

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: P299698

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299698
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-600
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(1) 70 CRI, 4000K 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: 4298.3 lumens
Efficiency: N/A
Efficacy: 126.4 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): 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

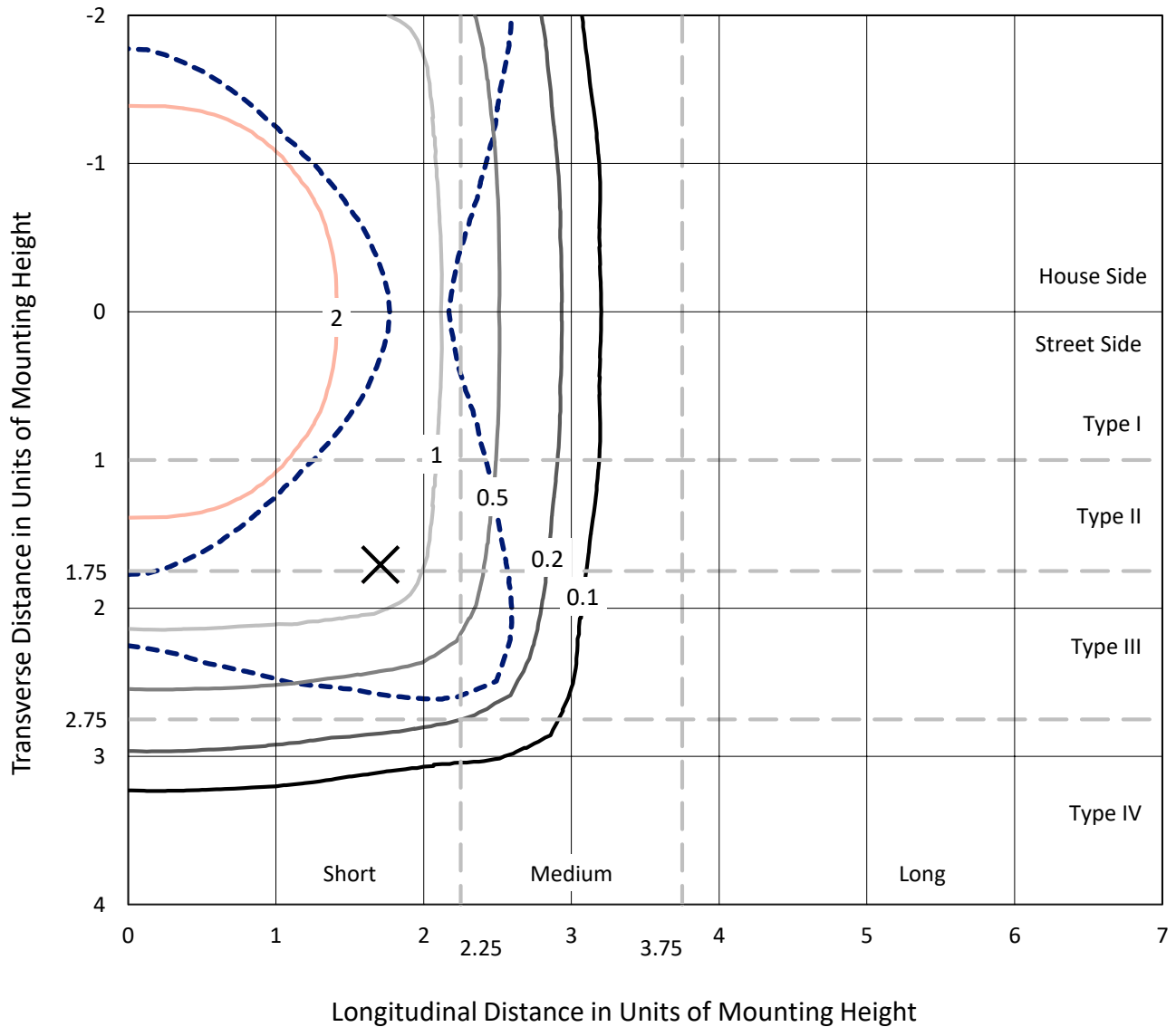


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

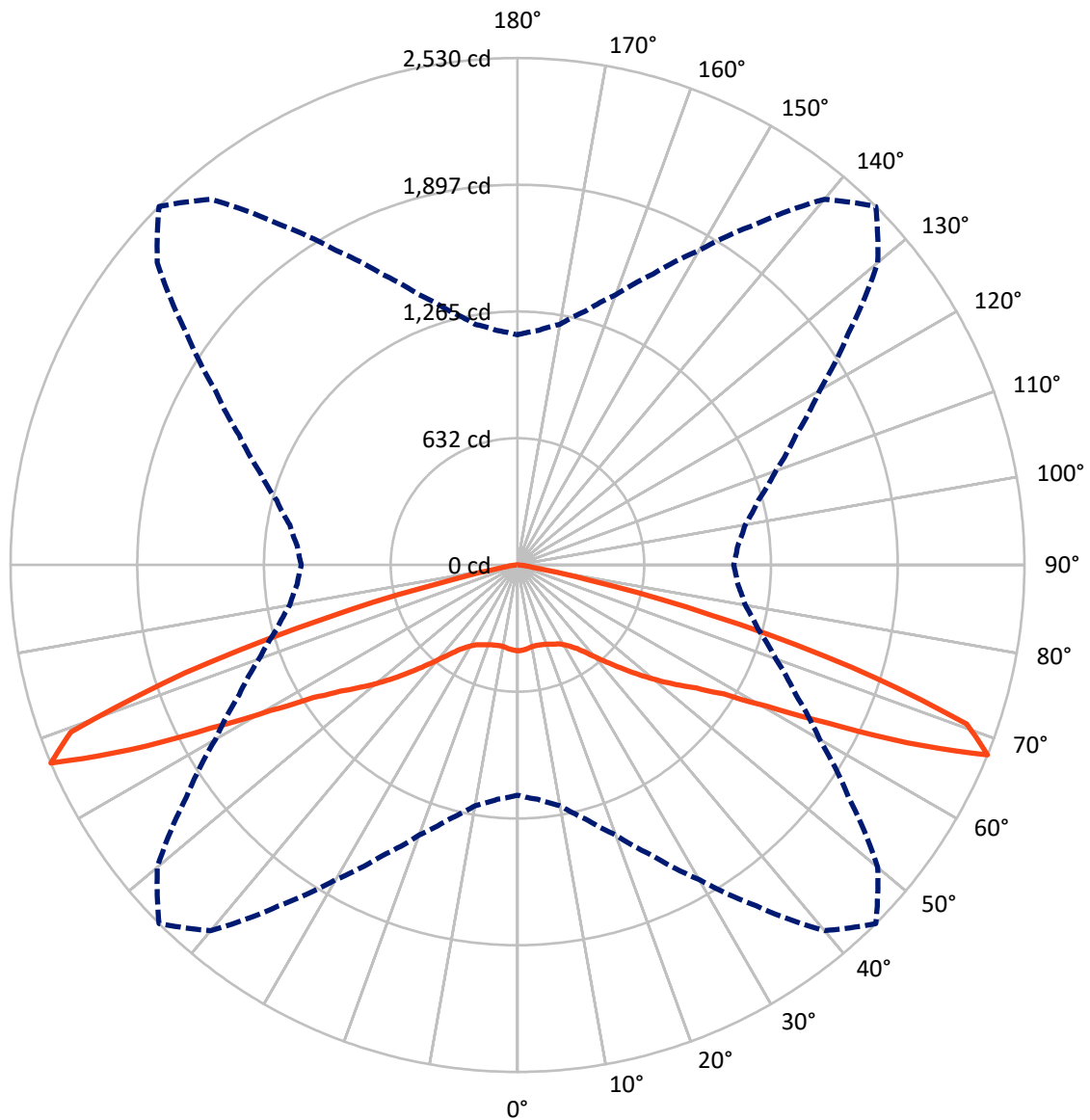


Based on 10 foot mounting height. Maximum calculated value = 4.3 fc
 Type V - Short - Full Cutoff

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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
House Side	Lumens	2149.2	0.0	2149.2
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	2149.2	0.0	2149.2
	% Fixture	50.0	0.0	50.0
Total	Lumens	4298.3	0.0	4298.3
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	40.1	0.9
10°-20°	116.3	2.7
20°-30°	197.8	4.6
30°-40°	323.3	7.5
40°-50°	577.1	13.4
50°-60°	973.1	22.6
60°-70°	1510.1	35.1
70°-80°	530.6	12.3
80°-90°	30.0	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°	4298.3	100.0
