

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: P300544

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P300544  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24166)  
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-RW  
Description: GALLEONAIRE AREA AND ROADWAY LUMINAIRE  
(2) 70 CRI, 4000K CCT 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND  
Rectangular Wide Type I OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 12406.2 lumens  
Efficiency: N/A  
Efficacy: 109.8 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type II - Medium - Full Cutoff  
BUG Rating: B3 - U0 - G3

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

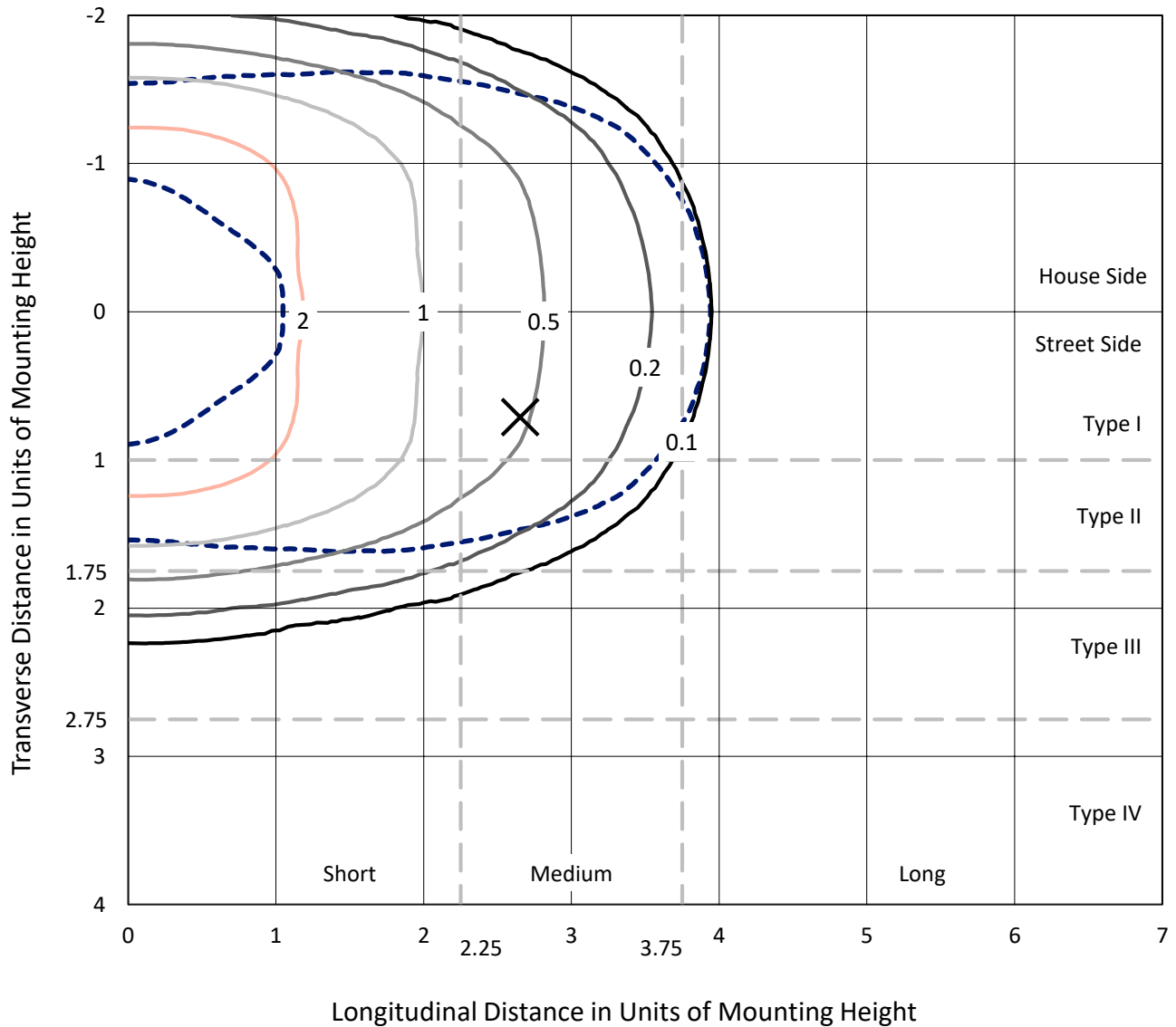


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

