

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: 769006_320MP

Luminaire Tested: **GSM-XX-320-MP-XX-1F-FG-XX-X**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: 769006_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-1F-FG-XX-X
Description: MEDIUM ARCHITECTURAL AREA LUMINAIRE-HORIZONTAL LAMP-TYPE I DISTRIBUTION
Light Source: 320 WATT PULSE-START CLEAR ED-28 HORIZONTAL BURN
Ballast/Driver: -

Summary

Lumens per Lamp: 30000 (1 lamp)
Luminaire Lumens: 18630.3 lumens
Efficiency: 62.1%
Efficacy: 53.2 lumens/watt
Luminous Opening: Point Source (0' x 0' x 0')
IES Classification: Type II - Medium - Full Cutoff
BUG Rating: B4 - U0 - G4

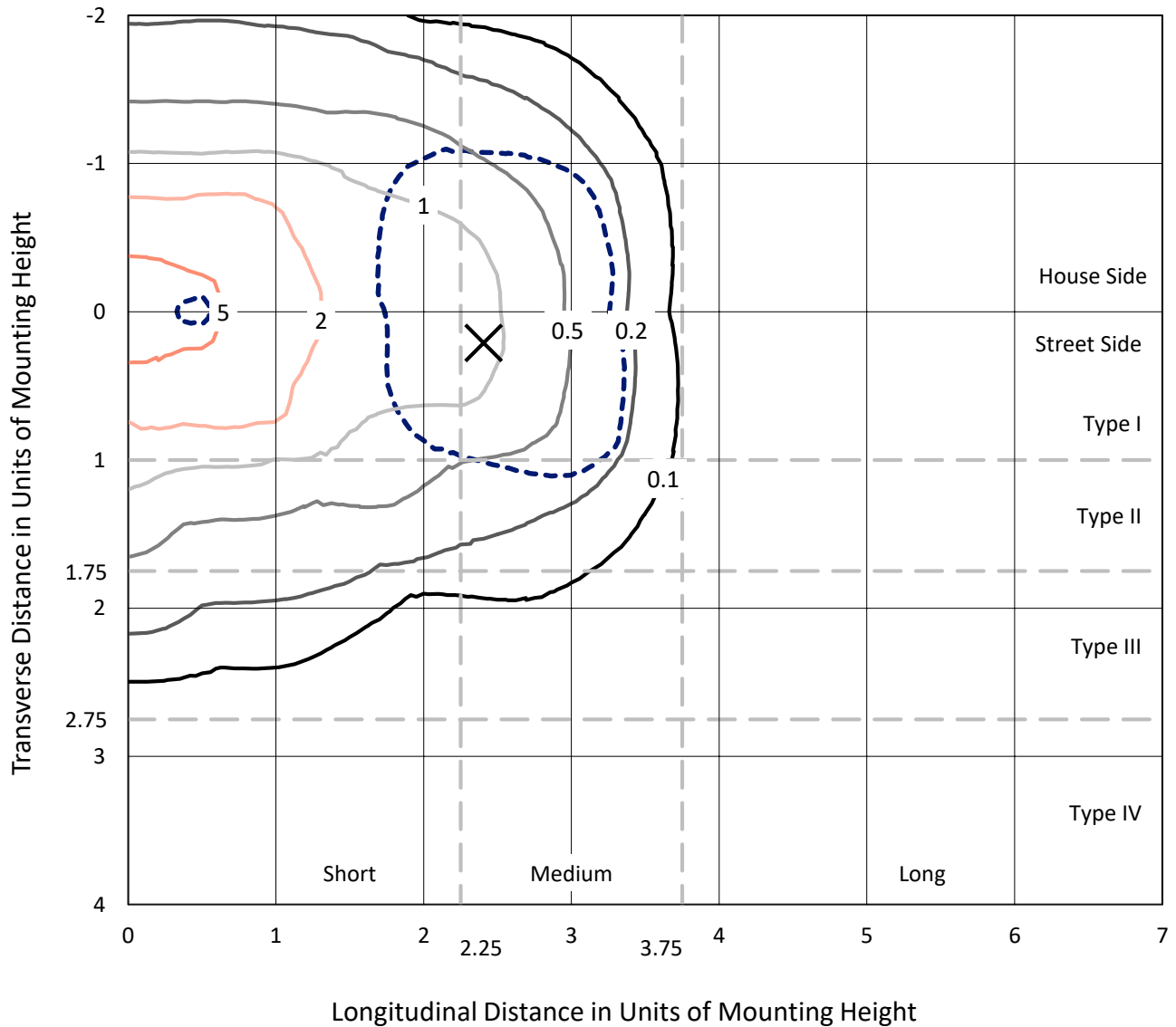
Input Watts (W): 350
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

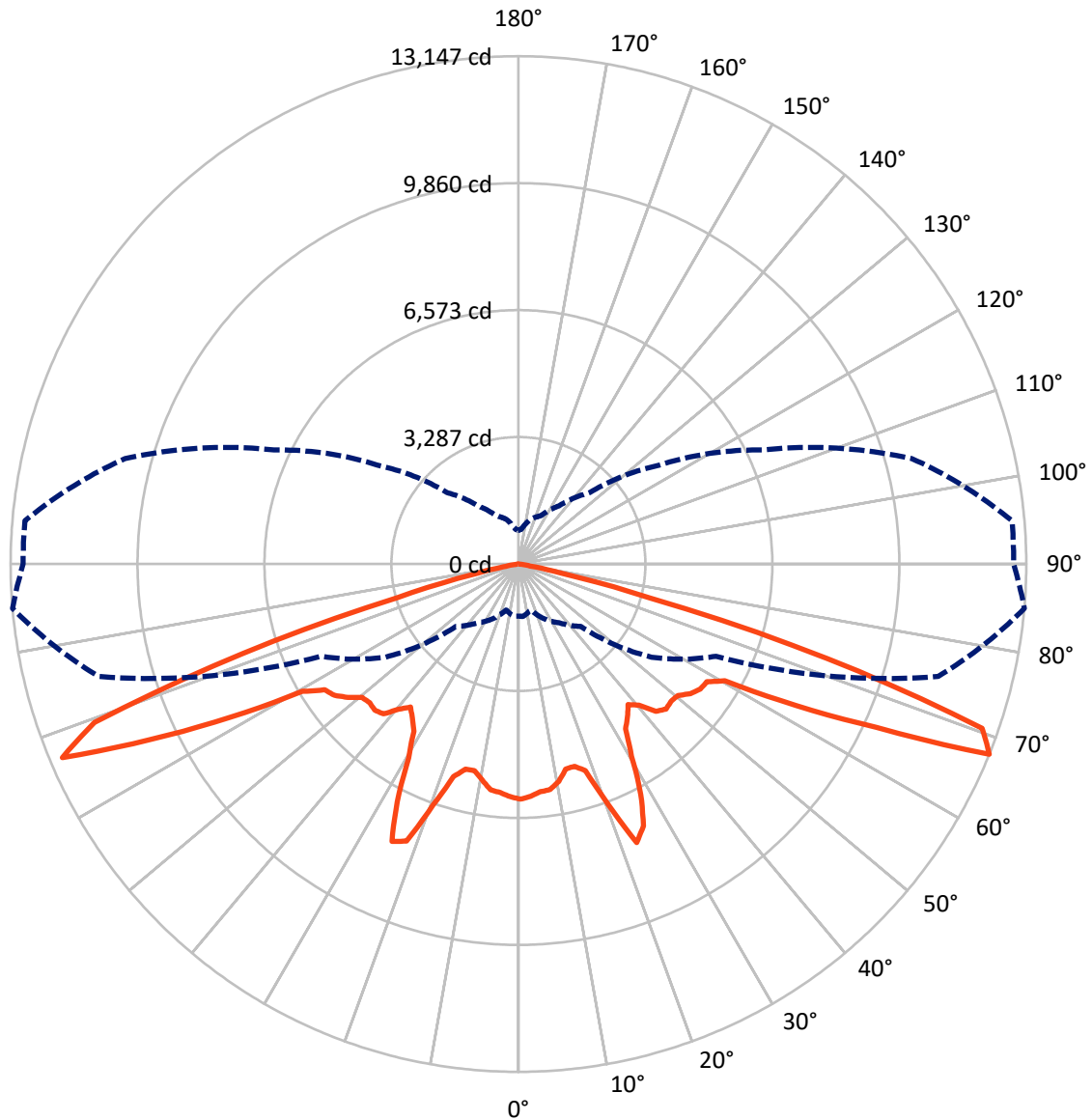
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.7 fc
 Type II - Medium - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 85-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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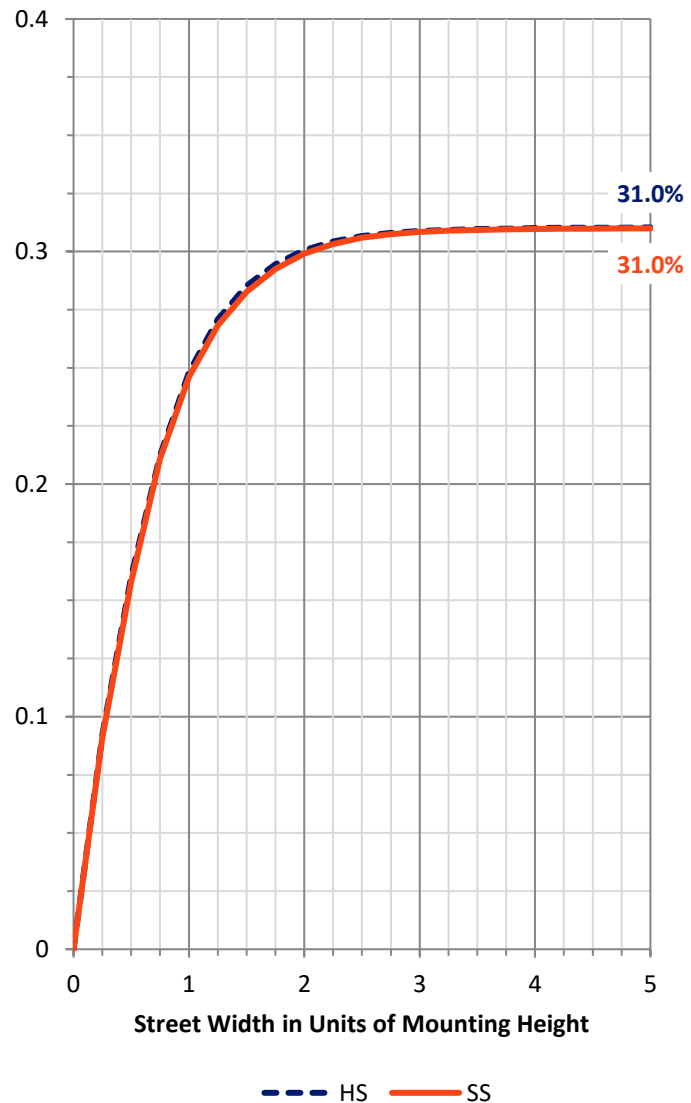
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	9348.7	0.0	9348.7
	% Lamp	31.2	0.0	31.2
Street Side	Lumens	9281.5	0.0	9281.5
	% Lamp	30.9	0.0	30.9
