

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: P966841

Luminaire Tested: **NAV-SB4C-830-U-T4FT**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P966841
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-24)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB4C-830-U-T4FT
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 80 CRI, 3000K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV
FORWARD THROW OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 27322.4 lumens
Efficiency: N/A
Efficacy: 136.1 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G4

Input Watts (W): 200.7
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



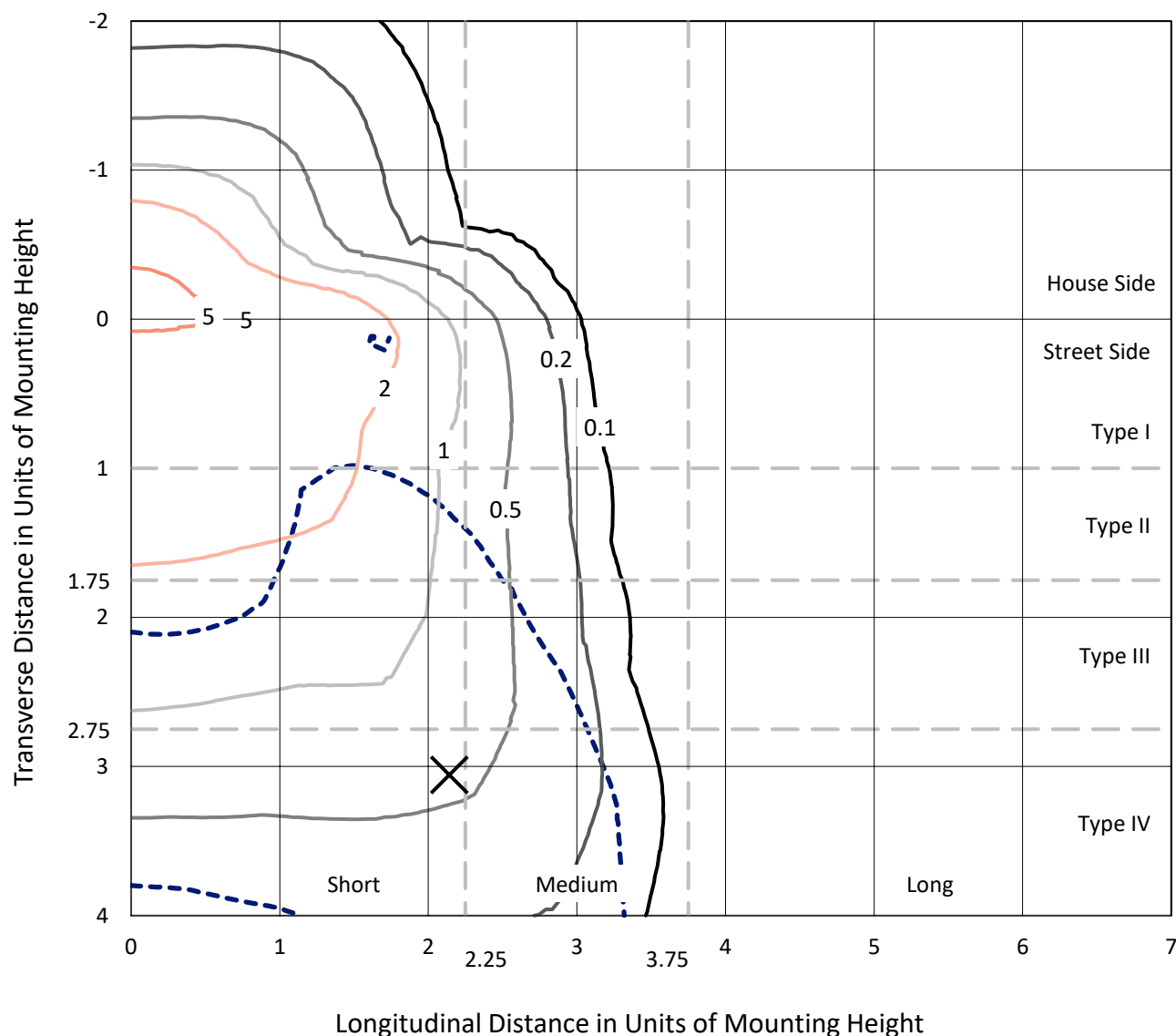
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

