

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: 769009_320MP

Luminaire Tested: **GSM-XX-320-MP-XX-2F-FG-XX-HS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: 769009_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-2F-FG-XX-HS
Description: MEDIUM ARCHITECTURAL AREA LUMINAIRE-HORIZONTAL LAMP-TYPE II
DISTRIBUTION
WITH HOUSE-SIDE SHIELD
Light Source: 320 WATT PULSE-START CLEAR ED-28 HORIZONTAL BURN
Ballast/Driver: -

Summary

Lumens per Lamp: 30000 (1 lamp)
Luminaire Lumens: 21514 lumens
Efficiency: 71.7%
Efficacy: 61.5 lumens/watt
Luminous Opening: Point Source (0' x 0' x 0')
IES Classification: Type II - Short - Full Cutoff
BUG Rating: B3 - U0 - G3

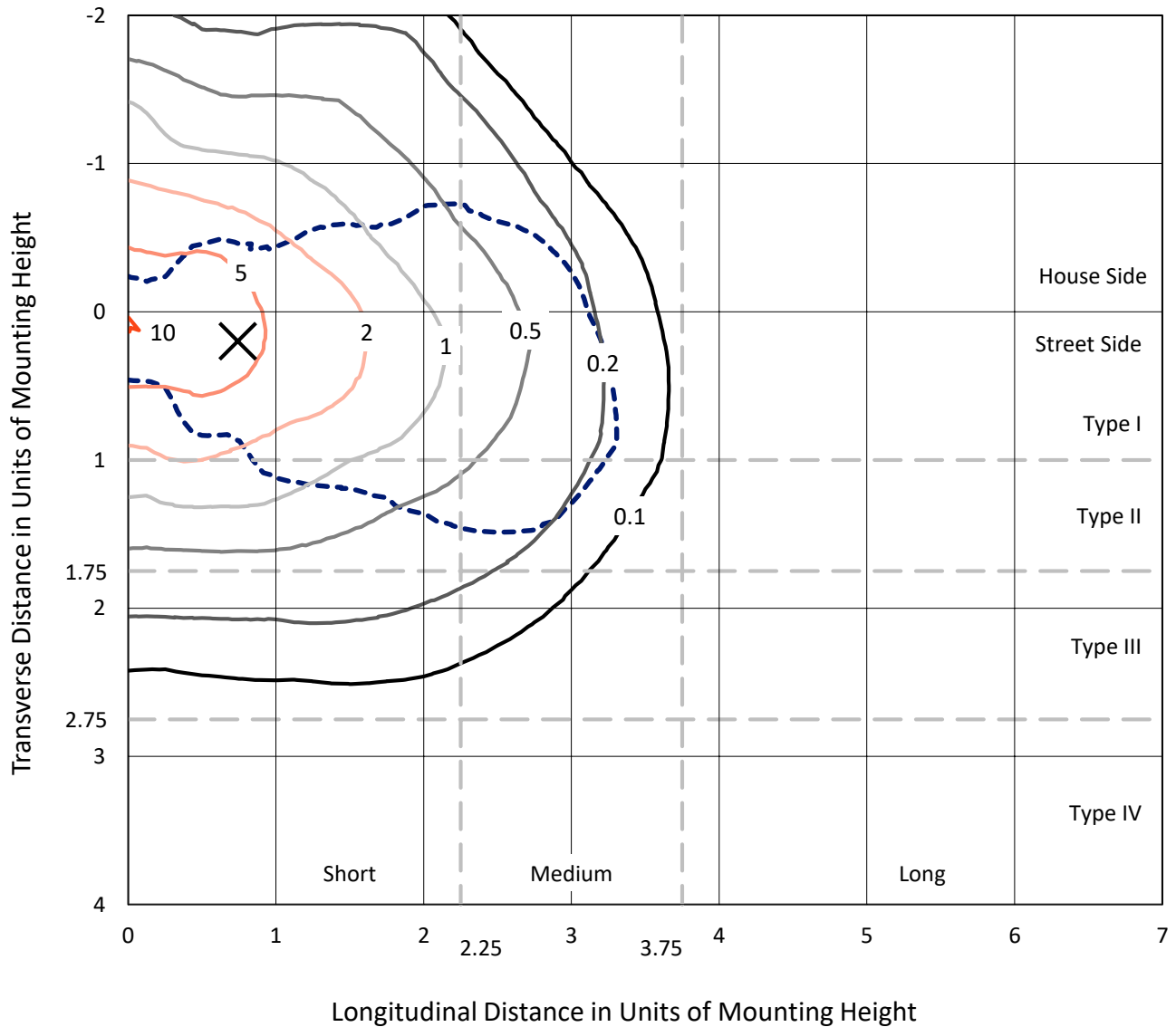
Input Watts (W): 350
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



