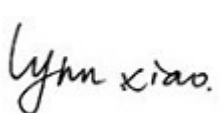
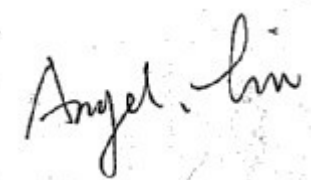
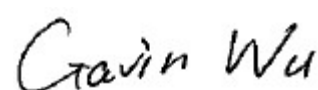


GRGTEST**TEST REPORT**

Report No.:	EM201200254-4	Application No.:	ZJ00016147
Client:	Shenzhen Landing Electronics Co., Ltd.		
Address:	A409-410 Nanshan Medical Instrument Industry Park, 1019# Nanhai Road, Nanshan District, Shenzhen, Guangdong, 518067, P.R. China		
Sample Description:	300Mbps Wireless ADSL2/2+ Router		
Model:	GD-W913ND		
FCC ID:	O5OGD-W913N		
Test Specification:	FCC Part 15, Subpart C (Section 15.247)		
Issue Date:	2012-06-29		
Test Result:	Pass.		
Prepared By:	Reviewed By:	Approved By:	
Lynn Xiao / Test Engineer	Angel Liu / Technical Assistance	Gavin Wu / Manager	
			
Date: 2012-06-29	Date: 2012-06-29	Date: 2012-06-29	
Other Aspects:			
/			
Abbreviations: ok / P = passed; fail / F = failed; n.a. / N = not applicable			
The test result in this test report refers exclusively to the presented test sample. This report shall not be reproduced except in full, without the written approval of GRGT.			

GRG Metrology and Test Co., Ltd.

Address: 163, Pingyun Road, West of Huangpu Avenue, Guangzhou, Guangdong, P.R. China

Tel: +86-20-38699960

Fax: +86-20-38695185

Email: cert-center@grg.net.cn<http://www.grgtest.com>

Ver.: 1.0 / 01.Jan.2011

FCC ID : O5OGD-W913N

DIRECTIONS OF TEST

1. This station carries out test task according to the national regulation of verifications which can be traced to National Primary Standards and BIPM.
2. The test report merely corresponds to the test sample. It is not permitted to copy extracts of these test result without the written permission of the test laboratory.
3. If there is any objection concerning the test, the client should inform the laboratory within 15 days from the date of receiving the test report.

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1. TEST RESULT SUMMARY

Section B of FCC Part 15.247:2009			
Standard	Item	Limit / Severity	Result
FCC Part 15, Subpart C (15.247)	Antenna Requirement	§15.203	PASS
	Conducted Emissions	§15.207 (a)	PASS
	Spurious Emissions at Antenna Port	§15.247(d)	PASS
	Restricted Bands	§15.205	PASS
	Spurious Emissions	§15.209, §15.205, §15.247(d)	PASS
	6 dB Bandwidth	§15.247 (a)(2)	PASS
	Maximum Peak Output Power	§15.247(b)(3)	PASS
	100kHz Bandwidth of Frequency Band Edge	§15.247(d)	PASS
	Power Spectral Density	§15.247(e)	PASS

2. GENERAL DESCRIPTION OF EUT

2.1 APPLICANT

Name: Shenzhen Landing Electronics Co., Ltd.
Address: A409-410 Nanshan Medical Instrument Industry Park, 1019# Nanhai Road, Nanshan District, Shenzhen, Guangdong, 518067, P.R. China

2.2 MANUFACTURER

Name: Shenzhen Gongjin Electronics Co., Ltd.
Address: B116, B118, A211-A213, B201-B213, A311-A313, B411-413, BF08-09 Nanshan Medical Instrument Industry Park, 1019# Nanhai Road, Nanshan District, Shenzhen, Guangdong, 518067, P.R. China

2.3 BASIC DESCRIPTION OF EQUIPMENT UNDER TEST

Equipment: 300Mbps Wireless ADSL2/2+ Router
Model No.: GD-W913ND
Adding Model: /
Trade Name: GOLDWEB
Power Supply: AC 120V/60Hz
Adapter: Have two models for using from Shenzhen Gongjin Electronics Co., Ltd.
Model 1 Product Name: Adapter
Model: RD1201000-C55-2MG
Input: 100-240V~ 50/60Hz 0.6A MAX
Output: 12VDC 1.0A
Model 2 Product Name: Switching adapter
Model: S12A02-120A100-P4
Input: 100-240V~ 50/60Hz max 0.5A
Output: 12VDC 1A
Frequency Range 2412MHz~2462MHz: 802.11b; 802.11g; 802.11n(HT20)
2422MHz~2452 MHz: 802.11n(HT40)
Channel: Channel with 5MHz step
Antenna gain: 3 dBi
Type of emission WIFI
Modulation type DSSS (802.11b) , OFDM (802.11g/HT20/HT40)
Note: /

3. LABORATORY AND ACCREDITATIONS

3.1 LABORATORY

The tests and measurements refer to this report were performed by Guangzhou GRG Metrology and Test CO., LTD.

Add. : 163 Pingyun Rd, West of Huangpu Ave, Guangzhou, 510656, P. R. China

Telephone: +86-20-38699959, 38699960, 38699961

Fax : +86-20-38695185

3.2 ACCREDITATIONS

Our laboratories are accredited and approved by the following approval agencies according to ISO/IEC 17025.

USA	FCC Listed Lab (No. 688188)
China	CNAS (No.L0446)
China	DILAC (No.DL175)
Canada	Registration No.:8355A-1

3.3 MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

Measurement		Frequency	Uncertainty
Radiated Emission	Horizontal	30MHz ~ 1000MHz	4.2dB
		1GHz ~ 26.5GHz	4.2dB
	Vertical	30MHz ~ 1000MHz	4.4dB
		1GHz ~ 26.5GHz	4.4dB
Conducted Emission		9kHz ~ 30MHz	3.1 dB

This uncertainty represents an expanded uncertainty factor of $k=2$.

3.4 LIST OF USED TEST EQUIPMENT AT GRGT

Name of Equipment	Manufacturer	Model	Serial Number	Calibration Due
Conducted Emissions				
EMI Receiver	R&S	ESU40	100529	2012-09-26
L.I.S.N	SCHWARZBECK	NSLK 8127	8127450	2012-08-21
Spurious Emissions at Antenna Port				
Receiver	R&S	ESU40	100106	2012-09-26
Restricted Bands				
Receiver	R&S	ESU40	100106	2012-09-26
Spurious Emissions				
Receiver	R&S	ESU40	100106	2012-09-26
Signal Generator	R&S	SML03	103002	2012-09-02
Biconical Log-periodic Antenna	ETS.LINDGREN	3142C	00075971	2012-07-29
Horn antenna	SCHWARZBECK	BBHA9120D	D752	2013-10-14
6 dB Bandwidth				
Receiver	R&S	ESU40	100106	2012-09-26
Maximum Peak Output Power				
Receiver	R&S	ESU40	100106	2012-09-26
100kHz Bandwidth of Frequency Band Edge				
Receiver	R&S	ESU40	100106	2012-09-26
Power Spectral Density				
Receiver	R&S	ESU40	100106	2012-09-26

NOTE: The calibration interval of the above test instruments is 12 months.

4. ANTENNA REQUIREMENT

The EUT antenna is plug-in antenna. Antenna gain is 3dBi .which accordance 15.203.is considered sufficient to comply with the provisions of this section



Antenna



5. CONDUCTED EMISSION MEASUREMENT

5.1 LIMITS

Frequency range	Limits (dB μ V)	
	Quasi-peak	Average
150kHz ~ 0.5MHz	66 ~ 56	56 ~ 46
0.5 MHz ~ 5 MHz	56	46
5 MHz ~ 30 MHz	60	50

NOTE: (1) The lower limit shall apply at the transition frequencies.

(2) The limit decreases in line with the logarithm of the frequency in the range of 150 kHz to 0.5MHz.

5.2 TEST PROCEDURES

Procedure of Preliminary Test

For measurement of the disturbance voltage the equipment under test (EUT) is connected to the power supply mains and any other extended network via one or more artificial network(s). An EUT, whether intended to be grounded or not, and which is to be used on a table is configured as follows:

- Either the bottom or the rear of the EUT shall be at a controlled distance of 40 cm from a reference ground plane. This ground plane is normally the wall or floor of a shielded room. It may also be a grounded metal plane of at least 2 m by 2 m. This is physically accomplished as follows:

- 1) place the EUT on a table of non-conducting material which is at least 80 cm high. Place the EUT so that it is 40 cm from the wall of the shielded room, or

- 2) place the EUT on a table of non-conducting material which is 40 cm high so that the bottom of the EUT is 40 cm above the ground plane;

- All other conductive surfaces of the EUT shall be at least 80 cm from the reference ground plane;

- The EUT are placed on the floor that one side of the housings is 40 cm from the vertical reference ground plane and other metallic parts;

- Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth forming a bundle 30 cm to 40 cm long, hanging approximately in the middle between the ground plane and the table.

- I/O cables that are connected to a peripheral shall be bundled in the centre. The end of the cable may be terminated if required using correct terminating impedance. The total length shall not exceed 1 m.

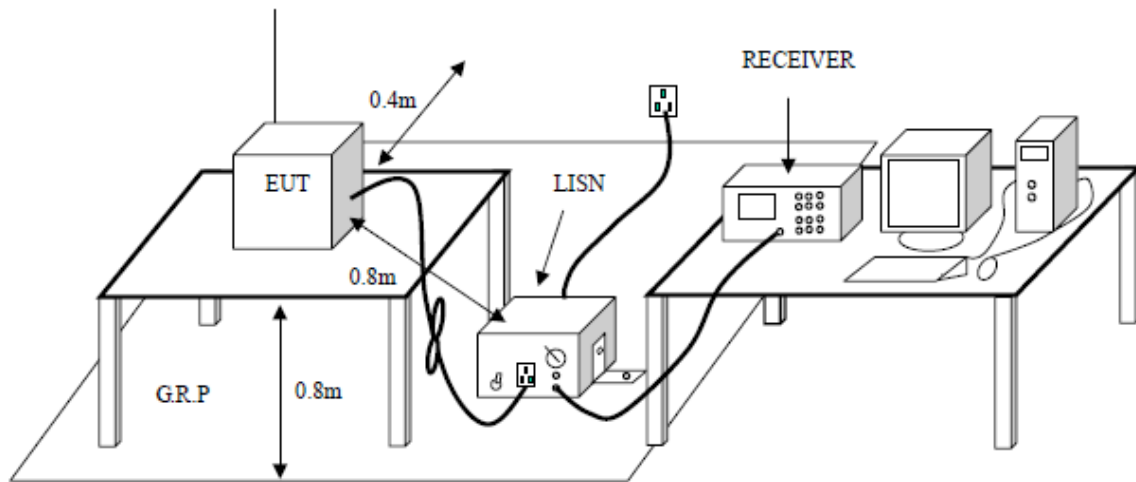
The test mode(s) described in Item 2.4 were scanned during the preliminary test. After the preliminary scan, we found the test mode described in Item 2.4 producing the highest emission level. The EUT configuration and cable configuration of the above highest emission levels were recorded for reference of the final test.

Procedure of Final Test

EUT and support equipment were set up on the test bench as per the configuration with highest emission level in the preliminary test. A scan was taken on both power lines, recording at least the six highest emissions. Emission frequency and amplitude were recorded into a computer in which correction factors were used to calculate the emission level and

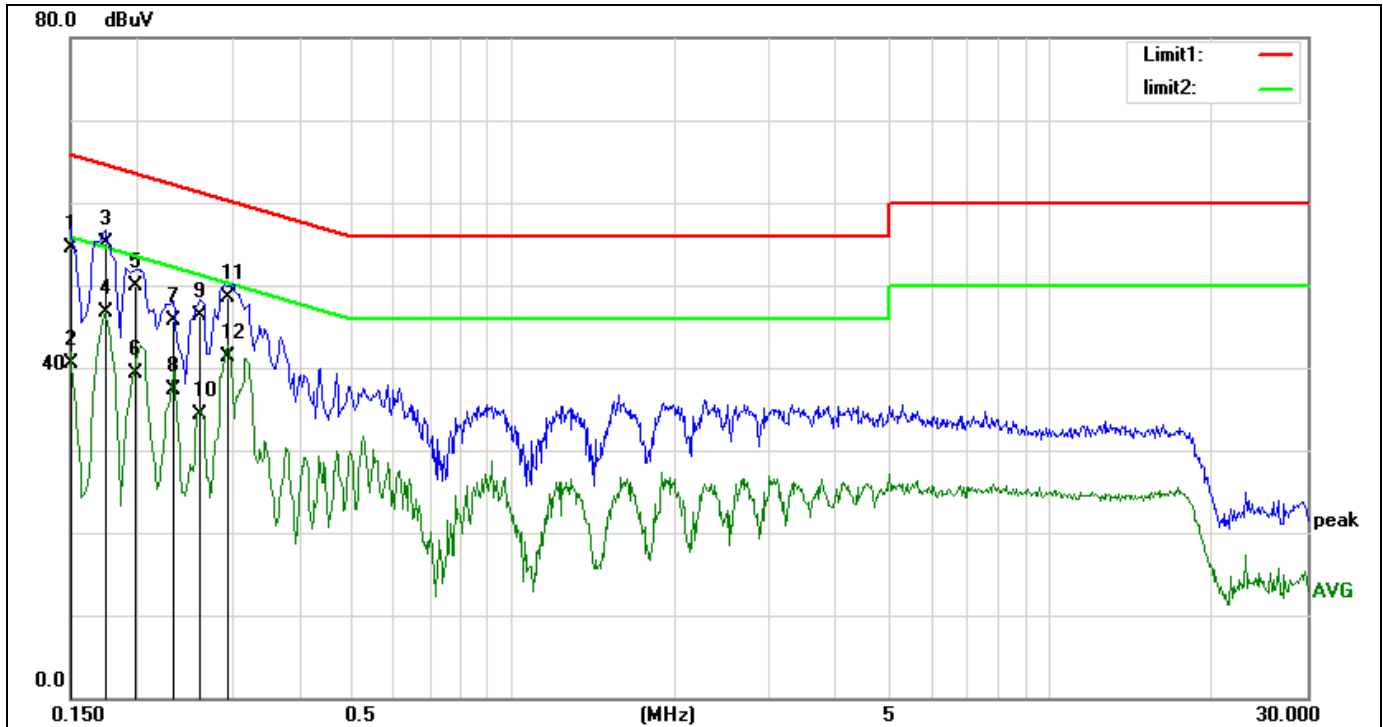
compare reading to the applicable limit. The test data of the worst-case condition(s) was recorded.

5.3 TEST SETUP



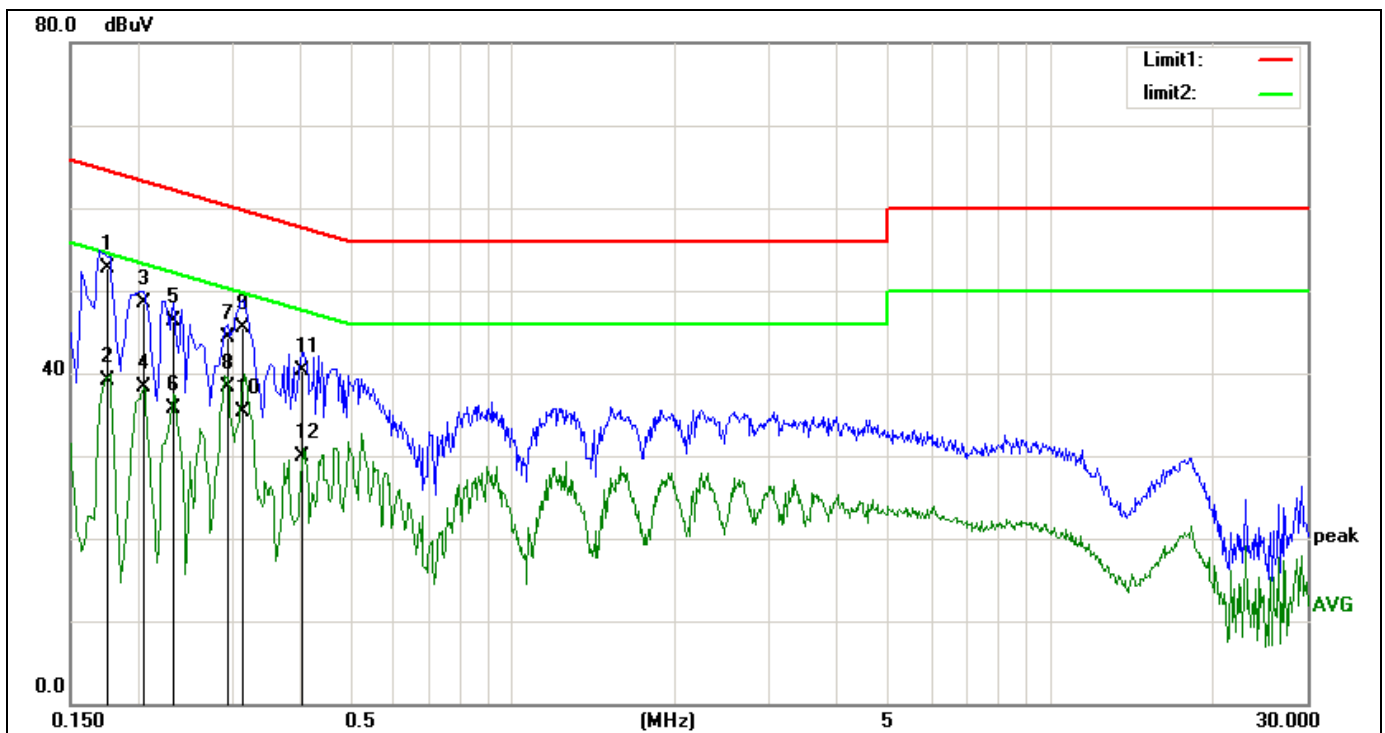
5.4 TEST RESULTS

Project No.:	ZJ00016147	Probe:	L1
Standard:	(CE)FCC PART 15 class B _QP	Power Source:	AC 120V/60Hz
Test item:	Conduction Test	Date:	2012-6-12
Temp./Hum.(%RH):	20/51%RH	Time:	16:28:42
EUT:	W913		
Model:	Transmitting	Test Result:	Pass
Note:			



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Remark
1	0.1500	52.68	1.92	54.60	65.99	-11.39	QP
2	0.1500	38.58	1.92	40.50	55.99	-15.49	AVG
3	0.1740	53.53	1.57	55.10	64.76	-9.66	QP
4	0.1740	45.13	1.57	46.70	54.76	-8.06	AVG
5	0.1980	48.87	1.13	50.00	63.69	-13.69	QP
6	0.1980	38.17	1.13	39.30	53.69	-14.39	AVG
7	0.2340	44.83	0.97	45.80	62.30	-16.50	QP
8	0.2340	36.43	0.97	37.40	52.30	-14.90	AVG
9	0.2620	45.32	0.98	46.30	61.36	-15.06	QP
10	0.2620	33.32	0.98	34.30	51.36	-17.06	AVG
11	0.2940	47.68	0.92	48.60	60.41	-11.81	QP
12	0.2940	40.38	0.92	41.30	50.41	-9.11	AVG

Project No.:	ZJ00016147	Probe:	N
Standard:	(CE)FCC PART 15 class B _QP	Power Source:	AC 120V/60Hz
Test item:	Conduction Test	Date:	2012-6-12
Temp./Hum.(%RH):	20/51%RH	Time:	16:33:07
EUT:	W913	Test Result:	Pass
Model:	Transmitting		
Note:			



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Remark
1	0.1758	51.26	1.54	52.80	64.68	-11.88	QP
2	0.1758	37.66	1.54	39.20	54.68	-15.48	AVG
3	0.2040	47.58	1.02	48.60	63.44	-14.84	QP
4	0.2040	37.38	1.02	38.40	53.44	-15.04	AVG
5	0.2340	45.33	0.97	46.30	62.30	-16.00	QP
6	0.2340	34.73	0.97	35.70	52.30	-16.60	AVG
7	0.2940	43.48	0.92	44.40	60.41	-16.01	QP
8	0.2940	37.38	0.92	38.30	50.41	-12.11	AVG
9	0.3116	44.71	0.89	45.60	59.93	-14.33	QP
10	0.3116	34.51	0.89	35.40	49.93	-14.53	AVG
11	0.4060	39.58	0.72	40.30	57.73	-17.43	QP
12	0.4060	29.28	0.72	30.00	47.73	-17.73	AVG

6. RADIATED ELECTROMAGNETIC DISTURBANCE

6.1 LIMITS

Frequency (MHz)	Quasi-peak(dB μ V/m)
30 ~ 88	40
88~216	43.5
216 ~ 960	46
Above 960	54

NOTE: (1) The lower limit shall apply at the transition frequencies.

Frequency (GHz)	Quasi-peak(dB μ V/m)
1 ~ 26.5	74
1~ 26.5	54

6.2 TEST PROCEDURES

Procedure of Preliminary Test

Radiated emission tests shall be made with the receive or transmit antenna located at a horizontal distance of 3 m plus half of the maximum width of the EUT being tested, measured from the centre of the EUT. The tests shall be performed with the equipment configured as closely as possible to its typical, practical operation. Unless stated otherwise, cables and wiring shall be as specified by the manufacturer and the equipment shall be in its housing (or cabinet) with all covers and access panels in place. Any deviation from normal EUT operating conditions shall be included in the test report.

The EUT (on a non-conductive support structure, where applicable) shall be placed on a remotely operated turntable, to allow the EUT to be rotated. The height of the EUT above the ground plane shall be according to the following requirements.

- Table-top equipment is placed on a non-conductive set-up table with height $0,8\text{ m} \pm 0,01\text{ m}$, ANSI C63.4 specifies the method to determine the impact of the non-conductive set-up table on test results.
- Floor-standing equipment is placed on a non-conductive support, as specified in the applicable product standard. If there are no EUT height placement requirements in the product standard, the EUT shall be placed on a non-conductive support at a height of 5 cm to 15 cm above the ground plane.

Interface cables, loads, and devices should be connected to at least one of each type of the interface ports of the EUT and, where practical, each cable shall be terminated in a device typical for its actual use. Where there are multiple interface ports of the same type, a typical number of these devices shall be connected to devices or loads. It is sufficient to connect only one of the loads, provided that it can be shown, for example by preliminary testing, that the connection of further ports would not significantly increase the level of disturbance (that is, more than 2 dB) or significantly degrade the immunity level.

The test mode(s) described in Item 2.4 were scanned during the preliminary test. After the preliminary scan, we found the test mode described in Item 2.4 producing the highest emission level. The EUT and cable configuration, antenna position, polarization and turntable position of the above highest emission level were recorded for the final test.

Procedure of Final Test

EUT and support equipment were set up on the turntable as per the configuration with highest

emission level in the preliminary test. The Analyzer / Receiver scanned from 30MHz to 1000MHz. Emissions were scanned and measured rotating the EUT to 360 degrees, varying cable placement and positioning the antenna 1 to 4 meters above the ground plane, in both the vertical and the horizontal polarization, to maximize the emission reading level. Record at least six highest emissions. Emission frequency, amplitude, antenna position, polarization and turntable position were recorded into a computer in which correction factors were used to calculate the emission level and compare reading to the applicable limit and only QP reading is presented. The test data of the worst-case condition(s) was recorded.

Procedure of Final Test

EUT and support equipment were set up on the test bench as per the configuration with highest emission level in the preliminary test. A scan was taken on both power lines, recording at least the six highest emissions. Emission frequency and amplitude were recorded into a computer in which correction factors were used to calculate the emission level and compare reading to the applicable limit. The test data of the worst-case condition(s) was recorded.

6.3 TEST SETUP

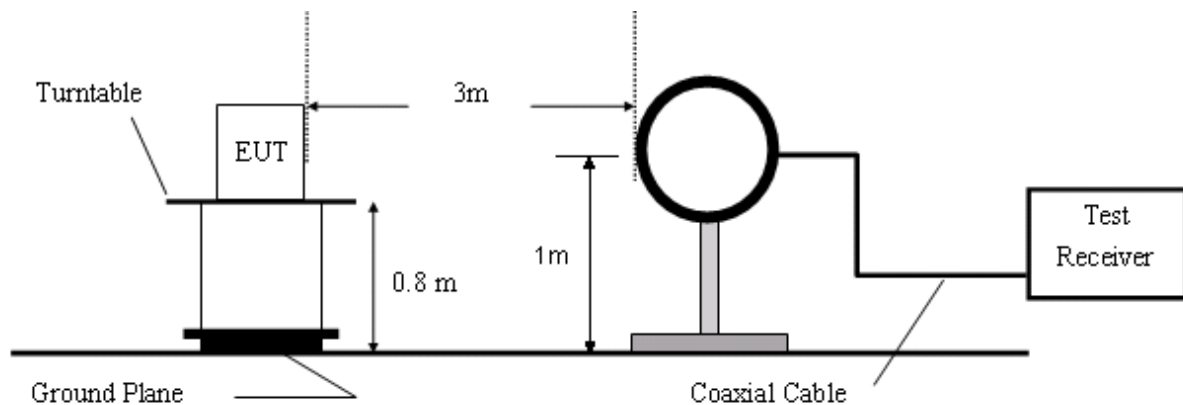


Figure 1. 9KHz to 30MHz radiated emissions test configuration

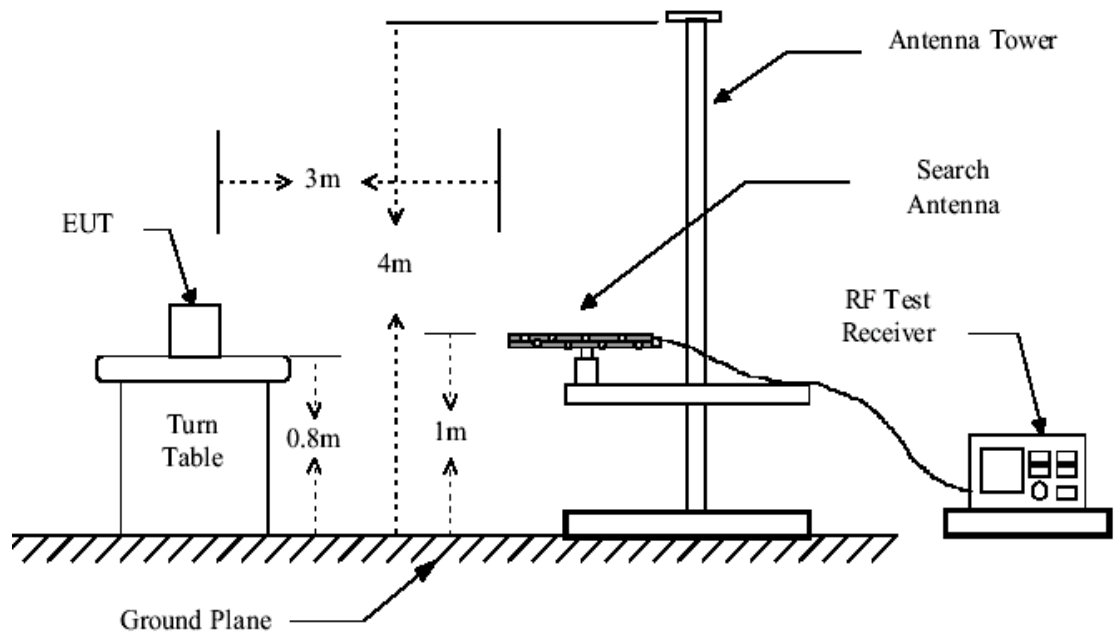


Figure 2. 30MHz to 1GHz radiated emissions test configuration

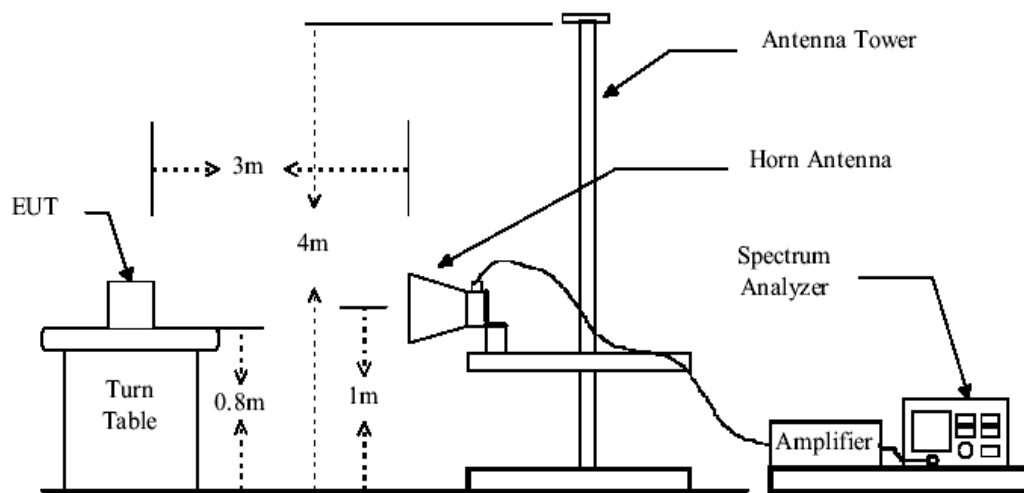
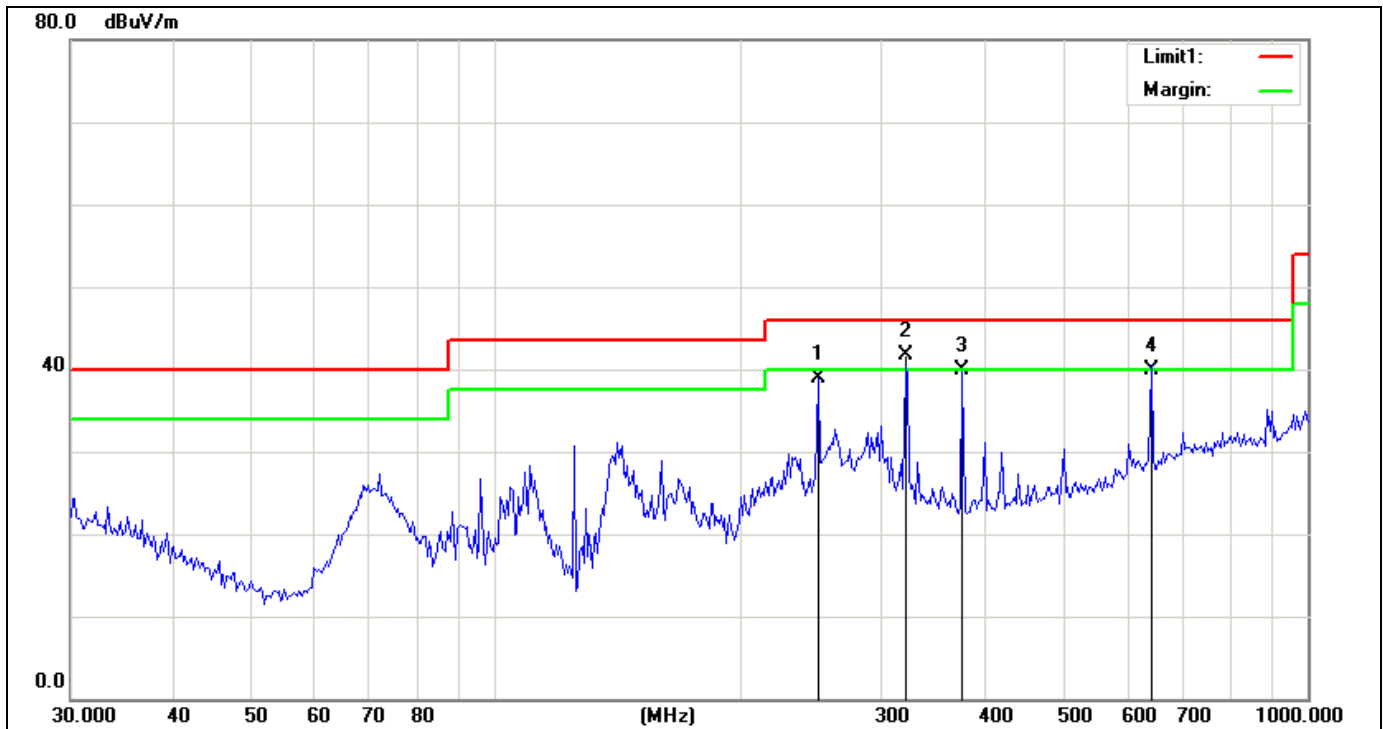


Figure 3. Above 1GHz radiated emissions test configuration

6.4 TEST RESULTS

Project No.:	ZJ00016147	Polarization:	Horizontal
Standard:	(RE)FCC PART 15 class B 3m	Power Source:	AC 120V/60Hz
Test item:	Radiation Test	Date:	2012-6-12
Temp./Hum. (%RH):	20/50%RH	Time:	10:10:54
EUT:	W913	Distance:	3m
Model:		Test Result:	Pass
Note:	fcc 802.11b 2412		

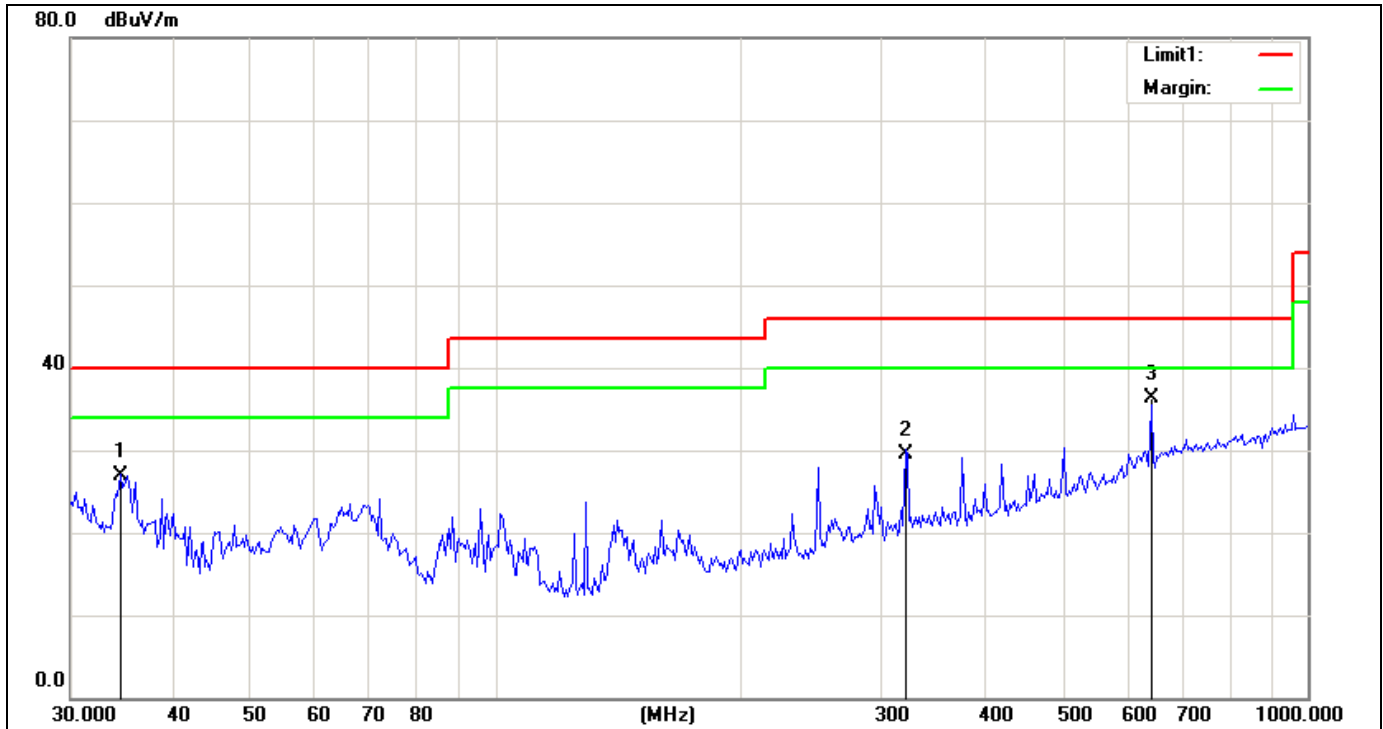


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	249.5707	25.24	13.66	38.90	46.00	-7.10	QP
2	319.5776	25.50	16.20	41.70	46.00	-4.30	QP
3	376.1413	22.18	17.72	39.90	46.00	-6.10	QP
4	641.5044	17.20	22.80	40.00	46.00	-6.00	QP

Emission above 1GHz:

No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4830.172	64.16	3.59	67.75	74.00	-6.25	peak
2	4830.172	45.81	3.59	49.40	54.00	-4.60	AVG
3	10229.411	33.18	17.52	50.70	74.00	-23.30	peak
4	10229.411	19.08	17.52	36.60	54.00	-17.40	AVG
5	16948.099	33.57	22.53	56.10	74.00	-17.90	peak
6	16948.099	19.57	22.53	42.10	54.00	-11.90	AVG

Project No.:	ZJ00016147	Polarization:	Vertical
Standard:	(RE)FCC PART 15 class B 3m	Power Source:	AC 120V/60Hz
Test item:	Radiation Test	Date:	2012-6-12
Temp./Hum.(%RH):	20/50%RH	Time:	10:05:23
EUT:	W913	Distance:	3m
Model:		Test Result:	Pass
Note:	fcc 802.11b 2412		

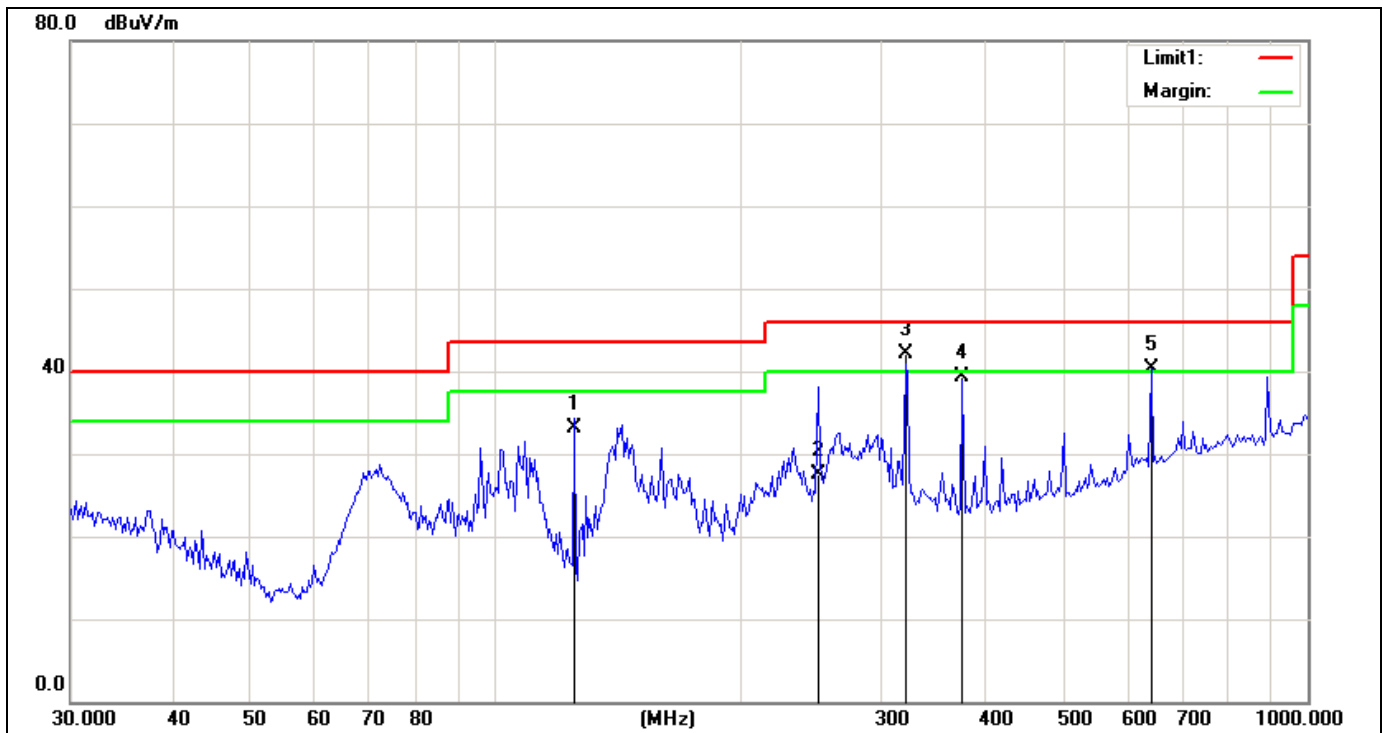


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	34.5248	10.22	16.68	26.90	40.00	-13.10	QP
2	319.5776	13.30	16.20	29.50	46.00	-16.50	QP
3	641.5044	13.50	22.80	36.30	46.00	-9.70	QP

Emission above 1GHz:

No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4830.172	49.31	3.59	52.90	74.00	-21.10	peak
2	4830.172	37.51	3.59	41.10	54.00	-12.90	AVG
3	10276.904	33.38	17.42	50.80	74.00	-23.20	peak
4	10276.904	19.28	17.42	36.70	54.00	-17.30	AVG
5	17026.785	33.19	22.71	55.90	74.00	-18.10	peak
6	17026.785	19.19	22.71	41.90	54.00	-12.10	AVG

Project No.:	ZJ00016147	Polarization:	Horizontal
Standard:	(RE)FCC PART 15 class B 3m	Power Source:	AC 120V/60Hz
Test item:	Radiation Test	Date:	2012-6-12
Temp./Hum.(%RH):	20/50%RH	Time:	9:47:06
EUT:	W913	Distance:	3m
Model:		Test Result:	Pass
Note:	FCC 802.11b 2437		

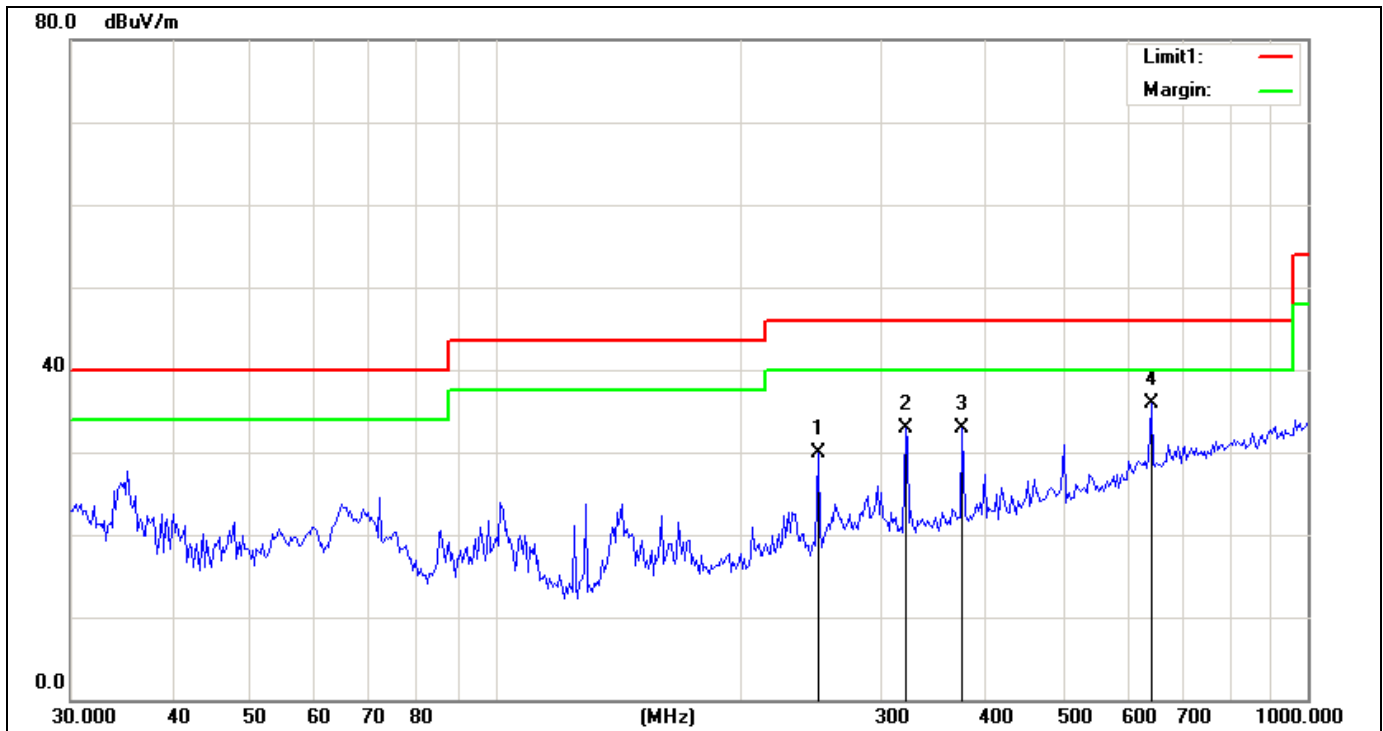


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	125.0291	24.34	8.76	33.10	43.50	-10.40	QP
2	249.5708	13.84	13.66	27.50	46.00	-18.50	QP
3	319.5776	25.90	16.20	42.10	46.00	-3.90	QP
4	376.1414	21.68	17.72	39.40	46.00	-6.60	QP
5	641.5044	17.60	22.80	40.40	46.00	-5.60	QP

