



**FCC 47 CFR PART 15 SUBPART C  
INDUSTRY CANADA RSS-210 ISSUE 8**

**CERTIFICATION TEST REPORT**

**FOR**

**Universal Sensor**

**MODEL NUMBER: FGBS001**

**FCC ID: 2AA9MFGBS001**

**REPORT NUMBER: 10044158C**

**ISSUE DATE: February 11, 2014**

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NVLAP Lab code: 100414-0

Revision History

Rev.	Issue Date	Revisions	Revised By
--	2/11/14	Initial Issue	M.Ferrer

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## 1. ATTESTATION OF TEST RESULTS

**COMPANY NAME:** Fibar Group sp. z.o.o  
Ul. Lotnicza 1  
Poznan, Poland 60-453

**EUT DESCRIPTION:** Universal Sensor

**MODEL:** FGBS001

**SERIAL NUMBER:** Prototype

**DATE TESTED:** September 12, 2013 – February 4, 2013

APPLICABLE STANDARDS	
STANDARD	TEST RESULTS
CFR 47 Part 15 Subpart C Part 15.249	Pass
INDUSTRY CANADA RSS-210 Issue 8 Annex A2.9	Pass
INDUSTRY CANADA RSS-GEN Issue 3	Pass

UL Verification Services Inc. tested the above equipment in accordance with the requirements set forth in the above standards. All indications of Pass/Fail in this report are opinions expressed by UL Verification Services Inc. based on interpretations and/or observations of test results. Measurement Uncertainties were not taken into account and are published for informational purposes only. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

**Note:** The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. This document may not be altered or revised in any way unless done so by UL Verification Services Inc. and all revisions are duly noted in the revisions section. Any alteration of this document not carried out by UL Verification Services Inc. will constitute fraud and shall nullify the document. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, any agency of the Federal Government, or any agency of any government.

Approved & Released For UL CCS By:



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UL Verification Services Inc.

Tested By:



MICHAEL FERRER  
WiSE Project Lead  
UL Verification Services Inc.

## 2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with ANSI C63.4-2003, FCC CFR 47 Part 15, RSS-GEN Issue 3, and RSS-210 Issue 8.

## 3. FACILITIES AND ACCREDITATION

The test sites and measurement facilities used to collect data are located at 333 Pfingsten Road, Northbrook, IL 60062, USA.

UL NBK is accredited by NVLAP, Laboratory Code 100414-0.

## 4. CALIBRATION AND UNCERTAINTY

### 4.1. MEASURING INSTRUMENT CALIBRATION

The measuring equipment utilized to perform the tests documented in this report has been calibrated in accordance with the manufacturer's recommendations, and is traceable to recognized national standards.

### 4.2. SAMPLE CALCULATION

Where relevant, the following sample calculation is provided:

$$\begin{aligned} \text{Field Strength (dBuV/m)} &= \text{Measured Voltage (dBuV)} + \text{Antenna Factor (dB/m)} + \\ &\text{Cable Loss (dB)} - \text{Preamplifier Gain (dB)} \\ 36.5 \text{ dBuV} + 18.7 \text{ dB/m} + 0.6 \text{ dB} - 26.9 \text{ dB} &= 28.9 \text{ dBuV/m} \end{aligned}$$

### 4.3. MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the apparatus: (MU shows 10m, but Emissions were extrapolated to 3m)

Test	Range	Equipment	Uncertainty k=2
Radiated Emissions	30-200MHz	Bicon 10m Horz	4.27dB
Radiated Emissions	30-200MHz	Bicon 10m Vert	4.28dB
Radiated Emissions	200-1000MHz	LogP 10m Horz	3.33dB
Radiated Emissions	200-1000MHz	LogP 10m Vert	3.39dB
Radiated Emissions	1-6GHz	Horn	5.02dB
Radiated Emissions	6-18GHz	Horn	5.34dB
Radiated Emissions	18-26GHz	Horn	6.60dB
Conducted Ant Port	30MHz-26GHz	Spectrum Analyzer	2.94
RF Power	dB	Power Meter	0.45dB

Uncertainty figures are valid to a confidence level of 95%.

## 5. EQUIPMENT UNDER TEST

### 5.1. DESCRIPTION OF EUT

The EUT contains a 908MHz transceiver. It is DC powered. The transmitter utilizes Z-wave technologies to communicate with other devices for home automation. EUT can be configured in 2 ways, alarm mode and temp mode.

The radio is manufactured by Fibar Group

### 5.2. MAXIMUM OUTPUT E-FIELD STRENGTH

The transmitter has a maximum output quasi-peak E-field as follows:  
Data from section 7.2

Frequency Range (MHz)	Mode	Output E-field Strength (dBuV/m)
908	TX	91.69

### 5.3. DESCRIPTION OF AVAILABLE ANTENNAS

The radio utilizes an isolated copper wire type whip antenna

### 5.4. WORST-CASE CONFIGURATION AND MODE

The EUT was set in worst axis as found in preliminary testing. X-axis is worst axis. There are 2 modes Temp mode and Alarm mode as shown in block diagram. Only temp mode was tested for Conducted Emissions as either mode will not affect this test.

## 5.5. DESCRIPTION OF TEST SETUP

### SUPPORT EQUIPMENT

Use	Product Type	Manufacturer	Model	Comments
EUT	Sensor	Fibar	FGBS001	None
AE	Power Supply	-	MW41-1200500	12VDV 500mA output
AE	Temp Sensor	-	-	3 wire connection
Note: EUT - Equipment Under Test, AE - Auxiliary/Associated Equipment, or SIM - Simulator (Not Subjected to Test)				

