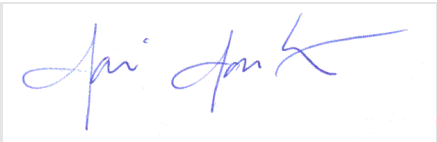
FCC Part 15C Compliance Test Report

Test Report no.:	FCC15C_RM-491_04.doc	**Date of Report:**	30-Nov-2009
Number of pages:	32	**Customer's Contact person:**	Jyrki Juvani
Testing laboratory:	TCC Nokia Tampere Laboratory P.O. Box 68 Sinitaival 5 FIN-33720 TAMPERE, FINLAND Tel. +358 (0) 7180 46800 Fax. +358 (0) 7180 46880	**Customer:**	Nokia Corporation P.O. Box 50 Elektroniikkatie 10 FIN-90571 OULU, FINLAND Tel. +358 (0) 7180 08000 Fax. +358 (0) 7180 47222
FCC listing no.: **IC recognition no.:**	94436 661AK-1		
Tested devices/ accessories:	**Phone RM-491 hw 0706 / Battery BL-5F, AC charger AC-8E, Headset HS-48**		
FCC ID:	LJPRM-491X	**IC:**	661E-RM491
Supplement reports:	-		
Testing has been carried out in accordance with:	**CFR 47, FCC rules Part 15 Subpart C, ANSI C63.4 (2003), Public Notice DA 00-705, DTS procedures KDB 558074, IC standards RSS-GEN (Issue 2, June 2007) and RSS-210 (Issue 7, June 2007). Deviations, modifications or clarifications (if any) to above mentioned documents are written in each section under "Test method and limit".**		
Documentation:	The test report must always be reproduced in full; reproduction of an excerpt only is subject to written approval of the testing laboratory. The documentation of the testing performed on the tested devices is archived for 15 years at TCC Nokia.		
Test Results:	**The EUT complies with the requirements in respect of all parameters subject to the test.** The test results relate only to devices specified in this document.		
Date and signature for the contents:	 Digitally signed by Jari Jantunen Date: 2009.11.30 14:09:55 +02'00'		

Jari Jantunen, System Manager, EMC

1. Summary for FCC Part 15C Compliance Test Report

Date of receipt	13-Nov-2009
Testing completed	17-Nov-2009
The customer's contact person	Jyrki Juvani
Test Plan referred to	T:\Projects\RM-491\TestPlan_RS\RS_testplan_RM-491_CR_HWID0706.xls
Notes	-
Document name	FCC15C_RM-491_04.doc

1.1. EUT and Accessory Information

The EUT is a 7-band (GSM850/900/1800/1900 and WCDMA Band I/II(1900)/VIII) mobile phone with GPRS, EGPRS, Bluetooth and WLAN. Bluetooth and WLAN are tested with maximum rated TX power.

Product	Type	SN	HW	MV	SW	DUT
Phone	RM-491	004401107690188	0706	-	022.009	42096
Phone	RM-491	004401107690170	0706	-	022.009	42097
Battery	BL-5F	3932139163160564079;0670498	-	-	-	42098
AC charger	AC-8E	4090499262040500403;0675387	-	-	-	42088
Headset	HS-48	0694340842283105160	-	-	-	42099

1.2. Summary of Test Results

WLAN:

Section in CFR 47	Section in *RSS-GEN* or RSS-210	Name of the test	Result
15.247(b)(1)	A8.4 (4)	Conducted peak output power	PASSED
15.247(d)	A8.5	Band edge compliance of RF emissions	PASSED
15.247(d)	A8.5	Spurious RF conducted emissions	PASSED
15.247(d), 15.209	A8.5	Spurious radiated emissions	PASSED
15.207	*7.2.2*	AC powerline conducted emissions	PASSED
15.247(a)(2)	A8.2 (a)	6 dB bandwidth	PASSED
15.247(e)	A8.2 (b)	Power spectral density	PASSED

PASSED The EUT complies with the essential requirements in the standard.
FAILED The EUT does not comply with the essential requirements in the standard.
NP The test was not performed by the TCC Nokia Tampere Laboratory.

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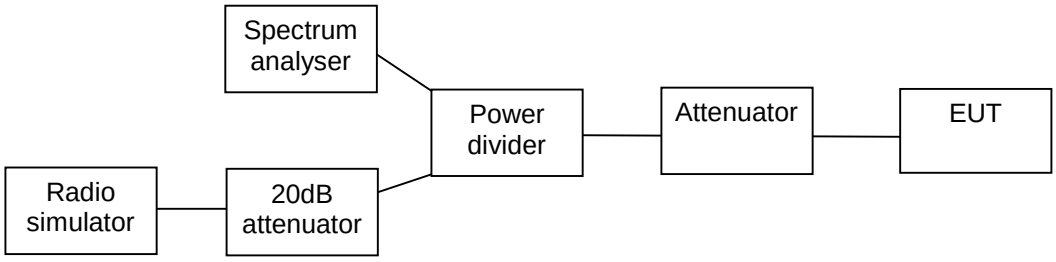
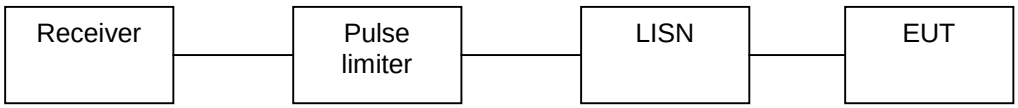
2. Test setups

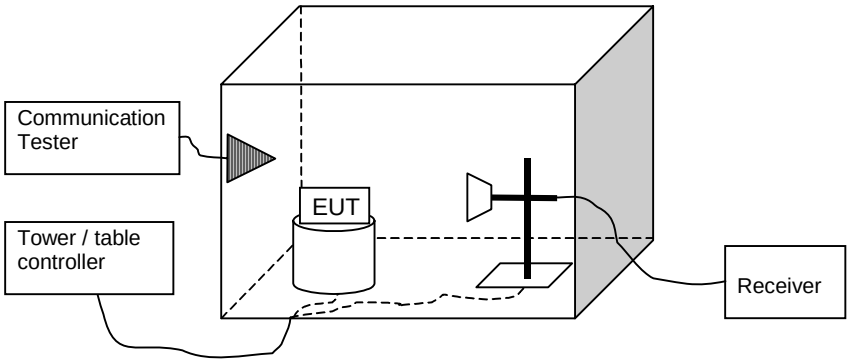
2.1. Conducted RF test setup



2.2. AC powerline conducted emissions test setup



2.3. Radiated test setup



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3. Conducted peak output power

(FCC §15.247(b)(1), RSS-210 A8.4 (4))

EUT with DUT number	RM-491 DUT 42097
Accessories with DUT numbers	BL-5F DUT 42098
Operation Voltage [V] / [Hz]	Nominal
Result	PASSED
Remarks	-
Temp [°C] / Humidity [%RH] / Air Pressure [kPa]	21 / 46 / 101.7
Date of measurements	13-Nov-2009
Measured by	Jari Jantunen

3.1. Test method and limit

The measurement is made according to DTS procedures KDB 558074 and IC standard RSS-210.

Limits for conducted peak output power measurements

Frequency range [MHz]	Limit [W]	Limit [dBm]
2400 – 2483.5	≤ 1	≤ 30

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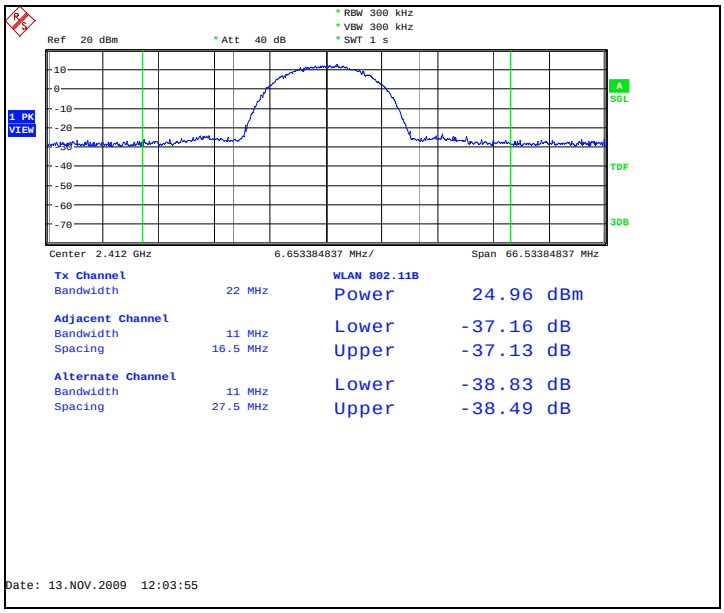
3.2. WLAN Test results

