

FCC Part 15C Compliance Test Report

Test Report no.:	FCC15C_RM-719_12.docx	Date of Report:	11-Nov-2010
Number of pages:	29	Customer's Contact person:	Mohammad El-Haj
Testing laboratory:	TCC Nokia Copenhagen Laboratory Frederikskaj 1790 COPENHAGEN V DENMARK Tel. +45 33 292929 Fax. +45 33 292934	Customer:	Nokia Corporation Frederikskaj 1790 COPENHAGEN V DENMARK Tel. +45 33 292929 Fax. +45 33 292934
FCC listing no.:	99059		
IC recognition no.:	661AL-1		
Tested devices/ accessories:	Phone RM-719 / Battery BL-4U / AC-Charger AC-8 / Headset WH-102		
FCC ID:	QTKRM-719	IC:	661AD-RM-719
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, System Manager, EMC

1. Summary for FCC Part 15C Compliance Test Report

Date of receipt	31-Aug-2010
Testing completed	16-Sep-2010
The customer's contact person	Mohammad El-Haj
Test Plan referred to	T:\Projects\RM-697\TestPlan\RS_testplan_RM-697 EMC FCC SAR.xls
Notes	None
Document name	FCC15C_RM-697_14.docx

1.1. EUT and Accessory Information

The EUT is a 7-band (GSM850/900/1800/1900 and WCDMA Band I/II(1900)/V(850)) mobile phone with Bluetooth and WLAN. Bluetooth and WLAN are tested with maximum rated TX power.

Product	Type	SN	HW	MV	SW	DUT
Phone	RM-697	004402/13/108474/5	2200	-	0.0.109	24097
Battery	BL-4U	4955400093210401053;0670560	-	-	-	24080
AC-Charger	AC-8E	4868670162530602954;0675387	-	-	-	24077
Headset	WH-102	0694323022523104246	-	-	-	24079
Phone	RM-697	004402/13/108361/4	2200	-	0.0.109	24092
Battery	BL-4U	4955400203010405902;0670560	-	-	-	24084
AC-Charger	AC-8E	4868670162510602628;0675387	-	-	-	24078
Headset	WH-102	0694323022523104246	-	-	-	24079
Phone	RM-697	004402/13/108387/9	2200	-	0.0.109	24099
Battery	BL-4U	4955400093210401068;0670560	-	-	-	24091

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	NP
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 Copenhagen Laboratory.

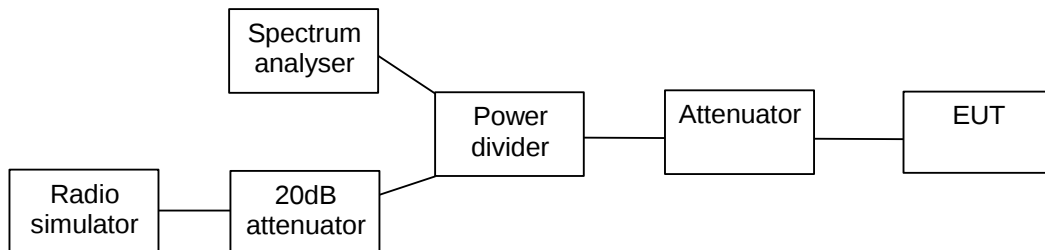
The test results of QTKRM-697 are re-used for certification of the QTKRM -719. The table above indicates the results, which will be re-used.

CONTENTS

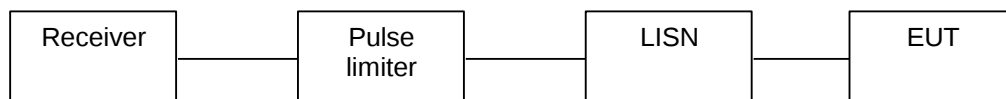
1. Summary for FCC Part 15C Compliance Test Report.....	2
1.1. EUT and Accessory Information	2
1.2. Summary of Test Results	2
2. Test setups.....	4
2.1. Conducted RF test setup	4
2.2. AC powerline conducted emissions test setup	4
2.3. Radiated test setup	4
3. Conducted peak output power (FCC §15.247(b)(1), RSS-210 A8.4 (4))	5
3.1. Test method and limit	5
3.2. WLAN Test results	6
4. Spurious RF conducted emissions (FCC §15.247(d), RSS-210 A8.5).....	9
4.1. Test method and limit	9
4.2. WLAN Test results	10
5. Spurious radiated emissions (FCC §15.247(d), §15.209, RSS-210 A8.5).....	14
5.1. Test method and limit	14
5.2. WLAN Test results	15
6. 6 dB bandwidth (FCC §15.247(a)(2), RSS-210 A8.2 (a))	18
6.1. Test method and limit	18
6.2. WLAN test results.....	19
7. Power spectral density (FCC §15.247(e), RSS-210 A8.2 (b))	22
7.1. Test method and limit	22
7.2. WLAN test results.....	23
8. AC powerline conducted emissions (FCC §15.107, ICES-003 section 5.3)	26
8.2. Test method and limit	26
8.3. WLAN 802.11b Test Results	27
9. Test Equipment.....	28
9.1. Conducted measurements	28
9.2. Radiated measurements	28

2. Test setups

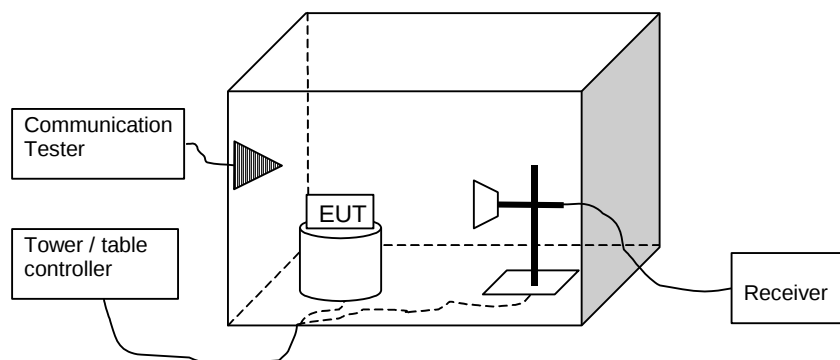
2.1. Conducted RF test setup



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-697 DUT 24097
Accessories with DUT numbers	BL-4U DUT 24080; AC-8 DUT 24077; WH-102 DUT 24079
Operation Voltage [V] / [Hz]	115V / 60Hz
Result	Passed
Remarks	None
Temp [°C] / Humidity [%RH] / Air Pressure [kPa]	26 / 45 / 1024
Date of measurements	7-Sep-2010
Measured by	Ruben Hansen

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

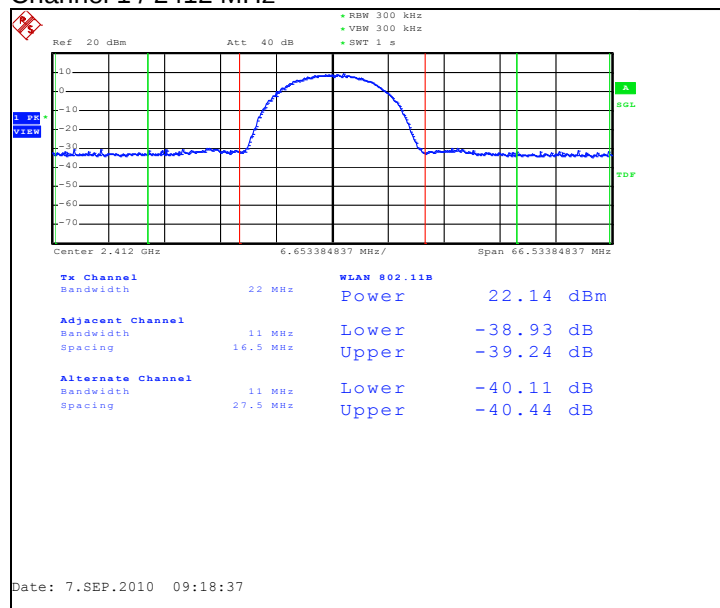
Frequency range [MHz]	Limit [W]	Limit [dBm]
2400 – 2483.5	≤ 1	≤ 30

