

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: 769015\_400MP

Luminaire Tested: **GSM-XX-400-MP-XX-1F-SG-XX-X**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: 769015\_400MP  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GSM-XX-400-MP-XX-1F-SG-XX-X  
Description: MEDIUM ARCHITECTURAL AREA LUMINAIRE-HORIZONTAL LAMP-TYPE I DISTRIBUTION  
Light Source: 400 WATT PULSE-START CLEAR ED-37 HORIZONTAL BURN  
Ballast/Driver: -

**Summary**

Lumens per Lamp: 40000 (1 lamp)  
Luminaire Lumens: 25897.9 lumens  
Efficiency: 64.7%  
Efficacy: 57.3 lumens/watt  
Luminous Opening: Point Source (0' x 0' x 0')  
IES Classification: Type II - Medium - Full Cutoff  
BUG Rating: B4 - U0 - G4

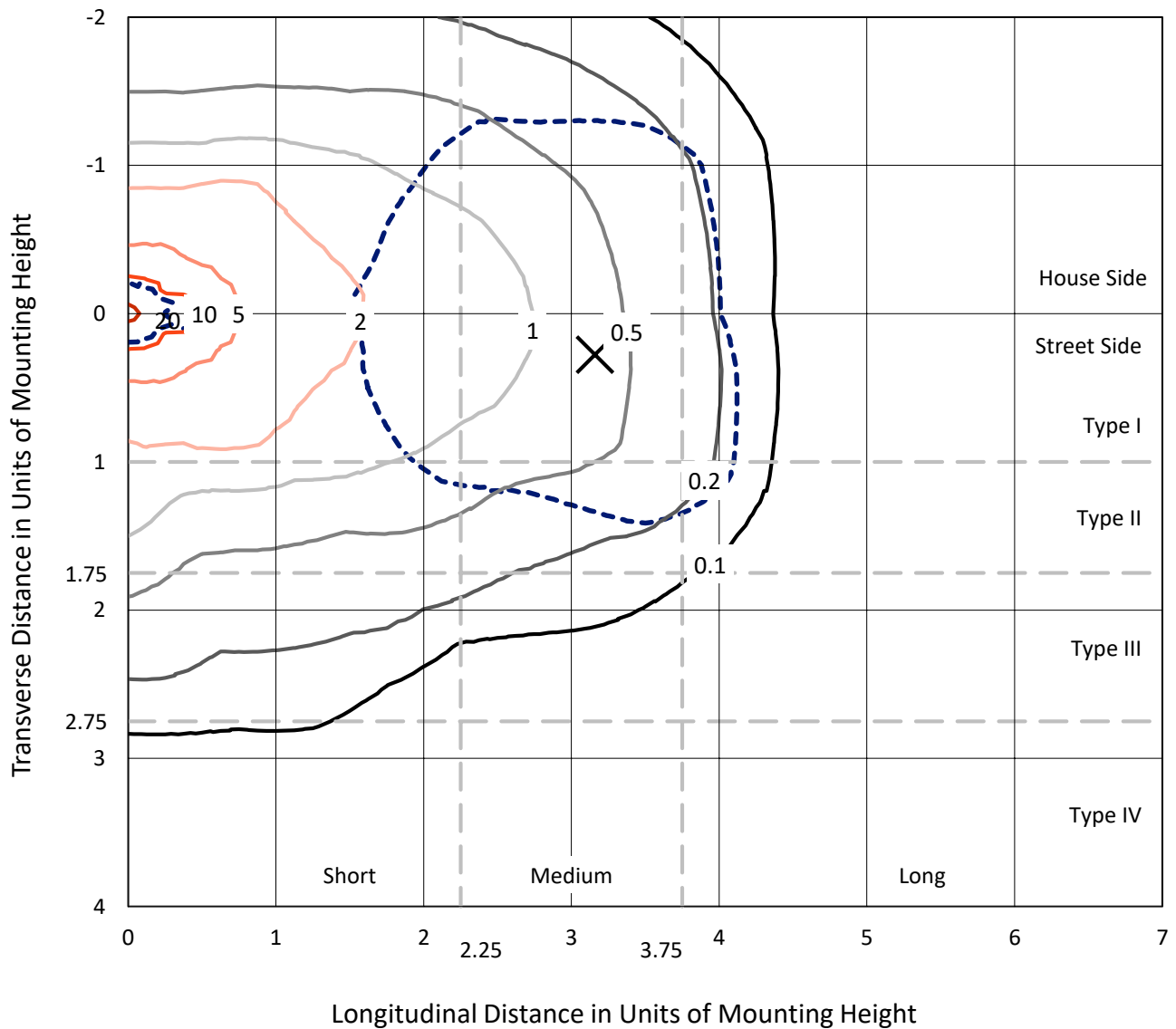
Input Watts (W): 452  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

