

FCC Part 15B Compliance Test Report

Test Report no.:	FCC15B_RM-1039_09.docx	Date of Report:	04-Sep-2014
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FCC listing no.:	94436		
IC recognition no.:	661AK-1		
Tested devices/ accessories:	Phone RM-1039 / Battery BV-T5A / Charger AC-20E / Headset WH-208		
FCC ID:	QTLRM-1039	IC:	
Supplement reports:	-		
Testing has been carried out in accordance with:	CFR 47, FCC rules Part 15 Subpart B, ANSI C63.4 (2003), CISPR 22, RSS-GEN (Issue 3, December 2010), RSS-132 (Issue 2, September 2005), RSS-133 (Issue 5, 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 Microsoft.		
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, System Manager, EMC

1. Summary for FCC Part 15B Compliance Test Report

Date of receipt	09-Jul-2014
Testing completed	1.8.2014
The customer's contact person	Hu Helen
Test Plan referred to	T:\Projects\RM-1039\TestPlan\RS_Testplan_RM-1039.xlsm
Notes	-
Document name	Y:\Projects\RM-1039\EMC\Temp\Jan\FCC15B_RM-1039_09.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-1039	004402479477972	0241	-	02032.00000.14271.24000	43203
Battery	BV-T5A	417534224c10101093;0670738	Proto V5	-	-	43205
Charger	AC-20E	4868674086311108110;0675628	CE	-	-	43207
Headset	WH-208	2302571	CE	-	-	43208

1.2. Summary of Test Results

GSM 850:

Section in CFR 47	Section in RSS-GEN	Name of the test	Result
15.107, a	7.2.4	AC powerline conducted emissions	NP
15.109, a	6.1	Radiated emissions	PASSED

GSM 1900:

Section in CFR 47	Section in RSS-GEN	Name of the test	Result
15.107, a	7.2.4	AC powerline conducted emissions	NP
15.109, a	6.1	Radiated emissions	PASSED

WCDMA 1700:

Section in CFR 47	Section in RSS-GEN	Name of the test	Result
15.107, a	7.2.4	AC powerline conducted emissions	NP
15.109, a	6.1	Radiated emissions	PASSED

LTE7:

Section in CFR 47	Section in RSS-GEN	Name of the test	Result
15.107, a	7.2.4	AC powerline conducted emissions	NP
15.109, a	6.1	Radiated emissions	PASSED

LTE700 Lower (Band 17):

Section in CFR 47	Section in RSS-GEN	Name of the test	Result
15.107, a	7.2.4	AC powerline conducted emissions	NP
15.109, a	6.1	Radiated emissions	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 Microsoft Laboratory.

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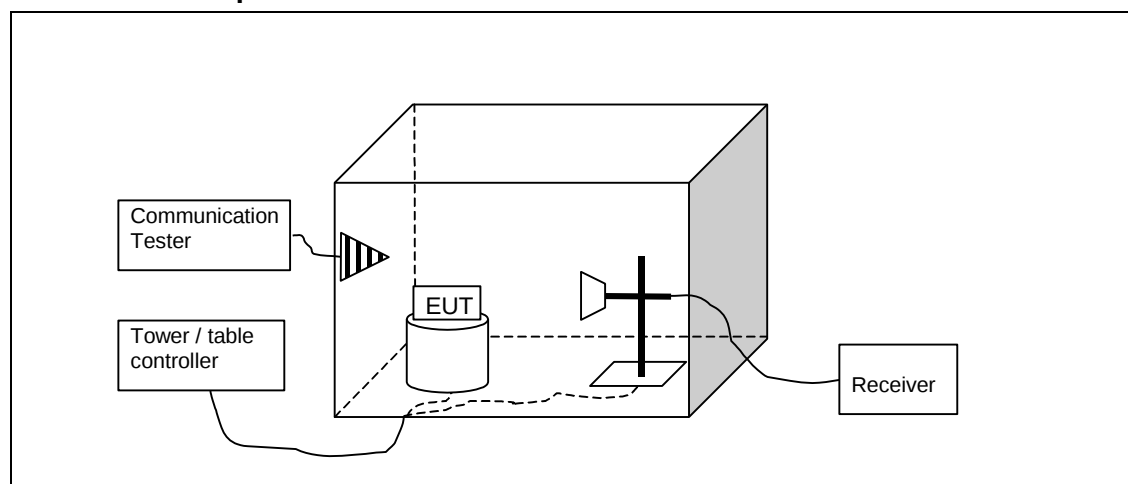
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2. Radiated emissions

