

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: LUMARK

Report Number: P968847

Luminaire Tested: **NAV-SB5C-750-U-T2R**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968847
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-3)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5C-750-U-T2R
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 5000K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II
ROADWAY OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 41785.2 lumens
Efficiency: N/A
Efficacy: 167.5 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G4

Input Watts (W): 249.5
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



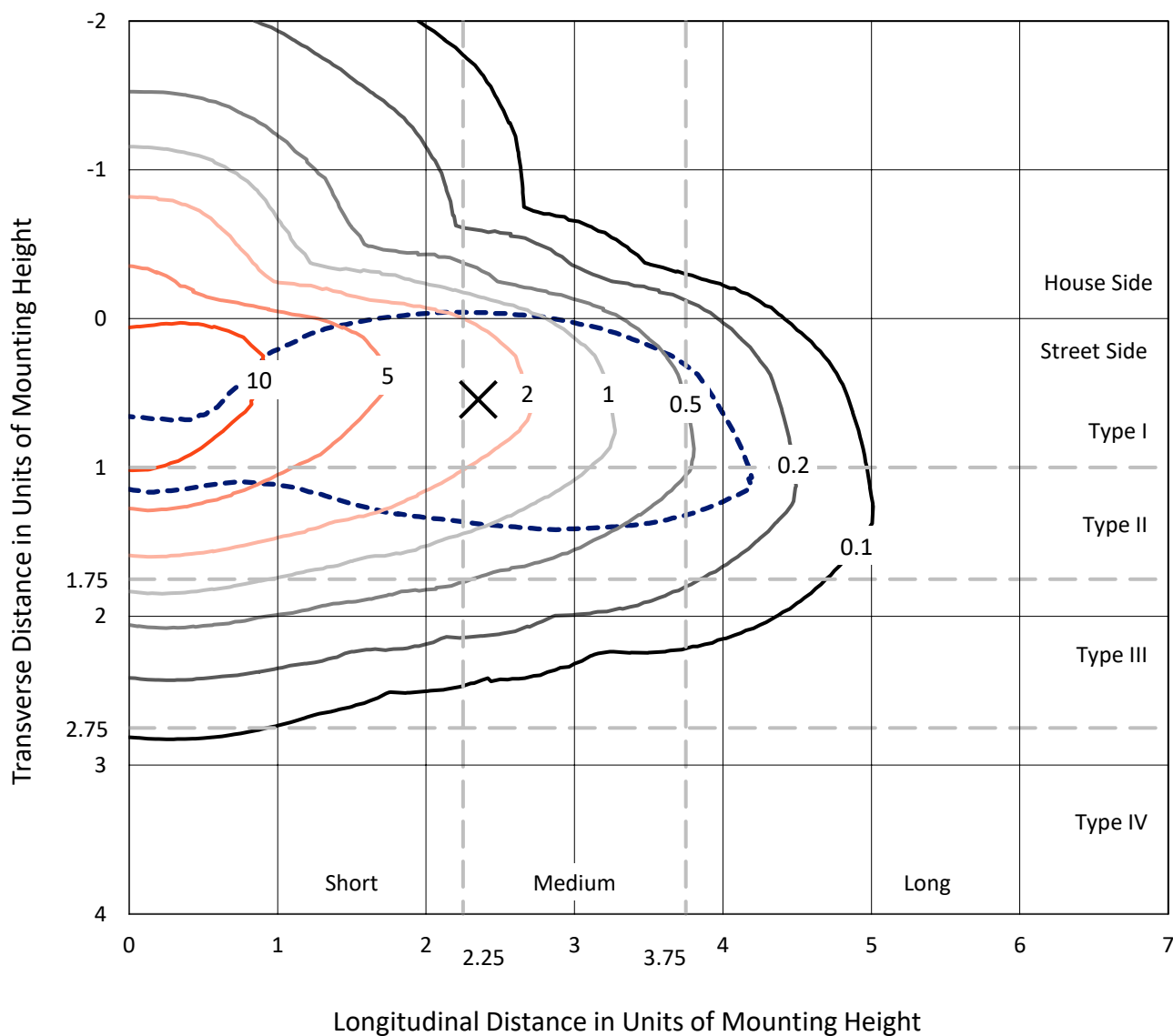
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

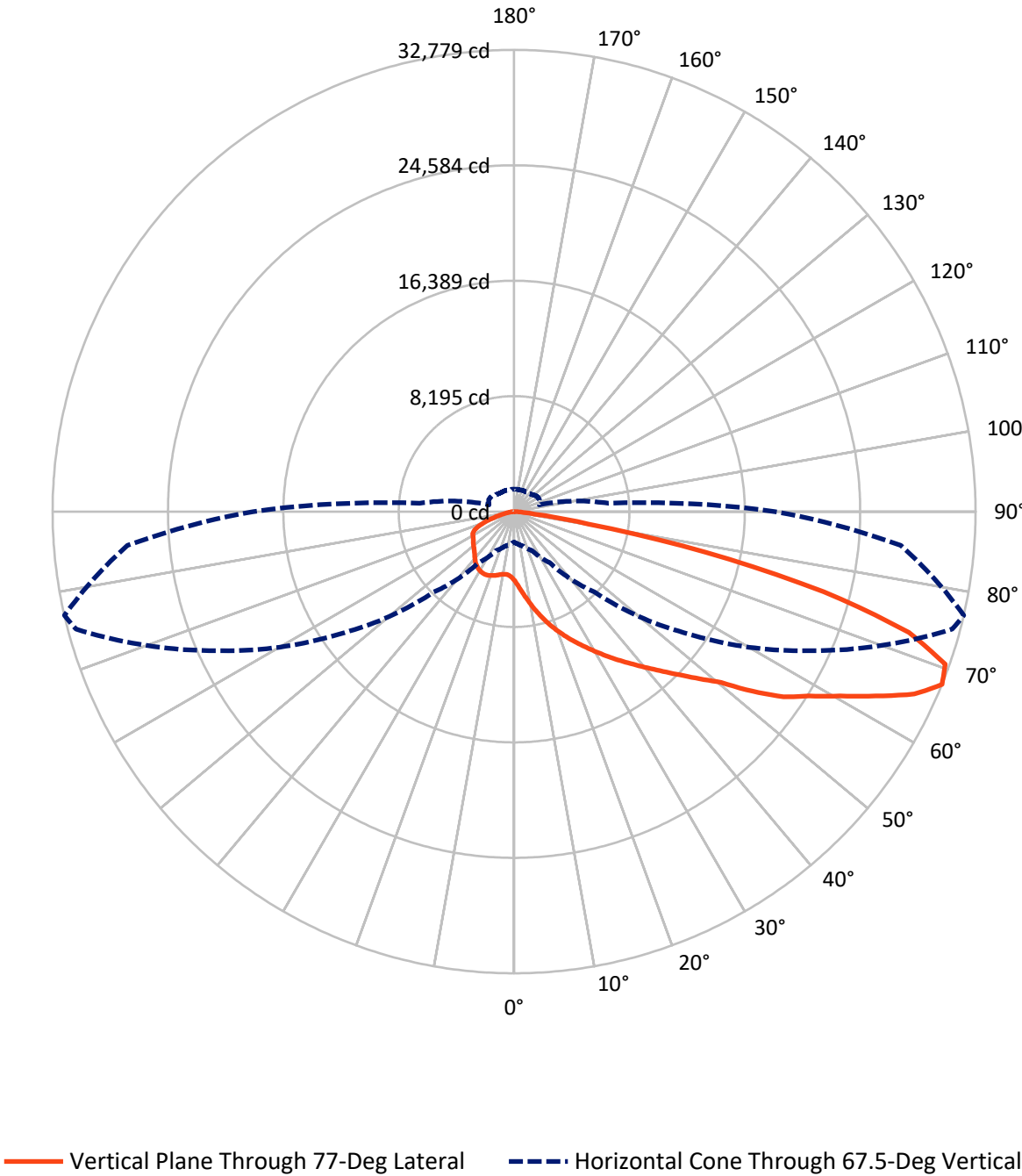
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 15.3 fc
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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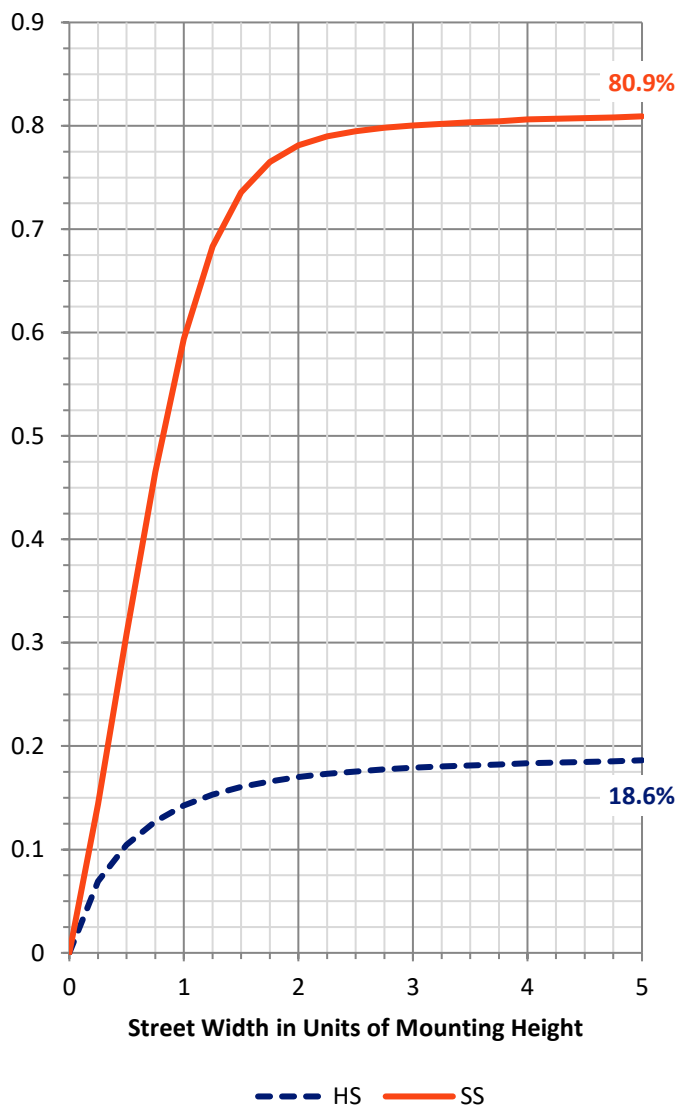
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7904.1	0.0	7904.1
	% Fixture	18.9	0.0	18.9
Street Side	Lumens	33881.1	0.0	33881.1
	% Fixture	81.1	0.0	81.1
Total	Lumens	41785.2	0.0	41785.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	525.5	1.3
10°-20°	1887.9	4.5
20°-30°	3564.6	8.5
30°-40°	5742.5	13.7
40°-50°	7854.7	18.8
