

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: P299575

Luminaire Tested: **GLNA-AF-01-LED-E1-5MQ-7027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299575
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-7027
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(1) 70 CRI, 2700K 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: 5669 lumens
Efficiency: N/A
Efficacy: 96.1 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

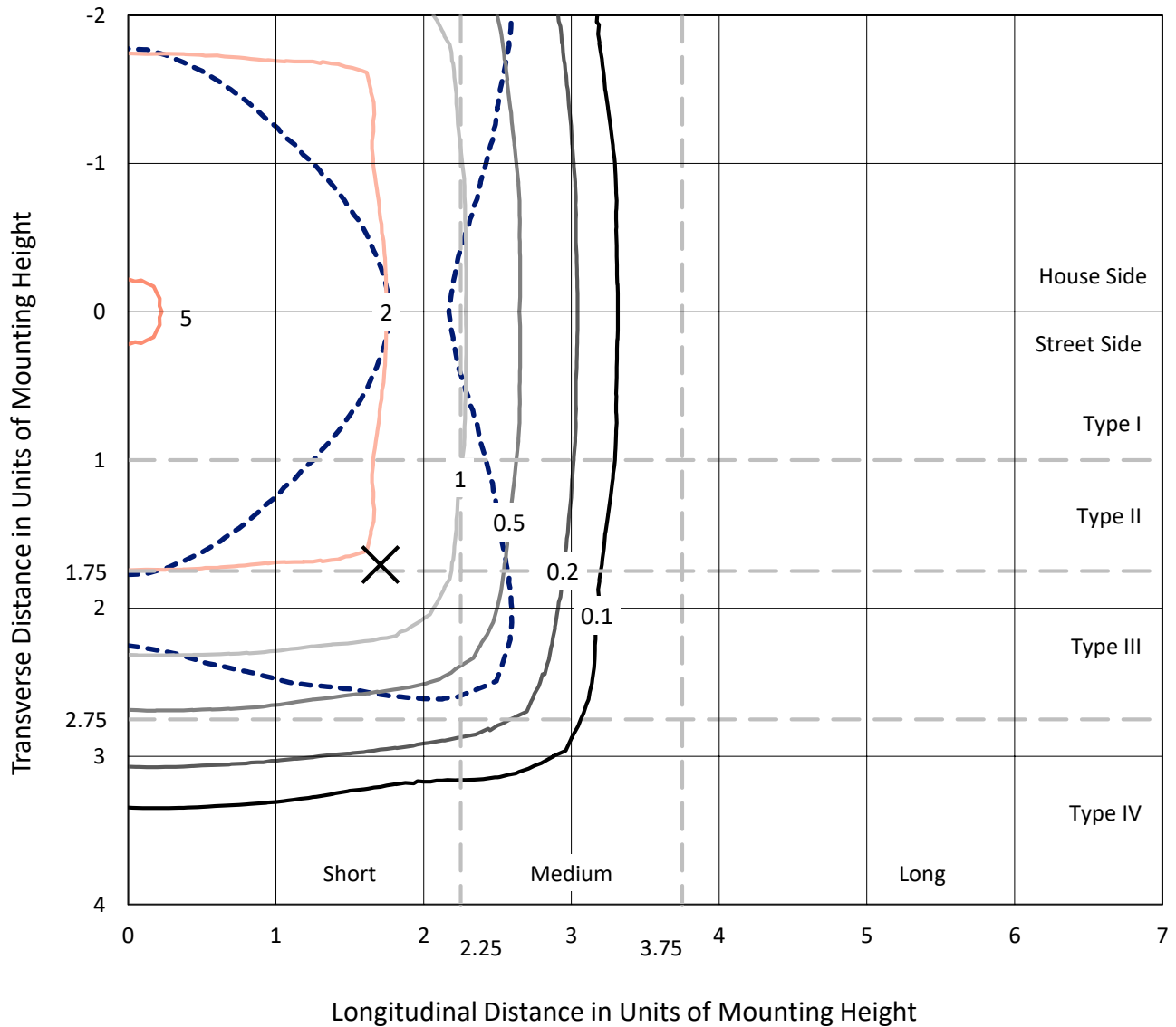
Input Watts (W): 59
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



