

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: LUMIERE

Report Number: G1-2405-109-2

Luminaire Tested: **650-2-8LED-30-10-12-X**

Test Date: 2024-07-13

Test Information

Test Method: LM-79-08
Report Number: G1-2405-109-2
Test Lab: Cooper Lighting Solutions
Test Date: 2024-07-13
Issue Date: 7/13/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMIERE
Catalog Number: 650-2-8LED-30-10-12-X
Description: Boca with Two openings
Light Source: Sora
SM16-04-10D-930-03
Ballast/Driver: @Current

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 28.8 lumens
Efficiency: N/A
Efficacy: 4.6 lumens/watt
Luminous Opening: Circular (Dia: 0.18' x H: 0')
IES Classification: Type I - Short
BUG Rating: B0 - U1 - G0

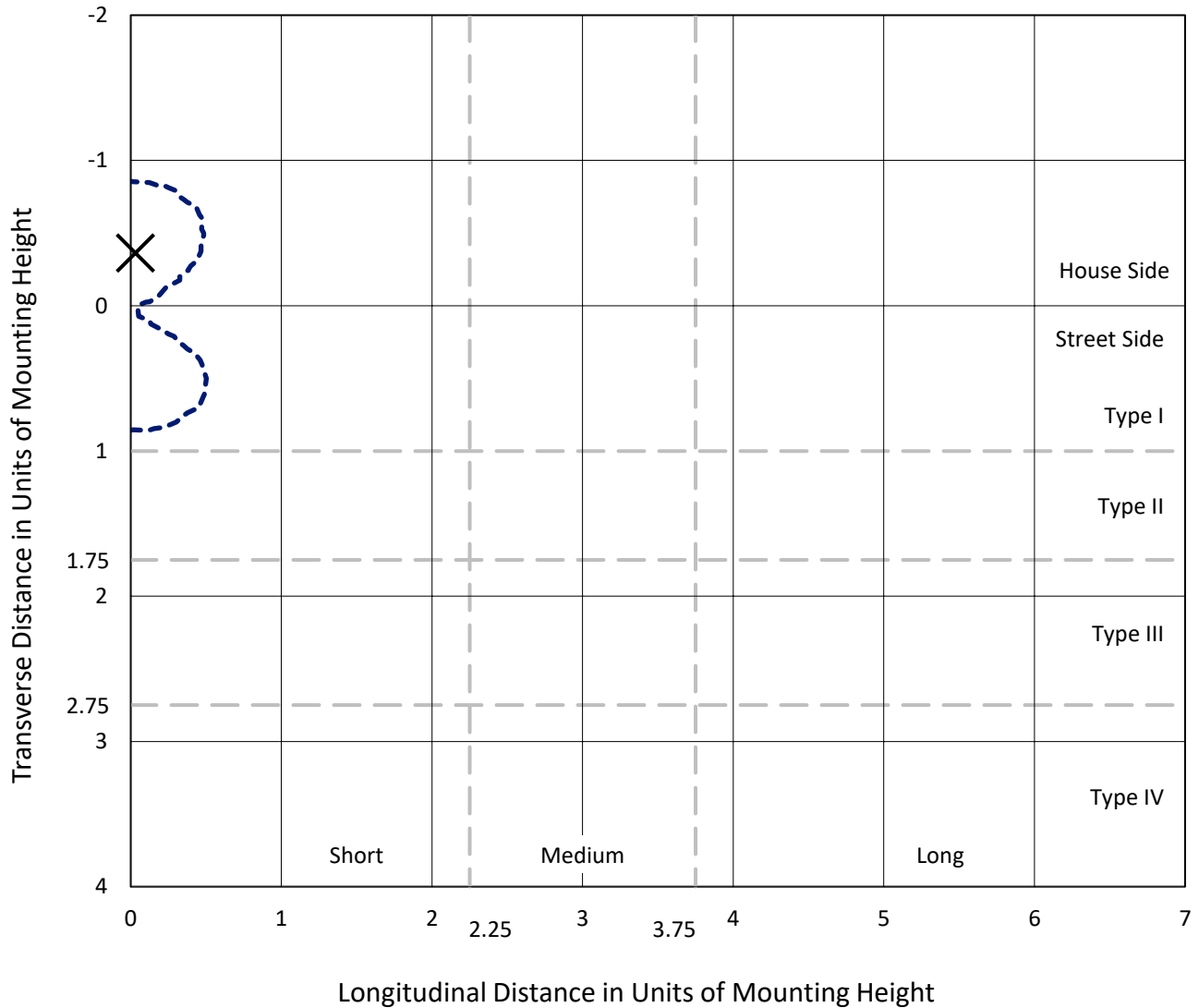
Input Watts (W): 6.19
Input Voltage (V): 12.0
Input Current (Ain): 0.516
Voltage Rise (V): NR
Power Factor: 1
Total Harmonic Distortion (THDi): 0.0%
Frequency (hertz): 60
Stabilization Time: 0.5 HR
Operation Time: 7.0 HR
Ambient Temperature (°C): 25.6
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

