

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: P191502

Luminaire Tested: **GLEON-AF-04-LED-E1-T3R-1200**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P191502
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P40129)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLEON-AF-04-LED-E1-T3R-1200
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 70 CRI, 4000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III
ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 27549.1 lumens
Efficiency: N/A
Efficacy: 106.8 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Short - Full Cutoff
BUG Rating: B3 - U0 - G4

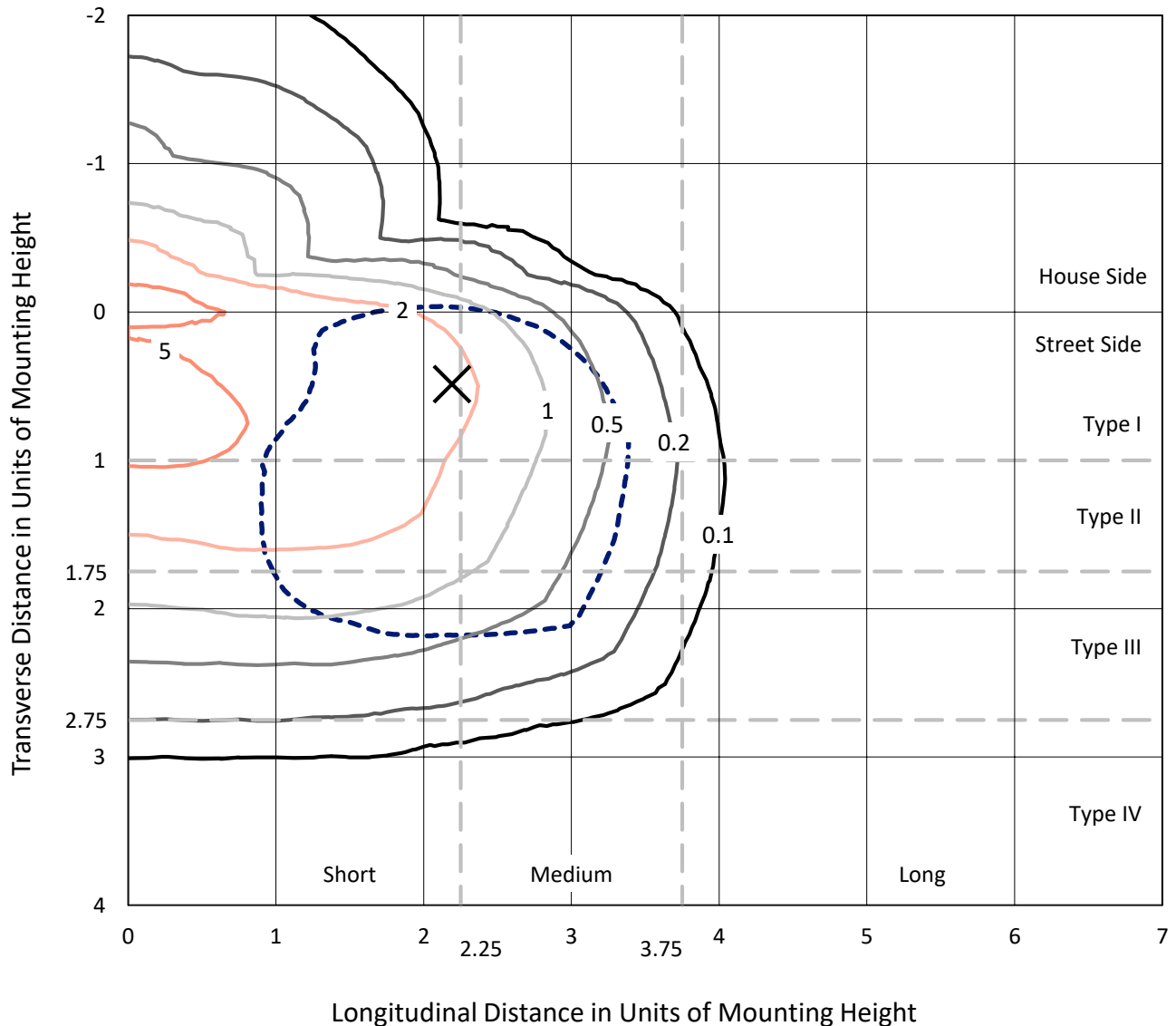
Input Watts (W): 258
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

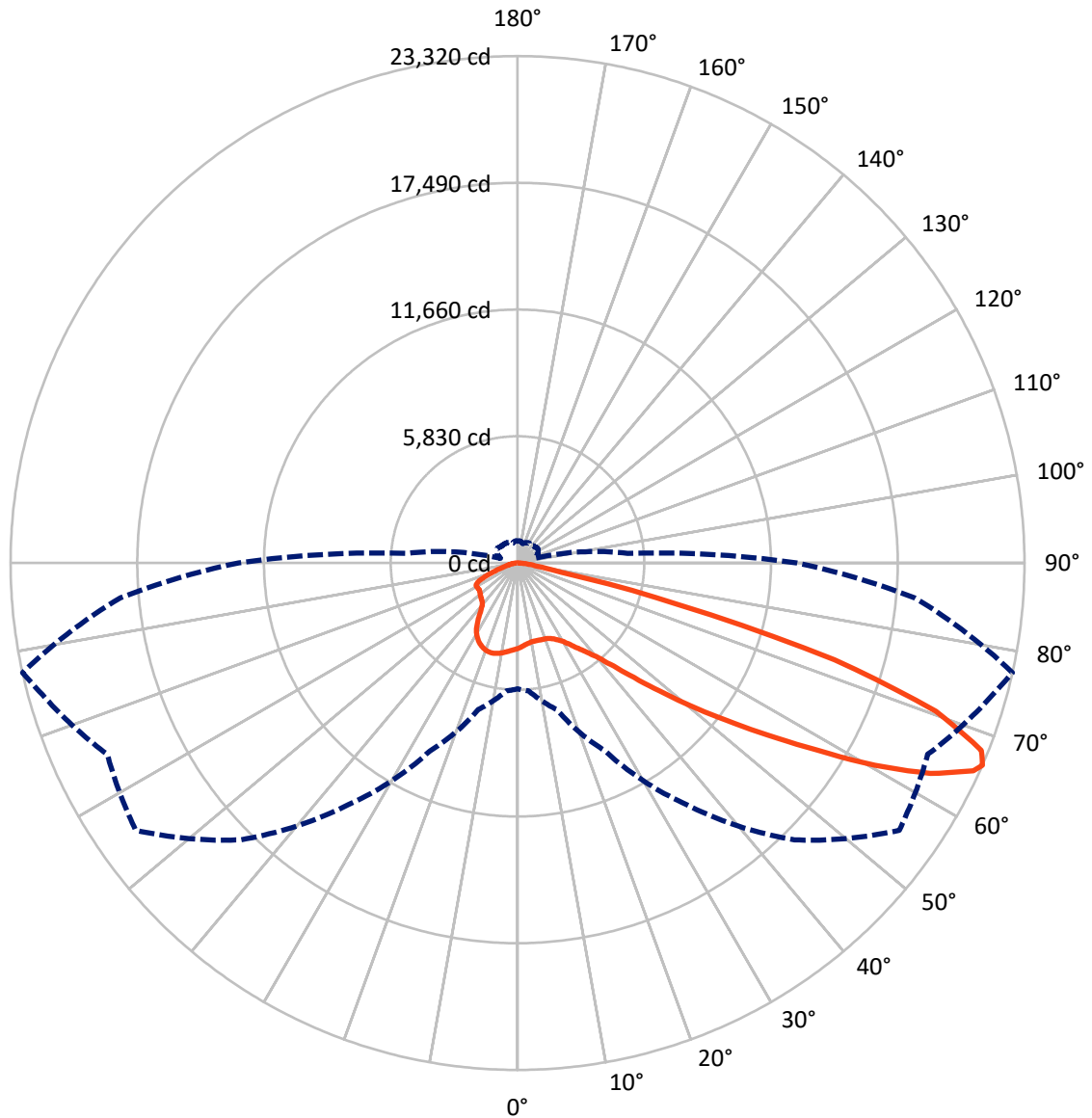
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.7 fc
 Type III - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 77.5-Deg Lateral - - - Horizontal Cone Through 66-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4706.6	0.0	4706.6
	% Fixture	17.1	0.0	17.1
Street Side	Lumens	22842.5	0.0	22842.5
	% Fixture	82.9	0.0	82.9
Total	Lumens	27549.1	0.0	27549.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	350.7	1.3
10°-20°	989.5	3.6
20°-30°	1688.7	6.1
30°-40°	2703.4	9.8
40°-50°	4176.5	15.2
50°-60°	5923.7	21.5
60°-70°	7924.3	28.8
70°-80°	3441.4	12.5
