

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: P966851

Luminaire Tested: **NAV-SB4C-835-U-SL2**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P966851
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-10)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB4C-835-U-SL2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 80 CRI, 3500K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II SPILL
LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 28362.8 lumens
Efficiency: N/A
Efficacy: 141.3 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G4

Input Watts (W): 200.7
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

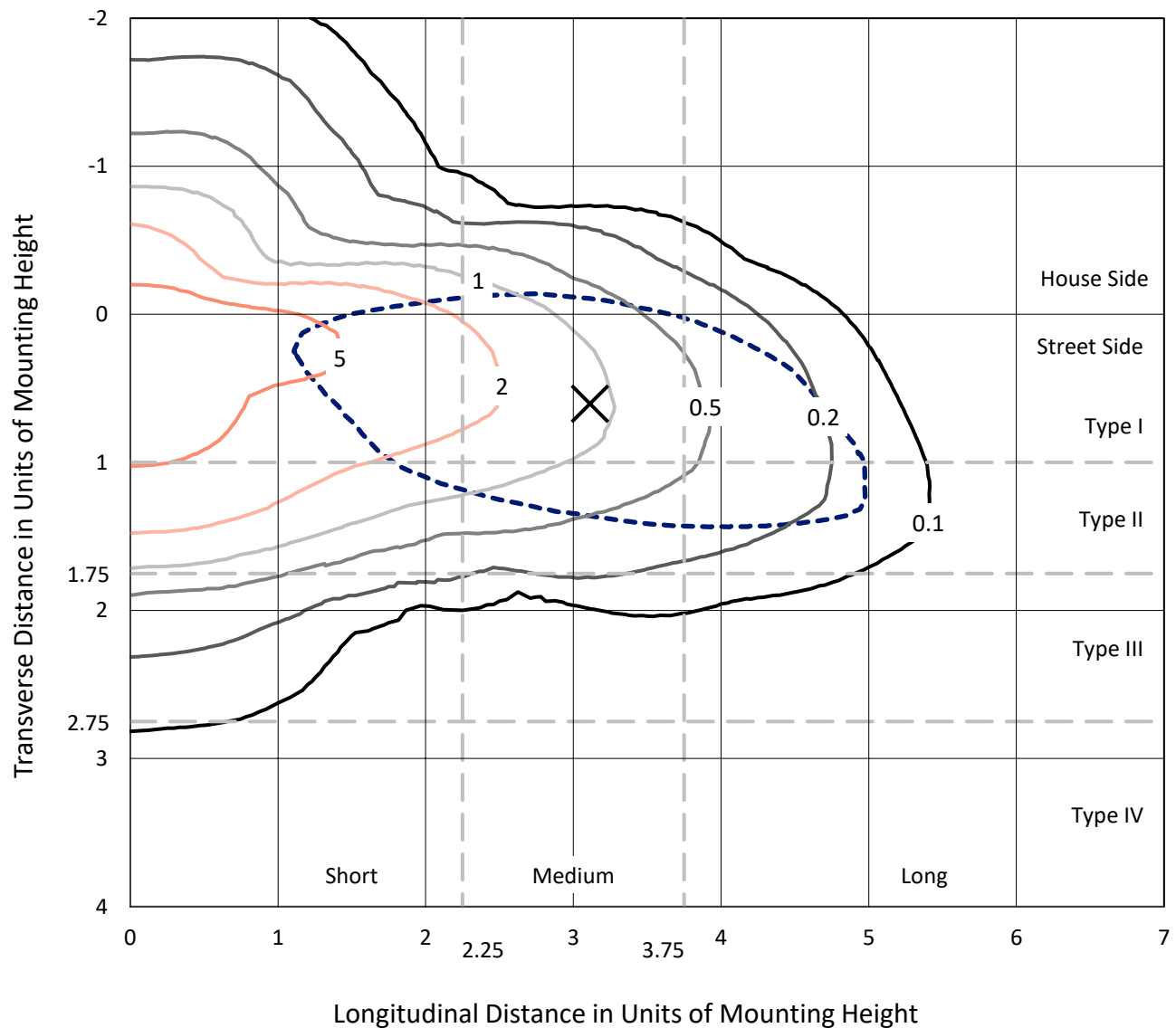


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Iso-Footcandle Lines of Horizontal Illumination

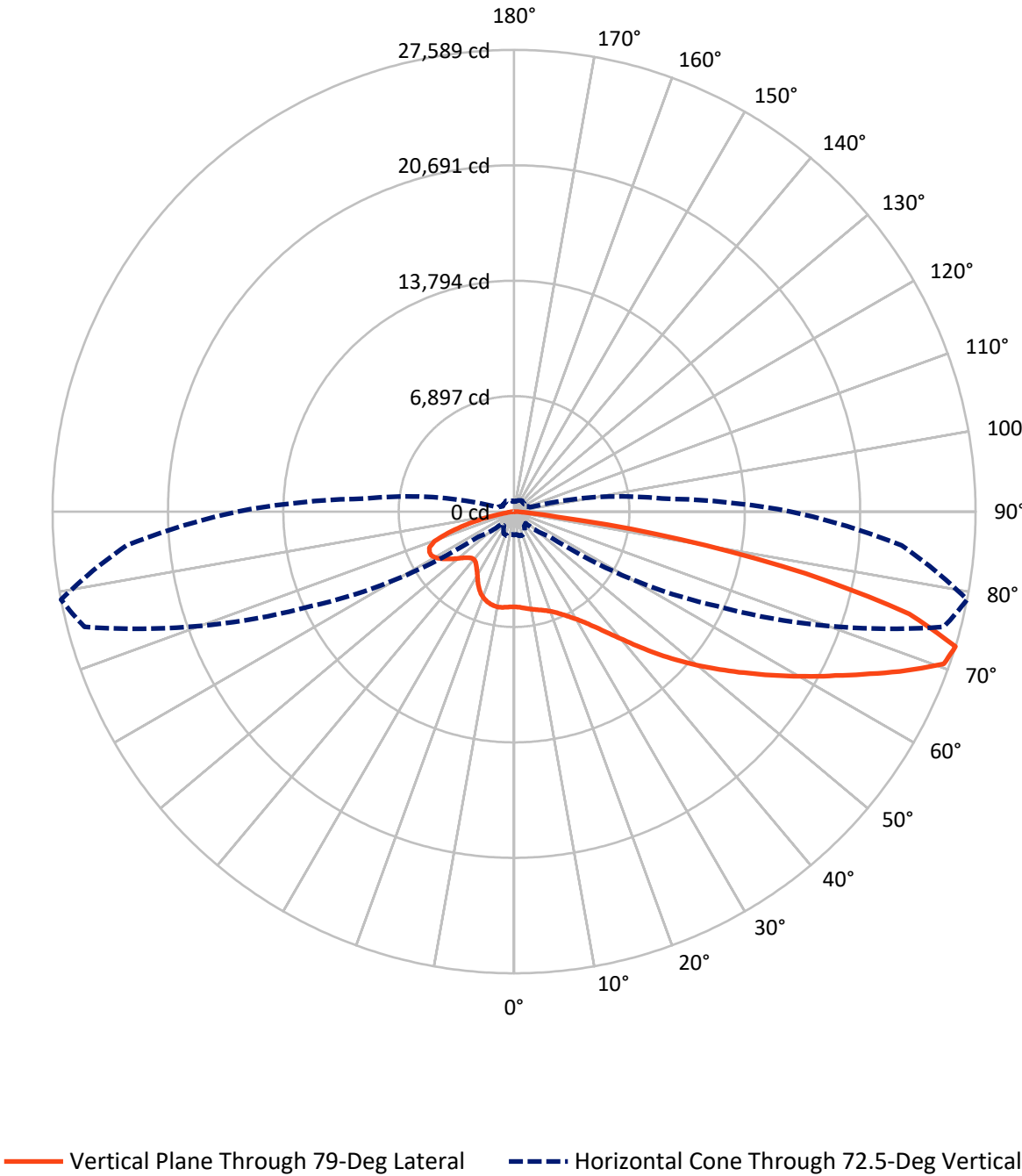
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.1 fc
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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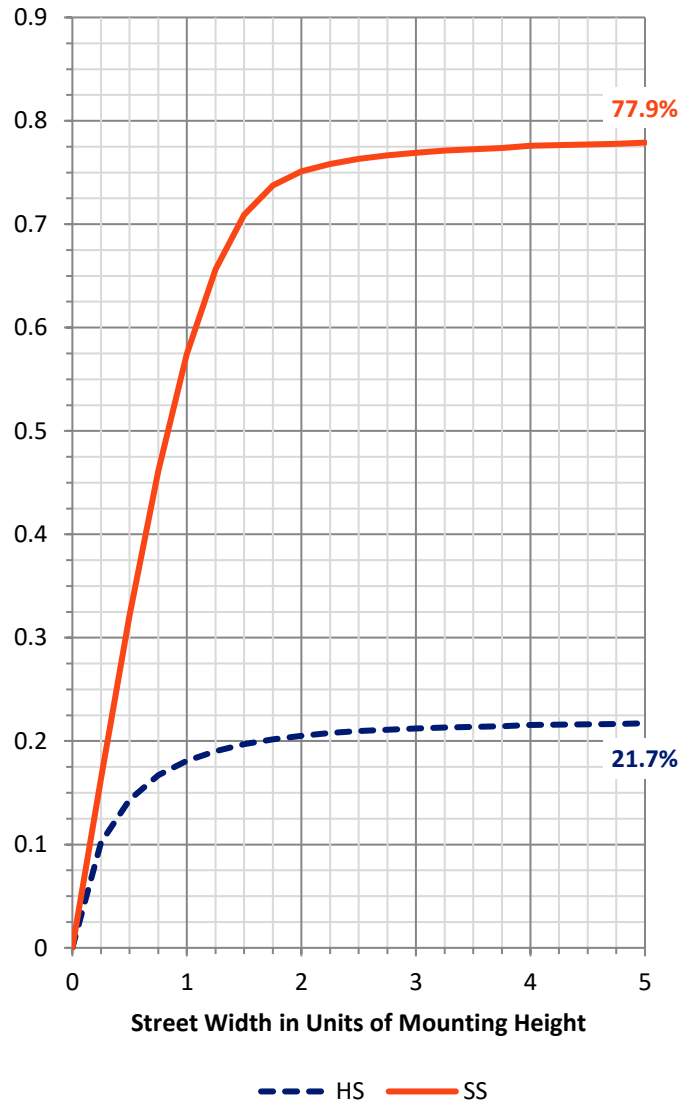
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6241.4	0.0	6241.4
	% Fixture	22.0	0.0	22.0
Street Side	Lumens	22121.4	0.0	22121.4
	% Fixture	78.0	0.0	78.0
Total	Lumens	28362.8	0.0	28362.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	516.8	1.8
10°-20°	1351.2	4.8