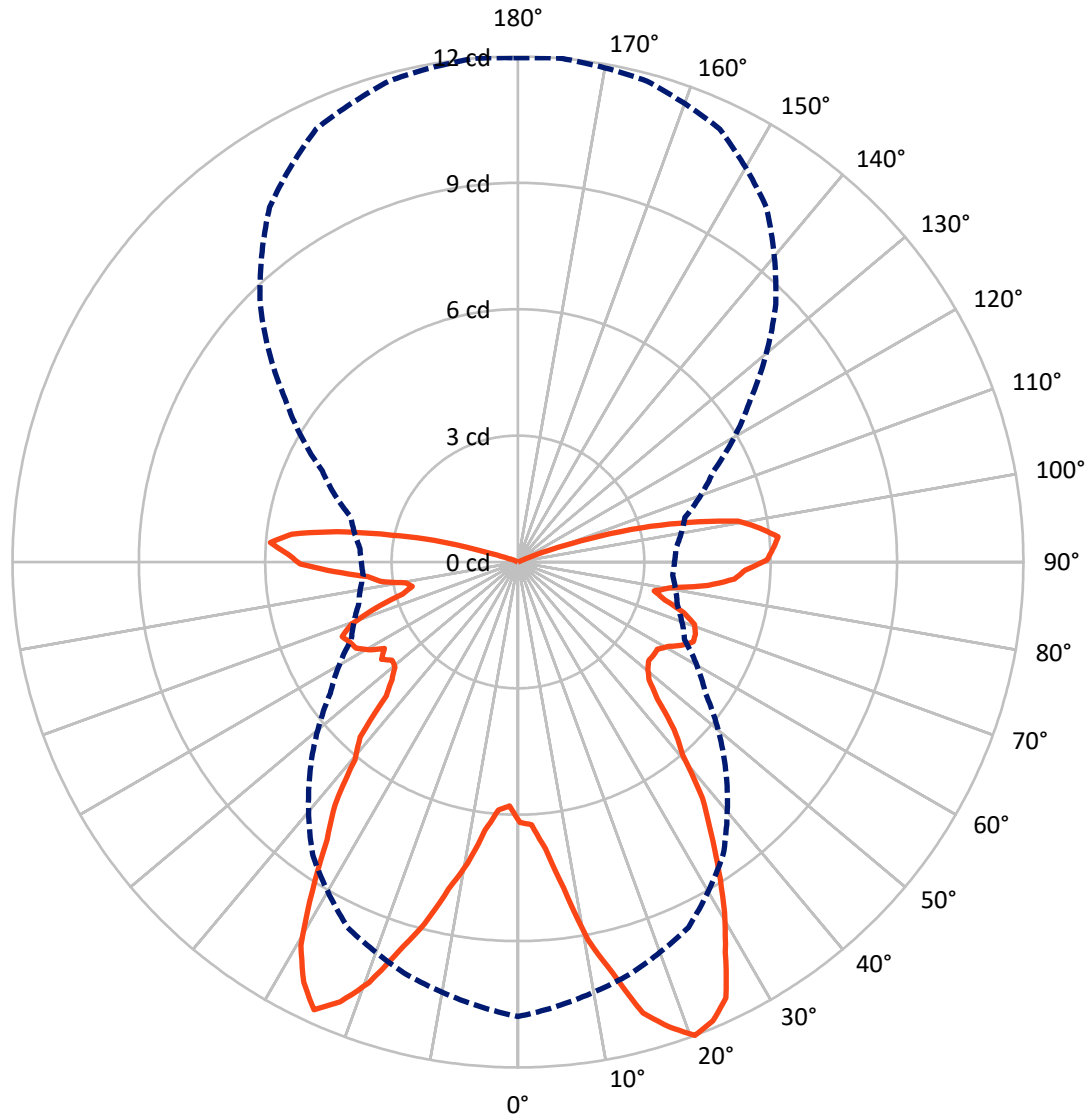
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0 fc
 Type I - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 175-Deg Lateral - - - Horizontal Cone Through 20-Deg Vertical

