

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: P301174

Luminaire Tested: **GLNA-AF-06-LED-E1-T3R-7050-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P301174
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P194839)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLNA-AF-06-LED-E1-T3R-7050-800
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(6) 70 CRI, 5000K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Type III
Roadway OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 29304.2 lumens
Efficiency: N/A
Efficacy: 117.7 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type III - Short - Full Cutoff
BUG Rating: B3 - U0 - G4

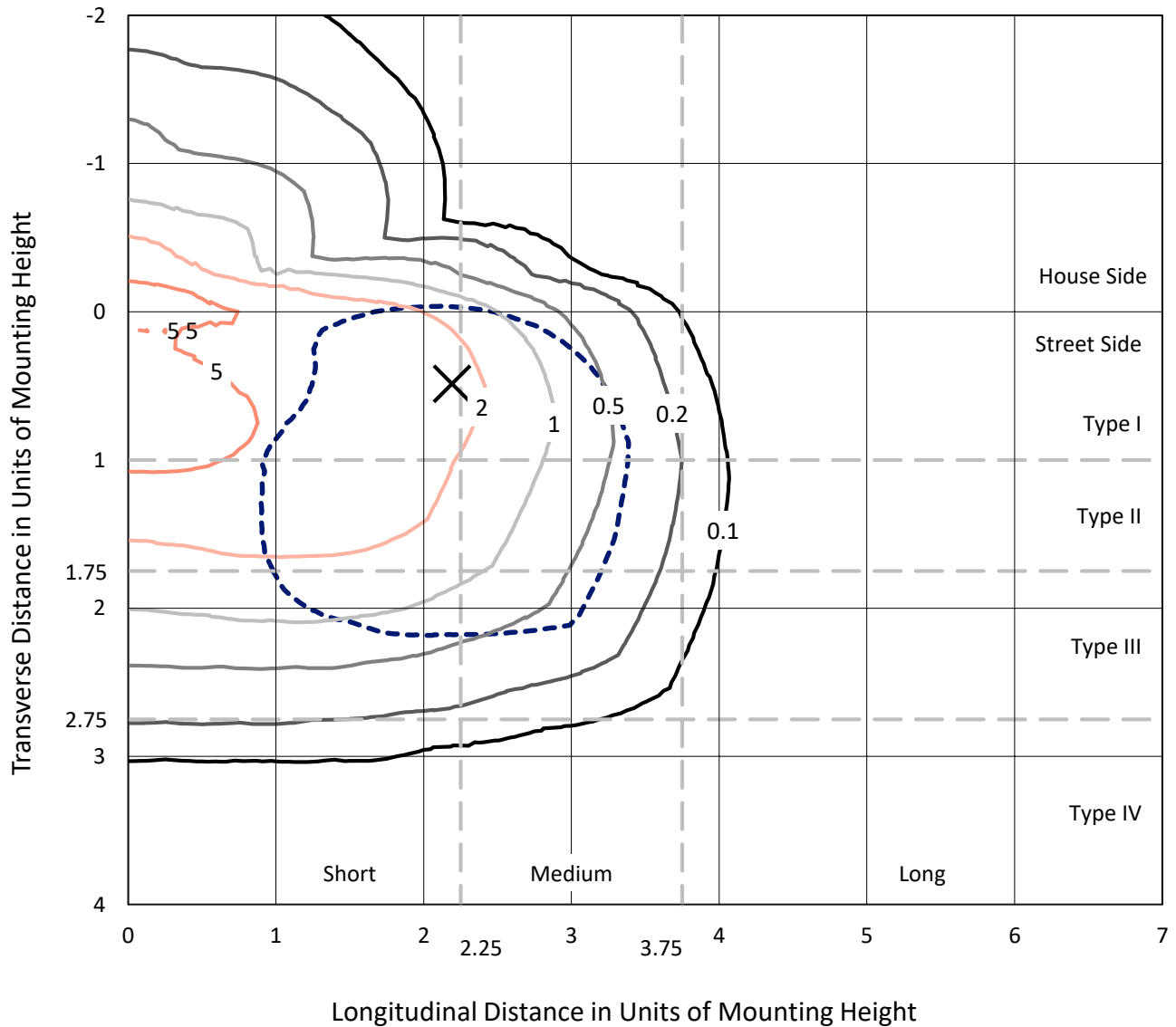
Input Watts (W): 249
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

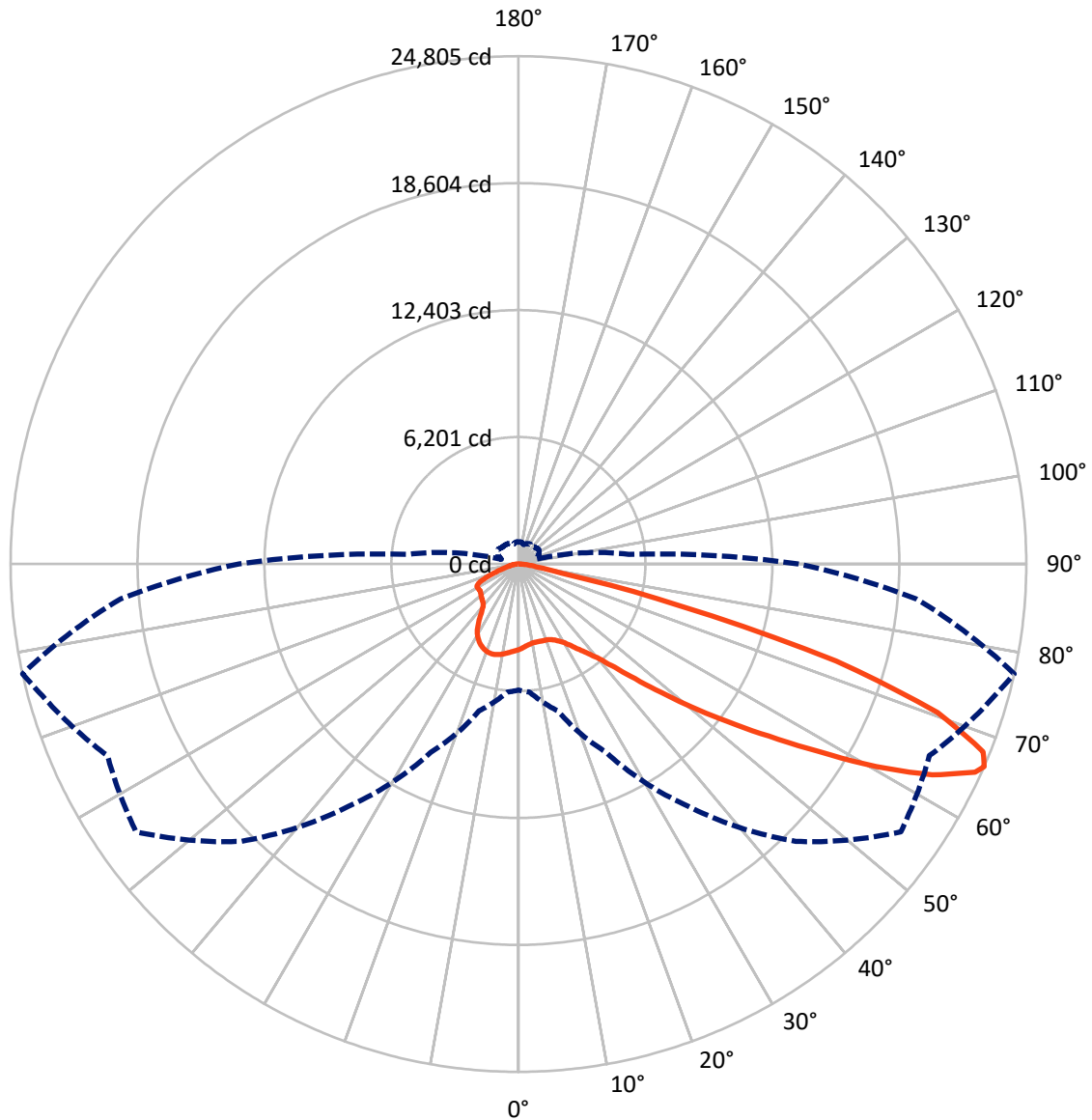
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.2 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	5006.5	0.0	5006.5
	% Fixture	17.1	0.0	17.1
Street Side	Lumens	24297.7	0.0	24297.7
	% Fixture	82.9	0.0	82.9
Total	Lumens	29304.2	0.0	29304.2
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	373.1	1.3
10°-20°	1052.6	3.6
20°-30°	1796.3	6.1
30°-40°	2875.6	9.8
40°-50°	4442.5	15.2
50°-60°	6301.1	21.5
60°-70°	8429.1	28.8
70°-80°	3660.6	12.5
80°-90°	373.3	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°	29304.2	100.0
