FCC TEST REPORT
for
Winner Wave Limited

EZCast Pro
Model No.: EZCast Pro D01

Prepared for	:	Winner Wave Limited
Address	:	4F-5, No.736, Jhongjheng Road, Jhonghe Dist., New Taipei City, Taiwan, R.O.C.

Prepared By	:	Shenzhen Anbotek Compliance Laboratory Limited
Address	:	1/F., Building 1, SEC Industrial Park, No.0409 Qianhai Road, Nanshan District, Shenzhen, Guangdong, China Tel: (86) 755-26066544 Fax: (86) 755-26014772

Report Number	:	R011408190E
Date of Test	:	Aug. 21~ Sept. 28, 2014
Date of Report	:	Oct. 23, 2014

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TEST REPORT

Applicant	:	Winner Wave Limited
Manufacturer	:	Winner Wave Limited
EUT	:	EZCast Pro
Model No.	:	EZCast Pro D01
Serial No.	:	N.A.
Trade Mark	:	EZCast Pro
Rating	:	DC 5V, 1A

Measurement Procedure Used:
FCC Part15 Subpart C, Paragraph 15.247

The device described above is tested by Shenzhen Anbotek Compliance Laboratory Limited to determine the maximum emission levels emanating from the device and the severe levels of the device can endure and its performance criterion. The measurement results are contained in this test report and Shenzhen Anbotek Compliance Laboratory Limited is assumed full of responsibility for the accuracy and completeness of these measurements. Also, this report shows that the EUT (Equipment Under Test) is technically compliant with the FCC Part 15 Subpart C requirements.

This report applies to above tested sample only and shall not be reproduced in part without written approval of Shenzhen Anbotek Compliance Laboratory Limited.

Date of Test : Aug. 21~ Sept. 28, 2014

Prepared by : (Tested Engineer / Kebo Zhang)

Reviewer : (Project Manager / Amy Ding)

Approved & Authorized Signer : (Manager / Tom Chen)

1. GENERAL INFORMATION

1.1. Description of Device (EUT)

EUT	:	EZCast Pro
Model Number	:	EZCast Pro D01
Test Power Supply	:	DC 5V via USB Port
RF Transmission Frequency	:	2412MHz~2462MHz (802.11b/802.11g/802.11n(HT20)) 2422MHz~2452MHz (802.11n(HT40))
Channels	:	11 For (802.11b/802.11g/802.11n(HT20)) 7 For (802.11n(HT40))
Modulation	:	802.11b CCK 802.11g OFDM 802.11n MCS
Antenna Gain:	:	2dBi
Applicant	:	Winner Wave Limited
Address	:	4F-5, No.736, Jhongjheng Road, Jhonghe Dist., New Taipei City, Taiwan, R.O.C.
Manufacturer	:	Winner Wave Limited
Address	:	4F-5, No.736, Jhongjheng Road, Jhonghe Dist., New Taipei City, Taiwan, R.O.C.
Factory	:	BIWIN SEMICONDUCTOR (HK) COMPANY LIMITED
Address	:	5/F, Block4, Tongfuyu Industrial Park, Tanglang, Xili, NanShan, Shenzhen, China
Date of receipt	:	Aug. 14, 2014
Date of Test	:	Aug. 21~ Sept. 28, 2014

1.2. Auxiliary Equipment Used during Test

TV1	:	Manufacturer: SONY M/N: KDL-26EX550 S/N: 1012240 CE , FCC
TV2	:	Manufacturer: LG M/N: 32LB5610-CD

1.3. Description of Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

CNAS - LAB Code: L3503
Shenzhen Anbotek Compliance Laboratory Limited., Laboratory has been assessed and in compliance with CNAS/CL01: 2006 accreditation criteria for testing laboratories (identical to ISO/IEC 17025:2005 General Requirements) for the Competence of Testing Laboratories.

FCC-Registration No.: 752021
Shenzhen Anbotek Compliance Laboratory Limited, EMC Laboratory has been registed and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files. Registration 752021, July 10, 2013.

IC-Registration No.: 8058A-1
Shenzhen Anbotek Compliance Laboratory Limited., EMC Laboratory has been registered and fully described in a report filed with the (IC) Industry Canada. The acceptance letter from the IC is maintained in our files. Registration 8058A, February 22, 2013.

Test Location
All Emissions tests were performed at
Shenzhen Anbotek Compliance Laboratory Limited. at 1/F., Building 1, SEC Industrial Park, No.0409 Qianhai Road, Nanshan District, Shenzhen, Guangdong, China

1.4. Measurement Uncertainty

Radiation Uncertainty	:	Ur = 4.3dB
Conduction Uncertainty	:	Uc = 3.4dB

2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with ANSI C63.4: 2009 and FCC Part 15, Paragraph 15.247.

2.1. Summary of Test Results

The EUT has been tested according to the following specifications:

Standard	Test Type	Result	Notes
FCC Part 15, Paragraph 15.107, 15.207	Conducted Emission Test	-	N/A
FCC Part 15, Paragraph 15.247(b)(1)	Peak Output Power	PASS	Complies
FCC Part 15, Paragraph 15.247(a)(2)	6dB Bandwidth	PASS	Complies
FCC Part 15, Paragraph 15.247(c)	100kHz Bandwidth of Frequency Band Edges	PASS	Complies
FCC Part 15, Paragraph 15.209(a)(f)	Spurious Emission	PASS	Complies
FCC Part 15, Paragraph 15.247(a)(1)	Frequency Separation	-	N/A
FCC Part 15, Paragraph 15.247(a)(1)(iii)	Number of Hopping Frequency	-	N/A
FCC Part 15, Paragraph 15.247(a)(1)(iii)	Time of Occupancy	-	N/A
FCC Part 15, Paragraph 15.247(c)	Peak Power Density	PASS	Complies

2.2. Description of Test Modes

The EUT has been tested under operating condition.
Software used to control the EUT for staying in continuous transmitting and receiving mode isprogrammed.
IEEE802.11b: Channel 1(2412MHz), Channel 6(2437MHz) and Channel 11(2462MHz) with 1 Mbps lowest data rate (worst case) are chosen for the final testing.
IEEE802.11g: Channel 1(2412MHz), Channel 6(2437MHz) and Channel 11(2462MHz) with 6 Mbps lowest data rate (the worst case) are chosen for the final testing.
IEEE802.11n (HT20): Channel 1(2412MHz), Channel 6(2437MHz) and Channel 11(2462MHz) with MCS 0 Mbps lowest data rate (the worst case) are chosen for the final testing.
IEEE802.11n (HT40): Channel 3(2422MHz), Channel 6(2437MHz) and Channel 9(2452MHz) with MCS 0 Mbps lowest data rate (the worst case) are chosen for the final testing.

2.3. List of channels:

√ - available

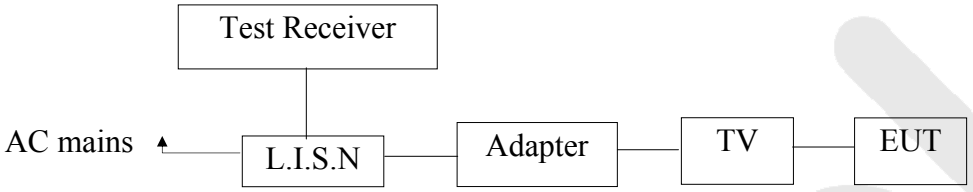
X - tested

Number	Frequency(MHz)		802.11 b/g/n （HT20）	802.11 b/g/n （HT40）
1	2412	√	X	
2	2417	√		
3	2422	√		X
4	2427	√		
5	2432	√		
6	2437	√	X	X
7	2442	√		
8	2447	√		
9	2452	√		X
10	2457	√		
11	2462	√	X	

3. Conducted Emission Test

3.1. Block Diagram of Test Setup

3.1.1. Block diagram of connection between the EUT and simulators



3.2. Power Line Conducted Emission Measurement Limits (15.207)

Frequency MHz	Limits dB(μV)	
	Quasi-peak Level	Average Level
0.15 ~ 0.50	66 ~ 56*	56 ~ 46*
0.50 ~ 5.00	56	46
5.00 ~ 30.00	60	50

Notes: 1. *Decreasing linearly with logarithm of frequency.
2. The lower limit shall apply at the transition frequencies.

3.3. Configuration of EUT on Measurement

The following equipments are installed on Power Line Conducted Emission Measurement to meet the commission requirement and operating regulations in a manner which tends to maximize its emission characteristics in a normal application.

3.4. Operating Condition of EUT

3.4.1. Setup the EUT and simulator as shown as Section 3.1.

3.4.2. Turn on the power of all equipment.

3.4.3. Let the EUT work in test mode (HDMI, MHL) and measure it.

3.5. Test Procedure

The EUT system is connected to the power mains through a line impedance stabilization network (L.I.S.N.). This provides a 50ohm coupling impedance for the EUT system. Please refer the block diagram of the test setup and photographs. Both sides of AC line are checked to find out the maximum conducted emission. In order to find the maximum emission levels, the relative positions of equipment and all of the interface cables shall be changed according to FCC ANSI C63.4-2003 on Conducted Emission Measurement.

The bandwidth of test receiver (ESCI) set at 9KHz.

The frequency range from 150KHz to 30MHz is checked.

The test results are reported on Section 3.6.

3.6. Test equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Two-Line V-network	Rohde & Schwarz	ENV216	100055	Apr. 22, 2014	1 Year
2.	EMI Test Receiver	Rohde & Schwarz	ESCI	100627	Apr. 22, 2014	1 Year
3.	RF Switching Unit	Compliance Direction	RSU-M2	38303	Apr. 22, 2014	1 Year

3.7. Power Line Conducted Emission Measurement Results

PASS.

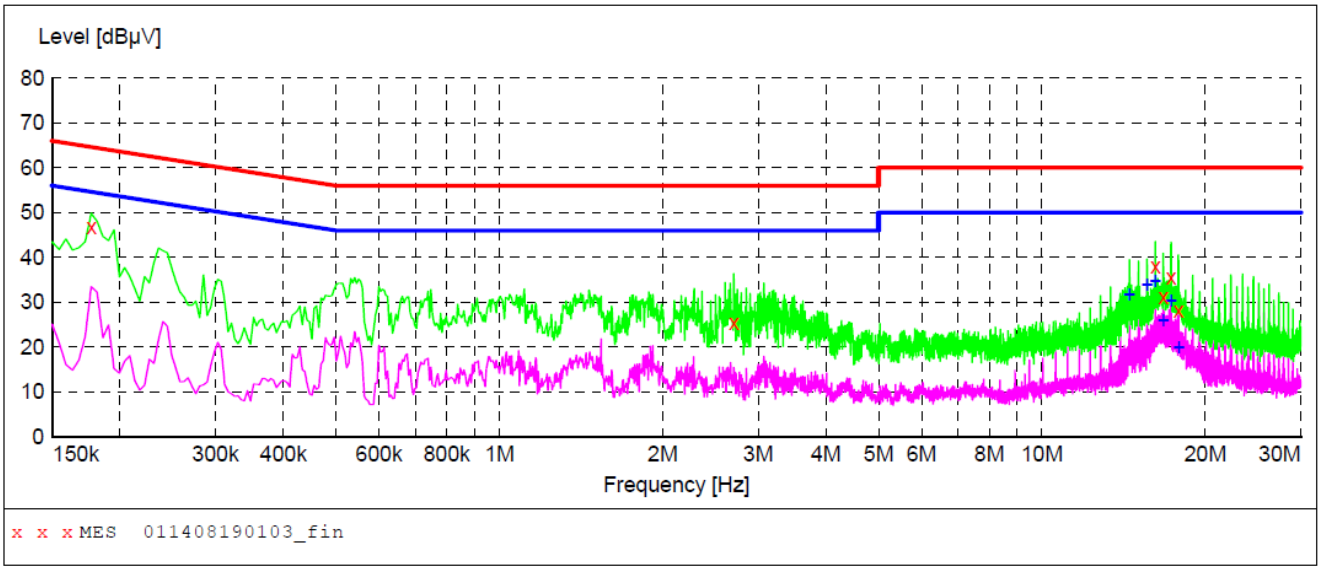
The frequency range from 150KHz to 30 MHz is investigated.

The EUT was tested on (HDMI, MHL) modes, only the worst data of (MHL) is attached in the following pages.

