

FCC Part 15B Compliance Test Report

Test Report no.:	Tre_FCC_0818_02.doc	Date of Report:	03-Jun-2008
Number of pages:	15	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-333 / Battery BL-5K / AC-Charger AC-10E, Audio Adapter AD-54, Headset HS-45, Data cable CA-101, Laptop IBM Thinkpad T22, AC adapter 02K6543, Printer HP deskjet 1600CC3540A, Digital camera FUJI DS-7, Serial cable for camera, Parallel cable for printer		
FCC ID:	QURRM-333	IC:	661AC-RM333
Supplement reports:	-		
Testing has been carried out in accordance with:	CFR 47, FCC rules Part 15 Subpart B, ANSI C63.4 (2003), ICES-003, CISPR 22 and IC standards RSS-132 (Issue 2, September 2005), RSS-133 (Issue 4, February 2008), RSS-139 (Issue 1, February 2008) 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 15B Compliance Test Report

Date of receipt	28-Apr-2008
Testing completed	30-May-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-333\EMC\Results\FCC\Tre_FCC_0818_02.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. GSM and WCDMA bands are tested in idle mode. Bluetooth and WLAN are tested with maximum rated TX power.

Product	Type	SN	HW	MV	SW	DUT
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
Data cable	CA-101	-	-	-	-	41370
Laptop	IBM Thinkpad T22	555V2PT	-	-	-	40201
AC Adapter	02K6543	-	-	-	-	40202
Printer	HP deskjet 1600CC3540A	USB8302546	-	-	-	40077
Digital camera	FUJI DS-7	7102516	-	-	-	40076
Serial cable for camera	-	-	-	-	-	40088
Parallel cable for printer	-	-	-	-	-	40087

1.2. Summary of Test Results

GSM 850:

Section in CFR 47	Section in ICES-003 (RSS-132)	Name of the test	Result
15.107, a	5.3	AC powerline conducted emissions	NP
15.109, a	5.5 (4.6)	Radiated emissions	PASSED

GSM 1900:

Section in CFR 47	Section in ICES-003 (RSS-133)	Name of the test	Result
15.107, a	5.3	AC powerline conducted emissions	NP
15.109, a	5.5 (6.6)	Radiated emissions	PASSED

WCDMA 1900 (Band II):

Section in CFR 47	Section in ICES-003 (RSS-133)	Name of the test	Result
15.107, a	5.3	AC powerline conducted emissions	NP
15.109, a	5.5 (6.6)	Radiated emissions	NP

Bluetooth:

Section in CFR 47	Section in ICES-003	Name of the test	Result
15.107, a	5.3	AC powerline conducted emissions	NP
15.109, a	5.5	Radiated emissions	PASSED

WLAN:

Section in CFR 47	Section in ICES-003	Name of the test	Result
15.107, a	5.3	AC powerline conducted emissions	NP
15.109, a	5.5	Radiated emissions	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.

CONTENTS

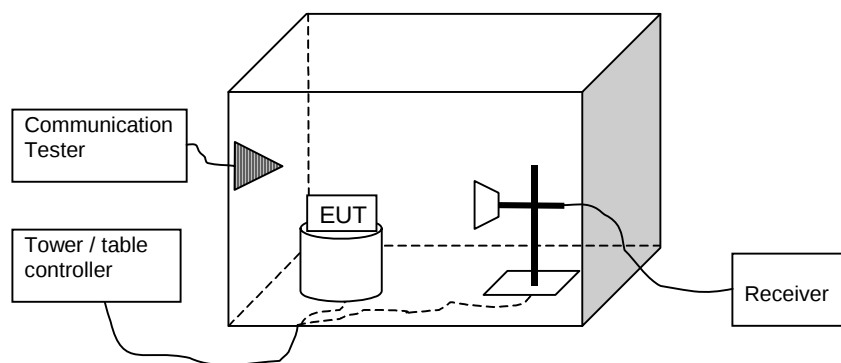
1. Summary for FCC Part 15B Compliance Test Report.....	2
1.1. EUT and Accessory Information	2
1.2. Summary of Test Results	2
2. Radiated emissions	
(FCC §15.109, ICES-003 section 5.5, RSS-132 4.6, RSS-133 6.6, RSS-139 6.6).....	5
2.1. Test setup	5
2.2. Test method and limit.....	5
2.3. GSM 850 +FM radio test results	6
2.4. GSM 1900 +GPS receiver on test results	7
2.5. Bluetooth +FM radio test results	8
2.6. WLAN +FM radio test results	9
3. Radiated emissions with computer peripherals	
(FCC §15.109, ICES-003 section 5.5, RSS-132 4.6, RSS-133 6.6, RSS-139 6.6).....	11
3.1. Test setup	11
3.2. Test method and limit.....	11
3.3. GSM 850 + computer peripherals	12
4. Test Equipment.....	14
4.1. Conducted measurements	14
4.2. Radiated measurements	14

2. Radiated emissions

(FCC §15.109, ICES-003 section 5.5, RSS-132 4.6, RSS-133 6.6, RSS-139 6.6)

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]	23-24 / 47-49 / 101.9-102.2
Date of measurements	28...29-May-2008
Measured by	Jari Jantunen

2.1. Test setup



2.2. Test method and limit

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

The measurement is performed in the Semi-Anechoic Chamber with conducting metal floor.

The measurement distance is 3 m.

The EUT is placed on a nonconductive plate at 80 cm height.

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

CISPR 22 and FCC Part 15 Class B limits (3 m measurement distance)

Frequency range [MHz]	Quasi peak limit [dBμV/m]	Average limit [dBμV/m]	Peak limit [dBμV/m]
30 – 230	40	-	-
230 – 1000	47	-	-
Above 1000	-	54	74

2.3. GSM 850 +FM radio test results

RX mode, channel 128 / 869.2 MHz

Peak (RBW: 1 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U_{RX} [dBμV]	A_{TOT} [dB]	Polarisation	Result
3476.800000	39.00	89.13	44.30	-5.3	VERTICAL	PASSED
6953.600000	43.80	154.88	42.20	1.6	VERTICAL	PASSED

Average (RBW: 1 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U_{RX} [dBμV]	A_{TOT} [dB]	Polarisation	Result
3476.800000	25.90	19.72	31.20	-5.3	VERTICAL	PASSED
6953.600000	30.90	35.08	29.30	1.6	VERTICAL	PASSED

RX mode, channel 190 / 881.6 MHz

Quasi peak (RBW: 120 kHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U_{RX} [dBμV]	A_{TOT} [dB]	Polarisation	Result
30.000000	32.40	41.69	58.00	-25.6	VERTICAL	PASSED
85.429659	22.40	13.18	58.90	-36.5	VERTICAL	PASSED
99.818036	28.00	25.12	63.40	-35.4	VERTICAL	PASSED
146.711824	23.20	14.45	57.90	-34.7	HORIZONTAL	PASSED
149.300000	21.30	11.61	56.20	-34.9	HORIZONTAL	PASSED

Average (RBW: 1 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U_{RX} [dBμV]	A_{TOT} [dB]	Polarisation	Result
1166.332665	33.20	45.71	52.90	-19.7	VERTICAL	PASSED
1234.466934	24.30	16.41	43.60	-19.3	VERTICAL	PASSED
1260.521042	30.10	31.99	49.00	-18.9	VERTICAL	PASSED
1668.832665	24.70	17.18	40.00	-15.3	VERTICAL	PASSED
1990.983968	35.10	56.89	47.50	-12.4	VERTICAL	PASSED
2504.512024	29.30	29.17	37.20	-7.9	VERTICAL	PASSED
2513.520040	29.40	29.51	37.20	-7.8	VERTICAL	PASSED
2515.526052	29.50	29.85	37.30	-7.8	VERTICAL	PASSED
3529.060120	25.90	19.72	31.00	-5.1	VERTICAL	PASSED

RX mode, channel 251 / 893.8 MHz

Peak (RBW: 1 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Polarisation	Result
3575.200000	38.80	87.10	43.70	-4.9	HORIZONTAL	PASSED
7150.400000	42.00	125.89	39.60	2.4	HORIZONTAL	PASSED

Average (RBW: 1 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Polarisation	Result
3575.200000	26.00	19.95	30.90	-4.9	HORIZONTAL	PASSED
7150.400000	29.10	28.51	26.70	2.4	VERTICAL	PASSED

2.4. GSM 1900 +GPS receiver on test results

RX mode, channel 512 / 1930.2 MHz

Peak (RBW: 1 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Polarisation	Result
3860.000000	40.50	105.93	43.20	-2.7	VERTICAL	PASSED
7720.000000	43.30	146.22	39.60	3.7	VERTICAL	PASSED

Average (RBW: 1 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Polarisation	Result
3860.000000	27.50	23.71	30.20	-2.7	HORIZONTAL	PASSED
7720.000000	30.60	33.88	26.90	3.7	HORIZONTAL	PASSED

RX mode, channel 661 / 1960.0 MHz

Quasi peak (RBW: 120 kHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Polarisation	Result
30.000000	29.70	30.55	55.30	-25.6	VERTICAL	PASSED
85.089178	23.70	15.31	60.20	-36.5	VERTICAL	PASSED
99.118036	29.20	28.84	64.70	-35.5	VERTICAL	PASSED
146.652305	21.90	12.45	56.60	-34.7	HORIZONTAL	PASSED
150.400000	19.70	9.66	54.60	-34.9	HORIZONTAL	PASSED
173.546894	17.80	7.76	53.50	-35.7	HORIZONTAL	PASSED

Average (RBW: 1 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Polarisation	Result
2976.459920	32.40	41.69	36.70	-4.3	HORIZONTAL	PASSED
3524.054108	26.10	20.18	31.20	-5.1	HORIZONTAL	PASSED

RX mode, channel 810 / 1989.8 MHz

Peak (RBW: 1 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Polarisation	Result
3980.000000	40.70	108.39	43.30	-2.6	HORIZONTAL	PASSED
7960.000000	43.70	153.11	39.50	4.2	VERTICAL	PASSED

Average (RBW: 1 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Polarisation	Result
3980.000000	27.90	24.83	30.50	-2.6	HORIZONTAL	PASSED
7960.000000	31.20	36.31	27.00	4.2	HORIZONTAL	PASSED

2.5. Bluetooth +FM radio test results

TX mode, channel 0 / 2402 MHz

Peak (RBW: 1 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Polarisation	Result
4804.000000	40.50	105.93	42.30	-1.8	HORIZONTAL	PASSED
7206.000000	46.80	218.78	44.20	2.6	VERTICAL	PASSED

Average (RBW: 1 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Polarisation	Result
4804.000000	26.80	21.88	28.60	-1.8	VERTICAL	PASSED
7206.000000	32.40	41.69	29.80	2.6	VERTICAL	PASSED

TX mode, channel 40 / 2442 MHz

Quasi peak (RBW: 120 kHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Polarisation	Result
73.286573	21.10	11.35	46.70	-25.6	HORIZONTAL	PASSED
74.269940	18.60	8.51	44.10	-25.5	VERTICAL	PASSED
108.096794	15.90	6.24	38.80	-22.9	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
7326.151303	49.50	298.54	46.50	3.0	VERTICAL	PASSED
7326.153307	49.60	302.00	46.60	3.0	VERTICAL	PASSED
17896.295591	53.40	467.74	33.80	19.6	VERTICAL	PASSED

Average (RBW: 1 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Polarisation	Result
7325.653307	35.70	60.95	32.70	3.0	VERTICAL	PASSED
7326.651303	33.90	49.55	30.90	3.0	VERTICAL	PASSED
17898.295591	40.60	107.15	20.90	19.7	VERTICAL	PASSED

TX mode, channel 78 / 2480 MHz

Peak (RBW: 1 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Polarisation	Result
4960.000000	39.90	98.86	41.20	-1.3	HORIZONTAL	PASSED
7440.000000	45.30	184.08	41.70	3.6	VERTICAL	PASSED

Average (RBW: 1 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Polarisation	Result
4960.000000	27.30	23.17	28.60	-1.3	HORIZONTAL	PASSED
7440.000000	32.20	40.74	28.60	3.6	VERTICAL	PASSED

2.6. WLAN +FM radio test results

RX 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	38.70	86.10	40.40	-1.7	VERTICAL	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	26.40	20.89	28.10	-1.7	HORIZONTAL	PASSED
7236.000000	29.60	30.20	27.00	2.6	HORIZONTAL	PASSED

RX 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
73.286573	20.50	10.59	46.10	-25.6	HORIZONTAL	PASSED
75.169940	19.90	9.89	45.30	-25.4	VERTICAL	PASSED
108.337275	18.30	8.22	41.20	-22.9	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
4884.000000	40.20	102.33	42.00	-1.80	VERTICAL	PASSED
7326.000000	43.30	146.22	40.30	3.00	HORIZONTAL	PASSED

Average (RBW: 1 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Polarisation	Result
4884.000000	26.80	21.88	28.60	-1.80	HORIZONTAL	PASSED
7326.000000	30.20	32.36	27.20	3.00	HORIZONTAL	PASSED

RX mode, channel 11 / 2462 MHz

Peak (RBW: 1 MHz)

Frequency [MHz]	E [dB μ V/m]	E [μ V/m]	U _{RX} [dB μ V]	A _{TOT} [dB]	Polarisation	Result
4924.000000	39.40	93.33	41.20	-1.8	VERTICAL	PASSED
7386.000000	43.80	154.88	40.30	3.5	HORIZONTAL	PASSED

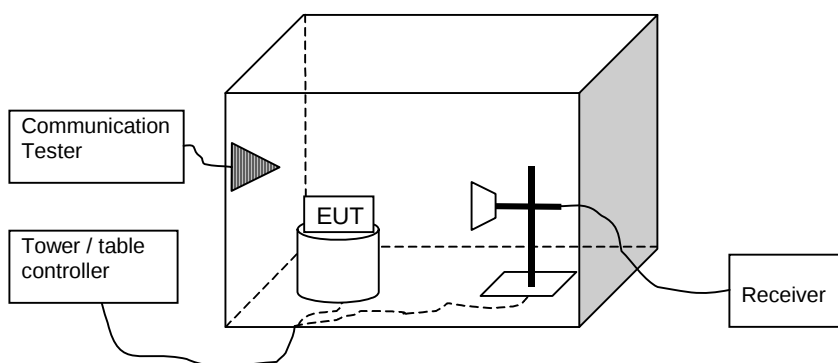
Average (RBW: 1 MHz)

Frequency [MHz]	E [dB μ V/m]	E [μ V/m]	U _{RX} [dB μ V]	A _{TOT} [dB]	Polarisation	Result
4924.000000	27.00	22.39	28.80	-1.8	HORIZONTAL	PASSED
7386.000000	30.60	33.88	27.10	3.5	HORIZONTAL	PASSED

3. Radiated emissions with computer peripherals (FCC §15.109, ICES-003 section 5.5, RSS-132 4.6, RSS-133 6.6, RSS-139 6.6)

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, CA-101 DUT 41370, IBM Thinkpad T22 DUT 40201, 02K6543 DUT 40202, HP deskjet 1600CC3540A DUT 40077, FUJI DS-7 DUT 40076, Serial cable for camera DUT 40088, Parallel cable for printer DUT 40087
Operation Voltage [V] / [Hz]	115 / 60
Result	PASSED
Remarks	Continuous data transfer was active between the phone and the computer during the test.
Temp [°C] / Humidity [%RH] / Air Pressure [kPa]	24 / 48 / 101.7
Date of measurements	30-May-2008
Measured by	Jari Jantunen

3.1. Test setup



3.2. Test method and limit

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

The measurement is performed in the Semi-Anechoic Chamber with conducting metal floor.

