RADIO TEST REPORT

No. 1507865STO-001, Ed. 1

RF Performance

EQUIPMENT UNDER TEST

Equipment:	Radio Base Station
Tested model:	AS9010602
Additional models:	AS9010601 AS9010607
Manufacturer:	Oy LM Ericsson AB
Tested by request of:	Oy LM Ericsson AB

SUMMARY

All selected test cases specified in this report comply with the requirements according to the following standards:

47 CFR Part 2 (2013)
47 CFR Part 24 (2013): Subpart E
47 CFR Part 15 (2013): Subpart B
RSS-GEN Issue 4 (2014)
RSS-133 Issue 6 (2013)
ICES-003 Issue 5 (2012)

For details, see clause 2 – 4.

Date of issue: 2015-03-30

Tested by: Matti Virkki

Approved by: Stefan Andersson

Revision History

Edition	Date	Description	Changes
1	2015-03-30	First release	

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1 CLIENT INFORMATION

The EUT has been tested by request of

Company	Oy LM Ericsson AB Elektroniikkatie 10 90590 OULU FINLAND
Name of contact	Mika Savilakso Phone +358 442654000
Client observer	Esko Korhonen

2 EQUIPMENT UNDER TEST (EUT)

2.1 Identification of the EUT

Equipment:	Radio base station	
Tested Model:	AS9010602	
Additional models:	AS9010601, AS9010607	
Brand name:	Ericsson	
Serial number:	C829414382 / C829278266	
Manufacturer:	Oy LM Ericsson AB	
Transmitter frequency range:	FDD Band 2	1930 – 1990 MHz
Receiver frequency range:	FDD Band 2	1850 – 1910 MHz
Antenna:	☒ Internal antennas	☐ External antenna
Antenna gain:	4.6 dBi max	
Rating RF output power:	13 – 24 dBm to antenna	
Type of modulation:	LTE (QPSK, 16-QAM, 64-QAM)	
Channel BW:	5, 10, 15, 20 MHz	
Transmitter standby mode supported:	☒ Yes	☐ No

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2.2 FCC ID, IC and IC model number

Function Designation	Product nr.	FCC ID:	IC:	IC MODEL NO:
RBS 6402;B2/25 B4 B7	KRD 901 060/1	TA8AKRD901060	287AB-AS901060	AS9010601
RBS 6402;2x B2/25 B4 B7	KRD 901 060/2	TA8AKRD901060	287AB-AS901060	AS9010602
RBS 6402;B2/25	KRD 901 060/7	TA8AKRD901060	287AB-AS901060	AS9010607

2.3 EUT description

RBS 6402 is a modular dual band indoor product for 3GPP LTE and WCDMA with Wi-Fi module. The main characteristics of the product are:

- Full modularity
- Dual band, FDD
- IBW 20/40 MHz
- Ericsson DFE algorithms (CFR, DPD, X-talk) to enable FPGA replacement by eASIC
- Wi-Fi as a separate module
- LTE 20+20 w/ CA over the bands (option)
- WCDMA 20 MHz (supported later)
- Wi-Fi with integrated internal antennas as a separate module (option)

RBS 6402 eNodeB product's maximum configurable output power is 20…250 mW (+13…+24 dBm) complying with the 3GPP Local Area requirement specification (maximum output power equal or less than +24 dBm).

RBS 6402 will include modules presented in Figure 1. Two triple band RF modules are included. RBS 6402 will support 2*three FDD bands (one band enabled at time / RF module) and four antenna modules.

Wi-Fi module can be included and supported. Wi-Fi module includes two integrated antenna modules. RBS 6402 has four integrated antenna modules for TX/RX, which can be alternatively changed to external antennas with specified external antenna kits.

Only one RF path out of three at each side of the radio module is active at the time to support 2*2 MIMO operations. The radio bands are divided into different variants so that one RF board design can support two high bands and one highest band (US or EU) and other RF board design supports three low bands (US or EU).

RBS 6402 shall always be powered via a specified power supply (AC/DC adapter) or PoE injector. The power input of RBS 6402 is not defined as DC input port although it is labelled so on RBS 6402. AC/DC Power supply adapter (190 09_BML 901 3021_1_A, or corresponding one) will be used as a power supply for regulatory approval testing and will be delivered as a site product with RBS 6402. Also PoE power supply can be used as an alternative power supply.

RBS 6402 is designed to get the clock synchronization from the GPS signal via the separate GRU module of Ericsson. This is connected to GRU port of RBS 6402.

Wi-Fi module was not included in the tested configuration.

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Below is a block diagram of RBS 6402 indoor base station.

