

Scaled data based on original data using  
LM-79-2024 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions

Brand: INVUE

Report Number: G1-2509-539-1

Luminaire Tested: ABB-C1-AMB-LED-XX-Dx-A-GM

Test Date: 2026-04-07

**Test Information**

Test Method: LM-79-2024  
Report Number: G1-2509-539-1  
Test Lab: Cooper Lighting Solutions  
Issue Date: 4/28/2026  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: INVUE  
Catalog Number: ABB-C1-AMB-LED-XX-Dx-A-GM  
Description: ARBOR OUTDOOR ARCHITECTURAL BOLLARD LUMINAIRE  
Light Source: NARROW BAND AMBER  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 80.4 lumens  
Efficiency: N/A  
Efficacy: 9.9 lumens/watt  
Luminous Opening: Circular (Dia: 0.4' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B0 - U0 - G0

Input Watts (W): 8.16  
Input Voltage (V): 120.1  
Input Current (Ain): 0.0701  
Voltage Rise (V): NR  
Power Factor: 0.9699  
Total Harmonic Distortion (THDi): 12.745800%  
Frequency (hertz): 60  
Stabilization Time: 0.5 HR  
Operation Time: 3 HR  
Ambient Temperature (°C): 24.8  
Test Distance: 28.75 FT

