

FCC Part 15B Compliance Test Report

Test Report no.:	Chh_FCC_0718_03.doc	Date of Report:	16-05-2007
Number of pages:	20	Customer's Contact person:	Ole H. Sørensen
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.:	-		
Tested devices/ accessories:	Phone; RM-207 (HW: 0002), Battery; BL-5C, AC-Charger; AC-4E, Data Cable; DKE-2, IBM Laptop; T43		
FCC ID:	QTKRM-207	IC:	-
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:			

Allan F. Henriksen, Engineer

1. Summary for FCC Part 15B Compliance Test Report

Date of receipt	01-05-2007
Testing completed	11-05-2007
The customer's contact person	Ole H. Sørensen
Test Plan referred to	T:\Projects\RM-207\TestPlan_RS\RS_test_plan_RM-207.xls
Notes	None
Document name	T:\Projects\RM-207\EMC\Results\FCC\Chh_FCC_0718_03.doc

1.1. EUT and Accessory Information

The EUT is a 5-band (GSM850/900/1800/1900/IV(1700)) mobile phone with GPRS, EGPRS and Bluetooth. GSM bands are tested in idle mode. Bluetooth is tested with maximum rated TX power.

Product	Type	SN	HW	MV	SW	DUT
Phone	RM-207	004401/01/289570/8	0002	-	Vp ws06w47_07w13	27290
AC-Charger	AC-4E	39434953070701101177;0675384	-	-	-	27291
Data Cable	DKE-2	EM1908882A	-	-	-	27287
Battery	BL-5C	0670397382066N483S40100000	-	-	-	27959
Phone	RM-207	004401/01/289596/3	0002	-	Vp ws06w47_07w13	29173
AC-Charger	AC-4U	3997915245061102926;0675379	1.1	-	-	27486
Battery	BL-5C	0670397382066N483S40100000	-	-	-	27957

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

WCDMA 1700 (Band IV):

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
NP

The EUT does not comply with the essential requirements in the standard.
The test was not performed by the TCC Nokia Copenhagen Laboratory.

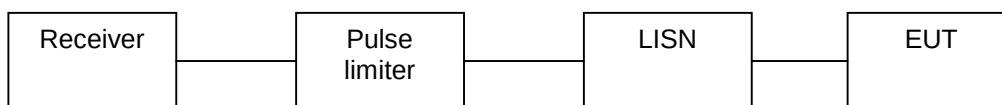
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2. AC powerline conducted emissions (FCC §15.107, ICES-003 section 5.3)

EUT with DUT number	RM-207 Dut # 27290
Accessories with DUT numbers	BL-5C Dut # 27959 + AC-4E Dut # 27291 + DKE-2 Dut # 27287
Operation Voltage [V] / [Hz]	230 / 50
Result	Passed
Remarks	GPS Activated with the Field Test Display. Continuous data transfer was active between the phone and the computer during the test.
Temp [°C] / Humidity [%RH] / Air Pressure [kPa]	23.3 / 31.5 102.5
Date of measurements	03-05-2007
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:

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

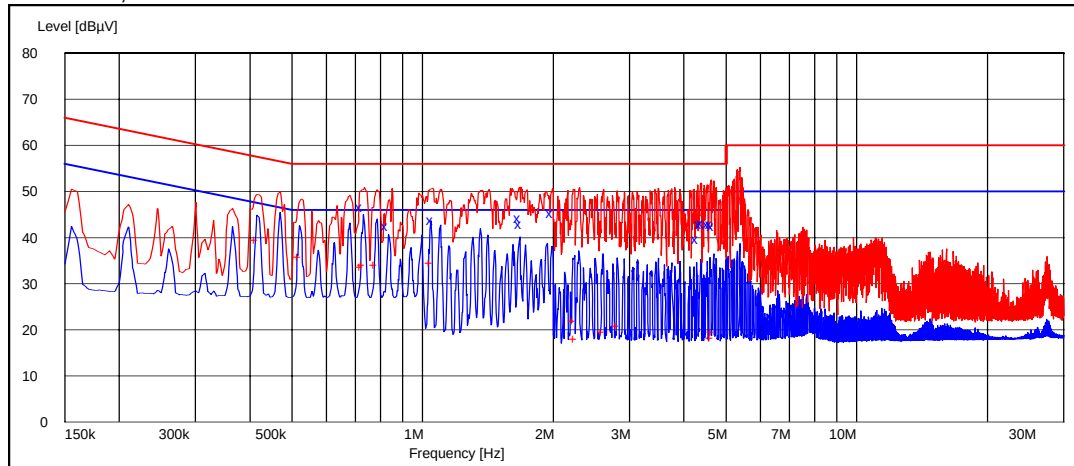
Where U_{RX} is receiver reading and A_{TOT} is total correction factor including cable and pulse limiter attenuations.

