

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_320MP

Luminaire Tested: **GSM-XX-320-MP-XX-3F-FG-XX-X**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: 769007_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-3F-FG-XX-X
Description: MEDIUM ARCHITECTURAL AREA LUMINAIRE-HORIZONTAL LAMP-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: 22593.9 lumens
Efficiency: 75.3%
Efficacy: 64.6 lumens/watt
Luminous Opening: Point Source (0' x 0' x 0')
IES Classification: Type III - Short - Full Cutoff
BUG Rating: B3 - U0 - G3

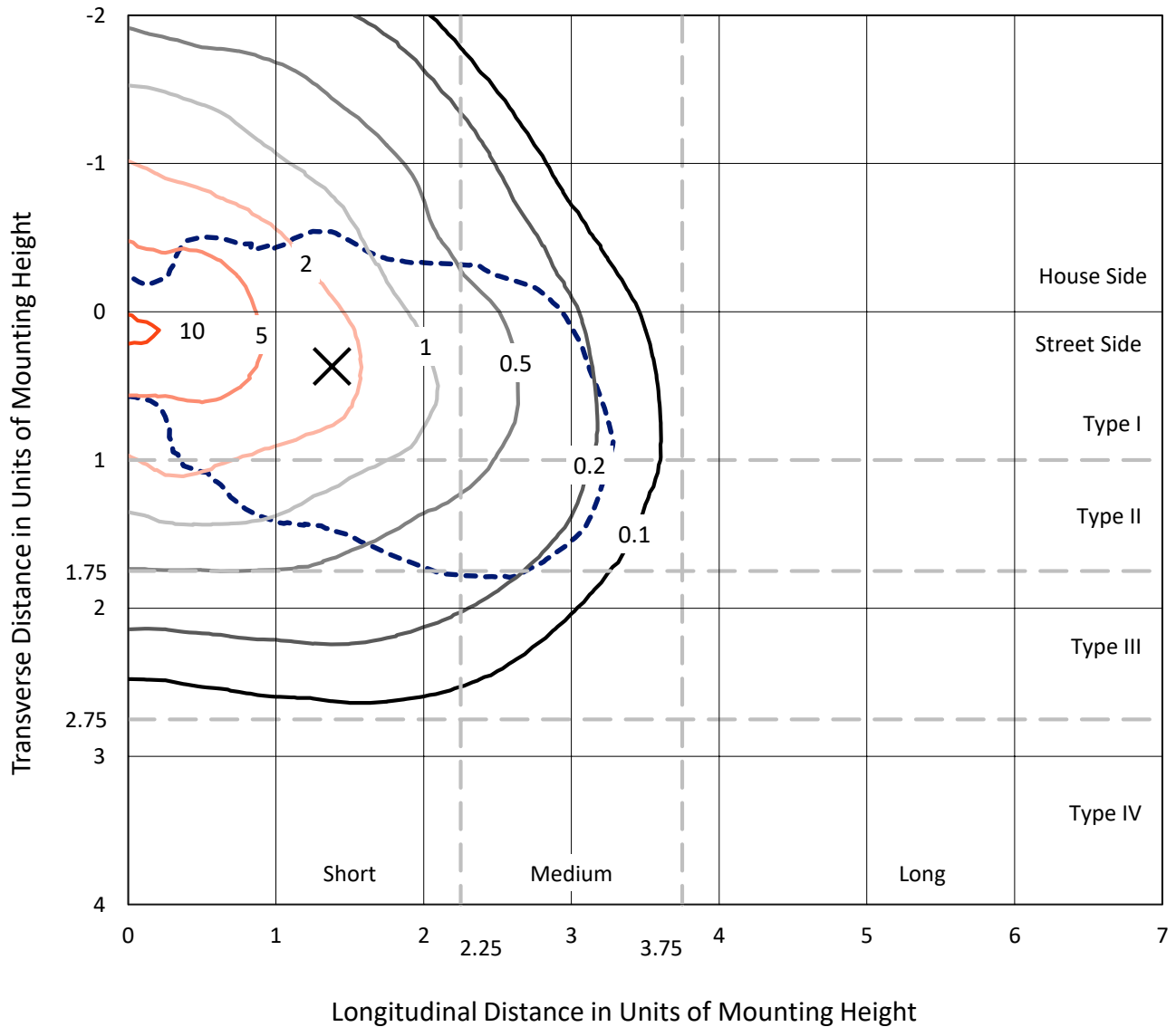
Input Watts (W): 350
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

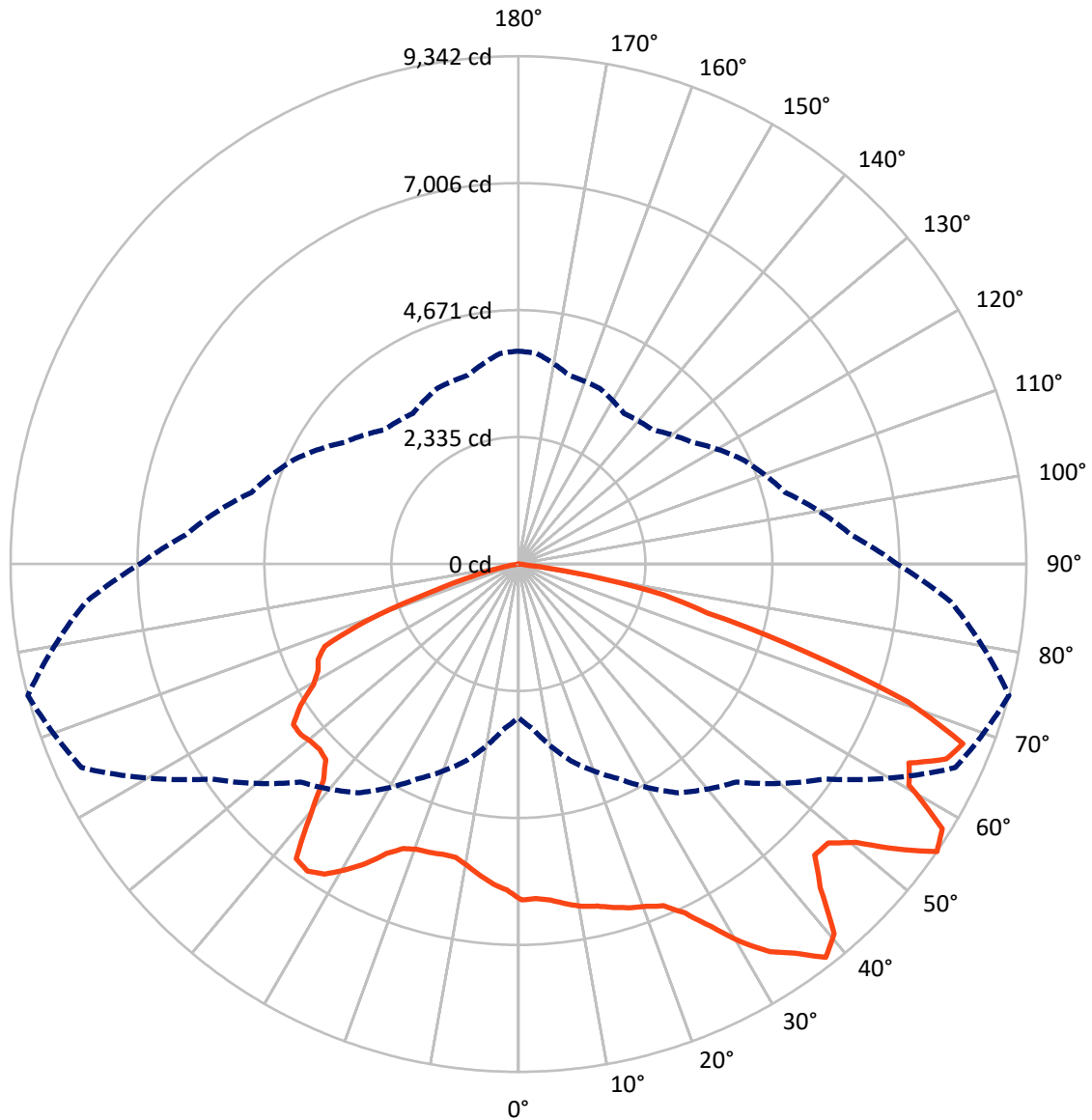
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10.6 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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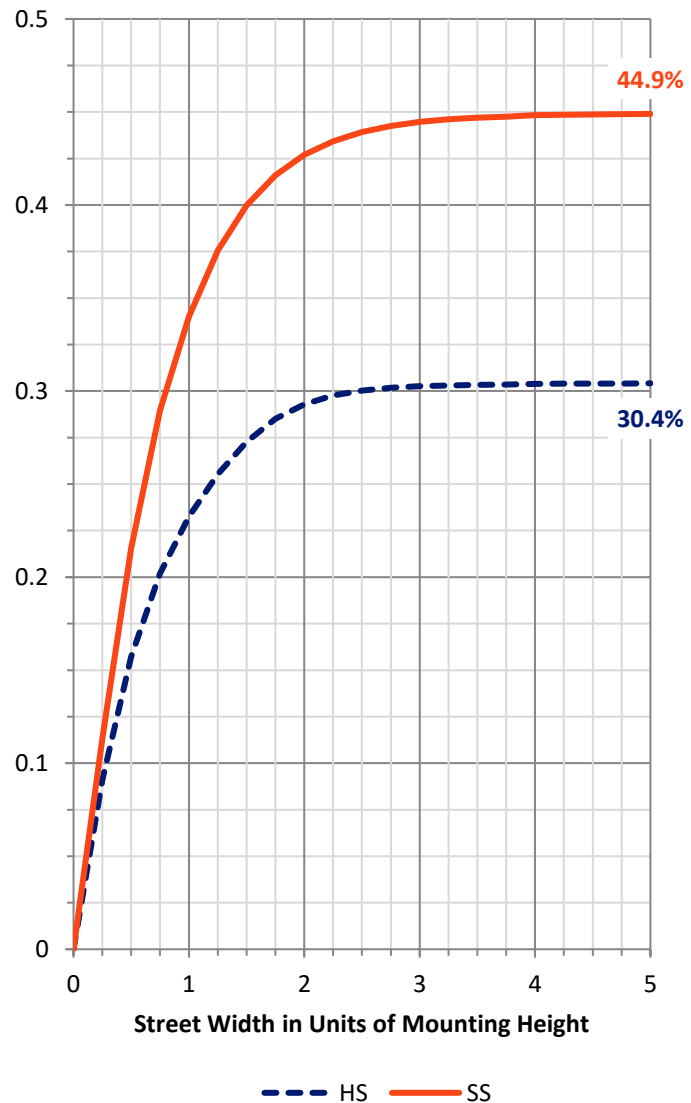
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	9160.8	0.0	9160.8
	% Lamp	30.5	0.0	30.5
Street Side	Lumens	13433.1	0.0	13433.1
	% Lamp	44.8	0.0	44.8
Total	Lumens	22593.9	0.0	22593.9
	% Lamp	75.3	0.0	75.3

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	573.5	2.5	1.9
10°-20°	1640.6	7.3	5.5
