

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: P836177

Luminaire Tested: **ARCH3-150-727-U-T4W-HSS**

Issue Date: 5/16/2024

Test Information

Test Method: LM-79-08
Report Number: P836177
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-27)
Test Lab: INNOVATION CENTER
Issue Date: 5/16/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH3-150-727-U-T4W-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 1170mA LIGHTSQUARE WITH 40 LEDS AND TYPE IV WIDE
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14017 lumens
Efficiency: N/A
Efficacy: 93.0 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): 150.7
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



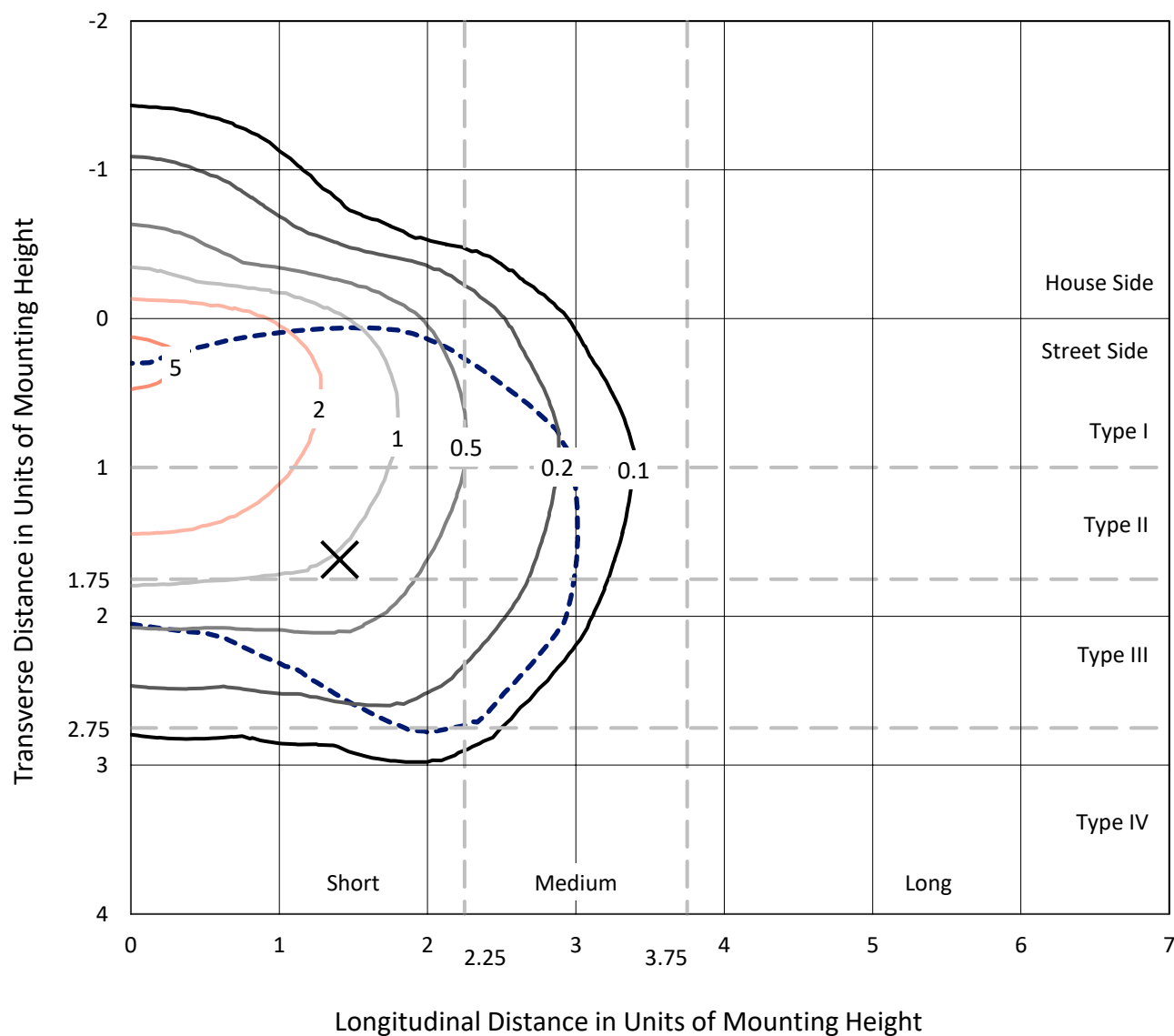
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

