

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: P299579

Luminaire Tested: **GLNA-AF-01-LED-E1-5MQ-7050**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299579
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24142)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLNA-AF-01-LED-E1-5MQ-7050
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(1) 70 CRI, 5000K CCT 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND Type III
w/Spill Control OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6524.8 lumens
Efficiency: N/A
Efficacy: 110.6 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type V - Short - Full Cutoff
BUG Rating: B3 - U0 - G1

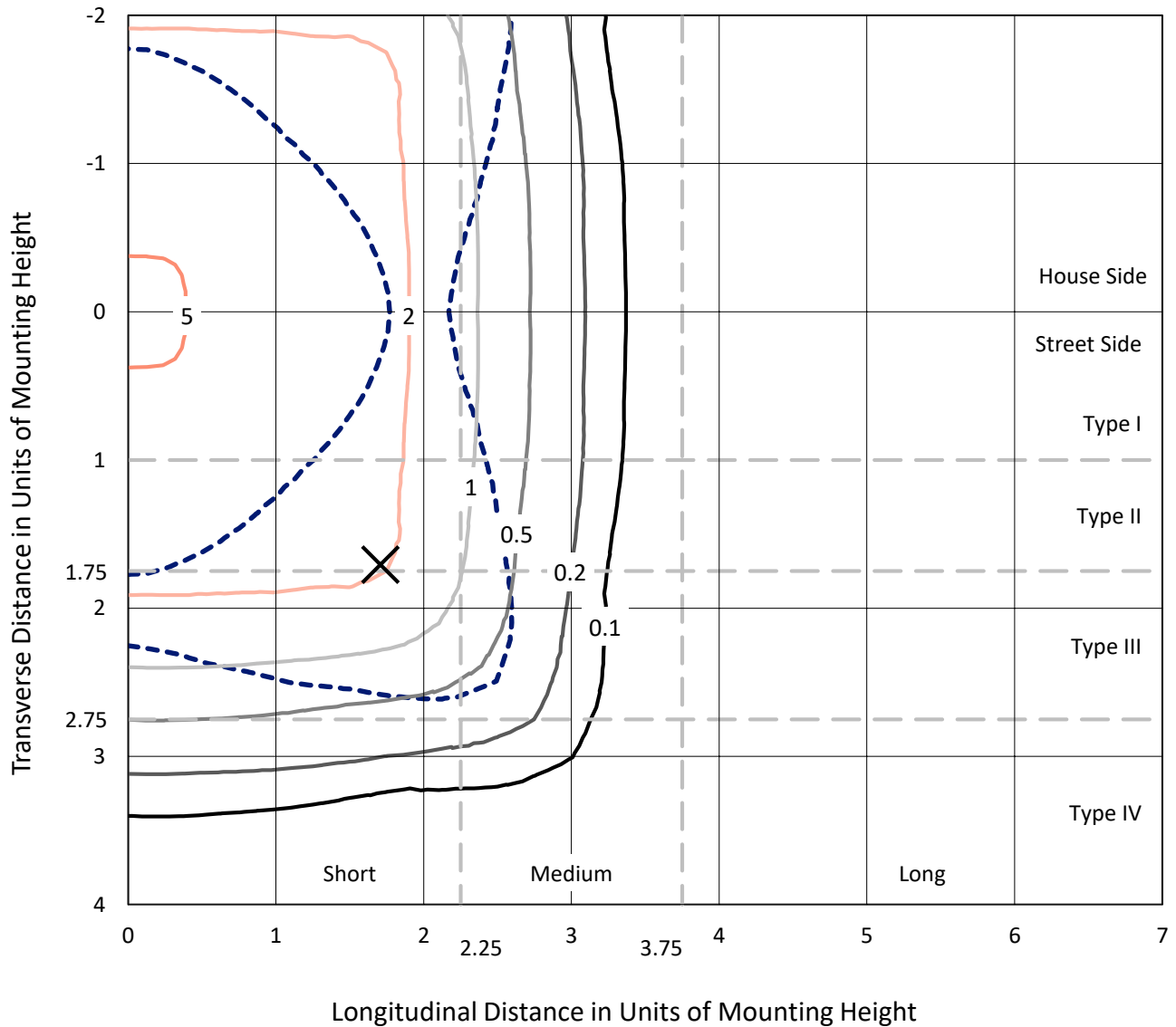
Input Watts (W): 59
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

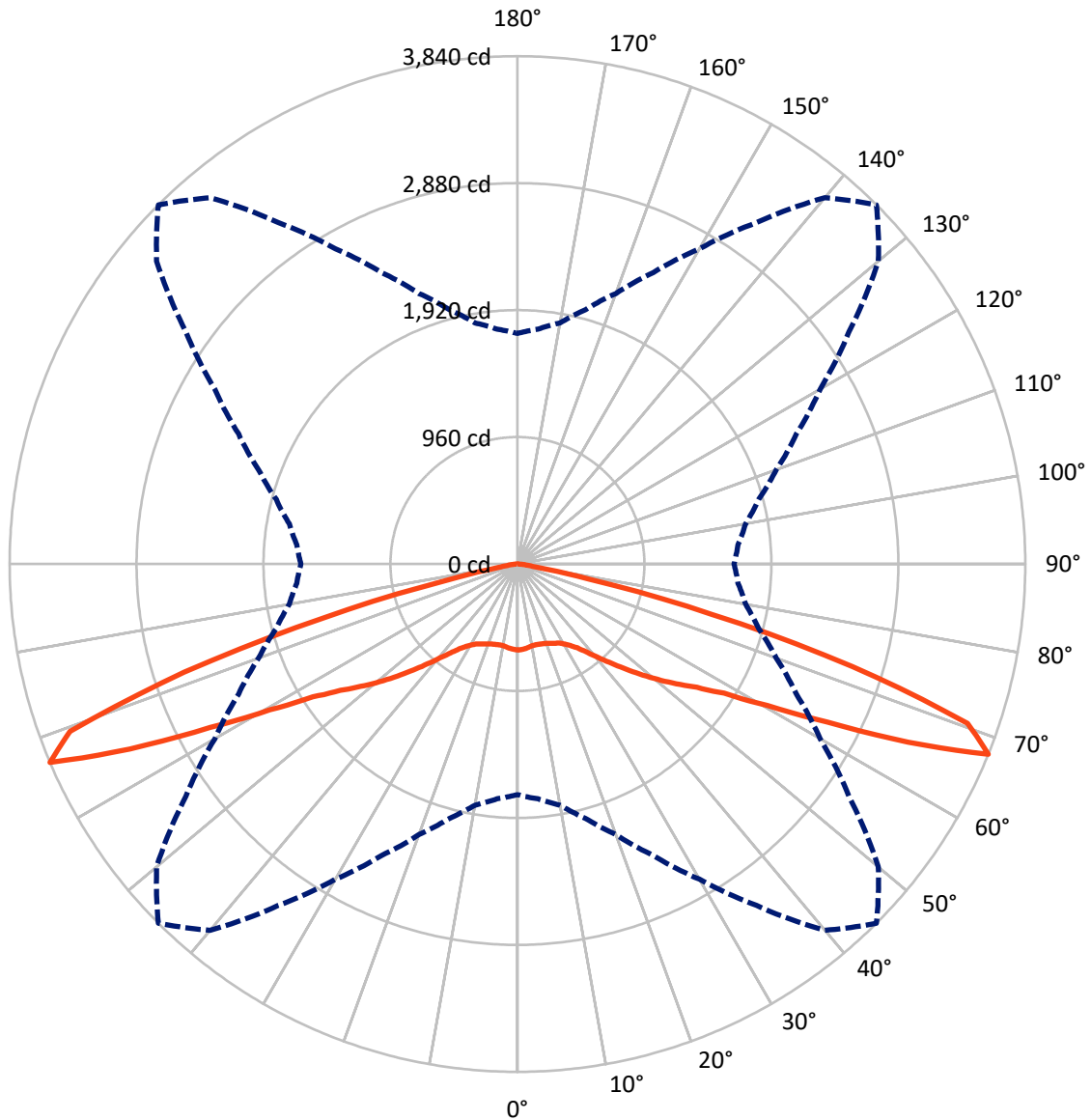
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 6.5 fc
 Type V - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3262.4	0.0	3262.4
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	3262.4	0.0	3262.4
	% Fixture	50.0	0.0	50.0
Total	Lumens	6524.8	0.0	6524.8
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	60.9	0.9
10°-20°	176.6	2.7
20°-30°	300.2	4.6
30°-40°	490.8	7.5
40°-50°	876.1	13.4
50°-60°	1477.1	22.6
60°-70°	2292.3	35.1
70°-80°	805.4	12.3
80°-90°	45.5	0.7
