

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: 769012\_400MP

Luminaire Tested: **GSM-XX-400-MP-XX-2F-SG-XX-HS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: 769012\_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-2F-SG-XX-HS  
Description: MEDIUM ARCHITECTURAL AREA LUMINAIRE-HORIZONTAL LAMP-TYPE II  
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: 28919.2 lumens  
Efficiency: 72.3%  
Efficacy: 64.0 lumens/watt  
Luminous Opening: Point Source (0' x 0' x 0')  
IES Classification: Type III - Medium - Cutoff  
BUG Rating: B4 - U2 - G4

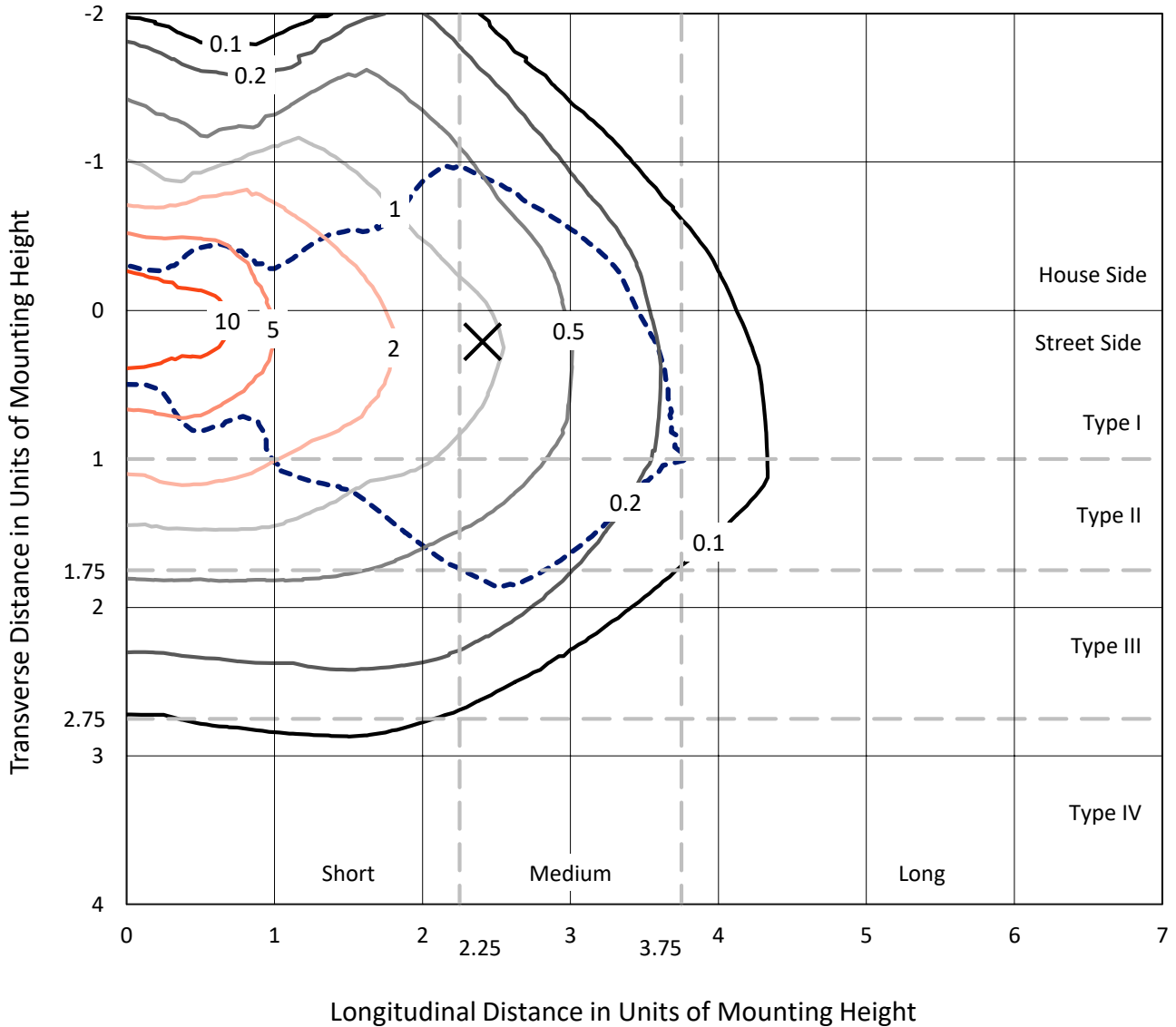
Input Watts (W): 452  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



