

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: P298882

Luminaire Tested: **GLNA-AF-05-LED-E1-T2**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P298882  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24139)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GLNA-AF-05-LED-E1-T2  
Description: GALLEONAIRE AREA AND ROADWAY LUMINAIRE  
(5) 70 CRI, 4000K CCT 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND Type II OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 29094.6 lumens  
Efficiency: N/A  
Efficacy: 104.3 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type II - Medium - Full Cutoff  
BUG Rating: B3 - U0 - G4

Input Watts (W): 279  
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

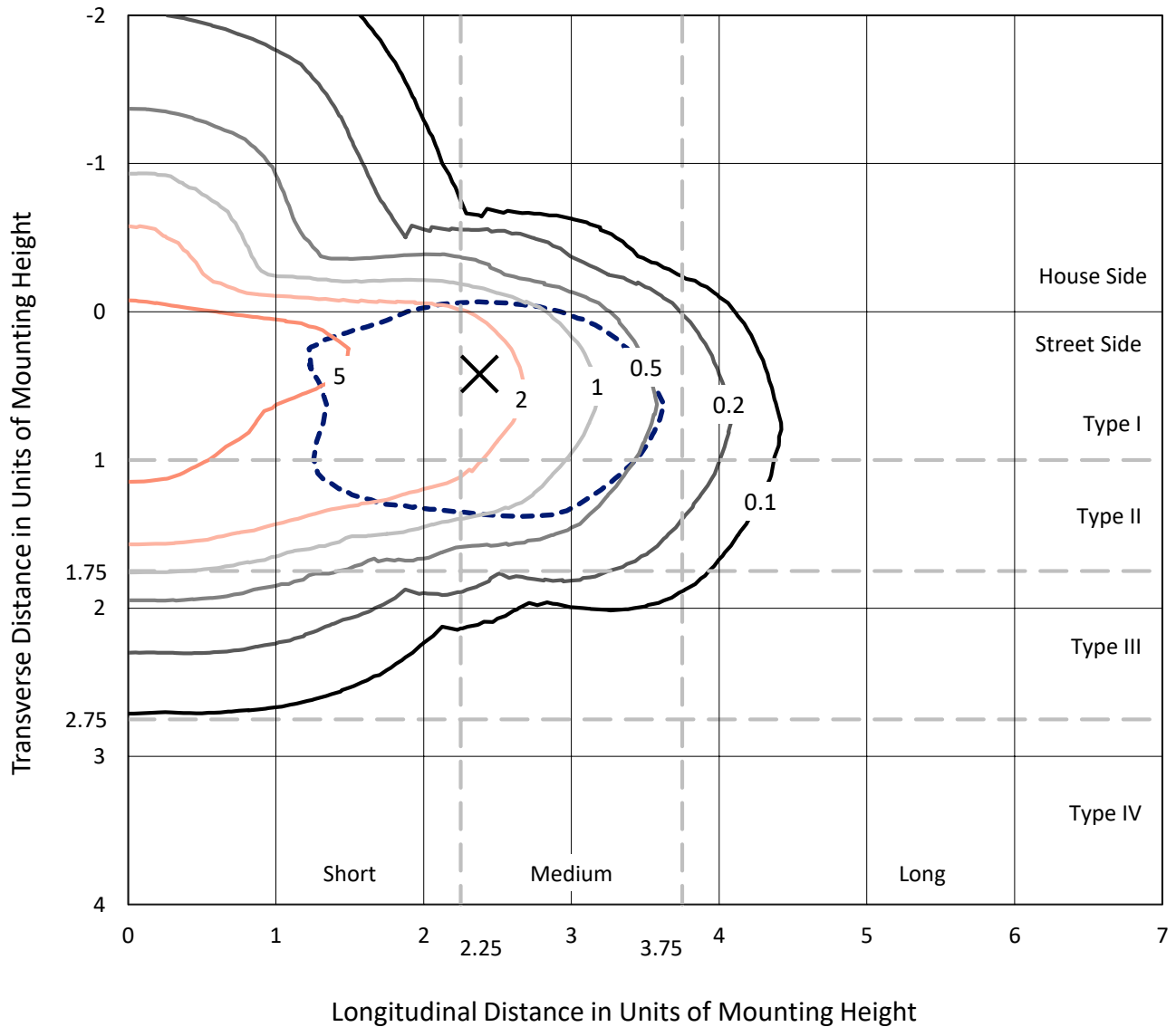


REPORT NUMBER: P298882

CATALOG NUMBER: GLNA-AF-05-LED-E1-T2

### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

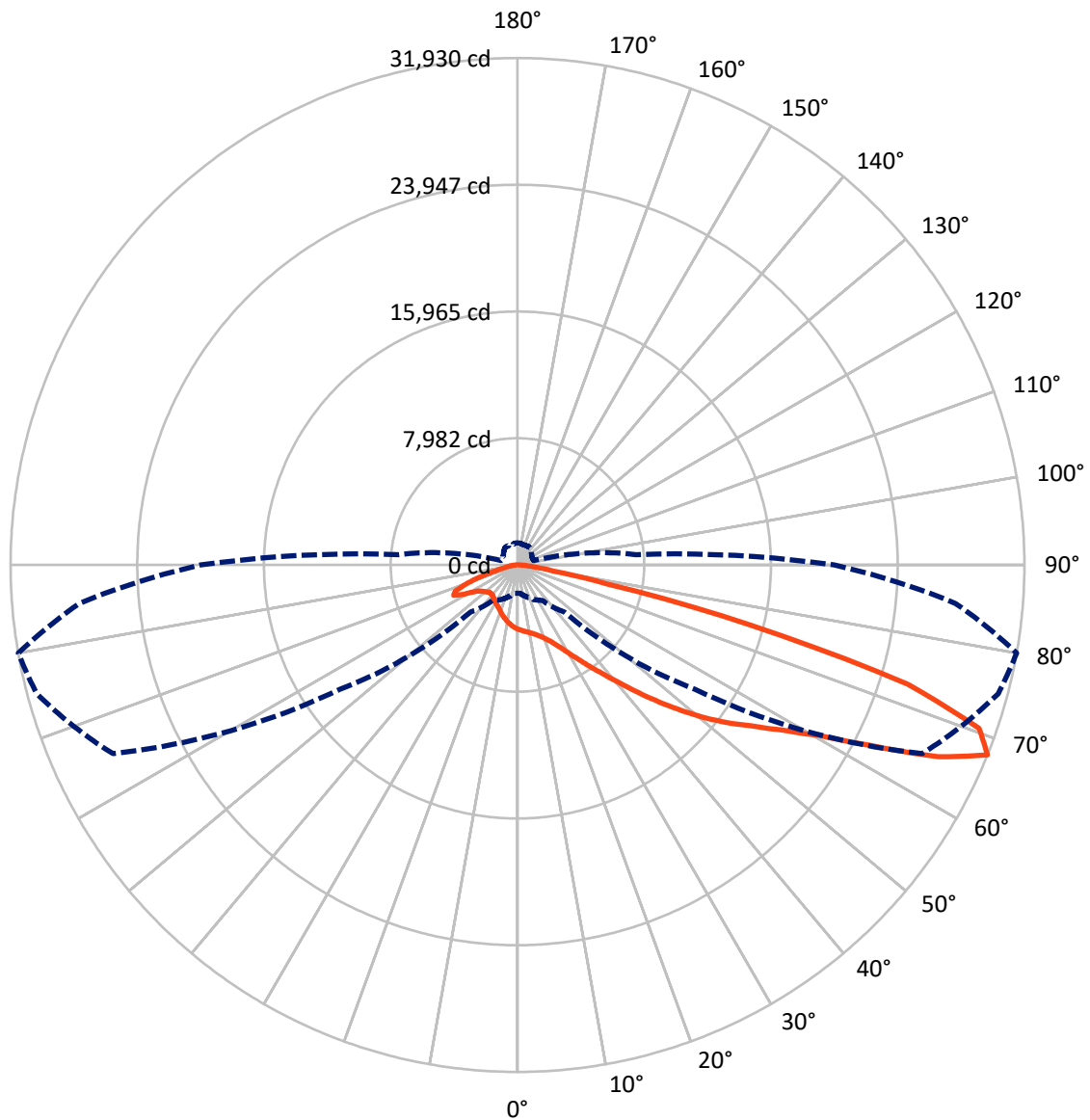


Based on 25 foot mounting height. Maximum calculated value = 7.9 fc  
 Type II - Medium - Full Cutoff

