

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: P836826

Luminaire Tested: **ARCH3-80-727-U-T4W**

Issue Date: 5/16/2024

Test Information

Test Method: LM-79-08
Report Number: P836826
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2310-189-19)
Test Lab: INNOVATION CENTER
Issue Date: 5/16/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH3-80-727-U-T4W
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 650mA LIGHTSQUARE WITH 40 LEDS AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12335 lumens
Efficiency: N/A
Efficacy: 150.6 lumens/watt
Luminous Opening: Rectangular (W 0.58' x L: 0.58' x H: 0')
IES Classification: Type IV - Short
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



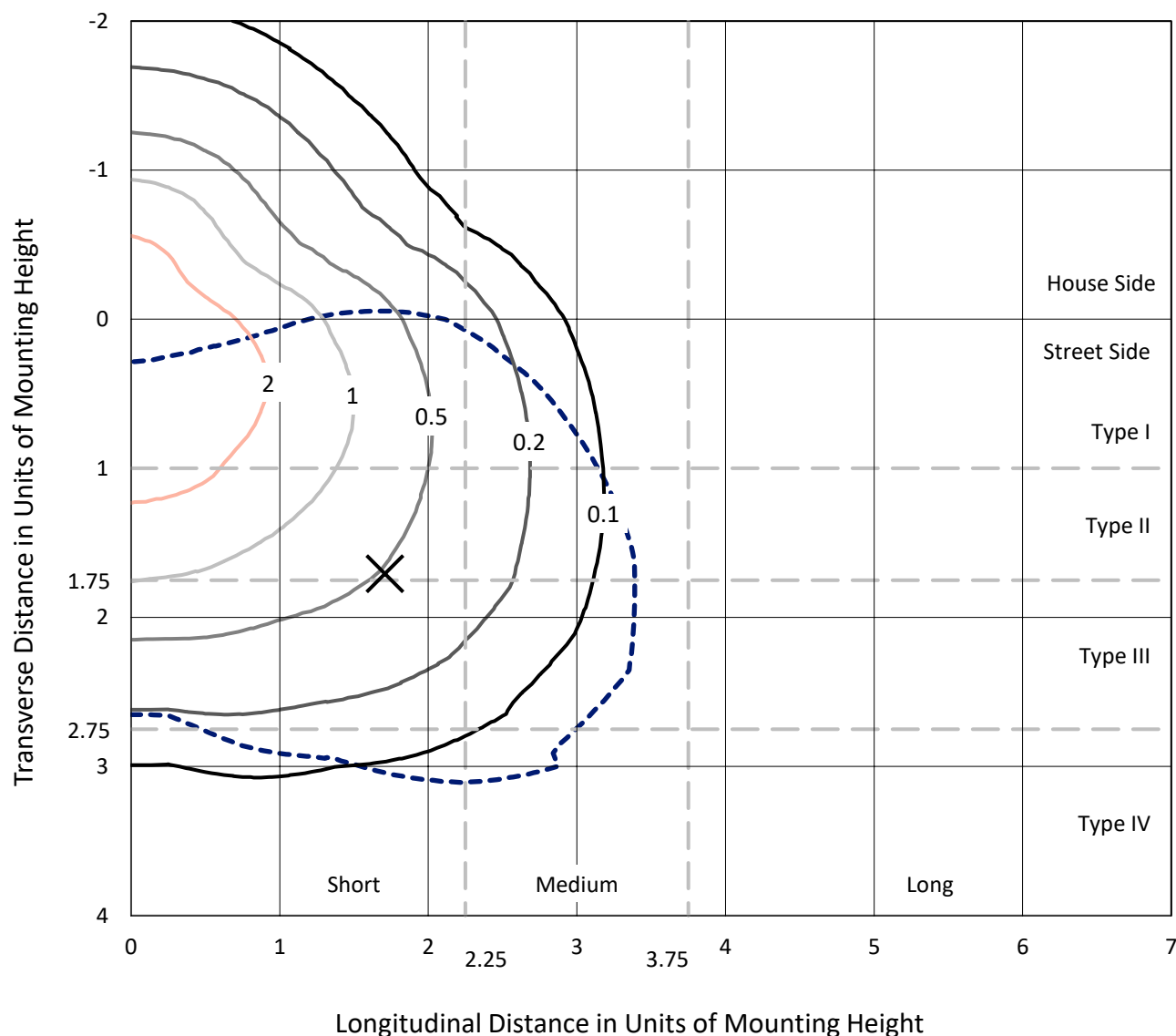
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

