

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_320MP

Luminaire Tested: **GSM-XX-320-MP-XX-2F-FG-XX-X**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: 769010_320MP
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GSM-XX-320-MP-XX-2F-FG-XX-X
Description: MEDIUM ARCHITECTURAL AREA LUMINAIRE-HORIZONTAL LAMP-TYPE II DISTRIBUTION
Light Source: 320 WATT PULSE-START CLEAR ED-28 HORIZONTAL BURN
Ballast/Driver: -

Summary

Lumens per Lamp: 30000 (1 lamp)
Luminaire Lumens: 22586.7 lumens
Efficiency: 75.3%
Efficacy: 64.5 lumens/watt
Luminous Opening: Point Source (0' x 0' x 0')
IES Classification: Type II - Short - Full Cutoff
BUG Rating: B4 - U0 - G3

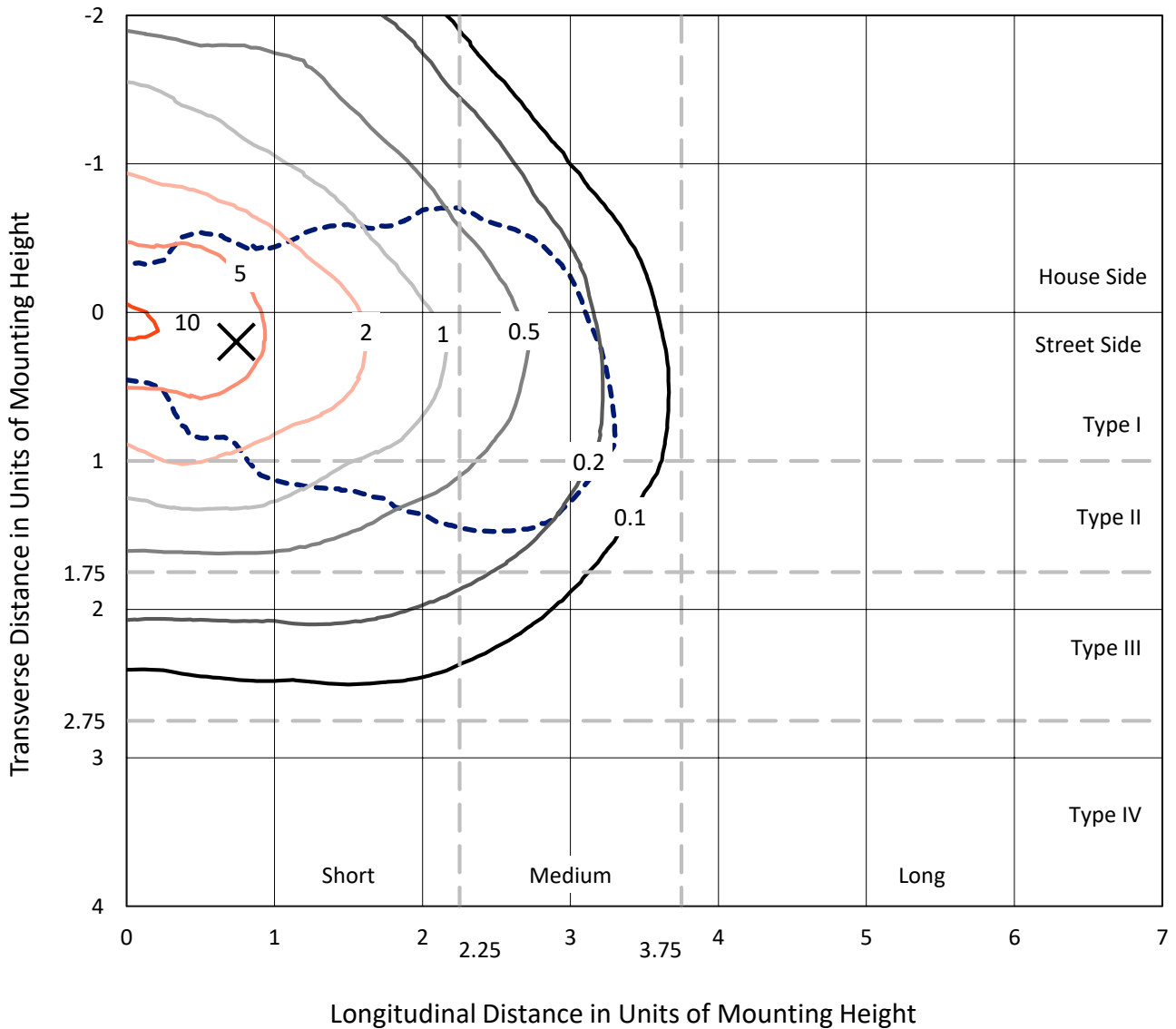
Input Watts (W): 350
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

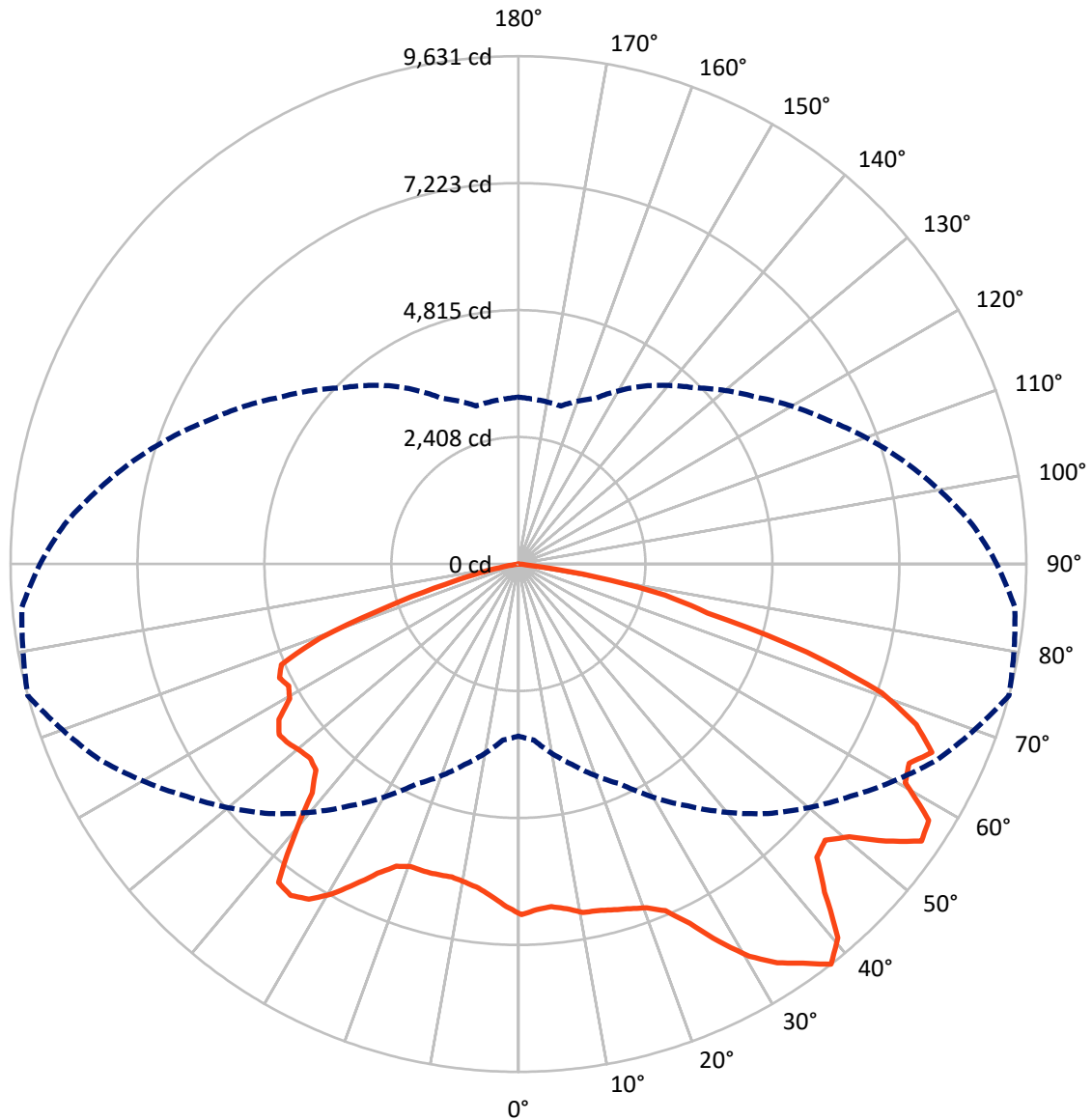
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10.7 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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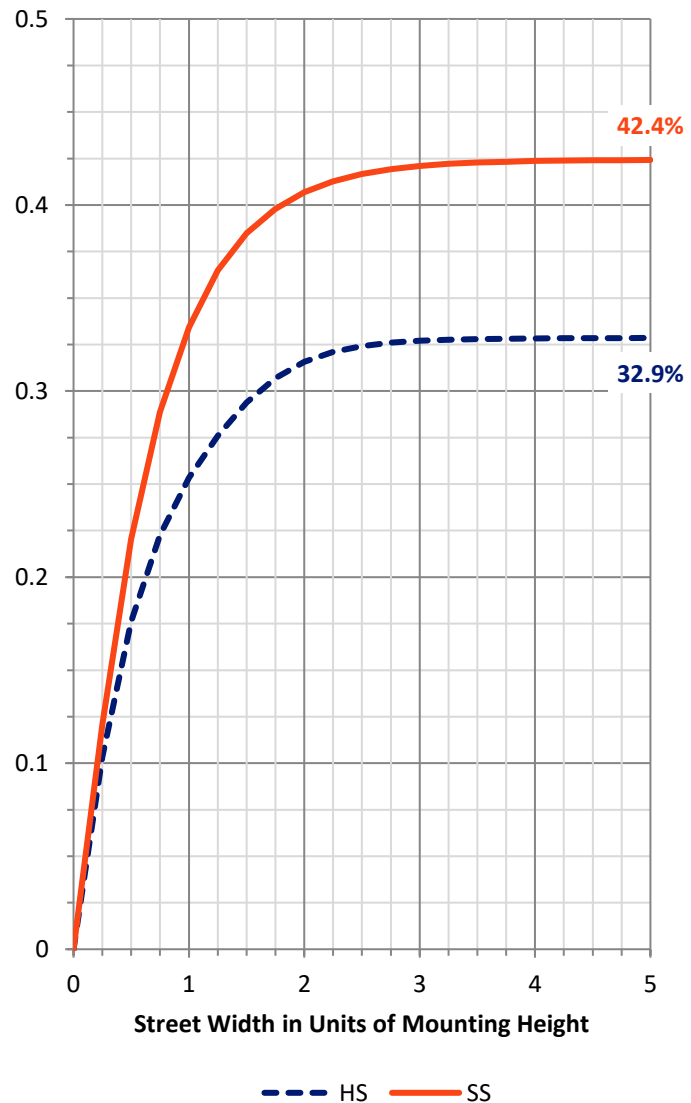
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	9899.1	0.0	9899.1
	% Lamp	33.0	0.0	33.0
Street Side	Lumens	12687.7	0.0	12687.7
	% Lamp	42.3	0.0	42.3
Total	Lumens	22586.7	0.0	22586.7
	% Lamp	75.3	0.0	75.3

