

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: STREETWORKS

Report Number: P836355

Luminaire Tested: **ARCH3-170-750-U-T3-HSS**

Issue Date: 5/16/2024

Test Information

Test Method: LM-79-08
Report Number: P836355
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-26)
Test Lab: INNOVATION CENTER
Issue Date: 5/16/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH3-170-750-U-T3-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 5000K, 1310mA LIGHTSQUARE WITH 40 LEDS AND TYPE III OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16713 lumens
Efficiency: N/A
Efficacy: 98.0 lumens/watt
Luminous Opening: Rectangular (W 0.58' x L: 0.58' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G2

Input Watts (W): 170.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



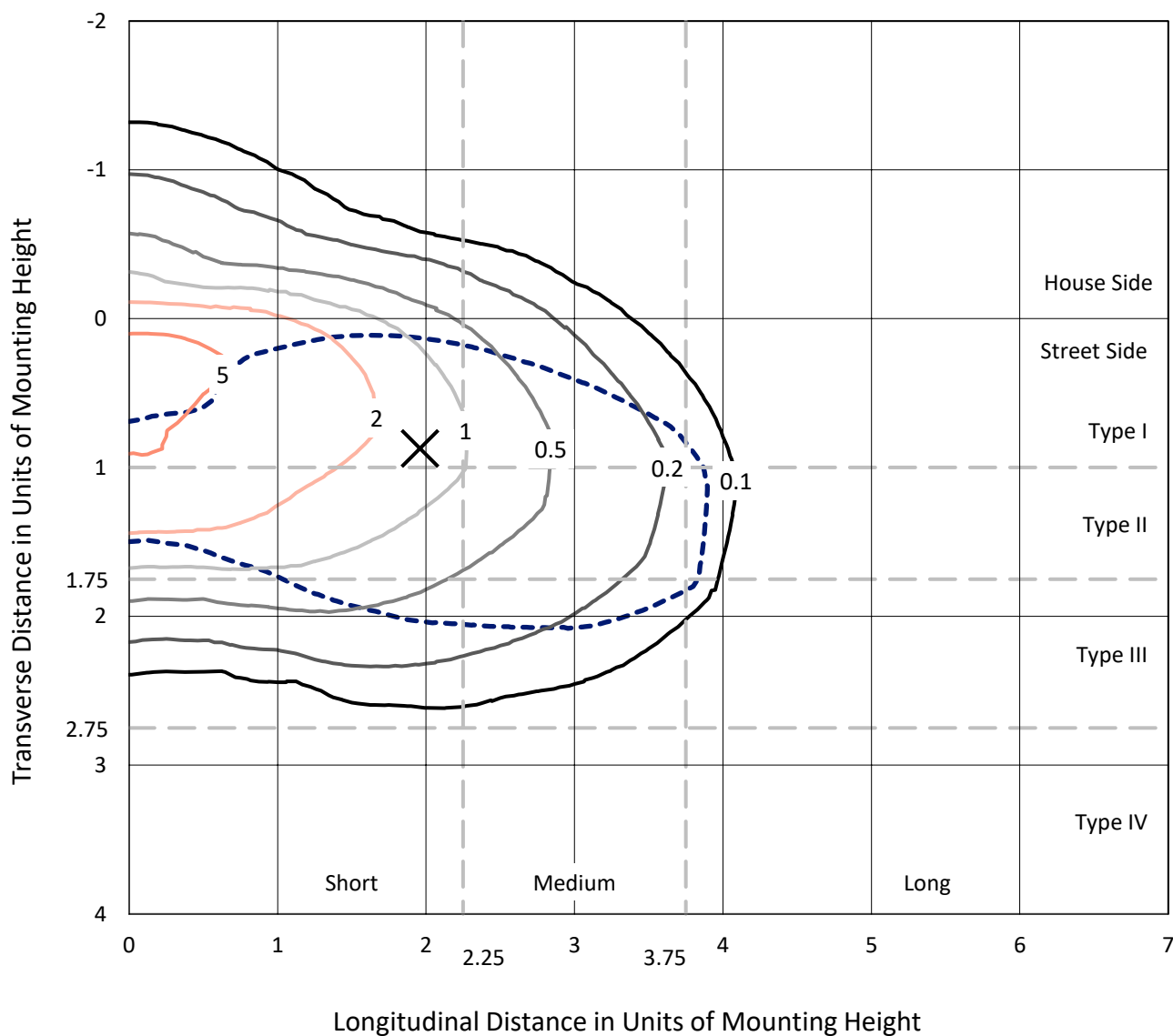
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