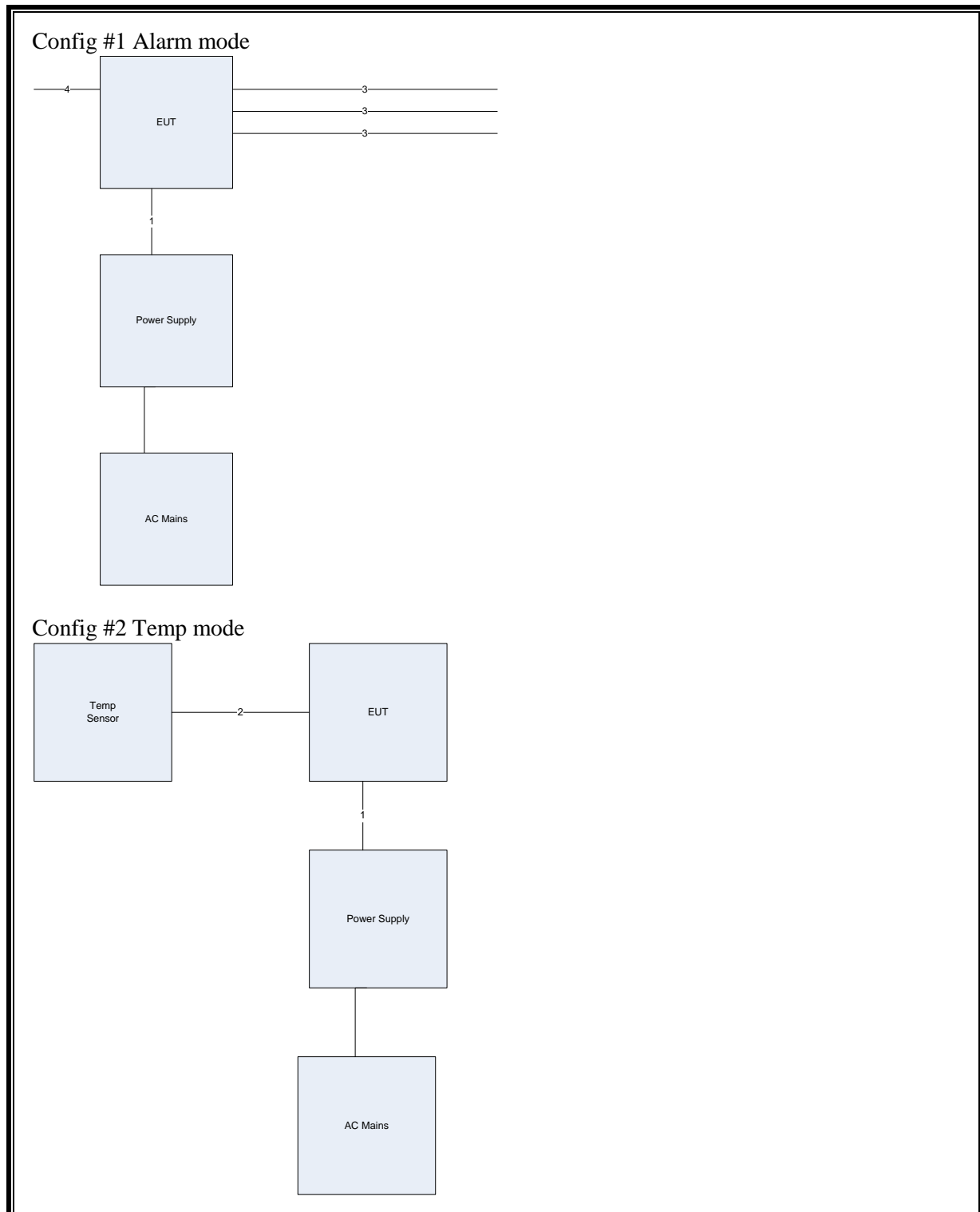
### I/O CABLES

Port #	Name	Type*	Cable Max. >3m (Y/N)	Cable Shielded (Y/N)	Comments
0	Enclosure	N/E	—	—	None
1	DC input	DC	N	N	AC adapter provided DC input
2	IO lines	IO	N	N	1m wire to Temp Sensor
3	IO Lines	IO	N	N	1m wires
4	IO lines	IO	N	N	6in wires connected to all IO ports
Note: AC = AC Power Port      DC = DC Power Port      N/E = Non-Electrical I/O = Signal Input or Output Port (Not Involved in Process Control) TP = Telecommunication Ports					

### TEST SETUP

The EUT is programmed for continuous TX mode.

**SETUP DIAGRAM FOR TESTS**





## 6. TEST AND MEASUREMENT EQUIPMENT

The following test and measurement equipment was utilized for the tests documented in this report:

Test Equipment List					
Description	Manufacturer	Model	Asset	Cal Date	Cal Due
EMI Test Receiver	Rohde & Schwarz	ESU	EMC4323	20121227	20131231
Bicon Antenna	Chase	VBA6106A	EMC4078	20130213	20140228
Log-P Antenna	Chase	UPA6109	EMC4258	20121015	20131030
Spectrum Analyzer	Rhode & Schwarz	FSEK	EMC4182	20121226	20131231
Antenna Array	UL	BOMS	EMC4276	20111227	20131231
Spectrum Analyzer	Agilent	N9030A	EMC4360	20121226	20131226
Near Field Antenna	EMCO	-	-	-	-
EMI Test Receiver	Rohde & Schwarz	ESCI	EMC4328	20121230	20131230
LISN	Solar	8602-50-TS-50-N	EMC4052	20130115	20140116
LISN	Solar	8602-50-TS-50-N	EMC4064	20130115	20140116

Log-P Antenna was used during testing in September before cal due date.

## 7. TEST RESULTS

### 7.1.1. 99%, 20dB BANDWIDTH

#### LIMITS

None; for reporting purposes only.

