

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: 769013\_400MP

Luminaire Tested: **GSM-XX-400-MP-XX-3F-SG-XX-HS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: 769013\_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-3F-SG-XX-HS  
Description: MEDIUM ARCHITECTURAL AREA LUMINAIRE-HORIZONTAL LAMP-TYPE III  
DISTRIBUTION  
WITH HOUSE-SIDE SHIELD  
Light Source: 400 WATT PULSE-START CLEAR ED-37 HORIZONTAL BURN  
Ballast/Driver: -

**Summary**

Lumens per Lamp: 40000 (1 lamp)  
Luminaire Lumens: 28561.6 lumens  
Efficiency: 71.4%  
Efficacy: 63.2 lumens/watt  
Luminous Opening: Point Source (0' x 0' x 0')  
IES Classification: Type III - Medium - Cutoff  
BUG Rating: B4 - U2 - G3

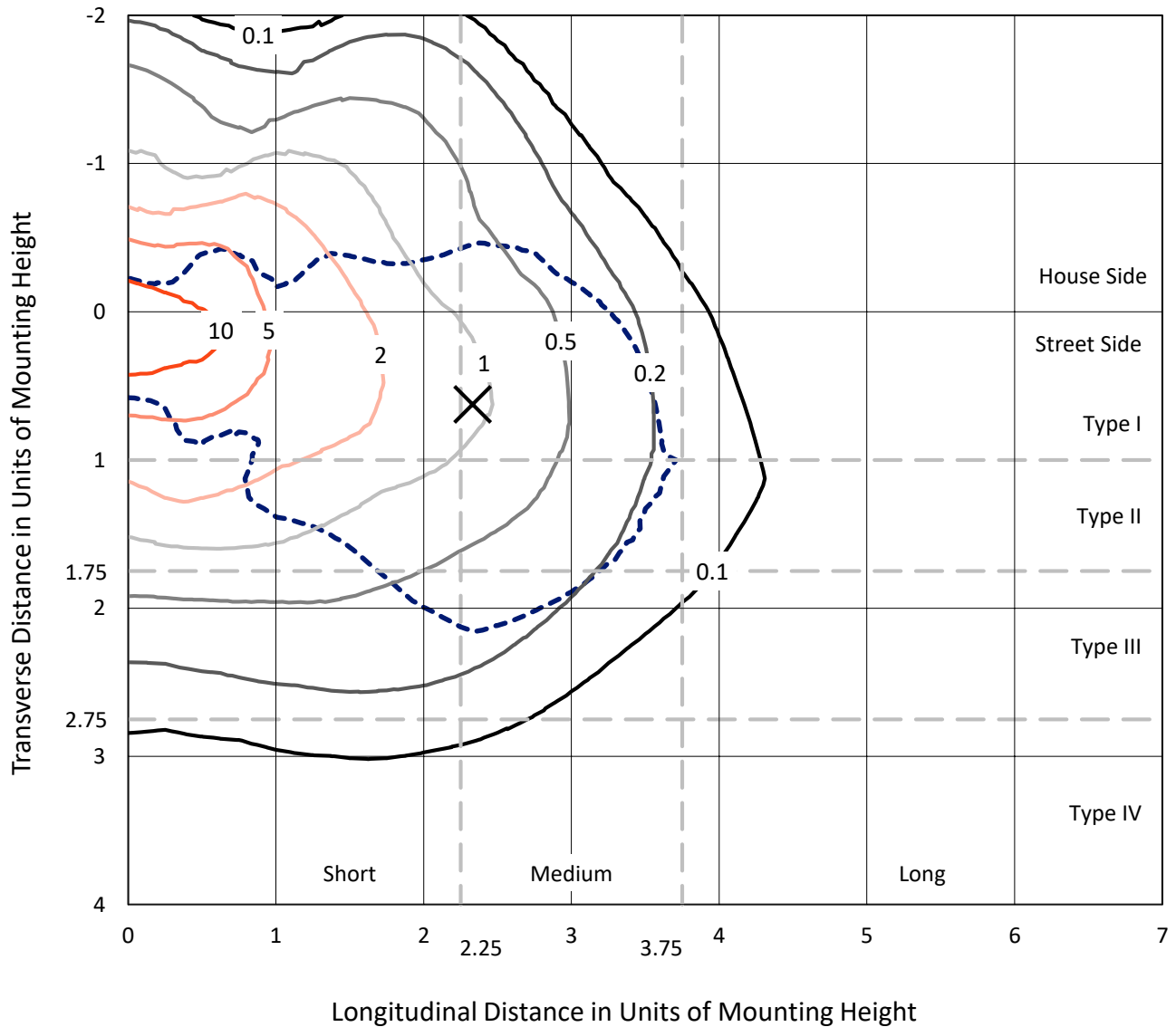
Input Watts (W): 452  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

