

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: P967763

Luminaire Tested: **NAV-SB5A-740-U-T2U-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P967763
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-740-U-T2U-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 4000K, 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: 18779 lumens
Efficiency: N/A
Efficacy: 132.5 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G3

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

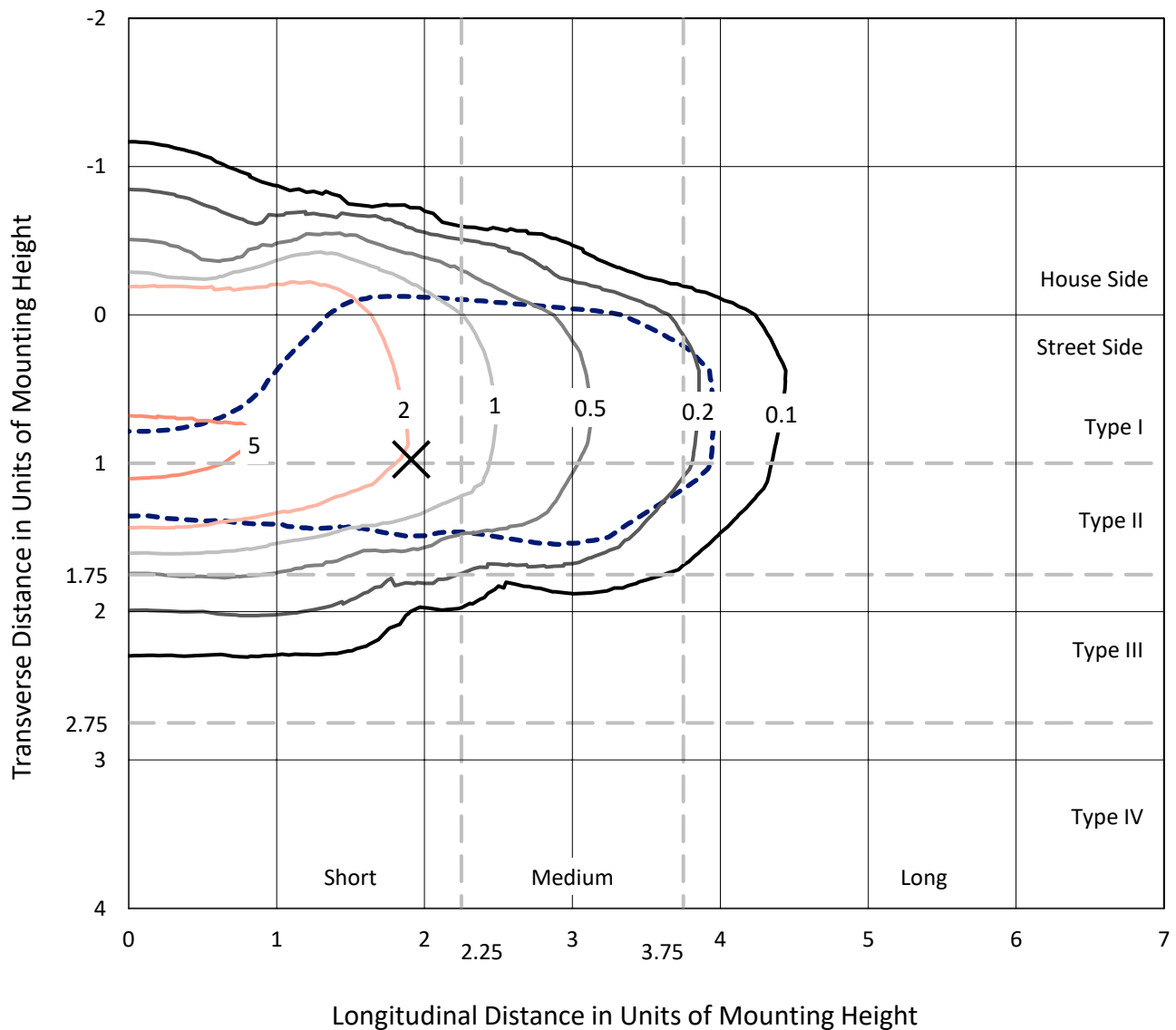


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Iso-Footcandle Lines of Horizontal Illumination

