

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: P232727

Luminaire Tested: **CTN-6-3-D-E1-T4-7050**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P232727  
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-T4-7050  
Description: CELESTEON HIGH MAST LUMINAIRE  
(6) 70 CRI, 5000K LEDS AND TYPE IV OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 31094 lumens  
Efficiency: N/A  
Efficacy: 132.9 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type IV - Short - Non-Cutoff  
BUG Rating: B3 - U0 - G5

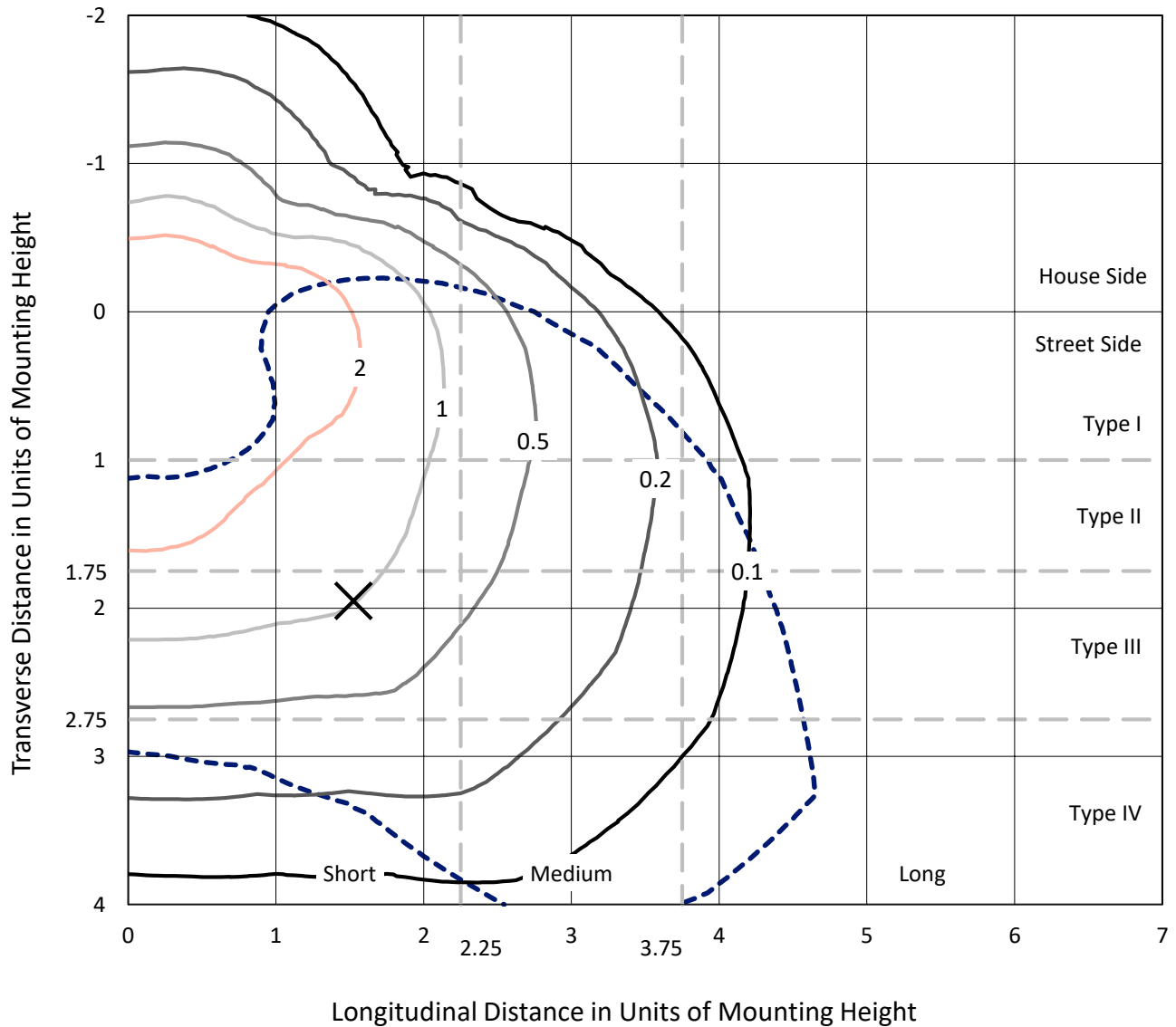
Input Watts (W): 234  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

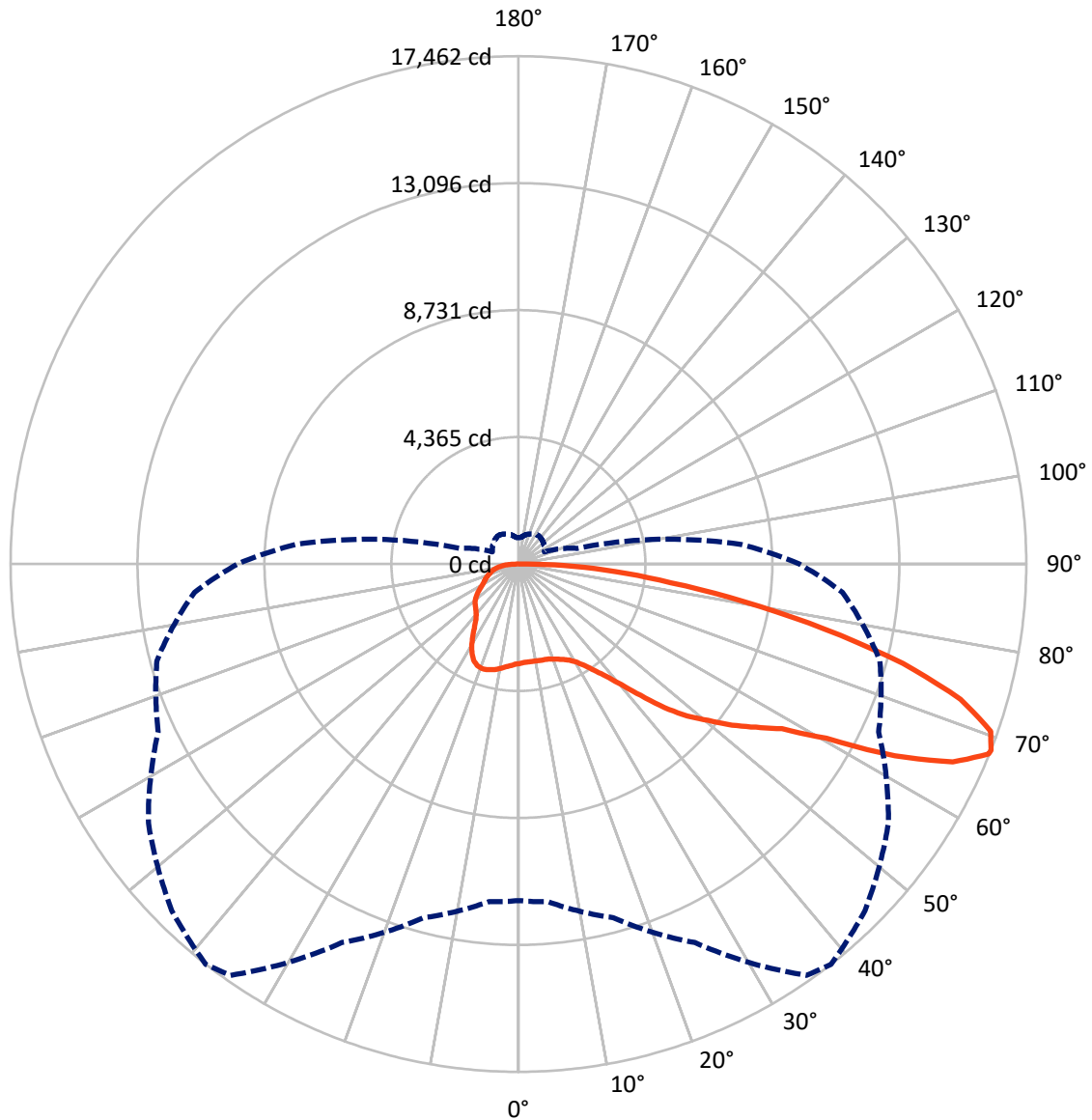


Based on 30 foot mounting height. Maximum calculated value = 3.9 fc  
 Type IV - Short - Non-Cutoff

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### Luminous Intensity Polar Plot



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

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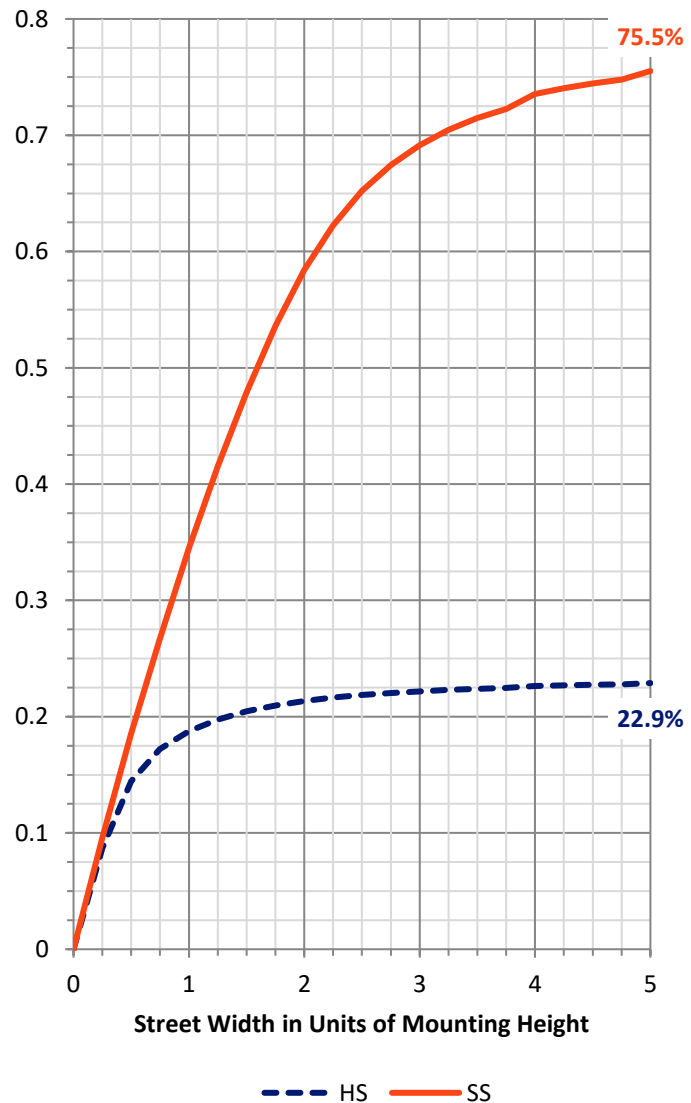
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	7256.7	0.0	7256.7
	% Fixture	23.3	0.0	23.3
<b>Street Side</b>	Lumens	23837.3	0.0	23837.3
	% Fixture	76.7	0.0	76.7
<b>Total</b>	Lumens	31094.0	0.0	31094.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	331.3	1.1
10°-20°	1022.6	3.3
20°-30°	1737.3	5.6
30°-40°	2630.9	8.5
