

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: P842748

Luminaire Tested: **ARCH4-90-730-U-T2R**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P842748
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: ARCH4-90-730-U-T2R
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 3000K, 765mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE II
ROADWAY OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16066 lumens
Efficiency: N/A
Efficacy: 172.6 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G3

Input Watts (W): 93.1
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

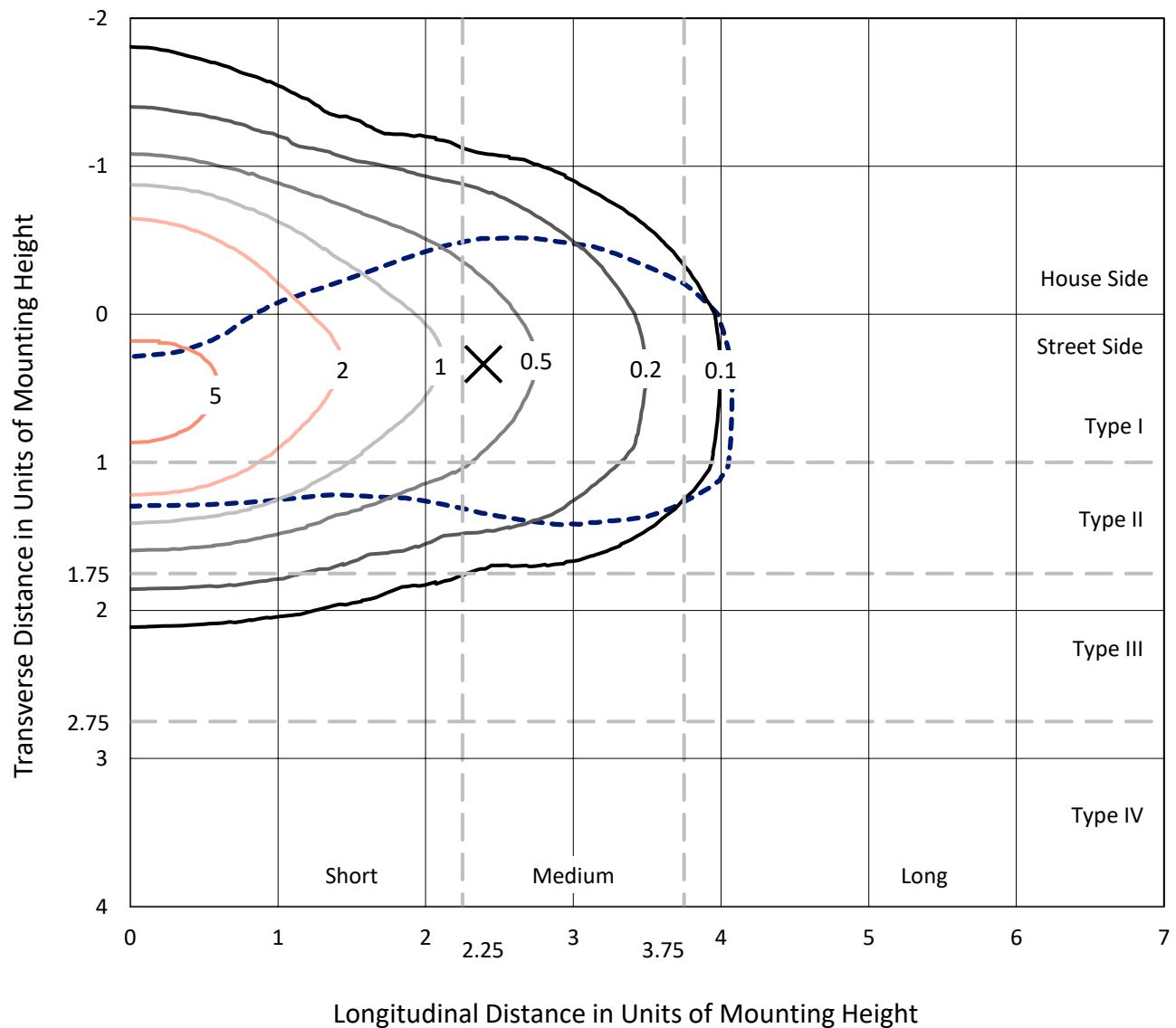


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Iso-Footcandle Lines of Horizontal Illumination

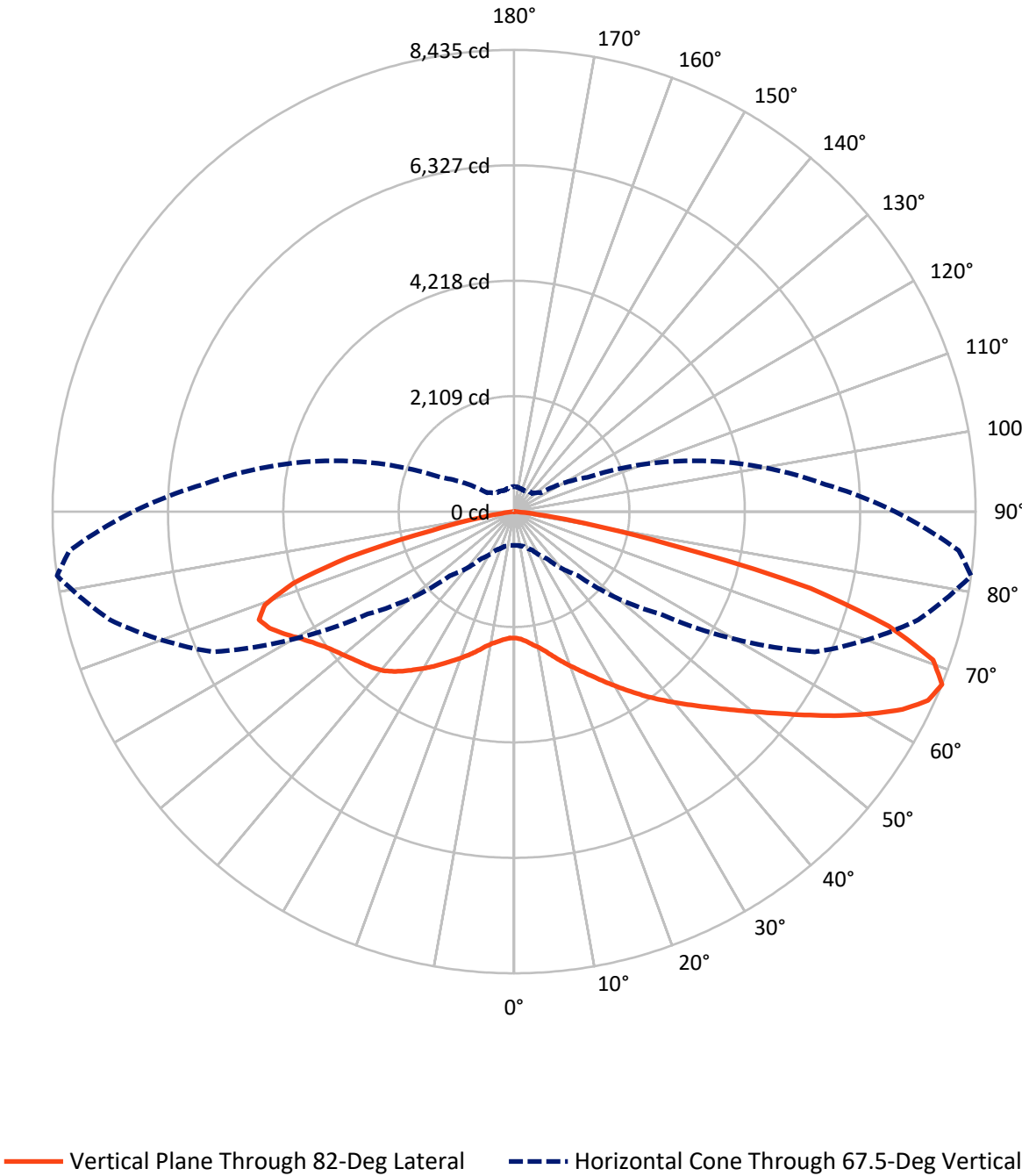
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.1 fc
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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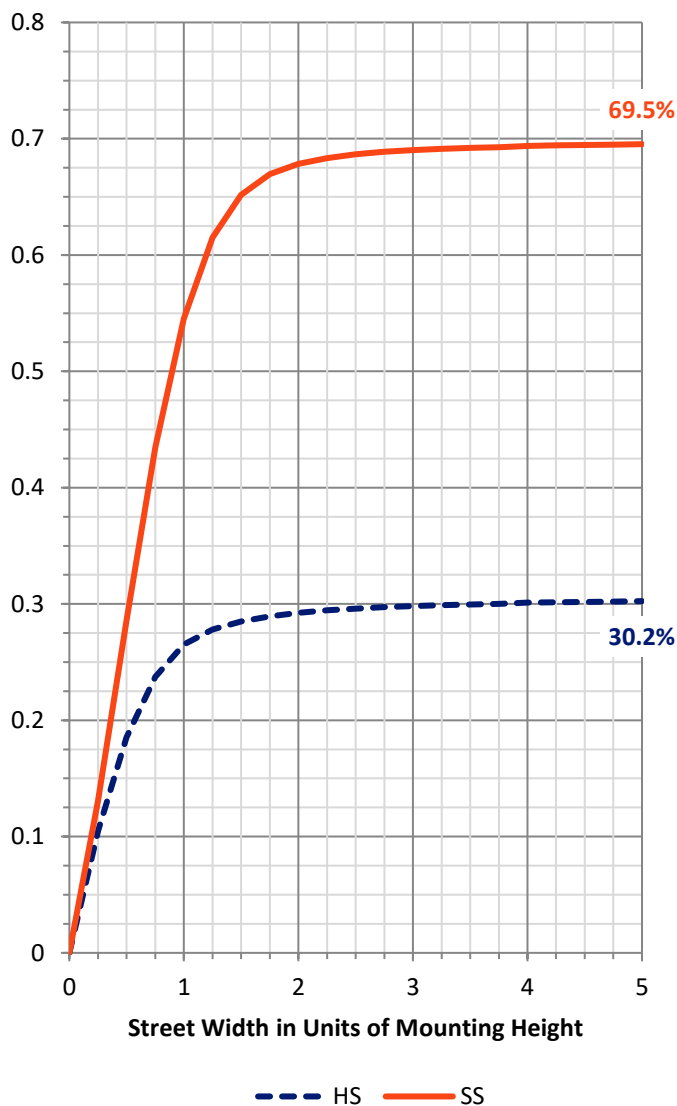
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4892.8	0.0	4892.8
	% Fixture	30.5	0.0	30.5
Street Side	Lumens	11173.3	0.0	11173.3
	% Fixture	69.5	0.0	69.5
Total	Lumens	16066.0	0.0	16066.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	238.7	1.5
10°-20°	859.7	5.4
20°-30°	1727.8	10.8