REPORT NUMBER: 769012\_400MP  
 CATALOG NUMBER: GSM-XX-400-MP-XX-2F-SG-XX-HS

### Iso-Footcandle Lines of Horizontal Illumination

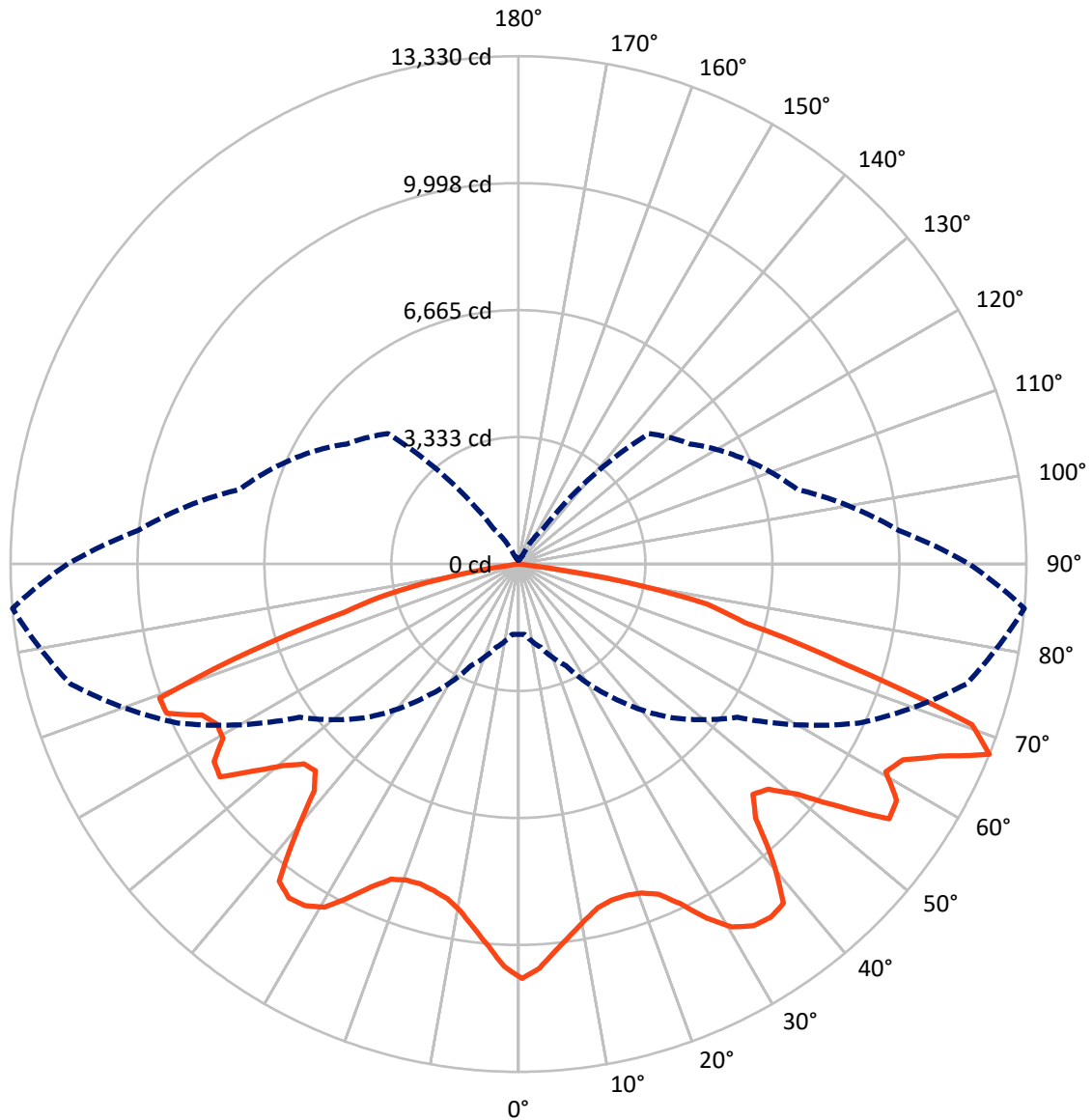
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 17.5 fc  
 Type III - Medium - Cutoff

