

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: P841664

Luminaire Tested: **ARCH4-210-727-U-T4W-HSS**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P841664
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-27)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-210-727-U-T4W-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 835mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE IV WIDE
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 21616 lumens
Efficiency: N/A
Efficacy: 101.4 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G3

Input Watts (W): 213.1
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



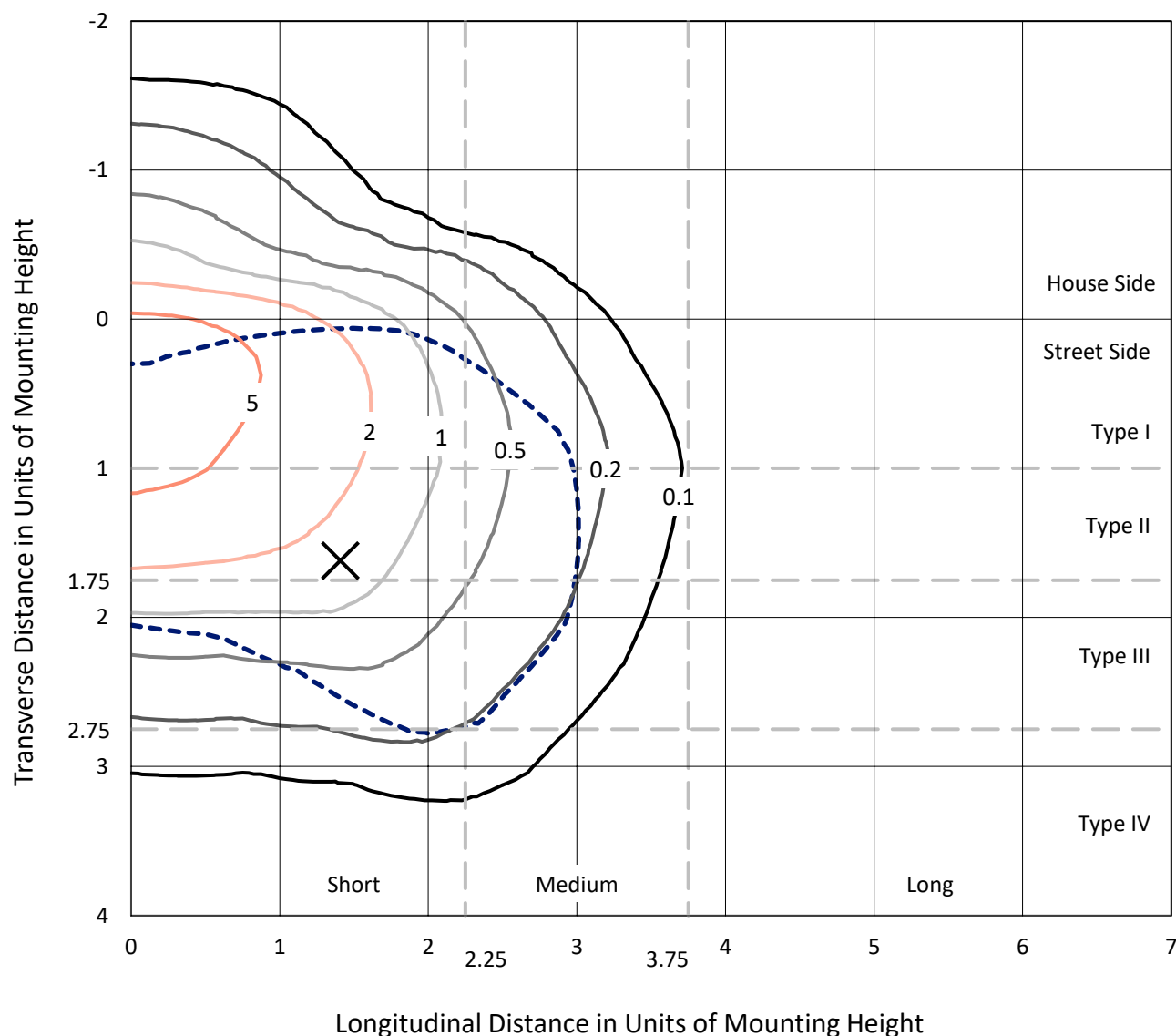
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