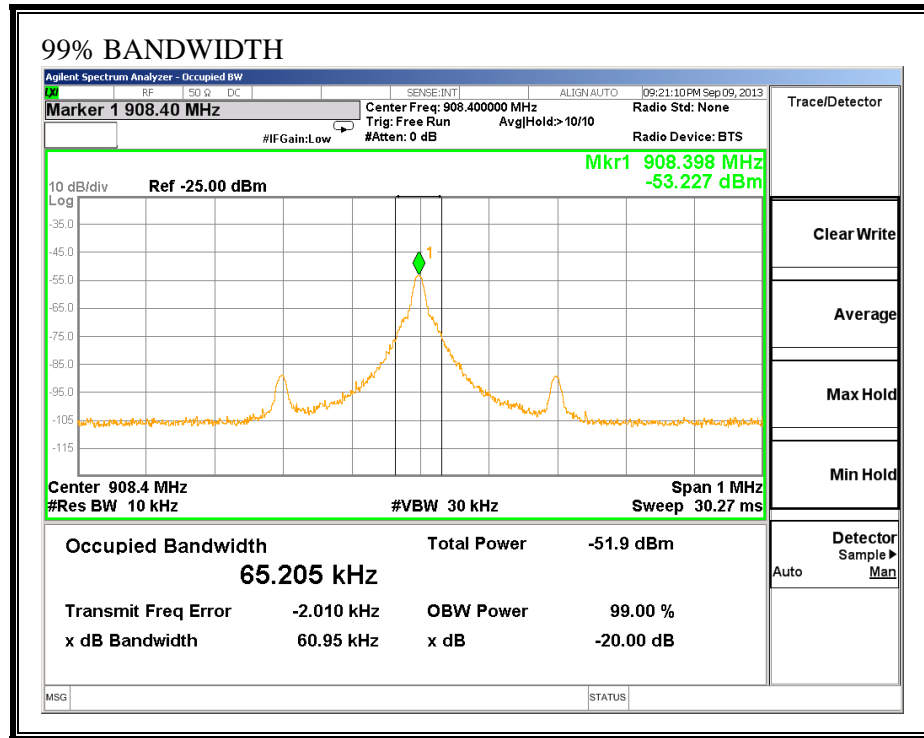
#### TEST PROCEDURE

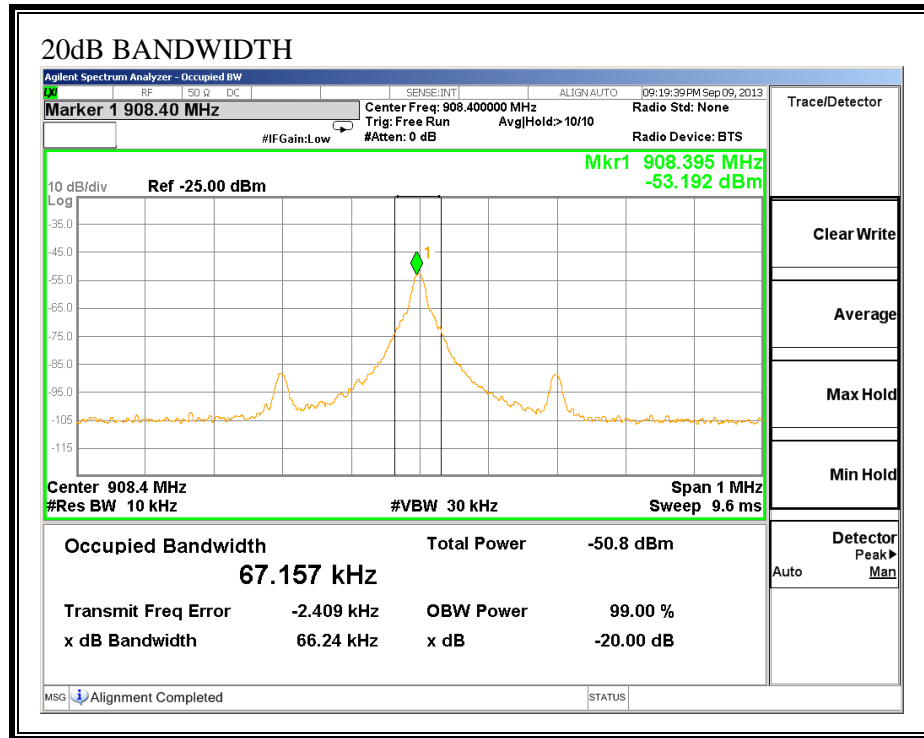
The transmitter output is connected to the spectrum analyzer. The RBW is set to 10kHz bandwidth. The VBW is set to 3 times the RBW. The sweep time is coupled. The spectrum analyzer internal 99% bandwidth and 20dB function is utilized.

#### RESULTS

Channel	Frequency (kHz)
99%	65.205
20dB	66.24

## 99% BANDWIDTH





## 7.2. RADIATED EMISSIONS

### TEST PROCEDURE

ANSI C63.4

### LIMIT

IC RSS-210, A2.9  
FCC 15.249

Operation within the bands 902–928 MHz, 2400–2483.5 MHz, 5725–5875 MHz, and 24.0–24.25 GHz.

(a) Except as provided in paragraph (b) of this section, the field strength of emissions from intentional radiators operated within these frequency bands shall comply with the following:

Limit is 3m

Fundamental frequency	Field strength of fundamental (millivolts/ meter)	Field strength of harmonics (microvolts/ meter)
902–928 MHz .....	50	500
2400–2483.5 MHz .....	50	500
5725–5875 MHz .....	50	500
24.0–24.25 GHz .....	250	2500

(d) Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in § 15.209, whichever is the lesser attenuation.

Frequency (MHz)	Field strength (microvolts/meter)	Measure- ment dis- tance (meters)
0.009-0.490 .....	2400/F(kHz)	300
0.490-1.705 .....	24000/F(kHz)	30
1.705-30.0 .....	30	30
30-88 .....	100 **	3
88-216 .....	150 **	3
216-960 .....	200 **	3
Above 960 .....	500	3

\*\* Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this section shall not be located in the frequency bands 54-72 MHz, 76-88 MHz, 174-216 MHz or 470-806 MHz. However, operation within these frequency bands is permitted under other sections of this part, e.g., §§15.231 and 15.241.

## RESULTS

Manufacturer:Fibar  
Model#Universal Sensor  
Mode:Security contacts to GND, TX  
Voltage:120Vac 60Hz Yellow PS  
RED:Horizontal, GREEN:Vertical

Radiated Emission Data		Transducer Factor (dB)	Gain/Loss Factor (dB)	Corrected Reading dB (uVolts/meter)	Limit:1	2	3	4	5	6	Notes
Test Frequency (MHz)	Meter Reading										
=====											
LogP Horizontal 200 - 1000MHz											
908.3808	51.73dBuV QP	23	10	84.73	-	94	-	-	-	-	1
Azimuth: 228	Height:100 Horz			Margin (dB):	-	-9.27	-	-	-	-	
908.3808	45.27dBuV QP	23	10	78.27	-	94	-	-	-	-	1
Azimuth: 272	Height:108 Vert			Margin (dB):	-	-15.73	-	-	-	-	
908.3808	48.78dBuV QP	23	10	81.78	-	94	-	-	-	-	2
Azimuth: 14	Height:116 Vert			Margin (dB):	-	-12.22	-	-	-	-	
908.3808	54.38dBuV QP	23	10	87.38	-	94	-	-	-	-	2
Azimuth: 229	Height:102 Horz			Margin (dB):	-	-6.62	-	-	-	-	
908.3808	58.69dBuV QP	23	10	91.69	-	94	-	-	-	-	3
Azimuth: 308	Height:103 Horz			Margin (dB):	-	-2.31	-	-	-	-	
908.3808	57.83dBuV QP	23	10	90.83	-	94	-	-	-	-	3
Azimuth: 203	Height:128 Vert			Margin (dB):	-	-3.17	-	-	-	-	