REPORT NUMBER: 769012\_400MP  
CATALOG NUMBER: GSM-XX-400-MP-XX-2F-SG-XX-HS

### Luminous Intensity Polar Plot



— Vertical Plane Through 85-Deg Lateral      - - - Horizontal Cone Through 67.5-Deg Vertical

REPORT NUMBER: 769012\_400MP

CATALOG NUMBER: GSM-XX-400-MP-XX-2F-SG-XX-HS

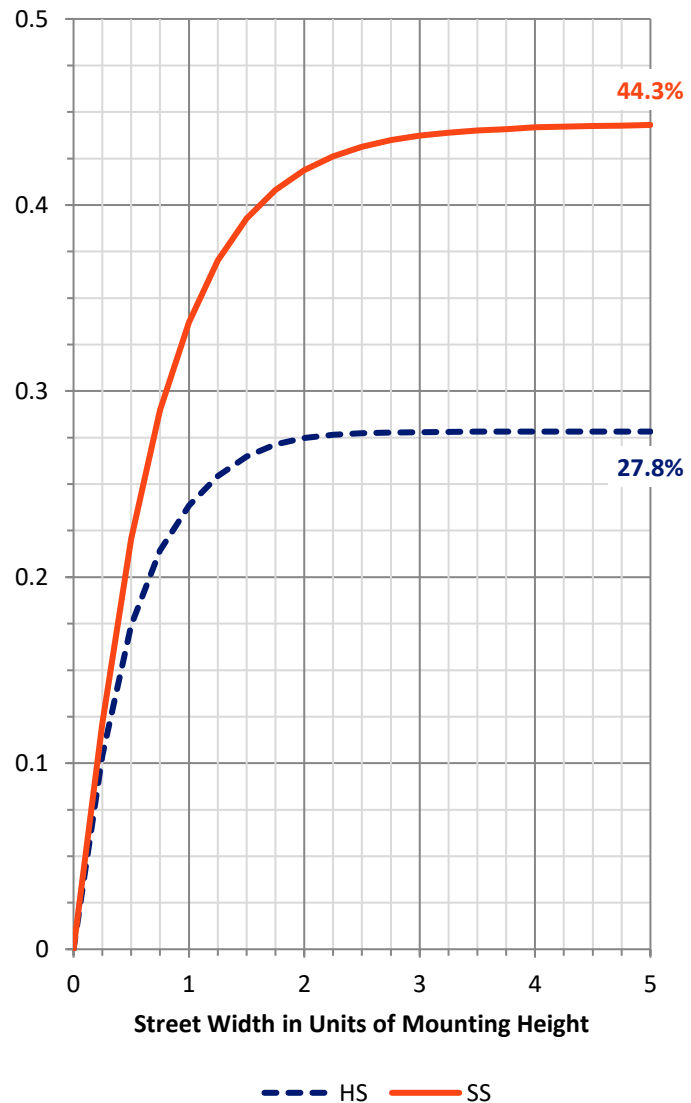
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	11201.1	0.0	11201.1
	% Lamp	28.0	0.0	28.0
<b>Street Side</b>	Lumens	17705.4	12.7	17718.0
	% Lamp	44.3	0.0	44.3
<b>Total</b>	Lumens	28906.5	12.7	28919.2
	% Lamp	72.3	0.0	72.3

