

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: P963055

Luminaire Tested: **NAV-SB2D-750-U-T3R-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P963055
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-6)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2D-750-U-T3R-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 5000K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 18373.1 lumens
Efficiency: N/A
Efficacy: 124.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B2 - U0 - G3

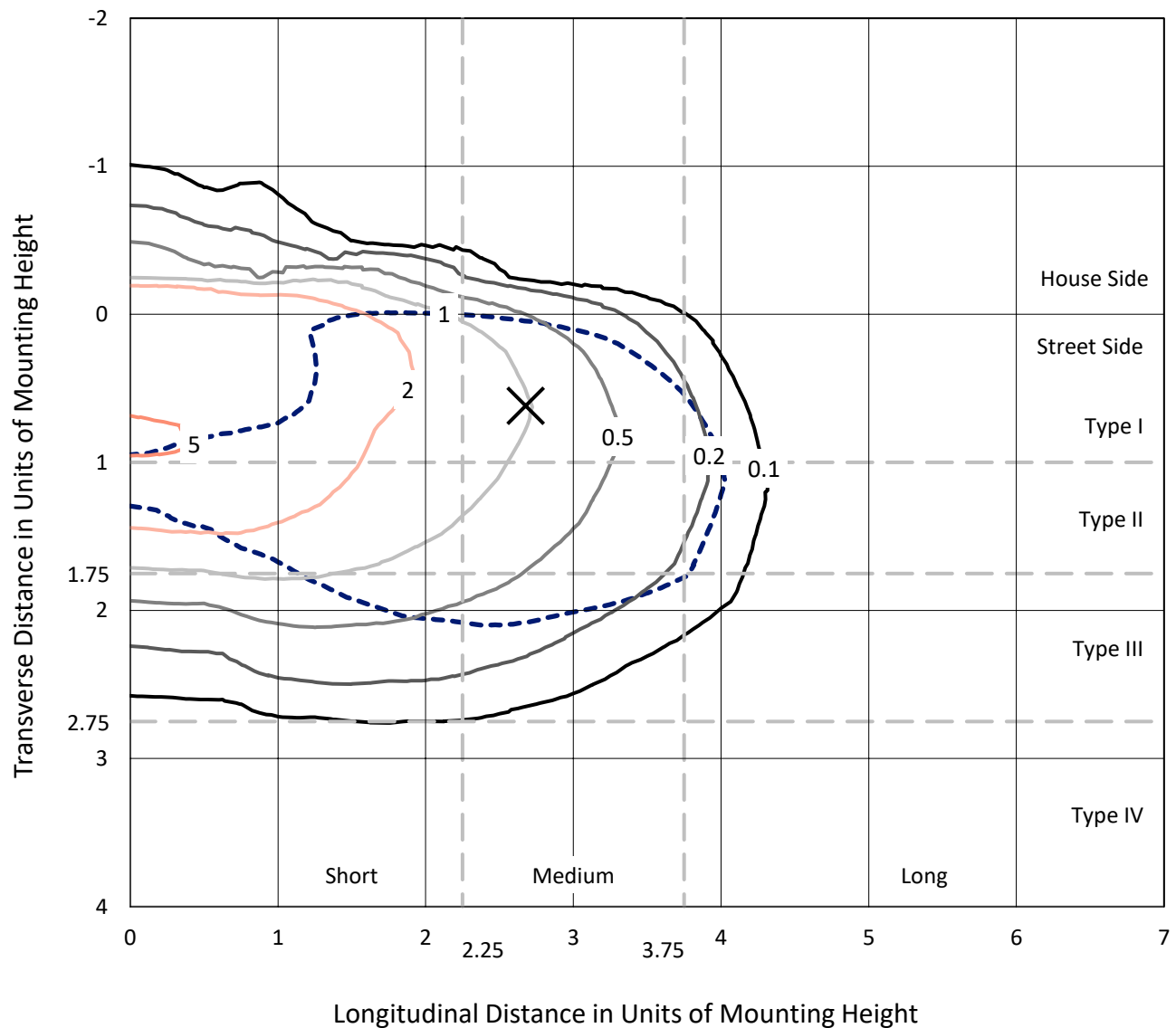
Input Watts (W): 147.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

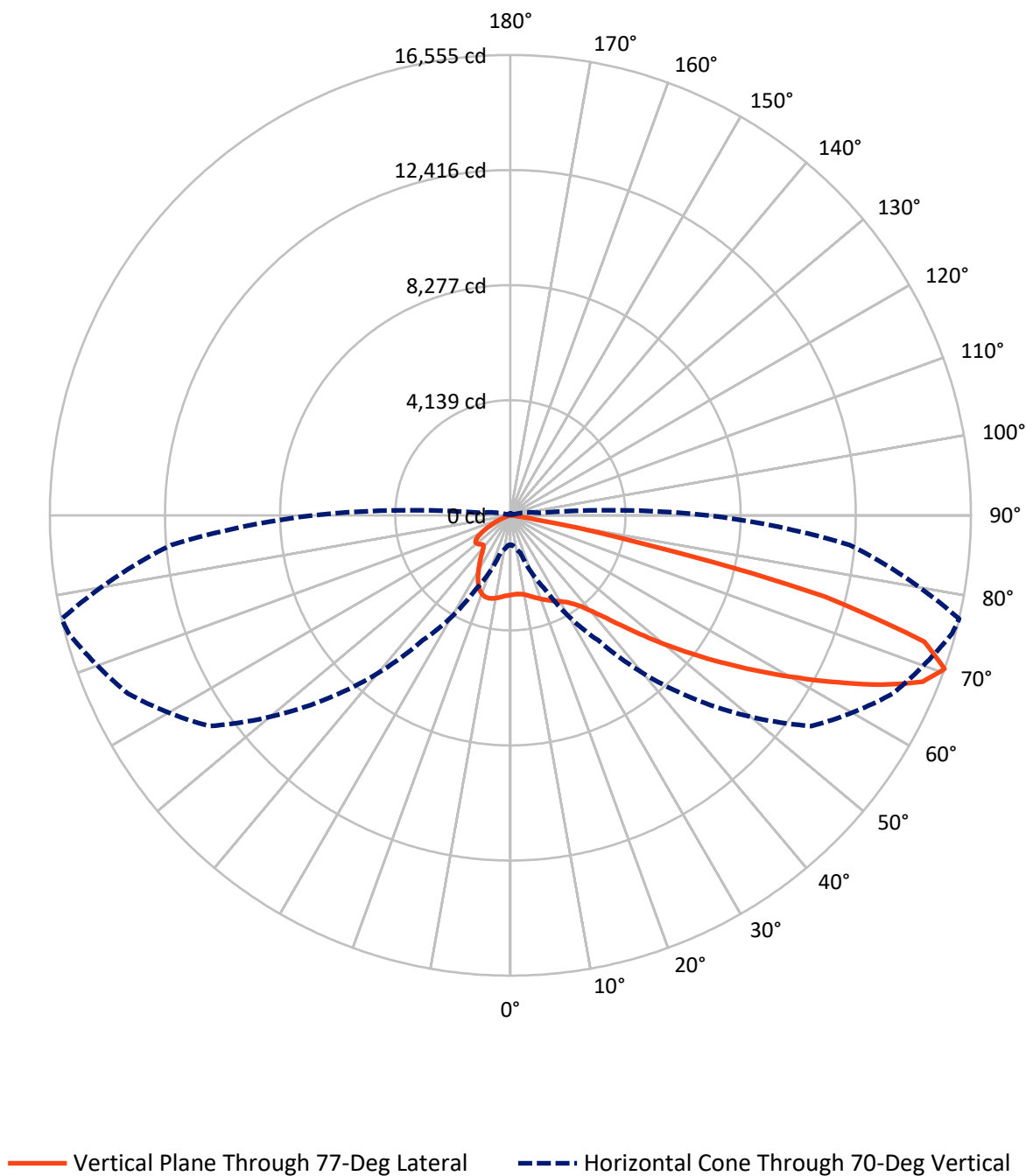
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.4 fc
Type III - Medium - N/A

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Luminous Intensity Polar Plot



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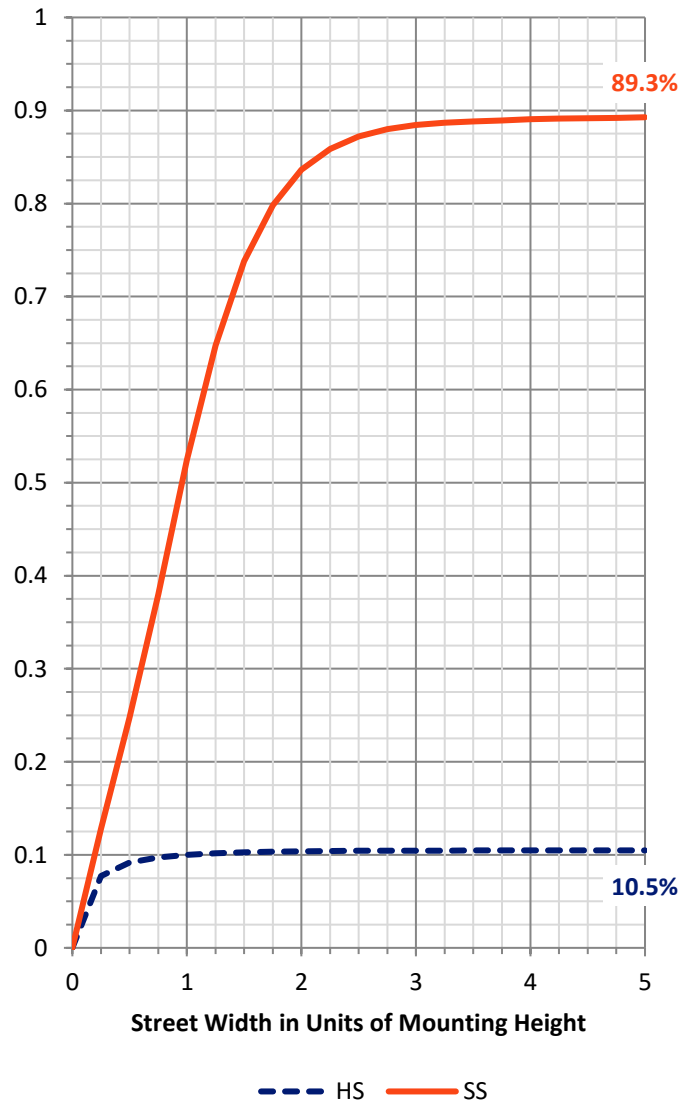
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1936.8	0.0	1936.8
	% Fixture	10.5	0.0	10.5
Street Side	Lumens	16436.3	0.0	16436.3
	% Fixture	89.5	0.0	89.5
Total	Lumens	18373.1	0.0	18373.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	247.0	1.3
10°-20°	586.3	3.2
20°-30°	906.9	4.9
30°-40°	1645.6	9.0
