

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: 769011_400MP

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: 769011_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-X
Description: MEDIUM ARCHITECTURAL AREA LUMINAIRE-HORIZONTAL LAMP-TYPE II DISTRIBUTION
Light Source: 400 WATT PULSE-START CLEAR ED-37 HORIZONTAL BURN
Ballast/Driver: -

Summary

Lumens per Lamp: 40000 (1 lamp)
Luminaire Lumens: 30561.5 lumens
Efficiency: 76.4%
Efficacy: 67.6 lumens/watt
Luminous Opening: Point Source (0' x 0' x 0')
IES Classification: Type III - Medium - Full Cutoff
BUG Rating: B4 - U0 - G4

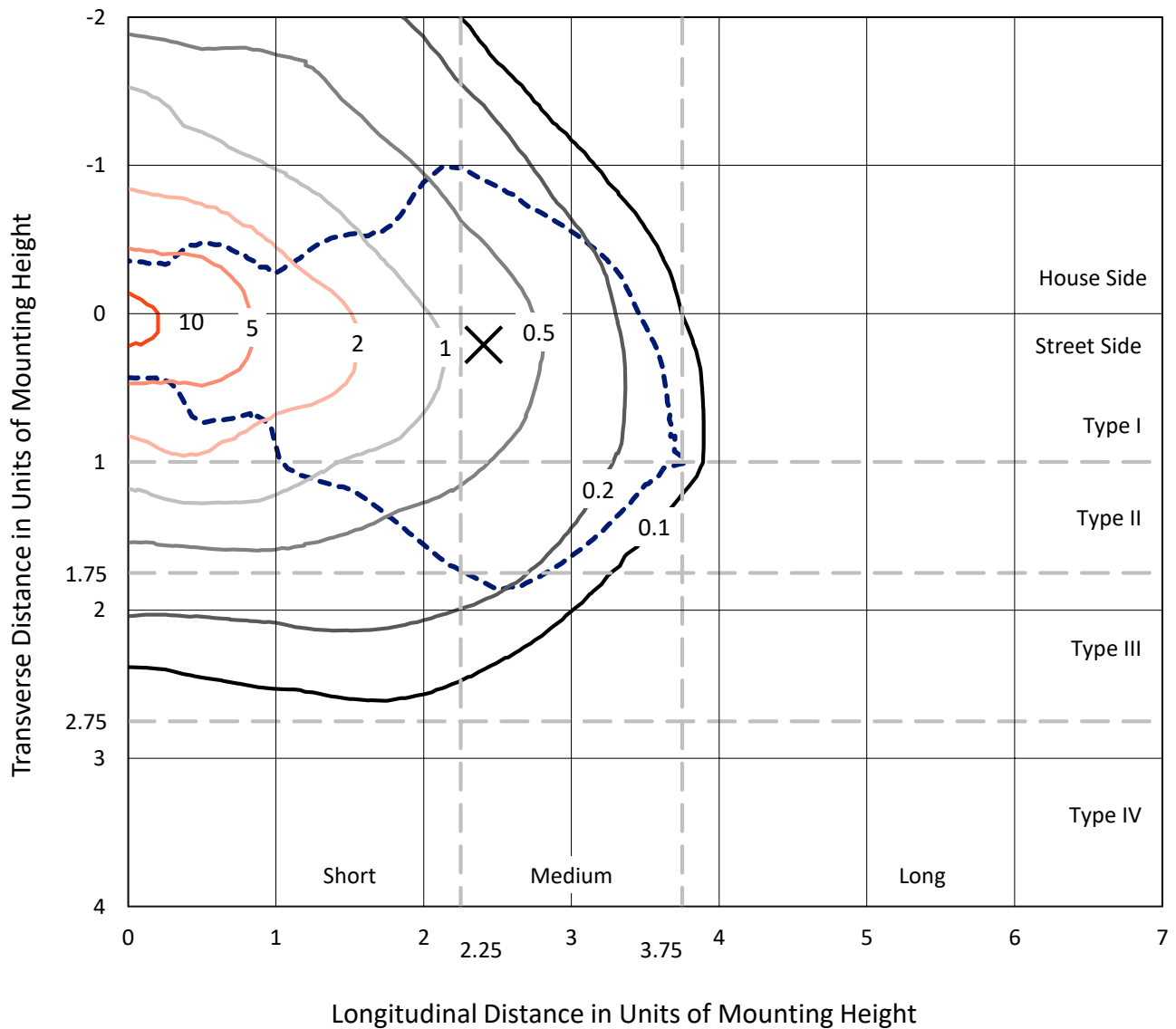
Input Watts (W): 452
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



