

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: P963658

Luminaire Tested: **NAV-SB3A-830-U-SL2**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P963658
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-10)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3A-830-U-SL2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 80 CRI, 3000K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II SPILL
LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12320.5 lumens
Efficiency: N/A
Efficacy: 145.5 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B2 - U0 - G2

Input Watts (W): 84.7
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

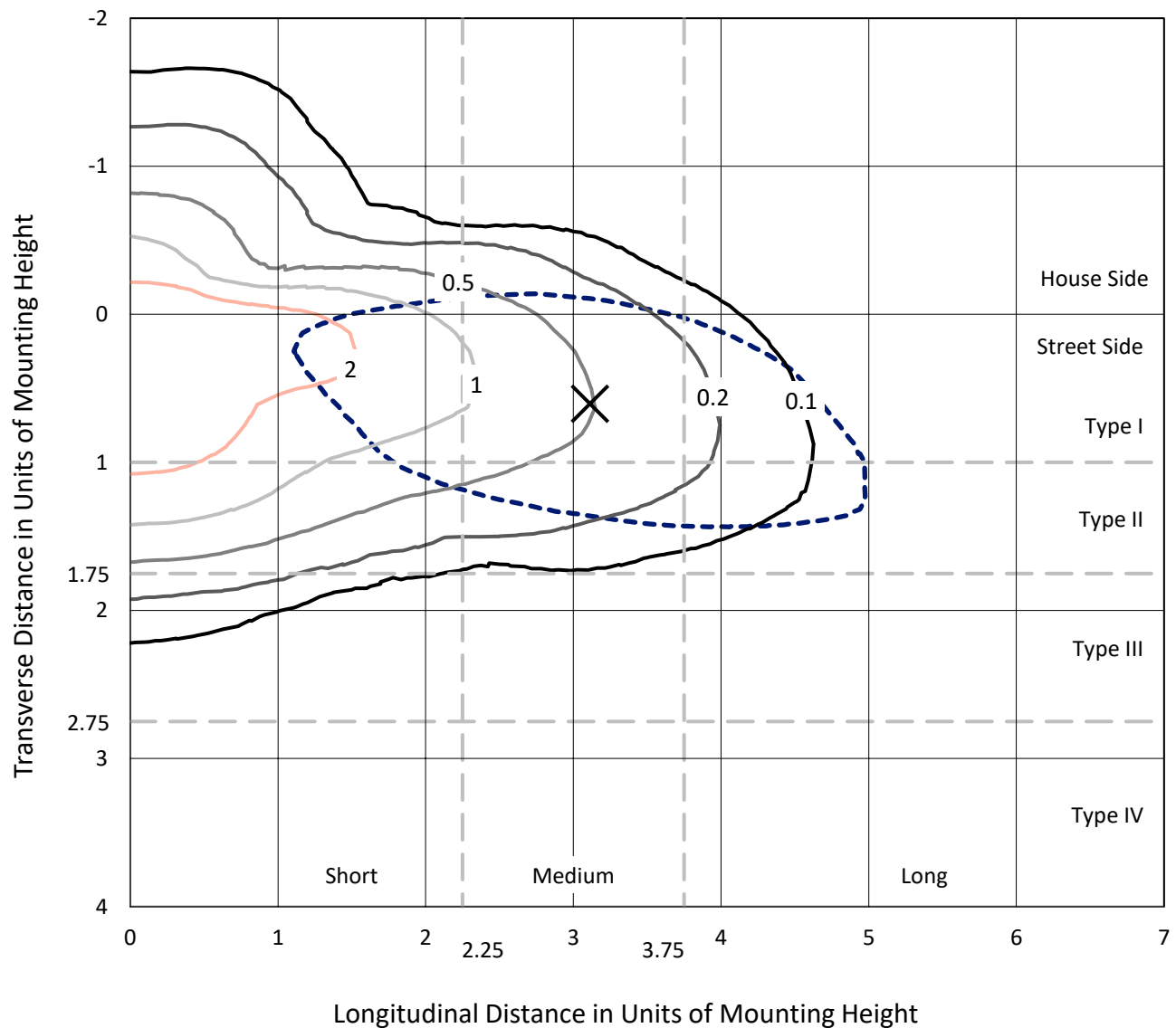


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Iso-Footcandle Lines of Horizontal Illumination

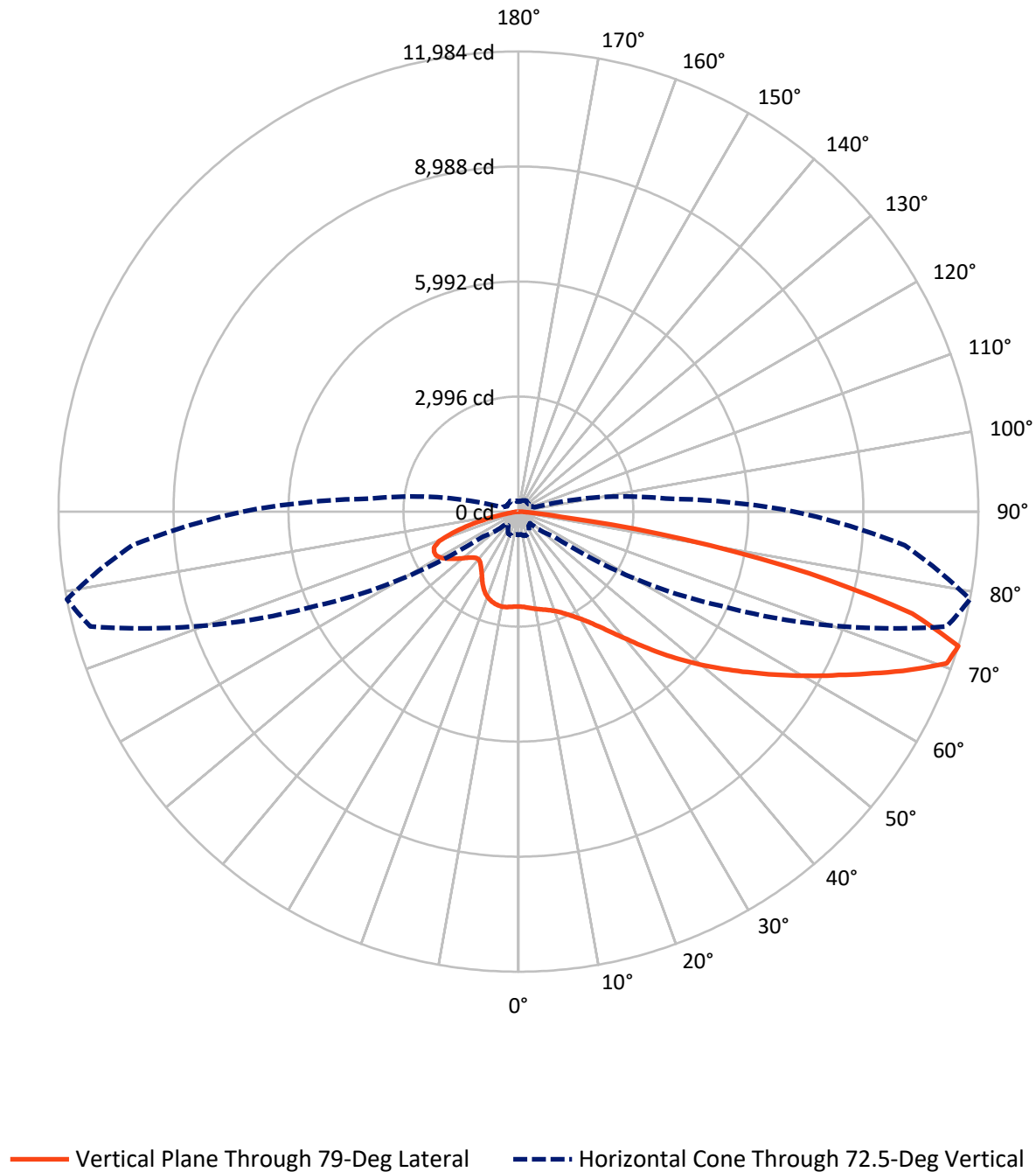
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4 fc
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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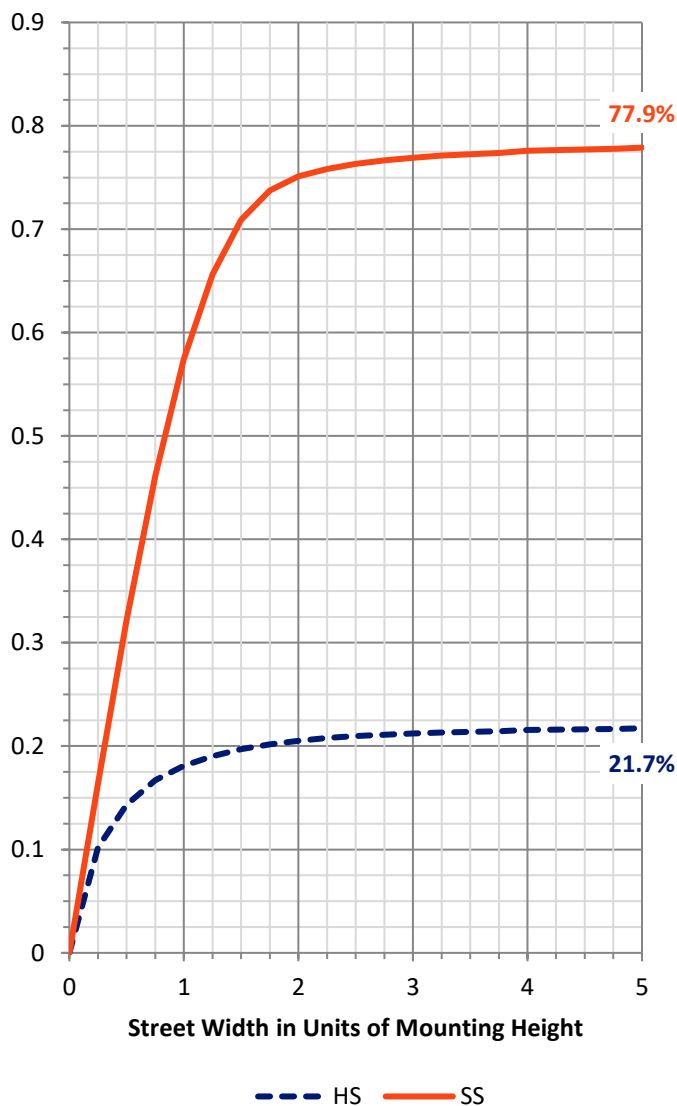
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2711.2	0.0	2711.2
	% Fixture	22.0	0.0	22.0
Street Side	Lumens	9609.3	0.0	9609.3
	% Fixture	78.0	0.0	78.0
Total	Lumens	12320.5	0.0	12320.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	224.5	1.8
