

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: P967732

Luminaire Tested: **NAV-SB5A-735-U-T2U-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P967732
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-17)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5A-735-U-T2U-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 3500K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II U
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17749.9 lumens
Efficiency: N/A
Efficacy: 125.3 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G2

Input Watts (W): 141.7
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

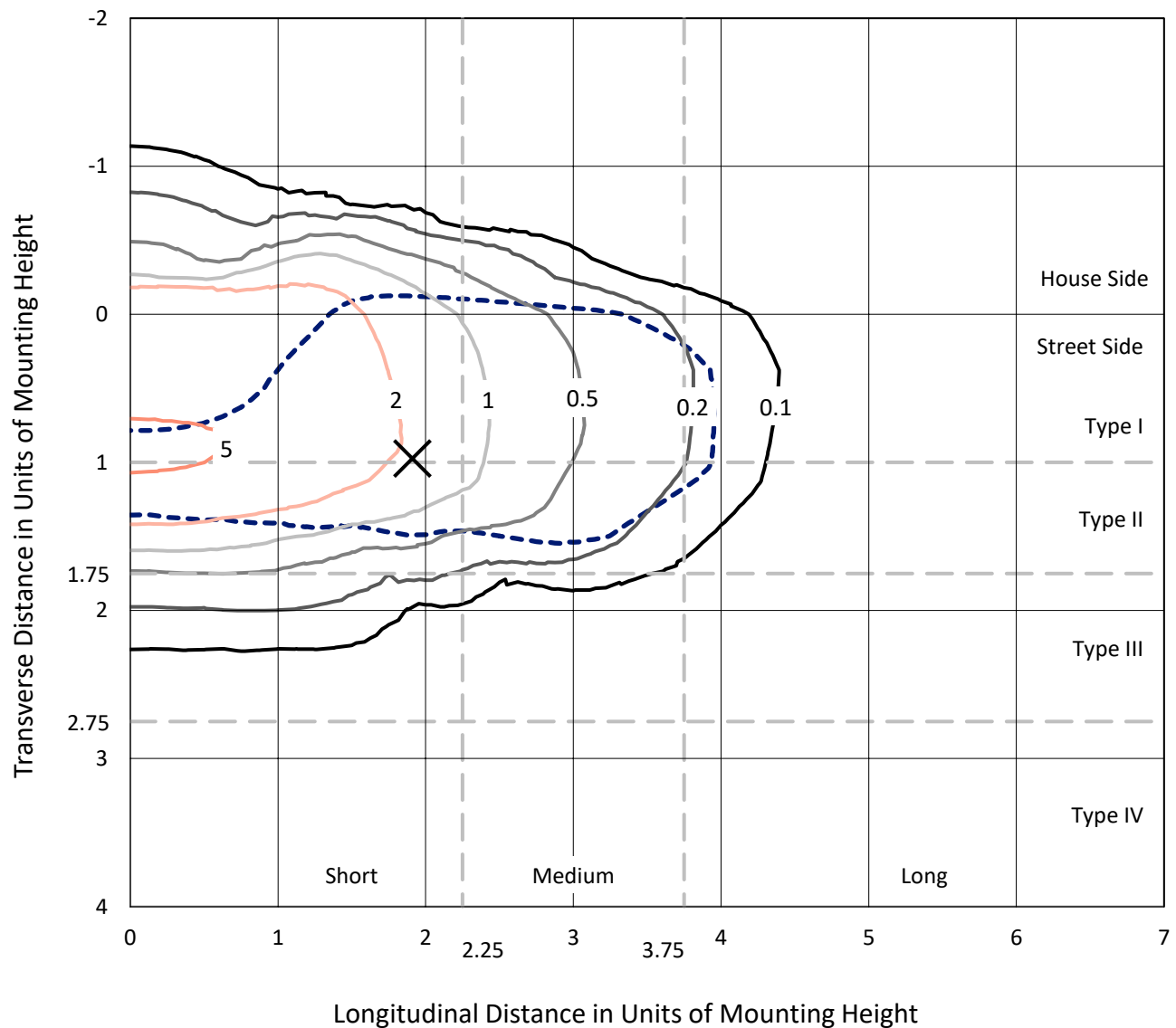


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Iso-Footcandle Lines of Horizontal Illumination

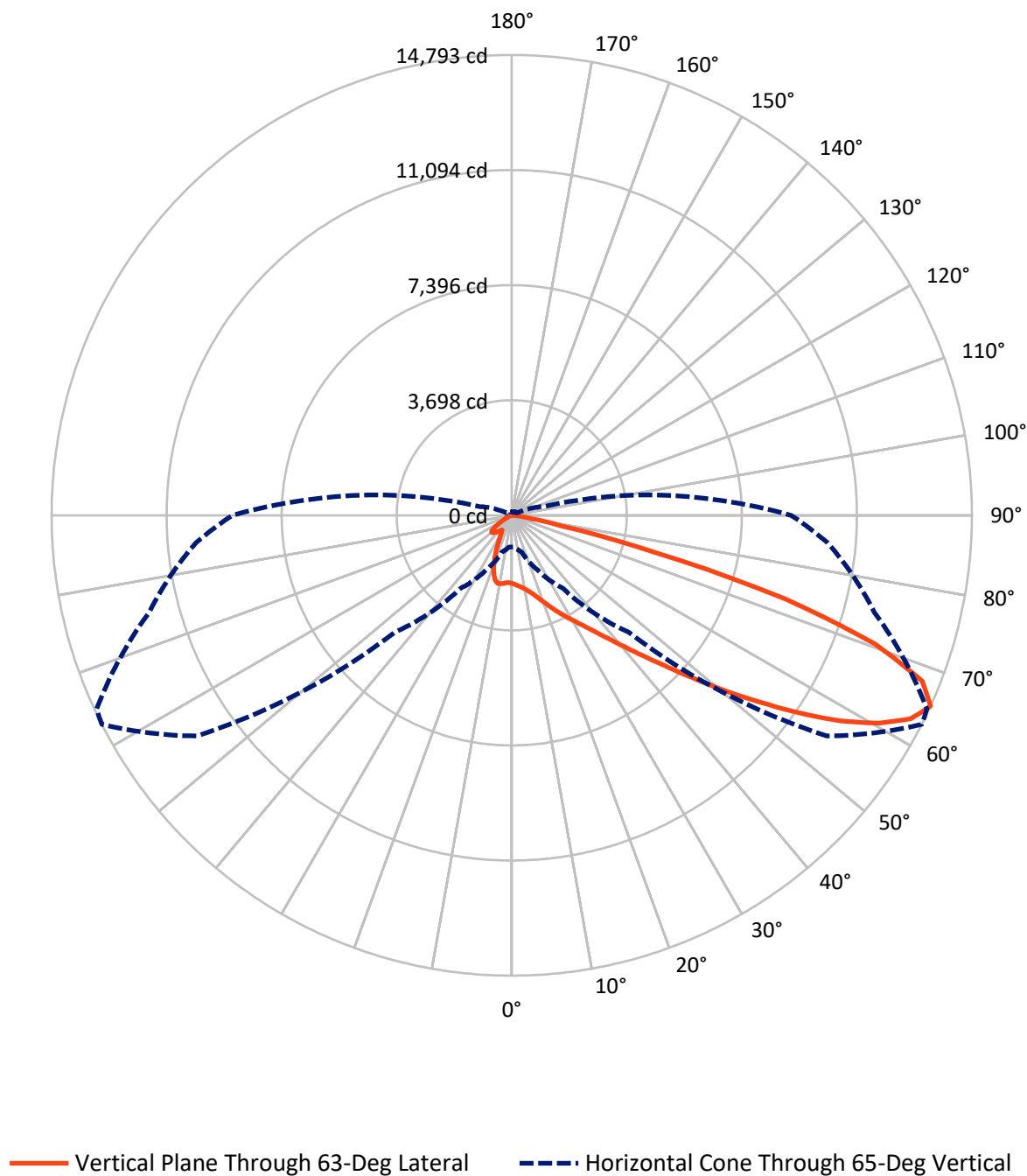
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6 fc
Type II - Short - N/A

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Luminous Intensity Polar Plot



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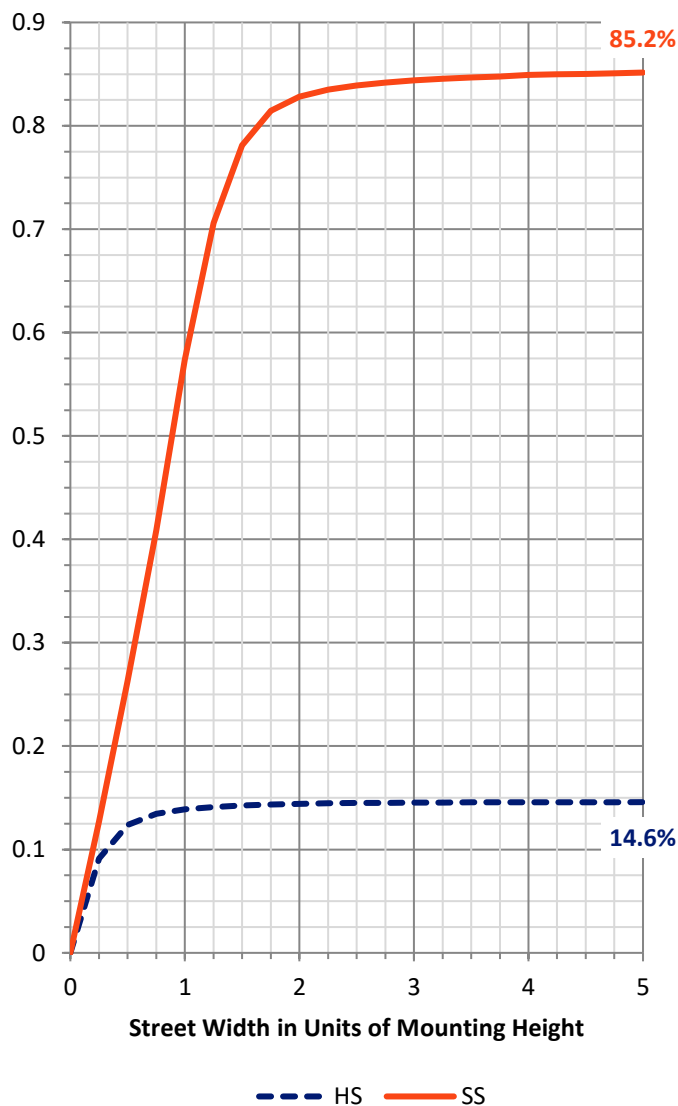
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2609.1	0.0	2609.1
	% Fixture	14.7	0.0	14.7
Street Side	Lumens	15140.8	0.0	15140.8
	% Fixture	85.3	0.0	85.3
