

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: P965259

Luminaire Tested: **NAV-SB3D-830-U-T4FT-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P965259
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-25)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3D-830-U-T4FT-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 80 CRI, 3000K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV
FORWARD THROW OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 21291.3 lumens
Efficiency: N/A
Efficacy: 97.6 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - U0 - G4

Input Watts (W): 218.1
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



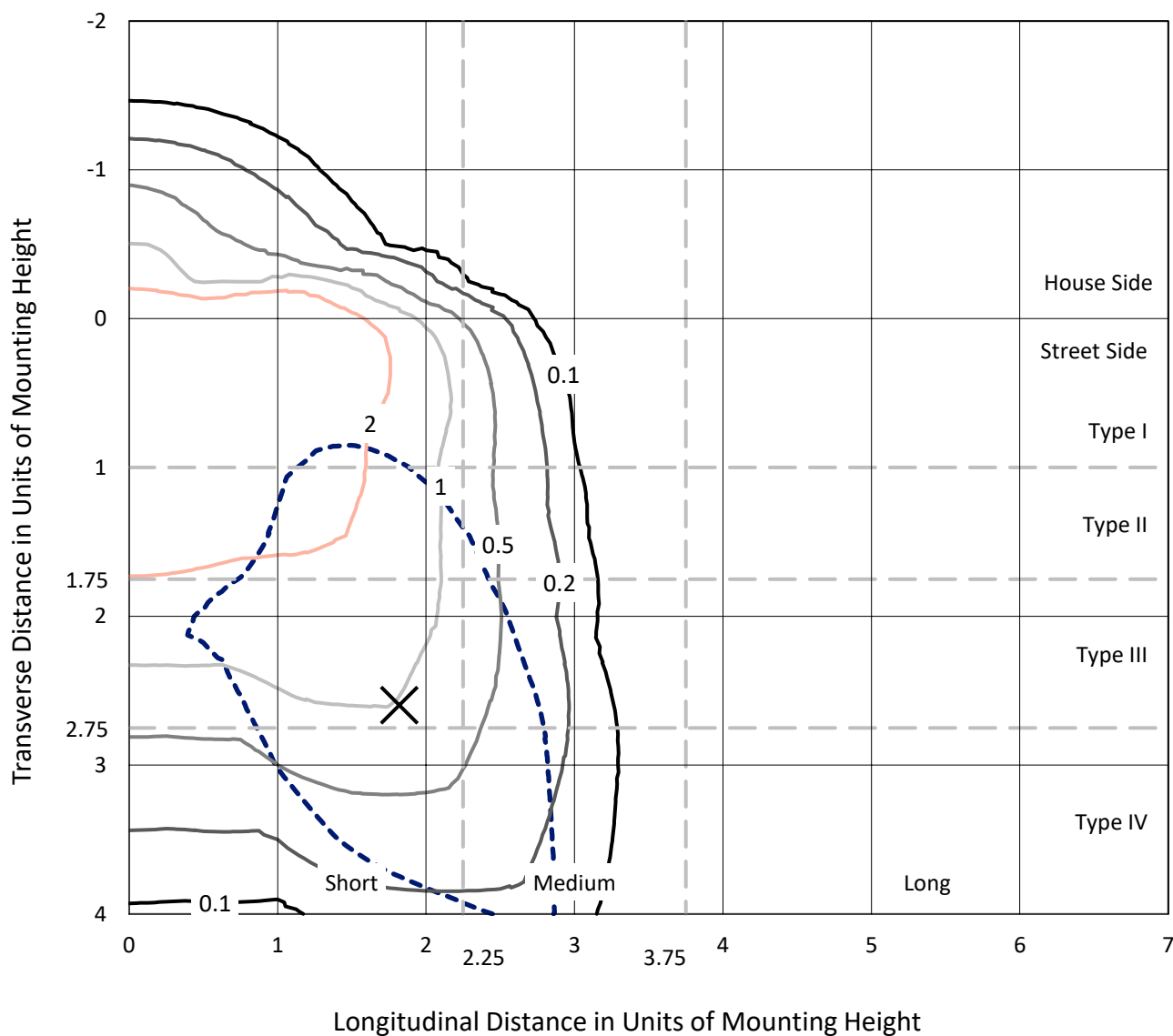
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

