

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: 769008_400MP

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: 769008_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-FG-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: 28461 lumens
Efficiency: 71.2%
Efficacy: 63.0 lumens/watt
Luminous Opening: Point Source (0' x 0' x 0')
IES Classification: Type III - Short - Full Cutoff
BUG Rating: B4 - U0 - G3

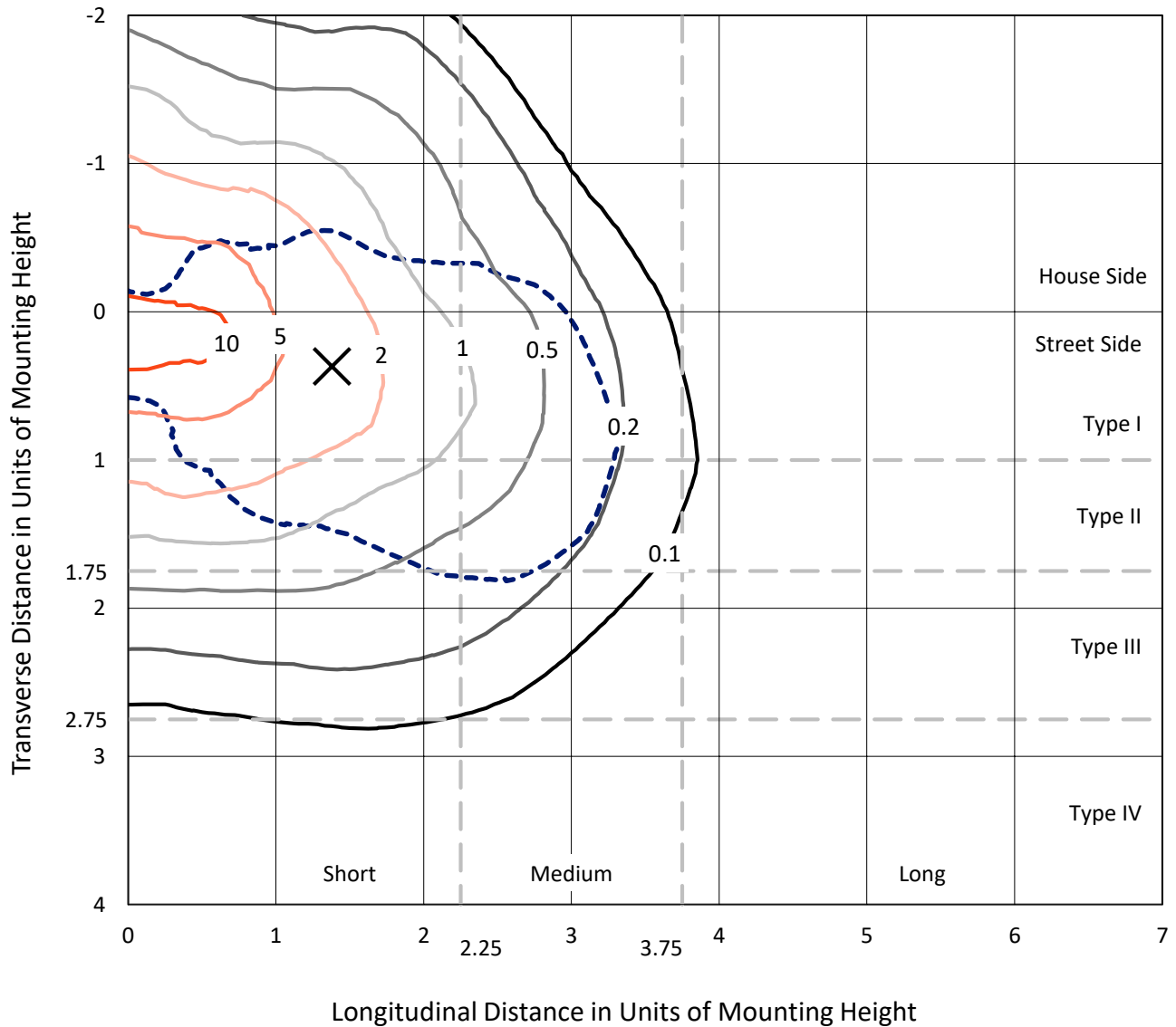
Input Watts (W): 452
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

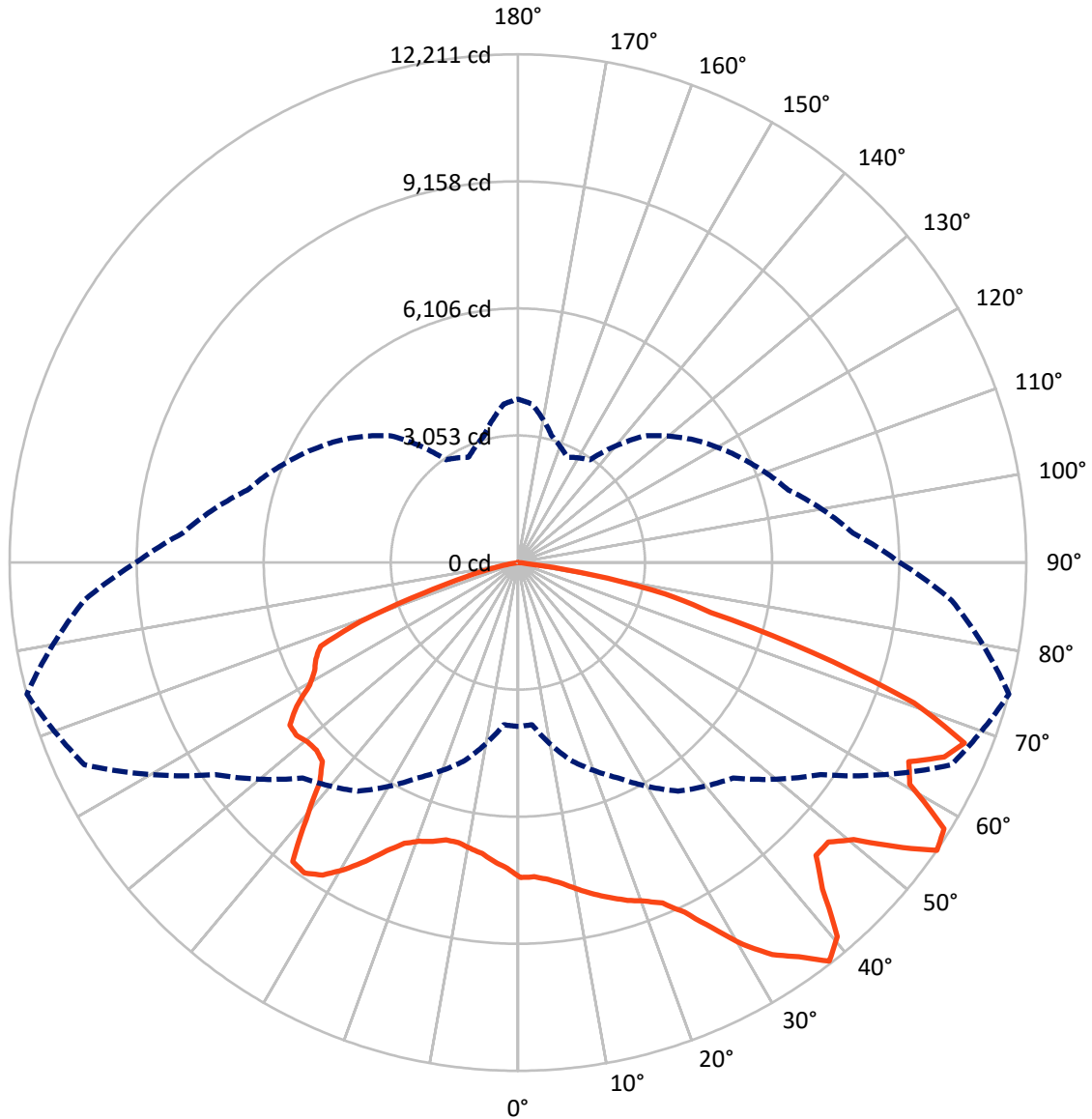
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 13.2 fc
 Type III - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral - - - Horizontal Cone Through 55-Deg Vertical

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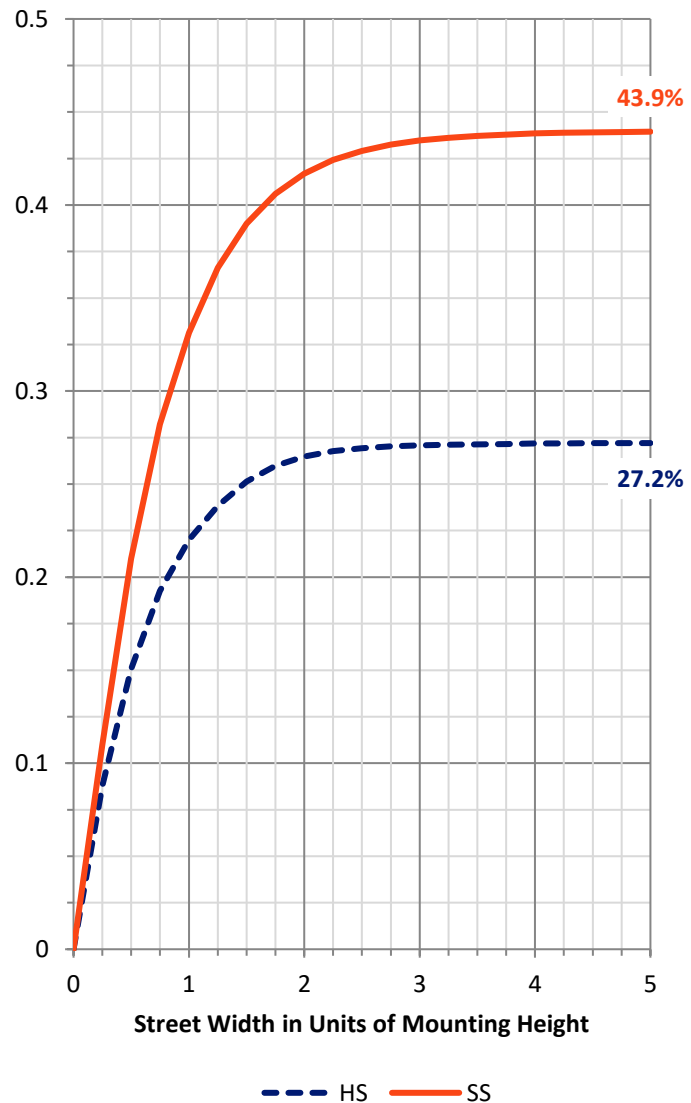
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	10930.0	0.0	10930.0
	% Lamp	27.3	0.0	27.3
Street Side	Lumens	17530.9	0.0	17530.9
	% Lamp	43.8	0.0	43.8
Total	Lumens	28461.0	0.0	28461.0
	% Lamp	71.2	0.0	71.2

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	705.1	2.5	1.8
10°-20°	2056.8	7.2	5.1
20°-30°	3363.9	11.8	8.4
30°-40°	4682.7	16.5	11.7
40°-50°	4964.7	17.4	12.4
50°-60°	5539.9	19.5	13.8