3.2. WLAN Test results

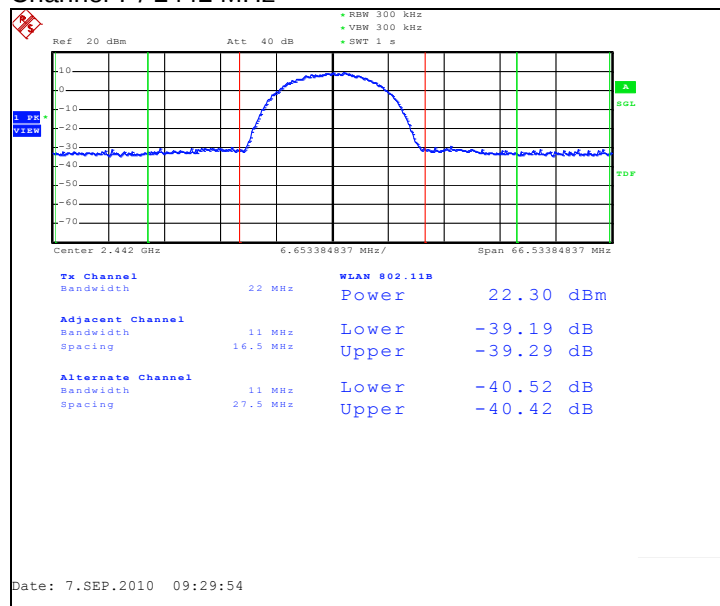
3.2.1 DSSS mode, QPSK modulation, 11 Mbps data rate

Channel / f _c [MHz]	P [dBm]	P [W]	Result
1 / 2412	22.14	0.164	PASSED
7 / 2442	22.30	0.170	PASSED
11 / 2462	22.40	0.174	PASSED

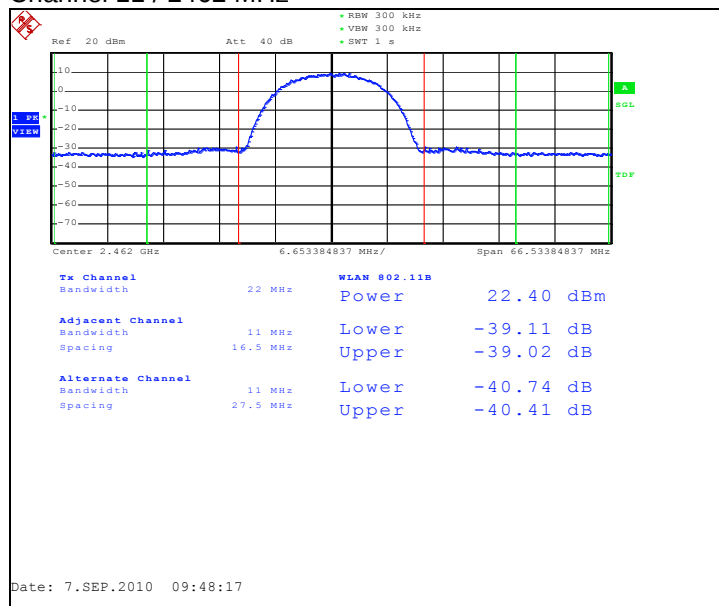
Channel 1 / 2412 MHz



Channel 7 / 2442 MHz



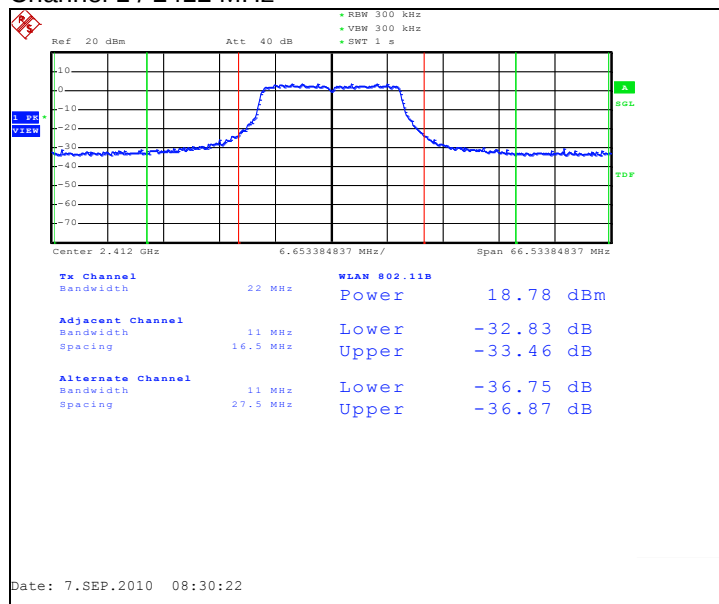
Channel 11 / 2462 MHz



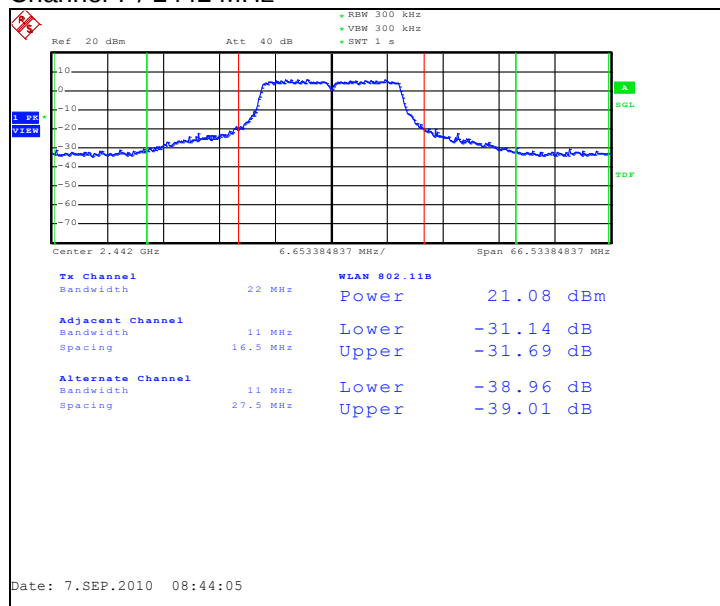
3.2.2 OFDM mode, BPSK modulation, 6 Mbps data rate

Channel / f _c [MHz]	P [dBm]	P [W]	Result
1 / 2412	18.78	0.076	PASSED
7 / 2442	21.08	0.128	PASSED
11 / 2462	19.26	0.084	PASSED

