

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: ITL52706\_320MP

Luminaire Tested: **GSM-XX-320-MP-XX-2S-FG**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: ITL52706\_320MP  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GSM-XX-320-MP-XX-2S-FG  
Description: ARCHITECTURAL AREA LUMINAIRE - TYPE II DISTRIBUTION  
Light Source: 320 WATT PULSE-START CLEAR ED-28 HORIZONTAL BURN  
Ballast/Driver: -

**Summary**

Lumens per Lamp: 30000 (1 lamp)  
Luminaire Lumens: 20057.2 lumens  
Efficiency: 66.9%  
Efficacy: 57.3 lumens/watt  
Luminous Opening: Rectangular (W 1.03' x L: 1.01' x H: 0')  
IES Classification: Type II - Medium - Full Cutoff  
BUG Rating: B3 - U0 - G3

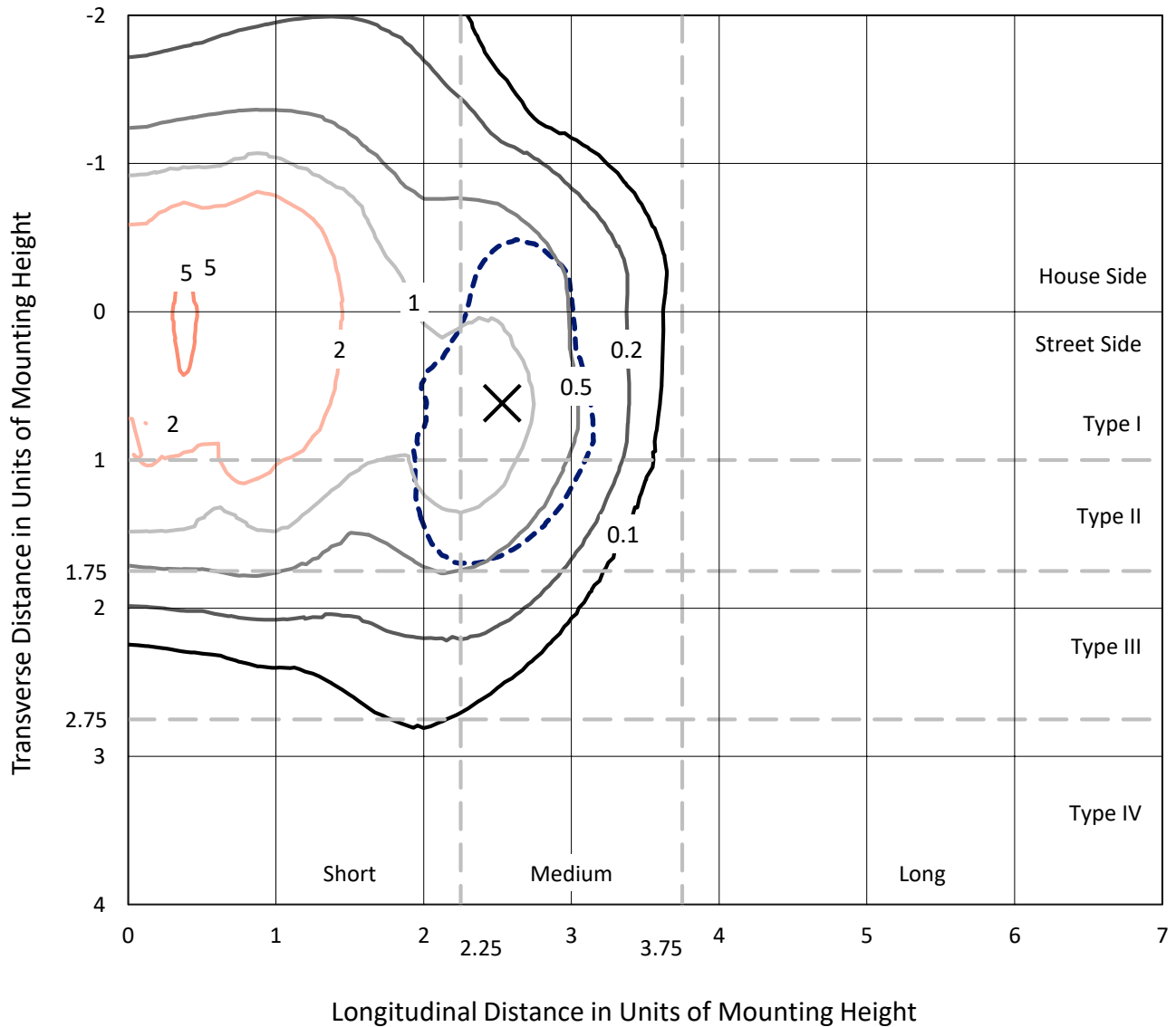
Input Watts (W): 350  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

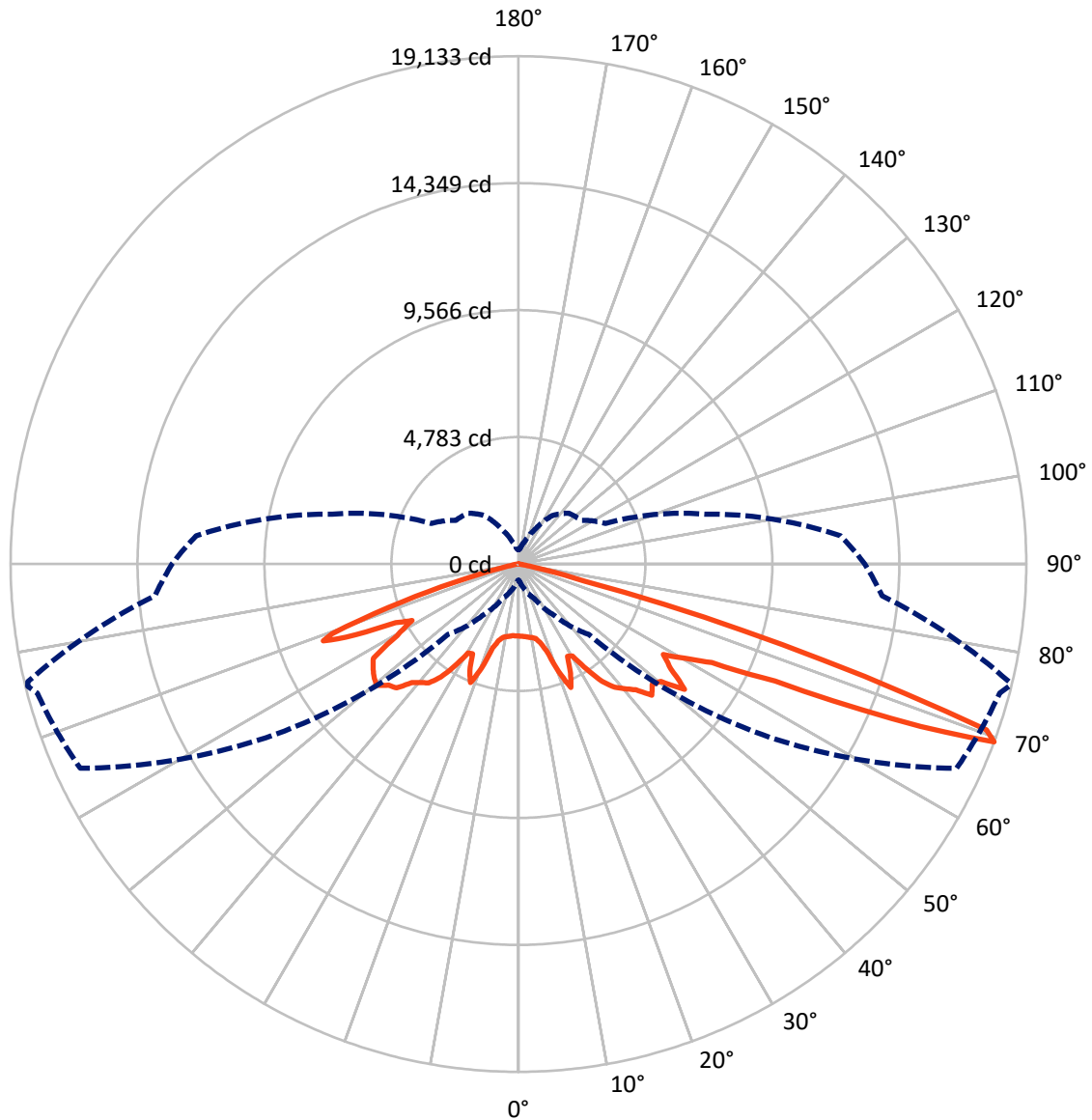
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.9 fc  
 Type II - Medium - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 76.3-Deg Lateral    - - - Horizontal Cone Through 69-Deg Vertical

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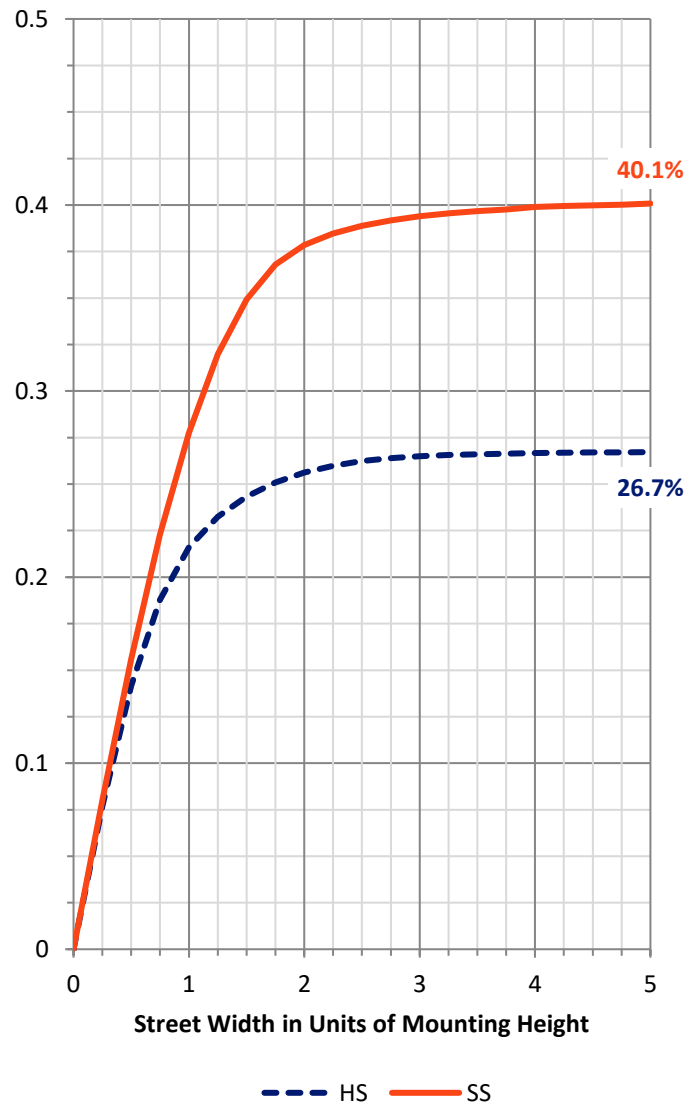
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	8043.3	0.0	8043.3
