

FCC Part 15B Compliance Test Report

Test Report no.:	FCC15B_RM-714_27.docx	Date of Report:	19-Jan-2012
Number of pages:	18	Customer's Contact person:	Bruno Ramelli
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FCC listing no.:	94436		
IC recognition no.:	661AK-1		
Tested devices/ accessories:	Phone RM-714 / Battery BL-4U / AC charger AC-11E / Headset WH-102 / Data cable CA-190CD / Laptop IBM Thinkpad T40 / AC adapter 02K6543 / Printer HP deskjet 1600CC3540A / Parallel cable for printer		
FCC ID:	PPIRM-714	IC:	661U-RM714
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, RSS-132 (Issue 2, September 2005), RSS-133 (Issue 5, February 2009), RSS-139 (Issue 2, February 2009), RSS-210 (Issue 8, December 2010). 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, System Manager, EMC

1. Summary for FCC Part 15B Compliance Test Report

Date of receipt	05-Dec-2011
Testing completed	13-Dec-2011
The customer's contact person	Bruno Ramelli
Test Plan referred to	T:\Projects\RM-714\TestPlan\RS_testplan_RM-714.xls
Notes	-
Document name	T:\Projects\RM-714\EMC\FCC15B_RM-714_27.docx

1.1. EUT and Accessory Information

The EUT is a 9-band mobile phone:

GSM850/900/1800/1900/GPRS/EGPRS

WCDMA I/II(1900)/IV(1700)/V(850)/VIII/HSDPA/HSUPA

WLAN/Bluetooth

The EUT is tested with maximum rated TX power, modulated with pseudo random bit sequence (PRBS9).

Product	Type	SN	HW	MV	SW	DUT
Phone	RM-714	004402136825662	0420		Vp hwi11w47	42723
Battery	BL-4U	4620408324i20179508;0670560				42730
AC charger	AC-11E	4090491212970500298;0675479	-	-	-	42735
Headset	WH-102	06943230363MA615055	-	-	-	42736
Data cable	CA-190CD	-	-	-	-	42720
Laptop	IBM Thinkpad T40	99ARTGD	-	-	-	41868
AC Adapter	02K6543	-	-	-	-	40202
Printer	HP deskjet 1600CC3540A	USB8302546	-	-	-	40077
Parallel cable for printer	-	-	-	-	-	40087

1.2. Summary of Test Results

GSM850:

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

WCDMA 850 (Band V):

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

GSM1900:

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

WCDMA 1700 (Band IV):

Section in CFR 47	Section in ICES-003 (RSS-139)	Name of the test	Result
15.107, a	5.3	AC powerline conducted emissions	-
15.109, a	5.5 (6.6)	Radiated emissions	PASSED

Bluetooth:

Section in CFR 47	Section in ICES-003 (RSS-139)	Name of the test	Result
15.107, a	5.3	AC powerline conducted emissions	-
15.109, a	5.5 (6.6)	Radiated emissions	PASSED

WLAN:

Section in CFR 47	Section in ICES-003 (RSS-139)	Name of the test	Result
15.107, a	5.3	AC powerline conducted emissions	-
15.109, a	5.5 (6.6)	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 Nokia Laboratory.