20°-30°	2180.3	7.7
30°-40°	3272.3	11.5
40°-50°	4641.9	16.4
50°-60°	5862.2	20.7
60°-70°	5953.8	21.0
70°-80°	4057.8	14.3
80°-90°	526.5	1.9
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°	28362.8	100.0
0°-180°	28362.8	100.0

Coefficient of Utilization



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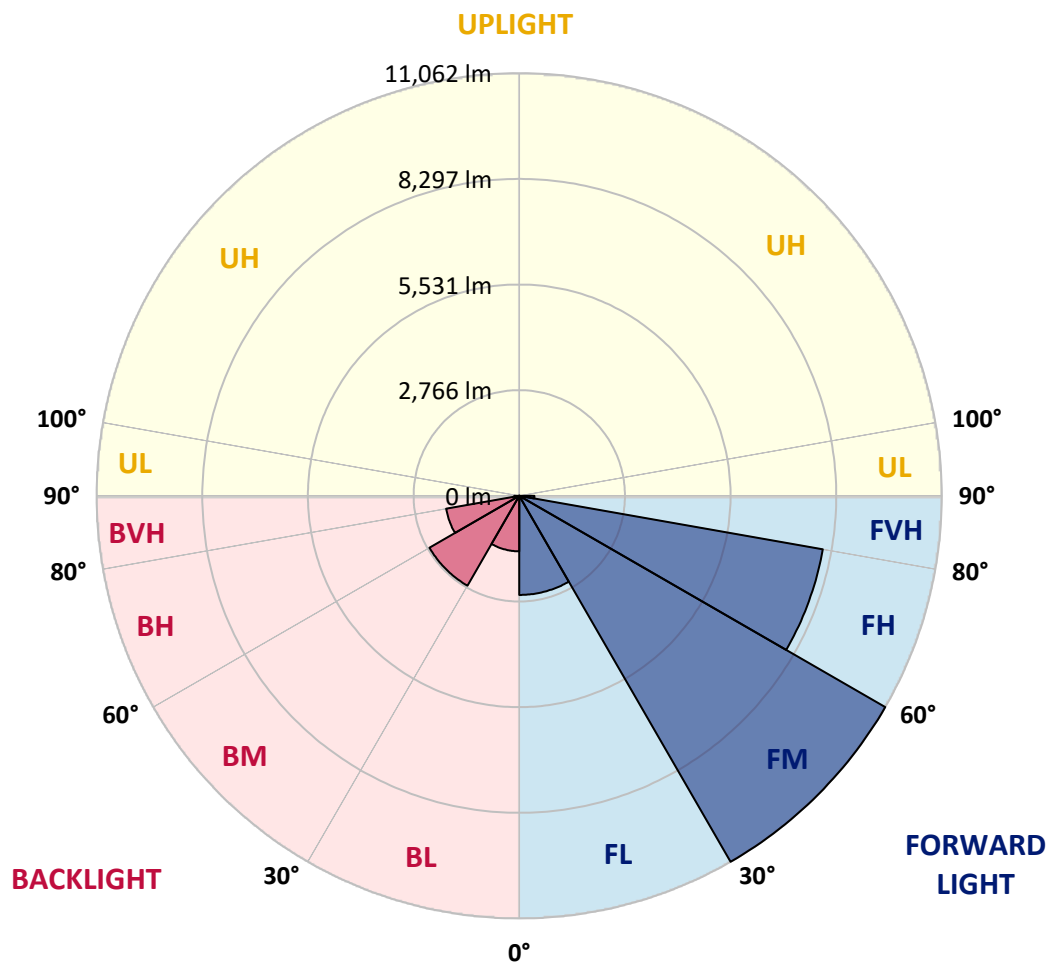
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2594.5	9.1			
FM	(30°-60°)	11062.1	39.0			
FH	(60°-80°)	8068.3	28.4			G4/12000
FVH	(80°-90°)	396.6	1.4			G3/500
BL	(0°-30°)	1453.8	5.1	B3/2500		
BM	(30°-60°)	2714.3	9.6	B3/5000		
BH	(60°-80°)	1943.4	6.9	B3/2500		G3/2500
BVH	(80°-90°)	129.9	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°	79°	85°
0°	5693.6	5693.6	5693.6	5693.6	5693.6	5693.6	5693.6	5693.6	5693.6	5693.6	5693.6
2.5°	5696.5	5669.6	5686.1	5680.0	5687.5	5696.5	5699.5	5704.0	5719.1	5717.6	5716.0
5°	5684.5	5657.6	5680.0	5672.6	5692.0	5713.0	5731.1	5747.6	5771.6	5782.0	5767.1
7.5°	5659.0	5641.1	5663.5	5686.1	5722.1	5753.5	5779.1	5816.6	5851.1	5857.1	5867.6
10°	5510.5	5497.0	5549.6	5608.1	5707.1	5792.6	5848.0	5891.6	5929.1	5935.1	5950.1
12.5°	5356.0	5339.5	5398.0	5477.5	5638.0	5792.6	5909.6	5966.6	5999.6	6019.1	6041.7
15°	5330.5	5317.0	5350.0	5419.0	5552.5	5752.1	5951.6	6056.6	6085.1	6107.7	6116.6
17.5°	5453.5	5428.0	5441.5	5465.5	5543.5	5714.6	5984.6	6158.6	6202.2	6226.2	6226.2