	% Lamp	26.8	0.0	26.8
<b>Street Side</b>	Lumens	12013.9	0.0	12013.9
	% Lamp	40.0	0.0	40.0
<b>Total</b>	Lumens	20057.2	0.0	20057.2
	% Lamp	66.9	0.0	66.9

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	256.6	1.3	0.9
10°-20°	798.2	4.0	2.7
20°-30°	1626.3	8.1	5.4
30°-40°	2442.4	12.2	8.1
40°-50°	3595.8	17.9	12.0
50°-60°	4393.4	21.9	14.6
60°-70°	4585.5	22.9	15.3
70°-80°	2278.9	11.4	7.6
80°-90°	80.0	0.4	0.3
90°-100°	0.0	0.0	0.0
100°-110°	0.0	0.0	0.0
110°-120°	0.0	0.0	0.0
120°-130°	0.0	0.0	0.0
130°-140°	0.0	0.0	0.0
140°-150°	0.0	0.0	0.0
150°-160°	0.0	0.0	0.0
160°-170°	0.0	0.0	0.0
170°-180°	0.0	0.0	0.0
0°-90°	20057.2	100.0	66.9
0°-180°	20057.2	100.0	66.9

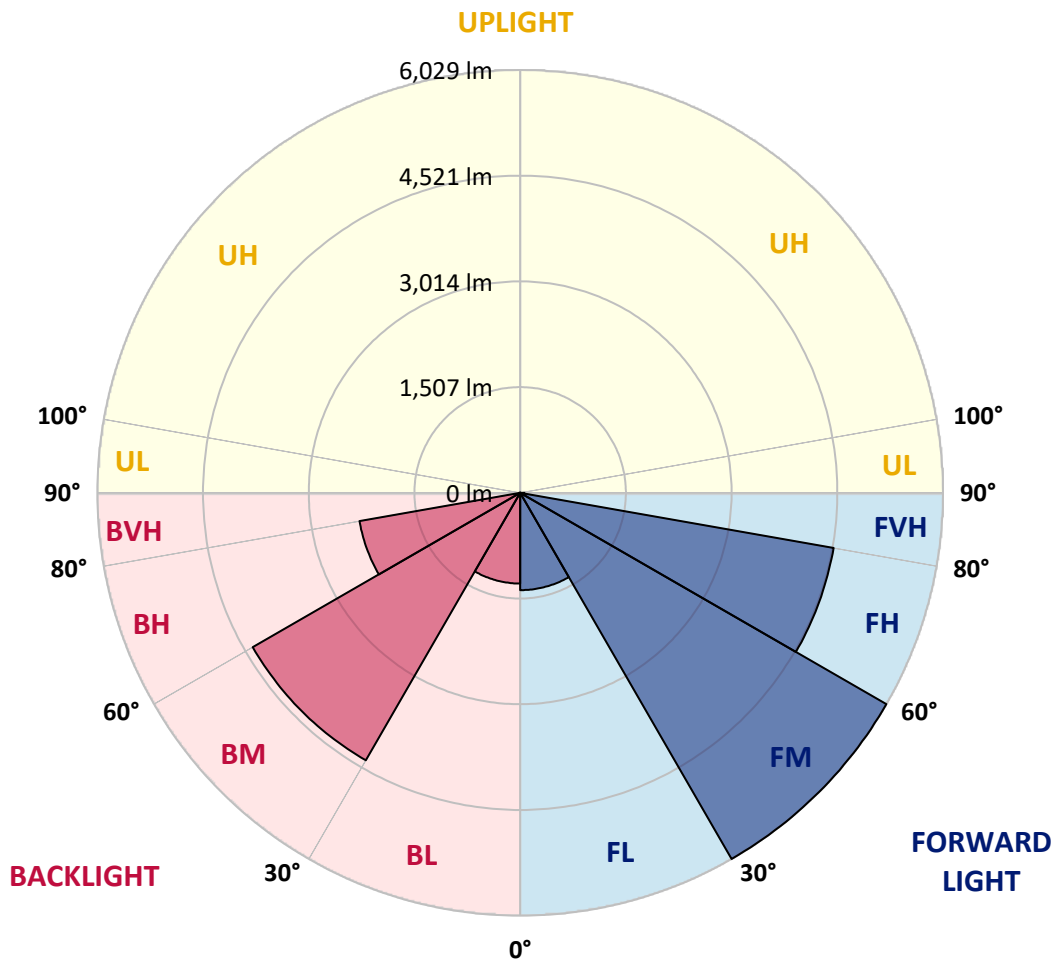


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Lamp	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1387.7	4.6			
FM (30°-60°)	6028.5	20.1			
FH (60°-80°)	4538.0	15.1			G2/5000
FVH (80°-90°)	59.6	0.2			G1/100
BL (0°-30°)	1293.5	4.3	B3/2500		
BM (30°-60°)	4403.1	14.7	B3/5000		
BH (60°-80°)	2326.4	7.8	B3/2500		G3/2500
BVH (80°-90°)	20.4	0.1			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	
Trapped Light	9942.8	33.1			

