

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: G1-2509-539-2

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

Test Date: 2026-04-08

Test Information

Test Method: LM-79-2024
Report Number: G1-2509-539-2
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-S-GM
Description: ARBOR OUTDOOR ARCHITECTURAL BOLLARD LUMINAIRE
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 111.9 lumens
Efficiency: N/A
Efficacy: 9.3 lumens/watt
Luminous Opening: Circular (Dia: 0.4' x H: 0')
IES Classification: Type III - Short
BUG Rating: B0 - U0 - G0

Input Watts (W): 12
Input Voltage (V): 120.0
Input Current (Ain): 0.105
Voltage Rise (V): NR
Power Factor: 0.9463
Total Harmonic Distortion (THDi): 13.064900%
Frequency (hertz): 60
Stabilization Time: 0.5 HR
Operation Time: 3 HR
Ambient Temperature (°C): 25.1
Test Distance: 28.75 FT

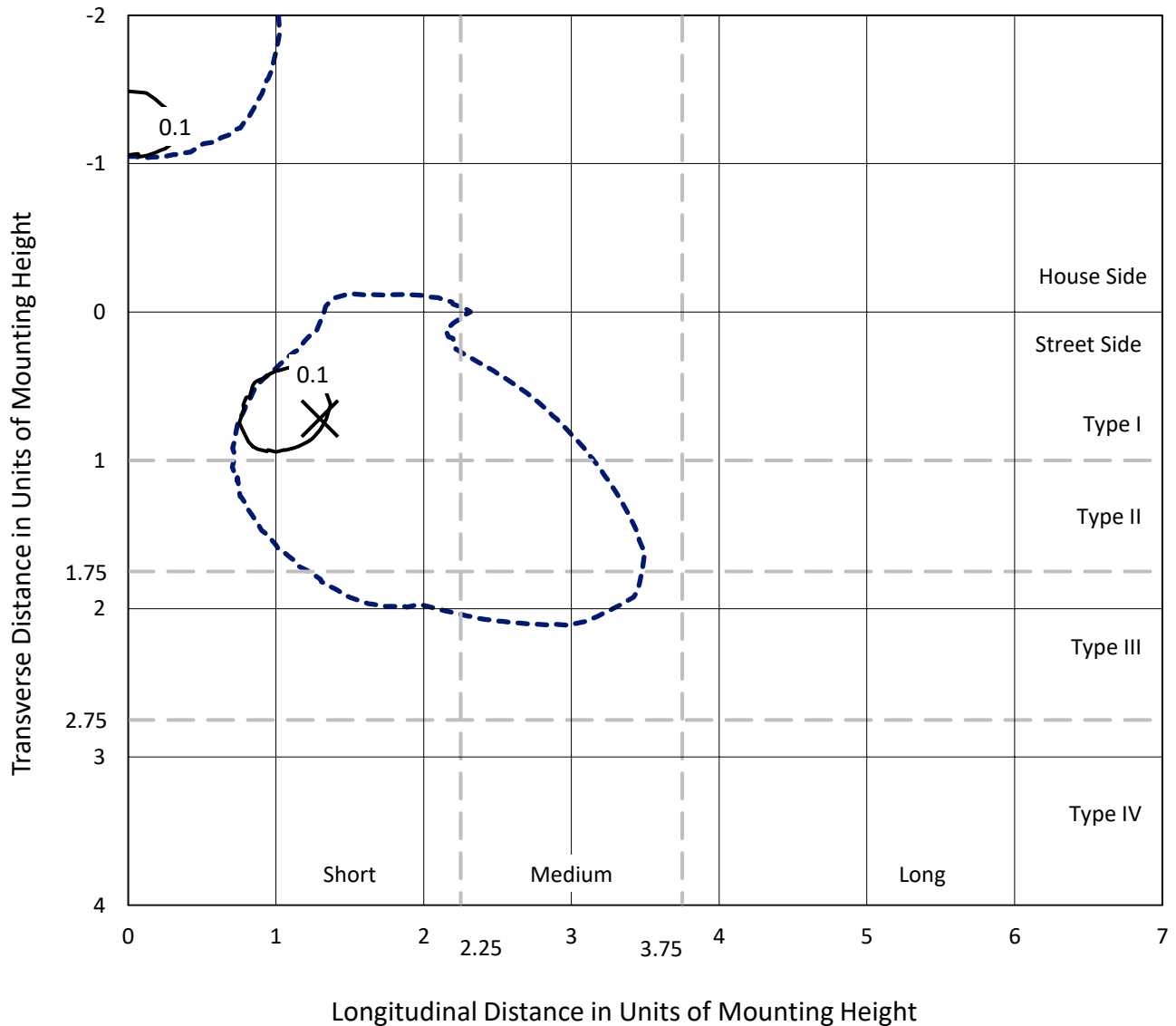


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Iso-Footcandle Lines of Horizontal Illumination

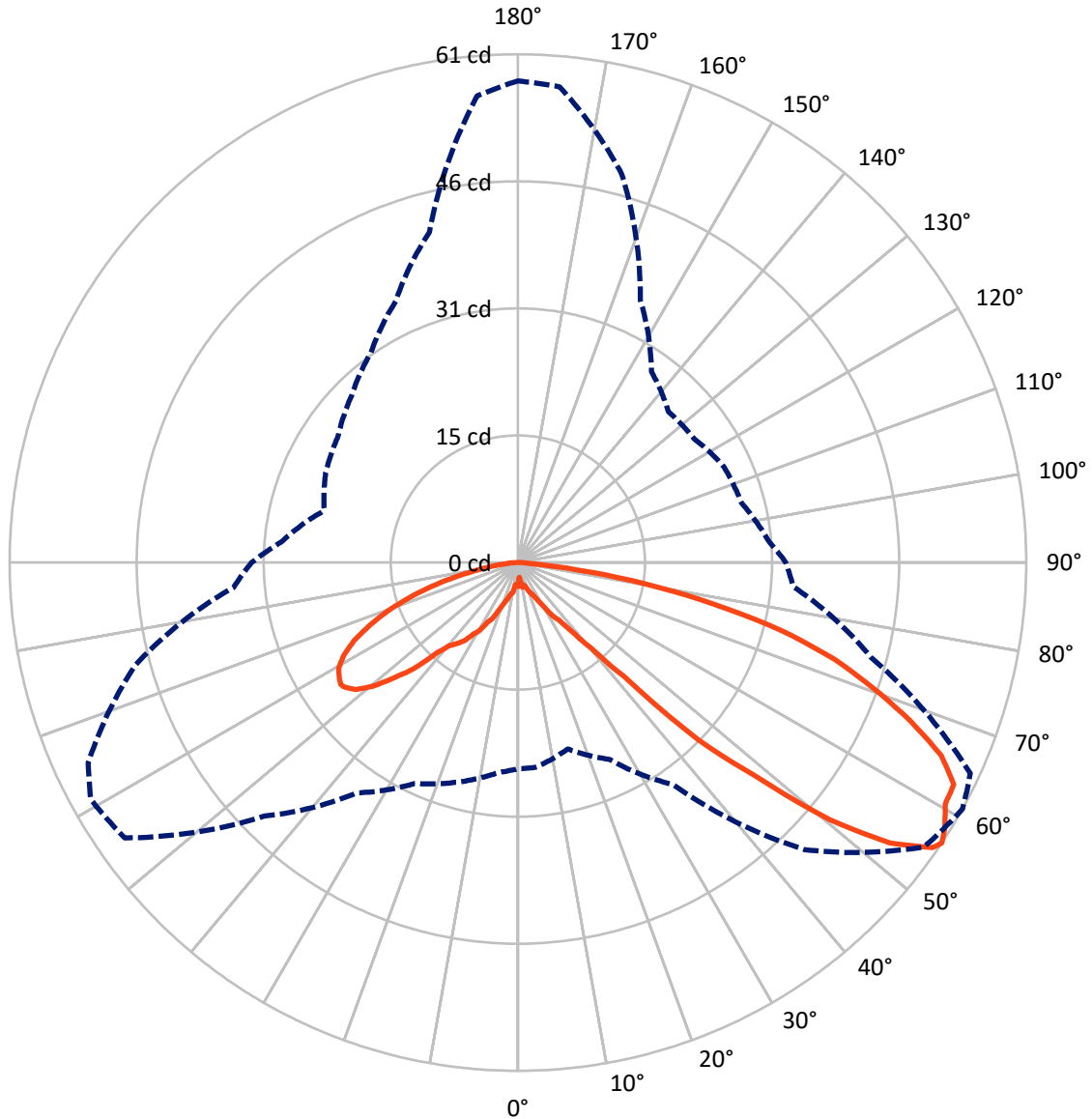
× Max cd
 - - - 1/2 Max cd



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

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Luminous Intensity Polar Plot



