

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: P842779

Luminaire Tested: **ARCH4-90-750-U-T3**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P842779
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2310-189-18)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-90-750-U-T3
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 5000K, 765mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE III OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16850 lumens
Efficiency: N/A
Efficacy: 181.0 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B3 - U0 - G3

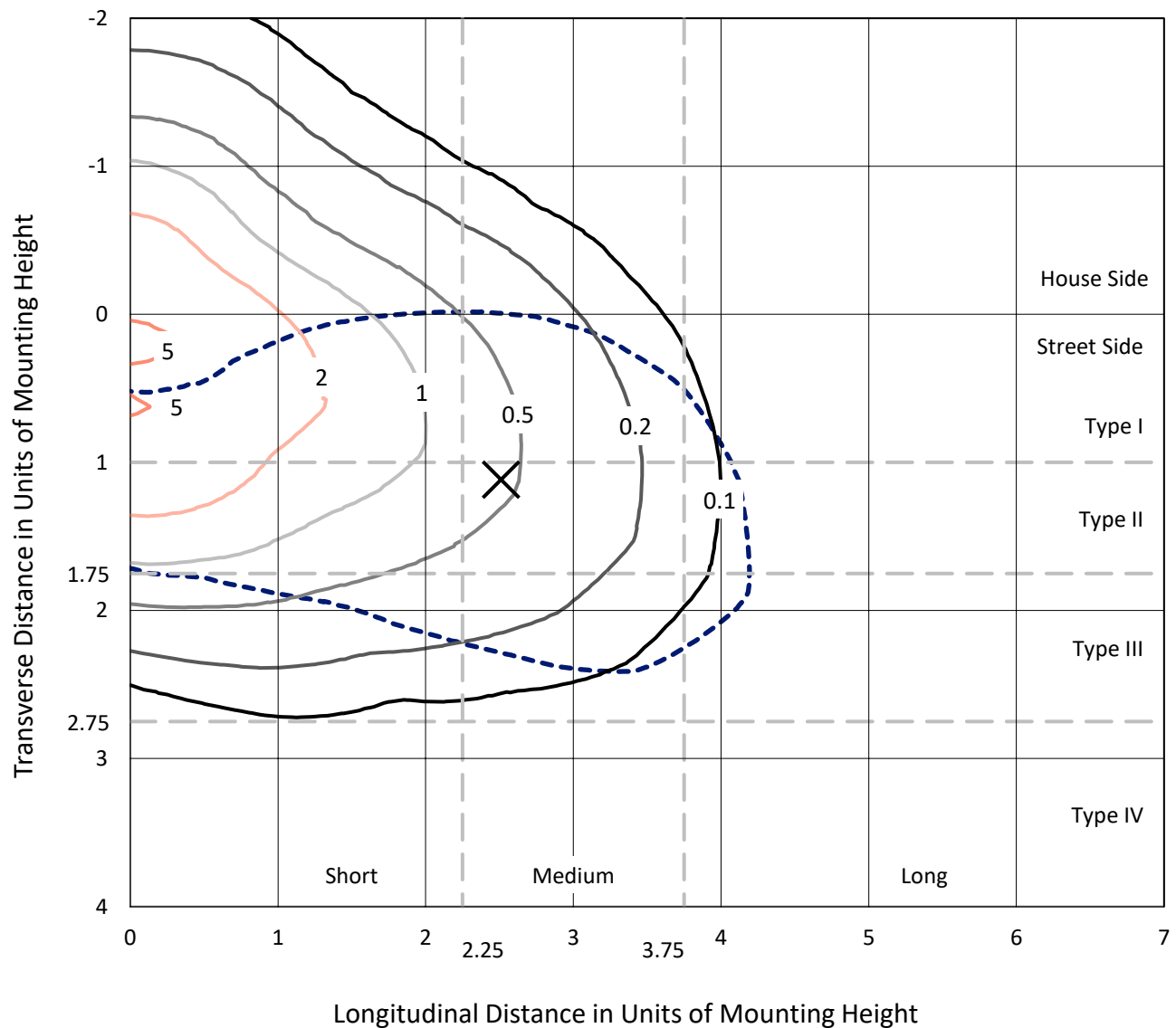
Input Watts (W): 93.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

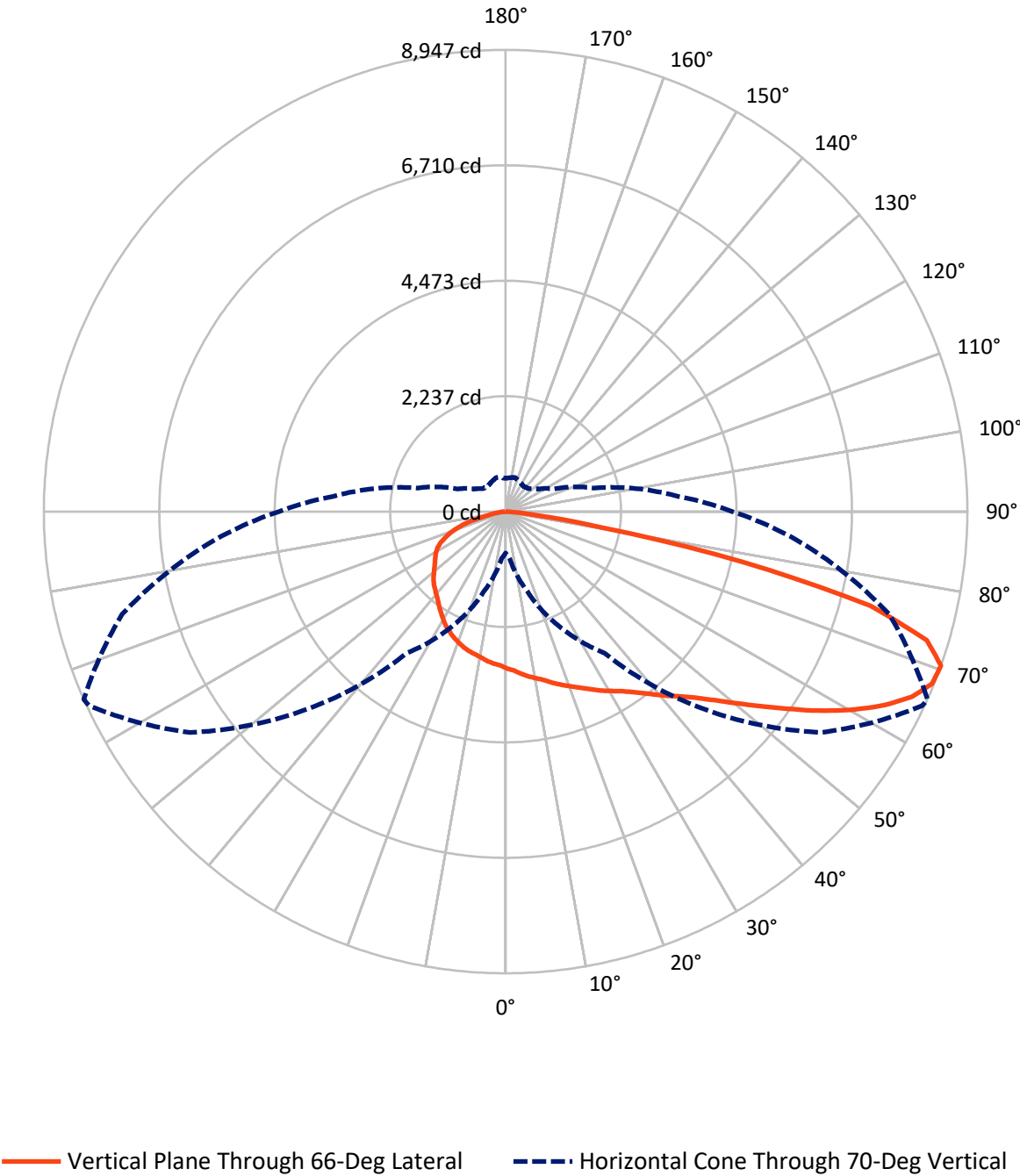
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.3 fc
 Type III - Medium - N/A

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Luminous Intensity Polar Plot



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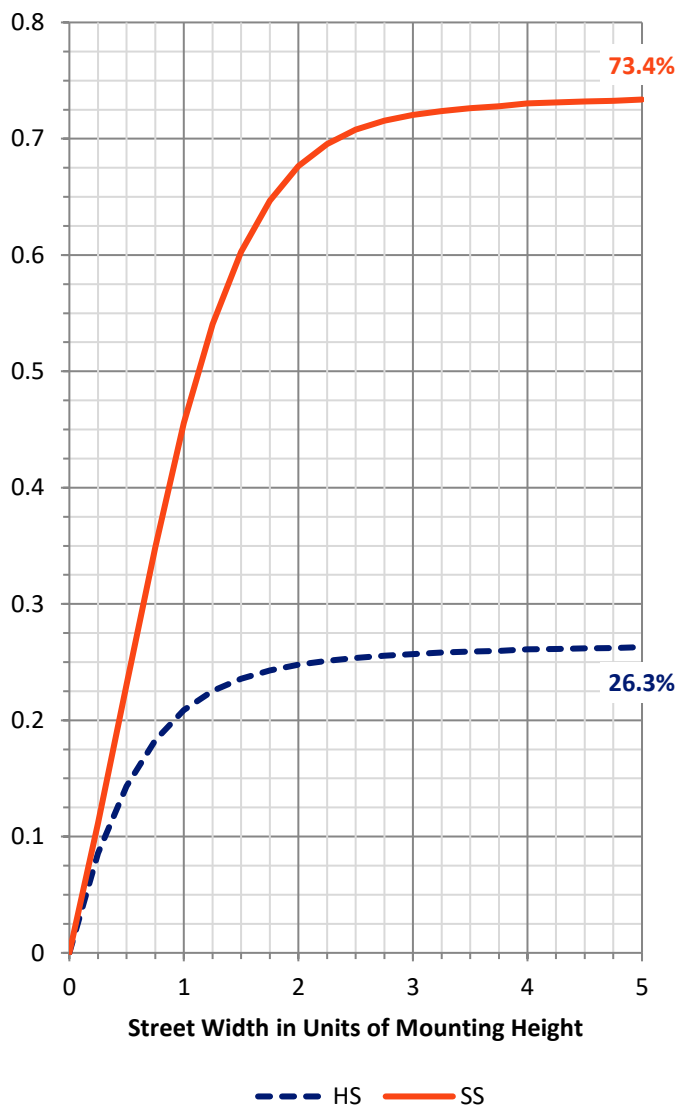
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4464.9	0.0	4464.9
	% Fixture	26.5	0.0	26.5
Street Side	Lumens	12385.1	0.0	12385.1
	% Fixture	73.5	0.0	73.5
Total	Lumens	16850.0	0.0	16850.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	292.2	1.7
10°-20°	876.5	5.2
20°-30°	1469.4	8.7