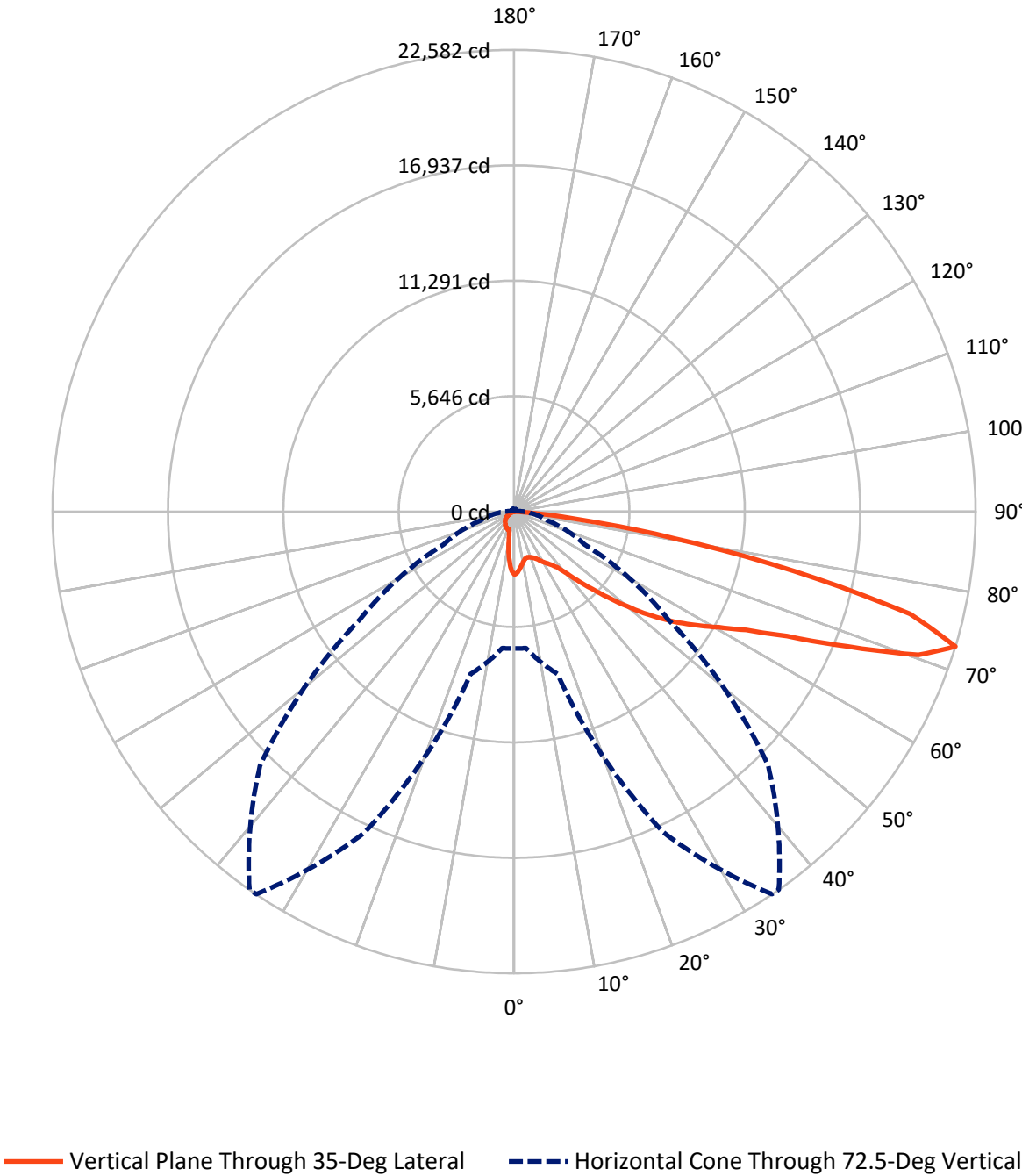


Based on 25 foot mounting height. Maximum calculated value = 4.9 fc

Type IV - Short - N/A

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Luminous Intensity Polar Plot