20°-30°	2634.8	11.7	8.8
30°-40°	3649.1	16.2	12.2
40°-50°	3927.2	17.4	13.1
50°-60°	4478.1	19.8	14.9
60°-70°	4055.6	17.9	13.5
70°-80°	1579.5	7.0	5.3
80°-90°	55.6	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°	22593.9	100.0	75.3
0°-180°	22593.9	100.0	75.3

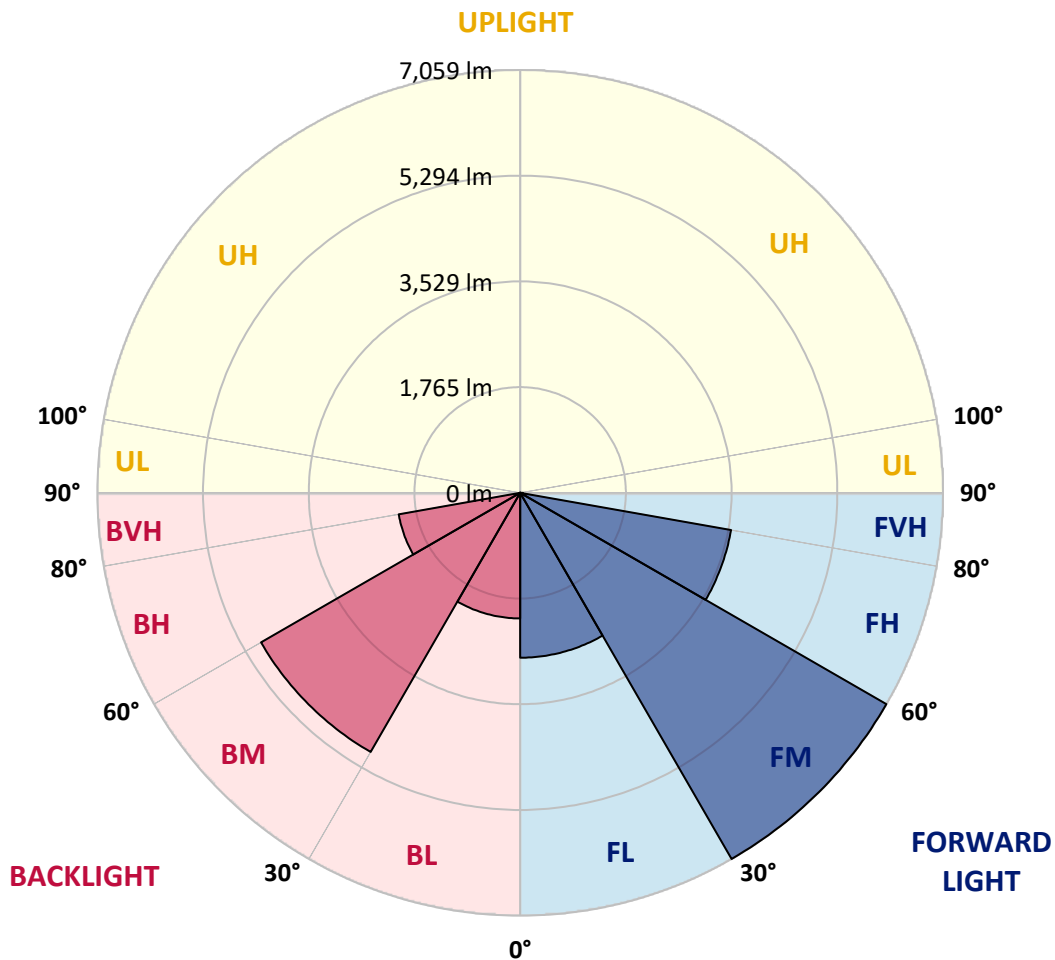


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Lamp	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2752.5	9.2			
FM (30°-60°)	7058.9	23.5			
FH (60°-80°)	3575.1	11.9			G2/5000
FVH (80°-90°)	46.6	0.2			G1/100
BL (0°-30°)	2096.4	7.0	B3/2500		
BM (30°-60°)	4995.5	16.7	B3/5000		
BH (60°-80°)	2060.0	6.9	B3/2500		G3/2500
BVH (80°-90°)	8.9	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	
Trapped Light	7406.1	24.7			

BUG Rating: B3-U0-G3
 Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	6179.2	6179.2	6179.2	6179.2	6179.2	6179.2	6179.2	6179.2	6179.2	6179.2	6179.2
2.5°	6472.5	6458.3	6463.3	6426.7	6390.0	6344.2	6293.3	6234.2	6160.8	6124.2	6078.3
5°	6683.3	6678.3	6655.8	6605.0	6527.5	6454.2	6390.0	6302.5	6210.8	6119.2	6045.8
7.5°	6802.5	6811.7	6784.2	6724.2	6683.3	6646.7	6591.7	6467.5	6311.7	6151.7	6036.7
10°	6857.5	6852.5	6857.5	6811.7	6843.3	6843.3	6811.7	6646.7	6403.3	6197.5	6050.8