30°-40°	2714.2	16.9
40°-50°	3306.4	20.6
50°-60°	3124.1	19.4
60°-70°	2579.8	16.1
70°-80°	1404.8	8.7
80°-90°	110.5	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°	16066.0	100.0
0°-180°	16066.0	100.0

Coefficient of Utilization



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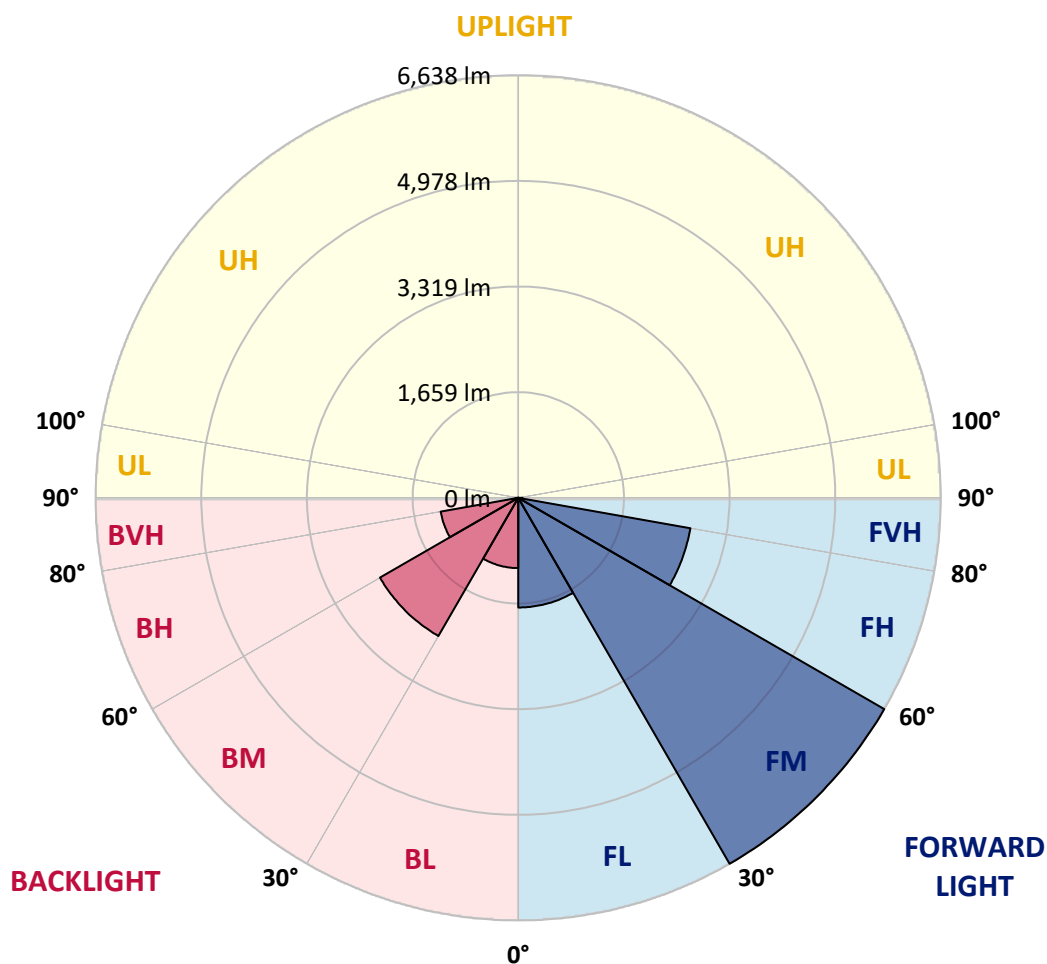
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1722.9	10.7			
FM	(30°-60°)	6637.5	41.3			
FH	(60°-80°)	2746.3	17.1			G2/5000
FVH	(80°-90°)	66.6	0.4			G1/100
BL	(0°-30°)	1103.4	6.9	B3/2500		
BM	(30°-60°)	2507.1	15.6	B3/5000		
BH	(60°-80°)	1238.4	7.7	B3/2500		G3/2500
BVH	(80°-90°)	43.9	0.3			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°	82°	85°
0°	2309.5	2309.5	2309.5	2309.5	2309.5	2309.5	2309.5	2309.5	2309.5	2309.5	2309.5
2.5°	2414.5	2414.5	2433.1	2433.1	2416.8	2391.1	2384.1	2356.1	2330.5	2330.5	2332.8
5°	2645.4	2643.1	2657.1	2638.4	2598.7	2547.4	2512.4	2451.8	2400.5	2384.1	2381.8
7.5°	2927.7	2925.3	2932.3	2902.0	2827.4	2743.4	2673.4	2575.4	2491.4	2456.4	2447.1
10°	3242.6	3240.3	3233.3	3181.9	3081.6	2951.0	2846.0	2710.7	2584.8	2528.8	2517.1
12.5°	3604.2	3599.5	3583.2	3508.5	3370.9	3202.9	3051.3	2876.4	2708.4	2631.4	2605.7
15°	4007.8	4000.8	3970.4	3879.5	3695.2	3482.9	3286.9	3063.0	2857.7	2757.4	2722.4