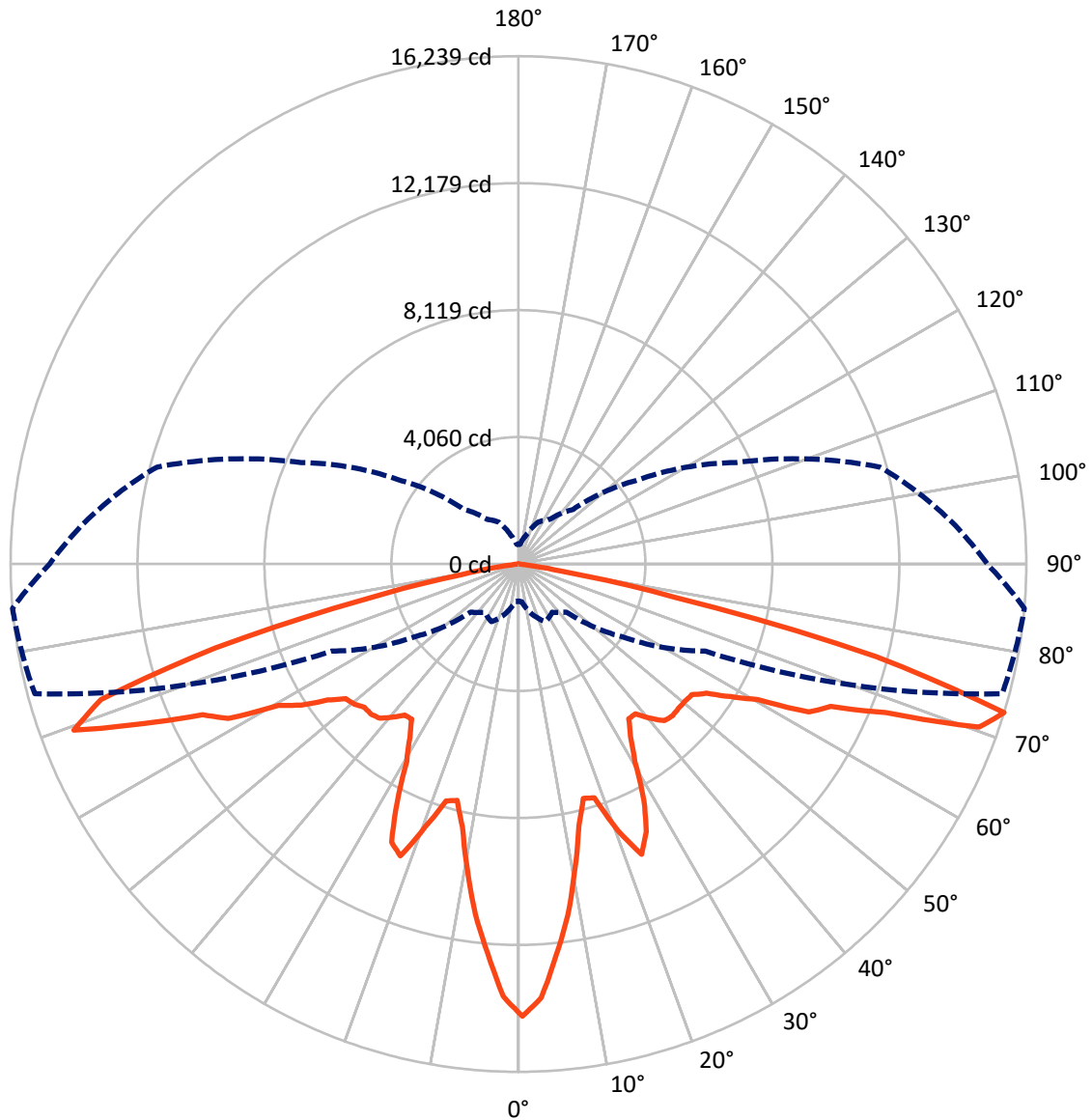
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 23.1 fc  
 Type II - Medium - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 85-Deg Lateral    - - - Horizontal Cone Through 72.5-Deg Vertical

