

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: P967734

Luminaire Tested: **NAV-SB5A-735-U-T2**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P967734
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-SB5A-735-U-T2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 3500K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 23013.3 lumens
Efficiency: N/A
Efficacy: 162.4 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G3

Input Watts (W): 141.7
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

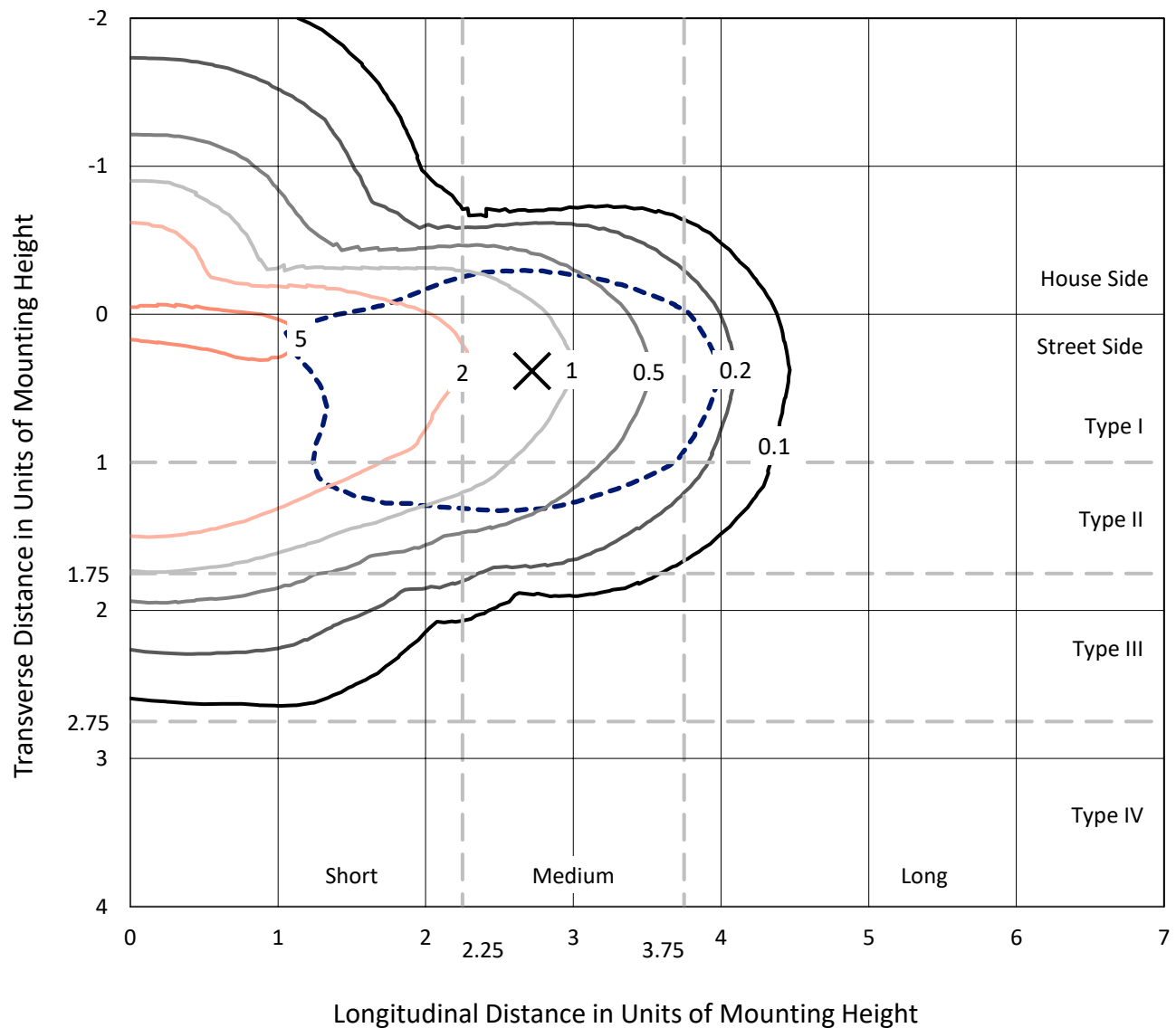


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Iso-Footcandle Lines of Horizontal Illumination

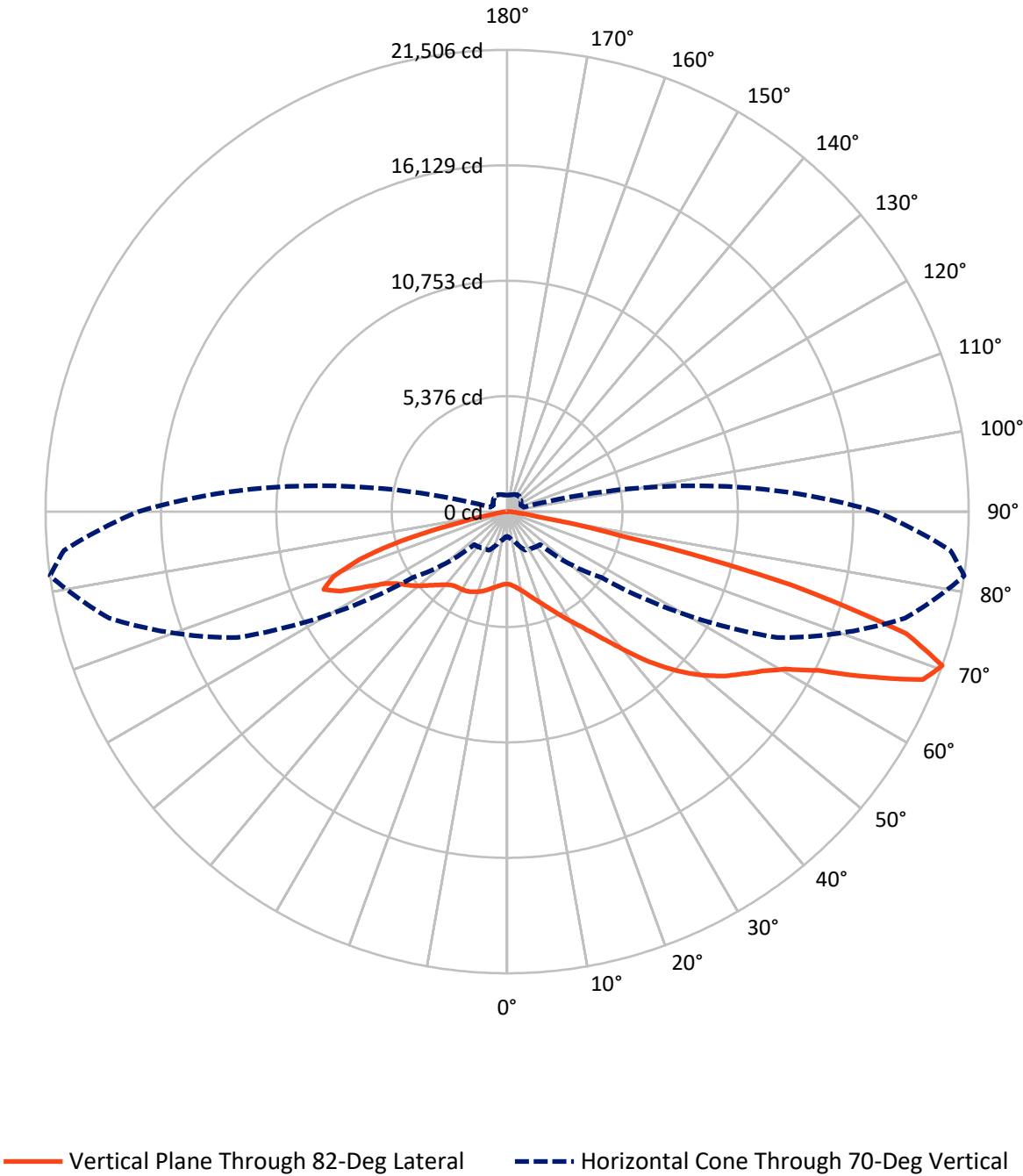
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.1 fc
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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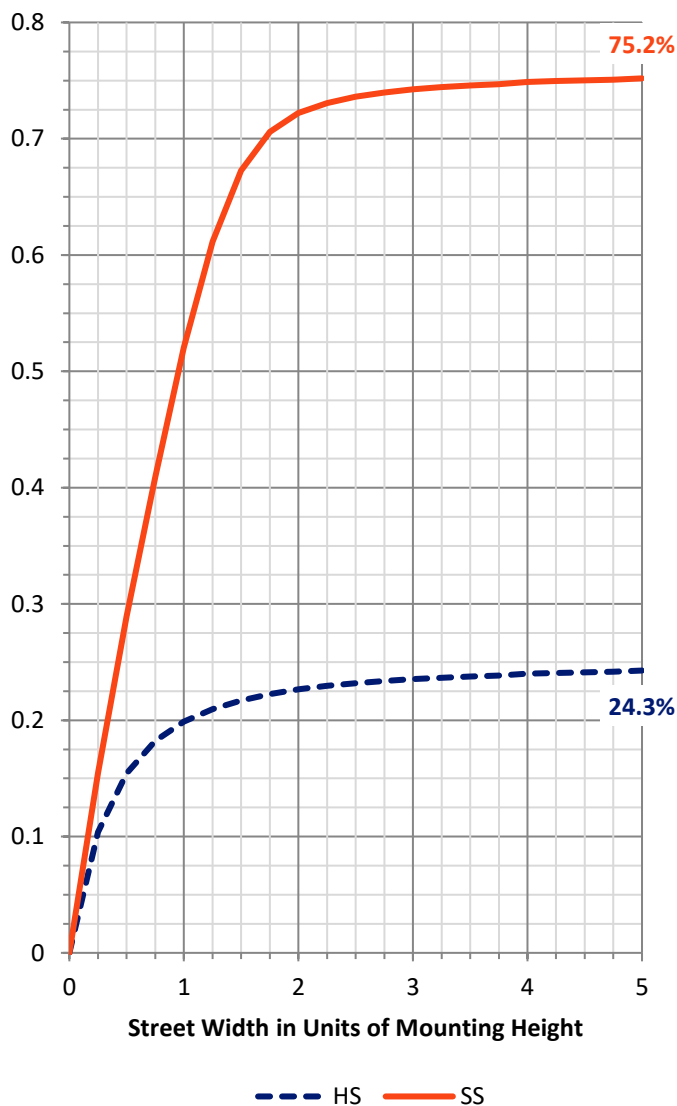
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5673.3	0.0	5673.3
	% Fixture	24.7	0.0	24.7
Street Side	Lumens	17340.0	0.0	17340.0
	% Fixture	75.3	0.0	75.3
Total	Lumens	23013.3	0.0	23013.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	318.6	1.4
10°-20°	915.3	4.0
20°-30°	1531.2	6.7
30°-40°	2392.0	10.4
40°-50°	3809.6	16.6
50°-60°	5301.6	23.0
60°-70°	5545.7	24.1
