

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: P968289

Luminaire Tested: **NAV-SB5B-740-U-T2R**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968289
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-SB5B-740-U-T2R
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 4000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II
ROADWAY OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 31418.3 lumens
Efficiency: N/A
Efficacy: 172.0 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): 182.7
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

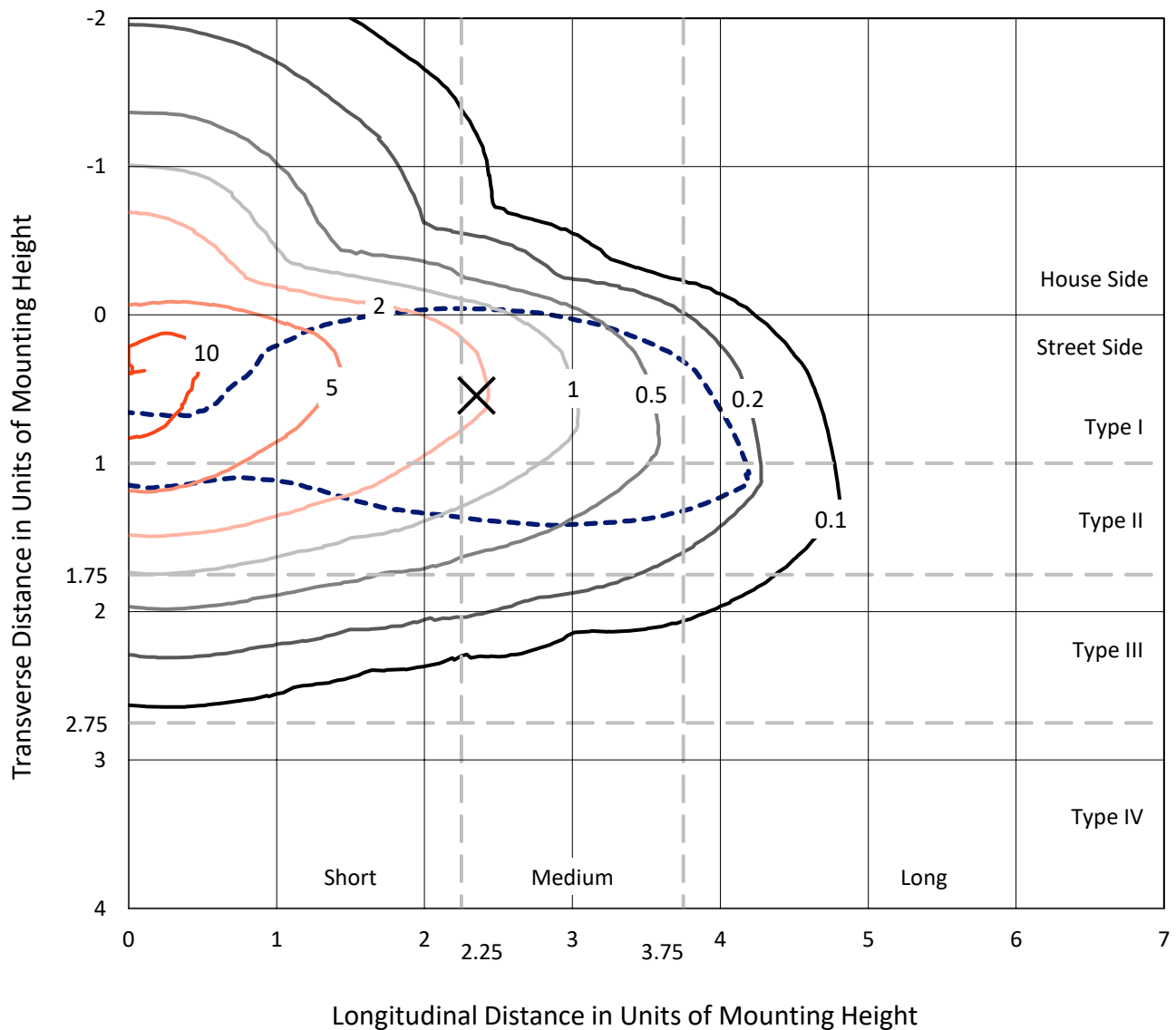


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Iso-Footcandle Lines of Horizontal Illumination

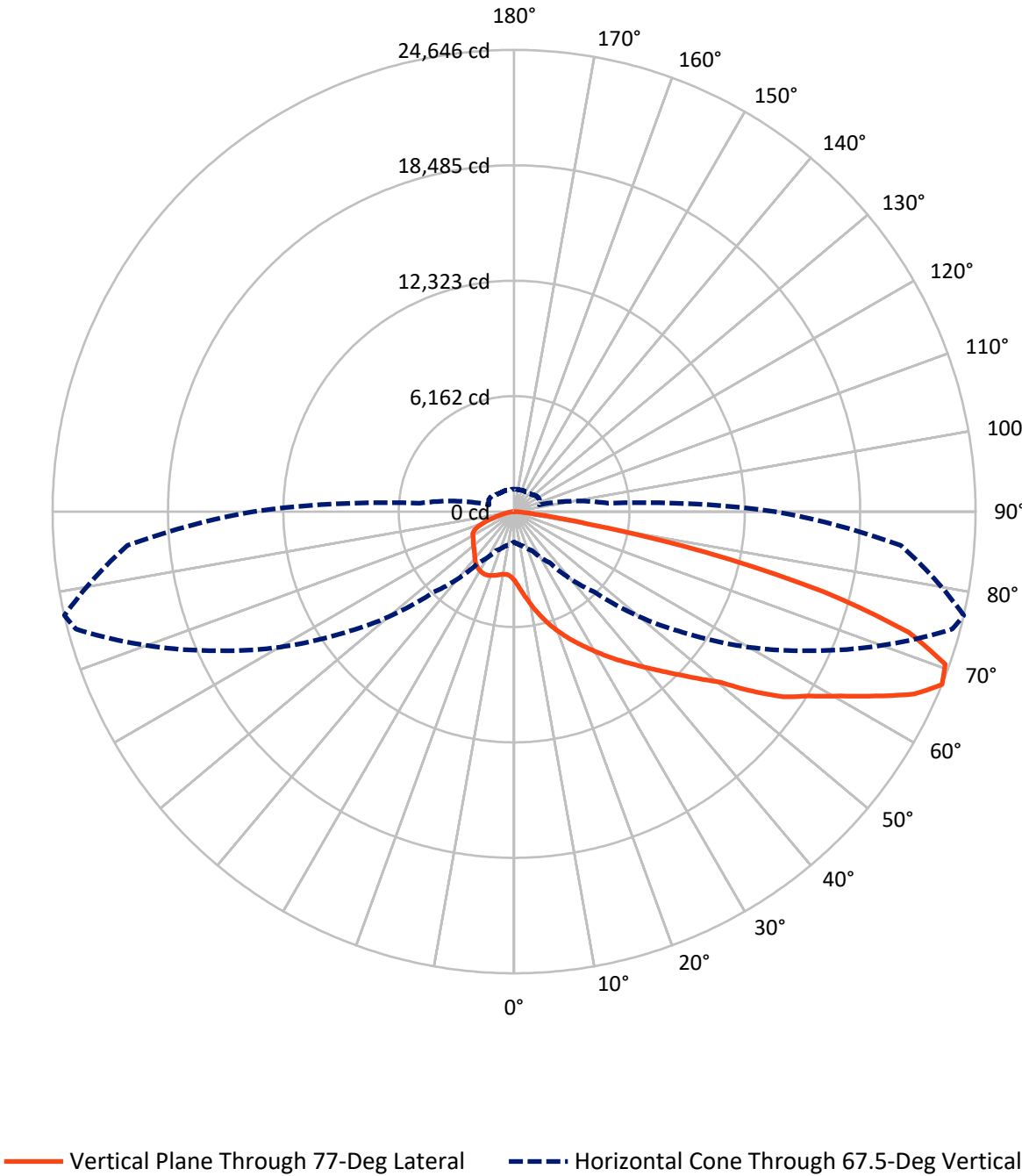
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 11.5 fc
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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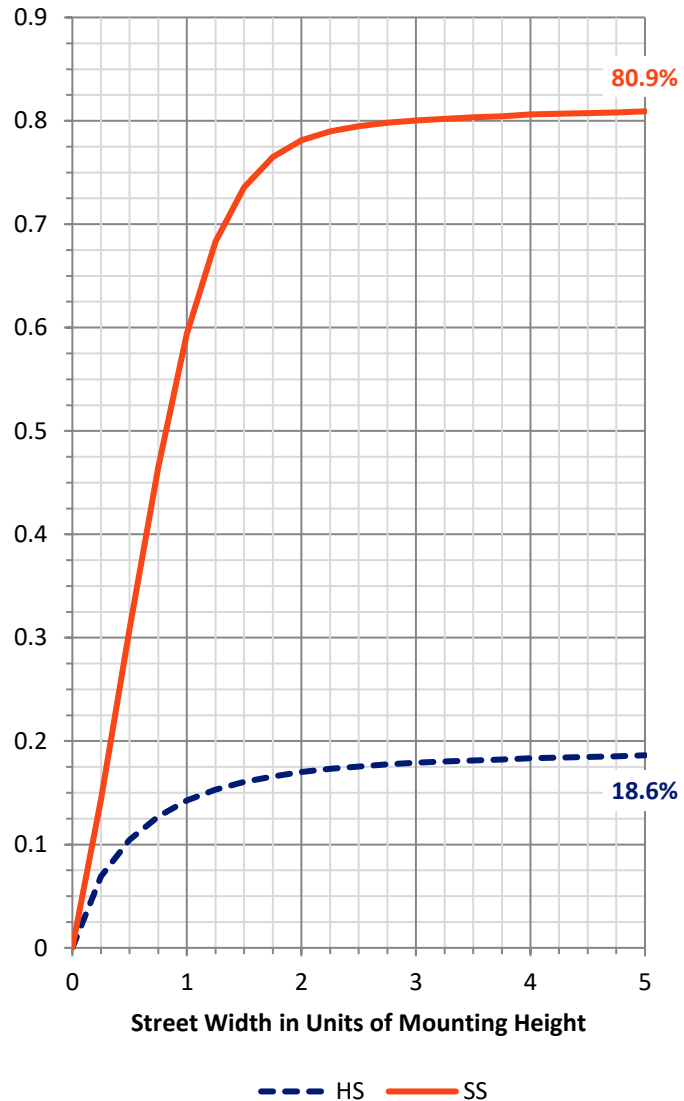
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5943.1	0.0	5943.1
	% Fixture	18.9	0.0	18.9
Street Side	Lumens	25475.2	0.0	25475.2
	% Fixture	81.1	0.0	81.1
Total	Lumens	31418.3	0.0	31418.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	395.1	1.3
10°-20°	1419.5	4.5
20°-30°	2680.2	8.5
30°-40°	4317.8	13.7
40°-50°	5905.9	18.8
50°-60°	6661.9	21.2
