

FCC Part 15E Compliance Test Report

Test Report no.:	FCC15E_RM-860_06.docx	Date of Report:	22-Jan-2013
Number of pages:	145	Customer's Contact person:	Thomas Mary
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FCC listing no.:	533467		
IC recognition no.:	661V-1		
Tested devices/ accessories:	Phone RM-860 / Headset WH-902 / AC-Charger AC-50U		
FCC ID:	QMNRM-860	IC:	661X-RM860
Supplement reports:	-		
Testing has been carried out in accordance with:	CFR 47, FCC rules Part 15 Subpart E, ANSI C63.4 (2003), DTS procedures KDB 789033 D01, 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:			

Sami Lehtonen, Specialist, EMC

1. Summary for FCC Part 15E Compliance Test Report

Date of receipt	26-Nov-2012
Testing completed	27-Dec-2012
The customer's contact person	Thomas Mary
Test Plan referred to	T:\Projects\RM-860\TestPlan\RS_testplan_RM-860_EMCC_FCC_SAR_HAC.xlsm
Notes	-
Document name	T:\Projects\RM-860\EMC\FCC15E_RM-860_06.docx

1.1. EUT and Accessory Information

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

Devices under tests

Product	Type	SN	HW	MV	SW	DUT
Phone	RM-860	354106050003398	0102	-	1532.5701.9200.10205.56	16892
Phone	RM-860	354106050009015	0103	-	1532.5701.9200.10205.56	17007
Headset	WH-902	06949721245B2R	-	-	-	17006
AC-Charger	AC-50U	409049215427050145100675620	860	-	-	17005
Phone	RM-860	354106050008520	0103	-	1532.5951.1249.0000	17028
Headset	WH-902	0694972	-	-	-	17008
AC-Charger	AC-50U	409049215427050147000675620	860	-	-	17009

1.2. Summary of Test Results

5 GHz RLAN:

Section in CFR 47	Section in RSS-GEN or RSS-210	Name of the test	Result
15.407(a)	A9.2	Conducted peak output power	PASSED
15.407(b)	A9.2	Band edge compliance of RF emissions	PASSED
15.407(a)(6)	A9.2	Peak excursion	PASSED
15.407(b)	A9.2	Spurious radiated emissions	PASSED
15.407(b)(6)	A9.2	AC powerline conducted emissions	PASSED
-	A9.2	26dB(bandwidth)	PASSED
15.407(a)	A9.2	Power spectral density	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.

CONTENTS

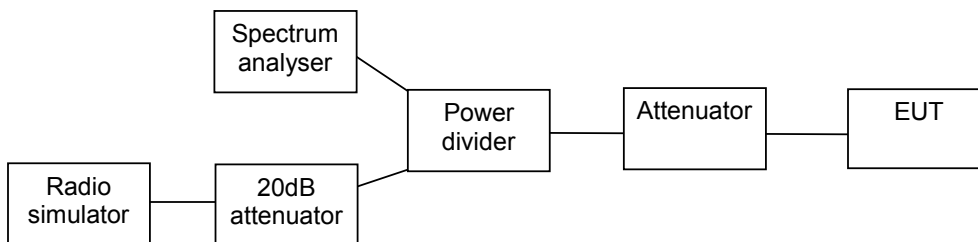
1. Summary for FCC Part 15E Compliance Test Report.....	2
1.1. EUT and Accessory Information.....	2
1.2. Summary of Test Results.....	2
2. Maximum conducted output power (FCC §15.407 (a), RSS-210 A9.2).....	5
2.1. Test Setup.....	5
2.2. Test method and limit.....	5
2.3. Power results summary.....	6
2.4. 5 GHz RLAN Test results.....	7
3. Peak excursion (FCC §15.407 (a), RSS-210 A9.2).....	41
3.1. Test Setup.....	41
3.2. Test method and limit.....	41
3.3. 5 GHz RLAN Test results.....	42
4. 26 dB bandwidth	61
4.1. Test Setup.....	61
4.2. Test method and limit.....	61
4.3. 5 GHz RLAN Test results.....	62
5. Spurious radiated emissions (FCC §15.407 (b), RSS-210 A9.2).....	82
5.2. Test method and limit.....	82
5.3. 5 GHz RLAN test results	84
5.4. 5 GHz RLAN test results	97
6. Band edge compliance of RF emissions (FCC §15.407 (b), RSS-210 A9.2).....	102
6.2. Test method and limit.....	102
6.3. 5 GHz RLAN test results	103
7. Peak power spectral density (FCC §15.407(a), RSS-210 A9.2).....	127
7.1. Test Setup.....	127
7.2. Test method and limit.....	127
7.3. 5 GHz RLAN Test results.....	128
8. AC powerline conducted emissions (FCC §15.407 (b) (6), RSS-210 A9.2)	139
8.1. Test Setup.....	139
8.2. Test method and limit.....	139

8.3.	5 GHz RLAN Test results	140
9.	Test Equipment.....	144
9.1.	Conducted measurements	144
9.2.	Radiated measurements	144

2. Maximum conducted output power (FCC §15.407 (a), RSS-210 A9.2)

EUT with DUT number	RM-860, DUT 16892
Accessories with DUT numbers	-
Operation Voltage [V] / [Hz]	Nominal
Results	PASSED
Remarks	-
Temp [°C] / Humidity [%RH] / Air Pressure [kPa]	21 / 43 / 100.9
Date of measurements	02-Dec-2012
Measured by	Sami Lehtonen

2.1. Test Setup



2.2. Test method and limit

The measurement is made according to Public Notice KDB 789033 D01 and IC standard RSS-210.

Limits for Maximum conducted output power measurements

Frequency range [MHz]	Limit [mW] / (dBm)	Limit [dBm]	Limit [dBm] for B=20 MHz
5150-5250	50 (17)	$4+10 \log B$	17
5250-5350	250 (24)	$11+10 \log B$	24
5470-5725	250 (24)	$11+10 \log B$	24
5725-5825	1000 (30)	$17+10 \log B$	30

2.3. Power results summary

Channel / fC [MHz]	Mode	Modulation	Data rate	Level [dBm]
36 / 5180	OFDM	BPSK	6 Mbps	11.24
36 / 5180	OFDM	BPSK	9 Mbps	11.26
36 / 5180	n-mode, 20 MHz CBW	BPSK	6.5 / 7.25 Mbps	11.32
36+40 / 5190	n-mode, 40 MHz CBW	BPSK	13.5 / 15.0 Mbps	8.24
36 / 5180	OFDM	QPSK	12 Mbps	11.36
36 / 5180	OFDM	QPSK	18 Mbps	11.42
36 / 5180	OFDM	16-QAM	24 Mbps	11.67
36 / 5180	OFDM	64-QAM	48 Mbps	11.81
36 / 5180	OFDM	64-QAM	54 Mbps	11.46
36 / 5180	OFDM	16-QAM	36 Mbps	11.56
36 / 5180	n-mode, 20 MHz CBW	QPSK	13.0 / 14.4 Mbps	11.3
36 / 5180	n-mode, 20 MHz CBW	QPSK	19.5 / 21.7 Mbps	11.21
36 / 5180	n-mode, 20 MHz CBW	16-QAM	26.0 / 28.9 Mbps	11.11
36 / 5180	n-mode, 20 MHz CBW	16-QAM	39.0 / 43.3 Mbps	11.46
36 / 5180	n-mode, 20 MHz CBW	64-QAM	52.0 / 57.8 Mbps	11.89
36 / 5180	n-mode, 20 MHz CBW	64-QAM	58.5 / 65.0 Mbps	11.07
36 / 5180	n-mode, 20 MHz CBW	64-QAM	65.0 / 72.2 Mbps	11.29
36+40 / 5190	n-mode, 40 MHz CBW	QPSK	27.0 / 30.0 Mbps	11.21
36+40 / 5190	n-mode, 40 MHz CBW	QPSK	40.5 / 45.0 Mbps	8.06
36+40 / 5190	n-mode, 40 MHz CBW	16-QAM	54.0 / 60.0 Mbps	8.85
36+40 / 5190	n-mode, 40 MHz CBW	16-QAM	81.0 / 90.0 Mbps	8.22
36+40 / 5190	n-mode, 40 MHz CBW	64-QAM	108.0 / 120.0 Mbps	8.42
36+40 / 5190	n-mode, 40 MHz CBW	64-QAM	121.5 / 135.0 Mbps	8.31
36+40 / 5190	n-mode, 40 MHz CBW	64-QAM	135.0 / 150.0 Mbps	8.18
36+40 / 5190	n-mode, 40 MHz CBW	BPSK	13.5 / 15.0 Mbps	8.18
36+40 / 5190	n-mode, 40 MHz CBW	BPSK	13.5 / 15.0 Mbps	8.19
36+40 / 5190	n-mode, 40 MHz CBW	BPSK	13.5 / 15.0 Mbps	10.77
36+40 / 5190	n-mode, 40 MHz CBW	BPSK	13.5 / 15.0 Mbps	12.08
36 / 5180	n-mode, 20 MHz CBW	BPSK	6.5 / 7.25 Mbps	11.35
40 / 5200	n-mode, 20 MHz CBW	BPSK	6.5 / 7.25 Mbps	11.22
48 / 5240	n-mode, 20 MHz CBW	BPSK	6.5 / 7.25 Mbps	11.25
52 / 5260	n-mode, 20 MHz CBW	BPSK	6.5 / 7.25 Mbps	11.37
60 / 5300	n-mode, 20 MHz CBW	BPSK	6.5 / 7.25 Mbps	11.21
64 / 5320	n-mode, 20 MHz CBW	BPSK	6.5 / 7.25 Mbps	11.42
100 / 5500	n-mode, 20 MHz CBW	BPSK	6.5 / 7.25 Mbps	11.96
116 / 5580	n-mode, 20 MHz CBW	BPSK	6.5 / 7.25 Mbps	11.66
140 / 5700	n-mode, 20 MHz CBW	BPSK	6.5 / 7.25 Mbps	11.66
36 / 5180	n-mode, 20 MHz CBW	64-QAM	52.0 / 57.8 Mbps	11.07
40 / 5200	n-mode, 20 MHz CBW	64-QAM	52.0 / 57.8 Mbps	11.01
48 / 5240	n-mode, 20 MHz CBW	64-QAM	52.0 / 57.8 Mbps	10.89
52 / 5260	n-mode, 20 MHz CBW	64-QAM	52.0 / 57.8 Mbps	10.72
60 / 5300	n-mode, 20 MHz CBW	64-QAM	52.0 / 57.8 Mbps	10.66
64 / 5320	n-mode, 20 MHz CBW	64-QAM	52.0 / 57.8 Mbps	10.96
100 / 5500	n-mode, 20 MHz CBW	64-QAM	52.0 / 57.8 Mbps	11.8
116 / 5580	n-mode, 20 MHz CBW	64-QAM	52.0 / 57.8 Mbps	12.19
140 / 5700	n-mode, 20 MHz CBW	64-QAM	52.0 / 57.8 Mbps	12.35
36+40 / 5190	n-mode, 40 MHz CBW	QPSK	27.0 / 30.0 Mbps	7.71
36+40 / 5190	n-mode, 40 MHz CBW	QPSK	27.0 / 30.0 Mbps	8.02
44+48 / 5230	n-mode, 40 MHz CBW	QPSK	27.0 / 30.0 Mbps	8.05
52+56 / 5270	n-mode, 40 MHz CBW	QPSK	27.0 / 30.0 Mbps	7.81
60+64 / 5310	n-mode, 40 MHz CBW	QPSK	27.0 / 30.0 Mbps	7.84

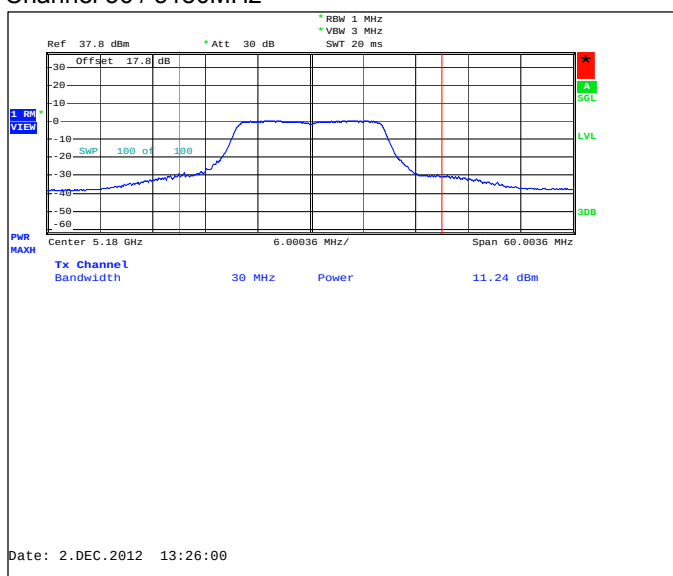
100+104 / 5510	n-mode, 40 MHz CBW	QPSK	27.0 / 30.0 Mbps	8.82
108+112 / 5550	n-mode, 40 MHz CBW	QPSK	27.0 / 30.0 Mbps	9.42
132+136 / 5670	n-mode, 40 MHz CBW	QPSK	27.0 / 30.0 Mbps	9.71

2.4. 5 GHz RLAN Test results

2.4.1 OFDM mode, BPSK modulation, 6 Mbps data rate

Channel / f _c [MHz]	P [dBm]	P [mW]	Result
36 / 5180	11.24	13.305	PASSED

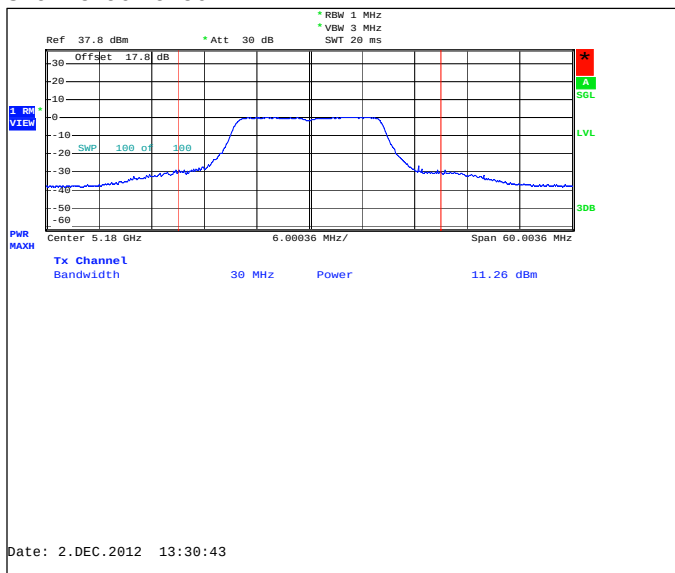
Channel 36 / 5180MHz



2.4.2 OFDM mode, BPSK modulation, 9 Mbps data rate

Channel / f _c [MHz]	P [dBm]	P [mW]	Result
36 / 5180	11.26	13.366	PASSED

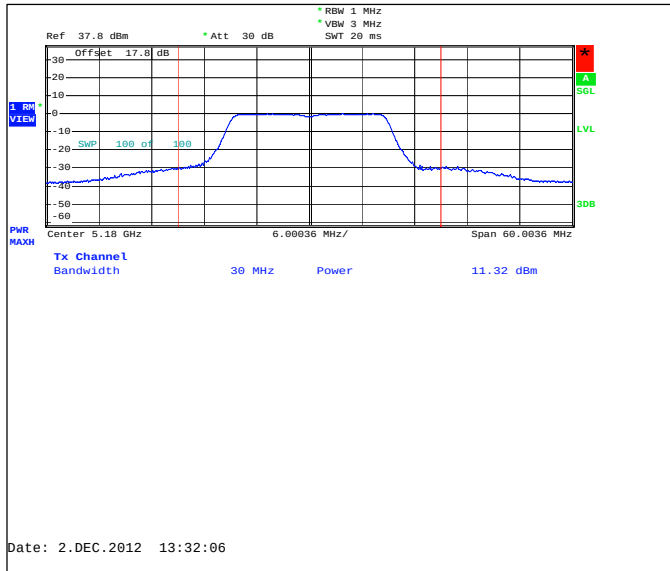
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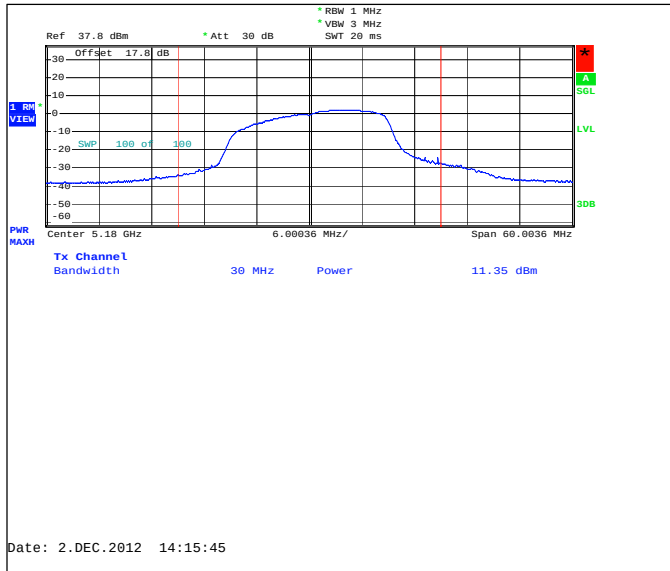
2.4.3 n-mode, 20 MHz CBW mode, BPSK modulation, 6.5 / 7.25 Mbps data rate

Channel / f_c [MHz]	P [dBm]	P [mW]	Result
36 / 5180	11.32	13.552	PASSED
36 / 5180	11.35	13.646	PASSED
40 / 5200	11.22	13.243	PASSED
48 / 5240	11.25	13.335	PASSED
52 / 5260	11.37	13.709	PASSED
60 / 5300	11.21	13.213	PASSED
64 / 5320	11.42	13.868	PASSED
100 / 5500	11.96	15.704	PASSED
116 / 5580	11.66	14.655	PASSED
140 / 5700	11.66	14.655	PASSED

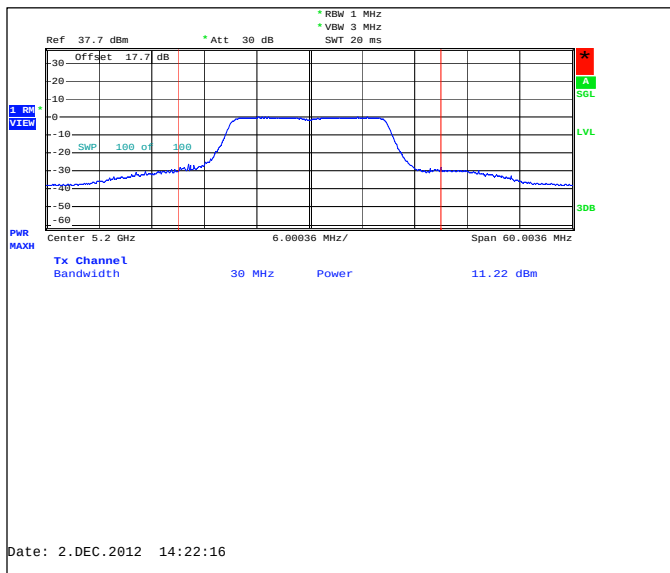
Channel 36 / 5180MHz



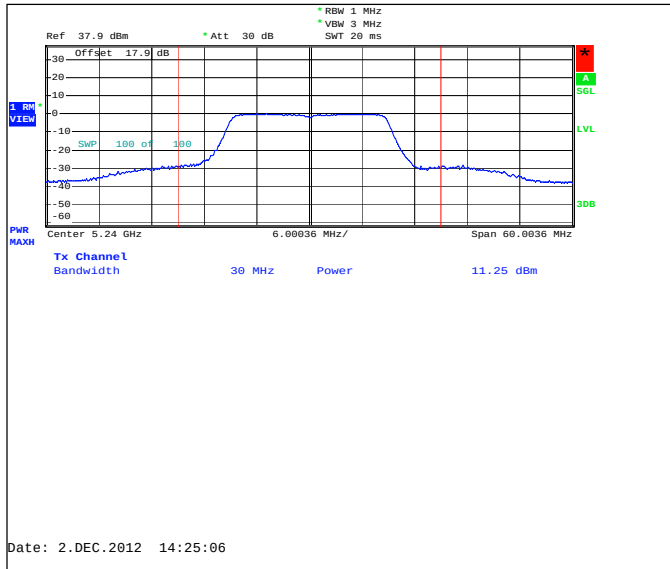
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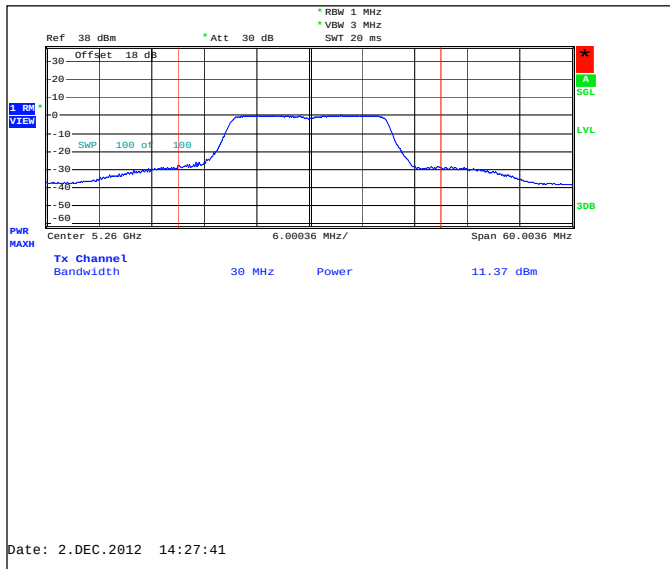
Channel 40 / 5200MHz



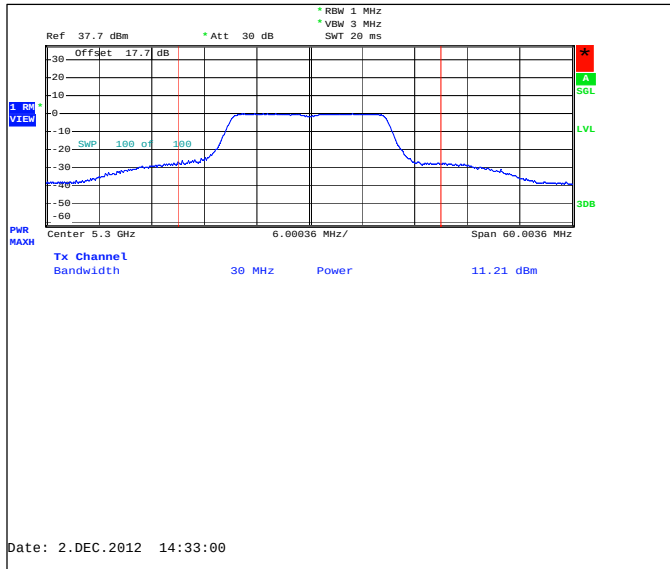
Channel 48 / 5240MHz



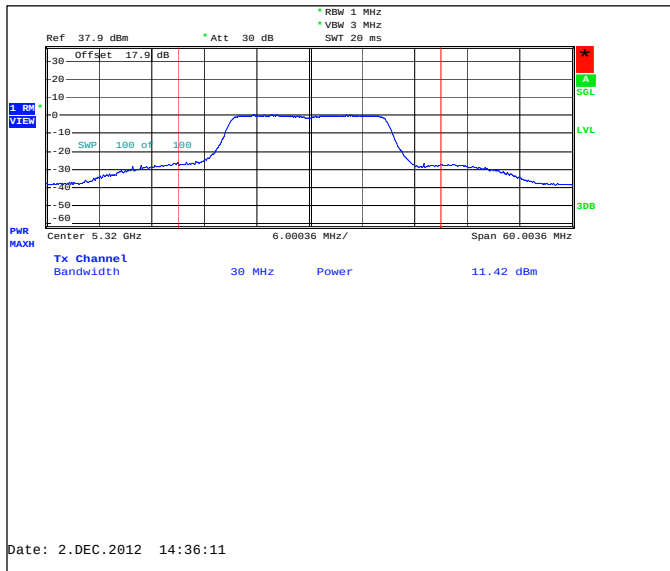
Channel 52 / 5260MHz



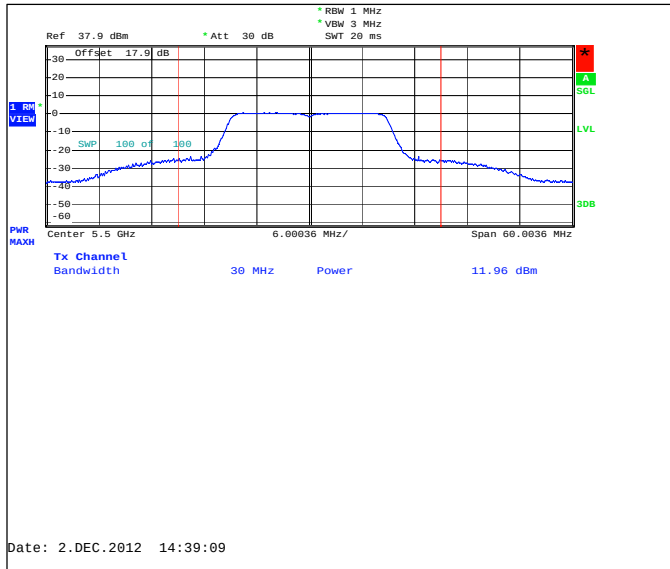
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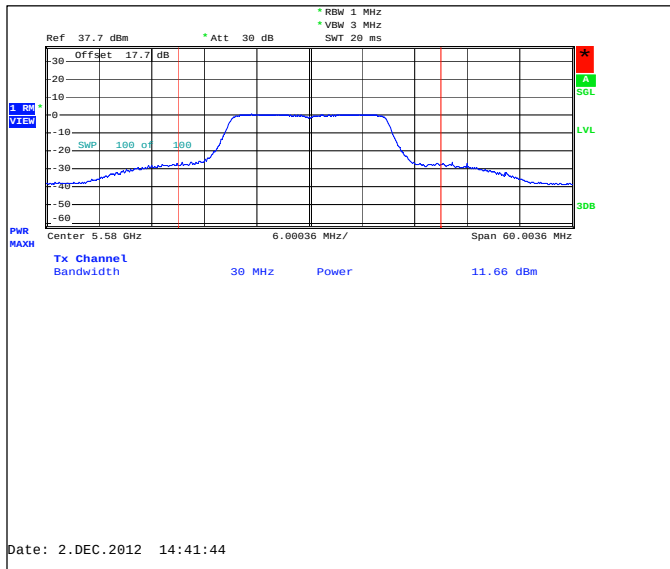
Channel 64 / 5320MHz



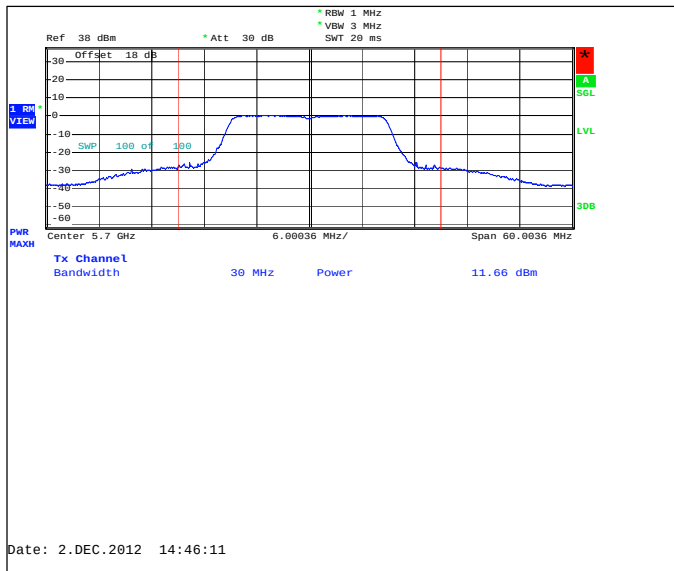
Channel 100 / 5500MHz



Channel 116 / 5580MHz



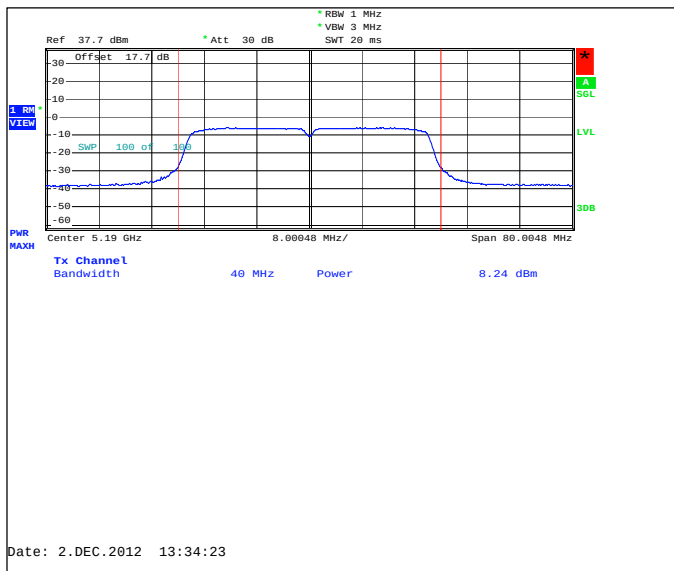
Channel 140 / 5700MHz



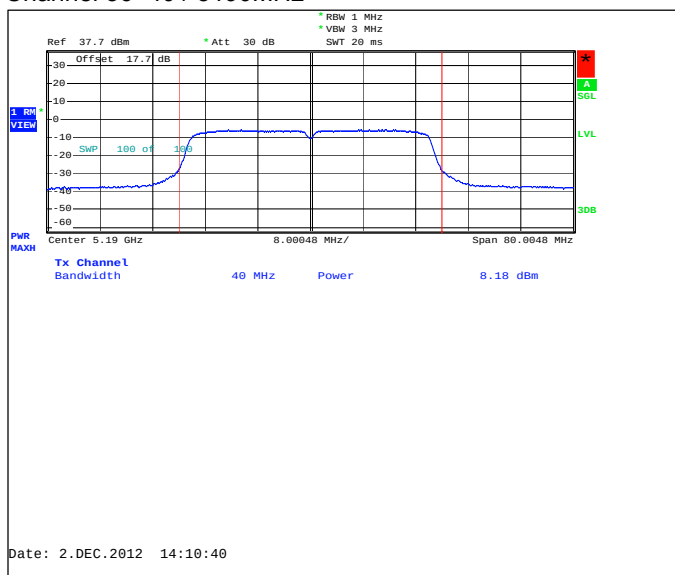
2.4.4 n-mode, 40 MHz CBW mode, BPSK modulation, 13.5 / 15.0 Mbps data rate

Channel / f_c [MHz]	P [dBm]	P [mW]	Result
36+40 / 5190	8.24	6.668	PASSED
36+40 / 5190	8.18	6.577	PASSED
36+40 / 5190	8.19	6.592	PASSED
36+40 / 5190	10.77	11.94	PASSED
36+40 / 5190	12.08	16.144	PASSED

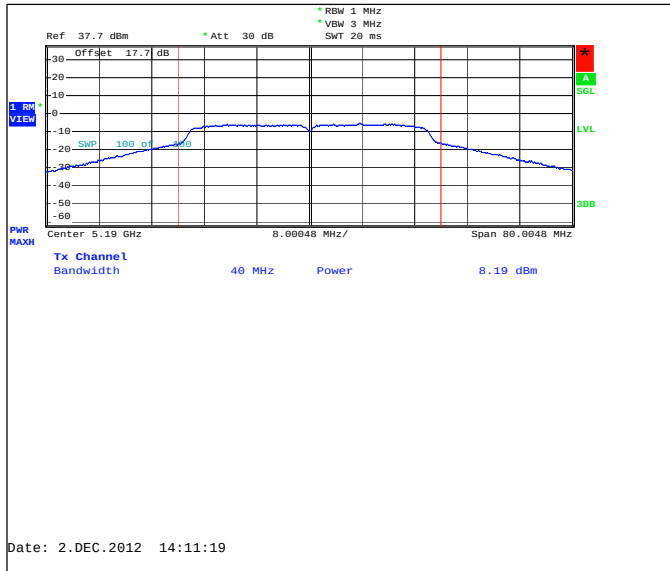
Channel 36+40 / 5190MHz



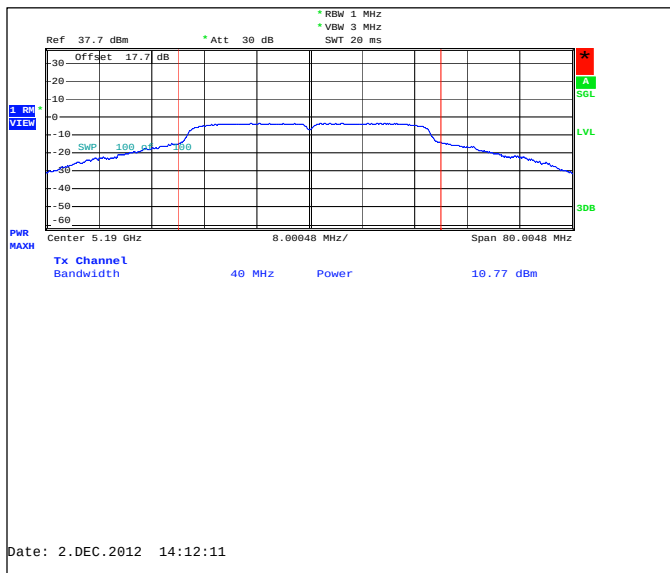
Channel 36+40 / 5190MHz



Channel 36+40 / 5190MHz



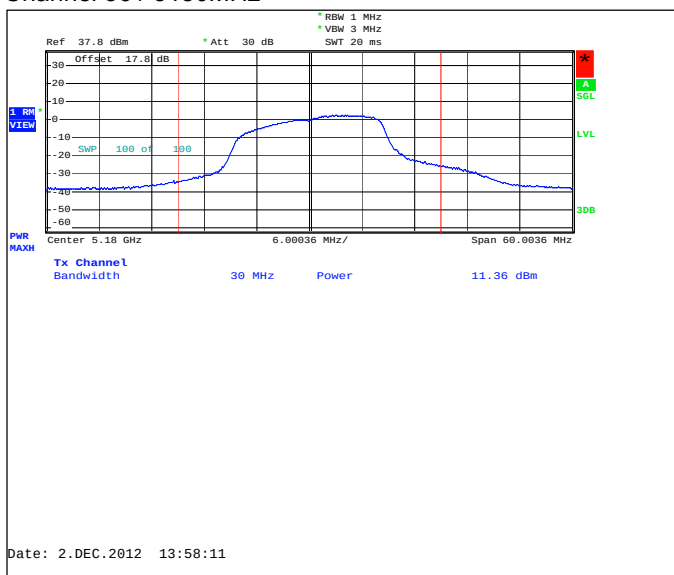
Channel 36+40 / 5190MHz



[illegible]

