

COMUNE DI PAVULLO NEL FRIGNANO (MO)

PROGETTO UNITARIO CONVENZIONATO PER IL

COMPARTO A11.b DEL POLO SOVRACOMUNALE


MADONNA BALDACCINI AMBITI ASP 2.9 - 2.10

VIS HYDRAULICS S.R.L.

Sig. MUCCIARINI ALBERTO

Sig. MUCCIARINI SERGIO

FORGIA DEL FRIGNANO S.P.A.

<div></div> <div><div>FUNDO SRL</div><div>VIA GIARDINI SUD 52 41026 PAVULLO NF MO T 0536 21643 F 0536 23684</div><div>STRADA VIGNOLESE 1175 41126 MODENA T 059 468364 F 059 469849</div><div>FUNDOSTUDIO.IT INFO@FUNDOSTUDIO.IT</div></div>	PROGETTISTI Arch. Gianmarco Bazzani - Arch. Maria Pia Mucciarini Geom. Vittorio Milani			
	DIRETTORE DEI LAVORI Dott. Arch. GIANMARCO BAZZANI			
<div>MUCCIARINI MARIA PIA</div> <div>architetto</div> <div>VIA ROSSINI 1 41026 PAVULLO NF MO T 0536 324371</div>	PROGETTISTA OPERE IN C.A. -			
	D.R. OPERE IN C.A. -			
<div>MILANI VITTORIO</div> <div>geometra</div> <div>VIA PER SESTOLA 8 41026 PAVULLO NF MO T 0536 41013</div>	COORDINATORE Arch. GIANMARCO BAZZANI			
	DISEGNATORE	NR. PRATICA	SCALA	DEMOLIZIONE
BA.GM. - BI.FE.		2200a1	1:500	
PRECEDENTE PRATICA EDILIZIA			DATA	COSTRUZIONE
-			Febbraio 2019	
DESCRIZIONE ILLUMINAZIONE PUBBLICA - RELAZIONE TECNICA				ELABORATO 10.1/

COMUNE: PAVULLO NEL FRIGNANO
PROVINCIA: MODENA

OGGETTO INTERVENTO:

**PROGETTO DI ILLUMINAZIONE PUBBLICA ESTERNA
PER IL COMPARTO A11.b DEL POLO SOVRACOMUNALE
MADONNA BALDACCINI AMBITI ASP 2.9 - 2.10**

Titolo Elaborato:

RELAZIONE TECNICA

Committente:

FUNDO SRL

VIA GIARDINI SUD 52 - 41026 PAVULLO NF

STRADA VIGNOLESE 1175 - 41126 MODENA

Proprietario:

VIS HYDRAULICS S.R.L. - SIG. MUCCIARINI ALBERT

SIG. MUCCIARINI SERGIO - FORGIA DEL FRIGNANO S.P.A.

Via Giardini Nord, 140, 41026 Pavullo nel Frignano MO

<i>Data di Emissione:</i>	28/01/2019	<i>Revisione n°:</i>	--	<i>Data Revisione:</i>	--
<i>Commessa n°:</i>	305	<i>Tavola n°:</i>	1IE_ES	<i>Scala:</i>	--
				<i>Nome del file:</i>	305_1IE_ES
<i>Disegnato da:</i> FRONTERA DAMIANO		<i>Controllato da:</i> GRAZIOSI MATTEO		<i>Approvato da:</i> GRAZIOSI MATTEO	



*Progettazione e Consulenze
Impianti Elettrici*

Piazza Repubblica 35 - 41030 Bastiglia (MO)
P.IVA & C.F. 03837180367
Cell 346/9422860 - Tel/Fax 059/8394783
Indirizzo email: grazioproject1@gmail.com

Timbro e firma:



Progettista:

GRAZIOSI MATTEO

COMMITTENTE:	FUNDO SRL VIA GIARDINI SUD 52 - 41026 PAVULLO NF STRADA VIGNOLESE 1175 - 41126 MODENA
OGGETTO:	PROGETTO DI ILLUMINAZIONE PUBBLICA ESTERNA PER IL COMPARTO A11.b DEL POLO SOVRACOMUNALE MADONNA BALDACCINI AMBITI ASP 2.9 – 2.10

INDICE DEI DOCUMENTI

1. OGGETTO DI INTERVENTO	2
2. NORMATIVA DI RIFERIMENTO	2
2.1 Requisiti tecnici degli impianti di illuminazione	3
3. OPERA 1 – ILLUMINAZIONE PUBBLICA ESTERNA.....	6
3.1 Marciapiedi / Piste Ciclabili – Strade Pedonali e Aree di Parcheggio.....	7
3.1.1 Calcolo IPEI per illuminamento Marciapiede / Piste ciclabili - SCHREDER KAZU 5117	12
3.2 Strada in zona commerciale	14
3.2.1 Calcolo IPEI per illuminamento Strada in Zona Commerciale ITALO 1	17
3.3 IMPIANTO ELETTRICO	18
3.3.1 Alimentazione impianto	18
3.3.2 Apparecchi illuminanti strada zona commerciale e parcheggi	18
3.3.3 Apparecchi illuminanti marciapiede	19
3.3.4 Pali per illuminazione	20
3.3.5 Cavi e connessioni	20
4. ALLEGATI AEC ILLUMINAZIONE SRL ITALO 1 STU-M 4.7 3M.....	21
4.1 Dichiarazione del costruttore sulla temperatura del colore (CCT) dell'apparecchio illuminante	21
4.2 Certificazione della non emissione di luce verso l'alto	22
4.3 Indice IPEA	58
4.4 Gruppo di riferimento in materia del rischio foto biologico	59
4.5 Misurazione fotometrica dell'apparecchio	61
5. ALLEGATI SCHREDER KAZU 5117	84
5.1 Dichiarazione del costruttore sulla temperatura del colore (CCT) dell'apparecchio illuminante	84
5.2 Misurazione fotometrica dell'apparecchio	85
5.3 Indice IPEA	95
5.4 Gruppo di riferimento in materia del rischio foto biologico	96
5.5 Certificazione della non emissione di luce verso l'alto	104

COMMITTENTE:	FUNDO SRL VIA GIARDINI SUD 52 - 41026 PAVULLO NF STRADA VIGNOLESE 1175 - 41126 MODENA
OGGETTO:	PROGETTO DI ILLUMINAZIONE PUBBLICA ESTERNA PER IL COMPARTO A11.b DEL POLO SOVRACOMUNALE MADONNA BALDACCINI AMBITI ASP 2.9 – 2.10

1. OGGETTO DI INTERVENTO

Il presente intervento ha per oggetto la realizzazione dell'impianto di illuminazione pubblica esterna per il comparto A11.b del polo sovracomunale Madonna Baldaccini ambiti asp. 2.9 – 2.10 sito a Pavullo nel Frignano (MO).

2. NORMATIVA DI RIFERIMENTO

Per lo studio e la progettazione degli impianti in progetto si è proceduto in conformità con quanto prescritto dalle seguenti normative:

- Legge Regionale dell'Emilia Romagna n° 19/2003 “Norme in materia di riduzione dell'inquinamento luminoso e di risparmio energetico”;
- Delibera di attuazione della Legge Regionale n° 19/2003 Direttiva di Giunta Regionale n.1732 del 12 novembre 2015;
- Legge n° 186 del 03.01.1968 sull'esecuzione degli impianti elettrici;
- Norma CEI 64-7 edizione 2010 “Impianti di illuminazione situati all'esterno con alimentazione in serie”
- Norma CEI 64-8 edizione 2012 “Impianti elettrici utilizzatori a tensione nominale non superiore a 1000V in corrente alternata e a 1500V in corrente continua”;
- Il Decreto Legislativo 81/08 per la sicurezza sul lavoro e successivi aggiornamenti;
- le vigenti Norme del Comitato Elettrotecnico Italiano (CEI);
- le prescrizioni delle Autorità Comunale e/o Regionali;
- le prescrizioni della Società Distributrice dell'energia elettrica competente della zona;
- le normative e raccomandazioni dell'Ispettorato del lavoro e dell'USL;
- le Norme e tabelle UNI e UNEL per i materiali già unificati, gli impianti ed i loro componenti, i criteri di progetto, le modalità di esecuzione e collaudo;
- ogni altra prescrizione, regolamentazione e raccomandazione emanata da eventuali Enti ed applicabile agli impianti oggetto della presente specifica tecnica.
- Il rispetto delle norme sopra indicate è inteso nel senso più restrittivo, cioè non solo la realizzazione dell'impianto sarà rispondente alle norme, ma altresì ogni singolo componente dell'impianto stesso.

COMMITTENTE:	FUNDO SRL VIA GIARDINI SUD 52 - 41026 PAVULLO NF STRADA VIGNOLESE 1175 - 41126 MODENA
OGGETTO:	PROGETTO DI ILLUMINAZIONE PUBBLICA ESTERNA PER IL COMPARTO A11.b DEL POLO SOVRACOMUNALE MADONNA BALDACCINI AMBITI ASP 2.9 – 2.10

2.1 Requisiti tecnici degli impianti di illuminazione

Gli impianti di illuminazione esterna sono stati progettati secondo quanto prescritto all'art. 4, della Delibera di Giunta Regionale n.1732 "Terza Direttiva applicativa Legge Regionale n°19/2003:

I nuovi impianti di illuminazione pubblica esterna, devono:

a) essere dotati di sorgenti luminose al sodio alta pressione o di altre sorgenti di almeno analoga efficienza in relazione allo stato della tecnologia e dell'applicazione. L'utilizzo dei LED o di altre sorgenti a luce bianca, è consentito nel rispetto dei seguenti requisiti:

- per le zone di protezione di cui all'art.3, se la temperatura di colore (CCT)(4) è minore o uguale a 3000K. In presenza di particolari situazioni di habitat (localizzabili ad esempio anche presso ponti, pontili, piattaforme, zone di riproduzione, corridoi di migrazioni, ecc.) e/o di specie di particolare rilevanza conservazionistica è preferibile l'uso di LED la cui lunghezza d'onda di picco sia indicativamente 590 nm (c.d. LED color ambra);

- per le restanti zone, se la temperatura di colore (CCT) è minore o uguale a 4000K.

Il valore di CCT deve essere dichiarato dal produttore utilizzando l'apposito modulo di cui all'ALLEGATO C o un equivalente.

b) essere dotati di apparecchi di illuminazione che:

I. non emettano luce verso l'alto, cioè possano dimostrare di avere nella loro posizione di installazione, per almeno 90°, un'intensità luminosa massima compresa tra 0,00 e 0,49 cd/klm.

A tale scopo devono essere allegate al Progetto illuminotecnico le misurazioni fotometriche dell'apparecchio sotto forma di file normalizzato, tipo il formato commerciale "Eulumdat" o analogo verificabile ed emesso in regime di sistema di qualità aziendale certificato o rilasciato da Ente terzo quale IMQ; le stesse devono riportare inoltre l'identificazione del laboratorio di misura, il nominativo del Responsabile tecnico e la sua dichiarazione circa la veridicità delle misure. A tal scopo può essere usato l'ALLEGATO C o un equivalente.

COMMITTENTE:	FUNDO SRL VIA GIARDINI SUD 52 - 41026 PAVULLO NF STRADA VIGNOLESE 1175 - 41126 MODENA
OGGETTO:	PROGETTO DI ILLUMINAZIONE PUBBLICA ESTERNA PER IL COMPARTO A11.b DEL POLO SOVRACOMUNALE MADONNA BALDACCINI AMBITI ASP 2.9 – 2.10

II. rispondano a determinati requisiti di prestazione energetica, cioè possano dimostrare di avere un Indice IPEA (6) corrispondente alla "classe C" o superiore, tranne in caso di utilizzo del c.d LED color ambra ai sensi del comma 1, lett.a), per cui è richiesta la "classe D" o superiore.

La prestazione energetica dell'apparecchio deve essere dichiarata dal produttore utilizzando l'apposito modulo di cui all'ALLEGATO C o un equivalente. Si veda l'ALLEGATO D per approfondimenti sull'IPEA.

III. siano ritenuti sicuri dal punto di vista fotobiologico, e cioè siano conformi alla Norma EN 60598-1:2015(7). Il gruppo di riferimento deve essere dichiarato dal produttore utilizzando l'apposito modulo di cui all'ALLEGATO C o un equivalente.

c) essere impianti che:

I. rispondano a determinati requisiti di prestazione energetica, cioè possano dimostrare di avere un Indice IPEI(8) corrispondente alla "classe B" o superiore; La prestazione energetica dell'impianto deve essere calcolata e dichiarata dal progettista nel progetto e corredata della pertinente documentazione tecnica. Si veda l'ALLEGATO E per approfondimenti sull'IPEI.

II. soddisfino i parametri illuminotecnici di riferimento di cui all'ALLEGATO F, con una tolleranza massima accettabile solo in eccesso del +20%. Nei casi di ambiti non stradali, in cui non sia possibile pervenire ad una classificazione illuminotecnica dell'ambito considerato, gli impianti devono garantire un valore di illuminamento medio minimo mantenuto non superiore a 15 lux.

III. siano dotati di dispositivi in grado di ridurre di almeno il 30% la potenza impiegata dall'impianto, qualora le condizioni di utilizzo della strada lo permettano e senza comprometterne la sicurezza o il rispetto dei parametri illuminotecnici. L'orario, le strade e le modalità che sono oggetto della riduzione di potenza devono essere stabilite con atto dell'Amministrazione comunale competente, sulla base di opportune valutazioni (analisi di rischio, calcoli illuminotecnici dedicati e quant'altro possa essere ritenuto utile a tale fine). Per garantire risparmio energetico ed un adeguato livello di illuminazione nelle varie situazioni di esercizio dell'impianto, può essere presa in considerazione la realizzazione della c.d. "illuminazione adattiva" che, attiva la corretta categoria illuminotecnica di esercizio (si veda ALLEGATO F per approfondimenti) al variare delle condizioni dei parametri di influenza.

COMMITTENTE:	FUNDO SRL VIA GIARDINI SUD 52 - 41026 PAVULLO NF STRADA VIGNOLESE 1175 - 41126 MODENA
OGGETTO:	PROGETTO DI ILLUMINAZIONE PUBBLICA ESTERNA PER IL COMPARTO A11.b DEL POLO SOVRACOMUNALE MADONNA BALDACCINI AMBITI ASP 2.9 – 2.10

IV. siano dotati di orologi astronomici il cui orario di accensione/spegnimento segua gli orari ufficiali di alba e tramonto del luogo di installazione, con un ritardo massimo dell'accensione o un anticipo massimo dello spegnimento pari a 20 minuti. Deve comunque essere garantito, per gli impianti accesi durante l'arco dell'intera notte, un funzionamento (lampade accese) annuo minimo non inferiore a 4000 ore. Per motivi di sicurezza il gestore dell'impianto può valutare l'opportunità di aggiungere un dispositivo di tecnologia adeguata (es. crepuscolare), al fine di garantire l'accensione degli impianti anche in particolari condizioni di anomala scarsa luminosità o per ovviare a malfunzionamenti dell'orologio astronomico.

V. garantiscano un rapporto fra interdistanza e altezza delle sorgenti non inferiore al valore di 3,7. Sono consentite soluzioni alternative solo in presenza di ostacoli quali alberi o in quanto funzionali a garantire prestazioni migliori dell'impianto.

VI. siano corredati, in caso di illuminazione stradale, da una Relazione di analisi dei consumi e dei risparmi energetici e dall'indicazione del TCO(9) dell'impianto, che prenda in considerazione un arco temporale non inferiore a 20 anni.

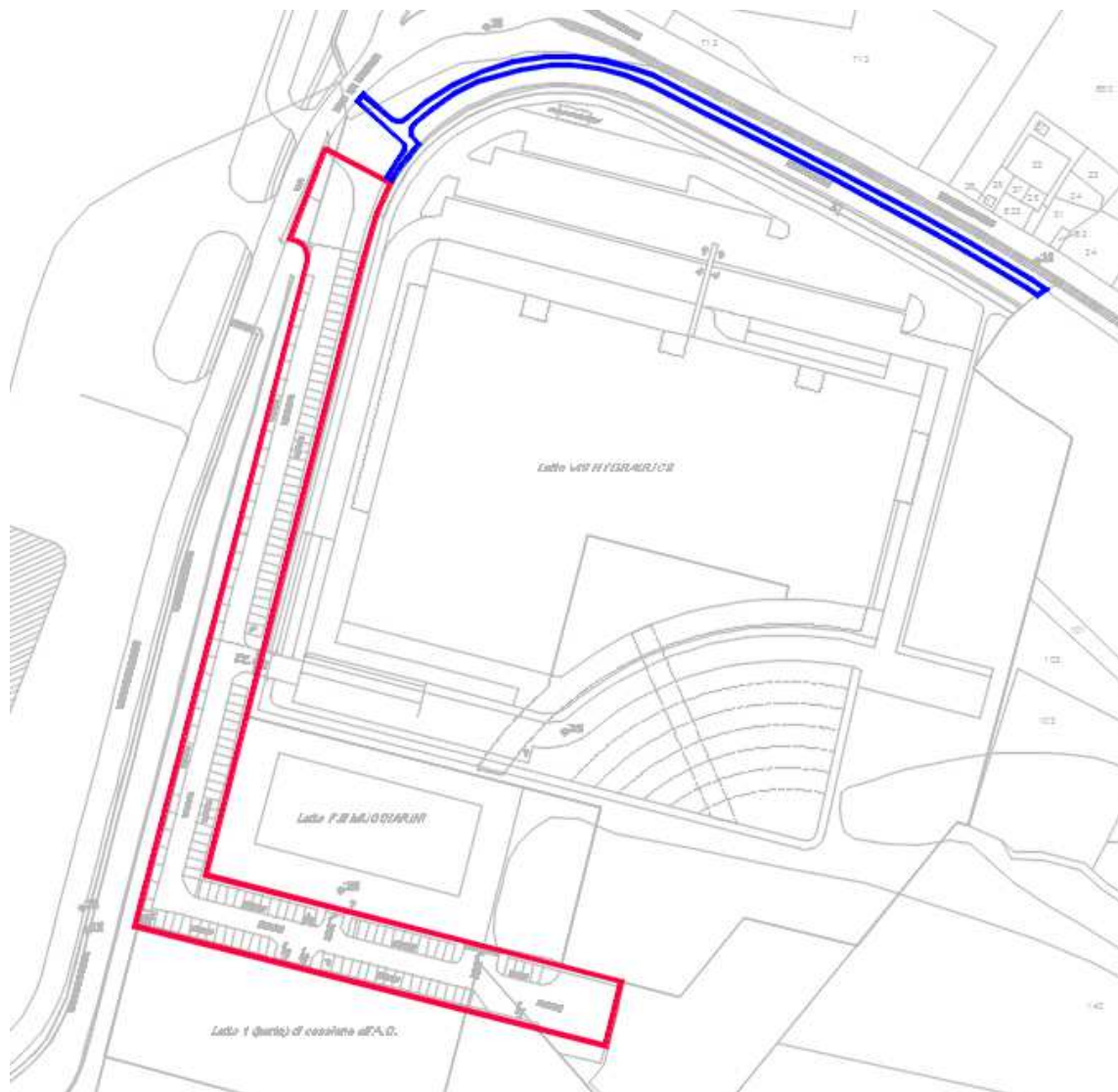
Nell'allegato F della suddetta direttiva sono fissati i valori dei parametri illuminotecnici da rispettare e i passaggi da eseguire per determinarli.

Si riporta in seguito la procedura dettagliata per l'identificazione dei parametri progettuali da soddisfare e le metodologie di calcolo da seguire, eseguita per ogni singola area di intervento oggetto del presente progetto.

COMMITTENTE:	FUNDO SRL VIA GIARDINI SUD 52 - 41026 PAVULLO NF STRADA VIGNOLESE 1175 - 41126 MODENA
OGGETTO:	PROGETTO DI ILLUMINAZIONE PUBBLICA ESTERNA PER IL COMPARTO A11.b DEL POLO SOVRACOMUNALE MADONNA BALDACCINI AMBITI ASP 2.9 – 2.10

3. OPERA 1 – ILLUMINAZIONE PUBBLICA ESTERNA

Quest'opera prevede l'illuminazione di tutte le zone in figura evidenziate:



— ZONA PARCHEGGI E STRADA IN ZONA COMMERCIALE

— MARCIAPIEDE

Si riportano in seguito i passaggi normativi effettuati per determinare i parametri illuminotecnici da soddisfare.

COMMITTENTE:	FUNDO SRL VIA GIARDINI SUD 52 - 41026 PAVULLO NF STRADA VIGNOLESE 1175 - 41126 MODENA
OGGETTO:	PROGETTO DI ILLUMINAZIONE PUBBLICA ESTERNA PER IL COMPARTO A11.b DEL POLO SOVRACOMUNALE MADONNA BALDACCINI AMBITI ASP 2.9 – 2.10

3.1 Marciapiedi / Piste Ciclabili – Strade Pedonali e Aree di Parcheggio

Si riportano in seguito i passaggi normativi effettuati per determinare i parametri illuminotecnici da soddisfare per le zone precedentemente descritte.

Categoria illuminotecnica di ingresso:

Da Tabella 1-allegato F della Direttiva di Giunta Regionale:

Tipo di Strada	Descrizione del tipo di strada	Limite di velocità (km/h)	Categoria Illuminotecnica di ingresso
F bis	Itinerari Ciclo - Pedonali	--	P3

Le categorie P definiscono gli illuminamenti per strade e piazze pedonali, piste ciclabili, campi scuola, parcheggi, tali risultano adeguate alla nostra zona di calcolo.

Da quanto detto sopra risulta che:

- La categoria illuminotecnica di ingresso e di progetto delle strade di accesso è P3
- Per stabilire i valori da rispettare bisogna trasformare la categoria di ingresso, ovvero P3, secondo la tabella 4 “Codifica delle categorie illuminotecniche P con quelle SE identificate dalla EN 13201-2” (pag 63 della Direttiva di Giunta Regionale):

Categoria	Classe EN 13201-2
P1	S1
P2	S2
P3	S3
P4	S4
P5	S5
P6	S6

- Le categorie illuminotecniche S riguardano pedoni e ciclisti su marciapiedi, piste ciclabili, corsie di emergenza e altre zone della strada come strade pedonali, aree di parcheggio e strade all'interno di complessi scolastici;

COMMITTENTE:	FUNDO SRL VIA GIARDINI SUD 52 - 41026 PAVULLO NF STRADA VIGNOLESE 1175 - 41126 MODENA
OGGETTO:	PROGETTO DI ILLUMINAZIONE PUBBLICA ESTERNA PER IL COMPARTO A11.b DEL POLO SOVRACOMUNALE MADONNA BALDACCINI AMBITI ASP 2.9 – 2.10

- Analisi dei rischi:

Rispetto al tipo di itinerario e alle sue specifiche caratteristiche si è effettuata l'analisi dei rischi sui parametri della Tabella 6-allegato F, rispetto al livello base di Tabella 5-allegato F.

Parametro di influenza	Livello base (Tab.5) per strada di categoria F	Analisi rischi	da Tabella 6
Flusso di traffico	elevato	elevato	+1
Complessità campo visivo	normale	normale	0
Zone di conflitto	non cospicue	non cospicue	-1
Dispositivi rallentatori	----	presenti	-1
Rischio aggressione	----	elevato	+1
Pendenza media	----	----	0
Livello luminoso dell'ambiente	----	----	0
Pedoni	ammessi	----	+1
Variazione di categoria $\Delta = 1$			

- Categoria illuminotecnica di progetto:

Tipo di Strada	Categoria illuminotecnica di ingresso (Tab.1)	Risultato Analisi dei rischi (Δ)	Categoria illuminotecnica di progetto
-----------------------	--	---	--

COMMITTENTE:	FUNDO SRL VIA GIARDINI SUD 52 - 41026 PAVULLO NF STRADA VIGNOLESE 1175 - 41126 MODENA
OGGETTO:	PROGETTO DI ILLUMINAZIONE PUBBLICA ESTERNA PER IL COMPARTO A11.b DEL POLO SOVRACOMUNALE MADONNA BALDACCINI AMBITI ASP 2.9 – 2.10

F	P3	+1	P2
----------	-----------	-----------	-----------

- Da quanto sopra risulta che:

Categoria P2 -----> Classe EN 13201-2: S2

Dal prospetto 3 “Categorie Illuminotecniche serie S” della UNI EN 13201 si evince che:

Classe	Illuminamento medio [lx]	Illuminamento minimo [lx]
S2	10*	3

* Per ottenere l'uniformità, il valore effettivo dell'illuminamento medio mantenuto non può essere maggiore di 1,5 volte il valore minimo E indicato per la categoria, il che significa che il valore di illuminamento medio dovrà essere ≤ 15 .

Di seguito saranno riportati i calcoli relativi alle zone interessate.

COMMITTENTE:	FUNDO SRL VIA GIARDINI SUD 52 - 41026 PAVULLO NF STRADA VIGNOLESE 1175 - 41126 MODENA
OGGETTO:	PROGETTO DI ILLUMINAZIONE PUBBLICA ESTERNA PER IL COMPARTO A11.b DEL POLO SOVRACOMUNALE MADONNA BALDACCINI AMBITI ASP 2.9 – 2.10

305_4IE

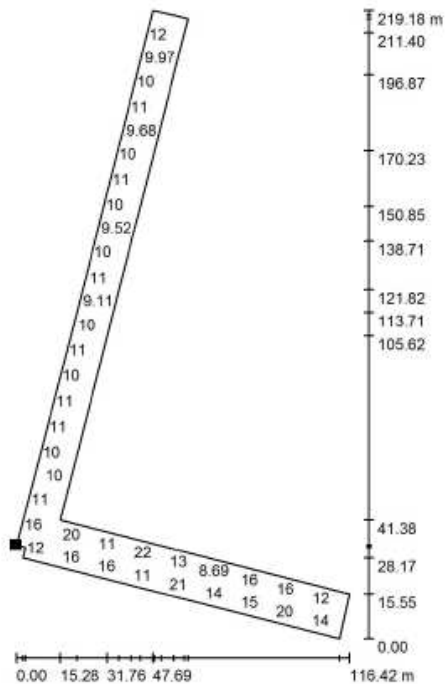
DIALux

14.02.2019

Studio MG SRL
grazloproject1@gmail.com
Piazza Repubblica 35
41030 Bastiglia (MO)

Redattore: Damiano Frontera
Telefono: 059 83 94 783
Fax: 059 83 94 783
e-Mail: grazloproject3@gmail.com

Parcheggi + Strada all'interno di Zona Commerciale / Superficie di calcolo 1 / Grafica dei valori (E, perpendicolare)



Valori in Lux, Scala 1 : 1714

Impossibile visualizzare tutti i valori calcolati.

Posizione della superficie nella
scena esterna:
Punto contrassegnato:
(76.387 m, 240.291 m, 0.000 m)



Reticolo: 128 x 128 Punti

E_m [lx]
14

E_{min} [lx]
3.54

E_{max} [lx]
64

E_{min} / E_m
0.249

E_{min} / E_{max}
0.066

DIALux 4.13 by DIAL GmbH

Pagina 6

COMMITTENTE:	FUNDO SRL VIA GIARDINI SUD 52 - 41026 PAVULLO NF STRADA VIGNOLESE 1175 - 41126 MODENA
OGGETTO:	PROGETTO DI ILLUMINAZIONE PUBBLICA ESTERNA PER IL COMPARTO A11.b DEL POLO SOVRACOMUNALE MADONNA BALDACCINI AMBITI ASP 2.9 – 2.10

305_4IE

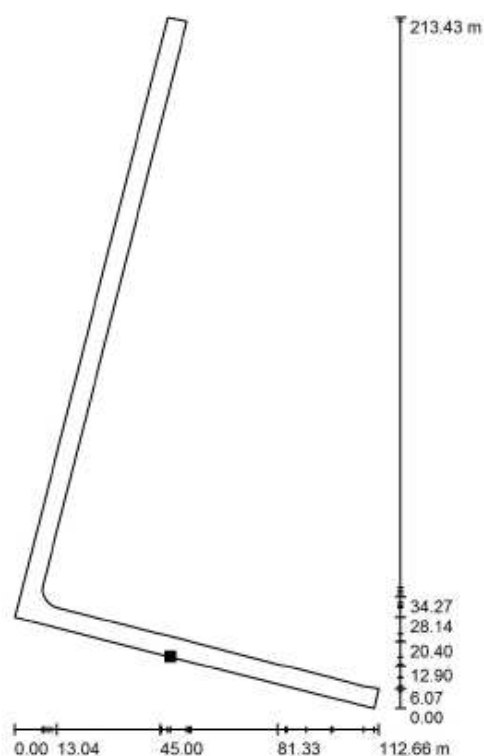
DIALux

14.02.2019

Studio MG SRL
grazloproject1@gmail.com
Piazza Repubblica 35
41030 Bastiglia (MO)

Redattore: Damiano Frontera
Telefono: 059 63 94 763
Fax: 059 63 94 763
e-Mail: grazloproject3@gmail.com

Parcheggi + Strada all'interno di Zona Commerciale / Campo di valutazione strada 1 /
Grafica dei valori (L)



Valori in Candela/m², Scala 1 : 1669

Impossibile visualizzare tutti i valori calcolati.

Posizione della superficie nella
scena esterna:
Punto contrassegnato:
(126.512 m, 228.715 m, 0.000 m)



Reticolo: 50 x 50 Punti
Posizione dell'osservatore: (18.337 m, 319.569 m, 1.500 m)
Linea di mira: 0.0 °
Manto stradale: R1, q0: 0.100

L_m [cd/m²]
1.29

U0
0.40

U1
0.92

L_v [cd/m²]
0.00

DIALux 4.13 by DIAL GmbH

Pagina 8

COMMITTENTE:	FUNDO SRL VIA GIARDINI SUD 52 - 41026 PAVULLO NF STRADA VIGNOLESE 1175 - 41126 MODENA
OGGETTO:	PROGETTO DI ILLUMINAZIONE PUBBLICA ESTERNA PER IL COMPARTO A11.b DEL POLO SOVRACOMUNALE MADONNA BALDACCINI AMBITI ASP 2.9 – 2.10

305_4IE

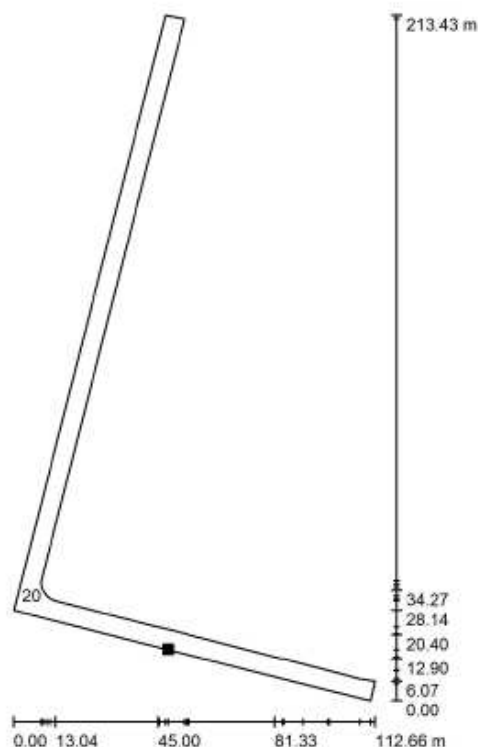
DIALux

14.02.2019

Studio MG SRL
grazloproject1@gmail.com
Piazza Repubblica 35
41030 Bastiglia (MO)

Redattore Damiano Frontera
Telefono 059 83 94 783
Fax 059 83 94 783
e-Mail grazloproject3@gmail.com

Parcheggi + Strada all'interno di Zona Commerciale / Campo di valutazione strada 1 /
Grafica dei valori (E)



Valori in Lux, Scala 1 : 1669

Impossibile visualizzare tutti i valori calcolati.

Posizione della superficie nella
scena esterna:
Punto contrassegnato:
(126.512 m, 228.715 m, 0.000 m)



Reticolo: 50 x 50 Punti

E_m [lx]
14

E_{min} [lx]
5.81

E_{max} [lx]
36

E_{min} / E_m
0.420

E_{min} / E_{max}
0.162

Rotazione: 0.0°

DIALux 4.13 by DIAL GmbH

Pagina 9

3.1.1 Calcolo IPEI per illuminamento Marciapiede / Piste ciclabili - SCHREDER KAZU 5117

per sorgenti LED



Progettazione e Consulenze
Impianti Elettrici

Piazza Repubblica 35 - 41030 Bastiglia (MO)
P.IVA & C.F. 03837180367
Cell 346/9422860 - Tel/Fax 059/8394783
Indirizzo email: grazloproject1@gmail.com

COMMITTENTE:	FUNDO SRL VIA GIARDINI SUD 52 - 41026 PAVULLO NF STRADA VIGNOLESE 1175 - 41126 MODENA
OGGETTO:	PROGETTO DI ILLUMINAZIONE PUBBLICA ESTERNA PER IL COMPARTO A11.b DEL POLO SOVRACOMUNALE MADONNA BALDACCINI AMBITI ASP 2.9 – 2.10

	Ambito principale da illuminare		
	Tipo strada (PUT)	<i>F</i>	
	Descrizione tipo strada	<i>strade locali extraurbane</i>	
	specificata	<i>marciapiedi, percorsi ciclopedonali e parcheggi</i>	
	Categoria illuminotecnica	<i>P3</i>	
$E_{m,rif}$	Illuminamento di riferimento	10	lux
<i>l</i>	Larghezza carreggiata	7	m

	Tipo di apparecchio	<i>SCHREDER</i>	
	Marca e modello	<i>KAZU 5117 - 16 Cree XP-G2 700mA</i>	
	Tipo sorgente	LED	
Φ_{sorg}	flusso Modulo LED	4 344	lm
P_{app}	potenza reale apparecchio LED	38	W

<i>i</i>	interdistanza	20	m
	altezza sorgenti	7	m
E_m	Illuminamento medio mantenuto	11,00	lux
	<i>Uo</i>		

<i>SE</i>	SLEEC in illuminamento $[P_{app}/(E_m \cdot i \cdot l)]$	0,02	W/[(lux)*mq]
<i>Kinst</i>	Costante d'installazione $(0,524 + [E_m/(E_{m,rif} \cdot 2,1)])$	1,05	

SE_R	SLEEC di riferimento	0,08	lm/W
--------	----------------------	------	------

IPEI ($SE/SE_R \cdot Kinst$)	0,32	A++

COMMITTENTE:	FUNDO SRL VIA GIARDINI SUD 52 - 41026 PAVULLO NF STRADA VIGNOLESE 1175 - 41126 MODENA
OGGETTO:	PROGETTO DI ILLUMINAZIONE PUBBLICA ESTERNA PER IL COMPARTO A11.b DEL POLO SOVRACOMUNALE MADONNA BALDACCINI AMBITI ASP 2.9 – 2.10

3.2 Strada in zona commerciale

Si riportano in seguito i passaggi normativi effettuati per determinare i parametri illuminotecnici da soddisfare per le zone precedentemente descritte.

Categoria illuminotecnica di ingresso:

Da Tabella 1-allegato F della Direttiva di Giunta Regionale:

Tipo di Strada	Descrizione del tipo di strada	Limite di velocità (km/h)	Categoria Illuminotecnica di ingresso
F	Strada locali extraurbane	50	M4

La rotonda e la strada devono essere illuminate applicando le categorie illuminotecniche della serie C, che definiscono il valore di sicurezza da rispettare per il calcolo dell'illuminamento delle rotonde e delle strade in zone commerciale e i parametri da rispettare nei "punti di conflitto" ossia nelle aree ove i flussi di traffico motorizzato si intersecano come ad esempio le strade commerciali.

Da quanto detto sopra risulta che:

- La categoria illuminotecnica di ingresso e di progetto della strada e della rotonda di accesso è M4
- Per stabilire i valori da rispettare bisogna trasformare la categoria di ingresso, ovvero M4, secondo la tabella 16 "Comparazione di categorie illuminotecniche per zone attigue/adiacenti" (pag 89 della Direttiva di Giunta Regionale):

LIVELLI DI PRESTAZIONE VISIVA E DI PROGETTO									
CATEGORIA		M1	M2	M3	M4	M5	M6		
CATEGORIA	C0	C1	C2	C3	C4	C5			
CATEGORIA				P1	P2	P3	P4	P5	P6
CATEGORIA	EV2	EV3	EV4	EV5	EV5	EV5			

- Da quanto sopra risulta che:

COMMITTENTE:	FUNDO SRL VIA GIARDINI SUD 52 - 41026 PAVULLO NF STRADA VIGNOLESE 1175 - 41126 MODENA
OGGETTO:	PROGETTO DI ILLUMINAZIONE PUBBLICA ESTERNA PER IL COMPARTO A11.b DEL POLO SOVRACOMUNALE MADONNA BALDACCINI AMBITI ASP 2.9 – 2.10

Categoria M4 -----> Classe EN 13201-2: C4

Dal prospetto 2 “Categorie Illuminotecniche serie CE” della UNI EN 13201 si evince che:

Classe	Illuminamento minimo mantenuto [lx]	U0 [Minima]
C4	$10 \leq X \leq 15$	0,4

Di seguito saranno riportati i calcoli relativi alle zone interessate.

