

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: P302798

Luminaire Tested: **GLNA-AF-07-LED-E1-T4W-7027**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P302798  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P191569)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GLNA-AF-07-LED-E1-T4W-7027  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(7) 70 CRI, 2700K CCT 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND Type IV  
Wide OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 36201.8 lumens  
Efficiency: N/A  
Efficacy: 92.6 lumens/watt  
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')  
IES Classification: Type IV - Short - Semi-Cutoff  
BUG Rating: B3 - U0 - G5

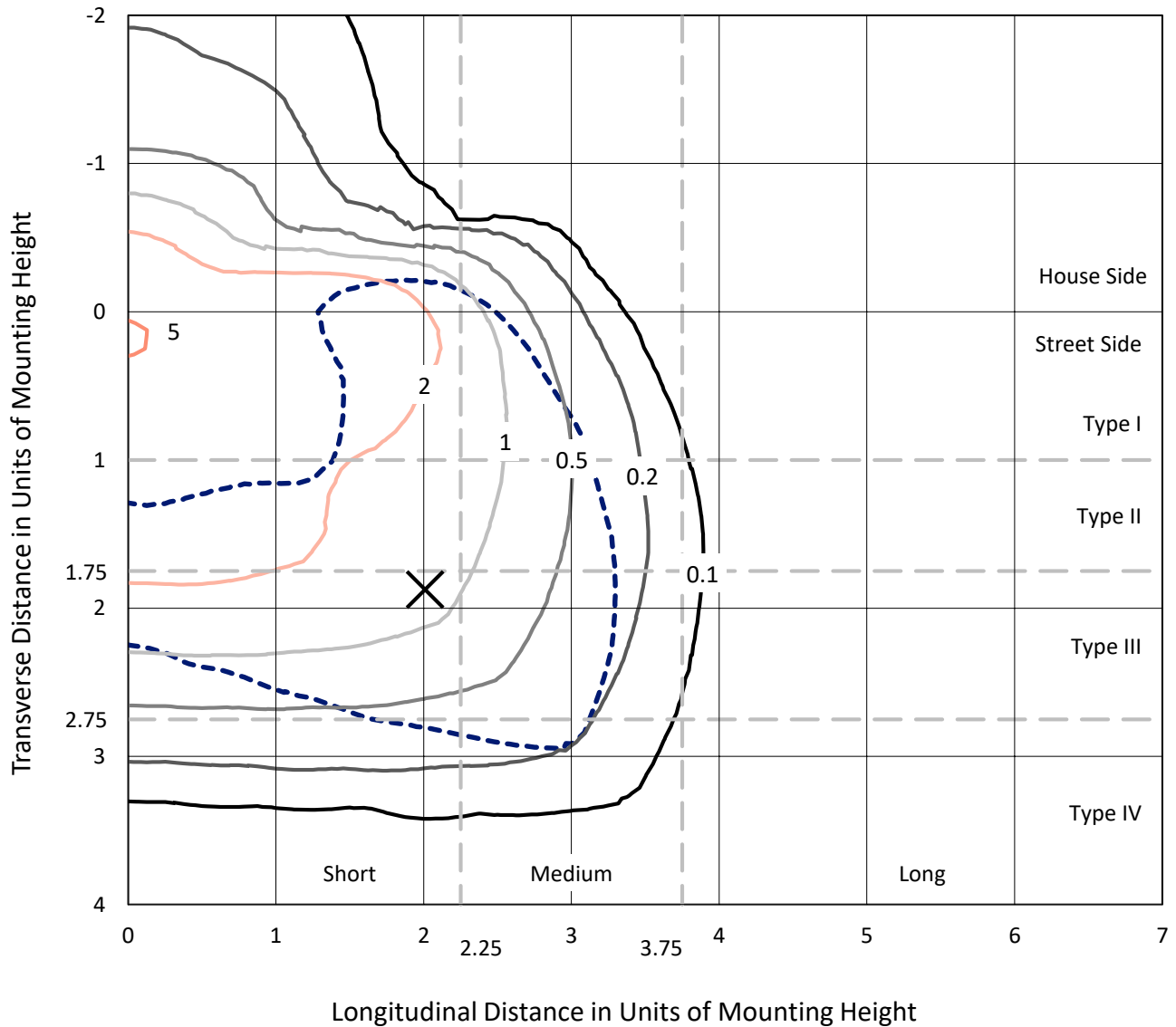
Input Watts (W): 391  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



