

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: P965258

Luminaire Tested: **NAV-SB3D-830-U-T3**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P965258
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-5)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3D-830-U-T3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 80 CRI, 3000K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 28139.3 lumens
Efficiency: N/A
Efficacy: 129.0 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B3 - U0 - G4

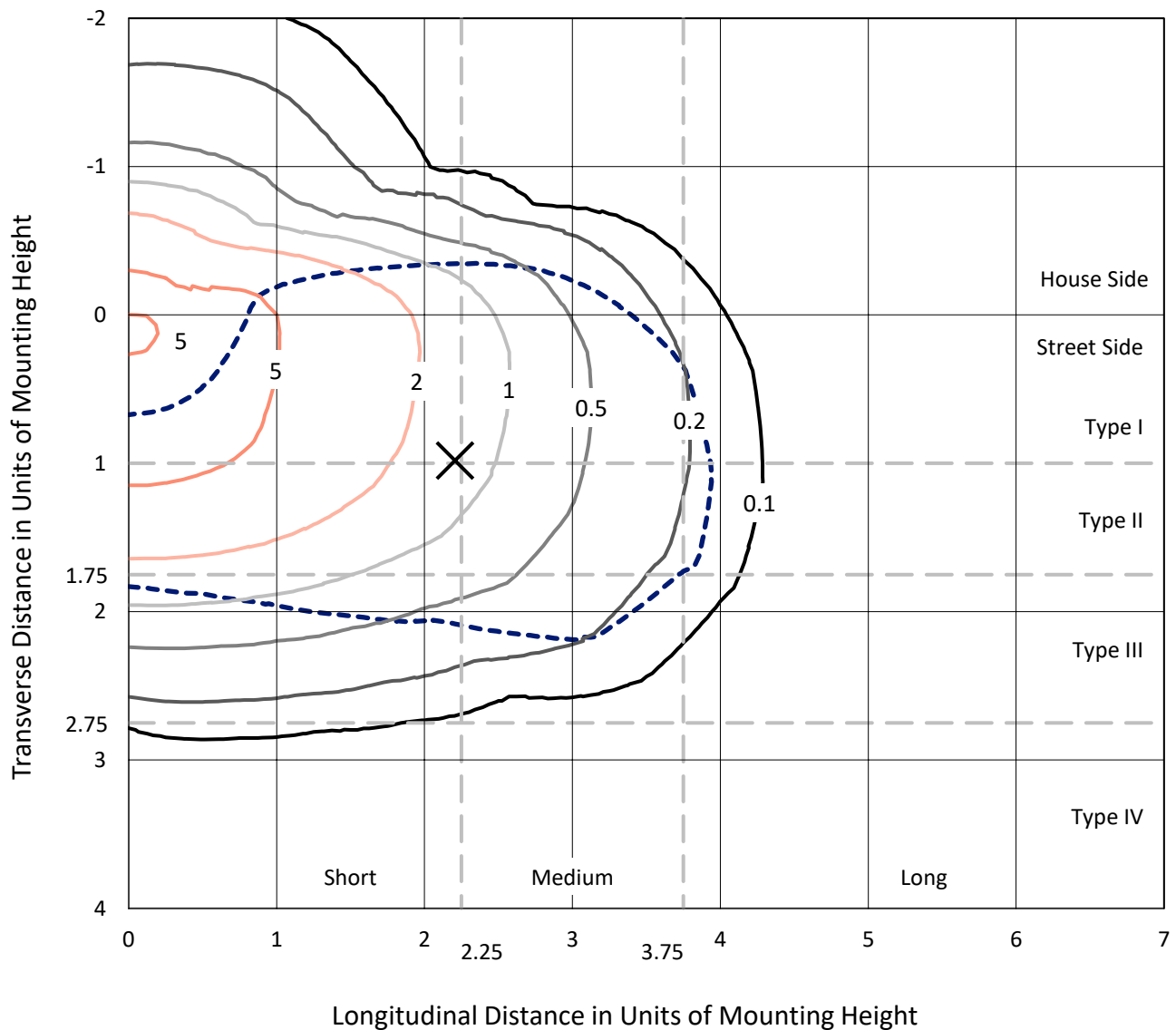
Input Watts (W): 218.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

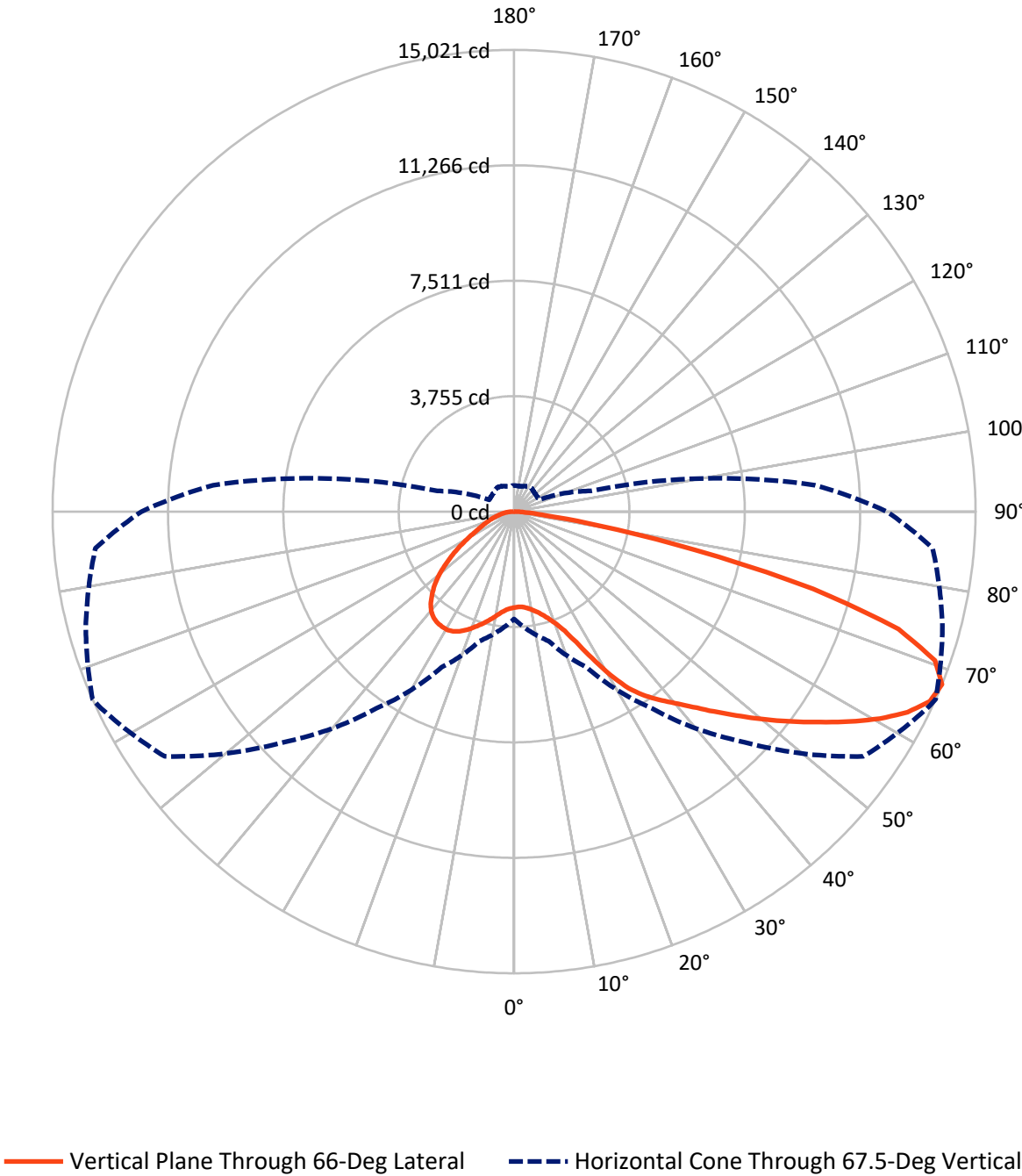
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.1 fc
Type III - Short - N/A

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Luminous Intensity Polar Plot



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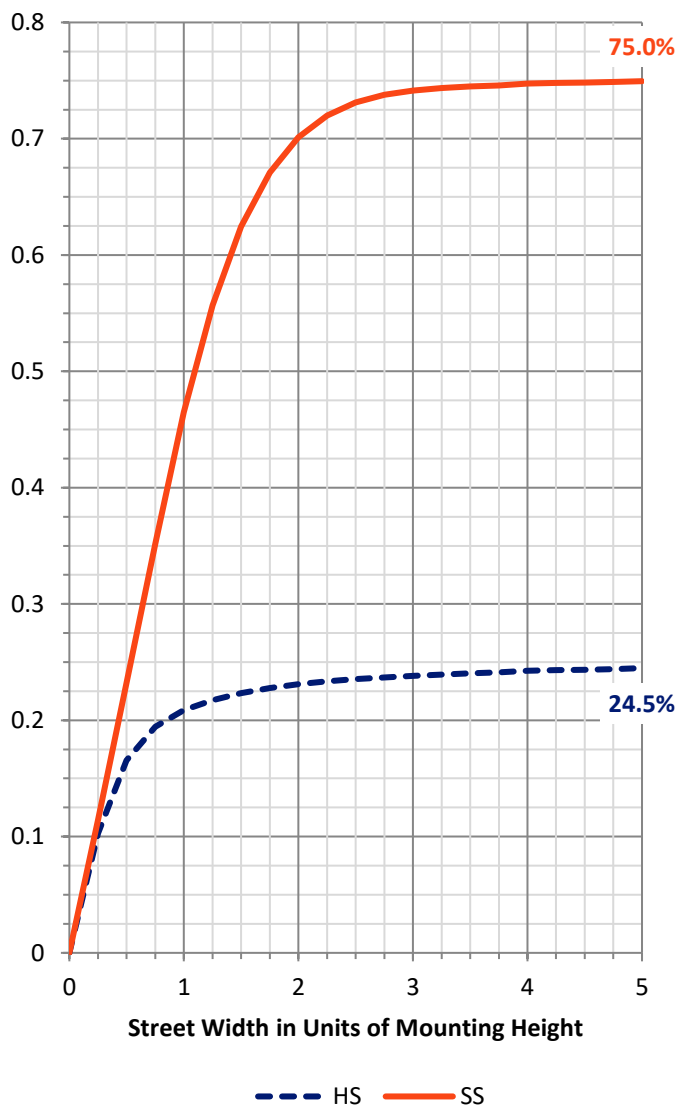
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6996.8	0.0	6996.8
	% Fixture	24.9	0.0	24.9
Street Side	Lumens	21142.6	0.0	21142.6
	% Fixture	75.1	0.0	75.1
Total	Lumens	28139.3	0.0	28139.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	309.4	1.1
10°-20°	1022.3	3.6
20°-30°	1970.5	7.0
30°-40°	3455.0	12.3
40°-50°	5136.5	18.3
50°-60°	6511.0	23.1
60°-70°	6370.8	22.6
