

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: P964078

Luminaire Tested: **NAV-SB3B-740-U-T3R-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P964078
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-SB3B-740-U-T3R-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 70 CRI, 4000K, 450mA 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: 15253 lumens
Efficiency: N/A
Efficacy: 139.7 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B2 - U0 - G3

Input Watts (W): 109.2
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



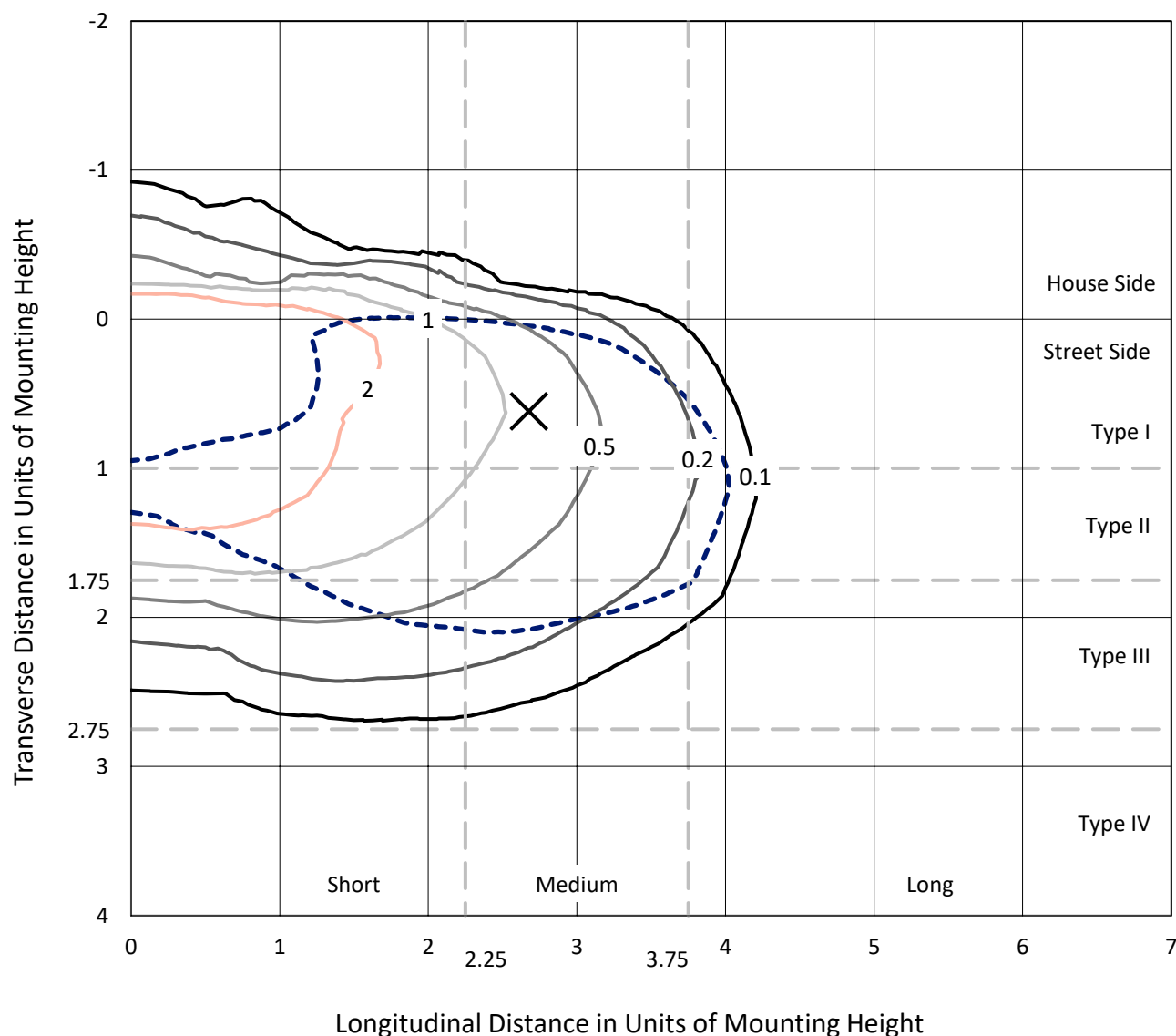
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