Total	Lumens	18630.3	0.0	18630.3
	% Lamp	62.1	0.0	62.1

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	541.9	2.9	1.8
10°-20°	1374.6	7.4	4.6
20°-30°	2061.6	11.1	6.9
30°-40°	2307.1	12.4	7.7
40°-50°	2907.5	15.6	9.7
50°-60°	3310.4	17.8	11.0
60°-70°	4240.8	22.8	14.1
70°-80°	1852.4	9.9	6.2
80°-90°	34.1	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°	18630.3	100.0	62.1
0°-180°	18630.3	100.0	62.1

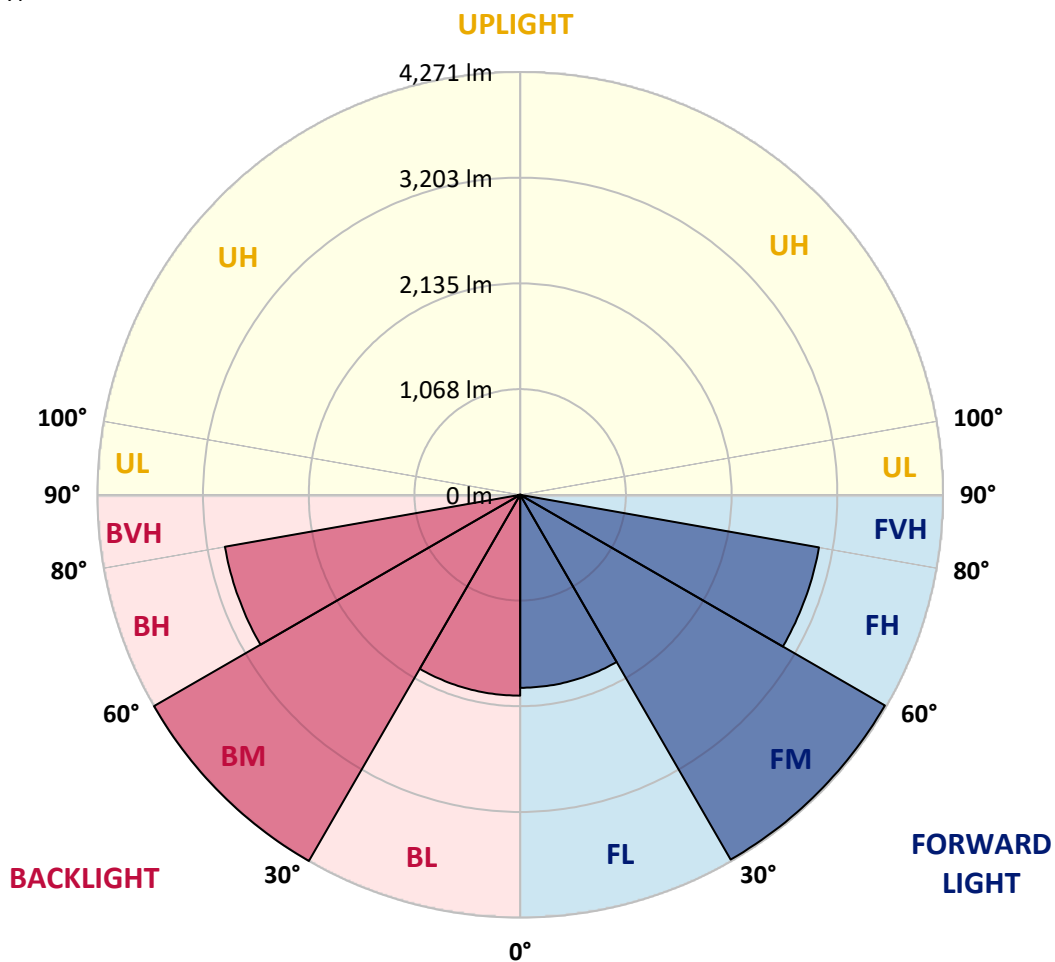


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Lamp	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1949.2	6.5			
FM	(30°-60°)	4254.1	14.2			
FH	(60°-80°)	3064.7	10.2			G2/5000
FVH	(80°-90°)	13.5	0.0			G1/100
BL	(0°-30°)	2028.8	6.8	B3/2500		
BM	(30°-60°)	4270.9	14.2	B3/5000		
BH	(60°-80°)	3028.4	10.1	B4/5000		G4/5000
BVH	(80°-90°)	20.6	0.1			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	
Trapped Light		11369.7	37.9			

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°	6087.5	6087.5	6087.5	6087.5	6087.5	6087.5	6087.5	6087.5	6087.5	6087.5	6087.5
2.5°	5995.8	6000.0	6000.0	6000.0	6005.0	6005.0	6032.5	6032.5	6027.5	6018.3	6041.7
5°	5665.8	5665.8	5684.2	5702.5	5752.5	5785.0	5858.3	5908.3	5926.7	5922.5	5940.8
7.5°	5216.7	5211.7	5257.5	5335.8	5436.7	5523.3	5642.5	5748.3	5844.2	5895.0	5908.3