17.5°	4432.3	4432.3	4385.7	4250.4	4045.1	3781.5	3538.9	3254.3	3014.0	2890.3	2848.4
20°	4863.9	4861.6	4803.3	4640.0	4397.3	4094.1	3786.1	3473.6	3175.0	3025.7	2974.3
22.5°	5318.8	5314.1	5241.8	5055.2	4765.9	4423.0	4063.8	3690.5	3352.2	3172.6	3107.3
25°	5841.3	5834.4	5745.7	5517.1	5174.2	4786.9	4376.3	3944.8	3555.2	3335.9	3258.9
27.5°	6396.6	6387.2	6282.2	6016.3	5640.7	5174.2	4721.6	4238.7	3779.1	3517.9	3431.6
30°	6891.1	6884.1	6769.8	6496.9	6065.3	5559.1	5050.5	4532.6	4014.8	3711.5	3604.2
32.5°	7264.4	7264.4	7161.7	6893.4	6445.5	5927.7	5381.8	4810.2	4259.7	3919.1	3793.1
35°	7490.6	7497.6	7409.0	7194.4	6772.1	6275.3	5724.7	5136.8	4521.0	4140.7	4005.4
37.5°	7523.3	7546.6	7495.3	7350.7	6998.4	6564.5	6060.6	5451.8	4791.6	4364.7	4213.0
40°	7371.7	7388.0	7390.3	7334.3	7091.7	6772.1	6356.9	5785.4	5078.5	4600.3	4425.3
42.5°	7068.4	7080.1	7101.1	7117.4	7024.1	6863.1	6583.2	6095.6	5384.1	4840.6	4635.3
45°	6676.5	6674.2	6709.2	6779.1	6774.5	6811.8	6709.2	6377.9	5701.4	5113.5	4868.6
47.5°	6091.0	6079.3	6202.9	6361.6	6440.9	6615.8	6711.5	6599.5	6046.6	5414.4	5134.5
50°	5174.2	5162.5	5433.1	5806.4	6039.6	6305.6	6583.2	6732.5	6408.2	5752.7	5423.8
52.5°	4059.1	4047.4	4390.3	5043.5	5552.1	5939.3	6324.2	6762.8	6751.1	6130.6	5750.4
55°	3018.7	3009.3	3342.9	4049.8	4873.2	5514.8	6007.0	6683.5	7073.1	6564.5	6146.9
