

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: P966839

Luminaire Tested: **NAV-SB4C-830-U-T3**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P966839
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-5)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB4C-830-U-T3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 80 CRI, 3000K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 27662.7 lumens
Efficiency: N/A
Efficacy: 137.8 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B3 - U0 - G4

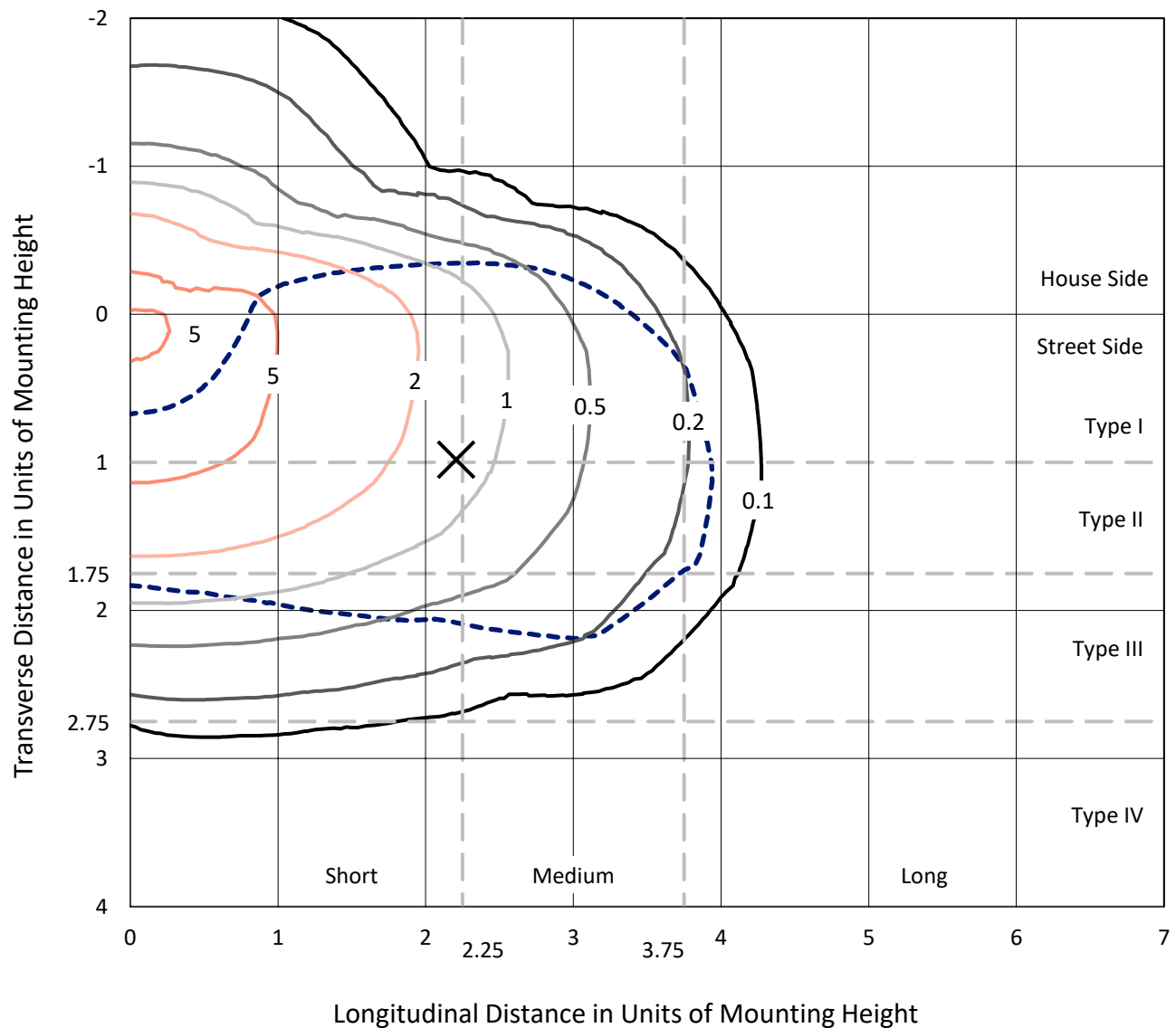
Input Watts (W): 200.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

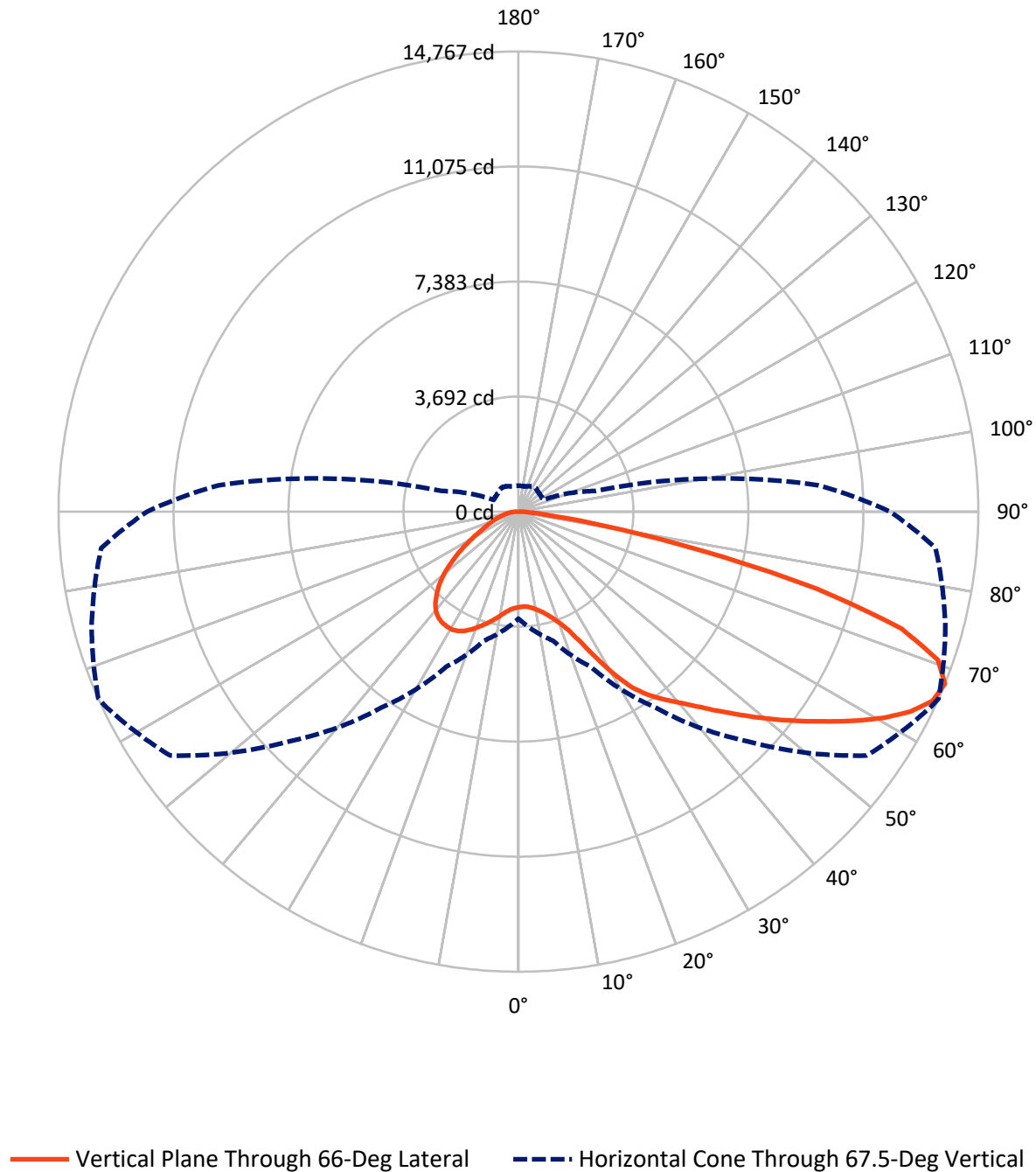
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7 fc
Type III - Short - N/A

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Luminous Intensity Polar Plot



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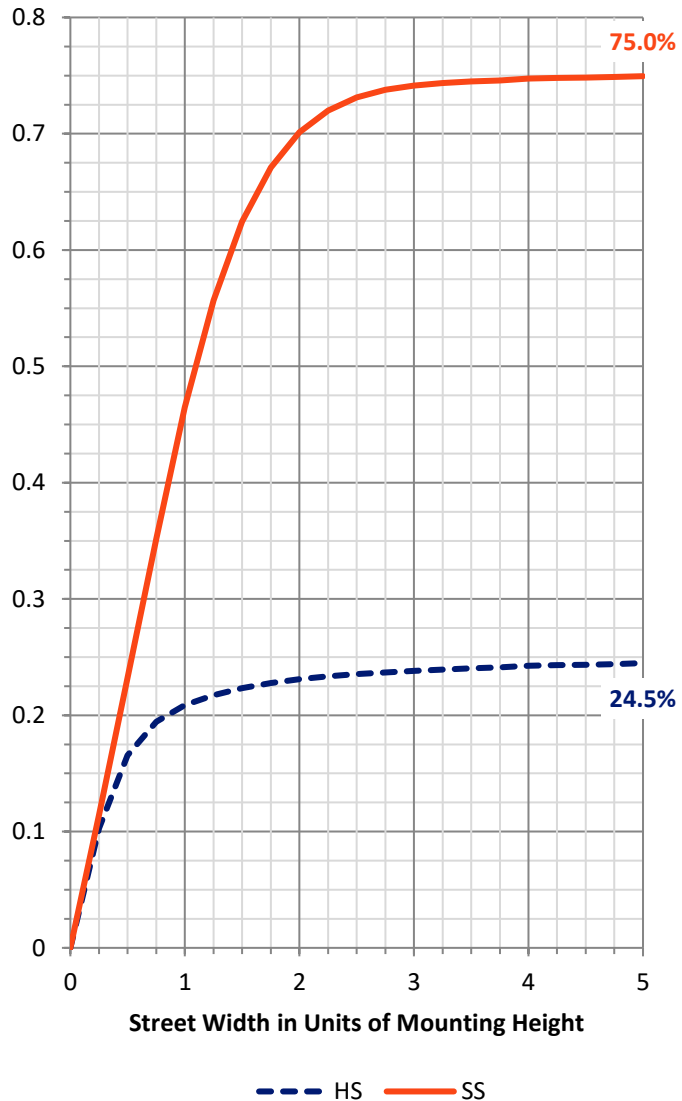
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6878.3	0.0	6878.3
	% Fixture	24.9	0.0	24.9
Street Side	Lumens	20784.4	0.0	20784.4
	% Fixture	75.1	0.0	75.1
Total	Lumens	27662.7	0.0	27662.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	304.2	1.1
10°-20°	1005.0	3.6
20°-30°	1937.1	7.0
30°-40°	3396.5	12.3
40°-50°	5049.5	18.3
50°-60°	6400.7	23.1
60°-70°	6262.9	22.6