40°-50°	4351.5	14.0
50°-60°	6268.1	20.2
60°-70°	7905.0	25.4
70°-80°	5626.1	18.1
80°-90°	1221.2	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°	31094.0	100.0
0°-180°	31094.0	100.0



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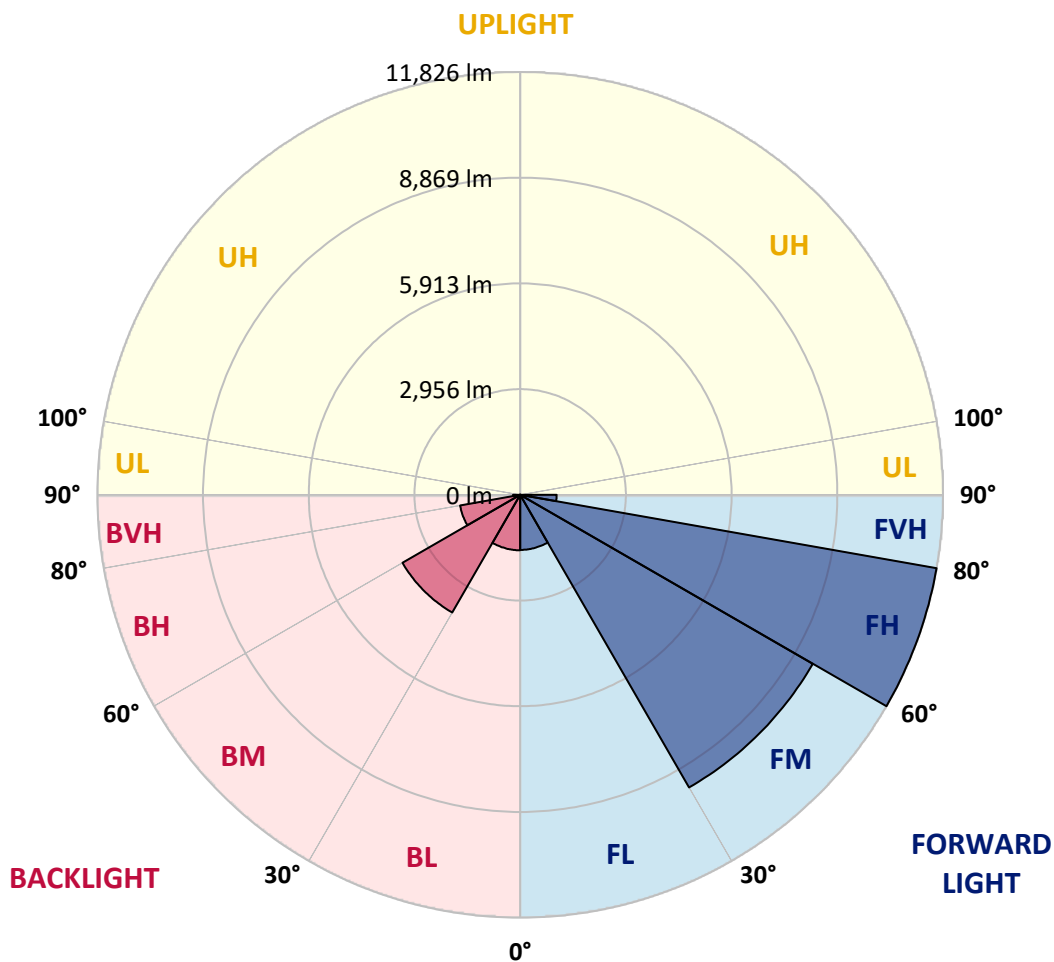
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1540.6	5.0			
FM	(30°-60°)	9450.4	30.4			
FH	(60°-80°)	11825.6	38.0			G4/12000
FVH	(80°-90°)	1020.8	3.3			G5
BL	(0°-30°)	1550.6	5.0	B3/2500		
BM	(30°-60°)	3800.1	12.2	B3/5000		
BH	(60°-80°)	1705.6	5.5	B3/2500		G3/2500
BVH	(80°-90°)	200.4	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°	3425.5	3425.5	3425.5	3425.5	3425.5	3425.5	3425.5	3425.5	3425.5	3425.5	3425.5
2.5°	3413.3	3419.4	3415.4	3413.3	3387.1	3393.1	3403.2	3389.1	3423.4	3421.4	3441.6
5°	3381.0	3384.0	3385.1	3394.2	3368.9	3382.0	3394.2	3385.1	3421.4	3411.3	3439.6
7.5°	3371.9	3370.9	3371.9	3389.1	3361.8	3382.0	3396.2	3393.1	3432.5	3424.5	3458.8
10°	3348.7	3349.7	3352.7	3371.9	3357.8	3385.1	3410.3	3423.4	3476.0	3468.9	3508.3
12.5°	3308.3	3316.4	3327.5	3359.8	3362.8	3399.2	3436.6	3462.8	3531.5	3537.6	3587.1
15°	3272.9	3287.1	3306.3	3349.7	3367.9	3409.3	3456.8	3505.3	3595.2	3622.4	3685.1
17.5°	3284.0	3305.3	3330.5	3375.0	3388.1	3431.5	3485.1	3549.7	3660.8	3719.4	3800.2
20°	3352.7	3366.9	3388.1	3429.5	3446.7	3490.1	3533.6	3597.2	3741.6	3836.6	3936.6
