

FCC Part 15E Compliance Test Report

Test Report no.:	FCC15E_RM-940_03.docx	Date of Report:	26-Sep-2013
Number of pages:	170	Customer's Contact person:	Lasse Vaattovaara
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FCC listing no.:	533467		
IC recognition no.:	661V-1		
Tested devices/ accessories:	Phone RM-940 / AC-Charger AC-60E / Headset WH-208 / CA-190CD		
FCC ID:	PYAB	IC:	661V-B
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	19-Jul-2013
Testing completed	31-Jul-2013
The customer's contact person	Lasse Vaattovaara
Test Plan referred to	T:\Projects\RM-940\TestPlan\RS_Testplan_RM-940.xlsm
Notes	-
Document name	T:\Projects\RM-940\EMC\FCC15E_RM-940_03.docx

1.1. EUT and Accessory Information

The EUT is a mobile phone with following features:

GSM/WCDMA/WLAN/Bluetooth

The EUT is tested with maximum rated TX power.

Devices under tests

Product	Type	SN	HW	MV	SW	DUT
Phone	RM-940	004402473425498	2102	-	1028.0301.1326	17563
AC-Charger	AC-60E	409049315461030285300675677	CE	-	-	17584
Data Cable	CA-190CD	-	CE	-	-	17585
Headset	WH-208	2131731	CE	-	-	17586
Phone	RM-940	004402473425951	2100	-	1028.0301.1326.10115	17583
Phone	RM-940	004402473425571	2100	-	1028.0305.1328.22293	17579
AC-Charger	AC-60E	409049315461030267600675677	-	-	-	17580
Headset	WH-208	2131731	-	-	-	17581
Data Cable	CA-190CD	-	CE	-	-	17608

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

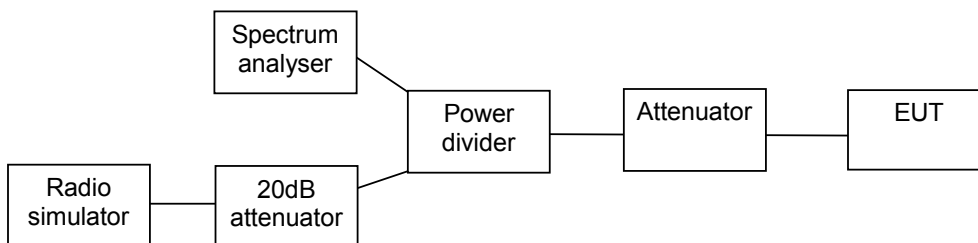
1. Summary for FCC Part 15E Compliance Test Report.....	2
1.1. EUT and Accessory Information.....	2
1.2. Summary of Test Results.....	2
2. Maximum conducted output power (FCC §15.407 (a), RSS-210 A9.2).....	5
2.1. Test Setup.....	5
2.2. Test method and limit.....	5
2.3. Power results summary, all modes	6
2.4. Power results summary, selected modes.....	7
2.5. 5 GHz RLAN Test results.....	8
3. Peak excursion (FCC §15.407 (a), RSS-210 A9.2).....	49
3.1. Test Setup.....	49
3.2. Test method and limit.....	49
3.3. 5 GHz RLAN Test results.....	50
4. AC powerline conducted emissions (FCC §15.407 (b) (6), RSS-210 A9.2)	71
4.1. Test Setup.....	71
4.2. Test method and limit.....	71
4.3. 5 GHz RLAN Test results.....	72
5. 26 dB bandwidth	78
5.1. Test Setup.....	78
5.2. Test method and limit.....	78
5.3. 5 GHz RLAN Test results.....	79
6. Peak power spectral density (FCC §15.407(a), RSS-210 A9.2).....	101
6.1. Test Setup.....	101
6.2. Test method and limit.....	101
6.3. 5 GHz RLAN Test results.....	102
7. Spurious radiated emissions (FCC §15.407 (b), RSS-210 A9.2).....	117
7.2. Test method and limit.....	117
7.3. 5 GHz RLAN test results	119
8. Band edge compliance of RF emissions (FCC §15.407 (b), RSS-210 A9.2).....	138
8.2. Test method and limit.....	138

8.3.	5 GHz RLAN test results	139
9.	Test Equipment.....	169
9.1.	Conducted measurements	169
9.2.	Radiated measurements	170

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

EUT with DUT number	RM-940, DUT 17563
Accessories with DUT numbers	AC-60E, DUT 17584; CA-190CD, DUT 17585; WH-208, DUT 17586
Operation Voltage [V] / [Hz]	Nominal
Results	PASSED
Remarks	-
Temp [°C] / Humidity [%RH] / Air Pressure [kPa]	22 / 44 / 101
Date of measurements	16-Jul-2013
Measured by	Tomi Lipponen

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, all modes

Channel / fC [MHz]	Mode	Modulation	Data rate	Level [dBm]
36 / 5180	802.11a	BPSK	6 Mbps	11.44
36 / 5180	802.11a	BPSK	9 Mbps	11.02
36 / 5180	802.11a	QPSK	12 Mbps	11.06
36 / 5180	802.11a	QPSK	18 Mbps	11.56
36 / 5180	802.11a	16QAM	24 Mbps	11.36
36 / 5180	802.11a	16QAM	36 Mbps	11.1
36 / 5180	802.11a	64QAM	48 Mbps	10.15
36 / 5180	802.11a	64QAM	54 Mbps	10.18
36 / 5180	802.11n	BPSK	6.5 / 7.25 Mbps	11.07
36 / 5180	802.11n	QPSK	13.0 / 14.4 Mbps	11.34
36 / 5180	802.11n	QPSK	19.5 / 21.7 Mbps	11.17
36 / 5180	802.11n	16QAM	26.0 / 28.9 Mbps	10.38
36 / 5180	802.11n	16QAM	39.0 / 43.3 Mbps	10.37
36 / 5180	802.11n	64QAM	52.0 / 57.8 Mbps	9.39
36 / 5180	802.11n	64QAM	58.5 / 65.0 Mbps	8.1
36 / 5180	802.11n	64QAM	65.0 / 72.2 Mbps	8.1
36 / 5180	802.11ac	256QAM	78.0 / 86.7 Mbps	5.84
36+40 / 5190	802.11n	BPSK	13.5 / 15.0 Mbps	9.81
36+40 / 5190	802.11n	QPSK	27.0 / 30.0 Mbps	9.86
36+40 / 5190	802.11n	QPSK	40.5 / 45.0 Mbps	8.92
36+40 / 5190	802.11n	16QAM	54.0 / 60.0 Mbps	9.08
36+40 / 5190	802.11n	16QAM	81.0 / 90.0 Mbps	8.1
36+40 / 5190	802.11n	64QAM	108.0 / 120.0 Mbps	8.09
36+40 / 5190	802.11n	64QAM	121.5 / 135.0 Mbps	7.09
36+40 / 5190	802.11n	64QAM	135.0 / 150.0 Mbps	6.09
36+40 / 5190	802.11ac	256QAM	162.0 / 180.0 Mbps	4.92
36+40 / 5190	802.11ac	256QAM	180.0 / 200.0 Mbps	4.97
36-48 / 5210	802.11ac	BPSK	29.3 / 32.5 Mbps	7.84
36-48 / 5210	802.11ac	QPSK	58.5 / 65.0 Mbps	7.84
36-48 / 5210	802.11ac	QPSK	87.8 / 97.5 Mbps	7.92
36-48 / 5210	802.11ac	16QAM	117.0 / 130.0 Mbps	6.69
36-48 / 5210	802.11ac	16QAM	175.5 / 195.0 Mbps	6.61
36-48 / 5210	802.11ac	64QAM	234.0 / 260.0 Mbps	5.49
36-48 / 5210	802.11ac	64QAM	263.3 / 292.5 Mbps	4.41
36-48 / 5210	802.11ac	64QAM	292.5 / 325.0 Mbps	4.53
36-48 / 5210	802.11ac	256QAM	351.0 / 390.0 Mbps	3.74
36-48 / 5210	802.11ac	256QAM	390.0 / 433.3 Mbps	3.52

2.4. Power results summary, selected modes

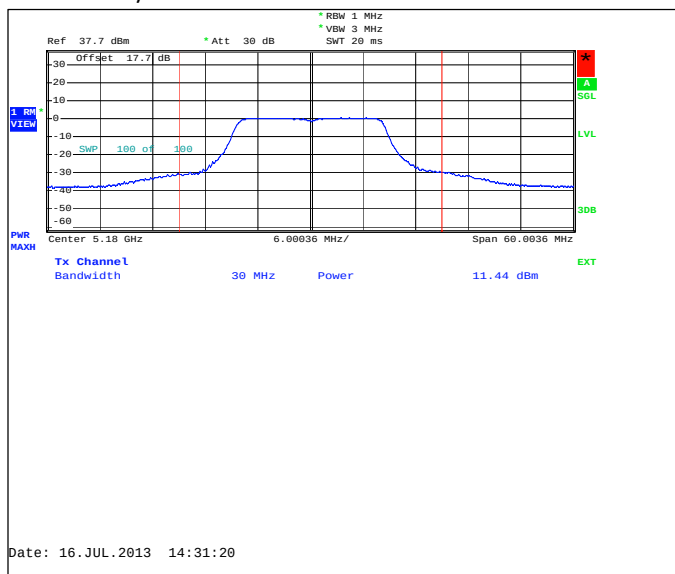
40 / 5200	802.11a	BPSK	6 Mbps	12.09
48 / 5240	802.11a	BPSK	6 Mbps	12.12
52 / 5260	802.11a	BPSK	6 Mbps	11.97
60 / 5300	802.11a	BPSK	6 Mbps	11.92
64 / 5320	802.11a	BPSK	6 Mbps	11.82
100 / 5500	802.11a	BPSK	6 Mbps	11.46
116 / 5580	802.11a	BPSK	6 Mbps	11.35
140 / 5700	802.11a	BPSK	6 Mbps	11.08
40 / 5200	802.11a	QPSK	18 Mbps	11.61
48 / 5240	802.11a	QPSK	18 Mbps	11.63
52 / 5260	802.11a	QPSK	18 Mbps	11.47
60 / 5300	802.11a	QPSK	18 Mbps	11.15
64 / 5320	802.11a	QPSK	18 Mbps	11.21
100 / 5500	802.11a	QPSK	18 Mbps	10.96
116 / 5580	802.11a	QPSK	18 Mbps	10.81
140 / 5700	802.11a	QPSK	18 Mbps	10.65
44+48 / 5230	802.11n	BPSK	13.5 / 15.0 Mbps	9.99
52+56 / 5270	802.11n	BPSK	13.5 / 15.0 Mbps	9.77
60+64 / 5310	802.11n	BPSK	13.5 / 15.0 Mbps	9.83
100+104 / 5510	802.11n	BPSK	13.5 / 15.0 Mbps	9.56
108+112 / 5550	802.11n	BPSK	13.5 / 15.0 Mbps	9.09
132+136 / 5670	802.11n	BPSK	13.5 / 15.0 Mbps	9.03
44+48 / 5230	802.11n	QPSK	27.0 / 30.0 Mbps	10.02
52+56 / 5270	802.11n	QPSK	27.0 / 30.0 Mbps	9.68
60+64 / 5310	802.11n	QPSK	27.0 / 30.0 Mbps	9.73
100+104 / 5510	802.11n	QPSK	27.0 / 30.0 Mbps	9.46
108+112 / 5550	802.11n	QPSK	27.0 / 30.0 Mbps	8.98
132+136 / 5670	802.11n	QPSK	27.0 / 30.0 Mbps	8.94
52-64 / 5290	802.11ac	BPSK	29.3 / 32.5 Mbps	8.96
100-112 / 5530	802.11ac	BPSK	29.3 / 32.5 Mbps	8.46
52-64 / 5290	802.11ac	QPSK	87.8 / 97.5 Mbps	8.72
100-112 / 5530	802.11ac	QPSK	87.8 / 97.5 Mbps	8.69

2.5. 5 GHz RLAN Test results

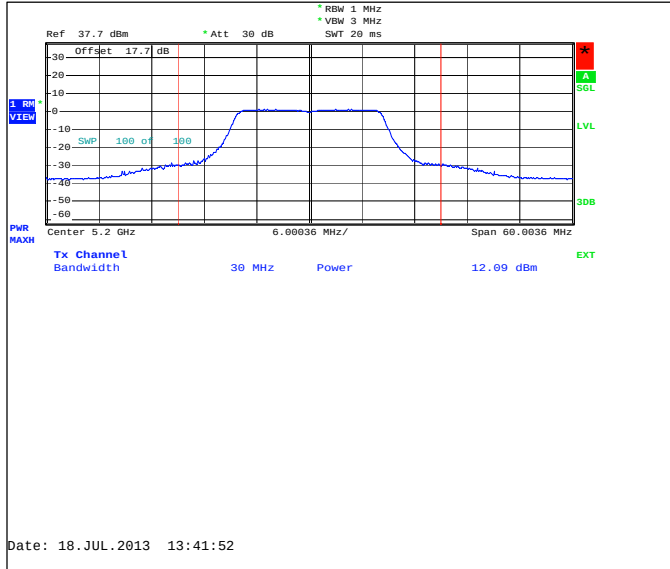
2.5.1 802.11a mode, BPSK modulation, 6 Mbps data rate

Channel / f _c [MHz]	P [dBm]	P [mW]	Result
36 / 5180	11.44	13.932	PASSED
40 / 5200	12.09	16.181	PASSED
48 / 5240	12.12	16.293	PASSED
52 / 5260	11.97	15.74	PASSED
60 / 5300	11.92	15.56	PASSED
64 / 5320	11.82	15.205	PASSED
100 / 5500	11.46	13.996	PASSED
116 / 5580	11.35	13.646	PASSED
140 / 5700	11.08	12.823	PASSED

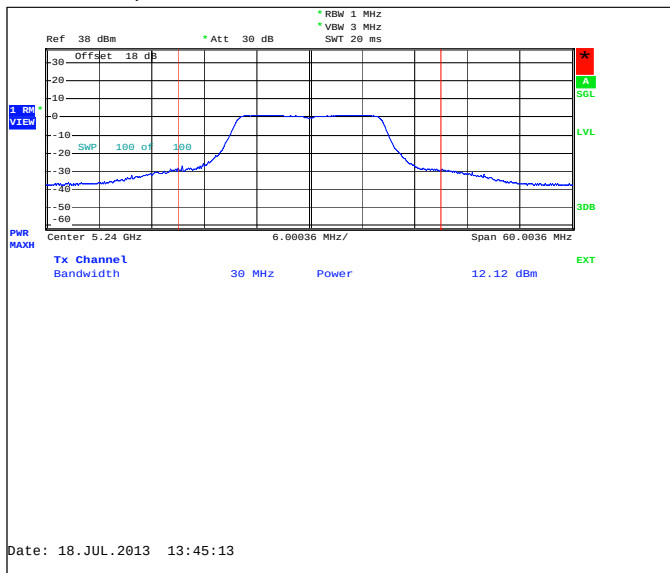
Channel 36 / 5180MHz



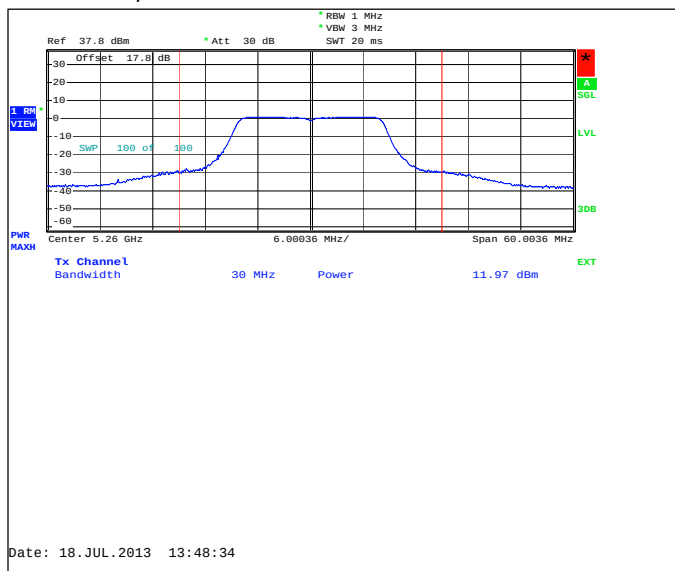
Channel 40 / 5200MHz



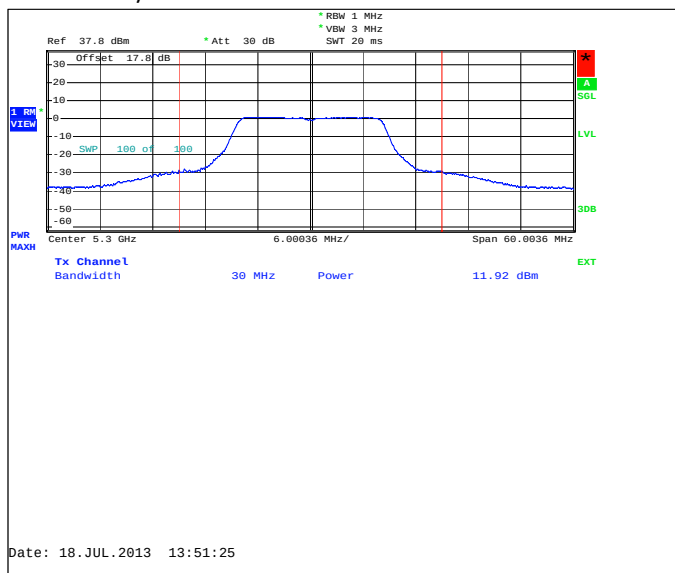
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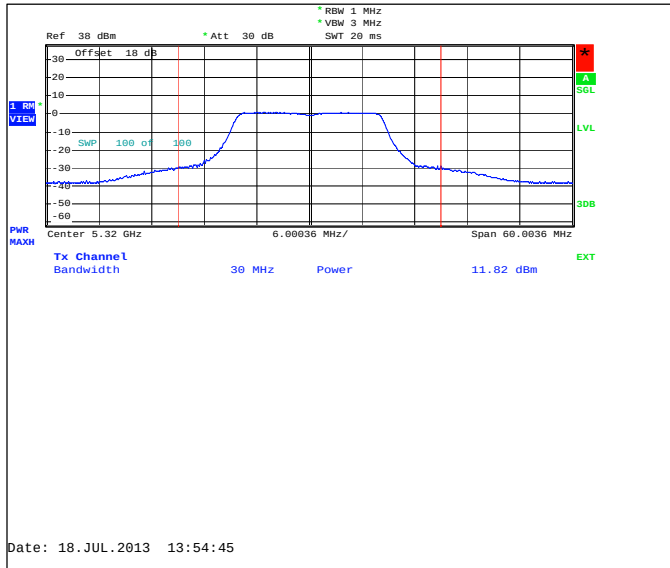
Channel 52 / 5260MHz



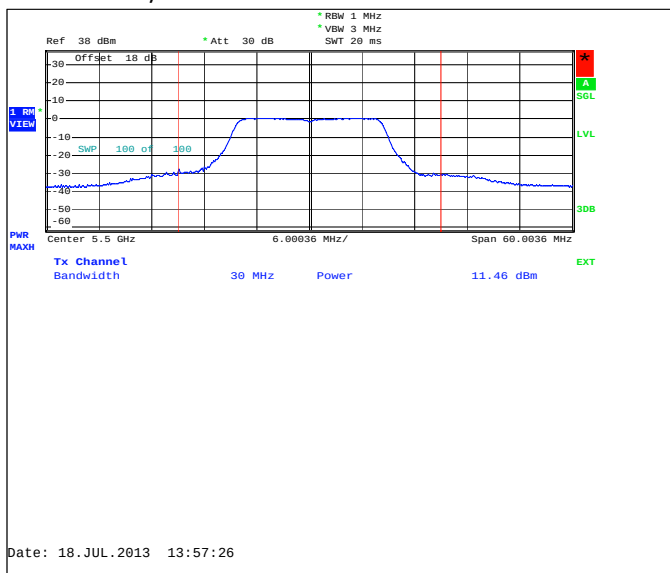
Channel 60 / 5300MHz



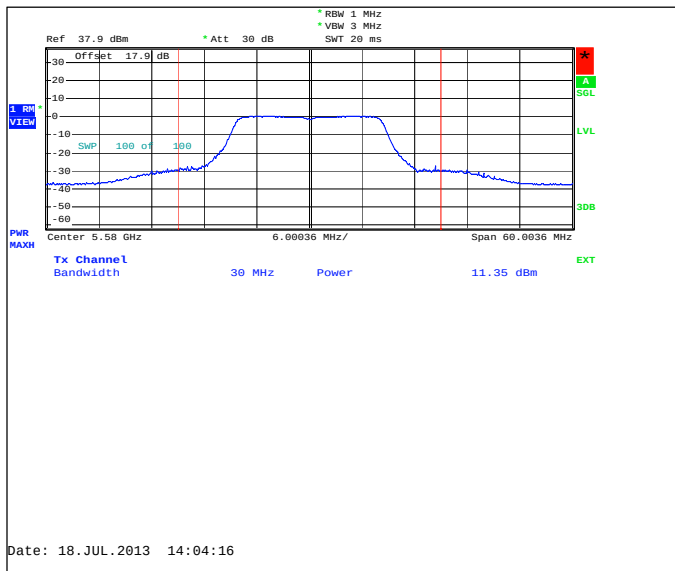
Channel 64 / 5320MHz



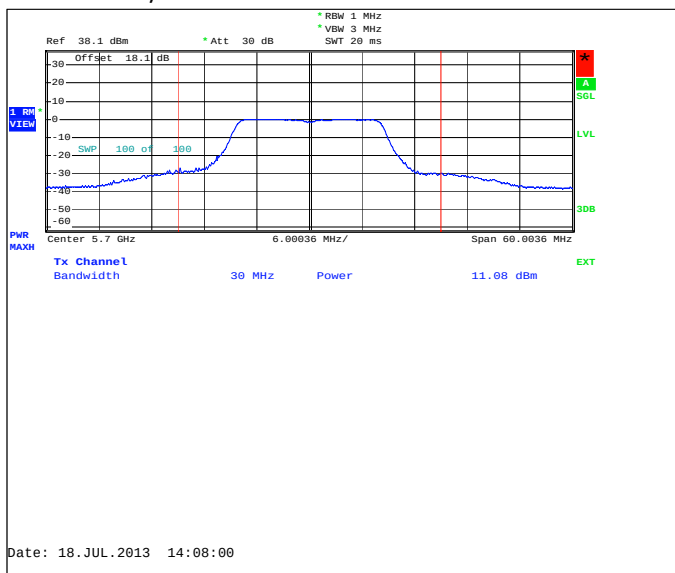
Channel 100 / 5500MHz



Channel 116 / 5580MHz



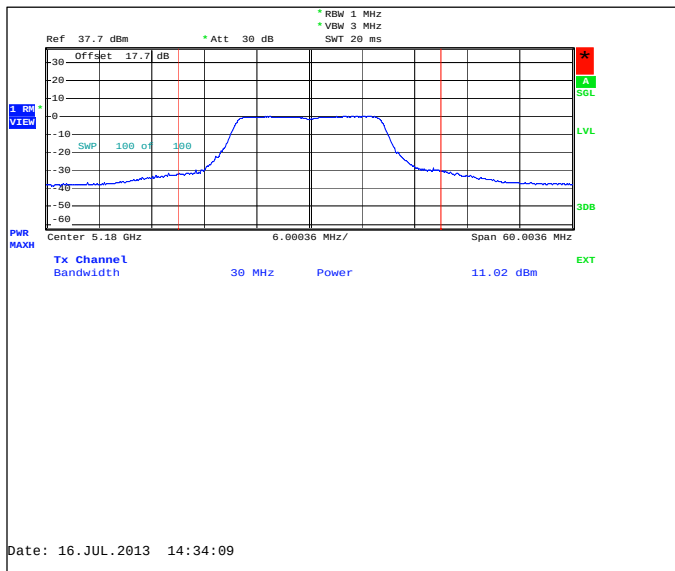
Channel 140 / 5700MHz



2.5.2 802.11a mode, BPSK modulation, 9 Mbps data rate

Channel / f_c [MHz]	P [dBm]	P [mW]	Result
36 / 5180	11.02	12.647	PASSED

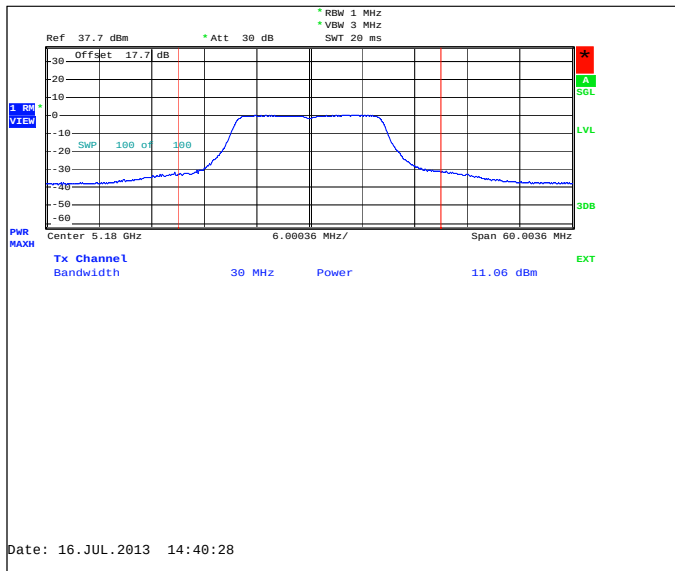
Channel 36 / 5180MHz



2.5.3 802.11a mode, QPSK modulation, 12 Mbps data rate

Channel / f_c [MHz]	P [dBm]	P [mW]	Result
36 / 5180	11.06	12.764	PASSED

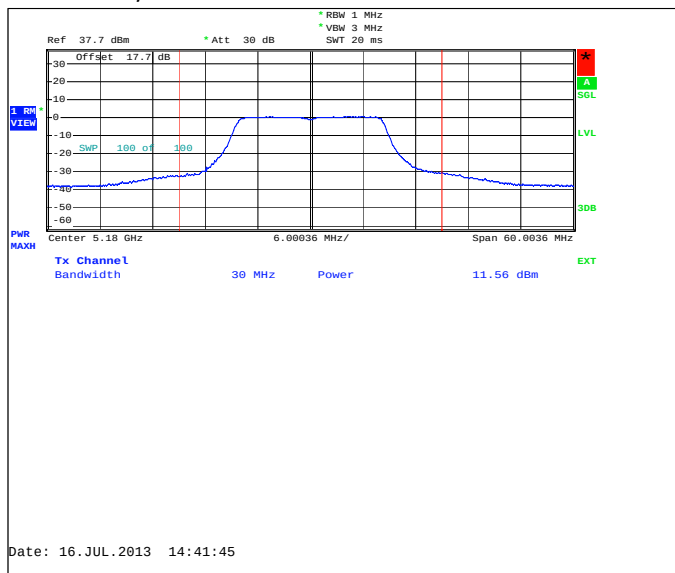
Channel 36 / 5180MHz



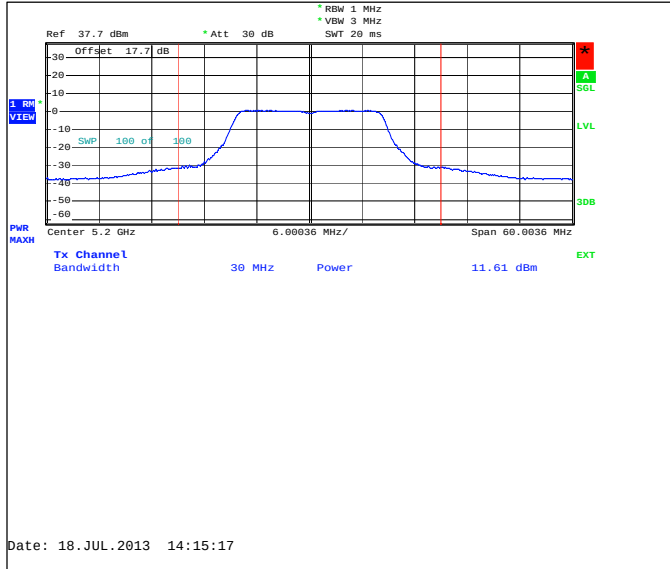
2.5.4 802.11a mode, QPSK modulation, 18 Mbps data rate

Channel / f _c [MHz]	P [dBm]	P [mW]	Result
36 / 5180	11.56	14.322	PASSED
40 / 5200	11.61	14.488	PASSED
48 / 5240	11.63	14.555	PASSED
52 / 5260	11.47	14.028	PASSED
60 / 5300	11.15	13.032	PASSED
64 / 5320	11.21	13.213	PASSED
100 / 5500	10.96	12.474	PASSED
116 / 5580	10.81	12.05	PASSED
140 / 5700	10.65	11.614	PASSED