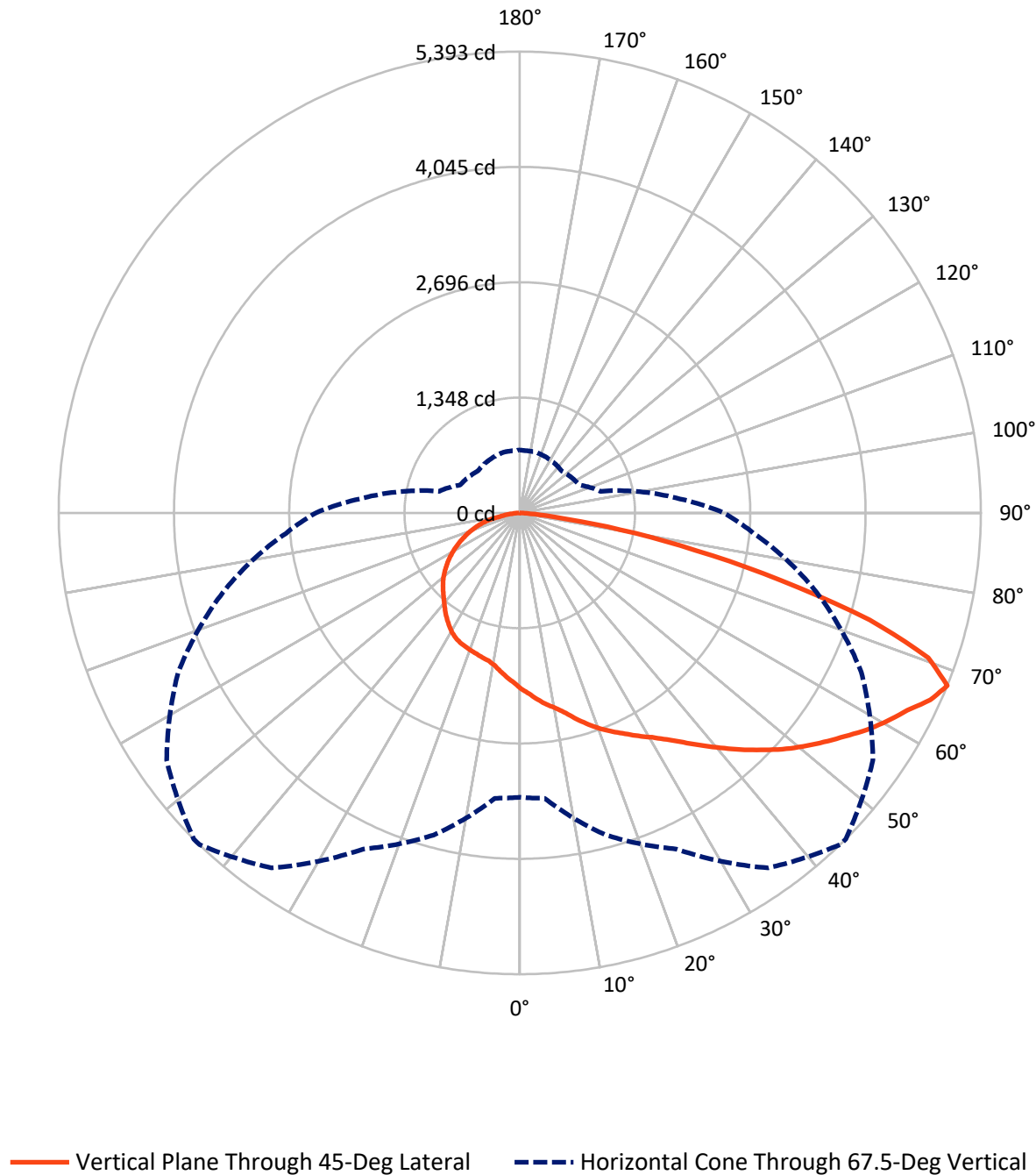


Based on 25 foot mounting height. Maximum calculated value = 3.8 fc

Type IV - Short - N/A

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Luminous Intensity Polar Plot



