

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: 769014_400MP

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: 769014_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-X
Description: MEDIUM ARCHITECTURAL AREA LUMINAIRE-HORIZONTAL LAMP-TYPE III DISTRIBUTION
Light Source: 400 WATT PULSE-START CLEAR ED-37 HORIZONTAL BURN
Ballast/Driver: -

Summary

Lumens per Lamp: 40000 (1 lamp)
Luminaire Lumens: 30479.9 lumens
Efficiency: 76.2%
Efficacy: 67.4 lumens/watt
Luminous Opening: Point Source (0' x 0' x 0')
IES Classification: Type III - Medium - Full Cutoff
BUG Rating: B4 - U0 - G4

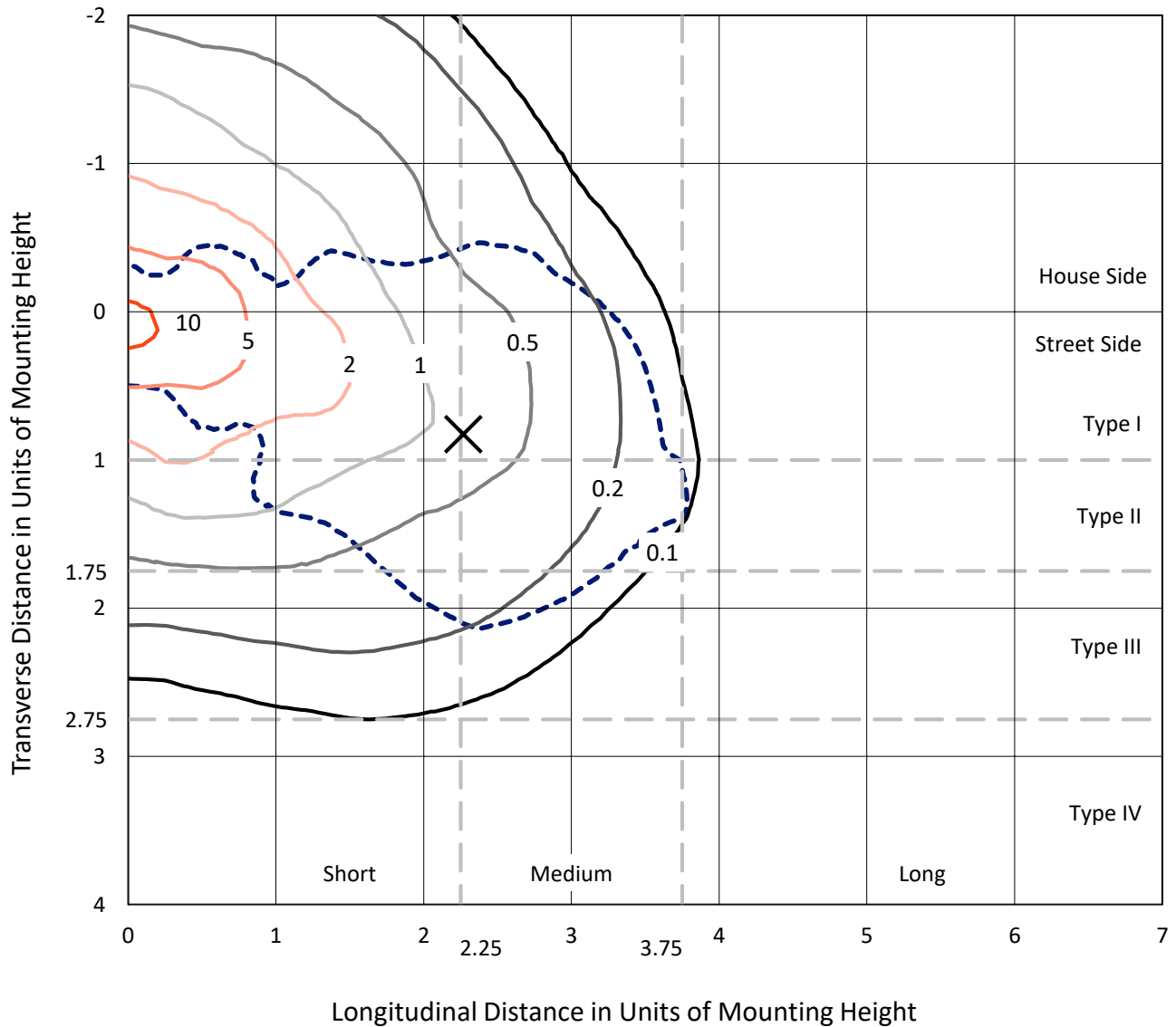
Input Watts (W): 452
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

