

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: 767599\_320MP

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: 767599\_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-HS  
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: 18312.6 lumens  
Efficiency: 55.5%  
Efficacy: 52.3 lumens/watt  
Luminous Opening: Point Source (0' x 0' x 0')  
IES Classification: Type IV - Medium - Non-Cutoff  
BUG Rating: B4 - U3 - G4

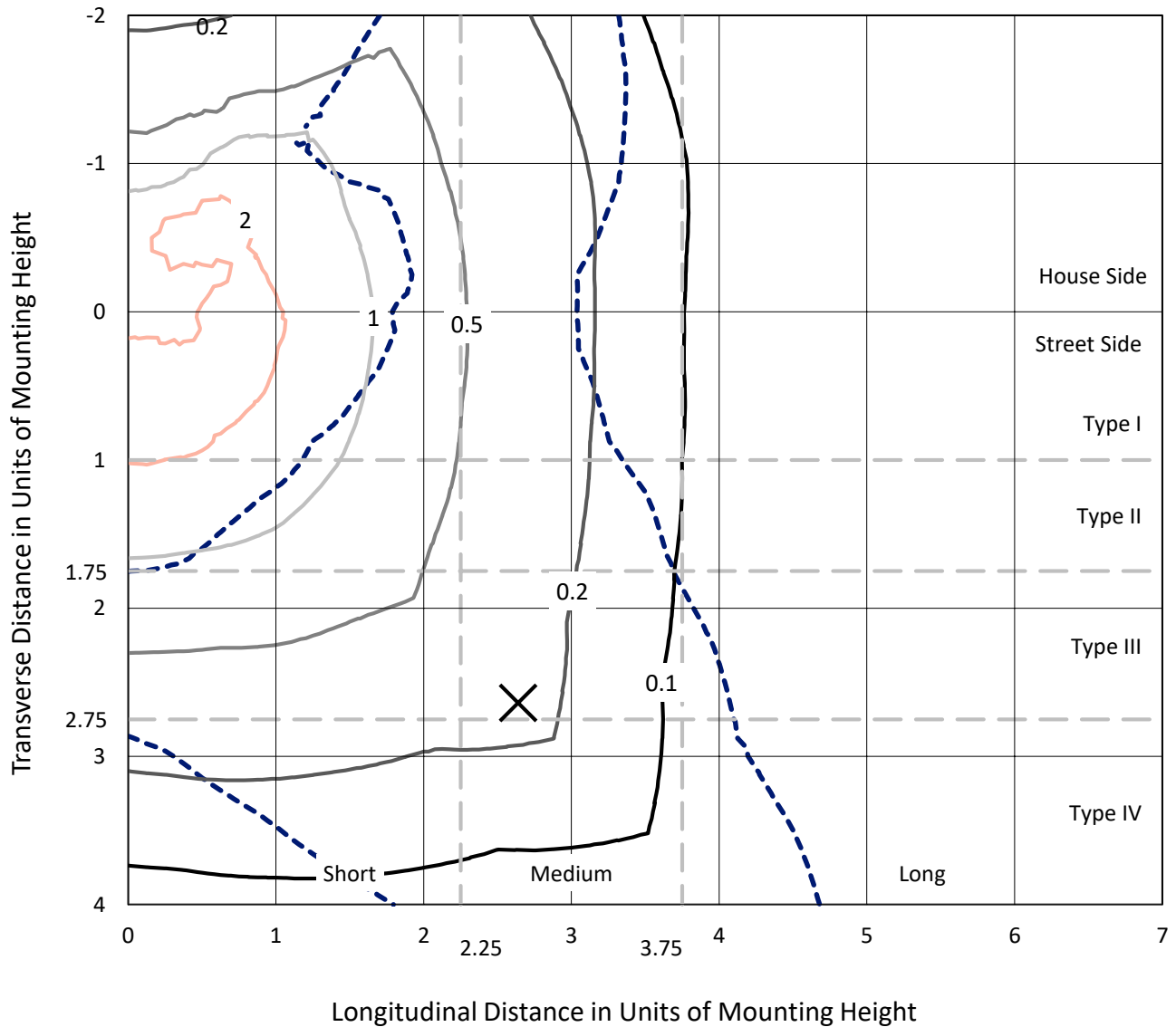
Input Watts (W): 350  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



