

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: P300410

Luminaire Tested: **GLNA-AF-10-LED-E1-T4FT-7027-800**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P300410  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24295)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GLNA-AF-10-LED-E1-T4FT-7027-800  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(10) 70 CRI, 2700K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Type IV Forward Throw OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 41462.8 lumens  
Efficiency: N/A  
Efficacy: 99.0 lumens/watt  
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')  
IES Classification: Type IV - Short - Non-Cutoff  
BUG Rating: B3 - U0 - G5

Input Watts (W): 419  
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

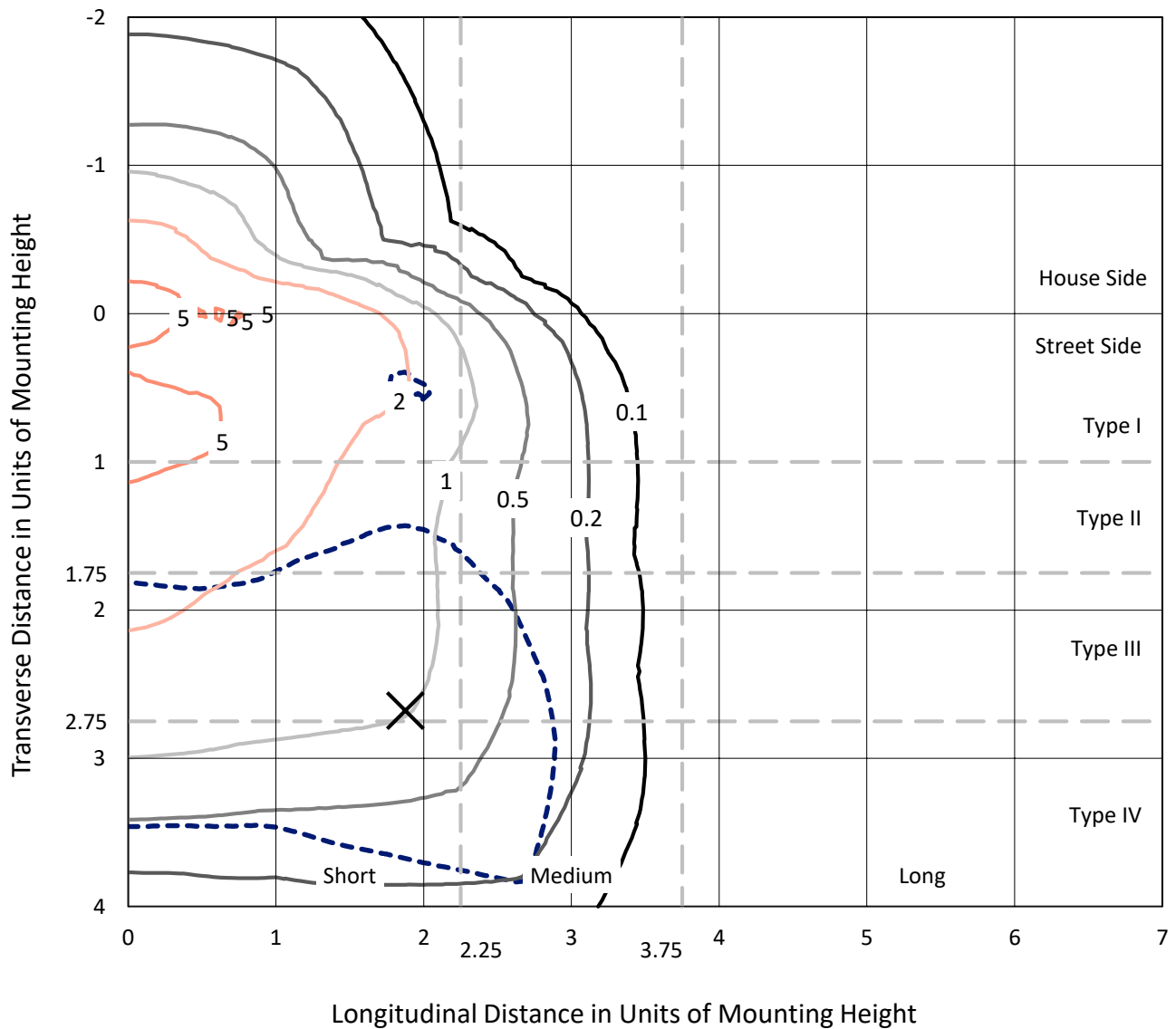


REPORT NUMBER: P300410

CATALOG NUMBER: GLNA-AF-10-LED-E1-T4FT-7027-800

### Iso-Footcandle Lines of Horizontal Illumination

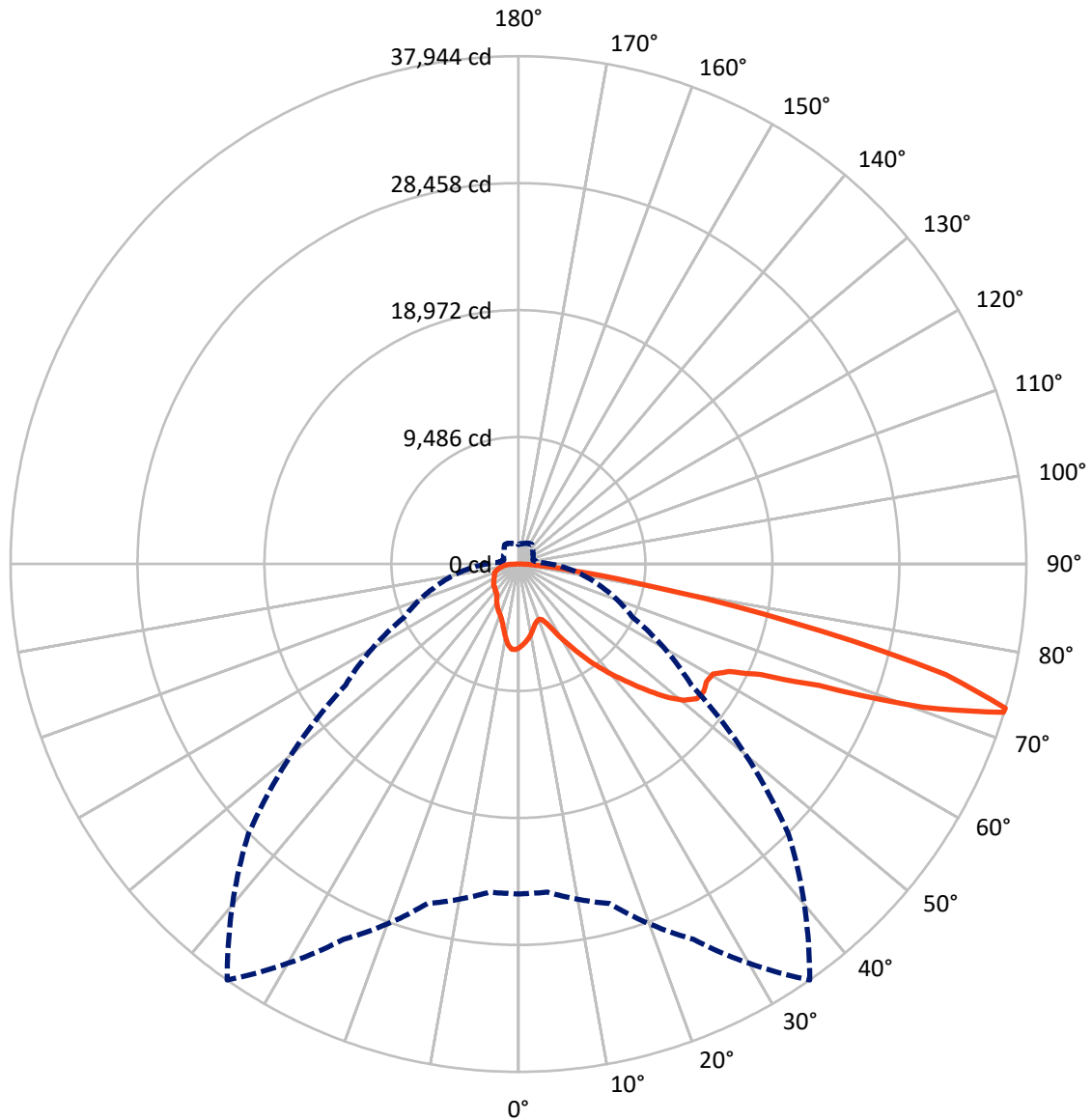
× Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 7 fc  
 Type IV - Short - Non-Cutoff

