

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: 769010_400MP

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: 769010_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-FG-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: 30115.6 lumens
Efficiency: 75.3%
Efficacy: 66.6 lumens/watt
Luminous Opening: Point Source (0' x 0' x 0')
IES Classification: Type II - Short - Full Cutoff
BUG Rating: B4 - U0 - G4

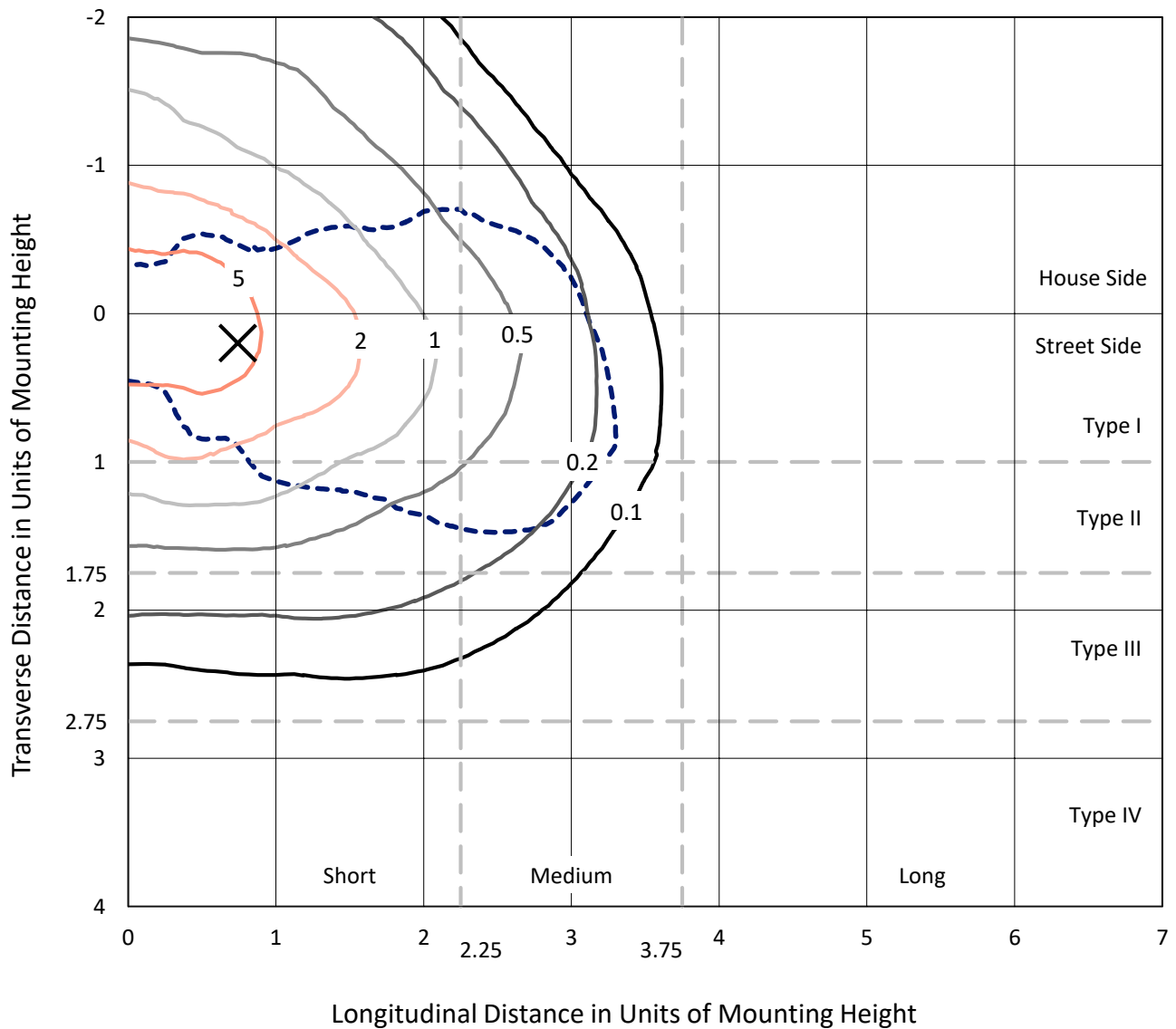
Input Watts (W): 452
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

