

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: P299635

Luminaire Tested: **GLNA-AF-01-LED-E1-5MQ-7027-800**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P299635  
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-7027-800  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(1) 70 CRI, 2700K 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: 4579.9 lumens  
Efficiency: N/A  
Efficacy: 104.1 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): 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

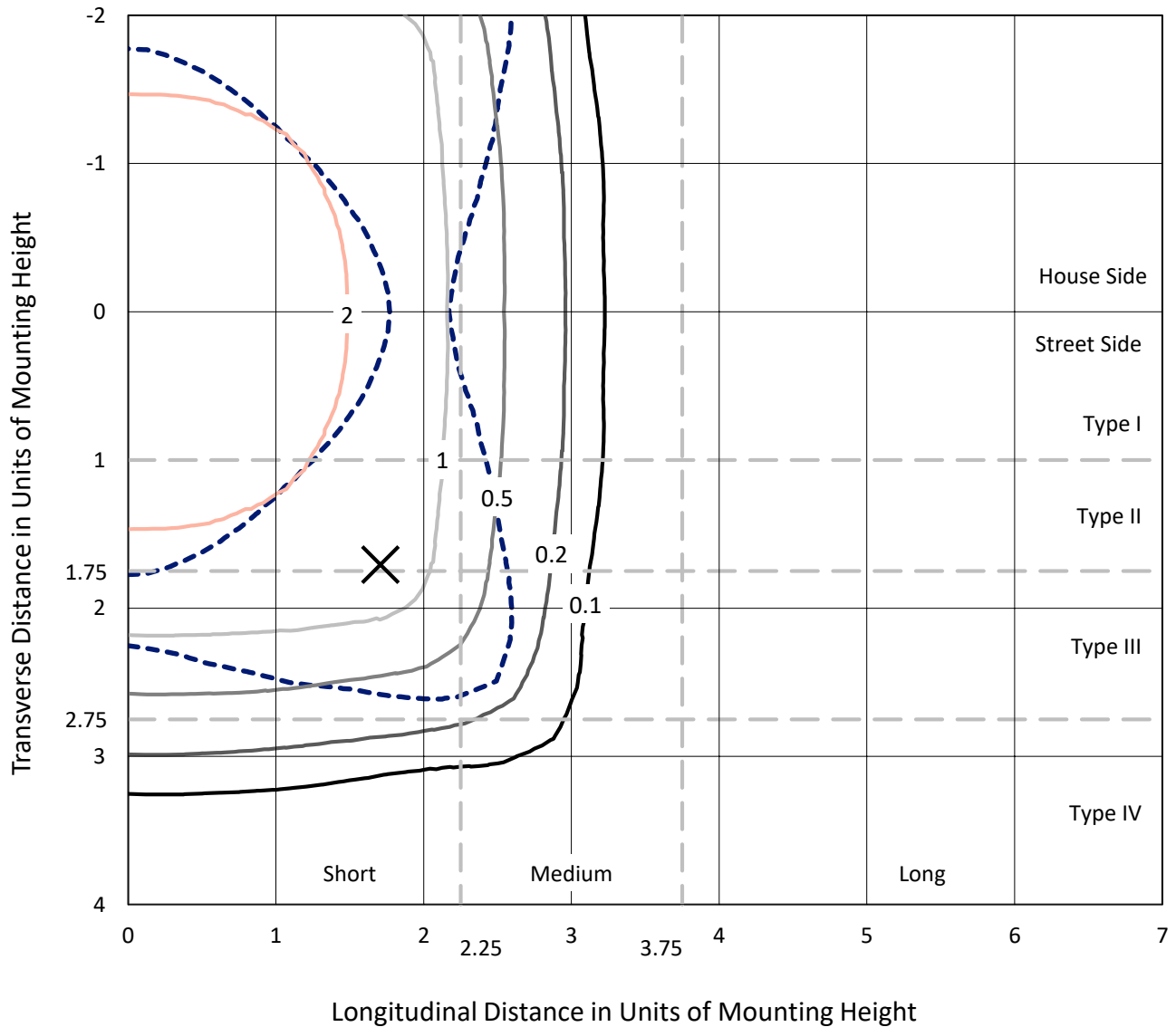


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

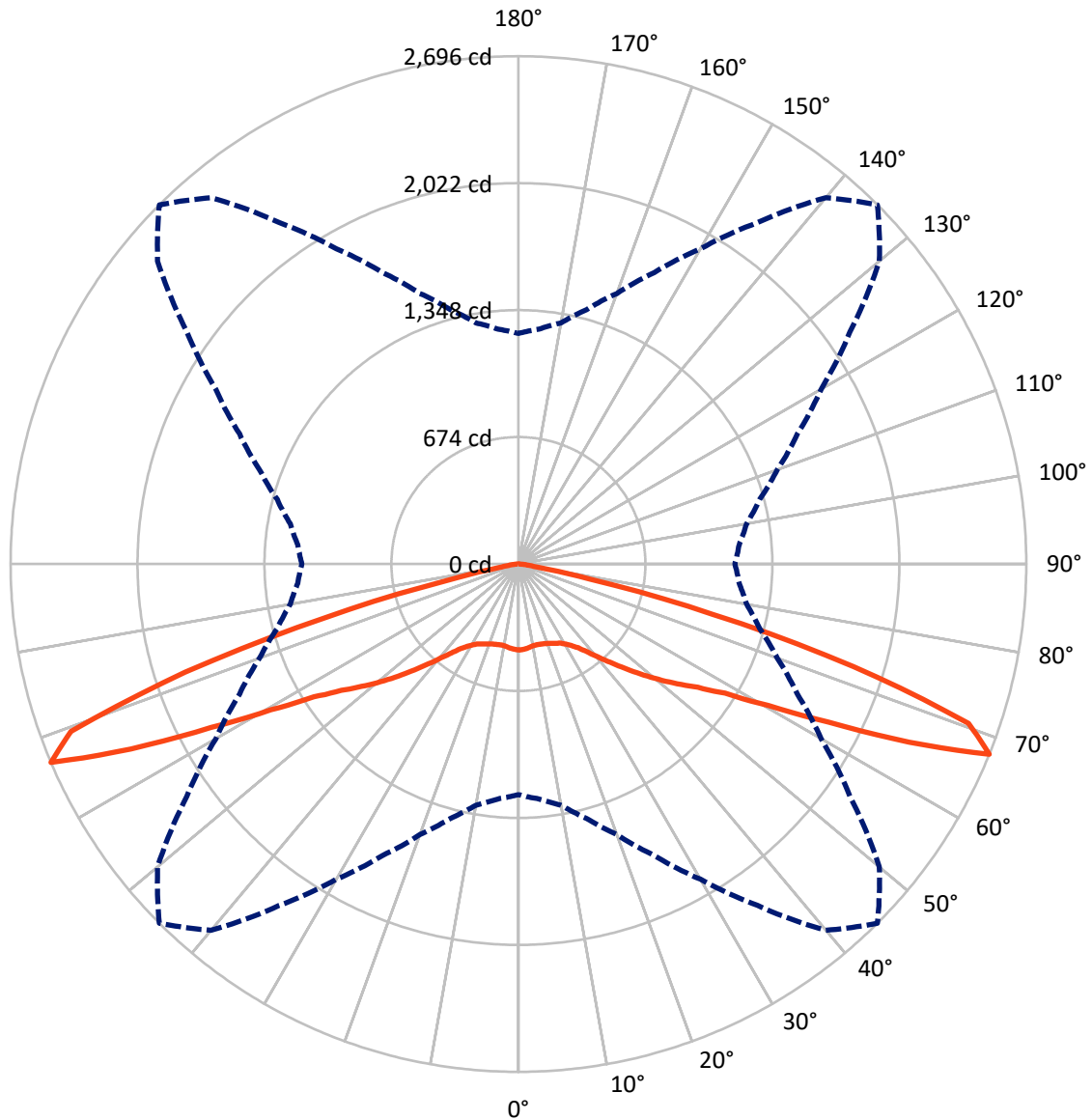


Based on 10 foot mounting height. Maximum calculated value = 4.6 fc  
 Type V - Short - Full Cutoff

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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	2289.9	0.0	2289.9
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	2289.9	0.0	2289.9
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	4579.9	0.0	4579.9
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	42.7	0.9
10°-20°	124.0	2.7
20°-30°	210.7	4.6
30°-40°	344.5	7.5
40°-50°	614.9	13.4
50°-60°	1036.8	22.6
60°-70°	1609.0	35.1
70°-80°	565.3	12.3
80°-90°	31.9	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°	4579.9	100.0