0°-180°	29304.2	100.0



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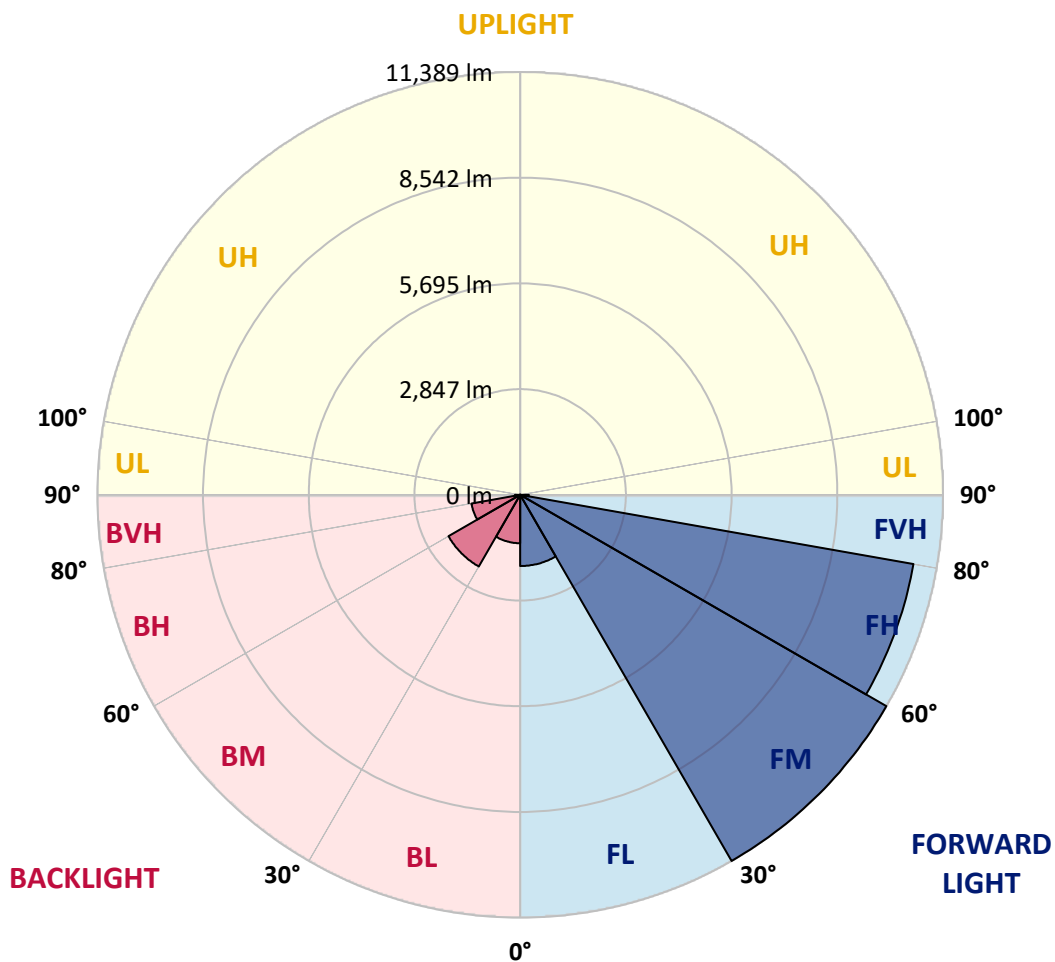
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1918.1	6.5			
FM	(30°-60°)	11389.1	38.9			
FH	(60°-80°)	10756.4	36.7			G4/12000
FVH	(80°-90°)	234.1	0.8			G3/500
BL	(0°-30°)	1303.9	4.4	B3/2500		
BM	(30°-60°)	2230.1	7.6	B2/2500		
BH	(60°-80°)	1333.3	4.5	B3/2500		G3/2500
BVH	(80°-90°)	139.2	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°	4175.9	4175.9	4175.9	4175.9	4175.9	4175.9	4175.9	4175.9	4175.9	4175.9	4175.9
2.5°	3694.2	3719.0	3739.9	3759.2	3797.8	3861.5	3934.9	3994.4	4080.4	4097.1	4142.8
5°	3355.1	3355.1	3371.4	3400.8	3453.2	3548.8	3648.6	3781.4	3968.4	4012.4	4134.4
7.5°	3190.3	3191.6	3201.2	3226.0	3271.7	3358.9	3468.3	3625.1	3878.3	3951.7	4159.2
10°	3251.1	3237.3	3216.3	3204.2	3210.9	3262.0	3366.0	3540.4	3822.9	3916.9	4214.9
12.5°	3591.5	3565.5	3493.4	3397.9	3306.5	3269.1	3329.9	3500.1	3799.5	3908.9	4288.3
15°	4148.3	4137.4	4002.8	3804.9	3583.6	3397.9	3356.3	3485.1	3802.0	3918.5	4375.5
17.5°	4846.3	4830.8	4653.9	4365.9	4004.5	3643.1	3449.0	3497.6	3811.6	3934.9	4459.8
20°	5551.0	5503.6	5312.9	4969.5	4505.5	3976.4	3602.9	3529.5	3824.2	3952.9	4548.6
22.5°	6077.1	6038.2	5866.7	5533.0	4998.5	4362.9	3809.1	3584.8	3864.5	4005.7	4657.6
