

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: P232711

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P232711  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1707-171-20)  
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  
Description: CELESTEON HIGH MAST LUMINAIRE  
(6) 70 CRI, 3000K LEDS AND TYPE IV OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 29953 lumens  
Efficiency: N/A  
Efficacy: 128.0 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type IV - Short - Non-Cutoff  
BUG Rating: B3 - U0 - G5

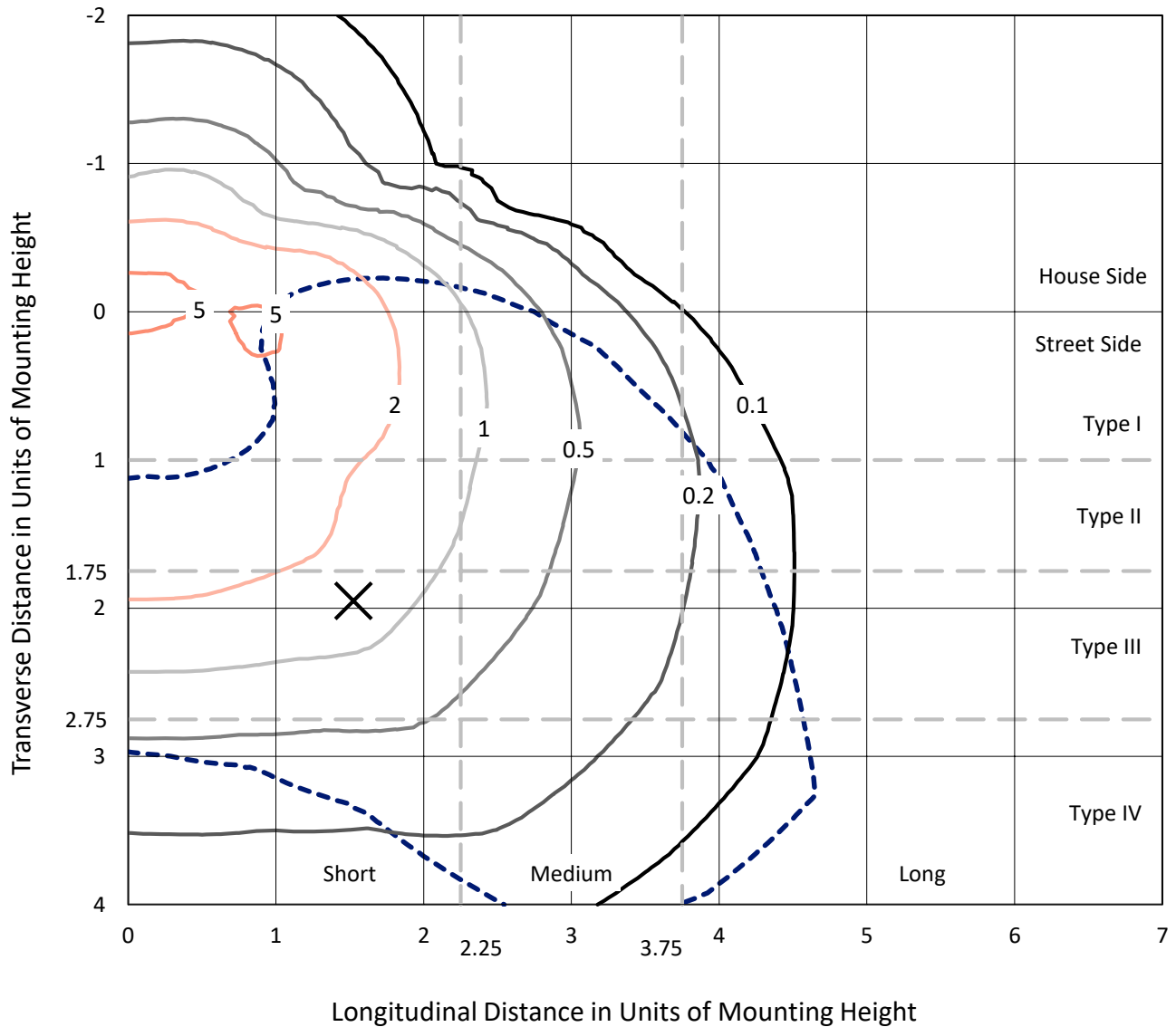
Input Watts (W): 234  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

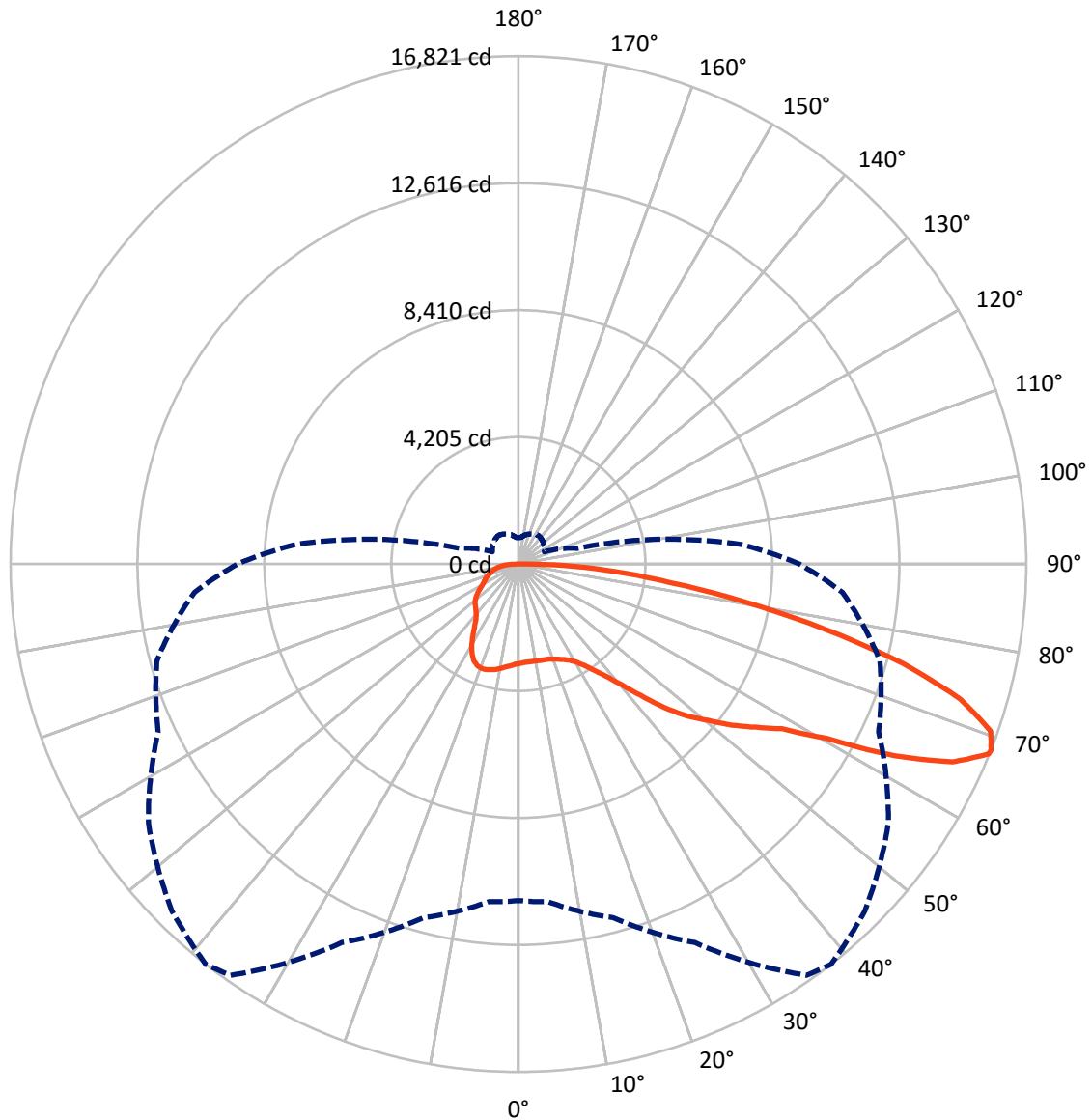
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.5 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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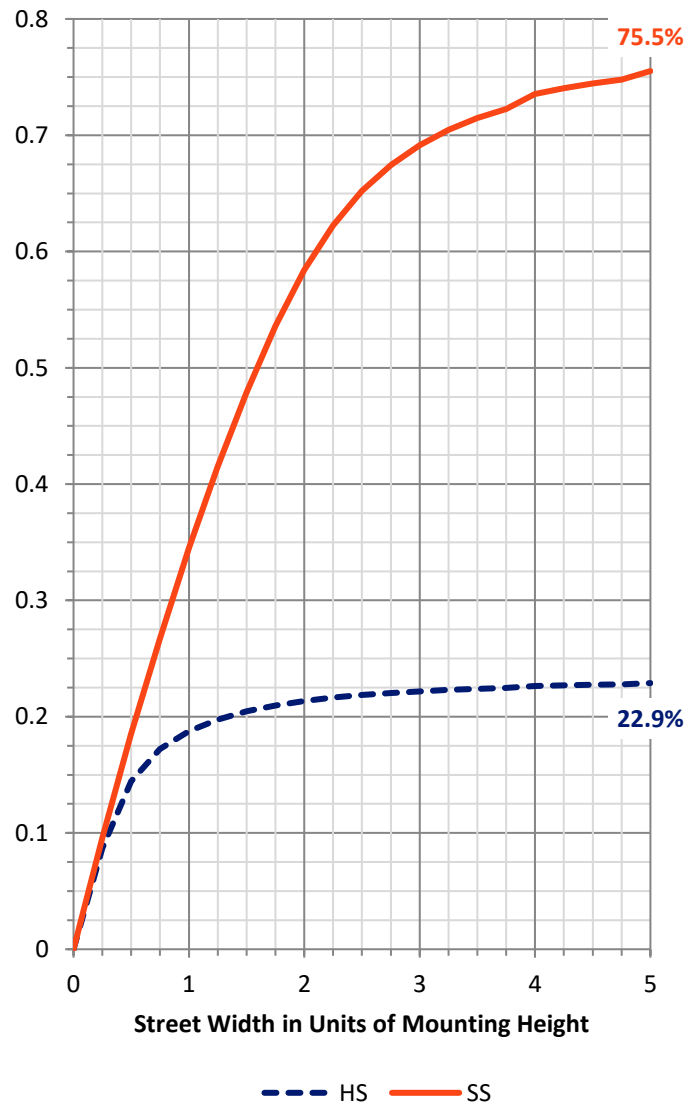
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	6990.4	0.0	6990.4
	% Fixture	23.3	0.0	23.3
<b>Street Side</b>	Lumens	22962.6	0.0	22962.6
	% Fixture	76.7	0.0	76.7
<b>Total</b>	Lumens	29953.0	0.0	29953.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	319.1	1.1
10°-20°	985.1	3.3
20°-30°	1673.6	5.6
30°-40°	2534.4	8.5
40°-50°	4191.8	14.0
50°-60°	6038.1	20.2
60°-70°	7614.9	25.4
70°-80°	5419.7	18.1
80°-90°	1176.4	3.9