30°-40°	2200.1	13.1
40°-50°	2941.5	17.5
50°-60°	3434.4	20.4
60°-70°	3414.9	20.3
70°-80°	2021.7	12.0
80°-90°	199.3	1.2
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°	16850.0	100.0
0°-180°	16850.0	100.0

Coefficient of Utilization



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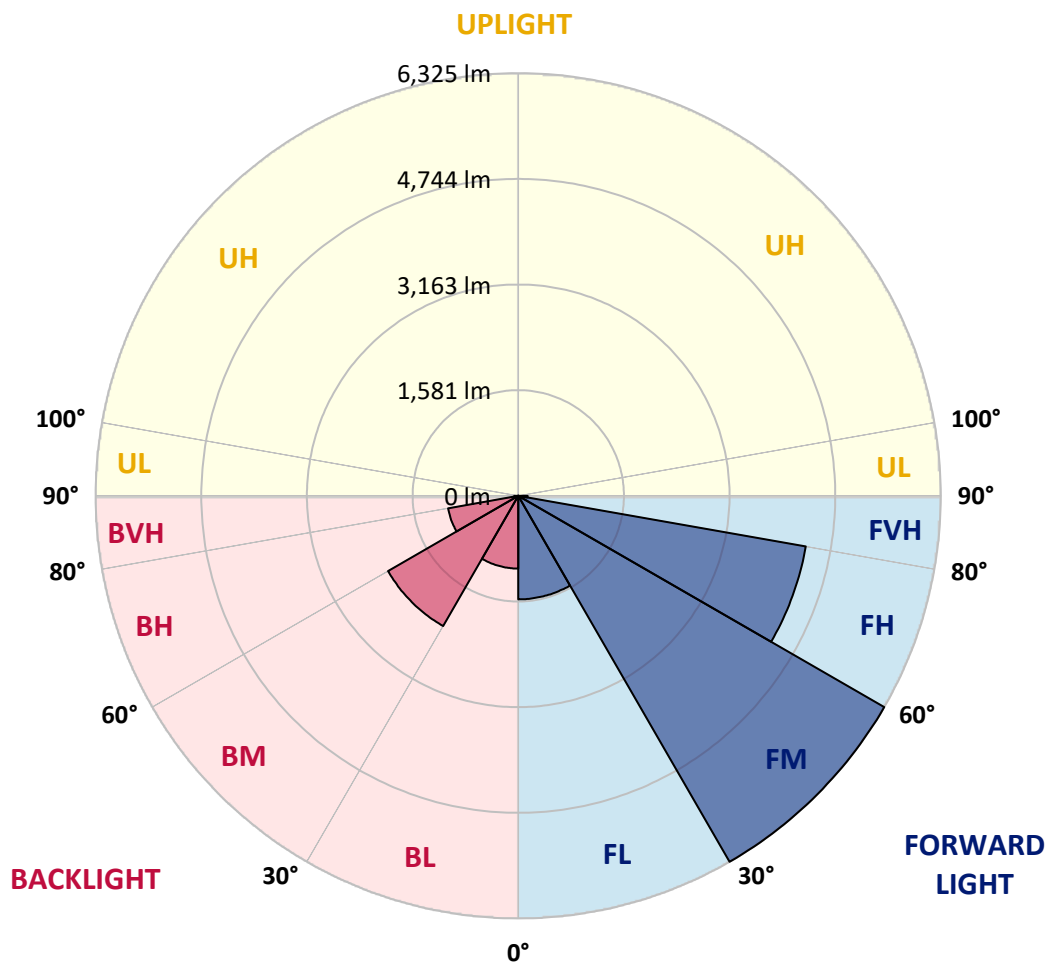
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1549.8	9.2			
FM	(30°-60°)	6325.3	37.5			
FH	(60°-80°)	4370.1	25.9			G2/5000
FVH	(80°-90°)	140.0	0.8			G2/225
BL	(0°-30°)	1088.3	6.5	B3/2500		
BM	(30°-60°)	2250.8	13.4	B2/2500		
BH	(60°-80°)	1066.5	6.3	B3/2500		G3/2500
BVH	(80°-90°)	59.2	0.4			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 III Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	3041.0	3041.0	3041.0	3041.0	3041.0	3041.0	3041.0	3041.0	3041.0	3041.0	3041.0
2.5°	3152.8	3147.9	3145.4	3135.5	3113.1	3123.0	3100.7	3085.8	3083.3	3048.5	3028.6
5°	3282.0	3279.6	3274.6	3259.7	3224.9	3229.9	3192.6	3165.3	3157.8	3103.2	3060.9
7.5°	3391.4	3386.4	3383.9	3364.0	3326.8	3324.3	3279.6	3239.8	3227.4	3152.8	3088.2
10°	3475.8	3468.4	3473.3	3453.5	3413.7	3406.3	3349.1	3296.9	3284.5	3190.1	3100.7
12.5°	3547.9	3542.9	3550.4	3533.0	3500.7	3493.2	3436.1	3369.0	3354.1	3244.8	3128.0
15°	3627.4	3610.0	3624.9	3617.4	3595.1	3592.6	3540.4	3465.9	3446.0	3314.3	3170.2
