

FCC Part 15C Compliance Test Report

Test Report no.:	Tre_FCC_0843_06.doc	Date of Report:	23-Oct-2008
Number of pages:	32	Customer's Contact person:	Asko Pasanen
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 Mattianniemi 6-8 FIN-40101 JYVÄSKYLÄ, FINLAND Tel. +358 (0) 7180 08000 Fax. +358 (0) 7180 78000
FCC listing no.:	94436		
IC recognition no.:	3608		
Tested devices/ accessories:	Phone RM-334 / Battery BL-5K, AC-Charger AC-10E, Audio Adapter AD-54, Headset HS-45		
FCC ID:	QURRM-334	IC:	661AC-RM334
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:			

Jari Jantunen, Test System Manager

1. Summary for FCC Part 15C Compliance Test Report

Date of receipt	28-Apr-2008
Testing completed	22-Oct-2008
The customer's contact person	Asko Pasanen
Test Plan referred to	T:\Projects\RM-333\TestPlan_RS\RS_Test_Plan_RM-333.xls
Notes	-
Document name	T:\Projects\RM-334\EMC\Results\FCC\Salo_FCC_0836_15.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, WLAN and FM transmitter. Bluetooth and WLAN are tested with maximum rated TX power.

Product	Type	SN	HW	MV	SW	DUT
Phone	RM-333	004401101023204	1004	-	0.35	41470
Phone	RM-333	004401101023121	1004	-	0.35	41471
Battery	BL-5K	-	-	-	-	41477
AC-Charger	AC-10E	-	-	-	-	41478
Audio Adapter	AD-54	-	-	-	-	41475
Headset	HS-45	-	-	-	-	41473

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 (1)	6 dB bandwidth	PASSED
15.247(e)	A8.2 (2)	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.

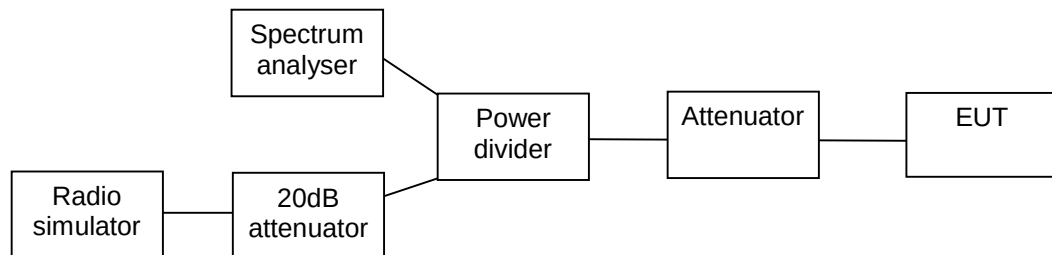
The test results of QURRM-333 are re-used for certification of the QURRM-334. The table above indicates the results, which will be re-used.

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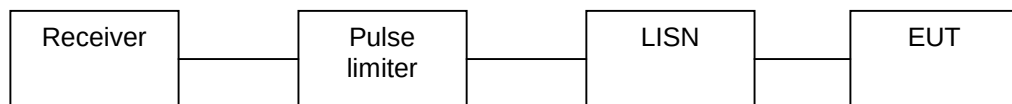
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2. Test setups

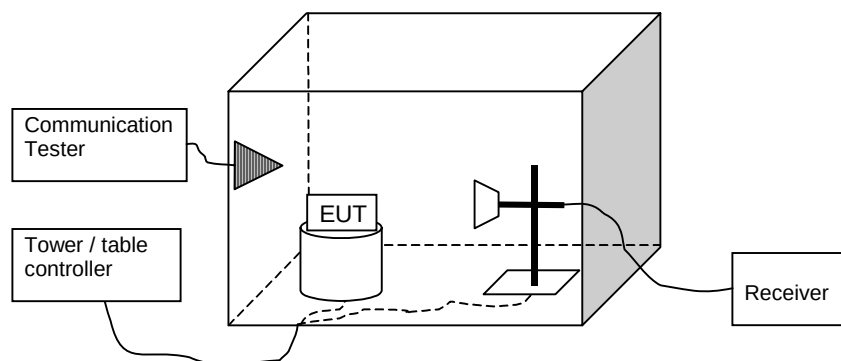
2.1. Conducted RF test setup



2.2. AC powerline conducted emissions test setup



2.3. Radiated test setup



3. Conducted peak output power (FCC §15.247(b)(1), RSS-210 A8.4 (4))

EUT with DUT number	RM-333 DUT 41675
Accessories with DUT numbers	BL-5K DUT 41676
Operation Voltage [V] / [Hz]	Nominal
Result	PASSED
Remarks	-
Temp [°C] / Humidity [%RH] / Air Pressure [kPa]	21 / 49 / 100.4
Date of measurements	20-Oct-2008
Measured by	Petteri Suni

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

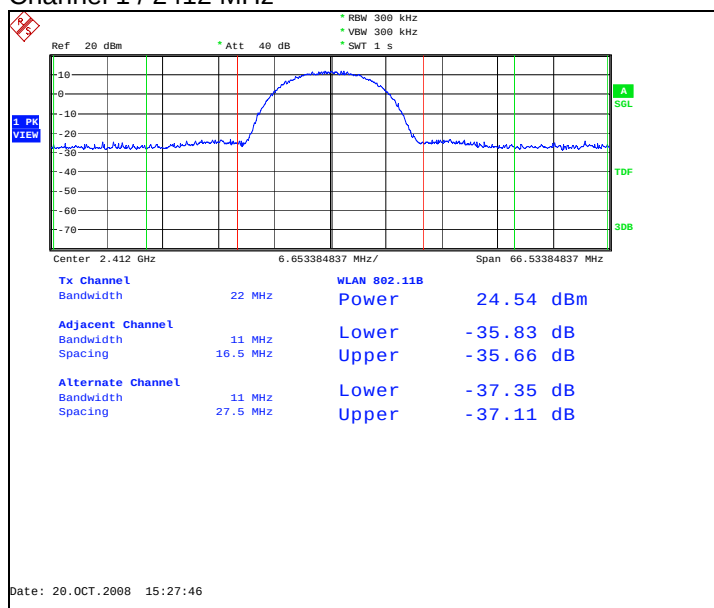
Frequency range [MHz]	Limit [W]	Limit [dBm]
2400 – 2483.5	≤ 1	≤ 30

3.2. WLAN Test results

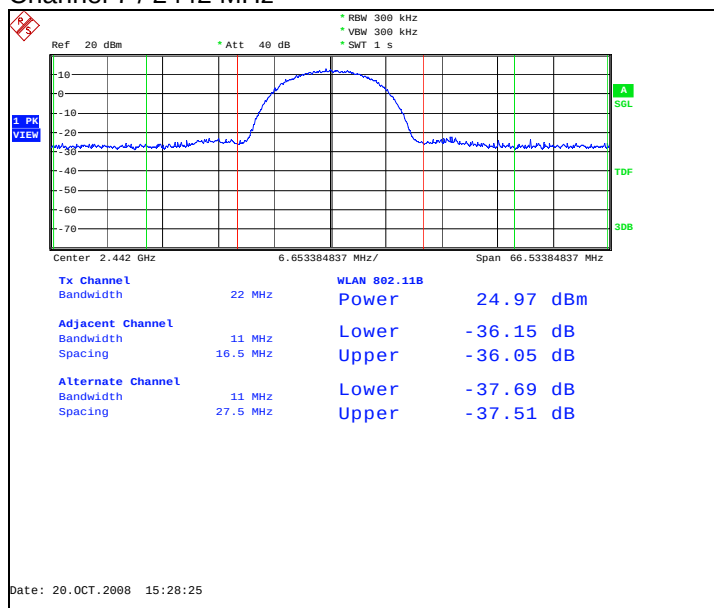
3.2.1 DSSS mode, QPSK modulation, 11 Mbps data rate

Channel / f_c [MHz]	P [dBm]	P [W]	Result
1 / 2412	24.54	0.284	PASSED
7 / 2442	24.97	0.314	PASSED
11 / 2462	25.31	0.340	PASSED

