

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\_400MP

Luminaire Tested: **GSM-XX-400-MP-XX-AS-SG-XX-X**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: 766461\_400MP  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GSM-XX-400-MP-XX-AS-SG-XX-X  
Description: MEDIUM ARCHITECTURAL AREA LUMINAIRE-VERTICAL LAMP-SQUARE DISTRIBUTION  
Light Source: 400 WATT PULSE-START CLEAR ED-37 VBU BURN  
Ballast/Driver: -

**Summary**

Lumens per Lamp: 44000 (1 lamp)  
Luminaire Lumens: 30121.3 lumens  
Efficiency: 68.5%  
Efficacy: 66.6 lumens/watt  
Luminous Opening: Point Source (0' x 0' x 0')  
IES Classification: Type V - Short - Cutoff  
BUG Rating: B5 - U3 - G4

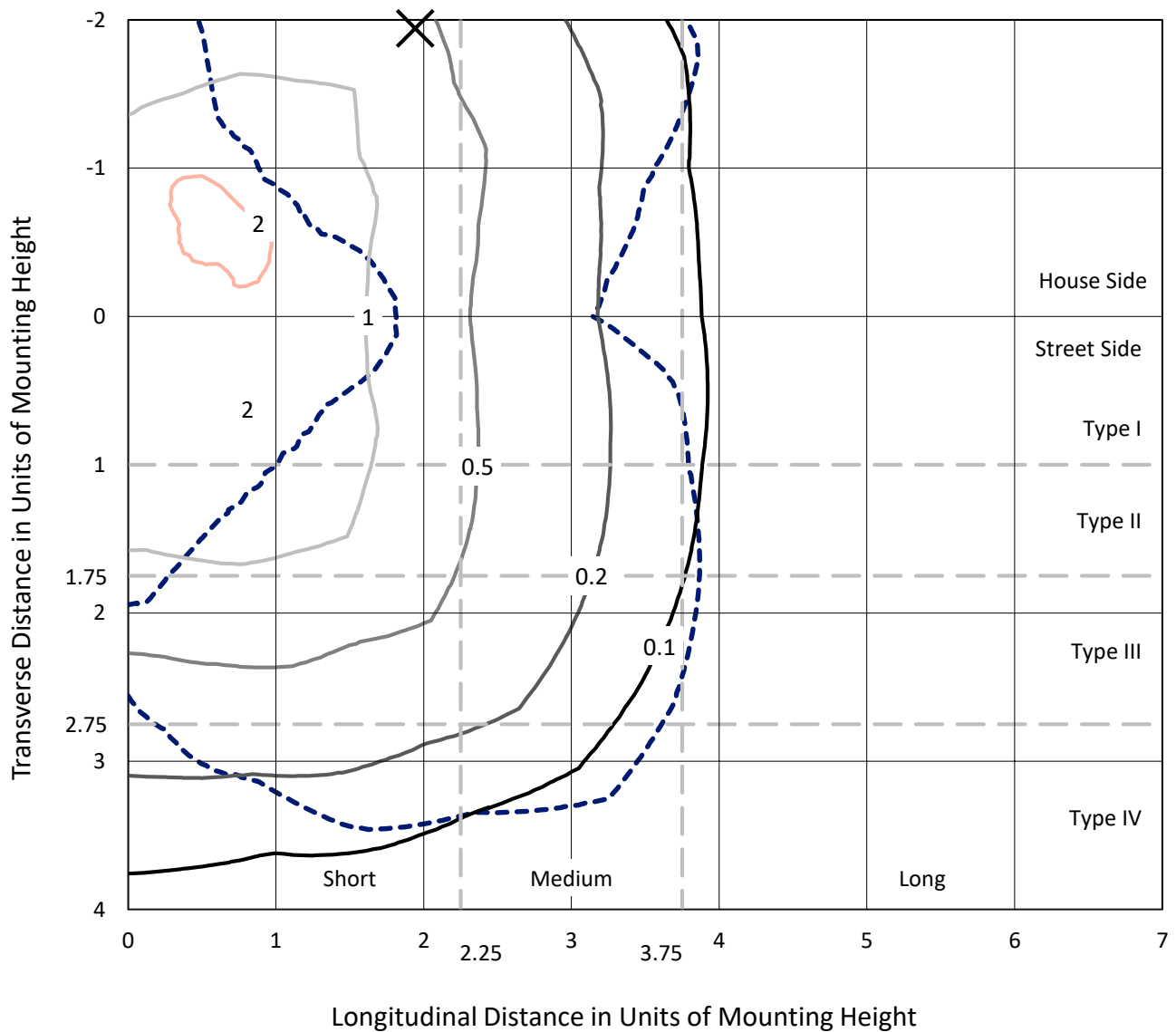
Input Watts (W): 452  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

