

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: 769007_400MP

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: 769007_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-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: 30125.2 lumens
Efficiency: 75.3%
Efficacy: 66.6 lumens/watt
Luminous Opening: Point Source (0' x 0' x 0')
IES Classification: Type III - Short - Full Cutoff
BUG Rating: B4 - U0 - G4

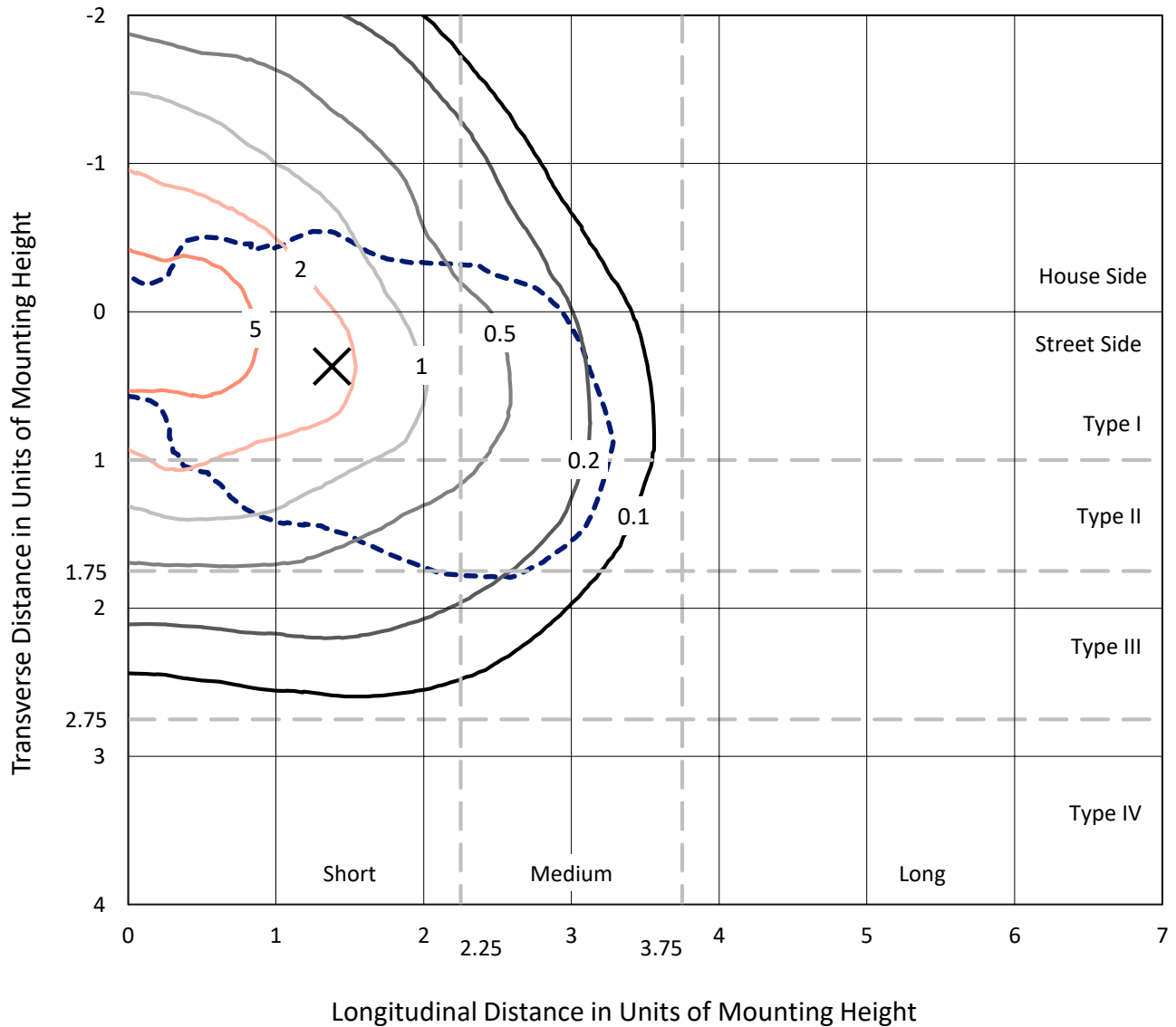
Input Watts (W): 452
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

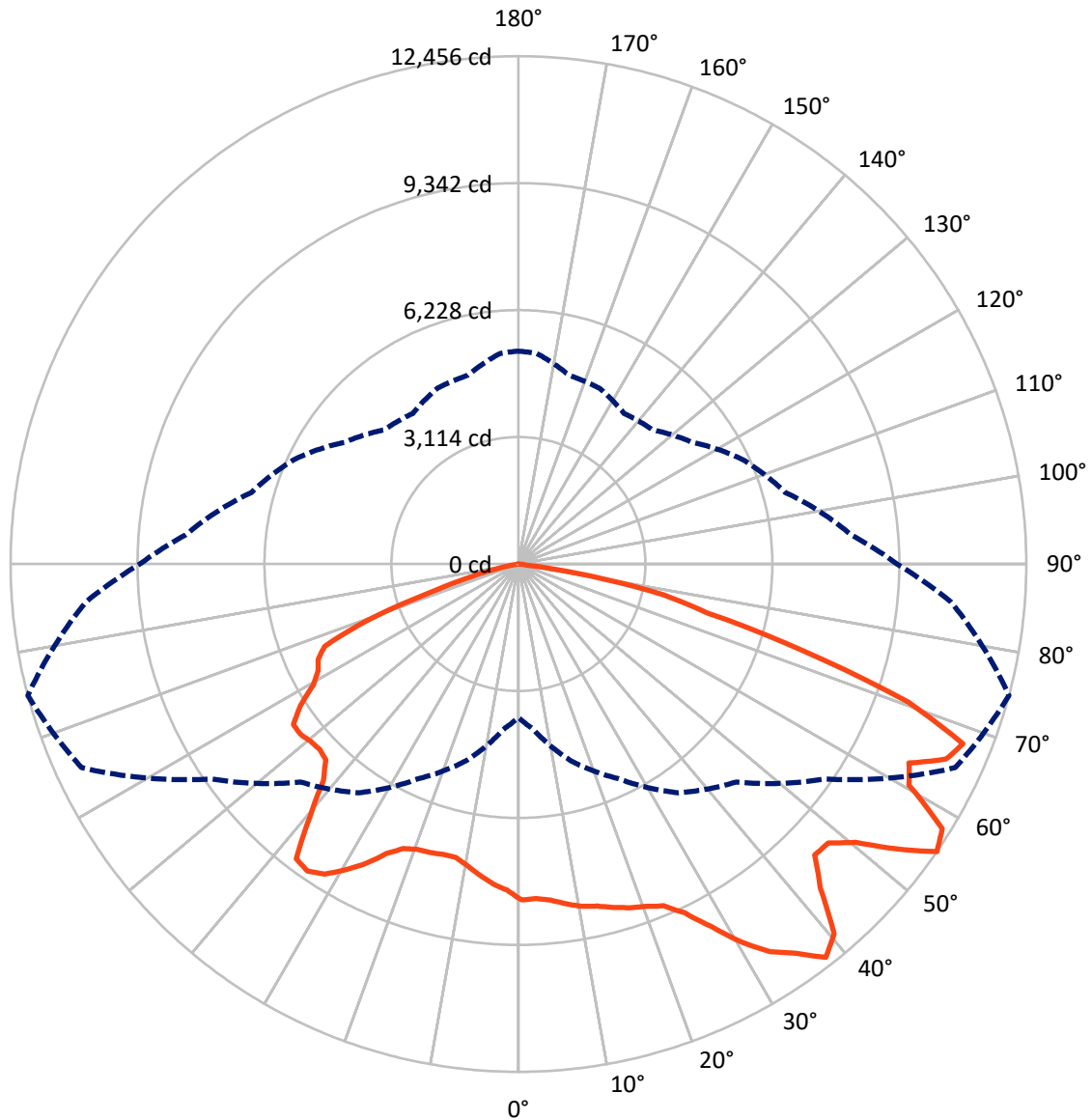
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 9.8 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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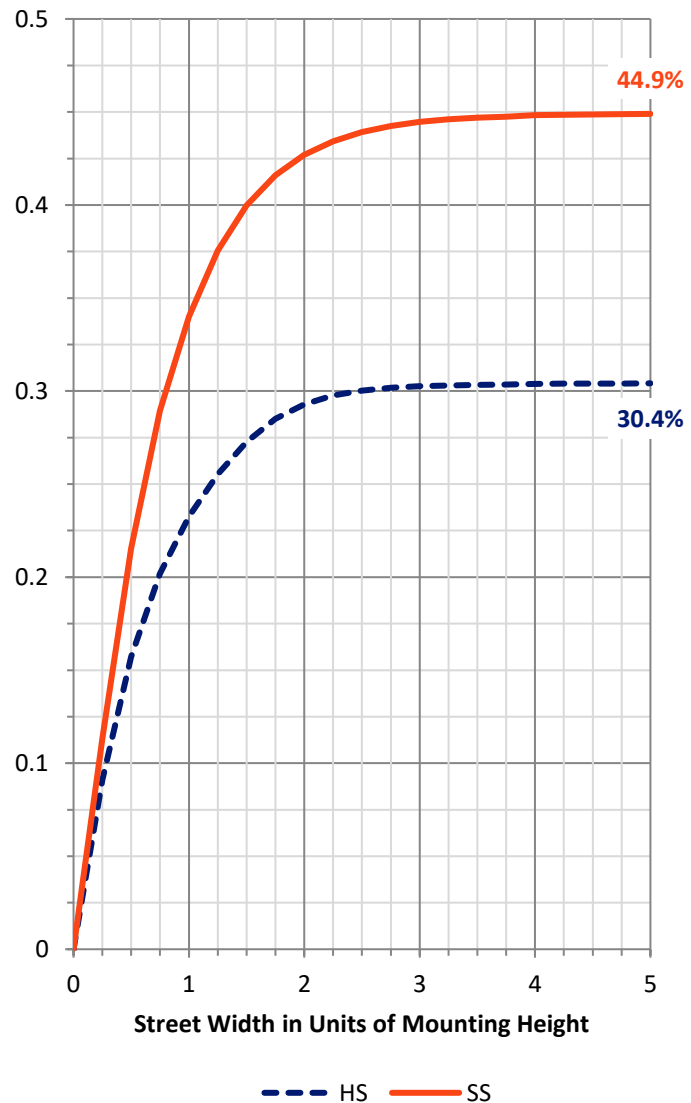
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	12214.4	0.0	12214.4
	% Lamp	30.5	0.0	30.5
Street Side	Lumens	17910.8	0.0	17910.8
	% Lamp	44.8	0.0	44.8
Total	Lumens	30125.2	0.0	30125.2
	% Lamp	75.3	0.0	75.3

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	764.6	2.5	1.9
10°-20°	2187.4	7.3	5.5
20°-30°	3513.1	11.7	8.8
30°-40°	4865.5	16.2	12.2
40°-50°	5236.2	17.4	13.1
50°-60°	5970.9	19.8	14.9
60°-70°	5407.4	17.9	13.5