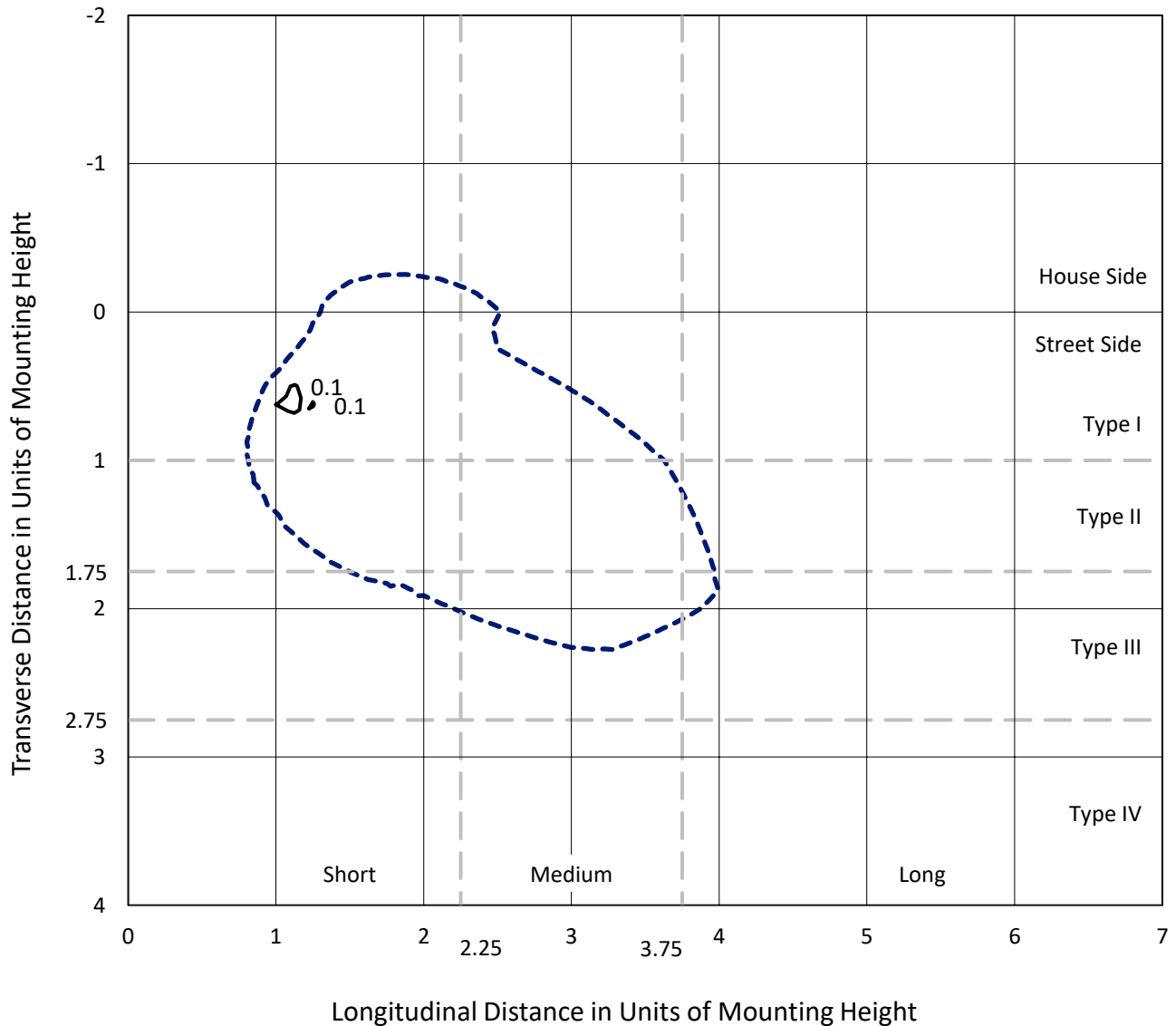


REPORT NUMBER: G1-2509-539-1

CATALOG NUMBER: ABB-C1-AMB-LED-XX-Dx-A-GM

### Iso-Footcandle Lines of Horizontal Illumination

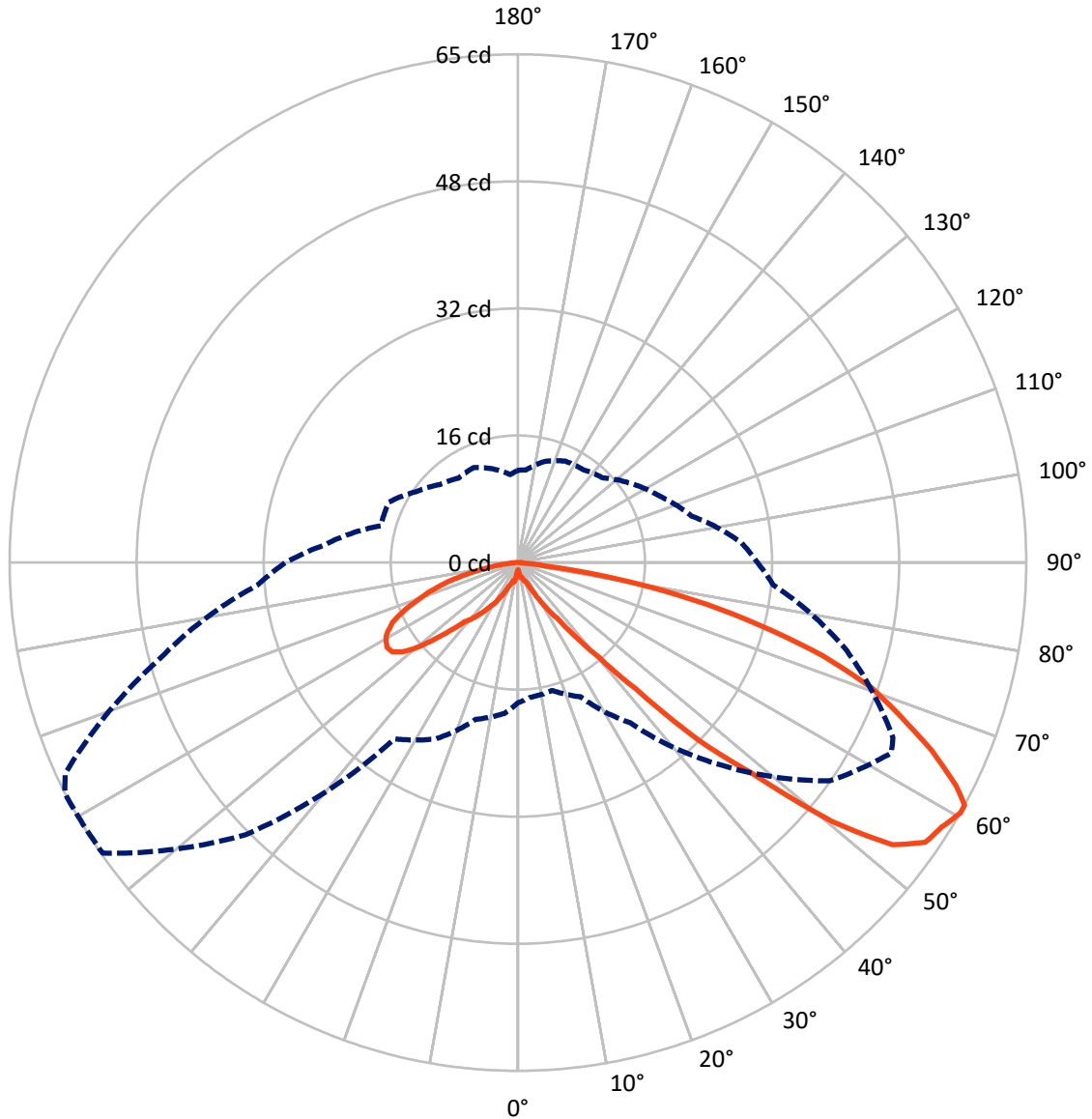
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 0.1 fc  
 Type III - Short - N/A

