

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: P298864

Luminaire Tested: **GLNA-AF-02-LED-E1-T2**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P298864  
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-02-LED-E1-T2  
Description: GALLEONAIRE AREA AND ROADWAY LUMINAIRE  
(2) 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: 11909.9 lumens  
Efficiency: N/A  
Efficacy: 105.4 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type II - Medium - Full Cutoff  
BUG Rating: B2 - U0 - G2

Input Watts (W): 113  
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

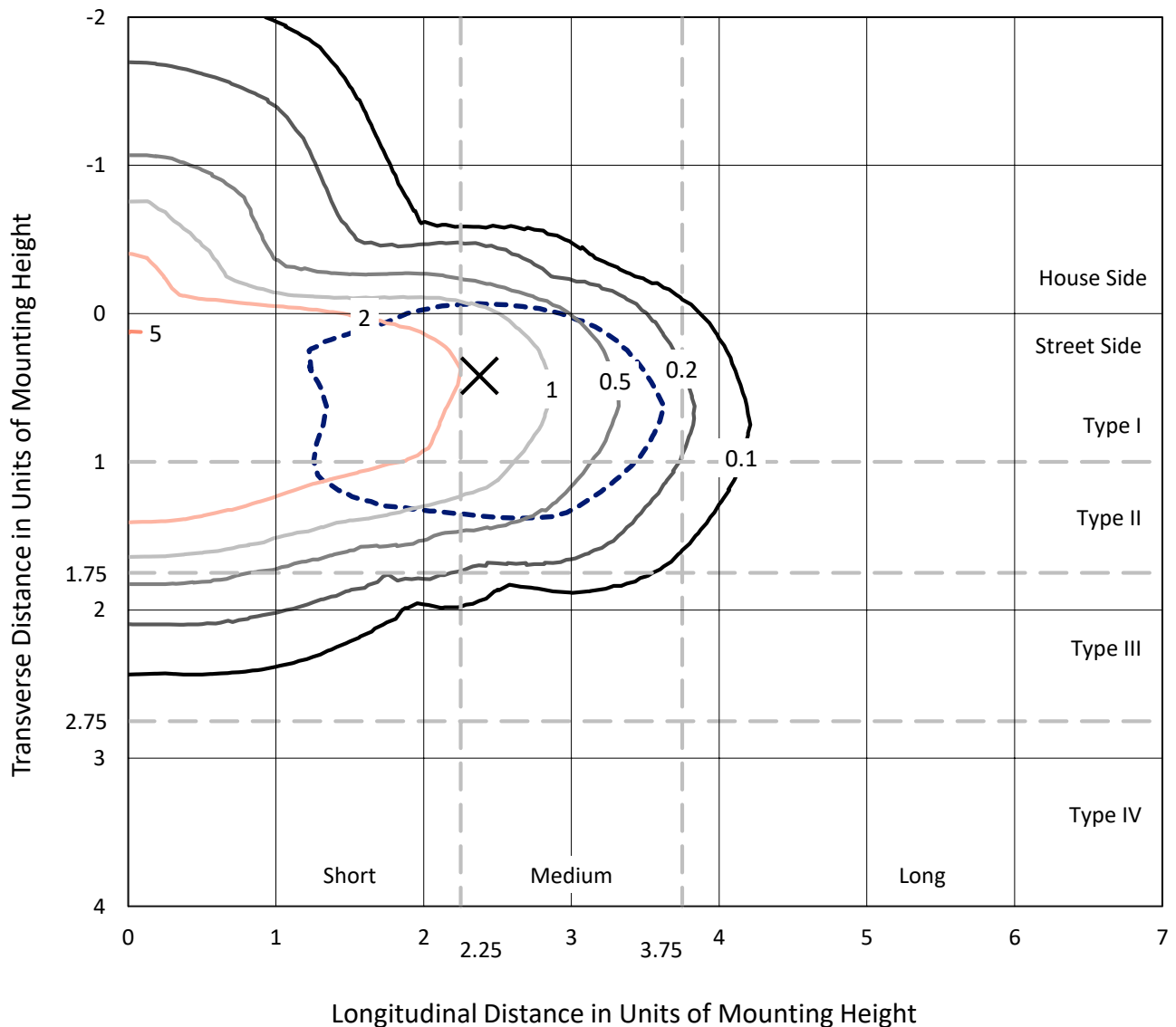


REPORT NUMBER: P298864

CATALOG NUMBER: GLNA-AF-02-LED-E1-T2

### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

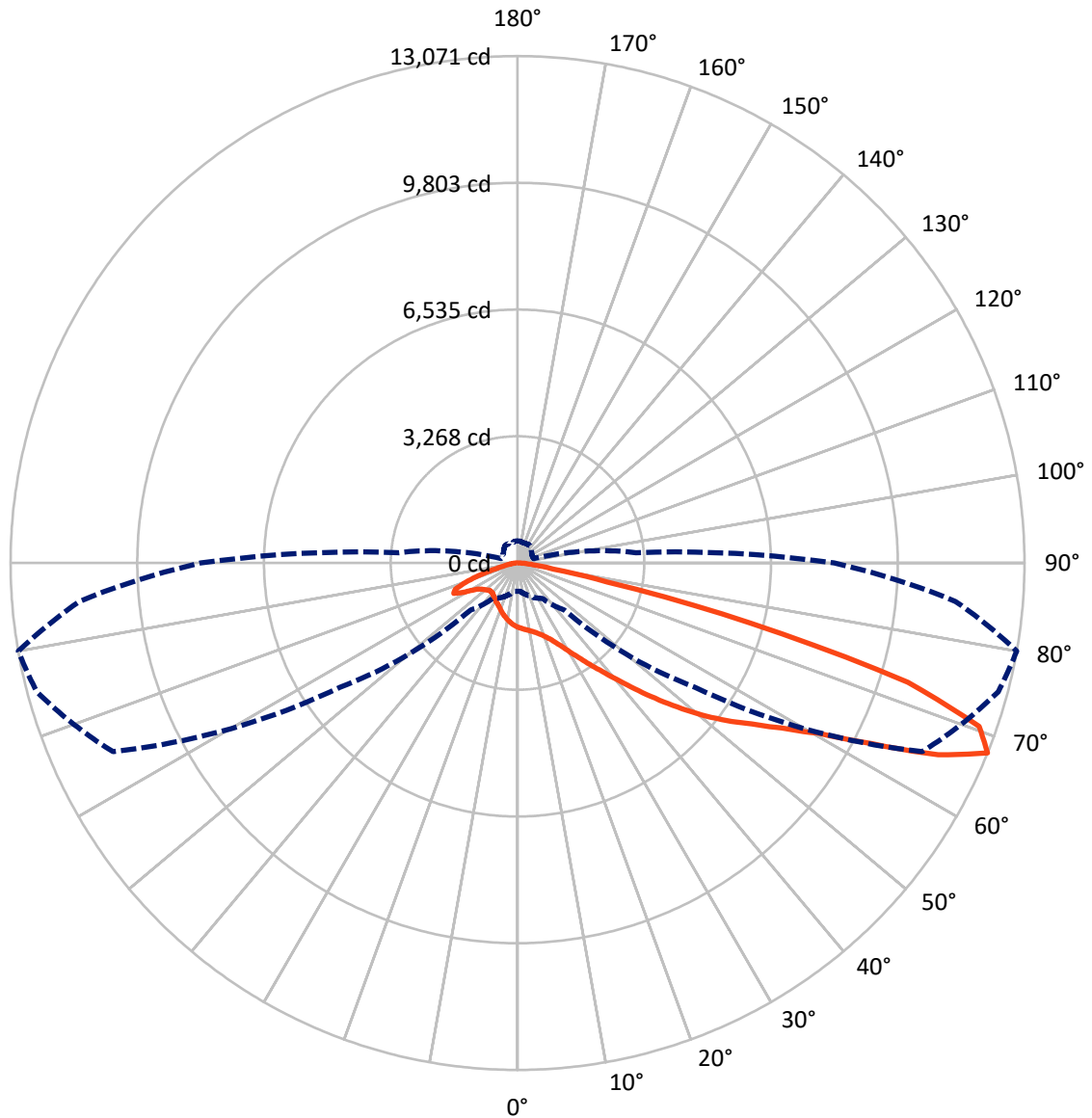


Based on 20 foot mounting height. Maximum calculated value = 5 fc  
 Type II - Medium - Full Cutoff

REPORT NUMBER: P298864

CATALOG NUMBER: GLNA-AF-02-LED-E1-T2

### Luminous Intensity Polar Plot



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

REPORT NUMBER: P298864

CATALOG NUMBER: GLNA-AF-02-LED-E1-T2

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2193.3	0.0	2193.3
	% Fixture	18.4	0.0	18.4
<b>Street Side</b>	Lumens	9716.6	0.0	9716.6
	% Fixture	81.6	0.0	81.6
<b>Total</b>	Lumens	11909.9	0.0	11909.9
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	152.6	1.3
10°-20°	439.7	3.7
20°-30°	727.8	6.1
30°-40°	1190.5	10.0
40°-50°	1922.1	16.1
50°-60°	2775.0	23.3
60°-70°	3062.4	25.7
70°-80°	1411.6	11.9
80°-90°	228.3	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°	11909.9	100.0
0°-180°	11909.9	100.0



