FCC Part 15C Compliance Test Report

Test Report no.:	FCC15CWLAN_RX-113_15.docx	**Date of Report:**	28-Oct-2013
Number of pages:	39	**Customer's Contact person:**	Jamie Lee
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, Inc. 16620 West Bernardo Drive San Diego, CA 92127 USA Tel. +1 858 831 5000 Fax. +1 858 385 1598
FCC listing no.: **IC recognition no.:**	533467 661V-1		
Tested devices/ accessories:	**Device RX-113 / AC-Charger AC-300 / Headset WH-208**		
FCC ID:	QMNB	**IC:**	-
Supplement reports:	-		
Testing has been carried out in accordance with:	**CFR 47, FCC rules Part 15 Subpart C, ANSI C63.4 (2003), DTS procedures KDB 558074, IC standards. 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 Kalle Hannila DN: cn=Kalle Hannila, o=DRD/DQD/DCO/CMCL, ou=TCC Nokia, email=EXT-kalle.t.hannila@nokia.com, c=FI Date: 2013.10.28 14:13:52 +02'00'

Kalle Hannila, System Manager, EMC

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1. Summary for FCC Part 15C Compliance Test Report

Date of receipt	30-Aug-2013
Testing completed	04-Sep-2013
The customer's contact person	Jamie Lee
Test Plan referred to	T:\Projects\RX-114\TestPlan\RS_testplan_RX-114.xlsm
Notes	-
Document name	T:\Projects\RX-113\EMC\FCC15CWLAN_RX-113_15.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
Device	RX-114	004402473513624	0108	-	9471_1032_1322_v1.2.2	17630
AC-Charger	AC-300	-	-	-	-	17632
Headset	WH-208	2332271	-	-	-	17375
Device	RX-114	004402473514366	0108	-	9471_1032_1322_v1.2.2	17662
AC-charger	AC-300	1325000334	1.0	-	-	17626
Headset	WH-208	2131731	CE	-	-	17586

1.2. Summary of Test Results

WLAN:

Section in CFR 47	Section in RSS-GEN or RSS-210	Name of the test	Result
15.247(b)(1)	A8.4 (4)	Conducted peak output power	
15.247(d), 15.205(b)	A8.5	Band edge compliance of RF emissions	PASSED
15.247(d)	A8.5	Spurious RF conducted emissions	
15.247(d), 15.209	A8.5	Spurious radiated emissions	PASSED
15.207	7.2.2	AC powerline conducted emissions	PASSED
15.247(a)(2)	A8.2 (a)	6dB(bandwidth)	
15.247(e)	A8.2 (b)	Power spectral density	

RLAN:

Section in CFR 47	Section in RSS-GEN or RSS-210	Name of the test	Result
15.247(b)(1)	A8.4 (4)	Conducted peak output power	
15.247(d), 15.205(b)	A8.5	Band edge compliance of RF emissions	PASSED
15.247(d)	A8.5	Spurious RF conducted emissions	
15.247(d), 15.209	A8.5	Spurious radiated emissions	PASSED
15.207	7.2.2	AC powerline conducted emissions	PASSED
15.247(a)(2)	A8.2 (a)	6dB(bandwidth)	
15.247(e)	A8.2 (b)	Power spectral density	

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.

The test results of RX-114 are re-used for certification of the RX-113. Table above indicates the results, which will be re-used.

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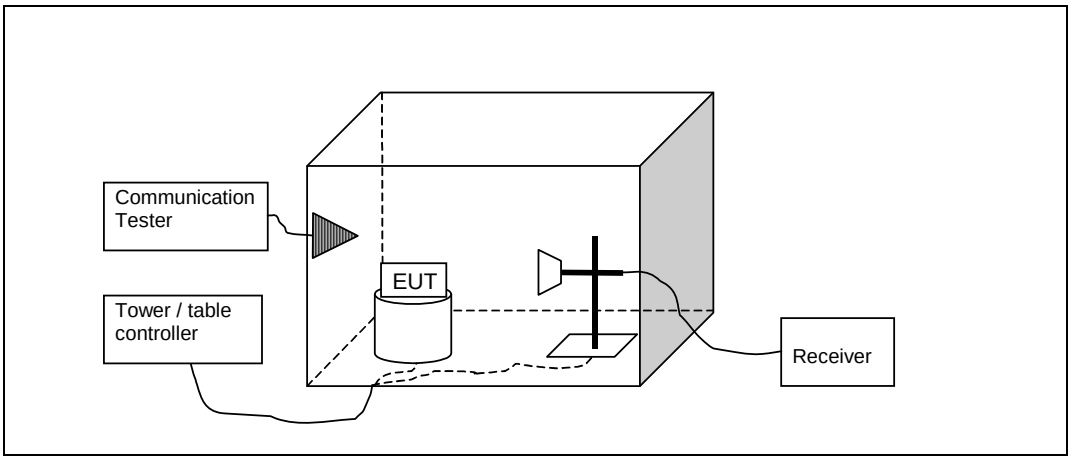
2. Band edge compliance of RF emissions
(FCC §15.247(d), 15.205(b), RSS-210 A8.5)

EUT with DUT number	RX-114, DUT 17630
Accessories with DUT numbers	AC-300, DUT 17632 ; WH-208, DUT 17375
Operation Voltage [V] / [Hz]	Nominal
Results	PASSED
Remarks	-
Temp [°C] / Humidity [%RH] / Air Pressure [kPa]	20 / 70 / 101.4
Date of measurements	30-Aug-2013
Measured by	Kalle Hannila

2.1.1 Test setup



2.2. Test method and limit

The measurement is made according to DTS procedures KDB 558074 and IC standard RSS-210.

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 ($A_{TOT} = L_{CABLES} + A_F - G_{PREAMP}$).

Limits for band edge compliance of RF emissions measurements (3 m measurement distance)

Frequency range [MHz]	Limit
Below 2390 and above 2483.5	54 dBuV/m (avg) and 74 dBuV/m (pk)

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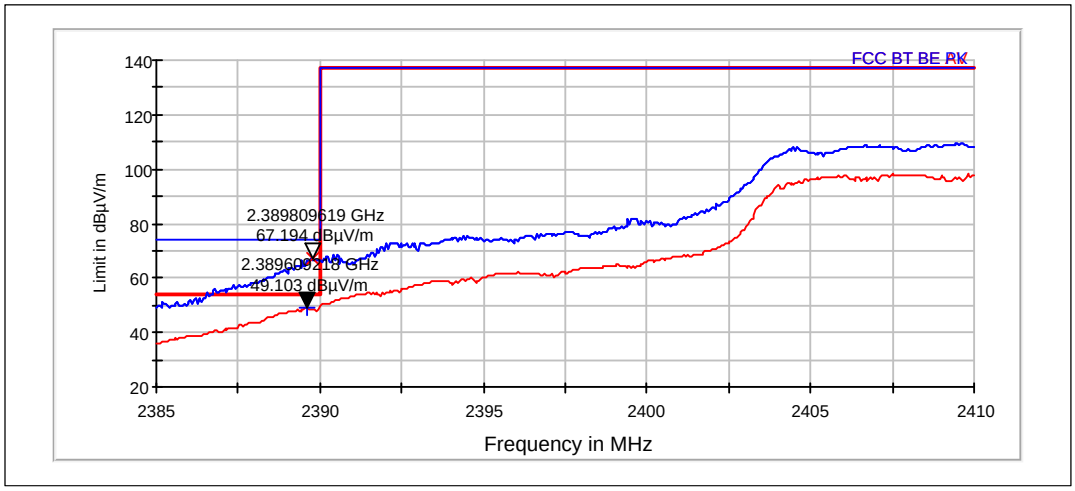
2.3. WLAN test results, Both Transmit Chains Active

2.3.1 802.11g, BPSK modulation, 9 Mbps data rate.

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]	Correction [dB]	Results
2390	67.19	2289.286	66.31	0.88	0.882	PASSED

Average (RBW: 1 MHz, VBW: 10 Hz)

Frequency [MHz]	E [dBµV/m]	E [µV/m]	U_{RX} [dBµV]	A_{TOT} [dB]	Correction [dB]	Results
2390	49.1	285.2	48.22	0.88	0.882	PASSED

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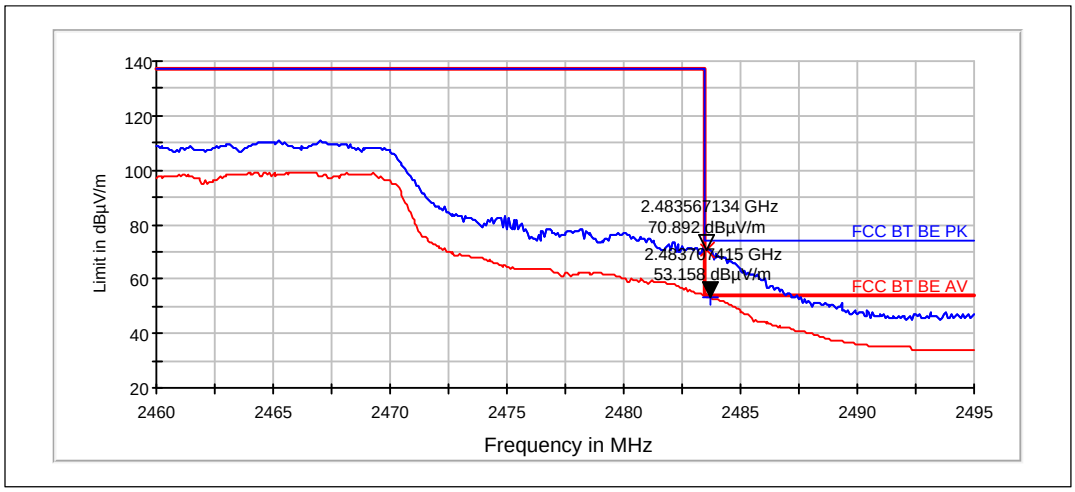
Channel 11 / 2462 MHz