CISPR 22 Class B limits

Frequency range [MHz]	Quasi peak limit [dB μ V]	Average limit [dB μ V]
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)

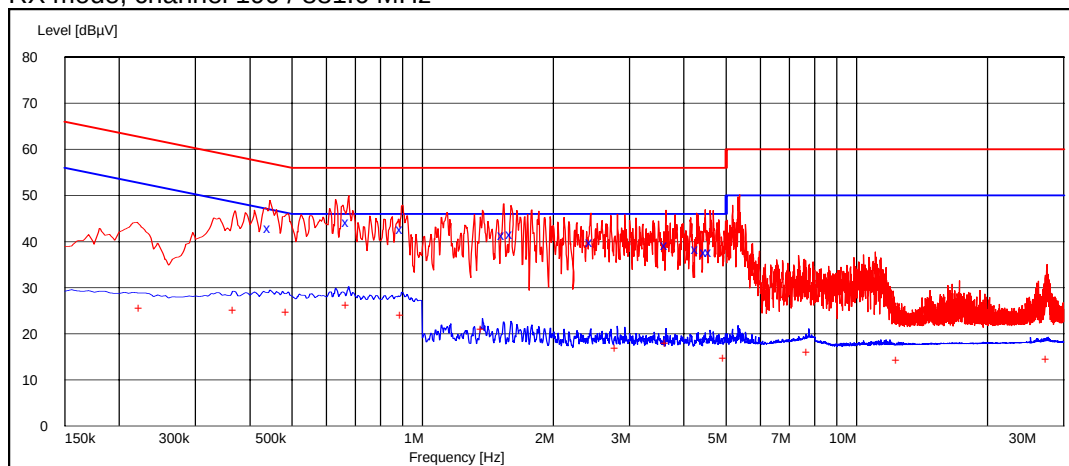
Frequency [MHz]	U [dBμV]	Line	Result
0.725000	46.60	N	Passed
0.830000	42.50	N	Passed
1.055000	43.80	N	Passed
1.675000	44.30	N	Passed
1.685000	42.90	N	Passed
1.990000	45.40	N	Passed
4.300000	39.60	N	Passed
4.380000	42.90	N	Passed
4.430000	43.10	N	Passed
4.565000	43.00	N	Passed
4.630000	43.00	N	Passed
4.680000	42.60	N	Passed

Average (RBW: 9 kHz)

Frequency [MHz]	U [dBμV]	Line	Result
0.415000	39.40	N	Passed
0.520000	35.80	N	Passed
0.725000	33.50	L1	Passed
0.730000	34.00	L1	Passed
0.780000	34.00	L1	Passed
1.045000	34.40	N	Passed
2.235000	21.80	L1	Passed
2.250000	17.90	L1	Passed
2.605000	19.60	N	Passed
2.820000	20.70	N	Passed
4.630000	18.20	N	Passed
4.655000	19.60	N	Passed

2.4. GSM 850 Test results + GPS Active

RX mode, channel 190 / 881.6 MHz



Quasi peak (RBW: 9 kHz)