70°-80°	2106.0	7.0	5.3
80°-90°	74.1	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°	30125.2	100.0	75.3
0°-180°	30125.2	100.0	75.3



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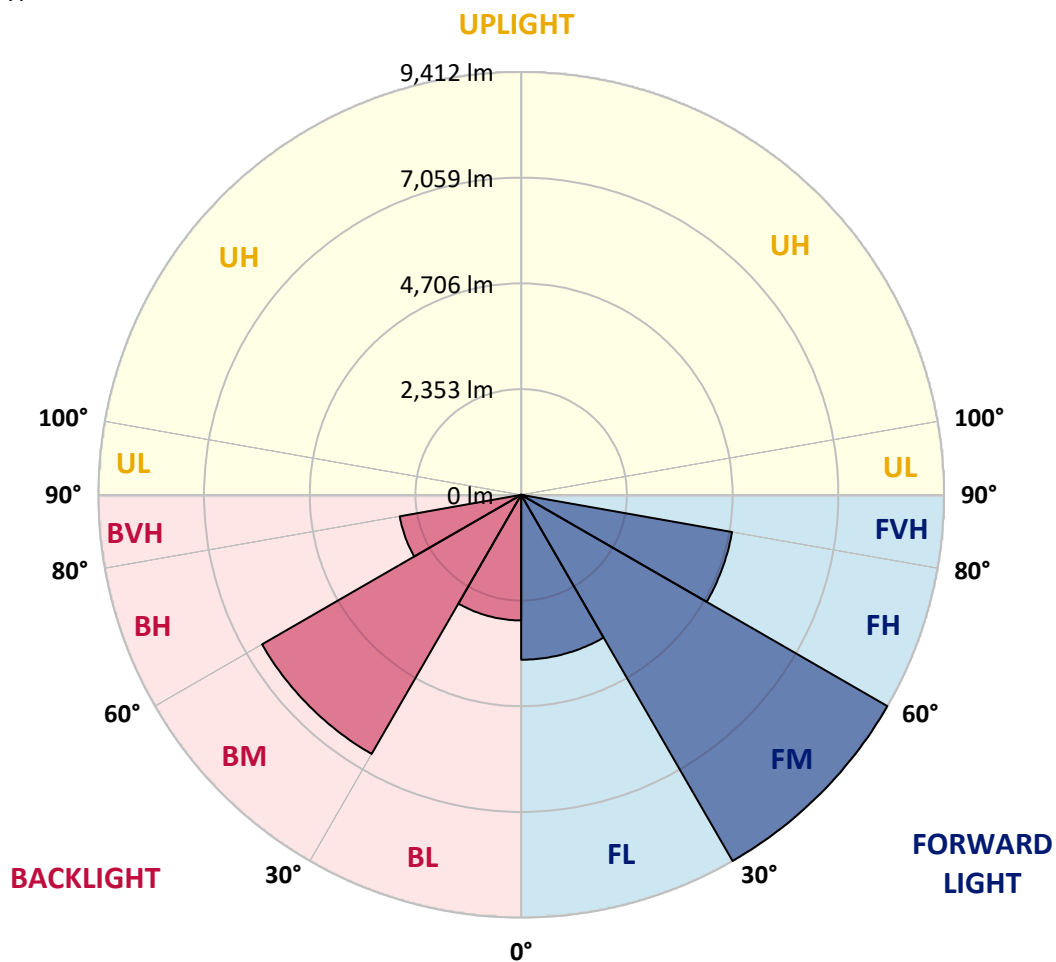
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Lamp	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3670.0	9.2			
FM (30°-60°)	9411.8	23.5			
FH (60°-80°)	4766.8	11.9			G2/5000
FVH (80°-90°)	62.2	0.2			G1/100
BL (0°-30°)	2795.2	7.0	B4/5000		
BM (30°-60°)	6660.7	16.7	B4/8500		
BH (60°-80°)	2746.6	6.9	B4/5000		G4/5000
BVH (80°-90°)	11.9	0.0			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	
Trapped Light	9874.8	24.7			

BUG Rating: B4-U0-G4

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	8238.9	8238.9	8238.9	8238.9	8238.9	8238.9	8238.9	8238.9	8238.9	8238.9	8238.9
2.5°	8630.0	8611.1	8617.8	8568.9	8520.0	8458.9	8391.1	8312.2	8214.4	8165.6	8104.4
5°	8911.1	8904.4	8874.4	8806.7	8703.3	8605.6	8520.0	8403.3	8281.1	8158.9	8061.1
7.5°	9070.0	9082.2	9045.6	8965.6	8911.1	8862.2	8788.9	8623.3	8415.6	8202.2	8048.9
10°	9143.3	9136.7	9143.3	9082.2	9124.4	9124.4	9082.2	8862.2	8537.8	8263.3	8067.8
12.5°	9045.6	9057.8	9094.4	9161.1	9265.6	9290.0	9185.6	8916.7	8611.1	8287.8	8036.7