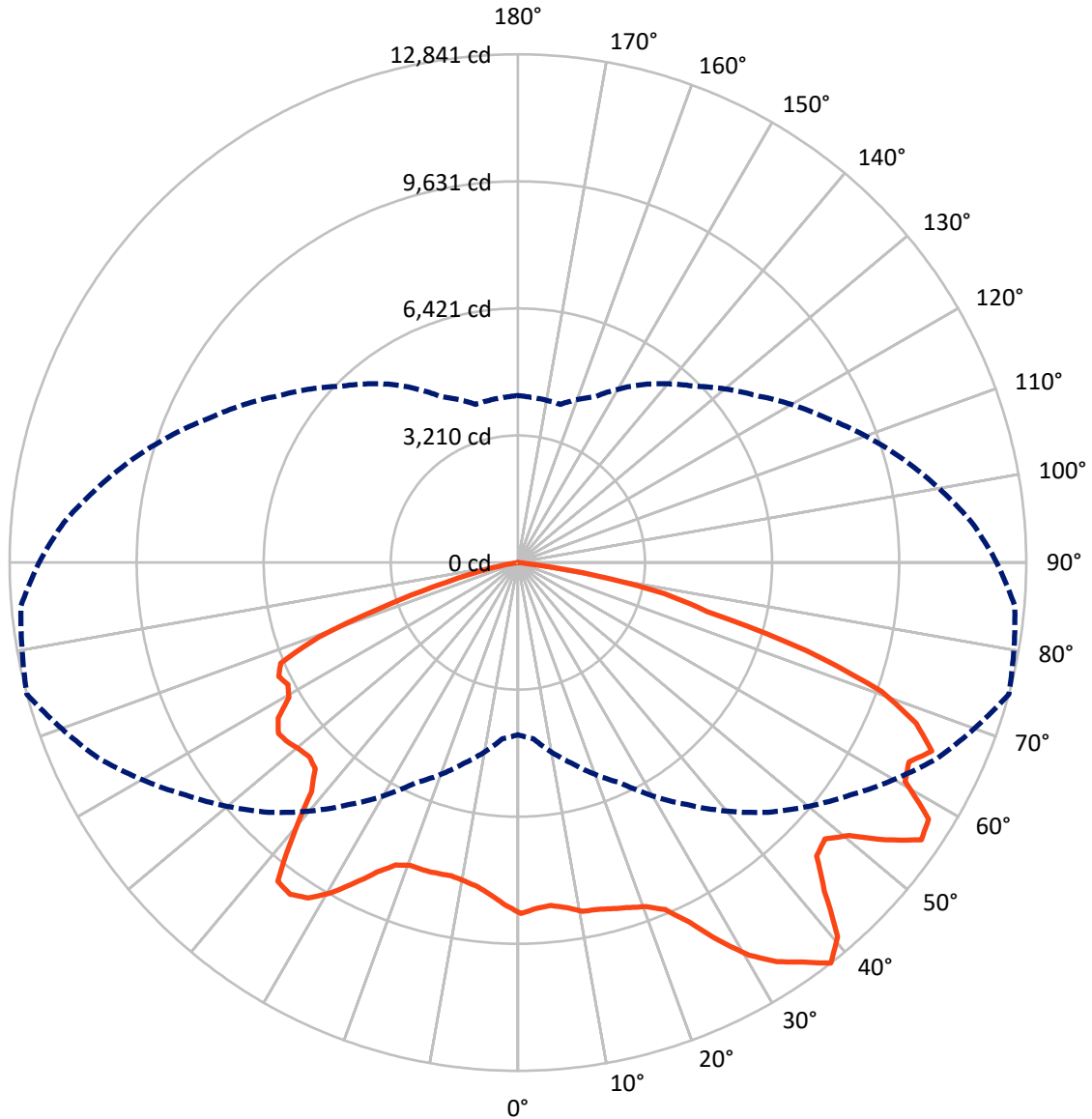
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 9.9 fc
 Type II - Short - Full Cutoff

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Luminous Intensity Polar Plot



