FCC Part 22/24/27 Compliance Test Report

Test Report no.:	FCC22&24&27_RM-940_01.docx	**Date of Report:**	13-Sep-2013
Number of pages:	15	**Customer's Contact person:**	Lasse Vaattovaara
Testing laboratory:	TCC Nokia Salo Laboratory P.O.Box(86) Joensuunkatu 7H / Kiila 1B FIN-24101 SALO, FINLAND Tel. +358 (0) 7180 08000 Fax. +358 (0) 7180 45220	**Customer:**	Nokia Corporation P.O.Box(86) Joensuunkatu 7 FIN-24101 SALO, FINLAND Tel. +358 (0) 7180 08000 Fax. +358 (0) 7180 45220
FCC listing no.: **IC recognition no.:**	533467 661V-1		
Tested devices/ accessories:	**Phone RM-940**		
FCC ID:	PYAB	**IC:**	661V-B
Supplement reports:	-		
Testing has been carried out in accordance with:	**CFR 47, FCC rules Parts 22/24/27 , TIA-603-C-2004 and IC standards, RSS-GEN (Issue 3, December 2010), RSS-132 (Issue 2, September 2005), RSS-133 (Issue 5, February 2009), RSS-139 (Issue 2, February 2009). 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:	 Digitally signed by Sami Lehtonen DN: cn=Sami Lehtonen, o=Nokia, ou, email=sami.k.lehtonen@nokia.com, c=FI Date: 2013.09.13 10:01:28 +03'00'		

Sami Lehtonen, Specialist, EMC

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1. Summary for FCC Part 22/24/27 Compliance Test Report

Date of receipt	19-Jul-2013
Testing completed	15-Aug-2013
The customer's contact person	Lasse Vaattovaara
Test Plan referred to	T:\Projects\RM-940\TestPlan\RS_Testplan_RM-940.xlsm
Notes	-
Document name	T:\Projects\RM-940\EMC\FCC22&24&27_RM-940_01.docx

1.1. EUT and Accessory Information

The EUT is a mobile phone with following features:
GSM/WCDMA/WLAN/Bluetooth
The EUT is tested with maximum rated TX power.

Devices under tests

Product	Type	SN	HW	MV	SW	DUT
Phone	RM-940	004402473425910	2100	-	1028.0305.1328.0000	17589

1.2. Summary of Test Results

GSM850:

Section in CFR 47	Section in RSS-GEN or RSS-132	Name of the test	Result
§2.1046(a), 22.913(a)	4.4	Conducted RF output power	NP
§22.913(a)	4.4	Radiated RF output power	PASSED
§2.1049(h)	4.6.1	99 % occupied bandwidth	NP
§22.917(a)	4.5	Band edge compliance	NP
§22.917(a), §2.1051	4.5	Spurious emissions at antenna terminals	NP
§22.917(a), §2.1053	4.5	Spurious radiated emissions	NP
§2.1055(a)	4.3	Frequency stability, temperature variation	NP
§2.1055(d)	4.3	Frequency stability, voltage variation	NP

WCDMA 850 (Band V):

Section in CFR 47	Section in RSS-GEN or RSS-132	Name of the test	Result
§2.1046(a), 22.913(a)	4.4	Conducted RF output power	NP
§22.913(a)	4.4	Radiated RF output power	PASSED
§2.1049(h)	4.6.1	99 % occupied bandwidth	NP
§22.917(a)	4.5	Band edge compliance	NP
§22.917(a), §2.1051	4.5	Spurious emissions at antenna terminals	NP
§22.917(a), §2.1053	4.5	Spurious radiated emissions	NP
§2.1055(a)	4.3	Frequency stability, temperature variation	NP
§2.1055(d)	4.3	Frequency stability, voltage variation	NP

LTE 850 (Band V):

Section in CFR 47	Section in RSS-GEN or RSS-132	Name of the test	Result
§2.1046(a), 22.913(a)	4.4	Conducted RF output power	NP
§22.913(a)	4.4	Radiated RF output power	PASSED
§2.1049(h)	4.6.1	99 % occupied bandwidth	NP
§22.917(a)	4.5	Band edge compliance	NP
§22.917(a), §2.1051	4.5	Spurious emissions at antenna terminals	NP
§22.917(a), §2.1053	4.5	Spurious radiated emissions	NP
§2.1055(a)	4.3	Frequency stability, temperature variation	NP