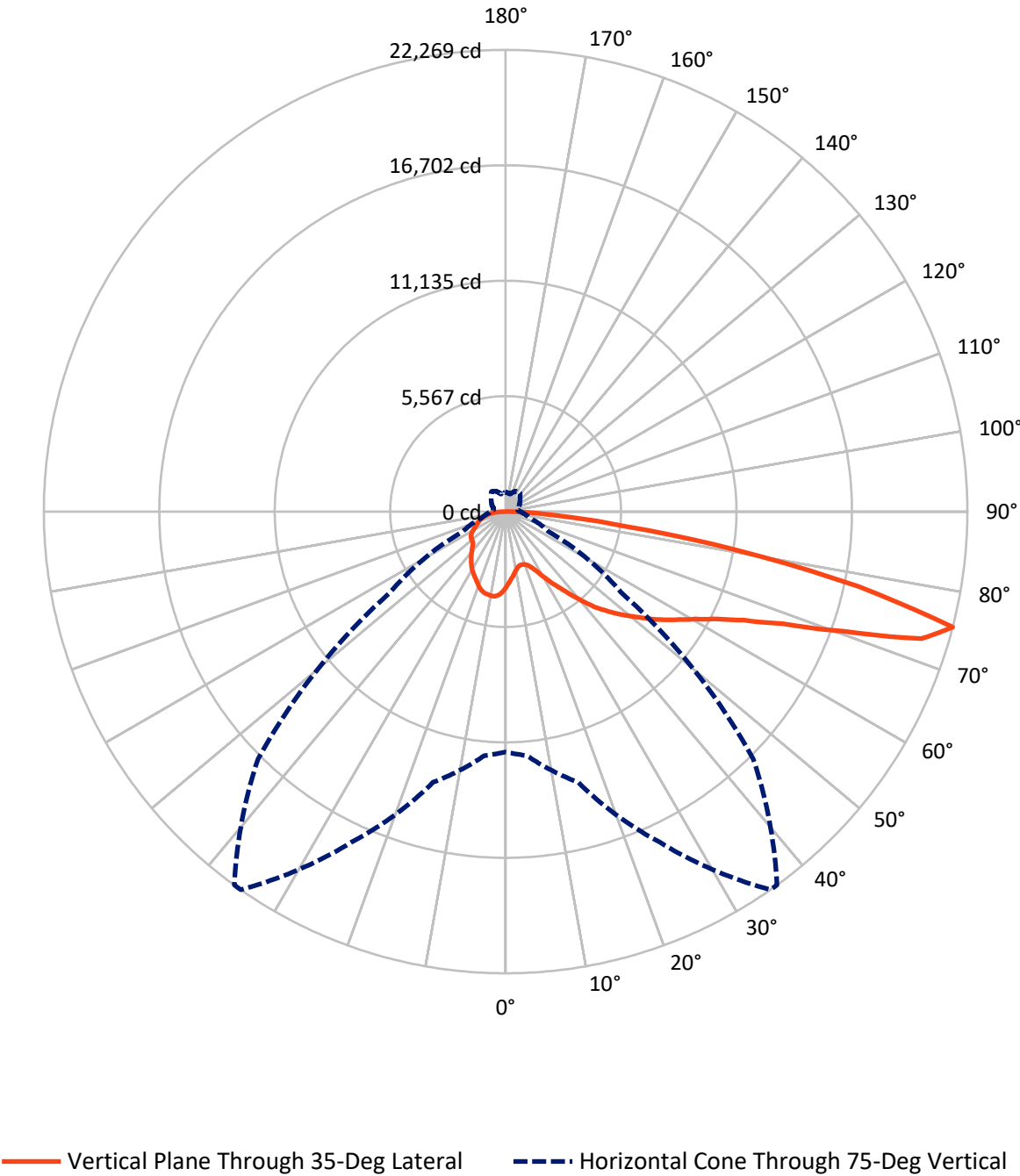


Based on 25 foot mounting height. Maximum calculated value = 6.4 fc

Type IV - Short - N/A

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Luminous Intensity Polar Plot