60°-70°	6218.1	19.8
70°-80°	3408.6	10.8
80°-90°	411.1	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°	31418.3	100.0
0°-180°	31418.3	100.0

Coefficient of Utilization



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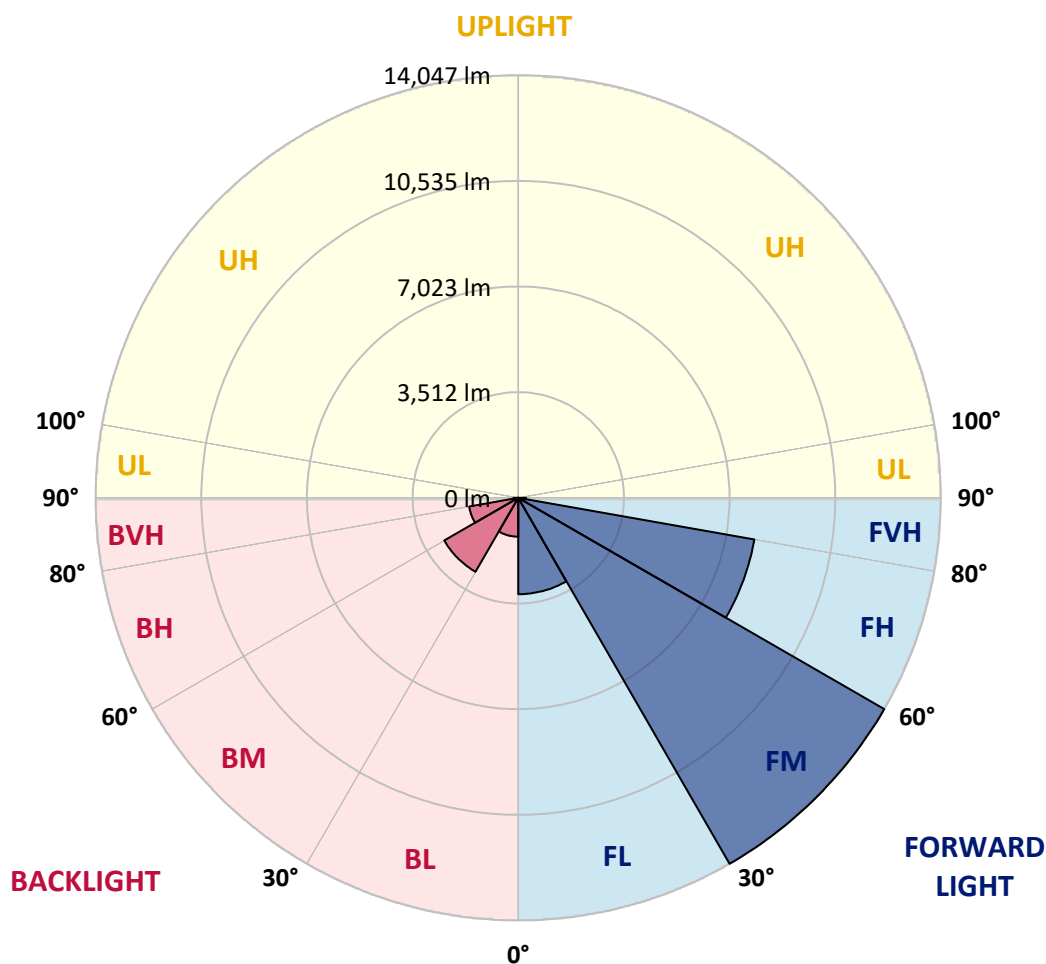
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3202.7	10.2			
FM	(30°-60°)	14046.8	44.7			
FH	(60°-80°)	7968.6	25.4			G4/12000
FVH	(80°-90°)	257.1	0.8			G3/500
BL	(0°-30°)	1292.2	4.1	B3/2500		
BM	(30°-60°)	2838.9	9.0	B3/5000		
BH	(60°-80°)	1658.0	5.3	B3/2500		G3/2500
BVH	(80°-90°)	154.0	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°	3686.3	3686.3	3686.3	3686.3	3686.3	3686.3	3686.3	3686.3	3686.3	3686.3	3686.3
2.5°	4615.7	4648.1	4607.5	4607.5	4471.3	4399.9	4263.7	4159.9	3973.4	3940.9	3817.7
5°	5455.8	5496.3	5439.5	5415.2	5254.7	5107.1	4878.4	4652.9	4320.5	4286.4	3996.1
7.5°	6106.0	6158.0	6107.7	6081.7	5939.1	5773.6	5506.0	5191.4	4722.7	4656.2	4236.1
10°	6636.4	6644.5	6628.3	6638.0	6526.1	6389.8	6115.8	5749.2	5163.8	5072.9	4526.4
12.5°	6936.4	6973.7	7006.2	7064.5	7045.1	6960.8	6714.3	6276.4	5630.8	5514.1	4842.7
15°	7077.5	7142.4	7215.4	7350.0	7458.6	7479.7	7291.6	6842.4	6106.0	5965.0	5162.2
17.5°	7127.7	7189.5	7304.6	7499.2	7732.7	7890.0	7805.7	7392.2	6576.4	6414.2	5497.9
20°	7382.5	7400.3	7470.0	7654.9	7907.9	8168.9	8232.3	7920.9	7041.9	6858.6	5845.0
