

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: P836860

Luminaire Tested: **ARCH3-80-750-U-T3**

Issue Date: 5/16/2024

Test Information

Test Method: LM-79-08
Report Number: P836860
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2310-189-18)
Test Lab: INNOVATION CENTER
Issue Date: 5/16/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH3-80-750-U-T3
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 5000K, 650mA LIGHTSQUARE WITH 40 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13767 lumens
Efficiency: N/A
Efficacy: 168.1 lumens/watt
Luminous Opening: Rectangular (W 0.58' x L: 0.58' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B2 - U0 - G2

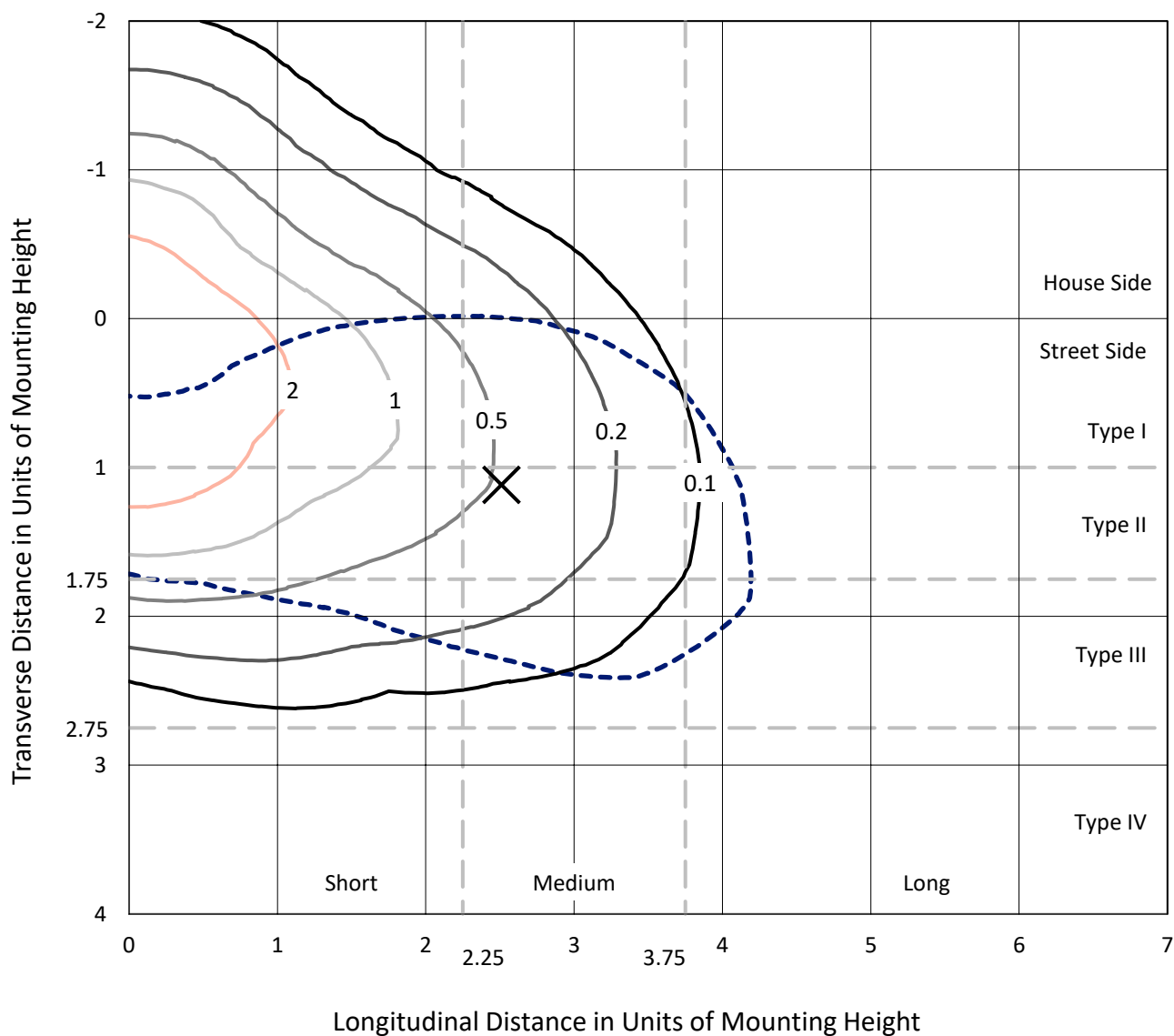
Input Watts (W): 81.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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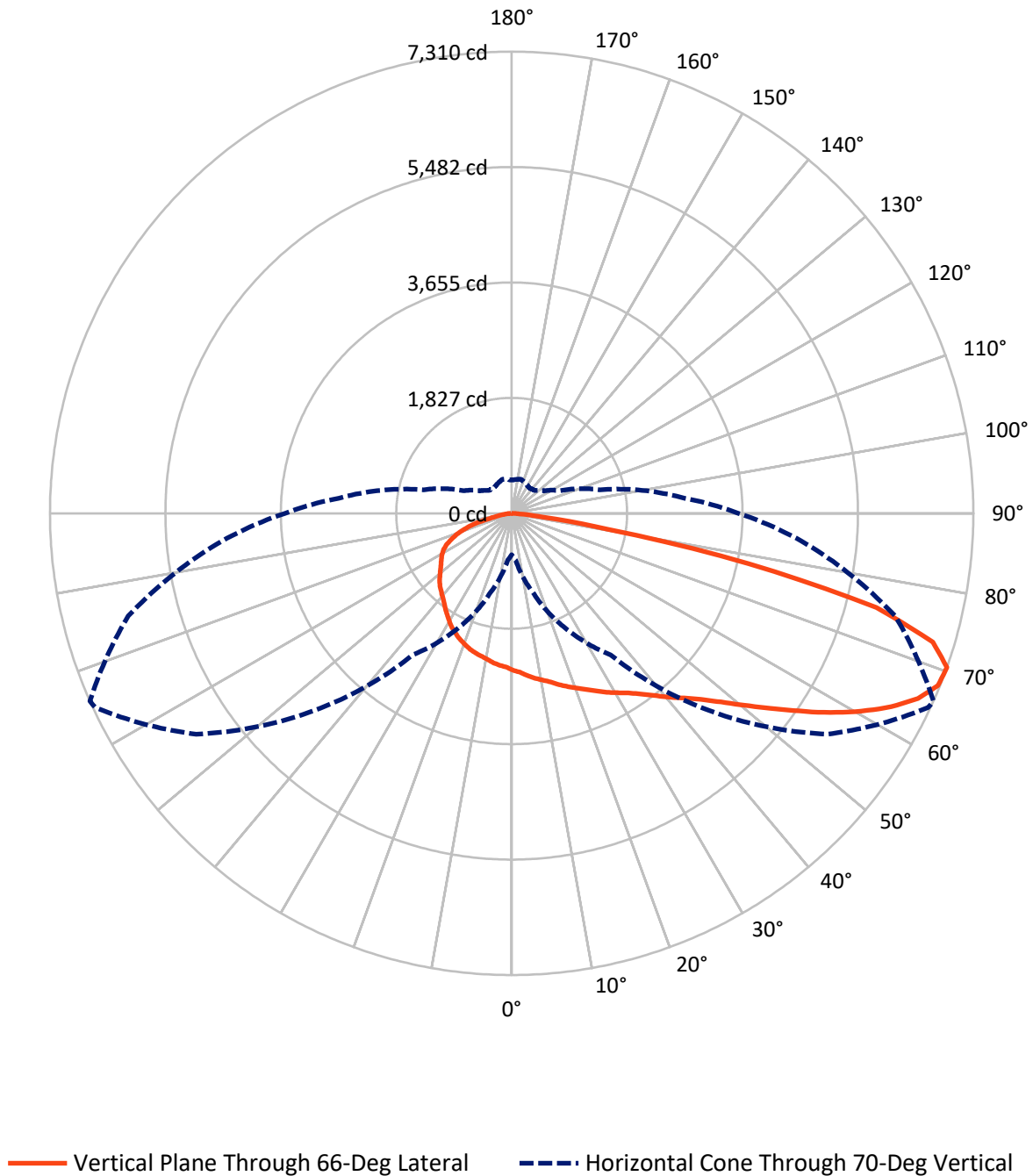
Iso-Footcandle Lines of Horizontal Illumination

× Max cd
- - - 1/2 Max cd



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Luminous Intensity Polar Plot