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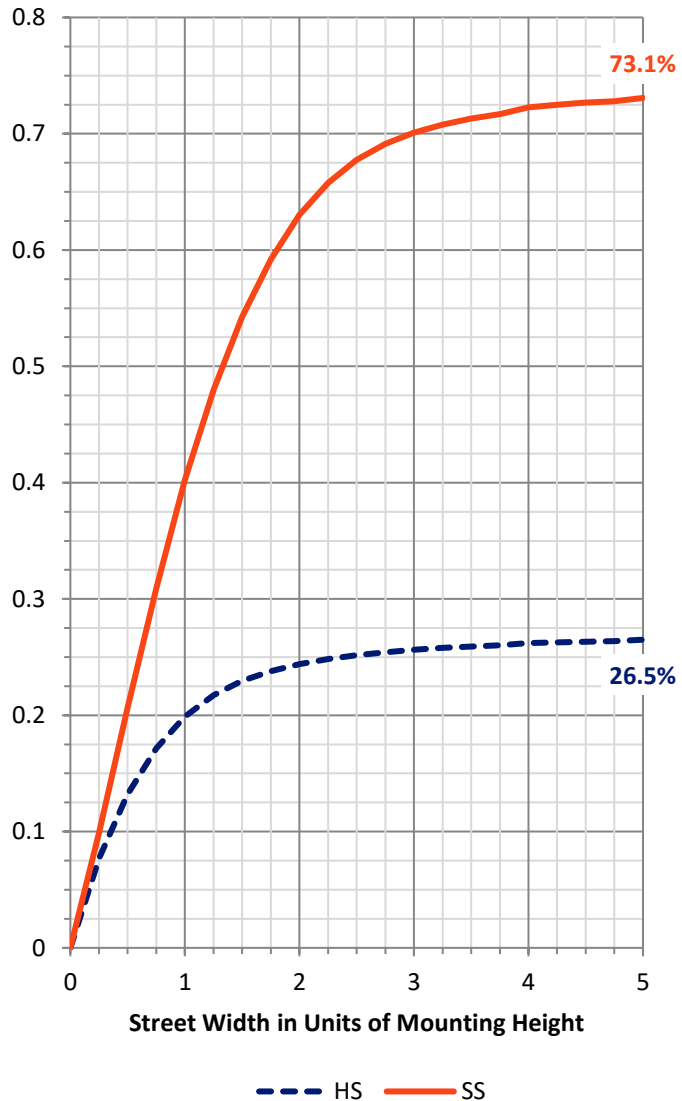
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3295.3	0.0	3295.3
	% Fixture	26.7	0.0	26.7
Street Side	Lumens	9039.7	0.0	9039.7
	% Fixture	73.3	0.0	73.3
Total	Lumens	12335.0	0.0	12335.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	197.0	1.6
10°-20°	608.5	4.9
20°-30°	1050.3	8.5
30°-40°	1548.8	12.6
40°-50°	2098.3	17.0
50°-60°	2564.7	20.8
60°-70°	2645.1	21.4
70°-80°	1448.8	11.7
80°-90°	173.6	1.4
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°	12335.0	100.0
0°-180°	12335.0	100.0

