

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: P299875

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299875
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24143)
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-E1-5WQ-7027-800
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(1) 70 CRI, 2700K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Type IV
w/Spill Control OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4591.7 lumens
Efficiency: N/A
Efficacy: 104.4 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type V - Short - Semi-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

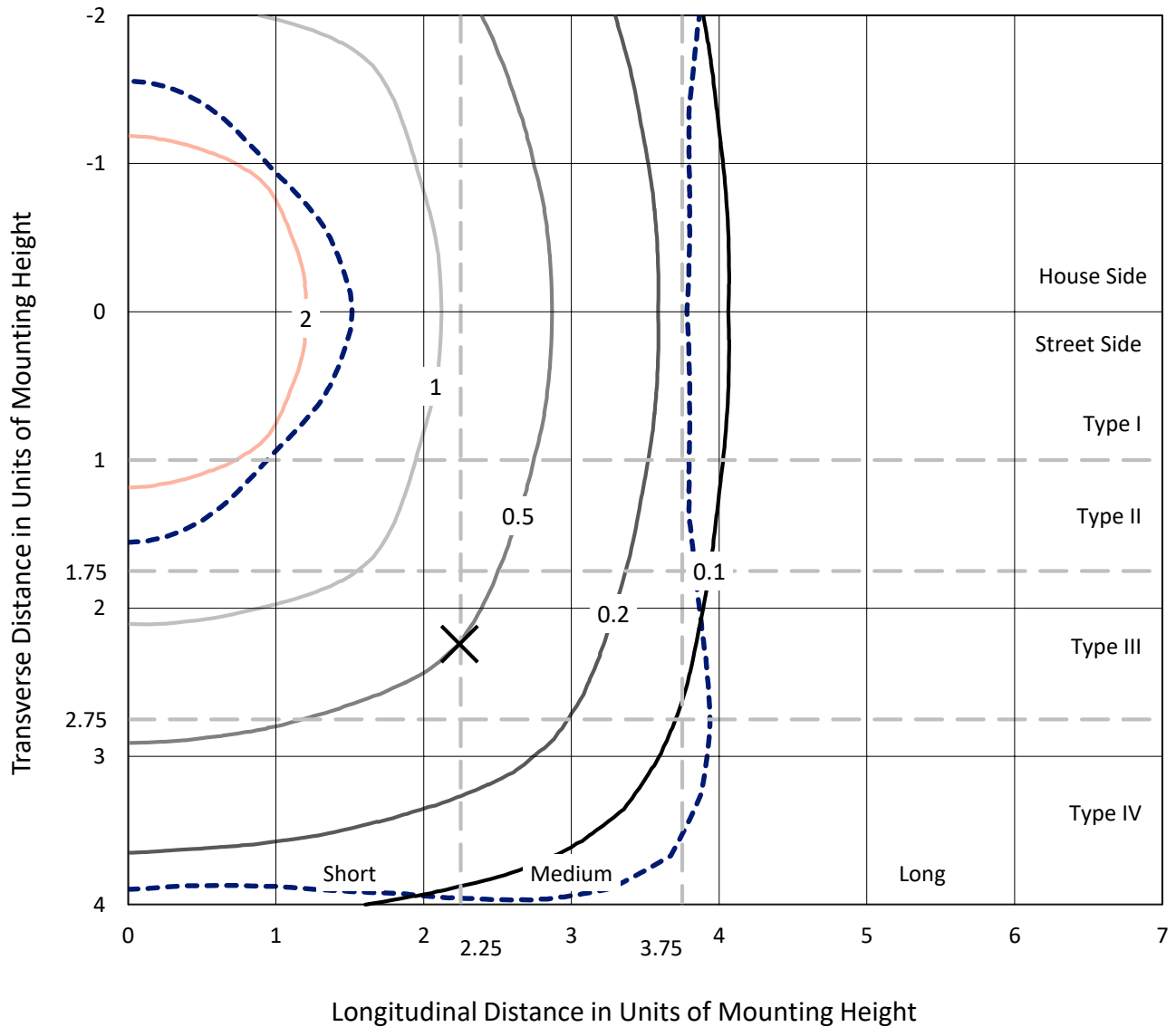


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

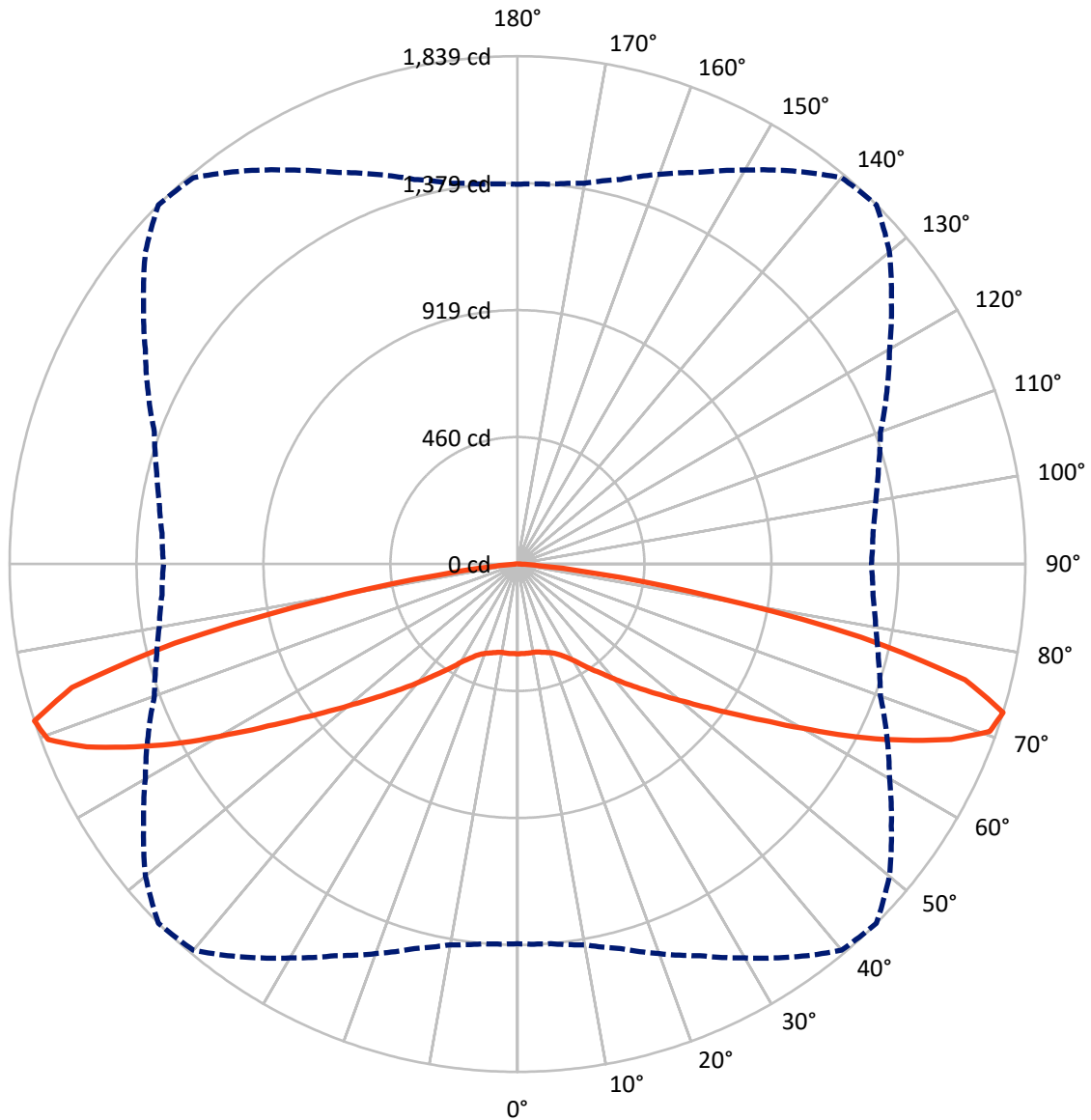


Based on 10 foot mounting height. Maximum calculated value = 3.3 fc
 Type V - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2295.9	0.0	2295.9
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	2295.9	0.0	2295.9
	% Fixture	50.0	0.0	50.0
Total	Lumens	4591.7	0.0	4591.7
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	31.0	0.7
10°-20°	94.3	2.1
20°-30°	172.3	3.8
30°-40°	297.1	6.5
40°-50°	507.9	11.1
50°-60°	823.3	17.9
60°-70°	1365.8	29.7
70°-80°	1202.9	26.2
80°-90°	97.0	2.1