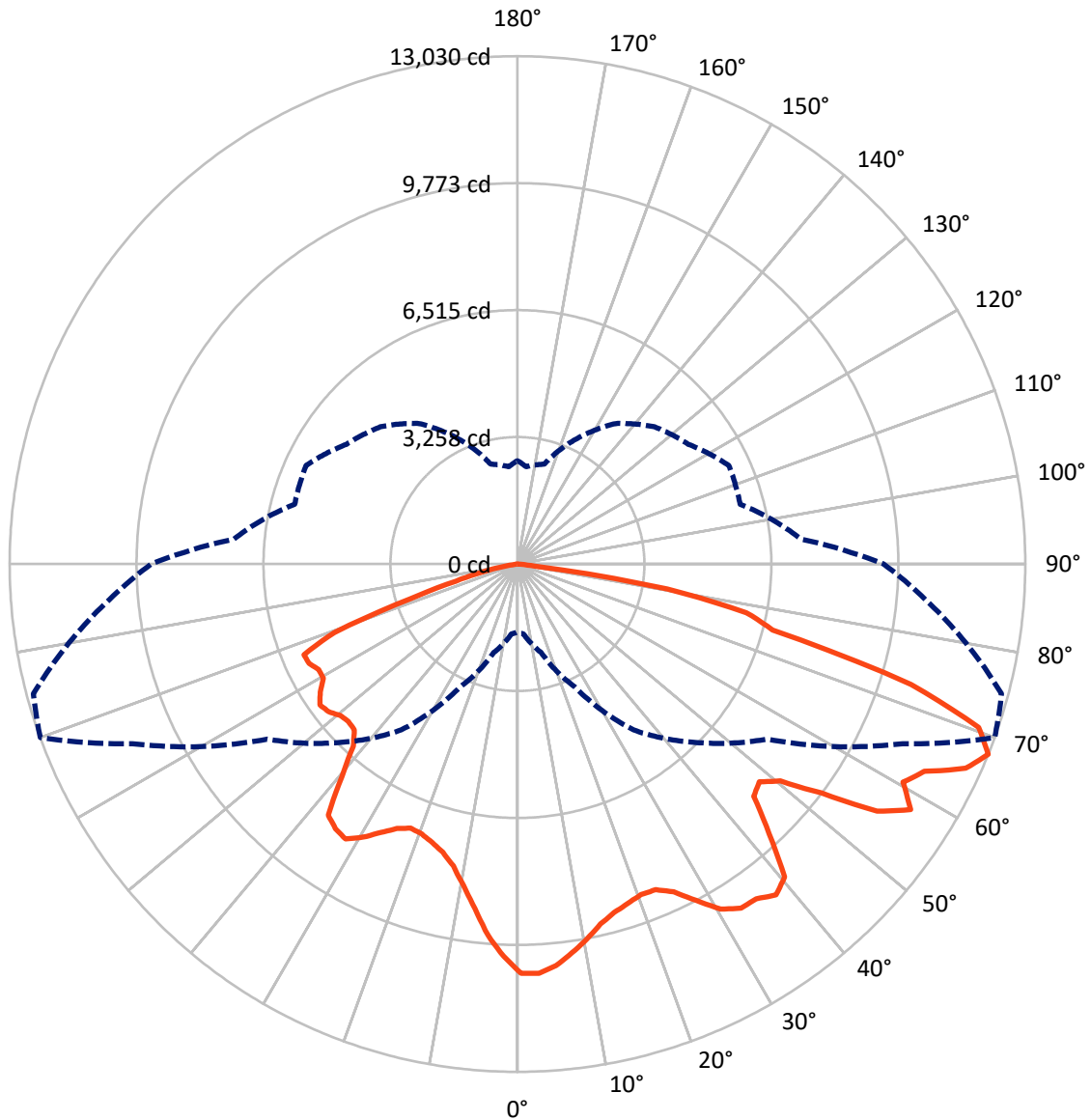
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 12.3 fc
 Type III - Medium - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 70-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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