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

Frequency [MHz]	E [dBµV/m]	E [µV/m]	U_{RX} [dBµV]	A_{TOT} [dB]	Correction [dB]	Results
2484	70.89	3504.29	69.9	0.99	0.994	PASSED

Average (RBW: 1 MHz, VBW: 10 Hz)

Frequency [MHz]	E [dBµV/m]	E [µV/m]	U_{RX} [dBµV]	A_{TOT} [dB]	Correction [dB]	Results
2484	53.16	454.883	52.17	0.99	0.994	PASSED

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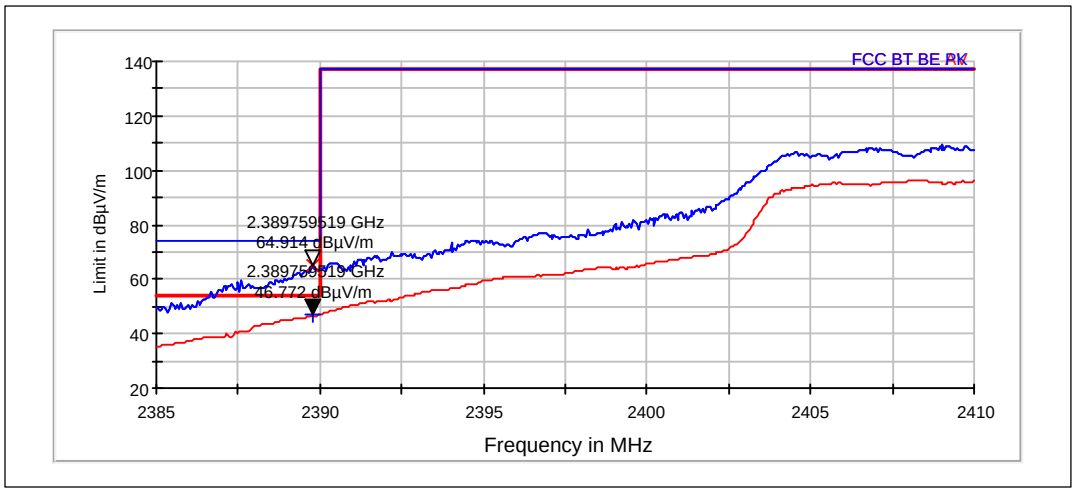
2.3.2 802.11g, 16QAM modulation, 24 Mbps data rate.

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]	Correction [dB]	Results
2390	64.91	1760.759	64.03	0.88	0.882	PASSED

Average (RBW: 1 MHz, VBW: 10 Hz)

Frequency [MHz]	E [dBµV/m]	E [µV/m]	U_{RX} [dBµV]	A_{TOT} [dB]	Correction [dB]	Results
2390	46.77	218.072	45.89	0.88	0.882	PASSED

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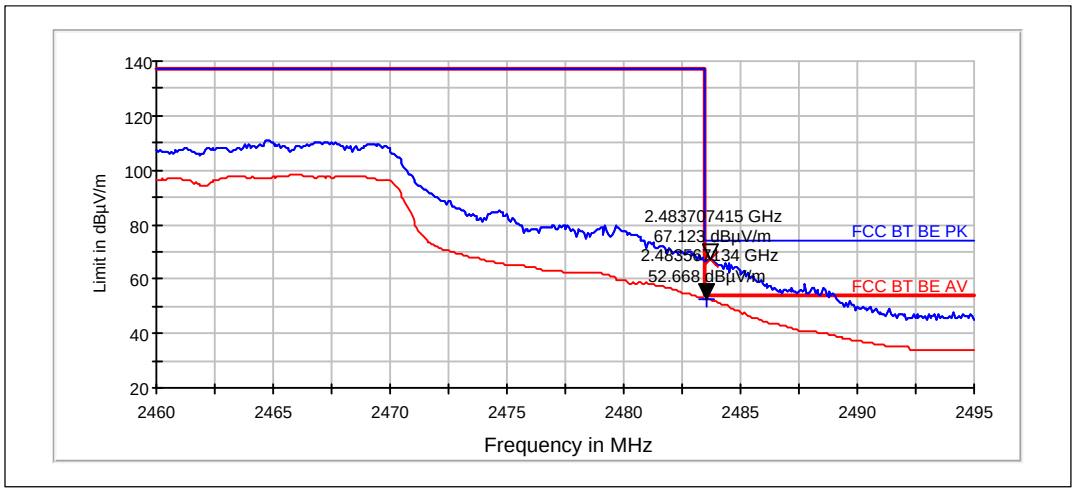
Channel 11 / 2462 MHz



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

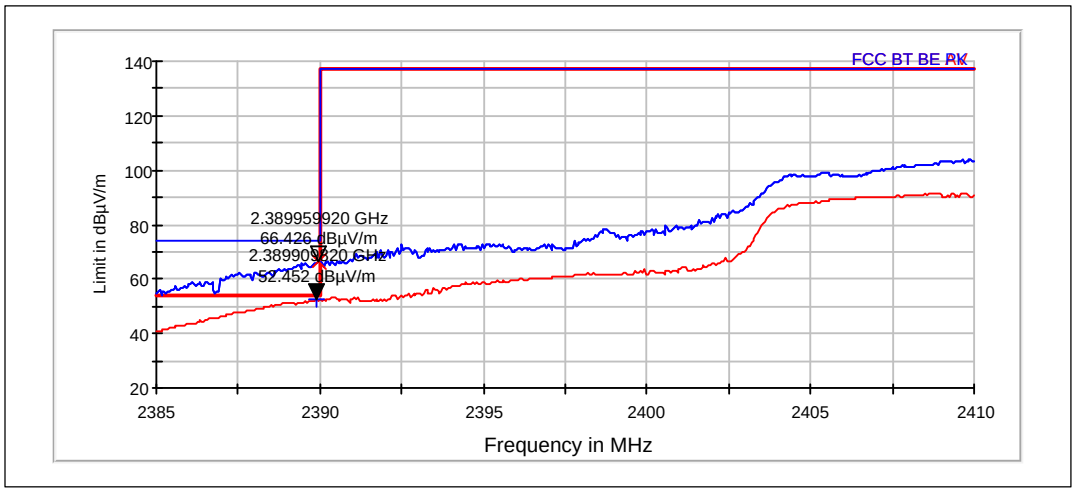
Frequency [MHz]	E [dBµV/m]	E [µV/m]	U_{RX} [dBµV]	A_{TOT} [dB]	Correction [dB]	Results
2484	67.12	2270.649	66.13	0.99	0.994	PASSED

Average (RBW: 1 MHz, VBW: 10 Hz)

Frequency [MHz]	E [dBµV/m]	E [µV/m]	U_{RX} [dBµV]	A_{TOT} [dB]	Correction [dB]	Results
2484	52.67	429.932	51.68	0.99	0.994	PASSED

2.3.3 802.11n, BPSK modulation, 13.5 / 15.0 Mbps data rate.

Channel 1-5 / 2422MHz



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

Frequency [MHz]	E [dBµV/m]	E [µV/m]	U_{RX} [dBµV]	A_{TOT} [dB]	Correction [dB]	Results
2390	66.43	2095.56	65.55	0.88	0.882	PASSED

Average (RBW: 1 MHz, VBW: 10 Hz)

Frequency [MHz]	E [dBµV/m]	E [µV/m]	U_{RX} [dBµV]	A_{TOT} [dB]	Correction [dB]	Results
2390	52.45	419.373	51.57	0.88	0.882	PASSED

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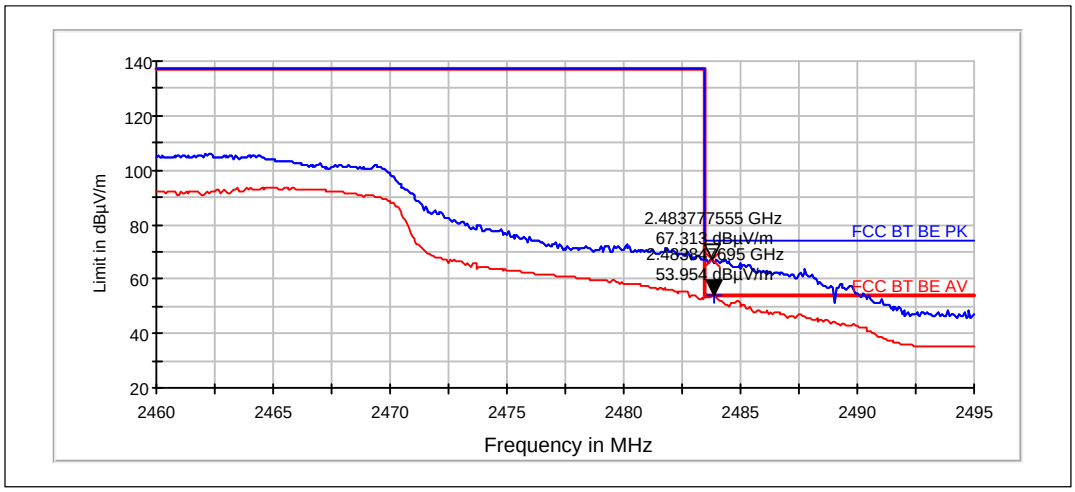
Channel 7-11 / 2452MHz