CONDUCTED EMISSION TEST DATA

Test Site:	1# Shielded Room
Operating Condition:	MHL
Test Specification:	DC 5V via USB Port
Comment:	Live Line
	Tem:25℃ Hum:50%

SCAN TABLE: "Voltage(150K~30M)FIN"
Short Description: 150K-30M Disturbance Voltages



MEASUREMENT RESULT: "011408190103_fin"

8/22/2014 4:29PM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.177000	46.80	20.1	65	17.8	QP	L1	GND
2.705500	25.40	20.4	56	30.6	QP	L1	GND
16.187500	38.00	20.7	60	22.0	QP	L1	GND
16.741000	31.10	20.7	60	28.9	QP	L1	GND
17.299000	35.60	20.7	60	24.4	QP	L1	GND
17.852500	28.10	20.8	60	31.9	QP	L1	GND

MEASUREMENT RESULT: "011408190103_fin2"

8/22/2014 4:29PM

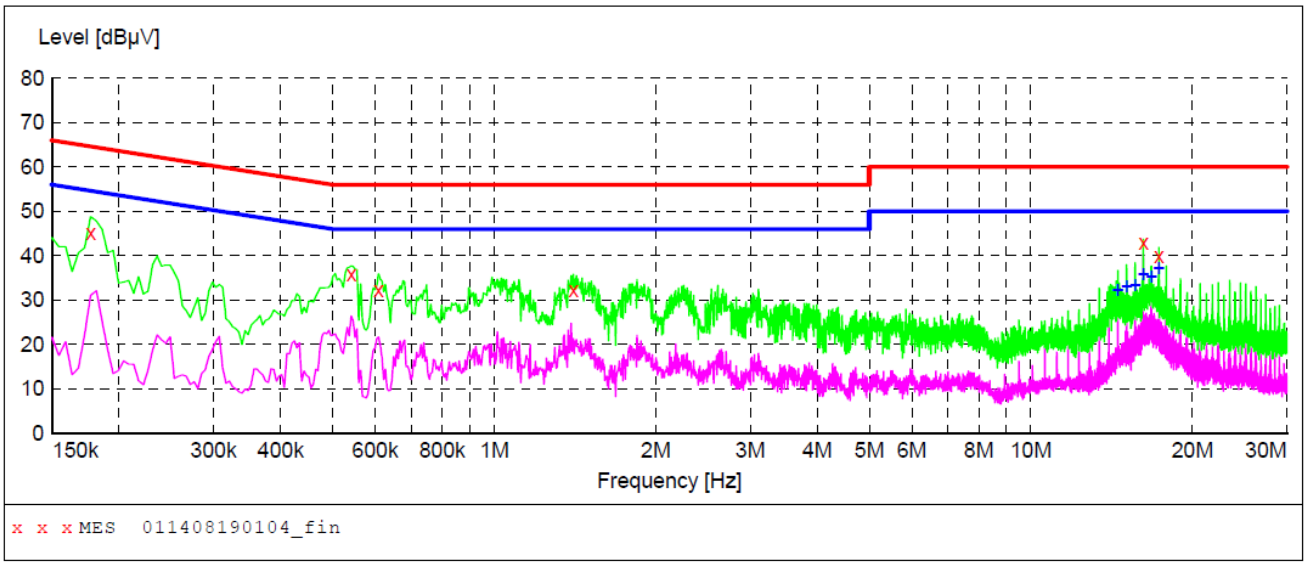
Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
14.504500	31.80	20.7	50	18.2	AV	L1	GND
15.625000	33.80	20.7	50	16.2	AV	L1	GND
16.187500	34.70	20.7	50	15.3	AV	L1	GND
16.741000	25.90	20.7	50	24.1	AV	L1	GND
17.299000	30.20	20.7	50	19.8	AV	L1	GND
17.852500	20.00	20.8	50	30.0	AV	L1	GND

CONDUCTED EMISSION TEST DATA

Test Site:	1# Shielded Room
Operating Condition:	MHL
Test Specification:	DC 5V via USB Port
Comment:	Neutral Line
	Tem:25℃ Hum:50%

SCAN TABLE: "Voltage(150K~30M)FIN"

Short Description: 150K-30M Disturbance Voltages



MEASUREMENT RESULT: "011408190104_fin"

8/22/2014 4:39PM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.177000	45.10	20.1	65	19.5	QP	N	GND
0.541500	35.80	20.1	56	20.2	QP	N	GND
0.609000	32.10	20.1	56	23.9	QP	N	GND
1.405000	32.30	20.2	56	23.7	QP	N	GND
16.210000	43.00	20.7	60	17.0	QP	N	GND
17.321500	39.90	20.8	60	20.1	QP	N	GND

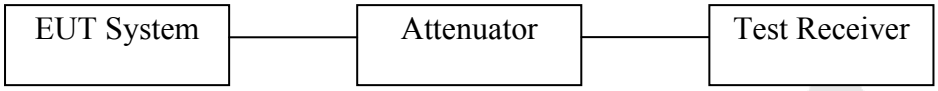
MEASUREMENT RESULT: "011408190104_fin2"

8/22/2014 4:39PM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
14.531500	32.30	20.7	50	17.7	AV	N	GND
15.094000	33.10	20.7	50	16.9	AV	N	GND
15.647500	33.20	20.7	50	16.8	AV	N	GND
16.205500	35.70	20.7	50	14.3	AV	N	GND
16.768000	35.30	20.7	50	14.7	AV	N	GND
17.326000	37.20	20.8	50	12.8	AV	N	GND

4. FCC Part 15.247 Requirements for DSSS & OFDM Modulation

4.1 Test Setup



4.2 6dB Bandwidth

a. Limit

For the direct sequence systems, the minimum 6dB bandwidth shall be at least 500kHz.

b.Test Procedure

1. Place the EUT on the table and set it in the transmitting mode.
2. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to the spectrum analyzer.
3. Set the spectrum analyzer as:
   RBW = 100kHz, VBW≥3*RBW =300kHz,
   Detector= Peak
   Trace mode= Max hold.
   Sweep- auto couple.
4. Mark the peak frequency and –6dB (upper and lower) frequency.
5. Repeat until all the rest channels are investigated.

20dB Bandwidth:
C63.10
Occupied Bandwidth (OBW=20dB Bandwidth

1. Set RBW=1%~5% OBW
2. Set the VBW≥3*RBW
3. Set the span range between 2 times and 5 times of the OBW
4. Sweep Time= Auto
   Detector= Peak
   Trace= Max hold
5. Once the reference level is established, the equipment is conditioned with typical modulating signals to produce the worst case (i.e. the widest) bandwidth. Unless otherwise specified for an unlicensed wireless device, measure the bandwidth at the -20dB levels with respect to the reference level.

c. Test Setup See 4.1

d. Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum Analysis	Agilent	E4407B	US39390582	Aug. 08, 2014	1 Year
2.	Preamplifier	Instruments corporation	EMC011830	980100	Aug. 08, 2014	1 Year
3.	EMI Test Receiver	Rohde & Schwarz	ESPI	101604	Apr. 22, 2014	1 Year
4.	Double Ridged Horn Antenna	Instruments corporation	GTH-0118	351600	Apr. 04, 2014	1 Year
5.	Bilog Broadband Antenna	Schwarzbeck	VULB9163	VULB 9163-289	Apr. 24, 2014	1 Year
6.	Pre-amplifier	SONOMA	310N	186860	Aug. 08, 2014	1 Year
7.	EMI Test Software EZ-EMC	SHURPLE	N/A	N/A	N/A	N/A

e. Test Results

Pass.

f. Test Data
6dB Bandwidth

ANT A
Test mode: IEEE 802.11b

Channel	Frequency (MHz)	Bandwidth (MHz)	Limit (kHz)	Results
Low	2412	10.120		Pass
Mid	2437	10.076	>500	Pass
High	2462	10.076		Pass

Test mode: IEEE 802.11g

Channel	Frequency (MHz)	Bandwidth (MHz)	Limit (kHz)	Results
Low	2412	16.560		Pass
Mid	2437	16.640	>500	Pass
High	2462	16.600		Pass

Test mode: IEEE 802.11n (HT20)

Channel	Frequency (MHz)	Bandwidth (MHz)	Limit (kHz)	Results
Low	2412	17.880		Pass
Mid	2437	17.880	>500	Pass
High	2462	17.880		Pass

Test mode: IEEE 802.11n (HT40)

Channel	Frequency (MHz)	Bandwidth (MHz)	Limit (kHz)	Results
Low	2422	36.400		Pass
Mid	2437	36.400	>500	Pass
High	2452	36.480		Pass

Test Plots See the following page.

ANT B

Test mode: IEEE 802.11b

Channel	Frequency (MHz)	Bandwidth (MHz)	Limit (kHz)	Results
Low	2412	10.032		Pass
Mid	2437	10.032	>500	Pass
High	2462	10.032		Pass

Test mode: IEEE 802.11g

Channel	Frequency (MHz)	Bandwidth (MHz)	Limit (kHz)	Results
Low	2412	16.544		Pass
Mid	2437	16.544	>500	Pass
High	2462	16.544		Pass

Test mode: IEEE 802.11n (HT20)

Channel	Frequency (MHz)	Bandwidth (MHz)	Limit (kHz)	Results
Low	2412	17.864		Pass
Mid	2437	17.820	>500	Pass
High	2462	17.820		Pass

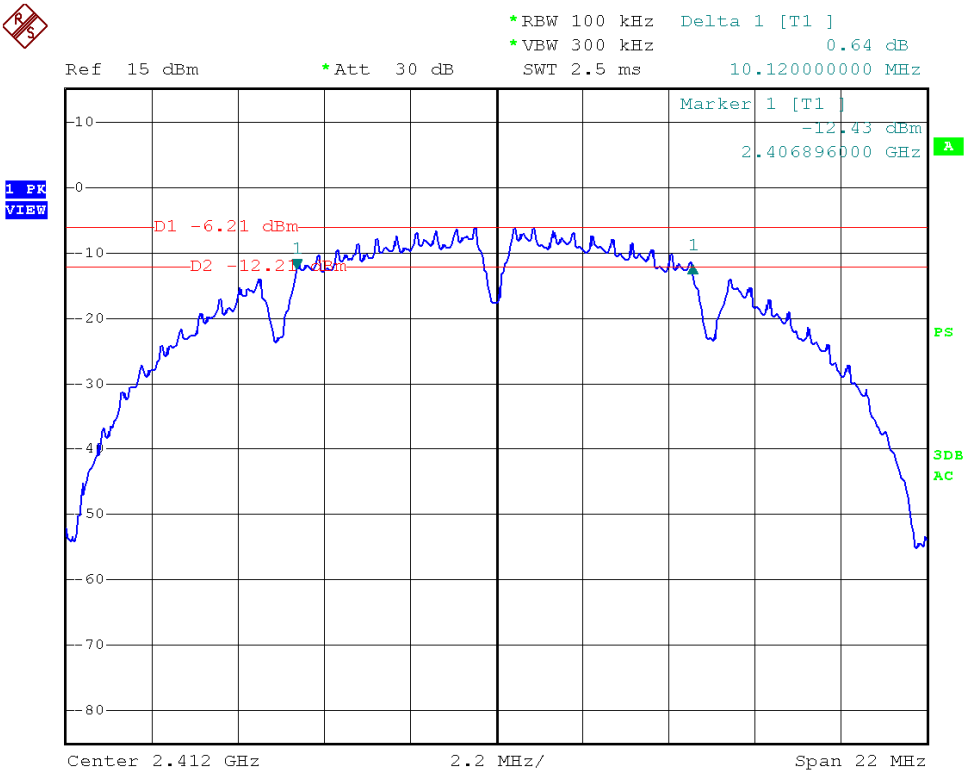
Test mode: IEEE 802.11n (HT40)

Channel	Frequency (MHz)	Bandwidth (MHz)	Limit (kHz)	Results
Low	2422	36.456		Pass
Mid	2437	36.456	>500	Pass
High	2452	36.456		Pass

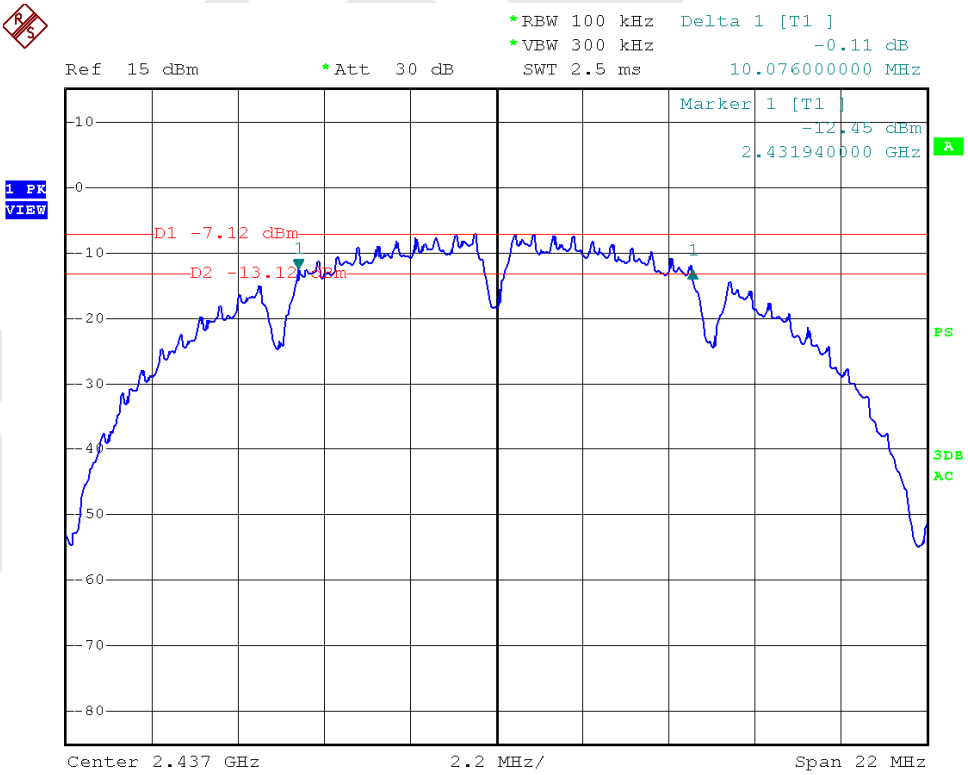
Test Plots See the following page.