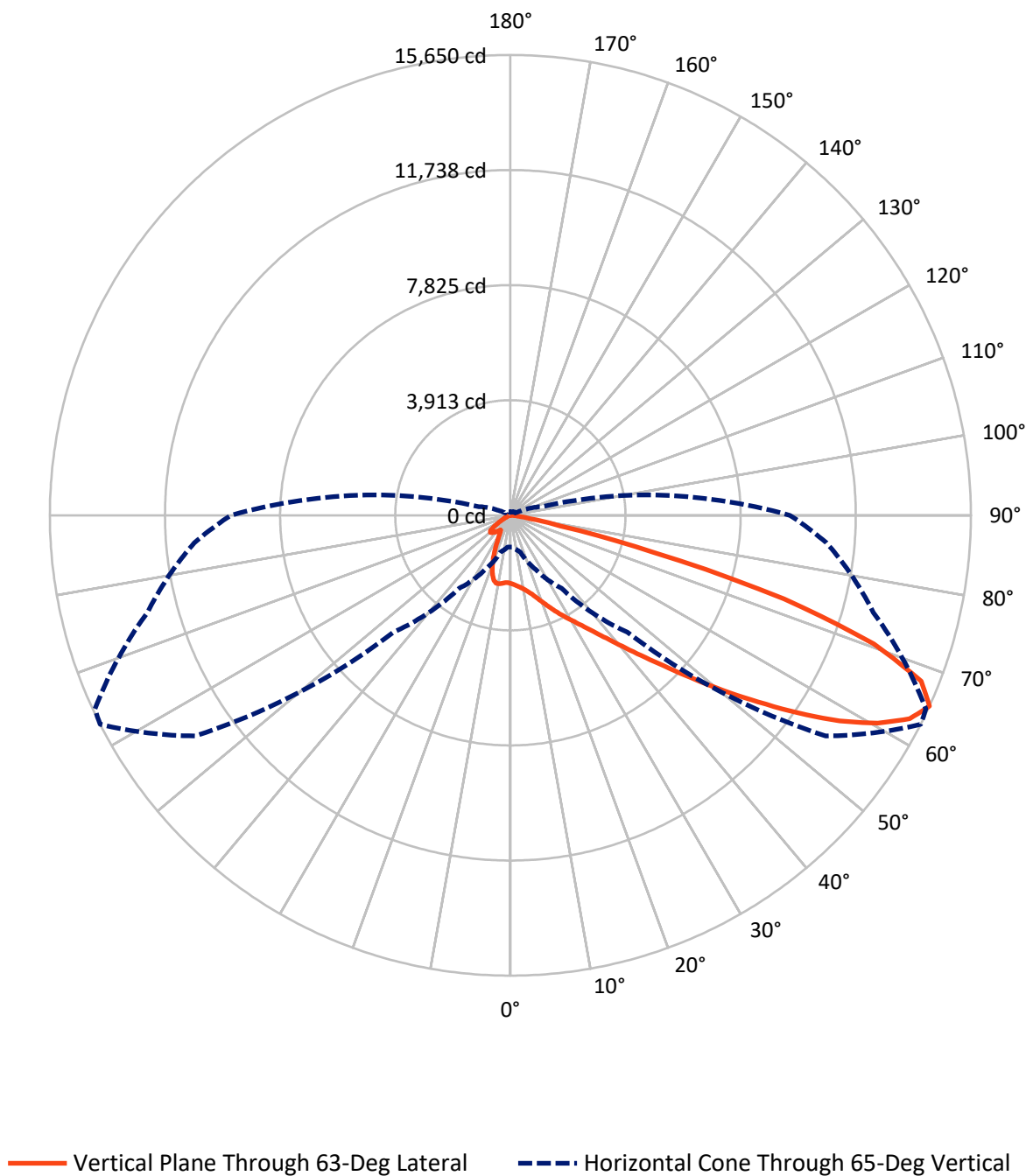
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.3 fc
Type II - Short - N/A

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Luminous Intensity Polar Plot



