

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: P299696

Luminaire Tested: **GLNA-AF-01-LED-E1-5MQ-7030-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299696
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-7030-600
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(1) 70 CRI, 3000K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Type III
w/Spill Control OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4157.7 lumens
Efficiency: N/A
Efficacy: 122.3 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type V - Short - Full Cutoff
BUG Rating: B2 - U0 - G1

Input Watts (W): 34
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

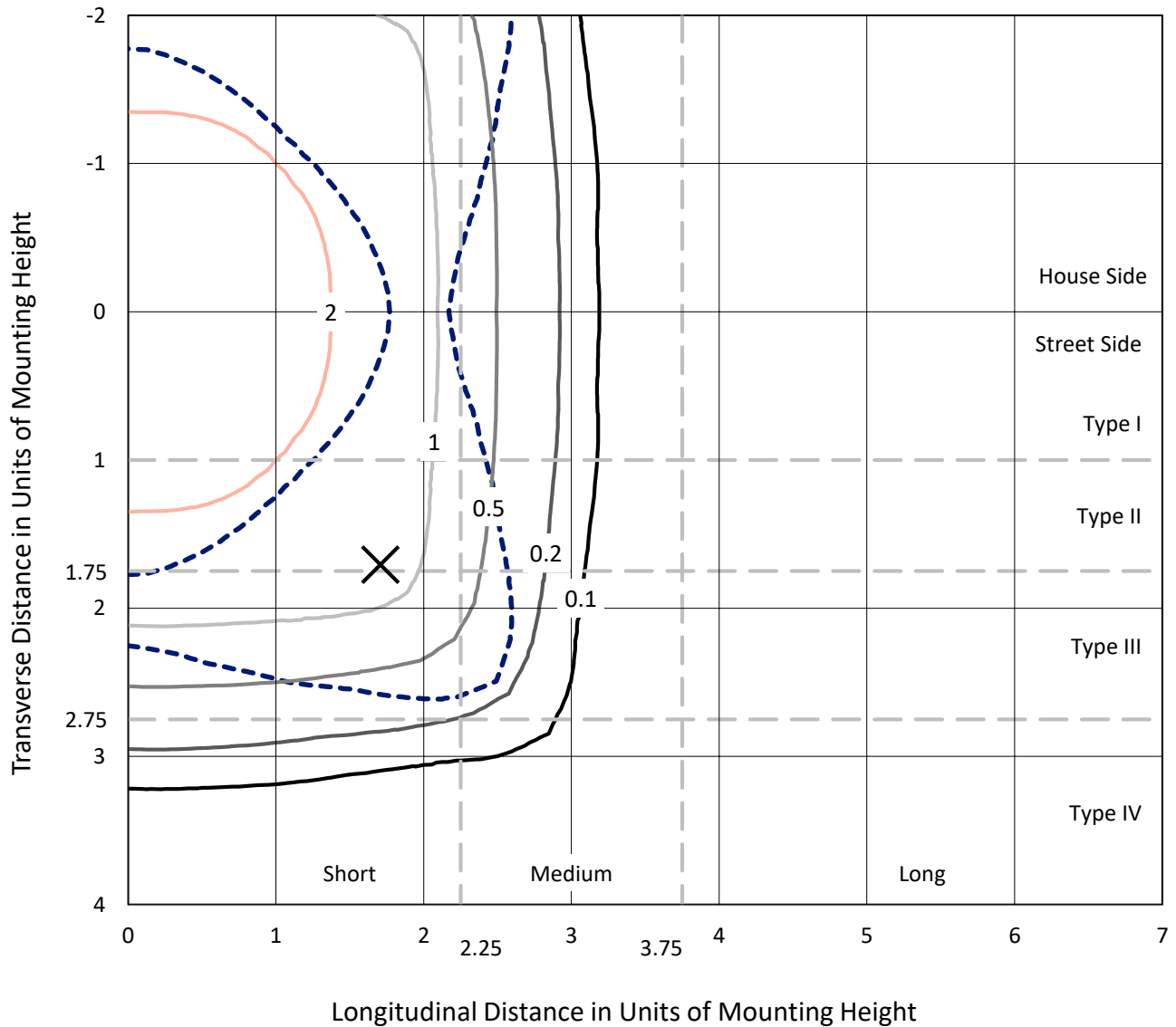


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

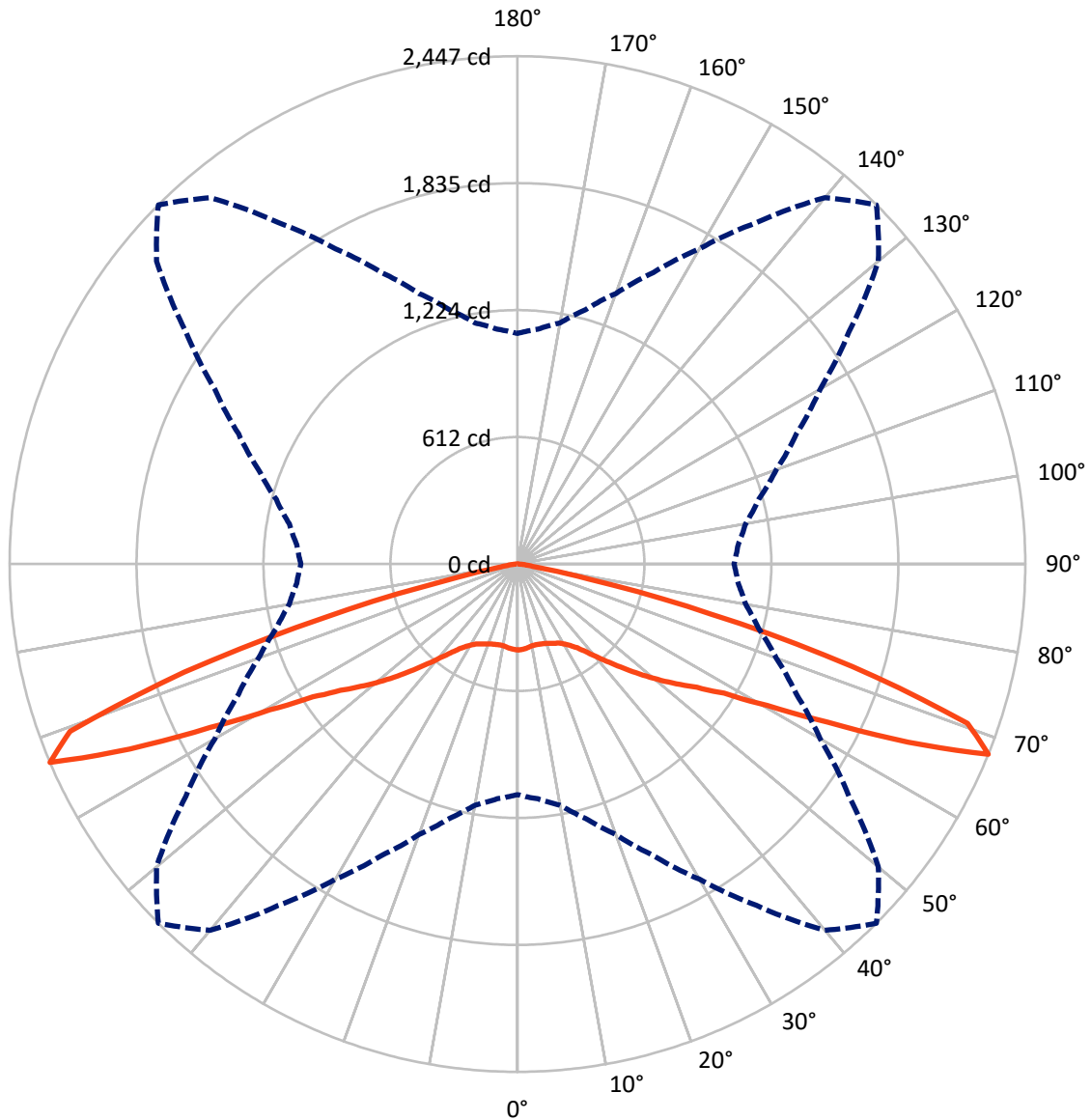


Based on 10 foot mounting height. Maximum calculated value = 4.1 fc
 Type V - Short - Full Cutoff