REPORT NUMBER: P298882

CATALOG NUMBER: GLNA-AF-05-LED-E1-T2

### Luminous Intensity Polar Plot



— Vertical Plane Through 80-Deg Lateral    - - - Horizontal Cone Through 67.5-Deg Vertical

REPORT NUMBER: P298882

CATALOG NUMBER: GLNA-AF-05-LED-E1-T2

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	5358.1	0.0	5358.1
	% Fixture	18.4	0.0	18.4
<b>Street Side</b>	Lumens	23736.5	0.0	23736.5
	% Fixture	81.6	0.0	81.6
<b>Total</b>	Lumens	29094.6	0.0	29094.6
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	372.9	1.3
10°-20°	1074.1	3.7
20°-30°	1777.9	6.1
30°-40°	2908.2	10.0
40°-50°	4695.5	16.1
50°-60°	6779.0	23.3
60°-70°	7481.0	25.7
70°-80°	3448.3	11.9
80°-90°	557.7	1.9
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°	29094.6	100.0
0°-180°	29094.6	100.0



REPORT NUMBER: P298882

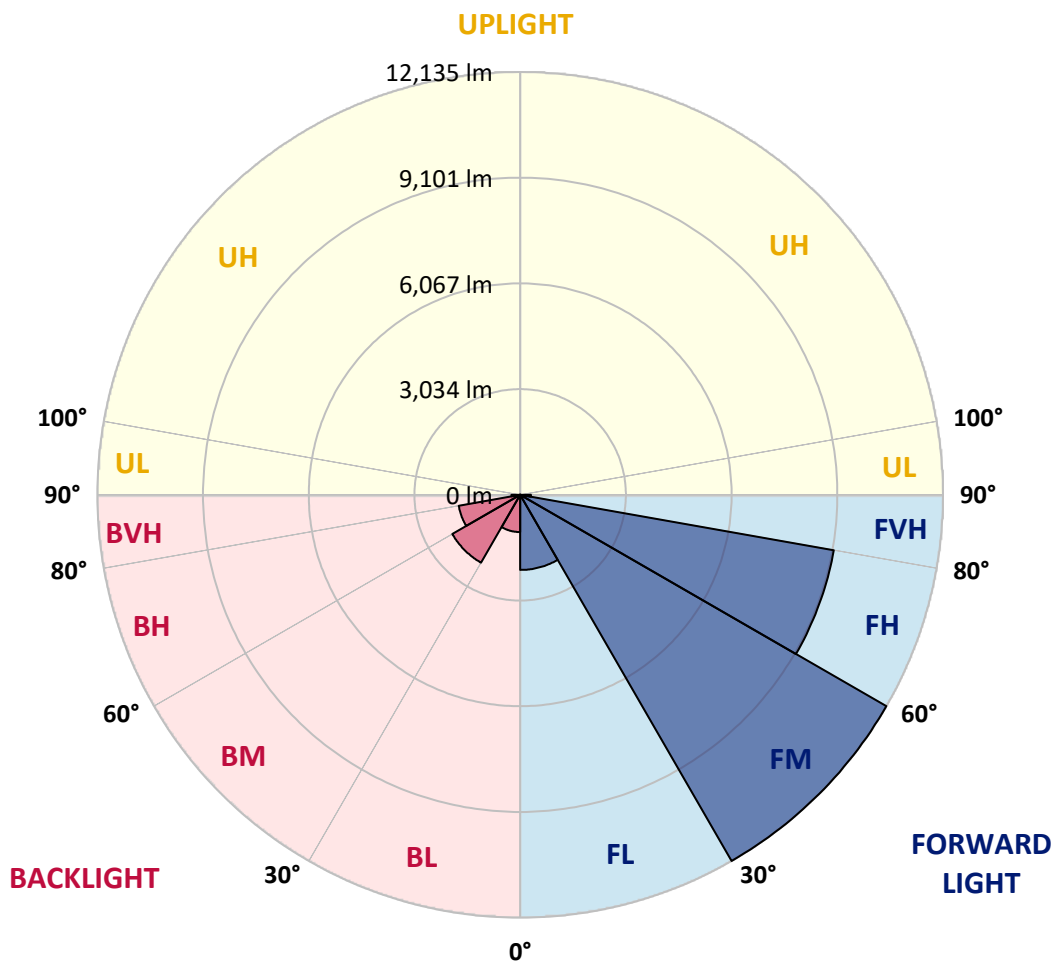
CATALOG NUMBER: GLNA-AF-05-LED-E1-T2

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2155.9	7.4			
FM	(30°-60°)	12134.6	41.7			
FH	(60°-80°)	9139.4	31.4			G4/12000
FVH	(80°-90°)	306.6	1.1			G3/500
BL	(0°-30°)	1069.0	3.7	B3/2500		
BM	(30°-60°)	2248.1	7.7	B2/2500		
BH	(60°-80°)	1789.9	6.2	B3/2500		G3/2500
BVH	(80°-90°)	251.1	0.9			G3/500
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G4**