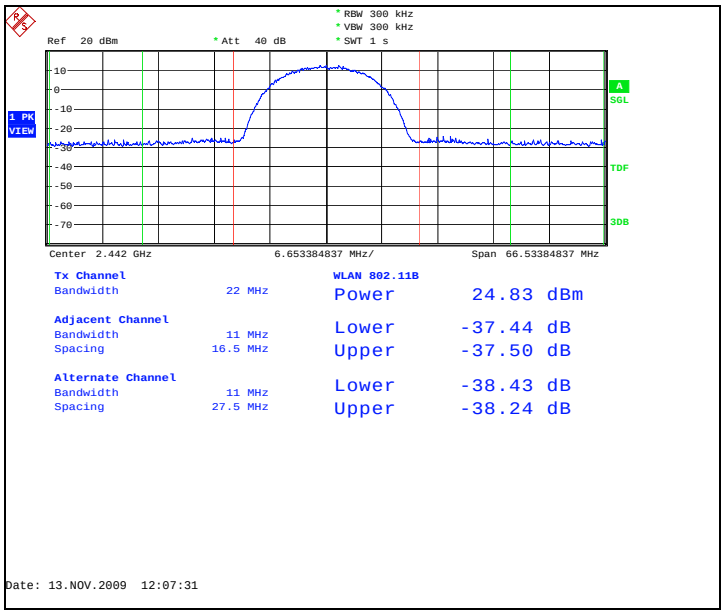
3.2.1 DSSS mode, QPSK modulation, 11 Mbps data rate

Channel / f_C [MHz]	P [dBm]	P [W]	Result
1 / 2412	24.96	0.313	PASSED
7 / 2442	24.83	0.304	PASSED
11 / 2462	24.39	0.275	PASSED

Channel 1 / 2412 MHz



Channel 7 / 2442 MHz



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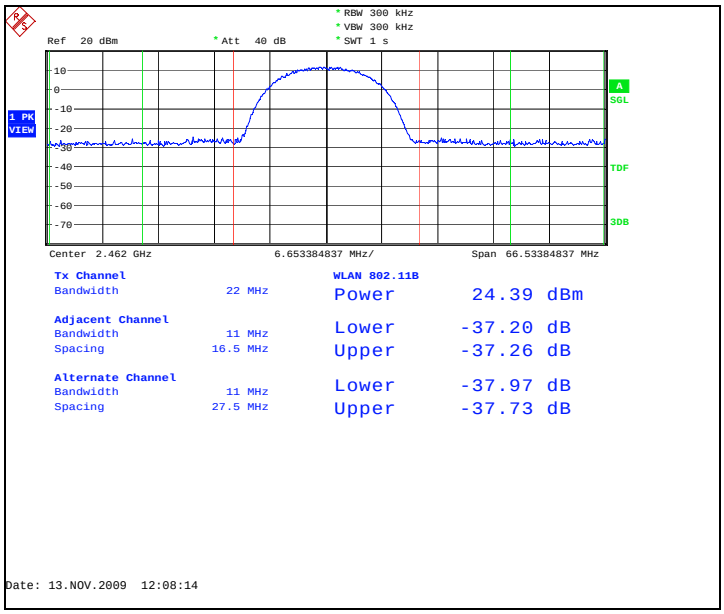
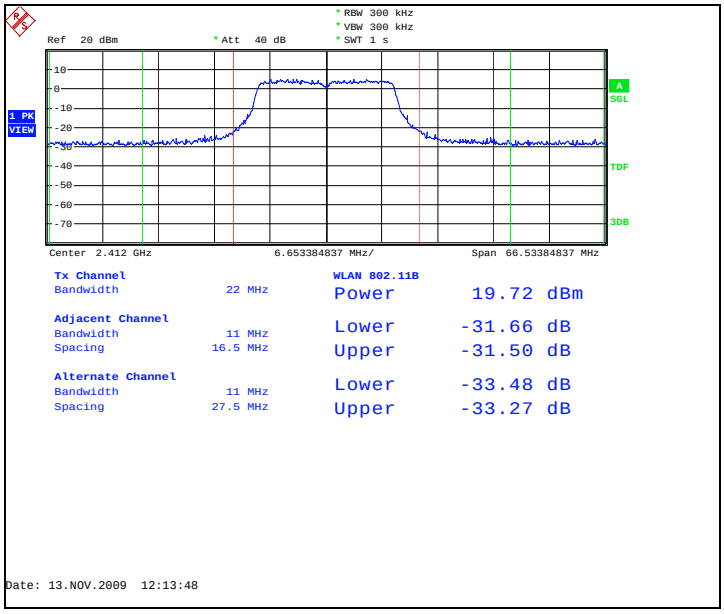
Channel 11 / 2462 MHz



3.2.2 OFDM mode, BPSK modulation, 6 Mbps data rate

Channel / f_C [MHz]	P [dBm]	P [W]	Result
1 / 2412	19.72	0.094	PASSED
7 / 2442	23.58	0.228	PASSED
11 / 2462	19.31	0.085	PASSED

Channel 1 / 2412 MHz



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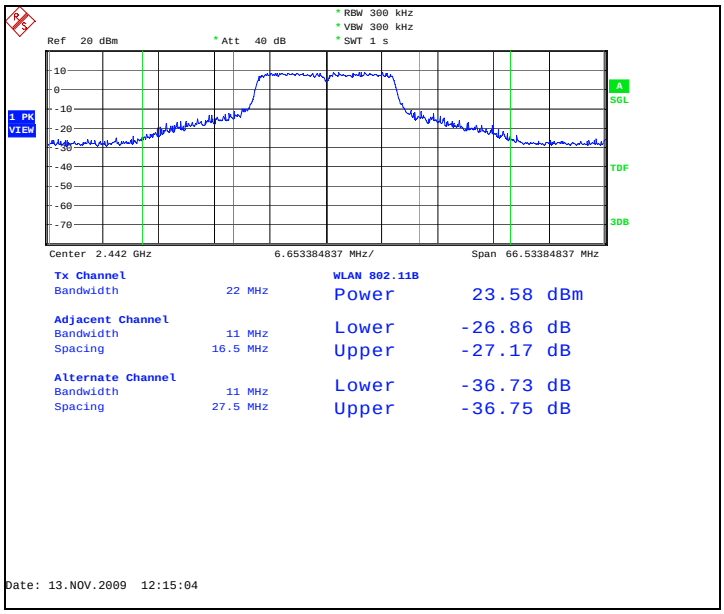
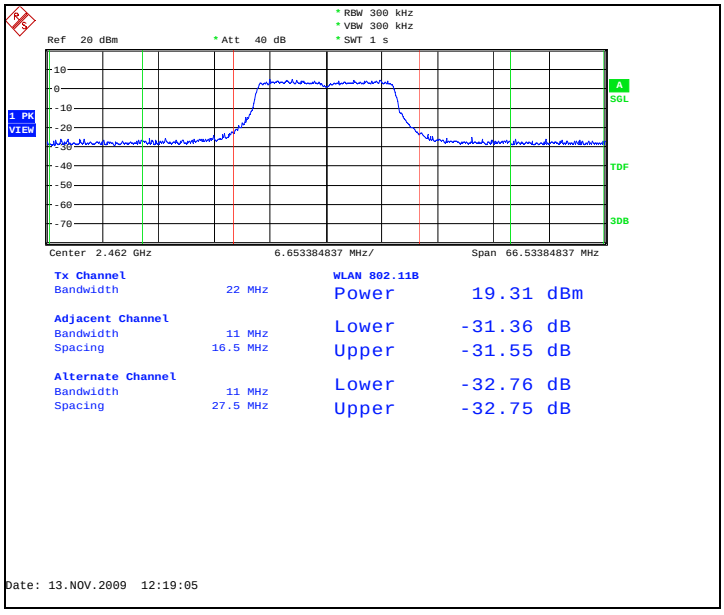
Channel 7 / 2442 MHz



Channel 11 / 2462 MHz



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4. Band edge compliance of RF emissions

(FCC §15.247(d), RSS-210 A8.5)

EUT with DUT number	RM-491 DUT42096
Accessories with DUT numbers	BL-5F DUT42098, AC-8E DUT42088, HS-48 DUT42099
Operation Voltage [V] / [Hz]	115 / 60
Result	PASSED
Remarks	-
Temp [°C] / Humidity [%RH] / Air Pressure [kPa]	21 / 59 / 101.6
Date of measurements	16-Nov-2009 -17-Nov-2009
Measured by	Hannu Söderholm

4.1. Test method and limit

The measurement is made according to DTS procedures KDB 558074 and IC standard RSS-210.

Limits for band edge compliance of RF emissions measurements (3 m measurement distance)

Frequency range [MHz]	Limit Average [dBµV/m]	Limit Peak [dBµV/m]
Below 2390 and above 2483.5	≤ 54	≤ 74

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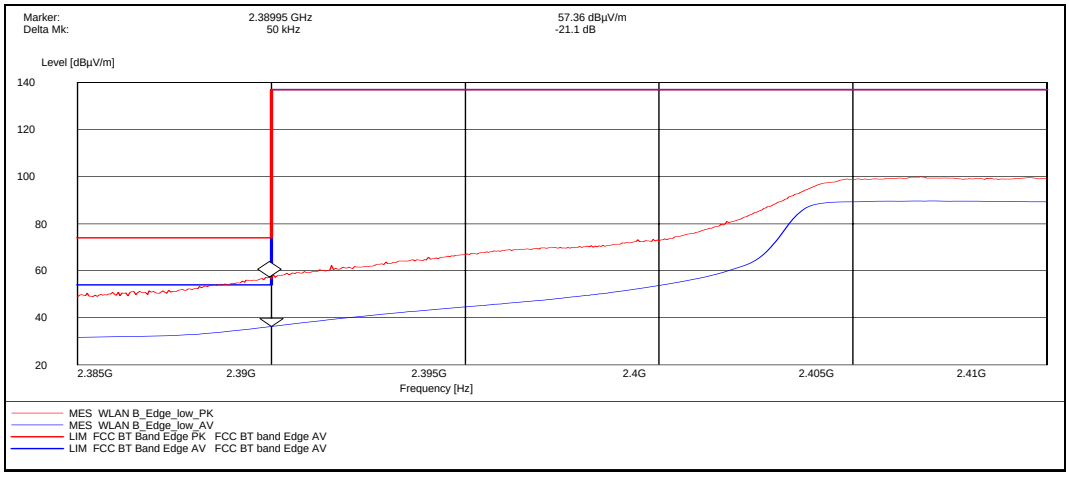
4.2. WLAN Test results

