

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: P836822

Luminaire Tested: **ARCH3-80-727-U-T2U**

Issue Date: 5/16/2024

Test Information

Test Method: LM-79-08
Report Number: P836822
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-18)
Test Lab: INNOVATION CENTER
Issue Date: 5/16/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH3-80-727-U-T2U
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 650mA LIGHTSQUARE WITH 40 LEDS AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12731 lumens
Efficiency: N/A
Efficacy: 155.4 lumens/watt
Luminous Opening: Rectangular (W 0.58' x L: 0.58' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G3

Input Watts (W): 81.9
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

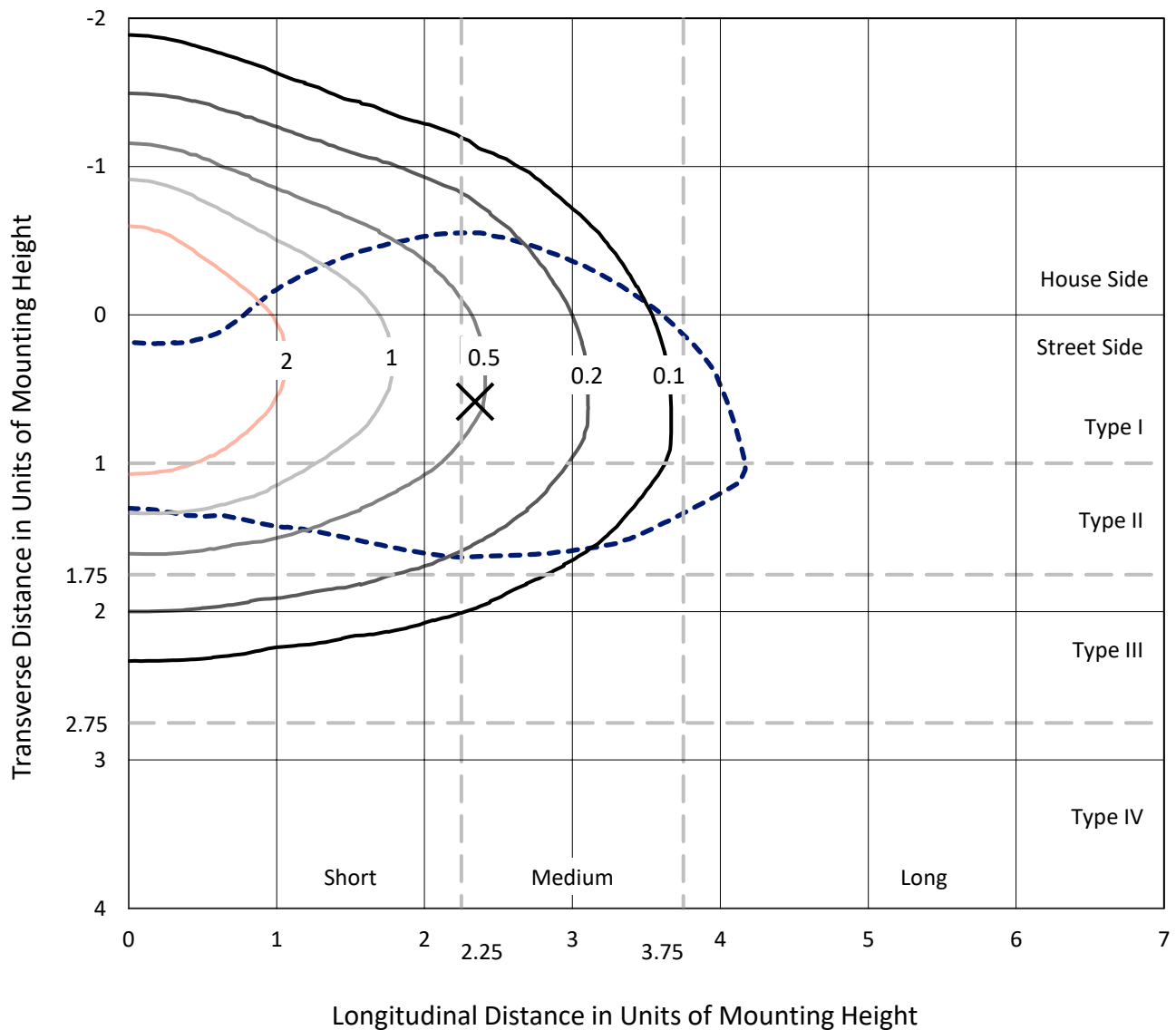


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Iso-Footcandle Lines of Horizontal Illumination