17.5°	3669.6	3659.7	3677.1	3679.6	3669.6	3687.0	3637.3	3547.9	3530.5	3378.9	3207.5
20°	3699.4	3684.5	3704.4	3719.3	3726.8	3761.5	3721.8	3634.8	3615.0	3441.0	3242.3
22.5°	3801.3	3769.0	3771.5	3781.4	3786.4	3836.1	3811.2	3726.8	3706.9	3518.1	3284.5
25°	4057.2	3992.6	3950.4	3920.6	3885.8	3928.0	3913.1	3831.1	3813.7	3610.0	3336.7
27.5°	4454.7	4372.7	4288.3	4201.3	4064.7	4047.3	4022.4	3947.9	3928.0	3701.9	3388.9
30°	4906.9	4824.9	4725.5	4586.4	4330.5	4196.3	4139.2	4057.2	4034.8	3783.9	3438.6
32.5°	5356.6	5284.6	5185.2	5016.2	4651.0	4377.7	4256.0	4171.5	4149.1	3873.4	3498.2
35°	5706.9	5662.2	5597.6	5386.4	4969.0	4591.4	4424.9	4323.0	4298.2	4015.0	3607.5
37.5°	5990.2	5957.9	5903.2	5682.1	5200.1	4805.0	4618.7	4501.9	4474.6	4169.0	3724.3
40°	6407.6	6323.1	6278.4	5957.9	5401.3	4998.8	4837.3	4715.6	4685.8	4333.0	3818.7
42.5°	6762.8	6700.7	6646.1	6203.8	5592.6	5165.3	5043.6	4931.8	4892.0	4494.5	3920.6
45°	6822.5	6847.3	6820.0	6325.6	5895.7	5329.3	5252.3	5180.2	5142.9	4713.1	4074.6
47.5°	6825.0	6825.0	6663.5	6395.1	6270.9	5513.1	5475.9	5500.7	5461.0	4991.4	4258.5
50°	6646.1	6678.4	6593.9	6412.5	6370.3	5697.0	5749.2	5883.3	5843.6	5287.0	4457.2
52.5°	6275.9	6382.7	6380.2	6385.2	6226.2	5853.5	6037.4	6343.0	6275.9	5620.0	4668.4
55°	5622.4	5836.1	6027.4	6191.4	6102.0	5947.9	6390.2	6832.4	6762.8	5992.6	4882.1