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	950.7	3.3	2.4
10°-20°	2380.7	8.2	6.0
20°-30°	3503.8	12.1	8.8
30°-40°	4476.6	15.5	11.2
40°-50°	4407.6	15.2	11.0
50°-60°	5046.5	17.5	12.6
60°-70°	5218.0	18.0	13.0
70°-80°	2741.5	9.5	6.9
80°-90°	181.0	0.6	0.5
90°-100°	11.6	0.0	0.0
100°-110°	2.2	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°	28906.5	100.0	72.3
0°-180°	28919.2	100.0	72.3



REPORT NUMBER: 769012\_400MP

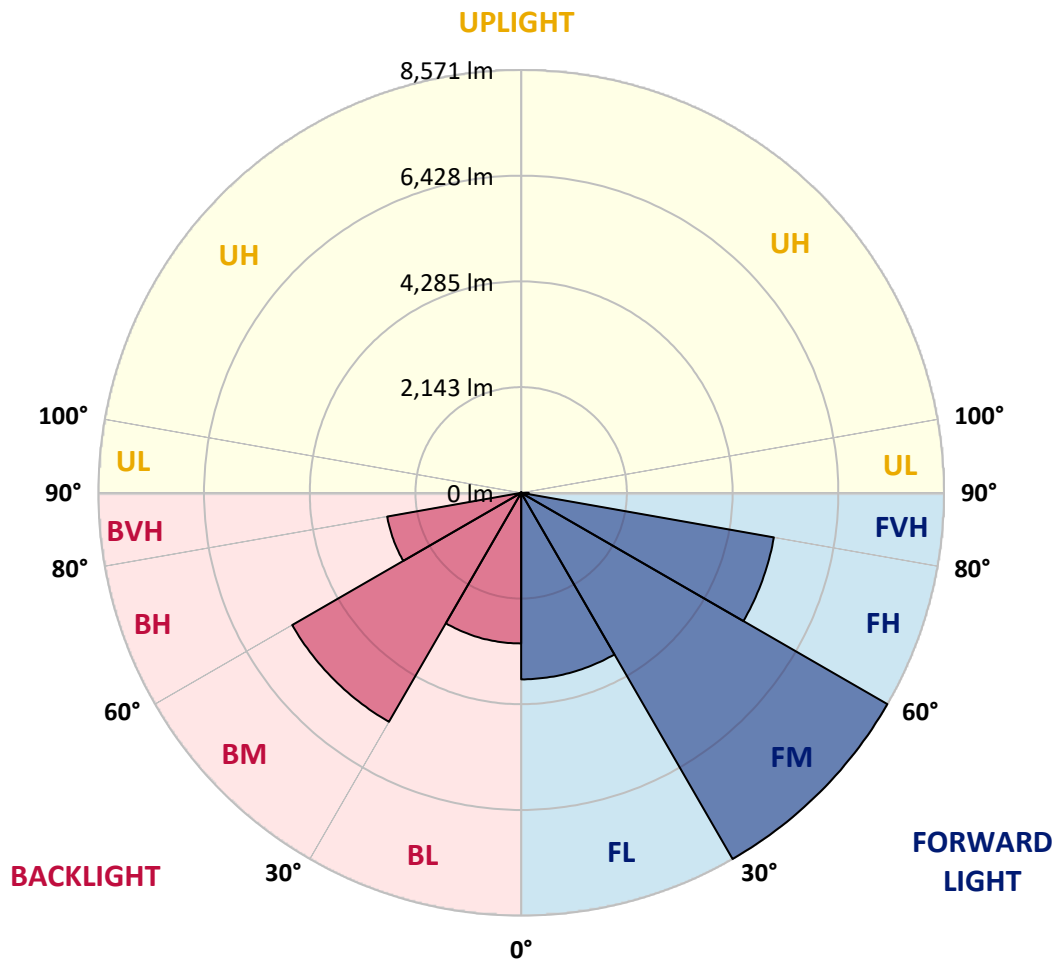
CATALOG NUMBER: GSM-XX-400-MP-XX-2F-SG-XX-HS

