

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: P965099

Luminaire Tested: **NAV-SB3D-735-U-T2**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P965099
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-SB3D-735-U-T2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 70 CRI, 3500K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 31008.3 lumens
Efficiency: N/A
Efficacy: 142.2 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B4 - U0 - G4

Input Watts (W): 218.1
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

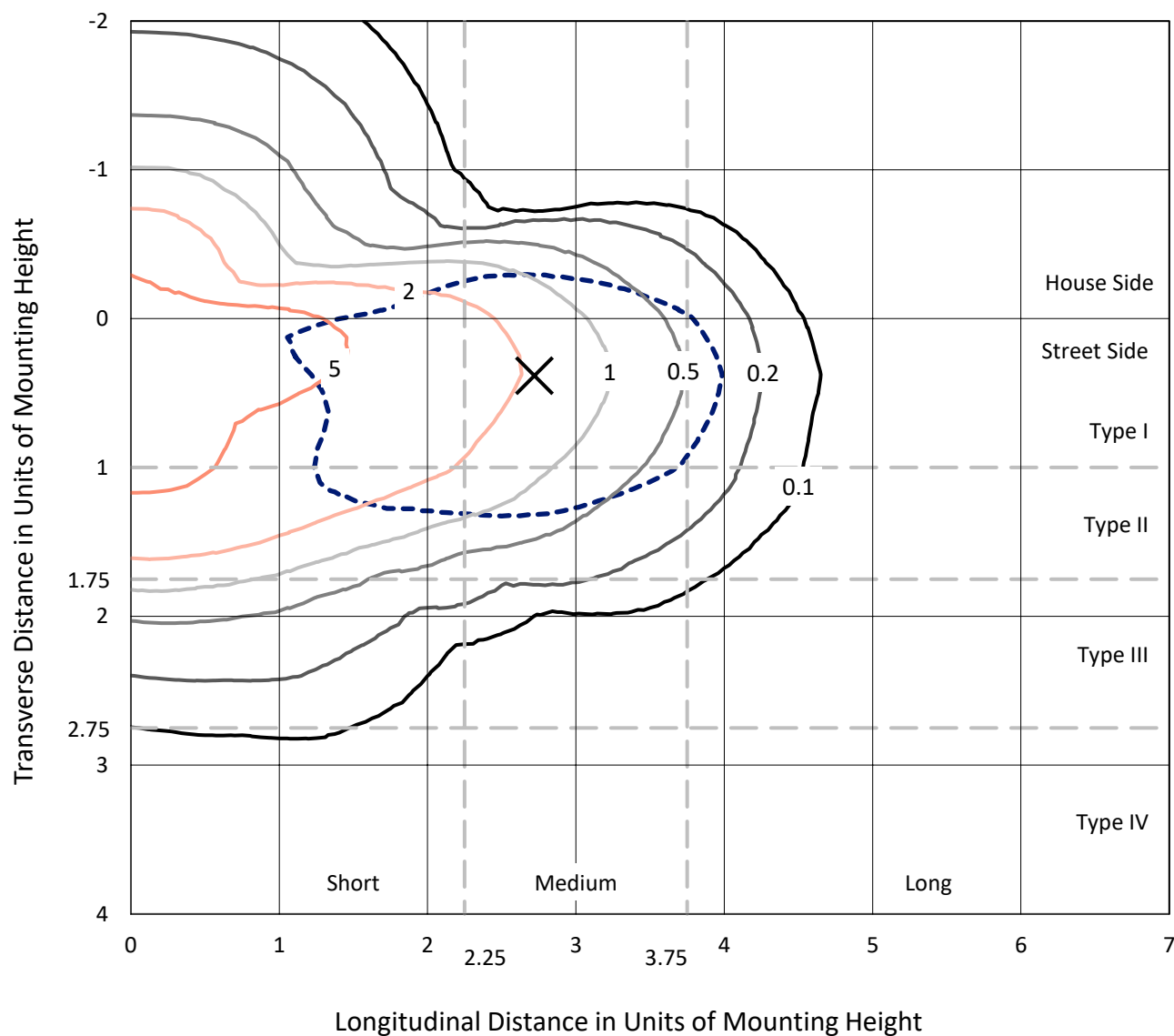


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Iso-Footcandle Lines of Horizontal Illumination

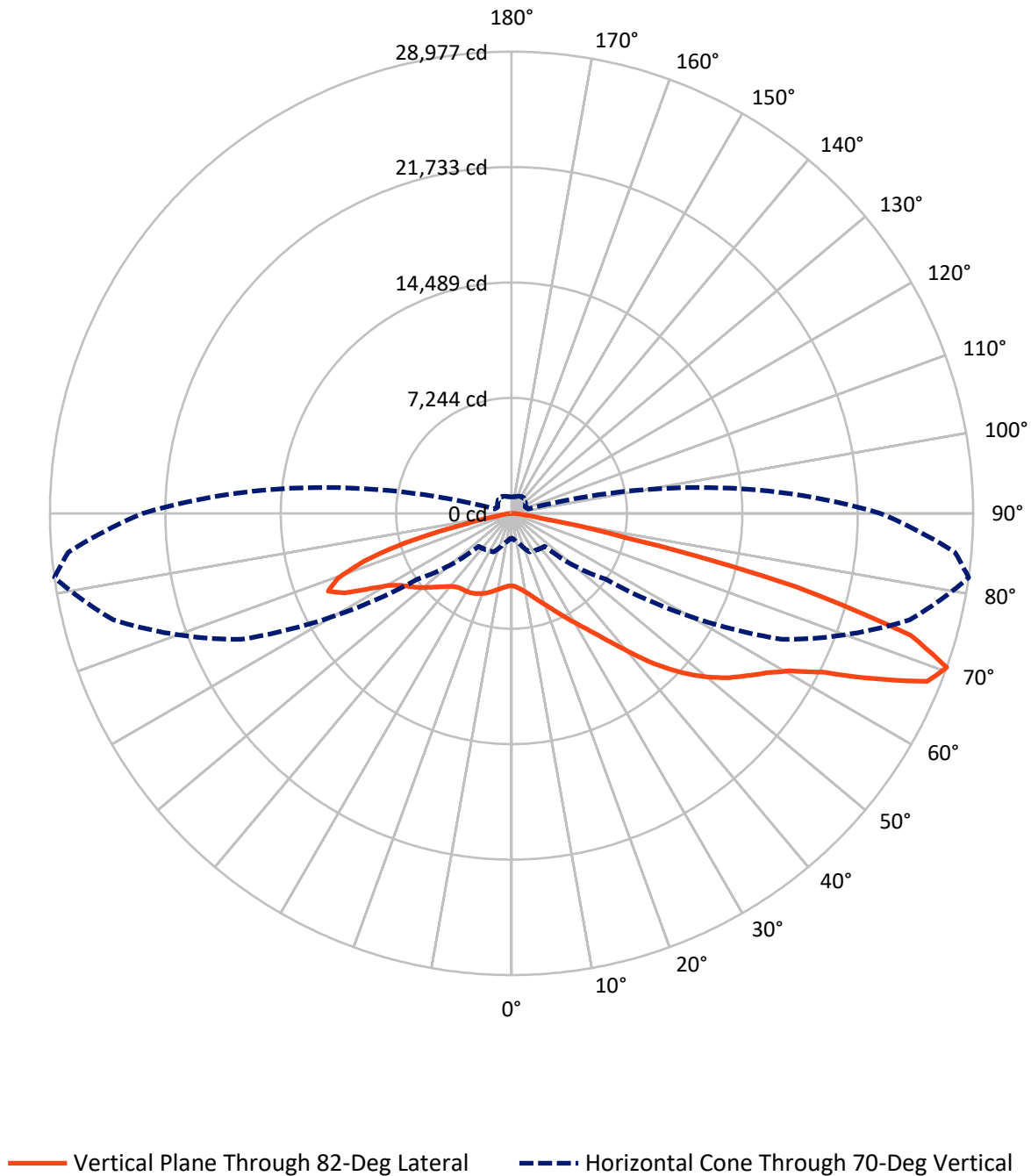
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.3 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



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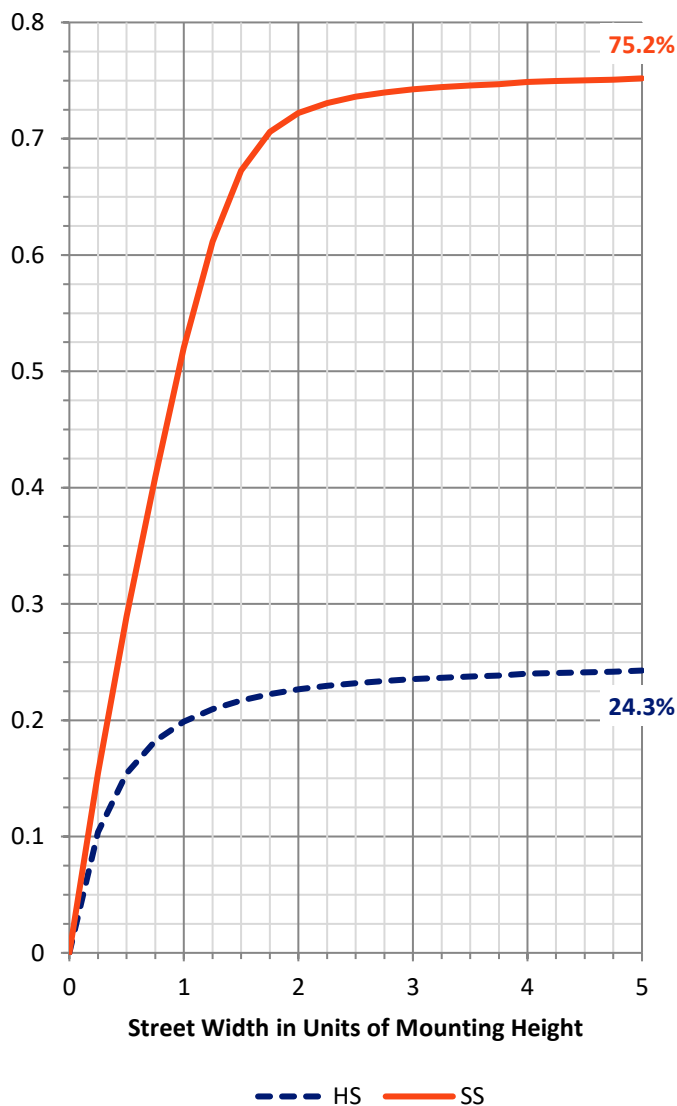
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7644.3	0.0	7644.3
	% Fixture	24.7	0.0	24.7
Street Side	Lumens	23364.0	0.0	23364.0
	% Fixture	75.3	0.0	75.3
Total	Lumens	31008.3	0.0	31008.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	429.2	1.4
10°-20°	1233.2	4.0
20°-30°	2063.1	6.7
30°-40°	3223.1	10.4
40°-50°	5133.1	16.6
50°-60°	7143.4	23.0
60°-70°	7472.3	24.1
70°-80°	3905.4	12.6