REPORT NUMBER: P302798  
 CATALOG NUMBER: GLNA-AF-07-LED-E1-T4W-7027

### Iso-Footcandle Lines of Horizontal Illumination

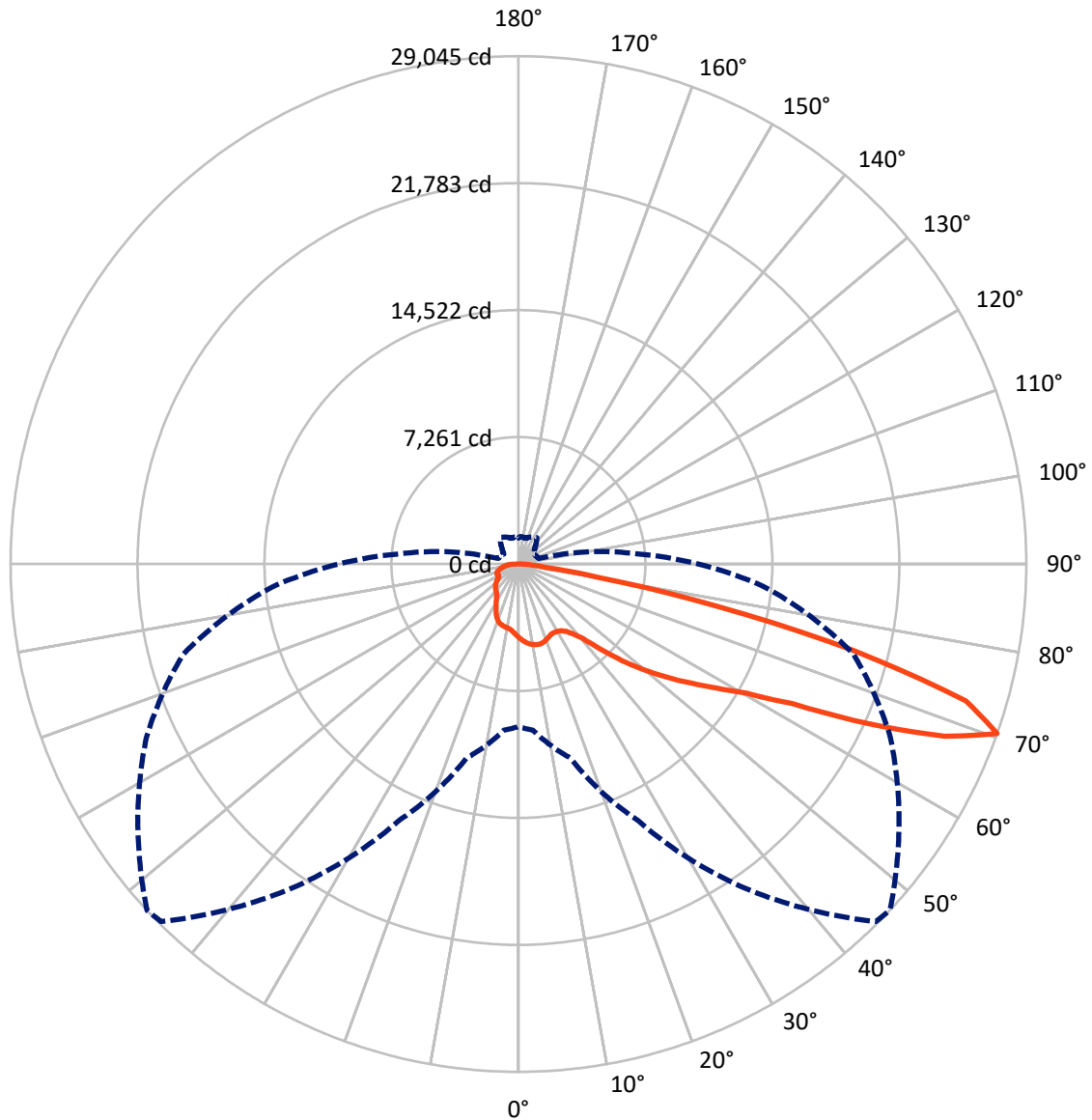
✕ Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 5.4 fc  
 Type IV - Short - Semi-Cutoff

