

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: P965286

Luminaire Tested: **NAV-SB3D-835-U-T3-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P965286
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-6)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3D-835-U-T3-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 80 CRI, 3500K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 22765.2 lumens
Efficiency: N/A
Efficacy: 104.4 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G3

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



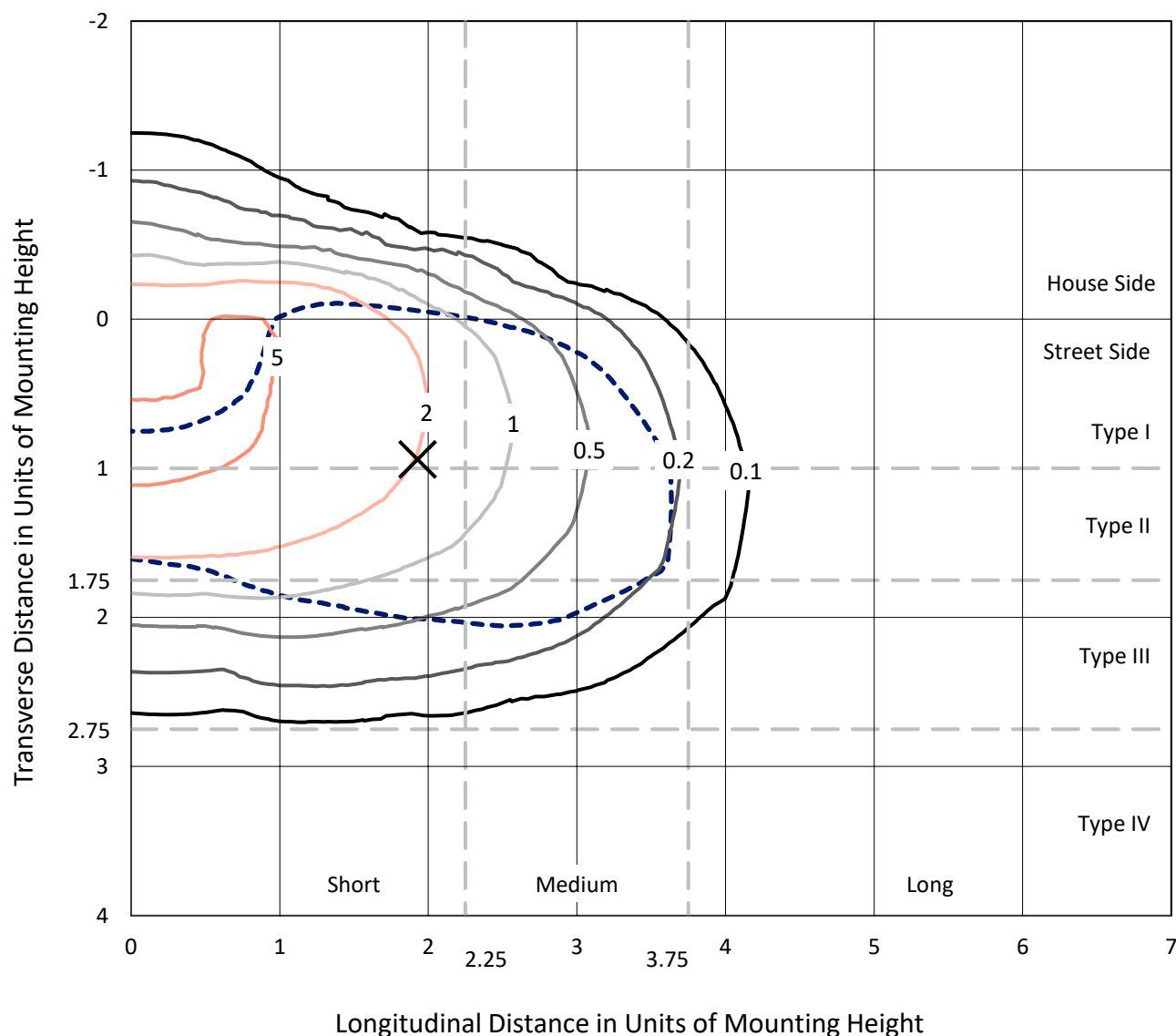
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd



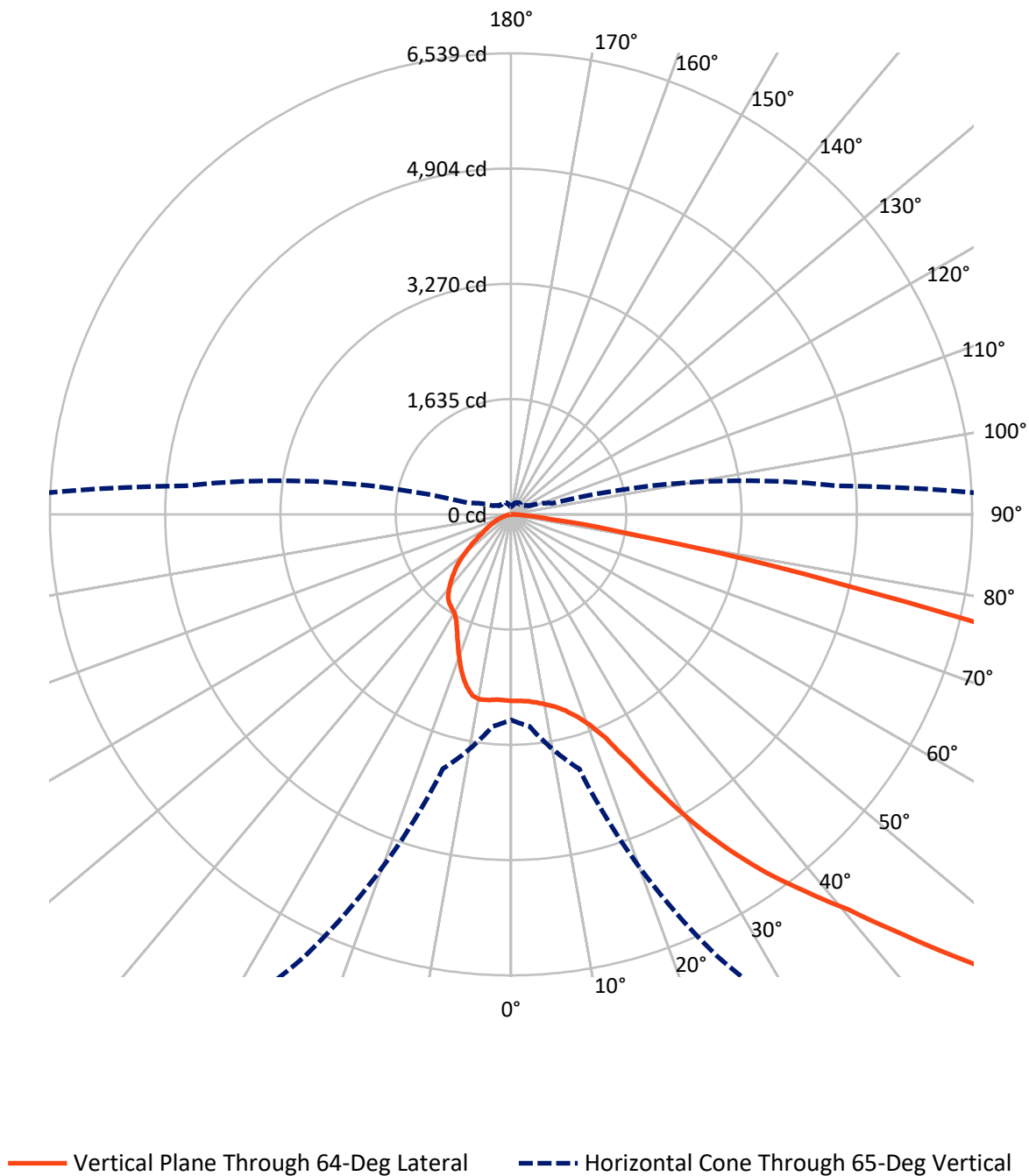
Based on 25 foot mounting height. Maximum calculated value = 6.7 fc

Type III - Short - N/A

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Luminous Intensity Polar Plot