80°-90°	350.9	1.3
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	27549.1	100.0
0°-180°	27549.1	100.0

Coefficient of Utilization



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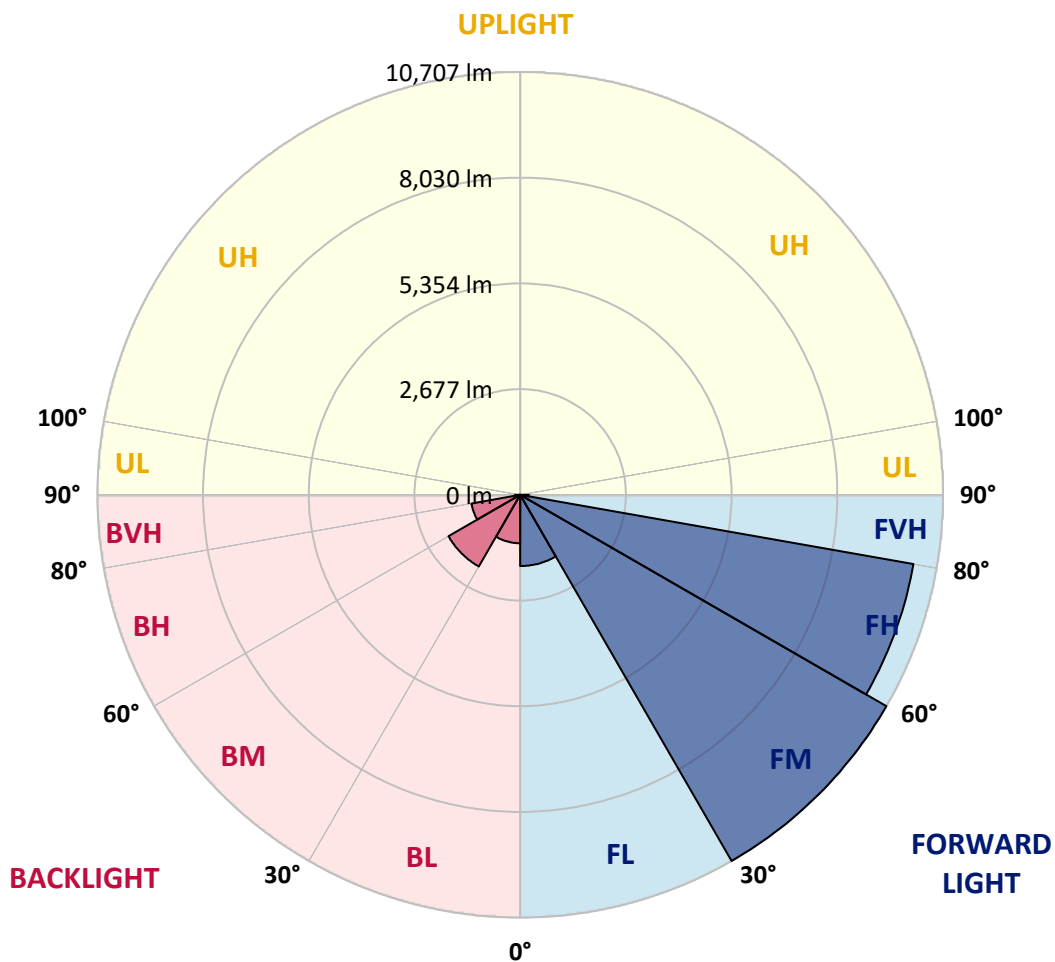
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1803.2	6.5			
FM	(30°-60°)	10707.0	38.9			
FH	(60°-80°)	10112.2	36.7			G4/12000
FVH	(80°-90°)	220.1	0.8			G2/225
BL	(0°-30°)	1225.8	4.4	B3/2500		
BM	(30°-60°)	2096.5	7.6	B2/2500		
BH	(60°-80°)	1253.5	4.5	B3/2500		G3/2500
BVH	(80°-90°)	130.8	0.5			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77.5°	85°
0°	3925.9	3925.9	3925.9	3925.9	3925.9	3925.9	3925.9	3925.9	3925.9	3925.9	3925.9
2.5°	3472.9	3496.3	3515.9	3534.1	3570.5	3630.4	3699.4	3755.4	3836.1	3851.7	3894.7
5°	3154.0	3154.0	3169.6	3196.9	3246.4	3336.3	3430.0	3554.9	3730.6	3772.2	3886.8
7.5°	2999.1	3000.4	3009.5	3032.9	3075.9	3157.8	3260.8	3407.8	3646.0	3715.1	3910.2
10°	3056.4	3043.4	3023.8	3012.1	3018.6	3066.8	3164.4	3328.4	3593.9	3682.4	3962.3
12.5°	3376.6	3351.8	3284.2	3194.4	3108.4	3073.3	3130.5	3290.6	3571.8	3674.6	4031.3
15°	3899.8	3889.5	3763.1	3577.1	3368.8	3194.4	3155.3	3276.3	3574.4	3683.7	4113.3
17.5°	4555.9	4541.6	4375.0	4104.2	3764.5	3424.7	3242.4	3288.1	3583.5	3699.4	4192.8
20°	5218.5	5174.2	4994.6	4671.7	4235.6	3738.5	3387.0	3317.9	3595.3	3716.3	4276.0
