

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: P968260

Luminaire Tested: **NAV-SB5B-735-U-T2U**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968260
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-16)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5B-735-U-T2U
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 3500K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 29546.6 lumens
Efficiency: N/A
Efficacy: 161.7 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B4 - 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



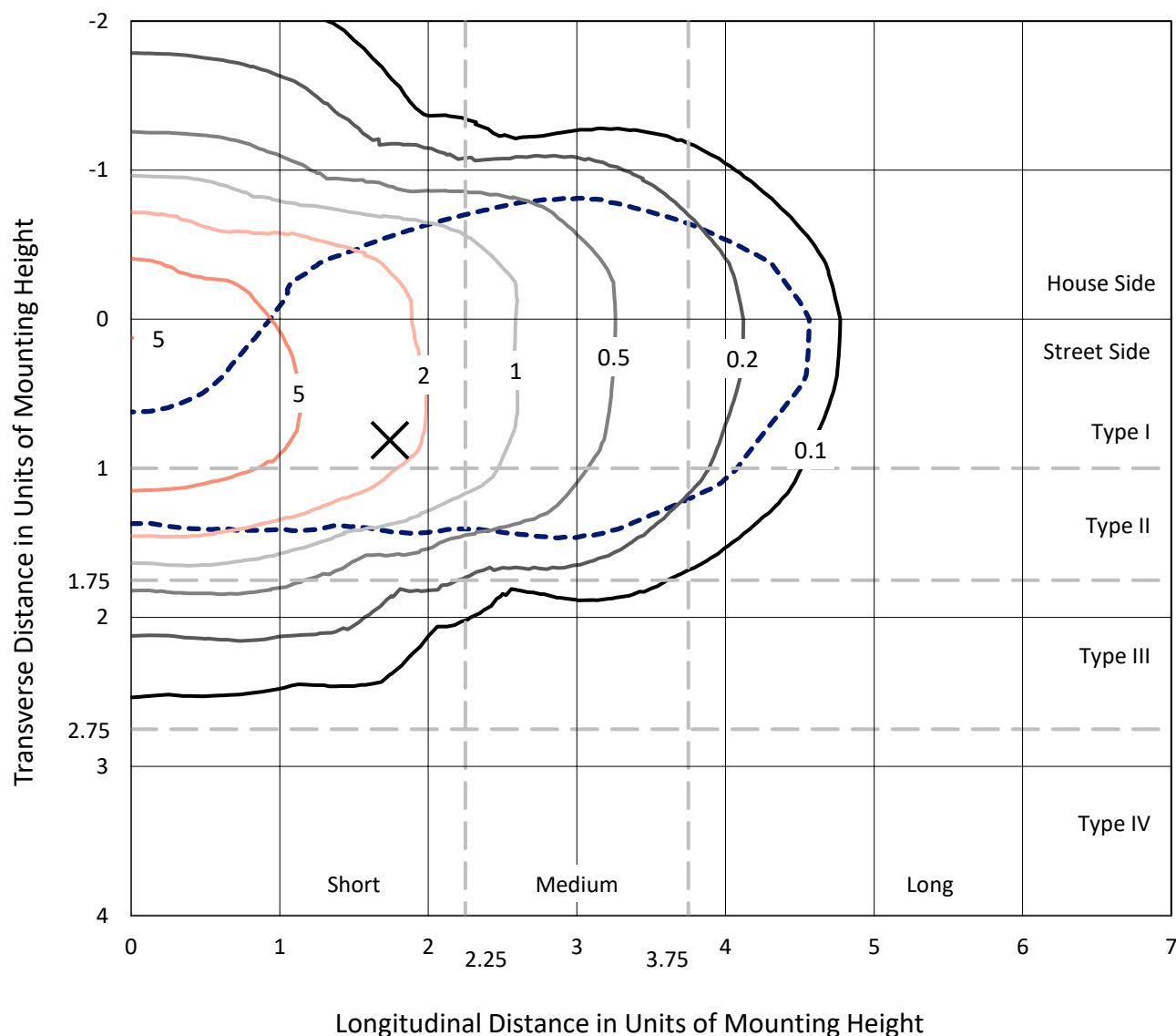
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

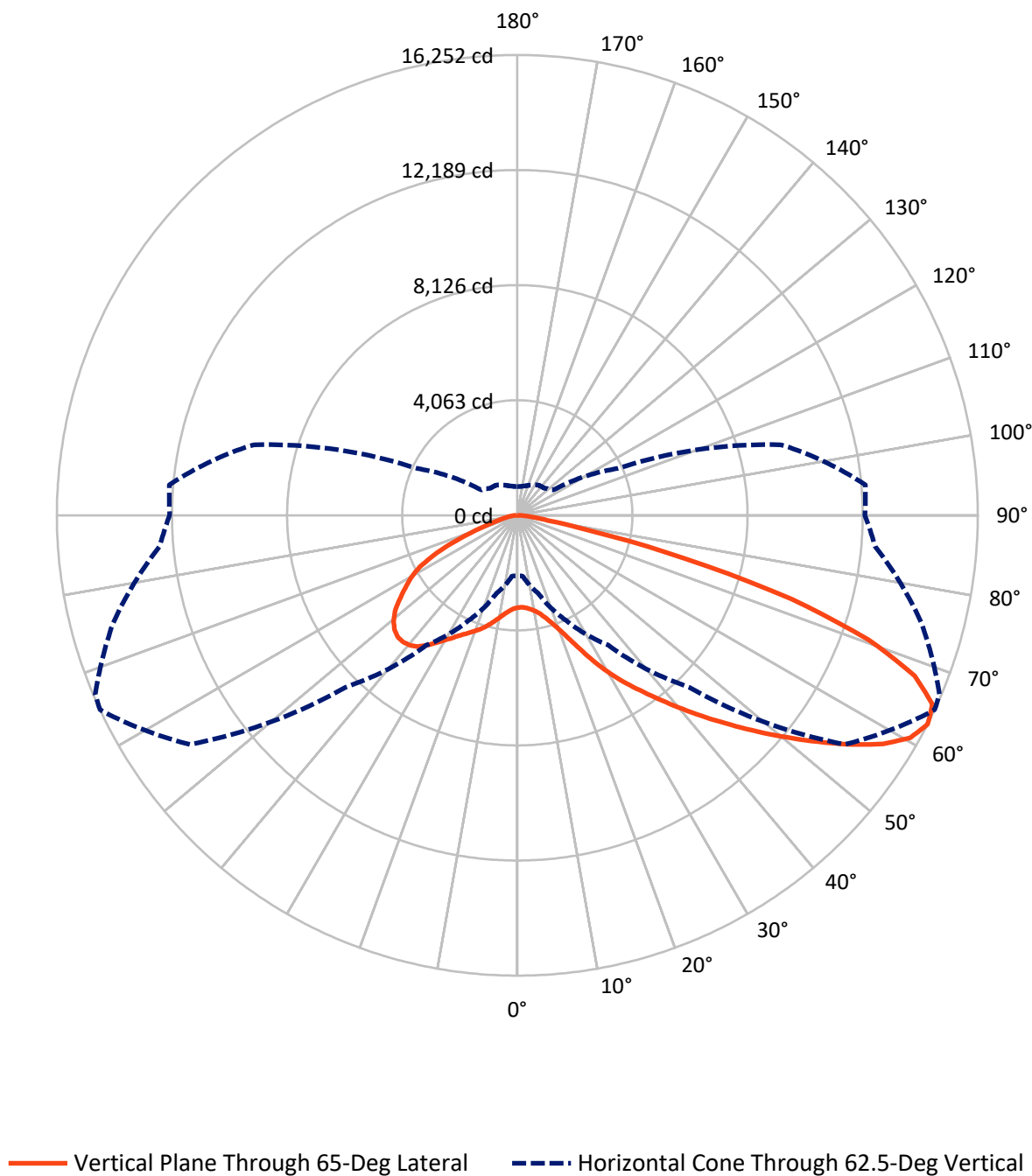


Based on 25 foot mounting height. Maximum calculated value = 8.3 fc

Type II - Short - N/A

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Luminous Intensity Polar Plot



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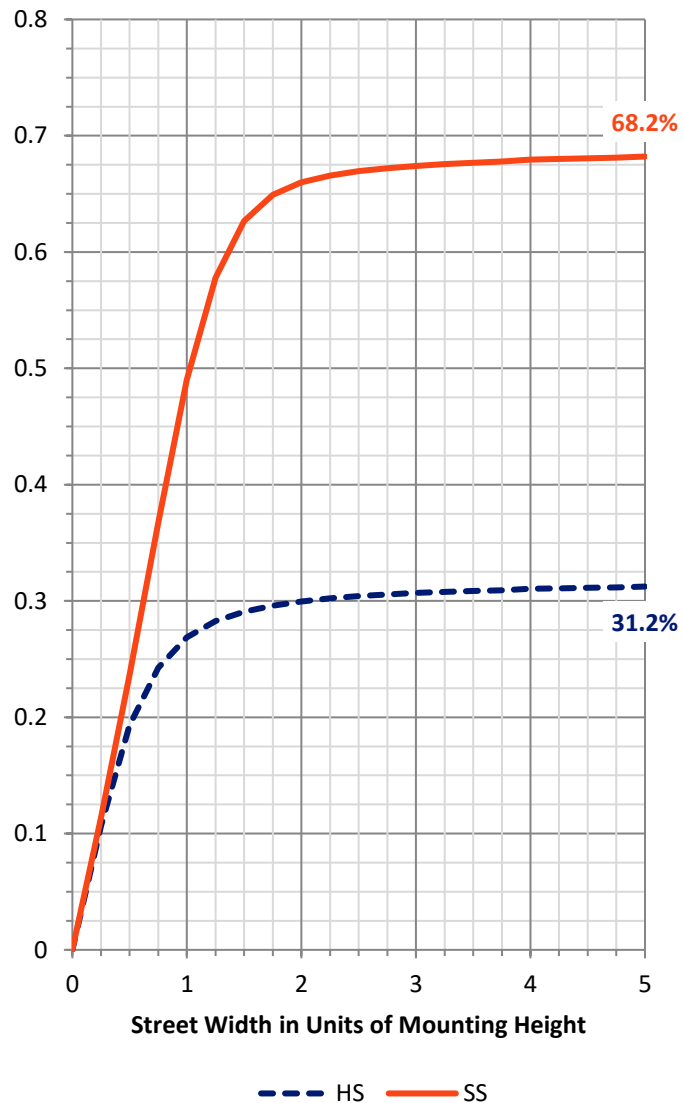
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	9323.6	0.0	9323.6
	% Fixture	31.6	0.0	31.6
Street Side	Lumens	20223.0	0.0	20223.0
	% Fixture	68.4	0.0	68.4
Total	Lumens	29546.6	0.0	29546.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	324.6	1.1
10°-20°	1100.8	3.7
20°-30°	2232.0	7.6
30°-40°	3862.4	13.1
40°-50°	5845.0	19.8
50°-60°	6852.8	23.2