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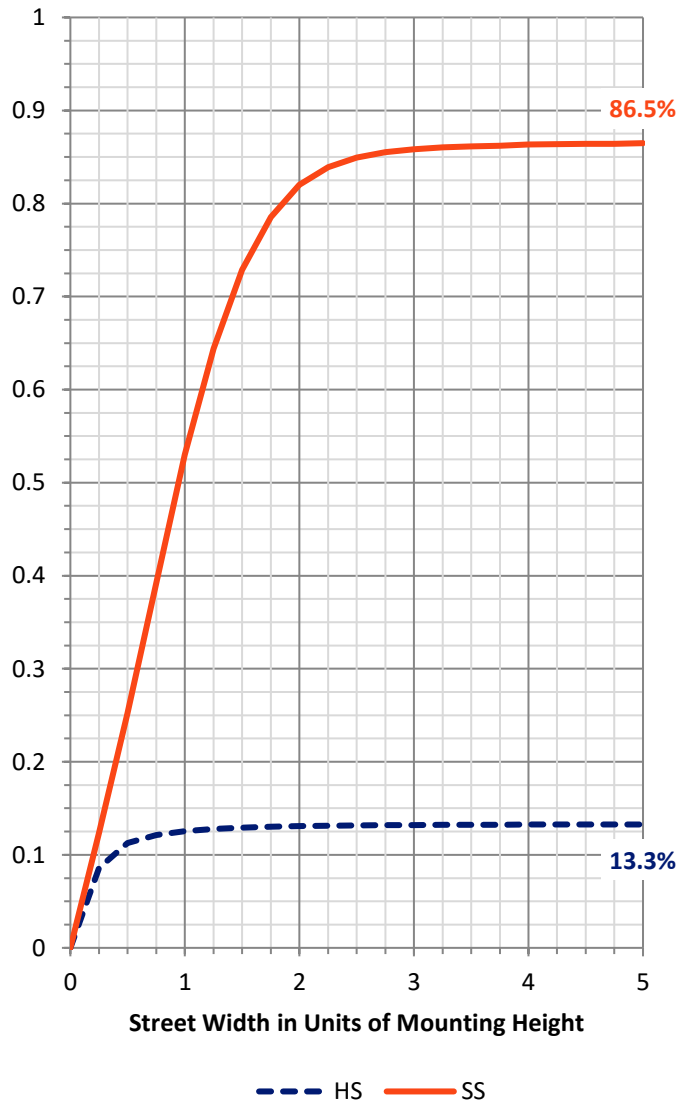
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3044.4	0.0	3044.4
	% Fixture	13.4	0.0	13.4
Street Side	Lumens	19720.8	0.0	19720.8
	% Fixture	86.6	0.0	86.6
Total	Lumens	22765.2	0.0	22765.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	244.3	1.1
10°-20°	662.6	2.9
20°-30°	1255.5	5.5
30°-40°	2540.6	11.2
40°-50°	4328.0	19.0
50°-60°	5885.7	25.9
60°-70°	5527.0	24.3
70°-80°	2214.3	9.7
80°-90°	107.3	0.5
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°	22765.2	100.0
0°-180°	22765.2	100.0