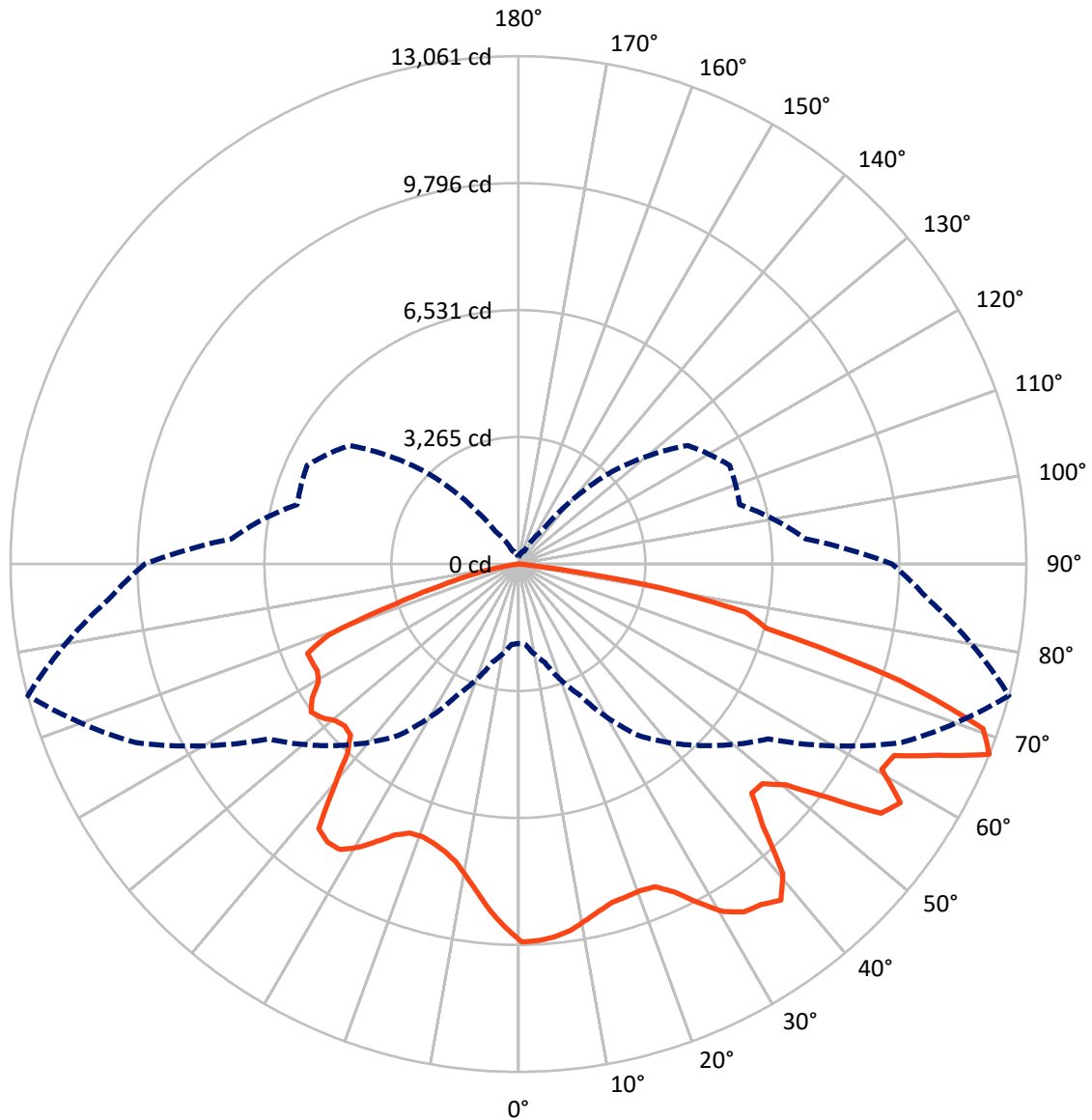
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 16.9 fc  
 Type III - Medium - Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral      - - - Horizontal Cone Through 67.5-Deg Vertical