REPORT NUMBER: 767599\_320MP  
 CATALOG NUMBER: GSM-XX-320-MP-XX-AS-SG-XX-HS

### Iso-Footcandle Lines of Horizontal Illumination

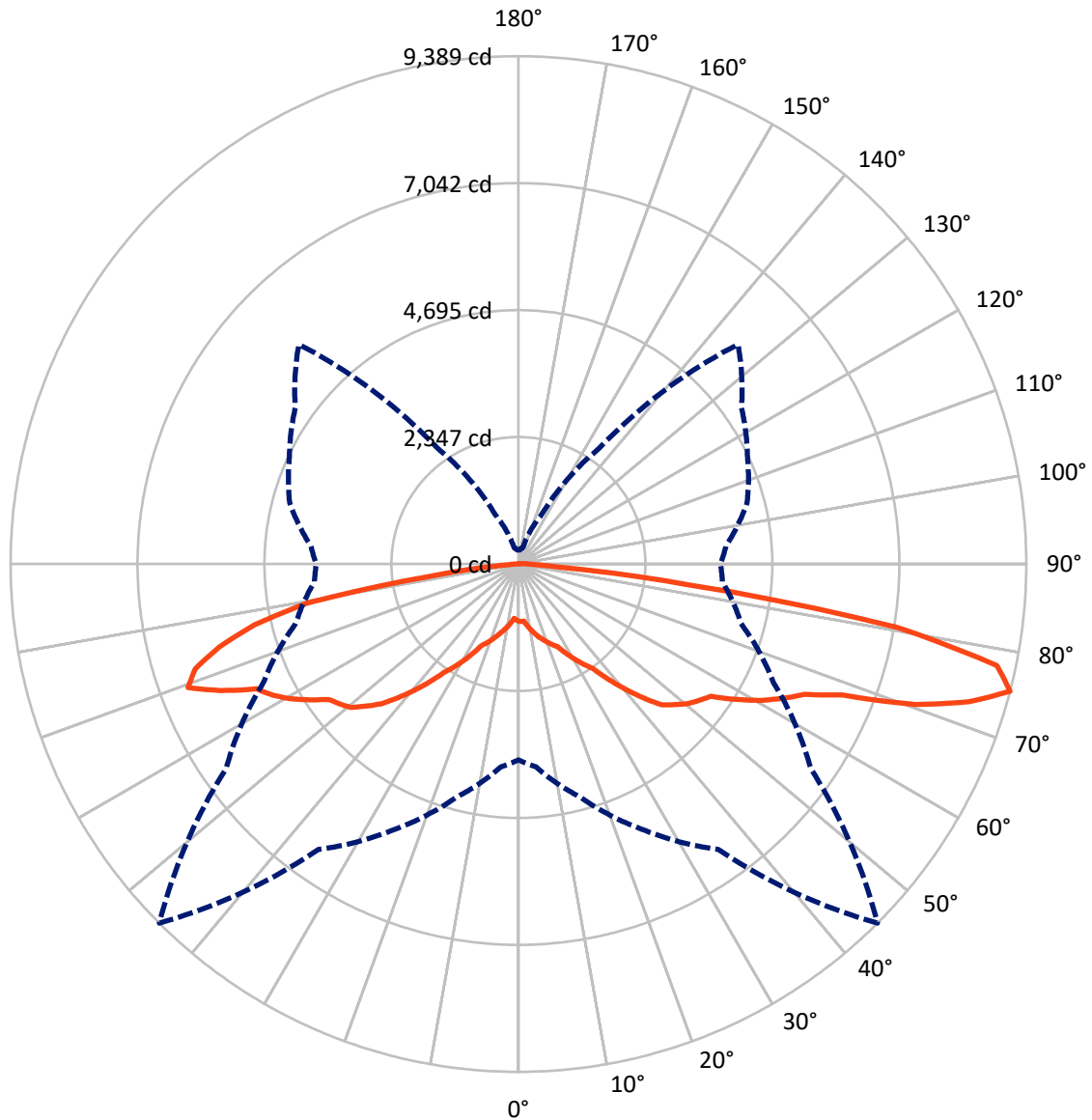
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.2 fc  
 Type IV - Medium - Non-Cutoff

REPORT NUMBER: 767599\_320MP  
CATALOG NUMBER: GSM-XX-320-MP-XX-AS-SG-XX-HS

### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral    - - - Horizontal Cone Through 75-Deg Vertical