REPORT NUMBER: 769011_400MP
 CATALOG NUMBER: GSM-XX-400-MP-XX-2F-SG-XX-X

Iso-Footcandle Lines of Horizontal Illumination

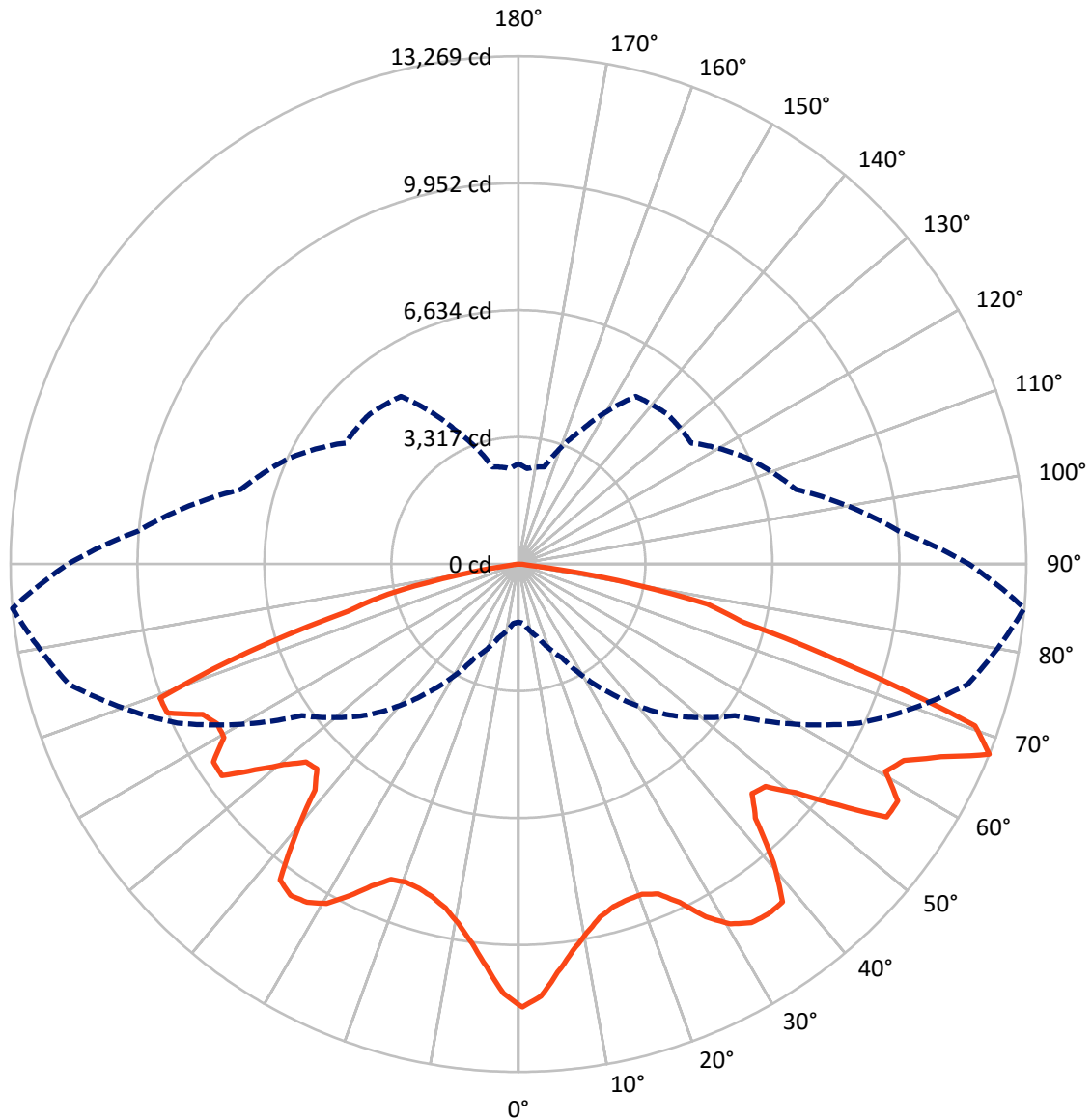
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 12.9 fc
 Type III - Medium - Full Cutoff

