

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: P968261

Luminaire Tested: **NAV-SB5B-735-U-T2**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968261
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-SB5B-735-U-T2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 3500K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 28888.6 lumens
Efficiency: N/A
Efficacy: 158.1 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G4

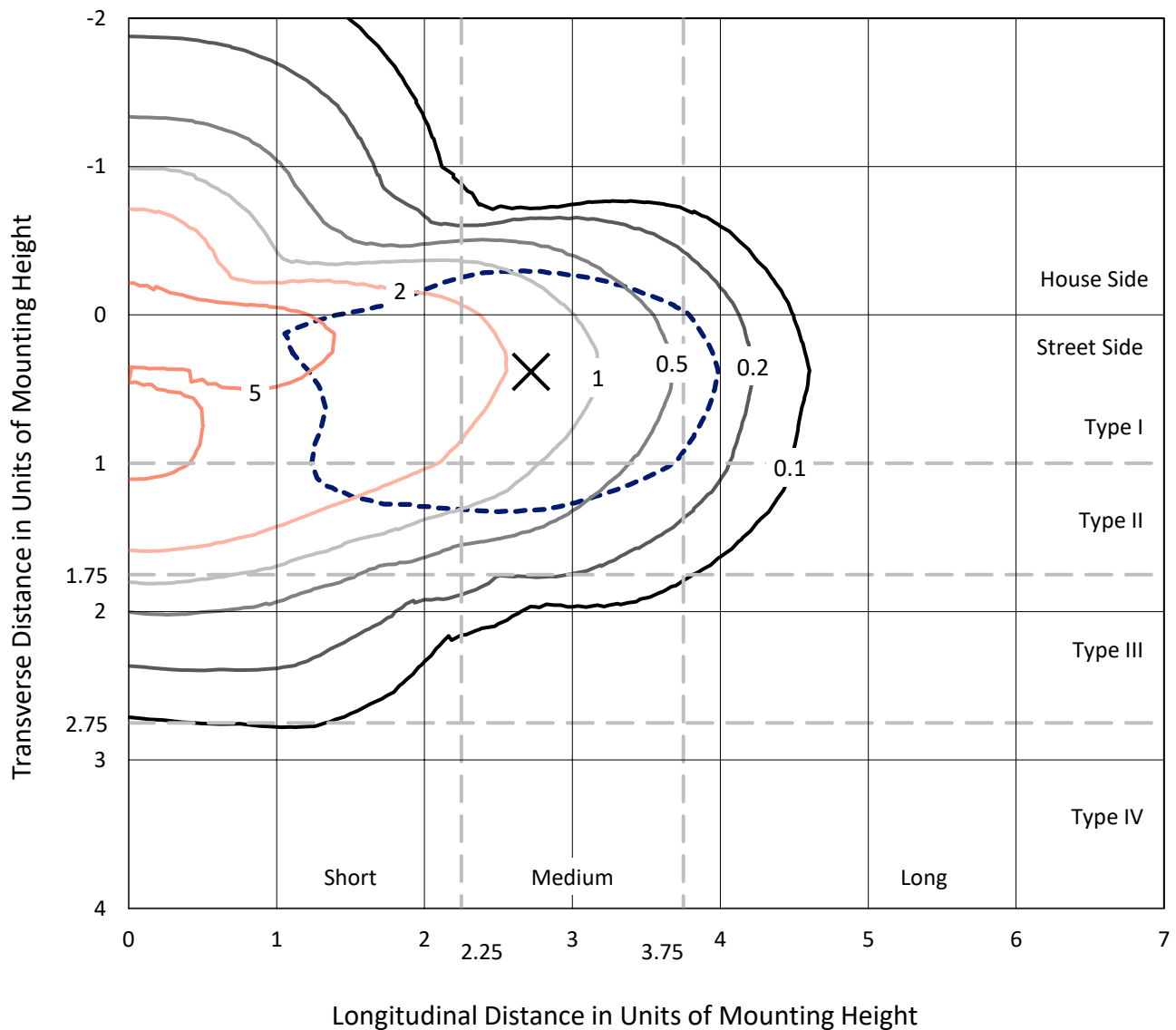
Input Watts (W): 182.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

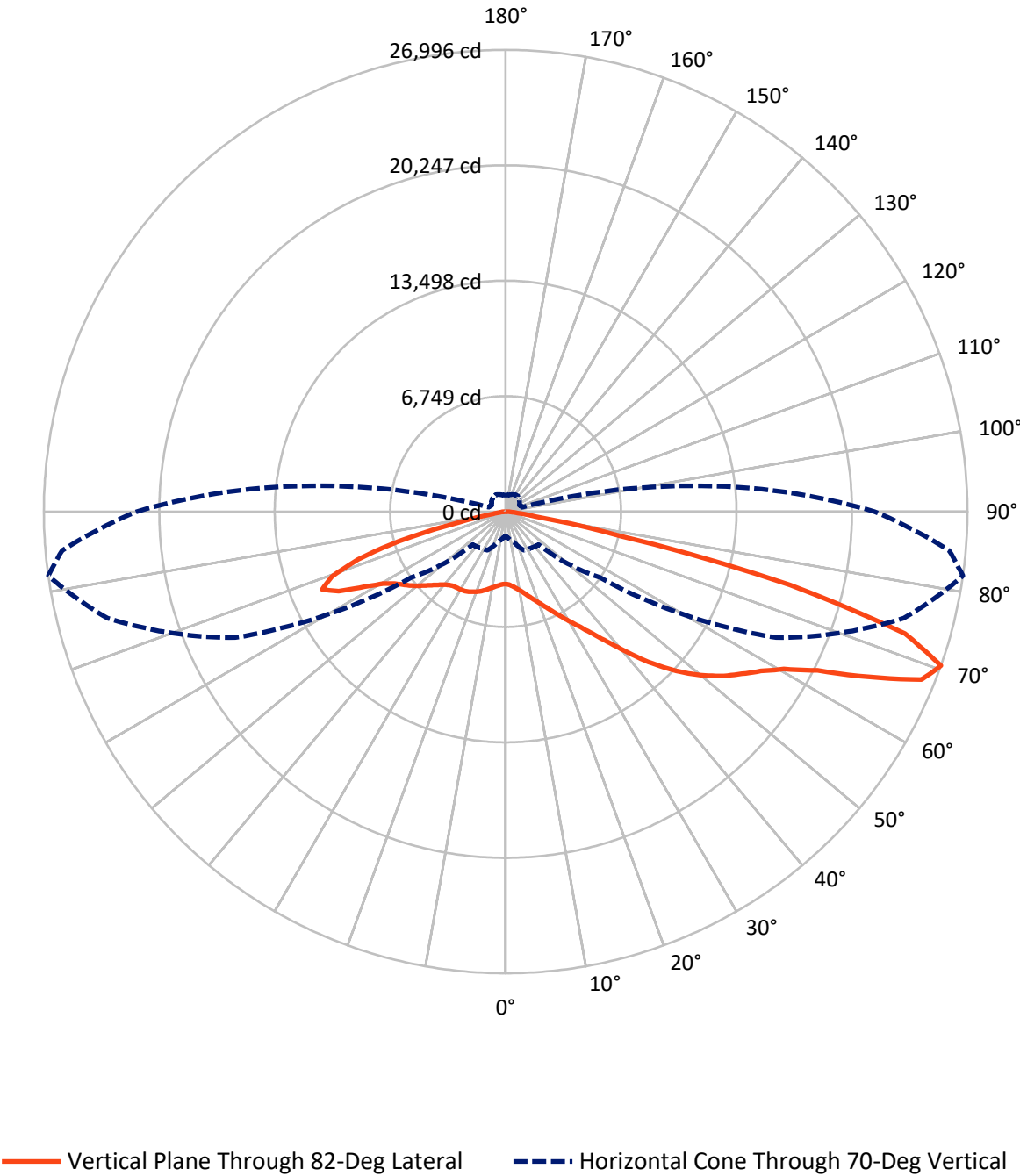
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.7 fc
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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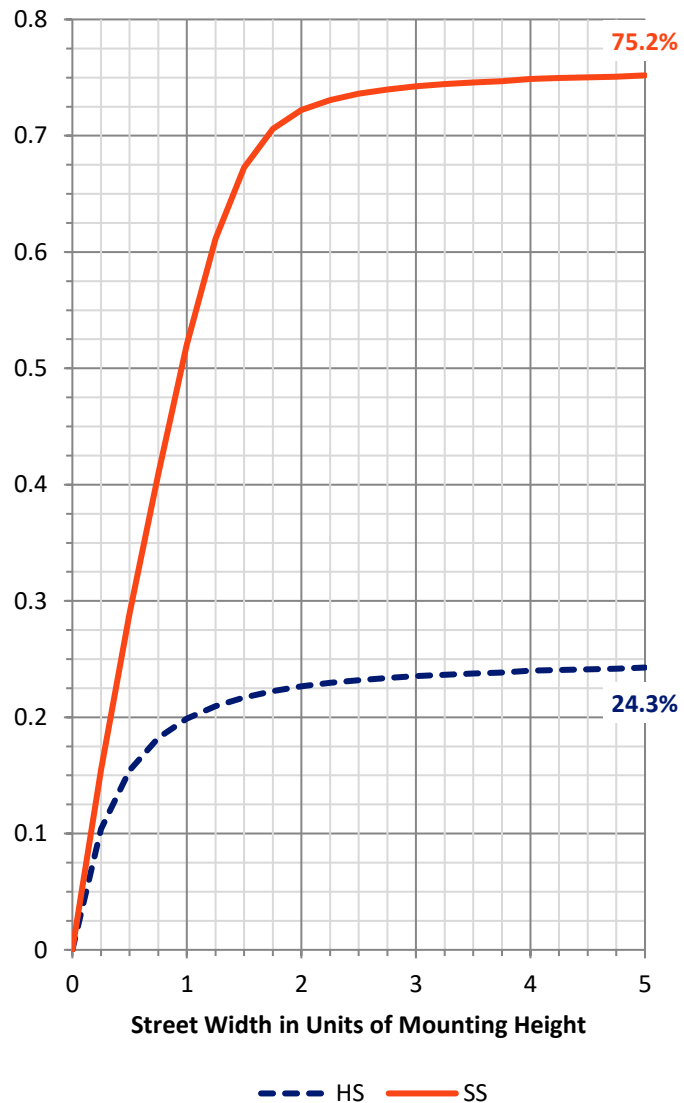
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7121.7	0.0	7121.7
	% Fixture	24.7	0.0	24.7
Street Side	Lumens	21766.8	0.0	21766.8
	% Fixture	75.3	0.0	75.3
Total	Lumens	28888.6	0.0	28888.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	399.9	1.4
10°-20°	1148.9	4.0
20°-30°	1922.1	6.7
30°-40°	3002.7	10.4
40°-50°	4782.2	16.6
50°-60°	6655.0	23.0
60°-70°	6961.5	24.1
70°-80°	3638.4	12.6
80°-90°	377.8	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°	28888.6	100.0
0°-180°	28888.6	100.0

