

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: 767515\_320MP

Luminaire Tested: **GSM-XX-320-MP-XX-3V-SG-XX-X**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: 767515\_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-3V-SG-XX-X  
Description: MEDIUM ARCHITECTURAL AREA LUMINAIRE-VERTICAL LAMP-TYPE III DISTRIBUTION  
Light Source: 320 WATT PULSE-START CLEAR ED-37 VBU BURN  
Ballast/Driver: -

**Summary**

Lumens per Lamp: 33000 (1 lamp)  
Luminaire Lumens: 21378.6 lumens  
Efficiency: 64.8%  
Efficacy: 61.1 lumens/watt  
Luminous Opening: Point Source (0' x 0' x 0')  
IES Classification: Type III - Medium - Cutoff  
BUG Rating: B4 - U3 - G4

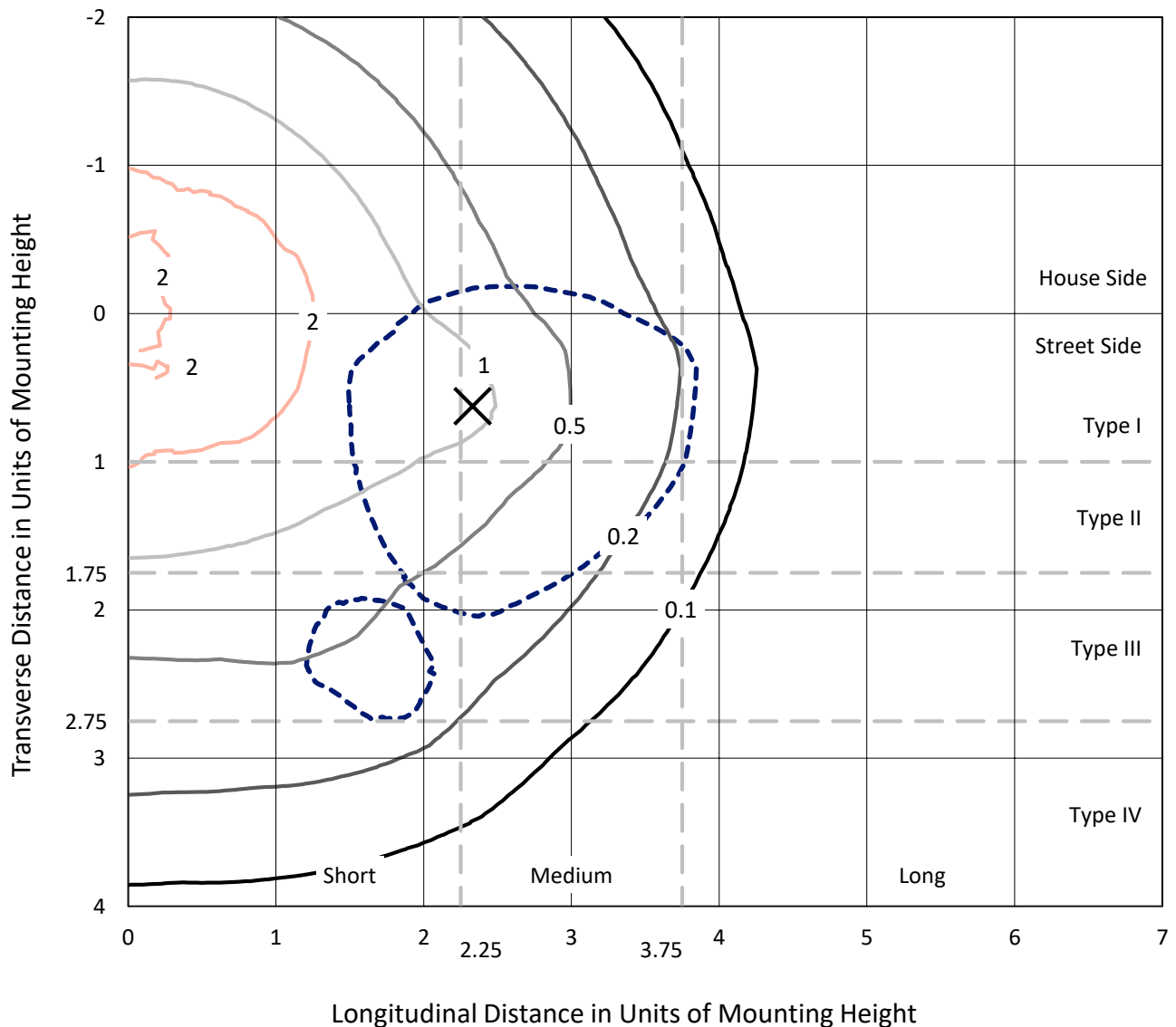
Input Watts (W): 350  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