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

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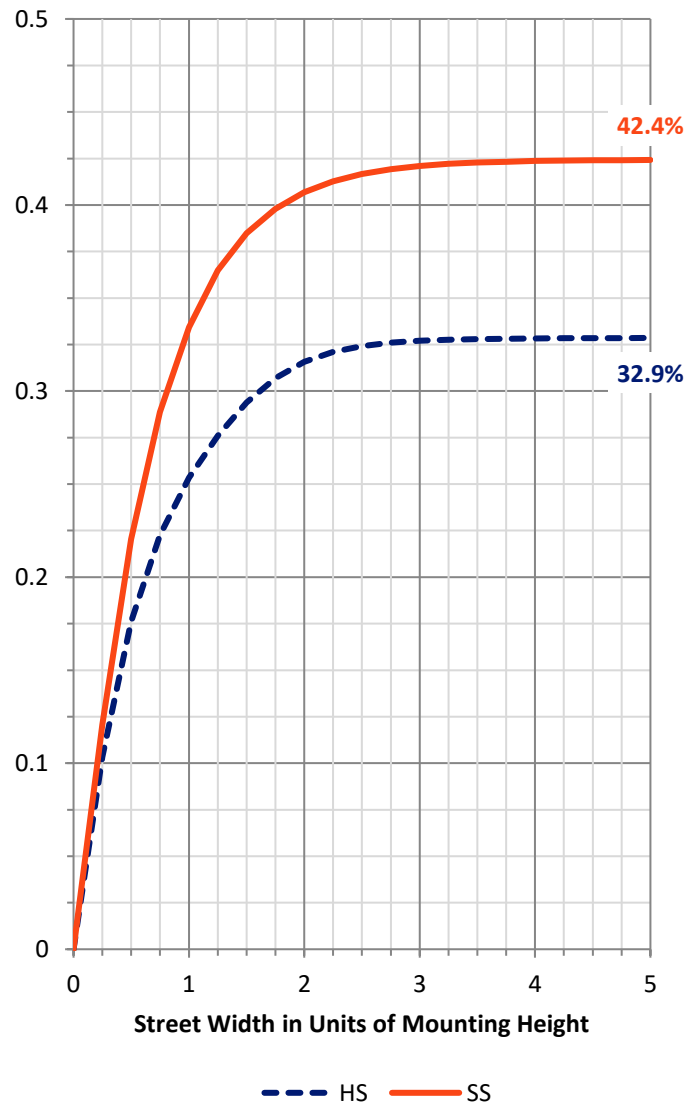
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	13198.8	0.0	13198.8
	% Lamp	33.0	0.0	33.0
Street Side	Lumens	16916.9	0.0	16916.9
	% Lamp	42.3	0.0	42.3
Total	Lumens	30115.6	0.0	30115.6
	% Lamp	75.3	0.0	75.3

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	815.3	2.7	2.0
10°-20°	2265.2	7.5	5.7
20°-30°	3560.0	11.8	8.9
30°-40°	4937.0	16.4	12.3
40°-50°	5120.3	17.0	12.8
50°-60°	5774.7	19.2	14.4
60°-70°	5440.7	18.1	13.6
70°-80°	2127.7	7.1	5.3
80°-90°	74.8	0.2	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°	30115.6	100.0	75.3
0°-180°	30115.6	100.0	75.3

