

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: P964696

Luminaire Tested: **NAV-SB3C-827-U-T2**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P964696
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-3)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3C-827-U-T2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 80 CRI, 2700K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 19844 lumens
Efficiency: N/A
Efficacy: 133.1 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G3

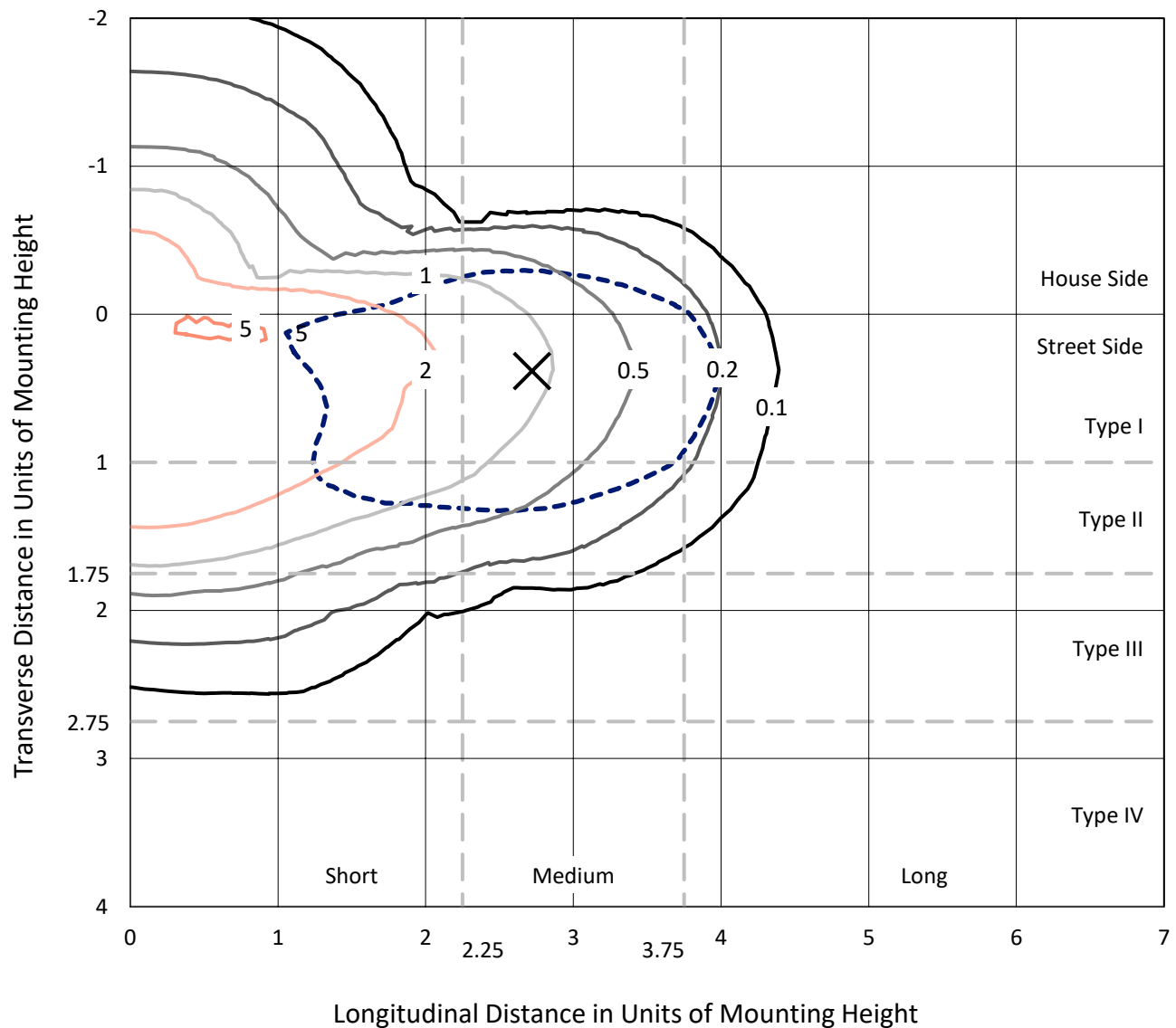
Input Watts (W): 149.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

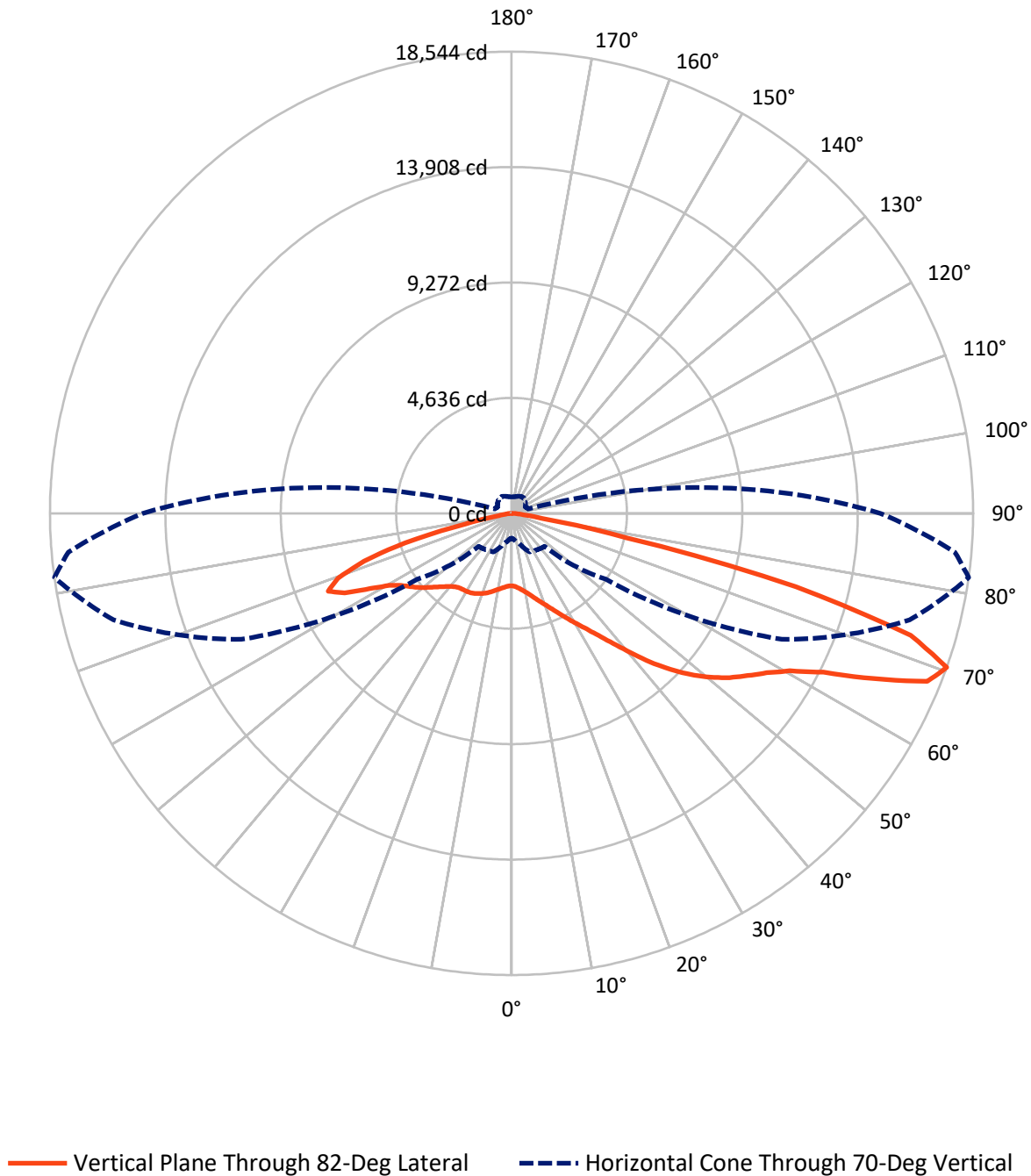
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.3 fc
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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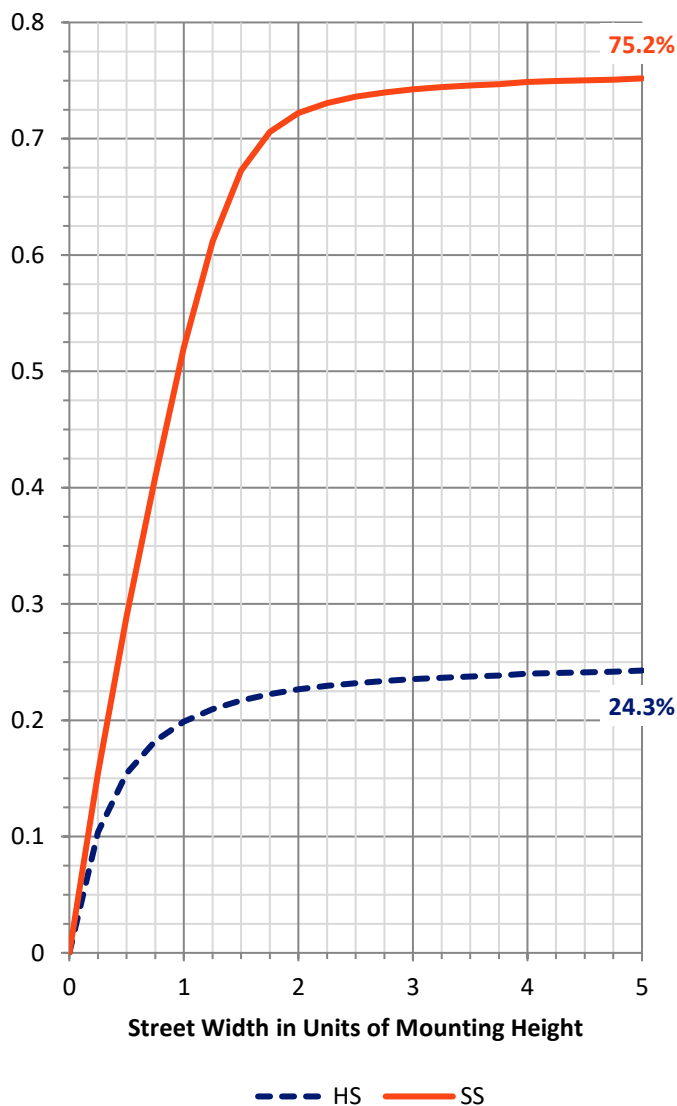
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4892.0	0.0	4892.0
	% Fixture	24.7	0.0	24.7
Street Side	Lumens	14952.0	0.0	14952.0
	% Fixture	75.3	0.0	75.3
Total	Lumens	19844.0	0.0	19844.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	274.7	1.4
10°-20°	789.2	4.0
20°-30°	1320.3	6.7
30°-40°	2062.6	10.4
40°-50°	3285.0	16.6
50°-60°	4571.4	23.0
60°-70°	4781.9	24.1
70°-80°	2499.3	12.6