15°	8837.8	8825.6	8916.7	9112.2	9253.3	9320.0	9246.7	9063.3	8740.0	8366.7	8097.8
17.5°	8520.0	8513.3	8678.9	8911.1	9070.0	9216.7	9277.8	9185.6	8862.2	8471.1	8202.2
20°	8141.1	8122.2	8348.9	8586.7	8801.1	9045.6	9277.8	9258.9	8965.6	8556.7	8281.1
22.5°	7627.8	7633.3	7914.4	8171.1	8483.3	8862.2	9258.9	9381.1	9106.7	8696.7	8397.8
25°	7151.1	7144.4	7388.9	7713.3	8202.2	8770.0	9400.0	9651.1	9480.0	9118.9	8757.8
27.5°	6588.9	6601.1	6894.4	7285.6	8006.7	8850.0	9700.0	10121.1	10066.7	9705.6	9277.8
30°	6100.0	6117.8	6454.4	6931.1	7841.1	9008.9	10078.9	10707.8	10756.7	10298.9	9852.2
32.5°	5660.0	5714.4	6124.4	6723.3	7828.9	9338.9	10470.0	11203.3	11337.8	10817.8	10316.7
35°	5256.7	5372.2	5892.2	6582.2	7921.1	9577.8	10641.1	11460.0	11722.2	11270.0	10726.7
37.5°	4938.9	5115.6	5836.7	6570.0	7982.2	9553.3	10702.2	11783.3	12242.2	11508.9	10897.8
40°	4681.1	4907.8	5873.3	6637.8	7823.3	9344.4	10702.2	11881.1	11924.4	10677.8	9981.1
42.5°	4558.9	4816.7	5977.8	6698.9	7486.7	8911.1	10225.6	11203.3	10854.4	9638.9	8977.8
45°	4436.7	4736.7	6093.3	6570.0	6924.4	8043.3	9307.8	10176.7	10182.2	9155.6	8422.2
47.5°	4387.8	4656.7	6117.8	6368.9	6491.1	7315.6	8623.3	9778.9	10225.6	9143.3	8312.2