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

Frequency [MHz]	E [dBµV/m]	E [µV/m]	U_{RX} [dBµV]	A_{TOT} [dB]	Correction [dB]	Results
2484	67.31	2320.866	66.43	0.88	0.882	PASSED

Average (RBW: 1 MHz, VBW: 10 Hz)

Frequency [MHz]	E [dBµV/m]	E [µV/m]	U_{RX} [dBµV]	A_{TOT} [dB]	Correction [dB]	Results
2484	53.95	498.54	53.07	0.88	0.882	PASSED

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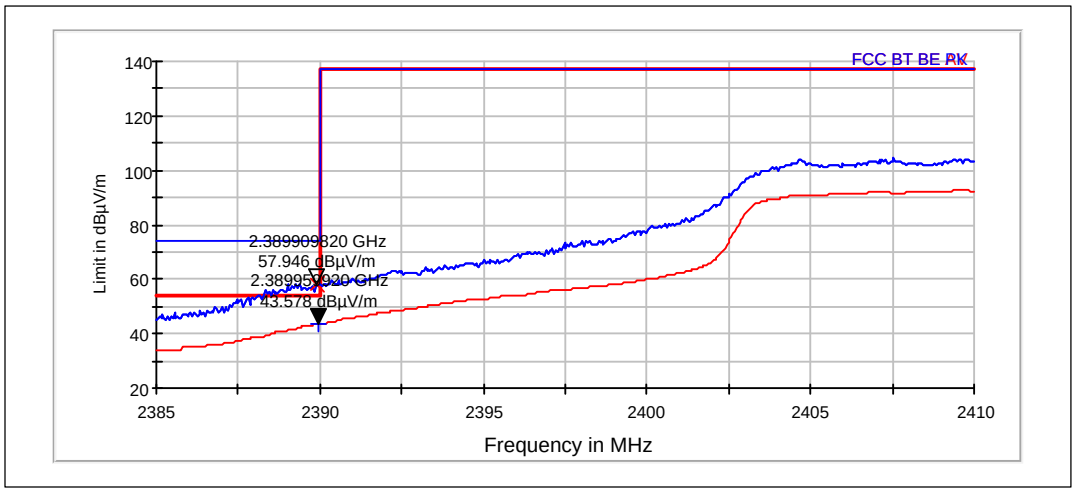
2.3.4 802.11n, 64QAM modulation, 52.0 / 57.8 Mbps data rate.

Channel 1-5 / 2422MHz



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

Frequency [MHz]	E [dBµV/m]	E [µV/m]	U_{RX} [dBµV]	A_{TOT} [dB]	Correction [dB]	Results
2390	57.95	789.405	57.07	0.88	0.882	PASSED

Average (RBW: 1 MHz, VBW: 10 Hz)

Frequency [MHz]	E [dBµV/m]	E [µV/m]	U_{RX} [dBµV]	A_{TOT} [dB]	Correction [dB]	Results
2390	43.58	150.973	42.7	0.88	0.882	PASSED

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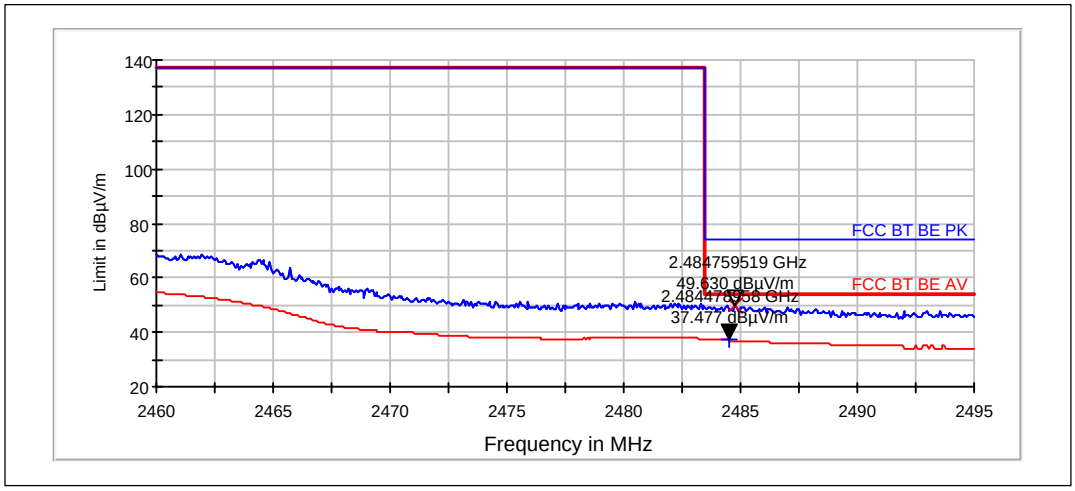
Channel 7-11 / 2452MHz



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

Frequency [MHz]	E [dBµV/m]	E [µV/m]	U_{RX} [dBµV]	A_{TOT} [dB]	Correction [dB]	Results
2485	49.63	303.04	48.75	0.88	0.882	PASSED

Average (RBW: 1 MHz, VBW: 10 Hz)

Frequency [MHz]	E [dBµV/m]	E [µV/m]	U_{RX} [dBµV]	A_{TOT} [dB]	Correction [dB]	Results
2484	37.48	74.791	36.6	0.88	0.882	PASSED

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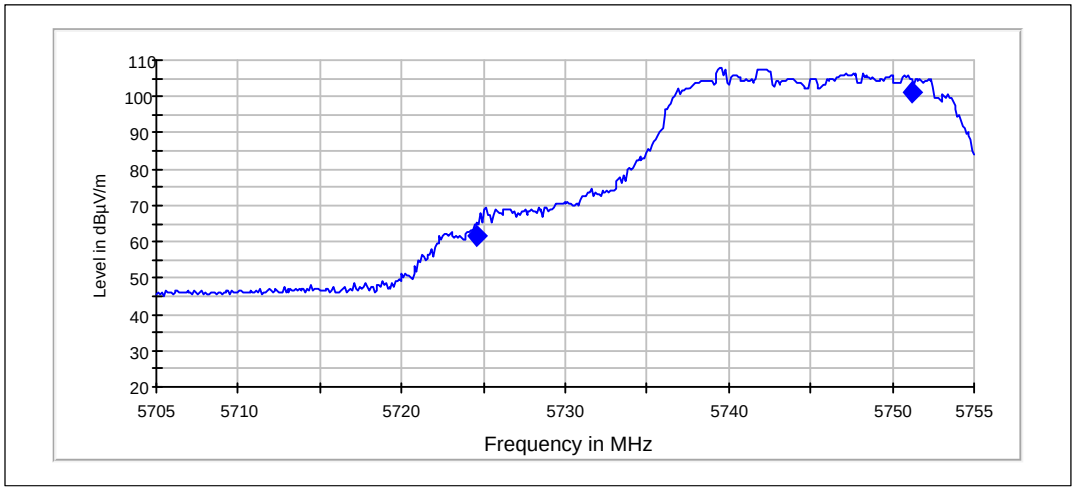
2.4. 5 GHz RLAN test results, Both Transmit Chains Active

2.4.1 802.11a, BPSK modulation, 6 Mbps data rate.

Channel 149 / 5745MHz



Peak (RBW: 1 MHz, VBW: 3 MHz)

Frequency [MHz]	E [dBµV/m]	E [µV/m]	U_{RX} [dBµV]	A_{TOT} [dB]	Results
5724.599	61.56	1196.878	57.36	4.2	PASSED
5751.152	101.16	114248.367	97.04	4.12	PASSED

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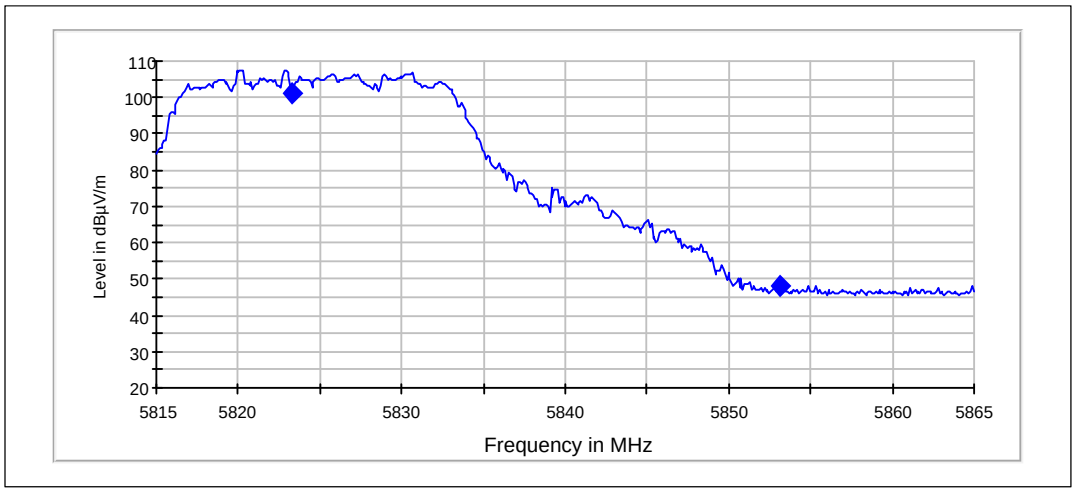
Channel 165 / 5825MHz



Peak (RBW: 1 MHz, VBW: 3 MHz)