**BUG Rating: B3-U0-G3**  
 Type II Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76.3°	85°
0°	2714.2	2714.2	2714.2	2714.2	2714.2	2714.2	2714.2	2714.2	2714.2	2714.2	2714.2
2.5°	2732.5	2739.2	2765.8	2725.8	2725.8	2739.2	2732.5	2732.5	2725.8	2725.8	2732.5
5°	2705.0	2719.2	2711.7	2705.0	2711.7	2745.8	2752.5	2765.8	2759.2	2745.8	2739.2
7.5°	2705.0	2732.5	2698.3	2705.0	2732.5	2752.5	2765.8	2779.2	2792.5	2785.8	2792.5
10°	2705.0	2705.0	2705.0	2719.2	2745.8	2765.8	2785.8	2806.7	2833.3	2820.0	2833.3
12.5°	2638.3	2638.3	2658.3	2691.7	2725.8	2759.2	2813.3	2840.0	2886.7	2880.0	2886.7
15°	2544.2	2557.5	2645.0	2725.8	2725.8	2792.5	2873.3	2934.2	3041.7	3075.8	3102.5
17.5°	2503.3	2530.0	2610.8	2658.3	2739.2	2846.7	2954.2	3149.2	3351.7	3432.5	3465.8
20°	2476.7	2536.7	2610.8	2651.7	2779.2	2927.5	3257.5	3674.2	4152.5	4327.5	4360.8
22.5°	2435.8	2476.7	2577.5	2658.3	2846.7	3330.8	4085.0	4690.8	5026.7	5054.2	5040.8
25°	2463.3	2435.8	2530.0	2685.0	3089.2	4098.3	4892.5	4939.2	4730.8	4555.8	4529.2
27.5°	2422.5	2456.7	2516.7	2698.3	3620.8	4885.8	4953.3	4374.2	4044.2	3936.7	3950.0
30°	2409.2	2470.0	2516.7	2785.8	4165.8	5047.5	4415.0	3950.0	3984.2	4017.5	4118.3
32.5°	2409.2	2429.2	2530.0	3001.7	4535.8	4684.2	4024.2	4225.8	4603.3	4730.8	4879.2