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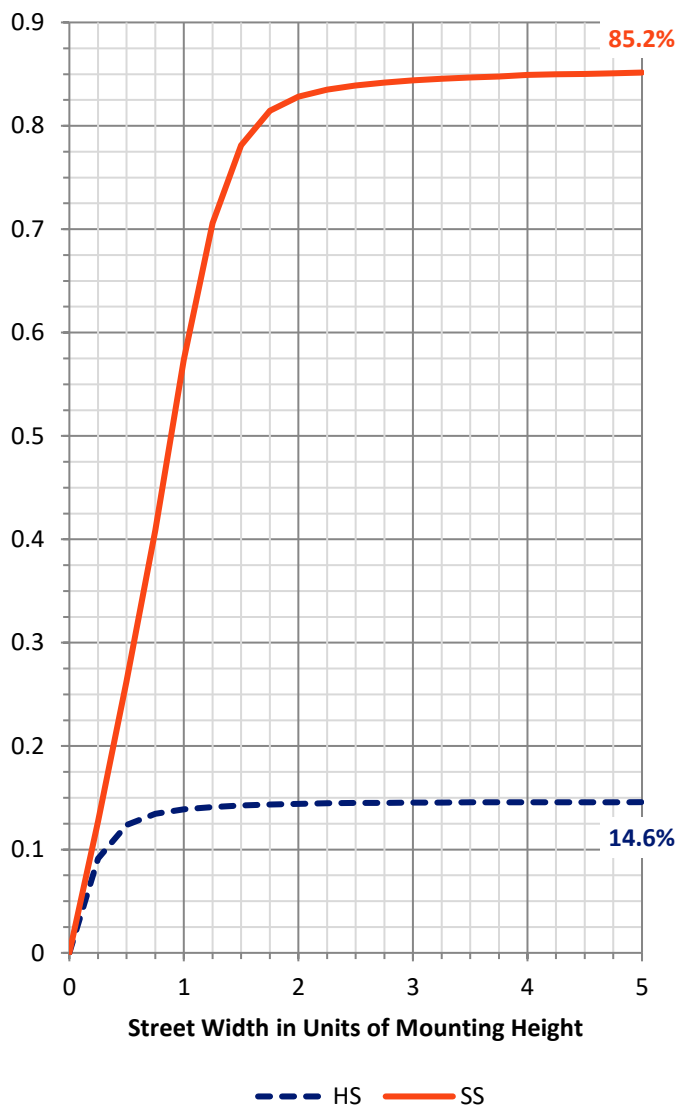
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2760.4	0.0	2760.4
	% Fixture	14.7	0.0	14.7
Street Side	Lumens	16018.6	0.0	16018.6
	% Fixture	85.3	0.0	85.3
Total	Lumens	18779.0	0.0	18779.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	218.4	1.2
10°-20°	605.9	3.2
20°-30°	1055.0	5.6
30°-40°	1901.6	10.1
40°-50°	3771.4	20.1
50°-60°	5137.3	27.4
60°-70°	4100.5	21.8
70°-80°	1855.6	9.9
80°-90°	133.4	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°	18779.0	100.0
0°-180°	18779.0	100.0