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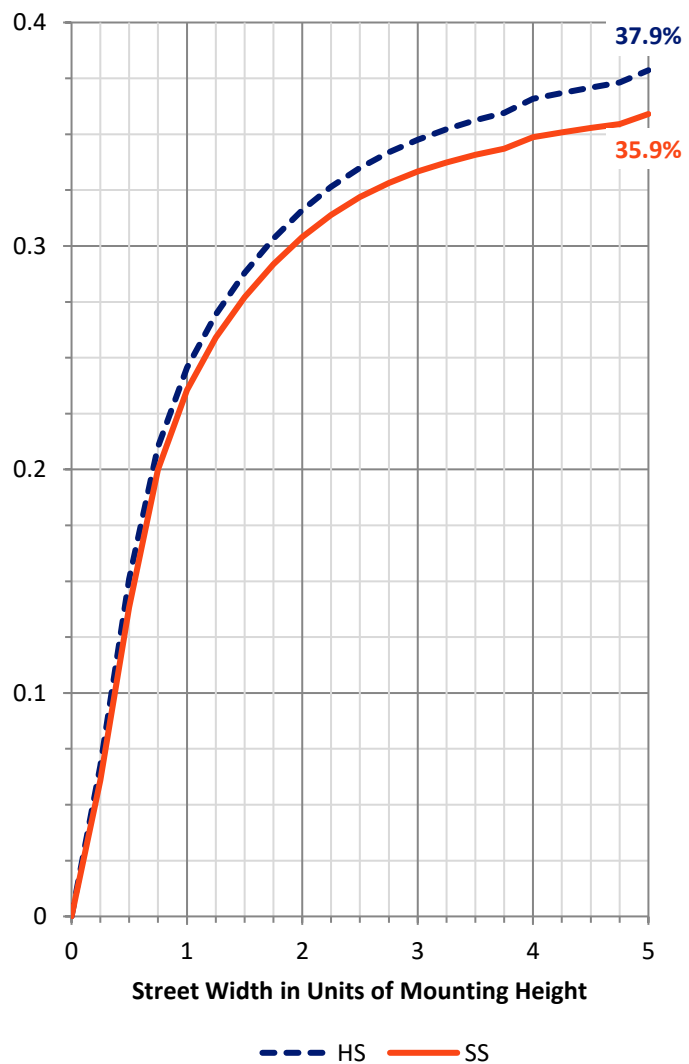
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	12.2	2.8	15.0
	% Fixture	42.5	9.8	52.2
Street Side	Lumens	11.4	2.4	13.7
	% Fixture	39.5	8.3	47.8
Total	Lumens	23.6	5.2	28.8
	% Fixture	81.9	18.1	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	0.6	2.1
10°-20°	2.0	7.1
20°-30°	3.4	11.9
30°-40°	3.5	12.1
40°-50°	2.8	9.9
50°-60°	2.7	9.5
60°-70°	3.2	11.0
70°-80°	2.4	8.2
80°-90°	2.9	10.2
90°-100°	3.6	12.4
100°-110°	1.6	5.4
110°-120°	0.1	0.3
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	23.6	81.9
0°-180°	28.8	100.0