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	611.5	2.7	2.0
10°-20°	1698.9	7.5	5.7
20°-30°	2670.0	11.8	8.9
30°-40°	3702.7	16.4	12.3
40°-50°	3840.2	17.0	12.8
50°-60°	4331.0	19.2	14.4
60°-70°	4080.5	18.1	13.6
70°-80°	1595.8	7.1	5.3
80°-90°	56.1	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°	22586.7	100.0	75.3
0°-180°	22586.7	100.0	75.3



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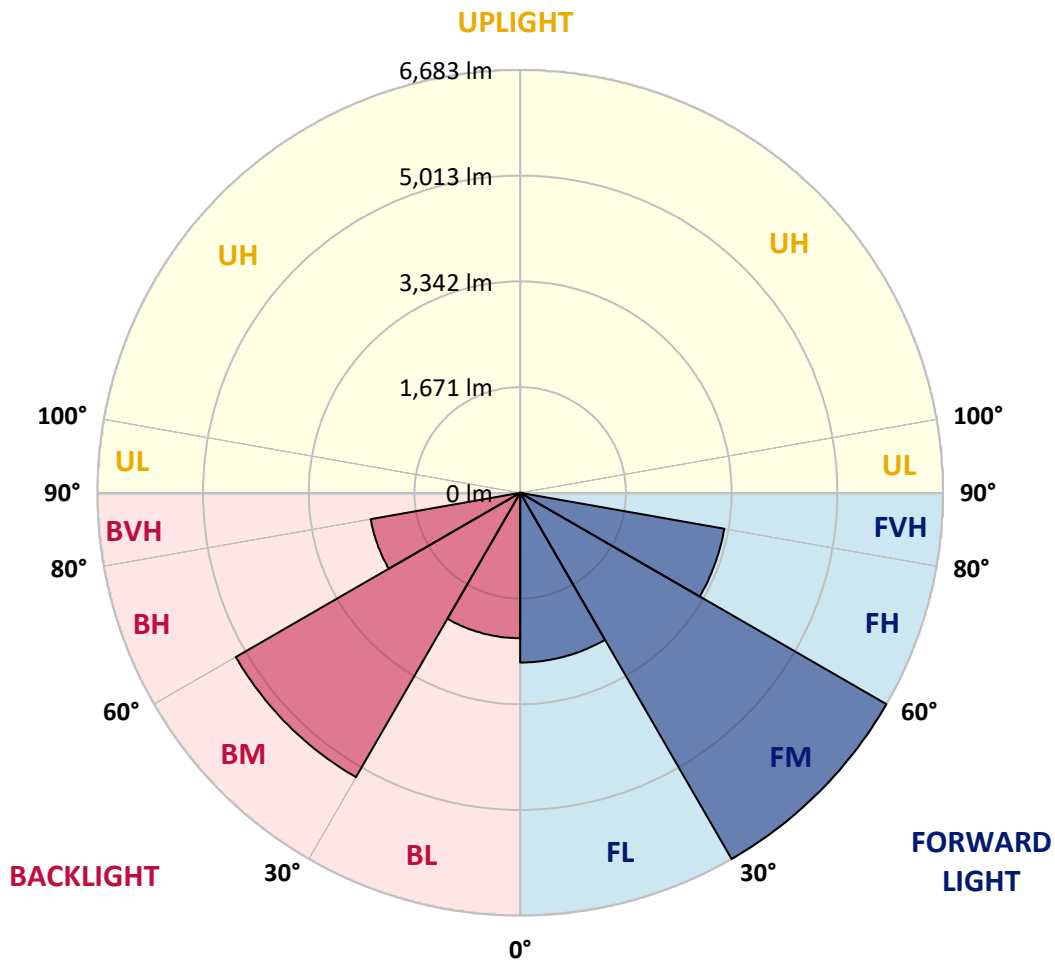
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Lamp	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2682.3	8.9			
FM (30°-60°)	6683.4	22.3			
FH (60°-80°)	3277.2	10.9			G2/5000
FVH (80°-90°)	44.8	0.1			G1/100
BL (0°-30°)	2298.1	7.7	B3/2500		
BM (30°-60°)	5190.6	17.3	B4/8500		
BH (60°-80°)	2399.1	8.0	B3/2500		G3/2500
BVH (80°-90°)	11.3	0.0			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	
Trapped Light	7413.3	24.7			

BUG Rating: B4-U0-G3

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	6646.7	6646.7	6646.7	6646.7	6646.7	6646.7	6646.7	6646.7	6646.7	6646.7	6646.7
2.5°	6775.0	6784.2	6770.0	6738.3	6678.3	6646.7	6623.3	6586.7	6564.2	6531.7	6527.5
5°	6894.2	6921.7	6880.0	6848.3	6793.3	6720.0	6650.8	6595.8	6527.5	6454.2	6421.7
7.5°	6811.7	6825.0	6830.0	6825.0	6830.0	6806.7	6760.8	6687.5	6600.8	6476.7	6421.7
