

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: P964730

Luminaire Tested: **NAV-SB3C-830-U-T3R**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P964730
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-5)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3C-830-U-T3R
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 80 CRI, 3000K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
ROADWAY OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 21245.2 lumens
Efficiency: N/A
Efficacy: 142.5 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B3 - U0 - G3

Input Watts (W): 149.1
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

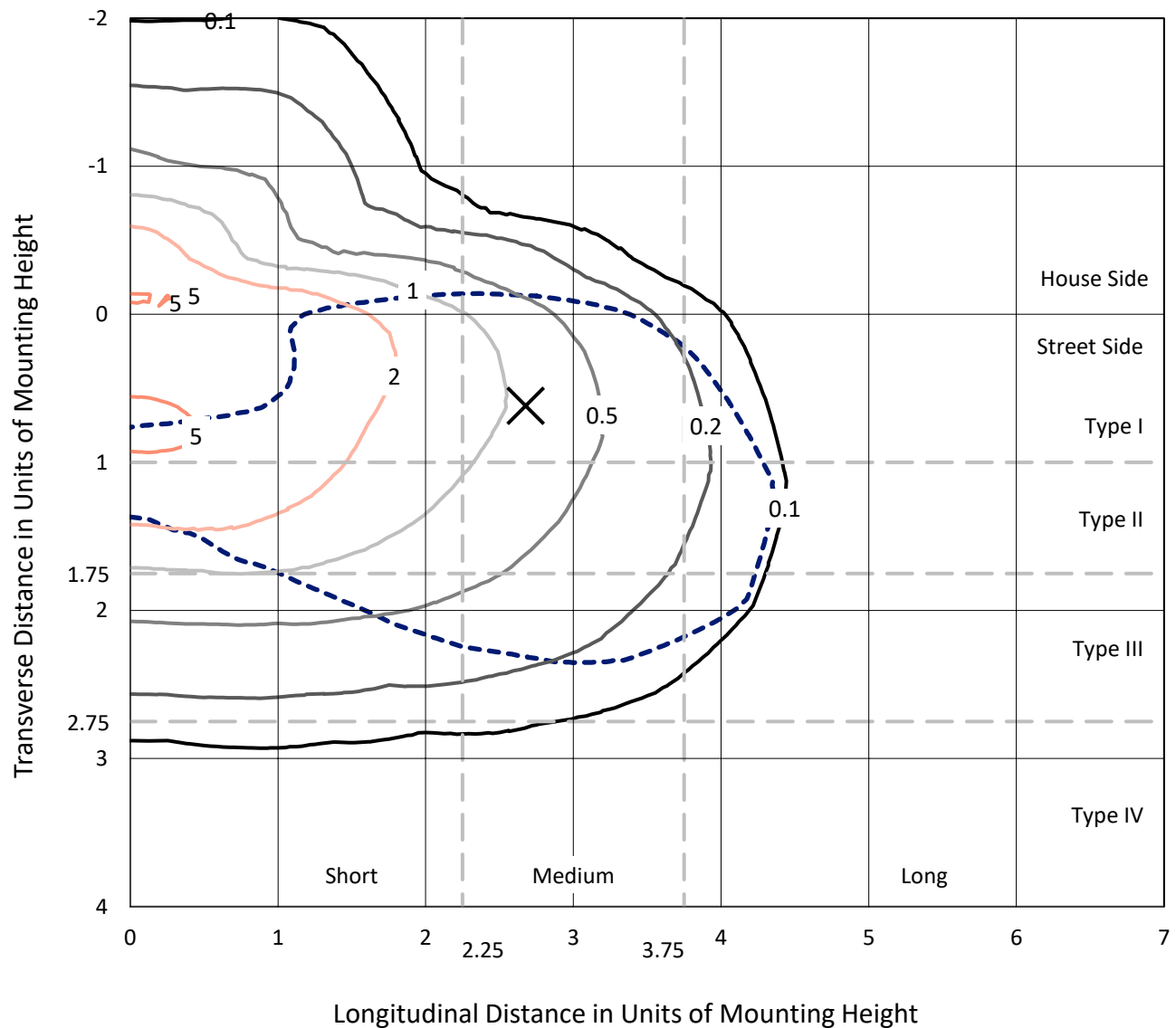


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Iso-Footcandle Lines of Horizontal Illumination

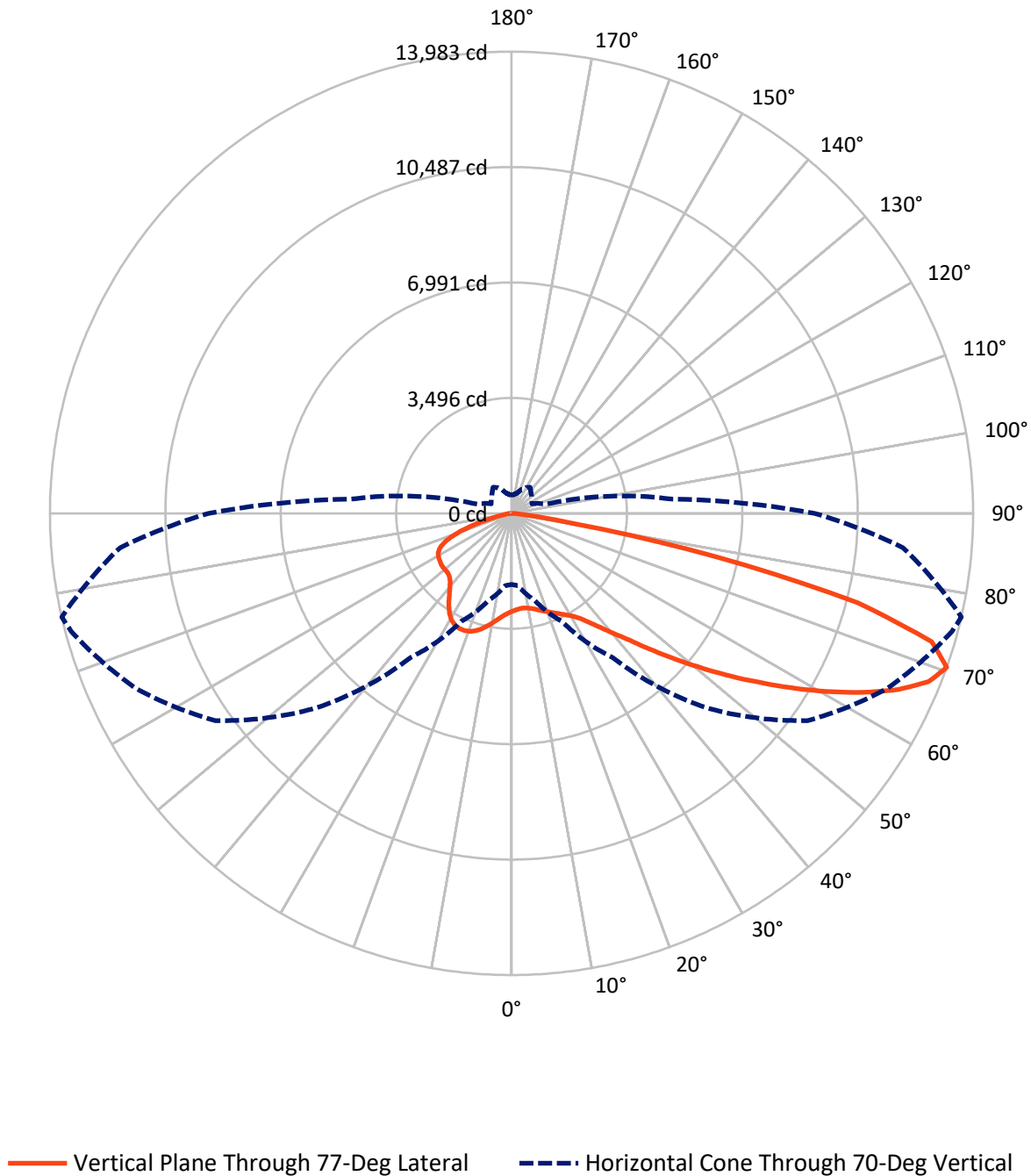
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.6 fc
Type III - Medium - N/A

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Luminous Intensity Polar Plot



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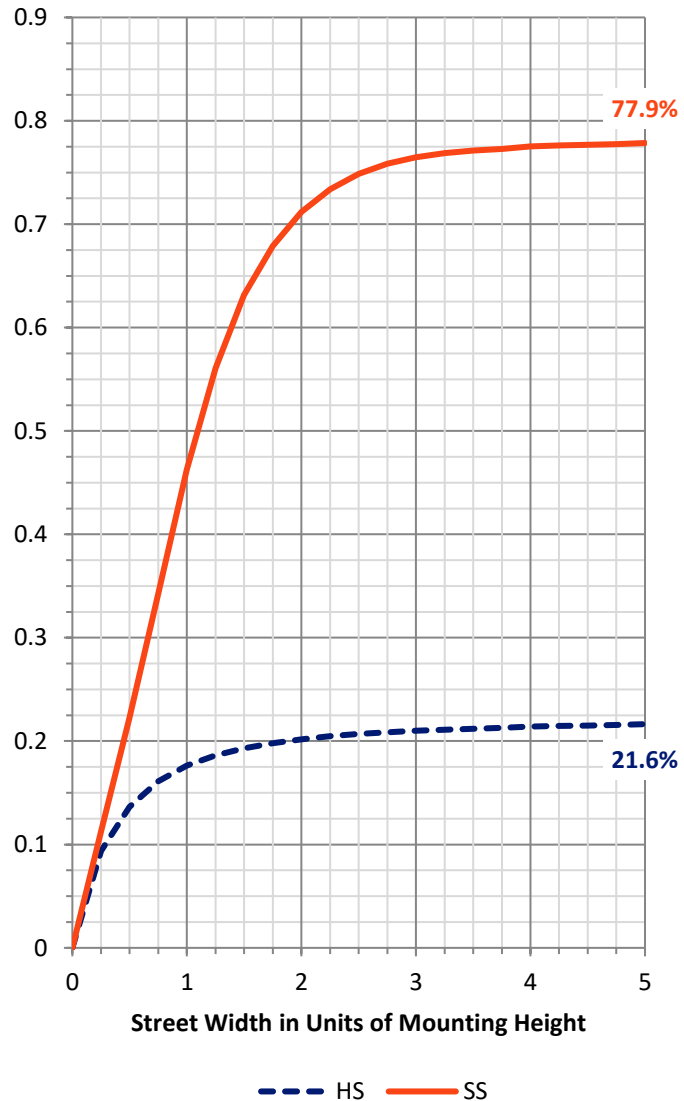
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4652.4	0.0	4652.4
	% Fixture	21.9	0.0	21.9
Street Side	Lumens	16592.8	0.0	16592.8
	% Fixture	78.1	0.0	78.1
Total	Lumens	21245.2	0.0	21245.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	282.7	1.3