0°-180°	4298.3	100.0



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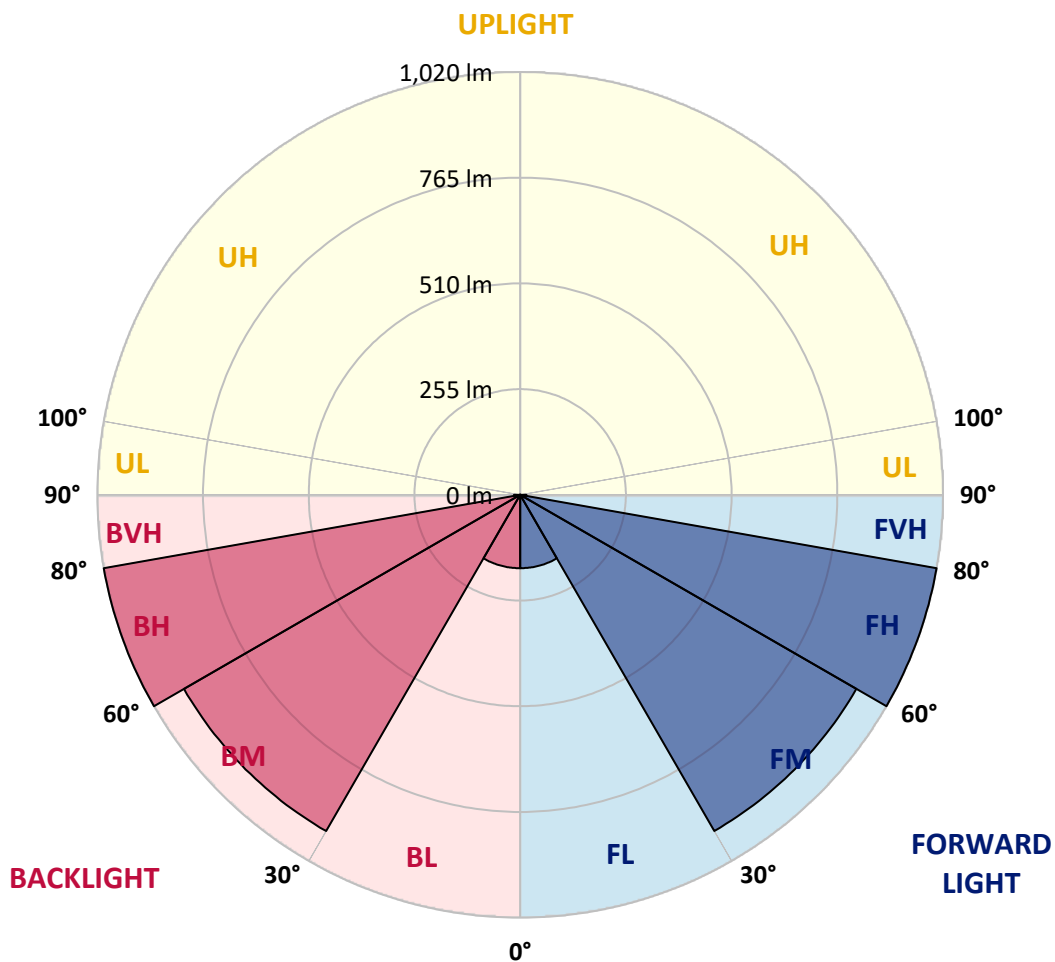
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	177.1	4.1			
FM (30°-60°)	936.7	21.8			
FH (60°-80°)	1020.3	23.7			G1/1800
FVH (80°-90°)	15.0	0.3			G1/100
BL (0°-30°)	177.1	4.1	B1/500		
BM (30°-60°)	936.7	21.8	B1/1000		
BH (60°-80°)	1020.3	23.7	B3/2500		G1/1800
BVH (80°-90°)	15.0	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°	428.3	428.3	428.3	428.3	428.3	428.3	428.3	428.3	428.3	428.3	428.3
2.5°	426.8	427.2	427.2	427.2	427.0	427.0	426.6	427.0	426.8	426.2	426.4
5°	423.2	423.6	423.6	423.4	424.0	423.8	423.2	423.6	423.4	423.0	423.2
7.5°	418.1	418.7	418.7	418.5	419.1	418.9	418.5	418.7	418.7	418.1	418.1
10°	412.3	412.7	412.7	412.5	413.5	413.5	413.3	413.9	414.1	413.5	413.1
12.5°	407.0	407.6	407.6	408.4	409.4	409.8	410.8	411.5	412.3	412.1	411.3
15°	403.8	404.2	405.0	406.0	407.6	409.0	410.6	412.3	413.9	414.3	413.1
17.5°	401.9	402.5	403.6	405.0	407.2	409.6	411.9	414.3	416.5	417.3	415.9
20°	401.3	401.7	402.8	405.2	408.2	411.7	415.1	417.9	420.8	421.8	420.8
22.5°	402.5	403.2	404.6	407.4	411.3	415.9	419.8	423.6	427.4	429.1	427.8
25°	407.8	408.6	410.4	413.9	418.3	423.0	427.6	431.9	435.3	437.0	436.1