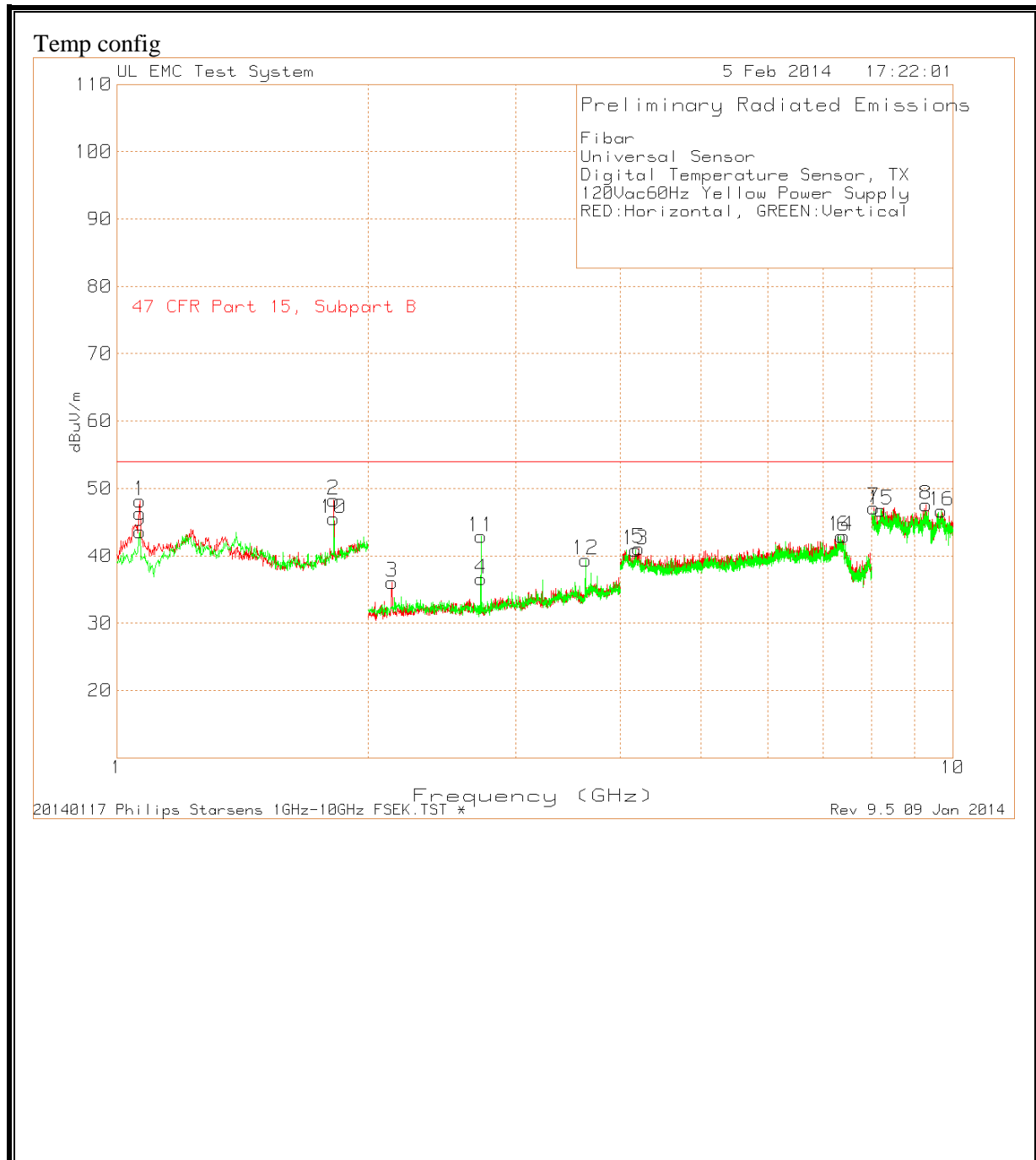
Notes:  
1 - Z-Axis (Laying Flat)  
2 - Y-Axis (On Side)  
3 - X-Axis (Standing Up)

LIMIT 1: NONE  
LIMIT 2: FCC 15.249 Limit  
LIMIT 3: NONE  
LIMIT 4: NONE  
LIMIT 5: NONE  
LIMIT 6: NONE

QP - Quasi-Peak detector

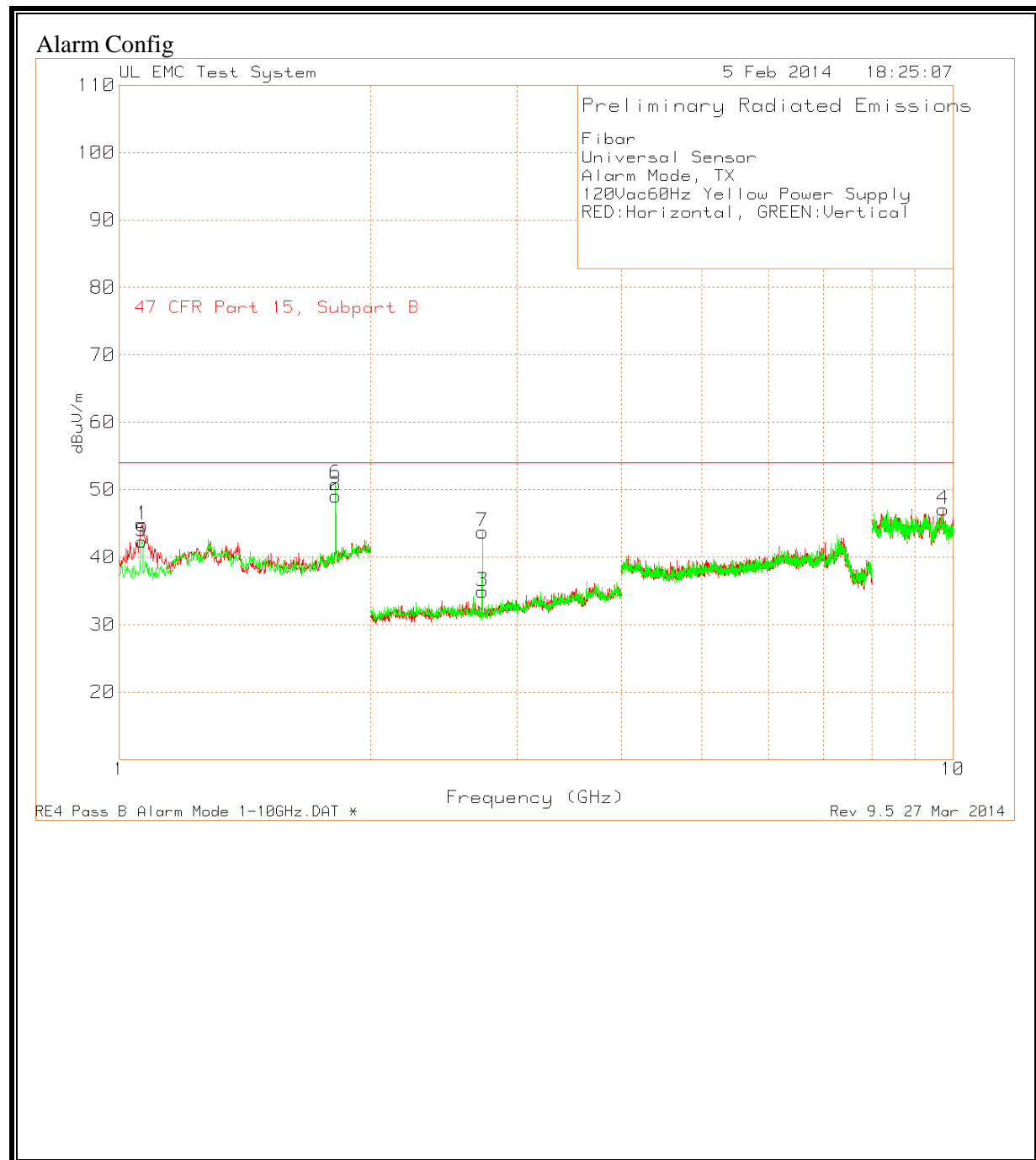
Measurements for above data were measured at 3m.