COMMITTENTE:	FUNDO SRL VIA GIARDINI SUD 52 - 41026 PAVULLO NF STRADA VIGNOLESE 1175 - 41126 MODENA
OGGETTO:	PROGETTO DI ILLUMINAZIONE PUBBLICA ESTERNA PER IL COMPARTO A11.b DEL POLO SOVRACOMUNALE MADONNA BALDACCINI AMBITI ASP 2.9 – 2.10

305_4IE

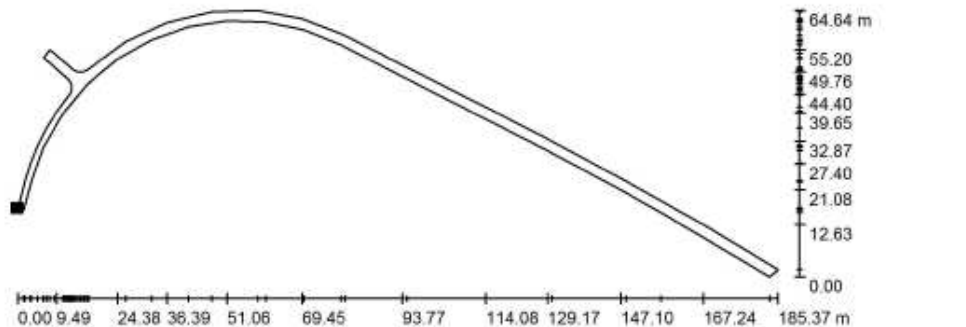
DIALux

14.02.2019

Studio MG SRL
grazloproject1@gmail.com
Piazza Repubblica 35
41030 Bastiglia (MO)

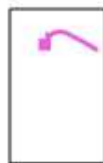
Redattore: Damiano Frontera
Telefono: 059 83 94 783
Fax: 059 83 94 783
e-Mail: grazloproject3@gmail.com

Parcheggi + Strada all'interno di Zona Commerciale / Superficie di calcolo 2 / Grafica dei valori (E, perpendicolare)



Impossibile visualizzare tutti i valori calcolati.

Posizione della superficie nella scena esterna:
Punto contrassegnato:
(136.342 m, 423.835 m, 0.000 m)



Reticolo: 128 x 128 Punti

E_m [lx]	E_{min} [lx]	E_{max} [lx]	E_{min} / E_m	E_{min} / E_{max}
15	8.20	27	0.553	0.300

COMMITTENTE:	FUNDO SRL VIA GIARDINI SUD 52 - 41026 PAVULLO NF STRADA VIGNOLESE 1175 - 41126 MODENA
OGGETTO:	PROGETTO DI ILLUMINAZIONE PUBBLICA ESTERNA PER IL COMPARTO A11.b DEL POLO SOVRACOMUNALE MADONNA BALDACCINI AMBITI ASP 2.9 – 2.10

3.2.1 Calcolo IPEI per illuminamento Strada in Zona Commerciale ITALO 1

per sorgenti LED

	Ambito principale da illuminare		
	Tipo strada (PUT)	<i>F</i>	
	Descrizione tipo strada	<i>strade locali extraurbane</i>	
	specificata	<i>marciapiedi, percorsi ciclopeditoni e parcheggi</i>	
	Categoria illuminotecnica	<i>C4</i>	
$E_{m,rif}$	Illuminamento di riferimento	15	lux
<i>l</i>	Larghezza carreggiata	7	m

	Tipo di apparecchio	<i>AEC ILLUMINAZIONE SRL</i>	
	Marca e modello	<i>ITALO 1 0F2H1 STU-M 4.7-3M</i>	
	Tipo sorgente	LED	
Φ_{sorg}	flusso Modulo LED	7 030	lm
P_{app}	potenza reale apparecchio LED	58	W

<i>i</i>	interdistanza	15	m
	altezza sorgenti	7	m
E_m	Illuminamento medio mantenuto	15,00	lux
	U_o		

<i>SE</i>	SLEEC in illuminamento $[P_{app}/(E_m \cdot i \cdot l)]$	0,04	W/[(lux)*mq]
<i>Kinst</i>	Costante d'installazione $(0,524 + [E_m/(E_{m,rif} \cdot 2,1)])$	1,00	

SE_R	SLEEC di riferimento	0,08	lm/W
--------	----------------------	------	------

IPEI ($SE/SE_R \cdot Kinst$)	0,46	A++

COMMITTENTE:	FUNDO SRL VIA GIARDINI SUD 52 - 41026 PAVULLO NF STRADA VIGNOLESE 1175 - 41126 MODENA
OGGETTO:	PROGETTO DI ILLUMINAZIONE PUBBLICA ESTERNA PER IL COMPARTO A11.b DEL POLO SOVRACOMUNALE MADONNA BALDACCINI AMBITI ASP 2.9 – 2.10

3.3 IMPIANTO ELETTRICO

3.3.1 Alimentazione impianto

L'alimentazione elettrica all'impianto di illuminazione esterna sarà derivata da quadro elettrico di zona esistente quest'ultimo non oggetto d'incarico.

3.3.2 Apparecchi illuminanti strada zona commerciale e parcheggi

1. ITALO1 STU-M 4.7 3M della ditta AEC ILLUMINAZIONE installato su palo h=8m f.t.. Tale apparecchiatura illuminerà:
 - Strada in zona commerciale e parcheggi

L'apparecchio illuminante ha le seguenti caratteristiche tecniche:

- Tecnologia LED di ultima generazione
- Temperatura di colore: 4000°K
- Potenza: 58W
- Lumen: 7030lm
- Corrente di alimentazione 700mA
- Ottica Asimmetrica per illuminazione stradale urbana e ciclopedonale
- Classe di isolamento: II
- Protezione alle sovratensioni 10kV
- Corpo in alluminio pressofuso
- Attacco testapalo da 60 o 76 mm
- Grado di protezione IP66
- Resistenza agli urti IK09
- Peso: 6.8kg

COMMITTENTE:	FUNDO SRL VIA GIARDINI SUD 52 - 41026 PAVULLO NF STRADA VIGNOLESE 1175 - 41126 MODENA
OGGETTO:	PROGETTO DI ILLUMINAZIONE PUBBLICA ESTERNA PER IL COMPARTO A11.b DEL POLO SOVRACOMUNALE MADONNA BALDACCINI AMBITI ASP 2.9 – 2.10

3.3.3 Apparecchi illuminanti marciapiede

2. Schreder KAZU 5117 16 Cree XP-G2 700mA installato su palo h=6m f.t.. Tale apparecchiatura illuminerà:

- Marciapiede

L'apparecchio illuminante ha le seguenti caratteristiche tecniche:

- Tecnologia LED di ultima generazione
- Temperatura di colore: 4000°K
- Potenza: 38W
- Lumen: 4344lm
- Corrente di alimentazione 700mA
- Ottica Asimmetrica per illuminazione stradale urbana e ciclopeditonale
- Classe di isolamento: II
- Protezione alle sovratensioni 10kV
- Corpo in alluminio pressofuso
- Attacco testapalo da 60 o 76 mm
- Grado di protezione IP66
- Resistenza agli urti IK09
- Peso: 6.8kg

COMMITTENTE:	FUNDO SRL VIA GIARDINI SUD 52 - 41026 PAVULLO NF STRADA VIGNOLESE 1175 - 41126 MODENA
OGGETTO:	PROGETTO DI ILLUMINAZIONE PUBBLICA ESTERNA PER IL COMPARTO A11.b DEL POLO SOVRACOMUNALE MADONNA BALDACCINI AMBITI ASP 2.9 – 2.10

3.3.4 Pali per illuminazione

I pali per l'illuminazione considerati, di altezza 6m f.t., avranno forma conica e saranno zincati a caldo con guaina termorestringente anticorrosiva posta alla base del palo o nel punto di inserimento nel terreno.

Saranno accessoriati di morsettiera alla base in classe II per il collegamento dei corpi illuminanti.

3.3.5 Cavi e connessioni

Tutta la distribuzione elettrica, sia di dorsale che alle morsettiere dei corpi illuminanti, sarà realizzata mediante cavi unipolari a doppio isolamento tipo FG16R16 0,6/1kV da 6mm².

Solo dalle morsettiere ai corpi illuminanti i cavi saranno della stessa tipologia ma multipolari (FG16OR16).

Le connessioni – derivazioni se in pozzetto, saranno realizzate mediante morsetti a “C” da chiudere con pinza oleodinamica in muffole di tipo apribile, annegate in gel che ripristineranno il grado di isolamento dei conduttori ed un grado di protezione non inferiore ad IP68.

COMMITTENTE:	FUNDO SRL VIA GIARDINI SUD 52 - 41026 PAVULLO NF STRADA VIGNOLESE 1175 - 41126 MODENA
OGGETTO:	PROGETTO DI ILLUMINAZIONE PUBBLICA ESTERNA PER IL COMPARTO A11.b DEL POLO SOVRACOMUNALE MADONNA BALDACCINI AMBITI ASP 2.9 – 2.10

4. ALLEGATI AEC ILLUMINAZIONE SRL ITALO 1 STU-M 4.7 3M

4.1 Dichiarazione del costruttore sulla temperatura del colore (CCT) dell'apparecchio illuminante

AUTHORIZATION AEC ILLUMINAZIONE S.R.L.	
Legal Entity: AEC Illuminazione S.R.L. Address: Zona Industriale Castelnuovo 256 Zip Code: 52010 City: Subbiano (Arezzo) Country: Italy	Principal Contact: Luca Vagheggi Email: l.vagheggi@aecilluminazione.it Phone Number: +39 0575 421534 Alternate Contact: Alessio Vagheggi Email: a.vagheggi@aecilluminazione.it Phone Number: +39 0575 421588
<p>The above Manufacturer's Testing Laboratory facilities and staff have been assessed in accordance with:</p> <ul style="list-style-type: none"> - UNI EN 13032-1:2012 – Measurement and presentation of photometric data of lamps and luminaire, Part: 1 Measurement and file format. - UNI EN 13032-4:2015 – Measurement and presentation of photometric data of lamps and luminaires, Part: 4 LED lamps, modules and luminaires. - IES LM-79-08 – Approved method: electrical and photometric measurement of solid-state lighting products - sec. 9, 9.1, 9.2, 12.0, 12.1 (Test methods for total luminous flux and color quantities measurement – integrating sphere only). - IES LM-82-12 - Approved method: Characterization of LED Light Engines and LED Lamps for Electrical and Photometric Properties as a Function of Temperature. <p style="text-align: center;">Scope</p> <p>Photometric measurement of lamps and luminaires according to UNI EN 13032-1:2012, UNI EN 13032-4:2015, IES LM-79-08: sec. 9, 9.1, 9.2, 12.0, 12.1 (Test methods for total luminous flux and color quantities measurement – Integrating sphere only), photometric characterization (Luminous flux and chromaticity) of LED modules as a function of temperature according to IES LM-82-12.</p>	
Issue Date: [31/OCT/2017]	Expiration Date: [31/OCT/2018]
UL International Italia S.R.L. Ref #: 4788197857	
Printed Name [Project Engineer]: Giovanni Di Martino	Signature
Printed Name [Approver]: Walter Parmiani	Signature
<p><small>The validity of this authorization is maintained through on-going Re-assessments. This authorization and schedule may only be reproduced in full. This authorization is not transferable. Test Reports shall be validated and issued only by UL International Italia s.r.l.</small></p>	
UL International Italia S.R.L. <small>Via XXV Aprile 3/B - 20875 Burago di Molgora (MB) - Italy</small>	

COMMITTENTE:	FUNDO SRL VIA GIARDINI SUD 52 - 41026 PAVULLO NF STRADA VIGNOLESE 1175 - 41126 MODENA
OGGETTO:	PROGETTO DI ILLUMINAZIONE PUBBLICA ESTERNA PER IL COMPARTO A11.b DEL POLO SOVRACOMUNALE MADONNA BALDACCINI AMBITI ASP 2.9 – 2.10

4.2 Certificazione della non emissione di luce verso l'alto



DEKRA Testing and Certification S.r.l.

AEC ILLUMINAZIONE S.r.l.
Via A. Righi, 4 – Z.I. Castelnuovo,
52010 Subbiano (AR)
Italy

DEKRA Testing and Certification S.r.l.

Via Martiri della Liberazione, 12
23875 Osnago (LC)

Telefono: +39. 039.9280293

Fax: +39. 039.9280294

Contact Franco Vasta

e-mail Franco.Vasta@dekra.com

Date 2016/06/01

Dear Mr Angelo Campagna

Subject: Luminaires for road and street lighting

Standard: EN 60598-1:2015
EN 60598-2-3:2003 +A1:2011

Series : ITALO 1 - ITALO 1 BASIC - ITALO 2 - ITALO 2 BASIC
ITALO 3 - ITALO 3 BASIC

With this letter we inform you that the following types refer to Annex 1 for the entire list of models covered by the certificate with trade mark AEC ILLUMINAZIONE.

With this letter we inform you that the above mentioned types (refer to following pages for the entire models list) covered by the certificate with trade mark AEC ILLUMINAZIONE, identical to the sample which have been accepted after positive type testing conducted by in DEKRA Italia S.r.l. test reports N° 3504461.60, 3504461.61 issued on May, 30th 2016 and manufactured in a registered factory according to the procedures discussed, may be marked with the ENEC 05 certification mark.

We confirm you that single compartment LED lighting ITALO series showed favourable results in thermal tests at an ambient temperature of 50°C and that heat transfer was within prescribed limits for all components inside the luminaires.

The original certificate is being prepared and will be sent to you in the next future.

We wish you good business with the certified product.

Franco Vasta
Executive
DEKRA Testing and Certification S.r.l.

DEKRA Testing and Certification S.r.l.

Cinisele Balzamo
(Sede legale)
Via Fratelli Gracchi 27 - Torre Nord
20092 Cinisele Balzamo (MI)
Capitale Sociale Euro 101.490
C.F. e P.IVA: 02694370963
Tel.: +39.02.6901-5526
Fax: +39.02.6901-5766

Roma
Via Odoardo Guerrini, 10
00137 Roma (RM)
Tel.: +39.06.87203-01
Fax: +39.06.87203-029

Osnago
Via Martiri della Liberazione, 12
23875 Osnago (LC)
Tel.: +39.039.928.0293
Fax: +39.039.928.0294

Torino
Via Poletto, 14
10020 Cambiano (TO)
Tel.: +39.011.198205-10
Fax: +39.011.198205-14

Imola
I Autodromo Internazionale Enzo
e Dino Ferrari
Via Fratelli Rosselli, 2
40026 Imola (BO)
Tel.: +39.0542.06623-0
Fax: +39.0542.06623-4

italy.certification@dekra.com www.dekra.it

COMMITTENTE:	FUNDO SRL VIA GIARDINI SUD 52 - 41026 PAVULLO NF STRADA VIGNOLESE 1175 - 41126 MODENA
OGGETTO:	PROGETTO DI ILLUMINAZIONE PUBBLICA ESTERNA PER IL COMPARTO A11.b DEL POLO SOVRACOMUNALE MADONNA BALDACCINI AMBITI ASP 2.9 – 2.10



Annex 1 to Authorization letter dated
2016/06/01

Series / Models	Supply voltage V	Hz	Insulation class	N° Led	Iout max mA	Pmax W	IP degree	t _a
ITALO 1 PIT1xywwzaaa01e_bb v.ch*****	220-240	50/60	I / II	6	350 525 700	31 45 59	IP66 IK09	50°C
ITALO 1 PIT1xywwzaaa02e_bb v.ch*****	220-240	50/60	I / II	12	350 525 700	59 87 115	IP66 IK09	50°C

Series / Models	Supply voltage V	Hz	Insulation class	N° Led	Iout max mA	Pmax W	IP degree	t _a
ITALO 1 BASIC PI1Bxywwzaaa01e_bb v.ch*****	220-240	50/60	I / II	6	350 525 700	31 45 59	IP66 IK09	50°C
ITALO 1 BASIC PI1Bxywwzaaa02e_bb v.ch*****	220-240	50/60	I / II	12	350 525 700	59 87 115	IP66 IK09	50°C

LEGEND ITALO 1 - ITALO 1 BASIC

x	Fixing Type	0 = post-top / bracket Ø33 - Ø60 1 = post-top / bracket Ø60 - Ø76 x = other type of fixing
y	Number of revision	0,1,2,...9,A,B,C,...Z
ww	Optic Type	0I = AS 0J = OP-DX 0K = OP-SX 0O = AS-L6 1A = ASP-4N 1B = ASP-5N 1C = ASP-6N 1D = ASP-7N 1E = ASP-4W 1F = ASP-5W 1G = ASP-6W 1H = ASP-7W 1I = ASC-4W 1J = ASC-5W 1K = ASC-6W 1L = ASC-7W 1M = SS-6A 1N = SS-7A 1O = SS-6M 1P = SS-7M 1Q = SS-6W 1R = SS-7W ww = Other type of optic
z	Colour temperature of LED	3 = 3000K 4 = 4000K 5 = 5000K 6 = 5700K z = Other temperature ≤ 5700K available

Pagina 2 di 36

COMMITTENTE:	FUNDO SRL VIA GIARDINI SUD 52 - 41026 PAVULLO NF STRADA VIGNOLESE 1175 - 41126 MODENA
OGGETTO:	PROGETTO DI ILLUMINAZIONE PUBBLICA ESTERNA PER IL COMPARTO A11.b DEL POLO SOVRACOMUNALE MADONNA BALDACCINI AMBITI ASP 2.9 – 2.10



Annex 1 to Authorization letter dated
2016/06/01

aaa	LED current	350 = 350 mA 525 = 525 mA 700 = 700 mA aaa = other current \leq 700 mA
e	Insulation class	1 = class I 2 = class II
bb	Finishing equipment	Letters or numbers indicating different colors of the luminaire for marketing purpose only and no impact safety related constructions and critical components.
v	Number of revision	It can be any alphanumeric value
c	Dimming version	0 = No dimming 1 = Dimming-Auto 2 = Dimming-Auto custom 3 = Step-Dimming 4 = Step-Dimming inverse 5 = Step-Dimming with timer 6 = Step-Dimming inverse with timer 7 = Mains dimming 9 = 1-10V EXT A = DALI EXT E = NEMA SOCKET (IP65) c = Other type of control
h	Surge protection device	0 = with SPD 1 = with TMOV 2 = without protection device
*	Code for internal use by manufacturer	

Pagina 3 di 36

COMMITTENTE:	FUNDO SRL VIA GIARDINI SUD 52 - 41026 PAVULLO NF STRADA VIGNOLESE 1175 - 41126 MODENA
OGGETTO:	PROGETTO DI ILLUMINAZIONE PUBBLICA ESTERNA PER IL COMPARTO A11.b DEL POLO SOVRACOMUNALE MADONNA BALDACCINI AMBITI ASP 2.9 – 2.10



Annex 1 to Authorization letter dated
2016/06/01

Series / Models	Supply voltage V	Hz	Insulation class	N° Led	Iout max mA	Pmax W	IP degree	t _a
ITALO 1 PI1Bxywwzaaa01e_bb v.ch*****	220-240	50/60	I / II	3	350 525 700	17 24 31	IP66 IK09	50°C
ITALO 1 PI1Bxywwzaaa02e_bb v.ch*****	220-240	50/60	I / II	6	350 525 700	31 45 59	IP66 IK09	50°C
ITALO 1 PI1Bxywwzaaa03e_bb v.ch*****	220-240	50/60	I / II	9	350 525 700	45 66 87	IP66 IK09	50°C
ITALO 1 PI1Bxywwzaaa04e_bb v.ch*****	220-240	50/60	I / II	12	350 525 700	59 87 115	IP66 IK09	50°C

Series / Models	Supply voltage V	Hz	Insulation class	N° Led	Iout max mA	Pmax W	IP degree	t _a
ITALO 1 BASIC PI1Bxywwzaaa01e_bb v.ch*****	220-240	50/60	I / II	3	350 525 700	17 24 31	IP66 IK09	50°C
ITALO 1 BASIC PI1Bxywwzaaa02e_bb v.ch*****	220-240	50/60	I / II	6	350 525 700	31 45 59	IP66 IK09	50°C
ITALO 1 BASIC PI1Bxywwzaaa03e_bb v.ch*****	220-240	50/60	I / II	9	350 525 700	45 66 87	IP66 IK09	50°C
ITALO 1 BASIC PI1Bxywwzaaa04e_bb v.ch*****	220-240	50/60	I / II	12	350 525 700	59 87 115	IP66 IK09	50°C

LEGEND ITALO 1 - ITALO 1 BASIC

x	Fixing Type	0 = post-top / bracket Ø33 - Ø60 1 = post-top / bracket Ø60 - Ø76 x = other type of fixing
y	Number of revision	0,1,2,...9,A,B,C....Z
ww	Optic Type	0A = STE-M 0B = STE-S 0C = STW 0P = HPO00 0Q = HPO01 0R = HPO02 0S = HPO03 0T = HPO04 0U = HPO05 0V = HPO06 0X = HPO07 0Y = HPO08 0Z = HPO09 01 = HPO10 02 = HPO11 03 = HPO12 04 = HPO13 05 = HPO14 ww = Other type of optic

Pagina 4 di 36

COMMITTENTE:	FUNDO SRL VIA GIARDINI SUD 52 - 41026 PAVULLO NF STRADA VIGNOLESE 1175 - 41126 MODENA
OGGETTO:	PROGETTO DI ILLUMINAZIONE PUBBLICA ESTERNA PER IL COMPARTO A11.b DEL POLO SOVRACOMUNALE MADONNA BALDACCINI AMBITI ASP 2.9 – 2.10



Annex 1 to Authorization letter dated
2016/06/01

z	Colour temperature of LED	3 = 3000K 4 = 4000K 5 = 5000K 6 = 5700K z = Other temperature ≤ 5700K available
aaa	LED current	350 = 350 mA 525 = 525 mA 700 = 700 mA aaa = other current ≤ 700 mA
e	Insulation class	1 = class I 2 = class II
bb	Finishing equipment	Letters or numbers indicating different colors of the luminaire for marketing purpose only and no impact safety related constructions and critical components.
v	Number of revision	It can be any alphanumeric value
c	Dimming version	0 = No dimming 1 = Dimming-Auto 2 = Dimming-Auto custom 3 = Step-Dimming 4 = Step-Dimming inverse 5 = Step-Dimming with timer 6 = Step-Dimming inverse with timer 7 = Mains dimming 9 = 1-10V EXT A = DALI EXT E = NEMA SOCKET (IP65) c = Other type of control
h	Surge protection device	0 = with SPD 1 = with TMOV 2 = without protection device
*	Code for internal use by manufacturer	

Pagina 5 di 36

COMMITTENTE:	FUNDO SRL VIA GIARDINI SUD 52 - 41026 PAVULLO NF STRADA VIGNOLESE 1175 - 41126 MODENA
OGGETTO:	PROGETTO DI ILLUMINAZIONE PUBBLICA ESTERNA PER IL COMPARTO A11.b DEL POLO SOVRACOMUNALE MADONNA BALDACCINI AMBITI ASP 2.9 – 2.10



Annex 1 to Authorization letter dated
2016/06/01

Series / Models	Supply voltage V	Hz	Insulation class	N° Led	Iout max mA	Pmax W	IP degree	t _a
ITALO 1 PIT1xywwzaaa01e_bb v.ch*****	220-240	50/60	I / II	3	350 525 700	14 19 25	IP66 IK09	50°C
ITALO 1 PIT1xywwzaaa02e_bb v.ch*****	220-240	50/60	I / II	6	350 525 700	25 35 46	IP66 IK09	50°C
ITALO 1 PIT1xywwzaaa03e_bb v.ch*****	220-240	50/60	I / II	9	350 525 700	35 51 67	IP66 IK09	50°C
ITALO 1 PIT1xywwzaaa04e_bb v.ch*****	220-240	50/60	I / II	12	350 525 700	46 67 88	IP66 IK09	50°C

Series / Models	Supply voltage V	Hz	Insulation class	N° Led	Iout max mA	Pmax W	IP degree	t _a
ITALO 1 BASIC PI1Bxywwzaaa01e_bb v.ch*****	220-240	50/60	I / II	3	350 525 700	14 19 25	IP66 IK09	50°C
ITALO 1 BASIC PI1Bxywwzaaa02e_bb v.ch*****	220-240	50/60	I / II	6	350 525 700	25 35 46	IP66 IK09	50°C
ITALO 1 BASIC PI1Bxywwzaaa03e_bb v.ch*****	220-240	50/60	I / II	9	350 525 700	35 51 67	IP66 IK09	50°C
ITALO 1 BASIC PI1Bxywwzaaa04e_bb v.ch*****	220-240	50/60	I / II	12	350 525 700	46 67 88	IP66 IK09	50°C

LEGEND ITALO 1 – ITALO 1 BASIC

x	Fixing Type	0 = post-top / bracket Ø33 - Ø60 1 = post-top / bracket Ø60 - Ø76 x = other type of fixing
y	Number of revision	0,1,2,...9,A,B,C,...Z
ww	Optic Type	0D = STU-M 0E = STU-S 0F = SV 0G = TS 0P = HPO00 0Q = HPO01 0R = HPO02 0S = HPO03 0T = HPO04 0U = HPO05 0V = HPO06 0X = HPO07 0Y = HPO08 0Z = HPO09 01 = HPO10 02 = HPO11 03 = HPO12 08 = S 09 = S05 ww = Other type of optic

Pagina 6 di 36

COMMITTENTE:	FUNDO SRL VIA GIARDINI SUD 52 - 41026 PAVULLO NF STRADA VIGNOLESE 1175 - 41126 MODENA
OGGETTO:	PROGETTO DI ILLUMINAZIONE PUBBLICA ESTERNA PER IL COMPARTO A11.b DEL POLO SOVRACOMUNALE MADONNA BALDACCINI AMBITI ASP 2.9 – 2.10



Annex 1 to Authorization letter dated
2016/06/01

z	Colour temperature of LED	3 = 3000K 4 = 4000K 5 = 5000K 6 = 5700K z = Other temperature ≤ 5700K available
aaa	LED current	350 = 350 mA 525 = 525 mA 700 = 700 mA aaa = other current ≤ 700 mA
e	Insulation class	1 = class I 2 = class II
bb	Finishing equipment	Letters or numbers indicating different colors of the luminaire for marketing purpose only and no impact safety related constructions and critical components.
v	Number of revision	It can be any alphanumeric value
c	Dimming version	0 = No dimming 1 = Dimming-Auto 2 = Dimming-Auto custom 3 = Step-Dimming 4 = Step-Dimming inverse 5 = Step-Dimming with timer 6 = Step-Dimming inverse with timer 7 = Mains dimming 9 = 1-10V EXT A = DALI EXT E = NEMA SOCKET (IP65) c = Other type of control
h	Surge protection device	0 = with SPD 1 = with TMOV 2 = without protection device
*	Code for internal use by manufacturer	

Pagina 7 di 36

COMMITTENTE:	FUNDO SRL VIA GIARDINI SUD 52 - 41026 PAVULLO NF STRADA VIGNOLESE 1175 - 41126 MODENA
OGGETTO:	PROGETTO DI ILLUMINAZIONE PUBBLICA ESTERNA PER IL COMPARTO A11.b DEL POLO SOVRACOMUNALE MADONNA BALDACCINI AMBITI ASP 2.9 – 2.10



Annex 1 to Authorization letter dated
2016/06/01

Series / Models	Supply voltage V	Hz	Insulation class	N° Led	Iout max mA	Pmax W	IP degree	t _a
ITALO 1 PIT1xywwzaaa01e_bb v.ch*****	220-240	50/60	I / II	2	350 525 700	13 17 22	IP66 IK09	50°C
ITALO 1 PIT1xywwzaaa02e_bb v.ch*****	220-240	50/60	I / II	4	350 525 700	22 31 41	IP66 IK09	50°C
ITALO 1 PIT1xywwzaaa03e_bb v.ch*****	220-240	50/60	I / II	6	350 525 700	31 45 59	IP66 IK09	50°C
ITALO 1 PIT1xywwzaaa04e_bb v.ch*****	220-240	50/60	I / II	8	350 525 700	41 59 78	IP66 IK09	50°C

Series / Models	Supply voltage V	Hz	Insulation class	N° Led	Iout max mA	Pmax W	IP degree	t _a
ITALO 1 BASIC PI1Bxywwzaaa01e_bb v.ch*****	220-240	50/60	I / II	2	350 525 700	13 17 22	IP66 IK09	50°C
ITALO 1 BASIC PI1Bxywwzaaa02e_bb v.ch*****	220-240	50/60	I / II	4	350 525 700	22 31 41	IP66 IK09	50°C
ITALO 1 BASIC PI1Bxywwzaaa03e_bb v.ch*****	220-240	50/60	I / II	6	350 525 700	31 45 59	IP66 IK09	50°C
ITALO 1 BASIC PI1Bxywwzaaa04e_bb v.ch*****	220-240	50/60	I / II	8	350 525 700	41 59 78	IP66 IK09	50°C

Pagina 8 di 36

COMMITTENTE:	FUNDO SRL VIA GIARDINI SUD 52 - 41026 PAVULLO NF STRADA VIGNOLESE 1175 - 41126 MODENA
OGGETTO:	PROGETTO DI ILLUMINAZIONE PUBBLICA ESTERNA PER IL COMPARTO A11.b DEL POLO SOVRACOMUNALE MADONNA BALDACCINI AMBITI ASP 2.9 – 2.10



Annex 1 to Authorization letter dated
2016/06/01

LEGEND ITALO 1 - ITALO 1 BASIC

x	Fixing Type	0 = post-top / bracket Ø33 - Ø60 1 = post-top / bracket Ø60 - Ø76 x = other type of fixing
y	Number of revision	0,1,2,...9,A,B,C,...Z
ww	Optic Type	0L = STA 0M = STA1 06 = STAN01 07 = STA-1 ww = Other type of optic
z	Colour temperature of LED	3 = 3000K 4 = 4000K 5 = 5000K 6 = 5700K z = Other temperature ≤ 5700K available
aaa	LED current	350 = 350 mA 525 = 525 mA 700 = 700 mA aaa = other current ≤ 700 mA
e	Insulation class	1 = class I 2 = class II
bb	Finishing equipment	Letters or numbers indicating different colors of the luminaire for marketing purpose only and no impact safety related constructions and critical components.
v	Number of revision	It can be any alphanumeric value
c	Dimming version	0 = No dimming 1 = Dimming-Auto 2 = Dimming-Auto custom 3 = Step-Dimming 4 = Step-Dimming inverse 5 = Step-Dimming with timer 6 = Step-Dimming inverse with timer 7 = Mains dimming 9 = 1-10V EXT A = DALI EXT E = NEMA SOCKET (IP65) c = Other type of control
h	Surge protection device	0 = with SPD 1 = with TMOV 2 = without protection device
*	Code for internal use by manufacturer	

Pagina 9 di 36

COMMITTENTE:	FUNDO SRL VIA GIARDINI SUD 52 - 41026 PAVULLO NF STRADA VIGNOLESE 1175 - 41126 MODENA
OGGETTO:	PROGETTO DI ILLUMINAZIONE PUBBLICA ESTERNA PER IL COMPARTO A11.b DEL POLO SOVRACOMUNALE MADONNA BALDACCINI AMBITI ASP 2.9 – 2.10



Annex 1 to Authorization letter dated
2016/06/01

Series / Models	Supply voltage V	Hz	Insulation class	N° Led	Iout max mA	Pmax W	IP degree	t _a
ITALO 1 PIT1xywwzaaa01e_bb v.ch*****	220-240	50/60	I / II	8	350 525 700	13 18 23	IP66 IK09	50°C
ITALO 1 PIT1xywwzaaa02e_bb v.ch*****	220-240	50/60	I / II	16	350 525 700	23 33 43	IP66 IK09	50°C
ITALO 1 PIT1xywwzaaa03e_bb v.ch*****	220-240	50/60	I / II	24	350 525 700	33 49 64	IP66 IK09	50°C
ITALO 1 PIT1xywwzaaa04e_bb v.ch*****	220-240	50/60	I / II	32	350 525 700	43 64 84	IP66 IK09	50°C

Series / Models	Supply voltage V	Hz	Insulation class	N° Led	Iout max mA	Pmax W	IP degree	t _a
ITALO 1 BASIC PI1Bxywwzaaa01e_bb v.ch*****	220-240	50/60	I / II	8	350 525 700	13 18 23	IP66 IK09	50°C
ITALO 1 BASIC PI1Bxywwzaaa02e_bb v.ch*****	220-240	50/60	I / II	16	350 525 700	23 33 43	IP66 IK09	50°C
ITALO 1 BASIC PI1Bxywwzaaa03e_bb v.ch*****	220-240	50/60	I / II	24	350 525 700	33 49 64	IP66 IK09	50°C
ITALO 1 BASIC PI1Bxywwzaaa04e_bb v.ch*****	220-240	50/60	I / II	32	350 525 700	43 64 84	IP66 IK09	50°C

Pagina 10 di 36

COMMITTENTE:	FUNDO SRL VIA GIARDINI SUD 52 - 41026 PAVULLO NF STRADA VIGNOLESE 1175 - 41126 MODENA
OGGETTO:	PROGETTO DI ILLUMINAZIONE PUBBLICA ESTERNA PER IL COMPARTO A11.b DEL POLO SOVRACOMUNALE MADONNA BALDACCINI AMBITI ASP 2.9 – 2.10



Annex 1 to Authorization letter dated
2016/06/01

LEGEND ITALO 1 - ITALO 1 BASIC

x	Fixing Type	0 = post-top / bracket Ø33 - Ø60 1 = post-top / bracket Ø60 - Ø76 x = other type of fixing
y	Number of revision	0,1,2,...9,A,B,C,...Z
ww	Optic Type	0H = SL ww = Other type of optic
z	Colour temperature of LED	3 = 3000K 4 = 4000K 5 = 5000K 6 = 5700K z = Other temperature ≤ 5700K available
aaa	LED current	350 = 350 mA 525 = 525 mA 700 = 700 mA aaa = other current ≤ 700 mA
bb	Finishing equipment	Letters or numbers indicating different colors of the luminaire for marketing purpose only and no impact safety related constructions and critical components.
e	Insulation class	1 = class I 2 = class II
c	Dimming version	0 = No dimming 1 = Dimming-Auto 2 = Dimming-Auto custom 3 = Step-Dimming 4 = Step-Dimming inverse 5 = Step-Dimming with timer 6 = Step-Dimming inverse with timer 7 = Mains dimming 9 = 1-10V EXT A = DALI EXT E = NEMA SOCKET (IP65) c = Other type of control
h	Surge protection device	0 = with SPD 1 = with TMOV 2 = without protection device
*	Code for internal use by manufacturer	

Pagina 11 di 36

COMMITTENTE:	FUNDO SRL VIA GIARDINI SUD 52 - 41026 PAVULLO NF STRADA VIGNOLESE 1175 - 41126 MODENA
OGGETTO:	PROGETTO DI ILLUMINAZIONE PUBBLICA ESTERNA PER IL COMPARTO A11.b DEL POLO SOVRACOMUNALE MADONNA BALDACCINI AMBITI ASP 2.9 – 2.10



Annex 1 to Authorization letter dated
2016/06/01

Series / Models	Supply voltage V	Hz	Insulation class	N° Led	Iout max mA	Pmax W	IP degree	t _a
ITALO 2 PIT2xywwzaaa01e_bb v.ch*****	220-240	50/60	I / II	6	350 525 700	31 45 59	IP66 IK09	50°C
ITALO 2 PIT2xywwzaaa02e_bb v.ch*****	220-240	50/60	I / II	12	350 525 700	59 87 115	IP66 IK09	50°C
ITALO 2 PIT2xywwzaaa03e_bb v.ch*****	220-240	50/60	I / II	18	350 525 700	87 129 171	IP66 IK09	50°C
ITALO 2 PIT2xywwzaaa04e_bb v.ch*****	220-240	50/60	I / II	24	350 525	115 171	IP66 IK09	50°C

Series / Models	Supply voltage V	Hz	Insulation class	N° Led	Iout max mA	Pmax W	IP degree	t _a
ITALO 2 BASIC PI2Bxywwzaaa01e_bb v.ch*****	220-240	50/60	I / II	6	350 525 700	31 45 59	IP66 IK09	50°C
ITALO 2 BASIC PI2Bxywwzaaa02e_bb v.ch*****	220-240	50/60	I / II	12	350 525 700	59 87 115	IP66 IK09	50°C
ITALO 2 BASIC PI2Bxywwzaaa03e_bb v.ch*****	220-240	50/60	I / II	18	350 525 700	87 129 171	IP66 IK09	50°C
ITALO 2 BASIC PI2Bxywwzaaa04e_bb v.ch*****	220-240	50/60	I / II	24	350 525	115 171	IP66 IK09	50°C

Pagina 12 di 36

COMMITTENTE:	FUNDO SRL VIA GIARDINI SUD 52 - 41026 PAVULLO NF STRADA VIGNOLESE 1175 - 41126 MODENA
OGGETTO:	PROGETTO DI ILLUMINAZIONE PUBBLICA ESTERNA PER IL COMPARTO A11.b DEL POLO SOVRACOMUNALE MADONNA BALDACCINI AMBITI ASP 2.9 – 2.10