10°-20°	815.8	3.8
20°-30°	1395.2	6.6
30°-40°	2243.6	10.6
40°-50°	3502.8	16.5
50°-60°	4679.0	22.0
60°-70°	4987.1	23.5
70°-80°	3070.0	14.5
80°-90°	269.0	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°	21245.2	100.0
0°-180°	21245.2	100.0

Coefficient of Utilization



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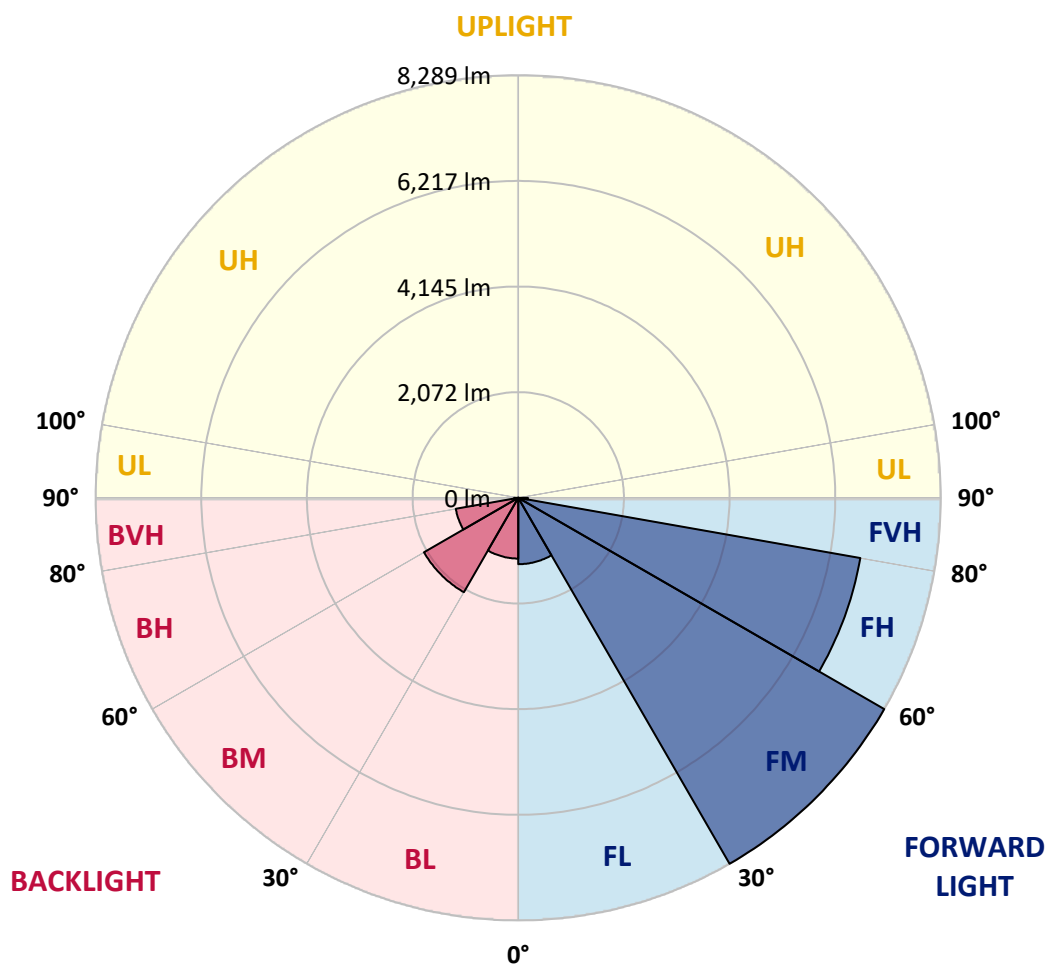
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1301.6	6.1			
FM	(30°-60°)	8289.4	39.0			
FH	(60°-80°)	6813.7	32.1			G3/7500
FVH	(80°-90°)	188.1	0.9			G2/225
BL	(0°-30°)	1192.1	5.6	B3/2500		
BM	(30°-60°)	2136.0	10.1	B2/2500		
BH	(60°-80°)	1243.4	5.9	B3/2500		G3/2500
BVH	(80°-90°)	80.9	0.4			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type III Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	2963.9	2963.9	2963.9	2963.9	2963.9	2963.9	2963.9	2963.9	2963.9	2963.9	2963.9
2.5°	2732.1	2731.0	2745.2	2749.6	2775.7	2794.1	2829.0	2866.0	2913.9	2919.3	2948.6
5°	2574.4	2574.4	2590.7	2608.1	2641.8	2678.8	2732.1	2796.3	2879.0	2892.0	2965.0
7.5°	2440.5	2449.2	2463.4	2497.1	2536.3	2589.6	2671.3	2762.6	2871.4	2892.0	3009.6
10°	2332.8	2342.6	2360.1	2387.2	2446.0	2520.0	2626.6	2744.1	2889.9	2922.6	3074.9
12.5°	2299.1	2308.9	2318.7	2339.4	2393.8	2480.8	2608.1	2752.8	2934.5	2967.2	3164.1