Coefficient of Utilization



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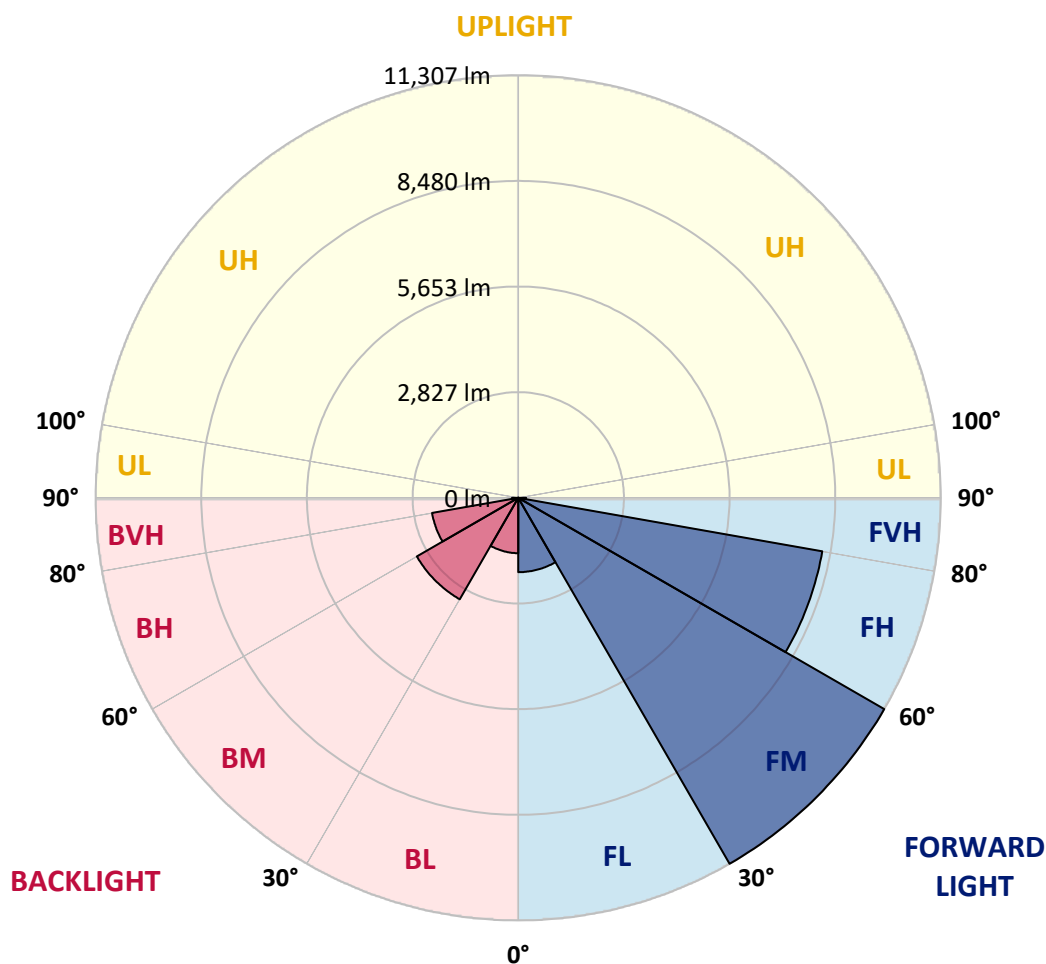
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1989.3	6.9			
FM	(30°-60°)	11306.7	39.1			
FH	(60°-80°)	8259.3	28.6			G4/12000
FVH	(80°-90°)	211.5	0.7			G2/225
BL	(0°-30°)	1481.6	5.1	B3/2500		
BM	(30°-60°)	3133.3	10.8	B3/5000		
BH	(60°-80°)	2340.6	8.1	B3/2500		G3/2500
BVH	(80°-90°)	166.3	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-G4

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	4235.4	4235.4	4235.4	4235.4	4235.4	4235.4	4235.4	4235.4	4235.4	4235.4	4235.4
2.5°	4336.6	4361.2	4353.5	4345.8	4345.8	4335.0	4333.5	4318.2	4305.9	4286.0	4281.4
5°	4391.8	4417.9	4414.8	4420.9	4440.8	4445.4	4450.0	4440.8	4416.3	4391.8	4381.1
7.5°	4342.7	4371.8	4381.1	4417.9	4479.1	4534.4	4575.7	4592.6	4569.7	4534.4	4517.5
10°	4177.2	4209.4	4241.6	4329.0	4437.7	4568.1	4678.4	4744.3	4739.8	4706.1	4676.9
12.5°	3841.5	3875.2	3944.2	4114.3	4313.6	4543.5	4748.9	4886.9	4934.5	4910.0	4859.3
15°	3573.3	3602.4	3654.4	3829.2	4088.3	4437.7	4775.1	5043.3	5164.4	5150.6	5089.2
17.5°	3565.6	3577.8	3610.0	3692.8	3892.0	4272.2	4747.4	5196.5	5428.0	5426.5	5349.9
20°	3700.5	3705.1	3723.4	3740.3	3853.7	4146.5	4676.9	5323.7	5723.9	5723.9	5641.1
