

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: INVUE

Report Number: P140433

Luminaire Tested: **ECM-F02-LED-E1-5WQ-8030**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P140433
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33687)
Test Lab: INNOVATION CENTER-P3
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: ECM-F02-LED-E1-5WQ-8030
Description: EPIC CLASSICAL MEDIUM DECORATIVE LED LUMINAIRE
(2) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE WIDE
Light Source: (14) 3000K CCT, 80 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4162.8 lumens
Efficiency: N/A
Efficacy: 75.7 lumens/watt
Luminous Opening: Rectangular (W 0.33' x L: 1' x H: 0')
IES Classification: Type V - Short - Semi-Cutoff
BUG Rating: B3 - U0 - G1

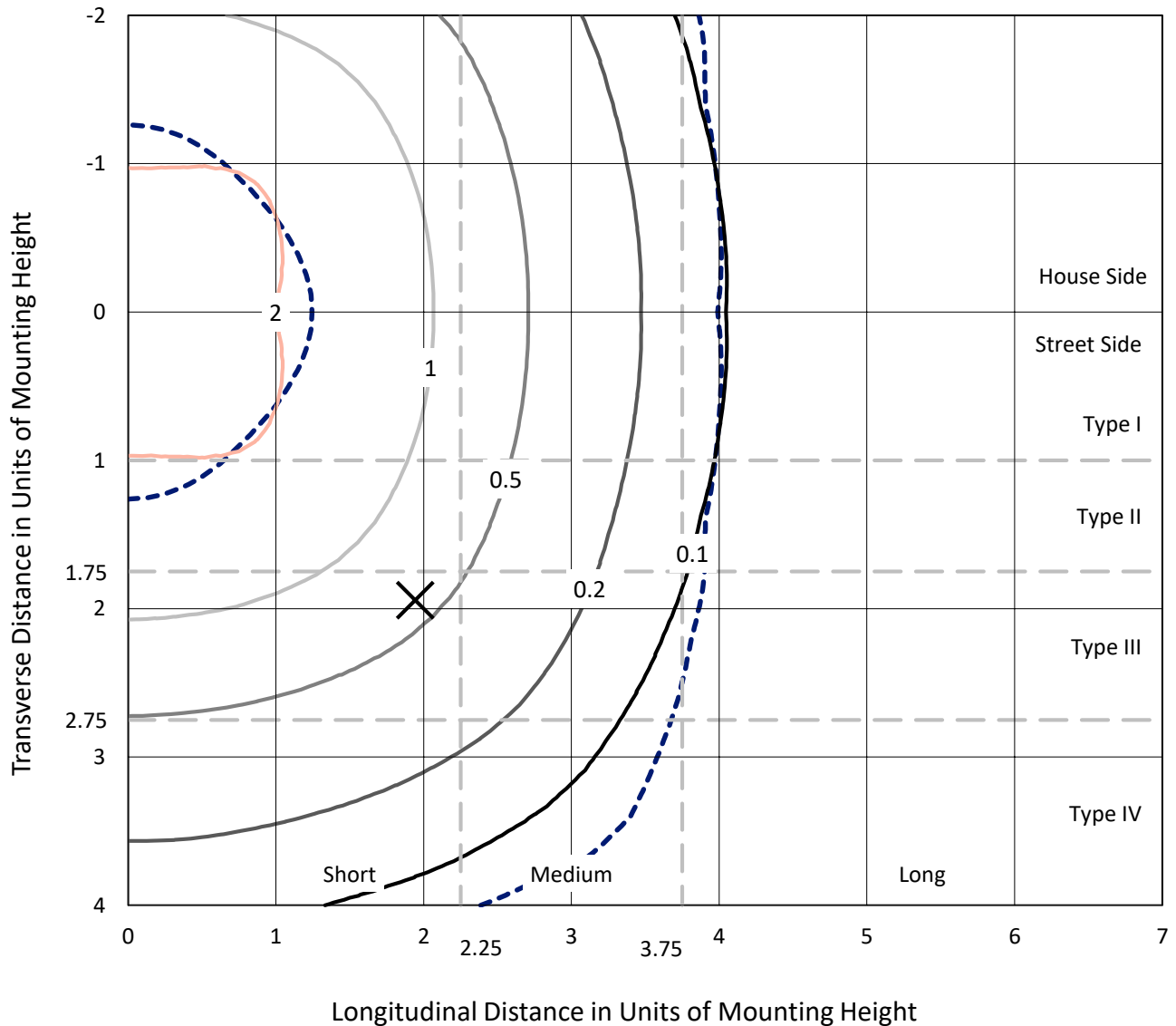
Input Watts (W): 55
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

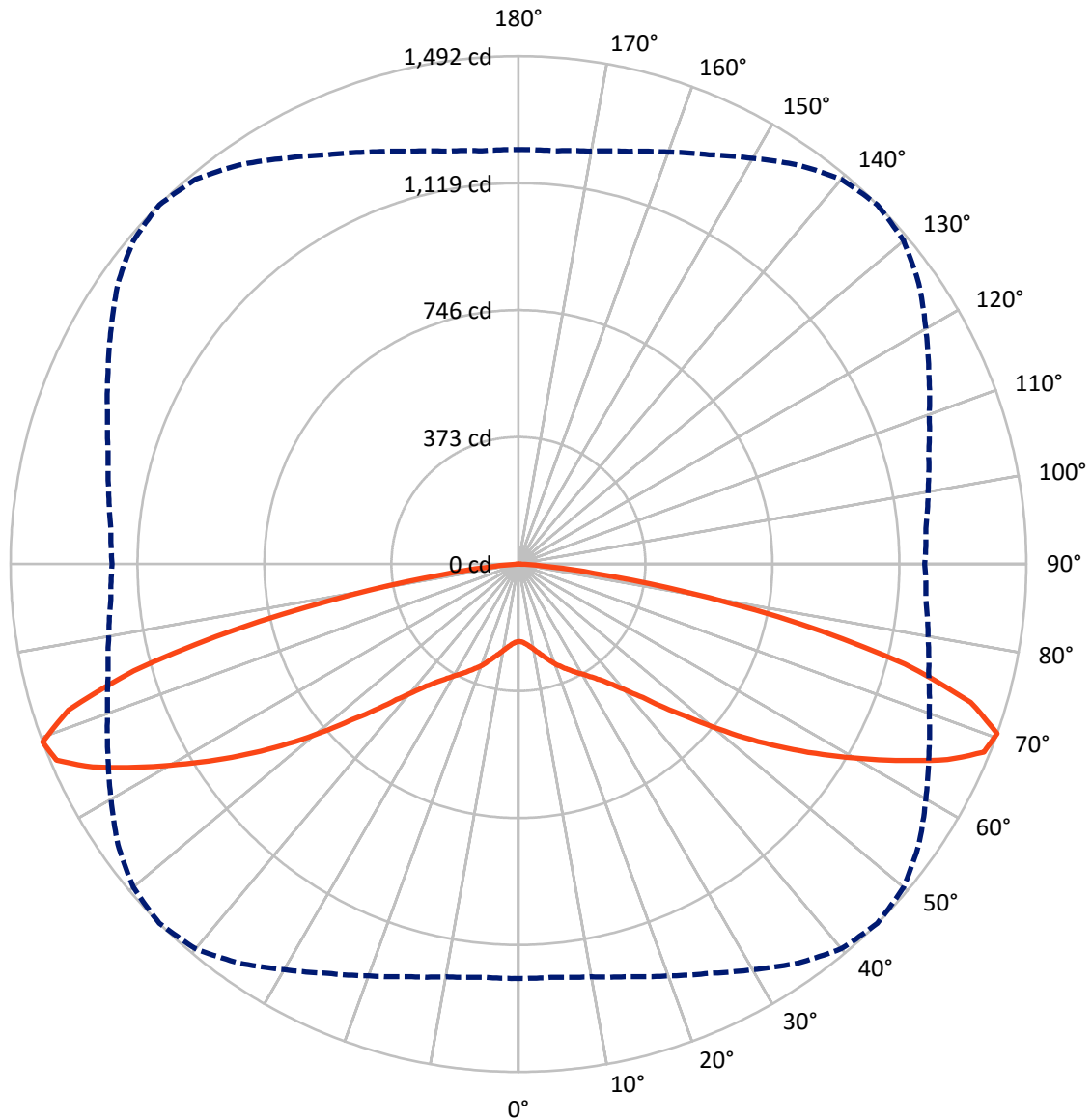
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 2.6 fc
 Type V - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2081.4	0.0	2081.4
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	2081.4	0.0	2081.4
	% Fixture	50.0	0.0	50.0
Total	Lumens	4162.8	0.0	4162.8
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	23.1	0.6
10°-20°	80.6	1.9
20°-30°	158.4	3.8
30°-40°	262.1	6.3