60°-70°	4992.0	17.5	12.5
70°-80°	2075.8	7.3	5.2
80°-90°	80.0	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°	28461.0	100.0	71.2
0°-180°	28461.0	100.0	71.2



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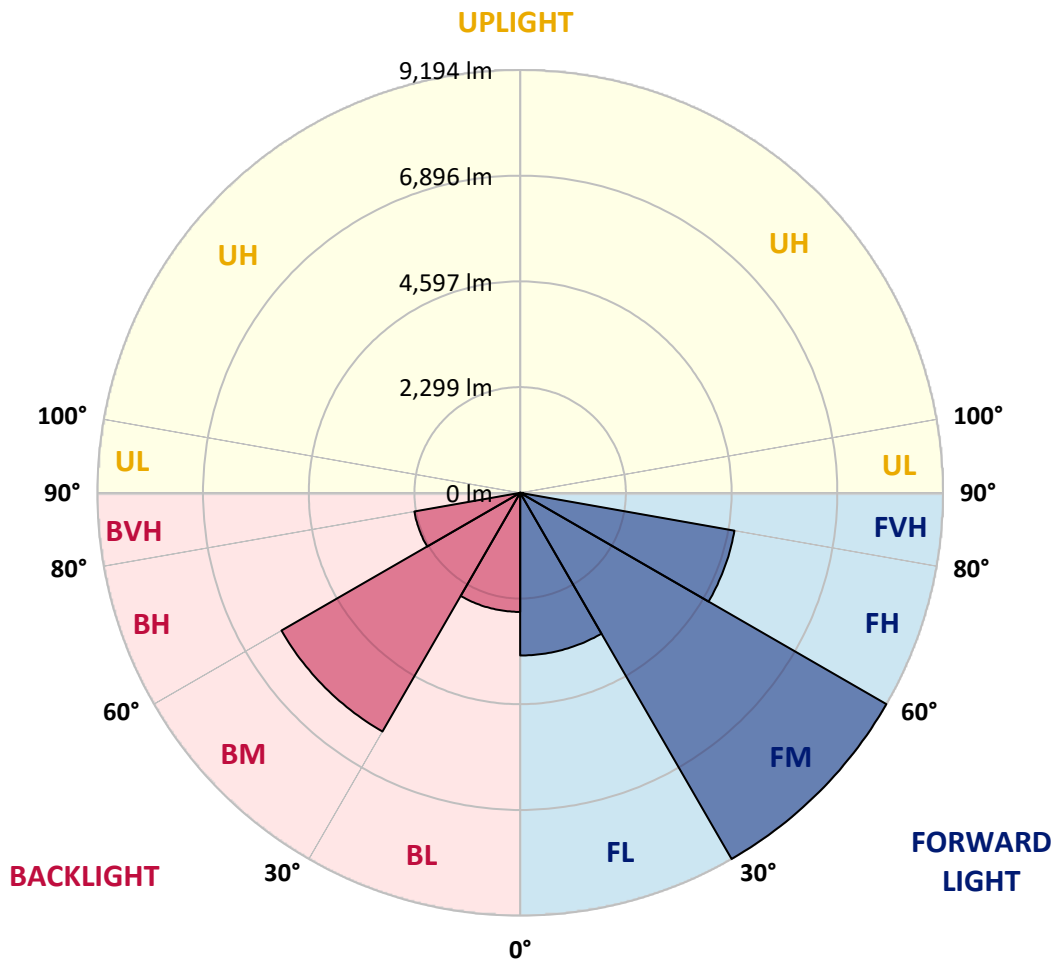
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Lamp	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3536.4	8.8			
FM	(30°-60°)	9194.2	23.0			
FH	(60°-80°)	4731.4	11.8			G2/5000
FVH	(80°-90°)	68.9	0.2			G1/100
BL	(0°-30°)	2589.5	6.5	B4/5000		
BM	(30°-60°)	5993.1	15.0	B4/8500		
BH	(60°-80°)	2336.4	5.8	B3/2500		G3/2500
BVH	(80°-90°)	11.1	0.0			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	
Trapped Light		11539.0	28.8			

BUG Rating: B4-U0-G3

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	7566.7	7566.7	7566.7	7566.7	7566.7	7566.7	7566.7	7566.7	7566.7	7566.7	7566.7
2.5°	7933.3	7963.3	7957.8	7877.8	7847.8	7755.6	7682.2	7633.3	7560.0	7481.1	7468.9
5°	8275.6	8305.6	8293.3	8183.3	8092.2	7963.3	7860.0	7767.8	7645.6	7498.9	7425.6
7.5°	8458.9	8495.6	8476.7	8366.7	8312.2	8244.4	8171.1	8031.1	7792.2	7542.2	7413.3
10°	8593.3	8617.8	8617.8	8532.2	8574.4	8556.7	8501.1	8324.4	7987.8	7652.2	7493.3
12.5°	8642.2	8660.0	8696.7	8691.1	8764.4	8782.2	8672.2	8458.9	8177.8	7780.0	7547.8