40°-50°	3106.3	16.9
50°-60°	4488.3	24.4
60°-70°	4777.7	26.0
70°-80°	2531.8	13.8
80°-90°	83.1	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°	18373.1	100.0
0°-180°	18373.1	100.0

Coefficient of Utilization



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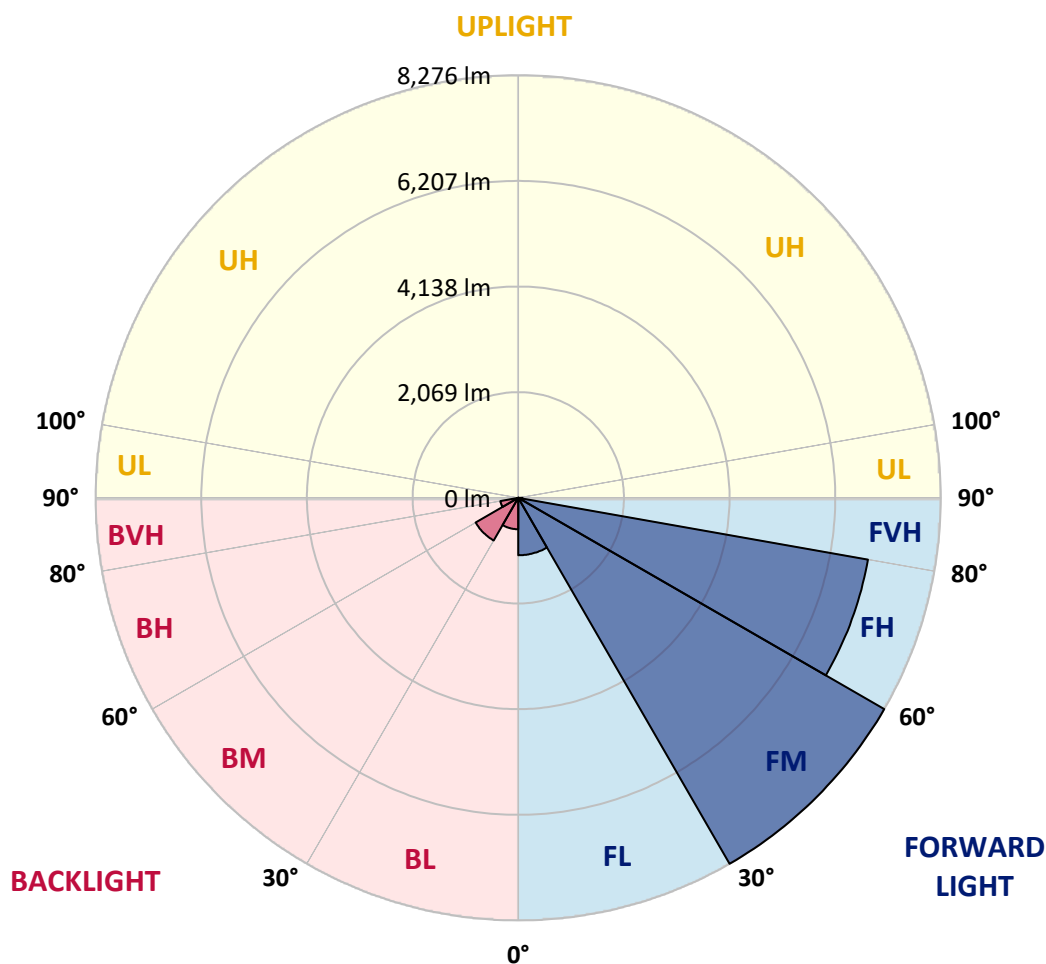
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1124.9	6.1			
FM	(30°-60°)	8276.1	45.0			
FH	(60°-80°)	6954.5	37.9			G3/7500
FVH	(80°-90°)	80.9	0.4			G1/100
BL	(0°-30°)	615.4	3.3	B2/1000		
BM	(30°-60°)	964.1	5.2	B1/1000		
BH	(60°-80°)	355.1	1.9	B1/500		G1/500
BVH	(80°-90°)	2.2	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 Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	2865.9	2865.9	2865.9	2865.9	2865.9	2865.9	2865.9	2865.9	2865.9	2865.9	2865.9
2.5°	2690.6	2715.0	2711.5	2727.8	2733.6	2756.8	2780.0	2811.4	2846.1	2845.0	2868.2
5°	2538.7	2563.0	2568.9	2590.9	2618.8	2654.7	2702.3	2764.9	2829.9	2840.4	2886.8
7.5°	2358.8	2384.4	2399.4	2443.5	2494.5	2568.9	2646.5	2738.3	2846.1	2861.2	2950.6
10°	2178.9	2202.2	2221.9	2284.6	2365.8	2476.0	2602.5	2734.8	2879.8	2901.9	3028.4
12.5°	2067.6	2089.7	2111.7	2166.2	2267.2	2401.8	2573.5	2751.0	2935.5	2966.9	3133.9
15°	2028.2	2047.8	2065.3	2114.1	2208.0	2361.2	2567.7	2784.6	3006.2	3048.0	3261.5
