

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: 766034\_320MP

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: 766034\_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-RW-SG-XX-X  
Description: MEDIUM ARCHITECTURAL AREA LUMINAIRE-VERTICAL LAMP-RECTANGULAR DISTRIBUTION  
Light Source: 320 WATT PULSE-START CLEAR ED-37 VBU BURN  
Ballast/Driver: -

**Summary**

Lumens per Lamp: 33000 (1 lamp)  
Luminaire Lumens: 22313.1 lumens  
Efficiency: 67.6%  
Efficacy: 63.8 lumens/watt  
Luminous Opening: Rectangular w/ Sides (W: 1.81' x L: 1.81' x H: 0.83')  
IES Classification: Type V - Short - Semi-Cutoff  
BUG Rating: B5 - U3 - G5

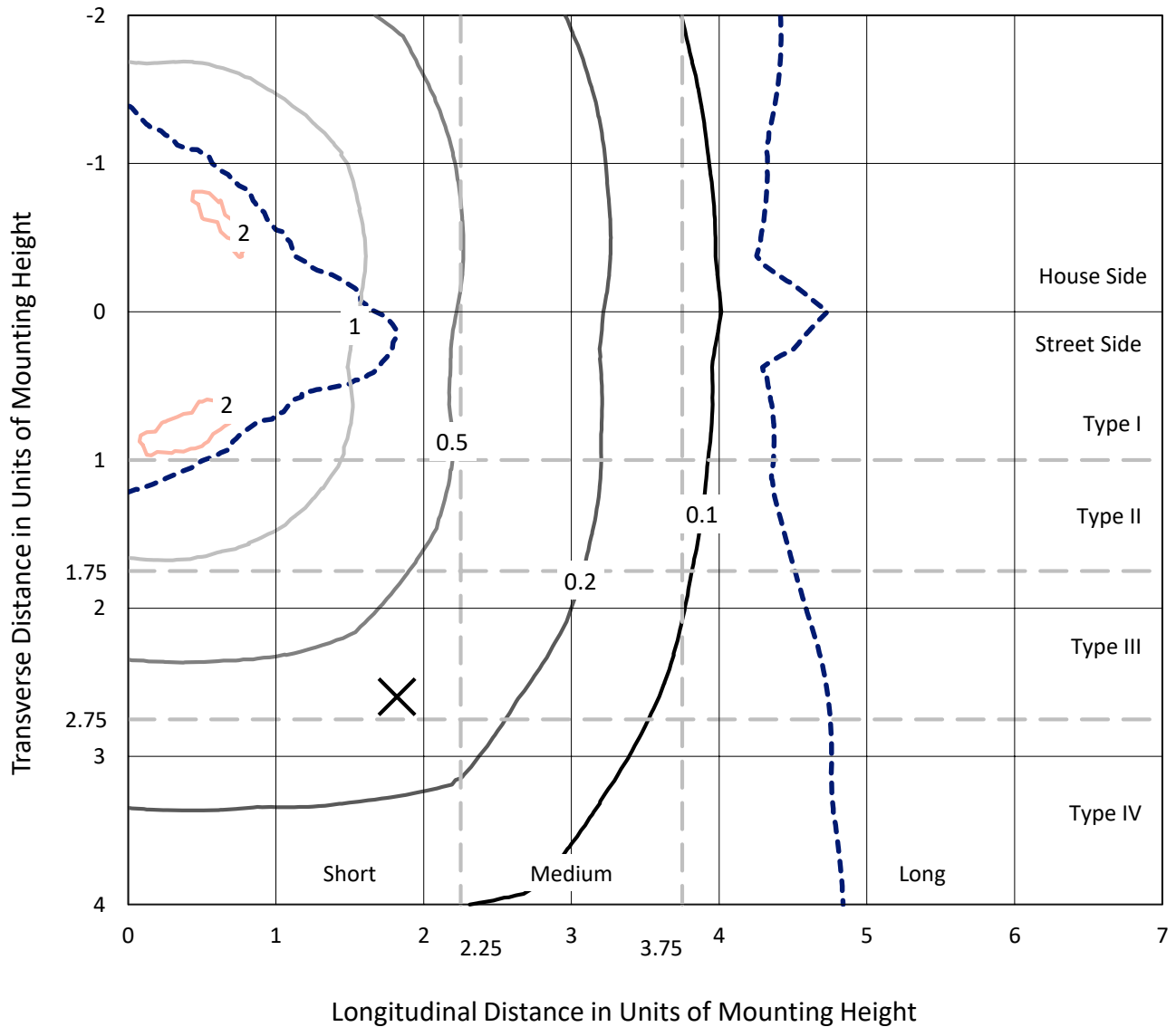
Input Watts (W): 350  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