80°-90°	259.5	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°	19844.0	100.0
0°-180°	19844.0	100.0

Coefficient of Utilization



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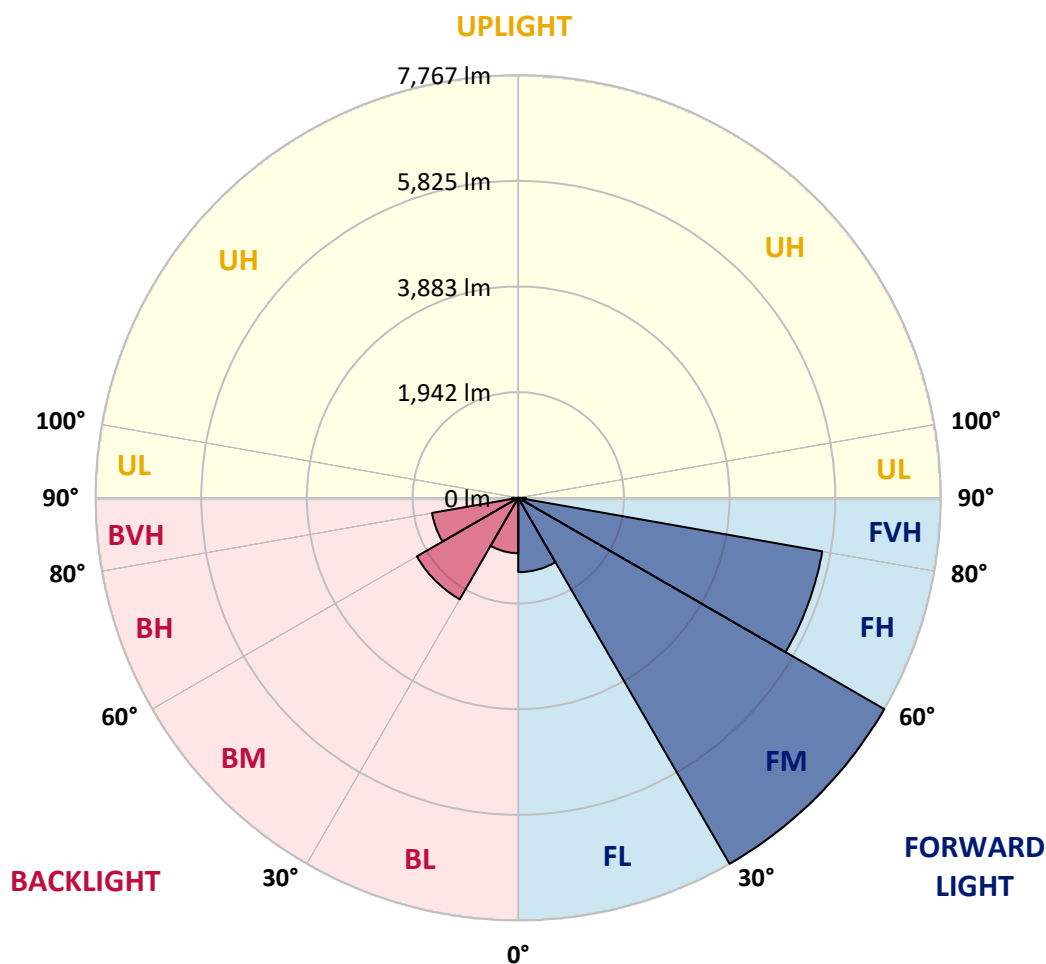
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1366.5	6.9			
FM	(30°-60°)	7766.7	39.1			
FH	(60°-80°)	5673.5	28.6			G3/7500
FVH	(80°-90°)	145.3	0.7			G2/225
BL	(0°-30°)	1017.7	5.1	B3/2500		
BM	(30°-60°)	2152.3	10.8	B2/2500		
BH	(60°-80°)	1607.8	8.1	B3/2500		G3/2500
BVH	(80°-90°)	114.2	0.6			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	2909.4	2909.4	2909.4	2909.4	2909.4	2909.4	2909.4	2909.4	2909.4	2909.4	2909.4
2.5°	2978.9	2995.8	2990.4	2985.2	2985.2	2977.8	2976.8	2966.2	2957.8	2944.1	2940.9
5°	3016.8	3034.7	3032.6	3036.8	3050.5	3053.7	3056.8	3050.5	3033.6	3016.8	3009.4
7.5°	2983.1	3003.0	3009.4	3034.7	3076.8	3114.7	3143.2	3154.7	3139.0	3114.7	3103.1
10°	2869.4	2891.5	2913.6	2973.6	3048.4	3137.8	3213.7	3259.0	3255.8	3232.6	3212.7
12.5°	2638.8	2661.9	2709.3	2826.2	2963.1	3121.0	3262.2	3356.9	3389.6	3372.7	3337.9
15°	2454.5	2474.5	2510.3	2630.4	2808.3	3048.4	3280.0	3464.3	3547.5	3538.0	3495.9
17.5°	2449.2	2457.6	2479.8	2536.7	2673.5	2934.7	3261.0	3569.6	3728.6	3727.5	3674.9
20°	2541.9	2545.1	2557.7	2569.3	2647.2	2848.3	3212.7	3657.0	3931.8	3931.8	3874.9