10°	6619.2	6641.7	6669.2	6747.5	6802.5	6848.3	6857.5	6820.8	6720.0	6536.7	6440.0
12.5°	6380.8	6408.3	6463.3	6600.8	6701.7	6811.7	6866.7	6857.5	6742.5	6568.3	6476.7
15°	6105.8	6137.5	6252.5	6408.3	6559.2	6683.3	6811.7	6875.8	6802.5	6646.7	6536.7
17.5°	5803.3	5840.0	5990.8	6179.2	6330.0	6540.8	6747.5	6861.7	6870.8	6733.3	6619.2
20°	5427.5	5459.2	5633.3	5862.5	6064.2	6344.2	6655.8	6894.2	6958.3	6852.5	6720.0
22.5°	5024.2	5042.5	5248.3	5523.3	5803.3	6160.8	6577.5	6971.7	7141.7	7055.0	6903.3
25°	4648.3	4685.0	4872.5	5184.2	5574.2	6060.0	6641.7	7205.8	7545.0	7453.3	7284.2
27.5°	4300.0	4322.5	4542.5	4909.2	5390.8	6078.3	6894.2	7664.2	8109.2	8030.8	7783.3
30°	4006.7	4038.3	4267.5	4707.5	5303.3	6215.8	7233.3	8131.7	8631.7	8549.2	8283.3
32.5°	3722.5	3768.3	4120.8	4634.2	5363.3	6440.0	7535.8	8448.3	9016.7	8975.0	8695.8
35°	3474.2	3548.3	3997.5	4620.8	5495.8	6683.3	7673.3	8608.3	9295.8	9300.8	8993.3
37.5°	3263.3	3350.8	3937.5	4606.7	5601.7	6692.5	7682.5	8769.2	9630.8	9451.7	9071.7
40°	3089.2	3190.0	3878.3	4648.3	5519.2	6527.5	7545.0	8745.8	9323.3	8796.7	8347.5
42.5°	2924.2	3070.8	3873.3	4648.3	5216.7	6069.2	7068.3	8136.7	8516.7	7966.7	7467.5
45°	2832.5	2970.0	3818.3	4515.0	4776.7	5468.3	6344.2	7361.7	7935.0	7554.2	7100.8