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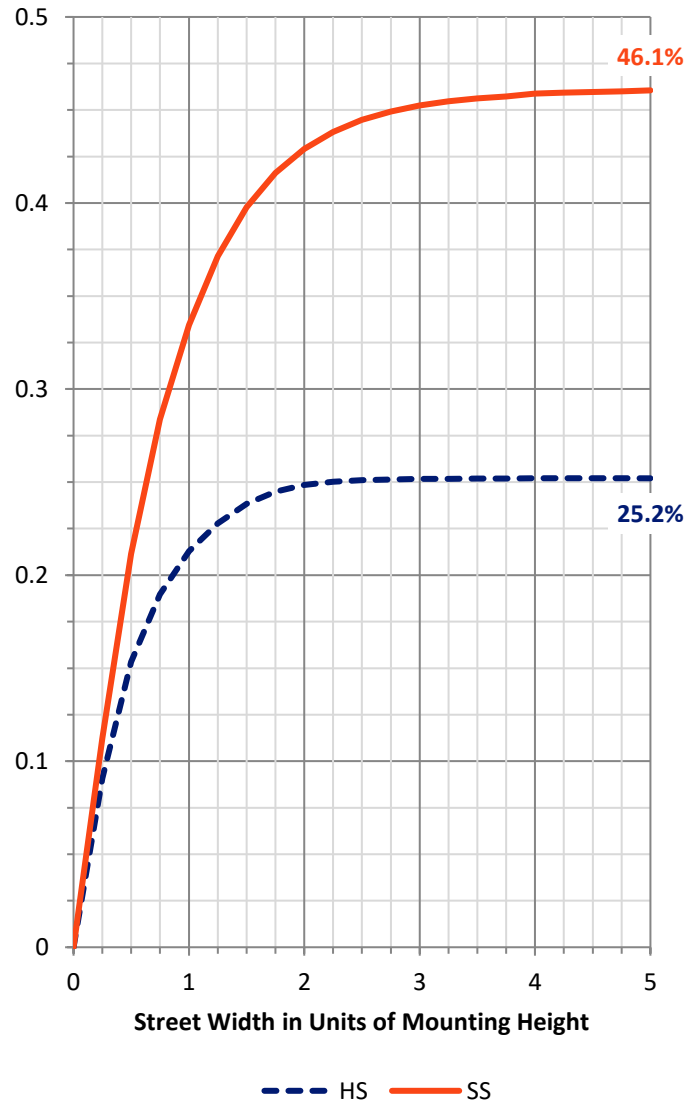
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	10143.4	0.0	10143.4
	% Lamp	25.4	0.0	25.4
<b>Street Side</b>	Lumens	18405.7	12.5	18418.2
	% Lamp	46.0	0.0	46.0
<b>Total</b>	Lumens	28549.1	12.5	28561.6
	% Lamp	71.4	0.0	71.4

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	872.2	3.1	2.2
10°-20°	2288.1	8.0	5.7
20°-30°	3380.8	11.8	8.5
30°-40°	4317.4	15.1	10.8
40°-50°	4389.6	15.4	11.0
50°-60°	5128.1	18.0	12.8
60°-70°	5162.5	18.1	12.9
70°-80°	2819.7	9.9	7.0
80°-90°	190.8	0.7	0.5
90°-100°	11.4	0.0	0.0
100°-110°	2.1	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°	28549.1	100.0	71.4
0°-180°	28561.6	100.0	71.4