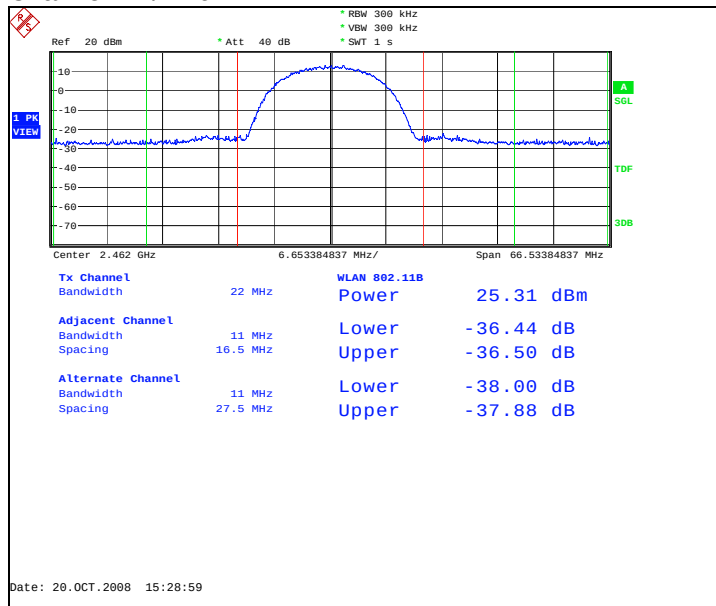
Channel 1 / 2412 MHz



Channel 7 / 2442 MHz



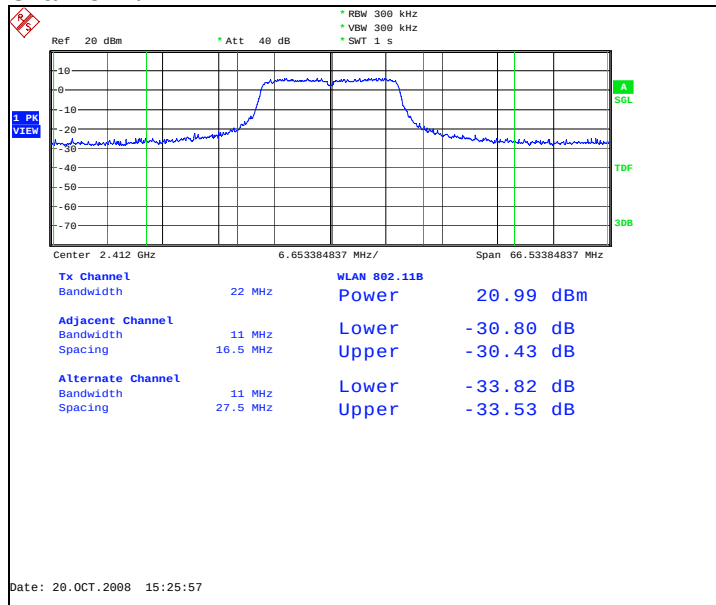
Channel 11 / 2462 MHz



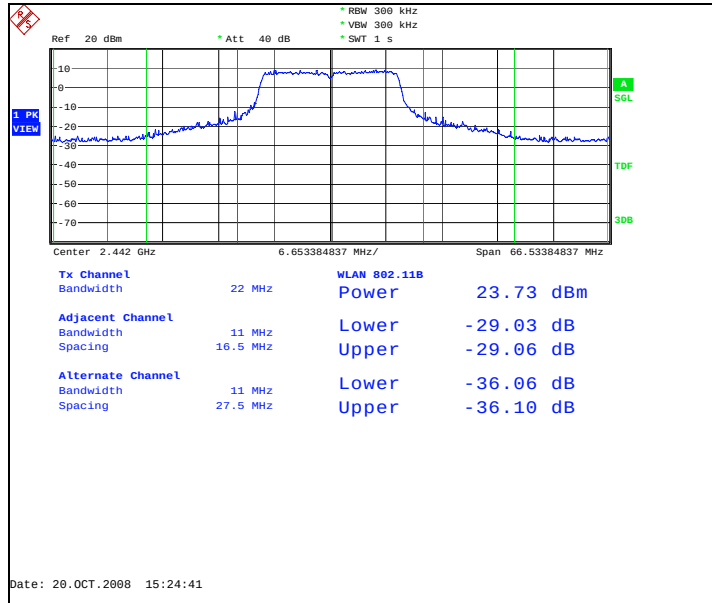
3.2.2 OFDM mode, BPSK modulation, 6 Mbps data rate

Channel / f _c [MHz]	P [dBm]	P [W]	Result
1 / 2412	20.99	0.126	PASSED
7 / 2442	23.73	0.236	PASSED
11 / 2462	21.94	0.156	PASSED

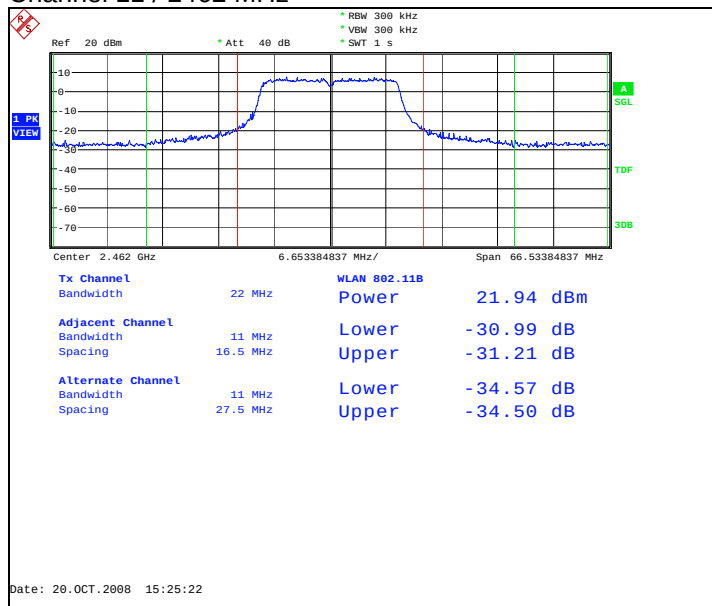
Channel 1 / 2412 MHz



Channel 7 / 2442 MHz



Channel 11 / 2462 MHz



4. Band edge compliance of RF emissions (FCC §15.247(d), RSS-210 A8.5)

EUT with DUT number	RM-333 DUT 41471
Accessories with DUT numbers	BL-5K DUT 41477, AC-10E DUT 41478, AD-54 DUT 41475, HS-45 DUT 41473
Operation Voltage [V] / [Hz]	115 / 60
Result	PASSED
Remarks	-
Temp [°C] / Humidity [%RH] / Air Pressure [kPa]	24 / 49 / 101.6
Date of measurements	08-May-2008
Measured by	Jari Jantunen

4.1. Test method and limit

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

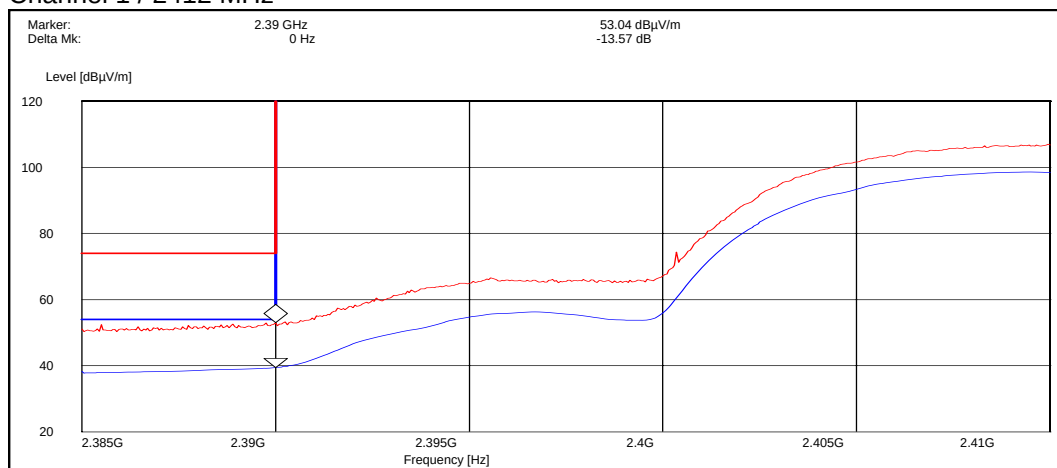
Limits for band edge compliance of RF emissions measurements (3 m measurement distance)