REPORT NUMBER: P302798  
CATALOG NUMBER: GLNA-AF-07-LED-E1-T4W-7027

### Luminous Intensity Polar Plot



— Vertical Plane Through 47-Deg Lateral    - - - Horizontal Cone Through 70-Deg Vertical

REPORT NUMBER: P302798

CATALOG NUMBER: GLNA-AF-07-LED-E1-T4W-7027

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	7552.4	0.0	7552.4
	% Fixture	20.9	0.0	20.9
<b>Street Side</b>	Lumens	28649.4	0.0	28649.4
	% Fixture	79.1	0.0	79.1
<b>Total</b>	Lumens	36201.8	0.0	36201.8
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	402.5	1.1
10°-20°	1180.8	3.3
20°-30°	1743.7	4.8
30°-40°	2534.4	7.0
40°-50°	4561.0	12.6
50°-60°	7901.6	21.8
60°-70°	11277.9	31.2
70°-80°	5789.4	16.0
80°-90°	810.5	2.2
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°	36201.8	100.0
0°-180°	36201.8	100.0



REPORT NUMBER: P302798

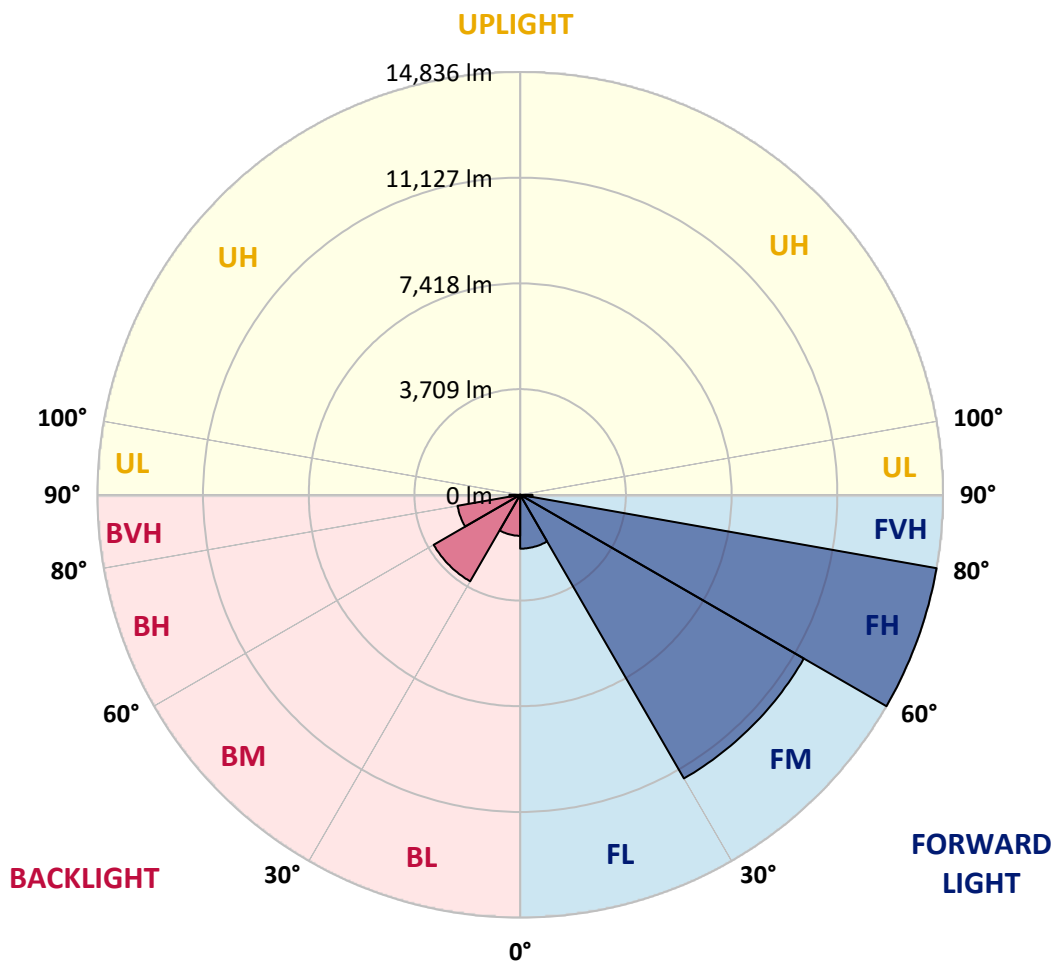
CATALOG NUMBER: GLNA-AF-07-LED-E1-T4W-7027