10°-20°	586.9	4.8
20°-30°	947.1	7.7
30°-40°	1421.5	11.5
40°-50°	2016.4	16.4
50°-60°	2546.5	20.7
60°-70°	2586.3	21.0
70°-80°	1762.7	14.3
80°-90°	228.7	1.9
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°	12320.5	100.0
0°-180°	12320.5	100.0

Coefficient of Utilization



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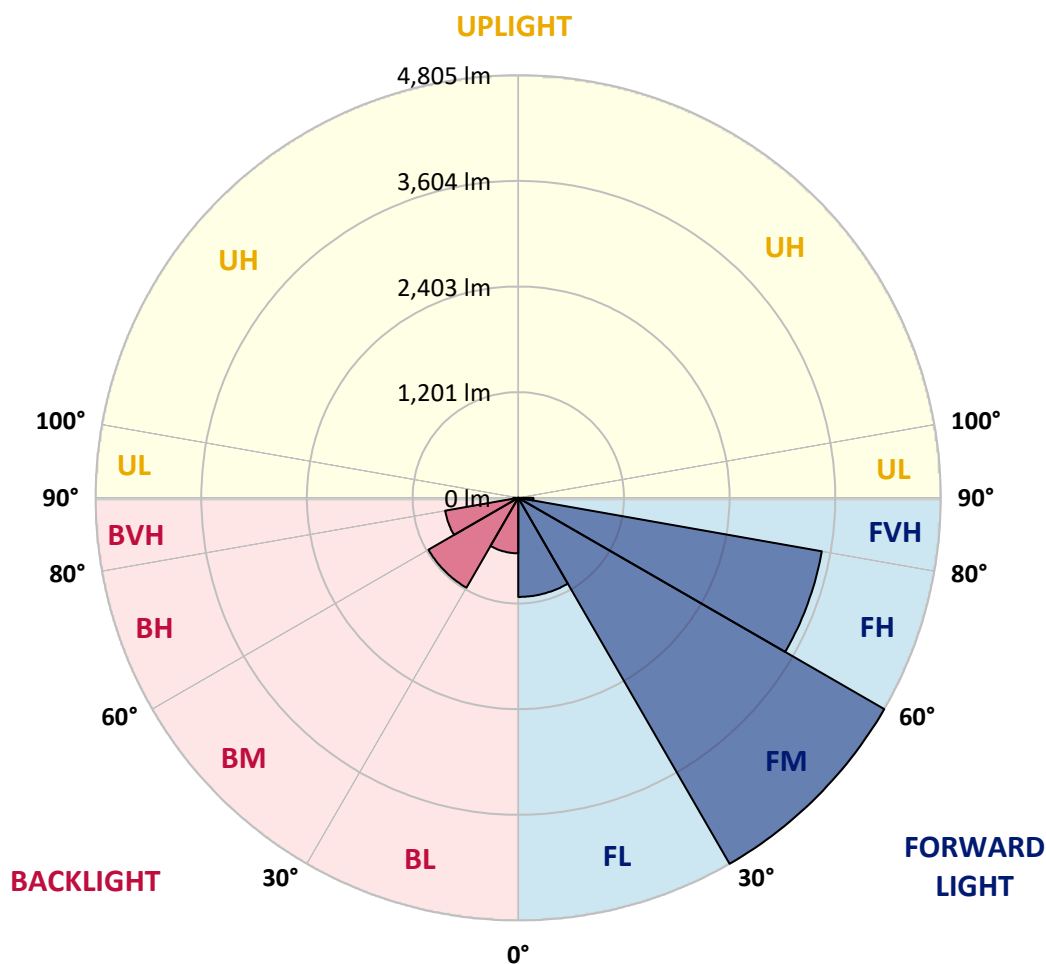
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1127.0	9.1			
FM	(30°-60°)	4805.2	39.0			
FH	(60°-80°)	3504.8	28.4			G2/5000
FVH	(80°-90°)	172.3	1.4			G2/225
BL	(0°-30°)	631.5	5.1	B2/1000		
BM	(30°-60°)	1179.1	9.6	B2/2500		
BH	(60°-80°)	844.2	6.9	B2/1000		G2/1000
BVH	(80°-90°)	56.4	0.5			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	79°	85°
0°	2473.2	2473.2	2473.2	2473.2	2473.2	2473.2	2473.2	2473.2	2473.2	2473.2	2473.2
2.5°	2474.6	2462.8	2469.9	2467.4	2470.7	2474.6	2475.8	2477.8	2484.3	2483.7	2483.0
5°	2469.3	2457.5	2467.4	2464.1	2472.6	2481.7	2489.5	2496.7	2507.1	2511.7	2505.2
7.5°	2458.3	2450.4	2460.2	2469.9	2485.6	2499.3	2510.3	2526.6	2541.7	2544.3	2548.9
10°	2393.7	2387.8	2410.7	2436.1	2479.1	2516.3	2540.4	2559.2	2575.5	2578.2	2584.6
12.5°	2326.5	2319.4	2344.8	2379.3	2449.1	2516.3	2567.1	2591.8	2606.2	2614.7	2624.4
15°	2315.5	2309.6	2324.0	2353.9	2411.9	2498.6	2585.4	2631.0	2643.3	2653.1	2657.0