REPORT NUMBER: 769009_320MP
 CATALOG NUMBER: GSM-XX-320-MP-XX-2F-FG-XX-HS

Iso-Footcandle Lines of Horizontal Illumination

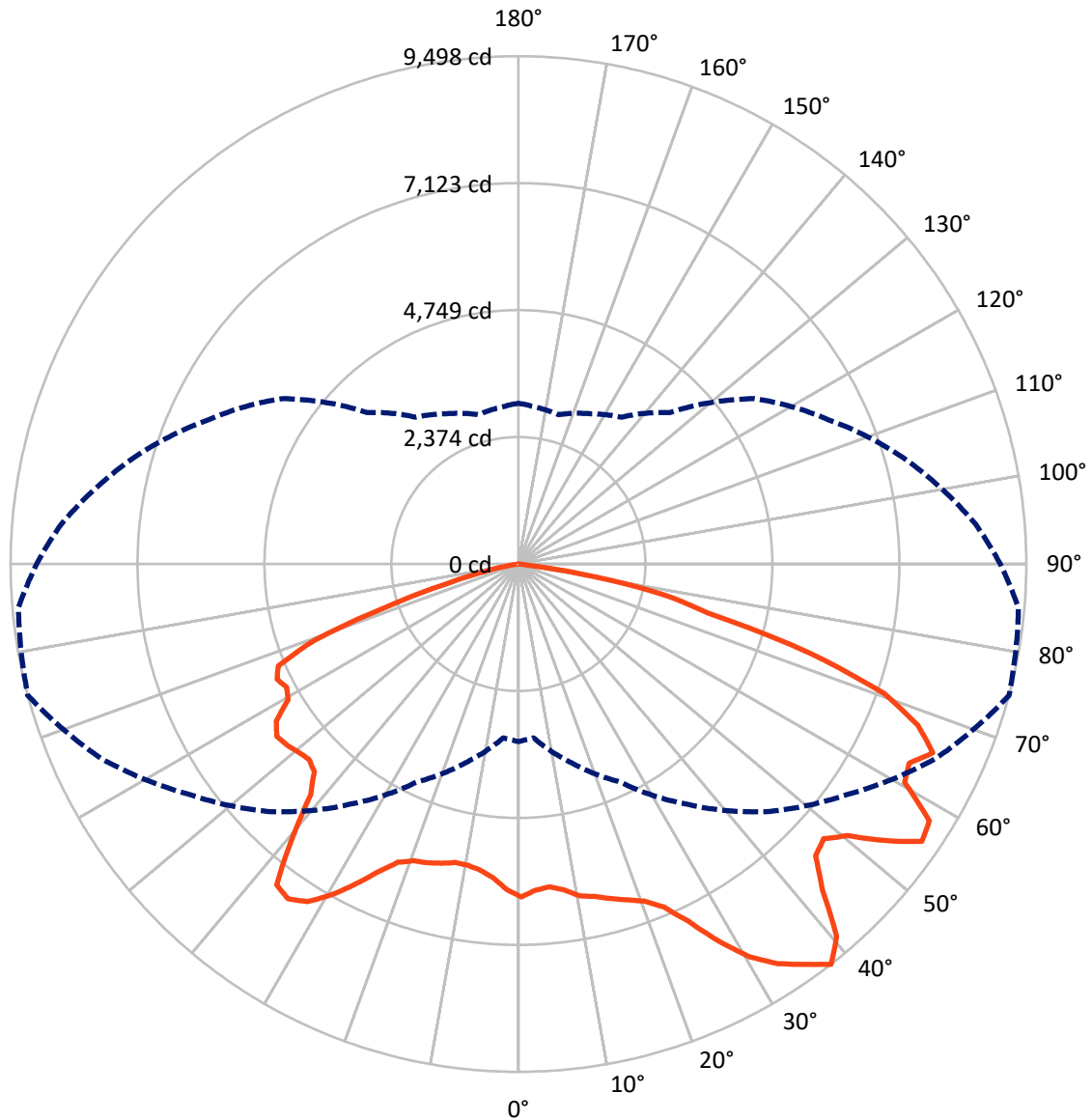
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10.1 fc
 Type II - Short - Full Cutoff

