

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: ITL52665_320MP

Luminaire Tested: **GSM-XX-320-MP-XX-3S-FG**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: ITL52665_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-3S-FG
Description: ARCHITECTURAL AREA LUMINAIRE - TYPE III DISTRIBUTION
Light Source: 320 WATT PULSE-START CLEAR ED-28 HORIZONTAL BURN
Ballast/Driver: -

Summary

Lumens per Lamp: 30000 (1 lamp)
Luminaire Lumens: 20903.6 lumens
Efficiency: 69.7%
Efficacy: 59.7 lumens/watt
Luminous Opening: Rectangular (W 1.03' x L: 1.01' x H: 0')
IES Classification: Type III - Medium - Full Cutoff
BUG Rating: B3 - U0 - G3

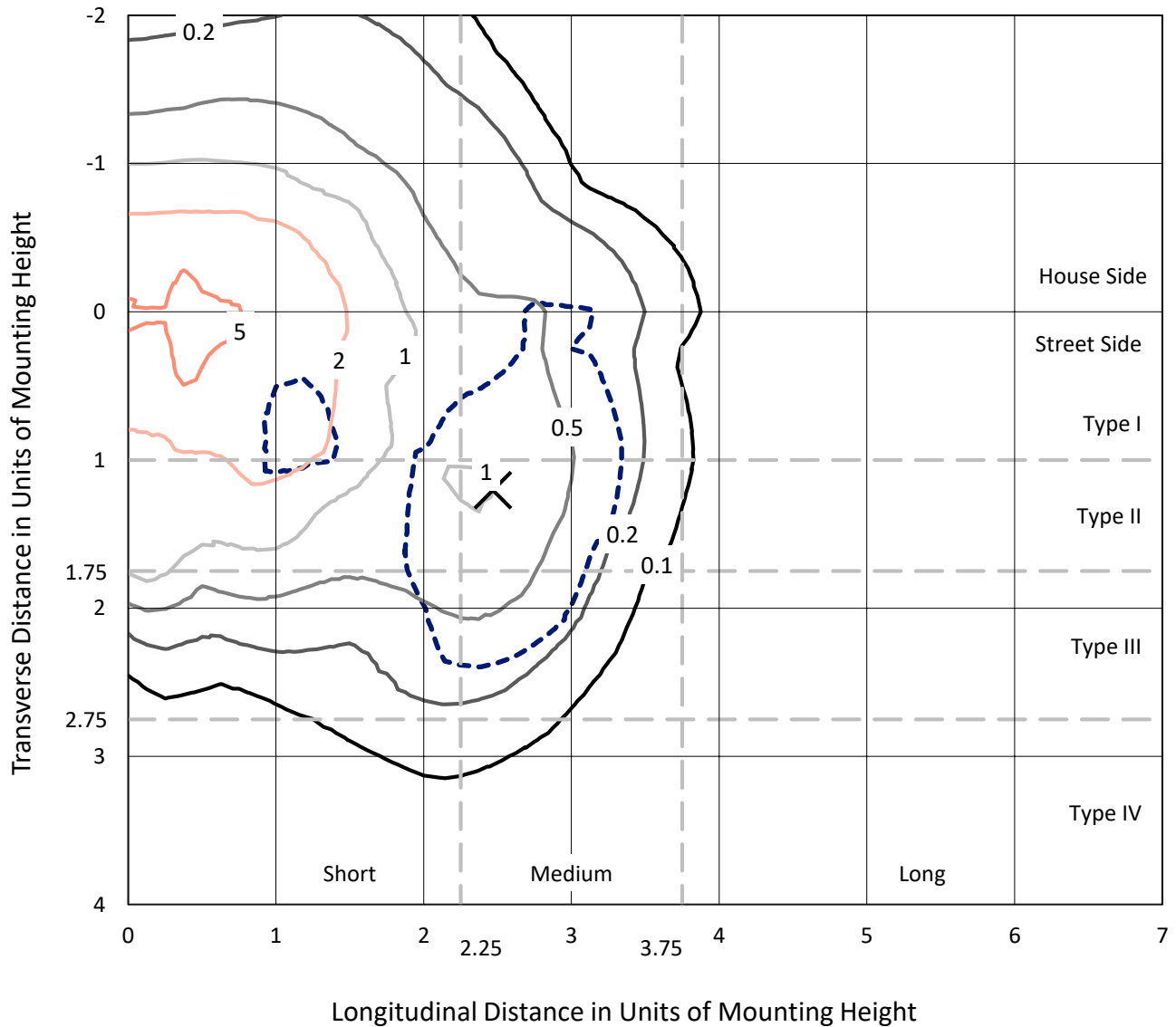
Input Watts (W): 350
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