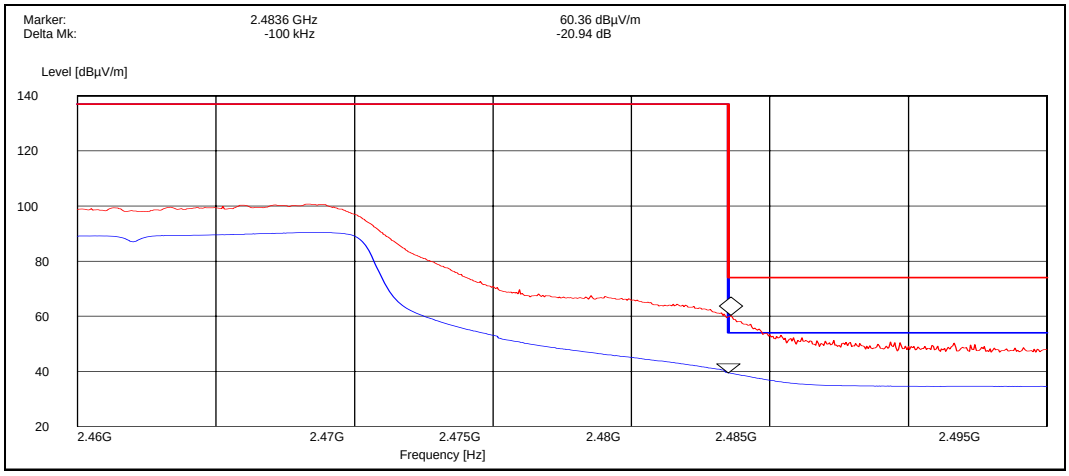
4.2.1 DSSS mode, QPSK modulation, 11 Mbps data rate

Channel 1 / 2412 MHz



Detector (RBW: 1 MHz)	E [dBµV/m]	Result
Peak	57.40	PASSED
Average	36.30	PASSED

Channel 11 / 2462 MHz



Detector (RBW: 1 MHz)	E [dBµV/m]	Result
Peak	60.40	PASSED
Average	39.40	PASSED

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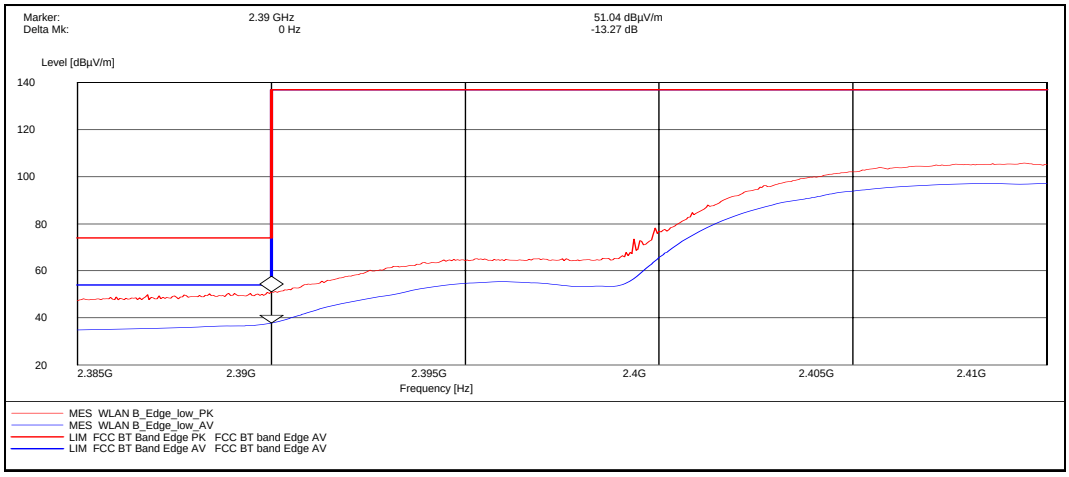
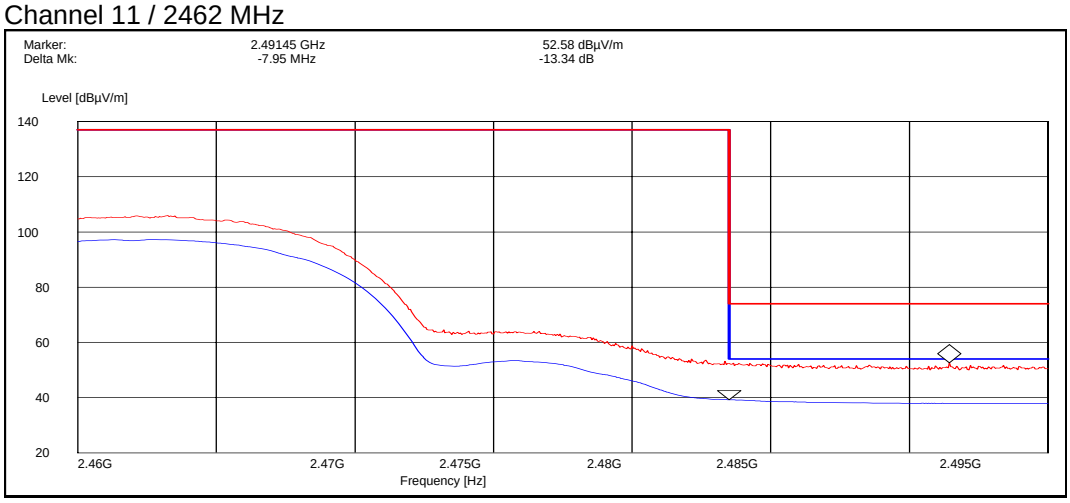
4.2.2 OFDM mode, BPSK modulation, 6 Mbps data rate

Channel 1 / 2412 MHz



Detector (RBW: 1 MHz)	E [dBµV/m]	Result
Peak	51.00	PASSED
Average	37.80	PASSED

Channel 11 / 2462 MHz



Detector (RBW: 1 MHz)	E [dBµV/m]	Result
Peak	52.60	PASSED
Average	39.20	PASSED

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5. Spurious RF conducted emissions
(FCC §15.247(d), RSS-210 A8.5)

EUT with DUT number	RM-491 DUT 42097
Accessories with DUT numbers	BL-5F DUT 42098
Operation Voltage [V] / [Hz]	Nominal
Result	PASSED
Remarks	-
Temp [°C] / Humidity [%RH] / Air Pressure [kPa]	21 / 46 / 101.7
Date of measurements	13-Nov-2009
Measured by	Jari Jantunen

5.1. Test method and limit
The measurement is made according to DTS procedures KDB 558074 and IC standard RSS-210.

Limits for spurious RF conducted emissions measurements

Frequency range [MHz]	Limit [dBc]
1 – 25000	≤ -20

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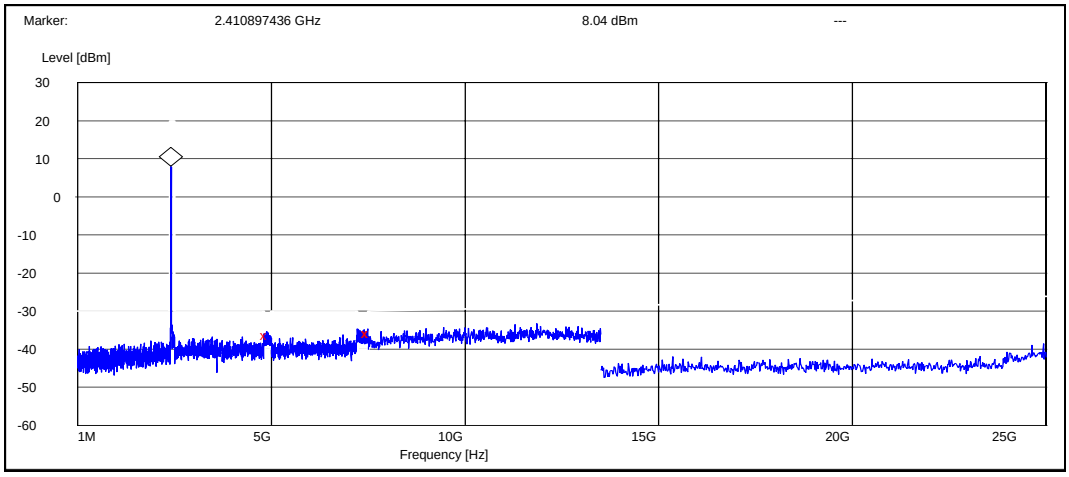
5.2. WLAN Test results