40°-50°	458.7	11.0
50°-60°	818.3	19.7
60°-70°	1263.3	30.3
70°-80°	1000.0	24.0
80°-90°	98.4	2.4
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°	4162.8	100.0
0°-180°	4162.8	100.0



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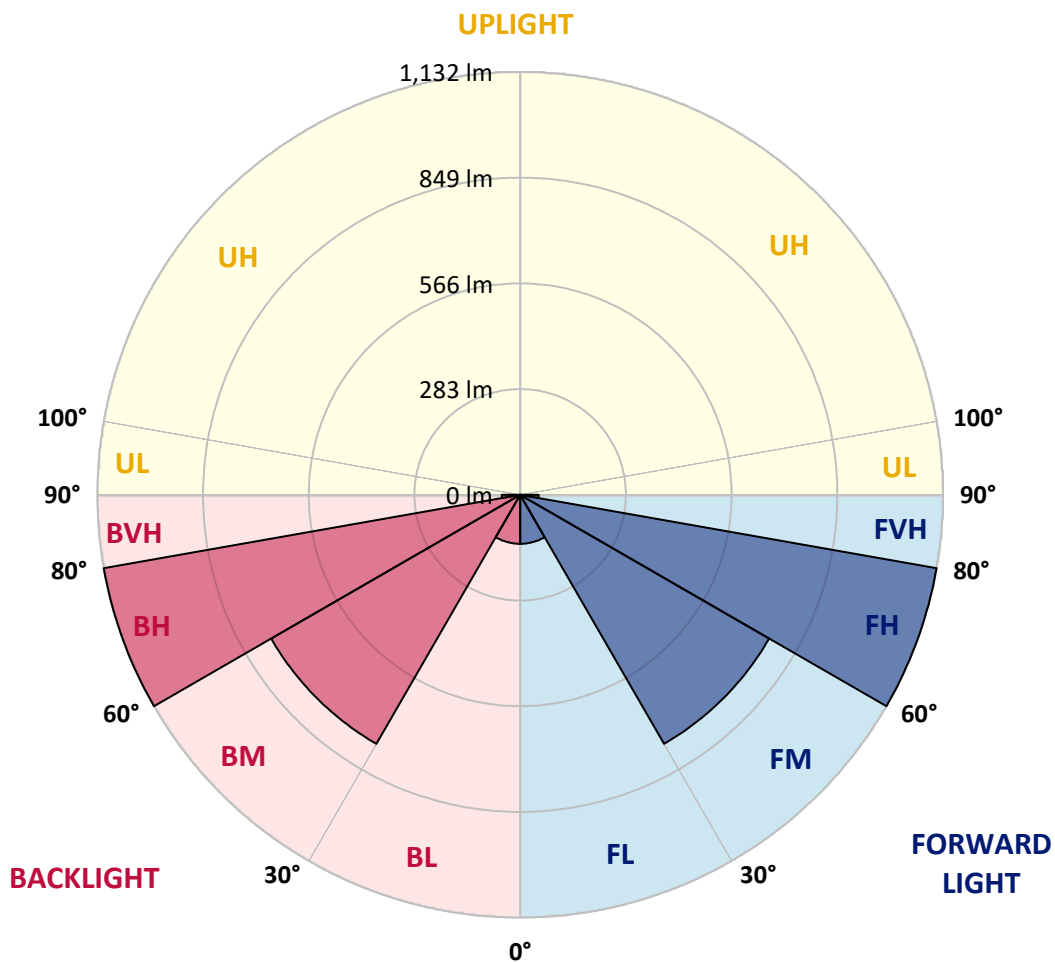
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	131.0	3.1			
FM	(30°-60°)	769.5	18.5			
FH	(60°-80°)	1131.6	27.2			G1/1800
FVH	(80°-90°)	49.2	1.2			G1/100
BL	(0°-30°)	131.0	3.1	B1/500		
BM	(30°-60°)	769.5	18.5	B1/1000		
BH	(60°-80°)	1131.6	27.2	B3/2500		G1/1800
BVH	(80°-90°)	49.2	1.2			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°	227.6	227.6	227.6	227.6	227.6	227.6	227.6	227.6	227.6	227.6	227.6
2.5°	230.4	230.4	229.9	229.9	229.9	229.9	229.5	229.5	229.9	229.5	229.5
5°	236.0	236.4	236.4	236.0	236.0	236.0	236.0	236.0	236.4	236.0	236.0
7.5°	244.3	244.8	244.8	244.3	244.3	244.3	244.3	244.3	244.8	244.8	243.9
10°	254.5	255.0	255.0	254.5	254.5	255.0	255.0	255.0	255.5	255.5	255.0
12.5°	266.6	267.1	267.5	267.1	267.5	267.5	268.0	268.5	268.5	268.5	267.5
15°	280.6	281.9	281.0	281.0	281.5	281.9	281.9	283.3	282.9	282.4	281.9
17.5°	296.8	296.3	296.3	296.8	297.3	296.8	297.3	298.7	298.2	297.7	297.3
20°	312.1	312.1	312.1	311.7	312.6	312.6	313.1	313.5	313.5	314.5	313.1
22.5°	327.0	327.0	326.5	326.5	327.5	327.5	328.4	329.3	329.3	329.3	328.4