22.5°	3438.6	3458.8	3472.9	3498.2	3518.4	3556.8	3602.2	3664.9	3835.6	3954.8	4092.2
25°	3530.5	3540.6	3560.8	3578.0	3603.3	3633.6	3685.1	3761.9	3942.7	4089.1	4281.1
27.5°	3615.4	3620.4	3658.8	3673.0	3722.5	3744.7	3785.1	3887.1	4082.1	4262.9	4499.3
30°	3739.6	3749.7	3779.0	3812.4	3885.1	3907.3	3948.7	4055.8	4267.9	4499.3	4783.1
32.5°	3975.0	4001.3	3997.2	4032.6	4118.4	4147.7	4204.3	4343.7	4575.0	4840.7	5178.1
35°	4451.8	4489.2	4442.7	4395.2	4440.7	4480.1	4567.0	4771.0	5056.9	5495.3	5828.6
37.5°	5232.6	5270.0	5104.4	4952.8	4853.8	4885.2	5003.3	5292.2	5729.7	6491.3	6863.1
40°	6144.8	6185.2	5954.9	5682.2	5458.9	5446.8	5483.2	5850.9	6482.2	7599.5	7889.4
42.5°	6939.8	7045.9	6744.9	6509.5	6220.6	6172.1	6084.2	6456.0	7278.2	8625.8	8789.4
45°	7712.6	7815.6	7578.3	7415.6	7120.6	7041.9	6875.2	7100.4	8059.1	9523.8	9530.9
47.5°	8421.7	8504.6	8228.8	8124.7	7833.8	7799.5	7628.8	7786.3	8782.4	10284.5	10141.0
50°	9214.7	9301.6	8862.2	8733.9	8499.5	8453.1	8397.5	8510.6	9611.7	10940.1	10659.3
52.5°	10184.5	10152.1	9609.7	9315.7	9191.5	9202.6	9140.0	9265.2	10491.6	11495.7	11067.4
55°	11345.2	11179.5	10583.5	10138.0	9852.1	9906.7	9824.9	10008.7	11361.3	11964.4	11362.3
57.5°	12004.8	12050.2	11993.7	11420.9	10693.6	10685.5	10556.2	10733.0	12121.0	12347.2	11542.1
60°	12966.5	13154.4	13226.1	13071.5	12419.0	12161.4	11513.9	11473.4	12762.4	12677.6	11634.1