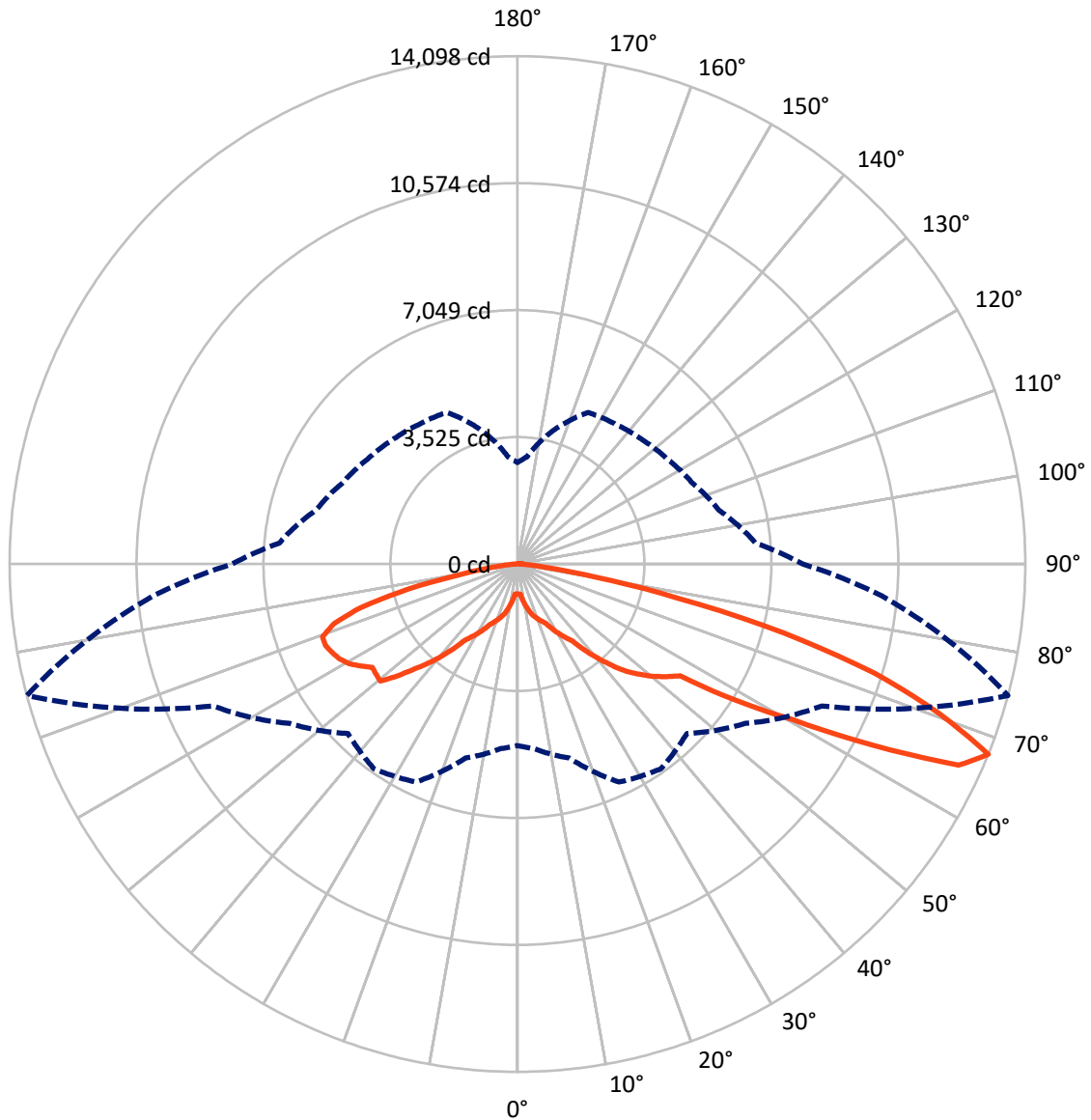
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.5 fc  
 Type III - Medium - Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral    - - - Horizontal Cone Through 67.5-Deg Vertical