10°	4840.8	4850.0	4900.0	5010.0	5180.0	5345.0	5532.5	5629.2	5702.5	5720.8	5715.8
12.5°	4538.3	4556.7	4602.5	4703.3	4877.5	5060.8	5266.7	5317.5	5358.3	5445.8	5486.7
15°	4263.3	4258.3	4327.5	4432.5	4579.2	4694.2	4886.7	5046.7	5207.5	5431.7	5510.0
17.5°	3896.7	3905.8	4020.0	4144.2	4267.5	4327.5	4565.8	4905.0	5299.2	5624.2	5766.7
20°	3510.8	3530.0	3640.0	3781.7	3887.5	3974.2	4272.5	4932.5	6036.7	6646.7	6715.0
22.5°	3217.5	3222.5	3332.5	3501.7	3621.7	3768.3	4065.8	4950.8	6646.7	7834.2	7990.0
25°	2970.0	2984.2	3103.3	3318.3	3492.5	3658.3	4015.8	4895.8	6353.3	7513.3	7884.2
27.5°	2759.2	2786.7	3015.8	3318.3	3501.7	3662.5	4125.8	4950.8	5935.8	6751.7	6967.5
30°	2566.7	2626.7	3103.3	3369.2	3488.3	3539.2	3915.0	4680.0	5184.2	5770.8	5913.3
32.5°	2465.8	2525.8	3277.5	3144.2	3360.0	3314.2	3470.0	4052.5	4643.3	5088.3	5193.3
35°	2401.7	2447.5	3180.8	3048.3	3534.2	3506.7	3424.2	3777.5	4377.5	4863.3	4909.2
37.5°	2410.8	2438.3	2924.2	2920.0	3640.0	3855.0	3616.7	3814.2	4281.7	4615.8	4685.0
40°	2456.7	2475.0	2553.3	2695.0	3497.5	4318.3	3965.0	4043.3	4496.7	4804.2	4877.5
42.5°	2410.8	2434.2	2310.0	2511.7	3263.3	4625.0	4405.0	4455.8	5019.2	5211.7	5211.7
45°	2355.8	2365.0	2181.7	2360.8	2988.3	4405.0	4845.0	4817.5	5312.5	5358.3	5280.8