70°-80°	3038.9	10.8
80°-90°	324.8	1.2
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°	28139.3	100.0
0°-180°	28139.3	100.0

Coefficient of Utilization



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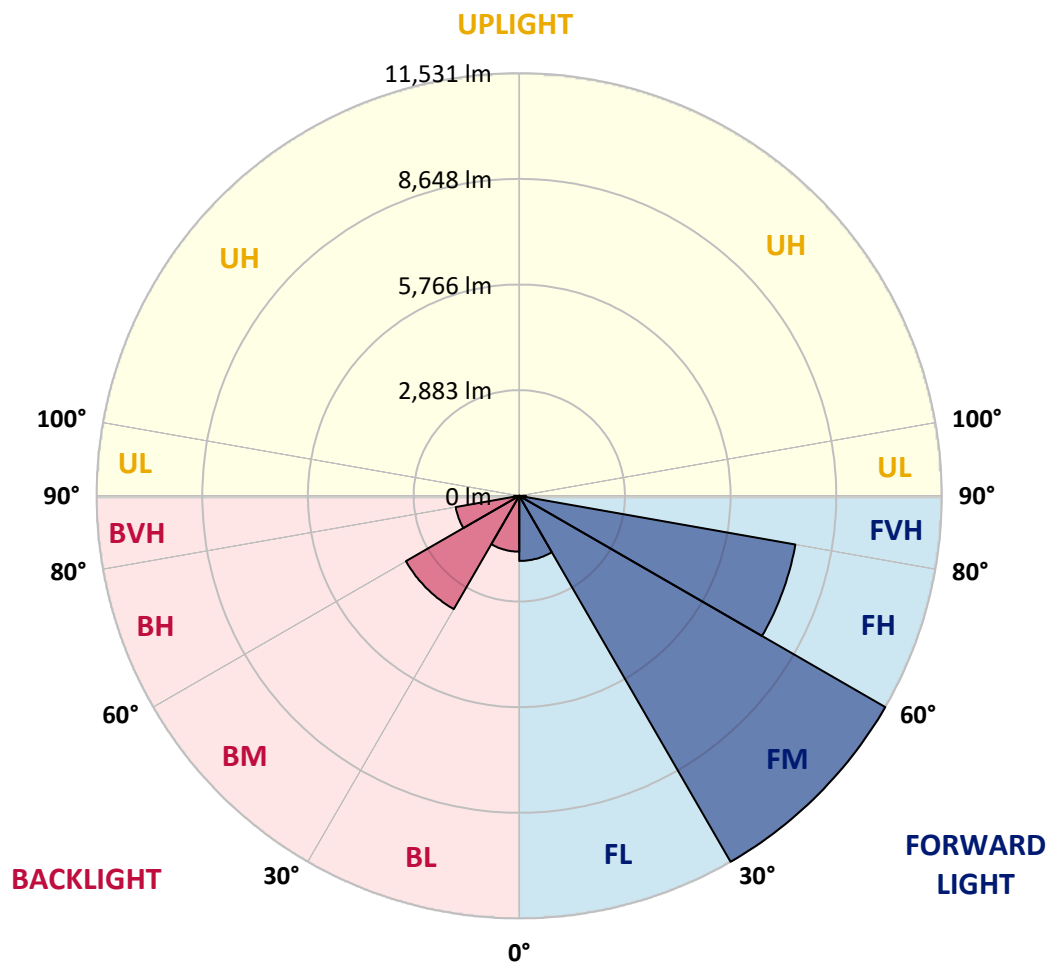
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1778.1	6.3			
FM	(30°-60°)	11531.3	41.0			
FH	(60°-80°)	7649.0	27.2			G4/12000
FVH	(80°-90°)	184.1	0.7			G2/225
BL	(0°-30°)	1524.1	5.4	B3/2500		
BM	(30°-60°)	3571.2	12.7	B3/5000		
BH	(60°-80°)	1760.7	6.3	B3/2500		G3/2500
BVH	(80°-90°)	140.6	0.5			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4

Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	3121.0	3121.0	3121.0	3121.0	3121.0	3121.0	3121.0	3121.0	3121.0	3121.0	3121.0
2.5°	3088.5	3106.3	3101.8	3094.4	3092.9	3095.9	3100.3	3104.7	3103.3	3110.7	3122.5
5°	3079.6	3097.3	3095.9	3095.9	3101.8	3113.6	3121.0	3128.4	3121.0	3129.9	3146.1
7.5°	3085.6	3098.9	3104.7	3110.7	3125.4	3147.7	3165.4	3181.6	3172.8	3183.1	3203.8
10°	3160.9	3171.2	3177.2	3177.2	3187.5	3212.7	3230.4	3260.0	3252.6	3268.8	3295.5
12.5°	3298.4	3308.8	3308.8	3302.9	3310.2	3326.5	3332.5	3365.0	3351.6	3378.3	3404.8
15°	3467.0	3487.7	3471.4	3461.1	3464.0	3480.3	3478.8	3504.0	3490.6	3512.8	3536.5
17.5°	3653.3	3679.9	3653.3	3651.8	3645.9	3663.7	3665.1	3687.2	3663.7	3679.9	3696.2
