

FCC Part 15C Compliance Test Report

Test Report no.:	Salo_FCC_0622_01.doc	Date of Report:	19.06.2006
Number of pages:	39	Customer's Contact person:	Ole Sørensen
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FCC listing no.:	533467		
IC recognition no.:	5385		
Tested devices/ accessories:	Phone RM-165 / Battery BP-6X, Headset HS-15 and AC- Charger AC-3		
FCC ID:	QTKRM-165	IC:	661AD-RM165
Supplement reports:	-		
Testing has been carried out in accordance with:	CFR 47, FCC rules Part 15 Subpart C, ANSI C63.4 (2003), IC standards RSS-GEN and RSS-210. 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:			

Tomi Lipponen, System Manager

1. Summary for FCC Part 15C Compliance Test Report

Date of receipt	29.05.2006
Testing completed	12.06.2006
The customer's contact person	Ole Sørensen
Test Plan referred to	T:\Projects\RM-165\TestPlan_RS\RS_Test_plan_RM-165.xls
Notes	-
Document name	T:\Projects\RM-165\EMC\Results\FCC\Salo_FCC_0622_01.doc

1.1. EUT and Accessory Information

The EUT is a triple band (GSM900/1800/1900) mobile phone with GPRS, EGPRS and Bluetooth. Bluetooth is tested with maximum rated TX power.

Product	Type	SN	HW	MV	SW	DUT
Phone	RM-165	004400/92/160543/0	0303	-	03.20	11295
Phone	RM-165	004400/92/160541/4	0303	-	03.20	11320
Battery	BP-6X	4181576146110100155;0670534	-	-	-	11291
Battery	BP-6X	4181576146110100116;0670534	-	-	-	11321
Headset	HS-15	0208	0.2	0.4	-	11299
AC- Charger	AC-3E	067537039350L392110000414	-	-	-	11129

1.2. Summary of Test Results

Bluetooth:

Section in CFR 47	Section in RSS-GEN or RSS-210	Name of the test	Result
15.247(b)(1)	A8.4 (2)	Peak output power	PASSED
15.247(c)	A8.5	Band edge compliance of RF emissions	PASSED
15.247(c)	A8.5	Spurious RF conducted emissions	PASSED
15.247(c), 15.209	A8.5	Spurious radiated emissions	PASSED
15.207	7.2.2	AC powerline conducted emissions	PASSED
15.247(a)(1)	A8.1 (1)	20 dB bandwidth	PASSED
15.247(a)(1)	A8.1 (2)	Carrier frequency separation	PASSED
15.247(a)(1)(iii)	A8.1 (4)	Number of hopping frequencies	PASSED
15.247(a)(1)(iii)	A8.1 (4)	Time of occupancy	PASSED

PASSED

FAILED

NP

The EUT complies with the essential requirements in the standard.

The EUT does not comply with the essential requirements in the standard.

The test was not performed by the TCC Nokia Salo Laboratory.

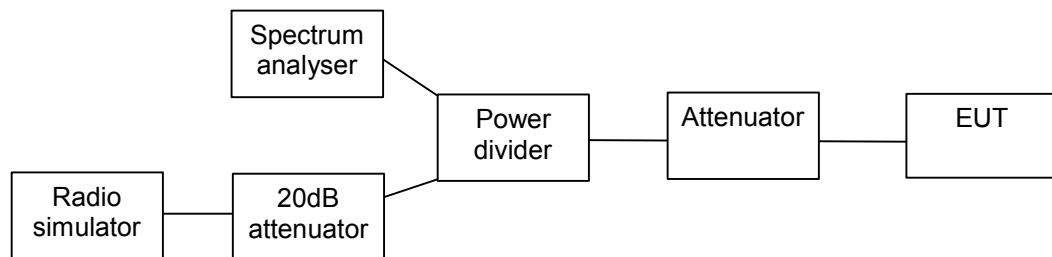
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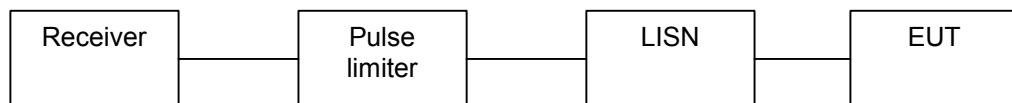
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2. Test setups

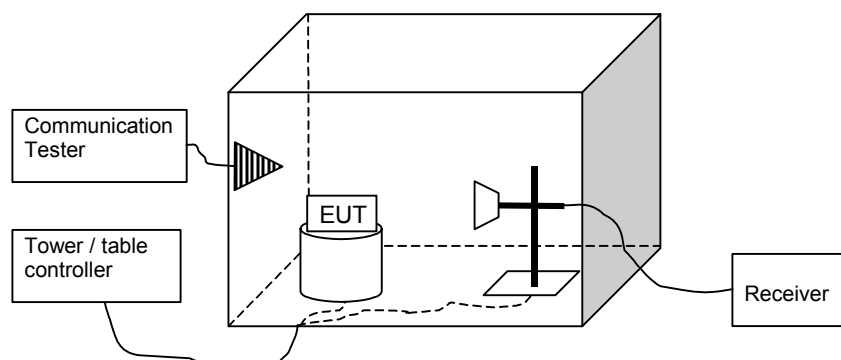
2.1. Conducted RF test setup



2.2. AC powerline conducted emissions test setup



2.3. Spurious radiated emissions test setup



3. Peak output power (FCC §15.247(b)(1), RSS-210 A8.4 (2))

EUT with DUT number	RM-165, DUT 11320
Accessories with DUT numbers	BP-6X, DUT 11321
Operation Voltage [V] / [Hz]	115 / 60
Result	PASSED
Remarks	-
Temp [°C] / Humidity [%RH] / Air Pressure [kPa]	20 / 40 / 101.2
Date of measurements	12.06.2006
Measured by	Janne Niemi

3.1. Test method and limit

The measurement is made according to FCC rules part 15.247 and IC standard RSS-210.

Limits for peak output power measurements

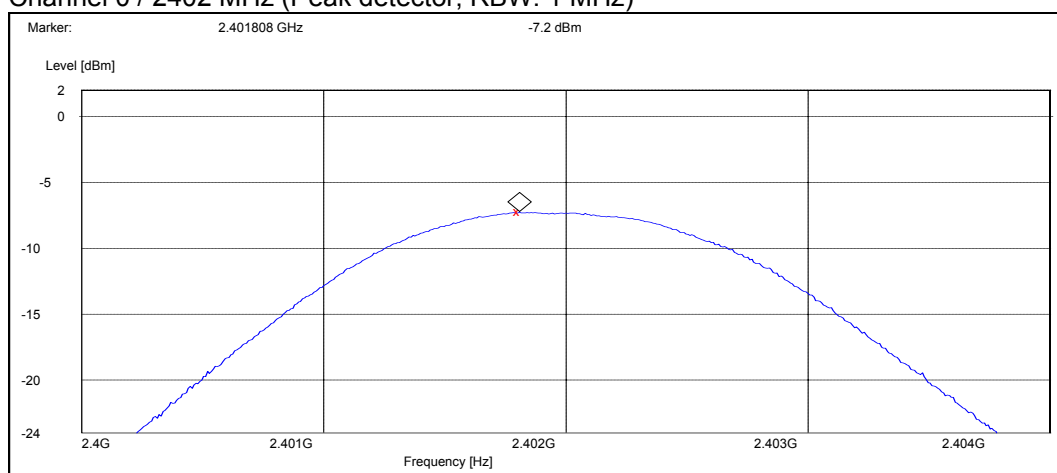
Frequency range [MHz]	Limit [W]	Limit [dBm]
2400 – 2483.5	≤ 1	≤ 30

3.2. Bluetooth Test results

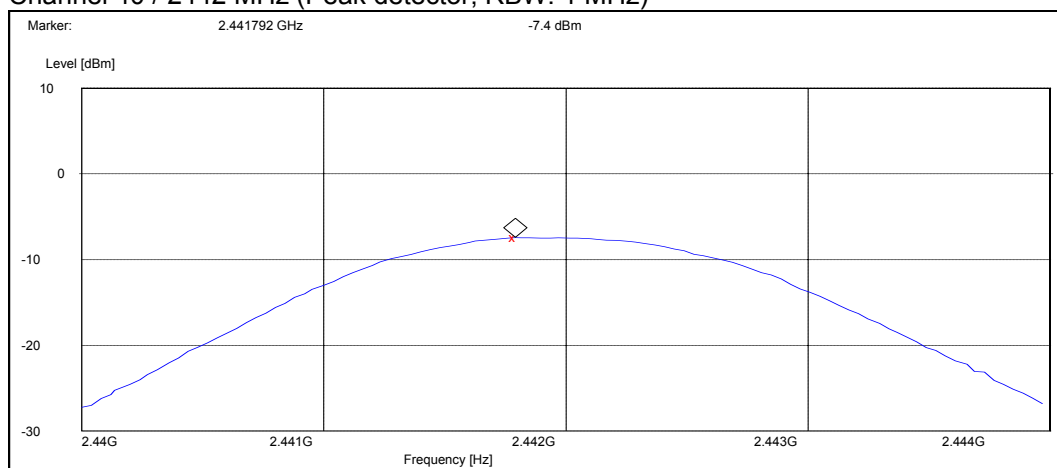
3.2.1 8DPSK modulation, PRBS packet type

