

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: P300398

Luminaire Tested: **GLNA-AF-08-LED-E1-T4FT-7027-800**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P300398  
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-08-LED-E1-T4FT-7027-800  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(8) 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: 33572.1 lumens  
Efficiency: N/A  
Efficacy: 100.5 lumens/watt  
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')  
IES Classification: Type IV - Short - Non-Cutoff  
BUG Rating: B3 - U0 - G5

Input Watts (W): 334  
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

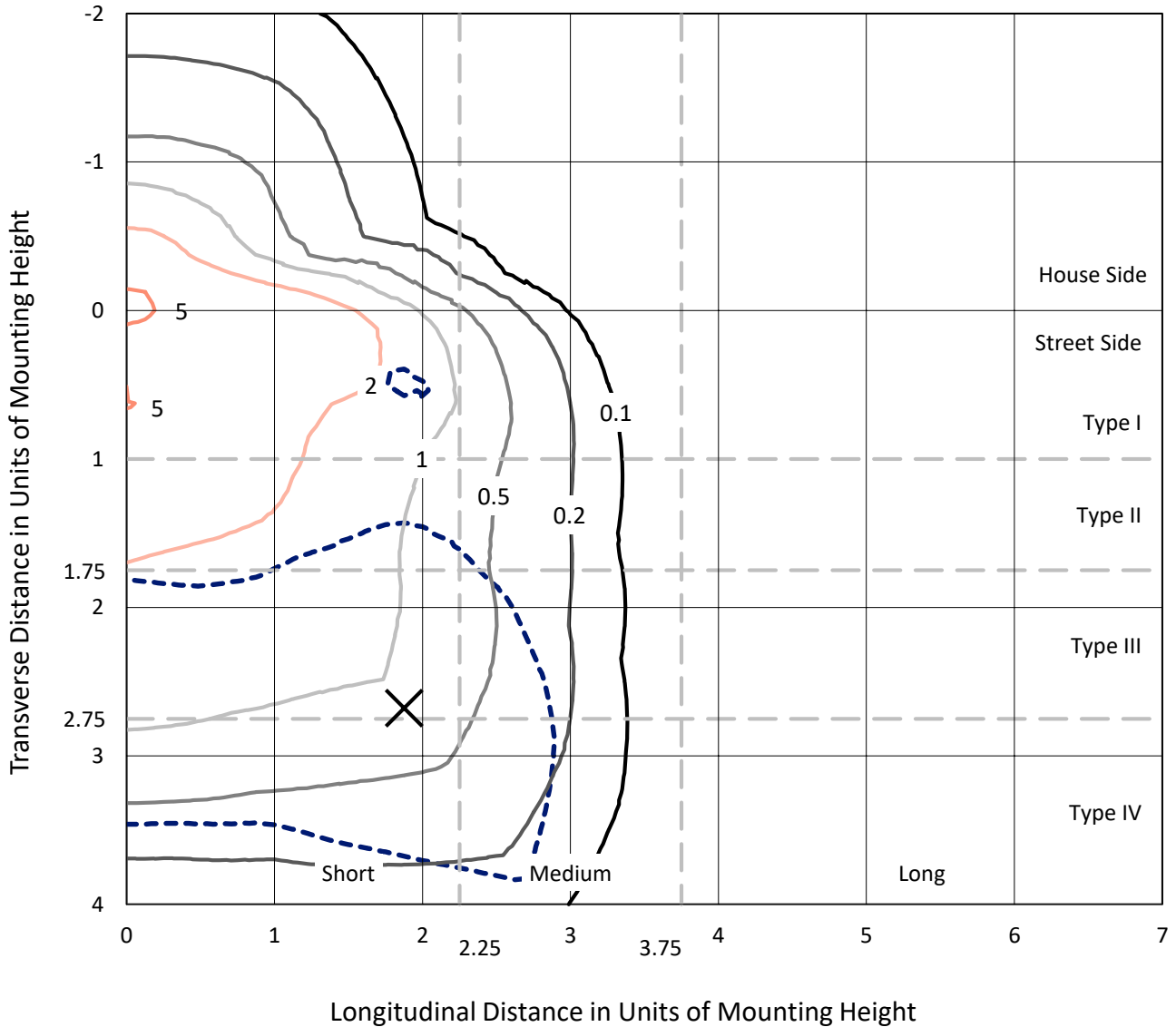


REPORT NUMBER: P300398

CATALOG NUMBER: GLNA-AF-08-LED-E1-T4FT-7027-800

### Iso-Footcandle Lines of Horizontal Illumination

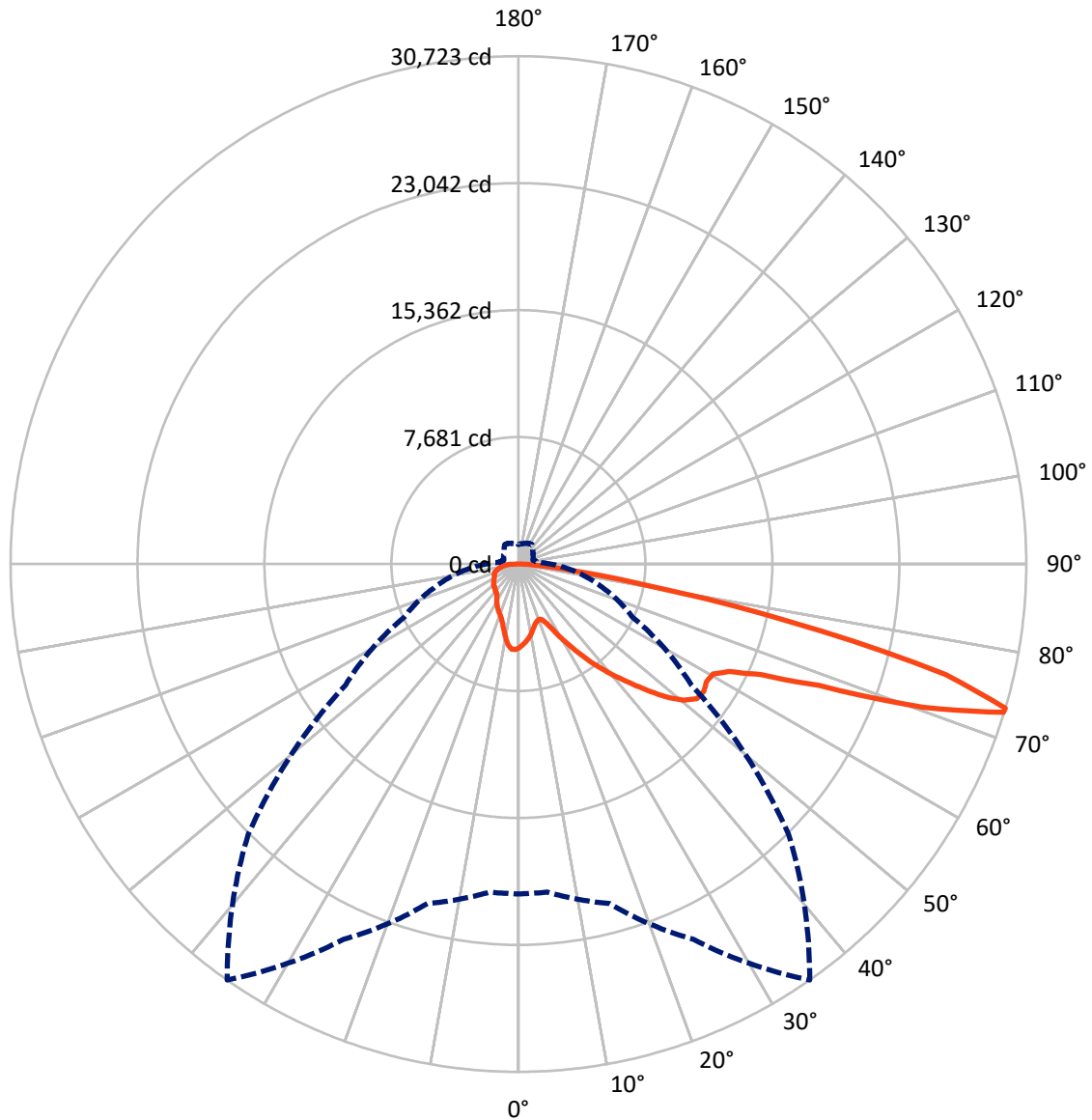
× Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 5.6 fc  
 Type IV - Short - Non-Cutoff