5.2.1 DSSS mode, QPSK modulation, 11 Mbps data rate

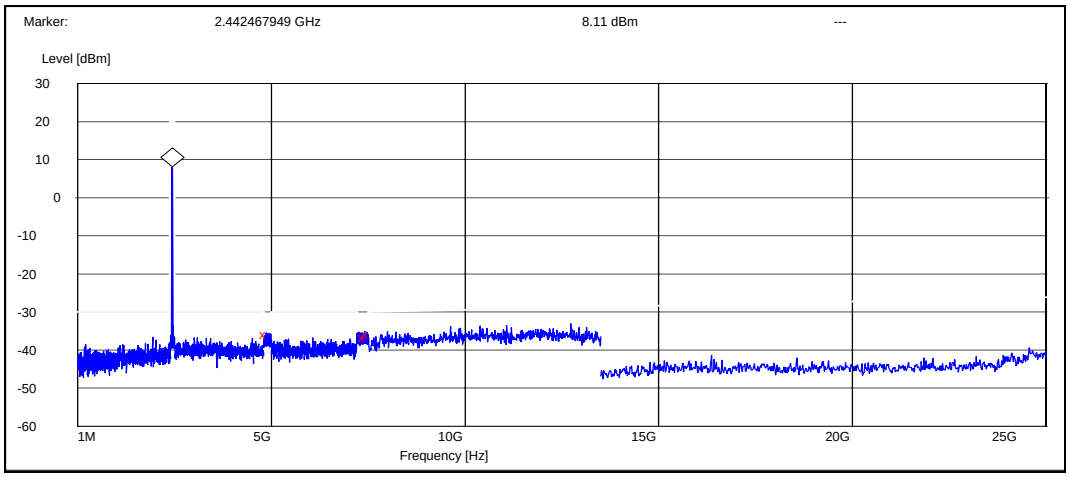
Channel 1 / 2412 MHz



Peak (RBW: 100 kHz, VBW: 100 kHz)

Frequency [MHz]	P [dBc]	Result
4875.641026	-44.438270	PASSED
7489.903846	-43.938270	PASSED
7500.000000	-43.938270	PASSED

Channel 7 / 2442 MHz



Peak (RBW: 100 kHz, VBW: 100 kHz)

Frequency [MHz]	P [dBc]	Result
4861.858974	-43.913981	PASSED
7409.615385	-44.913981	PASSED
7500.000000	-43.913981	PASSED

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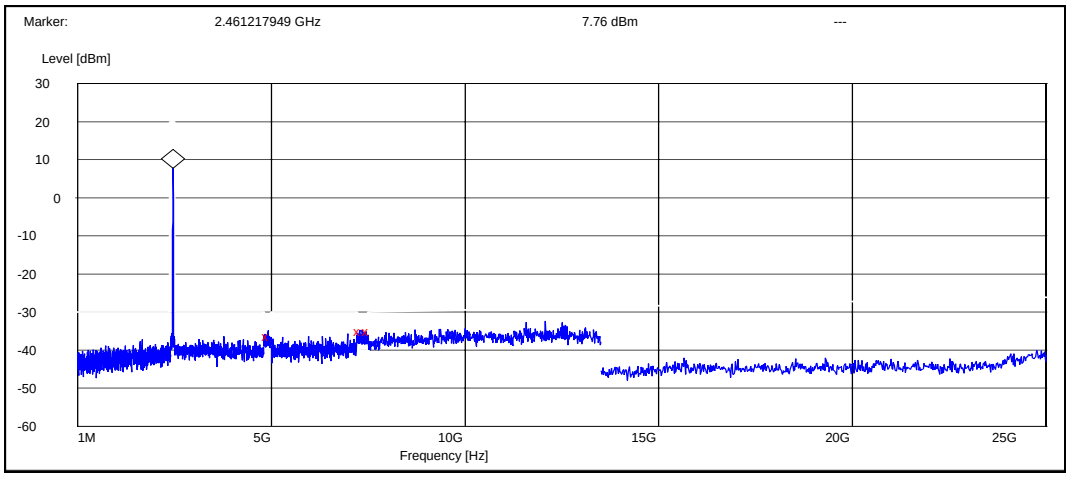
Channel 11 / 2462 MHz

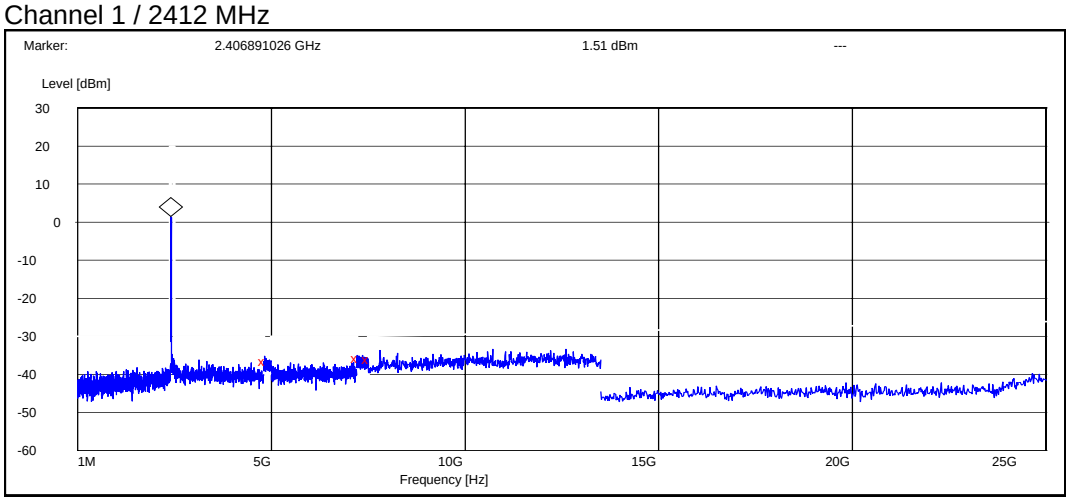


Peak (RBW: 100 kHz, VBW: 100 kHz)

Frequency [MHz]	P [dBc]	Result
4919.230769	-43.960906	PASSED
7280.769231	-42.860906	PASSED
7500.000000	-42.960906	PASSED

5.2.2 OFDM mode, BPSK modulation, 6 Mbps data rate

Channel 1 / 2412 MHz



Peak (RBW: 100 kHz, VBW: 100 kHz)

Frequency [MHz]	P [dBc]	Result
4819.551282	-38.006426	PASSED
7218.269231	-37.306426	PASSED
7500.000000	-37.606426	PASSED

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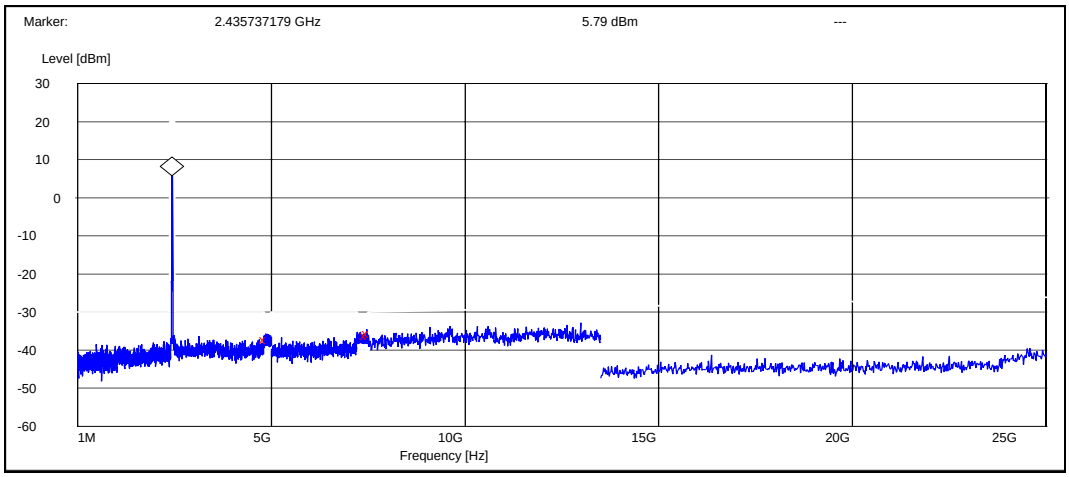
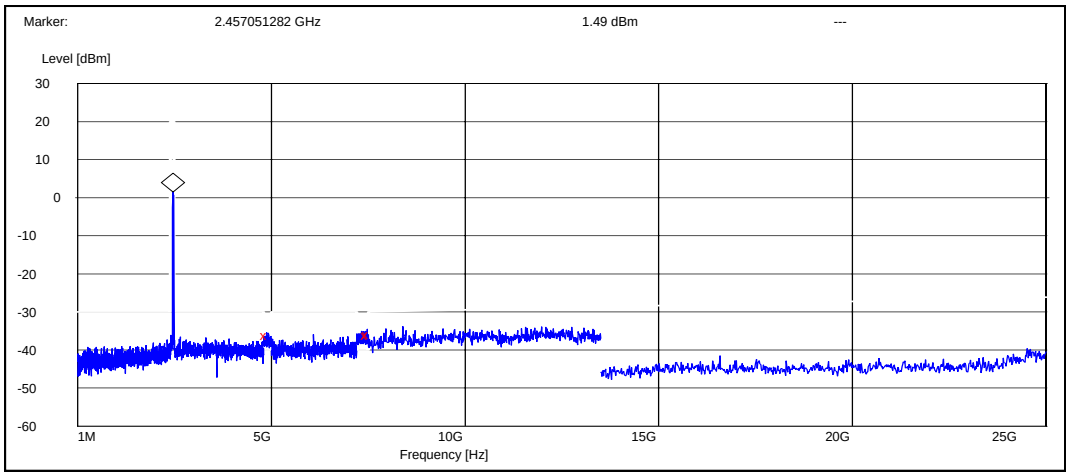
Channel 7 / 2442 MHz