22.5°	2670.3	2668.3	2680.9	2670.3	2708.3	2840.9	3182.1	3733.9	4158.2	4175.0	4103.5
25°	2863.0	2852.5	2849.4	2825.1	2832.5	2909.4	3215.8	3821.3	4426.8	4461.5	4371.9
27.5°	3120.0	3103.1	3091.5	3035.7	3016.8	3050.5	3319.0	3926.6	4725.8	4785.8	4672.1
30°	3454.9	3424.3	3407.4	3310.5	3242.1	3247.4	3474.9	4066.6	5038.5	5135.4	4991.1
32.5°	3911.8	3864.5	3819.2	3660.2	3534.8	3493.8	3676.0	4260.3	5377.6	5532.3	5347.0
35°	4423.6	4385.7	4337.2	4091.9	3899.2	3804.4	3947.6	4531.0	5774.5	6019.8	5778.7
37.5°	4916.3	4883.7	4906.9	4576.2	4327.8	4189.8	4303.6	4894.3	6264.2	6626.4	6319.9
40°	5426.0	5400.7	5403.9	5088.0	4798.4	4643.7	4735.2	5350.2	6825.4	7347.7	6970.7
42.5°	5979.8	5960.9	5897.7	5617.6	5292.3	5148.0	5232.2	5876.6	7427.7	8169.0	7684.6
45°	6600.1	6588.5	6529.6	6208.3	5835.6	5673.5	5787.2	6457.9	8033.1	8941.9	8401.7
47.5°	7136.0	7145.5	7138.1	6867.5	6481.1	6243.1	6379.0	7064.4	8596.5	9668.4	9089.3
50°	7394.0	7443.6	7516.1	7432.0	7191.8	6949.7	6975.9	7649.9	9133.6	10349.7	9748.5
52.5°	7259.3	7352.9	7550.9	7685.7	7778.3	7727.8	7657.3	8231.2	9639.0	10964.6	10371.9
55°	6757.0	6888.6	7217.1	7542.5	8015.3	8382.8	8475.4	8875.6	10131.7	11505.9	10961.5
57.5°	5841.9	6055.7	6350.5	7008.6	7804.7	8699.7	9429.4	9769.5	10654.1	12083.9	11578.5