20°	3873.6	3910.5	3888.3	3895.7	3882.4	3889.8	3897.3	3929.7	3892.7	3904.6	3900.1
22.5°	4184.0	4228.4	4204.8	4232.8	4223.9	4218.1	4216.5	4274.2	4216.5	4221.0	4178.1
25°	4636.5	4689.7	4648.3	4686.7	4686.7	4706.0	4728.1	4802.0	4706.0	4677.8	4567.0
27.5°	5304.7	5357.9	5276.6	5300.3	5292.9	5340.1	5316.6	5499.8	5396.3	5350.5	5127.3
30°	6109.0	6203.6	6049.9	6043.9	6036.5	6112.0	6145.9	6267.2	6162.2	6116.4	5847.3
32.5°	6978.3	7077.4	6894.0	6840.8	6812.8	6858.6	6830.5	6928.1	6855.6	6784.7	6452.0
35°	7897.9	7995.5	7821.1	7717.5	7605.2	7509.0	7408.6	7433.7	7365.6	7257.7	6913.2
37.5°	8767.2	8946.1	8761.3	8650.5	8443.4	8255.7	7974.8	7858.0	7794.4	7695.4	7347.9
40°	9652.8	9754.8	9614.4	9519.8	9295.1	9000.8	8551.4	8304.4	8218.8	8122.6	7828.4
42.5°	10304.8	10402.4	10327.0	10262.0	10086.0	9744.5	9163.5	8854.5	8730.3	8622.4	8372.5
45°	10822.3	10894.7	10847.5	10871.0	10795.7	10464.5	9797.8	9444.3	9315.7	9184.2	8987.5
47.5°	11030.7	11107.6	11183.1	11323.5	11452.1	11208.2	10479.3	10083.0	9947.0	9812.5	9618.8
50°	11007.1	11085.5	11304.3	11602.9	12002.1	11920.7	11197.8	10763.2	10637.4	10483.7	10304.8
52.5°	10817.8	10906.6	11187.5	11684.3	12320.0	12454.6	11929.7	11465.4	11347.2	11163.8	10984.9
55°	10321.1	10374.3	10795.7	11499.5	12395.4	12827.1	12646.8	12213.5	12095.3	11839.5	11644.3
57.5°	9400.1	9476.9	10090.5	11001.2	12206.1	13079.9	13276.5	13000.1	12886.2	12518.1	12314.0