Channel 36 / 5180MHz



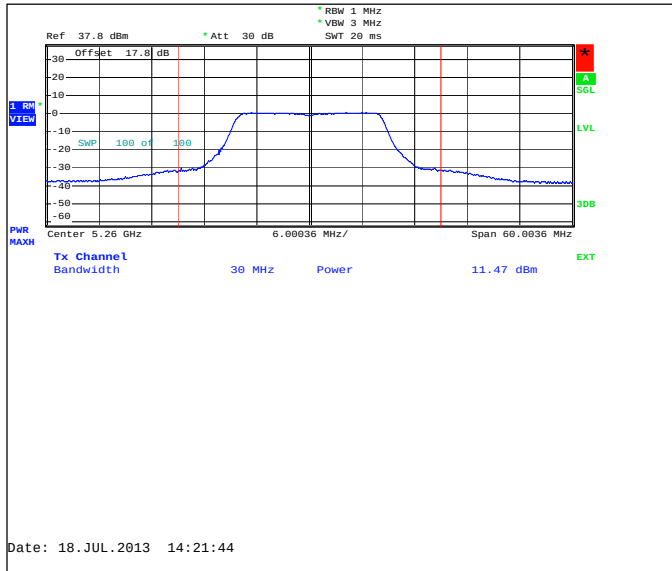
Channel 40 / 5200MHz



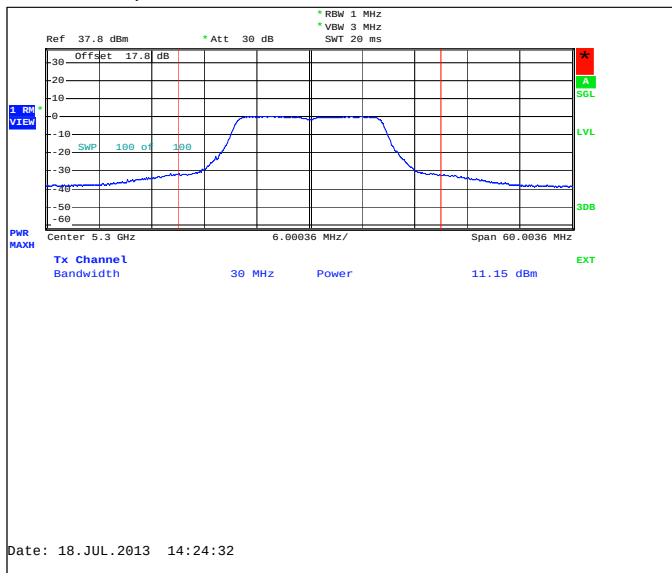
Channel 48 / 5240MHz



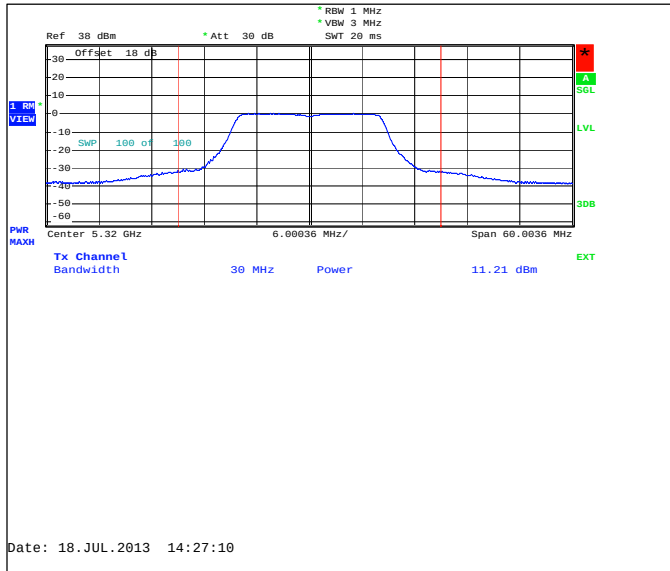
Channel 52 / 5260MHz



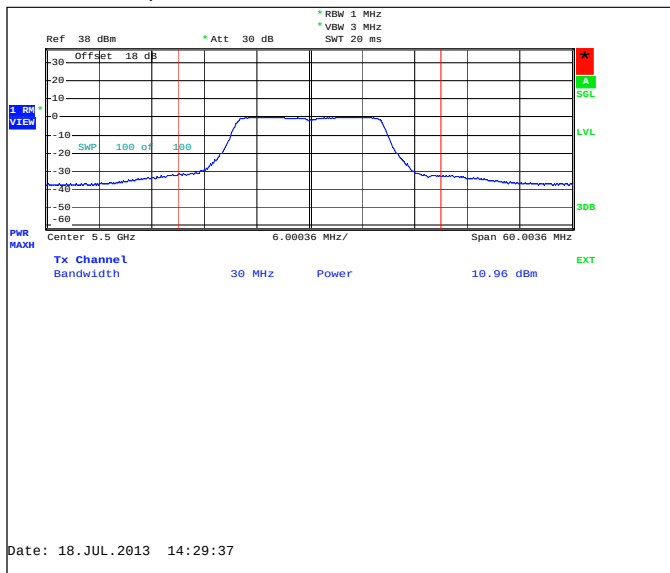
Channel 60 / 5300MHz



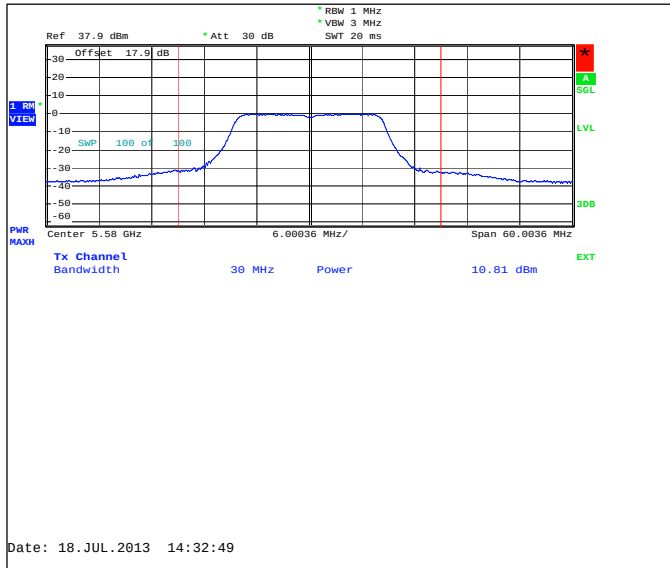
Channel 64 / 5320MHz



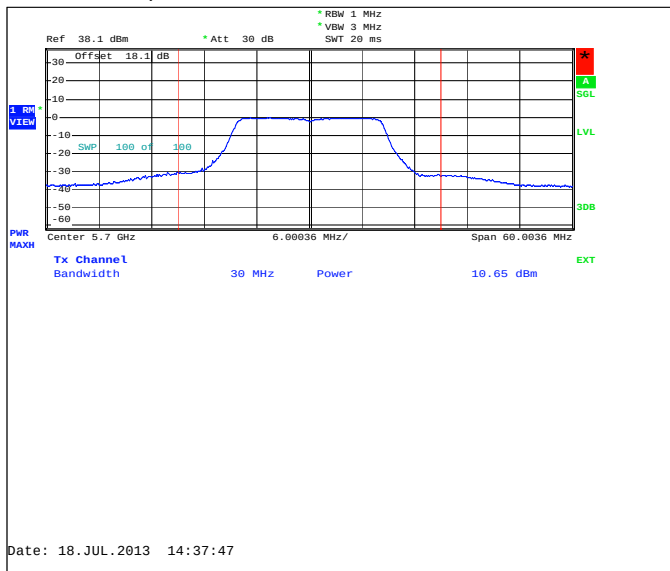
Channel 100 / 5500MHz



Channel 116 / 5580MHz



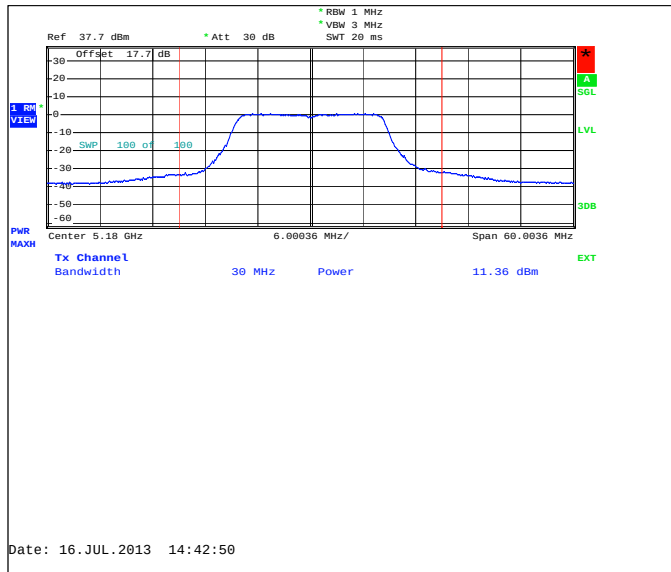
Channel 140 / 5700MHz



2.5.5 802.11a mode, 16QAM modulation, 24 Mbps data rate

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

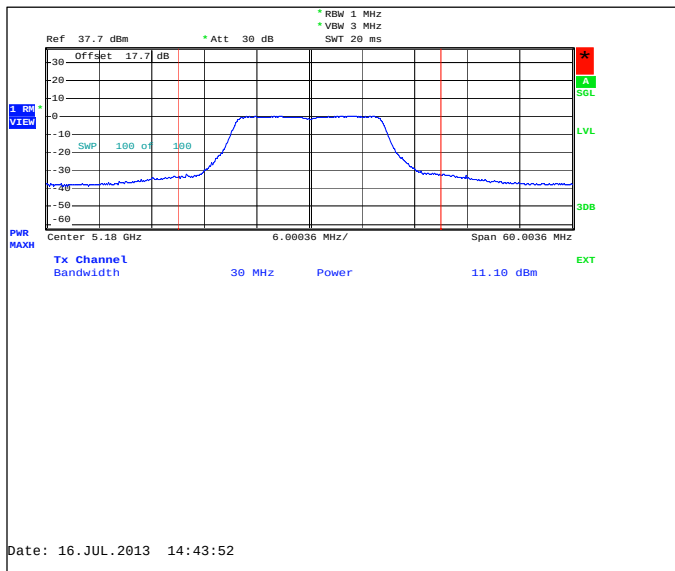
Channel 36 / 5180MHz



2.5.6 802.11a mode, 16QAM modulation, 36 Mbps data rate

Channel / f _c [MHz]	P [dBm]	P [mW]	Result
36 / 5180	11.1	12.882	PASSED

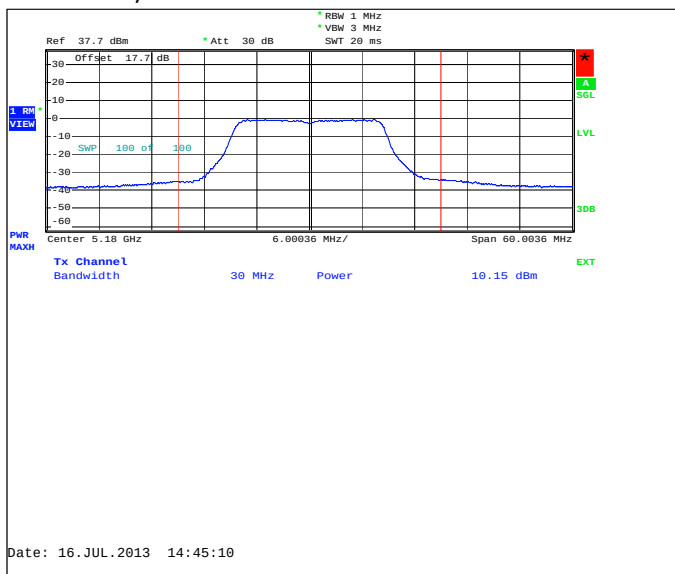
Channel 36 / 5180MHz



2.5.7 802.11a mode, 64QAM modulation, 48 Mbps data rate

Channel / f _c [MHz]	P [dBm]	P [mW]	Result
36 / 5180	10.15	10.351	PASSED

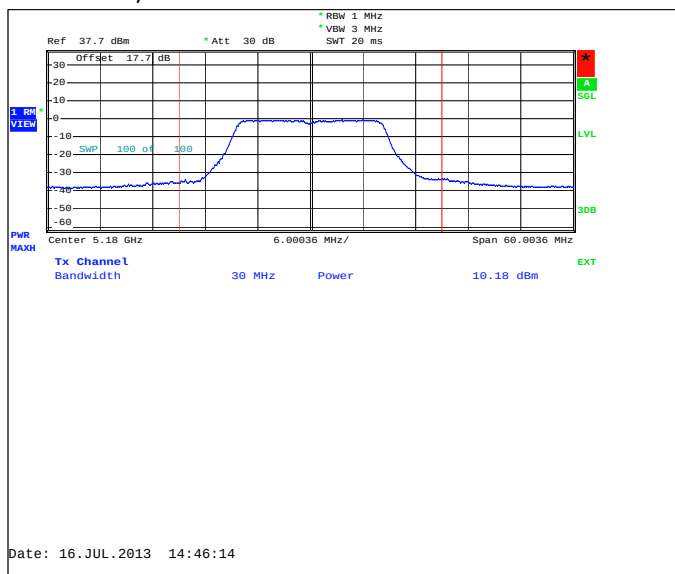
Channel 36 / 5180MHz



2.5.8 802.11a mode, 64QAM modulation, 54 Mbps data rate

Channel / f _c [MHz]	P [dBm]	P [mW]	Result
36 / 5180	10.18	10.423	PASSED

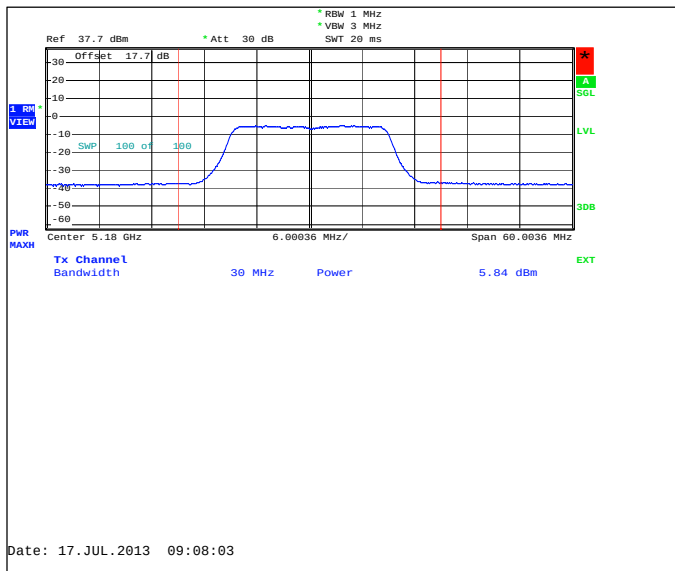
Channel 36 / 5180MHz



2.5.9 802.11ac mode, 256QAM modulation, 78.0 / 86.7 Mbps data rate

Channel / f _c [MHz]	P [dBm]	P [mW]	Result
36 / 5180	5.84	3.837	PASSED

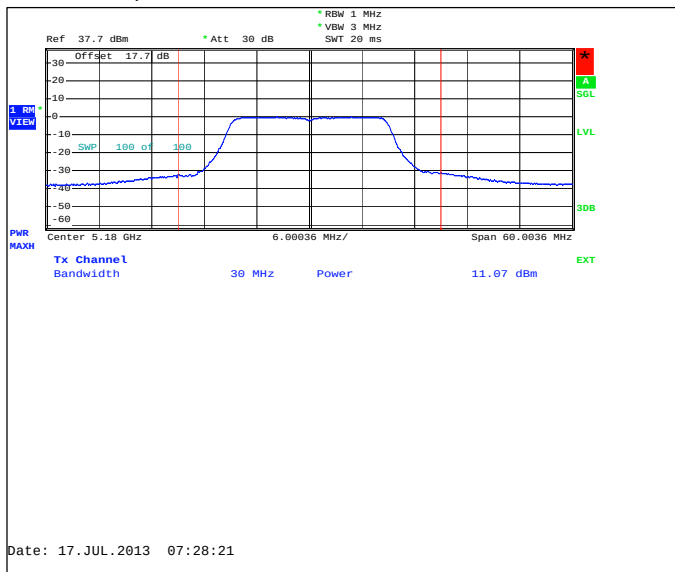
Channel 36 / 5180MHz



2.5.10 802.11n mode, BPSK modulation, 6.5 / 7.25 Mbps data rate

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

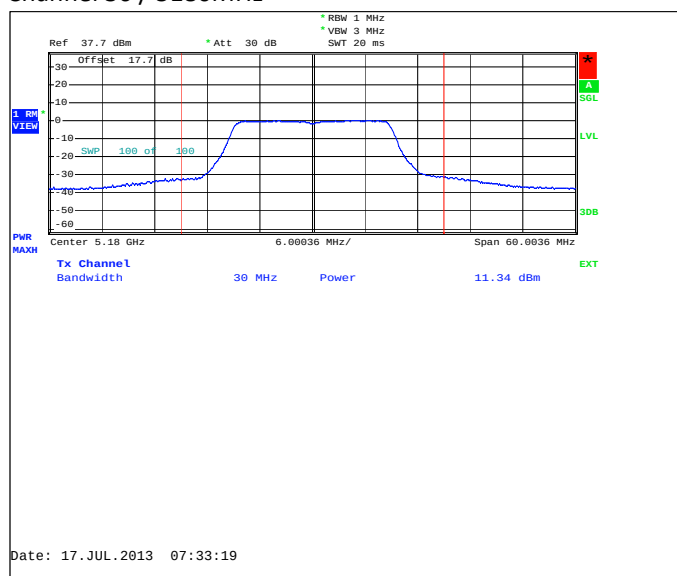
Channel 36 / 5180MHz



2.5.11 802.11n mode, QPSK modulation, 13.0 / 14.4 Mbps data rate

Channel / f _c [MHz]	P [dBm]	P [mW]	Result
36 / 5180	11.34	13.614	PASSED

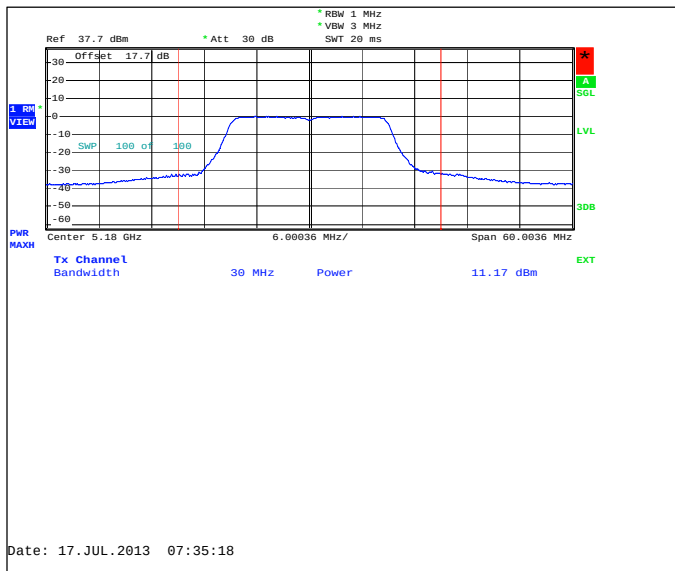
Channel 36 / 5180MHz



2.5.12 802.11n mode, QPSK modulation, 19.5 / 21.7 Mbps data rate

Channel / f _c [MHz]	P [dBm]	P [mW]	Result
36 / 5180	11.17	13.092	PASSED

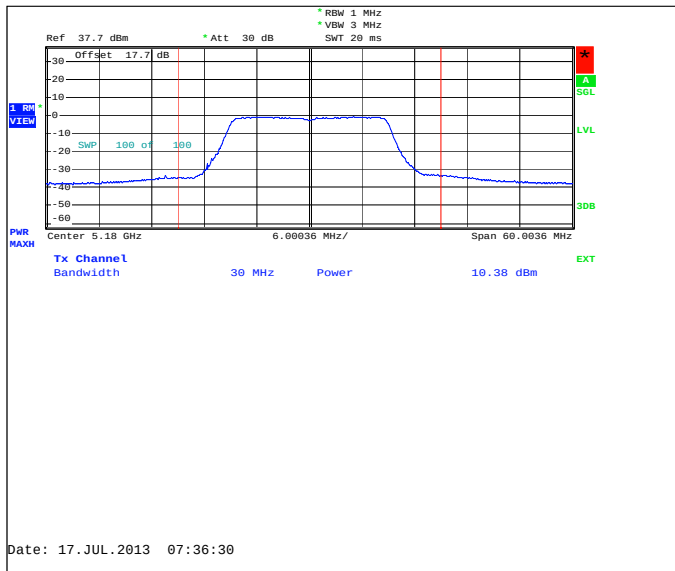
Channel 36 / 5180MHz



2.5.13 802.11n mode, 16QAM modulation, 26.0 / 28.9 Mbps data rate

Channel / f _c [MHz]	P [dBm]	P [mW]	Result
36 / 5180	10.38	10.914	PASSED

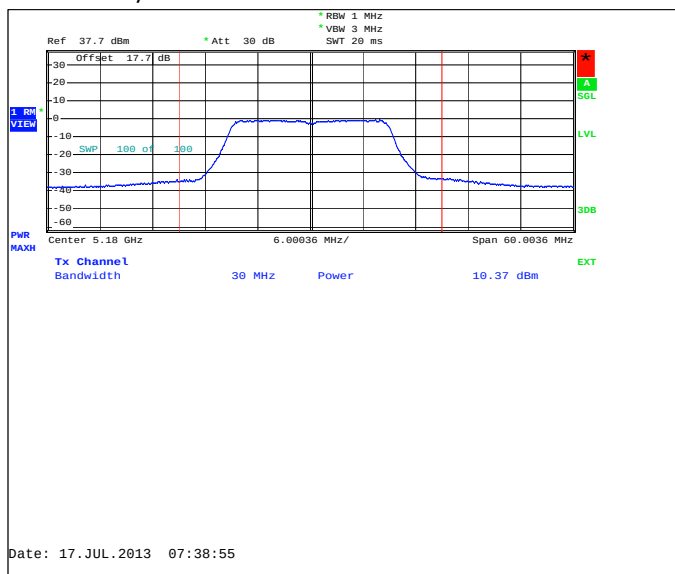
Channel 36 / 5180MHz



2.5.14 802.11n mode, 16QAM modulation, 39.0 / 43.3 Mbps data rate

Channel / f _c [MHz]	P [dBm]	P [mW]	Result
36 / 5180	10.37	10.889	PASSED

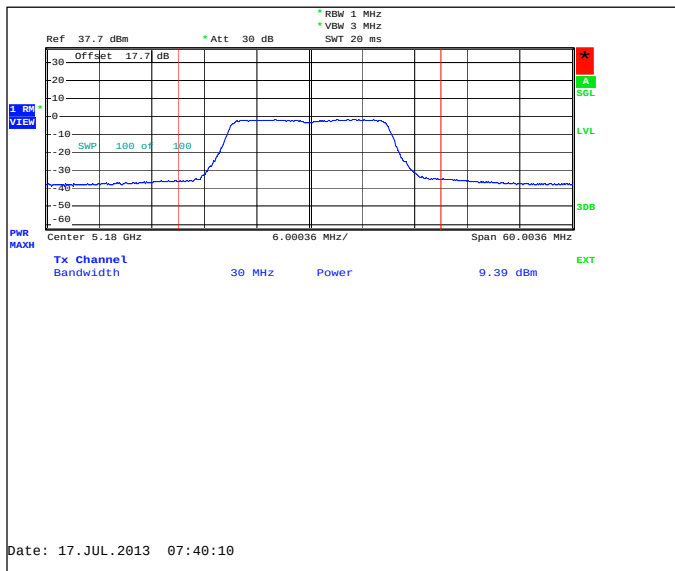
Channel 36 / 5180MHz



2.5.15 802.11n mode, 64QAM modulation, 52.0 / 57.8 Mbps data rate

Channel / f _c [MHz]	P [dBm]	P [mW]	Result
36 / 5180	9.39	8.69	PASSED

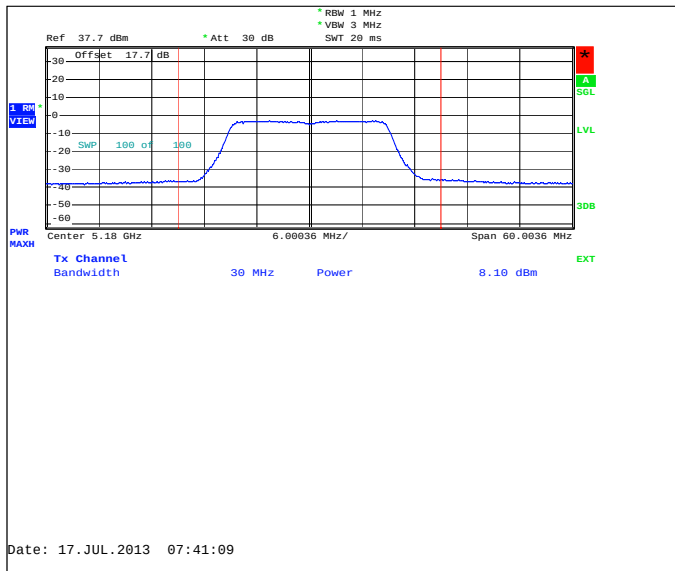
Channel 36 / 5180MHz



2.5.16 802.11n mode, 64QAM modulation, 58.5 / 65.0 Mbps data rate

Channel / f _c [MHz]	P [dBm]	P [mW]	Result
36 / 5180	8.1	6.457	PASSED

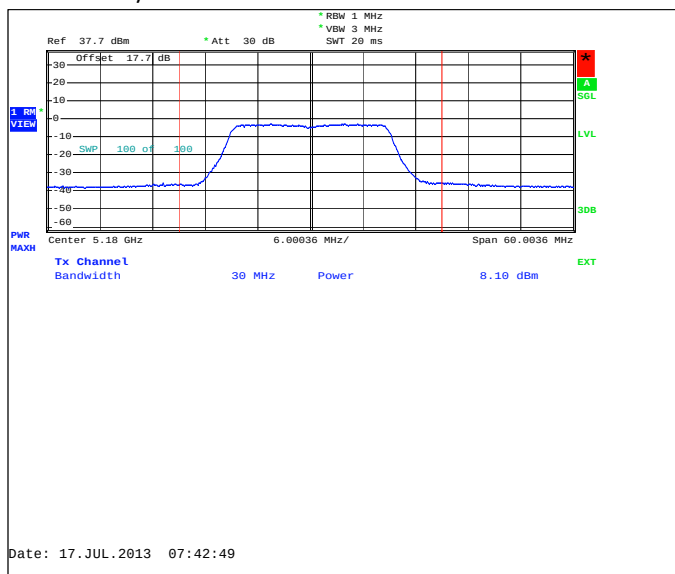
Channel 36 / 5180MHz



2.5.17 802.11n mode, 64QAM modulation, 65.0 / 72.2 Mbps data rate

Channel / f _c [MHz]	P [dBm]	P [mW]	Result
36 / 5180	8.1	6.457	PASSED

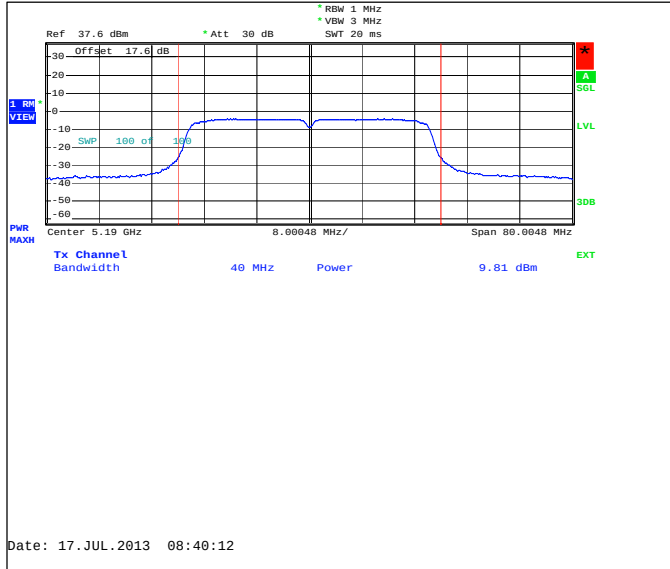
Channel 36 / 5180MHz



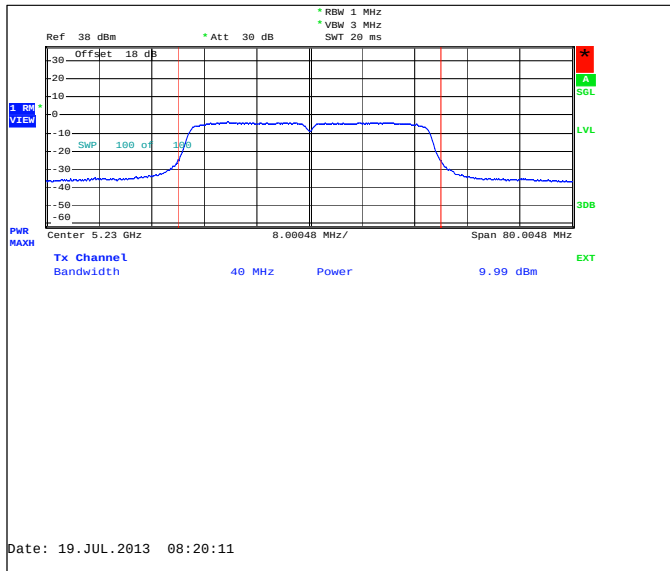
2.5.18 802.11n mode, BPSK modulation, 13.5 / 15.0 Mbps data rate

Channel / f _c [MHz]	P [dBm]	P [mW]	Result
36+40 / 5190	9.81	9.572	PASSED
44+48 / 5230	9.99	9.977	PASSED
52+56 / 5270	9.77	9.484	PASSED
60+64 / 5310	9.83	9.616	PASSED
100+104 / 5510	9.56	9.036	PASSED
108+112 / 5550	9.09	8.11	PASSED
132+136 / 5670	9.03	7.998	PASSED

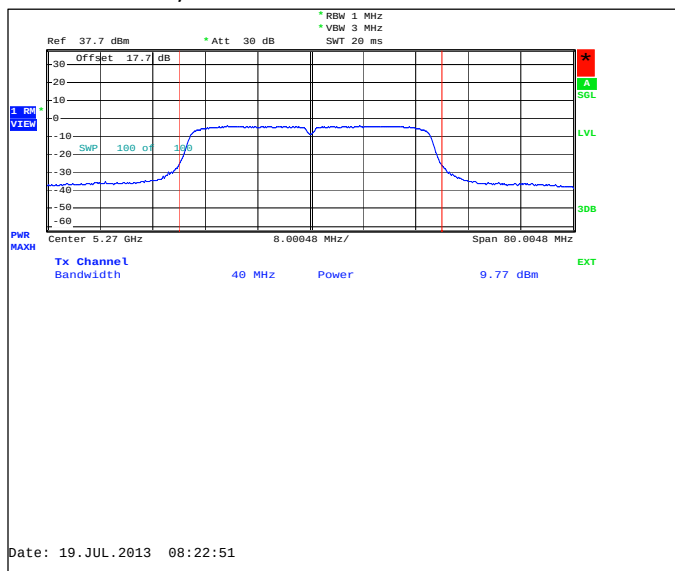
Channel 36+40 / 5190MHz



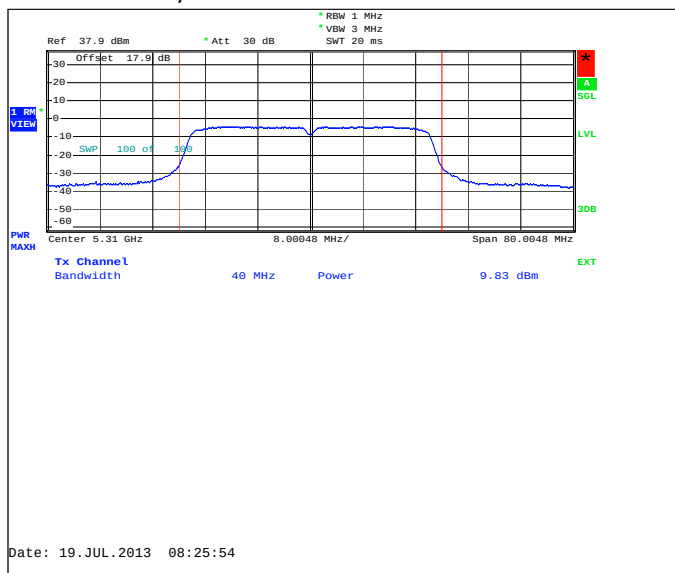
Channel 44+48 / 5230MHz



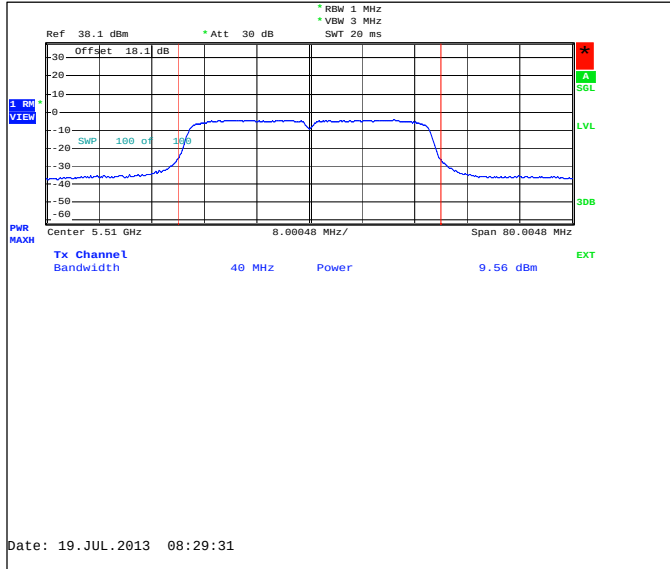
Channel 52+56 / 5270MHz



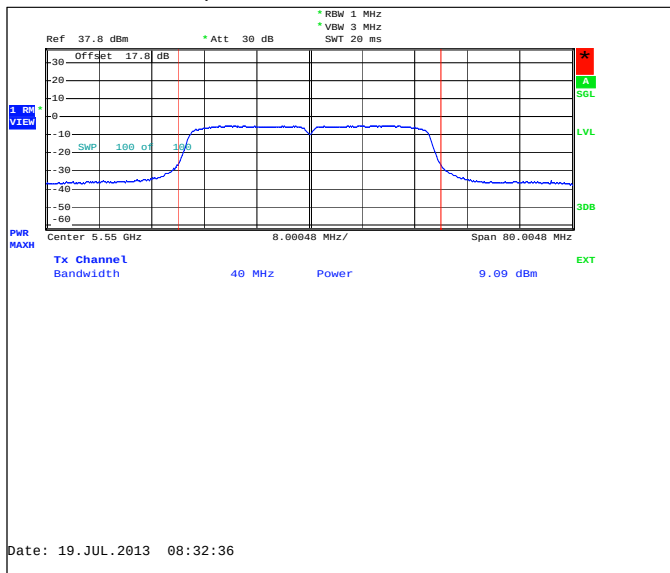
Channel 60+64 / 5310MHz



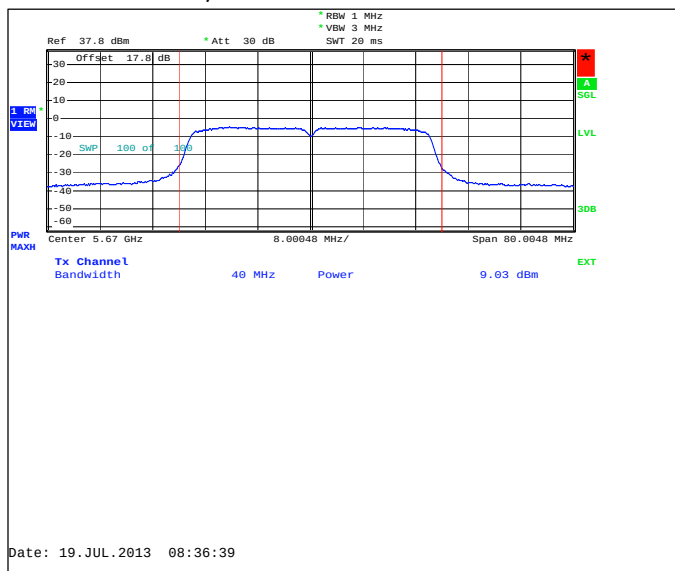
Channel 100+104 / 5510MHz



Channel 108+112 / 5550MHz



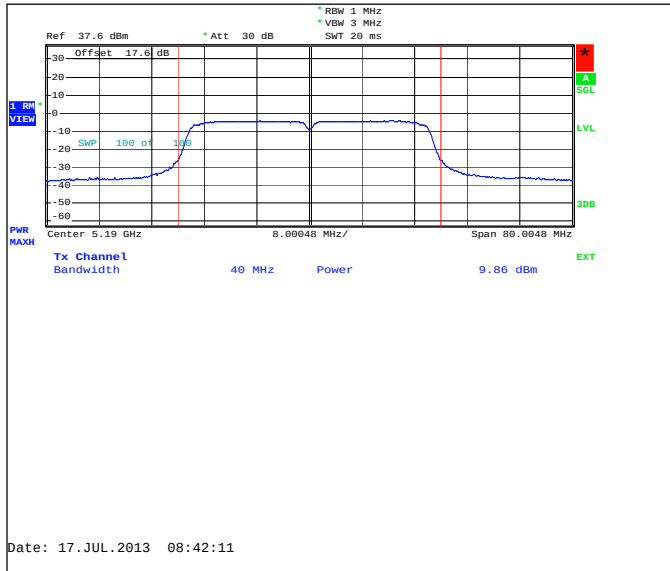
Channel 132+136 / 5670MHz



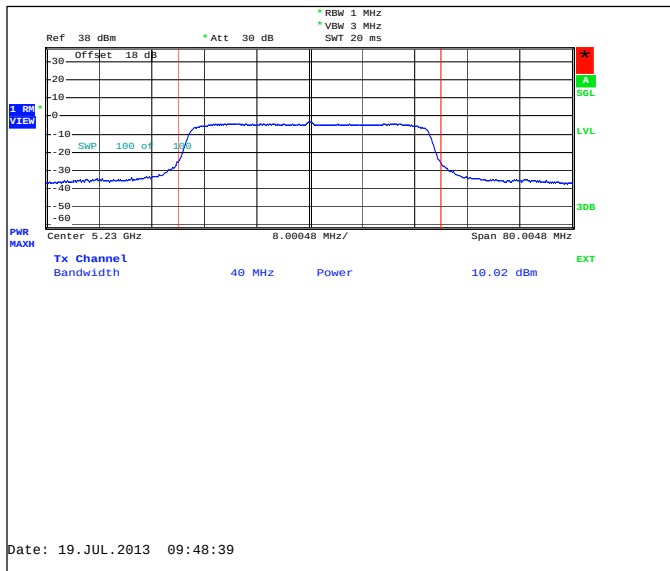
2.5.19 802.11n mode, QPSK modulation, 27.0 / 30.0 Mbps data rate

Channel / f _c [MHz]	P [dBm]	P [mW]	Result
36+40 / 5190	9.86	9.683	PASSED
44+48 / 5230	10.02	10.046	PASSED
52+56 / 5270	9.68	9.29	PASSED
60+64 / 5310	9.73	9.397	PASSED
100+104 / 5510	9.46	8.831	PASSED
108+112 / 5550	8.98	7.907	PASSED
132+136 / 5670	8.94	7.834	PASSED

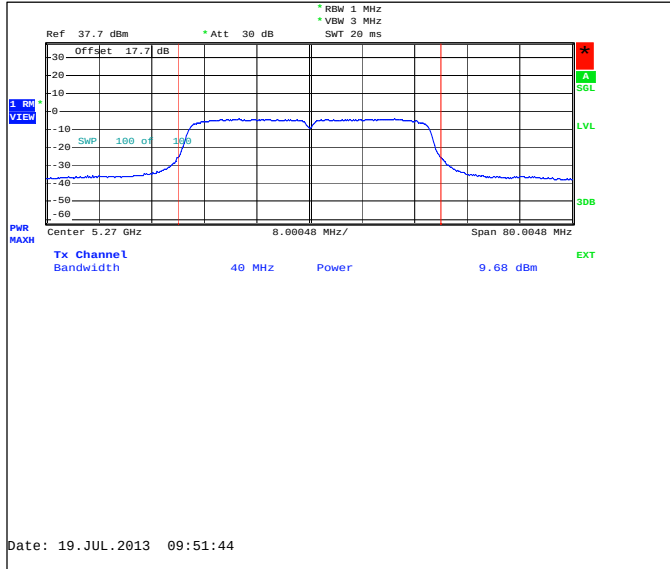
Channel 36+40 / 5190MHz



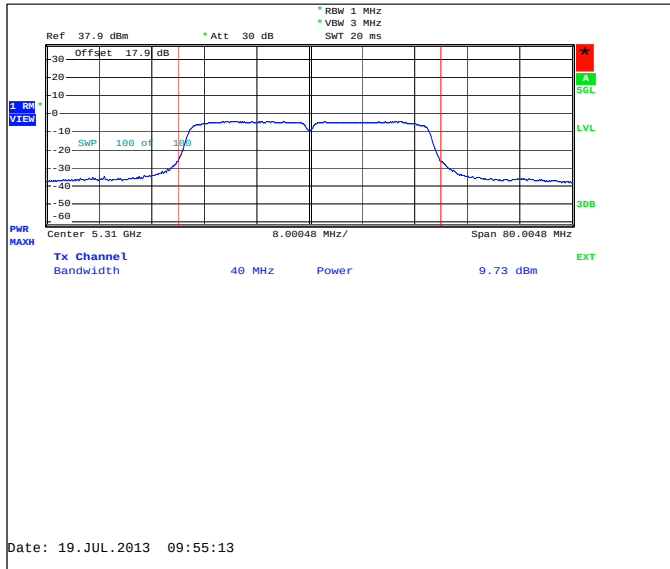
Channel 44+48 / 5230MHz



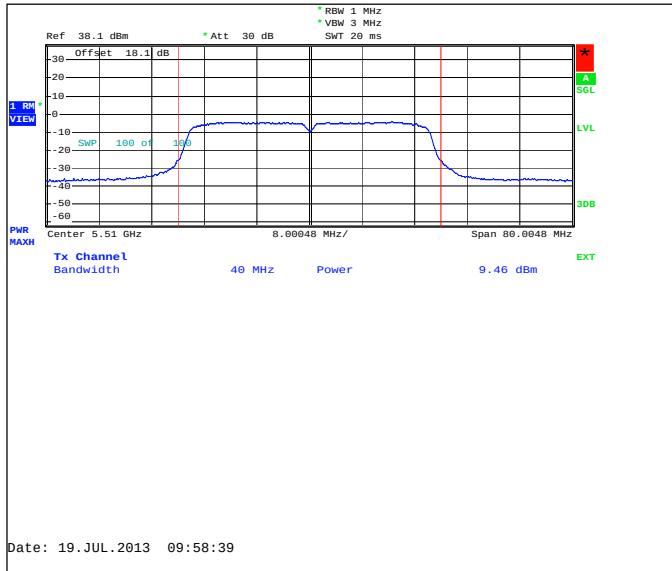
Channel 52+56 / 5270MHz



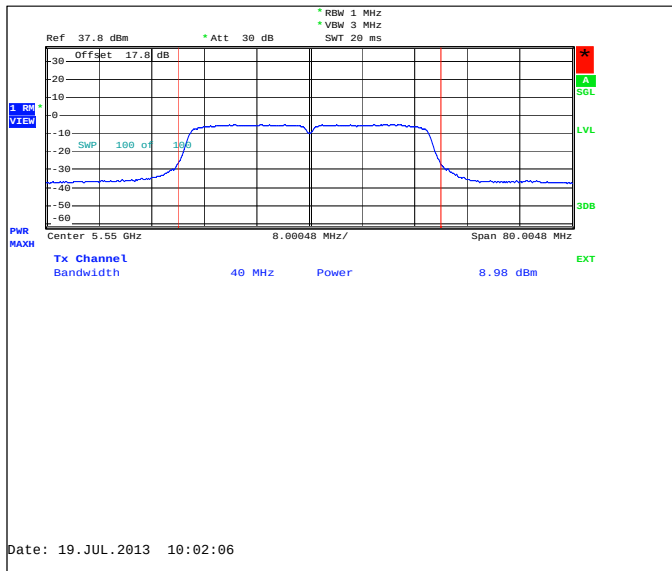
Channel 60+64 / 5310MHz



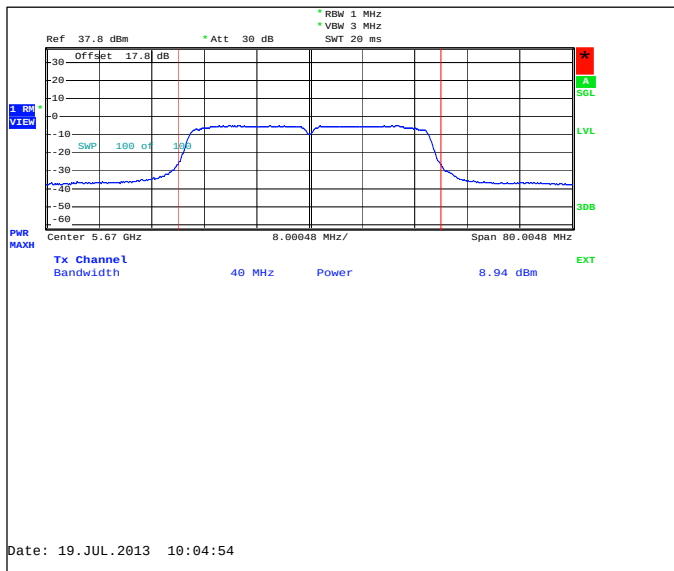
Channel 100+104 / 5510MHz



Channel 108+112 / 5550MHz



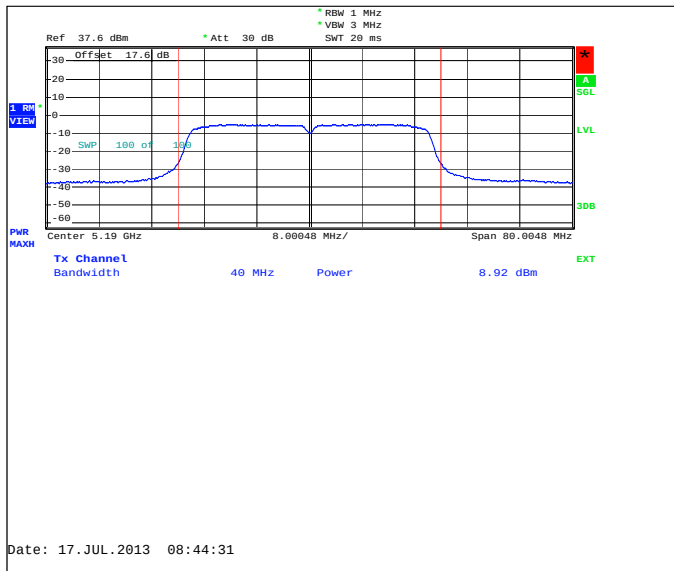
Channel 132+136 / 5670MHz



2.5.20 802.11n mode, QPSK modulation, 40.5 / 45.0 Mbps data rate

Channel / f _c [MHz]	P [dBm]	P [mW]	Result
36+40 / 5190	8.92	7.798	PASSED

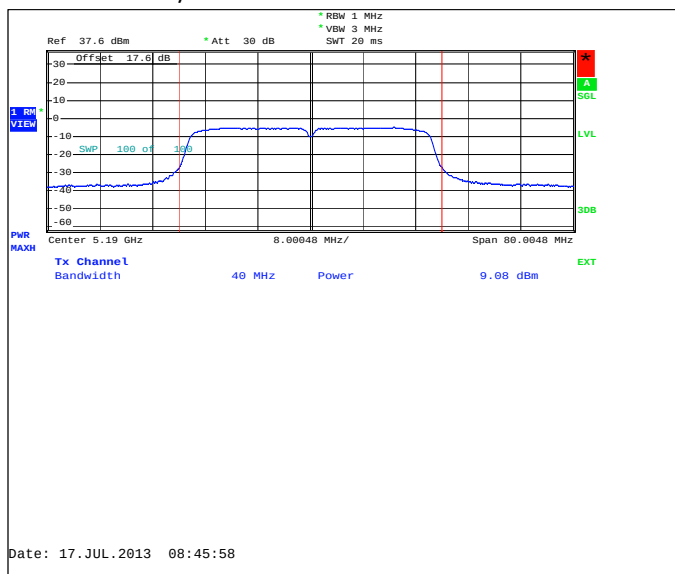
Channel 36+40 / 5190MHz



2.5.21 802.11n mode, 16QAM modulation, 54.0 / 60.0 Mbps data rate

Channel / f _c [MHz]	P [dBm]	P [mW]	Result
36+40 / 5190	9.08	8.091	PASSED

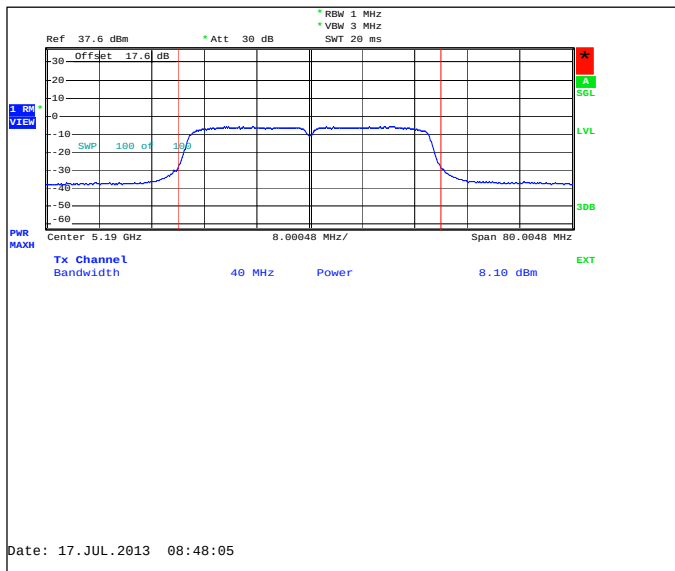
Channel 36+40 / 5190MHz



2.5.22 802.11n mode, 16QAM modulation, 81.0 / 90.0 Mbps data rate

Channel / f _c [MHz]	P [dBm]	P [mW]	Result
36+40 / 5190	8.1	6.457	PASSED

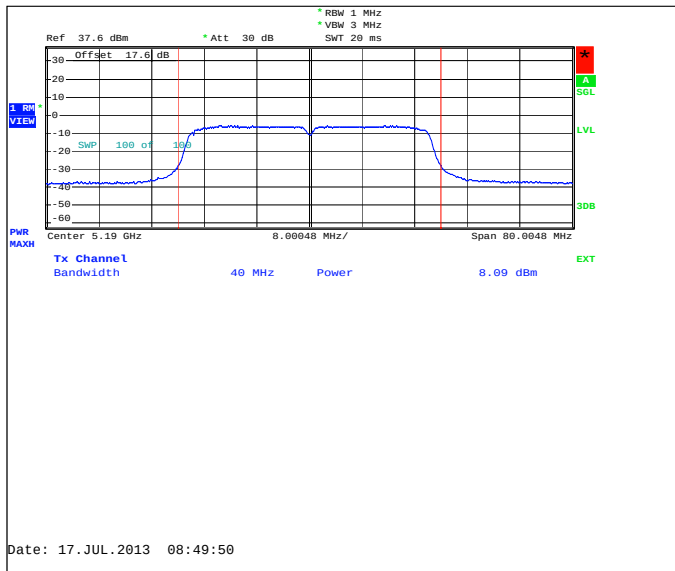
Channel 36+40 / 5190MHz



2.5.23 802.11n mode, 64QAM modulation, 108.0 / 120.0 Mbps data rate

Channel / f _c [MHz]	P [dBm]	P [mW]	Result
36+40 / 5190	8.09	6.442	PASSED

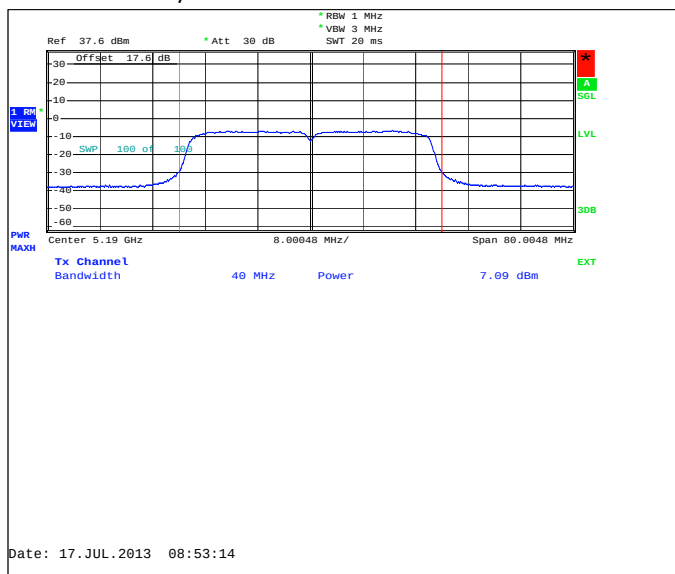
Channel 36+40 / 5190MHz



2.5.24 802.11n mode, 64QAM modulation, 121.5 / 135.0 Mbps data rate

Channel / f _c [MHz]	P [dBm]	P [mW]	Result
36+40 / 5190	7.09	5.117	PASSED

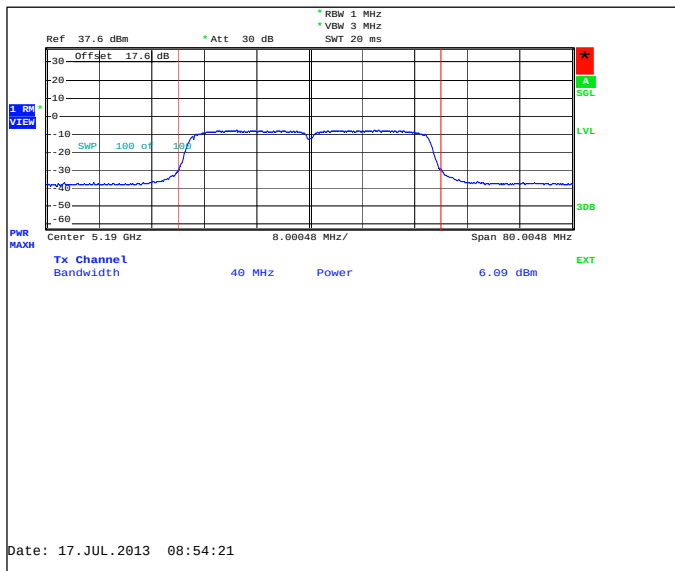
Channel 36+40 / 5190MHz



2.5.25 802.11n mode, 64QAM modulation, 135.0 / 150.0 Mbps data rate

Channel / f _c [MHz]	P [dBm]	P [mW]	Result
36+40 / 5190	6.09	4.064	PASSED

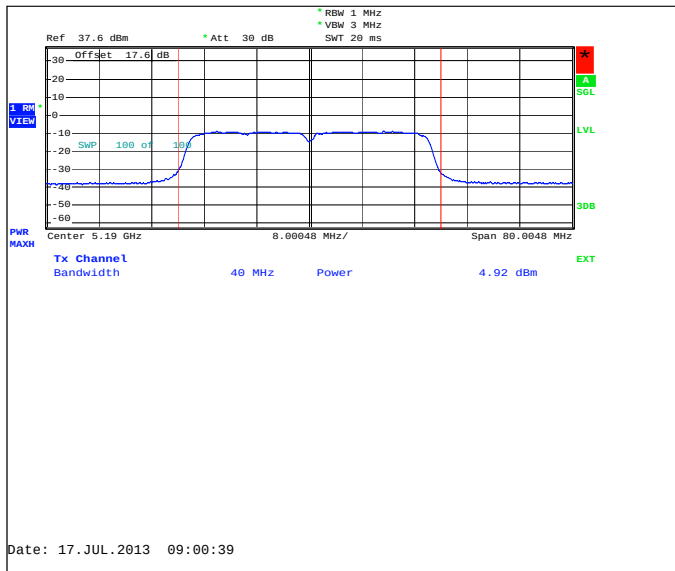
Channel 36+40 / 5190MHz



2.5.26 802.11ac mode, 256QAM modulation, 162.0 / 180.0 Mbps data rate

Channel / f _c [MHz]	P [dBm]	P [mW]	Result
36+40 / 5190	4.92	3.105	PASSED

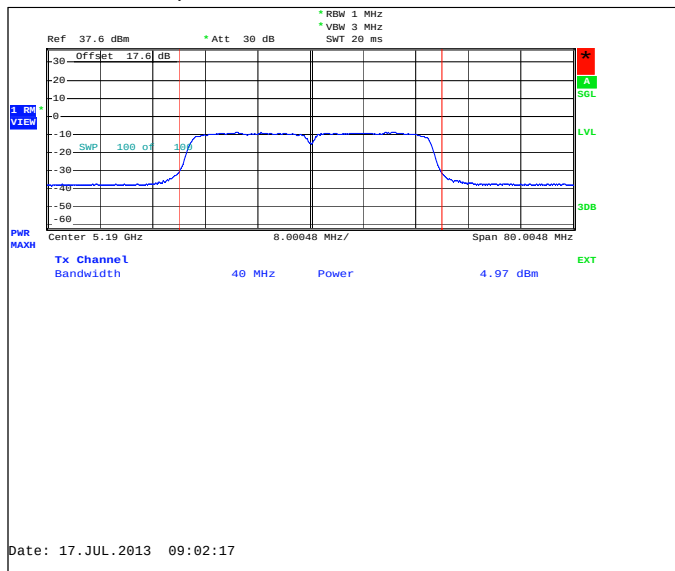
Channel 36+40 / 5190MHz



2.5.27 802.11ac mode, 256QAM modulation, 180.0 / 200.0 Mbps data rate

Channel / f _c [MHz]	P [dBm]	P [mW]	Result
36+40 / 5190	4.97	3.141	PASSED

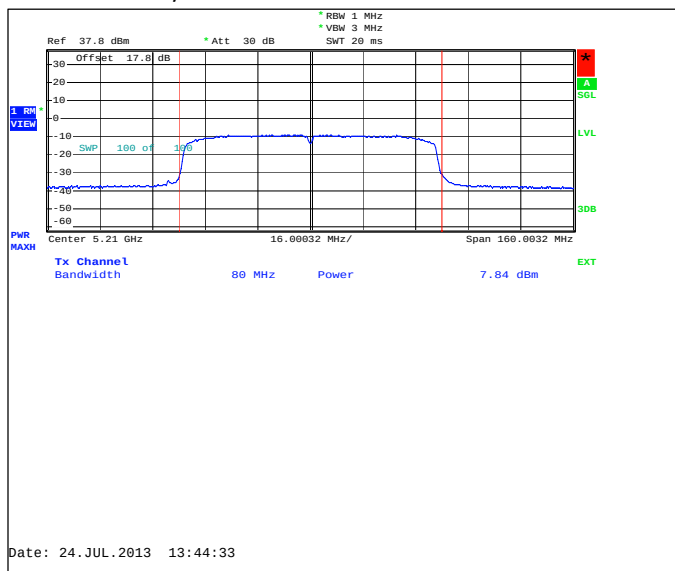
Channel 36+40 / 5190MHz



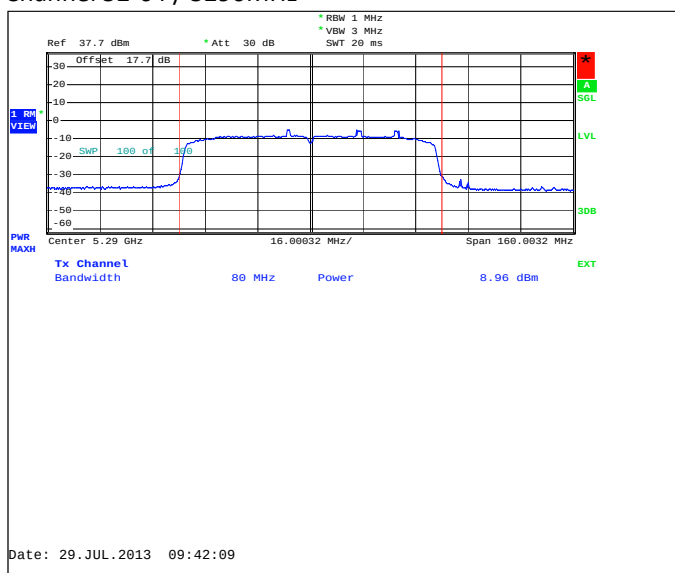
2.5.28 802.11ac mode, BPSK modulation, 29.3 / 32.5 Mbps data rate

Channel / f _c [MHz]	P [dBm]	P [mW]	Result
36-48 / 5210	7.84	6.081	PASSED
52-64 / 5290	8.96	7.87	PASSED
100-112 / 5530	8.46	7.015	PASSED

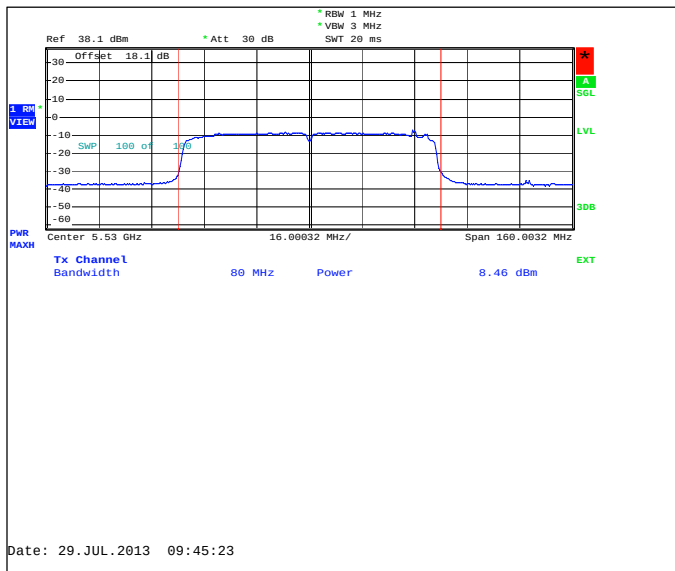
Channel 36-48 / 5210MHz



Channel 52-64 / 5290MHz



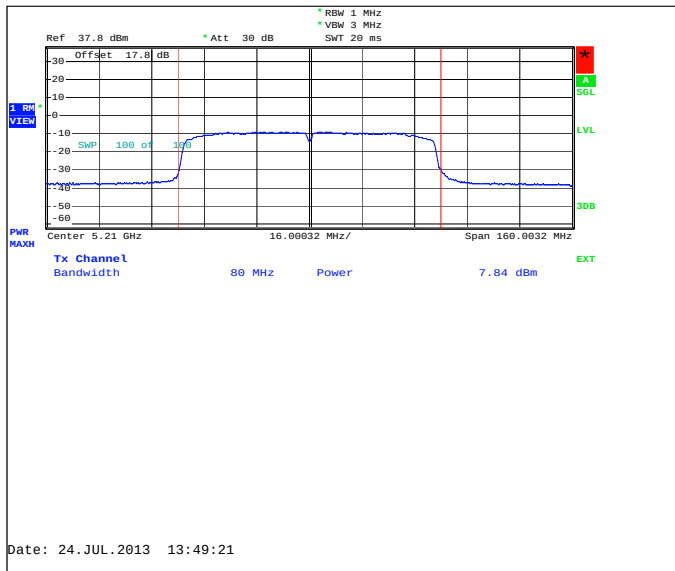
Channel 100-112 / 5530MHz



2.5.29 802.11ac mode, QPSK modulation, 58.5 / 65.0 Mbps data rate

Channel / f _c [MHz]	P [dBm]	P [mW]	Result
36-48 / 5210	7.84	6.081	PASSED

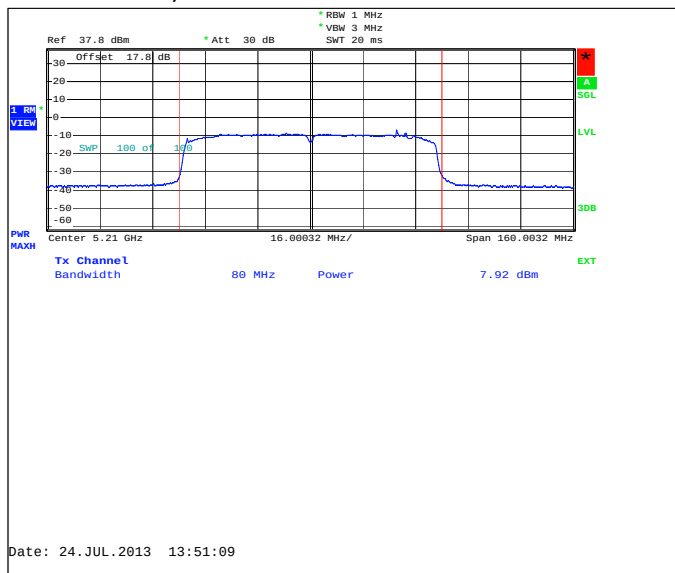
Channel 36-48 / 5210MHz



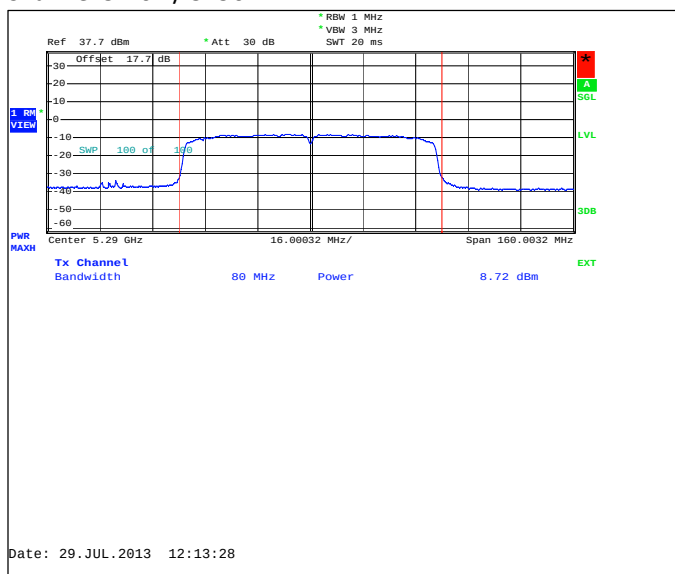
2.5.30 802.11ac mode, QPSK modulation, 87.8 / 97.5 Mbps data rate