Channel / f_c [MHz]	P [dBm]	P [mW]	Result
0 / 2402	-7.20	0.191	PASSED
40 / 2442	-7.40	0.182	PASSED
78 / 2480	-7.30	0.186	PASSED

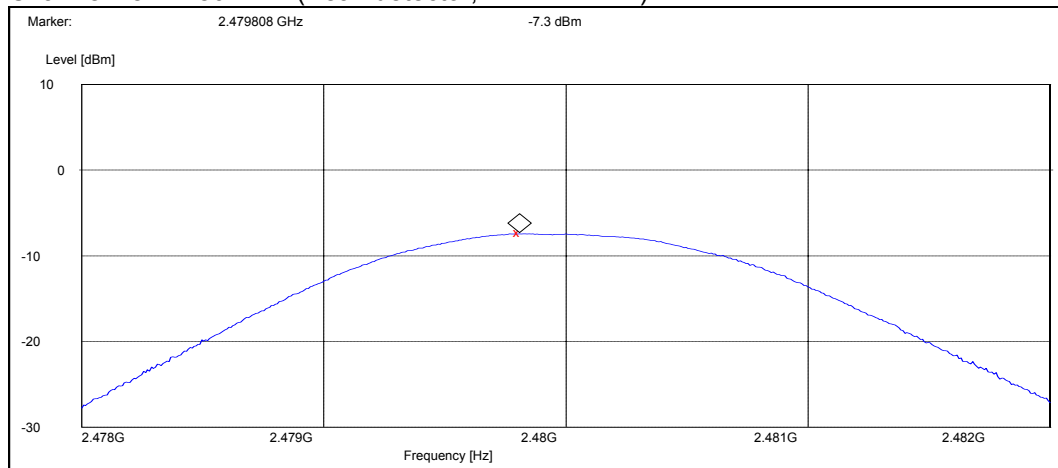
Channel 0 / 2402 MHz (Peak detector, RBW: 1 MHz)



Channel 40 / 2442 MHz (Peak detector, RBW: 1 MHz)



Channel 78 / 2480 MHz (Peak detector, RBW: 1 MHz)



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

EUT with DUT number	RM-165, DUT 11320
Accessories with DUT numbers	BP-6X, DUT 11321
Operation Voltage [V] / [Hz]	115 / 60
Result	PASSED
Remarks	-
Temp [°C] / Humidity [%RH] / Air Pressure [kPa]	20 / 40 / 101.2
Date of measurements	12.06.2006
Measured by	Janne Niemi

4.1. Test method and limit

The measurement is made according to FCC rules part 15.247 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. Bluetooth Test results

4.2.1 $\pi/4$ -DQPSK modulation, PRBS packet type

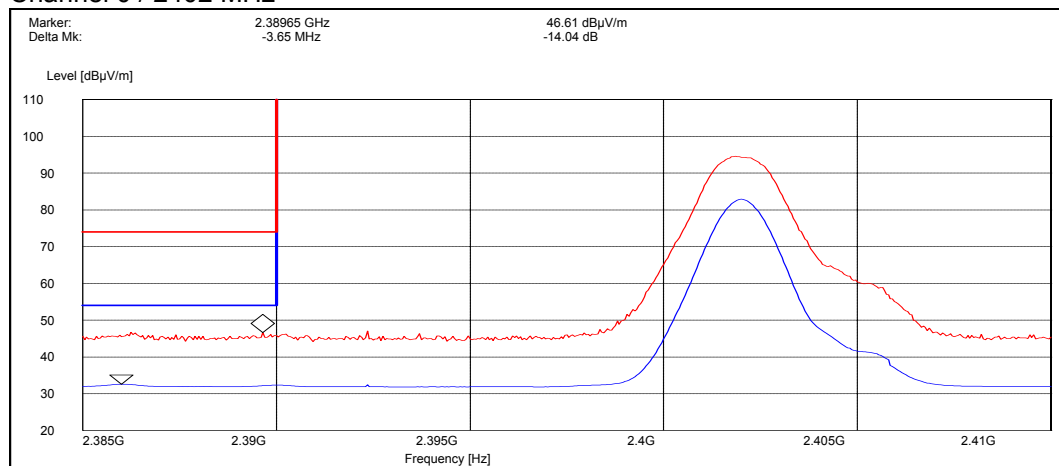
Average (RBW: 1 MHz)

Channel / f_c [MHz]	E [dB μ V/m]	Result
0 / 2402	32.57	PASSED
78 / 2480	42.57	PASSED
Hopping on, low end	31.74	PASSED
Hopping on, high end	35.11	PASSED

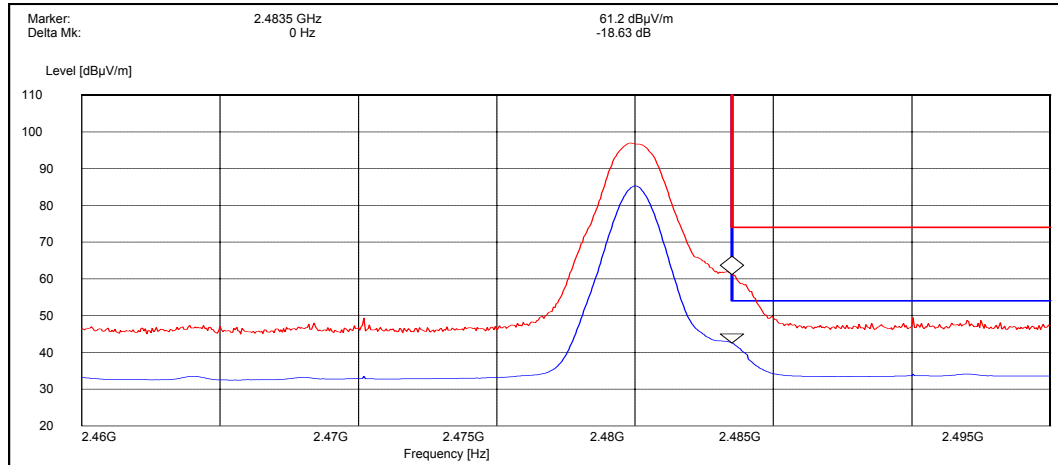
Peak (RBW: 1 MHz)

Channel / f_c [MHz]	E [dB μ V/m]	Result
0 / 2402	46.61	PASSED
78 / 2480	61.20	PASSED
Hopping on, low end	46.34	PASSED
Hopping on, high end	60.32	PASSED