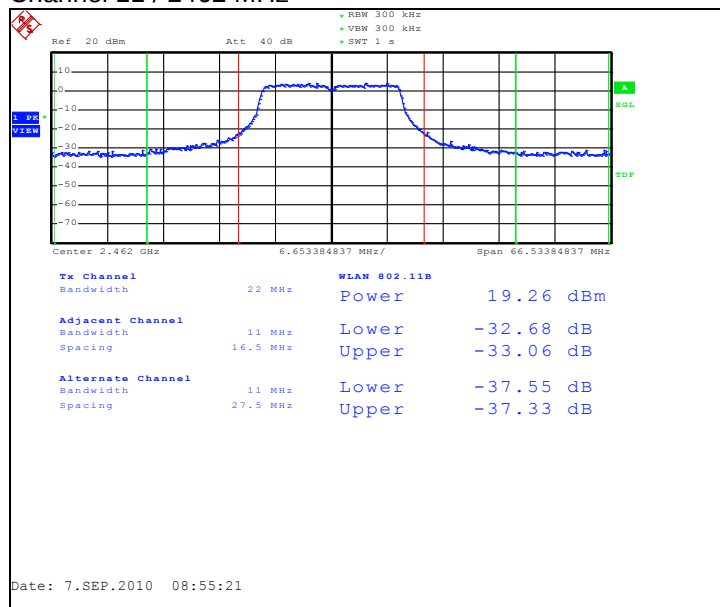
Channel 1 / 2412 MHz



Channel 7 / 2442 MHz



Channel 11 / 2462 MHz



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

EUT with DUT number	RM-697 DUT 24097
Accessories with DUT numbers	BL-4U DUT 24080; AC-8 DUT 24077; WH-102 DUT 24079
Operation Voltage [V] / [Hz]	115V / 60Hz
Result	Passed
Remarks	None
Temp [°C] / Humidity [%RH] / Air Pressure [kPa]	26 / 45 / 1024
Date of measurements	7-Sep-2010
Measured by	Ruben Hansen

4.1. Test method and limit

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

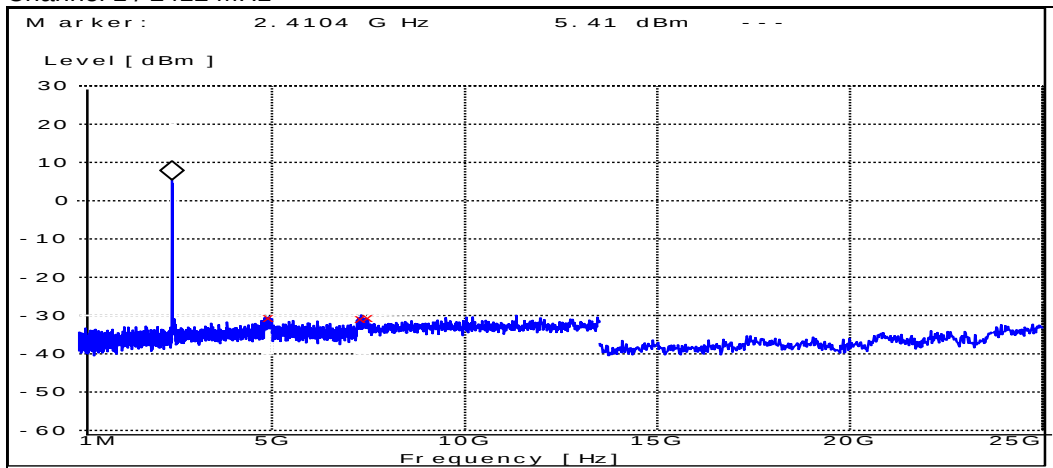
Limits for spurious RF conducted emissions measurements

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

4.2. WLAN Test results

4.2.1 DSSS mode, QPSK modulation, 11 Mbps data rate

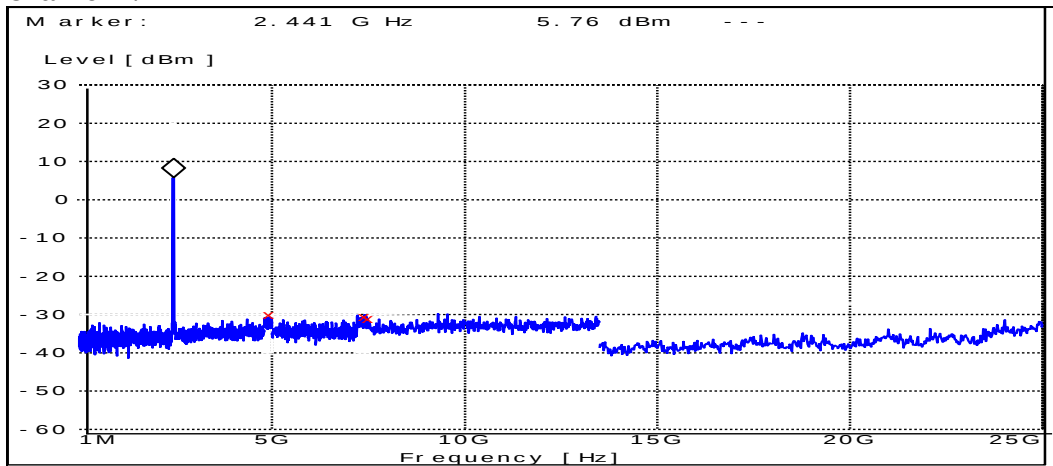
Channel 1 / 2412 MHz



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

Frequency [MHz]	P [dBc]	Result
4919.200000	-35.805296	PASSED
7317.600000	-36.105296	PASSED
7500.000000	-35.805296	PASSED

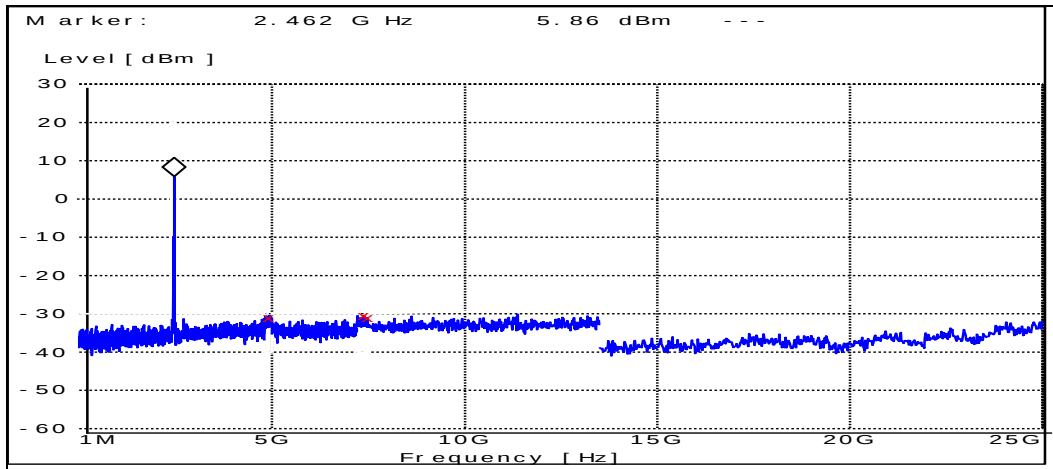
Channel 7 / 2442 MHz



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

Frequency [MHz]	P [dBc]	Result
4935.200000	-35.859186	PASSED
7403.400000	-36.359186	PASSED
7500.000000	-36.859186	PASSED

Channel 11 / 2462 MHz

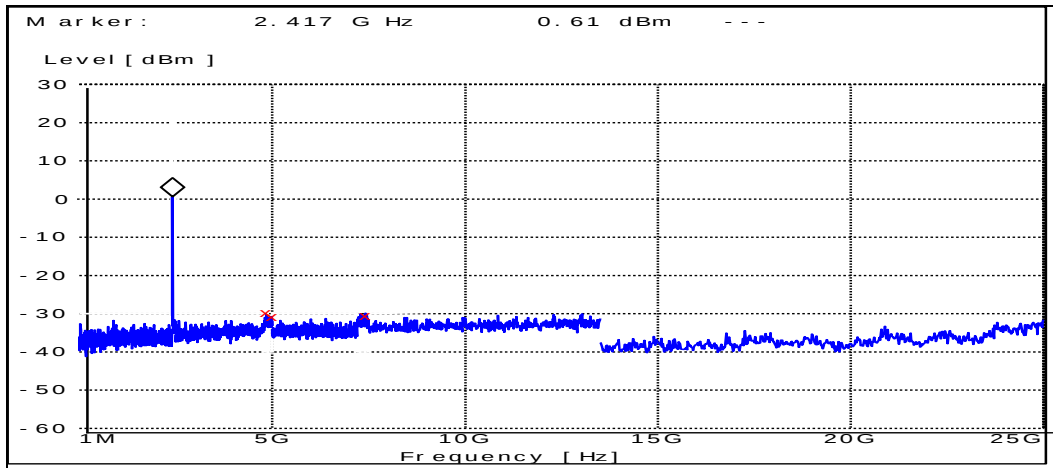


Peak (RBW: 100 kHz, VBW: 100 kHz)