Total	Lumens	17749.9	0.0	17749.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	206.4	1.2
10°-20°	572.7	3.2
20°-30°	997.2	5.6
30°-40°	1797.4	10.1
40°-50°	3564.7	20.1
50°-60°	4855.7	27.4
60°-70°	3875.8	21.8
70°-80°	1753.9	9.9
80°-90°	126.1	0.7
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°	17749.9	100.0
0°-180°	17749.9	100.0

Coefficient of Utilization



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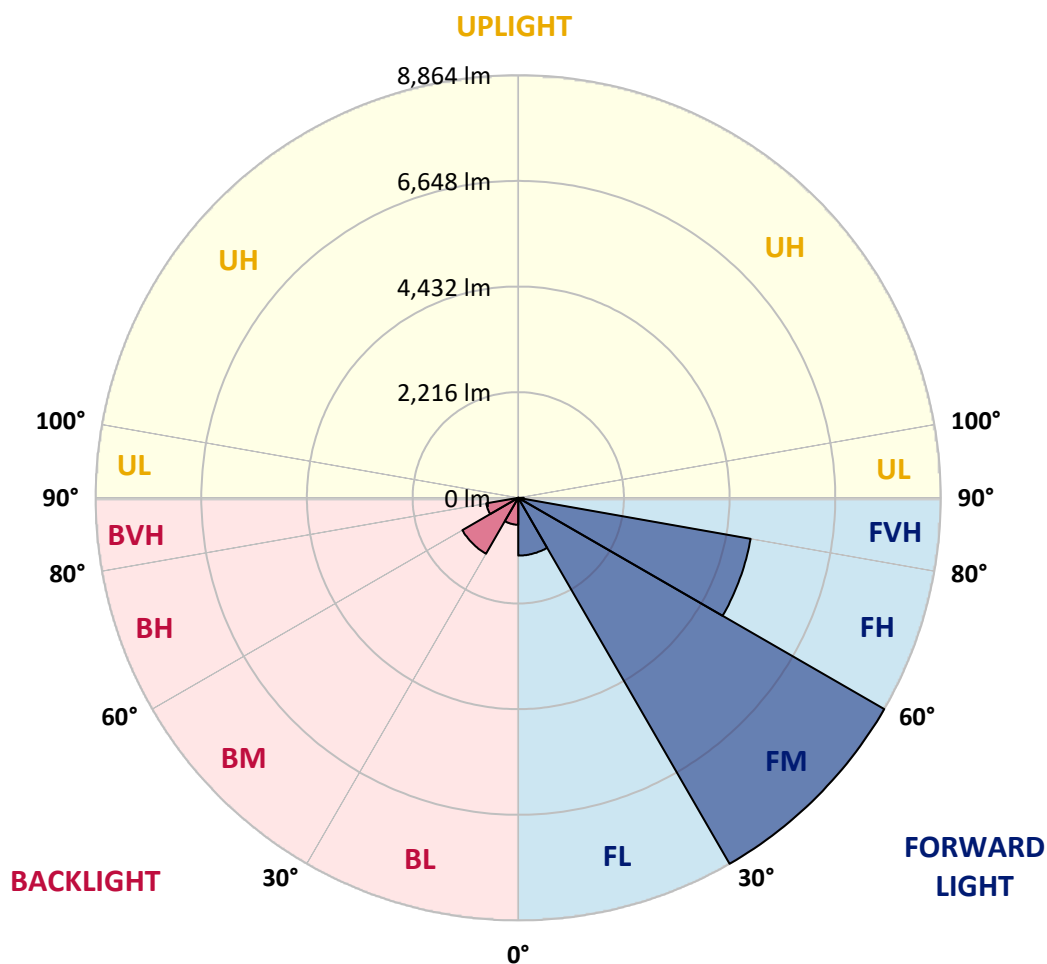
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1211.6	6.8			
FM	(30°-60°)	8863.9	49.9			
FH	(60°-80°)	4948.6	27.9			G2/5000
FVH	(80°-90°)	116.7	0.7			G2/225
BL	(0°-30°)	564.7	3.2	B2/1000		
BM	(30°-60°)	1354.0	7.6	B2/2500		
BH	(60°-80°)	681.1	3.8	B2/1000		G2/1000
BVH	(80°-90°)	9.4	0.1			G0/10
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 Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	63°	65°	75°	85°
0°	2190.6	2190.6	2190.6	2190.6	2190.6	2190.6	2190.6	2190.6	2190.6	2190.6	2190.6
2.5°	2242.0	2235.8	2244.4	2240.8	2238.3	2233.4	2231.0	2228.6	2223.6	2219.9	2205.3
5°	2248.0	2244.4	2253.0	2260.3	2267.6	2274.9	2278.6	2283.5	2278.6	2268.8	2254.2
7.5°	2196.8	2194.3	2212.7	2234.6	2267.6	2295.7	2326.2	2343.4	2344.6	2340.9	2325.0
10°	2193.1	2187.0	2205.3	2232.2	2274.9	2325.0	2378.7	2415.3	2420.2	2436.1	2419.0