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°	6524.8	100.0
0°-180°	6524.8	100.0



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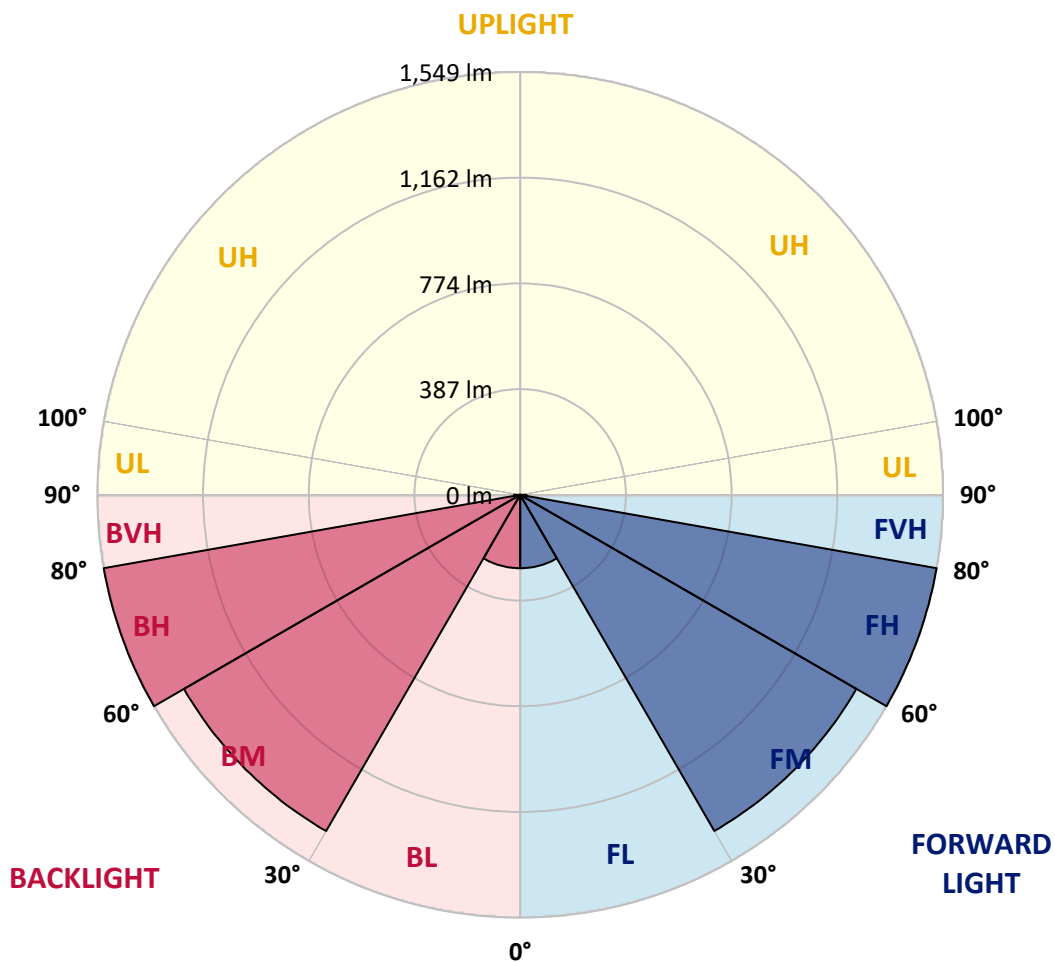
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	268.8	4.1			
FM	(30°-60°)	1422.0	21.8			
FH	(60°-80°)	1548.8	23.7			G1/1800
FVH	(80°-90°)	22.8	0.3			G1/100
BL	(0°-30°)	268.8	4.1	B1/500		
BM	(30°-60°)	1422.0	21.8	B2/2500		
BH	(60°-80°)	1548.8	23.7	B3/2500		G1/1800
BVH	(80°-90°)	22.8	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G1

Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	650.2	650.2	650.2	650.2	650.2	650.2	650.2	650.2	650.2	650.2	650.2
2.5°	647.8	648.4	648.4	648.4	648.1	648.1	647.5	648.1	647.8	646.9	647.2
5°	642.4	643.0	643.0	642.7	643.6	643.3	642.4	643.0	642.7	642.1	642.4
7.5°	634.6	635.5	635.5	635.2	636.1	635.8	635.2	635.5	635.5	634.6	634.6
10°	625.9	626.5	626.5	626.2	627.7	627.7	627.4	628.3	628.6	627.7	627.1
12.5°	617.8	618.7	618.7	619.9	621.4	622.0	623.5	624.7	625.9	625.6	624.4
15°	613.0	613.6	614.8	616.3	618.7	620.8	623.2	625.9	628.3	628.9	627.1
17.5°	610.0	610.9	612.7	614.8	618.1	621.7	625.3	628.9	632.2	633.4	631.3
20°	609.1	609.7	611.5	615.1	619.6	625.0	630.1	634.3	638.8	640.3	638.8
22.5°	610.9	612.1	614.2	618.4	624.4	631.3	637.3	643.0	648.7	651.4	649.3
25°	619.0	620.2	622.9	628.3	634.9	642.1	649.0	655.6	660.7	663.4	661.9