Channel / f _c [MHz]	P [dBm]	P [mW]	Result
36 / 5180	11.36	13.677	PASSED

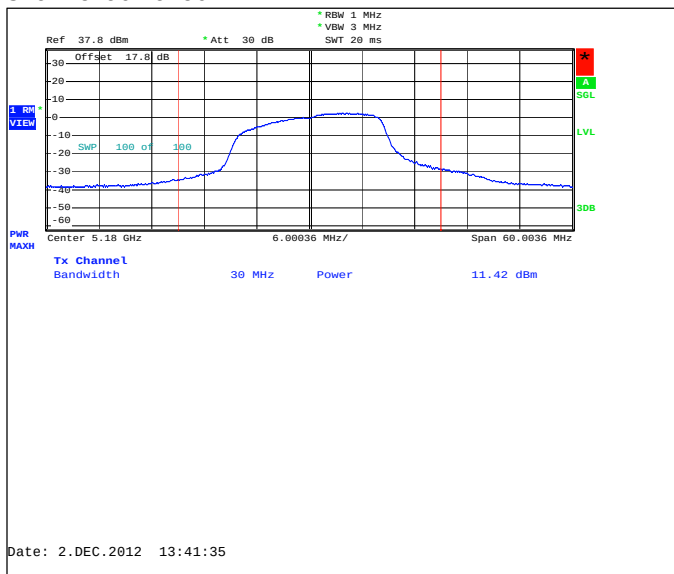
Channel 36 / 5180MHz



2.4.6 OFDM mode, QPSK modulation, 18 Mbps data rate

Channel / f _c [MHz]	P [dBm]	P [mW]	Result
36 / 5180	11.42	13.868	PASSED

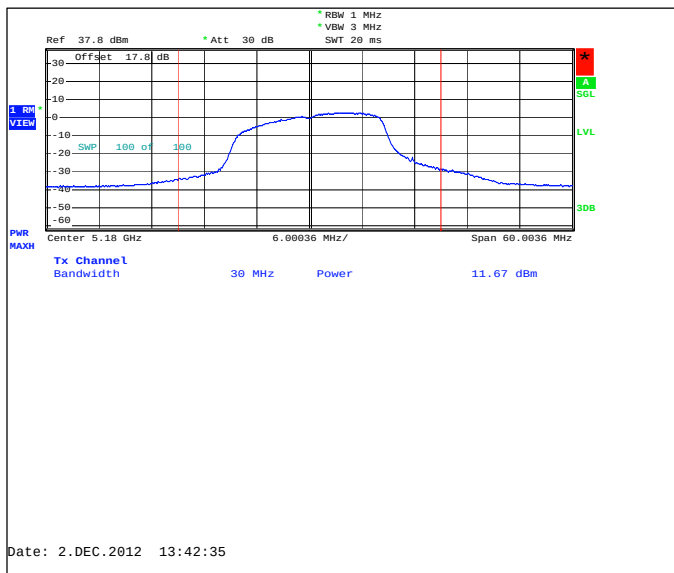
Channel 36 / 5180MHz



2.4.7 OFDM mode, 16-QAM modulation, 24 Mbps data rate

Channel / f_c [MHz]	P [dBm]	P [mW]	Result
36 / 5180	11.67	14.689	PASSED

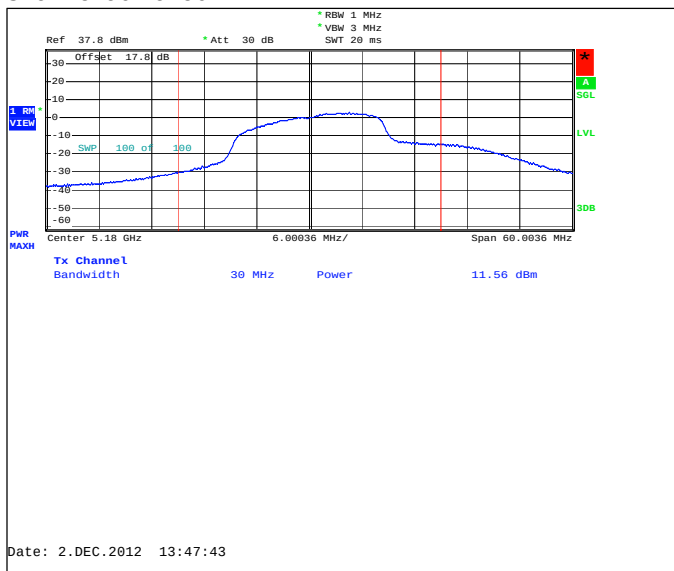
Channel 36 / 5180MHz



2.4.8 OFDM mode, 16-QAM modulation, 36 Mbps data rate

Channel / f_c [MHz]	P [dBm]	P [mW]	Result
36 / 5180	11.56	14.322	PASSED

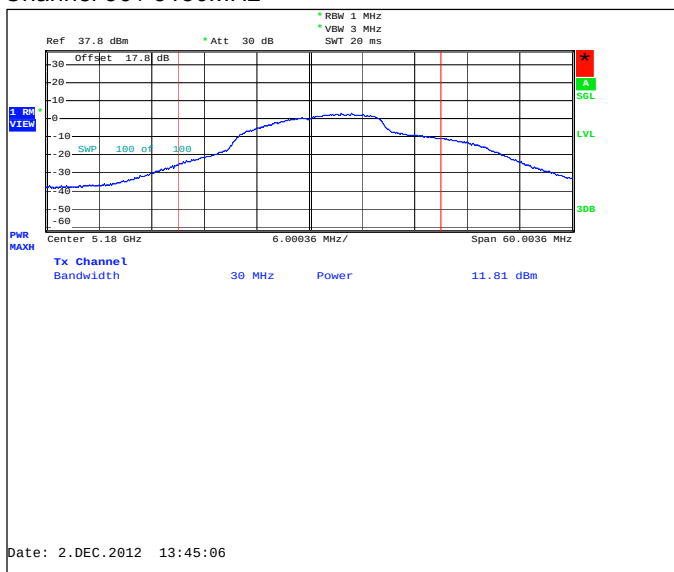
Channel 36 / 5180MHz



2.4.9 OFDM mode, 64-QAM modulation, 48 Mbps data rate

Channel / f_c [MHz]	P [dBm]	P [mW]	Result
36 / 5180	11.81	15.171	PASSED

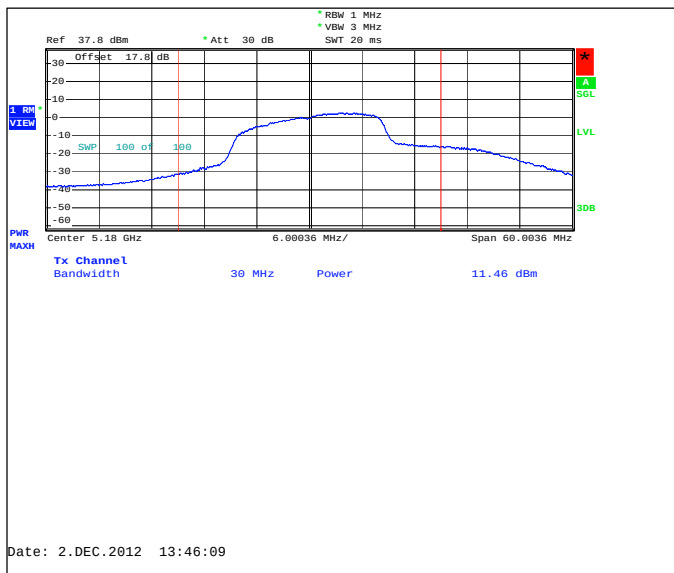
Channel 36 / 5180MHz



2.4.10 OFDM mode, 64-QAM modulation, 54 Mbps data rate

Channel / f_c [MHz]	P [dBm]	P [mW]	Result
36 / 5180	11.46	13.996	PASSED

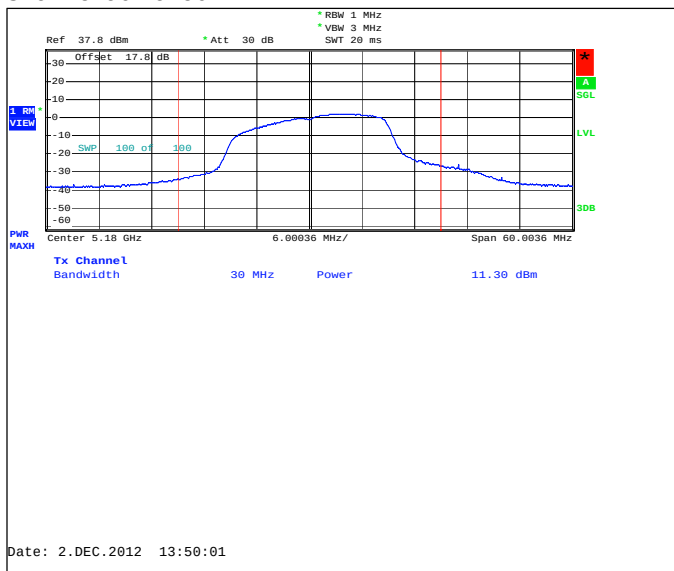
Channel 36 / 5180MHz



2.4.11 n-mode, 20 MHz CBW mode, QPSK modulation, 13.0 / 14.4 Mbps data rate

Channel / f_c [MHz]	P [dBm]	P [mW]	Result
36 / 5180	11.3	13.49	PASSED

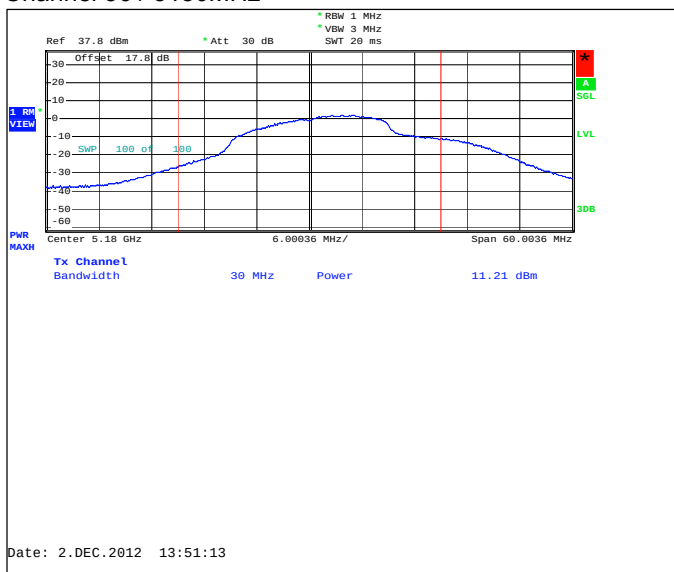
Channel 36 / 5180MHz



2.4.12 n-mode, 20 MHz CBW mode, QPSK modulation, 19.5 / 21.7 Mbps data rate

Channel / f_c [MHz]	P [dBm]	P [mW]	Result
36 / 5180	11.21	13.213	PASSED

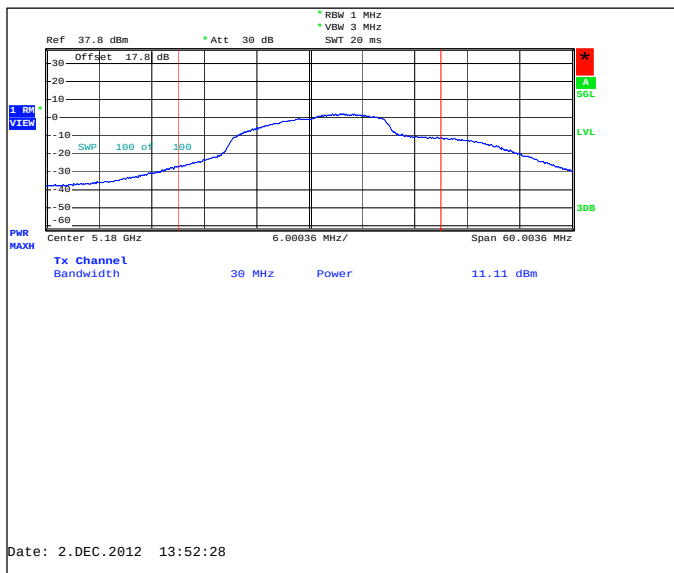
Channel 36 / 5180MHz



2.4.13 n-mode, 20 MHz CBW mode, 16-QAM modulation, 26.0 / 28.9 Mbps data rate

Channel / f_c [MHz]	P [dBm]	P [mW]	Result
36 / 5180	11.11	12.912	PASSED

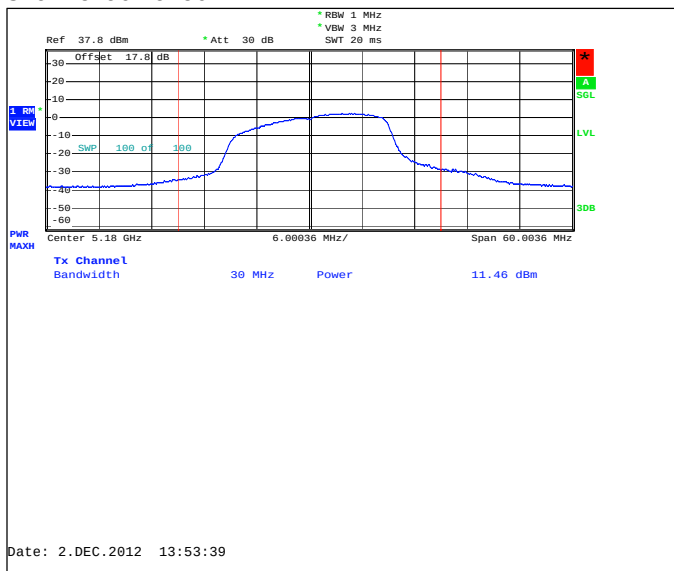
Channel 36 / 5180MHz



2.4.14 n-mode, 20 MHz CBW mode, 16-QAM modulation, 39.0 / 43.3 Mbps data rate

Channel / f_c [MHz]	P [dBm]	P [mW]	Result
36 / 5180	11.46	13.996	PASSED

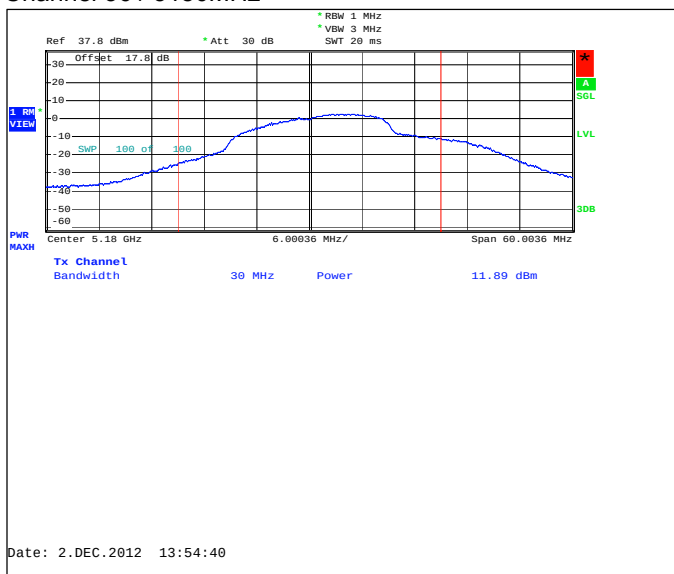
Channel 36 / 5180MHz



2.4.15 n-mode, 20 MHz CBW mode, 64-QAM modulation, 52.0 / 57.8 Mbps data rate

Channel / f_c [MHz]	P [dBm]	P [mW]	Result
36 / 5180	11.89	15.453	PASSED

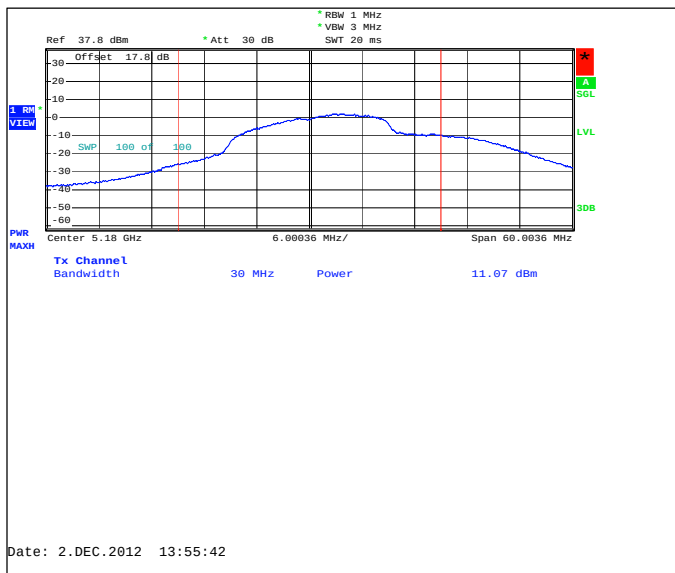
Channel 36 / 5180MHz



2.4.16 n-mode, 20 MHz CBW mode, 64-QAM modulation, 58.5 / 65.0 Mbps data rate

Channel / f_c [MHz]	P [dBm]	P [mW]	Result
36 / 5180	11.07	12.794	PASSED

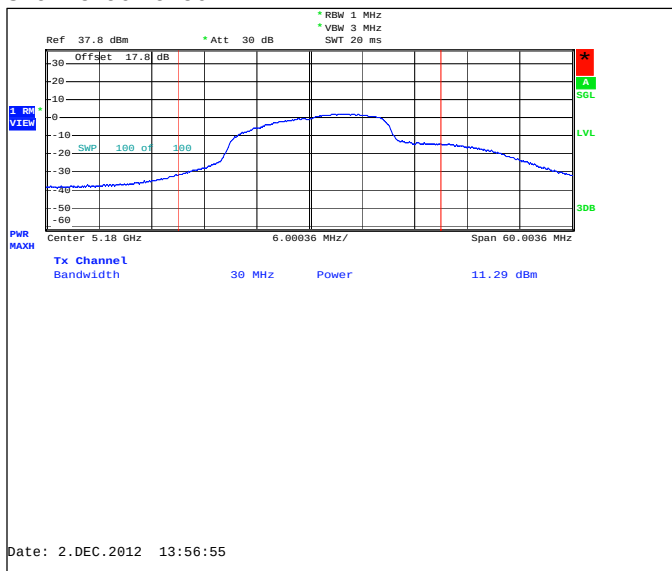
Channel 36 / 5180MHz



2.4.17 n-mode, 20 MHz CBW mode, 64-QAM modulation, 65.0 / 72.2 Mbps data rate

Channel / f_c [MHz]	P [dBm]	P [mW]	Result
36 / 5180	11.29	13.459	PASSED

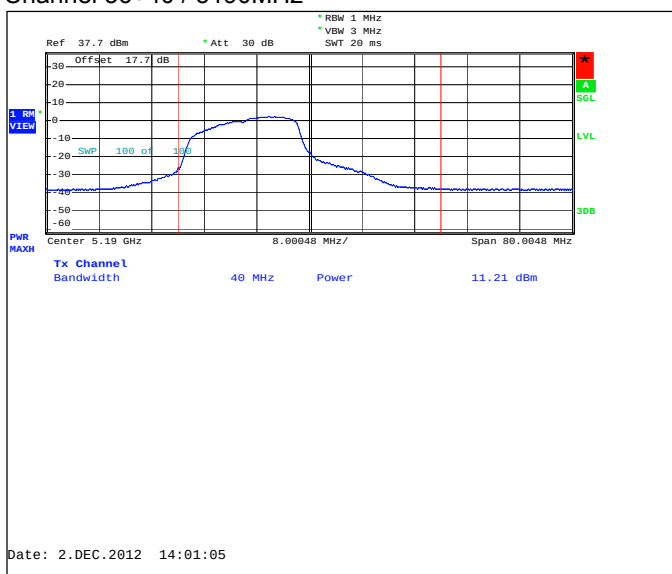
Channel 36 / 5180MHz



2.4.18 n-mode, 40 MHz CBW mode, QPSK modulation, 27.0 / 30.0 Mbps data rate

Channel / f_c [MHz]	P [dBm]	P [mW]	Result
36+40 / 5190	11.21	13.213	PASSED

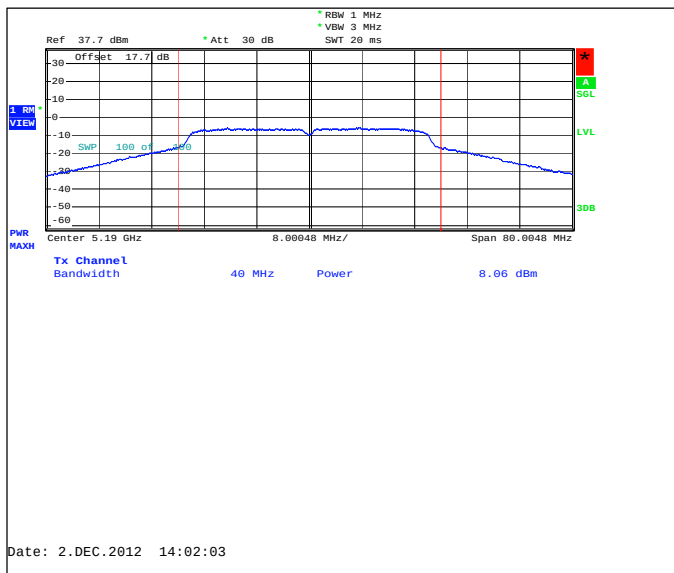
Channel 36+40 / 5190MHz



2.4.19 n-mode, 40 MHz CBW mode, QPSK modulation, 40.5 / 45.0 Mbps data rate

Channel / f_c [MHz]	P [dBm]	P [mW]	Result
36+40 / 5190	8.06	6.397	PASSED

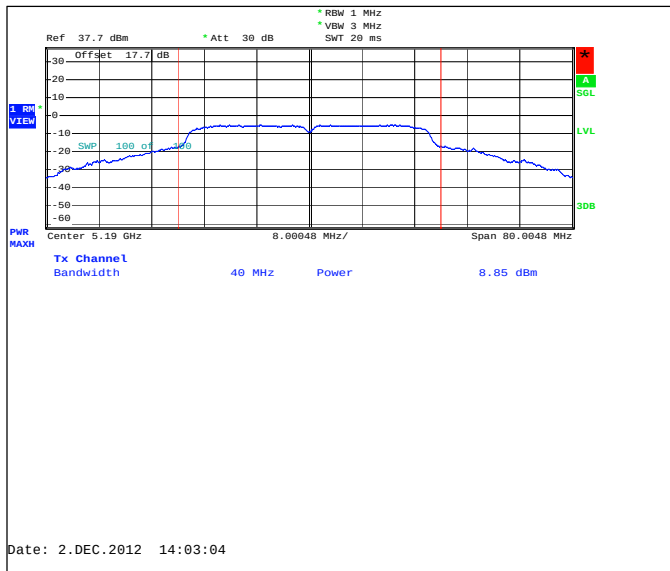
Channel 36+40 / 5190MHz



2.4.20 n-mode, 40 MHz CBW mode, 16-QAM modulation, 54.0 / 60.0 Mbps data rate

Channel / f_c [MHz]	P [dBm]	P [mW]	Result
36+40 / 5190	8.85	7.674	PASSED

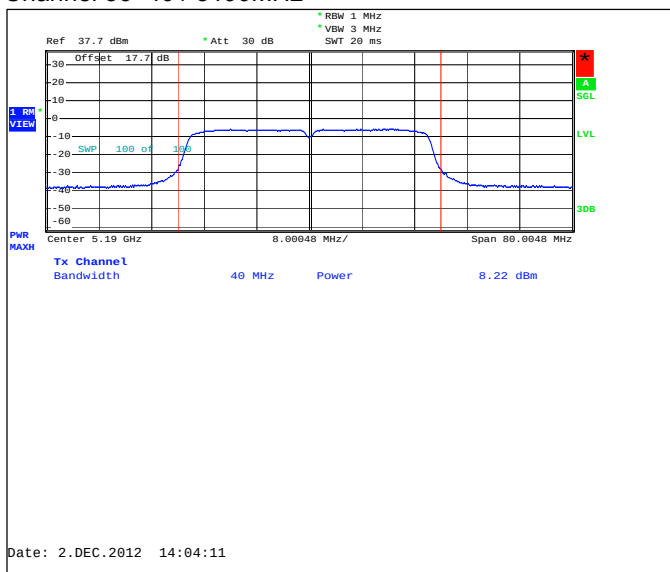
Channel 36+40 / 5190MHz



2.4.21 n-mode, 40 MHz CBW mode, 16-QAM modulation, 81.0 / 90.0 Mbps data rate

Channel / f_c [MHz]	P [dBm]	P [mW]	Result
36+40 / 5190	8.22	6.637	PASSED

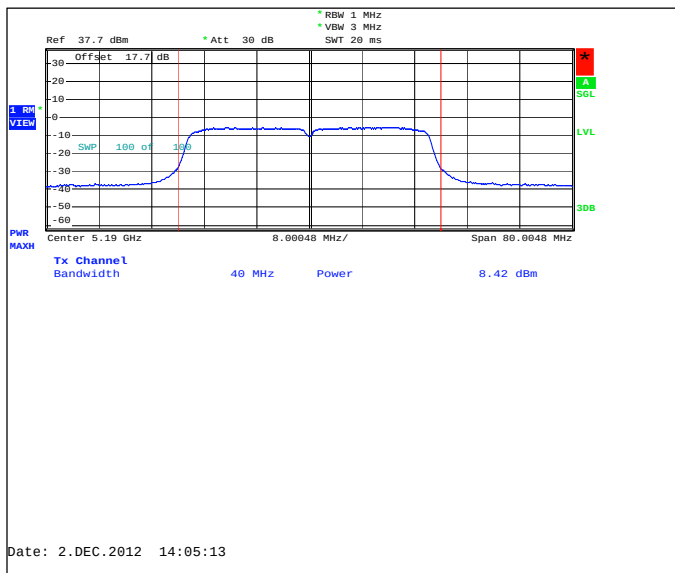
Channel 36+40 / 5190MHz



2.4.22 n-mode, 40 MHz CBW mode, 64-QAM modulation, 108.0 / 120.0 Mbps data rate

Channel / f_c [MHz]	P [dBm]	P [mW]	Result
36+40 / 5190	8.42	6.95	PASSED

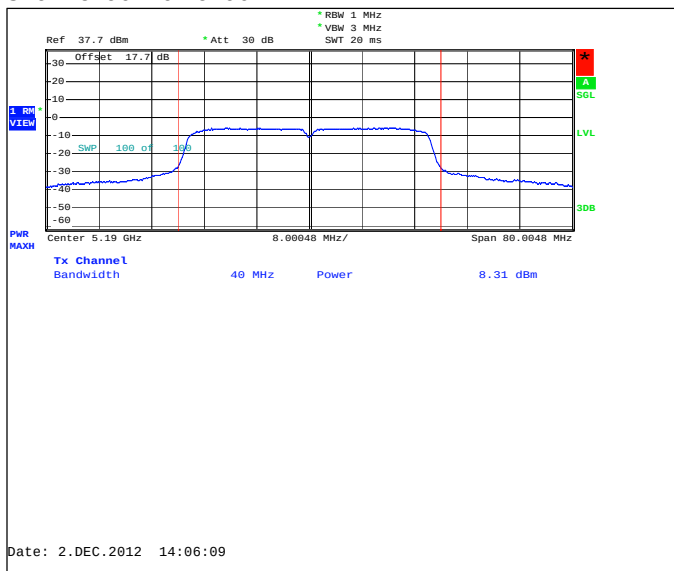
Channel 36+40 / 5190MHz



2.4.23 n-mode, 40 MHz CBW mode, 64-QAM modulation, 121.5 / 135.0 Mbps data rate

Channel / f_c [MHz]	P [dBm]	P [mW]	Result
36+40 / 5190	8.31	6.776	PASSED

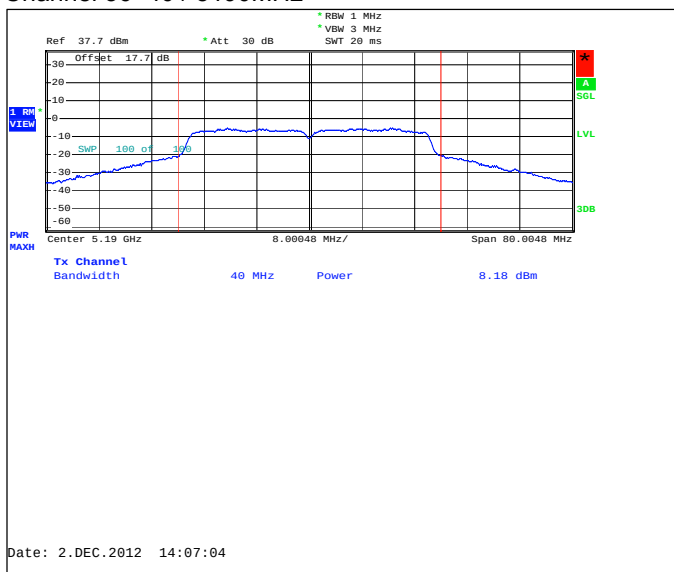
Channel 36+40 / 5190MHz



2.4.24 n-mode, 40 MHz CBW mode, 64-QAM modulation, 135.0 / 150.0 Mbps data rate

Channel / f_c [MHz]	P [dBm]	P [mW]	Result
36+40 / 5190	8.18	6.577	PASSED

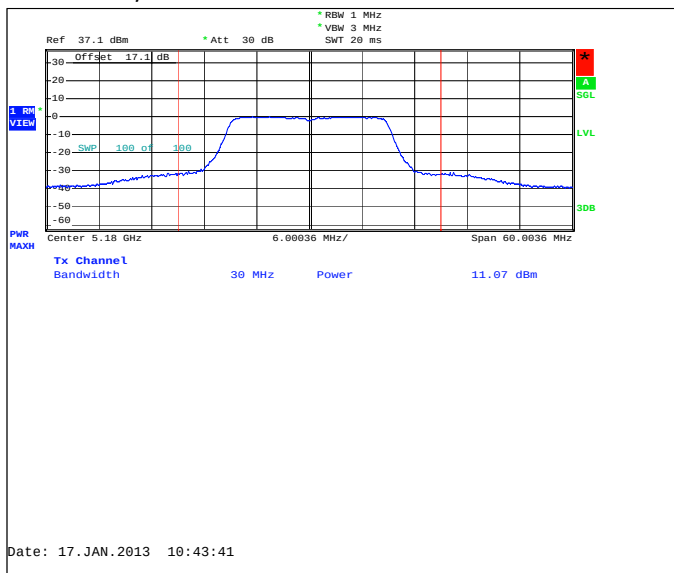
Channel 36+40 / 5190MHz



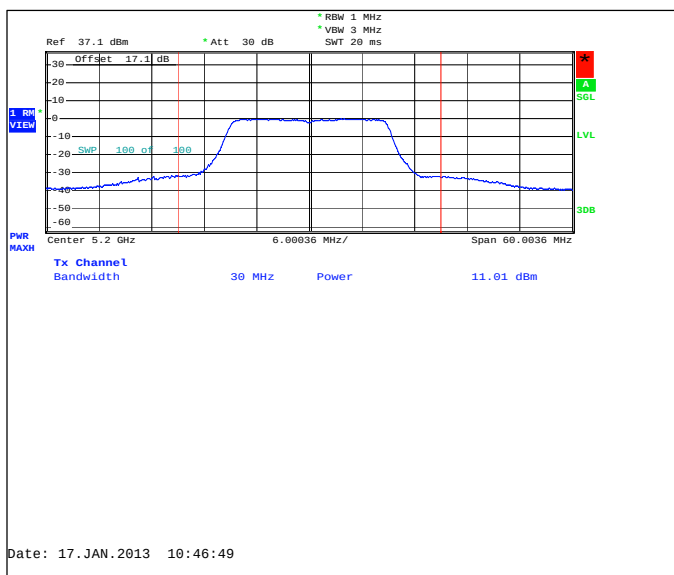
2.4.25 n-mode, 20 MHz CBW mode, 64-QAM modulation, 52.0 / 57.8 Mbps data rate

Channel / f _c [MHz]	P [dBm]	P [mW]	Result
36 / 5180	11.07	12.794	PASSED
40 / 5200	11.01	12.618	PASSED
48 / 5240	10.89	12.274	PASSED
52 / 5260	10.72	11.803	PASSED
60 / 5300	10.66	11.641	PASSED
64 / 5320	10.96	12.474	PASSED
100 / 5500	11.8	15.136	PASSED
116 / 5580	12.19	16.558	PASSED
140 / 5700	12.35	17.179	PASSED

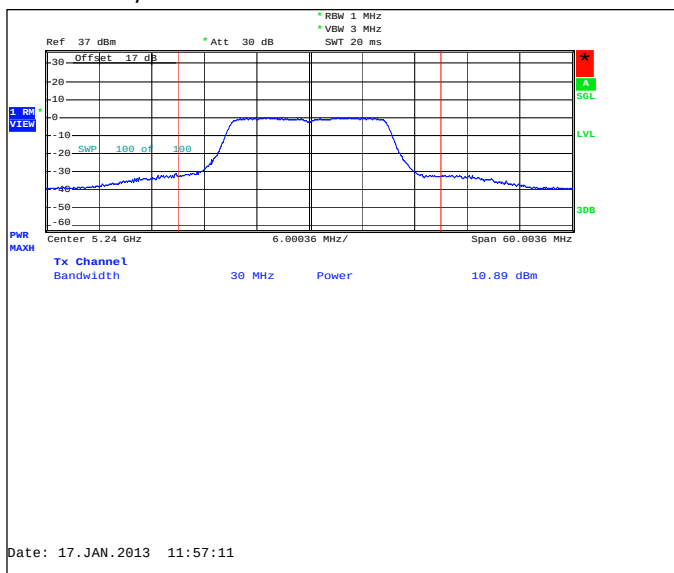
Channel 36 / 5180MHz



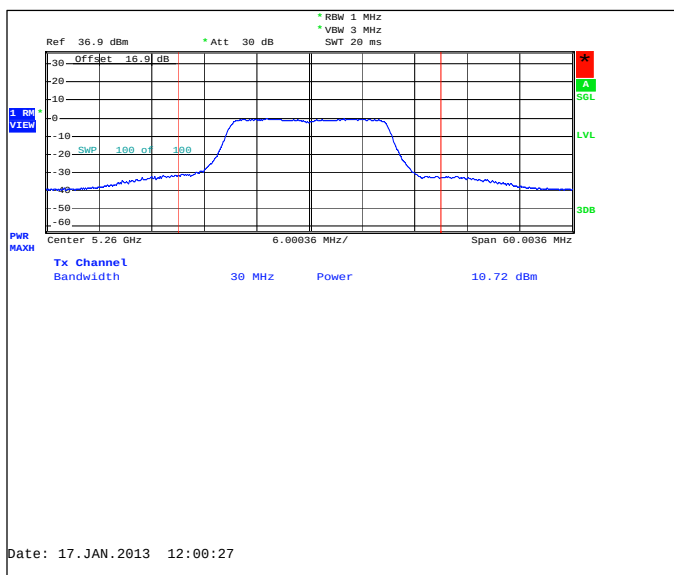
Channel 40 / 5200MHz



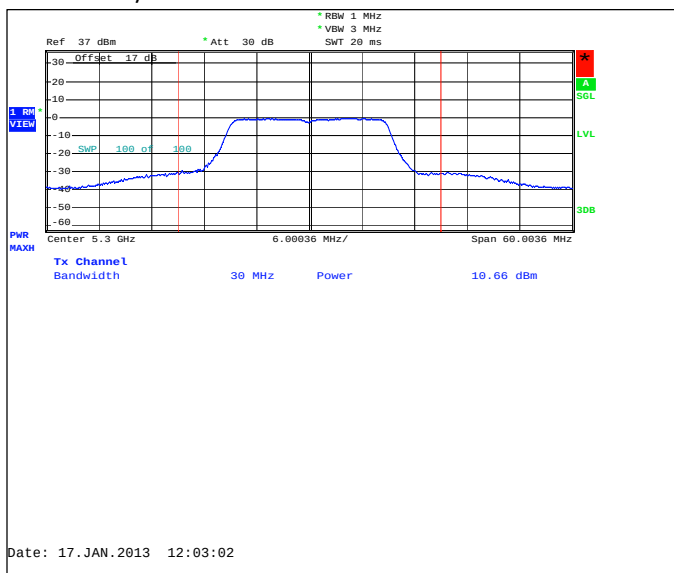
Channel 48 / 5240MHz



Channel 52 / 5260MHz



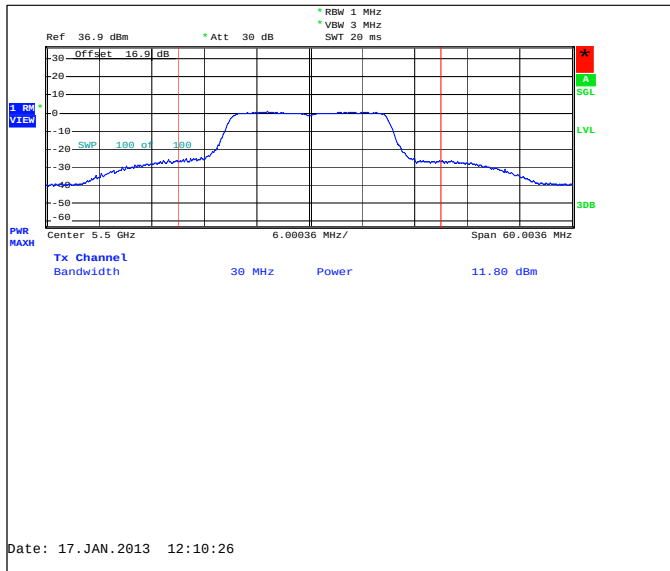
Channel 60 / 5300MHz



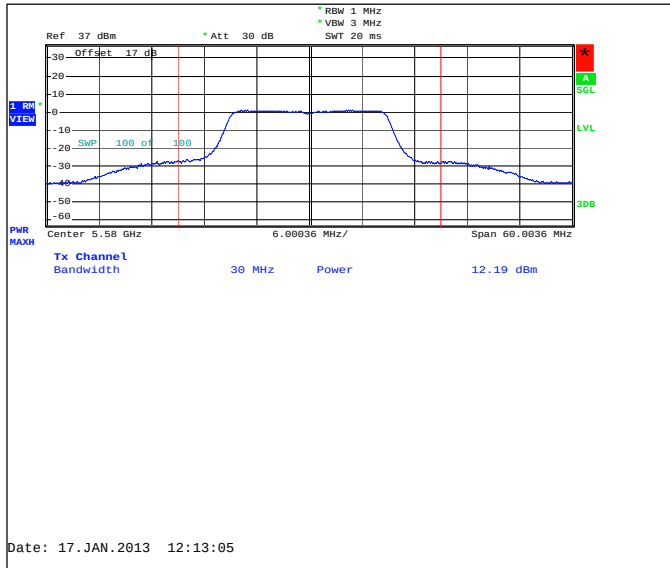
Channel 64 / 5320MHz



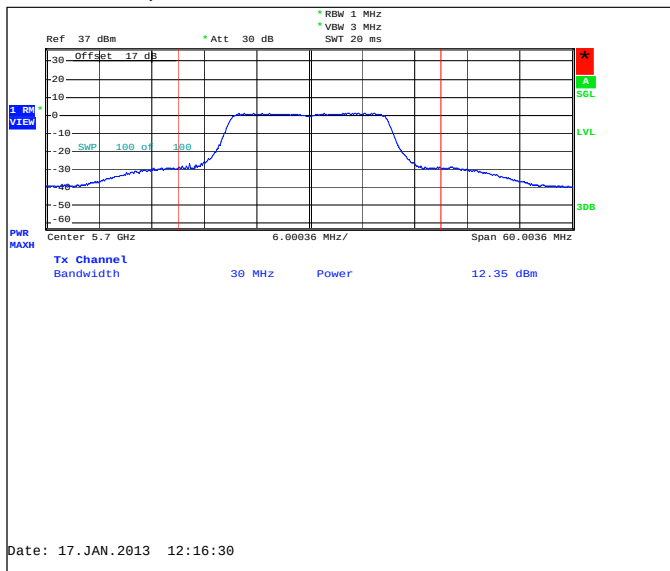
Channel 100 / 5500MHz



Channel 116 / 5580MHz



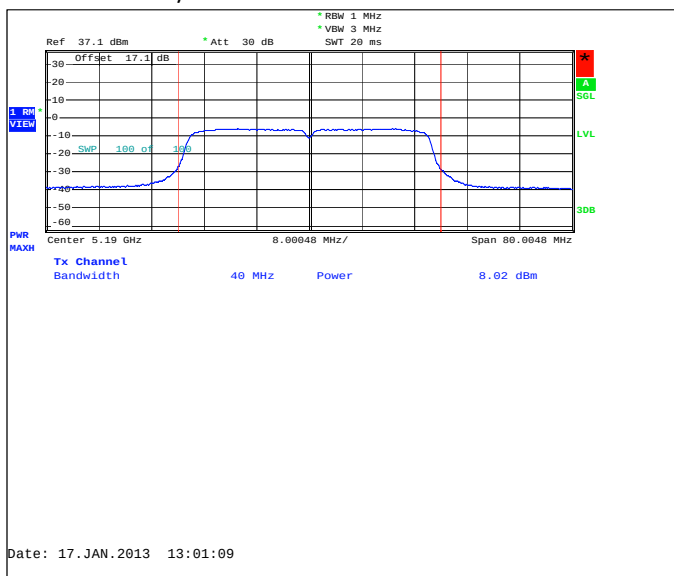
Channel 140 / 5700MHz



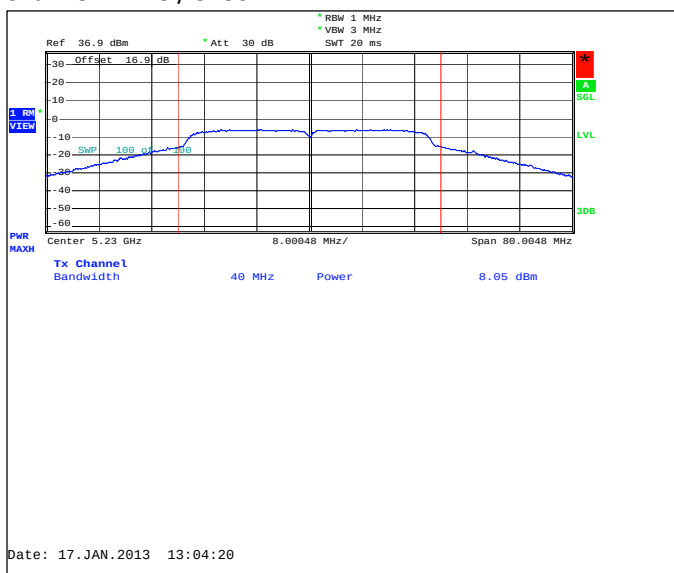
2.4.26 n-mode, 40 MHz CBW mode, QPSK modulation, 27.0 / 30.0 Mbps data rate