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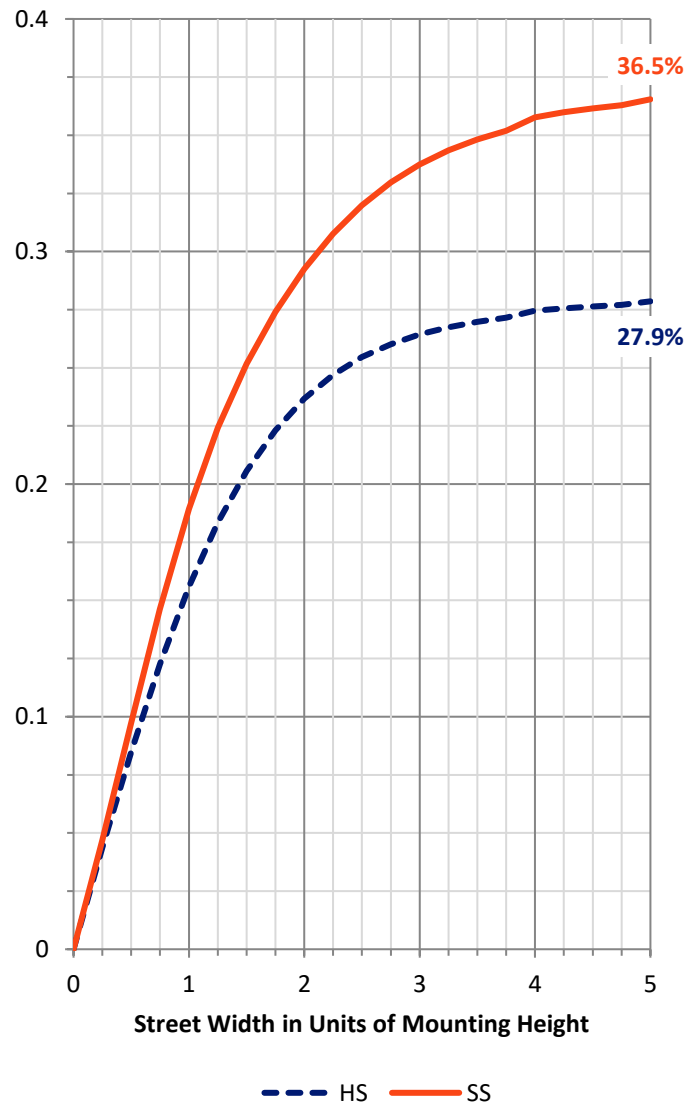
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	9220.3	25.3	9245.6
	% Lamp	27.9	0.1	28.0
<b>Street Side</b>	Lumens	12083.2	49.8	12133.0
	% Lamp	36.6	0.2	36.8
<b>Total</b>	Lumens	21303.5	75.1	21378.6
	% Lamp	64.6	0.2	64.8

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	89.6	0.4	0.3
10°-20°	376.4	1.8	1.1
20°-30°	839.4	3.9	2.5
30°-40°	1635.6	7.7	5.0
40°-50°	2919.9	13.7	8.8
50°-60°	4285.7	20.0	13.0
60°-70°	6062.2	28.4	18.4
70°-80°	4593.6	21.5	13.9
80°-90°	547.0	2.6	1.7
90°-100°	58.7	0.3	0.2
100°-110°	19.6	0.1	0.1
110°-120°	2.7	0.0	0.0
120°-130°	0.2	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°	21303.5	99.6	64.6
0°-180°	21378.6	100.0	64.8