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

4.2. WLAN Test results

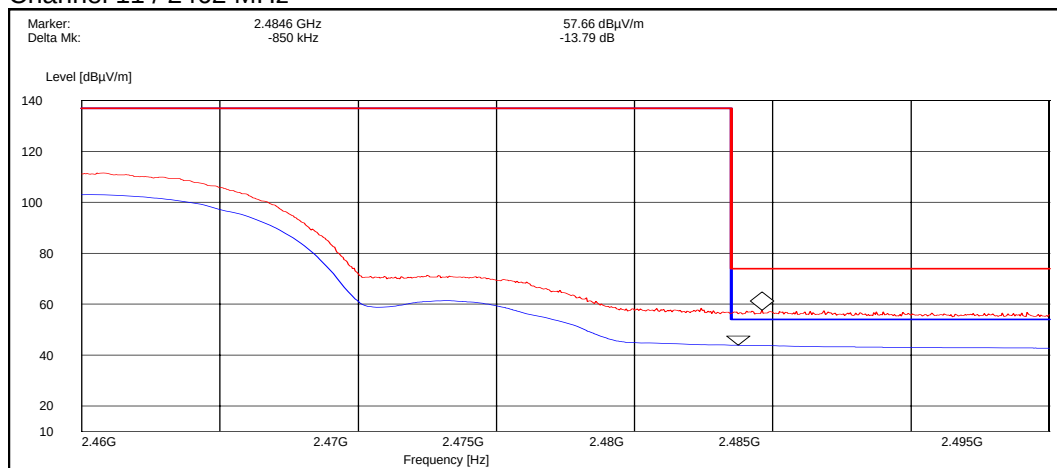
4.2.1 DSSS mode, QPSK modulation, 11 Mbps data rate

Channel 1 / 2412 MHz



Detector (RBW: 1 MHz)	E [dBμV/m]	Result
Peak	53.00	PASSED
Average	39.50	PASSED

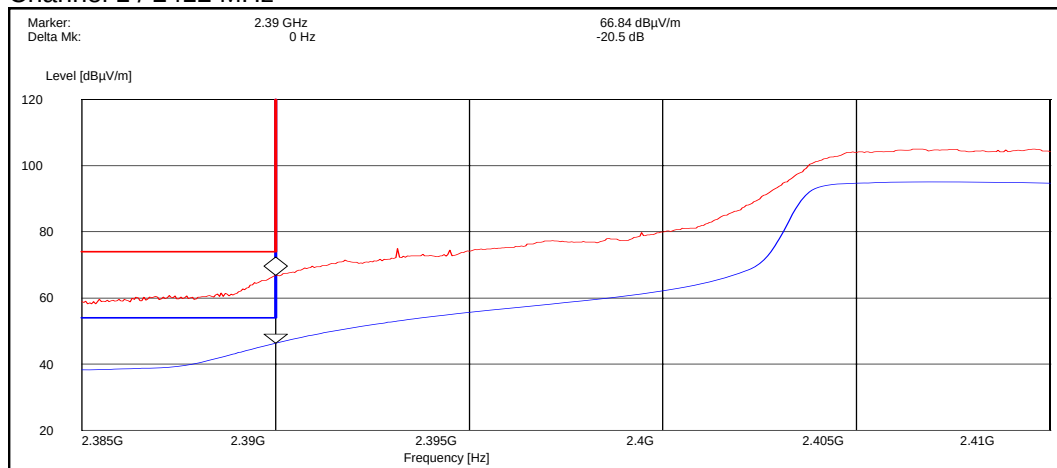
Channel 11 / 2462 MHz



Detector (RBW: 1 MHz)	E [dBμV/m]	Result
Peak	57.66	PASSED
Average	43.87	PASSED

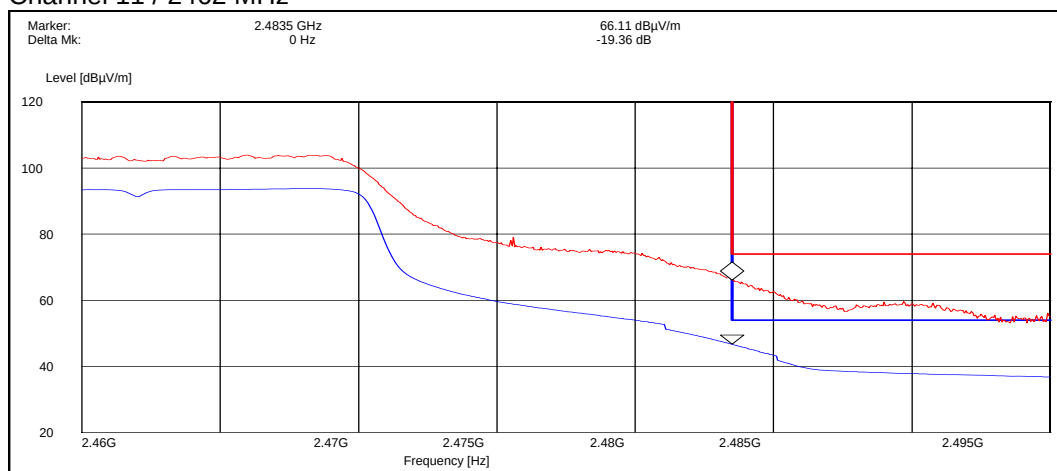
4.2.2 OFDM mode, BPSK modulation, 6 Mbps data rate

Channel 1 / 2412 MHz



Detector (RBW: 1 MHz)	E [dBμV/m]	Result
Peak	66.80	PASSED
Average	46.30	PASSED

Channel 11 / 2462 MHz



Detector (RBW: 1 MHz)	E [dBμV/m]	Result
Peak	66.10	PASSED
Average	46.80	PASSED

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

EUT with DUT number	RM-333 DUT 41470
Accessories with DUT numbers	BL-5K DUT 41477 / AC-10E DUT 41478 / AD-54 DUT 41475 / HS-45 DUT 41473
Operation Voltage [V] / [Hz]	Nominal
Result	PASSED
Remarks	-
Temp [°C] / Humidity [%RH] / Air Pressure [kPa]	20 / 50 / 102
Date of measurements	01-May-2008
Measured by	Petteri Suni

5.1. Test method and limit

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

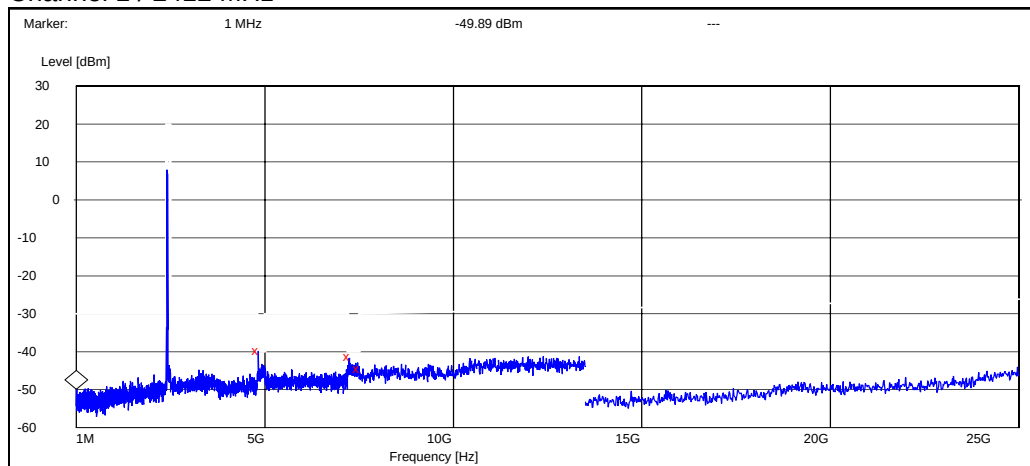
Limits for spurious RF conducted emissions measurements