12.5°	2250.5	2244.4	2270.1	2299.4	2343.4	2395.8	2461.7	2513.1	2520.4	2542.3	2530.1
15°	2346.9	2338.4	2367.8	2405.6	2461.7	2521.6	2591.2	2637.6	2643.7	2670.5	2648.6
17.5°	2459.3	2450.8	2485.0	2525.3	2586.3	2668.2	2748.7	2800.0	2807.4	2824.4	2784.1
20°	2603.4	2592.4	2619.3	2655.9	2720.7	2818.3	2914.8	2988.1	2986.8	2986.8	2920.9
22.5°	2770.7	2753.6	2776.8	2806.1	2867.1	2985.6	3113.8	3200.6	3200.6	3166.3	3057.7
25°	2950.3	2933.1	2958.8	2985.6	3039.3	3173.7	3323.9	3431.3	3436.2	3377.6	3204.1
27.5°	3174.9	3152.9	3172.5	3204.1	3235.9	3372.8	3551.0	3675.5	3678.0	3587.6	3343.4
30°	3607.2	3544.9	3483.9	3449.6	3464.3	3599.8	3790.3	3928.3	3940.5	3816.0	3494.8
32.5°	4398.5	4386.3	4171.3	3890.5	3743.9	3844.1	4057.8	4223.8	4231.2	4071.2	3691.4
35°	5628.1	5613.4	5267.9	4733.0	4255.6	4171.3	4382.6	4579.2	4574.3	4393.6	3946.7
37.5°	7095.9	7082.4	6626.9	5911.4	5138.4	4665.9	4801.4	5007.7	5038.3	4801.4	4276.3
40°	8350.0	8299.9	8011.7	7321.8	6310.7	5486.4	5397.3	5534.1	5565.9	5285.0	4695.2
42.5°	9300.0	9257.3	9110.7	8679.7	7729.6	6700.2	6099.5	6151.9	6187.4	5850.4	5176.2
45°	9792.1	9782.3	9840.9	9800.6	9175.4	8190.0	7103.2	6884.6	6898.0	6476.8	5722.2
47.5°	9861.7	9856.8	10124.2	10502.8	10418.5	9870.2	8391.5	7798.0	7750.4	7183.8	6315.6
50°	9451.4	9441.7	9954.5	10664.0	11248.9	11281.9	9854.3	8827.4	8722.4	7915.3	6934.7
