

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: P842595

Luminaire Tested: **ARCH4-70-727-U-T2R**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P842595
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: ARCH4-70-727-U-T2R
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 605mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE II
ROADWAY OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12431 lumens
Efficiency: N/A
Efficacy: 168.4 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B2 - U0 - G2

Input Watts (W): 73.8
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

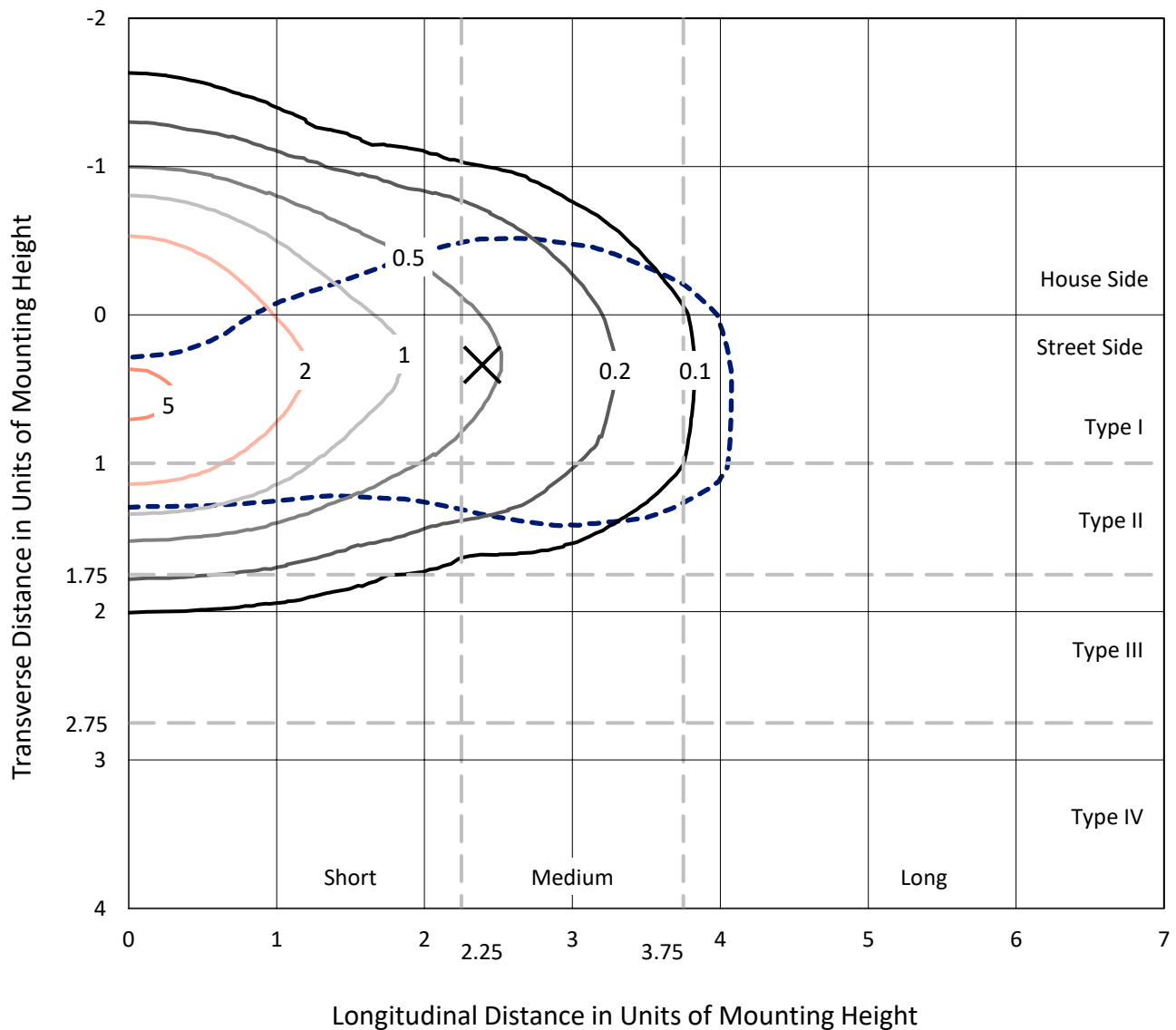


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Iso-Footcandle Lines of Horizontal Illumination

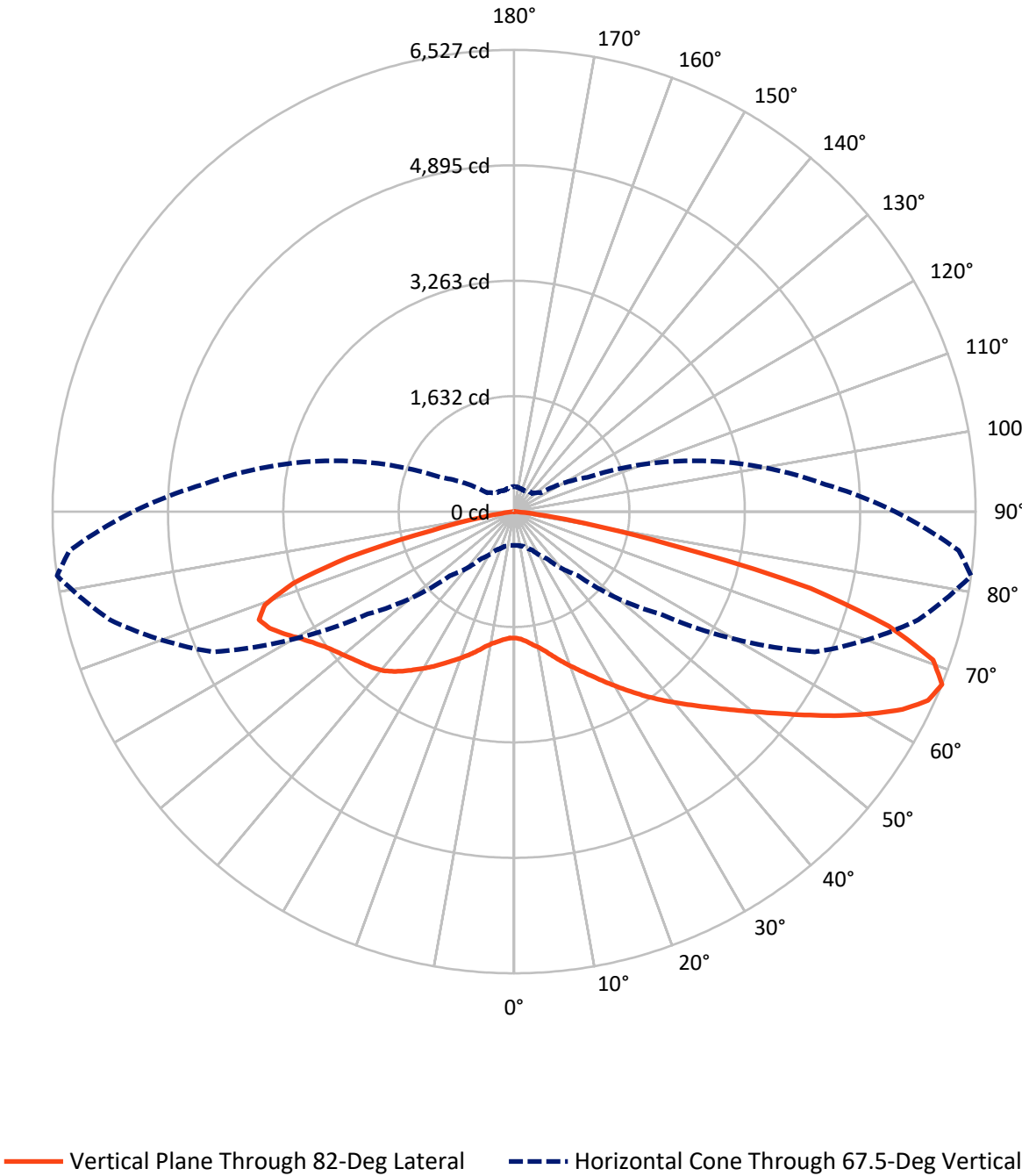
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.5 fc
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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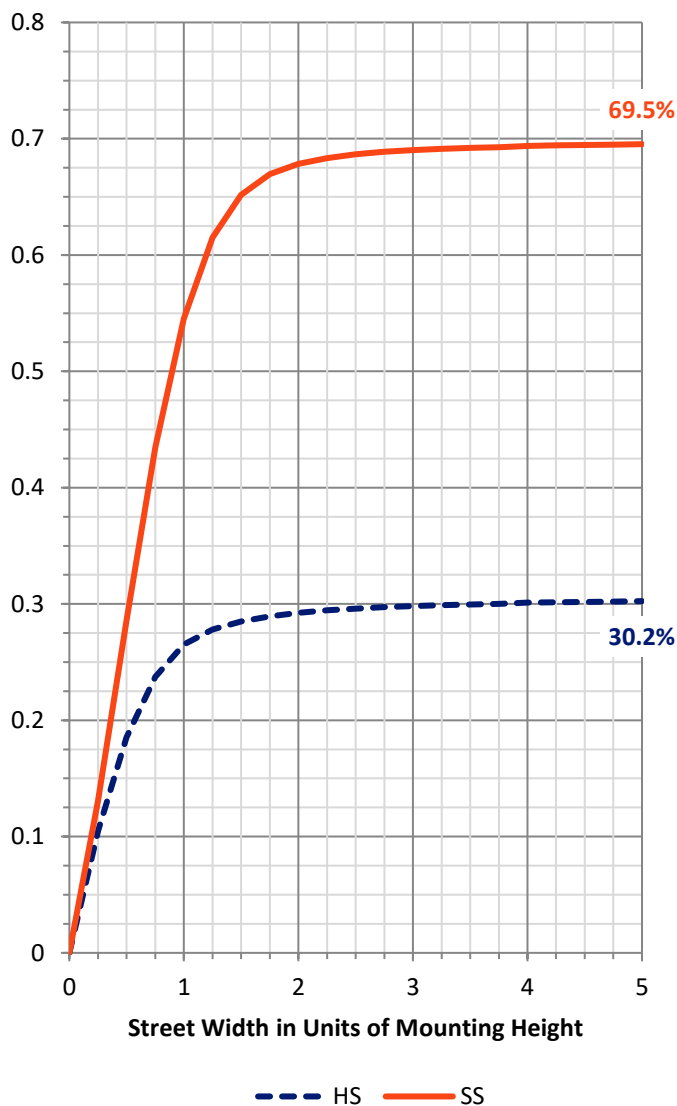
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3785.7	0.0	3785.7
	% Fixture	30.5	0.0	30.5
Street Side	Lumens	8645.3	0.0	8645.3
	% Fixture	69.5	0.0	69.5
Total	Lumens	12431.0	0.0	12431.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	184.7	1.5
10°-20°	665.2	5.4