17.5°	2369.0	2357.9	2363.8	2374.2	2408.0	2482.3	2599.6	2675.2	2694.1	2704.6	2704.6
20°	2492.8	2477.1	2468.0	2447.2	2441.2	2484.9	2598.4	2728.7	2753.5	2766.5	2769.8
22.5°	2657.6	2647.3	2627.7	2574.9	2517.5	2516.9	2623.1	2797.1	2843.4	2855.8	2848.0
25°	2857.1	2841.4	2816.7	2745.0	2634.9	2580.1	2664.8	2884.5	2962.0	2965.2	2942.5
27.5°	3086.5	3063.0	3029.1	2934.7	2786.1	2679.1	2728.7	2984.8	3098.2	3096.9	3050.0
30°	3328.3	3304.8	3268.9	3154.2	2967.2	2812.8	2817.3	3093.0	3259.8	3252.6	3172.5
32.5°	3504.9	3487.3	3480.1	3391.5	3175.8	2970.4	2919.0	3212.9	3459.3	3452.7	3340.7
35°	3640.4	3617.6	3626.0	3581.1	3403.2	3147.1	3043.4	3355.6	3701.7	3701.1	3561.6
37.5°	3774.7	3754.5	3761.6	3731.7	3613.7	3371.2	3195.3	3530.3	4002.1	4016.5	3828.8
40°	3897.2	3875.7	3904.3	3876.3	3777.3	3609.8	3368.0	3727.7	4350.1	4377.5	4152.0
42.5°	3970.8	3953.9	4001.5	4002.1	3919.4	3811.2	3557.7	3945.4	4752.9	4814.1	4549.6
45°	3996.3	3990.4	4062.1	4077.0	4045.2	3927.8	3728.4	4182.6	5186.9	5296.4	5002.5
47.5°	3968.9	3957.8	4056.8	4112.3	4137.7	3982.5	3869.8	4439.4	5630.1	5790.4	5496.5
50°	3830.7	3809.2	3956.5	4073.1	4163.8	4018.4	4012.6	4735.9	6133.8	6309.2	5993.1
52.5°	3582.5	3566.2	3733.7	3936.3	4106.4	4036.0	4172.9	5059.8	6612.2	6839.0	6502.1