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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	2078.8	0.0	2078.8
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	2078.8	0.0	2078.8
	% Fixture	50.0	0.0	50.0
Total	Lumens	4157.7	0.0	4157.7
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	38.8	0.9
10°-20°	112.5	2.7
20°-30°	191.3	4.6
30°-40°	312.7	7.5
40°-50°	558.3	13.4
50°-60°	941.2	22.6
60°-70°	1460.6	35.1
70°-80°	513.2	12.3
80°-90°	29.0	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°	4157.7	100.0
0°-180°	4157.7	100.0



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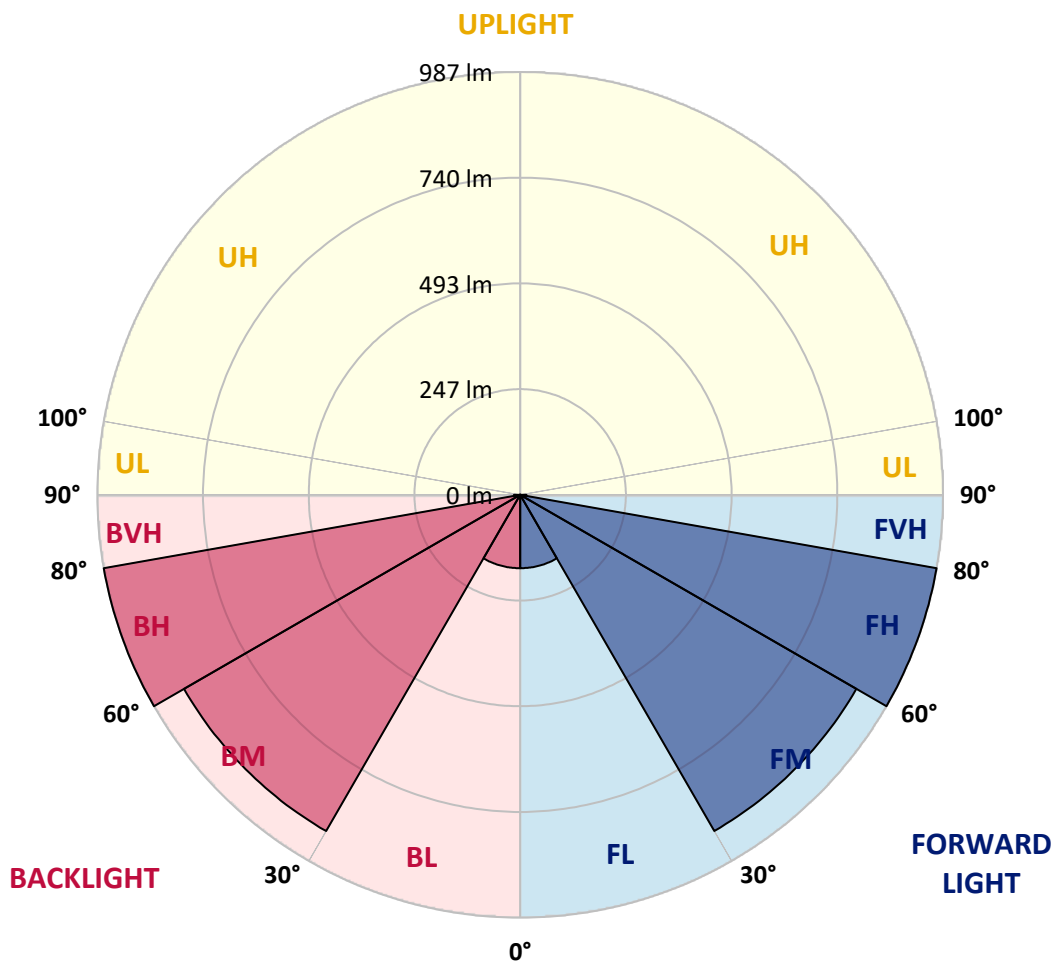
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	171.3	4.1			
FM	(30°-60°)	906.1	21.8			
FH	(60°-80°)	986.9	23.7			G1/1800
FVH	(80°-90°)	14.5	0.3			G1/100
BL	(0°-30°)	171.3	4.1	B1/500		
BM	(30°-60°)	906.1	21.8	B1/1000		
BH	(60°-80°)	986.9	23.7	B2/1000		G1/1800
BVH	(80°-90°)	14.5	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G1

Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	414.3	414.3	414.3	414.3	414.3	414.3	414.3	414.3	414.3	414.3	414.3
2.5°	412.8	413.2	413.2	413.2	413.0	413.0	412.6	413.0	412.8	412.2	412.4
5°	409.4	409.7	409.7	409.5	410.1	409.9	409.4	409.7	409.5	409.2	409.4
7.5°	404.4	405.0	405.0	404.8	405.3	405.2	404.8	405.0	405.0	404.4	404.4
10°	398.8	399.2	399.2	399.0	400.0	400.0	399.8	400.4	400.6	400.0	399.6
12.5°	393.7	394.3	394.3	395.0	396.0	396.4	397.3	398.1	398.8	398.7	397.9
15°	390.6	391.0	391.8	392.7	394.3	395.6	397.1	398.8	400.4	400.8	399.6
17.5°	388.7	389.3	390.4	391.8	393.9	396.2	398.5	400.8	402.9	403.6	402.3
20°	388.1	388.5	389.7	392.0	394.8	398.3	401.5	404.2	407.1	408.0	407.1
22.5°	389.3	390.0	391.4	394.1	397.9	402.3	406.1	409.7	413.4	415.1	413.8
25°	394.4	395.2	396.9	400.4	404.6	409.2	413.6	417.8	421.0	422.7	421.8
27.5°	404.0	405.0	407.1	410.5	415.1	420.1	424.8	428.3	431.0	431.5	430.4
30°	418.3	420.4	422.9	426.8	432.1	436.3	441.1	444.2	447.4	447.4	446.5
32.5°	440.7	442.8	445.5	449.1	453.3	457.9	462.1	464.8	468.2	468.4	466.1
35°	474.2	475.1	477.4	479.7	483.5	487.6	491.2	492.9	495.8	496.0	493.9
37.5°	518.3	518.5	520.1	520.8	524.3	528.7	532.1	533.3	535.9	535.5	533.4
40°	569.8	570.7	571.3	572.5	576.1	580.3	583.9	584.5	587.4	586.8	584.1
42.5°	629.2	629.6	632.9	634.6	638.0	640.1	644.7	645.3	648.7	647.2	644.2
45°	696.0	699.4	702.5	705.9	709.5	712.0	715.7	714.9	717.2	714.9	713.2
47.5°	766.1	768.6	775.5	780.9	786.8	788.9	794.1	791.8	794.1	790.8	790.2
50°	843.4	847.8	853.7	859.8	866.1	869.6	876.3	873.4	876.5	873.4	871.7
52.5°	919.5	920.6	933.6	942.6	951.4	955.4	959.4	958.1	958.3	958.1	956.4
55°	991.8	994.4	1007.4	1019.7	1035.0	1046.2	1053.1	1052.4	1050.6	1048.9	1046.1
57.5°	1073.2	1075.9	1090.8	1105.9	1123.3	1139.4	1153.3	1167.7	1173.2	1174.7	1168.4
60°	1183.3	1183.1	1203.0	1221.4	1246.2	1270.1	1300.7	1331.9	1367.6	1384.3	1362.3
62.5°	1295.4	1300.0	1328.6	1361.1	1412.4	1462.3	1518.7	1574.1	1630.7	1676.8	1627.9
65°	1282.0	1299.6	1342.2	1415.8	1510.5	1622.9	1744.5	1873.2	1989.4	2069.4	1979.7
67.5°	1111.1	1136.1	1179.5	1269.0	1387.3	1549.5	1753.7	2008.2	2304.0	2447.0	2269.7
70°	805.3	833.6	879.1	966.5	1083.7	1237.8	1459.6	1765.2	2156.7	2300.9	2105.7
72.5°	400.8	416.0	444.2	499.8	588.5	713.6	914.7	1208.4	1554.8	1687.1	1508.8
75°	136.1	143.2	148.0	166.2	194.3	243.4	343.4	528.3	805.9	966.1	794.4
