

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: 769001_400MP

Luminaire Tested: **GSM-XX-400-MP-XX-FT-SG-XX-X**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: 769001_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-FT-SG-XX-X
Description: MEDIUM ARCHITECTURAL AREA LUMINAIRE-HORIZONTAL LAMP-FORWARD THROW DISTRIBUTION
Light Source: 400 WATT PULSE-START CLEAR ED-37 HORIZONTAL BURN
Ballast/Driver: -

Summary

Lumens per Lamp: 40000 (1 lamp)
Luminaire Lumens: 18083.3 lumens
Efficiency: 45.2%
Efficacy: 40.0 lumens/watt
Luminous Opening: Point Source (0' x 0' x 0')
IES Classification: Type IV - Short - Semi-Cutoff
BUG Rating: B3 - U0 - G4

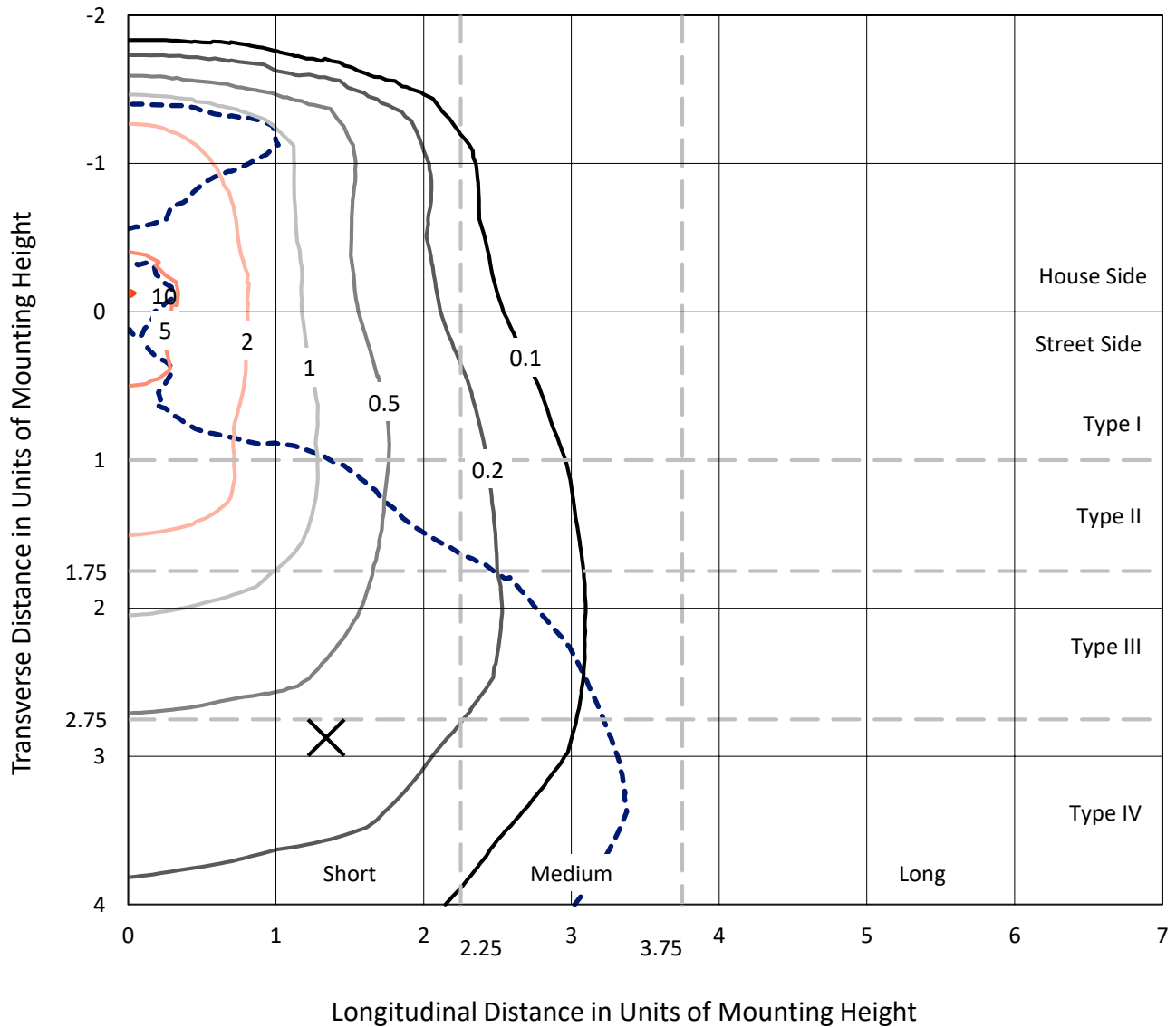
Input Watts (W): 452
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