27.5°	417.7	418.7	420.8	424.4	429.1	434.3	439.2	442.8	445.5	446.1	444.9
30°	432.5	434.7	437.2	441.2	446.7	451.1	456.0	459.2	462.5	462.5	461.6
32.5°	455.6	457.8	460.6	464.3	468.7	473.4	477.8	480.5	484.1	484.3	481.9
35°	490.2	491.2	493.6	495.9	499.9	504.1	507.8	509.6	512.6	512.7	510.6
37.5°	535.9	536.1	537.7	538.4	542.0	546.5	550.1	551.3	554.1	553.7	551.5
40°	589.0	590.0	590.6	591.8	595.6	599.9	603.7	604.3	607.2	606.6	603.9
42.5°	650.5	650.9	654.3	656.1	659.6	661.8	666.5	667.1	670.7	669.1	665.9
45°	719.5	723.1	726.2	729.8	733.5	736.1	739.9	739.1	741.4	739.1	737.3
47.5°	792.1	794.6	801.7	807.3	813.4	815.6	820.9	818.5	820.9	817.6	817.0
50°	871.9	876.5	882.6	888.9	895.4	899.0	905.9	902.9	906.1	902.9	901.2
52.5°	950.6	951.8	965.2	974.5	983.6	987.7	991.9	990.5	990.7	990.5	988.7
55°	1025.3	1028.1	1041.5	1054.2	1070.0	1081.6	1088.8	1088.0	1086.2	1084.4	1081.4
57.5°	1109.5	1112.3	1127.7	1143.3	1161.3	1177.9	1192.3	1207.2	1212.9	1214.5	1207.9
60°	1223.4	1223.2	1243.7	1262.7	1288.4	1313.1	1344.7	1376.9	1413.9	1431.1	1408.4
62.5°	1339.2	1343.9	1373.6	1407.2	1460.2	1511.8	1570.1	1627.4	1685.9	1733.5	1682.9
65°	1325.4	1343.5	1387.6	1463.7	1561.6	1677.8	1803.5	1936.5	2056.7	2139.4	2046.6
67.5°	1148.6	1174.5	1219.4	1311.9	1434.3	1601.9	1813.0	2076.1	2381.9	2529.7	2346.5
