

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: McGRAW-EDISON

Report Number: P237502

Luminaire Tested: **CTN-6-3-D-E1-T4-7030-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P237502  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1707-171-27)  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: CTN-6-3-D-E1-T4-7030-HSS  
Description: CELESTEON HIGH MAST LUMINAIRE  
(6) 70 CRI, 3000K LEDS AND TYPE IV OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 26621 lumens  
Efficiency: N/A  
Efficacy: 113.8 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type IV - Short - Non-Cutoff  
BUG Rating: B3 - U0 - G5

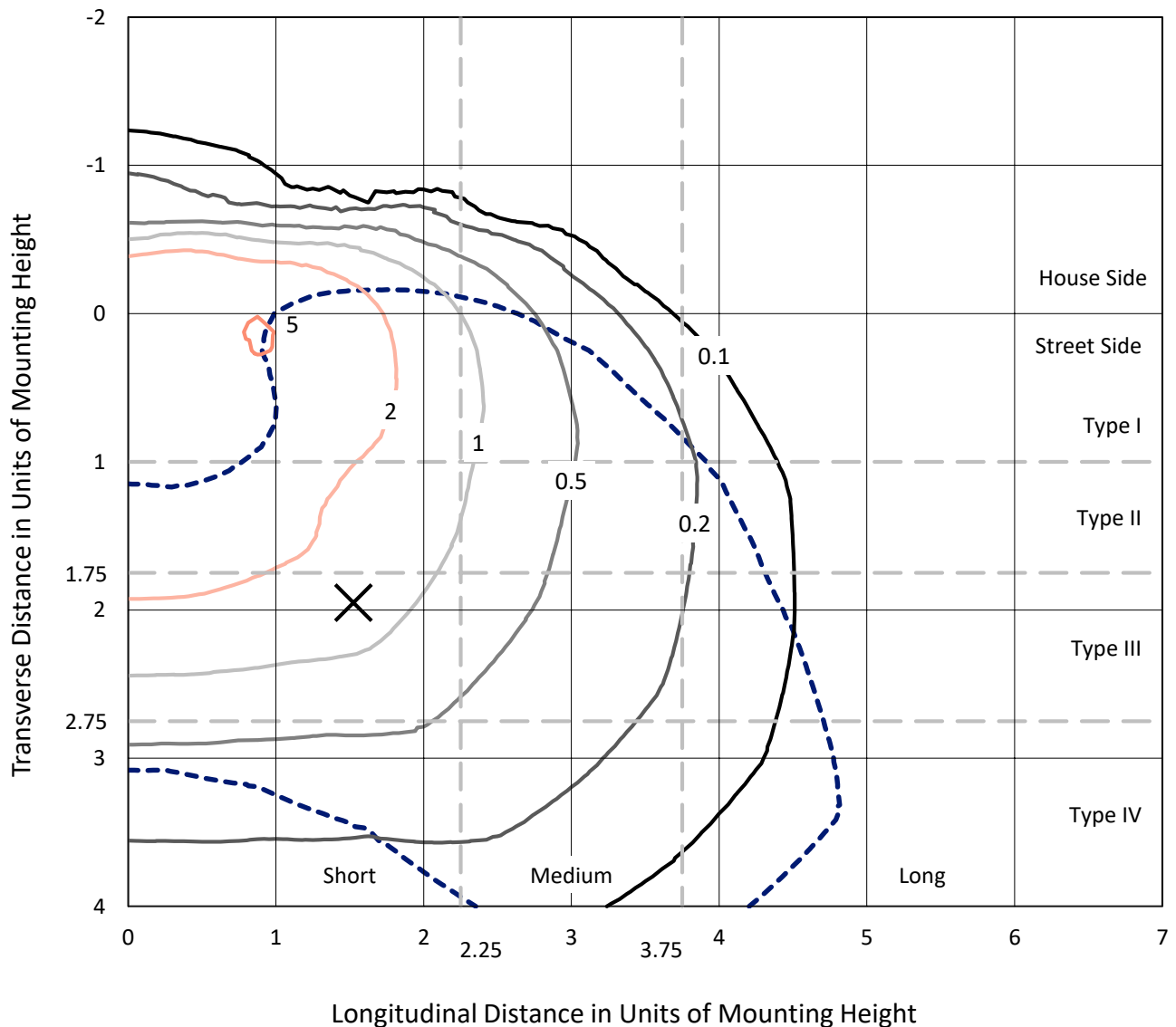
Input Watts (W): 234  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

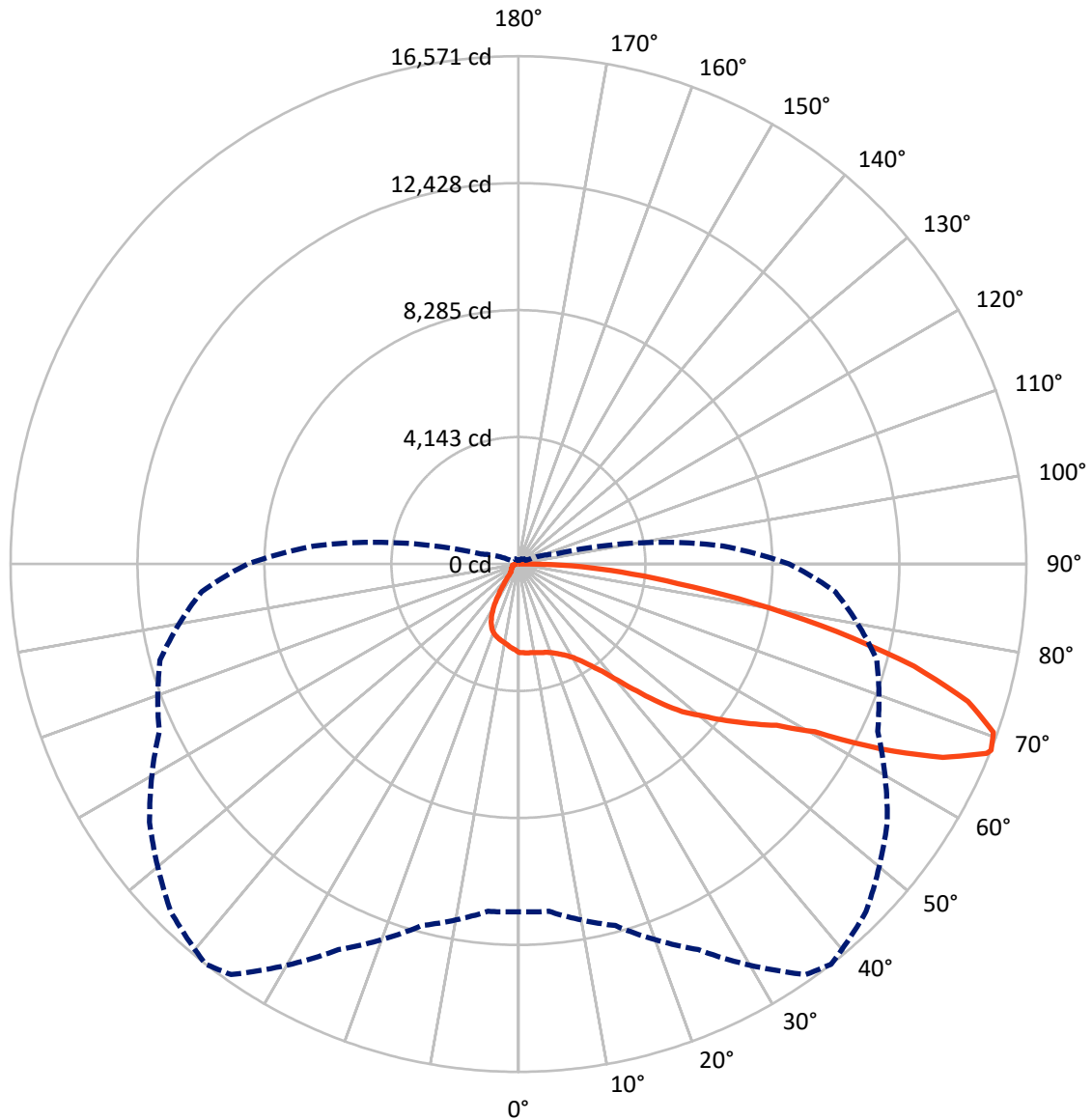
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.2 fc  
 Type IV - Short - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 38-Deg Lateral    - - - Horizontal Cone Through 68-Deg Vertical

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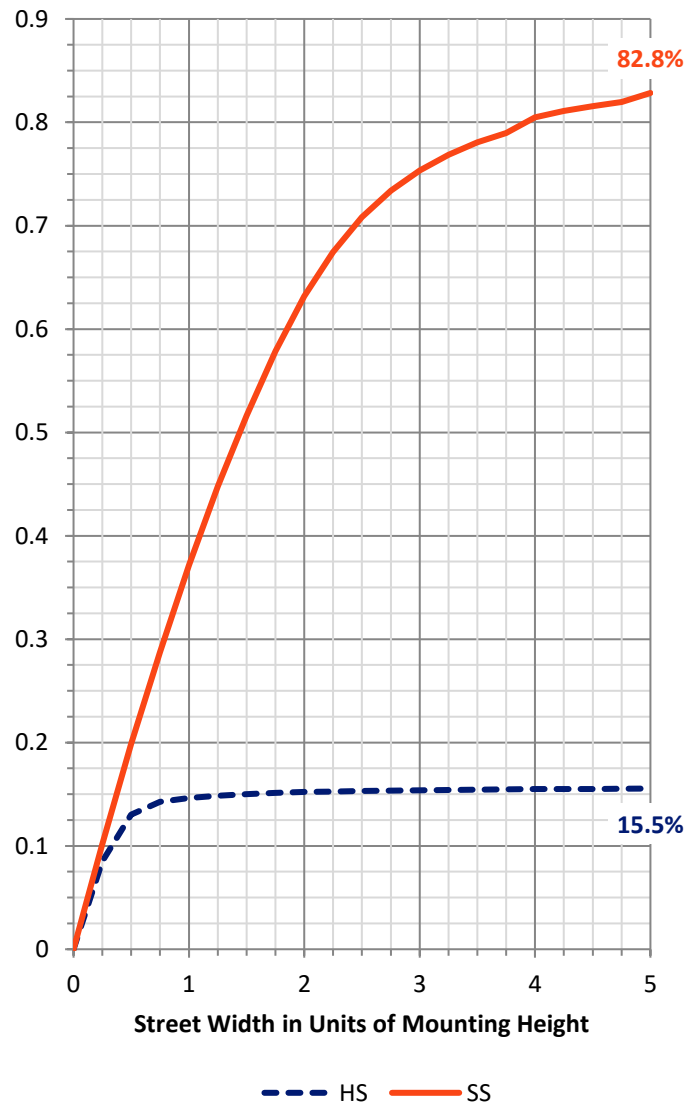
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	4198.9	0.0	4198.9
	% Fixture	15.8	0.0	15.8
<b>Street Side</b>	Lumens	22422.1	0.0	22422.1
	% Fixture	84.2	0.0	84.2
<b>Total</b>	Lumens	26621.0	0.0	26621.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	272.6	1.0