REPORT NUMBER: 769011_400MP
CATALOG NUMBER: GSM-XX-400-MP-XX-2F-SG-XX-X

Luminous Intensity Polar Plot



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

REPORT NUMBER: 769011_400MP
 CATALOG NUMBER: GSM-XX-400-MP-XX-2F-SG-XX-X

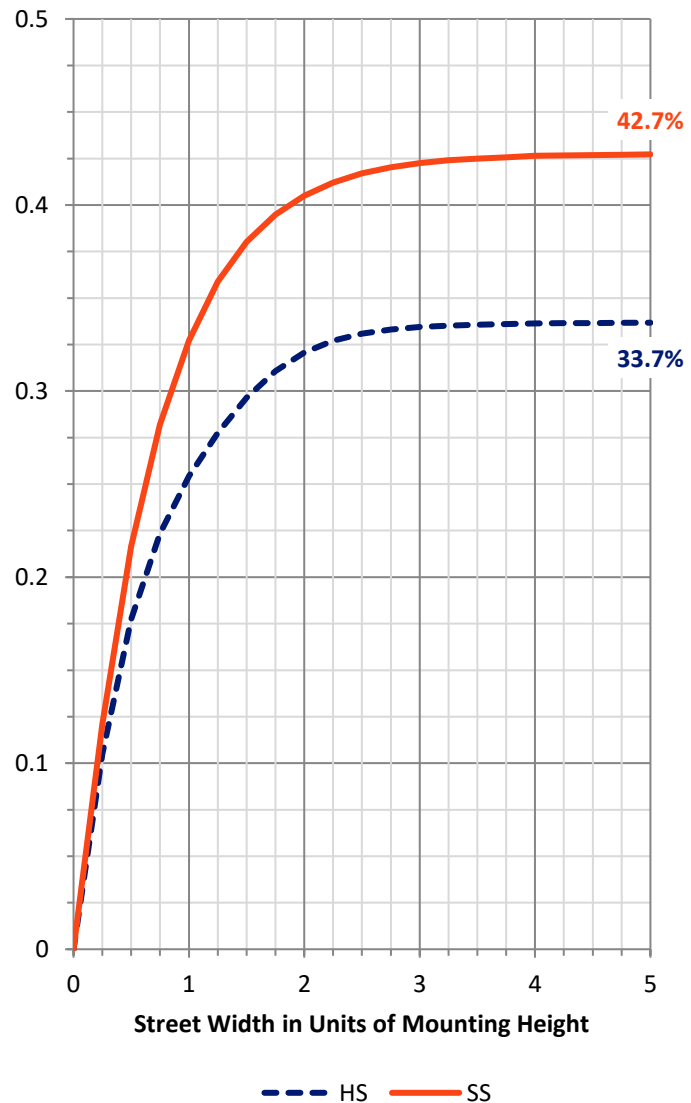
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	13522.9	0.0	13522.9
	% Lamp	33.8	0.0	33.8
Street Side	Lumens	17038.6	0.0	17038.6
	% Lamp	42.6	0.0	42.6
Total	Lumens	30561.5	0.0	30561.5
	% Lamp	76.4	0.0	76.4

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	990.4	3.2	2.5
10°-20°	2412.2	7.9	6.0
20°-30°	3485.3	11.4	8.7
30°-40°	4572.5	15.0	11.4
40°-50°	4623.2	15.1	11.6
50°-60°	5546.6	18.1	13.9
60°-70°	5914.0	19.4	14.8
70°-80°	2881.3	9.4	7.2
80°-90°	135.9	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°	30561.5	100.0	76.4
0°-180°	30561.5	100.0	76.4



