

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: P841767

Luminaire Tested: **ARCH4-220-750-U-T2R**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P841767
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2403-329-1)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-220-750-U-T2R
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 5000K, 870mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE II
ROADWAY OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 35335 lumens
Efficiency: N/A
Efficacy: 159.3 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B4 - U0 - G4

Input Watts (W): 221.8
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

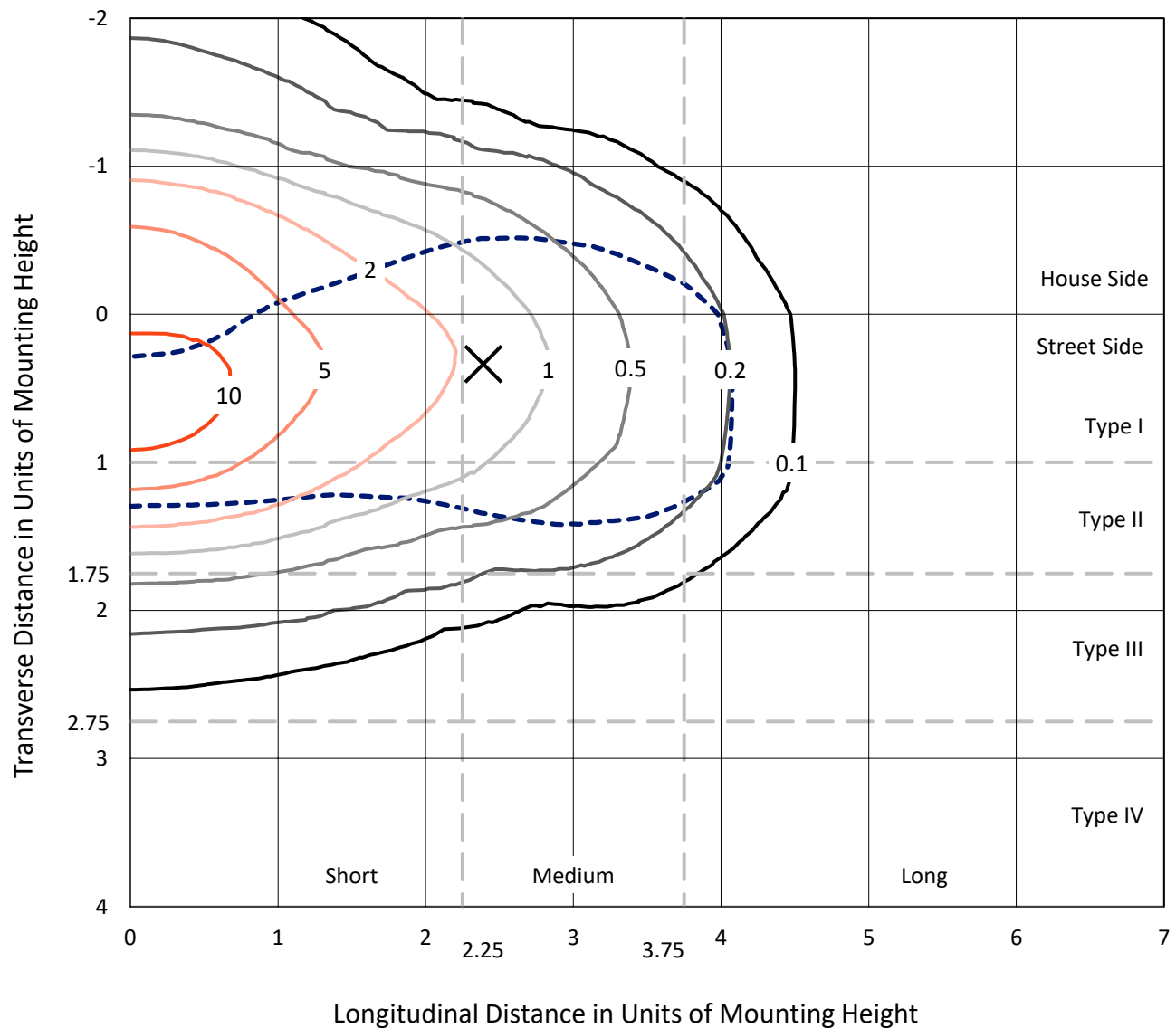


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Iso-Footcandle Lines of Horizontal Illumination

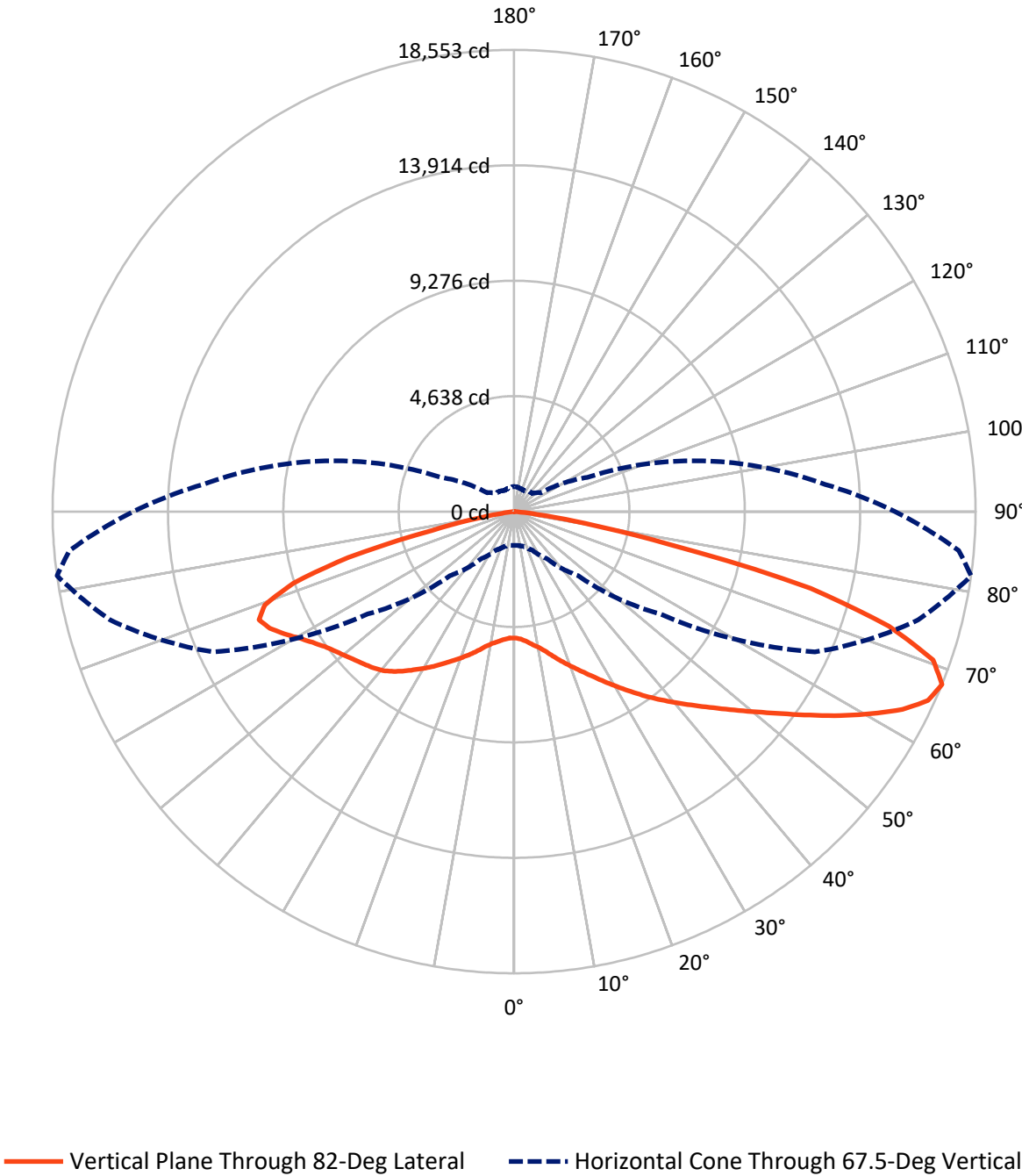
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 15.6 fc
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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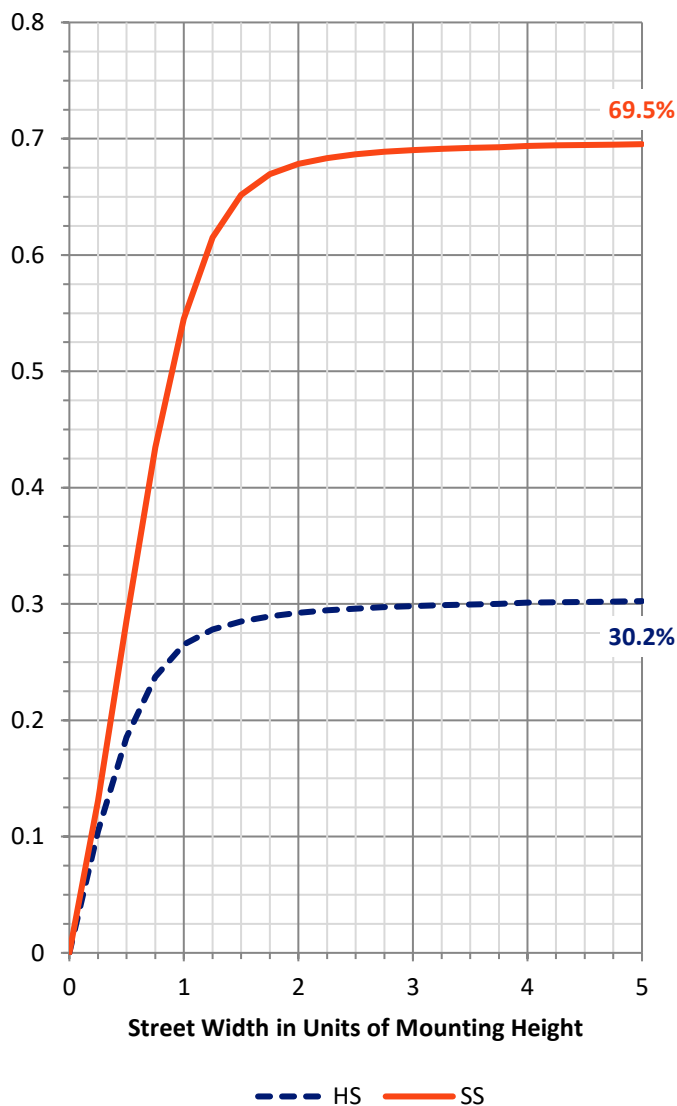
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	10760.9	0.0	10760.9
	% Fixture	30.5	0.0	30.5
Street Side	Lumens	24574.1	0.0	24574.1
	% Fixture	69.5	0.0	69.5
Total	Lumens	35335.0	0.0	35335.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	524.9	1.5
10°-20°	1890.8	5.4