25°	6539.6	6542.1	6371.9	6049.5	5496.9	4772.9	4074.9	3732.8	3966.7	4113.5	4807.3
27.5°	7111.4	7078.3	6919.0	6599.1	5989.9	5186.7	4396.0	3936.6	4119.3	4267.3	5003.9
30°	7795.1	7771.7	7587.6	7225.0	6536.6	5631.1	4762.9	4173.0	4316.0	4469.4	5261.3
32.5°	8599.6	8588.7	8397.6	7931.0	7168.0	6154.7	5193.8	4486.2	4609.4	4768.7	5631.1
35°	9544.2	9545.4	9319.9	8759.0	7858.9	6763.8	5682.2	4889.0	4966.6	5132.6	6071.7
37.5°	10125.6	10196.1	10111.8	9540.0	8641.1	7445.1	6316.5	5423.6	5373.7	5541.4	6543.7
40°	10250.1	10336.1	10603.1	10312.6	9516.5	8195.5	6878.7	5937.1	5875.1	6079.7	7151.6
42.5°	10075.8	10194.8	10759.9	10964.5	10445.5	9120.3	7634.6	6700.1	6621.3	6896.7	7907.5
45°	9971.8	10060.7	10714.2	11304.1	11251.3	10165.9	8597.1	7658.1	7629.1	7990.5	8779.9
47.5°	9791.9	9872.4	10500.8	11382.9	11725.0	11123.8	9753.4	8829.8	8886.4	9360.1	9764.3
50°	9888.8	9921.9	10262.7	11182.1	11862.1	11826.0	11045.0	10186.4	10380.5	10971.6	10879.0
52.5°	9874.9	9960.9	10235.1	10852.6	11880.1	12259.5	12317.4	11699.8	12108.6	12786.9	12115.3
55°	7983.8	8141.4	9909.7	10769.6	11943.4	12684.2	13450.1	13295.0	14056.3	14847.0	13510.9
57.5°	7623.7	7723.5	8703.6	10944.0	12281.3	13495.8	14709.9	15050.7	16324.4	17242.5	15211.3
60°	7552.8	7676.1	8691.0	11157.4	12966.8	14818.1	16578.0	17176.2	19084.1	20089.5	17182.9
62.5°	7332.7	7465.6	8609.3	11129.3	13940.2	16647.2	18969.3	19435.9	21701.0	22678.6	18832.2