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°	29953.0	100.0
0°-180°	29953.0	100.0



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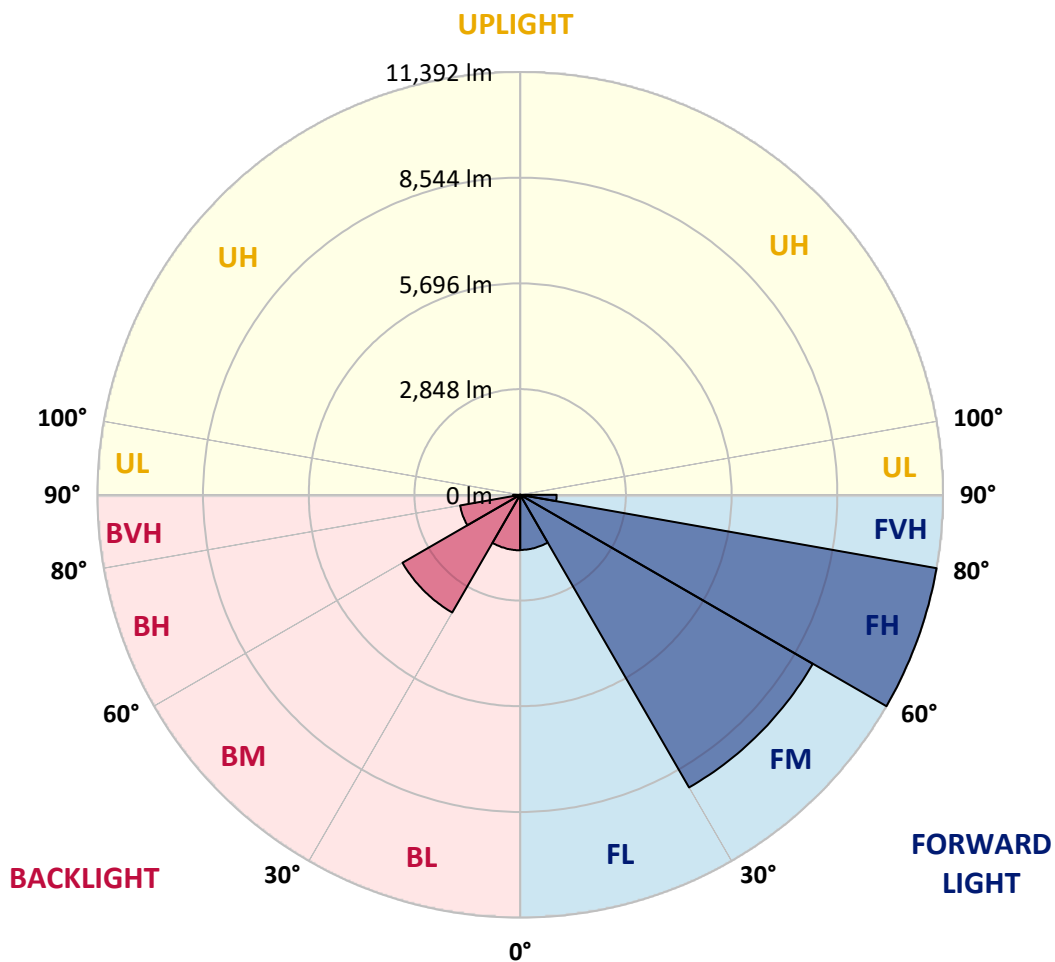
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1484.0	5.0			
FM (30°-60°)	9103.7	30.4			
FH (60°-80°)	11391.6	38.0			G4/12000
FVH (80°-90°)	983.3	3.3			G5
BL (0°-30°)	1493.7	5.0	B3/2500		
BM (30°-60°)	3660.6	12.2	B3/5000		
BH (60°-80°)	1643.0	5.5	B3/2500		G3/2500
BVH (80°-90°)	193.0	0.6			G2/225
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°	3299.8	3299.8	3299.8	3299.8	3299.8	3299.8	3299.8	3299.8	3299.8	3299.8	3299.8
2.5°	3288.1	3293.9	3290.0	3288.1	3262.8	3268.6	3278.4	3264.7	3297.8	3295.9	3315.3
5°	3257.0	3259.9	3260.8	3269.6	3245.3	3257.9	3269.6	3260.8	3295.9	3286.1	3313.4
7.5°	3248.2	3247.2	3248.2	3264.7	3238.5	3257.9	3271.5	3268.6	3306.6	3298.8	3331.9
10°	3225.8	3226.8	3229.7	3248.2	3234.6	3260.8	3285.2	3297.8	3348.4	3341.6	3379.6
12.5°	3186.9	3194.7	3205.4	3236.5	3239.4	3274.5	3310.5	3335.8	3401.9	3407.8	3455.5
15°	3152.8	3166.5	3184.9	3226.8	3244.3	3284.2	3329.9	3376.6	3463.2	3489.5	3549.9
17.5°	3163.5	3184.0	3208.3	3251.1	3263.8	3305.6	3357.2	3419.5	3526.5	3582.9	3660.8
20°	3229.7	3243.3	3263.8	3303.7	3320.2	3362.0	3403.9	3465.2	3604.3	3695.8	3792.2
22.5°	3312.4	3331.9	3345.5	3369.8	3389.3	3426.3	3470.1	3530.4	3694.8	3809.7	3942.0