REPORT NUMBER: 769011_400MP

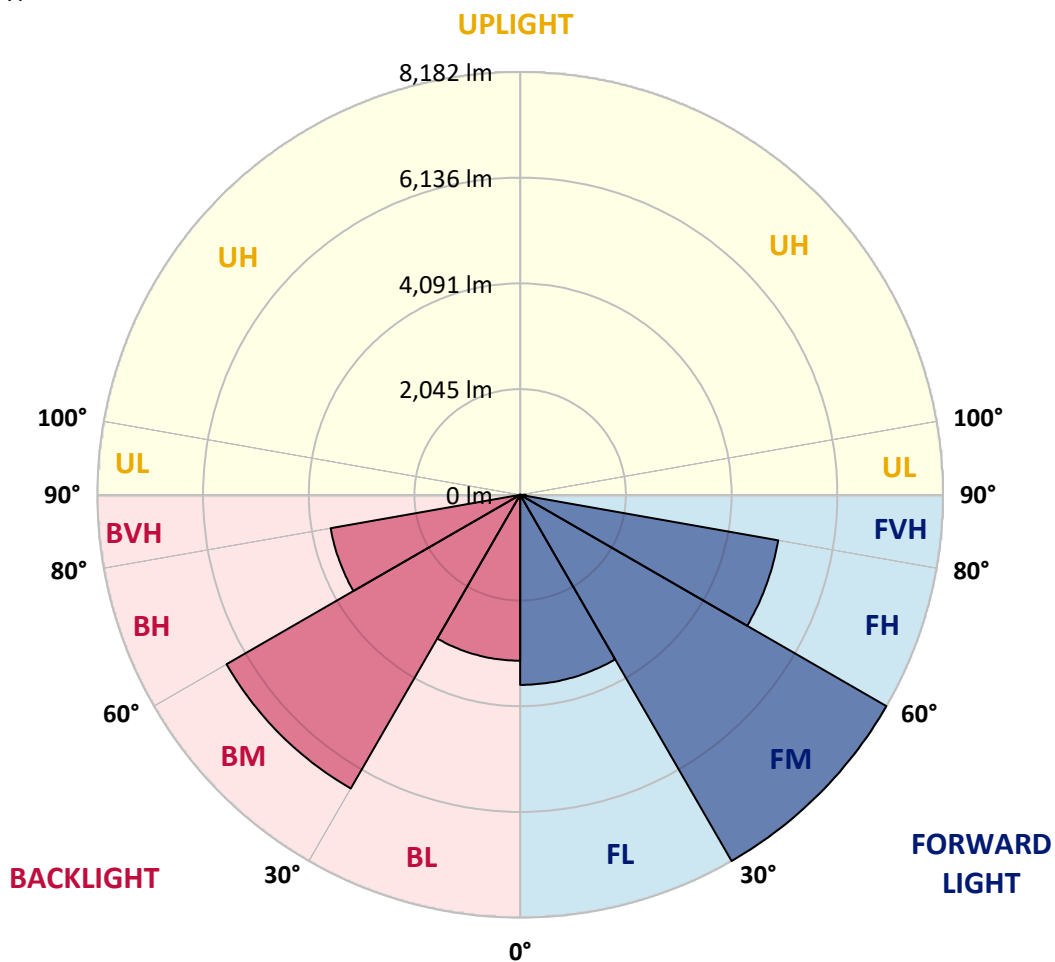
CATALOG NUMBER: GSM-XX-400-MP-XX-2F-SG-XX-X

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Lamp	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3677.6	9.2			
FM (30°-60°)	8182.0	20.5			
FH (60°-80°)	5071.6	12.7			G3/7500
FVH (80°-90°)	107.5	0.3			G2/225
BL (0°-30°)	3210.4	8.0	B4/5000		
BM (30°-60°)	6560.4	16.4	B4/8500		
BH (60°-80°)	3723.7	9.3	B4/5000		G4/5000
BVH (80°-90°)	28.4	0.1			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	
Trapped Light	9438.5	23.6			