55°	3265.0	3243.5	3428.0	3692.6	3963.7	4030.2	4333.2	5422.1	7176.5	7406.6	7028.0
57.5°	2762.0	2718.9	2952.2	3265.0	3731.0	4023.0	4500.1	5782.5	7750.1	8025.7	7589.1
60°	2028.1	1964.2	2250.4	2621.1	3276.1	3953.2	4706.6	6186.6	8438.3	8686.6	8201.7
62.5°	1180.9	1143.7	1330.8	1676.8	2469.3	3542.7	4822.6	6656.6	9114.7	9375.5	8803.9
65°	917.0	906.5	922.8	949.6	1374.4	2652.4	4464.8	7114.6	9975.0	10157.4	9431.4
67.5°	838.8	831.0	838.1	787.9	697.3	1477.4	3532.3	7230.7	10896.6	11007.3	9980.8
70°	745.6	736.5	759.9	716.9	548.8	671.9	2282.3	6809.7	11629.6	11837.6	10398.6
72.5°	607.4	597.0	651.7	632.1	462.1	431.4	1146.4	5809.3	11552.8	11984.2	10099.5
75°	466.6	460.7	525.9	542.2	376.7	339.6	550.0	4318.2	10166.6	10601.3	8704.2
77.5°	362.3	357.8	391.0	450.3	303.7	263.3	338.2	2739.1	7661.5	7737.7	5998.3
80°	271.7	258.7	289.4	348.7	236.6	192.3	229.4	1597.4	4842.8	4389.9	2610.8
82.5°	170.0	163.6	189.0	232.7	166.9	132.3	149.2	882.4	1940.7	1143.1	503.8
85°	97.1	94.5	103.0	132.9	90.6	76.3	85.4	389.7	354.5	243.7	151.8
87.5°	39.1	37.8	46.9	59.3	33.2	28.0	29.9	93.9	78.2	72.4	50.2
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°	2473.2	2473.2	2473.2	2473.2	2473.2	2473.2	2473.2	2473.2	2473.2	2473.2	2473.2
2.5°	2480.4	2480.4	2471.3	2456.9	2440.6	2430.2	2413.3	2408.8	2391.1	2385.9	2394.4
