

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: 769009_400MP

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: 769009_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-HS
Description: MEDIUM ARCHITECTURAL AREA LUMINAIRE-HORIZONTAL LAMP-TYPE II
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: 28685.4 lumens
Efficiency: 71.7%
Efficacy: 63.5 lumens/watt
Luminous Opening: Point Source (0' x 0' x 0')
IES Classification: Type II - Short - Full Cutoff
BUG Rating: B4 - U0 - G4

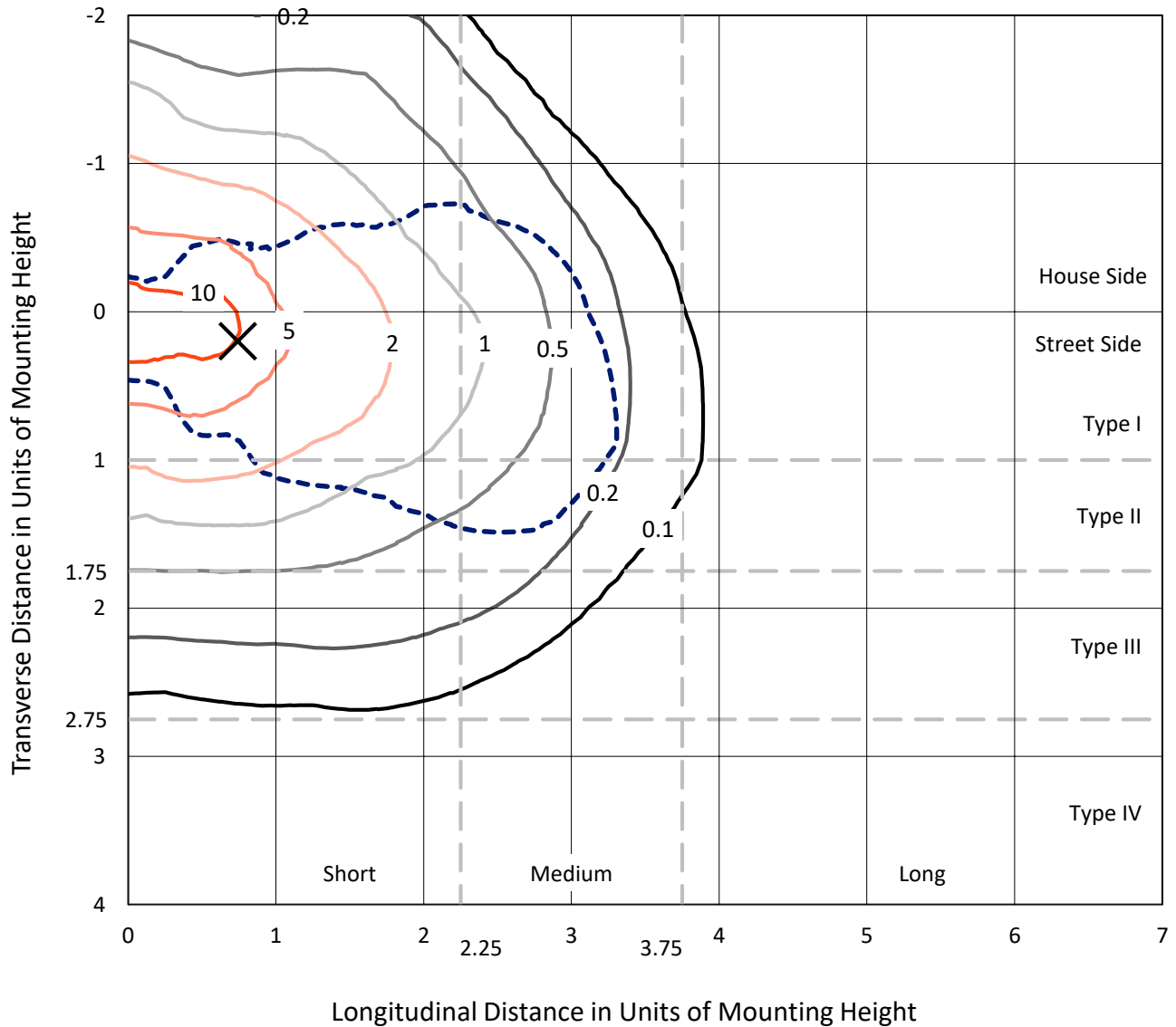
Input Watts (W): 452
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

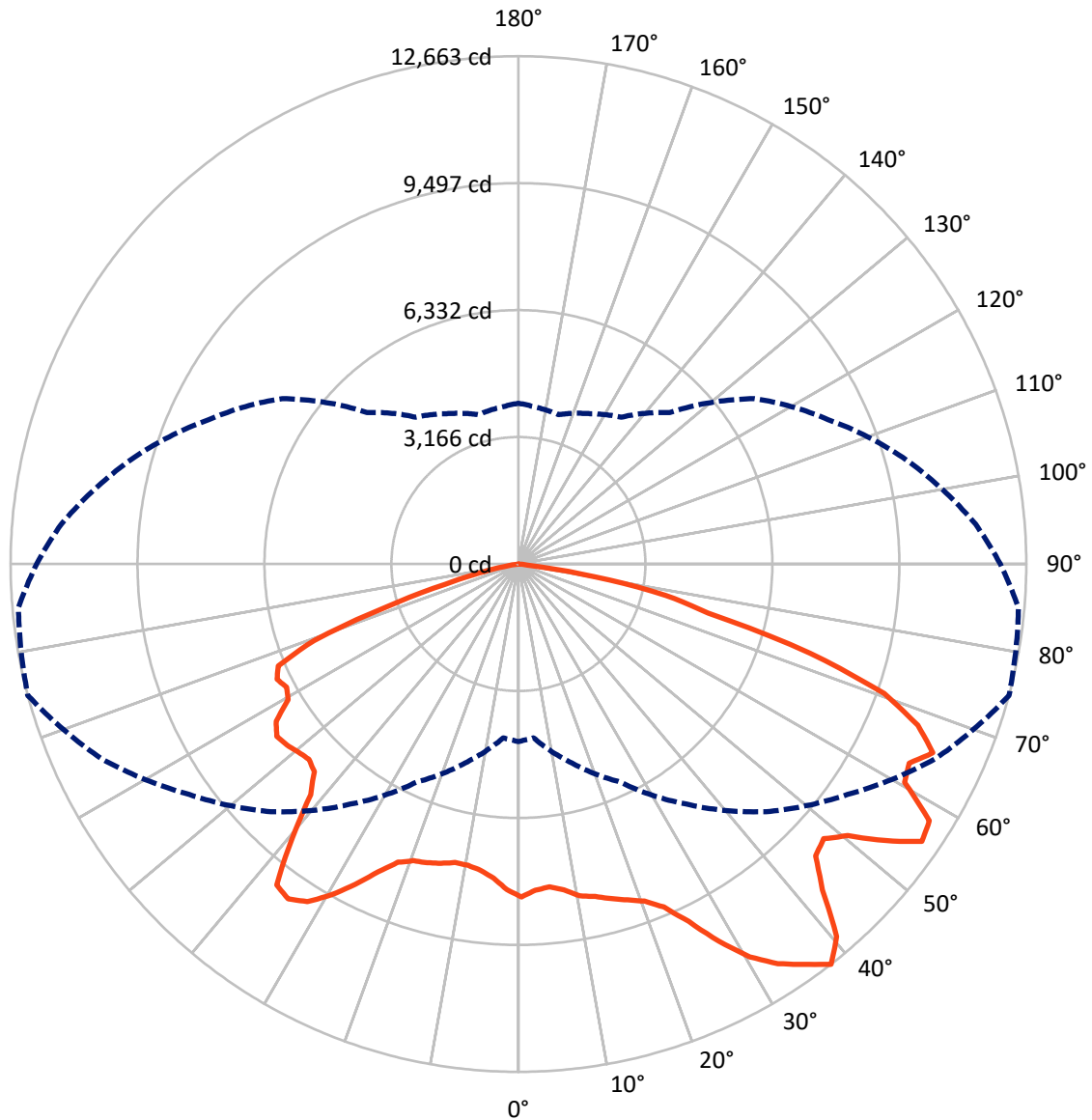
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 13.5 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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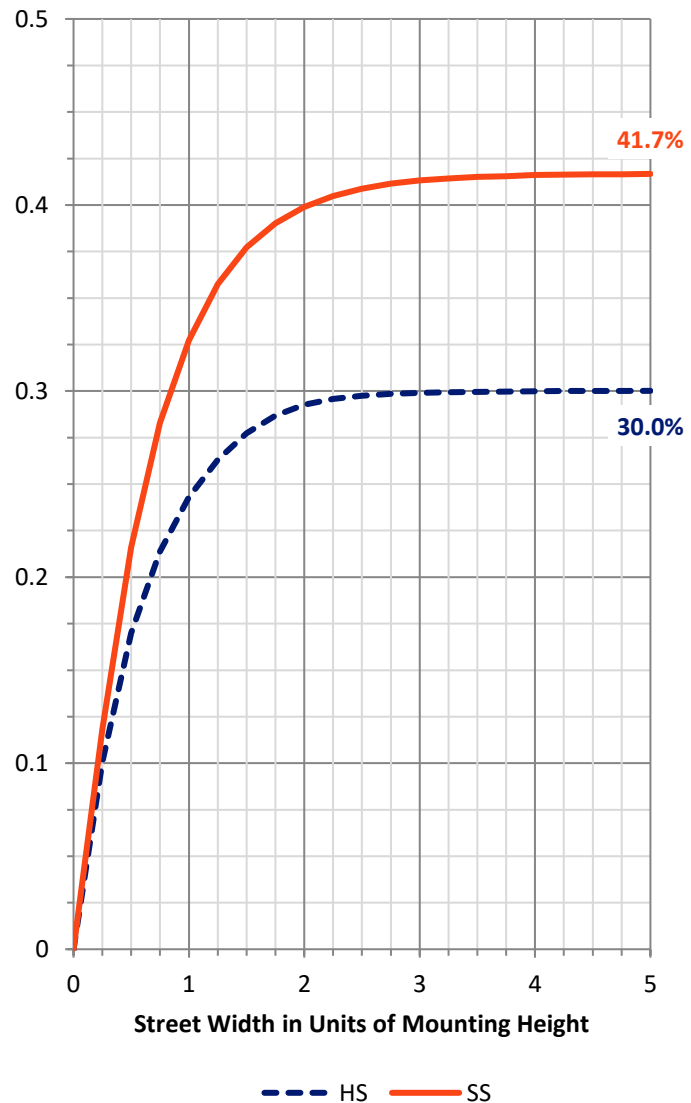
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	12066.0	0.0	12066.0
	% Lamp	30.2	0.0	30.2
Street Side	Lumens	16619.3	0.0	16619.3
	% Lamp	41.5	0.0	41.5
Total	Lumens	28685.4	0.0	28685.4
	% Lamp	71.7	0.0	71.7

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	761.3	2.7	1.9
10°-20°	2139.4	7.5	5.3
20°-30°	3420.4	11.9	8.6
30°-40°	4769.5	16.6	11.9