REPORT NUMBER: G1-2509-539-1  
CATALOG NUMBER: ABB-C1-AMB-LED-XX-Dx-A-GM

### Luminous Intensity Polar Plot



— Vertical Plane Through 297-Deg Lateral      - - - Horizontal Cone Through 60-Deg Vertical

REPORT NUMBER: G1-2509-539-1

CATALOG NUMBER: ABB-C1-AMB-LED-XX-Dx-A-GM

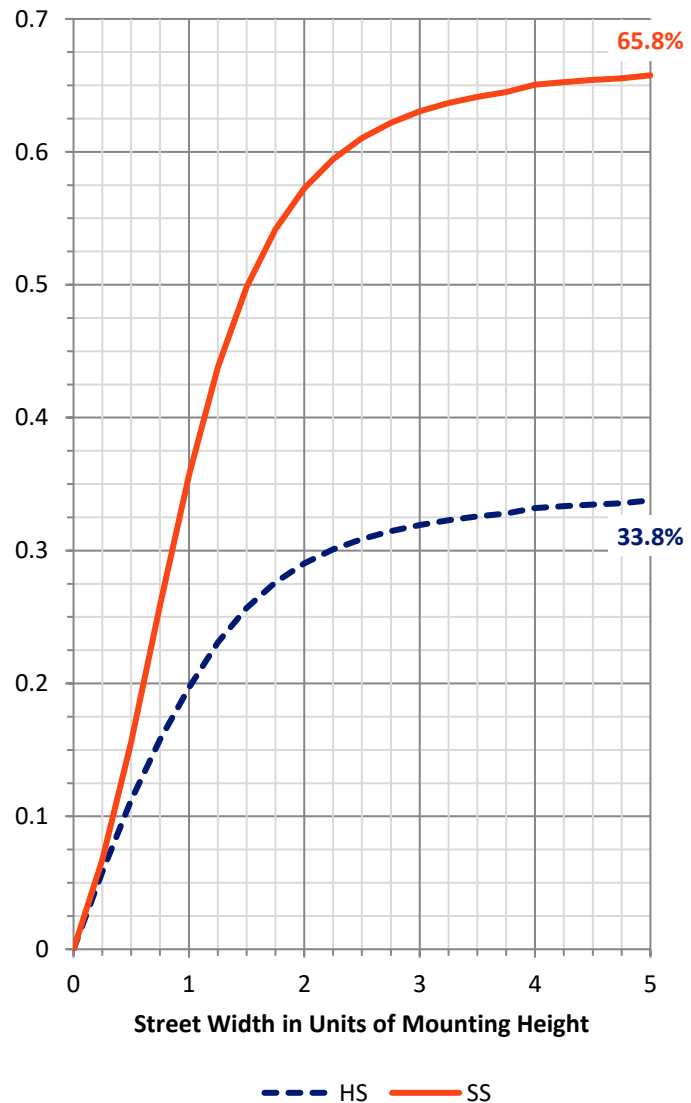
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	27.4	0.0	27.4
	% Fixture	34.0	0.0	34.0
<b>Street Side</b>	Lumens	53.0	0.0	53.0
	% Fixture	66.0	0.0	66.0
<b>Total</b>	Lumens	80.4	0.0	80.4
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	0.2	0.2
10°-20°	0.8	1.0
20°-30°	2.0	2.5
30°-40°	4.6	5.7
40°-50°	11.6	14.5
50°-60°	22.7	28.2
60°-70°	23.1	28.7
70°-80°	13.6	16.9
80°-90°	1.8	2.3
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
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°	80.4	100.0
0°-180°	80.4	100.0