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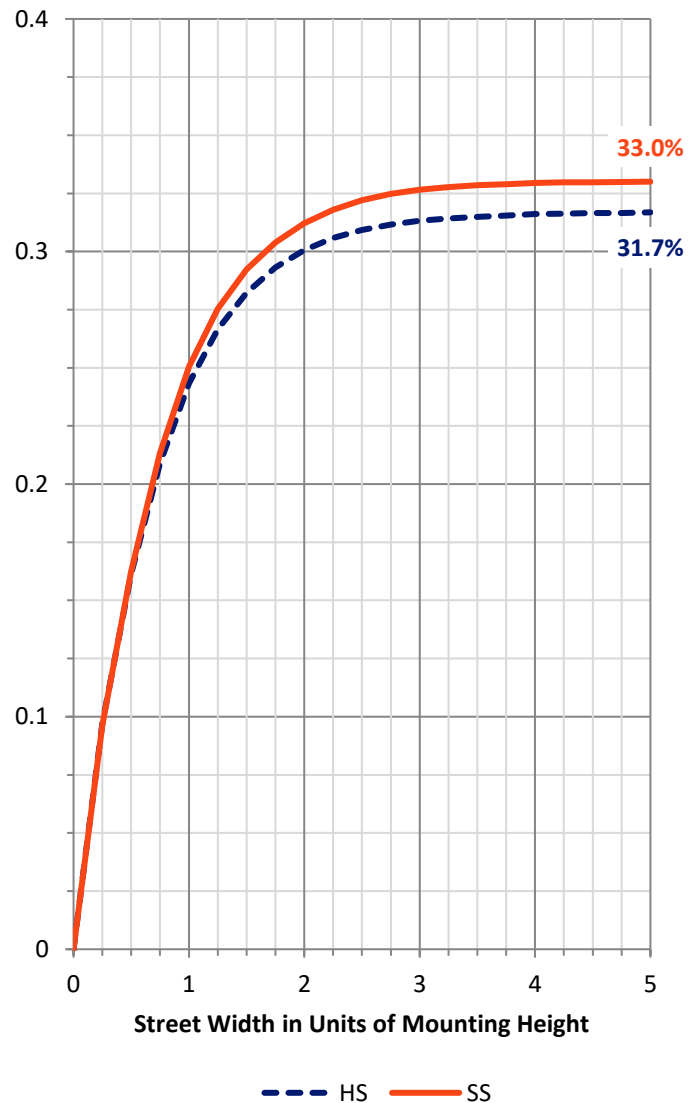
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	12718.3	0.0	12718.3
	% Lamp	31.8	0.0	31.8
<b>Street Side</b>	Lumens	13179.7	0.0	13179.7
	% Lamp	32.9	0.0	32.9
<b>Total</b>	Lumens	25897.9	0.0	25897.9
	% Lamp	64.7	0.0	64.7

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	1073.8	4.1	2.7
10°-20°	2012.2	7.8	5.0
20°-30°	2649.3	10.2	6.6
30°-40°	2844.8	11.0	7.1
40°-50°	3609.6	13.9	9.0
50°-60°	4133.5	16.0	10.3
60°-70°	5466.7	21.1	13.7
70°-80°	3949.4	15.2	9.9
80°-90°	158.6	0.6	0.4
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°	25897.9	100.0	64.7
0°-180°	25897.9	100.0	64.7