47.5°	2346.7	2300.8	2080.8	2241.7	2814.2	4047.5	5042.5	4877.5	5138.3	5312.5	5285.0
50°	2374.2	2260.0	1966.7	2150.0	2676.7	3745.0	5262.5	4859.2	5097.5	5349.2	5340.0
52.5°	2392.5	2223.3	1888.3	2062.5	2575.8	3465.0	5514.2	4964.2	5189.2	5574.2	5629.2
55°	2319.2	2159.2	1787.5	1989.2	2484.2	3149.2	5335.8	5055.8	5660.8	5711.7	5807.5
57.5°	2300.8	2205.0	1700.8	1920.8	2425.0	2924.2	4703.3	5051.7	5830.8	5752.5	5880.8
60°	2209.2	2108.3	1622.5	1842.5	2337.5	2791.7	4355.0	5033.3	5940.8	6133.3	6307.5
62.5°	1989.2	1930.0	1512.5	1765.0	2177.5	2663.3	4707.5	5523.3	7110.0	8063.3	8246.7
65°	1750.8	1741.7	1375.0	1677.5	2062.5	2516.7	4845.0	6014.2	8837.5	10190.0	10240.0
67.5°	1347.5	1361.7	1228.3	1563.3	1860.8	2282.5	4203.3	5647.5	11249.2	13146.7	12820.8
70°	861.7	870.8	1059.2	1310.8	1283.3	1352.5	3043.3	4670.8	11634.2	12738.3	11730.0
72.5°	412.5	426.7	665.0	573.3	472.5	600.8	2956.7	4602.5	8709.2	8356.7	7178.3
75°	110.0	119.2	289.2	197.5	215.8	353.3	2337.5	3483.3	4190.0	3510.8	2896.7
77.5°	36.7	45.8	100.8	82.5	128.3	201.7	976.7	1200.8	1205.8	1077.5	1022.5
80°	9.2	9.2	18.3	18.3	55.0	78.3	252.5	280.0	289.2	307.5	335.0
82.5°	0.0	0.0	0.0	0.0	9.2	9.2	32.5	50.8	64.2	73.3	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°	6087.5	6087.5	6087.5	6087.5	6087.5	6087.5	6087.5	6087.5	6087.5	6087.5