ANT A

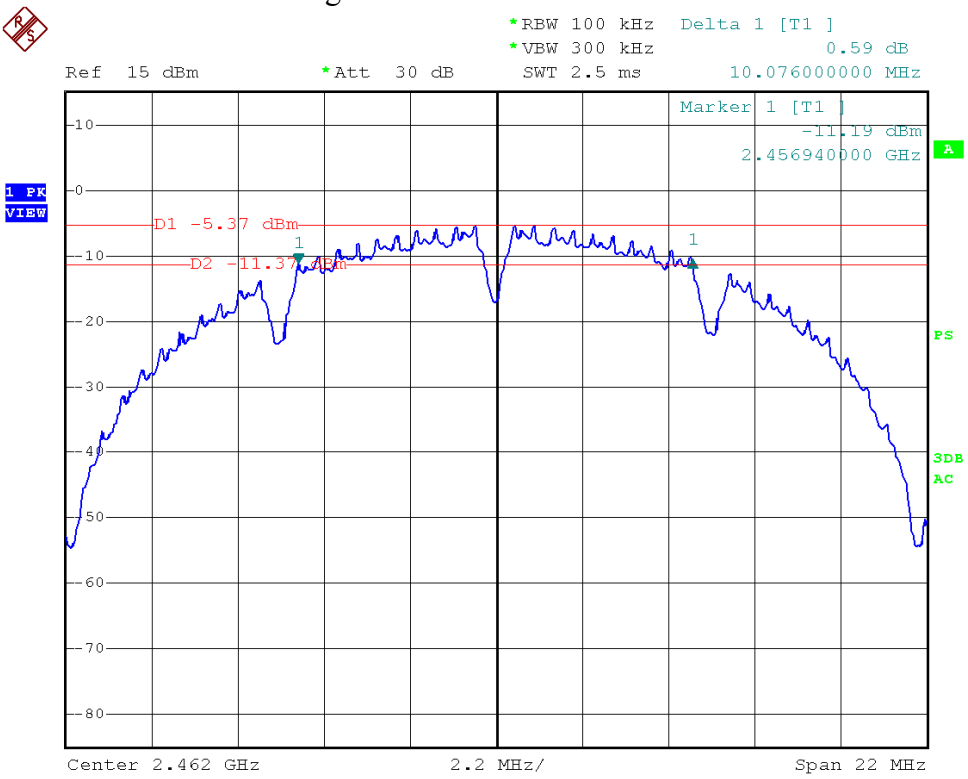
Test Mode: 802.11b---Low



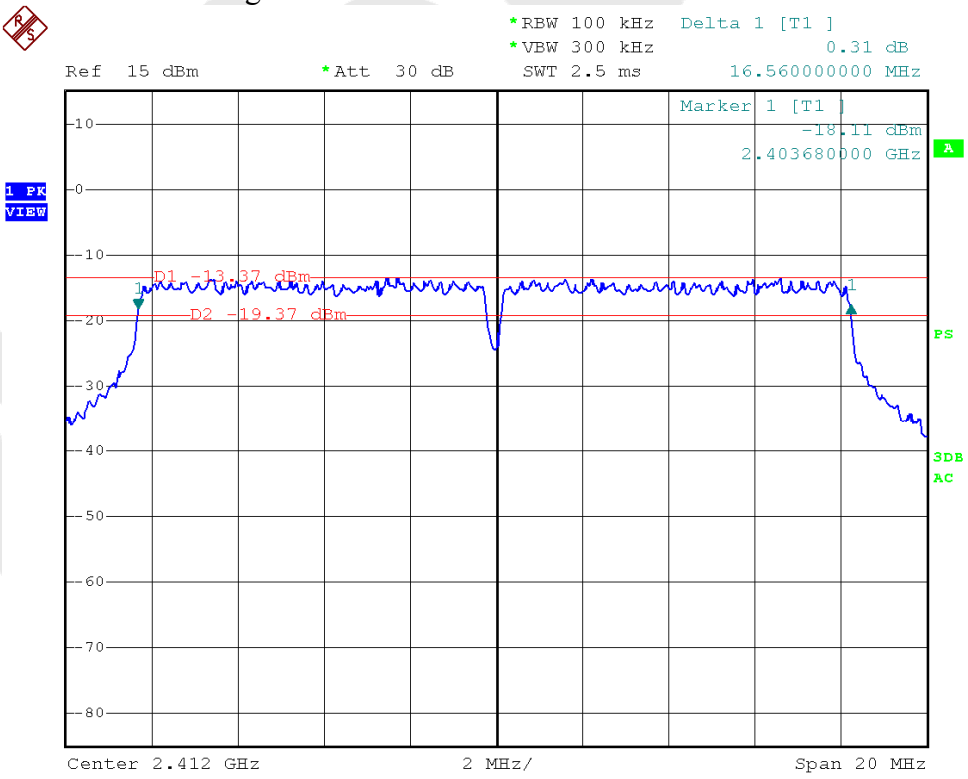
Test Mode: 802.11b---Mid



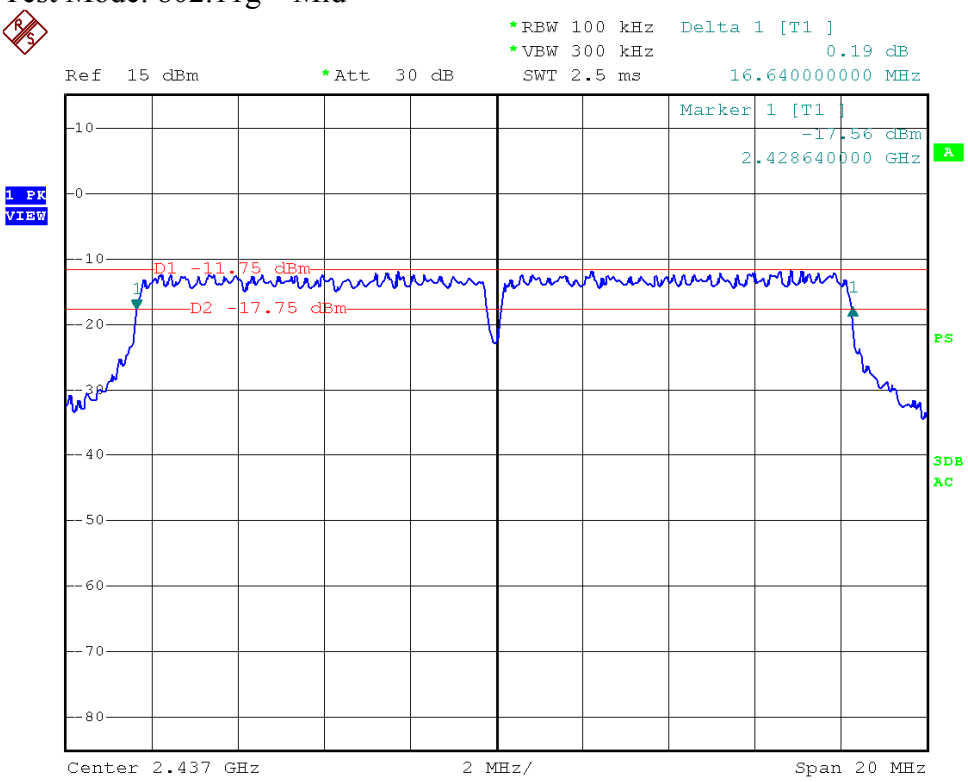
Test Mode: 802.11b---High



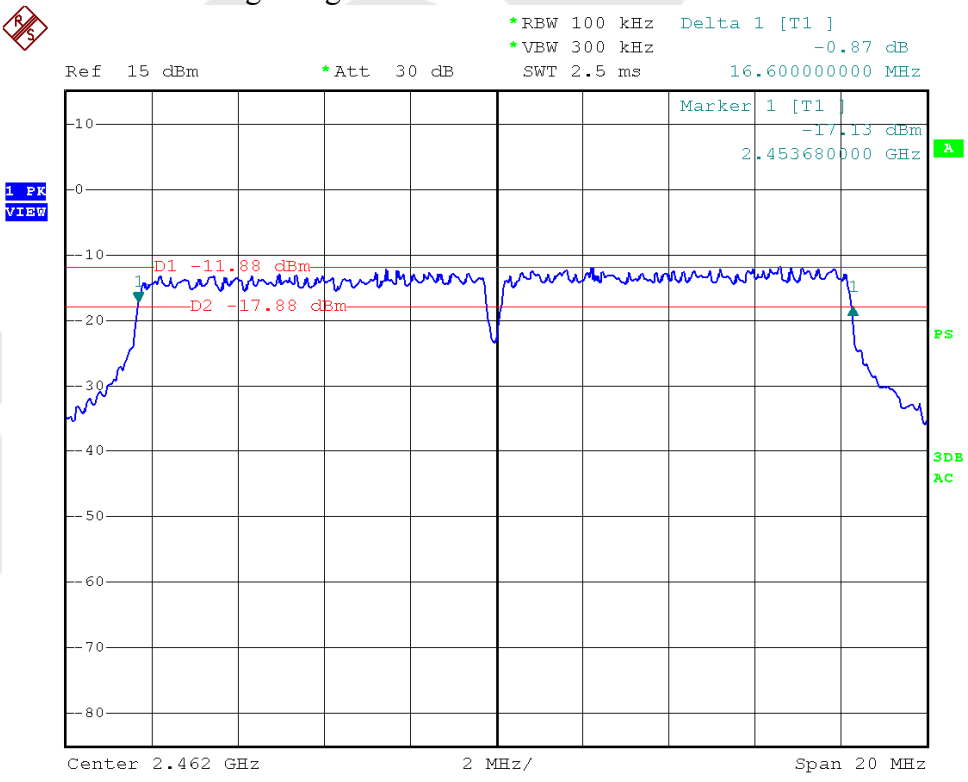
Test Mode: 802.11g---Low



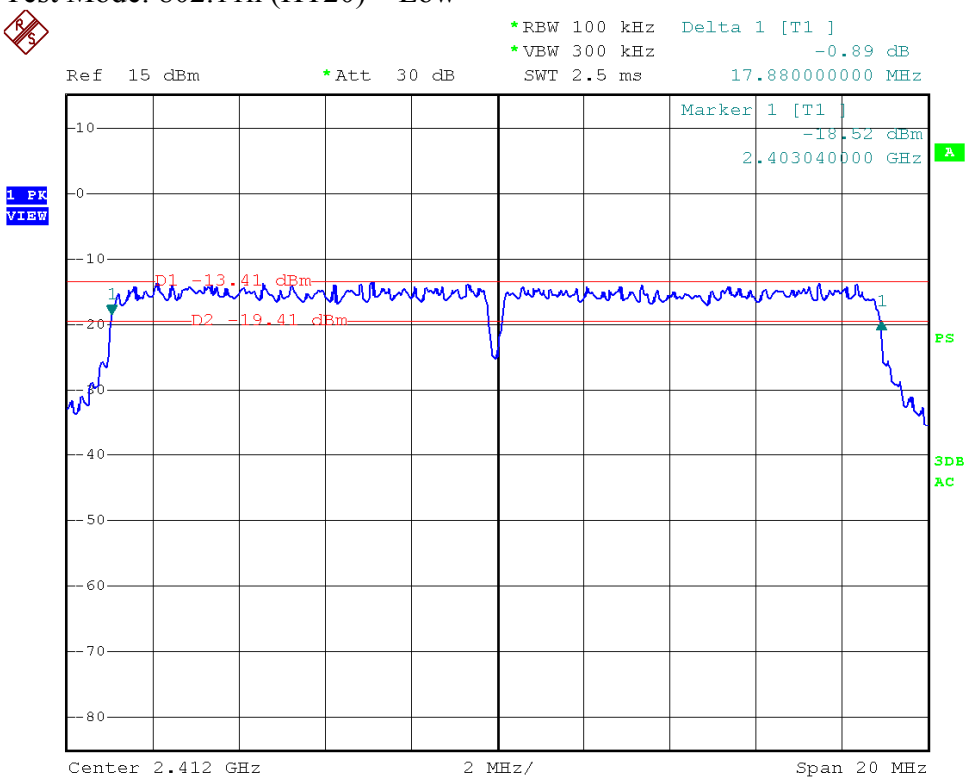
Test Mode: 802.11g---Mid



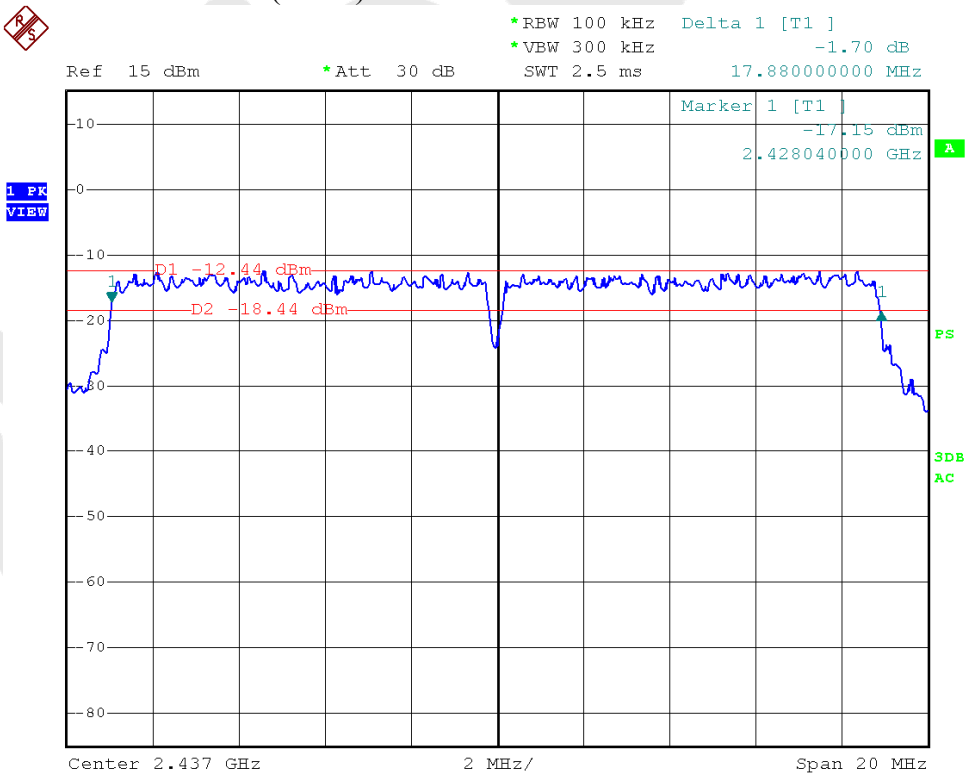
Test Mode: 802.11g---High



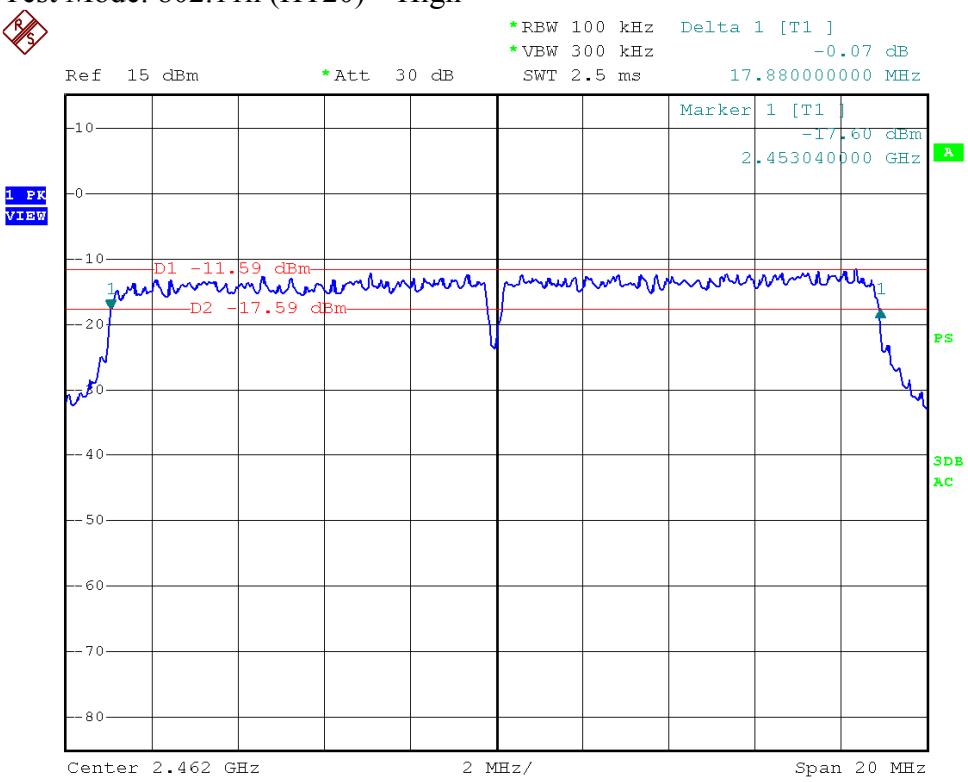
Test Mode: 802.11n (HT20)---Low



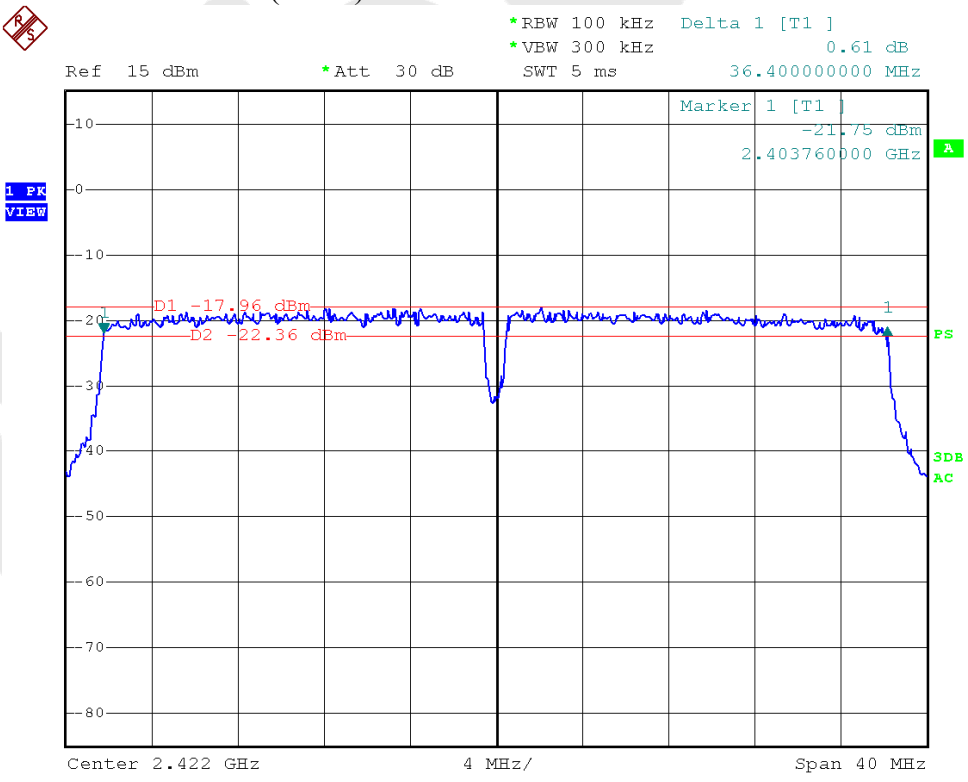
Test Mode: 802.11n (HT20)---Mid