10°-20°	809.5	3.0
20°-30°	1351.0	5.1
30°-40°	2072.2	7.8
40°-50°	3567.6	13.4
50°-60°	5301.9	19.9
60°-70°	7013.9	26.3
70°-80°	5151.1	19.3
80°-90°	1081.3	4.1
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°	26621.0	100.0
0°-180°	26621.0	100.0



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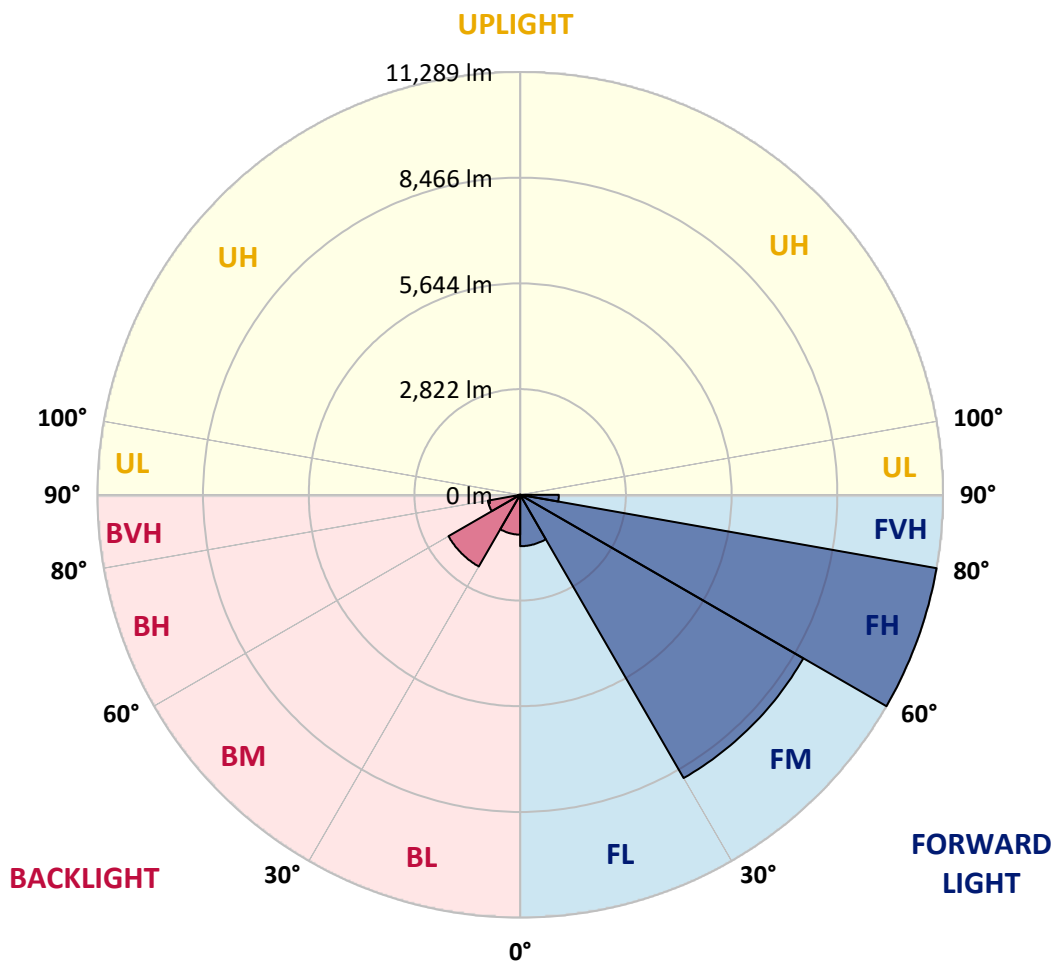
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1370.7	5.1			
FM	(30°-60°)	8731.3	32.8			
FH	(60°-80°)	11288.6	42.4			G4/12000
FVH	(80°-90°)	1031.5	3.9			G5
BL	(0°-30°)	1062.4	4.0	B3/2500		
BM	(30°-60°)	2210.4	8.3	B2/2500		
BH	(60°-80°)	876.4	3.3	B2/1000		G2/1000
BVH	(80°-90°)	49.7	0.2			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G5**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	38°	45°	55°	65°	75°	85°
0°	2891.0	2891.0	2891.0	2891.0	2891.0	2891.0	2891.0	2891.0	2891.0	2891.0	2891.0
2.5°	2952.4	2931.9	2935.8	2948.5	2896.9	2893.0	2909.5	2891.0	2915.4	2903.7	2904.7
5°	2960.1	2940.7	2948.5	2967.9	2919.3	2918.3	2936.8	2913.4	2931.9	2917.3	2913.4
7.5°	2953.3	2935.8	2941.7	2960.1	2918.3	2921.2	2945.5	2937.8	2965.0	2950.4	2939.7
10°	2950.4	2938.7	2939.7	2965.0	2931.9	2939.7	2970.8	2975.7	3019.5	3006.8	3002.0
12.5°	2924.1	2915.4	2924.1	2964.0	2953.3	2968.9	3010.7	3036.0	3087.6	3082.7	3092.5
15°	2908.6	2904.7	2911.5	2958.2	2970.8	2996.1	3051.6	3101.2	3163.5	3172.3	3194.7