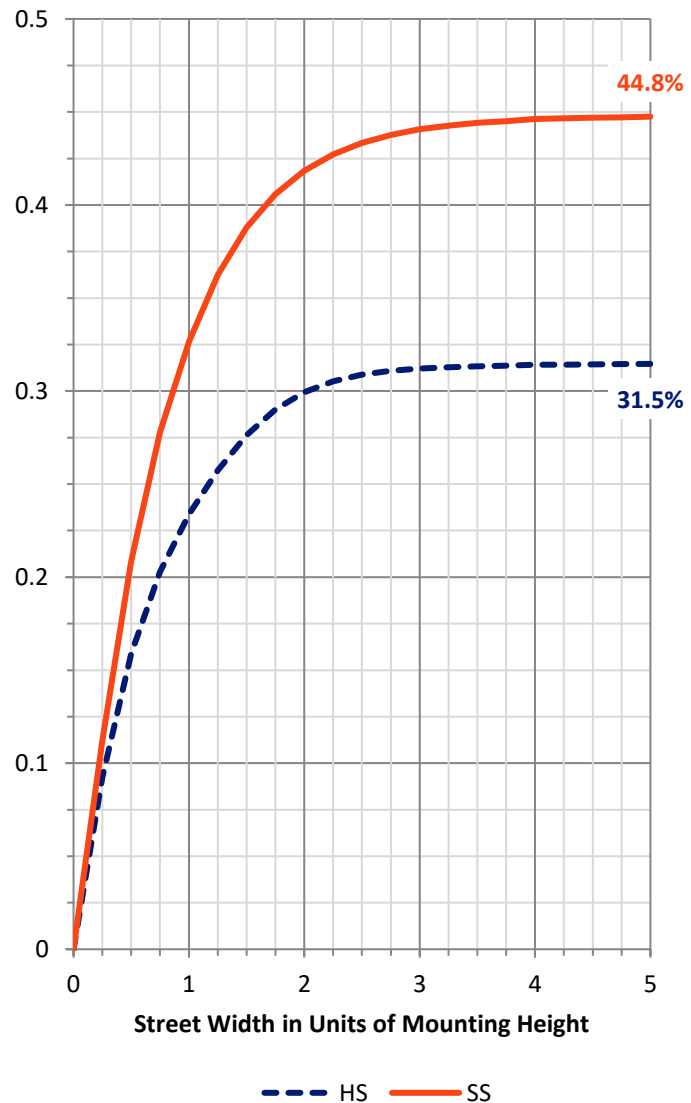
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	12628.2	0.0	12628.2
	% Lamp	31.6	0.0	31.6
Street Side	Lumens	17851.8	0.0	17851.8
	% Lamp	44.6	0.0	44.6
Total	Lumens	30479.9	0.0	30479.9
	% Lamp	76.2	0.0	76.2