20°	5738.6	5702.6	5681.6	5633.5	5620.1	5720.5	5981.6	6281.7	6338.7	6368.6	6376.2
22.5°	6118.1	6094.1	6049.1	5927.6	5795.6	5794.1	6038.6	6439.2	6545.8	6574.2	6556.2
25°	6577.2	6541.2	6484.3	6319.1	6065.6	5939.6	6134.6	6640.3	6818.8	6826.3	6773.7
27.5°	7105.3	7051.3	6973.3	6755.8	6413.7	6167.6	6281.7	6871.3	7132.4	7129.3	7021.4
30°	7661.9	7608.0	7525.4	7261.3	6830.8	6475.2	6485.7	7120.4	7504.4	7487.9	7303.3
32.5°	8068.5	8028.0	8011.5	7807.4	7310.8	6838.3	6719.8	7396.4	7963.4	7948.5	7690.5
35°	8380.6	8328.0	8347.6	8244.1	7834.5	7244.8	7006.3	7724.9	8521.5	8520.1	8199.0
37.5°	8689.6	8643.1	8659.6	8590.6	8319.0	7761.0	7355.9	8127.0	9213.2	9246.2	8814.2
40°	8971.6	8922.1	8988.1	8923.6	8695.6	8310.1	7753.4	8581.6	10014.4	10077.4	9558.2
42.5°	9141.2	9102.2	9211.7	9213.2	9022.7	8773.6	8190.1	9082.7	10941.6	11082.6	10473.4
45°	9199.7	9186.3	9351.3	9385.7	9312.2	9042.1	8583.1	9628.7	11940.7	12192.8	11516.2
47.5°	9136.7	9111.2	9339.2	9466.8	9525.2	9168.2	8908.7	10219.9	12960.9	13330.0	12653.3
50°	8818.6	8769.1	9108.2	9376.7	9585.3	9250.7	9237.2	10902.5	14120.6	14524.1	13796.6
52.5°	8247.0	8209.5	8595.1	9061.7	9453.3	9291.2	9606.3	11648.2	15221.9	15743.9	14968.3
55°	7516.4	7466.9	7891.5	8500.5	9124.7	9277.7	9975.4	12482.3	16521.1	17050.7	16179.0
57.5°	6358.2	6259.2	6796.3	7516.4	8589.1	9261.2	10359.5	13312.0	17841.4	18475.9	17470.7