17.5°	2927.1	2932.9	2945.5	2983.5	3001.0	3027.3	3089.6	3157.7	3246.2	3284.2	3310.5
20°	3004.9	3011.7	3023.4	3047.7	3067.2	3089.6	3145.0	3222.9	3340.6	3400.0	3441.8
22.5°	3117.8	3106.1	3122.6	3143.1	3148.9	3168.4	3224.8	3302.7	3436.0	3525.5	3583.9
25°	3205.4	3197.6	3214.1	3249.1	3248.2	3265.7	3321.2	3400.9	3545.0	3673.4	3776.6
27.5°	3296.8	3292.0	3298.8	3345.5	3364.0	3385.4	3434.0	3523.6	3686.1	3847.6	4010.1
30°	3429.2	3439.9	3428.2	3481.7	3521.6	3545.9	3595.6	3705.5	3879.7	4100.6	4305.9
32.5°	3634.5	3639.4	3619.9	3679.3	3736.7	3773.6	3821.3	3965.3	4156.1	4425.6	4690.3
35°	4072.4	4073.4	3993.6	3984.8	4016.9	4070.4	4140.5	4354.6	4638.7	5054.2	5353.9
37.5°	4736.0	4703.9	4628.0	4480.1	4432.4	4442.2	4542.4	4840.1	5271.2	6038.0	6325.1
40°	5497.0	5460.0	5326.7	5131.1	4991.0	4982.2	5016.3	5373.4	6004.0	7144.4	7289.4
42.5°	6318.3	6293.0	6076.9	5874.5	5695.5	5667.3	5590.4	5948.5	6811.6	8132.1	8131.1
45°	7076.3	7071.4	6807.7	6707.5	6517.8	6443.8	6352.3	6630.6	7641.7	8910.6	8817.2
47.5°	7787.6	7773.0	7492.8	7378.0	7233.0	7193.1	7085.1	7279.7	8351.1	9637.5	9404.9
50°	8542.8	8498.0	8081.5	7965.7	7822.7	7791.5	7735.1	7958.9	9123.7	10272.9	9887.6
52.5°	9420.5	9352.4	8784.1	8569.0	8466.9	8487.3	8451.3	8651.7	9987.8	10804.2	10282.6
55°	10458.8	10254.4	9711.4	9321.2	9094.5	9188.9	9118.8	9368.9	10816.9	11217.8	10570.7
57.5°	11220.7	11219.7	10998.8	10444.2	9930.4	9935.2	9794.1	10079.3	11487.3	11629.4	10739.0