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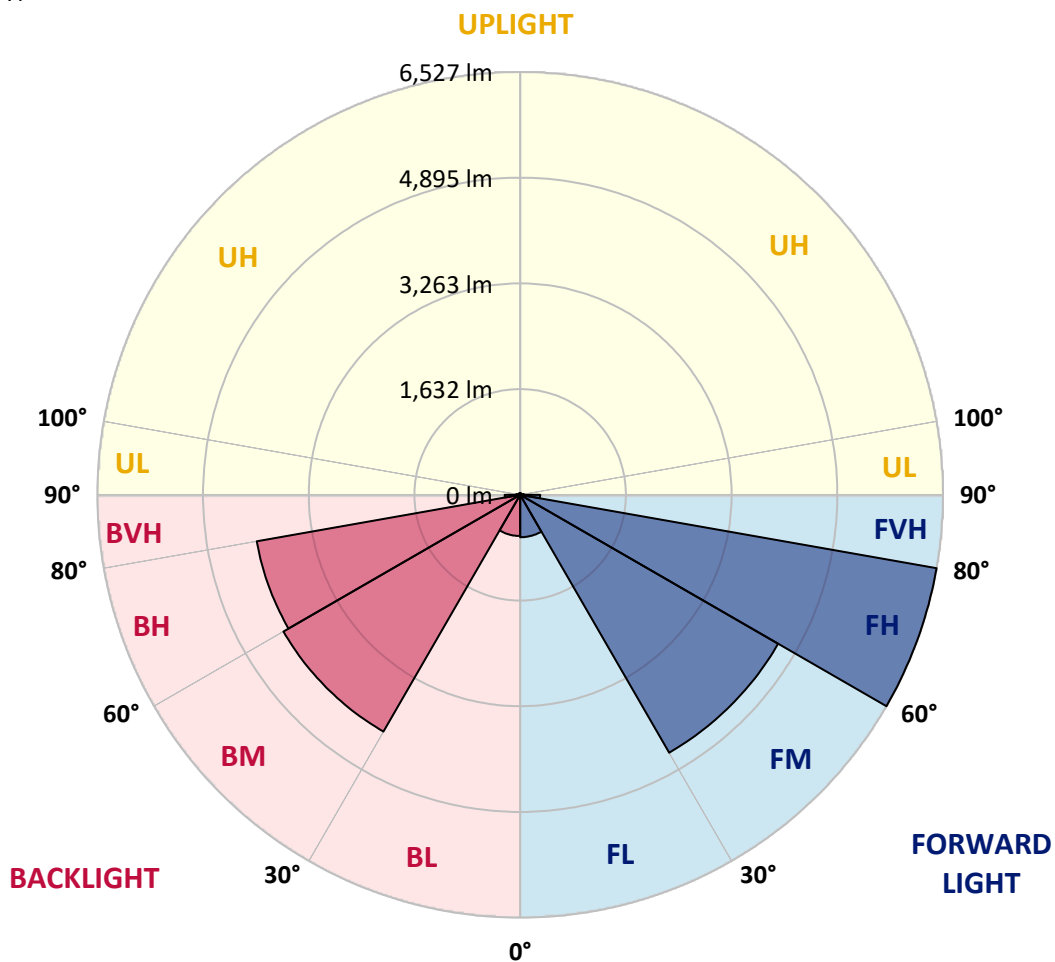
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Lamp	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	655.4	2.0			
FM (30°-60°)	4597.0	13.9			
FH (60°-80°)	6526.9	19.8			G3/7500
FVH (80°-90°)	307.9	0.9			G3/500
BL (0°-30°)	636.0	1.9	B2/1000		
BM (30°-60°)	4219.7	12.8	B3/5000		
BH (60°-80°)	4129.0	12.5	B4/5000		G4/5000
BVH (80°-90°)	239.1	0.7			G3/500
UL (90°-100°)	58.7	0.2		U3/500	
UH (100°-180°)	25.3	0.1		U2/50	
Trapped Light	11621.4	35.2			

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

Type III Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	832.3	832.3	832.3	832.3	832.3	832.3	832.3	832.3	832.3	832.3	832.3
5°	880.0	875.4	880.0	875.4	870.8	880.0	884.6	865.3	841.5	827.8	822.2
15°	1386.9	1386.9	1391.5	1401.6	1396.1	1430.0	1415.3	1492.3	1434.6	1386.9	1377.8
25°	1654.6	1640.8	1650.0	1650.0	1654.6	1712.3	1750.8	1788.4	1822.3	1870.0	1870.0
35°	2295.3	2286.2	2305.4	2314.6	2372.3	2477.8	2620.8	2644.6	2620.8	2730.8	2687.7
45°	3653.8	3491.6	3472.3	3634.6	3686.8	4160.8	4084.7	4400.0	4256.1	4223.1	4156.2
50°	4016.8	3988.4	3964.6	4180.0	4266.2	4701.6	4844.6	5049.9	4902.3	5079.2	5165.4
55°	4093.8	4065.4	4132.3	4290.0	4543.0	4926.2	5351.5	5433.1	5480.8	5155.3	5193.8
60°	4609.9	4624.6	4710.8	4916.1	5236.9	5666.8	6442.3	7236.2	8761.5	6518.4	6203.1
62.5°	4878.5	4878.5	5045.3	5418.4	5696.2	6059.2	6943.8	8250.0	11086.2	7805.4	6896.1
65°	5021.5	5060.0	5413.8	6073.8	6207.7	6384.6	7389.2	9039.2	13463.1	9158.4	7532.2
67.5°	5040.8	5141.6	5576.1	6676.1	6939.2	6652.2	7719.2	9320.7	14098.3	10148.4	7915.4
70°	5088.4	5193.8	5556.8	6829.2	7350.8	6796.2	7747.7	9009.9	12419.9	10200.7	7829.2
72.5°	5031.6	4993.1	5375.3	6341.5	7336.1	6604.6	7206.8	8025.4	10373.0	9192.3	7326.9
75°	4199.2	4141.5	4576.9	5251.6	5877.7	5681.5	6131.6	6671.5	7652.3	7469.9	6093.1
77.5°	2793.1	2950.8	3338.5	3615.3	4136.9	4136.9	4557.7	4557.7	4548.5	4452.2	3974.7
80°	1262.2	1406.2	1444.7	1731.6	1941.5	2152.3	2295.3	2180.8	2176.2	1946.1	1803.1
82.5°	593.1	640.8	607.8	717.8	846.1	899.2	956.1	913.0	836.9	793.8	779.2
85°	286.9	296.1	267.7	301.6	349.2	358.4	382.2	368.5	334.6	353.8	377.7
87.5°	105.4	105.4	114.6	124.7	129.2	129.2	138.4	153.1	138.4	129.2	129.2
90°	76.1	81.6	81.6	86.2	86.2	90.8	100.8	110.0	105.4	90.8	90.8
95°	66.9	57.8	57.8	66.9	71.5	66.9	86.2	95.3	124.7	76.1	76.1
105°	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2
115°	0.0	4.6	4.6	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