25°	3401.0	3410.7	3430.2	3446.7	3471.0	3500.2	3549.9	3623.8	3798.0	3939.1	4124.0
27.5°	3482.7	3487.6	3524.6	3538.2	3585.9	3607.3	3646.2	3744.5	3932.3	4106.5	4334.2
30°	3602.4	3612.1	3640.4	3672.5	3742.5	3763.9	3803.8	3907.0	4111.3	4334.2	4607.6
32.5°	3829.1	3854.4	3850.5	3884.6	3967.3	3995.5	4050.0	4184.3	4407.2	4663.1	4988.1
35°	4288.4	4324.4	4279.7	4233.9	4277.7	4315.7	4399.4	4595.9	4871.3	5293.6	5614.8
37.5°	5040.6	5076.6	4917.1	4771.1	4675.7	4705.9	4819.7	5098.0	5519.4	6253.1	6611.2
40°	5919.3	5958.3	5736.4	5473.7	5258.6	5246.9	5282.0	5636.2	6244.4	7320.6	7599.9
42.5°	6685.2	6787.3	6497.4	6270.6	5992.3	5945.6	5861.0	6219.1	7011.2	8309.3	8466.9
45°	7429.6	7528.8	7300.2	7143.5	6859.4	6783.5	6622.9	6839.9	7763.4	9174.3	9181.2
47.5°	8112.7	8192.5	7926.8	7826.6	7546.4	7513.3	7348.8	7500.6	8460.1	9907.1	9768.9
50°	8876.6	8960.3	8537.0	8413.4	8187.6	8142.9	8089.3	8198.3	9259.0	10538.6	10268.1
52.5°	9810.8	9779.6	9257.1	8973.9	8854.2	8864.9	8804.6	8925.2	10106.6	11073.8	10661.2
55°	10928.8	10769.3	10195.1	9766.0	9490.6	9543.2	9464.3	9641.4	10944.4	11525.3	10945.4
57.5°	11564.3	11608.1	11553.6	11001.8	10301.2	10293.4	10168.9	10339.1	11676.2	11894.2	11118.6
60°	12490.7	12671.7	12740.7	12591.9	11963.2	11715.1	11091.3	11052.4	12294.1	12212.4	11207.1
62.5°	13076.5	13161.1	13576.6	13756.7	13959.1	14001.9	13011.3	11911.7	12750.5	12374.9	11244.1