Annex 1 to Authorization letter dated
2016/06/01

LEGEND ITALO 2 - ITALO 2 BASIC

x	Fixing Type	0 = post-top / bracket Ø33 - Ø60 1 = post-top / bracket Ø60 - Ø76 x = other type of fixing
y	Number of revision	0,1,2,...9,A,B,C,...Z
ww	Optic Type	0I = AS 0J = OP-DX 0K = OP-SX 0O = AS-L6 1A = ASP-4N 1B = ASP-5N 1C = ASP-6N 1D = ASP-7N 1E = ASP-4W 1F = ASP-5W 1G = ASP-6W 1H = ASP-7W 1I = ASC-4W 1J = ASC-5W 1K = ASC-6W 1L = ASC-7W 1M = SS-6A 1N = SS-7A 1O = SS-6M 1P = SS-7M 1Q = SS-6W 1R = SS-7W ww = Other type of optic
z	Colour temperature of LED	3 = 3000K 4 = 4000K 5 = 5000K 6 = 5700K z = Other temperature ≤ 5700K available
aaa	LED current	350 = 350 mA 525 = 525 mA 700 = 700 mA aaa = other current ≤ 700 mA
e	Insulation class	1 = class I 2 = class II
bb	Finishing equipment	Letters or numbers indicating different colors of the luminaire for marketing purpose only and no impact safety related constructions and critical components.
v	Number of revision	It can be any alphanumeric value
c	Dimming version	0 = No dimming 1 = Dimming-Auto 2 = Dimming-Auto custom 3 = Step-Dimming 4 = Step-Dimming inverse 5 = Step-Dimming with timer 6 = Step-Dimming inverse with timer 7 = Mains dimming 9 = 1-10V EXT A = DALI EXT E = NEMA SOCKET (IP65) c = Other type of control

Pagina 13 di 36

COMMITTENTE:	FUNDO SRL VIA GIARDINI SUD 52 - 41026 PAVULLO NF STRADA VIGNOLESE 1175 - 41126 MODENA
OGGETTO:	PROGETTO DI ILLUMINAZIONE PUBBLICA ESTERNA PER IL COMPARTO A11.b DEL POLO SOVRACOMUNALE MADONNA BALDACCINI AMBITI ASP 2.9 – 2.10



Annex 1 to Authorization letter dated
2016/06/01

h	Surge protection device	0 = with SPD 1 = with TMOV 2 = without protection device
*	Code for internal use by manufacturer	

Pagina 14 di 36

COMMITTENTE:	FUNDO SRL VIA GIARDINI SUD 52 - 41026 PAVULLO NF STRADA VIGNOLESE 1175 - 41126 MODENA
OGGETTO:	PROGETTO DI ILLUMINAZIONE PUBBLICA ESTERNA PER IL COMPARTO A11.b DEL POLO SOVRACOMUNALE MADONNA BALDACCINI AMBITI ASP 2.9 – 2.10



Annex 1 to Authorization letter dated
2016/06/01

Series / Models	Supply voltage V	Hz	Insulation class	N° Led	Iout max mA	Pmax W	IP degree	t _a
ITALO 2 PIT2xywwzaaa01e_bb v.ch*****	220-240	50/60	I / II	3	350 525 700	17 24 31	IP66 IK09	50°C
ITALO 2 PIT2xywwzaaa02e_bb v.ch*****	220-240	50/60	I / II	6	350 525 700	31 45 59	IP66 IK09	50°C
ITALO 2 PIT2xywwzaaa03e_bb v.ch*****	220-240	50/60	I / II	9	350 525 700	45 66 87	IP66 IK09	50°C
ITALO 2 PIT2xywwzaaa04e_bb v.ch*****	220-240	50/60	I / II	12	350 525 700	59 87 115	IP66 IK09	50°C
ITALO 2 PIT2xywwzaaa05e_bb v.ch*****	220-240	50/60	I / II	15	350 525 700	73 108 143	IP66 IK09	50°C
ITALO 2 PIT2xywwzaaa06e_bb v.ch*****	220-240	50/60	I / II	18	350 525 700	87 129 171	IP66 IK09	50°C
ITALO 2 PIT2xywwzaaa07e_bb v.ch*****	220-240	50/60	I / II	21	350 525	101 150	IP66 IK09	50°C
ITALO 2 PIT2xywwzaaa08e_bb v.ch*****	220-240	50/60	I / II	24	350 525	115 171	IP66 IK09	50°C

Series / Models	Supply voltage V	Hz	Insulation class	N° Led	Iout max mA	Pmax W	IP degree	t _a
ITALO 2 BASIC PI2Bxywwzaaa01e_bb v.ch*****	220-240	50/60	I / II	3	350 525 700	17 24 31	IP66 IK09	50°C
ITALO 2 BASIC PI2Bxywwzaaa02e_bb v.ch*****	220-240	50/60	I / II	6	350 525 700	31 45 59	IP66 IK09	50°C
ITALO 2 BASIC PI2Bxywwzaaa03e_bb v.ch*****	220-240	50/60	I / II	9	350 525 700	45 66 87	IP66 IK09	50°C
ITALO 2 BASIC PI2Bxywwzaaa04e_bb v.ch*****	220-240	50/60	I / II	12	350 525 700	59 87 115	IP66 IK09	50°C
ITALO 2 BASIC PI2Bxywwzaaa05e_bb v.ch*****	220-240	50/60	I / II	15	350 525 700	73 108 143	IP66 IK09	50°C
ITALO 2 BASIC PI2Bxywwzaaa06e_bb v.ch*****	220-240	50/60	I / II	18	350 525 700	87 129 171	IP66 IK09	50°C
ITALO 2 BASIC PI2Bxywwzaaa07e_bb v.ch*****	220-240	50/60	I / II	21	350 525	101 150	IP66 IK09	50°C
ITALO 2 BASIC PI2Bxywwzaaa08e_bb v.ch*****	220-240	50/60	I / II	24	350 525	115 171	IP66 IK09	50°C

Pagina 15 di 36

COMMITTENTE:	FUNDO SRL VIA GIARDINI SUD 52 - 41026 PAVULLO NF STRADA VIGNOLESE 1175 - 41126 MODENA
OGGETTO:	PROGETTO DI ILLUMINAZIONE PUBBLICA ESTERNA PER IL COMPARTO A11.b DEL POLO SOVRACOMUNALE MADONNA BALDACCINI AMBITI ASP 2.9 – 2.10



Annex 1 to Authorization letter dated
2016/06/01

LEGEND ITALO 2 - ITALO 2 BASIC

x	Fixing Type	0 = post-top / bracket Ø33 - Ø60 1 = post-top / bracket Ø60 - Ø76 x = other type of fixing
y	Number of revision	0,1,2,...9,A,B,C,...Z
ww	Optic Type	0A = STE-M 0B = STE-S 0C = STW 0P = HPO00 0Q = HPO01 0R = HPO02 0S = HPO03 0T = HPO04 0U = HPO05 0V = HPO06 0X = HPO07 0Y = HPO08 0Z = HPO09 01= HPO10 02= HPO11 03= HPO12 04= HPO13 05= HPO14 ww = Other type of optic
z	Colour temperature of LED	3 = 3000K 4 = 4000K 5 = 5000K 6 = 5700K z = Other temperature ≤ 5700K available
aaa	LED current	350 = 350 mA 525 = 525 mA 700 = 700 mA aaa = other current ≤ 700 mA
e	Insulation class	1 = class I 2 = class II
bb	Finishing equipment	Letters or numbers indicating different colors of the luminaire for marketing purpose only and no impact safety related constructions and critical components.
v	Number of revision	It can be any alphanumeric value
c	Dimming version	0 = No dimming 1 = Dimming-Auto 2 = Dimming-Auto custom 3 = Step-Dimming 4 = Step-Dimming inverse 5 = Step-Dimming with timer 6 = Step-Dimming inverse with timer 7 = Mains dimming 9 = 1-10V EXT A = DALI EXT E = NEMA SOCKET (IP65) c = Other type of control
h	Surge protection device	0 = with SPD 1 = with TMOV 2 = without protection device
*	Code for internal use by manufacturer	

Pagina 16 di 36

COMMITTENTE:	FUNDO SRL VIA GIARDINI SUD 52 - 41026 PAVULLO NF STRADA VIGNOLESE 1175 - 41126 MODENA
OGGETTO:	PROGETTO DI ILLUMINAZIONE PUBBLICA ESTERNA PER IL COMPARTO A11.b DEL POLO SOVRACOMUNALE MADONNA BALDACCINI AMBITI ASP 2.9 – 2.10



Annex 1 to Authorization letter dated
2016/06/01

Series / Models	Supply voltage V	Hz	Insulation class	N° Led	Iout max mA	Pmax W	IP degree	t _a
ITALO 2 PIT2xywwzaaa01e_bb v.ch*****	220-240	50/60	I / II	3	350 525 700	14 19 25	IP66 IK09	50°C
ITALO 2 PIT2xywwzaaa02e_bb v.ch*****	220-240	50/60	I / II	6	350 525 700	25 35 46	IP66 IK09	50°C
ITALO 2 PIT2xywwzaaa03e_bb v.ch*****	220-240	50/60	I / II	9	350 525 700	35 51 67	IP66 IK09	50°C
ITALO 2 PIT2xywwzaaa04e_bb v.ch*****	220-240	50/60	I / II	12	350 525 700	46 67 88	IP66 IK09	50°C
ITALO 2 PIT2xywwzaaa05e_bb v.ch*****	220-240	50/60	I / II	15	350 525 700	56 83 109	IP66 IK09	50°C
ITALO 2 PIT2xywwzaaa06e_bb v.ch*****	220-240	50/60	I / II	18	350 525 700	67 99 131	IP66 IK09	50°C
ITALO 2 PIT2xywwzaaa07e_bb v.ch*****	220-240	50/60	I / II	21	350 525 700	78 115 152	IP66 IK09	50°C
ITALO 2 PIT2xywwzaaa08e_bb v.ch*****	220-240	50/60	I / II	24	350 525 700	88 131 173	IP66 IK09	50°C

Series / Models	Supply voltage V	Hz	Insulation class	N° Led	Iout max mA	Pmax W	IP degree	t _a
ITALO 2 BASIC PI2Bxywwzaaa01e_bb v.ch*****	220-240	50/60	I / II	3	350 525 700	14 19 25	IP66 IK09	50°C
ITALO 2 BASIC PI2Bxywwzaaa02e_bb v.ch*****	220-240	50/60	I / II	6	350 525 700	25 35 46	IP66 IK09	50°C
ITALO 2 BASIC PI2Bxywwzaaa03e_bb v.ch*****	220-240	50/60	I / II	9	350 525 700	35 51 67	IP66 IK09	50°C
ITALO 2 BASIC PI2Bxywwzaaa04e_bb v.ch*****	220-240	50/60	I / II	12	350 525 700	46 67 88	IP66 IK09	50°C
ITALO 2 BASIC PI2Bxywwzaaa05e_bb v.ch*****	220-240	50/60	I / II	15	350 525 700	56 83 109	IP66 IK09	50°C
ITALO 2 BASIC PI2Bxywwzaaa06e_bb v.ch*****	220-240	50/60	I / II	18	350 525 700	67 99 131	IP66 IK09	50°C
ITALO 2 BASIC PI2Bxywwzaaa07e_bb v.ch*****	220-240	50/60	I / II	21	350 525 700	78 115 152	IP66 IK09	50°C
ITALO 2 BASIC PI2Bxywwzaaa08e_bb v.ch*****	220-240	50/60	I / II	24	350 525 700	88 131 173	IP66 IK09	50°C

Pagina 17 di 36

COMMITTENTE:	FUNDO SRL VIA GIARDINI SUD 52 - 41026 PAVULLO NF STRADA VIGNOLESE 1175 - 41126 MODENA
OGGETTO:	PROGETTO DI ILLUMINAZIONE PUBBLICA ESTERNA PER IL COMPARTO A11.b DEL POLO SOVRACOMUNALE MADONNA BALDACCINI AMBITI ASP 2.9 – 2.10



Annex 1 to Authorization letter dated
2016/06/01

LEGEND ITALO 2 - ITALO 2 BASIC

x	Fixing Type	0 = post-top / bracket Ø33 - Ø60 1 = post-top / bracket Ø60 - Ø76 x = other type of fixing
y	Number of revision	0,1,2,...9,A,B,C,...Z
ww	Optic Type	0D = STU-M 0E = STU-S 0F = SV 0G = TS 0P = HPO00 0Q = HPO01 0R = HPO02 0S = HPO03 0T = HPO04 0U = HPO05 0V = HPO06 0X = HPO07 0Y = HPO08 0Z = HPO09 01= HPO10 02= HPO11 03= HPO12 08 = S 09 = S05 ww = Other type of optic
z	Colour temperature of LED	3 = 3000K 4 = 4000K 5 = 5000K 6 = 5700K z = Other temperature ≤ 5700K available
aaa	LED current	350 = 350 mA 525 = 525 mA 700 = 700 mA aaa = other current ≤ 700 mA
e	Insulation class	1 = class I 2 = class II
bb	Finishing equipment	Letters or numbers indicating different colors of the luminaire for marketing purpose only and no impact safety related constructions and critical components.
v	Number of revision	It can be any alphanumeric value
c	Dimming version	0 = No dimming 1 = Dimming-Auto 2 = Dimming-Auto custom 3 = Step-Dimming 4 = Step-Dimming inverse 5 = Step-Dimming with timer 6 = Step-Dimming inverse with timer 7 = Mains dimming 9 = 1-10V EXT A = DALI EXT E = NEMA SOCKET (IP65) c = Other type of control
h	Surge protection device	0 = with SPD 1 = with TMOV 2 = without protection device
*	Code for internal use by manufacturer	

Pagina 18 di 36

COMMITTENTE:	FUNDO SRL VIA GIARDINI SUD 52 - 41026 PAVULLO NF STRADA VIGNOLESE 1175 - 41126 MODENA
OGGETTO:	PROGETTO DI ILLUMINAZIONE PUBBLICA ESTERNA PER IL COMPARTO A11.b DEL POLO SOVRACOMUNALE MADONNA BALDACCINI AMBITI ASP 2.9 – 2.10



Annex 1 to Authorization letter dated
2016/06/01

Series / Models	Supply voltage V	Hz	Insulation class	N° Led	Iout max mA	Pmax W	IP degree	t _a
ITALO 2 PIT2xywwzaaa01e_bb v.ch*****	220-240	50/60	I / II	2	350 525 700	13 17 22	IP66 IK09	50°C
ITALO 2 PIT2xywwzaaa02e_bb v.ch*****	220-240	50/60	I / II	4	350 525 700	22 31 41	IP66 IK09	50°C
ITALO 2 PIT2xywwzaaa03e_bb v.ch*****	220-240	50/60	I / II	6	350 525 700	31 45 59	IP66 IK09	50°C
ITALO 2 PIT2xywwzaaa04e_bb v.ch*****	220-240	50/60	I / II	8	350 525 700	41 59 78	IP66 IK09	50°C
ITALO 2 PIT2xywwzaaa05e_bb v.ch*****	220-240	50/60	I / II	10	350 525 700	50 73 97	IP66 IK09	50°C
ITALO 2 PIT2xywwzaaa06e_bb v.ch*****	220-240	50/60	I / II	12	350 525 700	59 87 115	IP66 IK09	50°C
ITALO 2 PIT2xywwzaaa07e_bb v.ch*****	220-240	50/60	I / II	14	350 525 700	69 101 134	IP66 IK09	50°C
ITALO 2 PIT2xywwzaaa08e_bb v.ch*****	220-240	50/60	I / II	16	350 525 700	78 115 153	IP66 IK09	50°C

Series / Models	Supply voltage V	Hz	Insulation class	N° Led	Iout max mA	Pmax W	IP degree	t _a
ITALO 2 BASIC PI2Bxywwzaaa01e_bb v.ch*****	220-240	50/60	I / II	2	350 525 700	13 17 22	IP66 IK09	50°C
ITALO 2 BASIC PI2Bxywwzaaa02e_bb v.ch*****	220-240	50/60	I / II	4	350 525 700	22 31 41	IP66 IK09	50°C
ITALO 2 BASIC PI2Bxywwzaaa03e_bb v.ch*****	220-240	50/60	I / II	6	350 525 700	31 45 59	IP66 IK09	50°C
ITALO 2 BASIC PI2Bxywwzaaa04e_bb v.ch*****	220-240	50/60	I / II	8	350 525 700	41 59 78	IP66 IK09	50°C
ITALO 2 BASIC PI2Bxywwzaaa05e_bb v.ch*****	220-240	50/60	I / II	10	350 525 700	50 73 97	IP66 IK09	50°C
ITALO 2 BASIC PI2Bxywwzaaa06e_bb v.ch*****	220-240	50/60	I / II	12	350 525 700	59 87 115	IP66 IK09	50°C
ITALO 2 BASIC PI2Bxywwzaaa07e_bb v.ch*****	220-240	50/60	I / II	14	350 525 700	69 101 134	IP66 IK09	50°C
ITALO 2 BASIC PI2Bxywwzaaa08e_bb v.ch*****	220-240	50/60	I / II	16	350 525 700	78 115 153	IP66 IK09	50°C

Pagina 19 di 36

COMMITTENTE:	FUNDO SRL VIA GIARDINI SUD 52 - 41026 PAVULLO NF STRADA VIGNOLESE 1175 - 41126 MODENA
OGGETTO:	PROGETTO DI ILLUMINAZIONE PUBBLICA ESTERNA PER IL COMPARTO A11.b DEL POLO SOVRACOMUNALE MADONNA BALDACCINI AMBITI ASP 2.9 – 2.10



Annex 1 to Authorization letter dated
2016/06/01

LEGEND ITALO 2 - ITALO 2 BASIC

x	Fixing Type	0 = post-top / bracket Ø33 - Ø60 1 = post-top / bracket Ø60 - Ø76 x = other type of fixing
y	Number of revision	0,1,2,...9,A,B,C,...Z
ww	Optic Type	0L = STA 0M = STA1 06 = STAN01 07 = STA-1 ww = Other type of optic
z	Colour temperature of LED	3 = 3000K 4 = 4000K 5 = 5000K 6 = 5700K z = Other temperature ≤ 5700K available
aaa	LED current	350 = 350 mA 525 = 525 mA 700 = 700 mA aaa = other current ≤ 700 mA
e	Insulation class	1 = class I 2 = class II
bb	Finishing equipment	Letters or numbers indicating different colors of the luminaire for marketing purpose only and no impact safety related constructions and critical components.
v	Number of revision	It can be any alphanumeric value
c	Dimming version	0 = No dimming 1 = Dimming-Auto 2 = Dimming-Auto custom 3 = Step-Dimming 4 = Step-Dimming inverse 5 = Step-Dimming with timer 6 = Step-Dimming inverse with timer 7 = Mains dimming 9 = 1-10V EXT A = DALI EXT E = NEMA SOCKET (IP65) c = Other type of control
h	Surge protection device	0 = with SPD 1 = with TMOV 2 = without protection device
*	Code for internal use by manufacturer	

Pagina 20 di 36

COMMITTENTE:	FUNDO SRL VIA GIARDINI SUD 52 - 41026 PAVULLO NF STRADA VIGNOLESE 1175 - 41126 MODENA
OGGETTO:	PROGETTO DI ILLUMINAZIONE PUBBLICA ESTERNA PER IL COMPARTO A11.b DEL POLO SOVRACOMUNALE MADONNA BALDACCINI AMBITI ASP 2.9 – 2.10



Annex 1 to Authorization letter dated
2016/06/01

Series / Models	Supply voltage V	Hz	Insulation class	N° Led	Iout max mA	Pmax W	IP degree	t _a
ITALO 2 PIT2xywwzaaa01e_bb v.ch*****	220-240	50/60	I / II	8	350 525 700	13 18 23	IP66 IK09	50°C
ITALO 2 PIT2xywwzaaa02e_bb v.ch*****	220-240	50/60	I / II	16	350 525 700	23 33 43	IP66 IK09	50°C
ITALO 2 PIT2xywwzaaa03e_bb v.ch*****	220-240	50/60	I / II	24	350 525 700	33 49 64	IP66 IK09	50°C
ITALO 2 PIT2xywwzaaa04e_bb v.ch*****	220-240	50/60	I / II	32	350 525 700	43 64 84	IP66 IK09	50°C
ITALO 2 PIT2xywwzaaa05e_bb v.ch*****	220-240	50/60	I / II	40	350 525 700	54 79 104	IP66 IK09	50°C
ITALO 2 PIT2xywwzaaa06e_bb v.ch*****	220-240	50/60	I / II	48	350 525 700	64 94 124	IP66 IK09	50°C
ITALO 2 PIT2xywwzaaa07e_bb v.ch*****	220-240	50/60	I / II	56	350 525 700	74 109 145	IP66 IK09	50°C
ITALO 2 PIT2xywwzaaa08e_bb v.ch*****	220-240	50/60	I / II	64	350 525 700	84 124 165	IP66 IK09	50°C

Series / Models	Supply voltage V	Hz	Insulation class	N° Led	Iout max mA	Pmax W	IP degree	t _a
ITALO 2 BASIC PI2Bxywwzaaa01e_bb v.ch*****	220-240	50/60	I / II	8	350 525 700	13 18 23	IP66 IK09	50°C
ITALO 2 BASIC PI2Bxywwzaaa02e_bb v.ch*****	220-240	50/60	I / II	16	350 525 700	23 33 43	IP66 IK09	50°C
ITALO 2 BASIC PI2Bxywwzaaa03e_bb v.ch*****	220-240	50/60	I / II	24	350 525 700	33 49 64	IP66 IK09	50°C
ITALO 2 BASIC PI2Bxywwzaaa04e_bb v.ch*****	220-240	50/60	I / II	32	350 525 700	43 64 84	IP66 IK09	50°C
ITALO 2 BASIC PI2Bxywwzaaa05e_bb v.ch*****	220-240	50/60	I / II	40	350 525 700	54 79 104	IP66 IK09	50°C
ITALO 2 BASIC PI2Bxywwzaaa06e_bb v.ch*****	220-240	50/60	I / II	48	350 525 700	64 94 124	IP66 IK09	50°C
ITALO 2 BASIC PI2Bxywwzaaa07e_bb v.ch*****	220-240	50/60	I / II	56	350 525 700	74 109 145	IP66 IK09	50°C
ITALO 2 BASIC PI2Bxywwzaaa08e_bb v.ch*****	220-240	50/60	I / II	64	350 525 700	84 124 165	IP66 IK09	50°C

Pagina 21 di 36

COMMITTENTE:	FUNDO SRL VIA GIARDINI SUD 52 - 41026 PAVULLO NF STRADA VIGNOLESE 1175 - 41126 MODENA
OGGETTO:	PROGETTO DI ILLUMINAZIONE PUBBLICA ESTERNA PER IL COMPARTO A11.b DEL POLO SOVRACOMUNALE MADONNA BALDACCINI AMBITI ASP 2.9 – 2.10



Annex 1 to Authorization letter dated
2016/06/01

LEGEND ITALO 2 - ITALO 2 BASIC

x	Fixing Type	0 = post-top / bracket Ø33 - Ø60 1 = post-top / bracket Ø60 - Ø76 x = other type of fixing
y	Number of revision	0,1,2,...9,A,B,C,...Z
ww	Optic Type	0H = SL ww = Other type of optic
z	Colour temperature of LED	3 = 3000K 4 = 4000K 5 = 5000K 6 = 5700K z = Other temperature ≤ 5700K available
aaa	LED current	350 = 350 mA 525 = 525 mA 700 = 700 mA aaa = other current ≤ 700 mA
bb	Finishing equipment	Letters or numbers indicating different colors of the luminaire for marketing purpose only and no impact safety related constructions and critical components.
e	Insulation class	1 = class I 2 = class II
c	Dimming version	0 = No dimming 1 = Dimming-Auto 2 = Dimming-Auto custom 3 = Step-Dimming 4 = Step-Dimming inverse 5 = Step-Dimming with timer 6 = Step-Dimming inverse with timer 7 = Mains dimming 9 = 1-10V EXT A = DALI EXT E = NEMA SOCKET (IP65) c = Other type of control
h	Surge protection device	0 = with SPD 1 = with TMOV 2 = without protection device
*	Code for internal use by manufacturer	

Pagina 22 di 36

COMMITTENTE:	FUNDO SRL VIA GIARDINI SUD 52 - 41026 PAVULLO NF STRADA VIGNOLESE 1175 - 41126 MODENA
OGGETTO:	PROGETTO DI ILLUMINAZIONE PUBBLICA ESTERNA PER IL COMPARTO A11.b DEL POLO SOVRACOMUNALE MADONNA BALDACCINI AMBITI ASP 2.9 – 2.10



Annex 1 to Authorization letter dated
2016/06/01

Series / Models	Supply voltage V	Hz	Insulation class	N° Led	Iout max mA	Pmax W	IP degree	t _a
ITALO 3 PIT3xywwzaaa01e_bb v.ch*****	220-240	50/60	I / II	6	350 525 700	31 45 59	IP66 IK09	50°C
ITALO 3 PIT3xywwzaaa02e_bb v.ch*****	220-240	50/60	I / II	12	350 525 700	59 87 115	IP66 IK09	50°C
ITALO 3 PIT3xywwzaaa03e_bb v.ch*****	220-240	50/60	I / II	18	350 525 700	87 129 171	IP66 IK09	50°C
ITALO 3 PIT3xywwzaaa04e_bb v.ch*****	220-240	50/60	I / II	24	350 525 700	115 171 227	IP66 IK09	50°C
ITALO 3 PIT3xywwzaaa05e_bb v.ch*****	220-240	50/60	I / II	30	350 525 700	143 213 283	IP66 IK09	50°C
ITALO 3 PIT3xywwzaaa06e_bb v.ch*****	220-240	50/60	I / II	36	350 525 700	171 255 339	IP66 IK09	50°C
ITALO 3 PIT3xywwzaaa07e_bb v.ch*****	220-240	50/60	I / II	42	350 525	199 297	IP66 IK09	50°C
ITALO 3 PIT3xywwzaaa08e_bb v.ch*****	220-240	50/60	I / II	48	350 525	227 339	IP66 IK09	50°C

Series / Models	Supply voltage V	Hz	Insulation class	N° Led	Iout max mA	Pmax W	IP degree	t _a
ITALO 3 BASIC PI3Bxywwzaaa01e_bb v.ch*****	220-240	50/60	I / II	6	350 525 700	31 45 59	IP66 IK09	50°C
ITALO 3 BASIC PI3Bxywwzaaa02e_bb v.ch*****	220-240	50/60	I / II	12	350 525 700	59 87 115	IP66 IK09	50°C
ITALO 3 BASIC PI3Bxywwzaaa03e_bb v.ch*****	220-240	50/60	I / II	18	350 525 700	87 129 171	IP66 IK09	50°C
ITALO 3 BASIC PI3Bxywwzaaa04e_bb v.ch*****	220-240	50/60	I / II	24	350 525 700	115 171 227	IP66 IK09	50°C
ITALO 3 BASIC PI3Bxywwzaaa05e_bb v.ch*****	220-240	50/60	I / II	30	350 525 700	143 213 283	IP66 IK09	50°C
ITALO 3 BASIC PI3Bxywwzaaa06e_bb v.ch*****	220-240	50/60	I / II	36	350 525 700	171 255 339	IP66 IK09	50°C
ITALO 3 BASIC PI3Bxywwzaaa07e_bb v.ch*****	220-240	50/60	I / II	42	350 525	199 297	IP66 IK09	50°C
ITALO 3 BASIC PI3Bxywwzaaa08e_bb v.ch*****	220-240	50/60	I / II	48	350 525	227 339	IP66 IK09	50°C

Pagina 23 di 36

COMMITTENTE:	FUNDO SRL VIA GIARDINI SUD 52 - 41026 PAVULLO NF STRADA VIGNOLESE 1175 - 41126 MODENA
OGGETTO:	PROGETTO DI ILLUMINAZIONE PUBBLICA ESTERNA PER IL COMPARTO A11.b DEL POLO SOVRACOMUNALE MADONNA BALDACCINI AMBITI ASP 2.9 – 2.10



Annex 1 to Authorization letter dated
2016/06/01

LEGEND ITALO 3 - ITALO 3 BASIC

x	Fixing Type	0 = post-top / bracket Ø33 - Ø60 1 = post-top / bracket Ø60 - Ø76 x = other type of fixing
y	Number of revision	0,1,2,...9,A,B,C,...Z
ww	Optic Type	0I = AS 0J = OP-DX 0K = OP-SX 0O = AS-L6 1A = ASP-4N 1B = ASP-5N 1C = ASP-6N 1D = ASP-7N 1E = ASP-4W 1F = ASP-5W 1G = ASP-6W 1H = ASP-7W 1I = ASC-4W 1J = ASC-5W 1K = ASC-6W 1L = ASC-7W 1M = SS-6A 1N = SS-7A 1O = SS-6M 1P = SS-7M 1Q = SS-6W 1R = SS-7W ww = Other type of optic
z	Colour temperature of LED	3 = 3000K 4 = 4000K 5 = 5000K 6 = 5700K z = Other temperature ≤ 5700K available
aaa	LED current	350 = 350 mA 525 = 525 mA 700 = 700 mA aaa = other current ≤ 700 mA
e	Insulation class	1 = class I 2 = class II
bb	Finishing equipment	Letters or numbers indicating different colors of the luminaire for marketing purpose only and no impact safety related constructions and critical components.
v	Number of revision	It can be any alphanumeric value
c	Dimming version	0 = No dimming 1 = Dimming-Auto 2 = Dimming-Auto custom 3 = Step-Dimming 4 = Step-Dimming inverse 5 = Step-Dimming with timer 6 = Step-Dimming inverse with timer 7 = Mains dimming 9 = 1-10V EXT A = DALI EXT E = NEMA SOCKET (IP65) c = Other type of control

Pagina 24 di 36

COMMITTENTE:	FUNDO SRL VIA GIARDINI SUD 52 - 41026 PAVULLO NF STRADA VIGNOLESE 1175 - 41126 MODENA
OGGETTO:	PROGETTO DI ILLUMINAZIONE PUBBLICA ESTERNA PER IL COMPARTO A11.b DEL POLO SOVRACOMUNALE MADONNA BALDACCINI AMBITI ASP 2.9 – 2.10



Annex 1 to Authorization letter dated
2016/06/01

h	Surge protection device	0 = with SPD 1 = with TMOV 2 = without protection device
*	Code for internal use by manufacturer	

Pagina 25 di 36

COMMITTENTE:	FUNDO SRL VIA GIARDINI SUD 52 - 41026 PAVULLO NF STRADA VIGNOLESE 1175 - 41126 MODENA
OGGETTO:	PROGETTO DI ILLUMINAZIONE PUBBLICA ESTERNA PER IL COMPARTO A11.b DEL POLO SOVRACOMUNALE MADONNA BALDACCINI AMBITI ASP 2.9 – 2.10



Annex 1 to Authorization letter dated
2016/06/01

Series / Models	Supply voltage V	Hz	Insulation class	N° Led	lout max mA	Pmax W	IP degree	t _a
ITALO 3 PIT3xywwzaaa01e_bb v.ch*****	220-240	50/60	I / II	3	350 525 700	17 24 31	IP66 IK09	50°C
ITALO 3 PIT3xywwzaaa02e_bb v.ch*****	220-240	50/60	I / II	6	350 525 700	31 45 59	IP66 IK09	50°C
ITALO 3 PIT3xywwzaaa03e_bb v.ch*****	220-240	50/60	I / II	9	350 525 700	45 66 87	IP66 IK09	50°C
ITALO 3 PIT3xywwzaaa04e_bb v.ch*****	220-240	50/60	I / II	12	350 525 700	59 87 115	IP66 IK09	50°C
ITALO 3 PIT3xywwzaaa05e_bb v.ch*****	220-240	50/60	I / II	15	350 525 700	73 108 143	IP66 IK09	50°C
ITALO 3 PIT3xywwzaaa06e_bb v.ch*****	220-240	50/60	I / II	18	350 525 700	87 129 171	IP66 IK09	50°C
ITALO 3 PIT3xywwzaaa07e_bb v.ch*****	220-240	50/60	I / II	21	350 525 700	101 150 199	IP66 IK09	50°C
ITALO 3 PIT3xywwzaaa08e_bb v.ch*****	220-240	50/60	I / II	24	350 525 700	115 171 227	IP66 IK09	50°C
ITALO 3 PIT3xywwzaaa09e_bb v.ch*****	220-240	50/60	I / II	27	350 525 700	129 192 255	IP66 IK09	50°C
ITALO 3 PIT3xywwzaaa10e_bb v.ch*****	220-240	50/60	I / II	30	350 525 700	143 213 283	IP66 IK09	50°C
ITALO 3 PIT3xywwzaaa11e_bb v.ch*****	220-240	50/60	I / II	33	350 525 700	157 234 311	IP66 IK09	50°C
ITALO 3 PIT3xywwzaaa12e_bb v.ch*****	220-240	50/60	I / II	36	350 525 700	171 255 339	IP66 IK09	50°C
ITALO 3 PIT3xywwzaaa13e_bb v.ch*****	220-240	50/60	I / II	39	350 525	185 276	IP66 IK09	50°C
ITALO 3 PIT3xywwzaaa14e_bb v.ch*****	220-240	50/60	I / II	42	350 525	199 297	IP66 IK09	50°C
ITALO 3 PIT3xywwzaaa15e_bb v.ch*****	220-240	50/60	I / II	45	350 525	213 318	IP66 IK09	50°C
ITALO 3 PIT3xywwzaaa16e_bb v.ch*****	220-240	50/60	I / II	48	350 525	227 339	IP66 IK09	50°C

Pagina 26 di 36

COMMITTENTE:	FUNDO SRL VIA GIARDINI SUD 52 - 41026 PAVULLO NF STRADA VIGNOLESE 1175 - 41126 MODENA
OGGETTO:	PROGETTO DI ILLUMINAZIONE PUBBLICA ESTERNA PER IL COMPARTO A11.b DEL POLO SOVRACOMUNALE MADONNA BALDACCINI AMBITI ASP 2.9 – 2.10



Annex 1 to Authorization letter dated
2016/06/01

Series / Models	Supply voltage V	Hz	Insulation class	N° Led	Iout max mA	Pmax W	IP degree	t _a
ITALO 3 BASIC PI3Bxywwzaaa01e_bb v.ch*****	220-240	50/60	I / II	3	350 525 700	17 24 31	IP66 IK09	50°C
ITALO 3 BASIC PI3Bxywwzaaa02e_bb v.ch*****	220-240	50/60	I / II	6	350 525 700	31 45 59	IP66 IK09	50°C
ITALO 3 BASIC PI3Bxywwzaaa03e_bb v.ch*****	220-240	50/60	I / II	9	350 525 700	45 66 87	IP66 IK09	50°C
ITALO 3 BASIC PI3Bxywwzaaa04e_bb v.ch*****	220-240	50/60	I / II	12	350 525 700	59 87 115	IP66 IK09	50°C
ITALO 3 BASIC PI3Bxywwzaaa05e_bb v.ch*****	220-240	50/60	I / II	15	350 525 700	73 108 143	IP66 IK09	50°C
ITALO 3 BASIC PI3Bxywwzaaa06e_bb v.ch*****	220-240	50/60	I / II	18	350 525 700	87 129 171	IP66 IK09	50°C
ITALO 3 BASIC PI3Bxywwzaaa07e_bb v.ch*****	220-240	50/60	I / II	21	350 525 700	101 150 199	IP66 IK09	50°C
ITALO 3 BASIC PI3Bxywwzaaa08e_bb v.ch*****	220-240	50/60	I / II	24	350 525 700	115 171 227	IP66 IK09	50°C
ITALO 3 BASIC PI3Bxywwzaaa09e_bb v.ch*****	220-240	50/60	I / II	27	350 525 700	129 192 255	IP66 IK09	50°C
ITALO 3 BASIC PI3Bxywwzaaa10e_bb v.ch*****	220-240	50/60	I / II	30	350 525 700	143 213 283	IP66 IK09	50°C
ITALO 3 BASIC PI3Bxywwzaaa11e_bb v.ch*****	220-240	50/60	I / II	33	350 525 700	157 234 311	IP66 IK09	50°C
ITALO 3 BASIC PI3Bxywwzaaa12e_bb v.ch*****	220-240	50/60	I / II	36	350 525 700	171 255 339	IP66 IK09	50°C
ITALO 3 BASIC PI3Bxywwzaaa13e_bb v.ch*****	220-240	50/60	I / II	39	350 525	185 276	IP66 IK09	50°C
ITALO 3 BASIC PI3Bxywwzaaa14e_bb v.ch*****	220-240	50/60	I / II	42	350 525	199 297	IP66 IK09	50°C
ITALO 3 BASIC PI3Bxywwzaaa15e_bb v.ch*****	220-240	50/60	I / II	45	350 525	213 318	IP66 IK09	50°C
ITALO 3 BASIC PI3Bxywwzaaa16e_bb v.ch*****	220-240	50/60	I / II	48	350 525	227 339	IP66 IK09	50°C

Pagina 27 di 36

COMMITTENTE:	FUNDO SRL VIA GIARDINI SUD 52 - 41026 PAVULLO NF STRADA VIGNOLESE 1175 - 41126 MODENA
OGGETTO:	PROGETTO DI ILLUMINAZIONE PUBBLICA ESTERNA PER IL COMPARTO A11.b DEL POLO SOVRACOMUNALE MADONNA BALDACCINI AMBITI ASP 2.9 – 2.10