70°-80°	2898.5	12.6
80°-90°	301.0	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°	23013.3	100.0
0°-180°	23013.3	100.0

Coefficient of Utilization



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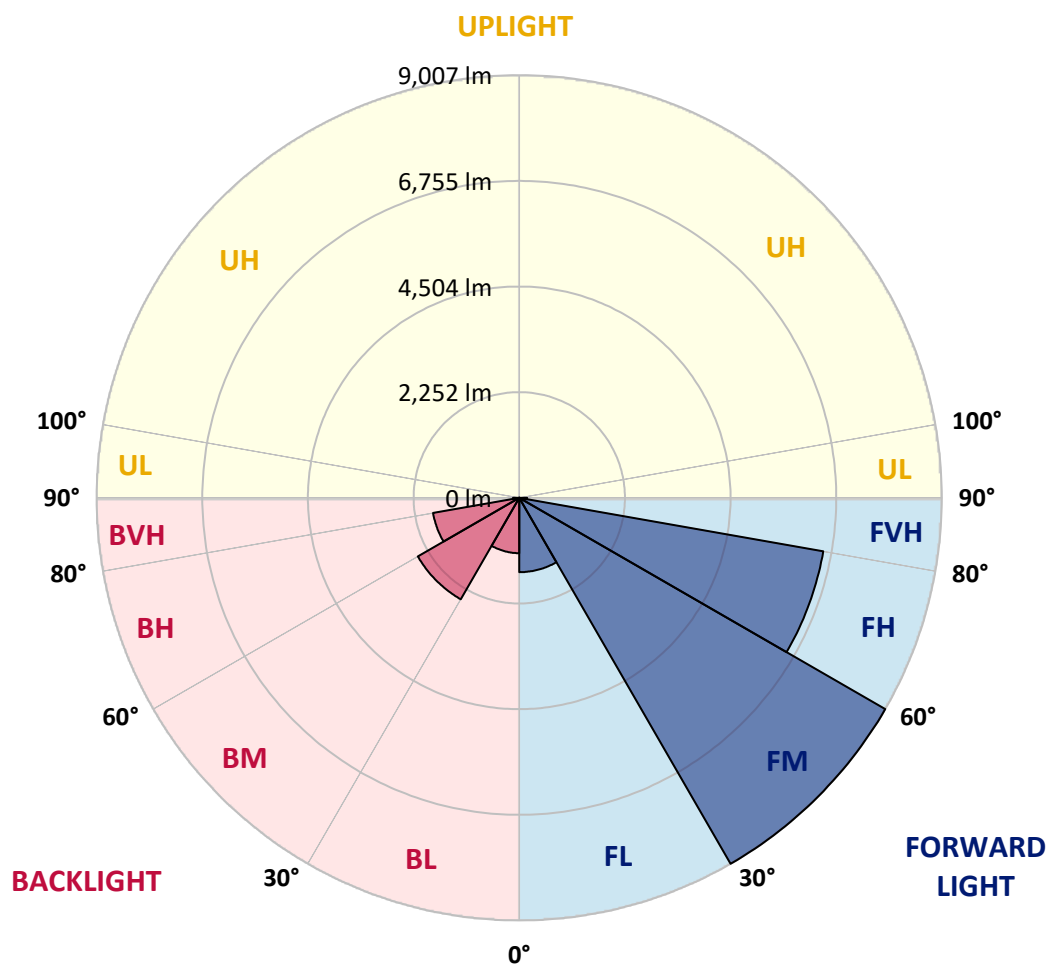
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1584.7	6.9			
FM	(30°-60°)	9007.2	39.1			
FH	(60°-80°)	6579.6	28.6			G3/7500
FVH	(80°-90°)	168.5	0.7			G2/225
BL	(0°-30°)	1180.3	5.1	B3/2500		
BM	(30°-60°)	2496.0	10.8	B2/2500		
BH	(60°-80°)	1864.5	8.1	B3/2500		G3/2500
BVH	(80°-90°)	132.5	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°	3374.0	3374.0	3374.0	3374.0	3374.0	3374.0	3374.0	3374.0	3374.0	3374.0	3374.0
2.5°	3454.7	3474.1	3468.1	3461.9	3461.9	3453.4	3452.2	3440.0	3430.2	3414.4	3410.7
5°	3498.6	3519.3	3516.9	3521.8	3537.7	3541.4	3545.0	3537.7	3518.1	3498.6	3490.0
7.5°	3459.5	3482.7	3490.0	3519.3	3568.2	3612.2	3645.1	3658.5	3640.3	3612.2	3598.8
10°	3327.7	3353.3	3378.9	3448.5	3535.2	3639.1	3726.9	3779.5	3775.8	3748.9	3725.8
12.5°	3060.2	3087.1	3142.0	3277.5	3436.3	3619.5	3783.2	3893.1	3930.9	3911.3	3871.0
15°	2846.5	2869.7	2911.2	3050.4	3256.8	3535.2	3803.9	4017.6	4114.0	4103.1	4054.2
17.5°	2840.4	2850.1	2875.8	2941.7	3100.5	3403.3	3781.9	4139.7	4324.1	4322.8	4261.8
20°	2947.9	2951.5	2966.1	2979.6	3070.0	3303.2	3725.8	4241.0	4559.8	4559.8	4493.8