57.5°	5063.4	5200.1	5438.6	5903.2	5955.4	6029.9	6720.6	7344.2	7282.1	6405.1	5105.7
60°	4424.9	4613.7	4852.2	5513.1	5776.5	6136.7	7083.3	7843.6	7784.0	6822.5	5321.8
62.5°	3443.5	3687.0	4164.0	4914.4	5515.6	6203.8	7369.1	8283.4	8256.0	7217.5	5515.6
65°	2400.0	2616.2	3284.5	4178.9	5100.7	6174.0	7597.6	8675.9	8651.1	7540.5	5652.3
67.5°	1401.3	1652.2	2407.5	3364.0	4367.8	5967.8	7672.2	8907.0	8907.0	7736.8	5689.5
70°	800.0	916.8	1587.6	2452.2	3349.1	5398.8	7463.5	8904.5	8946.7	7692.0	5535.5
72.5°	559.0	611.2	1068.3	1649.7	2270.8	4367.8	6916.9	8474.7	8531.8	7269.7	5008.8
75°	434.8	472.1	752.8	1125.5	1431.1	2966.5	5721.8	7145.5	7297.0	6196.4	4049.8
77.5°	330.4	357.8	439.8	703.1	916.8	1704.4	3776.5	4685.8	4695.7	3793.8	2171.5
80°	241.0	268.3	293.2	429.8	487.0	797.5	1426.1	1957.8	1903.1	1836.1	1175.2
82.5°	144.1	171.4	178.9	233.5	238.5	340.4	499.4	631.1	606.2	807.5	551.6
85°	62.1	87.0	91.9	106.8	101.9	139.1	198.8	166.5	149.1	171.4	119.3
87.5°	14.9	24.8	24.8	27.3	22.4	34.8	37.3	27.3	24.8	29.8	29.8
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°	3041.0	3041.0	3041.0	3041.0	3041.0	3041.0	3041.0	3041.0	3041.0	3041.0	3041.0
2.5°	3023.6	3016.2	3018.7	2976.4	2964.0	2951.6	2944.1	2939.2	2934.2	2941.7	2949.1
5°	3046.0	3028.6	3008.7	2946.6	2921.8	2894.5	2874.6	2857.2	2849.7	2849.7	2857.2