REPORT NUMBER: P300410  
CATALOG NUMBER: GLNA-AF-10-LED-E1-T4FT-7027-800

### Luminous Intensity Polar Plot



— Vertical Plane Through 35-Deg Lateral    - - - Horizontal Cone Through 73-Deg Vertical

REPORT NUMBER: P300410

CATALOG NUMBER: GLNA-AF-10-LED-E1-T4FT-7027-800

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	7908.1	0.0	7908.1
	% Fixture	19.1	0.0	19.1
<b>Street Side</b>	Lumens	33554.7	0.0	33554.7
	% Fixture	80.9	0.0	80.9
<b>Total</b>	Lumens	41462.8	0.0	41462.8
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	566.5	1.4
10°-20°	1414.0	3.4
20°-30°	2285.9	5.5
30°-40°	3833.1	9.2
40°-50°	5908.6	14.3
50°-60°	7927.0	19.1
60°-70°	10560.4	25.5
70°-80°	8054.4	19.4
80°-90°	912.9	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°	41462.8	100.0
0°-180°	41462.8	100.0

**Coefficient of Utilization**



REPORT NUMBER: P300410

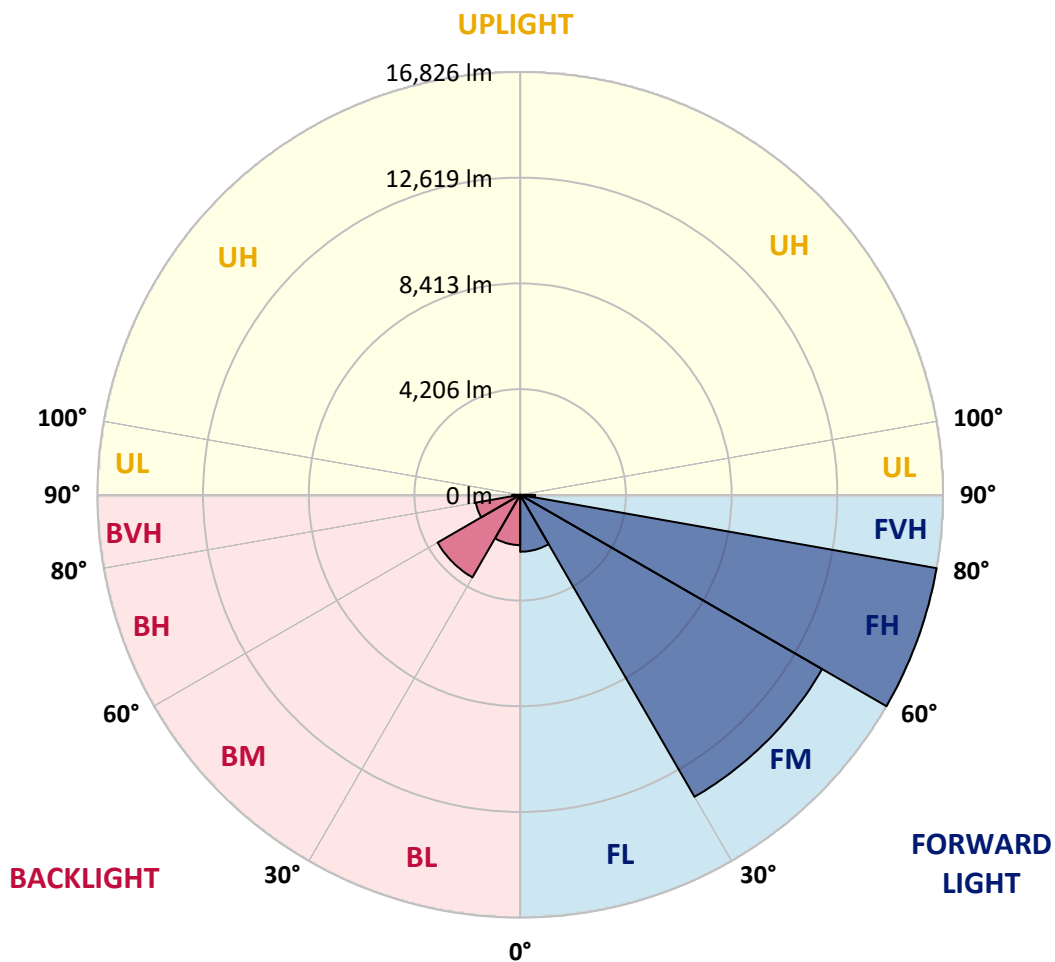
CATALOG NUMBER: GLNA-AF-10-LED-E1-T4FT-7027-800