27.5°	634.0	635.5	638.8	644.2	651.4	659.2	666.7	672.1	676.3	677.2	675.4
30°	656.5	659.8	663.7	669.7	678.1	684.7	692.2	697.0	702.1	702.1	700.6
32.5°	691.6	694.9	699.1	704.8	711.4	718.6	725.2	729.4	734.8	735.1	731.5
35°	744.1	745.6	749.2	752.8	758.8	765.1	770.8	773.5	778.0	778.3	775.0
37.5°	813.5	813.8	816.2	817.4	822.8	829.7	835.1	836.9	841.1	840.5	837.2
40°	894.2	895.7	896.6	898.4	904.1	910.7	916.4	917.3	921.8	920.9	916.7
42.5°	987.5	988.1	993.2	995.9	1001.3	1004.6	1011.8	1012.7	1018.1	1015.7	1010.9
45°	1092.2	1097.6	1102.4	1107.8	1113.5	1117.4	1123.1	1121.9	1125.5	1121.9	1119.2
47.5°	1202.3	1206.2	1217.0	1225.4	1234.7	1238.0	1246.1	1242.5	1246.1	1241.0	1240.1
50°	1323.6	1330.5	1339.8	1349.4	1359.3	1364.7	1375.2	1370.7	1375.5	1370.7	1368.0
52.5°	1443.0	1444.8	1465.2	1479.3	1493.1	1499.4	1505.7	1503.6	1503.9	1503.6	1500.9
55°	1556.4	1560.6	1581.0	1600.2	1624.2	1641.9	1652.7	1651.5	1648.8	1646.1	1641.6
57.5°	1684.2	1688.4	1711.8	1735.5	1762.8	1788.0	1809.9	1832.5	1841.2	1843.6	1833.7
60°	1857.1	1856.8	1888.0	1916.8	1955.8	1993.3	2041.3	2090.2	2146.3	2172.4	2137.9
62.5°	2032.9	2040.1	2085.1	2136.1	2216.5	2294.8	2383.4	2470.4	2559.2	2631.5	2554.7
65°	2011.9	2039.5	2106.4	2221.9	2370.5	2546.9	2737.7	2939.7	3122.1	3247.5	3106.8
67.5°	1743.6	1782.9	1851.1	1991.5	2177.2	2431.7	2752.1	3151.5	3615.7	3840.1	3562.0