Channel / f _c [MHz]	P [dBm]	P [mW]	Result
36-48 / 5210	7.92	6.194	PASSED
52-64 / 5290	8.72	7.447	PASSED
100-112 / 5530	8.69	7.396	PASSED

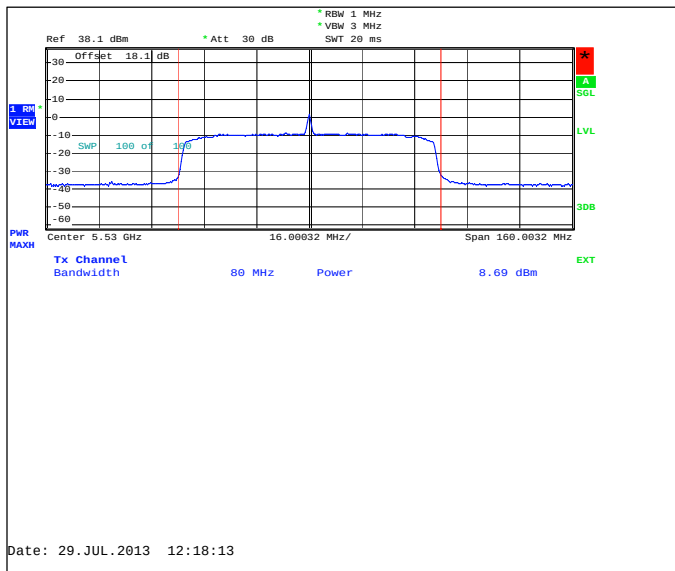
Channel 36-48 / 5210MHz



Channel 52-64 / 5290MHz



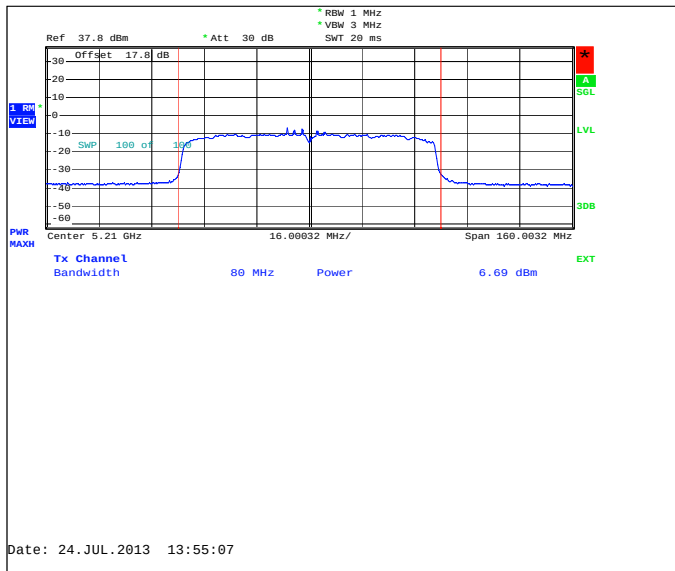
Channel 100-112 / 5530MHz



2.5.31 802.11ac mode, 16QAM modulation, 117.0 / 130.0 Mbps data rate

Channel / f _c [MHz]	P [dBm]	P [mW]	Result
36-48 / 5210	6.69	4.667	PASSED

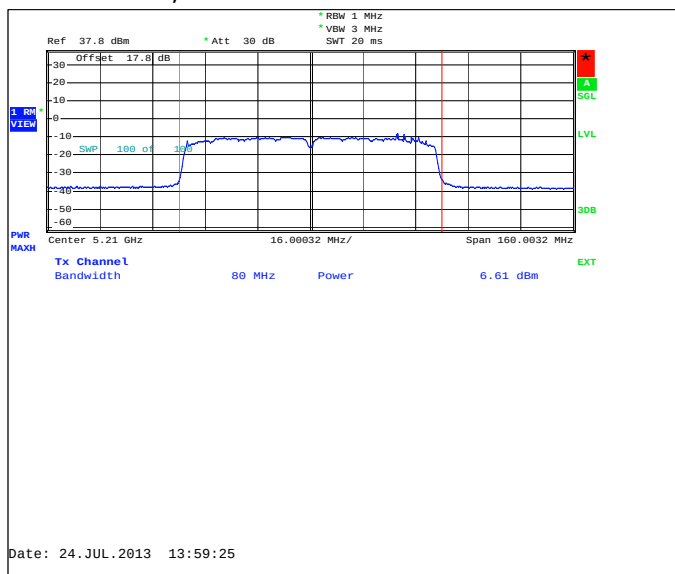
Channel 36-48 / 5210MHz



2.5.32 802.11ac mode, 16QAM modulation, 175.5 / 195.0 Mbps data rate

Channel / f _c [MHz]	P [dBm]	P [mW]	Result
36-48 / 5210	6.61	4.581	PASSED

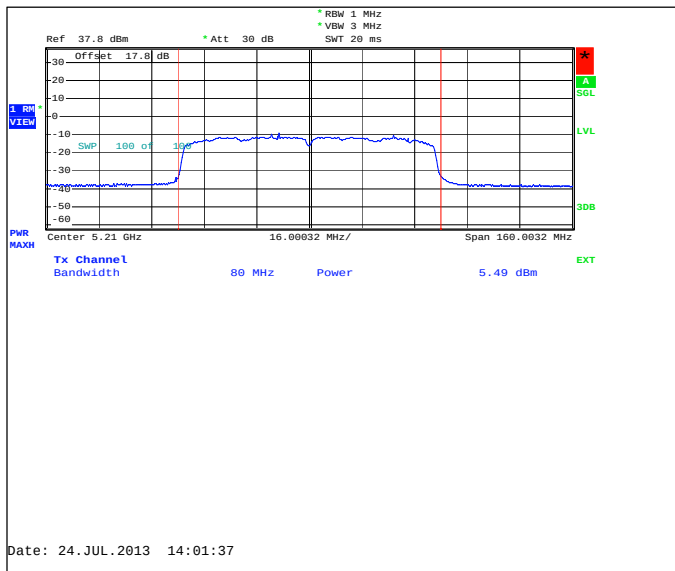
Channel 36-48 / 5210MHz



2.5.33 802.11ac mode, 64QAM modulation, 234.0 / 260.0 Mbps data rate

Channel / f _c [MHz]	P [dBm]	P [mW]	Result
36-48 / 5210	5.49	3.54	PASSED

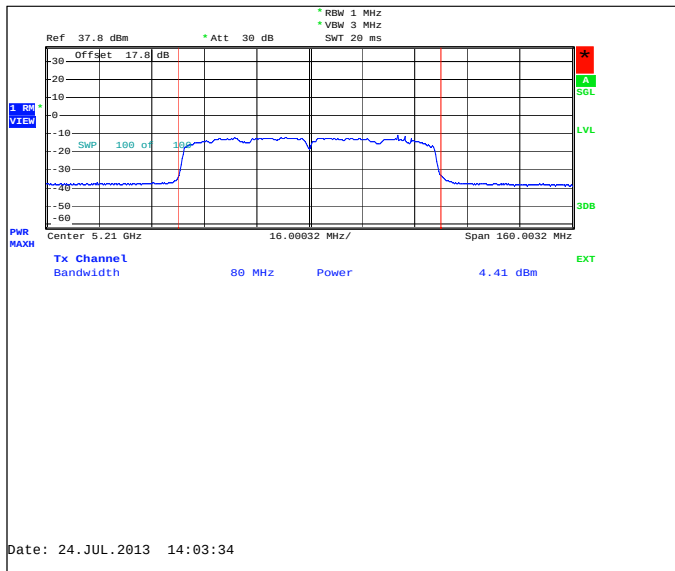
Channel 36-48 / 5210MHz



2.5.34 802.11ac mode, 64QAM modulation, 263.3 / 292.5 Mbps data rate

Channel / f _c [MHz]	P [dBm]	P [mW]	Result
36-48 / 5210	4.41	2.761	PASSED

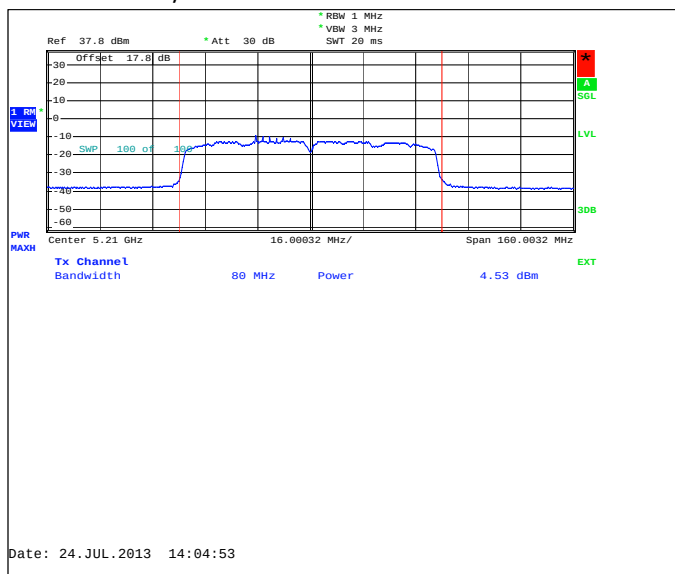
Channel 36-48 / 5210MHz



2.5.35 802.11ac mode, 64QAM modulation, 292.5 / 325.0 Mbps data rate

Channel / f _c [MHz]	P [dBm]	P [mW]	Result
36-48 / 5210	4.53	2.838	PASSED

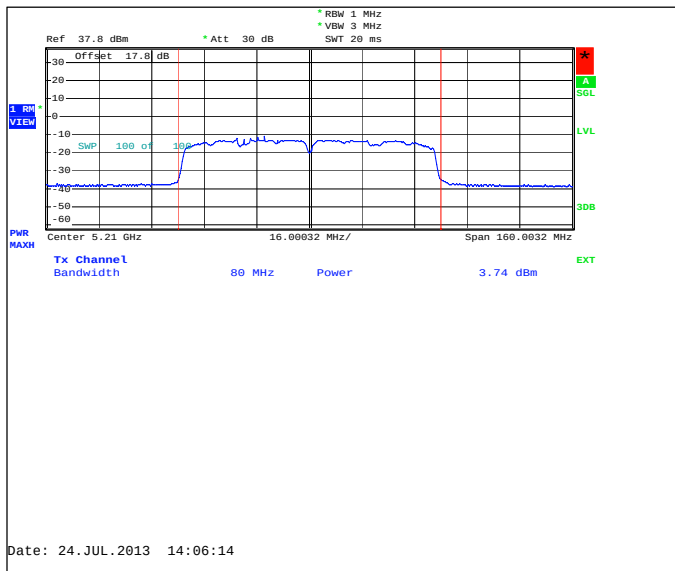
Channel 36-48 / 5210MHz



2.5.36 802.11ac mode, 256QAM modulation, 351.0 / 390.0 Mbps data rate

Channel / f _c [MHz]	P [dBm]	P [mW]	Result
36-48 / 5210	3.74	2.366	PASSED

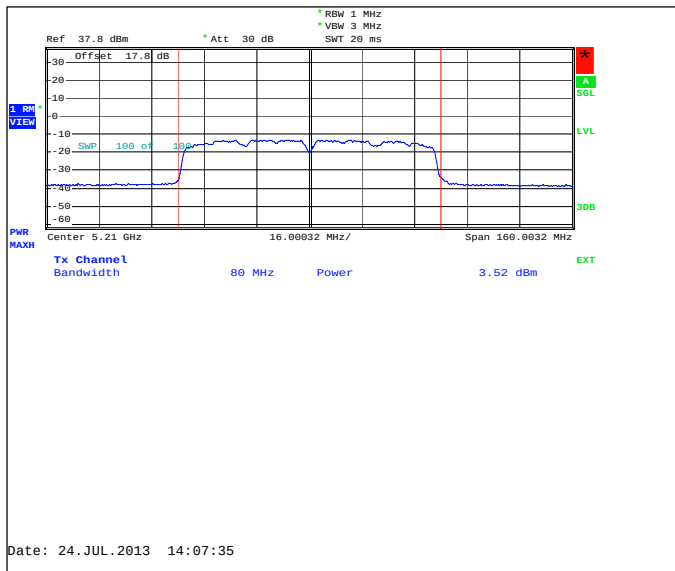
Channel 36-48 / 5210MHz



802.11ac mode, 256QAM modulation, 390.0 / 433.3 Mbps data rate

Channel / f _c [MHz]	P [dBm]	P [mW]	Result
36-48 / 5210	3.52	2.249	PASSED

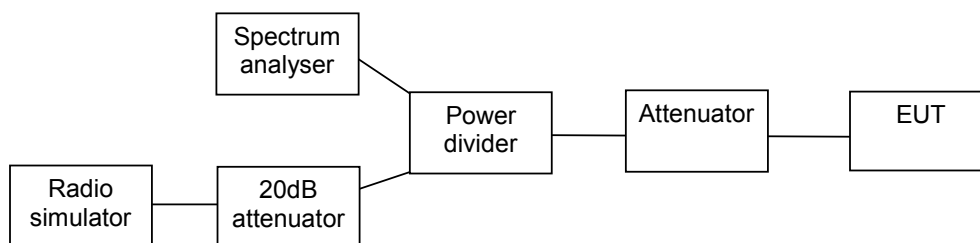
Channel 36-48 / 5210MHz



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

EUT with DUT number	RM-940, DUT 17563
Accessories with DUT numbers	AC-60E, DUT 17584; CA-190CD, DUT 17585; WH-208, DUT 17586
Operation Voltage [V] / [Hz]	Nominal
Results	PASSED
Remarks	-
Temp [°C] / Humidity [%RH] / Air Pressure [kPa]	22 / 44 / 101
Date of measurements	18-Jul-2013
Measured by	Tomi Lipponen

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

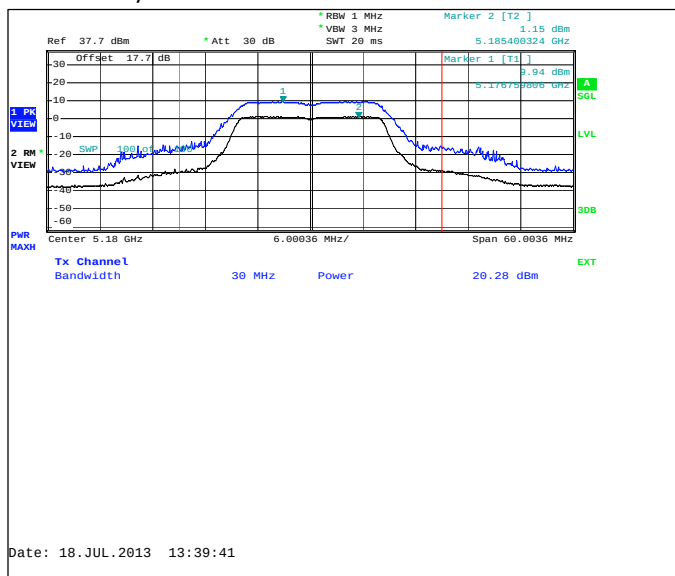
Limit [dB]
<= 13

3.3. 5 GHz RLAN Test results

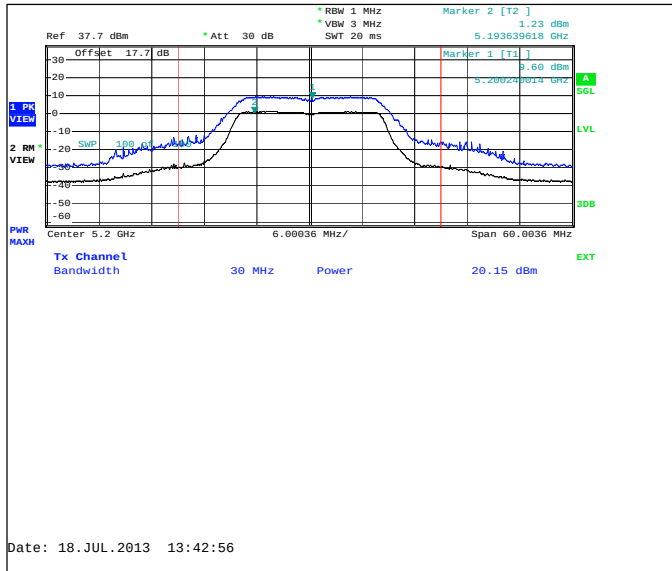
3.3.1 802.11a mode, BPSK modulation, 6 Mbps data rate

Channel / f _c [MHz]	Peak excursion [dB]	Result
36 / 5180	8.79	PASSED
40 / 5200	8.38	PASSED
48 / 5240	8.07	PASSED
52 / 5260	9.07	PASSED
60 / 5300	8.14	PASSED
64 / 5320	8.23	PASSED
100 / 5500	9.21	PASSED
116 / 5580	9.01	PASSED
140 / 5700	9.1	PASSED

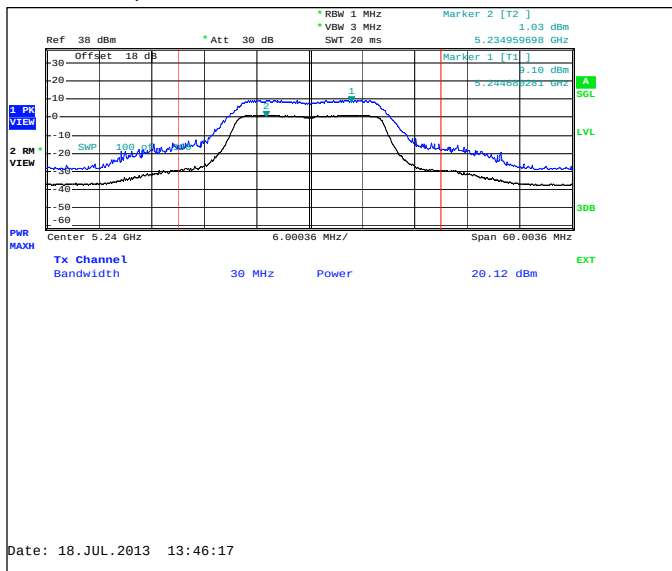
Channel 36 / 5180MHz



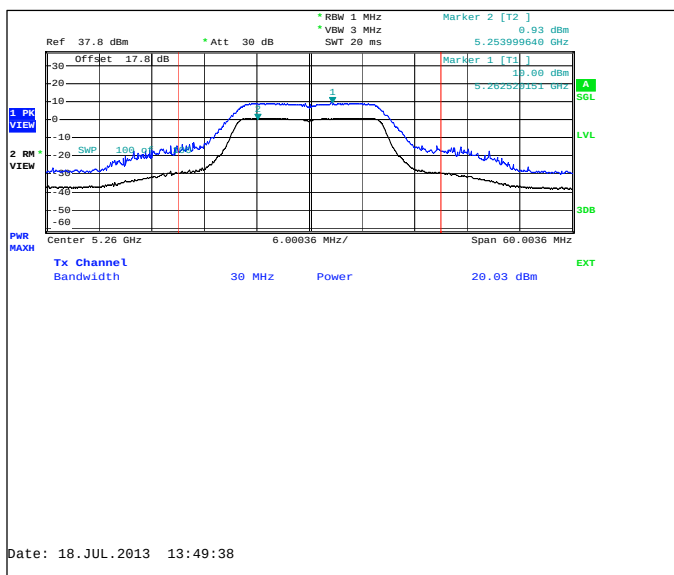
Channel 40 / 5200MHz



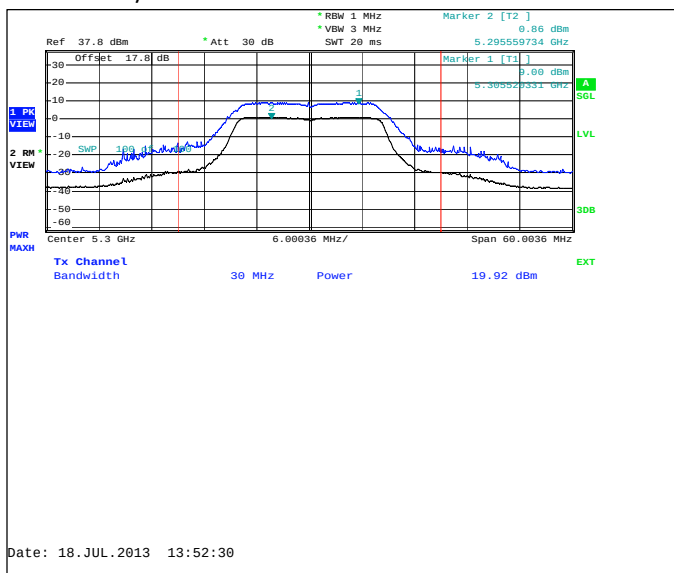
Channel 48 / 5240MHz



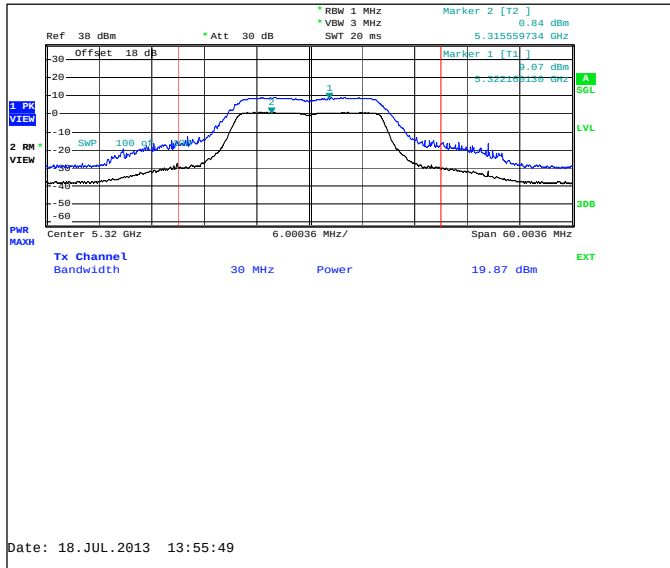
Channel 52 / 5260MHz



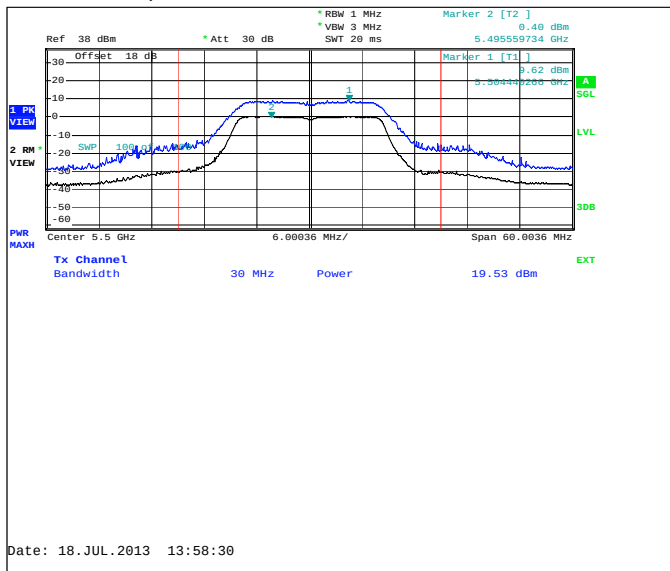
Channel 60 / 5300MHz



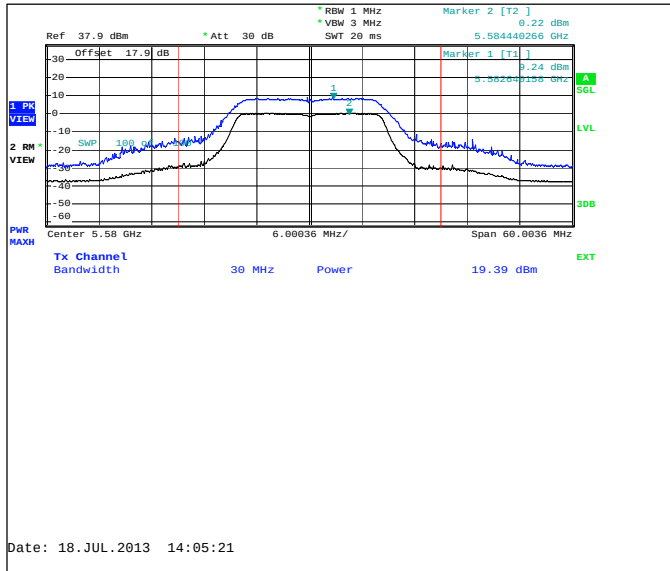
Channel 64 / 5320MHz



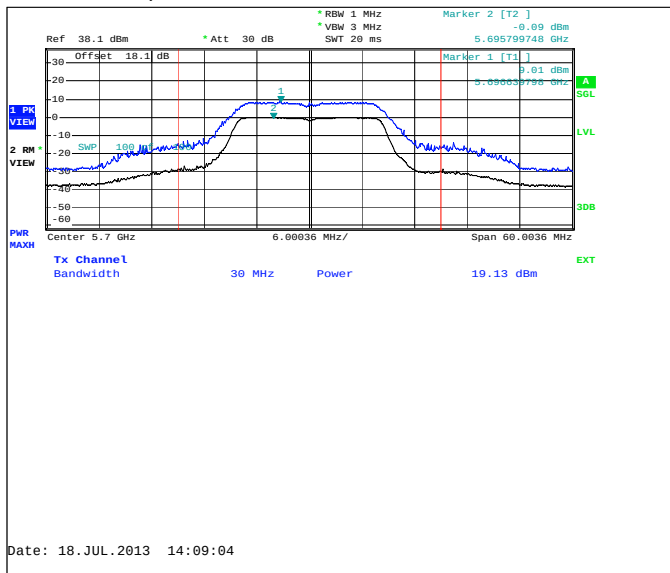
Channel 100 / 5500MHz



Channel 116 / 5580MHz



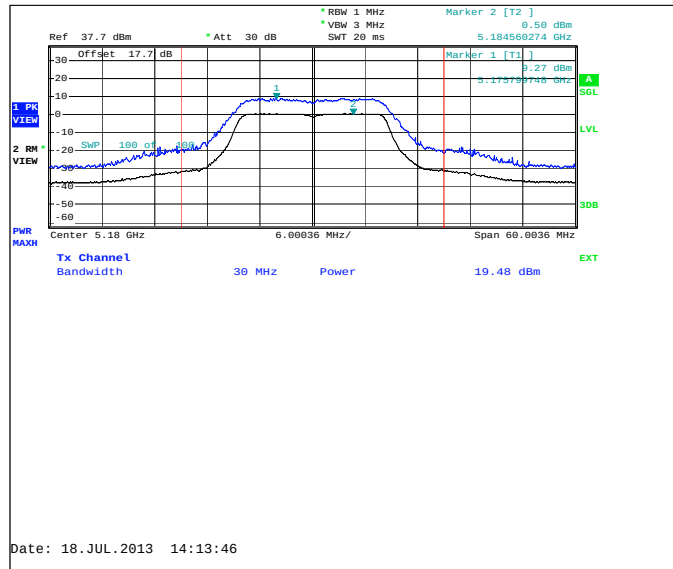
Channel 140 / 5700MHz



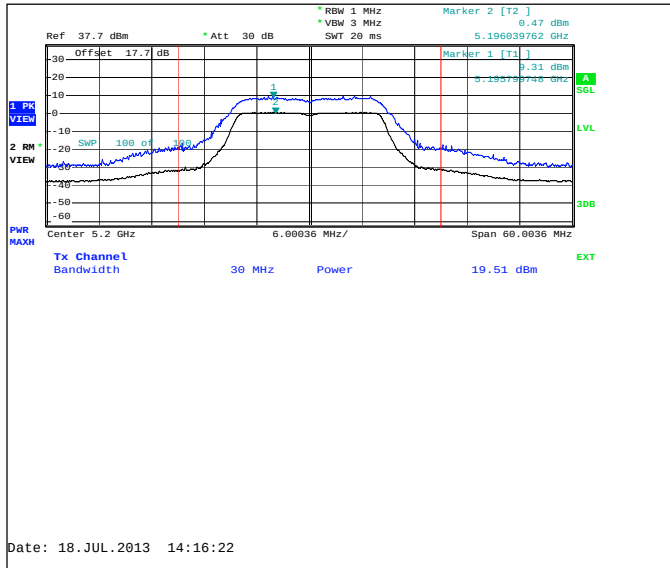
3.3.2 802.11a mode, QPSK modulation, 18 Mbps data rate

Channel / f _c [MHz]	Peak excursion [dB]	Result
36 / 5180	8.76	PASSED
40 / 5200	8.84	PASSED
48 / 5240	8.77	PASSED
52 / 5260	8.86	PASSED
60 / 5300	8.9	PASSED
64 / 5320	8.78	PASSED
100 / 5500	8.91	PASSED
116 / 5580	8.52	PASSED
140 / 5700	8.84	PASSED

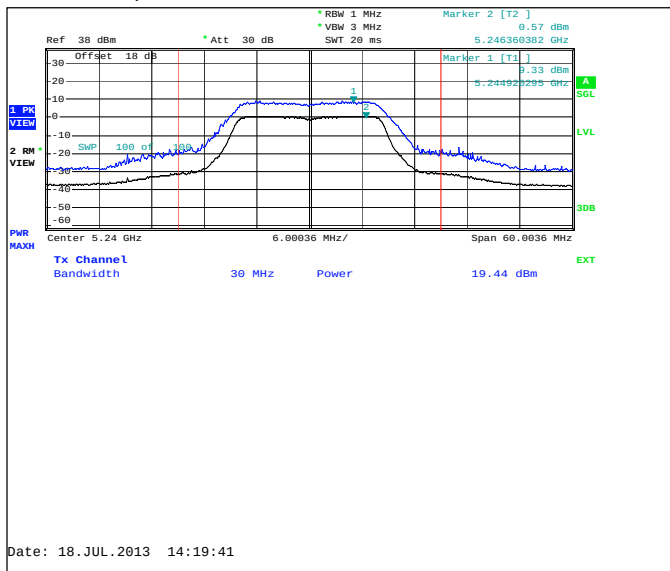
Channel 36 / 5180MHz



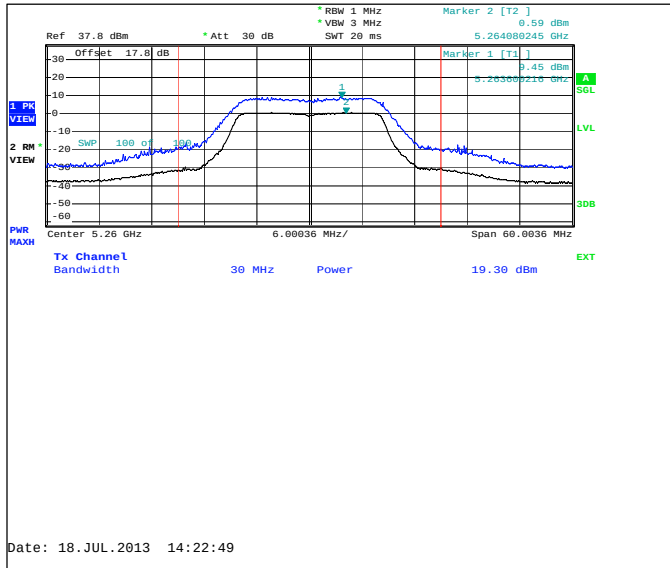
Channel 40 / 5200MHz



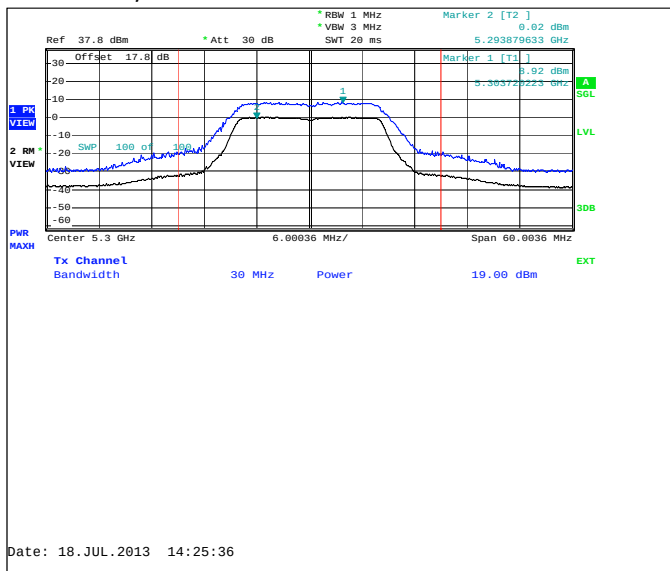
Channel 48 / 5240MHz



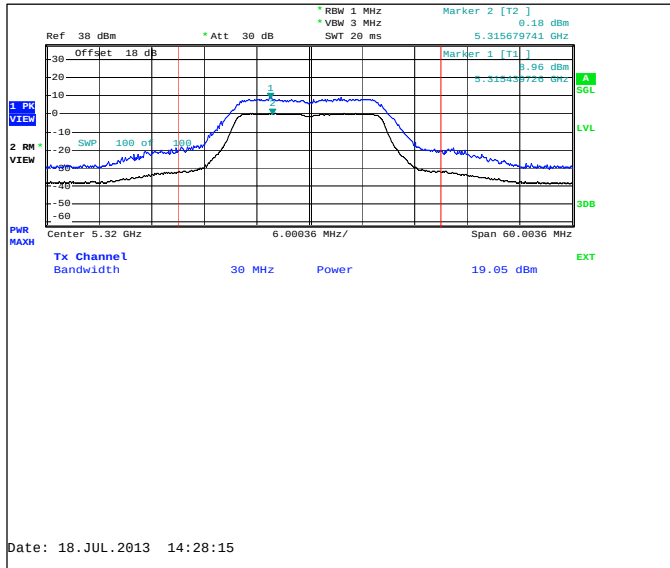
Channel 52 / 5260MHz



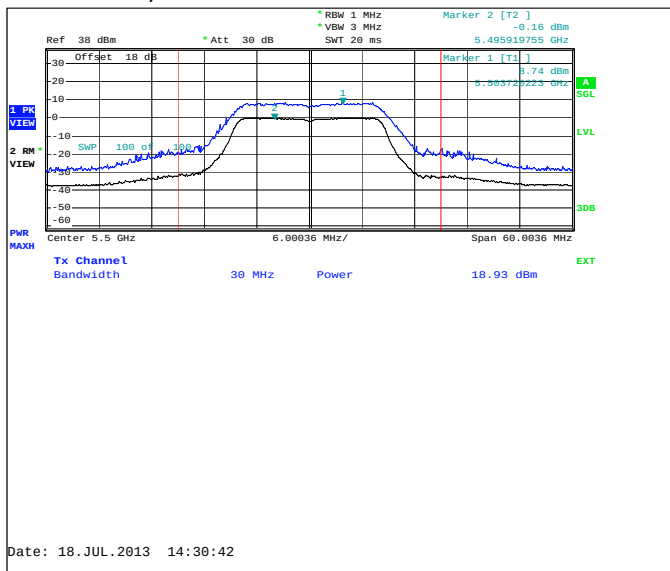
Channel 60 / 5300MHz



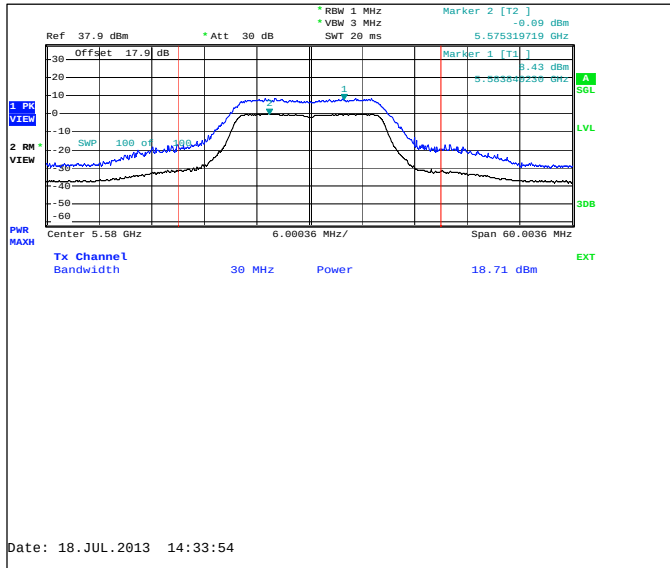
Channel 64 / 5320MHz



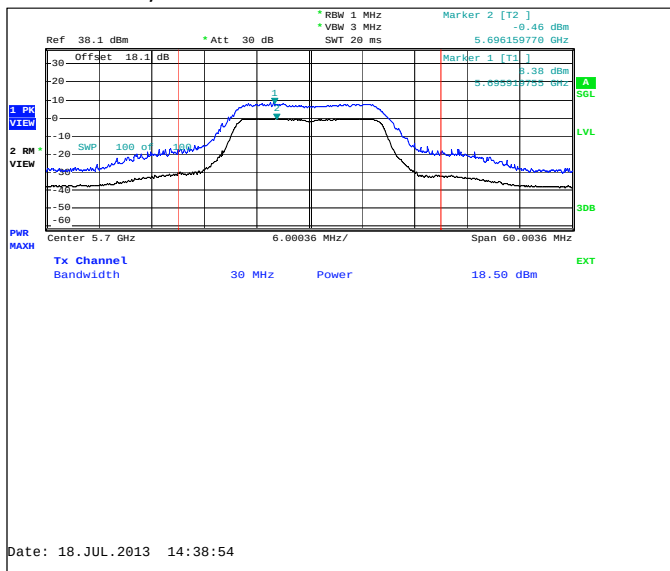
Channel 100 / 5500MHz



Channel 116 / 5580MHz



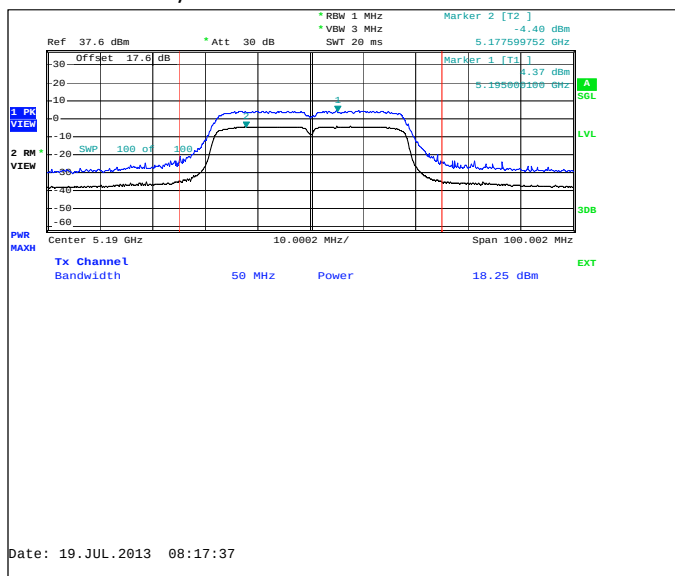
Channel 140 / 5700MHz



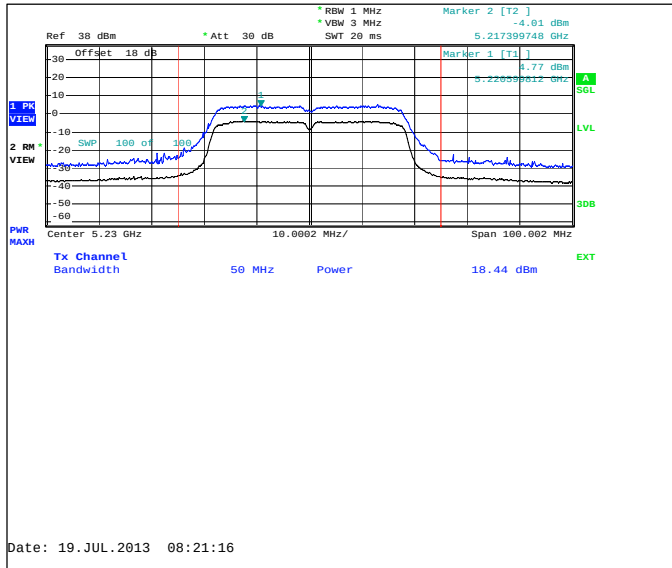
3.3.3 802.11n mode, BPSK modulation, 13.5 / 15.0 Mbps data rate

Channel / f _c [MHz]	Peak excursion [dB]	Result
36+40 / 5190	8.77	PASSED
44+48 / 5230	8.78	PASSED
52+56 / 5270	9.21	PASSED
60+64 / 5310	8.67	PASSED
100+104 / 5510	8.62	PASSED
108+112 / 5550	9.03	PASSED
132+136 / 5670	8.76	PASSED

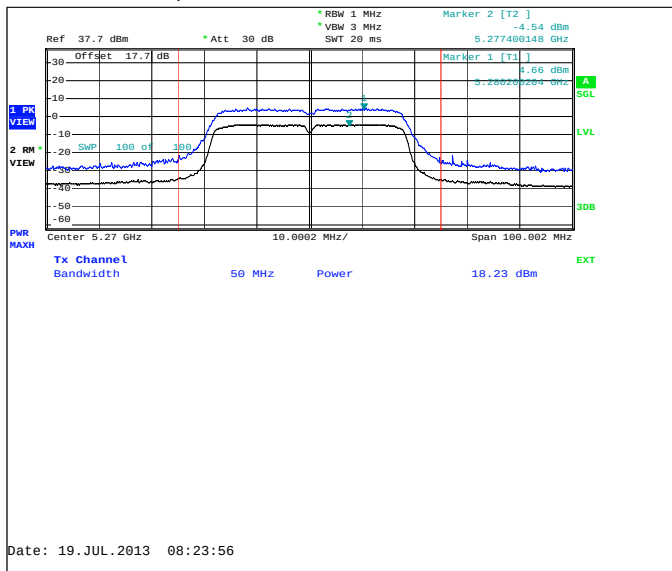
Channel 36+40 / 5190MHz



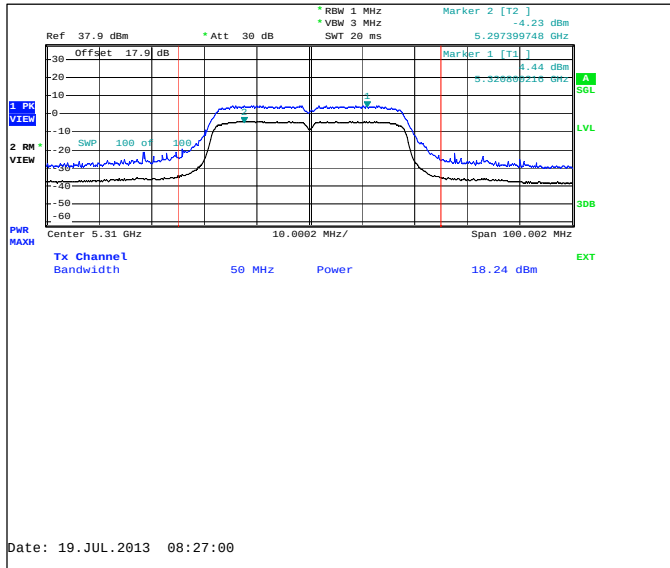
Channel 44+48 / 5230MHz



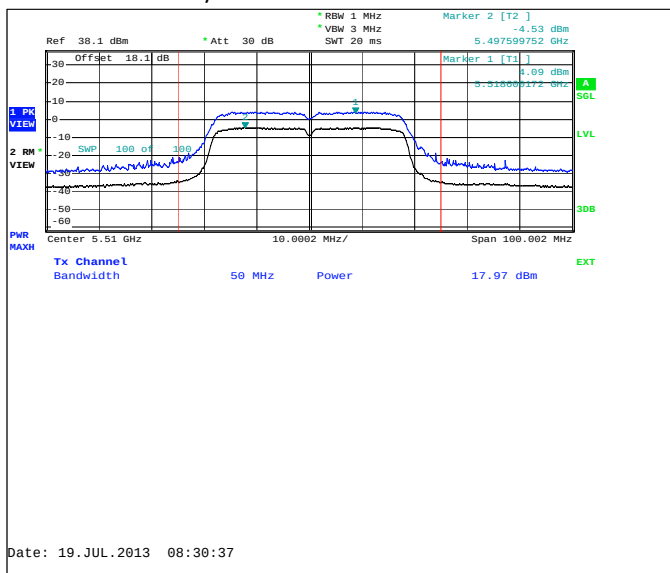
Channel 52+56 / 5270MHz



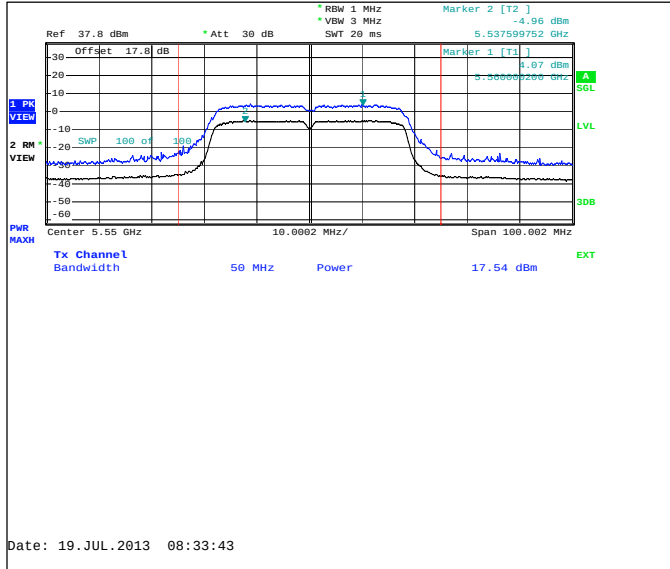
Channel 60+64 / 5310MHz



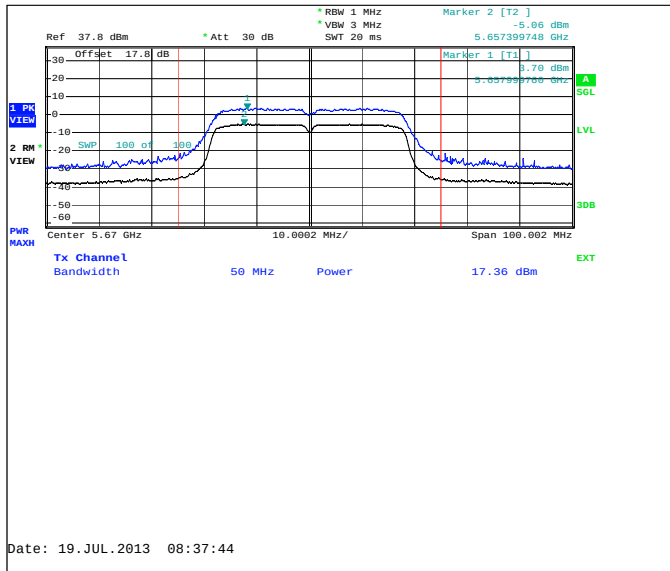
Channel 100+104 / 5510MHz



Channel 108+112 / 5550MHz



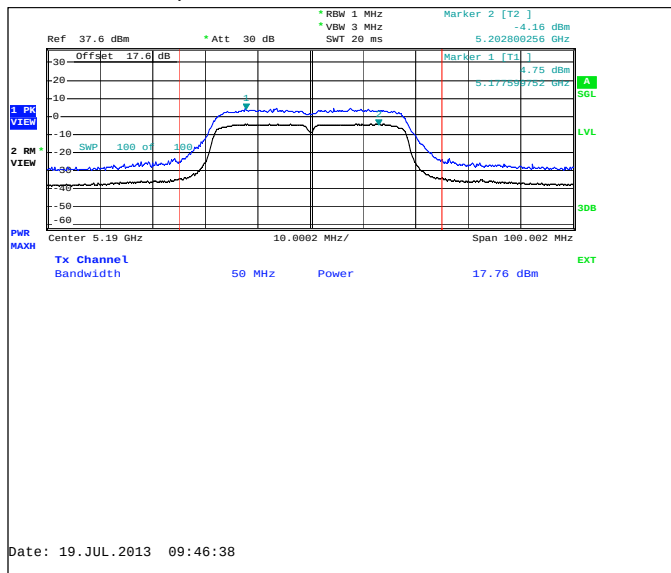
Channel 132+136 / 5670MHz



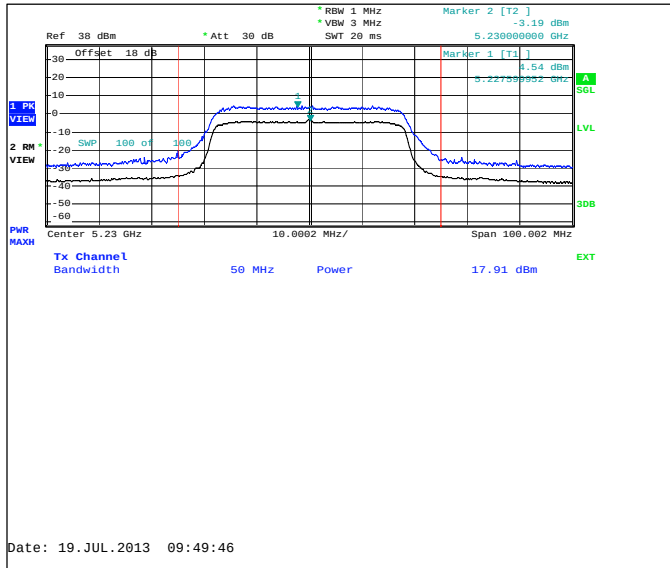
3.3.4 802.11n mode, QPSK modulation, 27.0 / 30.0 Mbps data rate