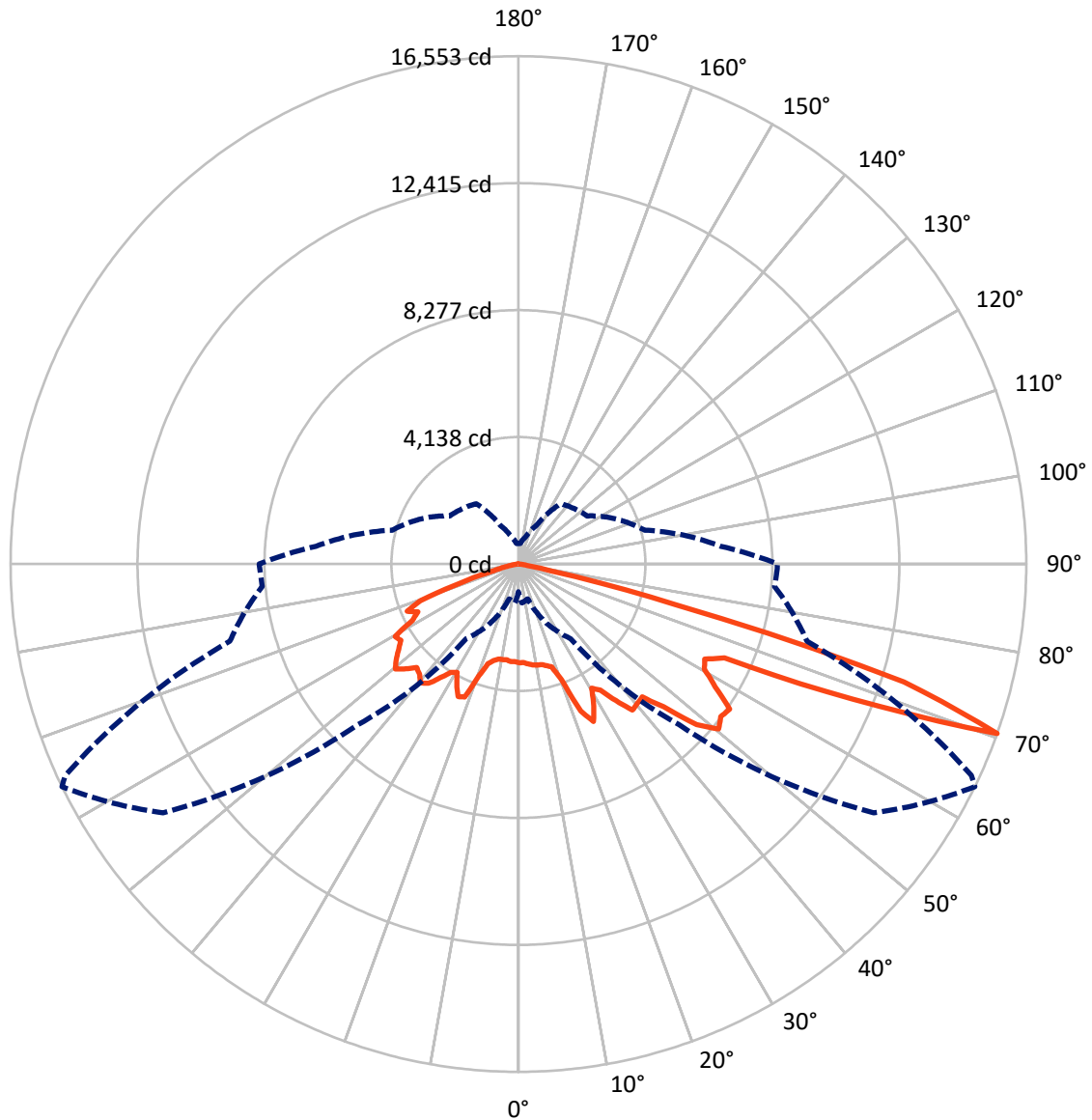
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.6 fc
 Type III - Medium - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 64-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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