22.5°	3096.8	3094.4	3109.0	3096.8	3140.8	3294.7	3690.3	4330.2	4822.3	4841.9	4758.9
25°	3320.3	3308.1	3304.4	3276.3	3284.9	3374.0	3729.4	4431.6	5133.7	5174.0	5070.3
27.5°	3618.2	3598.8	3585.3	3520.6	3498.6	3537.7	3849.1	4553.7	5480.6	5550.2	5418.3
30°	4006.6	3971.2	3951.7	3839.3	3759.9	3766.1	4029.8	4716.1	5843.2	5955.6	5788.3
32.5°	4536.5	4481.6	4429.1	4244.7	4099.4	4051.8	4263.1	4940.8	6236.4	6415.9	6201.0
35°	5130.0	5086.0	5029.9	4745.3	4521.9	4412.0	4578.1	5254.6	6696.8	6981.3	6701.7
37.5°	5701.6	5663.7	5690.6	5307.1	5018.9	4858.9	4990.8	5675.9	7264.6	7684.7	7329.4
40°	6292.6	6263.3	6267.0	5900.6	5564.8	5385.2	5491.5	6204.6	7915.5	8521.2	8084.0
42.5°	6934.9	6912.9	6839.6	6514.8	6137.5	5970.2	6067.9	6815.2	8614.0	9473.7	8912.0
45°	7654.2	7640.8	7572.4	7199.9	6767.6	6579.6	6711.4	7489.3	9316.1	10370.0	9743.5
47.5°	8275.7	8286.7	8278.2	7964.4	7516.2	7240.2	7397.7	8192.7	9969.5	11212.6	10541.0
50°	8574.9	8632.3	8716.6	8618.9	8340.4	8059.6	8090.1	8871.7	10592.2	12002.6	11305.4
52.5°	8418.6	8527.3	8756.9	8913.2	9020.6	8962.0	8880.2	9545.7	11178.4	12715.8	12028.4
55°	7836.1	7988.7	8369.7	8747.1	9295.4	9721.6	9829.0	10293.0	11749.9	13343.6	12712.2
57.5°	6774.9	7022.8	7364.7	8127.9	9051.2	10089.2	10935.4	11329.8	12355.6	14013.9	13427.8