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1888.9	5.2			
FM	(30°-60°)	11491.5	31.7			
FH	(60°-80°)	14836.5	41.0			G5
FVH	(80°-90°)	432.5	1.2			G3/500
BL	(0°-30°)	1438.0	4.0	B3/2500		
BM	(30°-60°)	3505.6	9.7	B3/5000		
BH	(60°-80°)	2230.8	6.2	B3/2500		G3/2500
BVH	(80°-90°)	378.0	1.0			G3/500
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G5**

Type IV Short





REPORT NUMBER: P302798

CATALOG NUMBER: GLNA-AF-07-LED-E1-T4W-7027

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	47°	55°	65°	75°	85°
0°	4200.4	4200.4	4200.4	4200.4	4200.4	4200.4	4200.4	4200.4	4200.4	4200.4	4200.4
2.5°	4447.3	4438.5	4435.0	4428.0	4419.2	4374.8	4366.0	4334.4	4290.5	4244.3	4196.9
5°	4739.8	4738.0	4718.1	4683.0	4626.9	4529.8	4507.0	4429.7	4325.6	4225.0	4125.0
7.5°	4996.5	4980.8	4943.9	4873.1	4774.9	4642.7	4611.1	4503.4	4360.7	4223.3	4087.6
10°	5184.9	5176.1	5095.4	4998.3	4869.6	4723.4	4686.5	4566.6	4409.9	4235.5	4066.5
12.5°	5292.5	5275.0	5181.4	5065.6	4912.3	4769.6	4732.2	4611.1	4435.0	4235.5	4036.7
15°	5285.5	5273.2	5179.6	5052.7	4898.3	4773.1	4739.8	4618.1	4429.7	4218.0	3998.1
17.5°	5144.5	5149.8	5070.8	4945.7	4818.7	4723.4	4693.5	4581.2	4394.1	4182.9	3952.4
20°	4898.3	4922.8	4869.6	4759.1	4688.3	4623.4	4604.1	4508.7	4339.7	4132.0	3902.7
22.5°	4651.4	4674.2	4653.2	4559.6	4549.1	4510.5	4499.9	4431.5	4292.3	4100.4	3872.9
25°	4470.1	4491.2	4487.6	4406.3	4438.5	4436.8	4428.0	4394.1	4281.8	4100.4	3878.1
27.5°	4421.0	4428.0	4421.0	4346.7	4390.6	4426.2	4419.2	4413.4	4313.3	4151.3	3945.4
30°	4590.0	4579.5	4524.5	4374.8	4415.7	4464.8	4457.8	4461.3	4408.1	4285.3	4095.2
32.5°	5264.4	5216.5	5043.9	4623.4	4515.7	4542.0	4545.6	4604.1	4612.8	4491.2	4327.4
35°	6273.5	6220.8	5996.8	5289.0	4827.5	4736.2	4736.2	4824.0	4876.6	4787.1	4688.3
37.5°	7342.7	7284.2	7164.9	6212.0	5482.6	5072.6	5063.8	5125.2	5200.7	5222.3	5246.9