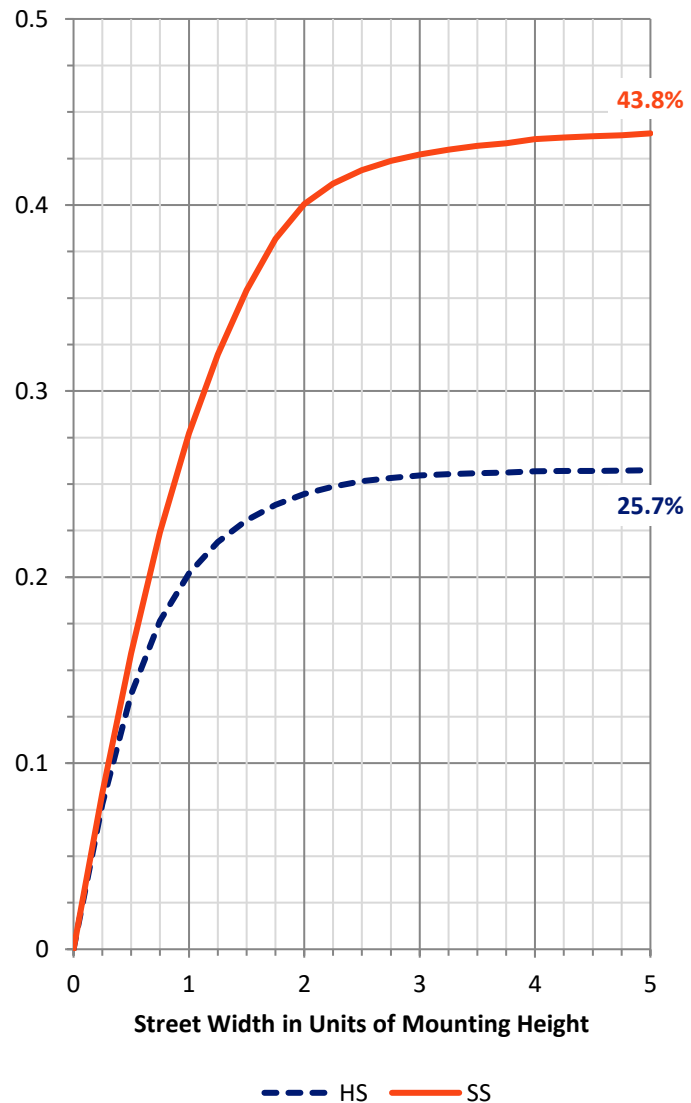
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7753.8	0.0	7753.8
	% Lamp	25.8	0.0	25.8
Street Side	Lumens	13149.8	0.0	13149.8
	% Lamp	43.8	0.0	43.8
Total	Lumens	20903.6	0.0	20903.6
	% Lamp	69.7	0.0	69.7