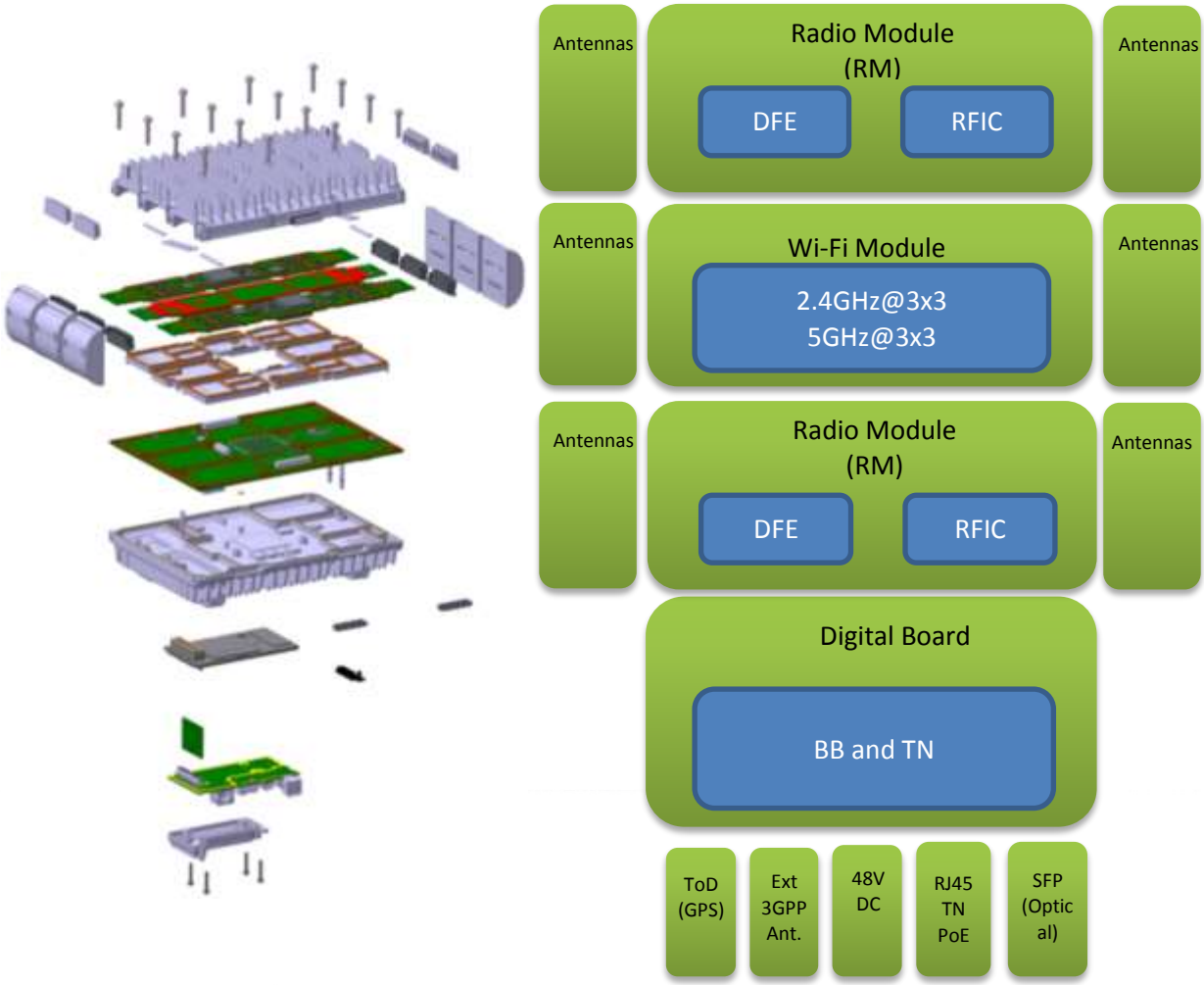

Figure 1. RBS 6402 block diagram. Wi-Fi module was not included in the tested configuration.

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2.4 Additional information about the EUT

The EUT consists of the following units:

Unit	Type	Serial number	Note
Radio base station	RBS 6402	C829414382	
Radio base station	RBS 6402	C829278266	Used in RF output power test
AC/DC Power supply adapter	190 09_BML 901 3021_1_A	D880000339	

The EUT was tested with the following cables:

Port:	Type:	Length: [m]	Specifications:
AC port	AC power supply for AC/DC adapter	2	Three core
DC port	Power	1.2	Coaxial
LAN/Power input port	Signal cable	10	Unshielded, CAT 6, RJ45
LAN (Telecommunication port)	Signal cable	10	Unshielded
GRU signal port	Signal cable	2.9	Shielded,CAT 6, Mini I/O connector

2.5 Peripheral equipment

Peripheral equipment is equipment needed for correct operation of the EUT, but not included as part of the testing and evaluation of the EUT.

Equipment	Type / Model	Manufacturer	Serial number
PoE injector	PowerDsine 9601G	Microsemi	N134466100002514A00
Laptop	Dell Latitude E6420	Dell	4rkfbs1

PoE injector was used as an alternative power supply in certain tests.

2.6 Modifications made to improve EMC-characteristics

No modifications have been made during the tests.

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3 TEST SPECIFICATIONS

3.1 Standards

Requirements:
47 CFR Part 2 (2013)
47 CFR Part 24 (2013): Subpart E
47 CFR Part 15 (2013): Subpart B
RSS-GEN Issue 4 (2014)
RSS-133 Issue 6 (2013)
ICES-003 Issue 5 (2012)

Test methods:
ANSI-TIA-603-C-2004
ANSI C63.4-2009
KDB 971168 D01 v02r01

3.2 Additions, deviations and exclusions from standards and accreditation

RSS-GEN Issue 4 (2014) and RSS-133 Issue 6 (2013) are not within the scope of accreditation.

Only radiated spurious emission, RF output power and conducted spurious emissions from AC-mains parts of the standards are measured by request from the client.

No other additions, deviations or exclusions have been made from standards and accreditation.

3.3 Test site

Measurements were performed at:

Intertek Semko AB.
Torshamnsgatan 43,
P.O. Box 1103
SE-164 22 Kista

Intertek Semko AB is a FCC listed test site with site registration number 90913
Intertek Semko AB is a FCC accredited conformity assessment body with designation number SE0002
Intertek Semko AB is an Industry Canada listed test facility with IC assigned code 2042G

Measurement chambers

Measurement Chamber	Type of chamber	IC Site filing #
BJÖRKHALLEN	Semi-anechoic 3 m	2042G-1

3.4 Mode of operation during the test

The EUT was tested with 120 V, 60 Hz. AC/DC adapter or PoE injector is used for powering EUT during tests.

Tests are made with QPSK, 16-QAM and 64-QAM modulation on the bottom (B), middle (M) and top (T) channels and with the channel bandwidths as stated in the table below.

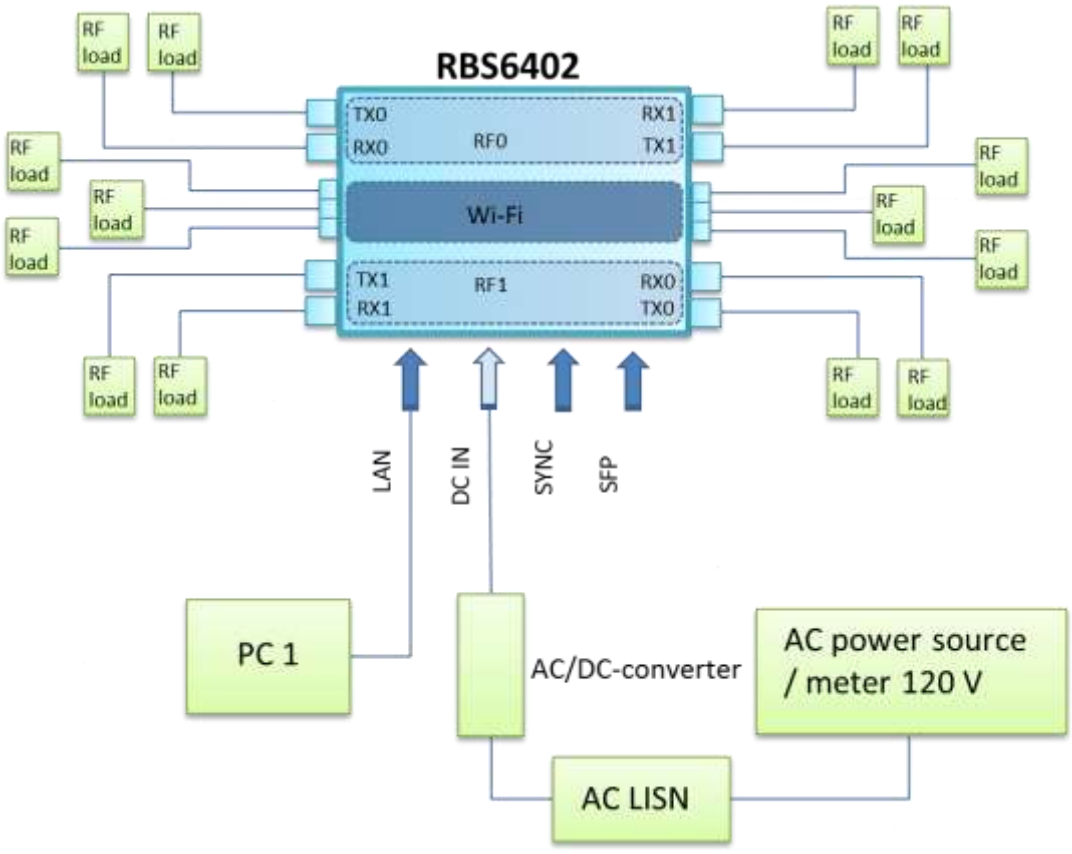
Mode	Channel BW [MHz]	TX B, M, T Frequencies [MHz]	TX B, M, T Channels	RX B, M, T Frequencies [MHz]	RX B, M, T Channels
LTE	5	1932.5 1960.0 1987.5	625 900 1175	1852.5 1880.0 1907.5	18625 18900 19175
LTE	20	1940.0 1960.0 1980.0	700 900 1100	1860.0 1880.0 1900.0	18700 18900 19100

The EUT is activated by software for maximum transmit power 2 x 0.25 W or 4 x 0.25 W (MIMO). Channel bandwidths 5 MHz and 20 MHz is used in tests.

