

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: 767600_320MP

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: 767600_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-AR-SG-XX-HS
Description: MEDIUM ARCHITECTURAL AREA LUMINAIRE-VERTICAL LAMP-ROUND DISTRIBUTION
Light Source: 320 WATT PULSE-START CLEAR ED-37 VBU BURN
Ballast/Driver: -

Summary

Lumens per Lamp: 33000 (1 lamp)
Luminaire Lumens: 18660.1 lumens
Efficiency: 56.5%
Efficacy: 53.3 lumens/watt
Luminous Opening: Point Source (0' x 0' x 0')
IES Classification: Type IV - Short - Cutoff
BUG Rating: B4 - U3 - G4

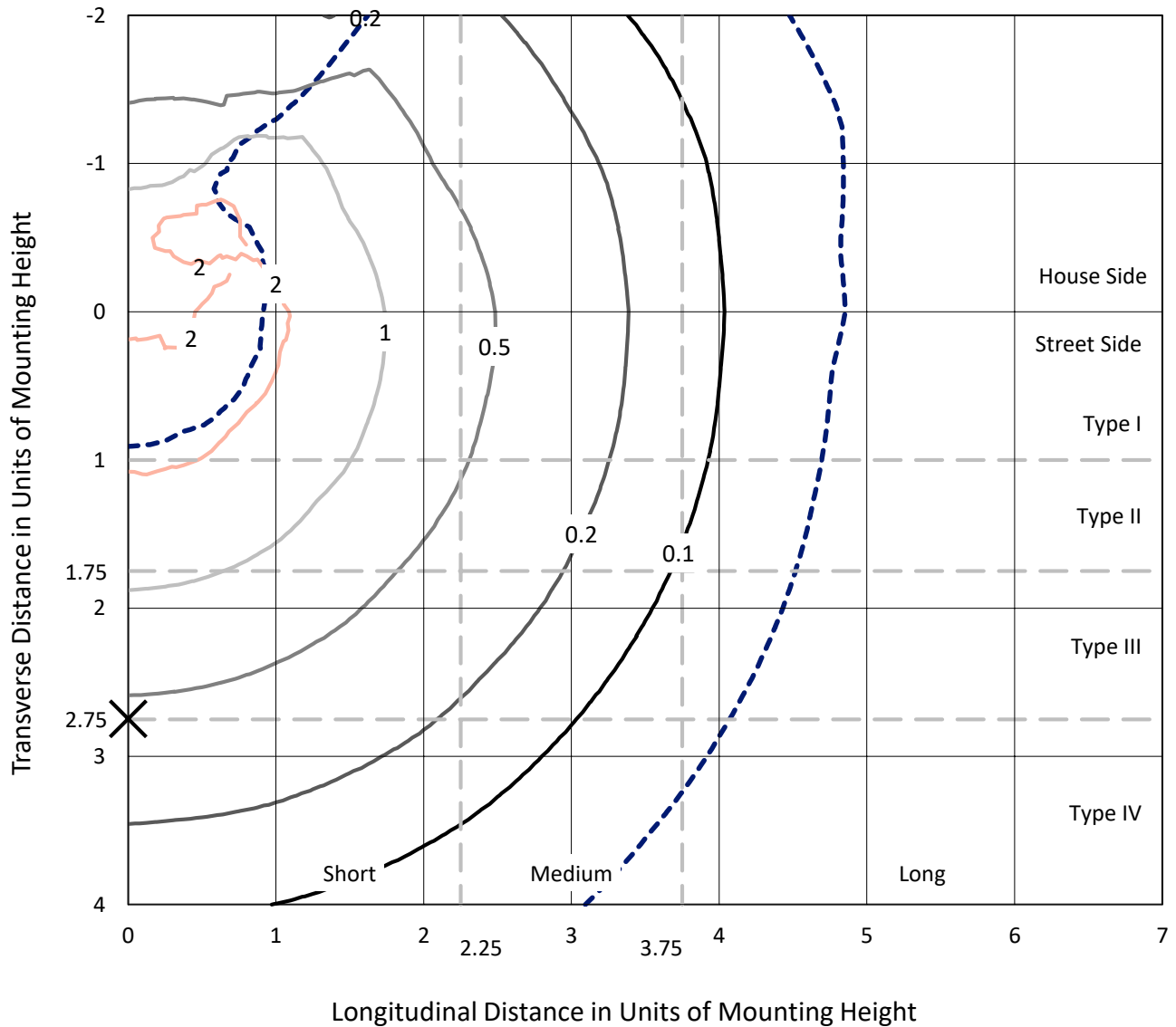
Input Watts (W): 350
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