65°	6635.1	6759.6	7943.6	10682.4	14596.7	18599.5	21799.1	21507.3	23766.9	24501.8	19654.3
66°	6157.2	6279.2	7418.7	10156.2	14444.1	19153.3	22801.9	22148.3	24229.3	24805.4	19493.7
67.5°	5283.5	5379.1	6399.5	8977.8	13634.2	19308.4	23644.9	22630.0	24277.6	24481.3	18576.0
70°	3338.3	3366.0	4159.2	6197.5	10321.0	16745.3	22361.3	21433.9	22275.7	21724.4	15572.7
72.5°	1448.4	1438.8	1996.8	3152.6	5843.2	11236.2	18088.5	17685.6	17473.9	16216.6	10901.2
75°	805.8	817.1	1037.2	1463.5	2374.5	5519.2	11832.7	11323.4	9560.5	8158.2	4943.1
77.5°	646.5	662.0	859.8	1038.4	1066.1	1924.7	5537.2	4505.5	2712.4	2176.6	1373.4
80°	511.0	538.7	750.4	808.7	718.6	793.2	1788.9	1430.4	1073.2	984.3	711.9
82.5°	404.1	423.8	643.9	612.1	502.7	534.5	856.9	835.1	698.0	635.6	411.3
85°	290.9	326.6	529.1	461.2	329.5	360.1	568.9	545.4	399.9	326.6	181.5
87.5°	119.1	155.1	374.0	306.0	184.0	167.7	283.8	267.0	189.5	138.3	90.1
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°	4175.9	4175.9	4175.9	4175.9	4175.9	4175.9	4175.9	4175.9	4175.9	4175.9	4175.9
2.5°	4171.7	4204.9	4248.0	4274.5	4288.3	4297.9	4313.0	4311.8	4316.0	4317.2	4322.7
5°	4199.4	4254.8	4317.2	4334.0	4334.0	4318.5	4303.4	4278.2	4268.6	4266.1	4268.6
7.5°	4271.5	4332.3	4386.4	4367.1	4325.6	4264.4	4185.6	4116.4	4079.1	4066.5	4064.0