50°	4253.3	4510.0	5946.7	6227.8	6435.6	7187.8	8464.4	10127.8	10726.7	9497.8	8544.4
52.5°	4045.6	4277.8	5616.7	6056.7	6674.4	7388.9	8776.7	10903.3	11606.7	10108.9	8916.7
55°	3764.4	4057.8	5000.0	5806.7	6851.1	7560.0	9185.6	11820.0	12455.6	10646.7	9283.3
57.5°	3593.3	3764.4	4351.1	5452.2	6711.1	7505.6	9136.7	12088.9	12254.4	10280.0	8916.7
60°	3348.9	3416.7	3820.0	4883.3	6246.7	7046.7	8715.6	11563.3	11007.8	9314.4	8251.1
62.5°	2896.7	2945.6	3306.7	4253.3	5635.6	6508.9	8104.4	11160.0	10751.1	9234.4	8122.2
65°	2175.6	2170.0	2671.1	3636.7	5140.0	6215.6	7560.0	10830.0	11533.3	9436.7	8251.1
67.5°	1662.2	1705.6	2157.8	3092.2	4668.9	5916.7	7242.2	9968.9	11758.9	9742.2	8556.7
70°	1283.3	1290.0	1723.3	2524.4	4064.4	5482.2	6931.1	9045.6	10145.6	8825.6	7505.6
72.5°	843.3	843.3	1167.8	1913.3	3184.4	4755.6	6124.4	7578.9	7340.0	5721.1	4767.8
75°	525.6	513.3	647.8	1131.1	2096.7	3251.1	3996.7	4804.4	4792.2	3673.3	3153.3
77.5°	293.3	275.6	232.2	330.0	654.4	1302.2	2108.9	3355.6	3636.7	2505.6	2041.1
80°	85.6	73.3	55.6	85.6	251.1	617.8	1070.0	1791.1	1796.7	1100.0	855.6
82.5°	0.0	0.0	0.0	0.0	24.4	80.0	128.9	190.0	207.8	116.7	80.0
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°	8238.9	8238.9	8238.9	8238.9	8238.9	8238.9	8238.9	8238.9	8238.9	8238.9