57.5°	2127.5	2122.9	2412.1	2997.7	4000.8	4996.9	5701.4	6529.5	7369.3	7035.7	6594.8
60°	1493.0	1486.0	1696.0	2148.5	3025.7	4215.4	5398.1	6324.2	7591.0	7500.0	7070.7
62.5°	1005.4	1000.8	1150.1	1528.0	2148.5	3244.9	4938.6	6186.6	7716.9	7966.5	7551.3
65°	762.8	760.5	828.1	1035.8	1521.0	2330.5	4208.4	6170.3	7733.3	8316.5	7959.5
67.5°	615.9	618.2	655.5	774.5	1052.1	1656.3	3263.6	6067.6	7646.9	8435.4	8157.8
70°	503.9	503.9	520.2	599.5	776.8	1117.4	2279.2	5601.1	7406.7	8125.2	7922.2
72.5°	384.9	387.2	438.6	485.2	585.5	783.8	1460.3	4635.3	6839.8	7164.1	7010.1
75°	305.6	303.3	333.6	398.9	454.9	559.9	895.8	3324.3	5820.4	5598.7	5500.8
77.5°	219.3	217.0	240.3	296.3	345.3	396.6	534.2	1677.3	3165.6	2909.0	2836.7
80°	149.3	144.6	165.6	205.3	228.6	233.3	261.3	643.9	1381.0	1301.7	1285.4
82.5°	77.0	77.0	88.6	116.6	119.0	121.3	116.6	207.6	457.2	426.9	408.2
85°	30.3	30.3	32.7	39.7	39.7	42.0	42.0	53.7	49.0	46.7	44.3
87.5°	2.3	2.3	4.7	4.7	7.0	7.0	7.0	9.3	11.7	11.7	11.7
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°	2309.5	2309.5	2309.5	2309.5	2309.5	2309.5	2309.5	2309.5	2309.5	2309.5	2309.5
2.5°	2328.1	2318.8	2288.5	2281.5	2276.8	2269.8	2272.2	2255.8	2248.8	2251.2	2241.8
5°	2370.1	2353.8	2316.5	2300.1	2295.5	2288.5	2295.5	2283.8	2272.2	2276.8	2272.2