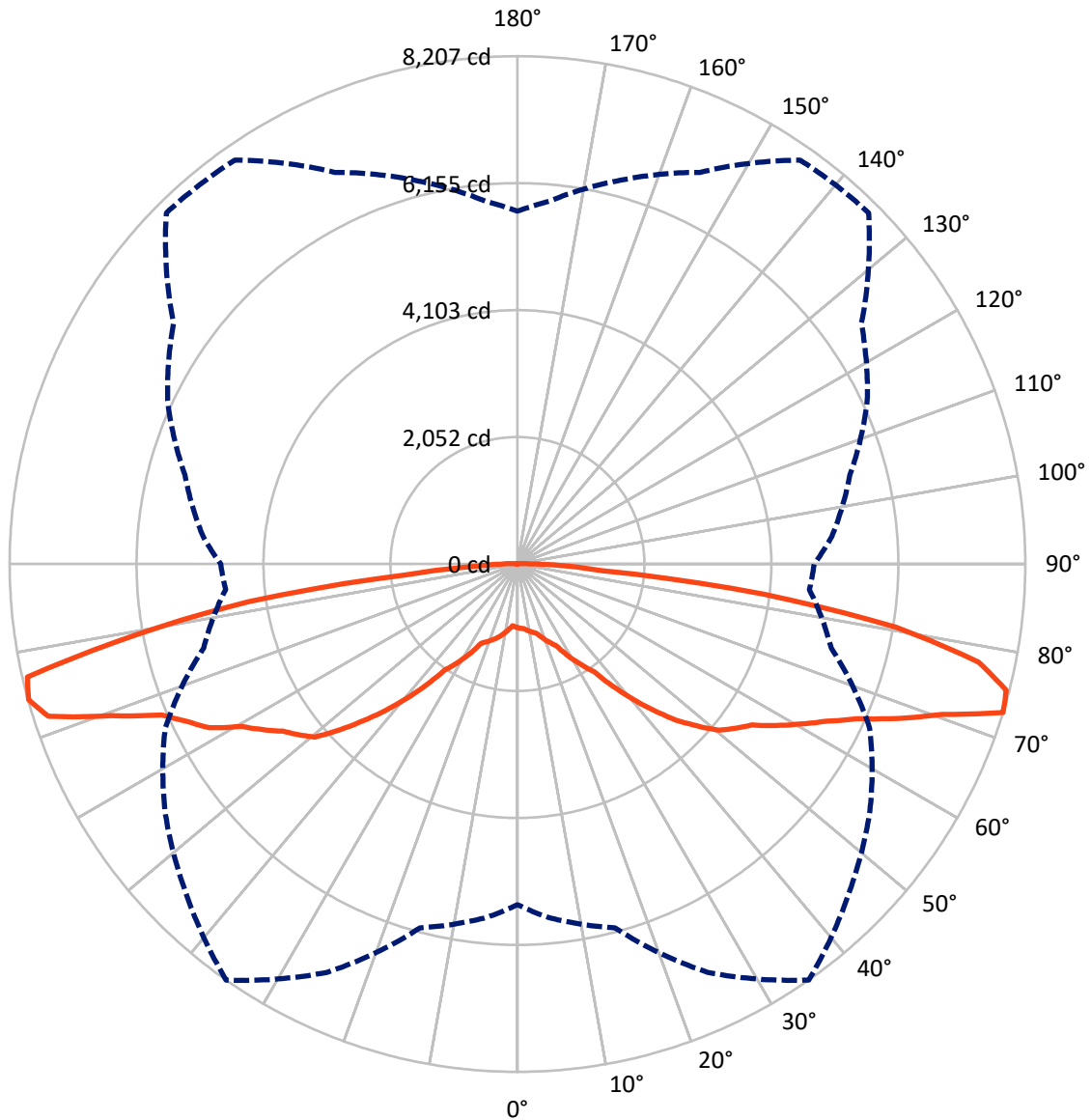
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.1 fc  
 Type V - Short - Semi-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 35-Deg Lateral    - - - Horizontal Cone Through 72.5-Deg Vertical