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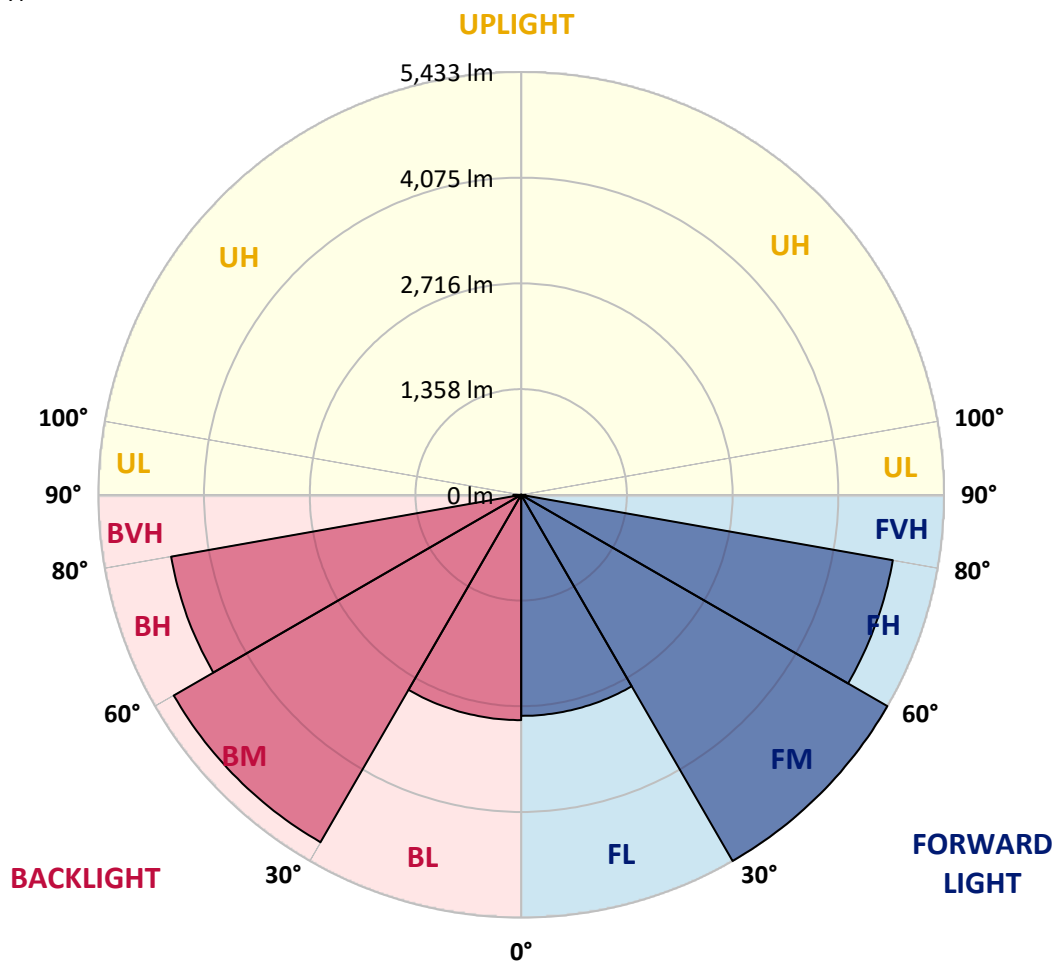
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Lamp	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2840.5	7.1			
FM	(30°-60°)	5432.8	13.6			
FH	(60°-80°)	4848.9	12.1			G2/5000
FVH	(80°-90°)	57.4	0.1			G1/100
BL	(0°-30°)	2894.9	7.2	B4/5000		
BM	(30°-60°)	5155.0	12.9	B4/8500		
BH	(60°-80°)	4567.2	11.4	B4/5000		G4/5000
BVH	(80°-90°)	101.1	0.3			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	
Trapped Light		14102.1	35.3			