77.5°	78.6	78.8	82.0	85.3	90.1	95.4	108.8	142.8	247.0	350.9	255.6
80°	50.9	50.7	53.3	55.8	59.1	61.8	62.5	66.2	76.3	90.4	80.9
82.5°	26.4	29.6	35.6	38.8	44.9	46.1	44.5	43.2	45.7	47.4	48.6
85°	14.5	12.6	18.9	24.5	27.2	27.5	27.5	26.0	27.0	26.4	28.7
87.5°	6.7	6.1	7.5	12.0	12.8	10.9	11.5	10.1	7.3	7.1	8.0
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°	414.3	414.3	414.3	414.3	414.3	414.3	414.3	414.3
2.5°	412.4	412.6	412.6	413.2	413.4	413.8	414.1	414.3
5°	409.2	409.7	409.4	409.9	409.9	410.3	410.3	410.5
7.5°	404.4	405.0	405.0	405.0	404.8	405.3	405.3	405.3
10°	399.4	399.8	399.6	399.2	398.8	399.4	399.2	399.0
12.5°	397.9	396.9	396.2	395.8	395.0	395.2	394.6	394.6
15°	398.8	397.1	395.8	395.2	394.4	394.1	393.7	393.9
17.5°	401.3	399.2	397.5	396.5	395.6	395.0	394.3	394.4
20°	405.7	403.2	400.8	398.8	397.1	396.2	395.6	395.4
22.5°	412.2	408.6	405.0	402.1	399.8	398.5	397.9	397.5
25°	419.7	415.7	411.5	408.2	405.9	404.2	403.0	403.0
27.5°	429.1	425.8	422.0	418.2	416.0	414.3	413.6	413.2
30°	444.7	441.7	438.6	435.0	432.3	430.6	429.2	428.1
32.5°	464.8	462.3	459.8	457.2	454.7	452.4	450.3	449.3
35°	493.1	491.2	489.5	486.4	485.5	484.1	483.0	482.0
37.5°	532.1	531.3	531.3	528.1	527.3	526.8	525.6	525.8
40°	583.3	584.1	583.2	582.0	581.4	579.9	579.9	581.2
42.5°	644.0	644.5	646.6	644.7	646.8	644.9	643.8	644.7
45°	714.3	716.4	720.6	718.7	720.1	716.8	712.8	713.0
47.5°	793.3	795.2	796.9	795.6	795.8	790.4	785.1	783.7
50°	875.3	876.1	877.0	875.1	875.5	869.6	863.5	863.6
52.5°	956.4	960.0	963.8	958.7	957.5	950.8	942.2	938.8
55°	1049.1	1054.3	1049.9	1040.9	1031.9	1022.9	1011.6	1009.7
57.5°	1163.4	1154.7	1140.9	1123.9	1111.4	1098.8	1087.4	1082.6
60°	1322.5	1289.4	1264.6	1239.4	1223.5	1208.0	1192.9	1190.6
62.5°	1547.4	1490.2	1440.7	1388.5	1345.9	1312.6	1286.0	1278.5
65°	1829.2	1694.0	1576.8	1467.5	1372.4	1300.7	1255.6	1235.7
67.5°	1950.4	1683.5	1482.6	1327.3	1203.0	1116.2	1067.5	1043.2
70°	1713.9	1396.1	1177.6	1022.2	909.0	816.4	772.3	746.3
72.5°	1179.1	888.1	702.3	573.2	482.8	405.3	374.8	372.5
75°	529.4	350.7	241.7	186.2	156.8	136.3	130.0	125.2
77.5°	148.2	109.6	97.7	91.4	85.3	78.2	75.5	76.1
80°	72.1	68.1	65.4	61.4	55.8	49.9	47.2	48.4
82.5°	47.8	47.2	48.9	46.1	38.0	32.3	27.2	24.9
85°	29.1	29.4	30.0	30.2	25.6	18.0	12.2	13.8
87.5°	11.5	13.2	14.3	14.9	14.0	8.6	6.9	7.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)