22.5°	5713.1	5676.7	5515.2	5201.5	4699.0	4101.6	3580.9	3370.0	3633.0	3765.8	4378.8
25°	6147.8	6150.5	5990.3	5687.1	5167.6	4486.9	3830.8	3509.3	3729.4	3867.3	4519.4
27.5°	6685.5	6654.2	6504.5	6203.8	5631.0	4876.1	4132.8	3700.7	3872.5	4011.8	4704.2
30°	7328.5	7306.3	7133.2	6792.2	6145.3	5294.0	4477.8	3923.3	4057.3	4201.9	4946.4
32.5°	8084.8	8074.4	7894.7	7456.1	6738.8	5786.0	4882.6	4217.4	4333.3	4483.0	5294.0
35°	8972.5	8973.8	8761.7	8234.4	7388.4	6358.8	5342.2	4596.2	4669.2	4825.4	5707.9
37.5°	9519.2	9585.6	9506.2	8968.6	8123.8	6999.1	5938.2	5098.7	5051.8	5209.4	6151.7
40°	9636.4	9717.1	9968.2	9694.9	8946.4	7704.7	6466.8	5581.6	5523.0	5715.7	6723.2
42.5°	9472.3	9584.3	10115.3	10308.1	9819.9	8574.2	7177.4	6298.8	6224.7	6483.7	7433.9
45°	9374.7	9458.0	10072.4	10626.9	10577.5	9556.9	8082.1	7199.6	7172.3	7512.0	8254.0
47.5°	9205.5	9281.0	9872.0	10701.1	11022.6	10457.7	9169.0	8300.8	8354.2	8799.4	9179.4
50°	9296.6	9327.9	9648.1	10512.4	11151.5	11117.6	10383.6	9576.5	9758.7	10314.5	10227.4
52.5°	9283.6	9364.3	9622.1	10202.6	11168.5	11525.1	11579.8	10999.2	11383.2	12021.0	11389.7
55°	7505.5	7653.9	9316.1	10124.5	11228.3	11924.7	12644.6	12498.7	13214.7	13958.0	12701.8
57.5°	7167.1	7260.8	8182.4	10288.5	11545.9	12687.5	13829.1	14149.3	15346.8	16209.9	14300.3
60°	7100.7	7216.5	8170.6	10488.9	12190.3	13930.6	15585.1	16147.4	17941.1	18886.1	16153.9