Type II Medium





REPORT NUMBER: P298882

CATALOG NUMBER: GLNA-AF-05-LED-E1-T2

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	80°	85°
0°	4042.1	4042.1	4042.1	4042.1	4042.1	4042.1	4042.1	4042.1	4042.1	4042.1	4042.1
2.5°	4421.7	4395.9	4400.2	4393.0	4371.5	4334.3	4294.2	4221.1	4145.2	4105.1	4073.6
5°	4791.2	4784.0	4774.0	4751.1	4696.7	4619.3	4523.4	4394.4	4255.5	4182.5	4112.3
7.5°	5067.7	5063.4	5050.5	5036.1	4983.1	4890.0	4745.4	4562.0	4360.1	4259.8	4150.9
10°	5090.6	5097.7	5107.8	5146.4	5153.6	5103.5	4955.9	4733.9	4468.9	4340.0	4201.1
12.5°	4895.8	4911.5	4950.2	5049.0	5153.6	5215.2	5139.3	4914.4	4596.4	4440.3	4264.1
15°	4637.9	4646.5	4693.8	4829.9	5017.5	5208.0	5279.6	5113.5	4761.1	4569.2	4358.6
17.5°	4527.7	4532.0	4564.9	4655.1	4829.9	5102.0	5358.4	5329.8	4963.1	4729.6	4474.7
20°	4471.8	4481.8	4529.1	4617.9	4728.2	4966.0	5369.9	5563.2	5203.7	4930.1	4620.8
22.5°	4630.8	4626.5	4643.7	4688.1	4781.2	4924.4	5361.3	5803.9	5510.2	5188.0	4811.3
25°	5001.8	5017.5	4987.4	4937.3	4967.4	5067.7	5407.1	6064.6	5894.1	5518.8	5060.5
27.5°	5530.3	5514.5	5470.1	5352.7	5291.1	5334.1	5558.9	6345.3	6371.1	5954.3	5389.9
30°	6057.4	6044.5	6001.5	5858.3	5732.3	5696.5	5854.0	6667.6	6939.7	6477.1	5793.9
32.5°	6604.6	6590.2	6550.1	6406.9	6255.1	6172.0	6273.7	7040.0	7610.1	7101.6	6269.4
35°	7279.2	7252.0	7167.5	6968.4	6819.4	6755.0	6802.2	7508.4	8383.5	7840.7	6846.6
37.5°	7913.7	7955.3	7869.3	7594.3	7400.9	7378.0	7431.0	8079.9	9217.2	8667.1	7509.8
40°	8551.1	8558.3	8480.9	8256.1	8057.0	8019.7	8152.9	8773.1	10201.2	9655.5	8316.2
42.5°	9210.0	9224.3	9094.0	8886.3	8740.2	8747.4	8899.2	9585.3	11329.9	10820.0	9244.4