Channel / f _c [MHz]	P [dBm]	P [mW]	Result
36+40 / 5190	8.02	6.339	PASSED
44+48 / 5230	8.05	6.383	PASSED
52+56 / 5270	7.81	6.039	PASSED
60+64 / 5310	7.84	6.081	PASSED
100+104 / 5510	8.82	7.621	PASSED
108+112 / 5550	9.42	8.75	PASSED
132+136 / 5670	9.71	9.354	PASSED

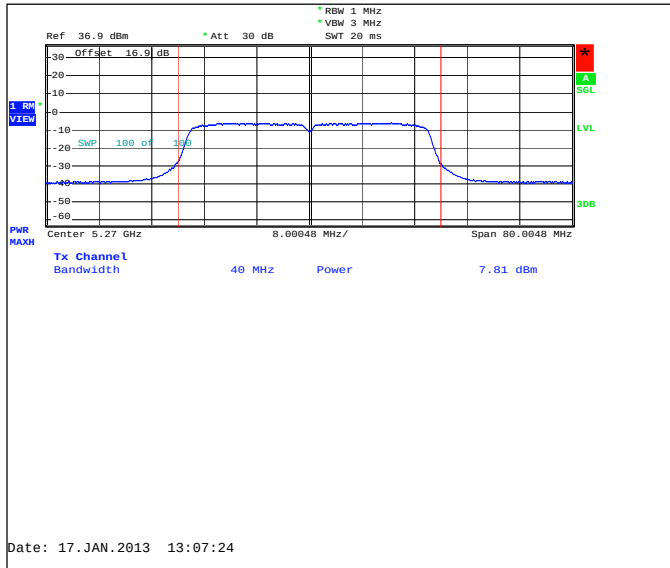
Channel 36+40 / 5190MHz



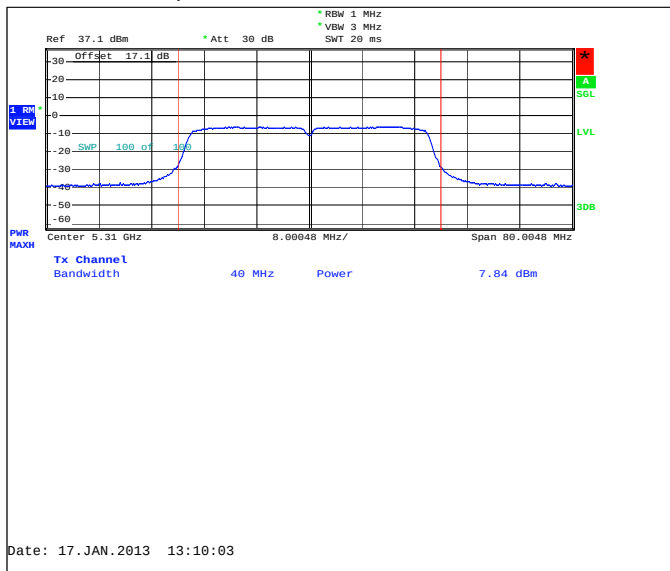
Channel 44+48 / 5230MHz



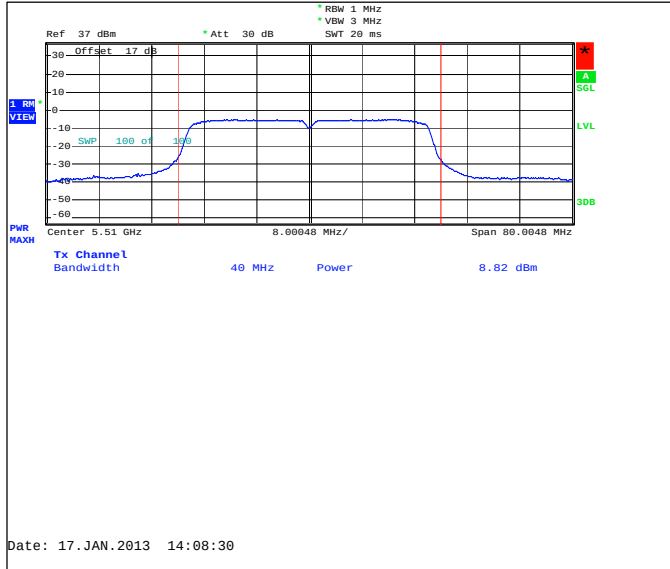
Channel 52+56 / 5270MHz



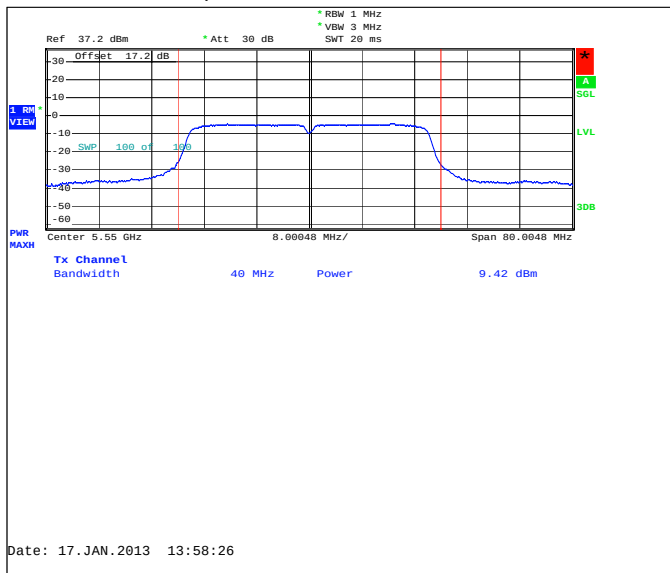
Channel 60+64 / 5310MHz



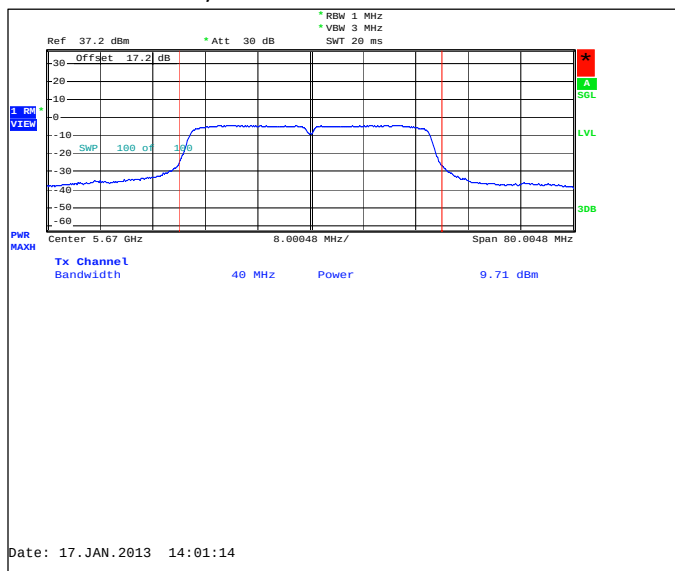
Channel 100+104 / 5510MHz



Channel 108+112 / 5550MHz



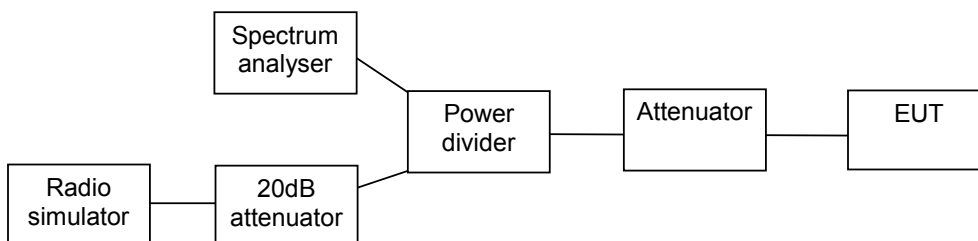
Channel 132+136 / 5670MHz



3. Peak excursion (FCC §15.407 (a), RSS-210 A9.2)

EUT with DUT number	RM-860, DUT 16892
Accessories with DUT numbers	-
Operation Voltage [V] / [Hz]	Nominal
Results	PASSED
Remarks	-
Temp [°C] / Humidity [%RH] / Air Pressure [kPa]	21 / 43 / 100.9
Date of measurements	02-Dec-2012
Measured by	Sami Lehtonen

3.1. Test Setup



3.2. Test method and limit

The measurement is made according to Public Notice KDB 789033 D01 and IC standard RSS-210.

Limits for peak excursion measurements

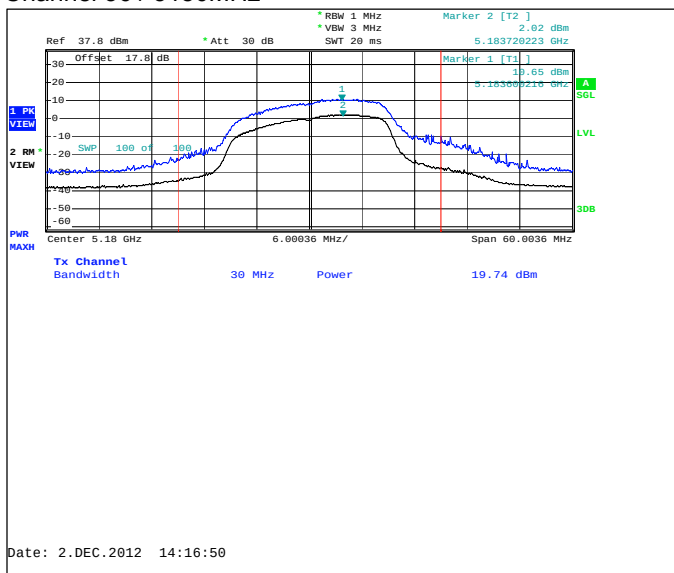
Limit [dB]
<= 13

3.3. 5 GHz RLAN Test results

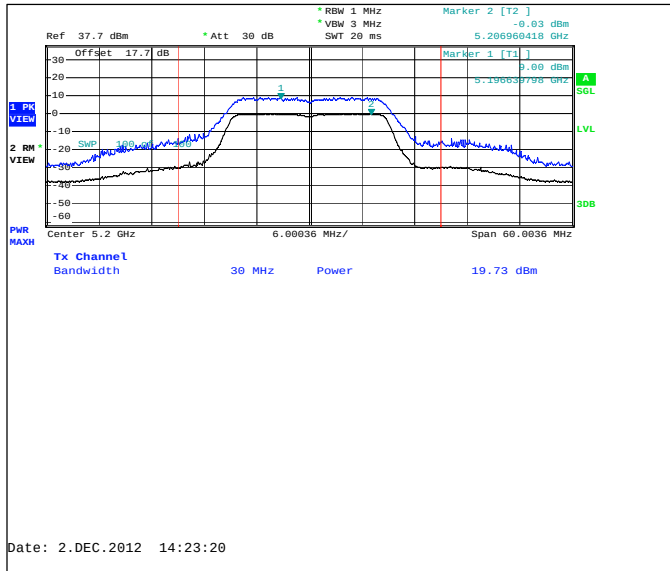
3.3.1 n-mode, 20 MHz CBW mode, BPSK modulation, 6.5 / 7.25 Mbps data rate

Channel / f_c [MHz]	Peak excursion [dB]	Result
36 / 5180	8.63	PASSED
40 / 5200	9.03	PASSED
48 / 5240	8.94	PASSED
52 / 5260	9.1	PASSED
60 / 5300	8.96	PASSED
64 / 5320	9.01	PASSED
100 / 5500	9.05	PASSED
116 / 5580	8.87	PASSED
140 / 5700	8.99	PASSED

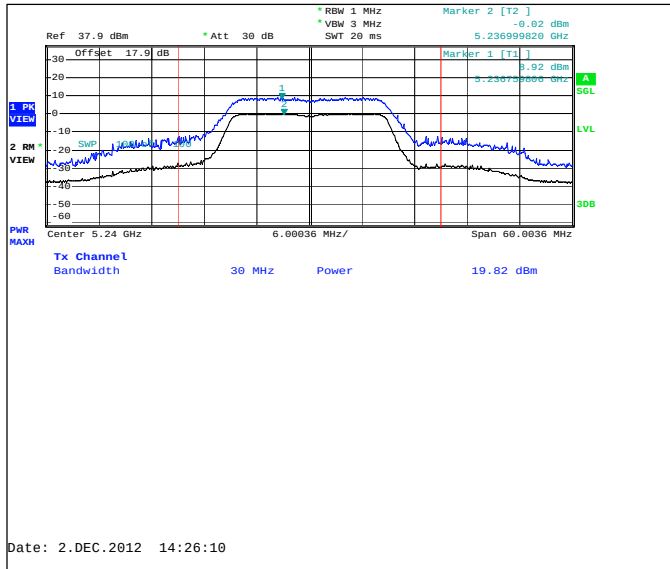
Channel 36 / 5180MHz



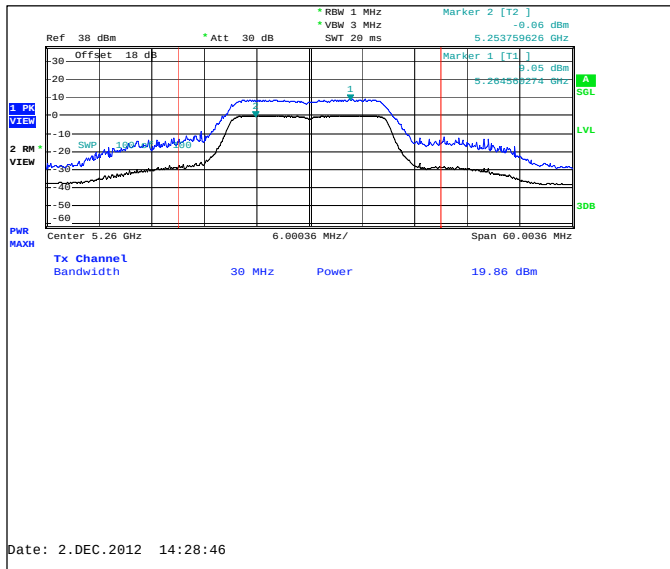
Channel 40 / 5200MHz



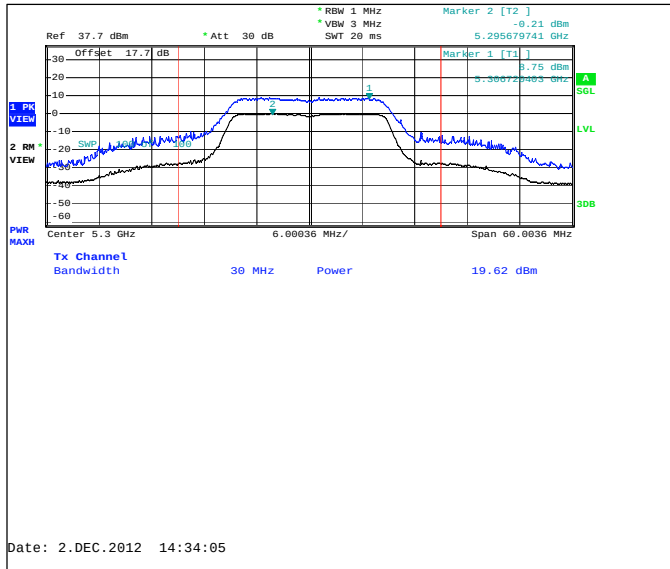
Channel 48 / 5240MHz



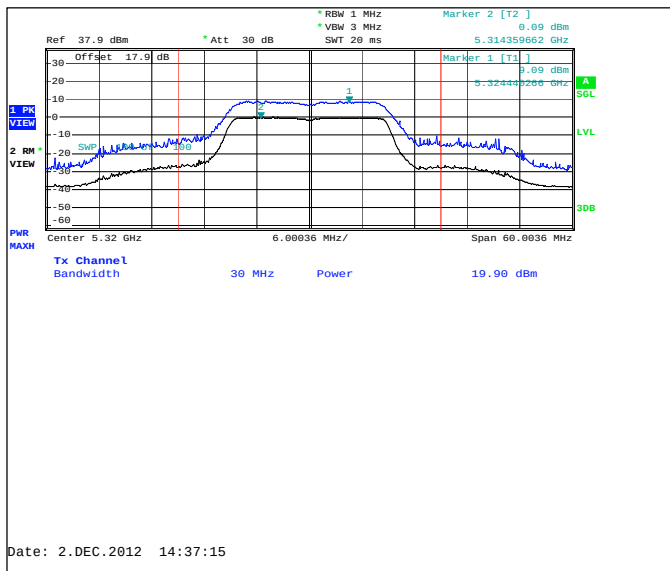
Channel 52 / 5260MHz



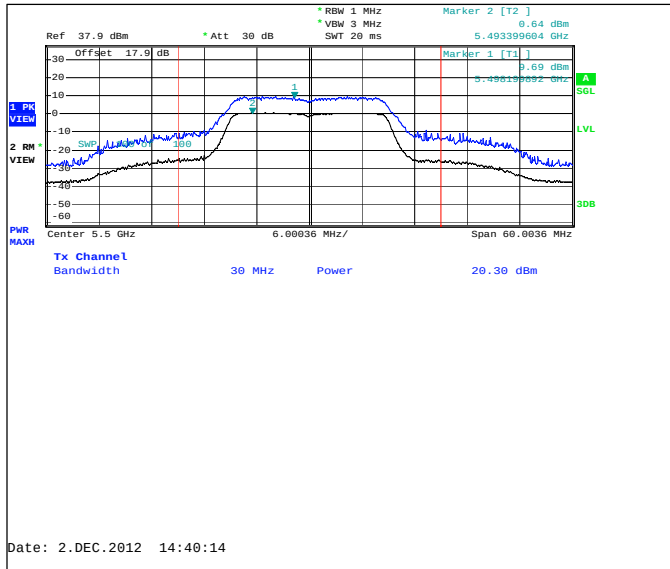
Channel 60 / 5300MHz



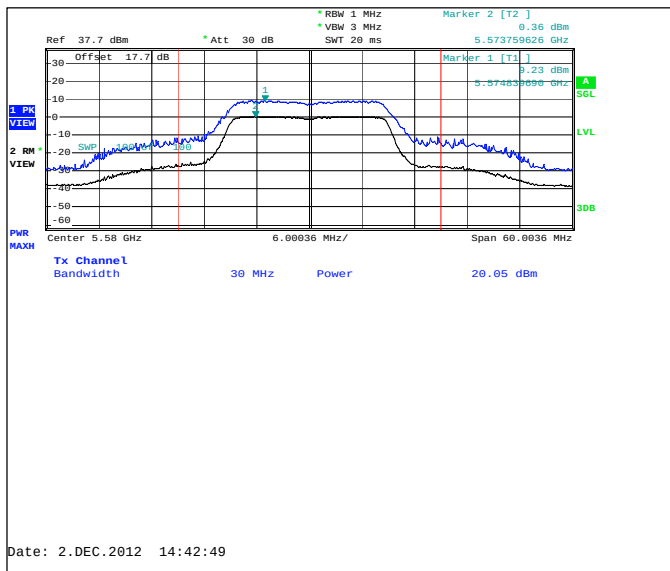
Channel 64 / 5320MHz



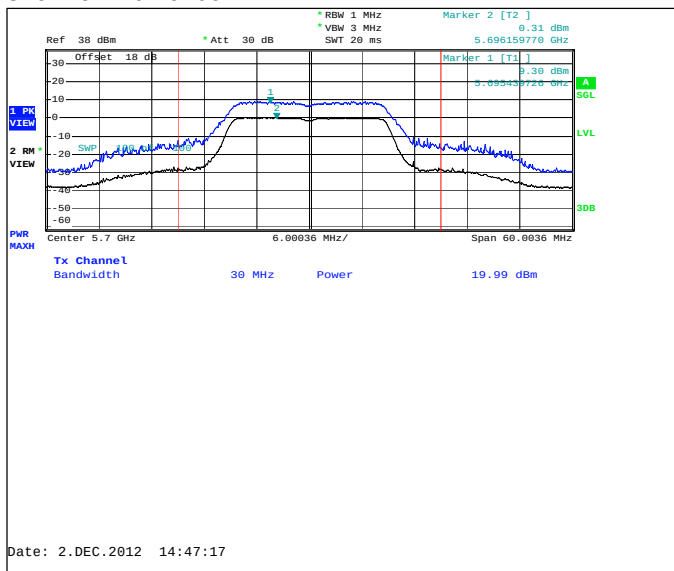
Channel 100 / 5500MHz



Channel 116 / 5580MHz



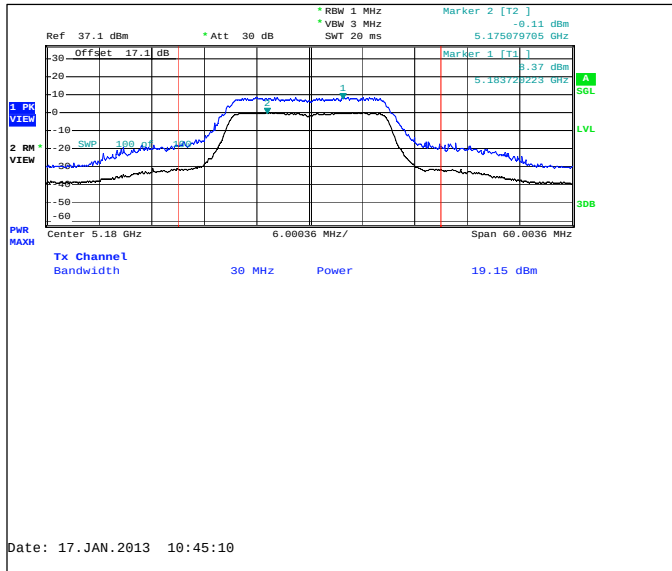
Channel 140 / 5700MHz



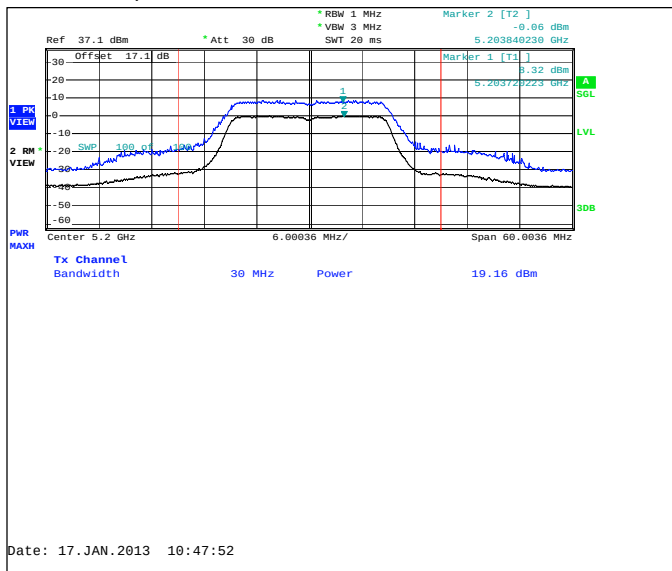
3.3.2 n-mode, 20 MHz CBW mode, 64-QAM modulation, 52.0 / 57.8 Mbps data rate

Channel / f_c [MHz]	Peak excursion [dB]	Result
36 / 5180	8.49	PASSED
40 / 5200	8.38	PASSED
48 / 5240	8.34	PASSED
52 / 5260	8.51	PASSED
60 / 5300	8.53	PASSED
64 / 5320	8.21	PASSED
100 / 5500	8.21	PASSED
116 / 5580	9.02	PASSED
140 / 5700	8.78	PASSED

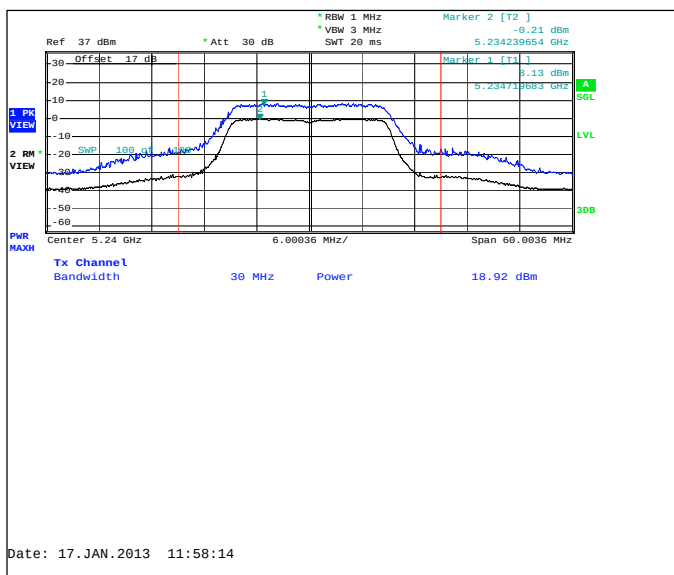
Channel 36 / 5180MHz



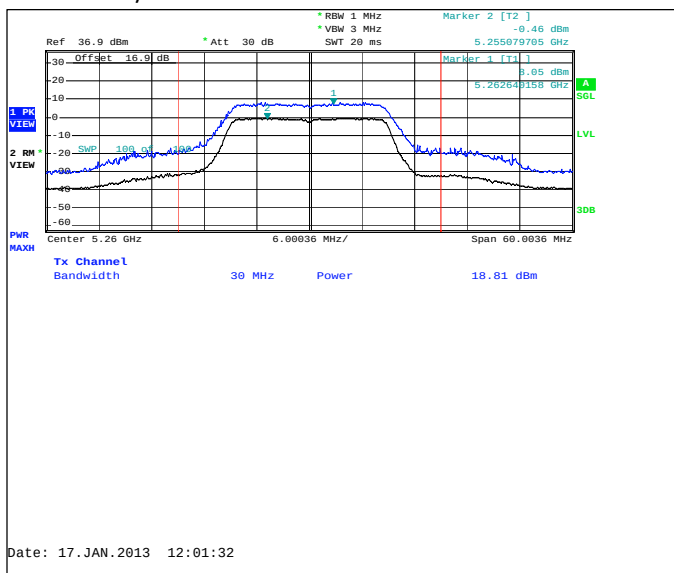
Channel 40 / 5200MHz



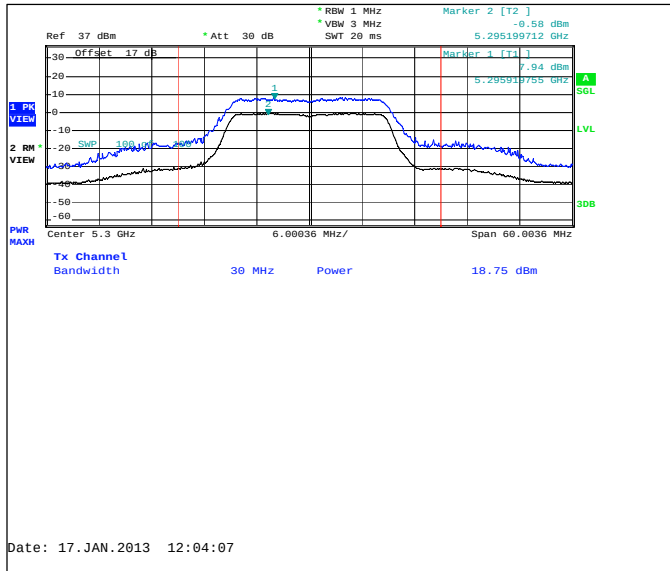
Channel 48 / 5240MHz



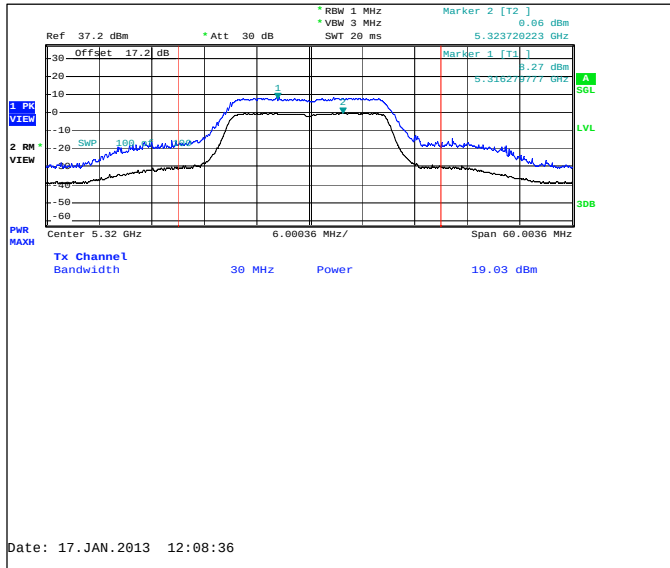
Channel 52 / 5260MHz



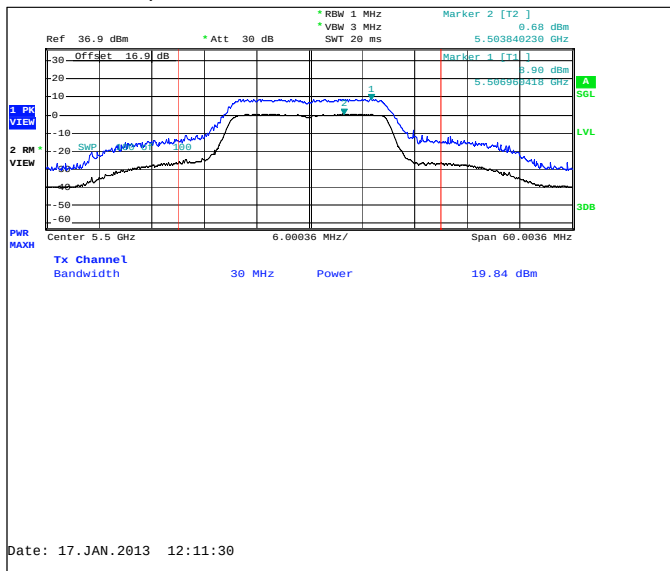
Channel 60 / 5300MHz



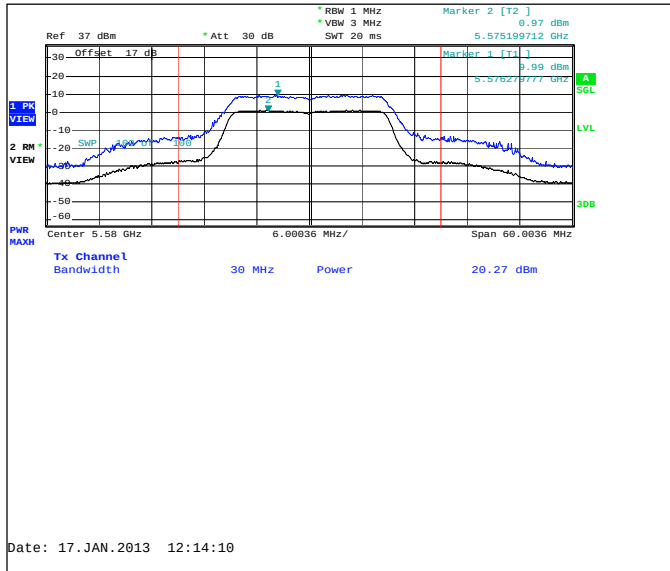
Channel 64 / 5320MHz



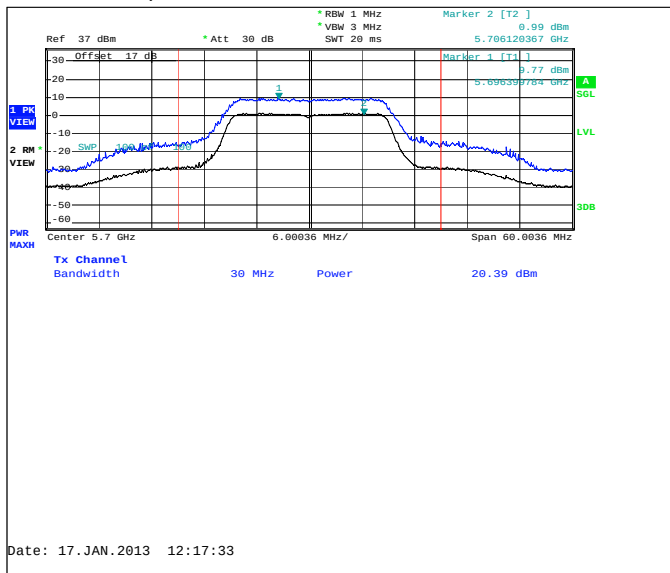
Channel 100 / 5500MHz



Channel 116 / 5580MHz



Channel 140 / 5700MHz



3.3.3 n-mode, 40 MHz CBW mode, BPSK modulation, 13.5 / 15.0 Mbps data rate

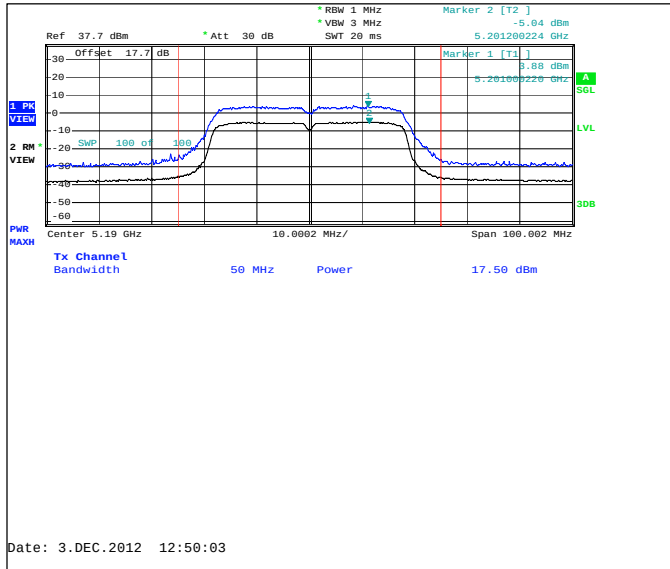
Channel / f_c [MHz]	Peak excursion [dB]	Result
36+40 / 5190	8.92	PASSED
44+48 / 5230	8.66	PASSED
52+56 / 5270	8.83	PASSED
60+64 / 5310	8.87	PASSED
100+104 / 5510	9.07	PASSED
108+112 / 5550	8.68	PASSED