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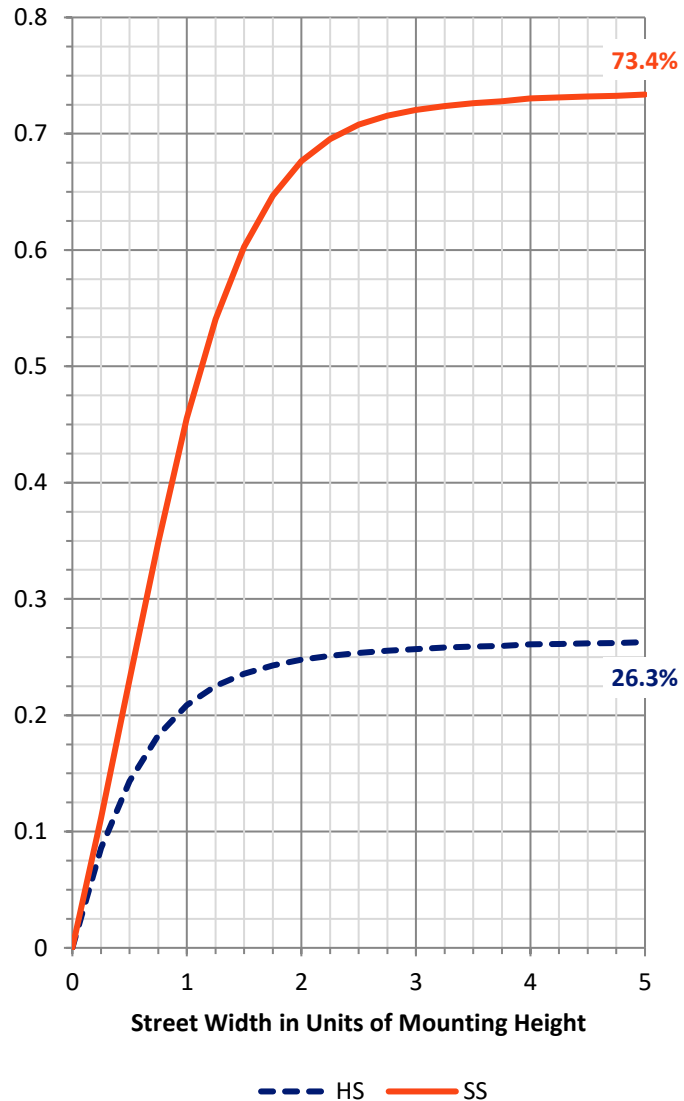
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3647.9	0.0	3647.9
	% Fixture	26.5	0.0	26.5
Street Side	Lumens	10119.1	0.0	10119.1
	% Fixture	73.5	0.0	73.5
Total	Lumens	13767.0	0.0	13767.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	238.7	1.7
10°-20°	716.2	5.2
20°-30°	1200.5	8.7
30°-40°	1797.6	13.1
40°-50°	2403.3	17.5
50°-60°	2806.0	20.4
60°-70°	2790.1	20.3
70°-80°	1651.8	12.0
80°-90°	162.8	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°	13767.0	100.0
0°-180°	13767.0	100.0

