

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: P836932

Luminaire Tested: **ARCH3-90-750-U-T3**

Issue Date: 5/16/2024

Test Information

Test Method: LM-79-08
Report Number: P836932
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: ARCH3-90-750-U-T3
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 5000K, 735mA LIGHTSQUARE WITH 40 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15350 lumens
Efficiency: N/A
Efficacy: 164.9 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

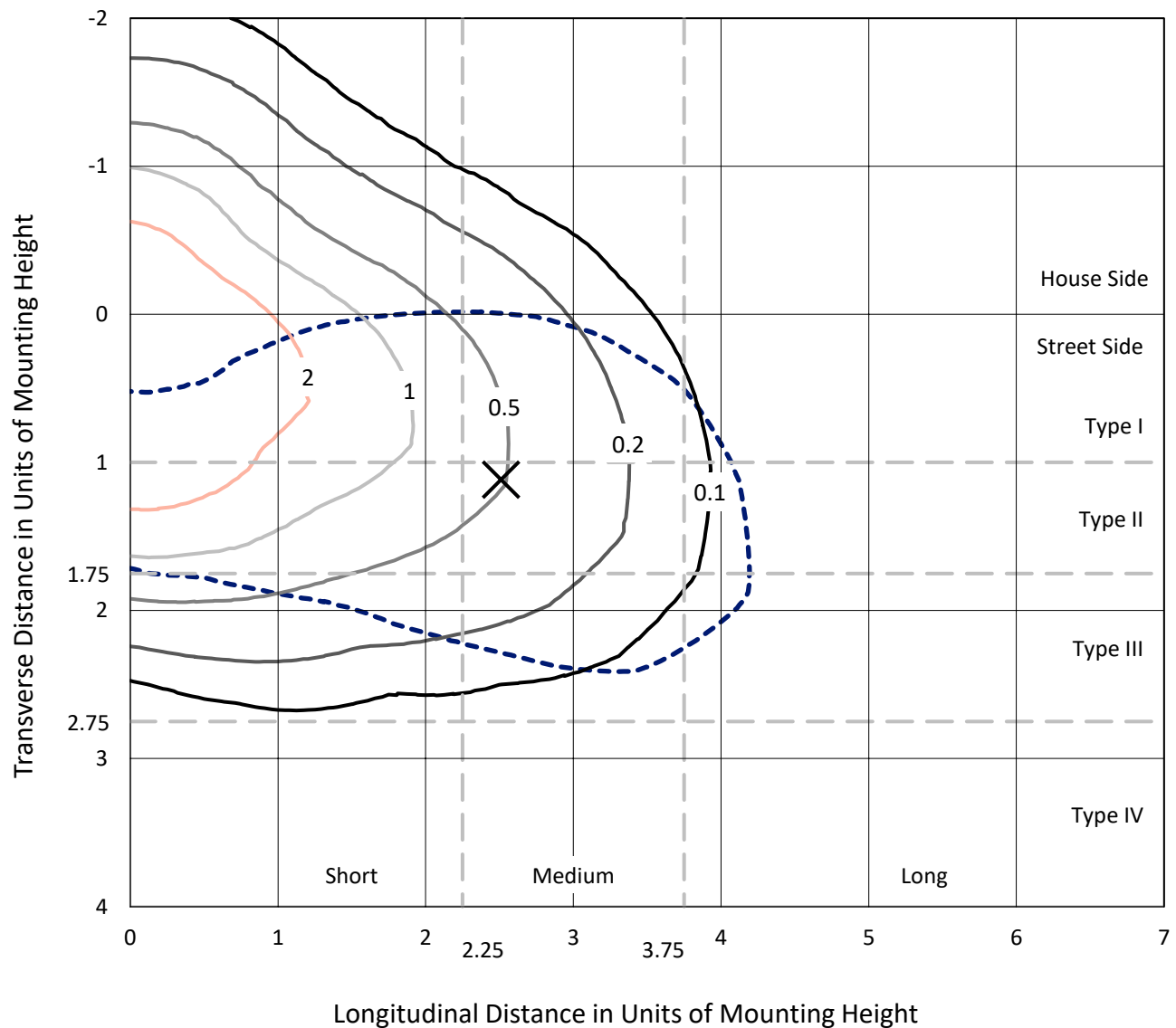
Input Watts (W): 93.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