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**CANDELA DISTRIBUTION (continued):**

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	832.3	832.3	832.3	832.3	832.3	832.3	832.3	832.3	832.3	832.3
5°	822.2	832.3	827.8	817.7	803.0	803.0	798.4	789.2	793.8	793.8
15°	1372.2	1425.4	1434.6	1391.5	1372.2	1310.8	1262.2	1253.1	1224.7	1214.6
25°	1884.7	1846.2	1764.6	1702.2	1678.4	1669.2	1635.3	1616.1	1626.2	1645.4
35°	2616.2	2553.8	2467.7	2357.7	2353.1	2299.9	2281.6	2271.5	2276.1	2266.9
45°	4132.3	4084.7	3839.9	3744.6	3619.9	3563.1	3399.9	3429.2	3524.6	3509.9
50°	5159.9	5006.8	4456.8	4466.9	4165.3	3983.8	3873.8	3668.5	3668.5	3500.8
55°	5208.5	4945.4	4605.3	4438.5	4309.2	4141.5	4089.2	4065.4	4041.6	4046.2
60°	5968.4	5442.2	5098.5	4835.4	4634.7	4524.7	4438.5	4342.2	4160.8	4016.8
62.5°	6283.8	5595.3	5289.2	5021.5	4811.6	4643.8	4553.1	4456.8	3869.2	3692.3
65°	6537.7	5700.8	5366.2	5073.8	4896.8	4715.3	4600.8	4294.6	3457.7	3280.8
67.5°	6638.5	5786.9	5346.9	5079.2	4887.7	4739.2	4643.8	3835.3	2984.7	2812.3
70°	6566.1	5776.8	5336.8	5073.8	4749.2	4605.3	4261.6	3218.4	2472.2	2295.3
72.5°	6145.3	5346.9	4878.5	4519.2	4184.6	3960.0	3443.0	2448.4	1946.1	1855.3
75°	5323.1	4505.4	4146.1	3768.4	3509.9	3179.9	2683.1	1917.7	1650.0	1654.6
77.5°	3610.8	3123.1	2950.8	2625.3	2415.4	2099.2	1755.4	1358.5	1276.9	1272.3
80°	1779.2	1597.8	1530.8	1272.3	1157.8	951.5	836.9	755.3	717.8	717.8
82.5°	774.6	750.8	746.2	703.1	688.4	621.5	559.2	526.2	526.2	526.2
85°	373.1	363.9	406.1	449.2	511.5	502.3	406.1	330.0	310.8	306.2
87.5°	114.6	100.8	95.3	81.6	76.1	76.1	71.5	62.3	57.8	57.8
90°	81.6	66.9	57.8	47.7	47.7	47.7	43.1	38.5	38.5	38.5
95°	57.8	38.5	38.5	28.4	28.4	9.2	28.4	28.4	28.4	19.2
105°	9.2	9.2	9.2	9.2	4.6	9.2	9.2	9.2	9.2	9.2
115°	0.0	0.0	4.6	0.0	4.6	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)