REPORT NUMBER: P299575
 CATALOG NUMBER: GLNA-AF-01-LED-E1-5MQ-7027

Iso-Footcandle Lines of Horizontal Illumination

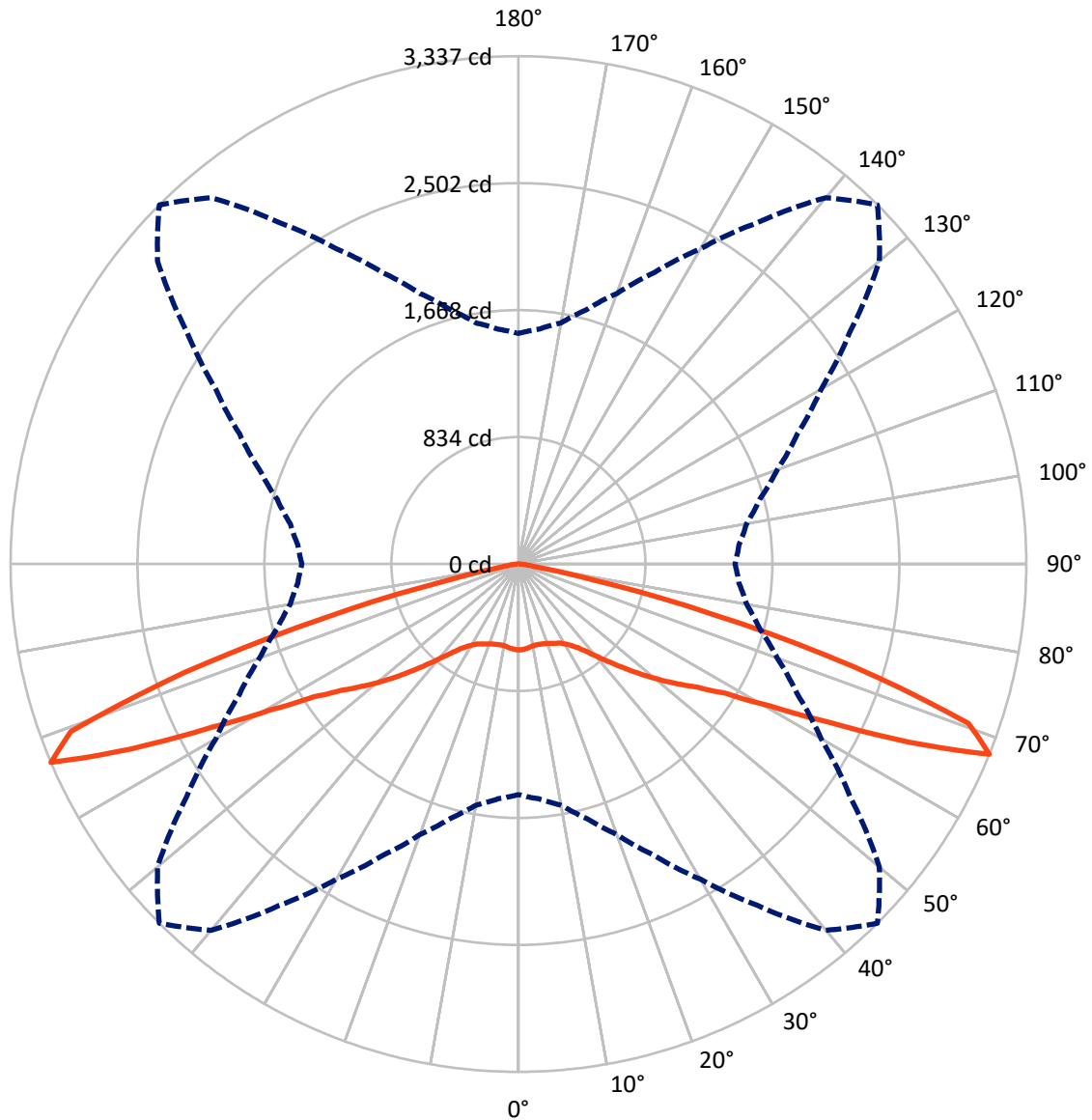
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 5.6 fc
 Type V - Short - Full Cutoff