60°	4955.5	5287.6	5712.5	6848.2	8196.3	9892.6	11876.9	12922.2	13216.6	14882.2	14359.5
62.5°	3171.4	3376.5	3767.3	4837.0	6386.6	8885.1	12165.1	14912.7	14675.7	16306.0	15756.5
65°	2171.2	2303.1	2660.9	3261.7	4128.7	6613.7	11393.3	16404.9	16993.5	18562.8	18145.1
67.5°	1577.7	1677.8	1983.2	2509.5	2690.2	3913.8	8841.1	16336.6	19246.5	20887.8	20238.1
70°	1150.4	1221.2	1477.6	1983.2	2069.9	2177.3	5355.9	13886.9	19197.7	21505.6	20727.8
72.5°	852.4	901.2	1073.4	1538.6	1675.5	1470.3	2651.2	10092.8	16496.6	19451.7	18827.7
75°	616.6	653.3	780.3	1177.2	1340.8	1119.8	1322.5	5898.2	11506.9	13683.0	13792.9
77.5°	471.4	499.5	582.5	862.1	1073.4	840.2	820.6	2713.4	5456.1	5482.9	5790.7
80°	378.5	396.9	442.1	606.9	823.1	628.9	534.8	1095.4	1724.3	1459.3	1531.4
82.5°	278.4	308.9	373.7	426.2	588.6	433.5	326.1	553.2	655.8	564.2	569.1
85°	158.8	179.5	225.9	305.2	376.1	265.0	186.9	245.5	305.2	250.3	223.4
87.5°	56.2	73.3	79.3	119.7	163.6	109.9	72.1	70.8	100.1	74.5	62.3
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°	3374.0	3374.0	3374.0	3374.0	3374.0	3374.0	3374.0	3374.0	3374.0	3374.0	3374.0
2.5°	3398.5	3392.3	3367.9	3334.9	3300.8	3267.8	3256.8	3233.6	3217.7	3209.2	3218.9
5°	3466.9	3447.3	3389.9	3316.6	3239.7	3156.7	3098.1	3044.4	3005.3	2968.6	2983.3
7.5°	3564.5	3530.3	3431.4	3303.2	3166.4	3028.5	2925.9	2847.8	2795.2	2761.0	2768.3