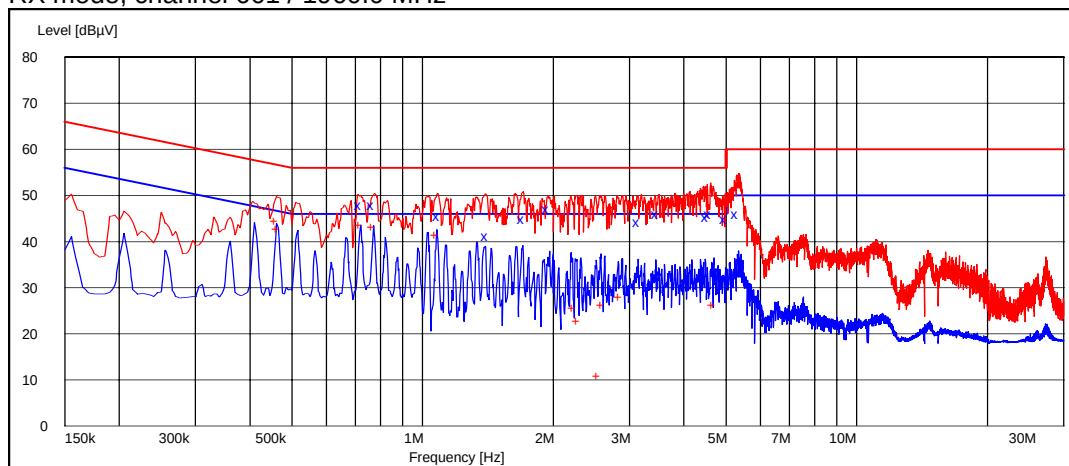
Frequency [MHz]	U [dBμV]	Line	Result
0.445000	42.90	N	Passed
0.675000	44.20	N	Passed
0.900000	42.80	N	Passed
1.540000	41.40	N	Passed
1.605000	41.60	N	Passed
2.455000	40.00	N	Passed
3.655000	39.30	N	Passed
4.310000	38.40	N	Passed
4.500000	37.70	N	Passed
4.625000	37.80	N	Passed

Average (RBW: 9 kHz)

Frequency [MHz]	U [dBμV]	Line	Result
0.225000	25.70	N	Passed
0.370000	25.20	N	Passed
0.490000	24.70	N	Passed
0.675000	26.20	N	Passed
0.900000	24.00	N	Passed
1.380000	21.00	N	Passed
2.810000	16.80	N	Passed
3.655000	17.90	N	Passed
4.990000	14.70	N	Passed
7.755000	16.00	N	Passed
12.480000	14.40	N	Passed
27.630000	14.60	N	Passed

2.5. GSM 1900 Test results

RX mode, channel 661 / 1960.0 MHz



Quasi peak (RBW: 9 kHz)

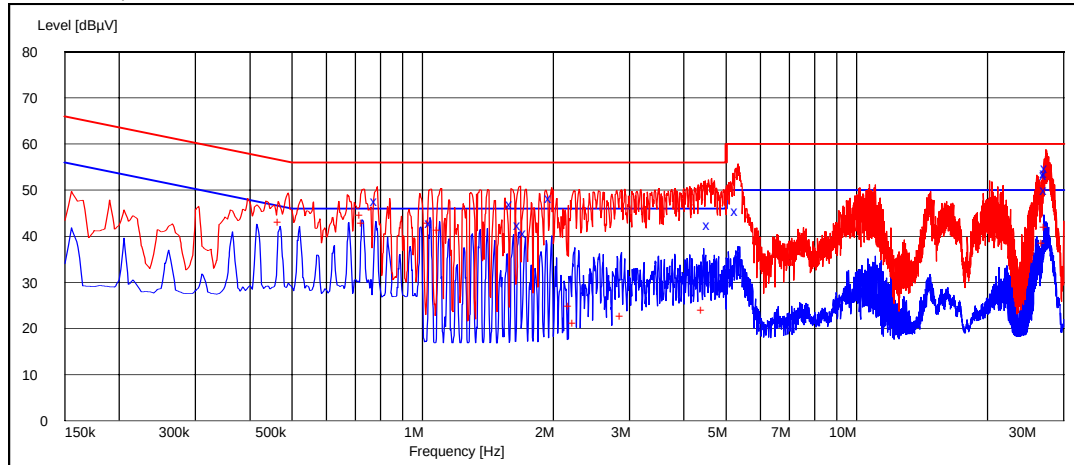
Frequency [MHz]	U [dBμV]	Line	Result
0.720000	47.90	N	Passed
0.770000	47.80	N	Passed
1.090000	45.60	N	Passed
1.410000	41.10	N	Passed
1.710000	44.90	N	Passed
1.950000	47.10	N	Passed
3.160000	44.30	N	Passed
3.485000	46.00	N	Passed
4.545000	45.30	N	Passed
4.610000	45.90	N	Passed
5.000000	44.80	N	Passed
5.320000	45.90	N	Passed