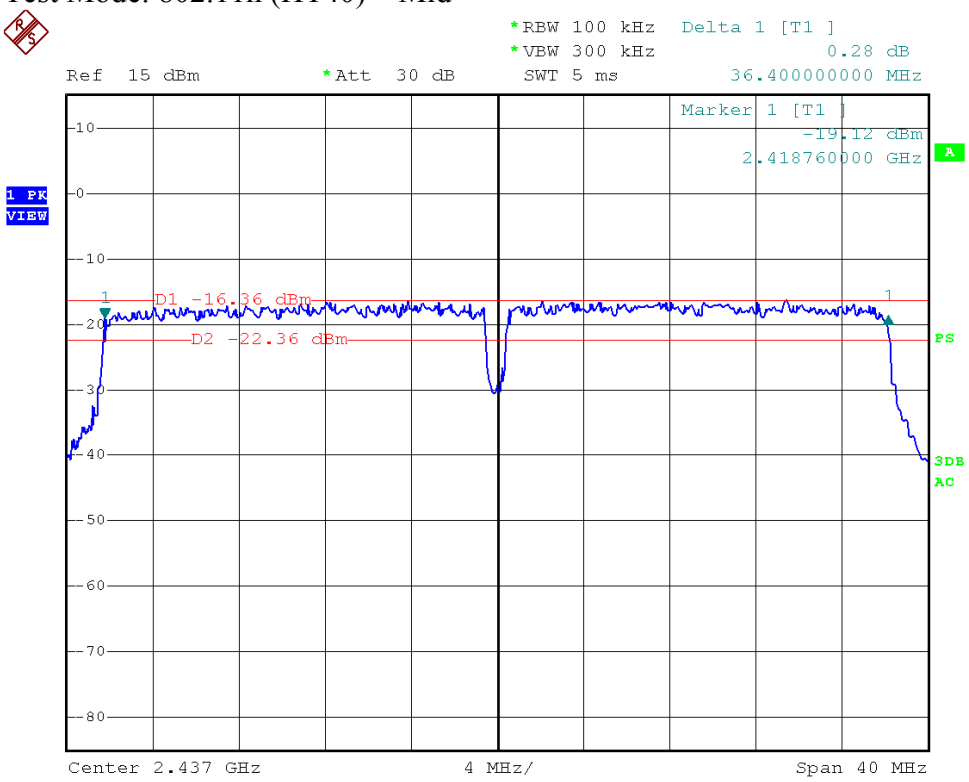
Test Mode: 802.11n (HT20)---High



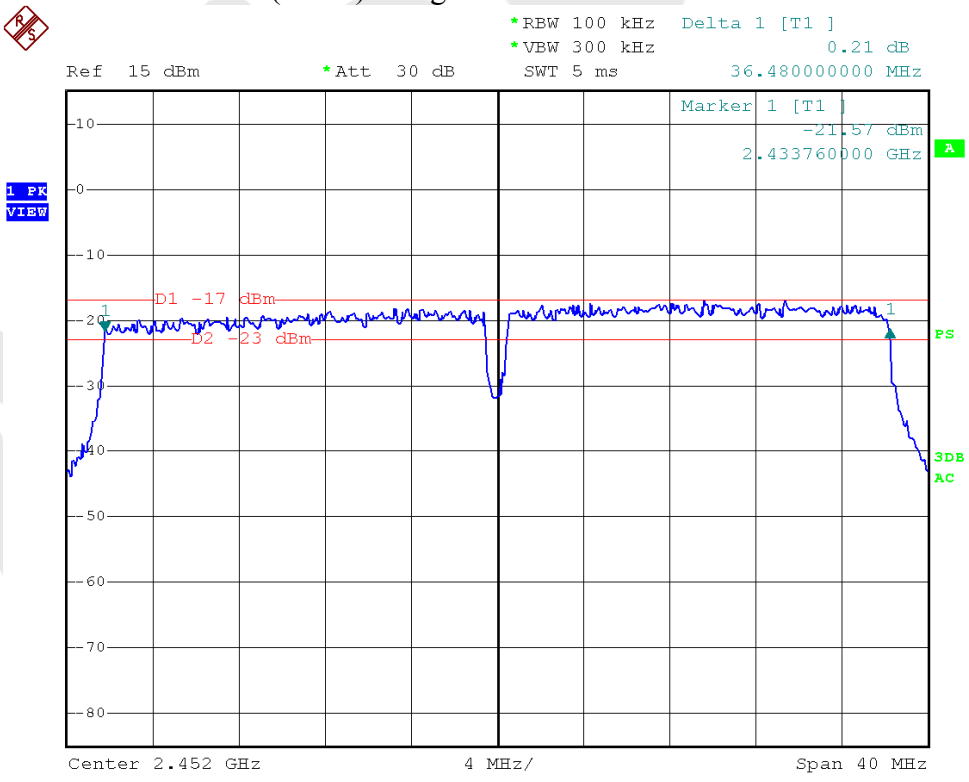
Test Mode: 802.11n (HT40)---Low



Test Mode: 802.11n (HT40)---Mid

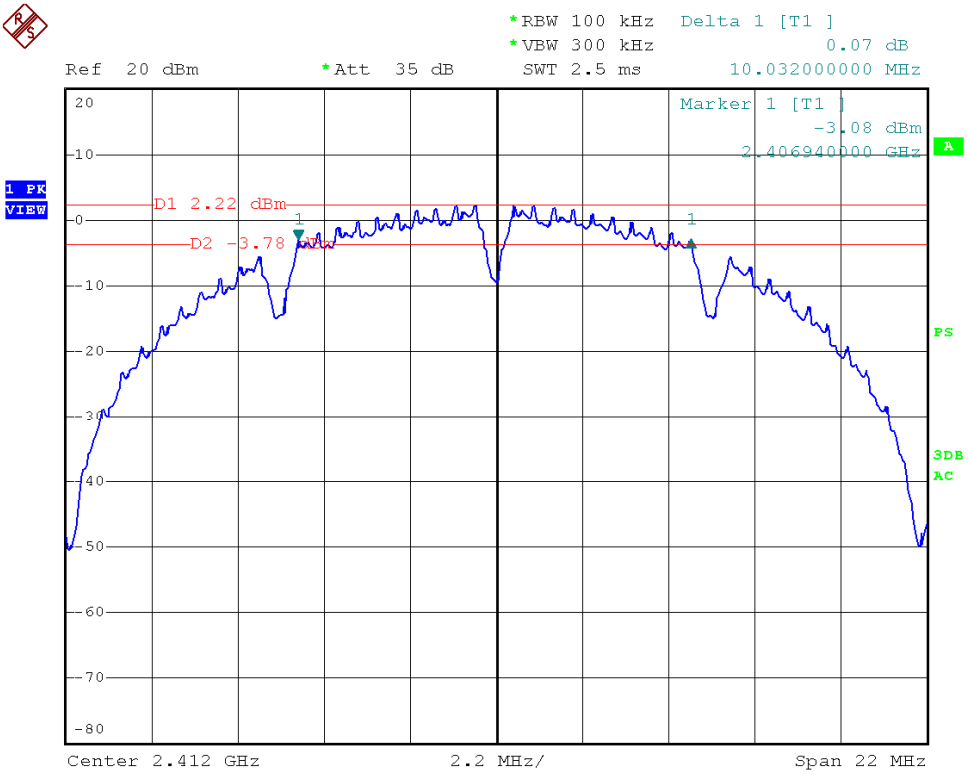


Test Mode: 802.11n (HT40)---High

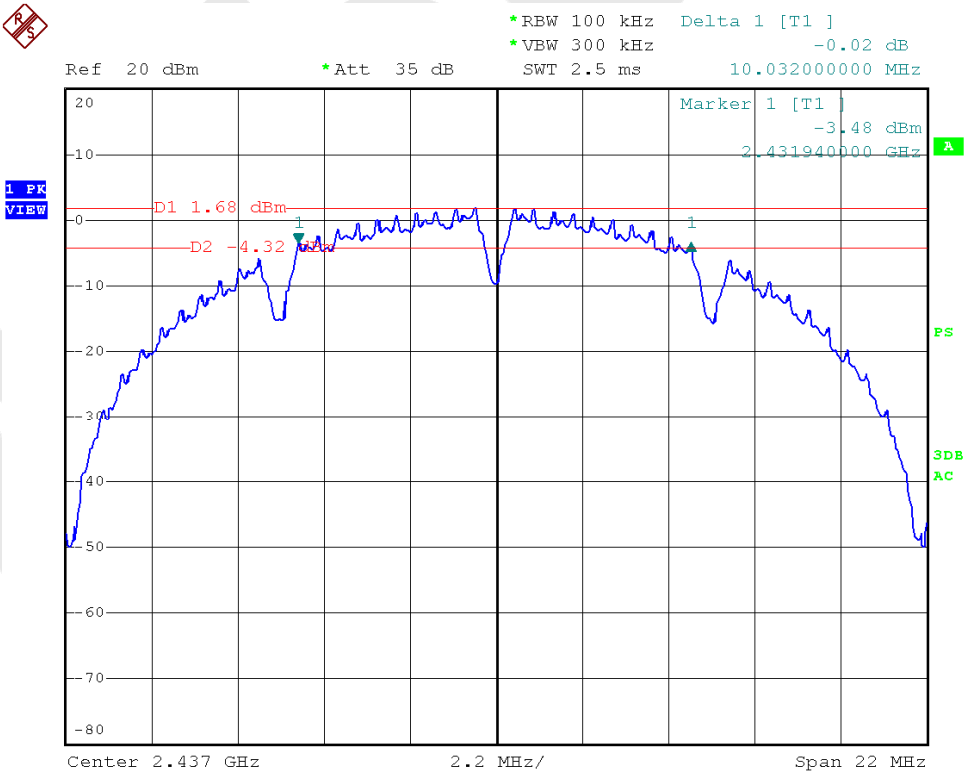


ANT B

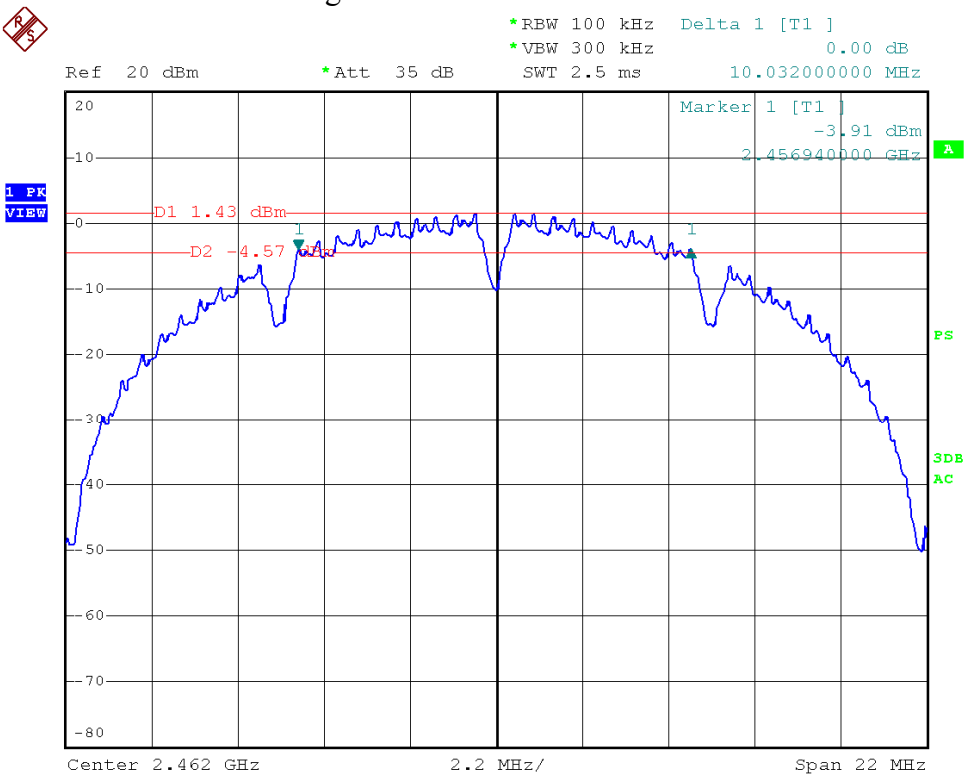
Test Mode: 802.11b---Low



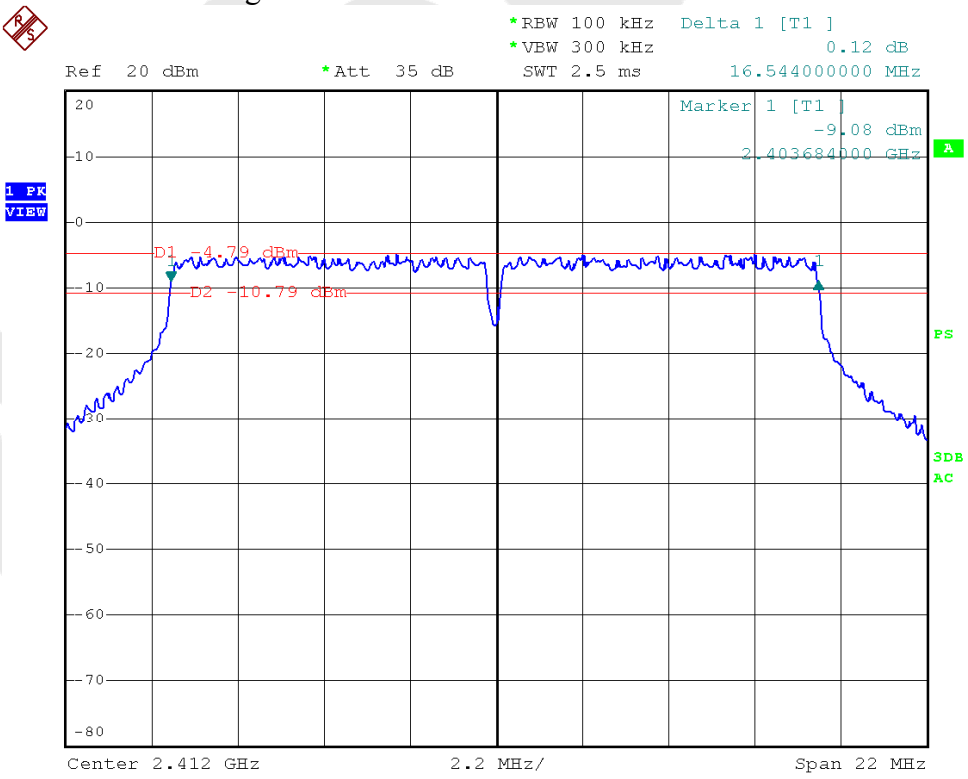
Test Mode: 802.11b---Mid



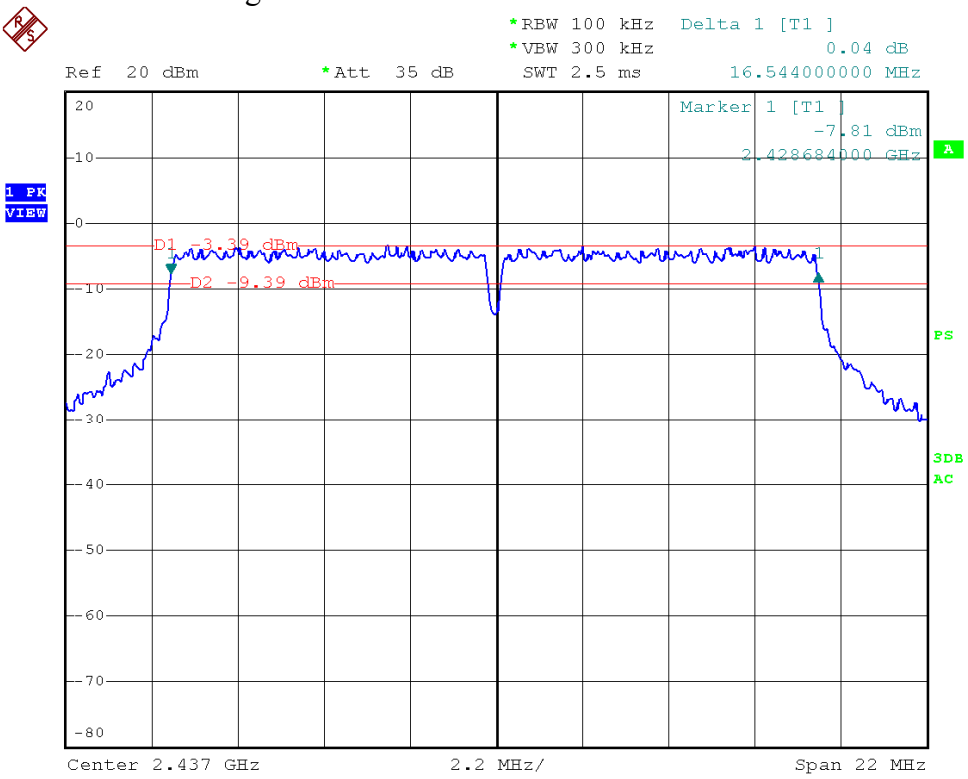
Test Mode: 802.11b---High



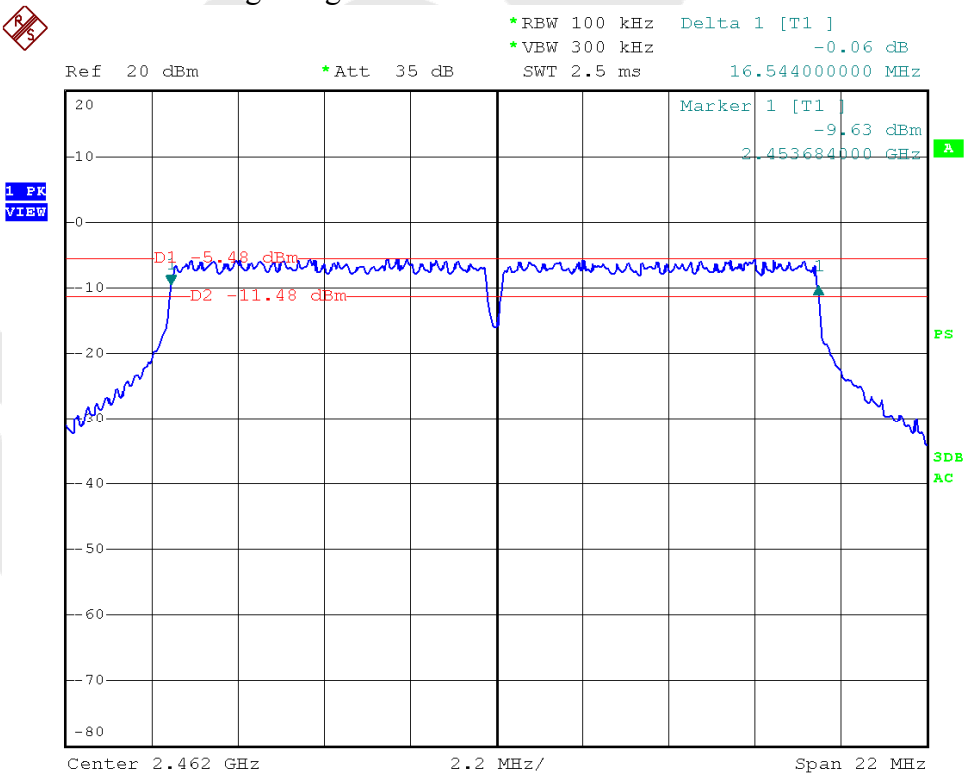
Test Mode: 802.11g---Low



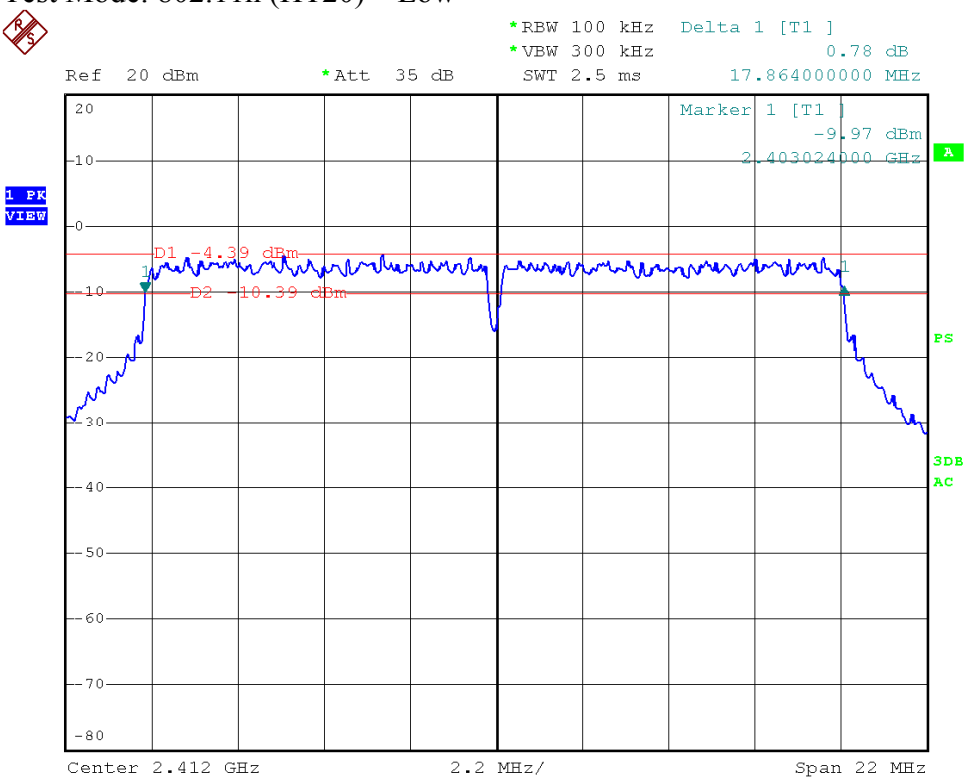