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§2.1055(d)	4.3	Frequency stability, voltage variation	NP

GSM1900:

Section in CFR 47	Section in RSS-GEN or RSS-133	Name of the test	Result
§2.1046(a)	6.4	Conducted RF output power	NP
§24.232(b)	6.4	Radiated RF output power	PASSED
§2.1049(h)	4.6.1	99 % occupied bandwidth	NP
§24.238(a)	6.5	Band edge compliance	NP
§24.238(a), §2.1051	6.5	Spurious emissions at antenna terminals	NP
§24.238(a), §2.1053	6.5	Spurious radiated emissions	NP
§2.1055(a)	6.3	Frequency stability, temperature variation	NP
§2.1055(d)	6.3	Frequency stability, voltage variation	NP

WCDMA 1900 (Band II):

Section in CFR 47	Section in RSS-GEN or RSS-133	Name of the test	Result
§2.1046(a)	6.4	Conducted RF output power	NP
§24.232(b)	6.4	Radiated RF output power	PASSED
§2.1049(h)	4.6.1	99 % occupied bandwidth	NP
§24.238(a)	6.5	Band edge compliance	NP
§24.238(a), §2.1051	6.5	Spurious emissions at antenna terminals	NP
§24.238(a), §2.1053	6.5	Spurious radiated emissions	NP
§2.1055(a)	6.3	Frequency stability, temperature variation	NP
§2.1055(d)	6.3	Frequency stability, voltage variation	NP

LTE 1900 (Band II):

Section in CFR 47	Section in RSS-GEN or RSS-133	Name of the test	Result
§2.1046(a)	6.4	Conducted RF output power	NP
§24.232(b)	6.4	Radiated RF output power	PASSED
§2.1049(h)	4.6.1	99 % occupied bandwidth	NP
§24.238(a)	6.5	Band edge compliance	NP
§24.238(a), §2.1051	6.5	Spurious emissions at antenna terminals	NP
§24.238(a), §2.1053	6.5	Spurious radiated emissions	NP
§2.1055(a)	6.3	Frequency stability, temperature variation	NP
§2.1055(d)	6.3	Frequency stability, voltage variation	NP

WCDMA 1700 (Band IV):

Section in CFR 47	Section in RSS-GEN or RSS-139	Name of the test	Result
§2.1046(a)	6.4	Conducted RF output power	NP
§27.50(d)(2)	6.4	Radiated RF output power	PASSED
§2.1049(h)	4.6.1	99 % occupied bandwidth	NP
§27.53(g)	6.5	Band edge compliance	NP
§27.53(g), §2.1051	6.5	Spurious emissions at antenna terminals	NP
§24.238(a), §2.1053	6.5	Spurious radiated emissions	NP
§2.1055(a)	6.3	Frequency stability, temperature variation	NP
§2.1055(d)	6.3	Frequency stability, voltage variation	NP

LTE1700 (Band 4):

Section in CFR 47	Section in RSS-GEN or RSS-139	Name of the test	Result
§2.1046(a)	6.4	Conducted RF output power	NP
§27.50(d)(4)	6.4	Radiated RF output power	PASSED

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§2.1049(h)	4.6.1	99 % occupied bandwidth	NP
§27.53(h)	6.5	Band edge compliance	NP
§27.53(h), §2.1051	6.5	Spurious emissions at antenna terminals	NP
§27.53(h), §2.1053	6.5	Spurious radiated emissions	NP
§2.1055(a)	6.3	Frequency stability, temperature variation	NP
§2.1055(d)	6.3	Frequency stability, voltage variation	NP

LTE700 Lower (Band 17):

Section in CFR 47	Section in RSS-GEN or RSS-133	Name of the test	Result
§2.1046 (a)	N/A	Conducted RF output power	NP
§27.50(c)(10)	N/A	Radiated RF output power	PASSED
§2.1049(h)	N/A	99 % occupied bandwidth	NP
§27.53(g)	N/A	Band edge compliance	NP
§27.53(g), §2.1051	N/A	Spurious emissions at antenna terminals	NP
§27.53(g), §2.1051	N/A	Spurious radiated emissions	NP
§2.1055(a)	N/A	Frequency stability, temperature variation	NP
§2.1055(d)	N/A	Frequency stability, voltage variation	NP

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 Laboratory.