Frequency [MHz]	P [dBc]	Result
4930.400000	-36.961458	PASSED
7399.800000	-36.361458	PASSED
7500.000000	-36.961458	PASSED

4.2.2 OFDM mode, BPSK modulation, 6 Mbps data rate

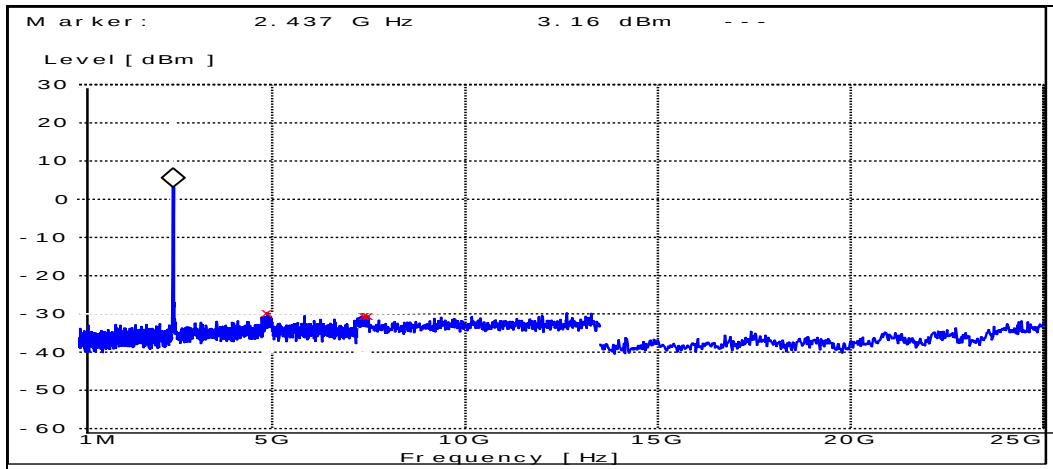
Channel 1 / 2412 MHz



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

Frequency [MHz]	P [dBc]	Result
4856.800000	-30.409451	PASSED
5000.000000	-31.509451	PASSED
7417.800000	-31.209451	PASSED

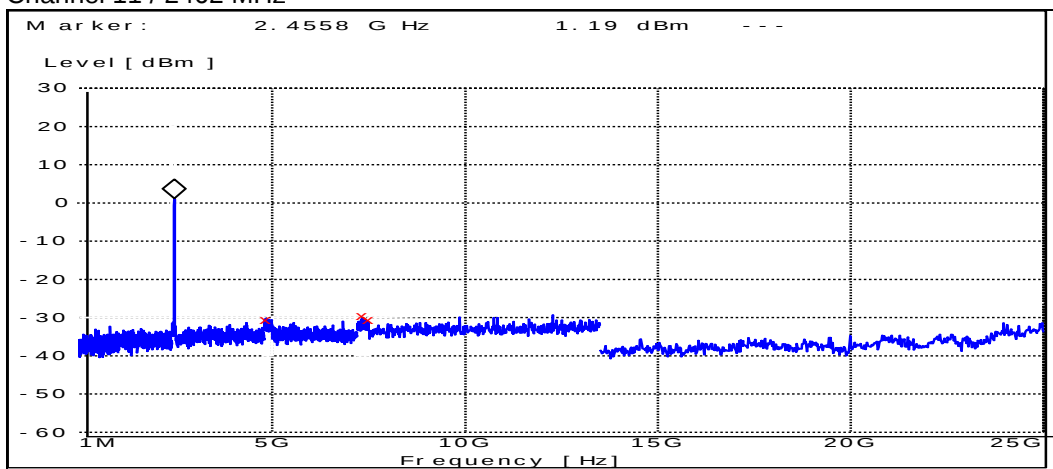
Channel 7 / 2442 MHz



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

Frequency [MHz]	P [dBc]	Result
4874.400000	-32.956029	PASSED
7409.400000	-33.756029	PASSED
7500.000000	-33.656029	PASSED

Channel 11 / 2462 MHz



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

Frequency [MHz]	P [dBc]	Result
4835.600000	-31.686974	PASSED
7335.600000	-30.786974	PASSED
7500.000000	-31.786974	PASSED

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

EUT with DUT number	RM-697, DUT 24092
Accessories with DUT numbers	BL-4U, DUT 24084 ; AC-8E, DUT 24078 ; WH-102, DUT 24079
Operation Voltage [V] / [Hz]	115 / 60
Result	Passed
Remarks	None
Temp [°C] / Humidity [%RH] / Air Pressure [kPa]	23 / 45 / 101.1
Date of measurements	14-Sep-2010
Measured by	Christian Andersen

5.1. 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 ($A_{TOT} = L_{CABLES} + AF - G_{PREAMP}$).

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

5.2. WLAN Test results

5.2.1 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	51.31	367.875	49.77	1.54	VERTICAL	Passed
7235	48.88	278.003	38.93	9.95	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
4824	38.27	81.969	36.73	1.54	VERTICAL	Passed
7235	36.2	64.528	26.25	9.95	HORIZONTAL	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
72.466	33.16	45.488	52.92	-19.76	VERTICAL	Passed
72.543	33.04	44.895	52.79	-19.75	VERTICAL	Passed
72.602	32.89	44.096	52.63	-19.74	VERTICAL	Passed
74.49	33.13	45.352	52.61	-19.48	VERTICAL	Passed
74.51	33.13	45.316	52.61	-19.48	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
2493.811	50.24	324.9	46.59	3.65	HORIZONTAL	Passed
11337.777	56.65	679.908	38.55	18.1	VERTICAL	Passed
11495.088	56.57	673.364	37.93	18.64	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
2493.811	37.15	72.061	33.5	3.65	HORIZONTAL	Passed
11337.777	43.89	156.477	25.79	18.1	VERTICAL	Passed
11495.088	43.9	156.585	25.26	18.64	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
4923.9	44.02	158.782	41.66	2.36	VERTICAL	Passed
7386	50.42	331.78	38.43	11.99	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
4923.9	30.4	33.098	28.04	2.36	VERTICAL	Passed
7386	37.55	75.379	25.56	11.99	VERTICAL	Passed

5.2.2 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
4824.7	48.26	258.791	46.71	1.55	VERTICAL	Passed
7237.7	49.23	289.534	39.29	9.94	HORIZONTAL	Passed