0°-180°	4579.9	100.0



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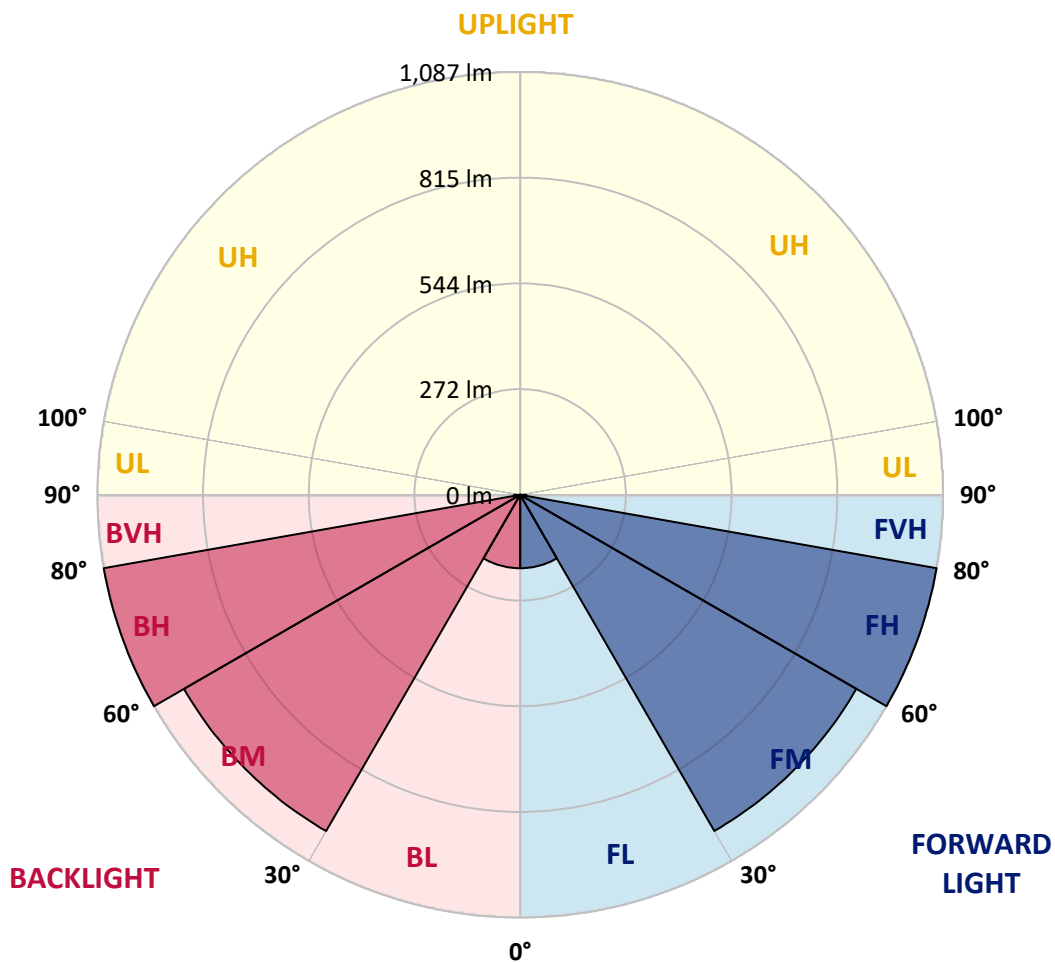
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	188.7	4.1			
FM	(30°-60°)	998.1	21.8			
FH	(60°-80°)	1087.2	23.7			G1/1800
FVH	(80°-90°)	16.0	0.3			G1/100
BL	(0°-30°)	188.7	4.1	B1/500		
BM	(30°-60°)	998.1	21.8	B1/1000		
BH	(60°-80°)	1087.2	23.7	B3/2500		G1/1800
BVH	(80°-90°)	16.0	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°	456.4	456.4	456.4	456.4	456.4	456.4	456.4	456.4	456.4	456.4	456.4
2.5°	454.7	455.1	455.1	455.1	454.9	454.9	454.5	454.9	454.7	454.1	454.3
5°	450.9	451.3	451.3	451.1	451.8	451.6	450.9	451.3	451.1	450.7	450.9
7.5°	445.5	446.1	446.1	445.9	446.5	446.3	445.9	446.1	446.1	445.5	445.5
10°	439.3	439.8	439.8	439.6	440.6	440.6	440.4	441.0	441.2	440.6	440.2
12.5°	433.7	434.3	434.3	435.1	436.2	436.6	437.7	438.5	439.3	439.1	438.3
15°	430.3	430.7	431.6	432.6	434.3	435.8	437.4	439.3	441.0	441.5	440.2
17.5°	428.2	428.8	430.1	431.6	433.9	436.4	438.9	441.5	443.8	444.6	443.1
20°	427.6	428.0	429.2	431.8	434.9	438.7	442.3	445.2	448.4	449.5	448.4
22.5°	428.8	429.7	431.1	434.1	438.3	443.1	447.3	451.3	455.4	457.2	455.8
25°	434.5	435.3	437.2	441.0	445.7	450.7	455.6	460.2	463.8	465.7	464.6