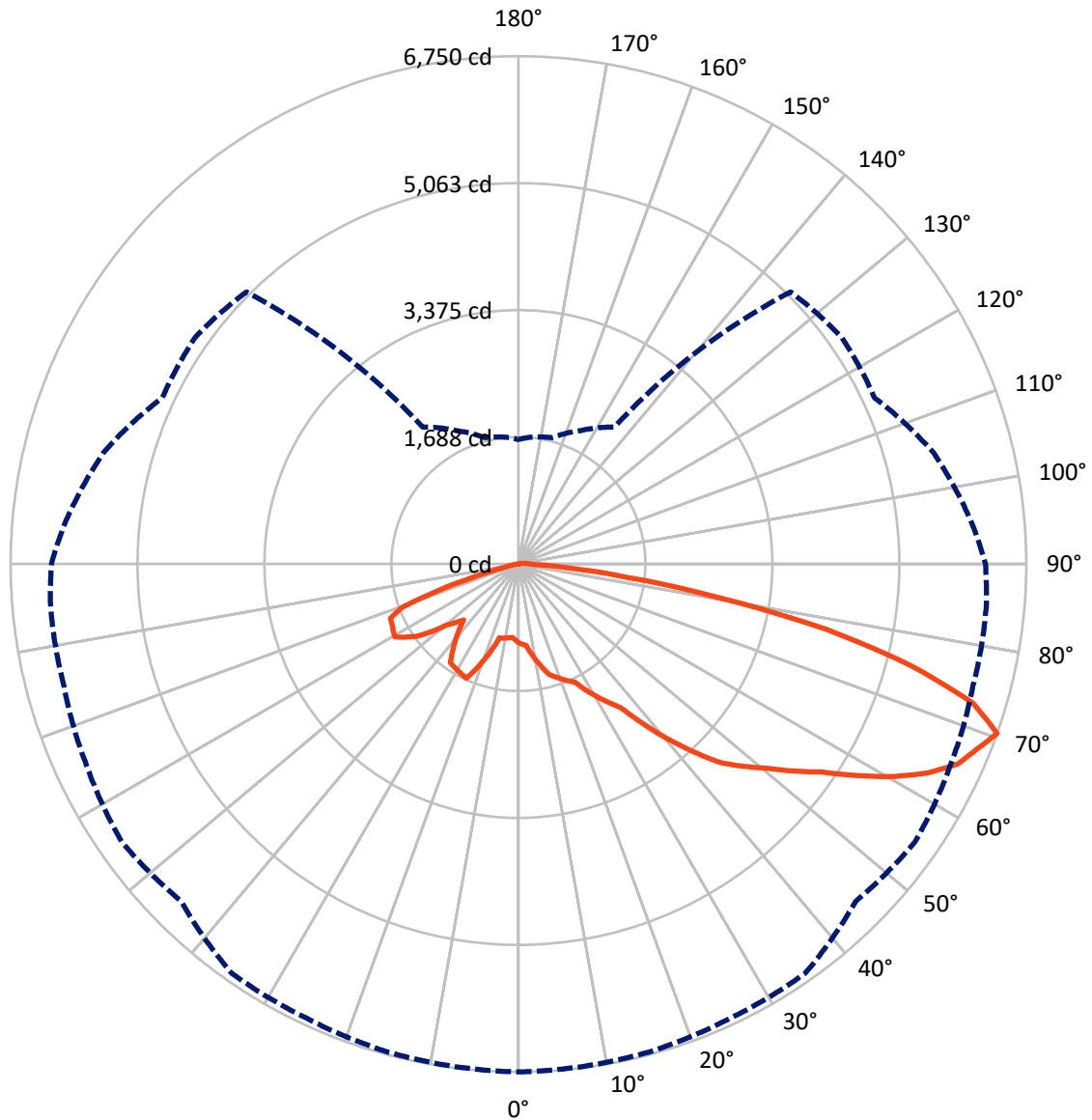
× Max cd
 - - - 1/2 Max cd



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

REPORT NUMBER: 767600_320MP
CATALOG NUMBER: GSM-XX-320-MP-XX-AR-SG-XX-HS

Luminous Intensity Polar Plot



— Vertical Plane Through 0-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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