40°-50°	4946.1	17.2	12.4
50°-60°	5451.7	19.0	13.6
60°-70°	5052.3	17.6	12.6
70°-80°	2068.0	7.2	5.2
80°-90°	76.7	0.3	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°	28685.4	100.0	71.7
0°-180°	28685.4	100.0	71.7



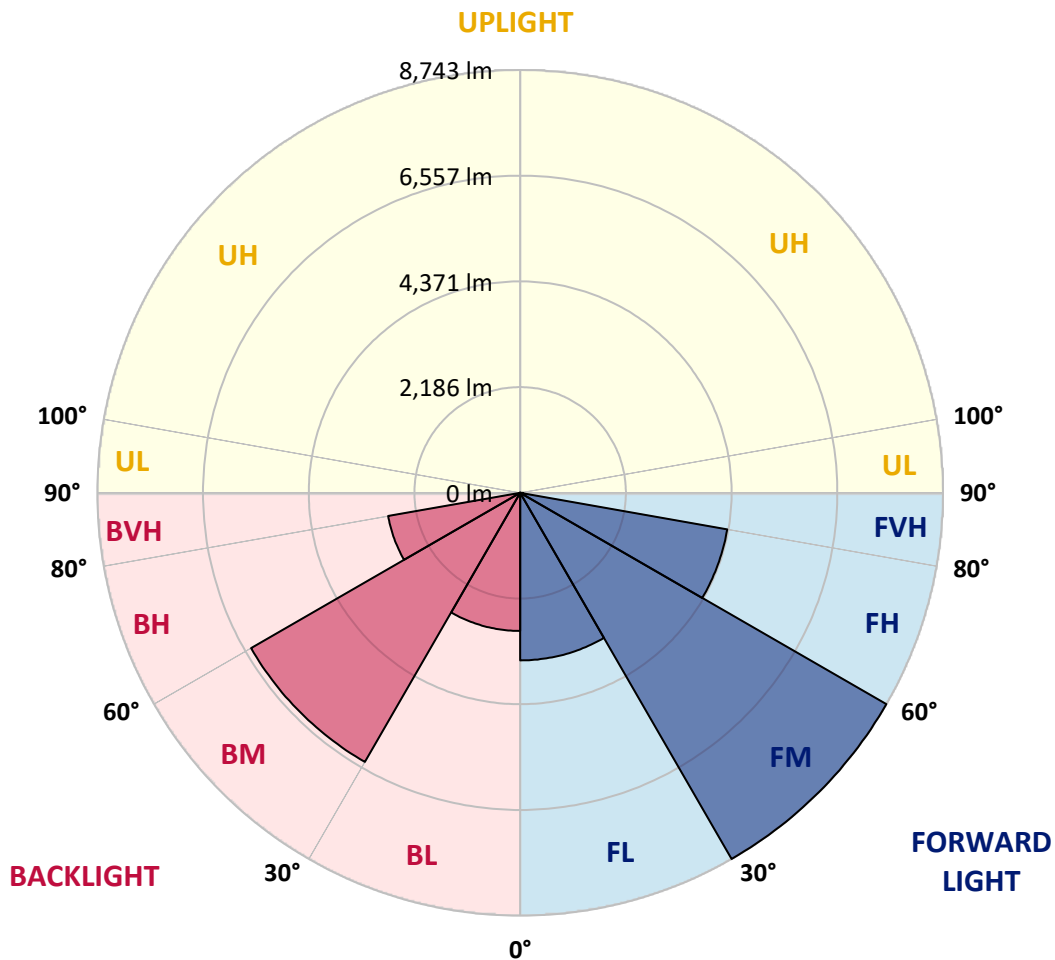
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Lamp	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3465.1	8.7			
FM	(30°-60°)	8742.8	21.9			
FH	(60°-80°)	4348.3	10.9			G2/5000
FVH	(80°-90°)	63.0	0.2			G1/100
BL	(0°-30°)	2855.9	7.1	B4/5000		
BM	(30°-60°)	6424.5	16.1	B4/8500		
BH	(60°-80°)	2771.9	6.9	B4/5000		G4/5000
BVH	(80°-90°)	13.6	0.0			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	
Trapped Light		11314.6	28.3			

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°	8300.0	8300.0	8300.0	8300.0	8300.0	8300.0	8300.0	8300.0	8300.0	8300.0	8300.0
2.5°	8471.1	8476.7	8440.0	8391.1	8342.2	8287.8	8244.4	8214.4	8141.1	8128.9	8128.9
5°	8642.2	8672.2	8611.1	8537.8	8495.6	8385.6	8293.3	8207.8	8085.6	8000.0	7963.3
7.5°	8605.6	8642.2	8611.1	8574.4	8586.7	8544.4	8464.4	8354.4	8207.8	8061.1	7982.2
10°	8483.3	8483.3	8476.7	8550.0	8630.0	8666.7	8660.0	8598.9	8415.6	8171.1	8055.6
12.5°	8275.6	8256.7	8300.0	8427.8	8562.2	8666.7	8703.3	8678.9	8507.8	8293.3	8153.3