27.5°	445.0	446.1	448.4	452.2	457.2	462.7	468.0	471.8	474.7	475.4	474.1
30°	460.8	463.1	465.9	470.1	476.0	480.6	485.9	489.3	492.8	492.8	491.8
32.5°	485.5	487.8	490.7	494.7	499.4	504.4	509.1	512.0	515.8	516.0	513.5
35°	522.3	523.4	525.9	528.4	532.6	537.1	541.1	543.0	546.1	546.3	544.0
37.5°	571.0	571.2	572.9	573.7	577.5	582.4	586.1	587.4	590.4	589.9	587.6
40°	627.6	628.7	629.3	630.6	634.6	639.2	643.2	643.9	647.0	646.4	643.4
42.5°	693.1	693.6	697.1	699.0	702.8	705.1	710.2	710.8	714.6	712.9	709.6
45°	766.6	770.4	773.8	777.6	781.6	784.3	788.3	787.5	790.0	787.5	785.6
47.5°	843.9	846.7	854.3	860.2	866.7	869.0	874.7	872.2	874.7	871.1	870.5
50°	929.0	933.9	940.4	947.1	954.1	957.9	965.3	962.1	965.5	962.1	960.2
52.5°	1012.9	1014.1	1028.4	1038.3	1048.0	1052.4	1056.9	1055.4	1055.6	1055.4	1053.5
55°	1092.5	1095.4	1109.7	1123.2	1140.1	1152.5	1160.1	1159.2	1157.3	1155.4	1152.3
57.5°	1182.2	1185.1	1201.6	1218.2	1237.4	1255.1	1270.4	1286.2	1292.3	1294.0	1287.1
60°	1303.5	1303.3	1325.2	1345.4	1372.8	1399.1	1432.8	1467.2	1506.5	1524.9	1500.6
62.5°	1426.9	1432.0	1463.6	1499.4	1555.8	1610.8	1672.9	1734.0	1796.3	1847.1	1793.2
65°	1412.2	1431.6	1478.5	1559.6	1663.9	1787.7	1921.7	2063.4	2191.5	2279.5	2180.7
67.5°	1223.9	1251.5	1299.3	1397.9	1528.2	1706.8	1931.8	2212.1	2537.9	2695.5	2500.2
