

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: P299882

Luminaire Tested: **GLNA-AF-02-LED-E1-5WQ-7030-800**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P299882  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24143)  
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-E1-5WQ-7030-800  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(2) 70 CRI, 3000K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Type IV  
w/Spill Control OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9989.1 lumens  
Efficiency: N/A  
Efficacy: 117.5 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type V - Short - Semi-Cutoff  
BUG Rating: B4 - U0 - G2

Input Watts (W): 85  
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

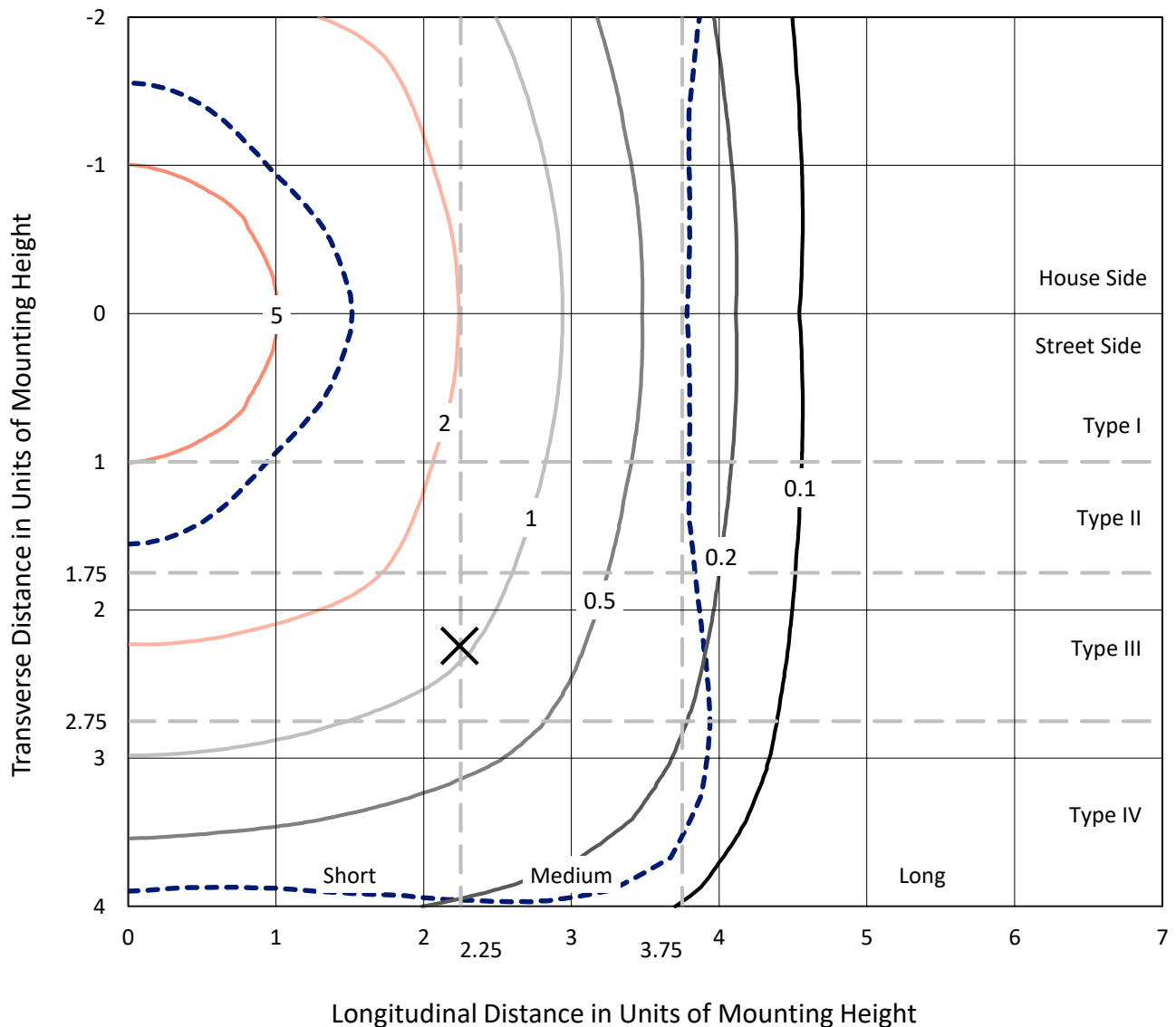


REPORT NUMBER: P299882

CATALOG NUMBER: GLNA-AF-02-LED-E1-5WQ-7030-800

### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

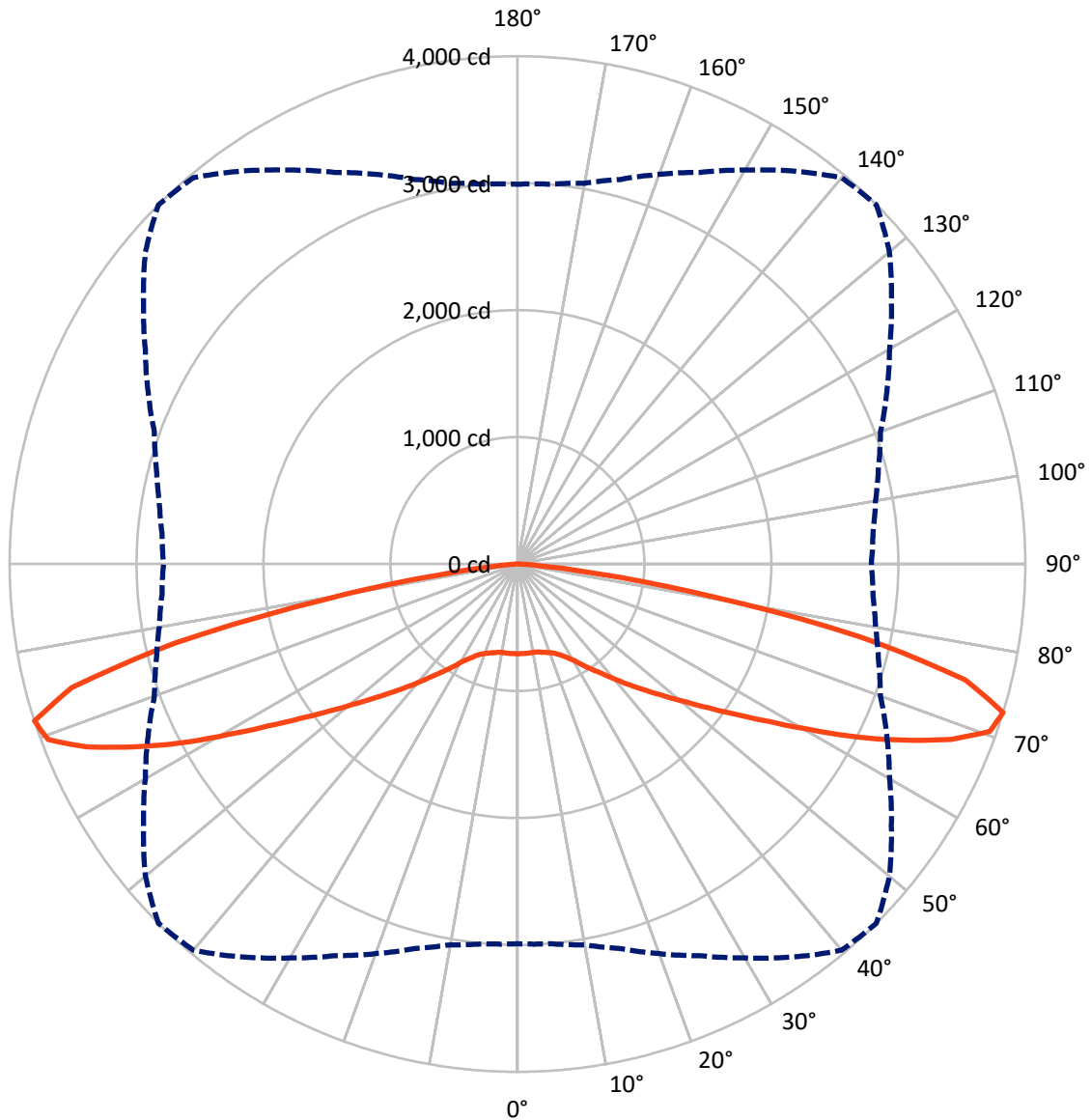


Based on 10 foot mounting height. Maximum calculated value = 7.1 fc  
 Type V - Short - Semi-Cutoff

REPORT NUMBER: P299882

CATALOG NUMBER: GLNA-AF-02-LED-E1-5WQ-7030-800

### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral    - - - Horizontal Cone Through 72.5-Deg Vertical