REPORT NUMBER: 767599\_320MP

CATALOG NUMBER: GSM-XX-320-MP-XX-AS-SG-XX-HS

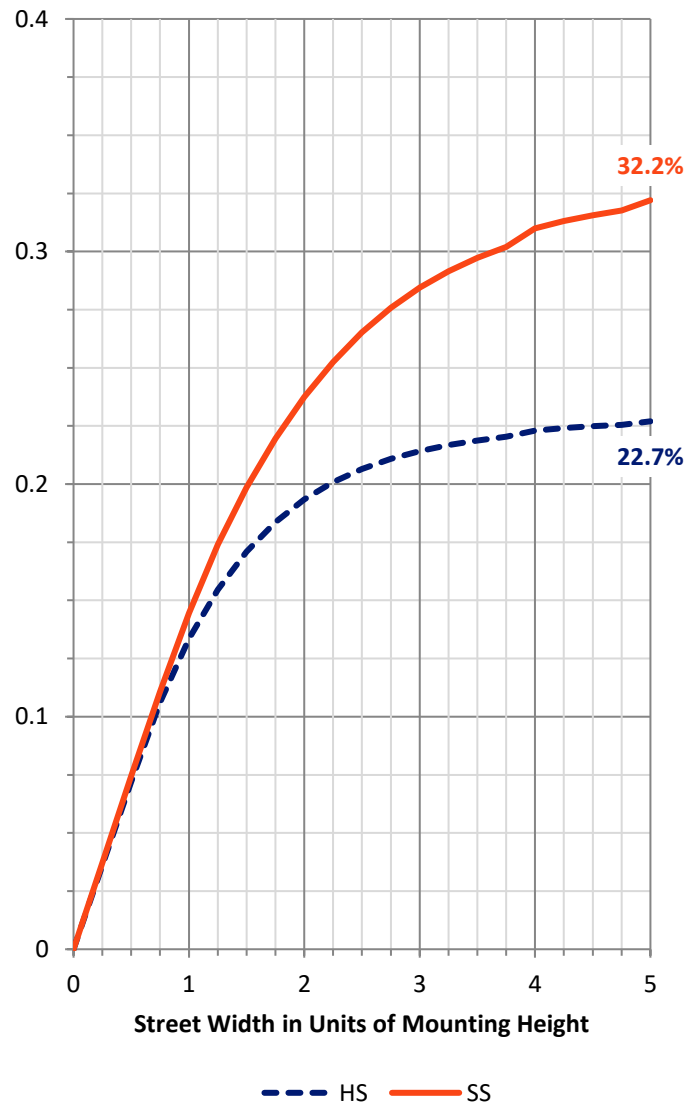
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	7496.1	20.5	7516.6
	% Lamp	22.7	0.1	22.8
<b>Street Side</b>	Lumens	10739.5	56.5	10796.0
	% Lamp	32.5	0.2	32.7
<b>Total</b>	Lumens	18235.6	77.0	18312.6
	% Lamp	55.3	0.2	55.5

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	103.8	0.6	0.3
10°-20°	375.7	2.1	1.1
20°-30°	799.6	4.4	2.4
30°-40°	1486.9	8.1	4.5
40°-50°	2470.0	13.5	7.5
50°-60°	3431.2	18.7	10.4
60°-70°	4480.4	24.5	13.6
70°-80°	4284.2	23.4	13.0
80°-90°	823.9	4.5	2.5
90°-100°	64.4	0.4	0.2
100°-110°	18.0	0.1	0.1
110°-120°	1.4	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°	18235.6	99.6	55.3
0°-180°	18312.6	100.0	55.5



