

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: 766461\_320MP

Luminaire Tested: **GSM-XX-320-MP-XX-AS-SG-XX-X**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: 766461\_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-AS-SG-XX-X  
Description: MEDIUM ARCHITECTURAL AREA LUMINAIRE-VERTICAL LAMP-SQUARE DISTRIBUTION  
Light Source: 320 WATT PULSE-START CLEAR ED-37 VBU BURN  
Ballast/Driver: -

**Summary**

Lumens per Lamp: 33000 (1 lamp)  
Luminaire Lumens: 22591 lumens  
Efficiency: 68.5%  
Efficacy: 64.5 lumens/watt  
Luminous Opening: Point Source (0' x 0' x 0')  
IES Classification: Type V - Short - Cutoff  
BUG Rating: B5 - U3 - G3

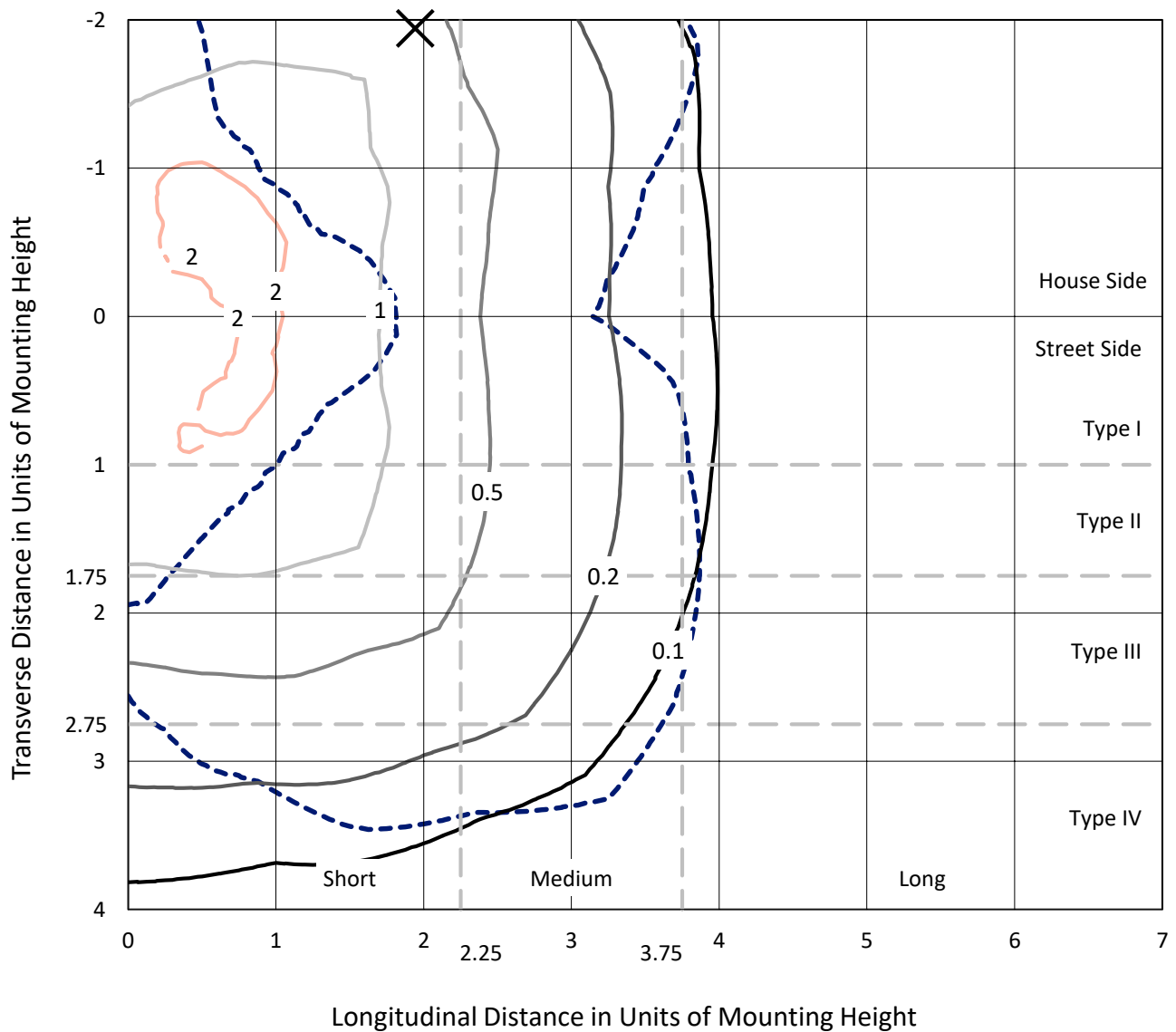
Input Watts (W): 350  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