17.5°	2034.0	2044.4	2056.0	2093.2	2184.8	2342.6	2578.1	2842.6	3089.8	3127.0	3389.2
20°	2067.6	2073.4	2074.6	2100.1	2181.3	2340.3	2599.0	2898.4	3168.7	3218.6	3515.6
22.5°	2110.6	2112.8	2110.6	2127.9	2203.3	2357.7	2626.9	2965.6	3256.9	3303.3	3643.3
25°	2311.3	2267.2	2211.4	2177.8	2240.4	2391.3	2668.6	3056.1	3353.2	3398.5	3767.4
27.5°	2934.4	2807.9	2608.3	2384.4	2317.1	2440.0	2726.6	3147.8	3450.7	3491.3	3900.8
30°	3946.0	3780.2	3441.3	2936.6	2563.0	2542.2	2802.0	3239.5	3553.9	3598.1	4043.5
32.5°	4960.2	4919.6	4528.6	3830.0	3116.5	2769.5	2927.4	3363.6	3690.8	3725.7	4236.1
35°	5985.9	5903.5	5583.3	4892.8	3969.3	3232.5	3136.2	3526.1	3870.7	3910.2	4517.0
37.5°	6771.4	6721.4	6523.1	5954.5	4981.1	3947.3	3493.6	3777.8	4131.8	4175.8	4876.6
40°	7465.2	7442.0	7374.7	6999.9	6112.3	4882.4	4049.4	4167.8	4493.7	4546.0	5317.5
42.5°	8010.5	8065.1	8103.3	7998.9	7278.4	5949.9	4796.6	4715.3	4998.4	5051.8	5879.1
45°	8568.6	8587.1	8741.5	8892.4	8436.4	7066.0	5638.9	5357.0	5626.1	5692.3	6552.1
47.5°	8927.1	9001.4	9272.9	9538.6	9409.8	8172.9	6543.9	6114.6	6353.7	6477.8	7306.2
50°	8953.8	9094.2	9467.8	9930.8	10118.7	9226.5	7527.8	6977.9	7232.0	7368.9	8111.4
52.5°	8509.4	8727.6	9306.6	9984.1	10501.6	10118.7	8545.4	7841.1	8167.2	8345.9	8946.9