20°-30°	3800.1	10.8
30°-40°	5969.4	16.9
40°-50°	7272.0	20.6
50°-60°	6871.1	19.4
60°-70°	5674.0	16.1
70°-80°	3089.7	8.7
80°-90°	242.9	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°	35335.0	100.0
0°-180°	35335.0	100.0

Coefficient of Utilization



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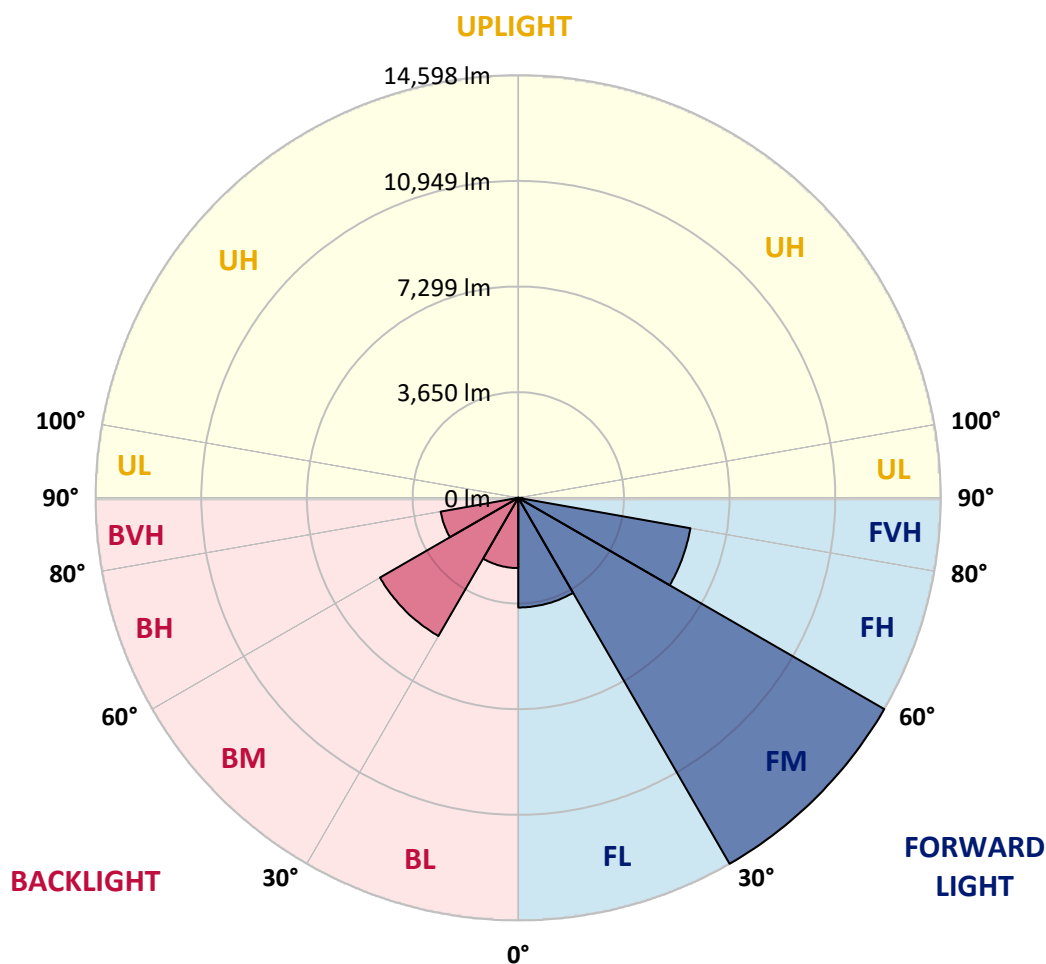
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3789.2	10.7			
FM	(30°-60°)	14598.4	41.3			
FH	(60°-80°)	6040.0	17.1			G3/7500
FVH	(80°-90°)	146.4	0.4			G2/225
BL	(0°-30°)	2426.7	6.9	B3/2500		
BM	(30°-60°)	5514.1	15.6	B4/8500		
BH	(60°-80°)	2723.6	7.7	B4/5000		G4/5000
BVH	(80°-90°)	96.5	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G4

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	5079.4	5079.4	5079.4	5079.4	5079.4	5079.4	5079.4	5079.4	5079.4	5079.4	5079.4
2.5°	5310.3	5310.3	5351.3	5351.3	5315.4	5259.0	5243.6	5182.0	5125.6	5125.6	5130.7
5°	5818.2	5813.1	5843.9	5802.8	5715.6	5602.7	5525.8	5392.4	5279.5	5243.6	5238.4
7.5°	6439.0	6433.9	6449.3	6382.6	6218.4	6033.7	5879.8	5664.3	5479.6	5402.6	5382.1
10°	7131.7	7126.5	7111.1	6998.3	6777.6	6490.3	6259.4	5961.9	5684.8	5561.7	5536.0
12.5°	7926.9	7916.7	7880.7	7716.6	7413.9	7044.4	6710.9	6326.1	5956.7	5787.4	5731.0
15°	8814.5	8799.1	8732.4	8532.3	8127.0	7660.1	7229.1	6736.6	6285.1	6064.5	5987.5