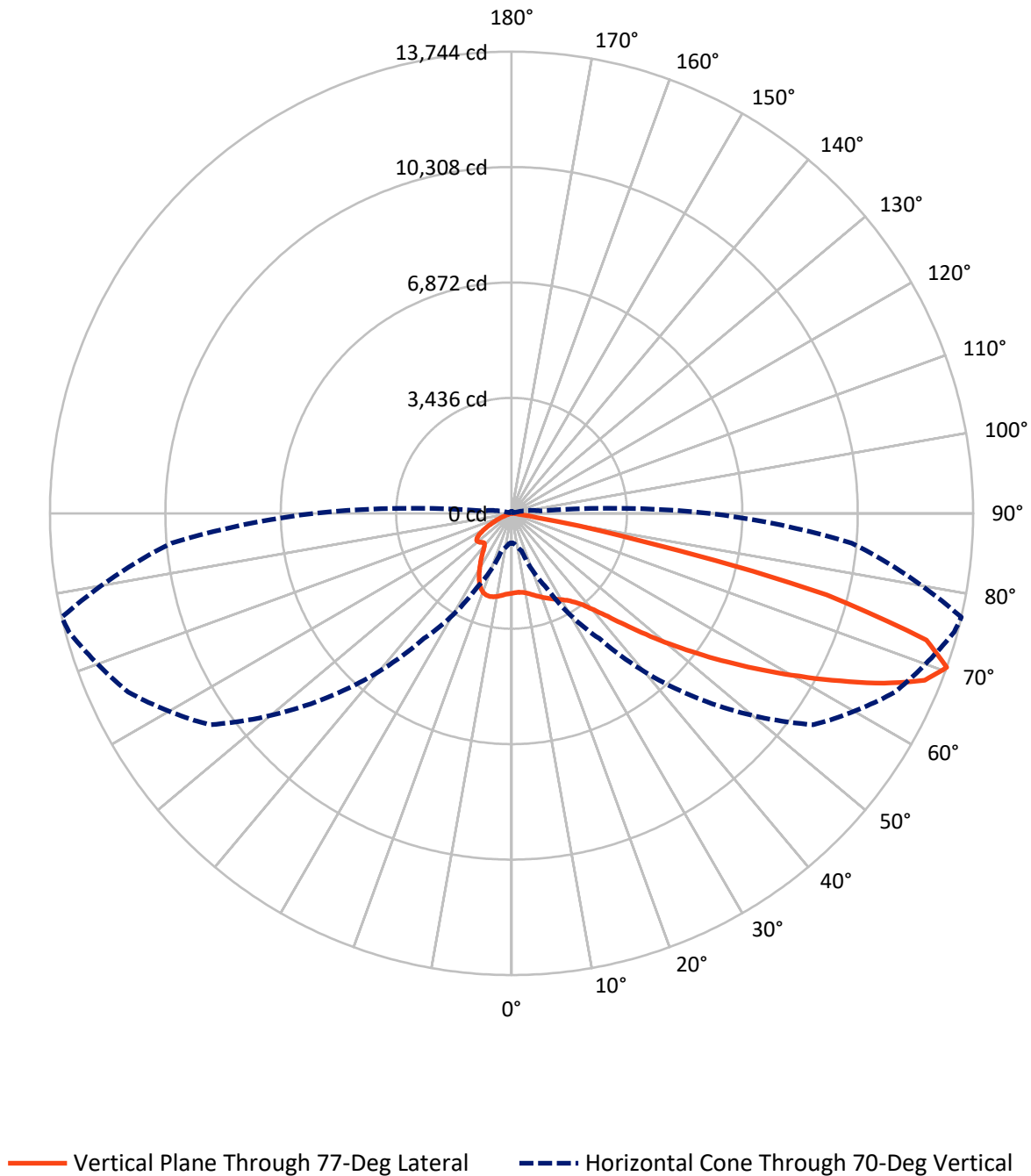


Based on 25 foot mounting height. Maximum calculated value = 4.5 fc

Type III - Medium - N/A

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Luminous Intensity Polar Plot