70°	887.1	918.3	968.4	1064.7	1193.8	1363.5	1607.8	1944.4	2375.7	2534.6	2319.5
72.5°	441.5	458.3	489.3	550.6	648.3	786.0	1007.6	1331.1	1712.7	1858.5	1662.0
75°	150.0	157.8	163.0	183.0	214.0	268.1	378.3	581.9	887.7	1064.2	875.1
77.5°	86.6	86.8	90.4	93.9	99.2	105.1	119.8	157.3	272.1	386.5	281.6
80°	56.0	55.8	58.8	61.5	65.1	68.0	68.9	72.9	84.0	99.6	89.1
82.5°	29.1	32.6	39.2	42.8	49.5	50.8	49.1	47.6	50.3	52.2	53.5
85°	16.0	13.9	20.9	27.0	29.9	30.3	30.3	28.6	29.7	29.1	31.6
87.5°	7.4	6.7	8.2	13.3	14.1	12.0	12.6	11.2	8.0	7.8	8.8
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°	456.4	456.4	456.4	456.4	456.4	456.4	456.4	456.4
2.5°	454.3	454.5	454.5	455.1	455.4	455.8	456.2	456.4
5°	450.7	451.3	450.9	451.6	451.6	452.0	452.0	452.2
7.5°	445.5	446.1	446.1	446.1	445.9	446.5	446.5	446.5
10°	440.0	440.4	440.2	439.8	439.3	440.0	439.8	439.6
12.5°	438.3	437.2	436.4	436.0	435.1	435.3	434.7	434.7
15°	439.3	437.4	436.0	435.3	434.5	434.1	433.7	433.9
17.5°	442.1	439.8	437.9	436.8	435.8	435.1	434.3	434.5
20°	446.9	444.2	441.5	439.3	437.4	436.4	435.8	435.6
22.5°	454.1	450.1	446.1	442.9	440.4	438.9	438.3	437.9
25°	462.3	457.9	453.2	449.7	447.1	445.2	444.0	444.0
27.5°	472.6	469.0	464.8	460.6	458.3	456.4	455.6	455.1
30°	489.9	486.5	483.2	479.2	476.2	474.3	472.8	471.6
