

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: P965644

Luminaire Tested: **NAV-SB4A-740-U-SL3**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P965644
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-12)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB4A-740-U-SL3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 70 CRI, 4000K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
SPILL LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 19053.7 lumens
Efficiency: N/A
Efficacy: 167.1 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B2 - U0 - G4

Input Watts (W): 114
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



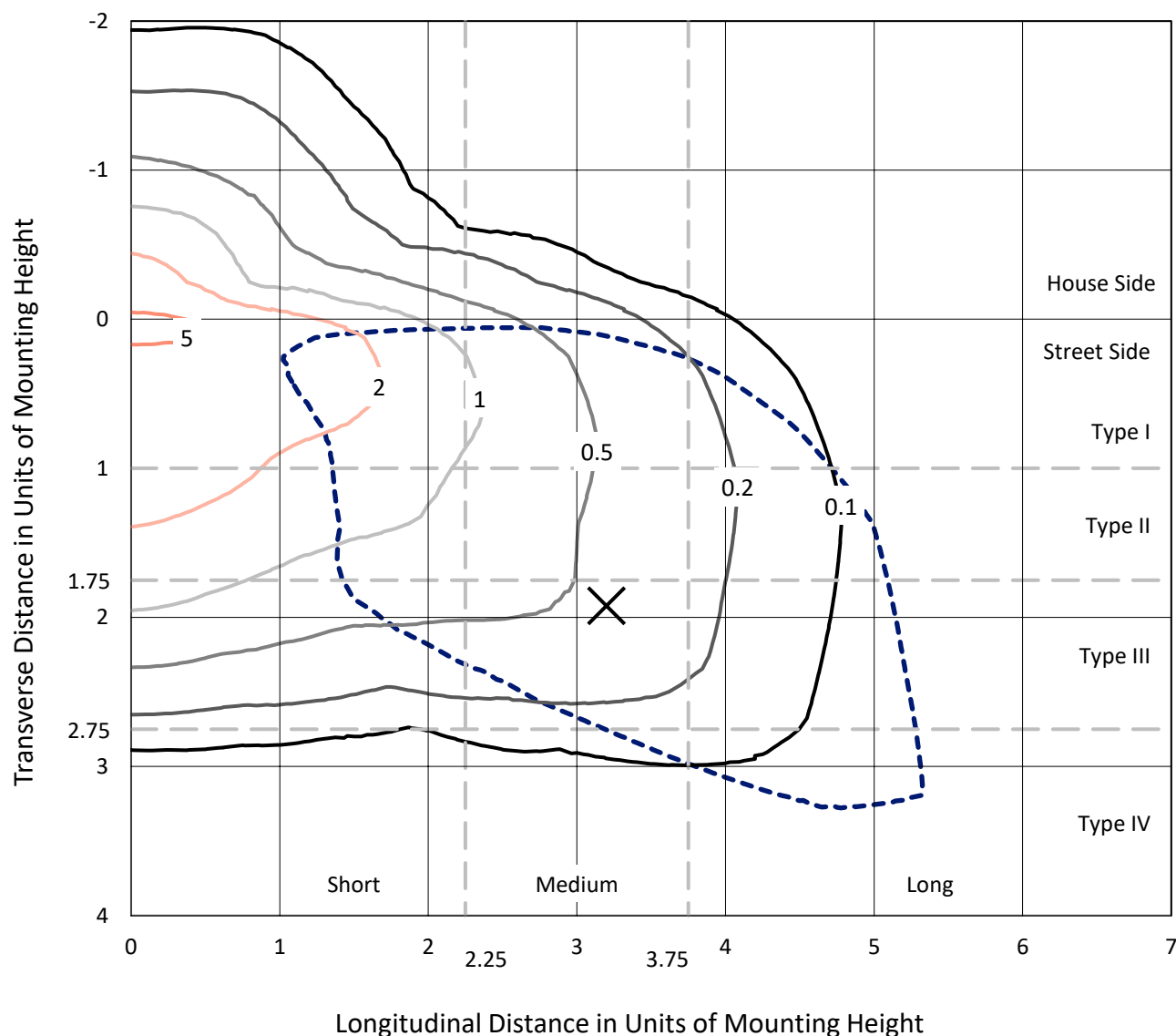
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