REPORT NUMBER: G1-2509-539-1

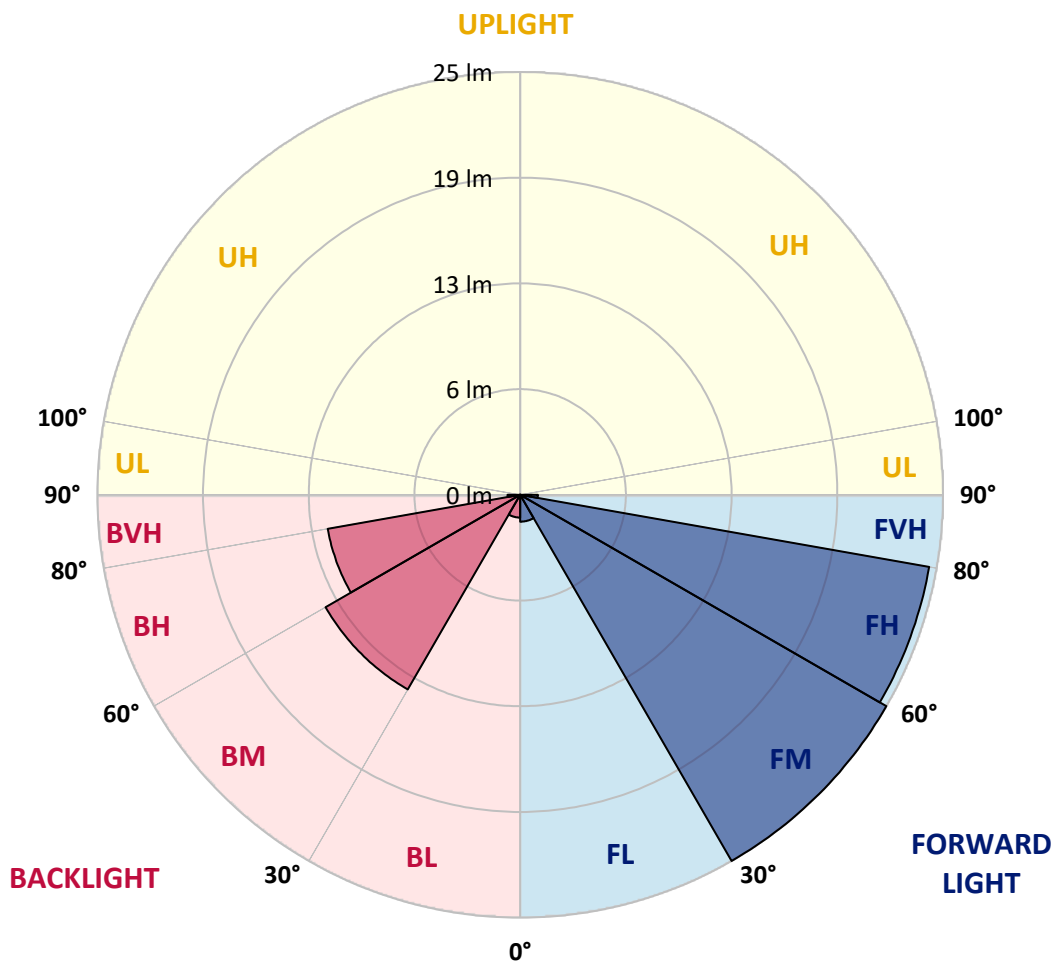
CATALOG NUMBER: ABB-C1-AMB-LED-XX-Dx-A-GM

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1.6	2.0			
FM	(30°-60°)	25.4	31.6			
FH	(60°-80°)	24.9	31.0			G0/660
FVH	(80°-90°)	1.1	1.3			G0/10
BL	(0°-30°)	1.4	1.7	B0/110		
BM	(30°-60°)	13.5	16.8	B0/220		
BH	(60°-80°)	11.7	14.6	B0/110		G0/110
BVH	(80°-90°)	0.8	0.9			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B0-U0-G0**