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°	4591.7	100.0
0°-180°	4591.7	100.0



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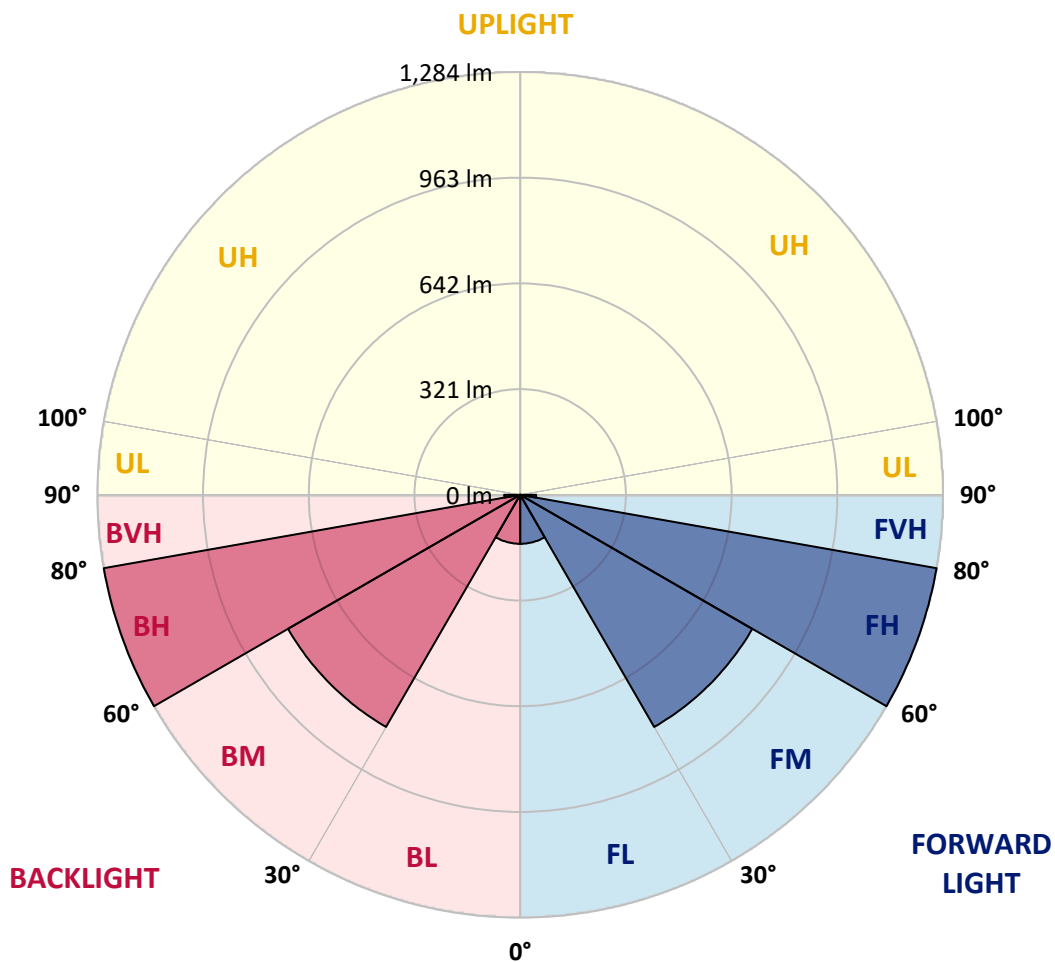
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	148.8	3.2			
FM (30°-60°)	814.2	17.7			
FH (60°-80°)	1284.4	28.0			G1/1800
FVH (80°-90°)	48.5	1.1			G1/100
BL (0°-30°)	148.8	3.2	B1/500		
BM (30°-60°)	814.2	17.7	B1/1000		
BH (60°-80°)	1284.4	28.0	B3/2500		G1/1800
BVH (80°-90°)	48.5	1.1			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°	325.2	325.2	325.2	325.2	325.2	325.2	325.2	325.2	325.2	325.2	325.2
2.5°	325.2	325.4	325.6	325.4	325.4	325.2	325.0	325.2	325.0	324.5	324.7
5°	326.2	326.6	326.6	326.2	326.4	326.2	325.8	326.0	325.6	325.0	325.0
7.5°	327.5	327.7	327.7	327.3	327.5	327.1	326.6	326.4	326.0	325.2	324.5
10°	329.4	329.6	329.4	329.0	329.0	328.3	327.3	326.9	326.0	324.7	324.1
12.5°	331.5	331.7	331.5	331.1	330.9	329.8	329.0	328.3	327.7	326.6	325.6
15°	334.4	334.9	334.4	333.6	333.0	332.1	331.7	331.9	332.1	331.3	330.2
17.5°	339.9	340.1	339.5	337.6	336.7	335.9	335.9	336.3	337.0	336.5	335.5
20°	350.0	349.4	347.9	345.6	344.5	343.1	342.9	343.1	343.1	342.9	342.0
22.5°	362.7	362.2	360.3	357.4	355.9	355.1	353.8	352.8	352.5	351.9	351.1
25°	377.8	377.6	375.3	372.8	371.7	370.7	369.6	368.1	366.9	365.4	364.5