Coefficient of Utilization



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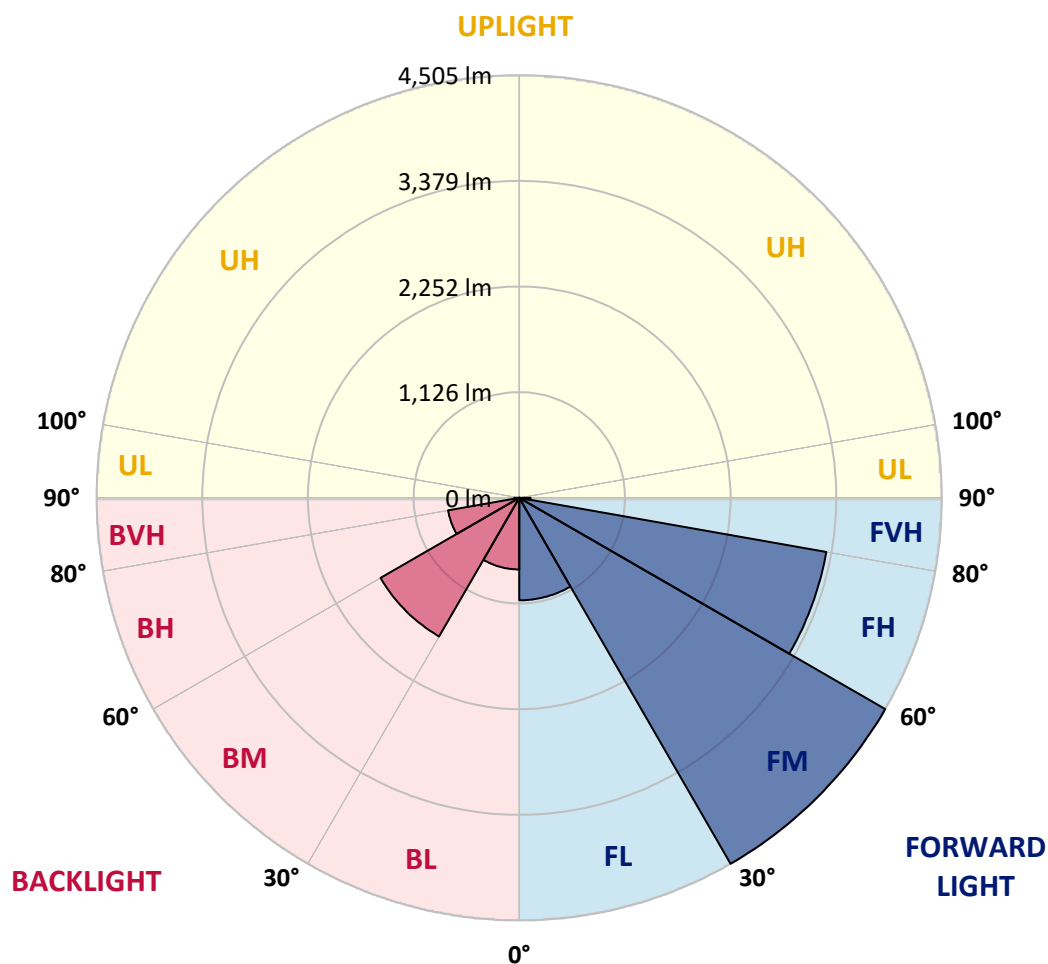
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1092.0	8.9			
FM	(30°-60°)	4504.9	36.5			
FH	(60°-80°)	3323.2	26.9			G2/5000
FVH	(80°-90°)	119.6	1.0			G2/225
BL	(0°-30°)	763.7	6.2	B2/1000		
BM	(30°-60°)	1706.9	13.8	B2/2500		
BH	(60°-80°)	770.6	6.2	B2/1000		G2/1000
BVH	(80°-90°)	54.0	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 IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	2057.2	2057.2	2057.2	2057.2	2057.2	2057.2	2057.2	2057.2	2057.2	2057.2	2057.2
2.5°	2147.3	2145.5	2149.2	2136.1	2119.2	2117.3	2117.3	2106.0	2092.9	2066.6	2046.0
5°	2248.7	2244.9	2246.8	2228.1	2205.5	2194.3	2192.4	2168.0	2138.0	2096.7	2059.1
7.5°	2342.6	2338.8	2336.9	2316.3	2282.5	2263.7	2261.8	2226.2	2190.5	2126.7	2072.3
10°	2430.8	2427.0	2423.3	2395.1	2353.8	2325.7	2321.9	2276.9	2231.8	2153.0	2083.5
12.5°	2543.4	2535.9	2532.1	2498.4	2438.3	2408.3	2402.6	2342.6	2286.2	2190.5	2106.0
15°	2661.7	2656.0	2650.4	2618.5	2550.9	2511.5	2502.1	2427.0	2350.1	2239.3	2139.8
17.5°	2749.9	2744.2	2744.2	2716.1	2654.1	2609.1	2601.6	2511.5	2415.8	2284.4	2166.1
20°	2804.3	2798.7	2804.3	2787.4	2740.5	2702.9	2695.4	2596.0	2481.5	2325.7	2188.6
22.5°	2843.7	2838.1	2847.5	2840.0	2806.2	2783.7	2778.0	2680.4	2549.0	2368.8	2211.2
25°	2913.2	2913.2	2913.2	2900.0	2868.1	2860.6	2860.6	2776.2	2635.4	2425.1	2244.9
27.5°	3052.1	3044.6	3035.2	2997.6	2943.2	2941.3	2952.6	2873.8	2734.9	2498.4	2286.2
30°	3256.7	3252.9	3217.3	3138.4	3046.4	3037.1	3044.6	2978.9	2841.8	2575.3	2333.2
32.5°	3521.3	3508.2	3435.0	3316.7	3185.3	3142.2	3157.2	3087.7	2954.5	2654.1	2378.2
35°	3709.0	3712.8	3660.2	3553.3	3397.5	3283.0	3294.2	3209.8	3076.5	2742.4	2434.5
37.5°	3924.9	3938.0	3859.2	3778.5	3634.0	3438.8	3450.0	3335.5	3198.5	2853.1	2494.6
40°	4223.4	4197.1	4063.8	3968.1	3808.5	3602.1	3611.4	3476.3	3339.3	2958.2	2564.0
42.5°	4473.0	4426.1	4264.7	4142.6	3951.2	3774.7	3784.1	3628.3	3481.9	3074.6	2641.0
45°	4831.5	4702.0	4469.3	4409.2	4097.6	3943.7	3953.1	3789.8	3632.1	3198.5	2723.6