47.5°	2722.5	2855.8	3708.3	4309.2	4505.8	5083.3	5835.0	6935.0	7825.0	7554.2	7086.7
50°	2630.8	2718.3	3479.2	4061.7	4483.3	5010.0	5665.8	6976.7	8127.5	7985.0	7444.2
52.5°	2520.8	2557.5	3190.0	3786.7	4529.2	5074.2	5730.0	7260.8	8727.5	8613.3	7902.5
55°	2328.3	2351.7	2850.8	3492.5	4460.0	5106.7	5895.0	7605.0	9273.3	9195.0	8420.8
57.5°	2145.0	2163.3	2470.8	3130.8	4199.2	4918.3	5840.0	7691.7	9176.7	9016.7	8223.3
60°	1998.3	1975.8	2186.7	2782.5	3750.0	4560.8	5486.7	7513.3	8425.0	8296.7	7623.3
62.5°	1778.3	1737.5	1920.8	2434.2	3295.8	4166.7	5046.7	7435.0	8315.0	8324.2	7495.0
65°	1393.3	1380.0	1631.7	2067.5	2956.7	3937.5	4822.5	7270.0	8617.5	8571.7	7531.7
67.5°	1090.8	1100.0	1384.2	1820.0	2722.5	3726.7	4620.8	6564.2	8136.7	8745.8	7728.3
70°	797.5	834.2	1141.7	1508.3	2365.0	3345.8	4377.5	5775.8	7311.7	7632.5	6770.0
72.5°	522.5	545.8	751.7	1164.2	1920.8	2841.7	3915.0	4945.8	5715.8	4941.7	4395.8
75°	320.8	325.8	394.2	595.8	1118.3	1741.7	2443.3	3048.3	3704.2	3268.3	2855.8
77.5°	174.2	165.0	124.2	155.8	289.2	610.0	1173.3	2021.7	2841.7	2333.3	1948.3
80°	64.2	55.0	36.7	45.8	105.8	293.3	600.8	1150.8	1508.3	1105.0	885.0
82.5°	0.0	0.0	0.0	0.0	0.0	41.7	82.5	137.5	179.2	115.0	82.5
