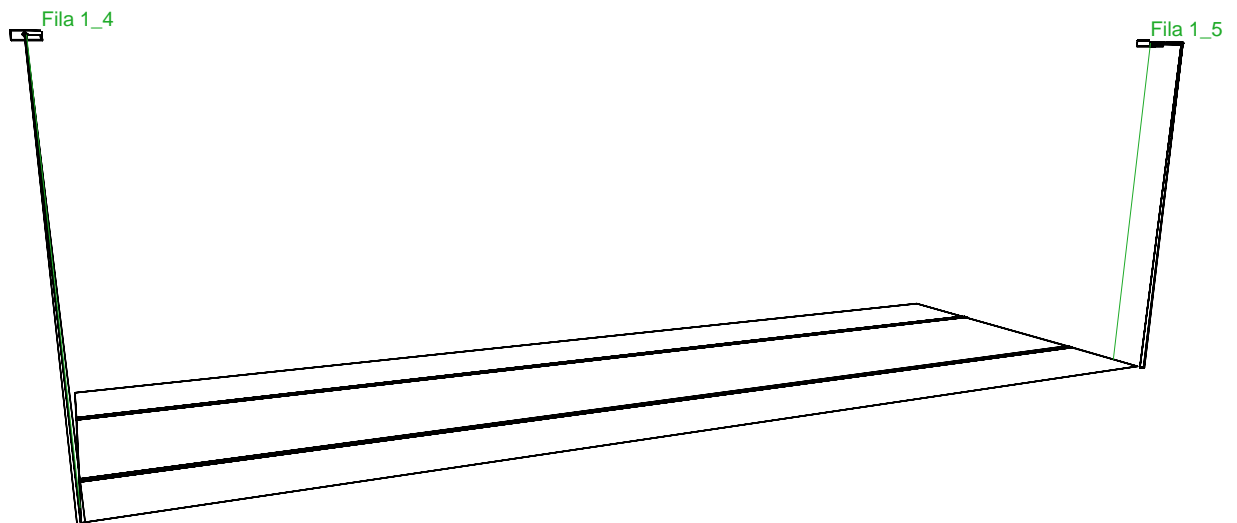


Svincolo di Chiomonte

Installation Notes:
Customer: G&C
Project Code: 599-12
Date: 12/12/2012

Notes:



DESIGNER NAME: Fael Spa
Address: Via Euripide 12/14-20864 Agrate Br. MB
Tel.-Fax: +3903963411 fax +39039653868

Remarks:

The lux levels provided by Technical Staff Fael Luce, are considered upon customer data. By changing type products installation, area dimension, the presence within the lighting area of obstacles, all of them produce some changing size of lighting. The lux levels can be changed by also tolerance of products' photometric values, lighting dazzling by light sources, reflecting properties of the planes and by alternating of power supply. The lighting project is done following the customer technics data.

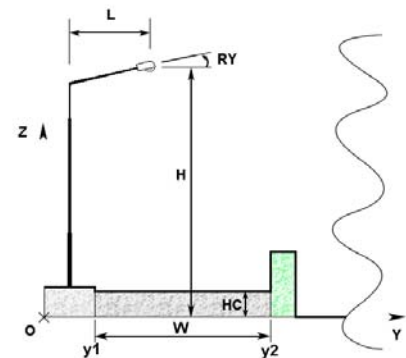
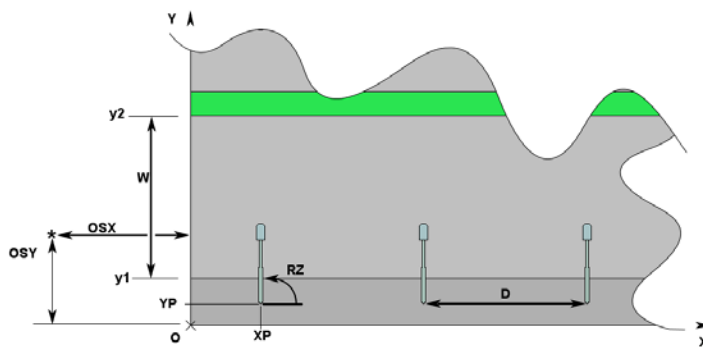
1.1 Area Information