REPORT NUMBER: P298864

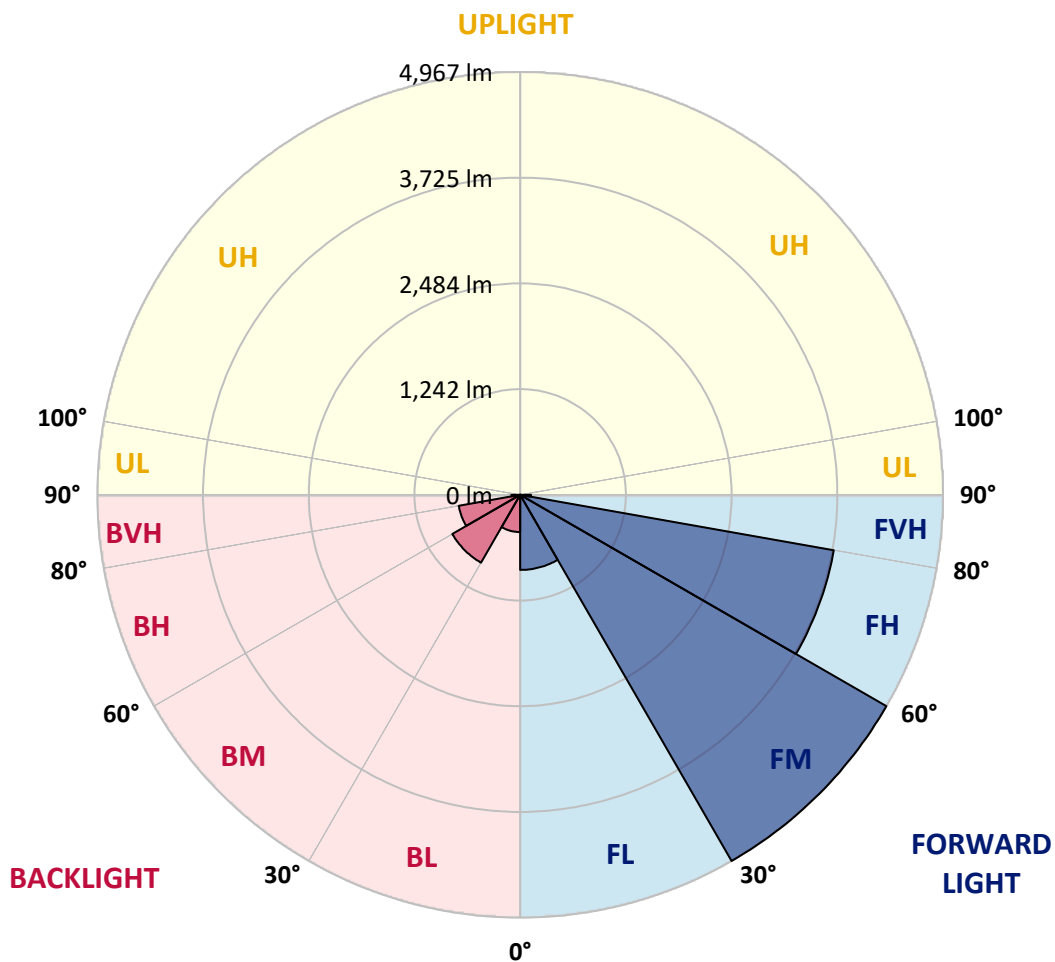
CATALOG NUMBER: GLNA-AF-02-LED-E1-T2

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	882.5	7.4			
FM (30°-60°)	4967.3	41.7			
FH (60°-80°)	3741.2	31.4			G2/5000
FVH (80°-90°)	125.5	1.1			G2/225
BL (0°-30°)	437.6	3.7	B1/500		
BM (30°-60°)	920.2	7.7	B1/1000		
BH (60°-80°)	732.7	6.2	B2/1000		G2/1000
BVH (80°-90°)	102.8	0.9			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G2**