Because RBS 6402 can be mounted on the wall (vertical position) or on the ceiling (horizontal position) a part of the radiated emission test cases are performed at the both positions.

3.5 Test setup block diagram

Conducted emissions



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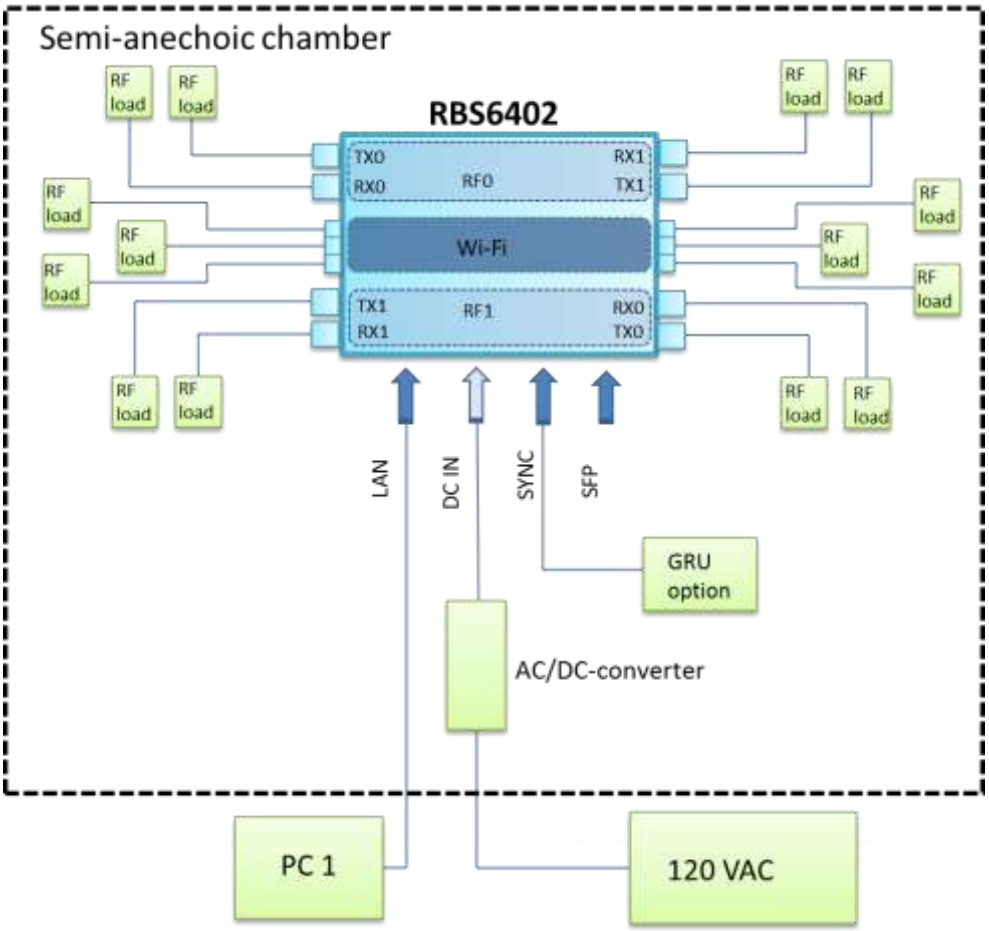
Radiated emissions



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4 TEST SUMMARY

The results in this report apply only to sample tested:

Standard	Description	Result
	Emission	
CFR 47, Part 2.1046, Part 24.232 RSS-Gen section 4.8 RSS-133 section 6.4	**RF output power** The EUT complies with the limits. The margin to the limit was at least 9.5 dB at 1960.0 MHz See clause 7.	**PASS**
CFR 47, Part 2.1049 RSS-Gen section 4.6	**Occupied bandwidth** Not Tested by request of the client. Test is performed by the client in another test house and reported in the corresponding documents.	**NT**
CFR 47, Part 2.1051, Part 24.238	**Intermodulation** Not Tested by request of the client. Test is performed by the client in another test house and reported in the corresponding documents.	**NT**
CFR 47, Part 2.1051, Part 24.238 RSS-Gen section 4.9 RSS-133 section 6.5	**Out of band spurious emissions, conducted** Not Tested by request of the client. Test is performed by the client in another test house and reported in the corresponding documents.	**NT**
CFR 47, Part 2.1053, Part 24.238 RSS-Gen section 4.9 RSS-133 section 6.5	**Transmitter out of band spurious emissions, radiated** The EUT complies with the limits. The margin to the limit was at least 30 dB at 18.0 GHz See clause 6.	**PASS**
CFR 47, Part 2.1055 RSS-Gen section 4.7 RSS-133 section 6.3	**Frequency stability** Not Tested by request of the client. Test is performed by the client in another test house and reported in the corresponding documents.	**NT**
CRF 47, Part 15.109 RSS-Gen section 6.1 ICES-003 section 6.2	**Receiver out of band spurious emissions, radiated** The EUT complies with the limits. The margin to the limit was at least 7.5 dB at 957.778 MHz See clause 6.	**PASS**
CRF 47, Part 15.107 ICES-003 section 6.1	**Conducted spurious emissions from AC-Mains** The EUT complies with the limits. The margin to the limit was at least 8.2 dB at 0.796 MHz See clause 5.	**PASS**

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5 CONDUCTED CONTINUOUS DISTURBANCES IN THE FREQUENCY-RANGE 0.15 - 30 MHZ

Date of test:	2015-03-11	**Test location:**	Björkhallen
EUT Serial:	C829414382	**Ambient temp:**	22 °C
Tested by:	Kajsa From	**Relative humidity:**	25 %
Test result:	Pass	**Margin:**	8.2 dB

5.1 Test set-up and test procedure

The test method is in accordance with ANSI C63.4 (2009).

The EUT was connected to the power via Artificial Mains Networks AMN.
The EUT was placed on an insulating support 0.8 m above the floor, 0.4 m from the vertical reference ground plane (RGP) and 0.8 m from the AMN/ISN.

Overview sweeps were performed for each lead.

During the tests the EUT was in receive mode.

Tests are made with EUT powered by both AC/DC adapter and PoE injector.