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°	6646.7	6646.7	6646.7	6646.7	6646.7	6646.7	6646.7	6646.7	6646.7	6646.7
2.5°	6522.5	6500.0	6467.5	6472.5	6481.7	6467.5	6467.5	6467.5	6458.3	6454.2
5°	6385.0	6325.8	6265.8	6229.2	6229.2	6238.3	6265.8	6261.7	6256.7	6252.5
7.5°	6339.2	6192.5	6036.7	5935.8	5858.3	5862.5	5926.7	5926.7	5895.0	5876.7
10°	6339.2	6115.0	5899.2	5702.5	5523.3	5482.5	5565.0	5587.5	5560.0	5555.8
12.5°	6344.2	6069.2	5803.3	5537.5	5326.7	5180.0	5303.3	5358.3	5335.8	5317.5
15°	6394.2	6082.5	5766.7	5464.2	5175.0	4991.7	5070.0	5092.5	5033.3	4996.7
17.5°	6454.2	6096.7	5734.2	5372.5	5097.5	4859.2	4877.5	4881.7	4804.2	4804.2
20°	6531.7	6087.5	5679.2	5358.3	5083.3	4813.3	4675.8	4721.7	4634.2	4630.0
22.5°	6692.5	6179.2	5702.5	5372.5	5147.5	4749.2	4465.0	4501.7	4515.0	4492.5
25°	7026.7	6445.0	5904.2	5541.7	5216.7	4707.5	4304.2	4153.3	4318.3	4290.8
27.5°	7480.8	6811.7	6188.3	5720.8	5317.5	4712.5	4194.2	3845.8	4038.3	4043.3
30°	7971.7	7187.5	6476.7	5904.2	5294.2	4680.0	4043.3	3594.2	3704.2	3704.2
32.5°	8342.5	7495.0	6715.0	5990.8	5308.3	4694.2	3878.3	3400.8	3400.8	3382.5
35°	8608.3	7623.3	6665.0	5816.7	5070.0	4377.5	3690.0	3231.7	3208.3	3199.2
37.5°	8640.8	7559.2	6463.3	5514.2	4725.8	4116.7	3470.0	3103.3	3140.0	3162.5
40°	7815.8	6692.5	5693.3	4767.5	4116.7	3717.5	3314.2	3039.2	3130.8	3199.2