65°	12796.2	12881.8	13658.4	14363.9	15564.7	15806.0	15490.7	13273.0	13058.9	12410.9	11120.5
67.5°	11359.9	11465.0	12507.2	13953.2	16535.8	16795.6	16286.7	14842.6	13160.1	12389.5	10852.0
68°	11149.7	11227.6	12126.7	13833.5	16633.1	16820.9	16234.2	14961.3	13166.0	12396.3	10769.3
70°	9534.4	9671.6	10618.4	12744.6	16476.5	16596.2	15906.2	14895.2	13033.6	12285.3	10164.0
72.5°	7431.5	7621.3	8341.4	10585.3	15218.2	15315.6	14737.5	14165.4	12633.7	11515.6	8712.1
75°	5384.1	5546.6	6239.5	8169.1	12811.8	13157.2	13059.9	13163.1	11324.9	9757.2	6309.6
77.5°	3718.2	3857.4	4503.5	6095.5	9934.3	10371.3	10876.3	11143.9	9305.7	7238.9	2999.1
80°	2382.1	2489.2	3039.0	4292.3	7163.9	7574.6	8118.5	8395.9	6619.0	3641.3	532.3
82.5°	1400.3	1473.3	1848.9	2769.4	4828.5	5078.6	5341.3	4876.2	2656.6	696.7	335.7
85°	695.8	744.4	975.0	1566.7	3002.0	3231.7	3319.2	2080.5	561.5	255.0	228.7
87.5°	311.4	325.0	418.4	705.5	1426.6	1503.4	1466.5	647.1	112.9	95.4	81.7
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°	3299.8	3299.8	3299.8	3299.8	3299.8	3299.8	3299.8	3299.8	3299.8	3299.8	3299.8
2.5°	3317.3	3309.5	3307.6	3320.2	3306.6	3323.1	3318.3	3355.2	3360.1	3346.5	3368.9
5°	3322.1	3318.3	3321.2	3344.5	3339.7	3373.7	3382.5	3419.5	3419.5	3408.8	3432.1
7.5°	3344.5	3344.5	3353.3	3396.1	3396.1	3425.3	3435.0	3475.9	3474.9	3474.9	3496.3