BUG Rating: B4-U0-G4

Type III Medium





REPORT NUMBER: 769011_400MP
 CATALOG NUMBER: GSM-XX-400-MP-XX-2F-SG-XX-X

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	11575.6	11575.6	11575.6	11575.6	11575.6	11575.6	11575.6	11575.6	11575.6	11575.6	11575.6
2.5°	11856.7	11868.9	11851.1	11795.6	11722.2	11612.2	11538.9	11460.0	11386.7	11306.7	11276.7
5°	11856.7	11856.7	11802.2	11692.2	11551.1	11355.6	11184.4	11025.6	10866.7	10714.4	10628.9
7.5°	11318.9	11325.6	11270.0	11178.9	11074.4	10934.4	10751.1	10573.3	10396.7	10201.1	10084.4
10°	10524.4	10518.9	10487.8	10482.2	10451.1	10384.4	10328.9	10201.1	10030.0	9797.8	9663.3
12.5°	9656.7	9693.3	9693.3	9748.9	9810.0	9864.4	9864.4	9815.6	9668.9	9467.8	9351.1
15°	8825.6	8867.8	8972.2	9087.8	9216.7	9307.8	9431.1	9516.7	9448.9	9290.0	9155.6
17.5°	8092.2	8122.2	8268.9	8458.9	8605.6	8818.9	9075.6	9258.9	9326.7	9222.2	9070.0
20°	7358.9	7364.4	7542.2	7786.7	8036.7	8336.7	8764.4	9118.9	9277.8	9210.0	9070.0
22.5°	6662.2	6674.4	6887.8	7200.0	7530.0	7963.3	8532.2	9112.2	9418.9	9363.3	9161.1
25°	6051.1	6081.1	6288.9	6662.2	7138.9	7718.9	8513.3	9307.8	9852.2	9791.1	9577.8
27.5°	5513.3	5525.6	5770.0	6210.0	6802.2	7633.3	8696.7	9778.9	10451.1	10438.9	10108.9
30°	5085.6	5103.3	5372.2	5904.4	6637.8	7701.1	8996.7	10225.6	10952.2	10910.0	10585.6
32.5°	4681.1	4736.7	5158.9	5800.0	6662.2	7896.7	9210.0	10384.4	11191.1	11172.2	10824.4
35°	4326.7	4418.9	4968.9	5751.1	6784.4	8061.1	9204.4	10390.0	11240.0	11233.3	10897.8
37.5°	4057.8	4174.4	4883.3	5733.3	6900.0	8006.7	9087.8	10426.7	11441.1	11208.9	10787.8
40°	3825.6	3972.2	4834.4	5812.2	6802.2	7706.7	8892.2	10304.4	10927.8	10267.8	9724.4
42.5°	3642.2	3795.6	4834.4	5818.9	6430.0	7114.4	8256.7	9461.1	9761.1	9082.2	8537.8
45°	3532.2	3685.6	4755.6	5696.7	5892.2	6362.2	7334.4	8458.9	9008.9	8556.7	8097.8
47.5°	3410.0	3551.1	4668.9	5494.4	5586.7	5971.1	6753.3	7957.8	8923.3	8684.4	8232.2
50°	3287.8	3397.8	4412.2	5220.0	5604.4	5995.6	6650.0	8165.6	9455.6	9387.8	8874.4
52.5°	3177.8	3208.9	4094.4	4914.4	5770.0	6222.2	6924.4	8740.0	10487.8	10463.3	9730.0
55°	2921.1	2970.0	3673.3	4534.4	5770.0	6435.6	7340.0	9485.6	11545.6	11673.3	10751.1
57.5°	2750.0	2762.2	3190.0	4118.9	5543.3	6374.4	7517.8	9852.2	11814.4	11685.6	10683.3
60°	2591.1	2566.7	2866.7	3740.0	5066.7	6056.7	7248.9	9834.4	11032.2	11020.0	10176.7
62.5°	2358.9	2304.4	2585.6	3336.7	4577.8	5714.4	6875.6	10060.0	11191.1	11301.1	10243.3
65°	1894.4	1864.4	2248.9	2921.1	4228.9	5611.1	6887.8	10475.6	12162.2	12137.8	10738.9
67.5°	1515.6	1558.9	1992.2	2707.8	4082.2	5580.0	6906.7	9834.4	12150.0	13268.9	11771.1
70°	1197.8	1234.4	1742.2	2402.2	3825.6	5372.2	7041.1	9277.8	11746.7	12657.8	11203.3
72.5°	831.1	867.8	1246.7	2016.7	3355.6	4907.8	6821.1	8727.8	10255.6	8990.0	8036.7
75°	562.2	562.2	727.8	1185.6	1967.8	2786.7	4003.3	5354.4	6723.3	6032.2	5268.9
77.5°	366.7	336.7	238.9	293.3	537.8	1222.2	2426.7	4211.1	6002.2	5048.9	4260.0
80°	146.7	116.7	85.6	116.7	293.3	727.8	1461.1	2701.1	3581.1	2652.2	2170.0
82.5°	24.4	18.9	0.0	6.7	55.6	122.2	183.3	281.1	415.6	256.7	202.2
85°	0.0	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	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