Frequency [MHz]	E [dBµV/m]	E [µV/m]	U_{RX} [dBµV]	A_{TOT} [dB]	Results
5823.337	101.41	117652.186	96.85	4.56	PASSED
5853.096	47.98	250.553	43.23	4.75	PASSED

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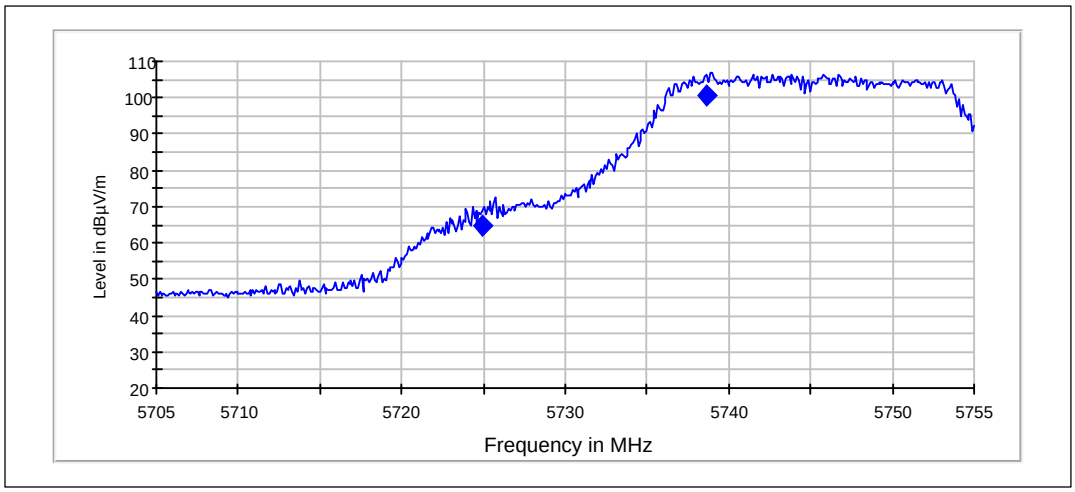
2.4.2 802.11n, 64QAM modulation, 52.0 / 57.8 Mbps data rate.

Channel 149 / 5745MHz



Peak (RBW: 1 MHz, VBW: 3 MHz)

Frequency [MHz]	E [dBµV/m]	E [µV/m]	U_{RX} [dBµV]	A_{TOT} [dB]	Results
5724.96	64.65	1707.458	60.44	4.21	PASSED
5738.687	100.4	104736.969	96.22	4.18	PASSED

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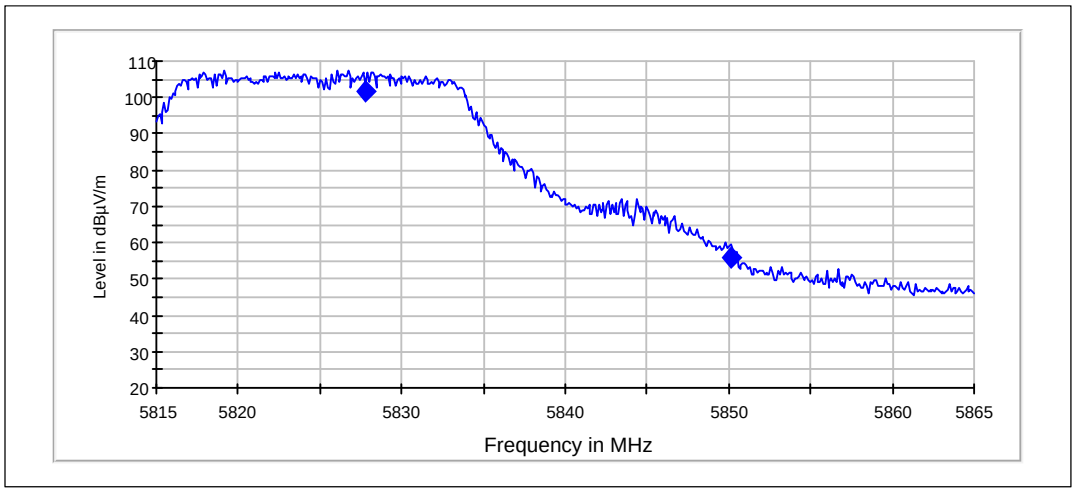
Channel 165 / 5825MHz



Peak (RBW: 1 MHz, VBW: 3 MHz)

Frequency [MHz]	E [dBµV/m]	E [µV/m]	U_{RX} [dBµV]	A_{TOT} [dB]	Results
5827.745	101.45	118100.028	96.9	4.55	PASSED
5850.15	55.89	623.161	51.14	4.75	PASSED

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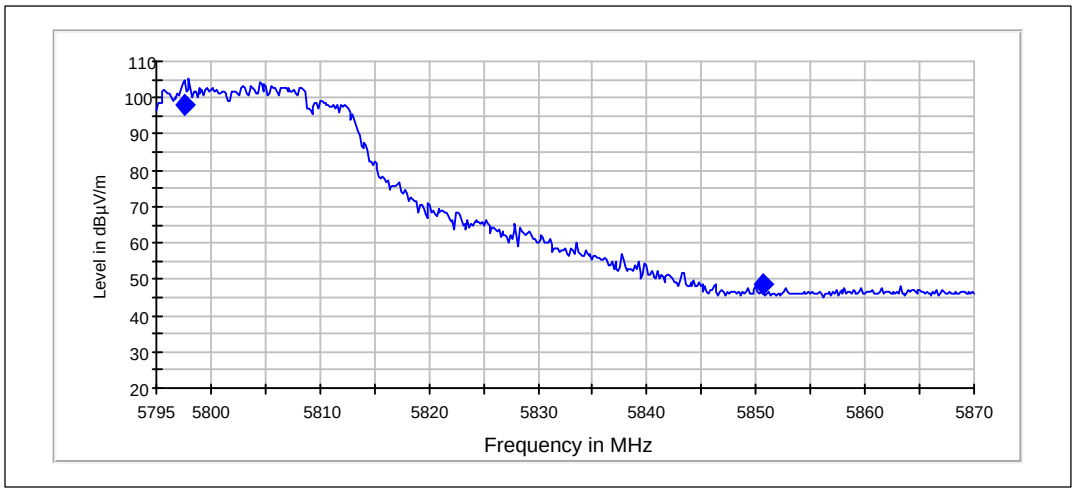
2.4.3 802.11n, BPSK modulation, 13.5 / 15.0 Mbps data rate.

Channel 157+161 / 5795MHz



Peak (RBW: 1 MHz, VBW: 3 MHz)

Frequency [MHz]	E [dBµV/m]	E [µV/m]	U_{RX} [dBµV]	A_{TOT} [dB]	Results
5797.645	97.85	78081.833	93.47	4.38	PASSED
5850.601	48.44	264.241	43.69	4.75	PASSED

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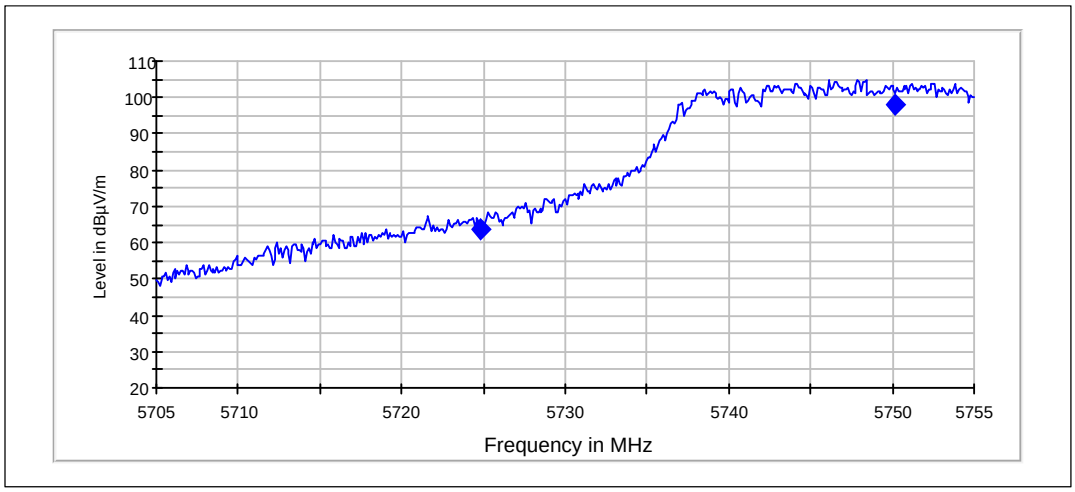
Channel 149+153 / 5755MHz



Peak (RBW: 1 MHz, VBW: 3 MHz)

Frequency [MHz]	E [dBµV/m]	E [µV/m]	U_{RX} [dBµV]	A_{TOT} [dB]	Results
5724.8	63.48	1492.279	59.28	4.21	PASSED
5750.19	97.78	77419.435	93.66	4.12	PASSED

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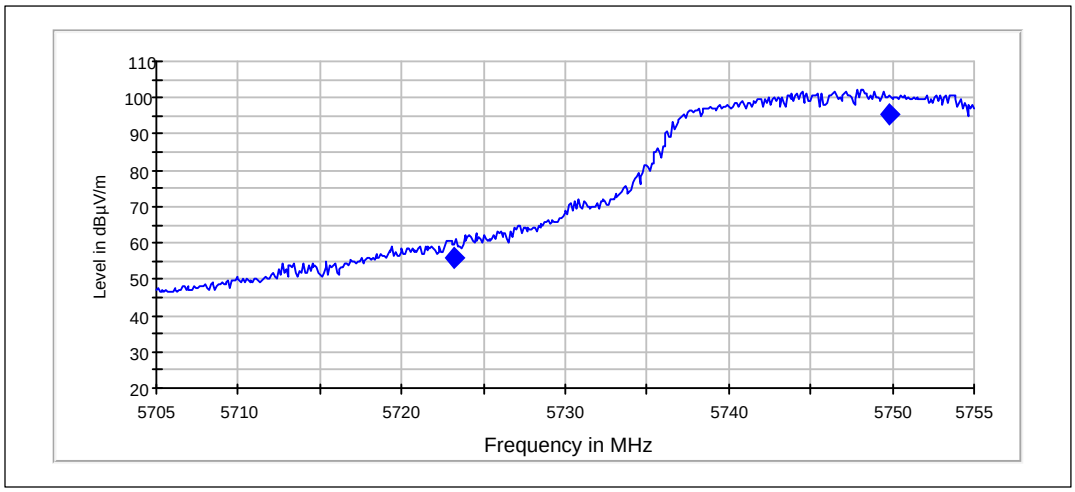
2.4.4 802.11n, QPSK modulation, 40.5 / 45.0 Mbps data rate.