15°	2377.4	2389.4	2381.8	2376.4	2404.6	2484.1	2616.8	2784.4	2990.0	3036.8	3274.0
17.5°	2558.1	2562.4	2545.0	2493.8	2489.5	2532.0	2658.1	2827.9	3059.6	3110.8	3385.0
20°	2849.6	2842.0	2806.1	2705.0	2647.3	2638.6	2728.9	2893.2	3131.5	3185.9	3504.7
22.5°	3245.7	3237.0	3165.2	3005.2	2876.9	2792.0	2831.2	2978.0	3211.9	3272.9	3621.1
25°	3739.7	3727.7	3622.1	3404.5	3205.5	2995.5	2970.4	3090.1	3311.0	3367.5	3743.0
27.5°	4316.4	4306.5	4192.4	3905.0	3617.8	3274.0	3143.5	3221.8	3414.4	3478.5	3880.0
30°	4936.6	4964.9	4762.5	4453.4	4090.1	3637.4	3376.2	3383.9	3548.1	3605.8	4046.5
32.5°	5665.6	5714.6	5470.8	5079.1	4583.0	4032.3	3670.0	3610.3	3743.0	3790.9	4256.5
35°	6388.0	6443.6	6241.1	5808.1	5236.8	4498.1	3976.9	3870.3	4001.9	4054.2	4535.1
37.5°	7012.6	7086.5	6982.1	6605.6	5936.5	5059.5	4377.3	4176.0	4320.7	4386.0	4909.3
40°	7505.5	7618.6	7611.0	7376.0	6761.2	5740.6	4885.5	4553.6	4716.7	4787.5	5363.1
42.5°	7905.9	8003.8	8088.7	8076.7	7621.9	6514.3	5482.7	5044.2	5168.4	5249.9	5873.4
45°	8182.3	8286.7	8469.5	8666.5	8449.9	7342.3	6167.1	5626.4	5739.6	5862.5	6481.6
47.5°	8429.3	8547.9	8785.1	9097.3	9152.8	8173.6	6916.8	6304.3	6407.6	6534.9	7092.0
50°	8451.0	8553.3	8921.1	9363.9	9652.2	8972.2	7722.0	7064.8	7161.7	7297.7	7745.9
52.5°	7925.5	8086.5	8728.5	9356.3	9881.8	9640.2	8521.7	7855.8	7964.7	8127.8	8422.7
55°	6151.9	6388.0	8163.8	9064.7	9800.2	10072.3	9282.3	8696.9	8836.2	9007.0	9103.8