17.5°	9748.3	9748.3	9645.7	9348.1	8896.6	8316.9	7783.3	7157.3	6628.9	6356.9	6264.6
20°	10697.5	10692.4	10564.1	10205.0	9671.4	9004.4	8327.1	7639.6	6982.9	6654.5	6541.6
22.5°	11698.0	11687.7	11528.7	11118.2	10482.0	9727.8	8937.7	8116.8	7372.8	6977.7	6834.1
25°	12847.3	12831.9	12636.9	12134.1	11379.9	10528.2	9625.2	8676.0	7819.2	7336.9	7167.6
27.5°	14068.4	14047.8	13817.0	13232.1	12406.0	11379.9	10384.5	9322.5	8311.7	7737.1	7547.3
30°	15156.1	15140.7	14889.3	14289.0	13339.8	12226.4	11108.0	9968.9	8829.9	8162.9	7926.9
32.5°	15977.0	15977.0	15751.2	15161.2	14176.1	13037.1	11836.5	10579.5	9368.6	8619.6	8342.5
35°	16474.7	16490.1	16295.1	15823.1	14894.4	13801.6	12590.7	11297.8	9943.3	9107.0	8809.4
37.5°	16546.5	16597.8	16484.9	16166.8	15392.1	14437.8	13329.5	11990.4	10538.4	9599.5	9266.0
40°	16213.0	16248.9	16254.0	16130.9	15597.3	14894.4	13981.1	12724.1	11169.5	10117.7	9732.9
42.5°	15546.0	15571.7	15617.8	15653.8	15448.5	15094.5	14478.8	13406.5	11841.6	10646.2	10194.7
45°	14684.0	14678.9	14755.9	14909.8	14899.5	14981.6	14755.9	14027.3	12539.4	11246.5	10707.8
47.5°	13396.2	13370.6	13642.5	13991.4	14165.8	14550.7	14761.0	14514.7	13298.8	11908.3	11292.7
50°	11379.9	11354.2	11949.4	12770.3	13283.4	13868.3	14478.8	14807.2	14094.0	12652.3	11928.9
52.5°	8927.4	8901.8	9656.0	11092.6	12211.1	13062.7	13909.3	14873.9	14848.2	13483.5	12647.2