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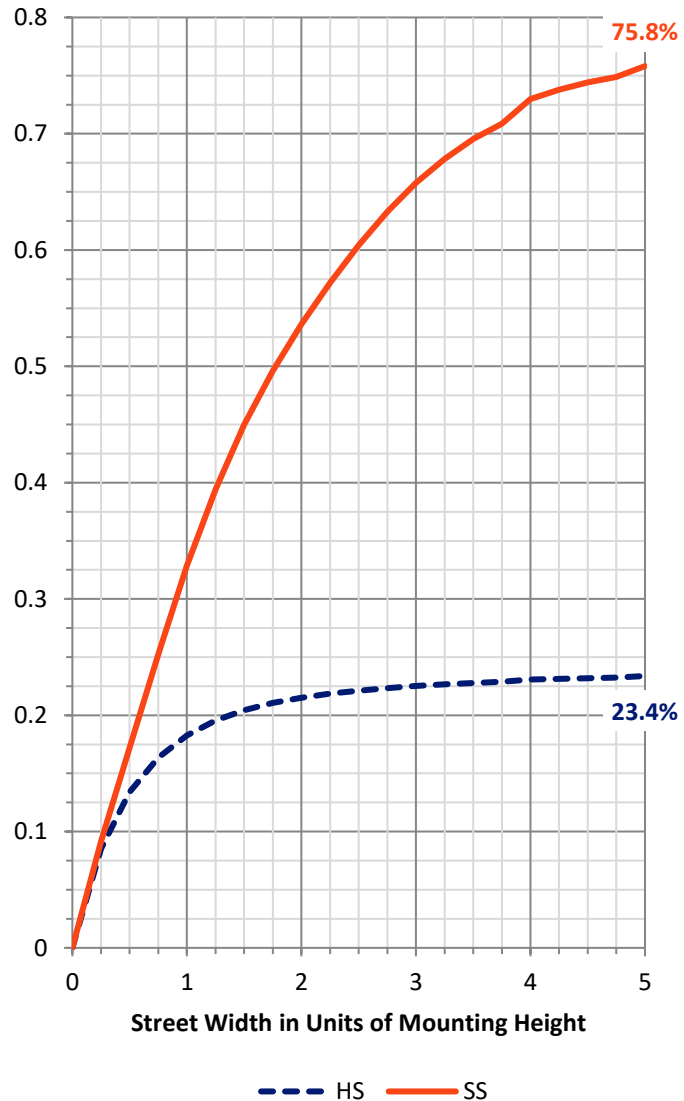
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6502.0	0.0	6502.0
	% Fixture	23.8	0.0	23.8
Street Side	Lumens	20820.4	0.0	20820.4
	% Fixture	76.2	0.0	76.2
Total	Lumens	27322.4	0.0	27322.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	344.7	1.3
10°-20°	994.3	3.6
20°-30°	1669.7	6.1
30°-40°	2595.0	9.5
40°-50°	3851.7	14.1
50°-60°	5317.4	19.5
60°-70°	6451.3	23.6
70°-80°	5331.5	19.5
80°-90°	766.8	2.8
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°	27322.4	100.0
0°-180°	27322.4	100.0