Peak (RBW: 100 kHz, VBW: 100 kHz)

Frequency [MHz]	P [dBc]	Result
4853.525641	-42.891816	PASSED
7464.423077	-41.791816	PASSED
7500.000000	-41.391816	PASSED

Channel 11 / 2462 MHz



Peak (RBW: 100 kHz, VBW: 100 kHz)

Frequency [MHz]	P [dBc]	Result
4881.089744	-37.587600	PASSED
7474.519231	-37.687600	PASSED
7500.000000	-37.287600	PASSED

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6. Spurious radiated emissions

(FCC §15.247(d), §15.209, RSS-210 A8.5)

EUT with DUT number	RM-491 DUT42096
Accessories with DUT numbers	BL-5F DUT42098, AC-8E DUT42088, HS-48 DUT42099
Operation Voltage [V] / [Hz]	115 / 60
Result	PASSED
Remarks	-
Temp [°C] / Humidity [%RH] / Air Pressure [kPa]	21 / 59 / 101.6
Date of measurements	16-Nov-2009 -17-Nov-2009
Measured by	Hannu Söderholm

6.1. Test method and limit

The measurement is made according to DTS procedures KDB 558074 and IC standard RSS-210 as follows:

The measurement is divided into the Preliminary Measurement and the Final Measurement.

The suspected frequencies are searched for in Preliminary Measurement with absorbers on the floor and measuring antenna at fixed height using 2-axis EUT position system.

The Final Measurement is performed in the Semi-Anechoic Chamber with conducting metal floor, if the Preliminary Measurement results are closer than 20 dB to the permissible value.

The EUT is placed at nonconductive plate at the turntable center.

For each suspected frequency, the turntable is rotated 360 degrees and antenna is scanned from 1 to 4 m. This is repeated for both horizontal and vertical receive antenna polarizations.

The emissions less than 20 dB below the permissible value are reported.

The measurement results are obtained as described below:

$$E\ [\mu V/m] = U_{RX} + A_{TOT}$$

Where U_{RX} is receiver reading and A_{TOT} is total correction factor including cable loss, antenna factor and preamplifier gain ($A_{TOT} = L_{CABLES} + AF - G_{PREAMP}$).

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Limits for spurious radiated emissions measurements (3 m measurement distance)

Frequency range [MHz]	Limit [µV/m]	Limit [dBµV/m]	Detector
30 – 88	100	40	Quasi peak
88 – 216	150	43.5	Quasi peak
216 – 960	200	46	Quasi peak
960 – 1000	500	54	Quasi peak
Above 1000	500	54	Average
Above 1000	5000	74	Peak

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6.2. WLAN Test results

6.2.1 DSSS mode, QPSK modulation, 11 Mbps data rate

TX mode, channel 1 / 2412 MHz
Peak (RBW: 1 MHz)

Frequency [MHz]	E [dBµV/m]	E [µV/m]	U_{RX} [dBµV]	A_{TOT} [dB]	Polarisation	Result
4824.000000	40.00	100.00	41.10	-1.1	HORIZONTAL	PASSED
7236.000000	43.30	146.22	40.70	2.6	HORIZONTAL	PASSED

Average (RBW: 1 MHz)

Frequency [MHz]	E [dBµV/m]	E [µV/m]	U_{RX} [dBµV]	A_{TOT} [dB]	Polarisation	Result
4824.000000	27.20	22.91	28.30	-1.1	HORIZONTAL	PASSED
7236.000000	30.30	32.73	27.70	2.6	HORIZONTAL	PASSED

TX mode, channel 7 / 2442 MHz
Quasi peak (RBW: 120 kHz)

Frequency [MHz]	E [dBµV/m]	E [µV/m]	U_{RX} [dBµV]	A_{TOT} [dB]	Polarisation	Result
35.609619	18.90	8.81	31.30	-12.4	VERTICAL	PASSED
38.195391	24.00	15.85	38.20	-14.2	VERTICAL	PASSED

Peak (RBW: 1 MHz, VBW: 1 MHz)

Frequency [MHz]	E [dBµV/m]	E [µV/m]	U_{RX} [dBµV]	A_{TOT} [dB]	Polarisation	Result
4884.271543	42.70	136.46	43.90	-1.2	VERTICAL	PASSED
4884.769539	42.70	136.46	43.90	-1.2	VERTICAL	PASSED
7327.155311	43.20	144.54	40.30	2.9	VERTICAL	PASSED
7332.165331	43.00	141.25	40.10	2.9	VERTICAL	PASSED
17498.993988	52.70	431.52	33.80	18.9	HORIZONTAL	PASSED
17787.079158	56.00	630.96	35.10	20.9	VERTICAL	PASSED

Average (RBW: 1 MHz)

Frequency [MHz]	E [dBµV/m]	E [µV/m]	U_{RX} [dBµV]	A_{TOT} [dB]	Polarisation	Result
4883.271543	29.30	29.17	30.50	-1.2	VERTICAL	PASSED
4884.769539	29.10	28.51	30.30	-1.2	VERTICAL	PASSED
7328.665331	30.50	33.50	27.60	2.9	VERTICAL	PASSED
7331.655311	30.70	34.28	27.80	2.9	VERTICAL	PASSED
17493.493988	39.70	96.61	20.80	18.9	HORIZONTAL	PASSED
17787.079158	42.20	128.82	21.30	20.9	VERTICAL	PASSED

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TX mode, channel 11 / 2462 MHz
Peak (RBW: 1 MHz)

Frequency [MHz]	E [dBµV/m]	E [µV/m]	U_{RX} [dBµV]	A_{TOT} [dB]	Polarisation	Result
4924.000000	43.50	149.62	44.60	-1.1	VERTICAL	PASSED
7386.000000	42.80	138.04	39.60	3.2	HORIZONTAL	PASSED

Average (RBW: 1 MHz)

Frequency [MHz]	E [dBµV/m]	E [µV/m]	U_{RX} [dBµV]	A_{TOT} [dB]	Polarisation	Result
4924.000000	28.40	26.30	29.50	-1.1	VERTICAL	PASSED
7386.000000	30.20	32.36	27.00	3.2	HORIZONTAL	PASSED

6.2.2 OFDM mode, BPSK modulation, 6 Mbps data rate

TX mode, channel 1 / 2412 MHz

Peak (RBW: 1 MHz)

Frequency [MHz]	E [dBµV/m]	E [µV/m]	U_{RX} [dBµV]	A_{TOT} [dB]	Polarisation	Result
4824.000000	40.00	100.00	41.10	-1.1	HORIZONTAL	PASSED
7236.000000	42.80	138.04	40.20	2.6	HORIZONTAL	PASSED

Average (RBW: 1 MHz)

Frequency [MHz]	E [dBµV/m]	E [µV/m]	U_{RX} [dBµV]	A_{TOT} [dB]	Polarisation	Result
4824.000000	27.00	22.39	28.10	-1.1	VERTICAL	PASSED
7236.000000	30.30	32.73	27.70	2.6	VERTICAL	PASSED

TX mode, channel 7 / 2442 MHz

Quasi peak (RBW: 120 kHz)

Frequency [MHz]	E [dBµV/m]	E [µV/m]	U_{RX} [dBµV]	A_{TOT} [dB]	Polarisation	Result
37.876353	23.60	15.14	37.60	-14.0	VERTICAL	PASSED
74.369940	13.70	4.84	37.30	-23.6	VERTICAL	PASSED
74.508016	11.30	3.67	34.80	-23.5	VERTICAL	PASSED

Peak (RBW: 1 MHz, VBW: 1 MHz)

Frequency [MHz]	E [dBµV/m]	E [µV/m]	U_{RX} [dBµV]	A_{TOT} [dB]	Polarisation	Result
4883.769539	44.70	171.79	45.90	-1.2	HORIZONTAL	PASSED
7300.103206	43.20	144.54	40.30	2.9	HORIZONTAL	PASSED
7313.631263	43.20	144.54	40.20	3.0	HORIZONTAL	PASSED
17484.965932	52.90	441.57	34.10	18.8	HORIZONTAL	PASSED
17924.847695	54.80	549.54	34.10	20.7	HORIZONTAL	PASSED

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Average (RBW: 1 MHz)

Frequency [MHz]	E [dBµV/m]	E [µV/m]	U_{RX} [dBµV]	A_{TOT} [dB]	Polarisation	Result
4883.769539	31.40	37.15	32.60	-1.2	HORIZONTAL	PASSED
7300.103206	30.30	32.73	27.40	2.9	HORIZONTAL	PASSED
7311.631263	30.60	33.88	27.60	3.0	HORIZONTAL	PASSED
17484.465932	39.80	97.72	21.10	18.7	HORIZONTAL	PASSED
17925.847695	41.90	124.45	21.20	20.7	HORIZONTAL	PASSED

TX mode, channel 11 / 2462 MHz

Peak (RBW: 1 MHz)

Frequency [MHz]	E [dBµV/m]	E [µV/m]	U_{RX} [dBµV]	A_{TOT} [dB]	Polarisation	Result
4924.000000	47.70	242.66	48.80	-1.1	VERTICAL	PASSED
7386.000000	42.80	138.04	39.60	3.2	HORIZONTAL	PASSED

Average (RBW: 1 MHz)

Frequency [MHz]	E [dBµV/m]	E [µV/m]	U_{RX} [dBµV]	A_{TOT} [dB]	Polarisation	Result
4924.000000	34.40	52.48	35.50	-1.1	VERTICAL	PASSED
7386.000000	30.60	33.88	27.40	3.2	VERTICAL	PASSED

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7. AC powerline conducted emissions

(FCC §15.207, RSS-GEN 7.2.2)

EUT with DUT number	RM-491 DUT42096
Accessories with DUT numbers	BL-5F DUT42098, AC-8E DUT42088, HS-48 DUT42099
Operation Voltage [V] / [Hz]	115 / 60
Result	PASSED
Remarks	-
Temp [°C] / Humidity [%RH] / Air Pressure [kPa]	20 / 50 / 101.6
Date of measurements	17-Nov-2009
Measured by	Jari Jantunen

7.1. Test method and limit

The measurement is made according to DTS procedures KDB 558074 and IC standard RSS-GEN as follows:

The EUT is placed on a wooden table 80 cm above the reference groundplane.