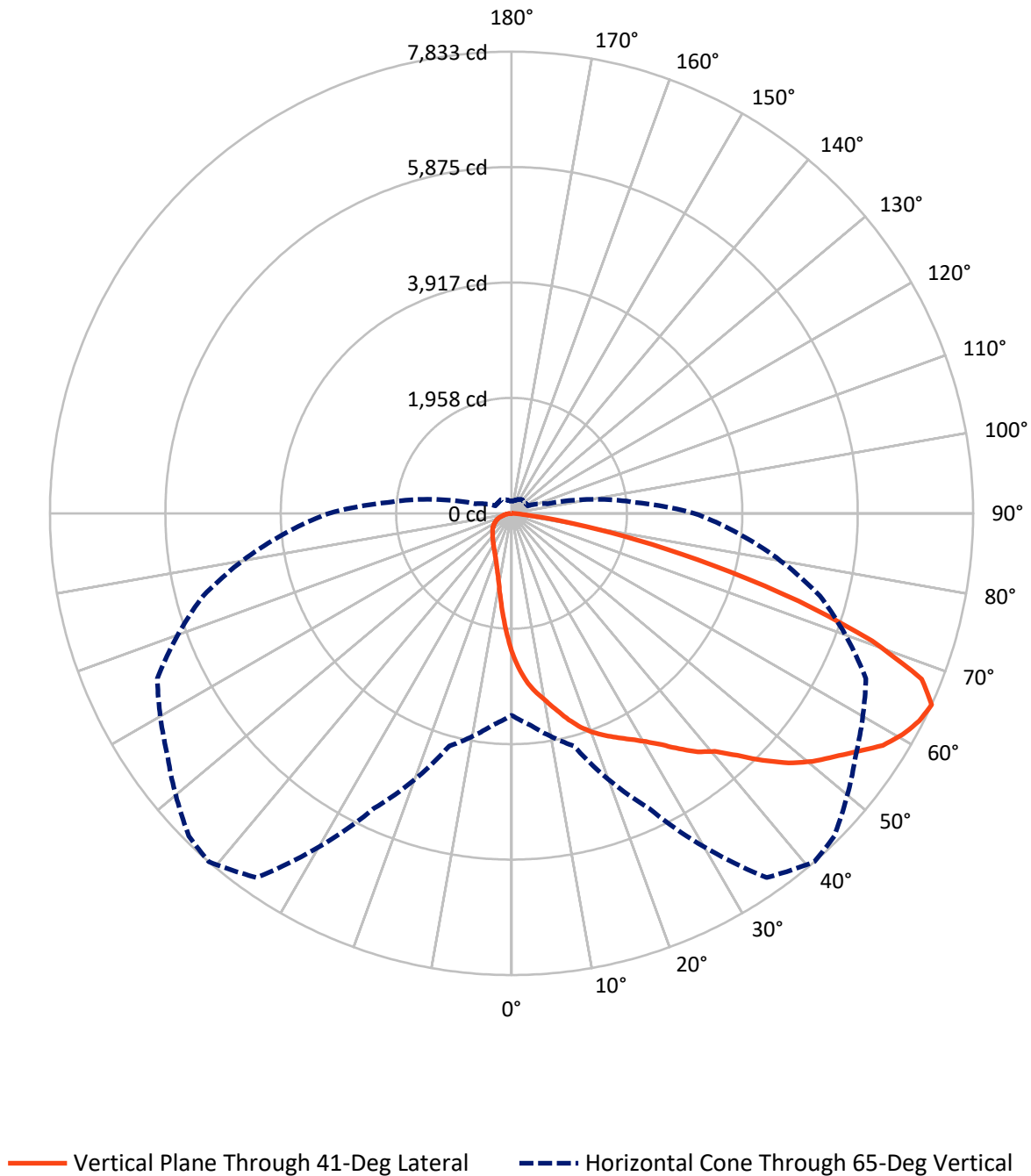


Based on 25 foot mounting height. Maximum calculated value = 5.5 fc

Type III - Short - N/A

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Luminous Intensity Polar Plot