Type III Short





REPORT NUMBER: G1-2509-539-1

CATALOG NUMBER: ABB-C1-AMB-LED-XX-Dx-A-GM

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	63°	65°	75°	85°
0°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
2.5°	2.1	2.1	2.5	2.5	2.4	2.2	1.9	1.6	1.7	1.5	1.3
5°	2.4	2.5	3.3	3.1	2.7	2.4	2.0	1.5	1.5	1.5	1.4
7.5°	3.1	3.1	3.3	3.5	2.7	3.0	2.8	2.2	2.3	2.0	1.9
10°	3.8	3.5	3.0	3.4	3.0	3.0	3.0	2.8	2.6	2.5	2.4
12.5°	3.0	3.0	2.9	3.4	2.7	2.6	3.0	2.1	1.9	1.9	2.0
15°	3.0	3.0	3.4	3.8	3.7	3.3	2.9	2.4	2.1	2.2	2.0
17.5°	3.7	4.0	3.9	3.9	4.1	3.5	2.9	2.3	2.2	2.1	2.1
20°	4.6	4.4	4.5	4.7	4.6	3.7	3.0	2.8	2.6	2.4	2.4
22.5°	5.4	5.8	5.9	5.1	5.2	4.0	3.4	3.0	2.9	2.8	2.6
25°	6.8	7.4	6.2	5.4	5.3	4.2	3.5	3.3	3.2	3.3	2.9
27.5°	8.3	8.0	6.7	5.7	5.8	4.7	4.1	3.8	3.8	3.9	3.6
30°	8.9	8.5	7.5	6.5	6.6	5.5	5.0	4.5	4.5	4.7	4.6
32.5°	9.9	9.5	8.7	7.1	7.1	6.6	6.1	5.5	5.4	5.4	5.3
35°	10.7	10.5	9.1	7.6	7.8	7.7	7.8	7.1	6.7	6.3	6.2
37.5°	11.4	11.2	9.8	8.3	8.6	9.2	9.6	9.0	8.6	7.8	7.5
40°	12.1	11.8	10.5	9.0	9.7	11.2	12.1	11.5	10.9	9.7	8.8
42.5°	13.1	13.0	11.6	10.4	11.5	13.6	15.8	15.0	14.4	12.1	10.5
45°	14.9	14.5	13.3	12.0	13.8	17.8	21.9	22.4	21.3	16.9	14.1
47.5°	16.5	15.9	14.7	13.3	16.0	22.2	28.3	30.3	28.8	22.6	17.9
50°	18.0	17.3	16.7	16.3	20.3	30.0	37.3	39.3	38.7	30.4	24.5
52.5°	18.6	17.9	17.6	17.9	22.8	33.3	43.0	46.4	45.5	36.2	29.1
55°	18.7	18.1	17.6	18.6	24.6	35.6	48.6	53.0	51.9	41.0	31.3
57.5°	18.6	17.7	17.4	19.0	25.2	36.8	49.3	53.5	52.5	43.3	32.2
60°	17.8	17.2	16.8	18.8	24.8	36.3	48.3	53.2	52.5	43.2	32.5
61°	17.5	16.8	16.3	18.6	25.0	35.8	48.5	54.2	53.0	43.3	32.5
62.5°	16.6	16.0	15.4	18.3	24.5	35.1	48.5	53.9	53.0	43.0	31.8
65°	14.8	14.4	13.7	17.4	23.2	32.1	47.2	52.2	51.2	41.0	29.7
67.5°	12.7	12.4	11.6	16.3	22.1	28.8	43.2	47.1	46.9	38.4	27.0
70°	10.4	10.5	9.8	14.6	20.8	25.1	39.1	43.4	43.0	34.8	23.6
72.5°	7.9	8.0	7.8	12.5	19.1	21.3	34.8	39.3	39.1	31.1	20.6
75°	5.8	5.7	5.7	9.9	16.4	16.9	29.5	34.2	33.5	26.7	16.4
77.5°	3.6	3.5	3.9	7.1	12.7	11.6	21.6	25.4	25.9	20.7	12.0
80°	2.1	2.0	2.3	4.0	8.1	6.2	13.8	16.9	16.7	13.3	7.3
82.5°	1.4	1.2	1.4	1.7	3.0	2.4	6.1	8.4	8.5	6.0	3.3
85°	0.7	0.7	0.6	0.6	0.8	0.8	1.0	1.0	1.2	0.9	0.9
87.5°	0.6	0.5	0.4	0.5	0.5	0.6	0.6	0.9	0.7	0.5	0.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: G1-2509-539-1