80°-90°	405.5	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°	31008.3	100.0
0°-180°	31008.3	100.0

Coefficient of Utilization



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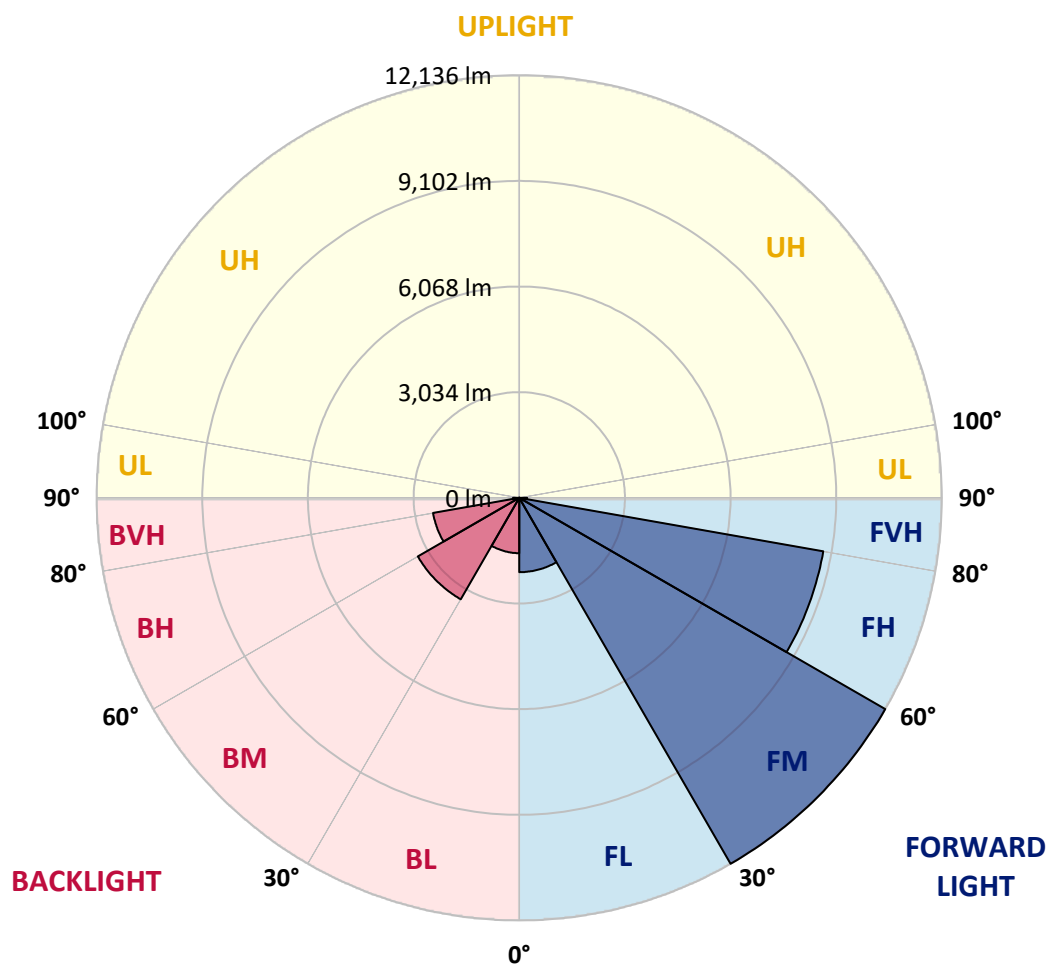
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2135.3	6.9			
FM	(30°-60°)	12136.3	39.1			
FH	(60°-80°)	8865.4	28.6			G4/12000
FVH	(80°-90°)	227.0	0.7			G3/500
BL	(0°-30°)	1590.3	5.1	B3/2500		
BM	(30°-60°)	3363.2	10.8	B3/5000		
BH	(60°-80°)	2512.3	8.1	B4/5000		G4/5000
BVH	(80°-90°)	178.5	0.6			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G4

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	4546.2	4546.2	4546.2	4546.2	4546.2	4546.2	4546.2	4546.2	4546.2	4546.2	4546.2
2.5°	4654.8	4681.2	4672.9	4664.7	4664.7	4653.2	4651.6	4635.0	4621.9	4600.5	4595.6
5°	4714.1	4742.0	4738.7	4745.3	4766.7	4771.6	4776.6	4766.7	4740.3	4714.1	4702.5
7.5°	4661.4	4692.7	4702.5	4742.0	4807.9	4867.0	4911.5	4929.5	4904.9	4867.0	4849.0
10°	4483.7	4518.2	4552.7	4646.5	4763.4	4903.3	5021.7	5092.5	5087.6	5051.3	5020.0
12.5°	4123.4	4159.6	4233.6	4416.2	4630.1	4877.0	5097.4	5245.5	5296.5	5270.1	5215.9
15°	3835.4	3866.7	3922.6	4110.1	4388.2	4763.4	5125.4	5413.3	5543.3	5528.5	5462.6
17.5°	3827.1	3840.4	3874.9	3963.8	4177.6	4585.6	5095.8	5577.8	5826.3	5824.7	5742.4