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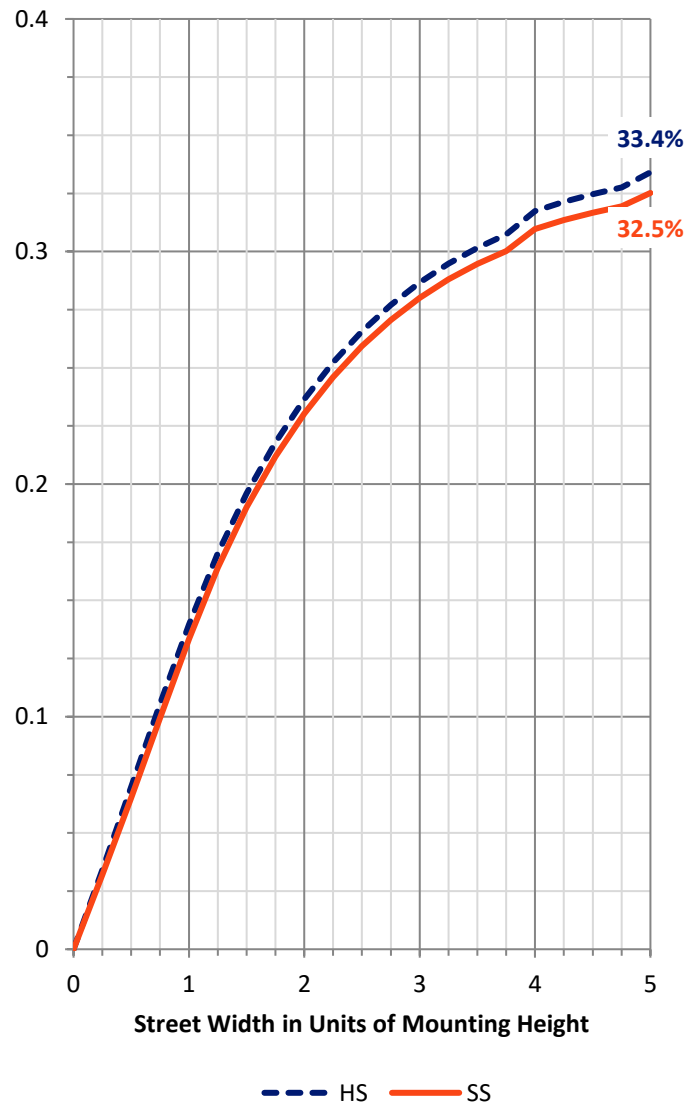
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	11235.8	62.8	11298.6
	% Lamp	34.0	0.2	34.2
<b>Street Side</b>	Lumens	10966.9	47.6	11014.4
	% Lamp	33.2	0.1	33.4
<b>Total</b>	Lumens	22202.7	110.3	22313.1
	% Lamp	67.3	0.3	67.6

**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	99.9	0.4	0.3
10°-20°	334.9	1.5	1.0
20°-30°	687.9	3.1	2.1
30°-40°	1381.8	6.2	4.2
40°-50°	2624.5	11.8	8.0
50°-60°	3968.9	17.8	12.0
60°-70°	5444.3	24.4	16.5
70°-80°	6065.6	27.2	18.4
80°-90°	1676.6	7.5	5.1
90°-100°	88.5	0.4	0.3
100°-110°	23.2	0.1	0.1
110°-120°	4.3	0.0	0.0
120°-130°	0.6	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°	22202.7	99.5	67.3
0°-180°	22313.1	100.0	67.6