60°-70°	5745.3	19.4
70°-80°	3171.9	10.7
80°-90°	412.0	1.4
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°	29546.6	100.0
0°-180°	29546.6	100.0

Coefficient of Utilization



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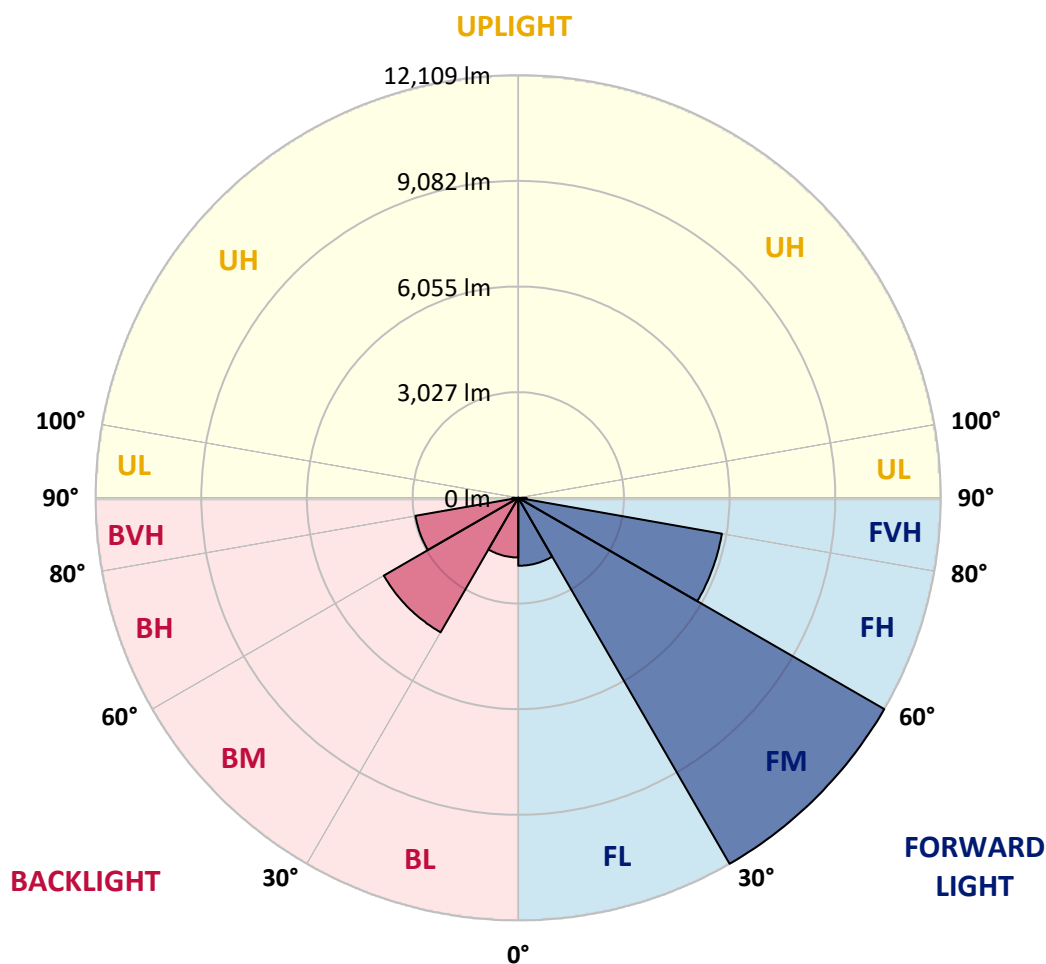
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1947.5	6.6			
FM	(30°-60°)	12109.2	41.0			
FH	(60°-80°)	5926.2	20.1			G3/7500
FVH	(80°-90°)	240.1	0.8			G3/500
BL	(0°-30°)	1709.8	5.8	B3/2500		
BM	(30°-60°)	4451.0	15.1	B3/5000		
BH	(60°-80°)	2990.9	10.1	B4/5000		G4/5000
BVH	(80°-90°)	171.9	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 Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	3255.9	3255.9	3255.9	3255.9	3255.9	3255.9	3255.9	3255.9	3255.9	3255.9	3255.9
2.5°	3234.5	3225.3	3233.0	3233.0	3236.0	3234.5	3245.1	3248.2	3252.8	3262.1	3262.1
5°	3202.3	3200.8	3214.5	3226.8	3239.0	3249.8	3263.6	3283.5	3286.6	3297.3	3311.1
7.5°	3191.5	3182.3	3203.8	3219.1	3248.2	3274.3	3311.1	3344.8	3358.6	3363.2	3389.3
10°	3274.3	3259.0	3278.9	3288.1	3312.6	3338.7	3381.6	3435.3	3450.6	3469.0	3498.1
12.5°	3415.3	3398.5	3427.6	3441.4	3464.4	3487.4	3516.5	3568.6	3576.3	3610.0	3637.6
15°	3608.5	3588.5	3607.0	3623.8	3662.1	3683.6	3712.8	3763.3	3763.3	3789.3	3809.3
17.5°	3870.6	3844.6	3858.3	3864.5	3889.1	3921.2	3970.2	4014.7	4037.7	4028.5	4000.9