(FCC 15.109, a, RSS-GEN, section 6.1)

EUT with DUT number	RM-1039, DUT 43203
Accessories with DUT numbers	BV-T5A, DUT 43205 ; AC-20E, DUT 43207 ; WH-208, DUT 43208
Operation Voltage [V] / [Hz]	115/60
Results	PASSED
Remarks	Ant1=swap antenna 1, Ant2= swap antenna 2
Temp [°C] / Humidity [%RH] / Air Pressure [kPa]	19 / 54 / 98-101
Date of measurements	31-Jul-2014
Measured by	Jan-Erik Lilja

2.1.1 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:

$$E [dB\mu V/m] = U_{RX} + A_{TOT}$$

Where U_{RX} is receiver reading and A_{TOT} is total correction factor including cable loss, antenna factor and preamplifier gain ($A_{TOT} = L_{CABLES} + A_F - G_{PREAMP}$).

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	-	-
1000 - 3000	-	50	70
Above 3000	-	54	74

2.3. GSM 850 test results

RX mode, channel 128 / 869.2 MHz

Peak (RBW: 1 MHz, VBW: 1 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Limit [dBμV/m]	Margin	Results
3477.5	36.77	68.945	45.17	-8.4	74	37.23	PASSED
6955.5	46.52	211.836	47.22	-0.7	74	27.48	PASSED

Average (RBW: 1 MHz, VBW: 1 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Limit [dBμV/m]	Margin	Results
3477.5	24.19	16.199	32.59	-8.4	54	29.81	PASSED
6955.5	33.97	49.946	34.67	-0.7	54	20.03	PASSED

RX mode, channel 190 / 881.6 MHz

Quasi peak (RBW: 100 kHz, VBW: 100 kHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Limit [dBμV/m]	Margin	Results
30.964	22.36	13.122	48.76	-26.4	40	17.64	PASSED
39.352	9.45	2.968	39.45	-30	40	30.55	PASSED
49.571	17.56	7.551	52.86	-35.3	40	22.44	PASSED

Peak (RBW: 1 MHz, VBW: 1 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Limit [dBμV/m]	Margin	Results
7823.448	45.95	198.381	43.15	2.8	74	28.05	PASSED
7837.178	46.24	205.116	43.44	2.8	74	27.76	PASSED
7851.203	46.27	205.826	43.37	2.9	74	27.73	PASSED
7860.321	46.33	207.253	43.43	2.9	74	27.67	PASSED

Average (RBW: 1 MHz, VBW: 1 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Limit [dBμV/m]	Margin	Results
7823.448	33.06	44.978	30.26	2.8	54	20.94	PASSED
7837.178	33.12	45.29	30.32	2.8	54	20.88	PASSED
7851.203	33.22	45.814	30.32	2.9	54	20.78	PASSED
7860.321	33.29	46.185	30.39	2.9	54	20.71	PASSED

Peak (RBW: 1 MHz, VBW: 1 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Limit [dBμV/m]	Margin	Results
3525	37.78	77.446	45.98	-8.2	74	36.22	PASSED
7052	44.09	160.14	44.19	-0.1	74	29.91	PASSED

Average (RBW: 1 MHz, VBW: 1 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Limit [dBμV/m]	Margin	Results
3525	24.3	16.406	32.5	-8.2	54	29.7	PASSED
7052	31.23	36.433	31.33	-0.1	54	22.77	PASSED

RX mode, channel 251 / 893.8 MHz

Peak (RBW: 1 MHz, VBW: 1 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Limit [dBμV/m]	Margin	Results
3576.3	37.31	73.367	45.81	-8.5	74	36.69	PASSED
7149.8	45.66	191.867	45.26	0.4	74	28.34	PASSED

Average (RBW: 1 MHz, VBW: 1 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Limit [dBμV/m]	Margin	Results
3576.3	24.27	16.349	32.77	-8.5	54	29.73	PASSED
7149.8	31.6	38.019	31.2	0.4	54	22.4	PASSED

2.4. GSM 1900 test results

RX mode, channel 512 / 1930.2 MHz

Peak (RBW: 1 MHz, VBW: 1 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Limit [dBμV/m]	Margin	Results
3861.7	37.43	74.388	45.13	-7.7	74	36.57	PASSED
7721.7	45.2	181.97	43	2.2	74	28.8	PASSED

Average (RBW: 1 MHz, VBW: 1 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Limit [dBμV/m]	Margin	Results
3861.7	24.68	17.14	32.38	-7.7	54	29.32	PASSED
7721.7	32.46	41.976	30.26	2.2	54	21.54	PASSED