— Vertical Plane Through 61-Deg Lateral - - - Horizontal Cone Through 56-Deg Vertical

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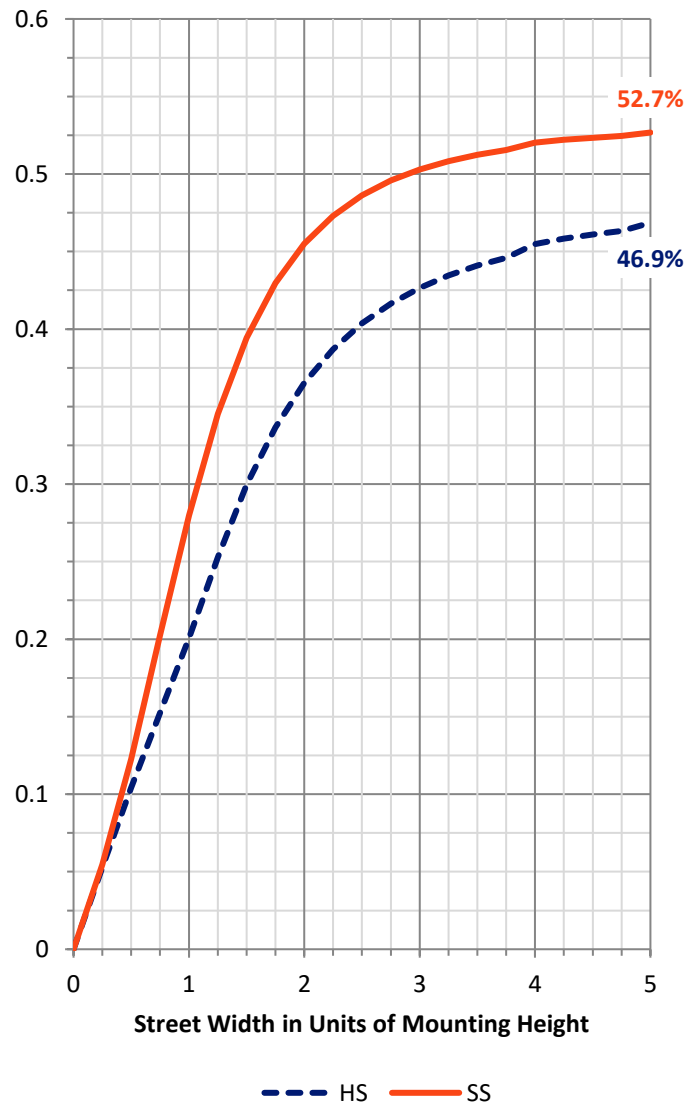
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	52.7	0.0	52.7
	% Fixture	47.1	0.0	47.1
Street Side	Lumens	59.2	0.0	59.2
	% Fixture	52.9	0.0	52.9
Total	Lumens	111.9	0.0	111.9
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	0.3	0.2
10°-20°	1.1	1.0
20°-30°	2.9	2.6
30°-40°	6.3	5.6
40°-50°	16.2	14.5
50°-60°	31.4	28.1
60°-70°	31.9	28.5
70°-80°	19.0	17.0
80°-90°	2.8	2.5
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°	111.9	100.0
0°-180°	111.9	100.0