Emission above 1GHz:

No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4875.127	60.81	3.69	64.50	74.00	-9.50	peak
2	4875.127	49.21	3.69	52.90	54.00	-1.10	AVG
3	10276.904	32.88	17.42	50.30	74.00	-23.70	peak
4	10276.904	19.28	17.42	36.70	54.00	-17.30	AVG
5	17185.254	33.01	22.59	55.60	74.00	-18.40	peak
6	17185.254	19.11	22.59	41.70	54.00	-12.30	AVG

Project No.:	ZJ00016147	Polarization:	Vertical
Standard:	(RE)FCC PART 15 class B 3m	Power Source:	AC 120V/60Hz
Test item:	Radiation Test	Date:	2012-6-12
Temp./Hum.(%RH):	20/50%RH	Time:	9:57:25
EUT:	W913	Distance:	3m
Model:		Test Result:	Pass
Note:	fcc 802.11b 2437		

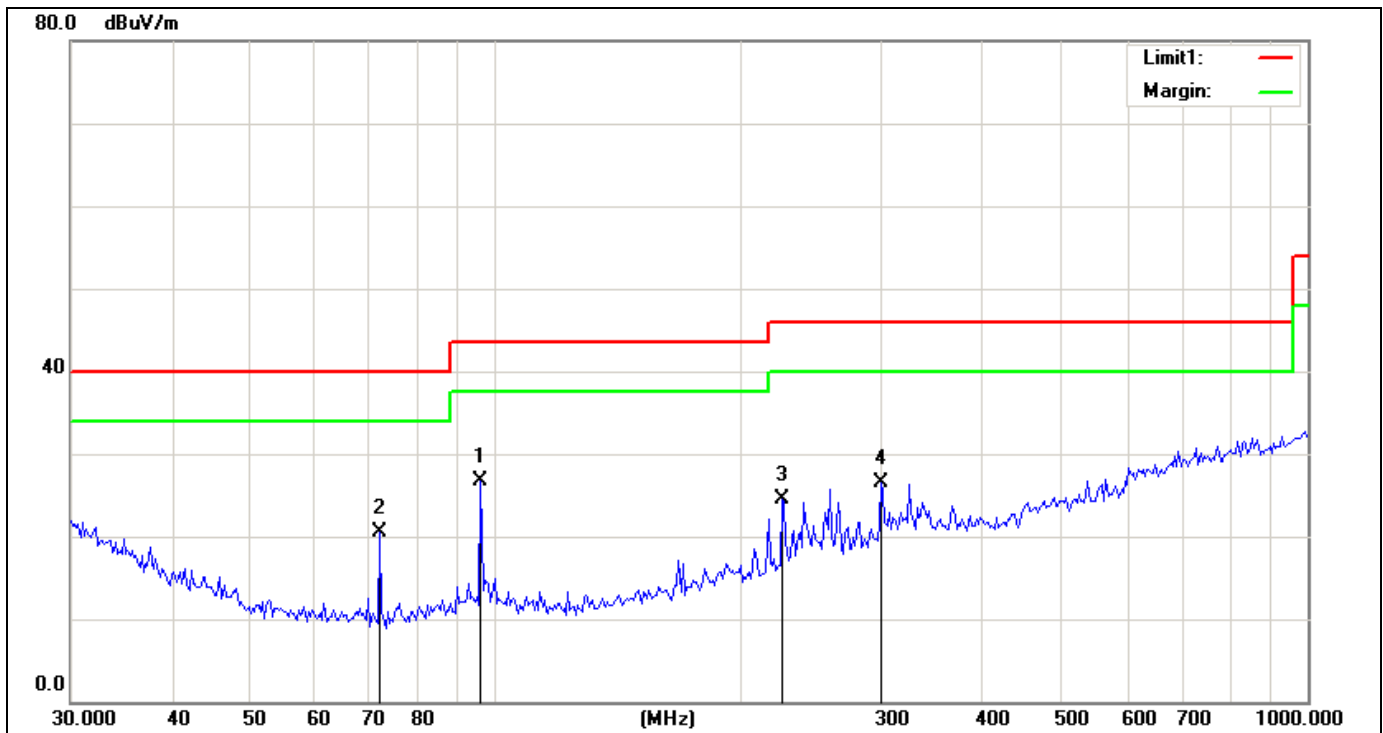


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	249.5707	16.27	13.66	29.93	46.00	-16.07	QP
2	319.5776	16.79	16.20	32.99	46.00	-13.01	QP
3	376.1413	15.15	17.72	32.87	46.00	-13.13	QP
4	641.5044	13.15	22.80	35.95	46.00	-10.05	QP

Emission above 1GHz:

No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4875.127	50.41	3.69	54.10	74.00	-19.90	peak
2	4875.127	38.01	3.69	41.70	54.00	-12.30	AVG
3	10229.411	32.88	17.52	50.40	74.00	-23.60	peak
4	10229.411	18.98	17.52	36.50	54.00	-17.50	AVG
5	16869.777	32.87	22.23	55.10	74.00	-18.90	peak
6	16869.777	19.17	22.23	41.40	54.00	-12.60	AVG

Project No.:	ZJ00016147	Polarization:	Horizontal
Standard:	(RE)FCC PART 15 class B 3m	Power Source:	AC 120V/60Hz
Test item:	Radiation Test	Date:	2012-6-12
Temp./Hum.(%RH):	20/50%RH	Time:	10:56:22
EUT:	W913	Distance:	3m
Model:		Test Result:	Pass
Note:	fcc 802.11b 2462		

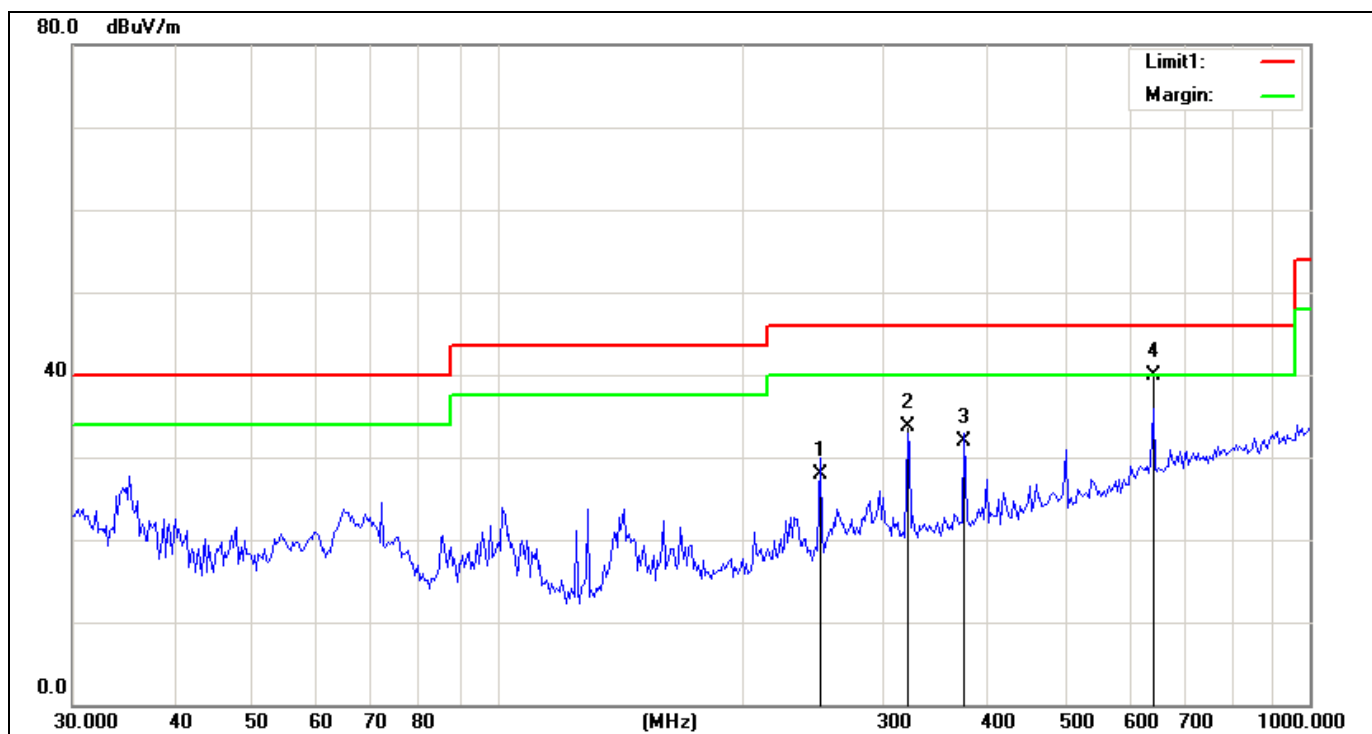


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	96.0079	16.79	9.86	26.65	43.50	-16.85	QP
2	72.0841	12.67	7.83	20.50	40.00	-19.50	QP
3	225.5612	11.69	12.77	24.46	46.00	-21.54	QP
4	298.7377	11.58	15.01	26.59	46.00	-19.41	QP

Emission above 1GHz:

No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4920.500	57.81	3.79	61.60	74.00	-12.40	peak
2	4920.500	45.01	3.79	48.80	54.00	-5.20	AVG
3	10324.617	32.06	17.34	49.40	74.00	-24.60	peak
4	10324.617	18.56	17.34	35.90	54.00	-18.10	AVG
5	16948.099	33.17	22.53	55.70	74.00	-18.30	peak
6	16948.099	19.47	22.53	42.00	54.00	-12.00	AVG

Project No.:	ZJ00016147	Polarization:	Vertical
Standard:	(RE)FCC PART 15 class B 3m	Power Source:	AC 120V/60Hz
Test item:	Radiation Test	Date:	2012-6-12
Temp./Hum.(%RH):	20/50%RH	Time:	9:57:25
EUT:	W913	Distance:	3m
Model:		Test Result:	Pass
Note:	fcc 802.11b 2462		

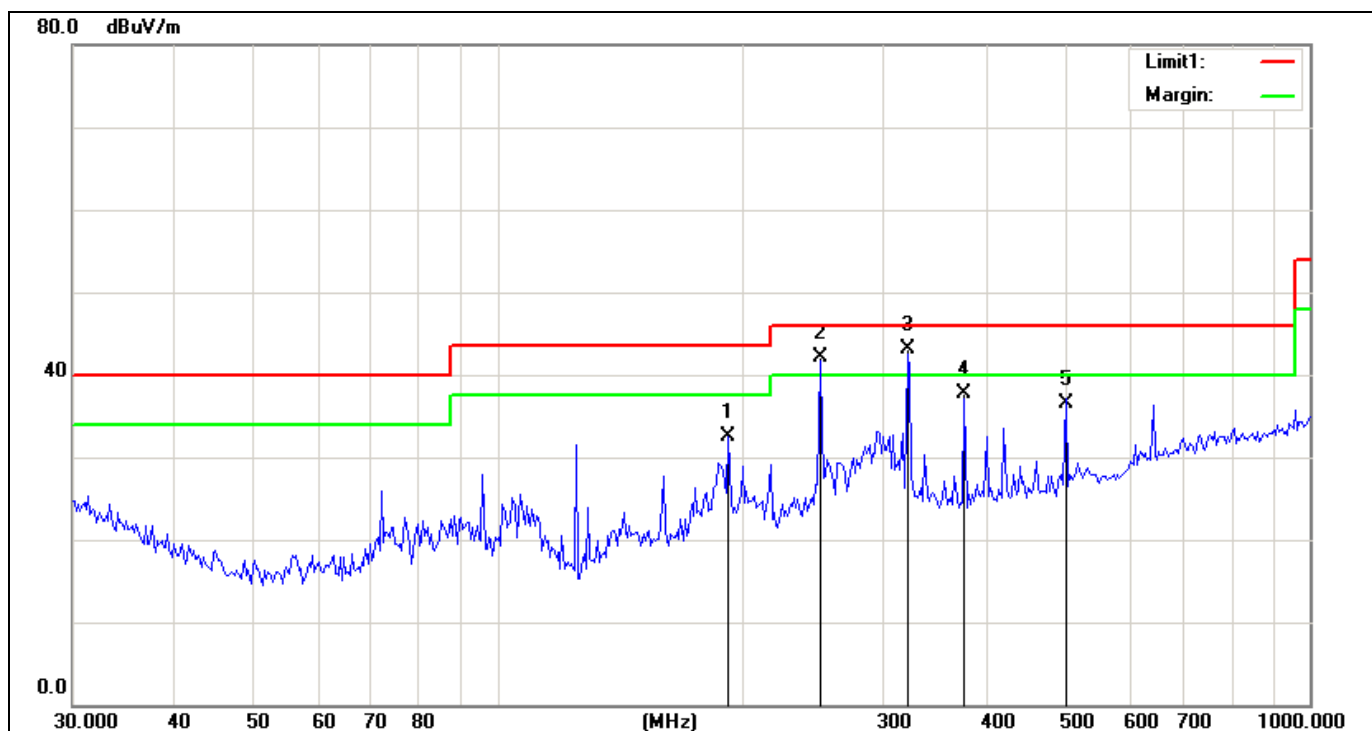


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	249.5707	14.24	13.66	27.90	46.00	-18.10	QP
2	319.5776	17.60	16.20	33.80	46.00	-12.20	QP
3	376.1413	14.18	17.72	31.90	46.00	-14.10	QP
4	641.5044	17.20	22.80	40.00	46.00	-6.00	QP

Emission above 1GHz:

o.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4920.500	45.51	3.79	49.30	74.00	-24.70	peak
2	4920.500	34.81	3.79	38.60	54.00	-15.40	AVG
3	10372.551	33.15	17.25	50.40	74.00	-23.60	peak
4	10372.551	18.85	17.25	36.10	54.00	-17.90	AVG
5	17185.254	33.21	22.59	55.80	74.00	-18.20	peak
6	17185.254	19.01	22.59	41.60	54.00	-12.40	AVG

Project No.:	ZJ00016147	Polarization:	Horizontal
Standard:	(RE)FCC PART 15 class B 3m	Power Source:	AC 120V/60Hz
Test item:	Radiation Test	Date:	2012-6-12
Temp./Hum.(%RH):	20/50%RH	Time:	8:44:23
EUT:	W913	Distance:	3m
Model:	802.11g 2412	Test Result:	Pass
Note:			

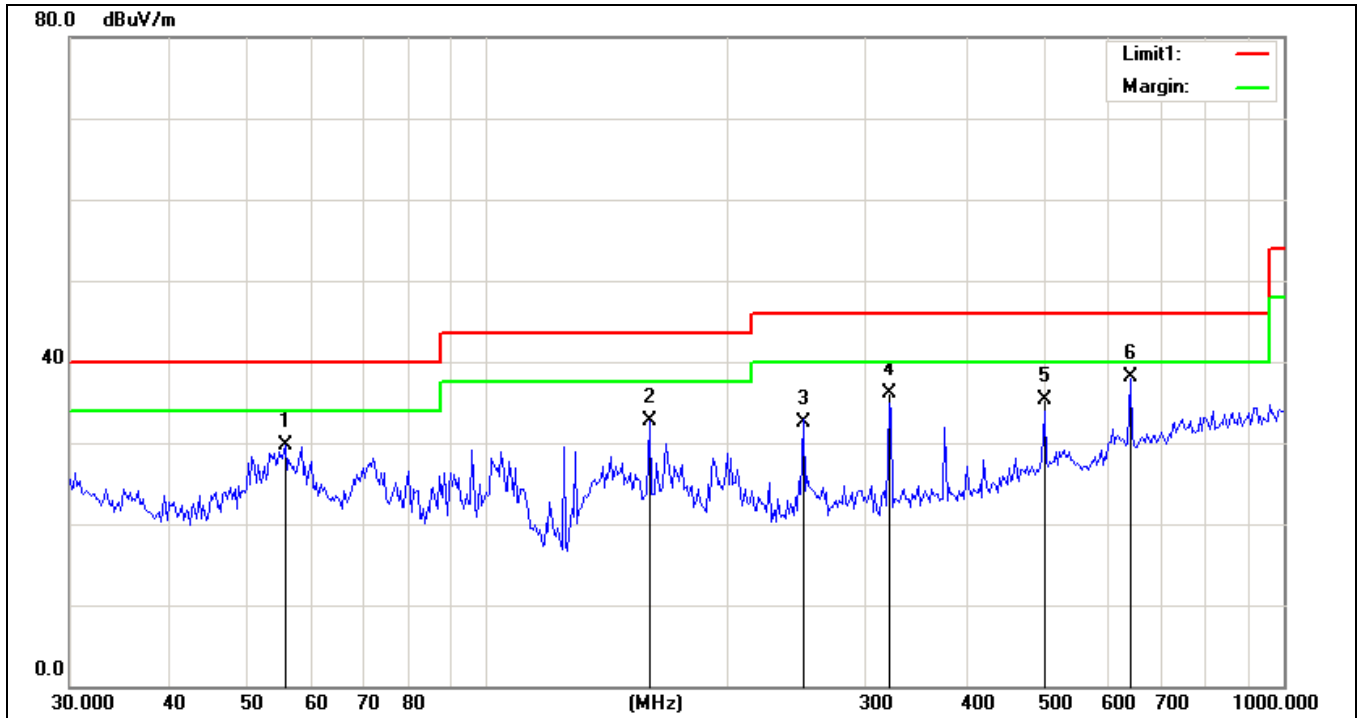


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	192.7216	18.53	13.91	32.44	43.50	-11.06	peak
2	249.5708	26.37	15.73	42.10	46.00	-3.90	QP
3	319.5776	25.02	18.18	43.20	46.00	-2.80	QP
4	376.1414	18.40	19.30	37.70	46.00	-8.30	QP
5	500.9763	14.63	21.87	36.50	46.00	-9.50	QP

Emission above 1GHz:

No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4830.172	66.76	3.59	70.35	74.00	-3.65	peak
2	4830.172	47.28	3.59	50.87	54.00	-3.13	AVG
3	7227.308	45.75	7.83	53.58	74.00	-20.42	peak
4	7227.308	28.67	7.83	36.50	54.00	-17.50	AVG
5	9676.333	46.16	16.85	63.01	74.00	-10.99	peak
6	9676.333	29.65	16.85	46.50	54.00	-7.50	AVG

Project No.:	ZJ00016147	Polarization:	Vertical
Standard:	(RE)FCC PART 15 class B 3m	Power Source:	AC 120V/60Hz
Test item:	Radiation Test	Date:	2012-6-12
Temp./Hum.(%RH):	20/50%RH	Time:	8:32:53
EUT:	W913	Distance:	3m
Model:	802.11g 2412	Test Result:	Pass
Note:			

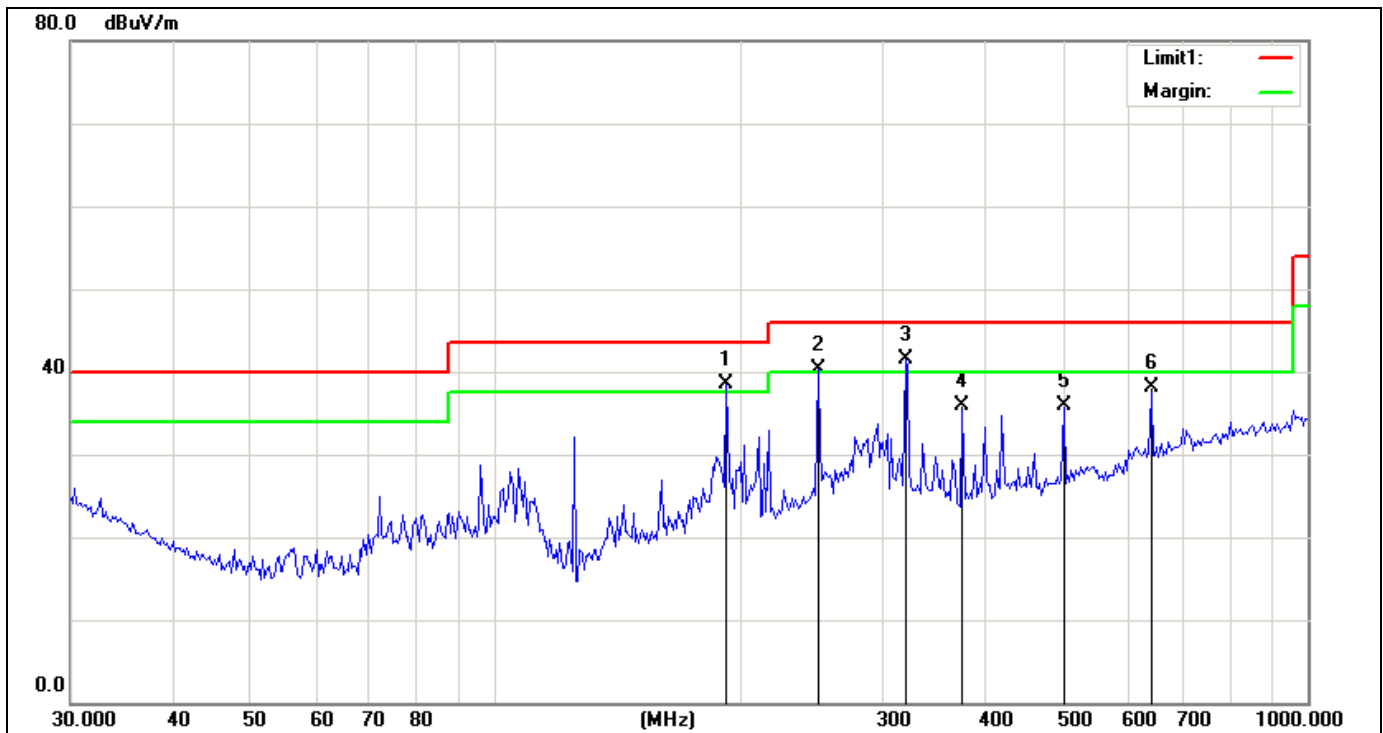


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	55.9780	18.24	11.46	29.70	40.00	-10.30	QP
2	160.1007	18.28	14.42	32.70	43.50	-10.80	QP
3	249.5707	16.77	15.73	32.50	46.00	-13.50	QP
4	319.5776	17.92	18.18	36.10	46.00	-9.90	QP
5	500.9762	13.43	21.87	35.30	46.00	-10.70	QP
6	641.5044	13.84	24.36	38.20	46.00	-7.80	QP

Emission above 1GHz:

No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4830.172	55.22	3.59	58.81	74.00	-15.19	peak
2	4830.172	45.01	3.59	48.60	54.00	-5.40	AVG
3	10276.904	30.52	17.42	47.94	74.00	-26.06	peak
4	10276.904	19.28	17.42	36.70	54.00	-17.30	AVG
5	16948.099	30.34	22.53	52.87	74.00	-21.13	peak
6	16948.099	19.37	22.53	41.90	54.00	-12.10	AVG

Project No.:	ZJ00016147	Polarization:	Horizontal
Standard:	(RE)FCC PART 15 class B 3m	Power Source:	AC 120V/60Hz
Test item:	Radiation Test	Date:	2012-6-12
Temp./Hum.(%RH):	20/50%RH	Time:	8:53:54
EUT:	W913	Distance:	3m
Model:	802.11g 2437	Test Result:	Pass
Note:			

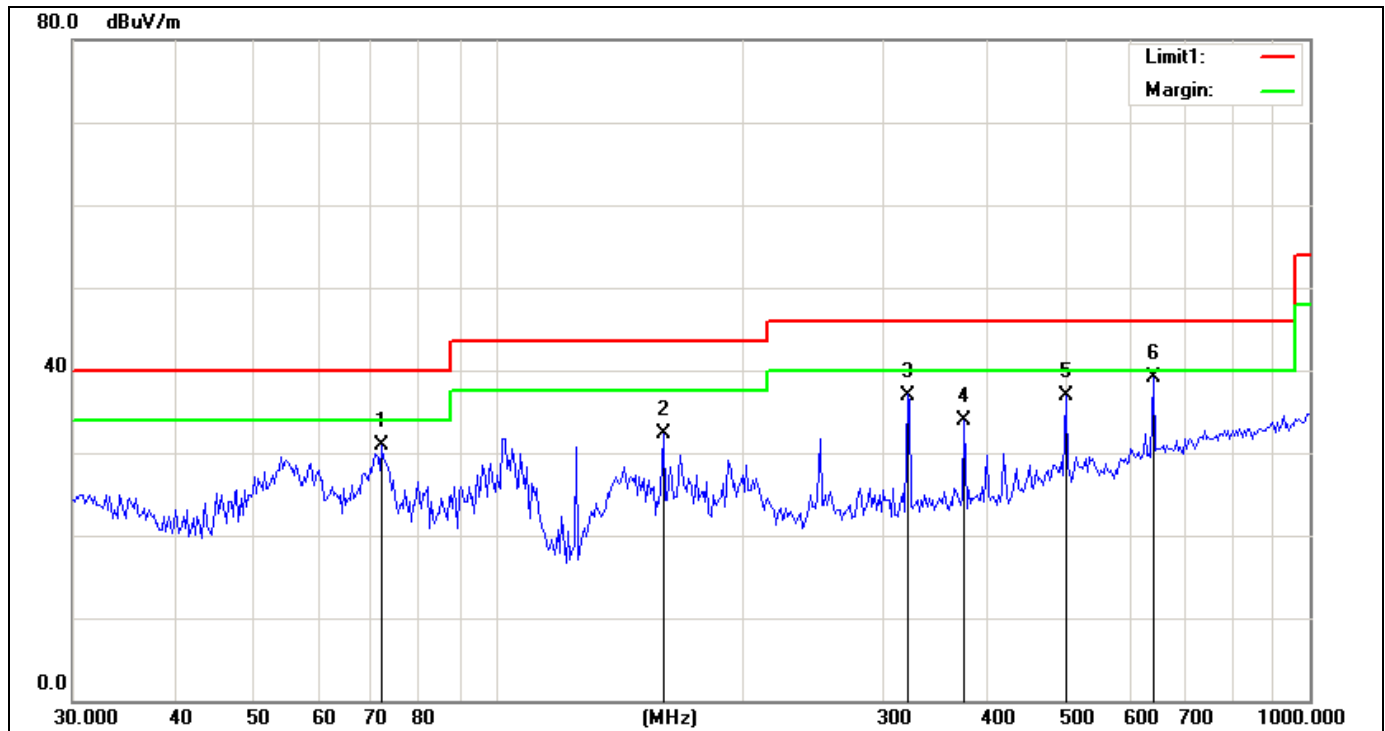


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	192.7215	24.64	13.91	38.55	43.50	-4.95	QP
2	249.5707	24.57	15.73	40.30	46.00	-5.70	QP
3	319.5776	23.32	18.18	41.50	46.00	-4.50	QP
4	376.1413	16.70	19.30	36.00	46.00	-10.00	QP
5	500.9762	14.03	21.87	35.90	46.00	-10.10	QP
6	641.5044	13.84	24.36	38.20	46.00	-7.80	QP

Emission above 1GHz:

No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4875.127	64.30	3.69	67.99	74.00	-6.01	peak
2	4875.127	46.60	3.69	50.29	54.00	-3.71	AVG
3	7328.439	44.28	8.42	52.70	74.00	-21.30	peak
4	7328.439	22.78	8.42	31.20	54.00	-22.80	AVG
5	9766.391	37.95	17.16	55.11	74.00	-18.89	peak
6	9766.391	22.84	17.16	40.00	54.00	-14.00	AVG

Project No.:	ZJ00016147	Polarization:	Vertical
Standard:	(RE)FCC PART 15 class B 3m	Power Source:	AC 120V/60Hz
Test item:	Radiation Test	Date:	2012-6-12
Temp./Hum.(%RH):	20/50%RH	Time:	8:56:51
EUT:	W913	Distance:	3m
Model:	802.11g 2437	Test Result:	Pass
Note:			

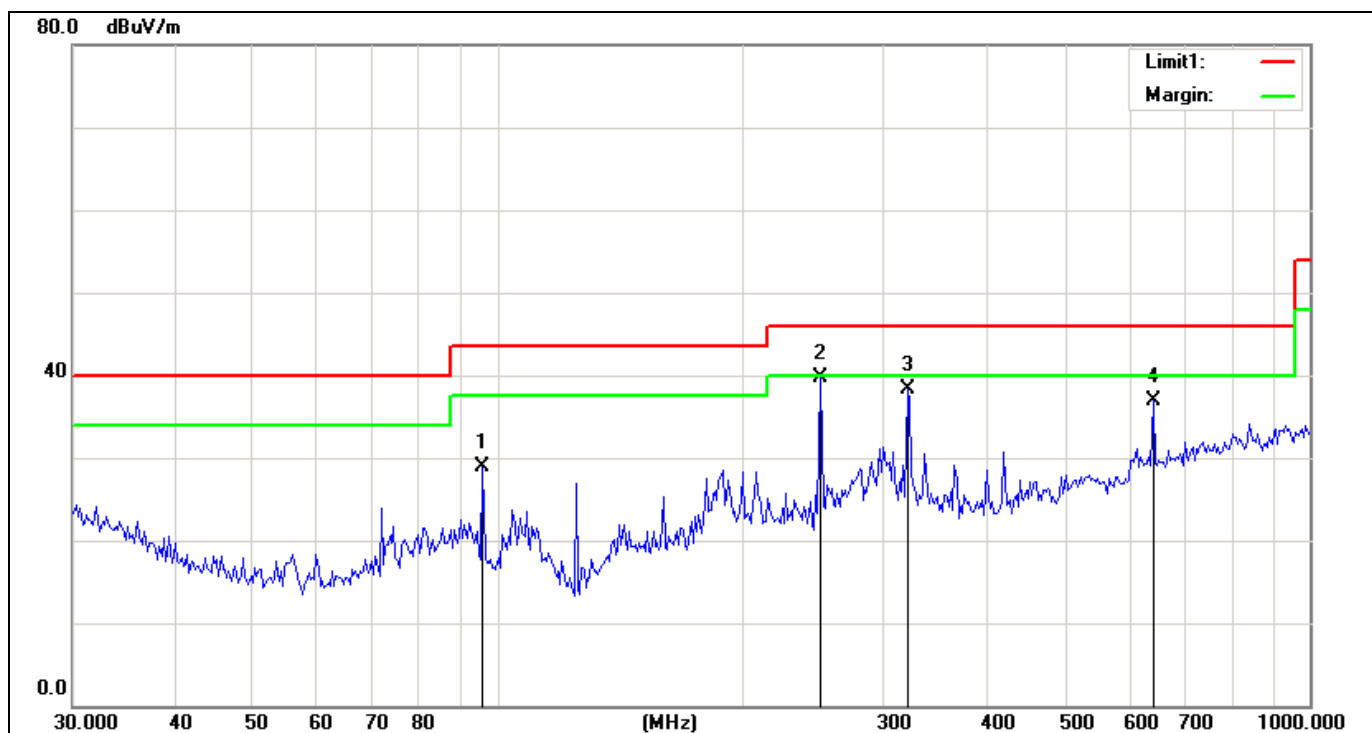


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	72.0842	19.40	11.56	30.96	40.00	-9.04	QP
2	160.1007	17.98	14.42	32.40	43.50	-11.10	QP
3	319.5776	18.82	18.18	37.00	46.00	-9.00	QP
4	376.1413	14.53	19.30	33.83	46.00	-12.17	QP
5	500.9762	14.97	21.87	36.84	46.00	-9.16	QP
6	641.5044	14.66	24.36	39.02	46.00	-6.98	QP

Emission above 1GHz:

No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4875.127	50.63	3.69	54.32	74.00	-19.68	peak
2	4875.127	35.31	3.69	39.00	54.00	-15.00	AVG
3	10276.904	30.28	17.42	47.70	74.00	-26.30	peak
4	10276.904	19.28	17.42	36.70	54.00	-17.30	AVG
5	17185.254	29.89	22.59	52.48	74.00	-21.52	peak
6	17185.254	17.61	22.59	40.20	54.00	-13.80	AVG

Project No.:	ZJ00016147	Polarization:	Horizontal
Standard:	(RE)FCC PART 15 class B 3m	Power Source:	AC 120V/60Hz
Test item:	Radiation Test	Date:	2012-6-12
Temp./Hum.(%RH):	20/50%RH	Time:	9:02:10
EUT:	W913	Distance:	3m
Model:	802.11g 2462	Test Result:	Pass
Note:			

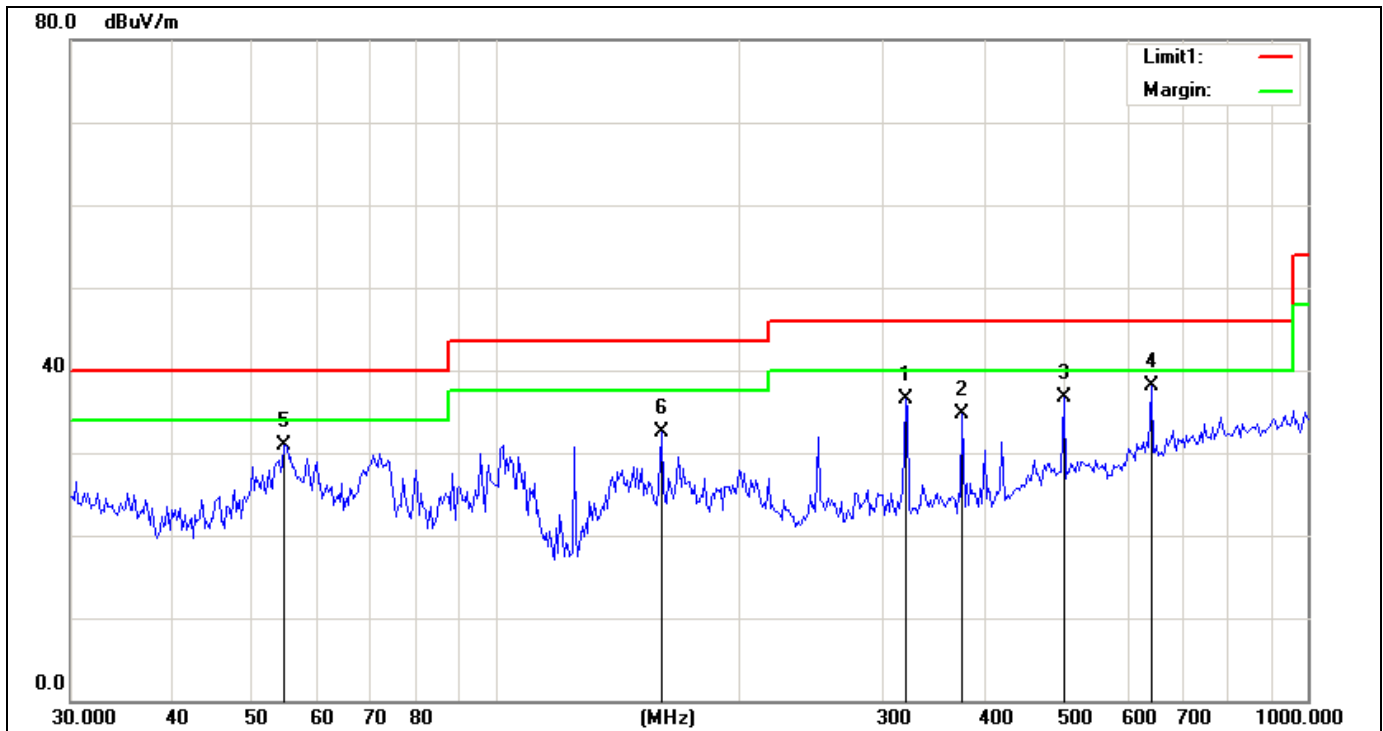


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	96.0079	14.87	14.08	28.95	43.50	-14.55	QP
2	249.5707	23.93	15.73	39.66	46.00	-6.34	QP
3	319.5776	20.19	18.18	38.37	46.00	-7.63	QP
4	641.5044	12.62	24.36	36.98	46.00	-9.02	QP

Emission above 1GHz:

No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4875.127	62.89	3.69	66.58	74.00	-7.42	peak
2	4875.127	46.29	3.69	49.98	54.00	-4.02	AVG
3	7328.439	41.93	8.42	50.35	74.00	-23.65	peak
4	7328.439	23.68	8.42	32.10	54.00	-21.90	AVG
5	9766.391	39.70	17.16	56.86	74.00	-17.14	peak
6	9766.391	25.34	17.16	42.50	54.00	-11.50	AVG

Project No.:	ZJ00016147	Polarization:	Vertical
Standard:	(RE)FCC PART 15 class B 3m	Power Source:	AC 120V/60Hz
Test item:	Radiation Test	Date:	2012-6-12
Temp./Hum.(%RH):	20/50%RH	Time:	8:59:19
EUT:	W913	Distance:	3m
Model:	802.11g 2462	Test Result:	Pass
Note:			

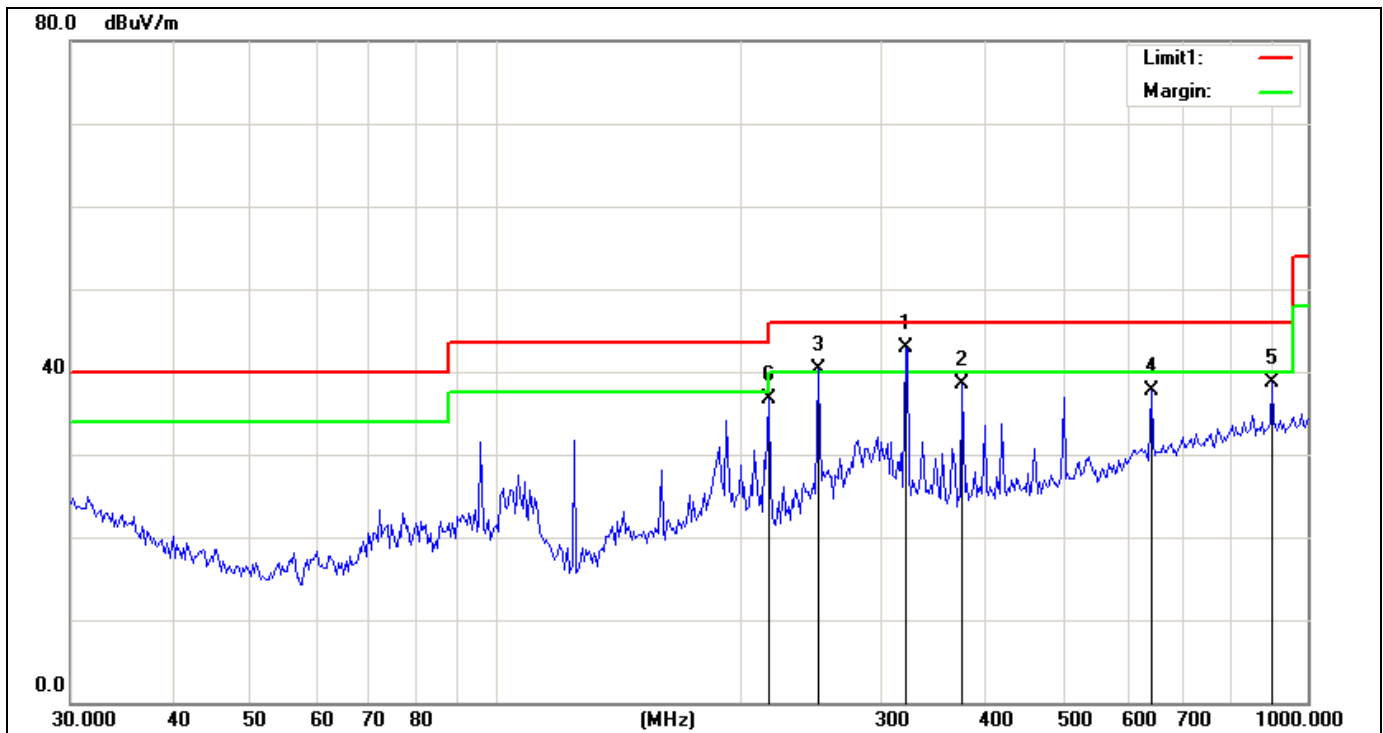


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	319.5776	18.28	18.18	36.46	46.00	-9.54	QP
2	376.1414	15.36	19.30	34.66	46.00	-11.34	QP
3	500.9763	14.78	21.87	36.65	46.00	-9.35	QP
4	641.5044	13.74	24.36	38.10	46.00	-7.90	QP
5	55.0423	19.32	11.60	30.92	40.00	-9.08	QP
6	160.1008	18.16	14.42	32.58	43.50	-10.92	QP

Emission above 1GHz:

No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4875.127	49.12	3.69	52.81	74.00	-21.19	peak
2	4875.127	37.51	3.69	41.20	54.00	-12.80	AVG
3	10276.904	30.45	17.42	47.87	74.00	-26.13	peak
4	10276.904	19.38	17.42	36.80	54.00	-17.20	AVG
5	16791.817	31.58	21.94	53.52	74.00	-20.48	peak
6	16791.817	18.36	21.94	40.30	54.00	-13.70	AVG

Project No.:	ZJ00016147	Polarization:	Horizontal
Standard:	(RE)FCC PART 15 class B 3m	Power Source:	AC 120V/60Hz
Test item:	Radiation Test	Date:	2012-6-12
Temp./Hum.(%RH):	20/50%RH	Time:	9:05:00
EUT:	W913	Distance:	3m
Model:	802.11N20 2412	Test Result:	Pass
Note:			

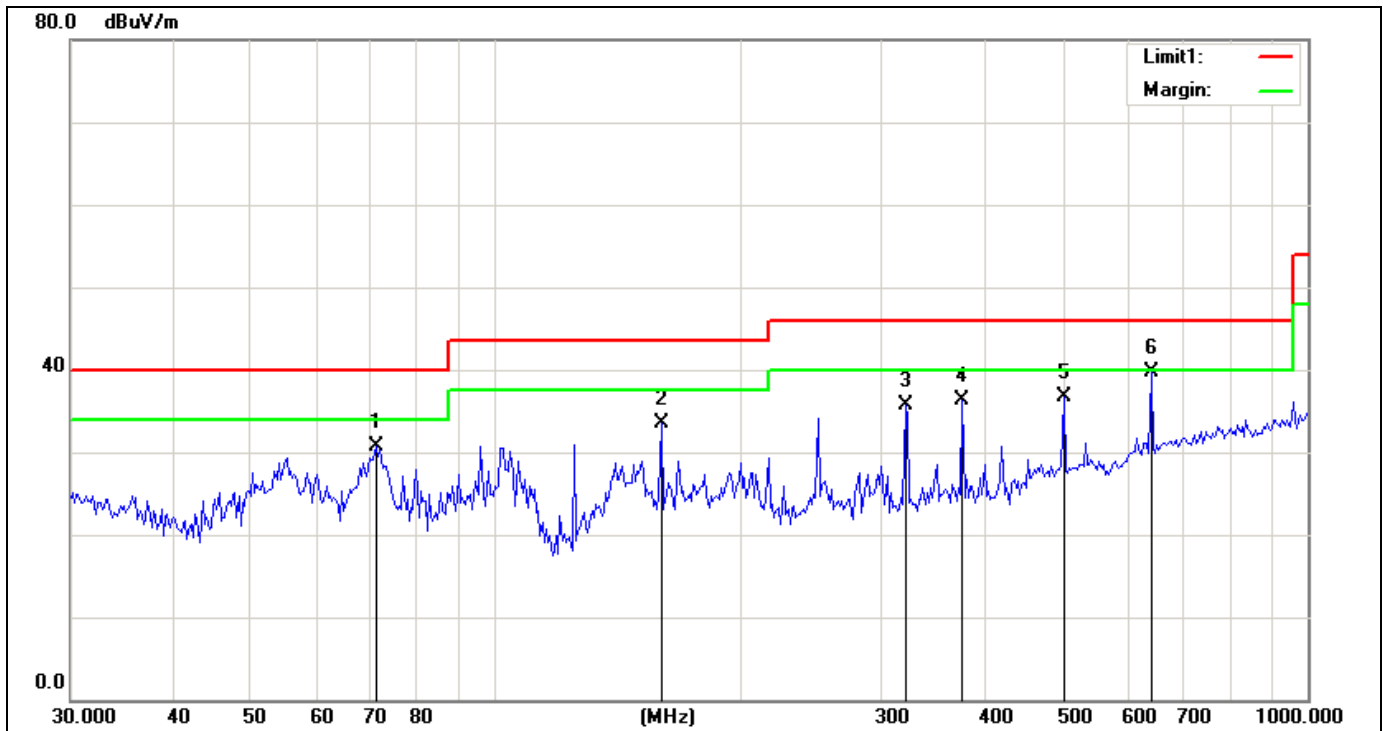


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	319.5776	24.78	18.18	42.96	46.00	-3.04	QP
2	376.1414	19.15	19.30	38.45	46.00	-7.55	QP
3	249.5708	24.63	15.73	40.36	46.00	-5.64	QP
4	641.5044	13.41	24.36	37.77	46.00	-8.23	QP
5	903.7968	11.40	27.22	38.62	46.00	-7.38	QP
6	216.8608	22.84	13.90	36.74	46.00	-9.26	QP