7.5°	3063.4	3033.6	2991.4	2909.4	2864.6	2827.4	2795.1	2772.7	2760.3	2760.3	2767.7
10°	3065.9	3023.6	2956.6	2857.2	2797.6	2742.9	2705.6	2680.8	2663.4	2663.4	2668.4
12.5°	3080.8	3023.6	2936.7	2817.4	2742.9	2675.8	2631.1	2593.8	2586.4	2586.4	2591.3
15°	3105.6	3036.1	2924.3	2782.7	2693.2	2616.2	2566.5	2526.7	2511.8	2521.8	2524.3
17.5°	3128.0	3043.5	2901.9	2737.9	2631.1	2546.6	2492.0	2457.2	2437.3	2459.7	2459.7
20°	3142.9	3043.5	2869.6	2680.8	2564.0	2469.6	2417.4	2375.2	2360.3	2387.6	2390.1
22.5°	3165.3	3041.0	2834.8	2623.6	2492.0	2392.6	2340.4	2308.1	2300.7	2330.5	2340.4
25°	3190.1	3046.0	2797.6	2559.0	2412.5	2315.6	2275.8	2260.9	2265.9	2303.1	2315.6
27.5°	3217.4	3055.9	2760.3	2487.0	2325.5	2238.5	2216.2	2223.6	2243.5	2290.7	2305.6
30°	3242.3	3058.4	2708.1	2402.5	2226.1	2144.1	2154.1	2186.4	2216.2	2263.4	2280.8
32.5°	3274.6	3060.9	2653.5	2310.6	2119.3	2059.7	2104.4	2156.6	2186.4	2231.1	2251.0
35°	3354.1	3103.2	2611.2	2221.2	2019.9	1987.6	2062.1	2129.2	2146.6	2186.4	2203.8
37.5°	3446.0	3172.7	2588.9	2129.2	1923.0	1915.6	2010.0	2077.1	2082.0	2106.9	2124.3
40°	3503.2	3202.5	2564.0	2052.2	1836.1	1841.0	1937.9	1990.1	1980.2	1997.5	2010.0
42.5°	3560.3	3212.5	2511.8	1987.6	1754.1	1759.0	1833.6	1870.8	1875.8	1913.1	1930.5
45°	3657.2	3239.8	2454.7	1928.0	1679.5	1662.1	1706.9	1756.5	1821.1	1893.2	1913.1
