

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: P299638

Luminaire Tested: **GLNA-AF-01-LED-E1-5MQ-800**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P299638  
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-800  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(1) 70 CRI, 4000K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Type III  
w/Spill Control OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5271.3 lumens  
Efficiency: N/A  
Efficacy: 119.8 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): 44  
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

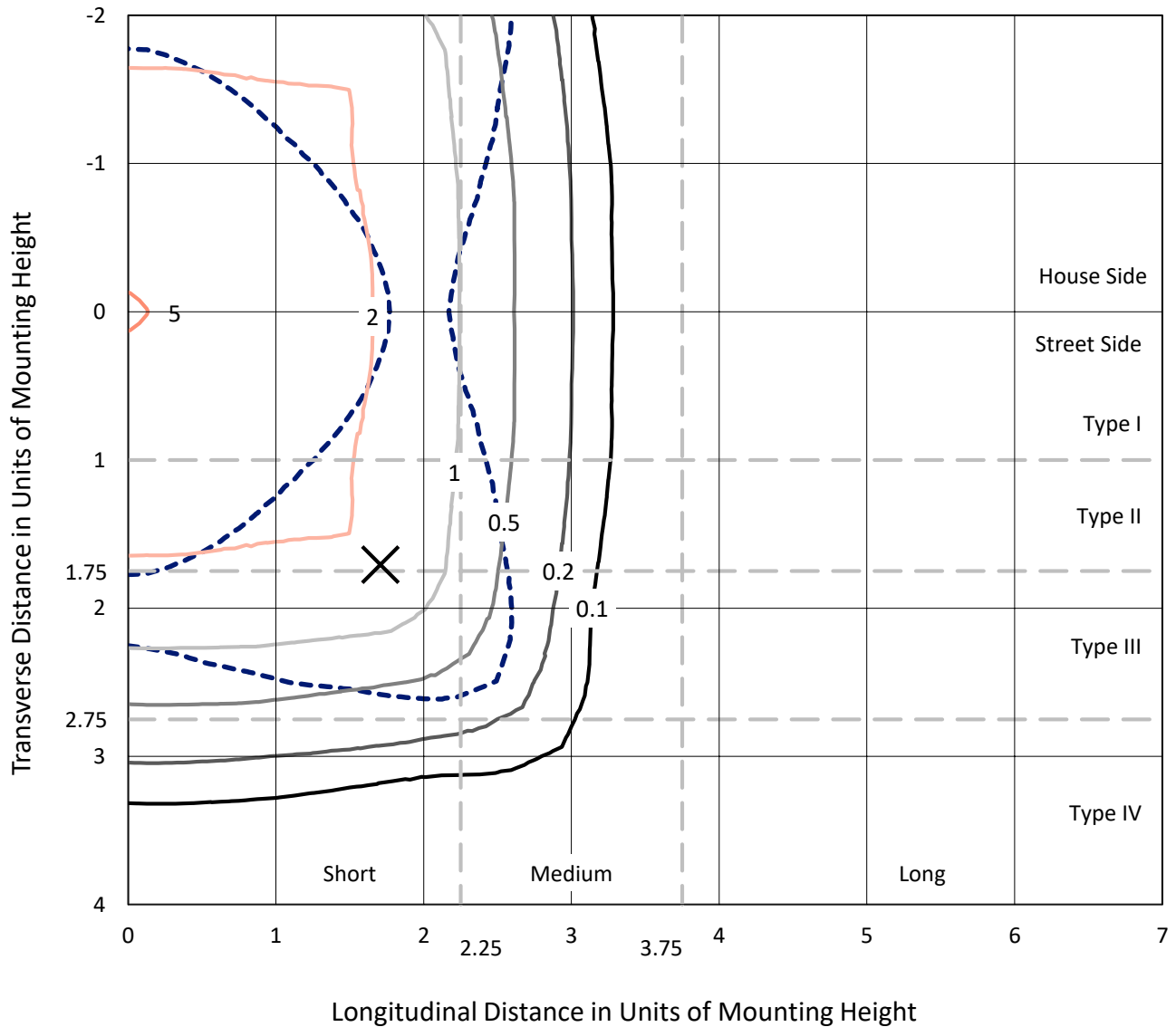


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

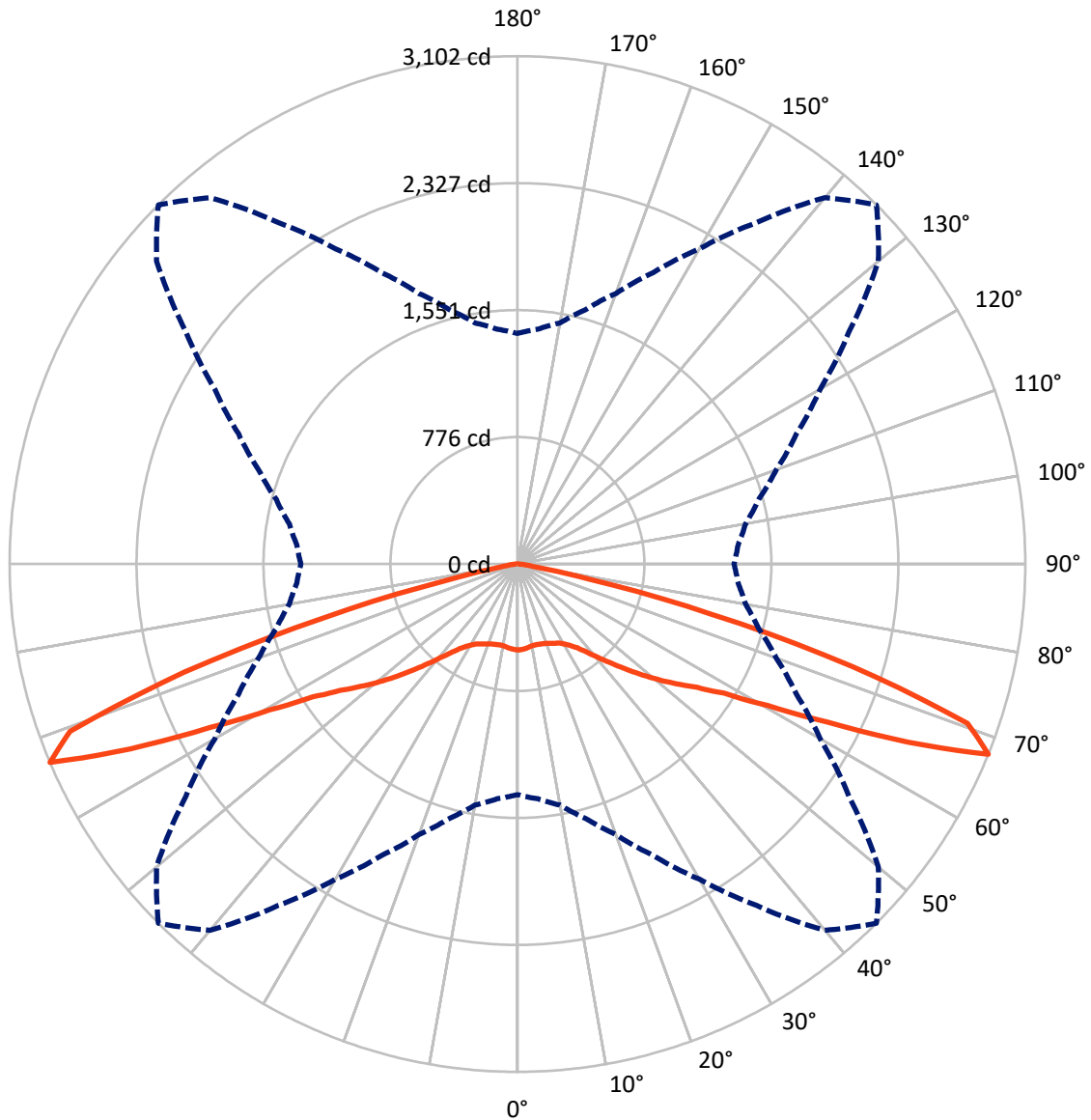


Based on 10 foot mounting height. Maximum calculated value = 5.3 fc  
 Type V - Short - Full Cutoff

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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
<b>House Side</b>	Lumens	2635.6	0.0	2635.6
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	2635.6	0.0	2635.6
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	5271.3	0.0	5271.3
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	49.2	0.9
10°-20°	142.7	2.7
20°-30°	242.5	4.6
30°-40°	396.5	7.5
40°-50°	707.8	13.4
50°-60°	1193.3	22.6
60°-70°	1851.9	35.1
