

Equipment Authorization measurements on 926.5 MHz

Transceiver Unit

FCC ID: OG4-RXDIN

(9 appendices)

Test objects

Product name: Din base unit

Type: S800 RXDIN

Art. no: 946413-000

Serial number: A0101386 (two different test object were used during the test. The stated serial number is the sample with the power set to nominal+9 dB.

The test object was powered with 12 V DC.

Summary

See Appendix 1 for general information and Appendix 9 for photos.

Emission measurements as specified below have been performed.

Standard	Compliant	Appendix	Remarks
FCC 47 CFR Part 15 C (07-10-08)			
15.249 Operation within the band 902-928 MHz	Yes		
IC RSS-210 Issue 8, June 2010	Yes		
15.249 (a) / RSS-210 A2.9(a) Field strength of fundamental	Yes	2	
15.249 (d) (e) / RSS-210 A2.9(b) Radiated emission	Yes	3	
15.215 (c) 20 dB bandwidth	Yes	4	
15.207 / RSS-Gen 7.2.4 Conducted emission limits	Yes	5	
2.1049 / RSS-Gen 4.6.1 Occupied bandwidth	Yes	6	
2.1049 / RSS-210 A2.9(b) Band Edge	Yes	7	
RF Safety / RSS-102 2.5.1 SAR Evaluation	Yes	8	

Note: Above RSS items are given as cross-reference only. Measurements were performed according to ANSI procedures referenced by FCC and covered by SP's accreditation.

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Performance test and requirements

The tests were performed to verify that Din base unit meets the electromagnetic compatibility requirements of FCC 47 CFR part 15 C.

Test facility

The used anechoic chamber is compliant with the requirements of section 2.948 of the FCC rules and listed, registration number 96866, as a facility accepted for certification under parts 15 and 18. The site complies with RSS Gen and is accepted by Industry Canada for the performance of radiated measurements, IC-file number 3482A-2.

Test object

Transceiver:	Din base unit
Antenna connector	Modified BNC, the connector is soldered, not possible to connect an antenna
Antenna:	N/A
Nominal power setting:	419792
Frequency range:	926.5 MHz
Frequencies used during test:	926.5 MHz
Modulation:	GFSK
Data rate:	9.6 kbps
Supply voltage:	12-24 V DC, 12.0 V DC nominal Extreme voltage ($\pm 15\%$): 10.2-27.6 V DC

During the radiated tests the EUT was powered by a external DC power supply, Topward 6303DS, SP 502 754, 12.0 V DC.

During the AC conducted emission test the EUT was powered by a typical AC/DC-adaptor, Xppower, model: AEP06US12.

Measurement equipment

Measurement equipment	Calibration Due	SP number
Test site Edison	2013-12	504 114
EMI test receiver R&S ESIB 26	2012-07	503 885
Antenna Schaffner CBL 6143	2013-04	504 079
Horn antenna EMCO 3115	2014-01	502 175
Low Noise Amplifier Miteq	2012-08	504 160
High pass filter Wainwright WHKY	2012-08	504 199
Multimeter Fluke 85 III 625	2012-05	503 418
Temperature and humidity meter Testo 625	2012-05	504 117

Operational test mode

The test was performed with continuously transmission (100% duty cycle), if not otherwise stated, and with normal modulation.

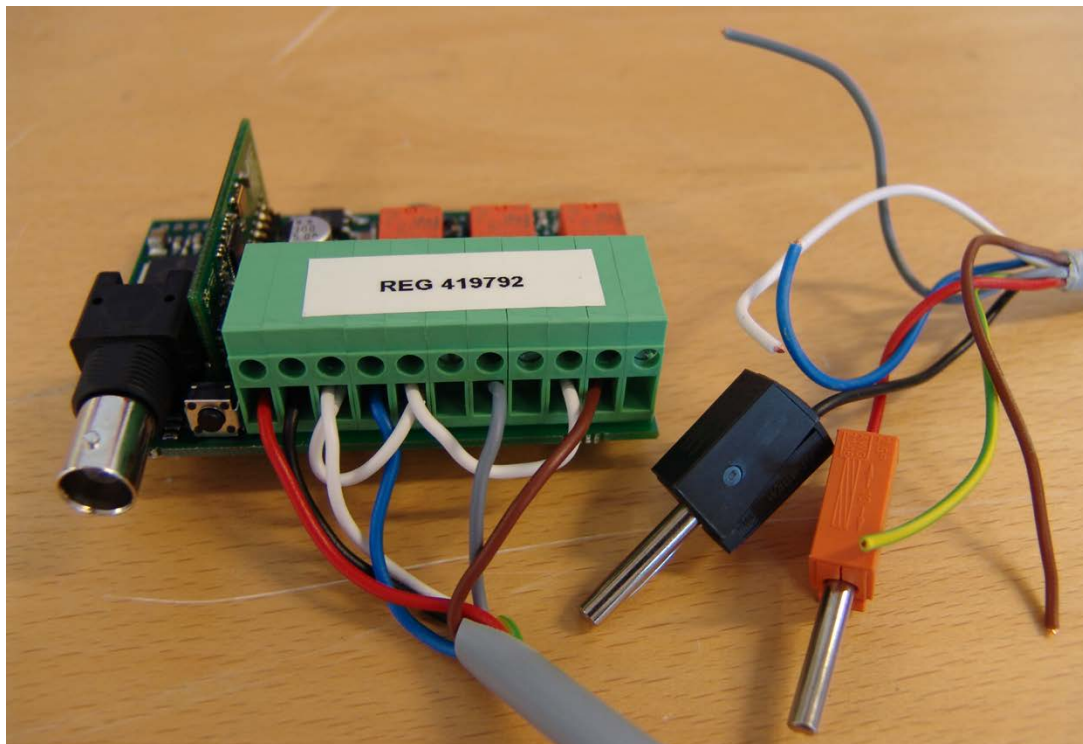
For duty cycle measurements see appendix 2.

With the normal duty cycle the duty cycle was measured to $29.5/125.3 \text{ ms} = 0.235 = 23.5\%$.

The PRF was calculated to $\text{PRF} = 1/T = 1/125.3 \text{ ms} = 8 \text{ Hz}$, thus QP-detector was used without any correction for pulse desensitization.

Cabling during emission test, see the photo below:

EUT port	Cable type	Termination / use
DC power port and I/O signals	Multi-wire, unshielded, 2.8m length	Power connected to the DC power supply, I/O unterminated



Uncertainties

Measurement and test instrument uncertainties are described in the quality assurance documentation "SP QD 10885". The measurement uncertainties can be found in the table below. The uncertainties are calculated with a coverage factor $k=2$ (95% level of confidence).

The measurement uncertainties can be found in the table below:

Method	Uncertainty
Radiated emission, 30 – 1000 MHz	4.8/5.6 dB (V/H-pol)
Radiated emission, 1 – 40 GHz	2.6 dB
Conducted emission	3.5 dB

Compliance evaluation is based on a shared risk principle with respect to the measurement uncertainty.

Reservation

The test results in this report apply only to the particular test object as declared in the report.

Delivery of test object

The test object was delivered: 2012-03-12 and 2012-03-20

Test engineers

Fredrik Isaksson and Azhar Abbas, SP

Field strength of fundamental measurements according to FCC 47 CFR part 15.249 (a) / RSS-210 A2.9(a)

Date	Temperature	Humidity
2012-03-15	21 °C ± 3 °C	26 % ± 5 %
2012-03-20	22 °C ± 3 °C	27 % ± 5 %

Test set-up and procedure

The measurements were performed according to ANSI C63.10-2009.

The test was performed with the power setting: 419792 (nominal) and with continuous transmission (100% duty cycle) and with normal modulation.

The radiated maximum peak output power measurements were performed in the semi-anechoic chamber.

The fundamental was scanned with peak detector with the antenna height 1-4 m and the turntable was varied between 0-360 degrees for maximum response. The antenna distance during the measurements was 3.0 m.

Final measurement was performed with detector according to the FCC rules.

Test set-up photos during the tests can be found in Appendix 9.

Measurement equipment	SP number
Semi anechoic chamber, Edison	504 114
Spectrum analyzer R&S ESI 26	503 885
EMI measurement computer	-
Software: R&S EMC32, ver. 6.30.20	503 745
Antenna Schaffner Bilog CBL6143	504 079
Multimeter Fluke 85 III	503 418
Temperature and humidity meter Testo 625	504 117

Results

Duty cycle measurements can be found in the diagrams below:

Diagram 1:	Normal duty cycle, Tx on
Diagram 2:	Normal duty cycle, Period time

Field strength of fundamental measurements:
RBW=120 kHz

		Max peak radiated output power Quasi-peak detector
		926.5 MHz
	Antenna height	1.00 m
	Azimuth	66 deg
	Polarization	Horizontal
T _{nom} 22°C	V _{nom} 12.0 V DC	91.4 dBμV/m
T _{nom} 22°C	V _{min} 10.2 V DC Note 1	91.4 dBμV/m
T _{nom} 22°C	V _{max} 27.6 V DC Note 1	91.4 dBμV/m

Note 1: According 47CFR 15.31(e), for intentional radiators, measurements of the variation of the input power or the radiated signal level of the fundamental frequency component of the emission, as appropriate, shall be performed with the supply voltage varied between 85% and 115% of the nominal rated supply voltage. For battery operated equipment, the equipment tests shall be performed using a new battery.