22.5°	3887.4	3884.4	3902.8	3887.4	3942.7	4135.8	4632.5	5435.7	6053.4	6077.9	5973.7
25°	4168.0	4152.7	4148.1	4112.8	4123.6	4235.4	4681.5	5562.9	6444.4	6494.9	6364.6
27.5°	4542.0	4517.5	4500.7	4419.4	4391.8	4440.8	4831.7	5716.2	6879.7	6967.0	6801.5
30°	5029.5	4985.0	4960.5	4819.4	4719.8	4727.5	5058.6	5920.1	7335.0	7476.0	7266.0
32.5°	5694.8	5625.8	5559.9	5328.4	5146.0	5086.2	5351.4	6202.2	7828.5	8053.9	7784.2
35°	6439.8	6384.5	6314.1	5956.9	5676.3	5538.4	5746.9	6596.1	8406.4	8763.6	8412.6
37.5°	7157.2	7109.6	7143.3	6662.0	6300.3	6099.5	6265.0	7125.0	9119.3	9646.6	9200.5
40°	7899.1	7862.3	7866.9	7407.1	6985.5	6760.2	6893.5	7788.7	9936.3	10696.7	10147.9
42.5°	8705.4	8677.8	8585.8	8178.1	7704.4	7494.4	7617.0	8555.2	10813.1	11892.4	11187.2
45°	9608.2	9591.4	9505.5	9038.0	8495.4	8259.3	8424.9	9401.3	11694.5	13017.5	12231.1
47.5°	10388.6	10402.3	10391.6	9997.6	9435.0	9088.6	9286.4	10284.3	12514.6	14075.2	13232.0
50°	10764.1	10836.1	10941.9	10819.3	10469.8	10117.2	10155.5	11136.6	13296.5	15067.0	14191.6
52.5°	10567.9	10704.3	10992.5	11188.7	11323.6	11250.0	11147.3	11982.8	14032.2	15962.2	15099.2
55°	9836.7	10028.3	10506.6	10980.2	11668.5	12203.4	12338.4	12920.9	14749.6	16750.1	15957.6
57.5°	8504.6	8815.7	9245.0	10203.1	11361.9	12664.9	13727.2	14222.4	15510.0	17591.7	16855.9
60°	6220.5	6637.5	7171.0	8596.6	10288.8	12418.1	14909.0	16221.2	16590.6	18681.5	18025.4