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	924.0	3.0	2.3
10°-20°	2332.1	7.7	5.8
20°-30°	3427.1	11.2	8.6
30°-40°	4493.8	14.7	11.2
40°-50°	4670.6	15.3	11.7
50°-60°	5665.7	18.6	14.2
60°-70°	5856.1	19.2	14.6
70°-80°	2955.6	9.7	7.4
80°-90°	154.8	0.5	0.4
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°	30479.9	100.0	76.2
0°-180°	30479.9	100.0	76.2

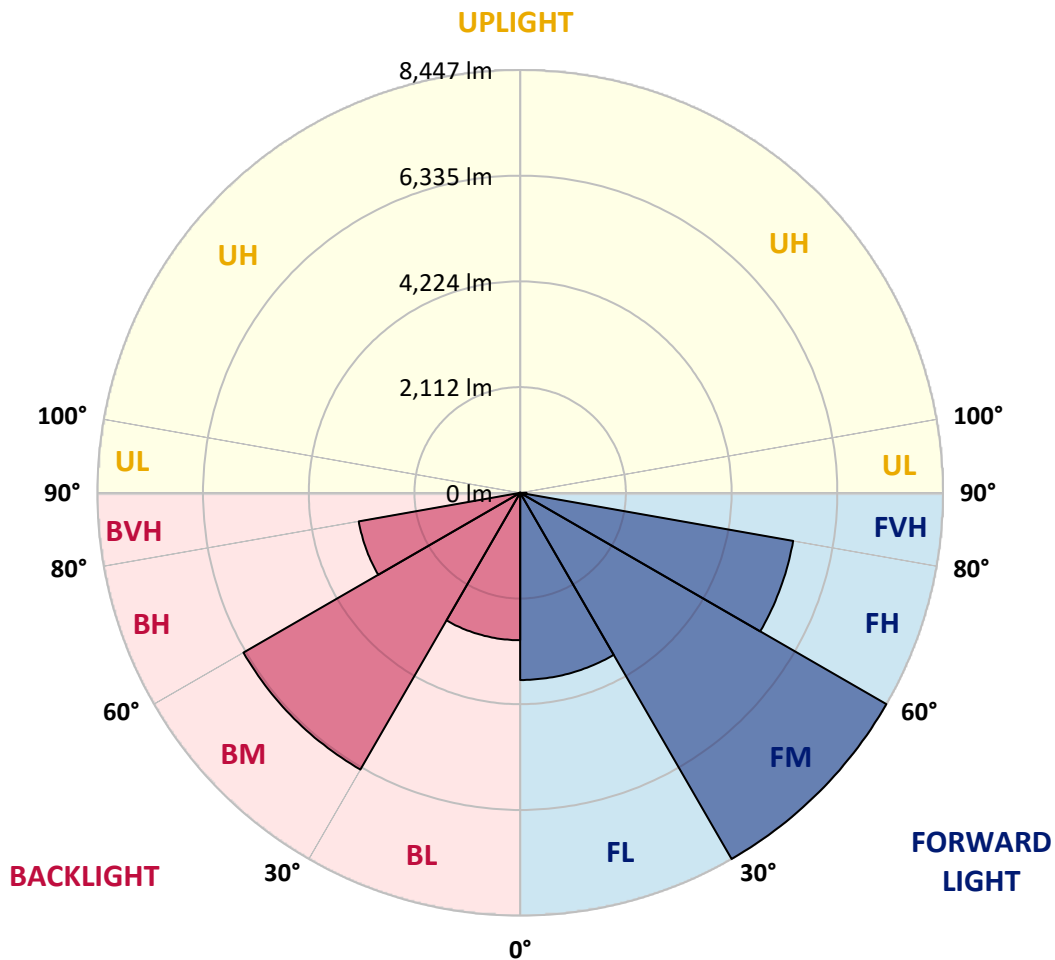


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Lamp	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3739.5	9.3			
FM (30°-60°)	8447.2	21.1			
FH (60°-80°)	5537.1	13.8			G3/7500
FVH (80°-90°)	128.0	0.3			G2/225
BL (0°-30°)	2943.8	7.4	B4/5000		
BM (30°-60°)	6383.0	16.0	B4/8500		
BH (60°-80°)	3274.5	8.2	B4/5000		G4/5000
BVH (80°-90°)	26.9	0.1			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	
Trapped Light	9520.1	23.8			

