

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: 769017_400MP

Luminaire Tested: **GSM-XX-400-MP-XX-1F-FG-XX-HS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: 769017_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-1F-FG-XX-HS
Description: MEDIUM ARCHITECTURAL AREA LUMINAIRE-HORIZONTAL LAMP-TYPE I
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: 24149.3 lumens
Efficiency: 60.4%
Efficacy: 53.4 lumens/watt
Luminous Opening: Point Source (0' x 0' x 0')
IES Classification: Type II - Medium - Full Cutoff
BUG Rating: B4 - U0 - G4

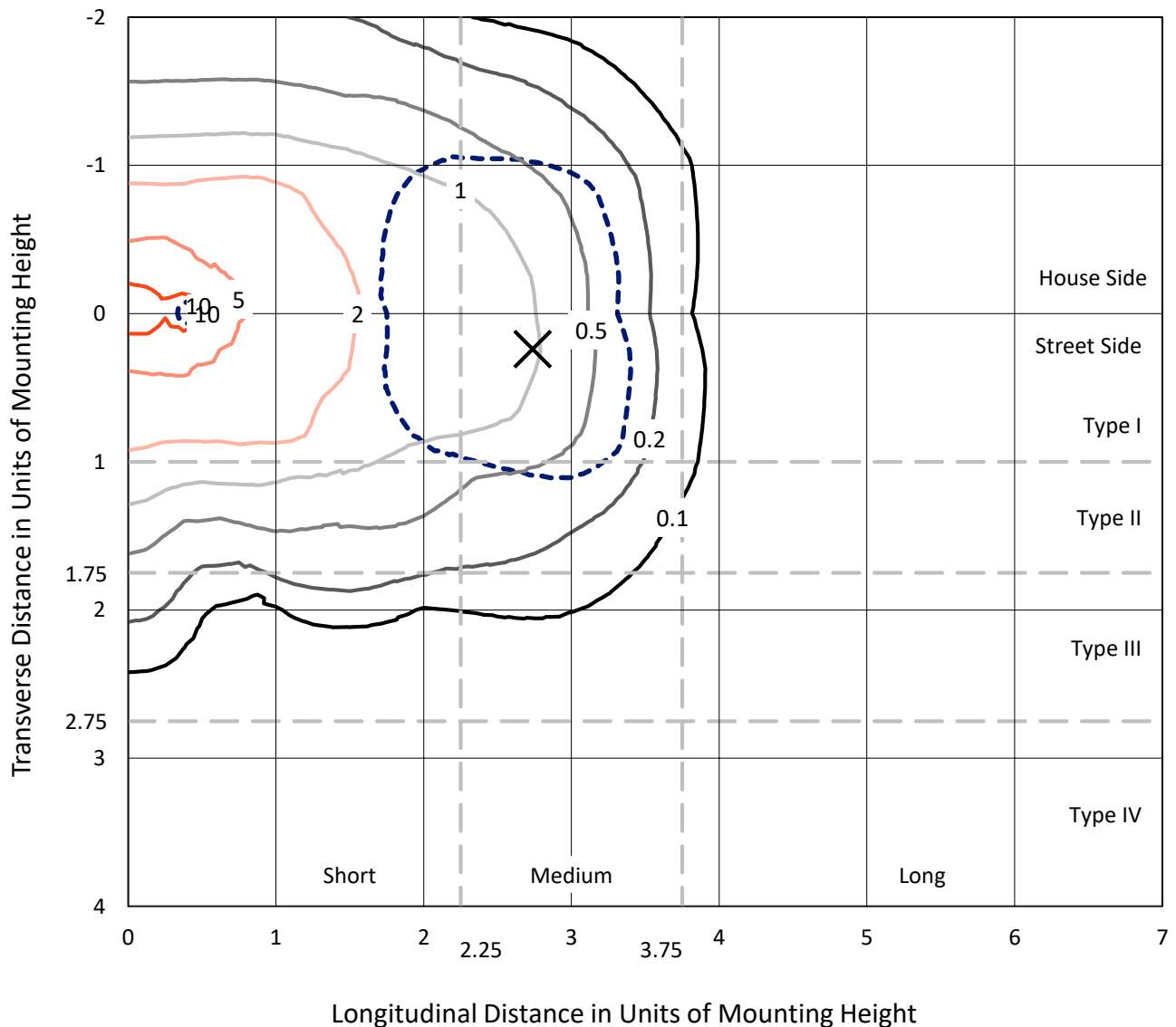
Input Watts (W): 452
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

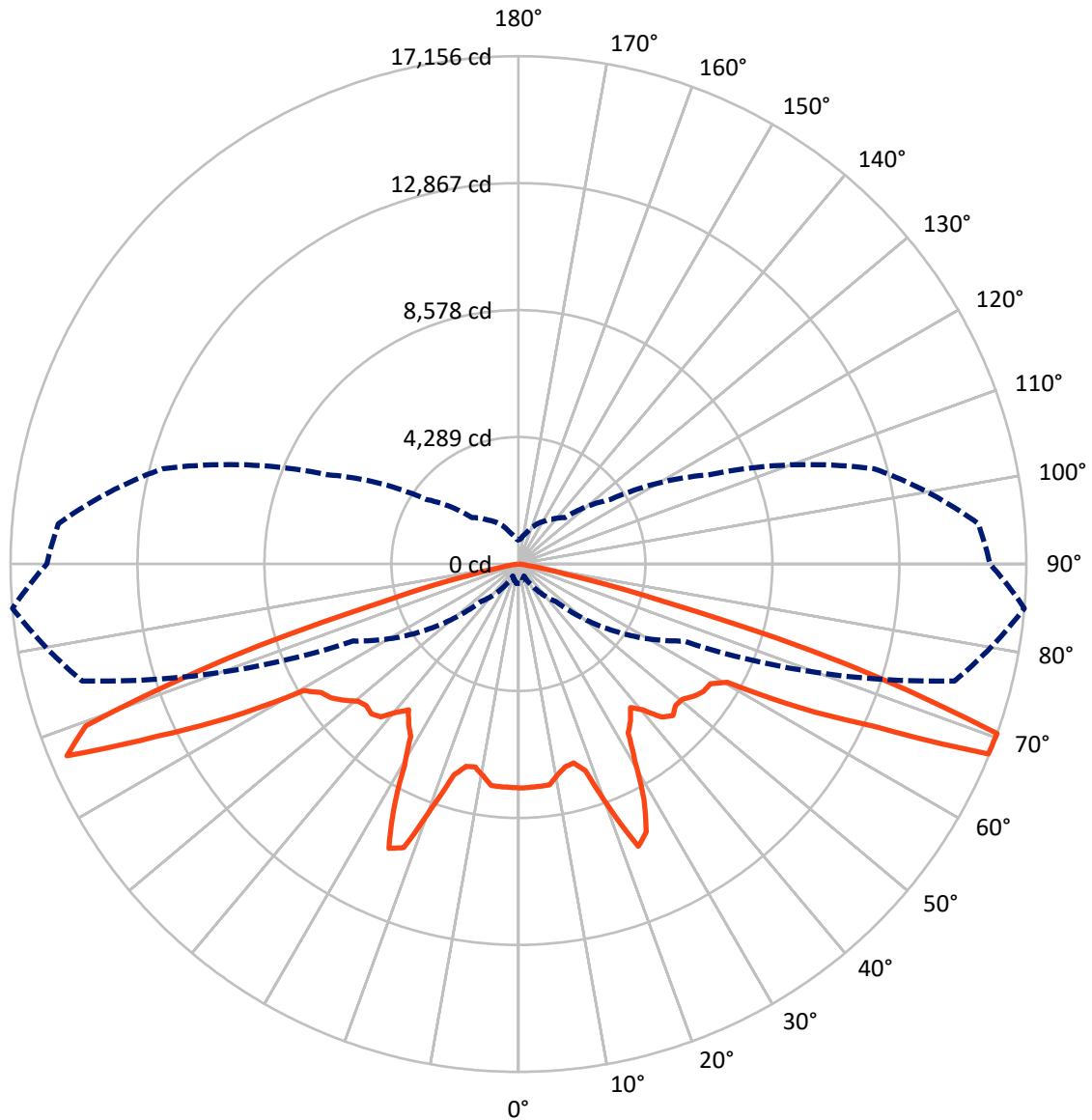
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 12.2 fc
 Type II - Medium - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 85-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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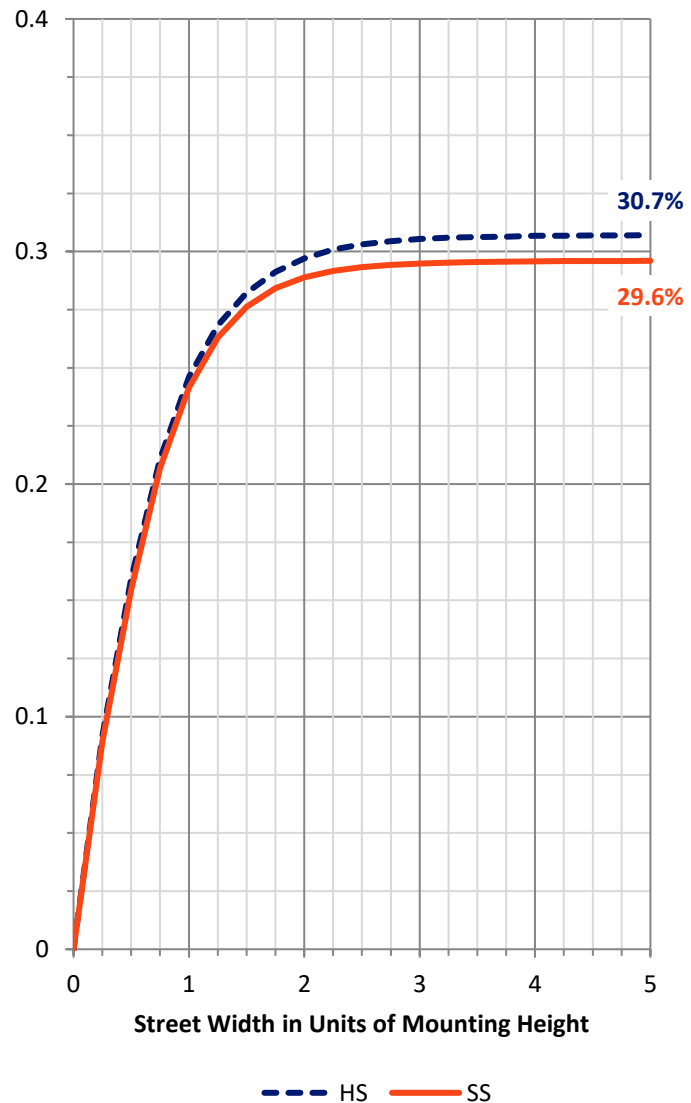
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	12331.9	0.0	12331.9
	% Lamp	30.8	0.0	30.8
Street Side	Lumens	11817.4	0.0	11817.4
	% Lamp	29.5	0.0	29.5
Total	Lumens	24149.3	0.0	24149.3
	% Lamp	60.4	0.0	60.4