12.5°	6784.2	6793.3	6820.8	6870.8	6949.2	6967.5	6889.2	6687.5	6458.3	6215.8	6027.5
15°	6628.3	6619.2	6687.5	6834.2	6940.0	6990.0	6935.0	6797.5	6555.0	6275.0	6073.3
17.5°	6390.0	6385.0	6509.2	6683.3	6802.5	6912.5	6958.3	6889.2	6646.7	6353.3	6151.7
20°	6105.8	6091.7	6261.7	6440.0	6600.8	6784.2	6958.3	6944.2	6724.2	6417.5	6210.8
22.5°	5720.8	5725.0	5935.8	6128.3	6362.5	6646.7	6944.2	7035.8	6830.0	6522.5	6298.3
25°	5363.3	5358.3	5541.7	5785.0	6151.7	6577.5	7050.0	7238.3	7110.0	6839.2	6568.3
27.5°	4941.7	4950.8	5170.8	5464.2	6005.0	6637.5	7275.0	7590.8	7550.0	7279.2	6958.3
30°	4575.0	4588.3	4840.8	5198.3	5880.8	6756.7	7559.2	8030.8	8067.5	7724.2	7389.2
32.5°	4245.0	4285.8	4593.3	5042.5	5871.7	7004.2	7852.5	8402.5	8503.3	8113.3	7737.5
35°	3942.5	4029.2	4419.2	4936.7	5940.8	7183.3	7980.8	8595.0	8791.7	8452.5	8045.0
37.5°	3704.2	3836.7	4377.5	4927.5	5986.7	7165.0	8026.7	8837.5	9181.7	8631.7	8173.3
40°	3510.8	3680.8	4405.0	4978.3	5867.5	7008.3	8026.7	8910.8	8943.3	8008.3	7485.8
42.5°	3419.2	3612.5	4483.3	5024.2	5615.0	6683.3	7669.2	8402.5	8140.8	7229.2	6733.3
45°	3327.5	3552.5	4570.0	4927.5	5193.3	6032.5	6980.8	7632.5	7636.7	6866.7	6316.7
47.5°	3290.8	3492.5	4588.3	4776.7	4868.3	5486.7	6467.5	7334.2	7669.2	6857.5	6234.2