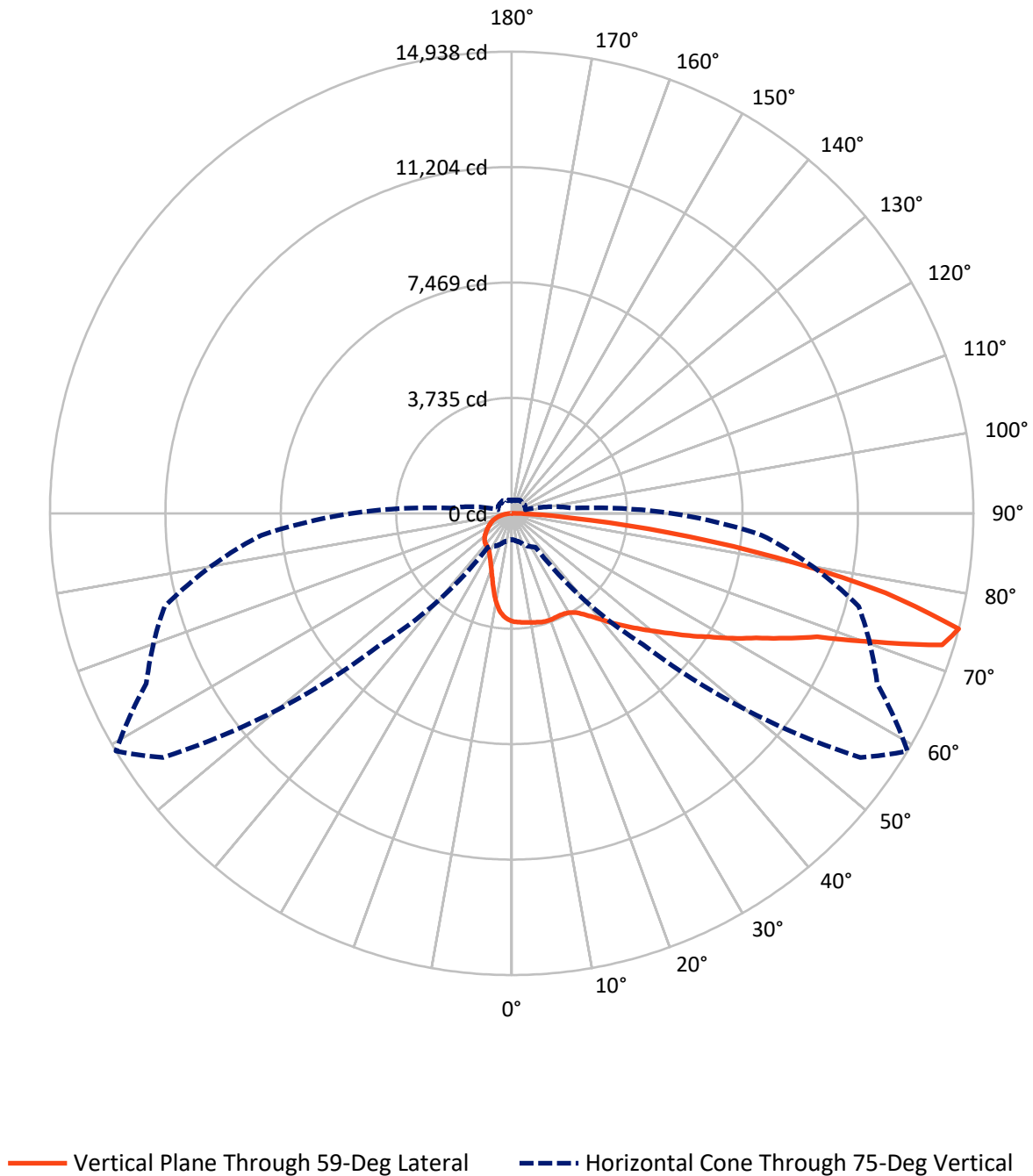
--- 1/2 Max cd



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

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Luminous Intensity Polar Plot