5.2 Conducted emission requirements:

The EUT shall meet the limits for the standards.
Reference: 47 CFR §15.107
ICES-003, section 8.8 table 3

Limits for conducted emission:

Frequency range [MHz]	Limits [dBµV]	
	Quasi-Peak	Average
0.15 – 0.50	66 – 56	56 – 46
0,50 – 5.00	56	46
5.00 – 30.0	60	50

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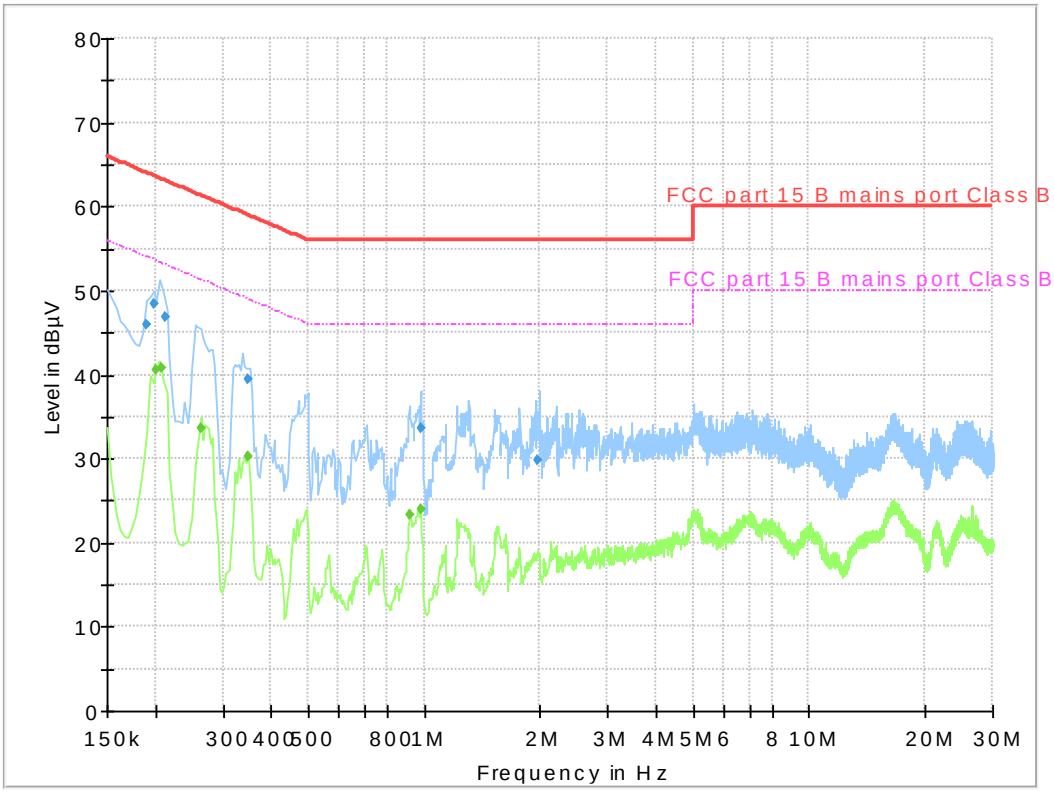
5.3 Test results: AC Power input port on AC/DC adapter



Diagram, Peak and Average overview sweep, EUT powered by AC/DC adapter

Measurement results, Quasi-peak

Frequency [MHz]	Level [dBµV]	Limit [dBµV]	Line L/N	Margin [dB]
0.191	46.0	64.0	N	18.0
0.198	48.4	63.7	L1	15.3
0.213	46.9	63.1	L1	16.2
0.347	39.5	59.0	L1	19.5
0.981	33.6	56.0	N	22.4
1.961	29.7	56.0	N	26.3

Measurement results, Average

Frequency [MHz]	Level [dBµV]	Limit [dBµV]	Line L/N	Margin [dB]
0.201	40.6	53.6	L1	13.0
0.209	40.7	53.2	L1	12.5
0.263	33.7	51.3	L1	17.6
0.348	30.3	49.0	L1	18.7
0.917	23.2	46.0	L1	22.8
0.979	24.0	46.0	N	22.0

Result [dBµV] = Analyser reading [dBµV] + cable loss [dB] + LISN insertion loss [dB]

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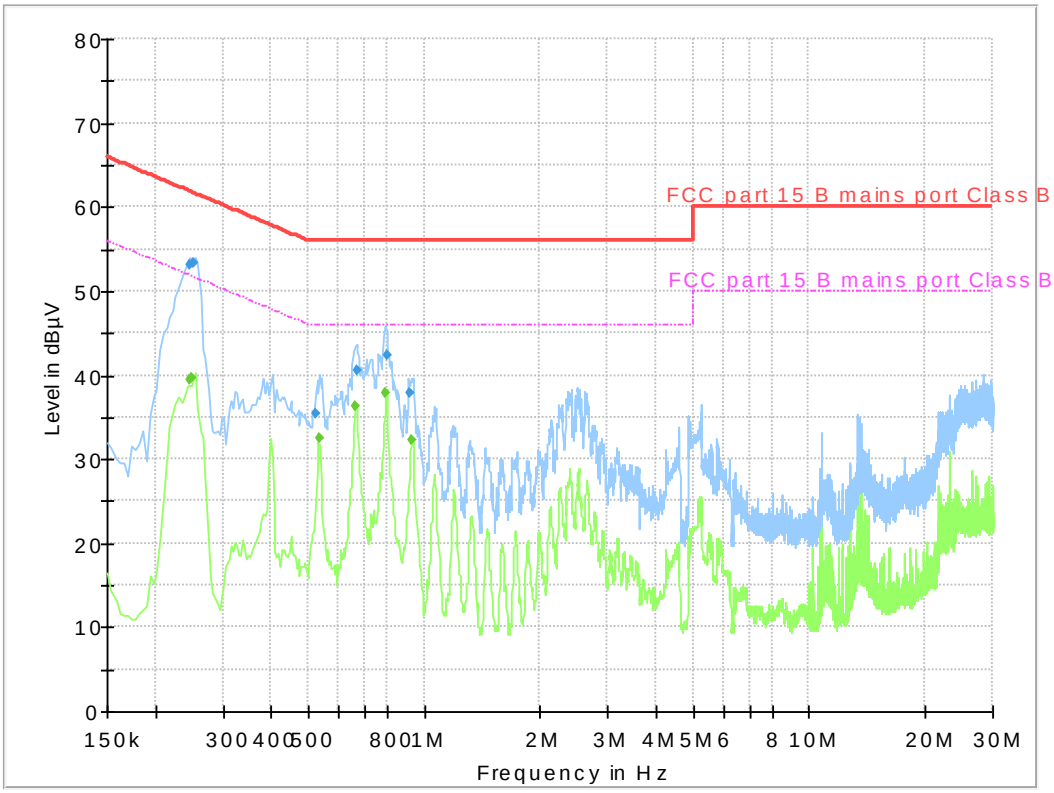
5.4 Test results: AC Power input port on PoE injector



Diagram, Peak and Average overview sweep, EUT powered by PoE injector

Measurement results, Quasi-peak

Frequency [MHz]	Level [dBµV]	Limit [dBµV]	Line L/N	Margin [dB]
0.245	53.1	61.9	L1	8.8
0.253	53.4	61.7	L1	8.3
0.525	35.4	56.0	N	20.6
0.667	40.6	56.0	N	15.4
0.802	42.5	56.0	L1	13.5
0.919	37.9	56.0	L1	18.1