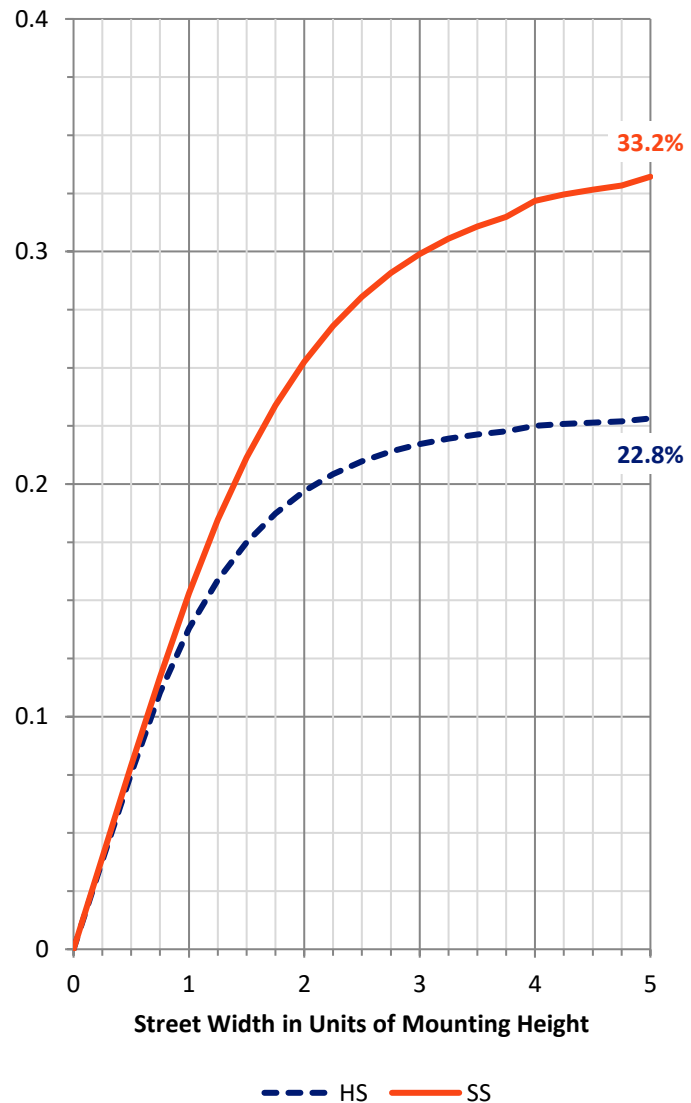
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7532.5	17.1	7549.6
	% Lamp	22.8	0.1	22.9
Street Side	Lumens	11063.9	46.7	11110.5
	% Lamp	33.5	0.1	33.7
Total	Lumens	18596.4	63.8	18660.1
	% Lamp	56.4	0.2	56.5

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	100.3	0.5	0.3
10°-20°	369.7	2.0	1.1
20°-30°	794.9	4.3	2.4
30°-40°	1488.5	8.0	4.5
40°-50°	2511.8	13.5	7.6
50°-60°	3634.9	19.5	11.0
60°-70°	4819.8	25.8	14.6
70°-80°	4174.5	22.4	12.7
80°-90°	735.0	3.9	2.2
90°-100°	53.7	0.3	0.2
100°-110°	15.2	0.1	0.0
110°-120°	0.9	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°	18596.4	99.7	56.4
0°-180°	18660.1	100.0	56.5