Coefficient of Utilization



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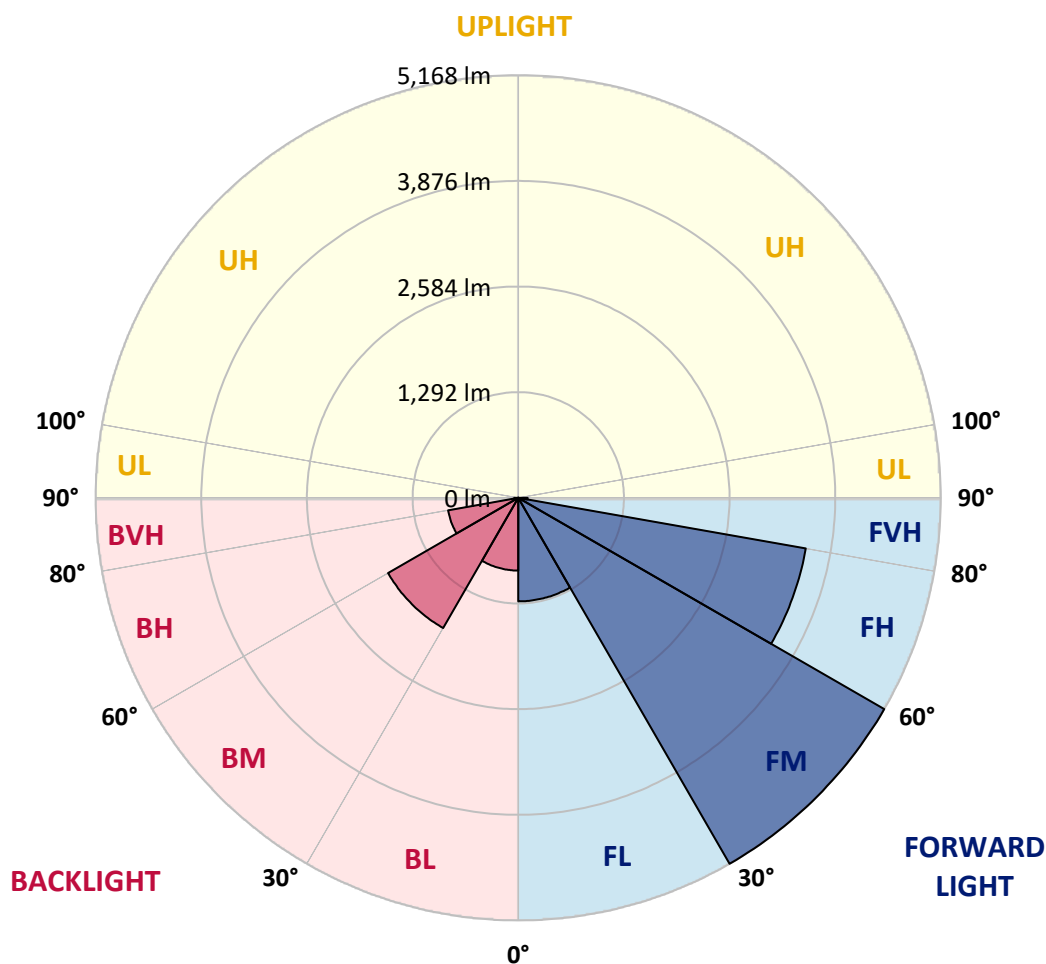
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1266.2	9.2			
FM	(30°-60°)	5167.9	37.5			
FH	(60°-80°)	3570.5	25.9			G2/5000
FVH	(80°-90°)	114.4	0.8			G2/225
BL	(0°-30°)	889.2	6.5	B2/1000		
BM	(30°-60°)	1838.9	13.4	B2/2500		
BH	(60°-80°)	871.4	6.3	B2/1000		G2/1000
BVH	(80°-90°)	48.4	0.4			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type III Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	2484.6	2484.6	2484.6	2484.6	2484.6	2484.6	2484.6	2484.6	2484.6	2484.6	2484.6
2.5°	2576.0	2571.9	2569.9	2561.8	2543.5	2551.6	2533.3	2521.2	2519.1	2490.7	2474.5
5°	2681.5	2679.5	2675.4	2663.3	2634.8	2638.9	2608.5	2586.1	2580.0	2535.4	2500.9
7.5°	2770.8	2766.8	2764.8	2748.5	2718.1	2716.0	2679.5	2647.0	2636.9	2576.0	2523.2
10°	2839.9	2833.8	2837.8	2821.6	2789.1	2783.0	2736.3	2693.7	2683.6	2606.4	2533.3
12.5°	2898.7	2894.7	2900.8	2886.6	2860.2	2854.1	2807.4	2752.6	2740.4	2651.1	2555.7
15°	2963.7	2949.5	2961.7	2955.6	2937.3	2935.3	2892.6	2831.7	2815.5	2707.9	2590.2
17.5°	2998.2	2990.1	3004.3	3006.3	2998.2	3012.4	2971.8	2898.7	2884.5	2760.7	2620.6
20°	3022.6	3010.4	3026.6	3038.8	3044.9	3073.3	3040.8	2969.8	2953.5	2811.4	2649.1
22.5°	3105.8	3079.4	3081.4	3089.5	3093.6	3134.2	3113.9	3044.9	3028.7	2874.4	2683.6
25°	3314.9	3262.1	3227.6	3203.2	3174.8	3209.3	3197.1	3130.1	3115.9	2949.5	2726.2
27.5°	3639.7	3572.7	3503.7	3432.6	3321.0	3306.8	3286.5	3225.6	3209.3	3024.6	2768.8
30°	4009.1	3942.1	3860.9	3747.2	3538.2	3428.5	3381.9	3314.9	3296.6	3091.6	2809.4
32.5°	4376.5	4317.7	4236.5	4098.4	3800.0	3576.7	3477.3	3408.2	3390.0	3164.7	2858.1
35°	4662.7	4626.2	4573.4	4400.9	4059.9	3751.3	3615.3	3532.1	3511.8	3280.4	2947.5
37.5°	4894.2	4867.8	4823.1	4642.4	4248.6	3925.9	3773.6	3678.2	3655.9	3406.2	3042.9
40°	5235.2	5166.2	5129.6	4867.8	4413.1	4084.2	3952.3	3852.8	3828.4	3540.2	3120.0
42.5°	5525.5	5474.7	5430.1	5068.7	4569.4	4220.2	4120.8	4029.4	3996.9	3672.1	3203.2
45°	5574.2	5594.5	5572.1	5168.2	4817.0	4354.2	4291.3	4232.4	4201.9	3850.8	3329.1