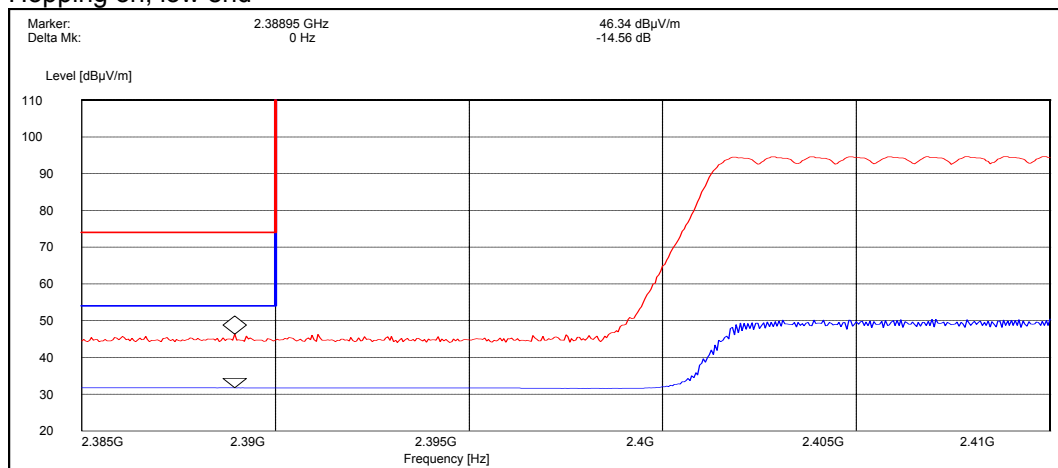
Channel 0 / 2402 MHz



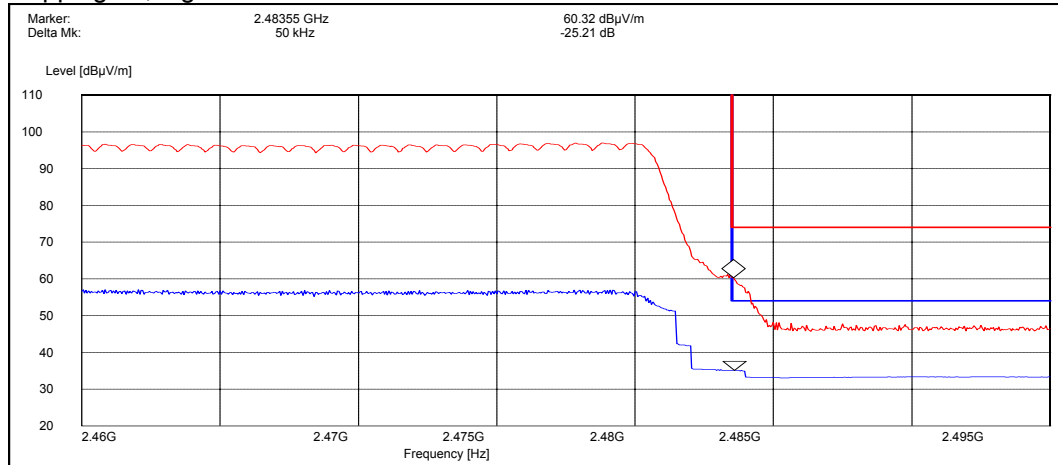
Channel 78 / 2480 MHz



Hopping on, low end



Hopping on, high end



4.2.2 8DPSK modulation, PRBS packet type

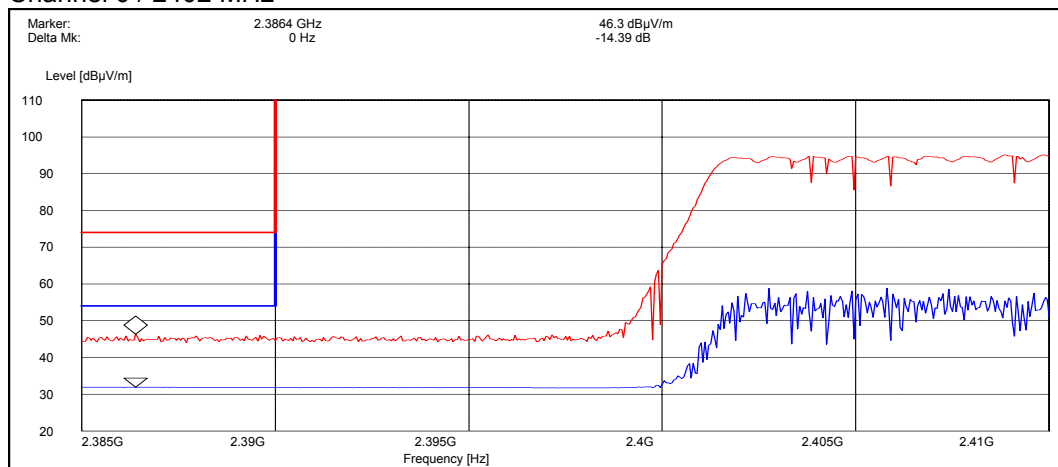
Average (RBW: 1 MHz)

Channel / f_c [MHz]	E [dBμV/m]	Result
0 / 2402	31.91	PASSED
78 / 2480	41.49	PASSED
Hopping on, low end	31.93	PASSED
Hopping on, high end	35.11	PASSED

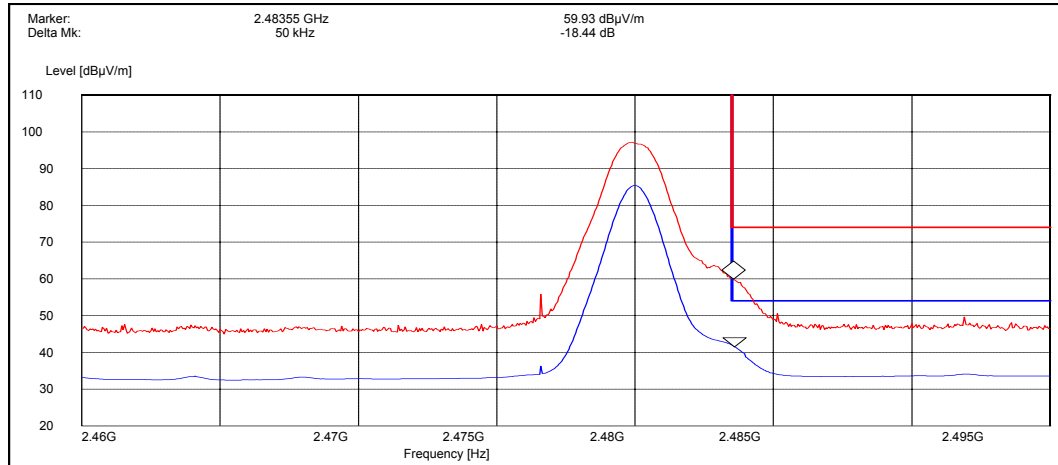
Peak (RBW: 1 MHz)

Channel / f_c [MHz]	E [dBμV/m]	Result
0 / 2402	46.30	PASSED
78 / 2480	59.93	PASSED
Hopping on, low end	46.45	PASSED
Hopping on, high end	59.04	PASSED

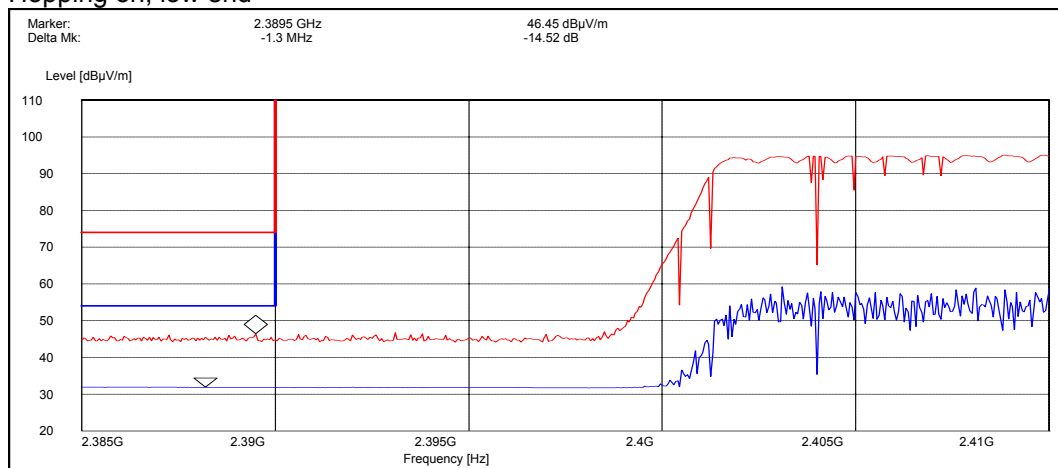
Channel 0 / 2402 MHz



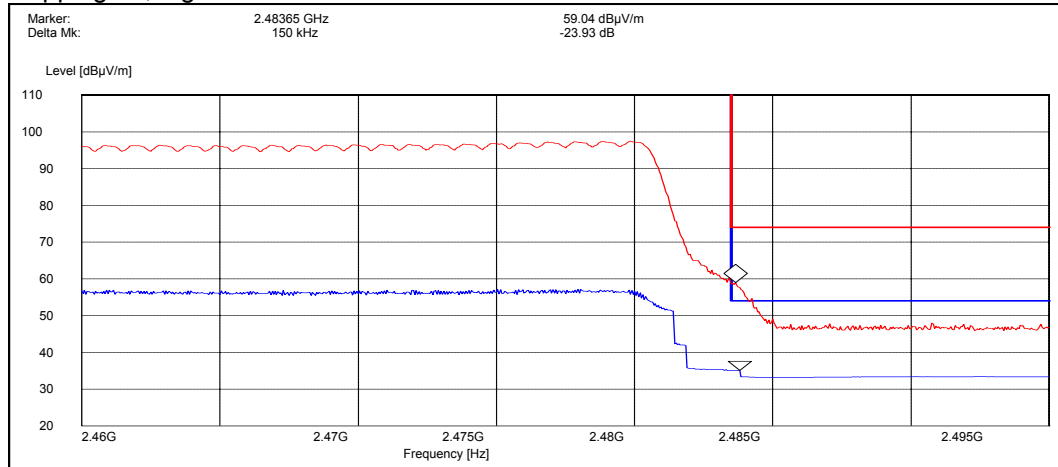
Channel 78 / 2480 MHz



Hopping on, low end



Hopping on, high end



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

EUT with DUT number	RM-165, DUT 11320
Accessories with DUT numbers	BP-6X, DUT 11321
Operation Voltage [V] / [Hz]	115 / 60
Result	PASSED
Remarks	-
Temp [°C] / Humidity [%RH] / Air Pressure [kPa]	20 / 40 / 101.2
Date of measurements	12.06.2006
Measured by	Janne Niemi

5.1. Test method and limit

The measurement is made according to FCC rules part 15.247 and IC standard RSS-210.