25°	340.9	340.9	341.4	340.9	341.4	341.9	342.8	343.7	344.2	344.2	344.2
27.5°	353.5	354.9	354.4	354.9	355.8	356.7	357.7	359.1	360.0	360.4	359.1
30°	369.3	369.3	368.8	369.3	370.2	371.6	373.5	375.8	375.8	376.2	376.2
32.5°	386.0	386.5	385.5	386.5	387.8	389.7	391.6	393.4	394.4	396.2	395.7
35°	407.8	406.4	406.9	408.3	409.2	411.1	413.4	416.6	418.5	419.4	418.5
37.5°	432.9	432.4	433.4	433.4	436.6	438.5	442.7	445.4	446.8	449.2	448.2
40°	464.5	466.3	466.8	468.2	470.1	473.8	478.4	483.1	485.9	487.7	488.2
42.5°	507.2	508.2	506.3	511.4	516.5	518.8	524.4	530.9	535.1	536.5	537.0
45°	559.7	559.7	562.5	565.7	572.3	576.9	582.9	593.6	597.3	602.4	602.4
47.5°	622.4	624.3	624.3	631.7	636.8	646.1	657.7	666.5	674.4	672.1	680.0
50°	694.9	696.3	701.4	705.6	714.4	725.1	735.8	748.8	760.4	761.8	763.2
52.5°	770.6	772.4	776.6	786.4	797.1	809.1	828.7	839.8	850.9	857.0	856.1
55°	857.4	856.5	863.5	870.9	886.7	903.0	919.2	935.0	946.6	955.0	954.5
57.5°	948.5	951.7	959.6	968.9	982.4	996.8	1016.3	1032.1	1051.1	1056.3	1048.8
60°	1054.4	1051.1	1059.0	1073.4	1085.5	1104.1	1121.3	1141.7	1155.2	1161.2	1158.9
62.5°	1162.6	1159.8	1165.9	1184.5	1198.8	1212.3	1236.0	1258.3	1269.5	1271.8	1267.6
65°	1242.0	1243.0	1252.7	1269.0	1291.7	1312.2	1338.7	1365.6	1383.3	1386.0	1376.7
67.5°	1260.6	1262.5	1276.0	1296.9	1325.2	1359.1	1398.6	1438.5	1468.7	1475.2	1461.8