Limits

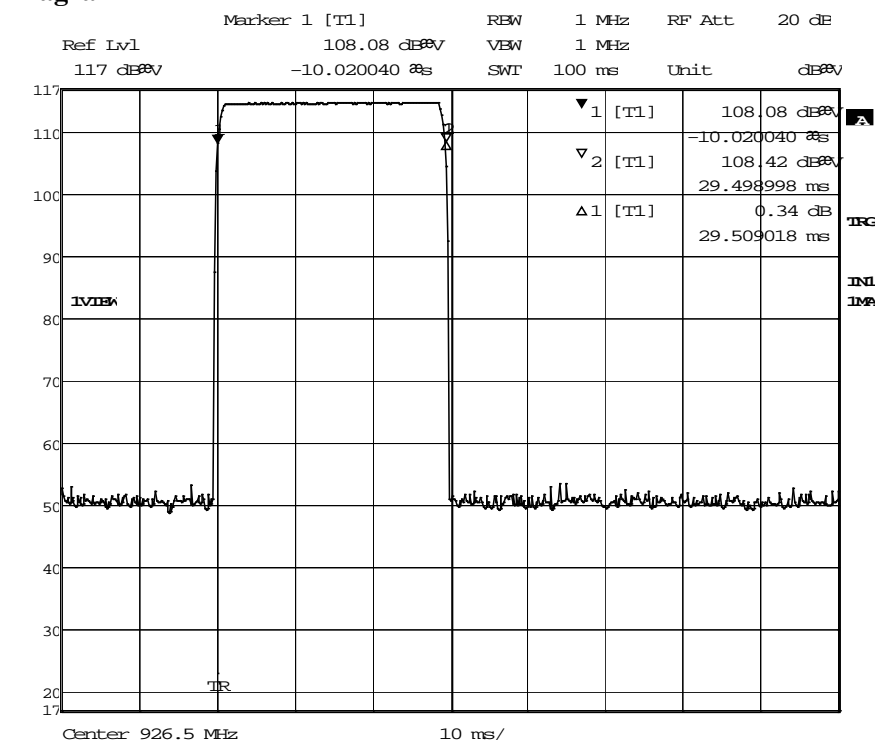
According to 47CFR 15.249(a), the field strength of emissions from intentional radiators operated within these frequency bands shall comply with the following:

According to RSS-210 A2.9(a), the field strength measured at 3 meter shall not exceed the following:

Fundamental Frequency	Field strength of fundamental
902-928 MHz	50 mV/m = 94 dBμV/m

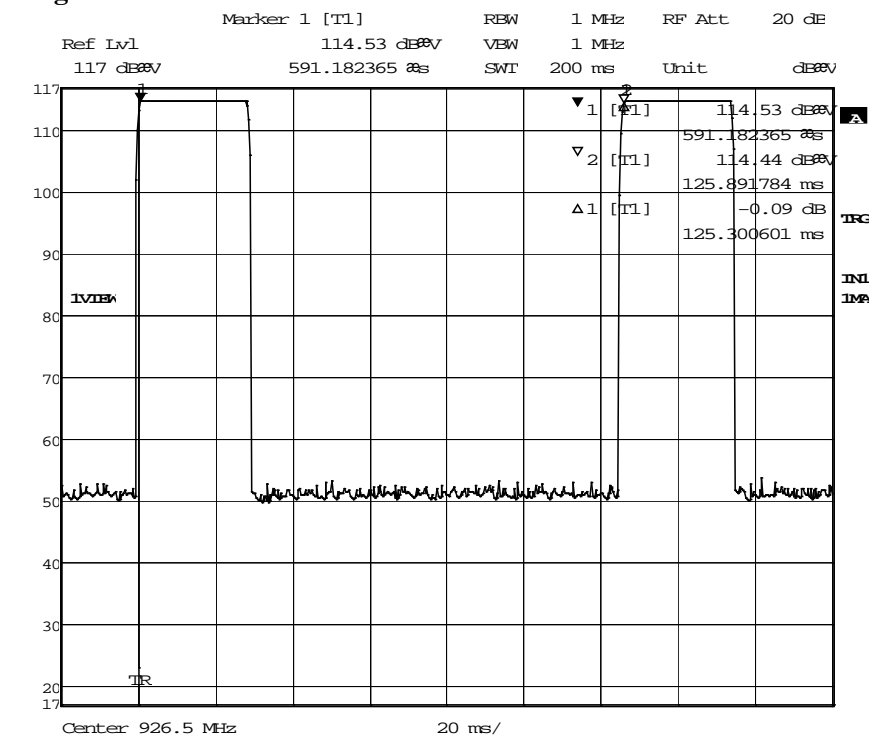
Complies?	Yes
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Diagram 1



Date: 15.MAR.2012 08:03:50

Diagram 2



Date: 15.MAR.2012 08:02:48

Radiated emission measurements according to FCC 47 CFR part 15.249 (d) (e) / RSS 210-210 A2.9(b)

Date	Temperature	Humidity
2012-03-16	22 °C ± 3 °C	33 % ± 5 %
2012-03-20	22 °C ± 3 °C	27 % ± 5 %

Test set-up and procedure

The measurements were performed according to ANSI C63.10-2009.

The test was performed with continuous transmission (100% duty cycle) and with normal modulation.

Two different power settings were used during the test, 419792 (nominal) and 458F92 (nominal+9 dB), see the results.

The test of radiated emission was performed in a semi anechoic chamber. The measurements were performed with both horizontal and vertical polarizations of the antenna. The antenna distance was 3.0 m.

The measurement procedure is as follows:

1. A pre-measurement is performed with peak detector. The test object is measured in eight directions with the antenna at three heights, 1.0 m, 1.5 m and 2.0 m (above 1 GHz pre-measurement was only performed at 1.0 m due to the small EUT size).
2. If the emission is close or above the limit during the pre-measurement, the test object is scanned 360 degrees and the antenna height scanned from 1 to 4 m for maximum response. Then the emission is measured with the quasi-peak detector on frequencies below 1 GHz and with the average detector above 1 GHz.

The measurement was first performed with peak detector.

The following RBW were used:

30 MHz-1 GHz: RBW=120 kHz

1-10 GHz: RBW=1 MHz

Test set-up photos during the tests can be found in Appendix 9.

Measurement equipment	SP number
Semi anechoic chamber, Edison	504 114
Spectrum analyzer R&S ESI 26	503 885
EMI measurement computer	-
Software: R&S EMC32, ver. 6.30.10	503 745
Antenna Schaffner Bilog CBL6143	504 079
Horn antenna EMCO 3115	501 548
Preamplifier Miteq, 1 18 GHz	504 160
High pass filter Wainwright WHKY	504 199
Temperature and humidity meter Testo 625	504 117

Results

The pre-measurement emission spectra can be found in the diagrams below:

Diagram 1:	Ambient, 30-1000 MHz vertical and horizontal polarization
Diagram 2:	30-1000 MHz, power setting: 458F92 (nominal+9 dB), vertical and horizontal polarization
Diagram 3:	1-10 GHz, power setting: 419792 (nominal), vertical and horizontal polarization

The highest detected levels during the final measurement in the frequency range 30 MHz-10 GHz are listed in the tables below.

Frequency (MHz)	QP level (dB μ V/m)	CISPR AV level (dB μ V/m)	Peak level (dB μ V/m)	Corr (dB)	Limit (dB μ V/m)	Height (m)	Azimuth (deg)	Polarization
45.4258	16.2 *	N/A	N/A	13.9	40	3.74	90	Vertical
1853.0360	N/A	45.4 **	58.0	-17.1	53.9 (AV)	1.25	7	Horizontal
2779.5290	N/A	34.0 **	46.6	-14.9	53.9 (AV)	1.32	250	Horizontal
3705.9819	N/A	31.3 **	43.9	-11.4	53.9 (AV)	1.80	78	Horizontal
4632.7354	N/A	31.0 **	43.6	-10.1	53.9 (AV)	1.18	206	Vertical
5558.8476	N/A	32.3 **	44.9	-8.8	53.9 (AV)	1.54	60	Vertical
6485.8016	N/A	31.9 **	44.5	-6.5	53.9 (AV)	1.12	317	Horizontal
7412.0741	N/A	35.9 **	48.5	-2.1	53.9 (AV)	1.29	222	Vertical
8338.4869	N/A	36.2 **	48.8	-2.5	53.9 (AV)	1.44	90	Horizontal

*) The level was measured with the power setting: 458F92 (nominal+9 dB).

**) The average level (with normal duty cycle 23.5%) was determined by calculation from the measured peak level (with 100% duty cycle) and the duty cycle correction factor, average level = measured peak level-duty cycle correction factor (12.6 dB).

Limits

According to 47CFR 15.249(a), the field strength of emissions from intentional radiators operated within these frequency bands shall comply with the following:

Fundamental	Field strength of
Frequency	harmonics
902-928 MHz	500 μ V/m = 54 dB μ V/m

According to 47CFR 15.249(d), emission 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 section 15.209, whichever is the lesser attenuation.

According to 47CFR 15.249(e), the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation.

According to RSS-210 A2.9(b), emissions radiated the 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 table 2 limits, whichever is the less stringent.