CATALOG NUMBER: ABB-C1-AMB-LED-XX-Dx-A-GM

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
2.5°	1.2	1.2	1.2	1.1	1.1	1.1	1.2	1.2	1.2	1.5	1.3
5°	1.3	1.2	1.3	1.3	1.3	1.5	1.4	1.2	1.1	1.5	1.5
7.5°	1.8	1.6	1.5	1.7	1.9	1.9	1.9	1.6	1.4	1.7	1.8
10°	2.5	2.6	2.5	2.4	2.4	2.3	2.1	2.0	2.1	2.0	2.1
12.5°	1.8	2.1	2.0	2.5	2.5	2.7	2.6	2.2	2.2	2.2	2.2
15°	2.0	2.1	2.2	2.3	2.8	3.2	2.8	2.4	2.3	2.2	2.0
17.5°	2.1	2.2	2.4	2.7	2.8	3.3	3.1	2.7	2.6	2.3	1.9
20°	2.4	2.5	2.8	3.0	3.1	3.7	3.9	3.3	3.0	2.5	2.2
22.5°	2.5	2.8	3.3	3.5	3.6	4.1	4.5	3.7	3.0	2.6	2.6
25°	2.9	3.3	3.6	4.4	4.1	4.4	4.7	3.8	3.0	2.7	2.8
27.5°	3.6	3.8	4.2	5.0	4.7	4.9	5.0	4.2	3.3	3.0	2.9
30°	4.6	4.8	5.4	6.0	5.6	5.4	5.3	4.4	3.5	3.0	2.9
32.5°	6.0	5.7	6.3	6.5	6.4	5.8	5.5	4.5	3.8	3.2	3.3
35°	7.0	7.4	7.4	7.5	7.2	6.3	6.0	4.9	4.2	3.3	3.2
37.5°	8.1	8.4	8.3	8.5	7.8	7.1	6.3	5.2	4.6	4.1	3.8
40°	9.1	9.8	9.3	9.4	8.8	7.8	7.2	5.8	5.0	4.6	4.6
42.5°	10.9	11.7	10.9	10.2	9.6	8.8	8.3	7.3	6.4	5.8	5.5
45°	14.1	14.6	13.6	12.1	11.2	10.4	9.8	8.9	8.3	7.4	7.4
47.5°	17.2	17.4	15.8	14.2	12.9	11.8	11.0	10.2	9.7	8.9	8.6
50°	22.7	22.8	19.6	16.7	15.1	13.8	13.2	12.5	11.8	10.5	10.3
52.5°	27.5	25.7	22.1	18.8	16.6	15.1	14.3	13.9	12.7	11.2	11.1
55°	29.7	27.2	23.4	20.0	17.7	15.8	14.8	14.7	13.5	11.8	11.3
57.5°	30.4	28.2	23.7	20.3	17.8	15.5	14.8	14.6	13.8	12.1	11.7
60°	30.4	28.5	22.8	19.9	17.5	15.2	14.4	14.2	13.3	11.8	11.7
61°	30.9	28.7	22.4	19.7	17.4	15.1	14.3	14.2	13.6	11.9	11.2
62.5°	30.8	28.4	21.7	19.1	17.1	14.7	13.7	13.9	13.2	11.4	10.9
65°	29.5	27.4	20.3	17.9	16.4	13.9	13.0	13.4	12.5	11.0	10.5
67.5°	27.5	25.6	18.6	16.0	14.7	12.5	11.9	12.3	11.9	10.2	9.5
70°	25.2	23.6	16.4	13.7	12.9	11.0	10.7	11.0	10.5	9.2	8.7
72.5°	21.8	20.8	14.4	11.7	11.2	9.6	9.3	9.9	9.5	8.0	7.4
75°	17.8	17.4	11.8	9.3	9.2	8.1	7.7	8.3	8.1	6.7	6.3
77.5°	13.1	12.8	9.1	6.9	6.7	6.0	5.9	6.4	6.4	5.1	4.9
80°	7.8	7.9	5.6	4.6	4.3	4.3	4.1	4.4	4.3	3.8	3.4
82.5°	3.3	3.2	2.9	2.6	2.4	2.4	2.5	2.6	2.6	2.4	2.4
85°	0.8	0.8	1.1	1.1	1.0	0.8	1.0	0.9	1.1	0.9	1.1
87.5°	0.5	0.4	0.7	0.7	0.6	0.6	0.6	0.7	1.0	0.8	0.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: G1-2509-539-1