70°-80°	650.7	12.3
80°-90°	36.8	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°	5271.3	100.0
0°-180°	5271.3	100.0



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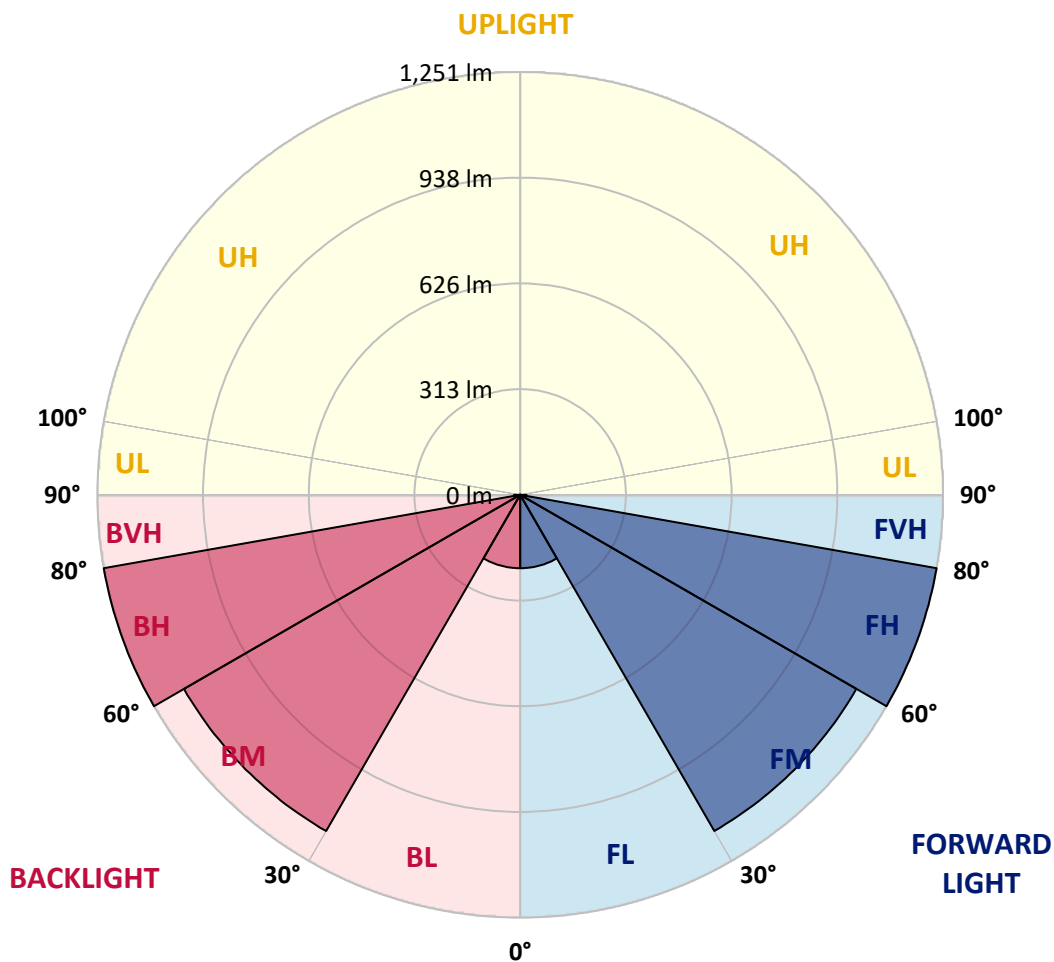
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	217.2	4.1			
FM	(30°-60°)	1148.8	21.8			
FH	(60°-80°)	1251.3	23.7			G1/1800
FVH	(80°-90°)	18.4	0.3			G1/100
BL	(0°-30°)	217.2	4.1	B1/500		
BM	(30°-60°)	1148.8	21.8	B2/2500		
BH	(60°-80°)	1251.3	23.7	B3/2500		G1/1800
BVH	(80°-90°)	18.4	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°	525.3	525.3	525.3	525.3	525.3	525.3	525.3	525.3	525.3	525.3	525.3
2.5°	523.4	523.8	523.8	523.8	523.6	523.6	523.1	523.6	523.4	522.6	522.9
5°	519.0	519.5	519.5	519.2	520.0	519.7	519.0	519.5	519.2	518.8	519.0
7.5°	512.7	513.4	513.4	513.2	513.9	513.7	513.2	513.4	513.4	512.7	512.7
10°	505.7	506.2	506.2	505.9	507.1	507.1	506.9	507.6	507.9	507.1	506.6
12.5°	499.1	499.9	499.9	500.8	502.0	502.5	503.7	504.7	505.7	505.4	504.5
15°	495.2	495.7	496.7	497.9	499.9	501.5	503.5	505.7	507.6	508.1	506.6
17.5°	492.8	493.5	495.0	496.7	499.4	502.3	505.2	508.1	510.8	511.7	510.0
20°	492.1	492.6	494.0	496.9	500.6	504.9	509.1	512.5	516.1	517.3	516.1
22.5°	493.5	494.5	496.2	499.6	504.5	510.0	514.9	519.5	524.1	526.3	524.6