60°	12092.6	12144.2	12220.1	11973.9	11367.6	11113.7	10617.4	10782.8	12026.4	11928.1	10813.9
62.5°	12850.6	12880.8	13216.5	13310.9	13357.6	13295.3	12191.8	11593.4	12467.2	12094.5	10835.4
65°	12823.4	12820.5	13546.4	14178.9	15161.7	15217.2	14899.0	12797.1	12808.8	12115.9	10724.4
67.5°	11572.0	11631.3	12602.5	13958.0	16302.2	16477.3	16038.5	14544.8	12935.3	12106.2	10459.7
68°	11348.2	11373.5	12213.3	13880.2	16350.8	16570.7	16040.4	14690.7	12931.4	12107.2	10378.0
70°	9922.6	9960.5	10939.5	12937.2	16364.5	16440.4	15800.1	14770.5	12802.9	12016.7	9788.3
72.5°	7833.4	7877.2	8769.5	10916.1	15344.7	15341.7	14722.8	14102.0	12368.0	11355.0	8303.4
75°	5675.1	5818.1	6598.5	8573.9	13135.7	13336.2	13256.4	13132.8	11130.2	9595.6	5859.9
77.5°	3979.0	4051.9	4786.6	6448.7	10322.5	10629.1	11167.2	11326.8	9278.4	7125.9	2639.0
80°	2509.6	2646.8	3255.0	4579.4	7520.0	7803.2	8455.2	8723.8	6848.6	3495.3	462.2
82.5°	1462.6	1544.3	1991.9	2966.0	5056.2	5253.7	5680.9	5351.0	2776.2	465.1	256.9
85°	708.4	783.3	1069.4	1687.3	3156.7	3356.2	3586.8	2333.5	459.3	182.9	173.2
87.5°	287.1	294.8	437.9	749.3	1573.5	1744.8	1688.3	765.8	119.7	66.2	54.5
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°	2891.0	2891.0	2891.0	2891.0	2891.0	2891.0	2891.0	2891.0	2891.0	2891.0	2891.0
2.5°	2909.5	2894.9	2877.4	2871.6	2830.7	2828.8	2794.7	2844.3	2829.7	2830.7	2842.4