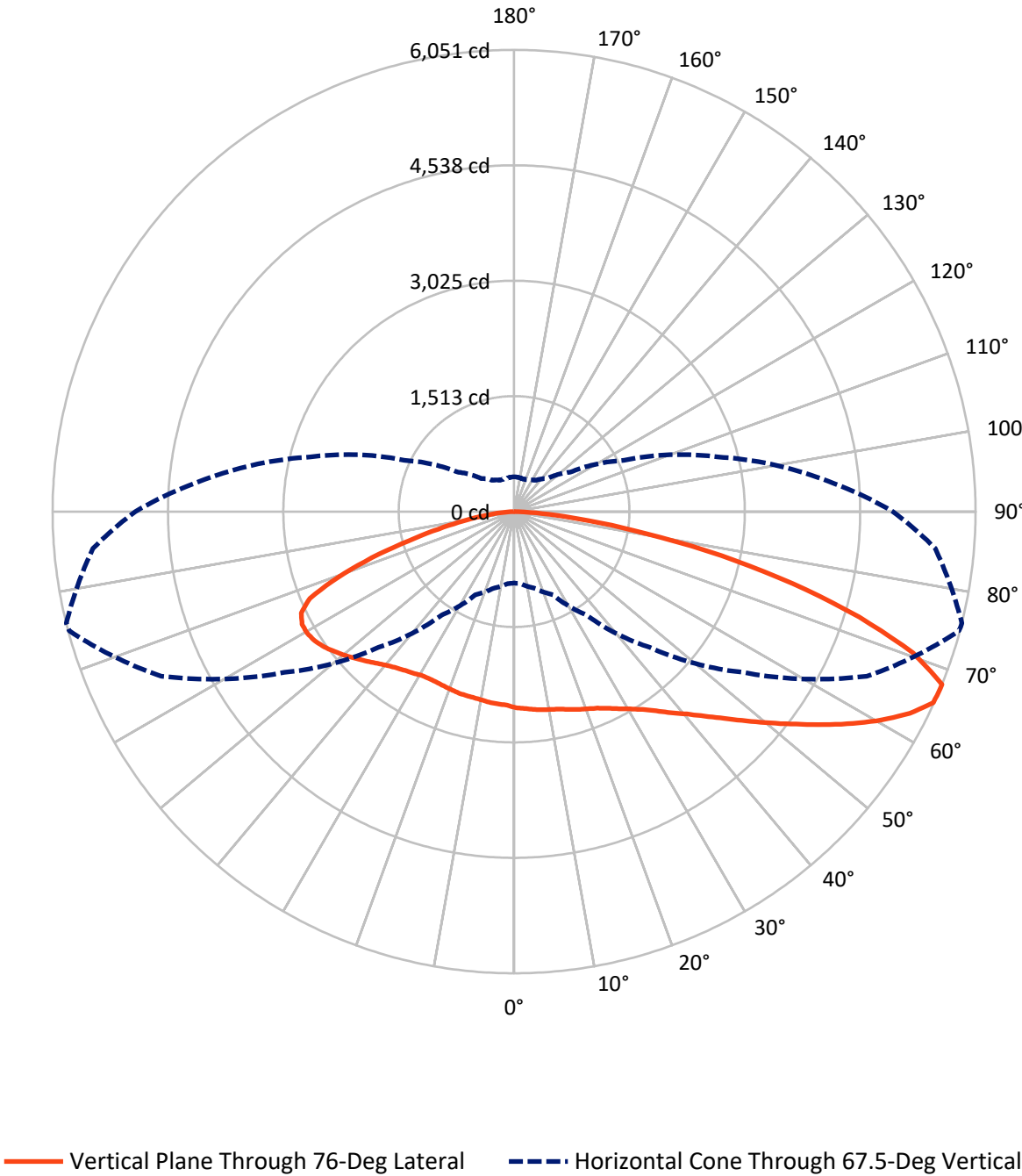
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.7 fc
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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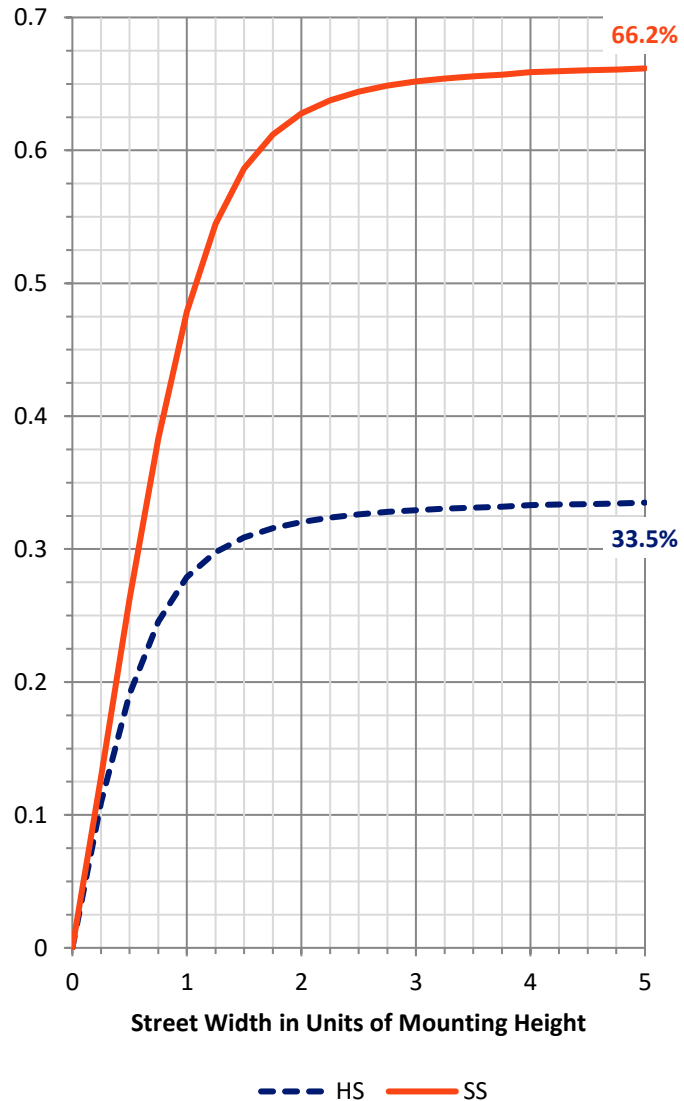
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4301.9	0.0	4301.9
	% Fixture	33.8	0.0	33.8
Street Side	Lumens	8429.1	0.0	8429.1
	% Fixture	66.2	0.0	66.2
Total	Lumens	12731.0	0.0	12731.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	248.0	1.9
10°-20°	758.1	6.0
20°-30°	1288.1	10.1
30°-40°	1832.7	14.4
40°-50°	2314.7	18.2
50°-60°	2506.1	19.7
60°-70°	2330.9	18.3
70°-80°	1251.9	9.8
80°-90°	200.6	1.6
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°	12731.0	100.0
0°-180°	12731.0	100.0