Coefficient of Utilization



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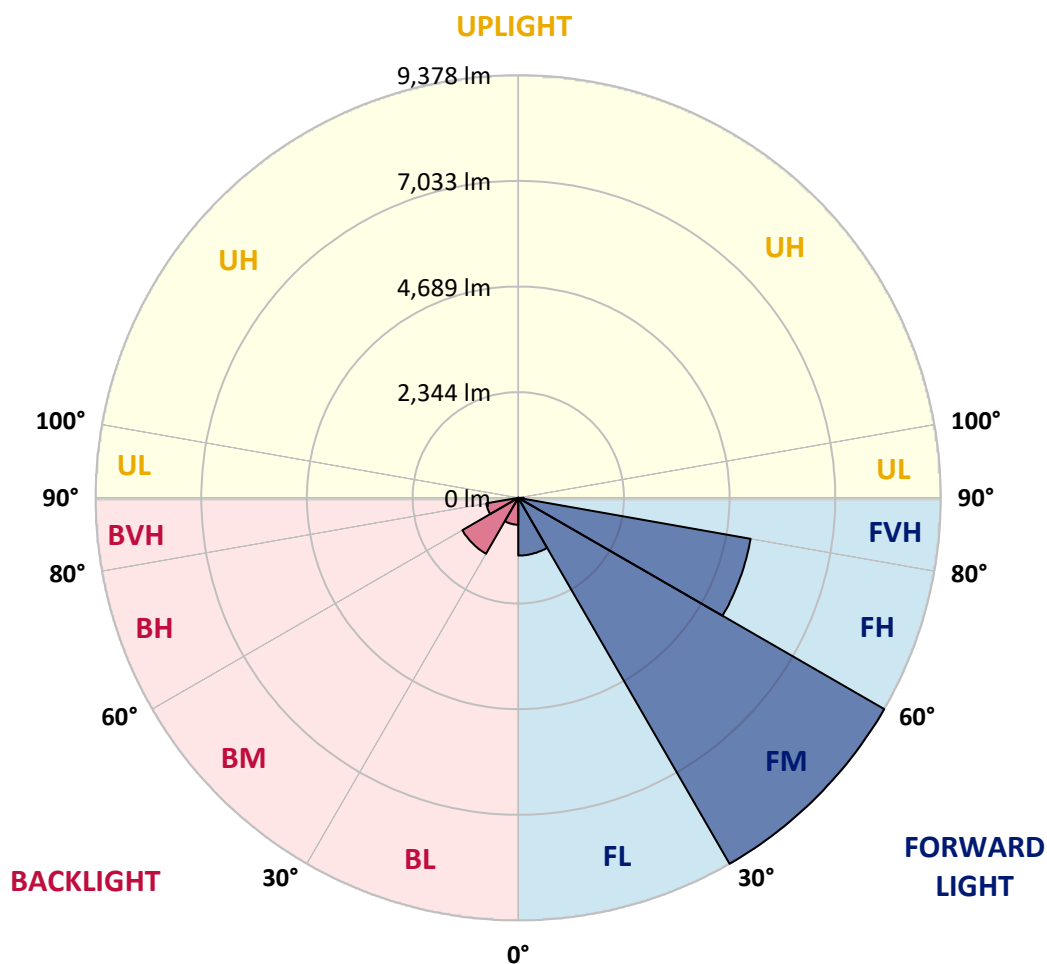
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1281.9	6.8			
FM	(30°-60°)	9377.8	49.9			
FH	(60°-80°)	5235.5	27.9			G3/7500
FVH	(80°-90°)	123.5	0.7			G2/225
BL	(0°-30°)	597.4	3.2	B2/1000		
BM	(30°-60°)	1432.5	7.6	B2/2500		
BH	(60°-80°)	720.6	3.8	B2/1000		G2/1000
BVH	(80°-90°)	9.9	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-G3