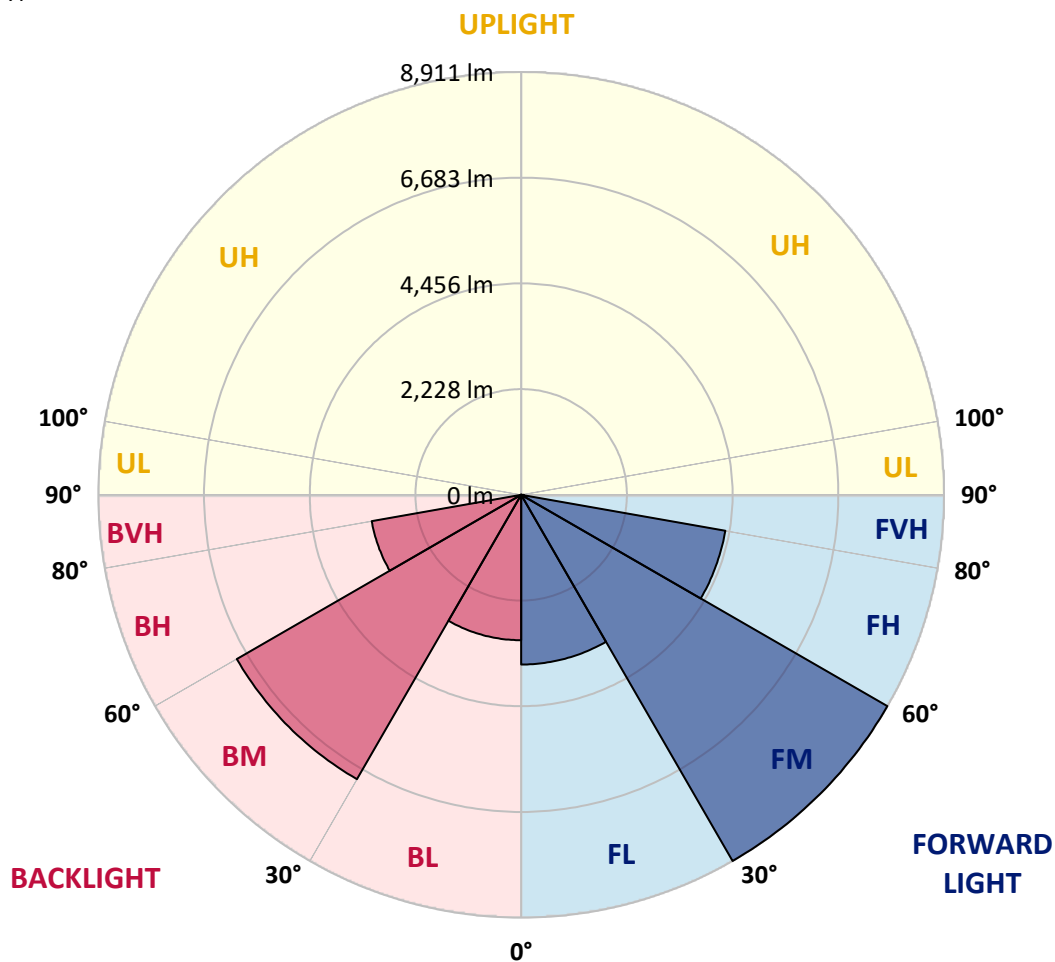


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Lamp	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3576.4	8.9			
FM (30°-60°)	8911.2	22.3			
FH (60°-80°)	4369.7	10.9			G2/5000
FVH (80°-90°)	59.7	0.1			G1/100
BL (0°-30°)	3064.1	7.7	B4/5000		
BM (30°-60°)	6920.8	17.3	B4/8500		
BH (60°-80°)	3198.7	8.0	B4/5000		G4/5000
BVH (80°-90°)	15.1	0.0			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	
Trapped Light	9884.4	24.7			