Channel / f _c [MHz]	Peak excursion [dB]	Result
36+40 / 5190	8.91	PASSED
44+48 / 5230	7.74	PASSED
52+56 / 5270	8.85	PASSED
60+64 / 5310	9.79	PASSED
100+104 / 5510	8.52	PASSED
108+112 / 5550	8.68	PASSED
132+136 / 5670	8.86	PASSED

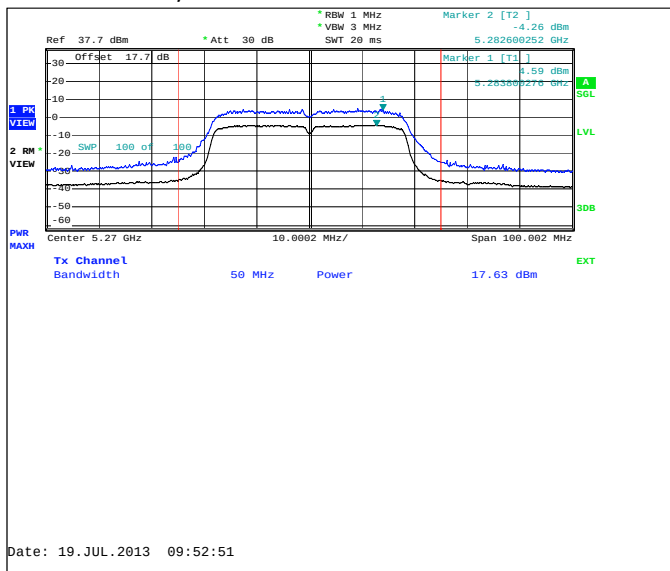
Channel 36+40 / 5190MHz



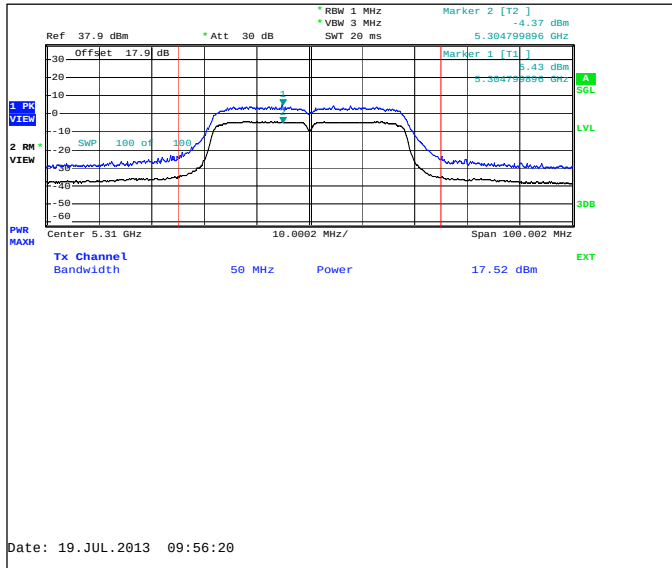
Channel 44+48 / 5230MHz



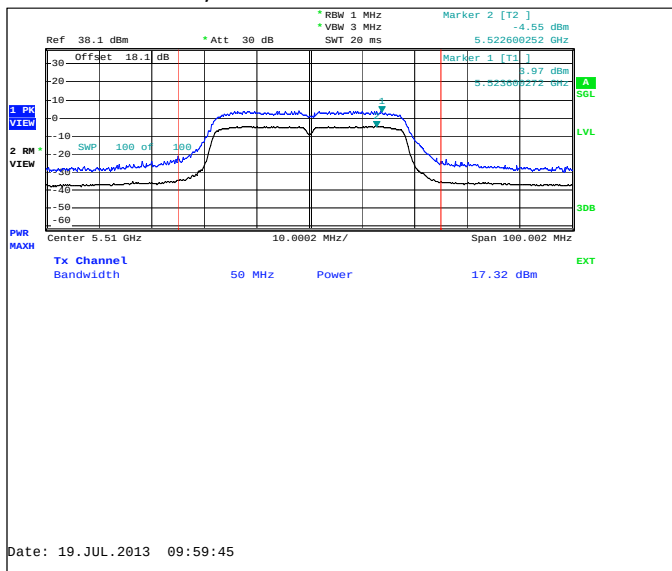
Channel 52+56 / 5270MHz



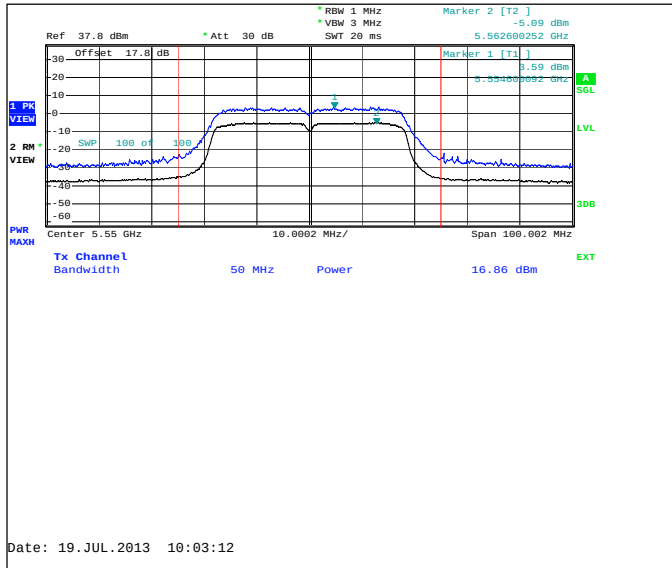
Channel 60+64 / 5310MHz



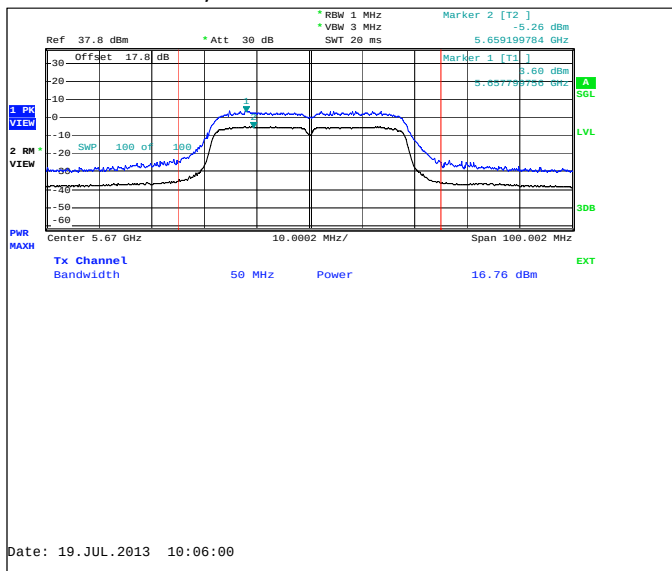
Channel 100+104 / 5510MHz



Channel 108+112 / 5550MHz



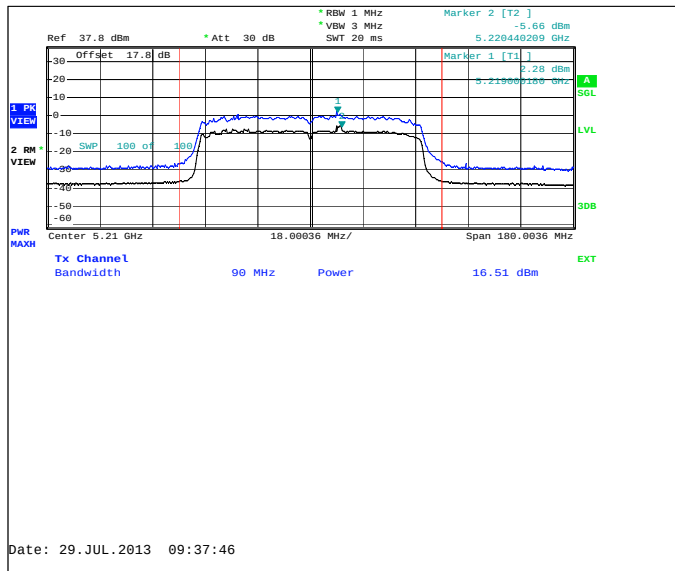
Channel 132+136 / 5670MHz



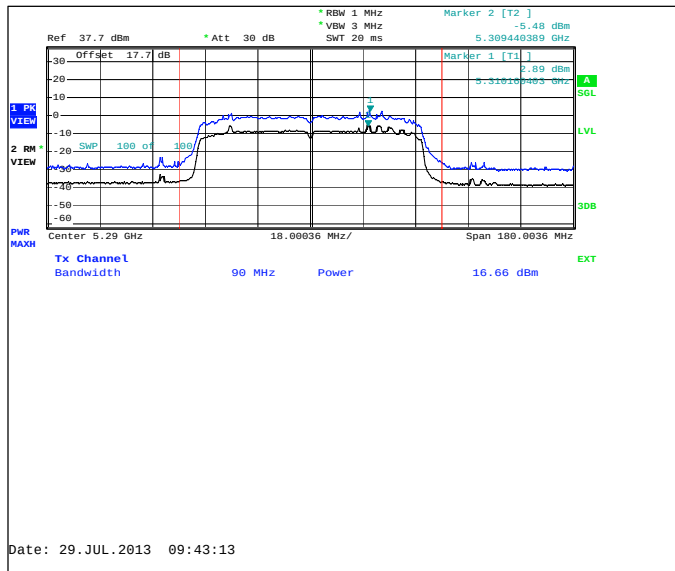
3.3.5 802.11ac mode, BPSK modulation, 29.3 / 32.5 Mbps data rate

Channel / f _c [MHz]	Peak excursion [dB]	Result
36-48 / 5210	7.94	PASSED
52-64 / 5290	8.37	PASSED
100-112 / 5530	8.14	PASSED

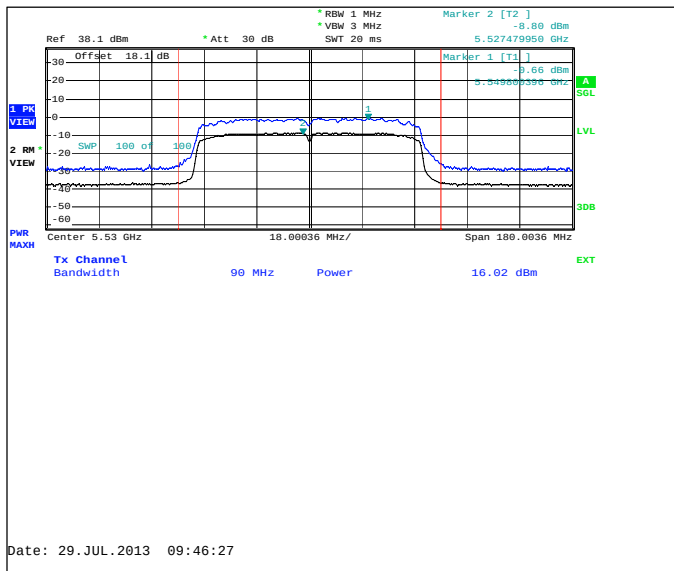
Channel 36-48 / 5210MHz



Channel 52-64 / 5290MHz



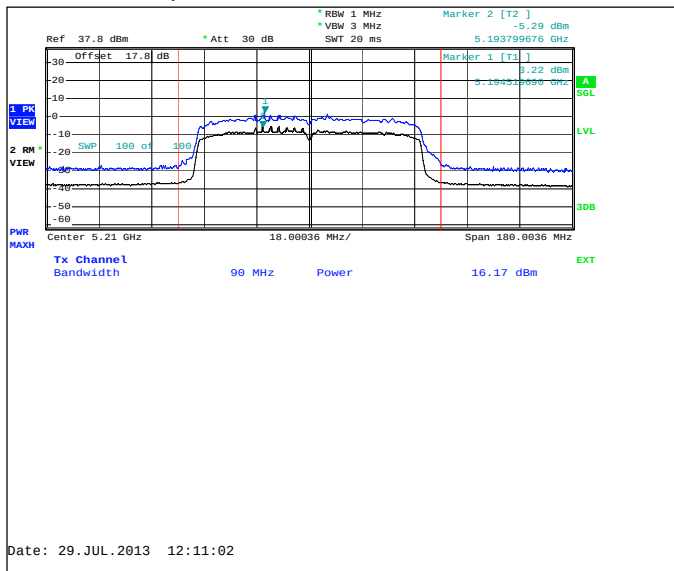
Channel 100-112 / 5530MHz



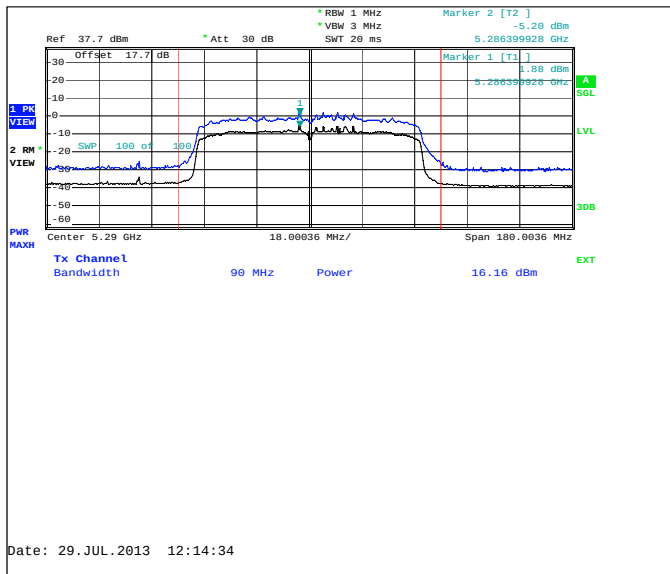
3.3.6 802.11ac mode, QPSK modulation, 87.8 / 97.5 Mbps data rate

Channel / f_c [MHz]	Peak excursion [dB]	Result
36-48 / 5210	8.51	PASSED
52-64 / 5290	7.09	PASSED
100-112 / 5530	2.22	PASSED

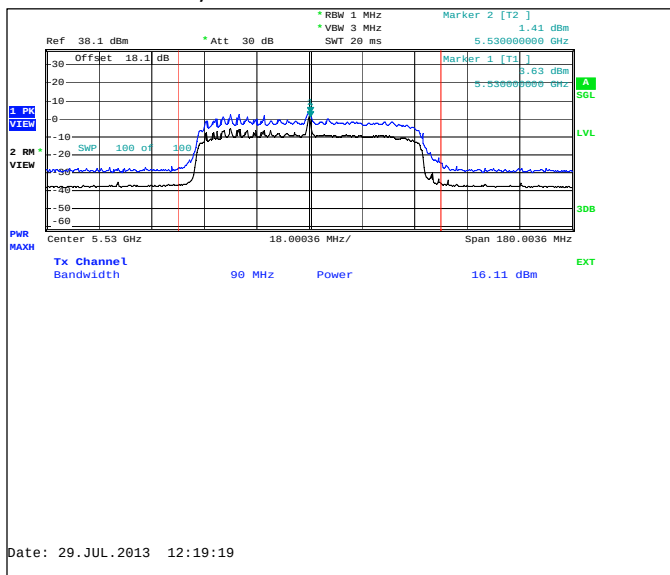
Channel 36-48 / 5210MHz



Channel 52-64 / 5290MHz



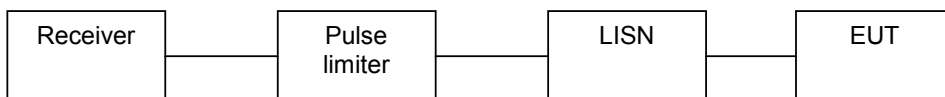
Channel 100-112 / 5530MHz



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

EUT with DUT number	RM-940, DUT 17583
Accessories with DUT numbers	AC-60E, DUT 17584; CA-190CD, DUT 17585; WH-208, DUT 17586
Operation Voltage [V] / [Hz]	Nominal
Results	PASSED
Remarks	-
Temp [°C] / Humidity [%RH] / Air Pressure [kPa]	22 / 44 / 101
Date of measurements	22-Jul-2013
Measured by	Tomi Lipponen

4.1. Test Setup



4.2. Test method and limit

FCC15E_RM-940_03.docx 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:

$$U [dB\mu V] = U_{RX} + A_{TOT}$$

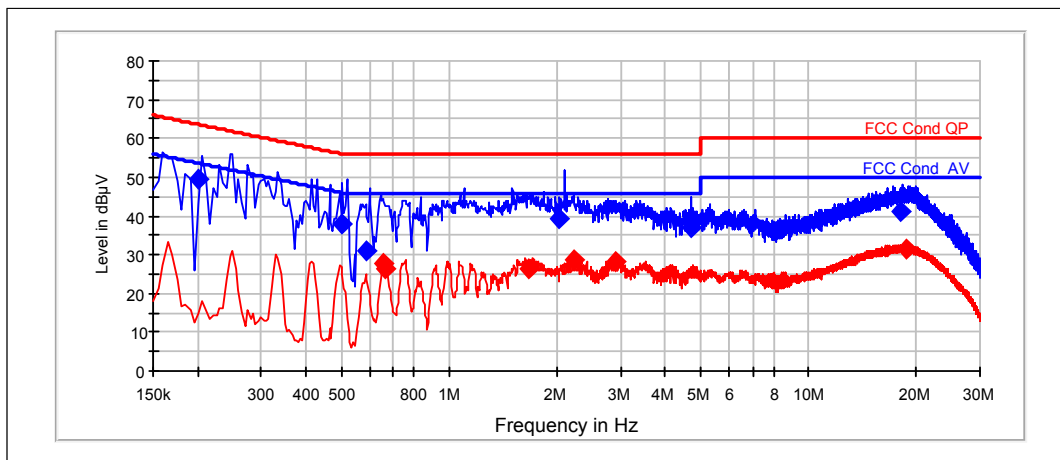
Where U_{RX} is receiver reading and A_{TOT} is total correction factor including cable and pulse limiter attenuations.

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

4.3. 5 GHz RLAN Test results

4.3.1 802.11a mode, BPSK modulation, 6 Mbps data rate



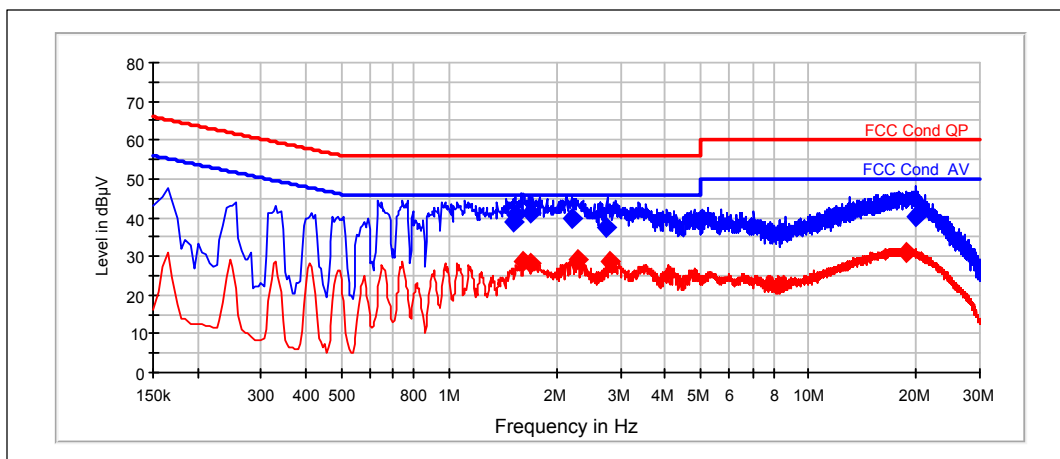
QuasiPeak (RBW: 9 kHz)

Frequency [MHz]	U [dBμV]	Line	Result
0.2	49.41	L1	PASSED
0.5	38.11	N	PASSED
0.59	31.17	L1	PASSED
2.025	39.47	N	PASSED
4.71	36.92	N	PASSED
18.135	41.38	N	PASSED

Average (RBW: 9 kHz)

Frequency [MHz]	U [dBμV]	Line	Result
0.655	27.72	N	PASSED
0.665	26.42	N	PASSED
1.675	26.48	N	PASSED
2.235	28.55	N	PASSED
2.89	28.19	N	PASSED
18.63	31.32	N	PASSED

4.3.2 802.11a mode, QPSK modulation, 18 Mbps data rate



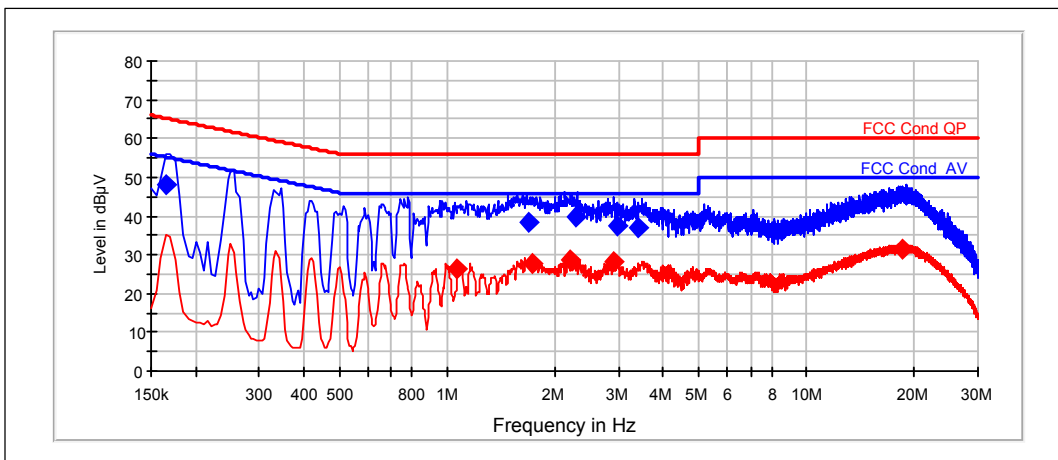
QuasiPeak (RBW: 9 kHz)

Frequency [MHz]	U [dBμV]	Line	Result
1.505	38.82	N	PASSED
1.525	40.63	N	PASSED
1.695	41.07	N	PASSED
2.19	39.69	N	PASSED
2.725	37.49	N	PASSED
19.78	40.32	N	PASSED

Average (RBW: 9 kHz)

Frequency [MHz]	U [dBμV]	Line	Result
1.61	28.54	N	PASSED
1.695	28.21	N	PASSED
2.27	29.02	N	PASSED
2.8	28.45	N	PASSED
18.625	30.87	N	PASSED

4.3.3 802.11n mode, BPSK modulation, 13.5 / 15.0 Mbps data rate



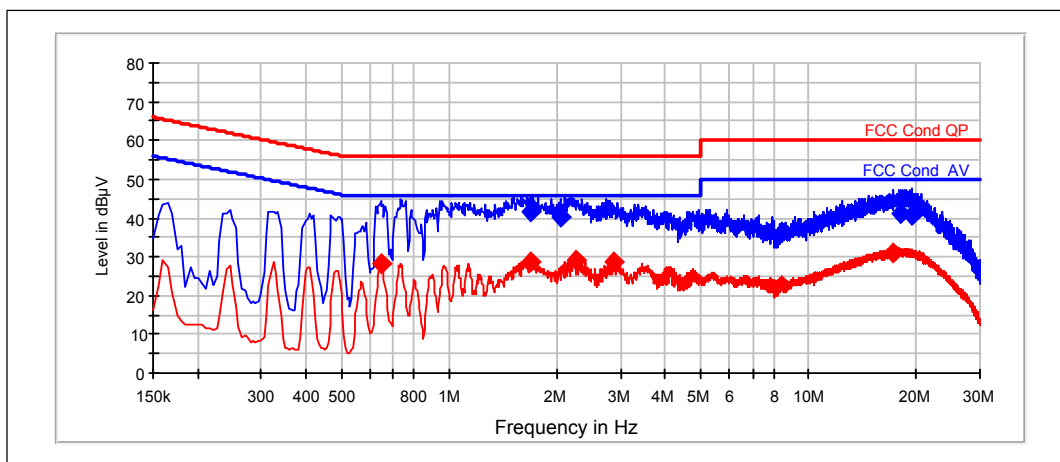
QuasiPeak (RBW: 9 kHz)

Frequency [MHz]	U [dBμV]	Line	Result
0.165	48.09	L1	PASSED
1.69	38.2	N	PASSED
2.285	39.83	N	PASSED
2.965	37.3	N	PASSED
3.395	36.85	N	PASSED

Average (RBW: 9 kHz)

Frequency [MHz]	U [dBμV]	Line	Result
1.07	26.43	N	PASSED
1.725	27.95	N	PASSED
2.205	28.75	N	PASSED
2.895	28.17	N	PASSED
18.46	31.45	N	PASSED

4.3.4 802.11n mode, QPSK modulation, 27.0 / 30.0 Mbps data rate



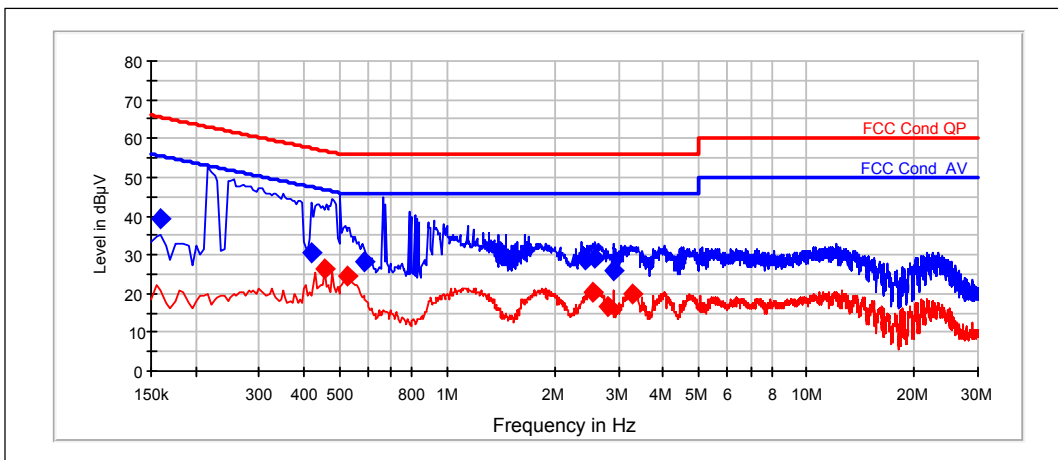
QuasiPeak (RBW: 9 kHz)

Frequency [MHz]	U [dBμV]	Line	Result
1.68	41.65	N	PASSED
2.035	40.42	N	PASSED
18.07	41.35	N	PASSED
19.495	40.91	N	PASSED

Average (RBW: 9 kHz)

Frequency [MHz]	U [dBμV]	Line	Result
0.645	28.35	N	PASSED
1.68	28.85	N	PASSED
2.265	29.32	N	PASSED
2.87	28.73	N	PASSED
17.255	31.15	N	PASSED

4.3.5 802.11ac mode, BPSK modulation, 29.3 / 32.5 Mbps data rate



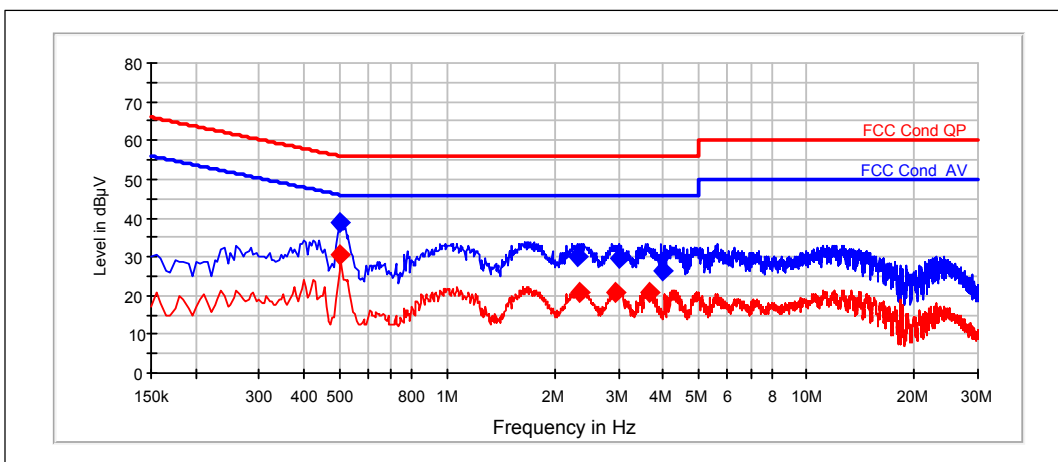
QuasiPeak (RBW: 9 kHz)

Frequency [MHz]	U [dBμV]	Line	Result
0.16	39.37	L1	PASSED
0.42	30.34	N	PASSED
0.585	28.24	N	PASSED
2.425	28.45	N	PASSED
2.565	29.19	N	PASSED
2.895	26.04	N	PASSED

Average (RBW: 9 kHz)

Frequency [MHz]	U [dBμV]	Line	Result
0.455	26.2	N	PASSED
0.53	24.51	N	PASSED
2.55	20.22	N	PASSED
2.815	16.82	N	PASSED
3.285	20.01	N	PASSED

4.3.6 802.11ac mode, QPSK modulation, 87.8 / 97.5 Mbps data rate



QuasiPeak (RBW: 9 kHz)

Frequency [MHz]	U [dBμV]	Line	Result
0.505	38.94	N	PASSED
2.315	30.23	N	PASSED
3	29.78	N	PASSED
3.99	26.29	N	PASSED

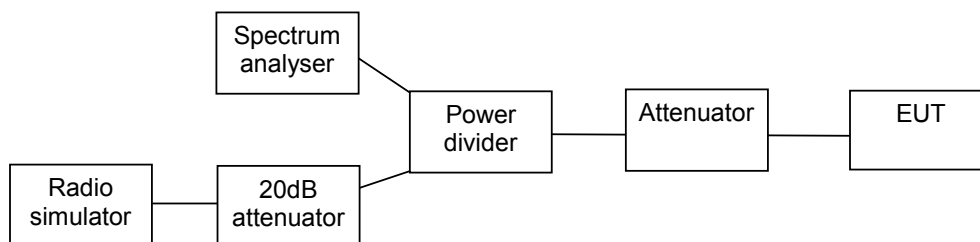
Average (RBW: 9 kHz)

Frequency [MHz]	U [dBμV]	Line	Result
0.505	30.57	N	PASSED
2.335	20.82	N	PASSED
2.95	20.74	N	PASSED
3.635	20.92	N	PASSED

5. 26 dB bandwidth

EUT with DUT number	RM-940, DUT 17563
Accessories with DUT numbers	AC-60E, DUT 17584; CA-190CD, DUT 17585; WH-208, DUT 17586
Operation Voltage [V] / [Hz]	Nominal
Results	PASSED
Remarks	-
Temp [°C] / Humidity [%RH] / Air Pressure [kPa]	22 / 44 / 101
Date of measurements	18-Jul-2013
Measured by	Tomi Lipponen

5.1. Test Setup



5.2. 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

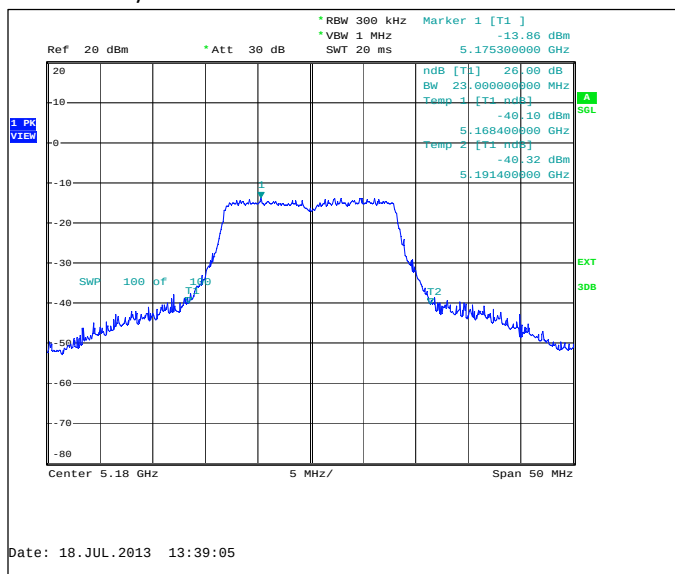
Limit [kHz]
No limit

5.3. 5 GHz RLAN Test results

5.3.1 802.11a mode, BPSK modulation, 6 Mbps data rate

Channel / f _c [MHz]	26 dB bandwidth [kHz]	Result
36 / 5180	23000	PASSED
40 / 5200	23300	PASSED
48 / 5240	23300	PASSED
52 / 5260	23400	PASSED
60 / 5300	23000	PASSED
64 / 5320	23300	PASSED
100 / 5500	23100	PASSED
116 / 5580	23700	PASSED
140 / 5700	23300	PASSED

Channel 36 / 5180MHz



1 PR VIEW

Ref 20 dBm Att 30 dB

* RBW 300 kHz Marker 1 [T1] -14.16 dBm
 * VBW 1 MHz
 SWT 20 ms 5.194100000 GHz

20 dB [T1] 26.00 dB
 BW 23.30000000 MHz
 Temp 1 [T1 nbf] -40.75 dBm
 5.188300000 GHz
 Temp 2 [T1 nbf] -40.71 dBm
 5.211600000 GHz

SWP 100 pf 1 pf

EXT 3DB

Center 5.2 GHz 5 MHz/ Span 50 MHz

Date: 18.JUL.2013 13:42:24

1 PK VIEW

Ref 20 dBm

*Att 30 dB

*RBW 300 kHz

*VBW 1 MHz

SWT 20 ms

Marker 1 [T1]

-14.30 dBm

5.24400000 GHz

20 dB [T1] 26.00 dB

BW 23.30000000 MHz

Temp 1 [T1 nB]

-40.34 dBm

5.22860000 GHz

Temp 2 [T1 nB]

-40.78 dBm

5.25190000 GHz

SWP

100 pf

100

T1

T2

EXT

3DB

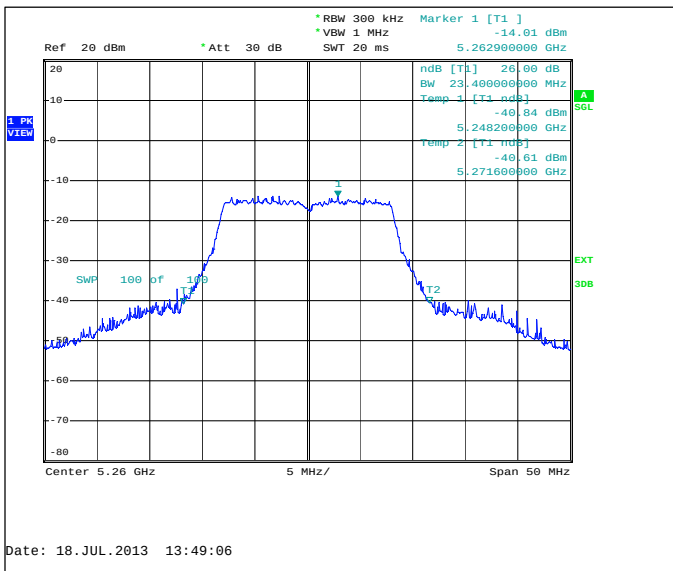
Center 5.24 GHz

5 MHz/

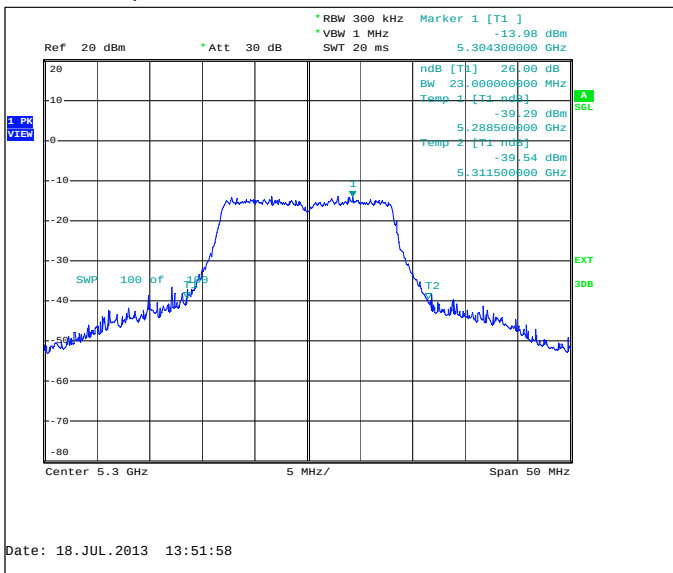
Span 50 MHz

Date: 18.JUL.2013 13:45:45

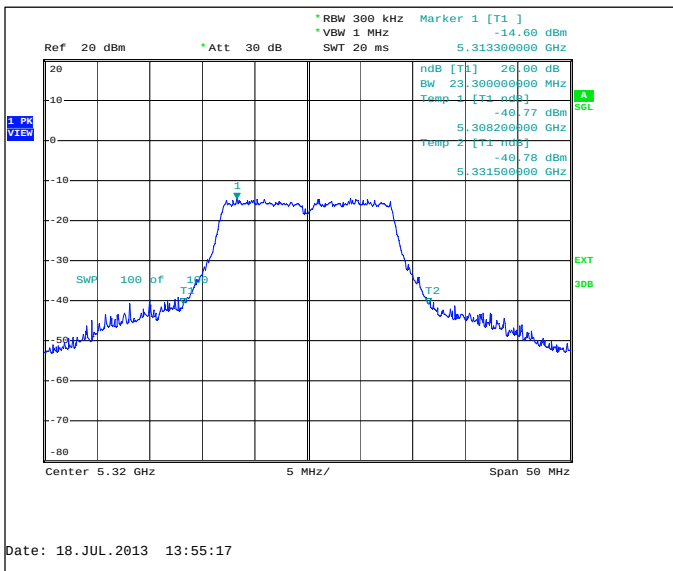
Channel 52 / 5260MHz



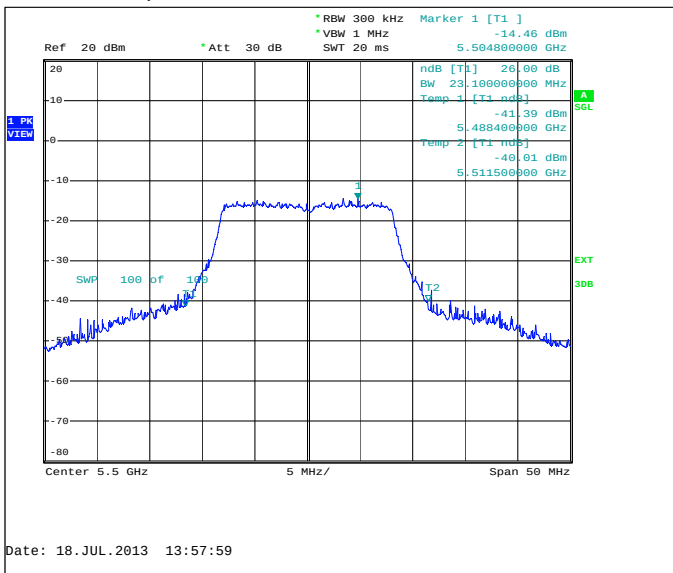
Channel 60 / 5300MHz



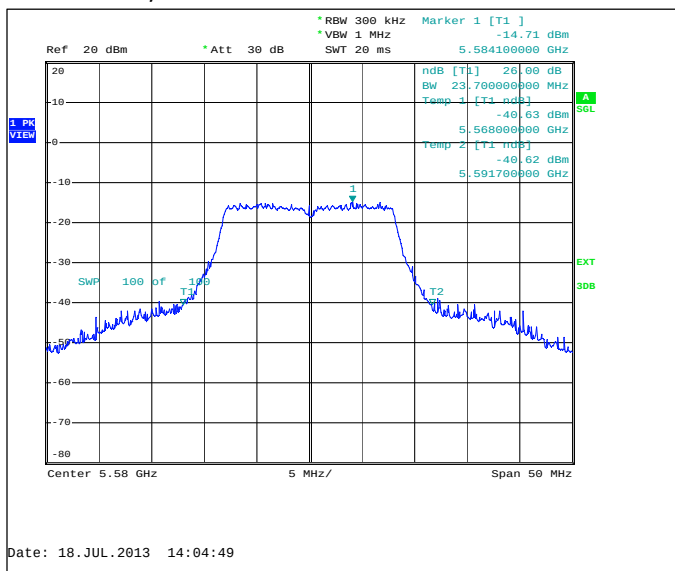
Channel 64 / 5320MHz



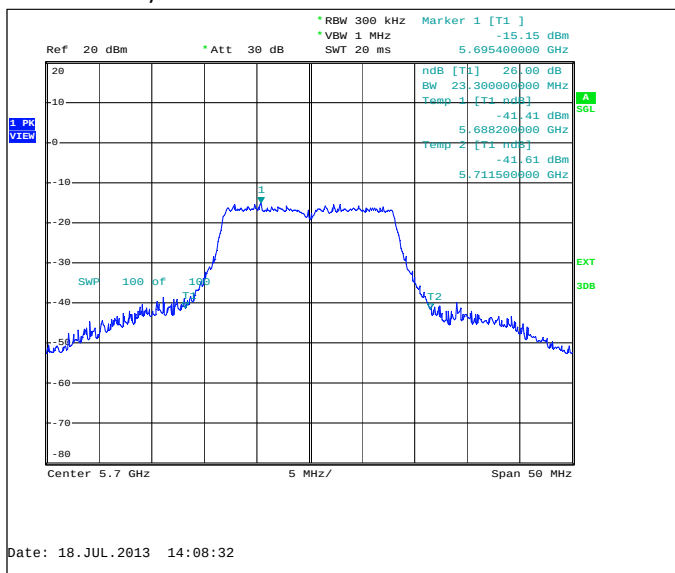
Channel 100 / 5500MHz



Channel 116 / 5580MHz



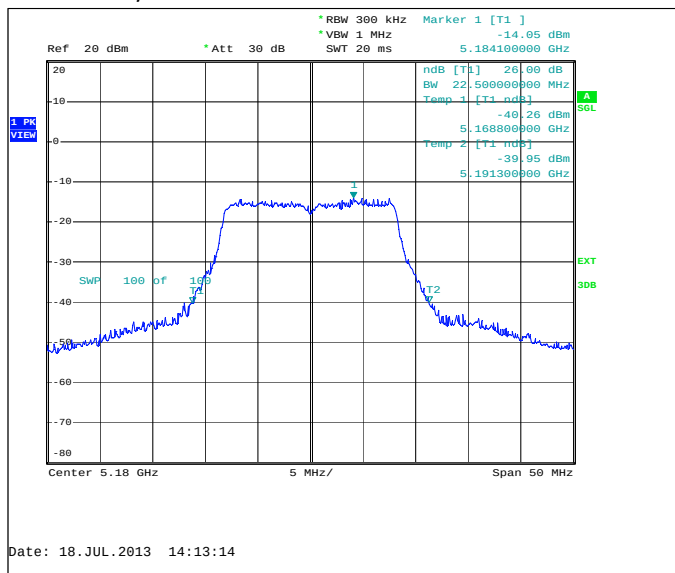
Channel 140 / 5700MHz



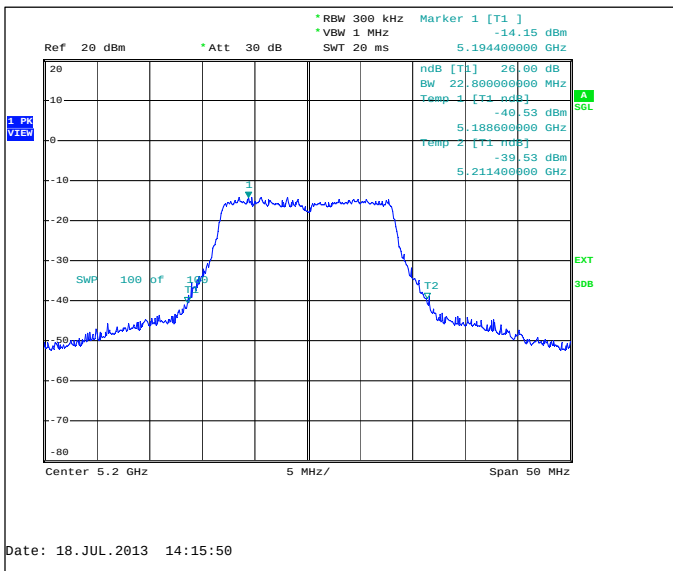
5.3.2 802.11a mode, QPSK modulation, 18 Mbps data rate

Channel / f _c [MHz]	26 dB bandwidth [kHz]	Result
36 / 5180	22500	PASSED
40 / 5200	22800	PASSED
48 / 5240	22600	PASSED
52 / 5260	22400	PASSED
60 / 5300	22700	PASSED
64 / 5320	22600	PASSED
100 / 5500	22300	PASSED
116 / 5580	22500	PASSED
140 / 5700	22500	PASSED

