

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: P967733

Luminaire Tested: **NAV-SB5A-735-U-T2U**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P967733
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-SB5A-735-U-T2U
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 3500K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 23537.1 lumens
Efficiency: N/A
Efficacy: 166.1 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G3

Input Watts (W): 141.7
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

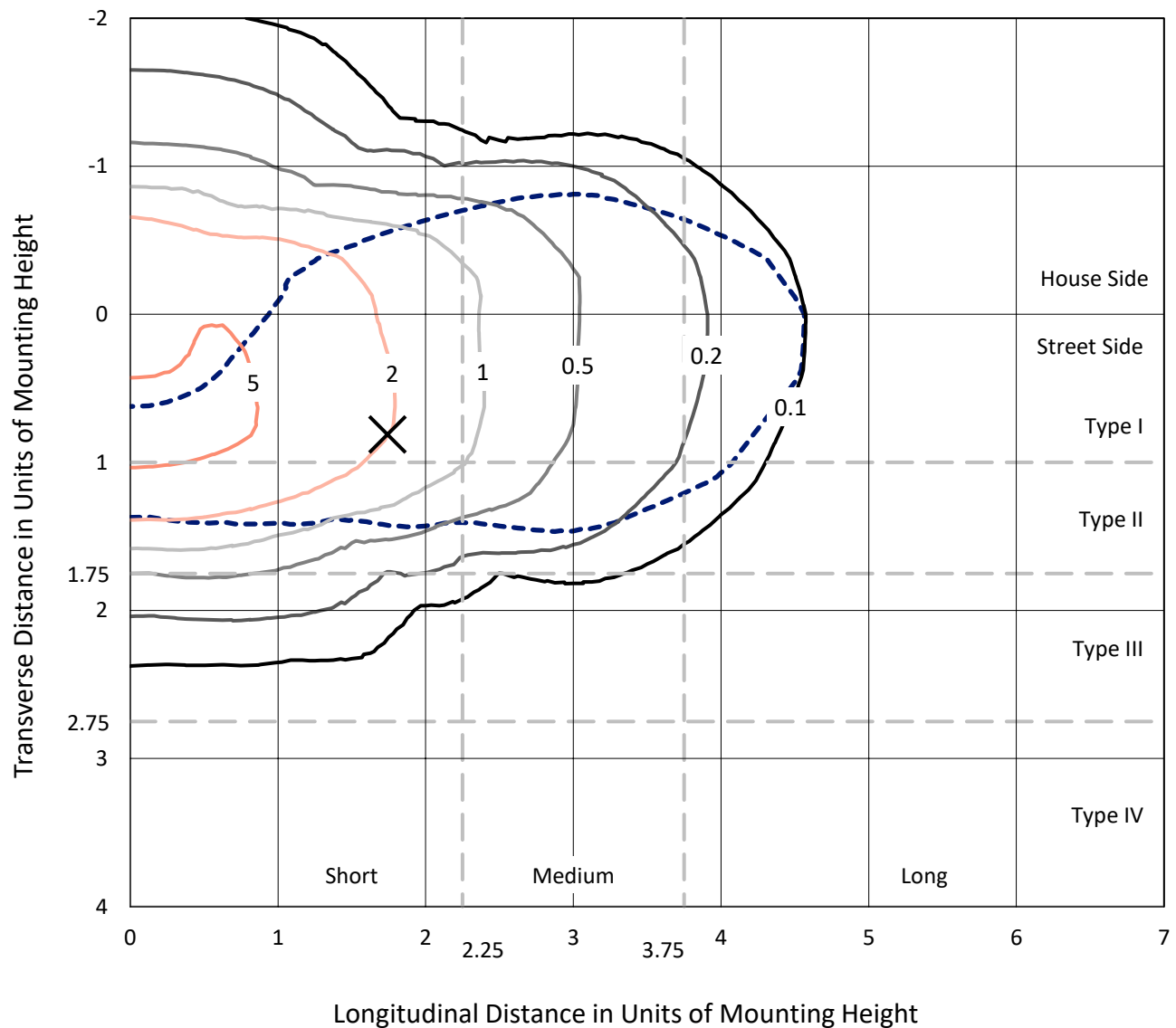


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Iso-Footcandle Lines of Horizontal Illumination

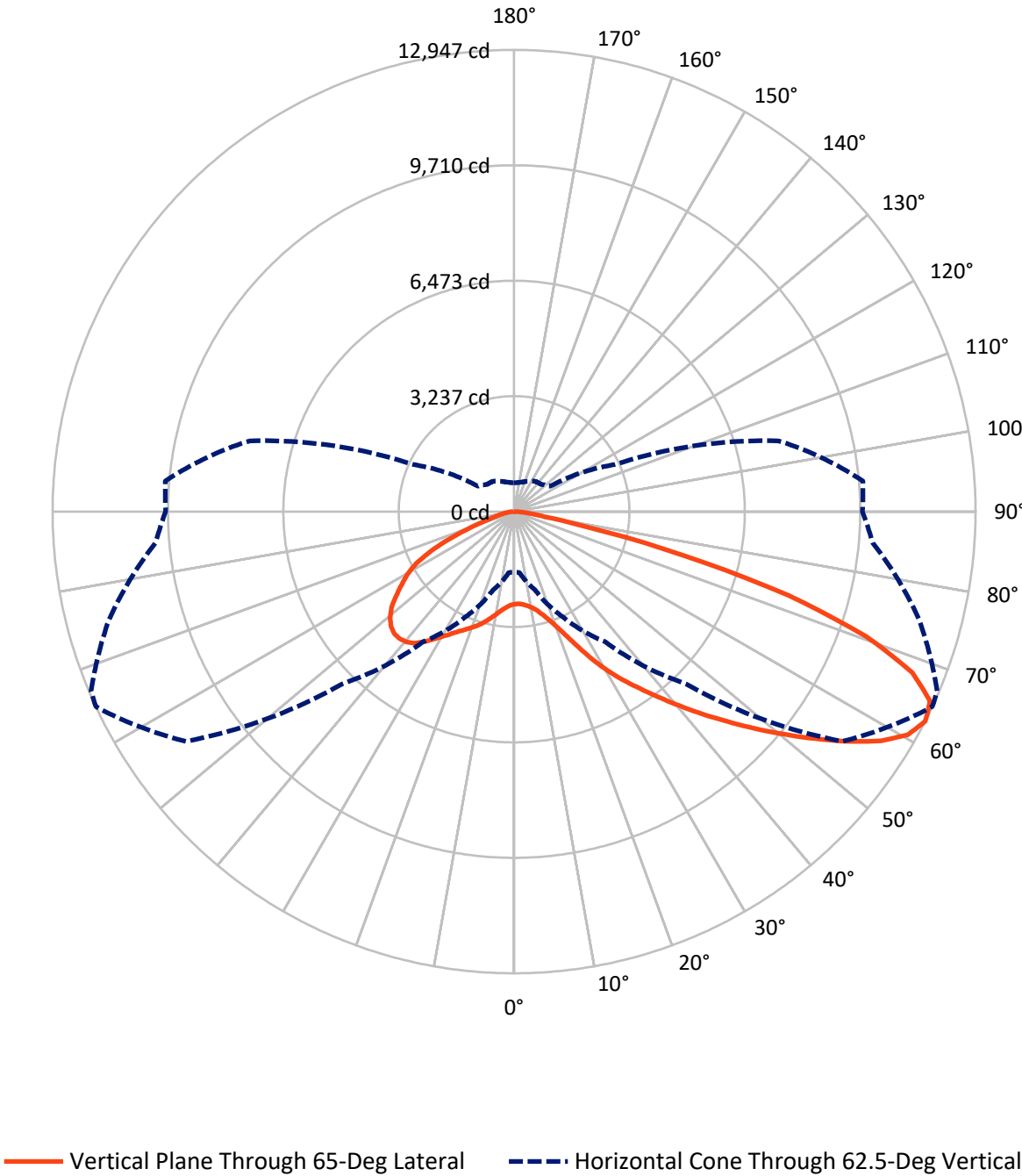
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.6 fc
Type II - Short - N/A

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Luminous Intensity Polar Plot



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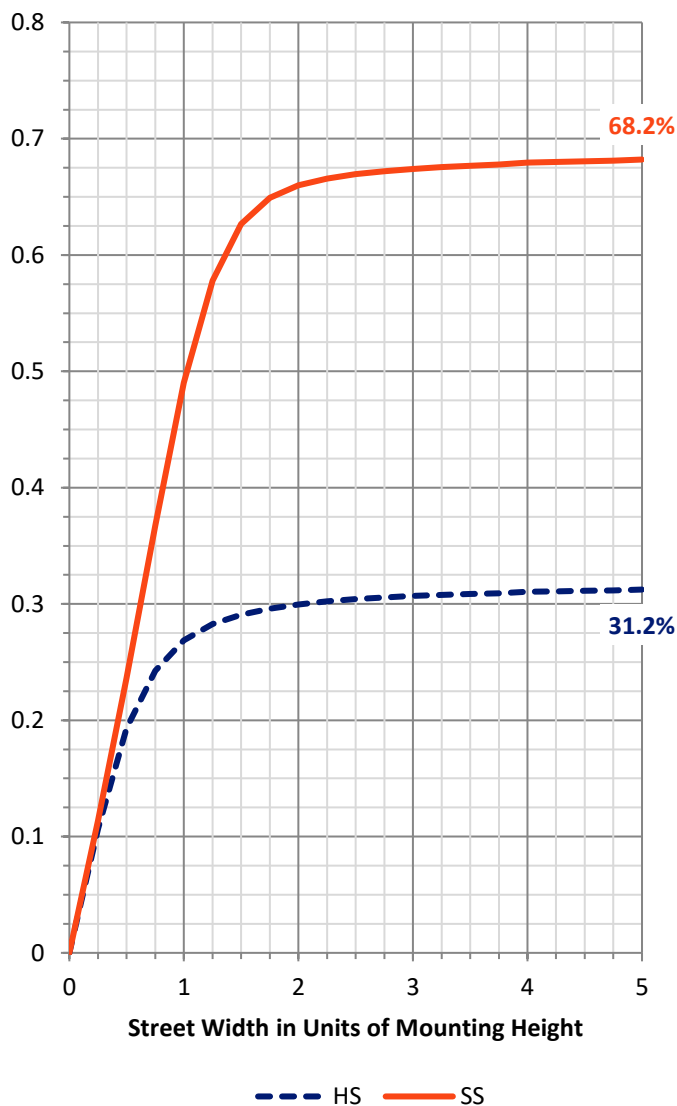
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7427.3	0.0	7427.3
	% Fixture	31.6	0.0	31.6
Street Side	Lumens	16109.8	0.0	16109.8
	% Fixture	68.4	0.0	68.4
Total	Lumens	23537.1	0.0	23537.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	258.6	1.1
10°-20°	876.9	3.7
20°-30°	1778.0	7.6
30°-40°	3076.8	13.1
40°-50°	4656.1	19.8
50°-60°	5459.0	23.2
60°-70°	4576.7	19.4
70°-80°	2526.7	10.7
80°-90°	328.2	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°	23537.1	100.0
0°-180°	23537.1	100.0

Coefficient of Utilization



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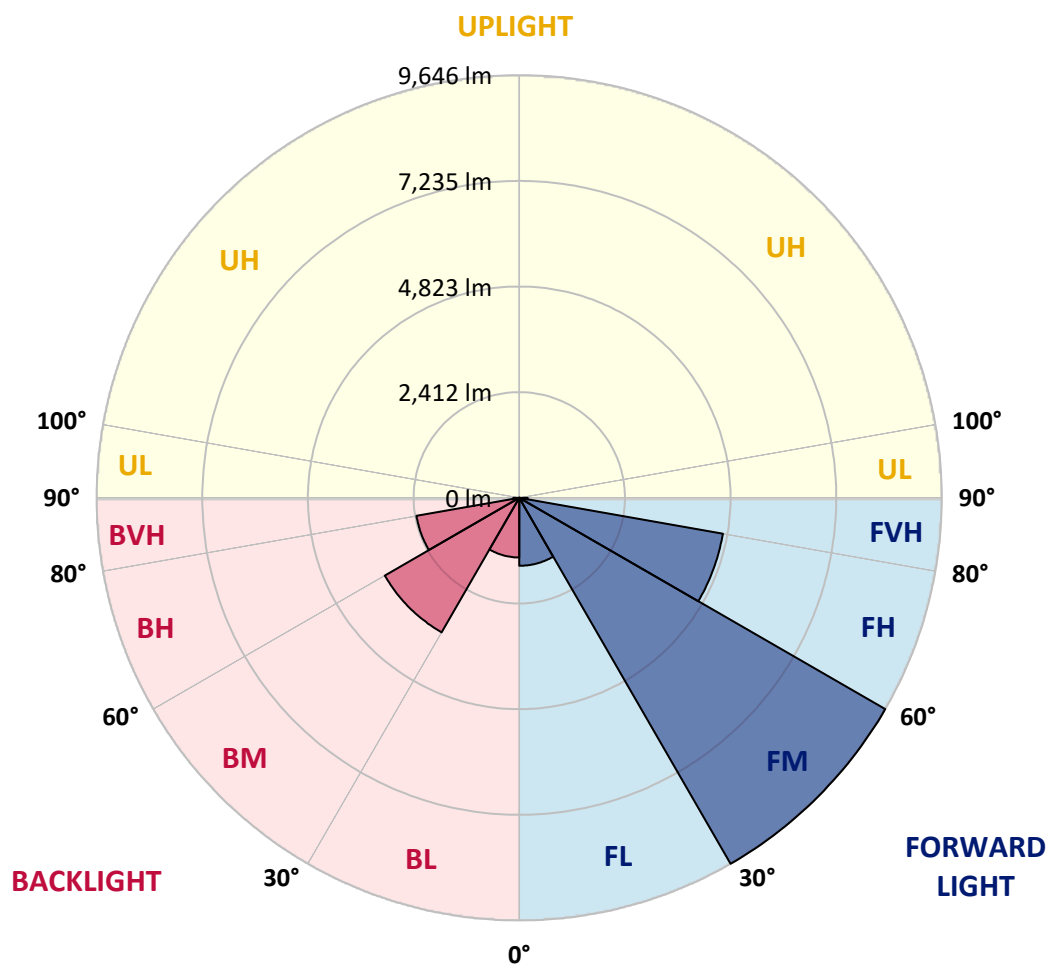
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1551.4	6.6			
FM	(30°-60°)	9646.3	41.0			
FH	(60°-80°)	4720.8	20.1			G2/5000
FVH	(80°-90°)	191.3	0.8			G2/225
BL	(0°-30°)	1362.1	5.8	B3/2500		
BM	(30°-60°)	3545.7	15.1	B3/5000		
BH	(60°-80°)	2382.6	10.1	B3/2500		G3/2500
BVH	(80°-90°)	136.9	0.6			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	2593.7	2593.7	2593.7	2593.7	2593.7	2593.7	2593.7	2593.7	2593.7	2593.7	2593.7
2.5°	2576.5	2569.3	2575.4	2575.4	2577.8	2576.5	2585.2	2587.6	2591.2	2598.6	2598.6
5°	2550.9	2549.7	2560.8	2570.5	2580.2	2588.8	2599.8	2615.7	2618.1	2626.7	2637.6
7.5°	2542.4	2535.0	2552.1	2564.3	2587.6	2608.3	2637.6	2664.5	2675.5	2679.1	2700.0
10°	2608.3	2596.1	2612.0	2619.3	2638.9	2659.7	2693.8	2736.5	2748.7	2763.4	2786.7
12.5°	2720.7	2707.2	2730.5	2741.5	2759.7	2778.1	2801.3	2842.8	2848.9	2875.7	2897.8
15°	2874.5	2858.6	2873.3	2886.7	2917.3	2934.4	2957.5	2997.9	2997.9	3018.6	3034.5
17.5°	3083.4	3062.6	3073.6	3078.5	3098.0	3123.7	3162.7	3198.1	3216.4	3209.2	3187.1
20°	3394.7	3369.1	3369.1	3344.7	3337.4	3358.1	3409.4	3458.2	3477.8	3439.9	3386.2
22.5°	3862.4	3825.8	3805.0	3722.0	3689.1	3691.4	3742.8	3802.6	3818.4	3751.3	3630.4
25°	4457.1	4399.7	4371.6	4249.5	4175.0	4110.4	4150.6	4227.5	4249.5	4166.5	3971.2
27.5°	5051.8	5055.5	5028.6	4882.1	4758.8	4640.3	4619.6	4700.1	4723.3	4629.3	4387.5
30°	5885.9	5799.1	5747.9	5572.0	5396.2	5230.1	5144.6	5177.6	5183.7	5071.4	4790.5
32.5°	6605.1	6583.2	6473.2	6319.3	6093.4	5833.4	5690.5	5638.0	5628.2	5468.3	5134.8
35°	7424.5	7412.3	7296.3	7113.1	6868.8	6507.4	6249.7	6099.6	6087.4	5862.7	5475.5
37.5°	8257.3	8257.3	8143.7	7943.4	7690.7	7238.9	6846.9	6608.8	6569.7	6276.6	5822.3
40°	8921.6	8881.3	8902.0	8817.8	8528.4	8048.5	7510.0	7164.3	7111.9	6760.2	6191.1
42.5°	9298.9	9285.5	9410.0	9504.1	9385.6	9002.2	8240.2	7766.4	7693.1	7292.6	6616.1
45°	9383.2	9368.5	9590.7	9935.1	10101.2	9943.6	9033.9	8400.2	8311.0	7849.4	7071.6
47.5°	9189.0	9159.7	9485.8	10029.1	10561.6	10838.8	9893.6	9087.6	8958.2	8391.6	7539.3
50°	8605.3	8577.2	9070.5	9792.2	10716.7	11446.9	10826.6	9816.6	9618.8	8972.8	8011.8
52.5°	7336.5	7350.0	8122.9	9114.5	10512.7	11825.4	11630.1	10584.8	10346.7	9567.6	8455.1
55°	5714.9	5744.2	6694.3	7785.9	9697.0	11768.0	12178.3	11376.1	11139.2	10126.8	8913.0
57.5°	4092.0	4221.5	5111.7	6192.3	8130.3	10858.3	12298.1	12128.3	11898.7	10737.4	9361.2
60°	2652.3	2675.5	3591.4	4680.6	6191.1	9241.5	12055.0	12698.5	12519.0	11360.2	9736.1
62.5°	1699.9	1715.6	2273.8	3273.8	4455.9	6837.2	11236.9	12946.5	12891.5	11771.7	10096.4
65°	1249.2	1237.0	1527.7	2163.9	3001.5	4216.5	9648.1	12826.7	12935.4	12029.4	10394.3
67.5°	1042.8	1025.7	1168.6	1498.3	2211.4	2394.6	7138.7	12048.9	12447.0	12000.1	10612.8
70°	950.1	935.4	1022.1	1112.4	1725.5	1603.3	3598.7	10474.9	11087.8	11666.7	10577.5
72.5°	804.7	779.1	897.5	987.9	1342.0	1229.7	1487.4	8046.0	8793.4	10598.2	10079.2
75°	624.0	606.9	708.3	869.4	1008.7	959.8	940.2	4885.8	5701.5	8196.2	8817.8
77.5°	494.6	471.4	564.2	677.7	907.3	724.2	685.0	2104.0	2912.4	5232.5	6597.8
80°	372.5	351.7	428.7	536.1	697.3	545.8	443.3	858.4	1097.8	2651.1	3317.8
82.5°	265.0	246.7	299.2	393.2	468.9	489.6	272.3	481.1	541.0	1022.1	741.2
85°	169.7	158.8	200.3	246.7	298.0	315.1	166.0	251.5	275.9	421.3	308.9
87.5°	92.8	75.7	107.4	114.8	138.0	125.8	79.3	91.6	98.9	152.6	130.7
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°	2593.7	2593.7	2593.7	2593.7	2593.7	2593.7	2593.7	2593.7	2593.7	2593.7	2593.7
2.5°	2603.5	2607.1	2619.3	2623.0	2631.6	2642.6	2649.8	2657.2	2657.2	2664.5	2664.5
5°	2638.9	2647.4	2673.1	2686.5	2708.5	2730.5	2743.9	2759.7	2769.5	2774.4	2776.8
7.5°	2707.2	2720.7	2757.4	2780.5	2818.3	2848.9	2869.7	2891.6	2896.5	2910.0	2905.1
10°	2800.1	2815.9	2857.5	2901.4	2946.6	2984.5	3004.0	3019.9	3026.0	3028.4	3022.3
12.5°	2906.3	2929.4	2983.3	3037.0	3084.5	3117.5	3122.5	3118.8	3101.6	3087.0	3087.0
15°	3037.0	3057.7	3117.5	3176.2	3222.6	3228.6	3198.1	3178.6	3157.8	3154.2	3154.2
17.5°	3193.3	3204.3	3259.2	3316.6	3320.3	3299.5	3254.3	3236.0	3216.4	3203.0	3204.3
20°	3375.2	3371.5	3410.6	3435.1	3409.4	3345.9	3277.5	3247.0	3227.4	3211.5	3212.8
22.5°	3592.5	3564.4	3559.6	3553.5	3485.1	3352.1	3259.2	3220.1	3189.6	3167.7	3174.9
25°	3908.8	3801.4	3726.9	3685.4	3531.5	3319.1	3200.6	3113.8	3056.4	3018.6	3033.3
27.5°	4304.5	4123.8	3935.7	3834.3	3531.5	3251.9	3058.9	2918.5	2824.5	2785.4	2804.9
30°	4681.8	4492.6	4215.3	4013.9	3522.9	3141.9	2830.5	2635.2	2525.3	2486.2	2509.4
32.5°	5004.2	4797.8	4512.0	4210.5	3502.2	2963.7	2547.3	2331.2	2224.9	2178.5	2201.7
35°	5303.3	5083.6	4810.0	4426.6	3447.3	2702.4	2235.9	2071.0	1952.6	1878.1	1902.5
37.5°	5609.9	5348.6	5092.1	4622.0	3348.4	2397.1	1996.6	1856.1	1716.9	1616.7	1643.7
40°	5943.3	5630.6	5393.8	4738.0	3185.9	2106.5	1811.0	1682.7	1534.9	1428.7	1449.5
42.5°	6332.8	5968.9	5729.5	4797.8	2963.7	1900.0	1690.0	1564.3	1425.1	1338.3	1355.5
45°	6739.4	6341.4	6036.0	4796.6	2715.8	1803.6	1651.0	1526.4	1372.6	1282.2	1296.8
47.5°	7165.6	6730.9	6301.1	4718.5	2500.9	1817.0	1629.0	1444.6	1274.9	1186.9	1199.1
50°	7593.0	7157.1	6557.4	4571.9	2409.3	1787.7	1547.1	1329.8	1129.6	1050.2	1055.0
52.5°	8016.7	7610.1	6778.5	4363.1	2316.5	1679.1	1442.2	1180.8	1069.7	1014.7	1014.7
55°	8442.9	8058.2	7019.1	4059.0	2084.4	1552.1	1266.3	1124.6	1022.1	972.0	967.1
57.5°	8870.3	8576.0	7247.5	3755.0	1792.6	1395.7	1169.8	1056.3	974.5	931.7	924.4
60°	9314.8	9168.2	7483.1	3475.4	1504.4	1195.5	1099.0	1001.3	918.3	870.6	867.0
62.5°	9772.8	9820.3	7667.5	3115.1	1239.4	1073.4	1035.6	935.4	854.7	809.6	808.4
65°	10234.3	10449.3	7788.4	2615.7	1005.0	957.4	967.1	863.4	781.6	742.4	741.2
67.5°	10582.3	10902.3	7754.2	1979.5	824.3	847.5	881.7	787.6	710.7	680.2	681.4
70°	10621.4	10848.5	7417.1	1355.5	689.9	740.0	786.4	713.1	633.8	611.8	613.1
72.5°	10101.2	10115.8	6478.1	885.3	583.7	649.6	686.2	637.4	560.5	538.5	537.3
75°	8737.2	8365.9	4756.3	583.7	488.4	558.0	592.2	558.0	483.6	488.4	471.4
77.5°	6619.8	5924.9	2887.9	415.2	407.8	468.9	515.3	490.9	427.4	479.9	422.5
80°	3410.6	3205.5	1288.3	310.2	322.4	374.8	423.7	392.0	338.2	322.4	294.3
82.5°	781.6	908.6	508.0	222.2	233.2	269.9	323.6	294.3	243.0	205.1	202.7
85°	273.6	299.2	224.7	139.2	136.7	168.5	219.8	196.6	164.8	131.9	139.2
87.5°	86.7	113.6	84.3	56.2	58.6	75.7	101.4	92.8	77.0	50.0	52.5
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)