Type II Medium





REPORT NUMBER: P298864

CATALOG NUMBER: GLNA-AF-02-LED-E1-T2

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	80°	85°
0°	1654.6	1654.6	1654.6	1654.6	1654.6	1654.6	1654.6	1654.6	1654.6	1654.6	1654.6
2.5°	1810.0	1799.5	1801.2	1798.3	1789.5	1774.2	1757.8	1727.9	1696.8	1680.4	1667.5
5°	1961.3	1958.4	1954.2	1944.9	1922.6	1890.9	1851.6	1798.9	1742.0	1712.1	1683.4
7.5°	2074.4	2072.7	2067.4	2061.5	2039.9	2001.7	1942.5	1867.5	1784.8	1743.8	1699.2
10°	2083.8	2086.8	2090.9	2106.7	2109.6	2089.1	2028.7	1937.8	1829.4	1776.6	1719.7
12.5°	2004.1	2010.5	2026.4	2066.8	2109.6	2134.8	2103.8	2011.7	1881.5	1817.6	1745.5
15°	1898.5	1902.1	1921.4	1977.1	2053.9	2131.9	2161.2	2093.2	1949.0	1870.4	1784.2
17.5°	1853.4	1855.2	1868.6	1905.6	1977.1	2088.5	2193.5	2181.7	2031.6	1936.1	1831.7
20°	1830.5	1834.6	1854.0	1890.3	1935.5	2032.8	2198.2	2277.3	2130.1	2018.2	1891.5
22.5°	1895.6	1893.9	1900.9	1919.1	1957.2	2015.8	2194.6	2375.8	2255.6	2123.7	1969.5
25°	2047.5	2053.9	2041.6	2021.1	2033.4	2074.4	2213.4	2482.5	2412.8	2259.1	2071.5
27.5°	2263.8	2257.4	2239.2	2191.1	2165.9	2183.5	2275.6	2597.5	2608.0	2437.4	2206.4
30°	2479.6	2474.3	2456.7	2398.1	2346.5	2331.8	2396.3	2729.4	2840.8	2651.4	2371.7
32.5°	2703.6	2697.7	2681.3	2622.7	2560.5	2526.5	2568.1	2881.8	3115.2	2907.0	2566.4
35°	2979.7	2968.6	2934.0	2852.5	2791.5	2765.1	2784.5	3073.6	3431.8	3209.6	2802.7
37.5°	3239.5	3256.5	3221.3	3108.7	3029.6	3020.2	3041.9	3307.5	3773.1	3547.9	3074.1
40°	3500.4	3503.3	3471.7	3379.6	3298.1	3282.9	3337.4	3591.3	4175.9	3952.5	3404.3
42.5°	3770.1	3776.0	3722.6	3637.6	3577.8	3580.7	3642.9	3923.7	4637.9	4429.2	3784.2
45°	4089.7	4098.5	4039.8	3928.4	3873.9	3983.6	3957.8	4296.7	5144.5	4970.9	4220.4
47.5°	4423.9	4437.4	4392.8	4288.4	4220.4	4371.1	4272.6	4710.0	5689.8	5552.0	4699.5
50°	4606.2	4625.6	4669.0	4661.4	4646.7	4621.5	4623.8	5153.3	6252.1	6157.1	5192.0
52.5°	4508.3	4507.7	4666.0	4858.4	5063.6	5078.8	5051.8	5620.6	6777.4	6748.7	5655.8
55°	4060.4	4090.8	4330.7	4703.0	5263.5	5613.6	5693.3	6155.9	7293.4	7326.8	6126.6
57.5°	3314.5	3339.8	3663.4	4182.3	4993.8	5931.4	6605.6	6934.0	7870.4	8026.3	6753.4
60°	2248.0	2278.5	2621.5	3244.8	4267.9	5754.3	7474.0	8322.4	8561.1	8915.8	7632.9
62.5°	1321.0	1348.6	1628.2	2046.9	3005.0	4931.7	7855.1	10297.8	9658.1	10257.9	8974.4
65°	909.4	928.2	1064.2	1274.1	1726.8	3321.6	7382.5	11661.6	11346.1	11920.7	10530.0
67.5°	731.7	729.4	837.3	980.3	1111.7	1712.7	5582.5	11507.4	12830.7	13070.5	11337.3
70°	602.8	600.4	673.7	792.1	888.3	964.5	3040.7	9710.9	12528.2	12625.5	10593.9
72.5°	504.2	506.6	553.5	641.4	728.8	726.5	1336.3	6831.4	9855.7	10528.8	8445.0
75°	425.7	426.9	457.9	520.1	591.6	585.2	724.7	3700.9	5729.1	6197.5	4681.3
77.5°	362.4	363.5	383.5	418.1	469.1	466.7	528.9	1598.9	2389.9	2360.6	1601.3
80°	323.1	323.1	332.5	338.9	367.0	356.5	392.3	768.1	1010.3	932.9	639.1
82.5°	253.3	254.5	311.9	309.6	289.1	275.6	275.6	452.6	535.3	494.9	374.1
85°	142.5	141.9	201.1	242.7	254.5	194.1	192.3	253.3	291.4	256.8	181.2
87.5°	61.0	62.2	93.2	107.9	144.2	120.8	119.0	130.8	148.3	128.4	83.8
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: P298864