Test Mode: 802.11g---Mid



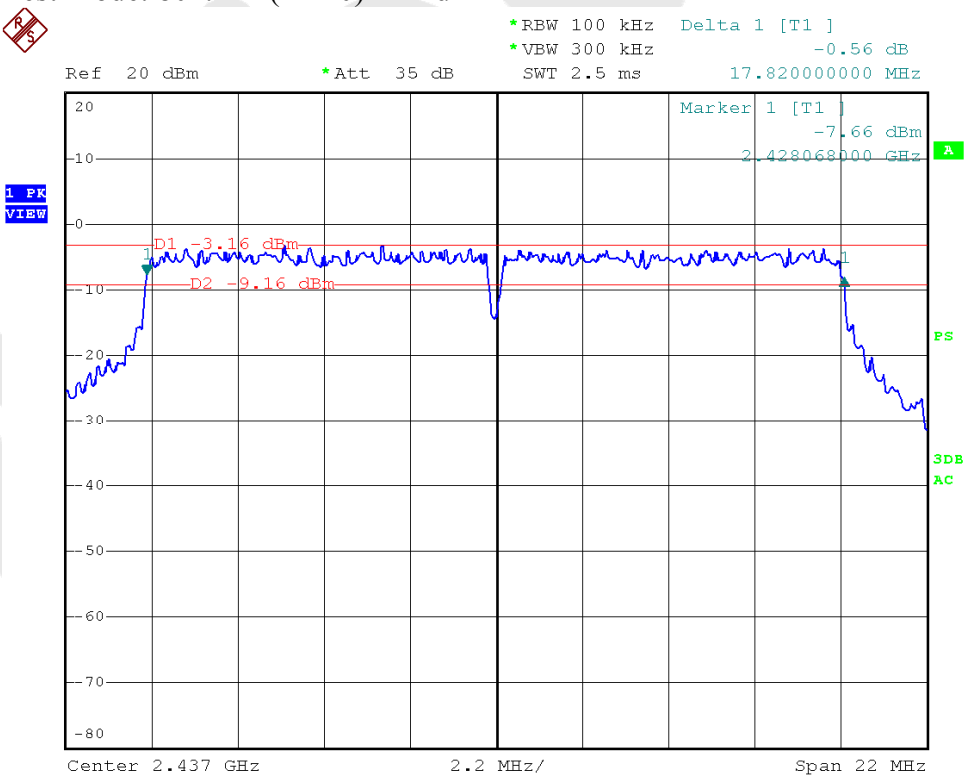
Test Mode: 802.11g---High



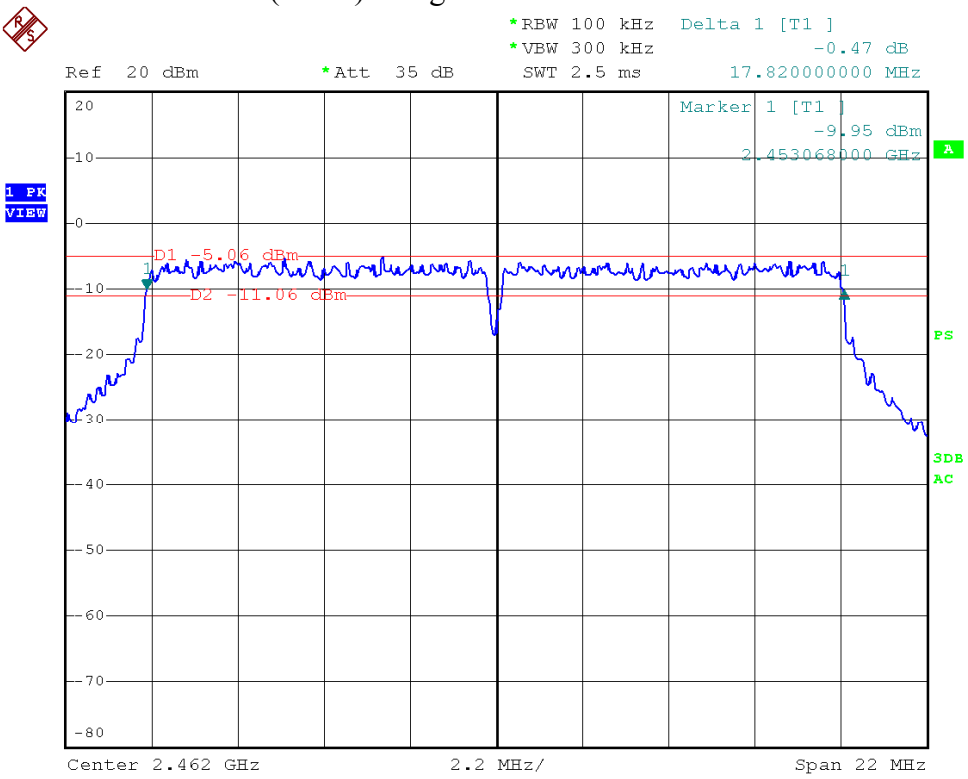
Test Mode: 802.11n (HT20)---Low



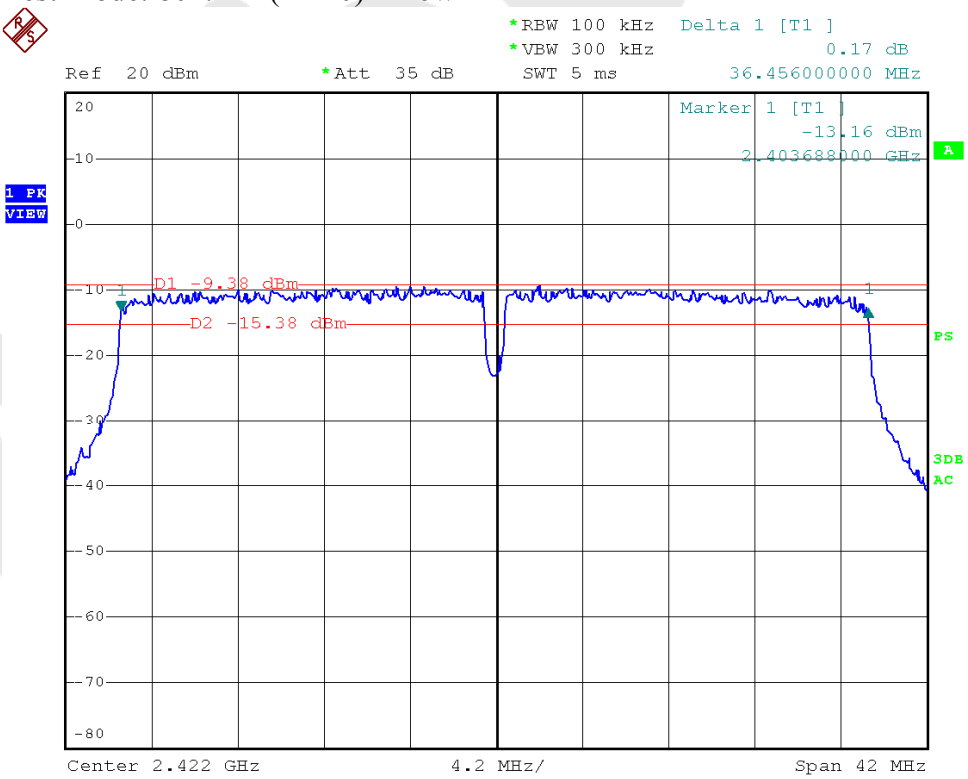
Test Mode: 802.11n (HT20)---Mid



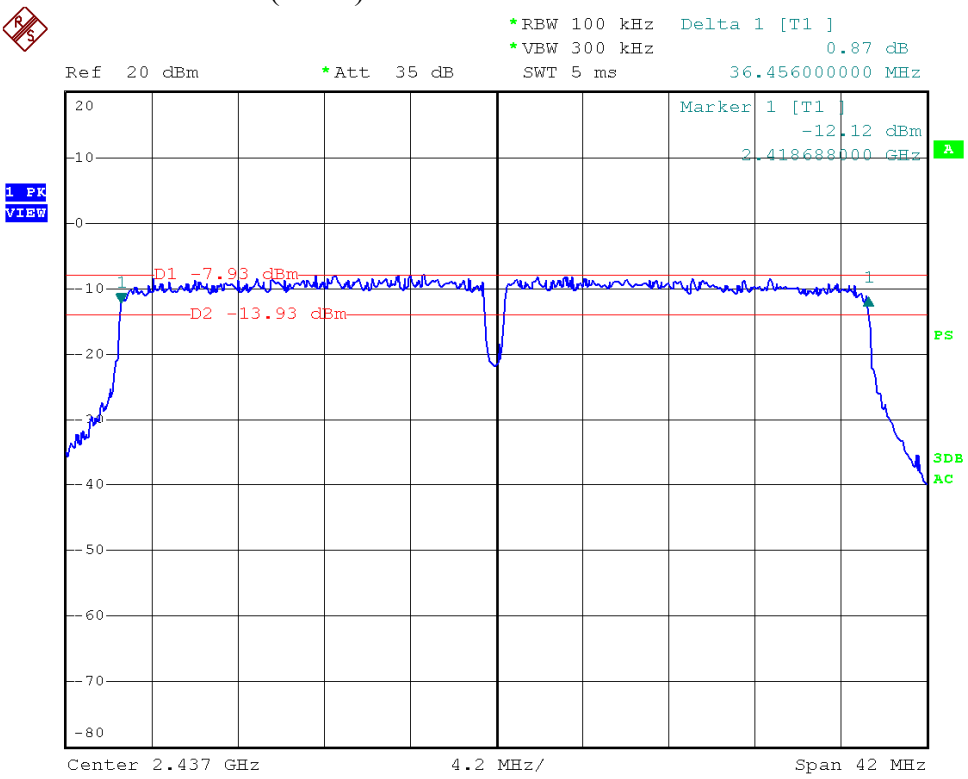
Test Mode: 802.11n (HT20)---High



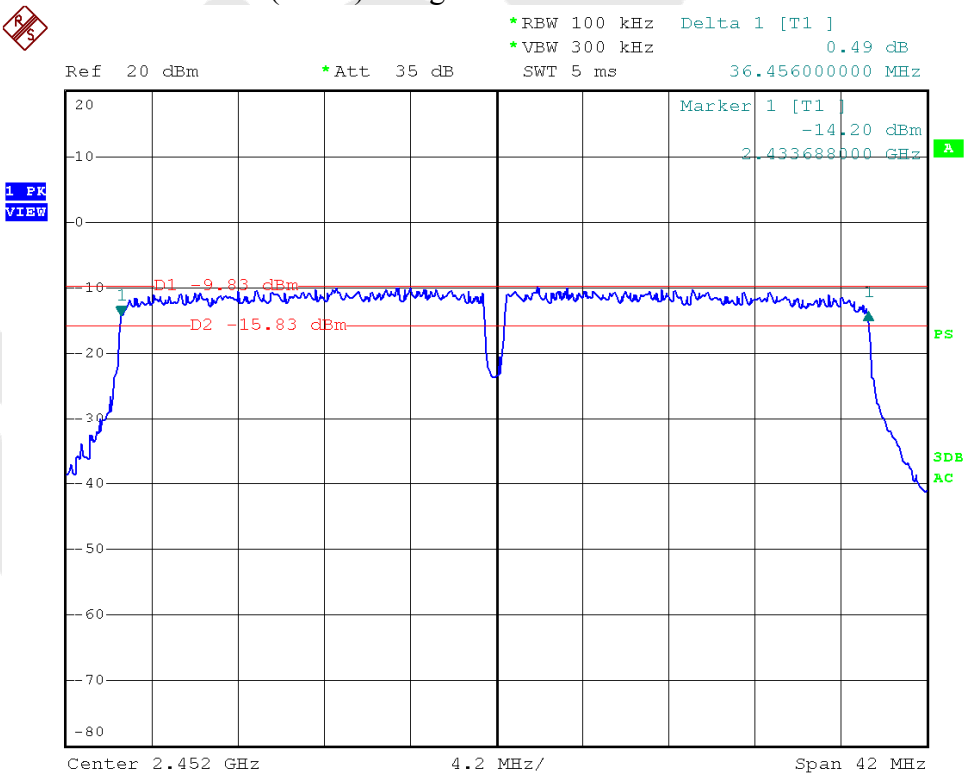
Test Mode: 802.11n (HT40)---Low



Test Mode: 802.11n (HT40)---Mid



Test Mode: 802.11n (HT40)---High



20dB Bandwidth

ANT A
Test mode: IEEE 802.11b

Channel	Frequency (MHz)	Bandwidth (MHz)	Results