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	690.4	2.9	1.7
10°-20°	1768.5	7.3	4.4
20°-30°	2695.3	11.2	6.7
30°-40°	3055.2	12.7	7.6
40°-50°	3856.1	16.0	9.6
50°-60°	4282.4	17.7	10.7
60°-70°	5313.2	22.0	13.3
70°-80°	2440.1	10.1	6.1
80°-90°	48.0	0.2	0.1
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°	24149.3	100.0	60.4
0°-180°	24149.3	100.0	60.4



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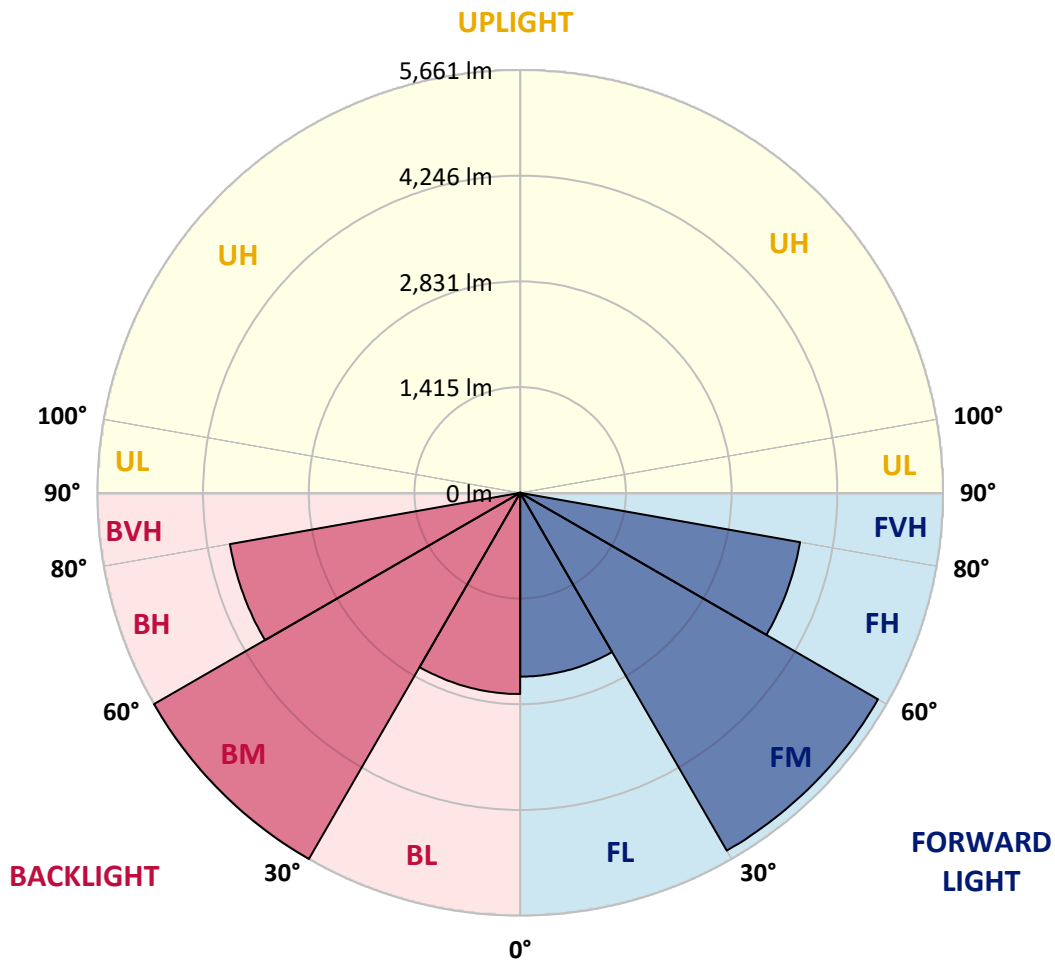
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Lamp	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2460.6	6.2			
FM	(30°-60°)	5532.4	13.8			
FH	(60°-80°)	3806.4	9.5			G2/5000
FVH	(80°-90°)	18.0	0.0			G1/100
BL	(0°-30°)	2693.7	6.7	B4/5000		
BM	(30°-60°)	5661.4	14.2	B4/8500		
BH	(60°-80°)	3946.9	9.9	B4/5000		G4/5000
BVH	(80°-90°)	30.0	0.1			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	
Trapped Light		15850.7	39.6			

BUG Rating: B4-U0-G4

Type II Medium





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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°	7444.4	7437.8	7450.0	7481.1	7523.3	7554.4	7554.4	7560.0	7554.4	7554.4	7554.4
5°	7016.7	7016.7	7046.7	7114.4	7224.4	7297.8	7383.3	7456.7	7517.8	7542.2	7554.4
7.5°	6478.9	6491.1	6557.8	6674.4	6814.4	6973.3	7120.0	7278.9	7425.6	7535.6	7554.4