REPORT NUMBER: 767599\_320MP

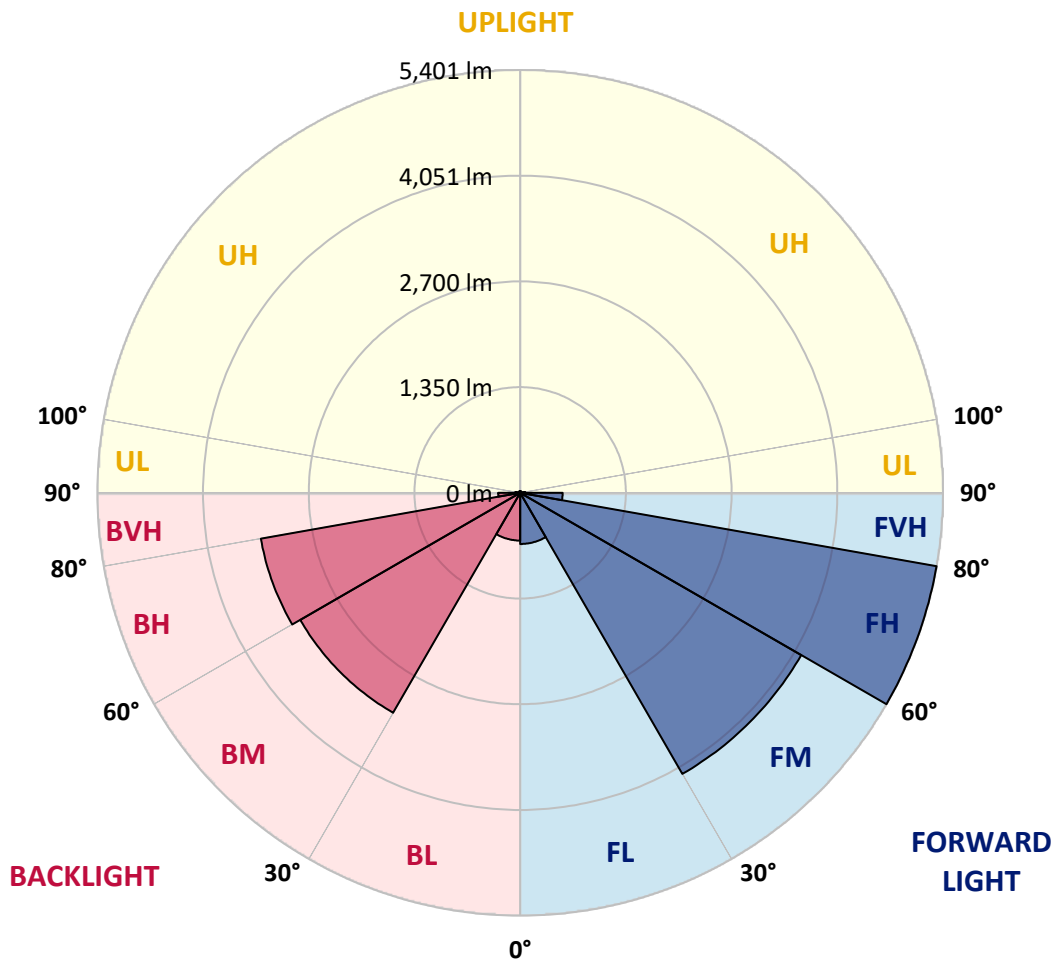
CATALOG NUMBER: GSM-XX-320-MP-XX-AS-SG-XX-HS

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

Zone	Lumens	% Lamp	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	653.9	2.0			
FM (30°-60°)	4145.4	12.6			
FH (60°-80°)	5401.0	16.4			G3/7500
FVH (80°-90°)	542.4	1.6			G4/750
BL (0°-30°)	609.8	1.8	B2/1000		
BM (30°-60°)	3244.2	9.8	B3/5000		
BH (60°-80°)	3363.5	10.2	B4/5000		G4/5000
BVH (80°-90°)	281.5	0.9			G3/500
UL (90°-100°)	64.4	0.2		U3/500	
UH (100°-180°)	20.5	0.1		U2/50	
Trapped Light	14687.4	44.5			

**BUG Rating: B4-U3-G4**

Type IV Medium





REPORT NUMBER: 767599\_320MP

CATALOG NUMBER: GSM-XX-320-MP-XX-AS-SG-XX-HS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	1062.4	1062.4	1062.4	1062.4	1062.4	1062.4	1062.4	1062.4	1062.4	1062.4	1062.4
5°	1122.9	1111.0	1092.7	1087.2	1056.9	1062.4	1050.5	1032.2	1026.7	1014.8	1001.9
15°	1509.8	1515.2	1540.0	1533.6	1454.8	1395.2	1364.9	1274.2	1267.8	1250.3	1237.5
25°	1738.9	1720.6	1733.4	1733.4	1684.8	1696.8	1715.1	1642.7	1636.2	1672.9	1660.1
35°	2354.9	2373.2	2354.9	2403.5	2336.6	2373.2	2336.6	2282.5	2282.5	2348.5	2343.0
45°	3610.8	3683.2	3634.6	3858.2	3610.8	3713.4	3664.8	3804.2	3647.4	3773.9	3647.4
50°	3876.6	4033.3	3955.4	4100.2	4124.1	4058.1	4263.4	4154.3	4124.1	4178.2	4263.4
55°	4142.4	4130.5	4136.0	4299.2	4347.8	4317.5	4486.2	4263.4	4263.4	4250.6	4233.2
60°	4673.2	4673.2	4733.7	4975.7	5169.1	5120.5	5066.4	4903.2	4709.8	4625.5	4637.4
62.5°	4770.3	4812.5	4903.2	5277.2	5561.4	5470.7	5422.1	5156.2	4878.5	4752.0	4794.2
65°	4878.5	4896.8	5071.9	5579.8	5839.2	5814.4	5808.9	5379.9	4999.5	4884.9	4830.8
67.5°	4963.8	4957.3	5211.2	5881.3	6261.8	6460.7	6243.4	5724.6	5186.5	4987.6	4915.2
70°	4891.3	5041.7	5494.5	6189.3	6822.8	7783.4	6714.6	6116.9	5391.8	5078.3	5029.8
72.5°	4202.9	4420.2	5120.5	5832.8	6720.1	8707.4	6690.8	5814.4	4950.9	4558.6	4541.2
75°	3622.7	3767.5	4467.8	5410.2	6442.3	9389.4	6600.0	5204.8	4263.4	3785.8	3737.2
77.5°	2838.0	2916.8	3725.3	4655.8	5736.5	9045.7	5615.5	4027.8	3157.9	2614.3	2560.2
80°	1642.7	1805.8	2723.4	2989.2	3955.4	7113.3	3780.3	2560.2	2156.0	1461.2	1430.9
82.5°	700.3	821.3	1430.9	1600.5	1980.9	3212.0	1805.8	1286.1	1153.2	597.7	646.2
85°	350.2	398.8	646.2	639.8	688.4	737.0	639.8	555.5	525.2	277.8	247.5
87.5°	193.4	205.3	271.3	265.8	271.3	284.2	259.4	217.2	217.2	132.9	109.1
90°	121.0	121.0	144.8	151.2	156.8	163.2	156.8	126.5	121.0	72.4	60.5
95°	60.5	66.0	78.8	84.3	102.7	90.8	109.1	90.8	72.4	48.6	42.2
105°	11.9	11.9	11.9	11.9	6.4	6.4	11.9	6.4	6.4	6.4	6.4
115°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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
166°	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