52.5°	8141.2	8138.7	8981.3	10162.1	11540.8	12517.6	11300.2	9958.2	9782.3	8689.4	7589.2
55°	6264.3	6309.5	7275.3	8671.1	11008.3	13112.3	12598.2	11213.5	10943.6	9468.5	8192.4
57.5°	4437.5	4503.4	5458.3	6701.4	9357.4	12760.6	13476.2	12471.2	12180.6	10245.2	8804.2
60°	2383.6	2442.3	3398.4	4882.0	6961.6	11449.1	13939.0	13562.9	13288.1	10982.7	9356.2
62.5°	1420.1	1439.7	1835.4	3151.7	4708.6	8746.8	13742.4	14394.5	14168.6	11601.8	9836.1
65°	1019.7	1023.3	1222.3	1924.4	2858.6	5314.3	12363.8	14792.6	14723.0	12068.2	10191.4
67.5°	858.4	856.0	939.0	1278.5	1947.7	2662.0	9475.8	14229.7	14525.2	12363.8	10392.9
70°	736.4	739.9	837.7	936.5	1464.1	1506.9	4711.0	12389.4	13019.6	12442.0	10380.7
72.5°	548.3	560.5	650.9	853.5	1105.2	1036.7	1626.6	9186.5	10325.7	11722.7	9842.2
75°	387.1	393.2	457.9	718.0	824.2	754.6	830.4	4748.9	6209.3	8987.4	8055.7
77.5°	298.0	308.9	346.8	501.8	812.0	529.9	508.0	1643.6	2525.3	5429.1	5523.1
80°	161.2	180.7	250.3	362.6	570.3	374.8	251.5	654.6	856.0	2538.7	2129.6
82.5°	83.0	92.8	174.7	261.3	324.8	327.3	124.5	272.3	352.9	783.9	291.8
85°	33.0	40.3	117.3	144.1	167.3	161.2	56.2	109.9	127.0	217.4	89.2
87.5°	7.3	12.2	42.7	33.0	31.8	34.2	13.4	25.6	24.4	25.6	15.9
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°	2190.6	2190.6	2190.6	2190.6	2190.6	2190.6	2190.6	2190.6	2190.6	2190.6	2190.6