55°	6639.1	6618.6	7352.3	8906.9	10718.0	12129.0	13211.5	14699.4	15556.3	14437.8	13519.4
57.5°	4679.2	4668.9	5305.1	6592.9	8799.1	10989.9	12539.4	14360.8	16207.9	15474.2	14504.5
60°	3283.6	3268.3	3730.0	4725.4	6654.5	9271.2	11872.4	13909.3	16695.3	16495.2	15551.1
62.5°	2211.3	2201.1	2529.4	3360.6	4725.4	7136.8	10861.7	13606.6	16972.3	17521.3	16608.1
65°	1677.7	1672.6	1821.4	2278.0	3345.2	5125.6	9255.8	13570.7	17008.3	18290.9	17505.9
67.5°	1354.5	1359.6	1441.7	1703.4	2313.9	3642.8	7177.8	13344.9	16818.4	18552.6	17942.0
70°	1108.2	1108.2	1144.1	1318.6	1708.5	2457.6	5012.7	12318.8	16290.0	17870.2	17423.8
72.5°	846.6	851.7	964.6	1067.2	1287.8	1723.9	3211.8	10194.7	15043.2	15756.4	15417.7
75°	672.1	667.0	733.7	877.3	1000.5	1231.4	1970.2	7311.2	12801.1	12313.7	12098.2
77.5°	482.3	477.2	528.5	651.6	759.3	872.2	1174.9	3689.0	6962.4	6398.0	6238.9
80°	328.4	318.1	364.3	451.5	502.8	513.1	574.6	1416.1	3037.4	2862.9	2827.0
82.5°	169.3	169.3	195.0	256.5	261.7	266.8	256.5	456.6	1005.6	938.9	897.9
85°	66.7	66.7	71.8	87.2	87.2	92.4	92.4	118.0	107.7	102.6	97.5
87.5°	5.1	5.1	10.3	10.3	15.4	15.4	15.4	20.5	25.7	25.7	25.7
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°	5079.4	5079.4	5079.4	5079.4	5079.4	5079.4	5079.4	5079.4	5079.4	5079.4	5079.4
2.5°	5120.4	5099.9	5033.2	5017.8	5007.6	4992.2	4997.3	4961.4	4946.0	4951.1	4930.6
5°	5212.8	5176.9	5094.8	5058.9	5048.6	5033.2	5048.6	5023.0	4997.3	5007.6	4997.3