Road Data

Zone	Zone Type	Lane	Direction	Width [m] W	y1 [m]	y2 [m]	Calc. Pts.Y (ILLUM.)	Calc. Pts.Y (LUMIN.)	h Zone [m] (HC)	Color	R Table	Refl. Coeff. q0 Factor
Secondaria	Secondary	Generica	<---	2.35	0.00	2.35	3	1	0.00	RGB=126,126,126		35.00
Carrabile	Carriageable	CorsiaStradale	<---	4.80	2.35	7.15	3	3	0.00	RGB=126,126,126	C2	7.01
Secondaria	Secondary	Generica	--->	2.35	7.15	9.50	3	1	0.00	RGB=126,126,126		35.00

Installation Data (Luminaires Row)

Row Name	1° Pole x [m] (XP)	1° Pole y [m] (YP)	Lum. Height [m] (H)	No. Poles	Interd. [m] (D)	Arm [m] (L)	Lum.Incl. ° (RY)	Arm Rot. ° (RZ)	Lateral Incl. ° (RX)	Maint.Coeff. [%]	Code Luminaire	Flux lm	Refer.
Fila 1	0.00	-0.15	9.00	---	28.00	1.00	0	90	0	80.00	37322	8500	A



1.2 Energy Calculation (Ground)

Area	134.40 m2
Average Illuminance	18.60 lx
Specific Power	0.68 W/m2
Lighting Engineering Specific Power	3.64 W/(m2 * 100lx)
Energy Efficiency	27.47 (m2*lx)/W
Total Power Used	91.00 W

1.3 Uniformity Installation Parameters

Summary Results

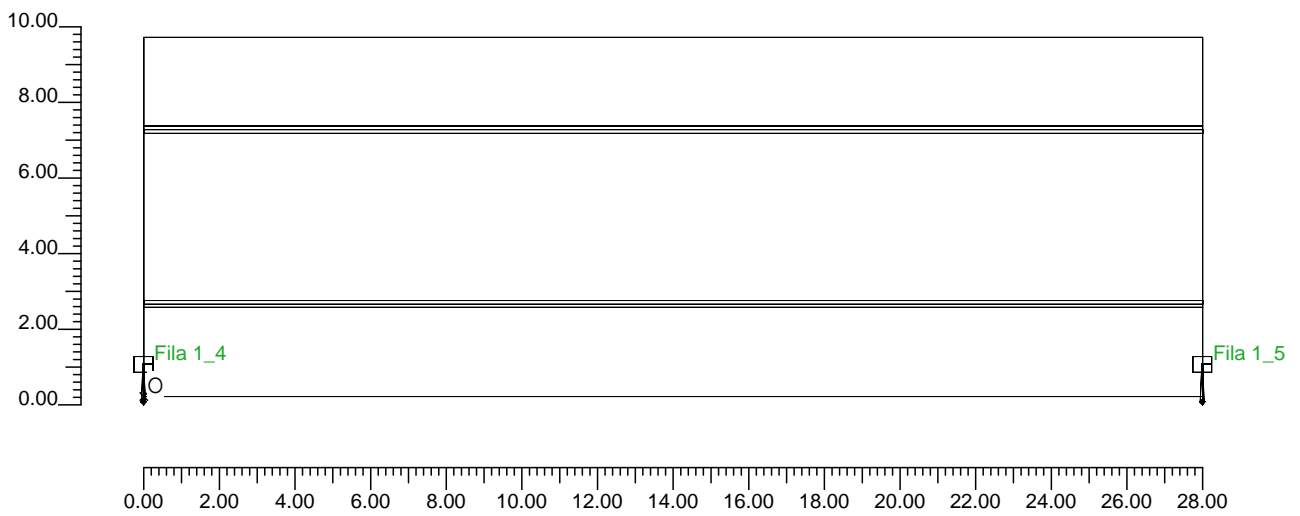
Zone	Observer	Lane	Sr	Ti	UI	LAv	Uo
Carrabile			Tot=0.86 R=1.01 L=0.74	Ti=5.13	0.89	1.12	0.82
	1) (x=88.00 y=4.75)m 2) (x=88.00 y=5.95)m (x=48.63 y=5.95)m	CorsiaStradale			0.89 *	1.12 *	0.82 *
Lv=0.11				Ti=5.13 *		1.16	0.82