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

5.2. WLAN Test results

5.2.1 DSSS mode, QPSK modulation, 11 Mbps data rate

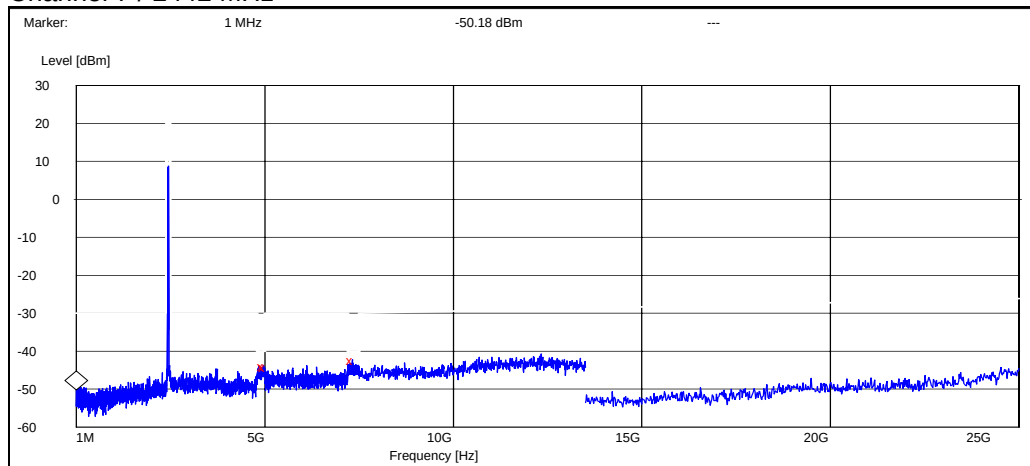
Channel 1 / 2412 MHz



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

Frequency [MHz]	P [dBc]	Result
4824.038462	-39.70	PASSED
7238.461538	-41.20	PASSED
7500.000000	-44.30	PASSED

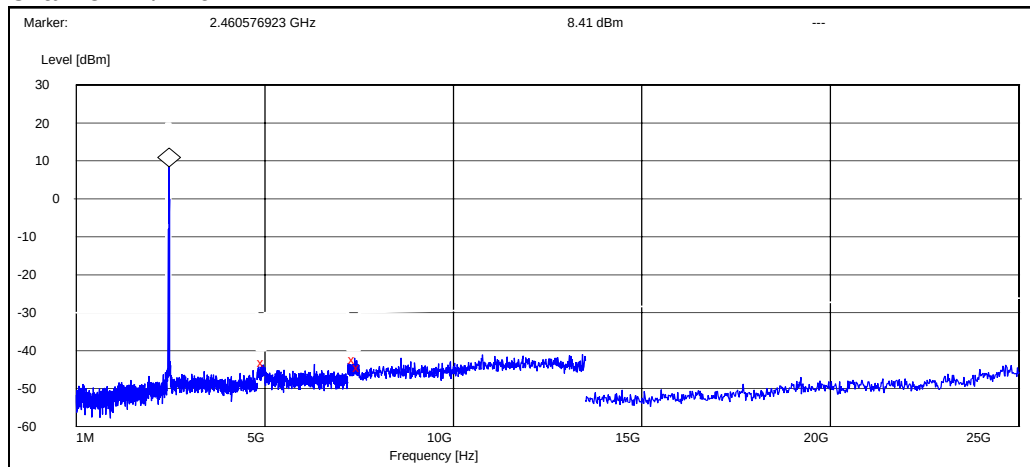
Channel 7 / 2442 MHz



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

Frequency [MHz]	P [dBc]	Result
4967.307692	-45.78	PASSED
5000.000000	-40.00	PASSED
7327.403846	-42.47	PASSED

Channel 11 / 2462 MHz

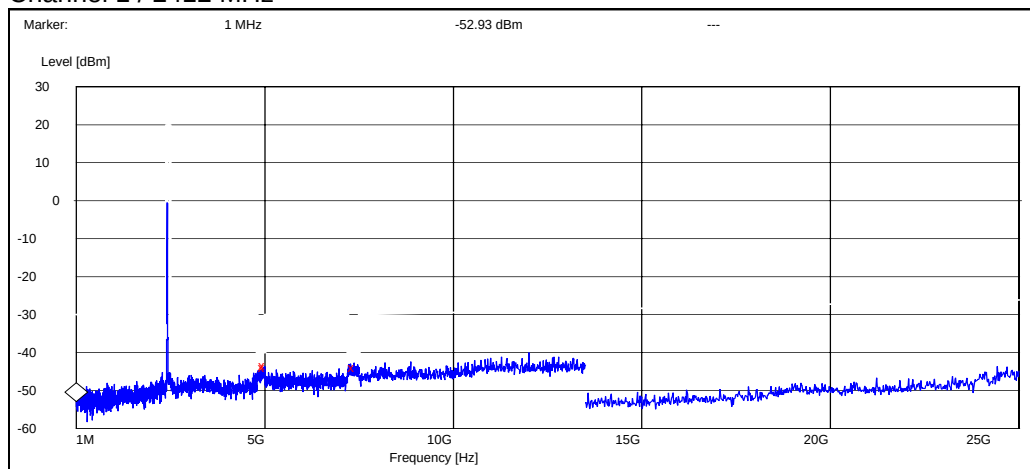


Peak (RBW: 100 kHz, VBW: 100 kHz)

Frequency [MHz]	P [dBc]	Result
4957.692308	-51.611729	PASSED
7385.096154	-50.711729	PASSED
7500.000000	-52.811729	PASSED

5.2.2 OFDM mode, BPSK modulation, 6 Mbps data rate

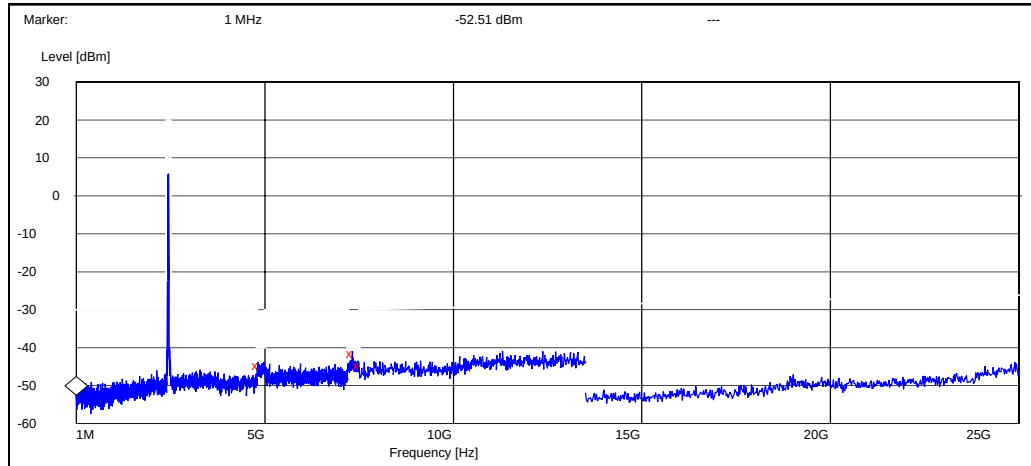
Channel 1 / 2412 MHz



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

Frequency [MHz]	P [dBc]	Result
4930.769231	-46.649779	PASSED
7246.153846	-45.949779	PASSED
7500.000000	-47.049779	PASSED