Emission above 1GHz:

1	4860.172	62.16	3.59	65.75	74.00	-8.25	peak
2	4860.172	43.81	3.59	47.40	54.00	-6.60	AVG
3	9269.411	31.18	17.52	48.70	74.00	-25.30	peak
4	9269.411	17.08	17.52	34.60	54.00	-19.40	AVG
5	17148.099	31.57	22.53	54.10	74.00	-19.90	peak
6	17148.099	17.57	22.53	40.10	54.00	-13.90	AVG

Project No.:	ZJ00016147	Polarization:	Vertical
Standard:	(RE)FCC PART 15 class B 3m	Power Source:	AC 120V/60Hz
Test item:	Radiation Test	Date:	2012-6-12
Temp./Hum.(%RH):	20/50%RH	Time:	9:06:40
EUT:	W913	Distance:	3m
Model:	802.11N20 2412	Test Result:	Pass
Note:			

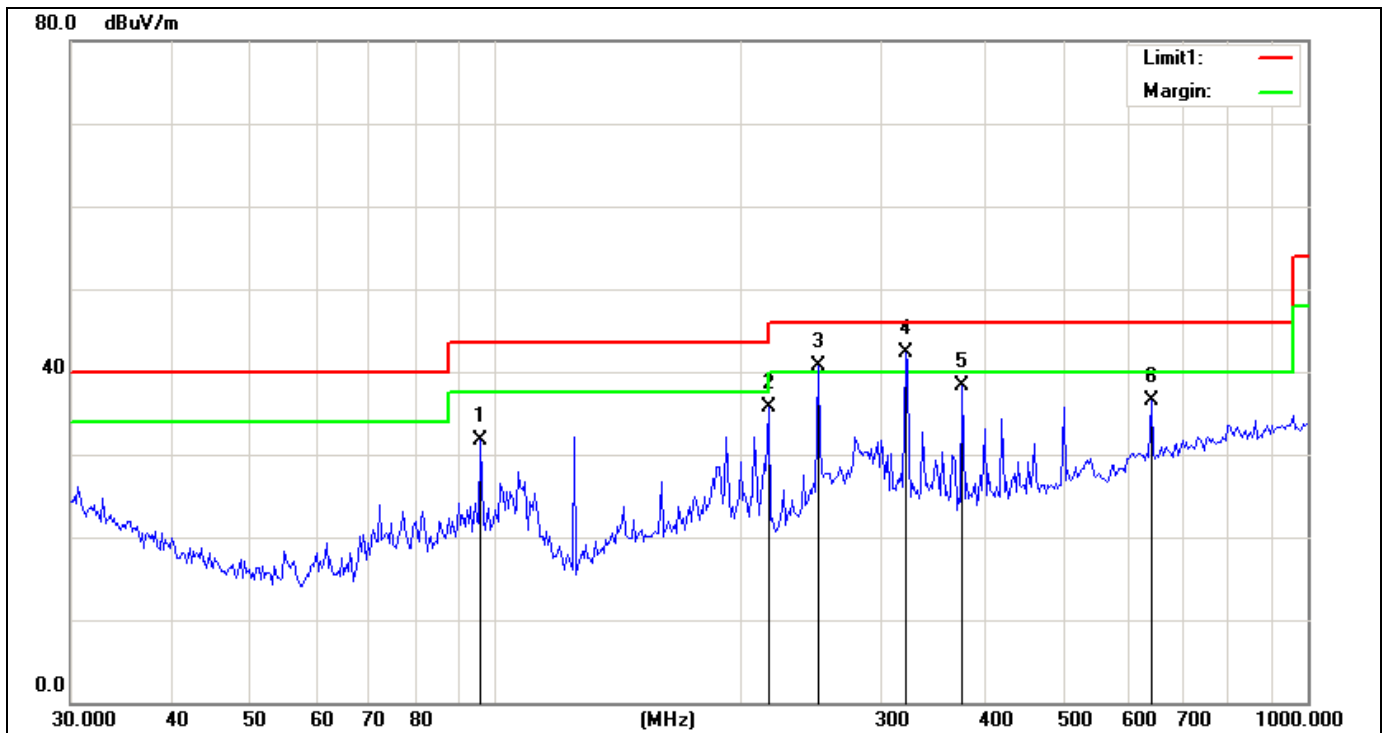


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	71.2787	19.43	11.34	30.77	40.00	-9.23	QP
2	160.1008	19.01	14.42	33.43	43.50	-10.07	QP
3	319.5776	17.47	18.18	35.65	46.00	-10.35	QP
4	376.1414	17.04	19.30	36.34	46.00	-9.66	QP
5	500.9763	14.81	21.87	36.68	46.00	-9.32	QP
6	641.5044	15.29	24.36	39.65	46.00	-6.35	QP

Emission above 1GHz:

No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4842.172	46.31	3.59	49.90	74.00	-24.10	peak
2	4842.172	34.51	3.59	38.10	54.00	-15.90	AVG
3	10576.904	30.38	17.42	47.80	74.00	-26.20	peak
4	10576.904	16.28	17.42	33.70	54.00	-20.30	AVG
5	16926.785	30.19	22.71	52.90	74.00	-21.10	peak
6	16926.785	16.19	22.71	38.90	54.00	-15.10	AVG

Project No.:	ZJ00016147	Polarization:	Horizontal
Standard:	(RE)FCC PART 15 class B 3m	Power Source:	AC 120V/60Hz
Test item:	Radiation Test	Date:	2012-6-12
Temp./Hum.(%RH):	20/50%RH	Time:	9:10:15
EUT:	W913	Distance:	3m
Model:	802.11N20 2437	Test Result:	Pass
Note:			

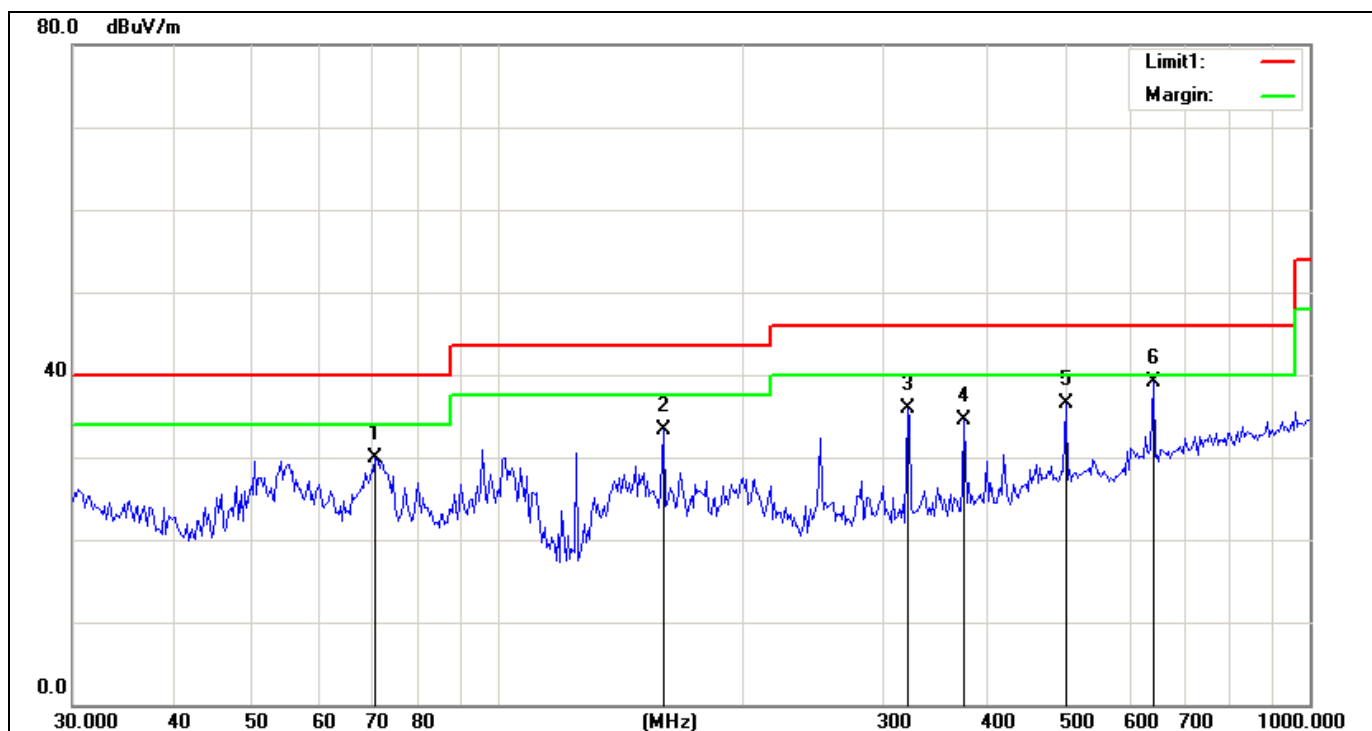


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	96.0079	17.54	14.08	31.62	43.50	-11.88	QP
2	216.8608	21.79	13.90	35.69	46.00	-10.31	QP
3	249.5708	24.93	15.73	40.66	46.00	-5.34	QP
4	319.5776	24.09	18.18	42.27	46.00	-3.73	QP
5	376.1414	19.05	19.30	38.35	46.00	-7.65	QP
6	641.5044	12.14	24.36	36.50	46.00	-9.50	QP

Emission above 1GHz:

No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4885.127	61.81	3.69	65.50	74.00	-8.50	peak
2	4885.127	45.21	3.69	48.90	54.00	-5.10	AVG
3	10485.291	32.82	16.28	49.10	74.00	-24.90	peak
4	10485.291	19.32	16.28	35.60	54.00	-18.40	AVG
5	16185.254	34.01	22.59	56.60	74.00	-17.40	peak
6	16185.254	20.11	22.59	42.70	54.00	-11.30	AVG

Project No.:	ZJ00016147	Polarization:	Vertical
Standard:	(RE)FCC PART 15 class B 3m	Power Source:	AC 120V/60Hz
Test item:	Radiation Test	Date:	2012-6-12
Temp./Hum.(%RH):	20/50%RH	Time:	9:08:49
EUT:	W913	Distance:	3m
Model:	802.11N20 2437	Test Result:	Pass
Note:			

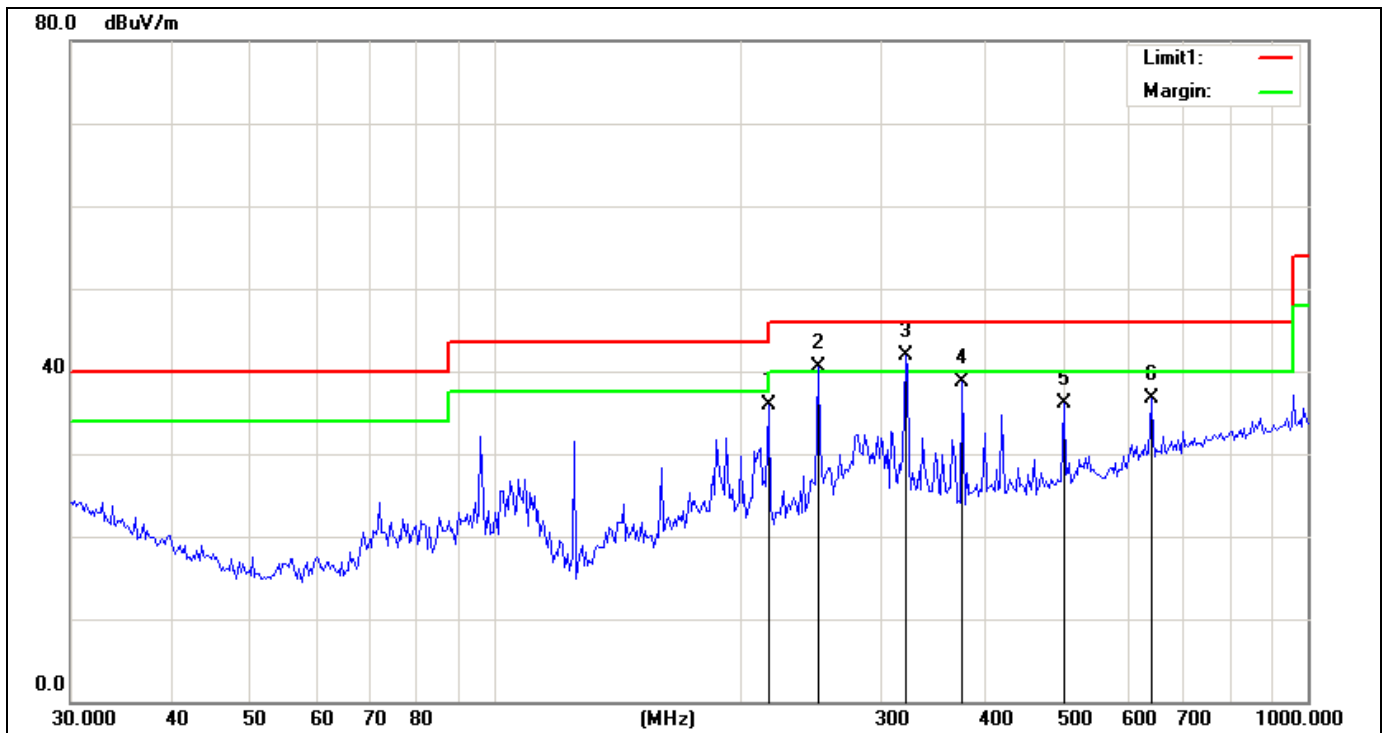


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	70.8793	18.61	11.23	29.84	40.00	-10.16	QP
2	160.1008	18.90	14.42	33.32	43.50	-10.18	QP
3	319.5776	17.80	18.18	35.98	46.00	-10.02	QP
4	376.1414	15.13	19.30	34.43	46.00	-11.57	QP
5	500.9763	14.55	21.87	36.42	46.00	-9.58	QP
6	641.5044	14.74	24.36	39.10	46.00	-6.90	QP

Emission above 1GHz:

No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4885.127	52.41	3.69	56.10	74.00	-17.90	peak
2	4885.127	40.01	3.69	43.70	54.00	-10.30	AVG
3	9929.411	34.88	17.52	52.40	74.00	-21.60	peak
4	9929.411	20.98	17.52	38.50	54.00	-15.50	AVG
5	16849.704	34.87	22.23	57.10	74.00	-16.90	peak
6	16849.704	21.17	22.23	43.40	54.00	-10.60	AVG

Project No.:	ZJ00016147	Polarization:	Horizontal
Standard:	(RE)FCC PART 15 class B 3m	Power Source:	AC 120V/60Hz
Test item:	Radiation Test	Date:	2012-6-12
Temp./Hum.(%RH):	20/50%RH	Time:	9:12:57
EUT:	W913	Distance:	3m
Model:	802.11N20 2462	Test Result:	Pass
Note:			

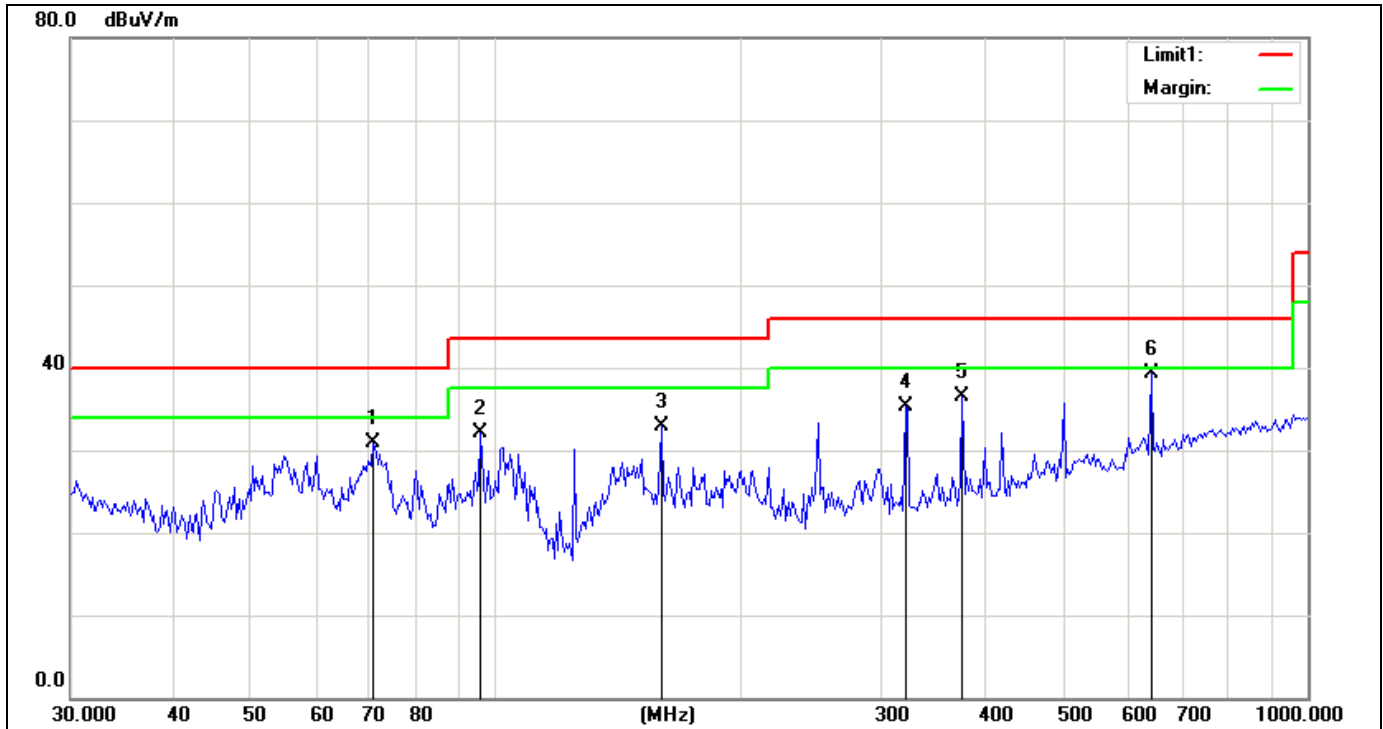


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	216.8608	22.01	13.90	35.91	46.00	-10.09	QP
2	249.5708	24.79	15.73	40.52	46.00	-5.48	QP
3	319.5776	23.72	18.18	41.90	46.00	-4.10	QP
4	376.1414	19.32	19.30	38.62	46.00	-7.38	QP
5	500.9763	14.21	21.87	36.08	46.00	-9.92	QP
6	641.5044	12.27	24.36	36.63	46.00	-9.37	QP

Emission above 1GHz:

No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4820.500	55.81	3.79	59.60	74.00	-14.40	peak
2	4820.500	43.01	3.79	46.80	54.00	-7.20	AVG
3	11324.617	30.06	17.34	47.40	74.00	-26.60	peak
4	11324.617	16.56	17.34	33.90	54.00	-20.10	AVG
5	17048.099	31.17	22.53	53.70	74.00	-20.30	peak
6	17048.099	17.47	22.53	40.00	54.00	-14.00	AVG

Project No.:	ZJ00016147	Polarization:	Vertical
Standard:	(RE)FCC PART 15 class B 3m	Power Source:	AC 120V/60Hz
Test item:	Radiation Test	Date:	2012-6-12
Temp./Hum.(%RH):	20/50%RH	Time:	9:14:38
EUT:	W913	Distance:	3m
Model:	802.11N20 2462	Test Result:	Pass
Note:			

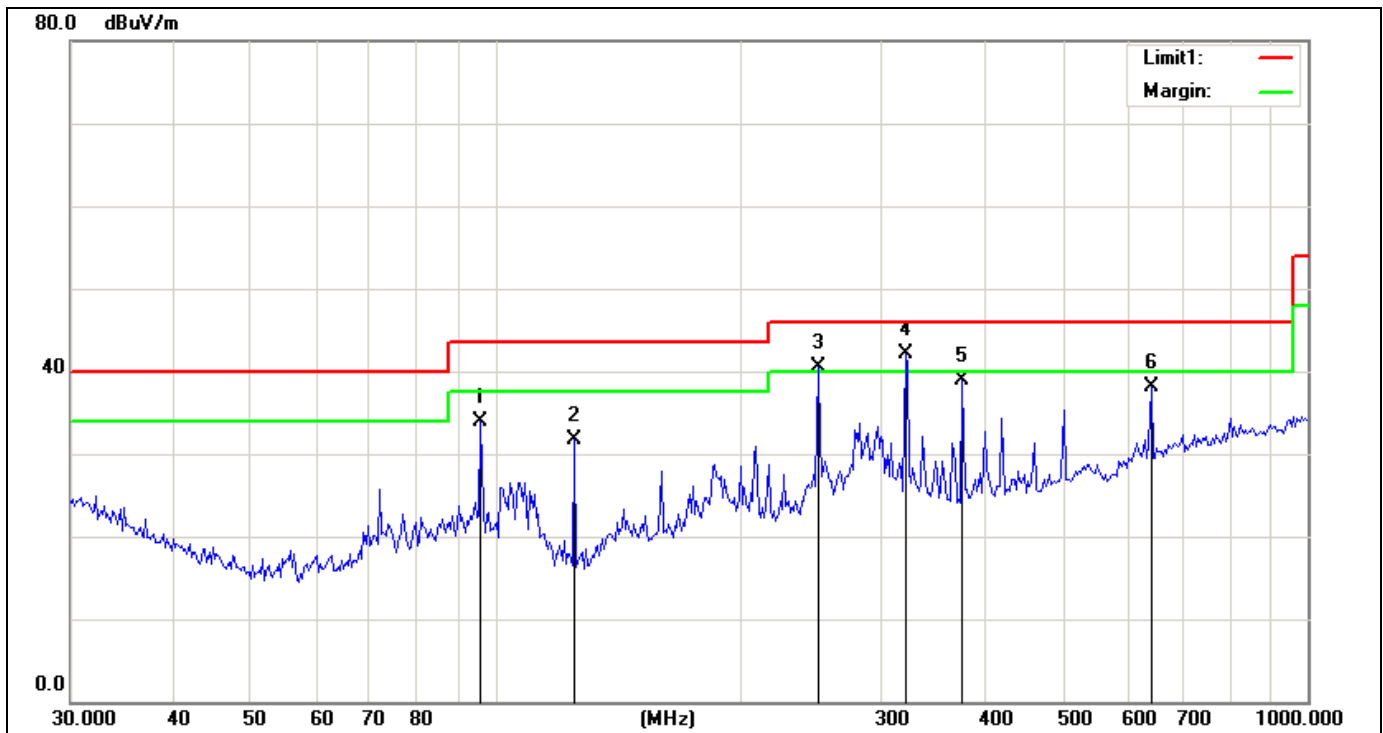


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	70.8793	19.71	11.23	30.94	40.00	-9.06	QP
2	96.0079	18.04	14.08	32.12	43.50	-11.38	QP
3	160.1008	18.43	14.42	32.85	43.50	-10.65	QP
4	319.5776	17.13	18.18	35.31	46.00	-10.69	QP
5	376.1414	17.23	19.30	36.53	46.00	-9.47	QP
6	641.5044	14.88	24.36	39.24	46.00	-6.76	QP

Emission above 1GHz:

No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4887.500	44.51	3.79	48.30	74.00	-25.70	peak
2	4887.500	33.81	3.79	37.60	54.00	-16.40	AVG
3	972.551	32.15	17.25	49.40	74.00	-24.60	peak
4	9372.551	17.85	17.25	35.10	54.00	-18.90	AVG
5	16885.254	32.21	22.59	54.80	74.00	-19.20	peak
6	16885.254	18.01	22.59	40.60	54.00	-13.40	AVG

Project No.:	ZJ00016147	Polarization:	Horizontal
Standard:	(RE)FCC PART 15 class B 3m	Power Source:	AC 120V/60Hz
Test item:	Radiation Test	Date:	2012-6-12
Temp./Hum.(%RH):	20/50%RH	Time:	9:18:25
EUT:	W913	Distance:	3m
Model:	802.11N40 2422	Test Result:	Pass
Note:			

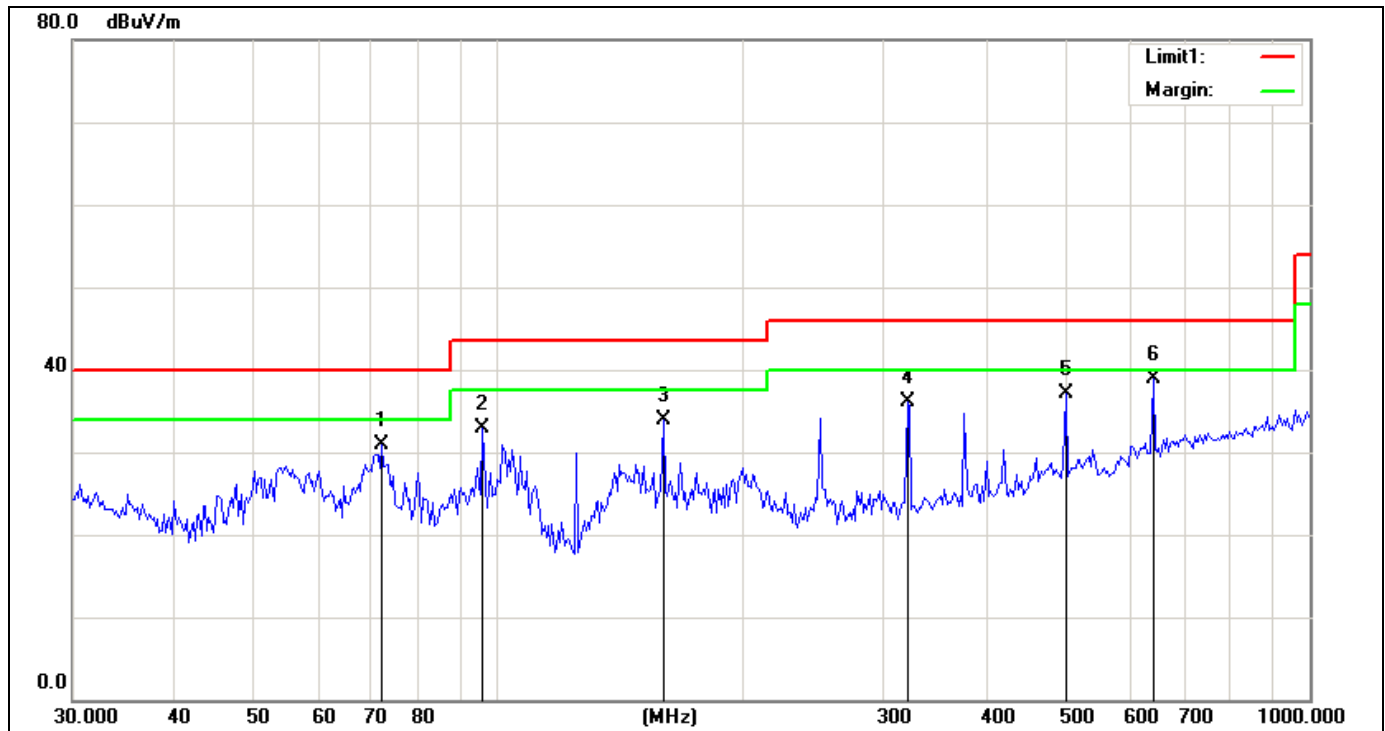


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	96.0079	19.80	14.08	33.88	43.50	-9.62	QP
2	125.0291	20.96	10.79	31.75	43.50	-11.75	QP
3	249.5708	24.86	15.73	40.59	46.00	-5.41	QP
4	319.5776	23.93	18.18	42.11	46.00	-3.89	QP
5	376.1414	19.54	19.30	38.84	46.00	-7.16	QP
6	641.5044	13.68	24.36	38.04	46.00	-7.96	QP

Emission above 1GHz:

No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4852.597	68.09	3.63	71.72	74.00	-2.28	peak
2	4852.597	46.68	3.63	50.31	54.00	-3.69	AVG
3	7260.862	55.50	8.02	63.52	74.00	-10.48	peak
4	7260.862	39.48	8.02	47.50	54.00	-6.50	AVG
5	9721.257	52.59	17.00	69.59	74.00	-4.41	peak
6	9721.257	33.20	17.00	50.20	54.00	-3.80	AVG

Project No.:	ZJ00016147	Polarization:	Vertical
Standard:	(RE)FCC PART 15 class B 3m	Power Source:	AC 120V/60Hz
Test item:	Radiation Test	Date:	2012-6-12
Temp./Hum.(%RH):	20/50%RH	Time:	9:16:57
EUT:	W913	Distance:	3m
Model:	802.11N40 2422	Test Result:	Pass
Note:			

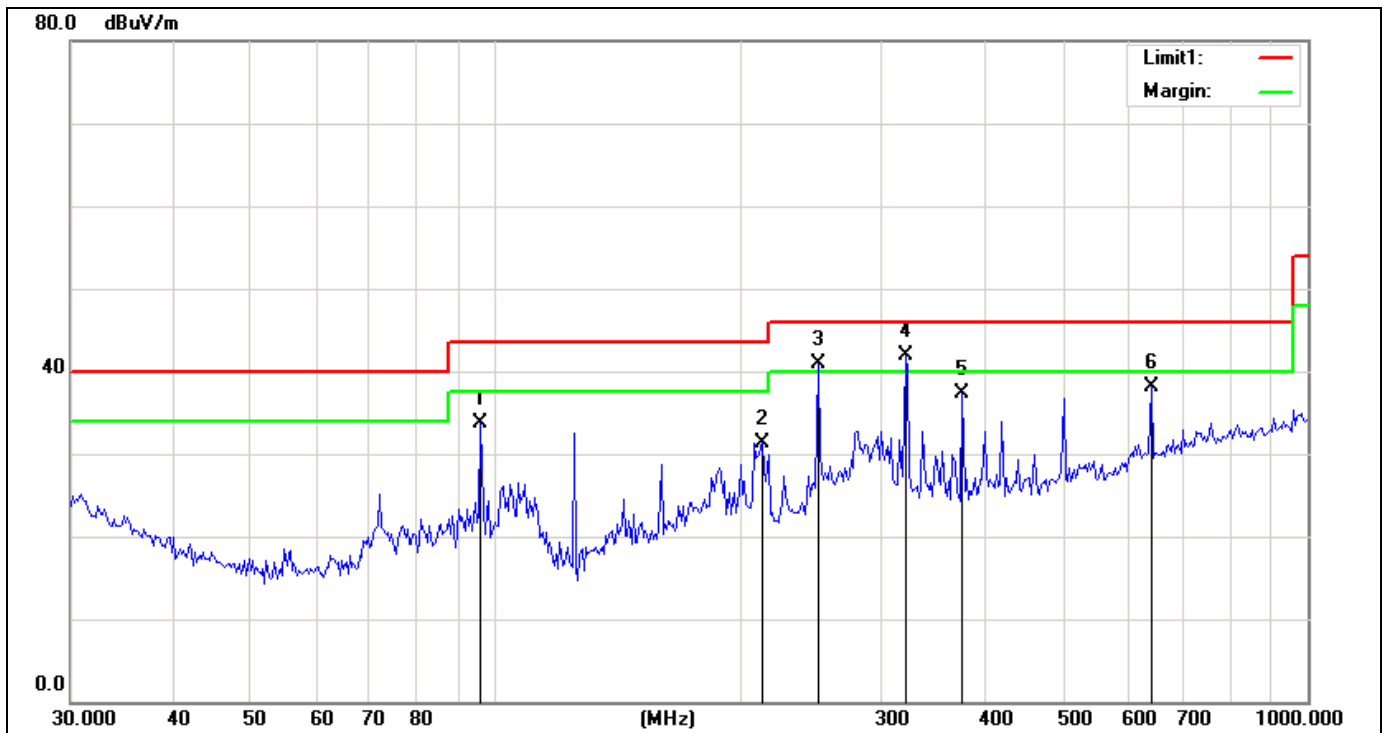


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	72.0843	19.31	11.56	30.87	40.00	-9.13	QP
2	96.0079	18.78	14.08	32.86	43.50	-10.64	QP
3	160.1008	19.52	14.42	33.94	43.50	-9.56	QP
4	319.5776	17.92	18.18	36.10	46.00	-9.90	QP
5	500.9763	15.24	21.87	37.11	46.00	-8.89	QP
6	641.5044	14.53	24.36	38.89	46.00	-7.11	QP

Emission above 1GHz:

No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4852.597	47.56	3.63	51.19	74.00	-22.81	peak
2	4852.597	32.57	3.63	36.20	54.00	-17.80	AVG
3	10229.411	30.26	17.52	47.78	74.00	-26.22	peak
4	10229.411	19.18	17.52	36.70	54.00	-17.30	AVG
5	16791.817	31.36	21.94	53.30	74.00	-20.70	peak
6	16791.817	19.66	21.94	41.60	54.00	-12.40	AVG

Project No.:	ZJ00016147	Polarization:	Horizontal
Standard:	(RE)FCC PART 15 class B 3m	Power Source:	AC 120V/60Hz
Test item:	Radiation Test	Date:	2012-6-12
Temp./Hum.(%RH):	20/50%RH	Time:	9:20:21
EUT:	W913	Distance:	3m
Model:	802.11N40 2437	Test Result:	Pass
Note:			

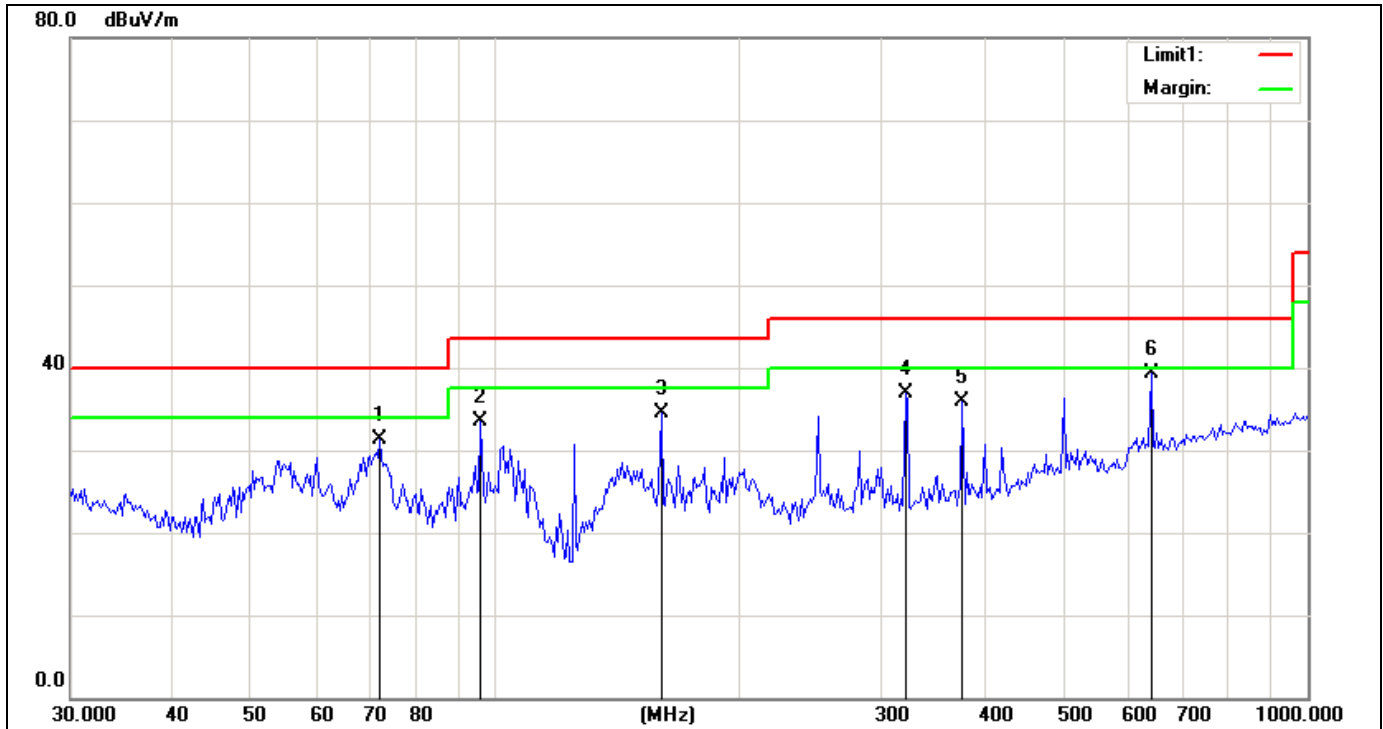


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	96.0079	19.65	14.08	33.73	43.50	-9.77	QP
2	213.2355	17.42	13.94	31.36	43.50	-12.14	QP
3	249.5708	25.10	15.73	40.83	46.00	-5.17	QP
4	319.5776	23.66	18.18	41.84	46.00	-4.16	QP
5	376.1414	17.99	19.30	37.29	46.00	-8.71	QP
6	641.5044	13.72	24.36	38.08	46.00	-7.92	QP

Emission above 1GHz:

No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4875.127	67.66	3.69	71.35	74.00	-2.65	peak
2	4875.127	47.13	3.69	50.82	54.00	-3.18	AVG
3	7328.439	57.96	8.42	66.38	74.00	-7.62	peak
4	7328.439	38.28	8.42	46.70	54.00	-7.30	AVG
5	9766.391	52.85	17.16	70.01	74.00	-3.99	peak
6	9766.391	33.64	17.16	50.80	54.00	-3.20	AVG
7	12198.137	42.66	16.21	58.87	74.00	-15.13	peak
8	12198.137	21.99	16.21	38.20	54.00	-15.80	AVG
9	14681.137	43.96	19.54	63.50	74.00	-10.50	peak
10	14681.137	17.66	19.54	37.20	54.00	-16.80	AVG

Project No.:	ZJ00016147	Polarization:	Vertical
Standard:	(RE)FCC PART 15 class B 3m	Power Source:	AC 120V/60Hz
Test item:	Radiation Test	Date:	2012-6-12
Temp./Hum.(%RH):	20/50%RH	Time:	9:21:57
EUT:	W913	Distance:	3m
Model:	802.11N40 2437	Test Result:	Pass
Note:			

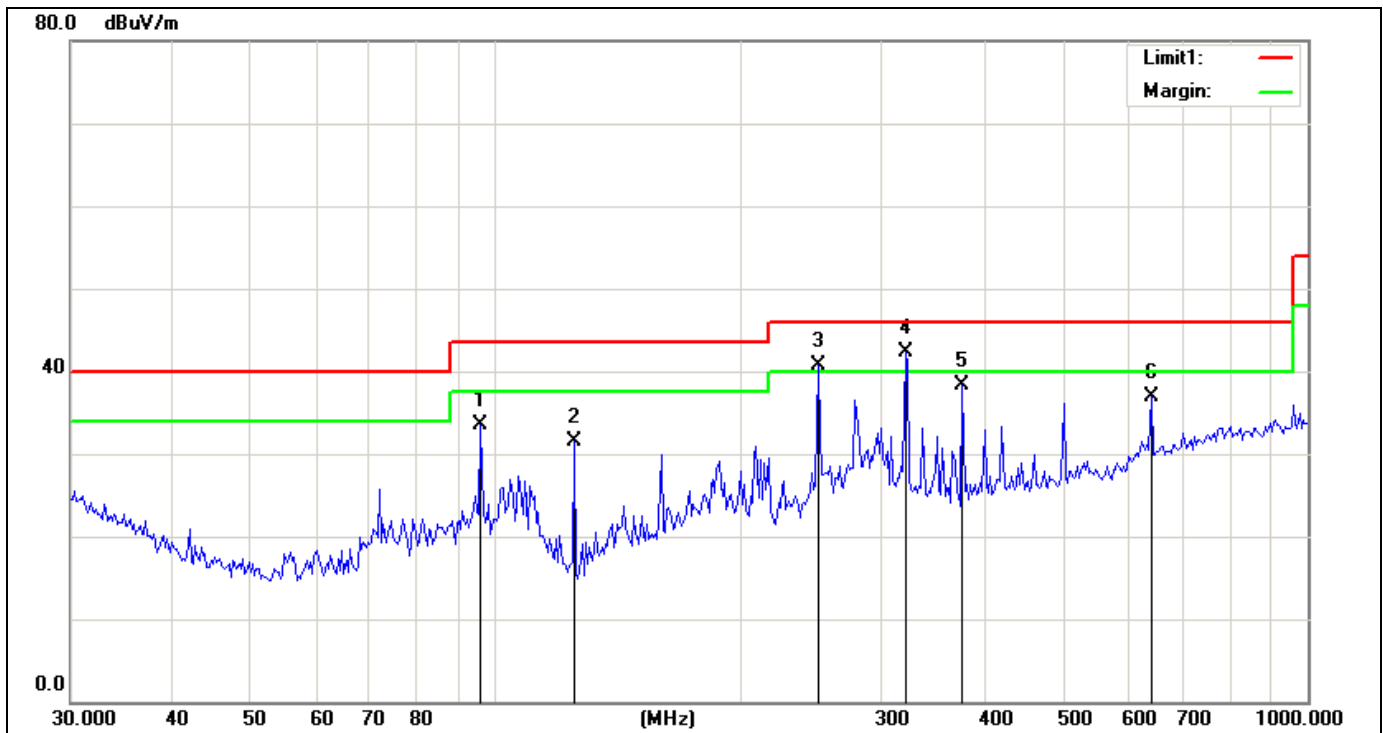


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	72.0843	19.76	11.56	31.32	40.00	-8.68	QP
2	96.0079	19.35	14.08	33.43	43.50	-10.07	QP
3	160.1008	20.01	14.42	34.43	43.50	-9.07	QP
4	319.5776	18.80	18.18	36.98	46.00	-9.02	QP
5	376.1414	16.66	19.30	35.96	46.00	-10.04	QP
6	641.5044	15.01	24.36	39.37	46.00	-6.63	QP

Emission above 1GHz:

No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4875.127	60.31	3.69	64.00	74.00	-10.00	peak
2	4875.127	39.71	3.69	43.40	54.00	-10.60	AVG
3	10324.617	32.06	17.34	49.40	74.00	-24.60	peak
4	10324.617	18.56	17.34	35.90	54.00	-18.10	AVG
5	16948.099	33.47	22.53	56.00	74.00	-18.00	peak
6	16948.099	19.47	22.53	42.00	54.00	-12.00	AVG

Project No.:	ZJ00016147	Polarization:	Horizontal
Standard:	(RE)FCC PART 15 class B 3m	Power Source:	AC 120V/60Hz
Test item:	Radiation Test	Date:	2012-6-12
Temp./Hum.(%RH):	20/50%RH	Time:	9:25:23
EUT:	W913	Distance:	3m
Model:	802.11N40 2452	Test Result:	Pass
Note:			

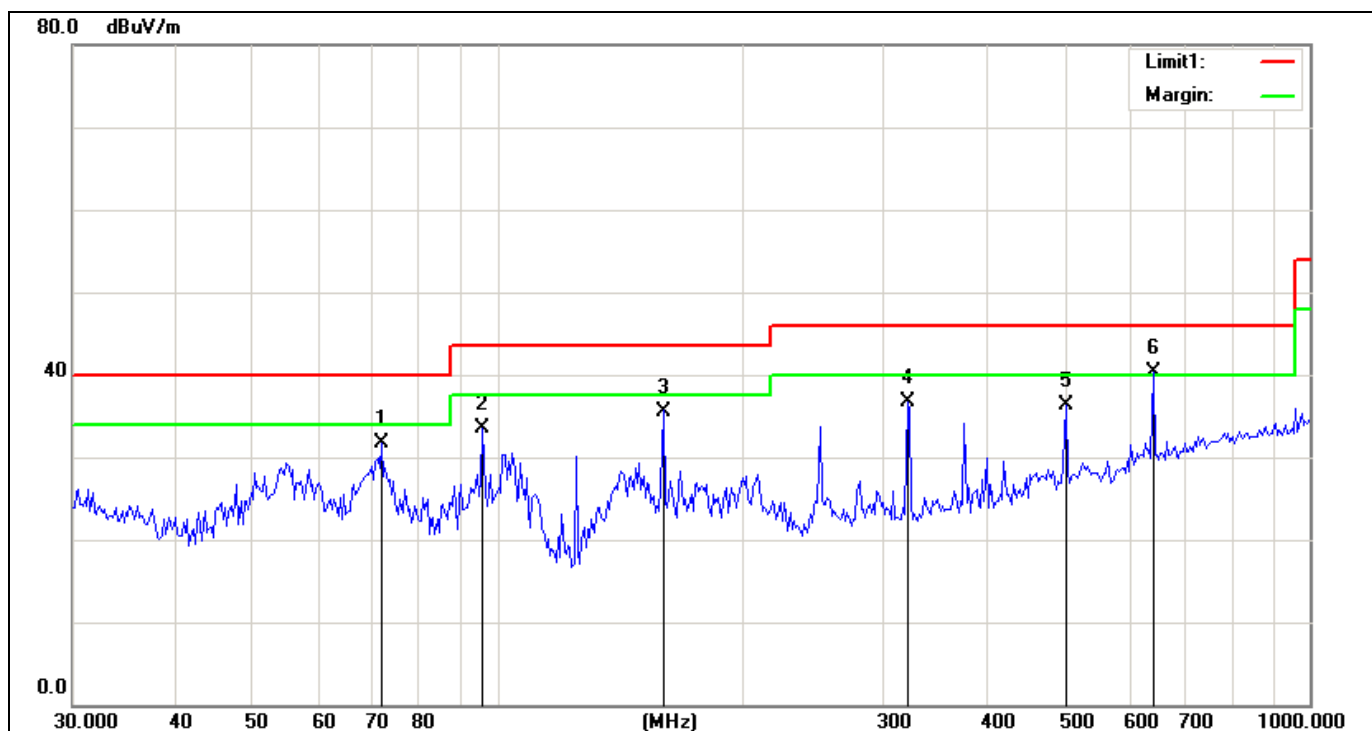


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	96.0079	19.33	14.08	33.41	43.50	-10.09	QP
2	125.0291	20.73	10.79	31.52	43.50	-11.98	QP
3	249.5708	24.92	15.73	40.65	46.00	-5.35	QP
4	319.5776	24.16	18.18	42.34	46.00	-3.66	QP
5	376.1414	18.97	19.30	38.27	46.00	-7.73	QP
6	641.5044	12.57	24.36	36.93	46.00	-9.07	QP

Emission above 1GHz:

No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4920.500	66.45	3.79	70.24	74.00	-3.76	peak
2	4920.500	46.75	3.79	50.54	54.00	-3.46	AVG
3	7396.646	60.46	8.81	69.27	74.00	-4.73	peak
4	7396.646	42.59	8.81	51.40	54.00	-2.60	AVG
5	9857.287	53.96	17.46	71.42	74.00	-2.58	peak
6	9857.287	33.50	17.46	50.96	54.00	-3.04	AVG
7	12368.826	42.02	16.33	58.35	74.00	-15.65	peak
8	12368.826	19.07	16.33	35.40	54.00	-18.60	AVG
9	14817.775	39.45	19.52	58.97	74.00	-15.03	peak
10	14817.775	23.68	19.52	43.20	54.00	-10.80	AVG

Project No.:	ZJ00016147	Polarization:	Vertical
Standard:	(RE)FCC PART 15 class B 3m	Power Source:	AC 120V/60Hz
Test item:	Radiation Test	Date:	2012-6-12
Temp./Hum.(%RH):	20/50%RH	Time:	9:23:54
EUT:	W913	Distance:	3m
Model:	802.11N40 2452	Test Result:	Pass
Note:			



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	72.0843	20.19	11.56	31.75	40.00	-8.25	QP
2	96.0079	19.41	14.08	33.49	43.50	-10.01	QP
3	160.1008	21.18	14.42	35.60	43.50	-7.90	QP
4	319.5776	18.45	18.18	36.63	46.00	-9.37	QP
5	500.9763	14.45	21.87	36.32	46.00	-9.68	QP
6	641.5044	15.95	24.36	40.31	46.00	-5.69	QP

Emission above 1GHz:

No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4920.500	50.26	3.79	54.05	74.00	-19.95	peak
2	4920.500	35.21	3.79	39.00	54.00	-15.00	AVG
3	10229.411	30.69	17.52	48.21	74.00	-25.79	peak
4	10229.411	19.18	17.52	36.70	54.00	-17.30	AVG
5	16948.099	30.81	22.53	53.34	74.00	-20.66	peak
6	16948.099	19.37	22.53	41.90	54.00	-12.10	AVG

Note: Below 30MHz, since the radiated emission of the EUT is too weak to be detected.