REPORT NUMBER: P300398  
CATALOG NUMBER: GLNA-AF-08-LED-E1-T4FT-7027-800

### Luminous Intensity Polar Plot



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

REPORT NUMBER: P300398

CATALOG NUMBER: GLNA-AF-08-LED-E1-T4FT-7027-800

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	6403.1	0.0	6403.1
	% Fixture	19.1	0.0	19.1
<b>Street Side</b>	Lumens	27169.0	0.0	27169.0
	% Fixture	80.9	0.0	80.9
<b>Total</b>	Lumens	33572.1	0.0	33572.1
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	458.7	1.4
10°-20°	1144.9	3.4
20°-30°	1850.9	5.5
30°-40°	3103.7	9.2
40°-50°	4784.1	14.3
50°-60°	6418.4	19.1
60°-70°	8550.7	25.5
70°-80°	6521.6	19.4
80°-90°	739.2	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°	33572.1	100.0
0°-180°	33572.1	100.0

**Coefficient of Utilization**



REPORT NUMBER: P300398

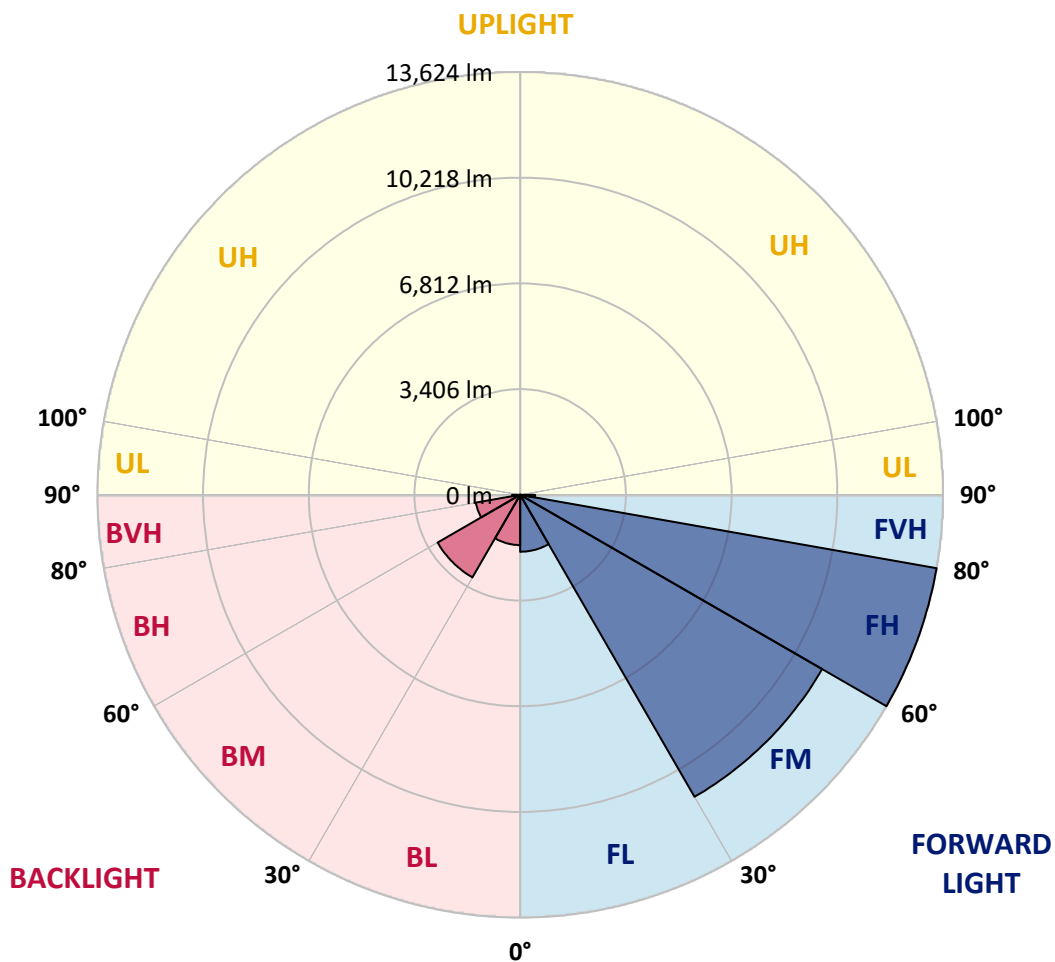
CATALOG NUMBER: GLNA-AF-08-LED-E1-T4FT-7027-800