70°-80°	2987.5	10.8
80°-90°	319.3	1.2
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°	27662.7	100.0
0°-180°	27662.7	100.0

Coefficient of Utilization



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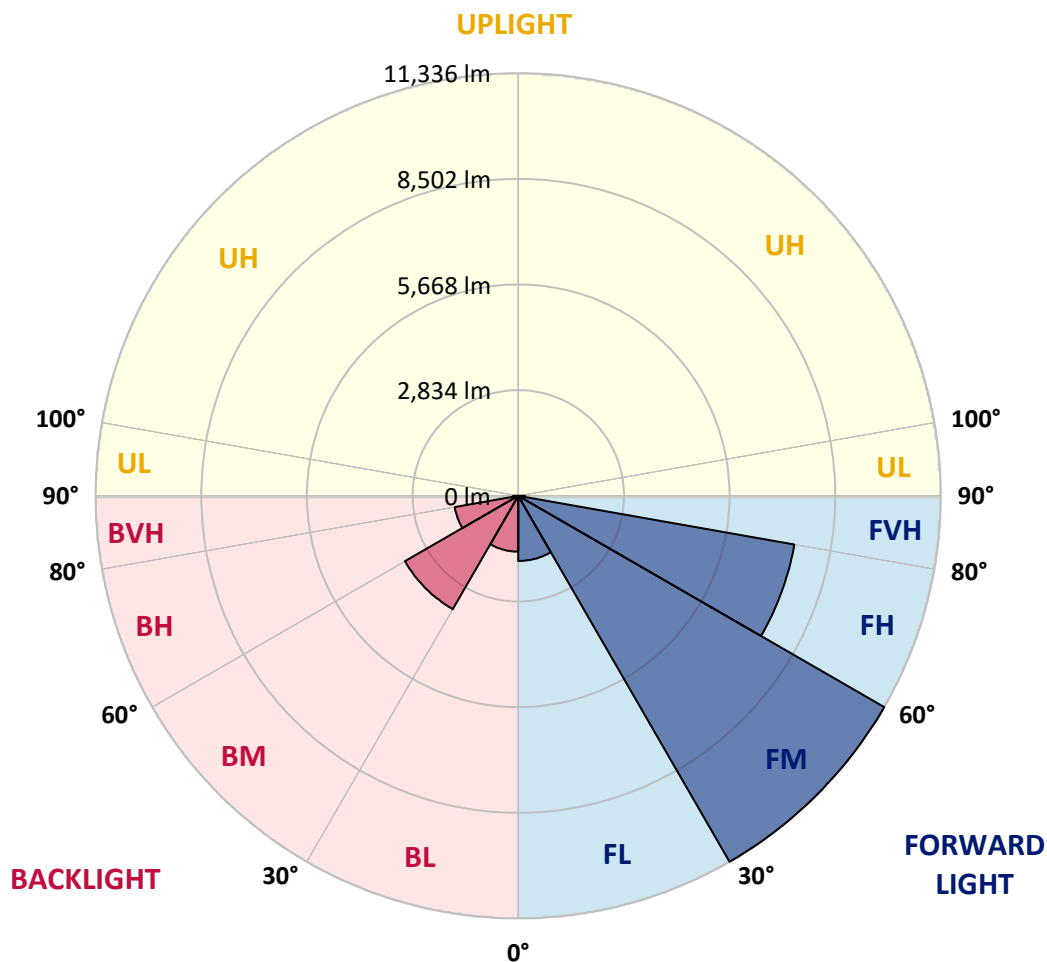
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1748.0	6.3			
FM	(30°-60°)	11335.9	41.0			
FH	(60°-80°)	7519.5	27.2			G4/12000
FVH	(80°-90°)	181.0	0.7			G2/225
BL	(0°-30°)	1498.3	5.4	B3/2500		
BM	(30°-60°)	3510.7	12.7	B3/5000		
BH	(60°-80°)	1730.9	6.3	B3/2500		G3/2500
BVH	(80°-90°)	138.3	0.5			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 III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	3068.1	3068.1	3068.1	3068.1	3068.1	3068.1	3068.1	3068.1	3068.1	3068.1	3068.1
2.5°	3036.2	3053.6	3049.3	3042.0	3040.6	3043.4	3047.8	3052.1	3050.7	3058.0	3069.6
5°	3027.4	3044.9	3043.4	3043.4	3049.3	3060.9	3068.1	3075.4	3068.1	3076.8	3092.8
7.5°	3033.3	3046.4	3052.1	3058.0	3072.5	3094.3	3111.8	3127.8	3119.1	3129.2	3149.5
10°	3107.4	3117.5	3123.4	3123.4	3133.5	3158.2	3175.8	3204.8	3197.5	3213.5	3239.6
12.5°	3242.6	3252.7	3252.7	3246.9	3254.2	3270.2	3276.0	3308.0	3294.9	3321.1	3347.2
15°	3408.2	3428.6	3412.6	3402.5	3405.4	3421.3	3419.9	3444.6	3431.5	3453.3	3476.6
17.5°	3591.4	3617.5	3591.4	3590.0	3584.1	3601.5	3603.0	3624.8	3601.5	3617.5	3633.5