10°	5977.8	5971.1	6038.9	6178.9	6411.1	6716.7	7016.7	7083.3	7144.4	7236.7	7261.1
12.5°	5464.4	5482.2	5550.0	5696.7	5971.1	6337.8	6625.6	6790.0	6924.4	7028.9	7053.3
15°	4963.3	4981.1	5110.0	5323.3	5592.2	5824.4	6087.8	6435.6	6723.3	6973.3	7065.6
17.5°	4461.1	4473.3	4656.7	4956.7	5158.9	5378.9	5714.4	6325.6	6900.0	7334.4	7444.4
20°	3960.0	3996.7	4211.1	4473.3	4731.1	4975.6	5403.3	6337.8	7908.9	8806.7	8867.8
22.5°	3654.4	3678.9	3874.4	4162.2	4473.3	4816.7	5262.2	6381.1	8635.6	10365.6	10641.1
25°	3483.3	3502.2	3642.2	3996.7	4387.8	4810.0	5256.7	6362.2	8324.4	10023.3	10543.3
27.5°	3385.6	3397.8	3630.0	3972.2	4461.1	4890.0	5403.3	6503.3	7811.1	9045.6	9326.7
30°	3287.8	3324.4	3862.2	4057.8	4467.8	4706.7	5097.8	6100.0	6875.6	7767.8	7963.3
32.5°	3177.8	3263.3	4101.1	4040.0	4431.1	4424.4	4590.0	5305.6	6136.7	6808.9	6936.7
35°	3116.7	3165.6	4137.8	4045.6	4706.7	4626.7	4602.2	4951.1	5721.1	6515.6	6601.1
37.5°	3141.1	3190.0	3801.1	3844.4	4865.6	5061.1	4890.0	5024.4	5690.0	6154.4	6222.2
40°	3202.2	3202.2	3275.6	3532.2	4700.0	5586.7	5347.8	5354.4	6002.2	6472.2	6515.6
42.5°	3177.8	3098.9	2945.6	3287.8	4314.4	6020.0	5946.7	5941.1	6723.3	7065.6	6985.6
45°	3067.8	2970.0	2732.2	3055.6	3911.1	5995.6	6484.4	6454.4	7156.7	7310.0	7144.4