50°	3190.0	3382.5	4460.0	4670.8	4826.7	5390.8	6348.3	7595.8	8045.0	7123.3	6408.3
52.5°	3034.2	3208.3	4212.5	4542.5	5005.8	5541.7	6582.5	8177.5	8705.0	7581.7	6687.5
55°	2823.3	3043.3	3750.0	4355.0	5138.3	5670.0	6889.2	8865.0	9341.7	7985.0	6962.5
57.5°	2695.0	2823.3	3263.3	4089.2	5033.3	5629.2	6852.5	9066.7	9190.8	7710.0	6687.5
60°	2511.7	2562.5	2865.0	3662.5	4685.0	5285.0	6536.7	8672.5	8255.8	6985.8	6188.3
62.5°	2172.5	2209.2	2480.0	3190.0	4226.7	4881.7	6078.3	8370.0	8063.3	6925.8	6091.7
65°	1631.7	1627.5	2003.3	2727.5	3855.0	4661.7	5670.0	8122.5	8650.0	7077.5	6188.3
67.5°	1246.7	1279.2	1618.3	2319.2	3501.7	4437.5	5431.7	7476.7	8819.2	7306.7	6417.5
70°	962.5	967.5	1292.5	1893.3	3048.3	4111.7	5198.3	6784.2	7609.2	6619.2	5629.2
72.5°	632.5	632.5	875.8	1435.0	2388.3	3566.7	4593.3	5684.2	5505.0	4290.8	3575.8
75°	394.2	385.0	485.8	848.3	1572.5	2438.3	2997.5	3603.3	3594.2	2755.0	2365.0
77.5°	220.0	206.7	174.2	247.5	490.8	976.7	1581.7	2516.7	2727.5	1879.2	1530.8
80°	64.2	55.0	41.7	64.2	188.3	463.3	802.5	1343.3	1347.5	825.0	641.7
82.5°	0.0	0.0	0.0	0.0	18.3	60.0	96.7	142.5	155.8	87.5	60.0
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°	6179.2	6179.2	6179.2	6179.2	6179.2	6179.2	6179.2	6179.2	6179.2	6179.2