62.5°	13574.6	13662.5	14093.8	14280.7	14490.8	14535.3	13506.9	12365.4	13236.2	12846.3	11672.4
65°	13283.7	13372.6	14178.7	14911.0	16157.6	16408.1	16080.8	13778.6	13556.4	12883.6	11544.2
67.5°	11792.7	11901.8	12983.6	14484.7	17165.7	17435.4	16907.1	15408.0	13661.5	12861.4	11265.3
68°	11574.5	11655.3	12588.7	14360.5	17266.7	17461.7	16852.6	15531.3	13667.5	12868.5	11179.5
70°	9897.6	10040.0	11022.9	13230.1	17104.1	17228.3	16512.1	15462.6	13530.1	12753.3	10551.2
72.5°	7714.6	7911.6	8659.1	10988.6	15798.0	15899.0	15298.9	14705.0	13115.0	11954.3	9044.0
75°	5589.2	5757.9	6477.2	8480.3	13299.8	13658.4	13557.4	13664.5	11756.3	10128.9	6549.9
77.5°	3859.8	4004.3	4675.0	6327.7	10312.8	10766.3	11290.6	11568.4	9660.2	7514.6	3113.3
80°	2472.9	2584.0	3154.7	4455.8	7436.8	7863.1	8427.8	8715.7	6871.1	3780.0	552.6
82.5°	1453.6	1529.4	1919.3	2874.9	5012.4	5272.0	5544.8	5061.9	2757.7	723.3	348.5
85°	722.3	772.8	1012.2	1626.4	3116.4	3354.8	3445.7	2159.7	582.9	264.7	237.4
87.5°	323.3	337.4	434.4	732.4	1480.9	1560.7	1522.3	671.8	117.2	99.0	84.9
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°	3425.5	3425.5	3425.5	3425.5	3425.5	3425.5	3425.5	3425.5	3425.5	3425.5	3425.5
2.5°	3443.6	3435.6	3433.5	3446.7	3432.5	3449.7	3444.7	3483.0	3488.1	3474.0	3497.2
5°	3448.7	3444.7	3447.7	3471.9	3466.9	3502.2	3511.3	3549.7	3549.7	3538.6	3562.8
7.5°	3471.9	3471.9	3481.0	3525.5	3525.5	3555.8	3565.9	3608.3	3607.3	3607.3	3629.5