15°	8532.2	8520.0	8605.6	8715.6	8818.9	8850.0	8764.4	8635.6	8354.4	7921.1	7676.7
17.5°	8312.2	8293.3	8464.4	8611.1	8721.1	8825.6	8855.6	8825.6	8532.2	8110.0	7877.8
20°	7970.0	7938.9	8165.6	8330.0	8476.7	8678.9	8880.0	8935.6	8678.9	8232.2	7987.8
22.5°	7554.4	7505.6	7786.7	7957.8	8214.4	8562.2	8935.6	9106.7	8886.7	8446.7	8177.8
25°	7053.3	7041.1	7273.3	7523.3	7957.8	8483.3	9106.7	9424.4	9307.8	8911.1	8586.7
27.5°	6503.3	6521.1	6790.0	7095.6	7750.0	8574.4	9412.2	9907.8	9932.2	9510.0	9131.1
30°	6063.3	6063.3	6344.4	6747.8	7591.1	8770.0	9815.6	10524.4	10646.7	10140.0	9730.0
32.5°	5635.6	5653.3	6026.7	6527.8	7578.9	9094.4	10213.3	11032.2	11227.8	10665.6	10231.1
35°	5268.9	5281.1	5763.3	6381.1	7676.7	9307.8	10372.2	11276.7	11631.1	11117.8	10634.4
37.5°	4963.3	5005.6	5672.2	6350.0	7737.8	9283.3	10426.7	11582.2	12150.0	11355.6	10824.4
40°	4718.9	4767.8	5684.4	6417.8	7572.2	9063.3	10408.9	11661.1	11814.4	10543.3	9901.1
42.5°	4595.6	4644.4	5757.8	6472.2	7248.9	8617.8	9913.3	10976.7	10726.7	9534.4	8923.3
45°	4546.7	4541.1	5885.6	6368.9	6704.4	7774.4	9002.2	9968.9	10035.6	9033.3	8361.1
47.5°	4473.3	4443.3	5922.2	6197.8	6283.3	7053.3	8275.6	9522.2	10035.6	8972.2	8214.4
50°	4302.2	4290.0	5794.4	6087.8	6246.7	6936.7	8104.4	9803.3	10457.8	9302.2	8427.8