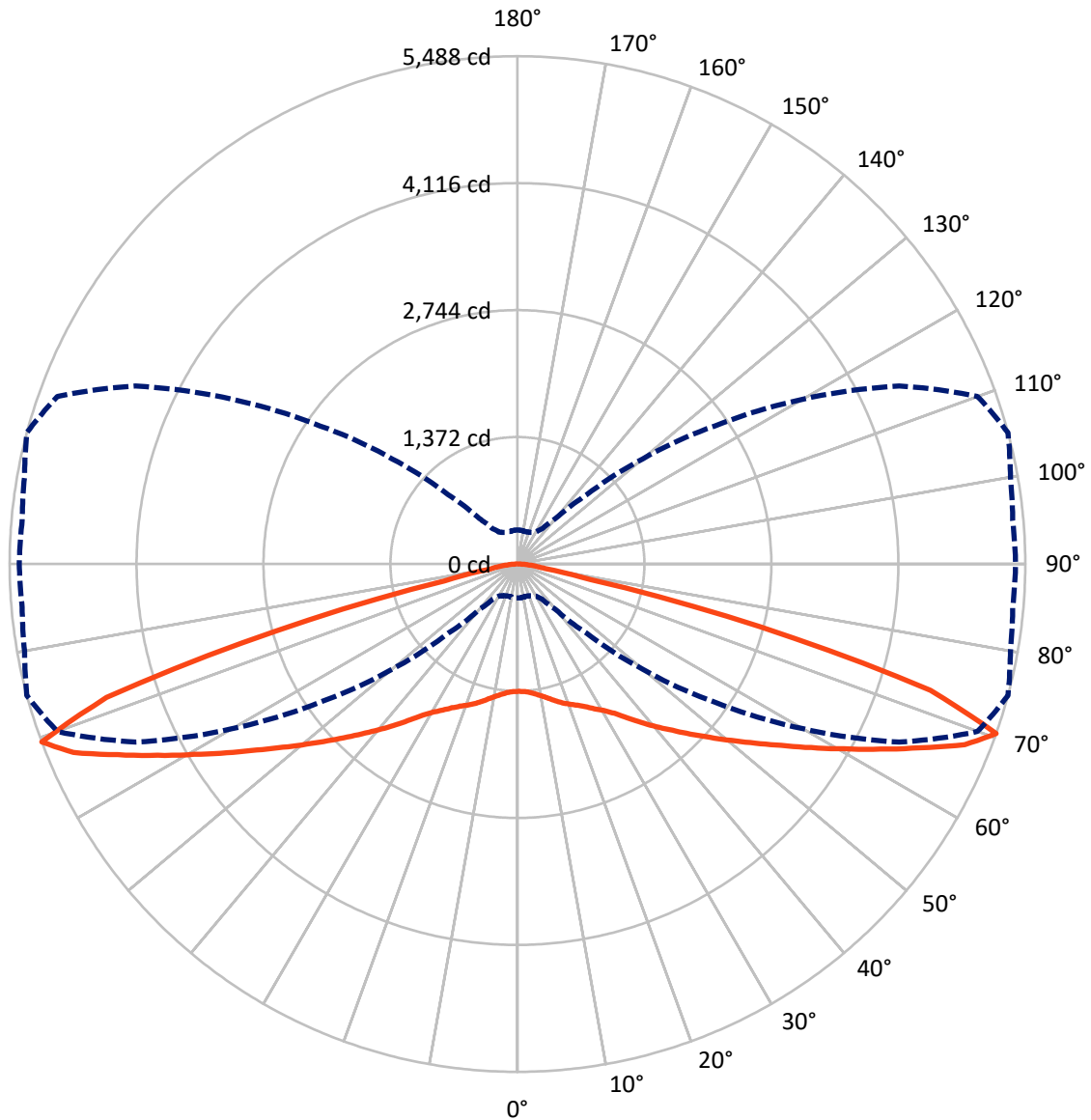


Based on 20 foot mounting height. Maximum calculated value = 3.5 fc  
 Type II - Medium - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral    - - - Horizontal Cone Through 70-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	6203.1	0.0	6203.1
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	6203.1	0.0	6203.1
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	12406.2	0.0	12406.2
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	132.0	1.1
10°-20°	410.1	3.3
20°-30°	771.8	6.2
30°-40°	1366.8	11.0
40°-50°	2285.7	18.4
50°-60°	3185.2	25.7
60°-70°	2953.7	23.8
70°-80°	1177.1	9.5
80°-90°	123.7	1.0
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°	12406.2	100.0
0°-180°	12406.2	100.0