REPORT NUMBER: P299882

CATALOG NUMBER: GLNA-AF-02-LED-E1-5WQ-7030-800

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	4994.5	0.0	4994.5
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	4994.5	0.0	4994.5
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	9989.1	0.0	9989.1
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	67.5	0.7
10°-20°	205.1	2.1
20°-30°	374.9	3.8
30°-40°	646.4	6.5
40°-50°	1105.0	11.1
50°-60°	1791.0	17.9
60°-70°	2971.2	29.7
70°-80°	2616.9	26.2
80°-90°	211.0	2.1
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°	9989.1	100.0
0°-180°	9989.1	100.0



REPORT NUMBER: P299882

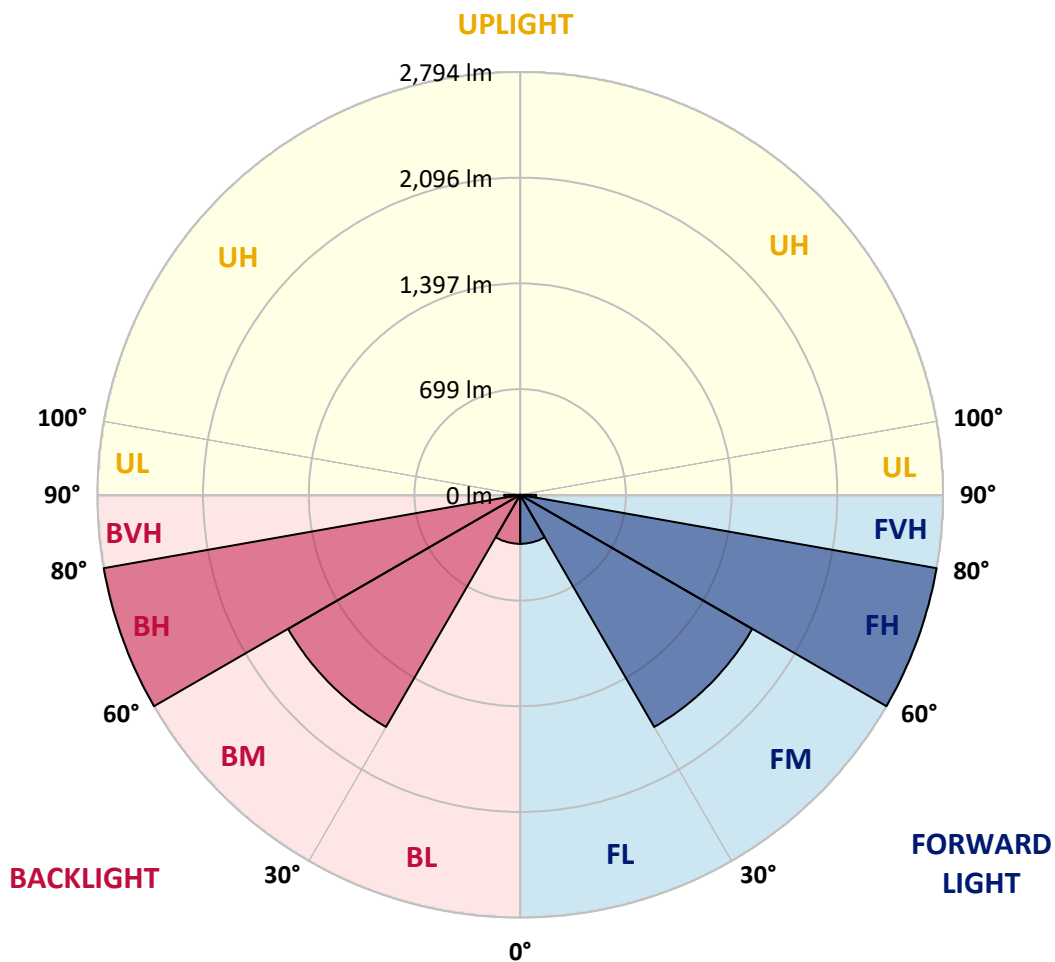
CATALOG NUMBER: GLNA-AF-02-LED-E1-5WQ-7030-800

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	323.8	3.2			
FM	(30°-60°)	1771.2	17.7			
FH	(60°-80°)	2794.1	28.0			G2/5000
FVH	(80°-90°)	105.5	1.1			G2/225
BL	(0°-30°)	323.8	3.2	B1/500		
BM	(30°-60°)	1771.2	17.7	B2/2500		
BH	(60°-80°)	2794.1	28.0	B4/5000		G2/5000
BVH	(80°-90°)	105.5	1.1			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B4-U0-G2**