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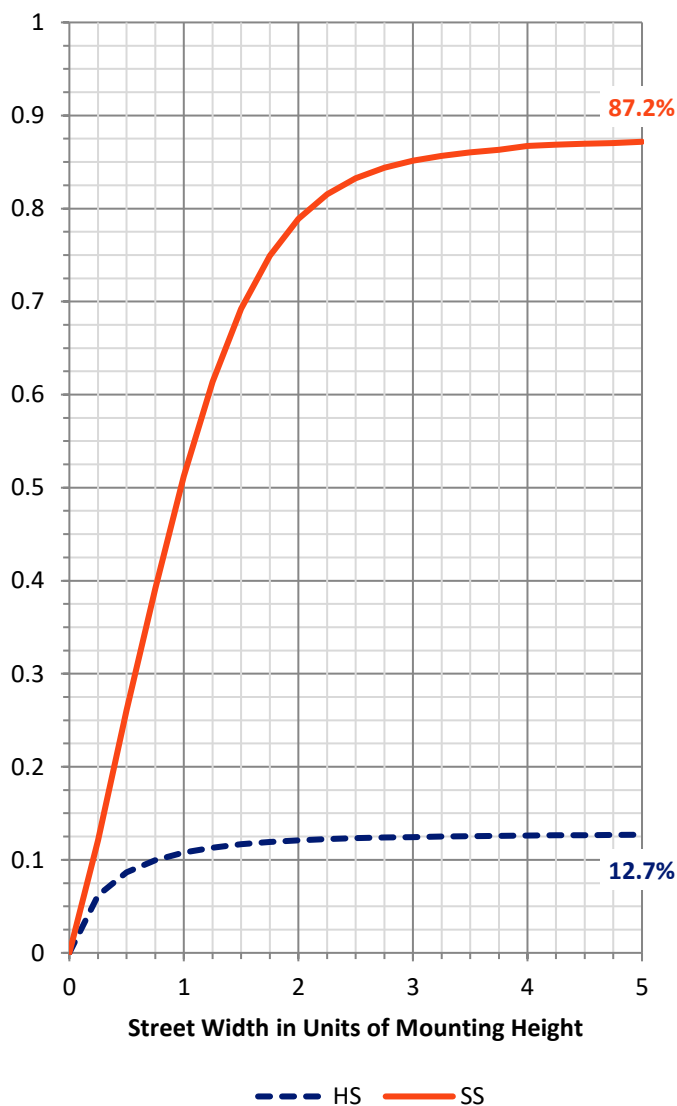
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1799.6	0.0	1799.6
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	12217.4	0.0	12217.4
	% Fixture	87.2	0.0	87.2
Total	Lumens	14017.0	0.0	14017.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	222.5	1.6
10°-20°	667.3	4.8
20°-30°	1148.0	8.2
30°-40°	1741.1	12.4
40°-50°	2550.8	18.2
50°-60°	3221.1	23.0
60°-70°	3020.3	21.5
70°-80°	1346.2	9.6
80°-90°	99.7	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°	14017.0	100.0
0°-180°	14017.0	100.0