47.5°	2970.0	2884.4	2566.7	2854.4	3636.7	5574.4	6760.0	6552.2	6912.2	7144.4	7058.9
50°	2860.0	2798.9	2371.1	2664.4	3477.8	5110.0	7114.4	6460.0	6728.9	7175.6	7156.7
52.5°	2688.9	2578.9	2096.7	2468.9	3348.9	4761.1	7468.9	6472.2	6875.6	7425.6	7505.6
55°	2407.8	2248.9	1735.6	2157.8	3184.4	4357.8	7065.6	6594.4	7462.2	7591.1	7718.9
57.5°	2236.7	2096.7	1381.1	1747.8	3025.6	3960.0	6136.7	6435.6	7804.4	7640.0	7816.7
60°	2016.7	1894.4	1070.0	1356.7	2866.7	3715.6	5611.1	6417.8	7975.6	8104.4	8256.7
62.5°	1698.9	1601.1	825.6	1008.9	2493.3	3556.7	6026.7	7242.2	9571.1	10707.8	10836.7
65°	1466.7	1412.2	684.4	691.1	2121.1	3404.4	6234.4	8048.9	11575.6	13225.6	13250.0
67.5°	1136.7	1112.2	605.6	537.8	1632.2	3086.7	5537.8	7505.6	14412.2	17118.9	16740.0
70°	660.0	660.0	550.0	446.7	1051.1	1796.7	3947.8	6154.4	15255.6	17155.6	15933.3
72.5°	330.0	330.0	488.9	317.8	452.2	837.8	3678.9	5990.0	11692.2	11636.7	10170.0
75°	146.7	141.1	317.8	195.6	244.4	501.1	2964.4	4663.3	5818.9	5091.1	4167.8
77.5°	61.1	67.8	134.4	97.8	141.1	305.6	1320.0	1686.7	1735.6	1588.9	1461.1
80°	0.0	6.7	18.9	24.4	55.6	110.0	330.0	378.9	410.0	440.0	471.1
82.5°	0.0	0.0	0.0	0.0	6.7	6.7	36.7	67.8	85.6	97.8	116.7