2.5°	8067.8	8000.0	7938.9	7890.0	7865.6	7865.6	7865.6	7890.0	7890.0	7908.9
5°	7987.8	7872.2	7767.8	7596.7	7498.9	7437.8	7376.7	7346.7	7322.2	7322.2
7.5°	7926.7	7694.4	7401.1	7144.4	6980.0	6894.4	6875.6	6833.3	6784.4	6772.2
10°	7890.0	7511.1	7156.7	6826.7	6552.2	6381.1	6350.0	6350.0	6398.9	6405.6
12.5°	7811.1	7358.9	6943.3	6576.7	6271.1	6056.7	6014.4	6154.4	6276.7	6307.8
15°	7847.8	7352.2	6875.6	6442.2	6075.6	5843.3	5806.7	5977.8	6075.6	6100.0
17.5°	7914.4	7401.1	6912.2	6423.3	6014.4	5696.7	5677.8	5794.4	5831.1	5867.8
20°	7975.6	7425.6	6931.1	6460.0	6087.8	5677.8	5598.9	5800.0	5824.4	5855.6
22.5°	8085.6	7523.3	7022.2	6570.0	6227.8	5708.9	5427.8	5690.0	5843.3	5855.6
25°	8410.0	7804.4	7261.1	6845.6	6405.6	5770.0	5274.4	5347.8	5721.1	5745.6
27.5°	8880.0	8238.9	7596.7	7071.1	6576.7	5855.6	5213.3	5005.6	5452.2	5574.4
30°	9363.3	8617.8	7951.1	7291.1	6521.1	5880.0	5091.1	4731.1	5030.0	5134.4
32.5°	9803.3	8965.6	8220.0	7352.2	6540.0	5897.8	4975.6	4565.6	4668.9	4718.9
35°	10145.6	9136.7	8226.7	7187.8	6288.9	5562.2	4841.1	4436.7	4480.0	4485.6
37.5°	10218.9	9051.1	8031.1	6900.0	5941.1	5335.6	4718.9	4357.8	4455.6	4461.1
40°	9246.7	8048.9	7144.4	6068.9	5298.9	4944.4	4571.1	4326.7	4565.6	4595.6