60°	4668.9	4521.9	5180.5	6034.1	7541.9	9100.7	10835.0	14242.2	19425.6	19997.2	18881.0
62.5°	2718.5	2633.0	3063.5	3860.3	5684.5	8155.5	11102.1	15323.9	20982.9	21583.0	20267.2
65°	2110.9	2086.9	2124.4	2185.9	3164.1	6106.1	10278.4	16378.6	22963.3	23383.3	21712.1
67.5°	1930.9	1912.9	1929.4	1813.8	1605.3	3401.2	8131.5	16645.6	25084.6	25339.7	22976.8
70°	1716.4	1695.4	1749.4	1650.4	1263.2	1546.8	5253.9	15676.5	26772.5	27251.1	23938.5
72.5°	1398.3	1374.2	1500.3	1455.3	1063.7	993.2	2639.0	13373.5	26595.5	27588.6	23249.8
75°	1074.2	1060.7	1210.7	1248.2	867.2	781.7	1266.3	9940.9	23404.3	24405.0	20037.7
77.5°	834.1	823.7	900.2	1036.7	699.2	606.1	778.7	6305.7	17637.3	17812.8	13808.6
80°	625.7	595.6	666.1	802.7	544.6	442.6	528.1	3677.2	11148.6	10105.9	6010.1
82.5°	391.5	376.6	435.1	535.6	384.1	304.5	343.6	2031.3	4467.9	2631.5	1159.7
85°	223.6	217.5	237.1	306.1	208.6	175.6	196.5	897.2	816.1	561.1	349.5
87.5°	90.0	87.0	108.0	136.5	76.5	64.5	69.0	216.1	180.0	166.6	115.5
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°	5693.6	5693.6	5693.6	5693.6	5693.6	5693.6	5693.6	5693.6	5693.6	5693.6	5693.6
2.5°	5710.1	5710.1	5689.1	5656.1	5618.5	5594.6	5555.5	5545.0	5504.6	5492.6	5512.0
5°	5779.1	5767.1	5702.6	5609.5	5482.0	5365.0	5236.0	5154.9	5041.0	5000.5	5030.4