62.5°	6893.7	7018.7	8093.9	10462.9	13105.3	15650.1	17833.1	18271.7	20401.3	21320.2	17704.2
65°	6237.6	6354.8	7467.7	10042.5	13722.4	17485.5	20493.7	20219.0	22343.4	23034.6	18477.4
66°	5788.6	5903.1	6974.4	9547.8	13579.2	18006.2	21436.1	20821.8	22778.1	23319.7	18326.4
67.5°	4967.2	5057.1	6016.4	8440.2	12817.7	18152.0	22228.8	21274.7	22823.7	23015.1	17463.4
70°	3138.3	3164.4	3910.2	5826.3	9702.8	15742.6	21022.2	20150.1	20941.4	20423.4	14640.1
72.5°	1361.5	1352.4	1877.0	2963.9	5493.1	10563.2	17005.2	16626.4	16427.3	15245.3	10248.1
75°	757.6	768.0	975.0	1375.9	2232.4	5188.5	11124.2	10645.1	8988.2	7669.5	4647.0
77.5°	607.8	622.2	808.3	976.3	1002.3	1809.3	5205.4	4235.6	2550.0	2046.2	1291.3
80°	480.3	506.4	705.5	760.2	675.6	745.8	1681.7	1344.7	1008.8	925.5	669.1
82.5°	380.1	398.3	605.3	575.3	472.5	502.5	805.8	784.9	656.0	597.5	386.6
85°	273.3	307.2	497.3	433.4	309.7	338.4	535.0	512.9	376.1	307.2	170.5
87.5°	111.9	145.8	351.5	287.7	173.1	157.5	266.9	251.2	178.3	130.1	84.6
90°	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):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3925.9	3925.9	3925.9	3925.9	3925.9	3925.9	3925.9	3925.9	3925.9	3925.9	3925.9
2.5°	3922.0	3953.2	3993.6	4018.3	4031.3	4040.5	4054.8	4053.4	4057.3	4058.7	4063.9
5°	3948.0	4000.0	4058.7	4074.3	4074.3	4060.0	4045.7	4022.2	4013.1	4010.5	4013.1