15°	8018.9	8000.0	8104.4	8268.9	8434.4	8532.2	8678.9	8757.8	8660.0	8476.7	8330.0
17.5°	7652.2	7640.0	7804.4	8000.0	8153.3	8373.3	8605.6	8776.7	8806.7	8654.4	8495.6
20°	7175.6	7175.6	7364.4	7627.8	7860.0	8141.1	8532.2	8862.2	8972.2	8862.2	8703.3
22.5°	6674.4	6662.2	6906.7	7193.3	7542.2	7957.8	8495.6	9033.3	9290.0	9204.4	9002.2
25°	6210.0	6178.9	6405.6	6784.4	7248.9	7865.6	8642.2	9412.2	9876.7	9797.8	9553.3
27.5°	5757.8	5726.7	5971.1	6411.1	7004.4	7908.9	9008.9	10054.4	10653.3	10610.0	10274.4
30°	5378.9	5347.8	5611.1	6136.7	6900.0	8097.8	9473.3	10665.6	11367.8	11306.7	10983.3
32.5°	5000.0	4963.3	5403.3	6056.7	6980.0	8378.9	9858.9	11081.1	11881.1	11893.3	11521.1
35°	4681.1	4638.9	5237.8	6020.0	7151.1	8696.7	10042.2	11301.1	12260.0	12333.3	11930.0
37.5°	4424.4	4351.1	5134.4	5995.6	7310.0	8733.3	10017.8	11477.8	12663.3	12516.7	12015.6
40°	4192.2	4113.3	5036.7	6068.9	7205.6	8483.3	9815.6	11404.4	12217.8	11624.4	11032.2
42.5°	4033.3	3898.9	5024.4	6063.3	6808.9	7877.8	9155.6	10561.1	11111.1	10500.0	9883.3
45°	3850.0	3722.2	4938.9	5897.8	6234.4	7053.3	8190.0	9553.3	10384.4	9950.0	9400.0
47.5°	3703.3	3563.3	4804.4	5660.0	5904.4	6601.1	7511.1	8990.0	10237.8	9974.4	9394.4