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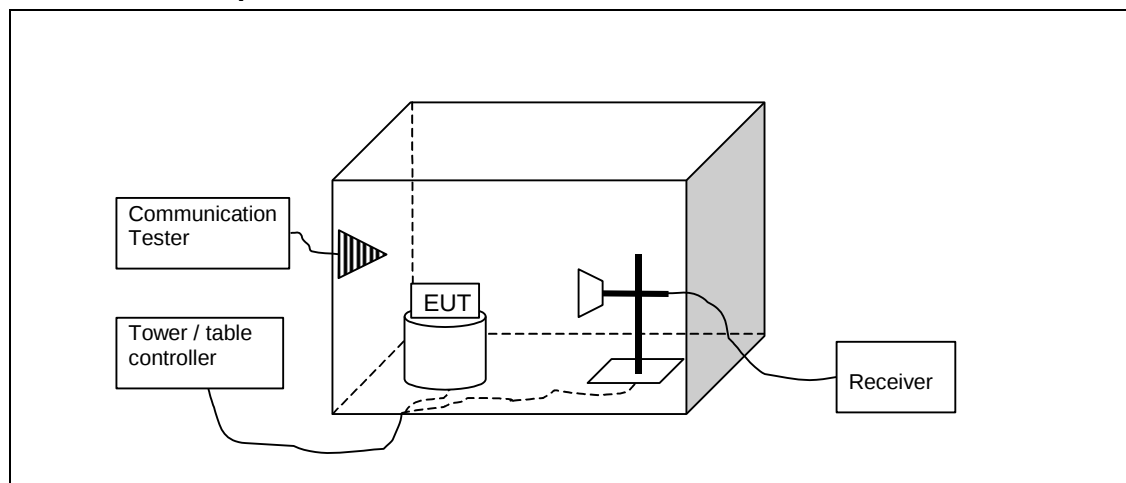
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2. Radiated emissions

(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-714, DUT 42723
Accessories with DUT numbers	BL-4U, DUT 42730 ; AC-11E, DUT 42735 ; WH-102, DUT 42736 ; CA-190CD, DUT 42720 ; IBM Thinkpad T40 DUT 41868, 02K6543 DUT 40202, HP deskjet 1600CC3540A DUT 40077, Parallel cable for printer DUT 40087
Operation Voltage [V] / [Hz]	115 / 60
Results	PASSED
Remarks	Continuos data transfer active between phone and computer.
Temp [°C] / Humidity [%RH] / Air Pressure [kPa]	25 / 50 / 66.6
Date of measurements	13-Dec-2011
Measured by	Jari Jantunen

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.

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

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

2.3. GSM850 + FM radioTest 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]	Polarisation	Result
3478.1	38.45	83.657	44.09	-5.64	VERTICAL	PASSED
6953.6	47.09	226.282	46.65	0.44	HORIZONTAL	PASSED

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

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Polarisation	Result
3478.1	25.81	19.521	31.45	-5.64	VERTICAL	PASSED
6953.6	34.36	52.252	33.92	0.44	HORIZONTAL	PASSED

RX mode, channel 190 / 881.6 MHz

Quasi peak (RBW: 120 kHz, VBW: 300 kHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Polarisation	Result
41.523	27.87	24.754	59.89	-32.02	VERTICAL	PASSED
41.83	25.32	18.459	57.47	-32.15	VERTICAL	PASSED
87.351	30.13	32.107	66.46	-36.33	HORIZONTAL	PASSED
99.349	30.39	33.075	64.97	-34.58	VERTICAL	PASSED
132.996	24.21	16.242	58.13	-33.92	VERTICAL	PASSED
176.926	25.33	18.48	60.83	-35.5	HORIZONTAL	PASSED
240.03	40.09	101.03	74.25	-34.16	HORIZONTAL	PASSED
720.11	46.31	206.728	69.71	-23.4	HORIZONTAL	PASSED
786.433	39.15	90.657	62.97	-23.82	VERTICAL	PASSED
800.992	38.12	80.538	61.61	-23.49	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
7819.24	44.25	163.061	41.74	2.51	VERTICAL	PASSED
7829.563	44.66	170.982	42.12	2.54	HORIZONTAL	PASSED
7839.379	45.03	178.361	42.51	2.52	VERTICAL	PASSED
7848.299	45.51	188.56	43.01	2.5	VERTICAL	PASSED

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

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Polarisation	Result
7819.24	31.83	39.021	29.32	2.51	VERTICAL	PASSED
7829.563	31.86	39.17	29.32	2.54	HORIZONTAL	PASSED
7839.379	31.95	39.564	29.43	2.52	VERTICAL	PASSED
7848.299	31.97	39.678	29.47	2.5	VERTICAL	PASSED