REPORT NUMBER: 769009_320MP
CATALOG NUMBER: GSM-XX-320-MP-XX-2F-FG-XX-HS

Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral - - - Horizontal Cone Through 37.5-Deg Vertical

REPORT NUMBER: 769009_320MP

CATALOG NUMBER: GSM-XX-320-MP-XX-2F-FG-XX-HS

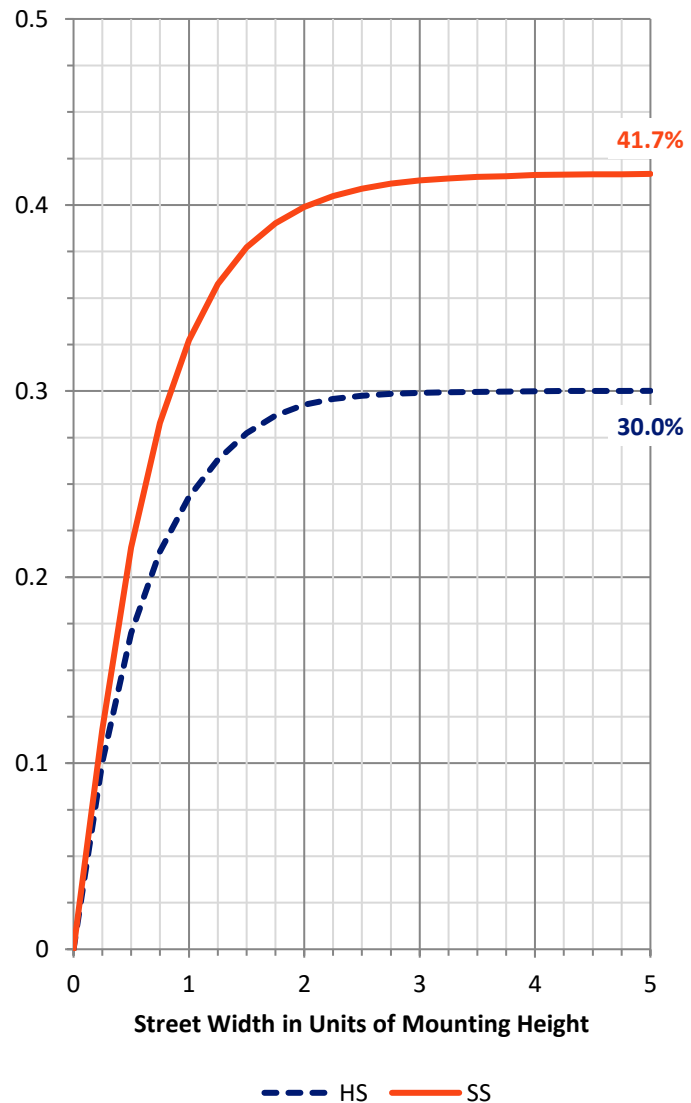
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	9049.5	0.0	9049.5
	% Lamp	30.2	0.0	30.2
Street Side	Lumens	12464.5	0.0	12464.5
	% Lamp	41.5	0.0	41.5
Total	Lumens	21514.0	0.0	21514.0
	% Lamp	71.7	0.0	71.7

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	571.0	2.7	1.9
10°-20°	1604.6	7.5	5.3
20°-30°	2565.3	11.9	8.6
30°-40°	3577.1	16.6	11.9
40°-50°	3709.6	17.2	12.4
50°-60°	4088.8	19.0	13.6
60°-70°	3789.2	17.6	12.6
70°-80°	1551.0	7.2	5.2
80°-90°	57.5	0.3	0.2
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°	21514.0	100.0	71.7
0°-180°	21514.0	100.0	71.7