32.5°	512.0	509.3	506.5	503.6	500.8	498.3	496.0	494.9
35°	543.2	541.1	539.2	535.8	534.8	533.3	532.0	531.0
37.5°	586.1	585.3	585.3	581.7	580.9	580.2	579.0	579.2
40°	642.6	643.4	642.4	641.1	640.5	638.8	638.8	640.3
42.5°	709.4	710.0	712.3	710.2	712.5	710.4	709.1	710.2
45°	786.9	789.2	793.8	791.7	793.2	789.6	785.2	785.4
47.5°	873.8	876.0	877.8	876.4	876.6	870.7	864.8	863.3
50°	964.2	965.0	966.1	964.0	964.4	957.9	951.1	951.4
52.5°	1053.5	1057.5	1061.7	1056.0	1054.8	1047.4	1037.9	1034.1
55°	1155.6	1161.3	1156.5	1146.6	1136.7	1126.8	1114.4	1112.3
57.5°	1281.6	1271.9	1256.7	1238.0	1224.3	1210.4	1197.8	1192.5
60°	1456.8	1420.4	1393.0	1365.2	1347.7	1330.7	1314.0	1311.5
62.5°	1704.5	1641.5	1587.0	1529.5	1482.5	1445.9	1416.6	1408.4
65°	2015.0	1866.1	1736.9	1616.5	1511.8	1432.8	1383.1	1361.2
67.5°	2148.5	1854.5	1633.1	1462.1	1325.2	1229.6	1175.9	1149.1
70°	1888.0	1537.9	1297.2	1126.0	1001.3	899.3	850.7	822.0
72.5°	1298.9	978.3	773.6	631.4	531.8	446.5	412.8	410.3
75°	583.2	386.3	266.2	205.1	172.7	150.2	143.2	138.0
77.5°	163.2	120.7	107.6	100.7	93.9	86.1	83.2	83.8
80°	79.4	75.0	72.0	67.6	61.5	55.0	52.0	53.3
82.5°	52.7	52.0	53.9	50.8	41.9	35.6	29.9	27.4
85°	32.0	32.4	33.1	33.3	28.2	19.8	13.5	15.2
87.5°	12.6	14.5	15.8	16.4	15.4	9.5	7.6	7.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)