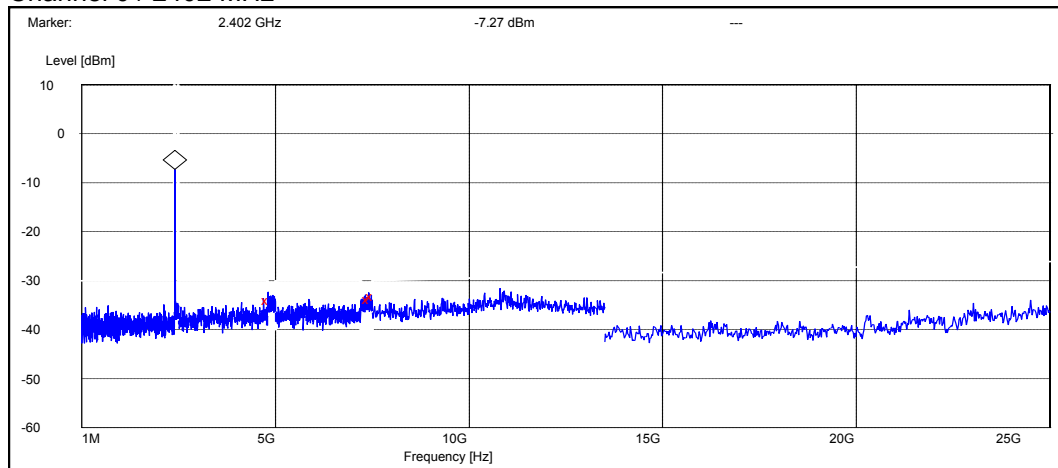
Limits for spurious RF conducted emissions measurements

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

5.2. Bluetooth Test results

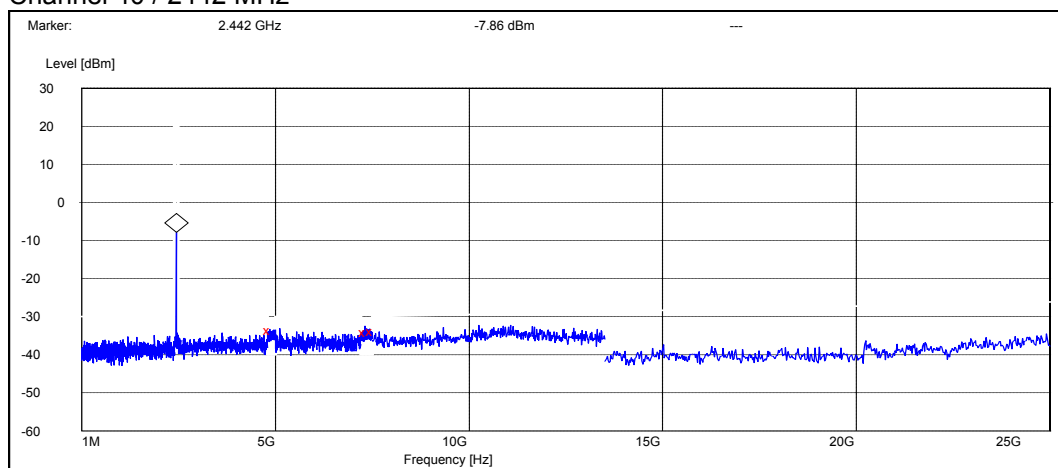
5.2.1 8DPSK modulation, PRBS packet type

Channel 0 / 2402 MHz



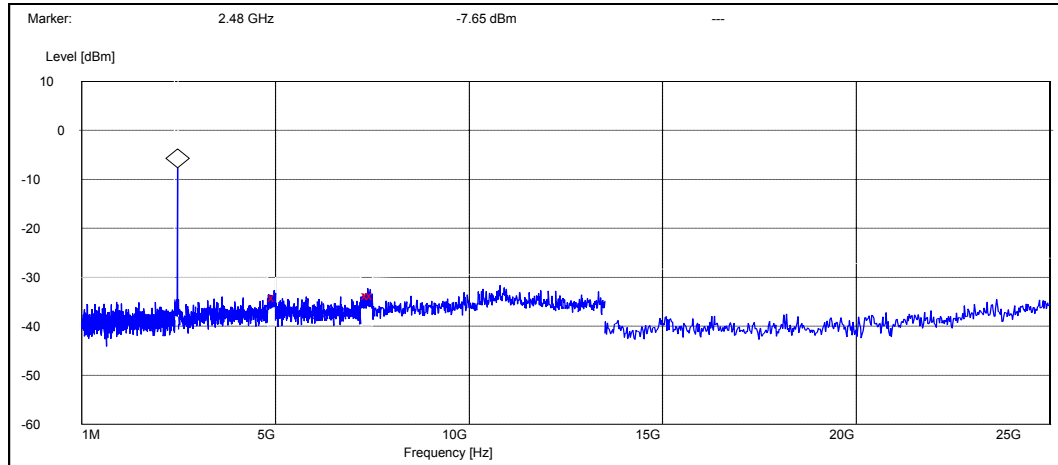
Frequency [MHz]	P [dBc]	Result
4812.800000	-26.731696	PASSED
7405.200000	-26.531696	PASSED
7500.000000	-25.931696	PASSED

Channel 40 / 2442 MHz



Frequency [MHz]	P [dBc]	Result
4847.200000	-25.644797	PASSED
7318.800000	-26.244797	PASSED
7500.000000	-25.944797	PASSED

Channel 78 / 2480 MHz



Frequency [MHz]	P [dBc]	Result
4976.400000	-26.554643	PASSED
7385.400000	-25.954643	PASSED
7500.000000	-26.154643	PASSED

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

EUT with DUT number	RM-165, DUT 11295
Accessories with DUT numbers	BP-6X, DUT 11291; HS-15, DUT 11299; AC-3, DUT 11129
Operation Voltage [V] / [Hz]	115 / 60
Result	PASSED
Remarks	
Temp [°C] / Humidity [%RH] / Air Pressure [kPa]	22 / 55 / 102.1
Date of measurements	31.05.2006
Measured by	Tomi Lipponen / Sami Lehtonen

6.1. Test method and limit

The measurement is made according to FCC rules part 15.247 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

6.2. Bluetooth Test results

6.2.1 8DPSK modulation, PRBS packet type

Channel 40 / 2442 MHz

Quasi peak (RBW: 120 kHz)

Frequency [MHz]	E [dB $\mu\text{V/m}$]	E [$\mu\text{V/m}$]	U _{RX} [dB μV]	A _{TOT} [dB]	Polarisation	Result
38.095391	16.80	6.92	35.70	-18.90	VERTICAL	PASSED

Peak (RBW: 1 MHz)

Frequency [MHz]	E [dB $\mu\text{V/m}$]	E [$\mu\text{V/m}$]	U _{RX} [dB μV]	A _{TOT} [dB]	Polarisation	Result
4850.701403	44.70	171.79	42.70	2.00	VERTICAL	PASSED
12442.893788	52.50	421.70	40.50	12.00	VERTICAL	PASSED
12504.000000	52.20	407.38	40.20	12.00	VERTICAL	PASSED
15499.495992	54.00	501.19	34.20	19.80	VERTICAL	PASSED
15899.303607	54.70	543.25	34.10	20.60	VERTICAL	PASSED
16155.318637	54.90	555.90	33.90	21.00	VERTICAL	PASSED
17717.928858	57.00	707.95	34.60	22.40	VERTICAL	PASSED

Average (RBW: 1 MHz)

Frequency [MHz]	E [dB $\mu\text{V/m}$]	E [$\mu\text{V/m}$]	U _{RX} [dB μV]	A _{TOT} [dB]	Polarisation	Result
4854.201403	31.90	39.36	29.90	2.00	VERTICAL	PASSED
12445.893788	38.80	87.10	26.80	12.00	VERTICAL	PASSED
12505.000000	39.20	91.20	27.20	12.00	VERTICAL	PASSED
15496.995992	41.20	114.82	21.40	19.80	VERTICAL	PASSED
15900.803607	41.90	124.45	21.30	20.60	VERTICAL	PASSED
16156.818637	42.20	128.82	21.20	21.00	VERTICAL	PASSED
17712.928858	43.80	154.88	21.40	22.40	VERTICAL	PASSED

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

EUT with DUT number	RM-165, DUT 11295
Accessories with DUT numbers	BP-6X, DUT 11291; HS-15, DUT 11299; AC-3, DUT 11129
Operation Voltage [V] / [Hz]	115 / 60
Result	PASSED
Remarks	-
Temp [°C] / Humidity [%RH] / Air Pressure [kPa]	22 / 42 / 102
Date of measurements	07.06.2006
Measured by	Sami Lehtonen

7.1. Test method and limit

The measurement is made according to FCC rules part 15.247 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.