10°	3678.1	3625.6	3474.1	3282.5	3071.2	2873.4	2752.4	2685.3	2652.3	2634.0	2638.9
12.5°	3808.8	3734.3	3518.1	3234.8	2925.9	2700.0	2616.9	2597.4	2598.6	2599.8	2602.3
15°	3969.9	3866.2	3553.6	3131.1	2736.6	2566.9	2552.2	2583.9	2616.9	2632.8	2631.6
17.5°	4151.9	4005.4	3559.6	2960.1	2551.0	2481.4	2527.8	2596.1	2646.2	2668.2	2673.1
20°	4347.3	4147.0	3515.6	2718.3	2398.3	2411.7	2494.8	2582.7	2637.7	2665.8	2673.1
22.5°	4570.8	4298.4	3410.7	2464.3	2273.8	2336.1	2433.8	2519.2	2576.6	2604.7	2612.0
25°	4826.0	4468.2	3245.9	2250.6	2166.3	2250.6	2348.3	2419.1	2465.5	2491.2	2498.4
27.5°	5109.3	4645.3	3026.0	2080.9	2072.2	2162.6	2243.2	2298.3	2322.6	2342.1	2349.5
30°	5393.9	4806.4	2759.8	1952.6	1990.4	2075.9	2133.3	2157.7	2165.1	2168.8	2177.3
32.5°	5701.6	4945.6	2480.2	1846.3	1912.3	1991.7	2025.9	2036.9	2002.6	1979.5	1986.9
35°	6074.0	5094.7	2206.6	1762.1	1835.4	1903.7	1914.8	1905.0	1864.7	1817.1	1819.5
37.5°	6534.4	5280.3	1988.0	1702.3	1763.3	1808.5	1795.1	1792.6	1796.3	1740.1	1743.8
40°	7098.5	5522.1	1828.1	1655.9	1704.7	1714.5	1676.6	1697.4	1715.7	1630.3	1632.7
42.5°	7725.0	5813.9	1726.7	1624.1	1655.9	1632.7	1574.1	1597.3	1594.8	1482.5	1481.2
45°	8363.7	6131.3	1691.2	1600.9	1610.7	1564.3	1499.6	1505.7	1454.4	1353.0	1356.7
47.5°	8998.7	6472.1	1713.3	1581.4	1554.5	1502.0	1451.9	1425.1	1349.4	1273.7	1273.7