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	304.3	1.5	1.0
10°-20°	919.9	4.4	3.1
20°-30°	1804.2	8.6	6.0
30°-40°	2601.2	12.4	8.7
40°-50°	3510.3	16.8	11.7
50°-60°	4536.8	21.7	15.1
60°-70°	4286.7	20.5	14.3
70°-80°	2830.9	13.5	9.4
80°-90°	109.2	0.5	0.4
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°	20903.6	100.0	69.7
0°-180°	20903.6	100.0	69.7

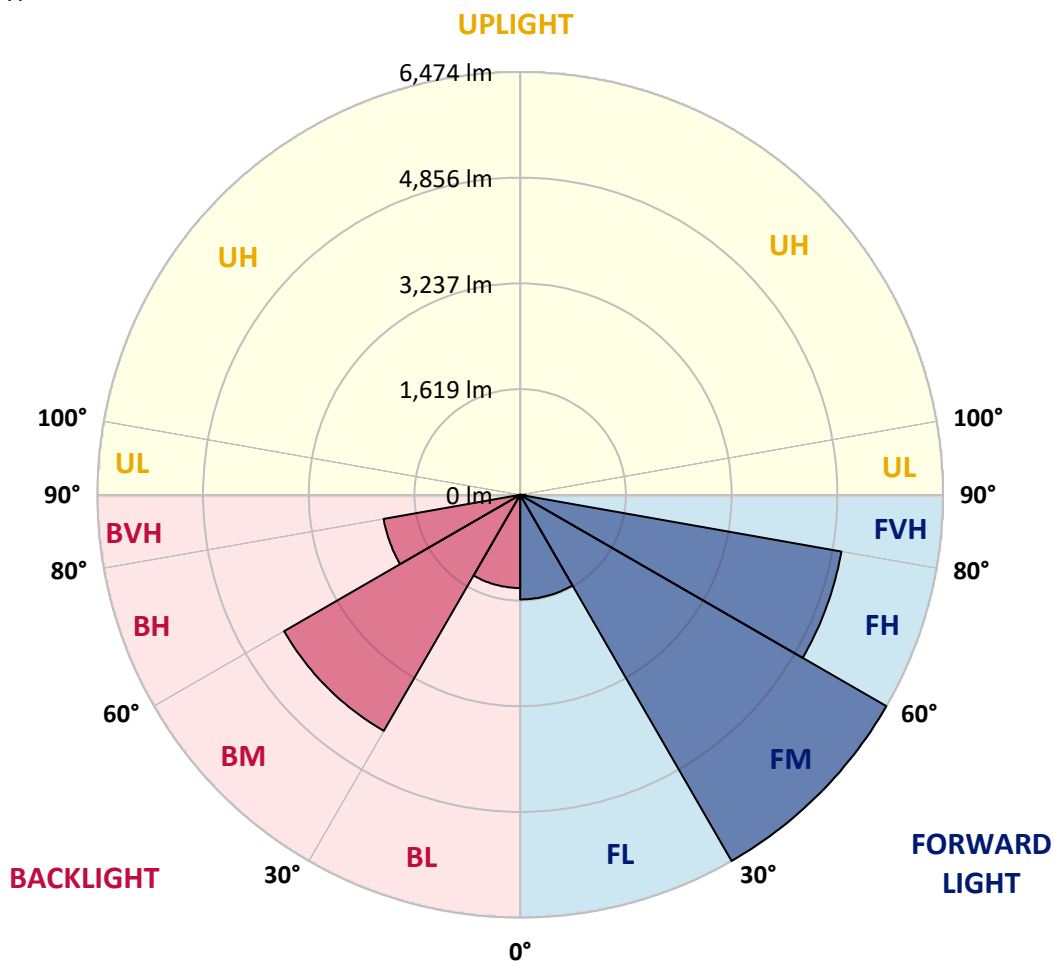


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Lamp	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1601.5	5.3			
FM (30°-60°)	6474.2	21.6			
FH (60°-80°)	4994.5	16.6			G2/5000
FVH (80°-90°)	79.6	0.3			G1/100
BL (0°-30°)	1426.9	4.8	B3/2500		
BM (30°-60°)	4174.1	13.9	B3/5000		
BH (60°-80°)	2123.1	7.1	B3/2500		G3/2500
BVH (80°-90°)	29.7	0.1			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	
Trapped Light	9096.4	30.3			