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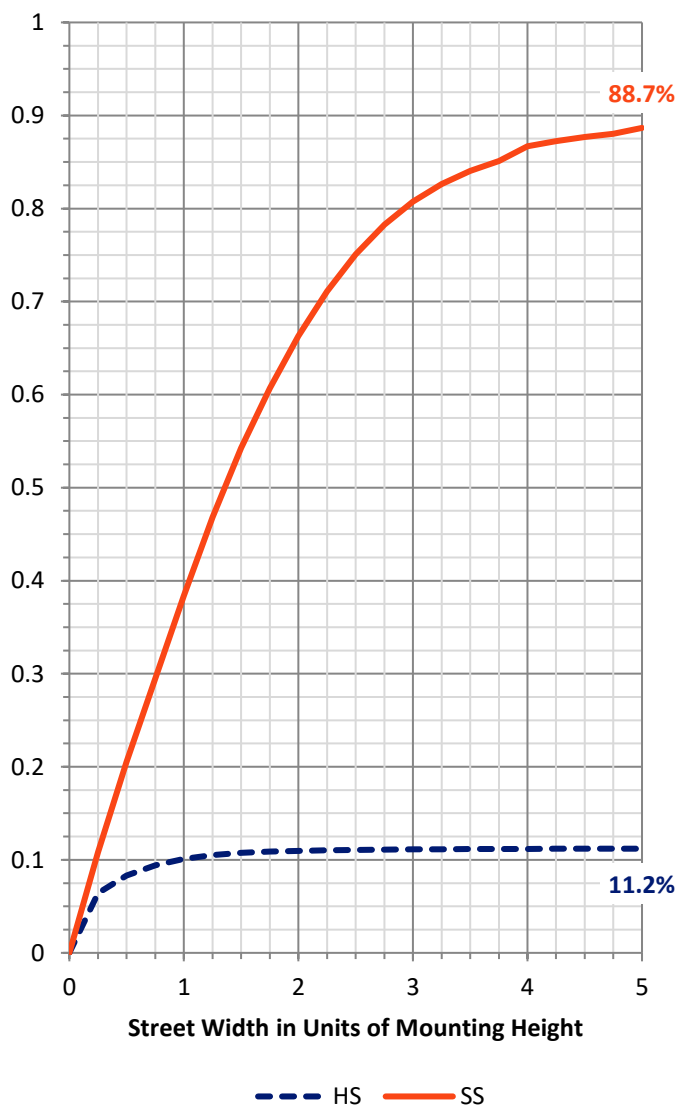
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2396.2	0.0	2396.2
	% Fixture	11.3	0.0	11.3
Street Side	Lumens	18895.1	0.0	18895.1
	% Fixture	88.7	0.0	88.7
Total	Lumens	21291.3	0.0	21291.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	253.6	1.2
10°-20°	593.2	2.8
20°-30°	963.6	4.5
30°-40°	1607.8	7.6
40°-50°	3042.1	14.3
50°-60°	4833.8	22.7
60°-70°	5979.7	28.1
70°-80°	3717.1	17.5
80°-90°	300.4	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°	21291.3	100.0
0°-180°	21291.3	100.0