CATALOG NUMBER: ABB-C1-AMB-LED-XX-Dx-A-GM

**CANDELA DISTRIBUTION (continued):**

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
2.5°	1.6	1.6	1.1	1.2	1.3	1.2	1.1	1.0	1.0	1.0	1.2
5°	1.6	1.5	1.3	1.3	1.9	1.9	1.4	1.3	1.2	1.0	1.2
7.5°	1.5	1.4	1.4	1.9	2.4	1.9	2.0	1.9	1.6	1.5	1.5
10°	2.4	2.4	2.1	2.7	3.1	2.2	2.0	1.9	1.9	1.7	1.6
12.5°	2.3	3.0	2.6	3.3	3.0	2.4	2.1	1.9	1.8	1.9	1.7
15°	2.6	3.0	3.0	3.5	3.4	2.7	2.0	2.0	2.0	2.1	1.9
17.5°	2.4	2.8	3.3	3.9	3.8	2.9	2.4	2.1	2.3	2.4	2.2
20°	2.3	3.3	3.5	4.0	4.0	4.0	3.1	2.5	2.3	2.5	2.3
22.5°	2.5	3.2	3.8	4.2	4.3	4.6	3.2	2.8	2.4	2.8	2.6
25°	2.8	3.4	3.8	4.5	4.6	5.0	4.1	3.2	2.8	3.1	3.3
27.5°	3.0	3.7	4.2	5.0	5.2	5.1	5.3	3.9	3.6	4.0	4.0
30°	3.1	4.0	4.7	5.3	5.8	5.9	6.0	4.4	4.7	4.9	5.0
32.5°	3.4	4.1	5.1	5.9	6.4	6.2	6.7	5.4	5.2	5.9	5.9
35°	3.5	4.5	5.4	6.1	6.8	7.0	7.6	6.3	6.4	7.1	7.2
37.5°	4.0	4.7	6.0	6.8	7.0	7.8	8.3	7.4	7.7	8.3	8.8
40°	4.5	5.3	6.5	7.1	7.9	8.8	9.1	8.5	9.4	9.8	10.9
42.5°	5.2	6.1	7.1	8.1	8.7	9.5	10.8	10.3	11.2	12.4	13.8
45°	6.9	7.6	8.5	9.5	10.3	11.7	12.7	12.9	14.2	15.5	17.8
47.5°	8.3	8.8	10.0	11.0	11.7	12.9	14.8	15.5	17.6	19.8	22.7
50°	10.1	10.5	11.9	12.9	13.5	14.8	16.5	17.9	21.2	24.4	27.4
52.5°	10.8	11.6	12.9	13.6	14.5	16.0	17.8	19.4	23.6	27.2	30.8
55°	11.3	12.2	13.4	13.9	14.9	16.3	18.8	19.4	24.3	28.1	31.8
57.5°	11.3	12.5	13.6	13.9	14.7	16.3	18.8	18.9	24.7	29.0	32.5
60°	11.2	12.3	13.3	13.1	14.0	15.7	18.1	18.0	24.8	29.5	33.2
61°	11.0	12.1	13.2	12.9	13.7	15.4	17.9	17.7	24.3	29.6	32.7
62.5°	10.8	11.6	12.9	12.6	13.1	14.7	17.6	17.0	23.8	28.9	32.0
65°	9.9	11.1	12.2	12.0	11.9	13.5	16.0	15.5	22.3	27.6	31.0
67.5°	9.2	9.9	11.2	10.8	10.3	12.0	14.4	13.8	20.6	26.3	29.4
70°	8.2	8.8	9.9	9.6	9.1	9.9	12.4	12.0	18.2	23.7	27.4
72.5°	7.0	7.6	8.6	8.1	7.4	8.4	9.8	10.0	15.2	19.8	23.5
75°	5.9	5.9	7.0	6.8	6.1	6.2	7.3	7.7	12.0	15.6	19.3
77.5°	4.6	4.6	5.1	5.0	4.6	4.4	5.0	5.3	7.9	11.1	13.9
80°	3.3	3.0	3.4	3.2	3.1	3.0	3.0	2.9	4.0	5.7	7.3
82.5°	2.3	2.0	1.8	1.7	1.7	1.5	1.4	1.4	1.5	1.5	1.6
85°	1.0	0.7	0.7	0.5	0.8	0.8	0.7	0.4	0.5	0.4	0.6
87.5°	0.9	0.4	0.6	0.5	0.6	0.6	0.5	0.4	0.4	0.5	0.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: G1-2509-539-1