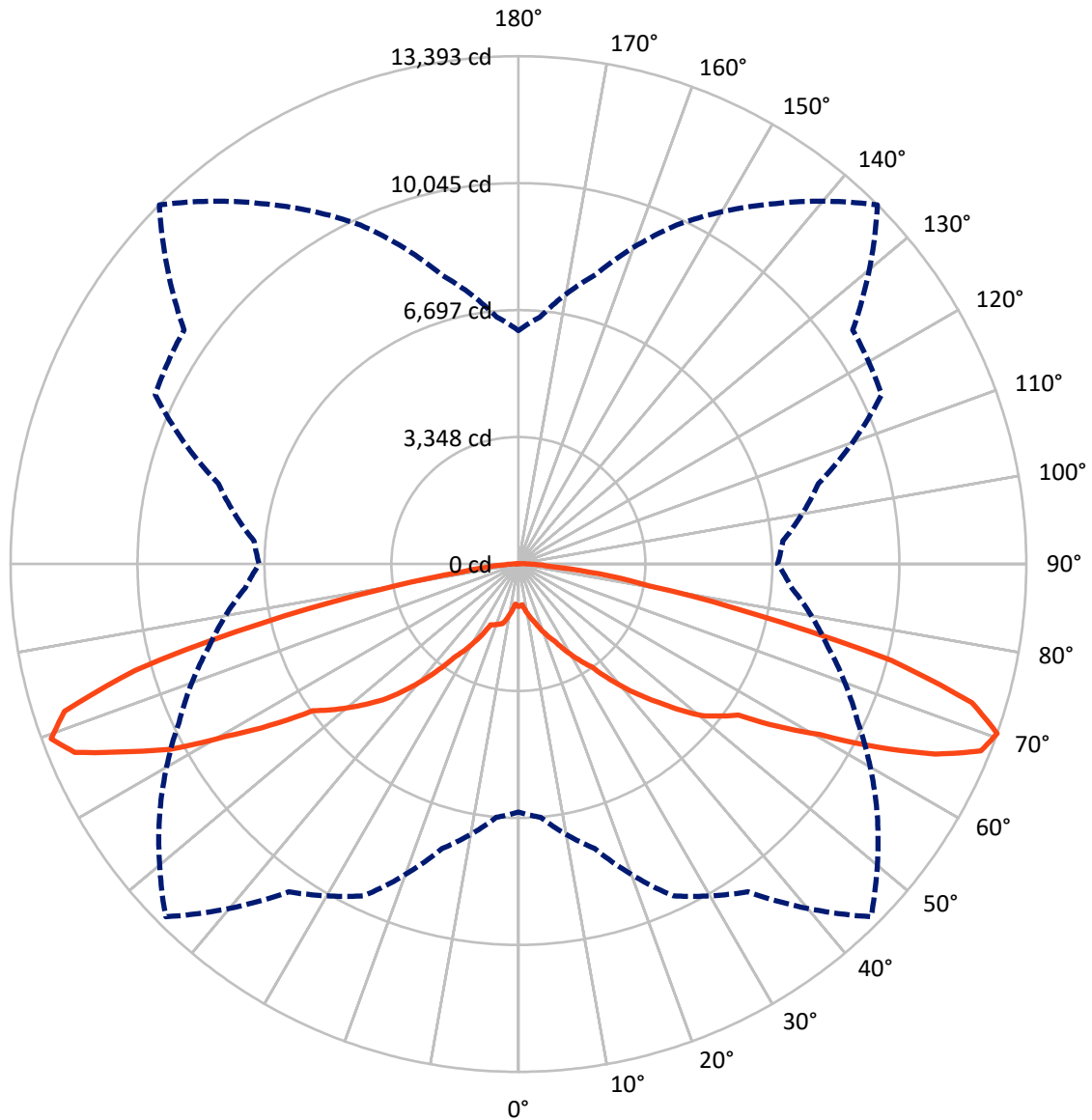
× Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 2.2 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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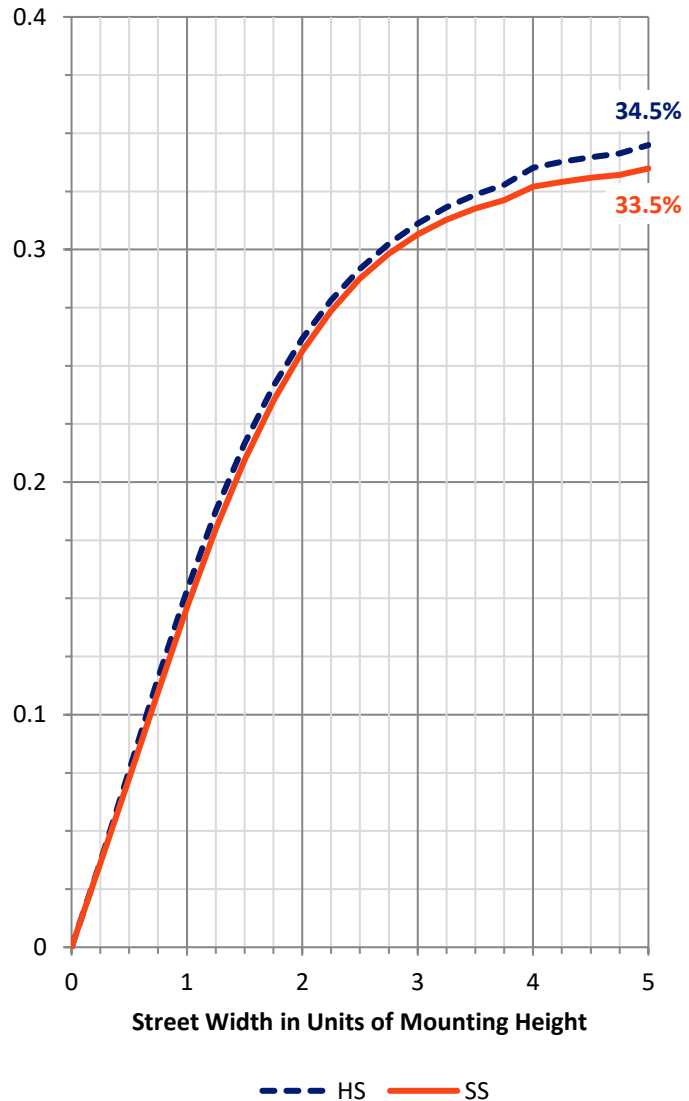
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	15185.1	54.9	15239.9
	% Lamp	34.5	0.1	34.6
<b>Street Side</b>	Lumens	14830.4	51.0	14881.4
	% Lamp	33.7	0.1	33.8
<b>Total</b>	Lumens	30015.5	105.9	30121.3
	% Lamp	68.2	0.2	68.5