Average (RBW: 9 kHz)

Frequency [MHz]	U [dBμV]	Line	Result
0.460000	44.40	N	Passed
0.465000	42.80	N	Passed
0.720000	43.50	N	Passed
0.770000	43.20	N	Passed
1.080000	41.50	N	Passed
2.235000	25.70	L1	Passed
2.290000	22.70	L1	Passed
2.550000	10.80	L1	Passed
2.600000	26.20	N	Passed
2.860000	28.00	N	Passed
4.685000	26.20	N	Passed

2.6. WCDMA 1700 Test results

RX mode, channel 1675 / 2140.0 MHz



Quasi peak (RBW: 9 kHz)

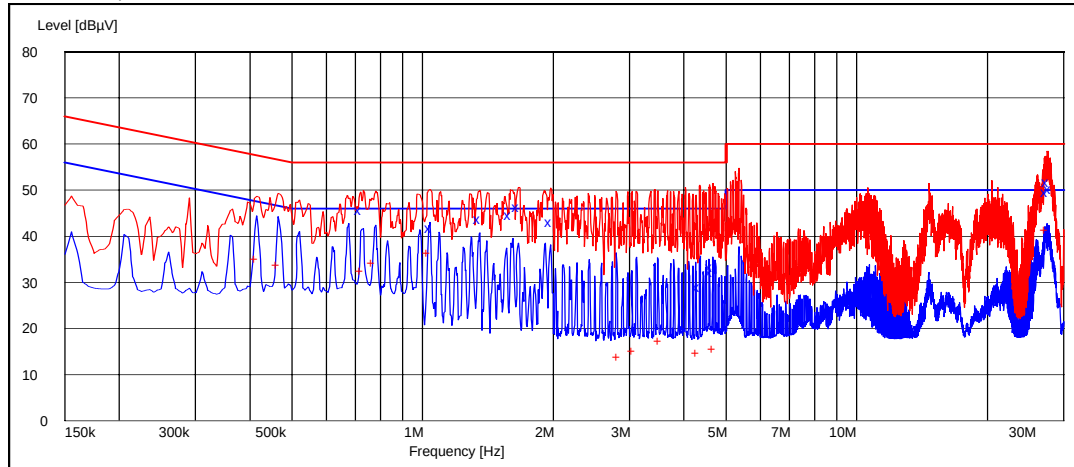
Frequency [MHz]	U [dBμV]	Line	Result
0.785000	47.70	N	Passed
1.050000	42.80	N	Passed
1.605000	47.00	N	Passed
1.675000	42.50	L1	Passed
1.730000	40.80	N	Passed
1.980000	48.30	N	Passed
4.585000	42.40	N	Passed
5.315000	45.50	N	Passed
27.325000	53.30	N	Passed
27.365000	50.00	N	Passed
27.410000	53.70	N	Passed
27.500000	54.80	N	Passed

Average (RBW: 9 kHz)

Frequency [MHz]	U [dBμV]	Line	Result
0.470000	43.10	N	Passed
0.725000	44.50	N	Passed
0.730000	43.00	N	Passed
1.040000	42.80	N	Passed
1.090000	41.30	N	Passed
2.195000	24.90	N	Passed
2.245000	21.20	L1	Passed
2.880000	22.60	N	Passed
4.445000	24.10	N	Passed
27.005000	38.60	N	Passed
27.325000	41.90	N	Passed