Channel 149+153 / 5755MHz



Peak (RBW: 1 MHz, VBW: 3 MHz)

Frequency [MHz]	E [dBµV/m]	E [µV/m]	U_{RX} [dBµV]	A_{TOT} [dB]	Results
5723.196	55.97	628.999	51.77	4.2	PASSED
5749.79	95.64	60520.151	91.52	4.12	PASSED

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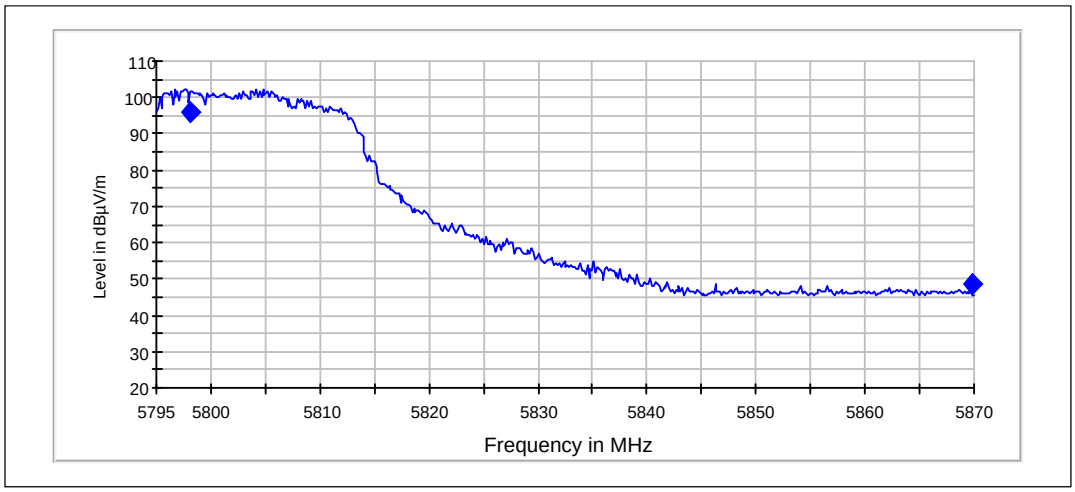
Channel 157+161 / 5795MHz



Peak (RBW: 1 MHz, VBW: 3 MHz)

Frequency [MHz]	E [dBµV/m]	E [µV/m]	U_{RX} [dBµV]	A_{TOT} [dB]	Results
5798.046	96.01	63132.066	91.63	4.38	PASSED
5869.88	48.43	264.028	43.57	4.86	PASSED

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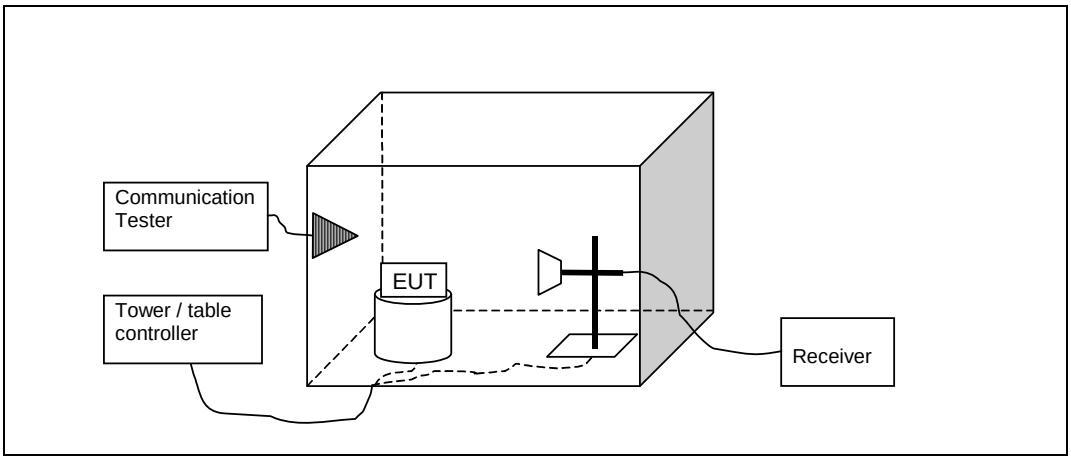
3. Spurious radiated emissions
(FCC §15.247(d), §15.209, RSS-210 A8.5)

EUT with DUT number	RX-114, DUT 17630
Accessories with DUT numbers	AC-300, DUT 17632 ; WH-208, DUT 17375
Operation Voltage [V] / [Hz]	Nominal
Results	PASSED
Remarks	-
Temp [°C] / Humidity [%RH] / Air Pressure [kPa]	20 / 70 / 101.4
Date of measurements	30-Aug-2013
Measured by	Kalle Hannila

3.1.1 Test setup



3.2. Test method and limit

The measurement is made according to DTS procedures KDB 558074 and IC standard RSS-210 as follows:
The measurement is divided into the Preliminary Measurement and the Final Measurement.

The suspected frequencies are searched for in Preliminary Measurement with absorbers on the floor and measuring antenna at fixed height using 2-axis EUT position system.

The Final Measurement is performed in the Semi-Anechoic Chamber with conducting metal floor, if the Preliminary Measurement results are closer than 20 dB to the permissible value.

The EUT is placed at nonconductive plate at the turntable center.

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.

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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 ($A_{TOT} = L_{CABLES} + A_F - G_{PREAMP}$).

Limits for spurious radiated emissions measurements (3 m measurement distance)

Frequency range [MHz]	Limit [µV/m]	Limit [dBµV/m]	Detector
30 - 88	100	40	Quasi peak
88 – 216	150	43.5	Quasi peak
216 – 960	200	46	Quasi peak
960 – 1000	500	54	Quasi peak
Above 1000	500	54	Average
Above 1000	5000	74	Peak

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3.3. WLAN test results, Both Transmit Chains Active

3.3.1 802.11g, BPSK modulation, 9 Mbps data rate.

Channel 6 / 2437 MHz

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

Frequency [MHz]	E [dBµV/m]	E [µV/m]	U_{RX} [dBµV]	A_{TOT} [dB]	Margin	Limit [dBµV/m]	Results
4880	41.65	120.865	42.81	-1.16	32.3	74	PASSED
7321.1	46.93	222.075	42.22	4.72	27	74	PASSED

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

Frequency [MHz]	E [dBµV/m]	E [µV/m]	U_{RX} [dBµV]	A_{TOT} [dB]	Margin	Limit [dBµV/m]	Results
31.77	35.59	60.214	40.01	-4.42	4.4	40	PASSED
34.342	32.05	40.018	38.15	-6.1	8	40	PASSED
37.779	35.3	58.177	43.57	-8.27	4.7	40	PASSED

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

Frequency [MHz]	E [dBµV/m]	E [µV/m]	U_{RX} [dBµV]	A_{TOT} [dB]	Margin	Limit [dBµV/m]	Results
4880	28.15	25.548	29.31	-1.16	25.8	54	PASSED
7321.1	33.88	49.42	29.17	4.72	20.1	54	PASSED

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]	Margin	Limit [dBµV/m]	Results
4824.4	42.87	139.107	44.09	-1.22	31.1	74	PASSED
7235.5	45.99	199.388	41.85	4.14	79.2	125	PASSED

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

Frequency [MHz]	E [dBµV/m]	E [µV/m]	U_{RX} [dBµV]	A_{TOT} [dB]	Margin	Limit [dBµV/m]	Results
4824.4	29.4	29.522	30.62	-1.22	24.6	54	PASSED
7235.5	33.48	47.201	29.34	4.14	---	---	PASSED

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Channel 11 / 2462 MHz

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

Frequency [MHz]	E [dBµV/m]	E [µV/m]	U_{RX} [dBµV]	A_{TOT} [dB]	Margin	Limit [dBµV/m]	Results
4926	47.52	237.711	48.55	-1.03	26.5	74	PASSED
7387.8	47.31	231.98	41.98	5.33	26.7	74	PASSED

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

Frequency [MHz]	E [dBµV/m]	E [µV/m]	U_{RX} [dBµV]	A_{TOT} [dB]	Margin	Limit [dBµV/m]	Results
4926	33.63	48.001	34.66	-1.03	20.4	54	PASSED
7387.8	34.21	51.363	28.88	5.33	19.8	54	PASSED

3.3.2 802.11g, 16QAM modulation, 24 Mbps data rate.