REPORT NUMBER: 767600_320MP

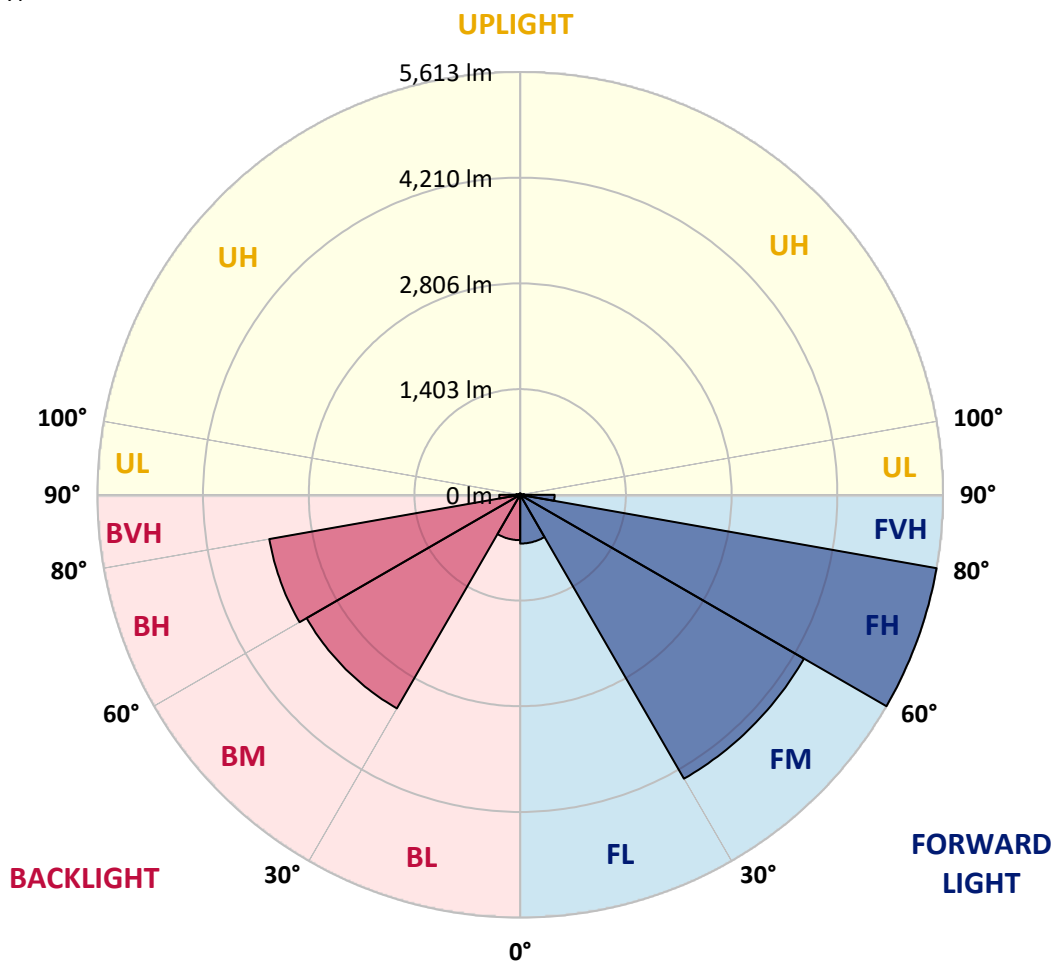
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Lamp	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	647.1	2.0			
FM (30°-60°)	4350.3	13.2			
FH (60°-80°)	5612.7	17.0			G3/7500
FVH (80°-90°)	457.1	1.4			G3/500
BL (0°-30°)	602.1	1.8	B2/1000		
BM (30°-60°)	3273.9	9.9	B3/5000		
BH (60°-80°)	3381.7	10.2	B4/5000		G4/5000
BVH (80°-90°)	277.9	0.8			G3/500
UL (90°-100°)	53.7	0.2		U3/500	
UH (100°-180°)	17.1	0.1		U2/50	
Trapped Light	14339.9	43.5			