20°-30°	1336.9	10.8
30°-40°	2100.1	16.9
40°-50°	2558.3	20.6
50°-60°	2417.3	19.4
60°-70°	1996.1	16.1
70°-80°	1087.0	8.7
80°-90°	85.5	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°	12431.0	100.0
0°-180°	12431.0	100.0

Coefficient of Utilization



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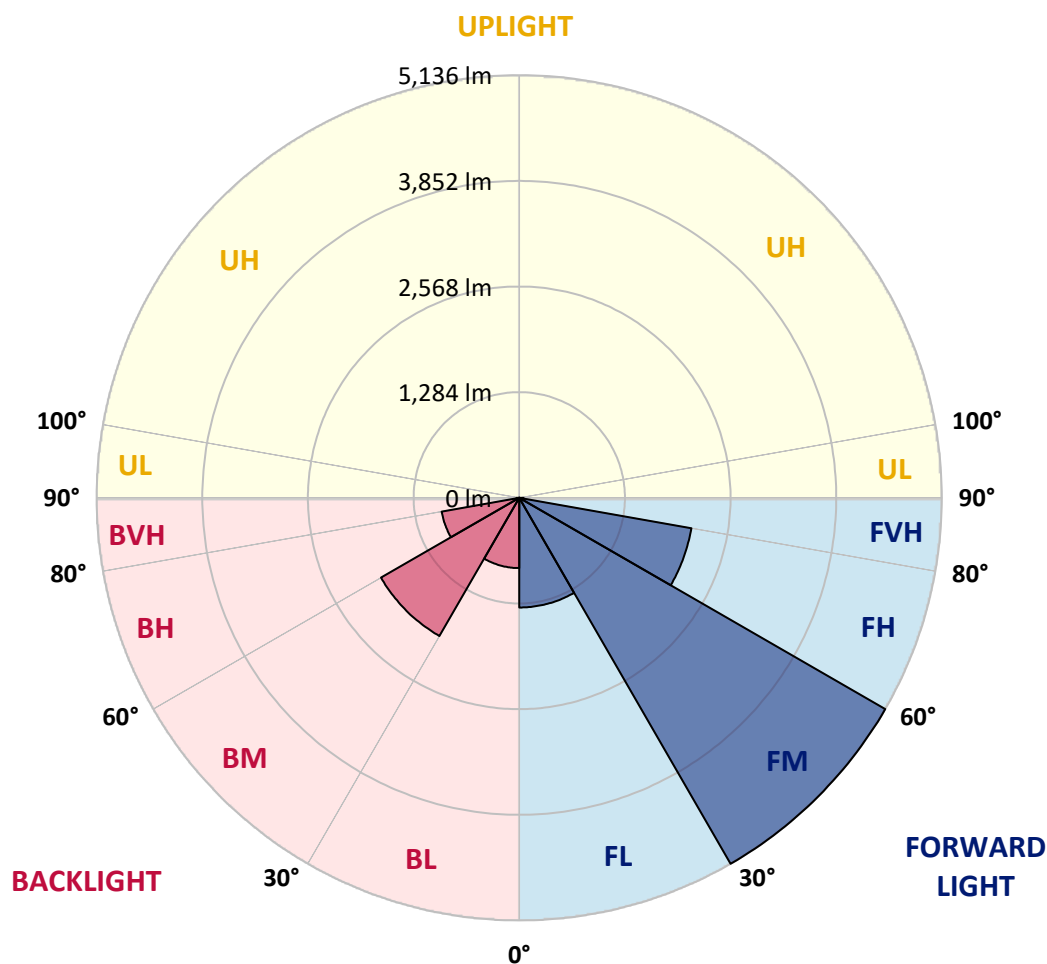
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1333.1	10.7			
FM	(30°-60°)	5135.8	41.3			
FH	(60°-80°)	2124.9	17.1			G2/5000
FVH	(80°-90°)	51.5	0.4			G1/100
BL	(0°-30°)	853.7	6.9	B2/1000		
BM	(30°-60°)	1939.9	15.6	B2/2500		
BH	(60°-80°)	958.2	7.7	B2/1000		G2/1000
BVH	(80°-90°)	33.9	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	1786.9	1786.9	1786.9	1786.9	1786.9	1786.9	1786.9	1786.9	1786.9	1786.9	1786.9
2.5°	1868.2	1868.2	1882.6	1882.6	1870.0	1850.1	1844.7	1823.0	1803.2	1803.2	1805.0
5°	2046.9	2045.1	2055.9	2041.5	2010.8	1971.1	1944.0	1897.1	1857.3	1844.7	1842.9
7.5°	2265.3	2263.5	2268.9	2245.4	2187.7	2122.7	2068.5	1992.7	1927.7	1900.7	1893.4
10°	2508.9	2507.1	2501.7	2462.0	2384.4	2283.3	2202.1	2097.4	1999.9	1956.6	1947.6
12.5°	2788.7	2785.1	2772.5	2714.7	2608.2	2478.3	2360.9	2225.6	2095.6	2036.0	2016.2
15°	3101.0	3095.6	3072.1	3001.7	2859.1	2694.9	2543.2	2370.0	2211.1	2133.5	2106.4