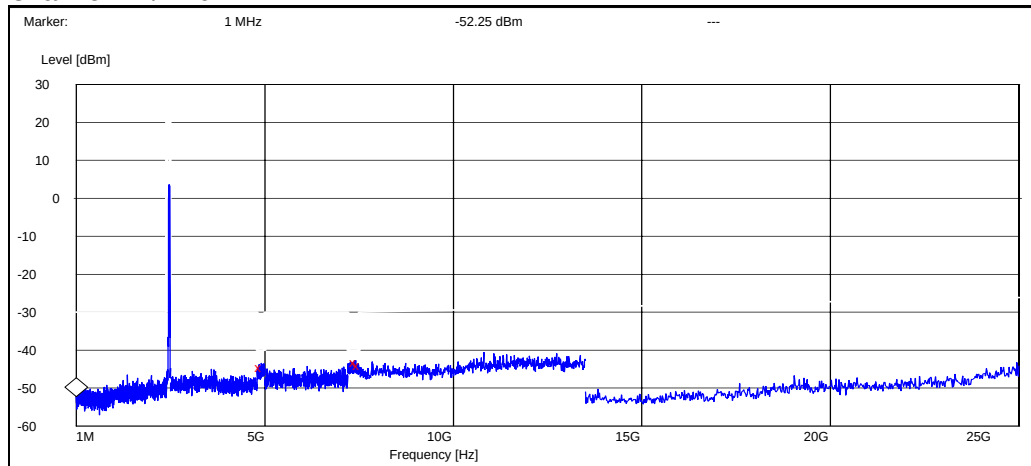
Channel 7 / 2442 MHz



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

Frequency [MHz]	P [dBc]	Result
4826.923077	-48.063805	PASSED
7335.096154	-47.563805	PASSED
7500.000000	-48.463805	PASSED

Channel 11 / 2462 MHz



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

Frequency [MHz]	P [dBc]	Result
4931.410256	-50.838134	PASSED
7320.673077	-48.038134	PASSED
7500.000000	-49.738134	PASSED

6. Spurious radiated emissions (FCC §15.247(d), §15.209, RSS-210 A8.5)

EUT with DUT number	RM-333 DUT 41471
Accessories with DUT numbers	BL-5K DUT 41477, AC-10E DUT 41478, AD-54 DUT 41475, HS-45 DUT 41473
Operation Voltage [V] / [Hz]	115 / 60
Result	PASSED
Remarks	-
Temp [°C] / Humidity [%RH] / Air Pressure [kPa]	24 / 49 / 101.6
Date of measurements	08-May-2008
Measured by	Jari Jantunen

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:

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

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

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

Frequency range [MHz]	Limit [$\mu\text{V/m}$]	Limit [dB $\mu\text{V/m}$]	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

6.2. WLAN Test results

6.2.1 DSSS mode, QPSK modulation, 11 Mbps data rate

Channel 1 / 2412 MHz

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

Frequency [MHz]	E [dB $\mu\text{V/m}$]	E [$\mu\text{V/m}$]	U _{RX} [dB μV]	A _{TOT} [dB]	Polarisation	Result
4824.000000	47.40	234.42	49.10	-1.7	HORIZONTAL	PASSED
7236.000000	43.10	142.89	40.50	2.6	VERTICAL	PASSED

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

Frequency [MHz]	E [dB $\mu\text{V/m}$]	E [$\mu\text{V/m}$]	U _{RX} [dB μV]	A _{TOT} [dB]	Polarisation	Result
4824.000000	28.20	25.70	29.90	-1.7	VERTICAL	PASSED
7236.000000	30.50	33.50	27.90	2.6	VERTICAL	PASSED

Channel 7 / 2442 MHz

Quasi peak (RBW: 100 kHz, VBW: 100 kHz)

Frequency [MHz]	E [dB $\mu\text{V/m}$]	E [$\mu\text{V/m}$]	U _{RX} [dB μV]	A _{TOT} [dB]	Polarisation	Result
37.995391	24.80	17.38	39.70	-14.9	VERTICAL	PASSED
75.088978	19.50	9.44	44.90	-25.4	HORIZONTAL	PASSED
75.169940	21.20	11.48	46.60	-25.4	VERTICAL	PASSED

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

Frequency [MHz]	E [dB $\mu\text{V/m}$]	E [$\mu\text{V/m}$]	U _{RX} [dB μV]	A _{TOT} [dB]	Polarisation	Result
4883.769539	55.90	623.73	57.70	-1.8	HORIZONTAL	PASSED
7326.151303	51.60	380.19	48.60	3.0	VERTICAL	PASSED
7327.653307	50.60	338.84	47.60	3.0	VERTICAL	PASSED
17981.957916	53.70	484.17	34.30	19.4	HORIZONTAL	PASSED

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

Frequency [MHz]	E [dB $\mu\text{V/m}$]	E [$\mu\text{V/m}$]	U _{RX} [dB μV]	A _{TOT} [dB]	Polarisation	Result
4884.269539	44.00	158.49	45.80	-1.8	HORIZONTAL	PASSED
7325.651303	38.90	88.10	35.90	3.0	VERTICAL	PASSED
7325.653307	38.80	87.10	35.80	3.0	VERTICAL	PASSED
17981.957916	40.50	105.93	21.10	19.4	HORIZONTAL	PASSED

Channel 11 / 2462 MHz

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

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Polarisation	Result
4924.000000	48.30	260.02	50.10	-1.8	HORIZONTAL	PASSED
7386.000000	62.20	1 288.25	58.70	3.5	VERTICAL	PASSED

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

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Polarisation	Result
4924.000000	35.70	60.95	37.50	-1.8	HORIZONTAL	PASSED
7386.000000	52.00	398.11	48.50	3.5	VERTICAL	PASSED

6.2.2 OFDM mode, BPSK modulation, 6 Mbps data rate

Channel 1 / 2412 MHz

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

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Polarisation	Result
4824.000000	50.60	338.84	52.30	-1.7	HORIZONTAL	PASSED
7236.000000	55.70	609.54	53.10	2.6	VERTICAL	PASSED

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

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Polarisation	Result
4824.000000	38.90	88.10	40.60	-1.7	HORIZONTAL	PASSED
7236.000000	37.70	76.74	35.10	2.6	VERTICAL	PASSED

Channel 7 / 2442 MHz

Quasi peak (RBW: 100 kHz, VBW: 100 kHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Polarisation	Result
37.795391	29.20	28.84	43.90	-14.7	VERTICAL	PASSED
73.346092	23.20	14.45	48.80	-25.6	HORIZONTAL	PASSED
75.169940	24.50	16.79	49.90	-25.4	HORIZONTAL	PASSED

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

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Polarisation	Result
4885.769539	56.30	653.13	58.10	-1.8	HORIZONTAL	PASSED
4886.265531	55.80	616.60	57.60	-1.8	HORIZONTAL	PASSED
7321.651303	56.80	691.83	53.80	3.0	VERTICAL	PASSED
7326.157315	56.00	630.96	53.00	3.0	VERTICAL	PASSED
17932.363727	54.20	512.86	34.70	19.5	VERTICAL	PASSED

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

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Polarisation	Result
4885.765531	41.80	123.03	43.60	-1.8	HORIZONTAL	PASSED
4885.769539	41.60	120.23	43.40	-1.8	HORIZONTAL	PASSED
7321.651303	40.50	105.93	37.50	3.0	VERTICAL	PASSED
7330.657315	39.40	93.33	36.40	3.0	VERTICAL	PASSED
17934.863727	40.30	103.51	20.80	19.5	VERTICAL	PASSED

Channel 11 / 2462 MHz

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

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Polarisation	Result
4924.000000	52.70	431.52	54.50	-1.8	HORIZONTAL	PASSED
7386.000000	51.90	393.55	48.40	3.5	VERTICAL	PASSED

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

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Polarisation	Result
4924.000000	40.20	102.33	42.00	-1.8	HORIZONTAL	PASSED
7386.000000	36.00	63.10	32.50	3.5	VERTICAL	PASSED

7. AC powerline conducted emissions (FCC §15.207, RSS-GEN 7.2.2)

EUT with DUT number	RM-333 DUT 41471
Accessories with DUT numbers	BL-5K DUT 41477, AC-10E DUT 41478, AD-54 DUT 41475, HS-45 DUT 41473
Operation Voltage [V] / [Hz]	115 / 60
Result	PASSED
Remarks	-
Temp [°C] / Humidity [%RH] / Air Pressure [kPa]	19 / 44 / 101.5
Date of measurements	07-May-2008
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.