REPORT NUMBER: 769009_320MP

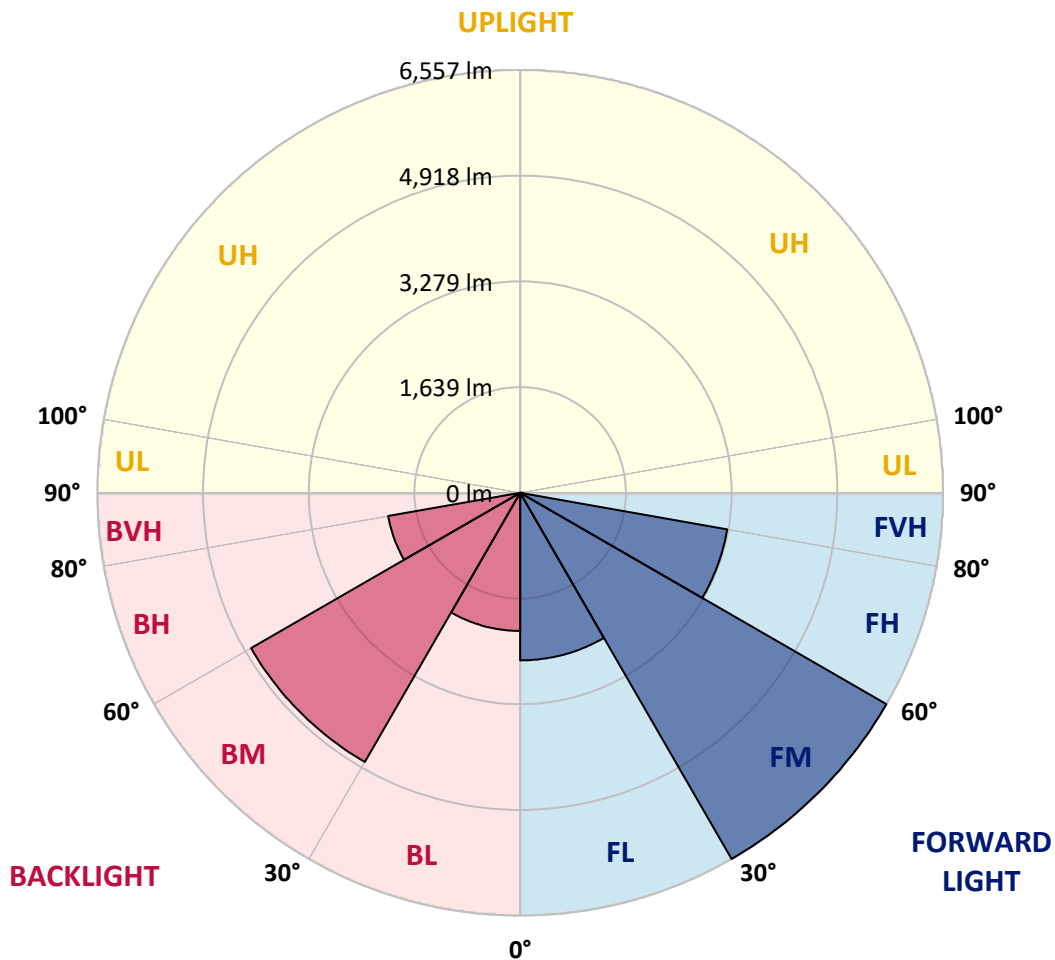
CATALOG NUMBER: GSM-XX-320-MP-XX-2F-FG-XX-HS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Lamp	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2598.8	8.7			
FM (30°-60°)	6557.1	21.9			
FH (60°-80°)	3261.3	10.9			G2/5000
FVH (80°-90°)	47.3	0.2			G1/100
BL (0°-30°)	2142.0	7.1	B3/2500		
BM (30°-60°)	4818.4	16.1	B3/5000		
BH (60°-80°)	2079.0	6.9	B3/2500		G3/2500
BVH (80°-90°)	10.2	0.0			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	
Trapped Light	8486.0	28.3			