Low	2412	17.36	Pass
Mid	2437	17.44	Pass
High	2462	17.36	Pass

Test mode: IEEE 802.11g

Channel	Frequency (MHz)	Bandwidth (MHz)	Results
Low	2412	20.08	Pass
Mid	2437	20.16	Pass
High	2462	19.68	Pass

Test mode: IEEE 802.11n (HT20)

Channel	Frequency (MHz)	Bandwidth (MHz)	Results
Low	2412	20.88	Pass
Mid	2437	21.28	Pass
High	2462	21.12	Pass

Test mode: IEEE 802.11n (HT40)

Channel	Frequency (MHz)	Bandwidth (MHz)	Results
Low	2422	39.12	Pass
Mid	2437	39.36	Pass
High	2452	39.00	Pass

Test Plots See the following page.

ANT B

Test mode: IEEE 802.11b

Channel	Frequency (MHz)	Bandwidth (MHz)	Results
Low	2412	17.28	Pass
Mid	2437	17.36	Pass
High	2462	17.36	Pass

Test mode: IEEE 802.11g

Channel	Frequency (MHz)	Bandwidth (MHz)	Results
Low	2412	20.08	Pass
Mid	2437	20.32	Pass
High	2462	20.32	Pass

Test mode: IEEE 802.11n (HT20)

Channel	Frequency (MHz)	Bandwidth (MHz)	Results
Low	2412	20.96	Pass
Mid	2437	21.04	Pass
High	2462	20.96	Pass

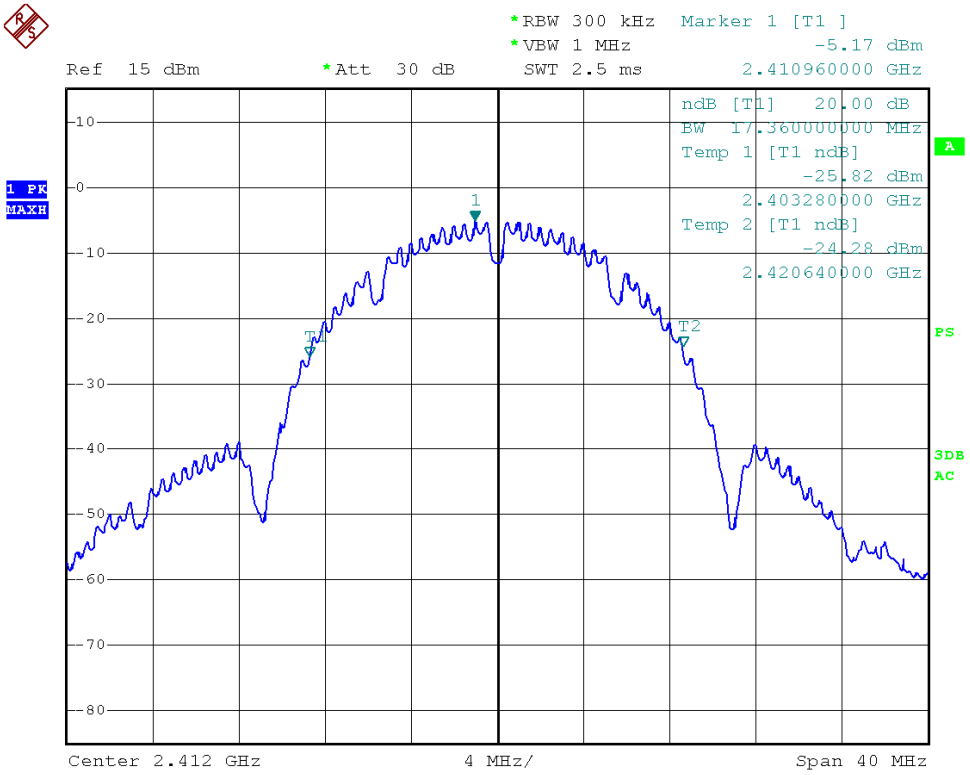
Test mode: IEEE 802.11n (HT40)

Channel	Frequency (MHz)	Bandwidth (MHz)	Results
Low	2422	39.12	Pass
Mid	2437	39.12	Pass
High	2452	39.12	Pass

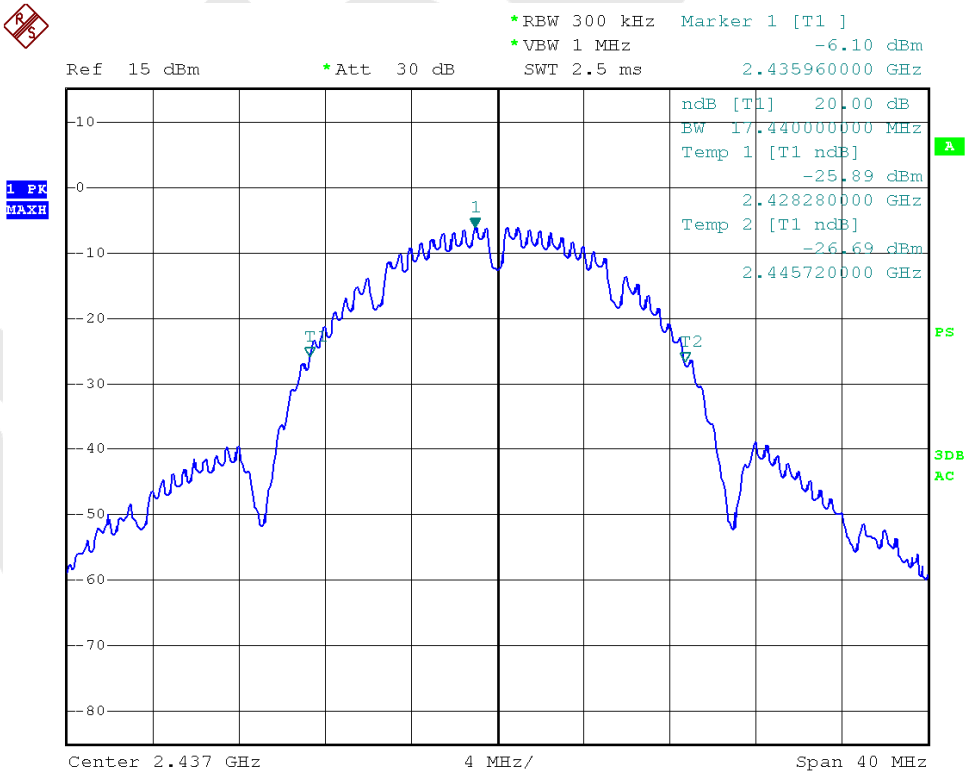
Test Plots See the following page.