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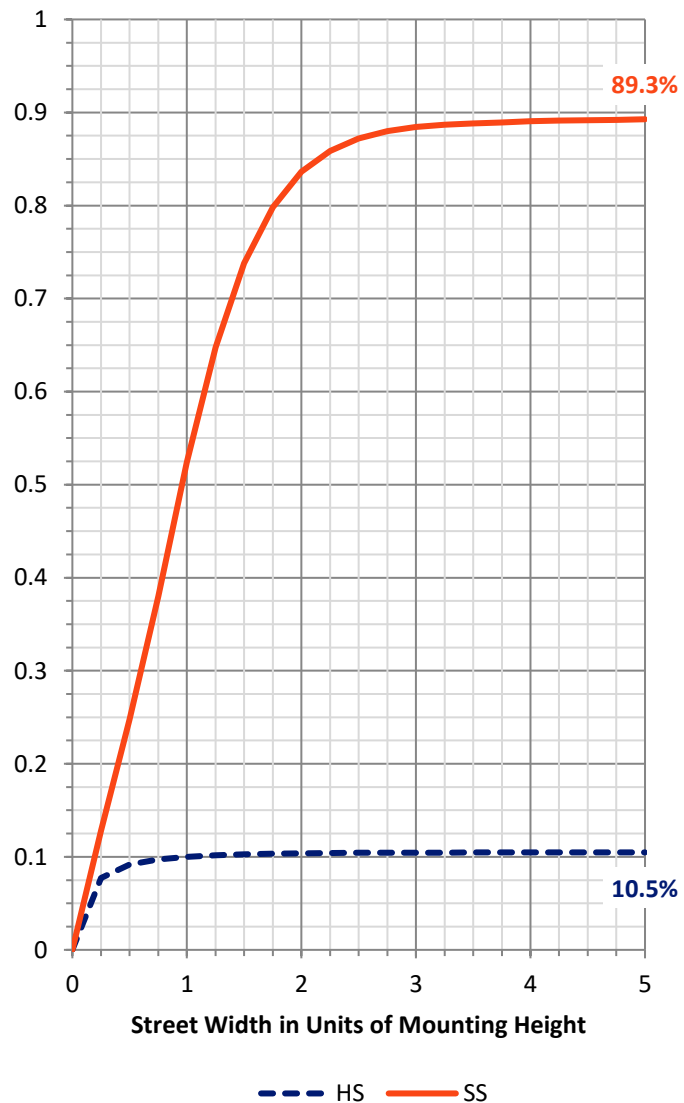
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1607.9	0.0	1607.9
	% Fixture	10.5	0.0	10.5
Street Side	Lumens	13645.2	0.0	13645.2
	% Fixture	89.5	0.0	89.5
Total	Lumens	15253.0	0.0	15253.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	205.0	1.3
10°-20°	486.8	3.2
20°-30°	752.9	4.9
30°-40°	1366.2	9.0
40°-50°	2578.8	16.9
50°-60°	3726.1	24.4
60°-70°	3966.4	26.0
70°-80°	2101.9	13.8
80°-90°	69.0	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°	15253.0	100.0
0°-180°	15253.0	100.0