Annex 1 to Authorization letter dated
2016/06/01

LEGEND ITALO 3 - ITALO 3 BASIC

x	Fixing Type	0 = post-top / bracket Ø33 - Ø60 1 = post-top / bracket Ø60 - Ø76 x = other type of fixing
y	Number of revision	0,1,2,...9,A,B,C,...Z
ww	Optic Type	0A = STE-M 0B = STE-S 0C = STW 0P = HPO00 0Q = HPO01 0R = HPO02 0S = HPO03 0T = HPO04 0U = HPO05 0V = HPO06 0X = HPO07 0Y = HPO08 0Z = HPO09 01= HPO10 02= HPO11 03= HPO12 04= HPO13 05= HPO14 ww = Other type of optic
z	Colour temperature of LED	3 = 3000K 4 = 4000K 5 = 5000K 6 = 5700K z = Other temperature ≤ 5700K available
aaa	LED current	350 = 350 mA 525 = 525 mA 700 = 700 mA aaa = other current ≤ 700 mA
e	Insulation class	1 = class I 2 = class II
bb	Finishing equipment	Letters or numbers indicating different colors of the luminaire for marketing purpose only and no impact safety related constructions and critical components.
v	Number of revision	It can be any alphanumeric value
c	Dimming version	0 = No dimming 1 = Dimming-Auto 2 = Dimming-Auto custom 3 = Step-Dimming 4 = Step-Dimming inverse 5 = Step-Dimming with timer 6 = Step-Dimming inverse with timer 7 = Mains dimming 9 = 1-10V EXT A = DALI EXT E = NEMA SOCKET (IP65) c = Other type of control
h	Surge protection device	0 = with SPD 1 = with TMOV 2 = without protection device
*	Code for internal use by manufacturer	

Pagina 28 di 36

COMMITTENTE:	FUNDO SRL VIA GIARDINI SUD 52 - 41026 PAVULLO NF STRADA VIGNOLESE 1175 - 41126 MODENA
OGGETTO:	PROGETTO DI ILLUMINAZIONE PUBBLICA ESTERNA PER IL COMPARTO A11.b DEL POLO SOVRACOMUNALE MADONNA BALDACCINI AMBITI ASP 2.9 – 2.10



Annex 1 to Authorization letter dated
2016/06/01

Series / Models	Supply voltage V	Hz	Insulation class	N° Led	Iout max mA	Pmax W	IP degree	t _a
ITALO 3 PIT3xywwzaaa01e_bb v.ch*****	220-240	50/60	I / II	3	350 525 700	14 19 25	IP66 IK09	50°C
ITALO 3 PIT3xywwzaaa02e_bb v.ch*****	220-240	50/60	I / II	6	350 525 700	25 35 46	IP66 IK09	50°C
ITALO 3 PIT3xywwzaaa03e_bb v.ch*****	220-240	50/60	I / II	9	350 525 700	35 51 67	IP66 IK09	50°C
ITALO 3 PIT3xywwzaaa04e_bb v.ch*****	220-240	50/60	I / II	12	350 525 700	46 67 88	IP66 IK09	50°C
ITALO 3 PIT3xywwzaaa05e_bb v.ch*****	220-240	50/60	I / II	15	350 525 700	56 83 109	IP66 IK09	50°C
ITALO 3 PIT3xywwzaaa06e_bb v.ch*****	220-240	50/60	I / II	18	350 525 700	67 99 131	IP66 IK09	50°C
ITALO 3 PIT3xywwzaaa07e_bb v.ch*****	220-240	50/60	I / II	21	350 525 700	78 115 152	IP66 IK09	50°C
ITALO 3 PIT3xywwzaaa08e_bb v.ch*****	220-240	50/60	I / II	24	350 525 700	88 131 173	IP66 IK09	50°C
ITALO 3 PIT3xywwzaaa09e_bb v.ch*****	220-240	50/60	I / II	27	350 525 700	99 147 194	IP66 IK09	50°C
ITALO 3 PIT3xywwzaaa10e_bb v.ch*****	220-240	50/60	I / II	30	350 525 700	109 162 215	IP66 IK09	50°C
ITALO 3 PIT3xywwzaaa11e_bb v.ch*****	220-240	50/60	I / II	33	350 525 700	120 178 237	IP66 IK09	50°C
ITALO 3 PIT3xywwzaaa12e_bb v.ch*****	220-240	50/60	I / II	36	350 525 700	131 194 258	IP66 IK09	50°C
ITALO 3 PIT3xywwzaaa13e_bb v.ch*****	220-240	50/60	I / II	39	350 525 700	141 210 279	IP66 IK09	50°C
ITALO 3 PIT3xywwzaaa14e_bb v.ch*****	220-240	50/60	I / II	42	350 525 700	152 226 300	IP66 IK09	50°C
ITALO 3 PIT3xywwzaaa15e_bb v.ch*****	220-240	50/60	I / II	45	350 525 700	162 242 321	IP66 IK09	50°C
ITALO 3 PIT3xywwzaaa16e_bb v.ch*****	220-240	50/60	I / II	48	350 525 700	173 258 343	IP66 IK09	50°C

Pagina 29 di 36

COMMITTENTE:	FUNDO SRL VIA GIARDINI SUD 52 - 41026 PAVULLO NF STRADA VIGNOLESE 1175 - 41126 MODENA
OGGETTO:	PROGETTO DI ILLUMINAZIONE PUBBLICA ESTERNA PER IL COMPARTO A11.b DEL POLO SOVRACOMUNALE MADONNA BALDACCINI AMBITI ASP 2.9 – 2.10



Annex 1 to Authorization letter dated
2016/06/01

Series / Models	Supply voltage V	Hz	Insulation class	N° Led	Iout max mA	Pmax W	IP degree	t _a
ITALO 3 BASIC PI3Bxywwzaaa01e_bb v.ch*****	220-240	50/60	I / II	3	350 525 700	14 19 25	IP66 IK09	50°C
ITALO 3 BASIC PI3Bxywwzaaa02e_bb v.ch*****	220-240	50/60	I / II	6	350 525 700	25 35 46	IP66 IK09	50°C
ITALO 3 BASIC PI3Bxywwzaaa03e_bb v.ch*****	220-240	50/60	I / II	9	350 525 700	35 51 67	IP66 IK09	50°C
ITALO 3 BASIC PI3Bxywwzaaa04e_bb v.ch*****	220-240	50/60	I / II	12	350 525 700	46 67 88	IP66 IK09	50°C
ITALO 3 BASIC PI3Bxywwzaaa05e_bb v.ch*****	220-240	50/60	I / II	15	350 525 700	56 83 109	IP66 IK09	50°C
ITALO 3 BASIC PI3Bxywwzaaa06e_bb v.ch*****	220-240	50/60	I / II	18	350 525 700	67 99 131	IP66 IK09	50°C
ITALO 3 BASIC PI3Bxywwzaaa07e_bb v.ch*****	220-240	50/60	I / II	21	350 525 700	78 115 152	IP66 IK09	50°C
ITALO 3 BASIC PI3Bxywwzaaa08e_bb v.ch*****	220-240	50/60	I / II	24	350 525 700	88 131 173	IP66 IK09	50°C
ITALO 3 BASIC PI3Bxywwzaaa09e_bb v.ch*****	220-240	50/60	I / II	27	350 525 700	99 147 194	IP66 IK09	50°C
ITALO 3 BASIC PI3Bxywwzaaa10e_bb v.ch*****	220-240	50/60	I / II	30	350 525 700	109 162 215	IP66 IK09	50°C
ITALO 3 BASIC PI3Bxywwzaaa11e_bb v.ch*****	220-240	50/60	I / II	33	350 525 700	120 178 237	IP66 IK09	50°C
ITALO 3 BASIC PI3Bxywwzaaa12e_bb v.ch*****	220-240	50/60	I / II	36	350 525 700	131 194 258	IP66 IK09	50°C
ITALO 3 BASIC PI3Bxywwzaaa13e_bb v.ch*****	220-240	50/60	I / II	39	350 525 700	141 210 279	IP66 IK09	50°C
ITALO 3 BASIC PI3Bxywwzaaa14e_bb v.ch*****	220-240	50/60	I / II	42	350 525 700	152 226 300	IP66 IK09	50°C
ITALO 3 BASIC PI3Bxywwzaaa15e_bb v.ch*****	220-240	50/60	I / II	45	350 525 700	162 242 321	IP66 IK09	50°C
ITALO 3 BASIC PI3Bxywwzaaa16e_bb v.ch*****	220-240	50/60	I / II	48	350 525 700	173 258 343	IP66 IK09	50°C

Pagina 30 di 36

COMMITTENTE:	FUNDO SRL VIA GIARDINI SUD 52 - 41026 PAVULLO NF STRADA VIGNOLESE 1175 - 41126 MODENA
OGGETTO:	PROGETTO DI ILLUMINAZIONE PUBBLICA ESTERNA PER IL COMPARTO A11.b DEL POLO SOVRACOMUNALE MADONNA BALDACCINI AMBITI ASP 2.9 – 2.10



Annex 1 to Authorization letter dated
2016/06/01

LEGEND ITALO 3 - ITALO 3 BASIC

x	Fixing Type	0 = post-top / bracket Ø33 - Ø60 1 = post-top / bracket Ø60 - Ø76 x = other type of fixing
y	Number of revision	0,1,2,...9,A,B,C,...Z
ww	Optic Type	0D = STU-M 0E = STU-S 0F = SV 0G = TS 0P = HPO00 0Q = HPO01 0R = HPO02 0S = HPO03 0T = HPO04 0U = HPO05 0V = HPO06 0X = HPO07 0Y = HPO08 0Z = HPO09 01 = HPO10 02 = HPO11 03 = HPO12 08 = S 09 = S05 ww = Other type of optic
z	Colour temperature of LED	3 = 3000K 4 = 4000K 5 = 5000K 6 = 5700K z = Other temperature ≤ 5700K available
aaa	LED current	350 = 350 mA 525 = 525 mA 700 = 700 mA aaa = other current ≤ 700 mA
e	Insulation class	1 = class I 2 = class II
bb	Finishing equipment	Letters or numbers indicating different colors of the luminaire for marketing purpose only and no impact safety related constructions and critical components.
v	Number of revision	It can be any alphanumeric value
c	Dimming version	0 = No dimming 1 = Dimming-Auto 2 = Dimming-Auto custom 3 = Step-Dimming 4 = Step-Dimming inverse 5 = Step-Dimming with timer 6 = Step-Dimming inverse with timer 7 = Mains dimming 9 = 1-10V EXT A = DALI EXT E = NEMA SOCKET (IP65) c = Other type of control
h	Surge protection device	0 = with SPD 1 = with TMOV 2 = without protection device
*	Code for internal use by manufacturer	

Pagina 31 di 36

COMMITTENTE:	FUNDO SRL VIA GIARDINI SUD 52 - 41026 PAVULLO NF STRADA VIGNOLESE 1175 - 41126 MODENA
OGGETTO:	PROGETTO DI ILLUMINAZIONE PUBBLICA ESTERNA PER IL COMPARTO A11.b DEL POLO SOVRACOMUNALE MADONNA BALDACCINI AMBITI ASP 2.9 – 2.10



Annex 1 to Authorization letter dated
2016/06/01

Series / Models	Supply voltage V	Hz	Insulation class	N° Led	Iout max mA	Pmax W	IP degree	t _a
ITALO 3 PIT3xywwzaaa01e_bb v.ch*****	220-240	50/60	I / II	2	350 525 700	13 17 22	IP66 IK09	50°C
ITALO 3 PIT3xywwzaaa02e_bb v.ch*****	220-240	50/60	I / II	4	350 525 700	22 31 41	IP66 IK09	50°C
ITALO 3 PIT3xywwzaaa03e_bb v.ch*****	220-240	50/60	I / II	6	350 525 700	31 45 59	IP66 IK09	50°C
ITALO 3 PIT3xywwzaaa04e_bb v.ch*****	220-240	50/60	I / II	8	350 525 700	41 59 78	IP66 IK09	50°C
ITALO 3 PIT3xywwzaaa05e_bb v.ch*****	220-240	50/60	I / II	10	350 525 700	50 73 97	IP66 IK09	50°C
ITALO 3 PIT3xywwzaaa06e_bb v.ch*****	220-240	50/60	I / II	12	350 525 700	59 87 115	IP66 IK09	50°C
ITALO 3 PIT3xywwzaaa07e_bb v.ch*****	220-240	50/60	I / II	14	350 525 700	69 101 134	IP66 IK09	50°C
ITALO 3 PIT3xywwzaaa08e_bb v.ch*****	220-240	50/60	I / II	16	350 525 700	78 115 153	IP66 IK09	50°C
ITALO 3 PIT3xywwzaaa09e_bb v.ch*****	220-240	50/60	I / II	18	350 525 700	87 129 171	IP66 IK09	50°C
ITALO 3 PIT3xywwzaaa10e_bb v.ch*****	220-240	50/60	I / II	20	350 525 700	97 143 190	IP66 IK09	50°C
ITALO 3 PIT3xywwzaaa11e_bb v.ch*****	220-240	50/60	I / II	22	350 525 700	106 157 209	IP66 IK09	50°C
ITALO 3 PIT3xywwzaaa12e_bb v.ch*****	220-240	50/60	I / II	24	350 525 700	115 171 227	IP66 IK09	50°C
ITALO 3 PIT3xywwzaaa13e_bb v.ch*****	220-240	50/60	I / II	26	350 525 700	125 185 246	IP66 IK09	50°C
ITALO 3 PIT3xywwzaaa14e_bb v.ch*****	220-240	50/60	I / II	28	350 525 700	134 199 265	IP66 IK09	50°C
ITALO 3 PIT3xywwzaaa15e_bb v.ch*****	220-240	50/60	I / II	30	350 525 700	143 213 283	IP66 IK09	50°C
ITALO 3 PIT3xywwzaaa16e_bb v.ch*****	220-240	50/60	I / II	32	350 525 700	153 227 302	IP66 IK09	50°C

Pagina 32 di 36

COMMITTENTE:	FUNDO SRL VIA GIARDINI SUD 52 - 41026 PAVULLO NF STRADA VIGNOLESE 1175 - 41126 MODENA
OGGETTO:	PROGETTO DI ILLUMINAZIONE PUBBLICA ESTERNA PER IL COMPARTO A11.b DEL POLO SOVRACOMUNALE MADONNA BALDACCINI AMBITI ASP 2.9 – 2.10



Annex 1 to Authorization letter dated
2016/06/01

Series / Models	Supply voltage V	Hz	Insulation class	N° Led	Iout max mA	Pmax W	IP degree	t _a
ITALO 3 BASIC PI3Bxywwzaaa01e_bb v.ch*****	220-240	50/60	I / II	2	350 525 700	13 17 22	IP66 IK09	50°C
ITALO 3 BASIC PI3Bxywwzaaa02e_bb v.ch*****	220-240	50/60	I / II	4	350 525 700	22 31 41	IP66 IK09	50°C
ITALO 3 BASIC PI3Bxywwzaaa03e_bb v.ch*****	220-240	50/60	I / II	6	350 525 700	31 45 59	IP66 IK09	50°C
ITALO 3 BASIC PI3Bxywwzaaa04e_bb v.ch*****	220-240	50/60	I / II	8	350 525 700	41 59 78	IP66 IK09	50°C
ITALO 3 BASIC PI3Bxywwzaaa05e_bb v.ch*****	220-240	50/60	I / II	10	350 525 700	50 73 97	IP66 IK09	50°C
ITALO 3 BASIC PI3Bxywwzaaa06e_bb v.ch*****	220-240	50/60	I / II	12	350 525 700	59 87 115	IP66 IK09	50°C
ITALO 3 BASIC PI3Bxywwzaaa07e_bb v.ch*****	220-240	50/60	I / II	14	350 525 700	69 101 134	IP66 IK09	50°C
ITALO 3 BASIC PI3Bxywwzaaa08e_bb v.ch*****	220-240	50/60	I / II	16	350 525 700	78 115 153	IP66 IK09	50°C
ITALO 3 BASIC PI3Bxywwzaaa09e_bb v.ch*****	220-240	50/60	I / II	18	350 525 700	87 129 171	IP66 IK09	50°C
ITALO 3 BASIC PI3Bxywwzaaa10e_bb v.ch*****	220-240	50/60	I / II	20	350 525 700	97 143 190	IP66 IK09	50°C
ITALO 3 BASIC PI3Bxywwzaaa11e_bb v.ch*****	220-240	50/60	I / II	22	350 525 700	106 157 209	IP66 IK09	50°C
ITALO 3 BASIC PI3Bxywwzaaa12e_bb v.ch*****	220-240	50/60	I / II	24	350 525 700	115 171 227	IP66 IK09	50°C
ITALO 3 BASIC PI3Bxywwzaaa13e_bb v.ch*****	220-240	50/60	I / II	26	350 525 700	125 185 246	IP66 IK09	50°C
ITALO 3 BASIC PI3Bxywwzaaa14e_bb v.ch*****	220-240	50/60	I / II	28	350 525 700	134 199 265	IP66 IK09	50°C
ITALO 3 BASIC PI3Bxywwzaaa15e_bb v.ch*****	220-240	50/60	I / II	30	350 525 700	143 213 283	IP66 IK09	50°C
ITALO 3 BASIC PI3Bxywwzaaa16e_bb v.ch*****	220-240	50/60	I / II	32	350 525 700	153 227 302	IP66 IK09	50°C

Pagina 33 di 36

COMMITTENTE:	FUNDO SRL VIA GIARDINI SUD 52 - 41026 PAVULLO NF STRADA VIGNOLESE 1175 - 41126 MODENA
OGGETTO:	PROGETTO DI ILLUMINAZIONE PUBBLICA ESTERNA PER IL COMPARTO A11.b DEL POLO SOVRACOMUNALE MADONNA BALDACCINI AMBITI ASP 2.9 – 2.10



Annex 1 to Authorization letter dated
2016/06/01

LEGEND ITALO 3

x	Fixing Type	0 = post-top / bracket Ø33 - Ø60 1 = post-top / bracket Ø60 - Ø76 x = other type of fixing
y	Number of revision	0,1,2,...9,A,B,C,...Z
ww	Optic Type	0L = STA 0M = STA1 06 = STAN01 07 = STA-1 ww = Other type of optic
z	Colour temperature of LED	3 = 3000K 4 = 4000K 5 = 5000K 6 = 5700K z = Other temperature ≤ 5700K available
aaa	LED current	350 = 350 mA 525 = 525 mA 700 = 700 mA aaa = other current ≤ 700 mA
e	Insulation class	1 = class I 2 = class II
bb	Finishing equipment	Letters or numbers indicating different colors of the luminaire for marketing purpose only and no impact safety related constructions and critical components.
v	Number of revision	It can be any alphanumeric value
c	Dimming version	0 = No dimming 1 = Dimming-Auto 2 = Dimming-Auto custom 3 = Step-Dimming 4 = Step-Dimming inverse 5 = Step-Dimming with timer 6 = Step-Dimming inverse with timer 7 = Mains dimming 9 = 1-10V EXT A = DALI EXT E = NEMA SOCKET (IP65) c = Other type of control
h	Surge protection device	0 = with SPD 1 = with TMOV 2 = without protection device
*	Code for internal use by manufacturer	

Pagina 34 di 36

COMMITTENTE:	FUNDO SRL VIA GIARDINI SUD 52 - 41026 PAVULLO NF STRADA VIGNOLESE 1175 - 41126 MODENA
OGGETTO:	PROGETTO DI ILLUMINAZIONE PUBBLICA ESTERNA PER IL COMPARTO A11.b DEL POLO SOVRACOMUNALE MADONNA BALDACCINI AMBITI ASP 2.9 – 2.10



Annex 1 to Authorization letter dated
2016/06/01

Series / Models	Supply voltage V	Hz	Insulation class	N° Led	Iout max mA	Pmax W	IP degree	t _a
ITALO 3 PIT3xywwzaaa08e_bb v.ch*****	220-240	50/60	I / II	64	350 525 700	84 124 165	IP66 IK09	50°C
ITALO 3 PIT3xywwzaaa09e_bb v.ch*****	220-240	50/60	I / II	72	350 525 700	94 140 185	IP66 IK09	50°C
ITALO 3 PIT3xywwzaaa10e_bb v.ch*****	220-240	50/60	I / II	80	350 525 700	104 155 205	IP66 IK09	50°C
ITALO 3 PIT3xywwzaaa11e_bb v.ch*****	220-240	50/60	I / II	88	350 525 700	114 170 225	IP66 IK09	50°C
ITALO 3 PIT3xywwzaaa12e_bb v.ch*****	220-240	50/60	I / II	96	350 525 700	124 185 246	IP66 IK09	50°C
ITALO 3 PIT3xywwzaaa13e_bb v.ch*****	220-240	50/60	I / II	104	350 525 700	134 200 266	IP66 IK09	50°C
ITALO 3 PIT3xywwzaaa14e_bb v.ch*****	220-240	50/60	I / II	112	350 525 700	145 215 286	IP66 IK09	50°C
ITALO 3 PIT3xywwzaaa15e_bb v.ch*****	220-240	50/60	I / II	120	350 525 700	155 231 306	IP66 IK09	50°C

Series / Models	Supply voltage V	Hz	Insulation class	N° Led	Iout max mA	Pmax W	IP degree	t _a
ITALO 3 BASIC PI3Bxywwzaaa08e_bb v.ch*****	220-240	50/60	I / II	64	350 525 700	84 124 165	IP66 IK09	50°C
ITALO 3 BASIC PI3Bxywwzaaa09e_bb v.ch*****	220-240	50/60	I / II	72	350 525 700	94 140 185	IP66 IK09	50°C
ITALO 3 BASIC PI3Bxywwzaaa10e_bb v.ch*****	220-240	50/60	I / II	80	350 525 700	104 155 205	IP66 IK09	50°C
ITALO 3 BASIC PI3Bxywwzaaa11e_bb v.ch*****	220-240	50/60	I / II	88	350 525 700	114 170 225	IP66 IK09	50°C
ITALO 3 BASIC PI3Bxywwzaaa12e_bb v.ch*****	220-240	50/60	I / II	96	350 525 700	124 185 246	IP66 IK09	50°C
ITALO 3 BASIC PI3Bxywwzaaa13e_bb v.ch*****	220-240	50/60	I / II	104	350 525 700	134 200 266	IP66 IK09	50°C
ITALO 3 BASIC PI3Bxywwzaaa14e_bb v.ch*****	220-240	50/60	I / II	112	350 525 700	145 215 286	IP66 IK09	50°C
ITALO 3 BASIC PI3Bxywwzaaa15e_bb v.ch*****	220-240	50/60	I / II	120	350 525 700	155 231 306	IP66 IK09	50°C

Pagina 35 di 36

COMMITTENTE:	FUNDO SRL VIA GIARDINI SUD 52 - 41026 PAVULLO NF STRADA VIGNOLESE 1175 - 41126 MODENA
OGGETTO:	PROGETTO DI ILLUMINAZIONE PUBBLICA ESTERNA PER IL COMPARTO A11.b DEL POLO SOVRACOMUNALE MADONNA BALDACCINI AMBITI ASP 2.9 – 2.10



Annex 1 to Authorization letter dated
2016/06/01

LEGEND ITALO 3 - ITALO 3 BASIC

x	Fixing Type	0 = post-top / bracket Ø33 - Ø60 1 = post-top / bracket Ø60 - Ø76 x = other type of fixing
y	Number of revision	0,1,2,...9,A,B,C,...Z
ww	Optic Type	0H = SL ww = Other type of optic
z	Colour temperature of LED	3 = 3000K 4 = 4000K 5 = 5000K 6 = 5700K z = Other temperature ≤ 5700K available
aaa	LED current	350 = 350 mA 525 = 525 mA 700 = 700 mA aaa = other current ≤ 700 mA
bb	Finishing equipment	Letters or numbers indicating different colors of the luminaire for marketing purpose only and no impact safety related constructions and critical components.
e	Insulation class	1 = class I 2 = class II
c	Dimming version	0 = No dimming 1 = Dimming-Auto 2 = Dimming-Auto custom 3 = Step-Dimming 4 = Step-Dimming inverse 5 = Step-Dimming with timer 6 = Step-Dimming inverse with timer 7 = Mains dimming 9 = 1-10V EXT A = DALI EXT E = NEMA SOCKET (IP65) c = Other type of control
h	Surge protection device	0 = with SPD 1 = with TMOV 2 = without protection device
*	Code for internal use by manufacturer	

Pagina 36 di 36

COMMITTENTE:	FUNDO SRL VIA GIARDINI SUD 52 - 41026 PAVULLO NF STRADA VIGNOLESE 1175 - 41126 MODENA
OGGETTO:	PROGETTO DI ILLUMINAZIONE PUBBLICA ESTERNA PER IL COMPARTO A11.b DEL POLO SOVRACOMUNALE MADONNA BALDACCINI AMBITI ASP 2.9 – 2.10

4.3 Indice IPEA



Indice di prestazione degli apparecchi di illuminazione IPEA

DATI APPARECCHIO LED

Produttore: AEC Illuminazione S.r.l.
Apparecchio: ITALO 1 0F2H1 STU-S 4.7-3M
Tc: 4000 K
CRI: >70
Flusso apparecchio: 7030 lm
Potenza apparecchio: 58,0 W
Efficienza apparecchio: 121 lm/W

A++	IPEA > 1.15
A+	1.10 < IPEA < 1.15
A	1.05 < IPEA < 1.10
B	1.00 < IPEA < 1.05
C	0.93 < IPEA < 1.00
D	0.84 < IPEA < 0.93
E	0.75 < IPEA < 0.84
F	0.65 < IPEA < 0.75
G	IPEA < 0.65

CLASSIFICAZIONE ENERGETICA

Illuminazione stradale e di grandi aree	IPEA = 1,86	A++
Illuminazione di percorsi ciclopedonali	IPEA = 2,16	A++
Illuminazione di aree verdi e parchi	IPEA = 2,20	A++
Illuminazione di centri storici con corpi illuminanti artistici	IPEA = 2,12	A++

EFFICIENZA GLOBALE DI RIFERIMENTO (η_r)

	Illuminazione stradale e di grandi aree	Percorsi ciclopedonali	Aree verdi e parchi	Centri storici e apparecchi artistici
(W)	(lm / W)	(lm / W)	(lm / W)	(lm / W)
P ≤ 55	60	50	49	51
55 < P ≤ 75	65	56	55	57
75 < P ≤ 105	75	58	57	58
105 < P ≤ 155	81	63	62	63
155 < P ≤ 255	93	67	66	68
255 < P ≤ 405	99	67	66	68

$$IPEA = \frac{\eta_a}{\eta_r}$$

AEC ILLUMINAZIONE Srl, 52010 SUBBIANO (AREZZO) ITALY - Via A. Righi, 4 Zona Ind.le Castelnuovo
 Tel. +39.0575.42151 - Fax +39.0575.420878 - www.aecilluminazione.com

Stampato il 04/12/2017

COMMITTENTE:	FUNDO SRL VIA GIARDINI SUD 52 - 41026 PAVULLO NF STRADA VIGNOLESE 1175 - 41126 MODENA
OGGETTO:	PROGETTO DI ILLUMINAZIONE PUBBLICA ESTERNA PER IL COMPARTO A11.b DEL POLO SOVRACOMUNALE MADONNA BALDACCINI AMBITI ASP 2.9 – 2.10

4.4 Gruppo di riferimento in materia del rischio foto biologico



STATEMENT OF COMPLIANCE

Photobiological safety of Lamp and Lamp system

Project No.: 4786114396
 Applicant: AEC Illuminazione SRL
 Product: LED Luminaire for street lighting
 Manufacturer: AEC Illuminazione SRL
 Trademark: AEC Illuminazione SRL
 Model/Type: ITALO 1
 Ratings: AC 120-277 V 50/60 Hz
 Test Standards: IEC/EN 62471
 Test Report No.: 4786114396.2.1
 Lamp Classification Group: **EXEMPT**
 Date of issue: 2013-11-28
 Laboratory Manager: Walter Parmiani


The product complies with the standards IEC 62471:2006 and EN 62471:2008 based on EU Directive 2006/25(EC). This statement of compliance applies only to the particular sample of the product and its technical documentation provided for testing. It is the responsibility of the company shown above that the products are in compliance with the applicable requirements. The detailed test results are described in the test report mentioned above. This statement does not imply assessment of the production and does not permit the use of UL's logo.

UL International Italia S.r.l.
 Via XXV Aprile 3B, 20875 Burago di Molgora (MB), Italy
 T: +39.039.63.85.801 / F: +39.039.63.85.865 / W: UL.com

Sede Legale Via Anichimide, 42, 20864 Agrate Brianza (MB)
 Cap. soc. € 10.400 i.v. C.F. e Iscrizione CCIAA di Monza e Brianza n. 01796660908 -
 iscritto al n. 0803080 del REA istituito presso la CCIAA di Monza e Brianza
 Soggetta a direzione e coordinamento di UL Inc., Northbrook (IL), USA

COMMITTENTE:	FUNDO SRL VIA GIARDINI SUD 52 - 41026 PAVULLO NF STRADA VIGNOLESE 1175 - 41126 MODENA
OGGETTO:	PROGETTO DI ILLUMINAZIONE PUBBLICA ESTERNA PER IL COMPARTO A11.b DEL POLO SOVRACOMUNALE MADONNA BALDACCINI AMBITI ASP 2.9 – 2.10



Notes:

ITALO 1 **af b c.d-e**

SYMBOL	DESCRIPTION	VALUES
a	Mechanical review	From 0 to x
f	LED type - LED module	F2 = 2 LED LUXEON for each module (STA, STA1) F3 = 3 LED LUXEON-M for each module (STE-M, STE-S, STW) F2H1 = 2 LED LUXEON-M + 1 LED LUXEON-T for each module (STU-M, STU-S, SV)
b	Optic	STE-M: Asymmetrical optic for street lighting (extraurban) STE-S: Asymmetrical optic for street lighting (extraurban) STU-M: Asymmetrical optic for street lighting (urban) STU-S: Asymmetrical optic for street lighting (urban) STW: Asymmetrical optic for wide roads and wet asphalts lighting SV: Asymmetrical optic for narrow urban streets or highway STA, STA1: Asymmetrical optic for V and P categories
c	Colour temperature	3 = 3000K 4 = 4000K 6 = 5700K k ≤ 5700K
d	Driving current	3 = 350mA 5 = 525mA 7 = 700mA k ≤ 700mA
e	LED module number	1M ÷ 4M @ k ≤ 700mA

2013-11-28
Date of issue

Walter Parmiani
Walter Parmiani
Laboratory Manager

UL International Italia S.r.l.
Via XXV Aprile 3B, 20875 Burago di Molgora (MB), Italy
T: +39.039.63.85.801 / F: +39.039.63.85.865 / W: UL.com

Sede Legale Via Archimede, 42, 20864 Agrate Brianza (MB)
Cap. soc. € 10.400 i.v. C.F. e iscrizione CCIAA di Monza e Brianza n. 01796660908 -
iscritta al n. MB055890 del REA istituto presso la CCIAA di Monza e Brianza
Soggetta a direzione e coordinamento di [UL Inc.], Northbrook (IL), USA

COMMITTENTE:	FUNDO SRL VIA GIARDINI SUD 52 - 41026 PAVULLO NF STRADA VIGNOLESE 1175 - 41126 MODENA
OGGETTO:	PROGETTO DI ILLUMINAZIONE PUBBLICA ESTERNA PER IL COMPARTO A11.b DEL POLO SOVRACOMUNALE MADONNA BALDACCINI AMBITI ASP 2.9 – 2.10

4.5 Misurazione fotometrica dell'apparecchio

Photometric Test Report

Test Report No. x-rep-code-x



Costruttore	AEC ILLUMINAZIONE SRL
Tipo di prodotto	Outdoor Lighting Luminaire
Codice fotometria	ITALO 1 0F2H1 STU-S 4.7-3M
Codice apparecchio	ITALO 1 0F2H1 STU-S 4.7-3M
Rilievo fotometrico	17-077-107
Descrizione apparecchio	ITALO 1 0F2H1 STU-S 4.7-3M
Data delle prove	24/07/2017

Foto del prodotto



Responsabile laboratorio fotometrico	Luca Vagheggi	
Tecnico laboratorio che ha eseguito la misura	Alessio Vagheggi	

AEC testing laboratory is recognized by UL for photometric testing in accordance with the following standards: UNE EN 13032-1:2012 Measurement and presentation of photometric data of lamps and luminaires Part1: Measurement and file format, UNI 11356:2010 Caratterizzazione fotometrica degli apparecchi di illuminazione a LED, IES LM-79-08 "Electrical and Photometric Measurement of Solid-State Lighting Products sec.3, 9.1, 9.2, 10, 12.1 "Test method for total luminous flux and colour quantifier measurement".
AEC ILLUMINAZIONE SRL - Via A. Righi, 4 - 22 Castelnovo S2010 Subbiano(AR) | Tel 0575041110/Fax 0575420878 - P.IVA: 00343170510



COMMITTENTE:	FUNDO SRL VIA GIARDINI SUD 52 - 41026 PAVULLO NF STRADA VIGNOLESE 1175 - 41126 MODENA
OGGETTO:	PROGETTO DI ILLUMINAZIONE PUBBLICA ESTERNA PER IL COMPARTO A11.b DEL POLO SOVRACOMUNALE MADONNA BALDACCINI AMBITI ASP 2.9 – 2.10

Photometric Test Report



DATI APPARECCHIO

Geometria apparecchio	Rettangolare		
Dimensioni apparecchio (mm)	Lunghezza / Diametro	Larghezza	Altezza
	615	343	106
Dimensioni area luminosa (mm)	Lunghezza / Diametro	Larghezza	Altezza C0
	120	220	0
	Altezza C90	Altezza C180	Altezza C270
	0	0	0
Tipo sorgente	LED		
Modello sorgente	Luxeon-Mx-Luxeon-Tx		
Tipo Alimentatore	Elettronico / Electronic		
Modello Alimentatore	OSRAM OT90		

NORMATIVE DI RIFERIMENTO

Normative di riferimento	EN 13032-1:2012 EN 13032-4:2015 IES LM-79-08
Valutazione luce parassita	In accordo con Annex A UNI EN 13032-1

PROCEDURE DI RIFERIMENTO

Procedure di riferimento	I-QL-009
---------------------------------	----------

AEC testing laboratory is recognized by UL for photometric testing in accordance with the following standards: ILM EN 13032-1:2012 Measurement and presentation of photometric data of lamps and luminaires Part1: Measurement and file format, UNI 11356:2010 Caratterizzazione fotometrica degli apparecchi di illuminazione a LED, IES LM-79-08 "Electrical and Photometric Measurement of Solid-State Lighting Products sec. 9, 9.1, 9.2, 12, 12.1 "(Test method for total luminous flux and colour quantities measurement).

AEC ILLUMINAZIONE SRL - Via A. Righi, 4 - 21100 Castelmarte 20100 Sabbioneta (AR) | Tel 0575941110/Fax 0575420878 - P.IVA: 00343170510



COMMITTENTE:	FUNDO SRL VIA GIARDINI SUD 52 - 41026 PAVULLO NF STRADA VIGNOLESE 1175 - 41126 MODENA
OGGETTO:	PROGETTO DI ILLUMINAZIONE PUBBLICA ESTERNA PER IL COMPARTO A11.b DEL POLO SOVRACOMUNALE MADONNA BALDACCINI AMBITI ASP 2.9 – 2.10

Photometric Test Report



RISULTATI FOTOMETRICI

Tipo di misura fotometrica	Assoluta
LOR (%)	100.0
Flusso luminoso apparecchio (lm)	7030
Potenza ingresso apparecchio (W)	58.0
Efficienza apparecchio (lm/W)	121
Note e commenti	

LISTA STRUMENTAZIONE

CODICE AEC	STRUMENTO	COSTRUTTORE	MODELLO
Q129	Luxmetro	Czibula&Grundmann	100310
Q130	Goniofotometro	Oxytech	T2
Q131	Termoigrometro	Delta Ohm	HD2001
Q132	Wattmetro	N4L	PPA2510
Q135	Stabilizzatore	Elettrotest	TPS/M/9KW
Q190	Sfera Integratrice	Labsphere	LMS65
Q195	Spettroradiometro	Labsphere	CDS610

INCERTEZZA STRUMENTALE

Encoder goniometrometro Oxytech T2	Precisione angolare in C – gamma	$\pm 0.044^\circ$
Luxmetro C&G	f1'	$< 1.23\%$
Spettroradiometro	Incertezza lunghezza d'onda	$< 0.5\text{nm}$
	Incertezza coordinate cromatiche	± 0.003
Wattmetro Kinetiq N4L PPA2510	Accuratezza di potenza	$< [0.05\% + 0.03\%/pf + (0.01\%/kHz)]pf] R_{dg} + 0.05\%VA$ Rng

AEC testing laboratory is recognized by UL for photometric testing in accordance with the following standards: UNI EN 13032-1:2012 Measurement and presentation of photometric data of lamps and luminaires Part 1: Measurement and file format, UNI 11356:2010 Caratterizzazione fotometrica degli apparecchi di illuminazione a LED, IES LM-79-08 "Electrical and Photometric Measurement of Solid-State Lighting Products sec.9, 9.1, 9.2, 12, 12.1, 12.1.1" (Test method for total luminous flux and colour quantities measurement).