BUG Rating: B4-U0-G4
 Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	8862.2	8862.2	8862.2	8862.2	8862.2	8862.2	8862.2	8862.2	8862.2	8862.2	8862.2
2.5°	9033.3	9045.6	9026.7	8984.4	8904.4	8862.2	8831.1	8782.2	8752.2	8708.9	8703.3
5°	9192.2	9228.9	9173.3	9131.1	9057.8	8960.0	8867.8	8794.4	8703.3	8605.6	8562.2
7.5°	9082.2	9100.0	9106.7	9100.0	9106.7	9075.6	9014.4	8916.7	8801.1	8635.6	8562.2
10°	8825.6	8855.6	8892.2	8996.7	9070.0	9131.1	9143.3	9094.4	8960.0	8715.6	8586.7
12.5°	8507.8	8544.4	8617.8	8801.1	8935.6	9082.2	9155.6	9143.3	8990.0	8757.8	8635.6
15°	8141.1	8183.3	8336.7	8544.4	8745.6	8911.1	9082.2	9167.8	9070.0	8862.2	8715.6
17.5°	7737.8	7786.7	7987.8	8238.9	8440.0	8721.1	8996.7	9148.9	9161.1	8977.8	8825.6
20°	7236.7	7278.9	7511.1	7816.7	8085.6	8458.9	8874.4	9192.2	9277.8	9136.7	8960.0
22.5°	6698.9	6723.3	6997.8	7364.4	7737.8	8214.4	8770.0	9295.6	9522.2	9406.7	9204.4
25°	6197.8	6246.7	6496.7	6912.2	7432.2	8080.0	8855.6	9607.8	10060.0	9937.8	9712.2
27.5°	5733.3	5763.3	6056.7	6545.6	7187.8	8104.4	9192.2	10218.9	10812.2	10707.8	10377.8
30°	5342.2	5384.4	5690.0	6276.7	7071.1	8287.8	9644.4	10842.2	11508.9	11398.9	11044.4
32.5°	4963.3	5024.4	5494.4	6178.9	7151.1	8586.7	10047.8	11264.4	12022.2	11966.7	11594.4
35°	4632.2	4731.1	5330.0	6161.1	7327.8	8911.1	10231.1	11477.8	12394.4	12401.1	11991.1
37.5°	4351.1	4467.8	5250.0	6142.2	7468.9	8923.3	10243.3	11692.2	12841.1	12602.2	12095.6
40°	4118.9	4253.3	5171.1	6197.8	7358.9	8703.3	10060.0	11661.1	12431.1	11728.9	11130.0
42.5°	3898.9	4094.4	5164.4	6197.8	6955.6	8092.2	9424.4	10848.9	11355.6	10622.2	9956.7
45°	3776.7	3960.0	5091.1	6020.0	6368.9	7291.1	8458.9	9815.6	10580.0	10072.2	9467.8
47.5°	3630.0	3807.8	4944.4	5745.6	6007.8	6777.8	7780.0	9246.7	10433.3	10072.2	9448.9
50°	3507.8	3624.4	4638.9	5415.6	5977.8	6680.0	7554.4	9302.2	10836.7	10646.7	9925.6
52.5°	3361.1	3410.0	4253.3	5048.9	6038.9	6765.6	7640.0	9681.1	11636.7	11484.4	10536.7
55°	3104.4	3135.6	3801.1	4656.7	5946.7	6808.9	7860.0	10140.0	12364.4	12260.0	11227.8
57.5°	2860.0	2884.4	3294.4	4174.4	5598.9	6557.8	7786.7	10255.6	12235.6	12022.2	10964.4
60°	2664.4	2634.4	2915.6	3710.0	5000.0	6081.1	7315.6	10017.8	11233.3	11062.2	10164.4
62.5°	2371.1	2316.7	2561.1	3245.6	4394.4	5555.6	6728.9	9913.3	11086.7	11098.9	9993.3
65°	1857.8	1840.0	2175.6	2756.7	3942.2	5250.0	6430.0	9693.3	11490.0	11428.9	10042.2
67.5°	1454.4	1466.7	1845.6	2426.7	3630.0	4968.9	6161.1	8752.2	10848.9	11661.1	10304.4
70°	1063.3	1112.2	1522.2	2011.1	3153.3	4461.1	5836.7	7701.1	9748.9	10176.7	9026.7
72.5°	696.7	727.8	1002.2	1552.2	2561.1	3788.9	5220.0	6594.4	7621.1	6588.9	5861.1
75°	427.8	434.4	525.6	794.4	1491.1	2322.2	3257.8	4064.4	4938.9	4357.8	3807.8
77.5°	232.2	220.0	165.6	207.8	385.6	813.3	1564.4	2695.6	3788.9	3111.1	2597.8
80°	85.6	73.3	48.9	61.1	141.1	391.1	801.1	1534.4	2011.1	1473.3	1180.0
82.5°	0.0	0.0	0.0	0.0	0.0	55.6	110.0	183.3	238.9	153.3	110.0
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