47.5°	5576.2	5576.2	5444.3	5225.0	5123.5	4504.4	4474.0	4494.3	4461.8	4078.1	3479.3
50°	5430.1	5456.4	5387.4	5239.2	5204.7	4654.6	4697.2	4806.9	4774.4	4319.7	3641.7
52.5°	5127.6	5214.9	5212.9	5216.9	5087.0	4782.5	4932.7	5182.4	5127.6	4591.7	3814.2
55°	4593.7	4768.3	4924.6	5058.6	4985.5	4859.6	5221.0	5582.3	5525.5	4896.2	3988.8
57.5°	4137.0	4248.6	4443.5	4823.1	4865.7	4926.6	5491.0	6000.5	5949.7	5233.2	4171.5
60°	3615.3	3769.6	3964.4	4504.4	4719.6	5013.9	5787.3	6408.5	6359.8	5574.2	4348.1
62.5°	2813.5	3012.4	3402.2	4015.2	4506.4	5068.7	6020.8	6767.8	6745.4	5896.9	4506.4
65°	1960.9	2137.5	2683.6	3414.3	4167.4	5044.4	6207.5	7088.5	7068.2	6160.8	4618.1
67.5°	1144.9	1349.9	1967.0	2748.5	3568.6	4875.9	6268.4	7277.3	7277.3	6321.2	4648.5
70°	653.6	749.0	1297.1	2003.5	2736.3	4411.0	6097.9	7275.3	7309.8	6284.7	4522.7
72.5°	456.7	499.4	872.9	1347.9	1855.4	3568.6	5651.3	6924.1	6970.8	5939.6	4092.3
75°	355.2	385.7	615.1	919.6	1169.2	2423.7	4674.9	5838.1	5961.9	5062.6	3308.8
77.5°	270.0	292.3	359.3	574.5	749.0	1392.5	3085.5	3828.4	3836.6	3099.7	1774.2
80°	196.9	219.2	239.5	351.2	397.9	651.6	1165.2	1599.6	1554.9	1500.1	960.2
82.5°	117.7	140.1	146.2	190.8	194.9	278.1	408.0	515.6	495.3	659.7	450.6
85°	50.7	71.0	75.1	87.3	83.2	113.7	162.4	136.0	121.8	140.1	97.4
87.5°	12.2	20.3	20.3	22.3	18.3	28.4	30.4	22.3	20.3	24.4	24.4
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°	2484.6	2484.6	2484.6	2484.6	2484.6	2484.6	2484.6	2484.6	2484.6	2484.6	2484.6
2.5°	2470.4	2464.3	2466.4	2431.9	2421.7	2411.6	2405.5	2401.4	2397.3	2403.4	2409.5
5°	2488.7	2474.5	2458.2	2407.5	2387.2	2364.9	2348.6	2334.4	2328.3	2328.3	2334.4
7.5°	2502.9	2478.5	2444.0	2377.0	2340.5	2310.1	2283.7	2265.4	2255.2	2255.2	2261.3
10°	2504.9	2470.4	2415.6	2334.4	2285.7	2241.0	2210.6	2190.3	2176.1	2176.1	2180.1
12.5°	2517.1	2470.4	2399.4	2301.9	2241.0	2186.2	2149.7	2119.2	2113.2	2113.2	2117.2
15°	2537.4	2480.6	2389.2	2273.5	2200.4	2137.5	2096.9	2064.4	2052.3	2060.4	2062.4
17.5°	2555.7	2486.7	2371.0	2237.0	2149.7	2080.7	2036.0	2007.6	1991.4	2009.6	2009.6
20°	2567.9	2486.7	2344.6	2190.3	2094.9	2017.7	1975.1	1940.6	1928.4	1950.8	1952.8