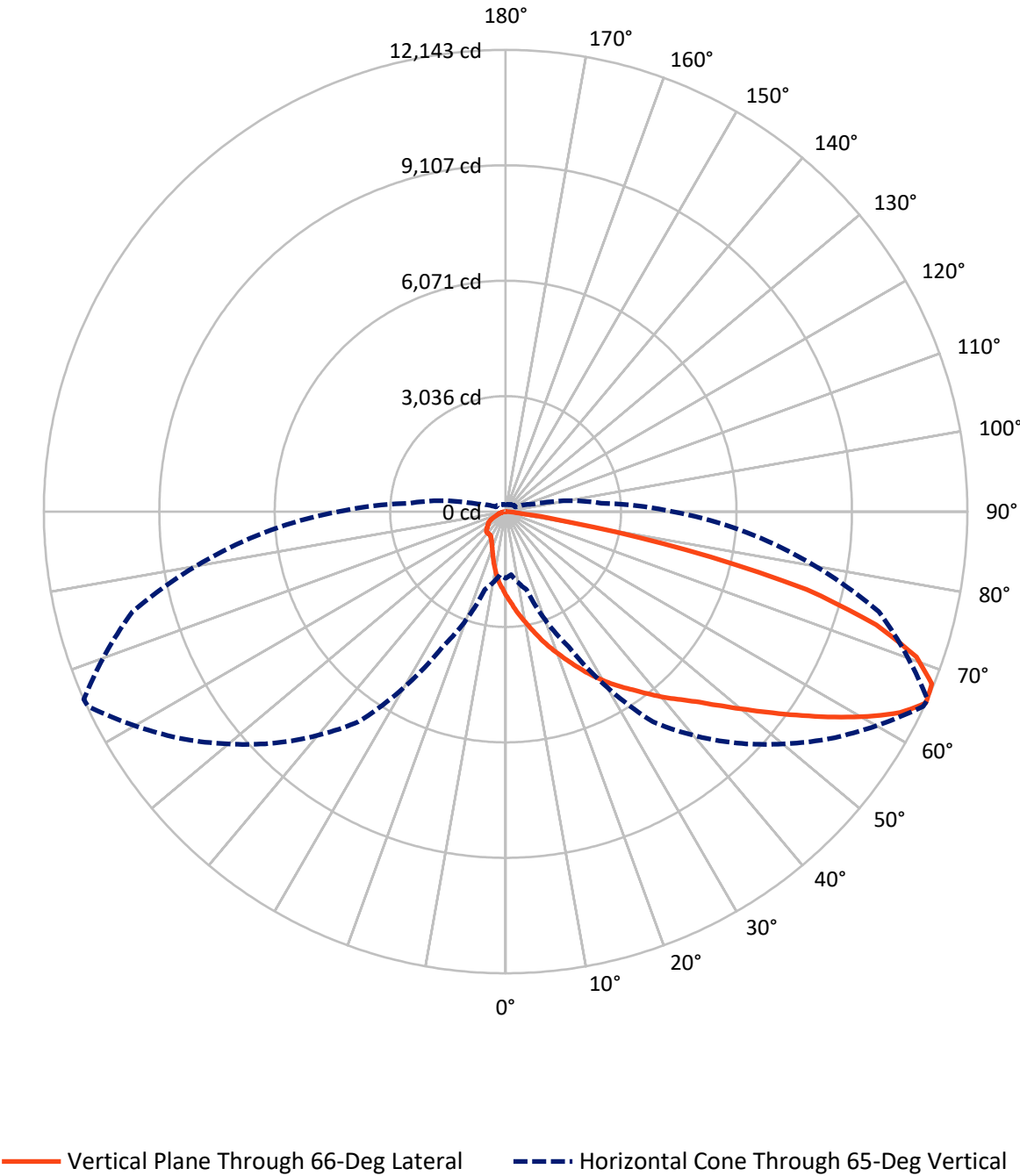


Based on 25 foot mounting height. Maximum calculated value = 6.4 fc

Type III - Short - N/A

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Luminous Intensity Polar Plot