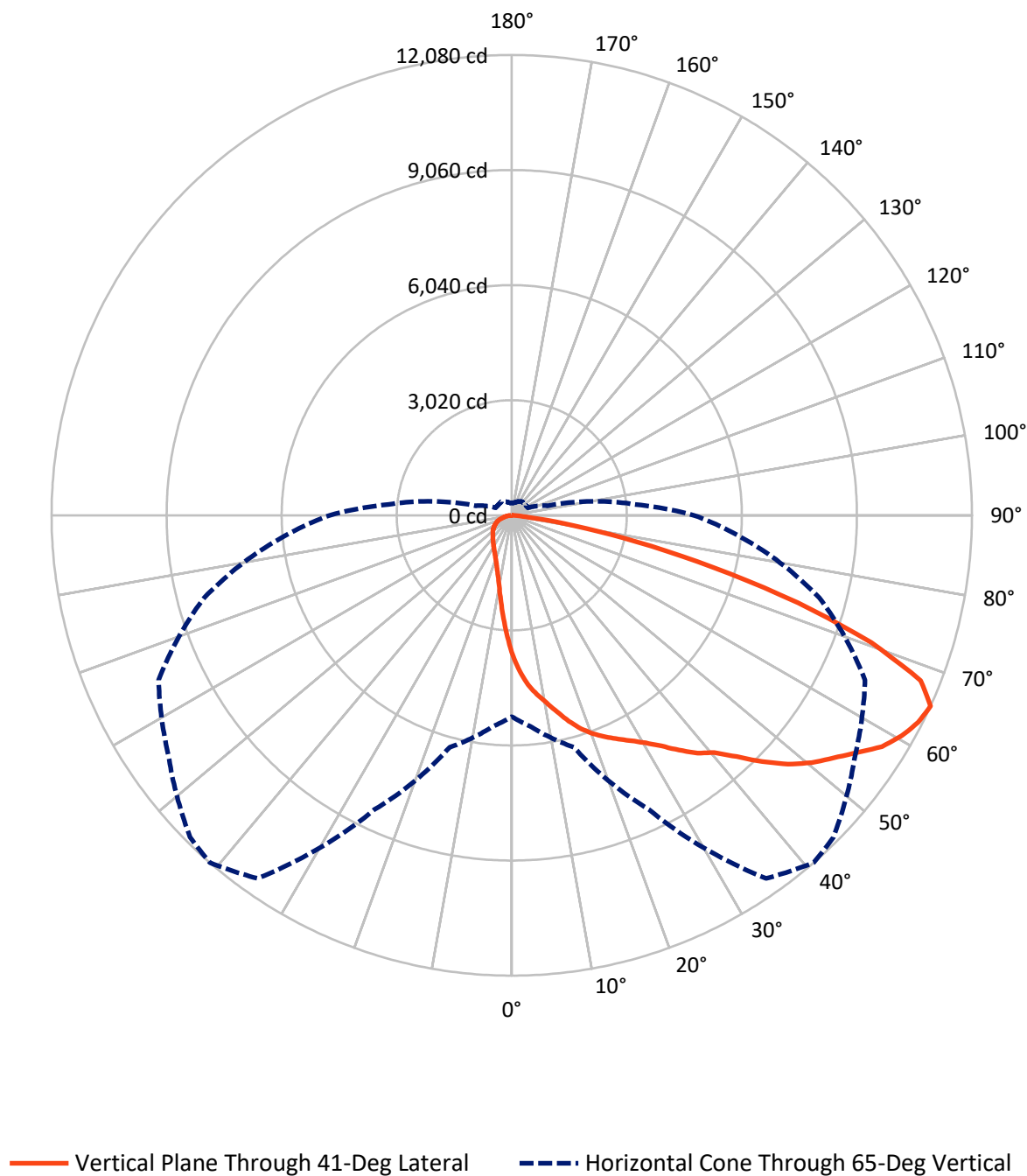


Based on 25 foot mounting height. Maximum calculated value = 8.5 fc

Type III - Short - N/A

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Luminous Intensity Polar Plot