Coefficient of Utilization



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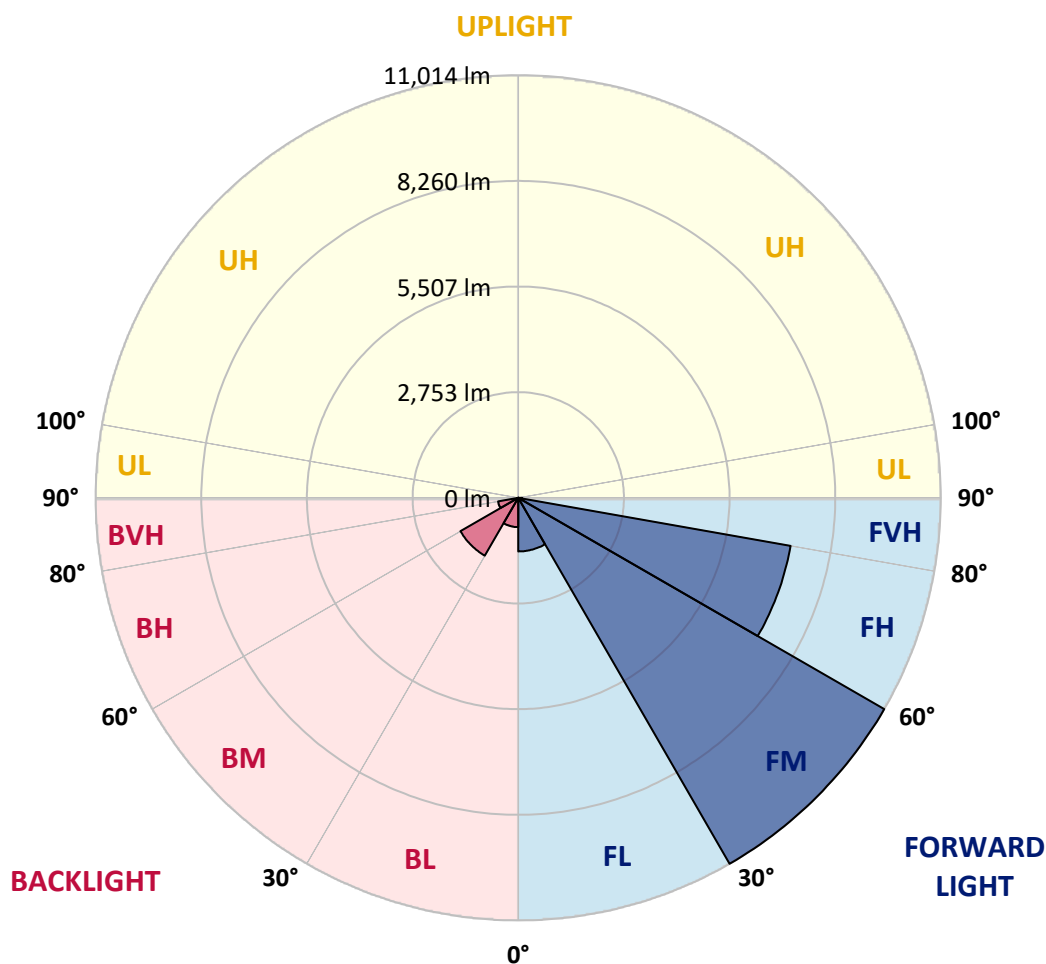
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1398.0	6.1			
FM	(30°-60°)	11013.8	48.4			
FH	(60°-80°)	7207.0	31.7			G3/7500
FVH	(80°-90°)	102.0	0.4			G2/225
BL	(0°-30°)	764.4	3.4	B2/1000		
BM	(30°-60°)	1740.5	7.6	B2/2500		
BH	(60°-80°)	534.3	2.3	B2/1000		G2/1000
BVH	(80°-90°)	5.2	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-G3

Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	2647.9	2647.9	2647.9	2647.9	2647.9	2647.9	2647.9	2647.9	2647.9	2647.9	2647.9
2.5°	2638.7	2657.0	2652.4	2647.9	2646.3	2649.3	2650.9	2649.3	2649.3	2649.3	2650.9
5°	2588.3	2603.6	2603.6	2614.3	2629.5	2647.9	2661.6	2664.6	2667.7	2672.3	2670.7
7.5°	2492.2	2504.4	2513.5	2548.7	2586.8	2635.6	2676.8	2698.2	2701.3	2718.0	2724.1
10°	2426.6	2441.9	2457.0	2493.7	2548.7	2621.8	2692.1	2744.0	2751.6	2791.3	2809.6
12.5°	2423.5	2438.8	2458.6	2498.2	2562.4	2640.2	2725.7	2800.4	2814.1	2872.2	2910.3
15°	2455.6	2473.8	2492.2	2541.0	2609.6	2704.3	2795.9	2889.0	2902.7	2985.1	3026.3
17.5°	2521.2	2545.6	2559.3	2608.1	2681.4	2786.7	2907.3	3014.1	3026.3	3122.5	3174.3
20°	2650.9	2679.9	2684.5	2724.1	2795.9	2908.8	3052.2	3185.0	3200.3	3310.1	3368.2
22.5°	2919.5	2960.7	2924.0	2943.9	3008.0	3120.9	3276.6	3444.5	3465.8	3591.0	3642.8
25°	3392.5	3450.6	3356.0	3322.4	3349.9	3467.4	3662.7	3874.8	3899.3	4000.0	4025.9
27.5°	4322.0	4247.2	4103.8	3963.4	3881.0	3948.1	4167.9	4430.4	4460.9	4558.6	4528.0
30°	5343.0	5277.3	5083.5	4772.2	4576.8	4566.2	4769.1	5062.2	5097.2	5190.4	5097.2
32.5°	6365.5	6302.9	6092.3	5709.2	5370.5	5202.6	5343.0	5668.0	5686.4	5745.8	5608.5
35°	7371.2	7307.1	7096.5	6704.3	6287.7	5906.2	5878.7	6244.9	6251.1	6313.6	6109.1
37.5°	8383.1	8329.7	8105.3	7720.7	7310.2	6783.7	6528.7	6791.2	6798.9	6859.9	6647.8
40°	9104.9	9127.8	8973.7	8676.0	8323.5	7748.2	7258.2	7372.7	7326.9	7429.2	7302.5
42.5°	9724.5	9770.3	9636.0	9486.4	9281.9	8775.2	8161.8	8141.9	8068.7	8123.6	7992.3
45°	10260.1	10298.3	10177.7	10142.7	10138.1	9782.5	9149.2	9030.1	8927.9	8917.2	8760.0
47.5°	10457.0	10530.3	10582.2	10699.7	10928.7	10779.1	10170.2	9985.4	9871.1	9787.1	9538.3
50°	10531.8	10609.7	10786.7	11128.5	11670.3	11734.4	11186.5	10979.0	10838.6	10685.9	10319.7
52.5°	10431.1	10570.0	10808.0	11383.4	12169.3	12500.5	12161.7	11980.1	11819.9	11571.1	11027.8
55°	9837.4	9976.3	10463.1	11380.4	12418.1	13037.7	13083.5	13002.6	12822.5	12430.3	11600.1
57.5°	8586.0	8792.0	9562.7	10992.7	12413.6	13500.2	13986.9	14045.0	13843.5	13282.0	12050.3
60°	6852.3	7131.6	8071.7	10133.5	12030.5	13750.5	14779.1	15069.0	14855.3	14121.3	12415.1
62.5°	4781.3	5104.9	5994.6	8787.4	11154.5	13570.4	15357.5	15893.1	15731.4	14872.1	12555.4
65°	2916.4	3020.2	3737.5	6914.9	9664.9	12816.4	15536.0	16338.7	16285.3	15331.5	12347.9
67.5°	1942.8	2029.7	2235.7	4741.6	7502.5	11310.2	15108.7	16260.9	16276.2	15256.7	11587.9
70°	1170.6	1245.3	1379.6	2757.8	4862.3	8952.2	13785.5	15268.9	15357.5	14257.1	10147.2
72.5°	482.3	532.6	654.7	1249.9	2518.1	5681.8	10977.4	13109.4	13315.5	11987.8	7787.8
75°	273.2	299.1	384.6	627.2	1092.8	2647.9	6649.4	9306.4	9610.0	8262.4	4685.2
77.5°	181.6	193.8	248.8	405.9	615.0	903.4	2841.6	4848.6	5428.4	4512.8	2028.3
80°	122.1	132.7	171.0	271.6	399.9	387.7	905.0	1796.2	2209.8	1550.5	494.5
82.5°	82.4	83.9	122.1	178.6	253.4	187.7	267.1	558.5	702.0	448.6	187.7