42.5°	8263.3	7144.4	6466.7	5580.0	4944.4	4663.3	4424.4	4272.2	4675.6	4706.7
45°	7725.6	6735.6	6191.1	5452.2	4858.9	4436.7	4223.3	4101.1	4651.1	4816.7
47.5°	7615.6	6662.2	6130.0	5421.1	4871.1	4284.4	4094.4	4027.8	4651.1	4902.2
50°	7743.3	6698.9	6117.8	5421.1	4871.1	4314.4	4211.1	4106.7	4743.3	4902.2
52.5°	7963.3	6784.4	6173.3	5342.2	4748.9	4400.0	4497.8	4480.0	5030.0	5134.4
55°	8190.0	6777.8	6063.3	5201.1	4651.1	4510.0	4743.3	4792.2	5183.3	5220.0
57.5°	7828.9	6374.4	5800.0	5110.0	4602.2	4656.7	4858.9	4718.9	4914.4	5000.0
60°	7168.9	5831.1	5518.9	5066.7	4595.6	4731.1	4792.2	4235.6	4443.3	4743.3
62.5°	6857.8	5562.2	5494.4	5073.3	4644.4	4651.1	4284.4	3593.3	3844.4	4204.4
65°	6674.4	5440.0	5506.7	4981.1	4590.0	4314.4	3587.8	2915.6	3013.3	3251.1
67.5°	6540.0	5164.4	5073.3	4436.7	4162.2	3654.4	2872.2	2200.0	2060.0	2212.2
70°	5672.2	3991.1	3367.8	2860.0	2744.4	2273.3	1888.9	1387.8	1197.8	1271.1
72.5°	3710.0	2310.0	1607.8	1302.2	1192.2	972.2	855.6	691.1	630.0	660.0
75°	2493.3	1307.8	837.8	630.0	501.1	415.6	366.7	373.3	385.6	403.3
77.5°	1522.2	691.1	415.6	287.8	202.2	171.1	158.9	190.0	202.2	220.0
80°	617.8	263.3	141.1	80.0	55.6	36.7	36.7	48.9	48.9	48.9
82.5°	61.1	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)