52.5°	4192.2	4101.1	5506.7	5934.4	6491.1	7156.7	8427.8	10555.6	11331.1	9913.3	8788.9
55°	3935.6	3911.1	4920.0	5708.9	6704.4	7315.6	8880.0	11490.0	12211.1	10463.3	9173.3
57.5°	3642.2	3648.9	4314.4	5372.2	6606.7	7310.0	8886.7	11795.6	12071.1	10115.6	8818.9
60°	3300.0	3355.6	3801.1	4841.1	6166.7	6894.4	8495.6	11306.7	10812.2	9173.3	8153.3
62.5°	2847.8	2921.1	3306.7	4223.3	5567.8	6381.1	7884.4	10958.9	10536.7	9051.1	7982.2
65°	2126.7	2151.1	2664.4	3617.8	5073.3	6075.6	7352.2	10671.1	11257.8	9204.4	8048.9
67.5°	1711.1	1705.6	2170.0	3098.9	4620.0	5794.4	7065.6	9815.6	11570.0	9571.1	8403.3
70°	1307.8	1320.0	1760.0	2561.1	4052.2	5408.9	6802.2	8941.1	10096.7	8806.7	7498.9
72.5°	880.0	892.2	1216.7	1962.2	3190.0	4731.1	6075.6	7572.2	7395.6	5806.7	4853.3
75°	586.7	581.1	721.1	1210.0	2175.6	3331.1	4057.8	4841.1	4785.6	3666.7	3153.3
77.5°	342.2	354.4	293.3	378.9	708.9	1351.1	2145.6	3361.1	3624.4	2500.0	2041.1
80°	158.9	158.9	122.2	146.7	293.3	666.7	1106.7	1852.2	1833.3	1124.4	867.8
82.5°	61.1	55.6	36.7	31.1	55.6	104.4	141.1	202.2	220.0	116.7	85.6
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



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CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	7566.7	7566.7	7566.7	7566.7	7566.7	7566.7	7566.7	7566.7	7566.7	7566.7