40°	8557.7	8496.2	8529.6	7247.4	6396.9	5655.2	5530.0	5486.1	5690.3	5826.0	6023.7
42.5°	9887.8	9859.1	9871.4	8400.9	7437.5	6527.3	6349.5	6122.0	6368.8	6609.8	7023.9
45°	11118.5	11143.1	11130.8	9635.7	8596.8	7590.7	7402.4	6961.9	7203.5	7617.1	8292.1
47.5°	12196.6	12094.2	12252.7	10984.6	9894.8	8781.7	8548.9	7959.3	8203.8	8714.4	9855.6
50°	13505.1	13491.0	13258.8	12785.0	11463.6	9977.3	9672.5	8989.3	9369.5	10079.7	11826.9
52.5°	14880.8	14625.2	14412.3	14184.8	13128.4	11203.3	10829.6	10015.9	10740.1	11632.7	14229.2
55°	15162.2	15048.1	15311.9	15694.5	14732.9	12476.7	12041.5	11303.4	12283.1	13408.6	16999.5
57.5°	15764.7	15762.9	16309.3	16990.7	16384.7	13827.4	13388.7	12858.7	14017.5	15442.4	19940.6
60°	16171.8	16285.9	17300.7	18623.3	18006.8	15388.0	14984.4	14653.3	15990.5	17716.0	22681.0
62.5°	16384.7	16539.7	17924.3	19285.4	20299.7	17985.7	17582.7	17105.4	18600.5	20210.2	24283.7
65°	15499.1	15803.3	17827.2	19858.1	22307.8	22196.7	22015.3	21177.1	21863.8	22180.9	23704.6
67.5°	13047.1	13358.8	15715.5	19324.0	23741.5	26258.5	26297.1	24865.2	23871.9	22349.9	19930.0
70°	9295.8	9540.4	11490.5	16201.6	22649.4	28912.4	29044.5	26564.4	23471.8	19820.6	13924.5
72.5°	4413.4	4563.1	6409.2	10544.7	17973.4	26490.7	26746.3	24394.9	19958.1	14674.4	7596.0
75°	1622.0	1667.7	2166.0	4485.9	10424.8	19535.8	19837.0	17487.3	13230.1	7305.9	2893.7
77.5°	972.2	1002.0	1215.5	1893.4	4100.4	11166.5	11611.6	9510.5	5782.1	2719.4	1423.2
80°	679.7	700.8	871.6	1178.1	1937.3	4255.4	4651.4	3881.7	2303.5	1720.9	1035.3
82.5°	459.8	470.3	613.0	796.1	1287.5	1519.7	1639.6	1726.2	1553.6	1280.4	656.9
85°	301.2	311.8	415.9	524.7	818.9	785.6	803.1	1016.0	1134.2	869.8	364.4
87.5°	172.6	179.6	250.4	280.2	401.9	332.8	336.3	535.2	725.9	586.7	221.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P302798  
 CATALOG NUMBER: GLNA-AF-07-LED-E1-T4W-7027