Type V Short





REPORT NUMBER: P299882

CATALOG NUMBER: GLNA-AF-02-LED-E1-5WQ-7030-800

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	707.4	707.4	707.4	707.4	707.4	707.4	707.4	707.4	707.4	707.4	707.4
2.5°	707.4	707.8	708.3	707.8	707.8	707.4	706.9	707.4	706.9	706.0	706.5
5°	709.7	710.6	710.6	709.7	710.1	709.7	708.8	709.2	708.3	706.9	706.9
7.5°	712.4	712.9	712.9	712.0	712.4	711.5	710.6	710.1	709.2	707.4	706.0
10°	716.5	717.0	716.5	715.6	715.6	714.3	712.0	711.0	709.2	706.5	705.1
12.5°	721.1	721.6	721.1	720.2	719.8	717.5	715.6	714.3	712.9	710.6	708.3
15°	727.5	728.5	727.5	725.7	724.3	722.5	721.6	722.0	722.5	720.7	718.4
17.5°	739.5	739.9	738.5	734.4	732.6	730.7	730.7	731.7	733.0	732.1	729.8
20°	761.4	760.1	756.9	751.8	749.5	746.3	745.9	746.3	746.3	745.9	744.0
22.5°	788.9	788.0	783.9	777.5	774.3	772.4	769.7	767.4	766.9	765.6	763.7
25°	821.9	821.5	816.4	810.9	808.6	806.3	804.1	800.8	798.1	794.9	793.1
27.5°	864.1	862.2	854.9	852.2	849.0	847.6	844.4	840.7	838.4	834.3	832.0
30°	910.3	910.3	904.4	903.5	903.5	900.3	896.6	890.2	886.1	881.9	880.6
32.5°	956.6	957.1	951.1	953.0	954.3	956.6	957.5	955.2	952.5	952.0	949.3
35°	1023.5	1021.7	1015.7	1017.1	1016.6	1016.2	1016.2	1021.2	1022.1	1023.0	1017.5
37.5°	1106.4	1106.4	1100.5	1100.5	1097.7	1095.0	1091.3	1094.5	1099.6	1100.9	1097.3
40°	1201.3	1204.5	1197.1	1196.7	1197.6	1188.9	1184.8	1189.8	1193.0	1198.5	1194.4
42.5°	1313.1	1310.8	1303.4	1302.5	1297.5	1294.7	1291.1	1295.2	1300.2	1303.9	1305.3
45°	1420.3	1418.4	1410.2	1410.2	1405.1	1402.9	1404.7	1411.6	1413.8	1418.9	1423.9
47.5°	1526.1	1523.8	1518.3	1520.6	1521.1	1525.2	1531.1	1537.5	1544.0	1550.8	1553.1
50°	1634.2	1634.7	1628.7	1634.2	1641.1	1652.5	1668.6	1679.1	1692.4	1701.1	1703.9
52.5°	1732.7	1734.6	1741.0	1753.8	1767.5	1790.0	1817.5	1843.1	1865.1	1879.8	1878.9
55°	1850.9	1853.7	1869.2	1891.2	1913.7	1947.6	1988.4	2033.7	2070.4	2091.5	2078.2
57.5°	2002.1	2008.1	2025.5	2055.3	2088.7	2132.7	2188.6	2256.8	2313.7	2342.1	2320.5
60°	2209.7	2213.3	2234.4	2267.4	2307.7	2362.2	2436.9	2528.5	2608.7	2646.3	2621.5
62.5°	2483.2	2490.0	2507.0	2540.4	2581.7	2643.5	2734.7	2849.2	2949.1	3001.3	2945.4
65°	2809.8	2831.8	2846.0	2879.9	2918.4	2983.9	3079.2	3202.0	3309.2	3343.6	3279.0
67.5°	3133.3	3152.5	3177.3	3216.2	3255.1	3328.9	3417.3	3536.5	3654.2	3685.4	3585.0
70°	3274.8	3285.8	3324.3	3377.5	3452.2	3539.2	3641.4	3775.1	3920.8	3946.5	3819.1
72.5°	2991.3	3002.3	3045.3	3135.6	3265.7	3404.0	3582.3	3778.8	3971.2	4000.1	3824.6
75°	2262.3	2244.5	2308.2	2427.7	2603.2	2796.1	3045.3	3327.1	3605.2	3641.4	3432.0
77.5°	1169.2	1166.9	1215.0	1363.5	1572.8	1792.3	2066.7	2385.1	2657.3	2767.2	2596.8
80°	329.4	333.1	356.0	429.7	552.1	710.6	925.0	1223.3	1445.9	1559.5	1464.2
82.5°	129.2	139.3	148.0	161.7	177.8	201.1	268.5	399.5	536.0	640.5	524.6
85°	46.3	49.5	70.1	82.9	84.3	88.9	101.3	118.2	142.5	170.0	139.7
87.5°	17.4	19.2	22.4	37.1	36.7	33.4	40.8	42.6	32.1	29.3	36.2
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: P299882