Coefficient of Utilization

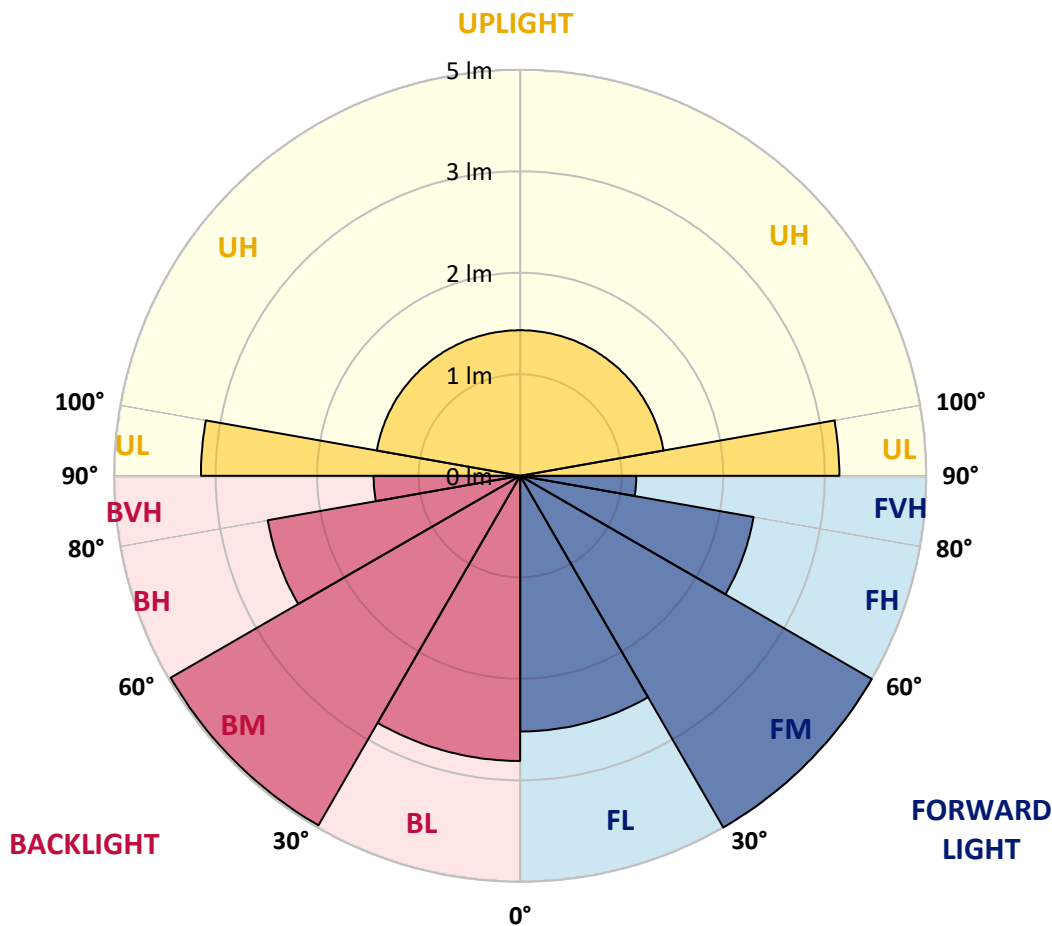


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2.9	9.9			
FM (30°-60°)	4.5	15.8			
FH (60°-80°)	2.7	9.2			G0/660
FVH (80°-90°)	1.3	4.5			G0/10
BL (0°-30°)	3.2	11.1	B0/110		
BM (30°-60°)	4.5	15.7	B0/220		
BH (60°-80°)	2.9	10.0	B0/110		G0/110
BVH (80°-90°)	1.6	5.7			G0/10
UL (90°-100°)	3.6	12.4		U1/10	
UH (100°-180°)	1.6	5.7		U1/10	