70°	1217.9	1218.8	1231.8	1255.5	1288.0	1327.0	1376.3	1431.6	1475.7	1492.4	1477.5
72.5°	1130.1	1133.8	1144.5	1164.5	1190.0	1228.6	1276.0	1325.2	1368.9	1390.2	1390.2
75°	971.7	980.1	985.2	991.7	1014.0	1045.1	1083.7	1122.7	1161.2	1173.3	1139.4
77.5°	693.5	679.5	682.8	719.0	713.9	749.2	792.0	819.8	854.2	849.1	800.3
80°	318.2	310.3	328.4	352.5	383.2	406.9	452.9	457.5	497.0	499.3	464.0
82.5°	63.6	66.9	79.9	98.5	122.6	149.1	173.3	193.7	220.6	225.7	209.5
85°	20.0	21.8	27.4	30.2	31.6	36.2	41.3	55.7	64.1	66.4	62.2
87.5°	4.2	6.5	10.7	12.1	12.5	12.1	12.1	11.6	9.3	7.4	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°	227.6	227.6	227.6	227.6	227.6	227.6	227.6	227.6
2.5°	229.0	229.0	229.5	229.5	229.5	229.0	228.5	229.0
5°	235.5	235.5	235.5	235.5	234.6	234.6	234.1	234.1
7.5°	243.9	243.4	243.4	242.9	242.5	242.5	242.0	242.5
10°	255.0	254.1	253.6	253.1	252.7	252.7	252.2	251.8
12.5°	267.1	266.6	266.2	265.2	264.8	263.8	263.8	263.8
15°	281.0	280.6	280.1	278.7	278.7	277.3	277.8	277.8
17.5°	296.3	295.4	294.0	293.6	293.1	291.7	291.7	291.7
20°	312.1	310.3	309.4	308.4	308.4	307.0	306.6	306.6
22.5°	327.5	325.6	323.7	322.8	321.9	321.4	320.5	320.0
25°	342.8	340.9	339.1	337.7	335.8	334.9	334.0	334.0
27.5°	358.1	356.3	353.5	351.6	349.8	347.9	347.0	347.4
30°	373.9	372.1	369.3	366.9	364.6	362.8	361.8	361.4