132+136 / 5670

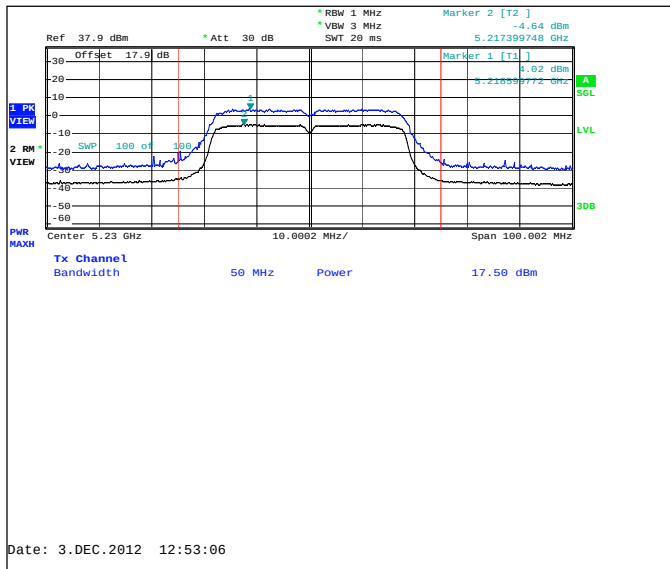
9.25

PASSED

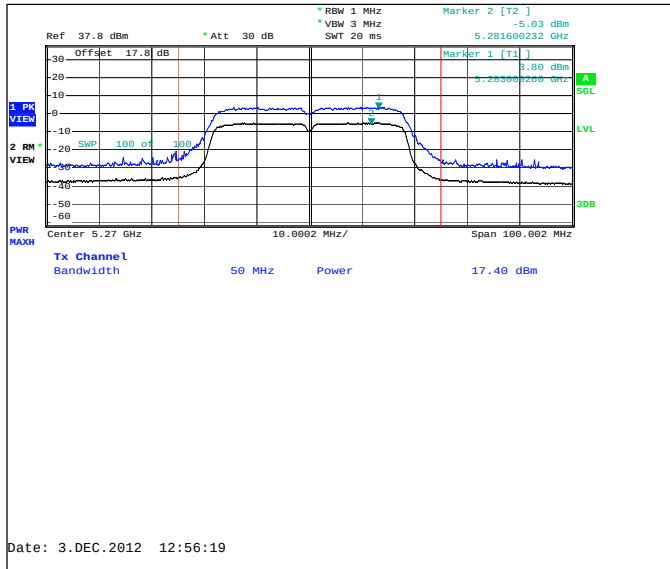
Channel 36+40 / 5190MHz



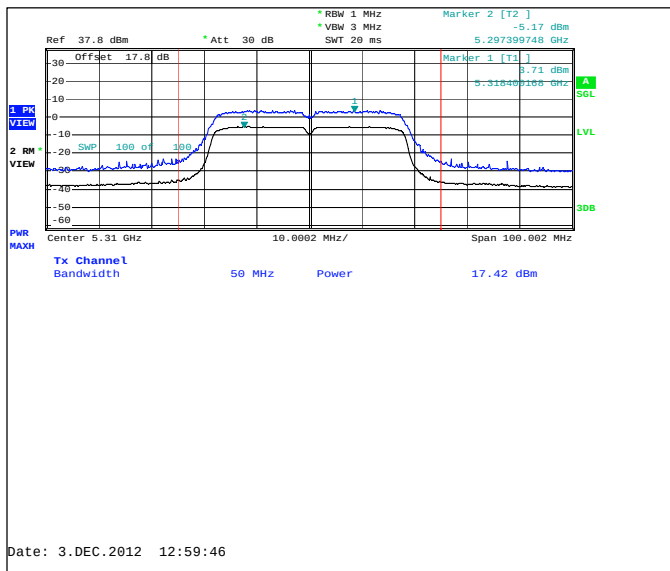
Channel 44+48 / 5230MHz



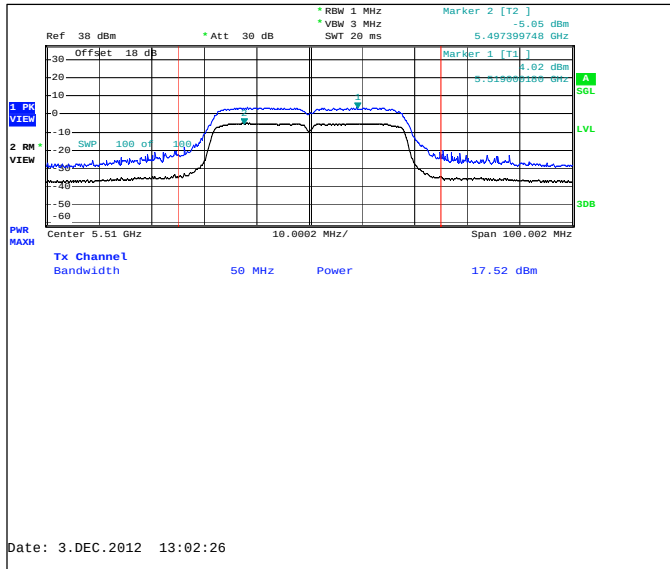
Channel 52+56 / 5270MHz



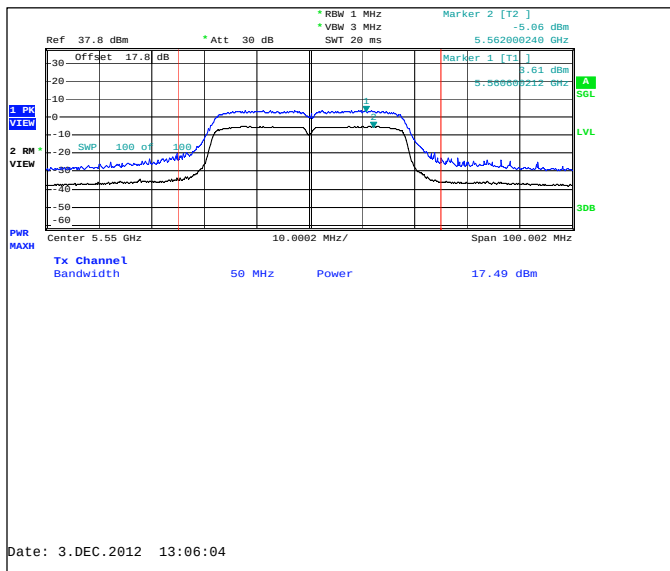
Channel 60+64 / 5310MHz



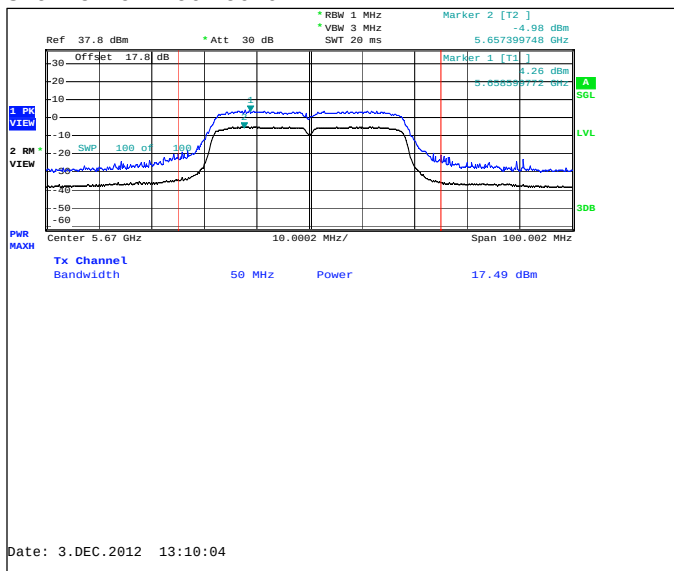
Channel 100+104 / 5510MHz



Channel 108+112 / 5550MHz



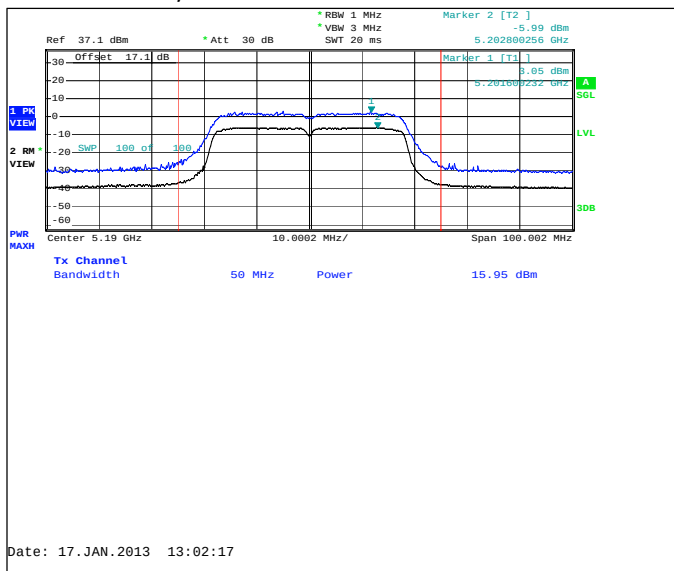
Channel 132+136 / 5670MHz



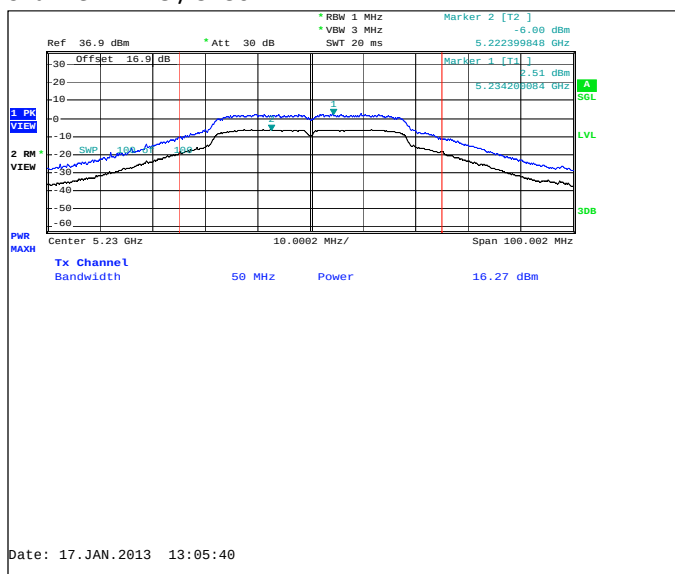
3.3.4 n-mode, 40 MHz CBW mode, QPSK modulation, 27.0 / 30.0 Mbps data rate

Channel / f _c [MHz]	Peak excursion [dB]	Result
36+40 / 5190	9.05	PASSED
44+48 / 5230	8.52	PASSED
52+56 / 5270	8.73	PASSED
60+64 / 5310	9.24	PASSED
100+104 / 5510	8.79	PASSED
108+112 / 5550	8.66	PASSED
132+136 / 5670	8.47	PASSED

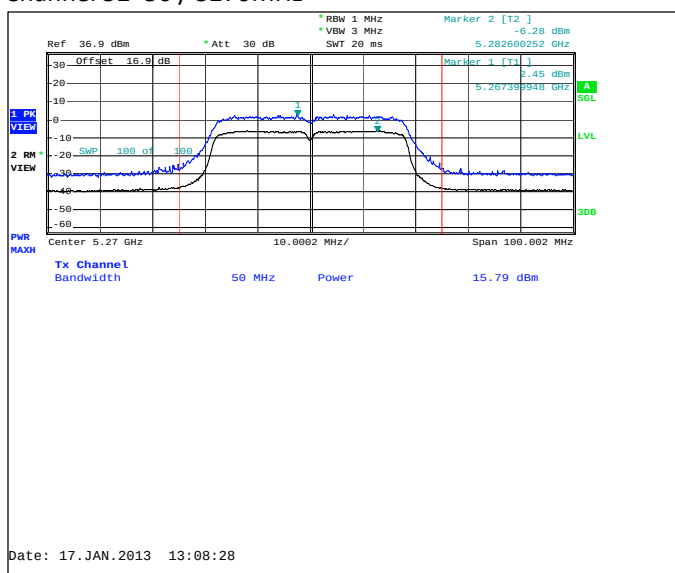
Channel 36+40 / 5190MHz



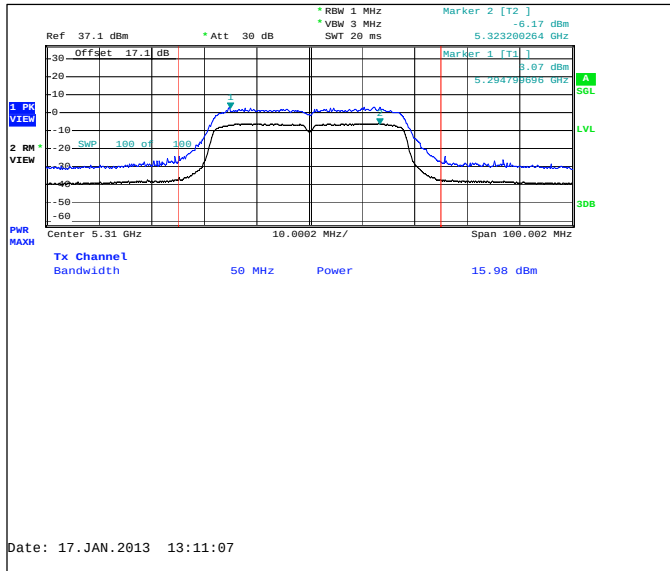
Channel 44+48 / 5230MHz



Channel 52+56 / 5270MHz

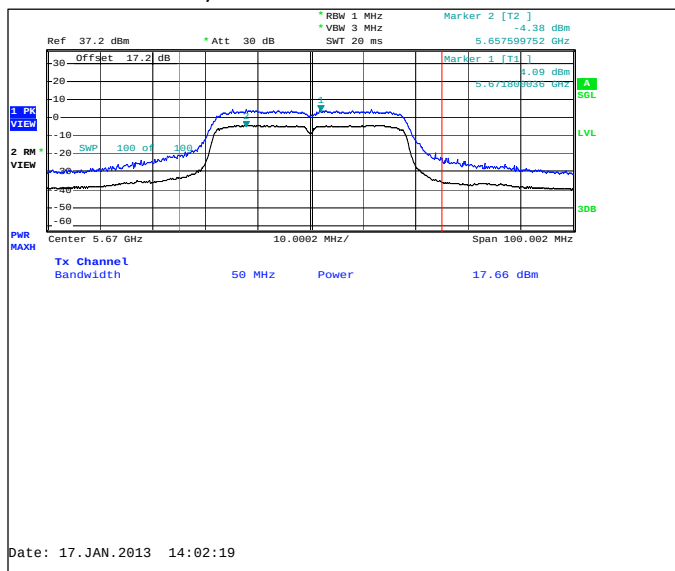


Channel 60+64 / 5310MHz



[illegible]

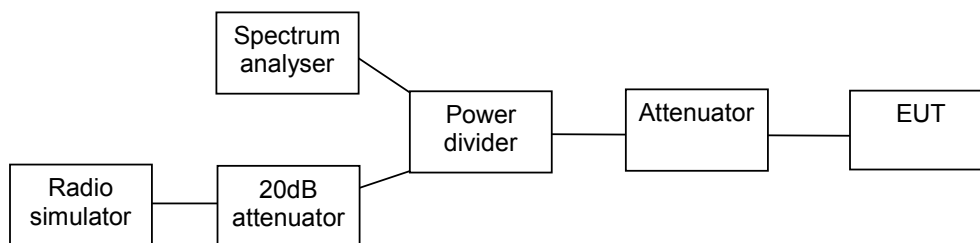
Channel 132+136 / 5670MHz



4. 26 dB bandwidth

EUT with DUT number	RM-860, DUT 16892
Accessories with DUT numbers	-
Operation Voltage [V] / [Hz]	Nominal
Results	PASSED
Remarks	-
Temp [°C] / Humidity [%RH] / Air Pressure [kPa]	21 / 43 / 100.9
Date of measurements	02-Dec-2012
Measured by	Sami Lehtonen

4.1. Test Setup



4.2. Test method and limit

The measurement is made according to Public Notice KDB 789033 D01 and IC standard RSS-210.

Limits for 26 dB bandwidth measurements

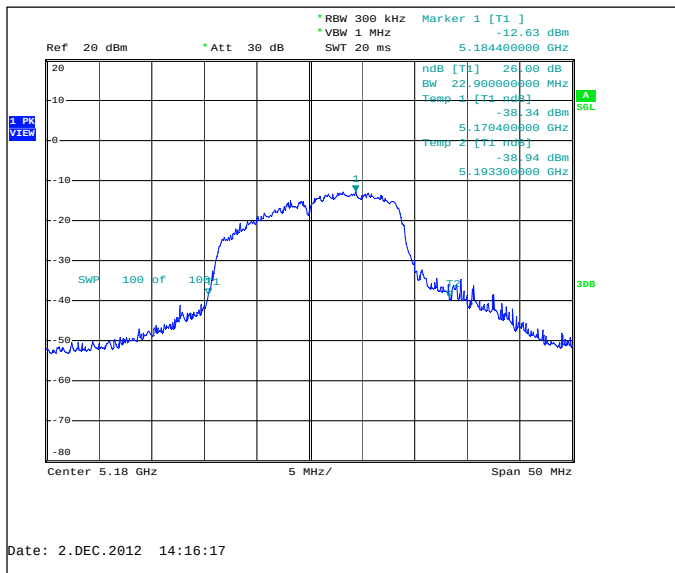
Limit [kHz]
No limit

4.3. 5 GHz RLAN Test results

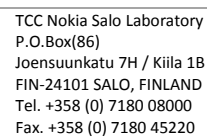
4.3.1 n-mode, 20 MHz CBW mode, BPSK modulation, 6.5 / 7.25 Mbps data rate

Channel / f_c [MHz]	26 dB bandwidth [kHz]	Result
36 / 5180	22900	PASSED
40 / 5200	24200	PASSED
48 / 5240	25000	PASSED
52 / 5260	24700	PASSED
60 / 5300	24600	PASSED
64 / 5320	25800	PASSED
100 / 5500	31300	PASSED
116 / 5580	25100	PASSED
140 / 5700	22800	PASSED

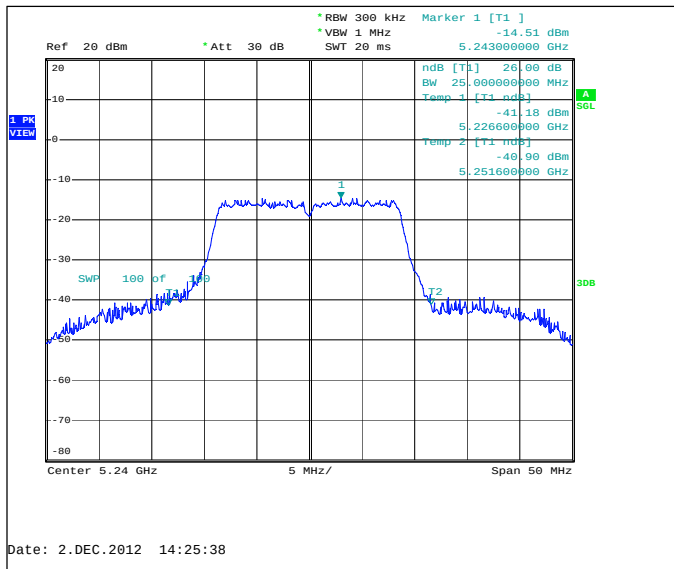
Channel 36 / 5180MHz



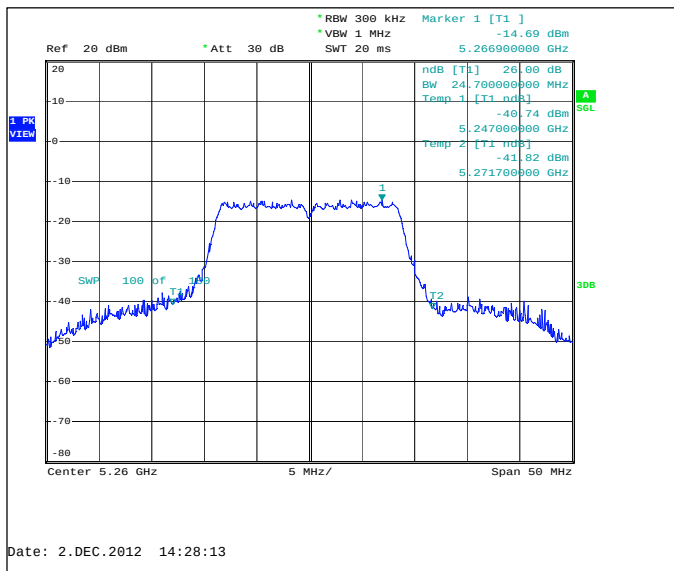
Channel 40 / 5200MHz



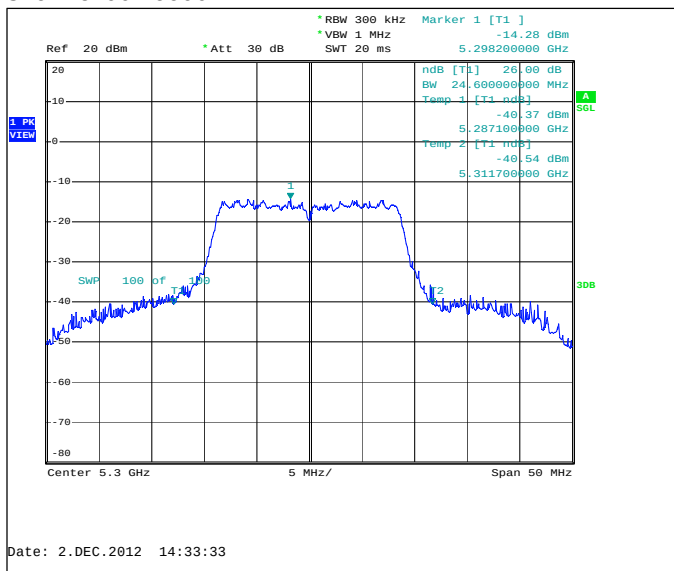
Channel 48 / 5240MHz



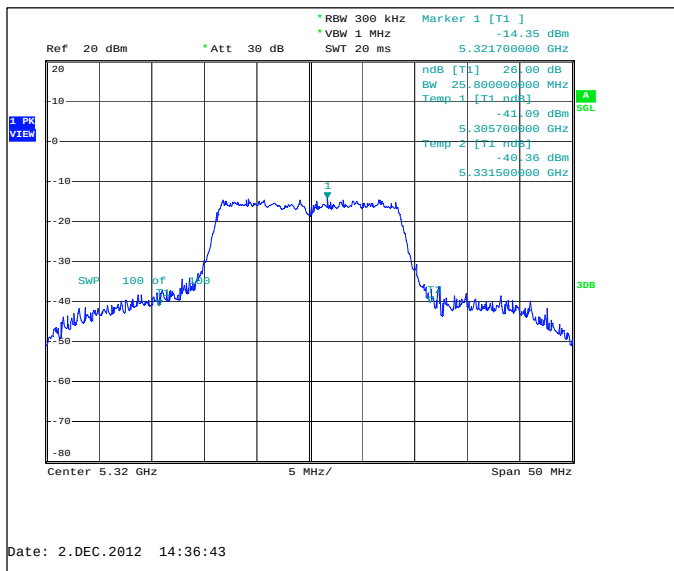
Channel 52 / 5260MHz



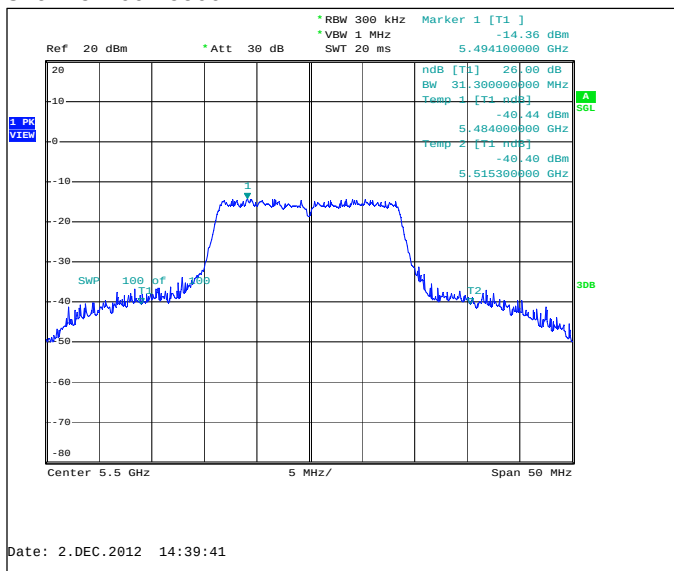
Channel 60 / 5300MHz



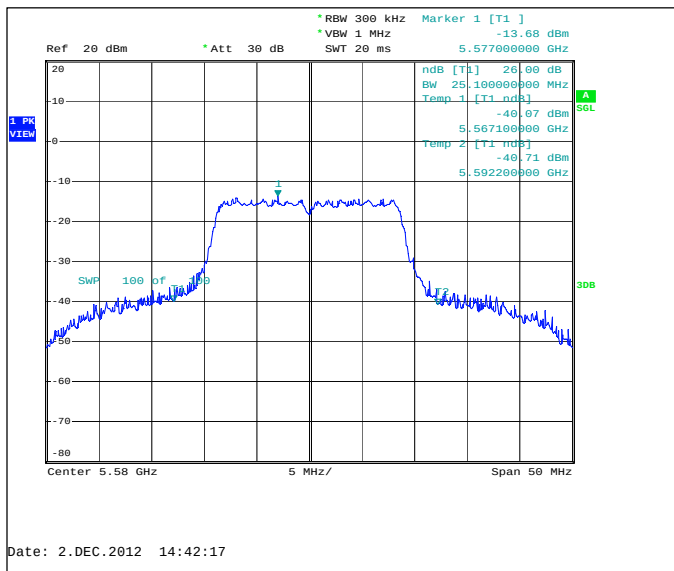
Channel 64 / 5320MHz



Channel 100 / 5500MHz



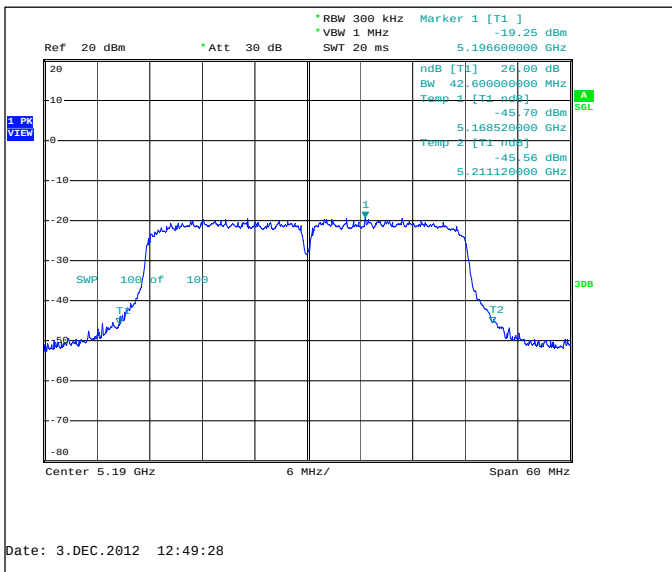
Channel 116 / 5580MHz



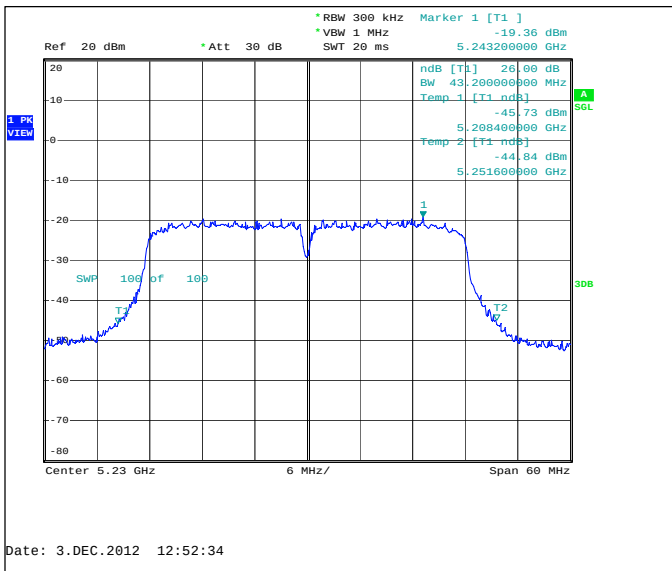
4.3.2 n-mode, 40 MHz CBW mode, BPSK modulation, 13.5 / 15.0 Mbps data rate

Channel / f _c [MHz]	26 dB bandwidth [kHz]	Result
36+40 / 5190	42600	PASSED
44+48 / 5230	43200	PASSED
52+56 / 5270	42600	PASSED
60+64 / 5310	42360	PASSED
100+104 / 5510	42840	PASSED
108+112 / 5550	43200	PASSED
132+136 / 5670	43560	PASSED

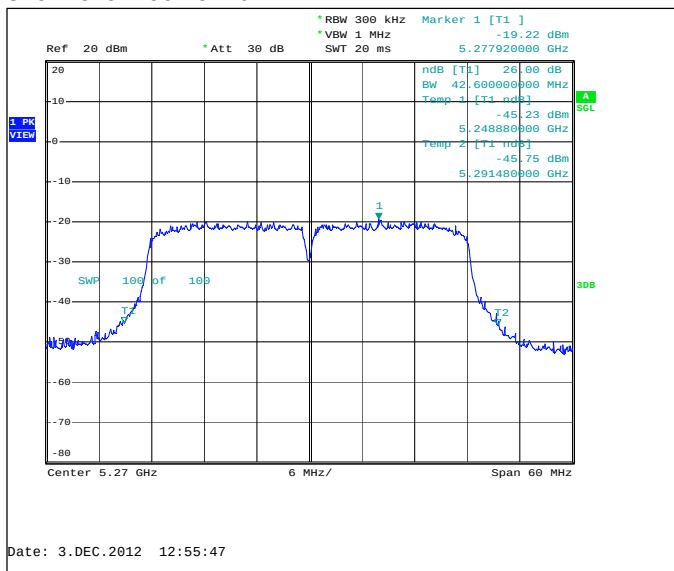
Channel 36+40 / 5190MHz



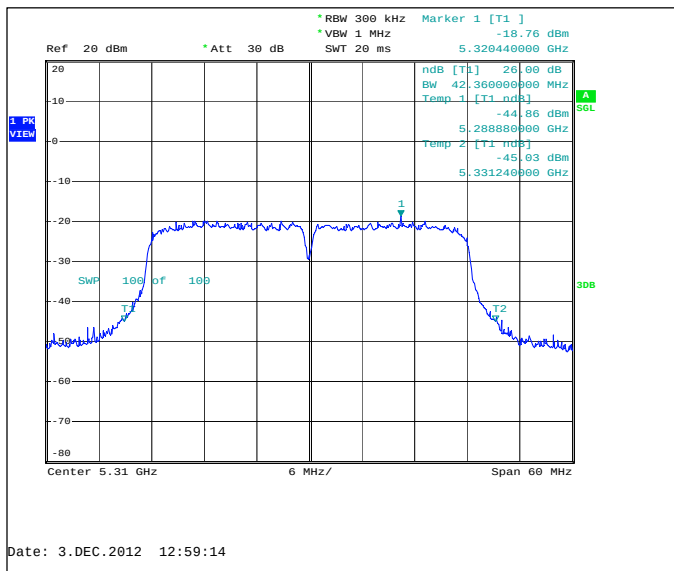
Channel 44+48 / 5230MHz



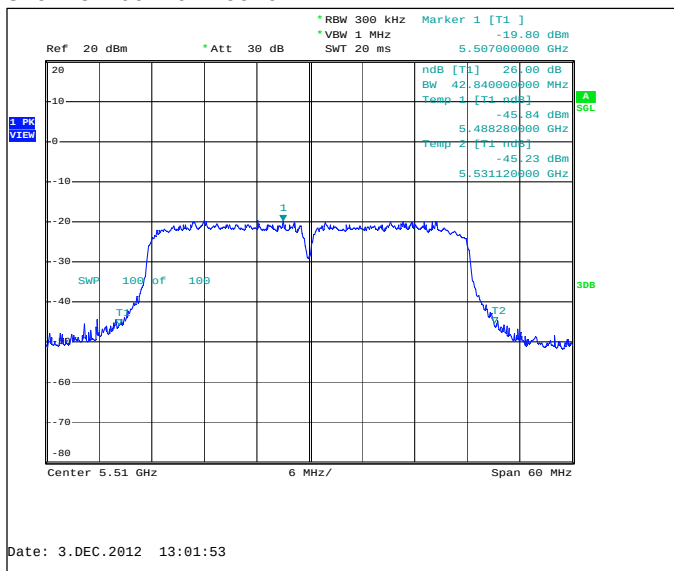
Channel 52+56 / 5270MHz



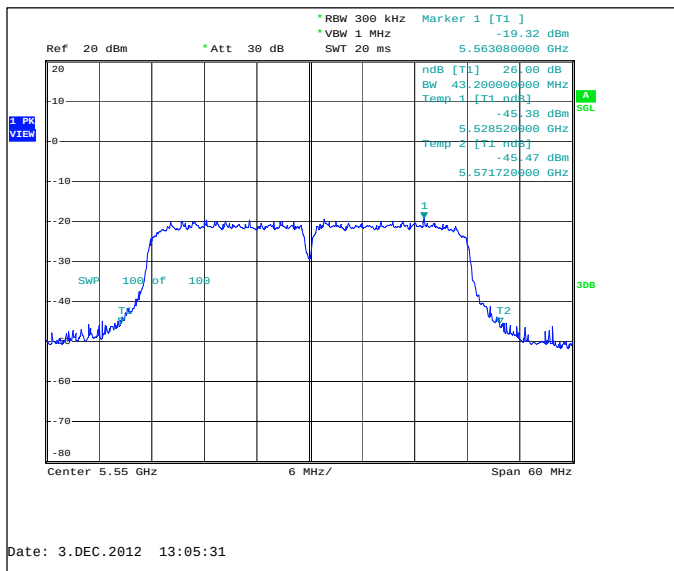
Channel 60+64 / 5310MHz



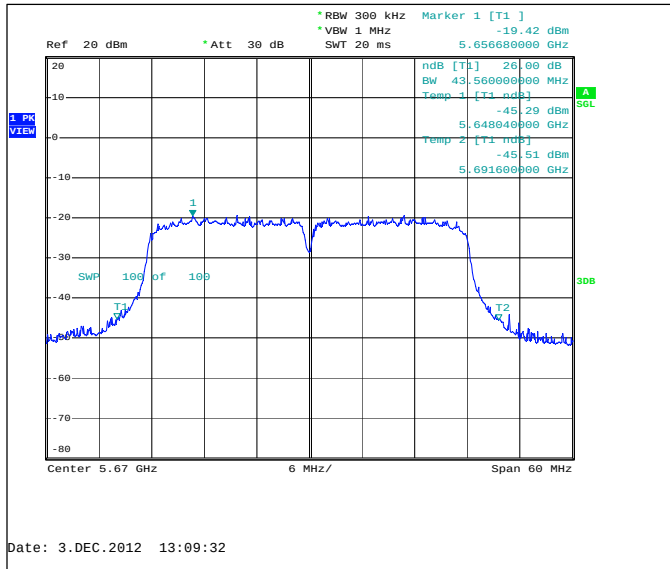
Channel 100+104 / 5510MHz



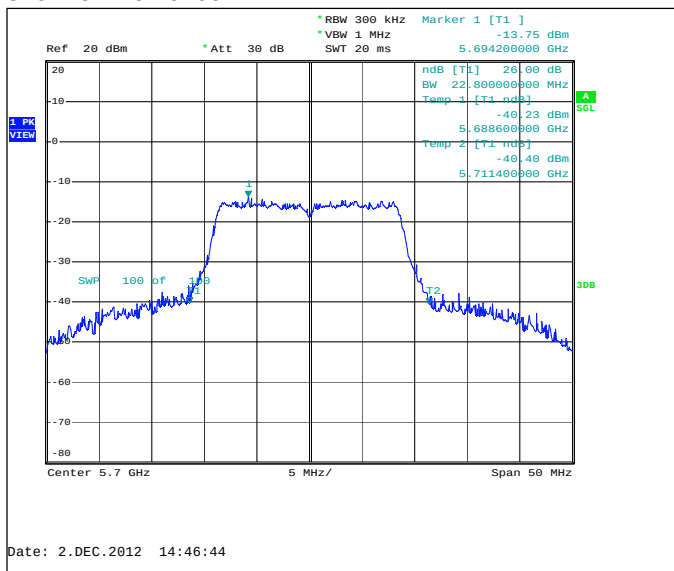
Channel 108+112 / 5550MHz



Channel 132+136 / 5670MHz



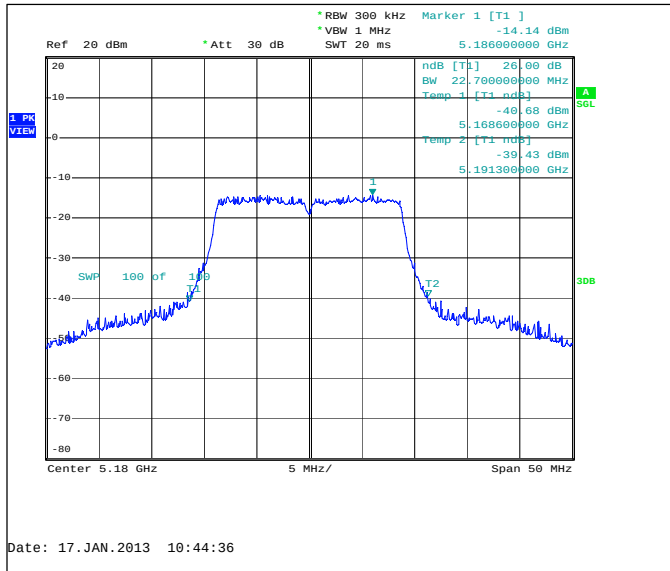
Channel 140 / 5700MHz



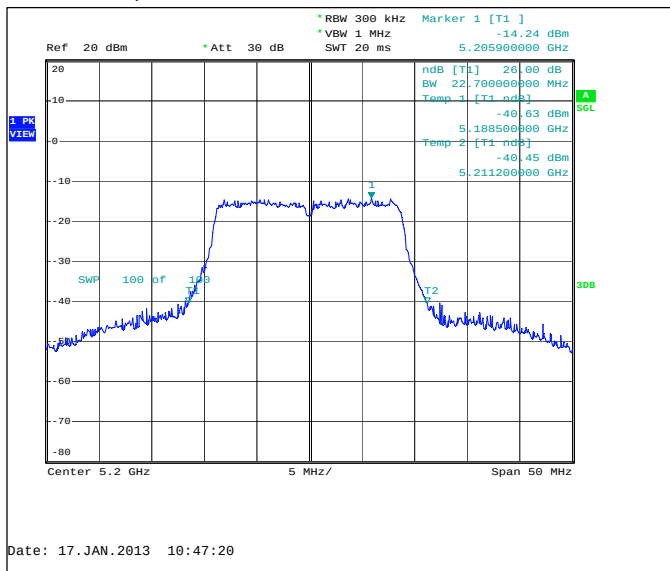
4.3.3 n-mode, 20 MHz CBW mode, 64-QAM modulation, 52.0 / 57.8 Mbps data rate

Channel / f _c [MHz]	26 dB bandwidth [kHz]	Result
36 / 5180	22700	PASSED
40 / 5200	22700	PASSED
48 / 5240	22600	PASSED
52 / 5260	22600	PASSED
60 / 5300	22900	PASSED
64 / 5320	23000	PASSED
100 / 5500	25500	PASSED
116 / 5580	23100	PASSED
140 / 5700	22600	PASSED