62.5°	3981.0	4238.5	4729.0	6071.9	8017.1	11153.4	15270.9	18719.9	18422.5	20468.9	19779.1
65°	2725.5	2891.1	3340.2	4094.4	5182.8	8302.2	14302.0	20593.1	21332.0	23301.7	22777.6
67.5°	1980.5	2106.2	2489.4	3150.1	3377.0	4912.9	11098.3	20507.3	24160.2	26220.4	25404.9
70°	1444.0	1532.9	1854.8	2489.4	2598.3	2733.2	6723.4	17432.3	24098.9	26996.0	26019.6
72.5°	1070.0	1131.3	1347.5	1931.5	2103.2	1845.6	3328.0	12669.5	20708.1	24417.8	23634.4
75°	774.1	820.1	979.5	1477.7	1683.2	1405.7	1660.2	7404.0	14444.6	17176.2	17314.2
77.5°	591.7	627.0	731.2	1082.2	1347.5	1054.6	1030.1	3406.1	6849.0	6882.8	7269.1
80°	475.2	498.2	554.9	761.9	1033.2	789.5	671.4	1375.0	2164.5	1831.8	1922.3
82.5°	349.5	387.9	469.0	534.9	738.8	544.2	409.3	694.4	823.2	708.2	714.3
85°	199.3	225.3	283.6	383.2	472.1	332.6	234.5	308.1	383.2	314.3	280.5
87.5°	70.5	91.9	99.6	150.3	205.4	138.0	90.4	88.9	125.7	93.5	78.2
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°	4235.4	4235.4	4235.4	4235.4	4235.4	4235.4	4235.4	4235.4	4235.4	4235.4	4235.4
2.5°	4266.0	4258.5	4227.7	4186.4	4143.5	4102.0	4088.3	4059.1	4039.2	4028.5	4040.8
5°	4351.9	4327.4	4255.4	4163.3	4066.8	3962.5	3889.0	3821.5	3772.5	3726.5	3744.9
7.5°	4474.5	4431.7	4307.5	4146.5	3974.8	3801.6	3672.9	3574.8	3508.8	3465.9	3475.1