35°	2328.3	2348.3	2584.2	3472.5	4764.2	4125.0	4354.2	4865.8	5330.0	5430.8	5673.3
37.5°	2301.7	2341.7	2678.3	3923.3	4590.0	3984.2	4831.7	5525.0	5814.2	5895.0	5989.2
40°	2395.8	2678.3	3304.2	3956.7	4145.8	4327.5	5269.2	5962.5	6150.8	6177.5	6130.8
42.5°	2826.7	3337.5	3970.8	3822.5	4024.2	4798.3	5612.5	6218.3	6406.7	6474.2	6487.5
45°	3391.7	3755.0	3654.2	3479.2	3835.8	5195.0	6218.3	6857.5	7019.2	7045.8	6803.3
47.5°	3580.0	3802.5	3505.8	3674.2	3930.0	6090.0	8156.7	7840.0	6938.3	6783.3	6144.2
50°	3499.2	3943.3	4286.7	3270.8	5457.5	7584.2	9051.7	8190.0	6897.5	6951.7	6817.5
52.5°	3728.3	3829.2	4892.5	3236.7	7039.2	7725.8	9132.5	8129.2	7772.5	7840.0	7496.7
55°	3890.0	3748.3	4165.8	3196.7	6568.3	6682.5	8627.5	7785.8	7180.8	6958.3	6581.7
57.5°	3216.7	3371.7	3452.5	3129.2	5935.8	6359.2	6555.0	7032.5	6393.3	6440.0	6487.5
60°	2275.0	2510.0	3041.7	3755.0	5693.3	6002.5	6170.8	7140.0	7093.3	7194.2	6783.3
62.5°	1494.2	1554.2	2085.8	3634.2	5269.2	4980.0	5875.0	7382.5	7503.3	8176.7	6945.0
65°	1050.0	1083.3	1359.2	2288.3	3270.8	3869.2	5969.2	8748.3	9562.5	10632.5	8264.2
67.5°	740.0	807.5	1050.0	1669.2	2442.5	3614.2	9260.0	15673.3	15653.3	16345.8	12100.0