Coefficient of Utilization



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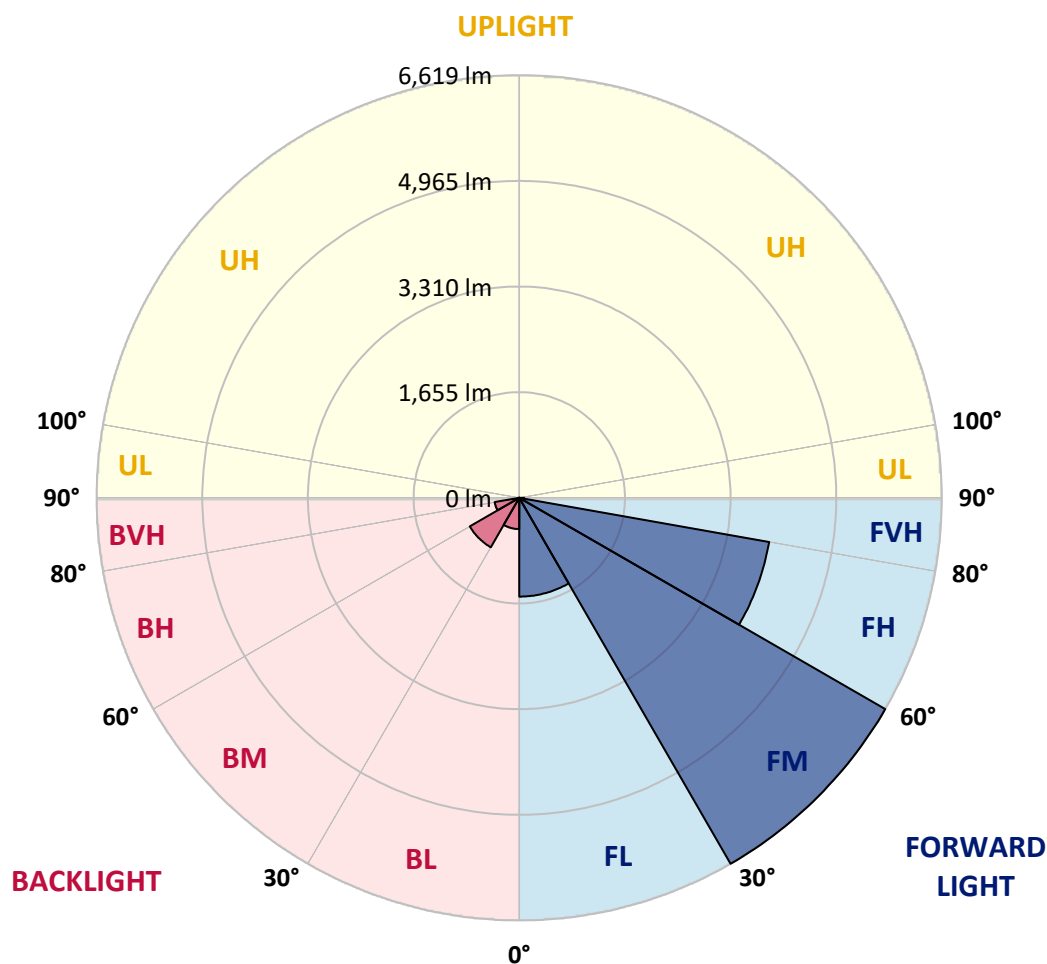
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1548.0	11.0			
FM	(30°-60°)	6619.4	47.2			
FH	(60°-80°)	3975.6	28.4			G2/5000
FVH	(80°-90°)	74.5	0.5			G1/100
BL	(0°-30°)	489.8	3.5	B1/500		
BM	(30°-60°)	893.6	6.4	B1/1000		
BH	(60°-80°)	390.9	2.8	B1/500		G1/500
BVH	(80°-90°)	25.2	0.2			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°	41°	45°	55°	65°	75°	85°
0°	2388.4	2388.4	2388.4	2388.4	2388.4	2388.4	2388.4	2388.4	2388.4	2388.4	2388.4
2.5°	2755.0	2746.1	2740.2	2707.7	2707.7	2663.3	2666.3	2624.9	2574.6	2494.8	2409.1
5°	3015.1	3003.3	2988.5	2956.0	2944.1	2899.8	2893.9	2834.8	2749.1	2610.1	2456.4
7.5°	3242.7	3230.9	3210.2	3162.9	3130.4	3077.2	3062.4	2985.5	2890.9	2719.5	2503.7
10°	3449.6	3440.7	3414.1	3355.0	3310.7	3245.7	3219.1	3115.6	2997.4	2808.2	2542.1
12.5°	3659.5	3647.7	3612.2	3561.9	3508.7	3431.9	3399.4	3266.3	3115.6	2905.7	2598.3
15°	3854.6	3836.8	3810.2	3757.0	3709.7	3635.8	3600.4	3443.7	3260.4	3015.1	2672.2
17.5°	3981.7	3966.9	3943.3	3913.7	3875.3	3819.1	3783.6	3629.9	3405.3	3121.5	2749.1
20°	4058.5	4052.6	4043.8	4026.0	4008.3	3969.9	3943.3	3798.4	3561.9	3225.0	2823.0
22.5°	4117.7	4111.8	4108.8	4108.8	4111.8	4097.0	4079.2	3955.1	3712.7	3334.3	2890.9
25°	4209.3	4206.3	4200.4	4194.5	4215.2	4218.2	4212.3	4126.5	3901.9	3479.2	2976.7
27.5°	4336.4	4327.5	4315.7	4309.8	4330.5	4345.3	4357.1	4298.0	4102.9	3627.0	3074.2
30°	4531.5	4504.9	4475.3	4454.6	4469.4	4493.1	4519.7	4484.2	4309.8	3810.2	3174.7
32.5°	4762.1	4729.6	4661.6	4623.1	4661.6	4679.3	4700.0	4682.3	4525.6	4008.3	3275.2
35°	5042.9	5004.5	4933.5	4877.4	4945.3	4906.9	4898.0	4880.3	4729.6	4203.4	3387.5
37.5°	5509.9	5453.8	5341.4	5217.3	5217.3	5134.5	5102.0	5048.8	4912.8	4377.8	3496.9
40°	6050.9	5977.0	5832.1	5648.9	5480.4	5308.9	5288.2	5249.8	5128.6	4578.8	3621.1
42.5°	6645.0	6503.1	6302.1	6080.4	5808.5	5613.4	5566.1	5456.7	5338.5	4782.8	3745.2
45°	7304.2	7008.6	6716.0	6603.6	6154.3	5977.0	5888.3	5690.2	5557.2	4995.6	3875.3