2.5°	7401.1	7346.7	7285.6	7248.9	7230.0	7212.2	7175.6	7168.9	7187.8	7187.8
5°	7340.0	7205.6	7071.1	6961.1	6875.6	6802.2	6716.7	6680.0	6650.0	6650.0
7.5°	7285.6	7041.1	6784.4	6570.0	6398.9	6283.3	6197.8	6124.4	6087.8	6087.8
10°	7303.3	6961.1	6582.2	6283.3	6007.8	5812.2	5738.9	5733.3	5757.8	5770.0
12.5°	7310.0	6875.6	6405.6	6044.4	5745.6	5513.3	5421.1	5543.3	5635.6	5660.0
15°	7425.6	6882.2	6325.6	5904.4	5537.8	5281.1	5188.9	5342.2	5445.6	5464.4
17.5°	7584.4	7004.4	6405.6	5873.3	5464.4	5146.7	5122.2	5232.2	5335.6	5366.7
20°	7688.9	7102.2	6435.6	5897.8	5476.7	5097.8	5036.7	5268.9	5366.7	5403.3
22.5°	7872.2	7273.3	6594.4	6026.7	5586.7	5110.0	4907.8	5250.0	5433.3	5476.7
25°	8238.9	7603.3	6900.0	6350.0	5696.7	5158.9	4810.0	4914.4	5317.8	5354.4
27.5°	8745.6	8048.9	7315.6	6650.0	5751.1	5171.1	4743.3	4590.0	5078.9	5195.6
30°	9277.8	8471.1	7731.1	6918.9	5690.0	5091.1	4626.7	4394.4	4718.9	4816.7
32.5°	9736.7	8850.0	8024.4	7028.9	5555.6	4951.1	4492.2	4228.9	4375.6	4412.2
35°	10078.9	9051.1	8012.2	6948.9	5293.3	4755.6	4345.6	4070.0	4113.3	4131.1
37.5°	10164.4	8990.0	7816.7	6723.3	5066.7	4590.0	4174.4	3886.7	3978.9	3984.4
40°	9192.2	7994.4	6955.6	5928.9	4846.7	4333.3	3911.1	3710.0	3947.8	3960.0