The EUT is connected via LISN to a test power supply.

The measurement results are obtained as described below:

$$U\ [dB\mu V] = U_{RX} + A_{TOT}$$

Where U_{RX} is receiver reading and A_{TOT} is total correction factor including cable and pulse limiter attenuations.

CISPR 22 Class B limits

Frequency range [MHz]	Quasi peak limit [dBµV]	Average limit [dBµV]
0.15 - 0.5	66 - 56	56 - 46
0.5 - 5	56	46
5 - 30	60	50

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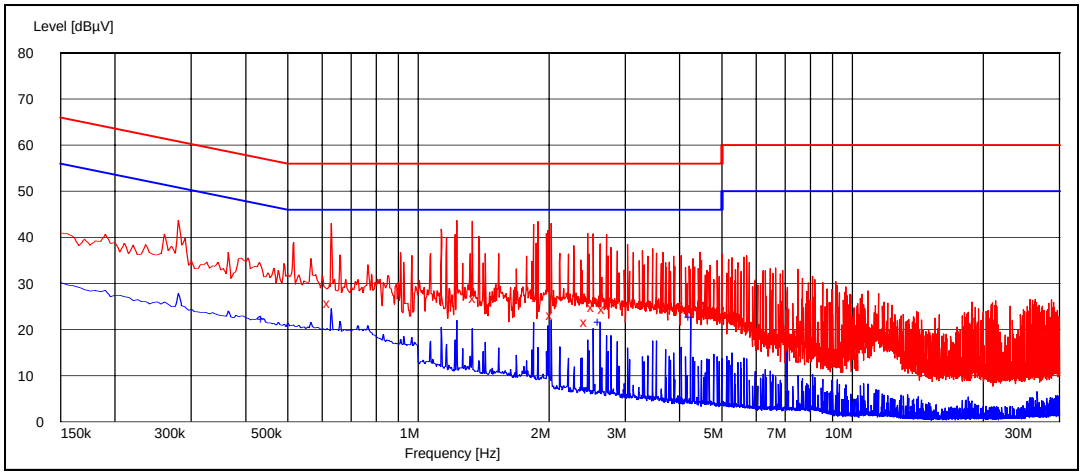
7.2. WLAN Test results

7.2.1 DSSS mode, QPSK modulation, 11 Mbps data rate

Channel 7 / 2442 MHz



Quasi peak (RBW: 9 kHz)

Frequency [MHz]	U [dBµV]	Line	Result
0.625000	25.70	N	PASSED
1.210000	26.70	L1	PASSED
1.355000	26.80	L1	PASSED
1.890000	27.00	L1	PASSED
2.035000	23.20	N	PASSED
2.440000	21.60	N	PASSED
2.535000	24.80	L1	PASSED
2.680000	24.50	L1	PASSED

Average (RBW: 9 kHz)

Frequency [MHz]	U [dBµV]	Line	Result
0.440000	22.20	L1	PASSED
2.625000	21.60	N	PASSED
4.240000	22.70	L1	PASSED

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8. 6 dB bandwidth

(FCC §15.247(a)(2), RSS-210 A8.2 (a))

EUT with DUT number	RM-491 DUT 42097
Accessories with DUT numbers	BL-5F DUT 42098
Operation Voltage [V] / [Hz]	Nominal
Result	PASSED
Remarks	-
Temp [°C] / Humidity [%RH] / Air Pressure [kPa]	21 / 46 / 101.7
Date of measurements	13-Nov-2009
Measured by	Jari Jantunen

8.1. Test method and limit

The measurement is made according to DTS procedures KDB 558074 and IC standard RSS-210.

Limits for 6 dB bandwidth measurements

Limit [kHz]
≥ 500

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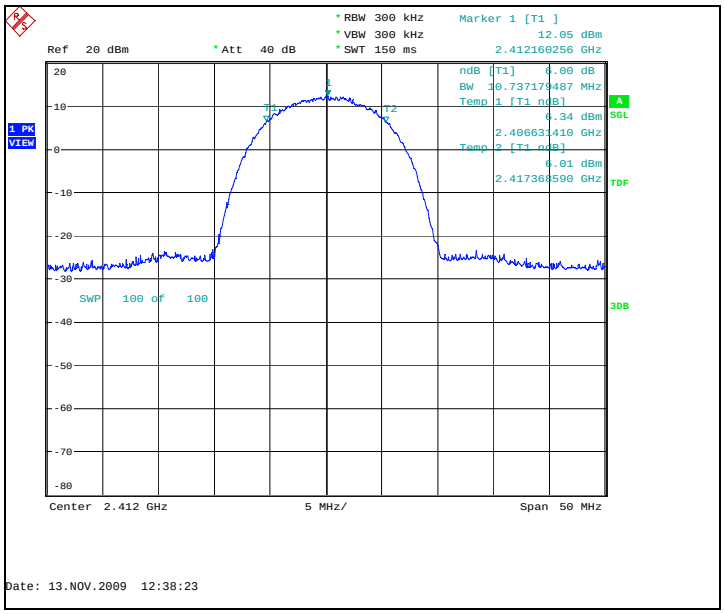
8.2. WLAN test results

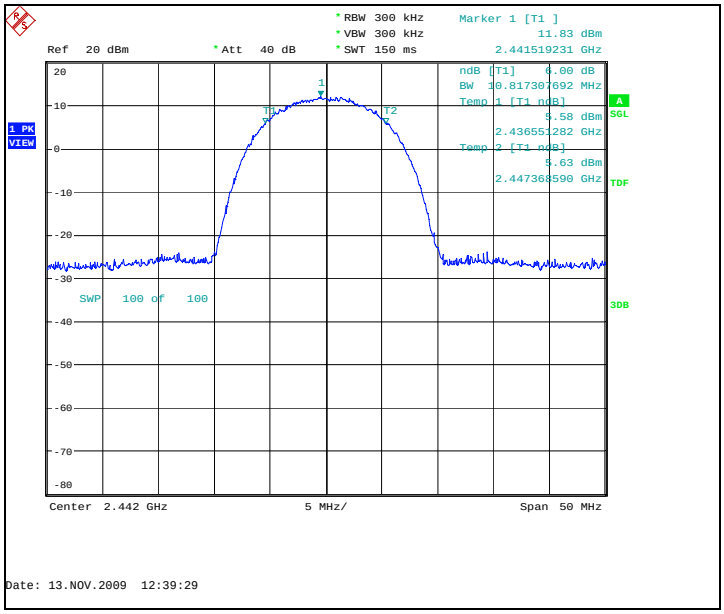
8.2.1 DSSS mode, QPSK modulation, 11 Mbps data rate

Channel / f_C [MHz]	6 dB bandwidth [kHz]	Result
1	10737.179	PASSED
7	10817.308	PASSED
11	10817.308	PASSED

Channel 1 / 2412 MHz



Channel 7 / 2442 MHz



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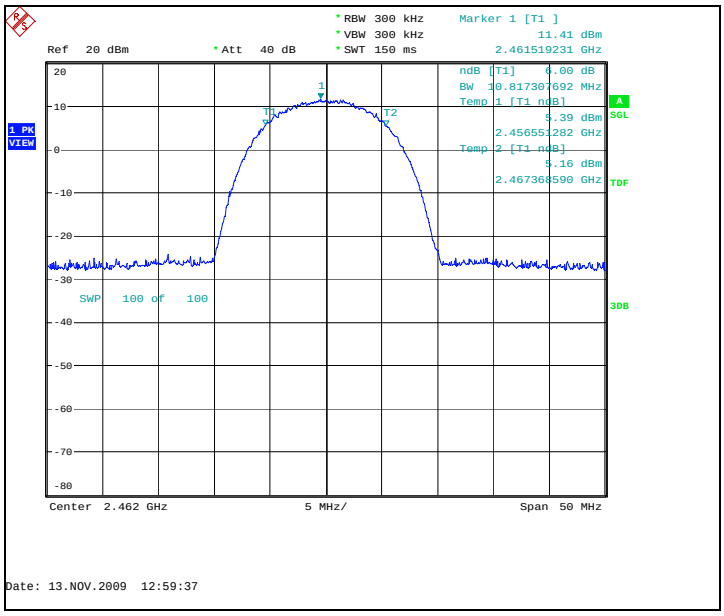
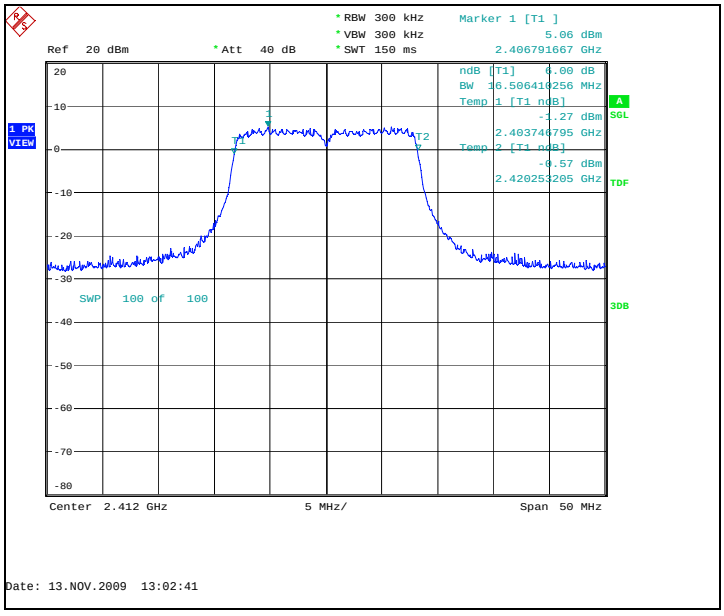
Channel 11 / 2462 MHz