70°	832.6	861.8	908.9	999.2	1120.4	1279.7	1509.0	1824.9	2229.7	2378.7	2176.9
72.5°	414.3	430.1	459.2	516.7	608.4	737.7	945.6	1249.3	1607.4	1744.2	1559.8
75°	140.7	148.1	153.0	171.8	200.8	251.6	355.0	546.2	833.2	998.8	821.3
77.5°	81.2	81.4	84.8	88.2	93.1	98.6	112.5	147.7	255.4	362.7	264.3
80°	52.6	52.4	55.1	57.7	61.1	63.8	64.6	68.4	78.9	93.5	83.6
82.5°	27.3	30.6	36.8	40.1	46.5	47.6	46.1	44.7	47.2	49.0	50.2
85°	15.0	13.0	19.6	25.3	28.1	28.5	28.5	26.9	27.9	27.3	29.7
87.5°	6.9	6.3	7.7	12.5	13.2	11.3	11.9	10.5	7.5	7.3	8.3
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°	428.3	428.3	428.3	428.3	428.3	428.3	428.3	428.3
2.5°	426.4	426.6	426.6	427.2	427.4	427.8	428.1	428.3
5°	423.0	423.6	423.2	423.8	423.8	424.2	424.2	424.4
7.5°	418.1	418.7	418.7	418.7	418.5	419.1	419.1	419.1
10°	412.9	413.3	413.1	412.7	412.3	412.9	412.7	412.5
12.5°	411.3	410.4	409.6	409.2	408.4	408.6	408.0	408.0
15°	412.3	410.6	409.2	408.6	407.8	407.4	407.0	407.2
17.5°	414.9	412.7	410.9	410.0	409.0	408.4	407.6	407.8
20°	419.4	416.9	414.3	412.3	410.6	409.6	409.0	408.8
22.5°	426.2	422.4	418.7	415.7	413.3	411.9	411.3	410.9
25°	433.9	429.7	425.4	422.0	419.6	417.9	416.7	416.7
27.5°	443.6	440.2	436.3	432.3	430.1	428.3	427.6	427.2
30°	459.8	456.6	453.4	449.7	446.9	445.1	443.8	442.6