**BUG Rating: B4-U0-G4**

Type II Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	14461.1	14461.1	14461.1	14461.1	14461.1	14461.1	14461.1	14461.1	14461.1	14461.1	14461.1
2.5°	13738.9	13738.9	13745.6	13770.0	13787.8	13831.1	13867.8	13885.6	13885.6	13892.2	13885.6
5°	11734.4	11734.4	11807.8	11912.2	12064.4	12217.8	12370.0	12480.0	12553.3	12572.2	12572.2
7.5°	9595.6	9626.7	9717.8	9907.8	10152.2	10433.3	10714.4	10983.3	11227.8	11343.3	11367.8
10°	8165.6	8171.1	8226.7	8342.2	8593.3	8977.8	9375.6	9607.8	9766.7	9913.3	9956.7
12.5°	7126.7	7107.8	7144.4	7217.8	7432.2	7737.8	8012.2	8300.0	8483.3	8586.7	8635.6
15°	6210.0	6197.8	6313.3	6496.7	6704.4	6772.2	6948.9	7224.4	7517.8	7774.4	7865.6
17.5°	5427.8	5440.0	5672.2	5958.9	6100.0	6075.6	6252.2	6765.6	7444.4	7860.0	7982.2
20°	4865.6	4871.1	5073.3	5391.1	5531.1	5518.9	5757.8	6564.4	8268.9	9112.2	9131.1
22.5°	4338.9	4357.8	4583.3	4890.0	5103.3	5164.4	5427.8	6430.0	8550.0	10084.4	10347.8
25°	3935.6	3966.7	4180.0	4528.9	4767.8	4920.0	5293.3	6320.0	8110.0	9485.6	9834.4
27.5°	3642.2	3661.1	3996.7	4326.7	4504.4	4731.1	5256.7	6350.0	7542.2	8550.0	8727.8
30°	3348.9	3416.7	3935.6	4088.9	4321.1	4412.2	4797.8	5782.2	6576.7	7334.4	7420.0
32.5°	3165.6	3257.8	3868.9	3844.4	4045.6	4082.2	4314.4	5012.2	5910.0	6582.2	6662.2
35°	3031.1	3135.6	3727.8	3801.1	4314.4	4162.2	4265.6	4841.1	5562.2	6075.6	6112.2
37.5°	2896.7	2994.4	3648.9	3825.6	4656.7	4412.2	4382.2	4963.3	5616.7	6075.6	6075.6
40°	2823.3	2988.9	3385.6	3715.6	4944.4	4883.3	4694.4	5220.0	6044.4	6484.4	6442.2
42.5°	2835.6	3062.2	3062.2	3477.8	5005.6	5347.8	5127.8	5513.3	6576.7	6851.1	6741.1
45°	2933.3	3092.2	2860.0	3177.8	4780.0	5611.1	5452.2	5708.9	6692.2	6918.9	6857.8
47.5°	3031.1	3116.7	2762.2	2970.0	4223.3	5677.8	5464.4	5592.2	6478.9	6887.8	6851.1
50°	3165.6	3141.1	2688.9	2842.2	3715.6	5403.3	5232.2	5518.9	6313.3	6900.0	6955.6
52.5°	3507.8	3270.0	2610.0	2756.7	3514.4	4871.1	5427.8	5616.7	6356.7	6943.3	7010.0
55°	3813.3	3367.8	2500.0	2683.3	3404.4	4406.7	5848.9	5824.4	6667.8	7291.1	7425.6
57.5°	3544.4	3196.7	2377.8	2627.8	3318.9	4162.2	6056.7	6154.4	7615.6	8000.0	8171.1
60°	3324.4	2988.9	2316.7	2585.6	3257.8	3991.1	6020.0	6931.1	8647.8	8794.4	8850.0
62.5°	3116.7	2866.7	2243.3	2530.0	3086.7	3868.9	6117.8	7804.4	10035.6	10421.1	10451.1
65°	2823.3	2762.2	2151.1	2468.9	2970.0	3820.0	6105.6	8635.6	10500.0	10976.7	10971.1
67.5°	2456.7	2505.6	2084.4	2451.1	2866.7	3825.6	6124.4	8953.3	11631.1	12670.0	12834.4
70°	1833.3	1894.4	1894.4	2402.2	2737.8	3642.2	5677.8	8195.6	14258.9	15627.8	15585.6
72.5°	1185.6	1210.0	1650.0	2041.1	1882.2	2170.0	4057.8	6588.9	16013.3	16238.9	14992.2
75°	562.2	598.9	898.9	801.1	635.6	923.3	3568.9	6307.8	12895.6	11820.0	10298.9
77.5°	158.9	177.8	312.2	256.7	244.4	471.1	2578.9	4260.0	5818.9	5110.0	4706.7
80°	48.9	48.9	92.2	104.4	116.7	232.2	923.3	1131.1	1400.0	1381.1	1515.6
82.5°	0.0	0.0	6.7	36.7	43.3	67.8	141.1	190.0	226.7	293.3	354.4
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.7	18.9	31.1	43.3
87.5°	0.0	0.0	0.0	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



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**CANDELA DISTRIBUTION (continued):**