Measurement results, Average

Frequency [MHz]	Level [dBµV]	Limit [dBµV]	Line L/N	Margin [dB]
0.245	39.4	51.9	L1	12.5
0.250	39.6	51.8	L1	12.2
0.532	32.5	46.0	N	13.5
0.664	36.2	46.0	N	9.8
0.796	37.8	46.0	L1	8.2
0.931	32.3	46.0	L1	13.7

Result [dBµV] = Analyser reading [dBµV] + cable loss [dB] + LISN insertion loss [dB]

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6 OUT OF BAND SPURIOUS EMISSIONS THE FREQUENCY-RANGE 30 MHZ TO 20 GHZ

Date of test:	2015-03-10	**Test location:**	Björkhallen
EUT Serial:	C829414382	**Ambient temp:**	22 – 23 °C
Tested by:	Matti Virkki, Kajsa From	**Relative humidity:**	23 – 28 %
Test result:	Pass	**Margin:**	7.5 dB

6.1 Test set-up and test procedure.

The test method is in accordance with ANSI C63.4 and ANSI-TIA-603-C-2004.

Both receiver and transmitter are active during the tests.

The EUT was set up in order to transmit maximum power, QPSK modulation and 5 MHz channel BW. Below 1 GHz two different carrier frequencies at the same time were used. Above 1 GHz 2*2 MIMO mode was used.

Antenna ports are terminated during the tests.

Both vertical and horizontal position of the EUT is evaluated. Below 1 GHz emissions are measured on EUT power by both AC/DC adapter and PoE injector. Above 1 GHz only AC/DC adapter is used.

Since the margin to the limit for the transmitter is large (more than 30 dB) not every combination of channel and EUT position is measured.

The EUT was placed on an insulating support 0.8 m above the turntable which is part of the reference ground plane.

Overview sweeps were performed with the measurement receiver in max-hold mode and the peak detector activated. Above 1 GHz both peak and average detector is activated.

6.2 Test conditions

Test set-up: **30 MHz to 1000 MHz**
Test receiver set-up:
Preview test: Peak, RBW 120 kHz. VBW 1 MHz
Final test: Quasi-Peak, RBW 120 kHz

Measuring distance: 3 m
Measuring angle: 0 – 359°
Antenna
- Height above ground plane: 1 – 4 m
- Polarisation: Vertical and Horizontal
- Type: Bilog

Test set-up: **1 GHz – 20 GHz**
Test receiver set-up:
Preview test: Peak, RBW 1 MHz. VBW 3 MHz
Average, RBW 1 MHz
Final test: Average, RBW 1 MHz
Peak, RBW 1 MHz

Measuring distance: 3 m
Measuring angle: 0 – 359°
Antenna

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Height above ground plane: 1 – 4 m
Polarisation: Vertical and Horizontal
Type: Horn
Antenna tilt: Activated

6.3 Radiated Emission requirements

The EUT shall meet the limits for the standards.

Receiver
Reference: 47 CFR §15.109
IC RSS-GEN Table 2
ICES-003 Table 5, Table 7

Limits for general radiated emission:

Frequency range [MHz]	Field strength at 3 m (dBµV/m)	Detector (dBµV/m)
30 – 88	40.0	Quasi Peak
88 – 216	43.5	Quasi Peak
216 – 960	46.0	Quasi Peak
960 – 1000	54.0	Quasi Peak
Above 1000	54.0 / 74.0	Average / Peak

The values for each measurement distance are given using an extrapolation factor of 20 dB/decade above 30 MHz and 40 dB/decade below 30 MHz according to §15.31(f)(1), §15.31(f)(2) and RSS-GEN sections 6.4 and 6.5.

The frequency range to be inspected is up to the fifth harmonics of the highest fundamental frequency according to 47 CFR §15.33 and ICES-003 Table 3.

Transmitter
Reference: 47 CFR §24.238
RSS-133 Section 6.5.1

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log(P) dB.
This gives a limit at -13 dBm.

The frequency range to be inspected is up to the tenth harmonics of the highest fundamental frequency according to 47 CFR 2.1057 and RSS-Gen Section 6.13.

The field strength limit is calculated using the plane wave relation.

$GP/4\pi R^2 = E^2 / 120\pi$

G: antenna gain
P: power (W)
R: measurement distance (m)

-13 dBm EIRP gives a field strength limit of 84.4 dBµV/m at a 3m measurement distance in an anechoic chamber.

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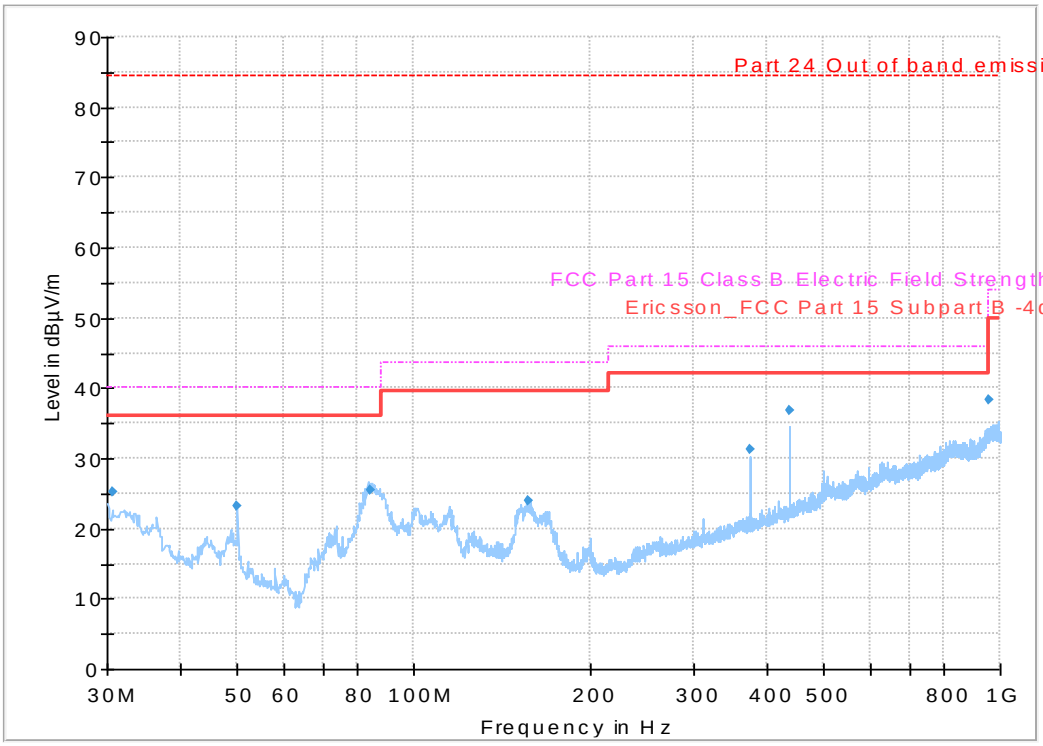
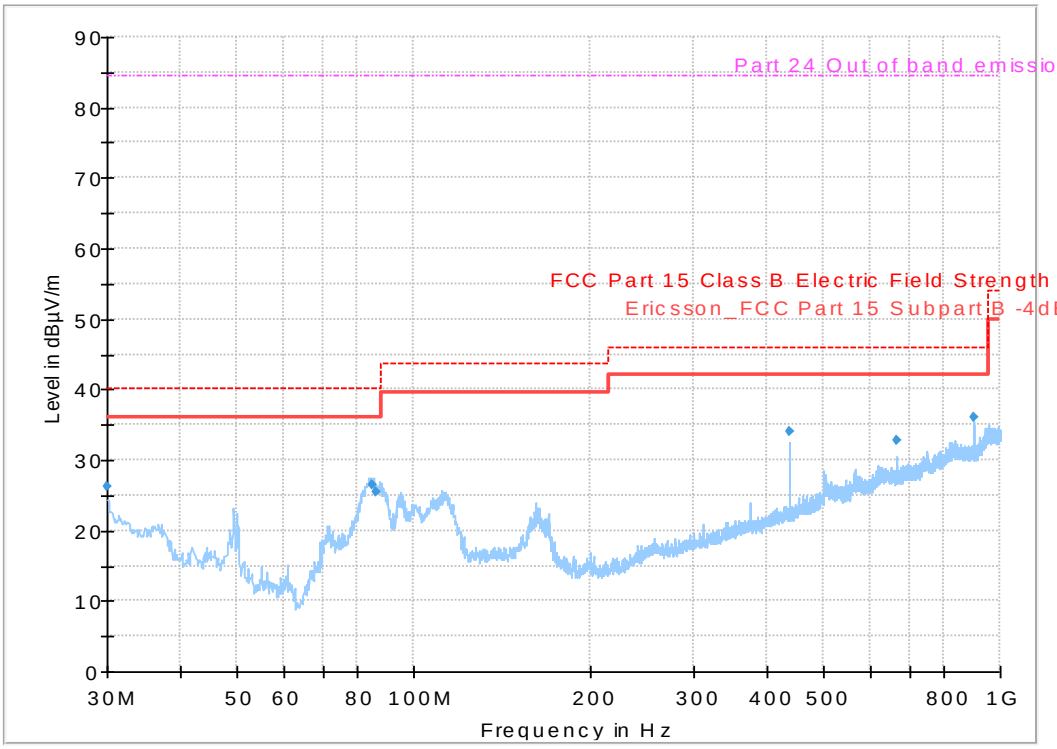
6.4 Test results 30 MHz – 1000 MHz