69°	605.8	686.7	1022.5	1446.7	2369.2	3755.0	11205.0	18210.0	18769.2	19132.5	13748.3
70°	538.3	612.5	1036.7	1292.5	2544.2	4078.3	11440.0	17362.5	18520.0	18701.7	13465.8
72.5°	350.0	430.8	921.7	827.5	3055.0	4380.8	7106.7	9710.8	10942.5	10397.5	7712.5
75°	255.8	302.5	780.8	518.3	2698.3	2719.2	2719.2	2759.2	2886.7	2577.5	2483.3
77.5°	161.7	201.7	619.2	370.0	1655.8	1763.3	1278.3	848.3	746.7	612.5	706.7
80°	80.8	94.2	383.3	221.7	995.8	1103.3	760.8	262.5	229.2	181.7	262.5
82.5°	26.7	33.3	135.0	120.8	316.7	309.2	269.2	114.2	107.5	80.8	107.5
85°	0.0	6.7	6.7	26.7	33.3	40.0	40.0	54.2	40.0	20.0	47.5
87.5°	0.0	0.0	0.0	0.0	0.0	6.7	6.7	6.7	13.3	0.0	6.7
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°	2714.2	2714.2	2714.2	2714.2	2714.2	2714.2	2714.2	2714.2	2714.2	2714.2	2714.2
2.5°	2725.8	2732.5	2711.7	2698.3	2685.0	2665.0	2651.7	2638.3	2638.3	2651.7	2651.7
5°	2725.8	2719.2	2698.3	2665.0	2651.7	2617.5	2597.5	2564.2	2550.8	2564.2	2584.2
7.5°	2779.2	2772.5	2739.2	2691.7	2651.7	2597.5	2577.5	2523.3	2503.3	2536.7	2584.2
10°	2820.0	2813.3	2765.8	2725.8	2658.3	2584.2	2516.7	2503.3	2456.7	2510.0	2449.2
12.5°	2893.3	2886.7	2820.0	2739.2	2638.3	2557.5	2503.3	2456.7	2395.8	2375.8	2382.5
15°	3082.5	3068.3	2967.5	2826.7	2719.2	2610.8	2496.7	2422.5	2389.2	2328.3	2341.7