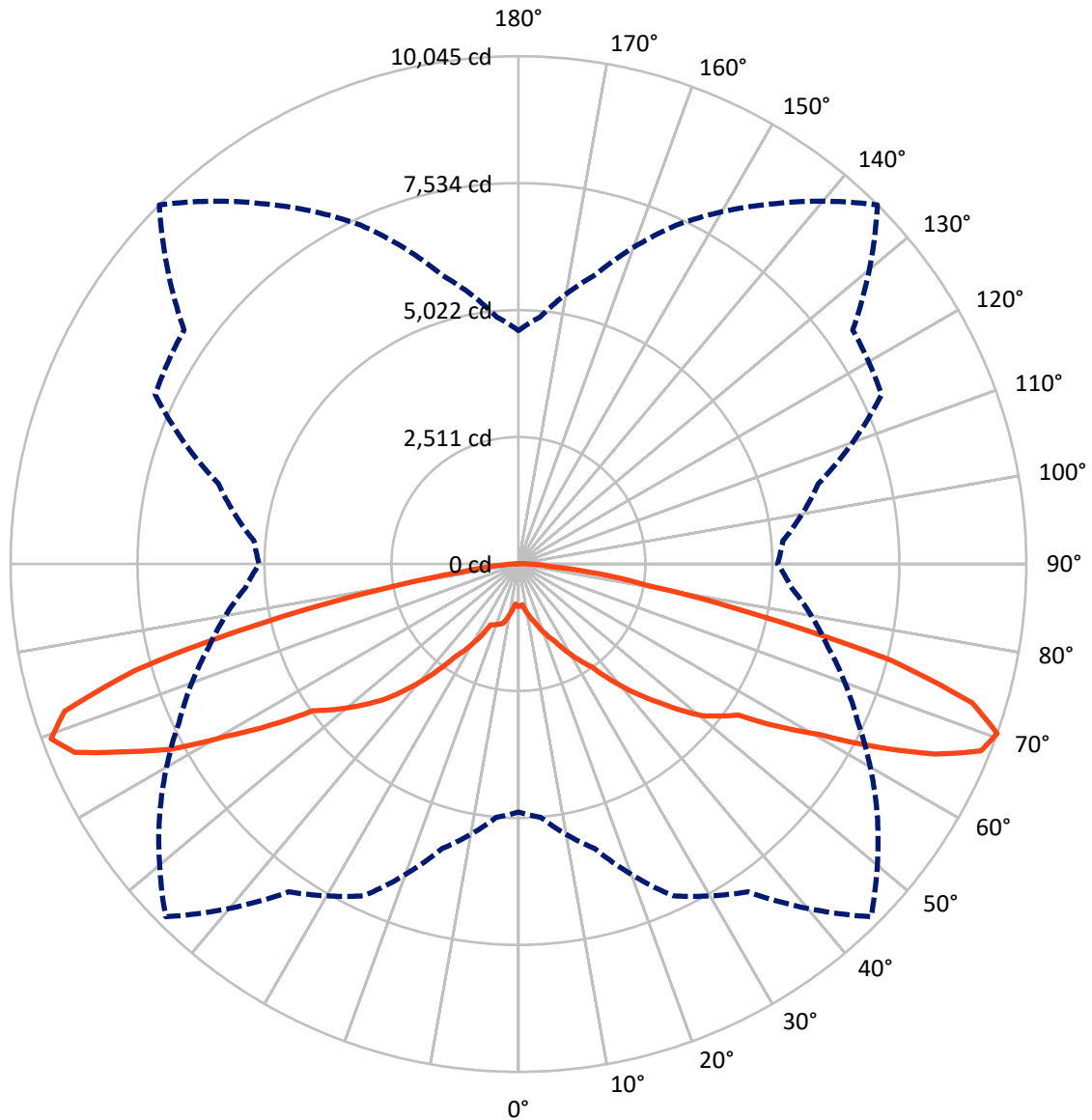
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.4 fc  
 Type V - Short - Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 135-Deg Lateral      - - - Horizontal Cone Through 70-Deg Vertical