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°	7547.8	7535.6	7566.7	7560.0	7560.0	7566.7	7578.9	7584.4	7584.4	7578.9
5°	7547.8	7547.8	7566.7	7554.4	7547.8	7542.2	7542.2	7530.0	7511.1	7505.6
7.5°	7535.6	7481.1	7498.9	7462.2	7420.0	7371.1	7310.0	7266.7	7236.7	7236.7
10°	7248.9	7200.0	7212.2	7181.1	7132.2	7077.8	6973.3	6912.2	6887.8	6894.4
12.5°	7010.0	6924.4	6936.7	6924.4	6814.4	6716.7	6625.6	6533.3	6515.6	6515.6
15°	7058.9	6851.1	6765.6	6601.1	6508.9	6362.2	6246.7	6161.1	6148.9	6148.9
17.5°	7444.4	7126.7	6637.8	6252.2	6068.9	5977.8	5848.9	5770.0	5745.6	5745.6
20°	8696.7	7902.2	6821.1	6038.9	5733.3	5592.2	5440.0	5384.4	5305.6	5281.1
22.5°	10328.9	8757.8	7016.7	5873.3	5421.1	5225.6	5061.1	5005.6	4865.6	4828.9
25°	10555.6	8965.6	6992.2	5738.9	5213.3	5042.2	4865.6	4694.4	4480.0	4448.9
27.5°	9271.1	8275.6	6777.8	5586.7	5127.8	5000.0	4846.7	4553.3	4155.6	4094.4
30°	7811.1	7205.6	6148.9	5158.9	4834.4	4895.6	4773.3	4424.4	3930.0	3850.0
32.5°	6863.3	6460.0	5660.0	4828.9	4577.8	4651.1	4387.8	4137.8	3740.0	3654.4
35°	6540.0	6203.3	5457.8	4792.2	4724.4	4651.1	4088.9	3703.3	3471.1	3410.0
37.5°	6166.7	6032.2	5347.8	4846.7	4993.3	4694.4	3856.7	3410.0	3251.1	3226.7
40°	6491.1	6234.4	5506.7	5110.0	5378.9	4694.4	3630.0	3172.2	3050.0	3031.1