**Coefficient of Utilization**



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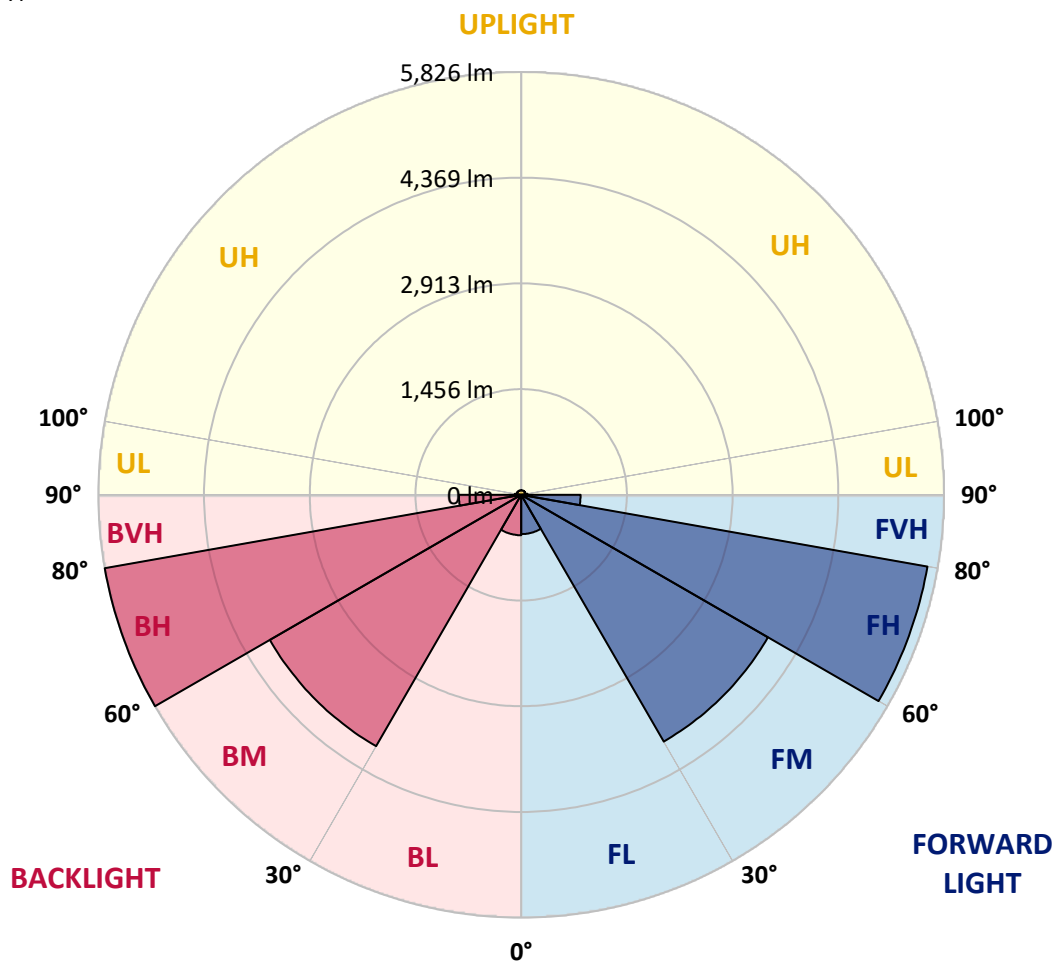
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Lamp	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	541.7	1.6			
FM	(30°-60°)	3925.9	11.9			
FH	(60°-80°)	5684.3	17.2			G3/7500
FVH	(80°-90°)	818.3	2.5			G5
BL	(0°-30°)	556.8	1.7	B2/1000		
BM	(30°-60°)	3998.4	12.1	B3/5000		
BH	(60°-80°)	5825.6	17.7	B5		G3/7500
BVH	(80°-90°)	858.3	2.6			G5
UL	(90°-100°)	88.5	0.3		U3/500	
UH	(100°-180°)	62.8	0.2		U3/500	
Trapped Light		10686.9	32.4			