RX mode, channel 251 / 893.8 MHz

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

Frequency [MHz]	E [dB μ V/m]	E [μ V/m]	U _{RX} [dB μ V]	A _{TOT} [dB]	Polarisation	Result
3576	38.4	83.167	43.82	-5.42	VERTICAL	PASSED
7152.2	43.18	144.129	41.87	1.31	VERTICAL	PASSED

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

Frequency [MHz]	E [dB μ V/m]	E [μ V/m]	U _{RX} [dB μ V]	A _{TOT} [dB]	Polarisation	Result
3576	25.23	18.264	30.65	-5.42	VERTICAL	PASSED
7152.2	30.58	33.799	29.27	1.31	VERTICAL	PASSED

2.4. GSM1900 + FM radioTest 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]	Polarisation	Result
3858.5	39.27	91.939	42.38	-3.11	HORIZONTAL	PASSED
7718.8	44.72	172.167	42.38	2.34	VERTICAL	PASSED

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

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Polarisation	Result
3858.5	26.46	21.047	29.57	-3.11	HORIZONTAL	PASSED
7718.8	31.47	37.437	29.13	2.34	VERTICAL	PASSED

RX mode, channel 661 / 1960.0 MHz

Quasi peak (RBW: 120 kHz, VBW: 300 kHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Polarisation	Result
41.653	33.18	45.583	65.26	-32.08	VERTICAL	PASSED
41.971	28.75	27.368	60.96	-32.21	VERTICAL	PASSED
85.911	25.07	17.916	61.55	-36.48	HORIZONTAL	PASSED
143.186	35.9	62.359	70.28	-34.38	HORIZONTAL	PASSED
229.762	34.62	53.827	69.2	-34.58	HORIZONTAL	PASSED
257.062	39.98	99.736	73.7	-33.72	HORIZONTAL	PASSED
501.332	35.79	61.61	63.4	-27.61	HORIZONTAL	PASSED
700.591	36.79	69.127	60.5	-23.71	HORIZONTAL	PASSED
786.403	39.25	91.685	63.07	-23.82	VERTICAL	PASSED
800.992	38.49	83.994	61.98	-23.49	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
7819.938	44.25	163.192	41.74	2.51	VERTICAL	PASSED
7830.164	45.17	181.238	42.64	2.53	HORIZONTAL	PASSED
7847.691	44.84	174.562	42.38	2.46	HORIZONTAL	PASSED
7851.206	44.7	171.83	42.25	2.45	HORIZONTAL	PASSED

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

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Polarisation	Result
7819.938	31.73	38.601	29.22	2.51	VERTICAL	PASSED
7830.164	31.8	38.9	29.27	2.53	HORIZONTAL	PASSED
7847.691	31.89	39.296	29.43	2.46	HORIZONTAL	PASSED
7851.206	31.98	39.701	29.53	2.45	HORIZONTAL	PASSED

RX mode, channel 810 / 1989.8 MHz

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

Frequency [MHz]	E [dB μ V/m]	E [μ V/m]	U _{RX} [dB μ V]	A _{TOT} [dB]	Polarisation	Result
3981.8	40.49	105.767	43.55	-3.06	VERTICAL	PASSED
7961.1	45	177.767	42.38	2.62	VERTICAL	PASSED

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

Frequency [MHz]	E [dB μ V/m]	E [μ V/m]	U _{RX} [dB μ V]	A _{TOT} [dB]	Polarisation	Result
3981.8	26.87	22.042	29.93	-3.06	VERTICAL	PASSED
7961.1	32.01	39.861	29.39	2.62	VERTICAL	PASSED

2.5. WCDMA 1700 (Band IV) + FM radioTest results

RX mode, channel 1537 / 2112.4 MHz

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

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Polarisation	Result
4223.2	39.26	91.812	43.15	-3.89	HORIZONTAL	PASSED
6335.4	44.1	160.288	45.16	-1.06	HORIZONTAL	PASSED