Complies?	Yes
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Diagram 1

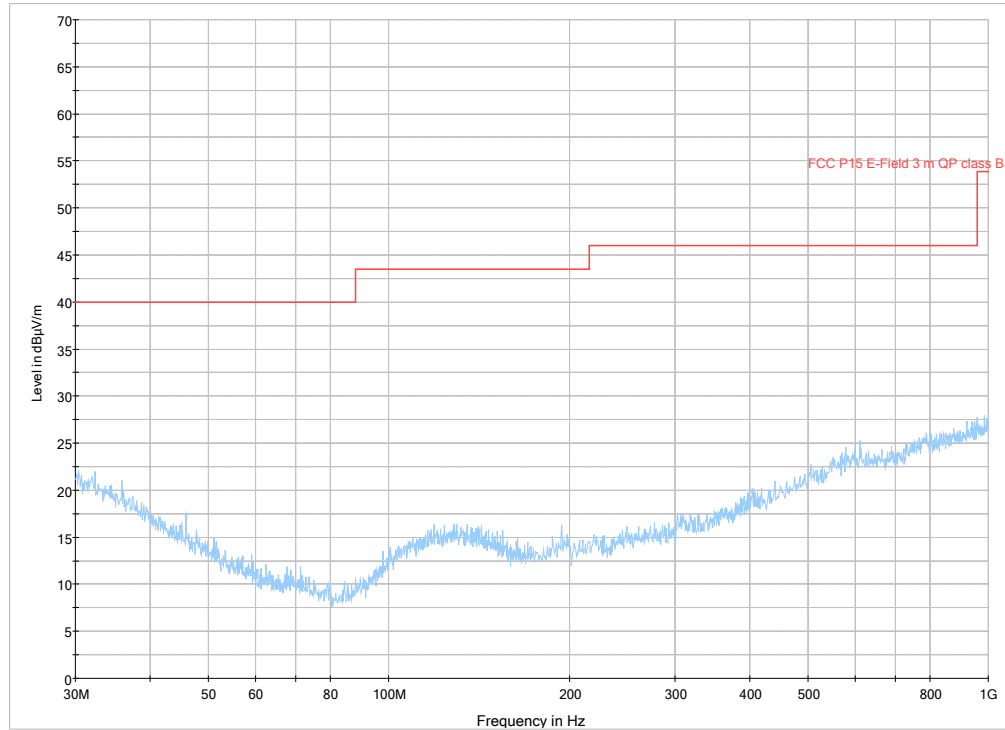
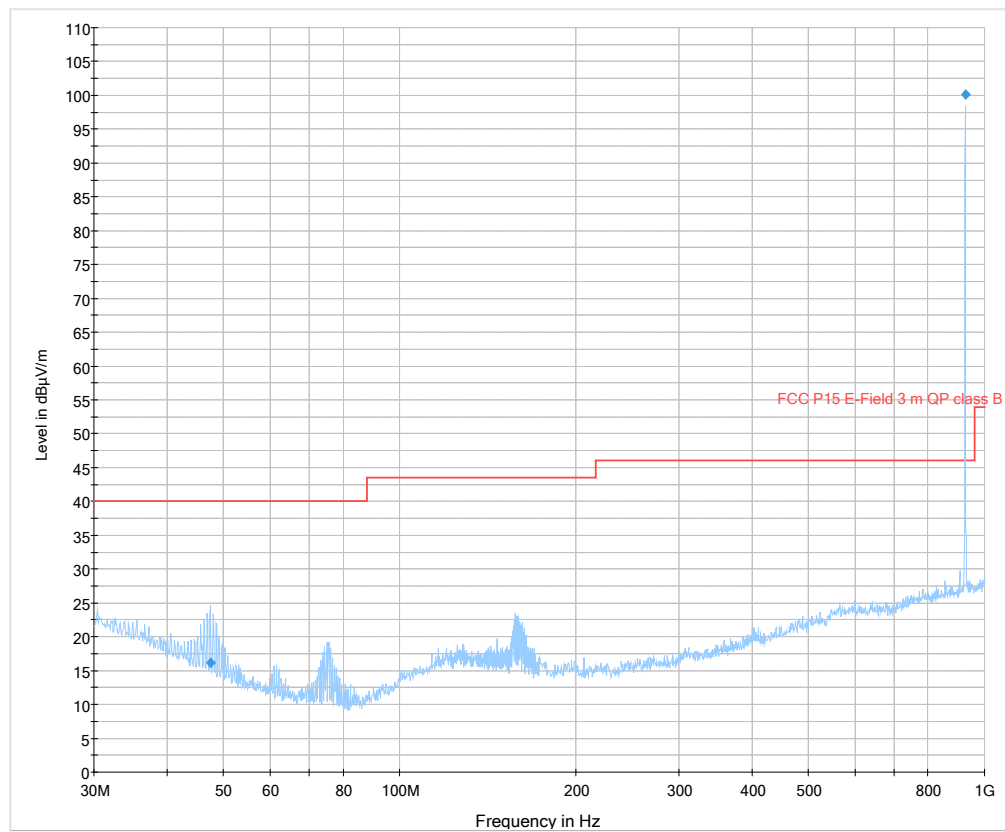


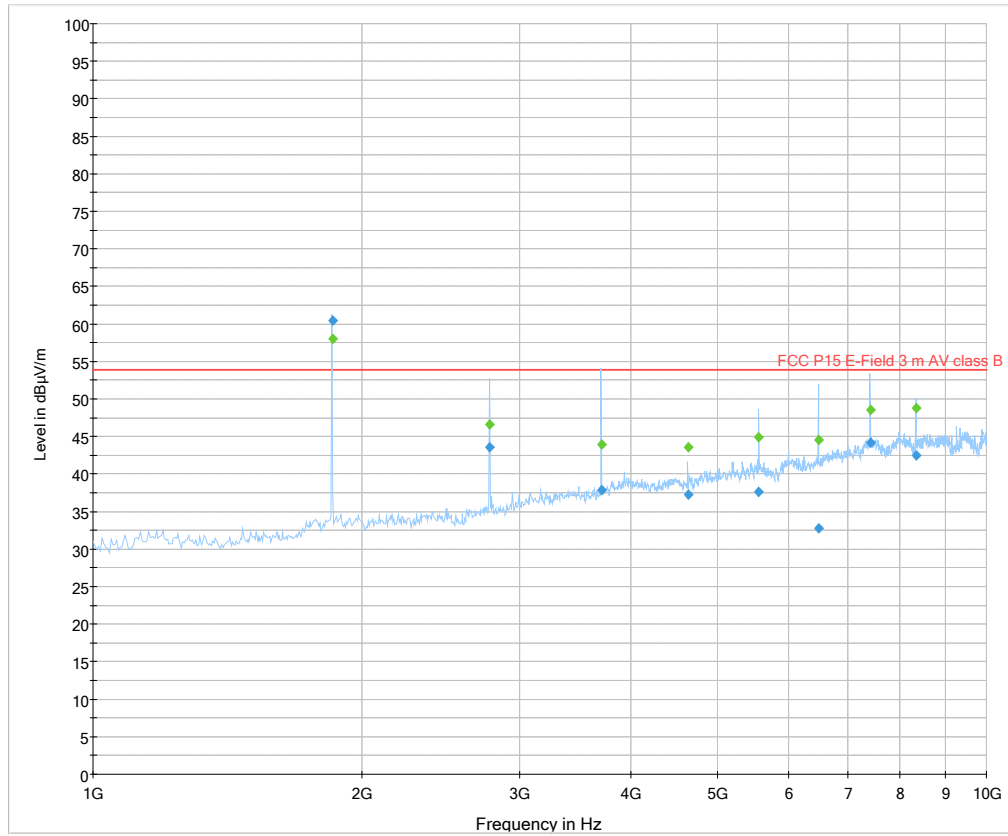
Diagram 2



FCC ID: OG4-RXDIN

Appendix 3

Diagram 3



20 dB bandwidth measurements according to FCC 47 CFR part 15.215 (c)

Date 2012-03-20	Temperature 22 °C ± 3 °C	Humidity 27 % ± 5 %
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Test set-up and procedure

The measurements were performed according to ANSI C63.10-2009.

The test was performed with the power setting: 419792 (nominal) and with continuous transmission with normal duty cycle (23.5%) and with normal modulation.

The radiated measurements were performed in the semi-anechoic chamber. The fundamental was scanned with peak detector with the antenna height 1-4 m and the turntable was varied between 0-360 degrees for maximum response, see Appendix 2. The antenna distance during the measurements was 3.0 m.

Test set-up photos during the tests can be found in Appendix 9.

Measurement equipment	SP number
Test site, Edison	504 114
Spectrum analyzer R&S ESI 26	503 885
Multimeter Fluke 85 III	503 418
Temperature and humidity meter Testo 625	504 117

Measurement uncertainty: 2.6 %

Results

The 20 dB BW measurements can be found in the diagram below:

Diagram 1	926.5 MHz	20 dB BW = 10.37 kHz
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Limits

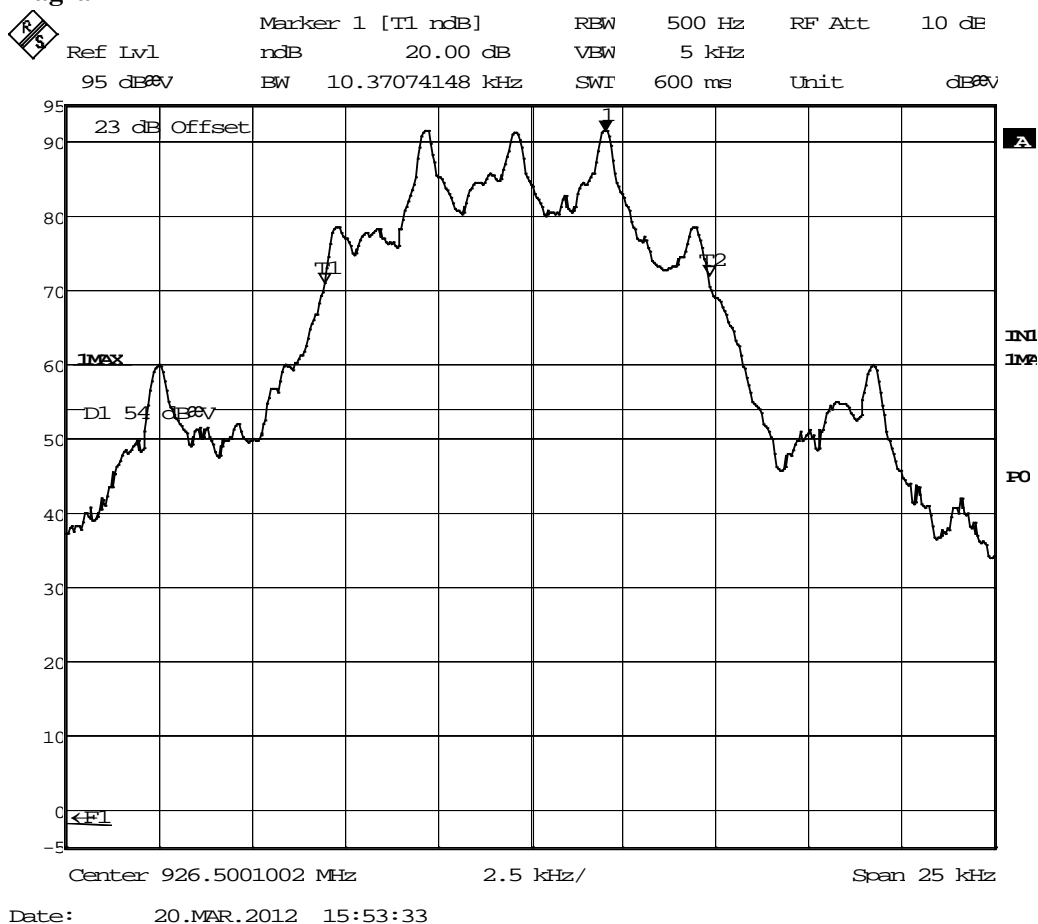
According to 47CFR 15.215(c), intentional radiators operating under the alternative provisions to the general emission limits, as contained in §§ 15.217 through 15.257 and in Subpart E of this part, must be designed to ensure that the 20 dB bandwidth of the emission, or whatever bandwidth may otherwise be specified in the specific rule section under which the equipment operates, is contained within the frequency band designated in the rule section under which the equipment is operated. The requirement to contain the designated bandwidth of the emission within the specified frequency band includes the effects from frequency sweeping, frequency hopping and other modulation techniques that may be employed as well as the frequency stability of the transmitter over expected variations in temperature and supply voltage. If a frequency stability is not specified in the regulations, it is recommended that the fundamental emission be kept within at least the central 80% of the permitted band in order to minimize the possibility of out-of-band operation.