8.2.2 OFDM mode, BPSK modulation, 6 Mbps data rate

Channel / f_C [MHz]	6 dB bandwidth [kHz]	Result
1	16506.410	PASSED
7	16506.410	PASSED
11	16506.410	PASSED

Channel 1 / 2412 MHz



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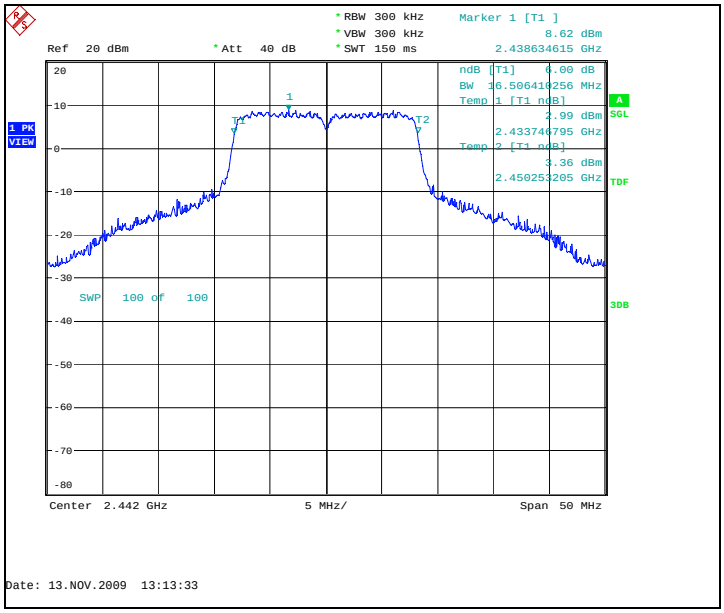
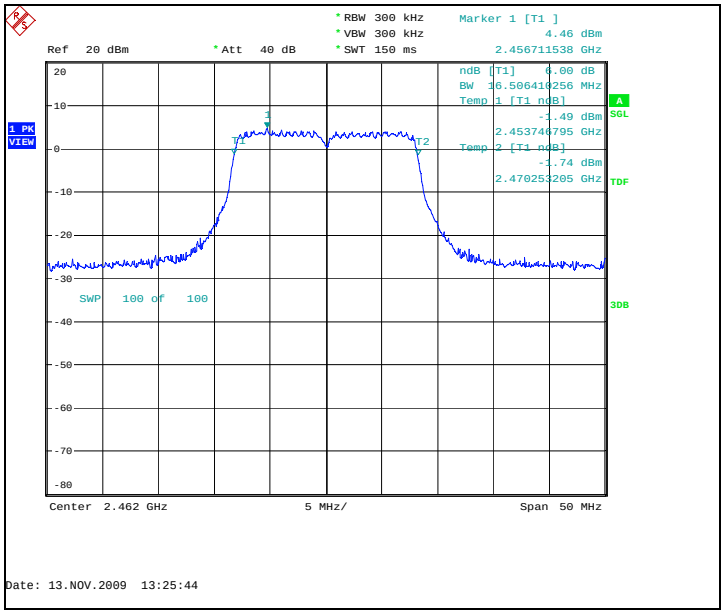
Channel 7 / 2442 MHz



Channel 11 / 2462 MHz



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9. Power spectral density

(FCC §15.247(e), RSS-210 A8.2 (b))

EUT with DUT number	RM-491 DUT 42097
Accessories with DUT numbers	BL-5F DUT 42098
Operation Voltage [V] / [Hz]	Nominal
Result	PASSED
Remarks	-
Temp [°C] / Humidity [%RH] / Air Pressure [kPa]	21 / 46 / 101.7
Date of measurements	13-Nov-2009
Measured by	Jari Jantunen

9.1. Test method and limit

The measurement is made according to DTS procedures KDB 558074 and IC standard RSS-210.

Limits for power spectral density measurements

Limit [dBm] @ 3 kHz
≤ 8

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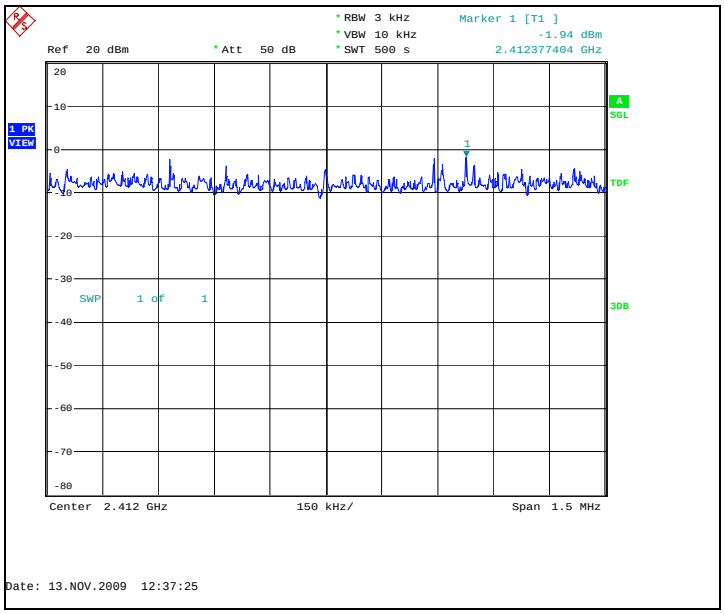
9.2. WLAN test results

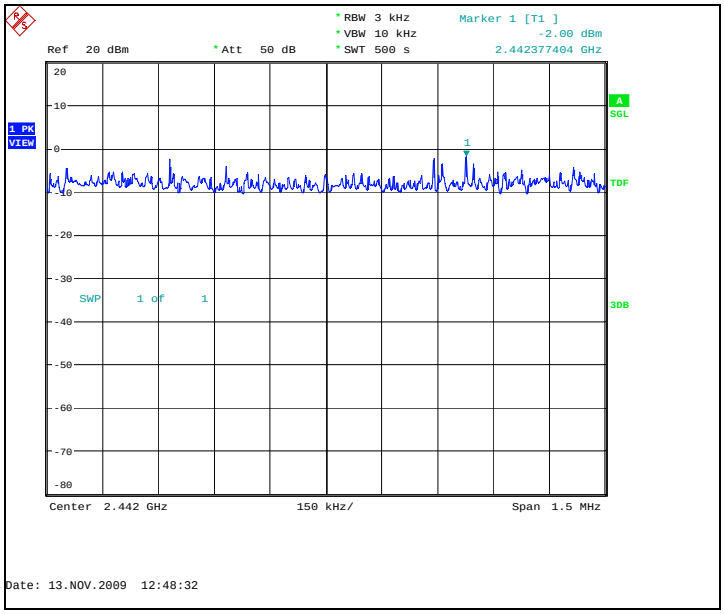
9.2.1 DSSS mode, QPSK modulation, 11 Mbps data rate

Channel / f_C [MHz]	P [dBm]	Result
1 / 2412	-1.94	PASSED
7 / 2442	-2.00	PASSED
11 / 2462	-2.28	PASSED