10°	4362.9	4436.3	4458.5	4385.1	4263.1	4116.4	3960.0	3846.4	3781.4	3763.4	3758.0
12.5°	4473.6	4542.8	4512.6	4357.5	4131.5	3895.1	3678.7	3497.6	3361.8	3319.0	3316.1
15°	4595.6	4649.7	4542.8	4271.5	3934.9	3586.1	3201.2	2888.5	2719.5	2665.5	2661.3
17.5°	4709.2	4736.9	4524.7	4121.9	3645.6	3080.9	2569.9	2328.8	2271.0	2284.8	2287.3
20°	4806.0	4806.0	4464.0	3907.2	3190.3	2414.8	2092.0	2088.2	2129.7	2171.2	2179.6
22.5°	4912.5	4848.8	4357.5	3604.1	2544.7	1975.8	1928.9	1967.4	2014.4	2060.1	2067.2
25°	5044.2	4883.6	4209.1	3144.6	2000.6	1794.3	1812.3	1844.2	1867.7	1897.0	1901.2
27.5°	5190.9	4927.6	4014.1	2511.6	1736.4	1681.1	1694.9	1705.8	1702.9	1714.2	1716.7
30°	5366.6	4979.2	3746.6	1963.2	1627.0	1583.8	1559.1	1549.5	1549.5	1567.5	1574.2
32.5°	5602.2	5055.1	3363.1	1682.4	1574.2	1514.7	1434.6	1398.5	1412.4	1473.2	1487.0
35°	5861.2	5136.8	2844.0	1586.8	1563.3	1482.8	1358.3	1291.6	1293.3	1349.9	1367.9
37.5°	6143.4	5240.8	2274.7	1568.8	1588.0	1484.5	1318.1	1226.7	1189.4	1189.4	1196.5
40°	6504.8	5347.3	1841.7	1581.3	1640.9	1500.8	1297.5	1175.5	1070.3	1073.2	1078.7
42.5°	6975.6	5438.7	1609.0	1607.3	1704.6	1523.1	1295.8	1107.6	1016.2	1078.7	1135.3
45°	7499.2	5484.4	1506.3	1631.2	1755.7	1536.9	1274.0	1096.7	1023.3	1208.6	1316.8
47.5°	8101.2	5457.9	1449.7	1639.2	1768.3	1536.9	1248.9	1123.1	1071.5	1399.8	1526.0