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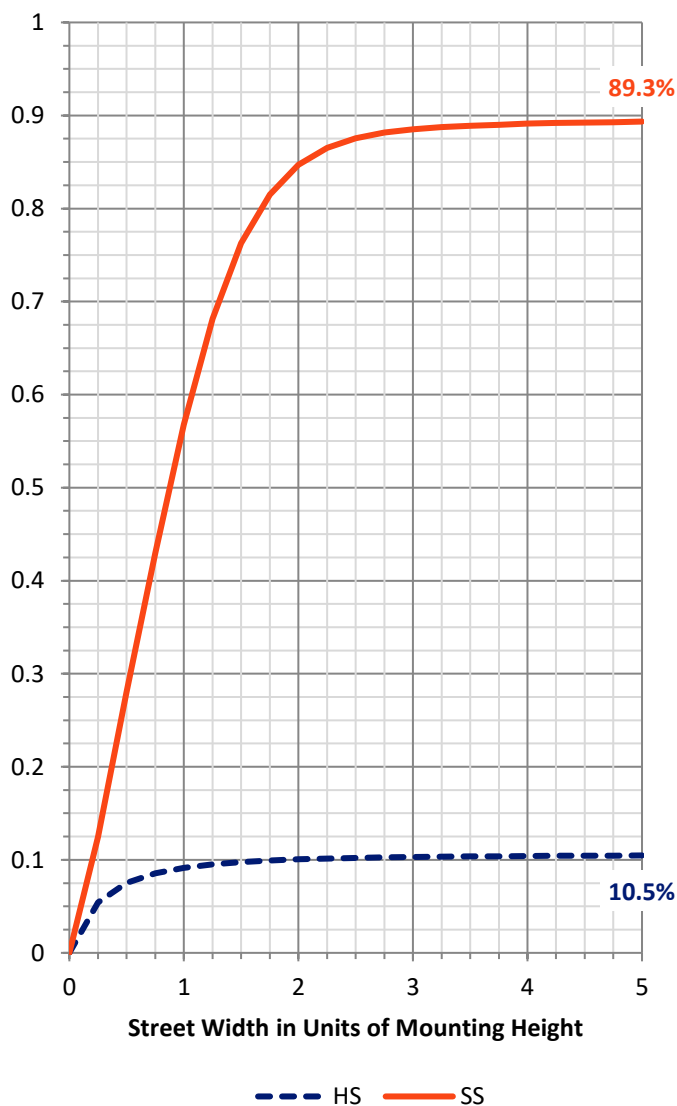
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1767.8	0.0	1767.8
	% Fixture	10.6	0.0	10.6
Street Side	Lumens	14945.2	0.0	14945.2
	% Fixture	89.4	0.0	89.4
Total	Lumens	16713.0	0.0	16713.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	218.3	1.3
10°-20°	711.5	4.3
20°-30°	1287.4	7.7
30°-40°	2013.2	12.0
40°-50°	3053.9	18.3
50°-60°	3880.1	23.2
60°-70°	3625.6	21.7
70°-80°	1801.9	10.8
80°-90°	121.1	0.7
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°	16713.0	100.0
0°-180°	16713.0	100.0