7. Spurious Emissions at Antenna Port

7.1 LIMITS

FCC 15.247(d) & 15.209

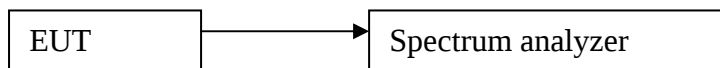
7.2 TEST PROCEDURES

Test procedures follow KDB 558074 D01 DTS Meas Guidance v01.

Remove the antenna from the EUT and then connect a low attenuation cable from the antenna port to the spectrum.

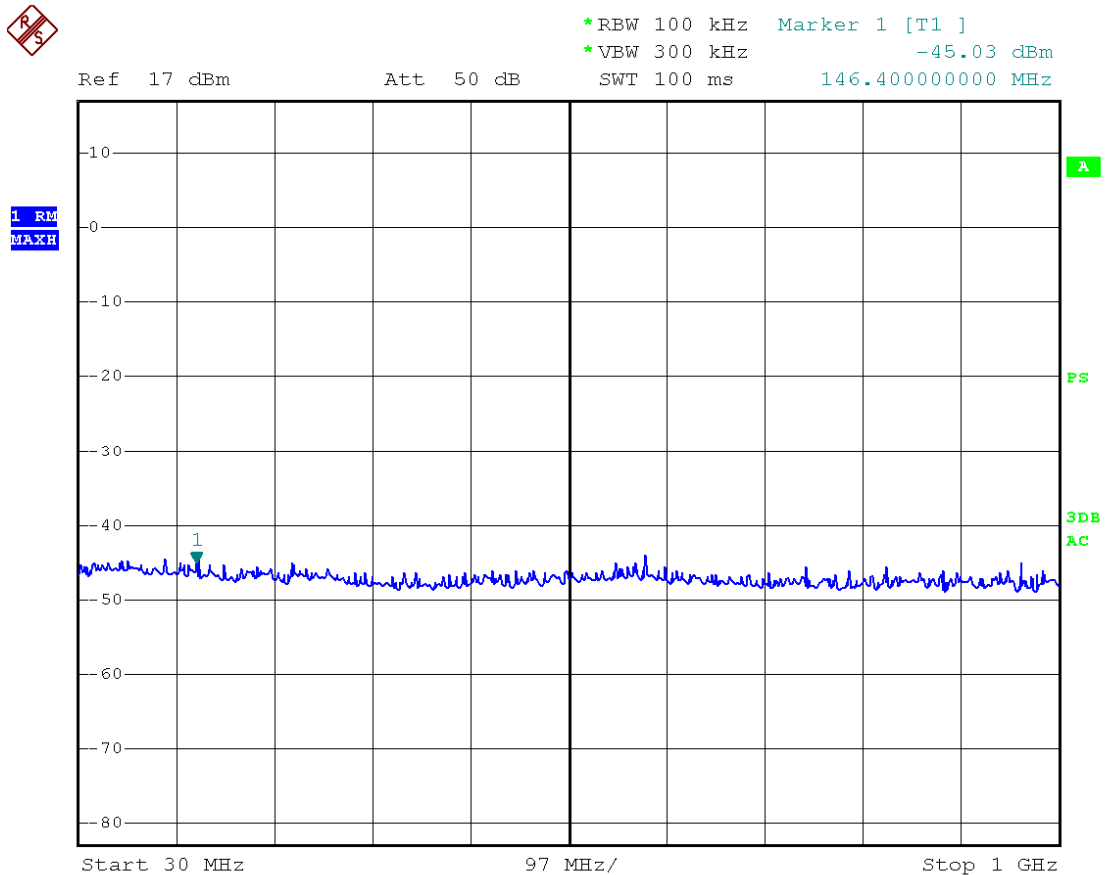
Below 1GHz Set the spectrum analyzer: RBW =100KHz VBW >= RBW , Span = enough to catch the trace. Sweep = auto; Detector Function = RMS. Trace = Max,hold. Allow the trace to stabilize

7.3 TEST SETUP

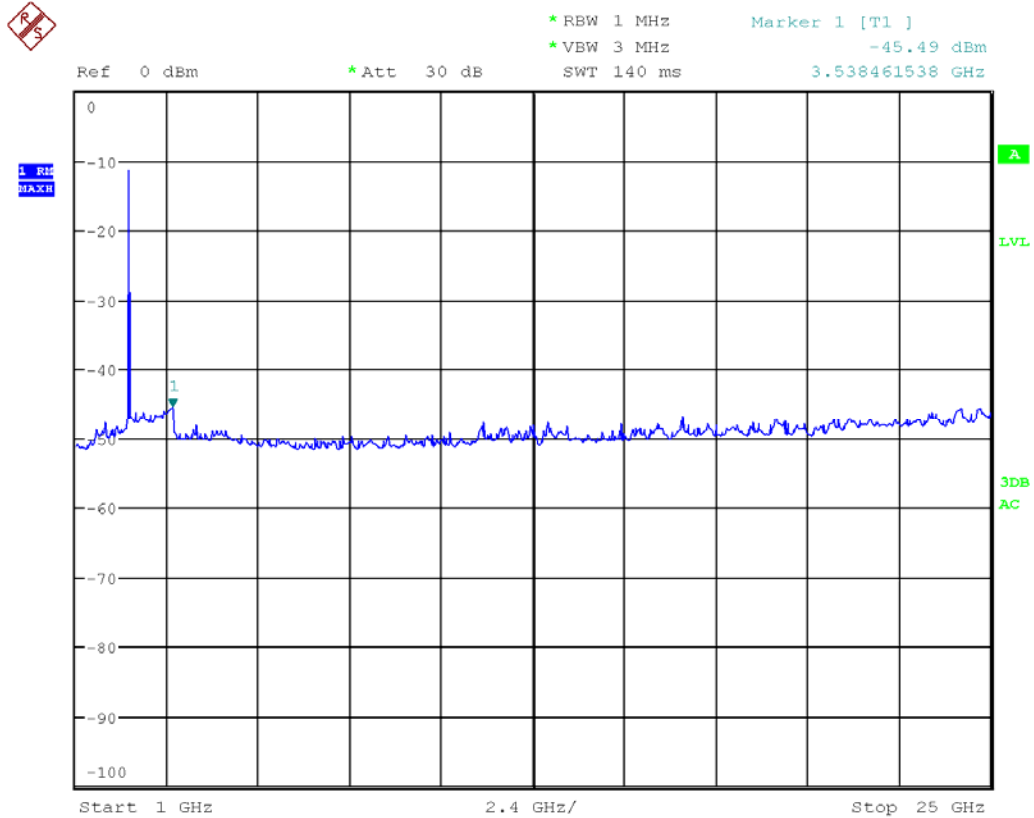


7.4 TEST RESULTS

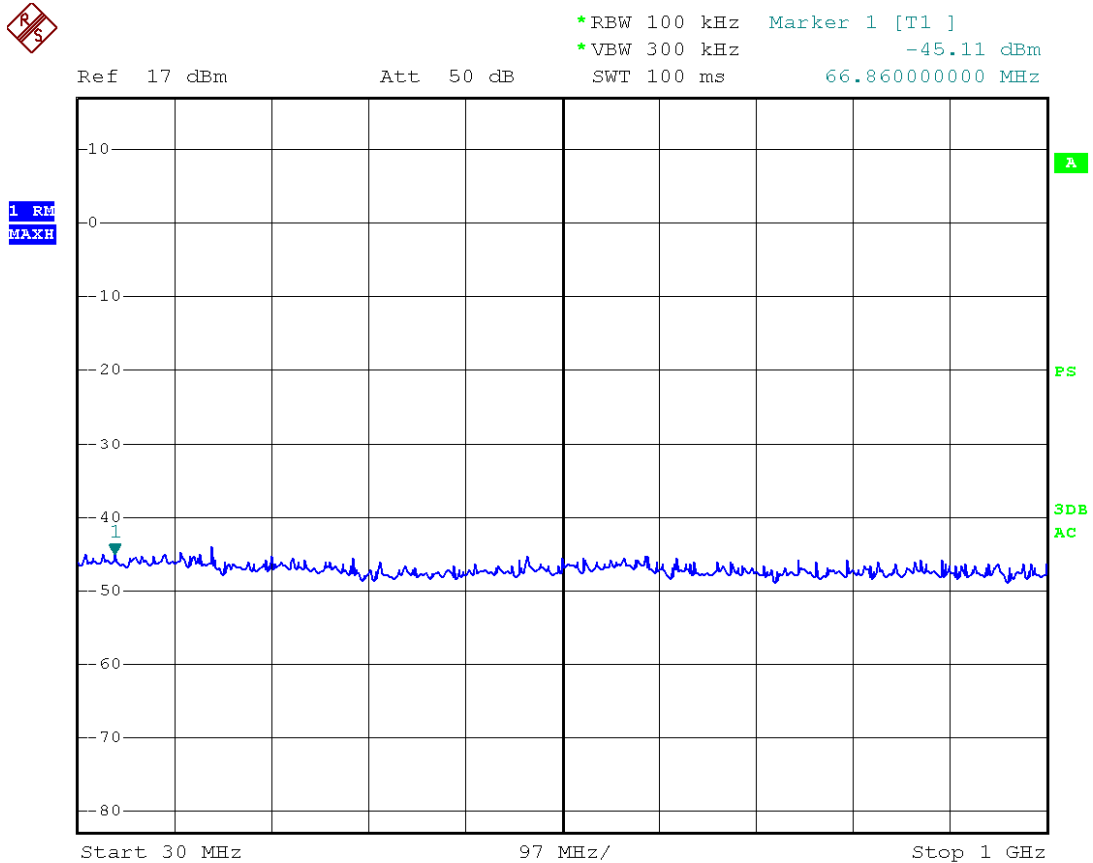
802.11b mode:
Channel 2412MHz
30MHz~1GHz



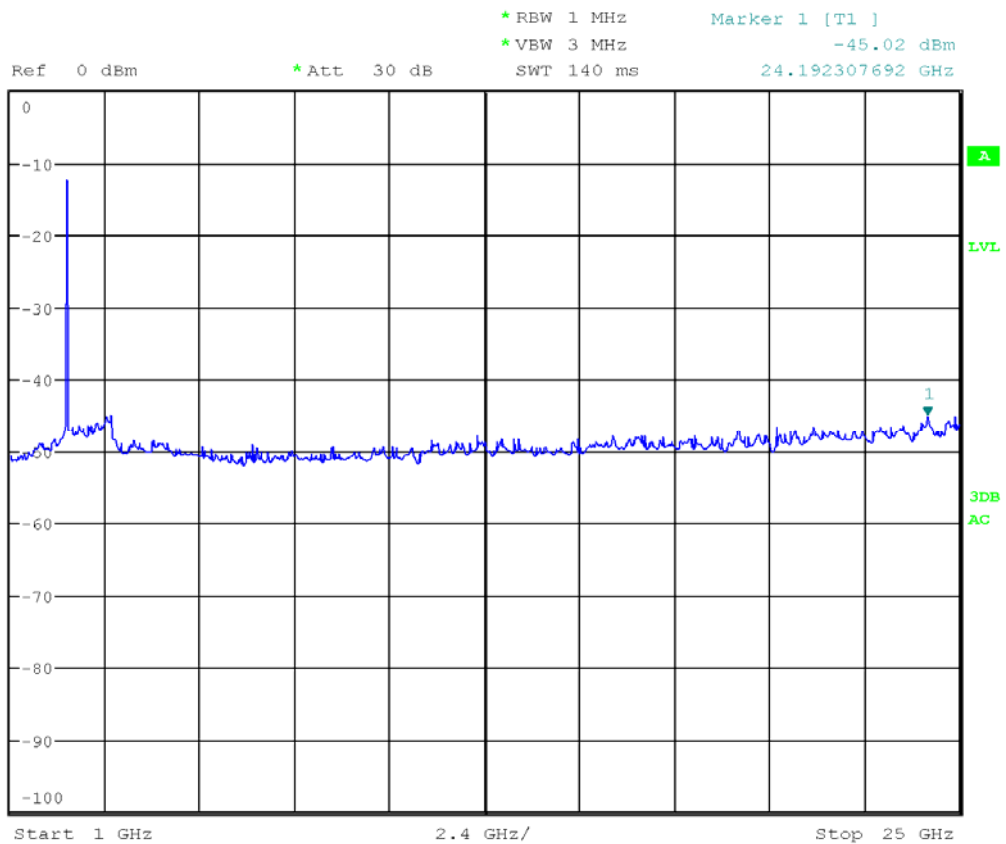
Channel 2412MHz
1GHz~25GHz



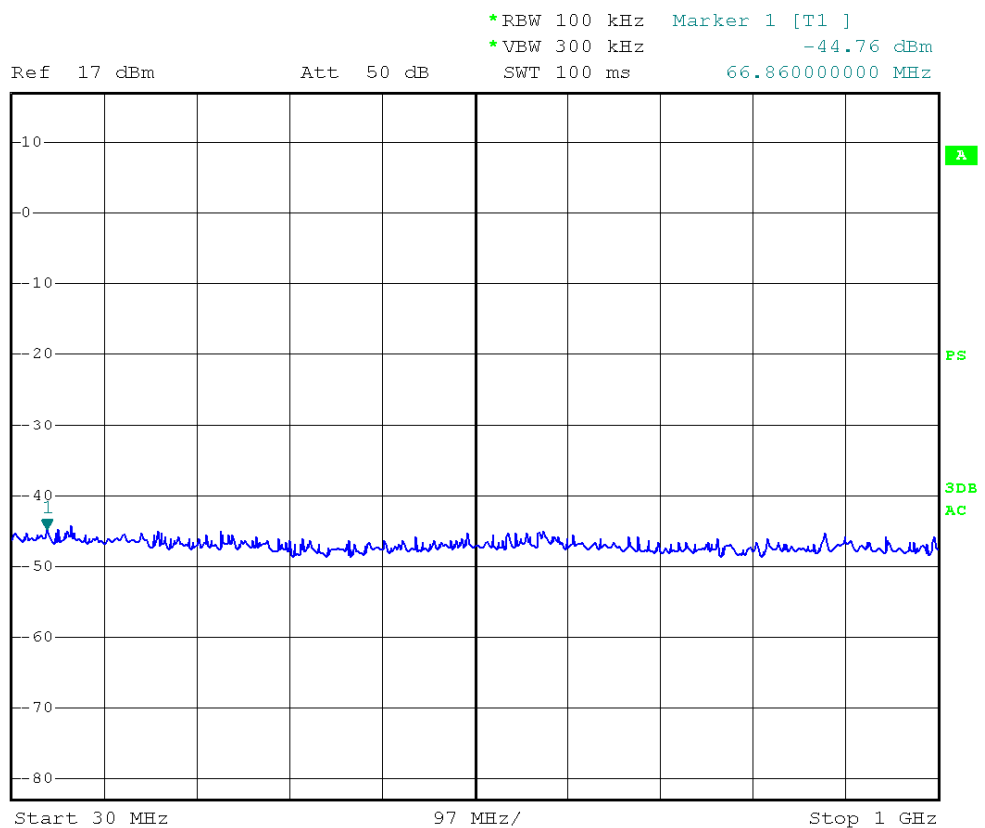
802.11b mode:
Channel 2437MHz
30MHz~1GHz



Channel 2437MHz
1GHz~25GHz



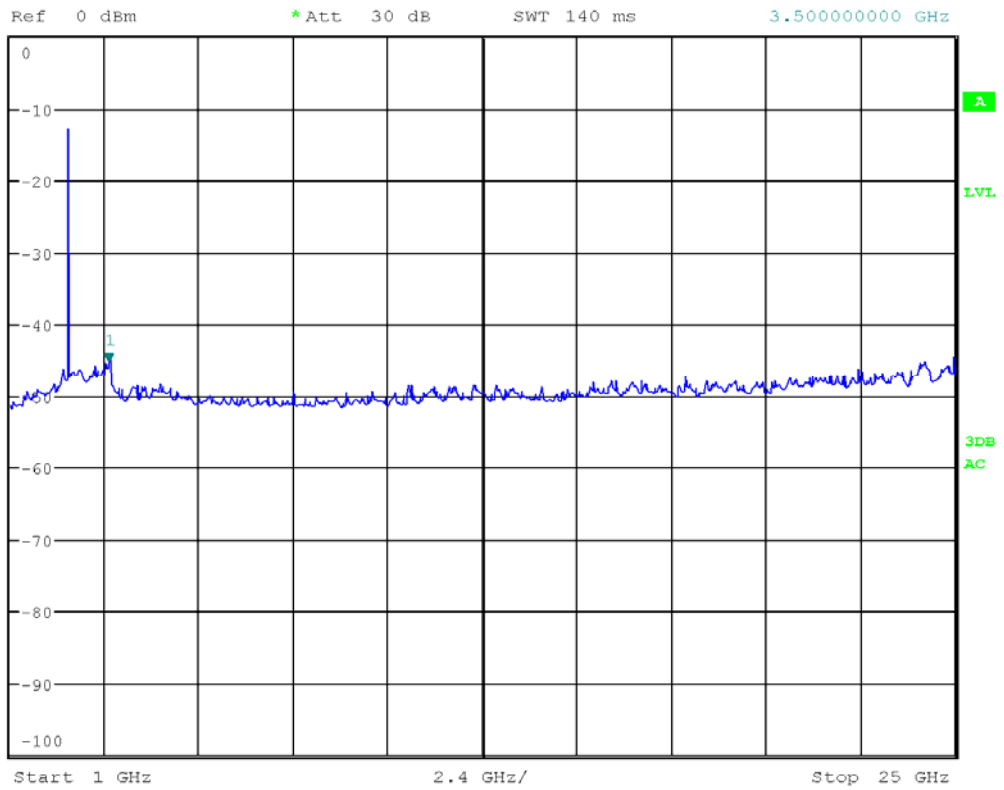
802.11b mode:
Channel 2462MHz
30MHz~1GHz



Channel 2462MHz
1GHz~25GHz



*RBW 1 MHz Marker 1 [T1]
*VBW 3 MHz -45.23 dBm
SWT 140 ms 3.500000000 GHz



802.11G mode:
Channel 2412MHz
30MHz~1GHz



*RBW 100 kHz Marker 1 [T1]
*VBW 300 kHz -43.57 dBm
SWT 100 ms 103.720000000 MHz

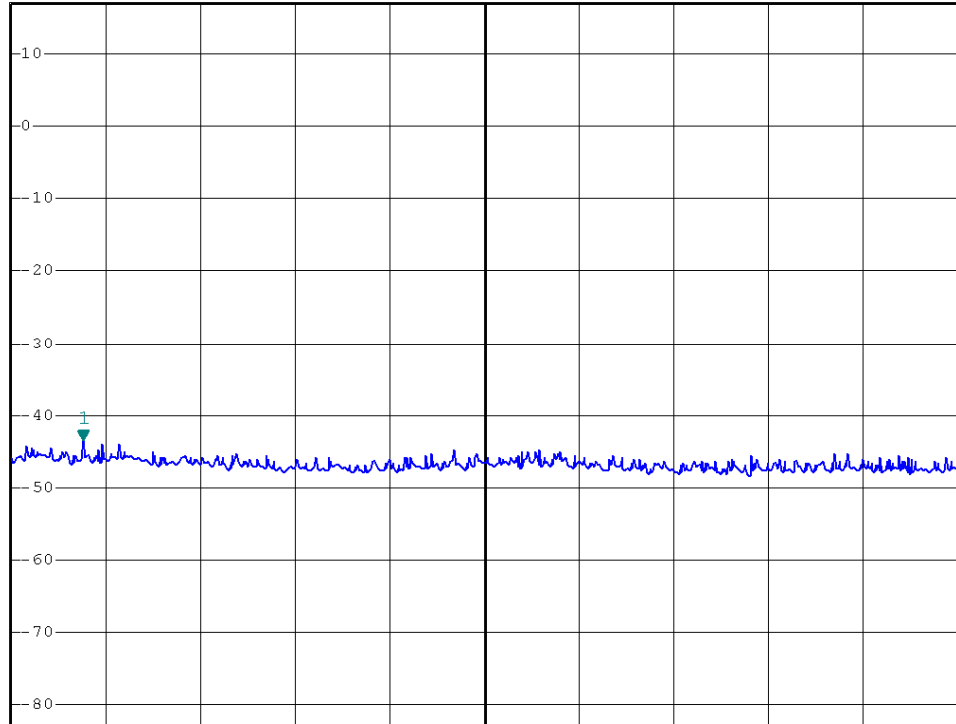
Ref 17 dBm

Att 50 dB

SWT 100 ms

103.720000000 MHz

1 RM
MAXH



Start 30 MHz

97 MHz/

Stop 1 GHz

Channel 2412MHz
1GHz~25GHz



*RBW 1 MHz Marker 1 [T1]
*VBW 3 MHz -44.59 dBm
SWT 140 ms 3.538461538 GHz

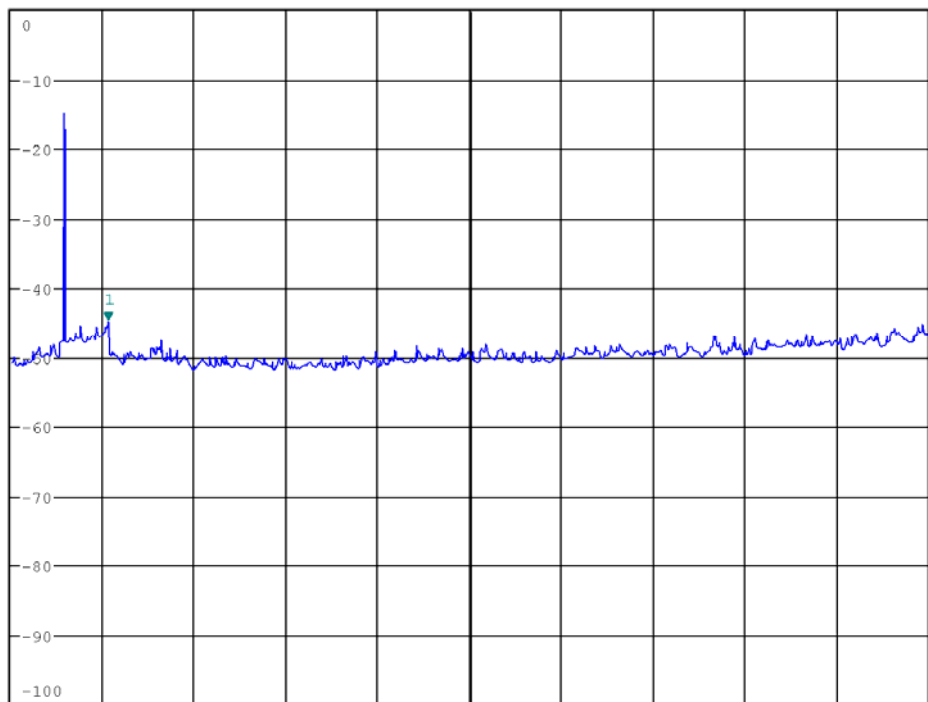
Ref 0 dBm

*Att 30 dB

SWT 140 ms

3.538461538 GHz

1 RM
MAXH



Start 1 GHz

2.4 GHz/

Stop 25 GHz

802.11G mode:
Channel 2437MHz
30MHz~1GHz



*RBW 100 kHz Marker 1 [T1]
*VBW 300 kHz -44.70 dBm
SWT 100 ms 128.940000000 MHz

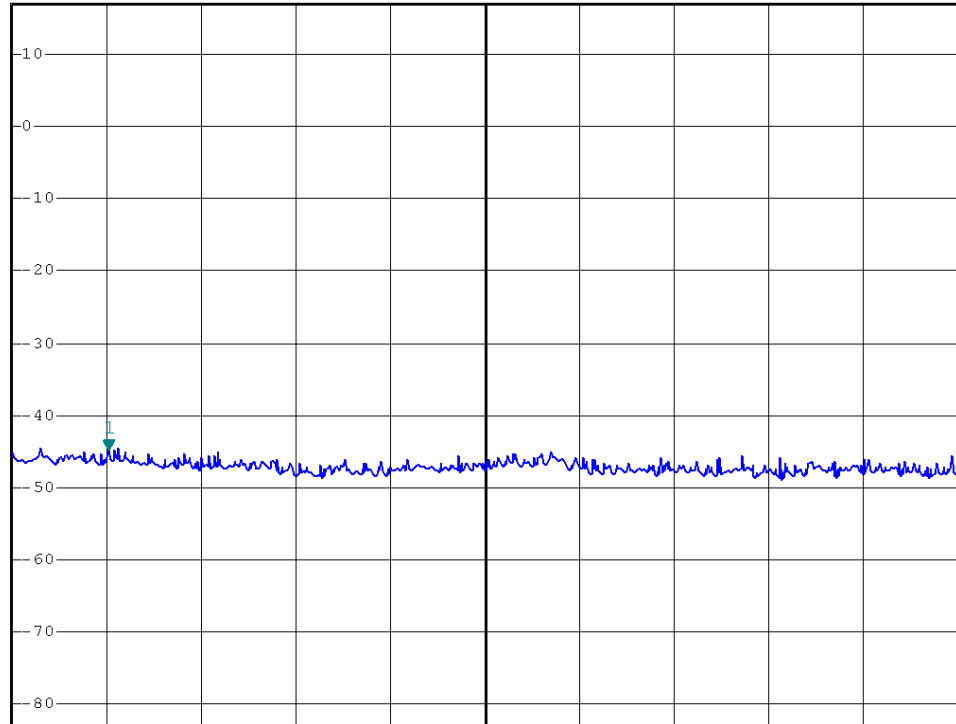
Ref 17 dBm

Att 50 dB

SWT 100 ms

128.940000000 MHz

1 RM
MAXH



Start 30 MHz

97 MHz/

Stop 1 GHz

Channel 2437MHz
1GHz~25GHz



*RBW 1 MHz Marker 1 [T1]
*VBW 3 MHz -45.11 dBm
SWT 140 ms 3.538461538 GHz

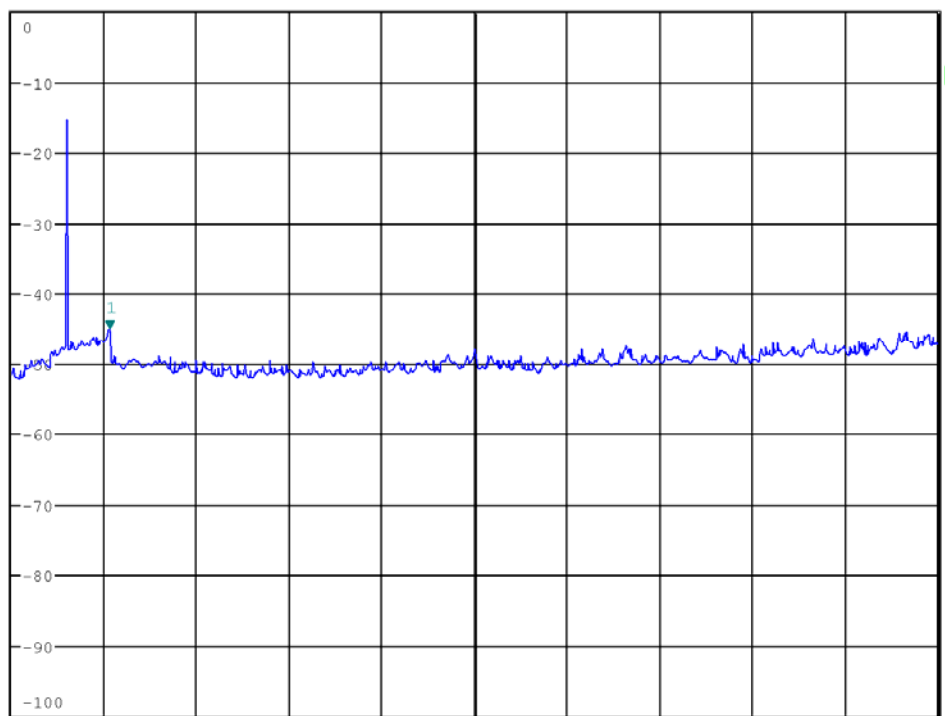
Ref 0 dBm

*Att 30 dB

SWT 140 ms

3.538461538 GHz

1 RM
MAXH



Start 1 GHz

2.4 GHz/

Stop 25 GHz

802.11G mode:
Channel 2462MHz
30MHz~1GHz



*RBW 100 kHz Marker 1 [T1]
*VBW 300 kHz -44.41 dBm
SWT 100 ms 61.040000000 MHz

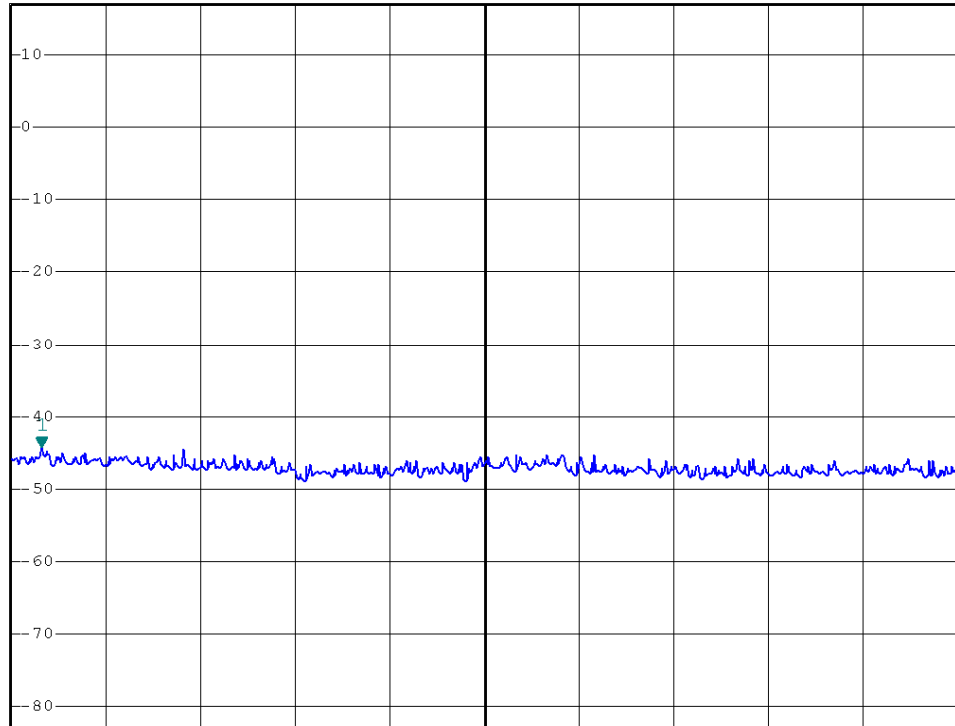
Ref 17 dBm

Att 50 dB

SWT 100 ms

61.040000000 MHz

1 RM
MAXH



Start 30 MHz

97 MHz/

Stop 1 GHz

Channel 2462MHz
1GHz~25GHz



*RBW 1 MHz Marker 1 [T1]
*VBW 3 MHz -45.25 dBm
SWT 140 ms 3.500000000 GHz

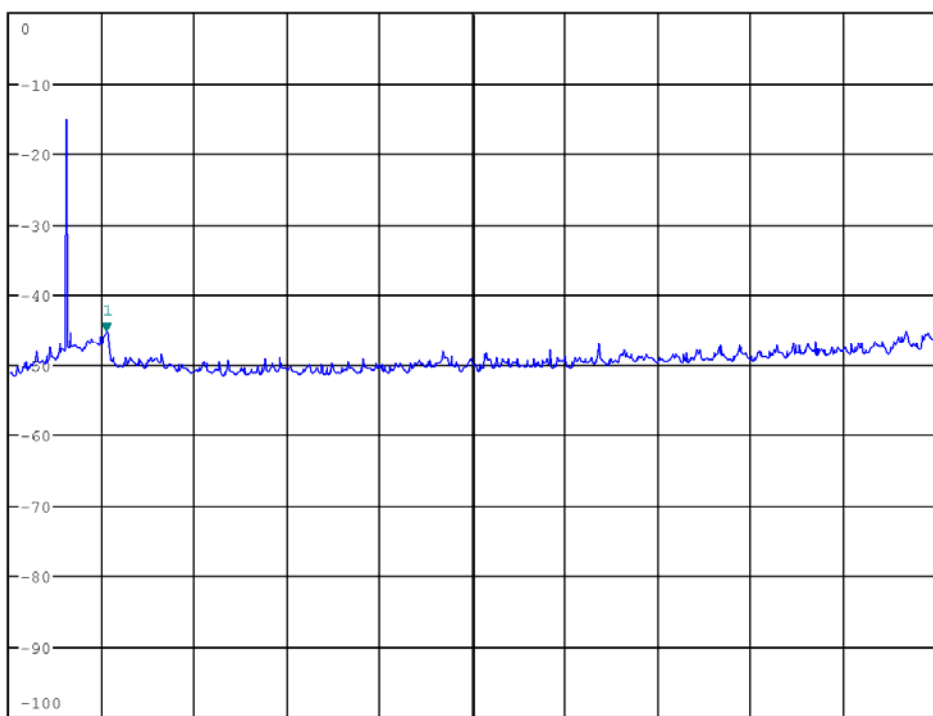
Ref 0 dBm

*Att 30 dB

SWT 140 ms

3.500000000 GHz

1 RM
MAXH

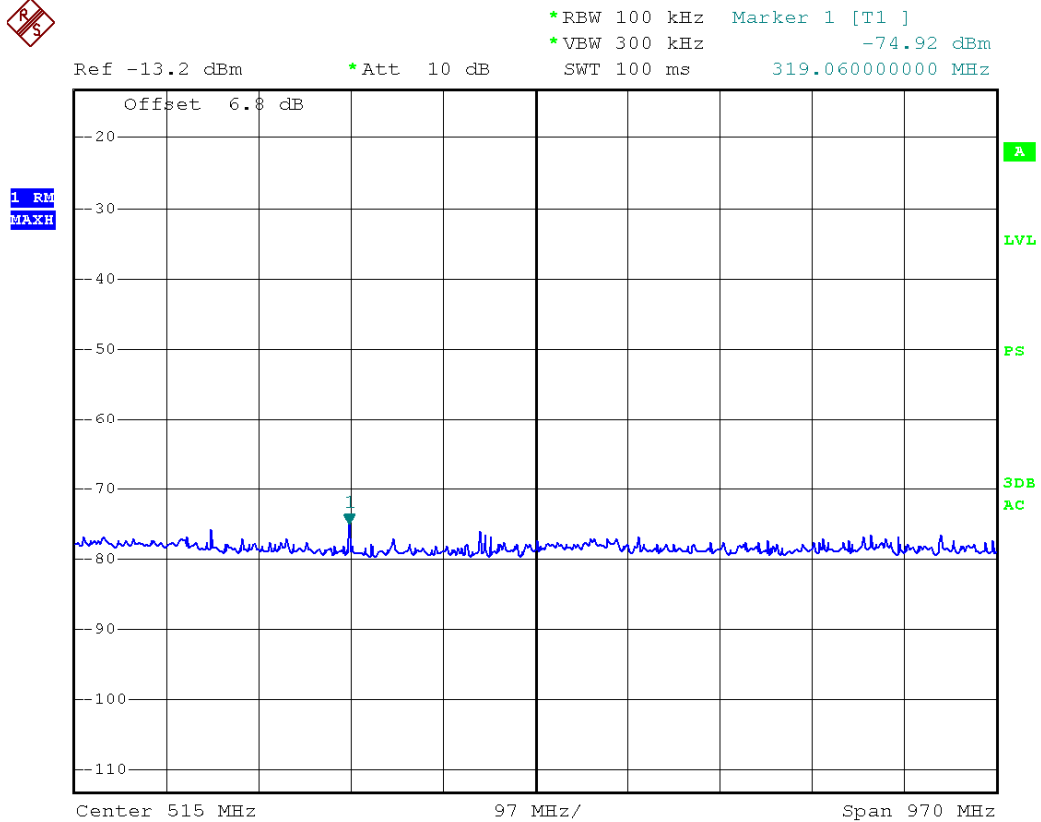


Start 1 GHz

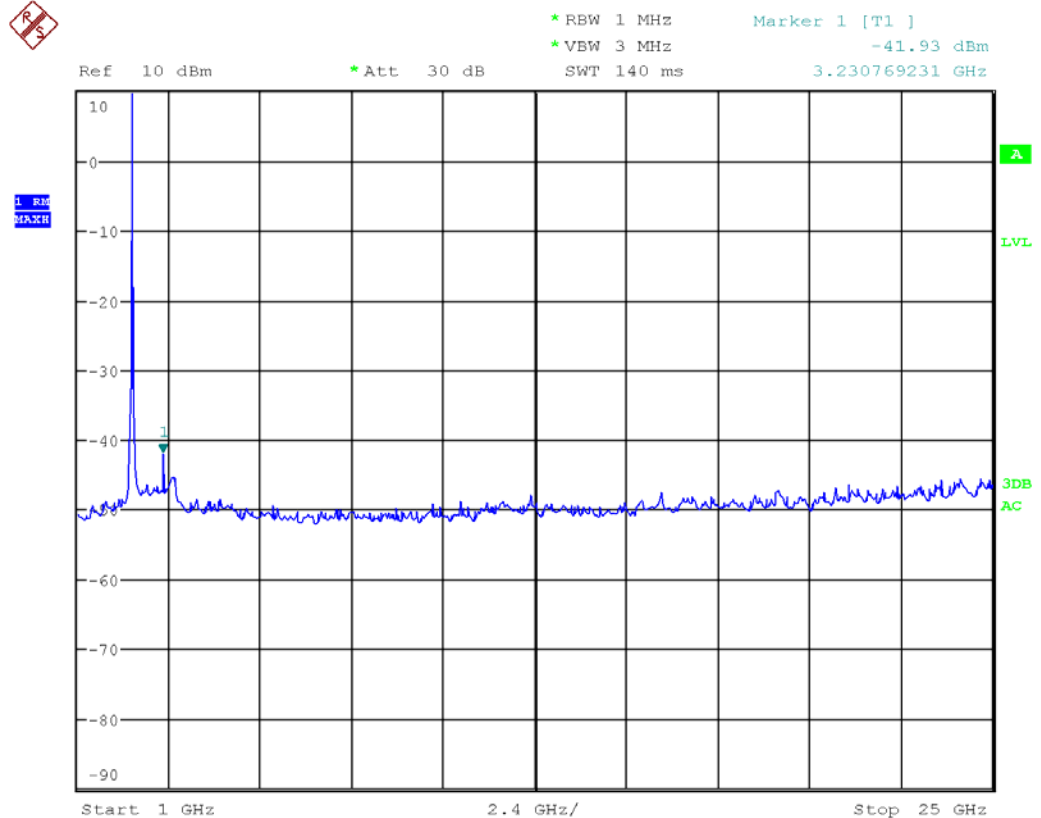
2.4 GHz/

Stop 25 GHz

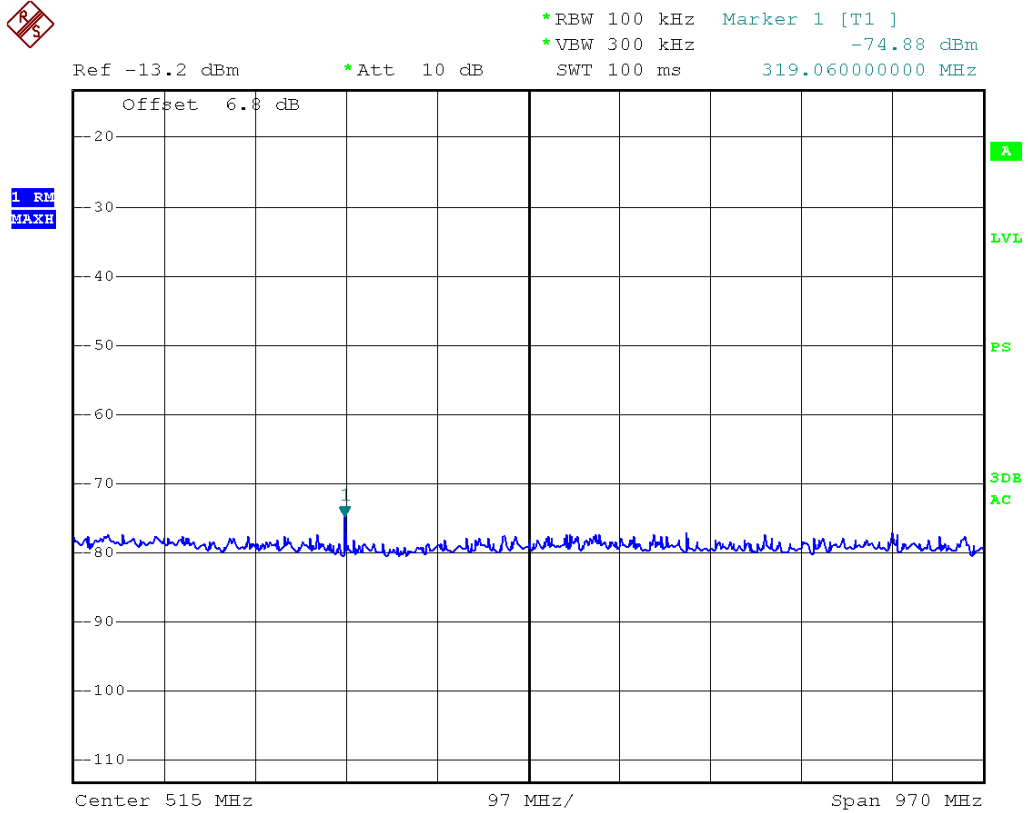
802.11n20 mode:
Channel 2412MHz
30MHz~1GHz