25°	500.1	501.1	503.2	507.6	512.9	518.8	524.3	529.7	533.8	536.0	534.8
27.5°	512.2	513.4	516.1	520.5	526.3	532.6	538.6	543.0	546.4	547.1	545.7
30°	530.4	533.1	536.2	541.1	547.8	553.2	559.2	563.1	567.2	567.2	566.0
32.5°	558.8	561.4	564.8	569.4	574.8	580.6	585.9	589.3	593.7	593.9	591.0
35°	601.2	602.4	605.3	608.2	613.1	618.1	622.8	624.9	628.6	628.8	626.1
37.5°	657.2	657.4	659.4	660.3	664.7	670.3	674.6	676.1	679.5	679.0	676.3
40°	722.4	723.6	724.3	725.8	730.4	735.7	740.3	741.0	744.7	744.0	740.6
42.5°	797.8	798.3	802.4	804.6	808.9	811.6	817.4	818.1	822.5	820.6	816.7
45°	882.4	886.7	890.6	895.0	899.6	902.7	907.3	906.4	909.3	906.4	904.2
47.5°	971.3	974.5	983.2	990.0	997.5	1000.2	1006.7	1003.8	1006.7	1002.6	1001.9
50°	1069.3	1074.8	1082.4	1090.1	1098.1	1102.5	1111.0	1107.3	1111.2	1107.3	1105.2
52.5°	1165.8	1167.2	1183.7	1195.1	1206.2	1211.3	1216.4	1214.7	1215.0	1214.7	1212.5
55°	1257.4	1260.8	1277.3	1292.8	1312.2	1326.5	1335.2	1334.2	1332.0	1329.9	1326.2
57.5°	1360.7	1364.0	1383.0	1402.1	1424.2	1444.5	1462.2	1480.4	1487.4	1489.4	1481.4
60°	1500.3	1500.0	1525.2	1548.5	1580.0	1610.3	1649.1	1688.6	1734.0	1755.1	1727.2
62.5°	1642.3	1648.2	1684.5	1725.7	1790.7	1854.0	1925.5	1995.8	2067.5	2125.9	2063.9
65°	1625.4	1647.7	1701.7	1795.1	1915.0	2057.6	2211.8	2374.9	2522.3	2623.6	2509.9
67.5°	1408.6	1440.4	1495.4	1608.9	1758.9	1964.5	2223.4	2546.0	2921.1	3102.4	2877.7