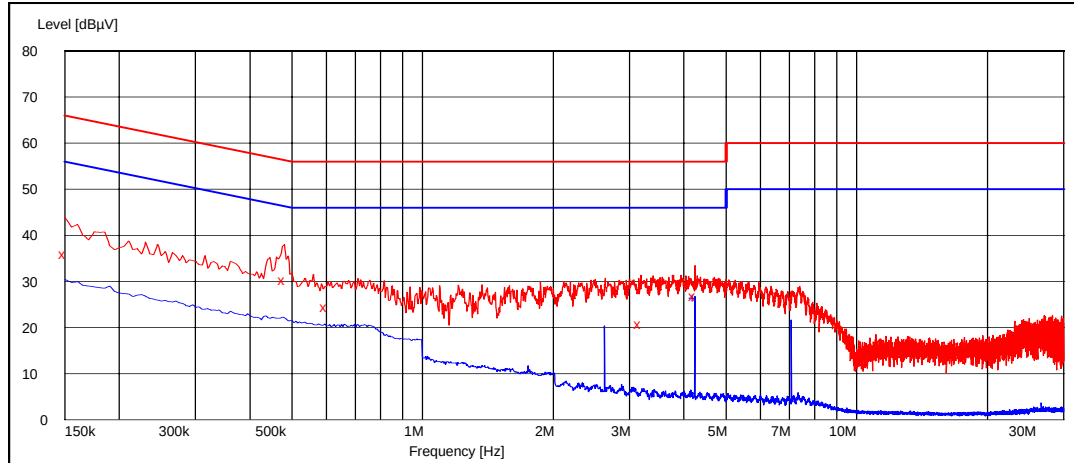
CISPR 22 Class B limits

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

7.2. WLAN Test results

7.2.1 DSSS mode, QPSK modulation, 11 Mbps data rate

Channel 7 / 2442 MHz



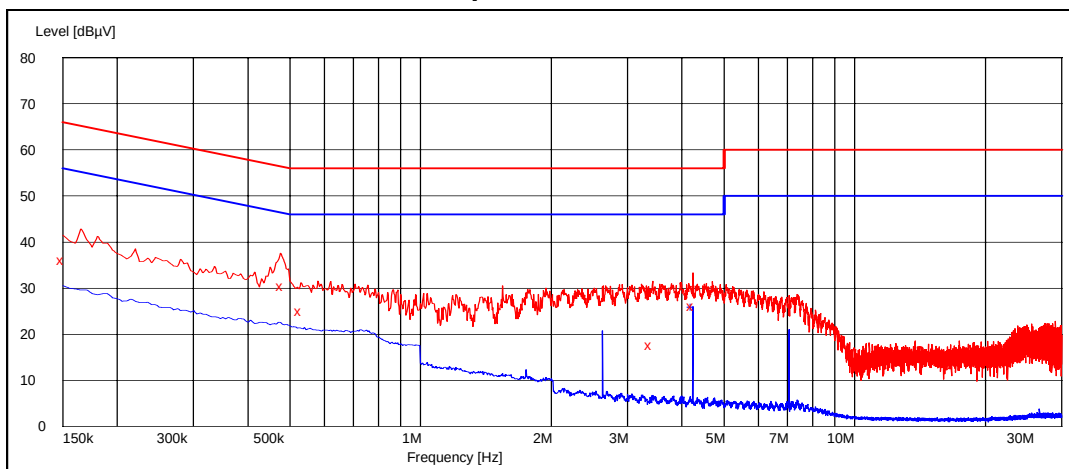
Quasi peak (RBW: 9 kHz)

Frequency [MHz]	U [dBμV]	Line	Result
0.150000	35.90	N	PASSED
0.480000	30.40	L1	PASSED
0.600000	24.40	L1	PASSED
3.175000	20.80	L1	PASSED
4.240000	26.80	L1	PASSED

Average (RBW: 9 kHz)

Frequency [MHz]	U [dBμV]	Line	Result
4.240000	26.40	N	PASSED

7.2.2 OFDM mode, BPSK modulation, 6 Mbps data rate



Channel 7 / 2442 MHz

Quasi peak (RBW: 9 kHz)

Frequency [MHz]	U [dBμV]	Line	Result
0.150000	36.00	L1	PASSED
0.480000	30.50	L1	PASSED
0.530000	25.00	N	PASSED
3.400000	17.60	N	PASSED
4.240000	26.10	L1	PASSED

Average (RBW: 9 kHz)

Frequency [MHz]	U [dBμV]	Line	Result
4.240000	25.90	L1	PASSED

8. 6 dB bandwidth (FCC §15.247(a)(2), RSS-210 A8.2 (1))

EUT with DUT number	RM-333 DUT 41470
Accessories with DUT numbers	BL-5K DUT 41477 / AC-10E DUT 41478 / AD-54 DUT 41475 / HS-45 DUT 41473
Operation Voltage [V] / [Hz]	Nominal
Result	PASSED
Remarks	-
Temp [°C] / Humidity [%RH] / Air Pressure [kPa]	20 / 50 / 102
Date of measurements	01-May-2008
Measured by	Petteri Suni

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

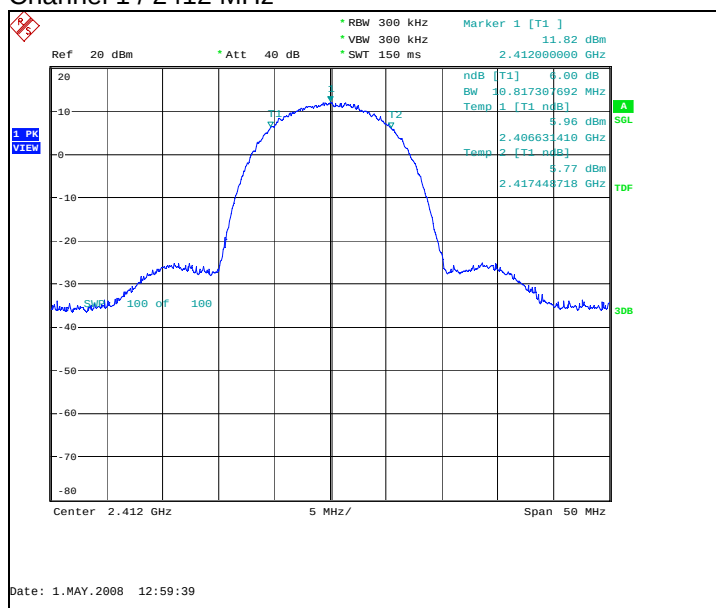
Limit [kHz]
≥ 500

8.2. WLAN test results

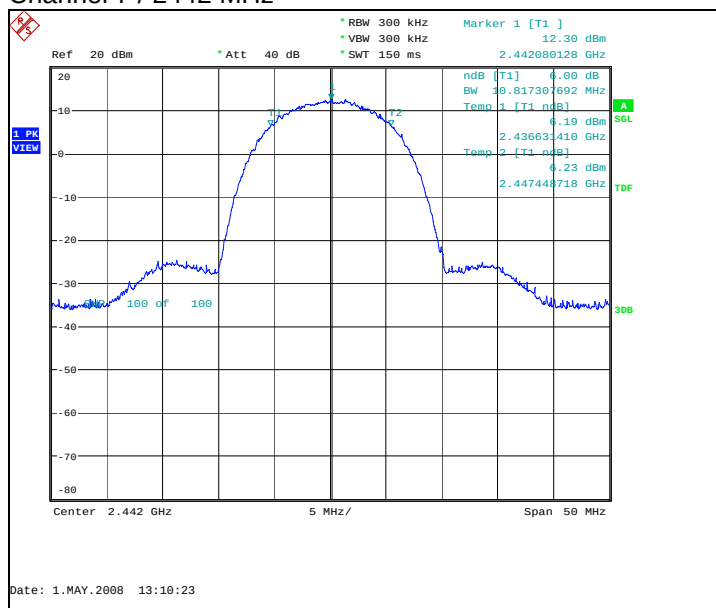
8.2.1 DSSS mode, QPSK modulation, 11 Mbps data rate