7.5°	5866.1	5833.1	5722.1	5518.0	5251.0	4988.5	4715.4	4508.4	4310.3	4239.8	4248.8
10°	5945.6	5899.1	5710.1	5353.0	4890.9	4436.3	4001.3	3696.7	3465.6	3371.1	3392.1
12.5°	6025.2	5939.6	5630.5	5078.5	4379.3	3762.7	3299.1	3062.1	2919.5	2805.5	2843.0
15°	6100.1	5980.2	5507.5	4710.9	3818.2	3192.6	2850.5	2661.5	2547.4	2472.5	2485.9
17.5°	6187.1	6014.6	5323.0	4244.3	3284.1	2798.0	2518.9	2405.0	2382.4	2373.5	2379.4
20°	6308.7	6046.2	5079.9	3722.2	2891.0	2483.0	2338.9	2328.4	2327.0	2322.4	2337.4
22.5°	6439.2	6083.6	4758.9	3248.1	2556.5	2286.5	2260.9	2239.9	2226.4	2224.9	2241.4
25°	6593.7	6095.7	4356.8	2859.5	2271.4	2193.4	2163.4	2131.9	2122.9	2122.9	2131.9
27.5°	6743.8	6055.1	3888.7	2522.0	2110.9	2107.9	2068.9	2058.4	2056.9	2061.4	2073.4
30°	6893.7	5978.6	3423.6	2209.9	2017.9	2017.9	2004.4	2011.9	2017.9	2032.9	2043.3
32.5°	7096.3	5897.6	3035.0	1978.9	1936.8	1921.9	1935.4	1950.4	1956.3	1975.9	1992.4
35°	7393.3	5840.6	2726.0	1852.9	1852.9	1833.3	1840.8	1837.8	1824.3	1815.4	1836.4
37.5°	7786.4	5837.6	2471.0	1794.4	1782.4	1779.3	1780.8	1761.4	1708.8	1645.8	1647.3
40°	8259.0	5918.6	2274.4	1753.8	1744.9	1762.8	1753.8	1701.3	1557.3	1447.8	1444.7
42.5°	8893.6	6149.7	2148.4	1704.3	1731.3	1753.8	1717.8	1536.3	1438.8	1365.3	1362.2
45°	9640.7	6524.7	2083.9	1651.8	1705.8	1732.9	1558.8	1479.3	1401.3	1312.7	1306.8