BUG Rating: B3-U0-G3
 Type III Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	3217.5	3217.5	3217.5	3217.5	3217.5	3217.5	3217.5	3217.5	3217.5	3217.5	3217.5
2.5°	3276.7	3268.3	3276.7	3259.2	3242.5	3242.5	3242.5	3216.7	3234.2	3234.2	3216.7
5°	3259.2	3268.3	3268.3	3234.2	3234.2	3268.3	3285.0	3268.3	3293.3	3285.0	3250.8
7.5°	3191.7	3250.8	3191.7	3191.7	3225.0	3285.0	3293.3	3319.2	3319.2	3319.2	3276.7
10°	3174.2	3148.3	3157.5	3174.2	3191.7	3234.2	3302.5	3353.3	3379.2	3387.5	3361.7
12.5°	3071.7	3071.7	3089.2	3123.3	3140.0	3191.7	3293.3	3361.7	3379.2	3413.3	3413.3
15°	3020.8	3029.2	3089.2	3131.7	3131.7	3208.3	3319.2	3438.3	3438.3	3592.5	3575.0
17.5°	3055.0	3055.0	3105.8	3097.5	3148.3	3242.5	3361.7	3524.2	3558.3	3729.2	3805.8
20°	3089.2	3131.7	3140.0	3123.3	3182.5	3293.3	3532.5	4027.5	3993.3	4539.2	4820.8
22.5°	3071.7	3097.5	3148.3	3140.0	3242.5	3532.5	4266.7	5205.0	5179.2	5657.5	5691.7
25°	2900.8	2978.3	3063.3	3148.3	3421.7	4291.7	5341.7	5682.5	5691.7	5623.3	5333.3
27.5°	2832.5	2884.2	2960.8	3140.0	3925.0	5350.0	5716.7	5239.2	5307.5	4965.8	4786.7
30°	2781.7	2850.0	2910.0	3114.2	4462.5	5836.7	5392.5	4693.3	4735.8	4812.5	4795.8
32.5°	2799.2	2824.2	2900.8	3216.7	4991.7	5853.3	4838.3	4897.5	4872.5	5401.7	5700.0
35°	2713.3	2755.8	2866.7	3498.3	5410.0	5239.2	4991.7	5469.2	5460.8	5964.2	6195.0
37.5°	2560.0	2653.3	2841.7	3890.8	5631.7	4693.3	5495.0	6040.8	6050.0	6280.0	6314.2
40°	2576.7	2619.2	2765.0	4275.0	5239.2	4872.5	6015.8	5973.3	6032.5	5990.0	6040.8
42.5°	2645.0	2602.5	2721.7	4335.0	4615.8	5333.3	6143.3	5921.7	5913.3	6040.8	6229.2
45°	2730.8	2713.3	2730.8	3985.0	4428.3	6092.5	6297.5	6638.3	6510.8	6945.8	7056.7
47.5°	3566.7	3276.7	3089.2	3592.5	4599.2	6903.3	7465.8	7815.8	7679.2	7525.8	7509.2
50°	4573.3	4130.0	3498.3	3379.2	4838.3	6911.7	8618.3	8455.8	8268.3	7227.5	7372.5
52.5°	5410.0	5170.8	3916.7	3361.7	5665.8	7867.5	9735.8	8260.0	8105.8	7790.8	7739.2
55°	5785.0	6195.0	4403.3	4138.3	6400.0	9266.7	10136.7	8353.3	8413.3	6937.5	6587.5
57.5°	5716.7	6280.0	4615.8	4257.5	5845.0	7440.8	8908.3	7568.3	7364.2	6075.0	7713.3
60°	5512.5	6467.5	4249.2	5120.0	6442.5	6400.0	8097.5	6962.5	6775.0	5794.2	7773.3
62.5°	3771.7	5094.2	3055.0	5367.5	6348.3	5546.7	6595.8	6817.5	6664.2	5042.5	6698.3
65°	1655.0	2474.2	1970.8	4053.3	5145.0	5776.7	6425.0	7380.8	6920.0	6996.7	6612.5
67.5°	1177.5	1578.3	1510.0	2799.2	3540.8	6510.8	8763.3	11732.5	10760.0	8566.7	6118.3
70°	904.2	1271.7	1177.5	2090.8	2969.2	7398.3	14139.2	16553.3	16289.2	9735.8	8379.2
72.5°	716.7	1160.8	1169.2	2039.2	4019.2	9608.3	14369.2	13140.8	13481.7	10794.2	7781.7
75°	529.2	1058.3	964.2	1749.2	4138.3	5760.0	6485.0	5290.0	6152.5	5742.5	3361.7
77.5°	358.3	819.2	750.8	1237.5	2679.2	2483.3	1519.2	1058.3	1441.7	1203.3	913.3
80°	221.7	384.2	409.2	589.2	1390.8	1195.0	597.5	281.7	350.0	290.0	298.3
82.5°	119.2	145.0	162.5	273.3	674.2	298.3	281.7	128.3	162.5	136.7	153.3
85°	0.0	0.0	8.3	25.8	42.5	42.5	42.5	25.8	42.5	42.5	42.5