2.7. Bluetooth Test results

TX mode, channel 40 / 2442 MHz



Quasi peak (RBW: 9 kHz)

Frequency [MHz]	U [dBμV]	Line	Result
0.720000	45.60	N	Passed
1.045000	41.70	N	Passed
1.355000	43.80	N	Passed
1.595000	44.60	N	Passed
1.665000	46.30	N	Passed
1.980000	43.20	N	Passed
4.340000	29.10	N	Passed
4.635000	32.20	N	Passed
4.640000	33.40	N	Passed
27.455000	49.70	N	Passed
27.590000	51.80	N	Passed
27.940000	50.30	N	Passed

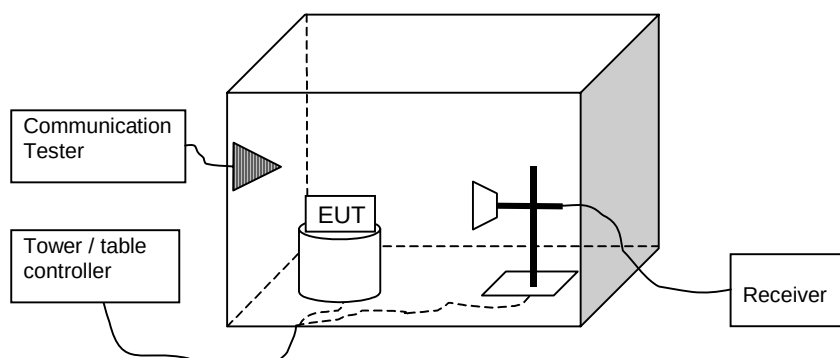
Average (RBW: 9 kHz)

Frequency [MHz]	U [dBμV]	Line	Result
0.415000	35.00	L1	Passed
0.465000	33.70	L1	Passed
0.725000	32.50	L1	Passed
0.770000	34.10	N	Passed
1.035000	36.40	N	Passed
2.830000	13.90	N	Passed
3.070000	15.20	N	Passed
3.525000	17.30	N	Passed
4.310000	14.60	N	Passed
4.705000	15.60	N	Passed
27.415000	41.40	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-207 Dut#29173
Accessories with DUT numbers	AC-4U Dut#27486, BL-5C Dut#27957, DKE-2 Dut#27287
Operation Voltage [V] / [Hz]	230 / 50
Result	Passed
Remarks	None
Temp [°C] / Humidity [%RH] / Air Pressure [kPa]	22 / 43 / 103
Date of measurements	11-05-2007
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	38.50	84.14	40.70	-2.20	HORIZONTAL	Passed
6953.600000	44.50	167.88	38.40	6.10	VERTICAL	Passed

Average (RBW: 1 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Polarisation	Result
3476.800000	25.80	19.50	28.00	-2.20	VERTICAL	Passed
6953.600000	31.60	38.02	25.50	6.10	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
31.383367	26.10	20.18	39.80	-13.70	VERTICAL	Passed
50.140882	26.30	20.65	52.40	-26.10	VERTICAL	Passed
68.795992	20.10	10.12	48.40	-28.30	VERTICAL	Passed
447.996593	35.00	56.23	53.80	-18.80	HORIZONTAL	Passed
499.799198	13.40	4.68	31.00	-17.60	HORIZONTAL	Passed

Average (RBW: 1 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Polarisation	Result
1616.732465	26.90	22.13	30.80	-3.90	VERTICAL	Passed
1763.027054	31.10	35.89	35.10	-4.00	VERTICAL	Passed
2295.089178	39.60	95.50	39.60	0.00	VERTICAL	Passed
2986.467936	34.50	53.09	28.80	5.70	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	40.00	100.00	41.80	-1.80	VERTICAL	Passed
7150.400000	41.10	113.50	34.10	7.00	VERTICAL	Passed