RX mode, channel 661 / 1960.0 MHz

Quasi peak (RBW: 100 kHz, VBW: 100 kHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Limit [dBμV/m]	Margin	Results
30.976	20.61	10.728	47.01	-26.4	40	19.39	PASSED
107.306	4.2	1.622	39.4	-35.2	40	35.8	PASSED
107.558	4.92	1.762	40.12	-35.2	40	35.08	PASSED
108.829	3.94	1.574	39.14	-35.2	40	36.06	PASSED
112.086	4.55	1.688	39.55	-35	40	35.45	PASSED
113.948	3.64	1.521	38.44	-34.8	40	36.36	PASSED
115.087	7.36	2.333	42.06	-34.7	40	32.64	PASSED
117.038	5.17	1.813	39.67	-34.5	40	34.83	PASSED
123.294	5.95	1.984	40.25	-34.3	40	34.05	PASSED
125.007	9.53	2.996	43.93	-34.4	40	30.47	PASSED

Peak (RBW: 1 MHz, VBW: 1 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Limit [dBμV/m]	Margin	Results
7821.442	46.18	203.704	43.38	2.8	74	27.82	PASSED
7831.561	46.1	201.837	43.3	2.8	74	27.9	PASSED
7841.183	46.12	202.302	43.32	2.8	74	27.88	PASSED
7851.801	47.75	244.062	44.85	2.9	74	26.25	PASSED

Average (RBW: 1 MHz, VBW: 1 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Limit [dBμV/m]	Margin	Results
7821.442	33.11	45.238	30.31	2.8	54	20.89	PASSED
7831.561	33.12	45.29	30.32	2.8	54	20.88	PASSED
7841.183	33.12	45.29	30.32	2.8	54	20.88	PASSED
7851.801	33.24	45.92	30.34	2.9	54	20.76	PASSED

Peak (RBW: 1 MHz, VBW: 1 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Limit [dBμV/m]	Margin	Results
3921.3	37.61	75.945	44.91	-7.3	74	36.39	PASSED
7839.8	46.12	202.302	43.32	2.8	74	27.88	PASSED

Average (RBW: 1 MHz, VBW: 1 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Limit [dBμV/m]	Margin	Results
3921.3	25.08	17.947	32.38	-7.3	54	28.92	PASSED
7839.8	33.2	45.709	30.4	2.8	54	20.8	PASSED

RX mode, channel 810 / 1989.8 MHz

Peak (RBW: 1 MHz, VBW: 1 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Limit [dBμV/m]	Margin	Results
3979.1	37.84	77.983	44.84	-7	74	36.16	PASSED
7961.9	46.61	214.042	43.41	3.2	74	27.39	PASSED

Average (RBW: 1 MHz, VBW: 1 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Limit [dBμV/m]	Margin	Results
3979.1	25.03	17.844	32.03	-7	54	28.97	PASSED
7961.9	33.52	47.424	30.32	3.2	54	20.48	PASSED

2.5. WCDMA 1700 test results, ant1

Channel 1312 / 1712.4 MHz

Peak (RBW: 1 MHz, VBW: 1 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Limit [dBμV/m]	Margin	Results
4223.7	38.52	84.333	45.02	-6.5	74	35.48	PASSED
6337.5	43.28	145.881	46.48	-3.2	74	30.72	PASSED

Average (RBW: 1 MHz, VBW: 1 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Limit [dBμV/m]	Margin	Results
4223.7	25.62	19.099	32.12	-6.5	54	28.38	PASSED
6337.5	30.65	34.08	33.85	-3.2	54	23.35	PASSED

Quasi peak (RBW: 100 kHz, VBW: 100 kHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Limit [dBμV/m]	Margin	Results
32.16	20.58	10.691	47.58	-27	40	19.42	PASSED
82.862	0.81	1.098	37.31	-36.5	40	39.19	PASSED
89.475	9.57	3.01	45.37	-35.8	40	30.43	PASSED
91.01	11.56	3.784	47.26	-35.7	40	28.44	PASSED
91.434	9.97	3.151	45.67	-35.7	40	30.03	PASSED
92.283	11.58	3.793	47.28	-35.7	40	28.42	PASSED
92.479	9.23	2.894	44.93	-35.7	40	30.77	PASSED
98.184	5.14	1.807	40.74	-35.6	40	34.86	PASSED
98.186	5.18	1.816	40.78	-35.6	40	34.82	PASSED
98.21	4.25	1.631	39.85	-35.6	40	35.75	PASSED