10°	3401.0	3401.0	3419.5	3474.0	3460.3	3498.3	3503.1	3524.6	3519.7	3520.7	3543.0
12.5°	3484.7	3489.5	3521.6	3569.3	3560.6	3574.2	3564.5	3560.6	3525.5	3525.5	3540.1
15°	3581.0	3601.4	3645.2	3689.0	3659.8	3654.9	3599.5	3550.8	3475.9	3443.8	3460.3
17.5°	3706.5	3741.6	3792.2	3823.3	3767.8	3727.9	3627.7	3501.2	3379.6	3308.5	3310.5
20°	3845.7	3892.4	3954.7	3965.4	3883.6	3784.4	3617.0	3418.5	3209.3	3096.4	3088.6
22.5°	4000.4	4058.8	4130.8	4088.9	3955.6	3794.1	3554.7	3291.0	3009.8	2820.0	2817.1
25°	4189.2	4252.4	4298.2	4181.4	3972.2	3744.5	3446.7	3092.5	2745.1	2540.8	2527.1
27.5°	4429.5	4471.4	4437.3	4229.1	3922.5	3625.8	3263.8	2837.5	2469.7	2284.8	2264.4
30°	4714.6	4709.8	4524.9	4215.5	3822.3	3437.9	3014.7	2561.2	2244.0	2085.3	2066.9
32.5°	5061.1	4991.0	4609.6	4150.3	3660.8	3191.8	2718.8	2331.5	2080.5	1919.9	1900.5
35°	5613.8	5416.3	4719.5	4052.0	3436.0	2895.0	2439.6	2154.4	1954.0	1770.1	1732.1
37.5°	6471.1	6054.6	4902.5	3948.8	3178.1	2604.0	2231.3	2026.0	1854.7	1646.5	1601.7
40°	7352.7	6796.1	5180.8	3837.9	2936.8	2384.1	2113.6	1965.7	1794.4	1593.9	1549.2
42.5°	8118.5	7488.0	5514.5	3698.7	2689.6	2210.9	2053.2	1946.2	1774.9	1584.2	1541.4
45°	8794.8	8109.8	5862.9	3537.2	2430.8	2070.7	2001.7	1918.9	1745.7	1561.8	1522.9
47.5°	9358.3	8605.1	6169.4	3358.2	2176.8	1967.6	1951.1	1854.7	1690.3	1513.2	1480.1