42.5°	6880.0	5844.2	4973.3	4203.3	3676.7	3373.3	3149.2	2965.8	3107.5	3199.2
45°	6500.0	5477.5	4725.8	4070.8	3548.3	3195.0	3006.7	2915.0	3121.7	3217.5
47.5°	6454.2	5400.0	4634.2	4047.5	3557.5	3121.7	2933.3	2860.0	3217.5	3355.0
50°	6674.2	5445.8	4620.8	4020.0	3543.3	3116.7	2993.3	2905.8	3424.2	3658.3
52.5°	7004.2	5528.3	4652.5	3965.0	3492.5	3135.0	3149.2	3116.7	3768.3	4070.8
55°	7407.5	5574.2	4611.7	3905.8	3437.5	3213.3	3350.8	3369.2	3946.7	4199.2
57.5°	7288.3	5413.3	4496.7	3841.7	3446.7	3364.2	3561.7	3437.5	3763.3	3869.2
60°	6669.2	5033.3	4313.3	3790.8	3470.0	3580.0	3722.5	3254.2	3360.0	3465.0
62.5°	6467.5	4932.5	4300.0	3800.0	3585.0	3772.5	3510.8	2764.2	2887.5	3015.8
65°	6390.0	5019.2	4377.5	3814.2	3713.3	3832.5	3061.7	2236.7	2333.3	2438.3
67.5°	6536.7	4881.7	4217.5	3561.7	3561.7	3419.2	2461.7	1705.0	1640.8	1732.5
70°	6014.2	4025.0	3217.5	2566.7	2630.8	2420.0	1829.2	1219.2	1017.5	1072.5
72.5°	3992.5	2557.5	1609.2	1141.7	1118.3	1013.3	866.7	605.0	531.7	550.0
75°	2489.2	1435.0	756.7	504.2	412.5	344.2	307.5	238.3	243.3	247.5
77.5°	1585.8	751.7	348.3	215.8	160.8	124.2	105.8	96.7	100.8	100.8
80°	692.5	284.2	119.2	64.2	41.7	18.3	23.3	23.3	18.3	18.3
82.5°	64.2	18.3	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)