

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: P842673

Luminaire Tested: **ARCH4-80-727-U-T4W**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P842673
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2310-189-19)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-80-727-U-T4W
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 685mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13608 lumens
Efficiency: N/A
Efficacy: 163.2 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - U0 - G2

Input Watts (W): 83.4
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



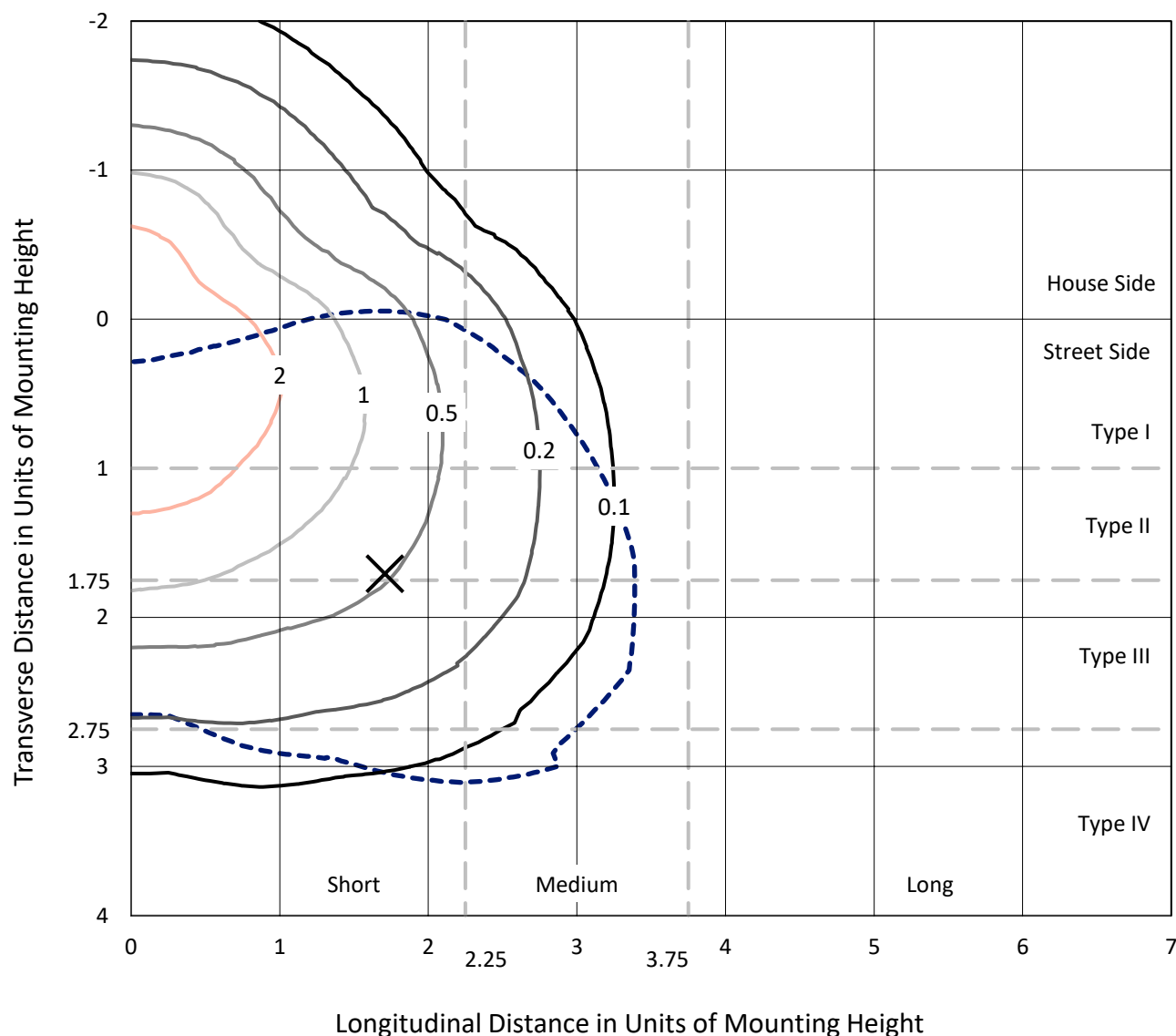
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