47.5°	7410.6	7180.1	6985.0	6967.2	6476.5	6328.7	6228.2	5944.5	5793.7	5223.2	4011.3
50°	7351.5	7212.6	7233.3	7162.3	6713.0	6615.5	6538.6	6216.4	6027.2	5441.9	4135.4
52.5°	7103.2	7180.1	7298.3	7168.2	6937.7	6857.8	6819.4	6509.0	6246.0	5642.9	4247.7
55°	6807.6	6860.8	7115.0	7274.6	7197.8	7126.8	7091.4	6849.0	6461.7	5811.4	4351.2
57.5°	6376.0	6352.4	6633.2	7256.9	7469.7	7428.4	7389.9	7183.0	6662.8	5932.6	4416.2
60°	5728.7	5678.4	6033.1	6902.2	7558.4	7623.4	7605.7	7404.7	6816.5	5929.7	4389.6
62.5°	4608.4	4732.5	5223.2	6322.8	7596.8	7762.4	7729.9	7422.4	6866.7	5758.2	4221.1
65°	3426.0	3603.3	4085.2	5524.7	7543.6	7833.3	7744.6	7132.8	6633.2	5418.3	3851.6
67.5°	2468.2	2624.9	2976.7	4546.3	7032.3	7508.2	7404.7	6659.8	6095.2	4936.5	3340.2
70°	1687.9	1800.2	2039.6	3310.7	6003.6	6491.3	6426.3	5953.3	5246.8	4363.0	2713.6
72.5°	1191.3	1238.6	1392.3	2184.5	4561.1	5093.1	5016.3	4898.0	4215.2	3627.0	2110.6
75°	892.7	922.3	1005.0	1413.0	3077.2	3529.4	3458.5	3526.5	3148.1	2746.1	1537.1
77.5°	337.0	366.5	570.5	901.6	1820.9	2166.7	2095.8	2137.2	1749.9	1386.3	765.6
80°	91.6	97.5	189.2	428.6	827.7	1078.9	981.4	842.5	650.3	638.5	405.0
82.5°	38.4	44.3	85.7	230.6	295.6	295.6	248.3	307.4	248.3	298.6	195.1
85°	14.8	17.7	20.7	59.1	38.4	41.4	44.3	59.1	50.3	62.1	44.3
87.5°	0.0	0.0	0.0	3.0	3.0	5.9	3.0	5.9	8.9	8.9	8.9
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°	2388.4	2388.4	2388.4	2388.4	2388.4	2388.4	2388.4	2388.4	2388.4	2388.4	2388.4
2.5°	2373.6	2341.1	2293.8	2217.0	2137.2	2092.8	2036.7	2027.8	1968.7	1962.8	1939.1
5°	2388.4	2320.4	2199.2	2051.4	1906.6	1794.3	1711.5	1667.2	1581.4	1581.4	1557.8
7.5°	2400.2	2293.8	2098.7	1880.0	1681.9	1531.2	1418.9	1371.6	1294.7	1288.8	1271.1
10°	2403.2	2261.3	1989.4	1705.6	1463.2	1309.5	1200.1	1146.9	1078.9	1073.0	1061.2
12.5°	2426.9	2243.6	1891.8	1554.8	1306.5	1141.0	1034.6	990.2	937.0	931.1	919.3
15°	2465.3	2243.6	1809.1	1427.7	1167.6	1013.9	922.3	880.9	842.5	836.5	830.6
17.5°	2503.7	2237.7	1726.3	1309.5	1052.3	913.4	833.6	801.1	771.5	768.6	762.6