Channel 1450 / 1740.0 MHz

Peak (RBW: 1 MHz, VBW: 1 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Limit [dBμV/m]	Margin	Results
7814.831	45.75	193.865	43.05	2.7	74	28.25	PASSED
7823.846	45.95	198.381	43.15	2.8	74	28.05	PASSED
7856.411	46.46	210.378	43.56	2.9	74	27.54	PASSED
7862.927	46.22	204.644	43.32	2.9	74	27.78	PASSED

Average (RBW: 1 MHz, VBW: 1 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Limit [dBμV/m]	Margin	Results
7814.831	32.96	44.463	30.26	2.7	54	21.04	PASSED
7823.846	33.11	45.238	30.31	2.8	54	20.89	PASSED
7856.411	33.24	45.92	30.34	2.9	54	20.76	PASSED
7862.927	33.32	46.345	30.42	2.9	54	20.68	PASSED

Peak (RBW: 1 MHz, VBW: 1 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Limit [dBμV/m]	Margin	Results
4280.1	38.17	81.003	44.67	-6.5	74	35.83	PASSED
6420.3	44.71	171.989	47.61	-2.9	74	29.29	PASSED

Average (RBW: 1 MHz, VBW: 1 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Limit [dBμV/m]	Margin	Results
4280.1	25.21	18.218	31.71	-6.5	54	28.79	PASSED
6420.3	31.52	37.67	34.42	-2.9	54	22.48	PASSED

Channel 1513 / 1752.6 MHz

Peak (RBW: 1 MHz, VBW: 1 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Limit [dBμV/m]	Margin	Results
4304.9	38.47	83.849	44.87	-6.4	74	35.53	PASSED
6458.4	44.66	171.002	47.56	-2.9	74	29.34	PASSED

Average (RBW: 1 MHz, VBW: 1 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Limit [dBμV/m]	Margin	Results
4304.9	25.53	18.902	31.93	-6.4	54	28.47	PASSED
6458.4	31.84	39.084	34.74	-2.9	54	22.16	PASSED

2.6. LTE7 test results, ant1

Channel 20775 / 2502. MHz

Peak (RBW: 1 MHz, VBW: 1 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Limit [dBμV/m]	Margin	Results
5244.3	40.81	109.774	45.31	-4.5	74	33.19	PASSED
7869	47.32	232.274	44.32	3	74	26.68	PASSED

Average (RBW: 1 MHz, VBW: 1 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Limit [dBμV/m]	Margin	Results
5244.3	28.07	25.322	32.57	-4.5	54	25.93	PASSED
7869	33.28	46.132	30.28	3	54	20.72	PASSED

Quasi peak (RBW: 100 kHz, VBW: 100 kHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Limit [dBμV/m]	Margin	Results
35.046	19.58	9.528	47.88	-28.3	40	20.42	PASSED
49.148	18.66	8.57	53.66	-35	40	21.34	PASSED

Channel 21100 / 2535.0 MHz

Peak (RBW: 1 MHz, VBW: 1 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Limit [dBμV/m]	Margin	Results
7825.049	46.63	214.536	43.83	2.8	74	27.37	PASSED
7844.886	47.08	225.944	44.28	2.8	74	26.92	PASSED
7846.393	46.41	209.17	43.61	2.8	74	27.59	PASSED
7857.319	46.58	213.304	43.68	2.9	74	27.42	PASSED

Average (RBW: 1 MHz, VBW: 1 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Limit [dBμV/m]	Margin	Results
7825.049	33.11	45.238	30.31	2.8	54	20.89	PASSED
7844.886	33.19	45.656	30.39	2.8	54	20.81	PASSED
7846.393	33.24	45.92	30.44	2.8	54	20.76	PASSED
7857.319	33.24	45.92	30.34	2.9	54	20.76	PASSED

Channel 21425 / 2567.6 MHz

Peak (RBW: 1 MHz, VBW: 1 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Limit [dBμV/m]	Margin	Results
5376.3	41.16	114.288	45.66	-4.5	74	32.84	PASSED
8061.4	47.07	225.684	43.37	3.7	74	26.93	PASSED

Average (RBW: 1 MHz, VBW: 1 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Limit [dBμV/m]	Margin	Results
5376.3	28.2	25.704	32.7	-4.5	54	25.8	PASSED
8061.4	34.22	51.404	30.52	3.7	54	19.78	PASSED