50°-60°	8860.1	21.2
60°-70°	8269.8	19.8
70°-80°	4533.3	10.8
80°-90°	546.8	1.3
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°	41785.2	100.0
0°-180°	41785.2	100.0

Coefficient of Utilization



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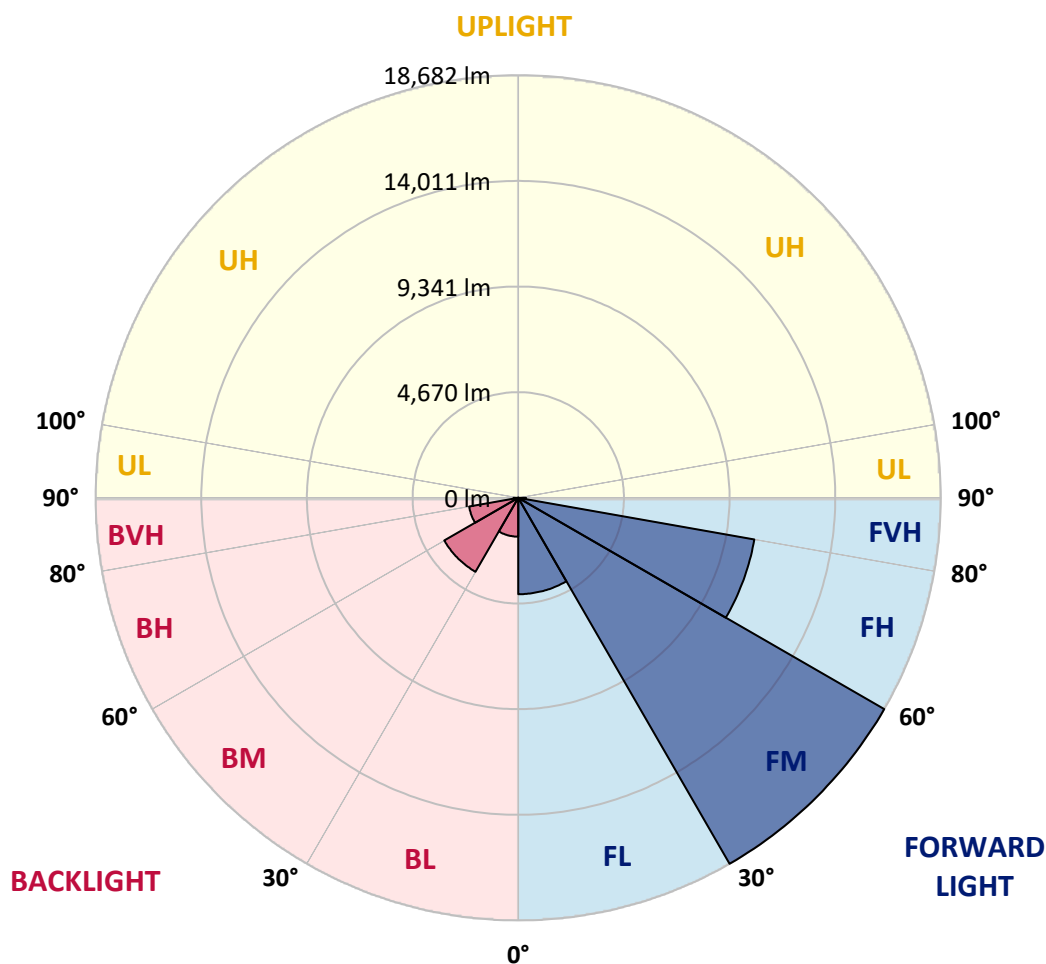
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	4259.5	10.2			
FM	(30°-60°)	18681.7	44.7			
FH	(60°-80°)	10598.0	25.4			G4/12000
FVH	(80°-90°)	342.0	0.8			G3/500
BL	(0°-30°)	1718.5	4.1	B3/2500		
BM	(30°-60°)	3775.6	9.0	B3/5000		
BH	(60°-80°)	2205.1	5.3	B3/2500		G3/2500
BVH	(80°-90°)	204.8	0.5			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	4902.7	4902.7	4902.7	4902.7	4902.7	4902.7	4902.7	4902.7	4902.7	4902.7	4902.7
2.5°	6138.6	6181.8	6127.9	6127.9	5946.6	5851.7	5670.6	5532.5	5284.5	5241.3	5077.4
5°	7255.9	7309.8	7234.3	7202.0	6988.4	6792.2	6488.0	6188.2	5746.0	5700.7	5314.6
7.5°	8120.9	8189.9	8123.0	8088.5	7898.6	7678.7	7322.8	6904.3	6281.0	6192.5	5633.9
10°	8826.2	8836.9	8815.4	8828.3	8679.5	8498.3	8133.8	7646.3	6867.7	6746.9	6020.0
12.5°	9225.2	9274.8	9318.0	9395.6	9369.7	9257.5	8929.7	8347.3	7488.9	7333.6	6440.6
15°	9412.9	9499.1	9596.2	9775.2	9919.7	9947.7	9697.5	9100.1	8120.9	7933.2	6865.4
17.5°	9479.7	9561.6	9714.8	9973.7	10284.2	10493.4	10381.3	9831.3	8746.3	8530.7	7311.9
20°	9818.4	9842.0	9934.8	10180.7	10517.2	10864.5	10948.5	10534.4	9365.4	9121.7	7773.6