### 7.2.1. HARMONICS AND SPURIOUS EMISSIONS ABOVE 1GHz





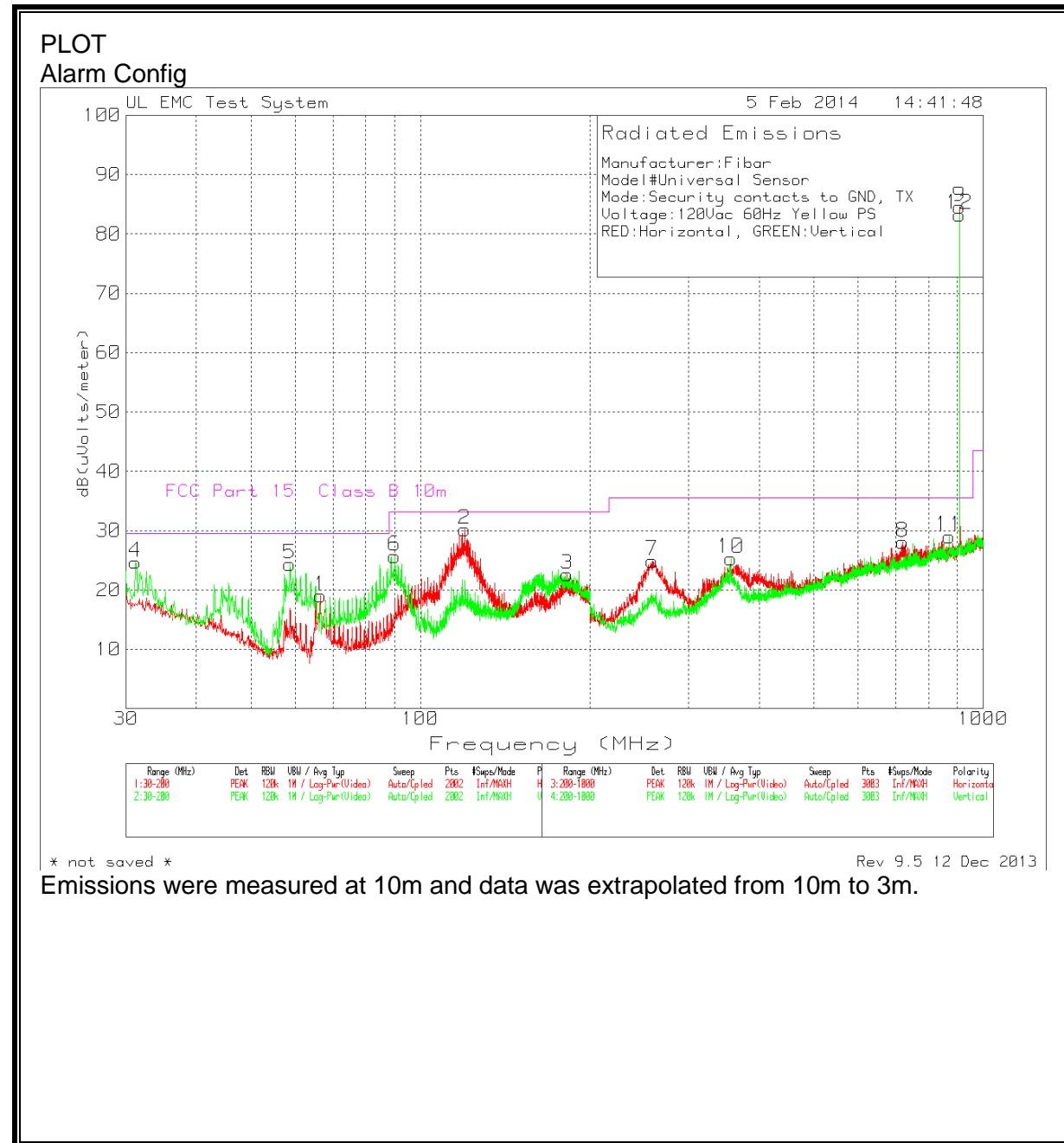
Fibar											
Universal Sensor											
Digital Temperature Sensor, TX											
120Vac60Hz Yellow Power Supply											
RED:Horizontal, GREEN:Vertical											
Marker No.	Test Frequency (GHz)	Meter Reading (dBuV)	Detector	Antenna Factor dB/m	BOMS Factor (dB)	Corrected Reading dBuV/m	47 CFR Part 15, Subpart B	Margin (dB)	Azimuth [Degs]	Height [cm]	Polarity
1	1.0661	76.94	PK	27.2	-55.98	48.16	54	-5.84	0-360	100	H
2	1.8176	71.75	PK	30.1	-53.55	48.3	54	-5.7	0-360	100	H
3	2.1321	66.71	PK	21.5	-52.09	36.12	54	-17.88	0-360	100	H
4	2.7247	65.15	PK	22.1	-50.66	36.59	54	-17.41	0-360	100	H
5	4.2121	64.05	PK	28.3	-51.26	41.09	54	-12.91	0-360	150	H
6	7.4017	58.06	PK	31.2	-46.35	42.91	54	-11.09	0-360	150	H
7	8.04	57.96	PK	36.1	-46.9	47.16	54	-6.84	0-360	150	H
8	9.2933	59.08	PK	36.4	-47.92	47.56	54	-6.44	0-360	150	H
9	1.0661	72.4	PK	27.2	-55.98	43.62	54	-10.38	0-360	100	V
10	1.8176	68.95	PK	30.1	-53.55	45.5	54	-8.5	0-360	100	V
11	2.7247	71.43	PK	22.1	-50.66	42.87	54	-11.13	0-360	150	V
12	3.6356	65.75	PK	23.3	-49.67	39.38	54	-14.62	0-360	150	V
13	4.1741	63.39	PK	28.3	-50.82	40.87	54	-13.13	0-360	150	V
14	7.3517	57.96	PK	30.8	-45.82	42.94	54	-11.06	0-360	150	V
15	8.2062	57.91	PK	36.3	-47.4	46.81	54	-7.19	0-360	150	V
16	9.6997	57.94	PK	36.4	-47.69	46.65	54	-7.35	0-360	150	V
Test Frequency (GHz)	Meter Reading (dBuV)	Detector	Antenna Factor dB/m	BOMS Factor (dB)	Corrected Reading dBuV/m	47 CFR Part 15, Subpart B	Margin (dB)	Azimuth [Degs]	Height [cm]	Polarity	
1.0664	77.75	PK	27.2	-55.97	48.98	54	-5.02	120	100	H	
1.0658	67.39	LnAv	27.2	-55.98	38.61	54	-15.39	120	100	H	
1.8168	74.96	PK	30.1	-53.55	51.51	54	-2.49	122	104	H	
1.8168	72.26	LnAv	30.1	-53.55	48.81	54	-5.19	122	104	H	
PK - Peak detector											
LnAv - Linear Average detector											