7.5°	5341.1	5289.7	5187.1	5151.2	5146.1	5130.7	5151.2	5130.7	5110.2	5120.4	5099.9
10°	5474.5	5407.8	5294.9	5259.0	5259.0	5253.8	5274.4	5243.6	5223.0	5228.2	5217.9
12.5°	5669.4	5582.2	5459.1	5428.3	5412.9	5428.3	5433.4	5392.4	5356.4	5361.6	5346.2
15°	5905.4	5807.9	5674.5	5628.4	5618.1	5613.0	5592.5	5541.2	5495.0	5489.8	5474.5
17.5°	6162.0	6038.8	5879.8	5833.6	5787.4	5772.0	5720.7	5654.0	5582.2	5582.2	5561.7
20°	6408.2	6269.7	6079.9	6013.2	5946.5	5884.9	5797.7	5689.9	5597.6	5582.2	5561.7
22.5°	6675.0	6510.9	6290.2	6192.7	6074.7	5951.6	5802.8	5659.2	5541.2	5515.5	5500.1
25°	6972.6	6767.4	6505.7	6362.1	6172.2	5982.4	5761.8	5577.1	5438.5	5397.5	5387.2
27.5°	7301.0	7054.7	6736.6	6526.2	6249.2	5951.6	5669.4	5448.8	5279.5	5228.2	5212.8
30°	7634.5	7342.0	6947.0	6639.1	6249.2	5854.1	5500.1	5243.6	5048.6	4976.8	4966.5
32.5°	7968.0	7639.6	7136.8	6700.7	6187.6	5689.9	5279.5	4976.8	4756.2	4668.9	4689.5
35°	8368.2	7968.0	7311.2	6726.3	6085.0	5489.8	5028.1	4674.1	4448.3	4371.4	4386.7
37.5°	8783.7	8296.3	7449.8	6705.8	5941.3	5264.1	4745.9	4402.1	4119.9	3986.5	4001.9
40°	9142.9	8593.9	7547.3	6634.0	5756.6	5007.6	4468.8	4017.3	3627.4	3499.1	3483.7
42.5°	9481.5	8814.5	7598.6	6526.2	5546.3	4710.0	4073.8	3494.0	3104.1	2945.0	2950.1
45°	9835.5	9030.0	7578.0	6382.6	5284.6	4361.1	3565.8	2980.9	2637.2	2493.5	2498.6