REPORT NUMBER: 769011_400MP
 CATALOG NUMBER: GSM-XX-400-MP-XX-2F-SG-XX-X

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	11575.6	11575.6	11575.6	11575.6	11575.6	11575.6	11575.6	11575.6	11575.6	11575.6
2.5°	11227.8	11166.7	11086.7	11032.2	11007.8	10964.4	10946.7	10940.0	10946.7	10927.8
5°	10561.1	10438.9	10323.3	10206.7	10194.4	10194.4	10218.9	10218.9	10218.9	10231.1
7.5°	9974.4	9742.2	9522.2	9368.9	9246.7	9265.6	9332.2	9363.3	9314.4	9314.4
10°	9516.7	9222.2	8953.3	8666.7	8464.4	8397.8	8537.8	8598.9	8562.2	8556.7
12.5°	9185.6	8831.1	8520.0	8177.8	7933.3	7767.8	7945.6	8024.4	7994.4	7970.0
15°	8984.4	8593.3	8220.0	7835.6	7505.6	7315.6	7420.0	7444.4	7352.2	7334.4
17.5°	8862.2	8403.3	7975.6	7523.3	7205.6	6955.6	6955.6	6967.8	6851.1	6833.3
20°	8818.9	8244.4	7767.8	7352.2	7028.9	6692.2	6521.1	6557.8	6442.2	6417.8
22.5°	8886.7	8251.1	7657.8	7236.7	6955.6	6447.8	6063.3	6100.0	6112.2	6075.6
25°	9241.1	8513.3	7823.3	7334.4	6906.7	6252.2	5738.9	5531.1	5726.7	5721.1
27.5°	9724.4	8880.0	8055.6	7437.8	6924.4	6154.4	5464.4	5036.7	5232.2	5232.2
30°	10188.9	9246.7	8373.3	7572.2	6790.0	6002.2	5195.6	4638.9	4761.1	4755.6
32.5°	10421.1	9522.2	8617.8	7652.2	6765.6	5953.3	4907.8	4326.7	4338.9	4326.7
35°	10506.7	9504.4	8397.8	7346.7	6405.6	5488.9	4638.9	4082.2	4070.0	4082.2
37.5°	10341.1	9283.3	8097.8	6912.2	5965.6	5158.9	4333.3	3905.6	3954.4	3996.7
40°	9143.3	8085.6	7034.4	5953.3	5164.4	4638.9	4131.1	3795.6	3923.3	4021.1
42.5°	7945.6	6955.6	6100.0	5213.3	4595.6	4192.2	3905.6	3703.3	3868.9	3972.2
45°	7505.6	6545.6	5818.9	5085.6	4461.1	3991.1	3734.4	3624.4	3881.1	3996.7
47.5°	7584.4	6533.3	5763.3	5103.3	4504.4	3935.6	3673.3	3593.3	4045.6	4216.7
50°	8061.1	6741.1	5800.0	5103.3	4516.7	3954.4	3795.6	3697.8	4375.6	4668.9
52.5°	8733.3	6992.2	5928.9	5091.1	4492.2	4027.8	4045.6	4045.6	4963.3	5378.9
55°	9516.7	7193.3	5990.0	5078.9	4485.6	4186.7	4345.6	4406.7	5281.1	5684.4
57.5°	9504.4	7102.2	5941.1	5097.8	4595.6	4461.1	4731.1	4595.6	5164.4	5354.4
60°	8928.9	6747.8	5848.9	5195.6	4767.8	4828.9	5097.8	4480.0	4706.7	4853.3
62.5°	8904.4	6838.9	6038.9	5378.9	5042.2	5286.7	4993.3	3930.0	4101.1	4265.6
65°	9131.1	7242.2	6411.1	5604.4	5470.0	5653.3	4546.7	3282.2	3416.7	3520.0
67.5°	9962.2	7511.1	6570.0	5513.3	5518.9	5347.8	3837.8	2627.8	2505.6	2615.6
70°	9998.9	6808.9	5464.4	4345.6	4436.7	4125.6	3055.6	2004.4	1637.8	1711.1
72.5°	7388.9	4712.2	2964.4	2028.9	2004.4	1833.3	1595.6	1082.2	923.3	965.6
75°	4614.4	2688.9	1400.0	916.7	740.0	647.8	574.4	440.0	446.7	452.2
77.5°	3495.6	1632.2	740.0	446.7	330.0	256.7	232.2	220.0	220.0	220.0
80°	1668.9	678.9	281.1	158.9	104.4	67.8	67.8	67.8	73.3	73.3
82.5°	146.7	67.8	12.2	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

(END OF REPORT)