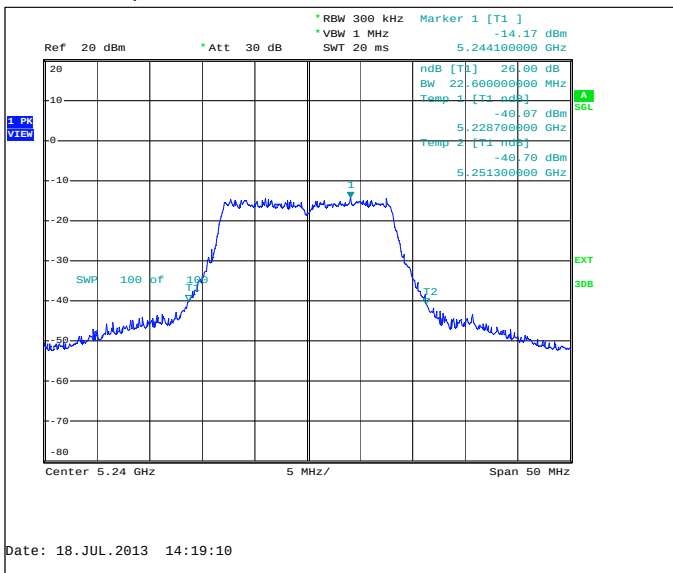
Channel 36 / 5180MHz



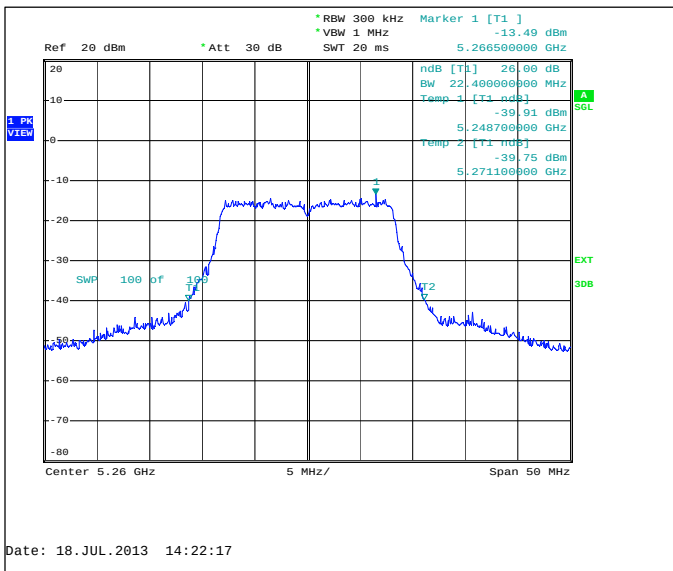
Channel 40 / 5200MHz



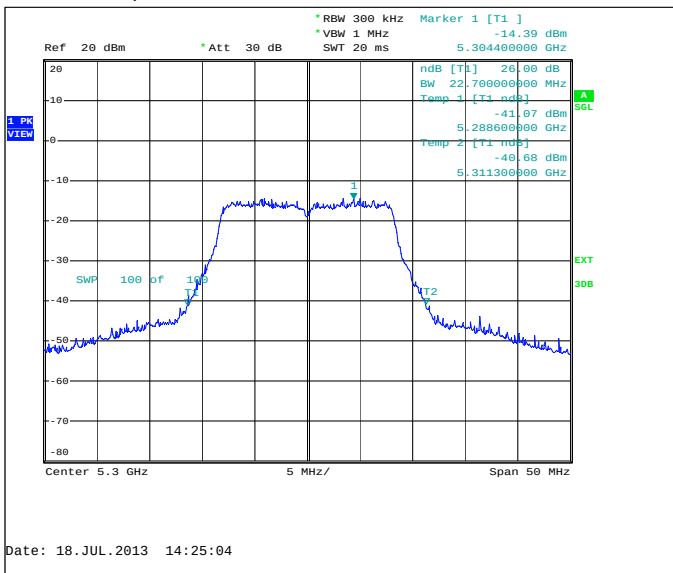
Channel 48 / 5240MHz



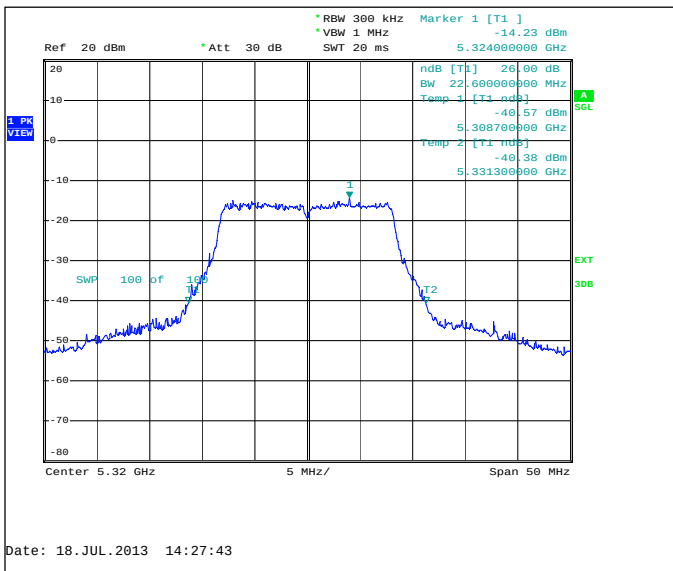
Channel 52 / 5260MHz



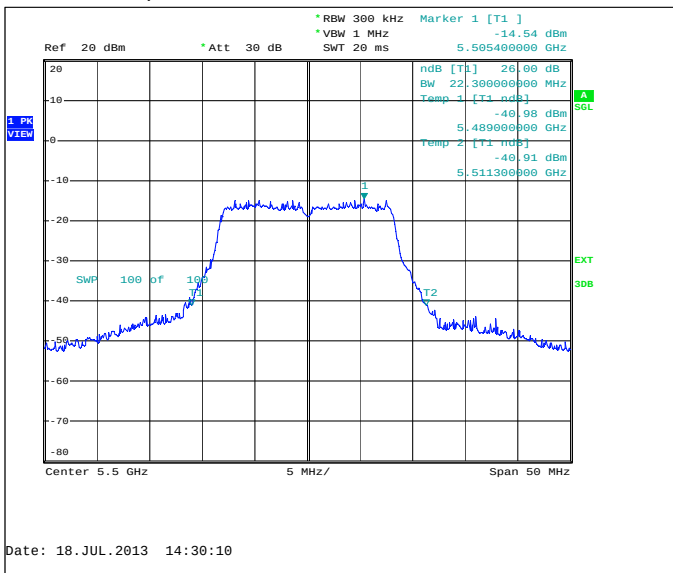
Channel 60 / 5300MHz



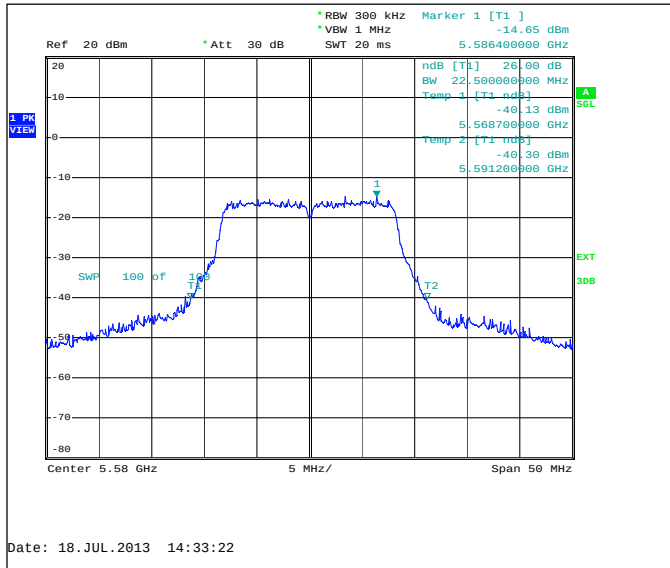
Channel 64 / 5320MHz



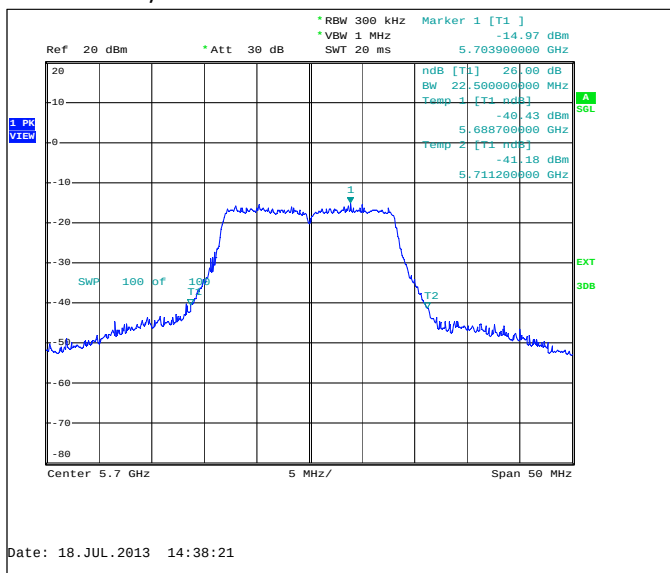
Channel 100 / 5500MHz



Channel 116 / 5580MHz



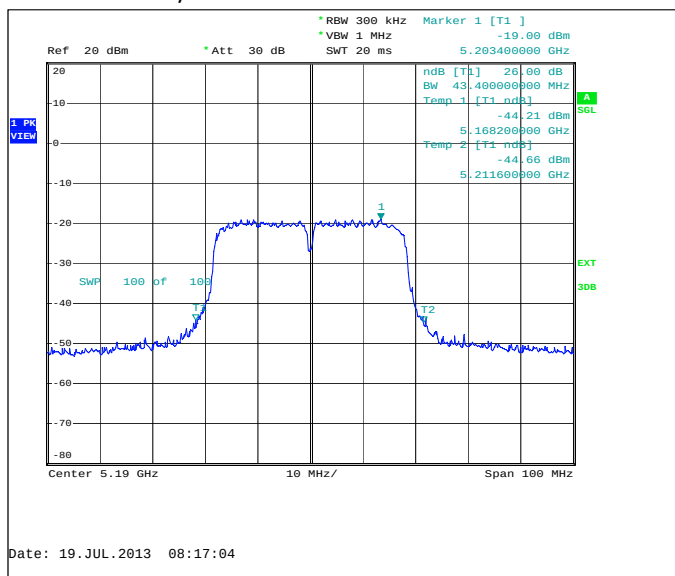
Channel 140 / 5700MHz



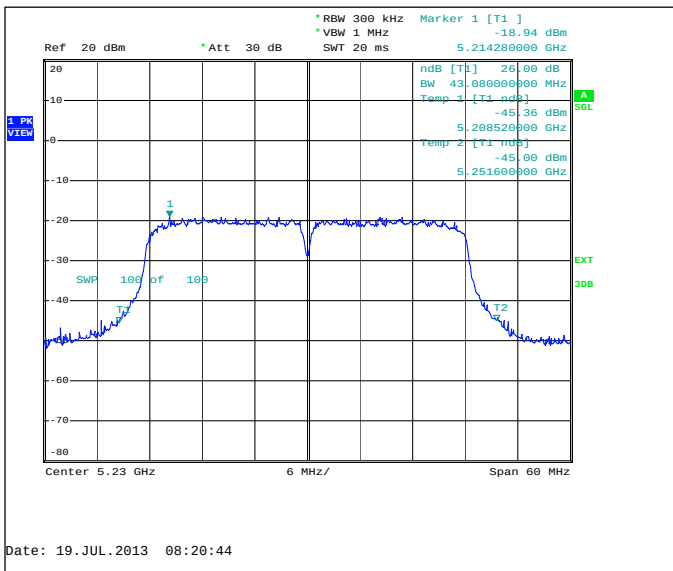
5.3.3 802.11n mode, BPSK modulation, 13.5 / 15.0 Mbps data rate

Channel / f _c [MHz]	26 dB bandwidth [kHz]	Result
36+40 / 5190	43400	PASSED
44+48 / 5230	43080	PASSED
52+56 / 5270	43320	PASSED
60+64 / 5310	42240	PASSED
100+104 / 5510	43440	PASSED
108+112 / 5550	44040	PASSED
132+136 / 5670	42360	PASSED

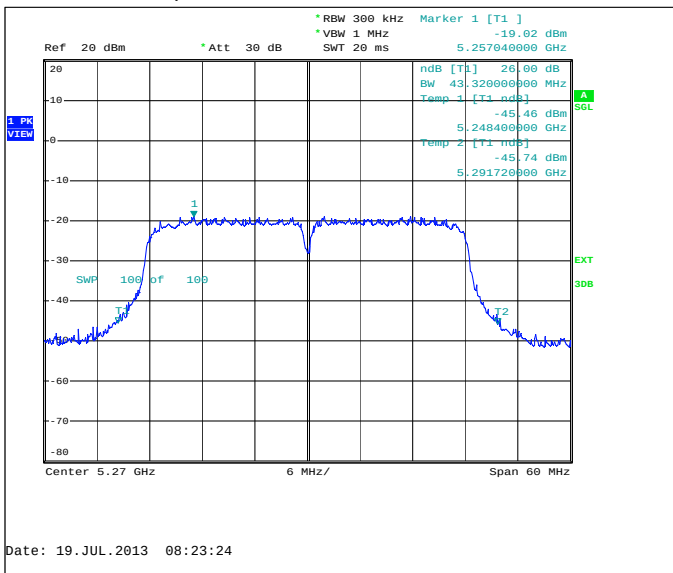
Channel 36+40 / 5190MHz



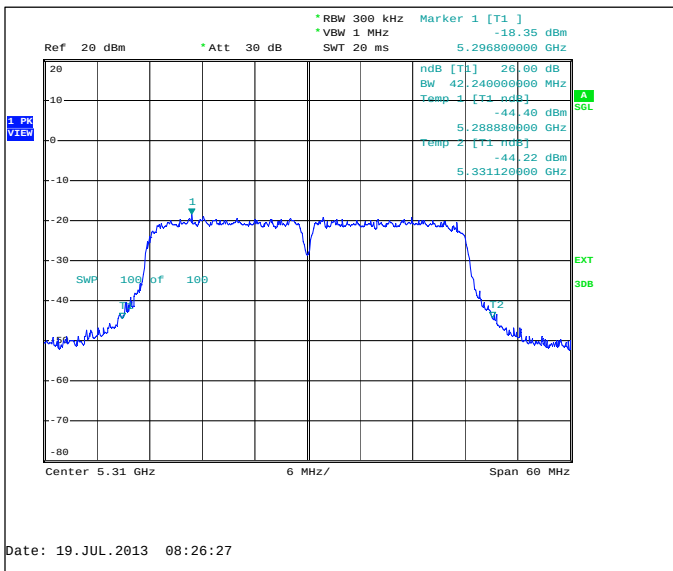
Channel 44+48 / 5230MHz



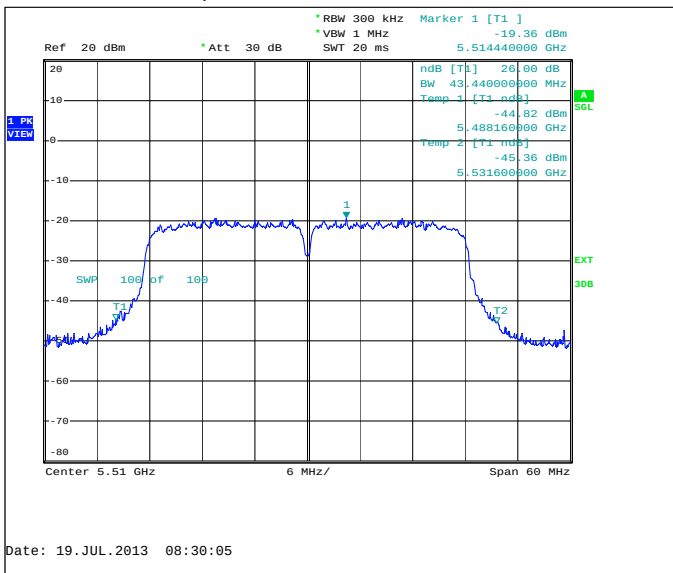
Channel 52+56 / 5270MHz



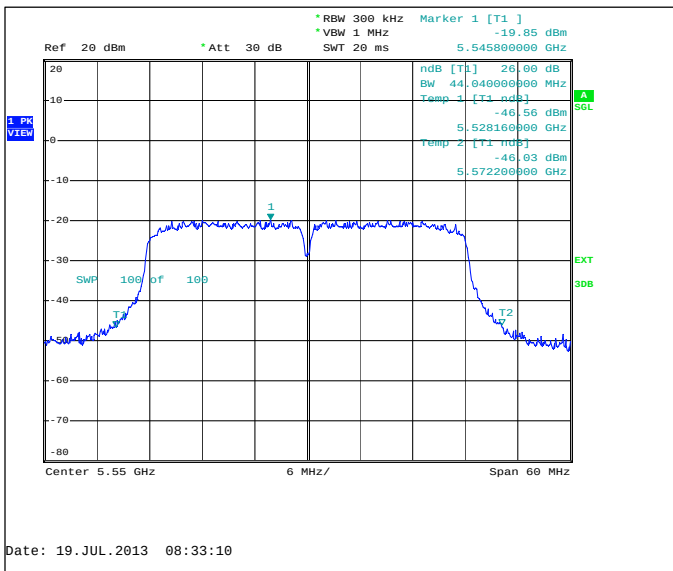
Channel 60+64 / 5310MHz



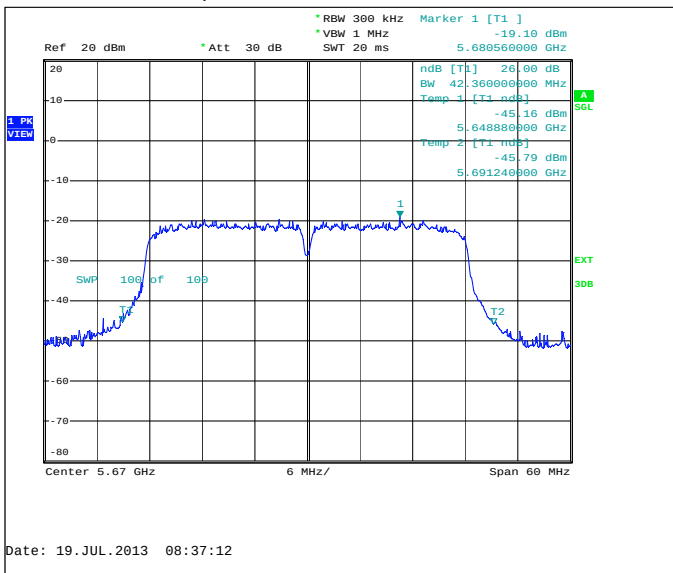
Channel 100+104 / 5510MHz



Channel 108+112 / 5550MHz



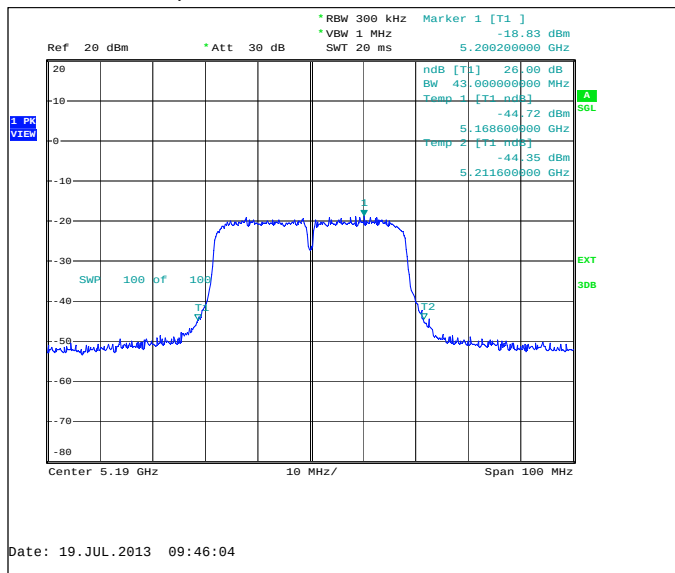
Channel 132+136 / 5670MHz



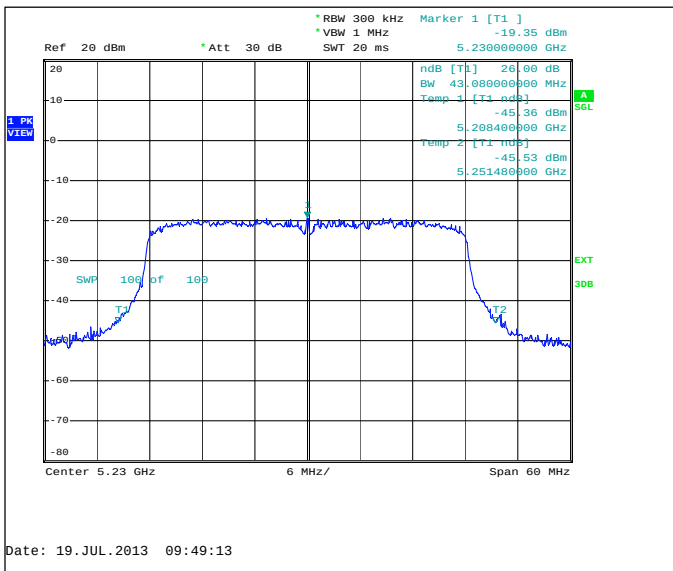
5.3.4 802.11n mode, QPSK modulation, 27.0 / 30.0 Mbps data rate

Channel / f _c [MHz]	26 dB bandwidth [kHz]	Result
36+40 / 5190	43000	PASSED
44+48 / 5230	43080	PASSED
52+56 / 5270	42840	PASSED
60+64 / 5310	43680	PASSED
100+104 / 5510	43320	PASSED
108+112 / 5550	43560	PASSED
132+136 / 5670	43440	PASSED

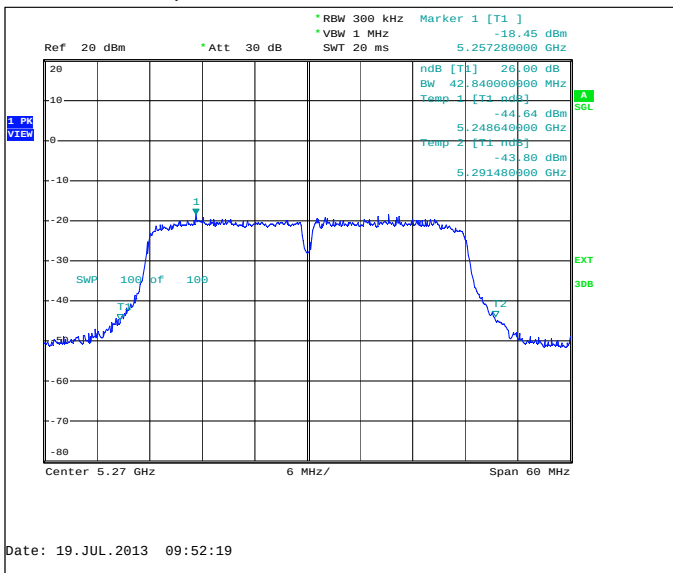
Channel 36+40 / 5190MHz



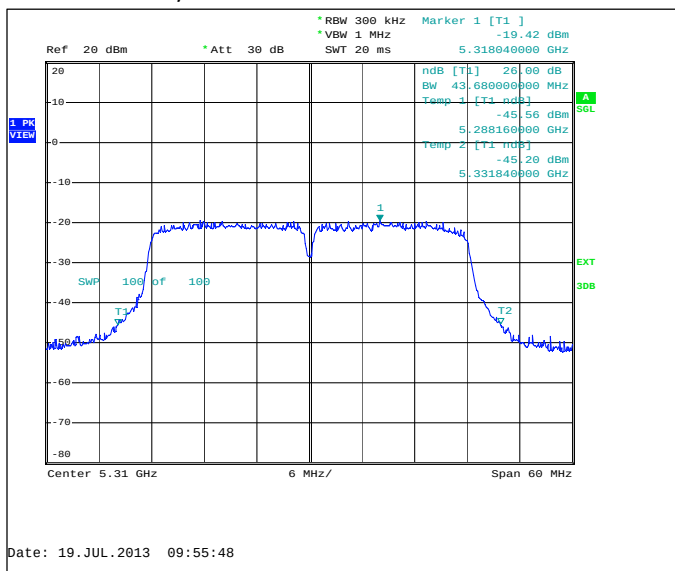
Channel 44+48 / 5230MHz



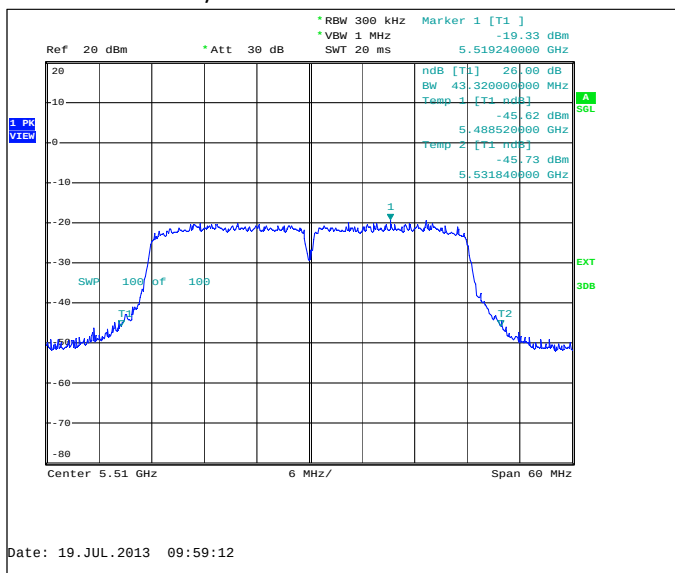
Channel 52+56 / 5270MHz



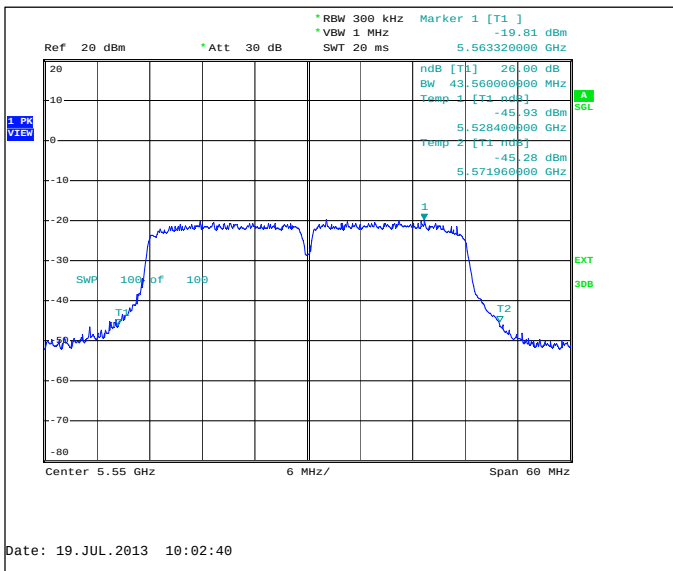
Channel 60+64 / 5310MHz



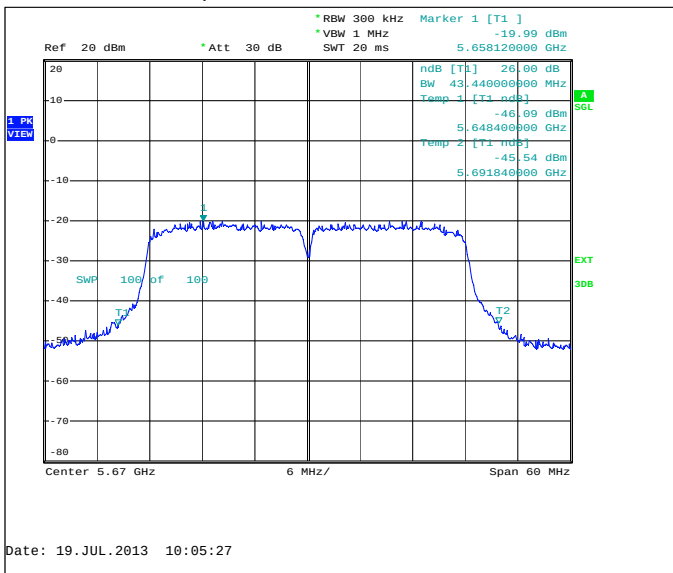
Channel 100+104 / 5510MHz



Channel 108+112 / 5550MHz



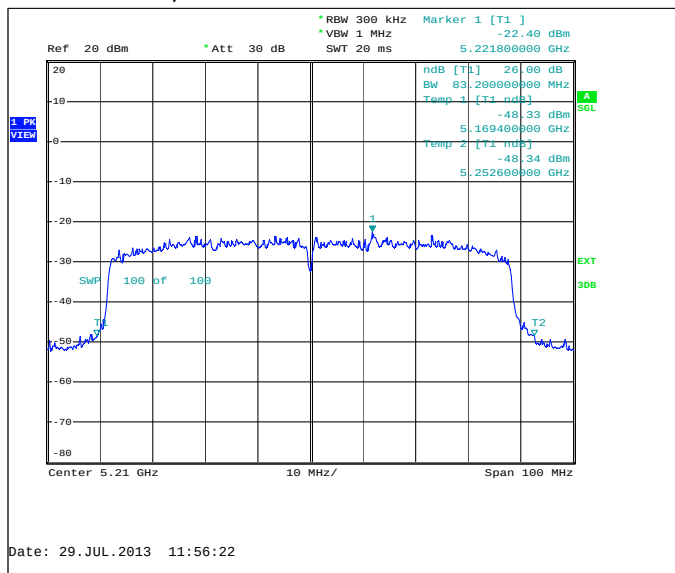
Channel 132+136 / 5670MHz



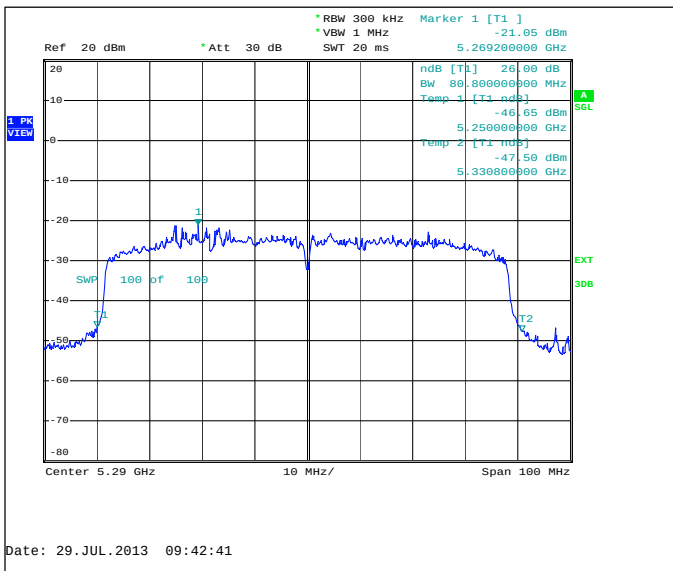
5.3.5 802.11ac mode, BPSK modulation, 29.3 / 32.5 Mbps data rate

Channel / f _c [MHz]	26 dB bandwidth [kHz]	Result
36-48 / 5210	83200	PASSED
52-64 / 5290	80800	PASSED
100-112 / 5530	83400	PASSED

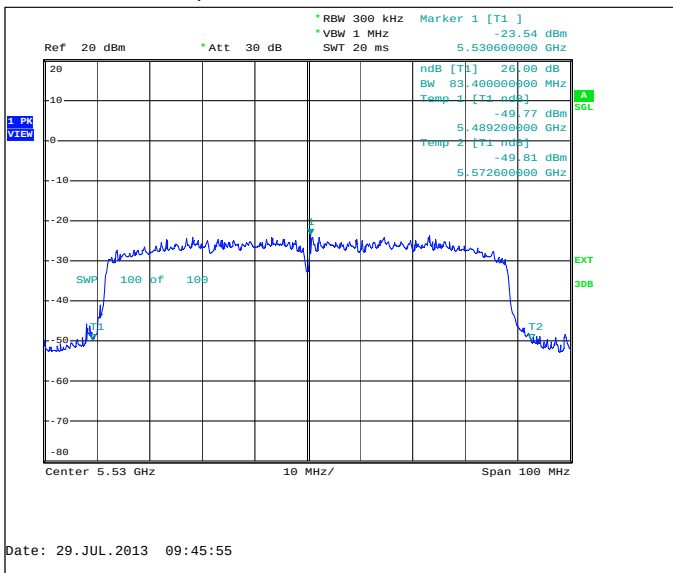
Channel 36-48 / 5210MHz



Channel 52-64 / 5290MHz



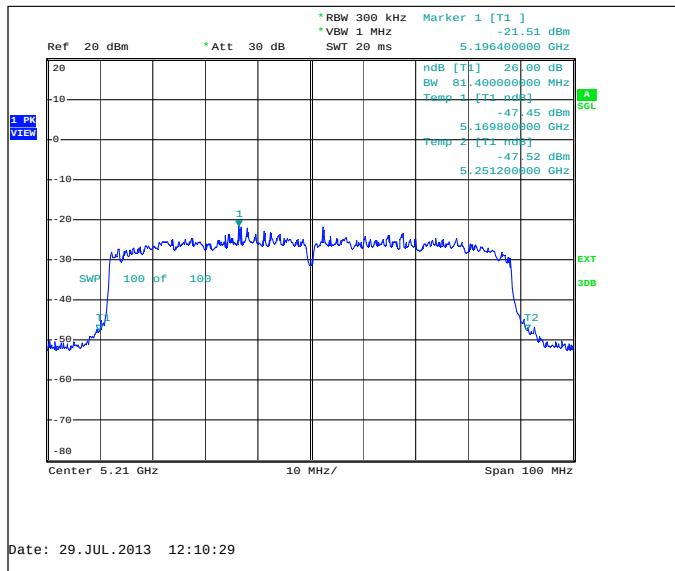
Channel 100-112 / 5530MHz



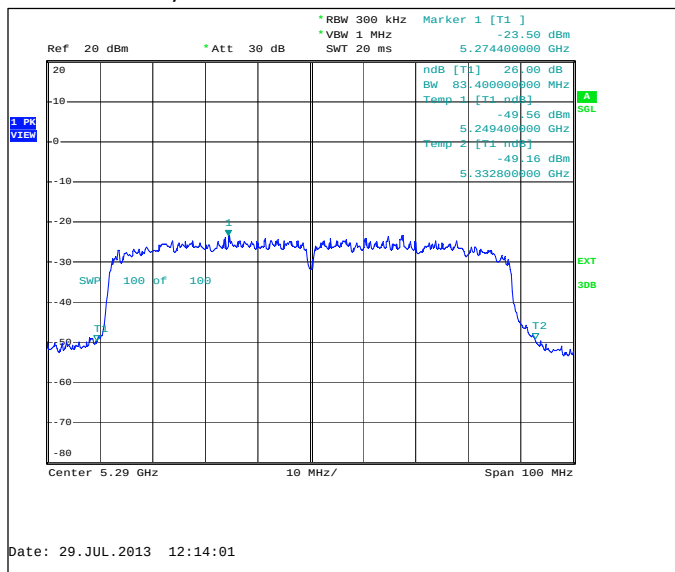
5.3.6 802.11ac mode, QPSK modulation, 87.8 / 97.5 Mbps data rate

Channel / f _c [MHz]	26 dB bandwidth [kHz]	Result
36-48 / 5210	81400	PASSED
52-64 / 5290	83400	PASSED
100-112 / 5530	78000	PASSED

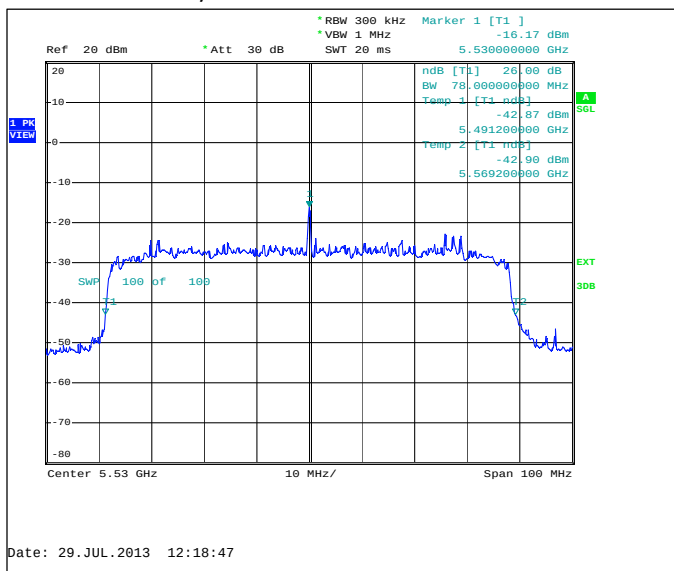
Channel 36-48 / 5210MHz



Channel 52-64 / 5290MHz



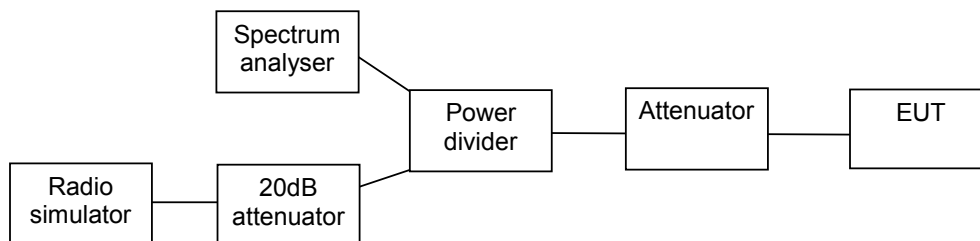
Channel 100-112 / 5530MHz



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

EUT with DUT number	RM-940, DUT 17563
Accessories with DUT numbers	AC-60E, DUT 17584; CA-190CD, DUT 17585; WH-208, DUT 17586
Operation Voltage [V] / [Hz]	Nominal
Results	PASSED
Remarks	-
Temp [°C] / Humidity [%RH] / Air Pressure [kPa]	22 / 44 / 101
Date of measurements	18-Jul-2013
Measured by	Tomi Lipponen

6.1. Test Setup



6.2. 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

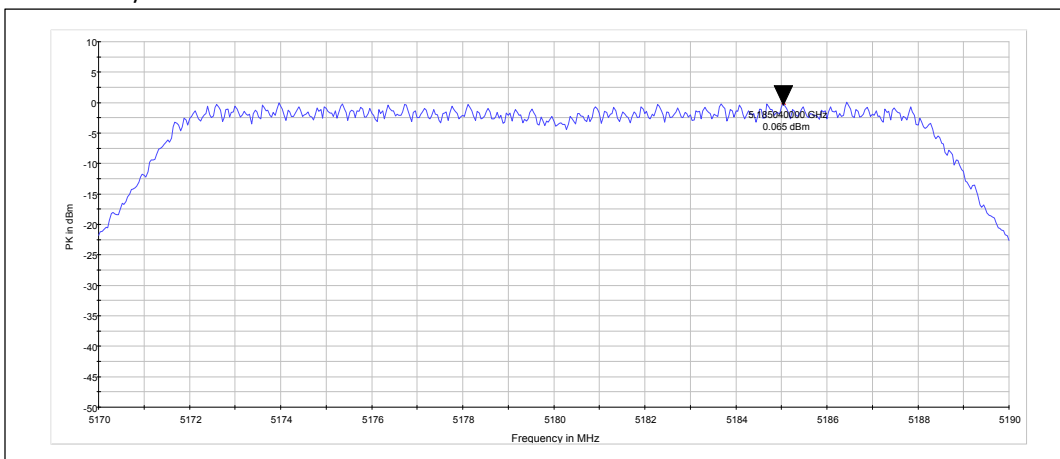
6.3. 5 GHz RLAN Test results

6.3.1 802.11a mode, BPSK modulation, 6 Mbps data rate

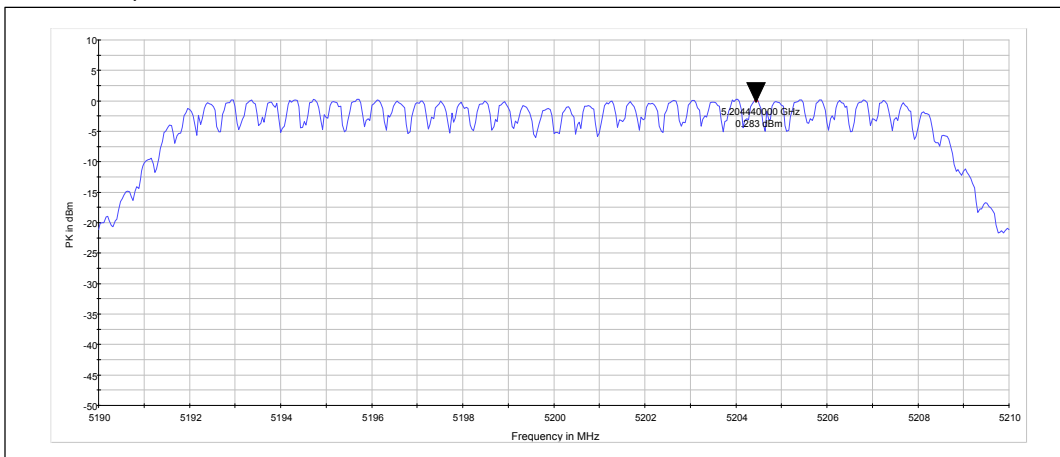
RMS detector (RBW: 1 MHz, VBW: 3 MHz, Video averaging)

Channel / f _c [MHz]	P [dBm]	Result
36 / 5180	0.06	PASSED
40 / 5200	0.28	PASSED
48 / 5240	-0.22	PASSED
52 / 5260	-0.13	PASSED
60 / 5300	-0.18	PASSED
64 / 5320	-0.75	PASSED
100 / 5500	-0.97	PASSED
116 / 5580	-0.98	PASSED
140 / 5700	-0.85	PASSED