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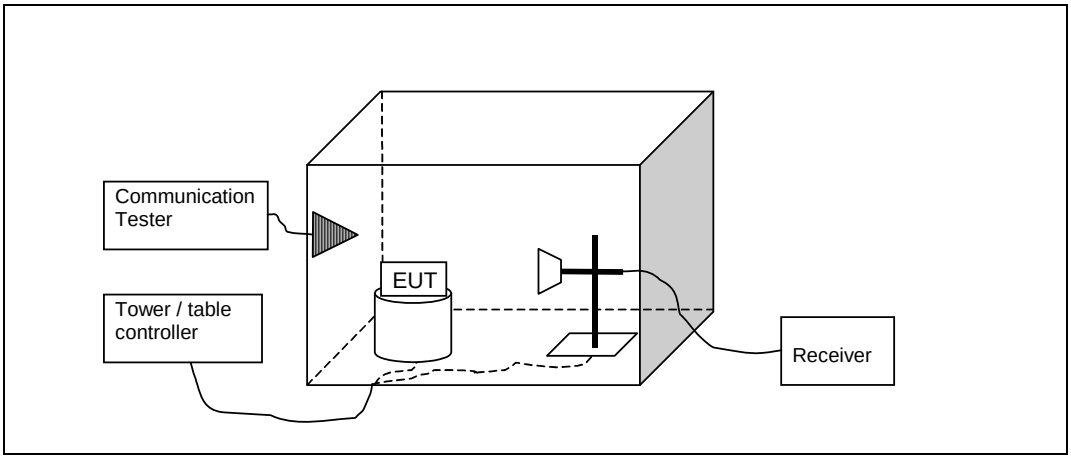
2. Radiated RF output power

(FCC §22.913(a), §24.232(b), §27.50(d)(2), §27.53(h), §27.53(g), RSS-132 4.4, RSS-133 6.4)

EUT with DUT number	RM-940, DUT 17589
Accessories with DUT numbers	-
Operation Voltage [V] / [Hz]	Nominal
Results	PASSED
Remarks	-
Temp [°C] / Humidity [%RH] / Air Pressure [kPa]	19 / 71 / 100.3
Date of measurements	05-Aug-2013
Measured by	Jari Keto

2.1.1 Test setup



2.2. Test method and limit

The measurement is made according to TIA-603-C-2004 as follows:

The measurement is performed in the Anechoic Chamber with absorbers on the floor and measuring antenna at fixed height using 2-axis EUT position system. The turntable is rotated 360 degrees and this is repeated for both horizontal and vertical receive antenna polarizations.

The EUT is placed on a nonconductive plate at 170 cm height.

The substitution method is used.The measurement results are obtained as described below:

$P[dBm] = P_{SUBST\ TX} + P_{MEAS} - P_{SUBST\ RX} - L_{SUBST\ CABLES} + G_{SUBST\ TX\ ANT}$

Where $P_{SUBST\ TX}$ is signal generator level. P_{MEAS} is measured power level from the EUT. $P_{SUBST\ RX}$ is measured power level in substitute measurement. $L_{SUBST\ CABLE}$ is the loss of the cable between the signal generator and the substitution antenna and $G_{SUBST\ TX\ ANT}$ is substitution antenna gain.

Limits for radiated RF output power measurements

Frequency range [MHz]	Limit [W]	Limit [dBm]
704 - 716	3 ERP	34.8
824 - 849	7 ERP	38.5
1710 - 1755	1 EIRP	30
1850 - 1910	2 EIRP	33

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2.3. GSM850 TX test results

Peak detector
GSM mode

Channel / f_C [MHz]	ERP [dBm]	ERP [W]	P_{MEAS} [dBm]	$P_{SUBST\ TX}$ [dBm]	$P_{SUBST\ RX}$ [dBm]	$G_{SUBST\ TX\ ANT}$ [dBd]	$L_{SUBST\ CABLE}$ [dB]	Polarisation	Result
128 / 824.2	26.18	0.415	-8.69	-10	-51.27	-2.7	3.7	HORIZONTAL	PASSED
190 / 836.6	28.02	0.634	-6.91	-10	-51.43	-2.8	3.7	VERTICAL	PASSED
251 / 848.8	27.36	0.545	-6.42	-10	-50.88	-3.4	3.7	VERTICAL	PASSED