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

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Polarisation	Result
4223.2	26.43	20.975	30.32	-3.89	HORIZONTAL	PASSED
6335.4	31.95	39.559	33.01	-1.06	HORIZONTAL	PASSED

RX mode, channel 1637 / 2132.4 MHz

Quasi peak (RBW: 120 kHz, VBW: 300 kHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Polarisation	Result
39.359	34.02	50.217	65.12	-31.1	VERTICAL	PASSED
41.782	31.23	36.446	63.36	-32.13	VERTICAL	PASSED
99.47	32.51	42.233	67.06	-34.55	VERTICAL	PASSED
143.756	33.39	46.736	67.79	-34.4	HORIZONTAL	PASSED
199.95	31.75	38.69	67.46	-35.71	HORIZONTAL	PASSED
240.03	38.46	83.705	72.62	-34.16	HORIZONTAL	PASSED
257.064	38.59	84.977	72.31	-33.72	HORIZONTAL	PASSED
720.11	43.29	145.999	66.69	-23.4	HORIZONTAL	PASSED
786.403	37.45	74.525	61.27	-23.82	VERTICAL	PASSED
800.992	37.86	78.118	61.35	-23.49	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
7834.67	45.29	183.95	42.75	2.54	VERTICAL	PASSED
7844.387	45.11	180.011	42.63	2.48	HORIZONTAL	PASSED
7853.306	44.75	172.862	42.24	2.51	VERTICAL	PASSED
7857.712	44.96	177.011	42.5	2.46	HORIZONTAL	PASSED

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

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Polarisation	Result
7834.67	31.77	38.766	29.23	2.54	VERTICAL	PASSED
7844.387	31.76	38.73	29.28	2.48	HORIZONTAL	PASSED
7853.306	31.98	39.724	29.47	2.51	VERTICAL	PASSED
7857.712	31.98	39.705	29.52	2.46	HORIZONTAL	PASSED

RX mode, channel 1738 / 2152.6 MHz

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

Frequency [MHz]	E [dB μ V/m]	E [μ V/m]	U _{RX} [dB μ V]	A _{TOT} [dB]	Polarisation	Result
4306.2	39.02	89.351	43.14	-4.12	HORIZONTAL	PASSED
6459.2	46.26	205.471	47.4	-1.14	VERTICAL	PASSED

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

Frequency [MHz]	E [dB μ V/m]	E [μ V/m]	U _{RX} [dB μ V]	A _{TOT} [dB]	Polarisation	Result
4306.2	25.92	19.765	30.04	-4.12	HORIZONTAL	PASSED
6459.2	32.65	42.909	33.79	-1.14	VERTICAL	PASSED

2.6. Bluetooth Test results

2.6.1 GFSK modulation, PRBS packet type

TX mode, Channel 0 / 2402 MHz

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

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Polarisation	Result
4803.5	39.74	97.073	42.12	-2.38	VERTICAL	PASSED
7206.1	43.88	156.369	42.37	1.51	VERTICAL	PASSED

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

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Polarisation	Result
4803.5	27.01	22.4	29.39	-2.38	VERTICAL	PASSED
7206.1	30.58	33.81	29.07	1.51	VERTICAL	PASSED

TX mode, Channel 40 / 2442 MHz

Quasi peak (RBW: 120 kHz, VBW: 300 kHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Polarisation	Result
75.07	30.19	32.311	68.15	-37.96	HORIZONTAL	PASSED
125.12	37.42	74.268	71.26	-33.84	HORIZONTAL	PASSED
150.17	36.83	69.438	71.26	-34.43	HORIZONTAL	PASSED
176.951	26.01	19.976	61.34	-35.33	HORIZONTAL	PASSED
183.587	24.83	17.438	60.68	-35.85	HORIZONTAL	PASSED
200.15	38.91	88.237	74.33	-35.42	HORIZONTAL	PASSED
250.191	41.12	113.763	75	-33.88	HORIZONTAL	PASSED
300.27	43.22	144.944	75.13	-31.91	HORIZONTAL	PASSED