Coefficient of Utilization



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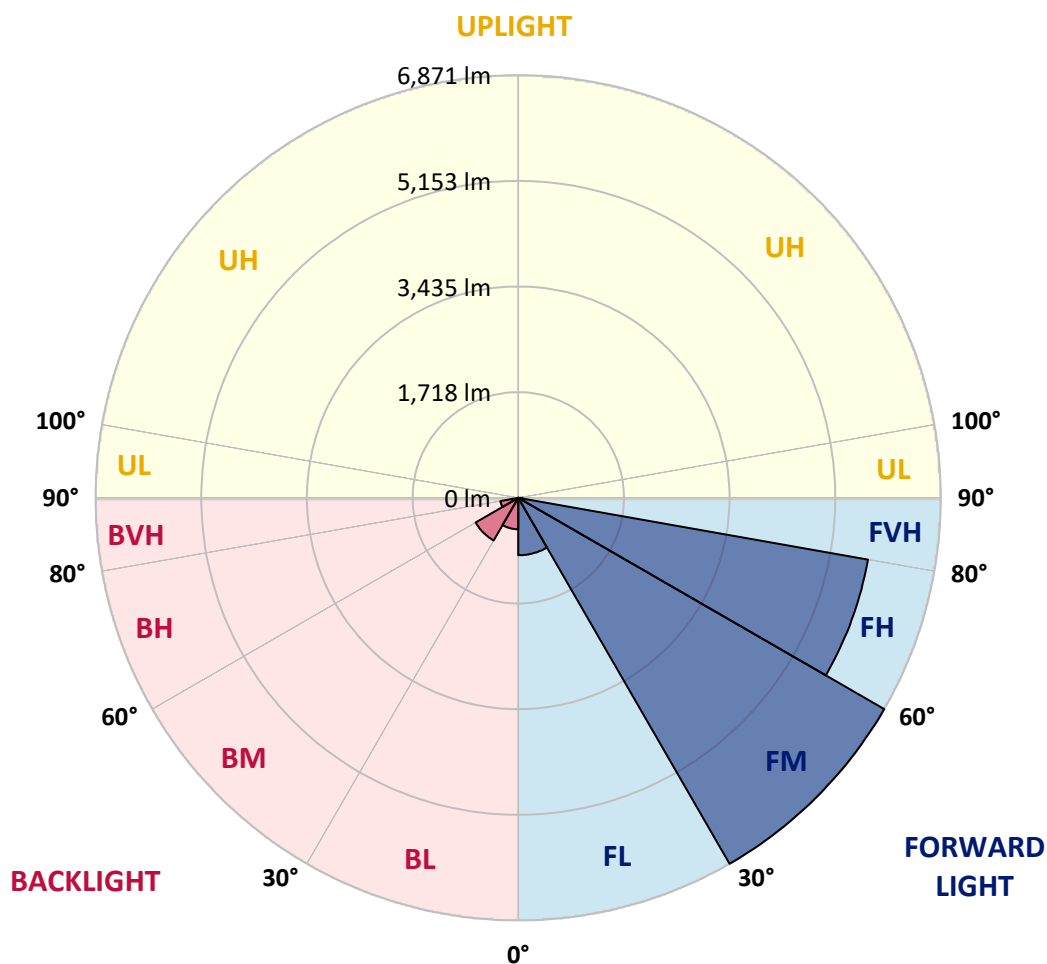
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	933.8	6.1			
FM	(30°-60°)	6870.7	45.0			
FH	(60°-80°)	5773.5	37.9			G3/7500
FVH	(80°-90°)	67.2	0.4			G1/100
BL	(0°-30°)	510.9	3.3	B2/1000		
BM	(30°-60°)	800.4	5.2	B1/1000		
BH	(60°-80°)	294.8	1.9	B1/500		G1/500
BVH	(80°-90°)	1.9	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°	2379.2	2379.2	2379.2	2379.2	2379.2	2379.2	2379.2	2379.2	2379.2	2379.2	2379.2
2.5°	2233.8	2254.0	2251.1	2264.5	2269.4	2288.6	2307.9	2333.9	2362.8	2361.9	2381.1
5°	2107.6	2127.8	2132.6	2150.9	2174.0	2203.9	2243.4	2295.4	2349.3	2358.0	2396.6
7.5°	1958.3	1979.5	1992.0	2028.6	2070.9	2132.6	2197.2	2273.2	2362.8	2375.3	2449.5
10°	1808.9	1828.2	1844.6	1896.7	1964.0	2055.5	2160.5	2270.4	2390.7	2409.1	2514.0
12.5°	1716.5	1734.8	1753.1	1798.4	1882.2	1993.9	2136.5	2283.8	2437.0	2463.0	2601.7
15°	1683.8	1700.1	1714.5	1755.0	1833.0	1960.2	2131.7	2311.8	2495.8	2530.4	2707.6
17.5°	1688.6	1697.2	1706.8	1737.7	1813.7	1944.7	2140.3	2360.0	2565.1	2595.9	2813.6
20°	1716.5	1721.3	1722.3	1743.4	1810.9	1942.9	2157.6	2406.2	2630.6	2672.0	2918.6
22.5°	1752.1	1754.1	1752.1	1766.6	1829.2	1957.3	2180.8	2462.0	2703.8	2742.4	3024.6
25°	1918.8	1882.2	1836.0	1808.0	1860.0	1985.2	2215.4	2537.2	2783.8	2821.3	3127.6
27.5°	2436.0	2331.1	2165.3	1979.5	1923.6	2025.7	2263.6	2613.2	2864.7	2898.4	3238.4
30°	3276.0	3138.2	2857.0	2438.0	2127.8	2110.5	2326.2	2689.4	2950.4	2987.0	3356.9
32.5°	4117.8	4084.1	3759.5	3179.7	2587.3	2299.3	2430.3	2792.4	3064.0	3092.9	3516.8
35°	4969.3	4900.9	4635.0	4062.0	3295.3	2683.6	2603.6	2927.3	3213.4	3246.1	3749.9
37.5°	5621.4	5580.0	5415.3	4943.4	4135.2	3276.9	2900.3	3136.3	3430.1	3466.7	4048.4
40°	6197.5	6178.2	6122.3	5811.2	5074.4	4053.3	3361.7	3460.0	3730.6	3773.9	4414.5
42.5°	6650.2	6695.5	6727.3	6640.6	6042.4	4939.5	3982.0	3914.6	4149.6	4193.9	4880.7
45°	7113.5	7128.9	7257.0	7382.3	7003.7	5866.1	4681.4	4447.3	4670.7	4725.7	5439.4