17.5°	3429.5	3429.5	3393.4	3288.7	3129.9	2925.9	2738.2	2518.0	2332.1	2236.4	2203.9
20°	3763.4	3761.6	3716.5	3590.1	3402.4	3167.8	2929.5	2687.6	2456.6	2341.1	2301.4
22.5°	4115.4	4111.8	4055.8	3911.4	3687.6	3422.3	3144.3	2855.5	2593.8	2454.8	2404.3
25°	4519.7	4514.3	4445.7	4268.8	4003.5	3703.9	3386.2	3052.3	2750.8	2581.1	2521.6
27.5°	4949.3	4942.1	4860.9	4655.1	4364.5	4003.5	3653.3	3279.7	2924.1	2721.9	2655.2
30°	5332.0	5326.6	5238.1	5026.9	4693.0	4301.3	3907.8	3507.1	3106.4	2871.8	2788.7
32.5°	5620.8	5620.8	5541.3	5333.8	4987.2	4586.5	4164.1	3721.9	3295.9	3032.4	2934.9
35°	5795.9	5801.3	5732.7	5566.6	5239.9	4855.4	4429.5	3974.6	3498.1	3203.9	3099.2
37.5°	5821.1	5839.2	5799.5	5687.6	5415.0	5079.3	4689.4	4218.3	3707.5	3377.2	3259.8
40°	5703.8	5716.4	5718.2	5674.9	5487.2	5239.9	4918.6	4476.4	3929.5	3559.5	3424.1
42.5°	5469.1	5478.2	5494.4	5507.1	5434.9	5310.3	5093.7	4716.5	4165.9	3745.4	3586.5
45°	5165.9	5164.1	5191.2	5245.3	5241.7	5270.6	5191.2	4934.9	4411.4	3956.6	3767.0
47.5°	4712.9	4703.8	4799.5	4922.2	4983.6	5119.0	5193.0	5106.3	4678.6	4189.4	3972.8
50°	4003.5	3994.5	4203.8	4492.6	4673.1	4878.9	5093.7	5209.2	4958.3	4451.1	4196.6
52.5°	3140.7	3131.7	3397.0	3902.4	4295.9	4595.5	4893.4	5232.7	5223.7	4743.5	4449.3
55°	2335.7	2328.4	2586.6	3133.5	3770.6	4267.0	4647.9	5171.3	5472.8	5079.3	4756.2