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

Zone		Lumens	% Lamp	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3781.0	9.5			
FM	(30°-60°)	8570.9	21.4			
FH	(60°-80°)	5201.4	13.0			G3/7500
FVH	(80°-90°)	152.1	0.4			G2/225
BL	(0°-30°)	3054.3	7.6	B4/5000		
BM	(30°-60°)	5359.8	13.4	B4/8500		
BH	(60°-80°)	2758.1	6.9	B4/5000		G4/5000
BVH	(80°-90°)	28.9	0.1			G1/100
UL	(90°-100°)	11.6	0.0		U2/50	
UH	(100°-180°)	0.0	0.0		U0/0	
Trapped Light		11080.8	27.7			

**BUG Rating: B4-U2-G4**

Type III Medium





REPORT NUMBER: 769012\_400MP

CATALOG NUMBER: GSM-XX-400-MP-XX-2F-SG-XX-HS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	10878.9	10878.9	10878.9	10878.9	10878.9	10878.9	10878.9	10878.9	10878.9	10878.9	10878.9
2.5°	11233.3	11203.3	11166.7	11105.6	11032.2	10934.4	10854.4	10781.1	10690.0	10616.7	10592.2
5°	11428.9	11404.4	11325.6	11184.4	11032.2	10848.9	10653.3	10500.0	10353.3	10188.9	10103.3
7.5°	11135.6	11117.8	11032.2	10878.9	10781.1	10610.0	10402.2	10237.8	10047.8	9834.4	9717.8
10°	10573.3	10555.6	10482.2	10426.7	10353.3	10225.6	10152.2	9986.7	9785.6	9516.7	9368.9
12.5°	9925.6	9895.6	9864.4	9871.1	9871.1	9840.0	9773.3	9668.9	9504.4	9258.9	9124.4
15°	9253.3	9246.7	9307.8	9363.3	9418.9	9443.3	9480.0	9497.8	9387.8	9155.6	9026.7
17.5°	8642.2	8611.1	8745.6	8862.2	8911.1	9045.6	9210.0	9338.9	9332.2	9143.3	8990.0
20°	8006.7	7963.3	8128.9	8300.0	8458.9	8660.0	8996.7	9258.9	9351.1	9216.7	9051.1
22.5°	7395.6	7371.1	7566.7	7798.9	8018.9	8366.7	8831.1	9283.3	9534.4	9412.2	9222.2
25°	6870.0	6838.9	7016.7	7322.2	7706.7	8177.8	8837.8	9558.9	10030.0	9876.7	9663.3
27.5°	6344.4	6320.0	6527.8	6906.7	7420.0	8165.6	9087.8	10078.9	10628.9	10524.4	10218.9
30°	5928.9	5910.0	6173.3	6643.3	7322.2	8263.3	9455.6	10518.9	11142.2	11056.7	10756.7
32.5°	5501.1	5518.9	5928.9	6533.3	7383.3	8464.4	9644.4	10677.8	11392.2	11318.9	10971.1
35°	5134.4	5171.1	5714.4	6454.4	7444.4	8611.1	9595.6	10658.9	11447.8	11392.2	11007.8