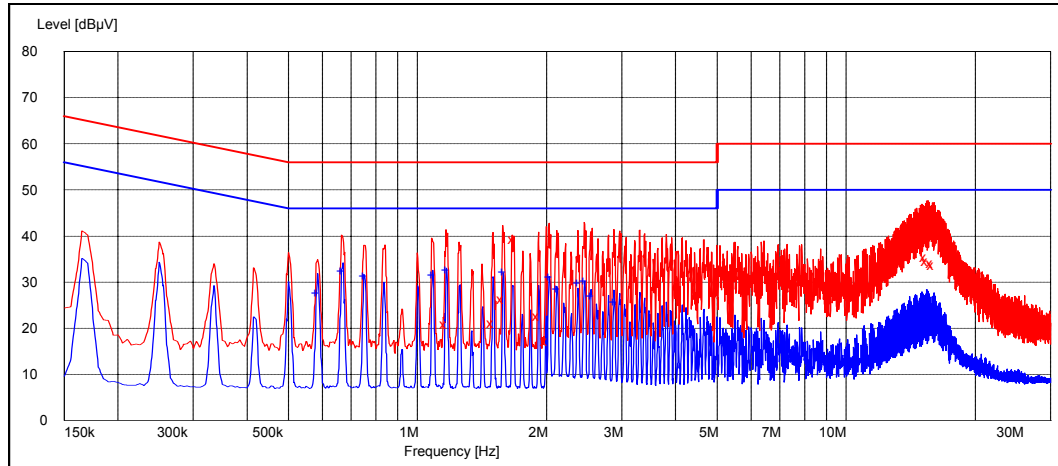
CISPR 22 Class B limits

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. Bluetooth Test results

7.2.1 8DPSK modulation, PRBS packet type

Channel 40 / 2442 MHz



Quasi peak (RBW: 9 kHz)

Frequency [MHz]	U [dBμV]	Line	Result
1.165000	20.90	N	PASSED
1.500000	21.10	N	PASSED
1.585000	26.20	N	PASSED
1.680000	39.20	L1	PASSED
1.920000	22.60	N	PASSED
2.000000	17.30	N	PASSED
15.375000	35.40	L1	PASSED
15.465000	34.60	L1	PASSED
15.480000	43.30	L1	PASSED
15.580000	43.00	L1	PASSED
15.890000	34.10	N	PASSED
15.985000	33.60	N	PASSED

Average (RBW: 9 kHz)

Frequency [MHz]	U [dBμV]	Line	Result
0.585000	27.70	L1	PASSED
0.670000	32.40	L1	PASSED
0.755000	31.30	L1	PASSED
1.090000	31.50	L1	PASSED
1.175000	32.50	L1	PASSED
1.595000	32.10	L1	PASSED
2.045000	31.10	L1	PASSED
2.130000	28.50	L1	PASSED
2.385000	29.70	L1	PASSED
2.470000	30.10	L1	PASSED
2.555000	27.00	L1	PASSED
2.895000	25.60	L1	PASSED

8. 20 dB bandwidth (FCC §15.247(a)(1), RSS-210 A8.1 (1))

EUT with DUT number	RM-165, DUT 11320
Accessories with DUT numbers	BP-6X, DUT 11321
Operation Voltage [V] / [Hz]	115 / 60
Result	PASSED
Remarks	-
Temp [°C] / Humidity [%RH] / Air Pressure [kPa]	20 / 40 / 101.2
Date of measurements	12.06.2006
Measured by	Janne Niemi

8.1. Test method and limit

The measurement is made according to FCC rules part 15.247 and IC standard RSS-210.

Limits for 20 dB bandwidth measurements

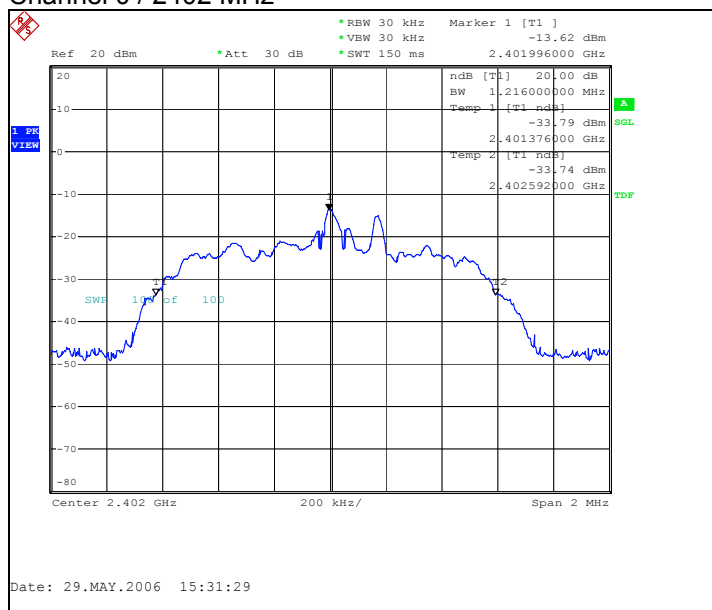
Limit [MHz]
N/A

8.2. Bluetooth Test results

8.2.1 $\pi/4$ -DQPSK modulation, PRBS packet type (2-DH5)

Channel / f_c [MHz]	20 dB bandwidth [kHz]	Result
0 / 2402	1216.000	PASSED
40 / 2442	1244.000	PASSED
78 / 2480	1216.000	PASSED

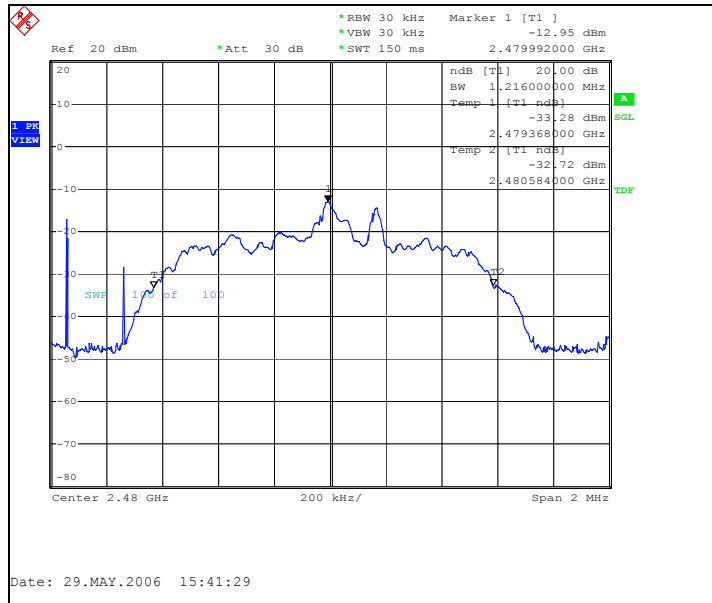
Channel 0 / 2402 MHz



Channel 40 / 2442 MHz



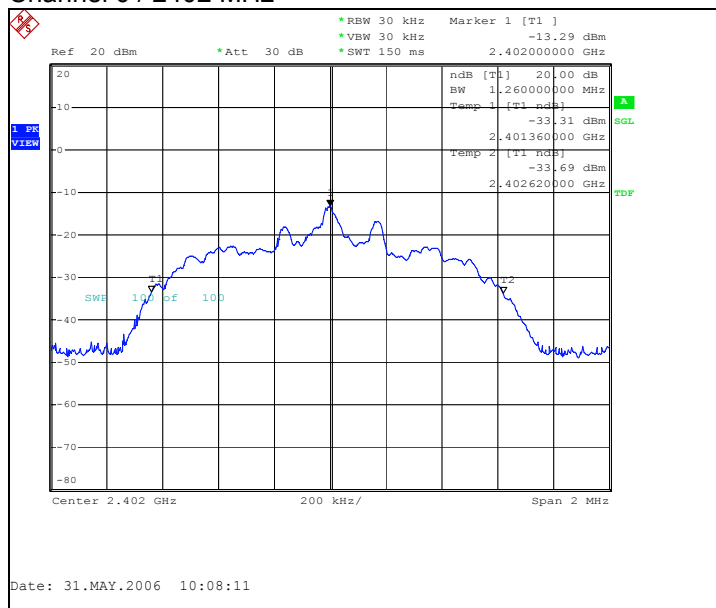
Channel 78 / 2480 MHz



8.2.2 8DPSK modulation, PRBS packet type (3-DH5)

Channel / f _c [MHz]	20 dB bandwidth [kHz]	Result
0 / 2402	1260.000	PASSED
40 / 2442	1264.000	PASSED
78 / 2480	1264.000	PASSED

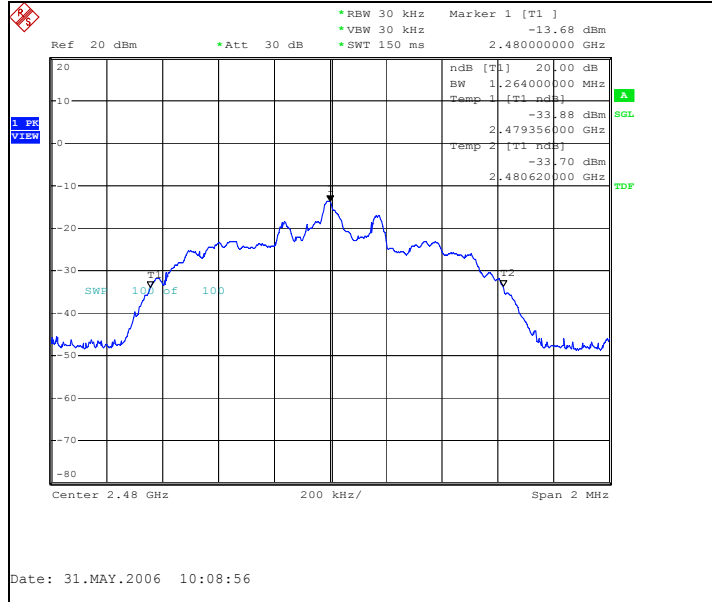
Channel 0 / 2402 MHz



Channel 40 / 2442 MHz



Channel 78 / 2480 MHz



9. Carrier frequency separation (FCC §15.247(a)(1), RSS-210 A8.1 (2))

EUT with DUT number	RM-165, DUT 11320
Accessories with DUT numbers	BP-6X, DUT 11321
Operation Voltage [V] / [Hz]	115 / 60
Result	PASSED
Remarks	-
Temp [°C] / Humidity [%RH] / Air Pressure [kPa]	20 / 40 / 101.2
Date of measurements	12.06.2006
Measured by	Janne Niemi

9.1. Test method and limit

The measurement is made according to FCC rules part 15.247 and IC standard RSS-210.

Limits for carrier frequency separation measurements

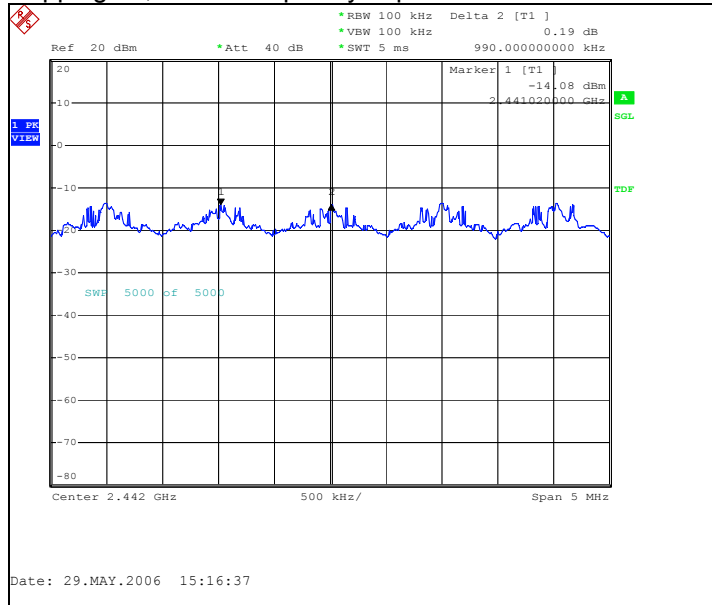
Limit [MHz]
≥ 0.025 or $2/3$ of the 20 dB bandwidth

9.2. Bluetooth Test results

9.2.1 $\pi/4$ -DQPSK modulation, PRBS packet type

Carrier frequency separation [kHz]	Result
990	PASSED

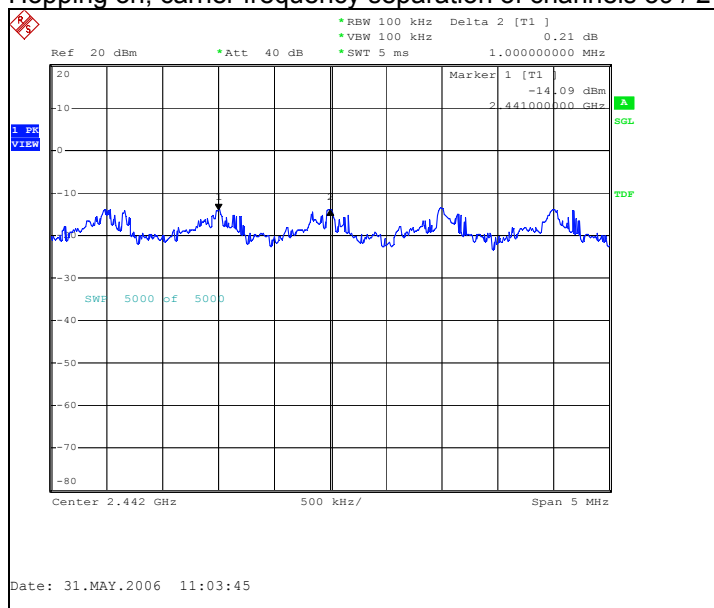
Hopping on, carrier frequency separation of channels 39 / 2441 MHz and 40 / 2442 MHz



9.2.2 8DPSK modulation, PRBS packet type

Carrier frequency separation [kHz]	Result
1000	PASSED

Hopping on, carrier frequency separation of channels 39 / 2441 MHz and 40 / 2442 MHz



10. Number of hopping frequencies (FCC §15.247(a)(1)(iii), RSS-210 A8.1 (4))

EUT with DUT number	RM-165, DUT 11320
Accessories with DUT numbers	BP-6X, DUT 11321
Operation Voltage [V] / [Hz]	115 / 60
Result	PASSED
Remarks	-
Temp [°C] / Humidity [%RH] / Air Pressure [kPa]	20 / 40 / 101.2
Date of measurements	12.06.2006
Measured by	Janne Niemi

10.1. Test method and limit

The measurement is made according to FCC rules part 15.247 and IC standard RSS-210.

Limits for number of hopping frequencies measurements

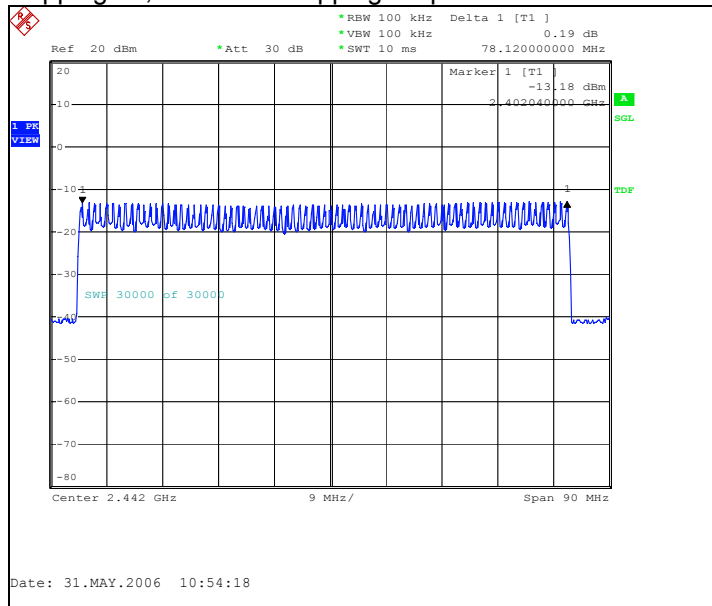
Limit [number]
≥ 15

10.2. Bluetooth Test results

10.2.1 8DPSK modulation, PRBS packet type

Measured number of hopping frequencies	Result
79	

Hopping on, number of hopping frequencies



11. Time of occupancy (FCC §15.247(a)(1)(iii), RSS-210 A8.1 (4))

EUT with DUT number	RM-165, DUT 11320
Accessories with DUT numbers	BP-6X, DUT 11321
Operation Voltage [V] / [Hz]	115 / 60
Result	PASSED
Remarks	-
Temp [°C] / Humidity [%RH] / Air Pressure [kPa]	20 / 40 / 101.2
Date of measurements	12.06.2006
Measured by	Janne Niemi

11.1. Test method and limit

The measurement is made according to FCC rules part 15.247 and IC standard RSS-210 as follows:

The total time of occupancy is get by multiplying the measured number of transmissions occurred during 31.6 second period with the duration of one transmission.