AEC ILLUMINAZIONE SRL - Via A.Right, 4 - Z.I. Castelnuovo S2010 Subbiano(AR) | Tel 0575041110/Fax 0575420878 - P.IVA: 00343170530

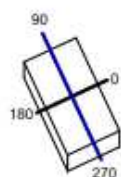


COMMITTENTE:	FUNDO SRL VIA GIARDINI SUD 52 - 41026 PAVULLO NF STRADA VIGNOLESE 1175 - 41126 MODENA
OGGETTO:	PROGETTO DI ILLUMINAZIONE PUBBLICA ESTERNA PER IL COMPARTO A11.b DEL POLO SOVRACOMUNALE MADONNA BALDACCINI AMBITI ASP 2.9 – 2.10



Apparecchio		Rilievo		Lampada		
Codice	ITALO 1 0F2H1 STU-S 4.7-3M	Codice	17-077-107	Codice	L-IT1-0F2H1-4000-700-3M-70-	
Nome	ITALO 1 0F2H1 STU-S 4.7-3M	Nome	ITALO 1 0F2H1 STU-S 4.7-3M	Numero	1	
Archivio	Eulundat	Data	24-07-2017	Posizione		
Flusso Apparecchio	7030.00 lm	Potenza Apparecchio	58.00 W	Efficacia	121.21 lm/W	
				Rendimento	100.00%	
Flusso Lampade	7030.00 lm	Valore Massimo	715.83 cd/klm	Posizione	C=10.00 G=70.00	
				CG	Asimmetrico	
Apparecchio Rettangolare	Lung.	615 mm	Larg.	343 mm	Alt.	106 mm
Area Luminosa Rettangolare	Lung.	120 mm	Larg.	220 mm	Alt.	0 mm
Area Luminosa Orizzontale	0.026400 m2		Area Luminosa Piano 180°	0.000000 m2		
Area Luminosa Piano 0°	0.000000 m2		Area Luminosa Piano 270°	0.000000 m2		
Area Luminosa Piano 90°	0.000000 m2		Area Luminosa a 76°	0.006387 m2		
Sistema Coordinate	CG		Tipo di Simmetria	Asimmetrico		
Data	24-07-2017		Massimo Angolo Gamma	180		
Lampade Apparecchio						
Archivio	Codice	Nome	Flusso [lm]	Pot. [W]	Q.tà	
	L-IT1-0F2H1-4000-700-3M-70-25	ITALO 1 0F2H1-4000-700-3M-70-25	58.00 W	7030.00	58.00	1
C.I.E.	40 72 96 100 100	D DIN 5040	A20			
F UTE	1.00 G	B NBN	BZ 5			

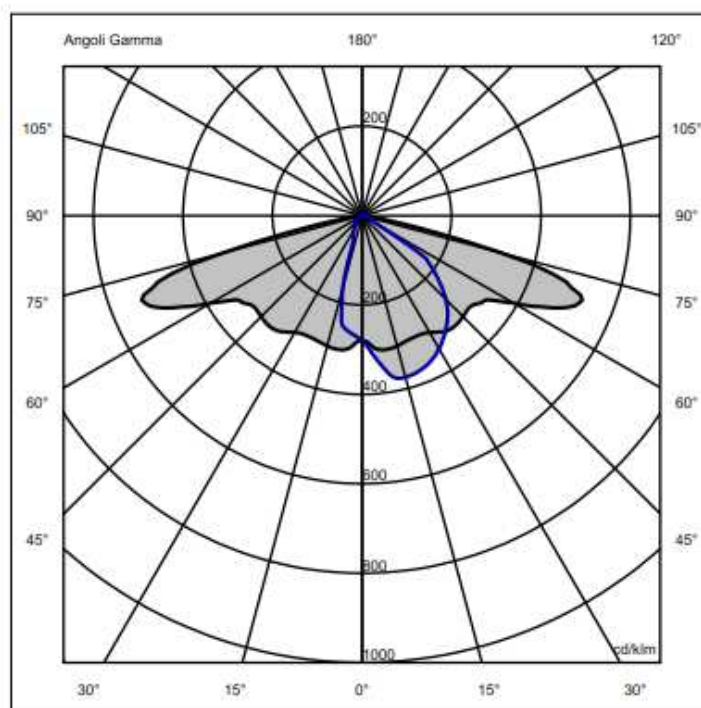
615mm x 343mm



Semipiani C

180.0 — 0.0
270.0 — 90.0

ULOR 0.00 %
DLOR 100.00 %
RN 0.00 %



Pagina 1

COMMITTENTE:	FUNDO SRL VIA GIARDINI SUD 52 - 41026 PAVULLO NF STRADA VIGNOLESE 1175 - 41126 MODENA
OGGETTO:	PROGETTO DI ILLUMINAZIONE PUBBLICA ESTERNA PER IL COMPARTO A11.b DEL POLO SOVRACOMUNALE MADONNA BALDACCINI AMBITI ASP 2.9 – 2.10



Apparecchio Codice ITALO 1 0F2H1 STU-S 4.7-3M Nome ITALO 1 0F2H1 STU-S 4.7-3M Archivio Eulundat	Rilievo Codice 17-077-107 Nome ITALO 1 0F2H1 STU-S 4.7-3M Data 24-07-2017	Lampada Codice L-IT1-0F2H1-4000-700-3M-70-25 Numero 1 Posizione
Flusso Apparecchio 7030.00 lm	Potenza Apparecchio 58.00 W	Efficacia 121.21 lm/W
Flusso Lampade 7030.00 lm	Valore Massimo 715.83 cd/klm	Posizione C=10.00 G=70.00 CG Asimmetrico

Tabella Intensità Luminosa - cd/klm													Tabella 1/18														
	C 0.00	C 5.00	C 10.00	C 15.00	C 20.00	C 25.00	C 30.00	C 35.00	C 40.00	C 45.00	C 50.00	C 55.00	C 60.00		C 0.00	C 5.00	C 10.00	C 15.00	C 20.00	C 25.00	C 30.00	C 35.00	C 40.00	C 45.00	C 50.00	C 55.00	C 60.00
G 0.0	279.02	279.02	279.02	279.02	279.02	279.02	279.02	279.02	279.02	279.02	279.02	279.02	279.02	G 0.0	279.02	279.02	279.02	279.02	279.02	279.02	279.02	279.02	279.02	279.02	279.02	279.02	279.02
G 1.0	280.57	279.79	279.68	280.52	280.28	281.18	280.95	282.33	281.69	282.61	282.18	283.61	283.43	G 1.0	280.57	279.79	279.68	280.52	280.28	281.18	280.95	282.33	281.69	282.61	282.18	283.61	283.43
G 2.0	282.18	281.25	280.56	282.85	282.62	284.63	284.31	286.43	285.81	287.38	287.34	289.34	289.08	G 2.0	282.18	281.25	280.56	282.85	282.62	284.63	284.31	286.43	285.81	287.38	287.34	289.34	289.08
G 3.0	285.41	283.28	283.65	285.88	286.01	288.16	288.65	291.02	290.92	293.36	293.21	295.69	295.37	G 3.0	285.41	283.28	283.65	285.88	286.01	288.16	288.65	291.02	290.92	293.36	293.21	295.69	295.37
G 4.0	291.29	285.74	286.31	289.64	289.98	292.88	294.19	297.38	297.06	300.13	300.20	303.64	303.28	G 4.0	291.29	285.74	286.31	289.64	289.98	292.88	294.19	297.38	297.06	300.13	300.20	303.64	303.28
G 5.0	296.73	291.94	291.53	296.44	295.53	299.76	299.47	303.98	303.48	307.64	307.63	310.75	310.33	G 5.0	296.73	291.94	291.53	296.44	295.53	299.76	299.47	303.98	303.48	307.64	307.63	310.75	310.33
G 6.0	299.45	299.14	299.08	305.11	304.29	309.56	308.54	313.77	311.84	316.45	316.03	318.83	318.39	G 6.0	299.45	299.14	299.08	305.11	304.29	309.56	308.54	313.77	311.84	316.45	316.03	318.83	318.39
G 7.0	301.39	303.96	305.76	311.62	312.36	319.59	319.62	325.34	322.24	326.99	323.88	326.31	325.83	G 7.0	301.39	303.96	305.76	311.62	312.36	319.59	319.62	325.34	322.24	326.99	323.88	326.31	325.83
G 8.0	302.92	306.44	308.98	316.42	319.59	326.47	326.32	334.43	334.37	336.82	333.19	336.19	335.63	G 8.0	302.92	306.44	308.98	316.42	319.59	326.47	326.32	334.43	334.37	336.82	333.19	336.19	335.63
G 9.0	303.90	309.30	313.61	321.91	325.64	333.61	335.26	342.59	343.39	346.27	344.22	346.38	345.73	G 9.0	303.90	309.30	313.61	321.91	325.64	333.61	335.26	342.59	343.39	346.27	344.22	346.38	345.73
G 10.0	304.32	310.91	317.01	325.84	332.02	341.14	344.69	351.40	351.16	355.05	353.54	355.23	354.57	G 10.0	304.32	310.91	317.01	325.84	332.02	341.14	344.69	351.40	351.16	355.05	353.54	355.23	354.57
G 11.0	304.30	312.10	319.46	329.81	337.57	347.76	351.67	358.60	359.14	362.57	361.28	362.66	361.52	G 11.0	304.30	312.10	319.46	329.81	337.57	347.76	351.67	358.60	359.14	362.57	361.28	362.66	361.52
G 12.0	304.06	312.90	321.57	333.03	342.15	353.00	358.59	365.04	366.20	369.47	368.28	369.08	367.99	G 12.0	304.06	312.90	321.57	333.03	342.15	353.00	358.59	365.04	366.20	369.47	368.28	369.08	367.99
G 13.0	303.41	313.34	323.64	335.75	346.57	357.48	364.00	370.52	373.21	375.11	374.11	373.65	372.47	G 13.0	303.41	313.34	323.64	335.75	346.57	357.48	364.00	370.52	373.21	375.11	374.11	373.65	372.47
G 14.0	302.76	313.69	324.93	338.84	350.20	361.37	368.03	375.05	377.44	380.18	379.46	378.04	376.47	G 14.0	302.76	313.69	324.93	338.84	350.20	361.37	368.03	375.05	377.44	380.18	379.46	378.04	376.47
G 15.0	301.97	313.60	326.17	341.09	353.41	364.66	371.59	378.35	382.05	383.79	383.19	380.38	378.59	G 15.0	301.97	313.60	326.17	341.09	353.41	364.66	371.59	378.35	382.05	383.79	383.19	380.38	378.59
G 16.0	300.61	313.48	327.29	342.93	355.97	367.03	374.86	381.70	385.23	386.78	385.89	382.45	380.59	G 16.0	300.61	313.48	327.29	342.93	355.97	367.03	374.86	381.70	385.23	386.78	385.89	382.45	380.59
G 17.0	299.72	313.10	328.18	344.77	358.03	369.02	377.39	383.98	387.69	388.29	387.70	383.50	381.63	G 17.0	299.72	313.10	328.18	344.77	358.03	369.02	377.39	383.98	387.69	388.29	387.70	383.50	381.63
G 18.0	298.47	312.22	328.98	346.61	359.71	370.92	379.05	385.43	389.62	389.08	388.77	384.03	382.16	G 18.0	298.47	312.22	328.98	346.61	359.71	370.92	379.05	385.43	389.62	389.08	388.77	384.03	382.16
G 19.0	297.82	312.59	329.74	347.75	361.54	372.43	380.60	386.37	390.21	389.19	388.99	384.09	382.16	G 19.0	297.82	312.59	329.74	347.75	361.54	372.43	380.60	386.37	390.21	389.19	388.99	384.09	382.16
G 20.0	296.86	312.64	330.75	349.17	362.77	373.41	381.73	386.62	390.33	388.58	388.75	383.65	381.63	G 20.0	296.86	312.64	330.75	349.17	362.77	373.41	381.73	386.62	390.33	388.58	388.75	383.65	381.63
G 21.0	296.34	312.31	331.36	350.29	363.75	374.46	382.32	386.39	389.53	387.43	387.89	382.97	380.91	G 21.0	296.34	312.31	331.36	350.29	363.75	374.46	382.32	386.39	389.53	387.43	387.89	382.97	380.91
G 22.0	295.93	312.54	332.49	351.34	364.70	374.97	382.46	385.69	388.86	386.81	387.45	382.67	380.61	G 22.0	295.93	312.54	332.49	351.34	364.70	374.97	382.46	385.69	388.86	386.81	387.45	382.67	380.61
G 23.0	295.52	312.67	333.61	352.48	365.65	375.20	382.37	384.57	386.95	384.31	384.31	377.82	375.77	G 23.0	295.52	312.67	333.61	352.48	365.65	375.20	382.37	384.57	386.95	384.31	384.31	377.82	375.77
G 24.0	295.47	313.12	335.10	353.41	366.35	375.47	381.75	382.89	385.06	381.45	382.01	377.77	375.79	G 24.0	295.47	313.12	335.10	353.41	366.35	375.47	381.75	382.89	385.06	381.45	382.01	377.77	375.79
G 25.0	295.67	313.54	338.88	354.52	367.27	375.40	380.47	381.03	382.38	378.75	379.56	374.64	372.64	G 25.0	295.67	313.54	338.88	354.52	367.27	375.40	380.47	381.03	382.38	378.75	379.56	374.64	372.64
G 26.0	295.94	314.70	337.25	355.22	367.58	374.88	379.40	379.82	380.06	376.37	377.07	373.14	370.14	G 26.0	295.94	314.70	337.25	355.22	367.58	374.88	379.40	379.82	380.06	376.37	377.07	373.14	370.14
G 27.0	296.69	315.74	338.55	356.14	367.97	374.24	377.72	378.20	377.35	373.26	374.21	370.51	367.46	G 27.0	296.69	315.74	338.55	356.14	367.97	374.24	377.72	378.20	377.35	373.26	374.21	370.51	367.46
G 28.0	297.88	316.94	340.12	357.00	368.11	373.36	375.78	373.52	374.41	370.52	371.91	368.04	364.99	G 28.0	297.88	316.94	340.12	357.00	368.11	373.36	375.78	373.52	374.41	370.52	371.91	368.04	364.99
G 29.0	299.79	318.97	341.66	357.89	368.18	371.69	373.38	370.86	371.19	368.86	369.67	366.84	363.79	G 29.0	299.79	318.97	341.66	357.89	368.18	371.69	373.38	370.86	371.19	368.86	369.67	366.84	363.79
G 30.0	301.67	321.12	343.73	358.72	367.94	370.50	370.78	367.48	368.47	364.87	366.33	363.69	360.54	G 30.0	301.67	321.12	343.73	358.72	367.94	370.50	370.78	367.48	368.47	364.87	366.33	363.69	360.54
G 31.0	304.63	324.09	346.41	359.95	367.89	368.83	368.30	364.61	365.31	361.97	363.79	361.30	358.14	G 31.0	304.63	324.09	346.41	359.95	367.89	368.83	368.30	364.61	365.31	361.97	363.79	361.30	358.14
G 32.0	307.46	327.51	347.77	361.56	367.89	367.05	365.31	361.47	362.33	359.56	361.28	358.91	355.65	G 32.0	307.46	327.51	347.77	361.56	367.89	367.05	365.31	361.47	362.33	359.56	361.28	358.91	355.65
G 33.0	310.47	331.58	350.53	362.88	367.64	364.87	362.38	358.09	359.76	357.34	358.98	356.50	353.24	G 33.0	310.47	331.58	350.53	362.88	367.64	364.87	362.38	358.09	359.76	357.34	358.98	356.50	353.24
G 34.0	313.75	335.69	353.88	364.64	367.58	362.96	359.49	355.57	357.39	355.04	356.72	354.36	351.09	G 34.0	313.75	335.69	353.88	364.64	367.58	362.96	359.49	355.57	357.39	355.04	356.72	354.36	351.09
G 35.0	316.95	340.12	356.86	366.75	367.66	360.63	356.33	352.99	354.99	353.30	354.56	351.81	348.46	G 35.0	316.95	340.12	356.86	366.75	367.66	360.63	356.33	352.99	354.99	353.30	354.56	351.81	348.46
G 36.0	319.95	345.22	360.79	368.73	367.58	358.56	354.26	350.73	352.85	351.63	352.70	349.41	346.14	G 36.0	319.95	345.22	360.79	368.73	367.58	358.56	354.26	350.73	352.85	351.63	352.70	349.41	346.14
G 37.0	320.78	350.13	364.58	371.30	367.81	356.49	350.88	348.56	351.22	350.09	350.58	346.63	343.27	G 37.0	320.78	350.13	364.58	371.30	367.81	356.49	350.88	348.56	351.22	350.09	350.58	346.63	343.27
G 38.0	322.69	3																									

COMMITTENTE:	FUNDO SRL VIA GIARDINI SUD 52 - 41026 PAVULLO NF STRADA VIGNOLESE 1175 - 41126 MODENA
OGGETTO:	PROGETTO DI ILLUMINAZIONE PUBBLICA ESTERNA PER IL COMPARTO A11.b DEL POLO SOVRACOMUNALE MADONNA BALDACCINI AMBITI ASP 2.9 – 2.10



Apparecchio			Rilievo			Lampada						
Codice Nome Archivio	ITALO 1 0F2H1 STU-S 4.7-3M ITALO 1 0F2H1 STU-S 4.7-3M Eulundat		Codice Nome Data	17-07-107 ITALO 1 0F2H1 STU-S 4.7-3M 24-07-2017		Codice Numero 1 Posizione	L-IT1-0F2H1-4000-700-3M-70-25					
Flusso Apparecchio	7030.00 lm	Potenza Apparecchio	58.00 W	Efficacia	121.21 lm/W	Rendimento	100.00%					
Flusso Lampade	7030.00 lm	Valore Massimo	715.83 cd/klm	Posizione	C=10.00 G=70.00	CG	Asimmetrico					
Tabella Intensità Luminosa - cd/klm												
Tabella 2/18												
C 65.00	C 70.00	C 75.00	C 80.00	C 85.00	C 90.00	C 95.00	C 100.00	C 105.00	C 110.00	C 115.00	C 120.00	C 125.00
G 0.0	279.02	279.02	279.02	279.02	279.02	279.02	279.02	279.02	279.02	279.02	279.02	279.02
G 1.0	283.98	283.42	284.33	283.41	283.69	284.30	283.69	283.41	284.33	283.42	283.98	283.61
G 2.0	289.88	288.98	290.69	290.08	291.36	290.56	291.36	290.08	290.69	288.98	289.88	289.34
G 3.0	297.81	296.95	299.00	297.55	299.38	298.66	299.38	297.55	299.00	296.95	297.81	295.37
G 4.0	305.51	304.71	307.23	306.45	307.76	307.84	307.76	306.45	307.23	304.71	305.51	302.66
G 5.0	313.89	312.41	315.57	314.19	316.07	316.36	316.07	314.19	315.57	312.41	313.89	311.03
G 6.0	321.28	321.10	323.92	323.44	325.17	325.90	325.17	323.44	323.92	321.10	321.28	318.99
G 7.0	329.18	329.39	332.34	332.72	334.16	334.03	334.16	332.72	332.34	329.39	329.18	326.31
G 8.0	335.96	336.56	340.83	340.70	343.67	343.89	343.67	340.70	340.83	336.56	335.96	333.72
G 9.0	343.06	344.35	347.49	348.71	351.97	353.06	351.97	347.49	348.71	344.35	343.06	342.07
G 10.0	349.63	350.35	353.76	356.16	359.57	361.88	359.57	356.16	353.76	350.35	349.63	348.83
G 11.0	356.03	356.23	359.09	362.26	364.70	368.02	364.70	362.26	359.09	356.23	356.03	358.22
G 12.0	360.86	358.25	359.20	365.25	366.85	371.70	366.85	365.25	359.20	358.25	360.86	366.19
G 13.0	365.11	360.46	358.70	365.54	367.49	373.56	367.49	365.54	358.70	360.46	365.11	370.73
G 14.0	367.31	361.64	357.35	364.81	367.11	373.97	367.11	364.81	357.35	361.64	367.31	374.30
G 15.0	368.42	362.01	355.67	363.09	366.49	373.77	366.49	363.09	355.67	362.01	368.42	376.46
G 16.0	368.82	362.77	354.84	361.30	365.58	373.83	365.58	361.30	354.84	362.77	368.82	377.83
G 17.0	369.40	363.12	354.14	359.33	364.10	373.36	364.10	359.33	354.14	363.12	369.40	378.85
G 18.0	369.74	363.39	353.51	357.14	362.79	372.91	362.79	353.51	363.39	369.74	379.31	384.03
G 19.0	370.01	363.15	352.83	355.06	361.21	371.81	361.21	355.06	352.83	363.15	370.01	379.68
G 20.0	370.08	362.89	352.41	352.63	358.95	370.29	358.95	352.63	352.41	362.89	370.08	379.80
G 21.0	369.73	362.70	351.96	350.68	357.03	368.90	357.03	350.68	351.96	362.70	369.73	379.41
G 22.0	369.34	362.34	351.54	348.92	354.70	367.47	354.70	348.92	351.54	362.34	369.34	378.87
G 23.0	368.44	362.31	351.05	347.18	352.12	365.54	352.12	347.18	351.05	362.31	368.44	377.82
G 24.0	367.78	361.75	350.34	345.65	349.73	363.42	349.73	345.65	350.34	361.75	367.78	376.29
G 25.0	366.50	361.27	349.58	343.70	346.56	361.56	346.56	343.70	349.58	361.27	366.50	374.84
G 26.0	365.95	360.50	348.96	342.15	344.01	357.77	344.01	342.15	348.96	360.50	365.95	372.73
G 27.0	364.43	360.14	348.35	340.76	340.62	354.74	340.62	340.76	348.35	360.14	364.43	371.02
G 28.0	363.05	359.31	347.64	339.21	337.65	351.54	337.65	339.21	347.64	359.31	363.05	368.91
G 29.0	361.54	358.66	346.84	337.96	334.14	347.84	334.14	337.96	346.84	358.66	361.54	366.84
G 30.0	359.95	357.77	345.94	336.31	331.14	344.14	331.14	336.31	345.94	357.77	359.95	364.88
G 31.0	358.15	356.61	344.80	334.56	327.63	340.30	327.63	334.56	344.80	356.61	358.15	362.89
G 32.0	356.23	354.89	343.25	332.39	324.03	336.68	324.03	332.39	343.25	354.89	356.23	360.50
G 33.0	354.00	353.14	341.52	330.17	320.22	331.50	320.22	330.17	341.52	353.14	354.00	358.24
G 34.0	351.01	351.06	339.61	327.65	316.25	327.33	316.25	327.65	339.61	351.06	351.01	355.79
G 35.0	348.12	348.44	337.28	324.99	312.25	323.07	312.25	324.99	337.28	348.44	348.12	353.38
G 36.0	344.97	345.33	334.76	322.49	308.60	317.87	308.60	322.49	345.33	344.97	344.97	350.55
G 37.0	341.64	342.19	331.57	319.41	304.66	312.99	304.66	319.41	331.57	342.19	341.64	347.33
G 38.0	337.67	338.17	327.70	316.03	300.34	307.66	300.34	316.03	327.70	338.17	337.67	343.86
G 39.0	333.79	333.92	323.38	311.65	295.17	302.91	295.17	311.65	323.38	333.92	333.79	340.37
G 40.0	329.63	329.54	318.60	307.69	297.41	290.35	297.41	307.69	318.60	329.54	329.63	336.66
G 41.0	324.46	323.69	313.00	302.53	284.92	292.28	284.92	302.53	313.00	323.69	324.46	332.81
G 42.0	319.22	318.45	306.47	297.43	285.63	279.12	285.63	297.43	306.47	318.45	319.22	329.08
G 43.0	314.52	311.51	299.90	290.73	273.52	278.91	273.52	290.73	299.90	311.51	314.52	325.44
G 44.0	309.65	304.42	291.33	283.80	266.27	271.64	266.27	283.80	291.33	304.42	309.65	322.19
G 45.0	304.88	297.45	283.64	276.04	259.04	264.44	259.04	276.04	283.64	297.45	304.88	319.59
G 46.0	301.38	290.80	274.83	269.32	251.09	257.10	251.09	269.32	274.83	290.80	301.38	318.83
G 47.0	297.32	283.23	265.48	259.67	242.68	248.23	242.68	259.67	265.48	283.23	297.32	319.30
G 48.0	291.76	274.56	256.71	251.23	234.74	240.42	234.74	251.23	256.71	274.56	291.76	319.98
G 49.0	284.74	265.35	246.11	242.25	225.75	231.30	225.75	242.25	246.11	265.35	284.74	317.89
G 50.0	275.76	256.12	236.82	232.02	216.90	222.94	216.90	232.02	236.82	256.12	275.76	312.83
G 51.0	263.97	244.43	226.91	222.47	208.19	213.84	208.19	222.47	226.91	244.43	263.97	306.25
G 52.0	249.03	232.99	216.73	213.81	199.13	205.55	199.13	213.81	216.73	232.99	249.03	295.81
G 53.0	233.91	222.00	206.66	204.30	190.57	197.24	190.57	204.30	206.66	222.00	233.91	278.36
G 54.0	220.39	211.01	197.41	195.50	181.02	188.24	181.02	195.50	197.41	211.01	220.39	256.01
G 55.0	206.62	200.26	187.15	186.34	173.35	180.79	173.35	186.34	187.15	200.26	206.62	236.69
G 56.0	195.46	190.18	179.09	177.56	161.49	171.82	161.49	177.56	179.09	190.18	195.46	219.80
G 57.0	184.71	179.91	165.37	161.10	132.01	144.66	132.01	161.10	165.37	179.91	184.71	205.67
G 58.0	174.43	167.25	130.75	127.19	89.22	106.34	89.22	127.19	130.75	167.25	174.43	192.84
G 59.0	150.13	133.84	87.56	81.74	49.36	63.00	49.36	81.74	87.56	133.84	150.13	180.24
G 60.0	109.17	95.94	51.93	48.54	40.86	42.63	40.86	48.54	51.93	95.94	109.17	167.01
G 61.0	71.67	55.36	44.75	42.25	37.21	38.38	37.21	42.25	44.75	55.36	71.67	136.21
G 62.0	50.60	46.84	41.10	38.51	34.09	35.11	34.09	38.51	41.10	46.84	50.60	93.52
G 63.0	45.83	42.85	37.95	35.72	30.97	32.26	30.97	35.72	37.95	42.85	45.83	61.62
G 64.0	42.49	39.79	34.79	32.54	28.66	29.08	28.66	32.54	34.79	39.79	42.49	49.84
G 65.0	38.98	36.45	32.14	30.41	26.53	26.83	26.53	30.41	32.14	36.45	38.98	45.80
G 66.0	36.32	33.61	29.75	28.00	24.56	24.77	24.56	28.00	29.75	33.61	36.32	42.14
G 67.0	33.55	31.48	27.73	26.10	22.89	23.11	22.89	26.10	27.73	31.48	33.55	39.21
G 68.0	31.29	29.11	25.16	24.28	21.15	21.34	21.15	24.28	25.16	29.11	31.29	36.35
G 69.0	29.98	27.02	23.97	22.47	19.64	19.87	19.64	22.47	23.97	27.02	29.98	33.73
G 70.0	26.78	25.16	22.32	20.88	18.15	18.36	18.15	20.88	22.32	25.16	26.78	31.30
G 71.0	24.84	23.44	20.60	19.31	16.73	16.79	16.73	19.31	20.60	23.44	24.84	28.92
G 72.0	23.01	21.52	19.01	17.79	15.40	15.51	15.40	17.79	19.01	21.52	23.01	26.54

COMMITTENTE:	FUNDO SRL
	VIA GIARDINI SUD 52 - 41026 PAVULLO NF STRADA VIGNOLESE 1175 - 41126 MODENA
OGGETTO:	PROGETTO DI ILLUMINAZIONE PUBBLICA ESTERNA PER IL COMPARTO A11.b DEL POLO SOVRACOMUNALE MADONNA BALDACCINI AMBITI ASP 2.9 – 2.10



Apparecchio		Rilievo		Lampada									
Codice	ITALO 1 0F2H1 STU-S 4.7-3M	Codice	17-077-107	Codice	L-IT1-0F2H1-4000-700-3M-70-25								
Nome	ITALO 1 0F2H1 STU-S 4.7-3M	Nome	ITALO 1 0F2H1 STU-S 4.7-3M	Numero	1								
Archivio	Eulundat	Data	24-07-2017	Posizione									
Flusso Apparecchio	7030.00 lm	Potenza Apparecchio	58.00 W	Efficacia	121.21 lm/W								
Flusso Lampade	7030.00 lm	Valore Massimo	715.83 cd/klm	Posizione	C=10.00 G=70.00								
				CG Asimmetrico									
Tabella Intensità Luminosa - cd/klm													
Tabella 3/18													
	C 130.00	C 135.00	C 140.00	C 145.00	C 150.00	C 155.00	C 160.00	C 165.00	C 170.00	C 175.00	C 180.00	C 185.00	C 190.00
G 0.0	279.02	279.02	279.02	279.02	279.02	279.02	279.02	279.02	279.02	279.02	279.02	279.02	279.02
G 1.0	282.18	282.61	281.69	282.33	280.95	281.18	280.28	280.52	279.68	279.79	280.57	279.36	278.76
G 2.0	287.34	287.38	285.81	286.43	284.31	284.63	282.62	282.85	280.96	281.25	282.18	280.37	279.72
G 3.0	293.21	293.35	290.92	291.02	288.65	288.16	286.01	285.88	283.65	283.28	285.41	281.57	280.43
G 4.0	300.20	300.13	297.06	297.38	294.19	292.88	289.98	289.64	286.31	285.74	291.29	284.17	283.89
G 5.0	307.63	307.64	303.48	303.98	299.47	299.76	295.53	296.44	291.53	291.94	296.73	290.00	289.51
G 6.0	315.03	316.45	311.84	313.77	308.54	309.56	304.29	305.11	299.08	299.14	299.45	294.96	292.72
G 7.0	323.88	326.99	322.24	325.34	319.62	319.59	312.36	311.62	306.76	306.56	301.39	297.23	293.78
G 8.0	333.18	336.82	334.37	334.43	328.32	326.47	319.59	316.42	309.98	306.44	302.92	298.43	294.20
G 9.0	344.22	346.27	343.39	342.59	336.26	333.61	325.54	321.91	313.81	309.30	303.90	298.65	293.50
G 10.0	353.54	355.05	351.16	351.40	344.69	341.14	332.02	325.84	317.01	310.91	304.32	298.48	292.60
G 11.0	361.28	362.57	359.14	358.60	351.67	347.76	337.57	329.81	319.46	312.10	304.30	298.18	291.32
G 12.0	368.28	369.47	366.20	365.04	358.59	353.00	342.15	333.03	321.57	312.90	304.06	297.35	289.66
G 13.0	374.11	375.11	373.21	370.52	364.00	357.48	346.57	336.75	323.64	313.34	303.41	296.38	288.27
G 14.0	379.46	380.18	377.44	375.05	368.03	361.37	350.20	338.84	324.93	313.59	302.76	295.11	286.30
G 15.0	383.19	383.79	382.05	378.35	371.59	364.66	353.41	341.09	326.17	313.60	301.97	293.31	284.15
G 16.0	385.89	386.78	385.23	381.70	374.86	367.03	355.97	342.93	327.29	313.48	300.61	292.11	282.24
G 17.0	387.70	388.29	387.69	383.98	377.39	369.02	358.03	344.77	328.18	313.10	299.72	290.36	280.48
G 18.0	388.77	389.08	389.62	385.43	379.05	370.52	359.71	346.61	328.98	313.22	298.47	288.15	278.51
G 19.0	388.99	389.19	389.21	385.37	378.60	370.43	361.54	347.75	328.74	312.69	297.82	286.86	276.80
G 20.0	388.75	388.58	389.33	386.62	381.73	373.41	362.77	349.17	328.75	312.54	296.86	285.58	275.45
G 21.0	387.89	387.43	389.53	386.39	382.32	374.46	363.75	350.29	331.35	312.31	296.34	284.11	274.27
G 22.0	386.24	385.82	388.46	385.69	382.46	374.57	364.70	351.34	332.49	312.54	295.93	283.35	273.20
G 23.0	384.31	383.53	386.95	384.57	382.37	375.20	365.65	352.48	333.61	312.67	295.52	282.40	272.39
G 24.0	382.01	381.45	385.06	382.89	381.75	375.47	366.35	353.41	335.10	313.12	295.47	281.81	271.62
G 25.0	379.56	378.75	382.38	381.03	380.47	375.40	367.27	354.52	335.88	313.54	295.67	281.48	271.53
G 26.0	377.07	376.37	380.08	378.82	378.40	374.88	367.58	355.22	337.25	314.70	295.94	281.44	271.24
G 27.0	374.21	373.26	377.35	376.20	372.72	374.24	367.97	356.14	338.55	315.74	296.69	281.60	271.84
G 28.0	371.91	370.52	374.41	373.52	375.76	373.36	368.11	357.00	340.12	316.94	297.88	282.14	272.04
G 29.0	368.86	367.81	371.19	370.86	373.38	371.89	368.18	357.89	341.66	318.97	299.79	282.93	272.28
G 30.0	366.33	364.87	368.47	367.48	370.78	370.50	367.94	358.72	343.73	321.12	301.67	284.18	273.17
G 31.0	363.79	361.97	365.31	364.61	368.30	368.83	367.89	359.96	345.41	324.09	304.63	285.70	274.08
G 32.0	361.28	359.56	362.33	361.47	365.31	367.05	367.89	361.56	347.77	327.51	307.46	287.78	274.97
G 33.0	358.98	357.34	359.76	358.09	362.38	364.87	367.64	362.88	350.53	331.58	310.47	289.48	275.80
G 34.0	356.72	355.04	357.39	355.57	359.49	362.98	367.58	364.64	352.88	335.69	313.75	291.21	276.23
G 35.0	354.56	353.30	354.99	352.99	356.33	360.63	367.66	366.75	350.86	340.12	316.57	292.96	276.46
G 36.0	352.70	351.63	352.85	350.73	353.33	358.56	367.56	368.73	350.79	345.22	318.95	293.74	276.21
G 37.0	350.58	350.09	351.22	348.56	350.88	356.49	367.81	371.30	364.68	350.13	320.76	294.55	275.13
G 38.0	348.65	348.33	350.19	346.96	348.36	354.49	368.02	374.00	369.04	354.77	321.89	294.49	273.11
G 39.0	346.56	347.50	349.17	345.98	346.42	352.63	368.37	376.78	372.81	358.19	322.71	293.90	270.44
G 40.0	344.85	346.67	348.60	345.70	344.02	350.62	368.94	379.64	376.76	361.66	322.67	292.42	267.06
G 41.0	342.93	345.76	348.99	346.05	344.08	349.61	369.32	381.77	380.00	363.62	322.23	290.84	262.54
G 42.0	341.37	345.86	349.88	347.47	344.20	348.80	369.41	384.34	382.90	366.07	321.88	288.81	258.19
G 43.0	340.17	346.80	351.43	350.07	345.15	348.76	369.73	388.57	386.10	368.12	321.29	286.42	253.54
G 44.0	339.79	348.30	354.01	353.99	347.26	349.68	369.99	388.59	388.83	369.77	320.30	283.79	248.66
G 45.0	340.50	361.85	368.84	359.26	350.85	351.94	370.74	380.53	391.54	371.54	319.43	280.73	243.76
G 46.0	342.67	366.95	364.01	366.80	355.83	355.51	371.73	382.81	394.00	372.45	318.23	277.86	238.65
G 47.0	346.42	364.15	372.04	374.59	363.73	360.91	374.06	395.11	396.69	373.15	317.11	274.75	234.28
G 48.0	353.47	374.95	383.21	389.65	373.72	368.13	377.11	397.15	397.27	374.15	316.36	271.43	228.59
G 49.0	362.05	387.67	397.62	404.29	387.11	378.53	382.05	400.56	396.69	374.51	315.52	268.97	224.34
G 50.0	370.65	399.70	413.82	422.57	404.26	391.92	388.43	404.13	400.87	374.92	316.48	266.59	220.49
G 51.0	375.81	411.94	435.76	445.36	423.56	407.53	396.53	408.28	403.43	375.94	318.34	265.45	216.86
G 52.0	376.00	419.80	454.08	469.45	447.89	429.92	407.95	412.50	406.55	377.78	321.49	265.09	213.57
G 53.0	371.81	423.85	473.66	496.13	475.55	452.78	419.89	417.44	407.77	381.75	326.61	265.57	208.72
G 54.0	361.46	423.43	488.08	525.42	507.41	479.98	435.43	425.77	412.72	389.16	331.27	265.62	201.63
G 55.0	345.57	417.13	499.28	553.44	538.82	509.54	455.11	437.94	421.60	398.22	332.42	260.80	189.90
G 56.0	319.39	404.44	506.97	579.67	572.22	540.05	475.89	452.83	433.84	402.72	336.88	256.58	180.93
G 57.0	291.27	383.00	510.24	602.04	607.71	571.56	499.44	465.46	440.78	412.56	348.15	252.78	176.03
G 58.0	265.46	358.90	508.66	625.93	641.66	608.29	522.45	479.70	453.70	427.85	361.40	264.90	170.51
G 59.0	241.82	325.32	499.07	641.20	670.54	635.55	543.49	506.42	474.84	448.98	375.98	270.30	165.00
G 60.0	221.51	297.44	480.91	650.02	694.47	661.09	574.01	531.98	496.47	467.19	391.85	276.34	158.88
G 61.0	202.45	267.56	456.32	646.20	705.79	684.09	603.31	558.18	522.89	488.58	411.28	283.96	153.53
G 62.0	183.89	241.92	422.61	623.97	708.54	701.56	629.02	584.07	549.94	513.89	431.65	292.07	146.50
G 63.0	166.09	213.03	383.50	578.64	708.43	707.34	650.79	614.24	580.02	539.93	448.41	299.70	139.91
G 64.0	131.38	187.49	332.16	534.02	699.46	705.74	665.24	634.32	606.94	563.08	469.89	336.62	132.28
G 65.0	92.40	151.33	269.68	465.30	675.25	694.36	673.65	657.59	633.11	591.78	488.52	313.11	123.53
G 66.0	62.82	106.81	223.63	397.61	633.63	672.03	674.63	672.88	658.01	612.22	504.47	317.84	115.31
G 67.0	54.43	73.53	177.04	322.94	578.47	636.85	668.69	685.88	681.98	631.67	516.48	320.63	107.62
G 68.0	50.17	59.85	135.03	265.28	508.82	593.82	655.76	692.78	699.91	644.91			