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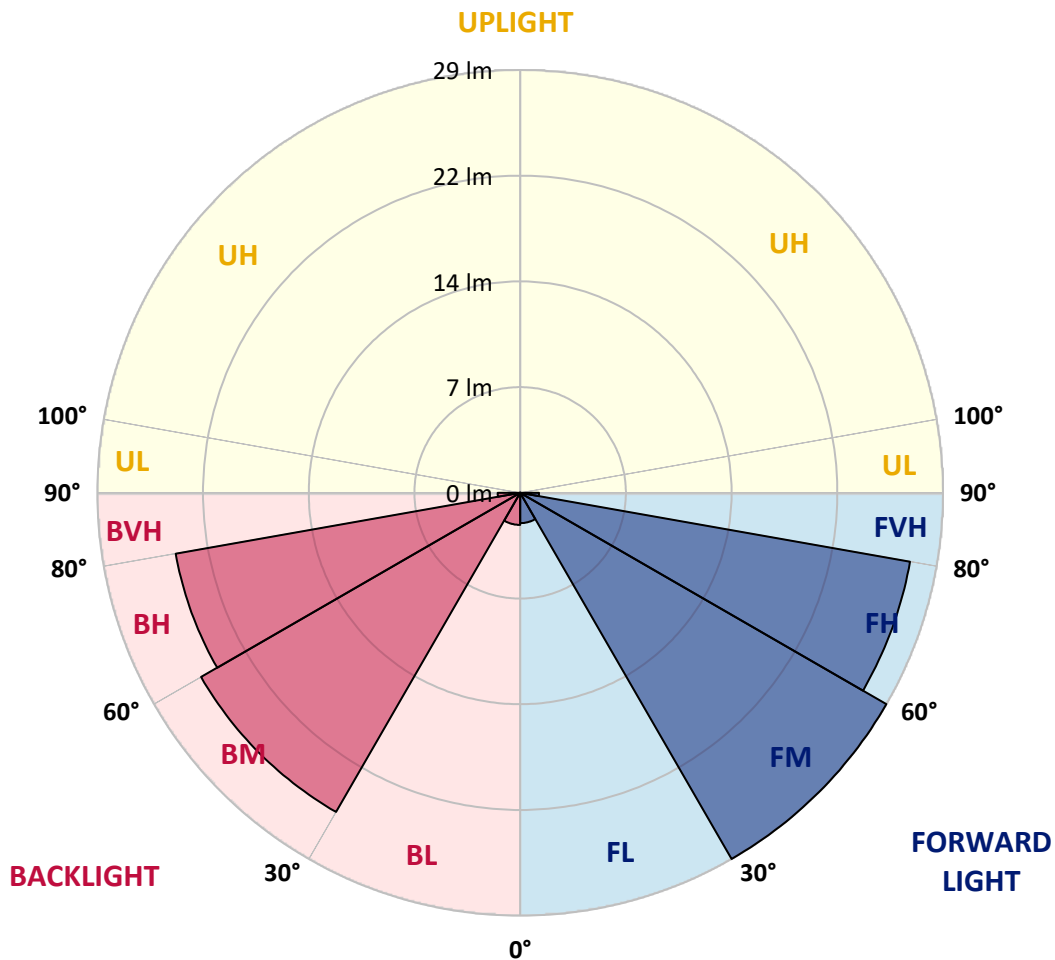
CATALOG NUMBER: ABB-C1-AMB-LED-XX-Dx-S-GM

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2.1	1.8			
FM	(30°-60°)	28.9	25.8			
FH	(60°-80°)	27.0	24.1			G0/660
FVH	(80°-90°)	1.3	1.1			G0/10
BL	(0°-30°)	2.2	2.0	B0/110		
BM	(30°-60°)	25.1	22.5	B0/220		
BH	(60°-80°)	23.9	21.3	B0/110		G0/110
BVH	(80°-90°)	1.5	1.4			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