47.5°	7411.2	7472.8	7698.2	7918.7	7811.8	6785.1	5432.7	5076.2	5274.6	5377.8	6065.5
50°	7433.3	7549.8	7860.0	8244.4	8400.4	7659.6	6249.5	5792.9	6003.8	6117.5	6733.9
52.5°	7064.4	7245.5	7726.1	8288.7	8718.2	8400.4	7094.2	6509.6	6780.3	6928.6	7427.6
55°	5416.3	5653.3	7222.4	8047.9	8730.7	8962.0	7916.9	7256.1	7645.2	7812.9	8176.9
57.5°	4718.9	4838.3	5678.3	7629.8	8498.7	9188.3	8660.4	7966.9	8586.3	8794.4	8884.9
60°	3926.2	4083.2	4762.3	6945.9	8183.7	9210.4	9317.4	8884.0	9606.4	9840.4	9534.1
62.5°	2668.2	2838.6	3513.9	5770.7	7753.1	9199.9	9855.9	9827.9	10740.1	10991.5	10084.2
65°	1652.9	1759.8	2204.9	4712.1	7151.1	9211.5	10419.3	10974.2	11936.4	12191.7	10509.8
67.5°	1306.2	1355.3	1587.4	3617.9	6113.7	8951.3	10981.8	12052.1	13062.5	13264.7	10639.9
70°	877.5	907.3	1155.0	2425.5	4548.4	7751.2	10971.3	12593.4	13642.3	13743.5	10166.1
72.5°	462.4	485.4	675.3	1123.1	2747.1	5509.7	9248.1	11946.1	13065.4	12913.2	8689.3
75°	231.1	269.7	454.7	570.2	1173.2	3072.7	5742.9	9418.5	10283.5	9694.0	5575.2
77.5°	175.3	211.9	375.7	375.7	408.5	1034.5	2432.2	5137.0	4738.2	3945.4	1636.5
80°	111.7	144.5	328.5	284.1	170.5	263.0	633.9	1439.1	1006.6	765.8	297.7
82.5°	65.5	94.4	273.6	187.9	95.3	97.3	179.2	306.3	261.1	203.3	91.5
85°	26.0	61.6	187.9	74.2	37.6	24.1	53.9	65.5	53.9	40.5	23.2
87.5°	0.0	14.5	32.8	0.0	2.9	1.9	3.9	4.8	4.8	3.9	7.7
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°	2379.2	2379.2	2379.2	2379.2	2379.2	2379.2	2379.2	2379.2	2379.2	2379.2	2379.2
2.5°	2389.8	2391.7	2397.5	2398.5	2385.0	2367.6	2360.9	2358.0	2346.4	2345.5	2347.5
5°	2418.7	2427.4	2418.7	2393.7	2333.9	2250.1	2186.5	2134.6	2087.3	2072.9	2064.2
7.5°	2476.5	2485.1	2459.2	2360.9	2210.6	2044.0	1893.7	1787.8	1692.4	1656.8	1642.4
10°	2559.3	2570.9	2489.0	2290.6	2024.7	1757.0	1502.6	1323.5	1183.8	1127.0	1102.9
12.5°	2663.4	2668.2	2505.4	2183.7	1783.0	1400.6	1040.3	848.6	724.4	678.1	663.7
15°	2778.0	2771.2	2507.4	2038.2	1453.6	990.3	679.1	557.7	507.6	492.2	492.2