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

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Polarisation	Result
4824.7	33.18	45.583	31.63	1.55	VERTICAL	Passed
7237.7	36.09	63.782	26.15	9.94	HORIZONTAL	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
74.608	33.2	45.719	52.67	-19.47	VERTICAL	Passed
74.64	33.2	45.709	52.66	-19.46	VERTICAL	Passed
74.689	32.92	44.254	52.38	-19.46	VERTICAL	Passed
74.708	33.03	44.833	52.48	-19.45	VERTICAL	Passed
74.711	33.17	45.546	52.62	-19.45	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
2494.211	52.98	445.502	49.78	3.2	HORIZONTAL	Passed
10860.023	57.18	722.687	39.29	17.89	VERTICAL	Passed
11379.456	56.23	648.187	38.42	17.81	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
2494.211	38.28	82.073	35.08	3.2	HORIZONTAL	Passed
10860.023	43.94	157.38	26.05	17.89	VERTICAL	Passed
11379.456	43.45	148.696	25.64	17.81	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
4922	42.58	134.617	40.25	2.33	HORIZONTAL	Passed
7386.3	50.66	341.35	38.67	11.99	HORIZONTAL	Passed

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

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Polarisation	Result
4922	29.71	30.581	27.38	2.33	HORIZONTAL	Passed
7386.3	37.58	75.657	25.59	11.99	HORIZONTAL	Passed

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

EUT with DUT number	RM-697 DUT 24097
Accessories with DUT numbers	BL-4U DUT 24080; AC-8 DUT 24077; WH-102 DUT 24079
Operation Voltage [V] / [Hz]	115V / 60Hz
Result	Passed
Remarks	None
Temp [°C] / Humidity [%RH] / Air Pressure [kPa]	26 / 45 / 1024
Date of measurements	7-Sep-2010
Measured by	Ruben Hansen

6.1. 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

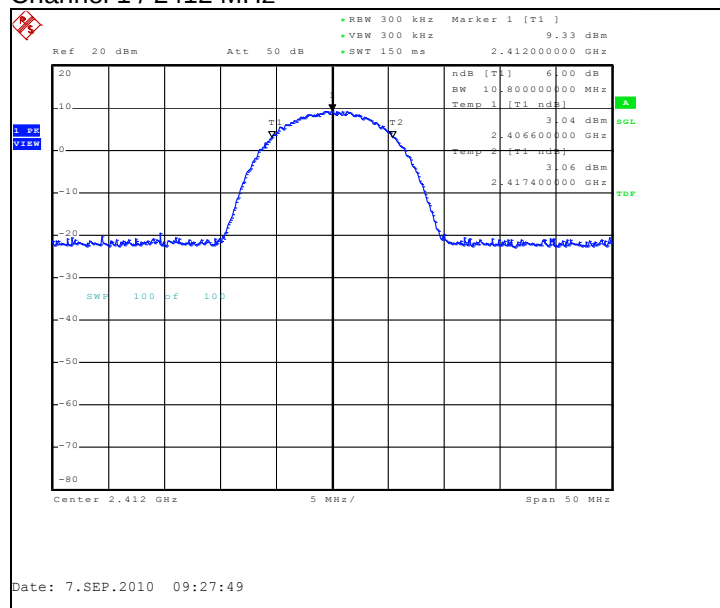
Limit [kHz]
≥ 500

6.2. WLAN test results

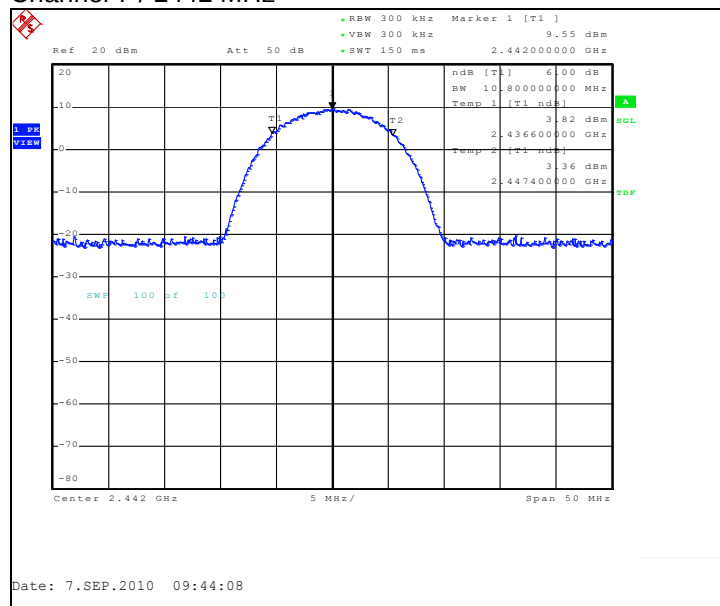
6.2.1 DSSS mode, QPSK modulation, 11 Mbps data rate

Channel / f _c [MHz]	6 dB bandwidth [kHz]	Result
1	10800.000	PASSED
7	10800.000	PASSED
11	10800.000	PASSED