Channel 1 / 2412 MHz



Channel 7 / 2442 MHz



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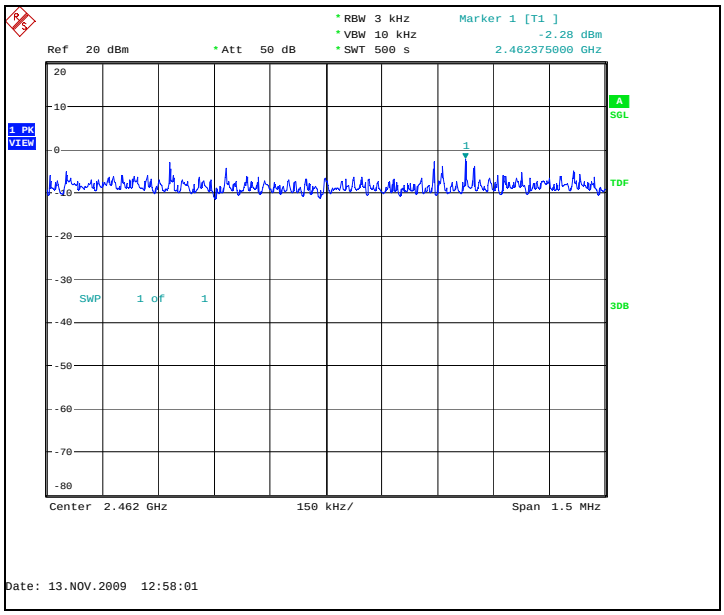
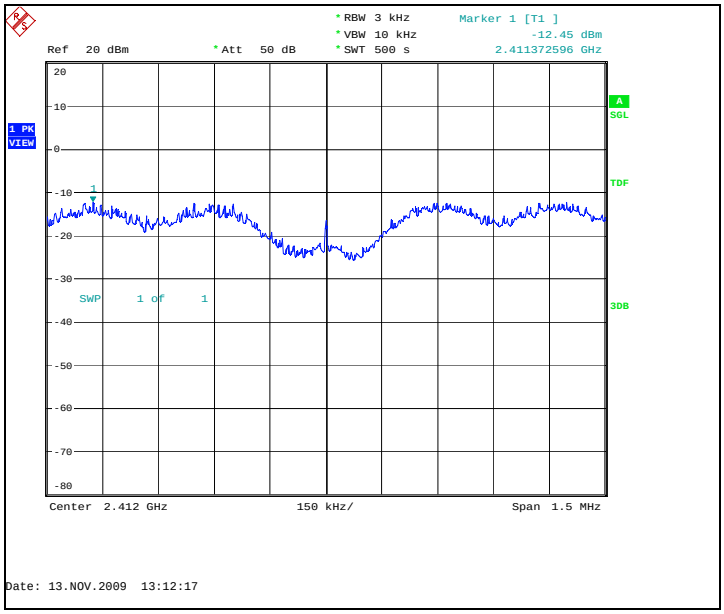
Channel 11 / 2462 MHz



9.2.2 OFDM mode, BPSK modulation, 6 Mbps data rate

Channel / f_C [MHz]	P [dBm]	Result
1 / 2412	-12.45	PASSED
7 / 2442	-7.97	PASSED
11 / 2462	-12.83	PASSED

Channel 1 / 2412 MHz



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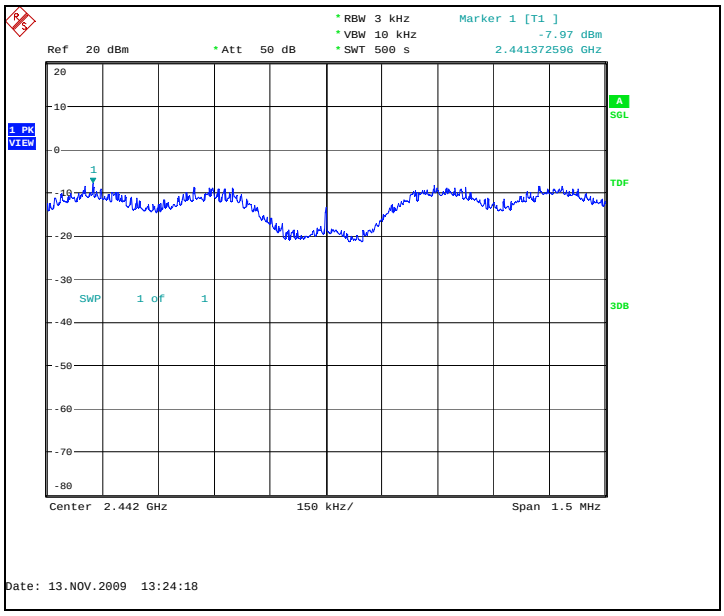
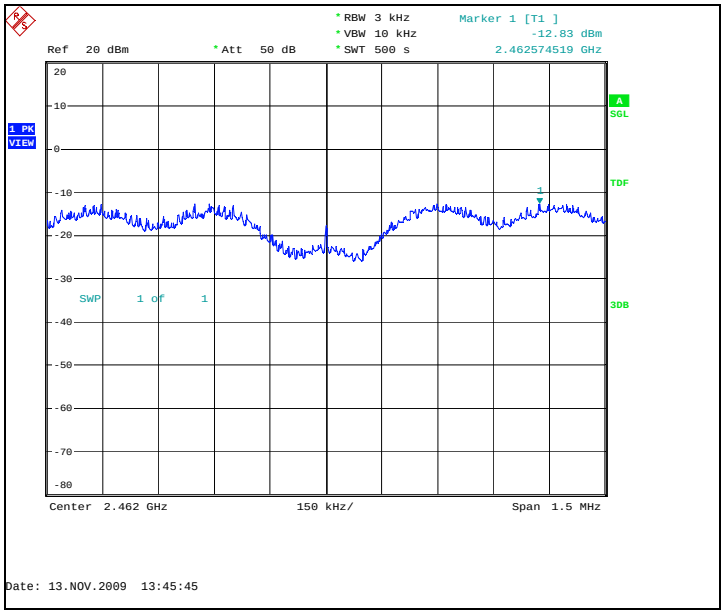
Channel 7 / 2442 MHz



Channel 11 / 2462 MHz



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10. Test Equipment

10.1. Conducted measurements

Eq. No	Equipment	Type	Manufacturer	Used in
TM30597	Power splitter	11667A	Agilent	22/24/27, 15C
TM37499	Power splitter	11667A	Agilent	22/24/27, 15C
TM38111	Multimeter	34401A	Agilent	22/24/27, 15C
TM38112	DC power supply	6632A	Agilent	22/24/27, 15C
TM22901	Attenuator	8496A	Agilent	22/24/27, 15C
TM30636	Artificial mains net	L2-16	PMM	15C, 15B
TM37678	Radio communication tester	CMU-200	R&S	22/24/27, 15C, 15B
TM37773	Radio communication tester	CMU-200	R&S	22/24/27, 15C, 15B
TM30600	Pulse Limiter	ESH3-Z2	R&S	15C, 15B
TM26490	LISN 50 µH	ESH3-Z5	R&S	15C, 15B
TM37610	Spectrum analyzer	FSU	R&S	22/24/27, 15C
TM22835	Multimeter	87	Fluke	15C, 15B
TM37500	Microwave switch system	7116-MSW	Keithley	22/24/27, 15C, 15B
TM22638	Power supply	OL63743-901	Transformatic	22/24/27, 15C, 15B
	Temperature chamber	VT4002	Vötsch	22/24/27, 15C
2058	EMI Test receiver	ESPC	R&S	15C, 15B
2001	Bluetooth tester	CBT	R&S	22/24/27, 15C, 15B
2002	Radio communication tester	CMU-200	R&S	22/24/27, 15C, 15B

10.2. Radiated measurements

Eq. No	Equipment	Type	Manufacturer	Used in
TM30599	3m semi-anechoic chamber		TDK	22/24/27, 15C, 15B
TM38845	EMI receiver	ESI 40	R&S	22/24/27, 15C, 15B
TM37498	Preamplifier	AMF-5D-020180-26-10P	MITEQ	22/24/27, 15C, 15B
TM37523	Preamplifier	AMF-4D-10M-3G-25-20P	MITEQ	22/24/27, 15C, 15B
TM37516	Biconilog antenna	HL562	R&S	22/24/27, 15C, 15B
TM26496	Double ridged waveguide antenna	3115	EMCO	22/24/27, 15C, 15B
TM39158	Horn antenna	3116	EMCO	22/24/27, 15C, 15B
TM26492	Reference dipole set	UHAP/VHAP	Schwarzbeck	22/24/27, 15C, 15B
TM37501	Dipole antenna	3125-870	EMCO	22/24/27
TM37502	Dipole antenna	3125-1880	EMCO	22/24/27
TM37773	Radio communication tester	CMU-200	R&S	22/24/27, 15C, 15B
TM38631	Signal generator	83640L	Agilent	22/24/27, 15C, 15B
TM38066	High pass filter	4HC3000/18000-3-KK	Trilithic	22/24/27, 15C, 15B
TM26511	Tunable notch filter	WRCA870	Wainwright	22/24/27
TM38215	Tunable notch filter	WRCD1850/1910-0.2/40	Wainwright	22/24/27
TM38214	Band reject filter	WRCT 2402/2480-2400/2483.5-30	Wainwright	15C
TM30642	Mast/Turntable controller	HD-100	Deisel	22/24/27, 15C, 15B
TM26500	Turntable	DS412	Deisel	22/24/27, 15C, 15B
TM38842	Antenna mast controller	2090	EMCO	22/24/27, 15C, 15B
TM38843	Antenna mast	2075	EMCO	22/24/27, 15C, 15B
TM38114	DC power supply	6632A	Agilent	22/24/27, 15C, 15B
TM38323	Preamplifier	PA-02 18-26 GHz	EMC Automation	22/24/27, 15C, 15B
TM37678	Radio communication tester	CMU-200	R&S	22/24/27, 15C, 15B
TM22638	Power supply	OL63743-901	Transformatic	22/24/27, 15C, 15B
TM23892	Yaesu controller	G-1000SDX	Yaesu	22/24/27, 15C, 15B
2001	Bluetooth tester	CBT	R&S	22/24/27, 15C, 15B

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Eq. No	Equipment	Type	Manufacturer	Used in
2002	Radio communication tester	CMU-200	R&S	22/24/27, 15C, 15B

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