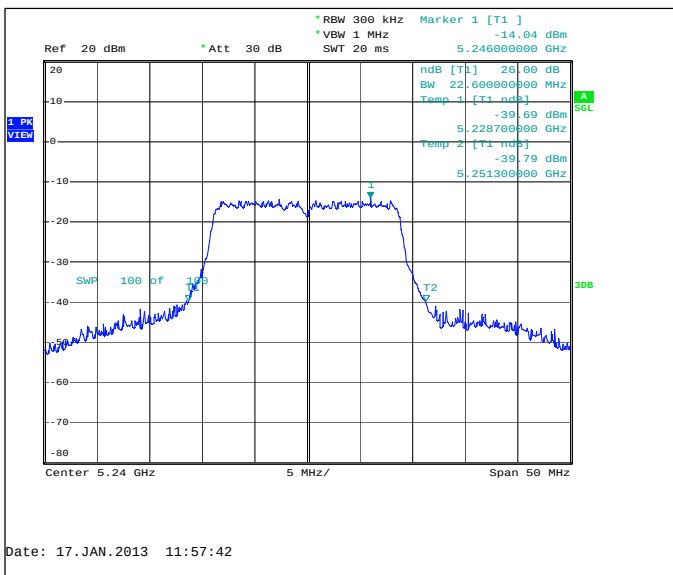
Channel 36 / 5180MHz



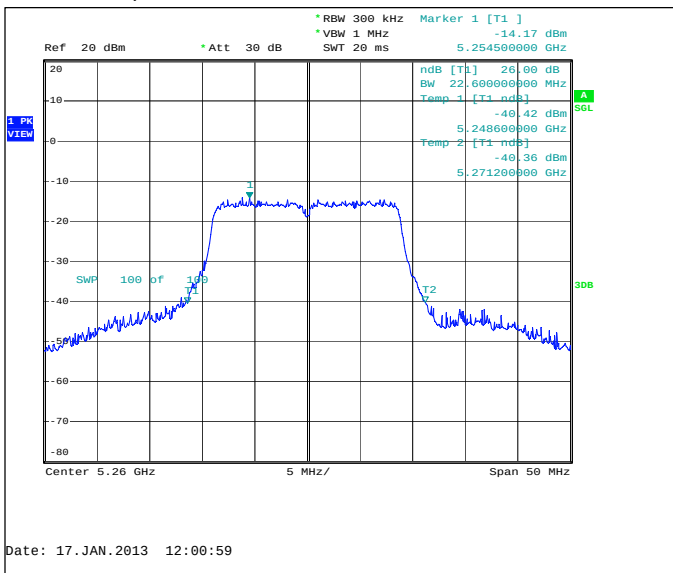
Channel 40 / 5200MHz



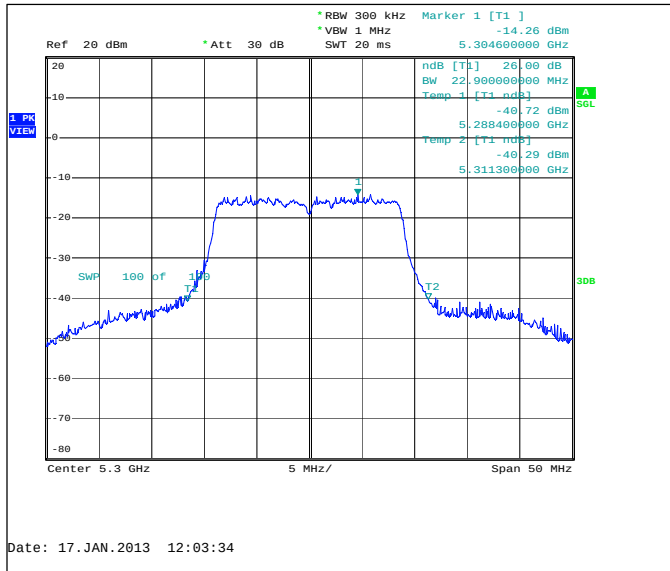
Channel 48 / 5240MHz



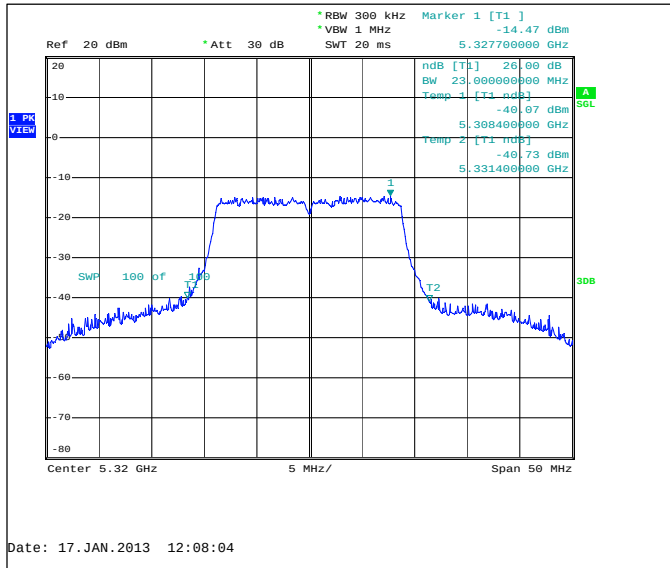
Channel 52 / 5260MHz



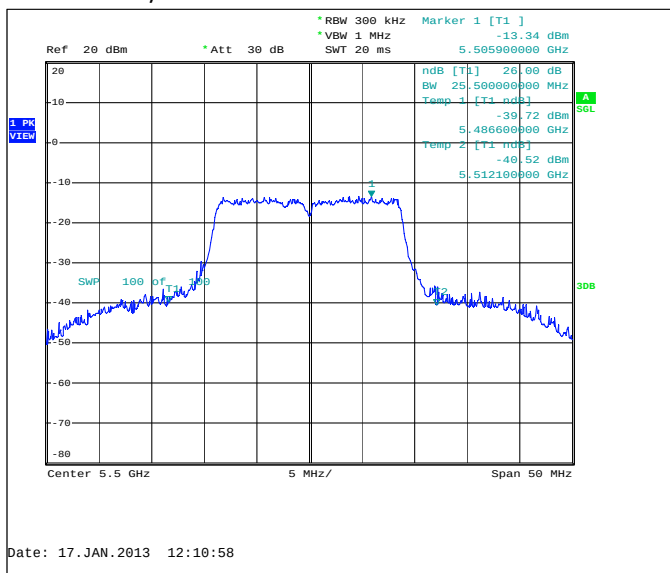
Channel 60 / 5300MHz



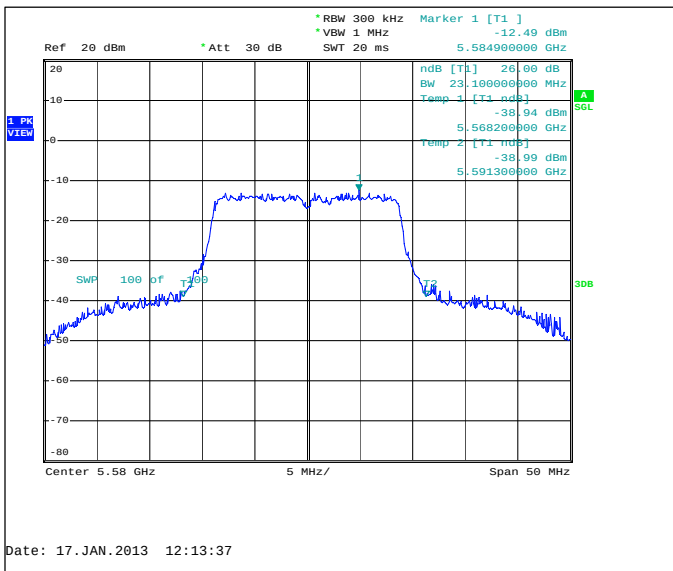
Channel 64 / 5320MHz



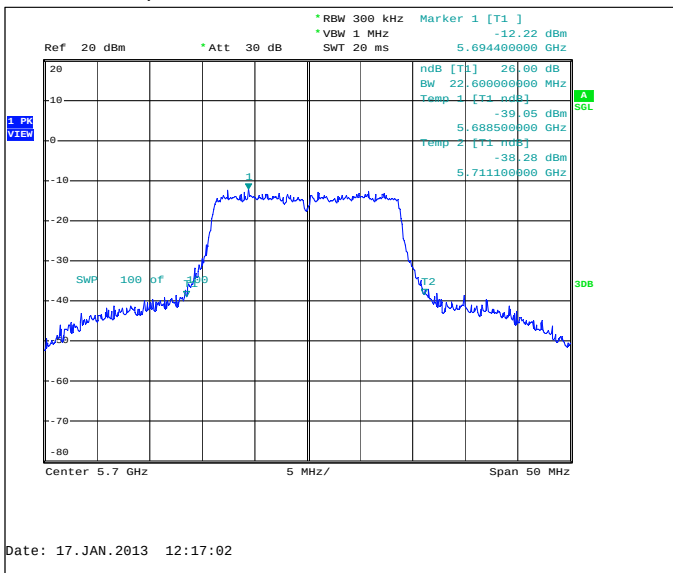
Channel 100 / 5500MHz



Channel 116 / 5580MHz



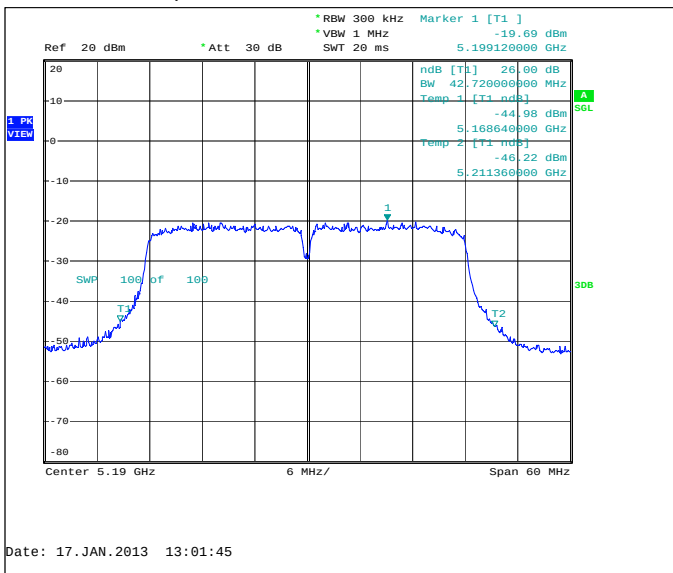
Channel 140 / 5700MHz



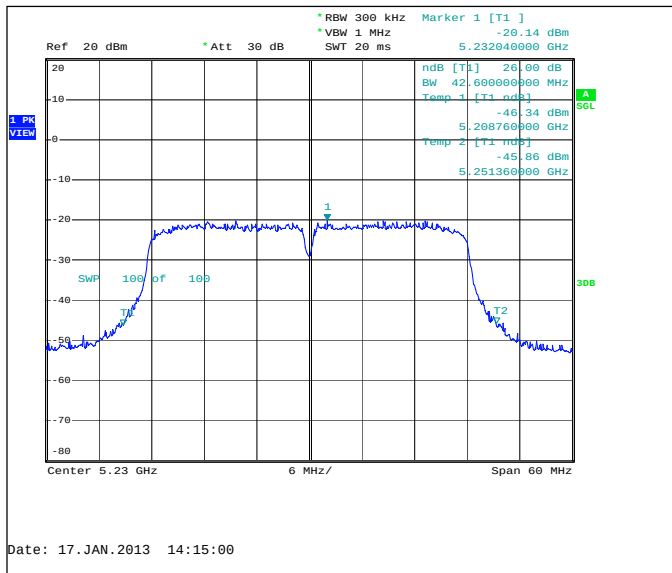
4.3.4 n-mode, 40 MHz CBW mode, QPSK modulation, 27.0 / 30.0 Mbps data rate

Channel / f _c [MHz]	26 dB bandwidth [kHz]	Result
36+40 / 5190	42720	PASSED
44+48 / 5230	42600	PASSED
52+56 / 5270	42480	PASSED
60+64 / 5310	42480	PASSED
100+104 / 5510	43560	PASSED
108+112 / 5550	42720	PASSED
132+136 / 5670	43440	PASSED

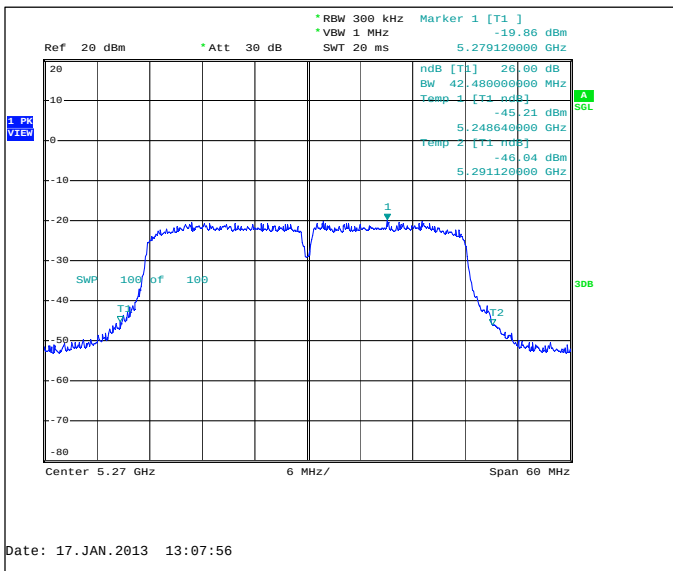
Channel 36+40 / 5190MHz



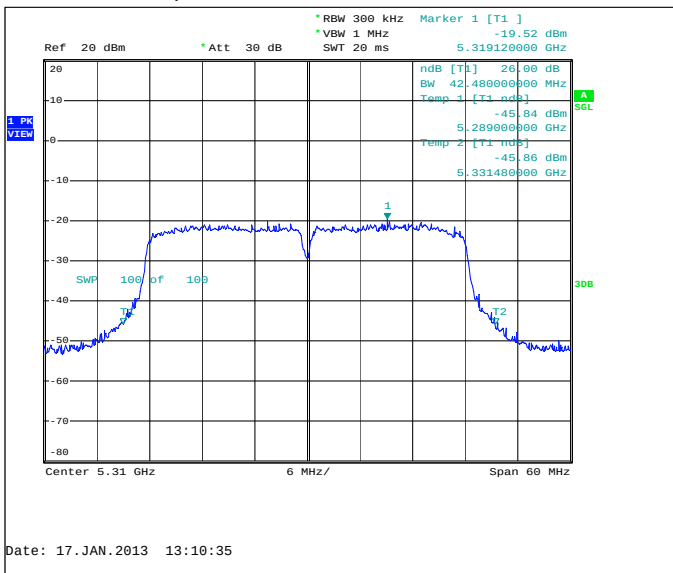
Channel 44+48 / 5230MHz



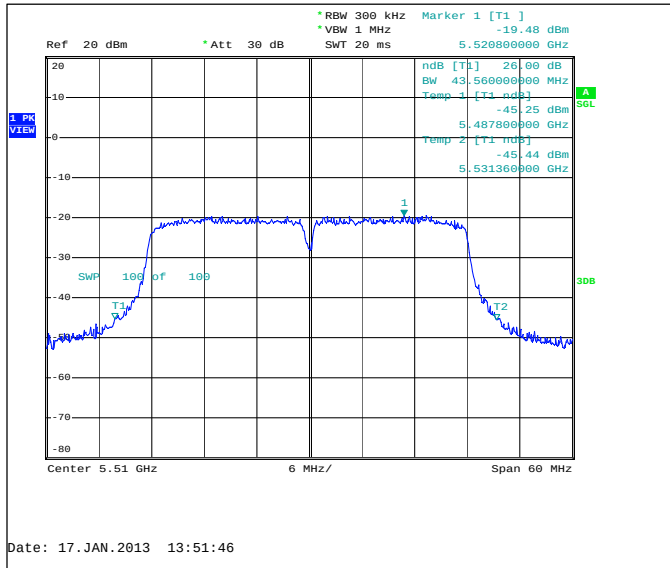
Channel 52+56 / 5270MHz



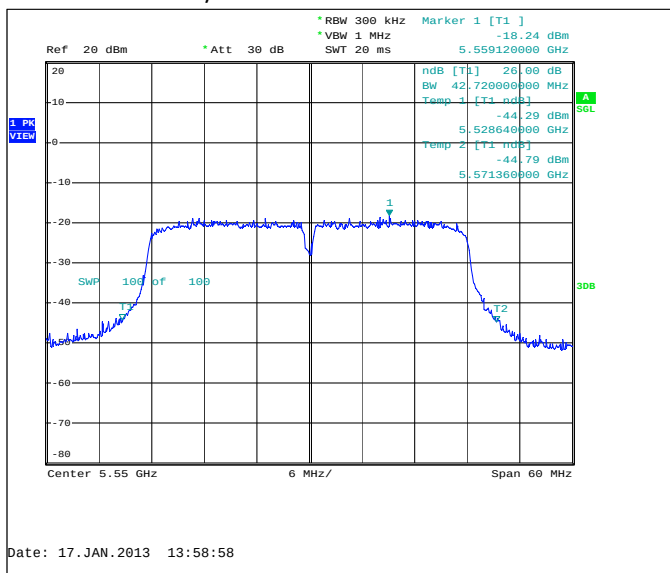
Channel 60+64 / 5310MHz



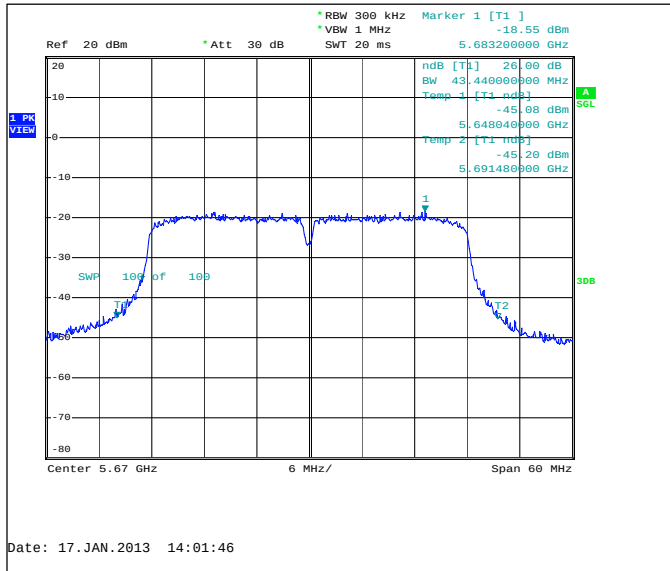
Channel 100+104 / 5510MHz



Channel 108+112 / 5550MHz



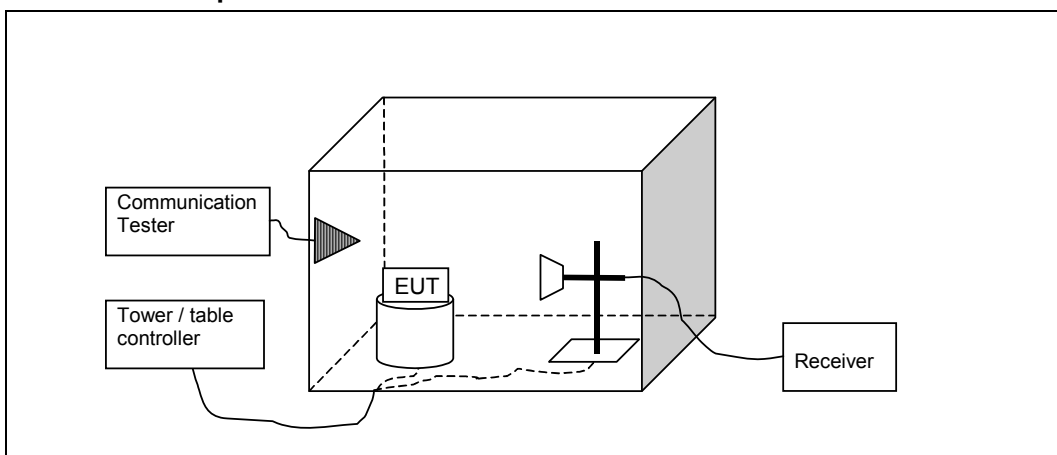
Channel 132+136 / 5670MHz



5. Spurious radiated emissions (FCC §15.407 (b), RSS-210 A9.2)

EUT with DUT number	RM-860, DUT 17007
Accessories with DUT numbers	WH-902, DUT 17006 ; AC-50U, DUT 17005
Operation Voltage [V] / [Hz]	115 / 60
Results	PASSED
Remarks	-
Temp [°C] / Humidity [%RH] / Air Pressure [kPa]	21 / 41 / 101.4
Date of measurements	11-Dec-2012
Measured by	Kalle Hannila

5.1.1 Test setup



5.2. Test method and limit

The measurement is made the following way:

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.

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)
There are 2 sets of limit lines. Part 15.209 limits apply below 1 GHz and on restricted bands above 1GHz. The other limits are described in the table below.

Frequency range [MHz]	Limit [dBm / MHz]
5150 - 5250	1 GHz – 5.15 GHz, 5.35 GHz – 40 GHz: -27
5250 - 5350	1 GHz – 5.25 GHz, 5.35 GHz – 40 GHz: -27
5470 - 5725	1 GHz – 5.47 GHz, 5.725 GHz – 40 GHz: -27
5725 - 5825	1 GHz – 5.715 GHz, 5.835 GHz – 40 GHz: -27 5.715 GHz – 5.725 GHz, 5.825 GHz – 5.835 GHz: -17

5.3. 5 GHz RLAN test results

5.3.1 n-mode, 20 MHz CBW, BPSK modulation, 6.5 / 7.25 Mbps data rate.

Channel 36 / 5180MHz

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

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
10359.221	62.62	1352.54	47.25	15.37	5.6	68.2	PASSED
10359.6	60.85	1102.174	45.48	15.37	7.4	68.2	PASSED
15538.9	51.14	360.413	42	9.15	22.8	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
926.616	23.58	15.101	27.3	-3.72	22.4	46	PASSED
959.098	23.51	14.986	27.42	-3.91	22.5	46	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
10359.221	47.63	240.824	32.26	15.37	---	---	PASSED
10359.6	47.42	234.936	32.05	15.37	---	---	PASSED
15538.9	37.67	76.489	28.53	9.15	16.3	54	PASSED

Channel 40 / 5200MHz

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

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
10399.2	57.33	735.614	41.62	15.71	10.9	68.2	PASSED
15600.1	50.92	351.399	41.26	9.66	23.1	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
928.02	23.57	15.087	27.29	-3.72	22.4	46	PASSED
952.913	23.32	14.662	27.29	-3.97	22.7	46	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
10399.2	44.4	165.978	28.69	15.71	---	---	PASSED
15600.1	38.06	80.02	28.4	9.66	15.9	54	PASSED

Channel 48 / 5240MHz

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

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
10479.9	60.17	1019.647	44.29	15.88	8.1	68.2	PASSED
10483.666	59.33	925.87	43.51	15.82	8.9	68.2	PASSED
15719	50.75	344.548	40.89	9.86	23.2	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
898.628	23.02	14.156	27.23	-4.21	23	46	PASSED
932.274	23.46	14.888	27.24	-3.78	22.6	46	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
10479.9	46.63	214.561	30.75	15.88	---	---	PASSED
10483.666	45.8	194.917	29.98	15.82	---	---	PASSED
15719	38.04	79.836	28.18	9.86	16	54	PASSED

Channel 52 / 5260MHz

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

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
5230.078	63.17	1441.12	59.49	3.68	5.1	68.23	PASSED
10388.374	55.78	615.035	39.99	15.79	12.5	68.23	PASSED
10519.5	56.13	640.472	40.61	15.52	12.1	68.23	PASSED
15778.4	50.48	334.041	40.74	9.74	23.5	73.979	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
912.355	23.13	14.343	27.17	-4.04	22.9	46.021	PASSED
930.534	23.43	14.834	27.17	-3.74	22.6	46.021	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
5230.078	38.75	86.626	35.07	3.68	---	---	PASSED
10388.374	43.2	144.594	27.41	15.79	---	---	PASSED
10519.5	43.34	146.893	27.82	15.52	---	---	PASSED
15778.4	37.86	78.127	28.12	9.74	16.1	54	PASSED

Channel 60 / 5300MHz

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

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
10406.214	56.39	659.933	40.61	15.78	11.8	68.2	PASSED
10599.9	56.91	700.648	40.99	15.92	11.3	68.2	PASSED
15901.5	50.51	335.351	40.87	9.65	23.5	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
917.677	23.21	14.469	27.11	-3.9	22.8	46	PASSED
932.328	23.39	14.779	27.17	-3.78	22.6	46	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
10406.214	43.34	146.876	27.56	15.78	---	---	PASSED
10599.9	44.46	167.071	28.54	15.92	---	---	PASSED
15901.5	37.36	73.748	27.72	9.65	16.6	54	PASSED

Channel 64 / 5320MHz

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

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
10580.362	56.94	702.83	41.25	15.69	11.3	68.2	PASSED
10638.3	56.88	698.554	41	15.88	17.1	74	PASSED
15960.7	49.57	300.989	40.24	9.33	24.4	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
921.414	23.55	15.049	27.36	-3.81	22.5	46	PASSED
941.837	23.34	14.691	27.29	-3.95	22.7	46	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
10580.362	43.84	155.579	28.15	15.69	---	---	PASSED
10638.3	43.86	155.991	27.98	15.88	10.1	54	PASSED
15960.7	36.82	69.335	27.49	9.33	17.2	54	PASSED

Channel 100 / 5500MHz

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

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
10419.538	56.47	665.963	40.75	15.72	11.8	68.2	PASSED
10999.3	57.03	709.986	40.63	16.4	17	74	PASSED
16500.3	49.85	310.67	40.12	9.73	18.4	68.2	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
901.076	23.12	14.314	27.3	-4.18	22.9	46	PASSED
926.166	23.77	15.431	27.48	-3.71	22.3	46	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
10419.538	43.38	147.554	27.66	15.72	---	---	PASSED
10999.3	44.37	165.463	27.97	16.4	9.6	54	PASSED
16500.3	36.93	70.243	27.2	9.73	---	---	PASSED

Channel 116 / 5580MHz

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

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
5547.491	55.01	563.248	51.28	3.73	13.2	68.2	PASSED
10475.05	56.43	662.674	40.88	15.55	11.8	68.2	PASSED
11160.7	57.23	726.775	41.25	15.98	16.8	74	PASSED
16741.2	50.51	335.235	40.88	9.63	17.7	68.2	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
929.04	23.63	15.184	27.36	-3.73	22.4	46	PASSED
934.452	23.54	15.037	27.35	-3.81	22.5	46	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
5547.491	37.63	76.129	33.9	3.73	---	---	PASSED
10475.05	43.34	146.926	27.79	15.55	---	---	PASSED
11160.7	44.3	164.04	28.32	15.98	9.7	54	PASSED
16741.2	37.64	76.234	28.01	9.63	---	---	PASSED

Channel 140 / 5700MHz

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

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
5670.6	58.69	859.706	54.91	3.78	9.5	68.2	PASSED
10599.198	57.03	710.477	41.12	15.91	11.2	68.2	PASSED
11400.6	57.23	727.194	41	16.23	16.7	74	PASSED
17101.2	50.34	328.776	39.87	10.47	17.9	68.2	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
903.536	23.23	14.503	27.36	-4.13	22.8	46	PASSED
925.938	23.71	15.325	27.42	-3.71	22.3	46	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
5670.6	38.29	82.13	34.51	3.78	---	---	PASSED
10599.198	43.99	158.234	28.08	15.91	---	---	PASSED
11400.6	44.36	165.12	28.13	16.23	9.6	54	PASSED
17101.2	37.63	76.111	27.16	10.47	---	---	PASSED

5.3.2 n-mode, 20 MHz CBW, 64-QAM modulation, 52 / 57.8 Mbps data rate.

Channel 36 / 5180MHz

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

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
5208.3	54.26	516.357	50.41	3.85	14	68.2	PASSED
10361.8	56.34	656.07	40.62	15.72	11.9	68.2	PASSED
10476.654	55.91	624.597	40.37	15.54	12.3	68.2	PASSED
15539.2	51.25	365.174	42.1	9.15	22.7	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
910.471	23.23	14.508	27.29	-4.06	22.8	46	PASSED
958.948	23.57	15.089	27.48	-3.91	22.4	46	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
5208.3	37.21	72.51	33.36	3.85	---	---	PASSED
10361.8	43.13	143.351	27.41	15.72	---	---	PASSED
10476.654	43.32	146.538	27.78	15.54	---	---	PASSED
15539.2	37.75	77.197	28.6	9.15	16.2	54	PASSED

Channel 40 / 5200MHz

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

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
10398.7	56.35	656.825	40.54	15.81	11.9	68.2	PASSED
10570.538	56.67	681.868	41.04	15.63	11.6	68.2	PASSED
15601.2	50.71	343.321	41.04	9.67	23.3	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
902.246	23.2	14.456	27.36	-4.16	22.8	46	PASSED
955.751	23.47	14.906	27.42	-3.95	22.6	46	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
10398.7	43.59	151.112	27.78	15.81	---	---	PASSED
10570.538	43.65	152.283	28.02	15.63	---	---	PASSED
15601.2	38.06	79.983	28.39	9.67	15.9	54	PASSED

5.3.3 n-mode, 40 MHz CBW, BPSK modulation, 13.5 / 15.0 Mbps data rate.

Channel 36+40 / 5190MHz

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

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
7953.901	53.89	494.766	40.55	13.34	14.3	68	PASSED
10378.5	56.15	641.727	40.42	15.73	12.1	68	PASSED
10417.134	56.27	651.178	40.54	15.73	12	68	PASSED
15566.1	50.65	340.761	41.29	9.36	23.3	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
173.58	13.68	4.83	32.25	-18.57	29.8	43.5	PASSED
176.178	15.7	6.093	33.57	-17.87	27.8	43.5	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
7953.901	40.33	103.813	26.99	13.34	---	---	PASSED
10378.5	43.06	142.266	27.33	15.73	---	---	PASSED
10417.134	43.32	146.605	27.59	15.73	---	---	PASSED
15566.1	37.8	77.589	28.44	9.36	16.2	54	PASSED

Channel 44+48 / 5230MHz

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

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
5170.2	47.58	239.249	43.27	4.31	20.7	68	PASSED
10265.525	56.54	671.352	40.67	15.87	11.7	68	PASSED
10459.2	56.16	642.614	40.67	15.49	12.1	68	PASSED
15569.8	51.3	367.24	41.9	9.4	22.7	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
31.14	24.43	16.653	29.2	-4.77	15.6	40	PASSED
37.952	23.11	14.309	32.36	-9.25	16.9	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
5170.2	34.59	53.635	30.28	4.31	---	---	PASSED
10265.525	43.4	147.877	27.53	15.87	---	---	PASSED
10459.2	43.22	144.927	27.73	15.49	---	---	PASSED
15569.8	37.81	77.678	28.41	9.4	16.2	54	PASSED

Channel 52+56 / 5270MHz

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

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
5208.779	46.62	214.166	42.77	3.85	21.6	68	PASSED
10325.757	57.23	726.691	41.29	15.94	11	68	PASSED
10542.7	56.57	674.062	41.04	15.53	11.7	68	PASSED
15810.6	50.8	346.537	41.17	9.63	23.2	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
30.15	24.18	16.181	28.3	-4.12	15.8	40	PASSED
234.944	25.71	19.306	42.94	-17.23	20.3	46	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
5208.779	33.93	49.716	30.08	3.85	---	---	PASSED
10325.757	43.36	147.299	27.42	15.94	---	---	PASSED
10542.7	43.53	150.176	28	15.53	---	---	PASSED
15810.6	37.6	75.832	27.97	9.63	16.4	54	PASSED

Channel 60+64 / 5310MHz

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

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
5227.258	46.36	207.874	42.64	3.72	21.9	68	PASSED
10328.449	55.96	628.058	40.04	15.92	12.3	68	PASSED
10621.1	56.83	694.145	41.05	15.79	17.2	74	PASSED
15930.3	49.64	303.249	40.3	9.34	24.3	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
31.11	25.45	18.718	30.2	-4.75	14.6	40	PASSED
234.512	23.86	15.59	41.1	-17.24	22.2	46	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
5227.258	33.94	49.751	30.22	3.72	---	---	PASSED
10328.449	43.33	146.757	27.41	15.92	---	---	PASSED
10621.1	43.78	154.597	28	15.79	10.2	54	PASSED
15930.3	37.17	72.177	27.83	9.34	16.8	54	PASSED

Channel 100+104 / 5510MHz

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

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
5574.67	47	223.949	43.01	3.99	21.2	68	PASSED
10582.57	56.86	696.707	41.16	15.7	11.4	68	PASSED
11023	56.99	707.131	40.79	16.2	17	74	PASSED
16527.7	50.75	344.548	41.05	9.7	17.5	68	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
31.14	25.78	19.445	30.55	-4.77	14.2	40	PASSED
37.916	17.49	7.491	26.71	-9.22	22.5	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
5574.67	34.14	50.927	30.15	3.99	---	---	PASSED
10582.57	43.76	154.135	28.06	15.7	---	---	PASSED
11023	43.97	157.961	27.77	16.2	10	54	PASSED
16527.7	36.79	69.088	27.09	9.7	---	---	PASSED

Channel 132+136 / 5670MHz

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

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
5732.849	48.97	280.802	45.23	3.74	19.3	68	PASSED
10492.582	56.9	700.003	41.41	15.49	11.3	68	PASSED
11336.1	56.85	696.145	40.79	16.06	17.1	74	PASSED
17012.6	51.06	357.396	40.67	10.39	17.2	68	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
31.14	24.33	16.461	29.1	-4.77	15.7	40	PASSED
237.968	25.43	18.694	42.54	-17.11	20.6	46	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
5732.849	34.55	53.376	30.81	3.74	---	---	PASSED
10492.582	43.23	145.094	27.74	15.49	---	---	PASSED
11336.1	44.19	161.901	28.13	16.06	9.8	54	PASSED
17012.6	37.38	73.995	26.99	10.39	---	---	PASSED

Channel 108+112 / 5550MHz

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

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
5475.298	47.17	228.166	43.54	3.63	21.1	68	PASSED
10304.309	57.11	716.803	40.92	16.19	11.1	68	PASSED
11097.2	57.23	726.608	41.05	16.18	16.8	74	PASSED
16647.6	50.69	342.295	40.67	10.02	17.5	68	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
30.33	24.39	16.577	28.63	-4.24	15.6	40	PASSED
234.962	25.84	19.582	43.07	-17.23	20.2	46	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
5475.298	34.41	52.529	30.78	3.63	---	---	PASSED
10304.309	43.59	151.112	27.4	16.19	---	---	PASSED
11097.2	44.23	162.798	28.05	16.18	9.8	54	PASSED
16647.6	37.81	77.705	27.79	10.02	---	---	PASSED

5.3.4 n-mode, 40 MHz CBW, QPSK modulation, 27.0 / 30.0 Mbps data rate.

Channel 44+48 / 5230MHz

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

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
5173.319	52.85	439.036	48.54	4.31	15.4	68	PASSED
10316.637	56.48	666.73	40.44	16.04	11.8	68	PASSED
10459.3	56.43	662.674	40.94	15.49	11.8	68	PASSED
15570.9	50.84	348.418	41.43	9.41	23.1	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
31.11	23.66	15.244	28.41	-4.75	16.3	40	PASSED
37.526	22.55	13.417	31.51	-8.96	17.4	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
5173.319	38.58	84.869	34.27	4.31	---	---	PASSED
10316.637	43.47	149.176	27.43	16.04	---	---	PASSED
10459.3	43.24	145.245	27.75	15.49	---	---	PASSED
15570.9	37.83	77.857	28.42	9.41	16.2	54	PASSED

Channel 52+56 / 5270MHz

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

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
5210.196	47.66	241.435	43.82	3.84	20.6	68	PASSED
10539.7	56.97	705.505	41.43	15.54	11.3	68	PASSED
10552.702	56.08	636.429	40.57	15.52	12.2	68	PASSED
15807.6	50.8	346.737	41.18	9.62	23.2	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
31.11	25.17	18.138	29.92	-4.75	14.8	40	PASSED
34.526	21.37	11.71	28.35	-6.98	18.6	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
5210.196	33.65	48.145	29.81	3.84	---	---	PASSED
10539.7	44	158.453	28.46	15.54	---	---	PASSED
10552.702	43.64	152.002	28.13	15.52	---	---	PASSED
15807.6	37.59	75.736	27.97	9.62	16.4	54	PASSED

Channel 60+64 / 5310MHz

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

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
7958.936	53.54	475.499	40.18	13.36	14.7	68	PASSED
10417.238	57.04	711.05	41.31	15.73	11.2	68	PASSED
10619	56.61	676.784	40.81	15.8	17.4	74	PASSED
15929.7	50.15	321.81	40.81	9.34	23.8	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
30.03	24.53	16.85	28.57	-4.04	15.5	40	PASSED
237.938	24.99	17.76	42.1	-17.11	21	46	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
7958.936	40.39	104.592	27.03	13.36	---	---	PASSED
10417.238	43.38	147.622	27.65	15.73	---	---	PASSED
10619	43.84	155.561	28.04	15.8	10.2	54	PASSED
15929.7	37.19	72.36	27.85	9.34	16.8	54	PASSED

Channel 100+104 / 5510MHz

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

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
7905.705	52.49	420.969	39.68	12.81	15.7	68	PASSED
10291.285	57.07	713.51	40.94	16.13	11.2	68	PASSED
11016.1	57.27	730.634	41.06	16.21	16.7	74	PASSED
16527.8	49.63	303.145	39.93	9.7	18.6	68	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
31.14	25.9	19.733	30.67	-4.77	14.1	40	PASSED
231.938	25.01	17.805	42.33	-17.32	21	46	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
7905.705	39.51	94.504	26.7	12.81	---	---	PASSED
10291.285	43.64	152.055	27.51	16.13	---	---	PASSED
11016.1	44.07	159.698	27.86	16.21	9.9	54	PASSED
16527.8	36.82	69.351	27.12	9.7	---	---	PASSED

Channel 108+112 / 5550MHz

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

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
7970.073	53.2	456.825	39.81	13.39	15	68	PASSED
10379.266	56.42	662.217	40.69	15.73	11.8	68	PASSED
11103.5	56.73	686.041	40.56	16.17	17.3	74	PASSED
16653.2	51.14	360.579	41.18	9.96	17.1	68	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
30.03	20.74	10.886	24.78	-4.04	19.3	40	PASSED
31.14	20.96	11.167	25.73	-4.77	19	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
7970.073	40.41	104.882	27.02	13.39	---	---	PASSED
10379.266	43.08	142.528	27.35	15.73	---	---	PASSED
11103.5	44.33	164.532	28.16	16.17	9.7	54	PASSED
16653.2	37.85	78.091	27.89	9.96	---	---	PASSED

Channel 132+136 / 5670MHz

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

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
5609.878	48.36	261.879	44.46	3.9	19.9	68	PASSED
10450.798	55.89	623.161	40.43	15.46	12.3	68	PASSED
11340.3	57	707.946	40.94	16.06	17	74	PASSED
17011	49.8	309.065	39.41	10.39	18.4	68	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
31.14	25.95	19.831	30.72	-4.77	14.1	40	PASSED
37.976	23.77	15.431	33.03	-9.26	16.2	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
5609.878	34.96	55.944	31.06	3.9	---	---	PASSED
10450.798	43.2	144.461	27.74	15.46	---	---	PASSED
11340.3	44.26	163.286	28.2	16.06	9.7	54	PASSED
17011	37.42	74.259	27.03	10.39	---	---	PASSED

Channel 36+40 / 5190MHz

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

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
5246.4	49.14	286.484	45.64	3.5	19.1	68	PASSED
10315.833	56.11	638.999	40.06	16.05	12.1	68	PASSED
10381.6	55.93	625.965	40.18	15.75	12.3	68	PASSED
15566.3	50.67	341.665	41.31	9.36	23.3	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
30	20.76	10.909	24.78	-4.02	19.2	40	PASSED
41.426	18.59	8.503	30.14	-11.55	21.4	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
5246.4	34.5	53.113	31	3.5	---	---	PASSED
10315.833	43.49	149.469	27.44	16.05	---	---	PASSED
10381.6	43.11	143.103	27.36	15.75	---	---	PASSED
15566.3	37.8	77.58	28.44	9.36	16.2	54	PASSED

5.4. 5 GHz RLAN test results

5.4.1 n-mode, 20 MHz CBW, 64-QAM modulation, 52 / 57.8 Mbps data rate.