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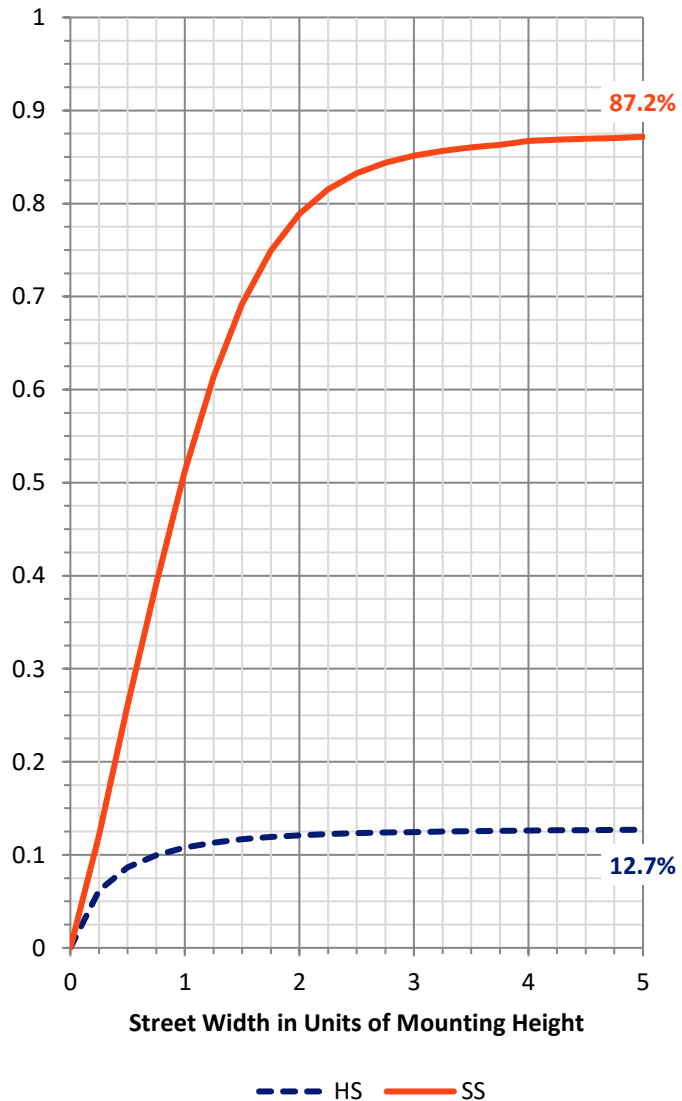
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2775.2	0.0	2775.2
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	18840.8	0.0	18840.8
	% Fixture	87.2	0.0	87.2
Total	Lumens	21616.0	0.0	21616.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	343.2	1.6
10°-20°	1029.1	4.8
20°-30°	1770.3	8.2
30°-40°	2685.0	12.4
40°-50°	3933.6	18.2
50°-60°	4967.3	23.0
60°-70°	4657.8	21.5
70°-80°	2075.9	9.6
80°-90°	153.8	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°	21616.0	100.0
0°-180°	21616.0	100.0