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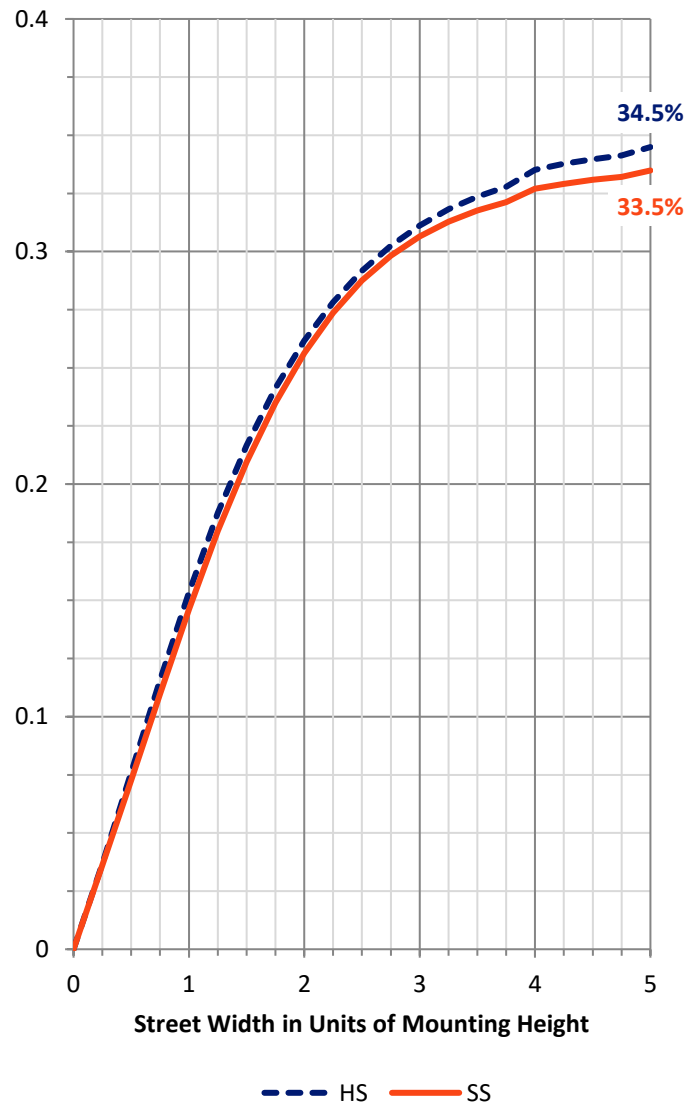
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	11388.8	41.1	11429.9
	% Lamp	34.5	0.1	34.6
<b>Street Side</b>	Lumens	11122.8	38.3	11161.1
	% Lamp	33.7	0.1	33.8
<b>Total</b>	Lumens	22511.6	79.4	22591.0
	% Lamp	68.2	0.2	68.5

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	83.6	0.4	0.3
10°-20°	321.7	1.4	1.0
20°-30°	720.2	3.2	2.2
30°-40°	1491.5	6.6	4.5
40°-50°	2797.9	12.4	8.5
50°-60°	4290.2	19.0	13.0
60°-70°	6477.0	28.7	19.6
70°-80°	5605.0	24.8	17.0
80°-90°	784.2	3.5	2.4
90°-100°	67.0	0.3	0.2
100°-110°	16.8	0.1	0.1
110°-120°	1.8	0.0	0.0
120°-130°	0.4	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°	22511.6	99.6	68.2
0°-180°	22591.0	100.0	68.5