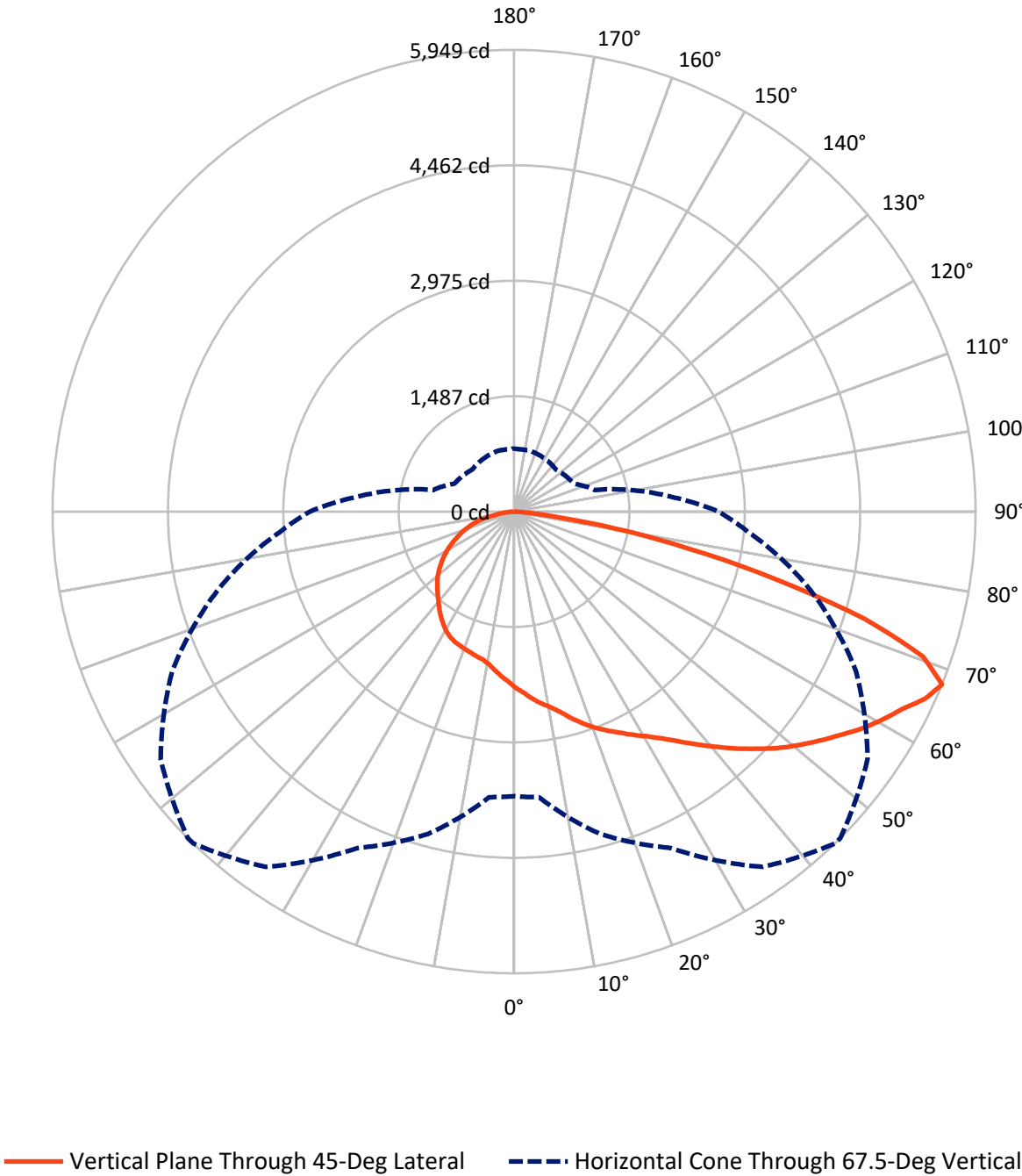


Based on 25 foot mounting height. Maximum calculated value = 4.2 fc

Type IV - Short - N/A

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Luminous Intensity Polar Plot