BUG Rating: B3-U0-G3

Type II Short





REPORT NUMBER: 769009_320MP

CATALOG NUMBER: GSM-XX-320-MP-XX-2F-FG-XX-HS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	6225.0	6225.0	6225.0	6225.0	6225.0	6225.0	6225.0	6225.0	6225.0	6225.0	6225.0
2.5°	6353.3	6357.5	6330.0	6293.3	6256.7	6215.8	6183.3	6160.8	6105.8	6096.7	6096.7
5°	6481.7	6504.2	6458.3	6403.3	6371.7	6289.2	6220.0	6155.8	6064.2	6000.0	5972.5
7.5°	6454.2	6481.7	6458.3	6430.8	6440.0	6408.3	6348.3	6265.8	6155.8	6045.8	5986.7
10°	6362.5	6362.5	6357.5	6412.5	6472.5	6500.0	6495.0	6449.2	6311.7	6128.3	6041.7
12.5°	6206.7	6192.5	6225.0	6320.8	6421.7	6500.0	6527.5	6509.2	6380.8	6220.0	6115.0
15°	6014.2	6000.0	6078.3	6201.7	6325.8	6399.2	6509.2	6568.3	6495.0	6357.5	6247.5
17.5°	5739.2	5730.0	5853.3	6000.0	6115.0	6280.0	6454.2	6582.5	6605.0	6490.8	6371.7
20°	5381.7	5381.7	5523.3	5720.8	5895.0	6105.8	6399.2	6646.7	6729.2	6646.7	6527.5
22.5°	5005.8	4996.7	5180.0	5395.0	5656.7	5968.3	6371.7	6775.0	6967.5	6903.3	6751.7
25°	4657.5	4634.2	4804.2	5088.3	5436.7	5899.2	6481.7	7059.2	7407.5	7348.3	7165.0
27.5°	4318.3	4295.0	4478.3	4808.3	5253.3	5931.7	6756.7	7540.8	7990.0	7957.5	7705.8
30°	4034.2	4010.8	4208.3	4602.5	5175.0	6073.3	7105.0	7999.2	8525.8	8480.0	8237.5
32.5°	3750.0	3722.5	4052.5	4542.5	5235.0	6284.2	7394.2	8310.8	8910.8	8920.0	8640.8
35°	3510.8	3479.2	3928.3	4515.0	5363.3	6522.5	7531.7	8475.8	9195.0	9250.0	8947.5
37.5°	3318.3	3263.3	3850.8	4496.7	5482.5	6550.0	7513.3	8608.3	9497.5	9387.5	9011.7
40°	3144.2	3085.0	3777.5	4551.7	5404.2	6362.5	7361.7	8553.3	9163.3	8718.3	8274.2
42.5°	3025.0	2924.2	3768.3	4547.5	5106.7	5908.3	6866.7	7920.8	8333.3	7875.0	7412.5
45°	2887.5	2791.7	3704.2	4423.3	4675.8	5290.0	6142.5	7165.0	7788.3	7462.5	7050.0
47.5°	2777.5	2672.5	3603.3	4245.0	4428.3	4950.8	5633.3	6742.5	7678.3	7480.8	7045.8
50°	2658.3	2553.3	3391.7	4001.7	4410.0	4895.8	5477.5	6797.5	7980.8	7907.5	7398.3
52.5°	2493.3	2420.0	3130.8	3740.8	4460.0	4964.2	5569.2	7059.2	8595.0	8516.7	7870.8
55°	2319.2	2236.7	2782.5	3433.3	4395.8	5015.0	5761.7	7425.8	9158.3	9149.2	8393.3
57.5°	2126.7	2095.0	2425.0	3089.2	4153.3	4835.8	5748.3	7513.3	9062.5	8943.3	8191.7
60°	1915.8	1939.2	2154.2	2745.8	3708.3	4492.5	5404.2	7343.3	8296.7	8246.7	7600.0
62.5°	1686.7	1710.0	1906.7	2401.7	3272.5	4107.5	4987.5	7311.7	8200.8	8250.8	7467.5
65°	1356.7	1361.7	1618.3	2049.2	2942.5	3887.5	4776.7	7174.2	8516.7	8485.0	7495.0
67.5°	1127.5	1109.2	1384.2	1815.0	2718.3	3690.0	4588.3	6490.8	8054.2	8695.8	7719.2
70°	852.5	843.3	1145.8	1530.8	2374.2	3341.7	4364.2	5734.2	7256.7	7645.8	6806.7
72.5°	577.5	568.3	775.0	1187.5	1934.2	2841.7	3933.3	4955.0	5702.5	4964.2	4414.2
75°	366.7	366.7	430.8	641.7	1150.8	1732.5	2425.0	3011.7	3662.5	3245.0	2832.5
77.5°	210.8	234.2	170.0	197.5	320.8	628.3	1173.3	2021.7	2819.2	2328.3	1952.5
80°	100.8	105.8	78.3	82.5	142.5	311.7	614.2	1141.7	1457.5	1090.8	875.8
82.5°	36.7	32.5	27.5	18.3	27.5	45.8	87.5	142.5	174.2	105.8	73.3
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: 769009_320MP