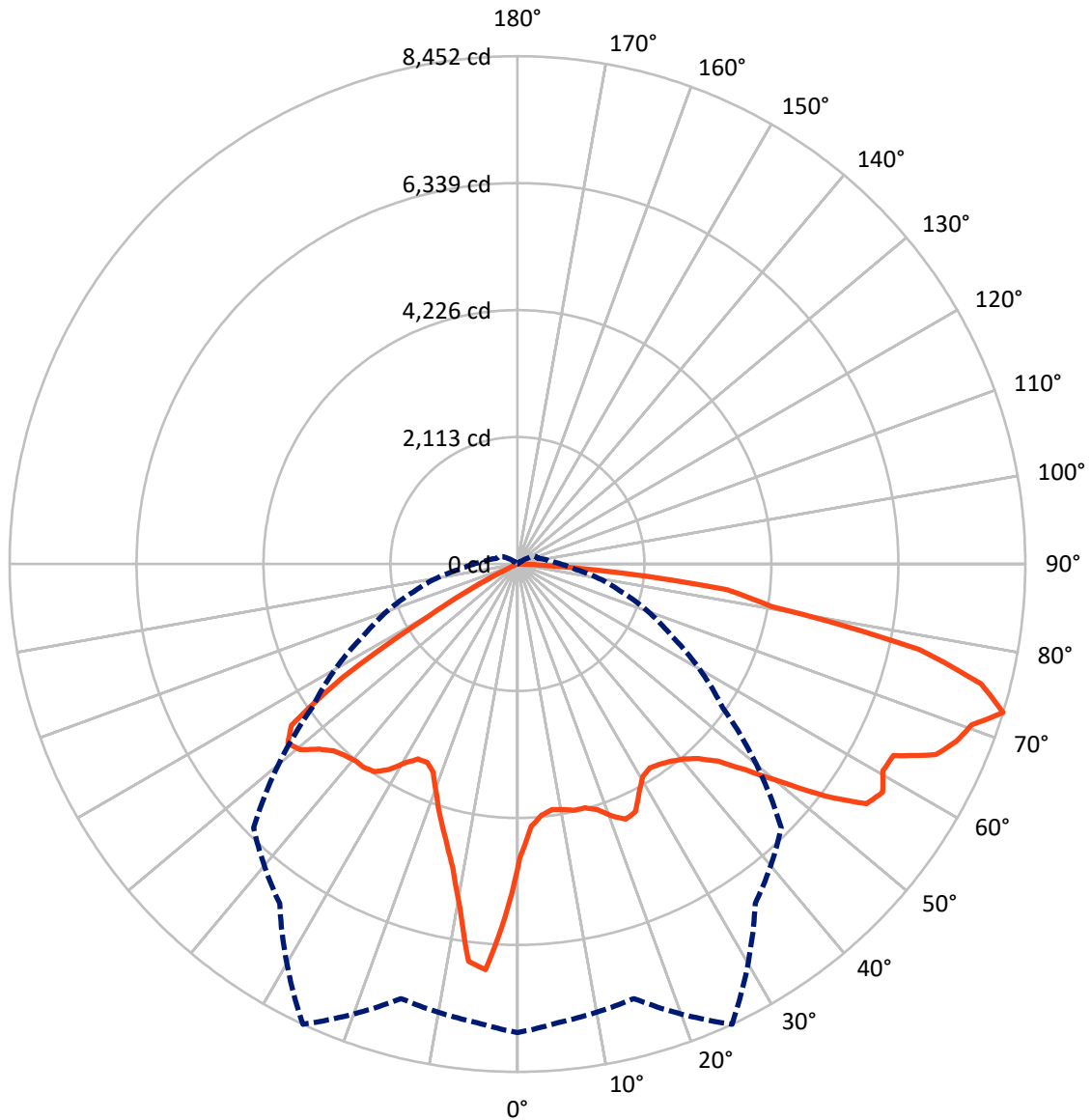
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10.5 fc
 Type IV - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 25-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical

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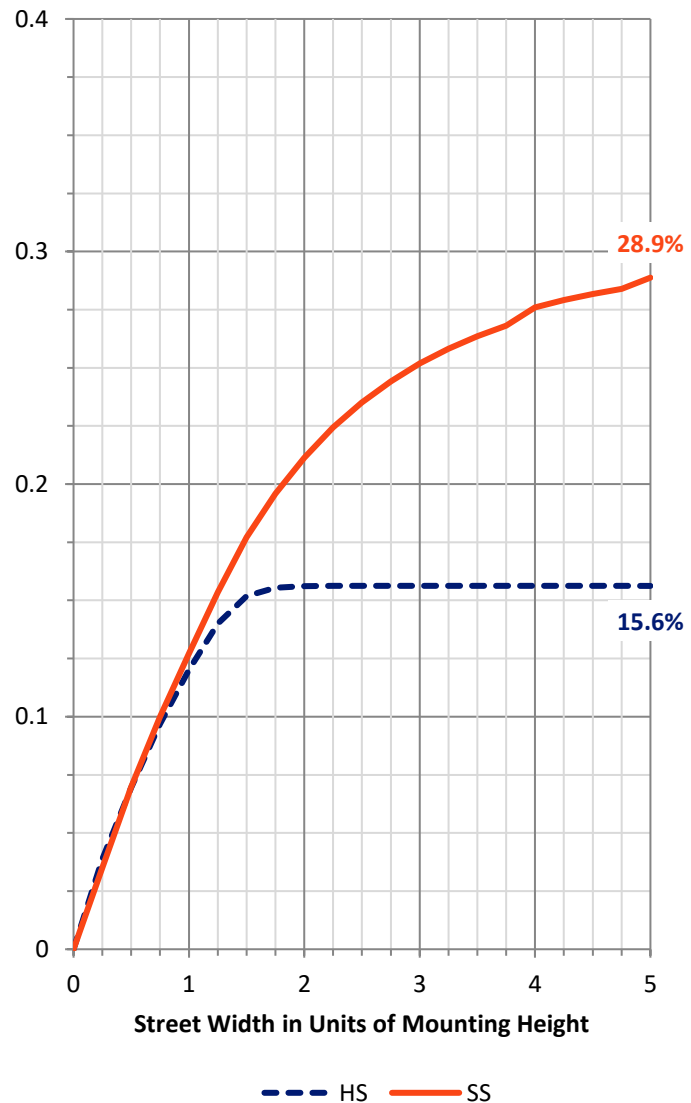
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6280.7	0.0	6280.7
	% Lamp	15.7	0.0	15.7
Street Side	Lumens	11802.6	0.0	11802.6
	% Lamp	29.5	0.0	29.5
Total	Lumens	18083.3	0.0	18083.3
	% Lamp	45.2	0.0	45.2

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	481.1	2.7	1.2
10°-20°	1194.2	6.6	3.0
20°-30°	1646.7	9.1	4.1
30°-40°	2191.0	12.1	5.5
40°-50°	2909.6	16.1	7.3
50°-60°	3620.6	20.0	9.1
60°-70°	3089.3	17.1	7.7
70°-80°	2420.4	13.4	6.1
80°-90°	530.4	2.9	1.3
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°	18083.3	100.0	45.2
0°-180°	18083.3	100.0	45.2