57.5°	5298.8	5402.3	6480.6	8533.7	9428.2	10184.3	9924.3	9546.7	9770.8	9958.0	9824.1
60°	4762.5	4848.5	5486.0	7707.9	8938.5	10007.0	10420.5	10338.9	10726.2	10949.3	10560.8
62.5°	4187.9	4269.5	4849.5	6435.9	8311.7	9712.1	10733.8	11070.0	11705.4	11949.1	11255.0
65°	3617.8	3687.4	4243.5	5407.7	7515.3	9417.2	10896.0	11702.1	12611.8	12864.3	11831.7
67.5°	2982.4	3040.0	3565.6	4562.3	6546.9	9013.5	10976.4	12199.4	13400.6	13617.1	12116.7
70°	2152.2	2196.8	2739.7	3608.0	5331.5	8319.4	10943.8	12551.9	13809.7	13982.7	11901.3
72.5°	1017.3	1057.6	1695.2	2342.6	3765.8	6968.0	10283.3	12272.3	13394.1	13308.2	10582.5
75°	542.9	577.8	973.9	1285.0	1989.0	4776.6	8415.1	10571.6	11247.3	10829.5	7821.1
77.5°	367.8	394.9	602.8	771.4	908.6	2267.5	5408.8	7319.4	7042.0	6352.1	3917.0
80°	291.6	319.9	493.9	522.2	439.6	819.3	2234.9	3388.2	2434.0	1946.6	1114.2
82.5°	224.2	255.7	415.6	378.6	239.3	336.2	650.7	1071.7	623.5	474.4	269.9
85°	137.1	170.9	326.5	241.6	134.9	153.4	220.9	298.2	190.4	158.9	96.9
87.5°	69.6	97.9	165.4	88.1	60.9	35.9	58.7	58.7	50.0	43.6	25.0
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°	2963.9	2963.9	2963.9	2963.9	2963.9	2963.9	2963.9	2963.9	2963.9	2963.9	2963.9
2.5°	2974.8	2996.6	3033.5	3068.3	3095.6	3121.6	3147.8	3161.9	3166.3	3183.6	3193.5
5°	3009.6	3049.9	3121.6	3189.1	3231.5	3257.7	3276.2	3287.1	3289.2	3294.7	3303.4