47.5°	5039.9	4833.4	4685.1	4653.2	4259.0	4118.2	4129.5	3960.6	3793.5	3339.3	2809.9
50°	5026.7	4893.5	4850.3	4771.5	4401.7	4281.5	4292.8	4137.0	3956.8	3478.2	2892.5
52.5°	4940.4	4964.8	4942.3	4810.9	4544.3	4439.2	4452.4	4311.6	4123.9	3607.7	2969.5
55°	5073.7	5090.6	5047.4	4874.7	4702.0	4596.9	4611.9	4495.5	4289.1	3722.2	3035.2
57.5°	5233.2	5173.1	5130.0	4987.3	4865.3	4767.7	4784.6	4683.2	4431.7	3814.2	3085.9
60°	5225.7	5099.9	5143.1	4994.8	4976.1	4925.4	4940.4	4837.2	4540.6	3881.7	3106.5
62.5°	4840.9	4773.3	4991.1	4940.4	5066.2	5066.2	5084.9	4931.0	4606.3	3909.9	3095.3
65°	4172.7	4176.4	4559.3	4769.6	5173.1	5259.5	5274.5	4989.2	4568.7	3827.3	2990.1
67.5°	3324.3	3348.7	3898.6	4336.0	5066.2	5390.9	5392.8	5041.7	4407.3	3594.5	2746.1
70°	2432.7	2451.4	3100.9	3632.1	4561.2	5099.9	5069.9	4893.5	4056.3	3189.1	2365.1
72.5°	1644.3	1661.2	2329.4	2789.3	3742.8	4343.5	4277.8	4324.7	3457.5	2620.4	1901.4
75°	1105.6	1126.2	1657.4	1995.3	2753.6	3298.0	3151.6	3275.4	2674.8	1984.0	1387.1
77.5°	696.4	709.5	1053.0	1308.3	1880.8	2244.9	2098.5	2100.4	1541.1	1068.0	745.2
80°	443.0	446.7	638.2	754.6	1088.7	1349.6	1193.8	970.4	694.5	566.9	444.9
82.5°	257.2	251.5	381.0	426.1	518.1	512.4	424.2	401.7	304.1	283.4	227.1
85°	103.2	95.7	167.1	155.8	157.7	167.1	123.9	123.9	99.5	77.0	56.3
87.5°	20.6	20.6	22.5	20.6	20.6	22.5	16.9	16.9	15.0	15.0	15.0
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°	2057.2	2057.2	2057.2	2057.2	2057.2	2057.2	2057.2	2057.2	2057.2	2057.2	2057.2
2.5°	2042.2	2038.5	2029.1	2004.7	1991.5	1984.0	1972.8	1969.0	1967.1	1969.0	1974.7
5°	2047.9	2034.7	2008.4	1969.0	1942.7	1925.9	1907.1	1899.6	1893.9	1893.9	1899.6
7.5°	2051.6	2031.0	1985.9	1927.7	1890.2	1863.9	1841.4	1832.0	1830.1	1835.8	1837.6
10°	2053.5	2023.5	1959.6	1886.4	1837.6	1803.8	1781.3	1775.7	1781.3	1792.6	1794.5
12.5°	2066.6	2025.3	1944.6	1858.3	1800.1	1766.3	1749.4	1749.4	1764.4	1785.1	1786.9
15°	2089.2	2038.5	1937.1	1835.8	1775.7	1745.7	1740.0	1749.4	1771.9	1803.8	1807.6
17.5°	2106.0	2046.0	1920.2	1805.7	1743.8	1725.0	1734.4	1756.9	1788.8	1832.0	1835.8
20°	2117.3	2046.0	1895.8	1770.1	1711.9	1708.1	1734.4	1770.1	1803.8	1854.5	1860.2