Coefficient of Utilization



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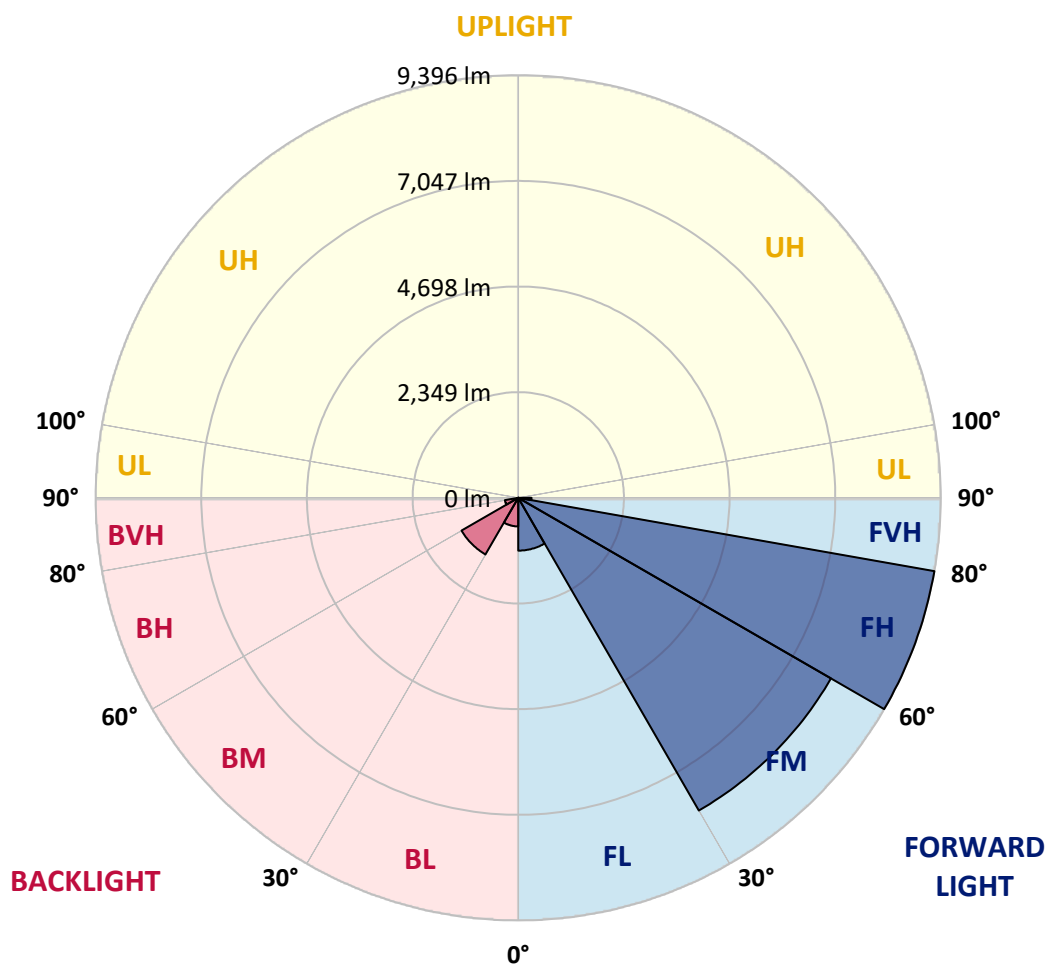
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1173.7	5.5			
FM	(30°-60°)	8029.0	37.7			
FH	(60°-80°)	9396.1	44.1			G4/12000
FVH	(80°-90°)	296.3	1.4			G3/500
BL	(0°-30°)	636.7	3.0	B2/1000		
BM	(30°-60°)	1454.7	6.8	B2/2500		
BH	(60°-80°)	300.7	1.4	B1/500		G1/500
BVH	(80°-90°)	4.1	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G4