27.5°	397.2	396.3	393.0	391.7	390.2	389.6	388.1	386.5	385.4	383.5	382.4
30°	418.5	418.5	415.7	415.3	415.3	413.8	412.1	409.2	407.3	405.4	404.8
32.5°	439.7	439.9	437.2	438.0	438.7	439.7	440.2	439.1	437.8	437.6	436.4
35°	470.5	469.6	466.9	467.5	467.3	467.1	467.1	469.4	469.8	470.3	467.7
37.5°	508.6	508.6	505.9	505.9	504.6	503.3	501.6	503.1	505.4	506.1	504.4
40°	552.2	553.7	550.3	550.1	550.5	546.5	544.6	546.9	548.4	550.9	549.0
42.5°	603.6	602.5	599.2	598.7	596.4	595.2	593.5	595.4	597.7	599.4	600.0
45°	652.9	652.0	648.2	648.2	645.9	644.9	645.7	648.9	649.9	652.2	654.5
47.5°	701.5	700.5	697.9	699.0	699.2	701.1	703.8	706.8	709.7	712.9	713.9
50°	751.2	751.4	748.7	751.2	754.4	759.6	767.0	771.8	778.0	782.0	783.2
52.5°	796.5	797.3	800.3	806.2	812.5	822.8	835.4	847.2	857.4	864.1	863.7
55°	850.8	852.1	859.2	869.4	879.7	895.3	914.0	934.9	951.7	961.4	955.3
57.5°	920.3	923.1	931.1	944.7	960.1	980.3	1006.0	1037.4	1063.5	1076.6	1066.7
60°	1015.7	1017.4	1027.1	1042.3	1060.8	1085.9	1120.2	1162.3	1199.2	1216.4	1205.1
62.5°	1141.4	1144.6	1152.4	1167.8	1186.7	1215.2	1257.1	1309.7	1355.6	1379.6	1353.9
65°	1291.6	1301.7	1308.2	1323.8	1341.5	1371.6	1415.4	1471.9	1521.2	1537.0	1507.3
67.5°	1440.3	1449.1	1460.5	1478.4	1496.3	1530.2	1570.9	1625.6	1679.7	1694.1	1647.9
70°	1505.4	1510.4	1528.1	1552.5	1586.9	1626.9	1673.8	1735.3	1802.3	1814.1	1755.6