22.5°	7927.4	7891.7	7911.2	7995.4	8177.1	8430.1	8574.4	8387.9	7520.2	7309.5	6195.3
25°	8827.4	8723.7	8619.8	8522.6	8615.0	8757.7	8921.5	8855.0	8021.4	7753.8	6548.8
27.5°	9964.3	9837.8	9609.2	9289.7	9177.7	9228.0	9301.0	9288.0	8485.3	8214.3	6913.7
30°	11083.3	10935.7	10663.3	10201.1	9905.9	9773.0	9717.8	9680.5	8989.7	8700.9	7281.9
32.5°	11976.9	11860.2	11592.6	11075.2	10647.1	10420.0	10236.8	10103.8	9516.7	9228.0	7671.1
35°	12758.7	12650.0	12343.5	11779.1	11313.6	11072.0	10832.0	10548.2	10064.9	9773.0	8089.5
37.5°	13472.3	13363.6	12943.6	12356.5	11887.7	11720.7	11506.6	11025.0	10614.7	10339.0	8532.3
40°	13923.1	13898.8	13506.3	12841.4	12354.8	12272.1	12200.8	11578.0	11224.5	10968.2	9018.8
42.5°	14038.3	14091.8	13780.4	13233.9	12770.1	12703.5	12870.6	12204.1	11908.9	11664.0	9570.2
45°	13760.9	13915.0	13710.7	13339.2	13065.2	13029.5	13464.2	12888.5	12666.2	12442.4	10235.1
47.5°	13058.7	13319.8	13235.5	13183.6	13144.7	13298.8	13986.3	13615.0	13524.2	13329.5	10994.2
50°	11641.2	12135.9	12283.5	12611.1	12987.4	13508.0	14461.5	14408.0	14526.4	14330.2	11918.6
52.5°	9190.8	9871.9	10728.2	11548.8	12504.1	13438.2	14983.8	15546.6	16046.1	15939.1	13387.9
55°	7586.7	7893.3	8551.8	10056.8	11566.6	13144.7	15218.9	16466.1	17554.4	17458.6	14502.1
57.5°	6354.2	6628.3	7033.8	8290.6	10149.2	12478.1	15364.9	17027.2	18587.5	18577.7	15601.7