20°	3808.0	3844.3	3822.5	3829.7	3816.7	3824.0	3831.2	3863.2	3826.8	3838.4	3834.1
22.5°	4113.1	4156.8	4133.5	4161.1	4152.4	4146.6	4145.1	4201.8	4145.1	4149.5	4107.4
25°	4557.9	4610.2	4569.6	4607.4	4607.4	4626.2	4648.1	4720.7	4626.2	4598.6	4489.6
27.5°	5214.9	5267.2	5187.2	5210.5	5203.2	5249.7	5226.5	5406.7	5305.0	5259.9	5040.4
30°	6005.5	6098.5	5947.4	5941.5	5934.3	6008.4	6041.9	6161.1	6057.9	6012.8	5748.3
32.5°	6860.1	6957.5	6777.3	6724.9	6697.4	6742.3	6714.8	6810.7	6739.5	6669.7	6342.7
35°	7764.2	7860.1	7688.5	7586.8	7476.4	7381.8	7283.0	7307.7	7240.9	7134.8	6796.2
37.5°	8618.7	8794.6	8613.0	8503.9	8300.4	8115.8	7839.7	7724.9	7662.4	7565.0	7223.5
40°	9489.3	9589.6	9451.5	9358.6	9137.7	8848.4	8406.5	8163.8	8079.6	7985.1	7695.8
42.5°	10130.3	10226.2	10152.1	10088.2	9915.2	9579.4	9008.3	8704.5	8582.4	8476.3	8230.6
45°	10639.0	10710.2	10663.7	10687.0	10612.8	10287.3	9631.8	9284.4	9158.0	9028.6	8835.3
47.5°	10843.9	10919.5	10993.6	11131.7	11258.2	11018.3	10301.8	9912.3	9778.6	9646.3	9455.9
50°	10820.7	10897.7	11112.8	11406.4	11798.8	11718.9	11008.2	10580.9	10457.4	10306.2	10130.3
52.5°	10634.7	10721.8	10997.9	11486.4	12111.3	12243.5	11727.6	11271.2	11155.0	10974.8	10798.9
55°	10146.3	10198.6	10612.8	11304.6	12185.4	12609.9	12432.5	12006.6	11890.4	11639.0	11447.1
57.5°	9240.8	9316.4	9919.5	10814.9	11999.4	12858.3	13051.6	12779.9	12668.0	12306.0	12105.5