Coefficient of Utilization



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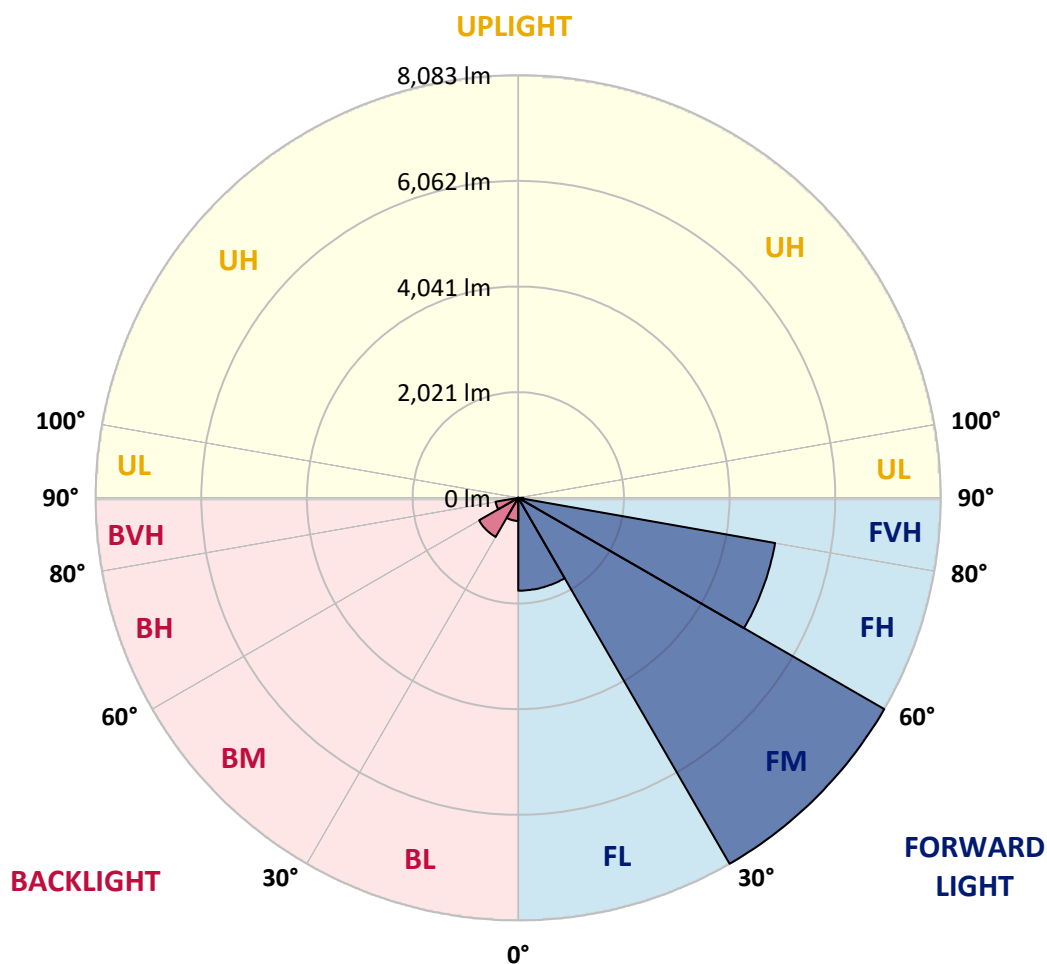
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1775.8	10.6			
FM	(30°-60°)	8082.6	48.4			
FH	(60°-80°)	4987.2	29.8			G2/5000
FVH	(80°-90°)	99.6	0.6			G1/100
BL	(0°-30°)	441.5	2.6	B1/500		
BM	(30°-60°)	864.6	5.2	B1/1000		
BH	(60°-80°)	440.2	2.6	B1/500		G1/500
BVH	(80°-90°)	21.4	0.1			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	2211.9	2211.9	2211.9	2211.9	2211.9	2211.9	2211.9	2211.9	2211.9	2211.9	2211.9
2.5°	2583.4	2604.5	2615.0	2618.5	2537.9	2502.8	2467.8	2387.1	2369.6	2324.0	2264.5
5°	3039.1	3067.2	3060.2	3046.1	2948.0	2835.8	2744.7	2594.0	2569.4	2460.8	2327.6
7.5°	3487.8	3512.4	3505.3	3452.8	3344.1	3186.4	3035.6	2814.8	2779.7	2604.5	2390.6
10°	3862.9	3883.9	3880.4	3827.8	3698.1	3505.3	3323.1	3028.6	2986.6	2737.7	2443.2
12.5°	4171.4	4199.4	4195.9	4160.8	4045.2	3834.8	3628.0	3274.0	3221.4	2898.9	2516.8
15°	4413.2	4448.3	4448.3	4434.3	4353.6	4178.4	3943.5	3543.9	3480.8	3084.7	2608.0
17.5°	4560.5	4588.5	4613.0	4637.6	4581.5	4448.3	4234.5	3813.8	3747.2	3267.0	2702.6
20°	4637.6	4665.6	4683.1	4735.7	4746.2	4679.6	4511.4	4080.2	4010.1	3473.8	2811.3
22.5°	4763.8	4788.3	4791.8	4837.4	4858.4	4875.9	4770.8	4343.1	4287.0	3701.6	2934.0
25°	4974.1	5002.1	4991.6	5012.6	5016.2	5037.2	5026.7	4644.6	4588.5	3961.0	3081.2
27.5°	5244.0	5279.1	5272.0	5251.0	5219.5	5201.9	5247.5	4949.5	4897.0	4220.4	3231.9
30°	5534.9	5577.0	5566.5	5524.4	5440.3	5366.7	5429.8	5237.0	5187.9	4486.8	3400.2
32.5°	5829.4	5878.5	5875.0	5804.9	5661.1	5534.9	5629.6	5506.9	5471.8	4774.3	3582.5
35°	6022.2	6085.3	6078.3	6036.2	5850.4	5741.8	5857.4	5783.8	5759.3	5124.8	3845.4
37.5°	6334.2	6400.8	6341.2	6236.0	6022.2	5966.1	6106.3	6095.8	6078.3	5496.4	4122.3
40°	7091.3	7189.5	7031.7	6600.6	6250.0	6201.0	6400.8	6442.8	6425.3	5864.4	4371.2
42.5°	7883.5	8030.7	7785.4	7189.5	6663.7	6484.9	6723.3	6782.8	6761.8	6179.9	4595.5
45°	8363.8	8426.9	8181.5	7718.8	7396.3	6828.4	7066.8	7164.9	7147.4	6558.5	4882.9