60°	5032.4	5322.7	5738.0	6628.3	8493.4	11326.7	15332.5	17666.2	19905.9	19987.0	16942.9
62.5°	3540.4	3859.8	4320.5	5150.8	6801.8	9834.6	14670.7	18128.5	21458.0	21678.5	18556.6
65°	2327.3	2538.1	2885.2	3602.1	5068.1	7916.0	13407.4	18188.4	23118.7	23491.7	20071.3
67.5°	1631.5	1712.6	1917.0	2306.1	3340.9	6070.4	11394.7	17567.3	24226.4	24646.4	20728.2
70°	1273.2	1313.6	1417.5	1573.2	2098.6	4082.1	8731.8	15952.0	23989.6	24427.5	20042.1
72.5°	1099.6	1138.5	1177.4	1196.9	1407.7	2520.3	5914.7	13337.6	21759.6	22056.5	17426.2
75°	997.4	1007.2	1039.6	1033.1	1073.6	1634.8	3413.9	9717.8	17168.3	17066.1	12864.1
77.5°	838.4	851.5	905.0	896.9	953.7	1117.5	1772.6	6271.5	11130.4	10436.2	7160.2
80°	710.3	716.9	775.2	765.5	828.7	809.2	905.0	3196.6	4721.0	3999.3	2064.6
82.5°	246.5	304.9	591.9	609.8	632.5	489.7	522.2	1303.9	1441.8	1104.4	433.1
85°	120.0	128.1	301.7	428.1	426.5	246.5	254.6	465.5	454.1	356.8	144.3
87.5°	19.5	24.3	35.7	167.1	132.9	64.9	87.5	90.8	94.1	81.1	32.4
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°	3686.3	3686.3	3686.3	3686.3	3686.3	3686.3	3686.3	3686.3	3686.3	3686.3	3686.3
2.5°	3726.9	3645.8	3475.5	3318.2	3194.9	3076.5	3010.0	2953.3	2920.8	2914.4	2914.4
5°	3827.5	3660.4	3350.6	3089.6	2919.2	2792.7	2726.2	2684.1	2663.0	2650.0	2648.4
7.5°	3971.8	3726.9	3285.7	2989.0	2810.5	2719.7	2685.7	2679.2	2677.6	2679.2	2684.1