20°	3972.0	3976.9	3996.7	4014.7	4136.5	4450.8	5020.0	5714.5	6143.8	6143.8	6055.0
22.5°	4172.7	4169.4	4189.2	4172.7	4231.9	4439.3	4972.4	5834.5	6497.7	6523.9	6412.1
25°	4473.8	4457.3	4452.4	4414.6	4426.1	4546.2	5025.1	5971.1	6917.2	6971.5	6831.6
27.5°	4875.3	4849.0	4830.8	4743.7	4714.1	4766.7	5186.3	6135.6	7384.5	7478.3	7300.6
30°	5398.5	5350.8	5324.5	5173.1	5066.2	5074.4	5429.7	6354.5	7873.1	8024.5	7799.1
32.5°	6112.6	6038.6	5967.9	5719.4	5523.5	5459.4	5744.0	6657.3	8402.9	8644.8	8355.3
35°	6912.3	6853.0	6777.3	6394.0	6092.9	5944.8	6168.6	7080.1	9023.3	9406.6	9029.8
37.5°	7682.3	7631.3	7667.5	7150.8	6762.5	6547.0	6724.7	7647.7	9788.4	10354.4	9875.6
40°	8478.7	8439.2	8444.2	7950.5	7498.1	7256.2	7399.3	8360.2	10665.4	11481.5	10892.5
42.5°	9344.1	9314.6	9215.8	8778.1	8269.7	8044.3	8175.9	9182.9	11606.6	12764.9	12008.1
45°	10313.2	10295.2	10203.1	9701.2	9118.7	8865.3	9043.1	10091.1	12552.7	13972.6	13128.5
47.5°	11150.8	11165.6	11154.0	10731.2	10127.3	9755.5	9967.7	11038.9	13432.9	15108.0	14203.0
50°	11553.9	11631.3	11744.8	11613.1	11238.0	10859.6	10900.7	11953.8	14272.1	16172.6	15233.0
52.5°	11343.3	11489.7	11799.1	12009.7	12154.4	12075.5	11965.2	12862.0	15061.9	17133.4	16207.1
55°	10558.4	10764.1	11277.5	11785.9	12524.7	13098.9	13243.7	13869.0	15831.9	17979.1	17128.5
57.5°	9128.6	9462.6	9923.3	10951.7	12195.7	13594.2	14734.5	15265.9	16648.0	18882.4	18092.7