50°	8761.9	5382.1	1394.4	1622.8	1764.1	1534.0	1272.4	1149.1	1089.6	1432.9	1520.1
52.5°	9538.7	5318.3	1336.1	1586.8	1734.8	1518.9	1300.0	1138.2	1033.0	1303.0	1363.8
55°	10424.5	5336.4	1271.1	1535.6	1689.1	1489.9	1290.4	1093.8	973.4	1147.8	1185.2
57.5°	11557.3	5551.0	1193.5	1470.7	1627.0	1441.3	1256.0	1073.2	955.4	1041.4	1063.6
60°	12821.3	5924.5	1096.7	1405.3	1549.5	1363.8	1229.6	1082.9	963.8	1033.0	1043.9
62.5°	13749.0	6142.1	1013.7	1309.7	1444.2	1277.8	1196.5	1095.0	986.0	1061.9	1059.4
65°	14001.0	5784.9	909.7	1170.1	1301.7	1188.1	1154.6	1108.9	995.7	1085.4	1073.2
66°	13648.0	5400.1	864.0	1105.1	1229.6	1143.7	1134.0	1107.6	991.5	1088.3	1067.4
67.5°	12791.1	4610.7	785.2	1009.5	1114.7	1077.4	1100.9	1095.0	980.2	1085.4	1056.5
70°	10431.7	3145.9	671.6	840.6	927.8	948.3	1037.2	1051.0	944.1	1037.2	973.4
72.5°	7288.7	1916.3	594.0	652.3	750.4	808.7	950.0	989.8	895.9	905.5	844.7
75°	3522.4	1017.9	538.7	505.6	582.7	675.8	844.7	906.8	819.6	757.5	735.3
77.5°	1098.0	621.7	457.0	407.1	457.0	545.4	706.0	794.9	729.9	634.3	625.9
80°	589.9	457.0	351.7	326.6	361.4	428.0	555.1	663.2	627.2	568.9	508.1
82.5°	389.0	296.4	260.3	253.2	275.4	326.6	412.5	549.6	549.6	487.6	354.7
85°	200.8	181.5	178.6	178.6	192.4	217.6	280.9	423.8	451.5	257.4	213.4
87.5°	99.8	104.0	96.8	101.0	108.2	106.5	134.2	213.4	254.9	156.4	130.0
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)