2.5°	6050.8	6000.0	5954.2	5917.5	5899.2	5899.2	5899.2	5917.5	5917.5	5931.7
5°	5990.8	5904.2	5825.8	5697.5	5624.2	5578.3	5532.5	5510.0	5491.7	5491.7
7.5°	5945.0	5770.8	5550.8	5358.3	5235.0	5170.8	5156.7	5125.0	5088.3	5079.2
10°	5917.5	5633.3	5367.5	5120.0	4914.2	4785.8	4762.5	4762.5	4799.2	4804.2
12.5°	5858.3	5519.2	5207.5	4932.5	4703.3	4542.5	4510.8	4615.8	4707.5	4730.8
15°	5885.8	5514.2	5156.7	4831.7	4556.7	4382.5	4355.0	4483.3	4556.7	4575.0
17.5°	5935.8	5550.8	5184.2	4817.5	4510.8	4272.5	4258.3	4345.8	4373.3	4400.8
20°	5981.7	5569.2	5198.3	4845.0	4565.8	4258.3	4199.2	4350.0	4368.3	4391.7
22.5°	6064.2	5642.5	5266.7	4927.5	4670.8	4281.7	4070.8	4267.5	4382.5	4391.7
25°	6307.5	5853.3	5445.8	5134.2	4804.2	4327.5	3955.8	4010.8	4290.8	4309.2
27.5°	6660.0	6179.2	5697.5	5303.3	4932.5	4391.7	3910.0	3754.2	4089.2	4180.8
30°	7022.5	6463.3	5963.3	5468.3	4890.8	4410.0	3818.3	3548.3	3772.5	3850.8
32.5°	7352.5	6724.2	6165.0	5514.2	4905.0	4423.3	3731.7	3424.2	3501.7	3539.2
35°	7609.2	6852.5	6170.0	5390.8	4716.7	4171.7	3630.8	3327.5	3360.0	3364.2
37.5°	7664.2	6788.3	6023.3	5175.0	4455.8	4001.7	3539.2	3268.3	3341.7	3345.8
40°	6935.0	6036.7	5358.3	4551.7	3974.2	3708.3	3428.3	3245.0	3424.2	3446.7