32.5°	393.9	391.6	388.3	386.0	381.8	380.0	379.0	379.5
35°	417.1	413.9	411.5	407.8	404.6	402.2	400.9	400.9
37.5°	446.8	444.1	441.7	438.0	433.4	430.6	428.7	430.1
40°	485.4	483.1	478.4	472.9	469.1	466.8	465.0	465.4
42.5°	534.6	530.0	525.8	522.6	517.0	513.7	508.6	510.5
45°	596.9	591.8	587.6	582.5	577.4	570.9	569.0	565.3
47.5°	672.1	668.4	659.1	654.5	648.0	638.7	634.0	630.3
50°	755.3	748.3	741.8	730.2	722.7	712.1	707.9	706.5
52.5°	849.1	837.5	826.8	816.1	801.2	791.0	782.7	784.5
55°	942.0	928.5	913.2	901.6	890.0	877.4	868.6	863.5
57.5°	1040.0	1025.1	1008.9	992.2	982.4	967.5	962.0	959.2
60°	1140.8	1127.3	1111.1	1095.7	1082.3	1065.1	1055.8	1052.1
62.5°	1252.3	1233.7	1214.2	1195.1	1180.3	1167.7	1158.0	1151.5
65°	1354.9	1329.4	1309.4	1285.2	1269.0	1250.9	1238.8	1236.5
67.5°	1431.6	1392.1	1357.2	1326.1	1301.0	1278.7	1263.4	1257.4
70°	1436.7	1382.3	1330.8	1284.8	1248.1	1222.5	1202.1	1194.2
72.5°	1337.3	1269.9	1200.2	1155.2	1116.2	1080.9	1066.5	1063.2
75°	1087.8	1031.6	973.6	922.5	895.5	877.9	865.8	848.2
77.5°	755.7	704.2	673.0	615.9	605.7	591.3	579.2	567.6
80°	423.2	378.1	343.3	307.5	285.7	273.6	261.0	254.1
82.5°	190.0	156.1	124.0	96.1	79.4	62.7	46.9	49.7
85°	47.4	39.9	30.7	25.5	23.2	21.4	17.2	15.3
87.5°	8.8	8.4	7.4	7.4	7.9	6.5	3.7	3.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)