32.5°	480.5	478.0	475.4	472.6	470.1	467.7	465.5	464.5
35°	509.8	507.8	506.0	502.9	501.9	500.5	499.3	498.3
37.5°	550.1	549.3	549.3	546.0	545.2	544.6	543.4	543.6
40°	603.1	603.9	602.9	601.7	601.1	599.5	599.5	600.9
42.5°	665.7	666.3	668.5	666.5	668.7	666.7	665.5	666.5
45°	738.5	740.7	745.0	743.0	744.4	741.1	736.9	737.1
47.5°	820.1	822.1	823.9	822.5	822.7	817.2	811.6	810.2
50°	904.9	905.7	906.7	904.7	905.1	899.0	892.7	892.9
52.5°	988.7	992.5	996.4	991.1	989.9	983.0	974.1	970.5
55°	1084.6	1089.9	1085.4	1076.1	1066.8	1057.5	1045.9	1043.9
57.5°	1202.8	1193.7	1179.5	1161.9	1149.0	1136.0	1124.1	1119.2
60°	1367.3	1333.1	1307.4	1281.3	1264.9	1248.9	1233.2	1230.9
62.5°	1599.7	1540.6	1489.4	1435.5	1391.4	1357.0	1329.5	1321.8
65°	1891.1	1751.3	1630.2	1517.1	1418.9	1344.7	1298.1	1277.5
67.5°	2016.4	1740.5	1532.7	1372.2	1243.7	1154.0	1103.6	1078.5
70°	1771.9	1443.4	1217.4	1056.7	939.7	844.0	798.4	771.5
72.5°	1219.0	918.2	726.0	592.6	499.1	419.1	387.4	385.1
75°	547.3	362.5	249.9	192.5	162.1	140.9	134.4	129.5
77.5°	153.2	113.3	101.0	94.5	88.2	80.8	78.1	78.7
80°	74.5	70.4	67.6	63.5	57.7	51.6	48.8	50.0
82.5°	49.4	48.8	50.6	47.6	39.3	33.4	28.1	25.7
85°	30.0	30.4	31.0	31.2	26.5	18.6	12.7	14.2
87.5°	11.9	13.6	14.8	15.4	14.4	8.9	7.1	7.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)