22.5°	10543.0	10495.6	10521.5	10633.7	10875.2	11211.8	11403.6	11155.6	10001.6	9721.3	8239.5
25°	11740.1	11602.1	11464.1	11334.7	11457.6	11647.4	11865.3	11776.8	10668.2	10312.3	8709.6
27.5°	13252.1	13083.9	12779.8	12354.8	12206.0	12272.9	12370.0	12352.7	11285.0	10924.9	9195.0
30°	14740.4	14544.1	14181.8	13567.1	13174.5	12997.6	12924.3	12874.7	11955.8	11571.9	9684.6
32.5°	15928.9	15773.6	15417.7	14729.7	14160.3	13858.3	13614.6	13437.6	12656.8	12272.9	10202.2
35°	16968.6	16824.0	16416.4	15665.8	15046.7	14725.4	14406.2	14028.7	13385.9	12997.6	10758.7
37.5°	17917.6	17773.1	17214.5	16433.6	15810.3	15588.1	15303.4	14662.8	14117.1	13750.4	11347.6
40°	18517.2	18484.8	17962.9	17078.6	16431.5	16321.5	16226.6	15398.3	14928.1	14587.3	11994.7
42.5°	18670.4	18741.5	18327.4	17600.5	16983.6	16895.2	17117.4	16230.9	15838.3	15512.7	12728.0
45°	18301.6	18506.5	18234.6	17740.7	17376.2	17328.8	17906.9	17141.1	16845.6	16547.9	13612.4
47.5°	17367.6	17714.9	17602.7	17533.6	17481.9	17686.8	18601.4	18107.4	17986.6	17727.8	14621.8
50°	15482.4	16140.3	16336.6	16772.3	17272.7	17965.1	19233.3	19162.2	19319.6	19058.6	15851.2
52.5°	12223.3	13129.2	14268.1	15359.5	16629.9	17872.3	19927.8	20676.3	21340.6	21198.3	17805.5
55°	10090.1	10497.7	11373.5	13375.1	15383.2	17481.9	20240.6	21899.3	23346.6	23219.3	19287.2