2.5°	2204.1	2199.2	2185.8	2171.2	2154.0	2144.3	2138.1	2136.9	2128.4	2122.3	2128.4
5°	2240.8	2235.8	2210.2	2179.7	2146.8	2121.0	2096.6	2074.7	2042.9	2036.8	2034.4
7.5°	2314.0	2300.6	2259.1	2217.6	2155.3	2080.8	1990.4	1886.6	1793.9	1765.8	1752.3
10°	2404.3	2386.1	2333.5	2260.3	2122.3	1919.6	1701.0	1498.3	1337.1	1291.9	1274.8
12.5°	2506.9	2491.1	2421.5	2286.0	1984.3	1616.7	1282.2	1030.6	874.3	835.3	824.2
15°	2629.0	2605.9	2509.4	2246.8	1737.7	1228.5	880.4	731.4	675.3	668.0	660.6
17.5°	2758.5	2720.7	2587.5	2106.4	1405.5	873.1	680.2	637.4	612.9	605.7	602.0
20°	2877.0	2828.1	2633.9	1894.0	1050.1	680.2	609.4	581.3	559.2	550.7	545.8
22.5°	2995.4	2925.8	2633.9	1604.5	787.6	603.2	559.2	533.6	508.0	497.0	490.9
25°	3118.8	3025.9	2587.5	1282.2	633.8	553.2	511.7	483.6	461.6	448.1	443.3
27.5°	3238.4	3110.2	2481.3	976.9	564.2	509.2	467.7	440.9	420.0	410.3	410.3
30°	3352.0	3193.2	2332.3	741.2	519.0	466.5	427.4	404.2	383.5	373.6	374.8
32.5°	3505.8	3298.2	2173.6	608.1	479.9	426.2	390.7	368.8	350.4	343.2	343.2
35°	3719.5	3453.3	2036.8	597.2	446.9	393.2	357.8	337.0	318.7	312.6	312.6
37.5°	4022.3	3703.6	1964.7	670.3	420.0	363.9	331.0	308.9	291.8	287.0	285.8
40°	4396.0	4043.1	2003.9	743.6	401.7	338.2	306.5	284.5	269.9	263.7	262.5