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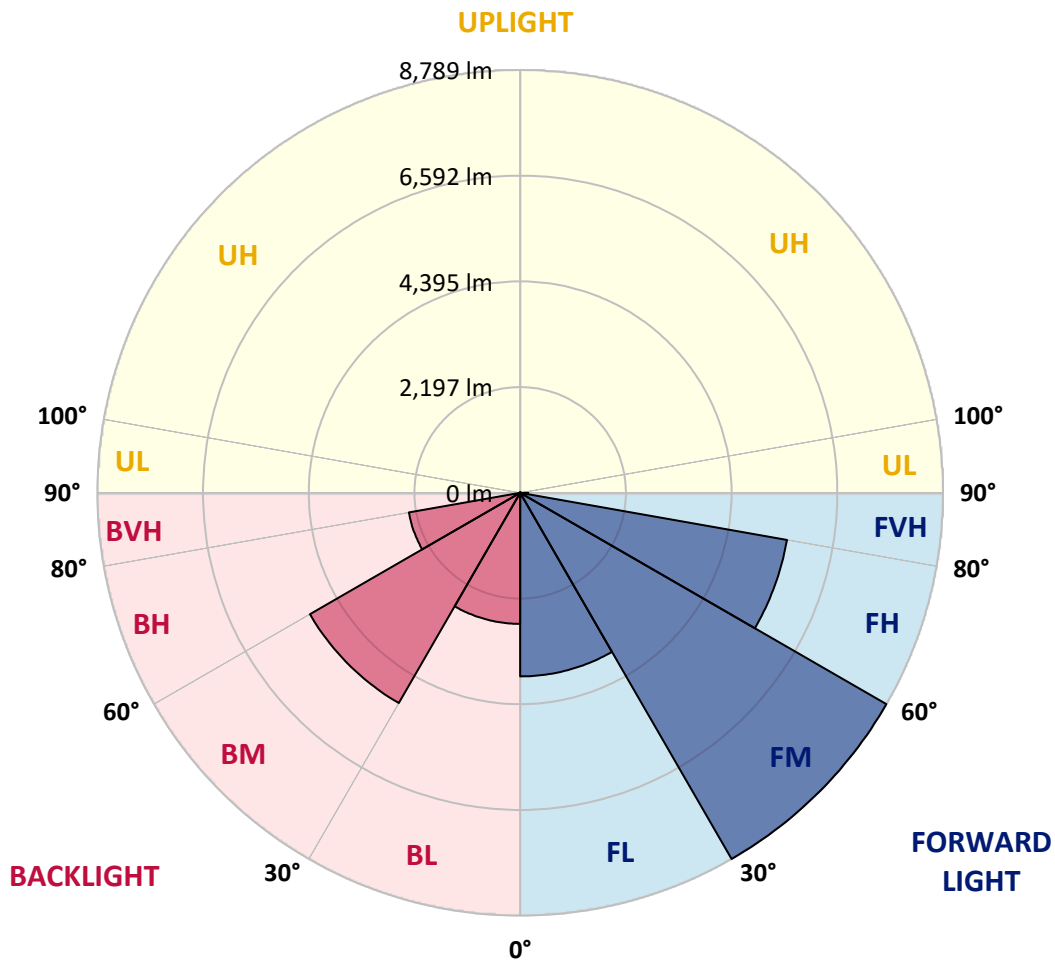
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Lamp	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3816.5	9.5			
FM (30°-60°)	8789.4	22.0			
FH (60°-80°)	5632.3	14.1			G3/7500
FVH (80°-90°)	167.5	0.4			G2/225
BL (0°-30°)	2724.6	6.8	B4/5000		
BM (30°-60°)	5045.7	12.6	B4/8500		
BH (60°-80°)	2349.8	5.9	B3/2500		G3/2500
BVH (80°-90°)	23.3	0.1			G1/100
UL (90°-100°)	11.4	0.0		U2/50	
UH (100°-180°)	0.0	0.0		U0/0	
Trapped Light	11438.4	28.6			