42.5°	6943.3	6716.7	5873.3	5537.8	5684.4	4614.4	3441.1	3006.7	2866.7	2872.2
45°	7090.0	6936.7	6215.6	5934.4	5770.0	4418.9	3257.8	2823.3	2676.7	2664.4
47.5°	7022.2	6838.9	6423.3	6264.4	5726.7	4180.0	3116.7	2688.9	2500.0	2468.9
50°	7132.2	6851.1	6545.6	6570.0	5604.4	3935.6	2988.9	2542.2	2341.1	2310.0
52.5°	7474.4	6936.7	6491.1	6747.8	5421.1	3740.0	2872.2	2426.7	2218.9	2187.8
55°	7780.0	7322.2	6667.8	6613.3	5103.3	3551.1	2756.7	2322.2	2102.2	2077.8
57.5°	7957.8	7578.9	6845.6	6398.9	4663.3	3397.8	2634.4	2182.2	1992.2	1980.0
60°	8422.2	7921.1	7022.2	6148.9	4265.6	3221.1	2512.2	2072.2	1888.9	1918.9
62.5°	11037.8	9791.1	7926.7	6178.9	3978.9	2994.4	2365.6	1974.4	1730.0	1772.2
65°	13501.1	11832.2	8782.2	6087.8	3740.0	2768.9	2145.6	1821.1	1466.7	1466.7
67.5°	16568.9	13550.0	8850.0	5513.3	3392.2	2463.3	1882.2	1564.4	1210.0	1148.9
70°	15597.8	12437.8	7138.9	3813.3	2224.4	1815.6	1497.8	1106.7	850.0	818.9
72.5°	10360.0	9351.1	5574.4	2835.6	1148.9	684.4	660.0	611.1	520.0	513.3
75°	4571.1	5122.2	3624.4	2133.3	770.0	324.4	207.8	207.8	214.4	220.0
77.5°	1711.1	2157.8	1833.3	1271.1	501.1	214.4	110.0	97.8	116.7	122.2
80°	550.0	696.7	647.8	513.3	220.0	85.6	36.7	31.1	48.9	48.9
82.5°	134.4	153.3	141.1	104.4	43.3	12.2	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)