Channel / f_c [MHz]	6 dB bandwidth [kHz]	Result
1	10817.308	PASSED
7	10817.308	PASSED
11	10897.436	PASSED

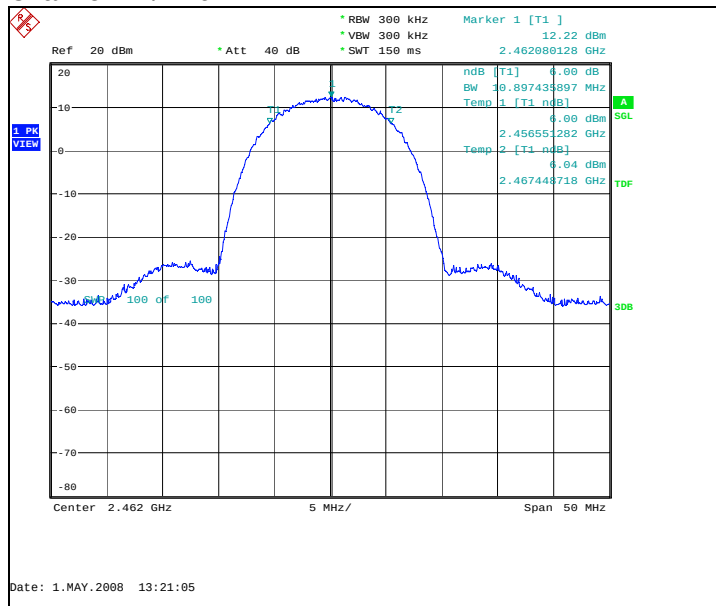
Channel 1 / 2412 MHz



Channel 7 / 2442 MHz



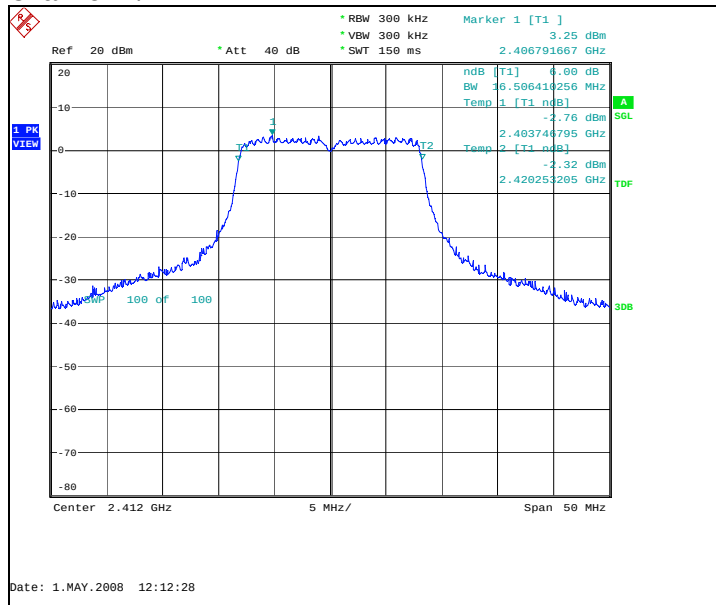
Channel 11 / 2462 MHz



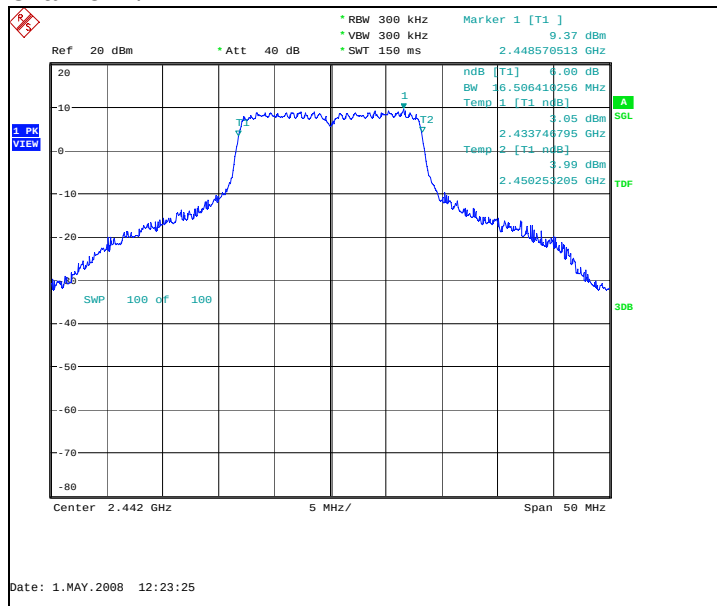
8.2.2 OFDM mode, BPSK modulation, 6 Mbps data rate

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

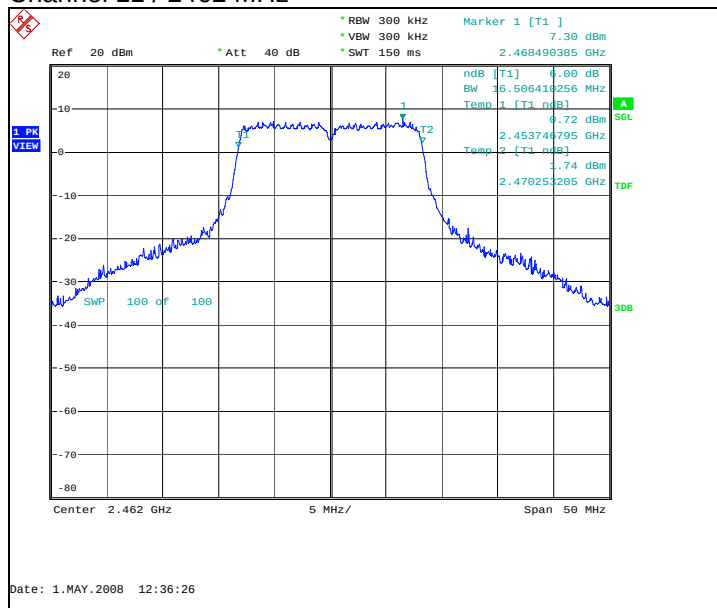
Channel 1 / 2412 MHz



Channel 7 / 2442 MHz



Channel 11 / 2462 MHz



9. Power spectral density (FCC §15.247(e), RSS-210 A8.2 (2))

EUT with DUT number	RM-333 DUT 41470
Accessories with DUT numbers	BL-5K DUT 41477 / AC-10E DUT 41478 / AD-54 DUT 41475 / HS-45 DUT 41473
Operation Voltage [V] / [Hz]	Nominal
Result	PASSED
Remarks	-
Temp [°C] / Humidity [%RH] / Air Pressure [kPa]	20 / 50 / 102
Date of measurements	01-May-2008
Measured by	Petteri Suni