Fibar											
Universal Sensor											
Alarm Mode, TX											
120Vac60Hz Yellow Power Supply											
RED:Horizontal, GREEN:Vertical											
Marker No.	Test Frequency (GHz)	Meter Reading (dBuV)	Detector	Antenna Factor dB/m	BOMS Factor (dB)	Corrected Reading dBuV/m	47 CFR Part 15, Subpart B	Margin (dB)	Azimuth [Degs]	Height [cm]	Polarity
1	1.0661	73.53	PK	27.2	-55.98	44.75	54	-9.25	0-360	95	H
2	1.8176	72.56	PK	30.1	-53.55	49.11	54	-4.89	0-360	95	H
3	2.7247	63.49	PK	22.1	-50.66	34.93	54	-19.07	0-360	150	H
4	9.7277	58.59	PK	36.4	-47.89	47.1	54	-6.9	0-360	150	H
5	1.0641	71.1	PK	27.2	-56	42.3	54	-11.7	0-360	150	V
6	1.8176	74.29	PK	30.1	-53.55	50.84	54	-3.16	0-360	150	V
7	2.7247	72.32	PK	22.1	-50.66	43.76	54	-10.24	0-360	150	V
PK - Peak detector											
Test Frequency (GHz)	Meter Reading (dBuV)	Detector	EMCO311 7 S/N 00060338	BOMS Factor (dB)	Corrected Reading dBuV/m	47 CFR Part 15, Subpart B	Margin (dB)	Azimuth [Degs]	Height [cm]	Polarity	
1.8167	75.7	PK		30.1	-53.55	52.25	54	-1.75	118	102	H
1.8168	73.29	LnAv		30.1	-53.55	49.84	54	-4.16	118	102	H
1.8168	71.2	PK		30.1	-53.55	47.75	54	-6.25	154	119	V
1.8168	66.83	LnAv		30.1	-53.55	43.38	54	-10.62	154	119	V
PK - Peak detector											
LnAv - Linear (voltage) average detector											

## 7.2.2. WORST-CASE BELOW 1 GHz

### SPURIOUS EMISSIONS 30 TO 1000 MHz



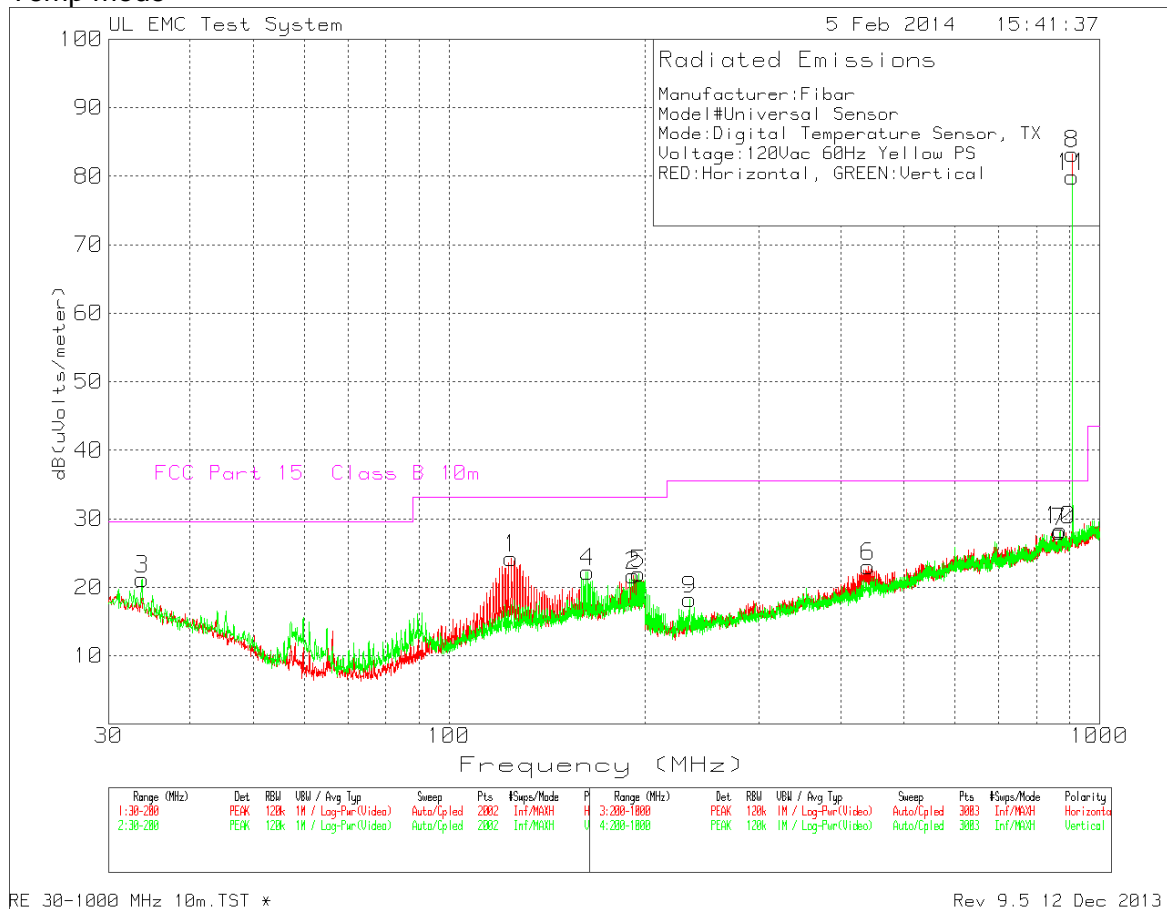
Manufacturer:Fibar  
Model#Universal Sensor  
Mode:Security contacts to GND, TX  
Voltage:120Vac 60Hz Yellow PS  
RED:Horizontal, GREEN:Vertical