45°	9990.6	10012.1	9868.9	9596.7	9463.5	9731.4	9668.4	10496.3	12567.4	12143.5	10310.1
47.5°	10807.1	10840.0	10731.2	10476.2	10310.1	10678.2	10437.5	11506.1	13899.5	13562.9	11480.3
50°	11252.5	11299.8	11405.8	11387.2	11351.4	11289.8	11295.5	12588.9	15273.1	15041.1	12683.5
52.5°	11013.3	11011.9	11398.6	11868.4	12369.8	12407.0	12341.1	13730.5	16556.5	16486.3	13816.4
55°	9919.0	9993.5	10579.3	11488.9	12858.2	13713.3	13908.1	15038.2	17817.0	17898.6	14966.6
57.5°	8097.1	8158.7	8949.3	10216.9	12199.3	14489.6	16136.8	16939.0	19226.4	19607.4	16497.8
60°	5491.6	5566.1	6404.0	7926.6	10426.1	14057.1	18258.2	20330.8	20913.7	21780.3	18646.3
62.5°	3227.1	3294.4	3977.6	5000.3	7340.8	12047.5	19189.2	25156.4	23593.7	25059.0	21923.5
65°	2221.6	2267.4	2599.7	3112.5	4218.3	8114.3	18034.7	28488.0	27717.4	29121.1	25723.6
67.5°	1787.6	1781.8	2045.4	2394.9	2715.7	4183.9	13637.4	28111.3	31344.1	31929.9	27695.9
70°	1472.5	1466.7	1645.8	1935.1	2170.0	2356.2	7428.2	23722.6	30605.0	30842.8	25879.7
72.5°	1231.8	1237.5	1352.1	1567.0	1780.4	1774.7	3264.3	16688.3	24076.4	25720.7	20630.1
75°	1039.9	1042.8	1118.7	1270.5	1445.2	1429.5	1770.4	9041.0	13995.5	15139.9	11435.9
77.5°	885.2	888.1	936.8	1021.3	1145.9	1140.2	1292.0	3906.0	5838.3	5766.6	3911.7
80°	789.2	789.2	812.1	827.9	896.7	870.9	958.2	1876.4	2467.9	2278.9	1561.3
82.5°	618.8	621.6	762.0	756.3	706.1	673.2	673.2	1105.8	1307.7	1208.9	913.8
85°	348.1	346.6	491.3	593.0	621.6	474.1	469.8	618.8	711.9	627.4	442.6
87.5°	149.0	151.8	227.7	263.6	352.4	295.1	290.8	319.4	362.4	313.7	204.8
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: P298882