85°	47.4	45.8	90.0	103.7	113.0	77.8	80.9	167.9	219.8	189.2	106.8
87.5°	6.1	9.1	35.1	27.5	15.3	16.8	16.8	29.0	42.7	45.8	22.9
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°	2647.9	2647.9	2647.9	2647.9	2647.9	2647.9	2647.9	2647.9	2647.9	2647.9	2647.9
2.5°	2650.9	2649.3	2644.8	2640.2	2629.5	2623.4	2626.5	2623.4	2621.8	2623.4	2629.5
5°	2670.7	2666.1	2653.9	2638.7	2617.3	2591.4	2574.6	2550.2	2527.2	2513.5	2516.6
7.5°	2724.1	2719.5	2702.8	2660.1	2591.4	2483.1	2383.8	2296.8	2231.2	2193.1	2194.5
10°	2809.6	2801.9	2776.0	2681.4	2501.3	2264.7	2067.9	1904.7	1797.7	1747.4	1742.8
12.5°	2910.3	2901.2	2855.3	2661.6	2330.4	1961.0	1689.4	1507.8	1408.7	1364.4	1359.8
15°	3029.4	3017.2	2927.1	2566.9	2081.7	1625.3	1376.6	1240.8	1176.6	1136.9	1138.5
17.5°	3177.4	3156.1	2980.5	2425.0	1811.5	1368.9	1184.3	1082.0	1025.5	987.4	984.3
20°	3369.7	3334.6	3023.2	2255.6	1562.7	1207.1	1054.5	969.1	926.4	892.8	886.7
22.5°	3638.3	3587.9	3075.1	2072.4	1387.2	1095.7	958.4	895.8	860.7	822.6	816.5
25°	3971.0	3911.5	3139.3	1903.1	1266.7	999.6	888.2	836.3	795.1	750.8	746.3
27.5°	4436.5	4329.6	3215.5	1764.2	1162.9	917.2	824.1	766.1	718.8	682.1	674.6
30°	4955.4	4779.9	3282.7	1680.3	1068.3	840.9	740.2	682.1	638.0	612.0	607.4
32.5°	5446.7	5208.6	3326.9	1643.7	982.9	753.9	648.6	586.0	552.5	544.8	549.4
35°	5910.7	5596.3	3322.4	1608.5	906.5	667.0	558.5	494.5	468.5	473.1	473.1
37.5°	6444.9	6009.9	3290.4	1553.6	844.0	587.5	480.7	424.2	401.4	402.9	409.0
40°	7065.9	6487.5	3270.5	1449.9	775.3	514.3	416.7	370.8	354.0	348.0	346.4
42.5°	7728.3	6950.0	3273.5	1332.3	689.8	448.6	372.4	334.3	319.0	314.4	312.8
45°	8393.7	7391.1	3278.2	1210.2	599.7	398.3	340.3	308.3	299.1	293.0	293.0
47.5°	9019.4	7766.4	3192.7	1079.0	511.3	360.2	314.4	293.0	285.4	277.8	277.8
50°	9602.4	8016.7	2986.6	926.4	441.1	329.6	294.6	279.3	271.6	264.0	264.0
52.5°	10055.7	8056.4	2646.3	769.2	392.2	306.8	282.3	268.5	259.4	251.8	250.3
55°	10257.1	7807.6	2162.5	622.7	354.0	286.9	270.1	256.4	245.7	238.1	236.6
57.5°	10205.2	7284.3	1686.3	500.6	317.4	267.1	254.8	245.7	233.5	221.3	219.8
60°	9950.4	6583.7	1271.3	416.7	283.8	245.7	238.1	230.4	213.6	195.4	192.3
62.5°	9509.3	5703.1	906.5	344.9	247.2	221.3	218.2	212.2	187.7	154.2	151.1
65°	8834.8	4633.3	610.5	286.9	212.2	193.8	195.4	184.7	152.6	114.5	111.4
67.5°	7848.8	3388.0	390.7	235.0	177.0	161.7	163.3	157.2	129.8	97.7	93.1
70°	6592.9	2243.4	254.8	178.6	142.0	125.2	134.3	135.8	109.9	79.3	76.3
72.5°	4833.3	1324.7	178.6	132.7	103.7	87.0	109.9	113.0	88.6	59.6	56.5
75°	2754.7	628.7	134.3	96.1	64.1	61.1	85.5	85.5	61.1	39.7	36.6
77.5°	1156.8	262.5	94.6	62.5	36.6	35.1	58.0	53.4	30.5	18.3	18.3
80°	334.3	117.5	50.3	30.5	15.3	13.7	22.9	16.8	7.6	3.1	3.1
82.5°	131.2	51.9	19.9	12.2	6.1	6.1	3.1	0.0	0.0	0.0	0.0
85°	77.8	21.3	9.1	4.6	1.5	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	19.9	4.6	3.1	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)