42.5°	4839.2	4461.9	2219.9	799.8	389.5	316.3	283.3	258.9	249.1	246.6	246.6
45°	5348.4	4922.3	2550.9	859.7	370.0	295.5	260.1	241.8	234.4	233.2	232.1
47.5°	5927.3	5427.9	2934.4	934.2	350.4	275.9	241.8	229.6	223.4	221.0	221.0
50°	6501.2	5937.0	3328.8	975.7	334.6	257.7	227.1	217.4	212.5	211.3	211.3
52.5°	7102.0	6460.9	3647.5	936.5	321.1	243.0	214.9	207.6	202.7	201.5	201.5
55°	7674.7	6884.6	3702.4	795.0	294.3	228.4	201.5	197.8	191.7	191.7	190.4
57.5°	8168.0	7097.1	3314.1	583.7	267.4	206.3	188.1	184.4	179.5	178.2	177.0
60°	8621.1	7036.0	2558.2	393.2	238.1	184.4	171.0	168.5	163.6	157.5	156.3
62.5°	8876.3	6767.4	1749.9	256.5	208.8	161.2	151.4	150.2	139.2	127.0	124.5
65°	8972.7	6215.5	1091.6	186.9	174.7	138.0	130.7	128.2	112.3	98.9	97.7
67.5°	8888.5	5306.9	550.7	147.8	138.0	114.8	107.4	107.4	96.5	84.3	83.0
70°	8551.5	3978.4	232.1	118.5	106.2	87.9	87.9	92.8	81.8	68.4	67.1
72.5°	7820.0	2676.7	123.3	90.4	79.3	62.3	72.1	75.7	64.7	51.2	51.2
75°	6216.7	1632.6	85.5	67.1	50.0	44.0	54.9	57.4	44.0	34.2	33.0
77.5°	4251.9	937.8	57.4	42.7	31.8	25.6	37.8	35.4	23.2	15.9	17.1
80°	1867.0	390.7	33.0	19.6	12.2	9.7	13.4	9.7	7.3	4.9	4.9
82.5°	218.5	91.5	12.2	7.3	4.9	2.5	1.2	0.0	0.0	0.0	0.0
85°	45.2	11.0	6.1	2.5	1.2	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	8.5	2.5	1.2	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)