47.5°	8756.4	8731.8	8451.4	8139.4	8199.0	7312.2	7455.9	7648.7	7634.6	6975.6	5198.4
50°	8840.5	8784.4	8672.2	8475.9	8633.7	7802.9	7866.0	8199.0	8185.0	7438.3	5517.4
52.5°	8248.1	8174.5	8479.4	8644.2	8591.6	8160.4	8318.2	8801.9	8794.9	7939.6	5822.4
55°	6768.8	6709.2	7529.5	8381.3	8546.0	8412.8	8819.5	9429.4	9467.9	8472.4	6099.3
57.5°	5324.6	5261.5	6067.8	7722.3	8377.8	8644.2	9404.8	10148.0	10197.1	9050.8	6362.2
60°	4245.0	4150.3	4767.3	6684.7	8062.3	8823.0	9969.2	10936.7	10943.7	9580.1	6523.5
62.5°	2884.9	2779.7	3463.3	5370.2	7533.0	8851.0	10403.9	11616.7	11644.8	9976.2	6551.5
65°	1752.7	1665.0	2127.7	3922.5	6751.3	8612.6	10410.9	12118.0	12142.5	10158.5	6383.2
67.5°	1016.6	981.5	1216.4	2443.2	5454.3	7971.2	9972.7	12040.9	12086.4	10081.4	6001.2
70°	592.4	588.9	676.5	1209.3	3848.9	6698.7	8994.7	11392.4	11459.0	9678.3	5415.8
72.5°	434.7	441.7	476.7	648.5	2229.4	4823.4	7617.1	10088.4	10190.0	8889.6	4581.5
75°	343.5	347.0	378.6	441.7	1170.8	2727.2	5706.7	8097.4	8178.0	7483.9	3579.0
77.5°	255.9	262.9	287.4	312.0	543.3	1251.4	3210.9	4988.1	4854.9	4108.3	1728.1
80°	185.8	203.3	213.8	224.3	287.4	483.7	964.0	1738.7	1724.6	1794.7	816.7
82.5°	119.2	133.2	143.7	150.7	171.8	231.4	287.4	389.1	420.6	697.6	326.0
85°	52.6	59.6	66.6	80.6	73.6	80.6	119.2	77.1	66.6	105.2	59.6
87.5°	0.0	0.0	10.5	17.5	14.0	7.0	21.0	14.0	10.5	10.5	10.5
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):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2211.9	2211.9	2211.9	2211.9	2211.9	2211.9	2211.9	2211.9	2211.9	2211.9	2211.9
2.5°	2232.9	2194.3	2113.7	2036.6	1991.0	1931.4	1878.9	1829.8	1826.3	1812.3	1787.7
5°	2260.9	2187.3	2036.6	1892.9	1784.2	1668.5	1570.4	1493.3	1465.2	1444.2	1416.2
7.5°	2289.0	2173.3	1949.0	1738.7	1566.9	1405.6	1290.0	1184.8	1153.3	1125.2	1107.7
10°	2299.5	2148.8	1847.3	1566.9	1342.5	1170.8	1048.1	971.0	942.9	928.9	918.4
12.5°	2331.1	2134.8	1752.7	1405.6	1146.2	988.5	900.9	855.3	844.8	834.3	823.8
15°	2373.1	2134.8	1658.0	1247.9	992.0	865.8	813.2	781.7	774.7	771.2	764.2
17.5°	2418.7	2134.8	1566.9	1114.7	879.8	785.2	746.6	729.1	725.6	722.1	718.6