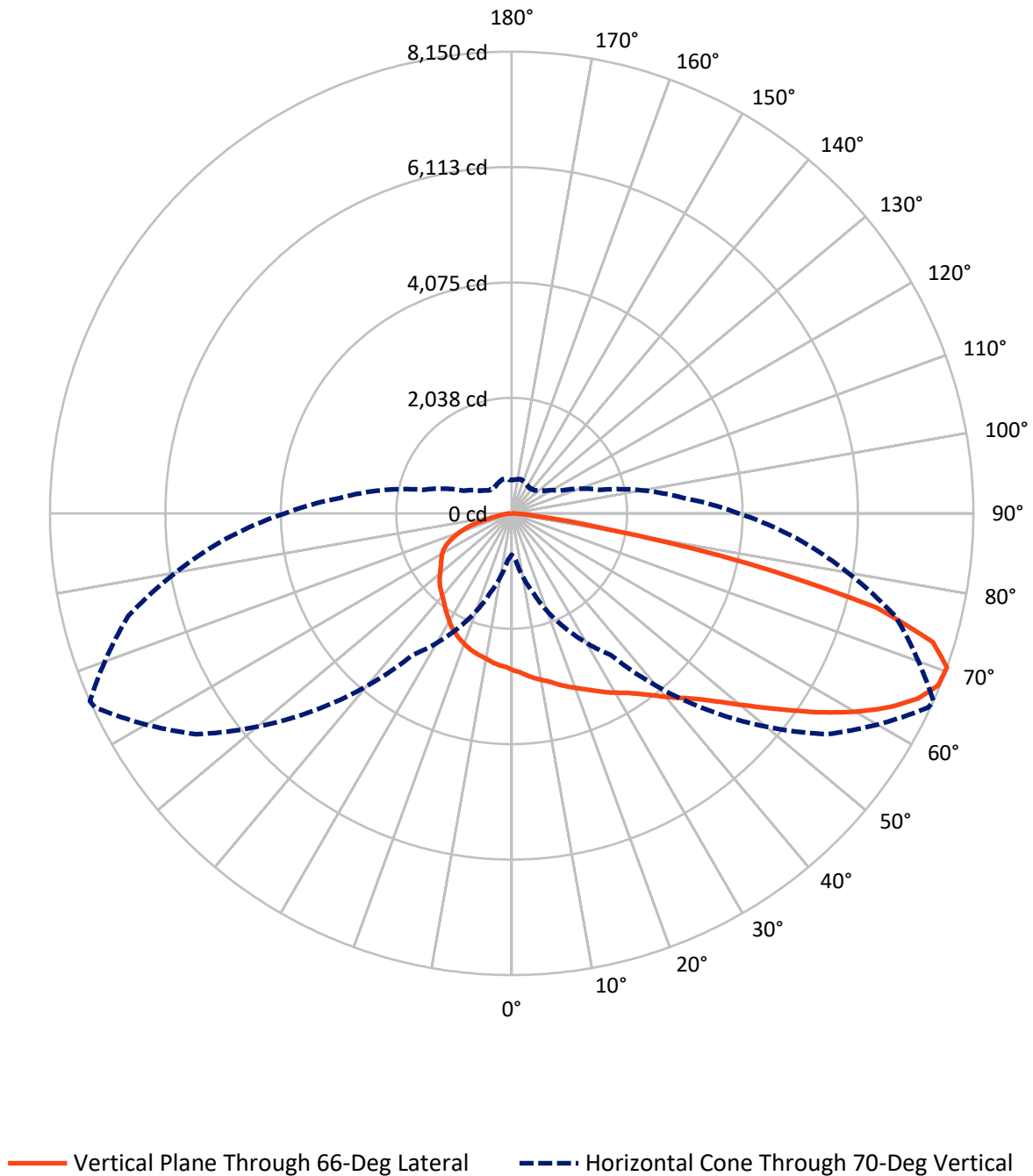
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.8 fc
Type III - Medium - N/A

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Luminous Intensity Polar Plot