60°	8059.2	8179.8	8870.1	9992.2	11525.6	12856.9	13614.2	13540.0	13447.0	12963.0	12753.8
62.5°	6722.1	6861.6	7525.8	8829.5	10697.1	12492.1	13965.8	14176.6	14128.6	13569.1	13301.6
65°	5162.5	5258.5	5919.8	7325.2	9408.0	11708.7	14006.5	14611.2	14619.9	14029.8	13588.0
67.5°	3437.3	3713.5	4287.6	5496.8	7681.2	10428.2	13649.0	14682.4	14766.7	14188.3	13444.1
70°	1677.2	2040.6	2603.1	3572.5	5496.8	8464.7	12714.5	14098.2	14285.6	13726.1	12586.6
72.5°	696.2	814.0	1120.6	1763.0	3155.4	5711.9	10836.7	12513.9	12861.3	12162.1	10582.3
75°	469.4	508.7	640.9	904.0	1437.5	2816.7	7815.0	9330.9	9890.5	9185.5	7508.3
77.5°	361.9	386.6	466.6	632.2	854.6	1065.4	4182.9	5623.3	5912.5	5473.6	3906.8
80°	284.8	303.8	348.8	460.7	606.1	569.7	1425.8	2547.8	2715.0	2277.5	1255.7
82.5°	247.1	254.3	250.0	312.5	402.6	332.8	468.0	940.3	1037.7	752.9	409.9
85°	178.8	199.2	207.9	193.3	213.6	168.6	191.9	332.8	366.2	327.0	231.1
87.5°	72.7	107.5	132.2	124.9	78.5	48.0	59.6	97.4	111.9	122.1	75.5
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°	3068.1	3068.1	3068.1	3068.1	3068.1	3068.1	3068.1	3068.1	3068.1	3068.1	3068.1
2.5°	3071.1	3081.3	3088.5	3097.2	3103.1	3111.8	3129.2	3139.4	3140.8	3148.1	3146.6
5°	3098.7	3113.2	3129.2	3152.5	3178.6	3200.5	3233.9	3257.1	3265.9	3273.1	3271.6