Light Pollution

Average Ratio - Rn -
0.00 %

2.1 2D Plane View

Scale 1/200



3.1 Luminaire/Measurements Info

Refer.	Line	Luminaire Name (Measurement Name)	Luminaire Code (Measurement Code)	Luminaires N.	Ref.Lamps	Lamps N.
A	TREND 4-5 WAY LED	TREND 5 WAY LED 56 RB AB1 530 (TREND5 WAY 56 RB AB1 700)	37322 (PRLED338A)	-	LMP-A	1

3.2 Lamp Information

Ref.Lamps	Type	Code	Flux lm	Power W	Color K	N.
LMP-A		FLUX 390A	8500	91	4300	-

4.1 Luminance Values on: Carreggiata Oss. 1(x=88.00;y=4.75;z=1.50)m

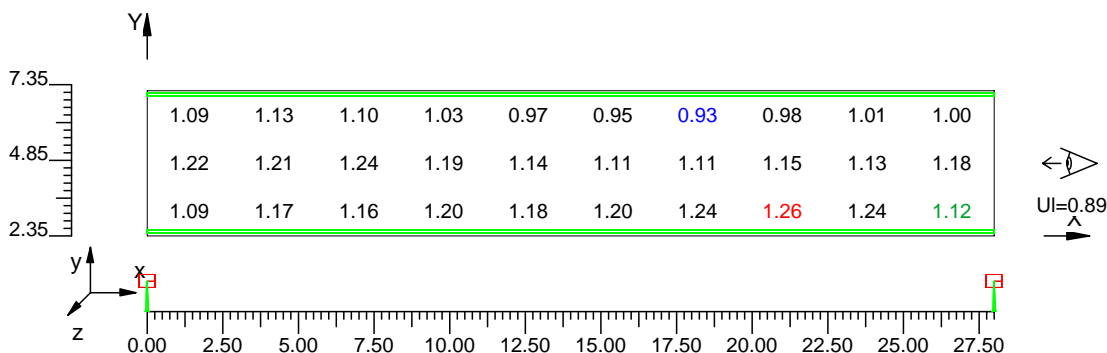
O (x:0.00 y:2.35 z:0.00)	Results	Average	Minimum	Maximum	Min/Ave	Min/Max	Ave/Max
DX:2.80 DY:1.60	Luminance (L)	1.12 cd/m ²	0.93 cd/m ²	1.26 cd/m ²	0.82	0.74	0.89

Calculation Type Only Dir. + Furniture

Lane Name	Lane Width [m] W	y1 [m]	y2 [m]	Calc. Pt. Y	R Table	Ref. Coeff. q0 Factor	Observer x Absolute [m]	Observer y Absolute [m]	Luminance Luminance [cd/m ²]	Threshold Increment [%]	Longitudinal Longitudinal
CorsiaStradale	4.80	2.35	7.15	3	C2	7.01	88.00	4.75	0.11	5.13	0.89 *