57.5°	1646.2	1642.5	1866.4	2319.4	3095.6	3866.3	4411.4	5052.2	5702.0	5443.9	5102.7
60°	1155.2	1149.8	1312.2	1662.4	2341.1	3261.6	4176.8	4893.4	5873.5	5803.1	5471.0
62.5°	778.0	774.3	889.9	1182.3	1662.4	2510.8	3821.2	4786.9	5970.9	6164.1	5842.8
65°	590.2	588.4	640.8	801.4	1176.9	1803.2	3256.2	4774.2	5983.6	6434.8	6158.7
67.5°	476.5	478.3	507.2	599.3	814.1	1281.5	2525.2	4694.8	5916.8	6526.9	6312.1
70°	389.9	389.9	402.5	463.9	601.1	864.6	1763.5	4333.8	5730.9	6286.8	6129.8
72.5°	297.8	299.6	339.3	375.4	453.1	606.5	1129.9	3586.5	5292.3	5543.2	5424.0
75°	236.5	234.6	258.1	308.7	352.0	433.2	693.1	2572.1	4503.5	4332.0	4256.2
77.5°	169.7	167.9	185.9	229.2	267.1	306.8	413.3	1297.8	2449.4	2250.8	2194.9
80°	115.5	111.9	128.2	158.8	176.9	180.5	202.2	498.2	1068.6	1007.2	994.6
82.5°	59.6	59.6	68.6	90.2	92.1	93.9	90.2	160.6	353.8	330.3	315.9
85°	23.5	23.5	25.3	30.7	30.7	32.5	32.5	41.5	37.9	36.1	34.3
87.5°	1.8	1.8	3.6	3.6	5.4	5.4	5.4	7.2	9.0	9.0	9.0
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°	1786.9	1786.9	1786.9	1786.9	1786.9	1786.9	1786.9	1786.9	1786.9	1786.9	1786.9
2.5°	1801.4	1794.2	1770.7	1765.3	1761.7	1756.3	1758.1	1745.4	1740.0	1741.8	1734.6
5°	1833.9	1821.2	1792.4	1779.7	1776.1	1770.7	1776.1	1767.1	1758.1	1761.7	1758.1