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	111.4	0.4	0.3
10°-20°	428.9	1.4	1.0
20°-30°	960.2	3.2	2.2
30°-40°	1988.6	6.6	4.5
40°-50°	3730.5	12.4	8.5
50°-60°	5720.2	19.0	13.0
60°-70°	8636.0	28.7	19.6
70°-80°	7473.3	24.8	17.0
80°-90°	1045.5	3.5	2.4
90°-100°	89.4	0.3	0.2
100°-110°	22.4	0.1	0.1
110°-120°	2.4	0.0	0.0
120°-130°	0.5	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°	30015.5	99.6	68.2
0°-180°	30121.3	100.0	68.5



REPORT NUMBER: 766461\_400MP

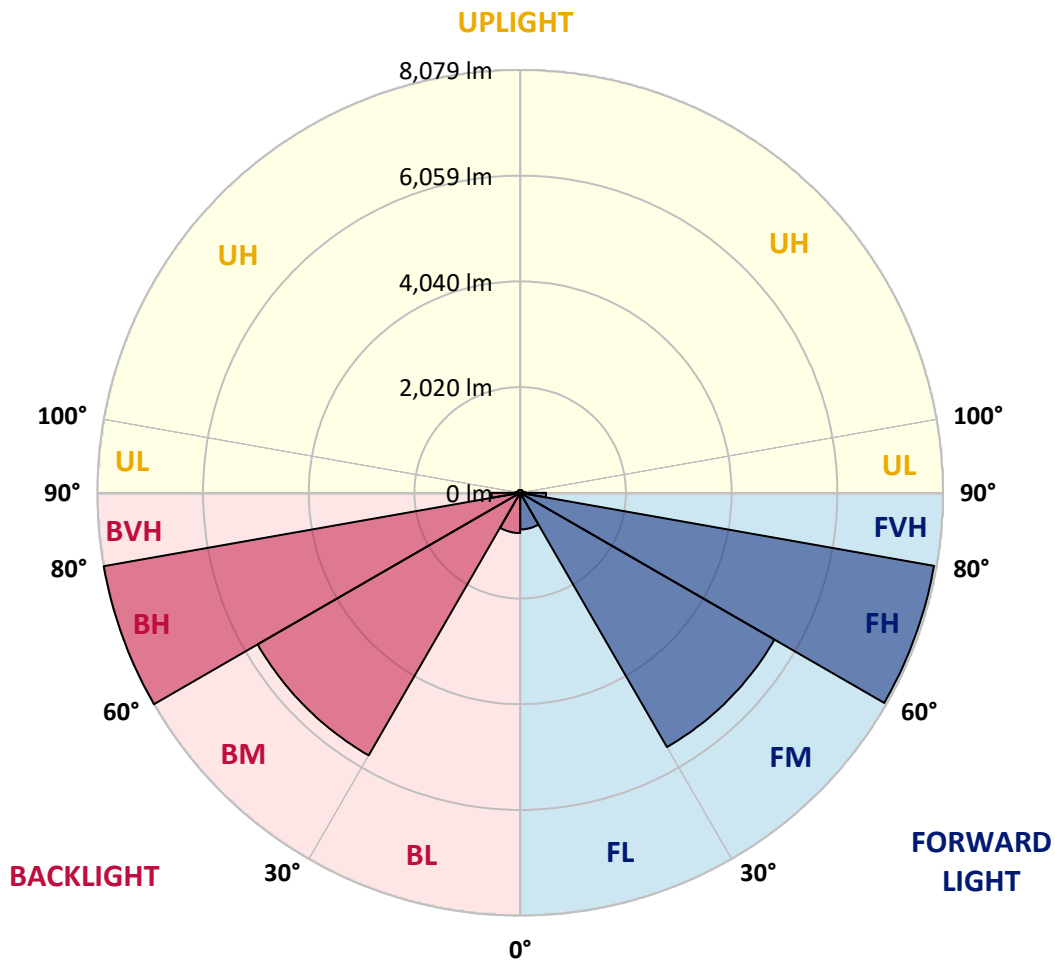
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Lamp	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	700.2	1.6			
FM	(30°-60°)	5610.0	12.8			
FH	(60°-80°)	8030.1	18.3			G4/12000
FVH	(80°-90°)	495.5	1.1			G3/500
BL	(0°-30°)	769.2	1.7	B2/1000		
BM	(30°-60°)	5791.8	13.2	B4/8500		
BH	(60°-80°)	8079.2	18.4	B5		G4/12000
BVH	(80°-90°)	550.1	1.3			G4/750
UL	(90°-100°)	89.4	0.2		U3/500	
UH	(100°-180°)	54.9	0.1		U3/500	
Trapped Light		13878.7	31.5			