Coefficient of Utilization



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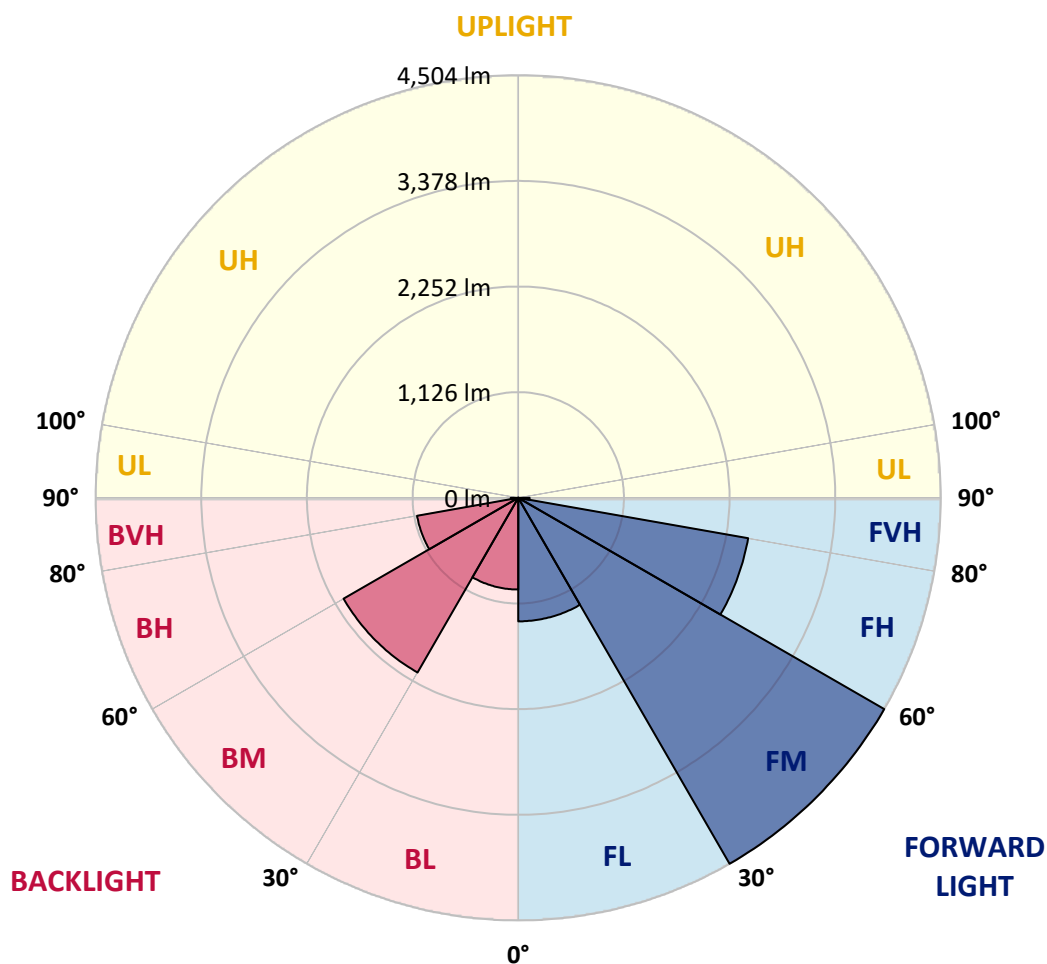
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1316.5	10.3			
FM	(30°-60°)	4503.7	35.4			
FH	(60°-80°)	2487.5	19.5			G2/5000
FVH	(80°-90°)	121.3	1.0			G2/225
BL	(0°-30°)	977.6	7.7	B2/1000		
BM	(30°-60°)	2149.7	16.9	B2/2500		
BH	(60°-80°)	1095.3	8.6	B3/2500		G3/2500
BVH	(80°-90°)	79.3	0.6			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	2571.6	2571.6	2571.6	2571.6	2571.6	2571.6	2571.6	2571.6	2571.6	2571.6	2571.6
2.5°	2649.6	2644.9	2626.0	2628.4	2628.4	2626.0	2597.6	2585.8	2585.8	2583.5	2557.5
5°	2744.2	2737.1	2715.8	2711.1	2701.6	2689.8	2644.9	2618.9	2607.1	2604.7	2569.3
7.5°	2855.3	2845.8	2819.8	2805.6	2782.0	2751.3	2694.5	2654.4	2626.0	2623.6	2574.0
10°	2966.4	2956.9	2926.2	2900.2	2867.1	2817.5	2744.2	2685.1	2640.2	2635.5	2576.4
12.5°	3098.7	3089.3	3051.5	3018.4	2968.7	2902.5	2805.6	2725.3	2663.8	2656.7	2583.5
15°	3238.2	3224.0	3186.2	3148.4	3086.9	3001.8	2886.0	2779.6	2701.6	2689.8	2604.7
17.5°	3354.0	3335.1	3304.4	3266.5	3198.0	3098.7	2966.4	2834.0	2737.1	2727.6	2626.0
20°	3453.3	3439.1	3406.0	3370.5	3297.3	3188.5	3042.0	2888.4	2770.2	2758.4	2642.5
22.5°	3547.8	3528.9	3510.0	3484.0	3403.6	3283.1	3129.5	2954.5	2812.7	2798.5	2663.8
25°	3656.5	3635.3	3628.2	3614.0	3519.5	3396.5	3235.8	3037.3	2871.8	2855.3	2701.6
27.5°	3791.3	3767.6	3753.5	3753.5	3640.0	3512.4	3349.3	3134.2	2940.4	2926.2	2748.9
30°	3933.1	3904.7	3883.5	3883.5	3755.8	3628.2	3460.4	3231.1	3018.4	3001.8	2810.4
32.5°	4058.4	4030.0	4006.4	4004.0	3871.6	3744.0	3576.2	3337.5	3112.9	3091.6	2886.0
35°	4155.3	4129.3	4108.0	4112.7	3987.5	3862.2	3706.2	3479.3	3231.1	3207.5	2985.3
37.5°	4214.4	4204.9	4193.1	4209.6	4093.8	3975.6	3840.9	3616.4	3365.8	3344.5	3108.2
40°	4245.1	4238.0	4285.3	4306.5	4183.6	4077.3	3975.6	3758.2	3512.4	3488.7	3250.0
42.5°	4290.0	4349.1	4368.0	4363.3	4249.8	4155.3	4098.5	3911.8	3684.9	3663.6	3420.2
45°	4129.3	4115.1	4219.1	4275.8	4254.5	4204.9	4214.4	4096.2	3885.8	3864.5	3616.4
47.5°	3914.2	3895.3	3954.4	4093.8	4176.5	4223.8	4318.4	4287.6	4117.5	4098.5	3845.6