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):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3217.5	3217.5	3217.5	3217.5	3217.5	3217.5	3217.5	3217.5	3217.5	3217.5	3217.5
2.5°	3216.7	3208.3	3200.0	3182.5	3174.2	3165.8	3191.7	3148.3	3140.0	3148.3	3157.5
5°	3242.5	3234.2	3208.3	3191.7	3165.8	3140.0	3114.2	3080.0	3071.7	3071.7	3089.2
7.5°	3259.2	3216.7	3182.5	3148.3	3105.8	3071.7	3045.8	3029.2	3011.7	3055.0	3174.2
10°	3336.7	3302.5	3250.8	3165.8	3071.7	3011.7	2995.0	2978.3	2952.5	2969.2	2935.0
12.5°	3405.0	3370.8	3293.3	3174.2	3080.0	2986.7	2944.2	2944.2	2926.7	2875.8	2866.7
15°	3550.0	3524.2	3387.5	3268.3	3105.8	3011.7	2935.0	2858.3	2832.5	2815.8	2815.8
17.5°	3814.2	3780.0	3651.7	3421.7	3216.7	3029.2	2935.0	2799.2	2755.8	2713.3	2730.8
20°	4880.8	4795.8	4488.3	3916.7	3438.3	3071.7	2850.0	2739.2	2662.5	2619.2	2645.0
22.5°	5648.3	5537.5	5213.3	4752.5	3985.0	3250.8	2850.0	2687.5	2576.7	2542.5	2542.5
25°	5239.2	5170.8	5025.8	4786.7	4385.8	3635.0	2892.5	2619.2	2500.0	2440.0	2440.0
27.5°	4684.2	4548.3	4428.3	4436.7	4275.0	3848.3	3011.7	2568.3	2405.8	2329.2	2338.3
30°	4727.5	4607.5	4377.5	4078.3	3908.3	3788.3	3037.5	2508.3	2329.2	2244.2	2252.5
32.5°	5537.5	5350.0	4855.0	4215.0	3720.0	3584.2	2918.3	2465.8	2260.8	2167.5	2167.5
35°	6109.2	5947.5	5401.7	4573.3	3822.5	3250.8	2755.8	2423.3	2201.7	2081.7	2099.2
37.5°	6280.0	6135.0	5760.0	4975.0	3925.0	3216.7	2713.3	2380.8	2141.7	2013.3	2013.3
40°	6007.5	5870.8	5640.0	5110.8	4190.0	3234.2	2679.2	2329.2	2073.3	1936.7	1945.8
42.5°	6109.2	5895.8	5401.7	4889.2	4164.2	3250.8	2610.8	2260.8	1988.3	1851.7	1860.0
45°	6954.2	6698.3	5802.5	4804.2	4087.5	3336.7	2568.3	2201.7	1911.7	1749.2	1757.5
47.5°	7475.0	7261.7	6646.7	5120.0	3993.3	3310.8	2525.8	2159.2	1843.3	1655.0	1655.0
50°	7286.7	7056.7	6570.0	5401.7	4138.3	3225.0	2474.2	2115.8	1783.3	1578.3	1553.3
52.5°	7636.7	7312.5	6024.2	5162.5	4087.5	3105.8	2457.5	2090.8	1698.3	1485.0	1467.5
55°	6680.8	6570.0	5913.3	4923.3	3566.7	3029.2	2449.2	2073.3	1630.0	1399.2	1365.0
57.5°	7500.0	6962.5	6126.7	4701.7	3387.5	2910.0	2449.2	2065.0	1553.3	1305.8	1280.0
60°	6843.3	6553.3	4846.7	4812.5	3310.8	2926.7	2474.2	1970.8	1467.5	1237.5	1195.0
62.5°	5827.5	4897.5	4044.2	3993.3	3157.5	2841.7	2405.8	1834.2	1356.7	1117.5	1075.0
65°	5973.3	4761.7	4035.8	3695.0	3020.8	2832.5	2636.7	1715.0	1237.5	981.7	955.8
67.5°	6066.7	4915.0	4095.8	4035.8	3029.2	2926.7	2483.3	1587.5	1092.5	827.5	819.2
70°	8447.5	6621.7	4257.5	3481.7	2730.8	2560.0	2397.5	1382.5	921.7	674.2	665.8
72.5°	8063.3	6638.3	2355.0	1954.2	1809.2	2081.7	1783.3	1058.3	700.0	529.2	529.2
75°	4727.5	3950.8	1433.3	913.3	785.0	938.3	725.0	469.2	384.2	358.3	375.8
77.5°	1340.0	1501.7	700.0	563.3	392.5	400.8	281.7	187.5	170.8	179.2	221.7
80°	537.5	460.8	281.7	264.2	221.7	187.5	153.3	94.2	85.0	76.7	85.0
82.5°	153.3	170.8	136.7	162.5	110.8	76.7	68.3	42.5	42.5	42.5	50.8
85°	42.5	50.8	42.5	34.2	42.5	16.7	8.3	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

(END OF REPORT)