57.5°	8450.8	8815.4	9354.6	11026.2	13498.0	16595.4	20434.7	22645.6	24720.5	24707.6	20749.7
60°	6692.9	7079.1	7631.2	8815.4	11295.8	15064.0	20391.6	23495.5	26474.1	26581.9	22533.4
62.5°	4708.5	5133.5	5746.0	6850.4	9046.1	13079.6	19511.6	24110.2	28538.4	28831.6	24679.5
65°	3095.2	3375.6	3837.2	4790.5	6740.4	10528.0	17831.3	24189.9	30747.0	31243.1	26694.2
67.5°	2169.8	2277.8	2549.5	3067.1	4443.3	8073.4	15154.5	23363.8	32220.2	32778.8	27567.7
70°	1693.2	1747.1	1885.2	2092.2	2791.1	5429.0	11612.9	21215.6	31905.3	32487.7	26655.3
72.5°	1462.4	1514.1	1565.9	1591.8	1872.2	3351.9	7866.4	17738.5	28939.5	29334.2	23176.2
75°	1326.6	1339.5	1382.6	1374.0	1427.9	2174.2	4540.3	12924.3	22833.2	22697.4	17108.8
77.5°	1115.1	1132.4	1203.6	1192.8	1268.2	1486.1	2357.5	8340.8	14802.9	13879.8	9522.9
80°	944.7	953.4	1031.0	1018.0	1102.2	1076.4	1203.6	4251.3	6278.8	5319.0	2745.8
82.5°	327.9	405.5	787.3	811.0	841.2	651.4	694.5	1734.2	1917.5	1468.8	575.9
85°	159.6	170.4	401.2	569.4	567.2	327.9	338.7	619.0	603.9	474.6	192.0
87.5°	25.9	32.4	47.5	222.1	176.9	86.3	116.4	120.7	125.2	107.8	43.2
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°	4902.7	4902.7	4902.7	4902.7	4902.7	4902.7	4902.7	4902.7	4902.7	4902.7	4902.7
2.5°	4956.6	4848.8	4622.3	4413.0	4249.1	4091.7	4003.2	3927.8	3884.6	3876.0	3876.0
5°	5090.4	4868.1	4456.2	4108.9	3882.5	3714.2	3625.8	3569.7	3541.7	3524.5	3522.3