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	61°	65°	75°	85°
0°	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
2.5°	2.0	2.1	2.3	2.1	1.7	1.8	2.1	2.0	2.2	2.2	2.4
5°	2.3	2.3	2.0	1.7	1.7	1.9	1.9	1.8	1.6	1.7	1.9
7.5°	3.3	3.1	3.2	2.7	2.3	2.4	2.4	2.3	2.3	2.5	2.3
10°	3.1	3.5	3.7	3.8	3.2	3.2	2.7	3.0	3.1	3.1	2.8
12.5°	3.5	3.5	3.8	4.0	3.5	3.5	3.1	2.8	2.7	3.0	3.1
15°	3.6	3.6	4.1	4.5	4.0	3.6	3.3	2.8	3.0	2.9	3.4
17.5°	4.5	4.4	4.6	5.3	5.1	4.2	3.4	3.1	3.2	3.4	4.1
20°	5.9	5.6	5.2	5.2	5.2	4.3	3.7	3.6	3.7	3.8	4.7
22.5°	7.5	6.3	5.6	5.3	5.7	4.7	4.0	4.0	3.8	4.2	4.9
25°	8.0	7.6	6.5	5.9	6.2	5.2	4.5	4.4	4.2	4.5	5.4
27.5°	9.6	9.4	7.5	6.8	6.8	5.8	5.3	5.2	5.1	5.2	6.0
30°	10.2	10.7	8.0	7.5	7.5	6.7	6.4	6.1	5.9	5.9	6.5
32.5°	11.1	11.7	9.0	8.4	8.1	7.9	7.8	7.6	7.5	6.9	7.3
35°	11.7	12.4	9.9	8.9	9.1	9.1	9.0	8.5	8.5	8.1	8.4
37.5°	12.8	13.1	11.0	10.3	10.4	11.6	11.3	10.4	10.3	9.4	9.7
40°	14.1	14.1	12.7	11.8	11.9	14.5	14.9	13.5	12.9	11.3	11.3
42.5°	15.9	15.8	14.5	14.0	15.1	18.5	19.8	18.7	17.2	13.6	13.4
45°	19.2	19.0	17.9	17.2	19.8	26.7	29.8	30.4	28.6	20.0	17.9
47.5°	21.5	20.7	19.9	19.3	23.1	32.9	39.1	38.2	37.0	24.9	21.2
50°	23.4	22.9	22.2	22.8	27.4	41.4	48.4	48.6	48.4	33.4	26.6
52.5°	24.4	24.2	23.4	25.1	30.9	46.0	55.2	56.0	55.4	39.6	30.8
55°	24.8	24.9	23.4	26.0	32.1	48.5	58.9	60.5	59.8	43.1	33.1
56°	24.8	24.7	23.2	26.1	32.6	48.8	59.6	61.1	60.0	43.9	33.2
57.5°	24.5	24.5	22.6	26.0	32.7	48.6	59.0	60.5	59.8	44.6	33.3
60°	23.6	23.2	21.6	25.6	32.4	47.2	57.9	59.0	58.6	45.0	33.4
62.5°	22.3	22.0	20.2	24.7	31.8	44.2	57.1	58.8	57.6	43.5	32.0
65°	20.1	20.2	18.3	23.3	30.0	41.3	54.0	55.9	55.5	42.0	29.7
67.5°	17.7	17.6	15.9	21.5	28.0	36.3	48.8	50.9	50.5	38.7	26.0
70°	14.9	14.8	13.8	19.3	25.8	30.8	43.1	45.4	44.9	34.4	22.9
72.5°	12.0	12.0	11.2	16.5	22.7	25.2	37.1	39.8	39.1	29.2	19.1
75°	9.0	8.6	8.6	13.2	18.9	18.9	29.7	32.8	31.8	23.9	14.7
77.5°	6.0	5.9	6.2	9.5	14.6	13.3	22.3	24.1	23.6	18.2	10.2
80°	3.4	3.4	3.7	5.5	9.0	7.2	14.3	15.5	15.7	11.4	6.0
82.5°	2.0	1.9	2.0	2.3	2.8	2.7	6.1	7.1	6.8	5.1	2.6
85°	1.0	0.8	0.8	0.9	0.9	1.2	1.2	1.3	1.2	0.8	1.0
87.5°	0.8	0.7	0.7	0.8	0.7	0.9	0.9	0.8	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