17.5°	3485.8	3439.2	3277.5	3035.0	2860.0	2658.3	2503.3	2389.2	2355.0	2288.3	2275.0
20°	4340.8	4374.2	4131.7	3755.0	3290.8	2826.7	2523.3	2355.0	2295.0	2234.2	2247.5
22.5°	4973.3	4905.8	4805.0	4515.8	4024.2	3297.5	2645.0	2348.3	2234.2	2187.5	2180.0
25°	4441.7	4380.8	4421.7	4575.8	4448.3	3916.7	2954.2	2341.7	2166.7	2100.0	2100.0
27.5°	3890.0	3835.8	3789.2	4010.8	4266.7	4225.8	3465.8	2422.5	2133.3	2025.8	2032.5
30°	4078.3	4010.8	3822.5	3715.0	3761.7	4098.3	3809.2	2564.2	2085.8	1978.3	1978.3
32.5°	4885.8	4791.7	4481.7	3997.5	3512.5	3748.3	3768.3	2671.7	2012.5	1870.8	1870.8
35°	5558.3	5437.5	5120.8	4656.7	3829.2	3365.0	3526.7	2779.2	1951.7	1796.7	1790.0
37.5°	5929.2	5841.7	5572.5	4939.2	4320.0	3351.7	3196.7	2779.2	1890.8	1709.2	1709.2
40°	6110.8	6030.0	5747.5	5303.3	4596.7	3606.7	2853.3	2651.7	1837.5	1641.7	1641.7
42.5°	6480.8	6359.2	5955.8	5632.5	4710.8	3701.7	2604.2	2389.2	1763.3	1561.7	1561.7
45°	6756.7	6730.0	6520.8	6271.7	4946.7	3715.0	2483.3	2120.0	1689.2	1474.2	1466.7
47.5°	6117.5	6184.2	6770.0	6743.3	5693.3	3997.5	2402.5	1897.5	1608.3	1386.7	1359.2
50°	6884.2	6730.0	7072.5	6695.8	5921.7	4415.0	2369.2	1857.5	1554.2	1319.2	1292.5