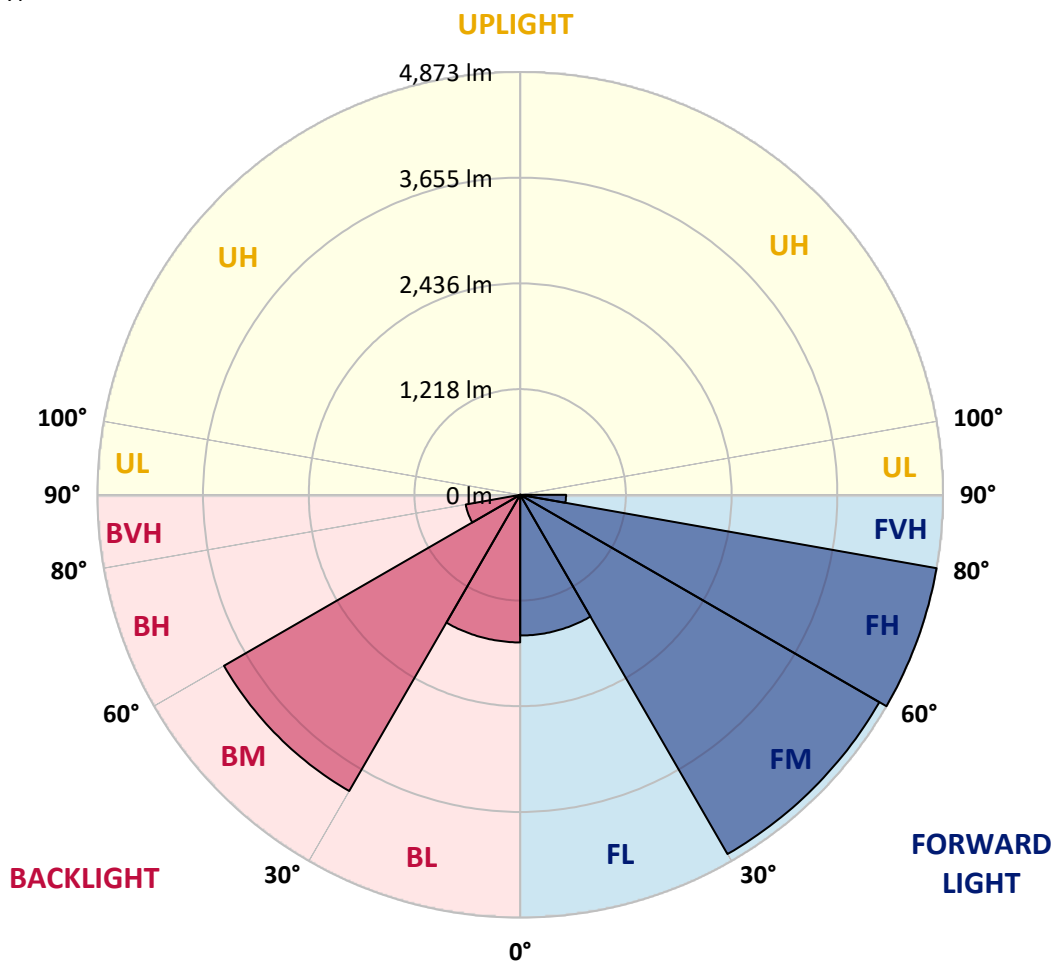


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Lamp	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1621.4	4.1			
FM (30°-60°)	4779.7	11.9			
FH (60°-80°)	4872.8	12.2			G2/5000
FVH (80°-90°)	528.8	1.3			G4/750
BL (0°-30°)	1700.6	4.3	B3/2500		
BM (30°-60°)	3941.5	9.9	B3/5000		
BH (60°-80°)	636.9	1.6	B2/1000		G2/1000
BVH (80°-90°)	1.7	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	
Trapped Light	21916.7	54.8			