10°	4617.1	4551.2	4361.2	4120.5	3855.2	3607.0	3455.2	3370.9	3329.5	3306.4	3312.6
12.5°	4781.1	4687.6	4416.3	4060.6	3672.9	3389.3	3285.0	3260.5	3262.1	3263.6	3266.7
15°	4983.4	4853.2	4460.8	3930.4	3435.3	3222.2	3203.7	3243.6	3285.0	3304.9	3303.4
17.5°	5211.9	5027.9	4468.4	3715.7	3202.2	3114.9	3173.1	3259.0	3321.8	3349.4	3355.5
20°	5457.2	5205.8	4413.2	3412.2	3010.6	3027.5	3131.8	3242.1	3311.1	3346.3	3355.5
22.5°	5737.6	5395.8	4281.4	3093.4	2854.3	2932.4	3055.1	3162.4	3234.5	3269.6	3278.9
25°	6058.1	5608.9	4074.5	2825.1	2719.4	2825.1	2947.8	3036.7	3095.0	3127.2	3136.3
27.5°	6413.7	5831.2	3798.5	2612.1	2601.3	2714.8	2816.0	2885.0	2915.6	2940.1	2949.3
30°	6770.8	6033.6	3464.4	2451.1	2498.6	2606.0	2678.0	2708.7	2717.9	2722.4	2733.2
32.5°	7157.2	6208.3	3113.3	2317.7	2400.5	2500.2	2543.1	2556.9	2514.0	2484.8	2494.0
35°	7624.7	6395.3	2770.0	2212.0	2304.0	2389.8	2403.6	2391.3	2340.8	2280.9	2284.0
37.5°	8202.6	6628.3	2495.6	2136.9	2213.5	2270.3	2253.4	2250.3	2254.9	2184.4	2189.0
40°	8910.8	6931.8	2294.8	2078.6	2139.9	2152.2	2104.7	2130.8	2153.7	2046.4	2049.5
42.5°	9697.2	7298.2	2167.6	2038.7	2078.6	2049.5	1975.9	2005.0	2002.0	1861.0	1859.5
45°	10498.9	7696.7	2123.1	2009.6	2021.9	1963.7	1882.4	1890.1	1825.7	1698.4	1703.0
47.5°	11296.0	8124.5	2150.7	1985.1	1951.4	1885.5	1822.7	1788.9	1693.9	1598.8	1598.8