10°	3530.5	3530.5	3549.7	3606.3	3592.1	3631.5	3636.6	3658.8	3653.8	3654.8	3678.0
12.5°	3617.4	3622.4	3655.8	3705.3	3696.2	3710.3	3700.2	3696.2	3659.8	3659.8	3675.0
15°	3717.4	3738.6	3784.1	3829.5	3799.2	3794.2	3736.6	3686.1	3608.3	3575.0	3592.1
17.5°	3847.7	3884.1	3936.6	3968.9	3911.4	3869.9	3765.9	3634.6	3508.3	3434.6	3436.6
20°	3992.2	4040.7	4105.3	4116.4	4031.6	3928.5	3754.8	3548.7	3331.5	3214.3	3206.3
22.5°	4152.8	4213.4	4288.1	4244.7	4106.3	3938.6	3690.1	3416.4	3124.4	2927.5	2924.4
25°	4348.8	4414.4	4461.9	4340.7	4123.5	3887.1	3578.0	3210.3	2849.7	2637.5	2623.4
27.5°	4598.3	4641.7	4606.3	4390.2	4072.0	3763.9	3388.1	2945.6	2563.8	2371.9	2350.7
30°	4894.2	4889.2	4697.3	4376.0	3967.9	3568.9	3129.5	2658.8	2329.4	2164.8	2145.6
32.5°	5253.9	5181.1	4785.1	4308.3	3800.2	3313.3	2822.4	2420.4	2159.7	1993.1	1972.9
35°	5827.6	5622.6	4899.3	4206.3	3566.9	3005.2	2532.5	2236.5	2028.4	1837.5	1798.1
37.5°	6717.6	6285.2	5089.2	4099.2	3299.2	2703.2	2316.3	2103.2	1925.4	1709.2	1662.7
40°	7632.8	7055.0	5378.1	3984.1	3048.7	2474.9	2194.1	2040.5	1862.7	1654.6	1608.2
42.5°	8427.8	7773.2	5724.6	3839.6	2792.1	2295.1	2131.4	2020.3	1842.5	1644.5	1600.1
45°	9129.9	8418.7	6086.2	3671.9	2523.4	2149.6	2077.9	1992.0	1812.2	1621.3	1580.9
47.5°	9714.7	8932.9	6404.4	3486.1	2259.7	2042.6	2025.4	1925.4	1754.7	1570.8	1536.5