**BUG Rating: B5-U3-G5**

Type V Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	1031.2	1031.2	1031.2	1031.2	1031.2	1031.2	1031.2	1031.2	1031.2	1031.2	1031.2
5°	1072.5	1075.2	1059.7	1063.3	1049.6	1036.8	1041.3	1023.0	1018.4	995.5	1006.5
15°	1118.3	1121.1	1114.7	1145.8	1162.3	1138.5	1090.8	1072.5	1036.8	1056.9	1082.6
25°	1442.8	1454.8	1458.4	1470.3	1463.9	1422.7	1378.7	1315.4	1221.0	1228.3	1255.8
35°	2129.4	2106.5	2121.2	2138.6	2139.5	2109.2	2022.2	1926.8	1741.7	1769.2	1862.7
45°	3289.9	3521.8	3531.9	3576.8	3599.8	3506.2	3314.7	3255.1	2887.5	3024.1	3033.2
50°	4126.8	4143.3	4230.4	4365.2	4223.1	4444.9	4020.5	3913.2	3346.8	3501.7	3616.2
55°	4257.9	4414.7	4618.2	4722.7	4593.4	4633.8	4400.9	4356.0	3641.0	3711.6	3935.2
60°	4616.3	4695.2	4923.4	5067.3	5250.7	5195.7	5090.2	4688.8	4125.0	3908.7	4106.7
62.5°	4938.1	4938.1	5234.2	5529.3	5597.2	5607.2	5558.7	5011.4	4364.2	4195.6	4351.4
65°	4840.0	5145.2	5486.2	5886.8	6027.1	5990.4	5839.2	5327.7	4550.3	4334.9	4489.8
67.5°	5281.8	5346.9	5679.7	6179.2	6655.0	6393.8	6203.1	5607.2	4702.5	4414.7	4587.9
70°	5544.9	5556.8	6040.8	6759.5	7280.2	6957.5	6667.8	5835.5	4976.6	4587.9	4728.2
72.5°	5505.5	5732.8	6086.7	7280.2	8206.9	7560.7	6953.8	6281.9	5248.8	4734.6	4796.0
75°	4981.2	5033.4	5584.3	6668.8	8159.2	7108.8	6589.9	5588.0	4941.8	4408.2	4538.4
77.5°	3899.5	3924.2	4817.1	5951.0	7620.2	6543.2	5720.9	4714.4	4077.3	3983.8	4262.5
80°	2376.9	2643.7	3065.3	4086.5	6207.7	5035.2	4200.2	3620.8	2762.8	2970.0	3474.2
82.5°	1335.6	1639.0	1741.7	2438.3	4013.2	3586.9	2995.7	2291.7	2077.2	1953.4	2049.7
85°	603.2	547.2	760.8	1127.5	1376.8	1289.8	1465.8	943.2	822.2	871.8	1036.8
87.5°	220.9	251.2	363.0	527.1	682.0	627.9	583.9	570.2	337.3	308.0	287.8
90°	57.8	84.3	99.9	146.7	193.4	207.2	193.4	171.4	143.9	95.3	95.3
95°	21.1	29.3	38.5	53.2	63.2	56.8	61.4	64.2	55.0	36.7	34.8
105°	6.4	9.2	11.0	13.8	6.4	7.3	11.9	20.2	15.6	6.4	2.8
115°	0.0	0.0	1.8	1.8	1.8	1.8	1.8	1.8	2.8	2.8	2.8
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°	1031.2	1031.2	1031.2	1031.2	1031.2	1031.2	1031.2	1031.2	1031.2	1031.2
5°	1012.9	992.8	993.7	988.2	983.6	1000.1	983.6	986.3	1006.5	970.8
15°	1116.5	1208.2	1226.5	1259.5	1280.6	1221.0	1253.1	1223.8	1210.0	1228.3
25°	1308.1	1408.0	1395.2	1421.8	1429.1	1404.3	1367.7	1376.8	1351.2	1385.1
35°	1920.4	1920.4	2106.5	2088.2	2145.9	2081.8	2034.1	1995.6	1915.8	1972.7
45°	3204.7	3362.3	3465.9	3495.2	3465.9	3547.5	3423.8	3455.8	3340.3	3317.4
50°	3694.2	4057.2	4169.0	4403.7	4310.2	4308.3	4154.3	4155.2	3985.7	3884.8
55°	3873.8	4312.0	4423.8	4648.4	4581.5	4653.0	4478.8	4308.3	4230.4	4099.3
60°	4296.4	4643.8	4904.2	5344.2	5225.9	5170.9	5161.8	5063.7	4719.0	4803.3
62.5°	4592.5	4892.2	5241.5	5616.4	5686.1	5638.4	5631.1	5451.4	5097.6	5058.2
65°	4688.8	5068.2	5462.4	5914.3	6027.1	5909.8	5960.2	5584.3	5291.9	5250.7
67.5°	4796.0	5183.8	5668.7	6180.2	6421.2	6241.6	6312.2	5942.8	5465.2	5483.5
70°	4983.9	5323.1	5932.7	6422.2	7216.0	6999.7	6631.2	6245.2	5641.2	5593.5
72.5°	5099.4	5561.4	6237.0	6785.2	8024.5	7967.7	6981.3	6419.4	5883.2	5700.8
75°	4620.9	5024.2	5659.5	6295.7	7962.2	8199.6	6428.6	5868.5	5289.2	5051.8
77.5°	3880.2	4042.5	4576.9	5597.2	7471.8	8127.2	5741.1	4990.3	4848.2	4702.5
80°	2945.2	2971.8	3186.3	3889.4	5789.7	6259.9	4147.9	3357.8	3415.5	3366.9
82.5°	1794.8	1810.4	1931.4	2403.5	3675.8	4380.8	2472.2	2317.3	1871.8	1837.9
85°	842.4	868.1	1100.9	1289.8	1689.4	1798.5	1447.4	929.5	865.3	778.2
87.5°	303.4	385.9	538.1	648.1	614.2	638.9	572.9	367.6	306.2	285.1
90°	96.2	132.0	193.4	249.3	253.0	258.5	214.5	180.6	104.5	95.3
95°	39.4	72.4	77.0	87.1	75.2	81.6	84.3	64.2	52.2	39.4
105°	6.4	16.5	21.1	13.8	11.0	11.9	20.2	15.6	9.2	6.4
115°	2.8	2.8	2.8	2.8	4.6	4.6	4.6	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)