Diagram, Peak overview sweep, 30 – 1000 MHz at 3 m distance. Bottom channel. EUT in vertical position, powered by AC/DC adapter.



Diagram, Peak overview sweep, 30 – 1000 MHz at 3 m distance. Middle and top channel. EUT in vertical position, powered by AC/DC adapter.

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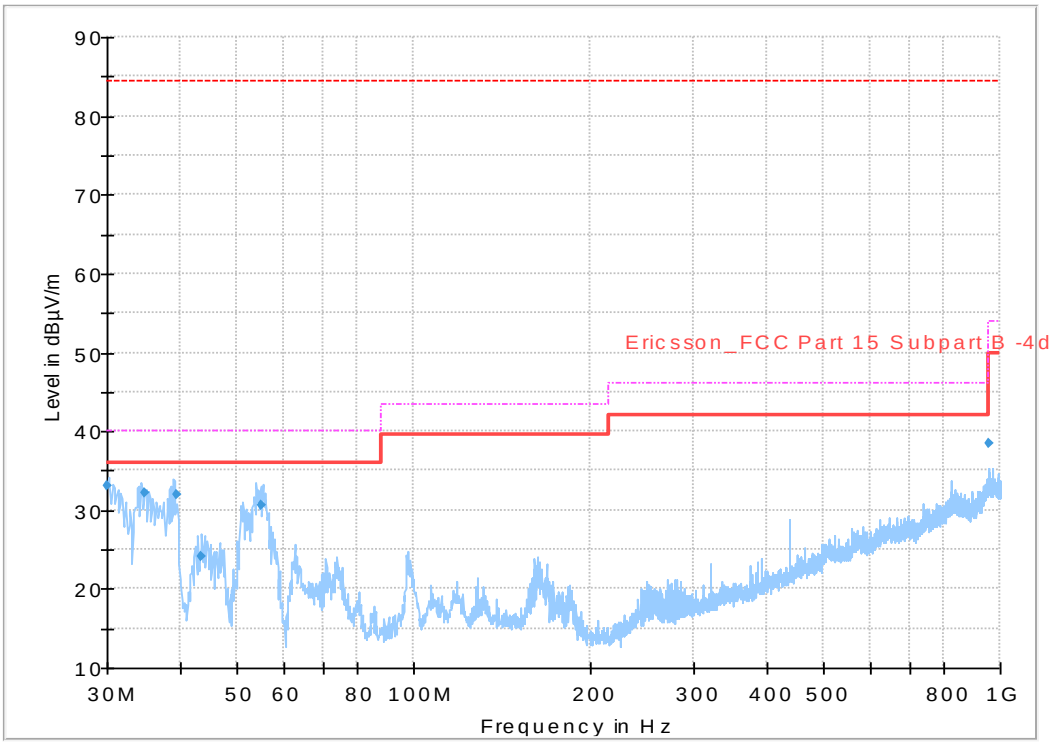
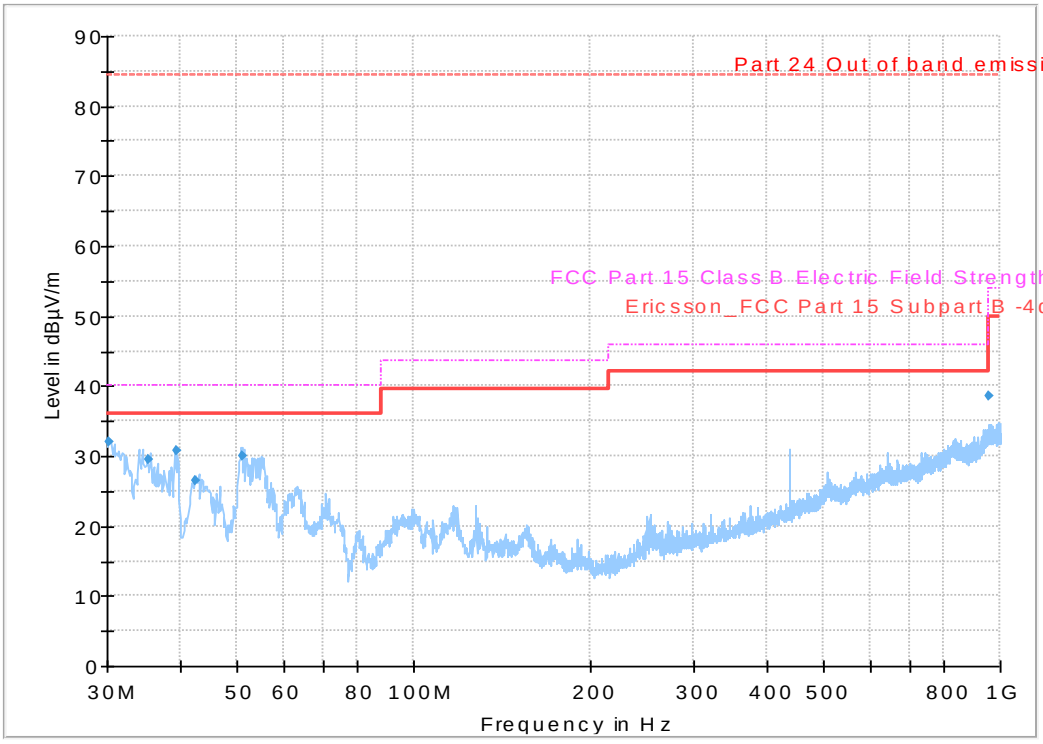


Diagram, Peak overview sweep, 30 – 1000 MHz at 3 m distance. Bottom channel. EUT in horizontal position, powered by PoE injector.