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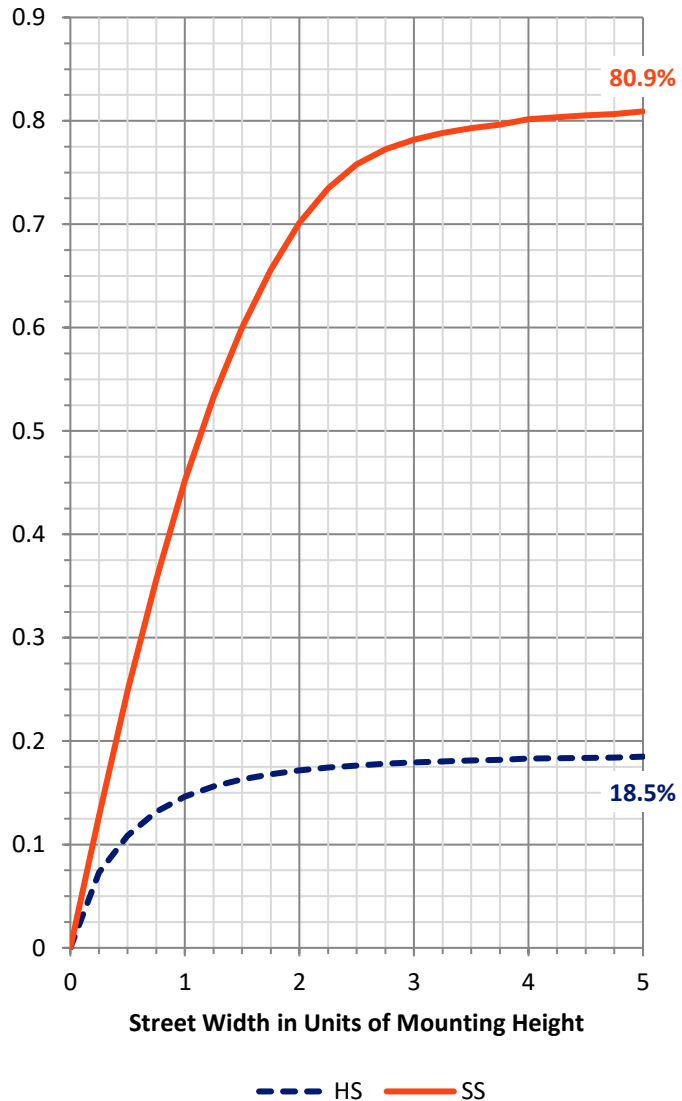
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3573.7	0.0	3573.7
	% Fixture	18.8	0.0	18.8
Street Side	Lumens	15480.0	0.0	15480.0
	% Fixture	81.2	0.0	81.2
Total	Lumens	19053.7	0.0	19053.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	313.6	1.6
10°-20°	801.6	4.2
20°-30°	1217.5	6.4
30°-40°	1809.8	9.5
40°-50°	2691.4	14.1
50°-60°	3653.3	19.2
60°-70°	4460.1	23.4
70°-80°	3500.2	18.4
80°-90°	606.3	3.2
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°	19053.7	100.0
0°-180°	19053.7	100.0