Limits for time of occupancy measurements

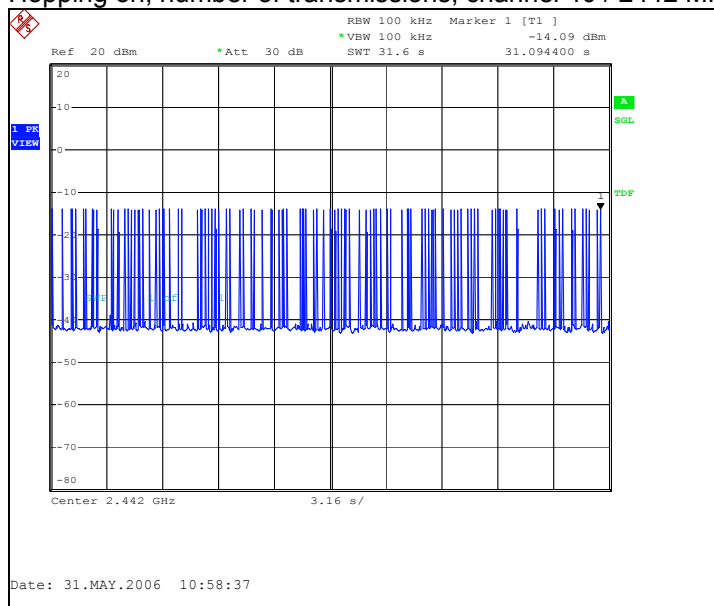
Limit [s]
≤ 0.4

11.2. Bluetooth test results

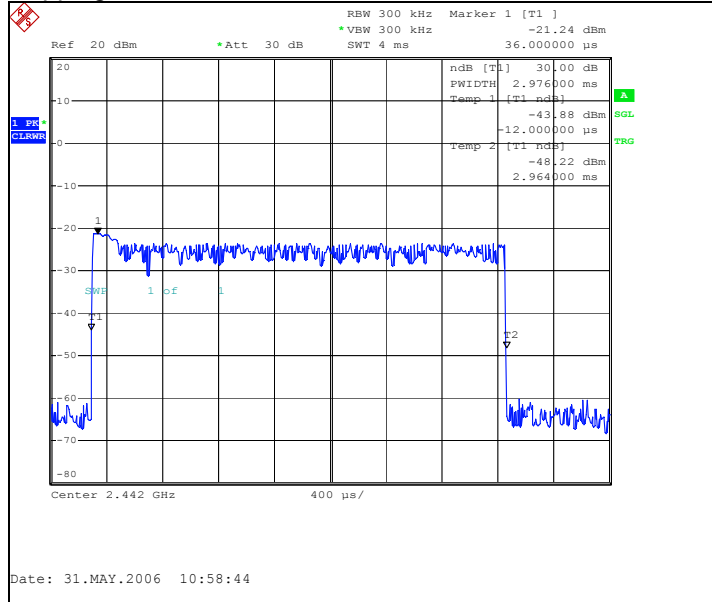
11.2.1 $\pi/4$ -DQPSK modulation, PRBS packet type

Measured number of transmissions	Duration of one transmission [μ s]	Time of occupancy [s]	Result
98	2976.000	0.291648	PASSED

Hopping on, number of transmissions, channel 40 / 2442 MHz



Hopping on, duration of one transmission, channel 40 / 2442 MHz

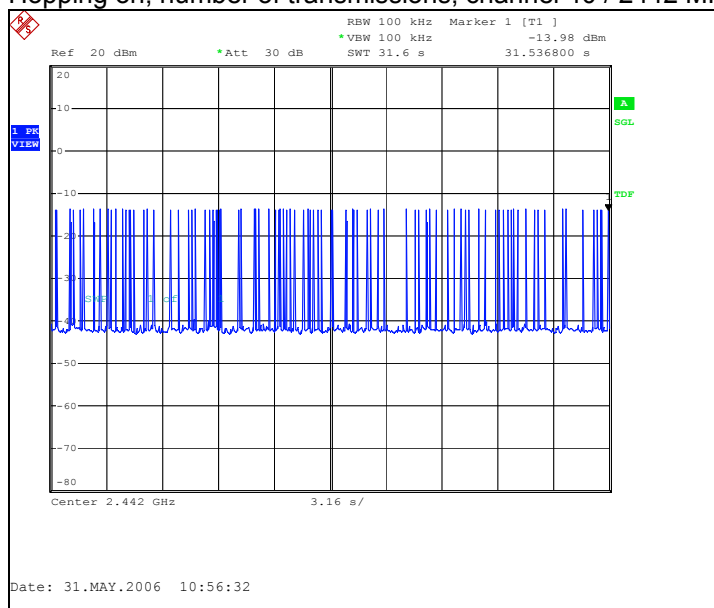


11.2.2 8DPSK modulation, PRBS packet type

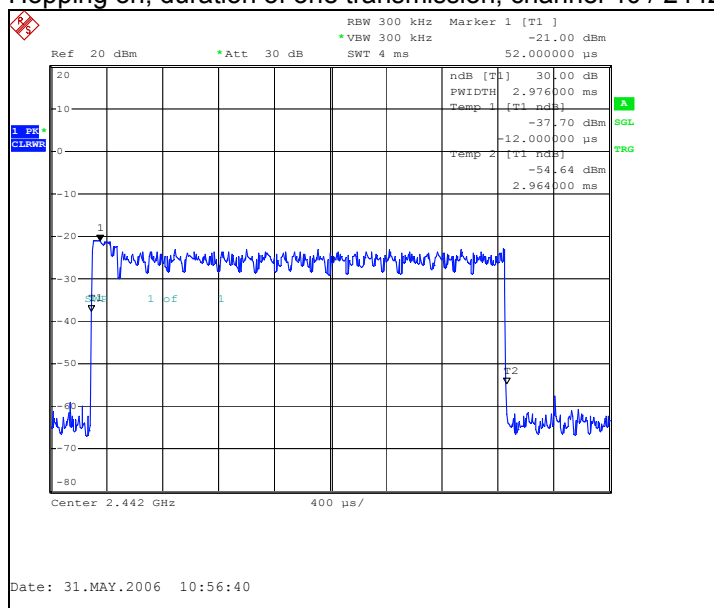
Packet 3-DH5

Measured number of transmissions	Duration of one transmission [μ s]	Time of occupancy [s]	Result
84	2976.000	0.249984	PASSED

Hopping on, number of transmissions, channel 40 / 2442 MHz



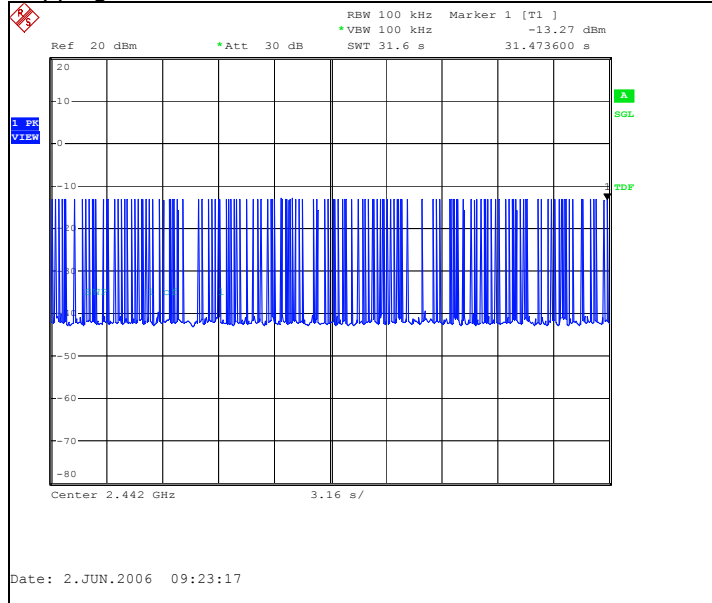
Hopping on, duration of one transmission, channel 40 / 2442 MHz



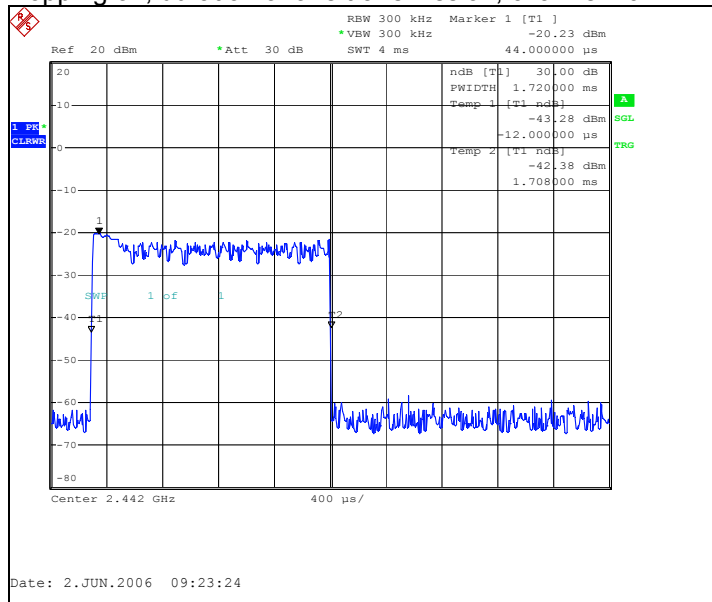
Packet 3-DH3

Measured number of transmissions	Duration of one transmission [μ s]	Time of occupancy [s]	Result
121	1720.000	0.208120	PASSED