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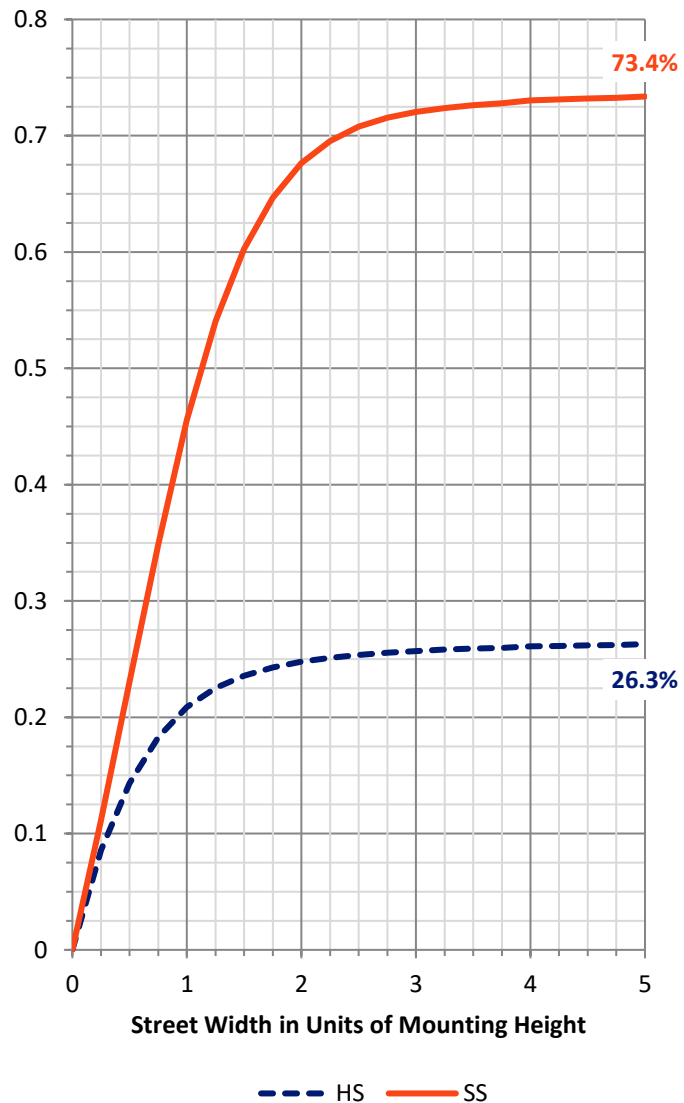
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4067.4	0.0	4067.4
	% Fixture	26.5	0.0	26.5
Street Side	Lumens	11282.6	0.0	11282.6
	% Fixture	73.5	0.0	73.5
Total	Lumens	15350.0	0.0	15350.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	266.2	1.7
10°-20°	798.5	5.2
20°-30°	1338.6	8.7
30°-40°	2004.3	13.1
40°-50°	2679.7	17.5
50°-60°	3128.6	20.4
60°-70°	3110.9	20.3
70°-80°	1841.7	12.0
80°-90°	181.5	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°	15350.0	100.0
0°-180°	15350.0	100.0