Complies?	Yes
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FCC ID: OG4-RXDIN

Appendix 4

Diagram 1



Conducted emission measurements according to FCC 47 CFR part 15.207, class B / RSS-Gen 7.2.4

Date 2012-03-19	Temperature 22 °C ± 3 °C	Humidity 33 % ± 5 %
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Test set-up and procedure

The measurements were performed according to ANSI C63.10-2009.

The test was performed with continuous transmission (100% duty cycle) and with normal modulation.

Measurements were performed on the 120 V AC/60 Hz, phase and neutral terminals, at the AC-side of the external AC/DC-adaptor, Xppower, model: AEP06US12.

Test set-up photos during the tests can be found in Appendix 9.

Measurement equipment	SP number
Semi anechoic chamber, Edison	504 114
Spectrum analyzer R&S ESI 26	503 885
EMI measurement computer	-
Software: R&S EMC32, ver. 8.52.0	503 745
LISN Schwartzbeck NNLA20	504 129
Multimeter Fluke 83	501 522
Temperature and humidity meter Testo 625	504 117

Result

The conducted emission spectra can be found in the diagrams below:

Diagram 1:	Ambient, 120 V AC, phase terminal
Diagram 2:	Only AC/DC-adaptor Xppower, model: AEP06US12, 120 V AC, phase terminal
Diagram 3:	120 V AC, phase terminal
Diagram 4:	120 V AC, neutral terminal

The limit lines indicated as Voltage on Mains in the diagrams are the same limit lines as of FCC part 15.

Limits

According to 47CFR 15.207 and according to RSS-Gen 7.2.4,

Frequency (MHz)	Quasi-peak value (dBμV)	Average value (dBμV/m)
0.15-0.5	66-56*	56-46*
0.5-5	56	46
5-30	60	50

*=Decreases with the logarithm of the frequency

Complies?	Yes
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Diagram 1

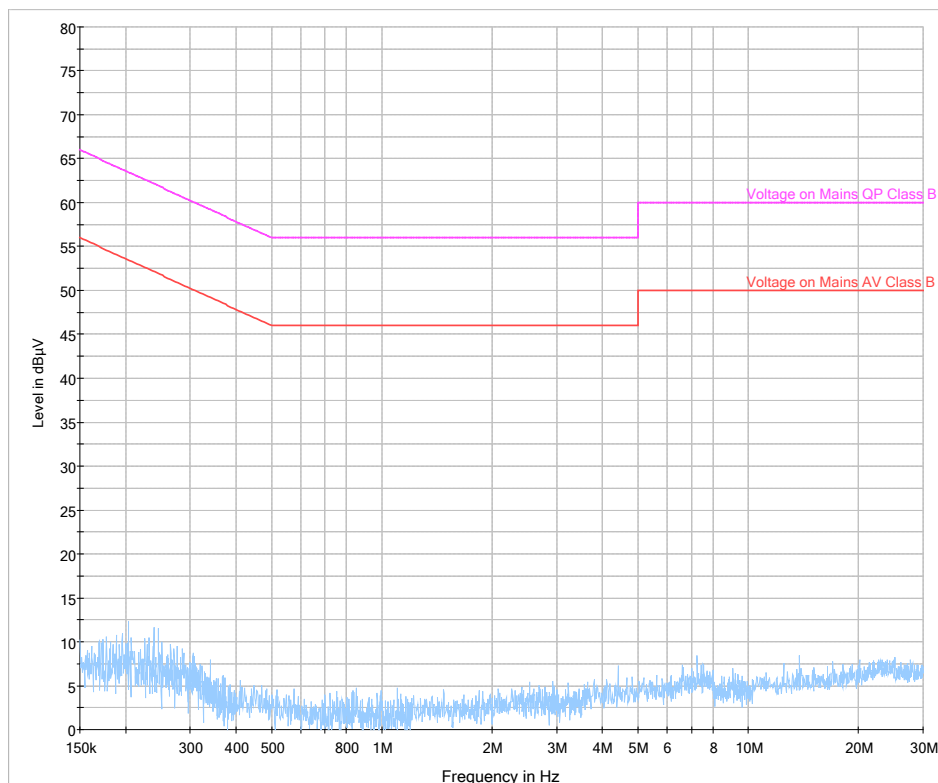


Diagram 2

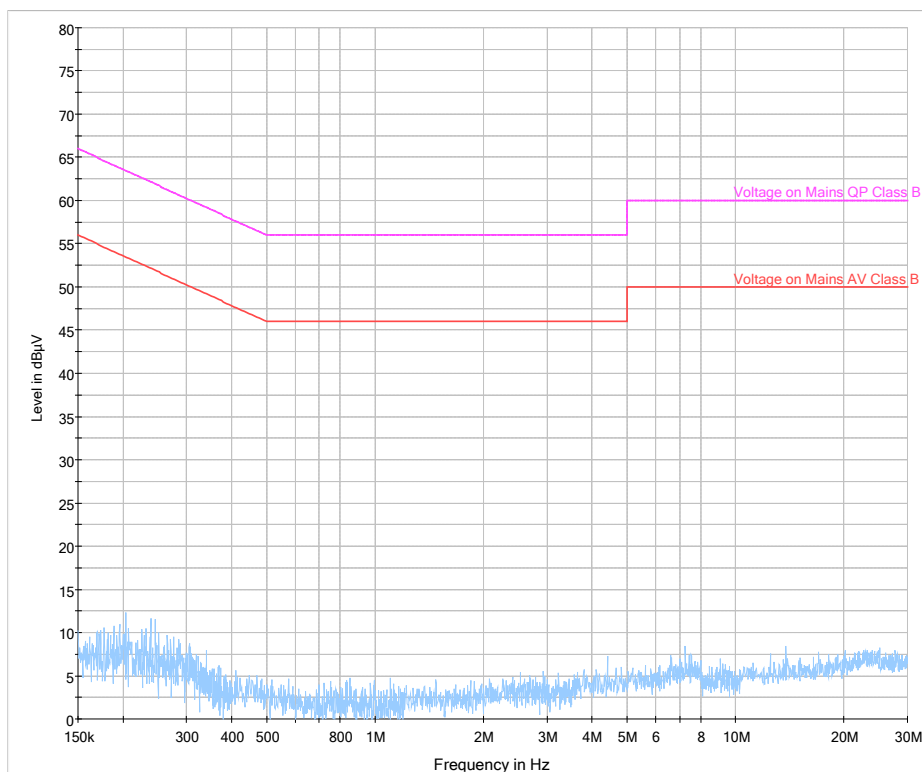
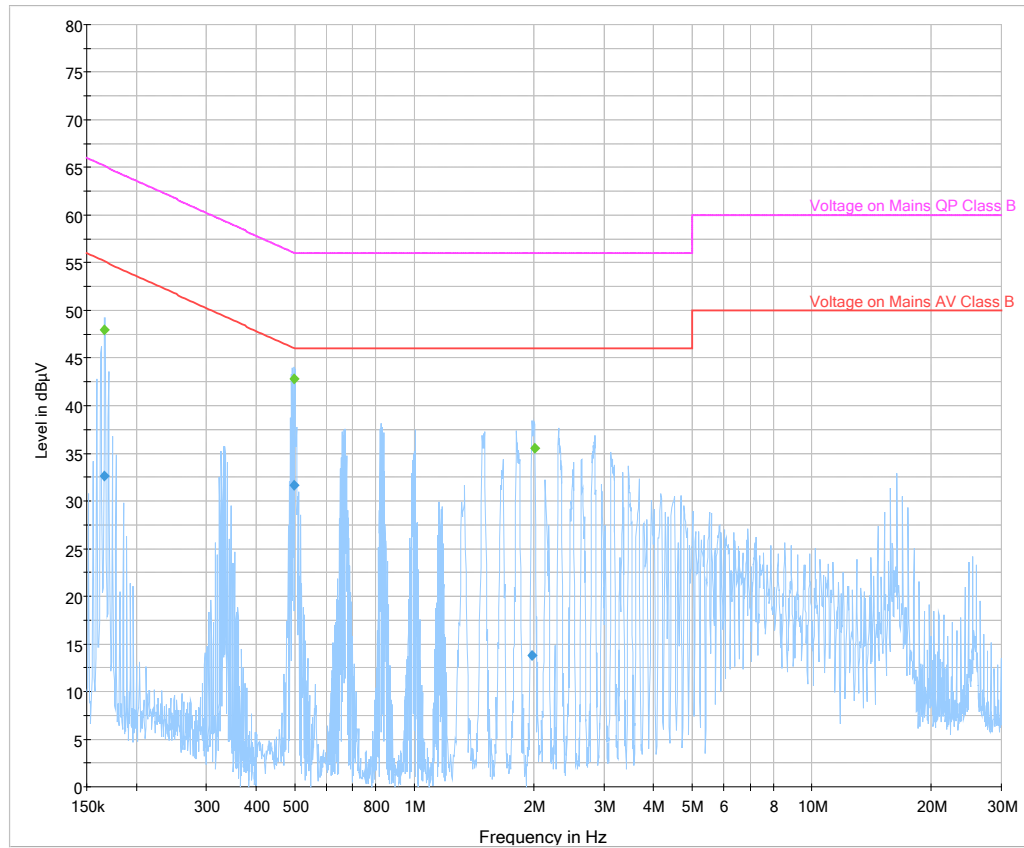