Coefficient of Utilization



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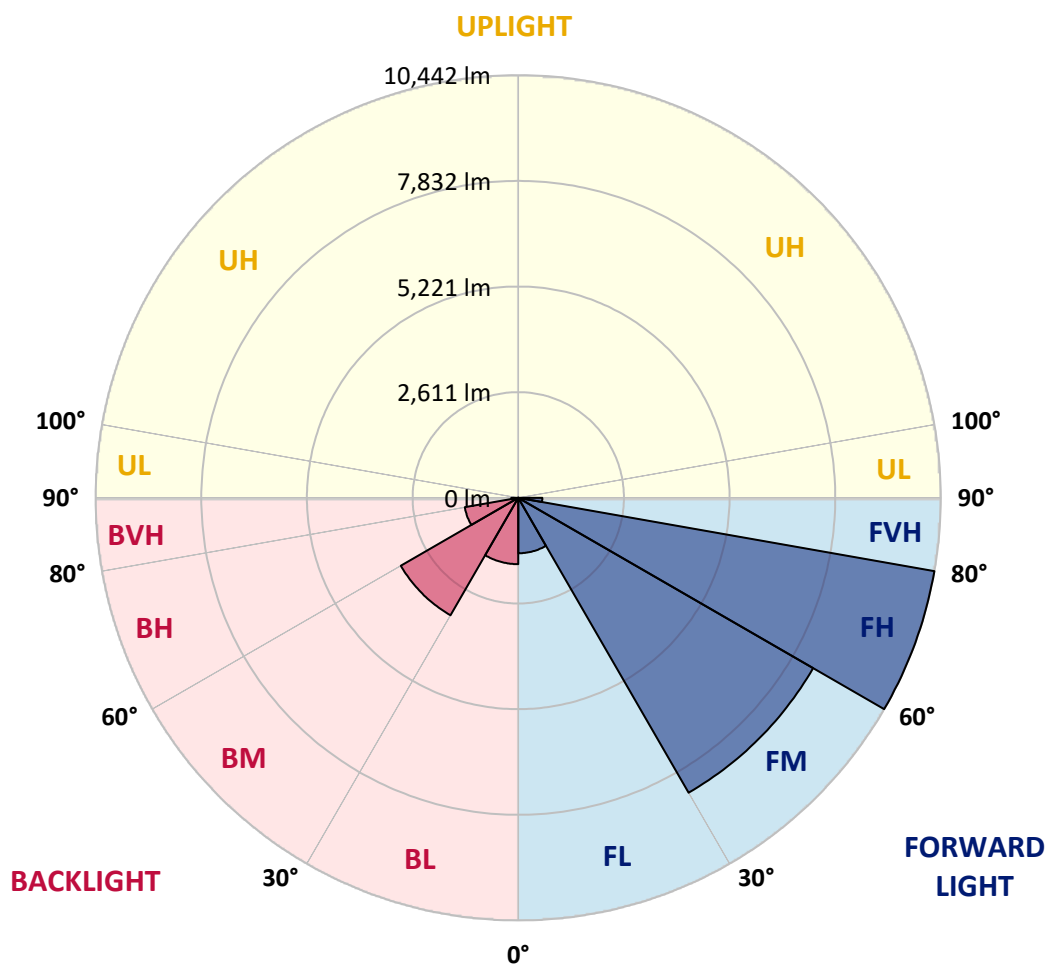
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1370.2	5.0			
FM	(30°-60°)	8413.8	30.8			
FH	(60°-80°)	10442.2	38.2			G4/12000
FVH	(80°-90°)	594.2	2.2			G4/750
BL	(0°-30°)	1638.6	6.0	B3/2500		
BM	(30°-60°)	3350.3	12.3	B3/5000		
BH	(60°-80°)	1340.5	4.9	B3/2500		G3/2500
BVH	(80°-90°)	172.7	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 IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	3640.9	3640.9	3640.9	3640.9	3640.9	3640.9	3640.9	3640.9	3640.9	3640.9	3640.9
2.5°	3357.3	3378.0	3386.8	3382.4	3404.5	3401.6	3432.6	3471.1	3524.3	3575.9	3651.3
5°	3098.8	3121.0	3140.2	3157.9	3200.8	3214.0	3262.8	3336.6	3434.2	3533.1	3657.1
7.5°	2858.1	2877.3	2906.8	2939.3	3011.7	3025.0	3106.2	3221.4	3357.3	3502.0	3673.4
10°	2661.6	2680.8	2711.8	2748.7	2838.8	2855.1	2958.5	3112.1	3289.3	3472.5	3691.1
12.5°	2577.5	2583.3	2601.0	2637.9	2716.2	2726.6	2840.4	3016.1	3222.9	3450.4	3717.7
15°	2573.0	2584.8	2586.3	2605.4	2670.4	2674.9	2779.8	2954.0	3181.5	3445.9	3757.5
17.5°	2617.3	2626.2	2612.8	2624.7	2679.4	2686.7	2769.4	2924.5	3168.3	3465.1	3825.5
20°	2735.5	2742.9	2703.0	2686.7	2726.6	2732.5	2813.7	2943.7	3181.5	3505.0	3918.6
22.5°	2986.5	2991.0	2893.5	2827.1	2830.0	2833.0	2903.8	3022.0	3233.3	3577.4	4036.8
25°	3378.0	3375.0	3219.9	3091.4	3017.6	3001.3	3048.6	3149.0	3320.4	3673.4	4188.9
27.5°	3835.9	3813.7	3658.6	3466.7	3305.6	3281.9	3271.6	3314.4	3444.4	3800.4	4375.0
30°	4352.9	4332.2	4165.3	3914.2	3691.1	3652.7	3555.2	3533.1	3629.1	3973.2	4633.5
32.5°	4920.0	4906.7	4707.3	4403.1	4104.7	4060.3	3896.4	3837.3	3912.6	4234.7	4993.9
35°	5395.6	5383.8	5218.4	4905.2	4540.4	4485.8	4318.8	4252.4	4290.8	4570.0	5465.0
37.5°	5825.4	5819.5	5677.7	5431.1	5054.4	4988.0	4800.4	4778.2	4770.9	5011.6	6036.6
40°	6224.2	6209.4	6061.7	5931.8	5652.6	5592.1	5426.7	5407.4	5351.3	5555.1	6683.6
42.5°	6665.9	6627.4	6413.3	6352.7	6277.4	6227.2	6128.3	6131.1	6007.1	6168.1	7368.9
45°	7026.3	7004.1	6784.1	6748.6	6829.8	6809.2	6894.8	6917.0	6676.2	6810.6	8080.9
47.5°	7413.2	7392.6	7206.5	7181.4	7401.4	7407.4	7710.2	7717.5	7329.1	7478.2	8794.3