BUG Rating: B0-U1-G0
 Type I Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2
2.5°	5.7	5.8	5.6	5.8	5.8	5.9	5.8	5.9	5.9	6.0	6.0
5°	5.9	5.9	6.0	5.9	5.9	5.9	5.7	5.7	5.8	5.8	5.9
7.5°	6.3	6.4	6.3	6.3	6.2	5.8	5.7	5.4	5.4	5.6	5.5
10°	7.2	7.3	7.1	6.8	6.4	6.1	5.5	5.3	5.0	5.0	5.0
12.5°	8.0	8.0	7.7	7.3	6.7	6.1	5.5	4.9	4.6	4.5	4.6
15°	9.1	8.9	8.6	8.1	7.4	6.5	5.5	4.8	4.4	4.4	4.4
17.5°	9.9	9.7	9.3	8.9	7.9	6.5	5.4	4.6	4.0	3.9	4.0
20°	10.8	10.6	10.2	9.6	8.5	7.0	5.4	4.4	3.9	3.7	3.7
22.5°	11.1	11.3	10.8	10.0	8.7	7.3	5.4	4.3	3.6	3.4	3.5
25°	11.6	11.7	11.2	10.5	9.2	7.3	5.4	4.1	3.5	3.4	3.5
27.5°	11.2	11.2	10.9	10.3	9.0	7.2	5.4	3.8	3.3	3.1	3.0
30°	10.3	10.5	10.2	9.6	8.9	7.3	5.3	3.6	3.1	3.1	2.9
32.5°	9.1	9.2	9.1	8.8	8.0	6.9	5.0	3.4	3.0	2.9	2.9
35°	8.0	8.0	7.9	7.9	7.3	6.1	4.3	3.3	2.9	2.6	2.6
37.5°	7.2	7.2	7.1	7.0	6.7	5.4	4.1	3.3	2.8	2.6	2.7
40°	5.8	6.1	6.0	5.9	5.5	4.8	3.7	2.8	2.6	2.5	2.5
42.5°	5.6	5.6	5.4	5.3	5.1	4.3	3.6	3.1	2.8	2.7	2.7
45°	4.7	4.5	4.7	4.4	4.1	3.8	3.0	2.5	2.4	2.3	2.3
47.5°	3.9	4.1	4.1	3.8	3.8	3.5	2.9	2.5	2.3	2.2	2.3
50°	3.9	3.8	3.9	3.6	3.5	3.3	2.9	2.6	2.3	2.3	2.3
52.5°	3.9	3.8	3.7	3.6	3.6	3.1	2.8	2.5	2.3	2.3	2.1
55°	4.2	4.0	3.8	3.6	3.4	3.2	2.8	2.5	2.2	2.1	2.0
57.5°	4.1	3.8	3.9	3.5	3.3	3.0	2.6	2.2	2.0	1.8	1.9
60°	4.1	4.1	4.1	3.9	3.4	3.2	2.8	2.3	2.0	2.0	2.0
62.5°	4.5	4.4	4.2	3.9	3.6	3.2	2.9	2.4	2.2	2.0	2.0
65°	4.6	4.4	4.3	4.1	3.6	3.3	2.6	2.4	1.9	1.8	1.9
67.5°	4.5	4.5	4.5	4.0	3.8	3.3	2.7	2.1	1.7	1.6	1.5
70°	4.3	4.2	4.0	3.8	3.5	3.1	2.3	1.8	1.5	1.2	1.2
72.5°	3.6	3.6	3.6	3.3	3.1	2.6	1.9	1.4	1.1	0.8	0.8
75°	3.1	2.8	3.0	2.8	2.7	2.3	1.7	1.1	0.7	0.6	0.6
77.5°	2.6	2.6	2.6	2.6	2.4	2.0	1.3	0.9	0.6	0.3	0.4
80°	3.0	2.7	2.9	2.9	2.7	2.4	1.5	0.7	0.6	0.5	0.5
82.5°	3.1	3.3	3.4	3.4	3.0	2.6	1.4	0.9	0.6	0.5	0.5
85°	3.7	3.6	3.8	3.8	3.4	2.7	1.8	1.0	0.5	0.5	0.5
87.5°	4.2	4.4	4.3	4.2	3.9	3.1	1.9	1.1	0.4	0.2	0.4
90°	5.1	5.2	5.0	4.7	4.3	3.5	2.3	1.2	0.6	0.5	0.5
92.5°	5.6	5.5	5.3	5.0	4.2	3.5	2.6	1.4	0.6	0.4	0.3
95°	5.7	5.9	5.7	5.2	4.6	3.7	2.7	1.6	0.8	0.4	0.4
97.5°	5.3	5.4	5.4	4.9	4.4	3.7	2.5	1.3	0.6	0.1	0.1
100°	4.4	4.4	4.5	4.3	3.8	3.0	2.1	1.0	0.5	0.1	0.0
102.5°	3.2	3.1	3.2	3.1	2.7	2.1	1.4	0.8	0.3	0.1	0.0
105°	2.1	2.1	2.1	1.9	1.7	1.3	0.9	0.6	0.2	0.2	0.1
107.5°	0.9	0.7	0.7	0.8	0.6	0.6	0.3	0.2	0.2	0.1	0.0
110°	0.2	0.2	0.2	0.3	0.2	0.3	0.2	0.0	0.1	0.1	0.2



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 CATALOG NUMBER: 650-2-8LED-30-10-12-X

CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
112.5°	0.0	0.2	0.1	0.2	0.1	0.2	0.0	0.1	0.1	0.1	0.1
115°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: G1-2405-109-2
 CATALOG NUMBER: 650-2-8LED-30-10-12-X