37.5°	4890.0	4914.4	5616.7	6430.0	7523.3	8483.3	9418.9	10677.8	11612.2	11301.1	10866.7
40°	4668.9	4681.1	5518.9	6454.4	7346.7	8128.9	9185.6	10463.3	11013.3	10304.4	9730.0
42.5°	4448.9	4467.8	5476.7	6374.4	6900.0	7450.0	8483.3	9644.4	9827.8	9124.4	8556.7
45°	4277.8	4296.7	5372.2	6215.6	6307.8	6667.8	7566.7	8611.1	9063.3	8623.3	8171.1
47.5°	4106.7	4113.3	5207.8	5977.8	5953.3	6210.0	6985.6	8134.4	9033.3	8831.1	8336.7
50°	3898.9	3893.3	4907.8	5672.2	5958.9	6240.0	6851.1	8336.7	9595.6	9492.2	8953.3
52.5°	3691.1	3654.4	4541.1	5311.1	6063.3	6447.8	7102.2	8886.7	10580.0	10585.6	9815.6
55°	3410.0	3397.8	4113.3	4902.2	6056.7	6625.6	7505.6	9626.7	11667.8	11807.8	10861.1
57.5°	3141.1	3135.6	3556.7	4467.8	5812.2	6552.2	7670.0	9962.2	11820.0	11704.4	10720.0
60°	2847.8	2915.6	3184.4	4040.0	5311.1	6222.2	7346.7	9846.7	11098.9	11074.4	10237.8
62.5°	2566.7	2627.8	2896.7	3624.4	4804.4	5873.3	6936.7	10170.0	11245.6	11325.6	10286.7
65°	2151.1	2170.0	2542.2	3208.9	4455.6	5763.3	6967.8	10548.9	12223.3	12150.0	10800.0
67.5°	1845.6	1852.2	2267.8	2945.6	4260.0	5708.9	7010.0	9871.1	12168.9	13330.0	11832.2
70°	1491.1	1515.6	2011.1	2627.8	3972.2	5457.8	7083.3	9185.6	11728.9	12626.7	11191.1
72.5°	1136.7	1148.9	1515.6	2248.9	3477.8	4981.1	6838.9	8678.9	10182.2	8923.3	7938.9
75°	843.3	831.1	990.0	1430.0	1901.1	2756.7	4106.7	5391.1	6753.3	6136.7	5360.0
77.5°	574.4	593.3	440.0	452.2	642.2	1295.6	2475.6	4162.2	6044.4	5061.1	4272.2
80°	403.3	391.1	305.6	300.0	397.8	764.4	1454.4	2671.1	3697.8	2786.7	2316.7
82.5°	317.8	312.2	244.4	202.2	177.8	183.3	232.2	312.2	452.2	305.6	256.7
85°	268.9	268.9	207.8	146.7	92.2	43.3	12.2	6.7	0.0	0.0	0.0
87.5°	158.9	165.6	116.7	67.8	24.4	0.0	0.0	0.0	0.0	0.0	0.0
90°	171.1	177.8	122.2	67.8	31.1	0.0	0.0	0.0	0.0	0.0	0.0
95°	73.3	73.3	48.9	24.4	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



REPORT NUMBER: 769012\_400MP

CATALOG NUMBER: GSM-XX-400-MP-XX-2F-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