2.4. GSM850-E1 TX test results

Peak detector
EGPRS mode, 1 TX Slot

Channel / f_C [MHz]	ERP [dBm]	ERP [W]	P_{MEAS} [dBm]	$P_{SUBST\ TX}$ [dBm]	$P_{SUBST\ RX}$ [dBm]	$G_{SUBST\ TX\ ANT}$ [dBd]	$L_{SUBST\ CABLE}$ [dB]	Polarisation	Result
128 / 824.2	17.21	0.053	-17.66	-10	-51.27	-2.7	3.7	HORIZONTAL	PASSED
190 / 836.6	20.32	0.108	-14.61	-10	-51.43	-2.8	3.7	VERTICAL	PASSED
251 / 848.8	22.18	0.165	-11.6	-10	-50.88	-3.4	3.7	VERTICAL	PASSED

2.5. GSM1900 TX test results

Peak detector
GSM mode

Channel / f_C [MHz]	EIRP [dBm]	EIRP [W]	P_{MEAS} [dBm]	$P_{SUBST\ TX}$ [dBm]	$P_{SUBST\ RX}$ [dBm]	$G_{SUBST\ TX\ ANT}$ [dBi]	$L_{SUBST\ CABLE}$ [dB]	Polarisation	Result
512 / 1850.2	28.83	0.764	-16.18	-10	-50.5	10.11	5.6	VERTICAL	PASSED
661 / 1880	28.96	0.787	-15.54	-10	-49.98	10.22	5.7	VERTICAL	PASSED
810 / 1909.8	28.14	0.652	-16.54	-10	-50.16	10.22	5.7	VERTICAL	PASSED

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2.6. GSM1900-E1 TX test results

Peak detector
EGPRS mode, 1 TX Slot

Channel / f_C [MHz]	EIRP [dBm]	EIRP [W]	P_{MEAS} [dBm]	$P_{SUBST\ TX}$ [dBm]	$P_{SUBST\ RX}$ [dBm]	$G_{SUBST\ TX\ ANT}$ [dBi]	$L_{SUBST\ CABLE}$ [dB]	Polarisation	Result
512 / 1850.2	26.04	0.402	-18.97	-10	-50.5	10.11	5.6	VERTICAL	PASSED
661 / 1880	25.9	0.389	-18.6	-10	-49.98	10.22	5.7	VERTICAL	PASSED
810 / 1909.8	24.48	0.281	-20.2	-10	-50.16	10.22	5.7	VERTICAL	PASSED

2.7. WCDMA 1900 (Band II) test results

Peak
Detector

Channel / f_C [MHz]	EIRP [dBm]	EIRP [W]	P_{MEAS} [dBm]	$P_{SUBST\ TX}$ [dBm]	$P_{SUBST\ RX}$ [dBm]	$G_{SUBST\ TX\ ANT}$ [dBi]	$L_{SUBST\ CABLE}$ [dB]	Polarisation	Result
9262 / 1852.4	25.74	0.375	-19.08	-10	-50.31	10.11	5.6	HORIZONTAL	PASSED
9400 / 1880	25.43	0.349	-19.07	-10	-49.98	10.22	5.7	HORIZONTAL	PASSED
9538 / 1907.6	23.73	0.236	-20.75	-10	-49.96	10.22	5.7	HORIZONTAL	PASSED

RMS
Detector

Channel / f_C [MHz]	EIRP [dBm]	EIRP [W]	P_{MEAS} [dBm]	$P_{SUBST\ TX}$ [dBm]	$P_{SUBST\ RX}$ [dBm]	$G_{SUBST\ TX\ ANT}$ [dBi]	$L_{SUBST\ CABLE}$ [dB]	Polarisation	Result
9262 / 1852.4	22.07	0.161	-22.75	-10	-50.31	10.11	5.6	HORIZONTAL	PASSED
9400 / 1880	21.81	0.152	-22.69	-10	-49.98	10.22	5.7	HORIZONTAL	PASSED
9538 / 1907.6	20	0.100	-24.48	-10	-49.96	10.22	5.7	HORIZONTAL	PASSED

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2.8. WCDMA 1700 (Band IV) test results