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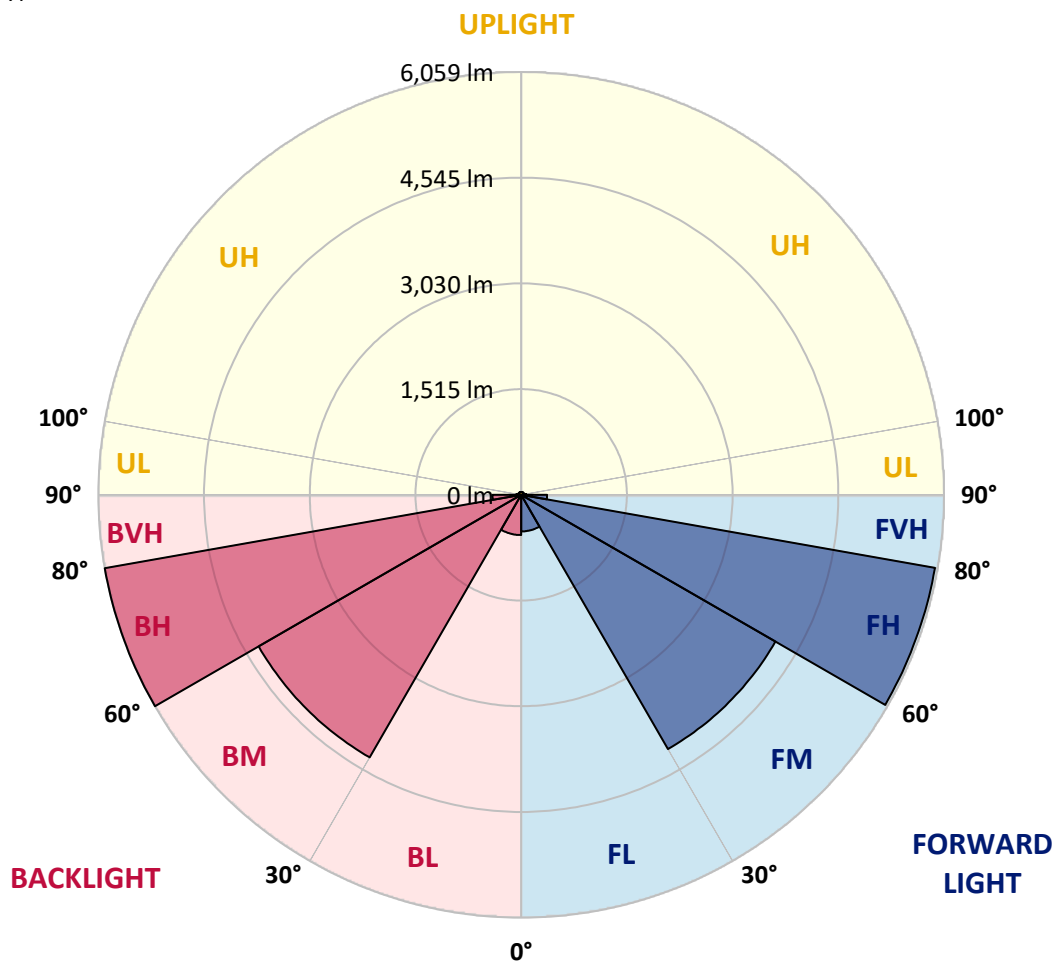
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Lamp	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	525.1	1.6			
FM	(30°-60°)	4207.5	12.8			
FH	(60°-80°)	6022.5	18.3			G3/7500
FVH	(80°-90°)	371.6	1.1			G3/500
BL	(0°-30°)	576.9	1.7	B2/1000		
BM	(30°-60°)	4343.8	13.2	B3/5000		
BH	(60°-80°)	6059.4	18.4	B5		G3/7500
BVH	(80°-90°)	412.5	1.3			G3/500
UL	(90°-100°)	67.0	0.2		U3/500	
UH	(100°-180°)	41.1	0.1		U2/50	
Trapped Light		10409.0	31.5			