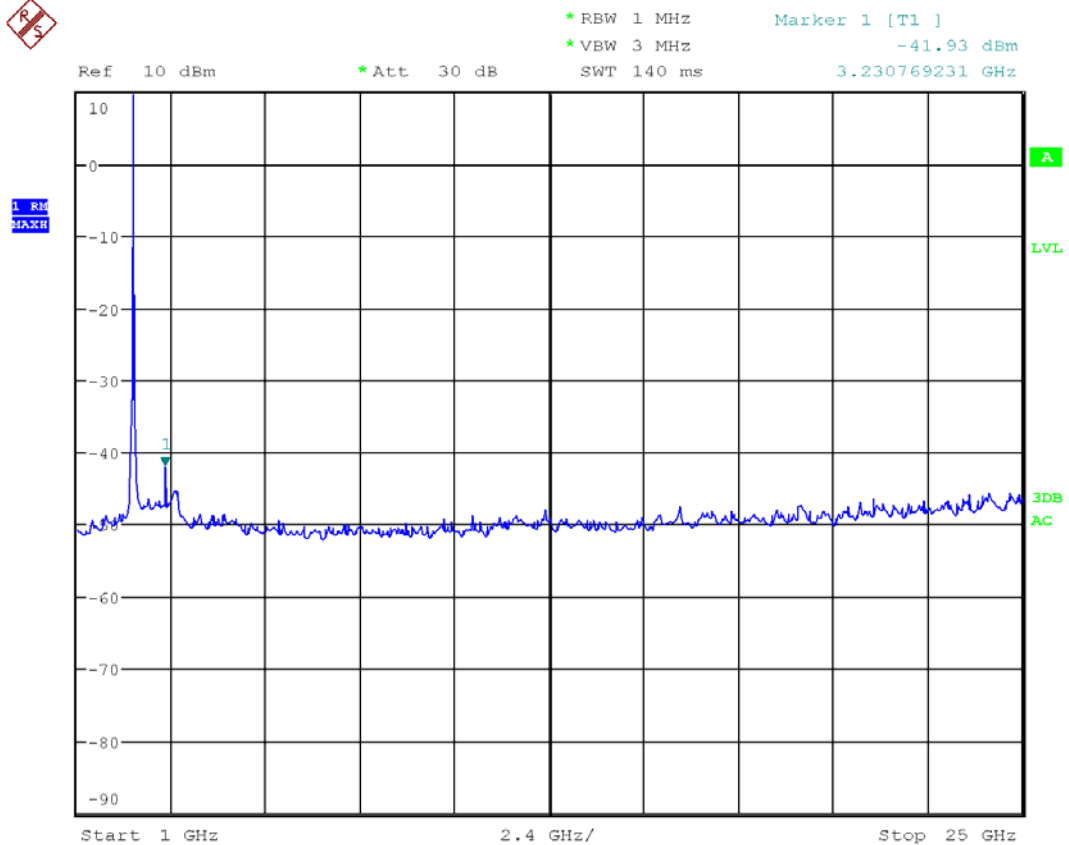
Channel 2412MHz
1GHz~25GHz



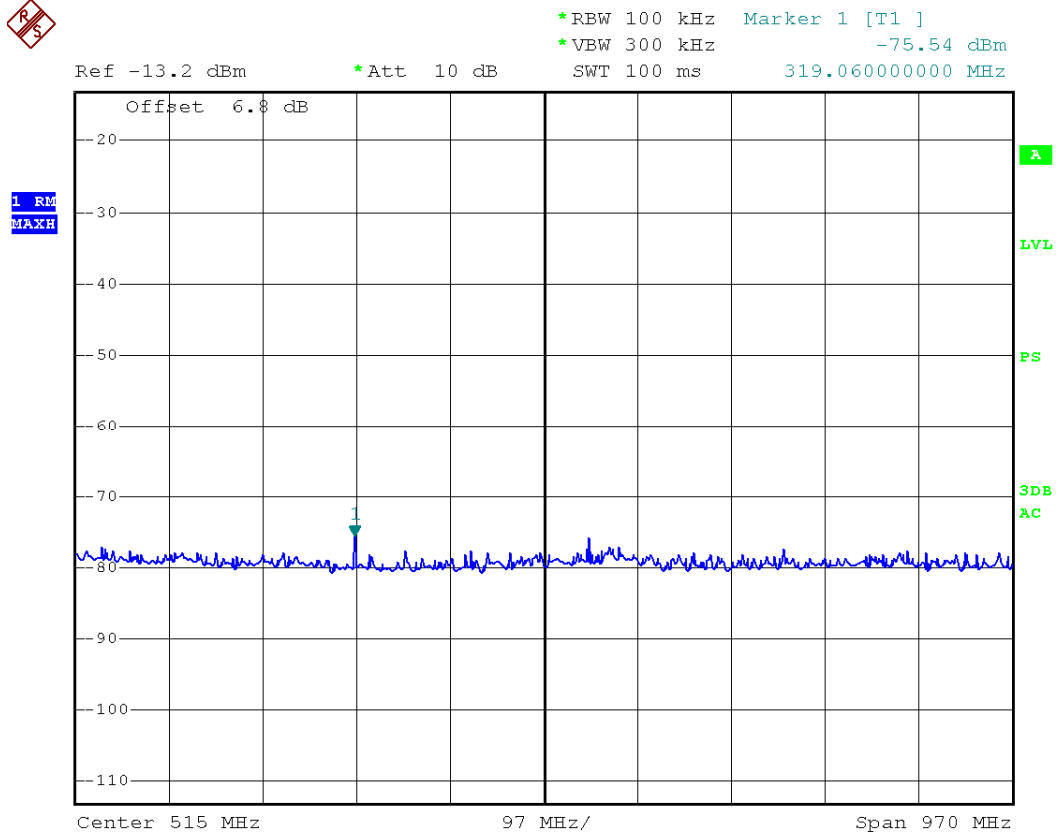
802.11n20 mode:
Channel 2437MHz
30MHz~1GHz



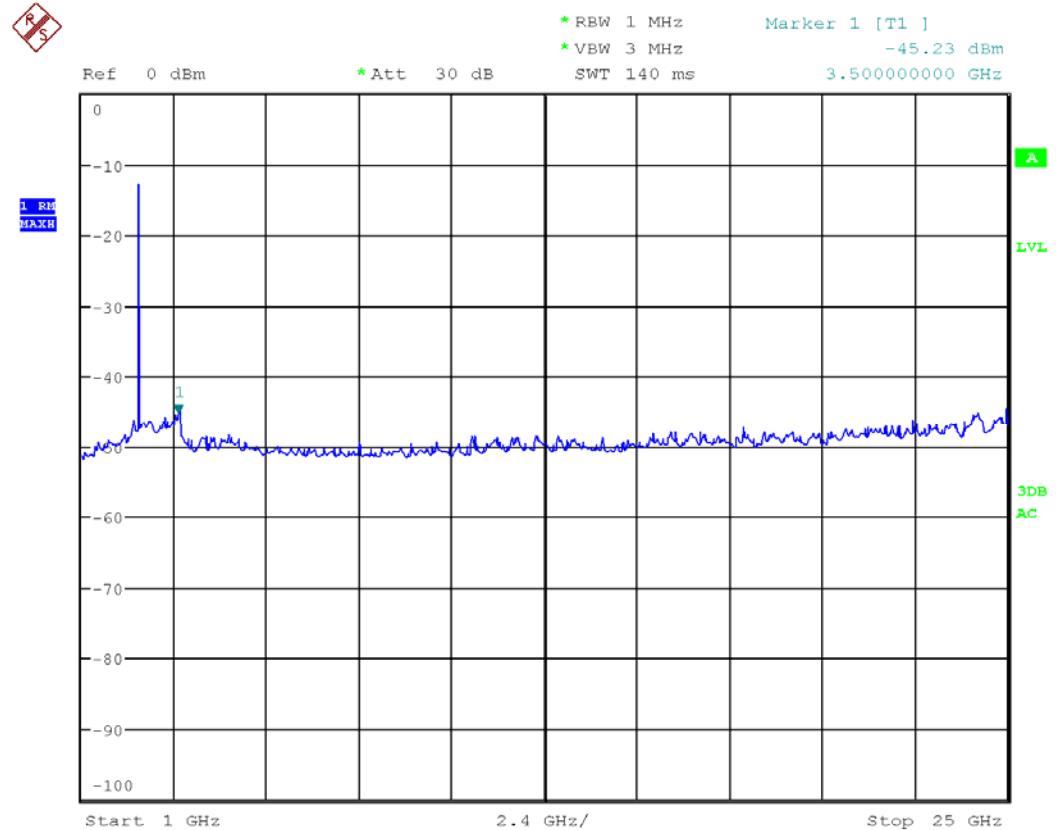
Channel 2437MHz
1GHz~25GHz



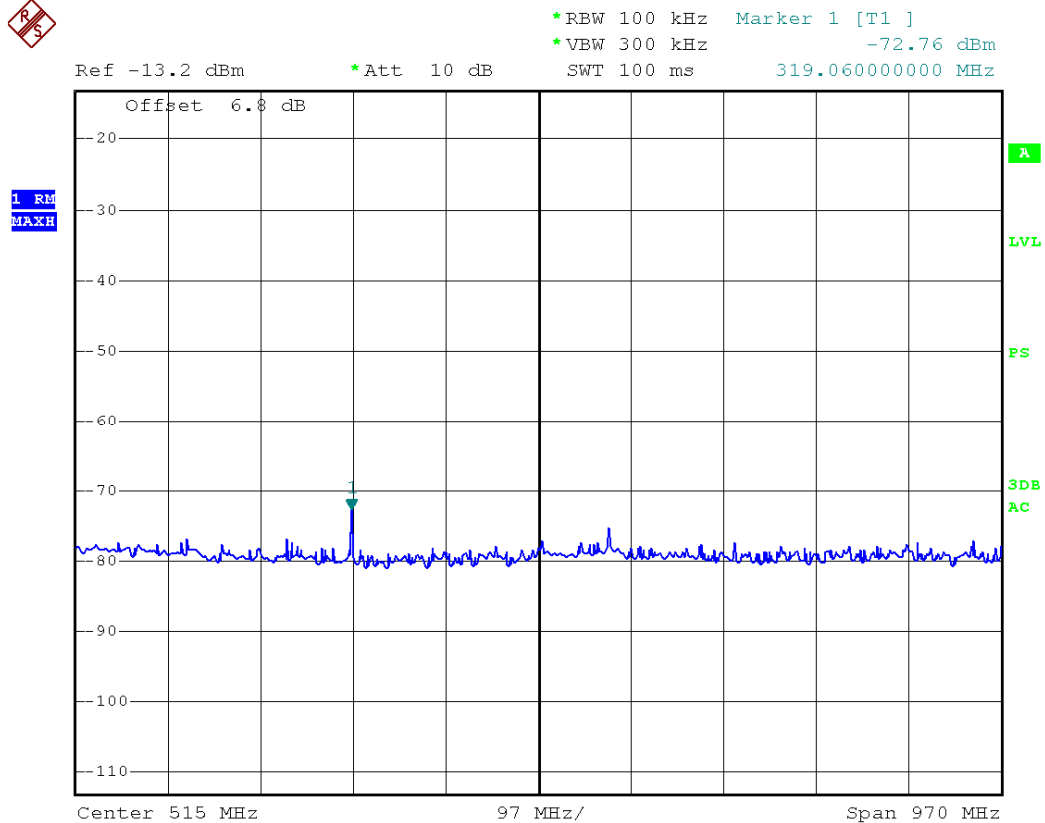
802.11n20 mode:
Channel 2462MHz
30MHz~1GHz



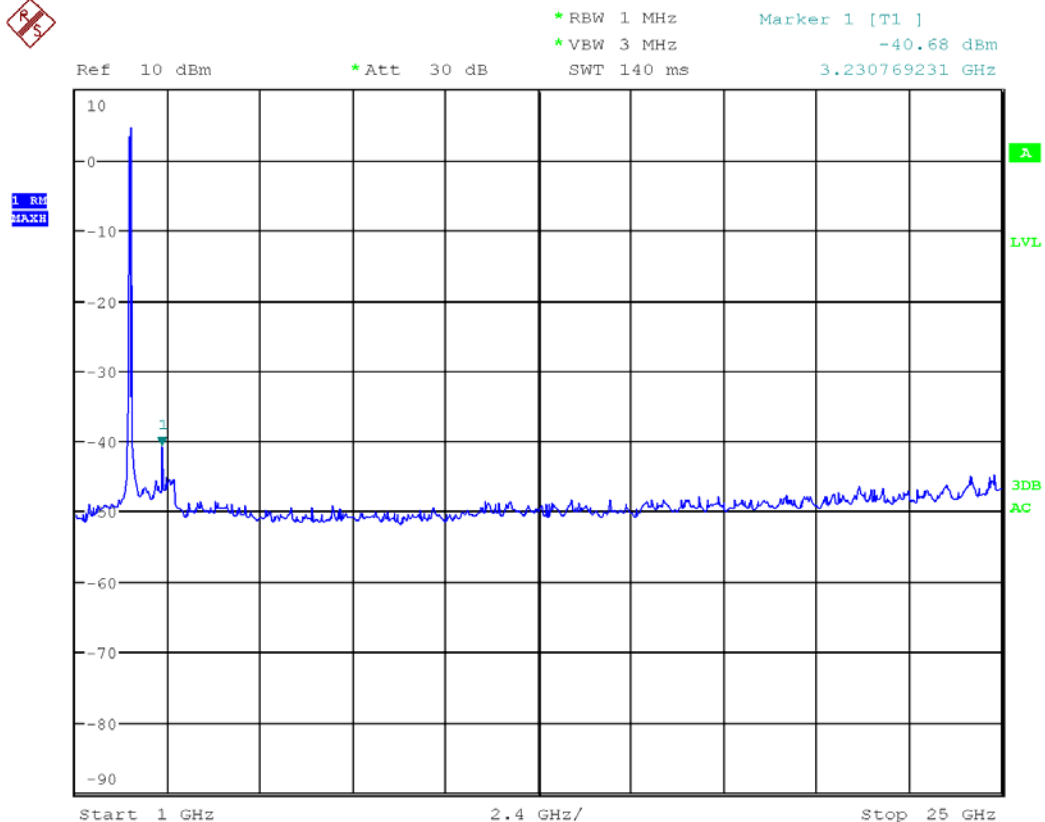
Channel 2462MHz
1GHz~25GHz



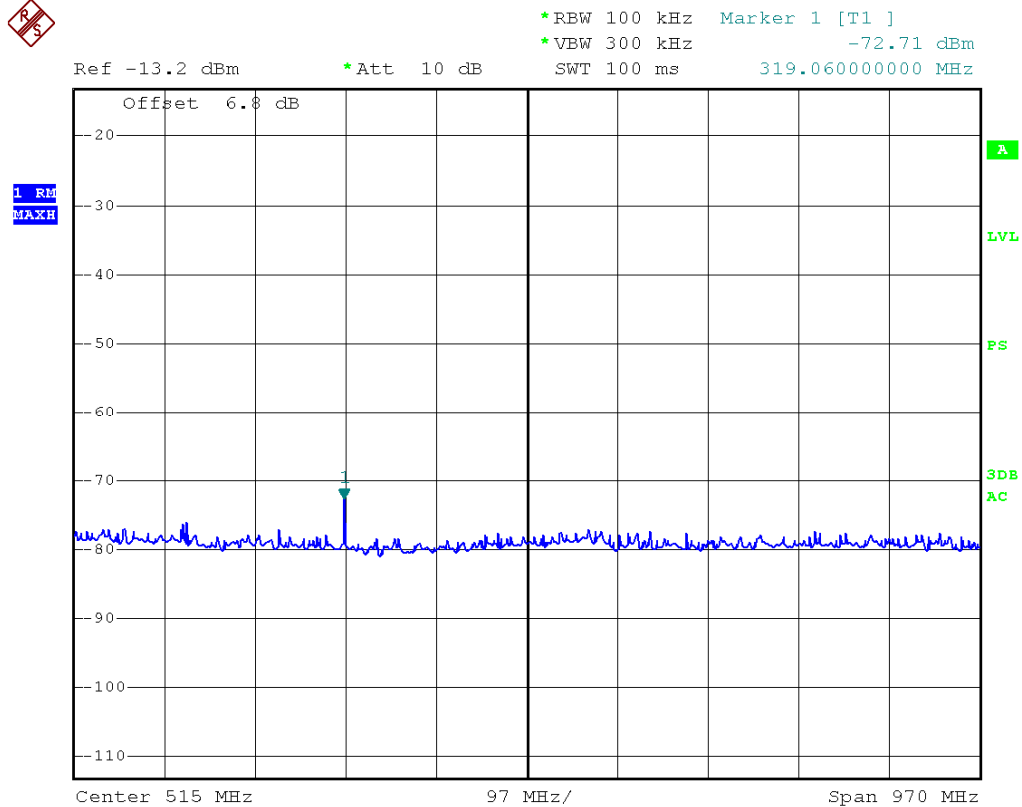
802.11n40 mode:
Channel 2422MHz
30MHz~1GHz



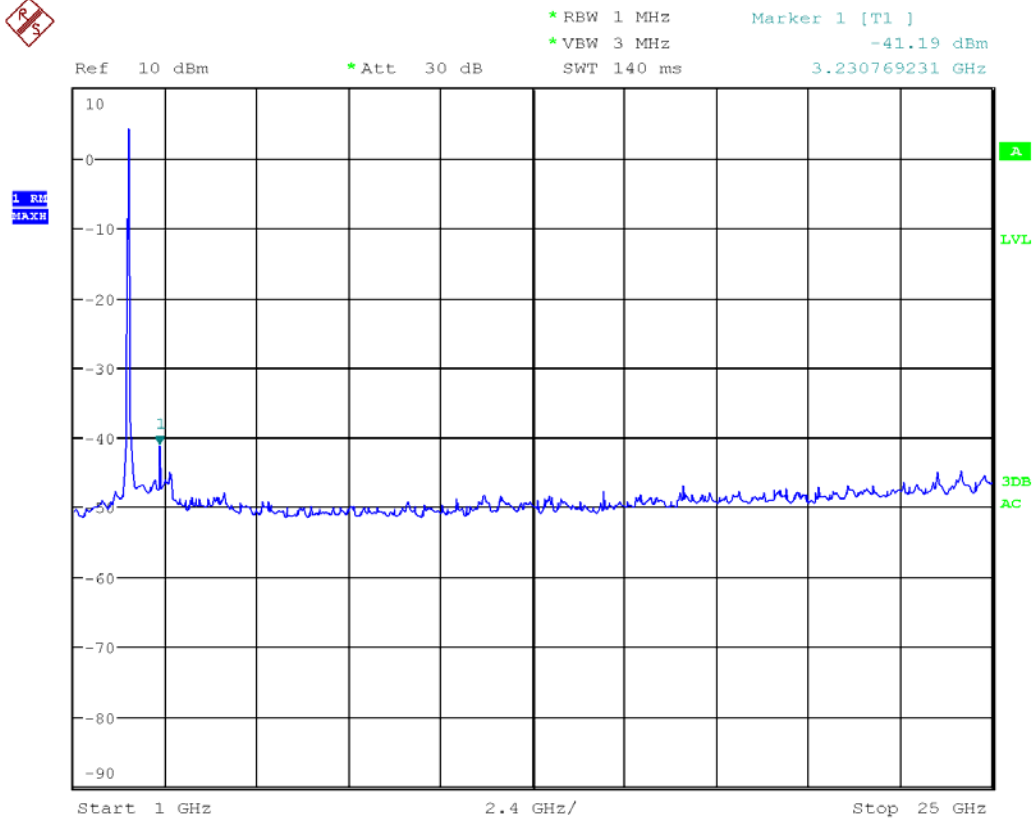
Channel 2422MHz
1GHz~25GHz



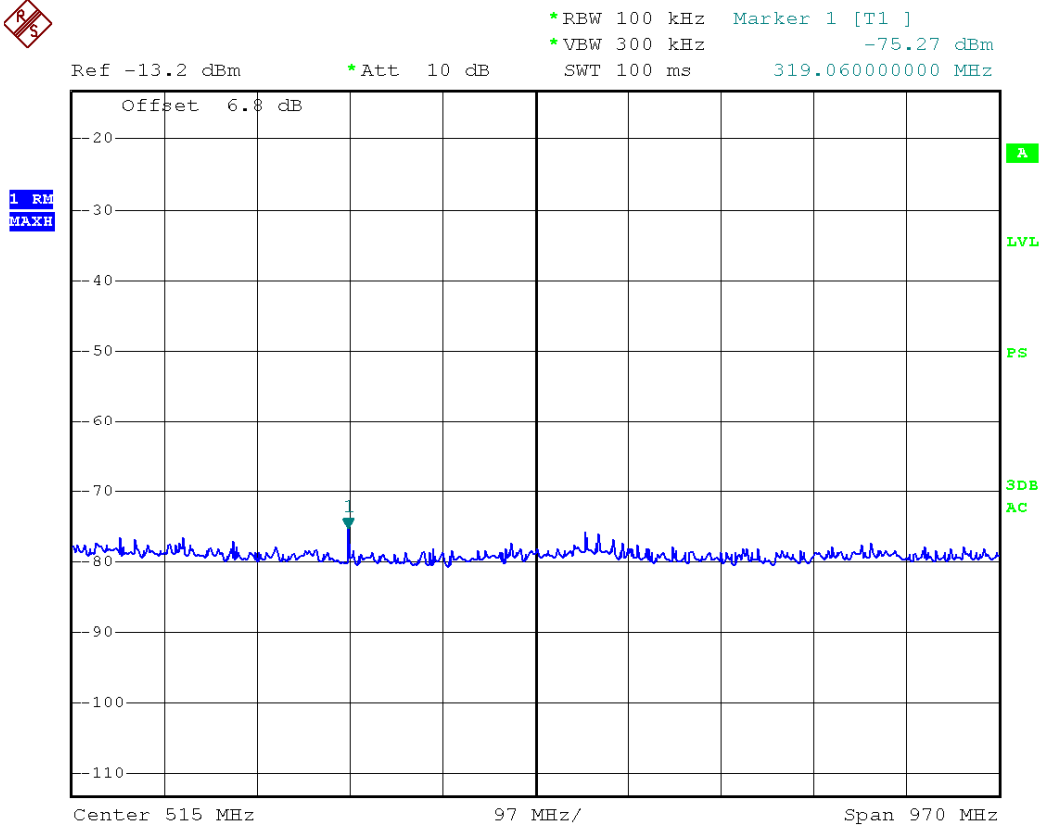
802.11n40 mode:
Channel 2437MHz
30MHz~1GHz



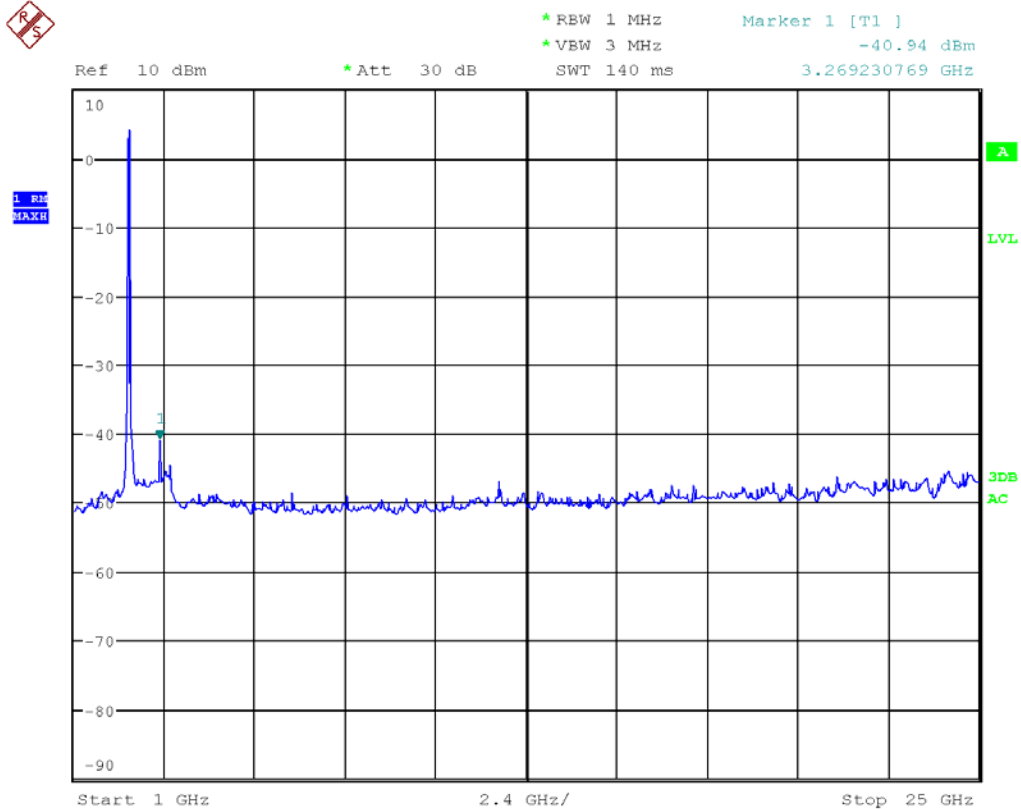
Channel 2437MHz
1GHz~25GHz



802.11n40 mode:
Channel 2452MHz
30MHz~1GHz



Channel 2452MHz
1GHz~25GHz



8. 6dB BANDWIDTH TESTING

8.1 LIMITS

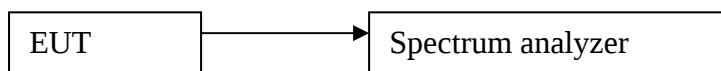
Systems using digital modulation techniques may operate in the 902–928 MHz, 2400–2483.5 MHz, and 5725–5850 MHz bands. The minimum 6dB bandwidth shall be at least 500 kHz.

8.2 TEST PROCEDURES

Test procedures follow KDB 558074 D01 DTS Meas Guidance v01.

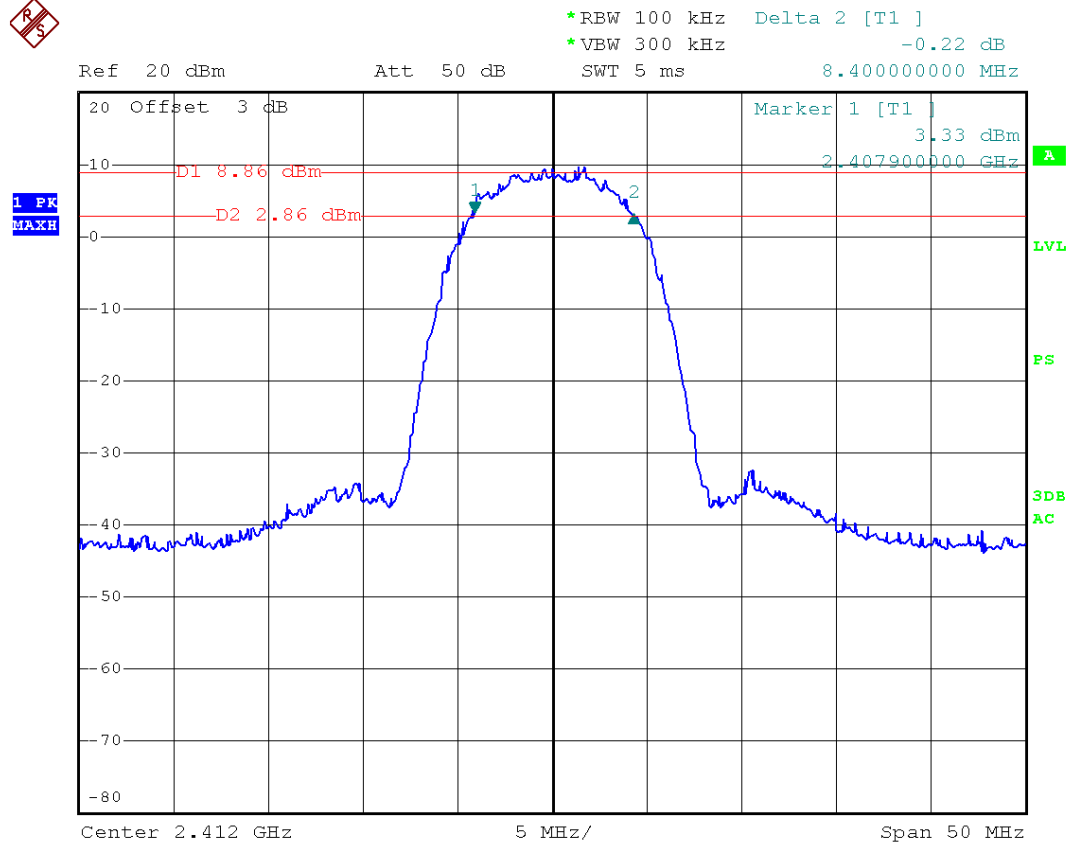
1. Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
2. Position the EUT without connection to measurement instrument. Turn on the EUT and connect it to measurement instrument. Then set it to any one convenient frequency within its operating range. Set a reference level on the measuring instrument equal to the highest peak value.
3. Set resolution bandwidth (RBW) = 1-5 % of the emission bandwidth (EBW). Set the video bandwidth (VBW) $\geq 3 \times$ RBW. Detector = Peak. Trace mode = max hold. Sweep = auto couple. Allow the trace to stabilize.
4. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission. Compare the resultant bandwidth with the RBW setting of the analyzer.
5. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is 1-5 %.
6. Repeat above procedures until all frequencies measured were complete.

8.3 TEST SETUP

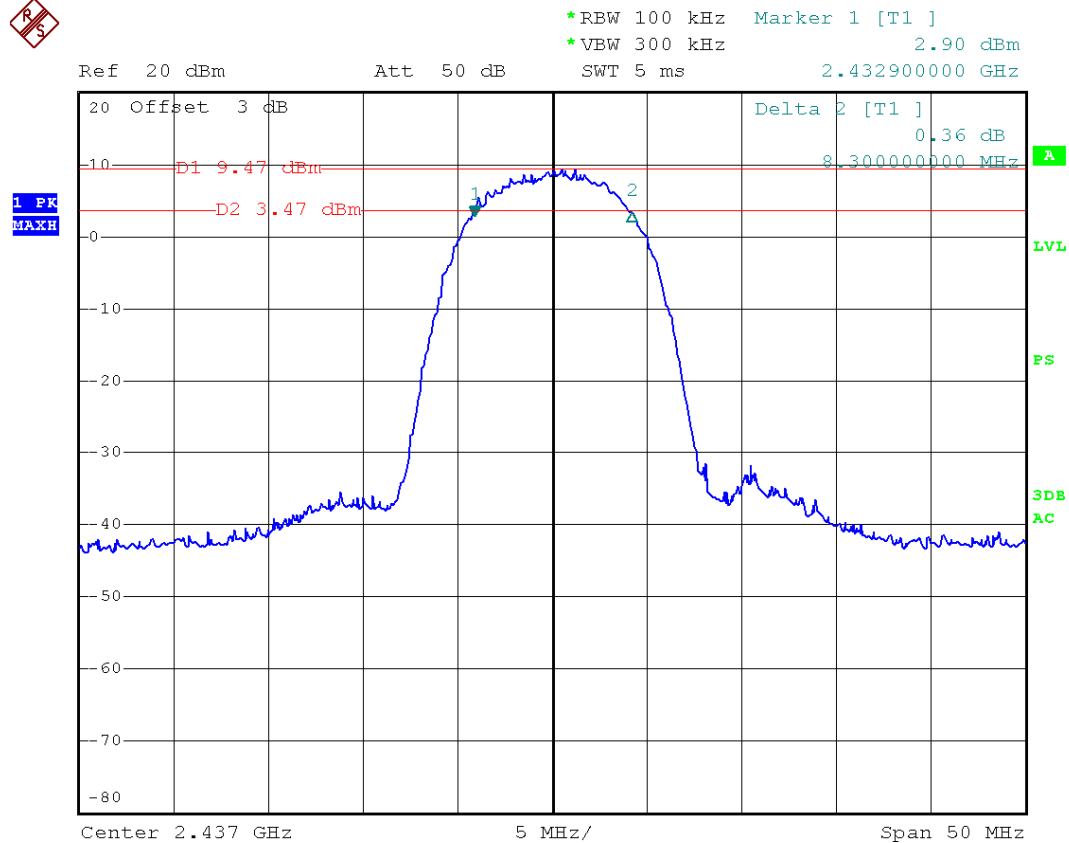


8.4 TEST RESULTS

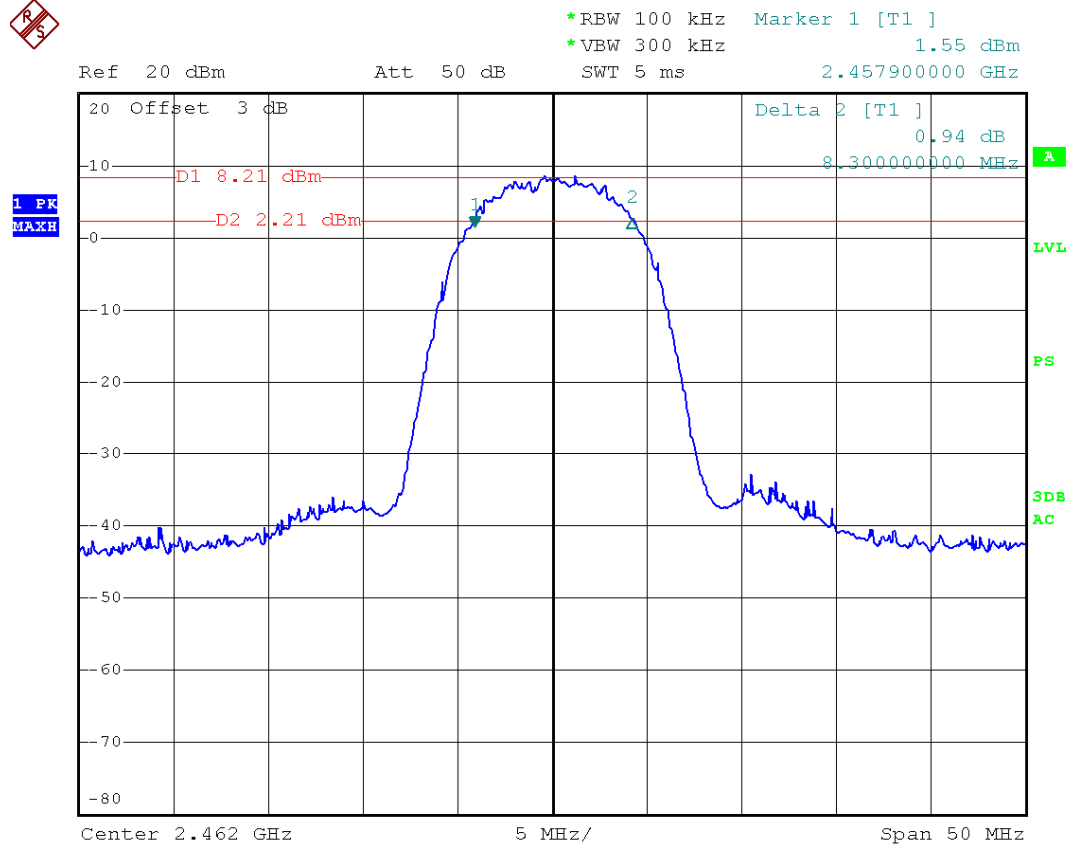
Channel	Channel Frequency (MHz)	Data Rate (Mbps)	6dB Bandwidth (MHz)	Limit (kHz)
802.11b Mode				
Low Channel	2412	11	8.400	> 500
Middle Channel	2437	11	8.300	> 500
High Channel	2462	11	8.300	> 500

802.11b mode:
Channel 2412MHz

Channel 2437MHz

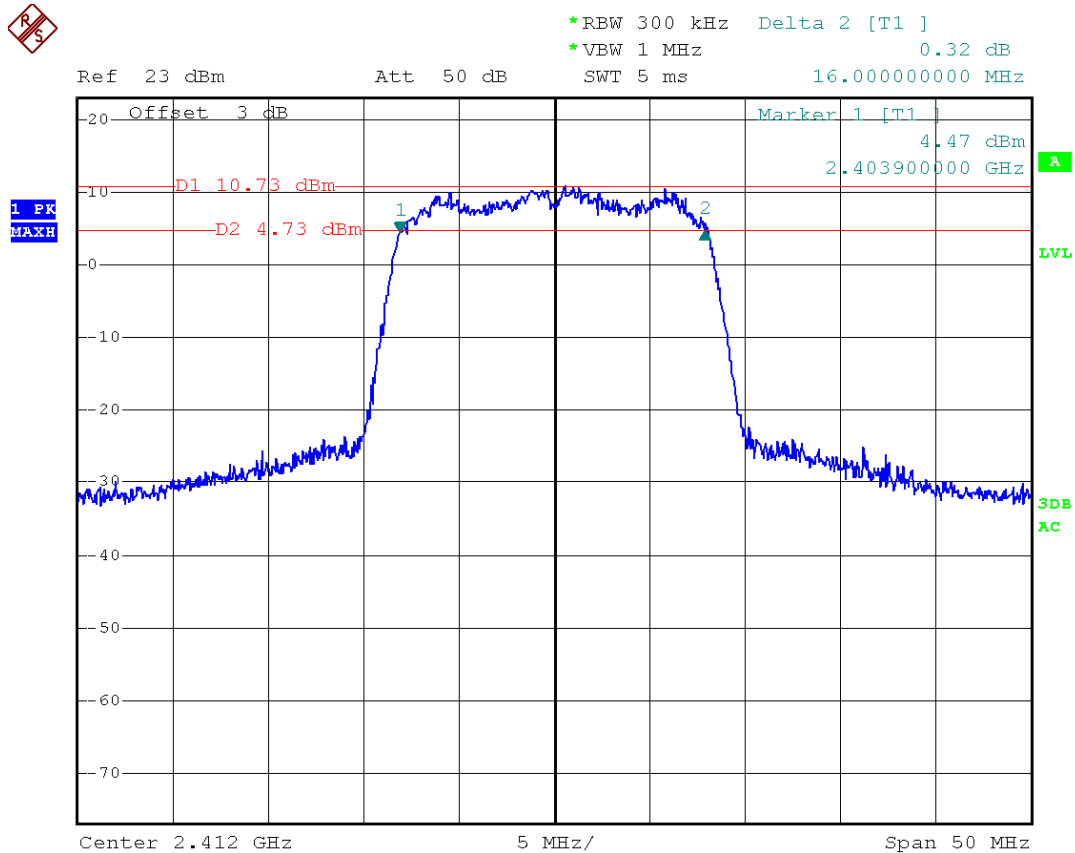


Channel 2462MHz

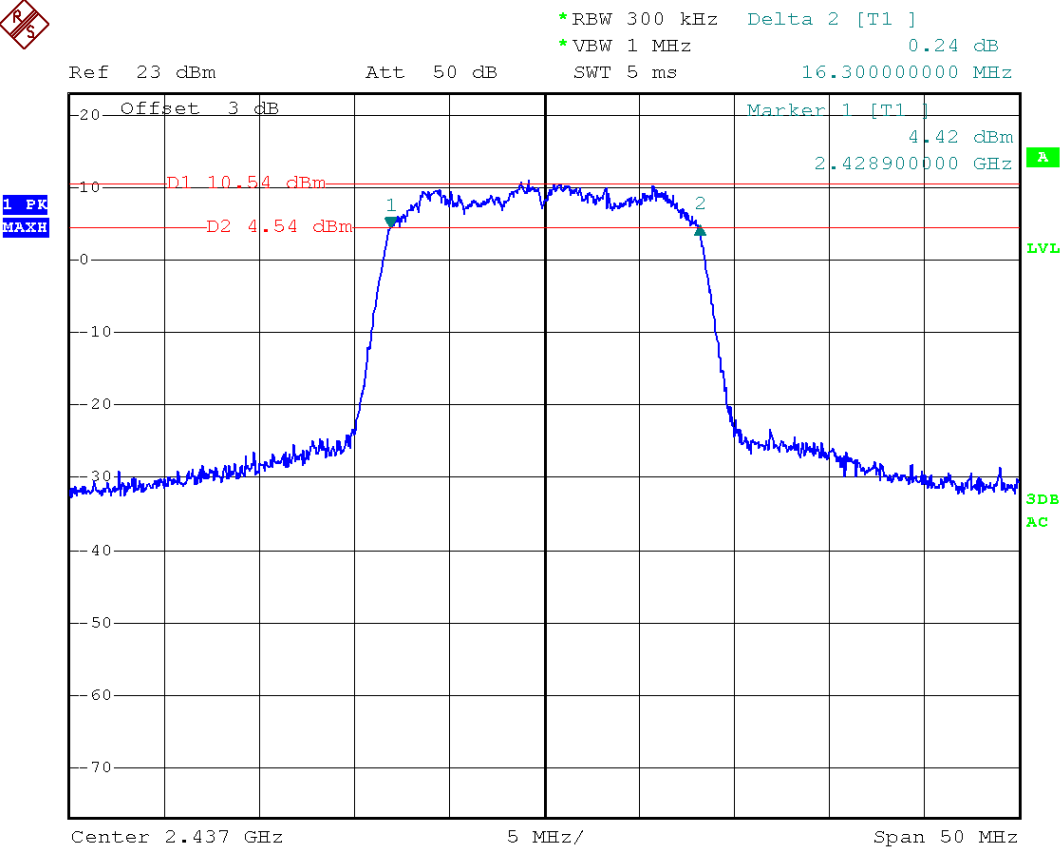


Channel	Channel Frequency (MHz)	Data Rate (Mbps)	6dB Bandwidth (MHz)	Limit (kHz)
802.11g Mode				
Low Channel	2412	54	16.000	> 500
Middle Channel	2437	54	16.300	> 500
High Channel	2462	54	16.100	> 500