Peak Detector

Channel / f_C [MHz]	EIRP [dBm]	EIRP [W]	P_{MEAS} [dBm]	$P_{SUBST\ TX}$ [dBm]	$P_{SUBST\ RX}$ [dBm]	$G_{SUBST\ TX\ ANT}$ [dBi]	$L_{SUBST\ CABLE}$ [dB]	Polarisation	Result
1392 / 1712.4	18.78	0.076	-24.72	-10	-48.95	9.95	5.4	HORIZONTAL	PASSED
1420 / 1740	20.76	0.119	-22.84	-10	-48.91	10.09	5.4	HORIZONTAL	PASSED
1432 / 1752.6	21.48	0.141	-21.97	-10	-48.76	10.09	5.4	HORIZONTAL	PASSED

RMS Detector

Channel / f_C [MHz]	EIRP [dBm]	EIRP [W]	P_{MEAS} [dBm]	$P_{SUBST\ TX}$ [dBm]	$P_{SUBST\ RX}$ [dBm]	$G_{SUBST\ TX\ ANT}$ [dBi]	$L_{SUBST\ CABLE}$ [dB]	Polarisation	Result
1392 / 1712.4	15.46	0.035	-28.04	-10	-48.95	9.95	5.4	HORIZONTAL	PASSED
1420 / 1740	17.2	0.052	-26.4	-10	-48.91	10.09	5.4	HORIZONTAL	PASSED
1432 / 1752.6	17.84	0.061	-25.61	-10	-48.76	10.09	5.4	HORIZONTAL	PASSED

2.9. WCDMA 850 (Band V) test results

Peak Detector

Channel / f_C [MHz]	ERP [dBm]	ERP [W]	P_{MEAS} [dBm]	$P_{SUBST\ TX}$ [dBm]	$P_{SUBST\ RX}$ [dBm]	$G_{SUBST\ TX\ ANT}$ [dBd]	$L_{SUBST\ CABLE}$ [dB]	Polarisation	Result
4132 / 826.4	21.33	0.136	-13.75	-10	-51.48	-2.7	3.7	VERTICAL	PASSED
4183 / 836.6	21.6	0.145	-13.33	-10	-51.43	-2.8	3.7	VERTICAL	PASSED
4233 / 846.6	20.29	0.107	-13.4	-10	-50.69	-3.3	3.7	VERTICAL	PASSED

RMS Detector

Channel / f_C [MHz]	ERP [dBm]	ERP [W]	P_{MEAS} [dBm]	$P_{SUBST\ TX}$ [dBm]	$P_{SUBST\ RX}$ [dBm]	$G_{SUBST\ TX\ ANT}$ [dBd]	$L_{SUBST\ CABLE}$ [dB]	Polarisation	Result
4132 / 826.4	17.82	0.061	-17.26	-10	-51.48	-2.7	3.7	VERTICAL	PASSED
4183 / 836.6	17.62	0.058	-17.31	-10	-51.43	-2.8	3.7	VERTICAL	PASSED
4233 / 846.6	16.79	0.048	-16.9	-10	-50.69	-3.3	3.7	VERTICAL	PASSED

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2.10. LTE 1900 (Band II) test results

5MHz, QPSK, 1RB, Peak

Channel / f_C [MHz]	ERP [dBm]	ERP [W]	P_{MEAS} [dBm]	$P_{SUBST\ TX}$ [dBm]	$P_{SUBST\ RX}$ [dBm]	$G_{SUBST\ TX\ ANT}$ [dBi]	$L_{SUBST\ CABLE}$ [dB]	Polarisation	Result
18625 / 1852.5	26.31	0.427563	-18.68	-10	-50.28	10.11	5.4	VERTICAL	PASSED
18900 / 1880	26.61	0.458142	-18.19	-10	-49.98	10.22	5.4	VERTICAL	PASSED
19175 / 1907.5	24.17	0.261216	-20.61	-10	-49.96	10.22	5.4	VERTICAL	PASSED