72.5°	1375.0	1380.1	1399.9	1441.3	1501.2	1564.8	1646.7	1737.0	1825.5	1838.7	1758.1
75°	1039.9	1031.7	1061.0	1116.0	1196.6	1285.3	1399.9	1529.4	1657.2	1673.8	1577.6
77.5°	537.4	536.4	558.5	626.7	723.0	823.9	950.0	1096.4	1221.5	1272.0	1193.7
80°	151.4	153.1	163.6	197.5	253.8	326.6	425.2	562.3	664.7	716.9	673.1
82.5°	59.4	64.0	68.0	74.3	81.7	92.5	123.4	183.6	246.4	294.4	241.1
85°	21.3	22.7	32.2	38.1	38.8	40.9	46.5	54.3	65.5	78.1	64.2
87.5°	8.0	8.8	10.3	17.1	16.8	15.4	18.7	19.6	14.7	13.5	16.6
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°	325.2	325.2	325.2	325.2	325.2	325.2	325.2	325.2
2.5°	324.3	324.5	324.5	324.7	325.0	325.0	325.4	325.4
5°	324.5	324.5	324.1	324.3	324.1	324.1	324.3	324.3
7.5°	324.1	323.9	323.5	323.3	322.8	322.8	322.8	322.8
10°	323.5	323.3	322.8	322.6	322.4	322.4	322.4	322.4
12.5°	325.2	324.5	324.1	323.9	323.9	323.9	323.9	323.9
15°	329.6	328.1	327.1	327.1	327.3	327.7	327.7	328.1
17.5°	335.1	333.4	332.3	331.5	331.9	332.5	333.0	333.4
20°	341.6	340.7	339.3	338.4	338.4	339.3	339.7	339.9
22.5°	350.6	350.0	349.4	348.3	348.3	348.8	349.6	349.6
25°	364.1	363.7	363.3	362.4	362.2	362.2	362.7	363.1
27.5°	381.0	381.2	380.8	380.6	379.9	379.7	380.3	380.1
30°	403.5	404.6	405.6	404.8	403.7	403.1	402.5	401.6