60°	4273.0	4559.4	4925.8	5905.1	7067.6	8530.2	10241.3	11142.6	11396.4	12832.7	12382.0
62.5°	2734.6	2911.5	3248.4	4170.8	5507.1	7661.5	10489.7	12858.9	12654.6	14060.4	13586.6
65°	1872.2	1985.9	2294.5	2812.5	3560.1	5702.9	9824.3	14145.7	14653.2	16006.3	15646.2
67.5°	1360.5	1446.8	1710.0	2163.9	2319.7	3374.8	7623.5	14086.8	16596.0	18011.2	17451.0
70°	991.9	1053.0	1274.1	1710.0	1784.8	1877.5	4618.3	11974.5	16553.9	18544.0	17873.2
72.5°	735.0	777.1	925.6	1326.8	1444.6	1267.8	2286.1	8702.9	14224.6	16772.9	16234.8
75°	531.8	563.3	672.8	1015.1	1156.2	965.6	1140.4	5085.8	9922.2	11798.6	11893.4
77.5°	406.4	430.7	502.2	743.4	925.6	724.5	707.6	2339.8	4704.8	4727.9	4993.2
80°	326.5	342.2	381.2	523.4	709.7	542.3	461.2	944.5	1486.8	1258.3	1320.4
82.5°	240.1	266.4	322.3	367.5	507.6	373.8	281.2	477.0	565.5	486.5	490.7
85°	136.8	154.8	194.7	263.2	324.3	228.5	161.1	211.7	263.2	215.9	192.7
87.5°	48.5	63.1	68.5	103.2	141.1	94.8	62.1	61.1	86.3	64.3	53.7
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°	2909.4	2909.4	2909.4	2909.4	2909.4	2909.4	2909.4	2909.4	2909.4	2909.4	2909.4
2.5°	2930.5	2925.1	2904.1	2875.6	2846.2	2817.7	2808.3	2788.3	2774.6	2767.2	2775.7
5°	2989.4	2972.6	2923.1	2859.9	2793.5	2722.0	2671.4	2625.0	2591.4	2559.8	2572.4
7.5°	3073.7	3044.1	2958.9	2848.3	2730.4	2611.4	2522.9	2455.6	2410.3	2380.8	2387.1