COMMITTENTE:	FUNDO SRL VIA GIARDINI SUD 52 - 41026 PAVULLO NF STRADA VIGNOLESE 1175 - 41126 MODENA
OGGETTO:	PROGETTO DI ILLUMINAZIONE PUBBLICA ESTERNA PER IL COMPARTO A11.b DEL POLO SOVRACOMUNALE MADONNA BALDACCINI AMBITI ASP 2.9 – 2.10



Apparecchio		Rilievo		Lampada									
Codice	ITALO 1 0F2H1 STU-S 4.7-3M	Codice	17-077-107	Codice	L-IT1-0F2H1-4000-700-3M-70-25								
Nome	ITALO 1 0F2H1 STU-S 4.7-3M	Nome	ITALO 1 0F2H1 STU-S 4.7-3M	Numero	1								
Archivio	Eulundat	Data	24-07-2017	Posizione									
Flusso Apparecchio	7030.00 lm	Potenza Apparecchio	58.00 W	Efficacia	121.21 lm/W								
Flusso Lampade	7030.00 lm	Valore Massimo	715.83 cd/klm	Posizione	C=10.00 G=70.00								
				CG	Asimmetrico								
Tabella Intensità Luminosa - cd/klm													
Tabella 4/18													
	C 195.00	C 200.00	C 205.00	C 210.00	C 215.00	C 220.00	C 225.00	C 230.00	C 235.00	C 240.00	C 245.00	C 250.00	C 255.00
G 0.0	279.02	279.02	279.02	279.02	279.02	279.02	279.02	279.02	279.02	279.02	279.02	279.02	279.02
G 1.0	278.17	278.01	277.53	277.21	276.79	276.85	276.27	275.82	276.09	275.91	275.35	275.28	275.20
G 2.0	278.53	277.99	276.92	276.64	275.68	275.27	274.29	273.91	273.58	273.49	272.38	272.46	271.97
G 3.0	278.82	277.75	276.62	276.50	274.56	273.87	272.51	272.05	271.50	271.45	269.92	269.98	269.38
G 4.0	280.39	279.94	276.02	275.16	272.76	271.44	270.58	269.73	269.13	269.15	267.81	267.66	267.14
G 5.0	284.75	283.81	278.22	277.11	273.17	271.80	268.30	267.11	267.02	266.63	265.39	265.40	264.77
G 6.0	288.74	286.30	282.21	280.15	274.87	273.11	268.50	266.74	263.85	263.67	262.88	262.82	262.13
G 7.0	289.71	286.12	282.59	280.19	277.31	275.49	269.61	267.04	263.01	261.16	259.93	259.80	259.83
G 8.0	289.55	285.50	282.03	279.43	276.60	274.60	271.32	268.42	262.79	259.86	256.76	256.25	256.69
G 9.0	288.68	284.40	281.19	278.37	275.81	273.50	270.51	268.07	262.92	259.05	253.73	252.49	253.44
G 10.0	287.51	282.95	279.81	277.08	274.59	271.81	268.87	266.20	263.43	258.44	251.80	248.81	249.99
G 11.0	285.96	281.48	278.44	275.80	273.10	270.32	266.99	264.24	261.52	258.03	250.09	244.46	244.99
G 12.0	284.21	279.75	276.84	273.70	271.03	267.94	264.42	261.71	258.96	254.91	246.80	234.92	233.37
G 13.0	282.61	278.00	275.09	271.97	268.87	265.64	262.16	259.11	255.99	248.69	239.60	223.29	217.54
G 14.0	280.76	276.31	273.31	269.87	266.69	263.22	259.82	255.98	250.96	240.56	232.30	212.72	203.06
G 15.0	278.74	274.42	271.48	267.71	264.76	260.35	256.87	252.79	246.72	234.74	222.60	201.21	189.29
G 16.0	276.98	272.56	269.27	265.26	261.89	257.68	254.11	249.44	242.89	225.94	209.54	186.66	174.51
G 17.0	274.92	270.63	267.20	262.77	259.54	254.41	251.12	245.13	236.90	211.03	194.74	164.90	152.21
G 18.0	273.28	268.80	264.99	260.33	256.38	251.54	247.21	236.26	223.25	192.59	173.53	138.77	125.36
G 19.0	271.67	267.02	262.96	257.82	253.65	248.02	242.12	231.26	206.74	168.69	149.23	114.02	100.80
G 20.0	270.21	265.21	260.55	255.16	251.00	243.94	232.17	202.51	184.10	148.82	128.62	99.27	78.86
G 21.0	268.80	263.39	258.62	252.51	247.83	235.74	218.04	181.35	160.22	125.95	103.03	76.42	66.75
G 22.0	267.65	261.93	256.48	249.82	244.62	224.06	200.09	160.09	136.62	101.98	86.77	63.04	57.17
G 23.0	266.57	260.51	254.49	247.32	239.49	208.58	180.07	139.01	113.53	82.45	69.03	54.39	52.21
G 24.0	265.70	259.80	252.30	244.57	231.09	192.55	159.04	115.48	93.20	65.62	57.34	52.22	50.43
G 25.0	264.99	257.34	250.14	240.73	220.14	173.25	141.77	96.44	75.33	56.45	53.51	50.33	48.46
G 26.0	264.28	255.62	247.83	234.52	205.76	154.35	119.93	79.09	61.72	54.46	51.82	48.58	46.66
G 27.0	263.45	253.85	245.10	226.66	191.53	137.17	101.07	64.13	56.37	52.81	49.97	47.01	45.00
G 28.0	262.84	252.84	244.48	214.88	171.01	116.06	85.34	58.35	54.66	51.06	48.41	45.40	43.27
G 29.0	262.07	249.94	239.15	200.73	155.47	99.09	70.01	56.34	53.21	49.69	46.81	43.85	41.82
G 30.0	261.43	247.62	233.99	186.23	138.32	83.49	60.30	54.85	51.66	48.22	45.46	42.56	40.36
G 31.0	260.63	245.49	226.98	169.75	120.54	70.79	57.48	53.39	50.33	46.93	44.23	41.08	39.05
G 32.0	259.57	242.50	217.27	154.31	103.05	62.03	56.14	52.15	49.06	45.98	42.83	39.80	37.75
G 33.0	258.58	239.39	206.23	136.46	89.01	58.99	54.93	50.97	47.73	44.37	41.49	38.52	36.24
G 34.0	256.87	235.64	193.34	122.29	75.29	57.53	53.52	49.79	46.76	43.22	40.39	37.32	35.05
G 35.0	254.98	230.37	179.02	105.64	65.68	56.44	52.48	48.65	45.52	41.99	38.98	36.09	33.86
G 36.0	252.16	222.65	164.35	91.69	61.00	55.20	51.33	47.61	44.37	40.91	38.01	35.02	32.71
G 37.0	249.31	213.92	149.23	79.41	58.90	54.08	50.24	46.54	43.26	39.78	36.85	33.92	31.72
G 38.0	245.66	203.24	135.17	69.70	57.72	52.95	49.34	45.49	42.12	38.70	35.75	32.93	30.62
G 39.0	241.17	190.40	119.79	63.75	56.54	52.11	48.26	44.42	41.14	37.76	34.74	31.87	29.58
G 40.0	236.38	177.70	105.88	60.86	55.60	51.09	47.28	43.52	40.19	36.84	33.85	30.80	28.53
G 41.0	230.47	162.90	93.74	59.56	54.65	50.23	46.33	42.57	39.31	35.98	32.87	29.81	27.60
G 42.0	224.66	150.29	81.85	58.48	53.76	49.27	45.44	41.55	38.36	34.89	31.95	28.82	26.60
G 43.0	217.92	136.28	72.65	57.47	52.88	48.40	44.47	40.60	37.36	33.94	30.91	27.85	25.62
G 44.0	209.89	124.27	65.89	56.44	51.96	47.47	43.52	39.65	36.38	32.80	29.88	26.81	24.68
G 45.0	201.89	110.91	61.89	55.58	51.05	46.61	42.65	38.80	35.34	31.86	28.87	25.88	23.63
G 46.0	190.94	98.26	60.01	54.55	50.25	45.78	41.82	37.91	34.45	30.85	27.92	24.92	22.81
G 47.0	180.80	87.04	58.98	53.67	49.42	44.98	41.02	37.01	33.46	29.81	27.06	24.00	21.86
G 48.0	167.93	76.95	57.98	52.87	48.69	44.28	40.26	36.09	32.53	28.88	26.10	23.22	21.10
G 49.0	157.34	69.77	56.99	52.09	47.92	43.63	39.50	35.26	31.62	28.02	25.21	22.31	20.40
G 50.0	145.40	65.04	56.02	51.26	47.22	43.00	38.75	34.36	30.73	27.02	24.29	21.51	19.81
G 51.0	135.17	62.11	55.18	50.51	46.43	42.37	38.00	33.57	29.77	26.16	23.43	20.79	19.17
G 52.0	123.62	60.84	54.36	49.73	45.83	41.74	37.30	32.70	28.98	25.12	22.52	20.04	18.44
G 53.0	111.93	59.91	53.57	49.03	45.27	41.02	36.54	31.85	28.05	24.19	21.69	19.27	17.86
G 54.0	100.77	59.02	52.81	48.41	44.67	40.41	35.83	31.07	26.97	23.21	20.84	18.50	17.16
G 55.0	91.21	58.13	52.12	47.82	43.96	39.71	34.98	30.02	25.88	22.31	20.04	17.72	16.56
G 56.0	83.16	57.23	51.46	47.32	43.39	39.02	34.30	28.88	24.98	21.46	19.18	16.99	15.95
G 57.0	77.69	56.21	50.79	46.71	42.75	38.39	33.55	27.79	24.00	20.61	18.46	16.29	15.36
G 58.0	72.53	55.05	50.04	46.18	42.27	37.71	32.42	26.70	23.07	19.76	17.63	15.59	14.86
G 59.0	69.04	53.70	49.23	45.54	41.74	36.85	31.20	25.74	22.25	18.99	16.99	14.96	14.38
G 60.0	66.17	52.27	48.28	44.86	41.16	35.81	30.08	24.87	21.55	18.36	16.27	14.46	13.98
G 61.0	63.84	50.97	47.17	44.08	40.57	34.75	28.86	24.10	20.76	17.75	15.70	13.96	13.64
G 62.0	61.24	49.49	45.94	43.04	39.86	33.66	28.01	23.32	20.09	17.17	15.21	13.51	13.29
G 63.0	58.69	48.23	44.87	41.98	38.84	32.74	27.25	22.71	19.50	16.69	14.73	13.16	12.96
G 64.0	56.19	47.06	43.54	41.02	37.78	32.02	26.68	22.22	18.98	16.19	14.29	12.72	12.41
G 65.0	54.25	46.08	42.46	40.16	36.94	31.59	26.29	21.89	18.57	15.74	13.84	12.36	11.94
G 66.0	52.53	45.22	41.68	39.55	36.38	31.42	26.12	21.65	18.15	15.29	13.43	11.92	11.36
G 67.0	51.49	44.57	41.07	39.25	36.23	31.66	26.15	21.47	17.78	14.84	13.00	11.50	10.84
G 68.0	50.64	43.80	40.63	39.19	36.47	32.04	26.31	21.34	17.34	14.34	12.56	11.02	10.23
G 69.0	50.00	43.20	40.21	39.17	36.83	32.68	26.55	21.16	16.93	13.81	12.08	10.55	9.70
G 70.0	49.10	42.31	39.71	39.11	37.36	33.21	26.75	20.82	16.37	13.20	11.45	9.90	9.13
G 71.0	48.05	41.28	39.04	38.78	37.73	33.54	26.77	20.37	15.70	12.40	10.74	9.05	8.43
G 72.0	46.46	39.81	37.99	38.07	37.77	33.46	26.41	19.48	14.84	11.36	9.85	8.22	7.95

Pagina 5

COMMITTENTE:	FUNDO SRL VIA GIARDINI SUD 52 - 41026 PAVULLO NF STRADA VIGNOLESE 1175 - 41126 MODENA
OGGETTO:	PROGETTO DI ILLUMINAZIONE PUBBLICA ESTERNA PER IL COMPARTO A11.b DEL POLO SOVRACOMUNALE MADONNA BALDACCINI AMBITI ASP 2.9 – 2.10



Apparecchio		Rilievo		Lampada									
Codice	ITALO 1 0F2H1 STU-S 4.7-3M	Codice	17-077-107	Codice	L-IT1-0F2H1-4000-700-3M-70-25								
Nome	ITALO 1 0F2H1 STU-S 4.7-3M	Nome	ITALO 1 0F2H1 STU-S 4.7-3M	Numero	1								
Archivio	Eulundat	Data	24-07-2017	Posizione									
Flusso Apparecchio	7030.00 lm	Potenza Apparecchio	58.00 W	Efficacia	121.21 lm/W								
Flusso Lampade	7030.00 lm	Valore Massimo	715.83 cd/klm	Posizione	C=10.00 G=70.00								
				Rendimento	100.00%								
					CG Asimmetrico								
Tabella Intensità Luminose - cd/klm													
Tabella 5/18													
	C 280.00	C 265.00	C 270.00	C 275.00	C 280.00	C 285.00	C 290.00	C 295.00	C 300.00	C 305.00	C 310.00	C 315.00	C 320.00
G 0.0	279.02	279.02	279.02	279.02	279.02	279.02	279.02	279.02	279.02	279.02	279.02	279.02	279.02
G 1.0	275.62	274.37	276.15	274.37	275.62	275.20	275.28	275.35	275.91	276.09	275.82	276.27	276.85
G 2.0	272.49	271.48	272.53	271.48	272.49	271.97	272.46	272.38	273.49	273.68	273.91	274.29	275.27
G 3.0	269.87	268.67	270.01	268.67	269.87	269.38	269.98	269.92	271.45	271.50	272.05	272.51	273.87
G 4.0	267.47	266.25	267.61	266.25	267.47	267.14	267.66	267.81	269.19	269.13	269.73	270.58	271.44
G 5.0	264.83	263.79	265.21	263.79	264.83	264.77	265.40	265.39	266.63	267.02	267.11	268.30	271.80
G 6.0	262.52	261.37	262.72	261.37	262.52	262.13	262.82	262.88	263.67	263.85	264.74	268.50	273.11
G 7.0	259.83	258.61	260.32	258.61	259.83	259.83	259.80	259.93	261.16	261.01	262.04	269.61	275.49
G 8.0	256.65	256.01	257.15	256.01	256.65	256.69	256.25	256.76	259.86	262.79	268.42	271.32	274.60
G 9.0	253.57	252.71	254.29	252.71	253.57	253.44	252.49	253.73	259.05	262.92	268.07	270.51	273.50
G 10.0	250.08	249.72	250.73	249.72	250.08	249.99	248.81	251.80	258.44	263.43	266.20	268.87	271.81
G 11.0	240.99	243.28	241.65	243.28	240.99	244.99	244.46	250.09	258.03	261.52	264.24	266.99	270.32
G 12.0	224.02	227.79	221.28	227.79	224.02	233.37	234.92	246.80	254.91	258.95	261.71	264.42	267.94
G 13.0	207.36	208.19	200.32	208.19	207.36	217.54	223.29	239.60	248.69	255.99	259.11	262.16	265.94
G 14.0	189.45	189.76	182.58	189.76	189.45	203.06	212.72	232.30	240.56	250.96	259.98	263.22	267.22
G 15.0	174.77	173.58	164.65	173.58	174.77	189.29	201.21	222.60	234.74	246.72	252.79	256.87	260.35
G 16.0	151.23	153.76	141.83	153.76	151.23	174.51	196.66	209.54	225.94	242.89	248.44	254.11	257.68
G 17.0	122.58	123.19	109.48	123.19	122.58	152.21	164.90	194.74	211.03	236.90	245.13	251.12	254.41
G 18.0	97.04	94.12	78.91	94.12	97.04	125.36	138.77	173.53	192.59	223.25	236.26	247.21	251.54
G 19.0	73.02	69.80	58.76	69.80	73.02	100.80	114.02	149.23	168.69	206.74	221.26	242.12	248.02
G 20.0	62.76	57.29	55.23	57.29	62.76	78.88	90.27	128.82	148.62	184.10	202.51	232.17	243.94
G 21.0	56.18	54.18	53.11	54.18	56.18	66.75	76.42	103.03	125.95	160.22	181.35	218.04	235.74
G 22.0	52.06	51.49	51.00	51.49	52.06	57.17	63.04	86.77	101.58	139.62	160.09	200.09	224.06
G 23.0	50.02	49.37	49.05	49.37	50.02	52.21	54.39	69.03	82.45	113.53	139.01	180.07	208.58
G 24.0	48.10	47.39	46.96	47.39	48.10	50.43	52.22	57.34	65.62	93.20	115.48	159.04	192.55
G 25.0	46.27	45.50	45.08	45.50	46.27	48.46	50.33	53.51	56.45	75.33	96.44	141.77	173.25
G 26.0	44.40	43.70	43.25	43.70	44.40	46.56	48.58	51.82	54.46	61.72	79.09	119.93	154.35
G 27.0	42.80	41.97	41.40	41.97	42.80	45.00	47.01	49.97	52.81	56.37	64.13	101.07	137.17
G 28.0	41.08	40.42	40.01	40.42	41.08	43.27	45.40	48.41	51.06	54.66	58.35	85.34	116.06
G 29.0	39.65	38.83	38.35	38.83	39.65	41.82	43.85	46.81	49.69	53.21	56.34	70.01	99.09
G 30.0	38.20	37.24	36.83	37.24	38.20	40.36	42.56	45.46	48.22	51.66	54.85	60.30	83.49
G 31.0	36.63	35.81	35.28	35.81	36.63	39.05	41.08	44.23	46.93	50.33	53.39	57.48	70.79
G 32.0	35.35	34.42	33.73	34.42	35.35	37.75	39.80	42.83	45.58	49.05	52.15	56.14	62.03
G 33.0	34.16	33.11	32.42	33.11	34.16	36.24	38.52	41.49	44.37	47.73	50.97	54.93	58.99
G 34.0	32.95	31.92	31.37	31.92	32.95	35.05	37.32	40.39	43.22	46.76	49.79	53.52	57.53
G 35.0	31.99	30.75	29.92	30.75	31.99	33.56	35.09	38.98	41.99	45.52	48.65	52.48	56.44
G 36.0	30.96	29.61	28.79	29.61	30.96	32.71	35.02	38.01	40.91	44.37	47.61	51.33	55.20
G 37.0	29.98	28.58	27.67	28.58	29.98	31.72	33.92	36.85	39.78	43.26	46.54	50.24	54.08
G 38.0	29.09	27.55	26.48	27.55	29.09	30.62	32.93	35.75	38.70	42.12	45.49	49.34	52.95
G 39.0	28.23	26.59	25.43	26.59	28.23	29.58	31.87	34.74	37.76	41.14	44.42	48.26	52.11
G 40.0	27.52	25.74	24.46	25.74	27.52	28.53	30.80	33.85	36.84	40.19	43.52	47.28	51.09
G 41.0	26.82	24.92	23.37	24.92	26.82	27.60	29.81	32.87	35.98	39.31	42.57	46.33	50.23
G 42.0	26.10	24.03	22.35	24.03	26.10	26.60	28.82	31.95	34.89	38.36	41.55	45.44	49.27
G 43.0	25.35	23.21	21.25	23.21	25.35	25.62	27.85	30.91	33.84	37.36	40.60	44.47	48.40
G 44.0	24.60	22.31	20.28	22.31	24.60	24.68	26.81	29.68	32.80	36.38	39.65	43.52	47.47
G 45.0	23.94	21.49	19.31	21.49	23.94	23.63	25.88	28.87	31.86	35.34	38.80	42.65	46.61
G 46.0	23.30	20.71	18.34	20.71	23.30	22.81	24.92	27.92	30.85	34.45	37.91	41.82	45.78
G 47.0	22.65	19.97	17.52	19.97	22.65	21.86	24.00	27.06	29.81	33.46	37.01	41.02	44.98
G 48.0	22.23	19.43	16.97	19.43	22.23	21.10	23.22	26.10	28.88	32.53	36.09	40.26	44.28
G 49.0	21.79	18.94	16.41	18.94	21.79	20.40	22.31	25.21	28.02	31.62	35.26	38.50	43.63
G 50.0	21.30	18.46	15.84	18.46	21.30	19.81	21.51	24.29	27.02	30.73	34.36	38.75	43.00
G 51.0	20.78	17.91	15.12	17.91	20.78	19.17	20.79	23.43	26.16	29.77	33.57	38.00	42.37
G 52.0	20.20	17.37	14.58	17.37	20.20	18.44	20.04	22.52	25.12	28.68	32.70	37.30	41.74
G 53.0	19.58	16.73	13.92	16.73	19.58	17.86	19.27	21.69	24.19	28.05	31.85	36.54	41.02
G 54.0	19.00	16.11	13.30	16.11	19.00	17.16	18.50	20.84	23.21	26.97	31.07	35.83	40.41
G 55.0	18.34	15.52	12.74	15.52	18.34	16.56	17.72	20.04	22.31	25.88	30.02	34.98	39.71
G 56.0	17.73	14.92	12.10	14.92	17.73	15.95	16.99	19.18	21.46	24.98	28.88	34.30	39.02
G 57.0	17.17	14.36	11.60	14.36	17.17	15.36	16.29	18.46	20.61	24.00	27.79	33.55	38.39
G 58.0	16.58	13.85	11.00	13.85	16.58	14.86	15.59	17.63	19.76	23.07	26.70	32.42	37.71
G 59.0	16.00	13.36	10.63	13.36	16.00	14.36	14.96	16.99	18.99	22.25	25.74	31.20	36.85
G 60.0	15.56	12.88	10.21	12.88	15.56	13.98	14.46	16.27	18.36	21.55	24.87	30.08	35.81
G 61.0	15.06	12.45	9.86	12.45	15.06	13.64	13.96	15.70	17.75	20.76	24.10	28.86	34.75
G 62.0	14.61	12.04	9.53	12.04	14.61	13.29	13.51	15.21	17.17	20.09	23.32	28.01	33.66
G 63.0	13.88	11.39	9.18	11.39	13.88	12.96	13.16	14.73	16.69	19.50	22.71	27.25	32.74
G 64.0	12.71	10.67	8.84	10.67	12.71	12.41	12.72	14.29	16.19	18.98	22.22	26.68	32.02
G 65.0	11.78	9.99	8.53	9.99	11.78	11.94	12.36	13.84	15.74	18.57	21.89	26.29	31.59
G 66.0	10.74	9.25	8.25	9.25	10.74	11.36	11.92	13.43	15.29	18.15	21.65	26.12	31.42
G 67.0	9.70	8.56	7.58	8.56	9.70	10.84	11.30	13.00	14.84	17.78	21.47	26.15	31.66
G 68.0	9.07	8.10	7.49	8.10	9.07	10.23	11.02	12.56	14.34	17.34	21.34	26.31	32.04
G 69.0	8.61	7.70	7.10	7.70	8.61	9.70	10.55	12.08	13.81	16.93	21.16	26.55	32.68
G 70.0	7.97	7.22	6.58	7.22	7.97	9.13	9.90	11.45	13.20	16.37	20.82	26.75	33.21
G 71.0	7.29	6.60	5.99	6.60	7.29	8.43	9.05	10.74	12.40	15.70	20.37	26.77	33.54
G 72.0	6.59	5.99	5.42	5.99	6.59	7.56	8.22	9.85	11.36	14.84	19.48	26.41	33.46

Pagina 6

COMMITTENTE:	FUNDO SRL VIA GIARDINI SUD 52 - 41026 PAVULLO NF STRADA VIGNOLESE 1175 - 41126 MODENA
OGGETTO:	PROGETTO DI ILLUMINAZIONE PUBBLICA ESTERNA PER IL COMPARTO A11.b DEL POLO SOVRACOMUNALE MADONNA BALDACCINI AMBITI ASP 2.9 – 2.10



Apparecchio		Rilievo		Lampada	
Codice	ITALO 1 0F2H1 STU-S 4.7-3M	Codice	17-077-107	Codice	L-IT1-0F2H1-4000-700-3M-70-25
Nome	ITALO 1 0F2H1 STU-S 4.7-3M	Nome	ITALO 1 0F2H1 STU-S 4.7-3M	Numero	1
Archivio	Eulundat	Data	24-07-2017	Posizione	
Flusso Apparecchio	7030.00 lm	Potenza Apparecchio	58.00 W	Efficacia	121.21 lm/W
Flusso Lampade	7030.00 lm	Valore Massimo	715.83 cd/km	Posizione	C=10.00 G=70.00
				CG	Asimmetrico
Tabella Intensità Luminosa - cd/km Tabella 6/18					
	C 325.00	C 330.00	C 335.00	C 340.00	C 345.00
G 0.0	279.02	279.02	279.02	279.02	279.02
G 1.0	276.79	277.21	277.53	278.01	278.17
G 2.0	275.68	276.64	276.52	277.99	278.53
G 3.0	274.56	275.60	276.62	277.75	278.82
G 4.0	272.76	275.16	276.02	279.94	280.39
G 5.0	273.17	277.11	278.22	283.81	284.75
G 6.0	274.87	280.15	282.21	286.30	288.74
G 7.0	277.31	280.15	282.59	286.12	289.71
G 8.0	276.60	279.43	282.03	285.50	289.55
G 9.0	275.81	278.37	281.19	284.40	288.68
G 10.0	274.59	277.08	279.81	282.95	287.51
G 11.0	273.10	275.60	278.44	281.48	285.96
G 12.0	271.03	273.70	276.84	279.75	284.21
G 13.0	268.87	271.97	275.09	278.00	282.61
G 14.0	266.69	269.87	273.31	276.31	280.76
G 15.0	264.76	267.71	271.48	274.42	278.74
G 16.0	261.89	265.26	269.27	272.59	276.98
G 17.0	258.54	262.77	267.20	270.63	274.82
G 18.0	256.38	260.33	264.99	268.90	273.28
G 19.0	253.65	257.82	262.96	267.02	271.67
G 20.0	251.00	255.16	260.55	265.21	270.21
G 21.0	247.83	252.51	258.62	263.39	268.80
G 22.0	244.62	249.82	256.48	261.93	267.65
G 23.0	238.49	247.32	254.49	260.51	266.57
G 24.0	231.09	244.57	252.30	258.90	265.70
G 25.0	226.14	240.73	250.14	257.34	264.69
G 26.0	220.76	234.52	247.83	255.62	264.28
G 27.0	191.53	226.66	245.10	253.85	263.45
G 28.0	171.01	214.88	242.48	252.03	262.84
G 29.0	155.47	200.73	239.15	249.94	262.07
G 30.0	138.32	186.23	233.99	247.62	261.43
G 31.0	120.54	169.75	226.98	245.49	260.63
G 32.0	103.05	154.31	217.27	242.50	259.57
G 33.0	89.01	139.46	206.23	239.39	258.68
G 34.0	75.29	122.29	193.34	235.64	256.87
G 35.0	65.88	105.64	179.02	230.37	254.98
G 36.0	61.00	91.89	164.35	222.65	252.16
G 37.0	58.90	79.41	149.23	213.92	249.31
G 38.0	57.72	69.70	135.17	203.24	245.66
G 39.0	56.54	63.75	119.79	190.40	241.17
G 40.0	56.60	60.86	106.88	177.70	236.38
G 41.0	54.65	59.56	93.74	162.90	230.47
G 42.0	53.76	58.48	81.85	150.29	224.66
G 43.0	52.88	57.47	72.65	136.28	217.92
G 44.0	51.96	56.44	65.89	124.27	209.89
G 45.0	51.05	55.58	61.89	110.91	201.89
G 46.0	50.25	54.55	60.01	98.26	190.94
G 47.0	49.42	53.67	58.98	87.04	180.80
G 48.0	48.69	52.87	57.98	76.95	167.93
G 49.0	47.92	52.09	56.99	69.77	157.34
G 50.0	47.22	51.26	56.02	65.04	145.40
G 51.0	46.43	50.51	55.18	62.11	135.17
G 52.0	45.83	49.73	54.36	60.84	123.62
G 53.0	45.27	49.03	53.57	59.91	111.93
G 54.0	44.67	48.41	52.81	59.02	100.77
G 55.0	43.96	47.82	52.12	58.13	91.21
G 56.0	43.39	47.32	51.46	57.23	83.16
G 57.0	42.75	46.71	50.79	56.21	77.69
G 58.0	42.27	46.18	50.04	55.05	72.53
G 59.0	41.74	45.54	49.23	53.70	69.04
G 60.0	41.16	44.86	48.28	52.27	66.17
G 61.0	40.57	44.08	47.17	50.97	63.84
G 62.0	39.96	43.04	45.94	49.49	61.24
G 63.0	38.84	41.98	44.87	48.23	58.69
G 64.0	37.78	41.02	43.54	47.06	56.19
G 65.0	36.94	40.16	42.46	46.08	54.25
G 66.0	36.38	39.55	41.68	45.22	52.53
G 67.0	36.23	39.25	41.07	44.57	51.49
G 68.0	36.47	39.19	40.63	43.80	50.64
G 69.0	36.83	39.17	40.21	43.20	50.00
G 70.0	37.36	39.11	39.71	42.31	49.10
G 71.0	37.73	38.78	39.04	41.28	48.05
G 72.0	37.77	38.07	37.99	39.81	46.46

Pagina 7

COMMITTENTE:	FUNDO SRL VIA GIARDINI SUD 52 - 41026 PAVULLO NF STRADA VIGNOLESE 1175 - 41126 MODENA
OGGETTO:	PROGETTO DI ILLUMINAZIONE PUBBLICA ESTERNA PER IL COMPARTO A11.b DEL POLO SOVRACOMUNALE MADONNA BALDACCINI AMBITI ASP 2.9 – 2.10



Apparecchio		Rilievo		Lampada									
Codice	ITALO 1 0F2H1 STU-S 4.7-3M	Codice	17-077-107	Codice	L-IT1-0F2H1-4000-700-3M-70-25								
Nome	ITALO 1 0F2H1 STU-S 4.7-3M	Nome	ITALO 1 0F2H1 STU-S 4.7-3M	Numero	1								
Archivio	Eulumat	Data	24-07-2017	Posizione									
Flusso Apparecchio	7030.00 lm	Potenza Apparecchio	58.00 W	Efficacia	121.21 lm/W								
Flusso Lampade	7030.00 lm	Valore Massimo	715.83 cd/klm	Posizione	C=10.00 G=70.00								
				CG Asimmetrico									
Tabella Intensità Luminosa - cd/klm													
Tabella 7/18													
	C 0.00	C 5.00	C 10.00	C 15.00	C 20.00	C 25.00	C 30.00	C 35.00	C 40.00	C 45.00	C 50.00	C 55.00	C 60.00
G 73.0	446.84	597.31	663.96	605.02	500.80	341.73	191.03	70.07	47.21	37.56	32.90	26.99	24.68
G 74.0	397.43	560.66	638.80	567.53	434.98	273.89	139.65	57.00	41.78	34.01	30.02	24.81	22.77
G 75.0	318.94	484.11	592.25	515.97	387.63	220.98	109.45	47.04	36.84	30.90	27.16	22.41	20.77
G 76.0	245.32	406.98	506.95	439.12	336.25	174.92	86.95	39.38	32.67	27.01	24.31	20.29	18.94
G 77.0	175.24	311.19	412.89	340.58	268.21	138.89	67.47	33.21	28.82	23.77	21.72	18.37	17.25
G 78.0	126.34	238.38	309.93	250.23	212.07	100.81	51.59	27.82	24.77	21.01	19.21	16.49	15.67
G 79.0	84.63	165.04	215.48	182.00	150.51	73.84	39.71	23.63	21.52	18.29	17.11	14.78	14.07
G 80.0	58.23	107.91	138.66	118.94	105.36	54.10	30.66	19.97	18.31	15.89	15.17	12.75	12.37
G 81.0	44.85	73.31	95.43	74.29	67.97	38.29	23.84	16.40	15.81	13.46	12.95	11.09	10.65
G 82.0	34.53	55.38	63.96	50.49	45.55	26.42	18.78	13.45	13.22	11.53	11.13	9.44	9.04
G 83.0	26.44	42.68	49.05	35.97	30.41	18.72	14.59	11.26	10.99	9.58	9.30	7.96	7.65
G 84.0	18.56	32.22	36.90	27.15	22.42	13.72	11.52	9.12	8.88	7.67	7.68	6.55	6.44
G 85.0	11.60	22.43	27.99	20.25	15.87	10.07	8.73	6.94	7.03	6.20	6.28	5.13	5.16
G 86.0	5.16	12.86	18.11	13.37	11.60	7.22	6.63	5.06	5.31	4.47	4.67	3.97	3.99
G 87.0	1.37	6.16	10.53	7.38	6.96	4.55	4.54	3.44	3.92	3.07	3.46	2.74	3.03
G 88.0	0.13	1.61	3.73	2.17	3.63	1.91	2.51	1.70	2.28	1.77	2.21	1.52	1.95
G 89.0	0.04	0.05	0.60	0.26	0.88	0.37	0.80	0.60	0.99	0.70	1.04	0.77	0.98
G 90.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 91.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 92.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 93.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 94.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 95.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 96.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 97.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 98.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 99.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G100.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G101.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G102.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G103.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G104.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G105.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G106.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G107.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G108.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G109.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G110.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G111.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G112.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G113.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G114.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G115.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G116.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G117.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G118.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G119.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G120.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G121.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G122.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G123.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G124.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G125.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G126.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G127.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G128.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G129.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G130.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G131.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G132.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G133.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G134.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G135.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G136.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G137.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G138.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G139.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G140.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G141.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G142.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G143.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G144.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G145.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

COMMITTENTE:	FUNDO SRL VIA GIARDINI SUD 52 - 41026 PAVULLO NF STRADA VIGNOLESE 1175 - 41126 MODENA
OGGETTO:	PROGETTO DI ILLUMINAZIONE PUBBLICA ESTERNA PER IL COMPARTO A11.b DEL POLO SOVRACOMUNALE MADONNA BALDACCINI AMBITI ASP 2.9 – 2.10



Apparecchio		Rilievo		Lampada									
Codice	ITALO 1 0F2H1 STU-S 4.7-3M	Codice	17-077-107	Codice	L-IT1-0F2H1-4000-700-3M-70-25								
Nome	ITALO 1 0F2H1 STU-S 4.7-3M	Nome	ITALO 1 0F2H1 STU-S 4.7-3M	Numero	1								
Archivio	Eulundat	Data	24-07-2017	Posizione									
Flusso Apparecchio	7030.00 lm	Potenza Apparecchio	58.00 W	Efficacia	121.21 lm/W	Rendimento	100.00%						
Flusso Lampade	7030.00 lm	Valore Massimo	715.83 cd/km	Posizione	C=10.00 G=70.00	CG	Asimmetrico						
Tabella Intensità Luminosa - cd/km													
Tabella 8/18													
	C 65.00	C 70.00	C 75.00	C 80.00	C 85.00	C 90.00	C 95.00	C 100.00	C 105.00	C 110.00	C 115.00	C 120.00	C 125.00
G 73.0	21.20	19.99	17.59	16.53	14.21	14.18	14.21	16.53	17.59	19.99	21.20	24.68	26.99
G 74.0	19.56	18.36	16.26	15.21	13.09	13.01	13.09	15.21	16.26	18.36	19.56	22.77	24.61
G 75.0	18.02	17.06	14.96	14.07	12.02	12.01	12.02	14.07	14.96	17.06	18.02	20.77	22.41
G 76.0	16.52	15.57	13.63	12.83	11.03	10.89	11.03	12.83	13.63	15.57	16.52	18.94	20.29
G 77.0	15.06	14.28	12.30	11.57	9.75	9.80	9.75	11.57	12.30	14.28	15.06	17.25	18.37
G 78.0	13.45	12.69	10.99	10.23	8.70	8.69	8.70	10.23	10.99	12.69	13.45	15.57	16.49
G 79.0	11.88	11.24	9.63	9.04	7.61	7.61	7.61	9.04	9.63	11.24	11.88	14.07	14.78
G 80.0	10.44	9.82	8.37	7.83	6.80	6.78	6.80	7.83	8.37	9.82	10.44	12.37	12.75
G 81.0	8.96	8.43	7.20	6.88	5.82	5.93	5.82	6.88	7.20	8.43	8.96	10.65	11.09
G 82.0	7.50	7.26	6.10	5.86	5.03	5.18	5.03	5.86	6.10	7.26	7.50	9.04	9.44
G 83.0	6.36	6.18	5.23	5.04	4.27	4.48	4.27	5.04	5.23	6.18	6.36	7.65	7.96
G 84.0	5.32	5.12	4.22	4.18	3.48	3.73	3.48	4.18	4.22	5.12	5.32	6.44	6.55
G 85.0	4.18	4.14	3.42	3.38	2.85	3.09	2.85	3.38	3.42	4.14	4.18	5.16	5.13
G 86.0	3.29	3.26	2.65	2.66	2.29	2.44	2.29	2.66	2.65	3.26	3.29	3.99	3.97
G 87.0	2.25	2.49	2.04	2.08	1.69	1.88	1.69	2.08	2.04	2.49	2.25	3.03	2.74
G 88.0	1.41	1.57	1.14	1.37	1.06	1.25	1.06	1.37	1.14	1.57	1.41	1.95	1.52
G 89.0	0.72	0.86	0.65	0.72	0.55	0.70	0.55	0.72	0.65	0.86	0.72	0.98	0.77
G 90.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 91.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 92.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 93.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 94.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 95.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 96.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 97.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 98.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 99.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 100.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 101.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 102.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 103.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 104.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 105.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 106.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 107.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 108.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 109.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 110.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 111.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 112.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 113.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 114.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 115.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 116.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 117.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 118.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 119.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 120.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 121.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 122.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 123.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 124.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 125.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 126.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 127.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 128.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 129.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 130.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 131.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 132.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 133.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 134.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 135.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 136.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 137.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 138.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 139.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 140.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 141.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 142.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 143.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 144.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 145.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