50°	3460.4	3486.4	3706.2	3892.9	4056.0	4219.1	4405.8	4493.3	4372.7	4353.8	4091.5
52.5°	2956.9	2982.9	3212.2	3642.4	3909.5	4183.6	4469.6	4698.9	4649.3	4628.0	4353.8
55°	2590.5	2647.3	2907.3	3219.3	3701.5	4072.5	4507.5	4909.3	4947.1	4928.2	4639.8
57.5°	2226.5	2269.1	2465.3	2741.8	3417.8	3878.7	4505.1	5105.4	5259.1	5240.2	4930.5
60°	1798.7	1853.1	2009.1	2306.9	3039.6	3647.1	4438.9	5259.1	5559.3	5545.1	5211.8
62.5°	1505.6	1522.2	1633.3	1890.9	2552.7	3354.0	4290.0	5341.8	5831.1	5821.6	5464.7
65°	1212.5	1214.9	1316.5	1531.6	2082.4	2990.0	4037.1	5311.1	6036.7	6041.4	5646.7
67.5°	936.0	947.8	1040.0	1203.1	1654.5	2517.3	3675.5	5103.1	6039.1	6050.9	5542.7
70°	647.6	657.1	796.5	954.9	1278.7	2006.7	3186.2	4552.4	5542.7	5552.2	4968.4
72.5°	456.2	460.9	609.8	763.5	999.8	1512.7	2403.8	3765.3	4724.9	4732.0	4178.9
75°	340.4	345.1	430.2	579.1	765.8	1047.1	1642.7	2883.6	3774.7	3774.7	3299.6
77.5°	241.1	243.5	278.9	399.5	510.5	706.7	988.0	1888.5	2770.2	2774.9	2403.8
80°	163.1	165.5	182.0	269.5	319.1	382.9	536.5	990.4	1746.7	1753.8	1526.9
82.5°	85.1	89.8	101.6	137.1	160.7	212.7	276.5	503.5	966.7	985.6	917.1
85°	33.1	33.1	37.8	44.9	59.1	82.7	127.6	191.5	437.3	451.5	404.2
87.5°	11.8	11.8	14.2	14.2	16.5	18.9	21.3	28.4	49.6	49.6	47.3
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):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2571.6	2571.6	2571.6	2571.6	2571.6	2571.6	2571.6	2571.6	2571.6	2571.6	2571.6
2.5°	2548.0	2548.0	2536.2	2540.9	2538.5	2533.8	2529.1	2536.2	2529.1	2512.5	2510.2
5°	2552.7	2548.0	2529.1	2526.7	2519.6	2510.2	2498.4	2503.1	2491.3	2477.1	2474.7
7.5°	2555.1	2545.6	2519.6	2510.2	2496.0	2477.1	2458.2	2458.2	2441.6	2427.5	2425.1
10°	2550.4	2538.5	2503.1	2484.2	2458.2	2429.8	2403.8	2396.7	2377.8	2361.3	2361.3
12.5°	2552.7	2536.2	2491.3	2460.5	2425.1	2389.6	2356.5	2347.1	2330.5	2314.0	2311.6
15°	2566.9	2543.3	2486.5	2446.4	2394.4	2354.2	2318.7	2311.6	2297.5	2285.6	2285.6
17.5°	2581.1	2550.4	2479.5	2422.7	2358.9	2314.0	2280.9	2280.9	2271.5	2264.4	2264.4
20°	2588.2	2552.7	2465.3	2389.6	2316.4	2269.1	2238.4	2243.1	2240.7	2238.4	2238.4