70°	1021.0	1056.9	1114.6	1225.4	1374.0	1569.4	1850.6	2237.9	2734.4	2917.2	2669.7
72.5°	508.1	527.5	563.1	633.7	746.1	904.7	1159.7	1532.0	1971.3	2139.0	1912.9
75°	172.6	181.6	187.6	210.7	246.3	308.6	435.4	669.8	1021.8	1224.9	1007.2
77.5°	99.6	99.9	104.0	108.1	114.2	121.0	137.9	181.1	313.2	444.8	324.1
80°	64.5	64.2	67.6	70.8	74.9	78.3	79.3	83.9	96.7	114.7	102.5
82.5°	33.5	37.6	45.1	49.2	57.0	58.4	56.5	54.8	57.9	60.1	61.6
85°	18.4	16.0	24.0	31.0	34.4	34.9	34.9	33.0	34.2	33.5	36.4
87.5°	8.5	7.8	9.5	15.3	16.2	13.8	14.5	12.8	9.2	9.0	10.2
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°	525.3	525.3	525.3	525.3	525.3	525.3	525.3	525.3
2.5°	522.9	523.1	523.1	523.8	524.1	524.6	525.1	525.3
5°	518.8	519.5	519.0	519.7	519.7	520.2	520.2	520.5
7.5°	512.7	513.4	513.4	513.4	513.2	513.9	513.9	513.9
10°	506.4	506.9	506.6	506.2	505.7	506.4	506.2	505.9
12.5°	504.5	503.2	502.3	501.8	500.8	501.1	500.3	500.3
15°	505.7	503.5	501.8	501.1	500.1	499.6	499.1	499.4
17.5°	508.8	506.2	504.0	502.8	501.5	500.8	499.9	500.1
20°	514.4	511.2	508.1	505.7	503.5	502.3	501.5	501.3
22.5°	522.6	518.0	513.4	509.8	506.9	505.2	504.5	504.0
25°	532.1	527.0	521.7	517.5	514.6	512.5	511.0	511.0
27.5°	544.0	539.8	535.0	530.2	527.5	525.3	524.3	523.8
30°	563.8	560.0	556.1	551.5	548.1	545.9	544.2	542.8