5°	2510.3	2505.2	2477.1	2436.7	2381.4	2330.5	2274.5	2239.2	2189.7	2172.2	2185.2
7.5°	2548.1	2533.8	2485.6	2397.0	2280.9	2167.0	2048.4	1958.4	1872.4	1841.7	1845.6
10°	2582.7	2562.5	2480.4	2325.3	2124.5	1927.1	1738.1	1605.8	1505.4	1464.4	1473.5
12.5°	2617.2	2580.1	2445.9	2206.0	1902.3	1634.5	1433.1	1330.1	1268.2	1218.7	1235.0
15°	2649.8	2597.7	2392.5	2046.3	1658.6	1386.8	1238.2	1156.1	1106.6	1074.0	1079.8
17.5°	2687.7	2612.7	2312.3	1843.7	1426.6	1215.4	1094.2	1044.7	1034.9	1031.0	1033.6
20°	2740.4	2626.4	2206.7	1616.8	1255.8	1078.6	1016.0	1011.5	1010.8	1008.8	1015.4
22.5°	2797.1	2642.7	2067.2	1410.9	1110.5	993.2	982.2	973.0	967.1	966.5	973.6
25°	2864.3	2647.9	1892.6	1242.2	986.7	952.8	939.7	926.1	922.2	922.2	926.1
27.5°	2929.4	2630.3	1689.2	1095.5	917.0	915.6	898.7	894.1	893.5	895.4	900.7
30°	2994.5	2597.0	1487.2	959.9	876.6	876.6	870.6	873.9	876.6	883.0	887.6
32.5°	3082.6	2561.9	1318.4	859.6	841.3	834.9	840.7	847.3	849.8	858.3	865.5
35°	3211.6	2537.1	1184.2	804.8	804.8	796.4	799.6	798.4	792.4	788.5	797.7
37.5°	3382.4	2535.7	1073.4	779.4	774.2	773.0	773.6	765.1	742.3	714.9	715.6
40°	3587.6	2571.0	988.0	761.9	757.9	765.8	761.9	739.0	676.5	628.9	627.6
42.5°	3863.3	2671.4	933.3	740.4	752.0	761.9	746.2	667.4	624.9	593.1	591.7
45°	4187.8	2834.2	905.2	717.5	741.0	752.8	677.1	642.6	608.6	570.2	567.6