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

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Polarisation	Result
7821.543	45.03	178.484	42.5	2.53	VERTICAL	PASSED
7846.093	44.72	172.127	42.25	2.47	HORIZONTAL	PASSED
7856.614	44.9	175.691	42.38	2.52	VERTICAL	PASSED
7865.429	44.59	169.531	42.13	2.46	HORIZONTAL	PASSED

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

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Polarisation	Result
7821.543	31.73	38.606	29.2	2.53	VERTICAL	PASSED
7846.093	31.82	38.976	29.35	2.47	HORIZONTAL	PASSED
7856.614	31.99	39.779	29.47	2.52	VERTICAL	PASSED
7865.429	32	39.797	29.54	2.46	HORIZONTAL	PASSED

TX mode, Channel 78 / 2480 MHz

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

Frequency [MHz]	E [dB μ V/m]	E [μ V/m]	U _{RX} [dB μ V]	A _{TOT} [dB]	Polarisation	Result
4958.4	42.02	126.11	43.69	-1.67	HORIZONTAL	PASSED
7438.8	43.89	156.495	41.74	2.15	VERTICAL	PASSED

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

Frequency [MHz]	E [dB μ V/m]	E [μ V/m]	U _{RX} [dB μ V]	A _{TOT} [dB]	Polarisation	Result
4958.4	28.71	27.271	30.38	-1.67	HORIZONTAL	PASSED
7438.8	30.61	33.916	28.46	2.15	VERTICAL	PASSED

2.7. WLAN Test results

2.7.1 WLAN RX + FM radio

RX mode, Channel 1 / 2412 MHz

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

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Polarisation	Result
4804.9	40.11	101.274	42.5	-2.39	HORIZONTAL	PASSED
7206.1	43.5	149.641	41.99	1.51	VERTICAL	PASSED

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

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Polarisation	Result
4804.9	27.03	22.47	29.42	-2.39	HORIZONTAL	PASSED
7206.1	30.58	33.795	29.07	1.51	VERTICAL	PASSED

RX mode, Channel 7 / 2442 MHz

Quasi peak (RBW: 120 kHz, VBW: 300 kHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Polarisation	Result
38.567	26.63	21.461	57.36	-30.73	VERTICAL	PASSED
143.177	36.12	63.951	70.26	-34.14	HORIZONTAL	PASSED
160.603	36.39	65.993	71.34	-34.95	VERTICAL	PASSED
200.43	34.2	51.268	69.61	-35.41	HORIZONTAL	PASSED
256.884	38.98	88.869	72.43	-33.45	HORIZONTAL	PASSED
720.11	23.04	14.192	45.81	-22.77	HORIZONTAL	PASSED
800.992	38.88	87.933	61.97	-23.09	VERTICAL	PASSED
911.072	17.58	7.569	38.08	-20.5	HORIZONTAL	PASSED

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

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Polarisation	Result
7839.678	44.62	170.157	42.12	2.5	HORIZONTAL	PASSED
7851.804	45.39	185.887	42.89	2.5	VERTICAL	PASSED
7855.411	44.58	169.395	42.12	2.46	HORIZONTAL	PASSED
7860.721	45.09	179.68	42.63	2.46	HORIZONTAL	PASSED

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

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Polarisation	Result
7839.678	31.82	38.981	29.32	2.5	HORIZONTAL	PASSED
7851.804	32.01	39.843	29.51	2.5	VERTICAL	PASSED
7855.411	31.93	39.496	29.47	2.46	HORIZONTAL	PASSED
7860.721	31.98	39.701	29.52	2.46	HORIZONTAL	PASSED