52.5°	7341.7	7079.2	6877.5	7019.2	5545.0	4428.3	2409.2	1810.0	1474.2	1238.3	1211.7
55°	6588.3	6568.3	6750.0	6500.8	4851.7	3492.5	2375.8	1763.3	1393.3	1150.8	1130.8
57.5°	6864.2	6991.7	6446.7	5754.2	3963.3	2960.8	2275.0	1743.3	1325.8	1083.3	1050.0
60°	6770.0	6662.5	5100.8	4939.2	3687.5	2947.5	2267.5	1715.8	1251.7	1009.2	969.2
62.5°	6319.2	6177.5	4286.7	3876.7	3277.5	2900.8	2234.2	1715.8	1164.2	901.7	861.7
65°	7160.0	6426.7	4932.5	3540.0	3075.8	2907.5	2348.3	1608.3	1050.0	774.2	740.0
67.5°	10982.5	10316.7	6575.0	3748.3	3095.8	3176.7	2275.0	1494.2	942.5	632.5	605.8
69°	13048.3	12187.5	7261.7	3620.8	2873.3	2705.0	2227.5	1400.0	861.7	565.0	538.3
70°	12860.0	12059.2	6810.0	3041.7	2604.2	2530.0	2140.0	1312.5	800.8	511.7	484.2
72.5°	7409.2	7496.7	4145.8	1575.0	1393.3	2180.0	1413.3	1036.7	625.8	383.3	363.3
75°	2435.8	2907.5	1877.5	753.3	659.2	753.3	538.3	457.5	370.0	262.5	255.8
77.5°	700.0	921.7	625.8	383.3	356.7	282.5	175.0	155.0	141.7	120.8	148.3
80°	249.2	282.5	229.2	188.3	175.0	114.2	74.2	60.8	54.2	47.5	40.0
82.5°	107.5	114.2	100.8	100.8	80.8	47.5	33.3	26.7	26.7	26.7	26.7
85°	40.0	40.0	33.3	33.3	33.3	13.3	13.3	0.0	0.0	6.7	13.3
87.5°	6.7	6.7	6.7	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)