Coefficient of Utilization



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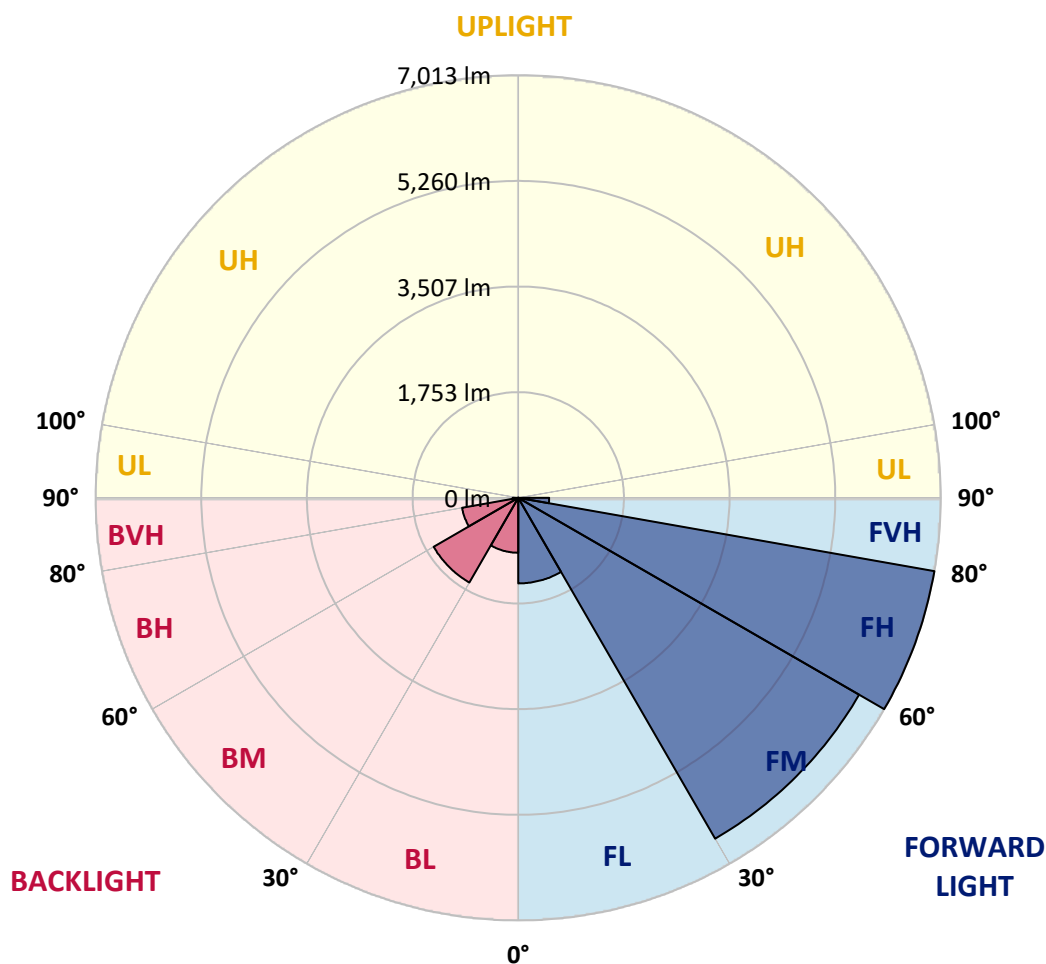
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1420.7	7.5			
FM	(30°-60°)	6532.4	34.3			
FH	(60°-80°)	7013.5	36.8			G3/7500
FVH	(80°-90°)	513.5	2.7			G4/750
BL	(0°-30°)	912.0	4.8	B2/1000		
BM	(30°-60°)	1622.1	8.5	B2/2500		
BH	(60°-80°)	946.8	5.0	B2/1000		G2/1000
BVH	(80°-90°)	92.8	0.5			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G4