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	34°	35°	45°	55°	65°	75°	85°
0°	3085.9	3085.9	3085.9	3085.9	3085.9	3085.9	3085.9	3085.9	3085.9	3085.9	3085.9
2.5°	2948.5	2973.5	2978.1	2985.9	2985.9	2995.4	3010.9	3032.8	3068.6	3087.4	3099.9
5°	2717.7	2736.3	2759.8	2778.5	2814.3	2819.1	2879.9	2939.2	3021.9	3084.2	3128.0
7.5°	2485.2	2507.0	2538.2	2583.5	2630.3	2644.3	2736.3	2836.2	2967.3	3084.2	3157.6
10°	2321.4	2323.0	2351.0	2396.2	2471.2	2488.3	2600.6	2742.6	2906.4	3065.6	3185.7
12.5°	2229.4	2240.2	2252.7	2287.1	2358.8	2369.8	2489.8	2656.8	2845.6	3054.6	3218.4
15°	2229.4	2237.2	2245.0	2262.1	2319.8	2329.2	2435.3	2602.2	2814.3	3059.3	3271.5
17.5°	2252.7	2265.2	2259.0	2279.3	2340.1	2346.3	2439.9	2586.6	2812.8	3088.9	3352.6
20°	2308.9	2318.2	2305.7	2318.2	2379.1	2391.6	2488.3	2616.2	2839.4	3140.4	3454.0
22.5°	2397.8	2402.5	2372.9	2382.2	2444.6	2460.2	2572.5	2700.5	2903.3	3223.1	3589.8
25°	2510.1	2519.6	2474.2	2485.2	2544.5	2563.2	2692.7	2826.8	3004.7	3337.0	3762.9
27.5°	2639.7	2644.3	2605.3	2603.8	2680.2	2706.7	2837.8	2982.9	3140.4	3480.5	3981.3
30°	2787.9	2801.9	2764.4	2758.2	2854.9	2876.8	3006.2	3174.7	3340.1	3695.8	4291.8
32.5°	2904.8	2915.8	2894.0	2909.6	3007.9	3025.0	3210.6	3446.2	3653.7	4001.6	4714.6
35°	3073.4	3079.6	3029.7	3057.8	3170.0	3213.8	3489.9	3826.8	4048.3	4385.4	5266.8
37.5°	3683.3	3683.3	3471.2	3332.3	3440.0	3479.0	3872.1	4305.8	4535.1	4900.2	5962.6
40°	4527.3	4513.3	4202.8	3918.9	3904.8	3981.3	4416.5	4909.5	5163.8	5518.0	6745.7
42.5°	5427.5	5405.6	4982.8	4702.1	4655.2	4681.8	5045.3	5653.7	5912.7	6271.5	7588.2
45°	6226.3	6220.0	5833.1	5455.6	5371.3	5455.6	5830.0	6524.2	6709.9	7087.4	8429.1
47.5°	6895.5	6895.5	6613.2	6366.7	6323.0	6372.9	6892.4	7489.9	7472.8	7956.4	9248.1
50°	7666.2	7659.9	7391.6	7285.5	7330.8	7401.0	8115.5	8507.1	8262.1	8809.8	9979.8
52.5°	8205.9	8243.5	8151.4	8134.2	8365.1	8486.8	9357.3	9502.4	8968.9	9619.4	10527.4
55°	8633.5	8677.1	8783.2	8903.4	9348.0	9507.1	10560.2	10446.3	9560.1	10321.4	10842.6
57.5°	9238.7	9176.3	9340.1	9577.3	10296.4	10488.4	11725.5	11337.0	10036.0	10890.8	10876.8
60°	9973.6	9982.9	10011.0	10310.5	11243.4	11489.9	12873.7	12179.5	10341.7	11240.4	10496.2
62.5°	10856.6	10870.5	10928.3	11388.6	12514.9	12747.3	14096.8	12869.1	10482.2	11142.1	9513.3
65°	10795.7	10855.0	11499.3	13073.4	14447.8	14677.2	15524.2	13352.7	10270.0	10243.4	7745.7
67.5°	9834.7	9931.4	11009.4	15086.0	17362.1	17617.9	17249.7	13447.8	9354.2	7965.7	5053.0
70°	8574.1	8608.5	9904.9	16895.6	20736.5	20995.5	18794.2	12401.1	7098.3	4443.1	2263.7
72.5°	6695.8	6703.6	8224.7	17315.2	22568.0	22582.1	17582.0	9206.0	3817.5	1706.7	786.3
75°	4783.2	4736.4	5508.7	14042.2	19855.1	20014.1	13181.1	4318.3	1458.7	806.6	391.5
77.5°	2564.8	2616.2	3117.0	8327.7	13716.1	13987.6	7191.9	1245.0	742.6	549.2	259.0
80°	792.5	836.2	1277.7	3812.8	7769.2	7933.0	2666.1	553.8	517.9	391.5	170.0
82.5°	249.6	259.0	595.9	1602.2	3224.6	3299.6	772.2	313.5	354.1	259.0	99.8