70°	1263.8	1308.3	1379.7	1516.8	1700.7	1942.6	2290.6	2770.1	3384.6	3610.9	3304.5
72.5°	628.9	652.9	697.0	784.4	923.6	1119.8	1435.5	1896.4	2440.1	2647.7	2367.8
75°	213.6	224.7	232.2	260.8	304.9	382.0	538.9	829.1	1264.7	1516.2	1246.7
77.5°	123.3	123.6	128.7	133.8	141.3	149.7	170.7	224.1	387.7	550.6	401.2
80°	79.8	79.5	83.7	87.6	92.7	96.9	98.1	103.8	119.7	141.9	126.9
82.5°	41.4	46.5	55.8	60.9	70.5	72.3	69.9	67.8	71.7	74.4	76.2
85°	22.8	19.8	29.7	38.4	42.6	43.2	43.2	40.8	42.3	41.4	45.0
87.5°	10.5	9.6	11.7	18.9	20.1	17.1	18.0	15.9	11.4	11.1	12.6
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°	650.2	650.2	650.2	650.2	650.2	650.2	650.2	650.2
2.5°	647.2	647.5	647.5	648.4	648.7	649.3	649.9	650.2
5°	642.1	643.0	642.4	643.3	643.3	643.9	643.9	644.2
7.5°	634.6	635.5	635.5	635.5	635.2	636.1	636.1	636.1
10°	626.8	627.4	627.1	626.5	625.9	626.8	626.5	626.2
12.5°	624.4	622.9	621.7	621.1	619.9	620.2	619.3	619.3
15°	625.9	623.2	621.1	620.2	619.0	618.4	617.8	618.1
17.5°	629.8	626.5	623.8	622.3	620.8	619.9	618.7	619.0
20°	636.7	632.8	628.9	625.9	623.2	621.7	620.8	620.5
22.5°	646.9	641.2	635.5	631.0	627.4	625.3	624.4	623.8
25°	658.6	652.3	645.7	640.6	637.0	634.3	632.5	632.5
27.5°	673.3	668.2	662.2	656.2	652.9	650.2	649.0	648.4
30°	697.9	693.1	688.3	682.6	678.4	675.7	673.6	671.8