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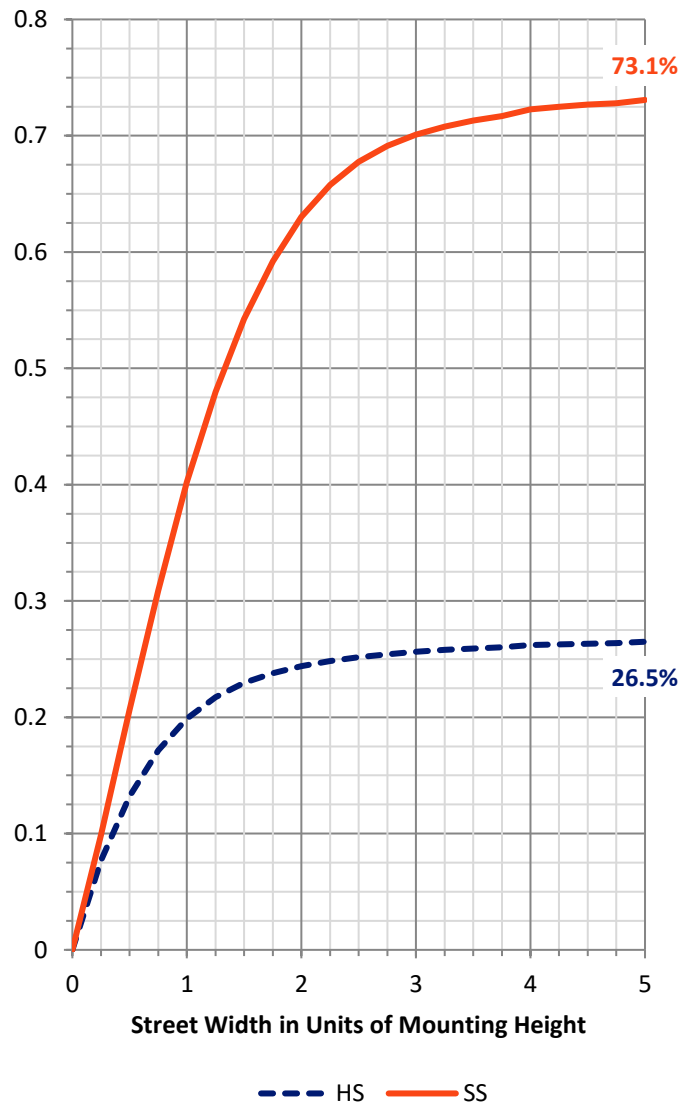
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3635.4	0.0	3635.4
	% Fixture	26.7	0.0	26.7
Street Side	Lumens	9972.6	0.0	9972.6
	% Fixture	73.3	0.0	73.3
Total	Lumens	13608.0	0.0	13608.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	217.3	1.6
10°-20°	671.3	4.9
20°-30°	1158.7	8.5
30°-40°	1708.6	12.6
40°-50°	2314.9	17.0
50°-60°	2829.3	20.8
60°-70°	2918.1	21.4
70°-80°	1598.3	11.7
80°-90°	191.6	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°	13608.0	100.0
0°-180°	13608.0	100.0