50°	7890.3	7860.8	7676.1	7707.2	7953.8	7976.0	8529.8	8479.6	7930.2	8156.2	9501.8
52.5°	8204.9	8222.7	8182.8	8233.0	8569.7	8590.4	9336.3	9207.9	8525.4	8825.2	10196.0
55°	8436.9	8472.2	8596.4	8711.6	9219.7	9240.4	10097.1	9900.6	9018.8	9445.7	10848.8
57.5°	8735.2	8684.9	8916.9	9141.4	9837.0	9891.8	10837.0	10568.2	9456.0	9980.3	11296.4
60°	9163.5	9128.0	9308.3	9640.6	10528.3	10615.4	11619.8	11169.3	9776.6	10404.3	11383.5
62.5°	10032.0	9943.4	9971.5	10265.4	11399.7	11515.0	12503.2	11693.7	9936.0	10569.7	10916.8
65°	11330.3	11178.2	11036.4	11240.3	12627.2	12741.0	13500.1	12105.8	9876.9	10249.2	9677.5
67.5°	12965.4	12814.8	12640.5	12832.5	14435.1	14525.2	14730.5	12337.7	9411.7	9014.4	7487.1
70°	14313.9	14257.9	14466.1	15256.3	17322.7	17325.7	16308.0	12145.6	8137.0	6391.2	4332.2
72.5°	14135.3	14101.2	15198.7	17641.7	20962.1	20883.9	17801.3	10692.3	5481.3	2883.2	1623.3
75°	11596.2	11816.3	13516.4	17598.8	22269.3	22258.9	16887.0	6797.3	2267.3	1194.9	839.0
77.5°	6218.4	6566.9	8775.0	12993.5	17384.7	17646.2	11872.4	2378.0	973.3	765.1	580.5
80°	2028.0	2332.3	3497.6	6615.7	11296.4	11247.6	5088.4	933.5	666.1	542.1	401.8
82.5°	861.1	896.6	1562.7	3123.9	5797.4	5707.3	1620.3	536.2	468.2	370.7	248.2
85°	336.8	376.7	689.8	1444.5	2510.9	2456.3	584.9	265.9	299.8	242.2	147.7
87.5°	110.8	134.4	246.6	494.8	781.4	753.3	143.3	91.5	130.0	110.8	53.2
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°	3640.9	3640.9	3640.9	3640.9	3640.9	3640.9	3640.9	3640.9	3640.9	3640.9	3640.9
2.5°	3672.0	3695.5	3723.6	3764.9	3800.4	3829.9	3861.0	3880.1	3887.5	3909.8	3908.2
5°	3698.5	3750.2	3819.7	3887.5	3954.0	3993.9	4029.4	4047.1	4063.3	4075.1	4078.1
7.5°	3742.8	3809.3	3918.6	4007.2	4063.3	4095.8	4119.5	4113.5	4119.5	4122.4	4126.9
10°	3781.2	3874.3	4004.3	4088.4	4131.3	4132.7	4126.9	4106.2	4095.8	4097.3	4100.2
12.5°	3827.0	3930.4	4070.7	4141.6	4153.4	4120.9	4095.8	4060.3	4047.1	4041.2	4038.2
15°	3889.1	4007.2	4143.0	4169.7	4140.2	4098.8	4055.9	3998.3	3968.8	3945.1	3952.5
17.5°	3964.4	4094.4	4199.2	4180.1	4116.5	4048.5	3979.2	3892.0	3831.4	3806.3	3807.8
20°	4069.2	4185.9	4242.1	4157.8	4061.9	3958.4	3840.3	3734.0	3677.8	3652.7	3649.7