REPORT NUMBER: P299575
CATALOG NUMBER: GLNA-AF-01-LED-E1-5MQ-7027

Luminous Intensity Polar Plot



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

REPORT NUMBER: P299575

CATALOG NUMBER: GLNA-AF-01-LED-E1-5MQ-7027

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2834.5	0.0	2834.5
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	2834.5	0.0	2834.5
	% Fixture	50.0	0.0	50.0
Total	Lumens	5669.0	0.0	5669.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	52.9	0.9
10°-20°	153.4	2.7
20°-30°	260.8	4.6
30°-40°	426.4	7.5
40°-50°	761.2	13.4
50°-60°	1283.4	22.6
60°-70°	1991.6	35.1
70°-80°	699.8	12.3
80°-90°	39.5	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°	5669.0	100.0
0°-180°	5669.0	100.0

Coefficient of Utilization



REPORT NUMBER: P299575

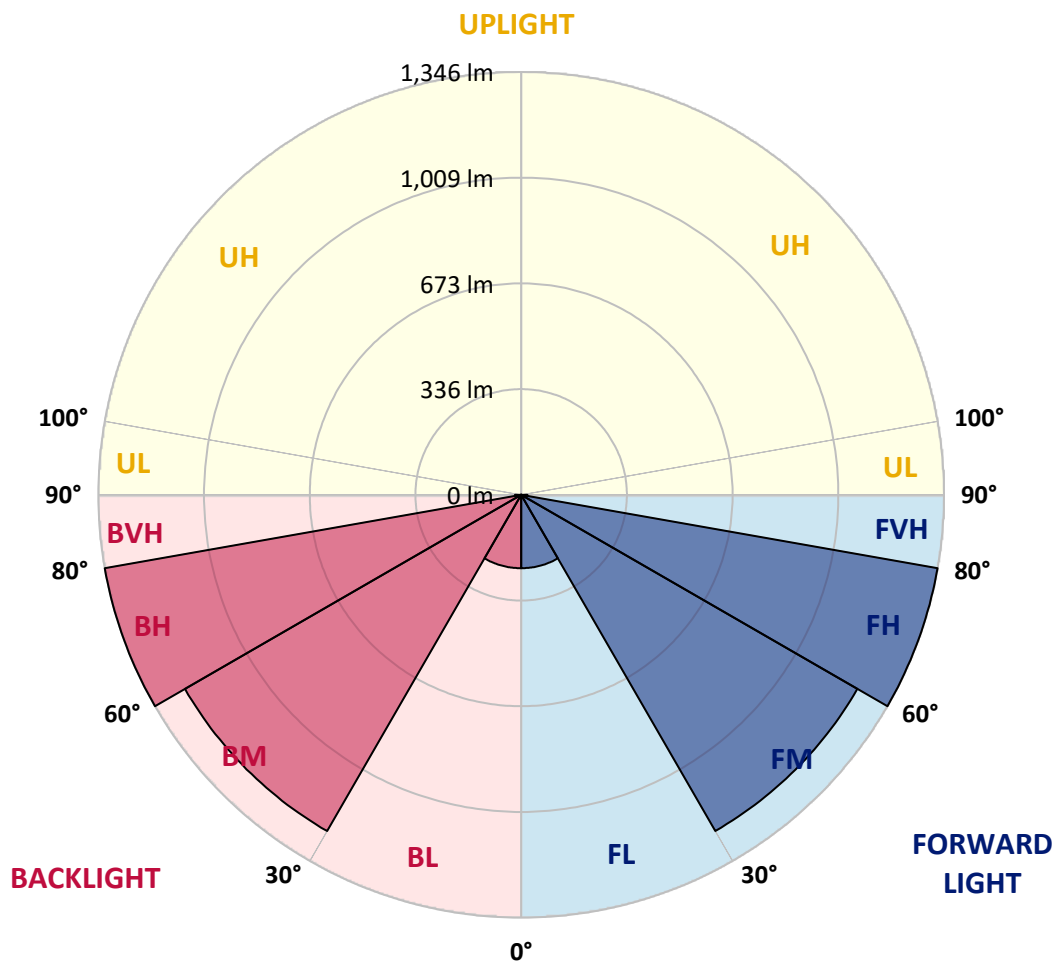
CATALOG NUMBER: GLNA-AF-01-LED-E1-5MQ-7027