50°	12077.8	8573.6	2251.8	1936.0	1854.8	1816.5	1770.5	1710.7	1609.6	1528.3	1522.2
52.5°	12802.9	9025.7	2365.3	1854.8	1733.7	1756.7	1727.6	1658.7	1558.9	1476.2	1477.7
55°	13489.6	9478.0	2409.8	1742.9	1620.3	1704.6	1687.8	1560.5	1440.9	1373.5	1367.4
57.5°	14237.7	10022.1	2360.7	1600.3	1528.3	1644.8	1580.4	1439.4	1370.4	1319.8	1315.3
60°	15273.9	10876.0	2254.9	1424.0	1440.9	1555.9	1445.6	1387.2	1312.2	1255.4	1252.3
62.5°	16995.4	12468.7	2084.7	1249.4	1338.2	1424.0	1381.2	1322.9	1246.3	1191.0	1191.0
65°	19540.0	14682.2	1764.3	1112.8	1223.2	1295.3	1312.2	1253.9	1174.2	1115.9	1119.0
67.5°	21686.0	16071.1	1335.2	999.5	1105.3	1191.0	1238.6	1181.8	1097.6	1040.9	1042.4
70°	21568.0	15062.4	1019.4	887.5	1001.0	1088.3	1149.6	1105.3	1014.7	961.1	965.8
72.5°	19156.7	12600.5	824.7	774.1	895.2	981.0	1054.6	1020.9	929.0	876.8	876.8
75°	14073.7	8944.6	659.2	659.2	763.4	869.2	950.4	929.0	844.6	807.8	797.1
77.5°	5932.4	3752.5	516.6	547.2	634.6	746.5	847.7	855.4	781.8	827.8	751.1
80°	1577.4	1034.7	393.9	430.7	498.2	616.2	737.3	734.3	654.6	611.6	568.7
82.5°	600.9	407.7	280.5	303.5	360.2	472.1	584.0	602.4	522.8	452.2	452.2
85°	231.4	174.8	173.2	182.4	210.0	312.7	441.5	456.8	393.9	334.2	344.9
87.5°	59.8	52.1	64.4	61.3	96.6	167.1	253.0	262.1	240.7	139.5	199.3
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)