55°	6524.2	6809.7	8699.7	9694.0	10516.7	10795.2	9536.3	8740.4	9209.1	9410.9	9849.5
57.5°	5684.1	5828.0	6839.8	9190.6	10237.1	11067.8	10432.0	9596.7	10342.7	10593.3	10702.3
60°	4729.2	4918.4	5736.4	8366.8	9857.7	11094.5	11223.3	10701.2	11571.4	11853.3	11484.4
62.5°	3214.0	3419.3	4232.6	6951.2	9339.1	11081.8	11872.0	11838.2	12937.0	13239.9	12146.9
65°	1991.1	2119.8	2655.9	5676.0	8613.9	11095.7	12550.7	13219.0	14378.1	14685.6	12659.8
67.5°	1573.4	1632.5	1912.1	4358.0	7364.2	10782.4	13228.2	14517.4	15734.5	15978.1	12816.4
70°	1057.0	1093.0	1391.1	2921.6	5478.8	9336.7	13215.5	15169.4	16433.0	16554.8	12245.6
72.5°	556.9	584.8	813.3	1352.9	3309.1	6636.8	11139.8	14389.7	15738.0	15554.6	10466.8
75°	278.5	324.9	547.7	686.9	1413.2	3701.3	6917.5	11345.1	12387.1	11677.0	6715.7
77.5°	211.2	255.2	452.5	452.5	492.0	1246.1	2929.7	6187.7	5707.4	4752.5	1971.3
80°	134.6	174.0	395.6	342.2	205.4	316.7	763.4	1733.5	1212.5	922.4	358.5
82.5°	78.9	113.7	329.5	226.2	114.9	117.2	215.8	369.0	314.5	244.8	110.2
85°	31.4	74.2	226.2	89.4	45.2	29.0	65.0	78.9	65.0	48.7	27.9
87.5°	0.0	17.4	39.5	0.0	3.5	2.4	4.6	5.8	5.8	4.6	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°	2865.9	2865.9	2865.9	2865.9	2865.9	2865.9	2865.9	2865.9	2865.9	2865.9	2865.9