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	14461.1	14461.1	14461.1	14461.1	14461.1	14461.1	14461.1	14461.1	14461.1	14461.1
2.5°	13831.1	13843.3	13843.3	13867.8	13867.8	13958.9	13941.1	14026.7	14032.2	14032.2
5°	12492.2	12492.2	12462.2	12431.1	12382.2	12425.6	12376.7	12450.0	12480.0	12480.0
7.5°	11288.9	11184.4	11050.0	10903.3	10726.7	10634.4	10500.0	10506.7	10500.0	10524.4
10°	9895.6	9778.9	9614.4	9368.9	9118.9	8965.6	8806.7	8770.0	8788.9	8801.1
12.5°	8593.3	8476.7	8324.4	8146.7	7860.0	7657.8	7493.3	7486.7	7517.8	7493.3
15°	7804.4	7554.4	7364.4	7156.7	6931.1	6741.1	6570.0	6552.2	6540.0	6540.0
17.5°	7921.1	7450.0	6863.3	6430.0	6227.8	6161.1	5904.4	5824.4	5757.8	5733.3
20°	8911.1	8031.1	6851.1	6020.0	5721.1	5604.4	5360.0	5256.7	5115.6	5073.3
22.5°	10066.7	8550.0	6845.6	5763.3	5305.6	5127.8	4895.6	4748.9	4558.9	4522.2
25°	9778.9	8440.0	6662.2	5518.9	5005.6	4792.2	4595.6	4338.9	4076.7	4045.6
27.5°	8544.4	7713.3	6313.3	5232.2	4694.4	4553.3	4382.2	4082.2	3734.4	3678.9
30°	7248.9	6723.3	5770.0	4780.0	4394.4	4345.6	4186.7	3813.3	3495.6	3434.4
32.5°	6552.2	6136.7	5281.1	4412.2	4027.8	4027.8	3850.0	3617.8	3331.1	3263.3
35°	6020.0	5721.1	5012.2	4284.4	4040.0	4008.9	3648.9	3367.8	3147.8	3104.4
37.5°	6044.4	5660.0	4932.2	4321.1	4204.4	4118.9	3514.4	3172.2	2970.0	2933.3
40°	6350.0	5958.9	5085.6	4492.2	4510.0	4223.3	3361.1	2988.9	2830.0	2798.9
42.5°	6631.1	6215.6	5305.6	4767.8	4853.3	4290.0	3184.4	2817.8	2676.7	2664.4
45°	6728.9	6276.7	5457.8	5036.7	5066.7	4216.7	3013.3	2646.7	2500.0	2505.6
47.5°	6723.3	6264.4	5476.7	5250.0	5183.3	4057.8	2854.4	2475.6	2341.1	2310.0
50°	6900.0	6320.0	5403.3	5152.2	5140.0	3820.0	2707.8	2310.0	2170.0	2138.9
52.5°	6997.8	6398.9	5562.2	5195.6	4871.1	3556.7	2566.7	2151.1	1998.9	1980.0
55°	7486.7	6643.3	5770.0	5391.1	4595.6	3343.3	2468.9	2023.3	1882.2	1870.0
57.5°	8281.1	7217.8	6026.7	5586.7	4351.1	3172.2	2365.6	1906.7	1791.1	1772.2
60°	8911.1	7835.6	6582.2	5738.9	4167.8	3037.8	2292.2	1833.3	1698.9	1698.9
62.5°	10512.2	9136.7	7371.1	6087.8	4057.8	2872.2	2224.4	1791.1	1564.4	1588.9
65°	11191.1	9998.9	7987.8	6325.6	4021.1	2805.6	2133.3	1760.0	1424.4	1405.6
67.5°	13054.4	11526.7	8788.9	6393.3	3942.2	2658.9	1980.0	1644.4	1210.0	1136.7
70°	15175.6	13042.2	9148.9	6252.2	3807.8	2493.3	1791.1	1375.6	965.6	892.2
72.5°	14032.2	11973.3	7670.0	4700.0	2468.9	1742.2	1473.3	953.3	635.6	623.3
75°	10060.0	9626.7	6442.2	3868.9	1393.3	605.6	537.8	532.2	427.8	440.0
77.5°	5091.1	5708.9	4406.7	2903.3	923.3	256.7	158.9	177.8	268.9	281.1
80°	1857.8	2365.6	2126.7	1576.7	544.4	165.6	85.6	61.1	80.0	97.8
82.5°	440.0	556.7	537.8	446.7	165.6	43.3	24.4	6.7	6.7	12.2
85°	36.7	43.3	24.4	6.7	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	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

(END OF REPORT)