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CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	8862.2	8862.2	8862.2	8862.2	8862.2	8862.2	8862.2	8862.2	8862.2	8862.2
2.5°	8696.7	8666.7	8623.3	8630.0	8642.2	8623.3	8623.3	8623.3	8611.1	8605.6
5°	8513.3	8434.4	8354.4	8305.6	8305.6	8317.8	8354.4	8348.9	8342.2	8336.7
7.5°	8452.2	8256.7	8048.9	7914.4	7811.1	7816.7	7902.2	7902.2	7860.0	7835.6
10°	8452.2	8153.3	7865.6	7603.3	7364.4	7310.0	7420.0	7450.0	7413.3	7407.8
12.5°	8458.9	8092.2	7737.8	7383.3	7102.2	6906.7	7071.1	7144.4	7114.4	7090.0
15°	8525.6	8110.0	7688.9	7285.6	6900.0	6655.6	6760.0	6790.0	6711.1	6662.2
17.5°	8605.6	8128.9	7645.6	7163.3	6796.7	6478.9	6503.3	6508.9	6405.6	6405.6
20°	8708.9	8116.7	7572.2	7144.4	6777.8	6417.8	6234.4	6295.6	6178.9	6173.3
22.5°	8923.3	8238.9	7603.3	7163.3	6863.3	6332.2	5953.3	6002.2	6020.0	5990.0
25°	9368.9	8593.3	7872.2	7388.9	6955.6	6276.7	5738.9	5537.8	5757.8	5721.1
27.5°	9974.4	9082.2	8251.1	7627.8	7090.0	6283.3	5592.2	5127.8	5384.4	5391.1
30°	10628.9	9583.3	8635.6	7872.2	7058.9	6240.0	5391.1	4792.2	4938.9	4938.9
32.5°	11123.3	9993.3	8953.3	7987.8	7077.8	6258.9	5171.1	4534.4	4534.4	4510.0
35°	11477.8	10164.4	8886.7	7755.6	6760.0	5836.7	4920.0	4308.9	4277.8	4265.6
37.5°	11521.1	10078.9	8617.8	7352.2	6301.1	5488.9	4626.7	4137.8	4186.7	4216.7
40°	10421.1	8923.3	7591.1	6356.7	5488.9	4956.7	4418.9	4052.2	4174.4	4265.6
42.5°	9173.3	7792.2	6631.1	5604.4	4902.2	4497.8	4198.9	3954.4	4143.3	4265.6
45°	8666.7	7303.3	6301.1	5427.8	4731.1	4260.0	4008.9	3886.7	4162.2	4290.0
47.5°	8605.6	7200.0	6178.9	5396.7	4743.3	4162.2	3911.1	3813.3	4290.0	4473.3
50°	8898.9	7261.1	6161.1	5360.0	4724.4	4155.6	3991.1	3874.4	4565.6	4877.8
52.5°	9338.9	7371.1	6203.3	5286.7	4656.7	4180.0	4198.9	4155.6	5024.4	5427.8
55°	9876.7	7432.2	6148.9	5207.8	4583.3	4284.4	4467.8	4492.2	5262.2	5598.9
57.5°	9717.8	7217.8	5995.6	5122.2	4595.6	4485.6	4748.9	4583.3	5017.8	5158.9
60°	8892.2	6711.1	5751.1	5054.4	4626.7	4773.3	4963.3	4338.9	4480.0	4620.0
62.5°	8623.3	6576.7	5733.3	5066.7	4780.0	5030.0	4681.1	3685.6	3850.0	4021.1
65°	8520.0	6692.2	5836.7	5085.6	4951.1	5110.0	4082.2	2982.2	3111.1	3251.1
67.5°	8715.6	6508.9	5623.3	4748.9	4748.9	4558.9	3282.2	2273.3	2187.8	2310.0
70°	8018.9	5366.7	4290.0	3422.2	3507.8	3226.7	2438.9	1625.6	1356.7	1430.0
72.5°	5323.3	3410.0	2145.6	1522.2	1491.1	1351.1	1155.6	806.7	708.9	733.3
75°	3318.9	1913.3	1008.9	672.2	550.0	458.9	410.0	317.8	324.4	330.0
77.5°	2114.4	1002.2	464.4	287.8	214.4	165.6	141.1	128.9	134.4	134.4
80°	923.3	378.9	158.9	85.6	55.6	24.4	31.1	31.1	24.4	24.4
82.5°	85.6	24.4	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)