60°	8198.1	8320.7	9023.1	10164.4	11724.2	13078.4	13848.7	13773.3	13678.7	13186.3	12973.4
62.5°	6837.9	6979.8	7655.4	8981.7	10881.4	12707.3	14206.5	14420.8	14372.0	13802.9	13530.8
65°	5251.5	5349.1	6021.8	7451.4	9570.0	11910.5	14247.9	14862.9	14871.8	14271.6	13822.1
67.5°	3496.6	3777.4	4361.5	5591.5	7813.7	10607.9	13884.2	14935.4	15021.2	14432.7	13675.8
70°	1706.1	2075.7	2647.9	3634.0	5591.5	8610.5	12933.6	14341.1	14531.7	13962.6	12803.5
72.5°	708.2	827.9	1139.9	1793.3	3209.7	5810.3	11023.4	12729.5	13082.9	12371.7	10764.7
75°	477.5	517.4	652.0	919.6	1462.2	2865.3	7949.7	9491.7	10060.9	9343.9	7637.7
77.5°	368.2	393.3	474.6	643.1	869.3	1083.7	4255.0	5720.1	6014.4	5567.9	3974.1
80°	289.8	309.0	354.9	468.6	616.5	579.5	1450.4	2591.7	2761.8	2316.7	1277.4
82.5°	251.3	258.7	254.3	317.9	409.5	338.6	476.1	956.5	1055.6	765.9	417.0
85°	181.8	202.5	211.5	196.6	217.3	171.5	195.2	338.6	372.6	332.6	235.0
87.5°	73.9	109.4	134.6	127.1	79.8	48.8	60.6	99.0	113.9	124.2	76.9
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°	3121.0	3121.0	3121.0	3121.0	3121.0	3121.0	3121.0	3121.0	3121.0	3121.0	3121.0
2.5°	3124.0	3134.3	3141.7	3150.5	3156.5	3165.4	3183.1	3193.5	3194.9	3202.3	3200.9
5°	3152.1	3166.8	3183.1	3206.8	3233.4	3255.6	3289.5	3313.2	3322.1	3329.5	3328.0