**BUG Rating: B4-U2-G3**

Type III Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	9717.8	9717.8	9717.8	9717.8	9717.8	9717.8	9717.8	9717.8	9717.8	9717.8	9717.8
2.5°	10316.7	10323.3	10280.0	10194.4	10121.1	10047.8	9937.8	9810.0	9700.0	9602.2	9522.2
5°	10744.4	10732.2	10677.8	10512.2	10347.8	10188.9	9998.9	9815.6	9632.2	9436.7	9302.2
7.5°	10854.4	10848.9	10751.1	10543.3	10390.0	10237.8	10035.6	9791.1	9522.2	9222.2	9033.3
10°	10720.0	10707.8	10610.0	10433.3	10304.4	10170.0	10005.6	9700.0	9338.9	9038.9	8806.7
12.5°	10316.7	10304.4	10243.3	10152.2	10115.6	10023.3	9803.3	9504.4	9167.8	8782.2	8520.0
15°	9778.9	9773.3	9778.9	9791.1	9815.6	9773.3	9614.4	9381.1	9026.7	8635.6	8378.9
17.5°	9216.7	9216.7	9344.4	9394.4	9424.4	9443.3	9480.0	9314.4	8996.7	8598.9	8342.2
20°	8654.4	8678.9	8818.9	8898.9	9002.2	9173.3	9271.1	9228.9	8965.6	8544.4	8268.9
22.5°	8067.8	8092.2	8287.8	8422.2	8598.9	8886.7	9148.9	9234.4	9014.4	8598.9	8312.2
25°	7493.3	7530.0	7718.9	7908.9	8256.7	8740.0	9197.8	9461.1	9344.4	8953.3	8630.0
27.5°	6955.6	6948.9	7193.3	7468.9	7994.4	8745.6	9387.8	9871.1	9864.4	9412.2	9045.6
30°	6442.2	6454.4	6741.1	7107.8	7853.3	8813.3	9736.7	10323.3	10372.2	9840.0	9473.3
32.5°	5990.0	6007.8	6393.3	6826.7	7853.3	8972.2	9944.4	10573.3	10665.6	10127.8	9742.2
35°	5562.2	5611.1	6068.9	6662.2	7792.2	9014.4	9895.6	10580.0	10756.7	10231.1	9834.4
37.5°	5220.0	5311.1	5965.6	6601.1	7755.6	8880.0	9717.8	10580.0	10964.4	10255.6	9791.1
40°	4926.7	5066.7	5946.7	6582.2	7468.9	8501.1	9546.7	10518.9	10475.6	9326.7	8740.0
42.5°	4731.1	4932.2	5995.6	6564.4	7083.3	7963.3	8996.7	9761.1	9228.9	8165.6	7652.2
45°	4595.6	4828.9	6112.2	6478.9	6570.0	7175.6	8073.3	8630.0	8410.0	7670.0	7168.9
47.5°	4473.3	4780.0	6136.7	6405.6	6100.0	6460.0	7340.0	8207.8	8440.0	7706.7	7163.3
50°	4314.4	4590.0	6056.7	6374.4	6056.7	6320.0	7212.2	8513.3	8923.3	8177.8	7523.3
52.5°	4021.1	4387.8	5897.8	6185.6	6320.0	6601.1	7603.3	9424.4	9974.4	9057.8	8158.9
55°	3837.8	4113.3	5232.2	5958.9	6564.4	6967.8	8287.8	10793.3	11313.3	10042.2	8843.3
57.5°	3715.6	3874.4	4675.6	5647.8	6655.6	7200.0	8598.9	11465.6	11582.2	9901.1	8617.8
60°	3556.7	3624.4	4198.9	5195.6	6386.7	7046.7	8324.4	10971.1	10732.2	9148.9	8153.3
62.5°	3177.8	3214.4	3776.7	4706.7	5941.1	6838.9	7957.8	10836.7	10842.2	9180.0	8146.7
65°	2493.3	2505.6	3141.1	4192.2	5567.8	6662.2	7811.1	11172.2	11863.3	9626.7	8537.8
67.5°	2041.1	2077.8	2622.2	3715.6	5384.4	6601.1	7841.1	10866.7	13061.1	10592.2	9607.8
70°	1808.9	1778.9	2261.1	3270.0	4975.6	6533.3	8080.0	10597.8	12675.6	10751.1	9754.4
72.5°	1381.1	1326.7	1766.7	2762.2	4272.2	6161.1	7731.1	9974.4	10286.7	8287.8	6912.2
75°	990.0	972.2	1204.4	2096.7	3037.8	4400.0	5378.9	6386.7	6582.2	5176.7	4436.7
77.5°	757.8	721.1	605.6	703.3	1161.1	2255.6	3446.7	5115.6	5971.1	4131.1	3477.8
80°	476.7	434.4	348.9	378.9	630.0	1332.2	2072.2	3318.9	3685.6	2316.7	1888.9
82.5°	330.0	312.2	244.4	207.8	195.6	238.9	287.8	366.7	458.9	256.7	202.2
85°	281.1	268.9	202.2	141.1	85.6	36.7	6.7	6.7	0.0	0.0	0.0
87.5°	183.3	171.1	116.7	61.1	31.1	6.7	0.0	0.0	0.0	0.0	0.0
90°	195.6	183.3	122.2	67.8	18.9	0.0	0.0	0.0	0.0	0.0	0.0
95°	85.6	80.0	43.3	18.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	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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CATALOG NUMBER: GSM-XX-400-MP-XX-3F-SG-XX-HS

**CANDELA DISTRIBUTION (continued):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	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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 CATALOG NUMBER: GSM-XX-400-MP-XX-3F-SG-XX-HS