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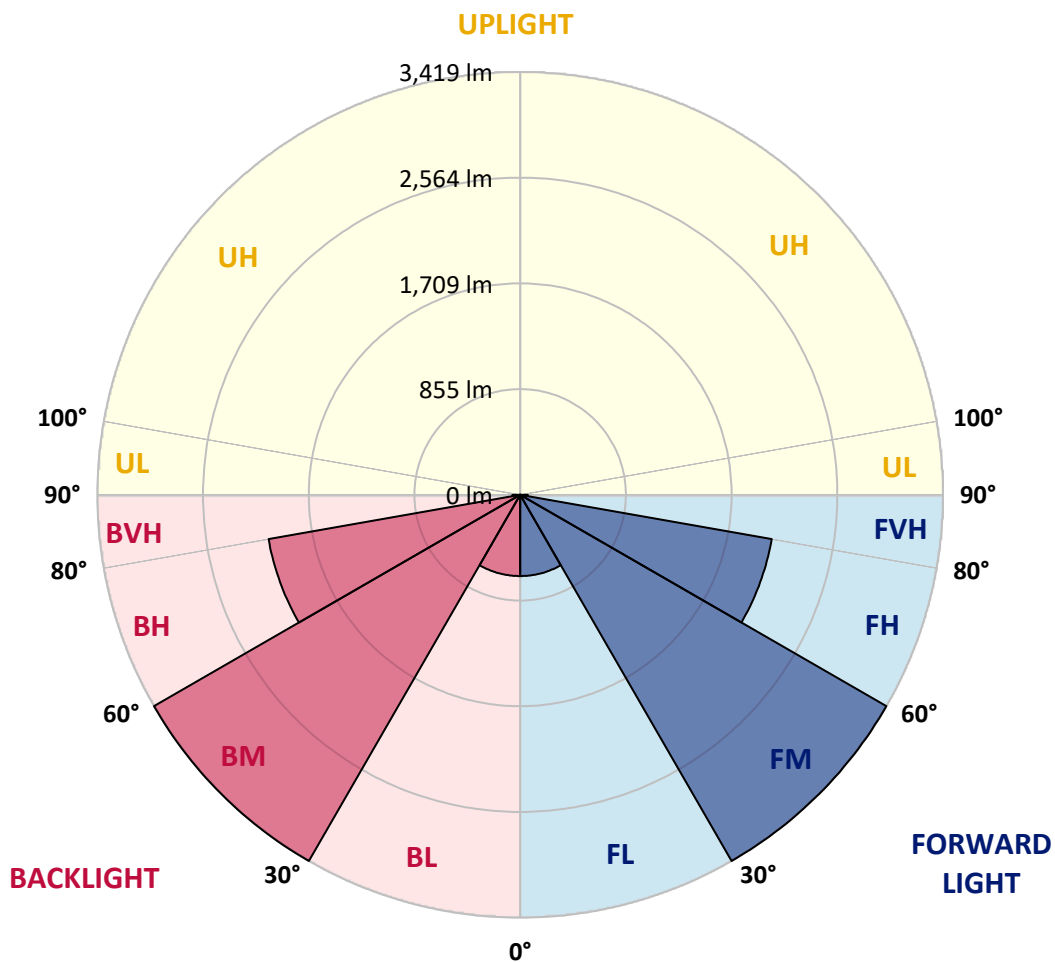
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	657.0	5.3			
FM (30°-60°)	3418.9	27.6			
FH (60°-80°)	2065.4	16.6			G2/5000
FVH (80°-90°)	61.9	0.5			G1/100
BL (0°-30°)	657.0	5.3	B2/1000		
BM (30°-60°)	3418.9	27.6	B3/5000		
BH (60°-80°)	2065.4	16.6	B3/2500		G3/2500
BVH (80°-90°)	61.9	0.5			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G3**