Coefficient of Utilization



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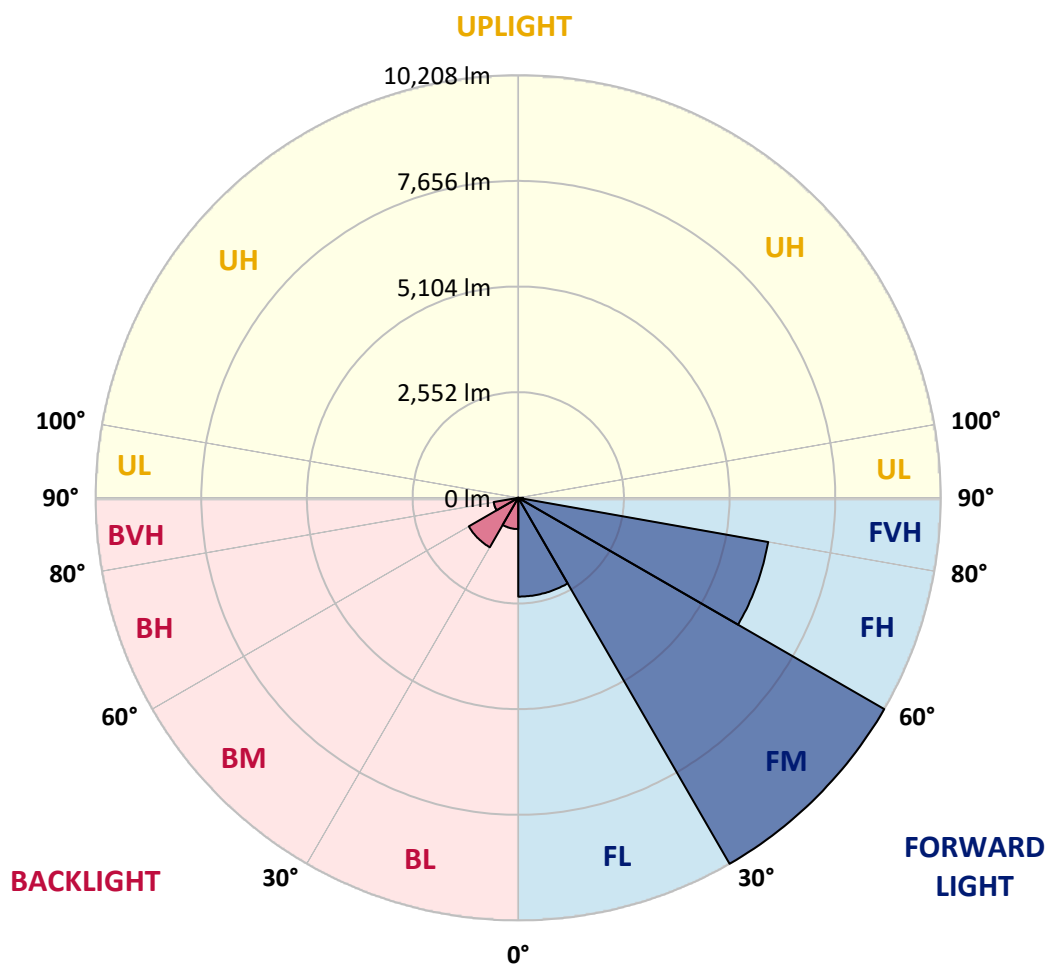
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2387.2	11.0			
FM	(30°-60°)	10207.9	47.2			
FH	(60°-80°)	6130.8	28.4			G3/7500
FVH	(80°-90°)	114.9	0.5			G2/225
BL	(0°-30°)	755.4	3.5	B2/1000		
BM	(30°-60°)	1378.0	6.4	B2/2500		
BH	(60°-80°)	602.8	2.8	B2/1000		G2/1000
BVH	(80°-90°)	38.9	0.2			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G3

Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	41°	45°	55°	65°	75°	85°
0°	3683.3	3683.3	3683.3	3683.3	3683.3	3683.3	3683.3	3683.3	3683.3	3683.3	3683.3
2.5°	4248.5	4234.8	4225.7	4175.6	4175.6	4107.2	4111.8	4047.9	3970.4	3847.4	3715.2
5°	4649.7	4631.4	4608.6	4558.5	4540.2	4471.9	4462.8	4371.6	4239.4	4025.1	3788.1
7.5°	5000.7	4982.4	4950.5	4877.6	4827.4	4745.4	4722.6	4604.1	4458.2	4193.8	3861.0
10°	5319.7	5306.1	5265.0	5173.9	5105.5	5005.2	4964.2	4804.6	4622.3	4330.6	3920.3
12.5°	5643.4	5625.2	5570.5	5493.0	5410.9	5292.4	5242.3	5037.1	4804.6	4481.0	4006.9
15°	5944.3	5916.9	5875.9	5793.8	5720.9	5606.9	5552.2	5310.6	5028.0	4649.7	4120.9
17.5°	6140.3	6117.5	6081.0	6035.4	5976.2	5889.6	5834.9	5597.8	5251.4	4813.8	4239.4
20°	6258.8	6249.7	6236.0	6208.7	6181.3	6122.0	6081.0	5857.6	5493.0	4973.3	4353.4
22.5°	6350.0	6340.8	6336.3	6336.3	6340.8	6318.1	6290.7	6099.2	5725.5	5142.0	4458.2
25°	6491.3	6486.7	6477.6	6468.5	6500.4	6505.0	6495.8	6363.6	6017.2	5365.3	4590.4
27.5°	6687.3	6673.6	6655.4	6646.3	6678.2	6701.0	6719.2	6628.0	6327.2	5593.3	4740.8
30°	6988.2	6947.1	6901.5	6869.6	6892.4	6928.9	6969.9	6915.2	6646.3	5875.9	4895.8
32.5°	7343.7	7293.6	7188.7	7129.5	7188.7	7216.1	7248.0	7220.6	6979.0	6181.3	5050.8
35°	7776.8	7717.5	7608.1	7521.5	7626.3	7567.1	7553.4	7526.1	7293.6	6482.2	5224.0
37.5°	8497.0	8410.4	8237.2	8045.7	8045.7	7918.1	7867.9	7785.9	7576.2	6751.1	5392.7
40°	9331.2	9217.3	8993.9	8711.3	8451.4	8187.0	8155.1	8095.9	7909.0	7061.1	5584.1
42.5°	10247.5	10028.7	9718.7	9376.8	8957.4	8656.6	8583.6	8415.0	8232.6	7375.6	5775.6
45°	11264.0	10808.2	10356.9	10183.6	9490.8	9217.3	9080.5	8775.1	8569.9	7703.8	5976.2
47.5°	11428.1	11072.6	10771.7	10744.3	9987.6	9759.7	9604.7	9167.1	8934.6	8054.8	6185.9
50°	11336.9	11122.7	11154.6	11045.2	10352.3	10201.9	10083.4	9586.5	9294.7	8392.2	6377.3
52.5°	10954.0	11072.6	11254.9	11054.3	10698.8	10575.7	10516.4	10037.8	9632.1	8702.1	6550.5
55°	10498.2	10580.2	10972.3	11218.4	11099.9	10990.5	10935.8	10562.0	9964.8	8962.0	6710.1
57.5°	9832.6	9796.2	10229.2	11191.1	11519.3	11455.5	11396.2	11077.1	10274.8	9148.9	6810.4
60°	8834.3	8756.8	9303.9	10644.1	11656.0	11756.3	11729.0	11419.0	10511.9	9144.3	6769.3
62.5°	7106.7	7298.1	8054.8	9750.6	11715.3	11970.6	11920.4	11446.3	10589.4	8879.9	6509.5
65°	5283.3	5556.8	6299.8	8519.8	11633.2	12080.0	11943.2	10999.6	10229.2	8355.7	5939.7
67.5°	3806.3	4047.9	4590.4	7010.9	10844.6	11578.5	11419.0	10270.3	9399.6	7612.7	5151.1
70°	2602.9	2776.1	3145.4	5105.5	9258.3	10010.4	9910.1	9180.8	8091.3	6728.3	4184.7
72.5°	1837.1	1910.0	2147.0	3368.7	7033.7	7854.3	7735.7	7553.4	6500.4	5593.3	3254.8
75°	1376.7	1422.2	1549.9	2179.0	4745.4	5442.8	5333.4	5438.3	4854.8	4234.8	2370.4
77.5°	519.7	565.3	879.8	1390.3	2808.0	3341.4	3232.0	3295.8	2698.6	2137.9	1180.6
80°	141.3	150.4	291.7	661.0	1276.4	1663.8	1513.4	1299.2	1002.9	984.6	624.5
82.5°	59.3	68.4	132.2	355.6	455.8	455.8	382.9	474.1	382.9	460.4	300.9