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2265.3	5.5			
FM	(30°-60°)	13873.7	33.5			
FH	(60°-80°)	16825.6	40.6			G5
FVH	(80°-90°)	590.1	1.4			G4/750
BL	(0°-30°)	2001.1	4.8	B3/2500		
BM	(30°-60°)	3795.0	9.2	B3/5000		
BH	(60°-80°)	1789.1	4.3	B3/2500		G3/2500
BVH	(80°-90°)	322.8	0.8			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: P300410

CATALOG NUMBER: GLNA-AF-10-LED-E1-T4FT-7027-800

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	6258.0	6258.0	6258.0	6258.0	6258.0	6258.0	6258.0	6258.0	6258.0	6258.0	6258.0
2.5°	6011.1	6023.1	6009.1	6027.1	6056.9	6088.8	6110.7	6142.5	6178.4	6228.2	6240.1
5°	5728.4	5746.3	5746.3	5778.2	5835.9	5887.7	5935.5	5987.2	6062.9	6148.5	6182.4
7.5°	5417.8	5427.7	5445.7	5493.4	5577.1	5650.7	5718.4	5802.1	5905.6	6019.1	6078.8
10°	5043.5	5057.4	5085.3	5153.0	5266.5	5368.0	5465.6	5581.0	5712.5	5853.8	5929.5
12.5°	4778.6	4774.7	4786.6	4836.4	4935.9	5059.4	5200.7	5348.1	5509.4	5674.6	5766.2
15°	4689.0	4667.1	4621.3	4609.4	4663.2	4786.6	4949.9	5131.1	5324.2	5523.3	5636.8
17.5°	4744.8	4707.0	4581.5	4489.9	4482.0	4575.5	4748.8	4951.9	5174.9	5417.8	5559.1
20°	5095.2	5005.6	4697.0	4484.0	4410.3	4456.1	4607.4	4822.4	5085.3	5407.8	5589.0
22.5°	5933.5	5802.1	5147.0	4750.8	4501.9	4446.1	4559.6	4788.6	5095.2	5531.3	5762.2
25°	7154.0	6966.9	5919.5	5415.8	4902.1	4605.4	4631.3	4866.2	5236.6	5818.0	6096.7
27.5°	8117.7	7996.2	6929.0	6353.6	5630.8	5035.5	4864.3	5061.4	5525.3	6287.9	6572.6
30°	8691.1	8617.5	8008.2	7416.8	6560.7	5720.4	5310.3	5427.7	5977.3	6939.0	7173.9
32.5°	9356.2	9312.4	9013.7	8470.1	7564.2	6620.4	6017.1	5975.3	6582.6	7721.5	7829.0
35°	10045.1	10031.1	9855.9	9465.7	8641.4	7807.1	6954.9	6672.2	7241.6	8533.8	8466.1
37.5°	10686.2	10662.3	10560.8	10333.8	9768.3	9081.4	7910.6	7387.0	7952.4	9310.4	9009.7
40°	11866.9	11679.8	11331.3	11160.1	10907.2	10154.6	8669.2	8054.0	8689.1	10051.1	9479.6