RX mode, Channel 11 / 2462 MHz

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

Frequency [MHz]	E [dB μ V/m]	E [μ V/m]	U _{RX} [dB μ V]	A _{TOT} [dB]	Polarisation	Result
4961.4	41.72	121.913	43.41	-1.69	HORIZONTAL	PASSED
7442.3	43.91	156.801	41.74	2.17	HORIZONTAL	PASSED

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

Frequency [MHz]	E [dB μ V/m]	E [μ V/m]	U _{RX} [dB μ V]	A _{TOT} [dB]	Polarisation	Result
4961.4	28.74	27.343	30.43	-1.69	HORIZONTAL	PASSED
7442.3	30.75	34.459	28.58	2.17	HORIZONTAL	PASSED

3. Test Equipment

3.1. Conducted measurements

Eq. No	Equipment	Type	Manufacturer	Used in
TM38112	Power supply	6632A	Agilent	22/24/27, 15C
TM38631	Signal Generator	83640L	Agilent	22/24/27, 15C, 15B
OM06312	Signal Generator	E4422B	Agilent	22/24
TM37678	Communication Tester	CMU200	R&S	22/24/27, 15C, 15B
TM37773	Communication Tester	CMU200	R&S	22/24/27, 15C, 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
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
2058	Receiver	ESPC	R&S	15C, 15B
2001	Bluetooth tester	CBT	R&S	22/24/27, 15C, 15B
2002	Communication Tester	CMU200	R&S	22/24/27
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

3.2. Radiated measurements

Eq. No	Equipment	Type	Manufacturer	Used in
TM38114	Power supply	6632A	Agilent	22/24/27, 15C, 15B
TM38631	Signal Generator	83640L	Agilent	22/24/27, 15C, 15B
TM38323	Preamplifier	PA-02 18-26 GHz	EMC Automation	22/24/27, 15C, 15B
-	Antenna	BBHA 9120 D	Schwarzbeck	22/24/27, 15C
TM26497	Antenna	3115	Emco	22/24/27, 15C, 15B
TM37678	Communication Tester	CMU200	R&S	22/24/27, 15C, 15B
TM37773	Communication Tester	CMU200	R&S	22/24/27, 15C, 15B
TM38845	Receiver	ESIB 26	R&S	22/24/27, 15C, 15B
-	Antenna	HL562	R&S	22/24/27, 15C, 15B
-	Turntable	2188	EMCO	22/24/27, 15C, 15B
-	Turntable controller	2090	EMCO	22/24/27, 15C, 15B
-	RF system panel	TS-RSP	R&S	22/24/27, 15C, 15B
-	RF system panel	TS-RSP	R&S	22/24/27, 15C, 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 μ H	LISN-5-20-2	FCC	22/24/27, 15C, 15B
TM30644	LISN 50 μ H	LISN-5-20-2	FCC	22/24/27, 15C, 15B
-	Temperature and humidity logger	175-H2	Testo	22/24/27, 15C, 15B
-	Air pressure and temperature logger	635-2	Testo	22/24/27, 15C, 15B
-	Air pressure sensor	0638-1835	Testo	22/24/27, 15C, 15B
TM39180	Laser distance meter	Disto Pro	Leica	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 chambre	UNKNOWN	TDK	22/24/27, 15C, 15B
TM22638	Power supply	OL63743-901	-	22/24/27, 15C, 15B
TM38066	High pass filter	4HC3000/18000-3-KK	Trilithic	22/24/27, 15C, 15B
-	High pass filter	WHKX 1.6/15G-12SS	Wainwright	22/24/27, 15C, 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
-	Band reject filter	WRCG832/838-825/848-40/5SS	Wainwright	22
TM23892	Controller	G-1000SDX	Yaesu	22/24/27
2001	Bluetooth tester	CBT	R&S	22/24/27, 15C, 15B
6023	Antenna	VUBA 9117	Schwarzbeck	22/24/27, 15C