47.5°	10487.0	6997.3	2068.9	1602.3	1648.8	1665.3	1491.3	1455.3	1366.7	1270.7	1263.2
50°	11408.1	7556.9	2109.3	1543.8	1566.3	1509.3	1468.7	1435.7	1344.3	1249.8	1239.2
52.5°	12360.8	8173.6	2190.4	1464.3	1483.8	1420.8	1459.8	1431.3	1330.8	1203.2	1194.2
55°	13297.0	8794.6	2268.4	1371.2	1399.7	1341.2	1434.3	1413.3	1269.3	1125.2	1117.7
57.5°	14248.1	9412.8	2344.9	1288.7	1318.8	1264.7	1393.8	1365.3	1200.2	1053.2	1050.2
60°	15236.8	10012.8	2381.0	1209.2	1230.2	1194.2	1332.3	1282.8	1122.2	979.7	975.2
62.5°	16162.5	10512.5	2322.4	1129.8	1143.2	1128.2	1251.2	1185.2	1044.2	897.2	895.6
65°	17091.2	10809.5	2142.4	1051.6	1054.7	1047.2	1137.2	1080.2	952.6	825.1	816.1
67.5°	17932.8	10976.0	1855.9	967.7	960.2	957.1	1030.7	966.2	864.2	753.2	744.2
70°	18111.3	10553.0	1417.8	868.7	868.7	861.2	913.7	847.7	766.6	676.6	673.6
72.5°	16542.1	8877.1	1006.7	756.1	768.1	753.2	796.6	741.2	667.6	607.6	589.6
75°	13338.9	6509.7	732.2	640.6	661.6	636.1	676.6	637.7	574.6	573.1	516.1
77.5°	9165.2	4025.3	531.1	528.1	543.1	510.1	556.6	535.6	478.6	453.0	424.6
80°	3911.2	1605.3	387.0	408.1	408.1	378.0	432.0	438.1	388.6	376.6	376.6
82.5°	778.7	456.1	271.5	280.5	264.0	255.0	306.1	339.1	468.1	520.6	522.1
85°	234.0	168.0	163.5	153.0	135.0	136.5	180.0	340.6	420.0	240.1	207.0
87.5°	64.5	42.0	43.5	34.5	28.5	37.5	61.5	258.1	141.0	60.0	51.0
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)