Diagram, Peak overview sweep, 30 – 1000 MHz at 3 m distance. Middle and top channel. EUT in horizontal position, powered by PoE injector.

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Measurement results, Quasi Peak

Bottom channel. EUT in vertical position, powered by AC/DC adapter.

Frequency [MHz]	Level [dBµV/m]	Limit, RX [dBµV/m]	Polarization H/V	Margin [dB]
30.720	25.1	40.0	V	14.9
49.980	23.3	40.0	V	16.7
84.247	25.5	40.0	V	14.5
156.635	23.9	43.5	V	19.6
375.010	31.3	46.0	V	14.7
437.495	36.9	46.0	V	9.1

Middle and top channel. EUT in vertical position, powered by AC/DC adapter.

Frequency [MHz]	Level [dBµV/m]	Limit, RX [dBµV/m]	Polarization H/V	Margin [dB]
30.060	26.1	40.0	V	13.9
84.649	26.4	40.0	V	13.6
86.254	25.4	40.0	V	14.6
437.515	34.1	46.0	V	11.9
667.775	32.8	46.0	H	13.3
901.924	36.0	46.0	H	10.0

Bottom channel. EUT in horizontal position, powered by PoE injector.

Frequency [MHz]	Level [dBµV/m]	Limit, RX [dBµV/m]	Polarization H/V	Margin [dB]
30.020	33.2	40.0	V	6.8
34.669	32.2	40.0	V	7.8
39.398	31.9	40.0	V	8.1
43.487	24.2	40.0	V	15.8
54.968	30.7	40.0	V	9.3
958.676	38.4	46.0	V	7.6

Middle and top channel. EUT in horizontal position, powered by PoE injector.

Frequency [MHz]	Level [dBµV/m]	Limit, RX [dBµV/m]	Polarization H/V	Margin [dB]
30.180	32.1	40.0	V	7.9
35.329	29.5	40.0	V	10.5
39.518	30.8	40.0	V	9.2
42.466	26.6	40.0	V	13.4
51.222	29.9	40.0	V	10.1
957.778	38.5	46.0	H	7.5

The margin to the TX limit is at least 45.9 dB.

Result [dBµV/m] = Analyser reading [dBµV] + Antenna factor [1/m] - Amplifier gain [dB] + Cable loss [dB]

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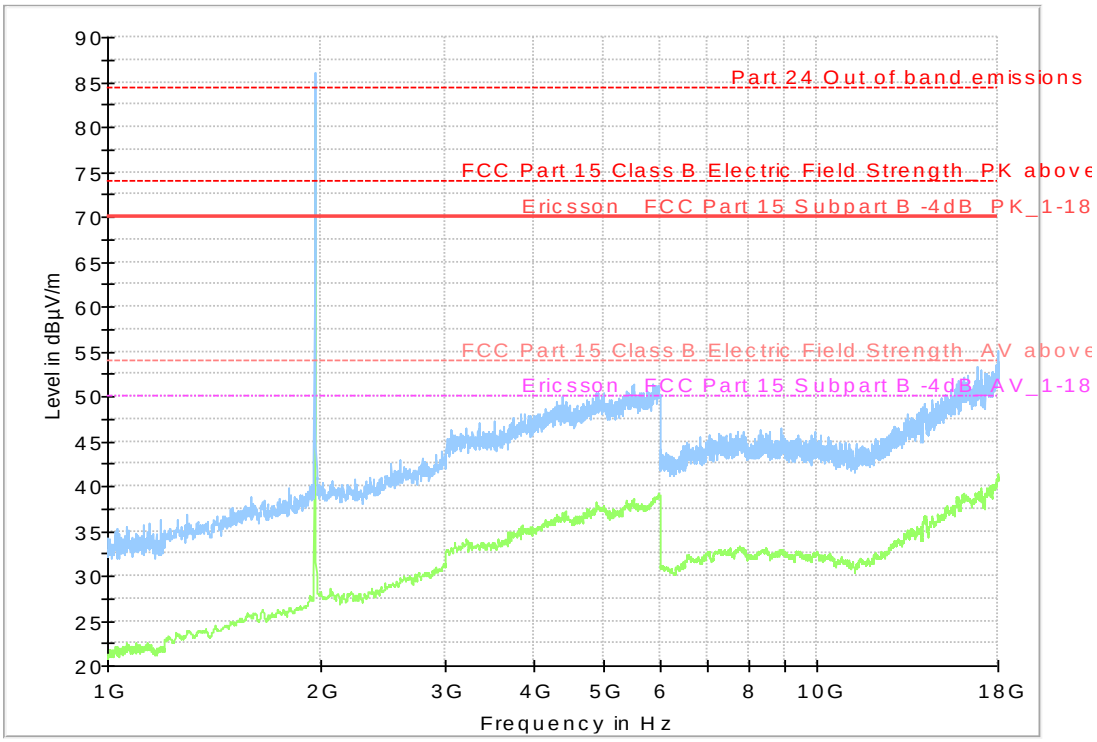
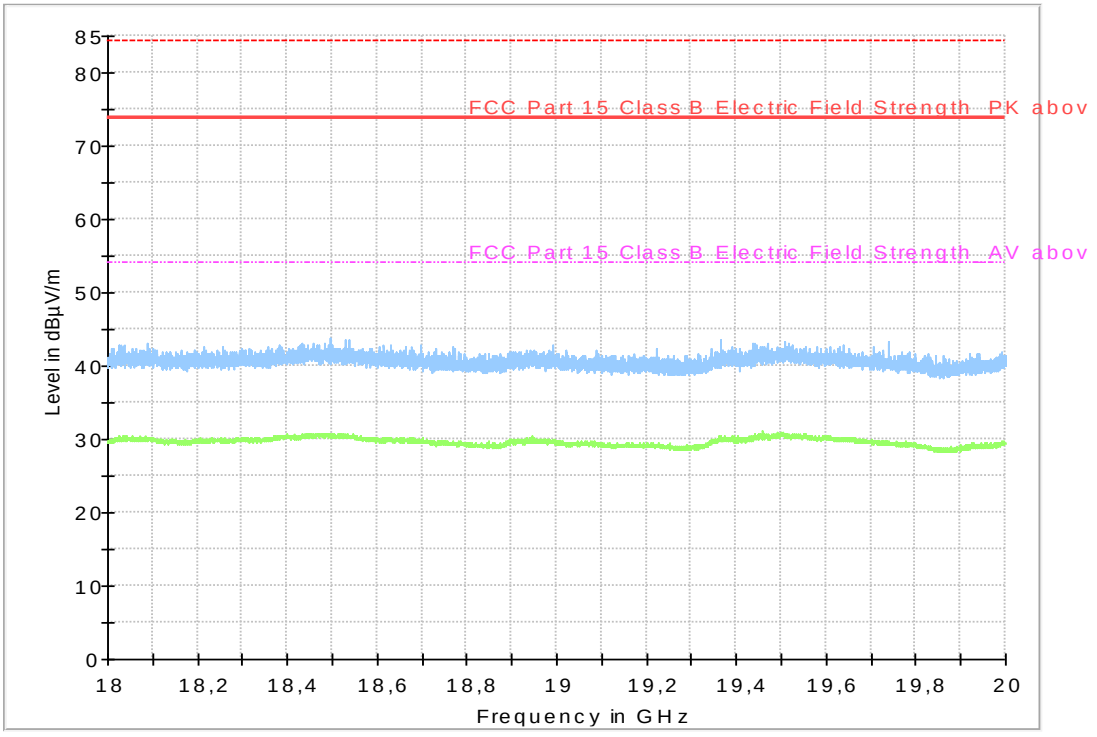
6.5 Test results 1 GHz – 20 GHz