60°	6677.0	7124.6	7697.1	9227.4	11043.9	13329.3	16003.0	17411.5	17808.0	20052.4	19348.1
62.5°	4273.0	4549.5	5076.0	6517.4	8605.4	11971.8	16391.4	20093.5	19774.3	21970.9	21230.4
65°	2925.5	3103.2	3585.3	4394.8	5563.1	8911.5	15351.4	22104.1	22897.2	25011.5	24448.8
67.5°	2125.8	2260.7	2672.1	3381.3	3624.8	5273.4	11912.7	22012.0	25932.9	28144.3	27269.0
70°	1550.0	1645.4	1991.0	2672.1	2788.9	2933.8	7216.7	18711.4	25867.1	28977.0	27928.8
72.5°	1148.5	1214.3	1446.3	2073.2	2257.5	1981.0	3572.1	13599.1	22227.5	26209.4	25368.5
75°	831.0	880.3	1051.4	1586.2	1806.7	1508.8	1782.0	7947.2	15504.5	18436.6	18584.7
77.5°	635.1	672.9	784.8	1161.6	1446.3	1132.0	1105.7	3656.1	7351.6	7387.8	7802.4
80°	510.0	534.7	595.6	817.7	1108.9	847.4	720.7	1475.9	2323.3	1966.3	2063.3
82.5°	375.2	416.3	503.5	574.2	793.0	584.1	439.3	745.4	883.6	760.1	766.7
85°	213.9	241.9	304.4	411.3	506.8	357.0	251.7	330.8	411.3	337.3	301.1
87.5°	75.6	98.7	106.9	161.2	220.5	148.1	97.1	95.4	134.9	100.3	83.9
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°	4546.2	4546.2	4546.2	4546.2	4546.2	4546.2	4546.2	4546.2	4546.2	4546.2	4546.2
2.5°	4579.1	4570.9	4538.0	4493.6	4447.5	4403.1	4388.2	4357.0	4335.5	4324.1	4337.3
5°	4671.2	4644.9	4567.6	4468.9	4365.2	4253.3	4174.3	4101.9	4049.3	4000.0	4019.6
7.5°	4802.8	4756.8	4623.6	4450.8	4266.5	4080.5	3942.4	3837.1	3766.3	3720.2	3730.1