20°	4261.5	4229.4	4229.4	4198.6	4189.5	4215.5	4279.9	4341.2	4365.8	4318.2	4250.8
22.5°	4848.7	4802.6	4776.6	4672.4	4631.0	4634.0	4698.4	4773.5	4793.4	4709.2	4557.4
25°	5595.2	5523.1	5487.8	5334.5	5241.0	5159.7	5210.4	5306.9	5334.5	5230.3	4985.1
27.5°	6341.7	6346.3	6312.6	6128.6	5973.8	5825.1	5799.0	5900.2	5929.3	5811.2	5507.7
30°	7388.6	7279.9	7215.4	6994.7	6773.9	6565.4	6458.2	6499.5	6507.2	6366.2	6013.7
32.5°	8291.5	8264.0	8126.0	7932.9	7649.3	7322.7	7143.4	7077.5	7065.2	6864.4	6445.9
35°	9320.1	9304.8	9159.2	8929.2	8622.6	8168.9	7845.5	7657.0	7641.6	7359.5	6873.5
37.5°	10365.6	10365.6	10223.0	9971.6	9654.3	9087.1	8595.0	8296.1	8247.0	7879.2	7309.0
40°	11199.5	11148.9	11175.0	11069.2	10705.9	10103.4	9427.4	8993.7	8927.8	8486.2	7771.9
42.5°	11673.1	11656.3	11812.6	11930.7	11782.0	11300.6	10344.1	9749.4	9657.3	9154.6	8305.4
45°	11778.9	11760.5	12039.5	12471.8	12680.3	12482.6	11340.5	10544.9	10433.1	9853.6	8877.1
47.5°	11535.1	11498.4	11907.7	12589.9	13258.2	13606.2	12419.7	11407.9	11245.5	10534.2	9464.2
50°	10802.5	10767.2	11386.5	12292.4	13452.8	14369.6	13590.8	12323.1	12074.8	11263.8	10057.5
52.5°	9209.7	9226.6	10196.9	11441.7	13196.9	14844.8	14599.5	13287.3	12988.4	12010.4	10613.9
55°	7174.1	7210.9	8403.5	9773.9	12172.9	14772.7	15287.8	14280.6	13983.3	12712.5	11188.8
57.5°	5136.8	5299.2	6416.8	7773.4	10206.1	13630.7	15438.0	15224.9	14936.7	13479.0	11751.3