10°	4171.2	3835.6	3279.3	2964.6	2815.5	2765.1	2763.5	2765.1	2771.6	2773.2	2774.9
12.5°	4387.0	3947.5	3305.2	2985.7	2877.1	2849.5	2844.6	2843.0	2847.9	2851.1	2852.8
15°	4622.1	4095.1	3349.0	3031.1	2945.1	2916.0	2911.1	2901.4	2899.7	2898.2	2896.5
17.5°	4863.7	4241.0	3397.7	3079.8	2989.0	2948.4	2930.6	2907.9	2890.1	2885.2	2890.1
20°	5108.7	4385.4	3431.7	3104.1	2992.2	2935.5	2899.7	2860.9	2830.0	2812.2	2818.6
22.5°	5369.8	4536.1	3452.8	3097.7	2963.1	2885.2	2820.3	2774.9	2727.8	2697.1	2698.6
25°	5624.4	4667.5	3451.2	3063.6	2906.3	2807.4	2724.7	2666.2	2601.3	2569.0	2569.0
27.5°	5869.3	4785.9	3410.7	3003.6	2825.2	2714.9	2616.0	2546.2	2483.0	2452.1	2450.6
30°	6122.3	4884.8	3347.3	2916.0	2729.5	2607.8	2499.2	2439.2	2382.4	2353.2	2351.6
32.5°	6373.7	4975.7	3258.2	2807.4	2619.2	2502.4	2395.4	2340.3	2306.1	2306.1	2307.8
35°	6639.6	5038.9	3139.8	2680.8	2502.4	2390.5	2306.1	2273.8	2270.5	2251.0	2246.2
37.5°	6920.2	5079.5	2995.5	2551.1	2387.3	2281.9	2255.9	2217.0	2184.6	2142.4	2135.9
40°	7215.4	5120.0	2821.9	2416.4	2265.7	2207.2	2196.0	2144.0	2051.5	1947.8	1933.2
42.5°	7573.8	5147.5	2641.9	2281.9	2137.5	2118.1	2134.3	2045.1	1897.5	1819.7	1821.3
45°	7989.0	5193.0	2476.5	2148.9	2006.1	2006.1	2074.3	1957.5	1835.9	1787.2	1795.3
47.5°	8527.4	5298.4	2322.4	2003.0	1884.6	1917.0	1941.2	1852.1	1784.0	1723.9	1722.3