10°	3171.6	3126.2	2995.8	2830.4	2648.2	2477.6	2373.4	2315.5	2287.1	2271.3	2275.5
12.5°	3284.2	3220.0	3033.6	2789.3	2522.9	2328.2	2256.5	2239.7	2240.8	2241.8	2243.9
15°	3423.2	3333.7	3064.1	2699.8	2359.8	2213.4	2200.7	2228.1	2256.5	2270.2	2269.1
17.5°	3580.1	3453.7	3069.5	2552.5	2199.6	2139.7	2179.7	2238.6	2281.8	2300.7	2305.0
20°	3748.6	3575.9	3031.5	2344.0	2068.0	2079.6	2151.3	2227.0	2274.5	2298.7	2305.0
22.5°	3941.3	3706.5	2940.9	2124.9	1960.6	2014.3	2098.6	2172.3	2221.8	2246.0	2252.3
25°	4161.4	3852.9	2798.9	1940.6	1868.0	1940.6	2024.9	2086.0	2126.0	2148.1	2154.3
27.5°	4405.7	4005.5	2609.2	1794.3	1786.9	1864.8	1934.3	1981.7	2002.7	2019.7	2025.9
30°	4651.0	4144.5	2379.7	1683.7	1716.4	1790.1	1839.6	1860.6	1866.9	1870.1	1877.5
32.5°	4916.3	4264.5	2138.6	1592.1	1648.9	1717.4	1746.9	1756.3	1726.9	1706.8	1713.2
35°	5237.5	4393.0	1902.7	1519.5	1582.6	1641.6	1651.1	1642.7	1607.9	1566.8	1569.0
37.5°	5634.5	4553.0	1714.2	1467.9	1520.5	1559.4	1547.9	1545.8	1549.0	1500.5	1503.7
40°	6121.0	4761.5	1576.3	1427.8	1470.0	1478.4	1445.8	1463.6	1479.5	1405.7	1407.8
42.5°	6661.2	5013.3	1488.9	1400.5	1427.8	1407.8	1357.3	1377.3	1375.1	1278.3	1277.3
45°	7211.8	5287.1	1458.4	1380.5	1388.9	1348.9	1293.0	1298.4	1254.1	1166.7	1169.8
47.5°	7759.4	5580.8	1477.3	1363.6	1340.4	1295.2	1252.0	1228.9	1163.6	1098.3	1098.3