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	233.6	4.1			
FM	(30°-60°)	1235.5	21.8			
FH	(60°-80°)	1345.7	23.7			G1/1800
FVH	(80°-90°)	19.8	0.3			G1/100
BL	(0°-30°)	233.6	4.1	B1/500		
BM	(30°-60°)	1235.5	21.8	B2/2500		
BH	(60°-80°)	1345.7	23.7	B3/2500		G1/1800
BVH	(80°-90°)	19.8	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





REPORT NUMBER: P299575
 CATALOG NUMBER: GLNA-AF-01-LED-E1-5MQ-7027

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	564.9	564.9	564.9	564.9	564.9	564.9	564.9	564.9	564.9	564.9	564.9
2.5°	562.9	563.4	563.4	563.4	563.1	563.1	562.6	563.1	562.9	562.1	562.3
5°	558.2	558.7	558.7	558.4	559.2	558.9	558.2	558.7	558.4	557.9	558.2
7.5°	551.4	552.2	552.2	551.9	552.7	552.4	551.9	552.2	552.2	551.4	551.4
10°	543.8	544.3	544.3	544.1	545.4	545.4	545.1	545.9	546.2	545.4	544.9
12.5°	536.8	537.6	537.6	538.6	539.9	540.4	541.7	542.8	543.8	543.6	542.5
15°	532.6	533.1	534.2	535.5	537.6	539.4	541.5	543.8	545.9	546.4	544.9
17.5°	530.0	530.8	532.4	534.2	537.0	540.2	543.3	546.4	549.3	550.3	548.5
20°	529.2	529.7	531.3	534.4	538.3	543.0	547.5	551.1	555.0	556.3	555.0
22.5°	530.8	531.8	533.7	537.3	542.5	548.5	553.7	558.7	563.6	566.0	564.2
25°	537.8	538.9	541.2	545.9	551.6	557.9	563.9	569.6	574.1	576.4	575.1
27.5°	550.9	552.2	555.0	559.7	566.0	572.8	579.3	584.0	587.6	588.4	586.8
30°	570.4	573.3	576.7	581.9	589.2	594.9	601.4	605.6	610.0	610.0	608.7
32.5°	600.9	603.8	607.4	612.4	618.1	624.4	630.1	633.8	638.5	638.7	635.6
35°	646.5	647.8	651.0	654.1	659.3	664.8	669.7	672.1	676.0	676.3	673.4
37.5°	706.8	707.0	709.1	710.2	714.8	720.8	725.5	727.1	730.7	730.2	727.4
40°	776.9	778.2	779.0	780.5	785.5	791.2	796.2	797.0	800.9	800.1	796.4
42.5°	858.0	858.5	862.9	865.3	870.0	872.8	879.1	879.9	884.6	882.5	878.3
45°	949.0	953.6	957.8	962.5	967.5	970.9	975.8	974.8	977.9	974.8	972.4
47.5°	1044.6	1048.0	1057.4	1064.7	1072.8	1075.7	1082.7	1079.6	1082.7	1078.3	1077.5
50°	1150.0	1156.0	1164.0	1172.4	1181.0	1185.7	1194.8	1190.9	1195.1	1190.9	1188.5
52.5°	1253.7	1255.3	1273.0	1285.3	1297.3	1302.7	1308.2	1306.4	1306.6	1306.4	1304.0
55°	1352.3	1355.9	1373.6	1390.3	1411.2	1426.6	1435.9	1434.9	1432.6	1430.2	1426.3
57.5°	1463.3	1467.0	1487.3	1507.9	1531.6	1553.5	1572.6	1592.1	1599.7	1601.8	1593.1
60°	1613.5	1613.2	1640.3	1665.4	1699.3	1731.8	1773.6	1816.0	1864.8	1887.5	1857.5
62.5°	1766.3	1772.5	1811.6	1855.9	1925.8	1993.8	2070.8	2146.4	2223.5	2286.4	2219.6
65°	1748.0	1772.0	1830.1	1930.5	2059.5	2212.8	2378.6	2554.1	2712.6	2821.6	2699.3
67.5°	1514.9	1549.1	1608.3	1730.3	1891.7	2112.7	2391.2	2738.1	3141.5	3336.5	3094.8
70°	1098.1	1136.7	1198.7	1317.8	1477.7	1687.8	1990.2	2406.8	2940.7	3137.3	2871.1
72.5°	546.4	567.3	605.6	681.5	802.4	972.9	1247.2	1647.6	2120.0	2300.4	2057.2
75°	185.6	195.3	201.8	226.5	264.9	331.9	468.2	720.3	1098.9	1317.3	1083.2
77.5°	107.1	107.4	111.8	116.3	122.8	130.1	148.3	194.7	336.8	478.4	348.6
80°	69.3	69.1	72.7	76.1	80.6	84.2	85.2	90.2	104.0	123.3	110.3
82.5°	36.0	40.4	48.5	52.9	61.3	62.8	60.7	58.9	62.3	64.7	66.2
85°	19.8	17.2	25.8	33.4	37.0	37.5	37.5	35.5	36.8	36.0	39.1
87.5°	9.1	8.3	10.2	16.4	17.5	14.9	15.6	13.8	9.9	9.6	10.9
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: P299575