20°	2481.8	2138.3	1468.7	999.0	799.2	725.6	694.1	673.0	669.5	666.0	666.0
22.5°	2544.9	2145.3	1374.1	911.4	746.6	680.0	641.5	620.4	613.4	613.4	613.4
25°	2625.5	2166.3	1286.5	837.8	701.1	638.0	588.9	571.4	567.9	567.9	564.4
27.5°	2720.1	2190.8	1209.3	781.7	655.5	588.9	539.8	522.3	515.3	515.3	511.8
30°	2821.8	2215.4	1146.2	739.6	609.9	539.8	494.3	473.2	466.2	469.7	466.2
32.5°	2934.0	2250.4	1097.2	711.6	567.9	497.8	455.7	431.2	427.7	427.7	424.1
35°	3123.3	2348.6	1090.2	697.6	532.8	466.2	424.1	399.6	396.1	396.1	392.6
37.5°	3326.6	2460.8	1121.7	690.6	504.8	438.2	399.6	375.1	371.6	371.6	371.6
40°	3498.3	2544.9	1156.8	690.6	487.2	413.6	378.6	357.5	357.5	357.5	357.5
42.5°	3614.0	2551.9	1149.8	690.6	473.2	396.1	364.6	343.5	343.5	347.0	343.5
45°	3785.8	2586.9	1121.7	680.0	462.7	382.1	350.5	333.0	329.5	333.0	333.0
47.5°	3989.1	2650.0	1093.7	638.0	459.2	368.1	340.0	319.0	315.5	319.0	315.5
50°	4181.9	2706.1	1079.6	581.9	452.2	354.0	326.0	305.0	301.5	305.0	301.5
52.5°	4343.1	2730.7	1055.1	543.3	434.7	340.0	312.0	290.9	283.9	287.4	287.4
55°	4472.8	2723.7	1020.1	511.8	403.1	326.0	294.4	276.9	266.4	266.4	262.9
57.5°	4592.0	2727.2	988.5	480.2	368.1	305.0	280.4	259.4	245.4	241.9	238.4
60°	4637.6	2709.6	932.4	438.2	333.0	287.4	262.9	238.4	224.3	220.8	217.3
62.5°	4574.5	2646.5	858.8	364.6	301.5	266.4	245.4	220.8	206.8	203.3	199.8
65°	4395.7	2527.4	746.6	287.4	273.4	241.9	224.3	206.8	189.3	182.3	178.8
67.5°	4090.7	2355.6	606.4	231.4	241.9	220.8	210.3	189.3	168.3	161.2	157.7
70°	3656.1	2127.7	455.7	196.3	213.8	196.3	189.3	168.3	150.7	143.7	140.2
72.5°	3046.1	1759.7	319.0	168.3	185.8	171.8	164.8	150.7	133.2	122.7	122.7
75°	2303.0	1261.9	210.3	143.7	154.2	147.2	136.7	126.2	115.7	108.7	105.2
77.5°	992.0	490.7	129.7	108.7	126.2	122.7	108.7	101.7	98.1	91.1	91.1
80°	427.7	199.8	80.6	80.6	91.1	87.6	84.1	77.1	77.1	73.6	70.1
82.5°	157.7	80.6	49.1	59.6	66.6	59.6	59.6	59.6	59.6	56.1	56.1
85°	38.6	24.5	24.5	35.1	38.6	35.1	38.6	35.1	35.1	35.1	31.5
87.5°	10.5	10.5	14.0	14.0	14.0	14.0	14.0	10.5	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)