60°	3329.5	3358.6	4508.3	5875.7	7771.9	11601.2	15132.9	15940.8	15715.4	14260.7	12221.9
62.5°	2133.8	2153.7	2854.3	4109.7	5593.6	8582.8	14105.8	16252.0	16183.0	14777.3	12674.1
65°	1568.1	1552.9	1917.7	2716.4	3767.9	5293.2	12111.6	16101.7	16238.2	15100.7	13048.1
67.5°	1309.1	1287.6	1467.0	1880.9	2776.1	3006.0	8961.5	15125.3	15625.0	15063.9	13322.5
70°	1192.6	1174.2	1283.1	1396.5	2166.0	2012.7	4517.5	13149.3	13918.9	14645.5	13278.2
72.5°	1010.2	978.0	1126.7	1240.1	1684.7	1543.6	1867.1	10100.3	11038.5	13304.2	12652.7
75°	783.3	761.9	889.1	1091.4	1266.2	1204.9	1180.4	6133.2	7157.2	10288.9	11069.2
77.5°	620.8	591.7	708.2	850.7	1139.0	909.0	860.0	2641.2	3656.0	6568.5	8282.3
80°	467.5	441.5	538.0	672.9	875.2	685.2	556.5	1077.7	1378.1	3328.0	4164.9
82.5°	332.6	309.7	375.6	493.6	588.7	614.7	341.8	603.9	679.1	1283.1	930.5
85°	213.1	199.3	251.4	309.7	374.0	395.4	208.5	315.8	346.4	528.9	387.9
87.5°	116.5	95.0	134.9	144.1	173.2	157.8	99.6	115.0	124.1	191.6	164.0
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°	3255.9	3255.9	3255.9	3255.9	3255.9	3255.9	3255.9	3255.9	3255.9	3255.9	3255.9
2.5°	3268.2	3272.8	3288.1	3292.7	3303.5	3317.2	3326.4	3335.7	3335.7	3344.8	3344.8
5°	3312.6	3323.4	3355.5	3372.5	3400.0	3427.6	3444.5	3464.4	3476.7	3482.7	3485.8