22.5°	2604.7	2557.5	2453.5	2358.9	2271.5	2221.8	2193.5	2200.5	2198.2	2198.2	2200.5
25°	2630.7	2569.3	2444.0	2330.5	2228.9	2174.5	2143.8	2148.5	2148.5	2148.5	2148.5
27.5°	2666.2	2592.9	2441.6	2304.5	2186.4	2124.9	2087.1	2087.1	2077.6	2080.0	2082.4
30°	2720.5	2637.8	2446.4	2280.9	2141.5	2063.5	2018.5	2011.5	2009.1	2013.8	2016.2
32.5°	2786.7	2699.3	2474.7	2264.4	2094.2	1994.9	1938.2	1935.8	1928.7	1928.7	1928.7
35°	2869.5	2758.4	2500.7	2262.0	2046.9	1921.6	1860.2	1853.1	1836.5	1829.5	1829.5
37.5°	2975.8	2850.5	2531.5	2245.5	2006.7	1850.7	1777.5	1753.8	1734.9	1732.5	1732.5
40°	3105.8	2954.5	2576.4	2226.5	1964.2	1777.5	1680.5	1640.4	1642.7	1652.2	1652.2
42.5°	3259.5	3082.2	2633.1	2217.1	1902.7	1701.8	1567.1	1519.8	1536.4	1545.8	1548.2
45°	3439.1	3233.5	2696.9	2205.3	1846.0	1616.7	1446.5	1387.5	1394.5	1396.9	1399.3
47.5°	3647.1	3401.3	2763.1	2195.8	1782.2	1510.4	1314.2	1236.2	1233.8	1219.6	1224.4
50°	3864.5	3578.5	2831.6	2179.3	1704.2	1385.1	1174.7	1082.5	1063.6	1042.4	1044.7
52.5°	4096.2	3760.5	2895.5	2153.3	1607.3	1257.5	1042.4	943.1	905.3	881.6	886.4
55°	4351.5	3947.3	2956.9	2113.1	1505.6	1129.8	924.2	822.5	775.3	756.4	758.7
57.5°	4585.5	4126.9	3001.8	2063.5	1394.5	1014.0	820.2	720.9	690.2	687.8	690.2
60°	4812.4	4278.2	3020.7	1994.9	1281.1	907.6	723.3	647.6	626.4	638.2	640.5
62.5°	5003.8	4375.1	3011.3	1902.7	1165.3	806.0	645.3	590.9	576.7	600.4	602.7
65°	5114.9	4405.8	2945.1	1770.4	1040.0	706.7	572.0	512.9	505.8	520.0	527.1
67.5°	4968.4	4214.4	2765.5	1588.4	900.5	614.5	501.1	453.8	442.0	453.8	453.8
70°	4403.5	3651.8	2340.0	1300.0	746.9	524.7	434.9	401.8	392.4	401.8	399.5
72.5°	3668.4	3037.3	1843.6	1014.0	588.5	442.0	378.2	347.5	338.0	328.5	323.8
75°	2845.8	2306.9	1337.8	744.5	444.4	354.5	316.7	288.4	264.7	274.2	269.5
77.5°	2084.7	1619.1	947.8	515.3	319.1	274.2	248.2	226.9	210.4	229.3	226.9
80°	1342.5	1047.1	633.5	345.1	219.8	191.5	182.0	170.2	186.7	243.5	248.2
82.5°	820.2	664.2	378.2	224.5	144.2	127.6	118.2	118.2	191.5	210.4	212.7
85°	366.4	352.2	205.6	115.8	80.4	73.3	66.2	85.1	78.0	56.7	59.1
87.5°	59.1	61.5	44.9	40.2	30.7	30.7	23.6	16.5	11.8	7.1	7.1
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)