Type II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	63°	65°	75°	85°
0°	2317.7	2317.7	2317.7	2317.7	2317.7	2317.7	2317.7	2317.7	2317.7	2317.7	2317.7
2.5°	2372.0	2365.5	2374.5	2370.6	2368.1	2362.9	2360.4	2357.7	2352.6	2348.7	2333.2
5°	2378.4	2374.5	2383.5	2391.3	2399.1	2406.8	2410.7	2415.8	2410.7	2400.3	2384.9
7.5°	2324.2	2321.5	2340.9	2364.2	2399.1	2428.8	2461.1	2479.2	2480.5	2476.6	2459.8
10°	2320.3	2313.8	2333.2	2361.6	2406.8	2459.8	2516.7	2555.4	2560.6	2577.4	2559.3
12.5°	2381.0	2374.5	2401.7	2432.6	2479.2	2534.7	2604.5	2658.7	2666.5	2689.8	2676.8
15°	2483.1	2474.0	2505.0	2545.1	2604.5	2667.8	2741.5	2790.6	2797.0	2825.4	2802.1
17.5°	2601.9	2592.8	2629.0	2671.7	2736.2	2822.8	2908.1	2962.4	2970.1	2988.2	2945.5
20°	2754.4	2742.7	2771.2	2809.9	2878.4	2981.7	3083.8	3161.3	3160.0	3160.0	3090.3
22.5°	2931.3	2913.3	2937.8	2968.8	3033.4	3158.7	3294.4	3386.1	3386.1	3349.9	3234.9
25°	3121.2	3103.2	3130.2	3158.7	3215.5	3357.7	3516.6	3630.2	3635.5	3573.5	3390.0
27.5°	3358.9	3335.8	3356.4	3390.0	3423.6	3568.2	3756.8	3888.6	3891.2	3795.7	3537.3
30°	3816.3	3750.4	3685.8	3649.6	3665.2	3808.6	4010.1	4156.1	4169.0	4037.2	3697.5
32.5°	4653.5	4640.6	4413.1	4116.0	3961.0	4066.9	4293.0	4468.7	4476.5	4307.3	3905.5
35°	5954.4	5939.0	5573.3	5007.4	4502.3	4413.1	4636.7	4844.7	4839.5	4648.3	4175.4
37.5°	7507.3	7493.1	7011.2	6254.1	5436.4	4936.4	5079.8	5298.1	5330.4	5079.8	4524.2
40°	8834.1	8781.1	8476.2	7746.3	6676.5	5804.6	5710.3	5854.9	5888.5	5591.4	4967.4
42.5°	9839.2	9794.0	9638.9	9182.9	8177.8	7088.7	6453.1	6508.6	6546.1	6189.6	5476.4
45°	10359.8	10349.5	10411.5	10368.9	9707.4	8664.8	7515.0	7283.8	7298.0	6852.3	6053.9
47.5°	10433.5	10428.2	10711.2	11111.7	11022.5	10442.5	8878.0	8250.1	8199.8	7600.3	6681.8
50°	9999.4	9989.0	10531.7	11282.3	11901.1	11935.9	10425.7	9339.2	9228.1	8374.1	7336.7
52.5°	8613.2	8610.6	9502.0	10751.2	12209.8	13243.4	11955.3	10535.6	10349.5	9193.2	8029.2
55°	6627.5	6675.3	7697.2	9173.9	11646.6	13872.6	13328.6	11863.7	11578.1	10017.4	8667.4
57.5°	4694.8	4764.6	5774.8	7090.0	9899.9	13500.5	14257.5	13194.3	12886.8	10839.2	9314.7
60°	2521.8	2583.8	3595.4	5165.1	7365.1	12112.9	14747.2	14349.3	14058.6	11619.4	9898.6
62.5°	1502.4	1523.1	1941.8	3334.4	4981.6	9253.9	14539.1	15229.0	14990.0	12274.5	10406.3
65°	1078.7	1082.6	1293.2	2036.1	3024.4	5622.4	13080.5	15650.2	15576.5	12767.9	10782.3
67.5°	908.3	905.6	993.4	1352.6	2060.6	2816.4	10025.2	15054.6	15367.3	13080.5	10995.5
70°	779.0	782.9	886.2	990.9	1549.0	1594.2	4984.2	13107.7	13774.4	13163.3	10982.6
72.5°	580.0	593.0	688.6	903.0	1169.2	1096.9	1720.9	9719.0	10924.3	12402.3	10412.8
75°	409.5	415.9	484.4	759.6	872.1	798.4	878.5	5024.2	6569.3	9508.4	8522.8
77.5°	315.2	326.9	367.0	530.9	859.2	560.7	537.4	1738.9	2671.7	5743.8	5843.3
80°	170.6	191.2	264.9	383.7	603.3	396.6	266.1	692.5	905.6	2685.9	2253.1
82.5°	87.8	98.2	184.7	276.4	343.7	346.2	131.8	288.1	373.4	829.4	308.7