7.5°	3212.7	3233.4	3263.0	3304.4	3342.8	3372.4	3413.8	3441.8	3469.9	3480.3	3481.7
10°	3302.9	3332.5	3375.3	3431.5	3472.9	3511.3	3554.2	3577.9	3606.0	3617.7	3623.7
12.5°	3415.2	3446.3	3502.4	3580.8	3619.3	3645.9	3660.7	3654.7	3660.7	3671.0	3674.0
15°	3543.8	3577.9	3641.4	3725.7	3752.3	3728.6	3696.2	3666.5	3662.1	3665.1	3675.4
17.5°	3696.2	3721.3	3795.2	3866.2	3846.9	3749.3	3678.4	3631.1	3607.4	3600.0	3610.4
20°	3909.0	3909.0	3969.6	4014.0	3885.4	3719.8	3608.9	3532.0	3483.3	3462.6	3458.1
22.5°	4167.8	4144.1	4182.5	4151.6	3878.0	3637.0	3483.3	3350.2	3276.3	3246.7	3242.3
25°	4496.0	4467.9	4457.5	4265.3	3824.8	3505.4	3255.6	3094.4	3029.4	3013.1	3016.1
27.5°	4991.2	4920.3	4785.7	4327.4	3727.2	3298.4	2989.4	2840.1	2803.2	2804.6	2809.1
30°	5650.6	5508.8	5179.0	4337.8	3567.5	3005.7	2717.4	2611.0	2593.2	2600.6	2625.7
32.5°	6261.3	6126.7	5581.1	4290.4	3322.1	2718.9	2473.4	2402.5	2375.8	2384.8	2396.6
35°	6740.3	6703.3	5953.7	4223.9	3020.5	2449.9	2254.7	2194.0	2142.2	2130.5	2139.3
37.5°	7192.7	7177.9	6233.1	4130.9	2721.9	2259.1	2078.7	1998.9	1923.5	1882.1	1883.5
40°	7689.4	7674.7	6416.5	3987.4	2457.2	2093.5	1920.5	1815.6	1722.4	1647.0	1654.4
42.5°	8248.3	8161.0	6503.7	3781.9	2232.4	1953.0	1791.9	1649.9	1527.2	1457.8	1462.2
45°	8858.9	8662.3	6502.3	3520.2	2043.2	1824.4	1654.4	1453.3	1339.5	1274.4	1271.5