32.5°	729.4	725.5	721.6	717.4	713.5	709.9	706.6	705.1
35°	773.8	770.8	768.1	763.3	761.8	759.7	757.9	756.4
37.5°	835.1	833.9	833.9	828.8	827.6	826.7	824.9	825.2
40°	915.5	916.7	915.2	913.4	912.5	910.1	910.1	912.2
42.5°	1010.6	1011.5	1014.8	1011.8	1015.1	1012.1	1010.3	1011.8
45°	1121.0	1124.3	1130.9	1127.9	1130.0	1124.9	1118.6	1118.9
47.5°	1244.9	1247.9	1250.6	1248.5	1248.8	1240.4	1232.0	1229.9
50°	1373.7	1374.9	1376.4	1373.4	1374.0	1364.7	1355.1	1355.4
52.5°	1500.9	1506.6	1512.6	1504.5	1502.7	1492.2	1478.7	1473.3
55°	1646.4	1654.5	1647.6	1633.5	1619.4	1605.3	1587.6	1584.6
57.5°	1825.9	1812.0	1790.4	1763.7	1744.2	1724.4	1706.4	1698.9
60°	2075.5	2023.6	1984.6	1945.0	1920.1	1895.8	1872.1	1868.5
62.5°	2428.4	2338.6	2260.9	2179.0	2112.1	2059.9	2018.2	2006.5
65°	2870.7	2658.5	2474.6	2302.9	2153.8	2041.3	1970.5	1939.3
67.5°	3060.9	2642.0	2326.6	2083.0	1888.0	1751.7	1675.2	1637.1
70°	2689.7	2191.0	1848.1	1604.1	1426.5	1281.2	1211.9	1171.1
72.5°	1850.5	1393.8	1102.1	899.6	757.6	636.1	588.1	584.5
75°	830.9	550.3	379.3	292.3	246.0	213.9	204.0	196.5
77.5°	232.5	171.9	153.3	143.4	133.8	122.7	118.5	119.4
80°	113.1	106.8	102.6	96.3	87.6	78.3	74.1	75.9
82.5°	75.0	74.1	76.8	72.3	59.7	50.7	42.6	39.0
85°	45.6	46.2	47.1	47.4	40.2	28.2	19.2	21.6
87.5°	18.0	20.7	22.5	23.4	21.9	13.5	10.8	11.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)