42.5°	13306.5	13001.9	12352.8	12117.8	12082.0	11000.8	9186.9	8701.1	9431.8	10785.8	9941.6
45°	14439.4	14152.7	13593.2	13296.5	13428.0	11767.4	9706.6	9392.0	10196.4	11556.3	10417.4
47.5°	15648.0	15198.0	14457.4	14547.0	14833.7	12492.1	10236.2	10134.7	11034.7	12418.5	11008.8
50°	15691.8	15347.4	15022.8	15558.4	16004.4	13159.2	10899.3	10913.2	12060.1	13503.6	11795.3
52.5°	14781.9	14708.2	15223.9	16066.2	16709.3	13686.8	11653.9	11717.6	13372.2	14750.1	12659.4
55°	14463.3	14379.7	14975.0	15889.0	16804.9	14122.9	12472.2	12587.7	14959.1	16064.2	13501.6
57.5°	15239.9	15054.7	15094.5	15805.3	16571.9	14600.7	13364.2	13597.2	16683.4	17213.0	14043.2
60°	17410.2	17013.9	16261.3	16243.4	16697.3	15317.5	14395.6	14680.4	18475.4	17762.6	13832.2
62.5°	20454.5	20058.3	18648.6	17730.7	17663.0	16500.2	15662.0	15737.6	19510.8	17017.9	12543.9
65°	23749.8	23395.4	21820.4	20524.2	19899.0	18459.5	17133.4	16209.5	19172.3	14969.1	10290.0
67.5°	27749.9	27369.6	26015.7	24819.0	24217.7	21621.3	18166.8	15757.5	17023.9	11596.2	7396.9
70°	30547.4	30159.2	29625.5	30595.2	32066.6	26182.9	18300.2	13919.8	12715.1	7707.5	4452.1
72.5°	26897.7	26716.5	27690.2	31773.9	37902.5	28950.6	16542.0	10134.7	7385.0	4091.7	2576.5
73°	24643.8	24604.0	26264.6	30947.6	37944.3	28524.5	15771.5	9419.9	6333.7	3619.8	2355.5
75°	11128.2	11448.8	15088.5	23638.3	32966.6	23504.9	11100.4	5403.8	3578.0	2500.8	1778.1
77.5°	2674.0	2785.5	4720.9	11225.8	20818.9	14007.4	5029.5	2672.1	2287.8	1766.1	1298.2
80°	1138.9	1176.7	1817.9	4147.5	9802.2	5640.8	2317.6	1790.0	1582.9	1232.5	909.9
82.5°	633.2	673.0	1031.4	1881.6	3956.3	1923.4	1413.7	1246.4	1041.3	742.7	591.4
85°	358.4	380.3	603.3	1051.3	1676.5	772.5	846.2	828.3	587.4	382.3	290.7
87.5°	169.2	183.2	290.7	487.8	657.1	302.6	430.1	473.9	368.4	233.0	151.3
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: P300410