42.5°	6197.5	5358.3	4850.0	4185.0	3708.3	3497.5	3318.3	3204.2	3506.7	3530.0
45°	5794.2	5051.7	4643.3	4089.2	3644.2	3327.5	3167.5	3075.8	3488.3	3612.5
47.5°	5711.7	4996.7	4597.5	4065.8	3653.3	3213.3	3070.8	3020.8	3488.3	3676.7
50°	5807.5	5024.2	4588.3	4065.8	3653.3	3235.8	3158.3	3080.0	3557.5	3676.7
52.5°	5972.5	5088.3	4630.0	4006.7	3561.7	3300.0	3373.3	3360.0	3772.5	3850.8
55°	6142.5	5083.3	4547.5	3900.8	3488.3	3382.5	3557.5	3594.2	3887.5	3915.0
57.5°	5871.7	4780.8	4350.0	3832.5	3451.7	3492.5	3644.2	3539.2	3685.8	3750.0
60°	5376.7	4373.3	4139.2	3800.0	3446.7	3548.3	3594.2	3176.7	3332.5	3557.5
62.5°	5143.3	4171.7	4120.8	3805.0	3483.3	3488.3	3213.3	2695.0	2883.3	3153.3
65°	5005.8	4080.0	4130.0	3735.8	3442.5	3235.8	2690.8	2186.7	2260.0	2438.3
67.5°	4905.0	3873.3	3805.0	3327.5	3121.7	2740.8	2154.2	1650.0	1545.0	1659.2
70°	4254.2	2993.3	2525.8	2145.0	2058.3	1705.0	1416.7	1040.8	898.3	953.3
72.5°	2782.5	1732.5	1205.8	976.7	894.2	729.2	641.7	518.3	472.5	495.0
75°	1870.0	980.8	628.3	472.5	375.8	311.7	275.0	280.0	289.2	302.5
77.5°	1141.7	518.3	311.7	215.8	151.7	128.3	119.2	142.5	151.7	165.0
80°	463.3	197.5	105.8	60.0	41.7	27.5	27.5	36.7	36.7	36.7
82.5°	45.8	18.3	5.0	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)