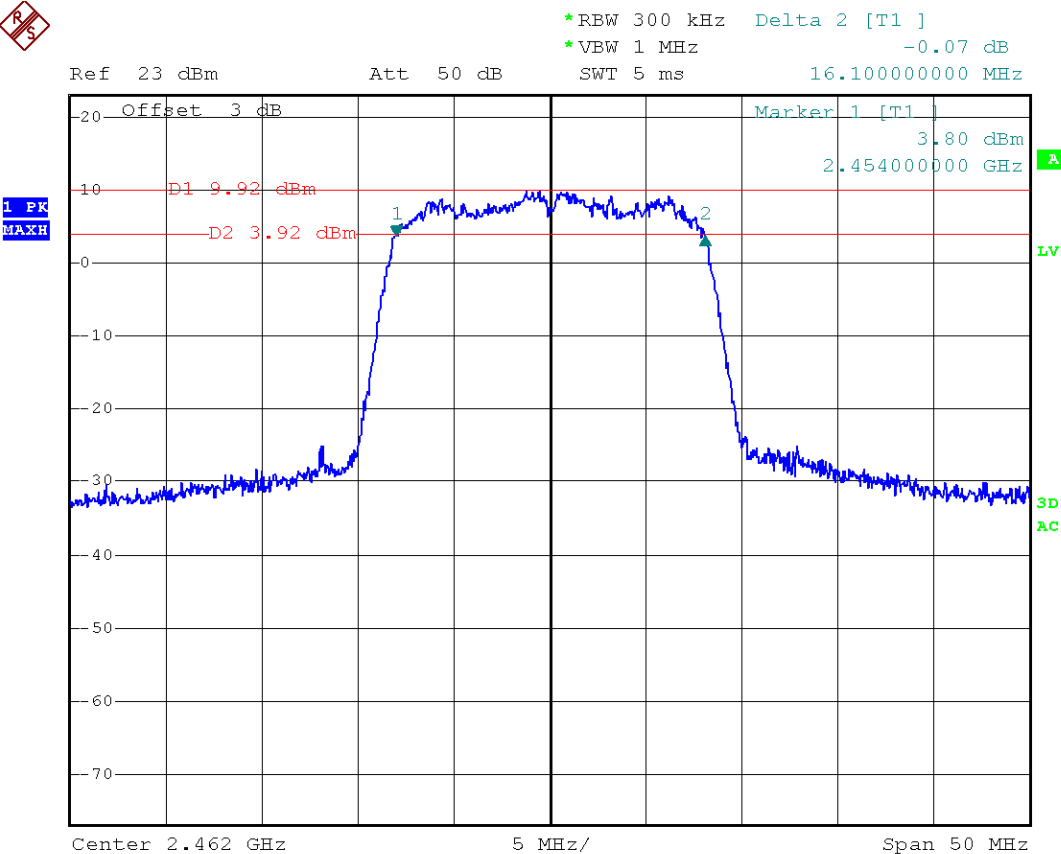
802.11g mode:
Channel 2412MHz



Channel 2437MHz

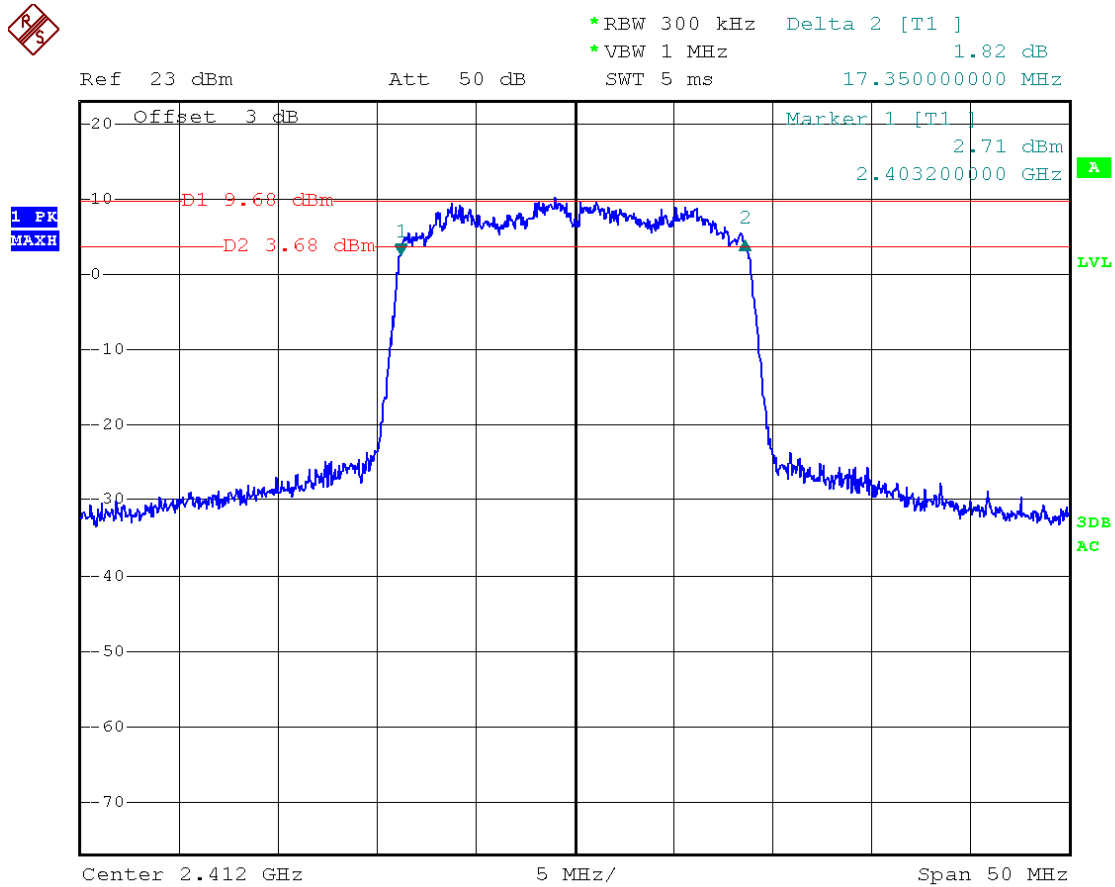


Channel 2462MHz

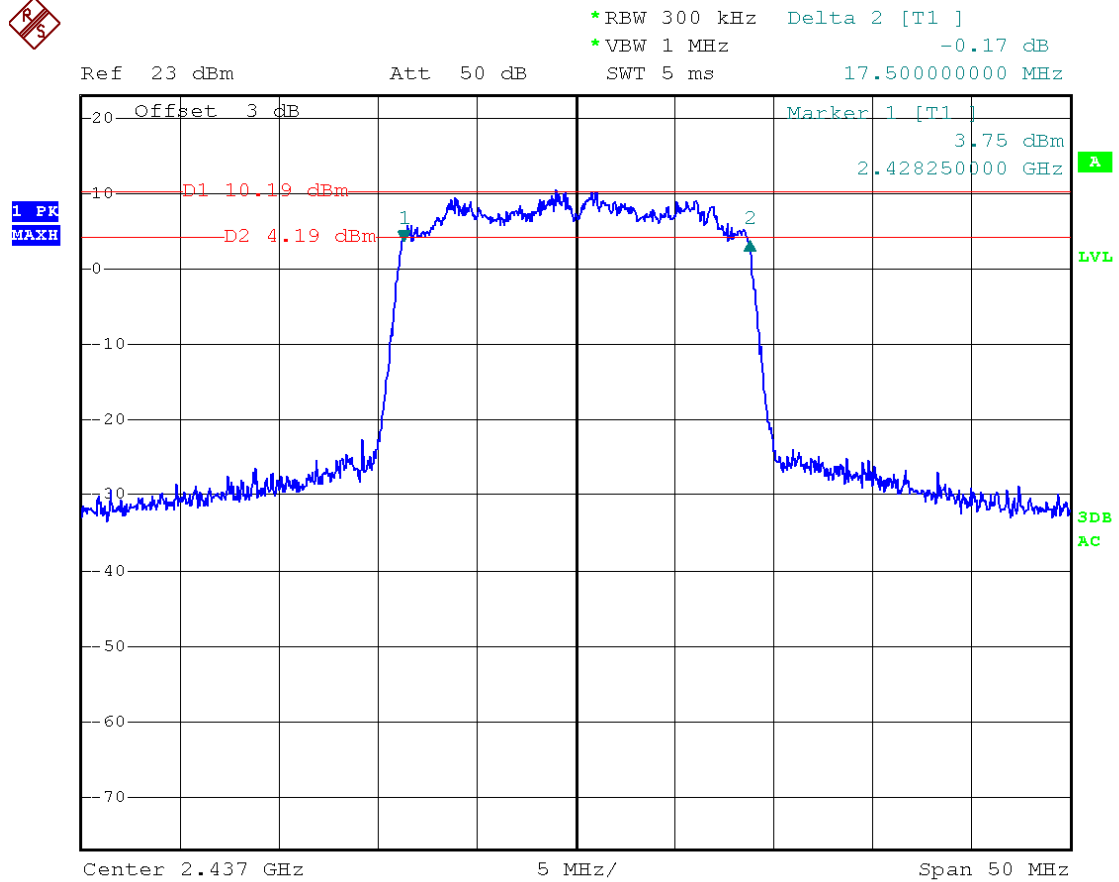


Channel	Channel Frequency (MHz)	Data Rate (Mbps)	6dB Bandwidth (MHz)	Limit (kHz)
802.11n20 Mode				
Low Channel	2412	MCS7	17.350	> 500
Middle Channel	2437	MCS7	17.500	> 500
High Channel	2462	MCS7	17.350	> 500

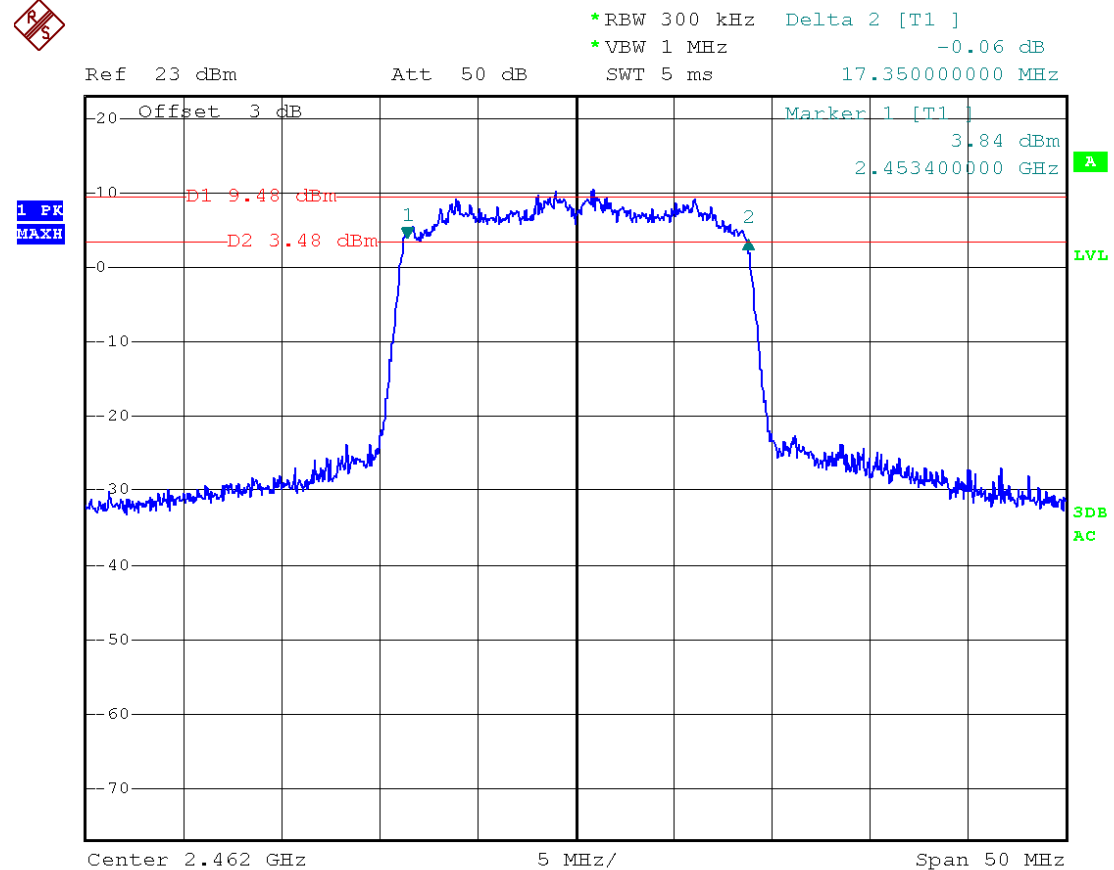
802.11n20 mode:
Channel 2412MHz



Channel 2437MHz

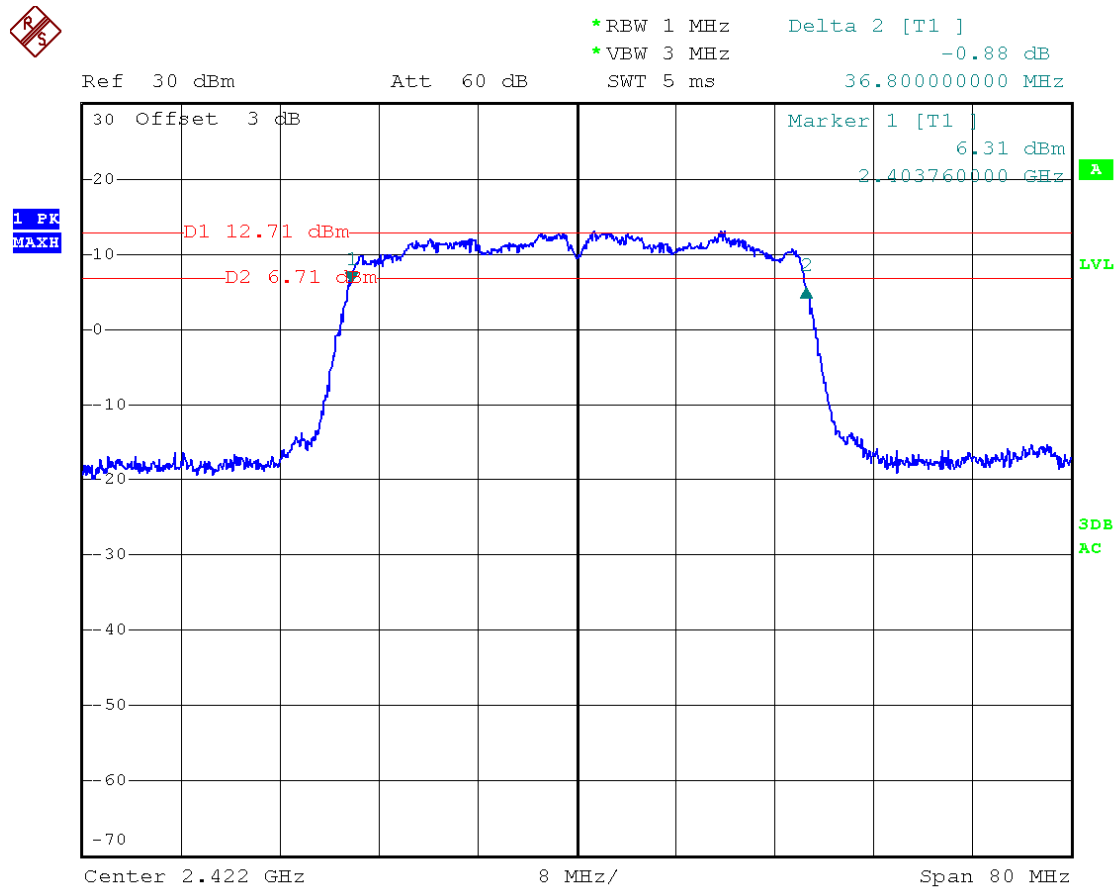


Channel 2462MHz

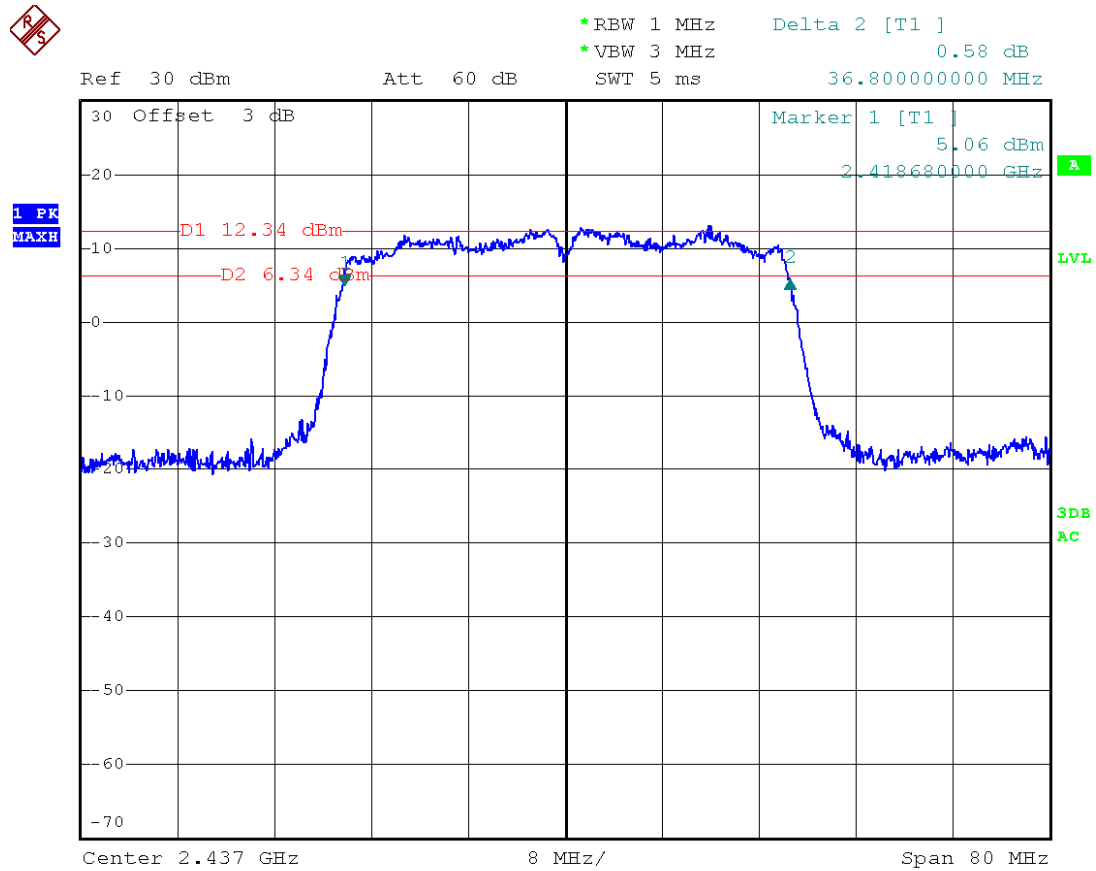


Channel	Channel Frequency (MHz)	Data Rate (Mbps)	6dB Bandwidth (MHz)	Limit (kHz)
802.11n40 Mode				
Low Channel	2422	MCS15	36.800	> 500
Middle Channel	2437	MCS15	36.800	> 500
High Channel	2452	MCS15	36.320	> 500

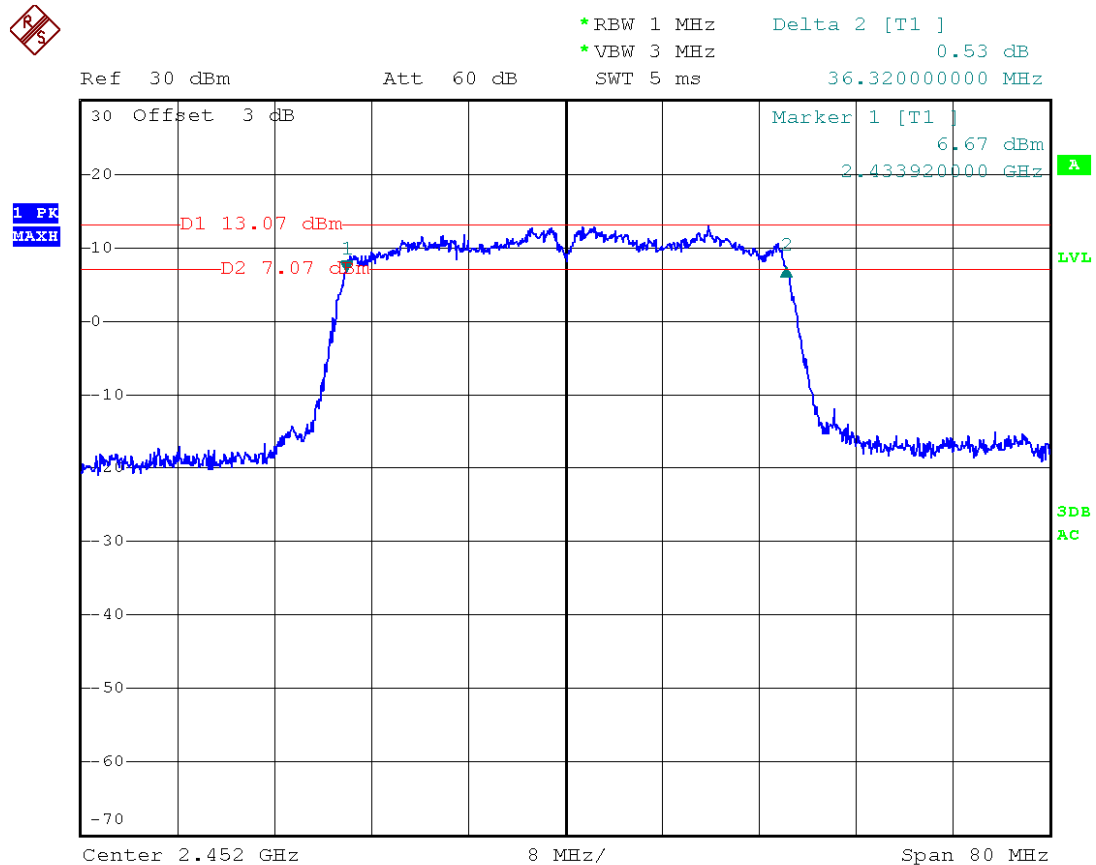
802.11n40 mode:
Channel 2422MHz



Channel 2437MHz



Channel 2452MHz



9. Maximum Peak Output Power

9.1 LIMITS

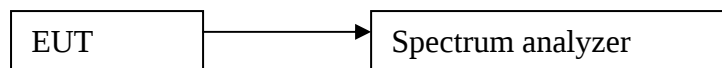
The maximum Peak output power measurement is 1W

9.2 TEST PROCEDURES

Test procedures follow KDB 558074 D01 DTS Meas Guidance v01.

1. Place the EUT on a bench and set it in transmitting mode.
2. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to an EMI Test Receiver.
3. The spectrum analyzer resolution bandwidth that is $\leq$ EBW. So we test the Maximum Conducted (Average) Output Power Level.
4. Set the analyzer span to 5-30% greater than the EBW. Set the RBW = 1 MHz. Set the VBW $\geq$ 3 MHz. Ensure that the number of measurement points in the sweep $\geq$ 2 x (span/RBW). Sweep time = auto couple. Detector = power averaging (RMS) or sample. Employ trace averaging in power averaging (RMS) mode over a minimum of 100 traces.

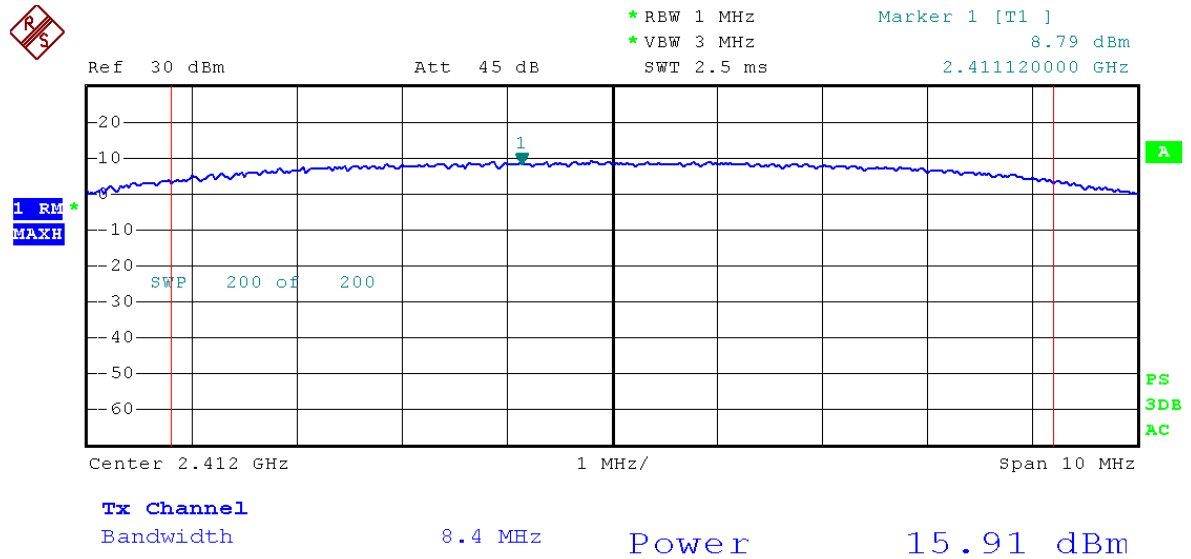
9.3 TEST SETUP



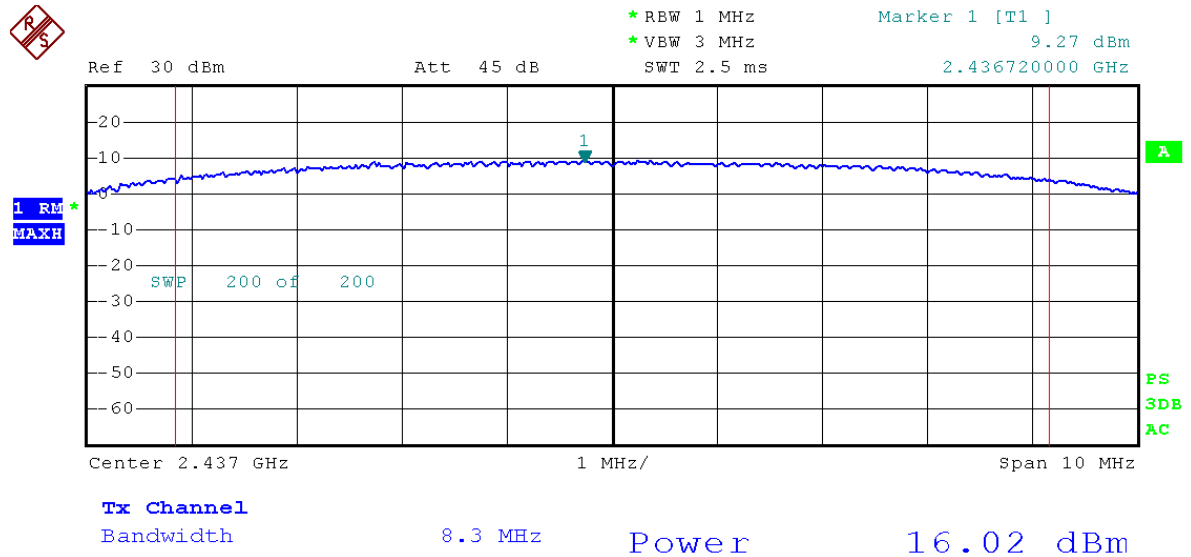
9.4 TEST RESULTS

802.11b Mode:

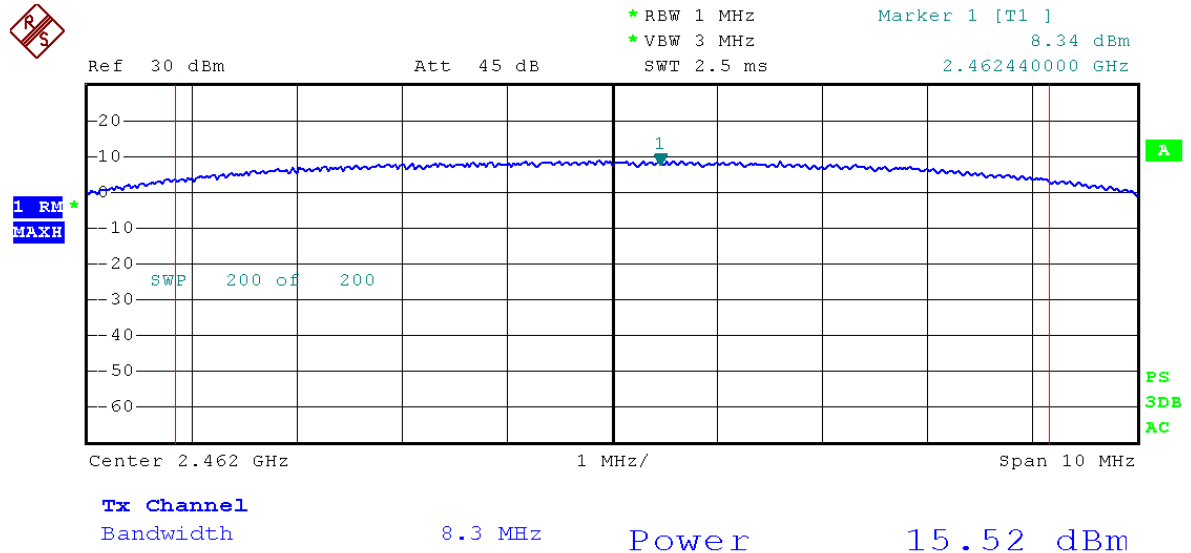
Channel No.	Frequency (MHz)	Mode	Data Rate	Measured Channel Power (dBm)	Gain (dBi)	Output Power (dBm)	Limit	Result
1	2412	802.11b	1Mbps	15.41	3	18.41	1W (30dBm)	Pass
6	2437			15.56	3	18.56		Pass
11	2462			15.01	3	18.01		Pass
1	2412		2Mbps	15.45	3	18.45		Pass
6	2437			15.49	3	18.49		Pass
11	2462			15.33	3	18.33		Pass
1	2412		5.5Mbps	15.62	3	18.62		Pass
6	2437			15.74	3	18.74		Pass
11	2462			15.46	3	18.46		Pass
1	2412		11Mbps	15.91	3	18.91		Pass
6	2437			16.02	3	19.02		Pass
11	2462			15.52	3	18.52		Pass

802.11b mode: 11Mbps
Channel 2412MHz

Channel 2437MHz



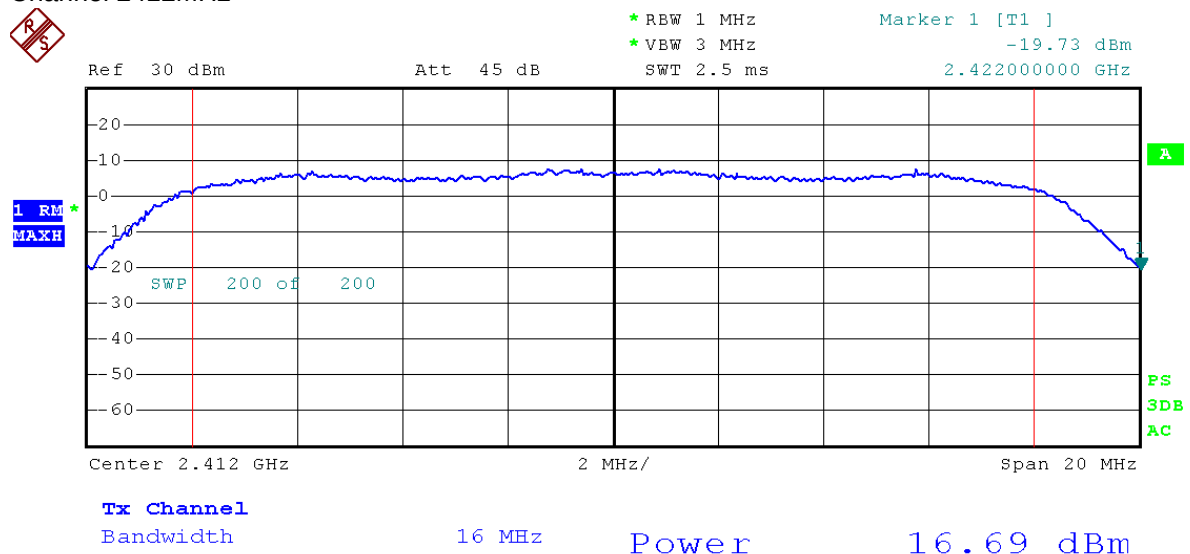
Channel 2462MHz



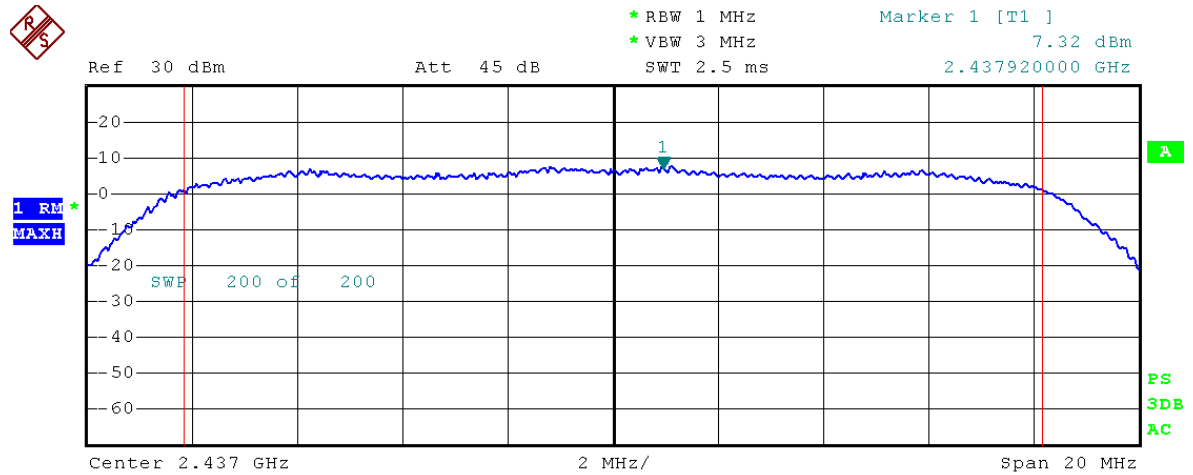
802.11g Mode:

Channel No.	Frequency (MHz)	Mode	Data Rate	Measured Channel Power (dBm)	Gain (dBi)	Output Power (dBm)	Limit	Result
1	2412	802.11g	6Mbps	16.03	3	19.03	1W (30dbm)	Pass
6	2437			16.09	3	19.09		Pass
11	2462			15.09	3	18.09		Pass
1	2412		9Mbps	15.93	3	18.93		Pass
6	2437			16.07	3	19.07		Pass
11	2462			15.01	3	18.01		Pass
1	2412		12Mbps	15.98	3	18.98		Pass
6	2437			16.07	3	19.07		Pass
11	2462			15.05	3	18.05		Pass
1	2412		18Mbps	15.81	3	18.81		Pass
6	2437			16.01	3	19.01		Pass
11	2462			15.04	3	18.04		Pass
1	2412		24Mbps	16.49	3	19.49		Pass
6	2437			16.24	3	19.24		Pass
11	2462			15.54	3	18.54		Pass
1	2412		36Mbps	16.44	3	19.44		Pass
6	2437			16.14	3	19.14		Pass
11	2462			15.65	3	18.65		Pass
1	2412		48Mbps	16.52	3	19.52		Pass
6	2437			16.24	3	19.24		Pass
11	2462			15.70	3	18.70		Pass
1	2412		54Mbps	16.69	3	19.69		Pass
6	2437			16.71	3	19.71		Pass
11	2462			16.01	3	19.01		Pass

802.11g mode: 54Mbps
Channel 2412MHz

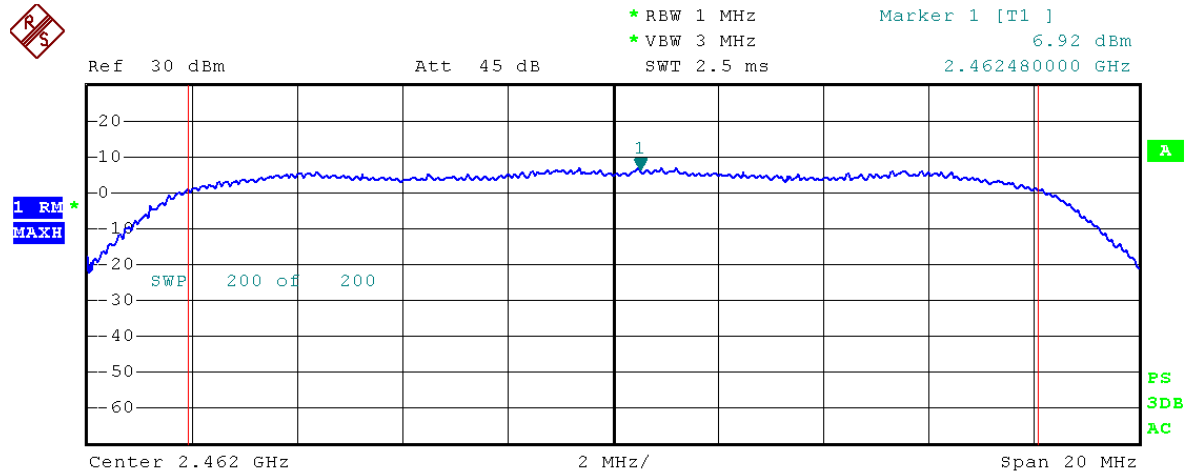


Channel 2437MHz



Tx Channel
Bandwidth 16.3 MHz Power 16.71 dBm

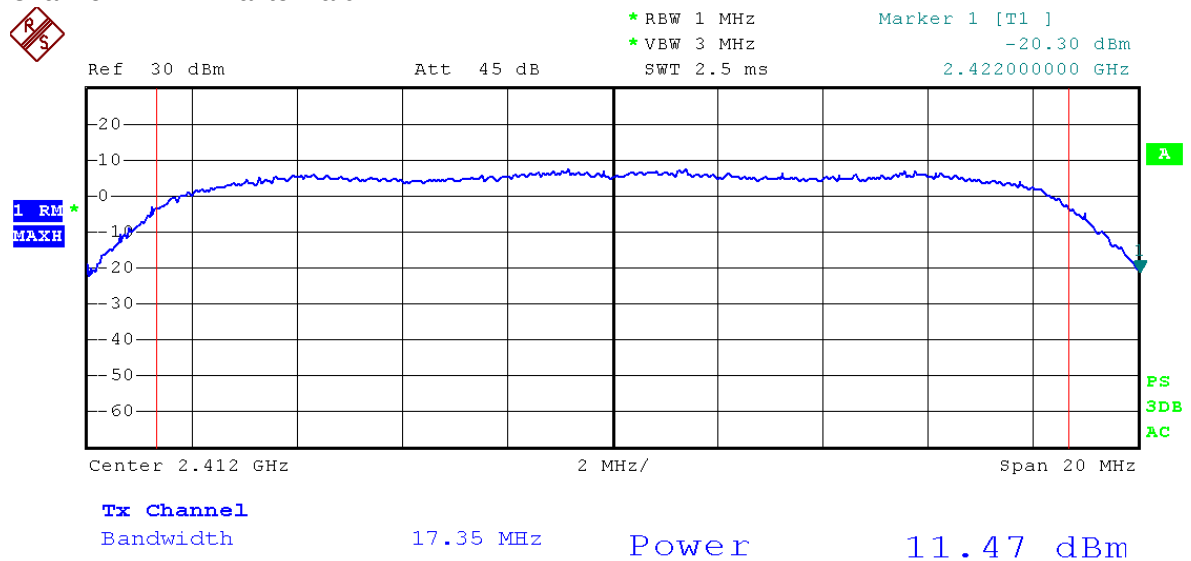
Channel 2462MHz



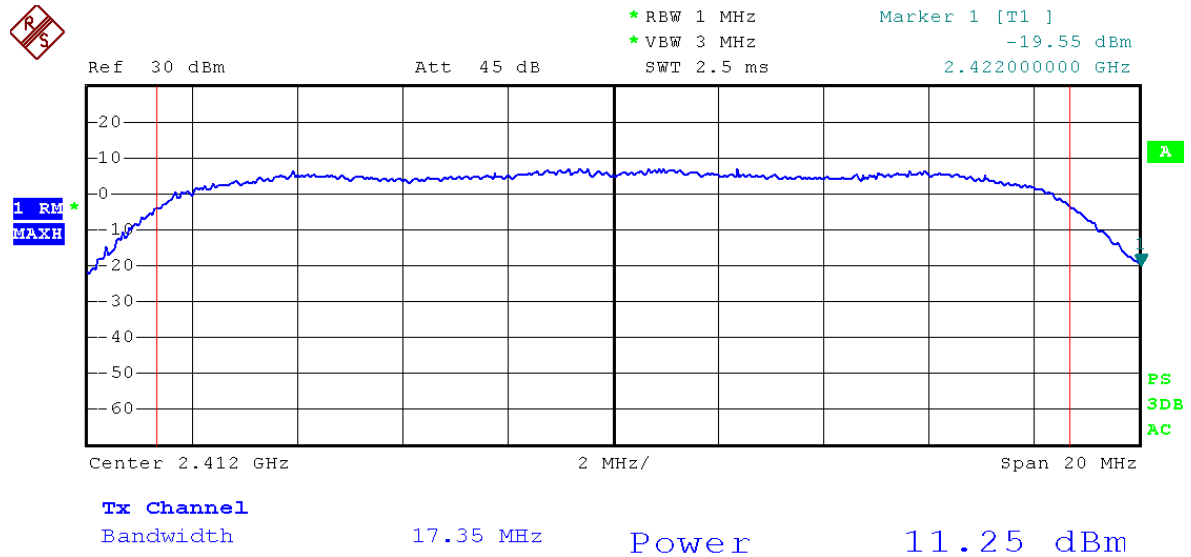
Tx Channel
Bandwidth 16.1 MHz Power 16.01 dBm

802.11n20 Mode:

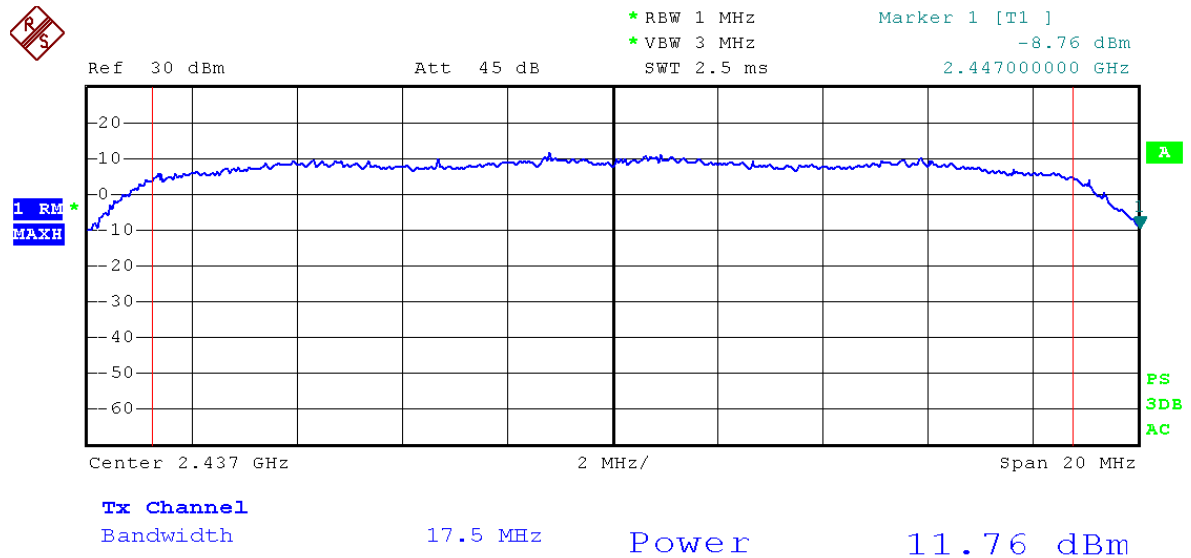
Channel No.	Frequency (MHz)	Mode	Data Rate	Measured Power(dBm) (Ant 0)	Measured Power(dBm) (Ant 1)	Gain (dBi)	Output Power (dBm)	Limit	Result
1	2412	802.11n20	13 Mbps	10.39	10.21	3	16.31	1W (30dBm)	Pass
6	2437			10.58	10.55	3	16.58		Pass
11	2462			10.71	10.71	3	16.72		Pass
1	2412		26 Mbps	10.56	10.37	3	16.48		Pass
6	2437			10.73	10.51	3	16.63		Pass
11	2462			10.80	10.68	3	16.75		Pass
1	2412		39 Mbps	10.83	10.41	3	16.64		Pass
6	2437			10.87	10.59	3	16.74		Pass
11	2462			10.91	10.66	3	16.80		Pass
1	2412		52 Mbps	10.97	10.72	3	16.86		Pass
6	2437			11.12	10.69	3	16.92		Pass
11	2462			11.09	10.71	3	16.91		Pass
1	2412		78 Mbps	11.17	10.87	3	17.03		Pass
6	2437			11.25	10.83	3	17.06		Pass
11	2462			11.26	10.99	3	17.14		Pass
1	2412		104 Mbps	11.28	11.01	3	17.16		Pass
6	2437			11.41	11.05	3	17.24		Pass
11	2462			11.69	11.09	3	17.41		Pass
1	2412		117 Mbps	11.34	11.18	3	17.27		Pass
6	2437			11.58	11.28	3	17.44		Pass
11	2462			11.73	11.21	3	17.49		Pass
1	2412		135 Mbps	11.47	11.25	3	17.37		Pass
6	2437			11.76	11.31	3	17.55		Pass
11	2462			11.88	11.35	3	17.63		Pass