CATALOG NUMBER: GLNA-AF-10-LED-E1-T4FT-7027-800

**CANDELA DISTRIBUTION (continued):**

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	6258.0	6258.0	6258.0	6258.0	6258.0	6258.0	6258.0	6258.0	6258.0	6258.0
2.5°	6254.0	6289.9	6331.7	6353.6	6373.5	6397.4	6421.3	6421.3	6425.3	6427.3
5°	6210.2	6283.9	6349.6	6377.5	6383.5	6383.5	6377.5	6345.6	6317.8	6329.7
7.5°	6118.6	6226.2	6281.9	6272.0	6196.3	6108.7	6035.0	5945.4	5899.6	5891.7
10°	5987.2	6110.7	6120.6	6021.1	5833.9	5646.8	5491.4	5340.1	5268.4	5250.5
12.5°	5841.9	5955.4	5891.7	5686.6	5385.9	5113.1	4916.0	4762.7	4695.0	4677.1
15°	5724.4	5802.1	5640.8	5318.2	4939.9	4651.2	4487.9	4374.4	4326.7	4312.7
17.5°	5662.7	5678.6	5383.9	4947.9	4545.7	4304.8	4203.2	4149.4	4131.5	4121.6
20°	5692.5	5581.0	5139.0	4603.4	4223.1	4053.9	4030.0	4016.0	4012.1	4006.1
22.5°	5841.9	5551.2	4914.0	4276.9	3940.4	3866.7	3886.6	3884.6	3880.6	3876.7
25°	6108.7	5577.1	4695.0	3966.3	3703.4	3687.5	3723.4	3723.4	3707.4	3707.4
27.5°	6461.1	5630.8	4450.1	3671.6	3488.4	3490.4	3518.3	3510.3	3492.4	3480.4
30°	6891.2	5664.7	4163.4	3406.8	3287.3	3279.3	3287.3	3253.5	3199.7	3195.7
32.5°	7331.2	5622.9	3830.9	3171.8	3074.3	3056.3	3050.4	3002.6	2940.9	2922.9
35°	7729.4	5469.5	3492.4	2984.7	2871.2	2831.3	2859.2	2843.3	2787.5	2773.6
37.5°	8020.1	5184.8	3187.7	2819.4	2725.8	2715.9	2733.8	2739.8	2674.0	2660.1
40°	8215.3	4798.5	2926.9	2680.0	2697.9	2660.1	2600.4	2558.6	2538.6	2532.7
42.5°	8372.6	4396.3	2707.9	2614.3	2703.9	2594.4	2465.0	2397.3	2433.1	2449.0
45°	8553.8	4004.1	2524.7	2532.7	2674.0	2518.7	2371.4	2305.7	2319.6	2323.6
47.5°	8802.6	3526.2	2327.6	2401.3	2574.5	2467.0	2313.7	2220.1	2154.4	2124.5
50°	9147.1	2960.8	2122.5	2253.9	2476.9	2429.1	2224.1	2124.5	2003.0	1975.2
52.5°	9386.0	2433.1	1953.3	2130.5	2389.3	2353.5	2152.4	2023.0	1895.5	1871.6
55°	9256.6	2021.0	1805.9	1993.1	2273.8	2259.9	2092.6	1919.4	1819.9	1800.0
57.5°	8609.5	1760.1	1692.4	1863.7	2132.5	2180.3	2013.0	1831.8	1760.1	1746.2
60°	7375.0	1596.9	1620.8	1776.1	2017.0	2100.6	1933.4	1784.0	1736.2	1726.3
62.5°	5722.4	1487.3	1567.0	1712.3	1927.4	2044.9	1889.6	1778.1	1760.1	1748.2
65°	4099.7	1399.7	1509.3	1648.6	1845.7	1993.1	1873.6	1770.1	1774.1	1764.1
67.5°	2785.5	1322.1	1439.6	1576.9	1766.1	1947.3	1851.7	1742.2	1792.0	1780.0
70°	1949.3	1246.4	1357.9	1485.4	1666.5	1883.6	1811.9	1700.4	1696.4	1648.6
72.5°	1521.2	1146.9	1246.4	1357.9	1539.1	1794.0	1732.3	1606.8	1541.1	1491.3
73°	1451.5	1123.0	1218.6	1330.1	1511.2	1772.1	1710.4	1580.9	1507.3	1461.5
75°	1200.6	1019.4	1107.1	1206.6	1391.8	1668.5	1602.8	1463.5	1369.9	1342.0
77.5°	943.8	872.1	955.7	1045.3	1226.5	1517.2	1443.5	1310.1	1258.4	1234.5
80°	698.9	722.8	796.4	876.1	1063.2	1355.9	1290.2	1156.8	1387.8	1330.1
82.5°	491.8	547.6	615.2	686.9	892.0	1198.6	1119.0	981.6	1015.5	844.2
85°	290.7	358.4	422.1	483.8	643.1	993.6	923.9	782.5	641.1	611.3
87.5°	169.2	199.1	217.0	280.7	442.0	748.7	651.1	579.4	332.5	225.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)