Diagram 3

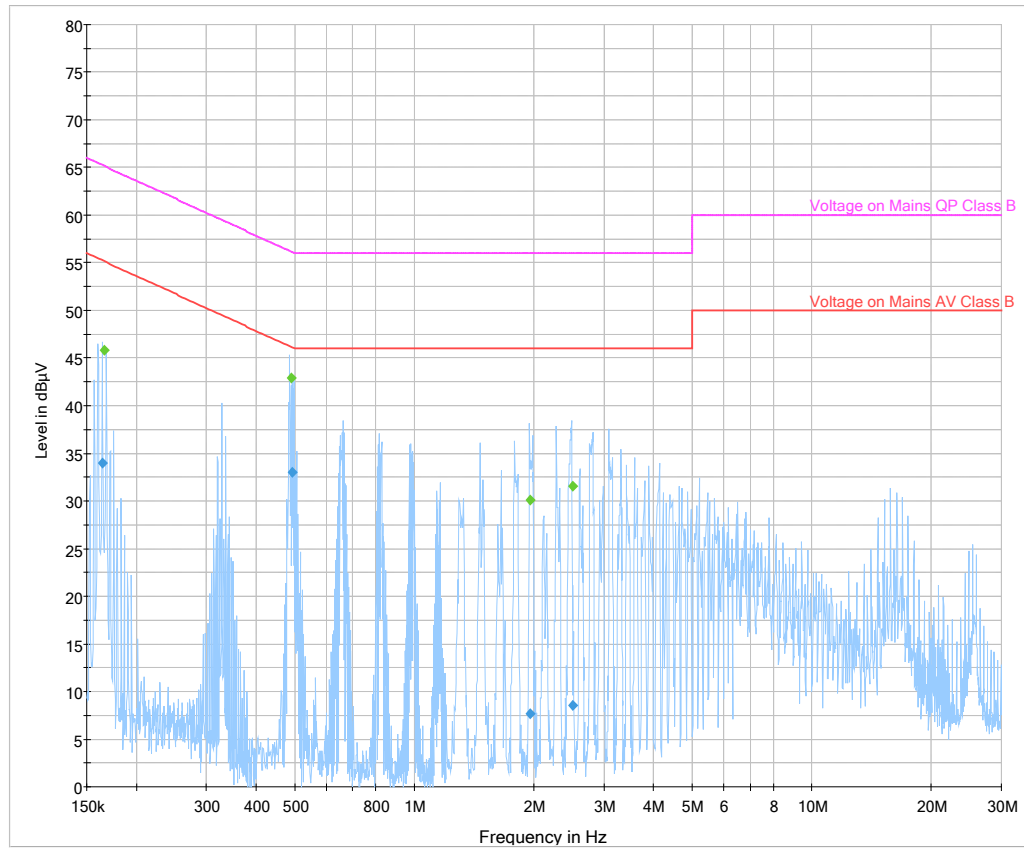


Final measurement: CISPR-Average detector

Frequency (MHz)	CAverage (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.166000	32.6	5000.0	9.000	GN	L1	0.3	22.6	55.2
0.497796	31.7	5000.0	9.000	GN	L1	0.2	14.4	46.0
1.980778	13.8	5000.0	9.000	GN	L1	0.3	32.2	46.0

Final measurement: QP detector

Frequency (MHz)	QuasiPeak (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.166000	47.9	5000.0	9.000	GN	L1	0.3	17.2	65.2
0.499796	42.8	5000.0	9.000	GN	L1	0.2	13.2	56.0
2.010778	35.5	5000.0	9.000	GN	L1	0.3	20.5	56.0

Diagram 4

Final measurement: CISPR-Average detector

Frequency (MHz)	CAverage (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.164000	34.0	5000.0	9.000	GN	N	0.1	21.3	55.3
0.493573	33.0	5000.0	9.000	GN	N	0.1	13.1	46.1
1.961301	7.7	5000.0	9.000	GN	N	0.2	38.3	46.0
2.503978	8.6	5000.0	9.000	GN	N	0.2	37.4	46.0

Final measurement: QP detector

Frequency (MHz)	QuasiPeak (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.166000	45.8	5000.0	9.000	GN	N	0.1	19.4	65.2
0.489573	42.9	5000.0	9.000	GN	N	0.1	13.2	56.2
1.961301	30.1	5000.0	9.000	GN	N	0.2	25.9	56.0
2.499978	31.6	5000.0	9.000	GN	N	0.2	24.4	56.0

Occupied bandwidth measurements according to 47CFR 2.1049 / RSS-Gen 7.2.2

Date 2012-03-20	Temperature 22 °C ± 3 °C	Humidity 27 % ± 5 %
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Test set-up and procedure

The measurements were performed according to ANSI C63.10-2009.

The test was performed with the power setting: 419792 (nominal) and with continuous transmission with normal duty cycle (23.5%) and with normal modulation.

The radiated measurements were performed in the semi-anechoic chamber. The fundamental was scanned with peak detector with the antenna height 1-4 m and the turntable was varied between 0-360 degrees for maximum response, see Appendix 2. The antenna distance during the measurements was 3.0 m.

Test set-up photos during the tests can be found in Appendix 9.

Measurement equipment	SP number
Test site, Edison	504 114
Spectrum analyzer R&S ESI 26	503 885
Multimeter Fluke 85 III	503 418
Temperature and humidity meter Testo 625	504 117

Measurement uncertainty: 2.6 %

Results

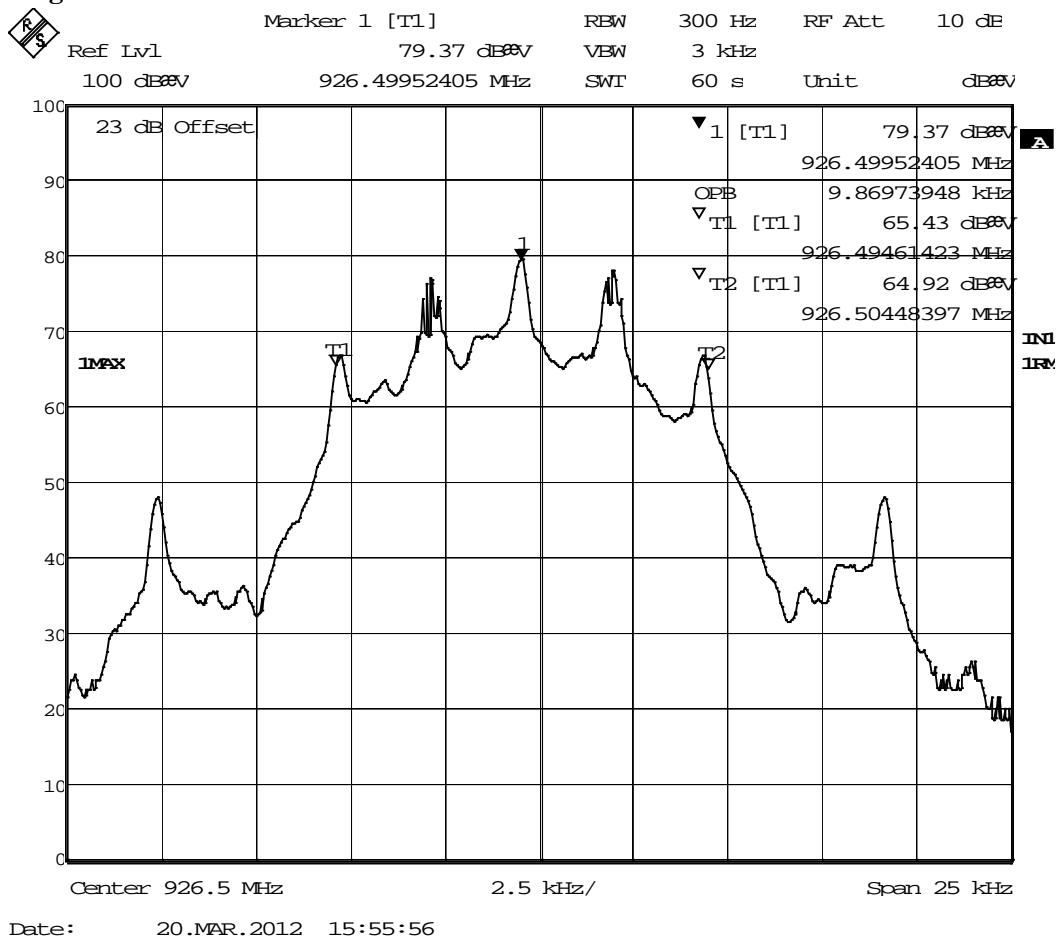
The OBW measurements can be found in the diagram below:

Diagram 1	926.5 MHz	OBW = 9.87 kHz (99%)
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FCC ID: OG4-RXDIN

Appendix 6

Diagram 1



Band edge measurements according to 47CFR 2.1049 / RSS-210 A2.9(b)

Date 2012-03-20	Temperature 22 °C ± 3 °C	Humidity 27 % ± 5 %
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Test set-up and procedure

The measurements were performed according to ANSI C63.10-2009.

The test was performed with the power setting: 419792 (nominal) and with continuous transmission with normal duty cycle (23.5%) and with normal modulation.

The radiated maximum peak radiated output power measurements were performed in the semi-anechoic chamber.

The measurement was scanned with PEAK-detector with the antenna height 1-4 m and the turntable was varied between 0-360 degrees for maximum response, see Appendix 2. The antenna distance during the measurements was 3.0 m.

Test set-up photos during the tests can be found in Appendix 9.

Measurement equipment	SP number
Semi anechoic chamber, Edison	504 114
Spectrum analyzer R&S ESI 26	503 885
EMI measurement computer	-
Software: R&S EMC32, ver. 6.30.10	503 745
Antenna Schaffner Bilog CBL6143	504 079
Temperature and humidity meter Testo 625	504 117

Results

Operation band 902-928 MHz

The pre-measurement diagrams with peak detector can be found in the diagrams below

Diagram 1	926.5 MHz	Band edge at 902 MHz
Diagram 2	926.5 MHz	Band edge at 928 MHz

Final measurements with QP detector:

926.5 MHz	QP level at band edge at 928 MHz: 21.5 dBμV/m
926.5 MHz	QP level at band edge at 902 MHz: 25.0 dBμV/m

Limits

According to 47CFR 15.249(d), emission 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 section 15.209, whichever is the lesser attenuation.