2.7. LTE700 Lower (Band 17) test results, ant1

Channel 23755 / 706.5 MHz

Peak (RBW: 1 MHz, VBW: 1 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Limit [dBμV/m]	Margin	Results
1472.2	33.32	46.345	53.32	-20	70	36.68	PASSED
2209.9	37.94	78.886	51.94	-14	70	32.06	PASSED
3001.8	39.99	99.885	48.29	-8.3	74	34.01	PASSED

Average (RBW: 1 MHz, VBW: 1 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Limit [dBμV/m]	Margin	Results
1472.2	20.42	10.495	40.42	-20	50	29.58	PASSED
2209.9	24.86	17.498	38.86	-14	50	25.14	PASSED
3001.8	24.87	17.519	33.17	-8.3	54	29.13	PASSED

Quasi peak (RBW: 100 kHz, VBW: 100 kHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Limit [dBμV/m]	Margin	Results
34.76	10.51	3.354	38.61	-28.1	40	29.49	PASSED
36.993	8.51	2.664	37.51	-29	40	31.49	PASSED
40.619	7.55	2.385	38.05	-30.5	40	32.45	PASSED
55.054	5.39	1.86	43.99	-38.6	40	34.61	PASSED
84.991	7.32	2.323	43.52	-36.2	40	32.68	PASSED
88.824	11.21	3.635	47.01	-35.8	40	28.79	PASSED
91.004	15.31	5.828	51.01	-35.7	40	24.69	PASSED
92.278	14.85	5.527	50.55	-35.7	40	25.15	PASSED
97.834	4.95	1.768	40.55	-35.6	40	35.05	PASSED

Channel 23790 / 710 MHz

Peak (RBW: 1 MHz, VBW: 1 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Limit [dBμV/m]	Margin	Results
7824.051	46.08	201.372	43.28	2.8	74	27.92	PASSED
7832.268	46.77	218.022	43.97	2.8	74	27.23	PASSED
7838.276	46.51	211.592	43.71	2.8	74	27.49	PASSED
7864.427	46.23	204.88	43.33	2.9	74	27.77	PASSED

Average (RBW: 1 MHz, VBW: 1 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Limit [dBμV/m]	Margin	Results
7824.051	33.11	45.238	30.31	2.8	54	20.89	PASSED
7832.268	33.13	45.342	30.33	2.8	54	20.87	PASSED
7838.276	33.15	45.446	30.35	2.8	54	20.85	PASSED
7864.427	33.28	46.132	30.38	2.9	54	20.72	PASSED

Channel 23825 / 713.5 MHz

Peak (RBW: 1 MHz, VBW: 1 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Limit [dBμV/m]	Margin	Results
1488.6	33.61	47.918	53.61	-20	70	36.39	PASSED
2231.7	38.2	81.283	51.7	-13.5	70	31.8	PASSED

Average (RBW: 1 MHz, VBW: 1 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Limit [dBμV/m]	Margin	Results
1488.6	20.49	10.58	40.49	-20	50	29.51	PASSED
2231.7	25.41	18.642	38.91	-13.5	50	24.59	PASSED

3. Test Equipment

3.1. Conducted measurements

Eq. No	Equipment	Type	Manufacturer	Used in
TM38112	Power supply	6632A	Agilent	22/24/27, 15C, 15E
TM38114	Power supply	6632A	Agilent	22/24/27, 15C, 15E
TM37773	Communication Tester	CMU200	R&S	22/24/27, 15B
TM30600	Impulse limiter	ESH3-Z2	R&S	15C, 15B
TM26490	LISN 50 µH	ESH3-Z5	R&S	15C, 15B
TM26491	LISN 50 µH	ESH3-Z5	R&S	15C, 15B
TM37610	Spectrum Analyzer	FSU26	R&S	22/24/27, 15C, 15E
TM23007	Oscilloscope	TDS684B	Tektronix	15E
TM22806	Battery	BAT 20/E	Fiskars	15C, 15B
TM22805	UPS	PS 20/1.2	Fiskars	15C, 15B
-	Temperature and humidity logger	175-H2	Testo	15C, 15B
-	Temperature and humidity logger	175-H2	Testo	22/24/27, 15C
-	Air pressure and temperature logger	635-2	Testo	22/24/27, 15C, 15B
-	Air pressure sensor	0638-1835	Testo	22/24/27, 15C, 15B
-	Temperature test chamber	VT 4002	Vötsch	22/24/27
2001	Bluetooth tester	CBT	R&S	15C, 15B
2009	LISN 50 µH	ENV216	R&S	15C, 15B
2010	LISN 50 µH	ENV216	R&S	15C, 15B
2012	Power splitter	11667B	Agilent	22/24/27, 15C
2013	Attenuator	8493C	Agilent	22/24/27, 15C
2014	Attenuator	8493C	Agilent	22/24/27, 15C
2019	Power splitter	ZN2PD-9G-S+	Mini-Circuits	15E
2020	Power splitter	ZN2PD-9G-S+	Mini-Circuits	15E
2021	Communication Tester	CMW500	R&S	22/24/27
2022	Communication Tester	CMU200	R&S	22/24/27
2023	Spectrum Analyzer	ESMI-RF	R&S	15B/15C
2024	Analyzer display unit	ESAI-D	R&S	15B/15C
2026	Signal Generator	SMF 100A	R&S	22/24/27, 15C, 15E, 15B
-	Bluetooth tester	CBT	R&S	15C, 15B