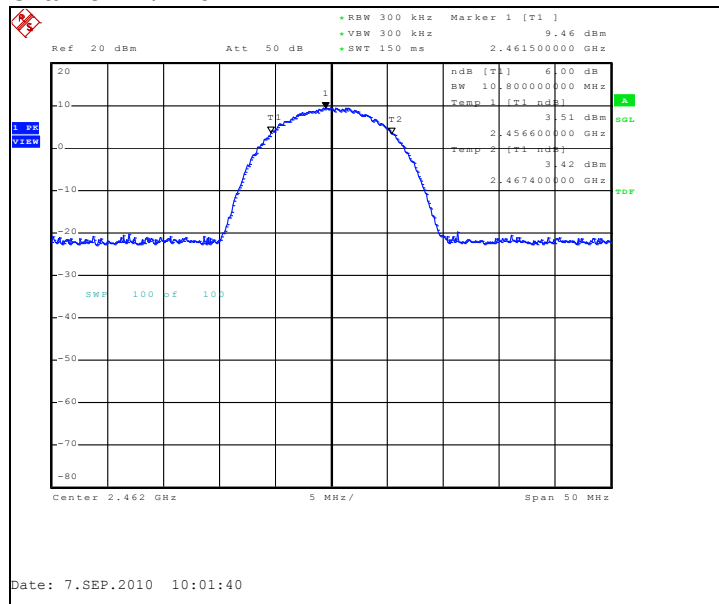
Channel 1 / 2412 MHz



Channel 7 / 2442 MHz



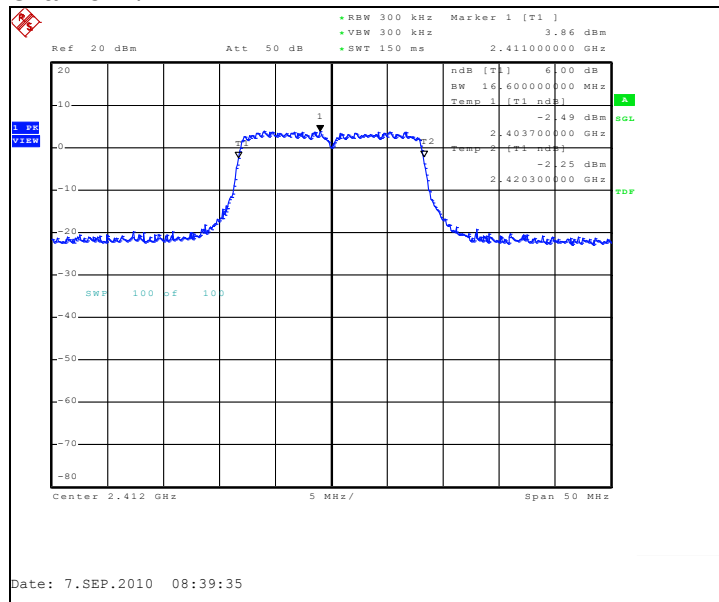
Channel 11 / 2462 MHz



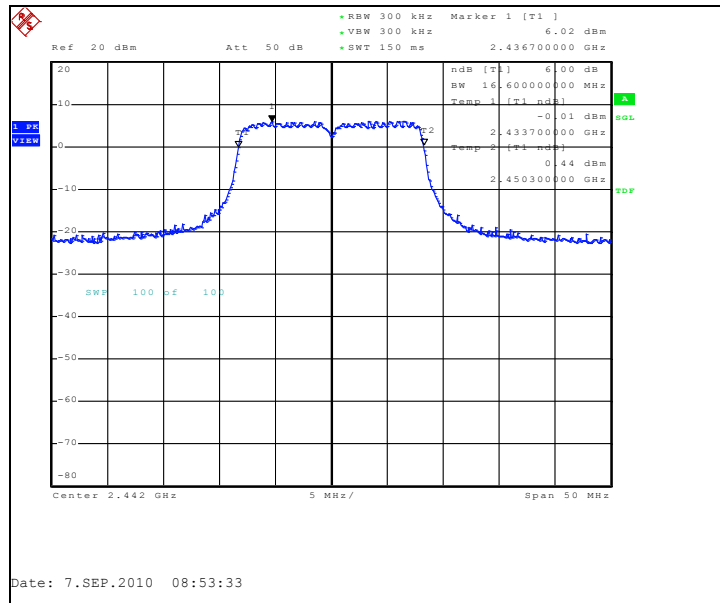
6.2.2 OFDM mode, BPSK modulation, 6 Mbps data rate

Channel / f_c [MHz]	6 dB bandwidth [kHz]	Result
1	16600.000	PASSED
7	16600.000	PASSED
11	16600.000	PASSED

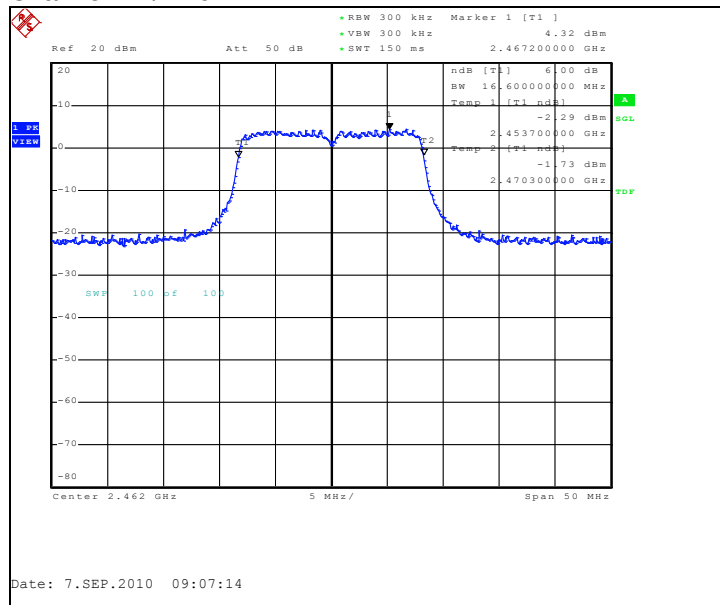
Channel 1 / 2412 MHz



Channel 7 / 2442 MHz



Channel 11 / 2462 MHz



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

EUT with DUT number	RM-697 DUT 24097
Accessories with DUT numbers	BL-4U DUT 24080; AC-8 DUT 24077; WH-102 DUT 24079
Operation Voltage [V] / [Hz]	115V / 60Hz
Result	Passed
Remarks	None
Temp [°C] / Humidity [%RH] / Air Pressure [kPa]	26 / 45 / 1024
Date of measurements	7-Sep-2010
Measured by	Ruben Hansen

7.1. 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

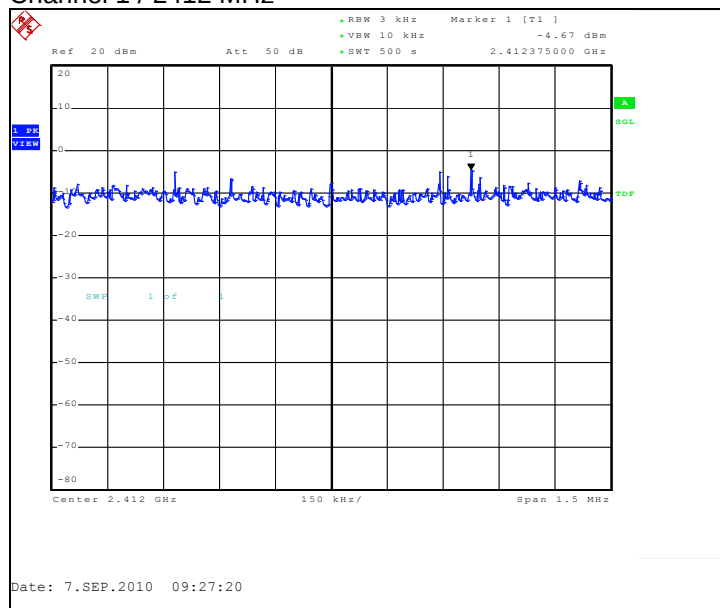
Limit [dBm] @ 3 kHz
≤ 8

7.2. WLAN test results

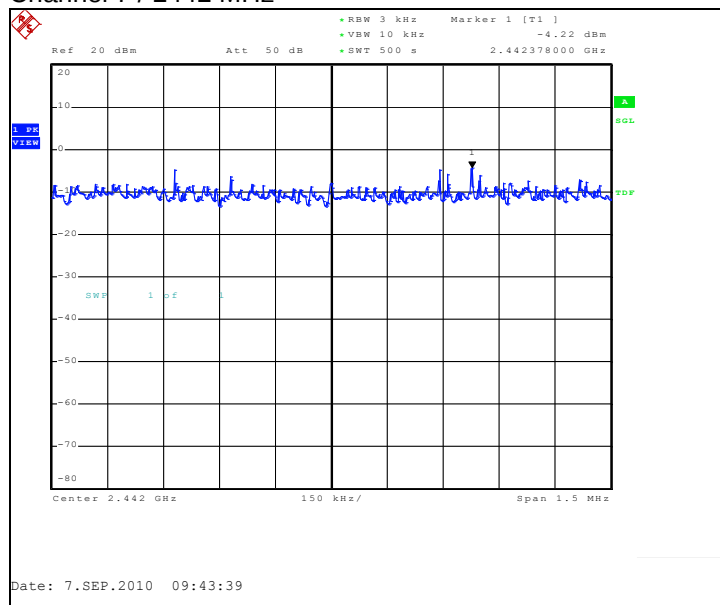
7.2.1 DSSS mode, QPSK modulation, 11 Mbps data rate