**CANDELA DISTRIBUTION (continued):**

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	9717.8	9717.8	9717.8	9717.8	9717.8	9717.8	9717.8	9717.8	9717.8	9717.8
2.5°	9467.8	9356.7	9302.2	9241.1	9173.3	9124.4	9082.2	9057.8	9051.1	9045.6
5°	9185.6	8972.2	8801.1	8642.2	8483.3	8378.9	8281.1	8214.4	8190.0	8177.8
7.5°	8867.8	8525.6	8190.0	7933.3	7718.9	7603.3	7530.0	7462.2	7407.8	7395.6
10°	8593.3	8134.4	7774.4	7432.2	7138.9	6924.4	6857.8	6814.4	6808.9	6808.9
12.5°	8300.0	7811.1	7395.6	7028.9	6674.4	6447.8	6344.4	6430.0	6478.9	6503.3
15°	8141.1	7621.1	7151.1	6686.7	6307.8	6051.1	5953.3	6020.0	6124.4	6124.4
17.5°	8067.8	7498.9	7041.1	6491.1	6051.1	5751.1	5684.4	5721.1	5812.2	5831.1
20°	8000.0	7432.2	6943.3	6362.2	5934.4	5537.8	5433.3	5567.8	5653.3	5696.7
22.5°	8031.1	7462.2	6894.4	6325.6	5885.6	5360.0	5012.2	5146.7	5268.9	5293.3
25°	8293.3	7657.8	7065.6	6503.3	5867.8	5146.7	4436.7	4308.9	4595.6	4632.2
27.5°	8672.2	8000.0	7358.9	6698.9	5757.8	4828.9	3837.8	3483.3	3825.6	3911.1
30°	9038.9	8373.3	7682.2	6906.7	5567.8	4443.3	3245.6	2798.9	3018.9	3104.4
32.5°	9326.7	8660.0	7957.8	6985.6	5384.4	4076.7	2750.0	2297.8	2383.3	2432.2
35°	9424.4	8672.2	7823.3	6747.8	5048.9	3710.0	2353.3	2004.4	2163.3	2175.6
37.5°	9344.4	8525.6	7608.9	6466.7	4785.6	3373.3	2090.0	1937.8	2151.1	2114.4
40°	8244.4	7468.9	6686.7	5647.8	4522.2	3025.6	1918.9	1925.6	2285.6	2273.3
42.5°	7230.0	6564.4	5995.6	5115.6	4338.9	2676.7	1852.2	1876.7	2407.8	2456.7
45°	6741.1	6161.1	5738.9	5054.4	4265.6	2334.4	1632.2	1723.3	2292.2	2371.1
47.5°	6723.3	6105.6	5702.2	5115.6	4272.2	2060.0	1461.1	1620.0	1950.0	1857.8
50°	6973.3	6197.8	5702.2	5134.4	4235.6	1943.3	1510.0	1656.7	1705.6	1760.0
52.5°	7364.4	6417.8	5824.4	5110.0	4088.9	1857.8	1632.2	1864.4	2108.9	2200.0
55°	7804.4	6552.2	5843.3	5054.4	3911.1	1784.4	1632.2	1980.0	2407.8	2554.4
57.5°	7608.9	6320.0	5721.1	5054.4	3771.1	1681.1	1503.3	1833.3	2310.0	2481.1
60°	7181.1	5965.6	5525.6	5115.6	3666.7	1527.8	1271.1	1412.2	1967.8	2151.1
62.5°	7028.9	5855.6	5665.6	5317.8	3630.0	1344.4	928.9	898.9	1363.3	1503.3
65°	7095.6	5873.3	5946.7	5452.2	3617.8	1210.0	647.8	525.6	605.6	696.7
67.5°	7413.3	5892.2	5995.6	5311.1	3300.0	1014.4	385.6	300.0	226.7	183.3
70°	7310.0	5213.3	4785.6	4027.8	2640.0	740.0	177.8	134.4	55.6	12.2
72.5°	5298.9	3324.4	2481.1	1876.7	1454.4	397.8	104.4	67.8	0.0	0.0
75°	3563.3	2035.6	1356.7	911.1	598.9	158.9	85.6	48.9	0.0	0.0
77.5°	2713.3	1258.9	752.2	440.0	214.4	36.7	24.4	12.2	0.0	0.0
80°	1387.8	568.9	300.0	146.7	48.9	0.0	0.0	0.0	0.0	0.0
82.5°	153.3	73.3	18.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	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
95°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	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°
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)