BUG Rating: B4-U0-G4
 Type III Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	70°	75°	85°
0°	10500.0	10500.0	10500.0	10500.0	10500.0	10500.0	10500.0	10500.0	10500.0	10500.0	10500.0
2.5°	11074.4	11098.9	11050.0	11001.1	10922.2	10812.2	10690.0	10567.8	10512.2	10463.3	10328.9
5°	11392.2	11416.7	11343.3	11208.9	11037.8	10830.0	10610.0	10438.9	10353.3	10255.6	10023.3
7.5°	11306.7	11313.3	11215.6	11032.2	10854.4	10677.8	10445.6	10194.4	10072.2	9944.4	9644.4
10°	10891.1	10915.6	10805.6	10671.1	10548.9	10384.4	10218.9	9944.4	9785.6	9620.0	9307.8
12.5°	10267.8	10274.4	10218.9	10170.0	10157.8	10060.0	9876.7	9614.4	9480.0	9332.2	8960.0
15°	9546.7	9541.1	9553.3	9626.7	9663.3	9663.3	9553.3	9406.7	9277.8	9118.9	8740.0
17.5°	8813.3	8825.6	8953.3	9070.0	9167.8	9241.1	9302.2	9258.9	9155.6	9008.9	8654.4
20°	8141.1	8153.3	8305.6	8476.7	8635.6	8867.8	9075.6	9131.1	9051.1	8941.1	8562.2
22.5°	7468.9	7481.1	7682.2	7884.4	8134.4	8495.6	8904.4	9094.4	9075.6	8960.0	8568.9
25°	6821.1	6851.1	7046.7	7322.2	7743.3	8300.0	8904.4	9271.1	9314.4	9241.1	8904.4
27.5°	6210.0	6234.4	6460.0	6802.2	7420.0	8232.2	9070.0	9651.1	9773.3	9742.2	9344.4
30°	5684.4	5708.9	5971.1	6411.1	7212.2	8268.9	9338.9	10103.3	10274.4	10250.0	9773.3
32.5°	5256.7	5293.3	5635.6	6166.7	7156.7	8452.2	9546.7	10341.1	10531.1	10536.7	10054.4
35°	4828.9	4914.4	5354.4	5977.8	7151.1	8520.0	9522.2	10341.1	10548.9	10641.1	10176.7
37.5°	4522.2	4626.7	5256.7	5934.4	7163.3	8410.0	9394.4	10390.0	10775.6	10873.3	10194.4
40°	4228.9	4394.4	5268.9	5958.9	6931.1	8097.8	9271.1	10311.1	10555.6	10390.0	9258.9
42.5°	4094.4	4314.4	5360.0	6020.0	6643.3	7640.0	8752.2	9571.1	9473.3	9161.1	8110.0
45°	3996.7	4247.8	5531.1	6007.8	6136.7	6870.0	7847.8	8458.9	8501.1	8336.7	7615.6
47.5°	3960.0	4216.7	5616.7	5965.6	5733.3	6227.8	7126.7	8036.7	8348.9	8378.9	7608.9
50°	3837.8	4076.7	5592.2	5934.4	5757.8	6166.7	7053.3	8403.3	8745.6	8855.6	8067.8
52.5°	3642.2	3911.1	5427.8	5824.4	6105.6	6447.8	7456.7	9307.8	9761.1	9962.2	8911.1
55°	3434.4	3758.9	4865.6	5653.3	6430.0	6790.0	8171.1	10604.4	11191.1	11318.9	9852.2
57.5°	3348.9	3532.2	4333.3	5342.2	6545.6	7004.4	8525.6	11306.7	11893.3	11538.9	9742.2
60°	3202.2	3312.2	3868.9	4932.2	6264.4	6870.0	8342.2	10885.6	11367.8	10567.8	9063.3
62.5°	2884.4	2940.0	3422.2	4431.1	5812.2	6625.6	8000.0	10971.1	11716.7	10555.6	9063.3
65°	2212.2	2218.9	2823.3	3947.8	5433.3	6503.3	7792.2	11386.7	12638.9	11655.6	9480.0
67.5°	1747.8	1803.3	2353.3	3477.8	5195.6	6472.2	7828.9	10903.3	13030.0	12858.9	10512.2
70°	1515.6	1485.6	2011.1	3037.8	4816.7	6393.3	8092.2	10610.0	12553.3	12535.6	10781.1
72.5°	1112.2	1070.0	1503.3	2536.7	4131.1	6002.2	7762.2	9981.1	10561.1	10176.7	8312.2
75°	721.1	708.9	965.6	1827.8	2884.4	4277.8	5427.8	6478.9	6765.6	6576.7	5176.7
77.5°	464.4	440.0	361.1	513.3	984.4	2133.3	3434.4	5237.8	6007.8	5934.4	4101.1
80°	195.6	153.3	110.0	195.6	501.1	1246.7	2047.8	3416.7	3898.9	3593.3	2292.2
82.5°	36.7	24.4	6.7	31.1	85.6	177.8	251.1	361.1	440.0	452.2	275.6