7.5°	1879.0	1861.0	1824.9	1812.2	1810.4	1805.0	1812.2	1805.0	1797.8	1801.4	1794.2
10°	1925.9	1902.5	1862.8	1850.1	1850.1	1848.3	1855.5	1844.7	1837.5	1839.3	1835.7
12.5°	1994.5	1963.8	1920.5	1909.7	1904.3	1909.7	1911.5	1897.1	1884.4	1886.2	1880.8
15°	2077.6	2043.3	1996.3	1980.1	1976.5	1974.7	1967.4	1949.4	1933.2	1931.3	1925.9
17.5°	2167.8	2124.5	2068.5	2052.3	2036.0	2030.6	2012.6	1989.1	1963.8	1963.8	1956.6
20°	2254.4	2205.7	2138.9	2115.5	2092.0	2070.3	2039.6	2001.7	1969.3	1963.8	1956.6
22.5°	2348.3	2290.5	2212.9	2178.6	2137.1	2093.8	2041.5	1990.9	1949.4	1940.4	1935.0
25°	2453.0	2380.8	2288.7	2238.2	2171.4	2104.6	2027.0	1962.0	1913.3	1898.9	1895.2
27.5°	2568.5	2481.9	2370.0	2296.0	2198.5	2093.8	1994.5	1916.9	1857.3	1839.3	1833.9
30°	2685.8	2583.0	2444.0	2335.7	2198.5	2059.5	1935.0	1844.7	1776.1	1750.8	1747.2
32.5°	2803.2	2687.6	2510.8	2357.3	2176.8	2001.7	1857.3	1750.8	1673.2	1642.5	1649.8
35°	2944.0	2803.2	2572.1	2366.4	2140.7	1931.3	1768.9	1644.4	1564.9	1537.9	1543.3
37.5°	3090.2	2918.7	2620.9	2359.1	2090.2	1851.9	1669.6	1548.7	1449.4	1402.5	1407.9
40°	3216.5	3023.4	2655.2	2333.9	2025.2	1761.7	1572.2	1413.3	1276.1	1231.0	1225.6
42.5°	3335.6	3101.0	2673.2	2296.0	1951.2	1657.0	1433.2	1229.2	1092.0	1036.1	1037.9
45°	3460.2	3176.8	2666.0	2245.4	1859.1	1534.2	1254.5	1048.7	927.8	877.2	879.0