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1834.2	5.5			
FM	(30°-60°)	11233.4	33.5			
FH	(60°-80°)	13623.5	40.6			G5
FVH	(80°-90°)	477.8	1.4			G3/500
BL	(0°-30°)	1620.3	4.8	B3/2500		
BM	(30°-60°)	3072.8	9.2	B3/5000		
BH	(60°-80°)	1448.7	4.3	B3/2500		G3/2500
BVH	(80°-90°)	261.4	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: P300398

CATALOG NUMBER: GLNA-AF-08-LED-E1-T4FT-7027-800

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	5067.1	5067.1	5067.1	5067.1	5067.1	5067.1	5067.1	5067.1	5067.1	5067.1	5067.1
2.5°	4867.2	4876.8	4865.6	4880.1	4904.2	4930.0	4947.8	4973.6	5002.6	5042.9	5052.6
5°	4638.2	4652.7	4652.7	4678.5	4725.3	4767.2	4805.9	4847.8	4909.1	4978.4	5005.8
7.5°	4386.7	4394.8	4409.3	4448.0	4515.7	4575.4	4630.2	4697.9	4781.7	4873.6	4922.0
10°	4083.6	4094.9	4117.5	4172.3	4264.2	4346.4	4425.4	4518.9	4625.3	4739.8	4801.1
12.5°	3869.2	3866.0	3875.7	3916.0	3996.6	4096.5	4211.0	4330.3	4460.9	4594.7	4668.9
15°	3796.7	3778.9	3741.9	3732.2	3775.7	3875.7	4007.9	4154.6	4311.0	4472.2	4564.1
17.5°	3841.8	3811.2	3709.6	3635.5	3629.0	3704.8	3845.0	4009.5	4190.0	4386.7	4501.2
20°	4125.6	4053.0	3803.1	3630.6	3571.0	3608.1	3730.6	3904.7	4117.5	4378.7	4525.4
22.5°	4804.3	4697.9	4167.5	3846.7	3645.1	3600.0	3691.9	3877.3	4125.6	4478.6	4665.6
25°	5792.6	5641.0	4793.0	4385.1	3969.2	3729.0	3749.9	3940.2	4240.0	4710.8	4936.5
27.5°	6572.8	6474.5	5610.4	5144.5	4559.2	4077.2	3938.5	4098.2	4473.8	5091.3	5321.8
30°	7037.2	6977.5	6484.2	6005.4	5312.1	4631.8	4299.7	4394.8	4839.8	5618.4	5808.7
32.5°	7575.6	7540.2	7298.3	6858.2	6124.7	5360.5	4872.0	4838.1	5329.9	6252.0	6339.1
35°	8133.4	8122.1	7980.3	7664.3	6996.8	6321.3	5631.3	5402.4	5863.5	6909.8	6855.0
37.5°	8652.6	8633.2	8551.0	8367.2	7909.3	7353.1	6405.2	5981.2	6439.0	7538.5	7295.1
40°	9608.6	9457.0	9174.9	9036.3	8831.5	8222.1	7019.4	6521.3	7035.5	8138.3	7675.6