Type IV Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	3497.3	3497.3	3497.3	3497.3	3497.3	3497.3	3497.3	3497.3	3497.3	3497.3	3497.3
2.5°	3527.0	3514.7	3527.0	3521.9	3519.8	3515.7	3516.8	3524.0	3519.8	3525.0	3507.6
5°	3503.4	3496.3	3508.6	3505.5	3518.8	3520.9	3534.2	3542.4	3547.5	3548.6	3535.2
7.5°	3464.5	3457.3	3474.7	3489.1	3517.8	3526.0	3553.7	3567.0	3574.2	3586.5	3567.0
10°	3322.0	3319.0	3362.0	3416.3	3484.0	3526.0	3568.0	3590.6	3601.8	3634.6	3612.1
12.5°	3069.9	3074.0	3130.4	3234.9	3370.2	3505.5	3584.4	3617.2	3634.6	3675.6	3665.4
15°	2829.0	2828.0	2889.5	3001.2	3190.8	3415.3	3592.6	3649.0	3678.7	3739.2	3731.0
17.5°	2689.6	2685.5	2728.5	2813.6	2989.9	3276.9	3572.1	3666.4	3730.0	3805.8	3798.6
20°	2664.0	2655.8	2678.3	2720.4	2845.4	3125.2	3518.8	3666.4	3771.0	3869.4	3865.3
22.5°	2757.2	2743.9	2734.7	2729.6	2784.9	3000.2	3458.4	3654.1	3831.4	3960.6	3953.4
25°	2944.8	2924.3	2877.2	2831.0	2814.6	2943.8	3405.0	3651.0	3921.6	4083.6	4057.0
27.5°	3248.2	3222.6	3127.3	3016.6	2917.1	2972.5	3381.5	3669.5	4021.1	4213.8	4160.5
30°	3624.4	3596.7	3476.8	3306.6	3128.3	3079.1	3411.2	3723.8	4148.2	4387.0	4282.4
32.5°	3961.6	3930.9	3828.4	3655.2	3414.3	3263.6	3505.5	3827.3	4348.0	4627.9	4465.9
35°	4260.9	4225.0	4132.8	3972.9	3764.8	3522.9	3675.6	4010.8	4632.0	5019.4	4715.0
37.5°	4554.1	4512.0	4411.6	4242.5	4096.9	3868.3	3910.4	4246.6	5009.2	5495.0	5045.0
40°	4882.1	4821.6	4699.6	4532.5	4391.1	4273.2	4218.9	4535.6	5392.5	6025.9	5457.1
42.5°	5199.8	5142.4	4996.9	4854.4	4677.1	4643.2	4576.6	4873.9	5811.6	6609.1	5875.2
45°	5542.2	5473.5	5297.2	5116.8	5005.1	4889.2	4923.1	5212.1	6222.7	7203.6	6313.9
47.5°	5862.9	5786.0	5578.0	5377.2	5315.6	5096.3	5240.8	5584.2	6650.1	7806.3	6748.5
50°	6036.1	5960.3	5787.0	5605.7	5557.5	5351.5	5585.2	5993.1	7098.0	8406.9	7165.7
52.5°	6180.6	6098.6	5872.1	5771.7	5757.3	5629.3	6009.5	6460.5	7545.9	8937.9	7568.5
55°	6334.4	6243.2	5954.1	5863.9	5929.5	5940.8	6512.7	6990.4	8019.5	9455.5	7948.8
57.5°	6511.7	6395.9	6033.0	5941.8	6097.6	6305.7	7090.8	7539.8	8484.8	9935.2	8287.0
60°	6678.8	6561.9	6184.7	6065.8	6279.0	6729.0	7754.0	8205.0	9011.7	10362.6	8606.8
62.5°	6711.6	6615.2	6305.7	6304.7	6525.0	7223.1	8539.2	8876.4	9471.9	10784.9	8893.8
65°	6143.7	6083.3	5899.8	6295.4	6877.6	7934.4	9413.5	9735.3	10057.2	11153.9	9146.0
67.5°	4676.0	4684.2	4670.9	5434.5	6592.7	8956.3	10679.4	10654.8	10779.8	11568.0	9436.0
70°	2138.1	2186.3	2500.0	3751.5	5281.8	9074.2	12772.4	12453.6	11686.9	12104.1	9687.2
72.5°	1155.2	1192.1	1320.2	1817.3	3175.4	8067.7	14336.6	14563.1	12893.4	12464.9	9411.4
75°	847.7	868.2	957.4	1155.2	1333.5	5996.1	13775.9	14938.2	13044.0	11623.4	8127.1
77.5°	634.5	643.7	716.5	915.3	682.6	3161.1	11007.4	12371.6	11166.2	9549.8	6003.3
80°	460.2	470.5	524.8	686.7	478.7	1156.2	7558.2	8683.7	7647.4	6087.4	2992.0
82.5°	317.8	321.8	345.4	467.4	334.2	449.0	4288.6	5092.2	4269.1	2136.1	807.7
85°	191.7	196.8	207.0	272.6	189.6	213.2	1851.2	1914.7	1276.1	510.4	251.1