47.5°	9506.5	9141.3	6422.4	3230.4	1859.9	1682.4	1441.5	1287.7	1212.4	1172.4	1163.6
50°	10174.8	9589.3	6286.4	2897.8	1672.2	1521.3	1308.4	1203.5	1145.8	1108.8	1095.5
52.5°	10803.1	9995.8	6122.3	2520.8	1481.4	1364.6	1249.3	1168.0	1107.4	1066.0	1048.3
55°	11387.0	10346.2	5890.2	2134.9	1326.1	1259.6	1221.2	1153.2	1083.7	1034.9	1015.7
57.5°	11906.0	10573.9	5489.5	1772.6	1215.3	1187.2	1191.7	1128.0	1048.3	1006.9	980.2
60°	12337.7	10741.0	4896.6	1437.0	1125.1	1116.2	1145.8	1080.8	987.6	940.3	919.6
62.5°	12596.4	10738.0	4169.3	1176.8	1048.3	1051.1	1085.2	1021.6	927.0	882.6	869.3
65°	12574.3	10474.9	3370.9	1006.9	974.3	977.2	1021.6	956.5	876.7	850.1	848.6
67.5°	12129.2	9833.2	2585.9	896.0	893.0	906.3	958.1	912.2	845.7	842.8	847.2
70°	10924.3	8501.1	1862.8	807.2	808.7	827.9	896.0	884.2	829.4	835.4	833.8
72.5°	8759.9	6481.6	1250.8	714.1	715.6	746.6	836.8	861.9	813.1	891.5	903.3
75°	5834.0	4042.1	804.3	615.0	616.5	656.4	785.0	819.1	768.7	888.6	896.0
77.5°	2803.2	1817.0	582.5	517.4	517.4	554.4	678.7	733.3	655.0	690.4	632.7
80°	968.4	683.1	458.3	417.0	408.1	433.2	572.2	635.7	564.8	520.4	487.9
82.5°	381.4	354.9	368.2	323.8	294.2	310.5	445.1	524.9	415.4	375.6	374.0
85°	218.8	230.6	260.2	214.3	170.0	190.8	326.8	377.0	313.4	276.4	282.4
87.5°	59.1	81.3	119.7	110.9	76.9	81.3	155.3	208.5	180.4	139.0	143.4
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)