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2
2.5°	6.0	6.1	6.1	6.1	6.2	6.2	6.2	6.2	6.3	6.1
5°	5.9	6.0	6.2	6.3	6.6	6.6	6.8	6.8	6.8	6.8
7.5°	5.5	5.8	6.2	6.6	7.0	7.2	7.6	7.8	7.8	7.7
10°	5.2	5.4	5.9	6.7	7.4	8.1	8.6	8.9	9.1	9.1
12.5°	4.6	5.0	5.7	6.7	7.6	8.5	9.4	9.7	10.0	10.0
15°	4.4	4.8	5.7	6.8	8.2	9.4	10.4	10.9	11.1	11.1
17.5°	3.9	4.5	5.3	6.8	8.4	9.9	10.9	11.4	11.6	11.6
20°	3.8	4.1	5.1	6.8	8.7	10.3	11.4	11.8	12.0	12.0
22.5°	3.4	3.8	4.7	6.5	8.7	10.3	11.4	11.7	11.9	11.9
25°	3.4	3.7	4.6	6.3	8.5	10.2	11.0	11.3	11.5	11.5
27.5°	3.1	3.2	4.1	5.8	7.9	9.5	10.2	10.5	10.5	10.6
30°	2.9	3.2	3.9	5.5	7.4	8.8	9.5	9.6	9.7	9.6
32.5°	2.7	3.0	3.5	4.9	6.5	7.8	8.3	8.6	8.8	8.8
35°	2.7	2.9	3.4	4.3	5.8	6.9	7.5	7.8	7.9	7.8
37.5°	2.8	2.9	3.3	4.2	5.3	6.3	6.7	7.0	7.1	7.0
40°	2.4	2.7	3.0	3.7	4.6	5.4	5.6	5.9	6.0	6.0
42.5°	2.7	2.8	3.0	3.6	4.3	4.8	5.3	5.4	5.4	5.5
45°	2.3	2.5	2.6	3.1	3.7	4.1	4.3	4.5	4.7	4.7
47.5°	2.2	2.5	2.6	2.9	3.3	3.8	3.9	4.0	4.2	4.1
50°	2.3	2.3	2.7	3.0	3.3	3.6	3.8	3.9	4.0	4.0
52.5°	2.1	2.3	2.5	2.8	3.2	3.5	3.8	3.9	3.9	3.9
55°	2.1	2.2	2.4	2.8	3.2	3.5	3.7	3.8	3.9	3.9
57.5°	2.0	2.1	2.3	2.6	3.1	3.3	3.6	3.7	3.9	3.8
60°	2.0	2.0	2.4	2.8	3.2	3.6	3.9	4.1	4.1	4.1
62.5°	2.0	2.2	2.5	2.9	3.6	3.8	4.2	4.3	4.4	4.4
65°	1.8	2.0	2.4	2.9	3.5	3.9	4.3	4.5	4.6	4.6
67.5°	1.5	1.8	2.2	2.8	3.6	4.0	4.4	4.5	4.6	4.7
70°	1.2	1.4	1.8	2.6	3.3	3.7	4.2	4.4	4.5	4.4
72.5°	0.8	1.1	1.4	2.1	3.0	3.6	3.8	4.0	4.1	4.1
75°	0.6	0.8	1.2	1.7	2.6	3.0	3.3	3.6	3.6	3.6
77.5°	0.4	0.6	0.8	1.4	2.3	2.8	3.0	3.2	3.3	3.3
80°	0.5	0.6	1.0	1.6	2.7	3.3	3.6	3.7	3.7	3.7
82.5°	0.5	0.7	1.2	2.0	3.2	3.8	4.3	4.5	4.6	4.5
85°	0.6	0.8	1.5	2.4	3.6	4.4	4.9	5.1	5.2	5.0
87.5°	0.3	0.8	1.4	2.5	3.8	4.5	5.1	5.3	5.4	5.4
90°	0.5	1.0	1.7	2.7	4.0	4.9	5.4	5.8	5.9	6.0
92.5°	0.5	0.8	1.8	2.8	3.9	4.8	5.5	5.9	6.1	6.1
95°	0.5	1.1	1.8	2.9	4.0	4.7	5.5	5.9	6.2	6.2
97.5°	0.2	0.8	1.6	2.6	3.6	4.5	5.0	5.5	5.8	5.8
100°	0.2	0.6	1.4	2.4	3.3	4.1	4.6	5.1	5.3	5.3
102.5°	0.1	0.4	1.1	1.8	2.6	3.3	3.6	4.0	4.2	4.3
105°	0.2	0.3	0.8	1.4	1.8	2.4	2.6	3.0	3.1	3.1
107.5°	0.1	0.2	0.3	0.7	1.1	1.3	1.6	1.6	1.8	1.8
110°	0.1	0.2	0.2	0.3	0.5	0.6	0.7	0.8	0.8	0.8



REPORT NUMBER: G1-2405-109-2
 CATALOG NUMBER: 650-2-8LED-30-10-12-X

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
112.5°	0.1	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2
115°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)