17.5°	2898.4	2870.4	2468.8	1828.2	1092.3	677.1	503.8	474.9	466.2	462.4	461.4
20°	3016.9	2954.3	2398.5	1553.7	784.1	505.7	457.6	448.8	444.0	442.1	440.2
22.5°	3124.7	3017.8	2278.1	1234.9	569.3	446.9	432.4	424.8	416.2	412.3	411.3
25°	3229.8	3054.4	2108.5	937.3	455.6	418.0	406.5	392.1	380.5	375.7	373.7
27.5°	3331.9	3077.6	1896.7	693.5	406.5	391.0	369.9	349.6	341.0	339.1	337.1
30°	3440.7	3085.2	1655.8	517.2	376.6	357.3	326.6	303.4	298.6	299.6	299.6
32.5°	3573.6	3096.8	1413.1	423.8	351.6	316.9	280.3	256.2	252.4	256.2	255.2
35°	3732.5	3119.9	1179.0	390.1	329.4	275.5	236.0	215.8	211.9	214.8	213.8
37.5°	3948.3	3157.5	960.3	383.3	311.1	240.8	198.4	182.0	182.0	183.1	182.0
40°	4235.4	3257.7	764.9	378.5	301.5	214.8	167.6	160.8	163.8	165.6	165.6
42.5°	4585.0	3470.5	632.8	372.8	290.9	203.3	152.2	149.3	154.2	156.0	156.0
45°	4977.1	3740.2	586.6	363.2	281.3	210.9	145.4	141.6	147.4	148.3	149.3
47.5°	5382.6	4004.2	580.9	352.5	271.6	222.5	143.5	134.9	141.6	142.6	143.5
50°	5792.9	4176.6	586.6	336.2	256.2	222.5	144.5	128.1	133.9	136.7	137.8
52.5°	6206.2	4255.6	582.7	300.5	229.3	209.0	144.5	122.3	128.1	130.1	130.1
55°	6606.8	4240.2	524.0	247.5	194.5	184.9	140.6	117.5	121.4	122.3	122.3
57.5°	6923.8	4025.4	415.1	192.6	158.0	154.2	128.1	111.7	114.6	113.7	113.7
60°	7089.4	3553.4	296.6	148.3	124.2	121.4	112.7	104.0	106.0	101.2	100.1
62.5°	7091.4	2929.2	198.4	117.5	99.2	96.4	96.4	93.5	91.5	81.9	79.0
65°	6940.2	2236.7	131.9	93.5	79.9	75.1	80.9	79.9	73.2	59.8	57.8
67.5°	6597.2	1466.1	100.1	73.2	61.6	58.7	64.6	67.4	62.6	50.1	49.1
70°	5892.1	853.4	82.8	56.8	46.2	43.4	52.0	57.8	52.0	40.5	38.5
72.5°	4894.2	460.4	67.4	42.3	31.8	28.9	41.4	47.2	41.4	29.8	28.9
75°	3175.8	246.6	52.0	28.0	16.4	18.3	30.9	34.6	28.9	19.3	17.3
77.5°	1066.3	108.9	32.8	13.5	7.7	7.7	18.3	21.2	13.5	6.8	5.7
80°	237.9	45.3	13.5	5.7	2.9	2.9	3.9	3.9	1.9	0.0	0.0
82.5°	78.0	18.3	5.7	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	29.8	6.8	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	11.6	0.9	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)