47.5°	3786.4	3296.9	2395.1	1855.9	1607.5	1550.3	1567.7	1654.7	1721.8	1788.8	1801.3
50°	3918.1	3354.1	2340.4	1769.0	1535.4	1431.1	1438.5	1518.0	1572.7	1624.9	1632.3
52.5°	4047.3	3403.8	2293.2	1687.0	1453.4	1289.5	1319.3	1401.3	1438.5	1463.4	1470.8
55°	4176.5	3446.0	2251.0	1617.4	1359.0	1177.7	1205.0	1282.0	1319.3	1331.7	1336.7
57.5°	4310.6	3495.7	2218.7	1557.8	1252.2	1078.3	1095.7	1150.3	1185.1	1200.0	1195.0
60°	4422.4	3537.9	2201.3	1495.7	1145.4	986.4	981.4	1031.1	1080.8	1095.7	1090.7
62.5°	4509.4	3565.3	2173.9	1416.2	1050.9	894.4	869.6	934.2	986.4	996.3	1003.7
65°	4556.6	3567.8	2106.9	1314.3	954.1	795.0	777.7	842.2	874.5	884.5	884.5
67.5°	4549.1	3528.0	1975.2	1177.7	864.6	705.6	690.7	730.4	777.7	785.1	777.7
70°	4395.1	3364.0	1764.0	1033.6	757.8	626.1	598.8	638.5	683.2	655.9	643.5
72.5°	3957.8	2939.2	1453.4	874.5	638.5	526.7	514.3	554.0	556.5	561.5	549.1
75°	3123.0	2188.9	1088.2	680.8	516.8	442.2	439.8	432.3	442.2	462.1	447.2
77.5°	1639.8	1093.2	588.8	417.4	375.2	355.3	337.9	335.4	365.2	377.6	362.7
80°	889.5	613.7	337.9	250.9	228.6	231.1	253.4	248.5	280.7	288.2	275.8
82.5°	387.6	290.7	166.5	151.6	151.6	149.1	156.5	173.9	208.7	208.7	166.5
85°	84.5	72.1	64.6	74.5	84.5	84.5	84.5	84.5	59.6	32.3	22.4
87.5°	27.3	27.3	27.3	29.8	32.3	32.3	27.3	19.9	12.4	2.5	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)