Channel 36 / 5180MHz

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

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
5208.3	54.26	516.357	50.41	3.85	14	68.2	PASSED
10361.8	56.34	656.07	40.62	15.72	11.9	68.2	PASSED
10476.654	55.91	624.597	40.37	15.54	12.3	68.2	PASSED
15539.2	51.25	365.174	42.1	9.15	22.7	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
910.471	23.23	14.508	27.29	-4.06	22.8	46	PASSED
958.948	23.57	15.089	27.48	-3.91	22.4	46	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
5208.3	37.21	72.51	33.36	3.85	---	---	PASSED
10361.8	43.13	143.351	27.41	15.72	---	---	PASSED
10476.654	43.32	146.538	27.78	15.54	---	---	PASSED
15539.2	37.75	77.197	28.6	9.15	16.2	54	PASSED

Channel 40 / 5200MHz

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

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
10398.7	56.35	656.825	40.54	15.81	11.9	68.2	PASSED
10570.538	56.67	681.868	41.04	15.63	11.6	68.2	PASSED
15601.2	50.71	343.321	41.04	9.67	23.3	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
902.246	23.2	14.456	27.36	-4.16	22.8	46	PASSED
955.751	23.47	14.906	27.42	-3.95	22.6	46	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
10398.7	43.59	151.112	27.78	15.81	---	---	PASSED
10570.538	43.65	152.283	28.02	15.63	---	---	PASSED

15601.2	38.06	79.983	28.39	9.67	15.9	54	PASSED
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Channel 48 / 5240MHz

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

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
5211.5	53.65	481.338	49.82	3.83	14.6	68.2	PASSED
10480	56.44	663.896	40.92	15.52	11.8	68.2	PASSED
10481.862	56.31	653.507	40.8	15.51	11.9	68.2	PASSED
15721.9	50.81	347.016	40.92	9.89	23.2	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
910.447	23.29	14.612	27.35	-4.06	22.7	46	PASSED
935.298	23.53	15.009	27.36	-3.83	22.5	46	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
5211.5	35.72	61.122	31.89	3.83	---	---	PASSED
10480	43.57	150.747	28.05	15.52	---	---	PASSED
10481.862	43.21	144.694	27.7	15.51	---	---	PASSED
15721.9	38.04	79.809	28.15	9.89	16	54	PASSED

Channel 52 / 5260MHz

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

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
5229.595	56.8	691.433	53.12	3.68	11.4	68.2	PASSED
10518.5	56.3	653.206	40.8	15.51	11.9	68.2	PASSED
10521.046	56.45	664.814	40.92	15.53	11.8	68.2	PASSED
15779.7	50.4	330.979	40.67	9.73	23.6	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
900.032	23.09	14.279	27.29	-4.2	22.9	46	PASSED
949.973	23.37	14.747	27.35	-3.98	22.6	46	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
5229.595	37.19	72.369	33.51	3.68	---	---	PASSED
10518.5	43.28	145.865	27.78	15.51	---	---	PASSED
10521.046	43.3	146.167	27.77	15.53	---	---	PASSED
15779.7	37.85	78.073	28.12	9.73	16.2	54	PASSED

Channel 60 / 5300MHz

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

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
10274.549	56.6	676.394	40.67	15.93	11.6	68.2	PASSED
10599	57.19	723.936	41.29	15.9	11	68.2	PASSED
15899.3	51.06	357.396	41.41	9.65	22.9	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
953.597	23.51	14.983	27.48	-3.97	22.5	46	PASSED
959.788	23.71	15.321	27.61	-3.9	22.3	46	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
10274.549	43.46	148.885	27.53	15.93	---	---	PASSED
10599	43.91	156.928	28.01	15.9	---	---	PASSED
15899.3	37.41	74.234	27.76	9.65	16.6	54	PASSED

Channel 64 / 5320MHz

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

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
5290.619	54.72	544.44	51.44	3.28	13.5	68.2	PASSED
10397.294	56.61	676.55	40.8	15.81	11.6	68.2	PASSED
10640.1	57.07	713.428	41.17	15.9	16.9	74	PASSED
15958.8	49.51	298.951	40.16	9.35	24.5	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
31.14	25.78	19.445	30.55	-4.77	14.2	40	PASSED
37.936	18.37	8.285	27.61	-9.24	21.6	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
5290.619	35.01	56.273	31.73	3.28	---	---	PASSED
10397.294	43.39	147.809	27.58	15.81	---	---	PASSED
10640.1	43.85	155.812	27.95	15.9	10.1	54	PASSED
15958.8	36.76	68.841	27.41	9.35	17.2	54	PASSED

Channel 100 / 5500MHz

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

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
5471.6	56.22	647.143	52.58	3.64	12	68.2	PASSED
11000.4	57.56	755.353	41.16	16.4	16.4	74	PASSED
16501.2	50.02	316.774	40.3	9.72	18.2	68.2	PASSED

Channel 116 / 5580MHz

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

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
5549.196	53.41	468.166	49.69	3.73	14.8	68.2	PASSED
10324.045	56.63	678.11	40.67	15.96	11.6	68.2	PASSED
11158.1	56.92	701.213	40.93	16	17.1	74	PASSED
16741.3	50.3	327.378	40.67	9.63	17.9	68.2	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
31.62	19.94	9.935	25.02	-5.08	20.1	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
5549.196	36.87	69.751	33.15	3.73	---	---	PASSED
10324.045	43.37	147.469	27.41	15.96	---	---	PASSED
11158.1	44.14	160.99	28.15	16	9.9	54	PASSED
16741.3	37.5	75.024	27.87	9.63	---	---	PASSED

Channel 140 / 5700MHz

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

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
5669.115	55.97	628.492	52.19	3.78	12.3	68.2	PASSED
10344.989	55.82	617.945	40.04	15.78	12.4	68.2	PASSED
11398.9	57.64	761.728	41.42	16.22	16.3	74	PASSED
17101.5	50.52	335.544	40.04	10.48	17.7	68.2	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
31.11	20.98	11.192	25.73	-4.75	19	40	PASSED
37.936	18.72	8.631	27.96	-9.24	21.3	40	PASSED

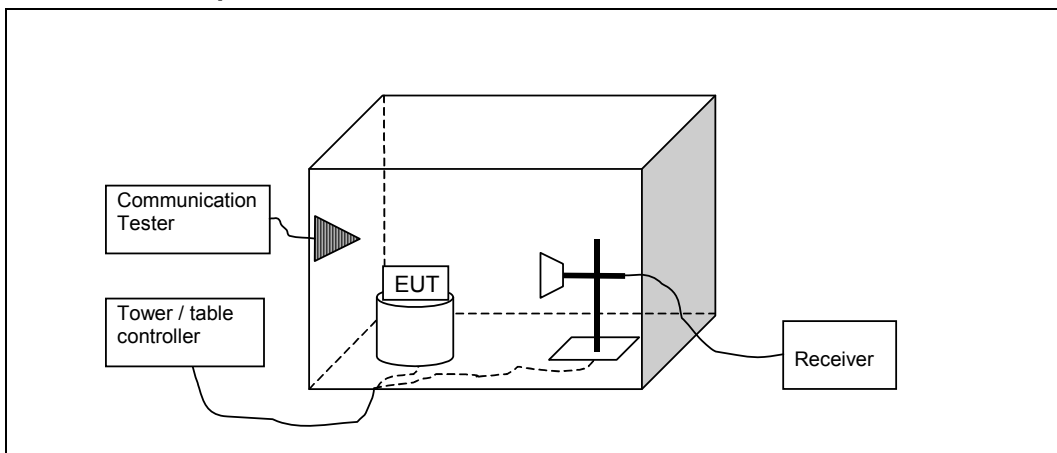
Average (RBW: 1 MHz, VBW: 1 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
5669.115	38.04	79.754	34.26	3.78	---	---	PASSED
10344.989	42.97	140.783	27.19	15.78	---	---	PASSED
11398.9	44.26	163.286	28.04	16.22	9.7	54	PASSED
17101.5	37.54	75.31	27.06	10.48	---	---	PASSED

6. Band edge compliance of RF emissions (FCC §15.407 (b), RSS-210 A9.2)

EUT with DUT number	RM-860, DUT 17007
Accessories with DUT numbers	WH-902, DUT 17006 ; AC-50U, DUT 17005
Operation Voltage [V] / [Hz]	115 / 60
Results	PASSED
Remarks	-
Temp [°C] / Humidity [%RH] / Air Pressure [kPa]	21 / 41 / 101.4
Date of measurements	11-Dec-2012
Measured by	Kalle Hannila

6.1.1 Test setup



6.2. Test method and limit

The measurement is made according to KDB 789033 and IC standard RSS-210.
The measurement results are obtained as described below:

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

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

The limits in the table below are listed for the 100 MHz span around the band edges.

$$P \text{ [W]} = (10 \text{ to power (P [dBm] / 10)}) / 1000.$$

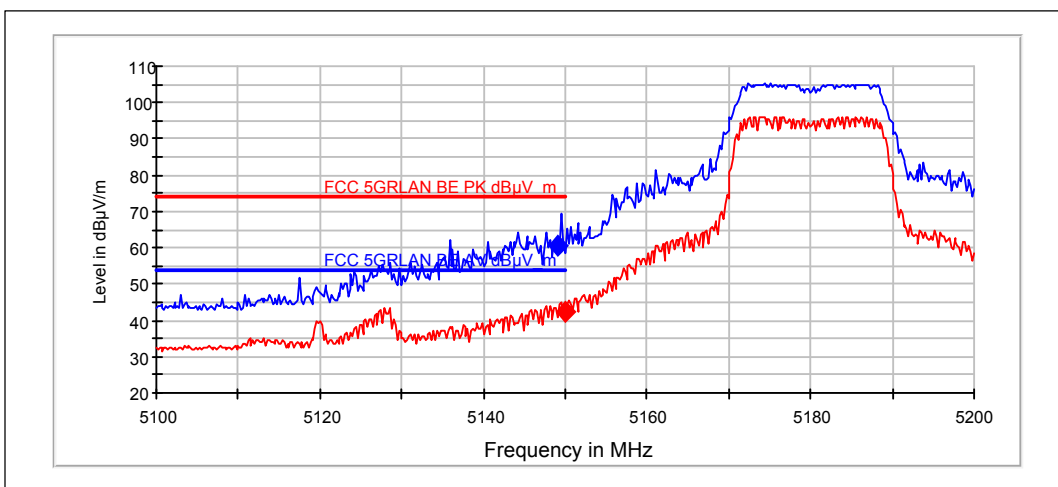
$$E \text{ [dB}\mu\text{V/m]} = 20 * \text{LOG} ((\text{square root (30 * P [W])} / 3 \text{ m}) * 1000000)$$

Frequency range [MHz]	Limit [dBm / MHz]	Limit dBuV/m @ 3m
5150 - 5250	$\leq 5.150 \text{ GHz}$ and ≥ 5.350 : 54 dBuV/m (avg), 74 dBuV/m (pk)	68.23
5250 - 5350	$\leq 5.150 \text{ GHz}$ and $\geq 5.350 \text{ GHz}$: 54 dBuV/m (avg), 74 dBuV/m (pk)	68.23
5470 - 5725	$\leq 5.460 \text{ GHz}$: 54 dBuV/m (avg), 74 dBuV/m (pk) 5.460 – 5.470 GHz: -27 dBm/MHz (pk)	68.23
5725 - 5825	5.825 – 5.835 GHz: -17 dBm/MHz (pk) $\geq 5.835 \text{ GHz}$: -27 dBm/MHz (pk)	68.23 78.23

6.3. 5 GHz RLAN test results

6.3.1 n-mode, 20 MHz CBW, BPSK modulation, 6.5 / 7.25 Mbps data rate.

Channel 36 / 5180MHz



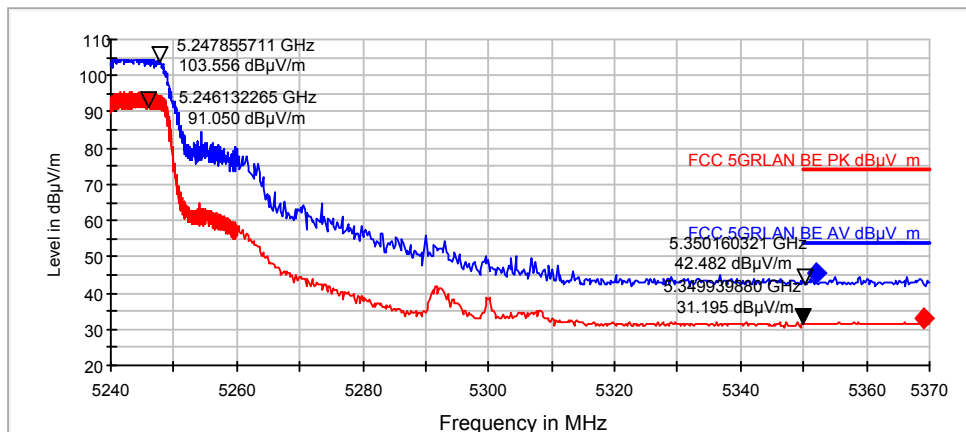
Peak (RBW: 1 MHz, VBW: 3 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
5148.998	60.65	1078.078	56.39	4.26	13.3	74	PASSED

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

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
5150	42.49	133.229	38.24	4.25	11.5	54	PASSED

Channel 48 / 5240MHz



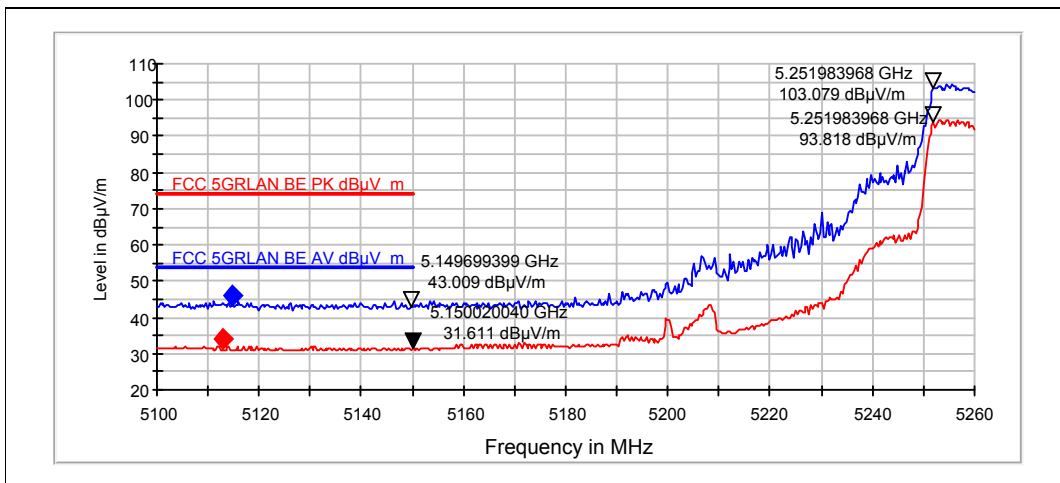
Peak (RBW: 1 MHz, VBW: 3 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
5351.964	45.68	192.331	42.43	3.25	28.3	74	PASSED

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

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
5369.238	32.85	43.888	29.54	3.31	21.2	54	PASSED

Channel 52 / 5260MHz



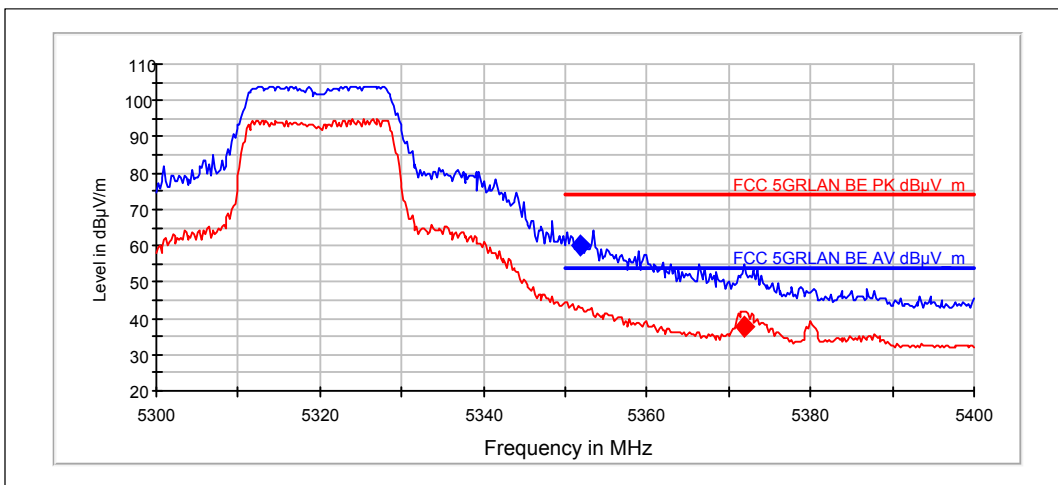
Peak (RBW: 1 MHz, VBW: 3 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
5114.604	46.13	202.488	41.71	4.42	27.9	74	PASSED

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

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
5113.001	33.98	50.021	29.54	4.44	20	54	PASSED

Channel 64 / 5320MHz



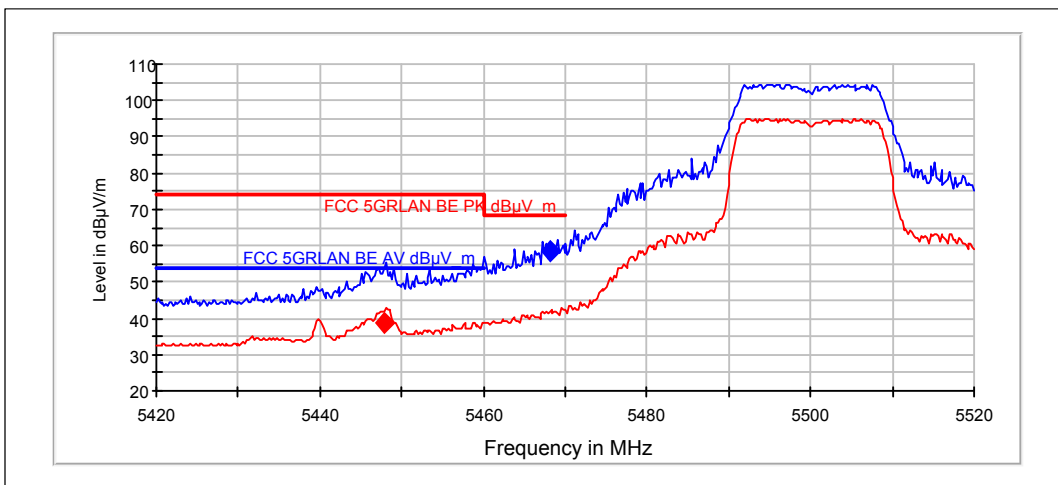
Peak (RBW: 1 MHz, VBW: 3 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
5351.804	60.15	1017.537	56.9	3.25	13.8	74	PASSED

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

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
5371.844	37.82	77.822	34.54	3.29	16.2	54	PASSED

Channel 100 / 5500MHz



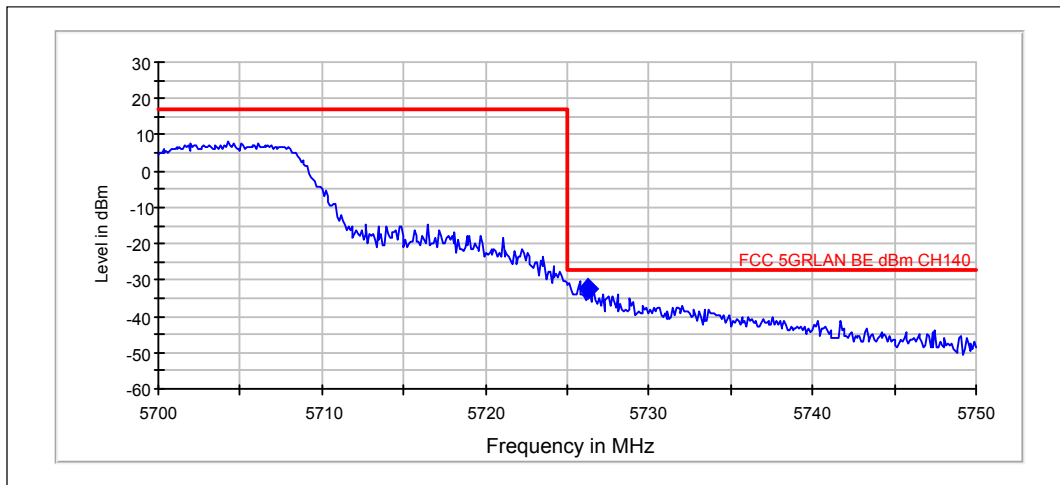
Peak (RBW: 1 MHz, VBW: 3 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
5468.196	58.34	825.563	54.69	3.65	9.9	68	PASSED

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

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
5447.956	38.75	86.626	35.06	3.69	15.2	54	PASSED

Channel 140 / 5700MHz

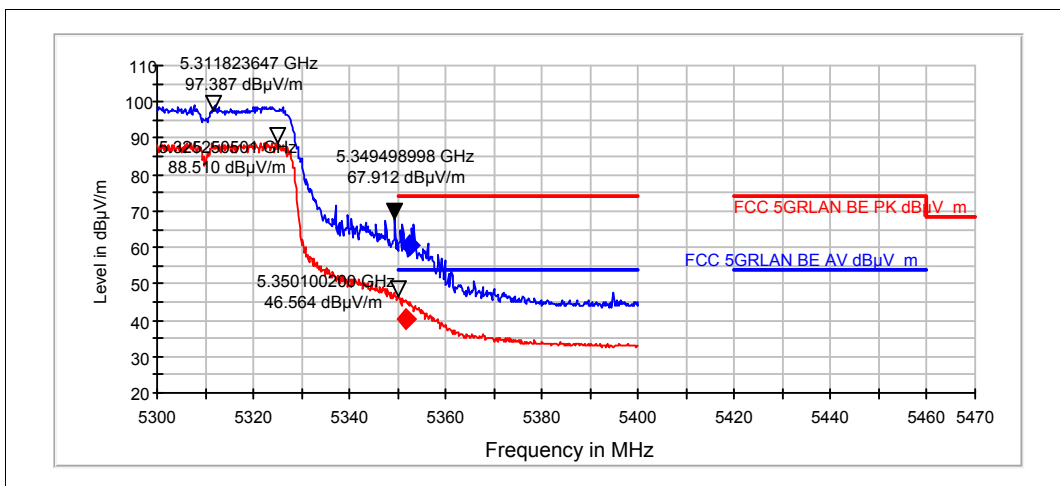


Peak (RBW: 1 MHz, VBW: 3 MHz)

Frequency [MHz]	P [dBm]	P [μ W]	P _{MEAS} [dBm]	A _{TOT} [dB]	Margin	Limit [dBm]	Results
5726.257	-32.58	0.5522	-46.15	13.57	5.6	-27	PASSED

6.3.2 n-mode, 40 MHz CBW, BPSK modulation, 13.5 / 15.0 Mbps data rate.

Channel 60+64 / 5310MHz



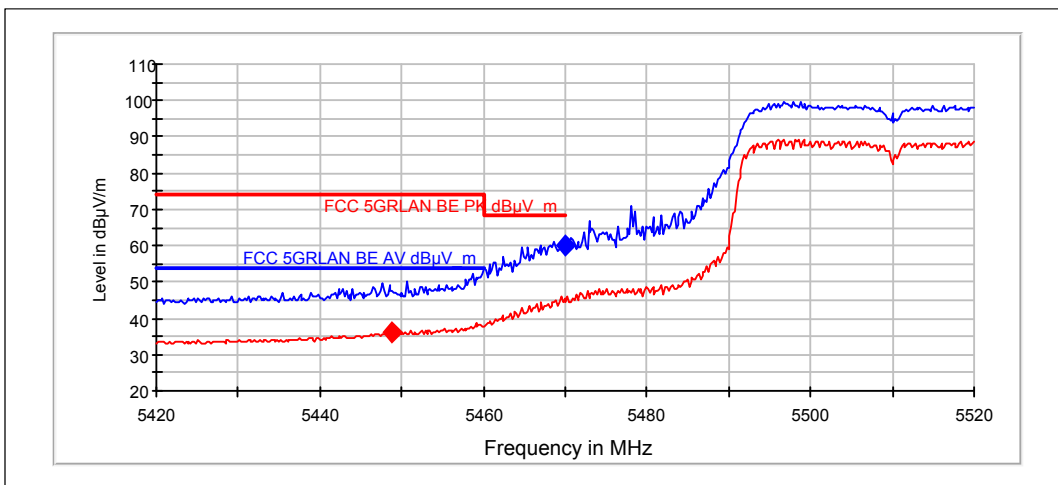
Peak (RBW: 1 MHz, VBW: 3 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
5352.605	60.78	1093.956	57.53	3.25	13.2	74	PASSED

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

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
5351.804	40.15	101.695	36.9	3.25	13.9	54	PASSED

Channel 100+104 / 5510MHz



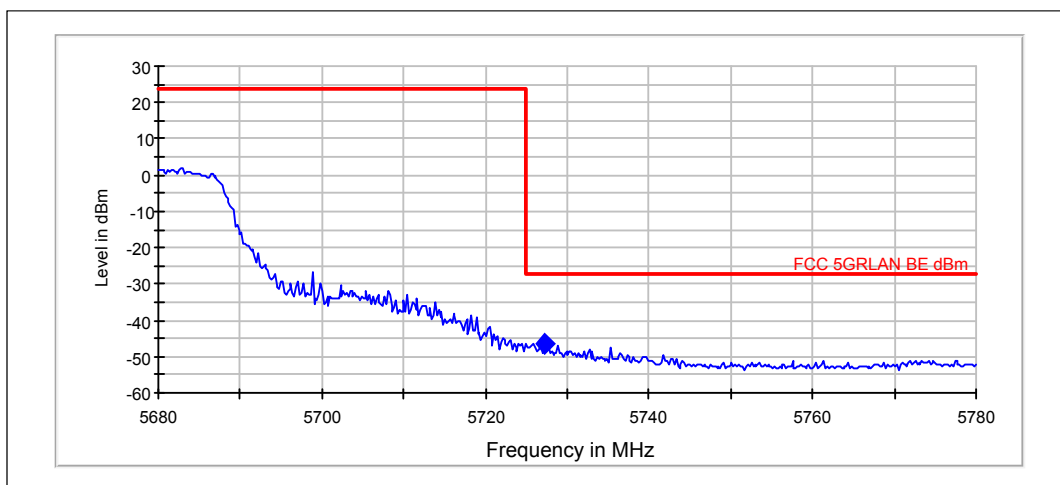
Peak (RBW: 1 MHz, VBW: 3 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
5469.9	60.02	1002.305	56.38	3.64	8.2	68	PASSED

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

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
5448.758	36.09	63.731	32.4	3.69	17.9	54	PASSED

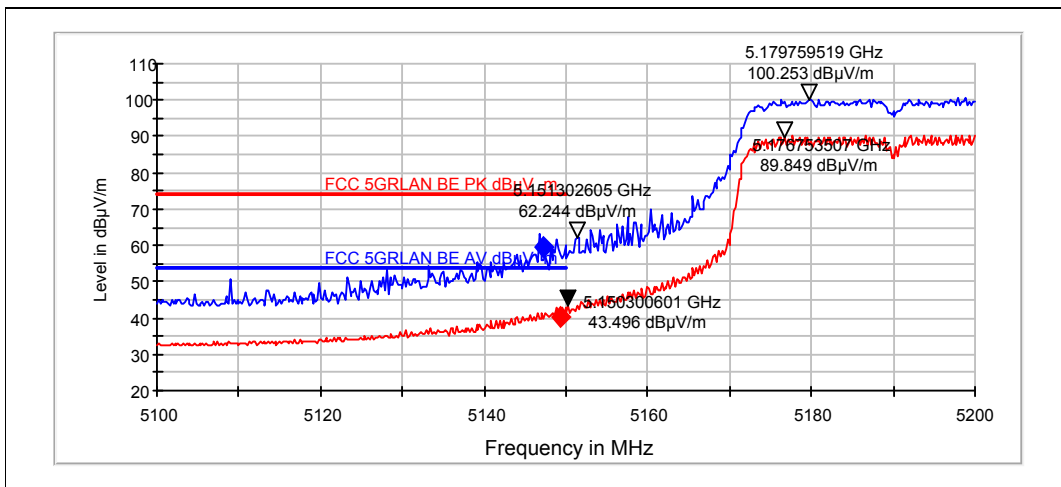
Channel 132+136 / 5670MHz



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

Frequency [MHz]	P [dBm]	P [μ W]	P _{MEAS} [dBm]	A _{TOT} [dB]	Margin	Limit [dBm]	Results
5727.259	-46.66	0.02158	-60.27	13.61	19.7	-27	PASSED

Channel 36+40 / 5190MHz



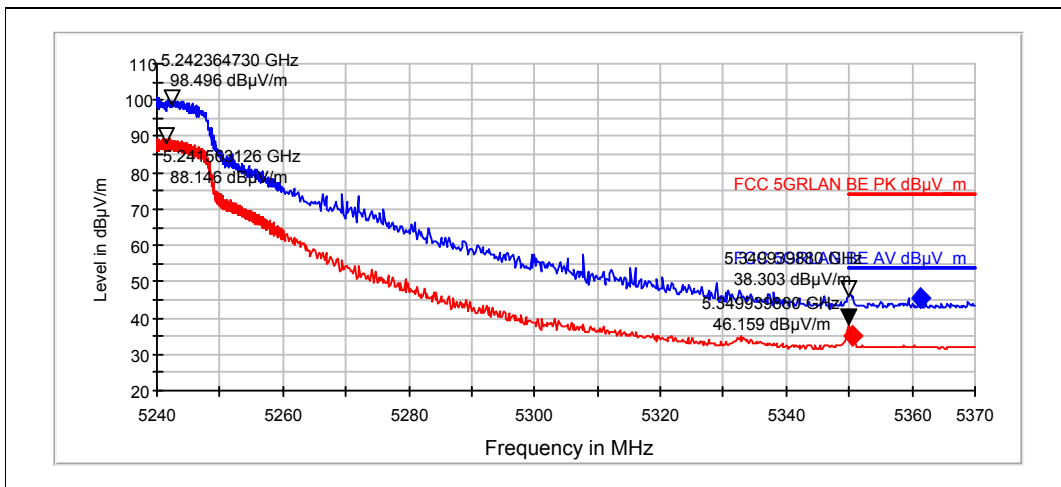
Peak (RBW: 1 MHz, VBW: 3 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
5147.295	59.53	947.545	55.27	4.26	14.5	74	PASSED

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

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
5149.198	40.06	100.635	35.8	4.26	13.9	54	PASSED

Channel 44+48 / 5230MHz



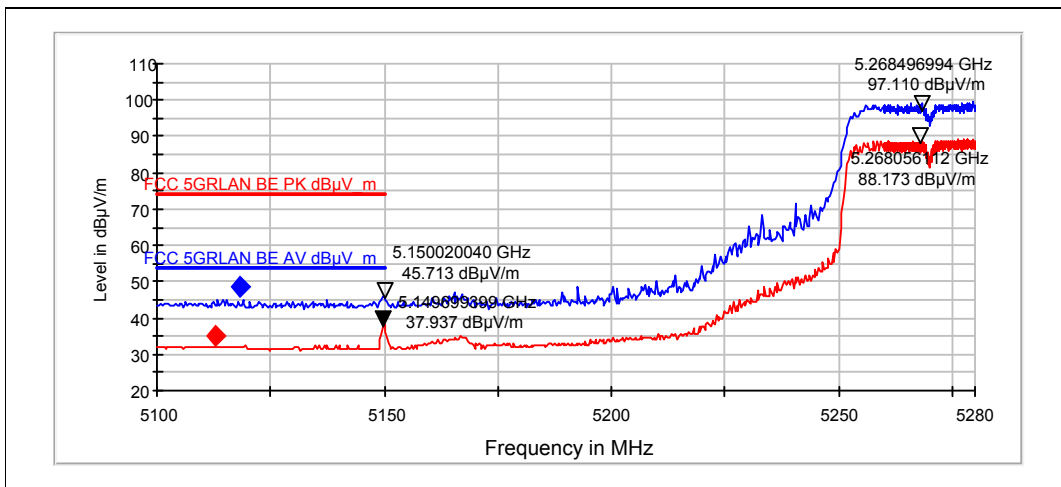
Peak (RBW: 1 MHz, VBW: 3 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
5361.423	45.61	190.744	42.33	3.28	28.4	74	PASSED

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

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
5350.401	34.91	55.654	31.67	3.24	19.1	54	PASSED

Channel 52+56 / 5270MHz



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

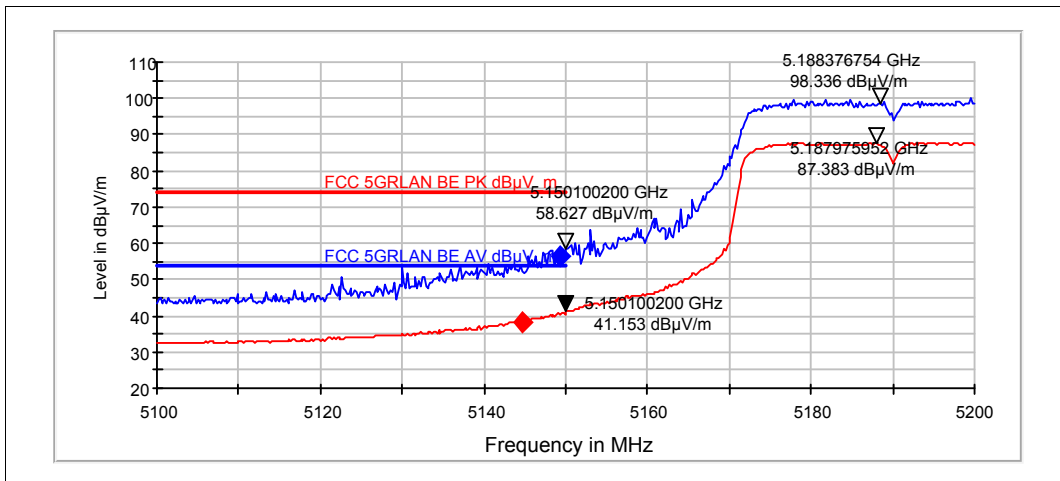
Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
5118.211	48.36	261.668	43.99	4.37	25.6	74	PASSED

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

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
5113.051	34.9	55.571	30.46	4.44	19.1	54	PASSED

6.3.3 n-mode, 40 MHz CBW, QPSK modulation, 27.0 / 30.0 Mbps data rate.