7.5°	3398.5	3415.3	3461.3	3490.4	3538.0	3576.3	3602.4	3629.9	3636.1	3652.9	3646.8
10°	3514.9	3534.9	3587.0	3642.2	3698.9	3746.5	3771.0	3790.9	3798.5	3801.6	3793.9
12.5°	3648.4	3677.5	3744.9	3812.4	3872.1	3913.6	3919.7	3915.1	3893.6	3875.2	3875.2
15°	3812.4	3838.4	3913.6	3987.1	4045.4	4053.1	4014.7	3990.2	3964.1	3959.5	3959.5
17.5°	4008.6	4022.4	4091.4	4163.4	4168.0	4141.9	4085.2	4062.2	4037.7	4020.9	4022.4
20°	4236.9	4232.4	4281.4	4312.1	4279.9	4200.1	4114.3	4076.0	4051.5	4031.5	4033.1
22.5°	4509.8	4474.5	4468.5	4460.8	4374.9	4207.8	4091.4	4042.3	4004.0	3976.4	3985.6
25°	4906.9	4772.0	4678.4	4626.3	4433.2	4166.4	4017.8	3908.9	3836.9	3789.3	3807.8
27.5°	5403.5	5176.7	4940.6	4813.4	4433.2	4082.2	3840.0	3663.7	3545.7	3496.6	3521.1
30°	5877.2	5639.5	5291.7	5038.7	4422.5	3944.2	3553.3	3308.0	3170.1	3121.0	3150.1
32.5°	6281.9	6022.8	5664.2	5285.5	4396.4	3720.3	3197.7	2926.4	2793.0	2734.7	2763.8
35°	6657.5	6381.5	6038.2	5556.8	4327.4	3392.3	2806.8	2599.8	2451.1	2357.6	2388.2
37.5°	7042.3	6714.2	6392.2	5802.1	4203.2	3009.1	2506.3	2330.0	2155.3	2029.6	2063.3
40°	7460.7	7068.3	6770.8	5947.7	3999.3	2644.3	2273.3	2112.3	1926.9	1793.5	1819.6
42.5°	7949.7	7492.9	7192.4	6022.8	3720.3	2385.2	2121.5	1963.7	1788.9	1680.1	1701.5
45°	8460.1	7960.5	7577.2	6021.3	3409.3	2264.1	2072.5	1916.1	1723.0	1609.6	1628.0
47.5°	8995.2	8449.4	7909.8	5923.2	3139.4	2280.9	2044.9	1813.4	1600.3	1490.0	1505.3