7.5°	4015.7	4073.0	4123.7	4105.5	4066.4	4009.1	3935.0	3869.9	3834.7	3823.1	3820.4
10°	4101.6	4170.6	4191.4	4122.4	4007.9	3869.9	3722.8	3616.0	3554.9	3538.0	3532.8
12.5°	4205.8	4270.8	4242.2	4096.4	3884.2	3661.7	3458.6	3288.1	3160.5	3120.1	3117.5
15°	4320.3	4371.1	4270.8	4015.7	3699.4	3371.3	3009.5	2715.3	2556.5	2505.7	2501.8
17.5°	4427.0	4453.0	4253.9	3875.1	3427.3	2896.3	2415.9	2189.4	2134.8	2147.8	2150.3
20°	4518.2	4518.2	4196.7	3673.3	2999.1	2270.1	1966.8	1962.9	2002.0	2041.0	2048.9
22.5°	4618.4	4558.5	4096.4	3388.3	2392.5	1857.5	1813.3	1849.7	1894.0	1936.9	1943.4
25°	4742.0	4591.0	3957.1	2956.1	1880.9	1686.9	1703.9	1733.8	1756.0	1783.3	1787.2
27.5°	4880.0	4632.7	3773.6	2361.3	1632.3	1580.3	1593.2	1603.7	1601.0	1611.5	1614.1
30°	5045.3	4680.8	3522.3	1845.8	1529.5	1489.1	1465.7	1456.6	1456.6	1473.5	1480.0
32.5°	5266.6	4752.4	3161.8	1581.6	1480.0	1424.0	1348.6	1314.7	1327.7	1385.0	1398.0
35°	5510.0	4829.2	2673.7	1491.8	1469.6	1394.1	1276.9	1214.4	1215.8	1269.2	1286.1
37.5°	5775.6	4926.8	2138.7	1474.8	1493.0	1395.4	1239.2	1153.3	1118.2	1118.2	1124.6
40°	6115.3	5027.1	1731.2	1486.6	1542.5	1411.1	1219.7	1105.1	1006.2	1008.8	1014.1
42.5°	6557.8	5113.0	1512.5	1511.2	1602.4	1431.8	1218.3	1041.4	955.4	1014.1	1067.3
45°	7049.9	5156.0	1416.3	1533.4	1650.5	1444.9	1197.6	1030.9	962.0	1136.4	1237.9
47.5°	7616.2	5131.2	1362.9	1541.2	1662.3	1444.9	1174.1	1055.7	1007.5	1316.0	1434.5