CATALOG NUMBER: ABB-C1-AMB-LED-XX-Dx-A-GM

**CANDELA DISTRIBUTION (continued):**

	285°	295°	297°	305°	315°	325°	335°	345°	355°	360°
0°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
2.5°	1.2	1.3	0.9	1.1	1.0	1.2	1.3	1.9	1.9	2.1
5°	1.4	1.3	1.4	1.5	1.6	1.5	1.9	2.1	1.8	2.4
7.5°	1.3	1.5	1.5	1.5	1.9	2.2	1.9	1.9	2.8	3.1
10°	2.0	1.8	1.9	2.3	2.7	2.3	2.7	2.9	3.8	3.8
12.5°	1.8	2.0	1.9	2.3	2.4	2.8	2.6	4.1	3.2	3.0
15°	1.9	1.9	2.0	2.5	2.9	3.3	3.1	3.9	3.5	3.0
17.5°	2.2	2.2	2.3	2.6	3.1	3.3	3.8	4.1	3.9	3.7
20°	2.3	2.4	2.5	2.9	3.4	3.8	4.1	4.5	4.4	4.6
22.5°	2.5	2.8	2.7	2.9	3.7	4.3	4.9	5.6	4.8	5.4
25°	3.2	3.5	3.3	3.3	4.0	4.8	5.3	6.1	6.6	6.8
27.5°	4.4	4.2	4.4	4.1	4.6	5.3	6.3	6.9	8.1	8.3
30°	5.3	5.9	5.8	5.4	5.3	5.8	7.3	7.9	9.4	8.9
32.5°	6.7	7.2	7.3	6.7	6.1	6.5	7.7	9.7	10.3	9.9
35°	8.5	9.3	8.9	8.2	7.4	7.4	8.8	10.7	11.1	10.7
37.5°	11.1	12.3	12.1	10.6	9.0	8.3	9.8	11.4	11.9	11.4
40°	14.6	15.8	15.8	14.1	10.7	9.5	11.0	12.4	12.5	12.1
42.5°	19.1	21.9	21.9	19.6	13.8	11.3	12.9	13.9	13.5	13.1
45°	25.2	32.1	32.2	30.1	20.3	15.4	16.7	17.2	15.7	14.9
47.5°	33.2	40.2	39.9	38.2	26.9	18.3	18.7	19.4	17.3	16.5
50°	39.4	51.7	51.7	50.4	35.9	22.8	22.3	22.1	19.5	18.0
52.5°	44.8	58.7	59.5	59.0	42.4	26.7	24.4	22.7	20.5	18.6
55°	47.1	61.6	62.7	62.2	45.4	27.7	24.4	22.9	20.7	18.7
57.5°	48.6	63.1	63.4	62.3	47.7	28.0	24.7	22.0	20.5	18.6
60°	47.0	63.4	64.5	64.3	48.8	27.3	24.7	20.6	19.2	17.8
61°	45.9	62.9	64.5	64.2	48.5	26.9	24.6	19.9	19.0	17.5
62.5°	44.7	60.7	62.4	62.6	47.3	25.6	24.2	19.0	17.8	16.6
65°	40.2	56.2	57.8	58.2	44.5	23.3	23.4	17.0	15.9	14.8
67.5°	35.2	51.1	52.5	53.4	40.8	20.2	22.2	15.2	13.4	12.7
70°	29.4	45.9	47.6	48.7	36.7	17.2	19.8	13.4	10.8	10.4
72.5°	23.6	37.9	40.4	41.4	31.4	13.8	16.5	11.3	8.3	7.9
75°	17.2	29.6	31.7	32.5	25.1	9.9	13.0	8.8	6.2	5.8
77.5°	11.4	21.1	22.7	24.2	17.7	6.6	8.5	5.9	3.9	3.6
80°	5.6	11.5	13.2	13.9	10.0	3.2	4.3	2.8	2.6	2.1
82.5°	1.5	3.1	3.4	3.8	2.9	1.3	1.0	1.4	1.5	1.4
85°	0.5	0.7	0.5	0.5	0.4	0.5	0.3	0.5	0.7	0.7
87.5°	0.4	0.4	0.6	0.4	0.4	0.5	0.2	0.7	0.6	0.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)