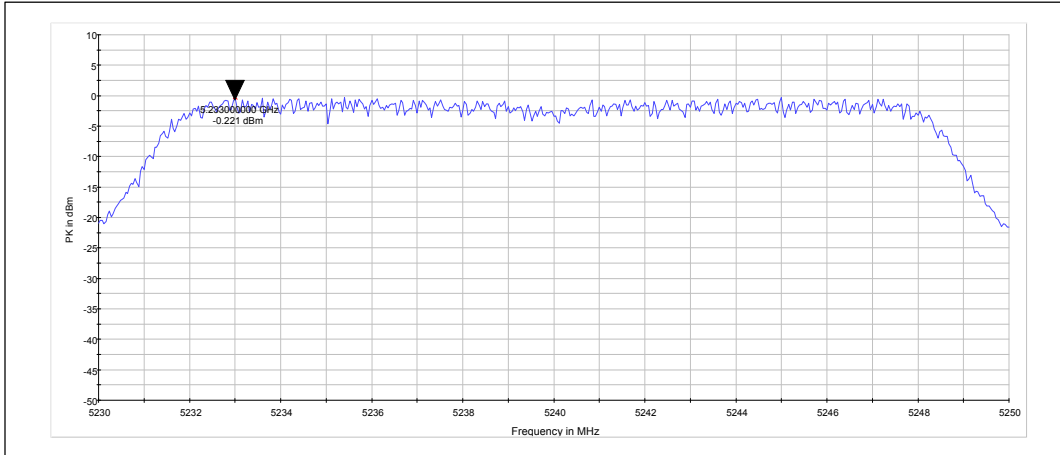
Channel 36 / 5180MHz



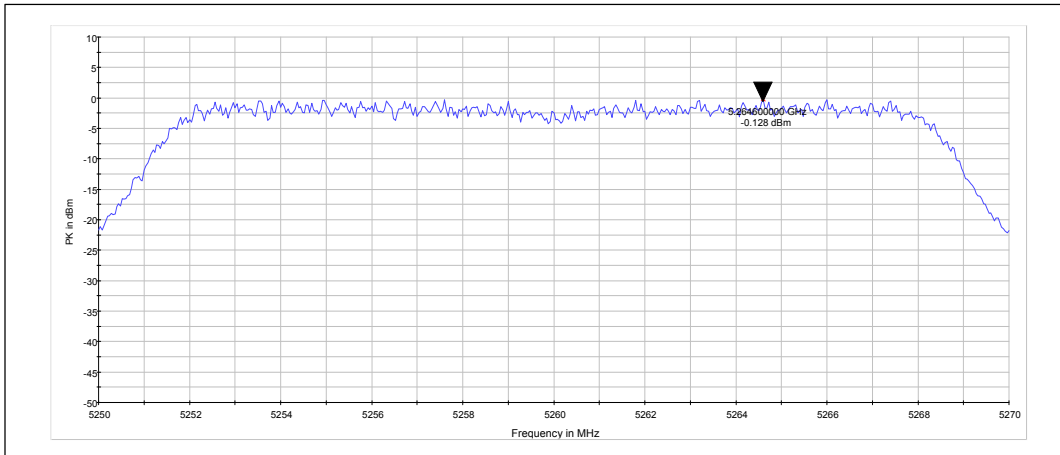
Channel 40 / 5200MHz



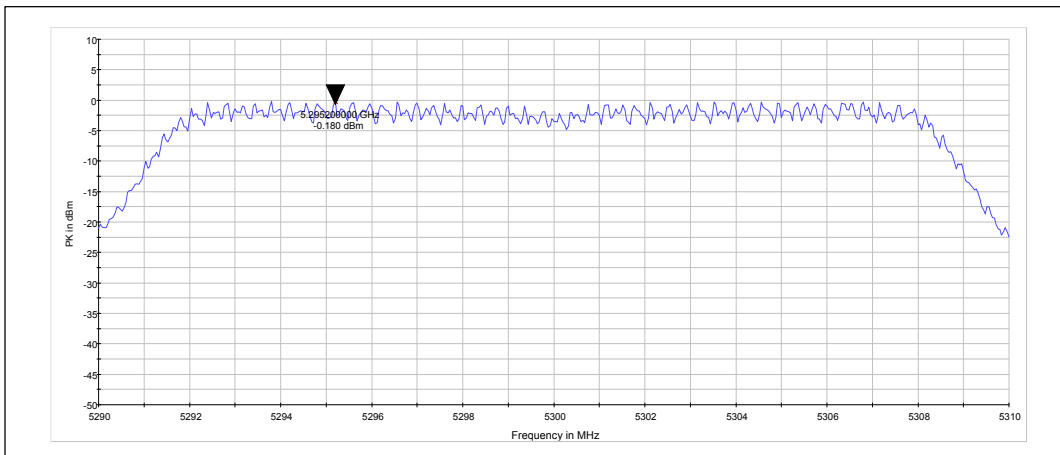
Channel 48 / 5240MHz



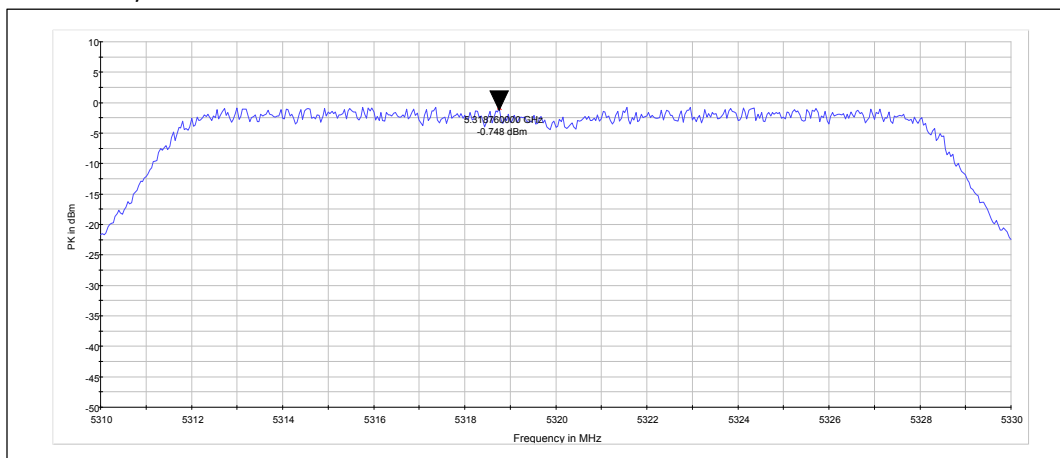
Channel 52 / 5260MHz



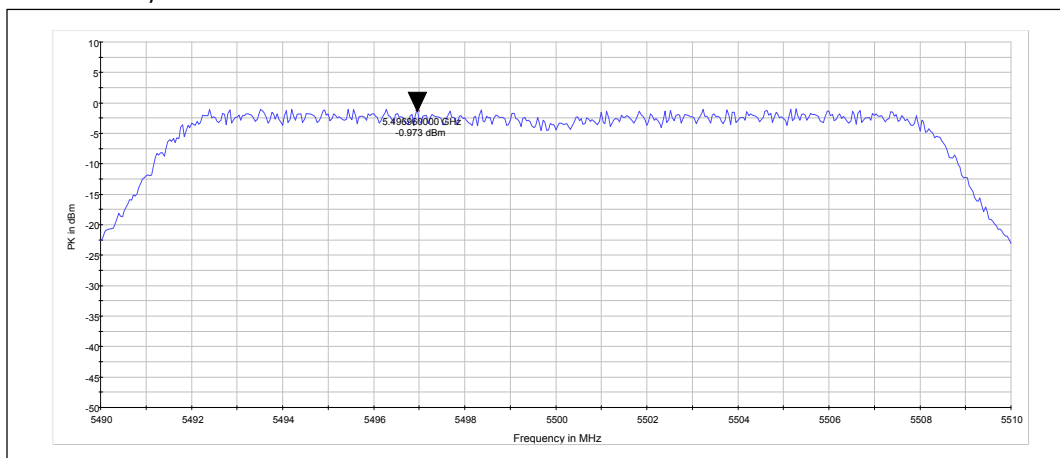
Channel 60 / 5300MHz



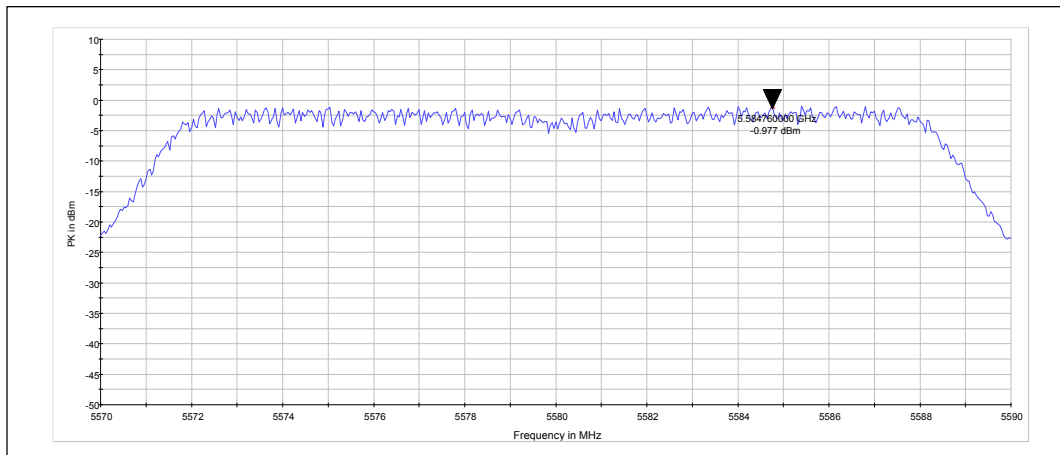
Channel 64 / 5320MHz



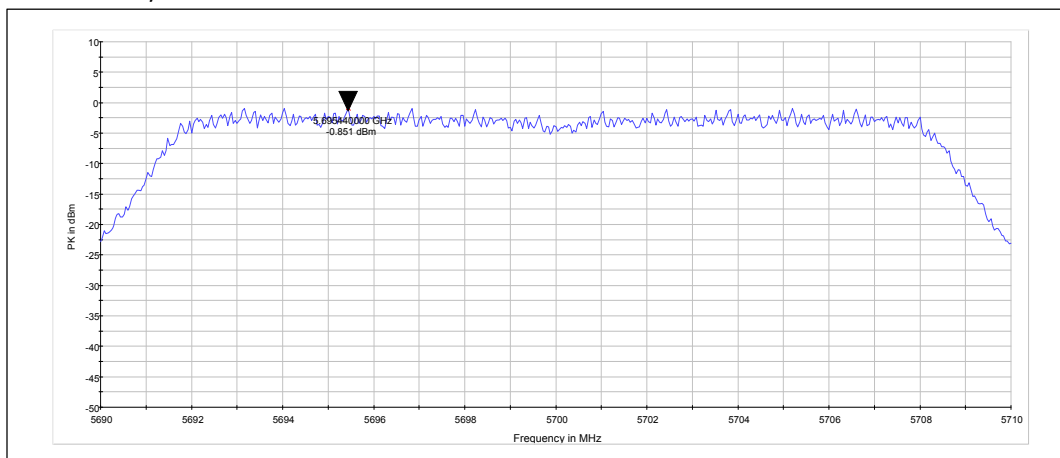
Channel 100 / 5500MHz



Channel 116 / 5580MHz



Channel 140 / 5700MHz

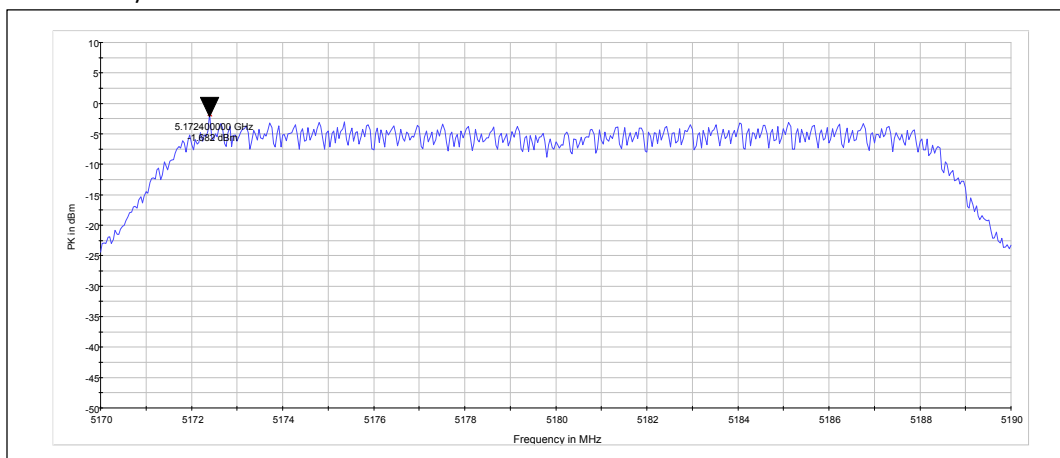


6.3.2 802.11a mode, QPSK modulation, 18 Mbps data rate

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

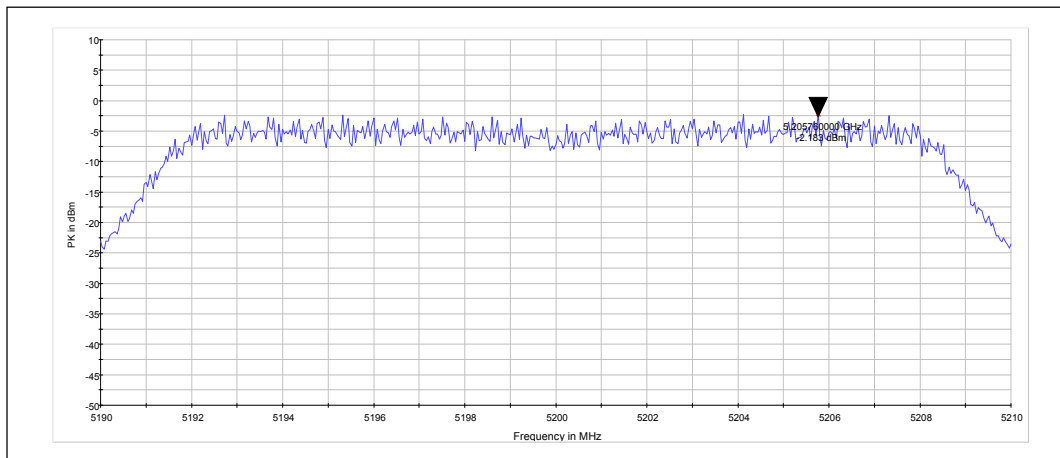
Channel / f_c [MHz]	P [dBm]	Result
36 / 5180	-1.68	PASSED
40 / 5200	-2.18	PASSED
48 / 5240	-1.28	PASSED
52 / 5260	-1.68	PASSED
60 / 5300	-2.47	PASSED
64 / 5320	-3.02	PASSED
100 / 5500	-2.49	PASSED
116 / 5580	-2.71	PASSED
140 / 5700	-2.31	PASSED

Channel 36 / 5180MHz

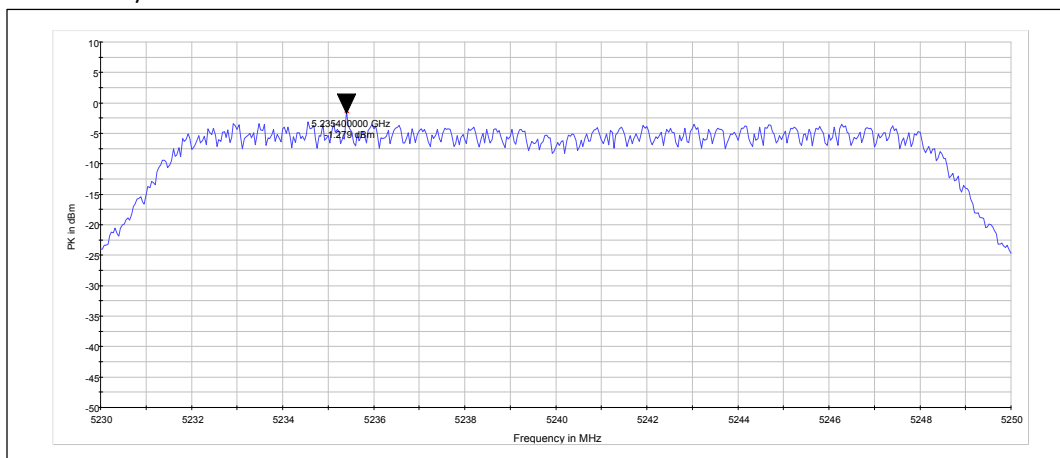


Channel

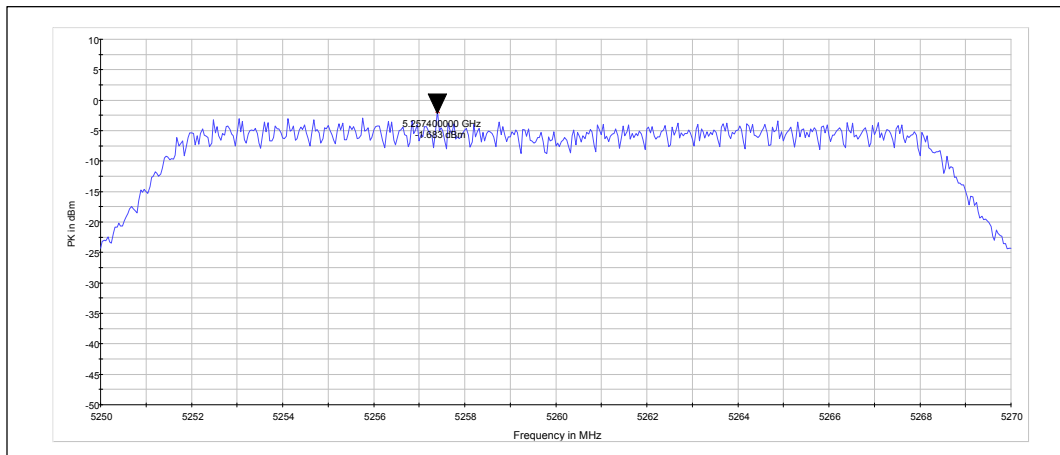
40 / 5200MHz



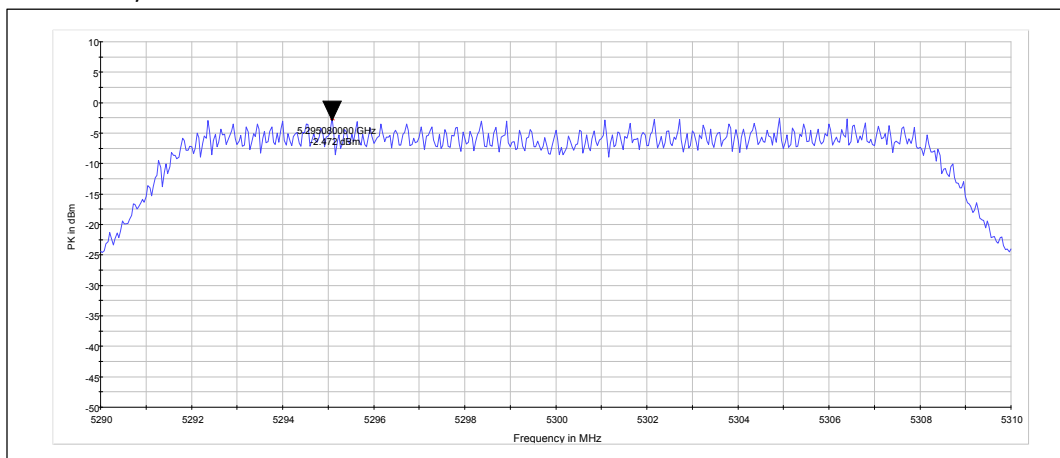
Channel 48 / 5240MHz



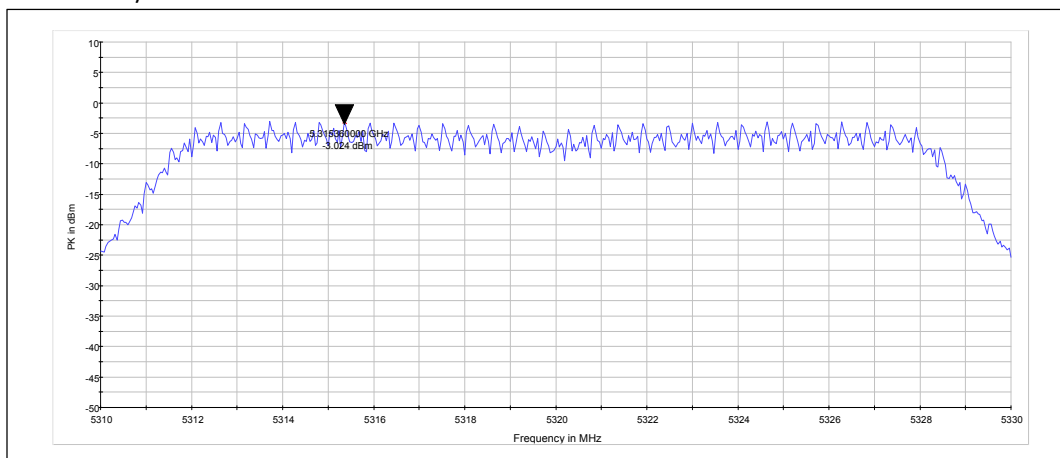
Channel 52 / 5260MHz



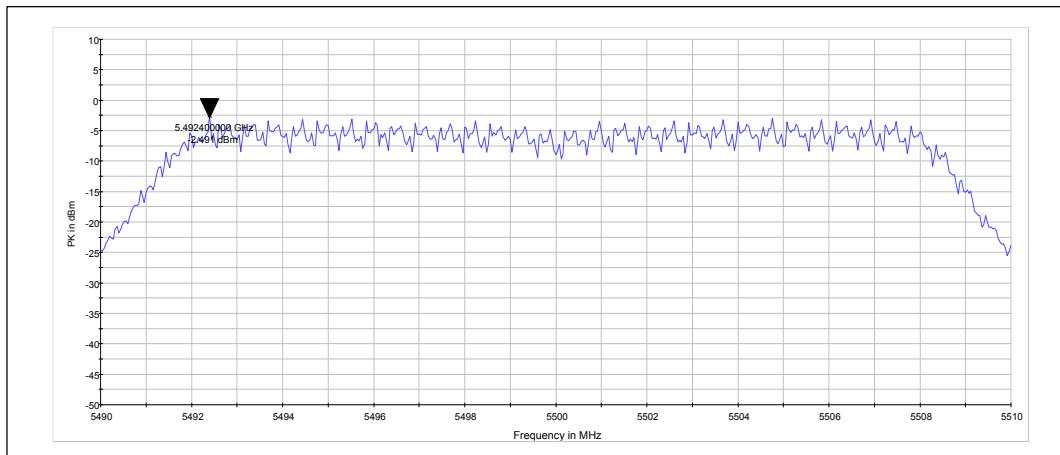
Channel 60 / 5300MHz



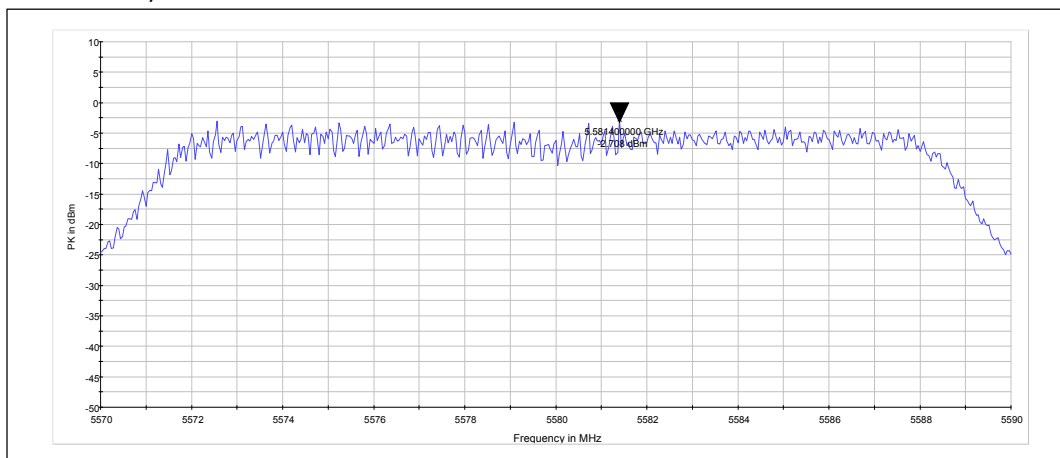
Channel 64 / 5320MHz



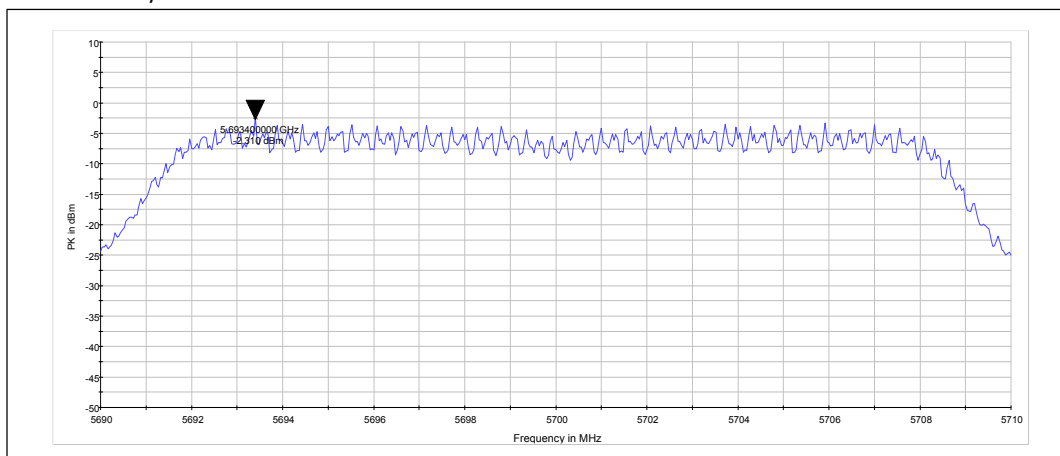
Channel 100 / 5500MHz



Channel 116 / 5580MHz



Channel 140 / 5700MHz

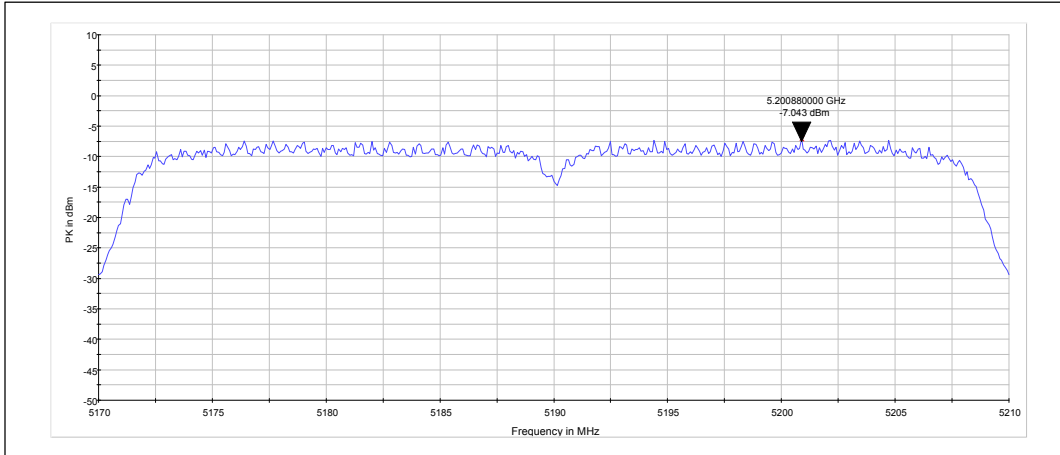


6.3.3 802.11n mode, BPSK modulation, 13.5 / 15.0 Mbps data rate

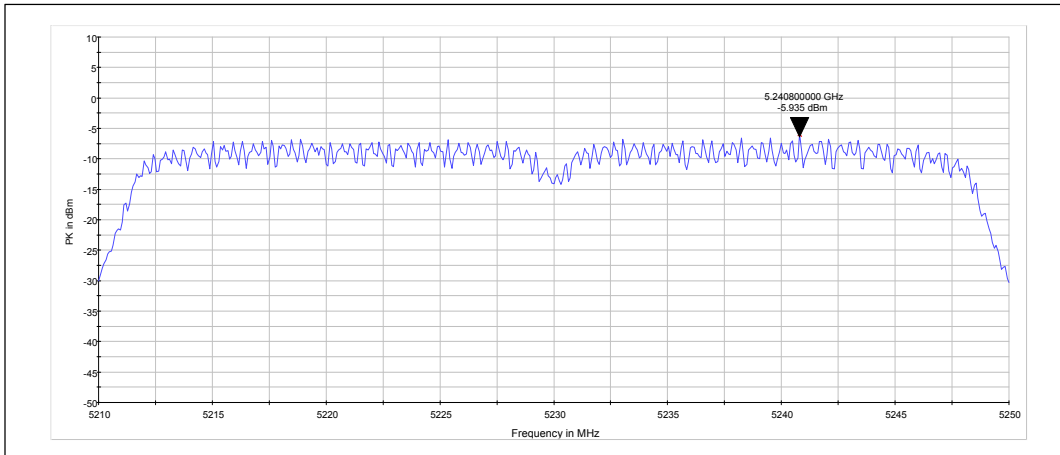
RMS detector (RBW: 1 MHz, VBW: 3 MHz, Video averaging)

Channel / f_c [MHz]	P [dBm]	Result
36+40 / 5190	-7.04	PASSED
44+48 / 5230	-5.94	PASSED
52+56 / 5270	-6.72	PASSED
60+64 / 5310	-6.45	PASSED
100+104 / 5510	-7.63	PASSED
108+112 / 5550	-7.56	PASSED
132+136 / 5670	-6.97	PASSED

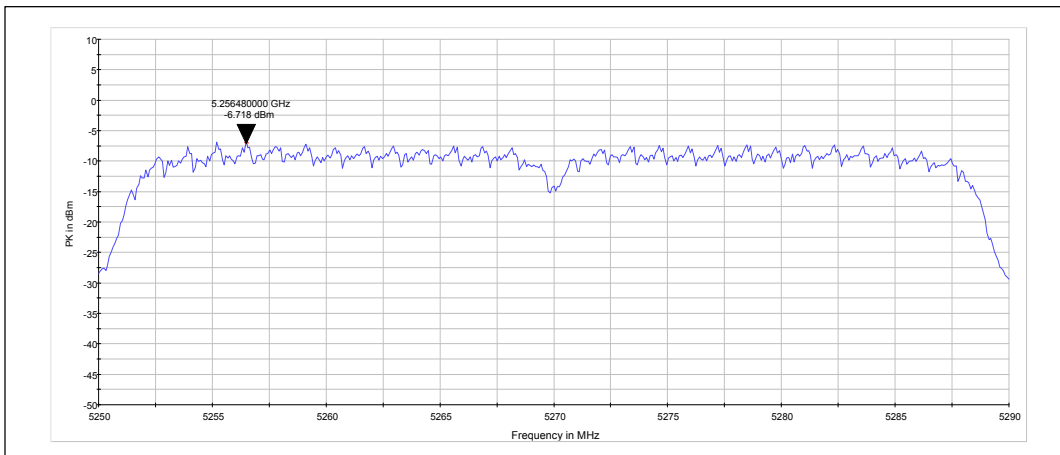
Channel 36+40 / 5190MHz



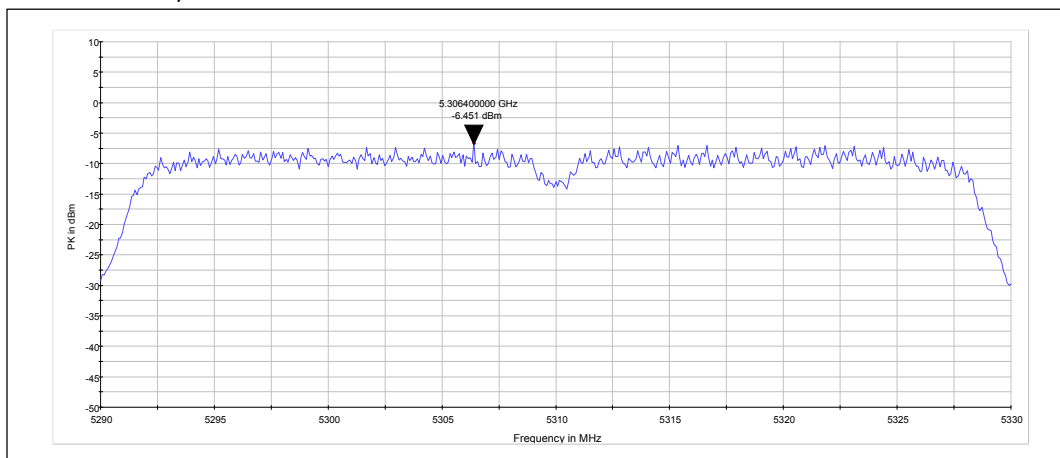
Channel 44+48 / 5230MHz



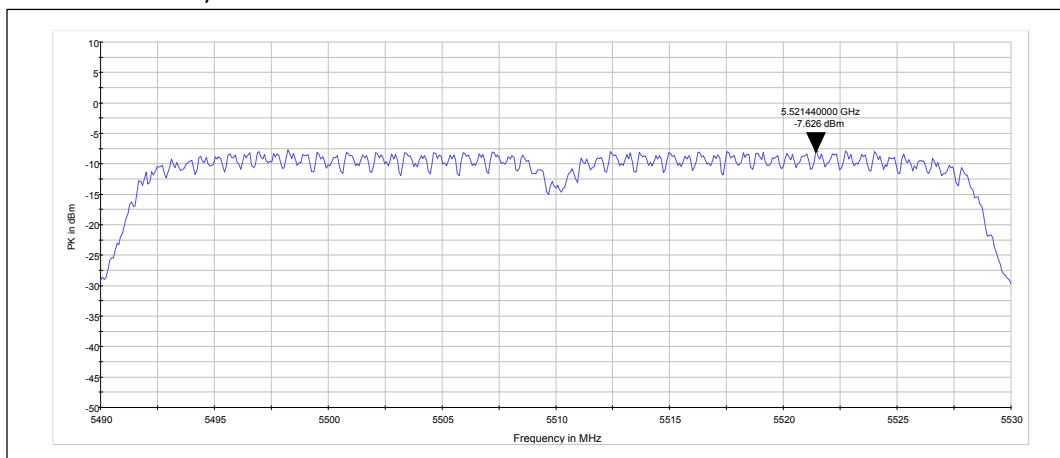
Channel 52+56 / 5270MHz



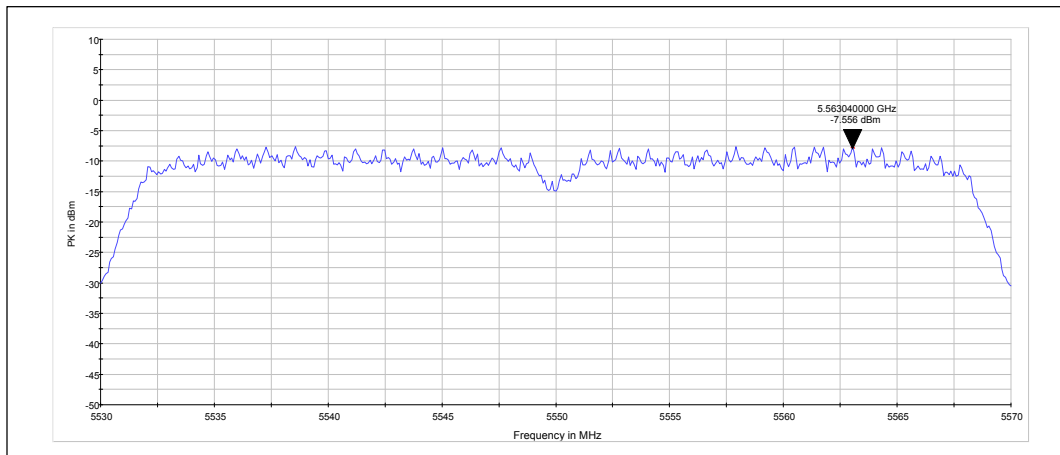
Channel 60+64 / 5310MHz



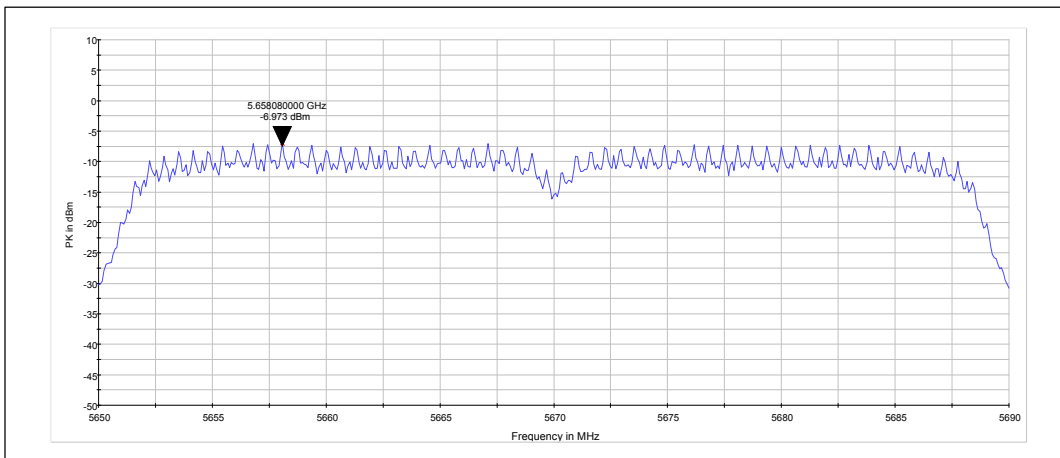
Channel 100+104 / 5510MHz



Channel 108+112 / 5550MHz



Channel 132+136 / 5670MHz

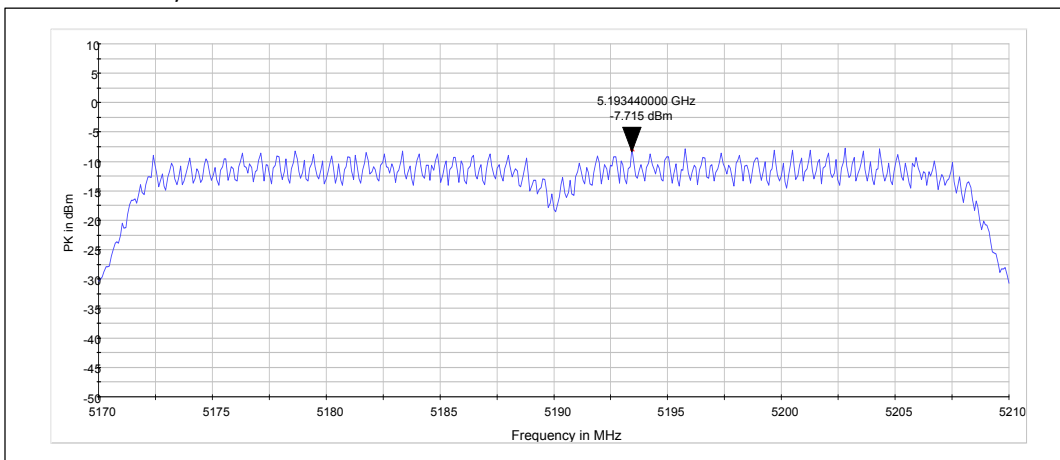


6.3.4 802.11n mode, QPSK modulation, 27.0 / 30.0 Mbps data rate

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

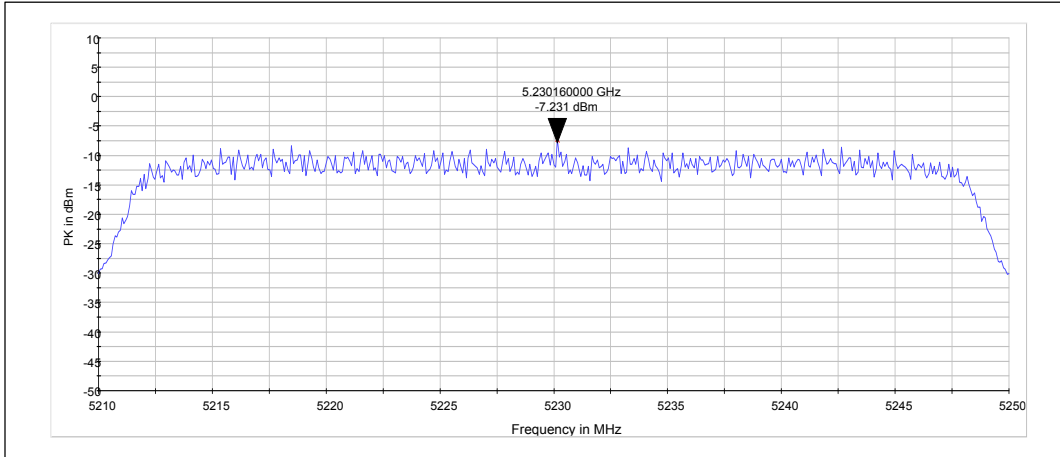
Channel / f_c [MHz]	P [dBm]	Result
36+40 / 5190	-7.71	PASSED
44+48 / 5230	-7.23	PASSED
52+56 / 5270	-8.33	PASSED
60+64 / 5310	-8.48	PASSED
100+104 / 5510	-8.67	PASSED
108+112 / 5550	-8.79	PASSED
132+136 / 5670	-9.25	PASSED

Channel 36+40 / 5190MHz

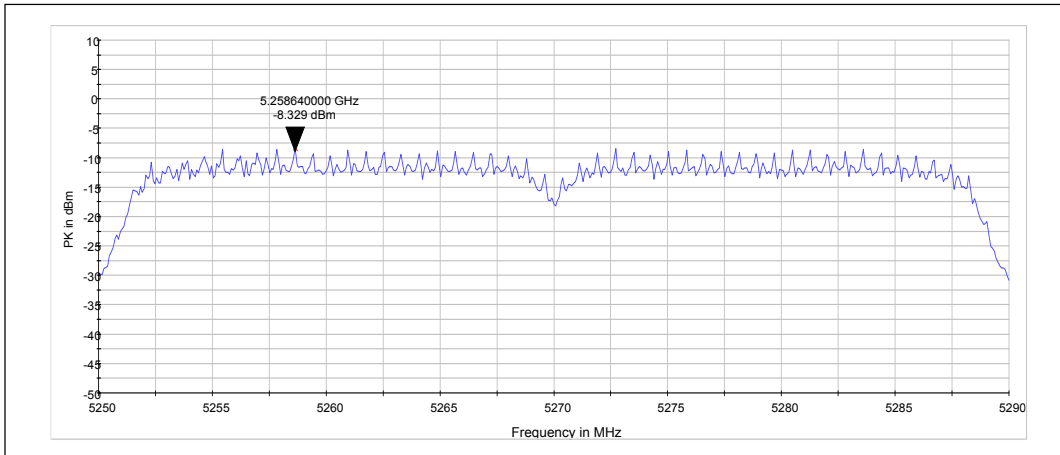


Channel

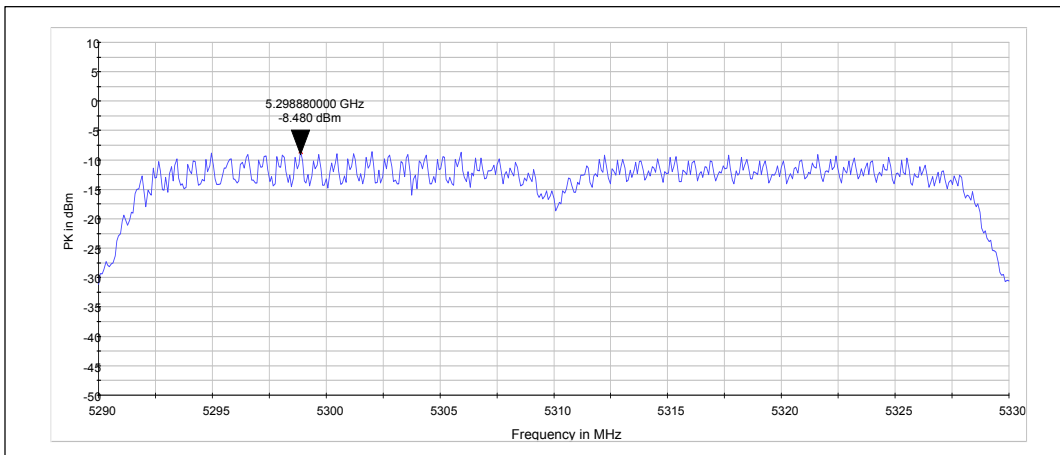
44+48 / 5230MHz



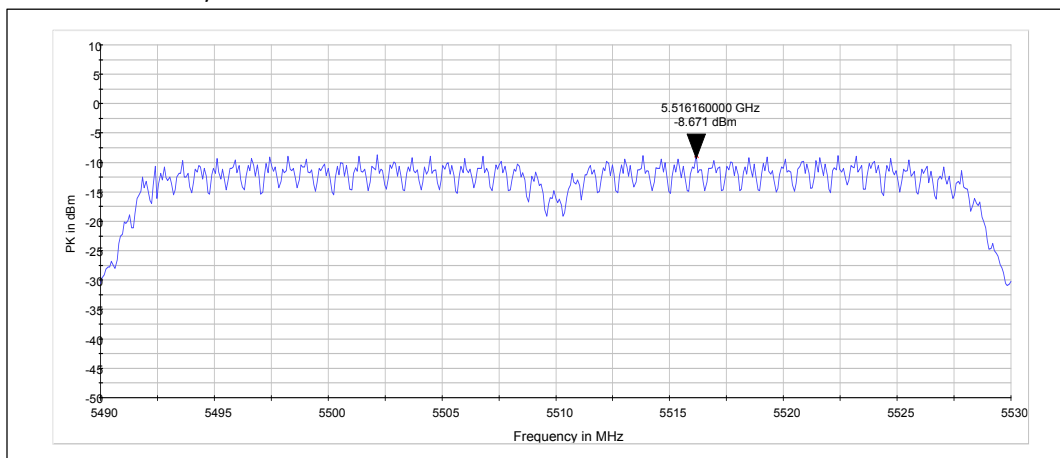
Channel 52+56 / 5270MHz



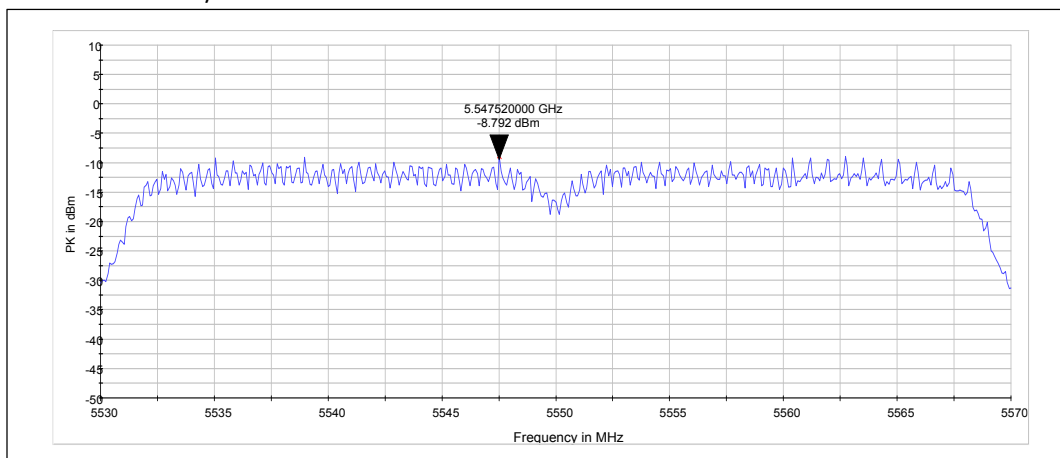
Channel 60+64 / 5310MHz



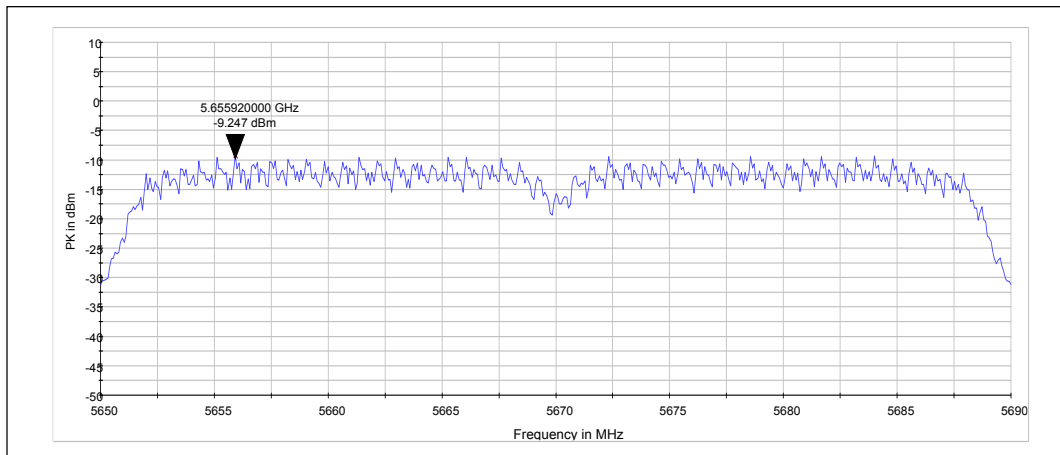
Channel 100+104 / 5510MHz



Channel 108+112 / 5550MHz



Channel 132+136 / 5670MHz

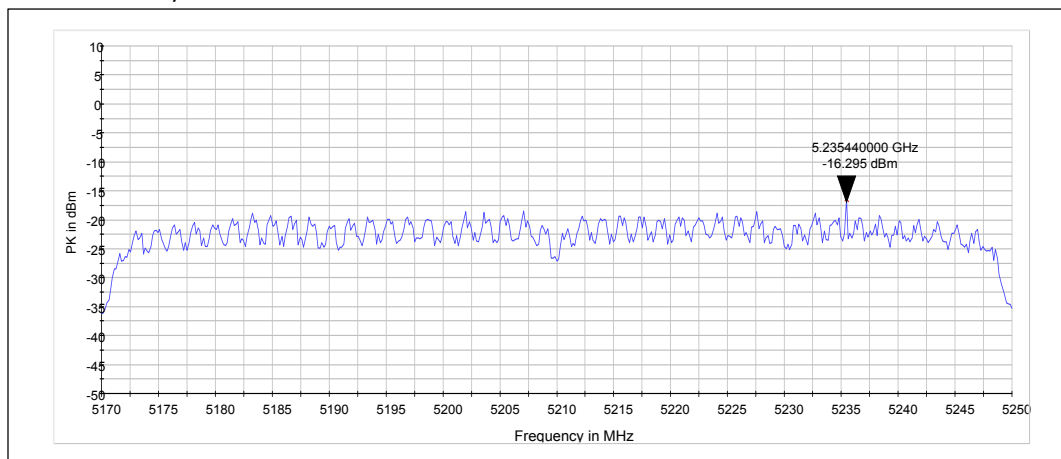


6.3.5 802.11ac mode, BPSK modulation, 29.3 / 32.5 Mbps data rate

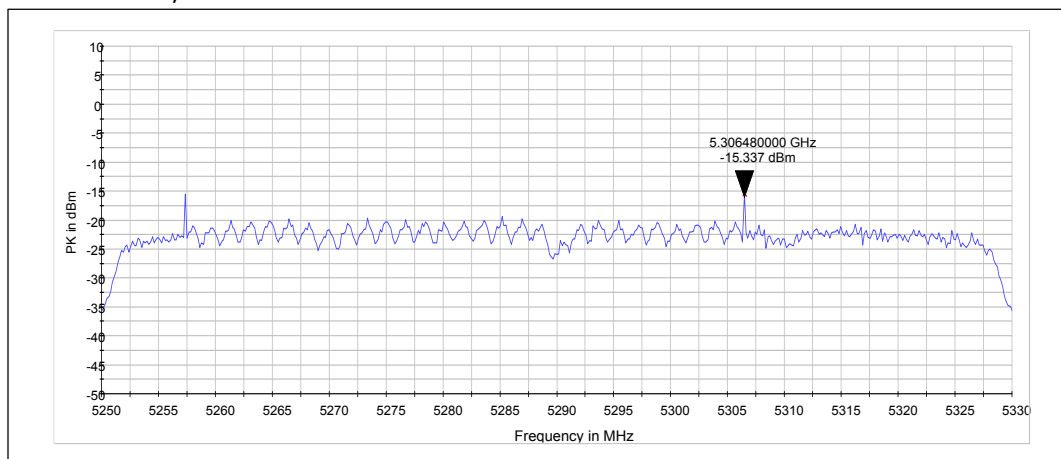
RMS detector (RBW: 1 MHz, VBW: 3 MHz, Video averaging)