87.5°	78.9	84.0	92.2	114.8	74.8	59.4	305.4	383.3	238.8	149.6	77.9
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°	3497.3	3497.3	3497.3	3497.3	3497.3	3497.3	3497.3	3497.3	3497.3	3497.3	3497.3
2.5°	3502.4	3495.2	3475.8	3449.1	3424.5	3393.8	3380.4	3369.2	3358.9	3339.4	3330.2
5°	3524.0	3504.5	3452.2	3384.6	3307.7	3223.6	3141.6	3085.2	3037.1	3001.2	2971.5
7.5°	3556.7	3519.8	3424.5	3286.2	3109.8	2929.4	2766.5	2650.6	2563.5	2531.8	2476.4
10°	3590.6	3546.5	3380.4	3136.5	2832.1	2554.3	2338.0	2219.1	2149.4	2126.9	2092.0
12.5°	3630.6	3566.0	3311.8	2928.4	2521.5	2217.1	2028.5	1958.8	1922.9	1910.6	1913.7
15°	3689.0	3582.4	3208.2	2668.1	2225.3	1971.1	1849.1	1800.9	1782.5	1781.4	1785.6
17.5°	3733.0	3585.4	3047.3	2389.3	1997.7	1822.4	1722.0	1703.6	1715.8	1734.3	1741.5
20°	3782.2	3557.8	2836.2	2135.1	1837.8	1692.3	1650.2	1662.6	1692.3	1718.9	1728.2
22.5°	3817.1	3507.6	2581.0	1937.2	1699.4	1617.4	1615.4	1641.0	1657.4	1670.7	1677.9
25°	3847.8	3422.5	2310.4	1771.2	1585.7	1572.4	1594.9	1586.7	1575.4	1586.7	1593.9
27.5°	3870.4	3288.2	2068.4	1625.6	1505.7	1541.6	1528.3	1509.8	1508.8	1514.9	1525.2
30°	3863.2	3108.8	1869.6	1487.3	1449.4	1484.2	1452.4	1449.4	1446.3	1449.4	1460.6
32.5°	3863.2	2904.8	1716.9	1391.9	1413.5	1400.1	1397.1	1389.9	1377.6	1376.6	1389.9
35°	3884.7	2700.9	1585.7	1340.7	1383.7	1352.0	1354.0	1336.6	1311.0	1298.7	1311.0
37.5°	3928.8	2536.9	1455.5	1316.1	1331.5	1330.4	1322.2	1292.5	1247.4	1208.5	1221.8
40°	4035.4	2488.7	1366.3	1304.8	1306.9	1319.2	1297.6	1240.2	1137.8	1074.2	1082.4
42.5°	4202.5	2569.7	1346.8	1277.1	1290.5	1302.8	1260.8	1127.5	1054.7	1016.8	1016.8
45°	4414.7	2711.1	1388.9	1237.2	1251.5	1273.0	1148.0	1084.4	1051.6	1052.7	1057.8
47.5°	4683.2	2859.7	1466.8	1202.3	1195.1	1207.4	1073.2	1034.2	989.1	1000.4	1029.1
50°	4993.8	3010.4	1540.6	1155.2	1132.6	1092.6	1025.0	988.1	930.7	904.0	911.2
52.5°	5330.0	3156.0	1570.3	1097.8	1065.0	1018.8	992.2	947.1	877.4	833.3	832.3
55°	5648.8	3288.2	1537.5	1029.1	997.3	961.4	957.4	929.7	854.8	793.3	793.3
57.5°	5950.0	3398.9	1455.5	959.4	928.6	907.1	934.8	921.5	827.2	748.2	744.2
60°	6205.2	3474.7	1336.6	888.7	867.2	855.9	897.9	893.8	788.2	700.1	697.0
62.5°	6408.2	3504.5	1205.4	821.0	815.9	795.4	846.6	846.6	739.0	652.9	649.8
65°	6567.1	3475.8	1072.1	754.4	764.6	733.9	784.1	778.0	686.7	610.9	606.8
67.5°	6707.5	3381.5	924.6	688.8	712.4	673.4	718.5	704.2	629.3	568.9	564.8
70°	6770.0	3162.1	756.4	623.2	651.9	614.0	652.9	626.3	564.8	523.8	515.6
72.5°	6267.8	2628.1	595.5	554.5	579.1	548.4	582.2	551.4	495.1	476.6	461.2
75°	5185.5	1972.1	458.2	479.7	498.2	474.6	497.1	474.6	423.3	436.6	398.7
77.5°	3765.8	1331.5	350.5	400.8	409.0	396.7	416.2	390.5	344.4	341.3	326.0
80°	1872.7	780.0	274.7	316.7	313.6	305.4	328.0	315.7	276.8	293.2	290.1
82.5°	542.2	334.2	199.9	222.4	216.3	218.3	234.7	240.9	360.8	357.7	365.9
85°	170.1	131.2	119.9	124.0	117.9	121.0	138.4	274.7	254.2	148.6	160.9
87.5°	44.1	45.1	29.7	31.8	32.8	38.9	44.1	167.1	79.9	52.3	55.4
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)