7.5°	3073.8	3138.0	3238.1	3305.5	3337.1	3334.9	3327.4	3300.1	3289.2	3279.4	3281.6
10°	3164.1	3248.9	3371.9	3418.7	3399.1	3346.9	3279.4	3200.0	3163.0	3127.1	3116.2
12.5°	3276.2	3383.9	3504.7	3502.5	3405.7	3271.8	3115.2	2993.3	2916.0	2860.6	2847.4
15°	3412.2	3536.2	3628.7	3554.7	3342.5	3102.1	2872.5	2713.7	2644.0	2583.1	2576.5
17.5°	3552.5	3685.3	3727.7	3538.4	3183.6	2850.7	2590.7	2465.5	2397.0	2364.4	2374.2
20°	3689.6	3821.3	3786.5	3444.8	2942.2	2565.7	2333.9	2265.4	2251.2	2258.8	2255.6
22.5°	3834.3	3951.9	3798.4	3264.2	2634.2	2274.1	2146.8	2148.9	2180.5	2203.3	2208.8
25°	3982.3	4061.8	3766.9	3003.0	2303.5	2059.7	2028.2	2063.0	2125.0	2169.6	2181.6
27.5°	4124.9	4159.7	3698.3	2679.9	2019.5	1906.3	1911.7	1983.6	2077.2	2139.2	2154.3
30°	4285.9	4246.7	3566.7	2316.5	1822.6	1774.7	1820.3	1904.1	1997.7	2053.2	2066.2
32.5°	4467.6	4321.8	3357.8	1980.3	1683.3	1669.1	1744.1	1798.6	1839.9	1856.3	1865.0
35°	4693.9	4427.4	3090.1	1744.1	1558.1	1591.8	1663.7	1636.4	1620.1	1611.4	1620.1
37.5°	4987.6	4569.9	2776.7	1590.8	1456.9	1536.4	1565.7	1480.8	1416.7	1385.1	1392.8
40°	5341.3	4778.8	2475.4	1472.1	1392.8	1488.5	1437.4	1335.1	1253.5	1208.9	1212.1
42.5°	5734.2	4997.5	2221.8	1382.9	1356.8	1449.4	1342.6	1220.8	1089.2	1075.0	1089.2
45°	6146.5	5222.7	2048.9	1314.4	1339.4	1415.5	1288.3	1091.3	997.7	1055.4	1085.9