50°	3544.4	3404.4	4522.2	5335.6	5880.0	6527.8	7303.3	9063.3	10641.1	10543.3	9864.4
52.5°	3324.4	3226.7	4174.4	4987.8	5946.7	6618.9	7425.6	9412.2	11460.0	11355.6	10494.4
55°	3092.2	2982.2	3710.0	4577.8	5861.1	6686.7	7682.2	9901.1	12211.1	12198.9	11191.1
57.5°	2835.6	2793.3	3233.3	4118.9	5537.8	6447.8	7664.4	10017.8	12083.3	11924.4	10922.2
60°	2554.4	2585.6	2872.2	3661.1	4944.4	5990.0	7205.6	9791.1	11062.2	10995.6	10133.3
62.5°	2248.9	2280.0	2542.2	3202.2	4363.3	5476.7	6650.0	9748.9	10934.4	11001.1	9956.7
65°	1808.9	1815.6	2157.8	2732.2	3923.3	5183.3	6368.9	9565.6	11355.6	11313.3	9993.3
67.5°	1503.3	1478.9	1845.6	2420.0	3624.4	4920.0	6117.8	8654.4	10738.9	11594.4	10292.2
70°	1136.7	1124.4	1527.8	2041.1	3165.6	4455.6	5818.9	7645.6	9675.6	10194.4	9075.6
72.5°	770.0	757.8	1033.3	1583.3	2578.9	3788.9	5244.4	6606.7	7603.3	6618.9	5885.6
75°	488.9	488.9	574.4	855.6	1534.4	2310.0	3233.3	4015.6	4883.3	4326.7	3776.7
77.5°	281.1	312.2	226.7	263.3	427.8	837.8	1564.4	2695.6	3758.9	3104.4	2603.3
80°	134.4	141.1	104.4	110.0	190.0	415.6	818.9	1522.2	1943.3	1454.4	1167.8
82.5°	48.9	43.3	36.7	24.4	36.7	61.1	116.7	190.0	232.2	141.1	97.8
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°	8300.0	8300.0	8300.0	8300.0	8300.0	8300.0	8300.0	8300.0	8300.0	8300.0