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

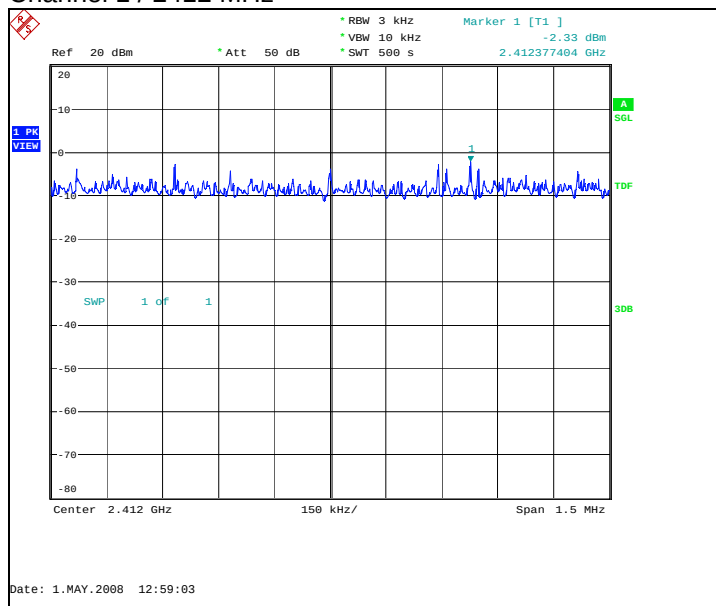
Limit [dBm] @ 3 kHz
≤ 8

9.2. WLAN test results

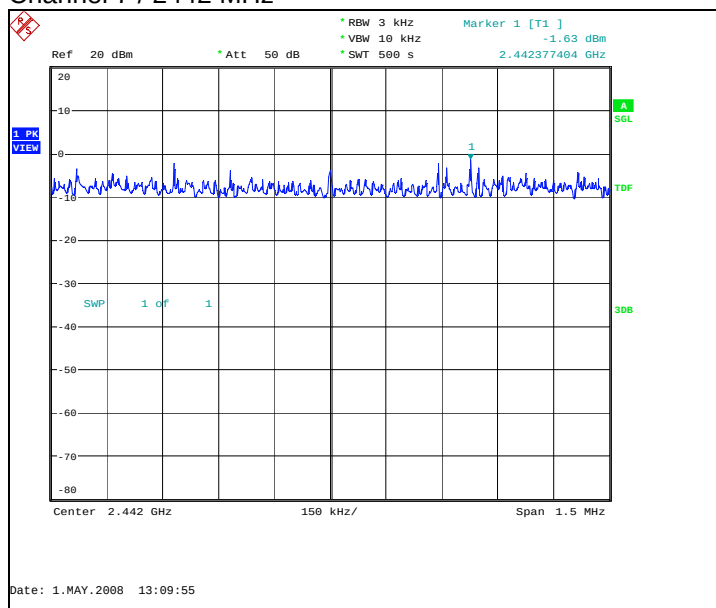
9.2.1 DSSS mode, QPSK modulation, 11 Mbps data rate

Channel / f_c [MHz]	P [dBm]	Result
1 / 2412	-2.33	PASSED
7 / 2442	-1.63	PASSED
11 / 2462	-1.71	PASSED

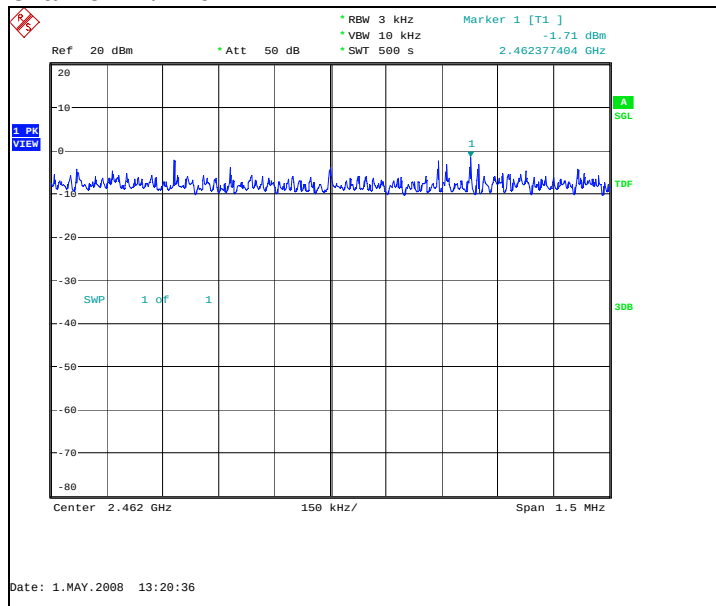
Channel 1 / 2412 MHz



Channel 7 / 2442 MHz



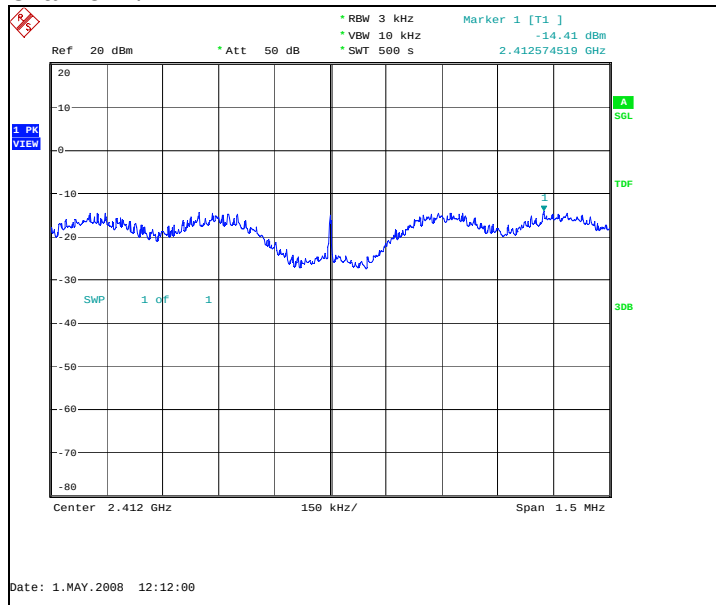
Channel 11 / 2462 MHz



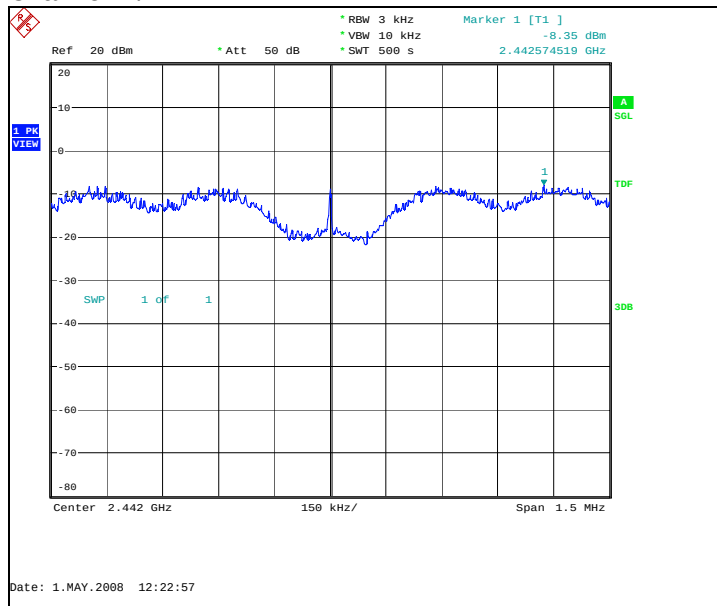
9.2.2 OFDM mode, BPSK modulation, 6 Mbps data rate

Channel / f_c [MHz]	P [dBm]	Result
1 / 2412	-14.41	PASSED
7 / 2442	-8.35	PASSED
11 / 2462	-10.14	PASSED

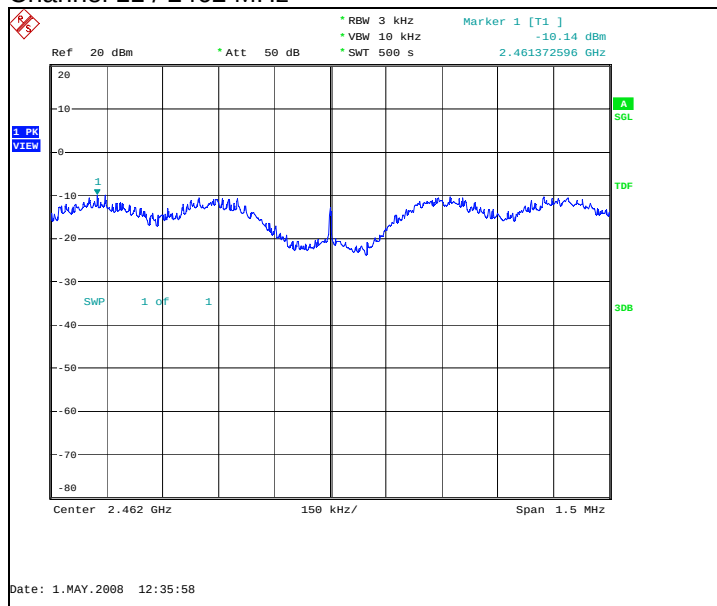
Channel 1 / 2412 MHz



Channel 7 / 2442 MHz



Channel 11 / 2462 MHz



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 μ H	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	Transformativ	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

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