22.5°	2586.1	2484.6	2316.1	2143.6	2036.0	1954.8	1912.2	1885.8	1879.7	1904.1	1912.2
25°	2606.4	2488.7	2285.7	2090.8	1971.1	1891.9	1859.4	1847.2	1851.3	1881.7	1891.9
27.5°	2628.8	2496.8	2255.2	2032.0	1900.0	1829.0	1810.7	1816.8	1833.0	1871.6	1883.8
30°	2649.1	2498.8	2212.6	1962.9	1818.8	1751.8	1759.9	1786.3	1810.7	1849.3	1863.5
32.5°	2675.4	2500.9	2168.0	1887.8	1731.5	1682.8	1719.3	1762.0	1786.3	1822.9	1839.1
35°	2740.4	2535.4	2133.5	1814.8	1650.3	1623.9	1684.8	1739.6	1753.9	1786.3	1800.5
37.5°	2815.5	2592.2	2115.2	1739.6	1571.2	1565.1	1642.2	1697.0	1701.1	1721.4	1735.6
40°	2862.2	2616.6	2094.9	1676.7	1500.1	1504.2	1583.3	1626.0	1617.9	1632.1	1642.2
42.5°	2908.9	2624.7	2052.3	1623.9	1433.1	1437.2	1498.1	1528.5	1532.6	1563.0	1577.3
45°	2988.1	2647.0	2005.6	1575.2	1372.2	1358.0	1394.6	1435.2	1487.9	1546.8	1563.0
47.5°	3093.6	2693.7	1956.8	1516.4	1313.4	1266.7	1280.9	1351.9	1406.7	1461.5	1471.7
50°	3201.2	2740.4	1912.2	1445.3	1254.5	1169.2	1175.3	1240.3	1284.9	1327.6	1333.7
52.5°	3306.8	2781.0	1873.6	1378.3	1187.5	1053.5	1077.9	1144.9	1175.3	1195.6	1201.7
55°	3412.3	2815.5	1839.1	1321.5	1110.4	962.2	984.5	1047.4	1077.9	1088.0	1092.1
57.5°	3521.9	2856.1	1812.7	1272.8	1023.1	881.0	895.2	939.9	968.3	980.5	976.4
60°	3613.3	2890.6	1798.5	1222.0	935.8	805.9	801.8	842.4	883.0	895.2	891.1
62.5°	3684.3	2912.9	1776.2	1157.1	858.7	730.8	710.5	763.3	805.9	814.0	820.1
65°	3722.9	2915.0	1721.4	1073.8	779.5	649.6	635.4	688.1	714.5	722.7	722.7
67.5°	3716.8	2882.5	1613.8	962.2	706.4	576.5	564.3	596.8	635.4	641.5	635.4
70°	3590.9	2748.5	1441.2	844.4	619.1	511.5	489.2	521.7	558.2	535.9	525.8
72.5°	3233.7	2401.4	1187.5	714.5	521.7	430.3	420.2	452.7	454.7	458.8	448.6
75°	2551.6	1788.4	889.1	556.2	422.2	361.3	359.3	353.2	361.3	377.6	365.4
77.5°	1339.8	893.2	481.1	341.0	306.5	290.3	276.1	274.0	298.4	308.5	296.4
80°	726.7	501.4	276.1	205.0	186.8	188.8	207.1	203.0	229.4	235.5	225.3
82.5°	316.7	237.5	136.0	123.8	123.8	121.8	127.9	142.1	170.5	170.5	136.0
85°	69.0	58.9	52.8	60.9	69.0	69.0	69.0	69.0	48.7	26.4	18.3
87.5°	22.3	22.3	22.3	24.4	26.4	26.4	22.3	16.2	10.1	2.0	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)