BUG Rating: B3-U0-G4
 Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	4890.0	4890.0	4890.0	4890.0	4890.0	4890.0	4890.0	4890.0	4890.0	4890.0	4890.0
2.5°	4338.9	4326.7	4345.6	4370.0	4400.0	4455.6	4480.0	4553.3	4626.7	4761.1	4841.1
5°	4216.7	4192.2	4204.4	4198.9	4211.1	4235.6	4235.6	4302.2	4400.0	4590.0	4724.4
7.5°	4143.3	4131.1	4137.8	4125.6	4131.1	4118.9	4088.9	4082.2	4150.0	4338.9	4492.2
10°	4180.0	4180.0	4167.8	4155.6	4155.6	4094.4	3984.4	3917.8	3917.8	4064.4	4235.6
12.5°	4277.8	4272.2	4247.8	4204.4	4143.3	4027.8	3862.2	3727.8	3685.6	3771.1	3911.1
15°	4485.6	4467.8	4363.3	4211.1	4082.2	3911.1	3691.1	3526.7	3446.7	3483.3	3593.3
17.5°	4780.0	4761.1	4583.3	4296.7	4057.8	3813.3	3538.9	3336.7	3245.6	3263.3	3331.1
20°	4902.2	4883.3	4724.4	4473.3	4131.1	3752.2	3416.7	3208.9	3104.4	3098.9	3135.6
22.5°	4718.9	4718.9	4687.8	4614.4	4284.4	3740.0	3318.9	3104.4	3013.3	2976.7	2982.2
25°	4485.6	4485.6	4504.4	4565.6	4382.2	3776.7	3263.3	3050.0	2952.2	2896.7	2878.9
27.5°	4326.7	4321.1	4308.9	4308.9	4211.1	3795.6	3208.9	3006.7	2896.7	2835.6	2805.6
30°	4228.9	4228.9	4180.0	4106.7	3930.0	3630.0	3165.6	2952.2	2830.0	2762.2	2744.4
32.5°	4277.8	4277.8	4192.2	4045.6	3776.7	3490.0	3141.1	2933.3	2805.6	2737.8	2725.6
35°	4338.9	4338.9	4272.2	4088.9	3740.0	3404.4	3128.9	2908.9	2768.9	2720.0	2707.8
37.5°	4473.3	4461.1	4412.2	4162.2	3752.2	3422.2	3147.8	2903.3	2756.7	2701.1	2664.4
40°	4681.1	4675.6	4602.2	4265.6	3795.6	3458.9	3184.4	2915.6	2744.4	2664.4	2615.6
42.5°	4963.3	4932.2	4810.0	4424.4	3911.1	3538.9	3226.7	2957.8	2737.8	2615.6	2561.1
45°	5354.4	5323.3	5152.2	4681.1	4113.3	3636.7	3287.8	3006.7	2737.8	2548.9	2493.3
47.5°	5941.1	5892.2	5647.8	5115.6	4436.7	3758.9	3385.6	3067.8	2701.1	2456.7	2390.0
50°	6747.8	6686.7	6325.6	5702.2	4858.9	3960.0	3520.0	3116.7	2622.2	2334.4	2255.6
52.5°	7407.8	7346.7	7058.9	6411.1	5384.4	4284.4	3691.1	3177.8	2542.2	2218.9	2138.9
55°	7566.7	7511.1	7376.7	7046.7	6044.4	4687.8	3807.8	3245.6	2505.6	2170.0	2053.3
57.5°	7297.8	7224.4	7168.9	7168.9	6728.9	5066.7	3923.3	3294.4	2517.8	2126.7	1962.2
60°	6943.3	6863.3	6790.0	6985.6	7022.2	5366.7	4052.2	3324.4	2548.9	2060.0	1870.0
62.5°	7151.1	7095.6	6900.0	7022.2	6870.0	5433.3	4106.7	3282.2	2512.2	1925.6	1730.0
65°	7566.7	7517.8	7560.0	7652.2	6618.9	5268.9	4003.3	3177.8	2395.6	1747.8	1576.7
67.5°	7334.4	7285.6	7462.2	7877.8	6838.9	5286.7	3898.9	3050.0	2261.1	1588.9	1375.6
70°	7530.0	7486.7	7474.4	8018.9	6838.9	5586.7	3996.7	2952.2	2084.4	1368.9	1100.0
72.5°	7798.9	7664.4	7486.7	8452.2	6900.0	6210.0	4174.4	2830.0	1796.7	947.8	721.1
75°	7688.9	7498.9	7376.7	7970.0	6576.7	5831.1	3752.2	2304.4	1082.2	562.2	410.0
77.5°	7493.3	7376.7	7254.4	6838.9	5335.6	4614.4	2878.9	1515.6	605.6	378.9	293.3
80°	5317.8	5225.6	4914.4	4290.0	3153.3	2964.4	1992.2	1070.0	446.7	238.9	158.9