CATALOG NUMBER: GLNA-AF-02-LED-E1-5WQ-7030-800

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	707.4	707.4	707.4	707.4	707.4	707.4	707.4	707.4
2.5°	705.5	706.0	706.0	706.5	706.9	706.9	707.8	707.8
5°	706.0	706.0	705.1	705.5	705.1	705.1	705.5	705.5
7.5°	705.1	704.6	703.7	703.3	702.3	702.3	702.3	702.3
10°	703.7	703.3	702.3	701.9	701.4	701.4	701.4	701.4
12.5°	707.4	706.0	705.1	704.6	704.6	704.6	704.6	704.6
15°	717.0	713.8	711.5	711.5	712.0	712.9	712.9	713.8
17.5°	728.9	725.2	723.0	721.1	722.0	723.4	724.3	725.2
20°	743.1	741.3	738.1	736.2	736.2	738.1	739.0	739.5
22.5°	762.8	761.4	760.1	757.8	757.8	758.7	760.5	760.5
25°	792.1	791.2	790.3	788.5	788.0	788.0	788.9	789.8
27.5°	828.8	829.2	828.3	827.9	826.5	826.0	827.4	827.0
30°	877.8	880.1	882.4	880.6	878.3	876.9	875.5	873.7
32.5°	944.2	941.5	939.7	936.5	932.3	928.7	925.9	922.7
35°	1007.0	1002.4	1000.6	1003.3	1002.9	1000.6	997.4	994.6
37.5°	1084.0	1083.1	1084.0	1089.0	1088.1	1090.4	1084.0	1083.5
40°	1181.1	1182.0	1188.4	1194.4	1197.6	1200.8	1197.1	1193.5
42.5°	1293.8	1293.4	1295.6	1303.9	1309.4	1313.1	1305.3	1304.4
45°	1412.9	1409.7	1411.6	1418.4	1423.9	1428.1	1419.3	1419.3
47.5°	1544.0	1538.5	1532.5	1540.3	1543.5	1546.3	1539.4	1537.1
50°	1690.1	1678.7	1665.8	1669.0	1669.0	1668.1	1659.4	1659.0
52.5°	1857.8	1836.7	1813.4	1804.6	1799.6	1794.1	1779.0	1771.7
55°	2050.7	2019.1	1982.4	1960.0	1948.0	1932.9	1907.7	1900.9
57.5°	2276.1	2226.6	2163.4	2135.9	2109.3	2084.6	2056.6	2048.8
60°	2543.2	2470.3	2386.5	2335.6	2306.8	2283.0	2254.1	2252.7
62.5°	2841.0	2726.0	2631.2	2585.3	2564.3	2543.2	2515.7	2519.4
65°	3143.8	3023.8	2934.9	2897.8	2878.1	2860.7	2833.2	2837.3
67.5°	3442.5	3332.1	3234.5	3196.5	3174.5	3152.5	3127.8	3131.9
70°	3656.9	3520.0	3410.0	3325.7	3273.0	3213.5	3175.0	3165.4
72.5°	3595.6	3384.3	3209.8	3042.6	2944.5	2864.8	2810.7	2787.4
75°	3111.7	2823.1	2598.6	2393.4	2277.9	2184.0	2115.7	2073.1
77.5°	2310.9	1986.5	1721.3	1484.9	1297.9	1172.4	1084.0	1026.7
80°	1264.9	962.1	703.3	494.3	363.3	301.9	266.6	249.7
82.5°	394.0	254.3	187.4	161.7	150.3	143.9	133.3	116.4
85°	125.5	110.0	102.2	97.6	93.0	81.1	55.9	50.9
87.5°	48.6	49.9	49.5	46.7	47.6	34.4	27.5	24.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)