50°	9621.5	6829.9	1793.9	1542.3	1477.6	1447.1	1410.4	1362.8	1282.2	1217.5	1212.6
52.5°	10199.1	7190.2	1884.3	1477.6	1381.1	1399.4	1376.3	1321.3	1241.9	1176.0	1177.2
55°	10746.1	7550.4	1919.6	1388.5	1290.8	1357.9	1344.5	1243.1	1147.9	1094.2	1089.3
57.5°	11342.0	7983.9	1880.6	1274.9	1217.5	1310.3	1259.0	1146.7	1091.7	1051.4	1047.8
60°	12167.6	8664.0	1796.3	1134.5	1147.9	1239.4	1151.6	1105.2	1045.3	1000.1	997.6
62.5°	13538.9	9932.9	1660.8	995.3	1066.1	1134.5	1100.2	1053.8	992.8	948.8	948.8
65°	15566.0	11696.2	1405.6	886.5	974.5	1031.9	1045.3	998.9	935.4	889.0	891.4
67.5°	17275.7	12802.6	1063.6	796.2	880.5	948.8	986.7	941.5	874.3	829.1	830.4
70°	17181.6	11999.1	812.1	707.0	797.4	867.0	915.8	880.5	808.4	765.7	769.4
72.5°	15260.7	10037.8	657.0	616.6	713.2	781.6	840.2	813.2	740.0	698.5	698.5
75°	11211.3	7125.4	525.1	525.1	608.1	692.4	757.1	740.0	672.8	643.5	635.0
77.5°	4725.9	2989.4	411.5	435.9	505.5	594.7	675.3	681.4	622.8	659.4	598.4
80°	1256.5	824.3	313.9	343.2	396.9	490.9	587.3	585.0	521.4	487.3	453.0
82.5°	478.7	324.8	223.4	241.8	287.0	376.1	465.2	479.9	416.5	360.3	360.3
85°	184.4	139.2	138.0	145.3	167.3	249.1	351.7	363.9	313.9	266.2	274.8
87.5°	47.7	41.5	51.2	48.9	77.0	133.1	201.5	208.8	191.7	111.1	158.8
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)