5°	2911.5	2894.9	2860.9	2845.3	2801.5	2789.8	2733.4	2764.5	2731.5	2728.5	2748.0
7.5°	2931.9	2913.4	2864.8	2840.4	2758.7	2719.8	2666.3	2693.5	2642.9	2632.2	2636.1
10°	2986.4	2963.1	2903.7	2846.3	2745.1	2688.6	2583.6	2592.3	2547.5	2533.0	2545.6
12.5°	3069.1	3040.9	2969.9	2885.2	2756.8	2657.5	2529.1	2477.5	2409.4	2387.0	2393.8
15°	3182.0	3148.9	3055.5	2957.2	2782.1	2642.9	2467.8	2360.7	2228.4	2191.4	2177.8
17.5°	3305.6	3270.6	3162.5	3039.0	2826.8	2626.4	2397.7	2227.4	2036.7	1953.0	1948.1
20°	3450.6	3412.6	3299.7	3134.3	2862.8	2605.9	2310.1	2065.9	1817.7	1677.6	1667.9
22.5°	3617.0	3583.9	3456.4	3219.0	2881.3	2552.4	2177.8	1859.6	1549.2	1374.0	1365.2
25°	3812.6	3781.4	3602.4	3278.3	2860.9	2458.0	1996.8	1606.6	1232.9	1057.7	1050.0
27.5°	4046.1	3997.5	3717.2	3295.9	2800.6	2303.3	1770.1	1281.6	910.8	777.5	770.7
30°	4311.8	4225.2	3825.2	3291.0	2693.5	2105.8	1457.7	944.9	647.1	557.6	554.7
32.5°	4646.5	4494.7	3928.4	3252.1	2540.7	1846.9	1109.3	655.9	465.1	421.3	420.4
35°	5205.1	4880.0	4041.2	3182.0	2333.5	1507.3	768.7	446.6	378.5	369.8	369.8
37.5°	6038.0	5515.5	4201.8	3070.1	2064.9	1149.2	506.0	355.2	356.2	361.0	362.0
40°	6893.4	6246.3	4434.4	2903.7	1751.6	807.7	367.8	329.9	341.6	349.3	355.2
42.5°	7678.7	6908.0	4693.2	2676.0	1397.4	533.3	328.9	317.2	323.1	328.9	334.7
45°	8337.4	7487.9	4937.5	2416.2	1035.4	379.5	326.0	302.6	299.7	303.6	307.5