BUG Rating: B4-U3-G4

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	1050.5	1050.5	1050.5	1050.5	1050.5	1050.5	1050.5	1050.5	1050.5	1050.5	1050.5
5°	1087.2	1045.0	1068.8	1062.4	1045.0	1014.8	1020.2	1014.8	513.3	990.0	990.0
15°	1521.7	1491.4	1557.4	1551.9	1442.8	1370.4	1358.5	1309.9	1255.8	1243.9	1232.0
25°	1738.9	1720.6	1733.4	1708.7	1684.8	1648.2	1678.4	1672.9	1630.8	1666.5	1666.5
35°	2343.0	2294.4	2331.1	2361.3	2318.2	2366.8	2300.8	2318.2	2294.4	2378.8	2397.1
45°	3767.5	3816.1	3767.5	3925.2	3677.7	3719.8	3629.1	3809.7	3659.3	3816.1	3719.8
50°	4263.4	4408.2	4311.1	4341.3	4365.2	4154.3	4378.0	4275.3	4292.8	4335.8	4395.4
55°	4878.5	4782.2	4830.8	4800.6	4728.2	4613.6	4697.9	4522.8	4528.3	4480.7	4474.2
60°	5736.5	5748.4	5711.8	5664.1	5603.6	5356.1	5403.8	5258.9	5150.8	5066.4	5017.8
62.5°	6110.5	6044.5	6032.6	5989.5	5905.2	5676.0	5730.1	5555.0	5482.6	5374.4	5319.4
65°	6413.0	6267.2	6310.3	6267.2	6110.5	5984.0	5941.8	5857.5	5742.0	5681.5	5597.2
67.5°	6569.8	6509.2	6521.2	6455.2	6364.4	6201.2	6159.1	6140.8	5989.5	5989.5	5929.9
70°	6750.3	6738.4	6714.6	6660.5	6642.2	6339.7	6436.8	6334.2	6255.3	6243.4	6207.7
72.5°	6315.8	6255.3	6339.7	6285.6	6322.2	6086.7	6140.8	5977.6	5929.9	5820.8	5844.7
75°	5386.3	5283.7	5398.2	5416.6	5434.0	5313.9	5247.0	5199.3	5156.2	5023.3	5029.8
77.5°	4190.1	4136.0	4220.3	4226.8	4238.7	4105.8	3991.2	3906.8	3792.2	3707.0	3773.9
80°	2681.2	2656.5	2669.3	2639.1	2669.3	2518.1	2451.2	2397.1	2397.1	2475.9	2608.8
82.5°	1461.2	1388.8	1370.4	1346.6	1364.9	1250.3	1274.2	1201.8	1250.3	1279.7	1322.8
85°	664.6	592.2	621.5	585.8	627.9	537.2	567.4	525.2	531.7	549.1	567.4
87.5°	205.3	151.2	175.1	126.5	205.3	132.9	187.0	163.2	139.3	132.9	126.5
90°	144.8	90.8	114.6	72.4	144.8	78.8	139.3	114.6	96.2	84.3	78.8
95°	84.3	42.2	54.1	42.2	90.8	60.5	102.7	96.2	84.3	72.4	66.0
105°	11.9	6.4	6.4	6.4	0.0	0.0	6.4	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



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CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1050.5	1050.5	1050.5	1050.5	1050.5	1050.5	1050.5	1050.5	1050.5	1050.5
5°	984.5	984.5	1008.3	1008.3	1008.3	996.4	1001.9	990.0	990.0	978.1
15°	1225.6	1195.3	1243.9	1292.5	1304.4	1237.5	1062.4	1032.2	1026.7	1014.8
25°	1648.2	1557.4	1503.3	1551.9	1642.7	1624.3	1690.3	1678.4	1690.3	1666.5
35°	2373.2	2282.5	2161.5	2282.5	2433.8	2451.2	2487.8	1878.2	1660.1	1594.1
45°	3622.7	3550.2	3417.3	3399.9	3605.2	3417.3	1829.7	1207.2	1056.9	1038.6
50°	4160.8	4087.4	3852.8	3883.0	4039.8	3797.8	1528.1	1298.0	1274.2	1243.9
55°	4353.2	4208.4	3955.4	4166.2	4275.3	3544.8	1817.8	1745.3	1684.8	1654.6
60°	4891.3	4661.2	4378.0	4583.3	4655.8	2759.2	2058.8	2004.8	1937.8	1908.5
62.5°	5181.0	4878.5	4546.7	4709.8	4775.8	2427.3	2046.9	1974.5	1937.8	1883.8
65°	5452.3	5096.7	4733.7	4818.9	4915.2	2240.3	2053.3	1932.3	1902.1	1859.9
67.5°	5754.8	5379.9	4969.2	4987.6	5023.3	2215.6	2065.2	1908.5	1848.0	1848.0
70°	6056.4	5711.8	5223.2	5247.0	5114.1	2222.0	1956.2	1738.9	1690.3	1654.6
72.5°	5724.6	5579.8	5150.8	4963.8	4703.4	2058.8	1684.8	1286.1	1104.6	1050.5
75°	4969.2	4969.2	4667.7	4233.2	3834.4	1878.2	1364.9	784.7	483.1	446.4
77.5°	3767.5	3930.7	3762.0	3327.5	2849.9	1733.4	1075.2	404.2	211.8	181.5
80°	2560.2	2759.2	2735.3	2294.4	1925.9	1298.0	646.2	198.9	96.2	84.3
82.5°	1255.8	1419.0	1437.3	1255.8	1068.8	579.3	247.5	78.8	42.2	36.7
85°	489.5	579.3	597.7	543.6	446.4	187.0	78.8	30.2	18.3	11.9
87.5°	48.6	126.5	132.9	121.0	102.7	36.7	11.9	11.9	0.0	0.0
90°	30.2	66.0	60.5	60.5	42.2	23.8	6.4	0.0	0.0	0.0
95°	23.8	48.6	42.2	36.7	30.2	18.3	18.3	11.9	11.9	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)