802.11n20 mode: 135 Mbps
Channel 2412MHz antenna 0

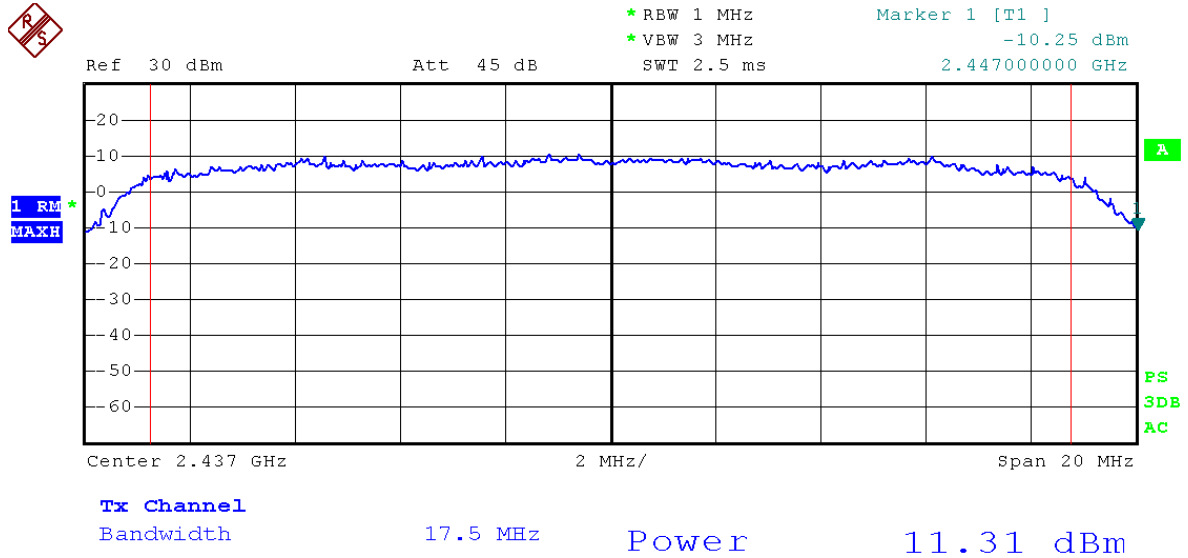
Channel 2412MHz antenna 1



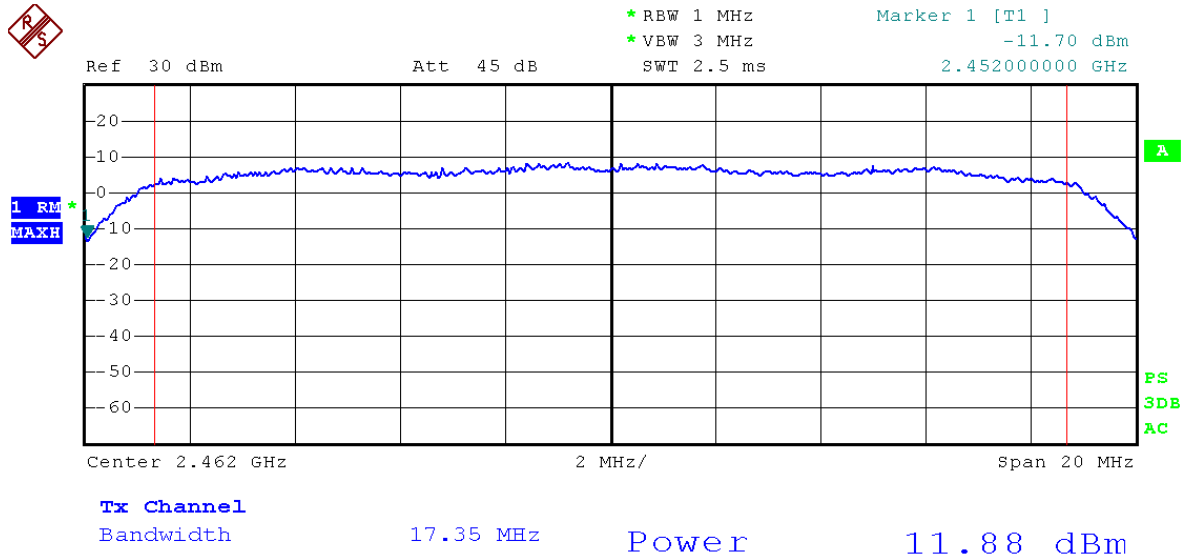
Channel 2437MHz antenna 0



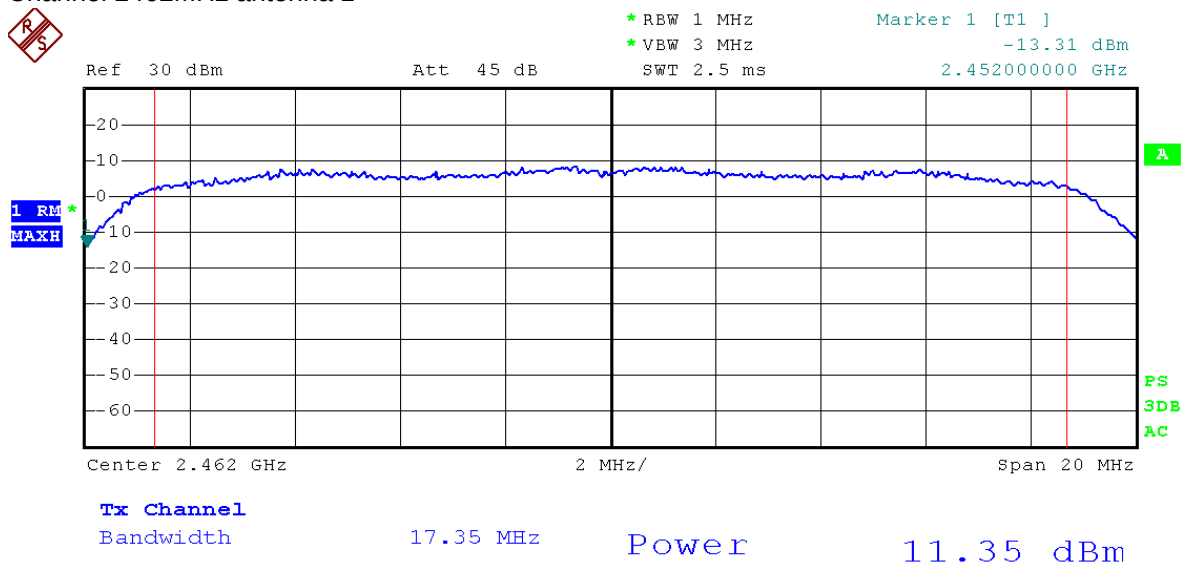
Channel 2437MHz antenna 1



Channel 2462MHz antenna 0

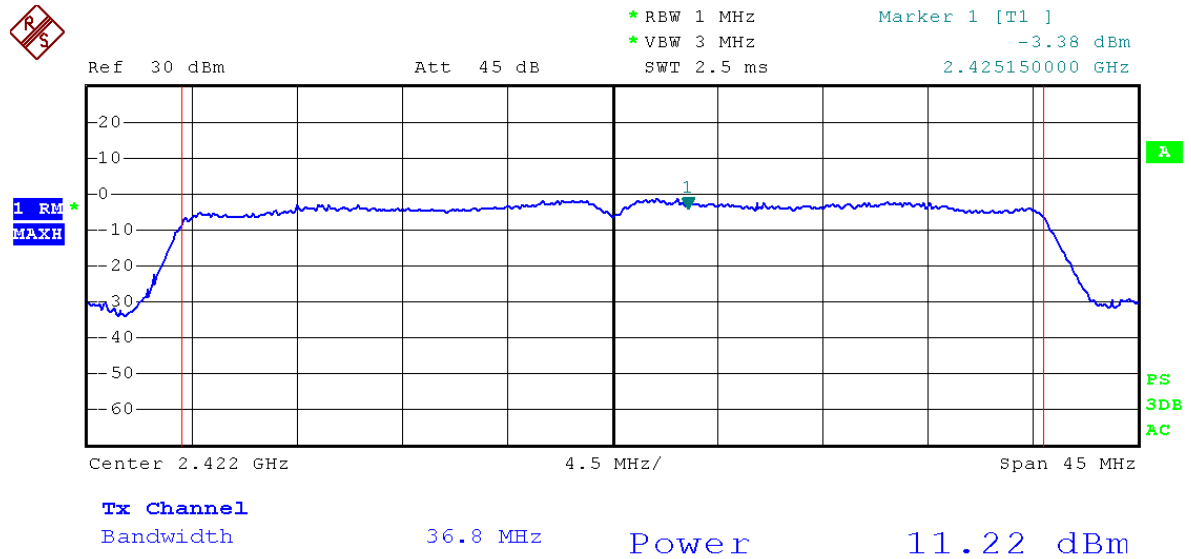


Channel 2462MHz antenna 1

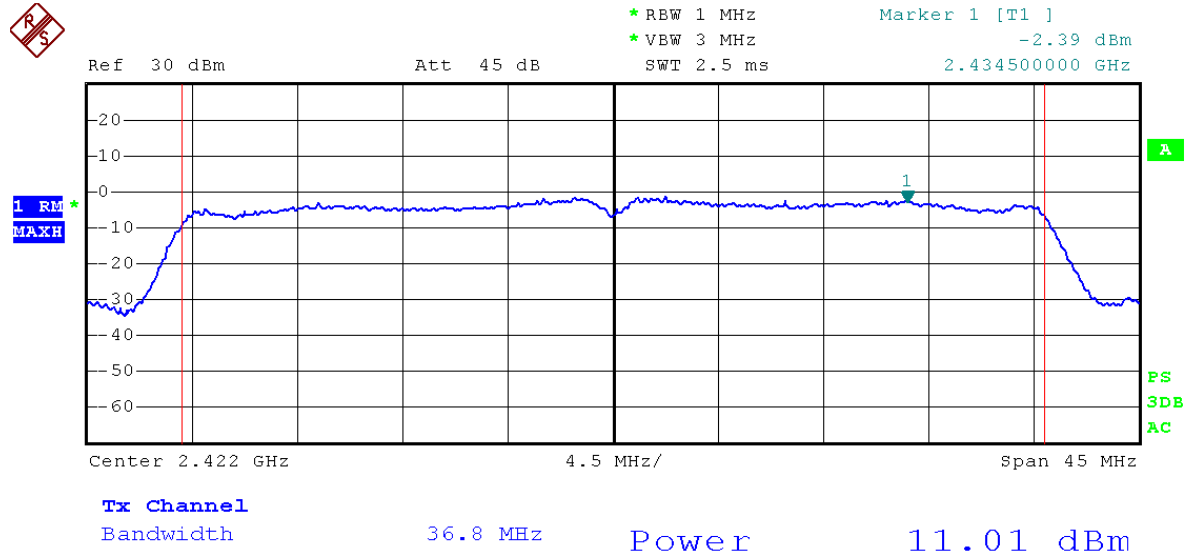


802.11n40 Mode:

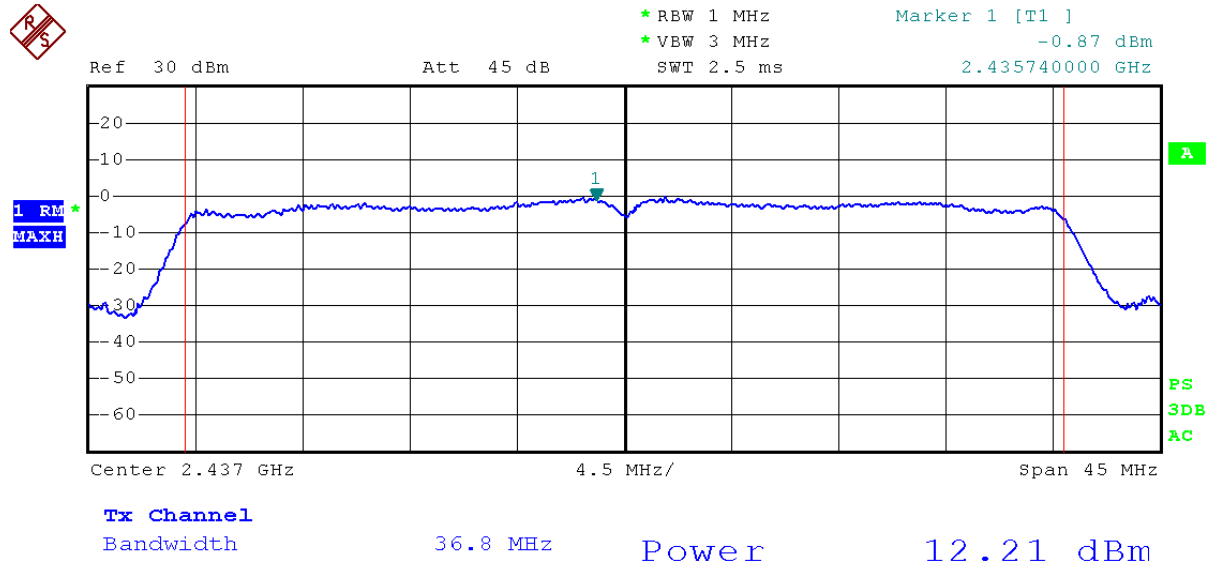
Channel No.	Frequency (MHz)	Mode	Data Rate	Measured Power(dBm) (Ant 0)	Measured Power(dBm) (Ant 1)	Gain (dBi)	Output Power (dBm)	Limit	Result
3	2422	802.11n40	27 Mbps	9.92	9.32	3	15.64	1W (30dBm)	Pass
6	2437			11.21	10.59	3	16.92		Pass
9	2452			11.29	10.72	3	17.02		Pass
3	2422		54 Mbps	10.00	9.63	3	15.83		Pass
6	2437			11.33	10.91	3	17.14		Pass
9	2452			11.30	10.83	3	17.08		Pass
3	2422		81 Mbps	10.11	9.92	3	16.03		Pass
6	2437			11.43	10.99	3	17.23		Pass
9	2452			11.49	10.97	3	17.25		Pass
3	2422		108 Mbps	10.12	10.25	3	16.20		Pass
6	2437			11.56	11.04	3	17.32		Pass
9	2452			11.57	11.06	3	17.33		Pass
3	2422		162 Mbps	10.01	10.52	3	16.28		Pass
6	2437			11.79	11.21	3	17.52		Pass
9	2452			11.88	11.12	3	17.53		Pass
3	2422		216 Mbps	11.09	10.82	3	16.97		Pass
6	2437			12.03	11.25	3	17.67		Pass
9	2452			11.95	11.09	3	17.55		Pass
3	2422		243 Mbps	11.15	10.96	3	17.07		Pass
6	2437			12.13	11.41	3	17.80		Pass
9	2452			12.02	11.21	3	17.64		Pass
3	2422		270 Mbps	11.22	11.01	3	17.13		Pass
6	2437			12.21	11.59	3	17.92		Pass
9	2452			12.11	11.25	3	17.71		Pass

802.11n40 mode: MCS15
Channel 2422MHz antenna 0

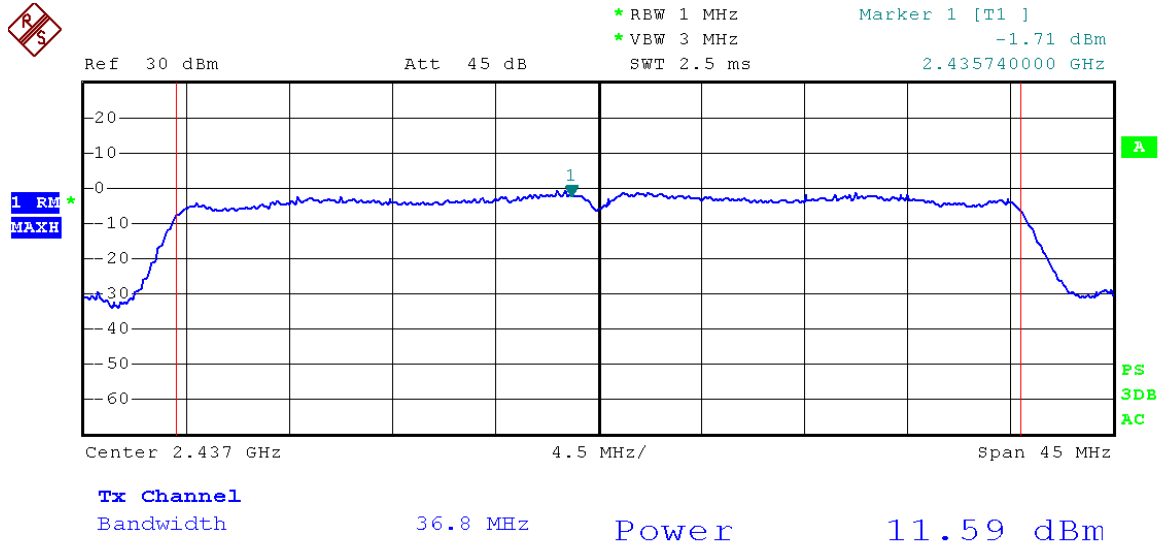
Channel 2422MHz antenna 1



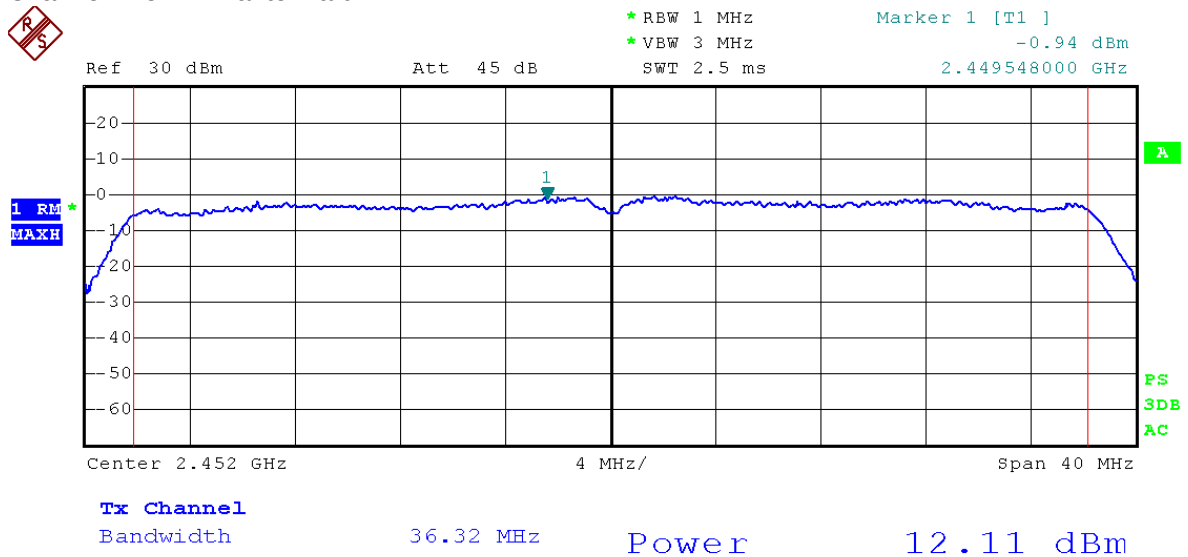
Channel 2437MHz antenna 0



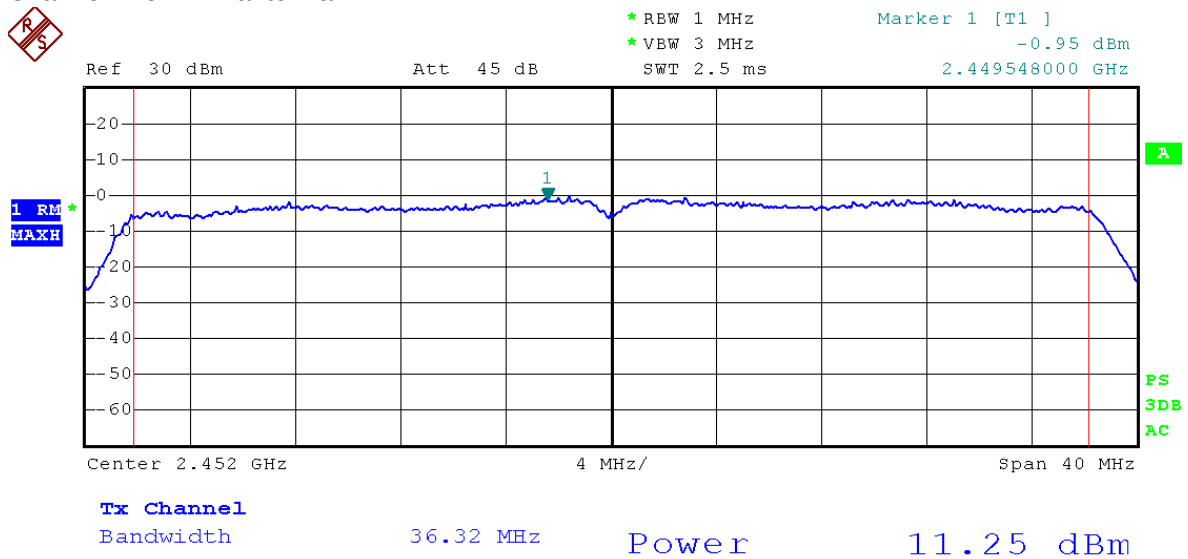
Channel 2437MHz antenna 1



Channel 2452MHz antenna 0



Channel 2452MHz antenna 1



10. 100 kHz Bandwidth of Frequency Band Edge

10.1 LIMITS

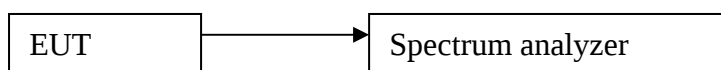
In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in §15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c)).

10.2 TEST PROCEDURES

Test procedures follow KDB 558074 D01 DTS Meas Guidance v01.

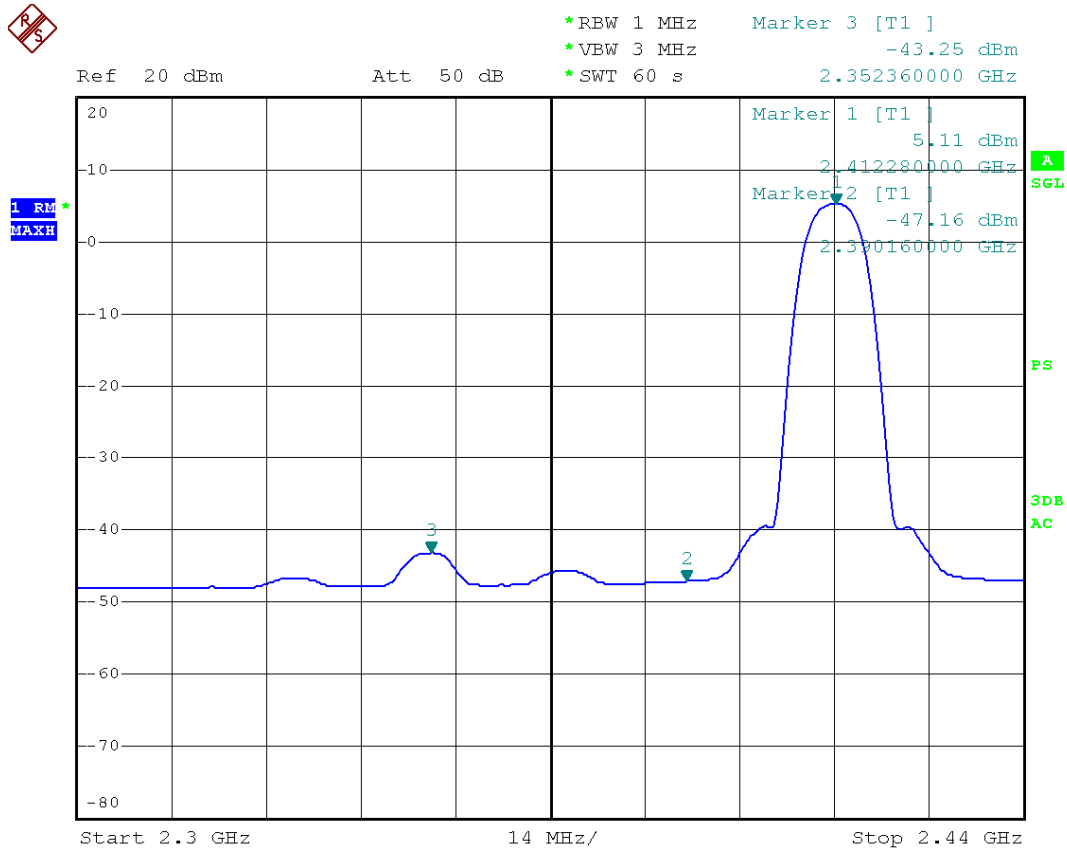
1. Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
2. Position the EUT without connection to measurement instrument. Turn on the EUT and connect its antenna terminal to measurement instrument via a low loss cable. Then set it to any one measured frequency within its operating range, and make sure the instrument is operated in its linear range.
3. Set the analyzer span to encompass the entire unwanted emission bandwidth above the measurement system noise level. Set the RBW = 1 MHz. Set the VBW $\geq$ 3 MHz. Ensure that the number of measurement points in the sweep $\geq 2 \times (\text{span}/\text{RBW})$. Set sweep time = auto couple. Detector = sample. Employ trace averaging over a minimum of 100 traces.
4. Use the peak marker function to determine the maximum average power level in any 1 MHz of the unwanted emission.
5. Repeat above procedures until all measured frequencies were complete.

10.3 TEST SETUP

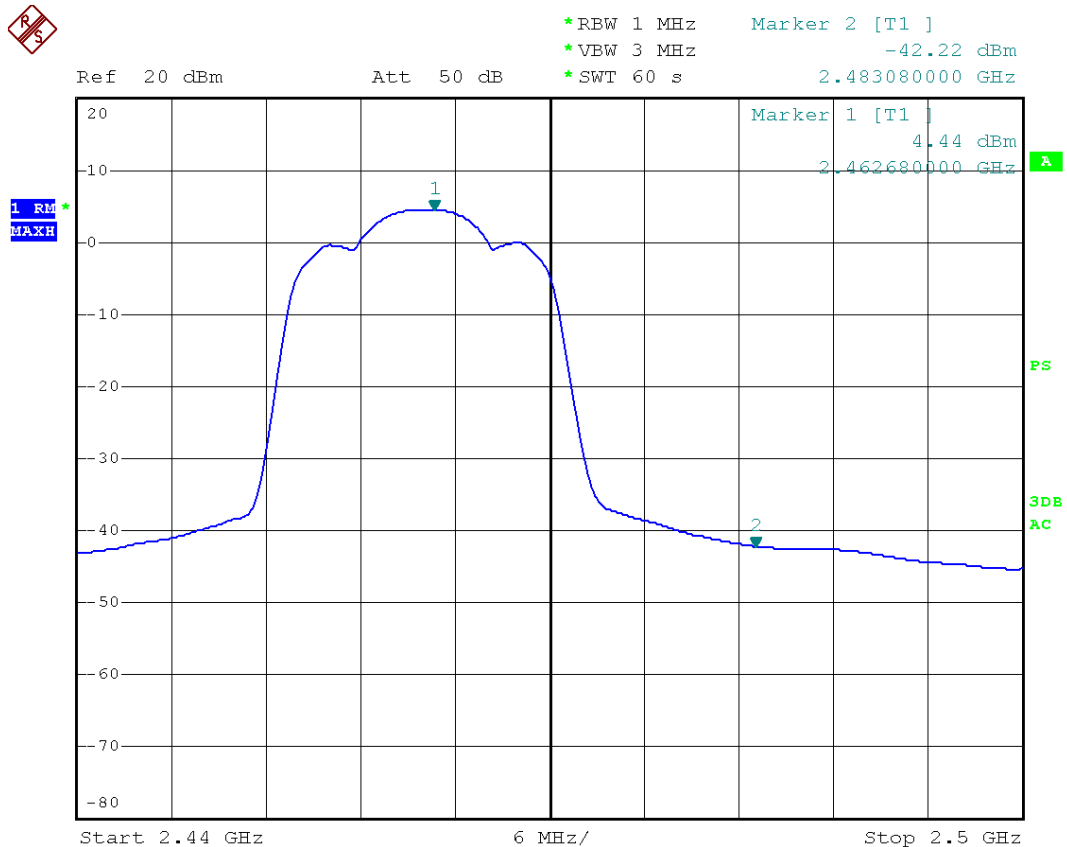


10.4 TEST RESULTS

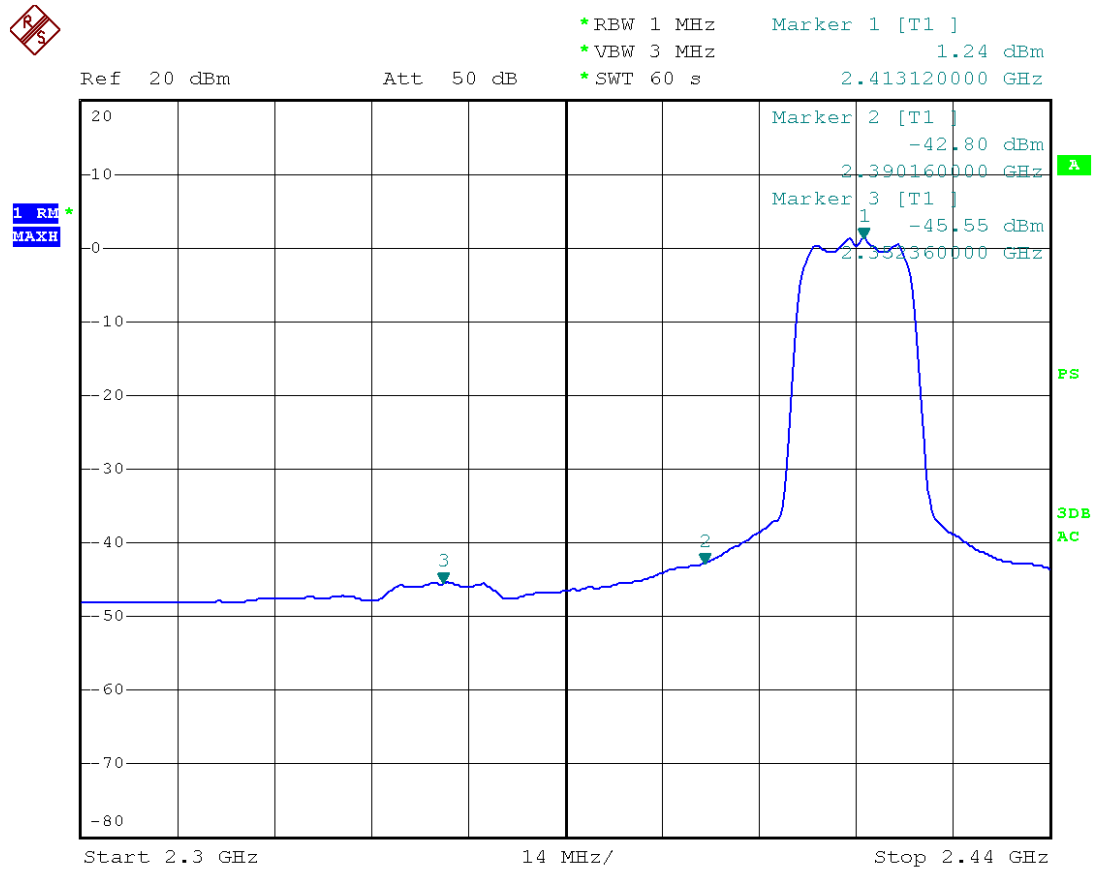
802.11b mode with 11Mbps data rates:
Channel 2412MHz



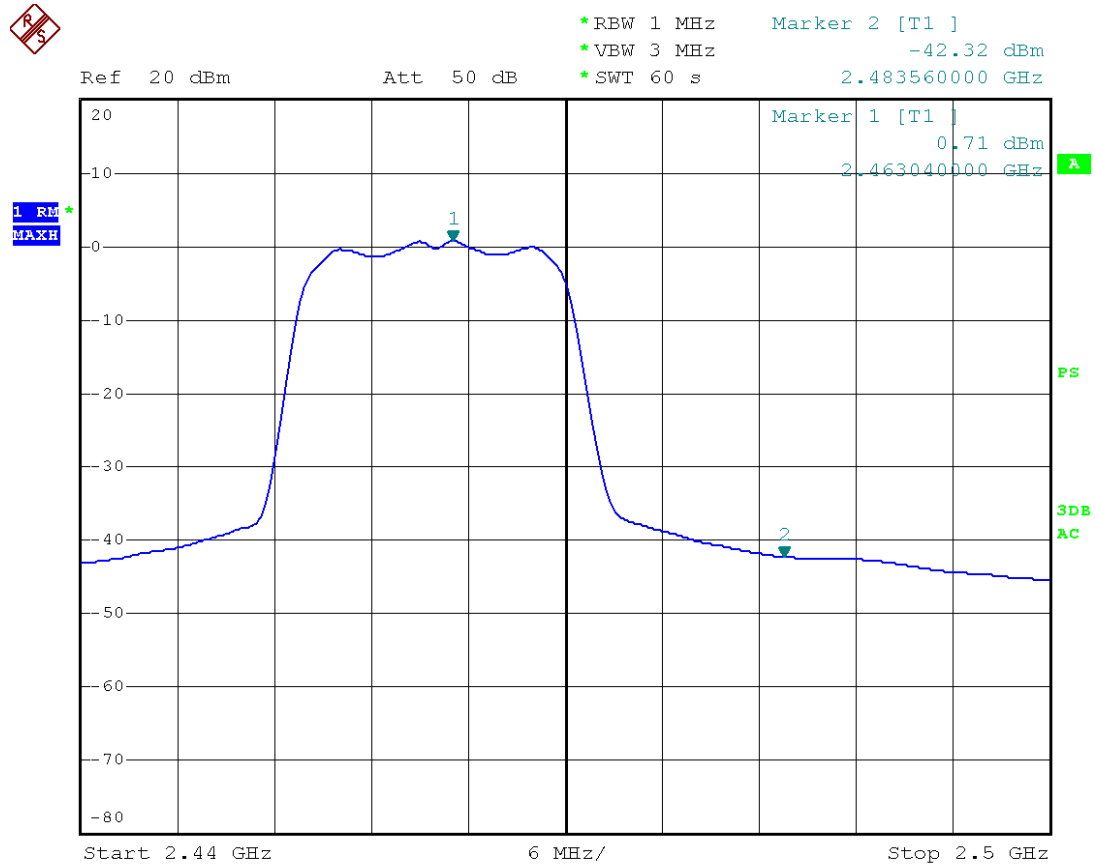
Channel 2462MHz



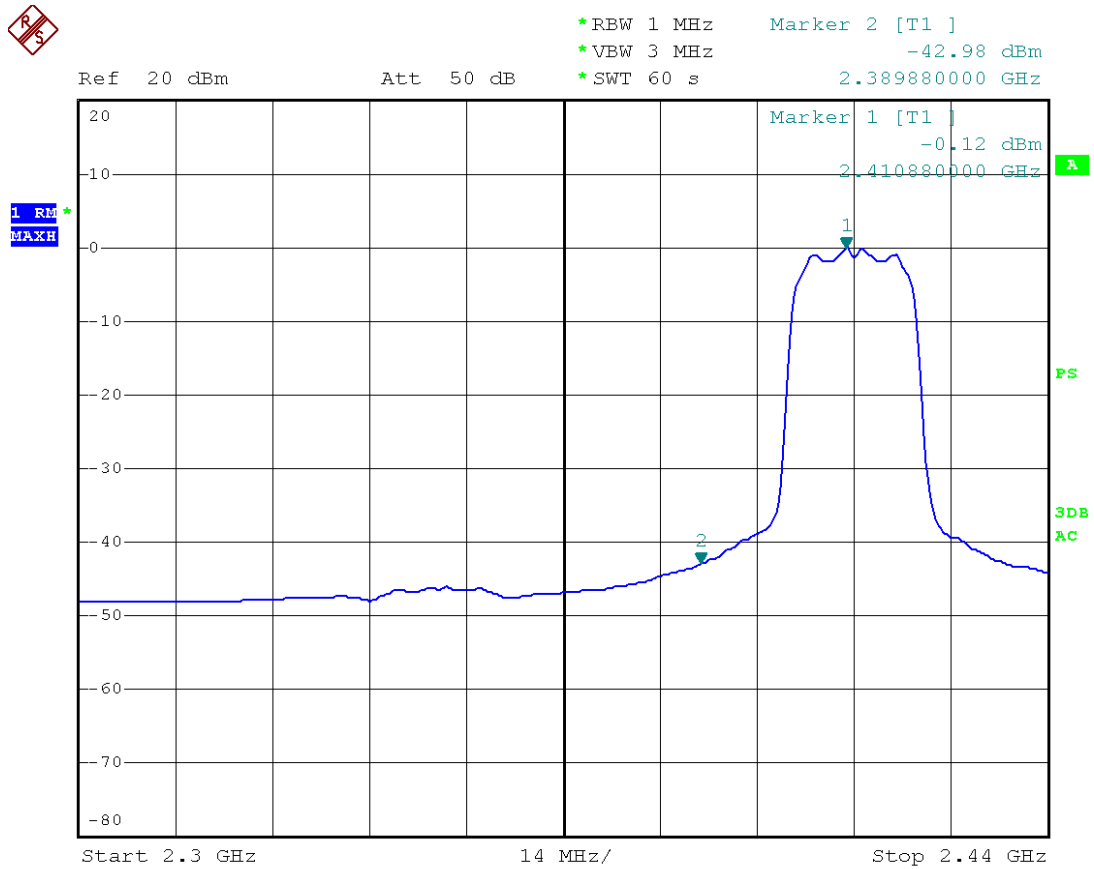
802.11g mode with 54Mbps data rates::
Channel 2412MHz



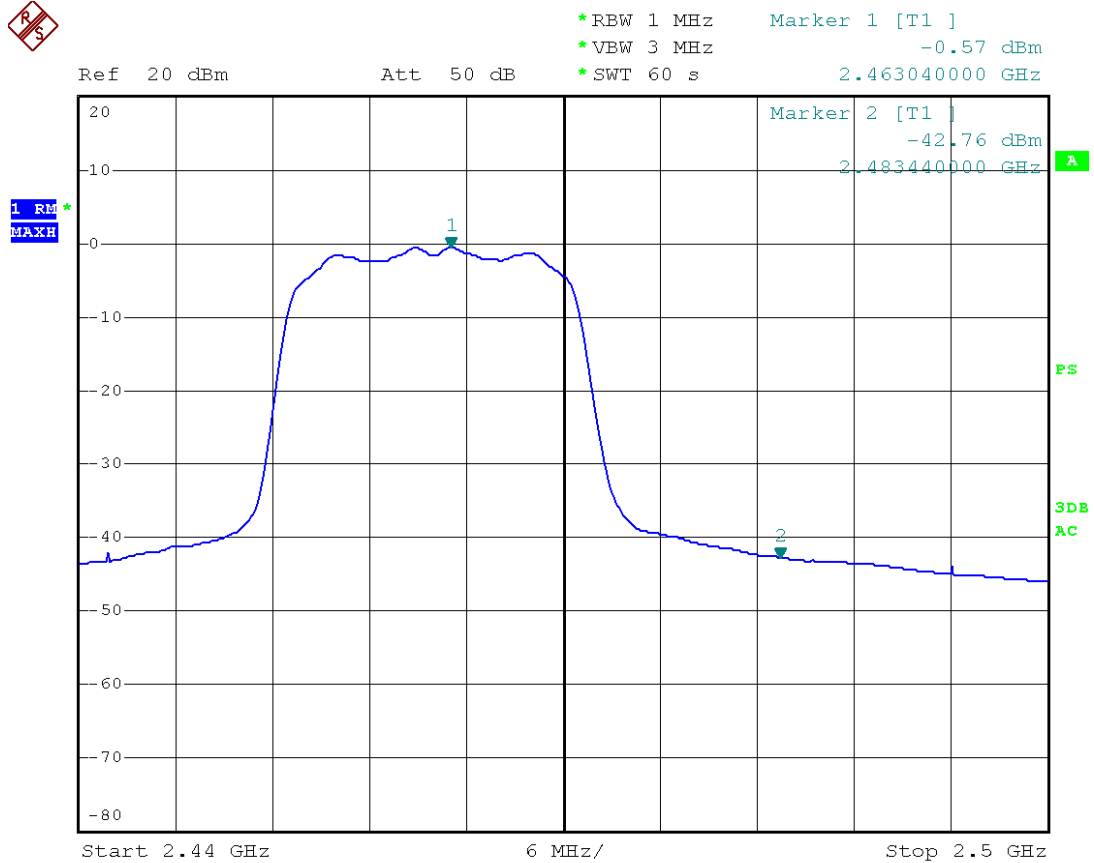
Channel 2462MHz



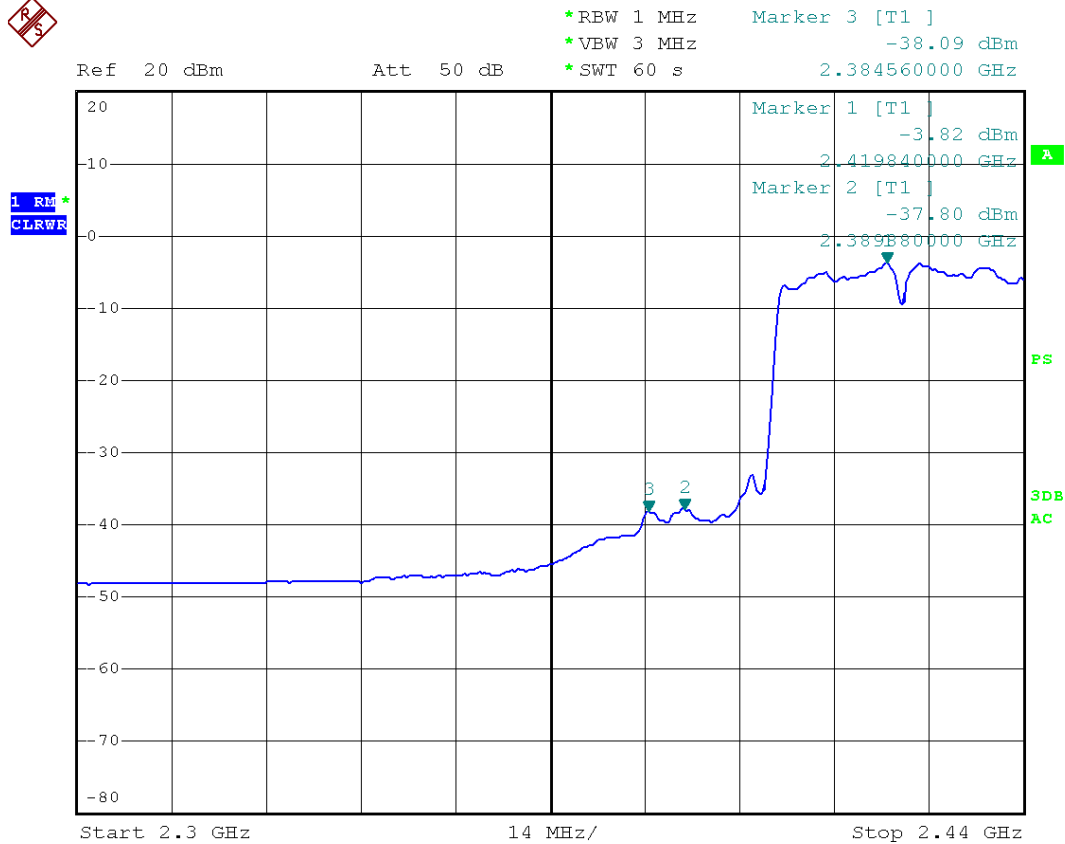
802.11n20 mode with MCS7 data rates::
Channel 2412MHz



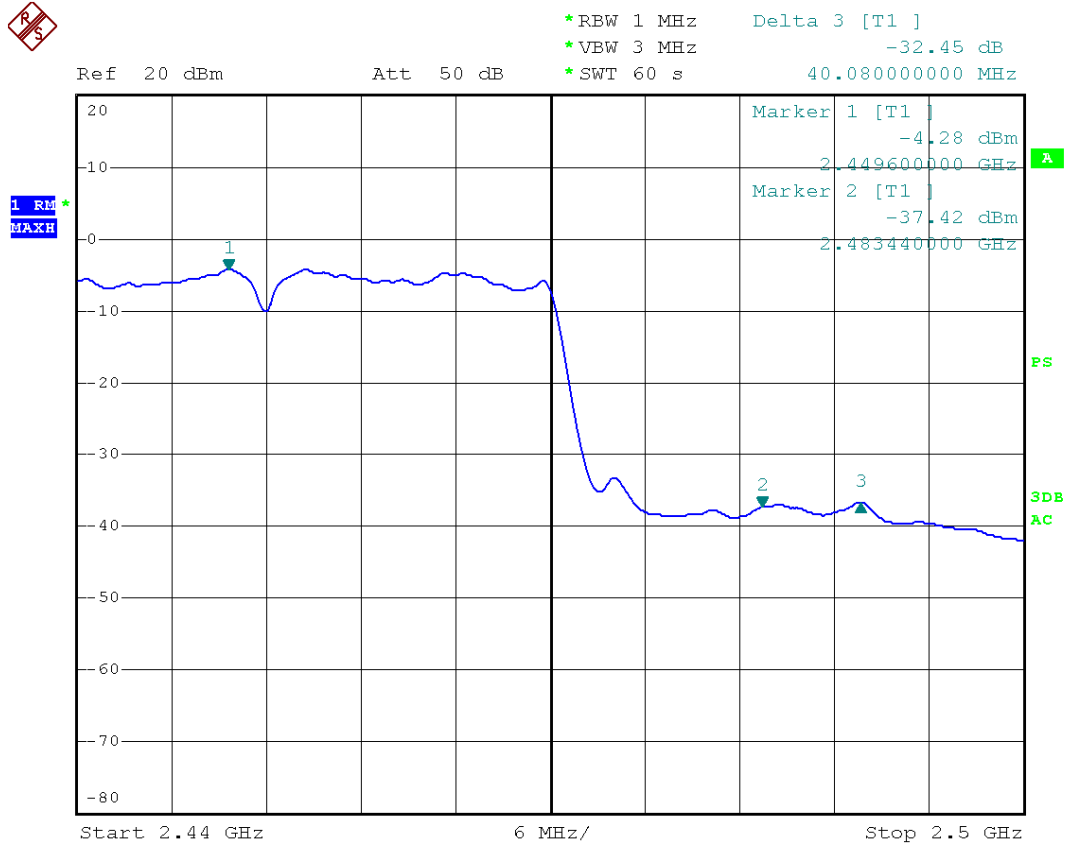
Channel 2462MHz



802.11n40 mode with MCS15 data rates::
Channel 2422MHz



Channel 2452MHz



11. Power Spectral Density

11.1 LIMITS

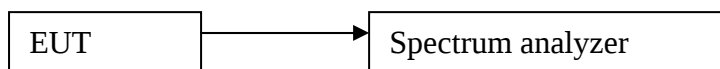
For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission. This power spectral density shall be determined in accordance with the provisions of paragraph (b) of this section. The same method of determining the conducted output power shall be used to determine the power spectral density.