50°	9794.2	8957.3	6374.8	3158.7	1959.8	1886.8	1878.1	1756.4	1596.9	1427.5	1394.4
52.5°	10103.7	9193.8	6494.4	3083.7	1789.5	1793.4	1778.8	1649.4	1494.7	1326.3	1300.1
55°	10300.2	9356.3	6465.2	2987.4	1617.3	1662.0	1664.0	1570.6	1434.3	1270.9	1249.5
57.5°	10375.1	9349.5	6293.0	2504.7	1449.9	1504.4	1530.7	1516.1	1395.4	1235.8	1218.3
60°	10334.3	9239.5	5926.2	1835.3	1276.7	1350.7	1414.9	1412.0	1309.8	1159.0	1140.5
62.5°	10266.2	8984.6	5207.0	1313.7	1146.3	1241.7	1319.5	1293.2	1195.9	1063.6	1050.9
65°	10021.9	8535.0	4025.7	1050.9	1091.8	1180.4	1244.6	1199.8	1104.5	966.3	959.5
67.5°	9481.8	7635.9	2350.0	958.5	1051.9	1128.8	1174.5	1119.1	1030.5	896.2	884.5
68°	9298.9	7405.3	1998.7	949.7	1044.1	1116.1	1158.0	1099.6	1013.0	882.6	870.9
70°	8375.4	6002.1	953.6	913.7	1010.1	1057.8	1082.1	1028.6	943.9	828.1	820.3
72.5°	6518.8	3620.9	637.4	859.2	943.9	989.6	995.5	911.8	832.0	746.4	741.5
75°	3851.5	1201.8	592.6	778.5	852.4	915.7	932.2	848.5	760.0	660.7	658.8
77.5°	938.1	466.1	559.5	694.8	772.6	833.9	846.6	785.3	707.4	595.5	591.6
80°	386.3	387.3	521.6	576.1	662.7	722.0	740.5	686.0	616.0	544.0	536.2
82.5°	321.1	327.0	442.8	425.2	530.3	599.4	617.9	580.0	555.6	477.8	470.0
85°	228.7	290.0	293.9	286.1	371.7	427.2	520.6	502.1	475.8	409.7	370.7
87.5°	107.0	169.3	127.5	122.6	188.8	253.0	297.8	312.4	270.5	210.2	194.6
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)