2.5°	2878.6	2881.0	2887.9	2889.1	2872.9	2852.0	2843.9	2840.4	2826.4	2825.3	2827.6
5°	2913.5	2923.9	2913.5	2883.3	2811.4	2710.4	2633.8	2571.2	2514.3	2496.9	2486.4
7.5°	2983.1	2993.5	2962.1	2843.9	2662.8	2462.0	2281.1	2153.4	2038.6	1995.7	1978.2
10°	3082.9	3096.7	2998.1	2759.1	2438.9	2116.3	1810.0	1594.2	1426.0	1357.5	1328.5
12.5°	3208.1	3214.0	3017.9	2630.4	2147.7	1687.0	1253.1	1022.2	872.5	816.8	799.4
15°	3346.2	3338.1	3020.2	2455.2	1750.8	1192.8	817.9	671.8	611.5	592.9	592.9
17.5°	3491.3	3457.6	2973.7	2202.2	1315.8	815.7	606.8	572.1	561.6	556.9	555.8
20°	3633.9	3558.6	2889.1	1871.5	944.4	609.2	551.1	540.7	534.8	532.6	530.2
22.5°	3763.9	3635.2	2744.0	1487.5	685.7	538.3	521.0	511.7	501.2	496.6	495.5
25°	3890.4	3679.2	2539.8	1128.9	548.8	503.6	489.6	472.2	458.3	452.5	450.2
27.5°	4013.4	3707.1	2284.6	835.4	489.6	471.1	445.6	421.2	410.7	408.5	406.1
30°	4144.5	3716.3	1994.5	623.1	453.7	430.5	393.3	365.5	359.7	360.8	360.8
32.5°	4304.6	3730.3	1702.1	510.6	423.5	381.7	337.6	308.6	304.0	308.6	307.5
35°	4496.1	3758.2	1420.1	469.9	396.8	331.8	284.2	259.9	255.2	258.7	257.6
37.5°	4756.0	3803.4	1156.8	461.8	374.7	290.1	239.0	219.2	219.2	220.5	219.2
40°	5101.7	3924.0	921.3	456.0	363.2	258.7	201.9	193.7	197.2	199.6	199.6
42.5°	5522.9	4180.5	762.3	449.1	350.4	244.8	183.4	179.9	185.6	188.0	188.0