CATALOG NUMBER: GSM-XX-320-MP-XX-2F-FG-XX-HS

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	6225.0	6225.0	6225.0	6225.0	6225.0	6225.0	6225.0	6225.0	6225.0	6225.0
2.5°	6096.7	6091.7	6060.0	6050.8	6060.0	6050.8	6069.2	6078.3	6069.2	6060.0
5°	5945.0	5895.0	5821.7	5785.0	5780.0	5766.7	5803.3	5821.7	5807.5	5803.3
7.5°	5917.5	5770.8	5610.8	5486.7	5409.2	5395.0	5440.8	5445.8	5413.3	5400.0
10°	5950.0	5711.7	5495.8	5280.8	5097.5	5005.8	5065.0	5083.3	5051.7	5042.5
12.5°	6000.0	5706.7	5413.3	5138.3	4905.0	4707.5	4785.8	4840.8	4817.5	4804.2
15°	6115.0	5780.0	5413.3	5070.0	4749.2	4533.3	4529.2	4584.2	4547.5	4538.3
17.5°	6234.2	5840.0	5413.3	4969.2	4657.5	4395.8	4331.7	4364.2	4350.0	4364.2
20°	6357.5	5885.8	5390.8	4955.0	4634.2	4327.5	4166.7	4230.8	4199.2	4199.2
22.5°	6555.0	6014.2	5455.0	5019.2	4666.7	4226.7	3965.0	4052.5	4139.2	4144.2
25°	6925.8	6320.8	5715.8	5248.3	4712.5	4171.7	3836.7	3777.5	4010.8	4006.7
27.5°	7425.8	6720.0	6050.8	5477.5	4740.0	4120.8	3745.0	3520.8	3781.7	3805.0
30°	7935.0	7110.0	6394.2	5706.7	4630.0	3965.0	3575.8	3314.2	3488.3	3530.0
32.5°	8301.7	7444.2	6641.7	5835.0	4529.2	3777.5	3391.7	3140.0	3213.3	3235.8
35°	8585.8	7600.0	6605.0	5684.2	4258.3	3552.5	3240.8	2997.5	3043.3	3052.5
37.5°	8580.8	7513.3	6390.0	5390.8	4006.7	3350.8	3103.3	2892.5	2960.8	3006.7
40°	7746.7	6650.8	5620.0	4661.7	3722.5	3204.2	2970.0	2828.3	2942.5	3015.8
42.5°	6839.2	5803.3	4905.0	4102.5	3479.2	3075.8	2855.8	2740.8	2883.3	2970.0
45°	6467.5	5445.8	4666.7	3974.2	3410.0	2951.7	2672.5	2594.2	2786.7	2869.2
47.5°	6430.8	5354.2	4579.2	3955.8	3424.2	2841.7	2475.0	2388.3	2718.3	2823.3
50°	6669.2	5413.3	4565.8	3951.7	3442.5	2773.3	2355.8	2250.8	2750.0	2951.7
52.5°	7008.3	5495.8	4615.8	3915.0	3391.7	2695.0	2287.5	2250.8	2970.0	3254.2
55°	7435.0	5550.8	4570.0	3864.2	3336.7	2640.0	2195.8	2260.0	3011.7	3345.8
57.5°	7293.3	5400.0	4455.8	3809.2	3341.7	2645.0	2090.0	2131.7	2654.2	2850.8
60°	6692.5	4996.7	4276.7	3768.3	3369.2	2672.5	1975.8	1820.0	2113.3	2291.7
62.5°	6485.8	4909.2	4290.8	3795.8	3474.2	2654.2	1741.7	1411.7	1746.7	1961.7
65°	6385.0	5000.8	4377.5	3823.3	3635.0	2507.5	1393.3	1068.3	1365.8	1512.5
67.5°	6564.2	4877.5	4226.7	3580.0	3510.8	2012.5	1017.5	779.2	916.7	1008.3
70°	6078.3	4080.0	3263.3	2608.3	2649.2	1224.2	687.5	527.5	536.7	595.8
72.5°	4029.2	2608.3	1631.7	1160.0	1145.8	600.8	408.3	311.7	302.5	320.8
75°	2489.2	1420.8	738.3	500.0	399.2	252.5	201.7	174.2	174.2	183.3
77.5°	1604.2	747.5	335.0	215.8	155.8	87.5	73.3	69.2	73.3	82.5
80°	674.2	275.0	105.8	55.0	32.5	5.0	0.0	5.0	9.2	9.2
82.5°	55.0	14.2	0.0	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)