REPORT NUMBER: 767599\_320MP

CATALOG NUMBER: GSM-XX-320-MP-XX-AS-SG-XX-HS

**CANDELA DISTRIBUTION (continued):**

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1062.4	1062.4	1062.4	1062.4	1062.4	1062.4	1062.4	1062.4	1062.4	1062.4
5°	996.4	984.5	1014.8	1020.2	1008.3	1014.8	1014.8	1008.3	1001.9	1014.8
15°	1225.6	1207.2	1255.8	1304.4	1316.3	1262.2	1099.1	1075.2	1038.6	1075.2
25°	1654.6	1594.1	1533.6	1582.2	1660.1	1672.9	1720.6	1720.6	1672.9	1715.1
35°	2324.7	2276.1	2173.4	2306.3	2433.8	2499.8	2475.9	1781.1	1515.2	1509.8
45°	3562.2	3514.5	3447.6	3538.3	3622.7	3508.1	1793.0	1225.6	1026.7	1050.5
50°	3985.7	3942.6	3846.3	4112.2	4081.9	3955.4	1654.6	1279.7	1171.5	1195.3
55°	4147.9	4100.2	3930.7	4233.2	4311.1	3531.9	1745.3	1551.9	1395.2	1388.8
60°	4565.0	4486.2	4510.9	4824.4	4903.2	2849.9	1986.4	1575.8	1358.5	1364.9
62.5°	4673.2	4686.0	4686.0	5041.7	5156.2	2626.2	1980.9	1485.0	1225.6	1220.1
65°	4782.2	4848.2	4884.9	5277.2	5361.6	2560.2	1944.2	1346.6	1038.6	1026.7
67.5°	4939.0	5048.1	5247.0	5609.1	5984.0	2669.3	2028.6	1213.7	809.4	797.5
70°	5023.3	5253.4	5555.0	5899.7	6521.2	2747.2	1937.8	942.3	604.1	627.9
72.5°	4565.0	5017.8	5271.8	5597.2	6285.6	2651.0	1461.2	592.2	417.1	422.6
75°	3852.8	4378.0	4673.2	5036.2	5742.0	2620.8	990.0	319.9	259.4	265.8
77.5°	2686.8	3399.9	3592.4	4124.1	5005.9	2553.8	670.1	223.7	193.4	193.4
80°	1503.3	2252.2	2409.0	2753.7	3955.4	1859.9	434.5	193.4	229.2	301.6
82.5°	592.2	1045.0	1279.7	1262.2	1708.7	742.5	217.2	175.1	90.8	96.2
85°	259.4	452.8	549.1	531.7	476.7	187.0	78.8	84.3	11.9	23.8
87.5°	84.3	163.2	168.7	168.7	144.8	78.8	36.7	18.3	6.4	23.8
90°	23.8	78.8	84.3	84.3	72.4	42.2	18.3	6.4	0.0	0.0
95°	11.9	48.6	54.1	54.1	36.7	36.7	18.3	11.9	6.4	0.0
105°	0.0	6.4	6.4	6.4	0.0	0.0	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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
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
166°	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)