42.5°	10774.2	10527.5	10001.9	9811.7	9782.7	8907.3	7438.6	7045.2	7636.9	8733.2	8049.6
45°	11691.5	11459.4	11006.3	10766.1	10872.5	9528.0	7859.4	7604.6	8256.0	9357.1	8434.9
47.5°	12670.1	12305.7	11706.0	11778.6	12010.7	10114.8	8288.2	8206.0	8934.7	10055.1	8913.7
50°	12705.6	12426.7	12163.9	12597.6	12958.7	10654.9	8825.1	8836.3	9765.0	10933.8	9550.5
52.5°	11968.8	11909.2	12326.7	13008.7	13529.4	11082.1	9436.1	9487.7	10827.4	11943.0	10250.2
55°	11710.9	11643.1	12125.2	12865.2	13606.8	11435.2	10098.7	10192.2	12112.3	13007.0	10932.2
57.5°	12339.6	12189.7	12221.9	12797.5	13418.1	11822.1	10820.9	11009.6	13508.4	13937.3	11370.7
60°	14096.9	13776.1	13166.7	13152.1	13519.7	12402.5	11656.0	11886.6	14959.4	14382.2	11199.8
62.5°	16561.9	16241.1	15099.7	14356.4	14301.6	13360.1	12681.4	12742.6	15797.7	13779.3	10156.7
65°	19230.0	18943.1	17667.8	16618.3	16112.1	14946.5	13872.8	13124.7	15523.7	12120.3	8331.7
67.5°	22468.9	22161.0	21064.7	20095.8	19608.9	17506.6	14709.5	12758.8	13784.1	9389.3	5989.2
70°	24734.0	24419.6	23987.6	24772.7	25964.1	21200.1	14817.5	11270.7	10295.4	6240.7	3604.8
72.5°	21778.9	21632.2	22420.5	25727.1	30689.4	23441.1	13394.0	8206.0	5979.6	3313.0	2086.2
73°	19953.9	19921.7	21266.2	25058.1	30723.3	23096.0	12770.1	7627.2	5128.3	2930.9	1907.2
75°	9010.5	9270.0	12217.1	19139.8	26692.8	19031.8	8987.9	4375.4	2897.1	2024.9	1439.7
77.5°	2165.2	2255.4	3822.5	9089.5	16856.9	11341.7	4072.4	2163.5	1852.4	1430.0	1051.1
80°	922.2	952.8	1471.9	3358.2	7936.7	4567.3	1876.6	1449.3	1281.7	997.9	736.8
82.5°	512.7	544.9	835.1	1523.5	3203.4	1557.4	1144.6	1009.2	843.2	601.3	478.8
85°	290.2	307.9	488.5	851.2	1357.5	625.5	685.2	670.7	475.6	309.5	235.4
87.5°	137.0	148.3	235.4	395.0	532.0	245.1	348.2	383.7	298.3	188.6	122.5
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: P300398