50°	8237.0	5059.6	1310.8	1525.5	1658.3	1442.3	1196.2	1080.4	1024.4	1347.2	1429.3
52.5°	8967.3	4999.8	1256.1	1491.8	1631.0	1427.9	1222.3	1070.0	971.1	1224.9	1282.2
55°	9800.4	5016.7	1194.9	1443.6	1588.0	1400.6	1213.2	1028.4	915.1	1079.1	1114.2
57.5°	10865.2	5218.5	1122.1	1382.4	1529.5	1355.1	1180.6	1008.8	898.2	978.9	999.7
60°	12053.6	5569.9	1030.9	1321.2	1456.6	1282.2	1155.9	1017.9	905.9	971.1	981.4
62.5°	12925.7	5774.3	952.9	1231.4	1357.7	1201.5	1124.6	1029.6	926.8	998.4	995.7
65°	13162.6	5438.4	855.2	1099.9	1223.6	1116.9	1085.6	1042.7	935.9	1020.5	1008.8
66°	12830.7	5076.6	812.2	1038.7	1155.9	1075.2	1066.1	1041.4	932.0	1023.2	1003.6
67.5°	12025.0	4334.7	738.1	948.9	1047.8	1012.7	1034.8	1029.6	921.6	1020.5	993.2
70°	9806.9	2957.5	631.4	790.1	872.2	891.6	975.0	988.0	887.7	975.0	915.1
72.5°	6852.0	1801.5	558.4	613.1	705.5	760.2	892.9	930.7	842.2	851.3	794.0
75°	3311.5	956.8	506.4	475.2	548.0	635.3	794.0	852.6	770.6	712.0	691.2
77.5°	1032.3	584.4	429.5	382.7	429.5	512.9	663.9	747.2	686.0	596.2	588.4
80°	554.5	429.5	330.6	307.2	339.7	402.2	522.0	623.5	589.6	535.0	477.7
82.5°	365.8	278.5	244.7	238.2	259.0	307.2	387.9	516.8	516.8	458.2	333.3
85°	188.7	170.5	167.9	167.9	181.0	204.4	264.2	398.3	424.3	242.1	200.5
87.5°	93.7	97.6	91.1	95.0	101.6	100.2	126.2	200.5	239.5	147.1	122.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)