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

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
2.5°	2.3	2.5	2.4	2.4	2.6	2.4	3.1	2.9	3.0	2.8	2.8
5°	2.0	2.3	2.7	2.8	3.3	2.8	2.7	3.0	2.8	2.3	2.2
7.5°	2.5	2.8	3.0	3.1	3.1	3.7	4.0	3.6	3.8	3.7	3.5
10°	3.0	3.2	3.4	3.5	3.2	3.6	4.4	4.2	4.1	4.2	3.8
12.5°	3.5	3.8	3.9	2.9	3.3	3.3	3.7	3.6	3.8	3.3	3.2
15°	3.6	3.9	3.8	3.3	3.4	3.7	4.1	3.9	3.8	3.3	3.5
17.5°	4.4	4.4	4.2	3.9	4.3	4.3	4.3	4.4	4.1	3.6	3.6
20°	4.6	4.5	4.7	4.5	4.5	4.7	4.7	4.6	4.1	3.5	4.1
22.5°	5.3	5.3	5.8	5.1	5.3	5.9	5.5	5.5	4.8	4.3	4.2
25°	5.9	6.0	6.1	6.6	7.1	6.5	5.8	5.7	4.9	4.6	4.5
27.5°	6.7	6.8	7.0	7.6	8.5	7.1	6.3	6.5	5.5	5.1	5.1
30°	7.4	7.7	8.4	9.2	9.0	8.1	7.0	7.0	6.1	5.7	5.6
32.5°	8.2	8.7	9.7	10.2	10.1	8.9	8.0	8.0	7.8	6.6	6.7
35°	9.3	10.0	11.0	11.3	10.9	9.4	8.6	8.7	8.6	8.2	7.8
37.5°	10.7	11.1	12.0	12.5	12.0	10.9	9.8	9.9	10.6	10.3	9.8
40°	12.1	12.6	13.4	13.5	13.6	11.9	11.1	11.4	12.9	12.8	12.5
42.5°	14.0	14.9	15.1	14.9	14.9	13.7	13.0	14.1	16.3	17.2	16.2
45°	18.5	19.5	19.3	18.7	18.2	17.6	16.7	18.7	23.6	26.7	25.4
47.5°	21.9	22.0	22.2	21.1	20.7	20.4	19.2	22.2	29.8	33.8	33.9
50°	26.6	26.2	25.7	24.0	23.5	22.8	23.3	27.3	38.7	44.2	45.5
52.5°	30.2	28.9	27.2	25.9	24.7	24.5	26.0	31.4	44.2	51.5	52.9
55°	32.1	30.1	27.8	27.0	25.8	25.4	27.5	34.2	47.7	56.7	57.7
56°	32.2	30.2	27.8	27.3	25.9	25.6	28.0	34.8	48.3	57.4	57.9
57.5°	32.5	29.9	27.5	27.0	25.9	25.3	28.2	34.8	48.9	57.6	57.8
60°	33.3	29.3	26.0	26.3	25.2	24.7	27.7	34.8	48.0	56.8	57.3
62.5°	33.6	28.9	24.3	25.3	24.3	23.7	27.5	33.7	46.4	56.8	57.7
65°	31.8	28.2	22.2	22.8	22.7	21.7	26.5	32.3	43.4	54.2	54.4
67.5°	29.4	26.7	19.6	20.3	20.6	19.5	25.1	29.7	39.2	50.5	50.5
70°	26.0	25.0	17.1	17.0	17.7	16.8	22.6	27.8	34.6	45.6	46.1
72.5°	22.2	22.4	14.7	14.2	15.1	14.1	20.1	25.3	29.0	40.5	40.8
75°	17.7	18.4	12.3	10.9	11.7	11.5	16.8	21.4	23.0	33.3	34.4
77.5°	13.0	13.6	9.2	7.8	8.4	8.5	12.7	17.4	17.0	26.6	27.3
80°	7.6	8.2	5.8	5.1	5.1	5.5	8.5	12.4	10.3	18.1	19.0
82.5°	2.8	3.2	2.9	3.1	3.1	3.2	4.1	6.6	5.3	9.9	11.0
85°	0.9	1.0	1.3	1.5	1.2	1.5	1.4	1.6	1.6	2.1	2.1