2.5°	8128.9	8122.2	8080.0	8067.8	8080.0	8067.8	8092.2	8104.4	8092.2	8080.0
5°	7926.7	7860.0	7762.2	7713.3	7706.7	7688.9	7737.8	7762.2	7743.3	7737.8
7.5°	7890.0	7694.4	7481.1	7315.6	7212.2	7193.3	7254.4	7261.1	7217.8	7200.0
10°	7933.3	7615.6	7327.8	7041.1	6796.7	6674.4	6753.3	6777.8	6735.6	6723.3
12.5°	8000.0	7608.9	7217.8	6851.1	6540.0	6276.7	6381.1	6454.4	6423.3	6405.6
15°	8153.3	7706.7	7217.8	6760.0	6332.2	6044.4	6038.9	6112.2	6063.3	6051.1
17.5°	8312.2	7786.7	7217.8	6625.6	6210.0	5861.1	5775.6	5818.9	5800.0	5818.9
20°	8476.7	7847.8	7187.8	6606.7	6178.9	5770.0	5555.6	5641.1	5598.9	5598.9
22.5°	8740.0	8018.9	7273.3	6692.2	6222.2	5635.6	5286.7	5403.3	5518.9	5525.6
25°	9234.4	8427.8	7621.1	6997.8	6283.3	5562.2	5115.6	5036.7	5347.8	5342.2
27.5°	9901.1	8960.0	8067.8	7303.3	6320.0	5494.4	4993.3	4694.4	5042.2	5073.3
30°	10580.0	9480.0	8525.6	7608.9	6173.3	5286.7	4767.8	4418.9	4651.1	4706.7
32.5°	11068.9	9925.6	8855.6	7780.0	6038.9	5036.7	4522.2	4186.7	4284.4	4314.4
35°	11447.8	10133.3	8806.7	7578.9	5677.8	4736.7	4321.1	3996.7	4057.8	4070.0
37.5°	11441.1	10017.8	8520.0	7187.8	5342.2	4467.8	4137.8	3856.7	3947.8	4008.9
40°	10328.9	8867.8	7493.3	6215.6	4963.3	4272.2	3960.0	3771.1	3923.3	4021.1