5MHz, 16-QAM, 1RB, Peak

Channel / f_C [MHz]	ERP [dBm]	ERP [W]	P_{MEAS} [dBm]	$P_{SUBST\ TX}$ [dBm]	$P_{SUBST\ RX}$ [dBm]	$G_{SUBST\ TX\ ANT}$ [dBi]	$L_{SUBST\ CABLE}$ [dB]	Polarisation	Result
18625 / 1852.5	26.38	0.43451	-18.61	-10	-50.28	10.11	5.4	VERTICAL	PASSED
18900 / 1880	26.61	0.458142	-18.19	-10	-49.98	10.22	5.4	VERTICAL	PASSED
19175 / 1907.5	24.24	0.265461	-20.54	-10	-49.96	10.22	5.4	VERTICAL	PASSED

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2.11. LTE 1700 (Band IV) test results

5MHz, QPSK, 1RB, Peak

Channel / f_C [MHz]	ERP [dBm]	ERP [W]	P_{MEAS} [dBm]	$P_{SUBST\ TX}$ [dBm]	$P_{SUBST\ RX}$ [dBm]	$G_{SUBST\ TX\ ANT}$ [dBi]	$L_{SUBST\ CABLE}$ [dB]	Polarisation	Result
19975 / 1712.5	19.39	0.086896	-24.18	-10	-49.02	9.95	5.4	VERTICAL	PASSED
20175 / 1732.5	20.66	0.116413	-22.39	-10	-48.42	10.03	5.4	VERTICAL	PASSED
20375 / 1752.5	22.05	0.160325	-21.35	-10	-48.71	10.09	5.4	VERTICAL	PASSED

5MHz, 16-QAM, 1RB, Peak

Channel / f_C [MHz]	ERP [dBm]	ERP [W]	P_{MEAS} [dBm]	$P_{SUBST\ TX}$ [dBm]	$P_{SUBST\ RX}$ [dBm]	$G_{SUBST\ TX\ ANT}$ [dBi]	$L_{SUBST\ CABLE}$ [dB]	Polarisation	Result
19975 / 1712.5	19.58	0.090782	-23.99	-10	-49.02	9.95	5.4	VERTICAL	PASSED
20175 / 1732.5	20.59	0.114551	-22.46	-10	-48.42	10.03	5.4	VERTICAL	PASSED
20375 / 1752.5	21.86	0.153462	-21.54	-10	-48.71	10.09	5.4	VERTICAL	PASSED

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2.12. LTE 850 (Band V) test results

LTE 5 5MHz, QPSK, 1RB, Peak

Channel / f_C [MHz]	ERP [dBm]	ERP [W]	P_{MEAS} [dBm]	$P_{SUBST\ TX}$ [dBm]	$P_{SUBST\ RX}$ [dBm]	$G_{SUBST\ TX\ ANT}$ [dBd]	$L_{SUBST\ CABLE}$ [dB]	Polarisation	Result
20425 / 826.5	20.39	0.109396	-12.86	-10	-51.35	-2.7	5.4	VERTICAL	PASSED
20525 / 836.5	20.58	0.114288	-12.23	-10	-51.01	-2.8	5.4	VERTICAL	PASSED
20625 / 846.5	17.33	0.054075	-14.72	-10	-50.75	-3.3	5.4	VERTICAL	PASSED

LTE 5 5MHz, 16-QAM, 1RB, Peak

Channel / f_C [MHz]	ERP [dBm]	ERP [W]	P_{MEAS} [dBm]	$P_{SUBST\ TX}$ [dBm]	$P_{SUBST\ RX}$ [dBm]	$G_{SUBST\ TX\ ANT}$ [dBd]	$L_{SUBST\ CABLE}$ [dB]	Polarisation	Result
20425 / 826.5	19.98	0.099541	-13.27	-10	-51.35	-2.7	5.4	VERTICAL	PASSED
20525 / 836.5	20.51	0.11246	-12.3	-10	-51.01	-2.8	5.4	VERTICAL	PASSED
20625 / 846.5	17.33	0.054075	-14.72	-10	-50.75	-3.3	5.4	VERTICAL	PASSED

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2.13. LTE700 Lower (Band 17) test results

5MHz, QPSK, 1RB, Peak

Channel / f_C [MHz]	ERP [dBm]	ERP [W]	P_{MEAS} [dBm]	$P_{SUBST\ TX}$ [dBm]	$P_{SUBST\ RX}$ [dBm]	$G_{SUBST\ TX\ ANT}$ [dBd]	$L_{SUBST\ CABLE}$ [dB]	Polarisation	Result
23755 / 706.5	18.9	0.077625	-12.26	-10	-49.16	-2.6	5.4	HORIZONTAL	PASSED
23790 / 710	17.73	0.059293	-13.51	-10	-49.24	-2.6	5.4	VERTICAL	PASSED
23825 / 713.5	18.33	0.068077	-12.76	-10	-49.09	-2.6	5.4	VERTICAL	PASSED