85°	71.8	73.3	265.2	597.5	797.2	812.8	216.9	121.7	202.8	160.7	51.5
87.5°	7.8	25.0	99.8	99.8	70.2	68.7	23.4	26.5	57.7	20.3	9.3
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°	3085.9	3085.9	3085.9	3085.9	3085.9	3085.9	3085.9	3085.9	3085.9	3085.9	3085.9
2.5°	3092.0	3093.7	3073.4	3039.0	3001.6	2970.3	2931.4	2900.1	2878.3	2872.0	2883.0
5°	3114.0	3103.0	3045.3	2940.7	2815.9	2708.3	2588.1	2493.0	2430.6	2404.0	2413.5
7.5°	3146.6	3115.5	2989.1	2783.2	2544.5	2332.3	2117.0	1950.1	1844.0	1791.0	1798.8
10°	3174.7	3112.3	2895.5	2555.4	2190.3	1869.0	1578.8	1377.5	1265.3	1212.2	1213.7
12.5°	3201.3	3110.8	2773.9	2285.5	1791.0	1397.8	1127.9	1028.1	996.9	985.9	982.9
15°	3251.2	3115.5	2620.9	1976.6	1393.2	1056.2	957.9	956.3	962.6	959.4	957.9
17.5°	3319.9	3120.1	2447.8	1649.0	1074.9	931.3	926.7	940.7	950.1	945.4	943.8
20°	3408.7	3138.9	2263.7	1324.5	923.5	900.2	911.1	923.5	931.3	923.5	922.0
22.5°	3533.6	3171.7	2062.4	1063.9	875.2	881.4	890.8	904.9	912.7	901.7	900.2
25°	3686.4	3223.1	1864.3	925.2	851.8	859.6	873.6	889.3	898.6	887.6	886.1
27.5°	3884.5	3305.8	1681.7	893.9	828.4	833.1	853.3	876.8	889.3	875.2	875.2
30°	4171.6	3441.5	1524.2	907.9	814.4	803.4	831.5	864.3	878.3	865.8	864.3
32.5°	4552.3	3633.4	1427.5	929.8	808.1	769.2	795.6	837.7	861.2	853.3	853.3
35°	5051.5	3925.1	1390.0	954.8	803.4	733.3	751.9	797.2	837.7	845.5	845.5
37.5°	5656.9	4330.7	1401.0	965.7	789.4	703.6	713.0	751.9	805.0	829.9	836.2
40°	6344.9	4803.5	1463.4	954.8	773.8	678.7	680.2	709.8	756.7	794.1	806.6
42.5°	7054.7	5355.7	1578.8	914.2	759.7	656.8	652.1	672.4	703.6	730.1	741.1
45°	7730.1	5923.6	1692.7	858.0	742.6	635.0	624.0	631.8	638.1	649.0	655.2
47.5°	8319.8	6323.0	1659.9	806.6	719.2	610.0	591.2	588.1	569.4	567.8	566.3
50°	8727.1	6410.3	1474.3	755.1	684.9	581.9	552.3	533.5	500.8	485.1	486.8
52.5°	8856.5	6065.5	1204.4	703.6	628.7	544.5	502.4	472.7	432.1	418.1	416.6
55°	8684.9	5390.1	962.6	641.2	550.7	494.6	447.7	408.8	376.0	358.9	358.9
57.5°	8265.3	4530.5	761.3	567.8	468.0	438.4	391.5	352.6	324.5	307.3	304.2
60°	7569.5	3597.5	602.2	480.5	399.3	377.5	329.1	304.2	279.2	259.0	254.3
62.5°	6513.3	2567.8	472.7	380.7	333.8	308.9	280.8	262.1	232.5	204.4	199.7
65°	5082.7	1571.0	365.1	279.2	268.3	255.8	238.7	221.5	185.6	157.5	152.9
67.5°	3206.0	744.2	260.6	210.6	212.2	205.9	198.1	184.1	157.5	132.6	129.5
70°	1411.8	360.4	171.6	160.7	157.5	157.5	163.8	159.1	134.2	110.8	106.1
72.5°	480.5	193.4	127.9	121.7	113.9	112.3	137.2	132.6	107.6	85.8	81.1
75°	251.1	129.5	93.6	87.3	68.7	82.7	109.2	103.0	76.5	56.2	51.5
77.5°	163.8	92.0	64.0	56.2	39.1	54.6	81.1	71.8	45.2	28.1	25.0
80°	103.0	60.9	37.4	26.5	18.8	29.6	43.7	31.2	17.1	6.3	4.7
82.5°	54.6	31.2	14.0	9.3	7.8	9.3	11.0	7.8	3.1	0.0	0.0
85°	21.8	11.0	4.7	3.1	1.5	0.0	3.1	1.5	0.0	0.0	0.0
87.5°	7.8	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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)