Preview sweep is repeated for bottom, middle and top channel with EUT in vertical position and for middle channel with EUT in horizontal position. No significant diffrence in results are found for different channels or positions of EUT.



Diagram, Peak overview sweep, 1 – 18 GHz at 3 m distance. Middle channel. EUT in vertical position, powered by AC/DC adapter.



Diagram, Peak overview sweep, 18 – 20 GHz at 3 m distance. Middle channel. EUT in vertical position, powered by AC/DC adapter.

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Measurement results, Peak / Average

No emissions except carrier are found above noise floor for any frequency above 1 GHz.

All measured emissions in RX mode have a margin of more than 12 dB to the average limit and more than 20 dB to the peak limit.

All measured emissions in TX mode have a margin of more than 30 dB to the limit.

Result [dBµV/m] = Analyser reading [dBµV] + Antenna factor [1/m] - Amplifier gain [dB] + Cable loss [dB]

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7 RF OUTPUT POWER

Date of test:	2015-03-12	**Test location:**	Björkhallen
EUT Serial:	C829278266	**Ambient temp:**	23 °C
Tested by:	Matti Virkki, Kajsa From	**Relative humidity:**	25 %
Test result:	Pass	**Margin:**	9.5 dB

7.1 Test set-up and test procedure.

The test method is in accordance with ANSI-TIA-603-C-2004 and KDB971168 D01 v02r01.

The same test setup as in radiated spurious emission test was used to find the angle and antenna height which gives highest emission (see section 6). Spectrum analyser with channel power measurement function and substitution method is used to determine the RF output power.

The EUT was set up in order to emit maximum output power. The EUT was placed in vertical position and transmitting in 2*2 MIMO mode.

Measurements are made with 5 and 20 MHz channel bandwidth and on bottom, middle and top channel for QPSK modulation. For 16QAM and 64QAM modulation measurements are made with 5 and 20 MHz channel band width on middle channel.

7.2 Test conditions

5MHz channel BW:
Detector: RMS
RBW 100 kHz
VBV 300 kHz
Span 7 MHz
Trace Max hold

20 MHz channel BW:
Detector: RMS
RBW 300 kHz
VBV 1 MHz
Span 25 MHz
Trace Max hold

7.3 RF output power requirements:

The EUT shall meet the limits for the standards.

Reference: 47 CFR §24.232
Base stations with an emission bandwidth greater than 1 MHz are limited to 1640 watts/MHz equivalent isotropically radiated power (EIRP) with an antenna height up to 300 meters HAAT.

Reference: RSS-133, section 6.4
Base station transmitters operating in the band 1930-1995 MHz shall not have output power exceeding 100 watts.

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7.4 Test results

RF output power

Frequency [MHz]	Modulation	Channel bandwidth [MHz]	EIRP [dBm]	Limit [dBm]	Polarization H/V
1932.5	QPSK	5	37.1	50	V
1960.0	QPSK	5	37.9	50	V
1987.5	QPSK	5	39.1	50	V
1940.0	QPSK	20	33.7	50	V
1960.0	QPSK	20	35.2	50	V
1980.0	QPSK	20	34.2	50	V
1960.0	16QAM	5	40.5	50	V
1960.0	16QAM	20	39.0	50	V
1960.0	64QAM	5	38.0	50	V
1960.0	64QAM	20	34.2	50	V

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8 TEST EQUIPMENT

Conducted emission, test site Björkhallen

Equipment type	Manufacturer	Model	Inv. No.	Last Cal. date	Cal. interval
Measurement software	Rohde & Schwarz	EMC32	--	--	--
Receiver	Rohde & Schwarz	ESIB26	32291	07-2014	1 year
AMN / LISN	Rohde & Schwarz	ESH3-Z5	8768	07-2013	3 years
Pulse limiter	Rohde & Schwarz	ESH3-Z2	32454	07-2014	1 year

Radiated emission, test site Björkhallen

Equipment type	Manufacturer	Model	Inv. No.	Last Cal. date	Cal. interval
Measurement software	Rohde & Schwarz	EMC32	--	--	--
Receiver	Rohde & Schwarz	ESIB26	32291	07-2014	1 year
Receiver	Rohde & Schwarz	ESU 40	13178	07-2014	1 year
Bilog antenna	Chase	CBL6111	8578	07-2013	3 years
Preamplifier + antenna	BONN Elektronik	BLMA 1826-5A	31247	01-2014	3 years
Preamplifier + antenna	BONN Elektronik	BLMA 2640-5A	31248	01-2014	3 years
Horn antenna	EMCO	3115	4628	10-2012	3 years
Signal generator	Rohde & Schwarz	SMB100A	31326	07-2014	1 year
Open switch and control platform	Rohde & Schwarz	OSP130	32300	07-2014	1 year
Control unit	Maturo GMBH	NCD	32391	--	--

9 MEASUREMENT UNCERTAINTY

Continuous conducted disturbances with AMN in the frequency range 9 kHz to 30 MHz ± 3.6 dB

Measurement uncertainty for radiated disturbance

Uncertainty for the frequency range 30 to 1000 MHz at 3 m	± 4.9 dB
Uncertainty for the frequency range 30 to 1000 MHz at 10 m	± 4.8 dB
Uncertainty for the frequency range 1.0 to 18 GHz at 3 m	± 5.4 dB
Uncertainty for the frequency range 18 to 26 GHz at 3 m	± 5.5 dB
Uncertainty for the frequency range 26 to 40 GHz at 3 m	± 5.6 dB

Measurement uncertainty is calculated in accordance with CISPR 16-4-2:2011.
The measurement uncertainty is given with a confidence of 95 %.

10 TEST SET UP AND EUT PHOTOS

EUT photos are in separate document 1507865STO, Annex 1, Ed 1.

Test setup photos are in separate document 1507865STO, Annex 2, Ed 1.