Coefficient of Utilization



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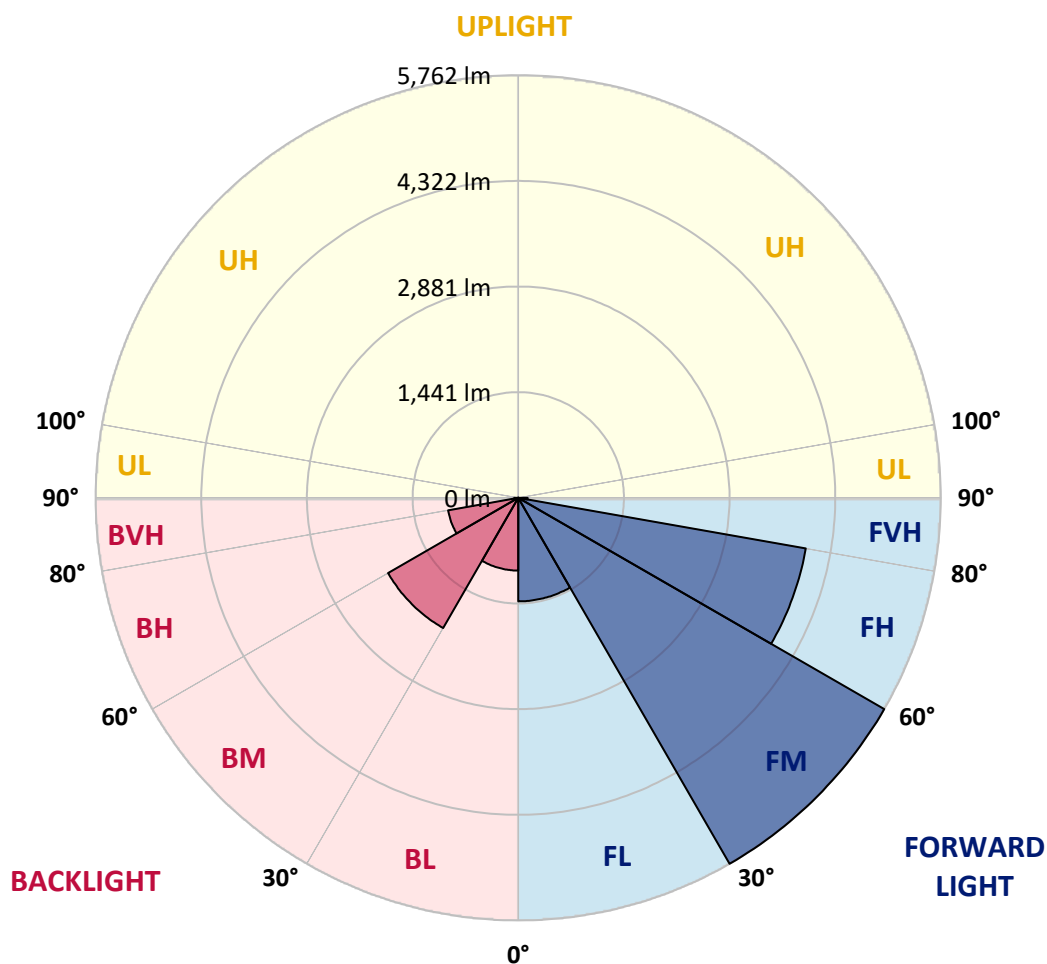
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1411.8	9.2			
FM	(30°-60°)	5762.2	37.5			
FH	(60°-80°)	3981.1	25.9			G2/5000
FVH	(80°-90°)	127.6	0.8			G2/225
BL	(0°-30°)	991.5	6.5	B2/1000		
BM	(30°-60°)	2050.4	13.4	B2/2500		
BH	(60°-80°)	971.6	6.3	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 III Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	2770.3	2770.3	2770.3	2770.3	2770.3	2770.3	2770.3	2770.3	2770.3	2770.3	2770.3
2.5°	2872.2	2867.6	2865.4	2856.3	2836.0	2845.0	2824.6	2811.1	2808.8	2777.1	2759.0
5°	2989.9	2987.6	2983.1	2969.5	2937.8	2942.3	2908.4	2883.5	2876.7	2826.9	2788.4
7.5°	3089.5	3084.9	3082.7	3064.6	3030.6	3028.3	2987.6	2951.4	2940.1	2872.2	2813.3
10°	3166.4	3159.6	3164.1	3146.0	3109.8	3103.0	3051.0	3003.4	2992.1	2906.1	2824.6
12.5°	3232.0	3227.5	3234.3	3218.5	3189.0	3182.3	3130.2	3069.1	3055.5	2955.9	2849.5
15°	3304.5	3288.6	3302.2	3295.4	3275.0	3272.8	3225.3	3157.4	3139.2	3019.3	2888.0
17.5°	3342.9	3333.9	3349.7	3352.0	3342.9	3358.8	3313.5	3232.0	3216.2	3078.1	2922.0
20°	3370.1	3356.5	3374.6	3388.2	3395.0	3426.7	3390.5	3311.3	3293.2	3134.7	2953.7
22.5°	3462.9	3433.5	3435.7	3444.8	3449.3	3494.6	3472.0	3395.0	3376.9	3204.9	2992.1
25°	3696.0	3637.2	3598.7	3571.5	3539.9	3578.3	3564.8	3490.1	3474.2	3288.6	3039.7
27.5°	4058.2	3983.5	3906.5	3827.3	3702.8	3687.0	3664.3	3596.4	3578.3	3372.4	3087.2
30°	4470.1	4395.4	4304.9	4178.1	3945.0	3822.8	3770.7	3696.0	3675.7	3447.1	3132.5
32.5°	4879.8	4814.1	4723.6	4569.7	4237.0	3988.0	3877.1	3800.1	3779.8	3528.5	3186.8
35°	5198.9	5158.1	5099.3	4906.9	4526.7	4182.6	4031.0	3938.2	3915.6	3657.6	3286.4
37.5°	5456.9	5427.5	5377.7	5176.3	4737.2	4377.3	4207.5	4101.2	4076.3	3797.9	3392.7
40°	5837.1	5760.2	5719.5	5427.5	4920.5	4553.8	4406.7	4295.8	4268.7	3947.3	3478.8
42.5°	6160.8	6104.2	6054.4	5651.6	5094.8	4705.5	4594.6	4492.7	4456.5	4094.4	3571.5
45°	6215.1	6237.8	6212.9	5762.5	5370.9	4854.9	4784.7	4719.1	4685.1	4293.6	3711.9
47.5°	6217.4	6217.4	6070.3	5825.8	5712.7	5022.3	4988.4	5011.0	4974.8	4547.0	3879.4