50°	10167.3	9298.6	6617.6	3279.0	2034.5	1958.7	1949.6	1823.3	1657.7	1481.9	1447.6
52.5°	10488.5	9544.0	6741.8	3201.2	1857.7	1861.7	1846.6	1712.2	1551.6	1376.9	1349.6
55°	10692.6	9712.7	6711.5	3101.2	1678.9	1725.4	1727.4	1630.4	1489.0	1319.3	1297.1
57.5°	10770.4	9705.7	6532.7	2600.2	1505.1	1561.7	1589.0	1573.8	1448.6	1282.9	1264.7
60°	10727.9	9591.5	6151.9	1905.2	1325.3	1402.1	1468.8	1465.7	1359.7	1203.1	1183.9
62.5°	10657.2	9326.8	5405.4	1363.7	1190.0	1289.0	1369.8	1342.5	1241.5	1104.1	1091.0
65°	10403.7	8860.1	4179.0	1091.0	1133.4	1225.3	1292.0	1245.5	1146.5	1003.1	996.0
67.5°	9843.0	7926.8	2439.5	995.0	1092.0	1171.8	1219.3	1161.7	1069.8	930.4	918.2
68°	9653.1	7687.3	2074.9	985.9	1083.9	1158.7	1202.1	1141.5	1051.6	916.2	904.1
70°	8694.5	6230.7	990.0	948.5	1048.6	1098.0	1123.3	1067.7	979.9	859.6	851.6
72.5°	6767.1	3758.8	661.7	892.0	979.9	1027.3	1033.4	946.5	863.7	774.8	769.7
75°	3998.2	1247.6	615.2	808.1	884.9	950.6	967.7	880.9	788.9	685.9	683.9
77.5°	973.8	483.9	580.8	721.3	802.1	865.7	878.8	815.2	734.4	618.2	614.2
80°	401.0	402.0	541.4	598.0	687.9	749.5	768.7	712.2	639.4	564.7	556.6
82.5°	333.4	339.4	459.6	441.4	550.5	622.3	641.5	602.1	576.8	496.0	487.9
85°	237.4	301.0	305.1	297.0	385.9	443.5	540.4	521.2	494.0	425.3	384.9
87.5°	111.1	175.8	132.3	127.3	196.0	262.6	309.1	324.3	280.8	218.2	202.0
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)