87.5°	0.6	0.7	1.0	0.9	0.8	1.0	0.9	1.0	1.0	1.3	1.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
2.5°	2.5	2.3	2.5	2.5	2.5	2.5	2.6	2.7	2.6	2.5	2.7
5°	2.2	2.2	1.9	1.9	2.1	2.3	2.8	2.4	2.2	2.2	2.2
7.5°	3.3	2.8	2.7	3.3	3.2	2.9	2.7	2.6	3.0	2.6	2.6
10°	4.0	3.3	3.5	4.0	4.1	3.4	3.8	3.6	3.6	3.3	3.3
12.5°	3.3	3.5	4.0	4.1	4.1	3.8	3.8	4.0	3.6	3.5	3.6
15°	3.3	4.1	4.0	4.8	4.1	4.4	4.1	4.2	4.0	4.0	3.7
17.5°	3.6	4.2	4.9	4.8	5.4	5.1	4.5	4.6	4.4	4.1	4.0
20°	4.2	4.4	5.0	5.7	6.0	5.6	5.1	5.4	5.4	5.0	4.6
22.5°	4.4	4.8	5.5	6.5	6.5	6.5	6.0	6.3	6.2	5.3	5.0
25°	5.1	5.4	5.8	6.4	7.0	8.0	7.0	6.4	6.2	5.8	5.4
27.5°	5.1	6.0	6.8	7.6	8.5	8.9	7.5	7.3	6.9	6.8	6.6
30°	6.1	6.8	7.9	8.1	9.3	10.0	9.0	8.1	7.8	7.5	7.1
32.5°	6.7	7.7	8.8	9.3	10.6	10.6	9.9	8.8	8.9	8.5	8.4
35°	7.4	8.1	9.7	10.8	10.9	11.8	11.1	9.8	9.3	9.3	9.6
37.5°	9.3	8.9	10.6	12.1	12.2	12.5	12.0	10.9	10.8	10.8	10.9
40°	11.6	10.7	11.4	13.2	13.3	13.2	12.8	12.6	12.2	12.2	12.7
42.5°	14.9	13.1	13.3	15.1	15.0	15.0	14.4	13.8	14.4	14.6	15.5
45°	22.4	17.9	17.6	19.8	18.6	18.1	17.8	17.5	18.0	18.6	21.0
47.5°	31.6	23.3	21.5	22.4	21.5	20.6	20.0	19.0	20.2	21.6	24.8
50°	43.4	30.3	27.6	27.3	25.2	23.6	22.4	22.0	24.7	26.6	30.1
52.5°	52.4	36.5	31.7	29.8	27.5	25.2	24.5	23.7	26.8	29.9	33.2
55°	56.0	40.3	33.8	30.7	27.7	26.2	25.4	24.2	28.3	31.5	34.4
56°	56.3	41.1	34.7	30.8	28.3	26.4	25.5	24.1	28.5	32.0	34.3
57.5°	56.5	41.9	35.6	31.0	28.0	26.0	25.3	23.7	28.7	31.8	34.6
60°	56.8	43.1	36.1	30.5	26.9	25.6	24.6	23.3	28.6	31.7	34.5
62.5°	56.2	42.6	35.5	29.7	25.0	24.2	23.3	22.0	27.8	31.1	34.3
65°	53.3	40.5	33.3	28.8	23.0	22.3	21.5	20.4	26.2	30.2	32.2
67.5°	49.9	37.3	29.6	27.5	20.3	19.7	19.2	18.3	24.3	28.5	29.4
70°	45.6	34.0	26.1	25.4	17.6	17.0	16.6	15.9	21.7	26.1	26.8
72.5°	40.7	29.8	22.2	22.7	15.0	14.0	13.7	13.2	18.9	23.2	23.9
75°	34.0	24.9	17.7	18.5	12.0	10.8	10.7	10.3	15.3	18.8	20.0
77.5°	27.2	19.8	12.9	14.8	9.4	7.9	7.6	8.0	11.0	13.9	15.3
80°	19.1	13.6	7.8	9.3	6.2	5.0	4.8	5.1	6.8	8.8	9.9
82.5°	10.2	6.9	4.0	4.1	3.2	3.1	2.8	2.7	2.9	3.3	4.0
85°	2.4	1.5	1.3	1.1	1.6	1.3	1.0	1.3	1.1	1.1	1.2