50°	9305.9	5551.4	2163.5	1855.4	1792.1	1857.0	1822.9	1771.0	1691.6	1642.9	1638.1
52.5°	10272.4	5700.6	2022.4	1722.3	1712.6	1777.5	1728.9	1680.2	1620.2	1555.3	1542.3
55°	10930.9	5728.2	1903.9	1625.0	1659.1	1652.6	1634.8	1591.0	1558.5	1472.6	1474.3
57.5°	11667.2	5783.4	1806.7	1566.6	1625.0	1553.7	1547.2	1509.9	1467.7	1409.4	1389.9
60°	12547.8	5869.3	1722.3	1544.0	1595.8	1488.8	1456.4	1441.8	1399.6	1370.4	1378.5
62.5°	13508.0	5947.2	1636.4	1547.2	1561.8	1425.6	1376.9	1372.1	1346.1	1336.4	1336.4
65°	14163.1	5734.7	1529.4	1544.0	1508.3	1360.7	1299.1	1297.4	1276.3	1273.2	1271.5
67.5°	13934.5	5061.7	1385.0	1498.6	1453.1	1295.8	1227.7	1221.2	1193.6	1195.3	1195.3
70°	12789.4	4101.5	1185.5	1386.6	1385.0	1237.4	1153.1	1132.0	1094.7	1101.2	1107.7
72.5°	10642.3	3039.2	917.9	1200.2	1276.3	1183.9	1067.1	1033.1	986.0	992.5	990.9
75°	7685.7	2066.2	668.2	913.1	1110.9	1120.6	982.8	924.4	867.7	877.4	880.7
77.5°	3932.8	1171.0	491.4	629.2	872.5	1018.4	906.6	828.7	815.8	906.6	893.6
80°	1282.9	587.1	340.6	441.2	572.5	833.6	794.7	705.5	702.2	723.3	621.2
82.5°	382.7	248.2	218.9	290.3	316.2	639.0	686.0	533.6	459.0	483.3	499.5
85°	131.4	120.0	124.8	144.3	150.8	374.6	480.0	353.5	334.0	368.2	363.3
87.5°	30.9	42.1	35.7	32.4	32.4	90.8	186.5	147.6	204.4	136.2	131.4
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)