42.5°	8226.7	7107.8	6307.8	5457.8	4668.9	4015.6	3630.0	3483.3	3893.3	3935.6
45°	7682.2	6698.9	6093.3	5360.0	4595.6	3636.7	3238.9	3135.6	3710.0	3874.4
47.5°	7554.4	6613.3	6026.7	5330.0	4590.0	3306.7	2866.7	2847.8	3520.0	3752.2
50°	7670.0	6637.8	5995.6	5330.0	4565.6	3184.4	2768.9	2750.0	3465.6	3642.2
52.5°	7865.6	6747.8	6051.1	5250.0	4431.1	3104.4	2805.6	2970.0	3685.6	3813.3
55°	8085.6	6728.9	5928.9	5146.7	4302.2	3013.3	2793.3	3147.8	3825.6	3923.3
57.5°	7731.1	6337.8	5672.2	5048.9	4204.4	2976.7	2695.6	3037.8	3556.7	3678.9
60°	7083.3	5800.0	5433.3	5012.2	4155.6	2903.3	2542.2	2610.0	3116.7	3483.3
62.5°	6741.1	5525.6	5396.7	5030.0	4143.3	2671.1	2200.0	2072.2	2664.4	3080.0
65°	6527.8	5378.9	5391.1	4944.4	4040.0	2224.4	1705.6	1588.9	1967.8	2248.9
67.5°	6442.2	5152.2	4987.8	4467.8	3630.0	1698.9	1204.4	1136.7	1253.3	1405.6
70°	5690.0	4040.0	3380.0	2927.8	2610.0	1161.1	818.9	745.6	740.0	806.7
72.5°	3734.4	2358.9	1576.7	1338.9	1180.0	684.4	520.0	483.3	464.4	488.9
75°	2468.9	1326.7	801.1	642.2	501.1	342.2	300.0	312.2	312.2	330.0
77.5°	1522.2	684.4	385.6	281.1	195.6	128.9	110.0	141.1	141.1	146.7
80°	623.3	263.3	128.9	73.3	43.3	18.9	6.7	18.9	24.4	24.4
82.5°	67.8	24.4	6.7	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)