7.5°	5282.3	4956.6	4370.0	3975.3	3738.0	3617.1	3571.9	3563.2	3561.1	3563.2	3569.7
10°	5547.6	5101.1	4361.3	3942.9	3744.4	3677.6	3675.4	3677.6	3686.2	3688.4	3690.5
12.5°	5834.5	5249.9	4395.8	3971.0	3826.4	3789.7	3783.3	3781.1	3787.6	3791.9	3794.0
15°	6147.2	5446.2	4454.0	4031.3	3916.9	3878.2	3871.7	3858.7	3856.6	3854.4	3852.3
17.5°	6468.7	5640.4	4518.7	4096.0	3975.3	3921.3	3897.6	3867.3	3843.6	3837.2	3843.6
20°	6794.3	5832.4	4564.0	4128.4	3979.6	3904.0	3856.6	3804.8	3763.8	3740.1	3748.7
22.5°	7141.6	6032.9	4592.1	4119.8	3940.7	3837.2	3750.9	3690.5	3628.0	3587.0	3589.1
25°	7480.2	6207.6	4590.0	4074.5	3865.2	3733.7	3623.7	3546.0	3459.7	3416.5	3416.5
27.5°	7805.9	6365.0	4536.0	3994.6	3757.3	3610.7	3479.2	3386.4	3302.2	3261.2	3259.1
30°	8142.4	6496.7	4451.9	3878.2	3630.1	3468.3	3323.9	3244.0	3168.5	3129.7	3127.6
32.5°	8476.8	6617.5	4333.3	3733.7	3483.5	3328.2	3185.8	3112.4	3067.1	3067.1	3069.3
35°	8830.5	6701.6	4175.8	3565.4	3328.2	3179.3	3067.1	3024.1	3019.6	2993.8	2987.4
37.5°	9203.6	6755.5	3983.9	3392.9	3175.0	3034.8	3000.3	2948.5	2905.4	2849.3	2840.7
40°	9596.2	6809.4	3753.0	3213.8	3013.2	2935.6	2920.4	2851.4	2728.5	2590.5	2571.0
42.5°	10072.9	6846.1	3513.6	3034.8	2842.8	2816.9	2838.5	2719.8	2523.7	2420.0	2422.3
45°	10625.0	6906.4	3293.6	2857.9	2668.1	2668.1	2758.7	2603.4	2441.7	2377.0	2387.7
47.5°	11341.1	7046.7	3088.7	2663.8	2506.3	2549.5	2581.9	2463.2	2372.7	2292.8	2290.7