85°	34.8	42.6	124.0	152.4	177.0	170.6	59.4	116.2	134.4	230.0	94.3
87.5°	7.8	12.9	45.2	34.8	33.6	36.2	14.2	27.2	25.8	27.2	16.8
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°	2317.7	2317.7	2317.7	2317.7	2317.7	2317.7	2317.7	2317.7	2317.7	2317.7	2317.7
2.5°	2331.9	2326.8	2312.5	2297.0	2278.9	2268.6	2262.2	2260.8	2251.8	2245.4	2251.8
5°	2370.6	2365.5	2338.3	2306.0	2271.2	2244.0	2218.2	2194.9	2161.3	2154.9	2152.3
7.5°	2448.2	2434.0	2390.0	2346.1	2280.2	2201.4	2105.9	1996.0	1897.8	1868.1	1853.9
10°	2543.7	2524.4	2468.8	2391.3	2245.4	2030.8	1799.6	1585.2	1414.6	1366.8	1348.8
12.5°	2652.3	2635.5	2561.9	2418.5	2099.3	1710.5	1356.5	1090.4	925.0	883.7	872.1
15°	2781.4	2756.9	2654.9	2377.1	1838.3	1299.7	931.4	773.9	714.4	706.6	698.9
17.5°	2918.4	2878.4	2737.6	2228.6	1487.0	923.7	719.6	674.3	648.5	640.8	636.9
20°	3043.7	2992.1	2786.7	2003.8	1111.0	719.6	644.6	615.0	591.7	582.6	577.5
22.5°	3169.1	3095.4	2786.7	1697.6	833.3	638.2	591.7	564.6	537.4	525.8	519.4
25°	3299.6	3201.4	2737.6	1356.5	670.5	585.3	541.3	511.6	488.3	474.2	468.9
27.5°	3426.2	3290.5	2625.1	1033.5	596.9	538.7	494.8	466.4	444.4	434.1	434.1
30°	3546.3	3378.3	2467.6	784.2	549.1	493.5	452.1	427.6	405.7	395.3	396.6
32.5°	3709.1	3489.4	2299.6	643.4	507.7	450.9	413.4	390.1	370.7	363.1	363.1
35°	3935.2	3653.5	2154.9	631.7	472.8	415.9	378.5	356.6	337.2	330.8	330.8
37.5°	4255.6	3918.4	2078.7	709.3	444.4	385.0	350.1	326.9	308.7	303.6	302.3
40°	4650.8	4277.5	2120.0	786.8	425.1	357.8	324.3	301.0	285.5	279.0	277.8
42.5°	5119.9	4720.6	2348.7	846.2	412.2	334.6	299.7	273.9	263.5	261.0	261.0
45°	5658.6	5207.7	2698.8	909.5	391.4	312.6	275.2	255.8	248.0	246.7	245.5
47.5°	6271.0	5742.6	3104.4	988.3	370.7	292.0	255.8	242.9	236.5	233.8	233.8
50°	6878.2	6281.3	3521.8	1032.3	353.9	272.5	240.3	230.0	224.8	223.4	223.4
52.5°	7513.8	6835.5	3858.9	990.9	339.8	257.1	227.3	219.7	214.4	213.2	213.2
55°	8119.6	7283.8	3917.0	841.0	311.4	241.6	213.2	209.3	202.8	202.8	201.5
57.5°	8641.6	7508.5	3506.2	617.6	282.9	218.3	199.0	195.1	189.9	188.6	187.4
60°	9120.9	7444.0	2706.5	415.9	251.9	195.1	180.9	178.2	173.1	166.7	165.3
62.5°	9390.8	7159.7	1851.4	271.3	220.9	170.6	160.2	158.9	147.3	134.4	131.8
65°	9492.9	6575.8	1155.0	197.6	184.7	146.0	138.3	135.6	118.9	104.7	103.3
67.5°	9403.9	5614.6	582.6	156.3	146.0	121.5	113.7	113.7	102.1	89.2	87.8
70°	9047.3	4209.1	245.5	125.4	112.4	93.0	93.0	98.2	86.5	72.4	71.0
72.5°	8273.4	2831.9	130.5	95.6	83.9	65.9	76.3	80.1	68.5	54.2	54.2
75°	6577.1	1727.3	90.4	71.0	53.0	46.5	58.1	60.7	46.5	36.2	34.8
77.5°	4498.4	992.2	60.7	45.2	33.6	27.2	40.1	37.5	24.5	16.8	18.0
80°	1975.4	413.4	34.8	20.7	12.9	10.4	14.2	10.4	7.8	5.1	5.1
82.5°	231.2	96.9	12.9	7.8	5.1	2.6	1.3	0.0	0.0	0.0	0.0
85°	47.8	11.6	6.5	2.6	1.3	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	9.0	2.6	1.3	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)