Channel 6 / 2437 MHz

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

Frequency [MHz]	E [dBµV/m]	E [µV/m]	U_{RX} [dBµV]	A_{TOT} [dB]	Margin	Limit [dBµV/m]	Results
4880.2	40.69	108.318	41.85	-1.16	33.3	74	PASSED
7319.9	46.93	222.024	42.22	4.71	27.1	74	PASSED

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

Frequency [MHz]	E [dBµV/m]	E [µV/m]	U_{RX} [dBµV]	A_{TOT} [dB]	Margin	Limit [dBµV/m]	Results
31.29	36.68	68.25	40.78	-4.1	3.3	40	PASSED
31.5	36.64	67.897	40.88	-4.24	3.4	40	PASSED
38.019	34.37	52.312	42.79	-8.42	5.6	40	PASSED

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

Frequency [MHz]	E [dBµV/m]	E [µV/m]	U_{RX} [dBµV]	A_{TOT} [dB]	Margin	Limit [dBµV/m]	Results
4880.2	28.23	25.796	29.39	-1.16	25.7	54	PASSED
7319.9	33.86	49.306	29.15	4.71	20.1	54	PASSED

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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]	Margin	Limit [dBµV/m]	Results
4825	43.9	156.747	45.09	-1.19	30.1	74	PASSED
7237.3	47.13	227.274	42.98	4.15	78.1	125	PASSED

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

Frequency [MHz]	E [dBµV/m]	E [µV/m]	U_{RX} [dBµV]	A_{TOT} [dB]	Margin	Limit [dBµV/m]	Results
4825	30.35	32.912	31.54	-1.19	23.6	54	PASSED
7237.3	33.55	47.605	29.4	4.15	---	---	PASSED

Channel 11 / 2462 MHz

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

Frequency [MHz]	E [dBµV/m]	E [µV/m]	U_{RX} [dBµV]	A_{TOT} [dB]	Margin	Limit [dBµV/m]	Results
4925.9	46.09	201.535	47.12	-1.03	27.9	74	PASSED
7386.4	47.13	227.248	41.8	5.33	26.8	74	PASSED

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

Frequency [MHz]	E [dBµV/m]	E [µV/m]	U_{RX} [dBµV]	A_{TOT} [dB]	Margin	Limit [dBµV/m]	Results
4925.9	32.7	43.167	33.73	-1.03	21.3	54	PASSED
7386.4	34.16	51.021	28.83	5.33	19.8	54	PASSED

3.3.3 802.11n, BPSK modulation, 13.5 / 15.0 Mbps data rate.

Channel 1-5 / 2422MHz

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

Frequency [MHz]	E [dBµV/m]	E [µV/m]	U_{RX} [dBµV]	A_{TOT} [dB]	Margin	Limit [dBµV/m]	Results
4843.7	40.84	110.192	42.1	-1.26	33.1	74	PASSED
7266.5	48.19	256.773	43.83	4.36	25.8	74	PASSED

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

Frequency [MHz]	E [dBµV/m]	E [µV/m]	U_{RX} [dBµV]	A_{TOT} [dB]	Margin	Limit [dBµV/m]	Results
30.09	33.05	44.921	36.37	-3.32	7	40	PASSED
32.85	36.9	70	42.03	-5.13	3.1	40	PASSED
40.749	33.69	48.334	43.85	-10.16	6.3	40	PASSED

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

Frequency [MHz]	E [dBµV/m]	E [µV/m]	U_{RX} [dBµV]	A_{TOT} [dB]	Margin	Limit [dBµV/m]	Results
4843.7	27.58	23.939	28.84	-1.26	26.4	54	PASSED
7266.5	33.62	47.968	29.26	4.36	20.4	54	PASSED

Channel 4-8 / 2437MHz

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

Frequency [MHz]	E [dBµV/m]	E [µV/m]	U_{RX} [dBµV]	A_{TOT} [dB]	Margin	Limit [dBµV/m]	Results
4881.6	40.94	111.404	42.1	-1.16	33	74	PASSED
7321.9	46.57	213.133	41.85	4.72	27.4	74	PASSED

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

Frequency [MHz]	E [dBµV/m]	E [µV/m]	U_{RX} [dBµV]	A_{TOT} [dB]	Margin	Limit [dBµV/m]	Results
32	36.53	67.05	41.1	-4.57	3.5	40	PASSED
32.13	36.71	68.446	41.36	-4.65	3.3	40	PASSED
32.728	36.89	69.904	41.94	-5.05	3.1	40	PASSED

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

Frequency [MHz]	E [dBµV/m]	E [µV/m]	U_{RX} [dBµV]	A_{TOT} [dB]	Margin	Limit [dBµV/m]	Results
4881.6	28.15	25.562	29.31	-1.16	25.8	54	PASSED
7321.9	33.9	49.539	29.18	4.72	20.1	54	PASSED

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Channel 7-11 / 2452MHz

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

Frequency [MHz]	E [dBµV/m]	E [µV/m]	U_{RX} [dBµV]	A_{TOT} [dB]	Margin	Limit [dBµV/m]	Results
4905.3	41.54	119.426	42.57	-1.03	32.4	74	PASSED
7357.5	47.43	235.207	42.34	5.09	26.6	74	PASSED

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

Frequency [MHz]	E [dBµV/m]	E [µV/m]	U_{RX} [dBµV]	A_{TOT} [dB]	Margin	Limit [dBµV/m]	Results
31.888	36.83	69.414	41.33	-4.5	3.2	40	PASSED
32	36.96	70.502	41.53	-4.57	3	40	PASSED
32.49	37.31	73.35	42.2	-4.89	2.7	40	PASSED

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

Frequency [MHz]	E [dBµV/m]	E [µV/m]	U_{RX} [dBµV]	A_{TOT} [dB]	Margin	Limit [dBµV/m]	Results
4905.3	28.39	26.266	29.42	-1.03	25.6	54	PASSED
7357.5	34.34	52.137	29.25	5.09	19.6	54	PASSED

3.3.4 802.11n, 64QAM modulation, 108.0 / 120.0 Mbps data rate.

Channel 1-5 / 2422MHz

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

Frequency [MHz]	E [dBµV/m]	E [µV/m]	U_{RX} [dBµV]	A_{TOT} [dB]	Margin	Limit [dBµV/m]	Results
4842.2	40.49	105.767	41.74	-1.25	33.5	74	PASSED
7267.6	45.98	199.113	41.61	4.37	28	74	PASSED

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

Frequency [MHz]	E [dBµV/m]	E [µV/m]	U_{RX} [dBµV]	A_{TOT} [dB]	Margin	Limit [dBµV/m]	Results
31.86	36.31	65.381	40.79	-4.48	3.7	40	PASSED
32.22	36.67	68.179	41.38	-4.71	3.3	40	PASSED
38.079	34.41	52.529	42.87	-8.46	5.6	40	PASSED

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

Frequency [MHz]	E [dBµV/m]	E [µV/m]	U_{RX} [dBµV]	A_{TOT} [dB]	Margin	Limit [dBµV/m]	Results
4842.2	27.5	23.703	28.75	-1.25	26.5	54	PASSED
7267.6	33.59	47.802	29.22	4.37	20.4	54	PASSED

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Channel 4-8 / 2437MHz

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

Frequency [MHz]	E [dBµV/m]	E [µV/m]	U_{RX} [dBµV]	A_{TOT} [dB]	Margin	Limit [dBµV/m]	Results
4881.9	41.06	112.928	42.22	-1.16	32.9	74	PASSED
7321.9	46.7	216.147	41.98	4.72	27.3	74	PASSED

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

Frequency [MHz]	E [dBµV/m]	E [µV/m]	U_{RX} [dBµV]	A_{TOT} [dB]	Margin	Limit [dBµV/m]	Results
31.95	36.61	67.702	41.15	-4.54	3.4	40	PASSED
32.55	36.9	69.992	41.83	-4.93	3.1	40	PASSED
37.989	34.25	51.6	42.65	-8.4	5.7	40	PASSED

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

Frequency [MHz]	E [dBµV/m]	E [µV/m]	U_{RX} [dBµV]	A_{TOT} [dB]	Margin	Limit [dBµV/m]	Results
4881.9	27.95	24.972	29.11	-1.16	26	54	PASSED
7321.9	33.86	49.317	29.14	4.72	20.1	54	PASSED

Channel 7-11 / 2452MHz

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

Frequency [MHz]	E [dBµV/m]	E [µV/m]	U_{RX} [dBµV]	A_{TOT} [dB]	Margin	Limit [dBµV/m]	Results
4902.3	40.95	111.545	41.98	-1.03	33	74	PASSED
7354.7	47.54	238.314	42.45	5.09	26.4	74	PASSED

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

Frequency [MHz]	E [dBµV/m]	E [µV/m]	U_{RX} [dBµV]	A_{TOT} [dB]	Margin	Limit [dBµV/m]	Results
31.86	36.08	63.687	40.56	-4.48	3.9	40	PASSED
32.28	36.9	69.992	41.65	-4.75	3.1	40	PASSED
37.719	34.27	51.713	42.51	-8.24	5.7	40	PASSED

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

Frequency [MHz]	E [dBµV/m]	E [µV/m]	U_{RX} [dBµV]	A_{TOT} [dB]	Margin	Limit [dBµV/m]	Results
4902.3	28.28	25.927	29.31	-1.03	25.7	54	PASSED
7354.7	34.27	51.689	29.18	5.09	19.7	54	PASSED

3.4. 5 GHz RLAN test results, Both Transmit Chains Active

3.4.1 802.11a, BPSK modulation, 6 Mbps data rate.