32.5°	434.0	432.8	431.9	430.5	428.6	426.9	425.6	424.1
35°	462.9	460.8	459.9	461.2	461.0	459.9	458.5	457.2
37.5°	498.3	497.9	498.3	500.6	500.2	501.2	498.3	498.1
40°	542.9	543.3	546.3	549.0	550.5	552.0	550.3	548.6
42.5°	594.7	594.5	595.6	599.4	601.9	603.6	600.0	599.6
45°	649.5	648.0	648.9	652.0	654.5	656.4	652.4	652.4
47.5°	709.7	707.2	704.5	708.0	709.5	710.8	707.6	706.6
50°	776.9	771.6	765.7	767.2	767.2	766.8	762.8	762.6
52.5°	854.0	844.3	833.6	829.6	827.2	824.7	817.8	814.4
55°	942.6	928.1	911.3	900.9	895.5	888.5	876.9	873.8
57.5°	1046.3	1023.5	994.5	981.8	969.6	958.2	945.4	941.8
60°	1169.0	1135.6	1097.0	1073.6	1060.4	1049.4	1036.1	1035.5
62.5°	1305.9	1253.1	1209.5	1188.4	1178.7	1169.0	1156.4	1158.1
65°	1445.1	1390.0	1349.1	1332.0	1323.0	1315.0	1302.3	1304.2
67.5°	1582.4	1531.7	1486.8	1469.4	1459.2	1449.1	1437.8	1439.7
70°	1681.0	1618.0	1567.5	1528.7	1504.5	1477.1	1459.5	1455.0
72.5°	1652.8	1555.7	1475.5	1398.6	1353.5	1316.9	1292.0	1281.3
75°	1430.4	1297.7	1194.5	1100.2	1047.1	1003.9	972.5	953.0
77.5°	1062.3	913.2	791.2	682.6	596.6	538.9	498.3	472.0
80°	581.5	442.3	323.3	227.2	167.0	138.8	122.6	114.8
82.5°	181.1	116.9	86.1	74.3	69.1	66.1	61.3	53.5
85°	57.7	50.5	47.0	44.9	42.8	37.3	25.7	23.4
87.5°	22.3	23.0	22.7	21.5	21.9	15.8	12.6	11.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)