CATALOG NUMBER: GLNA-AF-02-LED-E1-T2

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1654.6	1654.6	1654.6	1654.6	1654.6	1654.6	1654.6	1654.6	1654.6	1654.6	1654.6
2.5°	1655.2	1640.0	1606.6	1564.9	1527.4	1502.8	1480.5	1448.2	1450.0	1427.7	1411.3
5°	1654.0	1622.4	1545.0	1452.9	1364.4	1300.5	1252.4	1209.0	1198.5	1177.9	1165.6
7.5°	1655.2	1603.6	1473.5	1326.3	1216.6	1135.7	1094.7	1071.8	1066.5	1059.5	1060.1
10°	1659.3	1586.6	1394.9	1207.8	1092.9	1039.6	1029.6	1036.6	1044.8	1047.2	1047.8
12.5°	1668.7	1571.4	1308.7	1102.3	1015.5	999.1	1016.1	1040.2	1056.0	1063.6	1063.0
15°	1689.8	1559.6	1226.0	1019.6	972.7	981.5	1013.2	1047.2	1070.1	1080.6	1081.2
17.5°	1712.7	1542.6	1141.0	956.3	941.1	963.3	1002.6	1042.5	1070.6	1082.4	1084.7
20°	1742.6	1521.5	1051.9	908.8	911.2	936.4	973.3	1013.2	1044.3	1054.2	1058.9
22.5°	1781.9	1498.7	973.9	870.1	877.2	896.5	925.2	959.8	986.8	991.5	995.6
25°	1834.6	1474.0	911.7	834.9	837.9	849.0	868.4	888.9	907.6	902.4	906.5
27.5°	1905.6	1452.9	865.4	802.7	797.4	799.8	809.7	816.2	826.1	811.5	813.2
30°	1988.8	1430.1	829.7	774.5	759.9	755.8	758.1	761.6	769.3	749.3	746.4
32.5°	2085.6	1402.5	796.2	749.9	729.4	721.2	722.4	731.7	761.1	748.7	742.3
35°	2198.2	1371.4	761.1	722.9	708.9	697.2	696.0	725.3	812.7	805.0	799.2
37.5°	2330.1	1340.4	725.9	692.5	693.6	680.7	676.6	710.0	822.6	792.7	788.6
40°	2497.8	1323.9	696.0	660.2	674.9	673.1	664.9	681.9	757.0	702.4	695.4
42.5°	2705.3	1326.3	673.7	625.6	652.6	671.4	658.5	659.0	686.0	645.0	638.5
45°	2961.6	1353.8	657.9	598.1	627.4	669.6	656.1	646.7	649.1	627.4	623.9
47.5°	3260.6	1410.7	646.7	575.2	603.3	663.1	655.5	643.2	637.9	626.2	623.3
50°	3593.1	1493.4	638.5	553.5	581.6	652.6	656.1	639.7	633.8	629.1	627.4
52.5°	3919.6	1587.8	626.2	534.7	564.6	639.7	657.9	636.2	629.7	626.2	624.4
55°	4283.8	1705.6	607.4	518.9	550.6	623.3	657.9	630.9	623.9	624.4	623.9
57.5°	4775.7	1896.2	585.2	505.4	533.6	603.3	646.7	625.0	616.2	616.8	617.4
60°	5544.4	2232.2	558.2	491.9	512.5	579.9	631.5	612.1	603.3	605.7	606.3
62.5°	6674.8	2725.3	523.0	472.0	490.2	554.7	610.4	595.7	586.9	592.8	592.8
65°	7849.8	3160.3	479.6	446.8	466.7	527.1	584.0	575.2	566.4	579.9	579.3
67.5°	8165.9	3063.0	436.2	419.2	443.3	496.6	552.3	547.6	542.9	566.4	565.2
70°	7254.1	2459.1	396.4	391.1	417.5	463.8	518.3	518.3	515.4	533.0	528.9
72.5°	5526.8	1743.8	358.2	361.2	388.2	428.0	481.4	485.5	480.8	489.6	486.1
75°	2958.6	997.9	320.1	328.3	351.8	391.7	440.3	444.4	441.5	440.9	442.7
77.5°	983.3	487.8	280.3	293.2	313.7	354.1	397.5	404.0	396.9	395.8	395.2
80°	438.0	306.7	236.3	253.3	271.5	311.3	352.4	357.7	350.0	360.6	347.1
82.5°	281.4	201.7	189.4	208.1	225.7	268.5	307.2	308.4	301.4	350.0	298.4
85°	136.6	124.9	142.5	159.5	174.7	211.1	254.5	255.1	237.5	216.4	208.7
87.5°	68.0	72.7	95.0	110.2	117.9	144.8	185.3	181.8	174.1	158.3	146.0
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)