7.5°	2428.5	2405.1	2358.5	2342.1	2339.8	2332.8	2342.1	2332.8	2323.5	2328.1	2318.8
10°	2489.1	2458.8	2407.5	2391.1	2391.1	2388.8	2398.1	2384.1	2374.8	2377.1	2372.5
12.5°	2577.8	2538.1	2482.1	2468.1	2461.1	2468.1	2470.4	2451.8	2435.5	2437.8	2430.8
15°	2685.1	2640.7	2580.1	2559.1	2554.4	2552.1	2542.8	2519.4	2498.4	2496.1	2489.1
17.5°	2801.7	2745.7	2673.4	2652.4	2631.4	2624.4	2601.1	2570.8	2538.1	2538.1	2528.8
20°	2913.7	2850.7	2764.4	2734.1	2703.7	2675.7	2636.1	2587.1	2545.1	2538.1	2528.8
22.5°	3035.0	2960.3	2860.0	2815.7	2762.0	2706.1	2638.4	2573.1	2519.4	2507.8	2500.8
25°	3170.3	3077.0	2958.0	2892.7	2806.4	2720.1	2619.7	2535.8	2472.8	2454.1	2449.4
27.5°	3319.6	3207.6	3063.0	2967.3	2841.4	2706.1	2577.8	2477.4	2400.5	2377.1	2370.1
30°	3471.2	3338.2	3158.6	3018.7	2841.4	2661.7	2500.8	2384.1	2295.5	2262.8	2258.2
32.5°	3622.8	3473.6	3244.9	3046.6	2813.4	2587.1	2400.5	2262.8	2162.5	2122.9	2132.2
35°	3804.8	3622.8	3324.3	3058.3	2766.7	2496.1	2286.2	2125.2	2022.5	1987.6	1994.6
37.5°	3993.8	3772.1	3387.2	3049.0	2701.4	2393.5	2157.8	2001.5	1873.2	1812.6	1819.6
40°	4157.1	3907.5	3431.6	3016.3	2617.4	2276.8	2031.9	1826.6	1649.3	1591.0	1584.0
42.5°	4311.0	4007.8	3454.9	2967.3	2521.8	2141.5	1852.2	1588.6	1411.3	1339.0	1341.4
45°	4472.0	4105.7	3445.6	2902.0	2402.8	1982.9	1621.3	1355.4	1199.1	1133.7	1136.1