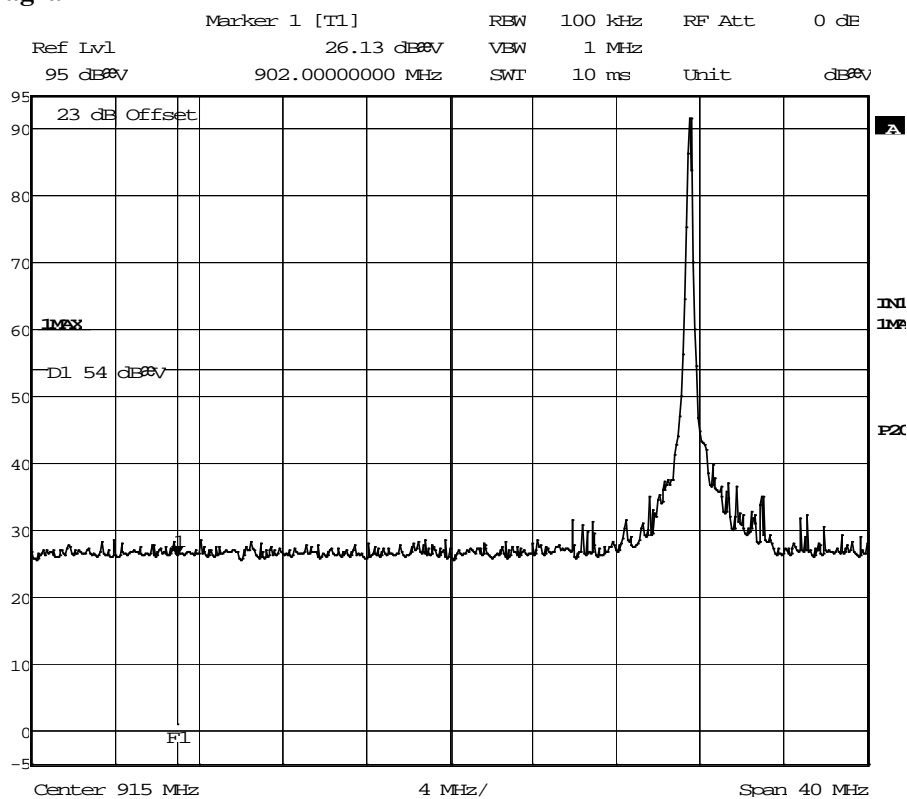
According to RSS-210 A2.9(b), emissions radiated the outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general field strength limits listed in RSS-Gen, whichever is the less stringent.

Complies?	Yes
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FCC ID: OG4-RXDIN

Appendix 7

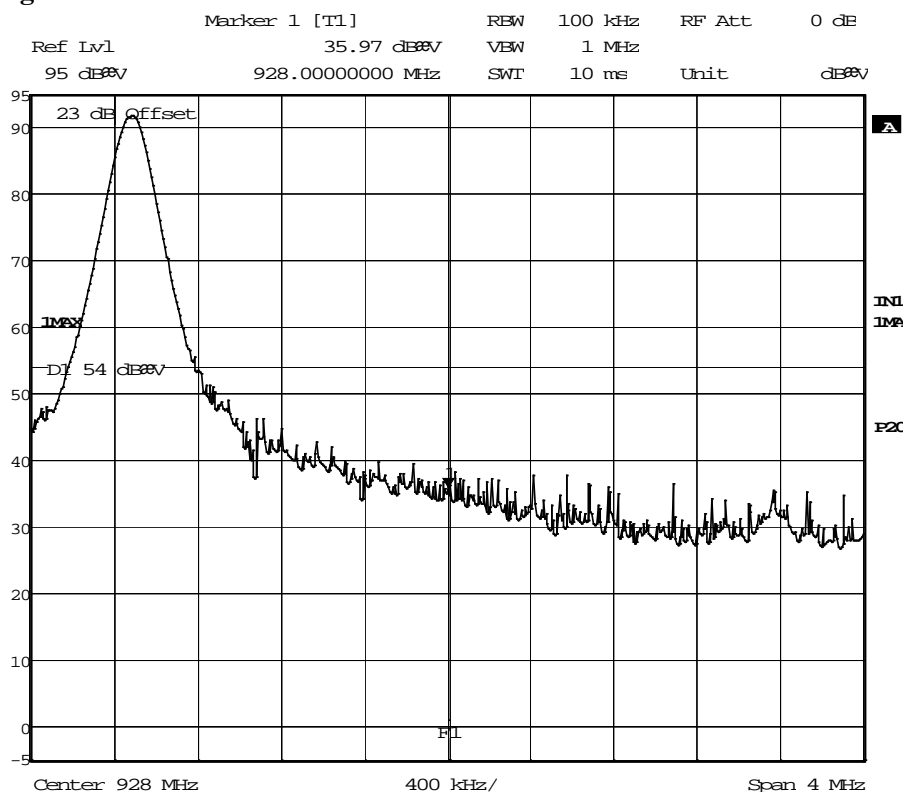
Diagram 1



Date: 20.MAR.2012 15:47:20

Note: The limit in the diagram is wrong, shall be 46 dB μ V/m

Diagram 2



Date: 20.MAR.2012 15:50:48

Note: The limit in the diagram is wrong, shall be 46 dB μ V/m

RF exposure evaluation: Fixed equipment / RSS-102 2.5.1

Date 2012-03-20	Temperature 22 °C ± 3 °C	Humidity 27 % ± 5 %
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Procedure

Systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy levels in excess limit for maximum permissible exposure. In accordance with 47 CFR FCC Part 2 Subpart J, section 2.1091 this device has been defined as a mobile device whereby a distance of 0.2 m normally can be maintained between the user and the device.

Results

The following formula was used to calculate the RF exposure,

$$P_d = P_{out} \times G / (4 \times \pi \times r^2_{cm})$$

where,

P_d = power density in mW/cm²

P_{out} = output power to antenna in mW

G = gain of antenna in linear scale

π = 3.1416

r = distance between observation and center of the radiator in cm

From the peak EUT RF output power, the minimum mobile separation distance, $r=20$ cm, as well as the gain of the used antenna, the RF power density can be obtained.

The maximum radiated peak output power from appendix 2 was used for calculation of MPE.

Antenna Gain (dBi)	Antenna Gain (numeric)	ERP Peak output power (dBm)	Peak output power (mW)	Power density, P_d [S] (mW/cm ²)	Limit of power density (mW/cm ²)
Note 1	Note 1	-3.8 Note 2	0.417	0.00008	0.62

Note 1: The antenna gain is not used in the MPE calculation as the ERP value (including the antenna) is used.

Note 2: The measurements were performed in field strength in dB μ V/m. The ERP level was the calculated by the formula $ERP = E(dB\mu V/m) - 90 + 20\log(d) - 10\log 30$.

Limits

According to 47CFR 1.1310.

(A) Limits for Occupational/Controlled Exposure

Frequency range (MHz)	Electric field strength [E] (V/m)	Magnetic field strength [H] (A/m)	Power density [S] (mW/cm ²)	Averaging time E ² , H ² or S (minutes)
0.3-3.0	614	1.63	(100)*	6
3.0-30	1842/f	4.89/f	(900/f)*	6
30-300	61.4	0.163	1.0	6
300-1500			F/300	6
1500-100,000			5	6

(B) Limits for General Population/Uncontrolled Exposure

Frequency range (MHz)	Electric field strength [E] (V/m)	Magnetic field strength [H] (A/m)	Power density [S] (mW/cm ²)	Averaging time E ² , H ² or S (minutes)
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	(180/f)*	30
30-300	27.5	0.073	0.2	30
300-1500			F/1500	30
1500-100,000			1.0	30

Note: f=frequency in MHz, *Plane-wave equivalent power density

According to RSS-102 2.5.2, RF exposure evaluation is required if the separation distance between the user and the device's radiating element is greater than 20 cm, except when the device operates as follows:

- below 1.5 GHz and the maximum e.i.r.p. of the device is equal to or less than 2.5 W;
- at or above 1.5 GHz and the maximum e.i.r.p. of the device is equal to or less than 5 W.