47.5°	3602.8	3258.0	2658.8	2191.3	1747.2	1375.4	1083.0	889.9	785.2	749.1	745.5
50°	3754.4	3348.3	2649.7	2124.5	1622.7	1198.5	913.3	741.9	653.4	629.9	624.5
52.5°	3925.9	3445.7	2644.3	2045.1	1472.9	1010.8	761.7	611.9	552.3	536.1	534.3
55°	4131.6	3559.5	2651.5	1949.4	1292.4	833.9	633.6	527.1	487.3	478.3	476.5
57.5°	4382.5	3705.7	2673.2	1837.5	1102.9	680.5	539.7	474.7	449.4	442.2	442.2
60°	4655.1	3871.7	2712.9	1711.1	913.3	561.4	478.3	433.2	422.4	431.4	431.4
62.5°	4949.3	4066.7	2783.3	1557.7	736.4	474.7	429.6	398.9	391.7	409.7	411.5
65°	5221.9	4256.2	2828.4	1373.6	584.8	411.5	391.7	364.6	368.2	386.3	384.5
67.5°	5389.7	4413.2	2765.3	1142.6	463.9	364.6	352.0	328.5	337.5	352.0	353.8
70°	5286.8	4324.8	2453.0	862.8	362.8	317.7	308.7	294.2	301.4	319.5	326.7
72.5°	4783.2	3873.5	1907.9	583.0	292.4	267.1	270.7	263.5	272.6	288.8	305.0
75°	3882.6	2927.7	1279.7	373.6	231.0	227.4	232.8	227.4	231.0	247.3	256.3
77.5°	2027.0	1427.8	637.2	232.8	171.5	176.9	185.9	187.7	198.5	202.2	205.8
80°	945.8	642.6	265.3	130.0	113.7	124.5	142.6	144.4	148.0	153.4	155.2
82.5°	308.7	193.1	122.7	70.4	65.0	70.4	92.1	110.1	111.9	122.7	122.7
85°	32.5	19.9	27.1	28.9	25.3	30.7	41.5	39.7	18.0	10.8	10.8
87.5°	9.0	7.2	9.0	9.0	7.2	7.2	5.4	1.8	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)