11.2 TEST PROCEDURES

Test procedures follow KDB 558074 D01 DTS Meas Guidance v01.

1. Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
2. Position the EUT was set without connection to measurement instrument. Turn on the EUT and connect its antenna terminal to measurement instrument via a low loss cable. Then set it to any one measured frequency within its operating range, and make sure the instrument is operated in its linear range.
3. Set the analyzer span to 5-30% greater than the EBW. Set the RBW = 100 kHz. Set the VBW $\geq$ 300 kHz. Detector = power average (RMS). Ensure that the number of measurement points in the sweep $\geq 2 \times \text{span/RBW}$ (use of a greater number of measurement points than this minimum requirement is recommended). Manually set the sweep time to: $\geq 10 \times (\text{number of measurement points in sweep}) \times (\text{transmission symbol period})$. Perform the measurement over a single sweep. Use the peak marker function to determine the maximum level in any 100 kHz band segment within the fundamental EBW.
4. Scale the observed power level to an equivalent level in 3 kHz by adjusting (reducing) the measured power by a bandwidth correction factor (BWCF) where: $\text{BWCF} = 10 \log (3\text{kHz}/100\text{ kHz} = -15.2\text{ dB})$.
5. Repeat above procedures until all frequencies measured were complete.

11.3 TEST SETUP



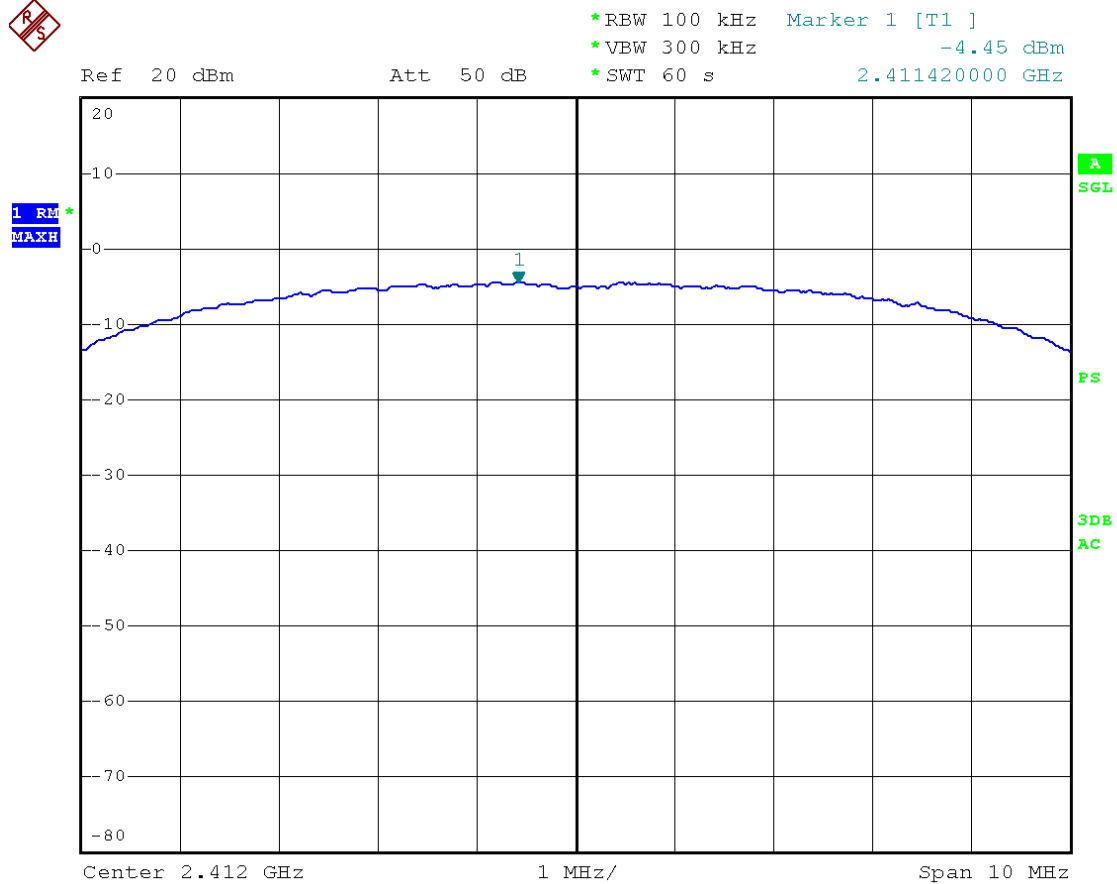
11.4 TEST RESULTS

802.11b mode:

Channel No.	Frequency (MHz)	Mode	Data Rate	PSD (dBm/100 KHz)	Gain (dBi)	Factor (100kHz/ 3kHz)(dB)	PSD (dBm/3K Hz)	Limit	Result
1	2412	802.11b	11Mbps	-4.45	3	-15.2	-16.65	8dBm/ 3KHz	Pass
6	2437			-4.86	3	-15.2	-17.06		Pass
11	2462			-5.18	3	-15.2	-17.38		Pass

802.11b mode:

Channel 2412MHz



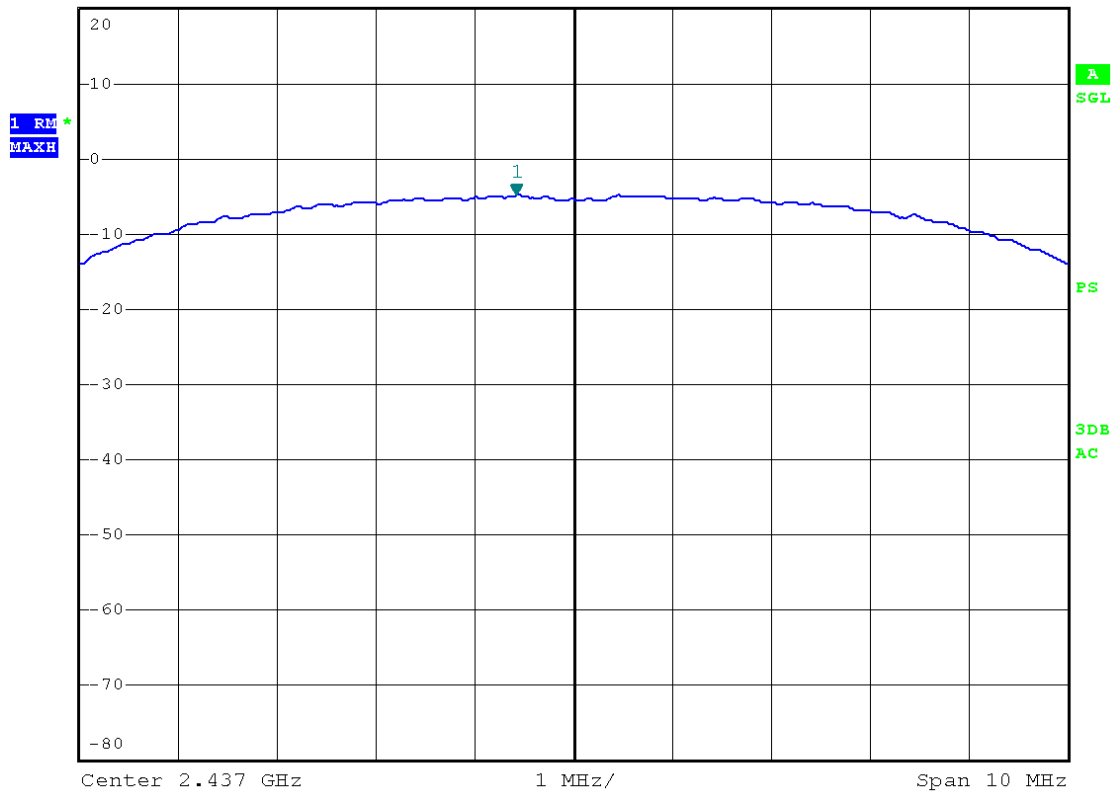
Channel 2437MHz



*RBW 100 kHz Marker 1 [T1]
*VBW 300 kHz -4.86 dBm
*SWT 60 s 2.436420000 GHz

Ref 20 dBm

Att 50 dB



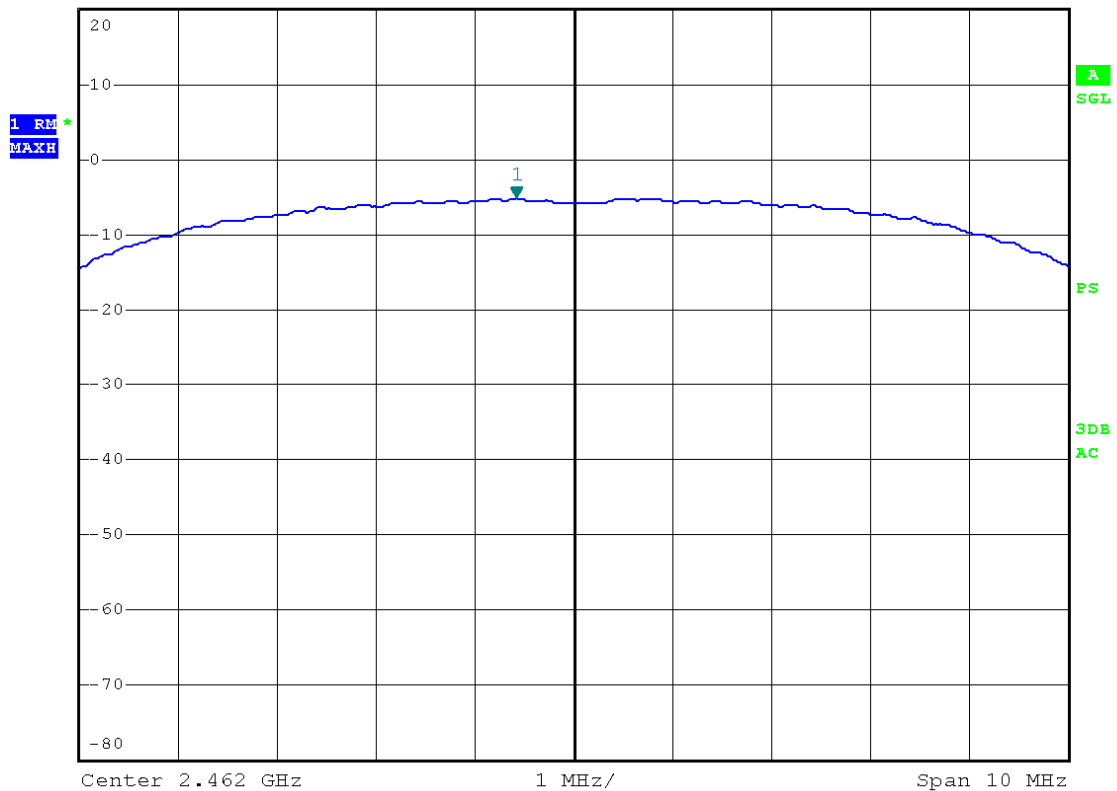
Channel 2462MHz



*RBW 100 kHz Marker 1 [T1]
*VBW 300 kHz -5.18 dBm
*SWT 60 s 2.461420000 GHz

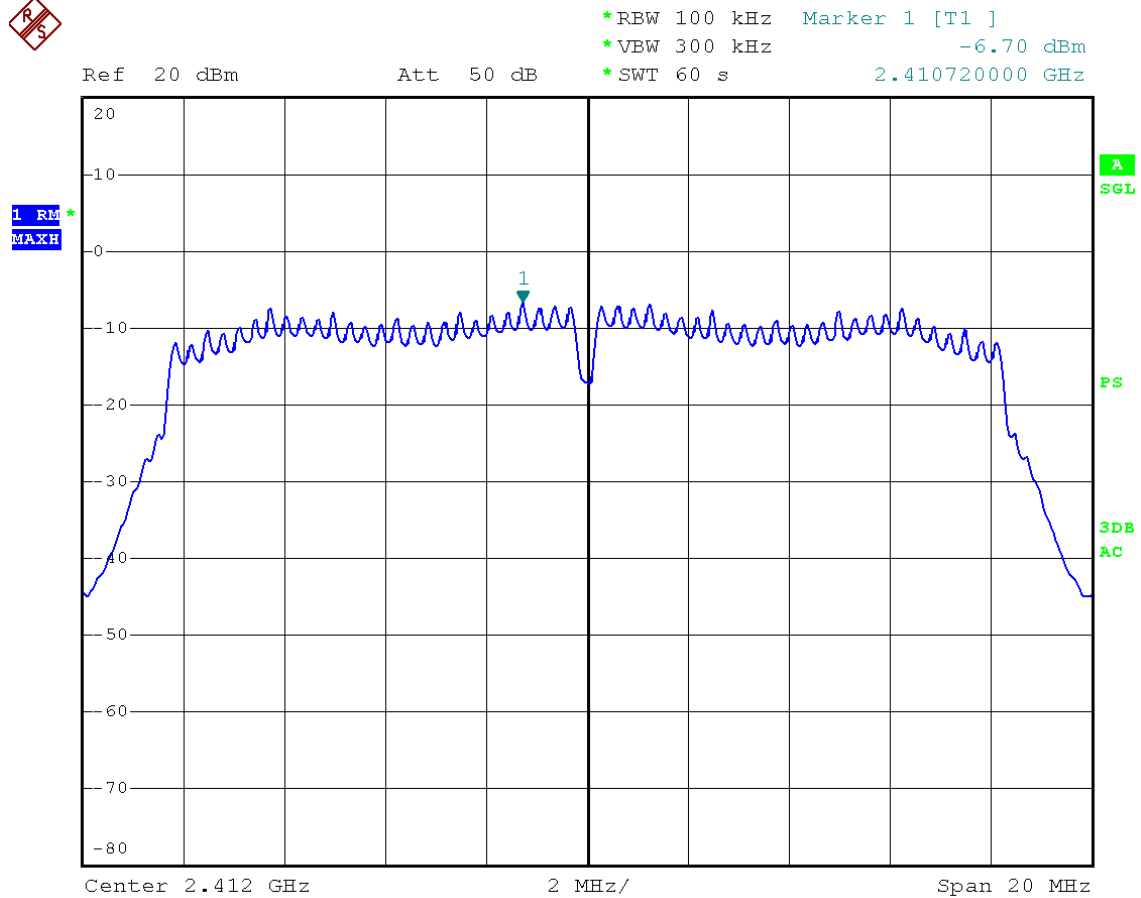
Ref 20 dBm

Att 50 dB



802.11g mode:

Channel No.	Frequency (MHz)	Mode	Data Rate	PSD (dBm/100 KHz)	Gain (dBi)	Factor (100kHz/ 3kHz)(dB)	PSD (dBm/3K Hz)	Limit	Result
1	2412	802.11g	54Mbps	-6.70	3	-15.2	-18.90	8dBm/ 3KHz	Pass
6	2437			-7.21	3	-15.2	-19.41		Pass
11	2462			-7.47	3	-15.2	-19.67		Pass

802.11g mode:
Channel 2412MHz

Channel 2437MHz

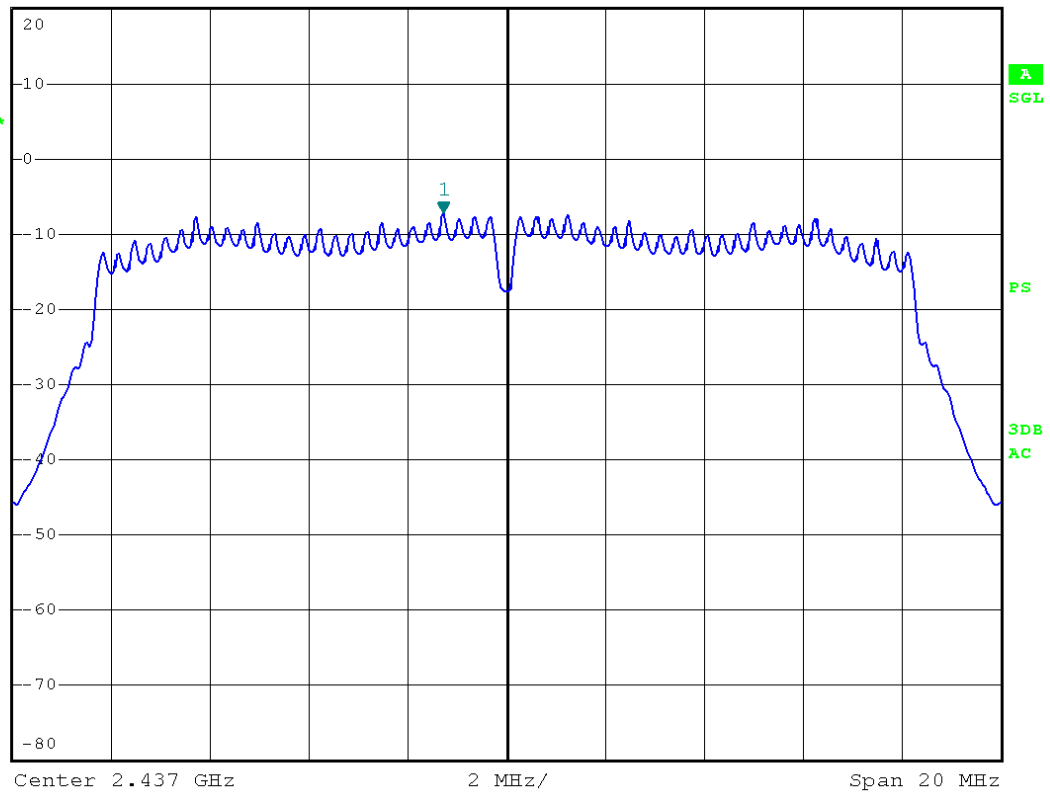


*RBW 100 kHz Marker 1 [T1]
*VBW 300 kHz -7.21 dBm
*SWT 60 s 2.435720000 GHz

Ref 20 dBm

Att 50 dB

1 RM
MAXH



Channel 2462MHz

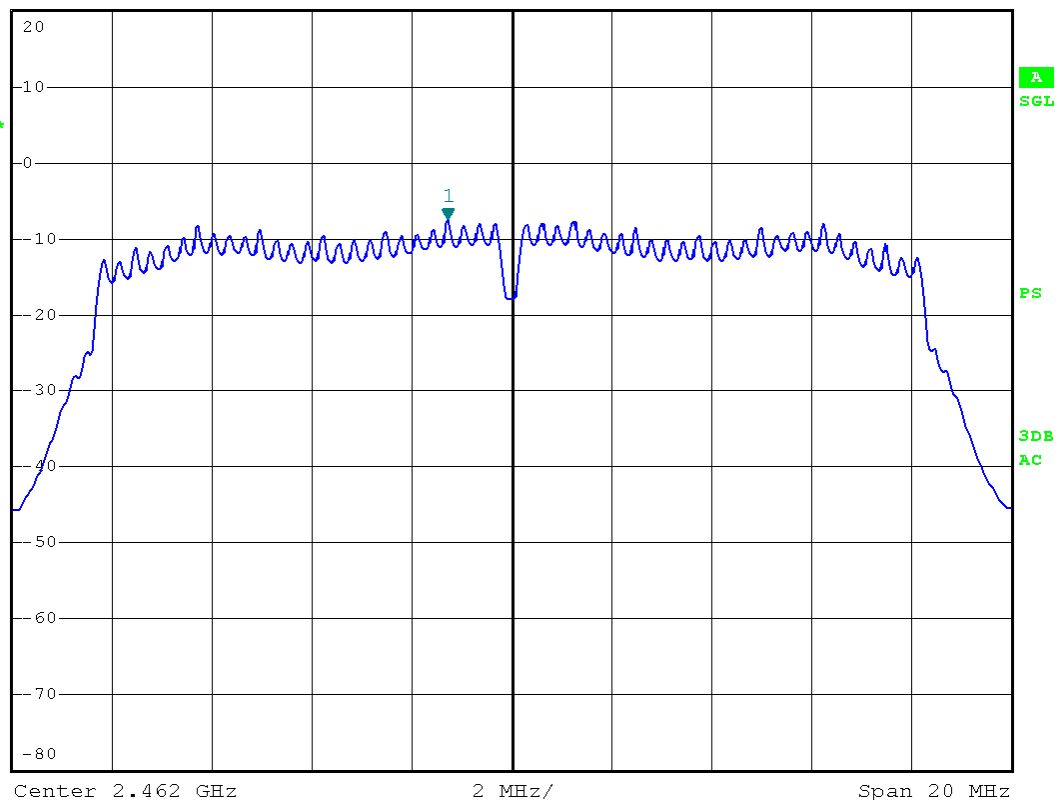


*RBW 100 kHz Marker 1 [T1]
*VBW 300 kHz -7.47 dBm
*SWT 60 s 2.460720000 GHz

Ref 20 dBm

Att 50 dB

1 RM
MAXH

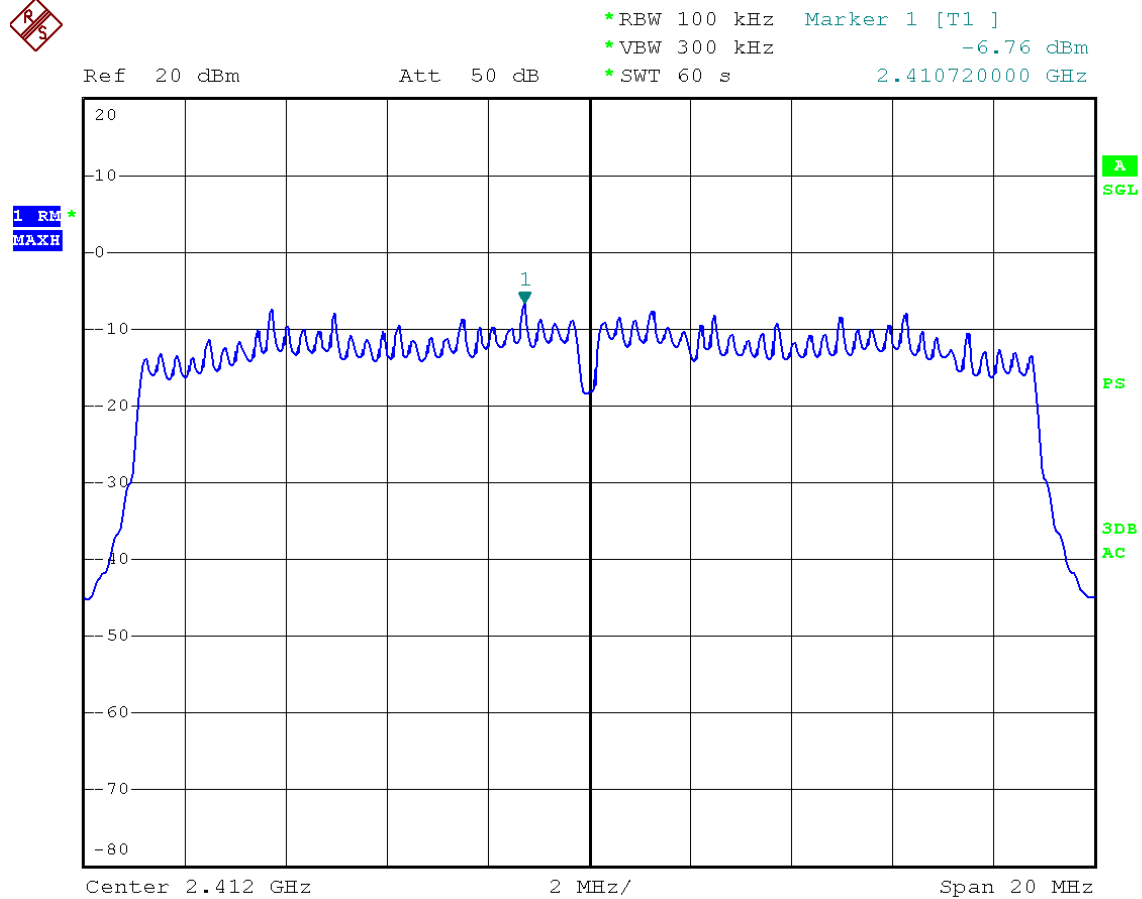


802.11n20 mode:

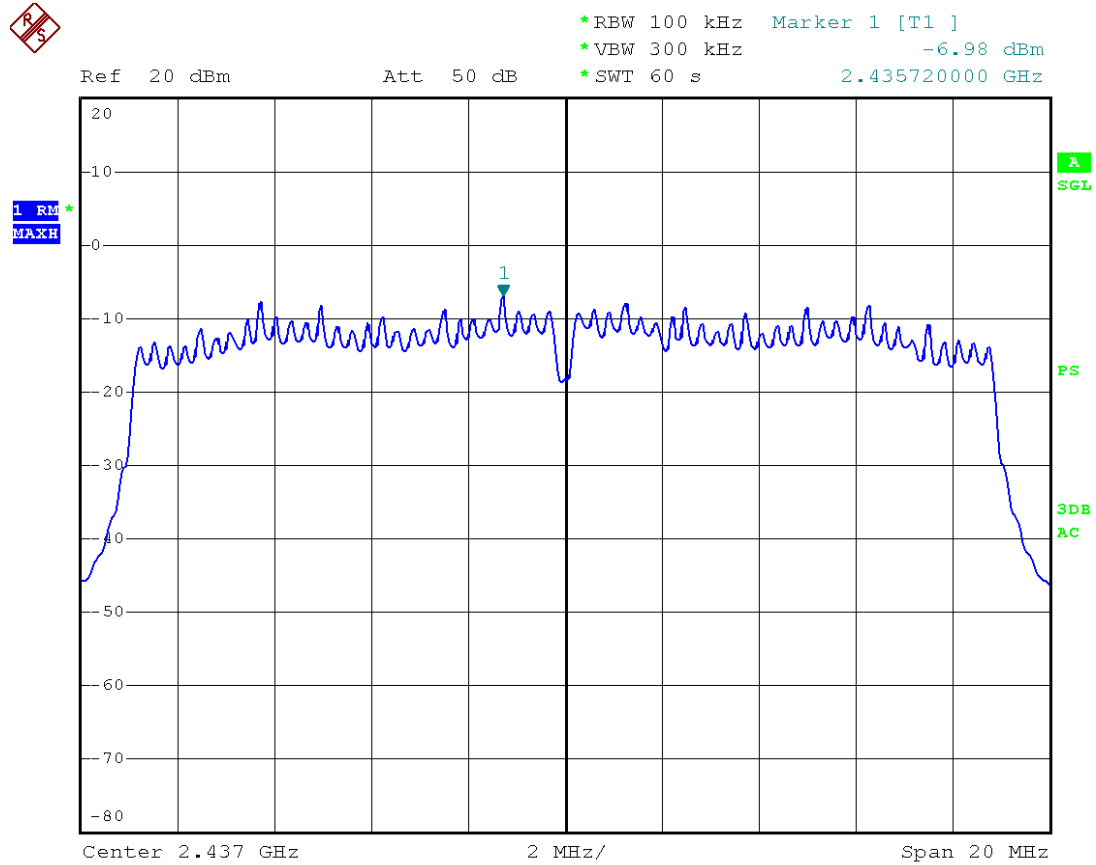
FCC ID : O5OGD-W913N

Channel No.	Frequency (MHz)	Mode	Data Rate	PSD (dBm/100 KHz)	Gain (dBi)	Factor (100kHz/3kHz)(dB)	PSD (dBm/3KHz)	Limit	Result
1	2412	802.11n 20	MCS7	-6.76	3	-15.2	-18.96	8dBm/ 3KHz	Pass
6	2437			-6.98	3	-15.2	-19.18		Pass
11	2462			-7.37	3	-15.2	-19.57		Pass

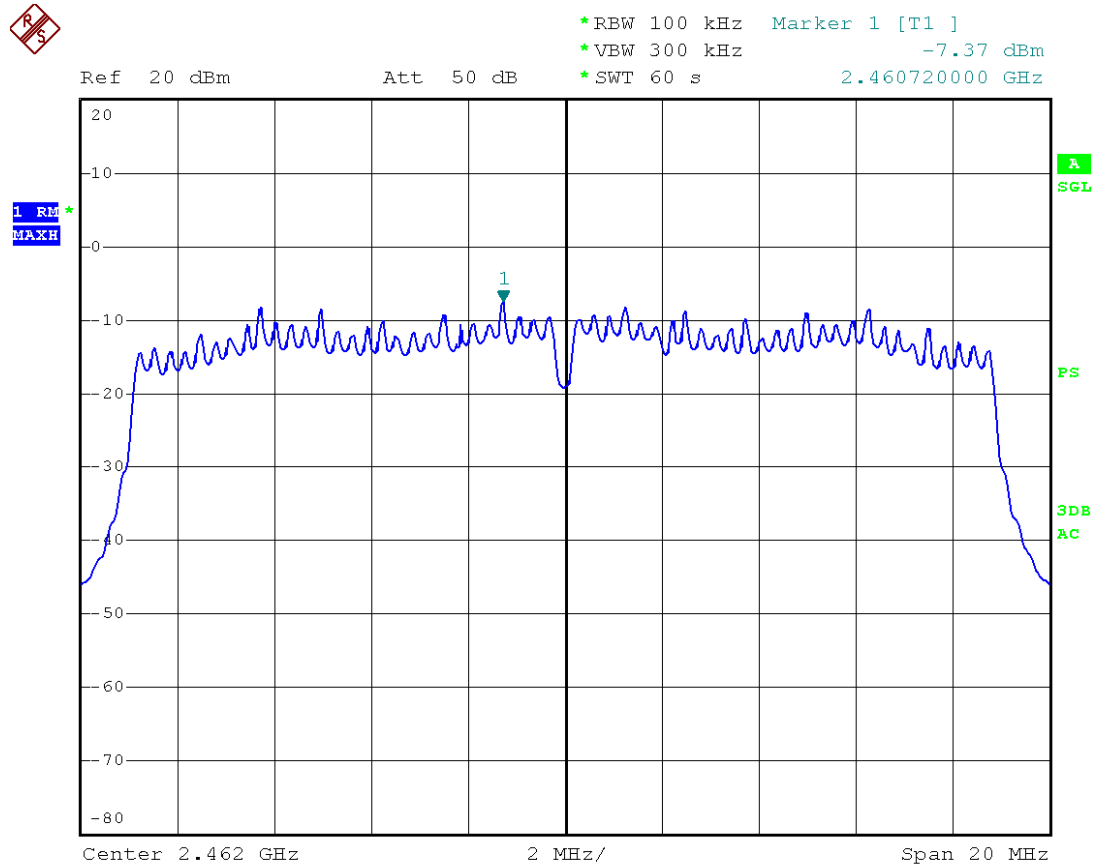
802.11n20 mode:
Channel 2412MHz



Channel 2437MHz



Channel 2462MHz



802.11n40 mode:

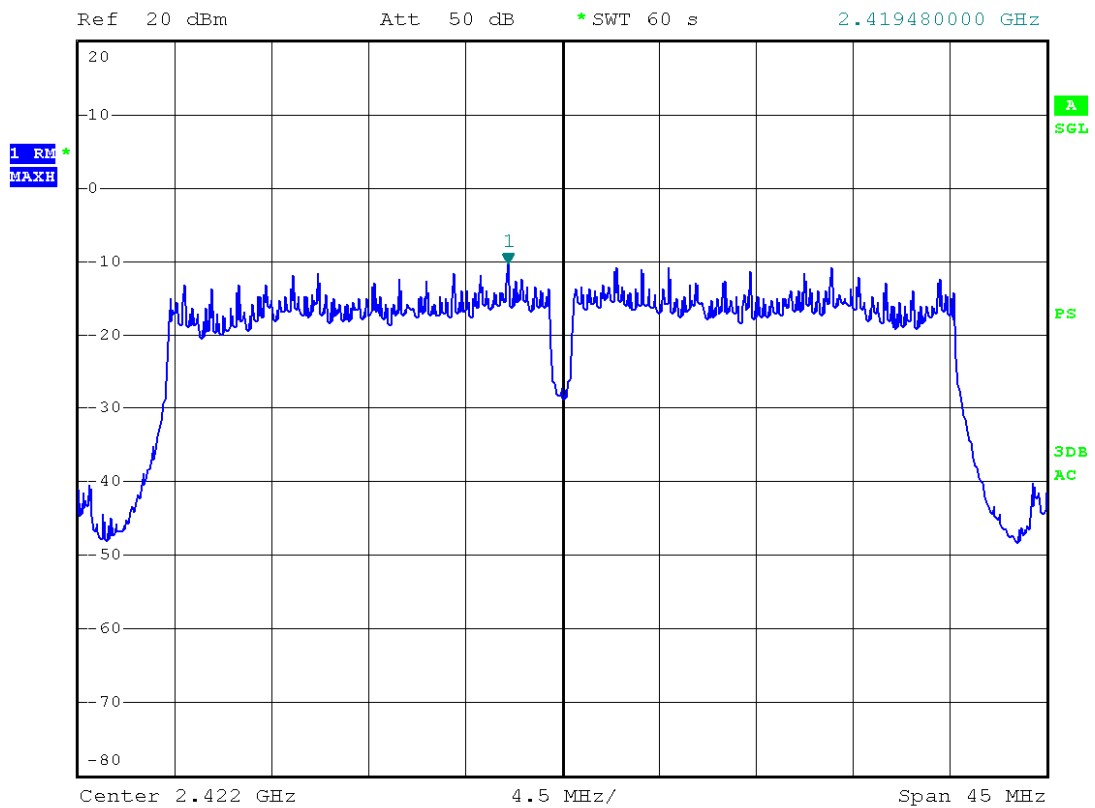
Channel No.	Frequency (MHz)	Mode	Data Rate	PSD (dBm/100 KHz)	Gain (dBi)	Factor (100kHz/3kHz)(dB)	PSD (dBm/3K Hz)	Limit	Result
3	2422	802.11n40	MCS15	-10.26	3	-15.2	-22.46	8dBm/3KHz	Pass
6	2437			-10.35	3	-15.2	-22.55		Pass
9	2452			-10.77	3	-15.2	-22.97		Pass

802.11n40 mode:

Channel 2422MHz



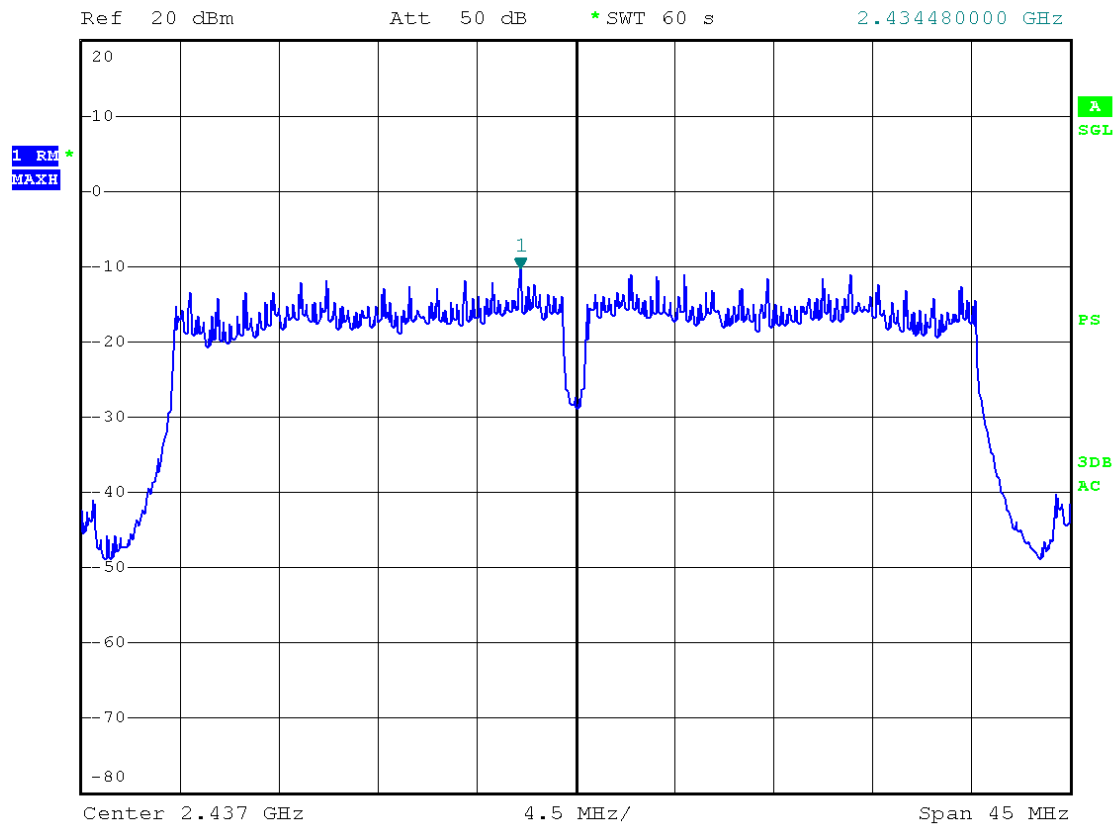
*RBW 100 kHz Marker 1 [T1]
 *VBW 300 kHz -10.26 dBm
 *SWT 60 s 2.419480000 GHz



Channel 2437MHz



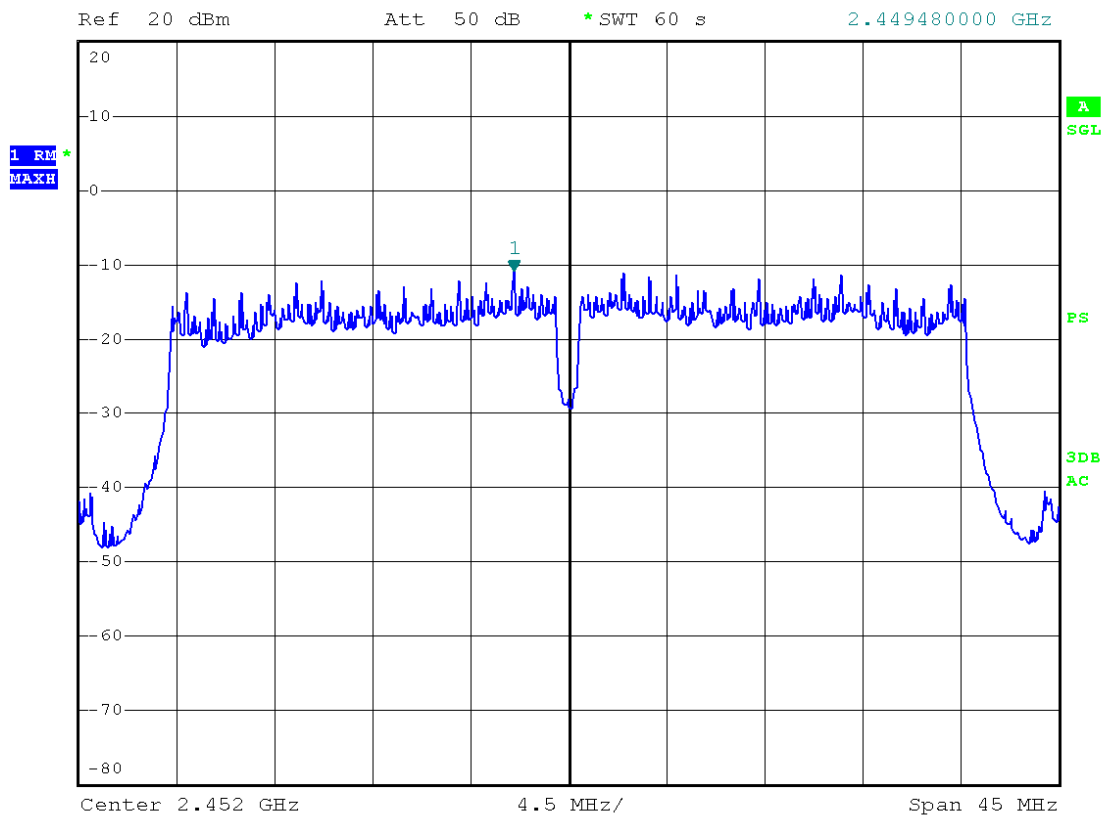
*RBW 100 kHz Marker 1 [T1]
*VBW 300 kHz -10.35 dBm
*SWT 60 s 2.434480000 GHz



Channel 2452MHz



*RBW 100 kHz Marker 1 [T1]
*VBW 300 kHz -10.77 dBm
*SWT 60 s 2.449480000 GHz

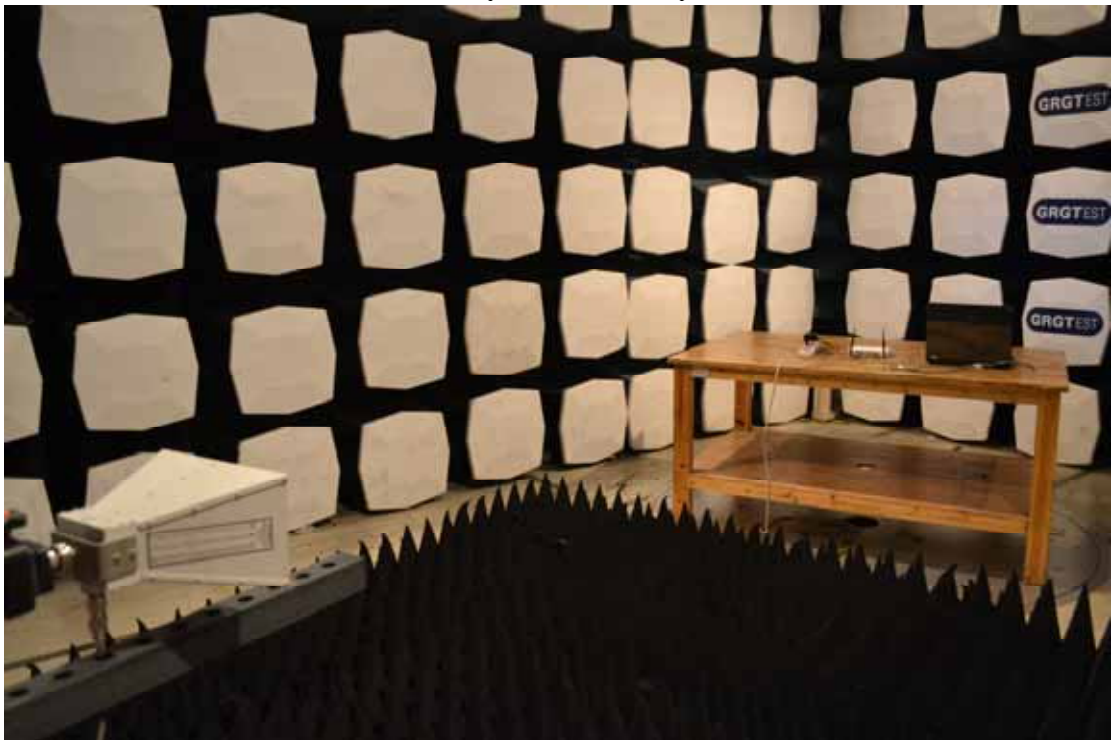


APPENDIX A: PHOTOGRAPH OF THE TEST ARRANGEMENT

RSE (Below 1GHz)



RSE (Above 1GHz)



CE



APPENDIX B: PHOTOGRAPH OF THE EUT







Adapter : RD1201000-C55-2MG



Adapter : S12A02-120A100-P4



-----This is the last page of the report. -----