Frequency	Level	Transd	Result
2412.000000	-4.67	17.0	PASSED

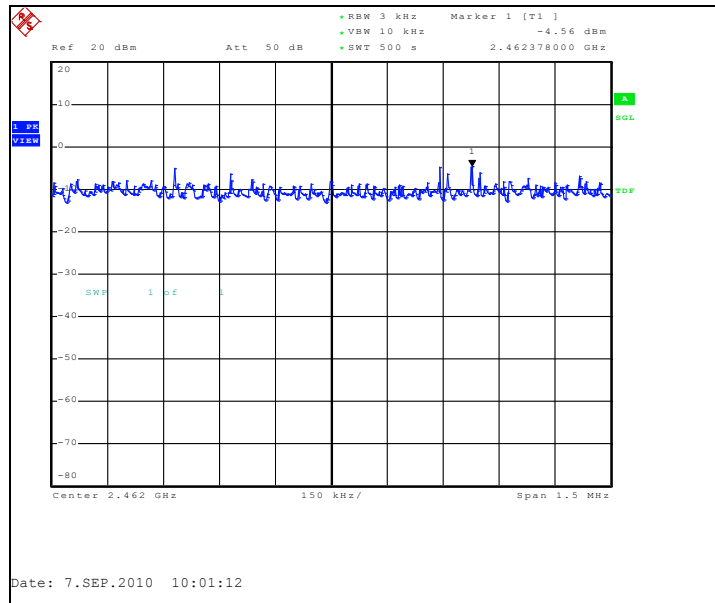
Channel 1 / 2412 MHz



Channel 7 / 2442 MHz



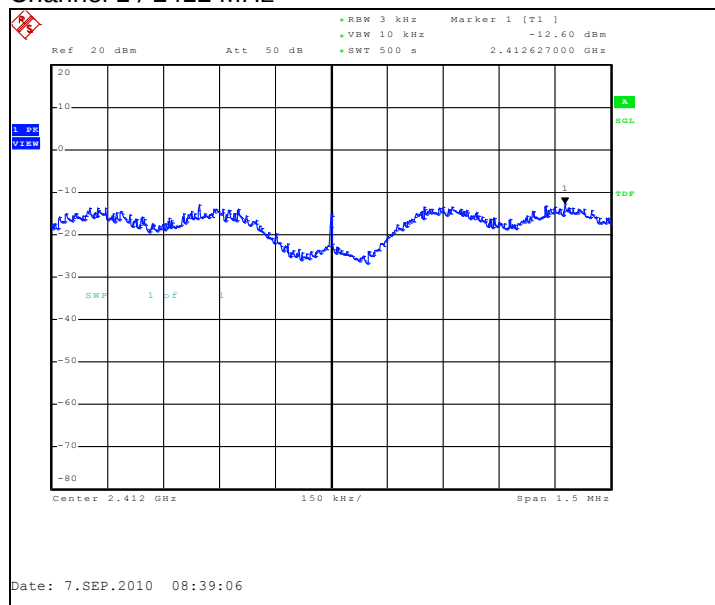
Channel 11 / 2462 MHz



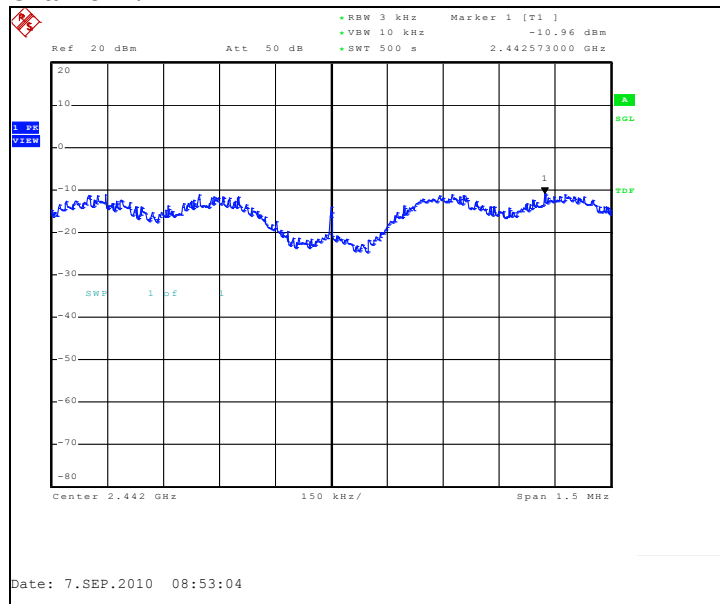
7.2.2 OFDM mode, BPSK modulation, 6 Mbps data rate

Channel / f_c [MHz]	P [dBm]	Result
1 / 2412	-12.60	PASSED
7 / 2442	-10.96	PASSED
11 / 2462	-12.61	PASSED

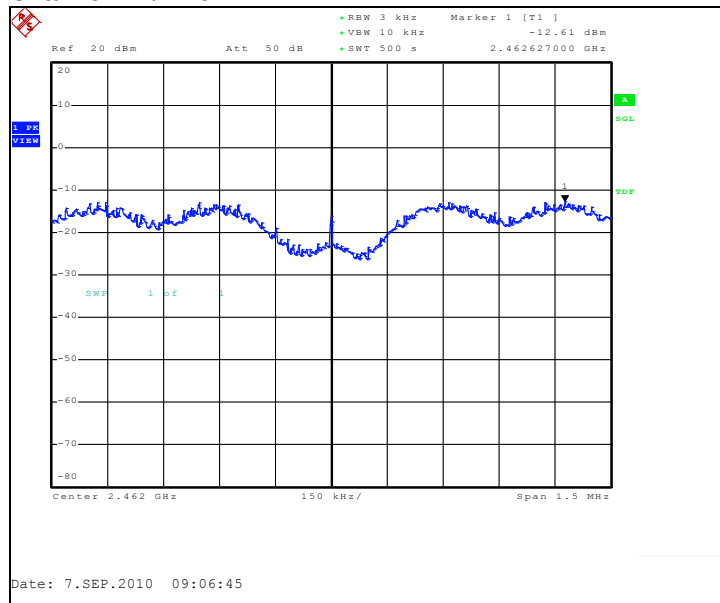
Channel 1 / 2412 MHz



Channel 7 / 2442 MHz



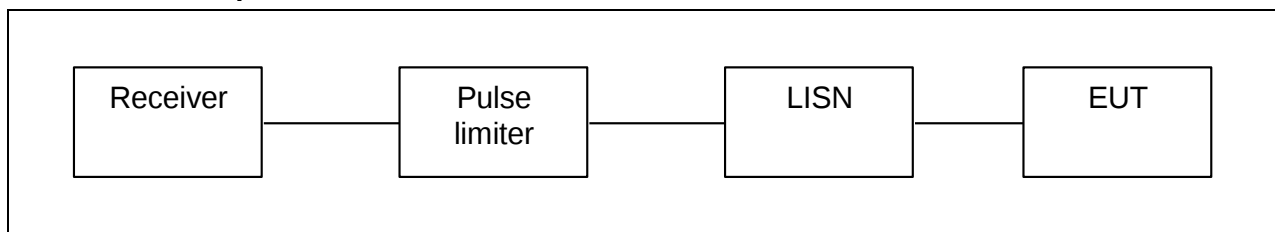
Channel 11 / 2462 MHz



8. AC powerline conducted emissions (FCC §15.107, ICES-003 section 5.3)

EUT with DUT number	RM-697, DUT 24099
Accessories with DUT numbers	BL-4U, DUT 24091 ; WH-102, DUT 24079 ; AC-8E, DUT 24077
Operation Voltage [V] / [Hz]	115 / 60
Results	Passed
Remarks	none
Temp [°C] / Humidity [%RH] / Air Pressure [kPa]	22 / 41 / 109
Date of measurements	23-Sep-2010
Measured by	Bo Moltved Christiansen

8.1.1 Test Setup



8.2. Test method and limit

The measurement is made according to ANSI C63.4-2003 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:

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

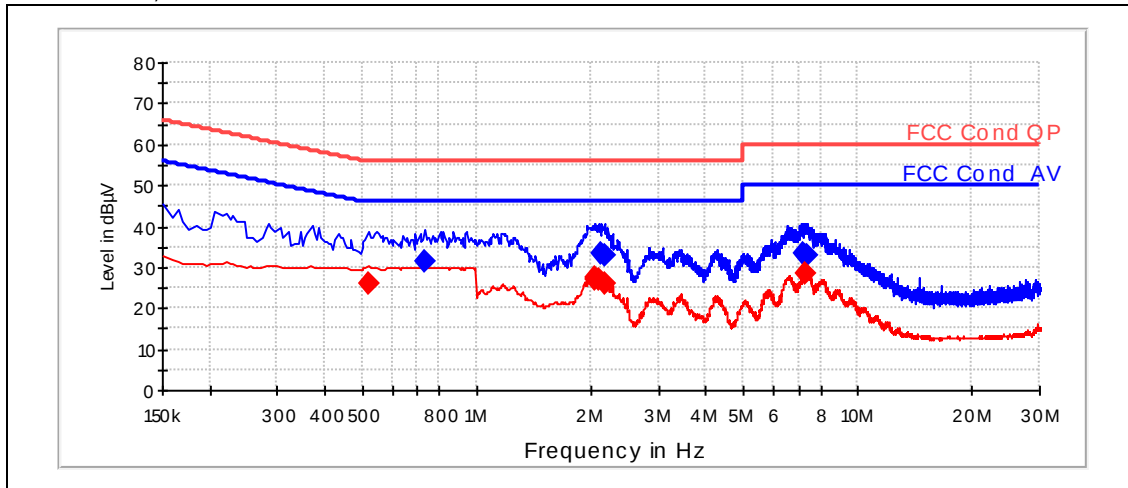
Where U_{RX} is receiver reading and A_{TOT} is total correction factor including cable and pulse limiter attenuations.

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

8.3. WLAN 802.11b Test Results

DSSS mode, channel 7



Quasi peak

Frequency [MHz]	U [dBμV]	IF-BW[kHz]	Line	Margin	Result
0.735	31.25	10	N	24.7	Passed
2.13	33.54	10	N	22.5	Passed
2.165	33.01	10	N	23	Passed
7.21	33.2	10	N	26.8	Passed
7.25	33.08	10	N	26.9	Passed
7.34	32.83	10	N	27.2	Passed

Average

Frequency [MHz]	U [dBμV]	IF-BW[kHz]	Line	Margin	Result
0.52	26.23	10	L1	19.8	Passed
2.035	26.81	10	N	19.2	Passed
2.05	27.37	10	N	18.6	Passed
2.105	27.1	10	N	18.9	Passed
2.165	26.2	10	N	19.8	Passed
7.295	28.39	10	N	21.6	Passed

9. Test Equipment

9.1. Conducted measurements

Eq. No	Equipment	Type	Manufacturer	Used in
20168	Bluetooth Tester	CBT	Rohde&Schwarz	22/24/27, 15C, 15B
18772	Shielded Chamber	RFD-100	ETS-Lindgren	15C, 15B
13037	Power Supply 0-15V 10A	EA3012	LP Instruments	15C, 15B
13513	Pulse Limiter	ESH3Z2	Rohde&Schwarz	15C, 15B
13666	Receiver	ESPC	Rohde&Schwarz	15C, 15B
13935	LISN	ESH3-Z5	Rohde&Schwarz	15C, 15B
16995	Directional Coupler 20dB 0,5-2,0 GHz SMA Conn.	1538RA-20	Weinschel	15C, 15B
18772	Shielded Chamber	RFD-100	ETS-Lindgren	15C, 15B
19171	Communication Tester	CMU200	Rohde&Schwarz	15C, 15B
11386	DC Power Supply	HP6632A	Hewlett Packard	22/24/27, 15C, 15B
19678	Spectrum Analyzer	FSP	Rohde&Schwarz	22/24/27, 15C, 15B
16601	Communication Tester	CMU200	Rohde&Schwarz	22/24/27, 15C, 15B
19625	Climatic Chamber	VT4002EMC	Vötsch	22/24/27, 15C, 15B
13357	Signal Generator	SMP02	Rohde&Schwarz	22/24/27, 15C, 15B
19116	Power splitter	-	various	22/24/27, 15C, 15B
20544	Transformer. 230/115V	-	Nokia	22/24/27, 15C, 15B
20543	UPS. 700V/A 490W	PW 9120 700i	Powerware	22/24/27, 15C, 15B

9.2. Radiated measurements

Eq. No	Equipment	Type	Manufacturer	Used in
18792	Mast/turntable controller	2090	ETS-EMCO	22/24/27, 15C, 15B
18416	Communication Tester	CMU200	Rohde&Schwarz	22/24/27, 15C, 15B
20168	Bluetooth Tester	CBT	Rohde&Schwarz	22/24/27, 15C, 15B
13077	Power Supply	EA-3016	-	22/24/27, 15C, 15B
15742	Programmable Relay Switching System	-----	Pickering	22/24/27, 15C, 15B
20078	Relay 2x6 Chnl μ Wave Mux	10-785B-522	Pickering	22/24/27, 15C, 15B
14021	Relay Dual 6 Chnl μ Wave Mux	10-785-522	-	22/24/27, 15C, 15B
-	Relay Dual 6 Chnl μ Wave Mux	10-785-522	-	22/24/27, 15C, 15B
17644	Dual 6 Channel MUX Microwave Relay SMA 50 Ohm	10-785-522	Pickering	22/24/27, 15C, 15B
16948	Dual 6 Channel MUX Microwave Relay SMA 50 Ohm	10-785-522	Pickering	22/24/27, 15C, 15B
16949	Dual 6 Channel MUX Microwave Relay SMA 50 Ohm	10-785-522	Pickering	22/24/27, 15C, 15B
18861	Receiver	EMI Test Receiver 20Hz-26,5GHz ESI	Rohde&Schwarz	22/24/27, 15C, 15B
18860	Antenna	HL562	Rohde&Schwarz	22/24/27, 15C, 15B
18773	Anechoic chamber	RFD-100	ETS-Lindgren	22/24/27, 15C, 15B
18774	Anechoic chamber	RFSD-F/A-100	ETS-Lindgren	22/24/27, 15C, 15B
19151	High Pass Filter	WHJS3000-10SS	Wainwright	22/24/27, 15C, 15B
13937	Band reject filter	WRCA902.4-0.2/40-6SS	Wainwright Instruments	22/24/27, 15C, 15B
13936	Band reject filter	WRCD1747.5-0.2/40-10SS	Wainwright Instruments	22/24/27, 15C, 15B

Eq. No	Equipment	Type	Manufacturer	Used in
14114	Highpass Filter	WHK1000-12SS	Wainwright Instruments	22/24/27, 15C, 15B
14188	Band reject filter	WRCA902.4-0.2/40-6SS	Wainwright	22/24/27, 15C, 15B
14187	Band reject filter	WRCD1747.5-0.2/40-10SS	Wainwright	22/24/27, 15C, 15B
16633	Band reject filter	WRCD1880.0-0.2/40-10SS	Wainwright	22/24/27, 15C, 15B
19587	Band reject filter	WRCG2400/2483-2390/2493-35/10SS	Wainwright	22/24/27, 15C, 15B
20115	Band reject filter	-	Wainwright	22/24/27, 15C, 15B
20114	Band reject filter	WRCG1737/1743-1733/1747-40/6SS	Wainwright	22/24/27, 15C, 15B
20116	Band reject filter	WRCG832/83/-825/845-40/5SS	Wainwright	22/24/27, 15C, 15B
20698	Antenna	BBHA 9120 D	SCHWARZBECK	22/24/27, 15C, 15B
19966	Antenna	HFH2-Z2	Rohde&Schwarz	15C, 15B
13799	Signal Generator	SMP02	Rohde&Schwarz	22/24/27, 15C, 15B
15191	Turntable Contoller Unit	G-800SDX	YAESU	22/24/27, 15C, 15B
14900	Antenna Controller	HD100	HD GmbH	22/24/27, 15C, 15B
20544	Transformer. 230/115V	-	Nokia	22/24/27, 15C, 15B
20543	UPS. 700V/A 490W	PW 9120 700i	Powerware	22/24/27, 15C, 15B