Scale 1/250

CV= 0.083



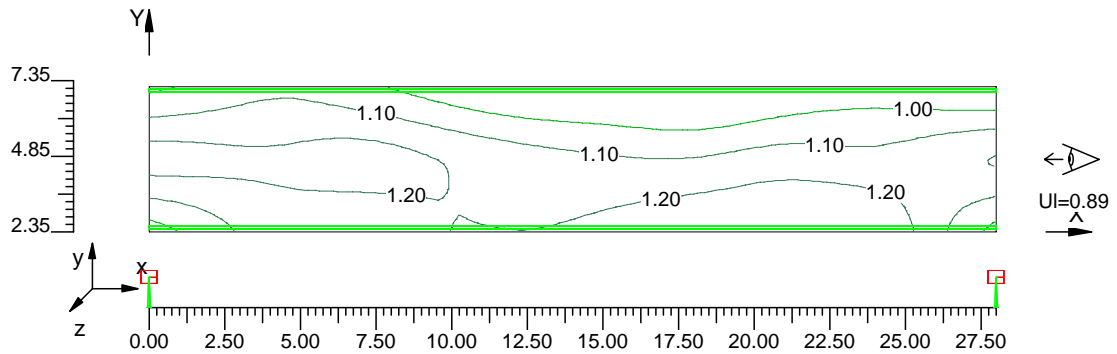
4.2 Isoluminance Curves on: Carreggiata. Oss. 1(x=88.00;y=4.75;z=1.50)m

O (x:0.00 y:2.35 z:0.00)	Results	Average	Minimum	Maximum	Min/Ave	Min/Max	Ave/Max
DX:2.80 DY:1.60	Luminance (L)	1.12 cd/m ²	0.93 cd/m ²	1.26 cd/m ²	0.82	0.74	0.89

Calculation Type Only Dir. + Furniture

Lane Name	Lane Width [m] W	y1 [m]	y2 [m]	Calc. Pt. Y	R Table	Ref. Coeff. q0 Factor	Observer x Absolute [m]	Observer y Absolute [m]	Luminance Luminance [cd/m ²]	Threshold Increment [%]	Longitudinal Longitudinal
CorsiaStradale	4.80	2.35	7.15	3	C2	7.01	88.00	4.75	0.11	5.13	0.89 *

Scale 1/250



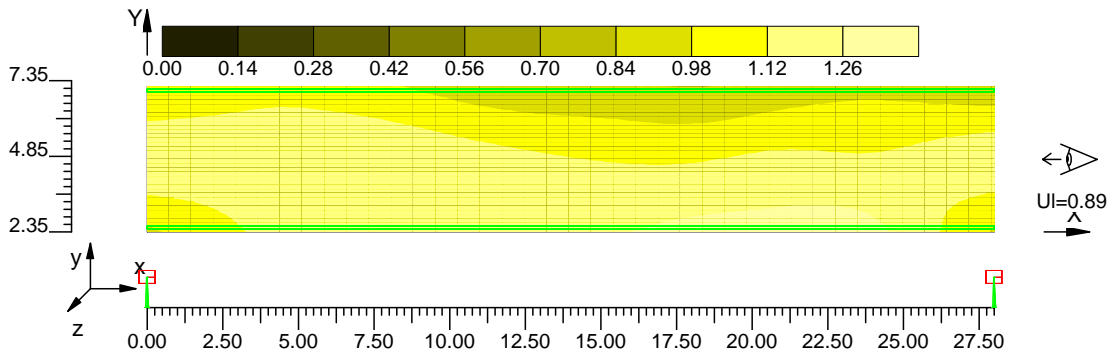
4.3 Luminance Spot Diagram on: Carreggiata.. Oss. 1(x=88.00;y=4.75;z=1.50)m

O (x:0.00 y:2.35 z:0.00)	Results	Average	Minimum	Maximum	Min/Ave	Min/Max	Ave/Max
DX:2.80 DY:1.60	Luminance (L)	1.12 cd/m ²	0.93 cd/m ²	1.26 cd/m ²	0.82	0.74	0.89

Calculation Type Only Dir. + Furniture

Lane Name	Lane Width [m] W	y1 [m]	y2 [m]	Calc. Pt. Y	R Table	Refl. Coeff. q0 Factor	Observer x Absolute [m]	Observer y Absolute [m]	Luminance Luminance [cd/m ²]	Threshold Increment [%]	Longitudinal Longitudinal
CorsiaStradale	4.80	2.35	7.15	3	C2	7.01	88.00	4.75	0.11	5.13	0.89 *