85°	22.8	27.4	31.9	91.2	59.3	63.8	68.4	91.2	77.5	95.7	68.4
87.5°	0.0	0.0	0.0	4.6	4.6	9.1	4.6	9.1	13.7	13.7	13.7
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°	3683.3	3683.3	3683.3	3683.3	3683.3	3683.3	3683.3	3683.3	3683.3	3683.3	3683.3
2.5°	3660.5	3610.3	3537.4	3418.9	3295.8	3227.4	3140.8	3127.1	3035.9	3026.8	2990.4
5°	3683.3	3578.4	3391.5	3163.6	2940.2	2767.0	2639.4	2571.0	2438.8	2438.8	2402.3
7.5°	3701.5	3537.4	3236.5	2899.2	2593.8	2361.3	2188.1	2115.1	1996.6	1987.5	1960.1
10°	3706.0	3487.2	3067.9	2630.2	2256.4	2019.4	1850.7	1768.7	1663.8	1654.7	1636.5
12.5°	3742.5	3459.9	2917.4	2397.8	2014.8	1759.6	1595.5	1527.1	1445.0	1435.9	1417.7
15°	3801.8	3459.9	2789.8	2201.7	1800.6	1563.6	1422.2	1358.4	1299.2	1290.1	1280.9
17.5°	3861.0	3450.8	2662.2	2019.4	1622.8	1408.6	1285.5	1235.3	1189.8	1185.2	1176.1
20°	3915.7	3446.2	2534.5	1864.4	1486.1	1280.9	1185.2	1139.6	1103.2	1103.2	1098.6
22.5°	3970.4	3437.1	2411.4	1718.5	1367.5	1185.2	1103.2	1053.0	1025.7	1025.7	1021.1
25°	4052.5	3437.1	2297.5	1595.5	1271.8	1112.3	1030.2	993.7	971.0	966.4	966.4
27.5°	4148.2	3464.4	2197.2	1486.1	1189.8	1039.3	975.5	939.0	911.7	902.6	907.1
30°	4253.1	3487.2	2106.0	1390.3	1112.3	984.6	916.3	879.8	852.4	843.3	847.9
32.5°	4357.9	3514.6	2024.0	1303.7	1034.8	934.5	866.1	825.1	797.7	793.2	793.2
35°	4471.9	3541.9	1941.9	1230.8	971.0	884.3	820.5	774.9	756.7	747.6	752.1
37.5°	4585.8	3587.5	1864.4	1162.4	925.4	838.8	779.5	733.9	720.2	715.7	715.7
40°	4722.6	3655.9	1832.5	1116.8	884.3	797.7	747.6	702.0	688.3	688.3	688.3
42.5°	4836.5	3710.6	1805.2	1066.7	852.4	761.3	715.7	679.2	670.1	665.5	670.1
45°	4950.5	3760.7	1768.7	1021.1	811.4	724.8	688.3	651.9	642.7	642.7	642.7
47.5°	5064.5	3788.1	1718.5	975.5	774.9	692.9	661.0	629.1	620.0	620.0	620.0
50°	5155.6	3810.9	1645.6	925.4	733.9	665.5	633.6	601.7	592.6	592.6	592.6
52.5°	5246.8	3815.4	1568.1	866.1	692.9	633.6	606.3	574.4	565.3	560.7	560.7
55°	5328.9	3810.9	1476.9	797.7	647.3	597.2	574.4	547.0	528.8	510.5	519.7
57.5°	5388.1	3806.3	1372.1	729.4	601.7	560.7	551.6	515.1	478.6	433.1	442.2
60°	5365.3	3756.2	1258.1	642.7	551.6	524.2	524.2	474.1	410.3	387.5	392.0
62.5°	5219.5	3614.9	1139.6	551.6	501.4	487.8	483.2	428.5	378.4	355.6	360.1
65°	4781.8	3259.3	966.4	469.5	451.3	446.7	446.7	396.6	351.0	323.7	328.2
67.5°	4116.3	2735.1	788.6	396.6	401.1	410.3	410.3	364.7	319.1	291.7	296.3
70°	3300.3	2137.9	629.1	341.9	346.4	360.1	369.2	328.2	287.2	259.8	259.8
72.5°	2484.4	1622.8	506.0	287.2	310.0	310.0	323.7	291.7	250.7	223.4	227.9
75°	1800.6	1162.4	401.1	241.6	269.0	264.4	264.4	246.2	214.2	196.0	196.0
77.5°	852.4	610.8	319.1	173.2	209.7	205.1	209.7	196.0	182.3	164.1	168.7
80°	419.4	300.9	205.1	123.1	145.9	150.4	164.1	155.0	150.4	136.8	136.8
82.5°	200.6	118.5	95.7	86.6	100.3	104.8	114.0	114.0	118.5	109.4	109.4
85°	54.7	31.9	41.0	54.7	63.8	68.4	77.5	82.1	82.1	77.5	82.1
87.5°	13.7	13.7	18.2	27.4	31.9	36.5	41.0	41.0	18.2	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)