Channel 36+40 / 5190MHz



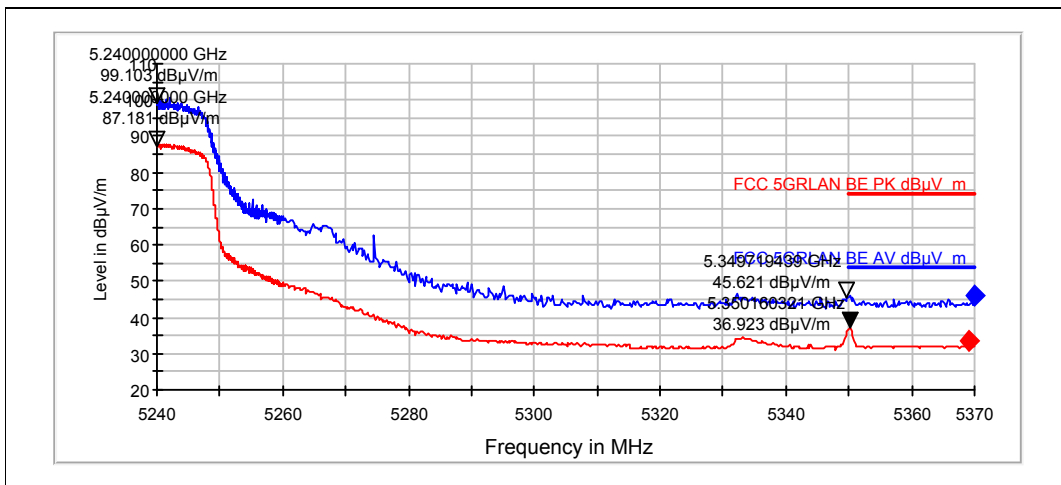
Peak (RBW: 1 MHz, VBW: 3 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
5149.399	56.3	652.98	52.05	4.26	17.7	74	PASSED

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

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
5144.79	37.95	78.995	33.68	4.27	16	54	PASSED

Channel 44+48 / 5230MHz



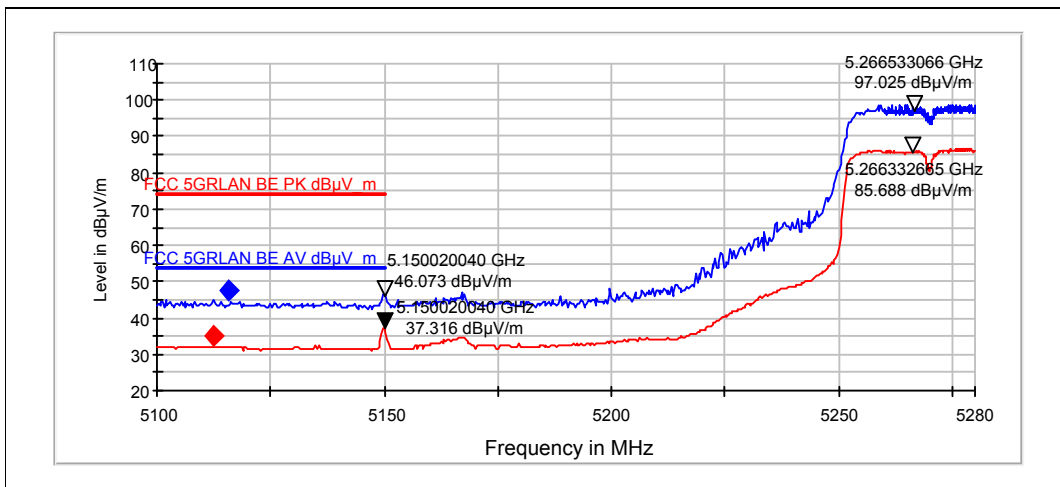
Peak (RBW: 1 MHz, VBW: 3 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
5370	46.19	203.939	42.88	3.31	27.8	74	PASSED

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

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
5369.118	33.76	48.764	30.45	3.31	20.2	54	PASSED

Channel 52+56 / 5270MHz



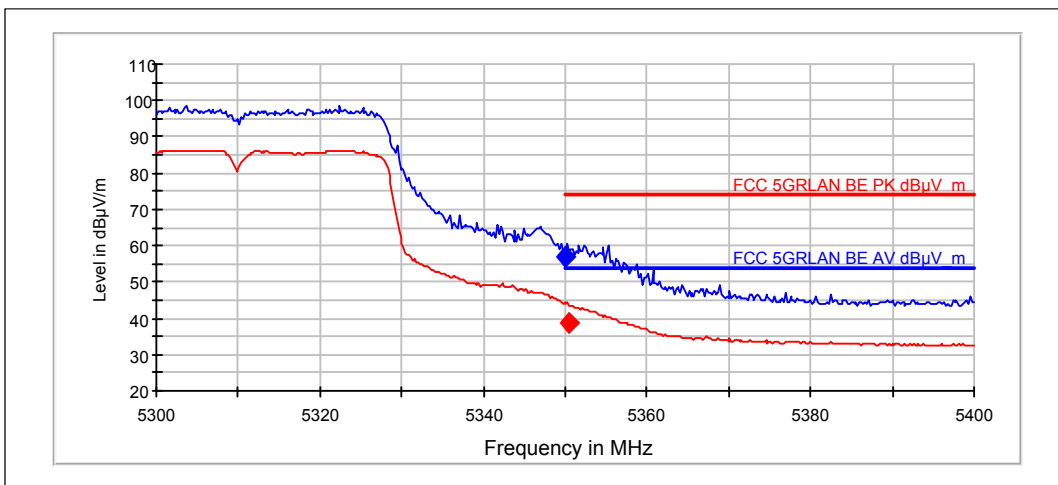
Peak (RBW: 1 MHz, VBW: 3 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
5115.706	47.68	242.075	43.28	4.4	26.3	74	PASSED

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

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
5112.6	34.9	55.61	30.45	4.45	19.1	54	PASSED

Channel 60+64 / 5310MHz



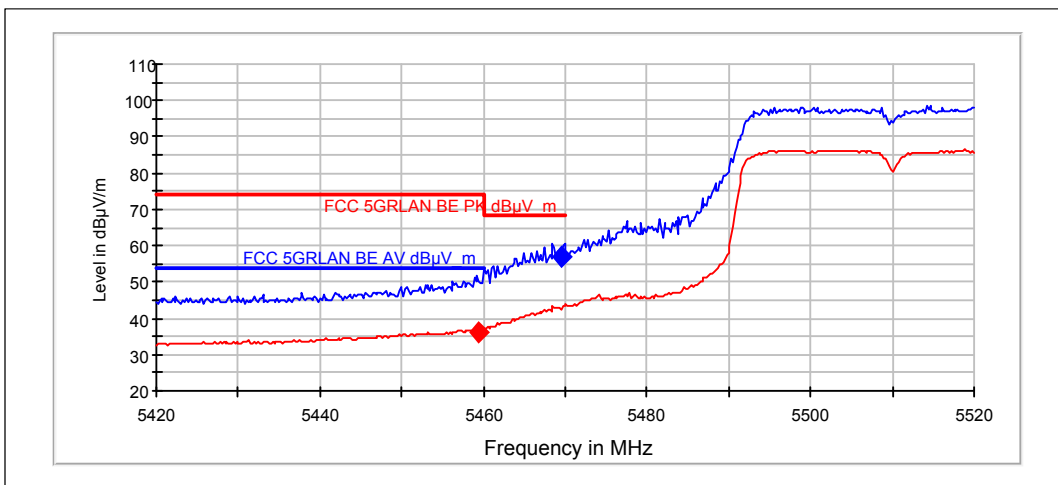
Peak (RBW: 1 MHz, VBW: 3 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
5350	56.95	704.206	53.71	3.24	17	74	PASSED

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

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
5350.501	38.56	84.703	35.32	3.24	15.4	54	PASSED

Channel 100+104 / 5510MHz



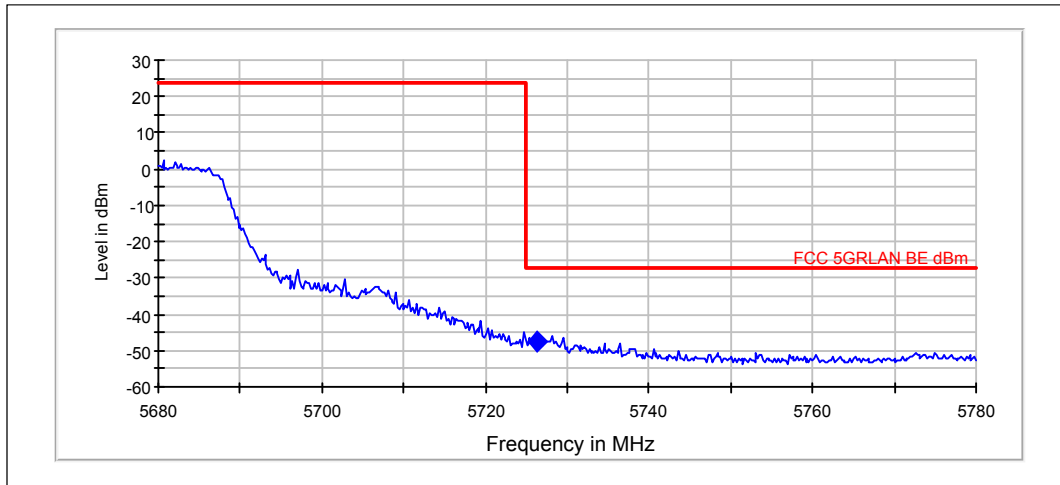
Peak (RBW: 1 MHz, VBW: 3 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
5469.499	56.78	690.558	53.14	3.64	11.4	68	PASSED

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

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
5459.379	36.07	63.584	32.4	3.67	17.9	54	PASSED

Channel 132+136 / 5670MHz

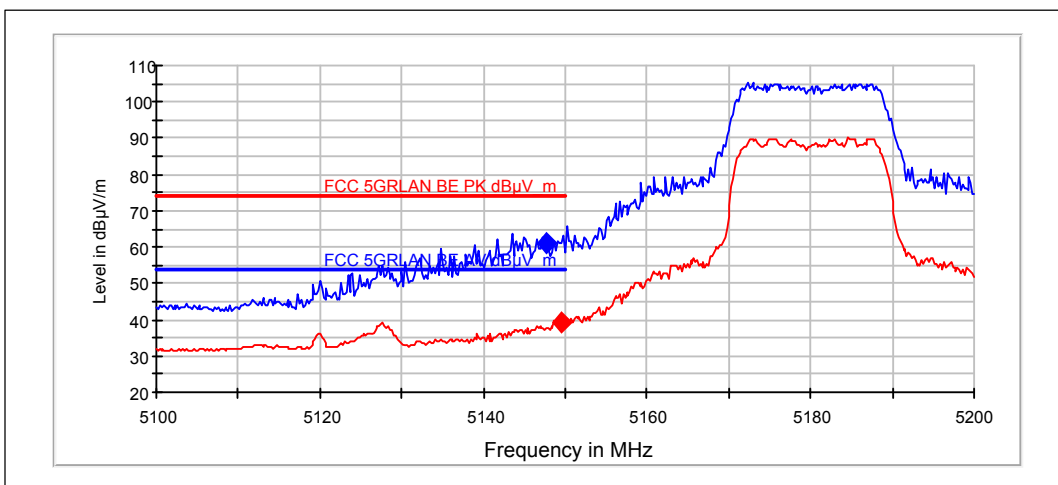


Peak (RBW: 1 MHz, VBW: 3 MHz)

Frequency [MHz]	P [dBm]	P [μ W]	P _{MEAS} [dBm]	A _{TOT} [dB]	Margin	Limit [dBm]	Results
5726.407	-47.45	0.01798	-61.03	13.58	20.5	-27	PASSED

6.3.4 n-mode, 20 MHz CBW, 64-QAM modulation, 52.0 / 57.8 Mbps data rate.

Channel 36 / 5180MHz



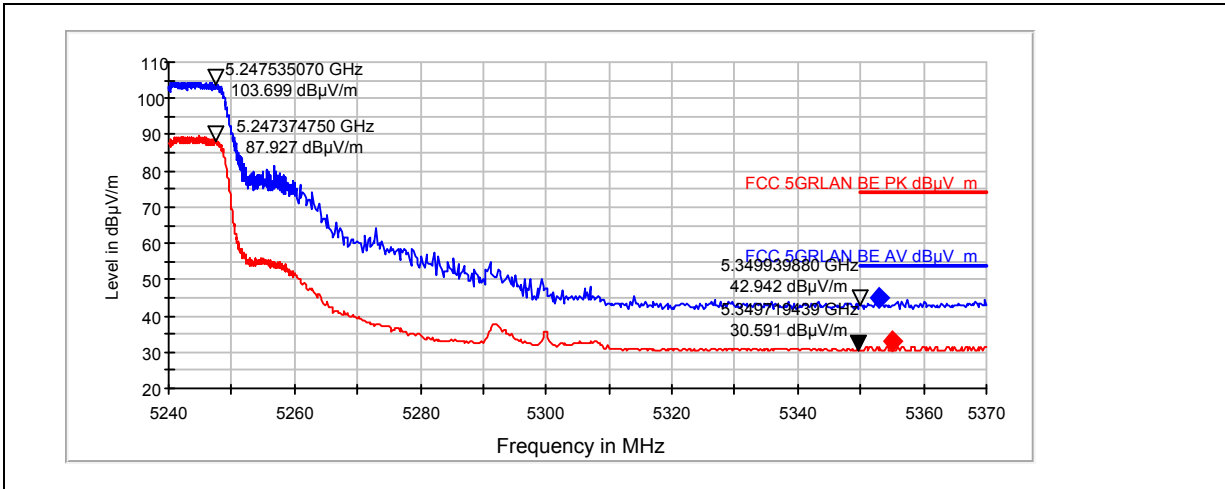
Peak (RBW: 1 MHz, VBW: 3 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
5147.595	60.91	1110.708	56.65	4.26	13.1	74	PASSED

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

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
5149.499	39.06	89.743	34.81	4.26	14.9	54	PASSED

Channel 48 / 5240MHz



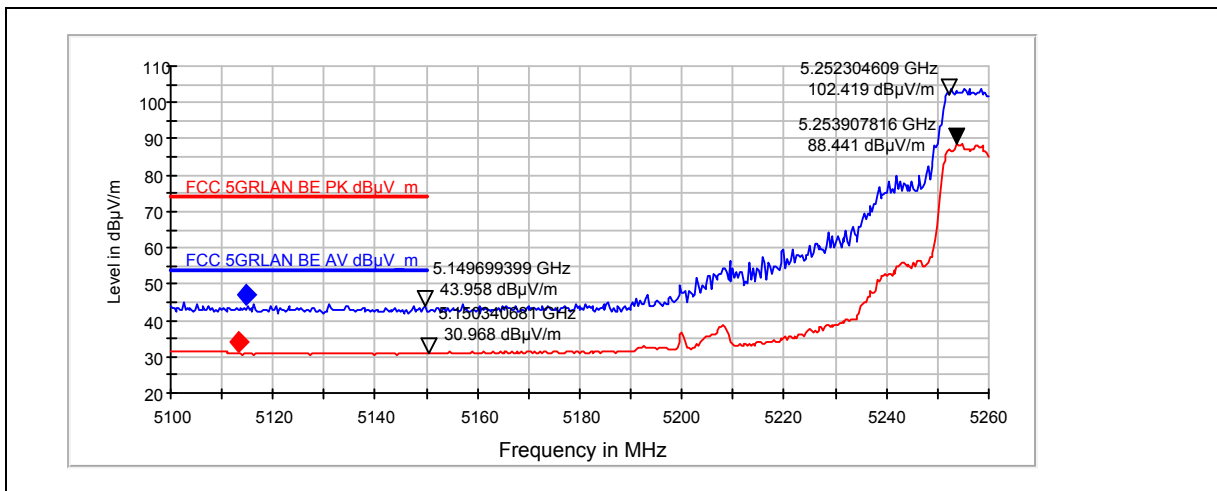
Peak (RBW: 1 MHz, VBW: 3 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
5353.006	44.95	176.705	41.7	3.25	29.1	74	PASSED

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

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
5355.17	32.8	43.642	29.54	3.26	21.2	54	PASSED

Channel 52 / 5260MHz



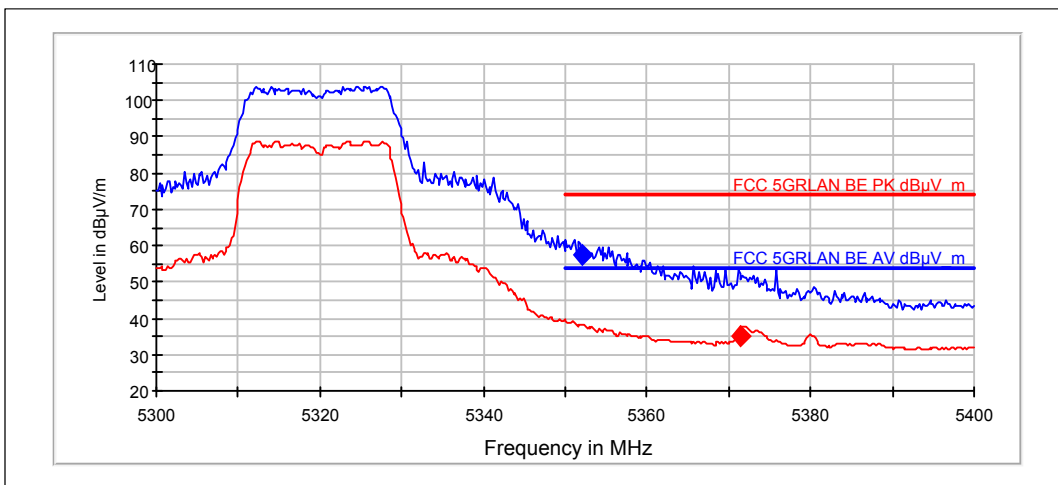
Peak (RBW: 1 MHz, VBW: 3 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
5114.755	46.91	221.539	42.49	4.42	27.1	74	PASSED

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

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
5113.101	33.98	50.009	29.54	4.44	20	54	PASSED

Channel 64 / 5320MHz



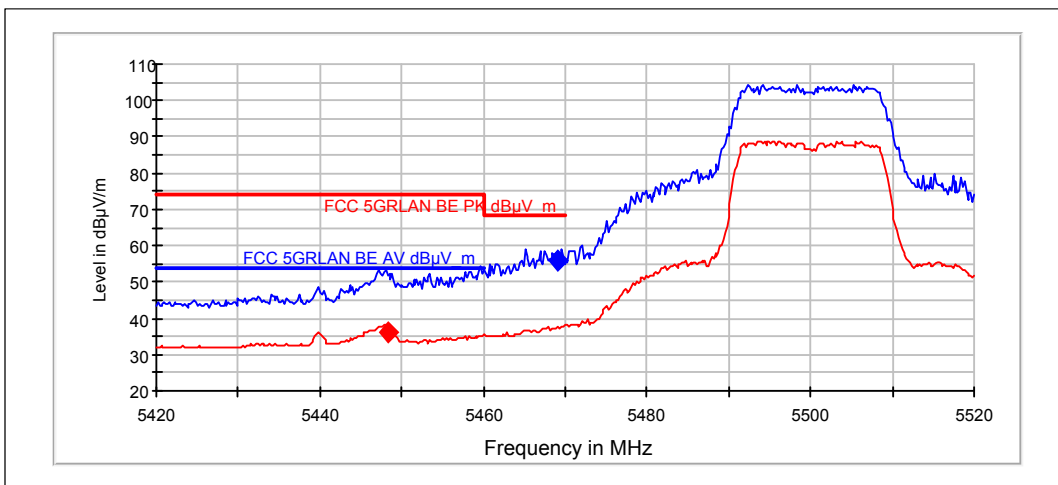
Peak (RBW: 1 MHz, VBW: 3 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
5352.104	57.47	747.653	54.22	3.25	16.5	74	PASSED

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

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
5371.443	35.33	58.405	32.04	3.29	18.7	54	PASSED

Channel 100 / 5500MHz



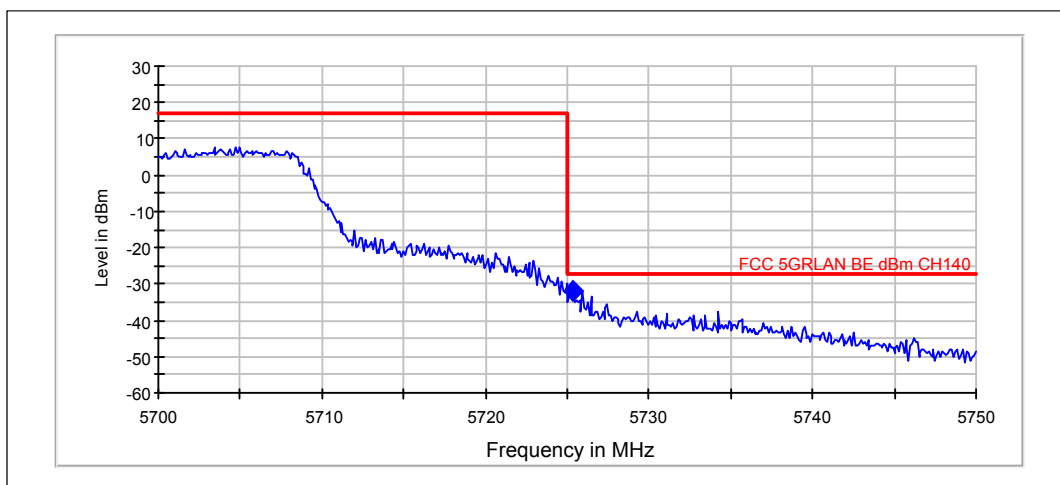
Peak (RBW: 1 MHz, VBW: 3 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
5469.098	56.15	642.022	52.51	3.65	12	68	PASSED

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

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
5448.257	36.08	63.709	32.39	3.69	17.9	54	PASSED

Channel 140 / 5700MHz



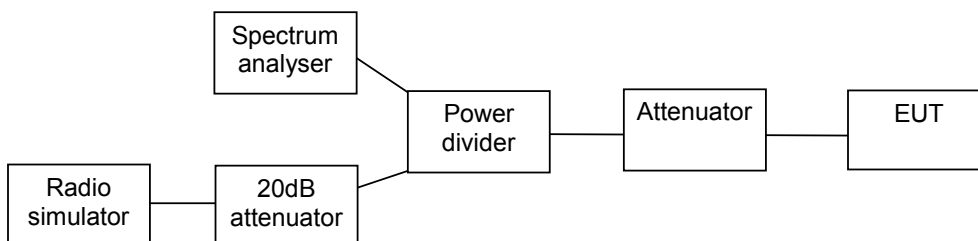
Peak (RBW: 1 MHz, VBW: 3 MHz)

Frequency [MHz]	P [dBm]	P [μ W]	P _{MEAS} [dBm]	A _{TOT} [dB]	Margin	Limit [dBm]	Results
5725.355	-31.91	0.64358	-45.45	13.54	4.9	-27	PASSED

7. Peak power spectral density (FCC §15.407(a), RSS-210 A9.2)

EUT with DUT number	RM-860, DUT 16892
Accessories with DUT numbers	-
Operation Voltage [V] / [Hz]	Nominal
Results	PASSED
Remarks	-
Temp [°C] / Humidity [%RH] / Air Pressure [kPa]	21 / 43 / 100.9
Date of measurements	02-Dec-2012
Measured by	Sami Lehtonen

7.1. Test Setup



7.2. Test method and limit

The measurement is made according to Public Notice KDB 789033 D01 and IC standard RSS-210.

Limits for power spectral density measurements

Frequency range [MHz]	Limit [dBm]
5150-5250	4
5250-5350	11
5470-5725	11
5725-5825	17

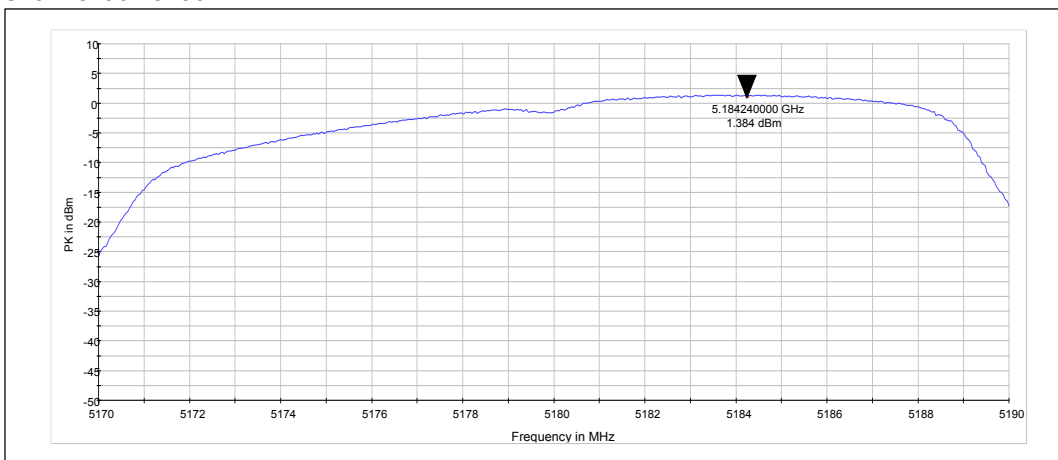
7.3. 5 GHz RLAN Test results

7.3.1 n-mode, 20 MHz CBW mode, BPSK modulation, 6.5 / 7.25 Mbps data rate

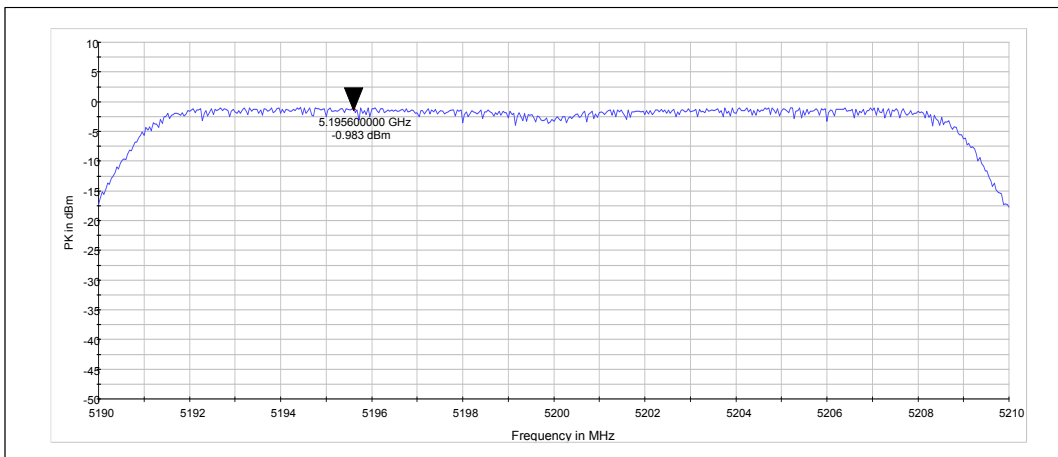
RMS detector (RBW: 1 MHz, VBW: 3 MHz, Video averaging)

Channel / f_c [MHz]	P [dBm]	Result
36 / 5180	1.38	PASSED
40 / 5200	-0.98	PASSED
48 / 5240	-0.83	PASSED
52 / 5260	-0.79	PASSED
60 / 5300	-0.89	PASSED
64 / 5320	-0.8	PASSED
100 / 5500	-0.33	PASSED
116 / 5580	-0.39	PASSED
140 / 5700	-1.44	PASSED

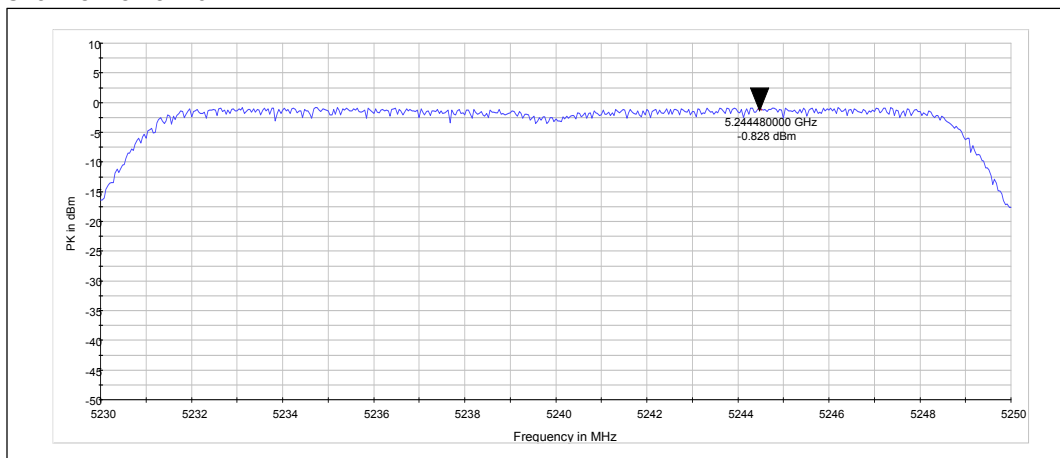
Channel 36 / 5180MHz



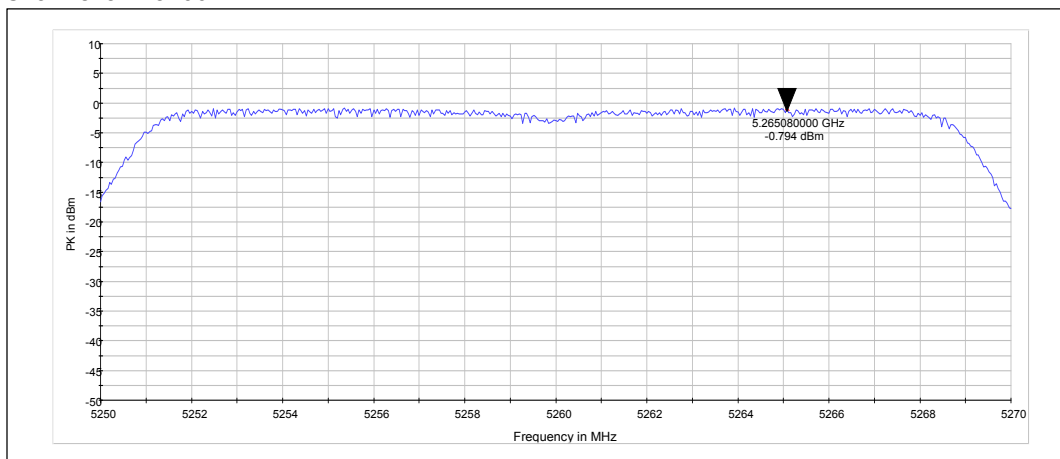
Channel 40 / 5200MHz



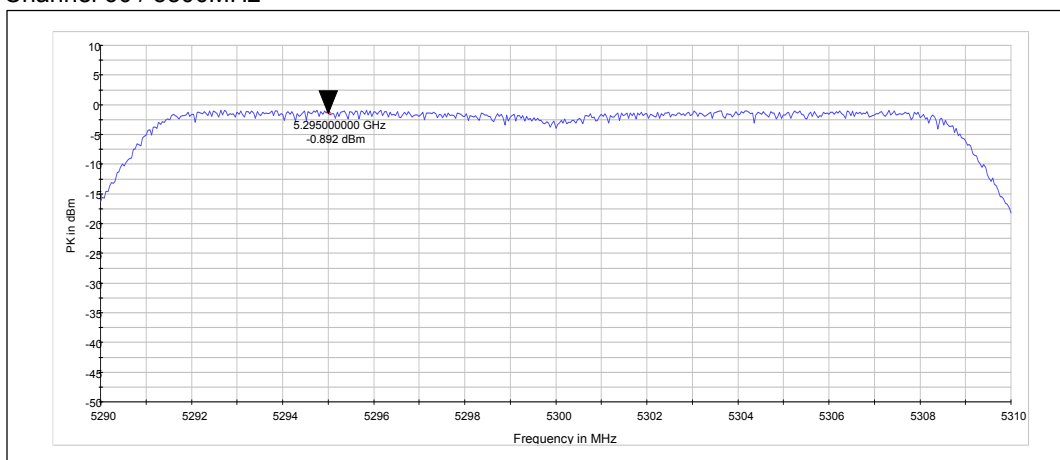
Channel 48 / 5240MHz



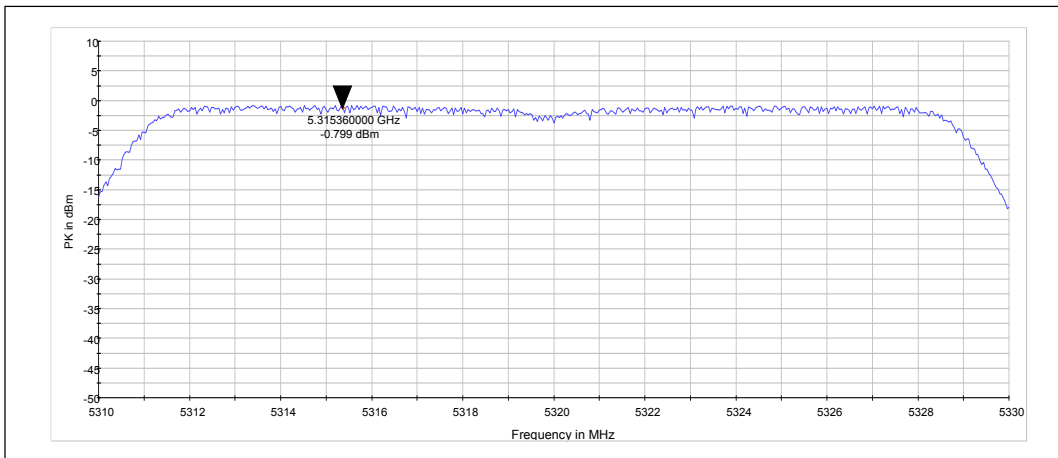
Channel 52 / 5260MHz



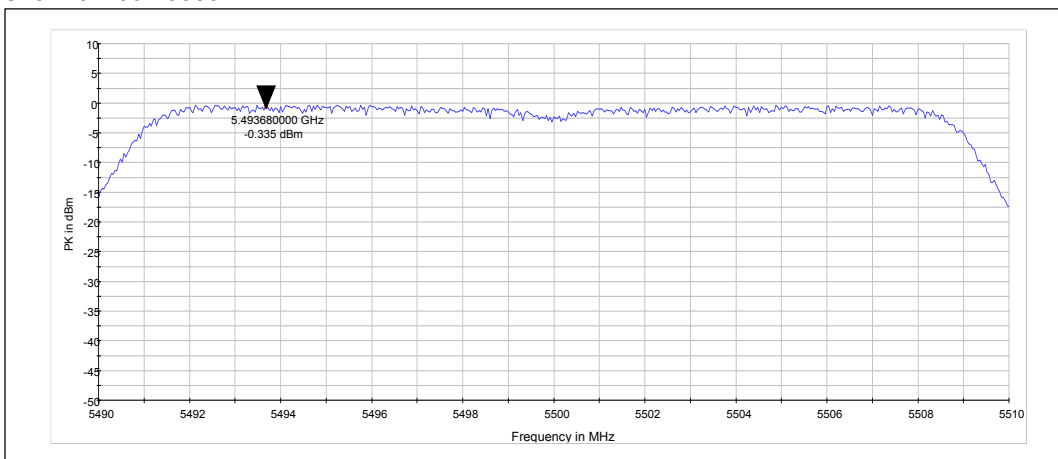
Channel 60 / 5300MHz



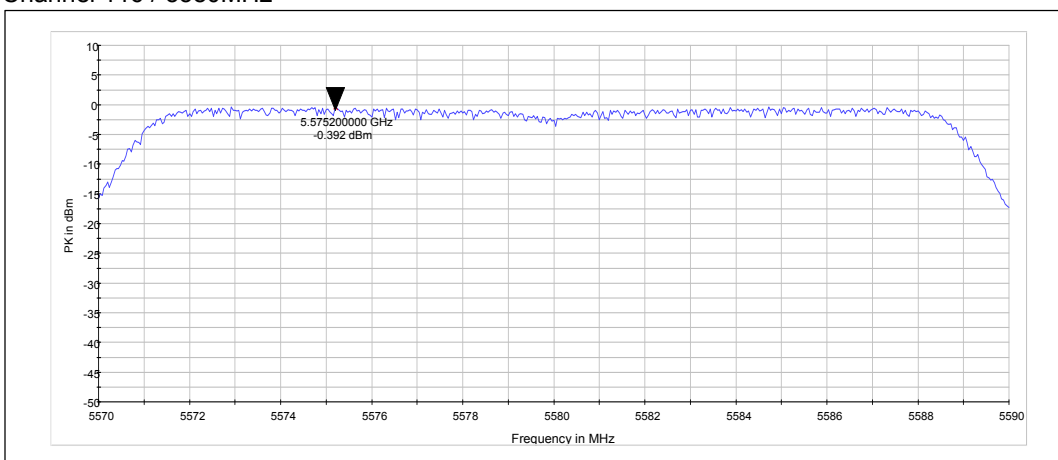
Channel 64 / 5320MHz



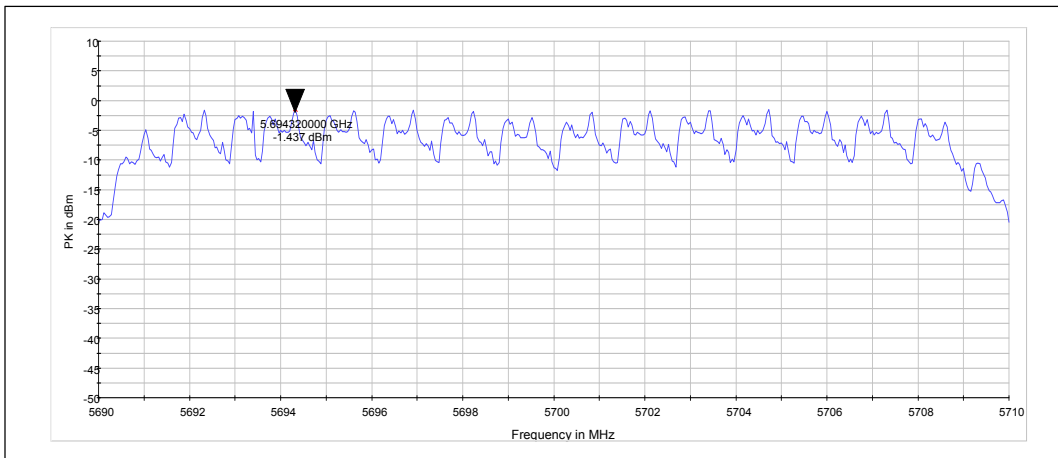
Channel 100 / 5500MHz



Channel 116 / 5580MHz



Channel 140 / 5700MHz

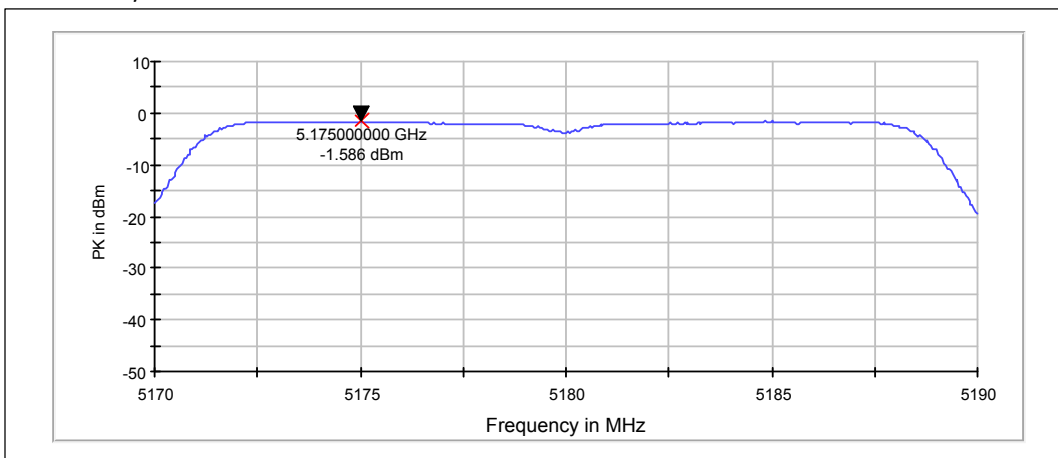


7.3.2 n-mode, 20 MHz CBW mode, 64-QAM modulation, 52.0 / 57.8 Mbps data rate

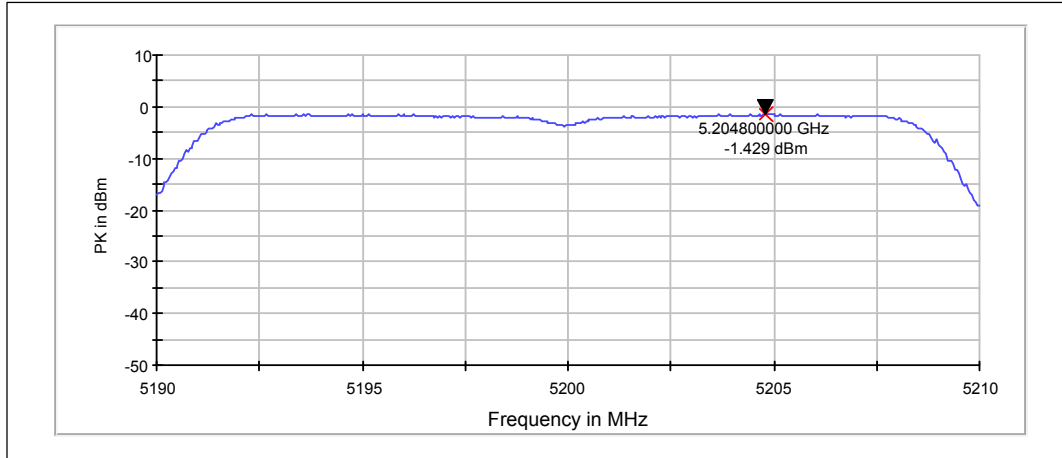
RMS detector (RBW: 1 MHz, VBW: 3 MHz, Video averaging)