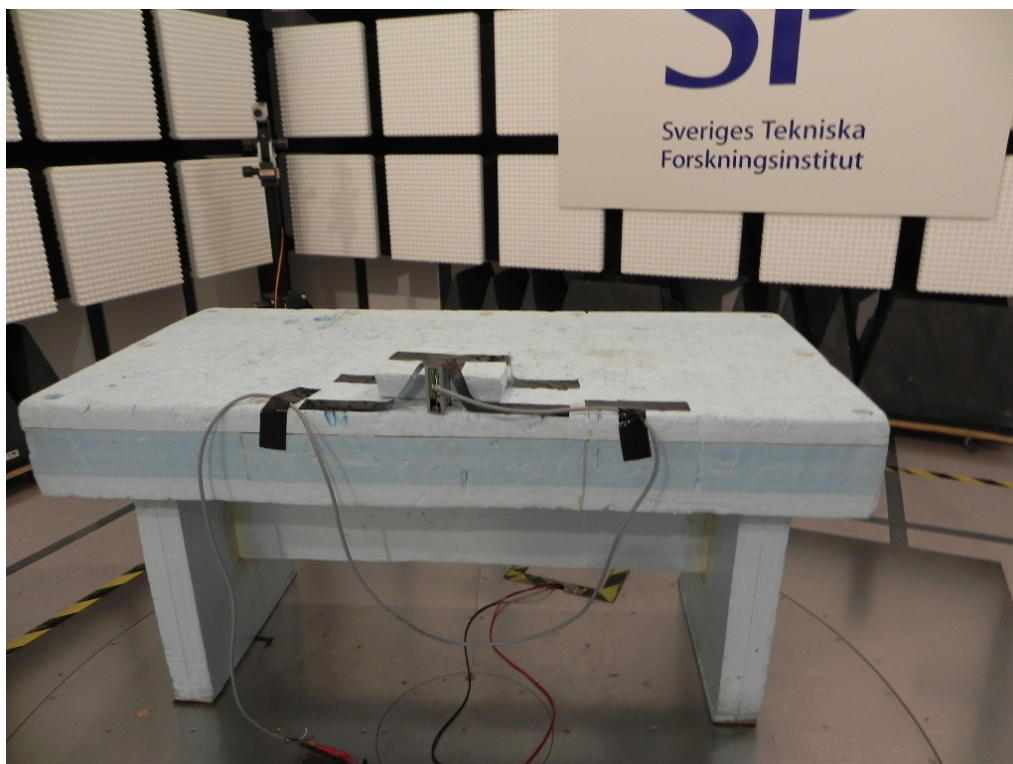
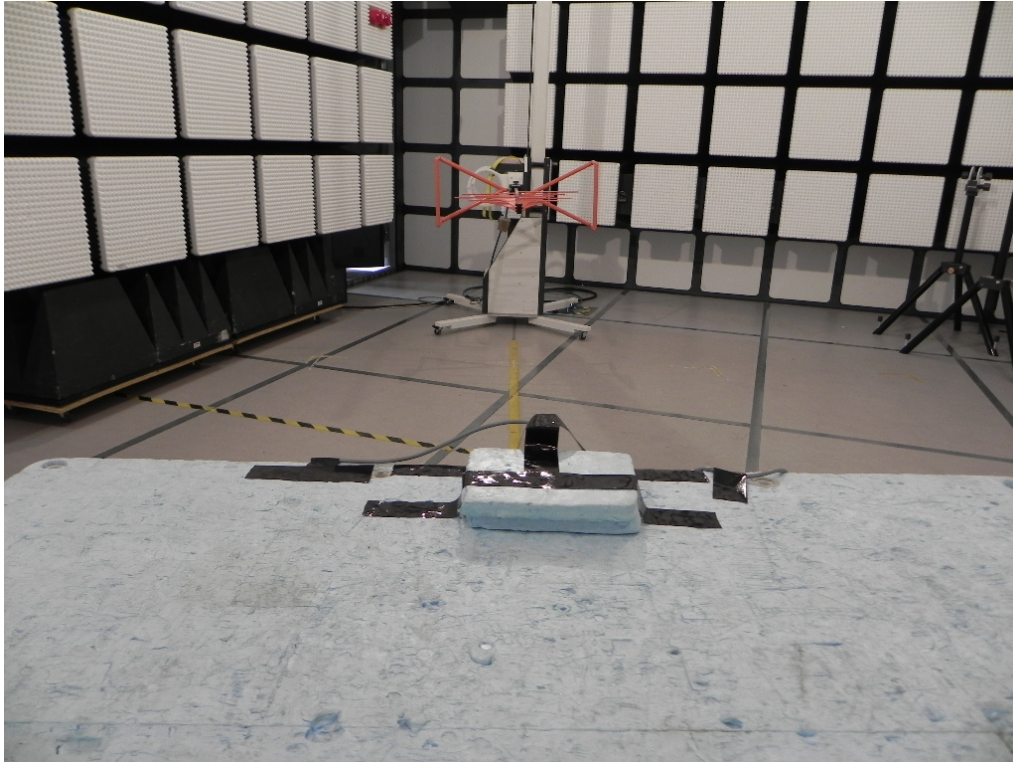
In these cases, the information contained in the RF exposure technical brief may be limited to information that demonstrates how the e.i.r.p. was derived.

Complies?	Yes
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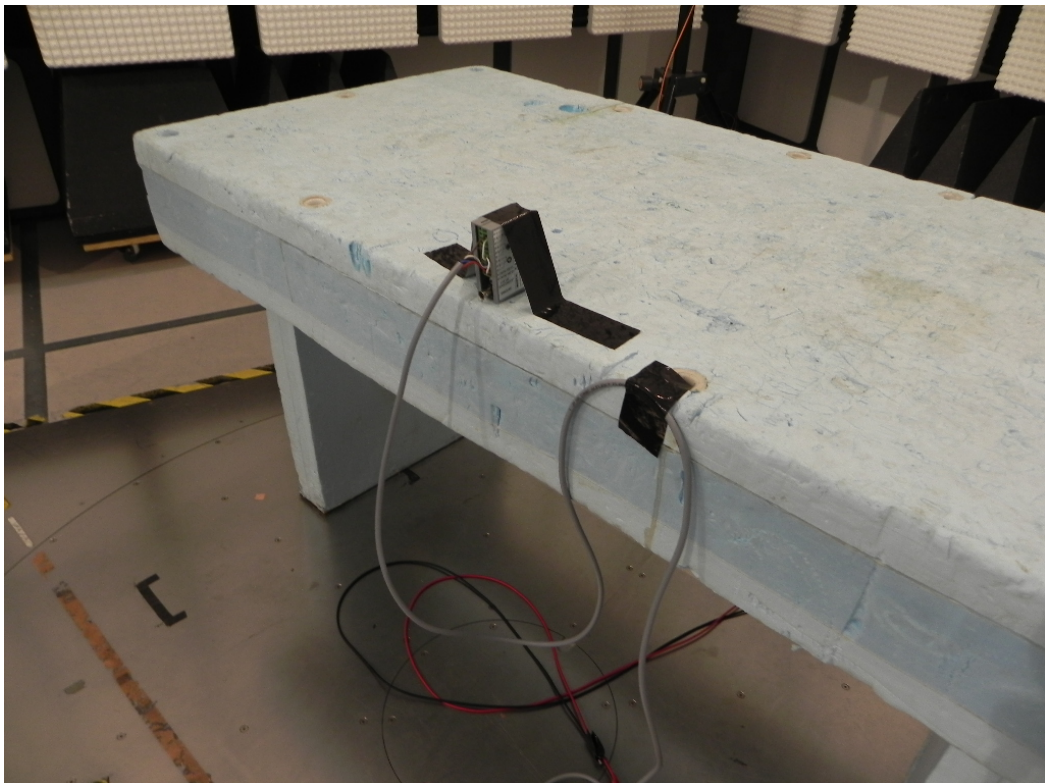
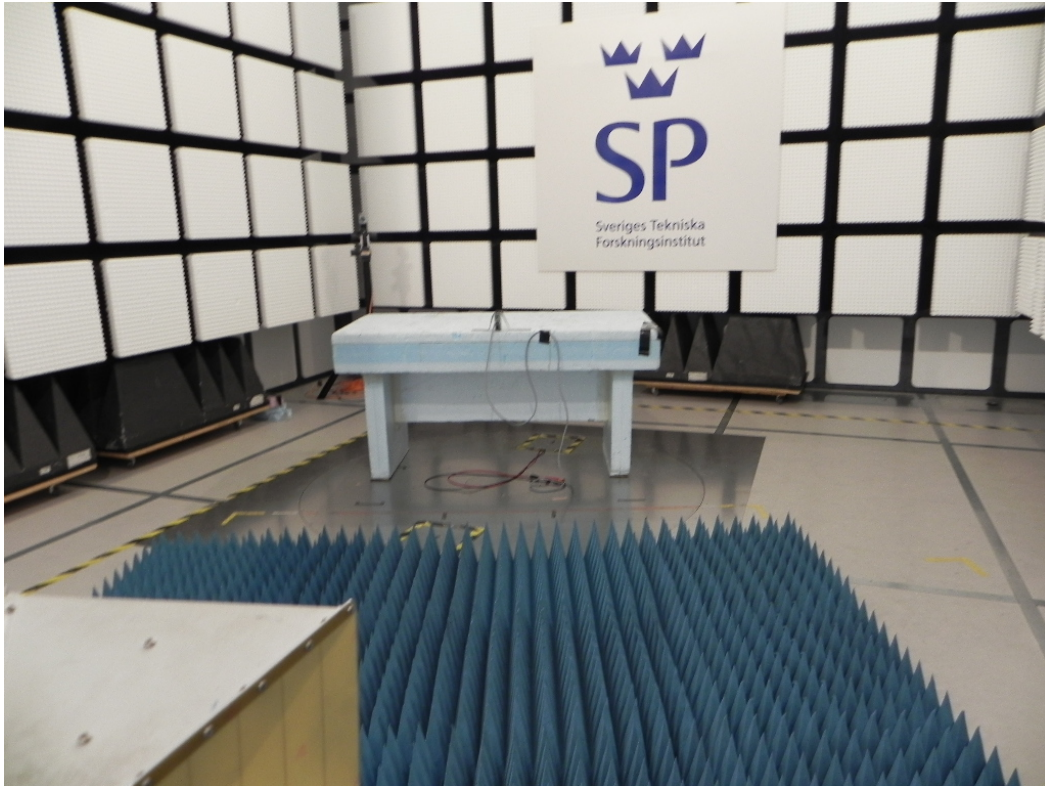
Photos

The test set-up during all the tests can be seen in the pictures below.

Radiated emission, 30-1000 MHz:



Radiated emission, 1-10 GHz:



Conducted emission:



FCC ID: OG4-RXDIN

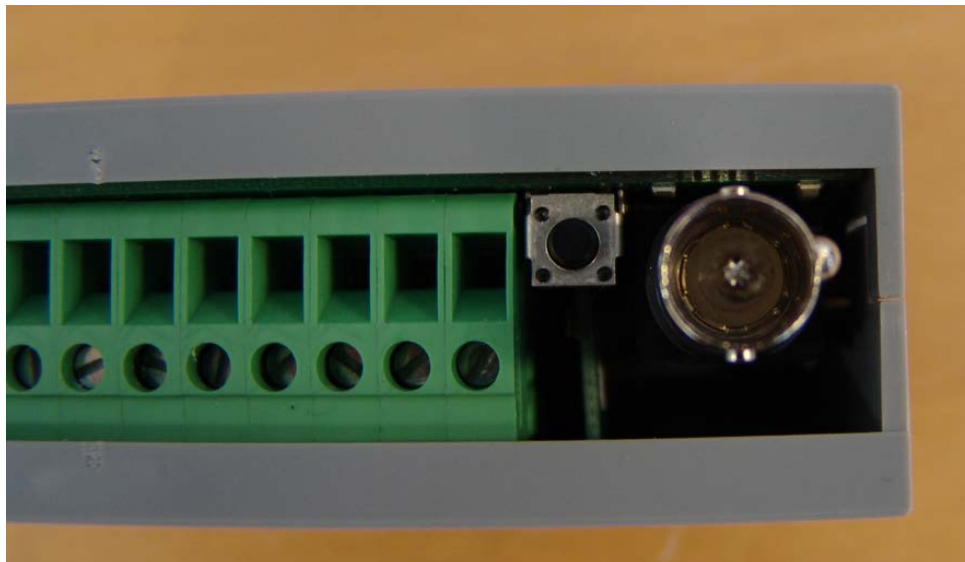
Appendix 9

EUT

Identity:



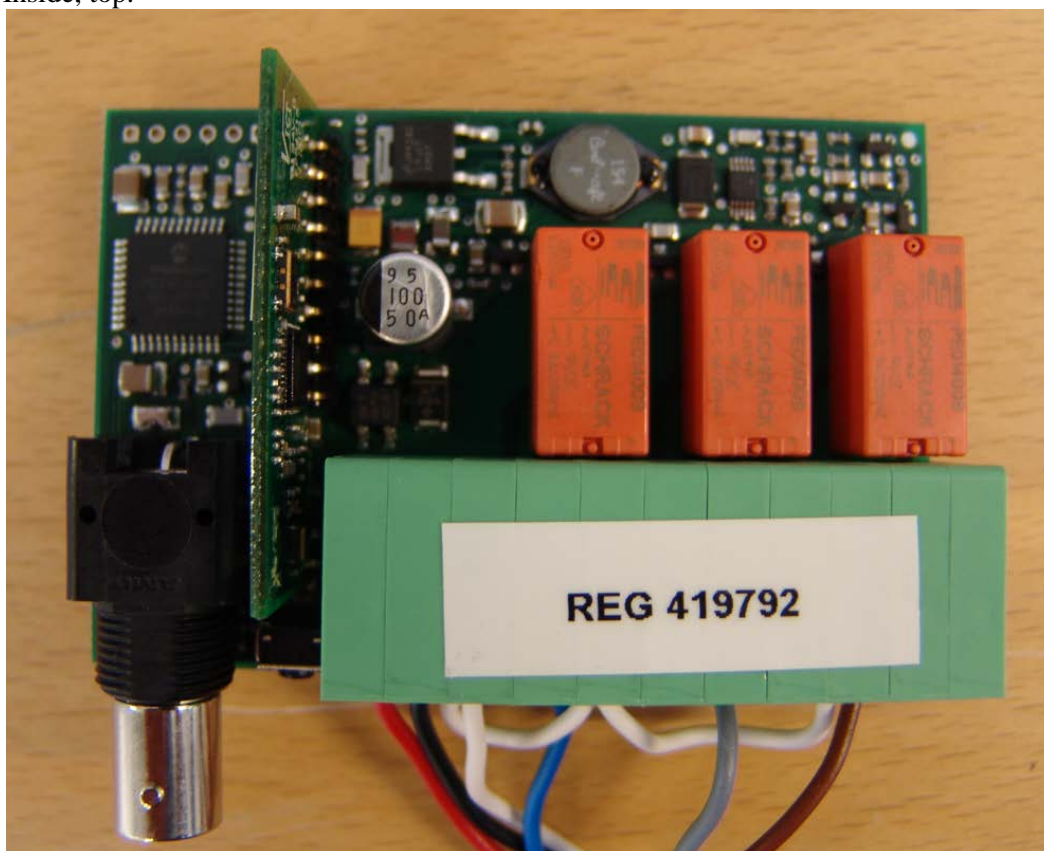
Soldered antenna:



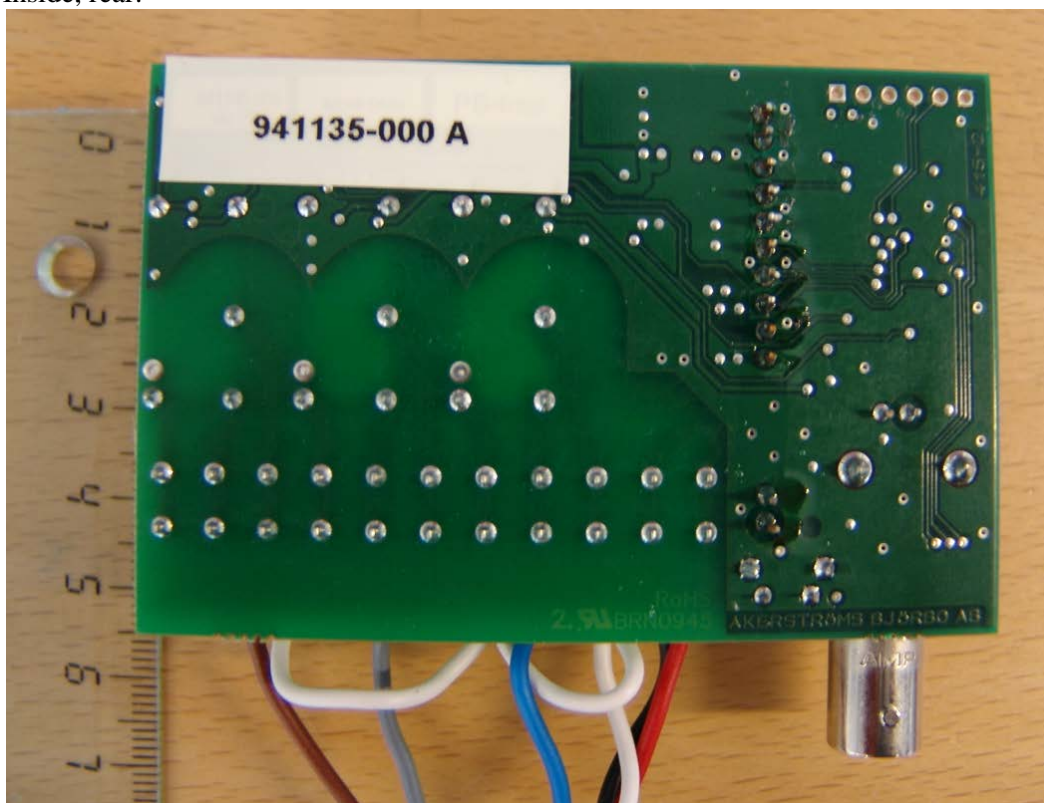
FCC ID: OG4-RXDIN

Appendix 9

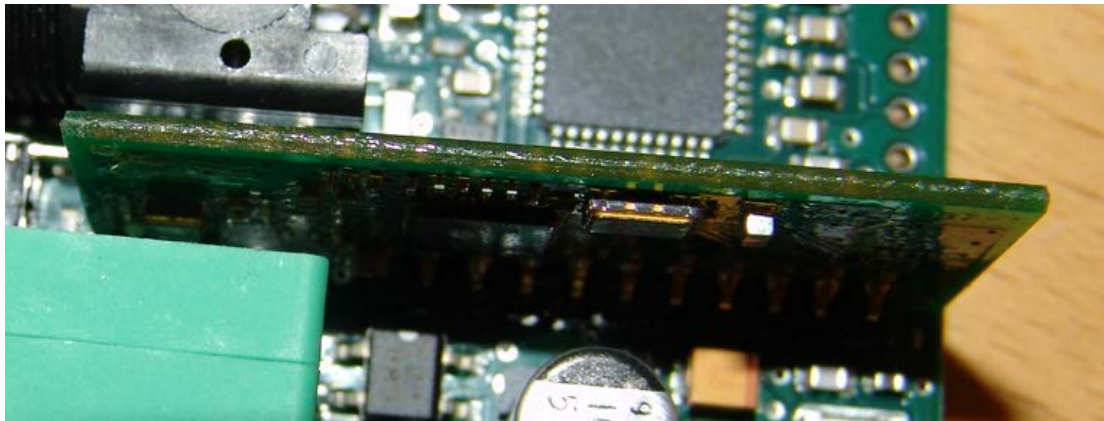
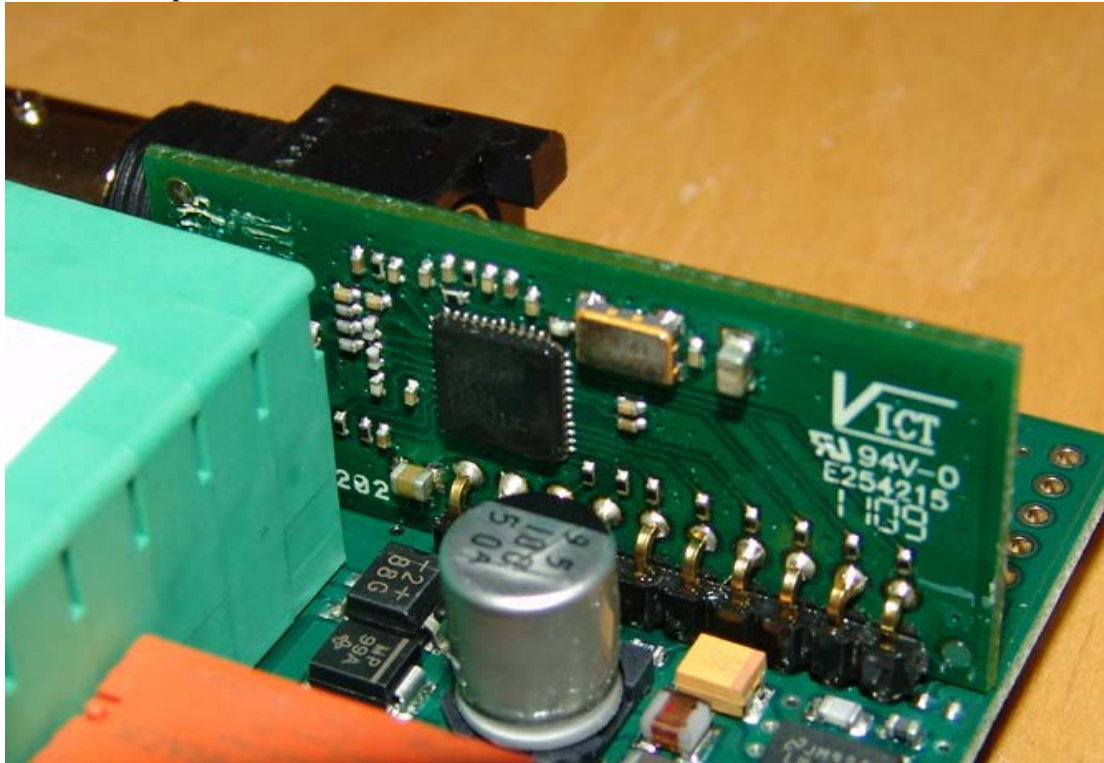
Inside, top:



Inside, rear:



Radio PCB, top:



FCC ID: OG4-RXDIN

Appendix 9

Radio PCB, rear:



AC/DC-adapter, used during the AC mains conducted emission test:

