

FCC Part 15B Compliance Test Report

Test Report no.:	Cph_FCC_0722_05.doc	Date of Report:	11-06-2007
Number of pages:	15	Customer's Contact person:	Bill Griffin
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FCC listing no.:	99059		
IC recognition no.:	661AD-1		
Tested devices/ accessories:	Phone; RM-271 (HW: 4523), Battery; BL-5C, AC-Charger; AC-4U, Headset; HS-40		
FCC ID:	QMNRM-271	IC:	661X-RM271
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, RSS-133 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:			

Niels Christian Andersen, Engineer

1. Summary for FCC Part 15B Compliance Test Report

Date of receipt	29-05-2007
Testing completed	08-06-2007
The customer's contact person	Bill Griffin
Test Plan referred to	T:\Projects\RM-271\TestPlan_RS\RS_Testplan_RM-271.xls
Notes	None
Document name	T:\Projects\RM-271\EMC\Results\FCC\Cph_FCC_0722_05.doc

1.1. EUT and Accessory Information

The EUT is a 6-band (GSM850/900/1800/1900 and WCDMA Band I/V(850)) mobile phone with GPRS, EGPRS and Bluetooth. GSM and WCDMA bands are tested in idle mode. Bluetooth is tested with maximum rated TX power.

Product	Type	SN	HW	MV	SW	DUT
Phone	RM-271	004401/01/243970/5	4523	-	Vp md3.09	27264
Battery	BL-5C	0670398380257M07221CO21331	-	-	-	27263
AC-Charger	AC-4U	4090495451960140533;0675379	-	-	-	27262
Headset	HS-40	0086925	-	-	-	27261
Data Cable	CA-101	B:3.2 WK:02/07	1.2	1.1	-	27260
Phone	RM-271	004401/01/243961/6	4523	-	Vp md3.09	27271
Battery	BL-5C	0670398380257N37142TA06427	-	-	-	27270
AC-Charger	AC-4U	0675379409049L515R2	-	-	-	27269
Headset	HS-40	0086901	-	-	-	27267

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	Passed
15.109, a	5.5 (6.6)	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	Passed
15.109, a	5.5 (9)	Radiated emissions	Passed

Bluetooth:

Section in CFR 47	Section in ICES-003	Name of the test	Result
15.107, a	5.3	AC powerline conducted emissions	Passed
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 Copenhagen Laboratory.

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

EUT with DUT number	RM-271 Dut # 27264
Accessories with DUT numbers	BL-5C Dut # 27263 + AC-4U Dut # 27262 + HS-40 Dut # 27261 + CA-101 Dut # 27260 + IBM Laptop T 43
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]	23.6 / 37.0 102.0
Date of measurements	31-05-2007
Measured by	Allan F. Henriksen

2.1. Test setup



2.2. 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:

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

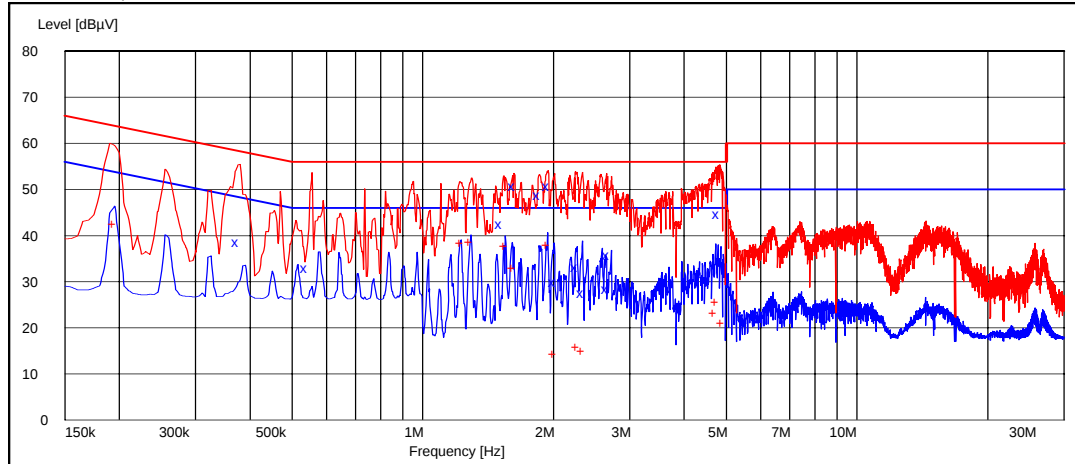
Where U_{RX} is receiver reading and A_{TOT} is total correction factor including cable and pulse limiter attenuations.

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

2.3. GSM 850 Test results

RX mode, channel 190 / 881.6 MHz



Quasi peak (RBW: 9 kHz)

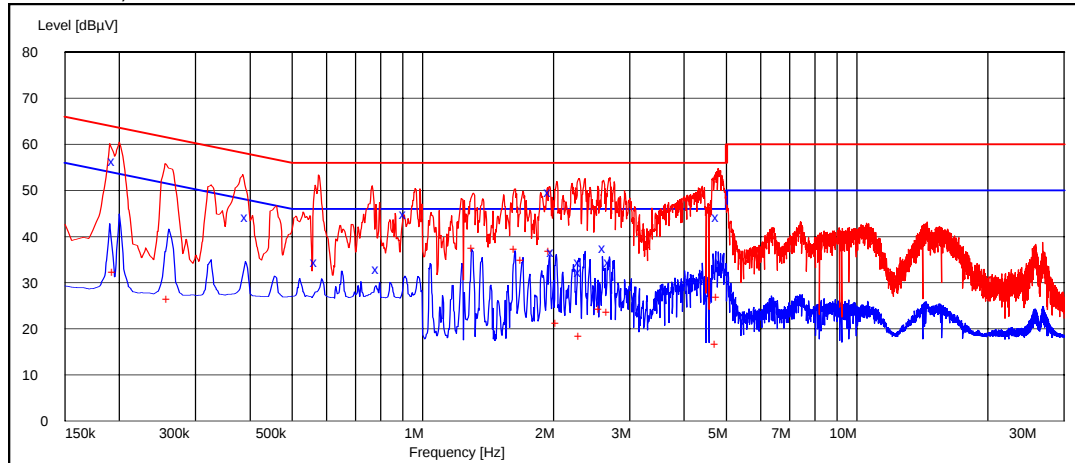
Frequency [MHz]	U [dBμV]	Line	Result
0.375000	38.60	L1	Passed
0.540000	33.00	N	Passed
1.520000	42.50	N	Passed
1.625000	50.80	N	Passed
1.860000	48.80	N	Passed
1.950000	50.80	N	Passed
2.015000	30.00	N	Passed
2.270000	33.20	N	Passed
2.340000	27.60	L1	Passed
2.665000	28.40	L1	Passed
2.680000	35.80	N	Passed
4.805000	44.60	N	Passed

Average (RBW: 9 kHz)

Frequency [MHz]	U [dBμV]	Line	Result
0.195000	42.60	L1	Passed
1.230000	38.40	N	Passed
1.290000	38.60	N	Passed
1.555000	37.70	N	Passed
1.620000	32.90	L1	Passed
1.945000	37.90	N	Passed
2.015000	14.20	N	Passed
2.275000	15.80	N	Passed
2.340000	15.00	N	Passed
4.715000	23.30	N	Passed
4.765000	25.60	N	Passed
4.905000	20.90	N	Passed

2.4. GSM 1900 Test results

RX mode, channel 661 / 1960.0 MHz



Quasi peak (RBW: 9 kHz)

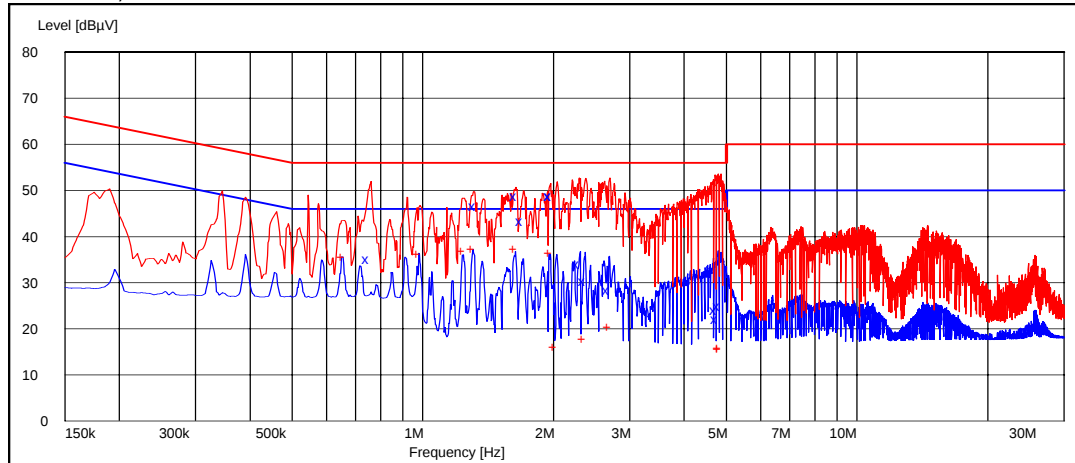
Frequency [MHz]	U [dBμV]	Line	Result
0.195000	56.30	L1	Passed
0.395000	44.30	N	Passed
0.570000	34.50	N	Passed
0.790000	33.00	L1	Passed
0.915000	44.80	N	Passed
1.965000	49.60	N	Passed
2.000000	36.60	N	Passed
2.310000	34.40	L1	Passed
2.315000	32.20	L1	Passed
2.630000	37.50	L1	Passed
2.705000	34.50	L1	Passed
4.800000	44.30	N	Passed

Average (RBW: 9 kHz)

Frequency [MHz]	U [dBμV]	Line	Result
0.195000	32.20	N	Passed
0.260000	26.50	N	Passed
1.310000	37.50	N	Passed
1.640000	37.30	N	Passed
1.700000	34.80	N	Passed
1.970000	36.80	N	Passed
2.045000	21.20	N	Passed
2.315000	18.40	N	Passed
2.570000	24.30	N	Passed
2.680000	23.70	N	Passed
4.770000	16.60	L1	Passed
4.800000	26.90	N	Passed

2.5. Bluetooth Test results

TX mode, channel 40 / 2442 MHz



Quasi peak (RBW: 9 kHz)

Frequency [MHz]	U [dBμV]	Line	Result
0.750000	35.20	L1	Passed
1.320000	46.60	N	Passed
1.640000	48.70	N	Passed
1.690000	43.40	N	Passed
1.965000	48.70	N	Passed
1.975000	48.80	N	Passed
2.290000	33.90	N	Passed
2.360000	30.40	L1	Passed
2.680000	28.40	N	Passed
4.735000	24.10	N	Passed
4.770000	22.20	N	Passed
4.820000	25.00	N	Passed

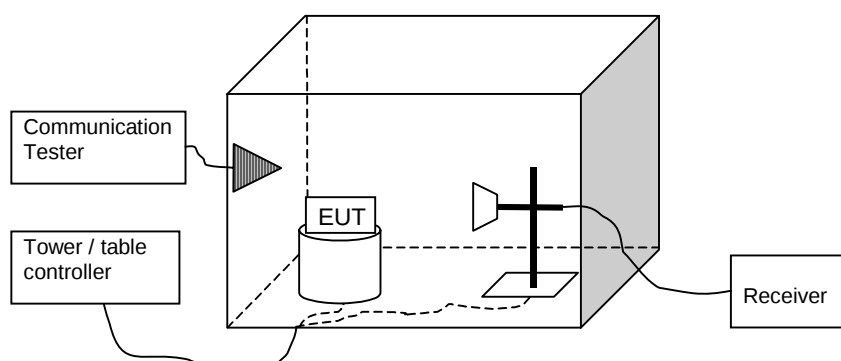
Average (RBW: 9 kHz)

Frequency [MHz]	U [dBμV]	Line	Result
0.655000	35.60	N	Passed
0.980000	36.30	N	Passed
1.240000	36.80	N	Passed
1.305000	37.30	N	Passed
1.635000	37.20	N	Passed
1.965000	36.50	N	Passed
2.020000	16.00	N	Passed
2.355000	17.70	N	Passed
2.690000	20.30	N	Passed
4.820000	15.80	N	Passed
4.825000	15.60	N	Passed

3. Radiated emissions (FCC §15.109, ICES-003 section 5.5, RSS-132 6.6, RSS-133 9)

EUT with DUT number	RM-271 Dut # 27271
Accessories with DUT numbers	BL-5C Dut # 27270 + AC-4U Dut # 27269 + HS-40 Dut # 27267 + CA-101 Dut # 27260 + IBM Laptop T43
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]	23.2 / 40.0 102.1
Date of measurements	08-06-2007
Measured by	Christian Andersen

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 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	41.20	-2.2	HORIZONTAL	Passed
6953.600000	44.90	175.79	38.80	6.1	VERTICAL	Passed

Average (RBW: 1 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Polarisation	Result
3476.800000	26.10	20.18	28.30	-2.2	VERTICAL	Passed
6953.600000	31.90	39.36	25.80	6.1	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
37.935872	32.70	43.15	50.60	-17.9	VERTICAL	Passed
101.822846	28.30	26.00	53.80	-25.5	VERTICAL	Passed
688.476754	26.90	22.13	41.20	-14.3	VERTICAL	Passed
798.597194	28.20	25.70	41.10	-12.9	VERTICAL	Passed
881.663527	59.10	901.57	71.00	-11.9	VERTICAL	Passed
933.265731	18.10	8.04	29.30	-11.2	VERTICAL	Passed

*881.6 MHz frequency is coming from communication tester and thus ignored.

Average (RBW: 1 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Polarisation	Result
1589.178357	26.50	21.13	31.00	-4.5	VERTICAL	Passed
2295.589178	36.40	66.07	36.50	-0.1	VERTICAL	Passed
2944.889780	34.60	53.70	29.20	5.4	HORIZONTAL	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	38.90	88.10	40.70	-1.8	VERTICAL	Passed
7150.400000	41.50	118.85	34.50	7.0	VERTICAL	Passed

Average (RBW: 1 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Polarisation	Result
3575.200000	26.20	20.42	28.00	-1.8	VERTICAL	Passed
7150.400000	29.00	28.18	22.00	7.0	VERTICAL	Passed

3.4. GSM 1900 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	40.80	-0.3	VERTICAL	Passed
7720.000000	42.50	133.35	34.00	8.5	HORIZONTAL	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	27.80	-0.3	VERTICAL	Passed
7720.000000	29.50	29.85	21.00	8.5	VERTICAL	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
38.897796	28.10	25.41	46.60	-18.5	VERTICAL	Passed
52.024248	20.90	11.09	48.40	-27.5	VERTICAL	Passed
250.200200	23.10	14.29	47.80	-24.7	HORIZONTAL	Passed
688.578758	26.70	21.63	41.00	-14.3	VERTICAL	Passed
787.075150	16.40	6.61	29.50	-13.1	HORIZONTAL	Passed
800.099198	30.20	32.36	43.10	-12.9	HORIZONTAL	Passed

Peak (RBW: 1 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Polarisation	Result
1959.919840	74.20	5128.61	76.80	-2.6	VERTICAL	Passed
1959.921844	74.20	5128.61	76.80	-2.6	VERTICAL	Passed

*1960 MHz frequency is coming from communication tester and thus ignored.

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
1409.815631	24.30	16.41	30.60	-6.3	HORIZONTAL	Passed
1445.387776	25.20	18.20	30.70	-5.5	HORIZONTAL	Passed
1601.202405	33.80	48.98	37.90	-4.1	VERTICAL	Passed
1959.919840	73.60	4786.30	76.20	-2.6	VERTICAL	Passed
1959.921844	73.60	4786.30	76.20	-2.6	VERTICAL	Passed
2295.089178	38.10	80.35	38.10	0.0	VERTICAL	Passed
2983.467936	34.60	53.70	28.90	5.7	VERTICAL	Passed

*1960 MHz frequency is coming from communication tester and thus ignored.

RX mode, channel 810 / 1989.8 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
3980.000000	40.70	108.39	41.10	-0.4	VERTICAL	Passed
7960.000000	42.60	134.90	33.50	9.1	VERTICAL	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
3980.000000	27.20	22.91	27.60	-0.4	VERTICAL	Passed
7960.000000	30.00	31.62	20.90	9.1	VERTICAL	Passed

3.5. Bluetooth 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	37.80	77.62	37.10	0.7	VERTICAL	Passed
7206.000000	40.60	107.15	33.50	7.1	VERTICAL	Passed

Average (RBW: 1 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Polarisation	Result
4804.000000	25.60	19.05	24.90	0.7	VERTICAL	Passed
7206.000000	28.10	25.41	21.00	7.1	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
37.835872	20.80	10.96	38.50	-17.7	VERTICAL	Passed
74.969940	27.20	22.91	54.20	-27.0	HORIZONTAL	Passed
121.563727	20.40	10.47	45.00	-24.6	VERTICAL	Passed
126.894790	27.70	24.27	53.10	-25.4	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
4943.391784	39.10	90.16	37.90	1.2	VERTICAL	Passed
4946.393788	39.70	96.61	38.50	1.2	VERTICAL	Passed
7299.593186	42.10	127.35	34.50	7.6	HORIZONTAL	Passed
7333.171343	43.30	146.22	35.80	7.5	VERTICAL	Passed
7415.331663	43.00	141.25	34.80	8.2	VERTICAL	Passed
7426.861723	43.30	146.22	35.40	7.9	VERTICAL	Passed
17478.457916	54.30	518.80	30.50	23.8	HORIZONTAL	Passed
17804.607214	58.80	870.96	30.00	28.8	VERTICAL	Passed

Average (RBW: 1 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Polarisation	Result
4948.393788	26.10	20.18	24.90	1.2	VERTICAL	Passed
4949.891784	26.20	20.42	24.90	1.3	VERTICAL	Passed
7297.593186	28.70	27.23	21.20	7.5	HORIZONTAL	Passed
7334.171343	29.50	29.85	21.90	7.6	VERTICAL	Passed
7415.331663	30.20	32.36	22.00	8.2	VERTICAL	Passed
7429.861723	29.90	31.26	21.90	8.0	VERTICAL	Passed
17480.957916	40.40	104.71	16.50	23.9	HORIZONTAL	Passed
17806.107214	46.40	208.93	17.60	28.8	VERTICAL	Passed

TX mode, channel 78 / 2480 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
4960.000000	39.60	95.50	38.30	1.3	VERTICAL	Passed
7440.000000	43.00	141.25	34.80	8.2	VERTICAL	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
4960.000000	26.70	21.63	25.40	1.3	VERTICAL	Passed
7440.000000	29.70	30.55	21.50	8.2	VERTICAL	Passed

4. Test Equipment

4.1. Conducted measurements

Eq. No	Equipment	Type	Manufacturer	Used in
13037	Power Supply 0-15V 10A	EA3012	LP Instruments	15C, 15B
13513	Pulse Limiter 9KHz-30MHz	ESH3Z2	Rohde&Schwarz	15C, 15B
13666	EMI Test Reciever 9KHz-2,5GHz	ESPC	Rohde&Schwarz	15C, 15B
13935	Two Lines Artificial Mains Network	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	Universal Radio Communication Tester	CMU200	Rohde&Schwarz	15C, 15B
11386	System DC Power Supply	HP6632A	Hewlett Packard	22/24, 15C, 15B
19678	Spectrum Analyzer 26 GHz	FSP	Rohde&Schwarz	22/24, 15C, 15B
16601	Universal Radio Communication Tester	CMU200	Rohde&Schwarz	22/24, 15C, 15B
19625	Vötsch Climatic Chamber	VT4002EMC	Vötsch	22/24, 15C, 15B
13357	Rohde & Schwartz Signal Generator	SMP02	Rohde&Schwarz	22/24, 15C, 15B

4.2. Radiated measurements

Eq. No	Equipment	Type	Manufacturer	Used in
18416	Universal Radio Communication Tester	CMU200	Rohde&Schwarz	22/24, 15C, 15B
	Programmable Relay Switching System	-----	Pickering	22/24, 15C, 15B
15742	Programmable Relay Switching System	-----	Pickering	22/24, 15C, 15B
14020	Power Supply Module Relay Switching System 45W	10-910-002	Pickering	22/24, 15C, 15B
15743	Power Supply Module Relay Switching System 50W	10-910L-001	Pickering	22/24, 15C, 15B
16490	RS-232/IEEE-488.2 Interface	10-921-001	Pickering	22/24, 15C, 15B
	RS-232/IEEE-488.2 Interface	10-921-001	Pickering	22/24, 15C, 15B
20078	Relay 2x6 Chnl μ Wave Mux	10-785B-522	Pickering	22/24, 15C, 15B
14021	Relay Dual 6 Chnl μ Wave Mux	10-785-522		22/24, 15C, 15B
	Relay Dual 6 Chnl μ Wave Mux	10-785-522		22/24, 15C, 15B
17644	Dual 6 Channel MUX Microwave Relay SMA 50 Ohm	10-785-522	Pickering	22/24, 15C, 15B
16948	Dual 6 Channel MUX Microwave Relay SMA 50 Ohm	10-785-522	Pickering	22/24, 15C, 15B
16949	Dual 6 Channel MUX Microwave Relay SMA 50 Ohm	10-785-522	Pickering	22/24, 15C, 15B
18792	Multi Device Controller	2090	ETS-EMCO	22/24, 15C, 15B
14963	RF Preampifier 100MHz-4GHz (Metal Chassis)	AFS3-00100400	Miteq/NMP Cph	22/24, 15C, 15B
18861	EMI Test Receiver 20Hz-26,5GHz	ESI	Rohde&Schwarz	22/24, 15C, 15B

Eq. No	Equipment	Type	Manufacturer	Used in
18860	Ultra Broadband Antenna Ultralog 30-3000MHz	HL562	Rohde&Schwarz	22/24, 15C, 15B
19830	Ultra Broadband Antenna Ultralog 30-3000MHz	HL562	Rohde&Schwarz	22/24, 15C, 15B
18773	Shielded Chamber	RFD-100	ETS-Lindgren	22/24, 15C, 15B
18774	Shielded Chamber	RFSD-F/A-100	ETS-Lindgren	22/24, 15C, 15B
19151	High Pass Filter 3GHz WHK3.0/18G-10ss	WHJS3000-10SS	Wainwright	22/24, 15C, 15B
13937	Ultra Stable Notch Filter 850MHz	WRCA902.4-0.2/40-6SS	Wainwright Instruments	22/24, 15C, 15B
13936	Ultra Stable Notch Filter 1747,5MHz	WRCD1747.5-0.2/40- 10SS	Wainwright Instruments	22/24, 15C, 15B
13917	Highpass Filter 1000-3000MHz 50OHM SMA Conn	WHKS1000-10SS	Wainwright Instruments	22/24, 15C, 15B
14188	Ultra Stable Notch Filter 902,4MHz	WRCA902.4-0.2/40-6SS	Wainwright	22/24, 15C, 15B
14187	Ultra Stable Notch Filter 1747,5MHz	WRCD1747.5-0.2/40- 10SS	Wainwright	22/24, 15C, 15B
16633	Ultra Stable Notch Filter 1880,0MHz	WRCD1880.0-0.2/40- 10SS	Wainwright	22/24, 15C, 15B
19587	BT/WLAN Band Reject Filter	WRCG2400/2483- 2390/2493-35/10SS	Wainwright	22/24, 15C, 15B
	WDCMA Band 4 filter	WRCG1737/1743- 1733/1747-40/6SS	Wainwright	22/24, 15C, 15B
	WDCMA Band 5&6 filter	WRCG832/83/-825/845- 40/5SS	Wainwright	22/24, 15C, 15B
	WDCMA Band 8 filter	WRCG894.6/900.6- 890.6/904.6-40/80SS	Wainwright	22/24, 15C, 15B
18323	Band reject filter 1947-1953MHz 40dB	WRCG1947/1953- 1940/1960-40/6SS	Wainwright	22/24, 15C, 15B
20031	Double Ridged Broadband Horn	BBHA 9120 D	SCHWARZBECK	22/24, 15C, 15B
15190	Infra Red Remote Control Unit	4630	Emco	22/24, 15C, 15B
14993	EMI Test Receiver 9KHz- 2750MHz	ESCS30	Rohde&Schwarz	22/24, 15C, 15B
15191	Turntable Contoller Unit	G-800SDX	YAESU	22/24, 15C, 15B
14900	Antenna Controller	HD100	HD GmbH	22/24, 15C, 15B
15105	Attenuator 30dB DC-1000MHz 50 Ohm Nf - Nm	NAT-30	Mini-Circuits	22/24, 15C, 15B
13302	Spectrum Analyzer 9KHz- 12.8GHz	HP8596E	Hewlett Packard	22/24, 15C, 15B
11584	Spectrum analyzer 50Hz- 6,5GHz	HP8561B	Hewlett Packard	22/24, 15C, 15B
13134	Tracking generator	HP85645A	Hewlett Packard	22/24, 15C, 15B
19374	Resonant Dipole Antenna 850MHz SMA m Conn.	-----	NMP Cph	22/24, 15C, 15B
19375	Resonant Dipole Antenna 1900MHz SMA m Conn.	-----	NMP Cph	22/24, 15C, 15B
11487	Network analyzer 300KHz- 3,0GHz	HP8753A	Hewlett Packard	22/24, 15C, 15B
14807	S - Parameter Test Set 300KHz- 6GHz	HP85047A	Hewlett Packard	22/24, 15C, 15B
17277	Multimeter Digital 6 1/2 Digit	AT34401A	Agilent Technologies	22/24, 15C, 15B