Average (RBW: 1 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Polarisation	Result
3575.200000	25.90	19.72	27.70	-1.80	VERTICAL	Passed
7150.400000	28.70	27.23	21.70	7.00	VERTICAL	Passed

3.4. GSM 850 Test results + GPS Active

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	39.70	96.61	41.90	-2.20	VERTICAL	Passed
6953.600000	44.90	175.79	38.80	6.10	VERTICAL	Passed

Average (RBW: 1 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Polarisation	Result
3476.800000	26.50	21.13	28.70	-2.20	VERTICAL	Passed
6953.600000	31.80	38.90	25.70	6.10	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
38.297796	26.30	20.65	44.40	-18.1	VERTICAL	Passed
68.155511	23.80	15.49	52.30	-28.5	VERTICAL	Passed
503.508016	20.00	10.00	37.50	-17.5	HORIZONTAL	Passed
506.812024	14.30	5.19	31.80	-17.5	HORIZONTAL	Passed
881.663527	68.80	2754.23	80.70	-11.9	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
1592.678357	29.10	28.51	33.50	-4.4	VERTICAL	Passed
1606.216433	27.60	23.99	31.60	-4.0	VERTICAL	Passed
1617.732465	27.20	22.91	31.10	-3.9	VERTICAL	Passed
1763.527054	37.90	78.52	41.90	-4.0	VERTICAL	Passed
2295.089178	39.90	98.86	39.90	0.0	VERTICAL	Passed
2981.967936	34.50	53.09	28.90	5.6	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	38.60	85.11	40.40	-1.80	HORIZONTAL	Passed
7150.400000	42.00	125.89	35.00	7.00	VERTICAL	Passed

Average (RBW: 1 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Polarisation	Result
3575.200000	25.70	19.28	27.50	-1.80	VERTICAL	Passed
7150.400000	28.60	26.92	21.60	7.00	VERTICAL	Passed

3.5. 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	40.40	104.71	40.70	-0.30	VERTICAL	Passed
7720.000000	42.20	128.82	33.70	8.50	HORIZONTAL	Passed

Average (RBW: 1 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Polarisation	Result
3860.000000	27.40	23.44	27.70	-0.30	VERTICAL	Passed
7720.000000	29.40	29.51	20.90	8.50	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
37.976353	29.60	30.20	47.50	-17.90	VERTICAL	Passed
71.784168	21.90	12.45	49.40	-27.50	VERTICAL	Passed
831.261323	16.40	6.61	28.60	-12.20	VERTICAL	Passed
883.167535	16.80	6.92	28.60	-11.80	VERTICAL	Passed
886.073547	17.00	7.08	28.80	-11.80	VERTICAL	Passed

Peak (RBW: 1 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Polarisation	Result
1959.919840	80.00	10000.00	82.60	-2.60	VERTICAL	Passed

*1960.0 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
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1589.678357	26.40	20.89	30.90	-4.50	VERTICAL	Passed
1616.732465	32.30	41.21	36.20	-3.90	VERTICAL	Passed
1959.919840	79.30	9225.71	81.90	-2.60	VERTICAL	Passed
2294.589178	37.90	78.52	37.90	0.00	VERTICAL	Passed
2983.967936	34.80	54.95	29.10	5.70	VERTICAL	Passed

*1960.0 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	40.50	105.93	40.90	-0.40	VERTICAL	Passed
7960.000000	43.20	144.54	34.10	9.10	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	27.40	23.44	27.80	-0.40	VERTICAL	Passed
7960.000000	30.10	31.99	21.00	9.10	VERTICAL	Passed

3.6. WCDMA 1700 Test results

RX mode, channel 1537 / 2112.4 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
2112.400000	47.50	237.14	43.10	4.40	VERTICAL	Passed
4224.800000	39.40	93.33	39.90	-0.50	HORIZONTAL	Passed
6337.200000	41.00	112.20	36.60	4.40	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
2112.400000	34.40	52.48	30.00	4.40	HORIZONTAL	Passed
4224.800000	26.40	20.89	26.90	-0.50	VERTICAL	Passed
6337.200000	28.50	26.61	24.10	4.40	VERTICAL	Passed