Coefficient of Utilization



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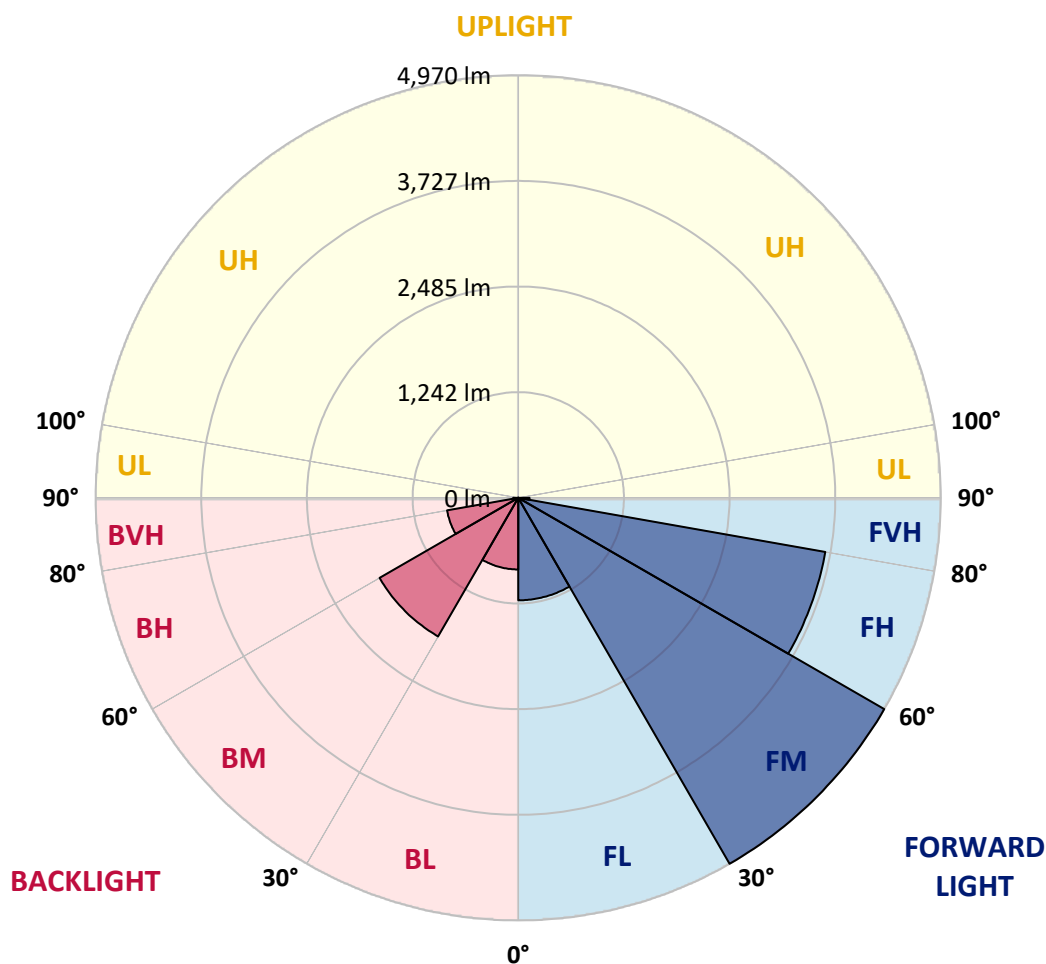
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1204.7	8.9			
FM	(30°-60°)	4969.8	36.5			
FH	(60°-80°)	3666.2	26.9			G2/5000
FVH	(80°-90°)	132.0	1.0			G2/225
BL	(0°-30°)	842.6	6.2	B2/1000		
BM	(30°-60°)	1883.1	13.8	B2/2500		
BH	(60°-80°)	850.2	6.2	B2/1000		G2/1000
BVH	(80°-90°)	59.6	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°	2269.6	2269.6	2269.6	2269.6	2269.6	2269.6	2269.6	2269.6	2269.6	2269.6	2269.6
2.5°	2369.0	2366.9	2371.0	2356.5	2337.9	2335.8	2335.8	2323.4	2308.9	2279.9	2257.1
5°	2480.8	2476.6	2478.7	2458.0	2433.1	2420.7	2418.7	2391.7	2358.6	2313.0	2271.6
7.5°	2584.3	2580.2	2578.1	2555.3	2518.0	2497.3	2495.3	2455.9	2416.6	2346.2	2286.1
10°	2681.6	2677.5	2673.4	2642.3	2596.7	2565.7	2561.5	2511.8	2462.1	2375.2	2298.5
12.5°	2805.9	2797.6	2793.5	2756.2	2689.9	2656.8	2650.6	2584.3	2522.2	2416.6	2323.4
15°	2936.3	2930.1	2923.9	2888.7	2814.2	2770.7	2760.3	2677.5	2592.6	2470.4	2360.7
17.5°	3033.7	3027.5	3027.5	2996.4	2928.1	2878.4	2870.1	2770.7	2665.1	2520.1	2389.7
20°	3093.7	3087.5	3093.7	3075.1	3023.3	2981.9	2973.6	2863.9	2737.5	2565.7	2414.5
22.5°	3137.2	3131.0	3141.3	3133.1	3095.8	3070.9	3064.7	2957.0	2812.1	2613.3	2439.4
25°	3213.8	3213.8	3213.8	3199.3	3164.1	3155.8	3155.8	3062.7	2907.4	2675.4	2476.6
27.5°	3367.1	3358.8	3348.4	3307.0	3247.0	3244.9	3257.3	3170.3	3017.1	2756.2	2522.2
30°	3592.8	3588.6	3549.3	3462.3	3360.8	3350.5	3358.8	3286.3	3135.1	2841.1	2574.0
32.5°	3884.8	3870.3	3789.5	3659.0	3514.1	3466.5	3483.0	3406.4	3259.4	2928.1	2623.7
35°	4091.8	4096.0	4038.0	3920.0	3748.1	3621.8	3634.2	3541.0	3394.0	3025.4	2685.8
37.5°	4330.0	4344.5	4257.5	4168.4	4009.0	3793.6	3806.1	3679.7	3528.6	3147.6	2752.0
40°	4659.2	4630.2	4483.2	4377.6	4201.6	3973.8	3984.1	3835.1	3683.9	3263.5	2828.7
42.5°	4934.6	4882.9	4704.8	4570.2	4359.0	4164.3	4174.7	4002.8	3841.3	3391.9	2913.6
45°	5330.1	5187.3	4930.5	4864.2	4520.5	4350.7	4361.0	4180.9	4006.9	3528.6	3004.7
47.5°	5560.0	5332.2	5168.6	5133.4	4698.6	4543.3	4555.7	4369.3	4185.0	3683.9	3099.9