47.5°	6558.9	5429.4	1944.4	1263.2	1330.8	1377.5	1240.4	1019.6	953.1	1036.9	1076.1
50°	7018.1	5614.4	1897.6	1226.2	1320.9	1362.2	1168.6	1001.0	906.4	961.9	1003.2
52.5°	7473.9	5758.0	1862.7	1189.3	1306.8	1350.3	1133.8	979.3	849.8	853.0	875.9
55°	7928.8	5851.6	1824.7	1140.3	1275.2	1324.2	1130.5	955.3	807.4	792.1	803.0
57.5°	8414.0	5904.9	1777.9	1085.9	1220.8	1257.8	1127.2	936.8	794.3	769.3	772.5
60°	8908.0	5983.2	1717.0	1019.6	1147.9	1178.3	1119.6	930.3	786.7	744.3	747.5
62.5°	9350.9	6010.5	1644.1	956.4	1054.3	1100.0	1103.3	924.9	766.0	693.1	693.1
65°	9641.4	5892.9	1516.8	884.6	953.1	1019.6	1071.7	906.4	729.0	656.1	656.1
67.5°	9629.4	5557.9	1317.6	792.1	855.3	930.3	1026.0	874.8	684.4	610.4	613.7
70°	9181.1	4896.3	1065.2	684.4	747.5	834.6	967.3	828.0	631.1	560.4	566.9
72.5°	7874.4	3832.2	773.6	558.2	622.4	735.5	891.1	771.4	576.7	515.8	512.5
75°	5625.3	2425.3	524.5	428.7	484.2	623.5	796.4	705.1	526.6	517.9	488.5
77.5°	2873.6	1158.8	347.1	313.3	337.3	491.8	669.1	630.0	534.2	427.6	380.8
80°	934.7	427.6	218.7	213.3	224.2	327.5	517.9	516.8	404.8	290.5	256.8
82.5°	298.2	183.9	142.6	137.1	131.6	205.6	361.2	409.1	273.1	183.9	182.8
85°	118.6	109.9	83.7	77.3	55.5	96.9	189.3	272.0	203.5	132.7	136.0
87.5°	43.6	43.6	22.9	16.3	12.0	32.6	51.1	81.6	116.4	68.6	67.4
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)