Channel / f _c [MHz]	P [dBm]	Result
36-48 / 5210	-16.29	PASSED
52-64 / 5290	-15.34	PASSED
100-112 / 5530	-18.39	PASSED

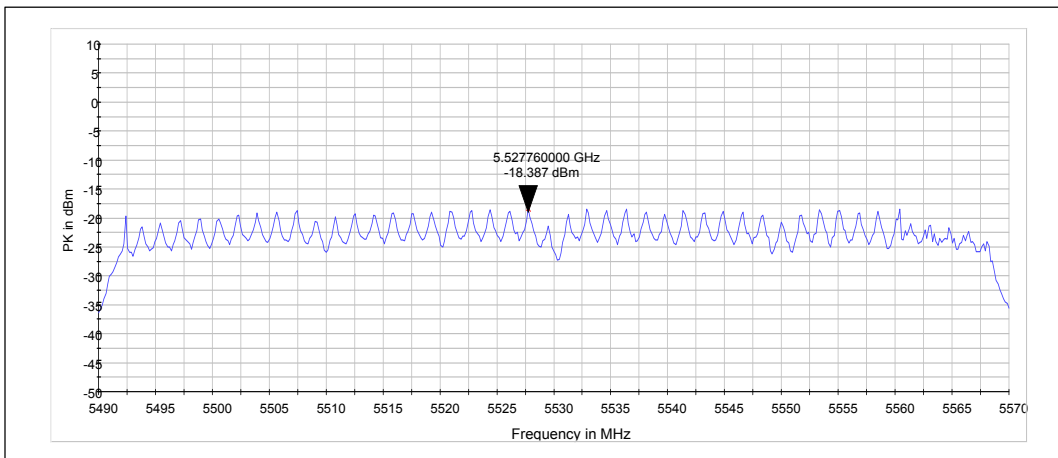
Channel 36-48 / 5210MHz



Channel 52-64 / 5290MHz



Channel 100-112 / 5530MHz

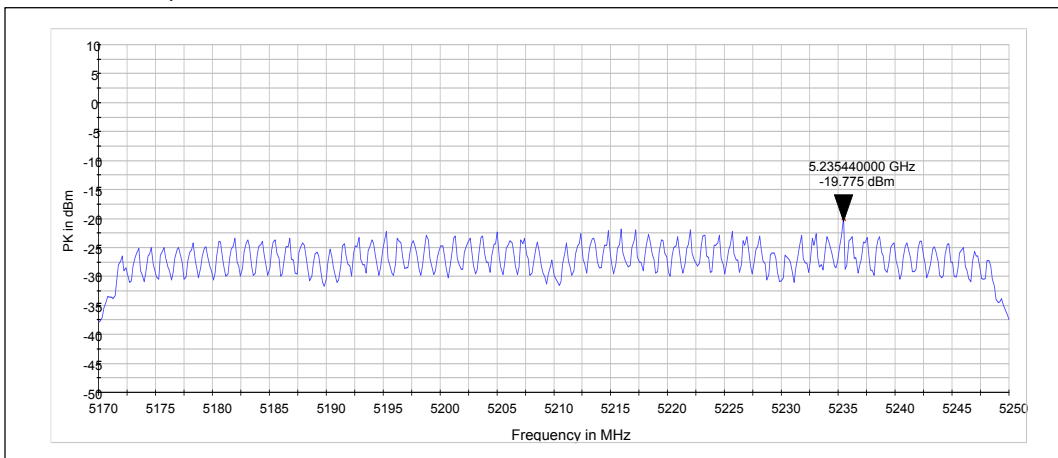


6.3.6 802.11ac mode, QPSK modulation, 87.8 / 97.5 Mbps data rate

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

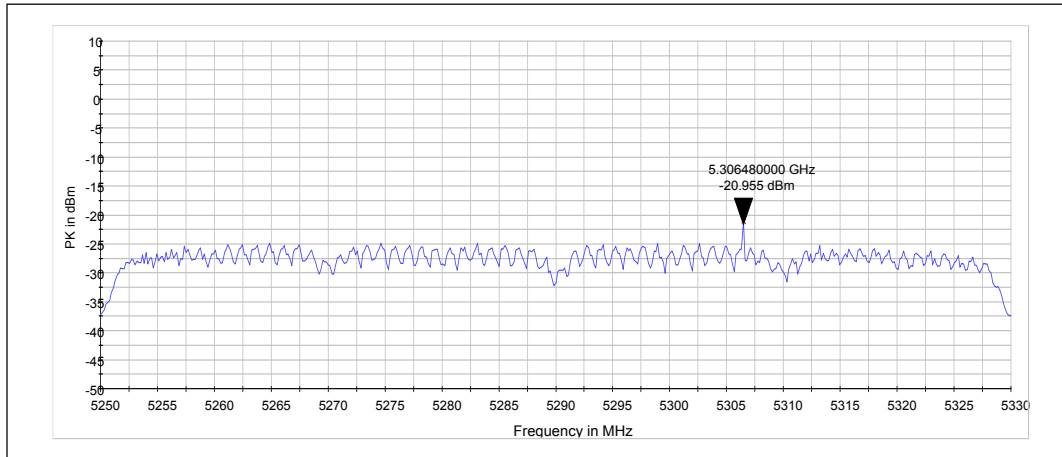
Channel / f_c [MHz]	P [dBm]	Result
36-48 / 5210	-19.78	PASSED
52-64 / 5290	-20.95	PASSED
100-112 / 5530	-20.57	PASSED

Channel 36-48 / 5210MHz

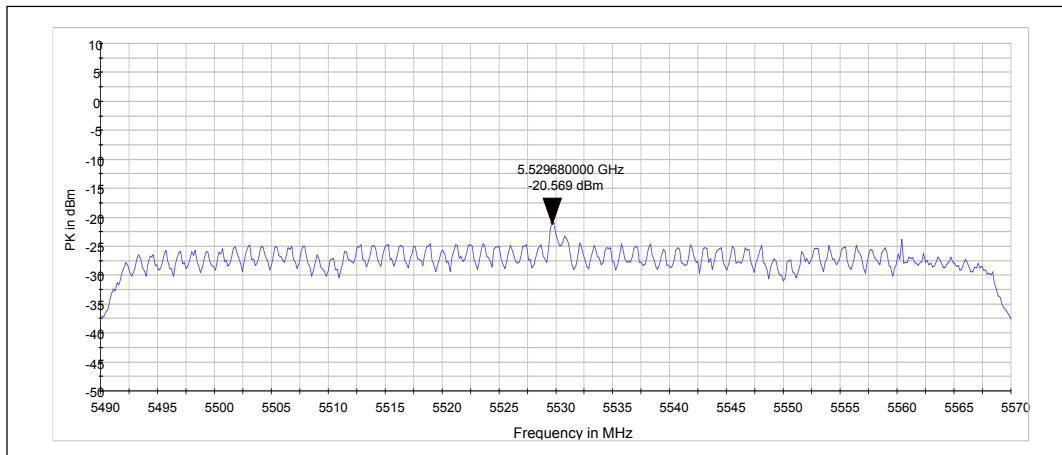


Channel

52-64 / 5290MHz



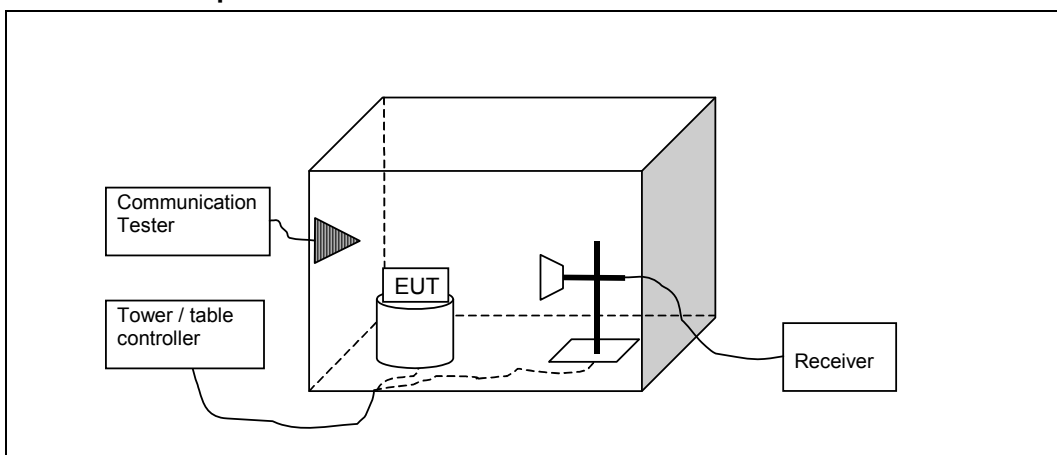
Channel 100-112 / 5530MHz



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

EUT with DUT number	RM-940, DUT 17579
Accessories with DUT numbers	AC-60E, DUT 17580 ; WH-208, DUT 17581; CA-190CD, DUT17608
Operation Voltage [V] / [Hz]	Nominal
Results	PASSED
Remarks	-
Temp [°C] / Humidity [%RH] / Air Pressure [kPa]	19 / 68 / 101
Date of measurements	17-Jul-2013
Measured by	Jari Keto

7.1.1 Test setup



7.2. 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

7.3. 5 GHz RLAN test results

7.3.1 802.11a, BPSK modulation, 6 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
10360.2	54.82	550.491	42.74	12.09	13.4	68	PASSED
15548	50.5	334.811	40.77	9.74	23.5	74	PASSED
20729.8	55.34	584.588	40.01	15.33	18.6	74	PASSED

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

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
10360.2	44.05	159.404	31.97	12.09	---	---	PASSED
15548	37.45	74.576	27.72	9.74	16.5	54	PASSED
20729.8	42.47	132.892	27.14	15.33	11.5	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
10400.2	55.85	620.012	43.5	12.35	12.4	68	PASSED
15602	51.3	367.113	41.51	9.79	22.7	74	PASSED
20801.6	54.93	557.635	40.01	14.92	19.1	74	PASSED

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

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
38.109	25.64	19.136	34.99	-9.35	14.4	40	PASSED
44.217	26.49	21.113	39.91	-13.42	13.5	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
10400.2	45.62	191.007	33.27	12.35	---	---	PASSED
15602	37.44	74.43	27.65	9.79	16.6	54	PASSED
20801.6	42.37	131.311	27.45	14.92	11.6	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	54.86	553.159	42	12.86	13.4	68	PASSED
15729.5	50.02	316.993	40.13	9.89	24	74	PASSED
20958.5	55.34	584.454	40.39	14.95	18.6	74	PASSED

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

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
10479.9	43.79	154.65	30.93	12.86	---	---	PASSED
15729.5	37.21	72.535	27.32	9.89	16.8	54	PASSED
20958.5	42.33	130.798	27.38	14.95	11.7	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
10519.9	54.97	560.531	42.24	12.73	13.3	68	PASSED
15776.5	50.24	324.9	40.26	9.98	23.7	74	PASSED
21049.7	54.94	558.663	39.88	15.06	19	74	PASSED

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

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
10519.9	42.98	140.994	30.25	12.73	---	---	PASSED
15776.5	37.43	74.405	27.45	9.98	16.6	54	PASSED
21049.7	42.31	130.452	27.25	15.06	11.7	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
10599.6	54.08	505.708	41.63	12.45	14.2	68	PASSED
15901.3	51.06	357.067	41.14	9.92	22.9	74	PASSED
21198.3	55.39	588.031	40.14	15.25	18.6	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
43.473	25.1	17.991	38.02	-12.92	14.9	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
10599.6	41.57	119.743	29.12	12.45	---	---	PASSED
15901.3	36.99	70.705	27.07	9.92	17	54	PASSED
21198.3	42.17	128.41	26.92	15.25	11.8	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
10630.3	53.75	487.024	41.26	12.49	20.2	74	PASSED
15968.9	50	316.301	40.13	9.87	24	74	PASSED
21289.1	55.7	609.186	40.39	15.31	18.3	74	PASSED

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

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
10630.3	40.44	105.136	27.95	12.49	13.6	54	PASSED
15968.9	36.49	66.719	26.62	9.87	17.5	54	PASSED
21289.1	42.32	130.572	27.01	15.31	11.7	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
11000.2	54.58	535.488	41.88	12.7	19.4	74	PASSED
16493.5	49.55	300.4	39.62	9.93	18.7	68	PASSED
22007.4	55.66	606.946	40.88	14.78	12.6	68	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
11000.2	42.9	139.637	30.2	12.7	11.1	54	PASSED
16493.5	36.47	66.566	26.54	9.93	---	---	PASSED
22007.4	42.12	127.703	27.34	14.78	---	---	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
11160.6	53.41	468.382	41.01	12.4	20.6	74	PASSED
16740.6	49.69	304.965	40.26	9.43	18.5	68	PASSED
22320.3	55.59	601.797	40.39	15.21	18.4	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
43.527	25.56	18.965	38.52	-12.96	14.4	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
11160.6	40.37	104.316	27.97	12.4	13.6	54	PASSED
16740.6	36.68	68.218	27.25	9.43	---	---	PASSED
22320.3	42.31	130.467	27.11	15.21	11.7	54	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
11393.1	53.74	486.631	41.25	12.49	20.2	74	PASSED
17094.8	48.54	267.208	38.98	9.56	19.7	68	PASSED
22794.2	55.48	594.361	41.01	14.47	18.5	74	PASSED

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

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
11393.1	40.72	108.668	28.23	12.49	13.3	54	PASSED
17094.8	35.77	61.412	26.21	9.56	---	---	PASSED
22794.2	42.38	131.538	27.91	14.47	11.6	54	PASSED

7.3.2 802.11a, QPSK modulation, 18 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
10359.6	53.46	471.032	41.38	12.08	14.8	68	PASSED
15531.9	50.2	323.519	40.39	9.81	23.8	74	PASSED
20727.3	55.61	603.254	40.26	15.35	18.4	74	PASSED

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

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
10359.6	41.65	120.962	29.57	12.08	---	---	PASSED
15531.9	37.57	75.596	27.76	9.81	16.4	54	PASSED
20727.3	42.5	133.291	27.15	15.35	11.5	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
10399.9	55.71	610.52	43.36	12.35	12.5	68	PASSED
15600.9	50.42	331.742	40.64	9.78	23.6	74	PASSED
20799.3	55.06	565.979	40.14	14.92	18.9	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
40.833	25.6	19.044	36.76	-11.16	14.4	40	PASSED
44.097	26.45	21.023	39.79	-13.34	13.5	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
10399.9	46.16	203.329	33.81	12.35	---	---	PASSED
15600.9	37.43	74.388	27.65	9.78	16.6	54	PASSED
20799.3	42.4	131.856	27.48	14.92	11.6	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
10480	54.86	553.095	42	12.86	13.4	68	PASSED
15721.2	50.31	327.718	40.26	10.05	23.7	74	PASSED
20956.5	54.94	558.213	40.01	14.93	19	74	PASSED

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

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
10480	43.35	147.079	30.49	12.86	---	---	PASSED
15721.2	37.43	74.353	27.38	10.05	16.6	54	PASSED
20956.5	42.36	131.22	27.43	14.93	11.6	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
10519.9	54.6	537.279	41.87	12.73	13.6	68	PASSED
15780.8	49.86	311.064	39.89	9.98	24.1	74	PASSED
21038	55.26	579.629	40.26	15	18.7	74	PASSED

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

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
10519.9	42.98	140.994	30.25	12.73	---	---	PASSED
15780.8	37.44	74.43	27.47	9.98	16.6	54	PASSED
21038	42.32	130.602	27.32	15	11.7	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
10599.9	55.18	573.984	42.73	12.45	13.1	68	PASSED
15899.5	49.78	308.283	39.88	9.9	24.2	74	PASSED
21201.6	54.76	546.827	39.5	15.26	19.2	74	PASSED

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

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
43.377	27.42	23.507	40.28	-12.86	12.6	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
10599.9	43.2	144.577	30.75	12.45	---	---	PASSED
15899.5	37.01	70.843	27.11	9.9	17	54	PASSED
21201.6	42.2	128.825	26.94	15.26	11.8	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
10639.9	54.78	548.088	42.25	12.54	19.2	74	PASSED
15956.6	49.13	286.022	39.5	9.63	24.9	74	PASSED
21282.1	55.47	593.882	40.13	15.34	18.5	74	PASSED

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

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
10639.9	43.48	149.211	30.95	12.54	10.5	54	PASSED
15956.6	36.31	65.351	26.68	9.63	17.7	54	PASSED
21282.1	42.35	131.009	27.01	15.34	11.7	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
11000.2	53.84	491.87	41.14	12.7	20.1	74	PASSED
16503.1	49.24	289.801	39.36	9.88	19	68	PASSED
22001.1	55.5	595.525	40.76	14.74	12.7	68	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
11000.2	41.75	122.377	29.05	12.7	12.2	54	PASSED
16503.1	36.34	65.592	26.46	9.88	---	---	PASSED
22001.1	42.03	126.386	27.29	14.74	---	---	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
11158.1	53.3	462.594	40.88	12.42	20.7	74	PASSED
16738.7	49.95	314.34	40.51	9.44	18.3	68	PASSED
22321.9	55.06	566.304	39.88	15.18	18.9	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
31.83	23.62	15.171	28.84	-5.22	16.4	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
11158.1	40.41	104.785	27.99	12.42	13.6	54	PASSED
16738.7	36.63	67.85	27.19	9.44	---	---	PASSED
22321.9	42.25	129.569	27.07	15.18	11.8	54	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
11392.7	53.25	459.462	40.77	12.48	20.7	74	PASSED
17106.4	48.56	267.763	38.98	9.58	19.7	68	PASSED
22805.8	55.21	575.838	40.77	14.45	18.8	74	PASSED

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

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
11392.7	40.47	105.572	27.99	12.48	13.5	54	PASSED
17106.4	35.77	61.447	26.19	9.58	---	---	PASSED
22805.8	42.46	132.709	28.02	14.45	11.5	54	PASSED

7.3.3 802.11n, 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
10380.1	54.5	531.068	42.35	12.15	13.7	68	PASSED
15567.5	50.42	331.78	40.75	9.67	23.6	74	PASSED
20758.1	55.58	601.381	40.37	15.21	18.4	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
37.682	24.85	17.482	33.92	-9.07	15.1	40	PASSED
38.113	25.24	18.279	34.59	-9.35	14.8	40	PASSED
41.047	24.57	16.918	35.87	-11.3	15.4	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
10380.1	44.91	175.954	32.76	12.15	---	---	PASSED
15567.5	37.05	71.162	27.38	9.67	17	54	PASSED
20758.1	42.4	131.886	27.19	15.21	11.6	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
10459.8	54.12	508.042	41.25	12.87	14.1	68	PASSED
15555.4	50.2	323.556	40.5	9.7	23.8	74	PASSED
20697.2	55.95	627.191	40.63	15.32	18	74	PASSED

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

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
10459.8	42.85	138.835	29.98	12.87	---	---	PASSED
15555.4	37.13	71.862	27.43	9.7	16.9	54	PASSED
20697.2	42.16	128.248	26.84	15.32	11.8	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
10540.2	54.28	517.309	41.62	12.66	14	68	PASSED
15812.9	49.85	310.67	39.62	10.23	24.1	74	PASSED
21082.5	55.12	570.033	40	15.12	18.9	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
37.976	25.28	18.357	34.54	-9.26	14.7	40	PASSED
40.783	24.77	17.312	35.9	-11.13	15.2	40	PASSED
43.297	25.04	17.855	37.85	-12.81	15	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
10540.2	42.79	137.832	30.13	12.66	---	---	PASSED
15812.9	36.97	70.567	26.74	10.23	17	54	PASSED
21082.5	42.06	126.751	26.94	15.12	11.9	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
10600	52.57	425.158	40.12	12.45	15.7	68	PASSED
15916.5	49.48	297.749	39.49	9.99	24.5	74	PASSED
21238.5	55.11	569.508	39.74	15.37	18.9	74	PASSED

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

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
10600	40.07	100.809	27.62	12.45	13.9	54	PASSED
15916.5	36.82	69.343	26.83	9.99	17.2	54	PASSED
21238.5	41.87	123.951	26.5	15.37	12.1	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
11018.8	53.42	468.705	40.63	12.79	20.6	74	PASSED
16517.4	49.25	290.035	39.36	9.89	19	68	PASSED
22055	55.62	604.088	40.88	14.75	18.4	74	PASSED

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

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
11018.8	40.18	102.117	27.39	12.79	13.8	54	PASSED
16517.4	35.9	62.373	26.01	9.89	---	---	PASSED
22055	42.28	129.987	27.54	14.75	11.7	54	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
11100.6	52.17	405.835	39.74	12.43	21.8	74	PASSED
16647.8	49.48	297.989	39.48	10	18.7	68	PASSED
22203.8	55.56	600.067	40.62	14.94	18.4	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
38.263	25.19	18.182	34.64	-9.45	14.8	40	PASSED
40.897	24.94	17.664	36.14	-11.2	15.1	40	PASSED
42.979	25.14	18.061	37.73	-12.59	14.9	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
11100.6	40.04	100.438	27.61	12.43	14	54	PASSED
16647.8	36.74	68.731	26.74	10	---	---	PASSED
22203.8	42.37	131.341	27.43	14.94	11.6	54	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
11340.1	53.91	496.192	41.86	12.05	20.1	74	PASSED
17026.3	48.23	257.899	38.84	9.39	20	68	PASSED
22693.2	55.73	611.646	40.5	15.23	18.2	74	PASSED

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

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
11340.1	42.22	129.107	30.17	12.05	11.8	54	PASSED
17026.3	35.45	59.197	26.06	9.39	---	---	PASSED
22693.2	42.54	133.983	27.31	15.23	11.5	54	PASSED

7.3.4 802.11n, 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
10380.1	54.48	529.846	42.33	12.15	13.7	68	PASSED
15569.9	49.89	312.356	40.22	9.67	24.1	74	PASSED
20756.6	55.67	607.645	40.47	15.2	18.3	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
37.993	26.04	20.049	35.31	-9.27	14	40	PASSED
38.546	25.24	18.289	34.88	-9.64	14.8	40	PASSED
41.107	25.24	18.285	36.58	-11.34	14.8	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
10380.1	44.63	170.314	32.48	12.15	---	---	PASSED
15569.9	37.23	72.661	27.56	9.67	16.8	54	PASSED
20756.6	42.57	134.385	27.37	15.2	11.4	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
10460.5	53.35	464.836	40.48	12.87	14.9	68	PASSED
15569	51.14	360.579	41.47	9.67	22.8	74	PASSED
20673.8	55.77	614.186	40.23	15.54	18.2	74	PASSED

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

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
10460.5	40.87	110.484	28	12.87	---	---	PASSED
15569	37.22	72.569	27.55	9.67	16.8	54	PASSED
20673.8	42.32	130.632	26.78	15.54	11.7	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
10540.6	53.76	487.641	41.1	12.66	14.5	68	PASSED
15809.3	50.26	325.837	40.1	10.16	23.7	74	PASSED
21080.7	55.09	568.46	39.97	15.12	18.9	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
37.346	25.1	17.995	33.95	-8.85	14.9	40	PASSED
37.939	25.65	19.154	34.89	-9.24	14.4	40	PASSED
44.767	24.58	16.934	38.37	-13.79	15.4	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
10540.6	40.78	109.396	28.12	12.66	---	---	PASSED
15809.3	37.13	71.895	26.97	10.16	16.9	54	PASSED
21080.7	42.27	129.823	27.15	15.12	11.7	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
10600	53.3	462.541	40.85	12.45	14.9	68	PASSED
15914.1	49.94	313.979	39.85	10.09	24	74	PASSED
21253.3	54.81	550.427	39.46	15.35	19.2	74	PASSED

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

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
10600	40.23	102.719	27.78	12.45	13.8	54	PASSED
15914.1	37.09	71.54	27	10.09	16.9	54	PASSED
21253.3	42.02	126.197	26.67	15.35	12	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
11019.8	53.28	461.371	40.48	12.8	20.7	74	PASSED
16519.1	48.71	272.709	38.81	9.9	19.5	68	PASSED
22043.8	55.59	601.52	40.73	14.86	18.4	74	PASSED

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

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
11019.8	40.71	108.505	27.91	12.8	13.3	54	PASSED
16519.1	36.06	63.526	26.16	9.9	---	---	PASSED
22043.8	42.44	132.358	27.58	14.86	11.6	54	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
11096.9	53.29	461.69	40.86	12.43	20.7	74	PASSED
16652.3	50.22	324.377	40.23	10	18	68	PASSED
22201.9	56.36	657.431	41.48	14.89	17.6	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
300.797	35.47	59.354	50.07	-14.6	10.6	46	PASSED
300.808	34.49	53.027	49.08	-14.59	11.5	46	PASSED
304	35.96	62.835	50.31	-14.35	10.1	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
11096.9	40.38	104.472	27.95	12.43	13.6	54	PASSED
16652.3	37	70.778	27.01	10	---	---	PASSED
22201.9	42.47	132.877	27.59	14.89	11.5	54	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
11340.1	54.76	546.701	42.71	12.05	19.2	74	PASSED
17028.2	48.58	268.504	39.2	9.38	19.7	68	PASSED
22677.7	55.76	613.621	40.35	15.41	18.2	74	PASSED

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

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
11340.1	42.78	137.721	30.73	12.05	11.2	54	PASSED
17028.2	35.63	60.485	26.25	9.38	---	---	PASSED
22677.7	42.84	138.66	27.43	15.41	11.2	54	PASSED

7.3.5 802.11ac, BPSK modulation, 29.3 / 32.5 Mbps data rate.

Channel 36-48 / 5210MHz

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
10420.1	55.18	574.381	42.6	12.58	13	68	PASSED
15630	50.62	339.469	40.63	9.99	23.4	74	PASSED
20844	55.95	627.047	40.89	15.07	18	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
37.35	24.87	17.509	33.72	-8.85	15.1	40	PASSED
38.097	25	17.789	34.34	-9.34	15	40	PASSED
38.223	25.71	19.306	35.14	-9.43	14.3	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
10420.1	44.11	160.583	31.53	12.58	---	---	PASSED
15630	37.4	74.131	27.41	9.99	16.6	54	PASSED
20844	42.51	133.521	27.45	15.07	11.5	54	PASSED

Channel 52-64 / 5290MHz

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
10572.1	53.7	484.34	41.13	12.57	14.5	68	PASSED
15874.5	49.35	293.528	39.36	9.99	24.6	74	PASSED
21158.6	54.99	561.371	39.75	15.24	19	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
38.16	24.59	16.969	33.97	-9.38	15.4	40	PASSED
40.623	24.9	17.573	35.92	-11.02	15.1	40	PASSED
40.737	24.89	17.559	35.99	-11.1	15.1	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
10572.1	40.45	105.366	27.88	12.57	---	---	PASSED
15874.5	37.09	71.54	27.1	9.99	16.9	54	PASSED
21158.6	42.22	129.152	26.98	15.24	11.8	54	PASSED

Channel 100-112 / 5530MHz

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
11053.5	53.19	456.773	40.63	12.56	20.8	74	PASSED
16593.3	49.31	292.112	39.75	9.56	18.9	68	PASSED
22119.9	55.49	595.251	40.63	14.86	18.5	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
37.977	24.83	17.436	34.09	-9.26	15.2	40	PASSED
38.163	25.07	17.927	34.46	-9.39	14.9	40	PASSED
40.71	26.05	20.063	37.13	-11.08	14	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
11053.5	40.34	104.016	27.78	12.56	13.7	54	PASSED
16593.3	35.89	62.273	26.33	9.56	---	---	PASSED
22119.9	42.64	135.488	27.78	14.86	11.4	54	PASSED

7.3.6 802.11ac, QPSK modulation, 87.8 / 97.5 Mbps data rate.

Channel 36-48 / 5210MHz

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
10420	55.06	566.174	42.48	12.58	13.2	68	PASSED
15625.3	50.54	336.318	40.51	10.03	23.4	74	PASSED
20841.3	55.59	602.005	40.51	15.09	18.4	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
30	23.52	15	27.54	-4.02	16.5	40	PASSED
30.03	23.26	14.548	27.3	-4.04	16.7	40	PASSED
38.619	23.53	15.019	33.22	-9.69	16.5	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
10420	45.51	188.582	32.93	12.58	---	---	PASSED
15625.3	37.48	74.8	27.45	10.03	16.5	54	PASSED
20841.3	42.56	134.338	27.48	15.09	11.4	54	PASSED

Channel 52-64 / 5290MHz

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
10580.1	55.01	563.119	42.48	12.53	13.2	68	PASSED
15870.8	49.94	314.051	39.88	10.06	24	74	PASSED
21167.7	55.55	598.756	40.26	15.29	18.4	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
38.103	23.65	15.225	33	-9.35	16.3	40	PASSED
38.337	24.09	16.016	33.59	-9.5	15.9	40	PASSED
43.95	23.3	14.622	36.54	-13.24	16.7	40	PASSED

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

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
10580.1	44.97	177.133	32.44	12.53	---	---	PASSED
15870.8	37.17	72.177	27.11	10.06	16.8	54	PASSED
21167.7	42.34	130.918	27.05	15.29	11.7	54	PASSED

Channel 100-112 / 5530MHz

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
11056.4	53.32	463.287	40.76	12.56	20.7	74	PASSED
16593.8	49.43	296.142	39.88	9.55	18.8	68	PASSED
22118.1	55.47	593.677	40.63	14.84	18.5	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
38.187	24.92	17.612	34.32	-9.4	15.1	40	PASSED
40.929	24.72	17.209	35.94	-11.22	15.3	40	PASSED
45.093	23.79	15.476	37.8	-14.01	16.2	40	PASSED

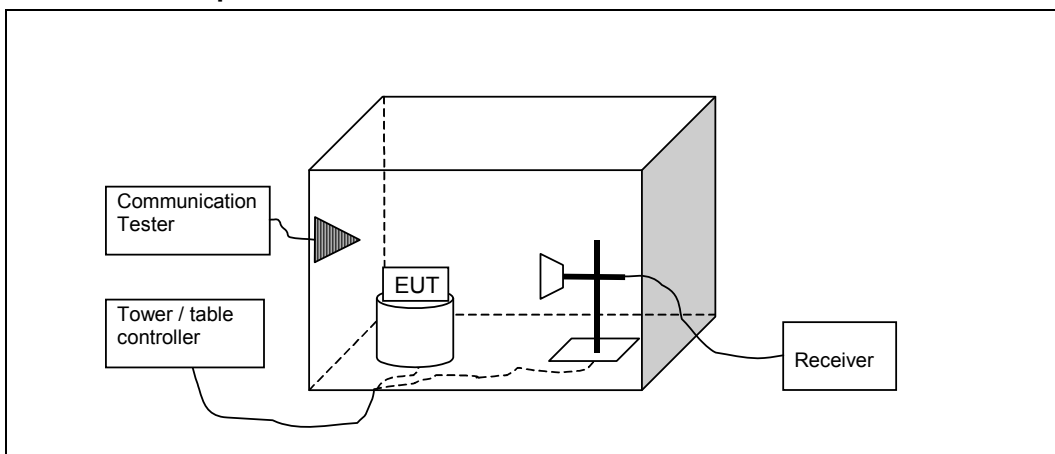
Average (RBW: 1 MHz, VBW: 1 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
11056.4	40.37	104.364	27.81	12.56	13.6	54	PASSED
16593.8	35.92	62.503	26.37	9.55	---	---	PASSED
22118.1	42.51	133.46	27.67	14.84	11.5	54	PASSED

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

EUT with DUT number	RM-940, DUT 17579
Accessories with DUT numbers	AC-60E, DUT 17580 ; WH-208, DUT 17581; CA-190CD, DUT17608
Operation Voltage [V] / [Hz]	Nominal
Results	PASSED
Remarks	-
Temp [°C] / Humidity [%RH] / Air Pressure [kPa]	19 / 68 /101
Date of measurements	17-Jul-2013
Measured by	Jari Keto

8.1.1 Test setup



8.2. 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:

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

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

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

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

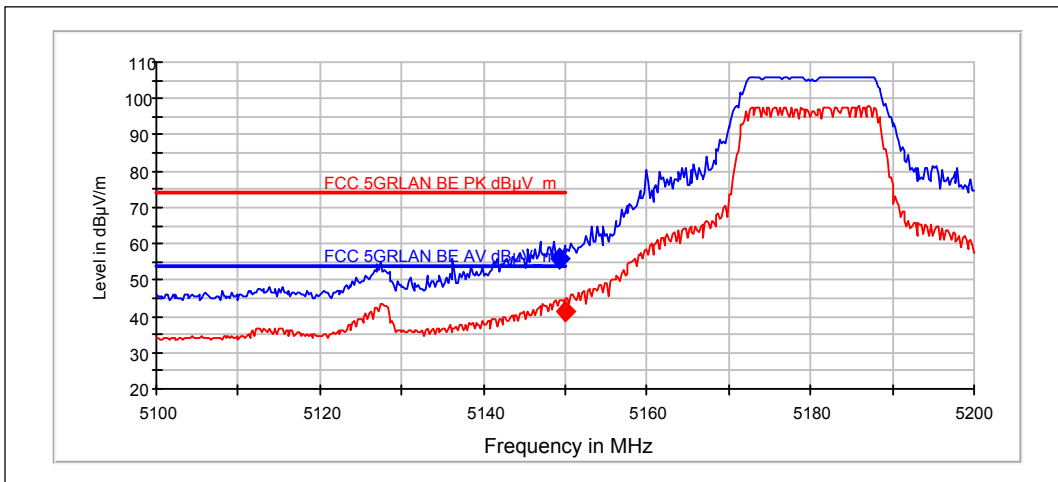
$$E [dB\mu V/m] = 20 * \text{LOG} ((\text{square root } (30 * P [W]) / 3 \text{ m}) * 1000000)$$

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

8.3. 5 GHz RLAN test results

8.3.1 802.11a, BPSK modulation, 6 Mbps data rate.

Channel 36 / 5180MHz



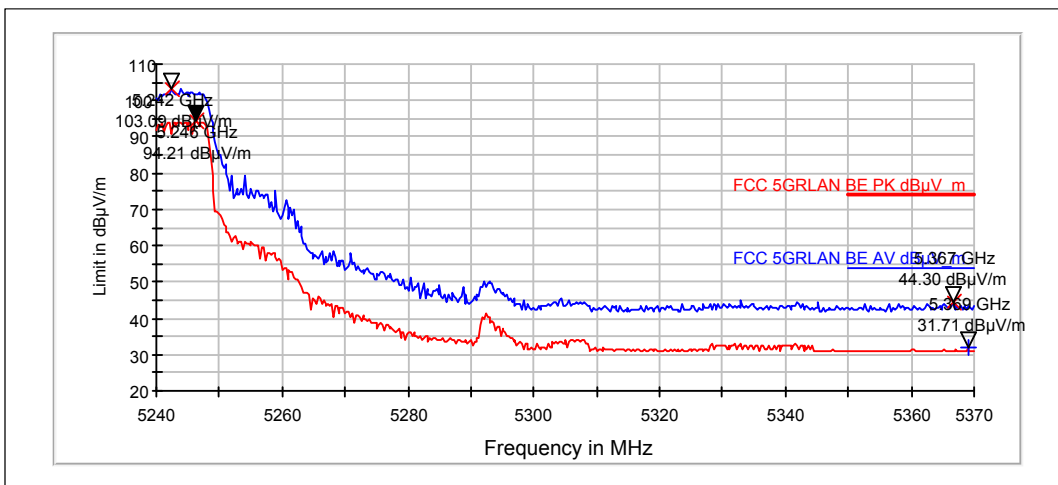
Peak (RBW: 1 MHz, VBW: 3 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
5149.299	55.85	620.083	50.71	5.15	18.2	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
5149.9	41.41	117.557	36.26	5.15	12.6	54	PASSED

Channel 48 / 5240MHz



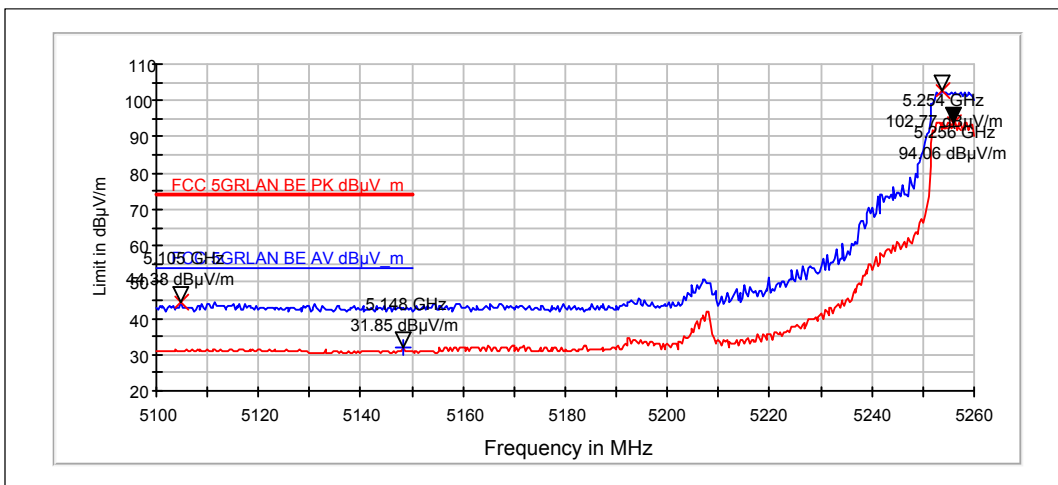
Peak (RBW: 1 MHz, VBW: 3 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Frequency2 [MHz]	PK2 [dBμV/m]	Results
5367	44.3	163.983	39.96	4.34	5242.345	103.091	PASSED

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

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Frequency2 [MHz]	AV2 [dBμV/m]	Results
5369	31.71	38.495	27.36	4.35	5246.253	94.214	PASSED

Channel 52 / 5260MHz



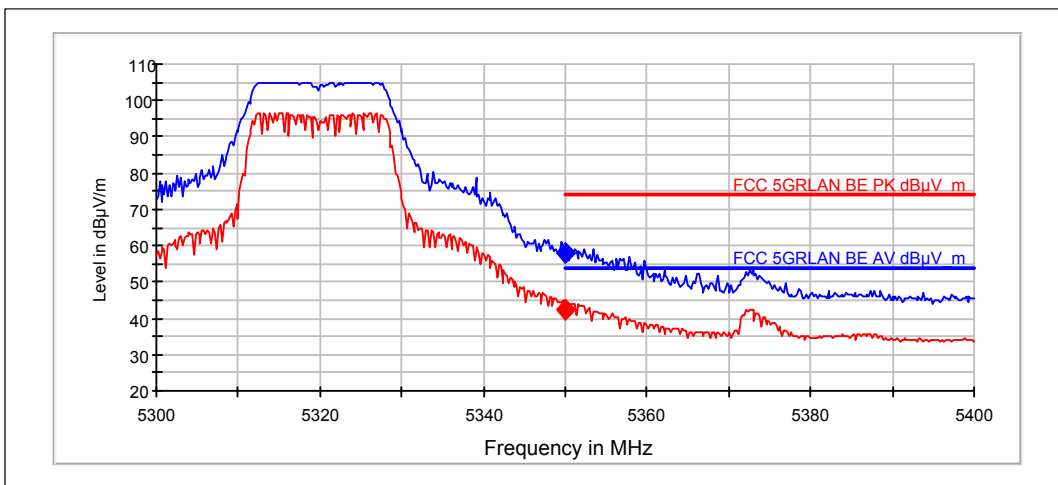
Peak (RBW: 1 MHz, VBW: 3 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Frequency2 [MHz]	PK2 [dBμV/m]	Results
5105	44.38	165.596	38.77	5.61	5253.587	102.767	PASSED

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

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Frequency2 [MHz]	AV2 [dBμV/m]	Results
5148	31.85	39.147	26.71	5.14	5255.832	94.06	PASSED

Channel 64 / 5320MHz



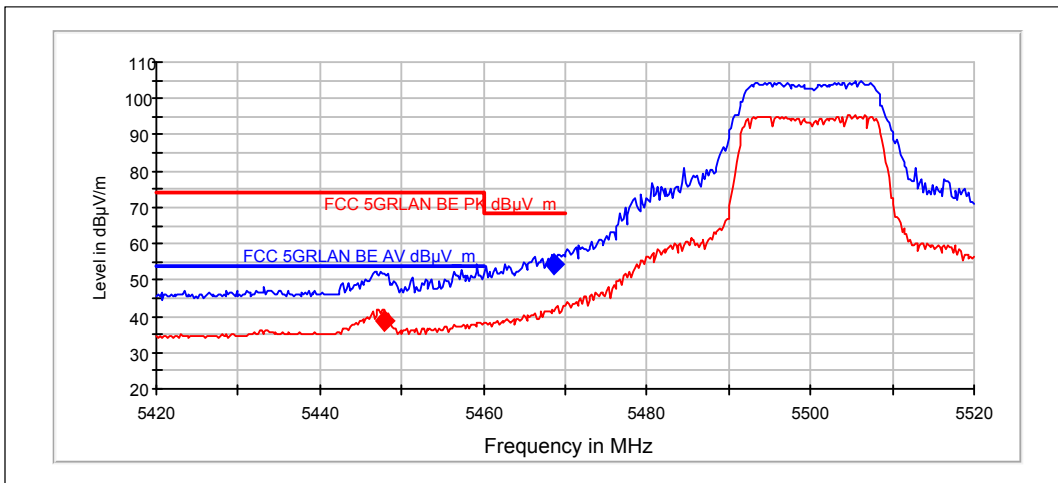
Peak (RBW: 1 MHz, VBW: 3 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
5350	58.16	808.63	53.9	4.26	15.8	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
5350	42.14	127.909	37.88	4.26	11.9	54	PASSED

Channel 100 / 5500MHz



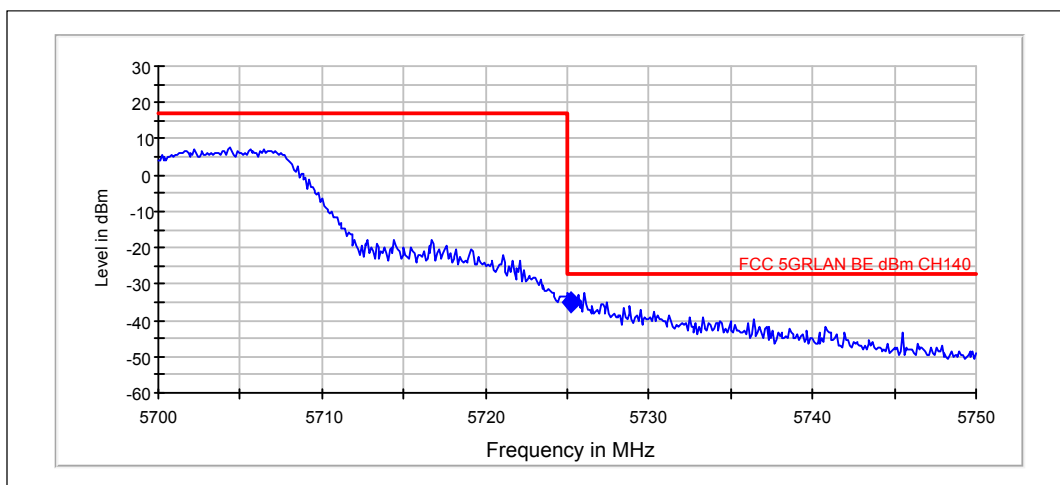
Peak (RBW: 1 MHz, VBW: 3 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
5468.697	54.25	515.585	49.8	4.45	14	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	38.94	88.501	34.54	4.4	15.1	54	PASSED

Channel 140 / 5700MHz

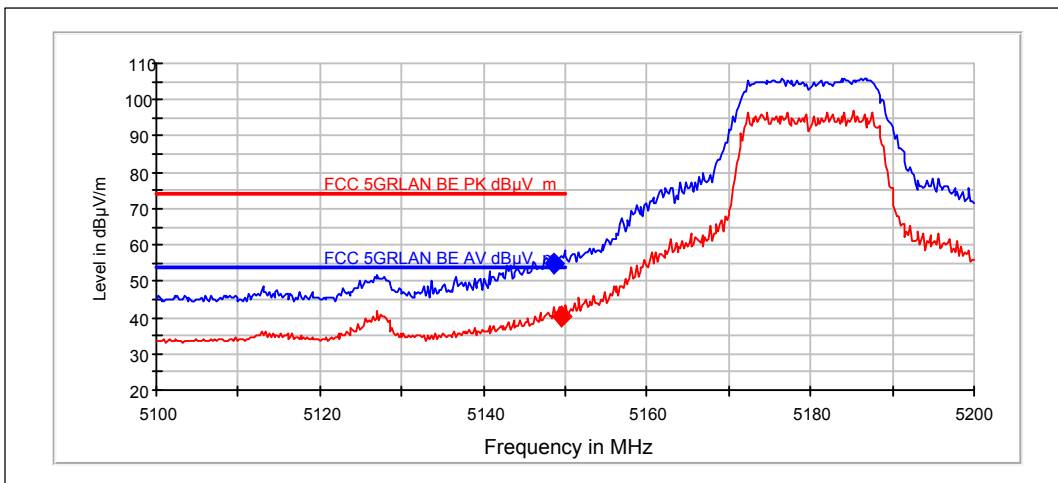


Peak (RBW: 1 MHz, VBW: 3 MHz)

Frequency [MHz]	P [dBm]	P [μ W]	P _{MEAS} [dBm]	A _{TOT} [dB]	Margin	Limit [dBm]	Results
5725.255	-35.07	0.31131	-49.69	14.62	8.1	-27	PASSED

8.3.2 802.11a, QPSK modulation, 18 Mbps data rate.