45°	5995.1	4505.4	706.6	437.5	338.8	254.1	175.2	170.6	177.5	178.7	179.9
47.5°	6483.6	4823.2	699.7	424.7	327.2	268.0	172.9	162.5	170.6	171.7	172.9
50°	6977.9	5030.9	706.6	405.0	308.6	268.0	174.0	154.4	161.2	164.7	165.9
52.5°	7475.6	5126.1	701.9	362.0	276.1	251.7	174.0	147.4	154.4	156.6	156.6
55°	7958.3	5107.6	631.2	298.2	234.4	222.7	169.4	141.6	146.2	147.4	147.4
57.5°	8340.0	4848.8	500.1	232.1	190.2	185.6	154.4	134.6	138.1	136.9	136.9
60°	8539.6	4280.3	357.3	178.7	149.6	146.2	135.7	125.4	127.6	121.9	120.6
62.5°	8541.9	3528.4	239.0	141.6	119.5	116.0	116.0	112.5	110.2	98.6	95.1
65°	8359.8	2694.1	159.0	112.5	96.4	90.5	97.5	96.4	88.1	72.0	69.6
67.5°	7946.7	1766.0	120.6	88.1	74.2	70.8	77.7	81.2	75.4	60.4	59.1
70°	7097.4	1028.0	99.7	68.5	55.7	52.2	62.6	69.6	62.6	48.7	46.4
72.5°	5895.4	554.6	81.2	51.0	38.3	34.8	49.9	56.9	49.9	36.0	34.8
75°	3825.4	297.0	62.6	33.6	19.7	22.0	37.1	41.8	34.8	23.2	20.9
77.5°	1284.4	131.1	39.5	16.2	9.3	9.3	22.0	25.5	16.2	8.1	7.0
80°	286.6	54.5	16.2	7.0	3.5	3.5	4.6	4.6	2.4	0.0	0.0
82.5°	94.0	22.0	7.0	2.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	36.0	8.1	2.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	13.9	1.1	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)