47.5°	4555.4	3039.5	898.7	696.0	716.3	723.3	647.8	632.1	593.7	552.0	548.8
50°	4955.6	3282.7	916.2	670.6	680.4	655.6	638.1	623.7	583.9	542.8	538.3
52.5°	5369.4	3550.5	951.5	636.1	644.5	617.2	634.1	621.8	578.1	522.6	518.8
55°	5776.1	3820.3	985.3	595.6	608.0	582.6	623.0	613.9	551.3	488.8	485.5
57.5°	6189.3	4088.8	1018.6	559.9	572.9	549.4	605.5	593.1	521.3	457.5	456.2
60°	6618.7	4349.5	1034.2	525.3	534.4	518.8	578.7	557.2	487.5	425.6	423.6
62.5°	7020.8	4566.5	1008.8	490.8	496.6	490.1	543.6	514.9	453.6	389.7	389.1
65°	7424.3	4695.5	930.6	456.8	458.2	454.9	493.9	469.2	413.8	358.4	354.5
67.5°	7789.8	4767.9	806.2	420.4	417.1	415.7	447.7	419.7	375.4	327.2	323.3
70°	7867.4	4584.1	615.8	377.3	377.3	374.1	396.9	368.2	333.0	294.0	292.6
72.5°	7185.7	3856.2	437.3	328.4	333.6	327.2	346.0	322.0	290.0	263.9	256.1
75°	5794.3	2827.8	318.1	278.3	287.4	276.3	294.0	277.0	249.6	249.0	224.2
77.5°	3981.3	1748.5	230.7	229.4	236.0	221.6	241.8	232.7	207.9	196.8	184.4
80°	1699.0	697.3	168.1	177.2	177.2	164.2	187.7	190.3	168.8	163.6	163.6
82.5°	338.2	198.1	118.0	121.9	114.7	110.8	132.9	147.3	203.4	226.1	226.8
85°	101.7	73.0	71.0	66.5	58.6	59.3	78.2	147.9	182.4	104.2	89.9
87.5°	28.0	18.2	18.9	15.0	12.4	16.3	26.8	112.1	61.3	26.0	22.1
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)