22.5°	4196.2	4308.5	4283.4	4119.5	3983.6	3818.1	3670.4	3592.1	3564.1	3546.4	3549.3
25°	4348.4	4444.4	4313.0	4063.3	3855.0	3632.0	3518.3	3493.2	3479.9	3466.7	3466.7
27.5°	4546.3	4598.0	4335.1	3980.6	3654.2	3434.2	3392.7	3397.2	3392.7	3370.6	3375.0
30°	4807.8	4797.4	4355.7	3846.2	3423.8	3255.4	3258.4	3277.5	3280.5	3265.8	3273.1
32.5°	5151.9	5047.0	4366.1	3672.0	3203.7	3098.8	3101.8	3122.5	3137.2	3112.1	3123.9
35°	5568.4	5338.0	4349.9	3453.3	3033.8	2949.6	2927.5	2933.3	2937.9	2914.2	2930.5
37.5°	6054.4	5664.5	4277.5	3211.1	2893.5	2803.4	2756.1	2716.2	2692.7	2670.4	2685.3
40°	6587.6	6020.4	4144.6	2974.8	2737.0	2648.3	2577.5	2502.1	2422.4	2392.8	2406.1
42.5°	7145.9	6386.7	3983.6	2748.7	2556.8	2484.4	2409.1	2299.8	2180.1	2119.6	2127.0
45°	7724.9	6761.8	3825.5	2525.7	2372.2	2341.1	2254.0	2122.5	1992.5	1915.7	1909.8
47.5°	8292.0	7116.4	3593.6	2301.2	2199.3	2233.3	2165.3	2044.3	1899.4	1778.4	1765.0
50°	8834.2	7448.7	3214.0	2073.8	2059.0	2200.8	2135.8	1961.5	1796.1	1641.0	1627.7
52.5°	9371.8	7717.5	2728.0	1866.9	1983.7	2192.0	2097.4	1905.4	1703.0	1540.6	1522.8
55°	9828.2	7856.3	2259.8	1689.7	1874.3	2116.6	2051.6	1839.0	1571.5	1398.7	1384.0
57.5°	10088.2	7744.1	1869.9	1515.5	1723.7	1992.5	1973.3	1697.1	1415.0	1282.1	1264.3
60°	9975.9	7289.2	1550.9	1363.4	1580.4	1858.1	1837.4	1556.8	1295.4	1169.8	1152.1
62.5°	9357.0	6422.1	1298.3	1230.4	1450.5	1720.8	1701.5	1448.9	1203.8	1082.7	1063.4
65°	8110.4	5224.3	1101.9	1119.6	1319.0	1555.3	1583.4	1358.8	1131.4	1013.2	994.0
67.5°	6185.9	3784.2	948.2	1023.6	1190.5	1392.9	1474.1	1293.9	1070.8	958.6	940.8
70°	3525.7	2149.1	818.3	930.5	1076.8	1242.2	1389.9	1242.2	1005.8	912.8	901.0
72.5°	1336.7	986.7	707.5	837.5	967.5	1115.2	1296.8	1160.9	930.5	861.1	849.3
75°	713.4	601.2	595.2	728.2	841.9	991.1	1180.2	1081.2	874.4	909.9	939.4
77.5°	486.0	425.4	497.7	623.3	704.6	853.7	1056.1	960.1	757.7	754.8	695.7
80°	336.8	301.3	404.7	502.1	545.0	717.8	921.7	824.2	617.4	576.0	550.9
82.5°	202.3	196.5	302.8	375.2	385.5	553.9	763.6	691.3	505.1	440.1	443.1
85°	110.8	116.6	193.5	220.1	224.5	386.9	598.2	534.6	388.5	326.5	329.3
87.5°	31.1	39.9	70.9	87.1	107.8	200.9	356.0	317.5	195.0	135.9	135.9
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)