Channel 149 / 5745MHz

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

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Frequency [MHz]	E [dBµV/m]	E [µV/m]	U_{RX} [dBµV]	A_{TOT} [dB]	Margin	Limit [dBµV/m]	Results
11487.6	53.68	483.003	40.61	13.07	20.3	74	PASSED
17241.6	49.01	282.228	39.32	9.69	76.2	125	PASSED
22975.6	56.11	639.146	41.12	14.99	17.9	74	PASSED

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

Frequency [MHz]	E [dBµV/m]	E [µV/m]	U_{RX} [dBµV]	A_{TOT} [dB]	Margin	Limit [dBµV/m]	Results
11487.6	40.79	109.559	27.72	13.07	13.2	54	PASSED
17241.6	36.19	64.461	26.5	9.69	---	---	PASSED
22975.6	42.46	132.709	27.47	14.99	11.5	54	PASSED

Channel 157 / 5785MHz

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

Frequency [MHz]	E [dBµV/m]	E [µV/m]	U_{RX} [dBµV]	A_{TOT} [dB]	Margin	Limit [dBµV/m]	Results
11569.7	53.71	484.786	40.87	12.84	20.3	74	PASSED
17359.7	49.66	304.194	40.35	9.32	75.6	125	PASSED
23133.2	54.69	542.5	39.84	14.85	---	---	PASSED

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

Frequency [MHz]	E [dBµV/m]	E [µV/m]	U_{RX} [dBµV]	A_{TOT} [dB]	Margin	Limit [dBµV/m]	Results
33.15	37.12	71.771	42.65	-5.53	2.9	40	PASSED
33.18	37.26	72.929	42.81	-5.55	2.7	40	PASSED
33.27	36.93	70.251	42.54	-5.61	3.1	40	PASSED

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

Frequency [MHz]	E [dBµV/m]	E [µV/m]	U_{RX} [dBµV]	A_{TOT} [dB]	Margin	Limit [dBµV/m]	Results
11569.7	40.77	109.232	27.93	12.84	13.2	54	PASSED
17359.7	36.34	65.584	27.03	9.32	---	---	PASSED
23133.2	41.75	122.321	26.9	14.85	---	---	PASSED

Channel 165 / 5825MHz

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

Frequency [MHz]	E [dBµV/m]	E [µV/m]	U_{RX} [dBµV]	A_{TOT} [dB]	Margin	Limit [dBµV/m]	Results
11654.1	53.83	491.53	41.6	12.23	20.1	74	PASSED
17444.8	49.87	311.638	40.48	9.4	75.4	125	PASSED
23304.2	57.34	735.953	42.33	15.01	---	---	PASSED

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

Frequency [MHz]	E [dBµV/m]	E [µV/m]	U_{RX} [dBµV]	A_{TOT} [dB]	Margin	Limit [dBµV/m]	Results
11654.1	40.57	106.807	28.34	12.23	13.4	54	PASSED
17444.8	37.06	71.252	27.67	9.4	---	---	PASSED
23304.2	43.79	154.757	28.78	15.01	---	---	PASSED

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3.4.2 802.11n, 64QAM modulation, 52.0 / 57.8 Mbps data rate.

Channel 149 / 5745MHz

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

Frequency [MHz]	E [dBµV/m]	E [µV/m]	U_{RX} [dBµV]	A_{TOT} [dB]	Margin	Limit [dBµV/m]	Results
11485.6	53.55	475.773	40.48	13.07	20.4	74	PASSED
17236.9	48.87	277.779	39.19	9.68	76.4	125	PASSED
22981.4	55.97	628.854	41	14.97	18	74	PASSED

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

Frequency [MHz]	E [dBµV/m]	E [µV/m]	U_{RX} [dBµV]	A_{TOT} [dB]	Margin	Limit [dBµV/m]	Results
11485.6	40.77	109.282	27.7	13.07	13.2	54	PASSED
17236.9	36.16	64.254	26.48	9.68	---	---	PASSED
22981.4	42.36	131.28	27.39	14.97	11.6	54	PASSED

Channel 157 / 5785MHz

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

Frequency [MHz]	E [dBµV/m]	E [µV/m]	U_{RX} [dBµV]	A_{TOT} [dB]	Margin	Limit [dBµV/m]	Results
11578.4	53.8	489.553	41.12	12.68	20.2	74	PASSED
17345.8	49.61	302.448	40.22	9.4	75.6	125	PASSED
23145.7	55.3	581.835	40.22	15.08	---	---	PASSED

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

Frequency [MHz]	E [dBµV/m]	E [µV/m]	U_{RX} [dBµV]	A_{TOT} [dB]	Margin	Limit [dBµV/m]	Results
33.03	35.94	62.633	41.39	-5.45	4.1	40	PASSED
33.06	36.03	63.292	41.5	-5.47	4	40	PASSED
33.27	35.76	61.341	41.37	-5.61	4.2	40	PASSED

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

Frequency [MHz]	E [dBµV/m]	E [µV/m]	U_{RX} [dBµV]	A_{TOT} [dB]	Margin	Limit [dBµV/m]	Results
11578.4	40.5	105.901	27.82	12.68	13.5	54	PASSED
17345.8	36.34	65.63	26.95	9.4	---	---	PASSED
23145.7	42.07	126.853	26.99	15.08	---	---	PASSED

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Channel 165 / 5825MHz

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

Frequency [MHz]	E [dBµV/m]	E [µV/m]	U_{RX} [dBµV]	A_{TOT} [dB]	Margin	Limit [dBµV/m]	Results
11654	53.83	491.587	41.6	12.23	20.1	74	PASSED
17434.9	50.59	338.337	41.24	9.35	74.6	125	PASSED
23298.2	56.8	691.911	41.72	15.08	---	---	PASSED

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

Frequency [MHz]	E [dBµV/m]	E [µV/m]	U_{RX} [dBµV]	A_{TOT} [dB]	Margin	Limit [dBµV/m]	Results
11654	40.57	106.832	28.34	12.23	13.4	54	PASSED
17434.9	36.72	68.573	27.37	9.35	---	---	PASSED
23298.2	43.96	157.743	28.88	15.08	---	---	PASSED

3.4.3 802.11n, BPSK modulation, 13.5 / 15.0 Mbps data rate.

Channel 149+153 / 5755MHz

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

Frequency [MHz]	E [dBµV/m]	E [µV/m]	U_{RX} [dBµV]	A_{TOT} [dB]	Margin	Limit [dBµV/m]	Results
11513.2	53.98	499.977	40.87	13.11	20	74	PASSED
17261.3	48.83	276.376	39.2	9.63	76.4	125	PASSED
23022.6	54.77	547.835	39.96	14.81	19.2	74	PASSED

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

Frequency [MHz]	E [dBµV/m]	E [µV/m]	U_{RX} [dBµV]	A_{TOT} [dB]	Margin	Limit [dBµV/m]	Results
33.09	36.24	64.834	41.73	-5.49	3.8	40	PASSED
33.12	36.3	65.306	41.81	-5.51	3.7	40	PASSED
37.736	35.26	57.916	43.77	-8.51	4.7	40	PASSED

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

Frequency [MHz]	E [dBµV/m]	E [µV/m]	U_{RX} [dBµV]	A_{TOT} [dB]	Margin	Limit [dBµV/m]	Results
11513.2	41.03	112.538	27.92	13.11	13	54	PASSED
17261.3	36.17	64.343	26.54	9.63	---	---	PASSED
23022.6	41.85	123.723	27.04	14.81	12.1	54	PASSED

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Channel 157+161 / 5795MHz

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

Frequency [MHz]	E [dBµV/m]	E [µV/m]	U_{RX} [dBµV]	A_{TOT} [dB]	Margin	Limit [dBµV/m]	Results
11570.3	53.57	476.87	40.74	12.83	20.4	74	PASSED
17393	48.86	277.172	39.58	9.28	76.4	125	PASSED
23167.5	54.88	554.817	39.7	15.18	---	---	PASSED

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

Frequency [MHz]	E [dBµV/m]	E [µV/m]	U_{RX} [dBµV]	A_{TOT} [dB]	Margin	Limit [dBµV/m]	Results
11570.3	40.58	106.942	27.75	12.83	13.4	54	PASSED
17393	36.37	65.872	27.09	9.28	---	---	PASSED
23167.5	42.06	126.721	26.88	15.18	---	---	PASSED

3.4.4 802.11n, QPSK modulation, 40.5 / 45.0 Mbps data rate.