50°	5545.5	5398.5	5350.9	5263.9	4855.9	4723.4	4735.8	4564.0	4365.2	3837.1	3191.0
52.5°	5450.2	5477.2	5452.3	5307.4	5013.3	4897.4	4911.8	4756.5	4549.5	3980.0	3275.9
55°	5597.3	5615.9	5568.3	5377.8	5187.3	5071.3	5087.9	4959.5	4731.7	4106.3	3348.4
57.5°	5773.3	5707.0	5659.4	5502.0	5367.4	5259.7	5278.4	5166.6	4889.1	4207.8	3404.3
60°	5765.0	5626.3	5673.9	5510.3	5489.6	5433.7	5450.2	5336.4	5009.2	4282.3	3427.1
62.5°	5340.5	5266.0	5506.2	5450.2	5589.0	5589.0	5609.7	5439.9	5081.7	4313.4	3414.7
65°	4603.3	4607.4	5029.9	5261.8	5707.0	5802.3	5818.8	5504.1	5040.2	4222.3	3298.7
67.5°	3667.3	3694.2	4301.0	4783.5	5589.0	5947.2	5949.3	5562.1	4862.2	3965.5	3029.5
70°	2683.7	2704.4	3420.9	4006.9	5032.0	5626.3	5593.1	5398.5	4474.9	3518.2	2609.2
72.5°	1814.0	1832.6	2569.8	3077.2	4129.1	4791.7	4719.3	4771.0	3814.3	2890.8	2097.7
75°	1219.7	1242.5	1828.5	2201.2	3037.8	3638.3	3476.8	3613.5	2950.8	2188.8	1530.3
77.5°	768.3	782.7	1161.7	1443.3	2074.9	2476.6	2315.1	2317.2	1700.1	1178.3	822.1
80°	488.7	492.8	704.1	832.4	1201.0	1488.9	1317.0	1070.6	766.2	625.4	490.8
82.5°	283.7	277.5	420.4	470.1	571.5	565.3	468.0	443.1	335.5	312.7	250.6
85°	113.9	105.6	184.3	171.9	173.9	184.3	136.7	136.7	109.8	84.9	62.1
87.5°	22.8	22.8	24.8	22.8	22.8	24.8	18.6	18.6	16.6	16.6	16.6
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°	2269.6	2269.6	2269.6	2269.6	2269.6	2269.6	2269.6	2269.6	2269.6	2269.6	2269.6
2.5°	2253.0	2248.8	2238.5	2211.6	2197.1	2188.8	2176.4	2172.2	2170.2	2172.2	2178.4
5°	2259.2	2244.7	2215.7	2172.2	2143.2	2124.6	2103.9	2095.6	2089.4	2089.4	2095.6
7.5°	2263.3	2240.6	2190.9	2126.7	2085.3	2056.3	2031.4	2021.1	2019.0	2025.2	2027.3
10°	2265.4	2232.3	2161.9	2081.1	2027.3	1990.0	1965.2	1958.9	1965.2	1977.6	1979.6
12.5°	2279.9	2234.4	2145.3	2050.1	1985.9	1948.6	1930.0	1930.0	1946.5	1969.3	1971.4
15°	2304.8	2248.8	2137.0	2025.2	1958.9	1925.8	1919.6	1930.0	1954.8	1990.0	1994.1
17.5°	2323.4	2257.1	2118.4	1992.1	1923.7	1903.0	1913.4	1938.2	1973.4	2021.1	2025.2
20°	2335.8	2257.1	2091.5	1952.7	1888.5	1884.4	1913.4	1952.7	1990.0	2045.9	2052.1
22.5°	2348.2	2253.0	2060.4	1905.1	1849.2	1861.6	1915.5	1965.2	2002.4	2062.5	2072.8