Trace Markers											
No.	Test Frequency (MHz)	Meter Reading	Transducer Factor (dB)	Gain/Loss Factor (dB)	Corrected Reading	Limit:1	2	3	4	5	6
dB(uVolts/meter)											
=====											
Bicon Horizontal 30 - 200MHz -----											
1	66.4468	42.78dBuV PK	6.2	-30	18.98	-	-	-	29.55	-	-
		Azimuth:0-360	Height:399	Horz	Margin (dB)	-	-	-	-10.57	-	-
2	119.8851	46.75dBuV PK	13.2	-29.8	30.15	-	-	-	33.07	-	-
		Azimuth:0-360	Height:399	Horz	Margin (dB)	-	-	-	-2.92	-	-
3	182.5837	35.98dBuV PK	15.8	-29.2	22.58	-	-	-	33.07	-	-
		Azimuth:0-360	Height:399	Horz	Margin (dB)	-	-	-	-10.49	-	-
Bicon Vertical 30 - 200MHz -----											
4	31.1894	37.39dBuV PK	17.4	-30.1	24.69	-	-	-	29.55	-	-
		Azimuth:0-360	Height:99	Vert	Margin (dB)	-	-	-	-4.86	-	-
5	58.6307	47.3dBuV PK	7.1	-30.1	24.3	-	-	-	29.55	-	-
		Azimuth:0-360	Height:250	Vert	Margin (dB)	-	-	-	-5.25	-	-
6	89.98	46.62dBuV PK	9	-29.9	25.72	-	-	-	33.07	-	-
		Azimuth:0-360	Height:250	Vert	Margin (dB)	-	-	-	-7.35	-	-
LogP Horizontal 200 - 1000MHz -----											
7	258.3611	38.9dBuV PK	12.4	-26.4	24.9	-	-	-	35.57	-	-
		Azimuth:0-360	Height:299	Horz	Margin (dB)	-	-	-	-10.67	-	-
8	720.986	31.72dBuV PK	20.6	-24.3	28.02	-	-	-	35.57	-	-
		Azimuth:0-360	Height:99	Horz	Margin (dB)	-	-	-	-7.55	-	-
9	908.5943	86.11dBuV PK	23.2	-24.8	84.51	-	-	-	35.57	-	-
		Azimuth:0-360	Height:99	Horz	Margin (dB)	-	-	-	48.94	-	-
LogP Vertical 200 - 1000MHz -----											
10	356.1626	36.19dBuV PK	14.9	-25.8	25.29	-	-	-	35.57	-	-
		Azimuth:0-360	Height:99	Vert	Margin (dB)	-	-	-	-10.28	-	-
11	870.2199	31.03dBuV PK	22.5	-24.5	29.03	-	-	-	35.57	-	-
		Azimuth:0-360	Height:399	Vert	Margin (dB)	-	-	-	-6.54	-	-
12	908.5943	84.86dBuV PK	23.2	-24.8	83.26	-	-	-	35.57	-	-
		Azimuth:0-360	Height:199	Vert	Margin (dB)	-	-	-	47.69	-	-
LIMIT 1: NONE											
LIMIT 2: NONE											
LIMIT 3: NONE											
LIMIT 4: FCC Part 15 Class B 10m											
LIMIT 5: NONE											
LIMIT 6: NONE											

Manufacturer:Fibar  
Model#Universal Sensor  
Mode:Security contacts to GND, TX  
Voltage:120Vac 60Hz Yellow PS  
RED:Horizontal, GREEN:Vertical

Radiated Emission Data										
Test	Meter	Transducer	Gain/Loss	Corrected	Limit:1	2	3	4	5	6
Frequency	Meter	Factor	Factor	Reading	dB(uVolts/meter)					
(MHz)	Reading	(dB)	(dB)							
=====										
=										
Bicon Horizontal 30 - 200MHz										
119.86266	44.06dBuV QP	13.2	-29.8	27.46	-	-	-	33.07	-	-
Azimuth: 0	Height:382 Horz			Margin (dB):	-	-	-	-5.61	-	-
Bicon Vertical 30 - 200MHz										
31.26793	36.07dBuV QP	17.3	-30.1	23.27	-	-	-	29.55	-	-
Azimuth: 0	Height:100 Vert			Margin (dB):	-	-	-	-6.28	-	-
Bicon Vertical 50 - 200MHz										
58.62429	45.49dBuV QP	7.1	-30.1	22.49	-	-	-	29.55	-	-
Azimuth: 65	Height:234 Vert			Margin (dB):	-	-	-	-7.06	-	-
LIMIT 4: FCC Part 15 Class B 10m										
PK - Peak detector										
QP - Quasi-Peak detector										

# PLOT Temp mode



All Peak Spurious Emissions at least 6dB under the limit.

Emissions were measured at 10m and data was extrapolated from 10m to 3m.

## 8. AC MAINS LINE CONDUCTED EMISSIONS

### LIMITS

§15.207 (a)  
IC RSS-GEN, Section 7.2.2

Frequency of emission (MHz)	Conducted Limit (dBμV)	
	Quasi-peak	Average
0.15 to 0.50	66 to 56*	56 to 46*
0.50 to 5	56	46
5 to 30	60	50
* Decreases with the logarithm of the frequency.		