47.5°	10240.9	9260.9	7557.5	6228.7	4966.5	3909.6	3078.4	2529.4	2231.9	2129.2	2119.0
50°	10671.8	9517.4	7531.9	6038.8	4612.5	3406.8	2596.1	2108.7	1857.3	1790.6	1775.2
52.5°	11159.3	9794.5	7516.5	5813.1	4186.6	2873.2	2165.2	1739.3	1570.0	1523.8	1518.7
55°	11744.2	10117.7	7537.0	5541.2	3673.6	2370.4	1800.9	1498.2	1385.3	1359.6	1354.5
57.5°	12457.3	10533.3	7598.6	5223.0	3134.9	1934.3	1534.1	1349.4	1277.5	1257.0	1257.0
60°	13232.1	11005.3	7711.4	4863.9	2596.1	1595.6	1359.6	1231.4	1200.6	1226.2	1226.2
62.5°	14068.4	11559.5	7911.5	4427.8	2093.3	1349.4	1221.1	1133.9	1113.4	1164.7	1169.8
65°	14843.1	12098.2	8039.8	3904.5	1662.3	1169.8	1113.4	1036.4	1046.7	1098.0	1092.8
67.5°	15320.3	12544.5	7860.2	3247.7	1318.6	1036.4	1000.5	933.8	959.4	1000.5	1005.6
70°	15027.8	12293.1	6972.6	2452.5	1031.3	903.0	877.3	836.3	856.8	908.1	928.7
72.5°	13596.3	11010.5	5423.1	1657.2	831.2	759.3	769.6	749.1	774.7	820.9	867.1
75°	11036.1	8322.0	3637.7	1062.1	656.7	646.5	661.9	646.5	656.7	702.9	728.6
77.5°	5761.8	4058.4	1811.1	661.9	487.4	502.8	528.5	533.6	564.4	574.6	584.9
80°	2688.5	1826.5	754.2	369.4	323.2	354.0	405.3	410.5	420.7	436.1	441.2
82.5°	877.3	549.0	348.9	200.1	184.7	200.1	261.7	313.0	318.1	348.9	348.9
85°	92.4	56.4	77.0	82.1	71.8	87.2	118.0	112.9	51.3	30.8	30.8
87.5°	25.7	20.5	25.7	25.7	20.5	20.5	15.4	5.1	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)