CATALOG NUMBER: GLNA-AF-08-LED-E1-T4FT-7027-800

**CANDELA DISTRIBUTION (continued):**

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	5067.1	5067.1	5067.1	5067.1	5067.1	5067.1	5067.1	5067.1	5067.1	5067.1
2.5°	5063.8	5092.9	5126.7	5144.5	5160.6	5179.9	5199.3	5199.3	5202.5	5204.1
5°	5028.4	5088.0	5141.2	5163.8	5168.6	5168.6	5163.8	5138.0	5115.4	5125.1
7.5°	4954.2	5041.3	5086.4	5078.4	5017.1	4946.2	4886.5	4814.0	4776.9	4770.4
10°	4847.8	4947.8	4955.8	4875.2	4723.7	4572.1	4446.4	4323.9	4265.8	4251.3
12.5°	4730.1	4822.0	4770.4	4604.4	4360.9	4140.1	3980.5	3856.3	3801.5	3787.0
15°	4635.0	4697.9	4567.3	4306.1	3999.8	3766.0	3633.8	3542.0	3503.3	3492.0
17.5°	4585.0	4597.9	4359.3	4006.3	3680.6	3485.5	3403.3	3359.8	3345.3	3337.2
20°	4609.2	4518.9	4161.0	3727.4	3419.4	3282.4	3263.0	3251.8	3248.5	3243.7
22.5°	4730.1	4494.7	3978.9	3463.0	3190.5	3130.8	3147.0	3145.4	3142.1	3138.9
25°	4946.2	4515.7	3801.5	3211.5	2998.6	2985.8	3014.8	3014.8	3001.9	3001.9
27.5°	5231.5	4559.2	3603.2	2972.9	2824.5	2826.1	2848.7	2842.3	2827.8	2818.1
30°	5579.7	4586.6	3371.1	2758.4	2661.7	2655.3	2661.7	2634.3	2590.8	2587.5
32.5°	5936.0	4552.8	3101.8	2568.2	2489.2	2474.7	2469.9	2431.2	2381.2	2366.7
35°	6258.5	4428.7	2827.8	2416.7	2324.8	2292.5	2315.1	2302.2	2257.0	2245.8
37.5°	6493.8	4198.1	2581.1	2282.8	2207.1	2199.0	2213.5	2218.4	2165.2	2153.9
40°	6651.8	3885.3	2369.9	2170.0	2184.5	2153.9	2105.5	2071.6	2055.5	2050.7
42.5°	6779.2	3559.7	2192.6	2116.8	2189.3	2100.7	1995.9	1941.1	1970.1	1983.0
45°	6925.9	3242.1	2044.2	2050.7	2165.2	2039.4	1920.1	1866.9	1878.2	1881.4
47.5°	7127.4	2855.2	1884.6	1944.3	2084.5	1997.5	1873.3	1797.6	1744.4	1720.2
50°	7406.3	2397.3	1718.6	1825.0	2005.5	1966.9	1800.8	1720.2	1621.9	1599.3
52.5°	7599.8	1970.1	1581.5	1725.0	1934.6	1905.6	1742.8	1638.0	1534.8	1515.4
55°	7495.0	1636.4	1462.2	1613.8	1841.1	1829.8	1694.4	1554.1	1473.5	1457.4
57.5°	6971.1	1425.2	1370.4	1509.0	1726.6	1765.3	1629.9	1483.2	1425.2	1413.9
60°	5971.5	1293.0	1312.3	1438.1	1633.1	1700.8	1565.4	1444.5	1405.8	1397.8
62.5°	4633.4	1204.3	1268.8	1386.5	1560.6	1655.7	1530.0	1439.7	1425.2	1415.5
65°	3319.5	1133.4	1222.0	1334.9	1494.5	1613.8	1517.1	1433.2	1436.4	1428.4
67.5°	2255.4	1070.5	1165.6	1276.8	1430.0	1576.7	1499.3	1410.7	1451.0	1441.3
70°	1578.3	1009.2	1099.5	1202.7	1349.4	1525.1	1467.1	1376.8	1373.6	1334.9
72.5°	1231.7	928.6	1009.2	1099.5	1246.2	1452.6	1402.6	1301.0	1247.8	1207.5
73°	1175.3	909.3	986.7	1076.9	1223.6	1434.8	1384.9	1280.1	1220.4	1183.3
75°	972.1	825.4	896.4	977.0	1126.9	1351.0	1297.8	1185.0	1109.2	1086.6
77.5°	764.2	706.1	773.8	846.4	993.1	1228.5	1168.8	1060.8	1018.9	999.5
80°	565.9	585.2	644.9	709.4	860.9	1097.9	1044.7	936.7	1123.7	1076.9
82.5°	398.2	443.3	498.2	556.2	722.3	970.5	906.0	794.8	822.2	683.6
85°	235.4	290.2	341.8	391.8	520.7	804.5	748.1	633.6	519.1	494.9
87.5°	137.0	161.2	175.7	227.3	357.9	606.2	527.2	469.1	269.2	182.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)