50°	6054.4	6083.9	6006.9	5841.7	5803.2	5189.8	5237.4	5359.6	5323.4	4816.4	4060.4
52.5°	5717.2	5814.5	5812.3	5816.8	5671.9	5332.4	5499.9	5778.3	5717.2	5119.7	4252.8
55°	5121.9	5316.6	5490.9	5640.2	5558.8	5418.4	5821.3	6224.2	6160.8	5459.2	4447.5
57.5°	4612.7	4737.2	4954.4	5377.7	5425.2	5493.1	6122.3	6690.4	6633.8	5834.9	4651.2
60°	4031.0	4203.0	4420.3	5022.3	5262.3	5590.4	6452.8	7145.4	7091.0	6215.1	4848.1
62.5°	3137.0	3358.8	3793.4	4476.9	5024.6	5651.6	6713.1	7546.0	7521.1	6575.0	5024.6
65°	2186.4	2383.3	2992.1	3806.9	4646.6	5624.4	6921.3	7903.6	7880.9	6869.2	5149.1
67.5°	1276.5	1505.1	2193.2	3064.6	3978.9	5436.5	6989.2	8114.1	8114.1	7048.0	5183.0
70°	728.8	835.2	1446.3	2233.9	3051.0	4918.2	6799.1	8111.8	8150.3	7007.3	5042.7
72.5°	509.3	556.8	973.2	1502.9	2068.7	3978.9	6301.1	7720.2	7772.3	6622.5	4562.9
75°	396.1	430.0	685.8	1025.3	1303.7	2702.4	5212.5	6509.4	6647.4	5644.8	3689.2
77.5°	301.0	325.9	400.6	640.5	835.2	1552.6	3440.3	4268.7	4277.7	3456.1	1978.2
80°	219.5	244.4	267.1	391.6	443.6	726.5	1299.2	1783.5	1733.7	1672.6	1070.6
82.5°	131.3	156.2	163.0	212.8	217.3	310.1	454.9	574.9	552.3	735.6	502.5
85°	56.6	79.2	83.7	97.3	92.8	126.7	181.1	151.6	135.8	156.2	108.6
87.5°	13.6	22.6	22.6	24.9	20.4	31.7	34.0	24.9	22.6	27.2	27.2
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°	2770.3	2770.3	2770.3	2770.3	2770.3	2770.3	2770.3	2770.3	2770.3	2770.3	2770.3
2.5°	2754.5	2747.7	2750.0	2711.5	2700.2	2688.8	2682.1	2677.5	2673.0	2679.8	2686.6
5°	2774.9	2759.0	2740.9	2684.3	2661.7	2636.8	2618.7	2602.8	2596.0	2596.0	2602.8
7.5°	2790.7	2763.5	2725.1	2650.4	2609.6	2575.7	2546.3	2525.9	2514.6	2514.6	2521.4
10°	2793.0	2754.5	2693.4	2602.8	2548.5	2498.7	2464.8	2442.1	2426.3	2426.3	2430.8
12.5°	2806.5	2754.5	2675.3	2566.6	2498.7	2437.6	2396.9	2362.9	2356.1	2356.1	2360.7
15°	2829.2	2765.8	2663.9	2534.9	2453.5	2383.3	2338.0	2301.8	2288.2	2297.3	2299.6
17.5°	2849.5	2772.6	2643.6	2494.2	2396.9	2319.9	2270.1	2238.4	2220.3	2240.7	2240.7
20°	2863.1	2772.6	2614.2	2442.1	2335.8	2249.8	2202.2	2163.8	2150.2	2175.1	2177.3