5MHz, 16-QAM, 1RB, Peak

Channel / f_C [MHz]	ERP [dBm]	ERP [W]	P_{MEAS} [dBm]	$P_{SUBST\ TX}$ [dBm]	$P_{SUBST\ RX}$ [dBm]	$G_{SUBST\ TX\ ANT}$ [dBd]	$L_{SUBST\ CABLE}$ [dB]	Polarisation	Result
23755 / 706.5	18.05	0.063826	-13.11	-10	-49.16	-2.6	5.4	VERTICAL	PASSED
23790 / 710	18.41	0.069343	-12.83	-10	-49.24	-2.6	5.4	HORIZONTAL	PASSED
23825 / 713.5	18.12	0.064863	-12.97	-10	-49.09	-2.6	5.4	VERTICAL	PASSED

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3. Test Equipment

3.1. Conducted measurements

Eq. No	Equipment	Type	Manufacturer	Used in
1759	LISN 50 µH	ESH3-Z5	R&S	15C, 15B
1916	Communication Tester	CMTA84	R&S	15B
1992	Signal Generator	83630B	Agilent	15C, 15B
1999	Receiver	ESIB26	R&S	22/24/27, 15C, 15B
2039	Power Supply	PL330QMD	Thurlby	15C, 15B
2059	V-network	ESH3-Z6	R&S	-
2097	Pulse Limiter	ESH3-Z2	R&S	15C, 15B
2156	Communication Tester	CMU200	R&S	22/24/27, 15C, 15B
2180	Communication Tester	CMU200	R&S	22/24/27, 15C, 15B
2206	Signal Generator	SMX	R&S	15C, 15B
2347	Communication Tester	CMU200	R&S	22/24/27, 15C, 15B
2352	Spectrum Analyzer	FSP-30	R&S	22/24/27, 15C
2359	Temperature Test Chamber	VT4002	Vötsch	22/24/27
2388	Bluetooth Tester	CBT	R&S	15B
2389	Signal Generator	SMJ 100A	R&S	15B
2390	Directional Coupler	DC2600	AR	-
6009	GPS Antenna	SA-700	Chronos	15C
6010	GPS Network amplifier	NLA20FPDC	GPS Networking, Inc	15C
6011	GPS signal Splitter	LDCBS1x4	GPS Networking, Inc	15C
6012	CDN	CDN USB/c	Teseq	-
6015	Receiver	ESI	R&S	22/24, 15C, 15B
6036	Data Logger	175-H2	Testo	22/24/27, 15C, 15B
6038	Data Logger	Testo 580	Testo	22/24/27, 15C, 15B
6039	USB Interface	5541765	Testo	22/24/27, 15C, 15B
6044	V-network	ESH3-Z6	R&S	-
6045	Power splitter	11667B	Agilent	22/24/27, 15C
6046	Attenuator 10dB	8493C	Agilent	22/24/27, 15C
6047	Attenuator 20dB	8493C	Agilent	22/24/27, 15C
6094	Communication Tester	CMW500	R&S	22/24/27, 15C, 15B
6096	EMC Analyzer	E7405A	HP	-
6098	Signal Generator	8648C	Agilent	-
6103	Bluetooth tester	CBT	R&S	15B
6113	Signal Generator	SMF100A	R&S	22/24/27, 15C 15B
6120	Thermal Chamber	WT 20/40	Weiss	22/24/27, 15C 15B
6121	Power Splitter	HP11667B	Agilent	22/24/27, 15C 15B
6122	Power Splitter	HP11667B	Agilent	22/24/27, 15C 15B
6134	Attenuator 10dB	BW-S10-2W263+	Mini-Circuits	22/24/27, 15C
6136	Attenuator 20dB	BW-S20-2W263+	Mini-Circuits	22/24/27, 15C
10479	Communication Tester	CMW500	R&S	22/24/27, 15C, 15B
-	BT / WLAN Antenna	SPA 2400/75/9/0/V	Huber-Suhner	15C, 15B
-	BT / WLAN Antenna	SPA 2400/75/9/0/V	Huber-Suhner	15C, 15B