COMMITTENTE:	FUNDO SRL VIA GIARDINI SUD 52 - 41026 PAVULLO NF STRADA VIGNOLESE 1175 - 41126 MODENA
OGGETTO:	PROGETTO DI ILLUMINAZIONE PUBBLICA ESTERNA PER IL COMPARTO A11.b DEL POLO SOVRACOMUNALE MADONNA BALDACCINI AMBITI ASP 2.9 – 2.10



Apparecchio		Rilievo		Lampada									
Codice	ITALO 1 0F2H1 STU-S 4.7-3M	Codice	17-077-107	Codice	L-IT1-0F2H1-4000-700-3M-70-25								
Nome	ITALO 1 0F2H1 STU-S 4.7-3M	Nome	ITALO 1 0F2H1 STU-S 4.7-3M	Numero	1								
Archivio	Eulundat	Data	24-07-2017	Posizione									
Flusso Apparecchio	7030.00 lm	Potenza Apparecchio	58.00 W	Efficacia	121.21 lm/W								
Flusso Lampade	7030.00 lm	Valore Massimo	715.83 cd/klm	Posizione	C=10.00 G=70.00								
		Rendimento		100.00%									
		CG		Asimmetrico									
Tabella Intensità Luminosa - cd/klm													
Tabella 9/18													
	C 130.00	C 135.00	C 140.00	C 145.00	C 150.00	C 155.00	C 160.00	C 165.00	C 170.00	C 175.00	C 180.00	C 185.00	C 190.00
G 73.0	32.90	37.56	47.21	70.07	191.03	341.73	500.80	605.02	663.96	597.31	446.84	232.39	55.79
G 74.0	30.02	34.01	41.78	57.00	139.65	273.89	434.98	567.53	638.80	560.66	397.43	192.41	49.91
G 75.0	27.16	30.90	36.84	47.04	109.45	220.96	387.63	515.57	592.25	484.11	318.94	149.95	44.55
G 76.0	24.31	27.01	32.67	39.38	86.95	174.92	336.25	439.12	506.95	406.98	245.32	116.51	40.41
G 77.0	21.72	23.77	28.82	33.21	67.47	138.89	268.21	340.58	412.89	311.19	175.24	82.89	35.01
G 78.0	19.21	21.01	24.77	27.82	51.59	100.81	212.07	259.23	309.93	236.36	126.37	62.19	30.71
G 79.0	17.11	18.29	21.52	23.63	39.71	73.84	150.51	182.00	215.48	165.04	84.63	47.05	25.91
G 80.0	15.17	15.89	18.31	19.97	30.66	54.10	105.36	118.94	138.66	107.91	58.23	36.55	19.63
G 81.0	12.95	13.48	15.81	16.40	23.84	38.29	67.97	74.29	95.43	73.31	44.85	26.52	15.08
G 82.0	11.13	11.53	13.22	13.45	18.78	26.42	45.55	50.49	63.95	55.38	34.53	18.53	11.41
G 83.0	9.30	9.58	10.99	11.26	14.59	18.72	30.41	35.97	49.05	42.68	26.44	13.75	7.96
G 84.0	7.88	7.67	8.88	9.12	11.52	13.72	22.42	27.15	36.90	32.22	18.56	10.29	4.86
G 85.0	6.25	6.20	7.03	6.94	8.73	10.07	15.87	20.25	27.99	22.43	11.60	6.68	2.58
G 86.0	4.67	4.47	5.31	5.05	6.63	7.22	11.60	13.37	18.11	12.86	5.16	3.28	1.00
G 87.0	3.46	3.07	3.92	3.44	4.54	4.55	6.96	7.38	10.53	6.16	1.37	1.02	0.23
G 88.0	2.21	1.77	2.28	1.70	2.51	1.91	3.63	2.17	3.73	1.61	0.13	0.15	0.05
G 89.0	1.04	0.70	0.99	0.60	0.80	0.37	0.88	0.26	0.60	0.05	0.04	0.05	0.05
G 90.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 91.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 92.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 93.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 94.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 95.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 96.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 97.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 98.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 99.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 100.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 101.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 102.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 103.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 104.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 105.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 106.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 107.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 108.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 109.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 110.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 111.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 112.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 113.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 114.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 115.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 116.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 117.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 118.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 119.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 120.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 121.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 122.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 123.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 124.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 125.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 126.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 127.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 128.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 129.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 130.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 131.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 132.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 133.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 134.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 135.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 136.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 137.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 138.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 139.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 140.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 141.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 142.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 143.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 144.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 145.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

COMMITTENTE:	FUNDO SRL VIA GIARDINI SUD 52 - 41026 PAVULLO NF STRADA VIGNOLESE 1175 - 41126 MODENA
OGGETTO:	PROGETTO DI ILLUMINAZIONE PUBBLICA ESTERNA PER IL COMPARTO A11.b DEL POLO SOVRACOMUNALE MADONNA BALDACCINI AMBITI ASP 2.9 – 2.10



Apparecchio				Rilievo				Lampada					
Codice	ITALO 1 0F2H1 STU-S 4.7-3M			Codice	17-077-107			Codice	L-IT1-0F2H1-4000-700-3M-70-25				
Nome	ITALO 1 0F2H1 STU-S 4.7-3M			Nome	ITALO 1 0F2H1 STU-S 4.7-3M			Numero	1				
Archivio	Eulundat			Data	24-07-2017			Posizione					
Flusso Apparecchio	7030.00 lm		Potenza Apparecchio	58.00 W		Efficacia	121.21 lm/W		Rendimento	100.00%			
Flusso Lampade	7030.00 lm		Valore Massimo	715.83 cd/klm		Posizione	C=10.00 G=70.00		CG	Asimmetrico			
Tabella Intensità Luminose - cd/klm													
Tabella 10/18													
	C 195.00	C 200.00	C 205.00	C 210.00	C 215.00	C 220.00	C 225.00	C 230.00	C 235.00	C 240.00	C 245.00	C 250.00	C 255.00
G 73.0	44.29	37.92	36.62	36.83	37.18	32.78	25.61	18.36	13.79	10.10	8.80	7.17	6.66
G 74.0	41.88	35.77	34.80	34.66	35.68	30.90	24.25	16.58	12.31	8.82	7.69	6.11	5.69
G 75.0	38.57	33.07	32.49	31.48	33.17	28.44	22.13	14.46	10.64	7.47	6.36	5.13	4.86
G 76.0	35.40	30.04	29.43	28.02	29.76	24.98	19.33	12.12	8.82	5.93	5.26	4.06	3.94
G 77.0	31.44	27.02	26.03	24.15	25.14	20.85	15.88	9.63	7.05	4.63	4.05	3.25	3.15
G 78.0	27.75	23.56	22.49	19.86	21.03	16.43	12.60	7.07	5.30	3.51	3.18	2.51	2.51
G 79.0	23.81	19.67	18.67	15.43	16.32	12.12	9.37	5.12	3.86	2.57	2.42	1.92	1.91
G 80.0	19.37	15.32	14.19	11.21	12.03	8.15	6.67	3.48	2.78	1.89	1.85	1.48	1.48
G 81.0	14.53	11.01	10.35	7.65	8.28	5.25	4.34	2.30	1.91	1.36	1.33	1.09	1.11
G 82.0	10.42	7.62	7.23	5.21	5.27	3.33	2.51	1.45	1.27	0.94	0.96	0.79	0.84
G 83.0	7.08	4.70	4.52	3.11	3.10	1.83	1.52	0.86	0.86	0.63	0.68	0.51	0.57
G 84.0	4.31	2.42	2.59	1.57	1.56	0.89	0.78	0.48	0.51	0.32	0.43	0.17	0.22
G 85.0	2.22	1.18	1.28	0.59	0.71	0.23	0.33	0.11	0.16	0.04	0.06	0.02	0.02
G 86.0	0.93	0.39	0.37	0.12	0.16	0.03	0.05	0.01	0.02	0.01	0.01	0.01	0.01
G 87.0	0.26	0.07	0.07	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01
G 88.0	0.05	0.04	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01
G 89.0	0.05	0.04	0.03	0.03	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01
G 90.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 91.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 92.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 93.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 94.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 95.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 96.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 97.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 98.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 99.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 100.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 101.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 102.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 103.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 104.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 105.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 106.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 107.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 108.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 109.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 110.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 111.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 112.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 113.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 114.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 115.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 116.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 117.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 118.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 119.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 120.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 121.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 122.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 123.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 124.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 125.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 126.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 127.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 128.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 129.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 130.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 131.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 132.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 133.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 134.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 135.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 136.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 137.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 138.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 139.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 140.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 141.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 142.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 143.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 144.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 145.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Pagina 11

COMMITTENTE:	FUNDO SRL VIA GIARDINI SUD 52 - 41026 PAVULLO NF STRADA VIGNOLESE 1175 - 41126 MODENA
OGGETTO:	PROGETTO DI ILLUMINAZIONE PUBBLICA ESTERNA PER IL COMPARTO A11.b DEL POLO SOVRACOMUNALE MADONNA BALDACCINI AMBITI ASP 2.9 – 2.10



Apparecchio		Rilievo		Lampada	
Codice	ITALO 1 0F2H1 STU-S 4.7-3M	Codice	17-077-107	Codice	L-IT1-0F2H1-4000-700-3M-70-25
Nome	ITALO 1 0F2H1 STU-S 4.7-3M	Nome	ITALO 1 0F2H1 STU-S 4.7-3M	Numero	1
Archivio	Eulundat	Data	24-07-2017	Posizione	

Flusso Apparecchio	7030.00 lm	Potenza Apparecchio	58.00 W	Efficacia	121.21 lm/W	Rendimento	100.00%
Flusso Lampade	7030.00 lm	Valore Massimo	715.83 cd/klm	Posizione	C=10.00 G=70.00	CG	Asimmetrico

Tabella Intensità Luminosa - cd/klm													
Tabella 11/18													
	C 260.00	C 265.00	C 270.00	C 275.00	C 280.00	C 285.00	C 290.00	C 295.00	C 300.00	C 305.00	C 310.00	C 315.00	C 320.00
G 73.0	5.73	5.27	4.67	5.27	5.73	6.66	7.17	8.80	10.10	13.79	18.36	25.61	32.78
G 74.0	4.86	4.54	4.01	4.54	4.86	5.69	6.11	7.69	8.82	12.31	16.58	24.25	30.90
G 75.0	3.99	3.85	3.36	3.85	3.99	4.86	5.13	6.36	7.47	10.64	14.46	22.13	28.44
G 76.0	3.27	3.13	2.81	3.13	3.27	3.94	4.06	5.26	5.93	8.82	12.12	19.33	24.98
G 77.0	2.63	2.56	2.31	2.56	2.63	3.15	3.25	4.05	4.63	7.05	9.63	15.88	20.85
G 78.0	2.10	2.09	1.88	2.09	2.10	2.51	2.51	3.18	3.51	5.30	7.07	12.60	16.43
G 79.0	1.66	1.69	1.51	1.69	1.66	1.91	1.92	2.42	2.57	3.86	5.12	9.37	12.12
G 80.0	1.27	1.32	1.17	1.32	1.27	1.48	1.48	1.85	1.89	2.78	3.48	6.67	8.15
G 81.0	0.96	1.00	0.87	1.00	0.96	1.11	1.09	1.33	1.36	1.91	2.30	4.34	5.25
G 82.0	0.61	0.74	0.46	0.74	0.61	0.84	0.75	0.96	0.94	1.27	1.45	2.51	3.33
G 83.0	0.29	0.30	0.11	0.30	0.29	0.57	0.51	0.68	0.63	0.86	0.86	1.52	1.83
G 84.0	0.06	0.06	0.01	0.06	0.06	0.22	0.17	0.43	0.32	0.51	0.48	0.78	0.89
G 85.0	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.06	0.04	0.16	0.11	0.33	0.38
G 86.0	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.01	0.05	0.06
G 87.0	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02
G 88.0	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02
G 89.0	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02
G 90.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 91.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 92.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 93.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 94.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 95.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 96.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 97.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 98.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 99.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G100.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G101.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G102.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G103.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G104.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G105.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G106.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G107.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G108.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G109.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G110.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G111.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G112.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G113.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G114.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G115.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G116.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G117.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G118.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G119.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G120.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G121.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G122.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G123.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G124.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G125.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G126.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G127.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G128.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G129.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G130.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G131.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G132.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G133.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G134.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G135.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G136.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G137.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G138.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G139.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G140.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G141.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G142.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G143.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G144.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G145.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Pagina 12

COMMITTENTE:	FUNDO SRL VIA GIARDINI SUD 52 - 41026 PAVULLO NF STRADA VIGNOLESE 1175 - 41126 MODENA
OGGETTO:	PROGETTO DI ILLUMINAZIONE PUBBLICA ESTERNA PER IL COMPARTO A11.b DEL POLO SOVRACOMUNALE MADONNA BALDACCINI AMBITI ASP 2.9 – 2.10



Apparecchio		Rilievo		Lampada	
Codice	ITALO 1 0F2H1 STU-S 4.7-3M	Codice	17-077-107	Codice	L-IT1-0F2H1-4000-700-3M-70-25
Nome	ITALO 1 0F2H1 STU-S 4.7-3M	Nome	ITALO 1 0F2H1 STU-S 4.7-3M	Numero	1
Archivio	Eulumdat	Data	24-07-2017	Posizione	
Flusso Apparecchio	7030.00 lm	Potenza Apparecchio	58.00 W	Efficacia	121.21 lm/W
Flusso Lampade	7030.00 lm	Valore Massimo	715.83 cd/klm	Posizione	C=10.00 G=70.00
				CG	Asimmetrico

Tabella Intensità Luminose - cd/klm							Tabella 12/18
	C 325.00	C 330.00	C 335.00	C 340.00	C 345.00	C 350.00	C 355.00
G 73.0	37.18	36.83	36.62	37.32	44.29	56.79	232.39
G 74.0	35.98	34.66	34.80	35.77	41.88	49.91	192.41
G 75.0	33.17	31.48	32.49	33.07	38.57	44.55	149.95
G 76.0	29.76	28.02	29.43	30.04	35.40	40.41	116.51
G 77.0	25.14	24.15	26.03	27.02	31.44	35.01	82.89
G 78.0	21.03	19.86	22.49	23.96	27.75	30.71	62.19
G 79.0	16.32	15.43	18.67	19.67	23.81	25.91	47.05
G 80.0	12.03	11.21	14.19	15.32	19.37	19.63	36.55
G 81.0	8.28	7.65	10.35	11.01	14.53	15.08	26.52
G 82.0	5.27	5.21	7.23	7.62	10.42	11.41	18.53
G 83.0	3.10	3.11	4.52	4.70	7.08	7.96	13.75
G 84.0	1.56	1.57	2.59	2.42	4.31	4.86	10.29
G 85.0	0.71	0.59	1.28	1.15	2.22	2.58	6.68
G 86.0	0.16	0.12	0.37	0.29	0.93	1.00	3.28
G 87.0	0.02	0.02	0.07	0.07	0.26	0.23	1.02
G 88.0	0.02	0.02	0.03	0.04	0.05	0.05	0.15
G 89.0	0.02	0.03	0.03	0.04	0.05	0.05	0.05
G 90.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 91.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 92.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 93.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 94.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 95.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 96.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 97.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 98.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G 99.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G100.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G101.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G102.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G103.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G104.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G105.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G106.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G107.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G108.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G109.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G110.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G111.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G112.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G113.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G114.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G115.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G116.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G117.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G118.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G119.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G120.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G121.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G122.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G123.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G124.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G125.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G126.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G127.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G128.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G129.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G130.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G131.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G132.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G133.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G134.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G135.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G136.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G137.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G138.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G139.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G140.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G141.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G142.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G143.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G144.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G145.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00

COMMITTENTE:	FUNDO SRL VIA GIARDINI SUD 52 - 41026 PAVULLO NF STRADA VIGNOLESE 1175 - 41126 MODENA
OGGETTO:	PROGETTO DI ILLUMINAZIONE PUBBLICA ESTERNA PER IL COMPARTO A11.b DEL POLO SOVRACOMUNALE MADONNA BALDACCINI AMBITI ASP 2.9 – 2.10



Apparecchio	Rilievo	Lampada
Codice ITALO 1 0F2H1 STU-S 4.7-3M	Codice 17-077-107	Codice L-IT1-0F2H1-4000-700-3M-70-25
Nome ITALO 1 0F2H1 STU-S 4.7-3M	Nome ITALO 1 0F2H1 STU-S 4.7-3M	Numero 1
Archivio Eulundat	Data 24-07-2017	Posizione
Flusso Apparecchio 7030.00 lm	Potenza Apparecchio 58.00 W	Efficacia 121.21 lm/W
Flusso Lampade 7030.00 lm	Valore Massimo 715.83 cd/km	Rendimento 100.00%
	Posizione C=10.00 G=70.00	CG Asimmetrico

Tabella Intensità Luminosa - cd/km													Tabella 13/18
	C 0.00	C 5.00	C 10.00	C 15.00	C 20.00	C 25.00	C 30.00	C 35.00	C 40.00	C 45.00	C 50.00	C 55.00	C 60.00
G146.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G147.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G148.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G149.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G150.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G151.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G152.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G153.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G154.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G155.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G156.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G157.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G158.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G159.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G160.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G161.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G162.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G163.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G164.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G165.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G166.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G167.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G168.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G169.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G170.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G171.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G172.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G173.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G174.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G175.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G176.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G177.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G178.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G179.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G180.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

COMMITTENTE:	FUNDO SRL VIA GIARDINI SUD 52 - 41026 PAVULLO NF STRADA VIGNOLESE 1175 - 41126 MODENA
OGGETTO:	PROGETTO DI ILLUMINAZIONE PUBBLICA ESTERNA PER IL COMPARTO A11.b DEL POLO SOVRACOMUNALE MADONNA BALDACCINI AMBITI ASP 2.9 – 2.10



Apparecchio		Rilievo		Lampada	
Codice	ITALO 1 0F2H1 STU-S 4.7-3M	Codice	17-077-107	Codice	L-IT1-0F2H1-4000-700-3M-70-25
Nome	ITALO 1 0F2H1 STU-S 4.7-3M	Nome	ITALO 1 0F2H1 STU-S 4.7-3M	Numero	1
Archivio	Eulundat	Data	24-07-2017	Posizione	
Flusso Apparecchio	7030.00 lm	Potenza Apparecchio	58.00 W	Efficacia	121.21 lm/W
Flusso Lampade	7030.00 lm	Valore Massimo	715.83 cd/klm	Posizione	C=10.00 G=70.00
					CG Asimmetrico
					Rendimento 100.00%

Tabella Intensità Luminose - cd/klm													Tabella 14/18
	C 65.00	C 70.00	C 75.00	C 80.00	C 85.00	C 90.00	C 95.00	C 100.00	C 105.00	C 110.00	C 115.00	C 120.00	C 125.00
G146.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G147.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G148.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G149.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G150.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G151.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G152.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G153.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G154.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G155.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G156.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G157.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G158.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G159.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G160.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G161.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G162.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G163.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G164.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G165.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G166.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G167.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G168.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G169.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G170.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G171.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G172.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G173.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G174.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G175.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G176.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G177.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G178.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G179.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G180.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

COMMITTENTE:	FUNDO SRL VIA GIARDINI SUD 52 - 41026 PAVULLO NF STRADA VIGNOLESE 1175 - 41126 MODENA
OGGETTO:	PROGETTO DI ILLUMINAZIONE PUBBLICA ESTERNA PER IL COMPARTO A11.b DEL POLO SOVRACOMUNALE MADONNA BALDACCINI AMBITI ASP 2.9 – 2.10



Apparecchio		Rilievo		Lampada	
Codice	ITALO 1 0F2H1 STU-S 4.7-3M	Codice	17-077-107	Codice	L-IT1-0F2H1-4000-700-3M-70-25
Nome	ITALO 1 0F2H1 STU-S 4.7-3M	Nome	ITALO 1 0F2H1 STU-S 4.7-3M	Numero	1
Archivio	Eulundat	Data	24-07-2017	Posizione	
Flusso Apparecchio	7030.00 lm	Potenza Apparecchio	58.00 W	Efficacia	121.21 lm/W
Flusso Lampade	7030.00 lm	Valore Massima	715.83 cd/km	Posizione	C=10.00 G=70.00
				CG	Asimmetrico

Tabella Intensità Luminose - cd/km												Tabella 15/18											
	C 130.00	C 135.00	C 140.00	C 145.00	C 150.00	C 155.00	C 160.00	C 165.00	C 170.00	C 175.00	C 180.00	C 185.00	C 190.00										
G146.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	G146.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G147.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	G147.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G148.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	G148.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G149.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	G149.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G150.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	G150.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G151.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	G151.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G152.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	G152.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G153.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	G153.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G154.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	G154.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G155.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	G155.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G156.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	G156.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G157.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	G157.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G158.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	G158.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G159.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	G159.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G160.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	G160.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G161.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	G161.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G162.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	G162.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G163.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	G163.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G164.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	G164.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G165.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	G165.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G166.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	G166.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G167.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	G167.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G168.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	G168.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G169.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	G169.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G170.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	G170.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G171.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	G171.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G172.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	G172.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G173.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	G173.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G174.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	G174.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G175.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	G175.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G176.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	G176.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G177.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	G177.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G178.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	G178.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G179.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	G179.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G180.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	G180.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

COMMITTENTE:	FUNDO SRL VIA GIARDINI SUD 52 - 41026 PAVULLO NF STRADA VIGNOLESE 1175 - 41126 MODENA
OGGETTO:	PROGETTO DI ILLUMINAZIONE PUBBLICA ESTERNA PER IL COMPARTO A11.b DEL POLO SOVRACOMUNALE MADONNA BALDACCINI AMBITI ASP 2.9 – 2.10



Apparecchio		Rilievo		Lampada									
Codice	ITALO 1 0F2H1 STU-S 4.7-3M	Codice	17-077-107	Codice	L-IT1-0F2H1-4000-700-3M-70-25								
Nome	ITALO 1 0F2H1 STU-S 4.7-3M	Nome	ITALO 1 0F2H1 STU-S 4.7-3M	Numero	1								
Archivio	Eulundat	Data	24-07-2017	Posizione									
Flusso Apparecchio	7030.00 lm	Potenza Apparecchio	58.00 W	Efficacia	121.21 lm/W	Rendimento	100.00%						
Flusso Lampade	7030.00 lm	Valore Massimo	715.83 cd/klm	Posizione	C=10.00 G=70.00	CG	Asimmetrico						
Tabella Intensità Luminose - cd/klm				Tabella 16/18									
C 195.00		C 200.00	C 205.00	C 210.00	C 215.00	C 220.00	C 225.00	C 230.00	C 235.00	C 240.00	C 245.00	C 250.00	C 255.00
G146.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G147.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G148.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G149.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G150.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G151.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G152.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G153.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G154.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G155.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G156.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G157.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G158.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G159.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G160.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G161.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G162.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G163.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G164.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G165.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G166.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G167.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G168.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G169.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G170.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G171.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G172.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G173.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G174.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G175.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G176.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G177.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G178.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G179.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G180.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Pagina 17

COMMITTENTE:	FUNDO SRL VIA GIARDINI SUD 52 - 41026 PAVULLO NF STRADA VIGNOLESE 1175 - 41126 MODENA
OGGETTO:	PROGETTO DI ILLUMINAZIONE PUBBLICA ESTERNA PER IL COMPARTO A11.b DEL POLO SOVRACOMUNALE MADONNA BALDACCINI AMBITI ASP 2.9 – 2.10



Apparecchio		Rilievo		Lampada	
Codice	ITALO 1 0F2H1 STU-S 4.7-3M	Codice	17-077-107	Codice	L-IT1-0F2H1-4000-700-3M-70-25
Nome	ITALO 1 0F2H1 STU-S 4.7-3M	Nome	ITALO 1 0F2H1 STU-S 4.7-3M	Numero	1
Archivio	Eulumdat	Data	24-07-2017	Posizione	

Flusso Apparecchio	7030.00 lm	Potenza Apparecchio	58.00 W	Efficacia	121.21 lm/W	Rendimento	100.00%
Flusso Lampade	7030.00 lm	Valore Massimo	715.83 cd/klm	Posizione	C=10.00 G=70.00	CG	Asimmetrico

Tabella Intensità Luminose - cd/klm						Tabella 17/18						
C 260.00	C 265.00	C 270.00	C 275.00	C 280.00	C 285.00	C 290.00	C 295.00	C 300.00	C 305.00	C 310.00	C 315.00	C 320.00
G145.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G147.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G148.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G149.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G150.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G151.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G152.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G153.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G154.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G155.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G156.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G157.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G158.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G159.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G160.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G161.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G162.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G163.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G164.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G165.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G166.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G167.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G168.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G169.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G170.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G171.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G172.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G173.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G174.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G175.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G176.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G177.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G178.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G179.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G180.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

COMMITTENTE:	FUNDO SRL VIA GIARDINI SUD 52 - 41026 PAVULLO NF STRADA VIGNOLESE 1175 - 41126 MODENA
OGGETTO:	PROGETTO DI ILLUMINAZIONE PUBBLICA ESTERNA PER IL COMPARTO A11.b DEL POLO SOVRACOMUNALE MADONNA BALDACCINI AMBITI ASP 2.9 – 2.10



Apparecchio		Rilievo		Lampada				
Codice	ITALO 1 0F2H1 STU-S 4.7-3M	Codice	17-077-107	Codice	L-IT1-0F2H1-4000-700-3M-70-25			
Nome	ITALO 1 0F2H1 STU-S 4.7-3M	Nome	ITALO 1 0F2H1 STU-S 4.7-3M	Numero	1			
Archivio	Eulundat	Data	24-07-2017	Posizione				
Flusso Apparecchio	7030.00 lm	Potenza Apparecchio	58.00 W	Efficacia	121.21 lm/W			
Flusso Lampade	7030.00 lm	Valore Massimo	715.83 cd/km	Posizione	C=10.00 G=70.00			
				CG Asimmetrico				
		Tabella Intensità Luminose - cd/km		Tabella 18/18				
		C 325.00	C 330.00	C 335.00	C 340.00	C 345.00	C 350.00	C 355.00
G146.0		0.00	0.00	0.00	0.00	0.00	0.00	0.00
G147.0		0.00	0.00	0.00	0.00	0.00	0.00	0.00
G148.0		0.00	0.00	0.00	0.00	0.00	0.00	0.00
G149.0		0.00	0.00	0.00	0.00	0.00	0.00	0.00
G150.0		0.00	0.00	0.00	0.00	0.00	0.00	0.00
G151.0		0.00	0.00	0.00	0.00	0.00	0.00	0.00
G152.0		0.00	0.00	0.00	0.00	0.00	0.00	0.00
G153.0		0.00	0.00	0.00	0.00	0.00	0.00	0.00
G154.0		0.00	0.00	0.00	0.00	0.00	0.00	0.00
G155.0		0.00	0.00	0.00	0.00	0.00	0.00	0.00
G156.0		0.00	0.00	0.00	0.00	0.00	0.00	0.00
G157.0		0.00	0.00	0.00	0.00	0.00	0.00	0.00
G158.0		0.00	0.00	0.00	0.00	0.00	0.00	0.00
G159.0		0.00	0.00	0.00	0.00	0.00	0.00	0.00
G160.0		0.00	0.00	0.00	0.00	0.00	0.00	0.00
G161.0		0.00	0.00	0.00	0.00	0.00	0.00	0.00
G162.0		0.00	0.00	0.00	0.00	0.00	0.00	0.00
G163.0		0.00	0.00	0.00	0.00	0.00	0.00	0.00
G164.0		0.00	0.00	0.00	0.00	0.00	0.00	0.00
G165.0		0.00	0.00	0.00	0.00	0.00	0.00	0.00
G166.0		0.00	0.00	0.00	0.00	0.00	0.00	0.00
G167.0		0.00	0.00	0.00	0.00	0.00	0.00	0.00
G168.0		0.00	0.00	0.00	0.00	0.00	0.00	0.00
G169.0		0.00	0.00	0.00	0.00	0.00	0.00	0.00
G170.0		0.00	0.00	0.00	0.00	0.00	0.00	0.00
G171.0		0.00	0.00	0.00	0.00	0.00	0.00	0.00
G172.0		0.00	0.00	0.00	0.00	0.00	0.00	0.00
G173.0		0.00	0.00	0.00	0.00	0.00	0.00	0.00
G174.0		0.00	0.00	0.00	0.00	0.00	0.00	0.00
G175.0		0.00	0.00	0.00	0.00	0.00	0.00	0.00
G176.0		0.00	0.00	0.00	0.00	0.00	0.00	0.00
G177.0		0.00	0.00	0.00	0.00	0.00	0.00	0.00
G178.0		0.00	0.00	0.00	0.00	0.00	0.00	0.00
G179.0		0.00	0.00	0.00	0.00	0.00	0.00	0.00
G180.0		0.00	0.00	0.00	0.00	0.00	0.00	0.00

Pagina 19

COMMITTENTE:	FUNDO SRL VIA GIARDINI SUD 52 - 41026 PAVULLO NF STRADA VIGNOLESE 1175 - 41126 MODENA
OGGETTO:	PROGETTO DI ILLUMINAZIONE PUBBLICA ESTERNA PER IL COMPARTO A11.b DEL POLO SOVRACOMUNALE MADONNA BALDACCINI AMBITI ASP 2.9 – 2.10

5. ALLEGATI SCHREDER KAZU 5117

5.1 Dichiarazione del costruttore sulla temperatura del colore (CCT) dell'apparecchio illuminante

INFORMAZIONI DI FLUSSO E POTENZA

Dati tipici per LED bianco Neutro (NW - 4000 K, CRI min. 70) a Tq 25° C.

Modello	Acronimo	Temp. colore	Codice flusso	Flusso in uscita tipico (lm)	Potenza apparecchio (W)	Efficienza apparecchio (lm/W)	Corrente (mA)	Flusso nominale LED (lm)	Numero LED
KAZU	KAZU00	NW	001B0	1900	21	90	500	2600	12
KAZU	KAZU00	NW	002B1	2500	29	86	700	3500	12
KAZU	KAZU00	NW	003B3	3400	38	89	700	4600	16
KAZU	KAZU00	NW	003B4	3900	40	98	500	5300	24
KAZU	KAZU00	NW	004B5	4500	56	80	1000	6200	16
KAZU	KAZU00	NW	006B6	6800	82	83	1000	9200	24
KAZU	KAZU00	NW	001B7	1400	15	93	350	1900	12
KAZU	KAZU00	NW	001B8	1900	20	95	350	2600	16
KAZU	KAZU00	NW	002B9	2800	28	100	350	3800	24

Dati tipici per LED bianco Caldo (WW - 3000 K, CRI min. 80) a Tq 25° C.

Modello	Acronimo	Temp. colore	Codice flusso	Flusso in uscita tipico (lm)	Potenza apparecchio (W)	Efficienza apparecchio (lm/W)	Corrente (mA)	Flusso nominale LED (lm)	Numero LED
KAZU	KAZU00	WW	001A0	1700	21	81	500	2300	12
KAZU	KAZU00	WW	002A1	2200	29	76	700	3100	12
KAZU	KAZU00	WW	002A3	2900	38	76	700	4100	16
KAZU	KAZU00	WW	003A4	3400	40	85	500	4600	24
KAZU	KAZU00	WW	003A5	3900	56	70	1000	5400	16
KAZU	KAZU00	WW	005A6	5900	82	72	1000	8100	24
KAZU	KAZU00	WW	001A7	1200	15	80	350	1700	12
KAZU	KAZU00	WW	001A8	1600	20	80	350	2200	16
KAZU	KAZU00	WW	002A9	2500	28	89	350	3400	24

COMMITTENTE:	FUNDO SRL VIA GIARDINI SUD 52 - 41026 PAVULLO NF STRADA VIGNOLESE 1175 - 41126 MODENA
OGGETTO:	PROGETTO DI ILLUMINAZIONE PUBBLICA ESTERNA PER IL COMPARTO A11.b DEL POLO SOVRACOMUNALE MADONNA BALDACCINI AMBITI ASP 2.9 – 2.10

5.2 Misurazione fotometrica dell'apparecchio

03/11/2016



KAZU 5117 - 16 Cree XP-G2

Ottica:
 Protettore:
 Sorgente: 16 Cree XP-G2
 Matrice: KAZU 5117 16 Cree XP-G2 700mA WW 361102 Piano PC Liscio -
 Regolazione meccanica:
 Regolazione fotometrica:
 Potenza (W): 38
 Flusso di lampada (lm): 4344
 Flusso emesso dall'apparecchio (lm): 3106

Caratteristiche

525	525	190	0,0	IP 66	IK 08	I e II
Lunghezza (mm):	Larghezza (mm):	Altezza (mm):	Peso (kg):	Grado di protezione*	Resistenza agli urti*	Classe elettrica*

* Secondo EN60598 e EN62292

Dati per 1000 lm

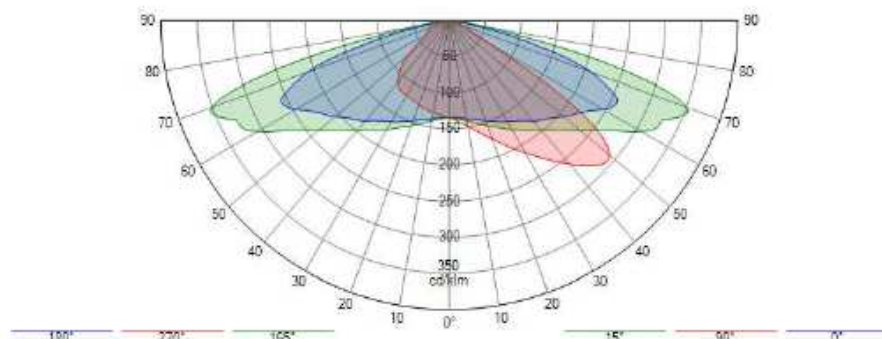
Efficienza (%): 71,5	Classe G (EN 13201-2): G4
UOLR (%): 0,0	Imax (cd/1000lm): 355
DLOR (%): 71,5	Apertura 0-180°: 38 - 38
UWLR (%): 0,0	Apertura 90-270°: 20 - X
	170-80-90-95 (cd): 350 - 49 - X - X

COMMITTENTE:	FUNDO SRL VIA GIARDINI SUD 52 - 41026 PAVULLO NF STRADA VIGNOLESE 1175 - 41126 MODENA
OGGETTO:	PROGETTO DI ILLUMINAZIONE PUBBLICA ESTERNA PER IL COMPARTO A11.b DEL POLO SOVRACOMUNALE MADONNA BALDACCINI AMBITI ASP 2.9 – 2.10

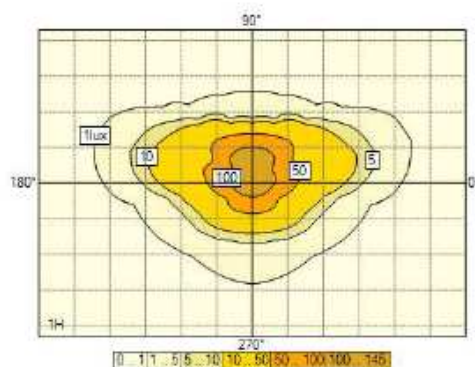
03/11/2016



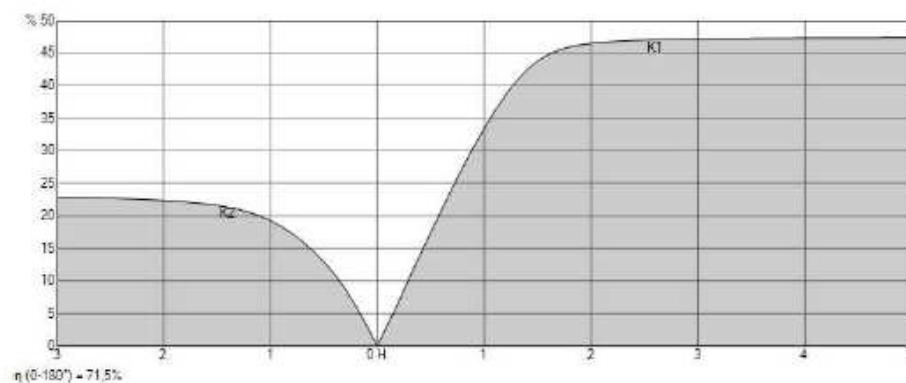
Diagramma polare/cartesiano



Isolux



Curva K



KAZU 5117 - 16 Cree XP-G2 700mA WW 230V Piano, PC, Liscio 361102 - 16 Cree XP-G2 - KAZU 5117 16 Cree XP-G2 700mA WW 361102Page 2

Schröder 

Format : Original (not tilted)