Hopping on, number of transmissions, channel 40 / 2442 MHz



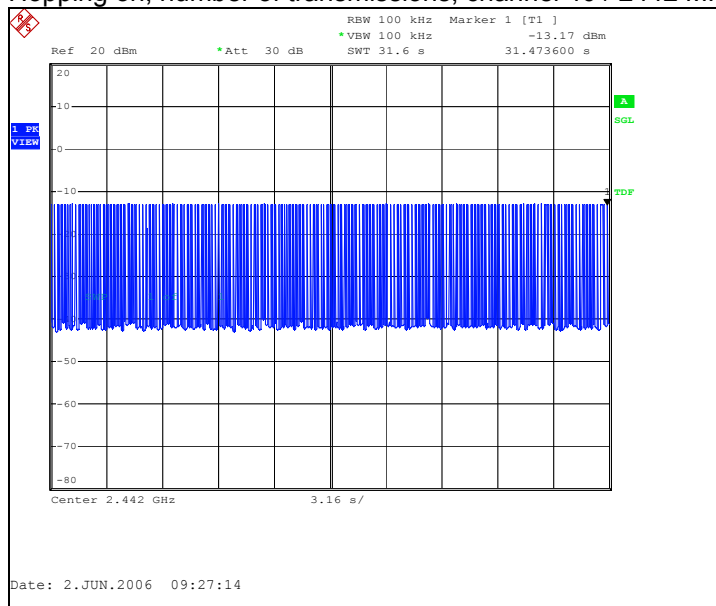
Hopping on, duration of one transmission, channel 40 / 2442 MHz



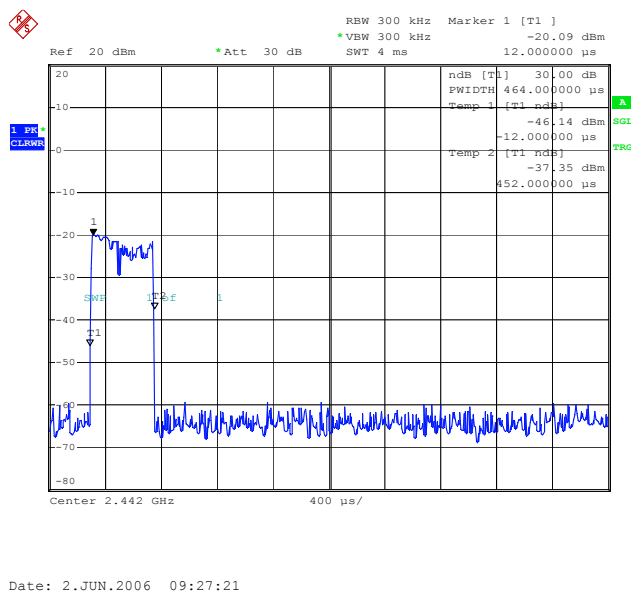
Packet 3-DH1

Measured number of transmissions	Duration of one transmission [μ s]	Time of occupancy [s]	Result
161	464.000	0.074704	PASSED

Hopping on, number of transmissions, channel 40 / 2442 MHz



Hopping on, duration of one transmission, channel 40 / 2442 MHz



Test Equipment

11.3. Conducted measurements

Eq. No	Equipment	Type	Manufacturer	Used in
1742	EMI Test Receiver	ESMI	R&S	15C, 15B
1759	LISN 50 µH	ESH3-Z5	R&S	15C, 15B
1872	Thermo- Hygrograph	00.02520.150700	Lambrecht	15C, 15B
1916	Radio Communication tester	CMTA84	R&S	15C, 15B
2039	Power Supply	PL330QMD	THURLBY	15C, 15B
2060	LISN 50 µH	ESH3-Z5	R&S	15C, 15B
2068	CDN-Antenna line	S1	NMP	15C, 15B
2097	Pulse Limiter	ESH3-Z2	R&S	15C, 15B
2111	Multimeter	TX3	Tektronix	15C, 15B
2156	Digital Radio Communication Tester	CMU200	R&S	15C, 15B
2206	Signal generator	SMX	R&S	15C, 15B
2335	GPIB Switch 2 to 1	-	National Instruments	15C, 15B
2347	Digital Radio Communication Tester	CMU200	R&S	22/24, 15C, 15B
2352	Spectrum Analyzer	FSP	R&S	22/24, 15C
2359	Temperature Test system	VT4002	Vötsch Industrietechnik	22/24
2360	Serial Bus Converter	Serial 488A	IO Tech	22/24
2362	Power Supply	NGPX 70/5	R&S	22/24
-	RF Emission Software	ES-K1 v.1.60	R&S	15C, 15B

11.4. Radiated measurements

Eq. No	Equipment	Type	Manufacturer	Used in
1748	Log. per. Antenna	HL025	R&S	22/24, 15C
1749	Log. per. Antenna	HL025	R&S	22/24, 15C
1875	Thermo- Hygrograph	00.02520.150700	Lambrecht	22/24, 15C, 15B
1917	Radio Communication tester	CMTA84	R&S	22/24, 15C, 15B
1933	Precision half-wave dipole antennas	HZ-13	R&S	22/24, 15C
1938	Precision half-wave dipole antennas	HZ-12	R&S	22/24, 15C
2006	Radiation Reference Source	VSQ	MEB	22/24, 15C, 15B
2009	Signal generator	SMP 22	R&S	22/24, 15C, 15B
2019	Multimeter	34401A	HP	22/24, 15C, 15B
2027	Coupling and Decoupling Network	M2 (modified) DC1	MEB	22/24, 15C, 15B
2028	Coupling and Decoupling Network	M3 (modified) DC2	MEB	22/24, 15C, 15B
2029	Power Supply	PL330	THURLBY	22/24, 15C
2043	Band Reject Filter	WRCA824/849-0,2-6SS	Wainwright	22/24, 15C, 15B
2047	Band Reject Filter	WRCC1800/2000-0.2-10SS	Wainwright	22/24, 15C, 15B
2051	High Pass Filter	4HC1700-1-KK	R&S	22/24, 15C
2057	Log. per. Antenna	HL025	R&S	22/24, 15C
2109	Power Supply	PL330QMD	THURLBY	22/24, 15C, 15B
2110	Multimeter	34401A	HP	22/24, 15C, 15B

Eq. No	Equipment	Type	Manufacturer	Used in
2112	Multimeter	TX3	Tektronix	22/24, 15C, 15B
2116	Controller	EMCO MODEL 2090	ETS	22/24, 15C, 15B
2133	Power Meter	NRVS	R&S	22/24, 15C
2134	Power Sensor	NRV-Z32	R&S	22/24, 15C
2135	Coupling and Decoupling Network	CDN 801-M3	LÜTHI	22/24, 15C, 15B
2138	Ultra Broadband Antenna	HL562	R&S	22/24, 15C, 15B
2140	Biconical Antenna	EMCO93110B	EMCO	22/24, 15C
2142	Log.-per.-dipol Antenna	3146	EMCO	22/24, 15C
2144	Attenuator	6803.17B	Huber-Suhner	22/24, 15C, 15B
2150	High Pass Filter	F-15041	RLC ELECTRONICS	22/24, 15C
2176	Coupling and Decoupling Network	CDN 801-M3	LÜTHI	22/24, 15C, 15B
2180	Digital Radio Communication Tester	CMU200	R&S	22/24, 15C, 15B
2188	Preamplifier	AFS4-00100300-20-23P-6	MITEQ	22/24, 15C, 15B
2330	EMI Test receiver	ESIB26	R&S	22/24, 15C, 15B
2334	GPIB Switch 2 to 1	-	National Instruments	22/24, 15C, 15B
2348	Yaesu controller	G-1000DXC	YAESU	22/24, 15C, 15B
2349	Computer controller (Yaesu)	GS-232B	YAESU	22/24, 15C, 15B
2350	Preamplifier	AMF-6D-020180-29-20P	MITEQ	22/24, 15C
2361	Anechoic chamber	3 meter semi/full anechoic chamber	Euroshield	22/24, 15C, 15B
2398	Horn antenna	HF906	R&S	22/24, 15C
2363	Band Reject Filter	WRCG 832/838-825/845/5SS	Wainwright	22/24
2364	Band Reject Filter	WRCG1877/1883 - 1870/1890-40/6SS	Wainwright	22/24
2365	Relay Switch Unit	TS-RSP	R&S	22/24, 15C, 15B
2366	Relay Switch Unit	TS-RSP	R&S	22/24, 15C, 15B
-	RF Emission Software	ES-K1 v.1.71	R&S	22/24, 15C, 15B