22.5°	2128.6	2042.2	1867.7	1726.9	1676.2	1687.5	1736.3	1781.3	1815.1	1869.5	1878.9
25°	2149.2	2047.9	1839.5	1683.7	1638.7	1670.6	1734.4	1788.8	1824.5	1880.8	1895.8
27.5°	2177.4	2061.0	1818.9	1644.3	1601.1	1644.3	1721.3	1786.9	1824.5	1878.9	1895.8
30°	2207.4	2076.0	1794.5	1601.1	1557.9	1606.8	1693.1	1766.3	1809.5	1860.2	1880.8
32.5°	2239.3	2092.9	1773.8	1554.2	1505.4	1556.1	1651.8	1734.4	1781.3	1828.2	1850.8
35°	2282.5	2122.9	1762.5	1516.7	1458.5	1503.5	1599.2	1693.1	1743.8	1786.9	1813.2
37.5°	2335.0	2160.5	1756.9	1479.1	1407.8	1445.3	1542.9	1642.4	1696.9	1732.5	1756.9
40°	2395.1	2207.4	1755.0	1443.4	1357.1	1385.3	1484.7	1584.2	1636.8	1664.9	1685.6
42.5°	2462.7	2260.0	1751.3	1407.8	1306.4	1328.9	1428.4	1526.0	1571.1	1595.5	1614.3
45°	2534.0	2312.5	1743.8	1364.6	1252.0	1278.3	1370.2	1456.6	1503.5	1524.2	1544.8
47.5°	2605.3	2365.1	1728.8	1315.8	1203.2	1227.6	1308.3	1383.4	1420.9	1439.7	1460.3
50°	2674.8	2412.0	1693.1	1259.5	1152.5	1175.0	1237.0	1287.7	1315.8	1330.8	1351.5
52.5°	2736.7	2443.9	1642.4	1193.8	1101.8	1113.1	1154.4	1197.6	1220.1	1222.0	1240.7
55°	2789.3	2460.8	1569.2	1126.2	1047.4	1049.3	1071.8	1105.6	1115.0	1107.5	1120.6
57.5°	2819.3	2451.4	1488.5	1056.8	991.1	983.6	1000.5	1017.4	1019.2	1000.5	1013.6
60°	2826.8	2408.3	1383.4	987.3	934.8	914.1	919.8	916.0	912.2	904.7	916.0
62.5°	2789.3	2316.3	1267.0	919.8	874.7	842.8	840.9	839.0	844.7	846.5	848.4
65°	2652.3	2143.6	1128.1	850.3	810.9	767.7	765.8	788.4	795.9	784.6	788.4
67.5°	2387.6	1878.9	976.1	769.6	730.2	692.6	707.6	720.8	733.9	730.2	733.9
70°	2012.2	1542.9	837.2	679.5	642.0	621.3	638.2	649.5	651.3	647.6	651.3
72.5°	1582.4	1205.1	707.6	587.5	553.7	544.3	565.0	574.4	591.3	598.8	600.7
75°	1143.1	889.7	580.0	488.0	459.9	459.9	478.6	495.5	510.6	501.2	495.5
77.5°	638.2	531.2	416.7	336.0	341.6	367.9	375.4	394.2	409.2	407.3	403.6
80°	386.7	332.2	281.6	217.7	215.9	236.5	285.3	317.2	324.7	307.8	306.0
82.5°	200.8	174.6	150.2	122.0	135.1	157.7	165.2	199.0	219.6	212.1	221.5
85°	50.7	48.8	54.4	56.3	69.5	77.0	84.5	99.5	65.7	31.9	31.9
87.5°	15.0	15.0	18.8	18.8	24.4	30.0	28.2	28.2	15.0	1.9	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)