Type II Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1376.1	1376.1	1376.1	1376.1	1376.1	1376.1	1376.1	1376.1	1376.1	1376.1	1376.1
2.5°	1373.8	1372.6	1373.8	1373.2	1374.4	1374.4	1375.6	1377.9	1377.9	1379.7	1379.1
5°	1360.3	1359.7	1361.5	1363.2	1365.0	1368.5	1372.0	1377.3	1381.4	1384.3	1387.3
7.5°	1333.9	1333.9	1336.3	1340.4	1344.5	1352.1	1360.3	1370.9	1381.4	1390.2	1397.8
10°	1312.2	1313.4	1316.3	1323.4	1330.4	1342.1	1353.3	1368.5	1383.2	1397.8	1409.6
12.5°	1299.3	1301.1	1306.4	1316.9	1328.6	1344.5	1361.5	1380.8	1397.2	1414.8	1426.6
15°	1303.4	1304.6	1312.2	1325.1	1340.4	1360.3	1383.2	1406.0	1425.4	1444.2	1460.0
17.5°	1326.3	1328.1	1336.9	1351.5	1367.3	1390.8	1415.4	1441.2	1465.3	1486.4	1505.7
20°	1367.3	1369.1	1380.2	1396.1	1414.8	1438.9	1463.5	1490.5	1517.4	1539.7	1561.4
22.5°	1425.4	1428.3	1438.9	1454.7	1475.8	1501.6	1530.9	1559.7	1585.5	1606.0	1625.3
25°	1501.6	1508.1	1518.0	1535.6	1557.9	1581.4	1613.0	1642.3	1667.0	1686.3	1700.4
27.5°	1609.5	1618.3	1625.9	1642.9	1664.6	1686.9	1718.6	1744.4	1767.8	1786.6	1797.1
30°	1752.6	1761.4	1769.0	1785.4	1805.3	1826.4	1856.4	1879.2	1893.9	1908.5	1908.0
32.5°	1926.1	1935.5	1938.4	1956.0	1976.6	1999.4	2026.4	2039.3	2051.0	2052.8	2042.2
35°	2120.2	2124.9	2136.6	2160.1	2183.5	2202.3	2228.1	2234.5	2234.5	2225.7	2202.3
37.5°	2333.0	2336.0	2352.4	2378.8	2402.8	2422.2	2439.8	2452.7	2446.2	2427.4	2388.2
40°	2566.4	2571.7	2595.1	2618.6	2645.6	2663.7	2682.5	2684.9	2678.4	2650.8	2597.5
42.5°	2789.2	2793.9	2817.4	2854.3	2889.5	2914.7	2932.3	2935.8	2915.3	2890.1	2823.8
45°	2981.0	2993.3	3023.8	3067.1	3118.2	3153.9	3178.0	3187.9	3169.8	3136.9	3060.1
47.5°	3132.8	3145.1	3188.5	3240.1	3303.4	3361.5	3401.4	3422.5	3417.8	3393.2	3309.3
50°	3244.2	3255.9	3302.9	3366.2	3440.1	3512.2	3580.2	3630.6	3648.2	3637.1	3560.3
52.5°	3257.1	3276.5	3331.6	3416.6	3512.8	3611.3	3708.0	3793.6	3851.7	3860.5	3803.6
55°	3077.1	3096.5	3172.7	3298.7	3441.8	3602.5	3757.3	3901.5	4015.8	4074.5	4044.6
57.5°	2652.6	2687.2	2767.5	2915.3	3125.8	3366.2	3613.0	3869.3	4102.0	4257.4	4287.3
60°	2032.8	2073.9	2154.8	2311.9	2546.5	2833.2	3162.7	3541.5	3952.5	4302.0	4510.7
62.5°	1304.0	1342.7	1427.7	1564.4	1755.5	2066.3	2419.8	2869.5	3421.9	3973.6	4470.8
65°	670.2	691.3	735.9	818.5	967.5	1199.7	1516.9	1965.4	2596.9	3277.6	3996.5
67.5°	424.5	428.6	438.6	450.3	488.4	568.7	716.5	996.2	1515.7	2225.7	3067.1
70°	367.0	367.0	362.4	360.6	365.3	376.4	399.3	464.4	639.7	1056.6	1769.0
72.5°	336.0	332.5	324.2	317.8	316.6	316.6	321.3	331.3	359.4	430.4	692.5
75°	309.6	299.6	288.5	280.9	277.9	275.0	274.4	276.2	282.0	293.2	330.7