	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100
0	0	1	4	9	16	25	36	49	64	81	100	121	144	169	196	225	256	289	324	361	400
1	1	2	5	8	13	18	25	32	41	50	61	72	85	99	114	129	145	162	181	199	219
2	4	5	10	16	23	32	42	53	65	78	92	107	123	140	158	177	196	216	237	259	282
3	9	8	16	25	36	49	64	81	100	121	144	169	196	225	256	289	324	361	400	441	484
4	16	13	25	36	49	64	81	100	121	144	169	196	225	256	289	324	361	400	441	484	529
5	25	18	36	49	64	81	100	121	144	169	196	225	256	289	324	361	400	441	484	529	576
6	36	25	49	64	81	100	121	144	169	196	225	256	289	324	361	400	441	484	529	576	625
7	49	32	64	81	100	121	144	169	196	225	256	289	324	361	400	441	484	529	576	625	676
8	64	41	81	100	121	144	169	196	225	256	289	324	361	400	441	484	529	576	625	676	729
9	81	50	100	121	144	169	196	225	256	289	324	361	400	441	484	529	576	625	676	729	784
10	100	61	121	144	169	196	225	256	289	324	361	400	441	484	529	576	625	676	729	784	841
11	121	72	144	169	196	225	256	289	324	361	400	441	484	529	576	625	676	729	784	841	896
12	144	85	169	196	225	256	289	324	361	400	441	484	529	576	625	676	729	784	841	896	951
13	169	99	196	225	256	289	324	361	400	441	484	529	576	625	676	729	784	841	896	951	1006
14	196	114	225	256	289	324	361	400	441	484	529	576	625	676	729	784	841	896	951	1006	1061
15	225	129	256	289	324	361	400	441	484	529	576	625	676	729	784	841	896	951	1006	1061	1116
16	256	140	289	324	361	400	441	484	529	576	625	676	729	784	841	896	951	1006	1061	1116	1171
17	289	158	324	361	400	441	484	529	576	625	676	729	784	841	896	951	1006	1061	1116	1171	1226
18	324	177	361	400	441	484	529	576	625	676	729	784	841	896	951	1006	1061	1116	1171	1226	1281
19	361	196	400	441	484	529	576	625	676	729	784	841	896	951	1006	1061	1116	1171	1226	1281	1336
20	400	216	441	484	529	576	625	676	729	784	841	896	951	1006	1061	1116	1171	1226	1281	1336	1391
21	441	237	484	529	576	625	676	729	784	841	896	951	1006	1061	1116	1171	1226	1281	1336	1391	1446
22	484	259	529	576	625	676	729	784	841	896	951	1006	1061	1116	1171	1226	1281	1336	1391	1446	1501
23	529	282	576	625	676	729	784	841	896	951	1006	1061	1116	1171	1226	1281	1336	1391	1446	1501	1556
24	576	305	625	676	729	784	841	896	951	1006	1061	1116	1171	1226	1281	1336	1391	1446	1501	1556	1611
25	625	328	676	729	784	841	896	951	1006	1061	1116	1171	1226	1281	1336	1391	1446	1501	1556	1611	1666
26	676	351	729	784	841	896	951	1006	1061	1116	1171	1226	1281	1336	1391	1446	1501	1556	1611	1666	1721
27	729	374	784	841	896	951	1006	1061	1116	1171	1226	1281	1336	1391	1446	1501	1556	1611	1666	1721	1776
28	784	397	841	896	951	1006	1061	1116	1171	1226	1281	1336	1391	1446	1501	1556	1611	1666	1721	1776	1831
29	841	420	896	951	1006	1061	1116	1171	1226	1281	1336	1391	1446	1501	1556	1611	1666	1721	1776	1831	1886
30	896	443	951	1006	1061	1116	1171	1226	1281	1336	1391	1446	1501	1556	1611	1666	1721	1776	1831	1886	1941
31	951	466	1006	1061	1116	1171	1226	1281	1336	1391	1446	1501	1556	1611	1666	1721	1776	1831	1886	1941	1996
32	1006	489	1061	1116	1171	1226	1281	1336	1391	1446	1501	1556	1611	1666	1721	1776	1831	1886	1941	1996	2051
33	1061	512	1116	1171	1226	1281	1336	1391	1446	1501	1556	1611	1666	1721	1776	1831	1886	1941	1996	2051	2106
34	1116	535	1171	1226	1281	1336	1391	1446	1501	1556	1611	1666	1721	1776	1831	1886	1941	1996	2051	2106	2161
35	1171	558	1226	1281	1336	1391	1446	1501	1556	1611	1666	1721	1776	1831	1886	1941	1996	2051	2106	2161	2216
36	1226	581	1281	1336	1391	1446	1501	1556	1611	1666	1721	1776	1831	1886	1941	1996	2051	2106	2161	2216	2271
37	1281	604	1336	1391	1446	1501	1556	1611	1666	1721	1776	1831	1886	1941	1996	2051	2106	2161	2216	2271	2326
38	1336	627	1391	1446	1501	1556	1611	1666	1721	1776	1831	1886	1941	1996	2051	2106	2161	2216	2271	2326	2381
39	1391	650	1446	1501	1556	1611	1666	1721	1776	1831	1886	1941	1996	2051	2106	2161	2216	2271	2326	2381	2436
40	1446	673	1501	1556	1611	1666	1721	1776	1831	1886	1941	1996	2051	2106	2161	2216	2271	2326	2381	2436	2491
41	1501	696	1556	1611	1666	1721	1776	1831	1886	1941	1996	2051	2106	2161	2216	2271	2326	2381	2436	2491	2546
42	1556	719	1611	1666	1721	1776	1831	1886	1941	1996	2051	2106	2161	2216	2271	2326	2381	2436	2491	2546	2601
43	1611	742	1666	1721	1776	1831	1886	1941	1996	2051	2106	2161	2216	2271	2326	2381	2436	2491	2546	2601	2656
44	1666	765	1721	1776	1831	1886	1941	1996	2051	2106	2161	2216	2271	2326	2381	2436	2491	2546	2601	2656	2711
45	1721	788	1776	1831	1886	1941	1996	2051	2106	2161	2216	2271	2326	2381	2436	2491	2546	2601	2656	2711	2766
46	1776	811	1831	1886	1941	1996	2051	2106	2161	2216	2271	2326	2381	2436	2491	2546	2601	2656	2711	2766	2821
47	1831	834	1886	1941	1996	2051	2106	2161	2216	2271	2326	2381	2436	2491	2546	2601	2656	2711	2766	2821	2876
48	1886	857	1941	1996	2051	2106	2161	2216	2271	2326	2381	2436	2491	2546	2601	2656	2711	2766	2821	2876	2931
49	1941	880	1996	2051	2106	2161	2216	2271	2326	2381	2436	2491	2546	2601	2656	2711	2766	2821	2876	2931	2986
50	1996	903	2051	2106	2161	2216	2271	2326	2381	2436	2491	2546	2601	2656	2711	2766	2821	2876	2931	2986	3041
51	2051	926	2106	2161	2216	2271	2326	2381	2436	2491	2546	2601	2656	2711	2766	2821	2876	2931	2986	3041	3096
52	2106	949	2161	2216	2271	2326	2381	2436	2491	2546	2601	2656	2711	2766	2821	2876	2931	2986	3041	3096	3151
53	2161	972	2216	2271	2326	2381	2436	2491	2546	2601	2656	2711	2766	2821	2876	2931	2986	3041	3096	3151	3206
54	2216	995	2271	2326	2381	2436	2491	2546	2601	2656	2711	2766	2821	2876	2931	2986	3041	3096	3151	3206	3261
55	2271	1018	2326	2381	2436	2491	2546	2601	2656	2711	2766	2821	2876	2931	2986	3041	3096	3151	3206	3261	3316
56	2326	1041	2381	2436	2491	2546	2601	2656	2711	2766	2821	2876	2931	2986	3041	3096	3151	3206	3261	3316	3371
57	2381	1064	2436	2491	2546	2601	2656	2711	2766	2821	2876	2931	2986	3041	3096	3151	3206	3261	3316	3371	3426
58	2436	1087	2491	2546	2601	2656	2711	2766	2821	2876	2931	2986	3041	3096	3151	3206	3261	3316	3371	3426	3481
59	2491	1110	2546	2601	2656	2711	2766	2821	2876	2931	2986	3041	3096	3151	3206	3261	3316	3371	3426	3481	3536
60	2546	1133	2601	2656	2711	2766	2821	2876	2931	2986	3041	3096	3151	3206	3261	3316	3371	3426	3481	3536	3591
61	2601	1156	2656	2711	2766	2821	2876	2931	2986	3041	3096	3151	3206	3261	3316	3371	3426	3481	3536	3591	3646
62	2656	1179	2711	2766	2821	2876	2931	2986	3041	3096	3151	3206	3261	3316	3371	3426	3481	3536	3591	3646	3701
63	2711	1202	2766	2821	2876	2931	2986	3041	3096	3151	3206	3261	3316	3371	3426	3481	3536	3591	3646	3701	3756
64	2766	1225																			

Schröder 

Format : Original (not tilted)

[illegible]

COMMITTENTE:	FUNDO SRL VIA GIARDINI SUD 52 - 41026 PAVULLO NF STRADA VIGNOLESE 1175 - 41126 MODENA
OGGETTO:	PROGETTO DI ILLUMINAZIONE PUBBLICA ESTERNA PER IL COMPARTO A11.b DEL POLO SOVRACOMUNALE MADONNA BALDACCINI AMBITI ASP 2.9 – 2.10

5.3 Indice IPEA



INDICE DI PRESTAZIONE ENERGETICA DELL'APPARECCHIO

Dati apparecchio:

Apparecchio	
Flusso Lampade	4344.000 lm
Flusso Apparecchio	3106.090 lm
Potenza Apparecchio	38.000 W
Efficacia	81.739 lm/W
Codice	KAZU 5117 - 16 Cree XP-G2 700mA WW 230V Piano, PC, Liscio 361102
Nome	KAZU 5117 - 16 Cree XP-G2 700mA WW 230V Piano, PC, Liscio 361102

Rilevato	
Rendimento	71.50 %
Max Inten.	354.74 cd/klm
Simmetria	Asimmetrico
Pos. Max	C=15.00 G=69.00
Massimo Angolo	180°
Flusso rilievo	4344.000 lm
Codice	36110 (Ambient temperature:)
Area Frontale	0.275625 m2
Nome	KAZU 5117 - 16 Cree XP-G2
Area Laterale	0.000000 m2

Calcolo IPEA:

IPEA Standard

☒ Valutazione IPEA e diagramma

☐ Documento IPEA

Tipo Area

Stradali (ME)

Flusso lampada 4344.00 lm

BLF o Efficacia LED 1.00

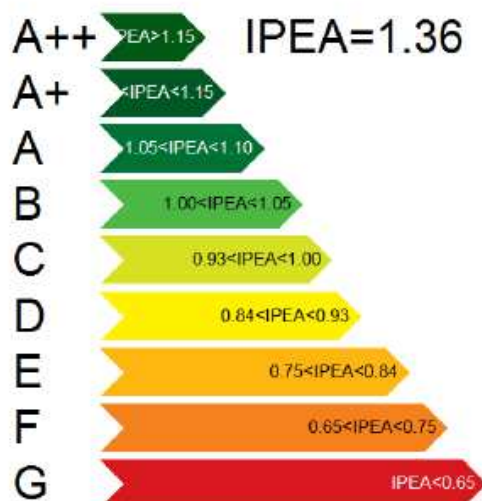
DLOR o OFF LED 0.715

Potenza Lampada 38.000 W

Potenza Apparecchio 38.000 W

Efficienza globale

81.739 lm/W



Schröder S.p.A. - Sede Operativa
Via Val della Torre 131 I 10040 Caselette (To) I T +39 011 98 49 111 I F +39 011 99 49 977
+39 011 98 49 132 Direzione Generale - Vendite
+39 011 98 49 158 Amministrazione
+39 011 98 49 126 Acquisti - Tecnico
mail@schroeder.it I www.schroeder.com
Sede Legale: Via Solari 9 I 20144 Milano I I.V. 1.000.000,00 € I RI. 00495940017

COMMITTENTE:	FUNDO SRL VIA GIARDINI SUD 52 - 41026 PAVULLO NF STRADA VIGNOLESE 1175 - 41126 MODENA
OGGETTO:	PROGETTO DI ILLUMINAZIONE PUBBLICA ESTERNA PER IL COMPARTO A11.b DEL POLO SOVRACOMUNALE MADONNA BALDACCINI AMBITI ASP 2.9 – 2.10

5.4 Gruppo di riferimento in materia del rischio foto biologico

Laboratory Service PHYSICAL TEST REPORT



R-Tech
Rue de Mons 3 - B-4000 Liège - Belgium
Tel.: +32 4 224 71 40 - Fax: +32 4 224 25 90
Member of Schröder Group

Subject: Modules 16 led's @ 700 mA

Sample n°: P-E13212

From: BER

Test purpose: Photobiological safety tests following IEC-EN 62471 Standard

Remarks:

Test request n°: P-D13310

Folder n°: P-F13067

TEST CONDITIONS:

Operator: Laborelec



Test program:

Spectral radiance and irradiance measurements of the device under test in the following wavelength ranges:

- 200 to 400 nm : « Actinic UV skin & eye » irradiance
- 315 to 400 nm : « Eye UV-A » irradiance
- 300 to 700 nm : « Blue Light » radiance
- 380 to 1100 nm : « Thermal Retinal » radiance

Determination of the Risk Group classification for each hazard and recommendation about the marking of the product.

Test and results: see report LBE03155934 - 1.0 here after

CONCLUSIONS:

Schröder Module equipped with 16 led' Cree XP-G2 @ 700 mA complies with the requirements of IEC/EN 62471 Standard.

It is classified RG0 for a distance which produces an illuminance of 500 lux (according to IEC/EN 62471 Std)

So nor restriction neither warning marking is required.

Duplicate to: MM C. Marville, Y. Borlez, M. Thijs
LAB 21/10/2013
J.P. Harchies

P-13E310

page 1/8

COMMITTENTE:	FUNDO SRL VIA GIARDINI SUD 52 - 41026 PAVULLO NF STRADA VIGNOLESE 1175 - 41126 MODENA
OGGETTO:	PROGETTO DI ILLUMINAZIONE PUBBLICA ESTERNA PER IL COMPARTO A11.b DEL POLO SOVRACOMUNALE MADONNA BALDACCINI AMBITI ASP 2.9 – 2.10



LABORATOIRE CENTRAL D'ELECTRICITE (L.C.E.)
CENTRAAL LABORATORIUM VOOR ELEKTRICITEIT (C.L.E.)
CENTRAL LABORATORY OF ELECTRICITY (C.L.E.)

Rodestraat, 125 – B-1630 Linkebeek

Photometry and lighting fixtures

REPORT OF TEST / MEASUREMENT

Purpose of the test / measurement	Photobiological safety according to IEC 62471 of a LED module (16 LEDs at 700mA) intended <u>for General Lighting Service use only</u>
Delivered to	R-TECH J-P Harchies rue de Mons 3 B-4000 Liège jp.harchies@rtech.be
Performed on	09/2013
Delivered on	16/09/2013
CLE task nr.	13EG0602 D
CLE report nr.	LBE03155934 - 1.0
Purchase order	N° 20130289 of 08/07/2013

*This document is fully electronically signed

*Author

Couvreux Guy
Technical operator
Tel.: +32 2 382 0373
E-mail: guy.couvreux@laborelec.com

*Verification

Conniasselle Thomas
Technical expert

*Approbation

Deswert Jean Michel
Technology Manager

The diffusion under any other form than the complete reproduction is not permitted except by written authorization from C.L.E.



*Progettazione e Consulenze
Impianti Elettrici*

Piazza Repubblica 35 – 41030 Bastiglia (MO)
P.IVA & C.F. 03837180367
Cell 346/9422860 - Tel/Fax 059/8394783
Indirizzo email: grazloproject1@gmail.com

COMMITTENTE:	FUNDO SRL VIA GIARDINI SUD 52 - 41026 PAVULLO NF STRADA VIGNOLESE 1175 - 41126 MODENA
OGGETTO:	PROGETTO DI ILLUMINAZIONE PUBBLICA ESTERNA PER IL COMPARTO A11.b DEL POLO SOVRACOMUNALE MADONNA BALDACCINI AMBITI ASP 2.9 – 2.10

1. Specifications of the device under test

Product/Device name : LED module (16 LEDs) intended for General Lighting Service (GLS¹) use only

Manufacturer : R-tech

Type : Module Lensoflex 16 LEDs – 700mA

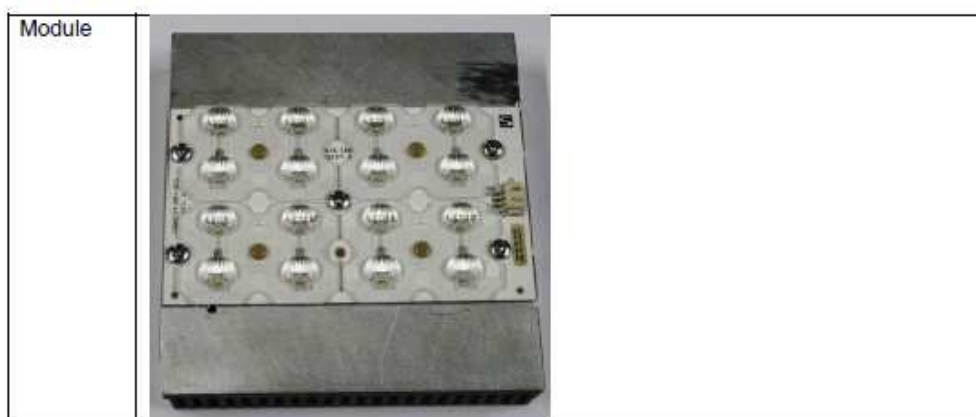
Serial number : -

Samples Date of entrance : 28/08/2013
Number of samples : 1
CLE Number : 13EG0602 D

1.1. Description:

Apparent dimensions (A x B) of the luminous area: 113 mm x 70 mm
Mean dimension (Z = (A + B)/2) : 86,5 mm

IEC 62471 defines the angular dimension in radian of the device as mean dimension (Z) divided by the measurement distance. This angular dimension is used to determine the test to be carried out and some applicable limits.



¹ * GLS : Term for lamps intended for lighting spaces that are typically occupied or viewed by people. Examples would be lamps for lighting offices, school, home, factories, roadways or automobiles. It does not include lamps for such uses as film projection, reprographic processes, suntanning, industrial processes, medical treatment and searchlight application.

COMMITTENTE:	FUNDO SRL VIA GIARDINI SUD 52 - 41026 PAVULLO NF STRADA VIGNOLESE 1175 - 41126 MODENA
OGGETTO:	PROGETTO DI ILLUMINAZIONE PUBBLICA ESTERNA PER IL COMPARTO A11.b DEL POLO SOVRACOMUNALE MADONNA BALDACCINI AMBITI ASP 2.9 – 2.10

2. Test program

2.1. Program

Spectral radiance and irradiance measurements of the device under test in the following wavelength ranges:

- 200 to 400 nm : « Actinic UV skin & eye » irradiance
- 315 to 400 nm : « Eye UV-A » irradiance
- 300 to 700 nm : « Blue Light » radiance
- 380 to 1100 nm: « Thermal Retinal » radiance

Determination of the Risk Group classification for each hazard and recommendation about the marking of the product.

2.2. Reference documents

- CIE 63 The spectroradiometric measurement of light sources
- IEC 62471 Photobiological safety of lamps and lamp systems (CIE S009)
- IEC 62471-2 Photobiological safety of lamps and lamp systems – Part 2: Guidance on manufacturing requirements relating to non-laser optical radiation safety
- IES LM79 Electrical and Photometric measurement of solid-state lighting Products

3. Method

According to IES LM79, LED products shall be tested with no seasoning (aging).

On the photometrical bench, measurement of the absolute spectral irradiance and radiance with a double monochromator is carried out. The measurement device is calibrated before the measurement with a calibrated deuterium standard lamp (PTB traceability) and a calibrated halogen standard lamp (NPL traceability).

The irradiance and radiance measurements are reported at a distance which produce an illuminance of 500 lux, which is only valid if the module is used in a luminaire intended for General Lighting Service, as described in the standard IEC 62471.

Each measurement is carried out after the thermal stabilization of the lamp (minimum 30 minutes).

Ambient temperature: $25 \pm 1^\circ\text{C}$

Stabilized voltage supply: 230,0 Vac 50 Hz.

The LED module is functioning with an LED driver giving 700mA output.

Position of the device under test: C : 50° , Gamma : 65°

COMMITTENTE:	FUNDO SRL VIA GIARDINI SUD 52 - 41026 PAVULLO NF STRADA VIGNOLESE 1175 - 41126 MODENA
OGGETTO:	PROGETTO DI ILLUMINAZIONE PUBBLICA ESTERNA PER IL COMPARTO A11.b DEL POLO SOVRACOMUNALE MADONNA BALDACCINI AMBITI ASP 2.9 – 2.10

4. Results

The following measurements have been performed on the device under test:

4.1. Electrical characteristics:

Voltage: 230,0 V
Power: 38,5 W
Current: 172,4 mA
Power Factor: 0,972

DC current to the LED module: 701mA

4.2. Risk Group for a distance of 2378 mm (distance which produce an illuminance of 500 lux)

Angular dimension (Z / 2378): 0,024 radian

Hazard Name	Action spectrum	Unit	Wavelength range (nm)	Field of view (mrad)	Measurement	Risk Group
Irradiance Actinic UV skin & eye	S(λ)	mW m ⁻²	200 - 400	-	0	Risk Group 0
Irradiance Eye UVA	-	mW m ⁻²	315 - 400	-	0	Risk Group 0
Radiance Blue Light	B(λ)	W m ⁻² sr ⁻¹	300 - 700	100	36	Risk Group 0
Radiance Retinal Thermal	R(λ)	W m ⁻² sr ⁻¹	380 – 1100 ⁽⁴⁾	11	10828	Risk Group 0

4.3. Notes:

⁽⁴⁾ according to the standard, "Radiance Retinal Thermal" hazard has to be assessed between 380 nm and 1400 nm. As LEDs don't emit between 1000 nm and 1400 nm, this hazard is only assessed between 380 nm and 1100 nm.

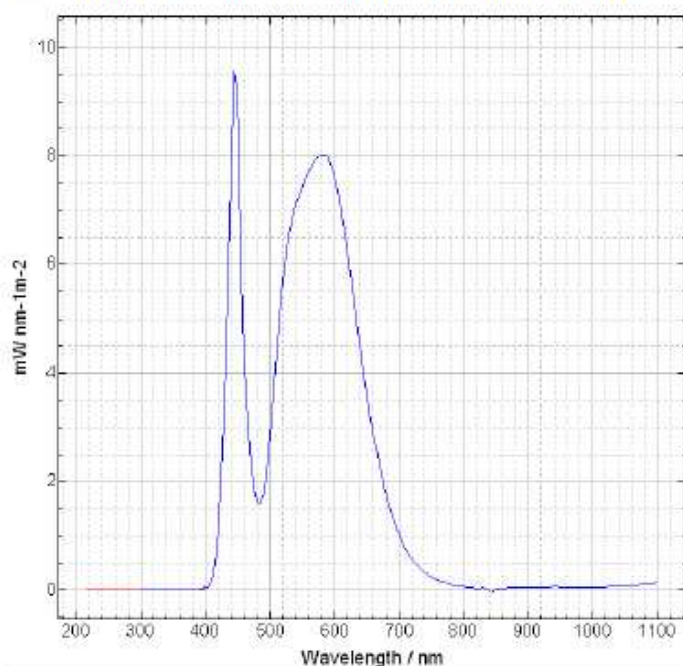
For information, the limits of the different risk group are presented in appendix 1.

COMMITTENTE:	FUNDO SRL VIA GIARDINI SUD 52 - 41026 PAVULLO NF STRADA VIGNOLESE 1175 - 41126 MODENA
OGGETTO:	PROGETTO DI ILLUMINAZIONE PUBBLICA ESTERNA PER IL COMPARTO A11.b DEL POLO SOVRACOMUNALE MADONNA BALDACCINI AMBITI ASP 2.9 – 2.10

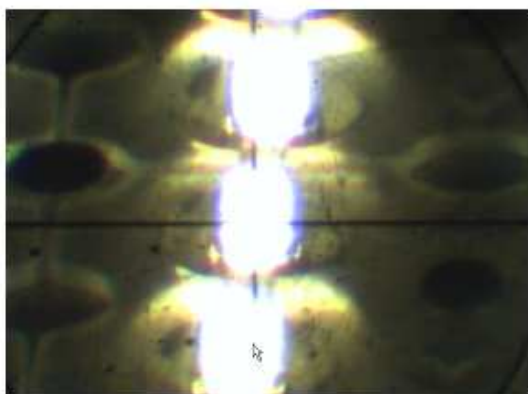
4.4. Colour characteristics of the lamp

Colour Temperature	3909	K
Colour Rendering	70,6	%

4.5. Irradiance between 200nm and 1100 nm [500Lux]



4.6. Field of view at 500 lx for the radiance measurement



COMMITTENTE:	FUNDO SRL VIA GIARDINI SUD 52 - 41026 PAVULLO NF STRADA VIGNOLESE 1175 - 41126 MODENA
OGGETTO:	PROGETTO DI ILLUMINAZIONE PUBBLICA ESTERNA PER IL COMPARTO A11.b DEL POLO SOVRACOMUNALE MADONNA BALDACCINI AMBITI ASP 2.9 – 2.10

5. Conclusion

According to the measurements, the following Risk Group can be calculated for each hazard and measurement distance. The measurement distance has a impact on the Risk Group classification. According to IEC 62471, the values shall be reported as follow:

- For lamps intended for general lighting service (GLS*), the hazard values shall be reported as either irradiance or radiance values at a distance which produces an illuminance of 500 lux, but not less than 200mm;
- For all other light sources, including pulsed lamp sources, the hazard values shall be reported at a distance of 200mm.

* GLS : Term for lamps intended for lighting spaces that are typically occupied or viewed by people. Examples would be lamps for lighting offices, school, home, factories, roadways or automobiles. It does not include lamps for such uses as film projection, reprographic processes, suntanning, industrial processes, medical treatment and searchlight application.

This clause is concerned with lamp classification. However a similar classification system could be applicable to luminaires or other containing operating lamps.

In some cases, the same lamp may be used in both GLS and special applications. In such cases, this lamp should be evaluated for intended applications. In this report, the results are expressed only for General Lighting Service applications.

Risk Group for a distance of 2378mm (distance where an illuminance of 500 lux is reached), for GLS sources

Hazard Name	Risk Group
Irradiance Actinic UV skin & eye	Risk Group 0 (Exempt)
Irradiance Eye UVA	Risk Group 0 (Exempt)
Radiance Blue Light	Risk Group 0 (Exempt)
Radiance Retinal Thermal	Risk Group 0 (Exempt)

According to IEC 62471-2, there is no marking mandatory for this product

COMMITTENTE:	FUNDO SRL VIA GIARDINI SUD 52 - 41026 PAVULLO NF STRADA VIGNOLESE 1175 - 41126 MODENA
OGGETTO:	PROGETTO DI ILLUMINAZIONE PUBBLICA ESTERNA PER IL COMPARTO A11.b DEL POLO SOVRACOMUNALE MADONNA BALDACCINI AMBITI ASP 2.9 – 2.10

5.5 Certificazione della non emissione di luce verso l'alto



Caselette, 4 Dicembre 2014

Dichiarazione

di Conformità alle Leggi relative al contenimento dell'Inquinamento Luminoso
e Veridicità delle misurazioni e dei dati fotometrici

La ditta **Schröder S.p.A.**, con sede operativa in Via Val della Torre 131 a Caselette (TO), azienda certificata ISO 9001:2008 con certificato numero 9130.COS6, dichiara sotto la propria responsabilità che il prodotto modello

KAZU con protettore piano

con ottica stradale o simmetrica, con tutti i numeri di LED disponibili e a tutte le correnti di alimentazione, è stato testato nel

Laboratorio fotometrico di	R-tech SA, Centro Ricerca e Sviluppo europeo del Gruppo Schröder
Accreditamento EN ISO 17025	Certificato Beltest n° 226-TEST (allegato)
Responsabile Tecnico	Ing. Laurent Maghe

secondo le indicazioni di seguito riportate:

Sistema di misura	Goniofotometro LMT tipo GO-DS 2000	Posizione apparecchio durante la misura	Orizzontale
Parametri di misura	Previsti dalla normativa	Incertezza di misura	Intensità $\pm 3\%$
Sistema di riferimento	C-Gamma	Simmetria applicata	Nessuna
Tensione di	230V $\pm 0,1\%$	Frequenza	50 Hz $\pm 0,1\%$
Temperatura Ambiente	25°C $\pm 1^\circ\text{C}$	Centro fotometrico	Al centro del vetro
Distanza fotocellula	10m o 30m ¹	Incertezza del flusso	$\pm 3\%$
Norme di riferimento	EN 13032/UNI 11356		
Intensità luminosa massima per Gamma $\geq 90^\circ$ (nella posizione di misura)			< 0,49 cd/klm
Posizione di installazione per i soddisfacimento dei requisiti di Legge:			
L'apparecchio deve essere installato in posizione orizzontale e unicamente come indicato sul foglio istruzioni. Non è ammesso l'uso di schermi che ne inficino il controllo luminoso.			

¹ In base alle dimensioni dell'apparecchio.

Schröder S.p.A. - Sede Operativa
Via Val della Torre 131 | 10040 Caselette (To) | T +39 011 98 49 111 | F +39 011 99 49 977
+39 011 98 49 132 Direzione Generale - Vendite
+39 011 98 49 158 Amministrazione
+39 011 98 49 126 Acquisti - Tecnica
mailto:mail@schroeder.it | www.schroeder.com
Sede Legale: Via Solari 9 | 20144 Milano | I.V. 1.000.000,00 € | P.I. 00495940017

COMMITTENTE:	FUNDO SRL VIA GIARDINI SUD 52 - 41026 PAVULLO NF STRADA VIGNOLESE 1175 - 41126 MODENA
OGGETTO:	PROGETTO DI ILLUMINAZIONE PUBBLICA ESTERNA PER IL COMPARTO A11.b DEL POLO SOVRACOMUNALE MADONNA BALDACCINI AMBITI ASP 2.9 - 2.10



È quindi conforme alle seguenti Leggi Regionali relative al contenimento dell'inquinamento luminoso e l.m.m.ii.:

- Abruzzo LR 12/05
- Alto Adige LP 4/11
- Basilicata LR 41/00
- Campania LR 13/02
- Emilia Romagna LR 19/03
- Friuli Venezia Giulia LR 15/07
- Lazio LR 23/00
- Liguria LR 22/07
- Lombardia LR 17/00
- Marche LR 10/02
- Molise LR 2/10
- Piemonte LR 31/00
- Puglia LR 15/05
- Sardegna DGR 48/31
- Toscana LR 37/00
- Trentino LP 16/07
- Umbria LR 20/05
- Valle d'Aosta LR 17/98
- Veneto LR 17/09

Inoltre Laurent Maghe, nel suo ruolo di Responsabile Tecnico del Laboratorio Fotometrico sopra indicato,

dichiara

che i dati fotometrici dei prodotti sopra elencati sono stati rilevati all'interno del laboratorio medesimo, senza manomissioni o alterazioni e sono gestiti in regime controllato di qualità (certificato ISO 9001:2008 n° BE05/051059) e in accordo con le norme di settore. Sono inoltre distribuiti in formato elettronico Eulumdat e disponibili su richiesta e/o sul sito <http://www.schreder.com>.



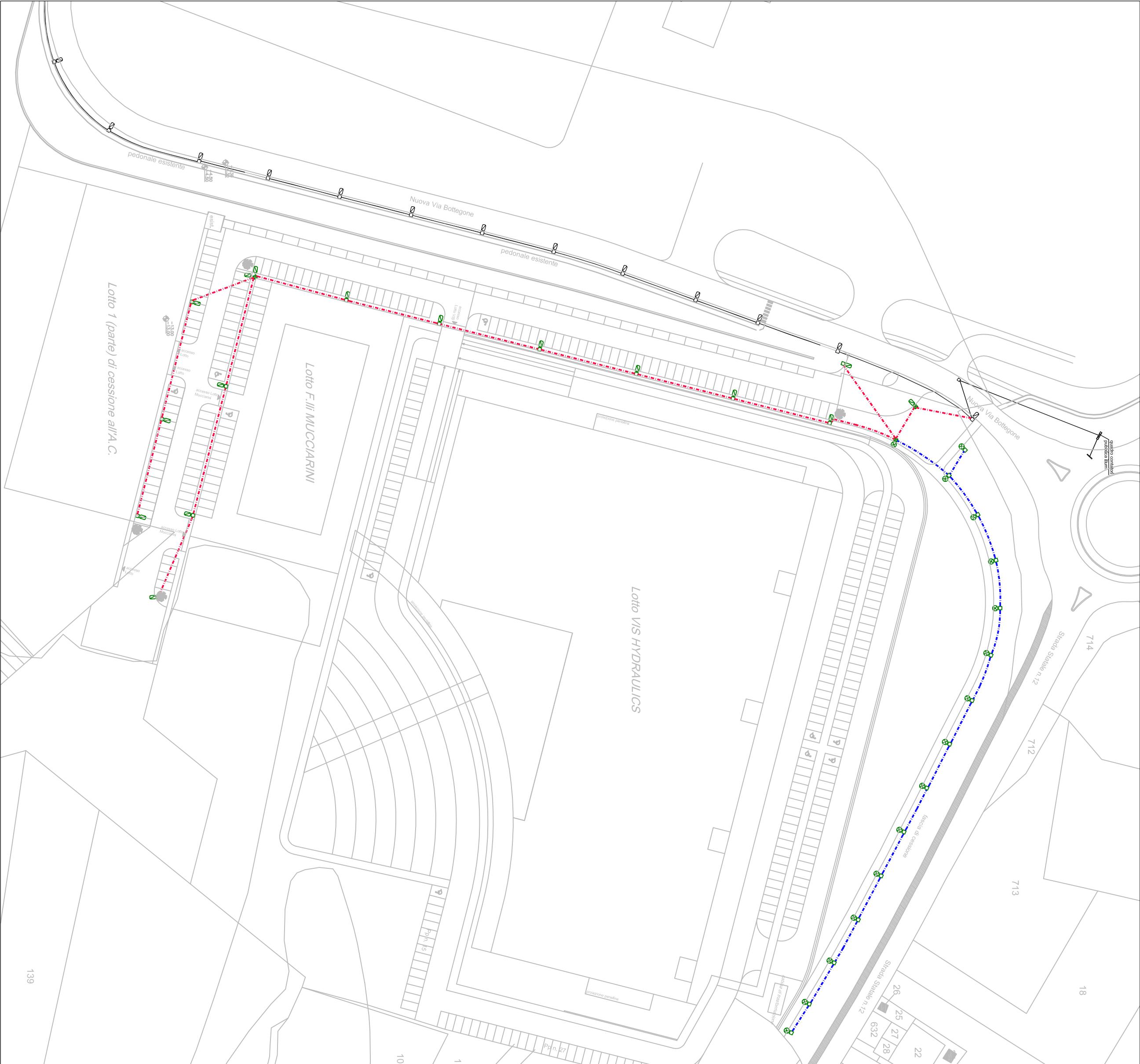
Schreder S.p.A. - Sede Operativa
Via Val della Torre 131 | 10040 Caselette (TO) | T +39 011 98 49 111 | F +39 011 99 49 977
+39 011 98 49 132 Direzione Generale - Vendite
+39 011 98 49 158 Amministrazione
+39 011 98 49 126 Acquisti - Tecnico
mailto:mai@schreder.it | www.schreder.com
Sede Legale: Via Solari 9 - I 20144 Milano | I.V. 1.000.000,00 € | P.I. 00495940017



Bastiglia, lì 14/02/2019



Progettazione e Consulenze
Impianti Elettrici

Piazza Repubblica 35 - 41030 Bastiglia (MO)
P.IVA & C.F. 03837180367
Cell 346/9422860 - Tel/Fax 059/8394783
Indirizzo email: grazloproject1@gmail.com



Calcoli Rete Elettrica						
TRATTA	SEGNO	POTENZA	LUNGHEZZA	C.D.T.	TIPOLOGIA CAVO	SEZIONE
"a"		P = 930W	L = 340m	$\Delta V\% = 1,23\%$	FG16(O)R16	6mm²
"b"		P = 600W	L = 313m	$\Delta V\% = 0,5\%$	FG16(O)R16	6mm²

COMUNE: PAVULLO NEL FRIGNANO
PROVINCIA: MODENA

OGGETTO INTERVENTO:

PROGETTO DI ILLUMINAZIONE PUBBLICA ESTERNA
PER IL COMPARTO A11.b DEL POLO SOVRACOMUNALE
MADONNA BALDACCINI AMBITI ASP 2.9 - 2.10

Titolo Elaborato:

PLANIMETRIA CALCOLI ELETTRICI

Committente:

FUNDO SRL
VIA GIARDINI SUD 52 - 41026 PAVULLO NF
STRADA VIGNOLESE 1175 - 41126 MODENA

Proprietario:

VIS HYDRAULICS S.R.L. - SIG. MUCCIARINI ALBERT
SIG. MUCCIARINI SERGIO - FORGIA DEL FRIGNANO S.P.A.
Via Giardini Nord, 140, 41026 Pavullo nel Frignano MO

Data di Emissione:	14/02/2019	Revisione n°:	--	Data Revisione:	--
Commessa n°:	305	Tavola n°:	2IE_ES	Scala:	1:100
Disegnato da: FRONTERA DAMIANO		Controllo da: GRAZIOSI MATTEO		Approvato da: GRAZIOSI MATTEO	

STUDIO

WG

Progettazione e Consulenze
Impianti Elettrici

Piazza Repubblica 35 - 41030 Bastiglia (MO)
P.IVA & C.F. 03837180367
Cell. 3469422860 - Tel/fax 0596394783
Indirizzo email: grazioproject@gmail.com

Progettista:
GRAZIOSI MATTEO

Timbro e firma: