

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: P967738

Luminaire Tested: **NAV-SB5A-735-U-T3**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P967738
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-SB5A-735-U-T3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 3500K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 23241.9 lumens
Efficiency: N/A
Efficacy: 164.0 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B3 - U0 - G3

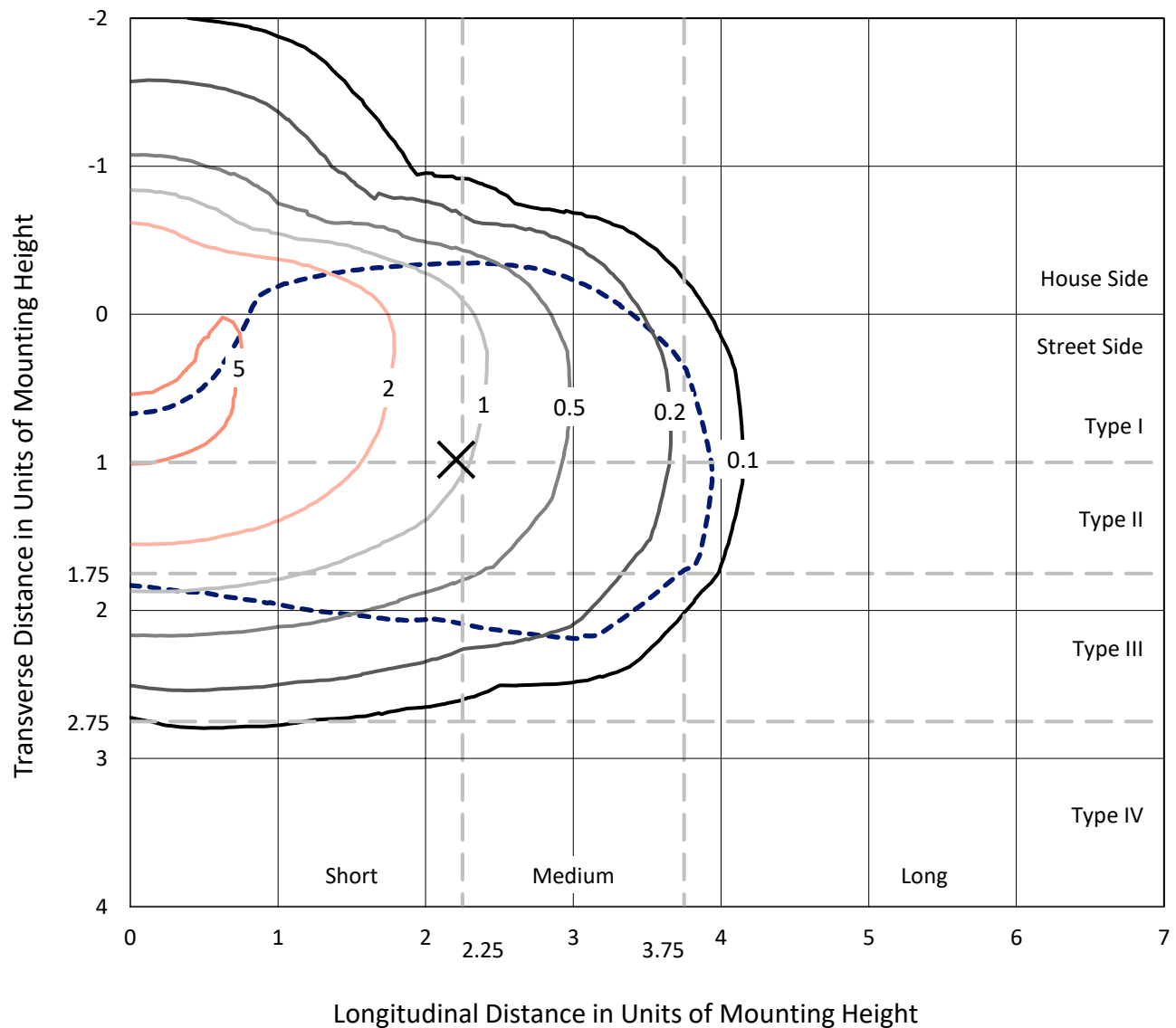
Input Watts (W): 141.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

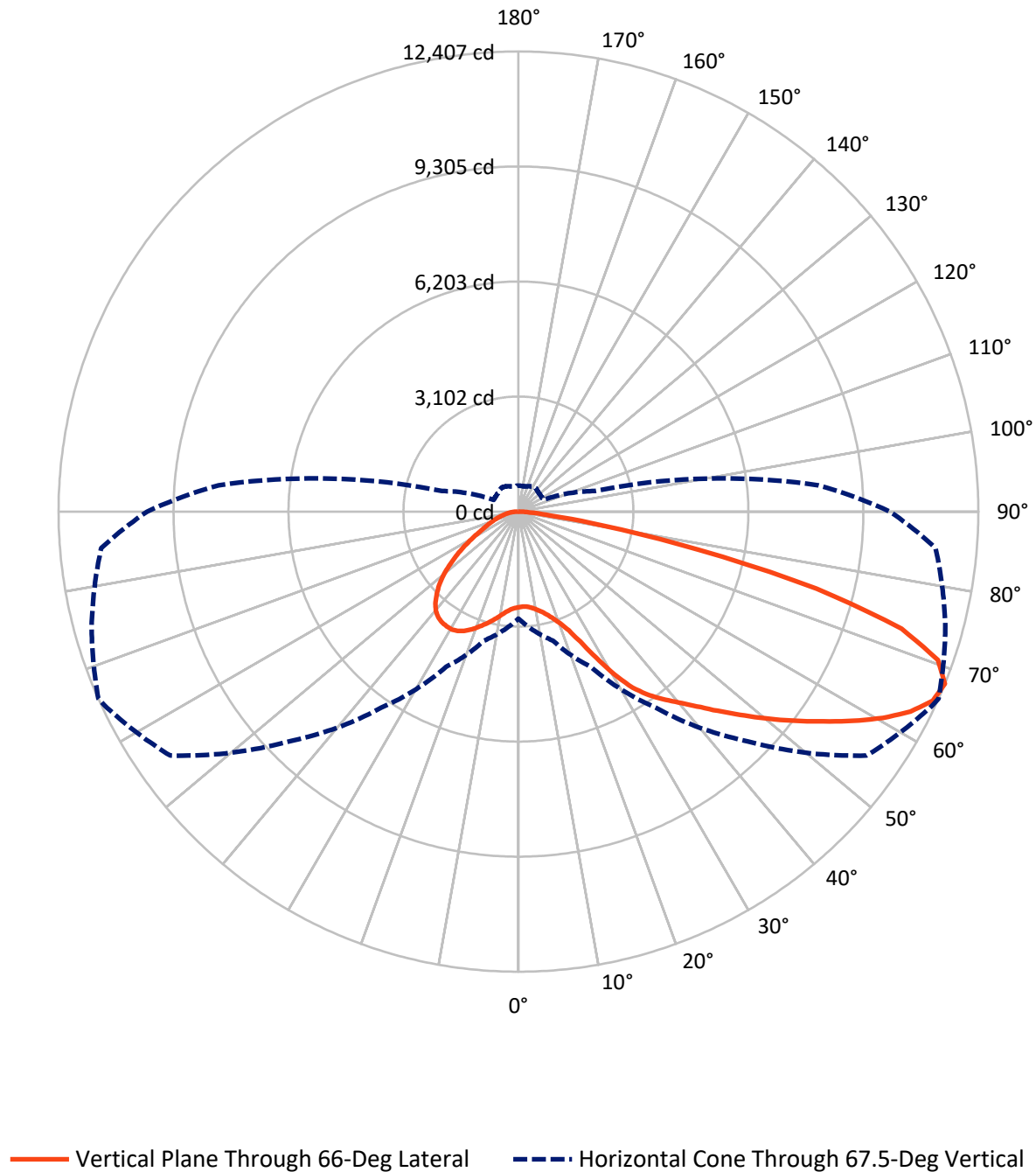
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.8 fc
Type III - Short - N/A

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Luminous Intensity Polar Plot



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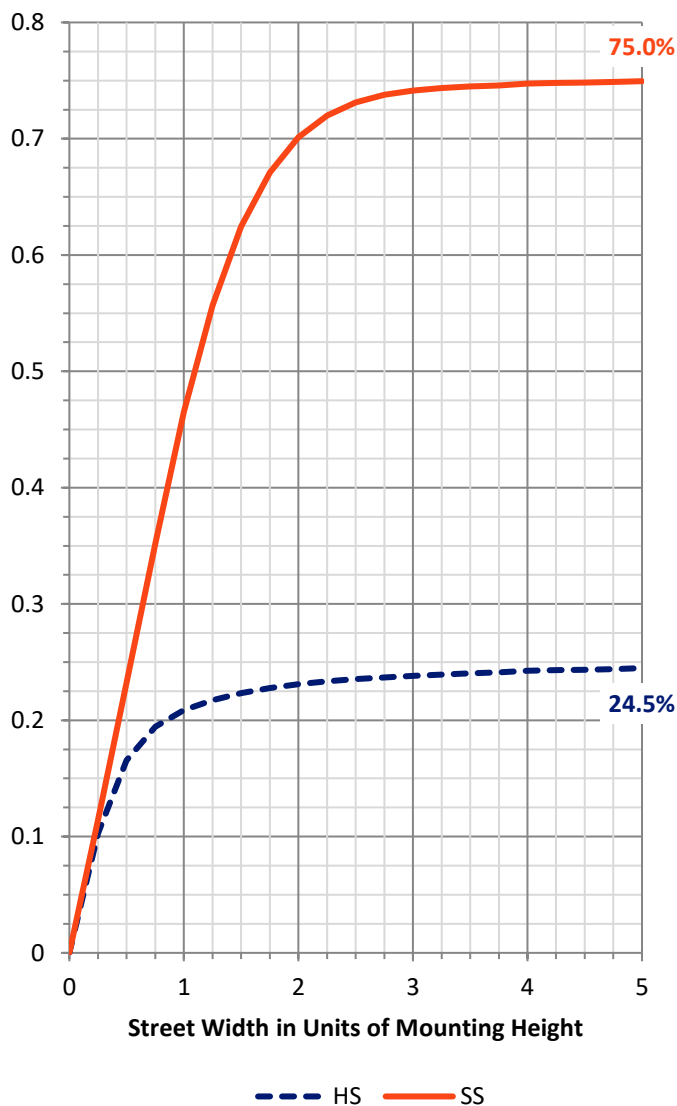
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5779.0	0.0	5779.0
	% Fixture	24.9	0.0	24.9
Street Side	Lumens	17462.9	0.0	17462.9
	% Fixture	75.1	0.0	75.1
Total	Lumens	23241.9	0.0	23241.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	255.6	1.1
10°-20°	844.4	3.6
20°-30°	1627.5	7.0
30°-40°	2853.7	12.3
40°-50°	4242.5	18.3
50°-60°	5377.8	23.1
60°-70°	5262.0	22.6
70°-80°	2510.0	10.8
80°-90°	268.3	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°	23241.9	100.0
0°-180°	23241.9	100.0

Coefficient of Utilization



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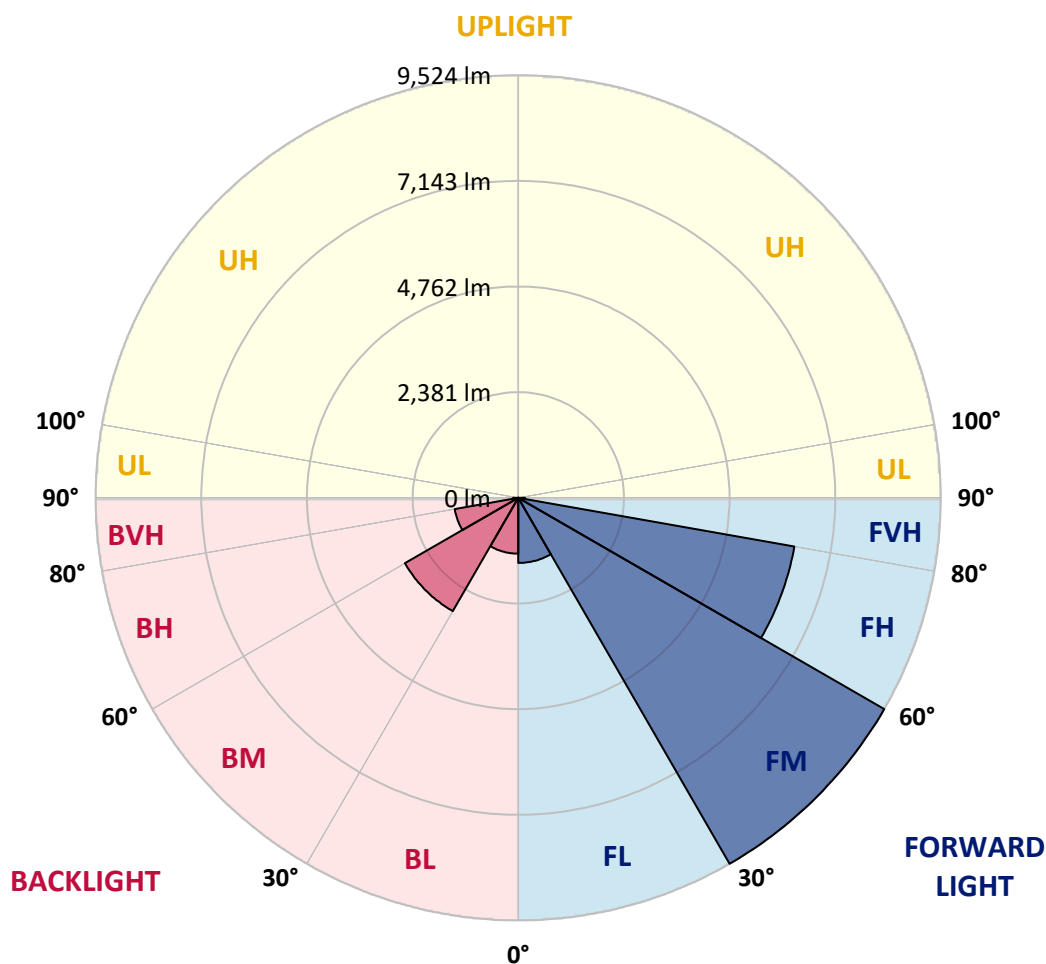
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1468.7	6.3			
FM	(30°-60°)	9524.3	41.0			
FH	(60°-80°)	6317.8	27.2			G3/7500
FVH	(80°-90°)	152.1	0.7			G2/225
BL	(0°-30°)	1258.9	5.4	B3/2500		
BM	(30°-60°)	2949.7	12.7	B3/5000		
BH	(60°-80°)	1454.3	6.3	B3/2500		G3/2500
BVH	(80°-90°)	116.2	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-G3

Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	2577.9	2577.9	2577.9	2577.9	2577.9	2577.9	2577.9	2577.9	2577.9	2577.9	2577.9
2.5°	2550.9	2565.6	2562.0	2555.8	2554.6	2557.1	2560.8	2564.4	2563.2	2569.3	2579.0
5°	2543.6	2558.3	2557.1	2557.1	2562.0	2571.7	2577.9	2583.9	2577.9	2585.2	2598.6
7.5°	2548.6	2559.5	2564.4	2569.3	2581.5	2599.8	2614.5	2627.9	2620.6	2629.1	2646.2
10°	2610.8	2619.4	2624.2	2624.2	2632.8	2653.5	2668.2	2692.6	2686.5	2700.0	2721.9
12.5°	2724.3	2733.0	2733.0	2728.0	2734.2	2747.6	2752.4	2779.3	2768.3	2790.4	2812.3
15°	2863.5	2880.7	2867.2	2858.7	2861.2	2874.6	2873.4	2894.1	2883.1	2901.5	2920.9
17.5°	3017.4	3039.4	3017.4	3016.3	3011.3	3026.0	3027.2	3045.5	3026.0	3039.4	3052.9
20°	3199.4	3229.9	3211.6	3217.7	3206.7	3212.9	3218.9	3245.8	3215.2	3225.1	3221.4
22.5°	3455.8	3492.5	3472.9	3496.2	3488.8	3483.9	3482.7	3530.3	3482.7	3486.3	3451.0
25°	3829.5	3873.5	3839.2	3871.0	3871.0	3886.9	3905.2	3966.2	3886.9	3863.7	3772.1
27.5°	4381.5	4425.4	4358.3	4377.8	4371.7	4410.8	4391.2	4542.7	4457.2	4419.3	4234.9
30°	5045.8	5123.9	4996.9	4992.1	4985.9	5048.2	5076.3	5176.5	5089.7	5051.8	4829.6
32.5°	5763.8	5845.6	5694.2	5650.2	5627.0	5664.9	5641.7	5722.3	5662.4	5603.8	5329.1
35°	6523.3	6604.0	6459.9	6374.4	6281.5	6202.2	6119.1	6139.9	6083.7	5994.6	5710.1
37.5°	7241.4	7389.1	7236.5	7144.9	6973.9	6818.8	6586.9	6490.4	6437.8	6356.0	6069.1
40°	7972.9	8057.1	7941.1	7863.0	7677.4	7434.3	7063.1	6859.2	6788.4	6708.9	6465.9
42.5°	8511.4	8592.0	8529.6	8475.9	8330.6	8048.5	7568.6	7313.4	7210.9	7121.7	6915.4
45°	8938.7	8998.6	8959.5	8979.1	8916.8	8643.2	8092.5	7800.7	7694.4	7585.7	7423.4
47.5°	9110.9	9174.5	9236.7	9352.7	9459.0	9257.5	8655.4	8328.2	8215.9	8104.7	7944.8
50°	9091.4	9156.1	9336.8	9583.5	9913.2	9846.0	9248.9	8889.9	8786.1	8659.1	8511.4
52.5°	8935.1	9008.3	9240.4	9650.7	10175.8	10286.9	9853.4	9470.0	9372.3	9220.8	9073.1
55°	8524.8	8568.8	8916.8	9498.1	10238.0	10594.6	10445.7	10087.8	9990.2	9778.9	9617.7
57.5°	7764.1	7827.5	8334.3	9086.5	10081.8	10803.4	10965.9	10737.5	10643.5	10339.4	10170.9
60°	6771.3	6872.6	7452.7	8395.4	9683.7	10802.3	11438.5	11376.2	11298.0	10891.3	10715.6
62.5°	5647.7	5765.0	6323.1	7418.4	8987.6	10495.7	11734.0	11911.0	11870.7	11400.6	11175.9
65°	4337.5	4418.1	4973.7	6154.5	7904.5	9837.5	11768.1	12276.1	12283.5	11787.7	11416.4
67.5°	2888.0	3120.0	3602.4	4618.3	6453.7	8761.7	11467.7	12336.0	12406.8	11920.7	11295.6
70°	1409.2	1714.5	2187.0	3001.6	4618.3	7112.0	10682.6	11845.1	12002.6	11532.5	10575.1
72.5°	585.0	683.9	941.5	1481.2	2651.1	4799.0	9104.9	10514.0	10805.9	10218.5	8891.2
75°	394.4	427.4	538.5	759.5	1207.8	2366.6	6566.0	7839.7	8309.9	7717.6	6308.5
77.5°	304.0	324.8	392.0	531.2	718.0	895.1	3514.4	4724.6	4967.6	4598.9	3282.5
80°	239.3	255.2	293.0	387.1	509.2	478.7	1197.9	2140.7	2281.1	1913.6	1055.0
82.5°	207.6	213.7	210.0	262.5	338.2	279.6	393.2	790.1	871.9	632.5	344.4
85°	150.2	167.3	174.7	162.5	179.5	141.7	161.2	279.6	307.7	274.8	194.1
87.5°	61.1	90.4	111.1	105.1	65.9	40.3	50.0	81.8	94.0	102.6	63.6
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°	2577.9	2577.9	2577.9	2577.9	2577.9	2577.9	2577.9	2577.9	2577.9	2577.9	2577.9
2.5°	2580.2	2588.8	2594.9	2602.3	2607.1	2614.5	2629.1	2637.6	2638.9	2645.0	2643.8
5°	2603.5	2615.7	2629.1	2648.7	2670.6	2689.0	2717.1	2736.5	2743.9	2750.0	2748.7
7.5°	2653.5	2670.6	2695.0	2729.3	2761.0	2785.4	2819.6	2842.8	2866.0	2874.6	2875.7
10°	2728.0	2752.4	2787.9	2834.2	2868.5	2900.2	2935.6	2955.2	2978.3	2988.2	2993.0
12.5°	2820.8	2846.5	2892.9	2957.6	2989.3	3011.3	3023.5	3018.6	3023.5	3032.1	3034.5
15°	2927.1	2955.2	3007.7	3077.3	3099.3	3079.7	3052.9	3028.5	3024.8	3027.2	3035.7
17.5°	3052.9	3073.6	3134.7	3193.3	3177.4	3096.8	3038.2	2999.1	2979.6	2973.5	2982.0
20°	3228.7	3228.7	3278.8	3315.4	3209.2	3072.4	2980.8	2917.4	2877.0	2860.0	2856.3
22.5°	3442.4	3422.9	3454.7	3428.9	3203.0	3004.0	2877.0	2767.1	2706.0	2681.6	2677.9
25°	3713.5	3690.3	3681.7	3523.0	3159.0	2895.3	2689.0	2555.8	2502.1	2488.7	2491.2
27.5°	4122.5	4063.9	3952.8	3574.3	3078.5	2724.3	2469.1	2345.8	2315.3	2316.5	2320.2
30°	4667.2	4550.0	4277.6	3582.8	2946.6	2482.5	2244.4	2156.5	2141.8	2148.0	2168.8
32.5°	5171.5	5060.4	4609.8	3543.7	2743.9	2245.7	2042.9	1984.4	1962.4	1969.7	1979.5
35°	5567.2	5536.6	4917.5	3488.8	2494.7	2023.5	1862.2	1812.2	1769.5	1759.6	1767.0
37.5°	5940.9	5928.6	5148.4	3411.9	2248.1	1865.9	1716.9	1651.0	1588.7	1554.5	1555.7
40°	6351.2	6338.9	5299.8	3293.4	2029.5	1729.2	1586.3	1499.6	1422.6	1360.4	1366.4
42.5°	6812.8	6740.7	5371.8	3123.7	1844.0	1613.1	1480.0	1362.8	1261.5	1204.1	1207.8
45°	7317.1	7154.7	5370.6	2907.5	1687.7	1506.9	1366.4	1200.4	1106.4	1052.7	1050.2
47.5°	7851.9	7550.4	5304.7	2668.2	1536.2	1389.7	1190.6	1063.6	1001.3	968.3	961.0
50°	8403.9	7920.3	5192.3	2393.5	1381.1	1256.5	1080.8	994.0	946.4	915.8	904.9
52.5°	8922.9	8256.2	5056.7	2082.1	1223.5	1127.1	1031.9	964.7	914.6	880.5	865.8
55°	9405.2	8545.5	4865.1	1763.3	1095.3	1040.4	1008.7	952.5	895.1	854.8	839.0
57.5°	9833.8	8733.6	4534.1	1464.1	1003.8	980.6	984.2	931.7	865.8	831.6	809.6
60°	10190.4	8871.6	4044.4	1186.9	929.3	922.0	946.4	892.7	815.7	776.6	759.5
62.5°	10404.2	8869.1	3443.6	972.0	865.8	868.3	896.4	843.8	765.7	729.0	718.0
65°	10385.8	8651.8	2784.2	831.6	804.7	807.2	843.8	790.1	724.2	702.1	700.9
67.5°	10018.2	8121.8	2135.8	740.0	737.6	748.6	791.3	753.5	698.5	696.1	699.7
70°	9023.0	7021.6	1538.6	666.8	668.0	683.9	740.0	730.2	685.1	689.9	688.7
72.5°	7235.3	5353.5	1033.1	589.8	591.0	616.6	691.2	712.0	671.6	736.4	746.1
75°	4818.6	3338.6	664.3	508.0	509.2	542.2	648.4	676.5	635.0	733.9	740.0
77.5°	2315.3	1500.8	481.1	427.4	427.4	458.0	560.5	605.7	541.0	570.3	522.6
80°	799.8	564.2	378.5	344.4	337.0	357.8	472.6	525.1	466.5	429.9	402.9
82.5°	315.1	293.0	304.0	267.4	243.0	256.5	367.6	433.5	343.2	310.2	308.9
85°	180.7	190.5	214.9	177.0	140.4	157.5	269.9	311.4	258.9	228.4	233.2
87.5°	48.9	67.1	98.9	91.6	63.6	67.1	128.2	172.2	148.9	114.8	118.5
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)