### TEST PROCEDURE

ANSI C63.4

### RESULTS

No non-compliance noted:

# **WORST EMISSIONS**

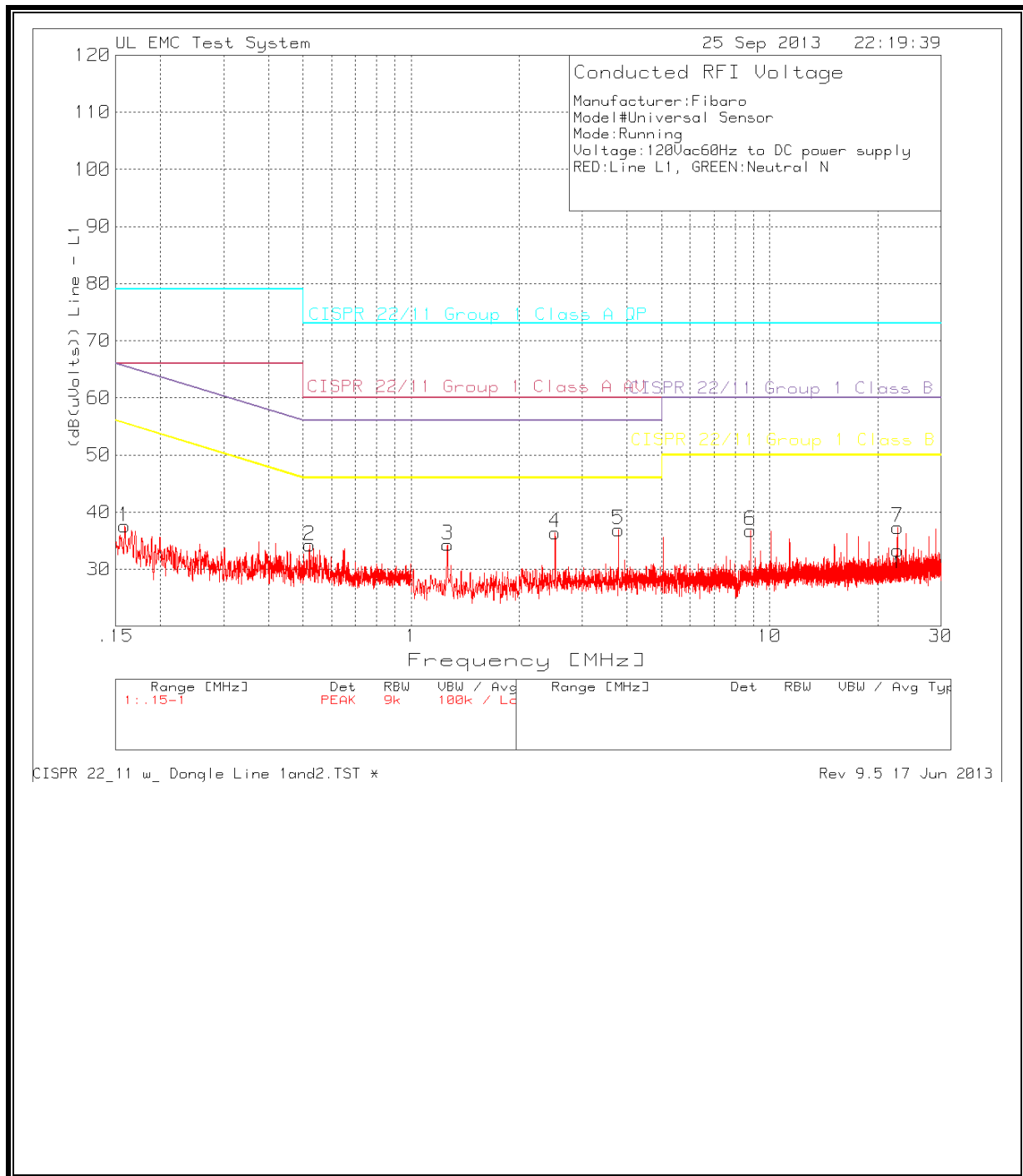
Manufacturer:Fibaro  
Model#Universal Sensor  
Mode:Running  
Voltage:120Vac60Hz to DC power supply  
RED:Line L1, GREEN:Neutral N

Trace Markers											
No.	Test Frequency [MHz]	Meter Reading	Transducer Factor [dB]	Gain/Loss Factor [dB]	Corrected Reading (dB(uVolts))	Limit:1	2	3	4	5	6
=====											
Line - L1 .15 - 1MHz -----											
1	.15913	23.42dBuV PK	.1	14	37.52	79	66	65.51	55.51	-	-
				Margin [dB]		-41.48	-28.48	-27.99	-17.99	-	-
2	.52064	23.5dBuV PK	.1	10.6	34.2	73	60	56	46	-	-
				Margin [dB]		-38.8	-25.8	-21.8	-11.8	-	-
Line - L1 1 - 30MHz -----											
3	1.26439	23.62dBuV PK	.1	10.6	34.32	73	60	56	46	-	-
				Margin [dB]		-38.68	-25.68	-21.68	-11.68	-	-
4	2.52117	25.66dBuV PK	.1	10.6	36.36	73	60	56	46	-	-
				Margin [dB]		-36.64	-23.64	-19.64	-9.64	-	-
5	3.78519	26.13dBuV PK	.1	10.7	36.93	73	60	56	46	-	-
				Margin [dB]		-36.07	-23.07	-19.07	-9.07	-	-
6	8.83402	25.71dBuV PK	.2	10.9	36.81	73	60	60	50	-	-
				Margin [dB]		-36.19	-23.19	-23.19	-13.19	-	-
7	22.69477	25.49dBuV PK	.2	11.6	37.29	73	60	60	50	-	-
				Margin [dB]		-35.71	-22.71	-22.71	-12.71	-	-
Line - L2 .15 - 1MHz -----											
8	.16465	23.2dBuV PK	.1	13.5	36.8	79	66	65.23	55.23	-	-
				Margin [dB]		-42.2	-29.2	-28.43	-18.43	-	-
9	.57532	22.96dBuV PK	.1	10.6	33.66	73	60	56	46	-	-
				Margin [dB]		-39.34	-26.34	-22.34	-12.34	-	-
Line - L2 1 - 30MHz -----											
10	1.25715	24.8dBuV PK	.1	10.6	35.5	73	60	56	46	-	-
				Margin [dB]		-37.5	-24.5	-20.5	-10.5	-	-
11	2.51755	25.15dBuV PK	.1	10.6	35.85	73	60	56	46	-	-
				Margin [dB]		-37.15	-24.15	-20.15	-10.15	-	-
12	3.77794	25.84dBuV PK	.1	10.7	36.64	73	60	56	46	-	-
				Margin [dB]		-36.36	-23.36	-19.36	-9.36	-	-
13	10.07631	25.53dBuV PK	.1	11	36.63	73	60	60	50	-	-
				Margin [dB]		-36.37	-23.37	-23.37	-13.37	-	-
14	23.93706	24.29dBuV PK	.5	11.6	36.39	73	60	60	50	-	-
				Margin [dB]		-36.61	-23.61	-23.61	-13.61	-	-
LIMIT 1: CISPR 22/11 Group 1 Class A QP											
LIMIT 2: CISPR 22/11 Group 1 Class A AV											
LIMIT 3: CISPR 22/11 Group 1 Class B QP											
LIMIT 4: CISPR 22/11 Group 1 Class B AV											
LIMIT 5: NONE											
LIMIT 6: NONE											

PK - Peak detector



## LINE 1 RESULTS



**LINE 2 RESULTS**