7.5°	3158.2	3178.6	3207.7	3248.4	3286.2	3315.3	3356.0	3383.5	3411.2	3421.3	3422.8
10°	3246.9	3276.0	3318.1	3373.4	3414.1	3451.9	3494.0	3517.3	3544.9	3556.5	3562.3
12.5°	3357.4	3387.9	3443.2	3520.2	3558.0	3584.1	3598.7	3592.8	3598.7	3608.8	3611.7
15°	3483.9	3517.3	3579.7	3662.6	3688.8	3665.5	3633.5	3604.5	3600.1	3603.0	3613.2
17.5°	3633.5	3658.2	3730.9	3800.7	3781.7	3685.9	3616.1	3569.6	3546.3	3539.0	3549.3
20°	3842.8	3842.8	3902.4	3946.0	3819.6	3656.8	3547.8	3472.2	3424.2	3403.9	3399.5
22.5°	4097.1	4074.0	4111.7	4081.1	3812.3	3575.4	3424.2	3293.4	3220.8	3191.7	3187.3
25°	4419.8	4392.2	4382.1	4193.1	3760.0	3446.0	3200.5	3042.0	2978.0	2962.0	2965.0
27.5°	4906.8	4837.0	4704.8	4254.2	3664.1	3242.6	2938.8	2792.0	2755.7	2757.1	2761.5
30°	5555.0	5415.4	5091.3	4264.3	3507.1	2954.8	2671.4	2566.7	2549.3	2556.6	2581.3
32.5°	6155.2	6023.0	5486.6	4217.8	3265.9	2672.8	2431.6	2361.8	2335.7	2344.4	2356.0
35°	6626.1	6589.8	5852.9	4152.4	2969.3	2408.3	2216.5	2156.9	2106.0	2094.4	2103.1
37.5°	7070.9	7056.3	6127.6	4060.8	2675.8	2220.9	2043.5	1965.0	1890.9	1850.2	1851.7
40°	7559.2	7544.7	6307.8	3919.9	2415.6	2058.0	1887.9	1784.8	1693.2	1619.1	1626.4
42.5°	8108.6	8022.9	6393.5	3717.9	2194.6	1919.9	1761.6	1622.0	1501.4	1433.1	1437.5
45°	8708.9	8515.6	6392.1	3460.6	2008.6	1793.5	1626.4	1428.7	1316.8	1252.9	1250.0