50°	12376.5	7383.2	2877.4	2467.5	2383.4	2469.6	2424.4	2355.3	2249.7	2185.0	2178.5
52.5°	13662.0	7581.6	2689.7	2290.7	2277.8	2364.0	2299.3	2234.6	2154.8	2068.4	2051.2
55°	14537.7	7618.3	2532.3	2161.2	2206.5	2197.9	2174.2	2115.9	2072.9	1958.5	1960.6
57.5°	15517.0	7691.6	2402.8	2083.6	2161.2	2066.3	2057.7	2008.1	1952.0	1874.4	1848.5
60°	16688.1	7805.9	2290.7	2053.4	2122.5	1980.1	1936.9	1917.5	1861.4	1822.7	1833.4
62.5°	17965.1	7909.4	2176.4	2057.7	2077.2	1895.9	1831.3	1824.8	1790.3	1777.4	1777.4
65°	18836.4	7626.9	2034.0	2053.4	2005.9	1809.6	1727.7	1725.6	1697.5	1693.2	1691.0
67.5°	18532.3	6731.8	1842.0	1993.0	1932.6	1723.4	1632.8	1624.2	1587.5	1589.7	1589.7
70°	17009.6	5454.8	1576.8	1844.2	1842.0	1645.7	1533.6	1505.5	1455.9	1464.5	1473.2
72.5°	14153.7	4042.1	1220.8	1596.1	1697.5	1574.6	1419.2	1374.0	1311.4	1320.0	1317.8
75°	10221.7	2747.9	888.7	1214.3	1477.5	1490.5	1307.1	1229.5	1153.9	1166.9	1171.2
77.5°	5230.6	1557.3	653.5	836.9	1160.4	1354.5	1205.7	1102.2	1085.0	1205.7	1188.5
80°	1706.1	780.8	452.9	586.7	761.4	1108.6	1056.9	938.3	934.0	962.0	826.2
82.5°	509.0	330.0	291.2	386.1	420.6	849.8	912.4	709.6	610.4	642.8	664.3
85°	174.7	159.6	166.0	192.0	200.6	498.3	638.5	470.2	444.3	489.6	483.2
87.5°	41.0	56.1	47.5	43.2	43.2	120.7	248.0	196.3	271.7	181.2	174.7
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)