87.5°	1.2	0.7	0.9	0.9	1.0	1.0	1.0	0.9	0.8	1.0	1.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	285°	295°	299°	305°	315°	325°	335°	345°	355°	360°
0°	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
2.5°	2.2	2.3	2.4	2.2	2.5	2.4	2.0	1.9	2.1	2.0
5°	1.9	1.7	1.8	1.8	2.0	2.2	2.3	2.5	2.5	2.3
7.5°	2.7	2.6	2.6	2.7	2.6	2.6	2.8	2.9	3.4	3.3
10°	3.0	2.4	2.8	3.1	3.3	3.3	3.7	3.7	3.2	3.1
12.5°	3.0	3.0	2.8	3.2	3.6	3.5	4.3	4.4	3.6	3.5
15°	3.5	2.9	2.9	3.4	3.7	4.0	4.5	4.6	4.1	3.6
17.5°	3.6	3.5	3.3	3.6	3.9	4.5	5.2	5.2	5.4	4.5
20°	4.4	4.1	3.8	4.0	4.5	4.7	5.4	5.3	6.2	5.9
22.5°	4.6	4.3	4.4	4.8	5.0	5.2	5.9	6.6	7.5	7.5
25°	5.1	5.1	4.9	5.0	5.6	5.8	6.4	6.9	8.1	8.0
27.5°	5.7	5.6	6.0	5.9	6.2	7.1	7.7	8.2	8.6	9.6
30°	6.5	6.6	6.8	6.5	7.0	7.4	8.8	9.3	10.4	10.2
32.5°	8.3	7.8	8.0	7.6	7.9	8.6	10.2	10.8	11.4	11.1
35°	9.8	9.6	9.4	8.9	8.8	9.2	11.3	11.4	12.3	11.7
37.5°	11.7	12.1	11.2	10.9	10.3	10.8	12.6	12.7	13.2	12.8
40°	14.7	15.4	14.6	13.9	12.0	11.9	13.6	14.0	14.5	14.1
42.5°	18.7	20.2	20.2	18.1	15.2	14.6	15.9	15.8	16.2	15.9
45°	26.6	29.9	30.4	27.7	21.7	19.0	20.4	19.8	19.3	19.2
47.5°	33.0	37.0	38.3	36.6	26.9	23.2	23.2	22.4	21.4	21.5
50°	41.3	46.0	47.2	44.4	33.3	28.8	27.1	25.5	23.5	23.4
52.5°	45.0	52.4	53.6	51.7	38.4	32.3	29.4	27.0	24.7	24.4
55°	47.6	56.7	58.2	57.3	42.0	33.5	29.5	27.2	25.5	24.8
56°	47.6	57.0	58.7	57.7	43.1	33.8	29.3	27.3	25.3	24.8
57.5°	48.1	57.6	58.4	57.6	43.3	33.7	29.1	26.8	24.7	24.5
60°	48.1	57.2	58.5	56.9	43.2	33.3	28.6	25.2	23.5	23.6
62.5°	46.8	56.9	58.6	56.6	41.6	32.0	27.5	23.2	22.1	22.3
65°	43.8	54.1	55.4	54.8	39.5	29.4	25.9	20.8	20.2	20.1
67.5°	38.7	49.1	50.2	50.0	36.9	26.1	24.3	18.3	17.5	17.7
70°	33.4	43.4	45.1	45.0	32.8	22.9	21.9	15.8	14.7	14.9
72.5°	27.2	37.7	39.2	39.1	27.9	18.4	18.6	13.0	11.7	12.0
75°	21.1	30.3	31.3	31.1	22.4	13.9	14.5	10.1	8.4	9.0
77.5°	14.7	22.0	22.9	23.3	16.0	9.5	9.8	7.3	5.8	6.0
80°	7.9	13.5	14.5	14.1	9.4	4.8	5.4	4.2	3.6	3.4
82.5°	3.2	5.4	5.6	6.0	3.1	2.2	2.0	2.0	1.9	2.0
85°	1.4	1.1	1.1	1.3	0.8	0.9	0.8	1.1	1.0	1.0
87.5°	1.0	1.0	1.1	0.9	0.6	0.7	0.5	0.9	0.9	0.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)