50°	9531.7	8984.4	8231.8	5739.3	3024.5	2244.2	1942.2	1669.3	1418.0	1318.4	1324.4
52.5°	10063.6	9553.1	8509.2	5477.1	2907.9	2107.8	1810.4	1482.4	1342.9	1273.9	1273.9
55°	10598.6	10115.7	8811.2	5095.4	2616.7	1948.3	1589.7	1411.8	1283.1	1220.2	1214.1
57.5°	11135.1	10765.7	9097.9	4713.7	2250.3	1752.1	1468.5	1325.9	1223.2	1169.6	1160.4
60°	11693.1	11509.1	9393.7	4362.7	1888.6	1500.7	1379.6	1257.0	1152.7	1093.0	1088.3
62.5°	12267.9	12327.7	9625.2	3910.5	1555.9	1347.5	1299.9	1174.2	1073.1	1016.3	1014.7
65°	12847.3	13117.1	9777.0	3283.5	1261.6	1201.8	1214.1	1083.7	981.0	932.0	930.5
67.5°	13284.2	13685.9	9734.0	2484.8	1034.7	1063.8	1106.8	988.7	892.2	853.8	855.4
70°	13333.3	13618.5	9310.9	1701.5	866.1	929.0	987.2	895.2	795.6	768.0	769.6
72.5°	12680.3	12698.6	8132.1	1111.4	732.8	815.5	861.5	800.2	703.6	676.0	674.4
75°	10968.0	10502.0	5970.7	732.8	613.2	700.6	743.4	700.6	607.0	613.2	591.7
77.5°	8310.0	7437.7	3625.3	521.2	512.0	588.7	646.9	616.2	536.5	602.4	530.4
80°	4281.4	4023.9	1617.2	389.4	404.7	470.6	531.9	492.1	424.7	404.7	369.4
82.5°	981.0	1140.5	637.7	279.0	292.7	338.8	406.2	369.4	305.0	257.5	254.5
85°	343.4	375.6	282.1	174.8	171.7	211.6	275.9	246.8	206.9	165.5	174.8
87.5°	108.9	142.6	105.8	70.5	73.6	95.0	127.2	116.5	96.6	62.8	65.9
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)