10°	4955.9	4885.2	4681.2	4422.8	4138.1	3871.6	3708.7	3618.2	3573.8	3549.1	3555.7
12.5°	5132.0	5031.6	4740.3	4358.6	3942.4	3637.9	3526.1	3499.8	3501.4	3503.0	3506.3
15°	5349.2	5209.3	4788.1	4218.8	3687.3	3458.6	3438.9	3481.6	3526.1	3547.4	3545.8
17.5°	5594.3	5396.8	4796.3	3988.4	3437.2	3343.4	3406.0	3498.1	3565.6	3595.2	3601.7
20°	5857.6	5587.7	4737.0	3662.6	3231.5	3249.7	3361.5	3480.0	3554.1	3591.9	3601.7
22.5°	6158.7	5791.8	4595.6	3320.4	3063.7	3147.7	3279.3	3394.4	3471.8	3509.6	3519.4
25°	6502.6	6020.4	4373.5	3032.5	2918.9	3032.5	3164.1	3259.5	3322.0	3356.6	3366.5
27.5°	6884.3	6259.1	4077.2	2803.8	2792.2	2914.0	3022.6	3096.6	3129.5	3155.9	3165.7
30°	7267.7	6476.3	3718.6	2631.0	2682.0	2797.1	2874.5	2907.4	2917.3	2922.2	2933.8
32.5°	7682.3	6663.8	3341.8	2487.8	2576.6	2683.7	2729.7	2744.5	2698.4	2667.2	2677.1
35°	8184.1	6864.5	2973.2	2374.3	2473.0	2565.2	2579.9	2566.8	2512.5	2448.3	2451.6
37.5°	8804.4	7114.6	2678.7	2293.6	2376.0	2436.8	2418.7	2415.4	2420.3	2344.7	2349.6
40°	9564.7	7440.5	2463.2	2231.1	2296.9	2310.1	2259.1	2287.1	2311.8	2196.6	2199.9
42.5°	10408.7	7833.7	2326.5	2188.4	2231.1	2199.9	2120.9	2152.2	2148.9	1997.5	1995.9
45°	11269.3	8261.5	2278.9	2157.1	2170.2	2107.7	2020.6	2028.8	1959.7	1823.1	1828.0
47.5°	12124.8	8720.6	2308.5	2130.8	2094.6	2023.9	1956.3	1920.1	1818.1	1716.2	1716.2