82.5°	4497.8	4370.0	4064.4	3507.8	2395.6	1546.7	843.3	403.3	171.1	73.3	43.3
85°	1662.2	1558.9	1400.0	1326.7	513.3	397.8	220.0	31.1	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	12.2	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°	4890.0	4890.0	4890.0	4890.0	4890.0	4890.0	4890.0	4890.0	4890.0	4890.0
2.5°	4926.7	5073.3	5256.7	5440.0	5611.1	5751.1	5880.0	5946.7	5983.3	5990.0
5°	4858.9	5176.7	5550.0	5922.2	6258.9	6552.2	6772.2	6894.4	6955.6	6967.8
7.5°	4687.8	5152.2	5647.8	6087.8	6393.3	6582.2	6662.2	6667.8	6662.2	6662.2
10°	4436.7	4968.9	5494.4	5855.6	5990.0	5941.1	5794.4	5647.8	5550.0	5525.6
12.5°	4113.3	4656.7	5207.8	5488.9	5476.7	5335.6	5164.4	4987.8	4767.8	4718.9
15°	3783.3	4321.1	4822.2	4963.3	4883.3	4816.7	4748.9	4644.4	4363.3	4302.2
17.5°	3483.3	3930.0	4272.2	4228.9	4155.6	4314.4	4394.4	4333.3	4143.3	4082.2
20°	3221.1	3526.7	3678.9	3568.9	3575.6	3783.3	4045.6	4064.4	3978.9	3947.8
22.5°	3013.3	3160.0	3226.7	3245.6	3336.7	3483.3	3740.0	3874.4	3874.4	3874.4
25°	2884.4	2945.6	3013.3	3128.9	3251.1	3410.0	3624.4	3776.7	3874.4	3886.7
27.5°	2811.1	2847.8	2940.0	3080.0	3221.1	3392.2	3642.2	3825.6	3972.2	3984.4
30°	2750.0	2781.1	2884.4	3018.9	3196.7	3483.3	3801.1	4008.9	4162.2	4180.0
32.5°	2732.2	2750.0	2847.8	3001.1	3233.3	3624.4	4033.3	4277.8	4455.6	4473.3
35°	2701.1	2737.8	2811.1	2982.2	3306.7	3746.7	4192.2	4345.6	4443.3	4448.9
37.5°	2664.4	2756.7	2798.9	2994.4	3385.6	3886.7	4241.1	4284.4	4351.1	4375.6
40°	2634.4	2805.6	2805.6	3018.9	3471.1	3960.0	4241.1	4308.9	4394.4	4400.0
42.5°	2603.3	2854.4	2811.1	3050.0	3538.9	3984.4	4290.0	4418.9	4528.9	4522.2
45°	2530.0	2805.6	2781.1	3062.2	3563.3	4008.9	4357.8	4590.0	4810.0	4816.7
47.5°	2390.0	2652.2	2701.1	3086.7	3581.1	4070.0	4516.7	4877.8	5140.0	5171.1
50°	2236.7	2451.1	2615.6	3067.8	3648.9	4272.2	4755.6	5122.2	5452.2	5501.1
52.5°	2096.7	2255.6	2530.0	3050.0	3740.0	4541.1	4846.7	5122.2	5262.2	5268.9
55°	1998.9	2096.7	2426.7	3043.3	3886.7	4718.9	4620.0	4338.9	3996.7	3960.0
57.5°	1901.1	1955.6	2341.1	3018.9	4101.1	4394.4	3465.6	2341.1	2163.3	2163.3
60°	1821.1	1827.8	2261.1	3025.6	4162.2	3147.8	1693.3	1161.1	953.3	928.9
62.5°	1681.1	1681.1	2163.3	2982.2	3397.8	1307.8	850.0	403.3	256.7	244.4
65°	1485.6	1478.9	2047.8	2676.7	1485.6	532.2	158.9	85.6	61.1	61.1
67.5°	1253.3	1228.9	1644.4	1558.9	373.3	55.6	12.2	12.2	6.7	12.2
70°	947.8	770.0	996.7	446.7	43.3	0.0	0.0	0.0	0.0	0.0
72.5°	544.4	361.1	312.2	85.6	0.0	0.0	0.0	0.0	0.0	0.0
75°	317.8	141.1	36.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	214.4	36.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	110.0	12.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	24.4	0.0	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	6.7	0.0
87.5°	6.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.7	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)