47.5°	8893.1	7959.9	5108.7	2123.3	704.5	325.0	318.2	287.1	277.3	278.3	280.2
50°	9317.3	8293.6	5184.6	1801.2	467.1	316.3	303.6	270.5	254.9	254.9	256.9
52.5°	9603.4	8502.9	5139.9	1438.2	335.7	311.4	291.9	253.0	234.5	237.4	239.4
55°	9815.6	8614.8	4963.7	1056.8	295.8	296.8	278.3	232.6	217.0	224.8	227.7
57.5°	9898.3	8611.8	4667.9	729.8	293.9	274.4	258.8	215.1	202.4	213.1	218.0
60°	9868.1	8469.8	4237.8	497.2	288.0	256.9	238.4	198.5	188.8	188.8	189.8
62.5°	9807.8	8270.3	3614.1	368.8	274.4	244.2	222.8	184.9	173.2	167.4	165.4
65°	9535.3	7786.7	2653.6	318.2	260.8	237.4	208.2	172.2	156.7	146.9	145.0
67.5°	8996.2	6954.7	1483.0	293.9	251.1	233.5	198.5	160.6	143.0	131.4	130.4
68°	8830.8	6694.9	1257.2	291.9	253.0	233.5	197.5	157.6	141.1	128.4	127.5
70°	7851.9	5400.6	519.6	274.4	266.6	234.5	192.7	148.9	133.3	120.7	119.7
72.5°	5938.8	3128.5	274.4	238.4	259.8	230.6	194.6	142.1	126.5	111.9	110.0
75°	3272.5	896.2	244.2	193.6	240.4	243.3	198.5	141.1	122.6	104.1	100.2
77.5°	726.9	291.9	227.7	169.3	207.3	223.8	183.9	134.3	124.6	95.4	91.5
80°	278.3	237.4	216.0	130.4	164.5	189.8	152.8	119.7	127.5	89.5	84.7
82.5°	232.6	208.2	198.5	101.2	113.9	139.2	122.6	102.2	117.7	82.7	78.8
85°	171.3	201.4	140.1	79.8	83.7	85.6	85.6	79.8	101.2	73.0	69.1
87.5°	69.1	97.3	59.4	37.0	42.8	39.9	35.0	42.8	58.4	51.6	51.6
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)