Scale 1/250



4.4 Illuminance Values on: Carreggiata

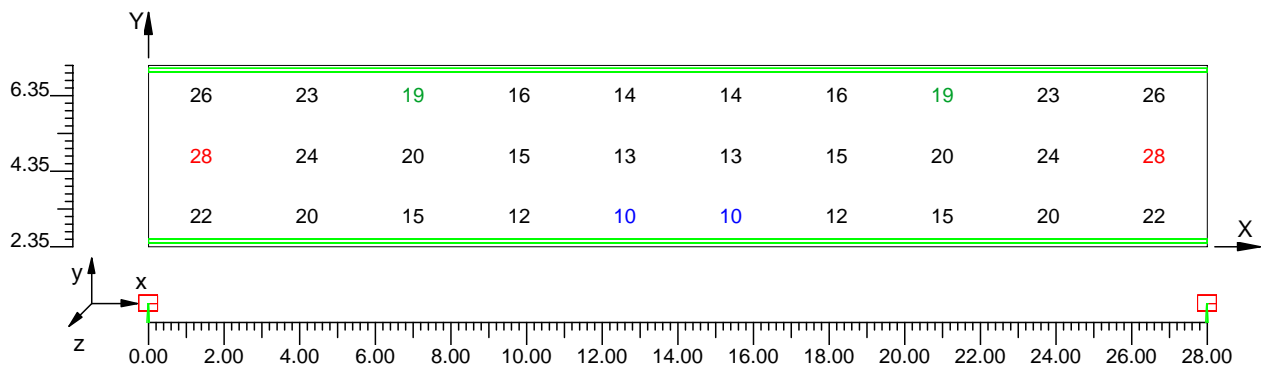
O (x:0.00 y:2.35 z:0.00)	Results	Average	Minimum	Maximum	Min/Ave	Min/Max	Ave/Max
DX:2.80 DY:1.60	Horizontal Illuminance (E)	19 lux	10 lux	28 lux	0.56	0.37	0.66

Calculation Type

Only Dir. + Furniture

Scale 1/200

CV= 0.275



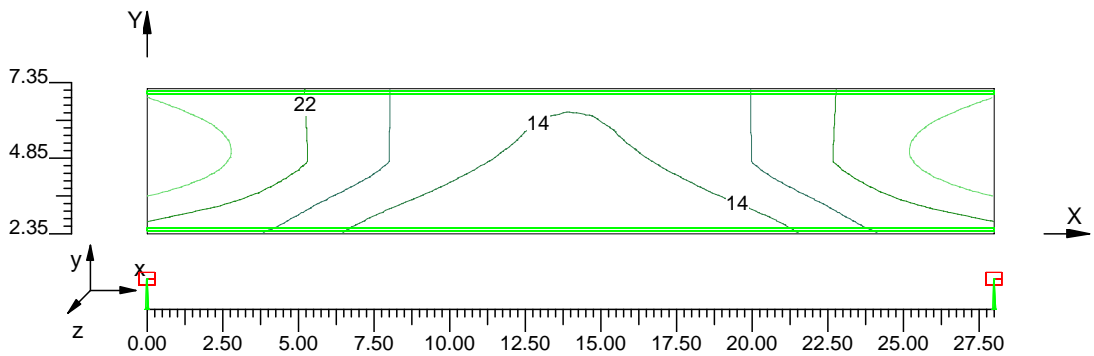
4.5 Isolux Curves on: Carreggiata

O (x:0.00 y:2.35 z:0.00)	Results	Average	Minimum	Maximum	Min/Ave	Min/Max	Ave/Max
DX:2.80 DY:1.60	Horizontal Illuminance (E)	19 lux	10 lux	28 lux	0.56	0.37	0.66

Calculation Type

Only Dir. + Furniture

Scale 1/250



4.6 Illuminance Spot Diagram on: Carreggiata 1

O (x:0.00 y:2.35 z:0.00)	Results	Average	Minimum	Maximum	Min/Ave	Min/Max	Ave/Max
DX:2.80 DY:1.60	Horizontal Illuminance (E)	19 lux	10 lux	28 lux	0.56	0.37	0.66

Calculation Type

Only Dir. + Furniture

Scale 1/250