50°	8296.5	5889.3	1546.8	1329.9	1274.1	1247.7	1216.2	1175.2	1105.7	1049.8	1045.6
52.5°	8794.5	6199.9	1624.7	1274.1	1190.9	1206.7	1186.7	1139.3	1070.9	1014.0	1015.1
55°	9266.2	6510.6	1655.3	1197.2	1113.0	1171.0	1159.4	1071.9	989.8	943.5	939.2
57.5°	9780.0	6884.4	1621.6	1099.3	1049.8	1129.9	1085.6	988.7	941.4	906.6	903.4
60°	10491.9	7470.9	1549.0	978.3	989.8	1068.8	992.9	952.9	901.4	862.4	860.3
62.5°	11674.3	8564.9	1432.0	858.1	919.2	978.3	948.7	908.8	856.1	818.2	818.2
65°	13422.3	10085.4	1212.0	764.4	840.3	889.8	901.4	861.3	806.6	766.6	768.6
67.5°	14896.5	11039.5	917.2	686.5	759.2	818.2	850.9	811.8	753.9	714.9	716.1
70°	14815.5	10346.6	700.3	609.7	687.6	747.6	789.8	759.2	697.1	660.2	663.4
72.5°	13159.1	8655.5	566.5	531.8	614.9	673.9	724.5	701.3	638.1	602.3	602.3
75°	9667.4	6144.2	452.7	452.7	524.4	597.1	652.8	638.1	580.2	554.9	547.6
77.5°	4075.0	2577.7	354.9	375.9	435.9	512.8	582.3	587.5	537.0	568.6	516.0
80°	1083.5	710.7	270.6	295.9	342.2	423.3	506.5	504.4	449.7	420.1	390.6
82.5°	412.8	280.1	192.7	208.5	247.4	324.3	401.2	413.8	359.1	310.7	310.7
85°	159.0	120.0	119.0	125.3	144.2	214.8	303.3	313.8	270.6	229.6	236.9
87.5°	41.1	35.8	44.2	42.1	66.3	114.8	173.7	180.1	165.3	95.8	136.8
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)