Channel 149+153 / 5755MHz

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

Frequency [MHz]	E [dBµV/m]	E [µV/m]	U_{RX} [dBµV]	A_{TOT} [dB]	Margin	Limit [dBµV/m]	Results
11513.8	54.6	536.846	41.49	13.11	19.4	74	PASSED
17261.7	49.08	284.512	39.45	9.63	76.1	125	PASSED
23017.3	54.92	557.378	40.09	14.84	19.1	74	PASSED

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

Frequency [MHz]	E [dBµV/m]	E [µV/m]	U_{RX} [dBµV]	A_{TOT} [dB]	Margin	Limit [dBµV/m]	Results
33.09	36.03	63.329	41.52	-5.49	4	40	PASSED
33.15	36.36	65.773	41.89	-5.53	3.6	40	PASSED
33.302	36.03	63.285	41.66	-5.63	4	40	PASSED

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

Frequency [MHz]	E [dBµV/m]	E [µV/m]	U_{RX} [dBµV]	A_{TOT} [dB]	Margin	Limit [dBµV/m]	Results
11513.8	41.08	113.279	27.97	13.11	12.9	54	PASSED
17261.7	36.18	64.402	26.55	9.63	---	---	PASSED
23017.3	41.89	124.294	27.06	14.84	12.1	54	PASSED

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Channel 157+161 / 5795MHz

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

Frequency [MHz]	E [dBµV/m]	E [µV/m]	U_{RX} [dBµV]	A_{TOT} [dB]	Margin	Limit [dBµV/m]	Results
11571.8	53.79	489.272	41	12.79	20.2	74	PASSED
17368.3	49.47	297.509	40.22	9.25	75.8	125	PASSED
23166.3	55.26	579.562	40.09	15.18	---	---	PASSED

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

Frequency [MHz]	E [dBµV/m]	E [µV/m]	U_{RX} [dBµV]	A_{TOT} [dB]	Margin	Limit [dBµV/m]	Results
11571.8	40.59	107.078	27.8	12.79	13.4	54	PASSED
17368.3	36.29	65.208	27.04	9.25	---	---	PASSED
23166.3	42.04	126.532	26.87	15.18	---	---	PASSED

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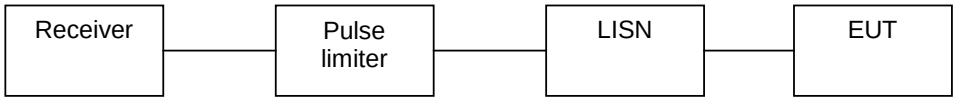
4. AC powerline conducted emissions
(FCC §15.207, RSS-GEN 7.2.2)

EUT with DUT number	RX-114, DUT 17630
Accessories with DUT numbers	AC-300, DUT 17626 ; WH-208, DUT 17586
Operation Voltage [V] / [Hz]	Nominal
Results	PASSED
Remarks	-
Temp [°C] / Humidity [%RH] / Air Pressure [kPa]	21 / 68 / 101.8
Date of measurements	10-Sep-2013
Measured by	Jari Keto

4.1. Test Setup



4.2. Test method and limit

The measurement is made according to procedure KDB 558074 and IC standard RSS-GEN 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

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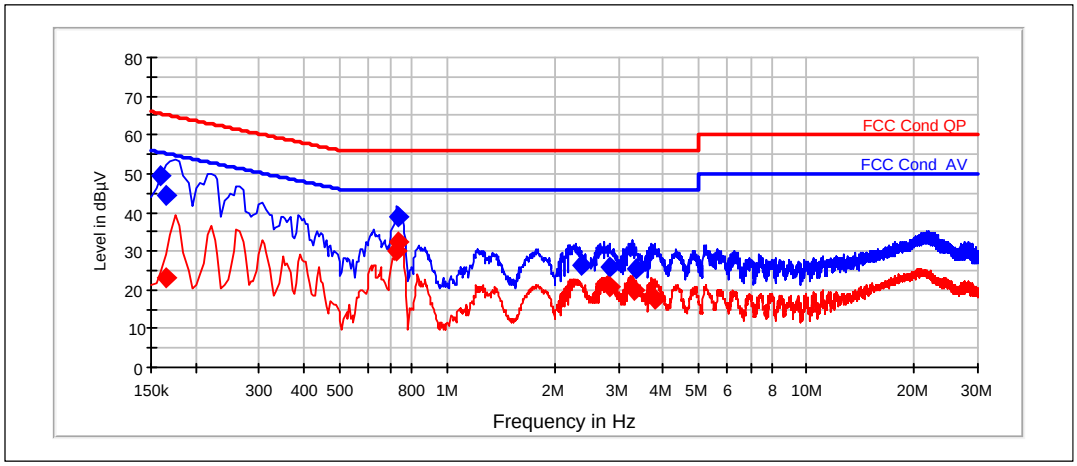
4.3. WLAN Test results

4.3.1 802.11g mode, 16QAM modulation, 24 Mbps data rate

Channel 6 / 2437 MHz



QuasiPeak (RBW: 9 kHz)

Frequency [MHz]	U [dBµV]	Line	Result
0.16	49.4	N	PASSED
0.165	44.56	L1	PASSED
0.73	38.62	N	PASSED
2.37	26.13	N	PASSED
2.835	25.85	N	PASSED
3.35	25.34	N	PASSED

Average (RBW: 9 kHz)

Frequency [MHz]	U [dBµV]	Line	Result
0.165	23.02	N	PASSED
0.725	30.15	N	PASSED
0.73	32.23	N	PASSED
2.85	20.8	N	PASSED
3.335	19.8	N	PASSED
3.805	17.55	N	PASSED

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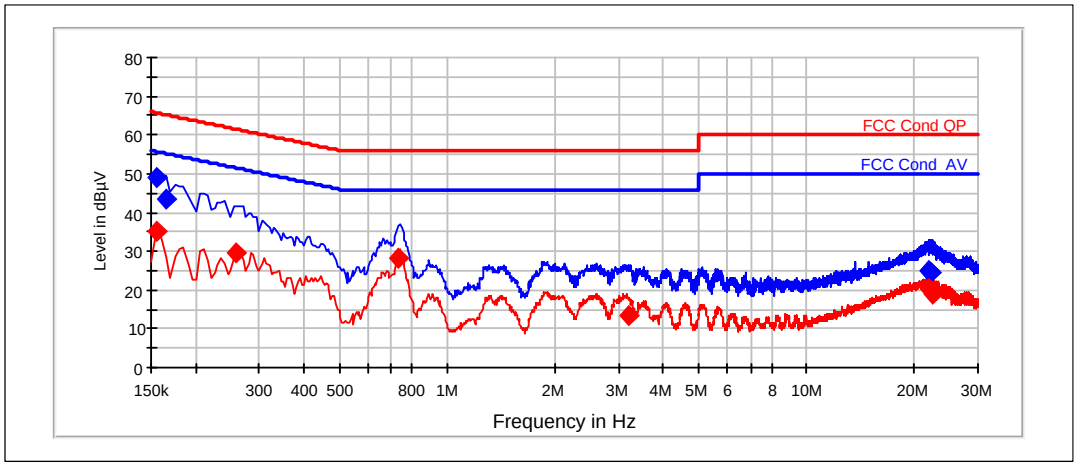
4.4. 5 GHz RLAN Test results

4.4.1 802.11a mode, BPSK modulation, 6 Mbps data rate

Channel 157 / 5785 MHz



QuasiPeak (RBW: 9 kHz)

Frequency [MHz]	U [dBµV]	Line	Result
0.155	48.83	N	PASSED
0.165	43.31	N	PASSED
21.895	25.14	N	PASSED
21.965	25.05	N	PASSED
22.075	24.53	L1	PASSED

Average (RBW: 9 kHz)

Frequency [MHz]	U [dBµV]	Line	Result
0.155	35.05	N	PASSED
0.26	29.68	N	PASSED
0.735	28.38	L1	PASSED
3.21	13.41	N	PASSED
21.775	20.2	N	PASSED
22.325	18.74	L1	PASSED

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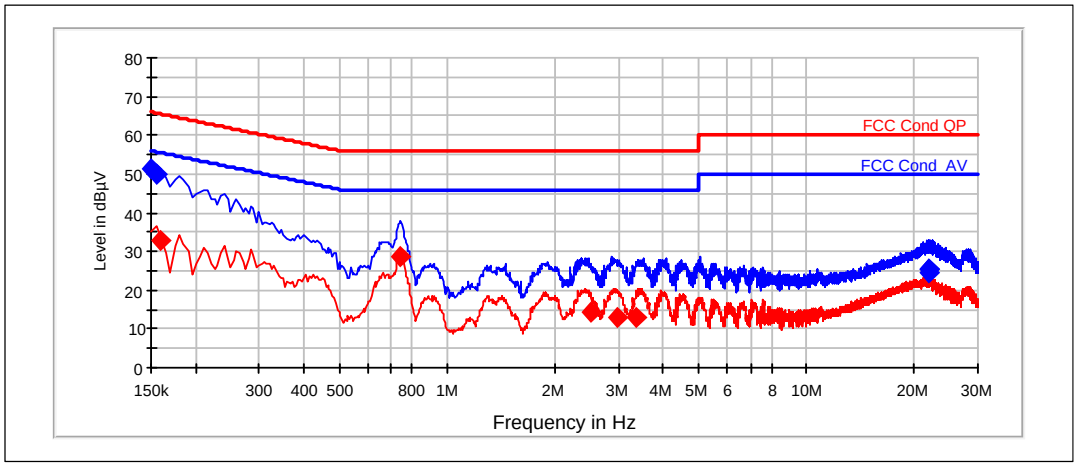
4.4.2 802.11n mode, BPSK modulation, 13.5 / 15.0 Mbps data rate

Channel 149+153 / 5755 MHz



QuasiPeak (RBW: 9 kHz)

Frequency [MHz]	U [dBµV]	Line	Result
0.15	51.14	L1	PASSED
0.155	50.16	N	PASSED
21.84	25.3	N	PASSED
21.845	25.3	N	PASSED
21.96	24.71	L1	PASSED

Average (RBW: 9 kHz)

Frequency [MHz]	U [dBµV]	Line	Result
0.16	32.96	N	PASSED
0.74	28.46	L1	PASSED
2.515	14.53	N	PASSED
2.975	12.88	N	PASSED
3.34	12.92	N	PASSED

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5. Test Equipment

5.1. 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

5.2. 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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