77.5°	277.3	264.4	251.5	243.9	240.4	236.3	232.8	228.7	225.7	229.3	245.7
80°	238.6	224.0	214.0	209.3	205.8	199.9	192.3	185.3	178.8	177.7	187.6
82.5°	192.3	175.3	175.9	177.7	171.2	163.0	154.8	147.2	136.0	130.2	136.0
85°	155.4	146.6	142.5	153.6	144.2	131.9	119.0	105.5	88.0	73.9	80.3
87.5°	60.4	60.4	90.3	139.0	124.9	102.0	87.4	74.5	46.3	35.8	36.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1376.1	1376.1	1376.1	1376.1	1376.1	1376.1	1376.1	1376.1
2.5°	1378.5	1379.7	1379.1	1378.5	1378.5	1377.9	1378.5	1378.5
5°	1389.0	1392.0	1392.0	1393.1	1393.1	1393.7	1394.3	1393.7
7.5°	1404.9	1410.1	1413.7	1417.8	1418.4	1418.9	1420.1	1418.9
10°	1420.7	1431.3	1438.9	1446.5	1450.0	1451.2	1452.4	1452.4
12.5°	1440.6	1455.3	1468.8	1482.3	1488.7	1492.2	1492.2	1494.6
15°	1473.5	1488.1	1504.0	1522.1	1533.3	1539.1	1540.9	1540.9
17.5°	1519.8	1532.7	1546.2	1563.8	1577.8	1585.5	1587.2	1586.6
20°	1573.7	1586.0	1593.7	1604.8	1617.1	1625.9	1628.3	1628.3
22.5°	1635.3	1642.3	1643.5	1647.0	1657.0	1668.7	1674.0	1675.2
25°	1703.3	1705.1	1700.4	1700.4	1706.8	1718.0	1723.3	1723.8
27.5°	1791.3	1782.5	1770.7	1766.6	1770.7	1783.6	1790.1	1792.4
30°	1900.9	1879.8	1852.8	1838.2	1835.8	1852.8	1864.6	1866.3
32.5°	2026.4	1995.9	1960.1	1930.2	1922.6	1933.2	1947.2	1946.6
35°	2175.3	2139.0	2095.6	2057.5	2039.9	2050.4	2070.4	2072.7
37.5°	2347.1	2299.6	2249.8	2201.7	2174.1	2177.1	2198.2	2205.2
40°	2538.9	2477.3	2414.5	2350.1	2310.8	2303.1	2328.9	2333.0
42.5°	2744.1	2664.9	2585.8	2506.0	2455.6	2443.9	2473.8	2472.0
45°	2962.8	2861.9	2769.3	2681.3	2621.5	2603.9	2628.6	2628.6
47.5°	3197.9	3073.6	2963.4	2863.7	2798.6	2773.4	2796.8	2798.6
50°	3447.1	3315.2	3185.6	3074.8	2996.8	2964.5	2995.0	2999.7
52.5°	3695.1	3566.7	3436.0	3309.3	3214.9	3175.6	3210.8	3226.0
55°	3946.7	3820.6	3695.7	3572.0	3460.0	3413.7	3451.2	3470.5
57.5°	4212.3	4095.6	3976.6	3851.7	3743.8	3671.7	3711.5	3737.3
60°	4523.6	4423.9	4300.2	4162.4	4053.4	3980.1	4002.9	4025.8
62.5°	4769.9	4808.6	4703.6	4544.1	4404.0	4310.2	4332.5	4356.5
65°	4650.8	5047.8	5141.0	4979.8	4785.7	4639.7	4630.3	4642.6
67.5°	3887.4	4658.5	5220.8	5374.4	5212.0	5009.1	4971.6	4989.8
70°	2600.4	3560.8	4552.9	5291.7	5488.1	5409.6	5372.6	5383.8
72.5°	1248.9	2073.9	3088.8	4071.0	4669.0	4943.4	5031.4	5074.2
75°	456.8	823.2	1488.7	2243.3	2708.3	3135.2	3413.7	3527.4
77.5°	275.6	332.5	475.5	715.9	810.9	907.7	870.1	888.9
80°	204.0	230.4	260.9	293.2	303.7	303.7	292.0	282.6
82.5°	143.1	160.1	174.7	192.3	197.0	188.2	154.8	123.1
85°	92.1	99.7	106.1	117.3	114.3	109.1	73.3	65.1
87.5°	42.2	48.1	50.4	55.7	53.4	51.0	36.4	30.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)