**BUG Rating: B5-U3-G3**

Type V Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	839.7	839.7	839.7	839.7	839.7	839.7	839.7	839.7	839.7	839.7	839.7
5°	760.8	761.8	774.6	776.4	792.0	793.8	809.4	820.4	837.8	844.2	840.6
15°	935.9	1009.2	1068.8	1112.8	1224.7	1212.8	1243.9	1201.8	1186.2	1159.6	1132.1
25°	1135.8	1149.5	1263.2	1236.6	1257.7	1324.6	1373.2	1387.8	1391.5	1457.5	1470.3
35°	1804.9	1906.7	1913.1	2062.5	2074.4	2244.0	2123.9	2168.8	2118.4	2220.2	2174.3
45°	3146.9	3262.4	3327.5	3593.3	3487.0	3735.4	3675.8	3766.6	3551.2	3607.1	3663.9
50°	3981.1	3875.7	4085.6	4444.9	4213.9	4362.4	4397.2	4410.1	4264.3	4041.6	4183.7
55°	3991.2	3998.5	4377.1	4690.6	4856.5	4998.6	4916.1	4806.1	4396.3	4162.6	4245.1
60°	4765.8	4777.7	5219.5	5932.7	6386.4	6719.2	6317.7	6021.6	5133.3	4848.2	4888.6
62.5°	4969.2	4986.7	5562.3	6402.0	7009.8	7803.6	7094.1	6559.7	5533.0	5156.2	5137.0
65°	5203.9	5254.3	5900.6	6961.2	7491.9	8626.8	7663.3	6688.9	5883.2	5404.7	5377.2
67.5°	5077.4	5296.5	6158.2	7463.5	7898.0	9531.5	8378.3	7163.8	6202.2	5599.9	5394.6
70°	4906.0	5031.6	5827.2	7242.6	7915.4	9866.1	8665.2	7407.6	6338.8	5425.8	5126.9
72.5°	4590.7	4697.0	5104.0	6577.1	7493.8	9438.0	8364.6	7278.3	6175.6	5312.1	4996.8
75°	4029.7	3960.0	3940.8	5248.8	6100.4	7874.2	7248.1	6463.4	5485.3	4896.8	4597.1
77.5°	2410.8	2678.5	2912.2	3333.9	3868.3	5227.8	5014.2	4434.8	3764.8	3568.6	3474.2
80°	1443.8	1543.7	1649.1	1815.0	2155.1	2776.6	2931.5	2540.1	2091.8	2105.6	2395.2
82.5°	557.3	527.1	970.8	713.2	895.6	1163.2	1217.3	1042.2	757.2	772.8	1047.8
85°	231.0	267.7	374.9	464.8	628.8	605.9	613.2	513.3	367.6	261.2	309.8
87.5°	88.0	131.1	176.9	229.2	503.2	271.3	292.4	252.1	134.8	94.4	129.2
90°	49.5	59.6	86.2	92.6	167.8	117.3	138.4	126.5	88.0	42.2	42.2
95°	13.8	21.1	55.9	66.9	66.9	52.2	59.6	92.6	49.5	21.1	19.2
105°	0.0	0.0	1.8	5.5	3.7	3.7	5.5	5.5	3.7	0.0	0.0
115°	0.0	0.0	1.8	1.8	3.7	1.8	1.8	1.8	1.8	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	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°	839.7	839.7	839.7	839.7	839.7	839.7	839.7	839.7	839.7	839.7
5°	837.8	837.8	832.3	820.4	811.2	803.9	807.6	781.0	816.8	763.6
15°	1091.8	1088.1	1217.3	1233.8	1189.8	1165.1	1142.2	1084.4	1017.5	1005.6
25°	1503.3	1538.2	1513.4	1650.0	1705.0	1672.9	1638.1	1496.0	1357.6	1317.2
35°	2260.5	2400.8	2330.2	2479.6	2498.8	2486.0	2337.5	2178.0	1869.1	1811.3
45°	3477.8	3679.5	4015.9	4070.0	3914.2	4079.2	4024.2	3586.9	3047.0	2691.3
50°	4159.8	4204.8	4756.6	4641.1	4718.1	4565.9	4577.8	4081.9	3558.5	3191.8
55°	4218.5	4343.2	5067.3	5093.0	5275.4	5023.3	4909.7	4083.8	3537.4	3227.6
60°	4877.6	5182.8	5984.9	6135.2	6852.1	6311.2	5734.7	4585.2	3862.8	3651.1
62.5°	5165.4	5559.6	6536.8	6763.2	7984.2	6976.8	6237.0	4929.8	4117.7	3896.8
65°	5394.6	5932.7	7069.3	7282.9	9064.9	7674.3	6584.4	5277.2	4345.0	4106.7
67.5°	5548.6	6313.1	7670.7	7680.8	9864.2	8270.2	7011.6	5554.1	4600.8	4345.0
70°	5250.7	6142.6	7926.4	8072.2	10044.8	8690.0	7397.5	5932.7	4902.3	4618.2
72.5°	5102.2	5732.8	7442.4	7682.6	9378.4	8434.2	7228.8	5892.3	4984.8	4831.8
75°	4541.2	4850.1	6254.4	6647.7	7617.5	7949.3	6146.2	5219.5	4552.2	4366.1
77.5°	3566.8	3541.1	4539.3	4390.8	4763.9	5348.8	4019.6	3409.1	3246.8	2995.7
80°	2095.5	2026.8	2749.1	2561.2	2641.8	2992.9	2305.4	1864.5	1799.4	1611.5
82.5°	818.6	753.5	1282.4	1145.8	1617.0	1520.8	1082.6	782.8	893.8	546.3
85°	286.0	336.4	511.5	584.8	625.2	671.0	490.4	330.9	250.2	171.4
87.5°	115.5	207.2	284.2	319.0	409.8	425.3	294.2	166.8	117.3	59.6
90°	47.7	86.2	113.7	163.2	167.8	194.3	134.8	86.2	40.3	38.5
95°	26.6	59.6	63.2	66.9	55.9	68.8	69.7	63.2	19.2	13.8
105°	1.8	3.7	5.5	5.5	3.7	5.5	7.3	5.5	3.7	3.7
115°	0.0	1.8	1.8	1.8	3.7	1.8	1.8	1.8	1.8	0.0
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)