47.5°	4656.3	4210.7	3436.2	2832.0	2258.2	1777.6	1399.7	1150.1	1014.8	968.1	963.4
50°	4852.2	4327.4	3424.6	2745.7	2097.2	1549.0	1180.4	958.8	844.5	814.1	807.2
52.5°	5073.9	4453.3	3417.6	2643.1	1903.6	1306.4	984.4	790.8	713.8	692.8	690.5
55°	5339.8	4600.3	3426.9	2519.4	1670.3	1077.8	818.8	681.2	629.9	618.2	615.9
57.5°	5664.1	4789.3	3454.9	2374.8	1425.3	879.5	697.5	613.5	580.9	571.5	571.5
60°	6016.3	5003.9	3506.2	2211.5	1180.4	725.5	618.2	559.9	545.9	557.5	557.5
62.5°	6396.6	5255.8	3597.2	2013.2	951.8	613.5	555.2	515.6	506.2	529.5	531.9
65°	6748.8	5500.8	3655.5	1775.3	755.8	531.9	506.2	471.2	475.9	499.2	496.9
67.5°	6965.8	5703.7	3573.9	1476.7	599.5	471.2	454.9	424.6	436.2	454.9	457.2
70°	6832.8	5589.4	3170.3	1115.1	468.9	410.6	398.9	380.2	389.6	412.9	422.2
72.5°	6181.9	5006.2	2465.8	753.5	377.9	345.3	349.9	340.6	352.3	373.2	394.2
75°	5017.9	3783.8	1654.0	482.9	298.6	293.9	300.9	293.9	298.6	319.6	331.3
77.5°	2619.7	1845.3	823.5	300.9	221.6	228.6	240.3	242.6	256.6	261.3	265.9
80°	1222.4	830.5	342.9	168.0	147.0	161.0	184.3	186.6	191.3	198.3	200.6
82.5°	398.9	249.6	158.6	91.0	84.0	91.0	119.0	142.3	144.6	158.6	158.6
85°	42.0	25.7	35.0	37.3	32.7	39.7	53.7	51.3	23.3	14.0	14.0
87.5°	11.7	9.3	11.7	11.7	9.3	9.3	7.0	2.3	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)