50°	12964.0	9202.7	2417.1	2078.1	1991.0	1949.8	1900.5	1836.3	1727.6	1640.4	1633.8
52.5°	13742.3	9688.0	2538.8	1991.0	1860.9	1885.6	1854.3	1780.3	1673.3	1584.5	1586.2
55°	14479.5	10173.4	2586.6	1870.8	1739.2	1829.6	1811.6	1675.1	1546.6	1474.3	1467.7
57.5°	15282.3	10757.6	2533.9	1717.8	1640.4	1765.5	1696.4	1545.0	1471.0	1416.7	1411.7
60°	16394.7	11674.0	2420.3	1528.6	1546.6	1670.0	1551.6	1489.1	1408.5	1347.6	1344.3
62.5°	18242.4	13383.5	2237.7	1341.0	1436.4	1528.6	1482.5	1419.9	1337.7	1278.5	1278.5
65°	20973.8	15759.5	1893.8	1194.5	1313.0	1390.3	1408.5	1345.9	1260.3	1197.8	1201.1
67.5°	23277.3	17250.2	1433.2	1072.8	1186.3	1278.5	1329.4	1268.6	1178.1	1117.2	1118.9
70°	23150.5	16167.5	1094.2	952.6	1074.4	1168.2	1234.0	1186.3	1089.3	1031.7	1036.6
72.5°	20562.4	13525.1	885.2	831.0	960.9	1053.1	1132.0	1095.8	997.1	941.2	941.2
75°	15106.3	9600.9	707.6	707.6	819.4	933.0	1020.2	997.1	906.6	867.2	855.6
77.5°	6367.6	4027.9	554.5	587.4	681.2	801.3	909.9	918.1	839.2	888.5	806.3
80°	1693.1	1110.6	422.9	462.4	534.7	661.4	791.4	788.1	702.5	656.5	610.4
82.5°	645.0	437.7	301.1	325.7	386.6	506.8	626.9	646.7	561.1	485.4	485.4
85°	248.5	187.6	185.9	195.8	225.4	335.7	473.9	490.4	422.9	358.6	370.2
87.5°	64.2	56.0	69.1	65.8	103.6	179.4	271.5	281.4	258.3	149.8	213.9
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)