CATALOG NUMBER: GLNA-AF-01-LED-E1-5MQ-7027

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	564.9	564.9	564.9	564.9	564.9	564.9	564.9	564.9
2.5°	562.3	562.6	562.6	563.4	563.6	564.2	564.7	564.9
5°	557.9	558.7	558.2	558.9	558.9	559.5	559.5	559.7
7.5°	551.4	552.2	552.2	552.2	551.9	552.7	552.7	552.7
10°	544.6	545.1	544.9	544.3	543.8	544.6	544.3	544.1
12.5°	542.5	541.2	540.2	539.7	538.6	538.9	538.1	538.1
15°	543.8	541.5	539.7	538.9	537.8	537.3	536.8	537.0
17.5°	547.2	544.3	542.0	540.7	539.4	538.6	537.6	537.8
20°	553.2	549.8	546.4	543.8	541.5	540.2	539.4	539.1
22.5°	562.1	557.1	552.2	548.3	545.1	543.3	542.5	542.0
25°	572.2	566.8	561.0	556.6	553.5	551.1	549.6	549.6
27.5°	585.0	580.6	575.4	570.2	567.3	564.9	563.9	563.4
30°	606.4	602.2	598.0	593.1	589.4	587.1	585.3	583.7
32.5°	633.8	630.4	627.0	623.3	619.9	616.8	614.0	612.6
35°	672.3	669.7	667.4	663.2	661.9	660.1	658.5	657.2
37.5°	725.5	724.5	724.5	720.1	719.0	718.2	716.7	716.9
40°	795.4	796.4	795.1	793.6	792.8	790.7	790.7	792.5
42.5°	878.0	878.8	881.7	879.1	882.0	879.3	877.8	879.1
45°	974.0	976.8	982.6	980.0	981.8	977.4	971.9	972.2
47.5°	1081.7	1084.3	1086.6	1084.8	1085.0	1077.7	1070.4	1068.6
50°	1193.5	1194.5	1195.8	1193.2	1193.8	1185.7	1177.3	1177.6
52.5°	1304.0	1309.0	1314.2	1307.2	1305.6	1296.5	1284.7	1280.0
55°	1430.5	1437.5	1431.5	1419.3	1407.0	1394.8	1379.4	1376.8
57.5°	1586.4	1574.4	1555.6	1532.4	1515.5	1498.3	1482.6	1476.1
60°	1803.3	1758.2	1724.3	1689.9	1668.2	1647.1	1626.5	1623.4
62.5°	2109.9	2031.9	1964.4	1893.2	1835.1	1789.7	1753.5	1743.3
65°	2494.1	2309.8	2150.0	2000.9	1871.3	1773.6	1712.0	1684.9
67.5°	2659.4	2295.5	2021.5	1809.8	1640.3	1522.0	1455.5	1422.4
70°	2336.9	1903.6	1605.7	1393.7	1239.4	1113.2	1053.0	1017.5
72.5°	1607.7	1211.0	957.6	781.6	658.3	552.7	511.0	507.8
75°	721.9	478.1	329.5	253.9	213.8	185.9	177.3	170.8
77.5°	202.0	149.4	133.2	124.6	116.3	106.6	103.0	103.8
80°	98.3	92.8	89.2	83.7	76.1	68.0	64.4	66.0
82.5°	65.2	64.4	66.7	62.8	51.9	44.1	37.0	33.9
85°	39.6	40.1	40.9	41.2	34.9	24.5	16.7	18.8
87.5°	15.6	18.0	19.6	20.3	19.0	11.7	9.4	9.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)