2.5°	6027.5	6027.5	6045.8	6023.3	6018.3	6014.2	6027.5	6032.5	6014.2	6041.7
5°	5935.8	5908.3	5913.3	5871.7	5862.5	5853.3	5853.3	5830.8	5821.7	5821.7
7.5°	5890.0	5825.8	5798.3	5715.8	5656.7	5596.7	5546.7	5510.0	5473.3	5473.3
10°	5670.0	5605.8	5550.8	5473.3	5409.2	5299.2	5220.8	5170.8	5156.7	5152.5
12.5°	5468.3	5390.8	5326.7	5202.5	5088.3	5005.8	4909.2	4840.8	4817.5	4813.3
15°	5482.5	5317.5	5152.5	4982.5	4840.8	4730.8	4620.8	4538.3	4496.7	4520.0
17.5°	5752.5	5418.3	5051.7	4703.3	4524.2	4455.8	4336.7	4240.0	4199.2	4208.3
20°	6614.2	5981.7	5129.2	4551.7	4267.5	4157.5	4034.2	3942.5	3887.5	3887.5
22.5°	7733.3	6527.5	5262.5	4400.8	4052.5	3924.2	3800.0	3680.8	3598.3	3585.0
25°	7893.3	6646.7	5262.5	4313.3	3928.3	3790.8	3658.3	3488.3	3336.7	3327.5
27.5°	6912.5	6174.2	5115.8	4217.5	3850.8	3754.2	3625.8	3405.8	3135.0	3098.3
30°	5770.8	5358.3	4648.3	3891.7	3658.3	3667.5	3525.0	3314.2	2984.2	2942.5
32.5°	5106.7	4850.0	4285.8	3649.2	3446.7	3501.7	3231.7	3089.2	2850.8	2805.0
35°	4845.0	4606.7	4089.2	3594.2	3543.3	3470.0	3030.0	2800.8	2667.5	2649.2
37.5°	4634.2	4474.2	4020.0	3653.3	3740.8	3510.8	2874.2	2612.5	2530.0	2530.0
40°	4868.3	4630.0	4139.2	3882.5	4010.8	3525.0	2727.5	2461.7	2397.5	2410.8