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):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	10500.0	10500.0	10500.0	10500.0	10500.0	10500.0	10500.0	10500.0	10500.0	10500.0	10500.0
2.5°	10292.2	10231.1	10108.9	10030.0	9950.0	9871.1	9822.2	9791.1	9791.1	9778.9	9791.1
5°	9925.6	9822.2	9632.2	9497.8	9320.0	9136.7	9026.7	8947.8	8886.7	8867.8	8874.4
7.5°	9516.7	9351.1	9082.2	8740.0	8464.4	8263.3	8134.4	8085.6	8055.6	8000.0	7994.4
10°	9124.4	8947.8	8544.4	8183.3	7872.2	7608.9	7371.1	7334.4	7334.4	7371.1	7383.3
12.5°	8757.8	8537.8	8104.4	7731.1	7395.6	7095.6	6894.4	6833.3	6943.3	7041.1	7053.3
15°	8537.8	8324.4	7853.3	7425.6	7058.9	6711.1	6515.6	6491.1	6601.1	6674.4	6686.7
17.5°	8452.2	8190.0	7682.2	7261.1	6851.1	6491.1	6222.2	6191.1	6271.1	6288.9	6295.6
20°	8330.0	8067.8	7566.7	7126.7	6711.1	6393.3	6044.4	5965.6	6117.8	6142.2	6136.7
22.5°	8336.7	8067.8	7547.8	7065.6	6692.2	6386.7	5916.7	5653.3	5880.0	6020.0	6014.4
25°	8617.8	8293.3	7725.6	7187.8	6821.1	6417.8	5836.7	5391.1	5421.1	5738.9	5745.6
27.5°	9002.2	8647.8	8036.7	7420.0	6912.2	6442.2	5770.0	5183.3	4993.3	5384.4	5464.4
30°	9406.7	8996.7	8378.9	7725.6	7090.0	6320.0	5708.9	4993.3	4656.7	4902.2	4963.3
32.5°	9687.8	9277.8	8654.4	7982.2	7144.4	6301.1	5628.9	4785.6	4431.1	4565.6	4607.8
35°	9815.6	9394.4	8666.7	7811.1	6882.2	5977.8	5244.4	4620.0	4265.6	4351.1	4338.9
37.5°	9797.8	9351.1	8532.2	7596.7	6552.2	5628.9	5012.2	4461.1	4162.2	4253.3	4241.1
40°	8752.2	8251.1	7474.4	6686.7	5708.9	4975.6	4626.7	4290.0	4113.3	4338.9	4387.8
42.5°	7664.4	7217.8	6557.8	6020.0	5213.3	4651.1	4370.0	4174.4	4040.0	4461.1	4522.2
45°	7132.2	6723.3	6154.4	5782.2	5152.2	4638.9	4204.4	4003.3	3898.9	4436.7	4546.7
47.5°	7102.2	6698.9	6105.6	5745.6	5171.1	4694.4	4113.3	3923.3	3832.2	4461.1	4607.8
50°	7468.9	6955.6	6203.3	5763.3	5201.1	4712.2	4192.2	4106.7	4003.3	4675.6	4853.3
52.5°	8055.6	7334.4	6430.0	5867.8	5171.1	4644.4	4296.7	4394.4	4443.3	5158.9	5427.8
55°	8727.8	7774.4	6570.0	5880.0	5134.4	4614.4	4424.4	4687.8	4846.7	5476.7	5660.0
57.5°	8537.8	7572.2	6313.3	5745.6	5152.2	4656.7	4614.4	4920.0	4902.2	5293.3	5391.1
60°	8116.7	7163.3	5941.1	5611.1	5237.8	4792.2	4767.8	5042.2	4590.0	4920.0	5146.7
62.5°	8104.4	6961.1	5818.9	5726.7	5427.8	4951.1	4865.6	4668.9	4003.3	4363.3	4694.4
65°	8458.9	7016.7	5848.9	5995.6	5562.2	5115.6	4834.4	4137.8	3336.7	3495.6	3727.8
67.5°	9394.4	7310.0	5916.7	5983.3	5354.4	4975.6	4400.0	3526.7	2652.2	2505.6	2652.2
70°	9412.2	7193.3	5293.3	4736.7	4057.8	3825.6	3233.3	2658.9	1888.9	1588.9	1711.1
72.5°	6870.0	5293.3	3373.3	2420.0	1925.6	1784.4	1454.4	1295.6	1008.9	928.9	977.8
75°	4424.4	3532.2	1980.0	1302.2	947.8	727.8	605.6	556.7	550.0	593.3	623.3
77.5°	3446.7	2640.0	1216.7	721.1	471.1	324.4	263.3	263.3	330.0	342.2	354.4
80°	1852.2	1338.9	556.7	287.8	165.6	110.0	85.6	85.6	116.7	128.9	122.2
82.5°	214.4	165.6	80.0	24.4	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	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

(END OF REPORT)