**BUG Rating: B5-U3-G4**

Type V Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	1119.6	1119.6	1119.6	1119.6	1119.6	1119.6	1119.6	1119.6	1119.6	1119.6	1119.6
5°	1014.4	1015.7	1032.8	1035.2	1056.0	1058.4	1079.2	1093.9	1117.1	1125.7	1120.8
15°	1247.9	1345.7	1425.1	1483.8	1632.9	1617.0	1658.6	1602.3	1581.6	1546.1	1509.4
25°	1514.3	1532.7	1684.2	1648.8	1676.9	1766.1	1830.9	1850.4	1855.3	1943.3	1960.4
35°	2406.6	2542.2	2550.8	2750.0	2765.9	2992.0	2831.9	2891.8	2824.6	2960.2	2899.1
45°	4195.9	4349.9	4436.7	4791.1	4649.3	4980.6	4901.1	5022.1	4734.9	4809.4	4885.2
50°	5308.1	5167.6	5447.4	5926.6	5618.6	5816.6	5863.0	5880.1	5685.8	5388.8	5578.2
55°	5321.6	5331.3	5836.1	6254.1	6475.3	6664.8	6554.8	6408.1	5861.8	5550.1	5660.1
60°	6354.3	6370.2	6959.3	7910.2	8515.2	8958.9	8423.6	8028.8	6844.4	6464.3	6518.1
62.5°	6625.7	6648.9	7416.4	8536.0	9346.3	10404.8	9458.8	8746.2	7377.3	6875.0	6849.3
65°	6938.6	7005.8	7867.4	9281.6	9989.2	11502.3	10217.8	8918.6	7844.2	7206.2	7169.6
67.5°	6769.9	7062.0	8210.9	9951.3	10530.7	12708.7	11171.1	9551.7	8269.6	7466.6	7192.8
70°	6541.3	6708.8	7769.7	9656.8	10553.9	13154.8	11553.7	9876.8	8451.7	7234.3	6835.9
72.5°	6120.9	6262.7	6805.3	8769.4	9991.7	12584.0	11152.8	9704.4	8234.1	7082.8	6662.3
75°	5372.9	5280.0	5254.3	6998.4	8133.9	10498.9	9664.1	8617.9	7313.8	6529.1	6129.4
77.5°	3214.4	3571.3	3883.0	4445.2	5157.8	6970.3	6685.6	5913.1	5019.7	4758.1	4632.2
80°	1925.0	2058.2	2198.8	2420.0	2873.4	3702.1	3908.7	3386.8	2789.1	2807.4	3193.7
82.5°	743.1	702.8	1294.3	950.9	1194.1	1551.0	1623.1	1389.7	1009.6	1030.3	1397.0
85°	308.0	356.9	499.9	619.7	838.4	807.9	817.7	684.4	490.1	348.3	413.1
87.5°	117.3	174.8	235.9	305.6	671.0	361.8	389.9	336.1	179.7	125.9	172.3
90°	66.0	79.4	114.9	123.4	223.7	156.4	184.6	168.7	117.3	56.2	56.2
95°	18.3	28.1	74.6	89.2	89.2	69.7	79.4	123.4	66.0	28.1	25.7
105°	0.0	0.0	2.4	7.3	4.9	4.9	7.3	7.3	4.9	0.0	0.0
115°	0.0	0.0	2.4	2.4	4.9	2.4	2.4	2.4	2.4	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°	1119.6	1119.6	1119.6	1119.6	1119.6	1119.6	1119.6	1119.6	1119.6	1119.6
5°	1117.1	1117.1	1109.8	1093.9	1081.7	1071.9	1076.8	1041.3	1089.0	1018.1
15°	1455.7	1450.8	1623.1	1645.1	1586.4	1553.4	1522.9	1445.9	1356.7	1340.8
25°	2004.4	2050.9	2017.9	2200.0	2273.3	2230.6	2184.1	1994.7	1810.1	1756.3
35°	3014.0	3201.0	3106.9	3306.1	3331.8	3314.7	3116.7	2904.0	2492.1	2415.1
45°	4637.1	4906.0	5354.6	5426.7	5218.9	5438.9	5365.6	4782.6	4062.7	3588.4
50°	5546.4	5606.3	6342.1	6188.1	6290.8	6087.9	6103.8	5442.6	4744.7	4255.8
55°	5624.7	5790.9	6756.4	6790.7	7033.9	6697.8	6546.2	5445.0	4716.6	4303.4
60°	6503.4	6910.4	7979.9	8180.3	9136.1	8415.0	7646.2	6113.6	5150.4	4868.1
62.5°	6887.2	7412.8	8715.7	9017.6	10645.6	9302.3	8316.0	6573.1	5490.2	5195.7
65°	7192.8	7910.2	9425.8	9710.6	12086.6	10232.4	8779.2	7036.3	5793.3	5475.6
67.5°	7398.1	8417.4	10227.6	10241.0	13152.3	11026.9	9348.8	7405.4	6134.3	5793.3
70°	7000.9	8190.1	10568.6	10762.9	13393.1	11586.7	9863.3	7910.2	6536.4	6157.6
72.5°	6802.9	7643.8	9923.2	10243.4	12504.6	11245.7	9638.4	7856.4	6646.4	6442.3
75°	6054.9	6466.8	8339.2	8863.6	10156.7	10599.1	8195.0	6959.3	6069.6	5821.4
77.5°	4755.7	4721.4	6052.4	5854.4	6351.9	7131.7	5359.4	4545.4	4329.1	3994.2
80°	2794.0	2702.3	3665.4	3414.9	3522.4	3990.6	3073.9	2486.0	2399.2	2148.7
82.5°	1091.4	1004.7	1709.9	1527.8	2156.0	2027.7	1443.4	1043.8	1191.7	728.4
85°	381.3	448.6	682.0	779.8	833.6	894.7	653.9	441.2	333.7	228.6
87.5°	154.0	276.2	378.9	425.3	546.3	567.1	392.3	222.4	156.4	79.4
90°	63.6	114.9	151.6	217.6	223.7	259.1	179.7	114.9	53.8	51.3
95°	35.4	79.4	84.3	89.2	74.6	91.7	92.9	84.3	25.7	18.3
105°	2.4	4.9	7.3	7.3	4.9	7.3	9.8	7.3	4.9	4.9
115°	0.0	2.4	2.4	2.4	4.9	2.4	2.4	2.4	2.4	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)