CATALOG NUMBER: GLNA-AF-05-LED-E1-T2

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	4042.1	4042.1	4042.1	4042.1	4042.1	4042.1	4042.1	4042.1	4042.1	4042.1	4042.1
2.5°	4043.5	4006.3	3924.6	3822.9	3731.3	3671.1	3616.7	3537.9	3542.2	3487.8	3447.7
5°	4040.7	3963.3	3774.2	3549.4	3333.1	3177.0	3059.5	2953.5	2927.7	2877.6	2847.5
7.5°	4043.5	3917.5	3599.5	3240.0	2972.1	2774.5	2674.2	2618.3	2605.4	2588.3	2589.7
10°	4053.5	3875.9	3407.6	2950.6	2669.9	2539.6	2515.2	2532.4	2552.4	2558.2	2559.6
12.5°	4076.5	3838.7	3197.0	2692.8	2480.8	2440.7	2482.3	2541.0	2579.7	2598.3	2596.8
15°	4128.0	3810.0	2995.0	2490.9	2376.3	2397.8	2475.1	2558.2	2614.0	2639.8	2641.3
17.5°	4183.9	3768.5	2787.4	2336.2	2298.9	2353.4	2449.3	2546.7	2615.5	2644.1	2649.8
20°	4256.9	3716.9	2569.6	2220.1	2225.9	2287.5	2377.7	2475.1	2551.0	2575.4	2586.8
22.5°	4352.9	3661.1	2379.1	2125.6	2142.8	2190.1	2260.2	2344.8	2410.6	2422.1	2432.1
25°	4481.8	3600.9	2227.3	2039.7	2046.8	2074.0	2121.3	2171.4	2217.3	2204.4	2214.4
27.5°	4655.1	3549.4	2114.1	1960.9	1948.0	1953.7	1978.1	1993.8	2018.2	1982.4	1986.7
30°	4858.5	3493.5	2026.8	1892.1	1856.3	1846.3	1852.0	1860.6	1879.2	1830.5	1823.4
32.5°	5094.9	3426.2	1945.1	1832.0	1781.8	1761.8	1764.7	1787.6	1859.2	1829.1	1813.4
35°	5369.9	3350.3	1859.2	1766.1	1731.7	1703.1	1700.2	1771.8	1985.2	1966.6	1952.3
37.5°	5692.2	3274.4	1773.2	1691.6	1694.5	1663.0	1652.9	1734.6	2009.6	1936.5	1926.5
40°	6101.8	3234.2	1700.2	1612.8	1648.6	1644.3	1624.3	1665.8	1849.2	1716.0	1698.8
42.5°	6608.9	3240.0	1645.8	1528.3	1594.2	1640.0	1608.5	1610.0	1675.8	1575.6	1559.8
45°	7234.8	3307.3	1607.1	1461.0	1532.6	1635.7	1602.8	1579.9	1585.6	1532.6	1524.0
47.5°	7965.3	3446.2	1579.9	1405.1	1473.9	1620.0	1601.4	1571.3	1558.4	1529.7	1522.6
50°	8777.4	3648.2	1559.8	1352.1	1420.9	1594.2	1602.8	1562.7	1548.4	1536.9	1532.6
52.5°	9575.3	3878.8	1529.7	1306.3	1379.4	1562.7	1607.1	1554.1	1538.3	1529.7	1525.5
55°	10464.7	4166.7	1483.9	1267.6	1345.0	1522.6	1607.1	1541.2	1524.0	1525.5	1524.0
57.5°	11666.5	4632.2	1429.5	1234.7	1303.4	1473.9	1579.9	1526.9	1505.4	1506.8	1508.3
60°	13544.3	5453.0	1363.6	1201.7	1251.9	1416.6	1542.6	1495.4	1473.9	1479.6	1481.0
62.5°	16305.9	6657.6	1277.7	1153.0	1197.4	1355.0	1491.1	1455.3	1433.8	1448.1	1448.1
65°	19176.3	7720.4	1171.7	1091.5	1140.2	1287.7	1426.6	1405.1	1383.6	1416.6	1415.2
67.5°	19948.3	7482.6	1065.7	1024.1	1082.9	1213.2	1349.3	1337.8	1326.4	1383.6	1380.8
70°	17721.0	6007.3	968.3	955.4	1019.8	1133.0	1266.2	1266.2	1259.0	1302.0	1292.0
72.5°	13501.3	4259.8	875.2	882.3	948.2	1045.6	1176.0	1186.0	1174.5	1196.0	1187.4
75°	7227.6	2437.9	782.1	802.1	859.4	956.8	1075.7	1085.7	1078.6	1077.1	1081.4
77.5°	2402.0	1191.7	684.7	716.2	766.3	865.1	971.1	986.9	969.7	966.8	965.4
80°	1070.0	749.1	577.2	618.8	663.2	760.6	860.8	873.7	855.1	880.9	848.0
82.5°	687.5	492.7	462.6	508.5	551.5	656.0	750.6	753.4	736.2	855.1	729.1
85°	333.7	305.1	348.1	389.6	426.8	515.6	621.6	623.1	580.1	528.5	509.9
87.5°	166.2	177.6	232.0	269.3	287.9	353.8	452.6	444.0	425.4	386.7	356.7
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)