22.5°	2883.5	2770.3	2582.5	2390.1	2270.1	2179.6	2132.1	2102.6	2095.9	2123.0	2132.1
25°	2906.1	2774.9	2548.5	2331.2	2197.7	2109.4	2073.2	2059.6	2064.2	2098.1	2109.4
27.5°	2931.0	2783.9	2514.6	2265.6	2118.5	2039.3	2018.9	2025.7	2043.8	2086.8	2100.4
30°	2953.7	2786.2	2467.0	2188.6	2028.0	1953.3	1962.3	1991.7	2018.9	2061.9	2077.7
32.5°	2983.1	2788.4	2417.2	2104.9	1930.6	1876.3	1917.0	1964.6	1991.7	2032.5	2050.6
35°	3055.5	2826.9	2378.8	2023.4	1840.1	1810.7	1878.6	1939.7	1955.5	1991.7	2007.6
37.5°	3139.2	2890.3	2358.4	1939.7	1751.8	1745.0	1831.0	1892.2	1896.7	1919.3	1935.2
40°	3191.3	2917.4	2335.8	1869.5	1672.6	1677.1	1765.4	1812.9	1803.9	1819.7	1831.0
42.5°	3243.4	2926.5	2288.2	1810.7	1597.9	1602.4	1670.3	1704.3	1708.8	1742.8	1758.6
45°	3331.6	2951.4	2236.2	1756.4	1530.0	1514.2	1554.9	1600.2	1659.0	1724.7	1742.8
47.5°	3449.3	3003.4	2181.9	1690.7	1464.4	1412.3	1428.2	1507.4	1568.5	1629.6	1640.9
50°	3569.3	3055.5	2132.1	1611.5	1398.7	1303.7	1310.5	1382.9	1432.7	1480.2	1487.0
52.5°	3687.0	3100.8	2089.1	1536.8	1324.1	1174.7	1201.8	1276.5	1310.5	1333.1	1339.9
55°	3804.7	3139.2	2050.6	1473.4	1238.0	1072.8	1097.7	1167.9	1201.8	1213.1	1217.7
57.5°	3926.9	3184.5	2021.2	1419.1	1140.7	982.3	998.1	1047.9	1079.6	1093.2	1088.7
60°	4028.7	3223.0	2005.3	1362.5	1043.4	898.5	894.0	939.3	984.6	998.1	993.6
62.5°	4108.0	3247.9	1980.4	1290.1	957.4	814.8	792.2	851.0	898.5	907.6	914.4
65°	4151.0	3250.2	1919.3	1197.3	869.1	724.3	708.4	767.3	796.7	805.7	805.7
67.5°	4144.2	3213.9	1799.4	1072.8	787.6	642.8	629.2	665.4	708.4	715.2	708.4
70°	4003.8	3064.6	1607.0	941.5	690.3	570.4	545.5	581.7	622.4	597.5	586.2
72.5°	3605.5	2677.5	1324.1	796.7	581.7	479.8	468.5	504.7	507.0	511.5	500.2
75°	2845.0	1994.0	991.3	620.2	470.8	402.9	400.6	393.8	402.9	421.0	407.4
77.5°	1493.8	995.9	536.4	380.2	341.8	323.7	307.8	305.6	332.7	344.0	330.4
80°	810.3	559.0	307.8	228.6	208.2	210.5	230.9	226.3	255.8	262.5	251.2
82.5°	353.1	264.8	151.6	138.1	138.1	135.8	142.6	158.4	190.1	190.1	151.6
85°	77.0	65.6	58.8	67.9	77.0	77.0	77.0	77.0	54.3	29.4	20.4
87.5°	24.9	24.9	24.9	27.2	29.4	29.4	24.9	18.1	11.3	2.3	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)