3.2. Radiated measurements

Eq. No	Equipment	Type	Manufacturer	Used in
1917	Communication Tester	CMTA84	R&S	15B
1984	Antenna	BBHA 9120 D	Schwarzbeck	22/24/27, 15C, 15B
2009	Signal Generator	SMP 22	R&S	22/24/27, 15C, 15B
2027	CDN	M2 (modified) DC1	MEB	22/24/27, 15C, 15B
2028	CDN	M3 (modified) DC2	MEB	22/24/27, 15C, 15B
2029	Power Supply	PL330	Thurlby	22/24/27, 15C
2043	Band Reject Filter	WRCA824/849-0,2-6SS	Wainwright	22
2135	CDN	CDN 801-M3	Lüthi	22/24/27, 15C, 15B

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Eq. No	Equipment	Type	Manufacturer	Used in
2140	Antenna	EMCO93110B	EMCO	22/24/27, 15C
2142	Antenna	3146	EMCO	22/24/27, 15C
2156	Communication Tester	CMU200	R&S	22/24/27, 15C, 15B
2176	CDN	CDN 801-M3	Lüthi	22/24/27, 15C, 15B
2180	Communication Tester	CMU200	R&S	22/24/27, 15C, 15B
2347	Communication Tester	CMU200	R&S	22/24/27, 15C, 15B
2353	Receiver	ESIB26	R&S	22/24/27, 15C, 15B
2357	Band Reject Filter	WRCG2400/2483-2390/2493-35/10SS	Wainwright	15C
2361	Anechoic Chamber	3 m Semi / Full Anechoic Chamber	Euroshield	22/24/27, 15C, 15B
2364	Band Reject Filter	WRCG1877/1883 - 1870/1890-40/6SS	Wainwright	24
2384	Band Reject Filter	WRCG832/838-825/845-40/5SS	Wainwright	22
2388	Bluetooth Tester	CBT	R&S	15B
2389	Signal Generator	SMJ 100A	R&S	15B
2391	Band Reject Filter	WRCG1729.4/1735.4-1722.4/1742.4-40/6SS	Wainwright	27
6009	GPS Antenna	SA-700	Chronos	15C
6010	GPS Network amplifier	NLA20FPDC	GPS Networking, Inc	15C
6011	GPS signal Splitter	LDCBS1x4	GPS Networking, Inc	15C
6014	Substitute Calibration Cable	Sucoflex 104PB	Suhner	-
6017	Antenna	SBA 9113	Schwarzbeck	22 / 24 / 27
6037	Data Logger	175-H2	Testo	22/24/27, 15C, 15B
6038	Data Logger	Testo 580	Testo	22/24/27, 15C, 15B
6039	USB Interface	5541765	Testo	22/24/27, 15C, 15B
6087	Antenna	BBHA 9120D	Scharzbeck	22/24/27, 15C
6088	Antenna	VUBA 9117	Scharzbeck	22/24/27, 15C
6089	Antenna	HFH2-Z2	R&S	15C, 15B
6094	Communication Tester	CMW500	R&S	22/24/27, 15C, 15B
6103	Bluetooth tester	CBT	R&S	15B
6113	Signal Generator	SMF100A	R&S	22/24/27, 15C 15B
6115	Open switch and control unit	OSP 130	R&S	22/24/27, 15C 15B
6116	Open switch and control unit	OSP 150	R&S	22/24/27, 15C 15B
6130	Notch Filter	WRCD1880-1.1.25/50-10SS	Wainwright	22/24/27
6131	Notch Filter	WRCT902.4-0.4/40-8SS	Wainwright	-
6135	Notch Filter	WRCJV2531/2539-2523/2547-60/12SS	Wainwright	22/24/27
10479	Communication Tester	CMW500	R&S	22/24/27, 15C, 15B
-	BT / WLAN Antenna	SPA 2400/75/9/0/V	Huber-Suhner	15C, 15B
-	BT / WLAN Antenna	SPA 2400/75/9/0/V	Huber-Suhner	15C, 15B
-	RF immunity / Emission Software	EMC32	R&S	22/24/27, 15C, 15B

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