25°	2371.0	2259.2	2029.3	1857.5	1807.8	1843.0	1913.4	1973.4	2012.8	2074.9	2091.5
27.5°	2402.1	2273.7	2006.6	1814.0	1766.4	1814.0	1898.9	1971.4	2012.8	2072.8	2091.5
30°	2435.2	2290.3	1979.6	1766.4	1718.7	1772.6	1867.8	1948.6	1996.2	2052.1	2074.9
32.5°	2470.4	2308.9	1956.9	1714.6	1660.8	1716.7	1822.3	1913.4	1965.2	2016.9	2041.8
35°	2518.0	2342.0	1944.4	1673.2	1609.0	1658.7	1764.3	1867.8	1923.7	1971.4	2000.4
37.5°	2576.0	2383.4	1938.2	1631.8	1553.1	1594.5	1702.2	1811.9	1872.0	1911.3	1938.2
40°	2642.3	2435.2	1936.2	1592.4	1497.2	1528.2	1638.0	1747.7	1805.7	1836.8	1859.5
42.5°	2716.8	2493.2	1932.0	1553.1	1441.3	1466.1	1575.9	1683.5	1733.2	1760.1	1780.9
45°	2795.5	2551.2	1923.7	1505.4	1381.2	1410.2	1511.7	1606.9	1658.7	1681.5	1704.2
47.5°	2874.2	2609.2	1907.2	1451.6	1327.4	1354.3	1443.3	1526.2	1567.6	1588.3	1611.1
50°	2950.8	2660.9	1867.8	1389.5	1271.4	1296.3	1364.6	1420.5	1451.6	1468.2	1490.9
52.5°	3019.2	2696.1	1811.9	1317.0	1215.5	1228.0	1273.5	1321.1	1346.0	1348.1	1368.8
55°	3077.2	2714.8	1731.2	1242.5	1155.5	1157.6	1182.4	1219.7	1230.0	1221.8	1236.2
57.5°	3110.3	2704.4	1642.1	1165.8	1093.4	1085.1	1103.7	1122.4	1124.4	1103.7	1118.2
60°	3118.6	2656.8	1526.2	1089.2	1031.2	1008.5	1014.7	1010.5	1006.4	998.1	1010.5
62.5°	3077.2	2555.3	1397.8	1014.7	965.0	929.8	927.7	925.6	931.8	933.9	936.0
65°	2926.0	2364.8	1244.5	938.1	894.6	846.9	844.9	869.7	878.0	865.6	869.7
67.5°	2634.0	2072.8	1076.8	849.0	805.5	764.1	780.7	795.2	809.7	805.5	809.7
70°	2219.9	1702.2	923.6	749.6	708.2	685.4	704.1	716.5	718.6	714.4	718.6
72.5°	1745.7	1329.4	780.7	648.1	610.9	600.5	623.3	633.7	652.3	660.6	662.6
75°	1261.1	981.5	639.9	538.4	507.3	507.3	528.0	546.7	563.2	552.9	546.7
77.5°	704.1	586.0	459.7	370.7	376.9	405.9	414.2	434.9	451.4	449.4	445.2
80°	426.6	366.5	310.6	240.2	238.1	260.9	314.8	350.0	358.2	339.6	337.5
82.5°	221.6	192.6	165.7	134.6	149.1	173.9	182.2	219.5	242.3	234.0	244.4
85°	55.9	53.8	60.1	62.1	76.6	84.9	93.2	109.8	72.5	35.2	35.2
87.5°	16.6	16.6	20.7	20.7	26.9	33.1	31.1	31.1	16.6	2.1	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)