32.5°	589.3	586.1	583.0	579.6	576.5	573.5	570.9	569.7
35°	625.2	622.8	620.6	616.7	615.5	613.8	612.3	611.1
37.5°	674.6	673.7	673.7	669.5	668.6	667.8	666.4	666.6
40°	739.6	740.6	739.4	737.9	737.2	735.2	735.2	736.9
42.5°	816.4	817.2	819.8	817.4	820.1	817.7	816.2	817.4
45°	905.6	908.3	913.6	911.2	912.9	908.8	903.7	903.9
47.5°	1005.8	1008.2	1010.4	1008.7	1008.9	1002.1	995.3	993.6
50°	1109.8	1110.7	1111.9	1109.5	1110.0	1102.5	1094.7	1095.0
52.5°	1212.5	1217.1	1222.0	1215.4	1214.0	1205.5	1194.6	1190.2
55°	1330.1	1336.7	1331.1	1319.7	1308.3	1296.9	1282.6	1280.2
57.5°	1475.1	1463.9	1446.5	1424.9	1409.1	1393.1	1378.6	1372.5
60°	1676.8	1634.8	1603.3	1571.3	1551.2	1531.6	1512.4	1509.5
62.5°	1961.8	1889.3	1826.6	1760.4	1706.3	1664.2	1630.5	1621.0
65°	2319.1	2147.8	1999.2	1860.5	1740.0	1649.1	1591.9	1566.7
67.5°	2472.8	2134.4	1879.7	1682.8	1525.2	1415.2	1353.4	1322.6
70°	2173.0	1770.1	1493.0	1295.9	1152.4	1035.1	979.1	946.1
72.5°	1494.9	1126.0	890.4	726.7	612.1	513.9	475.1	472.2
75°	671.2	444.6	306.4	236.1	198.8	172.8	164.8	158.8
77.5°	187.9	138.9	123.9	115.9	108.1	99.1	95.8	96.5
80°	91.4	86.3	82.9	77.8	70.8	63.3	59.9	61.3
82.5°	60.6	59.9	62.1	58.4	48.2	41.0	34.4	31.5
85°	36.8	37.3	38.1	38.3	32.5	22.8	15.5	17.5
87.5°	14.5	16.7	18.2	18.9	17.7	10.9	8.7	9.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)