47.5°	9345.4	8986.5	6313.6	3175.8	1828.4	1653.9	1417.1	1265.9	1191.8	1152.5	1143.8
50°	10002.4	9426.8	6179.9	2848.7	1643.8	1495.6	1286.3	1183.1	1126.4	1090.1	1077.0
52.5°	10620.1	9826.6	6018.6	2478.0	1456.3	1341.5	1228.2	1148.2	1088.7	1048.0	1030.4
55°	11194.2	10171.0	5790.4	2098.7	1303.7	1238.3	1200.5	1133.6	1065.4	1017.4	998.5
57.5°	11704.4	10394.8	5396.5	1742.6	1194.7	1167.1	1171.5	1108.9	1030.4	989.7	963.6
60°	12128.7	10559.0	4813.7	1412.8	1106.1	1097.4	1126.4	1062.4	970.9	924.3	904.0
62.5°	12383.1	10556.2	4098.7	1156.9	1030.4	1033.4	1066.8	1004.3	911.3	867.7	854.6
65°	12361.3	10297.5	3313.8	989.7	957.8	960.7	1004.3	940.3	861.9	835.7	834.2
67.5°	11923.8	9666.7	2542.0	880.8	877.9	890.9	941.8	896.8	831.4	828.4	832.8
70°	10739.2	8357.1	1831.3	793.6	795.0	814.0	880.8	869.1	815.4	821.2	819.7
72.5°	8611.4	6371.8	1229.6	702.0	703.5	734.0	822.7	847.4	799.4	876.4	888.1
75°	5735.2	3973.6	790.7	604.6	606.1	645.3	771.7	805.2	755.7	873.5	880.8
77.5°	2755.7	1786.3	572.7	508.7	508.7	545.0	667.1	720.9	643.9	678.8	622.1
80°	952.0	671.5	450.6	409.9	401.2	425.9	562.5	624.9	555.2	511.6	479.6
82.5°	374.9	348.8	361.9	318.3	289.3	305.2	437.5	516.0	408.4	369.2	367.7
85°	215.1	226.7	255.8	210.7	167.2	187.5	321.2	370.6	308.1	271.8	277.6
87.5°	58.1	79.9	117.8	109.0	75.5	79.9	152.6	204.9	177.3	136.6	140.9
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)