42.5°	5220.8	5024.2	4405.0	4203.3	4221.7	3455.8	2585.0	2333.3	2250.8	2255.0
45°	5303.3	5180.0	4648.3	4520.0	4281.7	3277.5	2456.7	2205.0	2099.2	2099.2
47.5°	5262.5	5134.2	4817.5	4780.8	4240.0	3089.2	2342.5	2080.8	1961.7	1943.3
50°	5317.5	5175.0	4936.7	5010.0	4135.0	2905.8	2232.5	1952.5	1824.2	1805.8
52.5°	5605.8	5244.2	5015.0	5161.7	4001.7	2755.0	2140.8	1851.7	1719.2	1705.0
55°	5849.2	5565.0	5088.3	5101.7	3772.5	2630.8	2049.2	1755.8	1622.5	1613.3
57.5°	5977.5	5785.0	5253.3	4905.0	3488.3	2520.8	1966.7	1668.3	1545.0	1530.8
60°	6490.8	6179.2	5500.8	4735.0	3217.5	2401.7	1875.0	1581.7	1462.5	1466.7
62.5°	8448.3	7627.5	6307.5	4845.0	3057.5	2245.8	1769.2	1508.3	1325.0	1329.2
65°	10547.5	9305.0	6985.8	4872.5	2901.7	2080.8	1609.2	1402.5	1118.3	1109.2
67.5°	12825.8	10542.5	6985.8	4465.0	2612.5	1838.3	1380.0	1196.7	907.5	870.8
70°	11716.7	9460.8	5675.0	3208.3	1650.0	1210.0	1054.2	834.2	655.8	650.8
72.5°	7499.2	6866.7	4492.5	2539.2	930.8	472.5	417.5	421.7	390.0	403.3
75°	3250.0	3671.7	2810.0	1792.5	619.2	238.3	133.3	142.5	155.8	165.0
77.5°	1210.0	1512.5	1320.0	953.3	362.5	137.5	64.2	64.2	82.5	82.5
80°	394.2	476.7	449.2	348.3	155.8	60.0	23.3	18.3	27.5	27.5
82.5°	96.7	110.0	91.7	69.2	27.5	5.0	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)