The measurement distance is 3 m.

The EUT is placed on a nonconductive plate at 80 cm height.

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

CISPR 22 and FCC Part 15 Class B limits (3 m measurement distance)

Frequency range [MHz]	Quasi peak limit [dBμV/m]	Average limit [dBμV/m]	Peak limit [dBμV/m]
30 – 230	40	-	-
230 – 1000	47	-	-
Above 1000	-	54	74

3.3. GSM 850 + computer peripherals

RX mode, channel 128 / 869.2 MHz

Peak (RBW: 1 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U_{RX} [dBμV]	A_{TOT} [dB]	Polarisation	Result
3476.800000	38.40	83.18	43.70	-5.3	HORIZONTAL	PASSED
6953.600000	43.20	144.54	41.60	1.6	HORIZONTAL	PASSED

Average (RBW: 1 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U_{RX} [dBμV]	A_{TOT} [dB]	Polarisation	Result
3476.800000	25.70	19.28	31.00	-5.3	HORIZONTAL	PASSED
6953.600000	30.70	34.28	29.10	1.6	HORIZONTAL	PASSED

RX mode, channel 190 / 881.6 MHz

Quasi peak (RBW: 120 kHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U_{RX} [dBμV]	A_{TOT} [dB]	Polarisation	Result
595.890381	31.40	37.15	57.60	-26.2	VERTICAL	PASSED
695.990782	23.50	14.96	48.10	-24.6	VERTICAL	PASSED
827.055311	21.00	11.22	43.40	-22.4	HORIZONTAL	PASSED
918.235671	17.70	7.67	39.30	-21.6	VERTICAL	PASSED

Average (RBW: 1 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U_{RX} [dBμV]	A_{TOT} [dB]	Polarisation	Result
1205.410822	32.40	41.69	52.00	-19.6	VERTICAL	PASSED
1235.966934	20.70	10.84	40.00	-19.3	VERTICAL	PASSED
1259.021042	31.00	35.48	49.90	-18.9	VERTICAL	PASSED
1325.151303	32.60	42.66	51.20	-18.6	VERTICAL	PASSED
1668.844689	24.30	16.41	39.60	-15.3	VERTICAL	PASSED
1669.842685	24.30	16.41	39.60	-15.3	VERTICAL	PASSED
2509.020040	29.30	29.17	37.20	-7.9	VERTICAL	PASSED
2512.022044	29.40	29.51	37.20	-7.8	VERTICAL	PASSED

RX mode, channel 251 / 893.8 MHz

Peak (RBW: 1 MHz)

Frequency [MHz]	E [dB μ V/m]	E [μ V/m]	U _{RX} [dB μ V]	A _{TOT} [dB]	Polarisation	Result
3575.200000	38.00	79.43	42.90	-4.9	VERTICAL	PASSED
7150.400000	41.70	121.62	39.30	2.4	HORIZONTAL	PASSED

Average (RBW: 1 MHz)

Frequency [MHz]	E [dB μ V/m]	E [μ V/m]	U _{RX} [dB μ V]	A _{TOT} [dB]	Polarisation	Result
3575.200000	25.60	19.05	30.50	-4.9	HORIZONTAL	PASSED
7150.400000	28.90	27.86	26.50	2.4	VERTICAL	PASSED

4. Test Equipment

4.1. 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

4.2. 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