RX mode, channel 1675 / 2140.0 MHz

Quasi peak (RBW: 120 kHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Polarisation	Result
38.295391	27.00	22.39	45.10	-18.10	VERTICAL	Passed
62.683968	22.00	12.59	52.20	-30.20	VERTICAL	Passed
797.095190	18.70	8.61	31.70	-13.00	HORIZONTAL	Passed
835.471343	17.10	7.16	29.30	-12.20	VERTICAL	Passed
873.445491	19.40	9.33	31.40	-12.00	VERTICAL	Passed
941.883768	16.80	6.92	28.00	-11.20	VERTICAL	Passed

Peak (RBW: 1 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Polarisation	Result
2139.778557	62.00	1258.93	63.60	-1.60	VERTICAL	Passed
2140.780561	63.40	1479.11	65.00	-1.60	VERTICAL	Passed

Average (RBW: 1 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Polarisation	Result
1593.178357	27.70	24.27	32.10	-4.40	VERTICAL	Passed
1618.732465	26.90	22.13	30.80	-3.90	VERTICAL	Passed
2139.778557	47.70	242.66	49.30	-1.60	VERTICAL	Passed
2139.780561	49.00	281.84	50.60	-1.60	VERTICAL	Passed
2294.089178	34.90	55.59	35.00	-0.10	VERTICAL	Passed
2987.967936	34.40	52.48	28.80	5.60	VERTICAL	Passed

RX mode, channel 1738 / 2152.6 MHz

Peak (RBW: 1 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Polarisation	Result
2152.600000	64.00	1584.89	59.50	4.50	VERTICAL	Passed
4305.200000	38.80	87.10	39.20	-0.40	HORIZONTAL	Passed
6457.800000	42.40	131.83	38.30	4.10	HORIZONTAL	Passed

Average (RBW: 1 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Polarisation	Result
2152.600000	49.60	302.00	45.10	4.50	VERTICAL	Passed
4305.200000	27.90	24.83	28.30	-0.40	VERTICAL	Passed
6457.800000	29.20	28.84	25.10	4.10	VERTICAL	Passed

3.7. 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	45.70	192.75	45.00	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	34.20	51.29	33.50	0.7	VERTICAL	Passed
7206.000000	28.10	25.41	21.00	7.1	VERTICAL	Passed

TX mode, channel 40 / 2442 MHz

Peak (RBW: 1 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Polarisation	Result
4884.267535	52.00	398.11	51.10	0.9	VERTICAL	Passed
4884.269539	52.00	398.11	51.10	0.9	VERTICAL	Passed
7342.683367	42.10	127.35	34.20	7.9	VERTICAL	Passed
7362.731463	42.20	128.82	34.20	8.0	VERTICAL	Passed
7414.831663	43.00	141.25	34.80	8.2	VERTICAL	Passed
17471.441884	53.20	457.09	29.50	23.7	HORIZONTAL	Passed
17861.727455	60.30	1035.14	31.30	29.0	HORIZONTAL	Passed

Average (RBW: 1 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Polarisation	Result
4884.267535	37.00	70.79	36.10	0.9	VERTICAL	Passed
4884.269539	37.10	71.61	36.20	0.9	VERTICAL	Passed
7343.183367	29.40	29.51	21.40	8.0	VERTICAL	Passed
7368.731463	29.80	30.90	21.90	7.9	VERTICAL	Passed
7411.831663	30.10	31.99	21.80	8.3	VERTICAL	Passed
17474.941884	40.30	103.51	16.50	23.8	HORIZONTAL	Passed
17867.727455	46.50	211.35	17.50	29.0	HORIZONTAL	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	50.20	323.59	48.90	1.3	VERTICAL	Passed
7440.000000	43.20	144.54	35.00	8.2	VERTICAL	Passed

Average (RBW: 1 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Polarisation	Result
4960.000000	37.80	77.62	36.50	1.3	VERTICAL	Passed
7440.000000	29.60	30.20	21.40	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 Preampfier 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