Channel 36 / 5180MHz



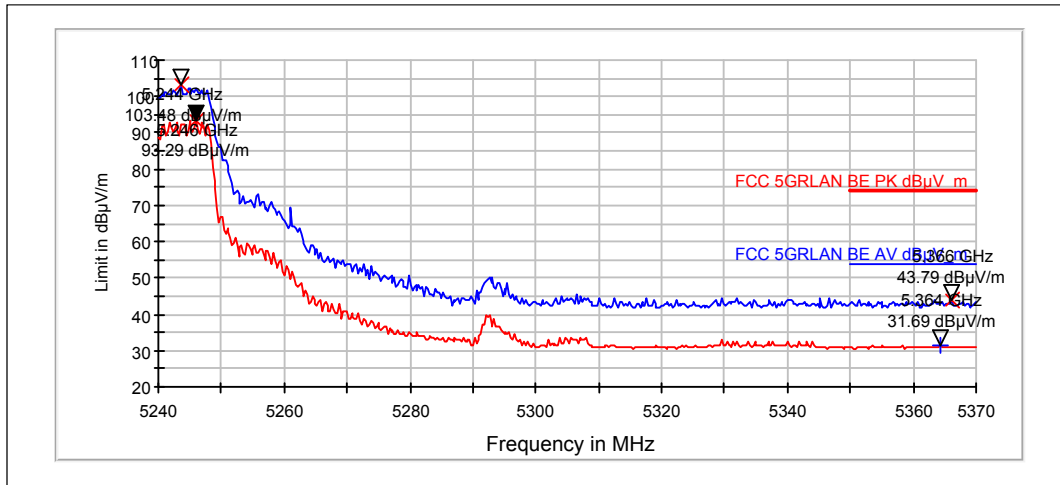
Peak (RBW: 1 MHz, VBW: 3 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
5148.697	54.88	554.881	49.74	5.14	19.1	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
5149.599	40.46	105.475	35.31	5.15	13.5	54	PASSED

Channel 48 / 5240MHz



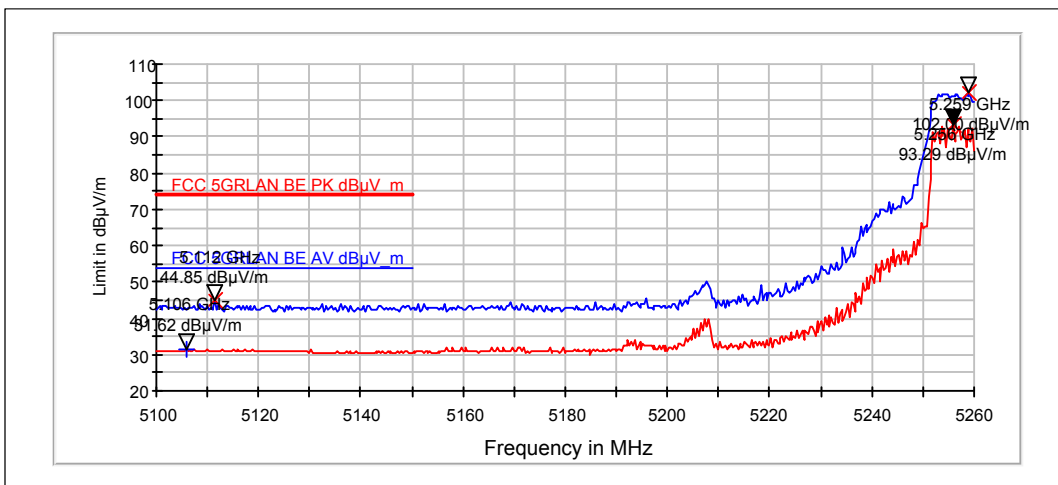
Peak (RBW: 1 MHz, VBW: 3 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Frequency2 [MHz]	PK2 [dBμV/m]	Results
5366	43.79	154.65	39.45	4.34	5243.647	103.477	PASSED

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

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Frequency2 [MHz]	AV2 [dBμV/m]	Results
5364	31.69	38.397	27.36	4.33	5245.992	93.285	PASSED

Channel 52 / 5260MHz



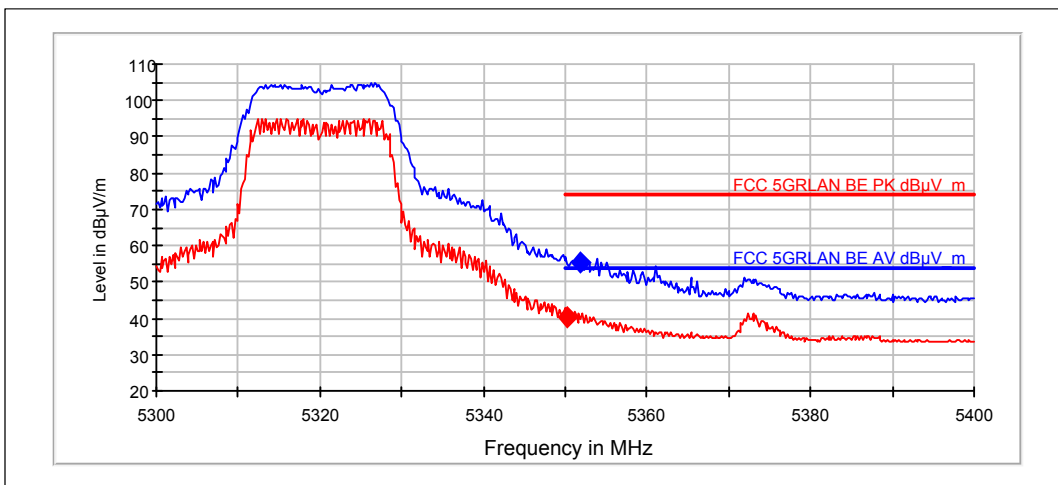
Peak (RBW: 1 MHz, VBW: 3 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Frequency2 [MHz]	PK2 [dBμV/m]	Results
5112	44.85	174.844	39.3	5.55	5259.038	102	PASSED

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

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Frequency2 [MHz]	AV2 [dBμV/m]	Results
5106	31.62	38.111	26.02	5.6	5255.832	93.29	PASSED

Channel 64 / 5320MHz



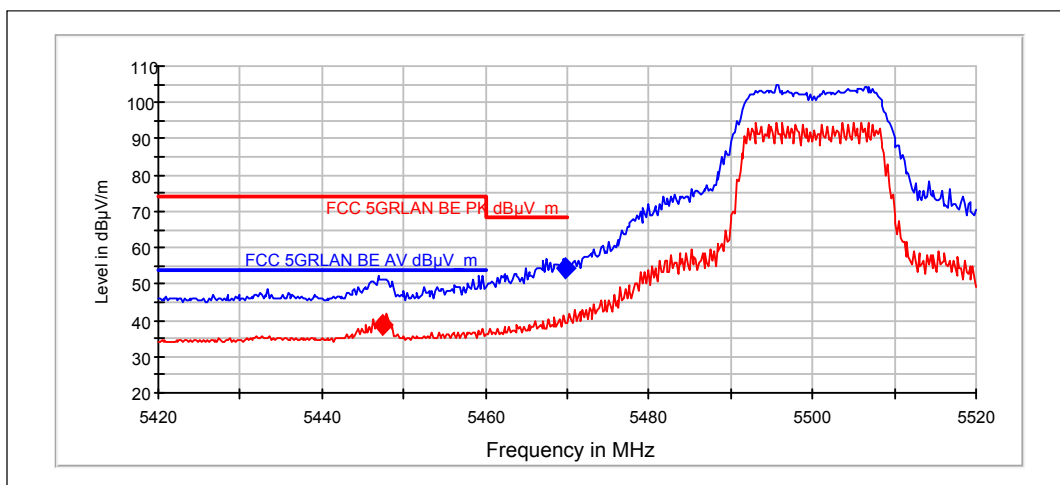
Peak (RBW: 1 MHz, VBW: 3 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
5351.804	55.2	575.44	50.93	4.27	18.8	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
5350.2	40.29	103.431	36.03	4.26	13.7	54	PASSED

Channel 100 / 5500MHz



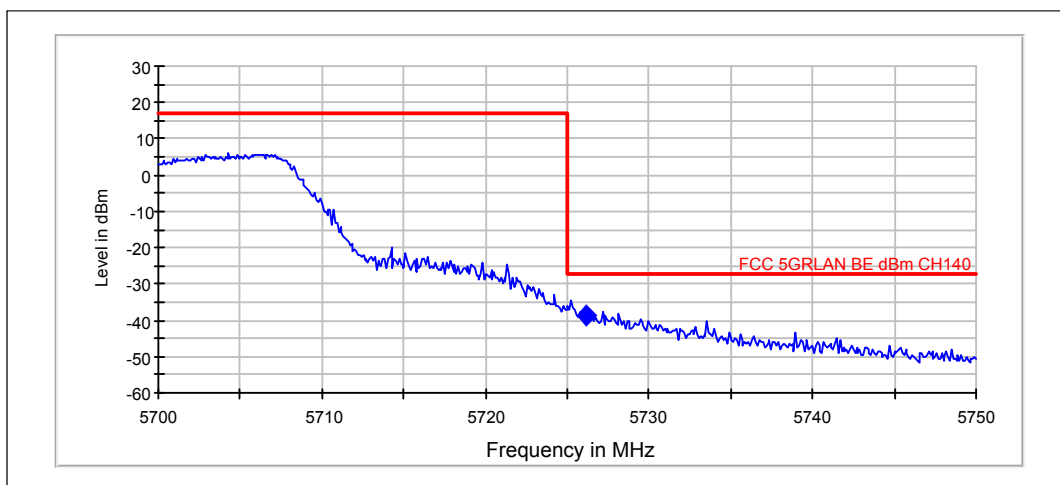
Peak (RBW: 1 MHz, VBW: 3 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
5469.699	54.25	515.644	49.8	4.45	14	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
5447.455	38.66	85.743	34.26	4.4	15.3	54	PASSED

Channel 140 / 5700MHz

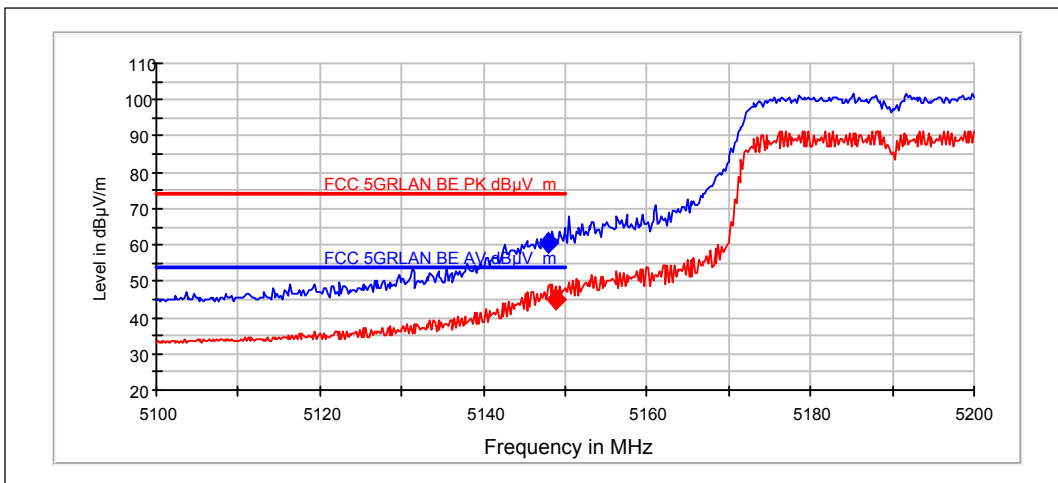


Peak (RBW: 1 MHz, VBW: 3 MHz)

Frequency [MHz]	P [dBm]	P [μ W]	P _{MEAS} [dBm]	A _{TOT} [dB]	Margin	Limit [dBm]	Results
5726.206	-38.51	0.14106	-53.08	14.57	11.5	-27	PASSED

8.3.3 802.11n, BPSK modulation, 13.5 / 15.0 Mbps data rate.

Channel 36+40 / 5190MHz



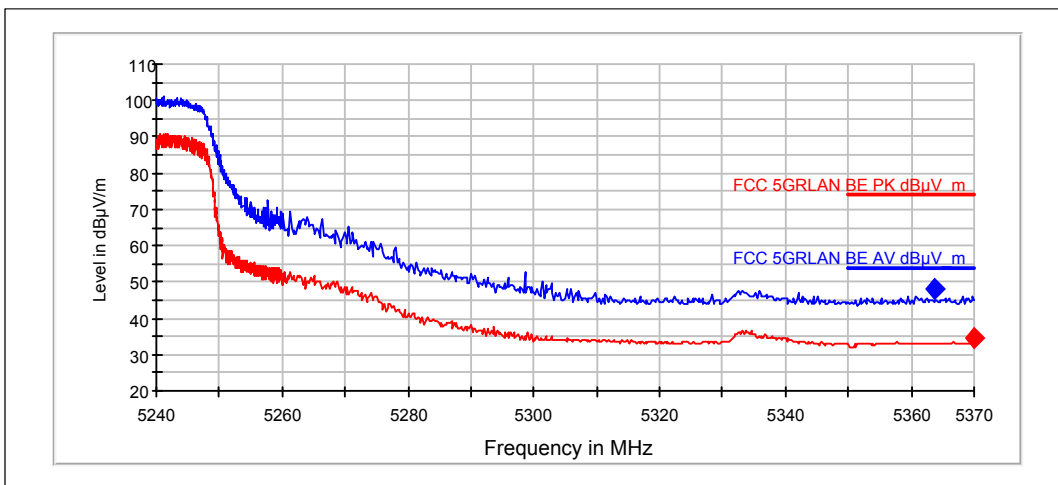
Peak (RBW: 1 MHz, VBW: 3 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
5147.996	60.34	1040.279	55.2	5.14	13.7	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
5148.898	45.14	180.738	40	5.14	8.9	54	PASSED

Channel 44+48 / 5230MHz



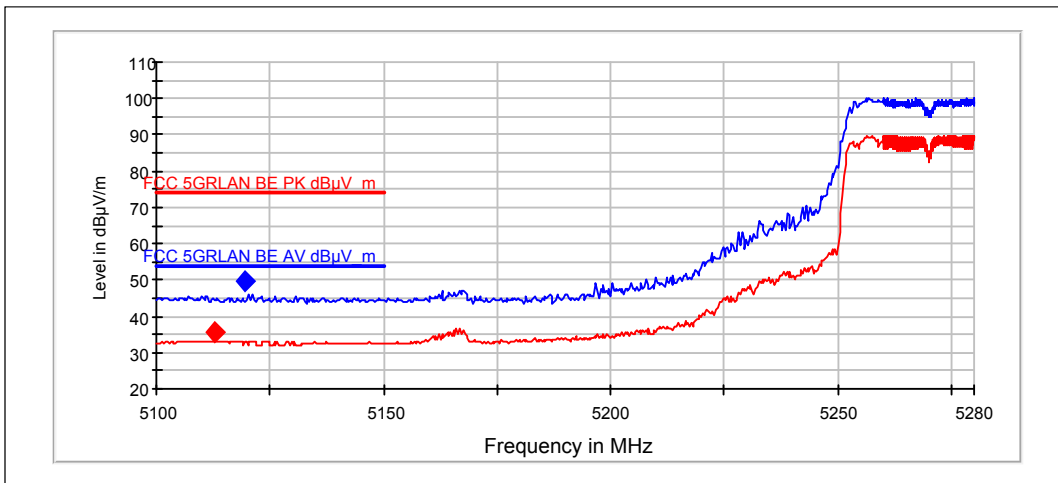
Peak (RBW: 1 MHz, VBW: 3 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
5363.788	47.87	247.4	43.54	4.33	26.1	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
5369.96	34.81	55.024	30.45	4.36	19.2	54	PASSED

Channel 52+56 / 5270MHz



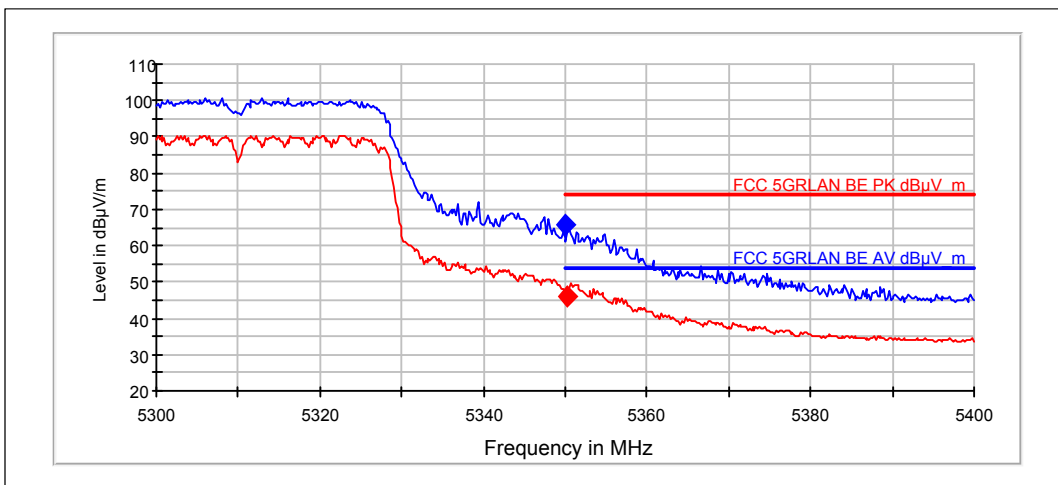
Peak (RBW: 1 MHz, VBW: 3 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
5119.464	49.89	312.176	44.41	5.48	24.1	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
5113.001	35.55	59.903	30.01	5.54	18.5	54	PASSED

Channel 60+64 / 5310MHz



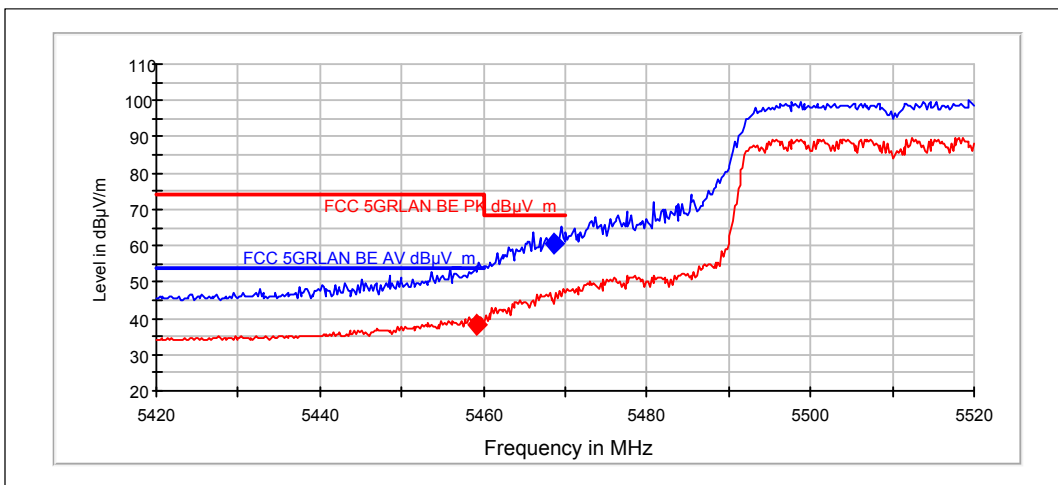
Peak (RBW: 1 MHz, VBW: 3 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
5350.1	65.6	1904.803	61.34	4.26	8.4	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
5350.2	46.2	204.127	41.94	4.26	7.8	54	PASSED

Channel 100+104 / 5510MHz



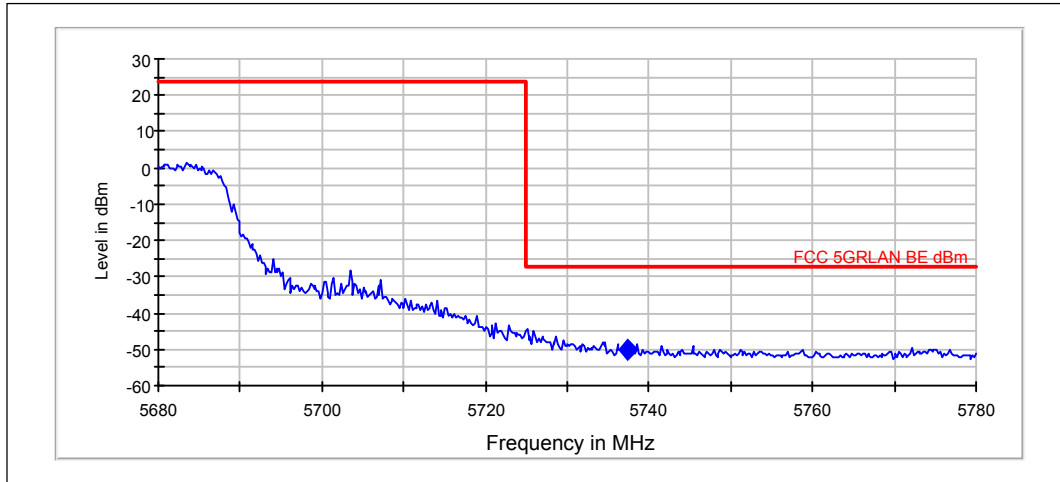
Peak (RBW: 1 MHz, VBW: 3 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
5468.697	60.61	1072.26	56.16	4.45	7.6	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
5459.279	38.4	83.176	33.98	4.42	15.6	54	PASSED

Channel 132+136 / 5670MHz

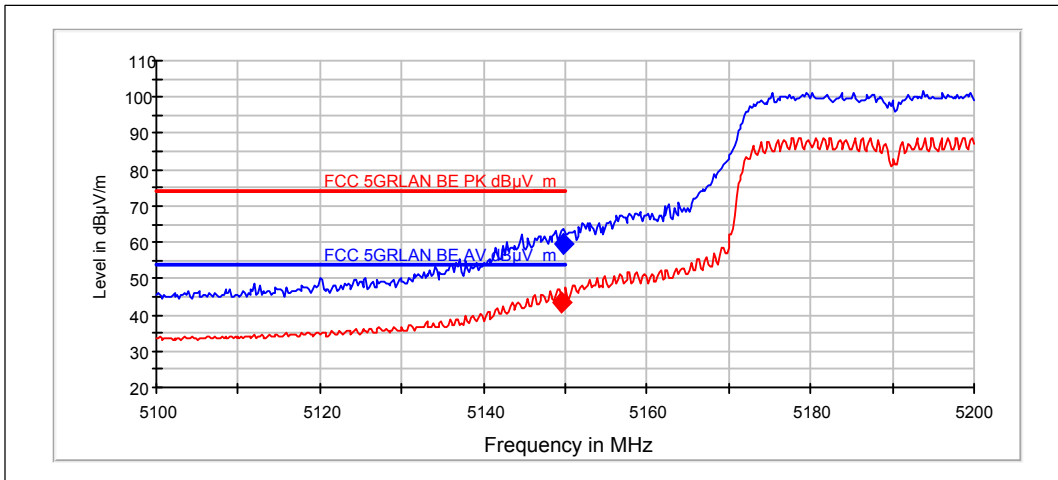


Peak (RBW: 1 MHz, VBW: 3 MHz)

Frequency [MHz]	P [dBm]	P [μ W]	P _{MEAS} [dBm]	A _{TOT} [dB]	Margin	Limit [dBm]	Results
5737.429	-49.91	0.0102	-64.27	14.36	22.9	-27	PASSED

8.3.4 802.11n, QPSK modulation, 27.0 / 30.0 Mbps data rate.

Channel 36+40 / 5190MHz



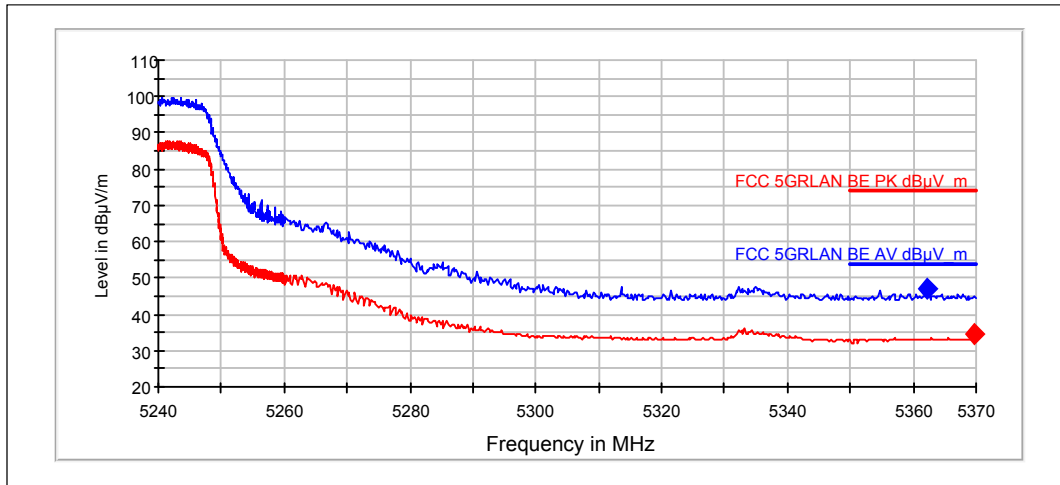
Peak (RBW: 1 MHz, VBW: 3 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
5149.8	59.5	943.518	54.35	5.15	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
5149.599	43.21	144.644	38.06	5.15	10.8	54	PASSED

Channel 44+48 / 5230MHz



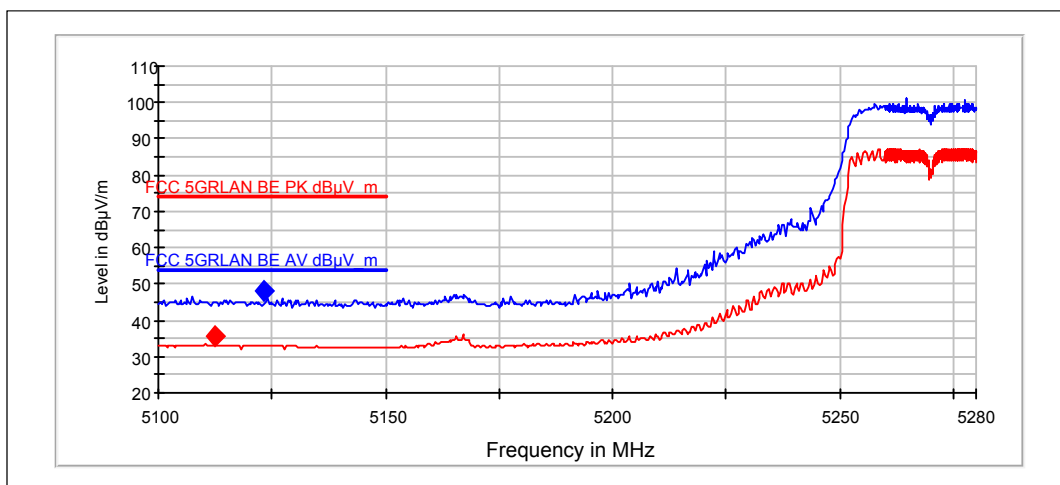
Peak (RBW: 1 MHz, VBW: 3 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
5362.345	46.95	222.638	42.63	4.32	27	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
5369.679	34.81	55.017	30.46	4.35	19.2	54	PASSED

Channel 52+56 / 5270MHz



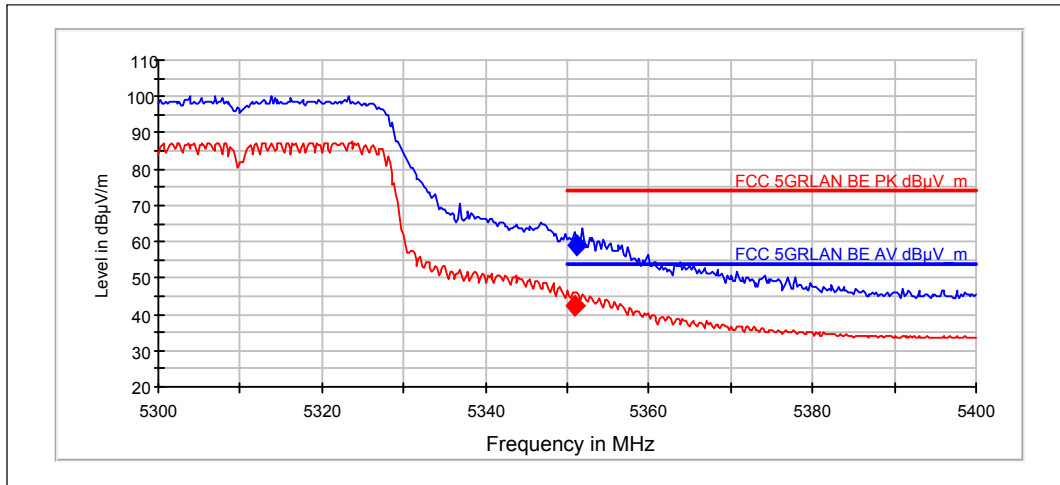
Peak (RBW: 1 MHz, VBW: 3 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
5123.171	47.94	249.316	42.49	5.45	26.1	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
5112.5	35.55	59.931	30.01	5.54	18.4	54	PASSED

Channel 60+64 / 5310MHz



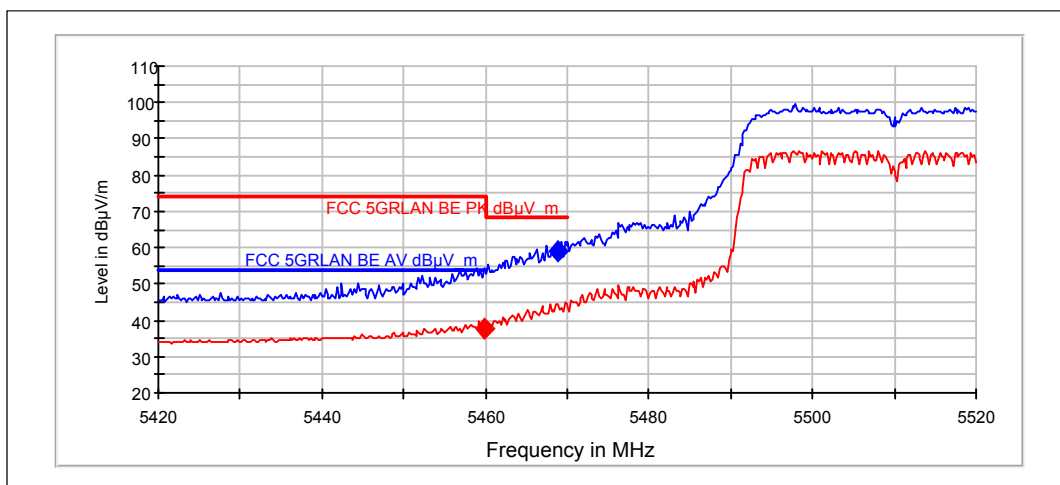
Peak (RBW: 1 MHz, VBW: 3 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
5351.202	59.27	919.285	55	4.27	14.7	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
5350.902	42.5	133.414	38.23	4.27	11.5	54	PASSED

Channel 100+104 / 5510MHz



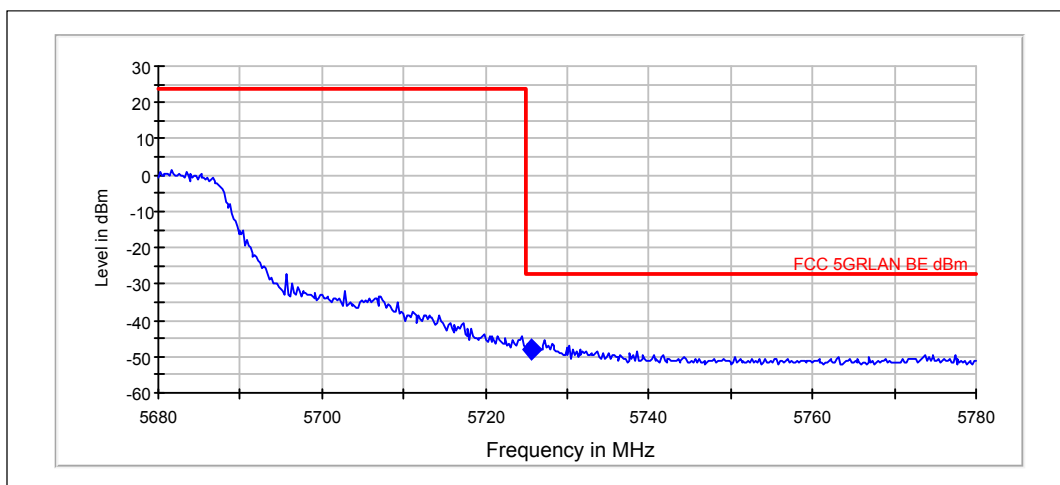
Peak (RBW: 1 MHz, VBW: 3 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
5468.798	58.81	872.168	54.36	4.45	9.4	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
5459.78	37.8	77.643	33.38	4.42	16.2	54	PASSED

Channel 132+136 / 5670MHz

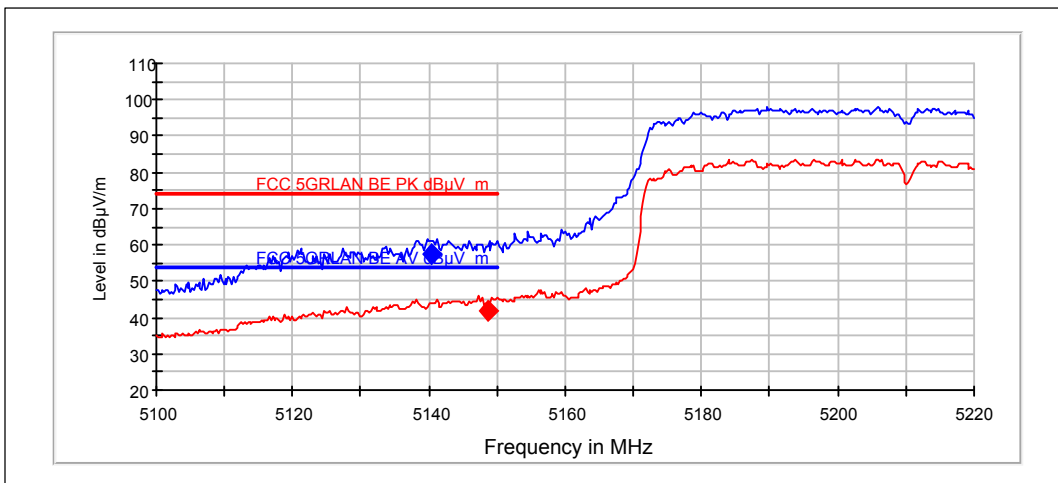


Peak (RBW: 1 MHz, VBW: 3 MHz)

Frequency [MHz]	P [dBm]	P [μ W]	P _{MEAS} [dBm]	A _{TOT} [dB]	Margin	Limit [dBm]	Results
5725.705	-47.99	0.0159	-62.59	14.6	21	-27	PASSED

8.3.5 802.11ac, BPSK modulation, 29.3 / 32.5 Mbps data rate.

Channel 36-48 / 5210MHz



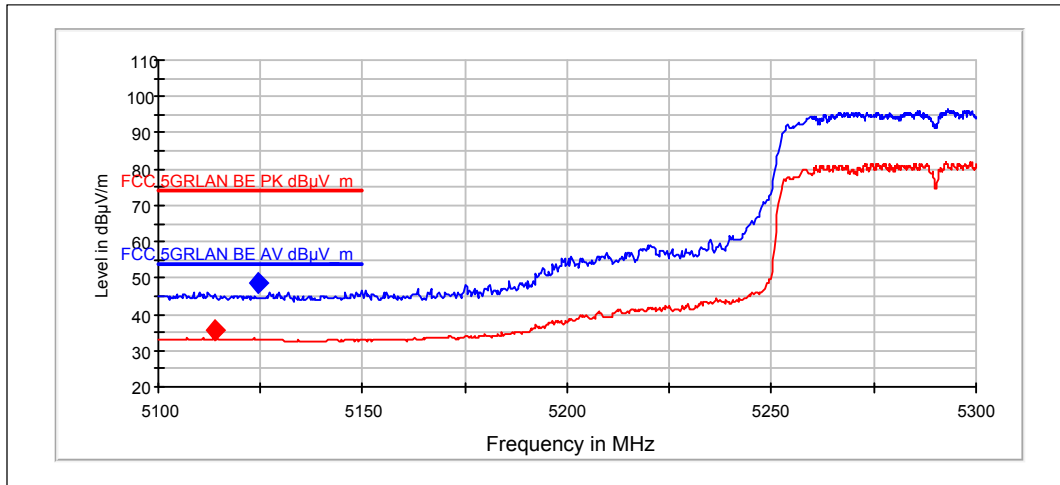
Peak (RBW: 1 MHz, VBW: 3 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
5140.381	57.42	743.276	52.32	5.1	16.6	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
5148.697	41.62	120.476	36.48	5.14	12.4	54	PASSED

Channel 52-64 / 5290MHz



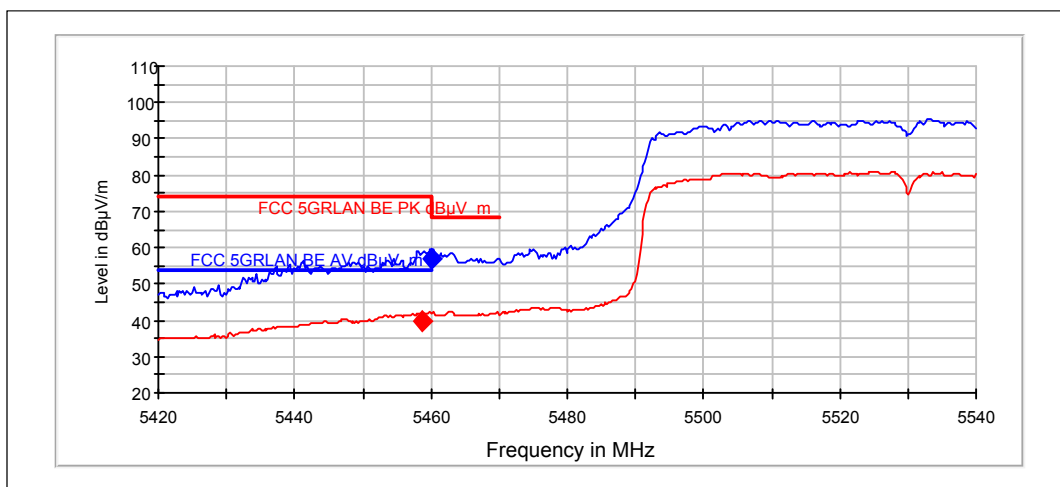
Peak (RBW: 1 MHz, VBW: 3 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
5124.574	48.43	263.846	42.99	5.44	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
5113.602	35.54	59.862	30.01	5.53	18.5	54	PASSED

Channel 100-112 / 5530MHz



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

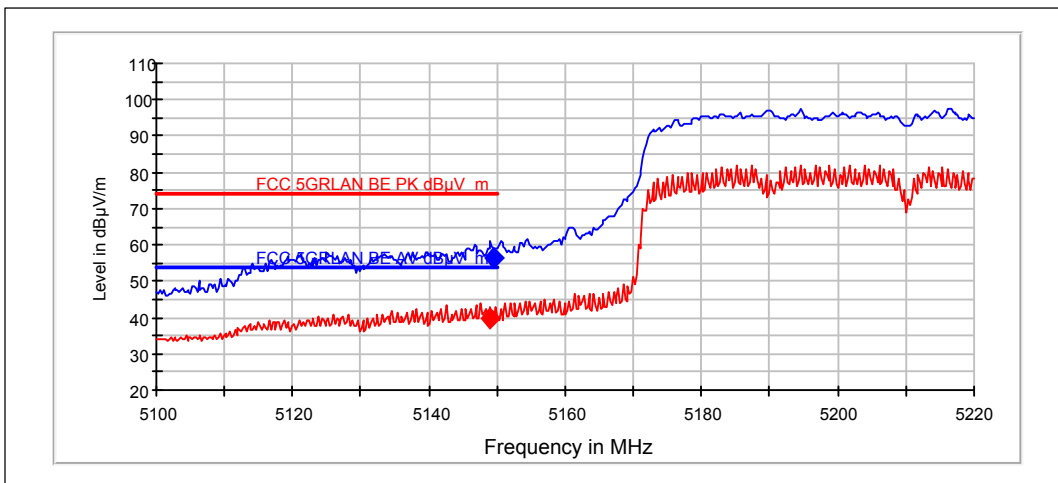
Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
5460.18	56.8	692.07	52.38	4.43	11.4	68	PASSED

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
5458.778	39.98	99.793	35.56	4.42	14	54	PASSED

8.3.6 802.11ac, QPSK modulation, 87.8 / 97.5 Mbps data rate.

Channel 36-48 / 5210MHz



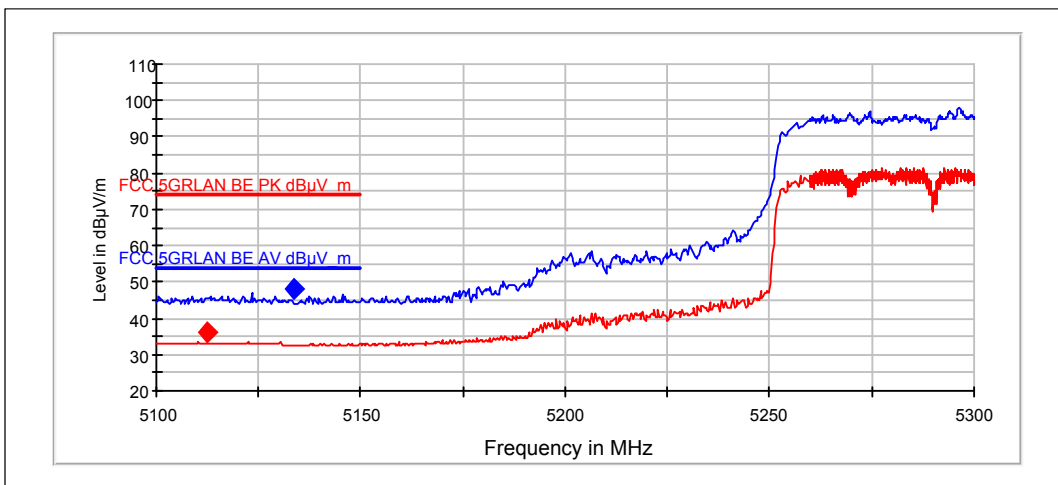
Peak (RBW: 1 MHz, VBW: 3 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
5149.399	56.32	654.787	51.17	5.15	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
5148.998	39.95	99.415	34.81	5.14	14.1	54	PASSED

Channel 52-64 / 5290MHz



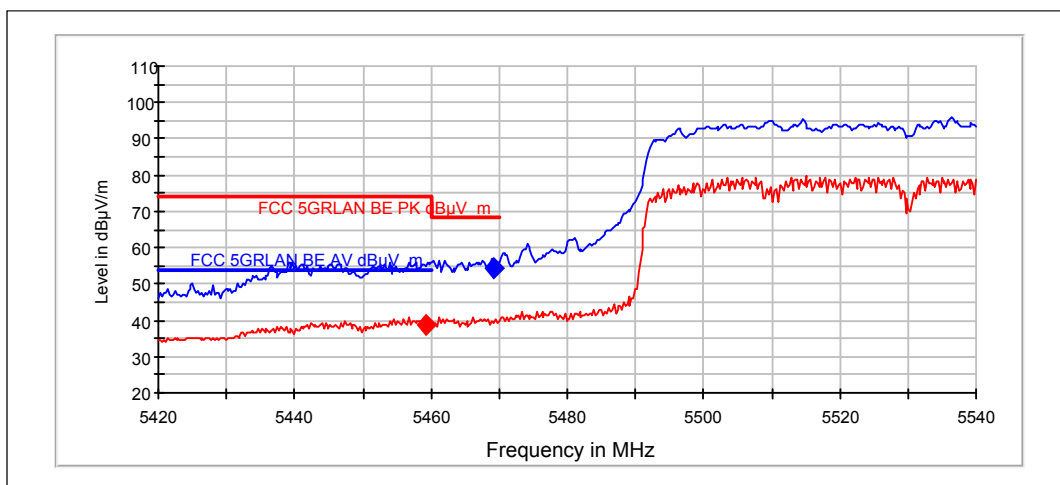
Peak (RBW: 1 MHz, VBW: 3 MHz)

Frequency [MHz]	E [dBμV/m]	E [μV/m]	U _{RX} [dBμV]	A _{TOT} [dB]	Margin	Limit [dBμV/m]	Results
5133.442	48.31	260.286	43.08	5.23	25.7	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
5112.5	36	63.088	30.46	5.54	18	54	PASSED

Channel 100-112 / 5530MHz



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
5469.299	54.28	517.726	49.83	4.45	13.9	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
5459.178	38.96	88.716	34.54	4.42	15	54	PASSED

9. Test Equipment

9.1. Conducted measurements

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

9.2. Radiated measurements

Eq. No	Equipment	Type	Manufacturer	Used in
1917	Communication Tester	CMTA84	R&S	15B
1984	Antenna	BBHA 9120 D	Schwarzbeck	22/24/27, 15C, 15B
2009	Signal Generator	SMP 22	R&S	22/24/27, 15C, 15B
2027	CDN	M2 (modified) DC1	MEB	22/24/27, 15C, 15B
2028	CDN	M3 (modified) DC2	MEB	22/24/27, 15C, 15B
2029	Power Supply	PL330	Thurlby	22/24/27, 15C
2043	Band Reject Filter	WRCA824/849-0,2-6SS	Wainwright	22
2135	CDN	CDN 801-M3	Lüthi	22/24/27, 15C, 15B
2140	Antenna	EMCO93110B	EMCO	22/24/27, 15C
2142	Antenna	3146	EMCO	22/24/27, 15C
2156	Communication Tester	CMU200	R&S	22/24/27, 15C, 15B
2176	CDN	CDN 801-M3	Lüthi	22/24/27, 15C, 15B
2180	Communication Tester	CMU200	R&S	22/24/27, 15C, 15B
2347	Communication Tester	CMU200	R&S	22/24/27, 15C, 15B
2353	Receiver	ESIB26	R&S	22/24/27, 15C, 15B
2357	Band Reject Filter	WRCG2400/2483-2390/2493-35/10SS	Wainwright	15C
2361	Anechoic Chamber	3 m Semi / Full Anechoic Chamber	Euroshield	22/24/27, 15C, 15B
2364	Band Reject Filter	WRCG1877/1883 - 1870/1890-40/6SS	Wainwright	24
2384	Band Reject Filter	WRCG832/838-825/845-40/5SS	Wainwright	22
2388	Bluetooth Tester	CBT	R&S	15B
2389	Signal Generator	SMJ 100A	R&S	15B
2391	Band Reject Filter	WRCG1729.4/1735.4-1722.4/1742.4-40/6SS	Wainwright	27
6009	GPS Antenna	SA-700	Chronos	15C
6010	GPS Network amplifier	NLA20FPDC	GPS Networking, Inc	15C
6011	GPS signal Splitter	LDCBS1x4	GPS Networking, Inc	15C
6014	Substitute Calibration Cable	Sucoflex 104PB	Suhner	-
6017	Antenna	SBA 9113	Schwarzbeck	22 / 24 / 27
6037	Data Logger	175-H2	Testo	22/24/27, 15C, 15B
6038	Data Logger	Testo 580	Testo	22/24/27, 15C, 15B
6039	USB Interface	5541765	Testo	22/24/27, 15C, 15B
6087	Antenna	BBHA 9120D	Scharzbeck	22/24/27, 15C
6088	Antenna	VUBA 9117	Scharzbeck	22/24/27, 15C
6089	Antenna	HFH2-Z2	R&S	15C, 15B
6094	Communication Tester	CMW500	R&S	22/24/27, 15C, 15B
6103	Bluetooth tester	CBT	R&S	15B
6113	Signal Generator	SMF100A	R&S	22/24/27, 15C 15B
6115	Open switch and control unit	OSP 130	R&S	22/24/27, 15C 15B
6116	Open switch and control unit	OSP 150	R&S	22/24/27, 15C 15B
6130	Notch Filter	WRCD1880-1.1.25/50-10SS	Wainwright	22/24/27
6131	Notch Filter	WRCT902.4-0.4/40-8SS	Wainwright	-
6135	Notch Filter	WRCJV2531/2539-2523/2547-60/12SS	Wainwright	22/24/27
10479	Communication Tester	CMW500	R&S	22/24/27, 15C, 15B
-	BT / WLAN Antenna	SPA 2400/75/9/0/V	Huber-Suhner	15C, 15B
-	BT / WLAN Antenna	SPA 2400/75/9/0/V	Huber-Suhner	15C, 15B
-	RF immunity / Emission Software	EMC32	R&S	22/24/27, 15C, 15B