REPORT NUMBER: 769012\_400MP

CATALOG NUMBER: GSM-XX-400-MP-XX-2F-SG-XX-HS

**CANDELA DISTRIBUTION (continued):**

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	10878.9	10878.9	10878.9	10878.9	10878.9	10878.9	10878.9	10878.9	10878.9	10878.9
2.5°	10573.3	10543.3	10475.6	10433.3	10421.1	10402.2	10384.4	10384.4	10347.8	10353.3
5°	10054.4	9920.0	9778.9	9700.0	9717.8	9736.7	9766.7	9766.7	9742.2	9742.2
7.5°	9620.0	9363.3	9112.2	8972.2	8855.6	8892.2	8941.1	8904.4	8825.6	8813.3
10°	9234.4	8898.9	8611.1	8330.0	8134.4	8036.7	8104.4	8097.8	8031.1	8031.1
12.5°	8977.8	8598.9	8251.1	7877.8	7591.1	7358.9	7437.8	7481.1	7425.6	7432.2
15°	8855.6	8440.0	8018.9	7560.0	7168.9	6931.1	6863.3	6875.6	6802.2	6808.9
17.5°	8782.2	8305.6	7804.4	7230.0	6857.8	6508.9	6337.8	6368.9	6313.3	6307.8
20°	8801.1	8214.4	7640.0	7090.0	6655.6	6203.3	5922.2	5953.3	5928.9	5953.3
22.5°	8923.3	8268.9	7560.0	7016.7	6545.6	5916.7	5494.4	5525.6	5665.6	5672.2
25°	9307.8	8544.4	7755.6	7168.9	6478.9	5677.8	5152.2	4975.6	5232.2	5244.4
27.5°	9827.8	8965.6	8061.1	7303.3	6398.9	5433.3	4761.1	4277.8	4424.4	4461.1
30°	10347.8	9381.1	8422.2	7493.3	6105.6	5091.1	4125.6	3507.8	3551.1	3568.9
32.5°	10573.3	9663.3	8678.9	7596.7	5910.0	4731.1	3483.3	2756.7	2725.6	2725.6
35°	10634.4	9632.2	8440.0	7291.1	5482.2	4357.8	2896.7	2163.3	2157.8	2163.3
37.5°	10426.7	9394.4	8128.9	6870.0	5091.1	4015.6	2426.7	1742.2	1864.4	1906.7
40°	9180.0	8146.7	7046.7	5848.9	4675.6	3654.4	2047.8	1644.4	1808.9	1906.7
42.5°	8000.0	7022.2	6081.1	5110.0	4382.2	3324.4	1735.6	1552.2	1796.7	1931.1
45°	7603.3	6618.9	5794.4	5005.6	4338.9	2988.9	1473.3	1491.1	1766.7	1821.1
47.5°	7694.4	6601.1	5757.8	5030.0	4400.0	2671.1	1290.0	1412.2	1497.8	1478.9
50°	8146.7	6790.0	5800.0	5066.7	4424.4	2402.2	1283.3	1393.3	1307.8	1356.7
52.5°	8818.9	7058.9	5892.2	5054.4	4387.8	2163.3	1338.9	1442.2	1522.2	1588.9
55°	9620.0	7291.1	5971.1	5054.4	4351.1	1950.0	1344.4	1368.9	1576.7	1686.7
57.5°	9522.2	7181.1	5928.9	5054.4	4387.8	1730.0	1246.7	1143.3	1417.8	1576.7
60°	9002.2	6838.9	5831.1	5146.7	4480.0	1510.0	1033.3	825.6	1136.7	1307.8
62.5°	8953.3	6906.7	6007.8	5323.3	4668.9	1454.4	691.1	495.6	715.6	806.7
65°	9204.4	7285.6	6405.6	5592.2	4968.9	1375.6	434.4	256.7	287.8	317.8
67.5°	10030.0	7572.2	6527.8	5494.4	4841.1	1143.3	238.9	134.4	97.8	97.8
70°	10054.4	6863.3	5488.9	4338.9	3868.9	782.2	116.7	55.6	6.7	0.0
72.5°	7358.9	4694.4	2994.4	2004.4	1791.1	348.9	85.6	31.1	0.0	0.0
75°	4731.1	2835.6	1454.4	892.2	605.6	97.8	55.6	12.2	0.0	0.0
77.5°	3507.8	1698.9	770.0	422.2	214.4	12.2	6.7	0.0	0.0	0.0
80°	1803.3	727.8	293.3	153.3	36.7	0.0	0.0	0.0	0.0	0.0
82.5°	195.6	92.2	36.7	6.7	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



REPORT NUMBER: 769012\_400MP

CATALOG NUMBER: GSM-XX-400-MP-XX-2F-SG-XX-HS

**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)