3.2. Radiated measurements

Eq. No	Equipment	Type	Manufacturer	Used in
-	Antenna	BBHA 9120 D	Schwarzbeck	22/24/27, 15C
TM37678	Communication Tester	CMU200	R&S	22/24/27, 15B
TM38845	Receiver	ESIB 26	R&S	22/24/27, 15C, 15E, 15B
-	Antenna	HL562	R&S	22/24/27, 15C, 15E, 15B
-	Turntable	2188	EMCO	22/24/27, 15C, 15E, 15B
-	Turntable controller	2090	EMCO	22/24/27, 15C, 15E, 15B
-	RF system panel	OSP130	R&S	22/24/27, 15C, 15E, 15B
-	Mini mast	2075-2	ETS Lindgren	22/24/27, 15C, 15B
TM38843	Mini mast	2075	Emco	22/24/27, 15C, 15B
TM38842	Antenna mast controller	2090	Emco	22/24/27, 15C, 15B
TM30643	LISN 50 µH	LISN-5-20-2	FCC	22/24/27, 15C, 15B
TM30644	LISN 50 µH	LISN-5-20-2	FCC	22/24/27, 15C, 15B
-	Temperature and humidity logger	175-H2	Testo	22/24/27, 15C, 15B

Eq. No	Equipment	Type	Manufacturer	Used in
-	Air pressure and temperature logger	635-2	Testo	22/24/27, 15C, 15B
-	Air pressure sensor	0638-1835	Testo	22/24/27, 15C, 15B
TM37523	Preamplifier	AMF-4D-10M-3G-25-20P	Miteq	22/24/27, 15C, 15B
TM37498	Preamplifier	AMF-5D-020180-26-10P	Miteq	22/24/27, 15C, 15B
TM30599	Semi anechoic chamber	UNKNOWN	TDK	22/24/27, 15C, 15B
TM22638	Power supply	OL63743-901	-	22/24/27, 15C, 15E, 15B
TM38066	High pass filter	WHKX3.0/18G-12SS	Wainwright	22/24/27, 15C, 15E, 15B
2028	High pass filter	WHKX 1.0/15G-12SS	Wainwright	22/24/27, 15C, 15E, 15B
TM37545	Tunable notch filter	800.0/960.0-0.2/40-8SSK	Wainwright	22
TM26512	Tunable notch filter	WRCD1850/1910-0.2/40-10SSK	Wainwright	24
-	Band reject filter	WRCG1877/1883-1870/1890-40/6EE	Wainwright	24
-	Band reject filter	WRCG1729.4/1735.4-1722.4/1742.4-40/6SS	Wainwright	27
TM23892	Controller	G-1000SDX	Yaesu	22/24/27, 15C, 15E
2001	Bluetooth tester	CBT	R&S	15C, 15B
6023	Antenna	VUBA 9117	Schwarzbeck	22/24/27
2021	Communication Tester	CMW500	R&S	22/24/27
2025	Antenna	HFH2-Z2	R&S	15C
2026	Signal Generator	SMF 100A	R&S	22/24/27, 15C, 15E, 15B
2052	Antenna	BBHA 9120 D	Schwarzbeck	22/24/27, 15C, 15B, 15E
-	Antenna	QSH18S20	Q-Par	22/24/27, 15C, 15B, 15E
-	Antenna	QSH20S20	Q-Par	22/24/27, 15C, 15B, 15E
-	Antenna	QSH20S20	Q-Par	22/24/27, 15C, 15B, 15E
-	Bluetooth tester	CBT	R&S	15C, 15B