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	4200.4	4200.4	4200.4	4200.4	4200.4	4200.4	4200.4	4200.4	4200.4	4200.4	4200.4
2.5°	4184.7	4161.8	4110.9	4078.8	4048.9	4041.9	4029.6	4027.9	4026.1	4026.1	4020.9
5°	4091.1	4052.5	3973.5	3929.0	3892.2	3888.7	3886.9	3895.7	3899.2	3902.7	3897.4
7.5°	4031.4	3978.8	3879.9	3816.7	3772.9	3761.7	3779.9	3820.2	3846.6	3857.1	3851.8
10°	3994.5	3929.0	3815.0	3745.9	3709.1	3703.8	3726.6	3774.6	3829.0	3850.1	3848.3
12.5°	3952.4	3878.1	3756.5	3684.5	3663.5	3674.0	3703.8	3747.7	3804.4	3837.8	3839.5
15°	3909.7	3823.7	3698.6	3635.4	3626.6	3640.7	3668.7	3702.1	3745.9	3779.9	3783.4
17.5°	3858.8	3768.8	3644.2	3578.7	3571.6	3578.7	3580.4	3598.0	3626.6	3658.2	3667.0
20°	3804.4	3712.6	3582.2	3517.2	3485.6	3457.6	3425.4	3428.9	3437.7	3469.9	3476.9
22.5°	3765.3	3674.0	3534.8	3444.7	3360.5	3275.7	3212.5	3203.7	3207.2	3233.5	3242.3
25°	3768.8	3672.2	3522.5	3367.5	3182.7	3046.9	2962.1	2948.1	2946.3	2965.6	2978.5
27.5°	3837.8	3740.7	3568.1	3287.9	2989.0	2787.8	2698.3	2687.8	2673.8	2679.0	2693.1
30°	3991.0	3901.0	3679.3	3207.2	2779.0	2534.5	2440.9	2430.4	2411.1	2402.3	2412.9
32.5°	4240.8	4167.1	3841.3	3129.4	2569.6	2317.5	2222.8	2200.0	2187.7	2177.1	2185.9
35°	4656.7	4625.1	4057.7	3045.2	2384.8	2150.2	2064.2	2029.2	2011.6	2030.9	2044.9
37.5°	5308.3	5325.9	4341.4	2913.0	2242.1	2039.7	1967.1	1926.8	1900.5	1916.3	1932.1
40°	6231.4	6243.6	4654.9	2726.4	2118.6	1974.2	1897.0	1860.1	1822.7	1794.6	1792.8
42.5°	7442.8	7318.2	4963.2	2524.0	1975.9	1933.8	1847.8	1801.6	1745.5	1667.7	1651.9
45°	8880.0	8441.8	5197.2	2291.2	1815.6	1884.7	1792.8	1729.7	1641.3	1557.1	1548.3
47.5°	10535.9	9648.0	5311.8	2050.2	1665.9	1812.1	1726.2	1625.5	1514.4	1472.3	1467.0
50°	12557.5	11079.9	5366.2	1815.6	1536.0	1717.4	1629.1	1510.9	1417.9	1409.1	1403.9
52.5°	14859.8	12802.6	5384.4	1623.8	1428.4	1594.0	1550.1	1435.4	1361.2	1368.8	1368.8
55°	17269.1	14581.4	5144.5	1484.6	1329.6	1467.0	1496.9	1405.6	1343.6	1372.3	1382.8
57.5°	19480.8	16157.8	4390.6	1377.5	1236.6	1370.5	1477.6	1433.7	1391.6	1505.6	1512.7
60°	21178.9	17089.0	3279.2	1280.4	1167.5	1336.6	1529.0	1541.3	1551.8	1824.4	1861.9
62.5°	21534.5	16779.6	2254.4	1205.0	1136.0	1365.2	1622.0	1623.8	1611.5	1801.6	1824.4
65°	19902.0	14818.8	1639.6	1162.3	1109.6	1416.1	1701.6	1664.2	1583.4	1727.9	1685.2
67.5°	15805.0	11164.7	1365.2	1130.7	1071.0	1412.6	1785.8	1701.6	1567.6	1692.8	1623.8
70°	10259.2	6750.8	1215.5	1104.4	1024.8	1345.4	1835.0	1698.1	1521.4	1574.7	1493.3
72.5°	5005.3	3018.9	1114.9	1065.8	977.4	1252.4	1833.2	1665.9	1474.0	1470.5	1426.7
75°	1958.4	1382.8	1023.1	1007.3	896.7	1146.5	1784.1	1620.3	1417.9	1361.2	1345.4
77.5°	1146.5	986.2	907.2	921.3	799.6	1040.6	1712.1	1541.3	1340.1	1273.4	1255.9
80°	834.7	738.2	773.3	796.1	683.2	935.3	1615.0	1444.2	1254.1	1287.5	1262.9
82.5°	535.2	475.6	627.1	649.9	569.1	827.7	1509.1	1341.8	1132.4	1028.3	1003.8
85°	273.2	301.2	466.8	494.9	438.7	679.7	1381.0	1206.7	995.0	855.8	869.8
87.5°	153.3	205.9	297.7	332.8	310.0	522.9	1120.2	995.0	811.9	660.4	581.4
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)