20°	2539.2	2234.7	1643.5	1209.0	963.6	830.6	768.6	739.0	715.3	715.3	712.4
22.5°	2574.6	2228.8	1563.7	1114.4	886.8	768.6	715.3	682.8	665.1	665.1	662.1
25°	2627.9	2228.8	1489.8	1034.6	824.7	721.3	668.0	644.4	629.6	626.7	626.7
27.5°	2689.9	2246.5	1424.8	963.6	771.5	674.0	632.6	608.9	591.2	585.3	588.2
30°	2757.9	2261.3	1365.7	901.6	721.3	638.5	594.1	570.5	552.8	546.9	549.8
32.5°	2825.9	2279.1	1312.5	845.4	671.0	606.0	561.6	535.0	517.3	514.3	514.3
35°	2899.8	2296.8	1259.2	798.1	629.6	573.5	532.1	502.5	490.7	484.8	487.7
37.5°	2973.7	2326.3	1209.0	753.8	600.1	543.9	505.5	475.9	467.0	464.1	464.1
40°	3062.4	2370.7	1188.3	724.2	573.5	517.3	484.8	455.2	446.4	446.4	446.4
42.5°	3136.3	2406.2	1170.6	691.7	552.8	493.6	464.1	440.4	434.5	431.6	434.5
45°	3210.2	2438.7	1146.9	662.1	526.2	470.0	446.4	422.7	416.8	416.8	416.8
47.5°	3284.1	2456.4	1114.4	632.6	502.5	449.3	428.6	407.9	402.0	402.0	402.0
50°	3343.2	2471.2	1067.1	600.1	475.9	431.6	410.9	390.2	384.3	384.3	384.3
52.5°	3402.3	2474.1	1016.9	561.6	449.3	410.9	393.1	372.5	366.5	363.6	363.6
55°	3455.5	2471.2	957.7	517.3	419.7	387.2	372.5	354.7	342.9	331.1	337.0
57.5°	3494.0	2468.2	889.7	473.0	390.2	363.6	357.7	334.0	310.4	280.8	286.7
60°	3479.2	2435.7	815.8	416.8	357.7	339.9	339.9	307.4	266.0	251.3	254.2
62.5°	3384.6	2344.1	739.0	357.7	325.2	316.3	313.3	277.9	245.3	230.6	233.5
65°	3100.8	2113.5	626.7	304.5	292.6	289.7	289.7	257.2	227.6	209.9	212.8
67.5°	2669.2	1773.6	511.4	257.2	260.1	266.0	266.0	236.5	206.9	189.2	192.1
70°	2140.1	1386.3	407.9	221.7	224.7	233.5	239.4	212.8	186.2	168.5	168.5
72.5°	1611.0	1052.3	328.1	186.2	201.0	201.0	209.9	189.2	162.6	144.8	147.8
75°	1167.6	753.8	260.1	156.7	174.4	171.4	171.4	159.6	138.9	127.1	127.1
77.5°	552.8	396.1	206.9	112.3	136.0	133.0	136.0	127.1	118.2	106.4	109.4
80°	271.9	195.1	133.0	79.8	94.6	97.5	106.4	100.5	97.5	88.7	88.7
82.5°	130.1	76.9	62.1	56.2	65.0	68.0	73.9	73.9	76.9	70.9	70.9
85°	35.5	20.7	26.6	35.5	41.4	44.3	50.3	53.2	53.2	50.3	53.2
87.5°	8.9	8.9	11.8	17.7	20.7	23.6	26.6	26.6	11.8	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)