Channel / f _c [MHz]	P [dBm]	Result
36 / 5180	-1.59	PASSED
40 / 5200	-1.43	PASSED
48 / 5240	-1.74	PASSED
52 / 5260	-1.83	PASSED
60 / 5300	-1.74	PASSED
64 / 5320	-1.58	PASSED
100 / 5500	-0.75	PASSED
116 / 5580	-0.34	PASSED
140 / 5700	-0.21	PASSED

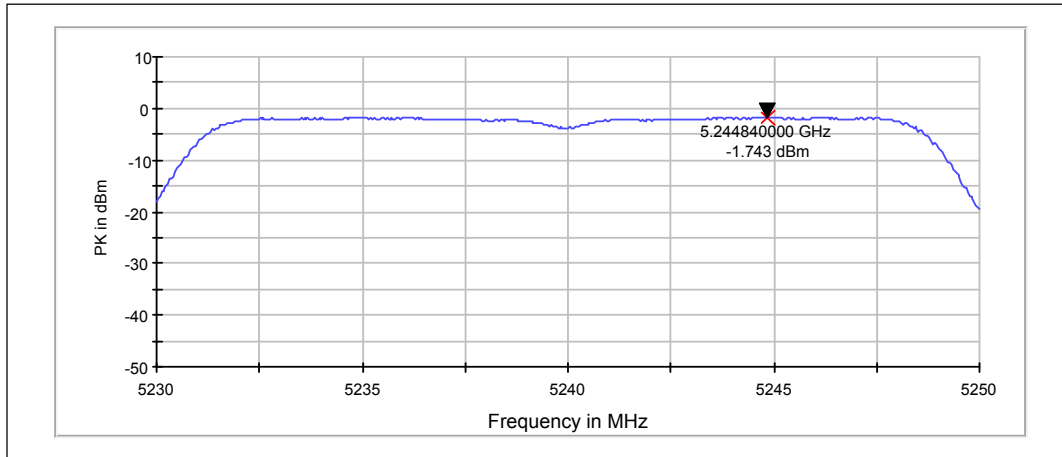
Channel 36 / 5180MHz



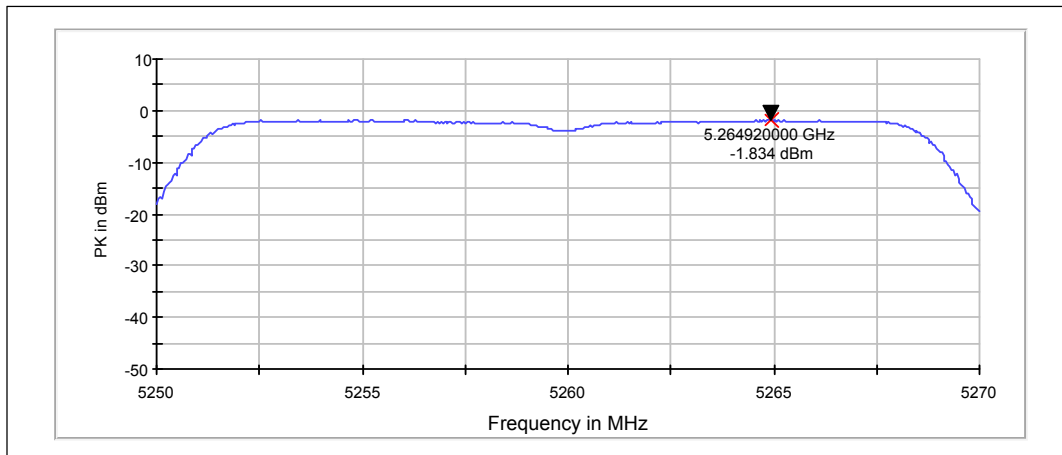
Channel 40 / 5200MHz



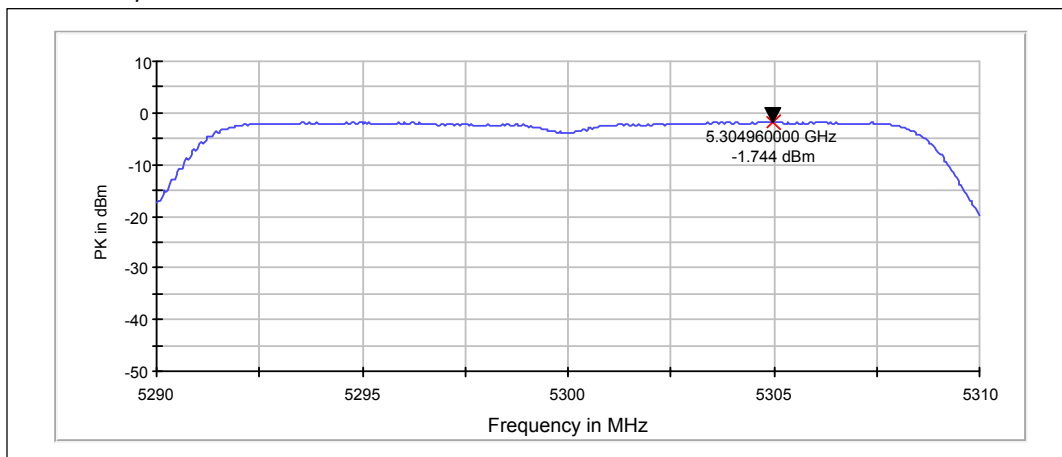
Channel 48 / 5240MHz



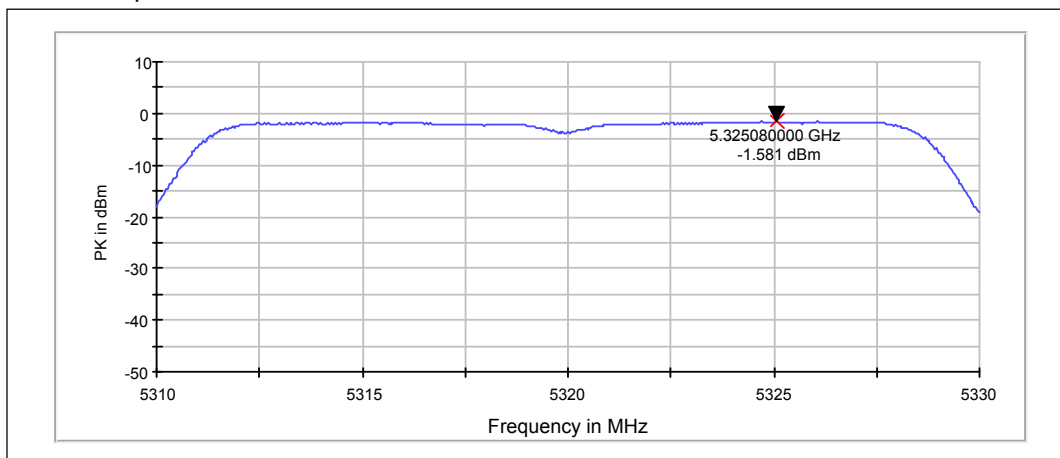
Channel 52 / 5260MHz



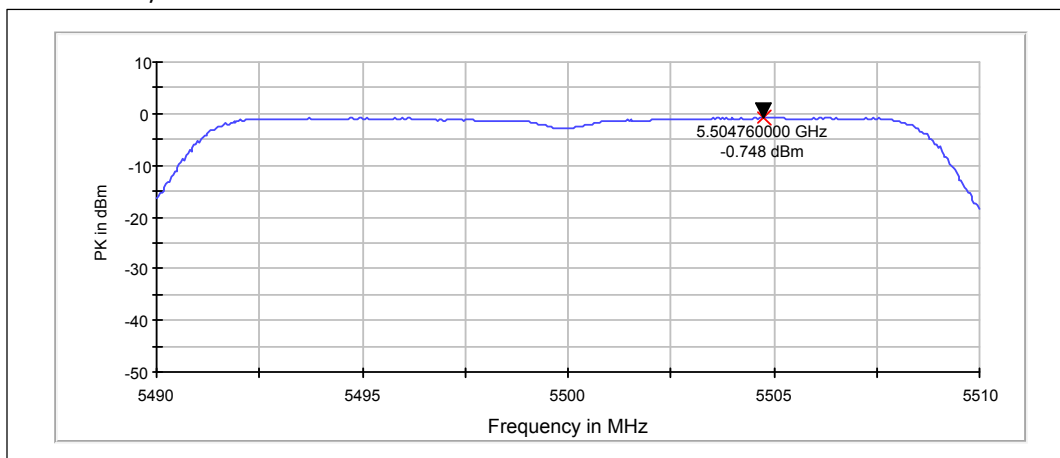
Channel 60 / 5300MHz



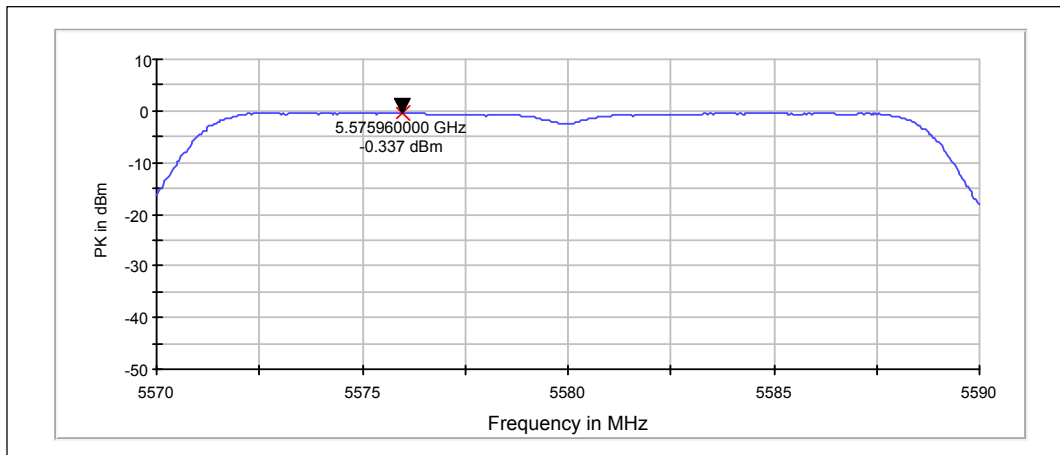
Channel 64 / 5320MHz



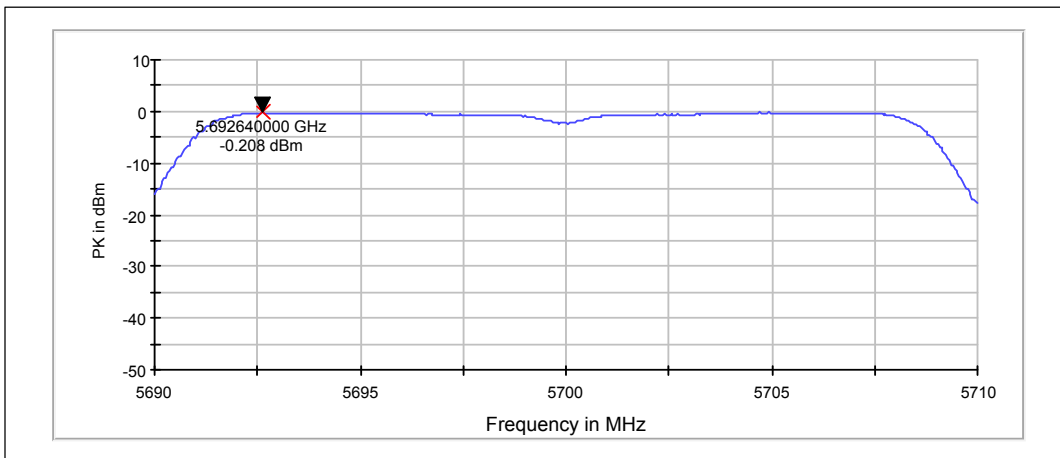
Channel 100 / 5500MHz



Channel 116 / 5580MHz



Channel 140 / 5700MHz

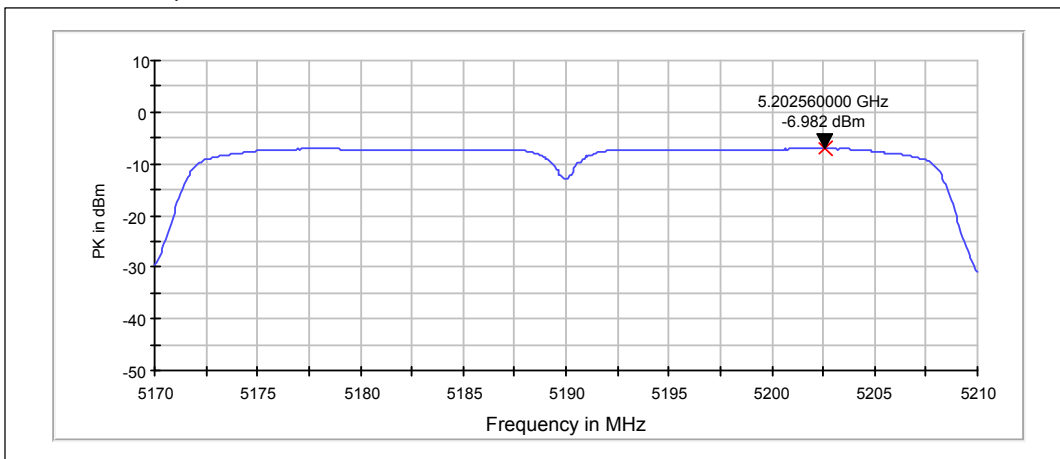


7.3.3 n-mode, 40 MHz CBW mode, QPSK modulation, 27.0 / 30.0 Mbps data rate

RMS detector (RBW: 1 MHz, VBW: 3 MHz, Video averaging)

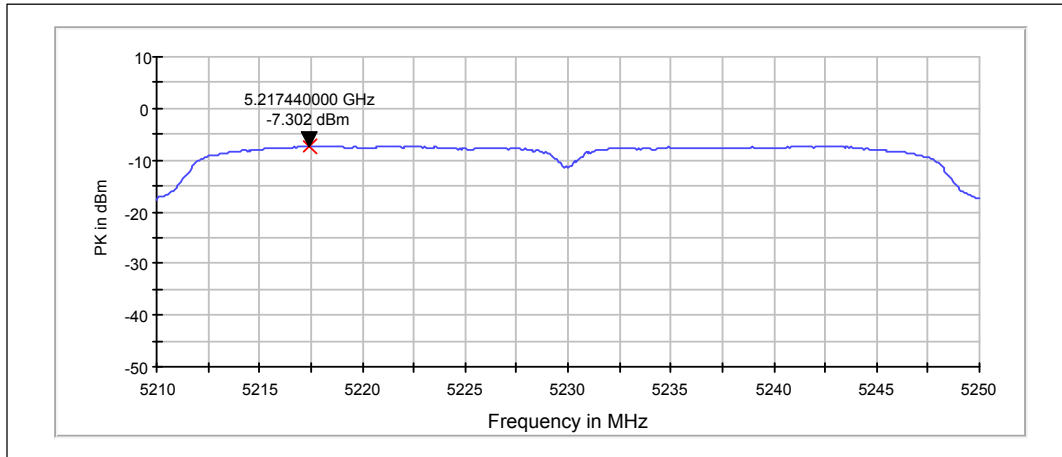
Channel / f_c [MHz]	P [dBm]	Result
36+40 / 5190	-6.98	PASSED
44+48 / 5230	-7.3	PASSED
52+56 / 5270	-7.16	PASSED
60+64 / 5310	-7.02	PASSED
100+104 / 5510	-6.09	PASSED
108+112 / 5550	-5.75	PASSED
132+136 / 5670	-5.35	PASSED

Channel 36+40 / 5190MHz

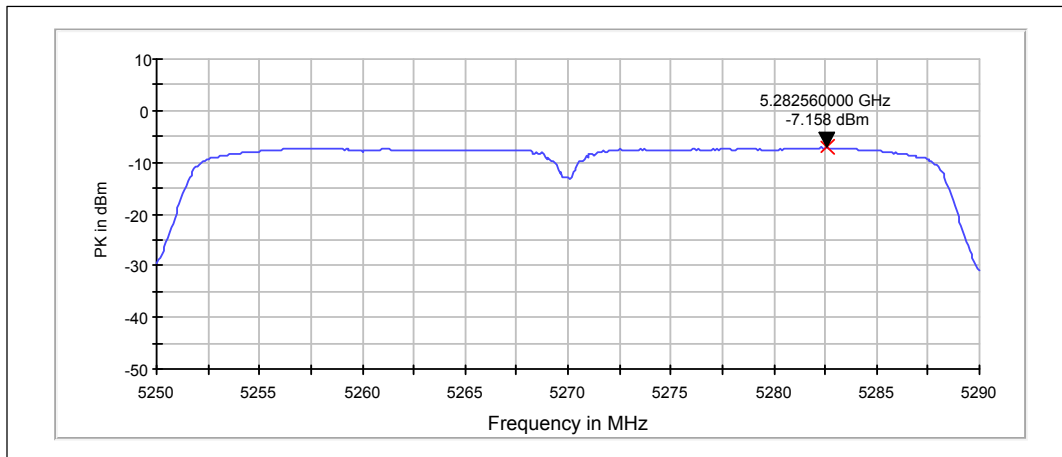


Channel

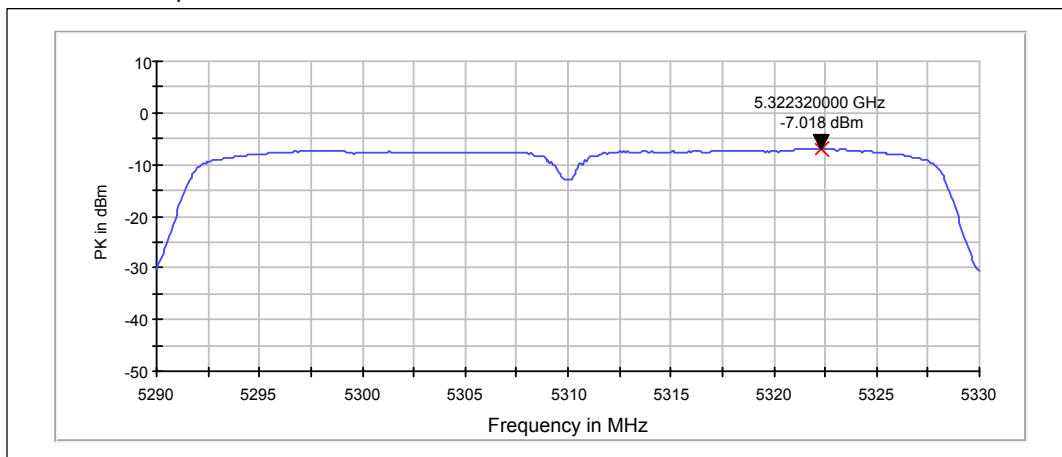
44+48 / 5230MHz



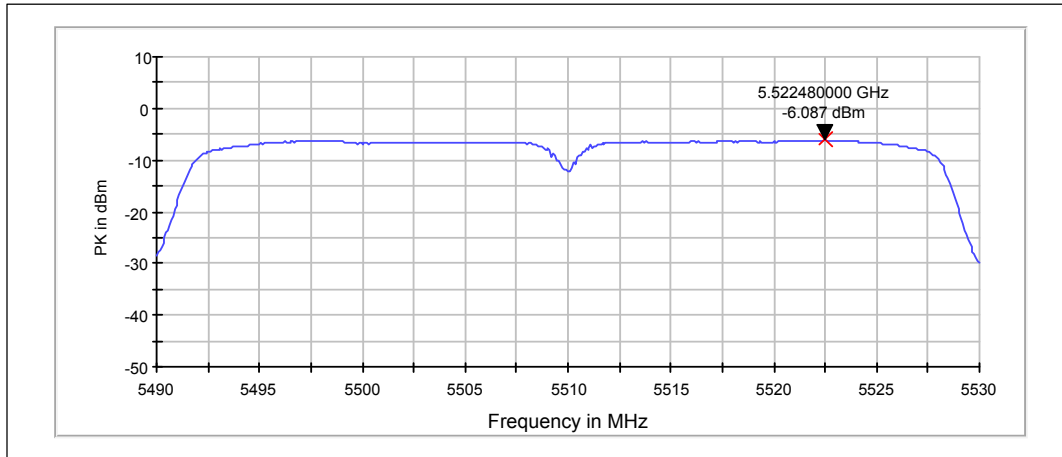
Channel 52+56 / 5270MHz



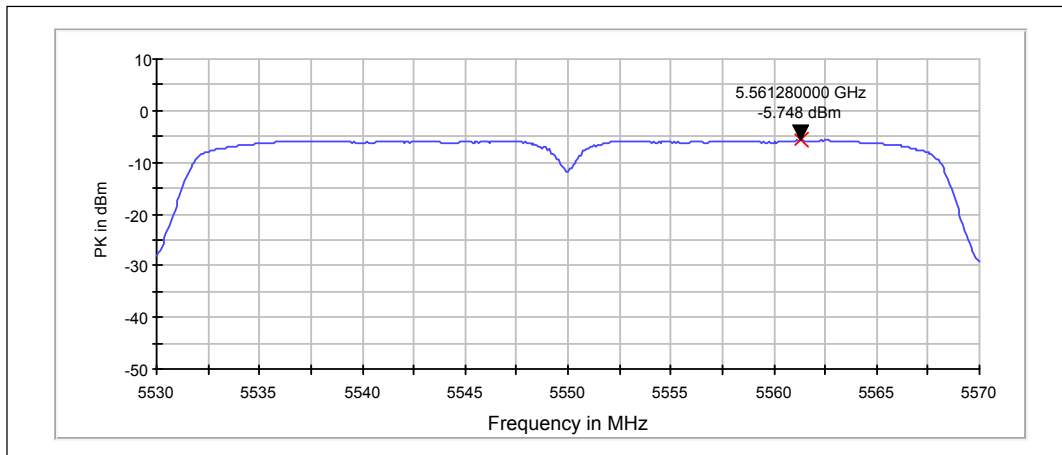
Channel 60+64 / 5310MHz



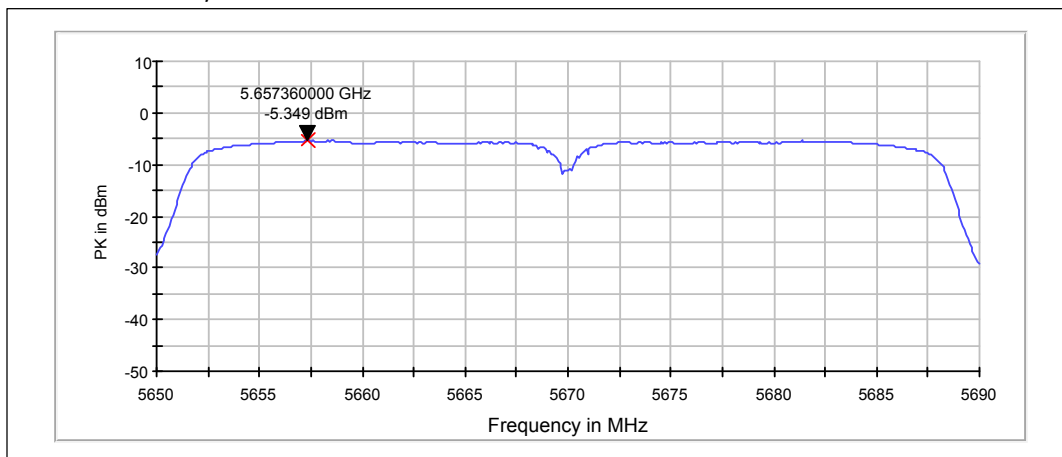
Channel 100+104 / 5510MHz



Channel 108+112 / 5550MHz



Channel 132+136 / 5670MHz



8. AC powerline conducted emissions (FCC §15.407 (b) (6), RSS-210 A9.2)

EUT with DUT number	RM-860, DUT 17028
Accessories with DUT numbers	WH-902, DUT 17008 ; AC-50U, DUT 17009
Operation Voltage [V] / [Hz]	115 / 60
Results	PASSED
Remarks	-
Temp [°C] / Humidity [%RH] / Air Pressure [kPa]	22 / 43 / 98.8
Date of measurements	27-Dec-2012
Measured by	Tomi Lipponen

8.1. Test Setup



8.2. Test method and limit

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.

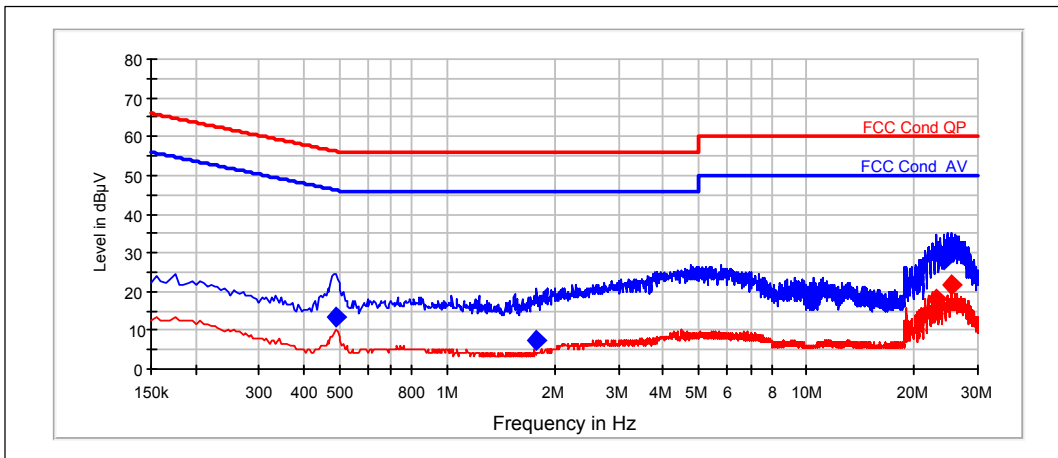
CISPR 22 Class B limits

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

8.3. 5 GHz RLAN Test results

8.3.1 DSSS mode, BPSK modulation, 6.5 7.25 Mbps data rate

Channel 116 / 5580 MHz



QuasiPeak (RBW: 9 kHz)

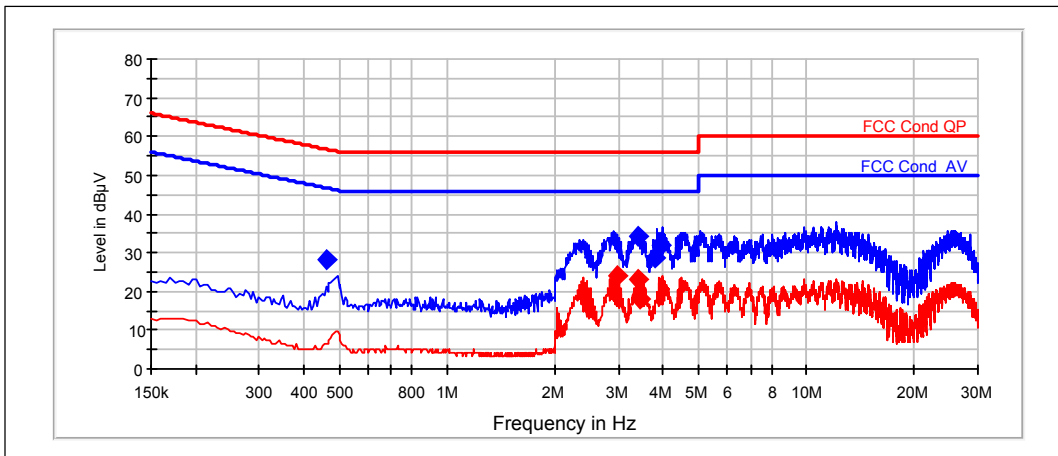
Frequency [MHz]	U [dBμV]	Line	Result
0.49	13.27	N	PASSED
1.76	7.31	N	PASSED
24.035	28.35	N	PASSED
24.67	29.58	N	PASSED
25.345	30.04	N	PASSED

Average (RBW: 9 kHz)

Frequency [MHz]	U [dBμV]	Line	Result
22.505	14.24	N	PASSED
22.9	17.84	L1	PASSED
25.195	21.67	L1	PASSED

8.3.2 n-mode, 20 MHz CBW mode, 64-QAM modulation, 52.0 / 57.8 Mbps data rate

Channel 116 / 5580 MHz



QuasiPeak (RBW: 9 kHz)

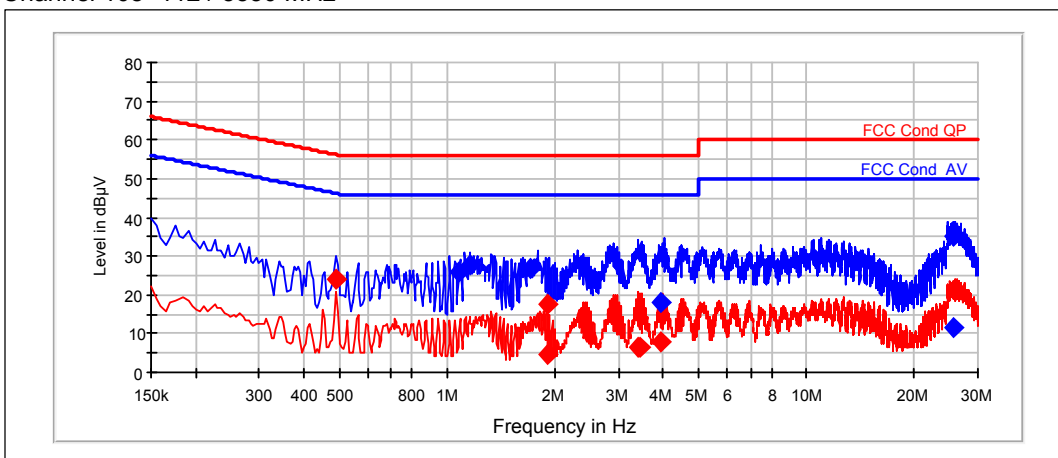
Frequency [MHz]	U [dBμV]	Line	Result
0.46	28.13	L1	PASSED
3.41	34.27	L1	PASSED
3.8	28.5	L1	PASSED
3.935	31.99	L1	PASSED

Average (RBW: 9 kHz)

Frequency [MHz]	U [dBμV]	Line	Result
2.975	23.82	L1	PASSED
3.415	23.28	L1	PASSED
3.43	18.22	L1	PASSED

8.3.3 n-mode, 40 MHz CBW mode, BPSK modulation, 13.5 / 15.0 Mbps data rate

Channel 108+112 / 5550 MHz



QuasiPeak (RBW: 9 kHz)

FCC Part 15E Compliance Test Report
/ Template

FCC15E_RM-860_06.docx
Copyright © TCC Nokia

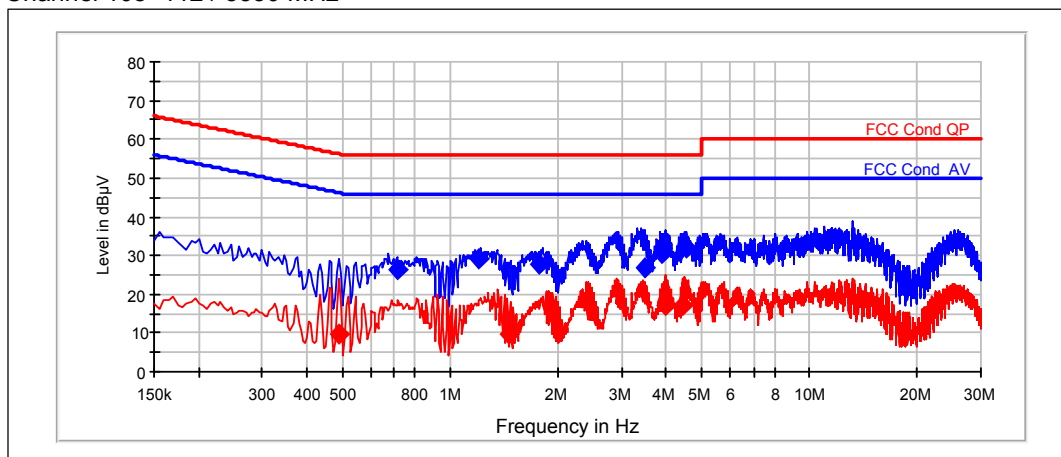
Frequency [MHz]	U [dBμV]	Line	Result
1.08	25.93	L1	PASSED
1.16	27.7	L1	PASSED
1.715	26.99	L1	PASSED
3.93	18.22	L1	PASSED
25.655	11.66	L1	PASSED
25.78	34.96	L1	PASSED

Average (RBW: 9 kHz)

Frequency [MHz]	U [dBμV]	Line	Result
0.49	24.13	L1	PASSED
1.9	17.43	L1	PASSED
1.905	4.42	L1	PASSED
3.405	6.55	L1	PASSED
3.46	6.62	L1	PASSED
3.925	7.69	L1	PASSED

8.3.4 n-mode, 40 MHz CBW mode, QPSK modulation, 27.0 / 30.0 Mbps data rate

Channel 108+112 / 5550 MHz



QuasiPeak (RBW: 9 kHz)

Frequency [MHz]	U [dBμV]	Line	Result
0.71	26.19	L1	PASSED
1.205	29.12	L1	PASSED
1.765	27.73	L1	PASSED
3.485	26.69	L1	PASSED
3.895	30.44	L1	PASSED
4.53	32.14	L1	PASSED

Average (RBW: 9 kHz)

Frequency [MHz]	U [dBμV]	Line	Result
0.49	9.57	L1	PASSED

1.45	9.78	L1	PASSED
4	17.34	L1	PASSED
4.46	17.29	L1	PASSED

9. Test Equipment

9.1. Conducted measurements

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

9.2. Radiated measurements

Eq. No	Equipment	Type	Manufacturer	Used in
2391	Band Reject Filter	WRCG1729.4/1735.4-1722.4/1742.4-40/6SS	Wainwright	27
6038	Data Logger	Testo 580	Testo	-
6014	Substitute Calibration Cable	Sucoflex 104PB	Suhner	-
-	BT / WLAN Antenna	SPA 2400/75/9/0/V	Huber-Suhner	-
-	BT / WLAN Antenna	SPA 2400/75/9/0/V	Huber-Suhner	-
2389	Signal Generator	SMJ 100A	R&S	-
6009	GPS Antenna	SA-700	Chronos	-

Eq. No	Equipment	Type	Manufacturer	Used in
6010	GPS Network amplifier	NLA20FPDC	GPS Networking, Inc	-
6011	GPS signal Splitter	LDCBS1x4	GPS Networking, Inc	-
-	RF immunity / Emission Software	EMC32	R&S	-
1917	Communication Tester	CMTA84	R&S	-
2388	Bluetooth Tester	CBT	R&S	-
6037	Data Logger	175-H2	Testo	-
6039	USB Interface	5541765	Testo	-
6087	Antenna	BBHA 9120D	Scharzbeck	-
6088	Antenna	VUBA 9117	Scharzbeck	-
6089	Antenna	HFH2-Z2	R&S	-
10479	Communication Tester	CMW500	R&S	-
6094	Communication Tester	CMW500	R&S	-
6103	Bluetooth tester	CBT	R&S	-
6113	Signal Generator	SMF100A	R&S	-
6115	Open switch and control unit	OSP 130	R&S	-
6116	Open switch and control unit	OSP 150	R&S	-
6130	Notch Filter	WRCD1880-1.1.25/50-10SS	Wainwright	-
6131	Notch Filter	WRCT902.4-0.4/40-8SS	Wainwright	-
6135	Notch Filter	WRCJV2531/2539-2523/2547-60/12SS	Wainwright	-
2140	Antenna	EMCO93110B	EMCO	-
2142	Antenna	3146	EMCO	-
2357	Band Reject Filter	WRCG2400/2483-2390/2493-35/10SS	Wainwright	-
2364	Band Reject Filter	WRCG1877/1883 - 1870/1890-40/6SS	Wainwright	24
2043	Band Reject Filter	WRCA824/849-0,2-6SS	Wainwright	22
2347	Communication Tester	CMU200	R&S	-
2180	Communication Tester	CMU200	R&S	-
2156	Communication Tester	CMU200	R&S	-
2176	CDN	CDN 801-M3	Lüthi	-
2027	CDN	M2 (modified) DC1	MEB	-
2028	CDN	M3 (modified) DC2	MEB	-
1984	Antenna	BBHA 9120 D	Schwarzbeck	-
6017	Antenna	SBA 9113	Schwarzbeck	-
2009	Signal Generator	SMP 22	R&S	-
2029	Power Supply	PL330	Thurlby	-
2361	Anechoic Chamber	3 m Semi / Full Anechoic Chamber	Euroshield	-
2353	Receiver	ESIB26	R&S	-
2135	CDN	CDN 801-M3	Lüthi	-