42.5°	9118.9	7737.8	6540.0	5470.0	4638.9	4101.1	3807.8	3654.4	3844.4	3960.0
45°	8623.3	7261.1	6222.2	5298.9	4546.7	3935.6	3563.3	3458.9	3715.6	3825.6
47.5°	8574.4	7138.9	6105.6	5274.4	4565.6	3788.9	3300.0	3184.4	3624.4	3764.4
50°	8892.2	7217.8	6087.8	5268.9	4590.0	3697.8	3141.1	3001.1	3666.7	3935.6
52.5°	9344.4	7327.8	6154.4	5220.0	4522.2	3593.3	3050.0	3001.1	3960.0	4338.9
55°	9913.3	7401.1	6093.3	5152.2	4448.9	3520.0	2927.8	3013.3	4015.6	4461.1
57.5°	9724.4	7200.0	5941.1	5078.9	4455.6	3526.7	2786.7	2842.2	3538.9	3801.1
60°	8923.3	6662.2	5702.2	5024.4	4492.2	3563.3	2634.4	2426.7	2817.8	3055.6
62.5°	8647.8	6545.6	5721.1	5061.1	4632.2	3538.9	2322.2	1882.2	2328.9	2615.6
65°	8513.3	6667.8	5836.7	5097.8	4846.7	3343.3	1857.8	1424.4	1821.1	2016.7
67.5°	8752.2	6503.3	5635.6	4773.3	4681.1	2683.3	1356.7	1038.9	1222.2	1344.4
70°	8104.4	5440.0	4351.1	3477.8	3532.2	1632.2	916.7	703.3	715.6	794.4
72.5°	5372.2	3477.8	2175.6	1546.7	1527.8	801.1	544.4	415.6	403.3	427.8
75°	3318.9	1894.4	984.4	666.7	532.2	336.7	268.9	232.2	232.2	244.4
77.5°	2138.9	996.7	446.7	287.8	207.8	116.7	97.8	92.2	97.8	110.0
80°	898.9	366.7	141.1	73.3	43.3	6.7	0.0	6.7	12.2	12.2
82.5°	73.3	18.9	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)