ANT A

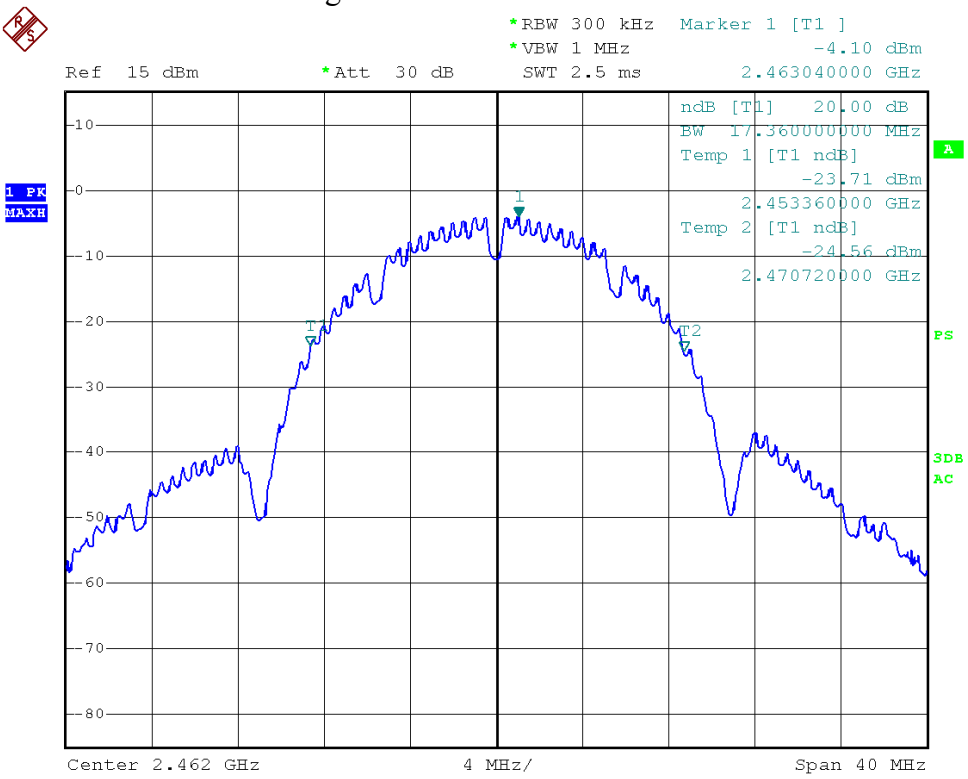
Test Mode: 802.11b---Low



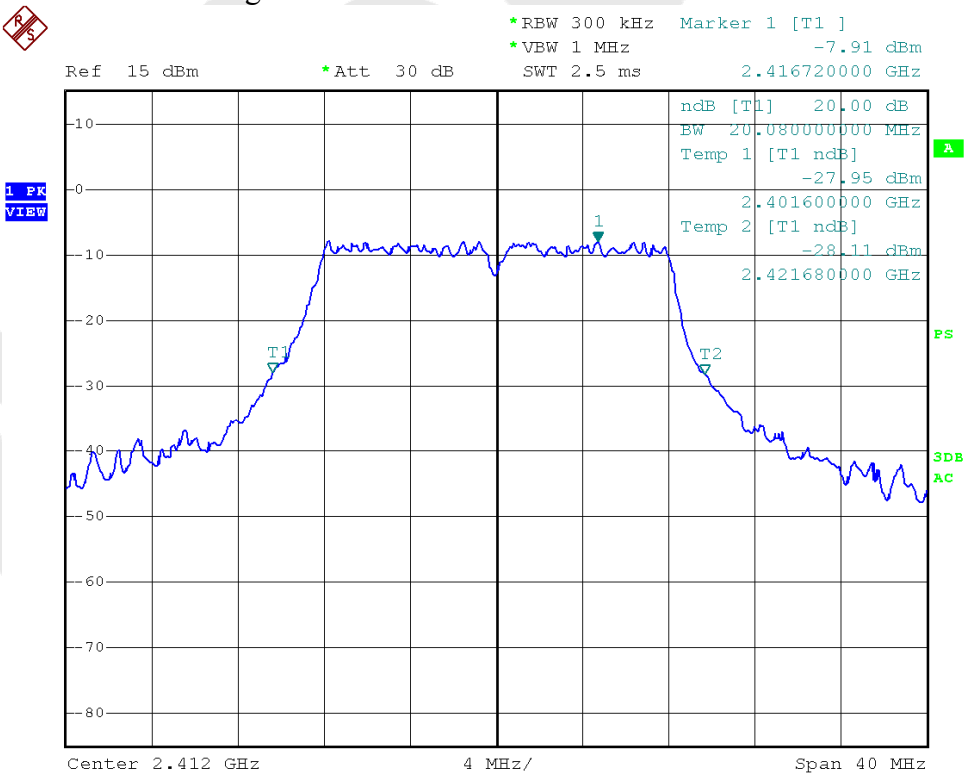
Test Mode: 802.11b---Mid



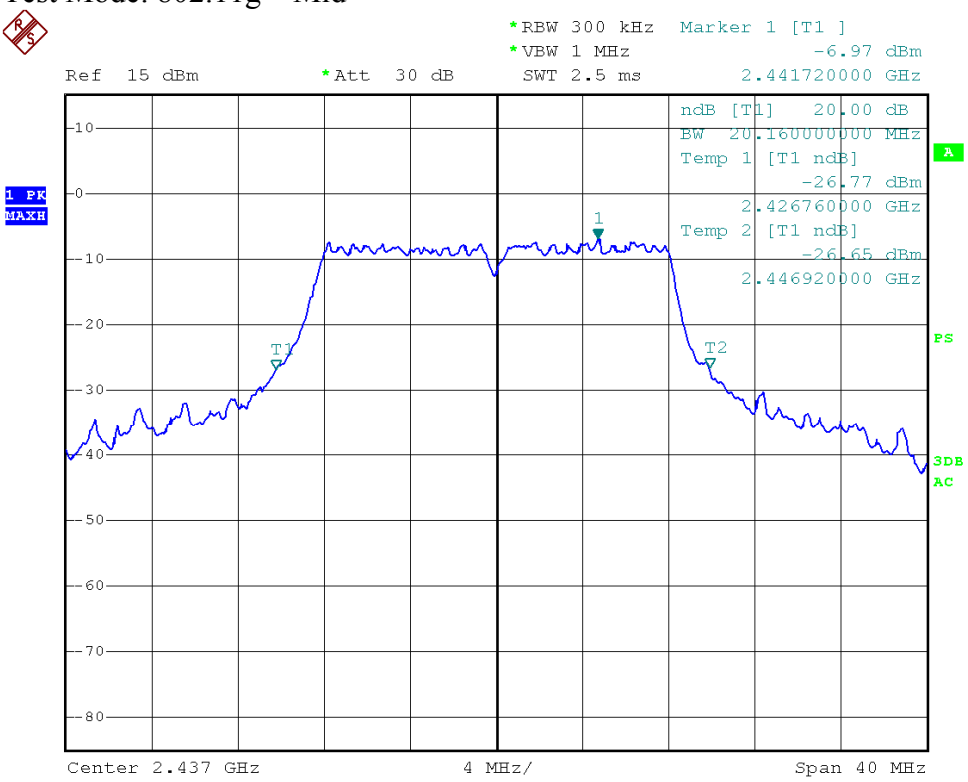
Test Mode: 802.11b---High



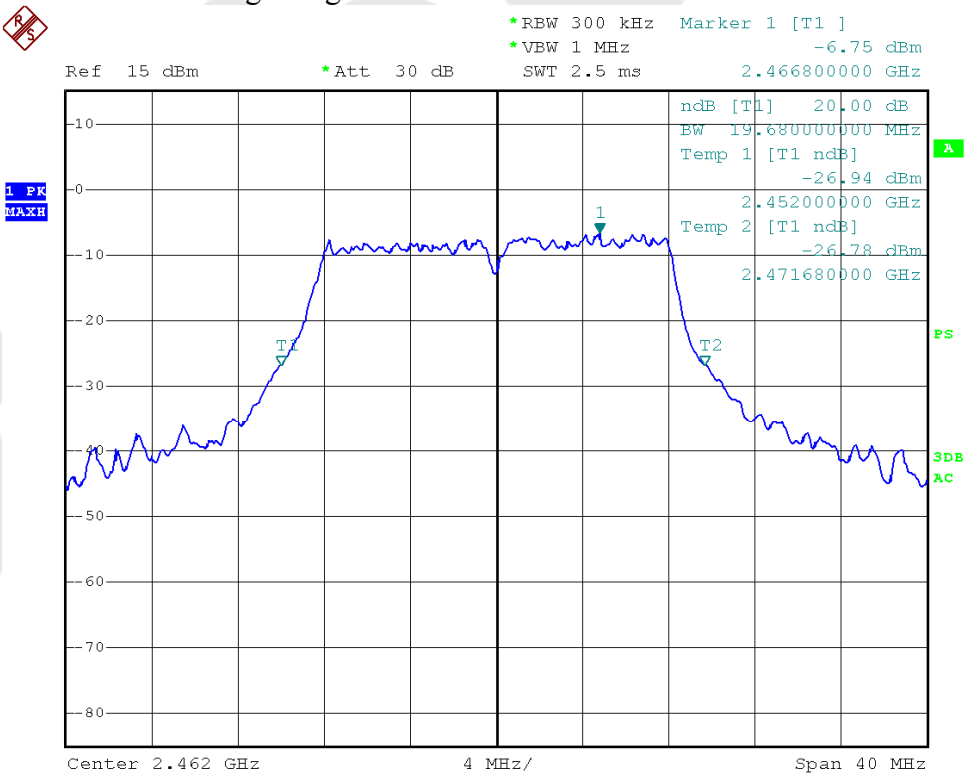
Test Mode: 802.11g---Low



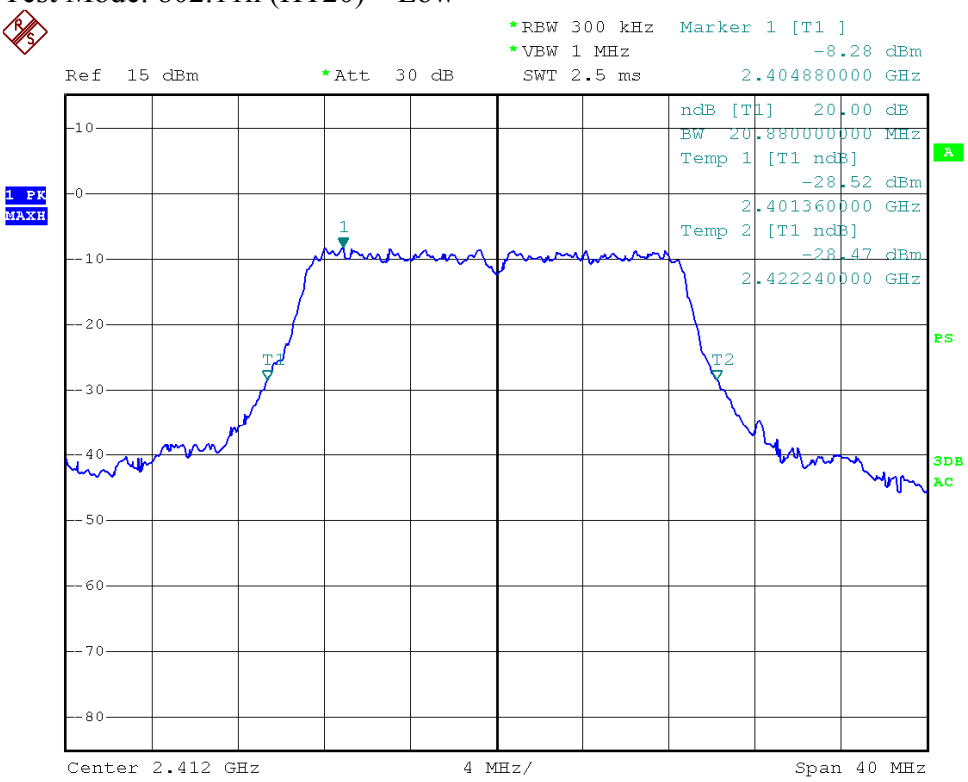
Test Mode: 802.11g---Mid



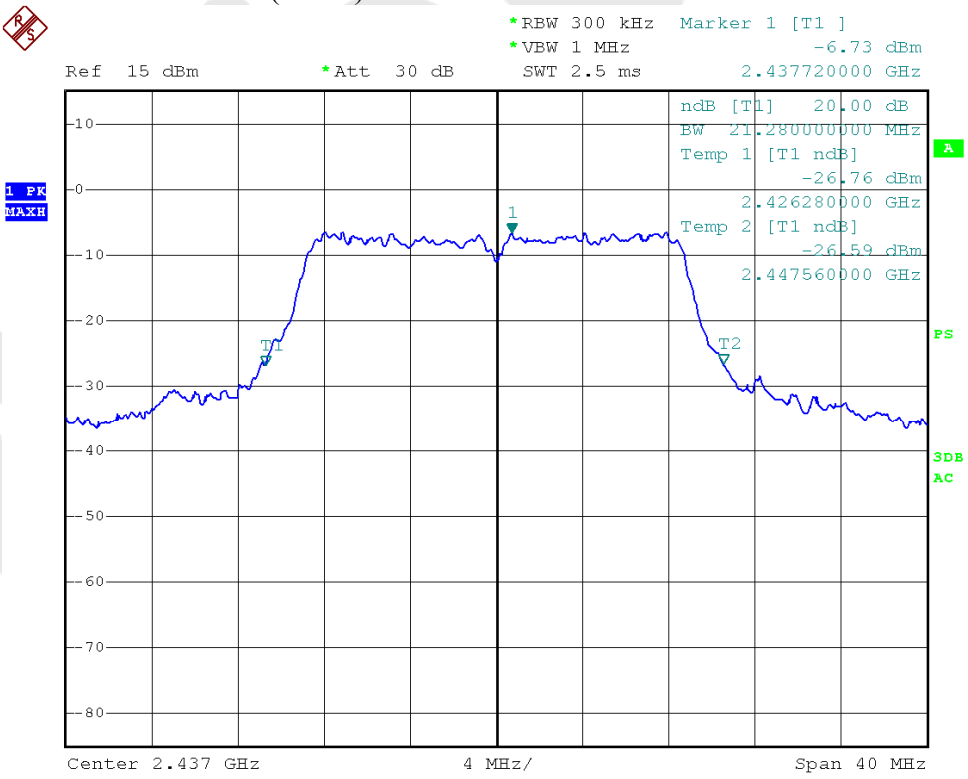
Test Mode: 802.11g---High



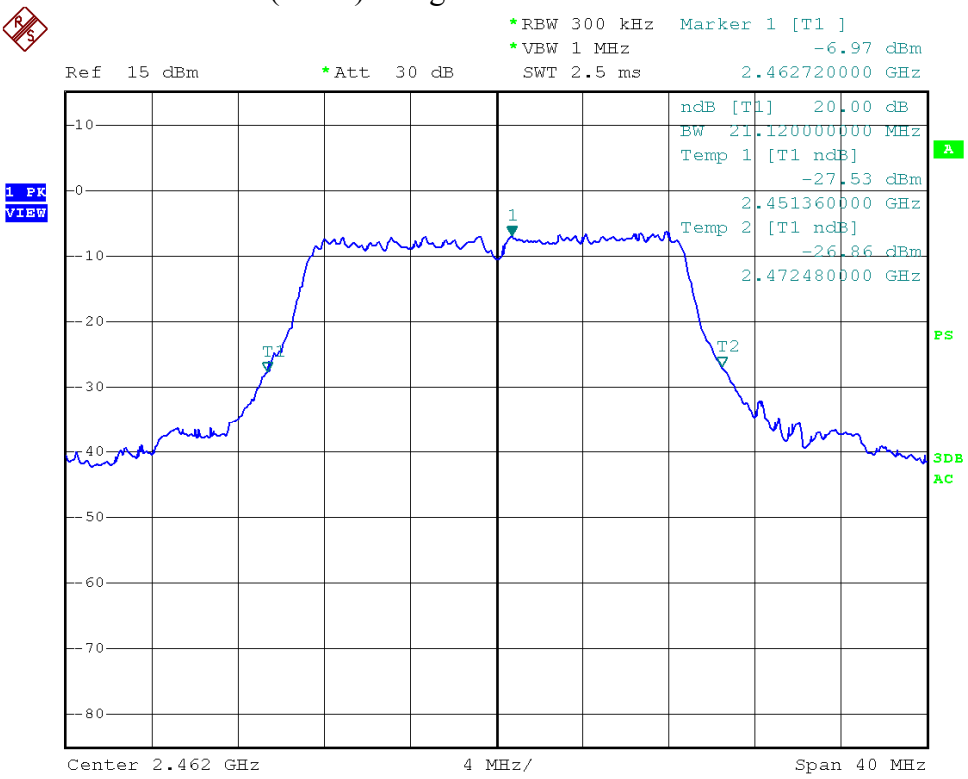
Test Mode: 802.11n (HT20)---Low



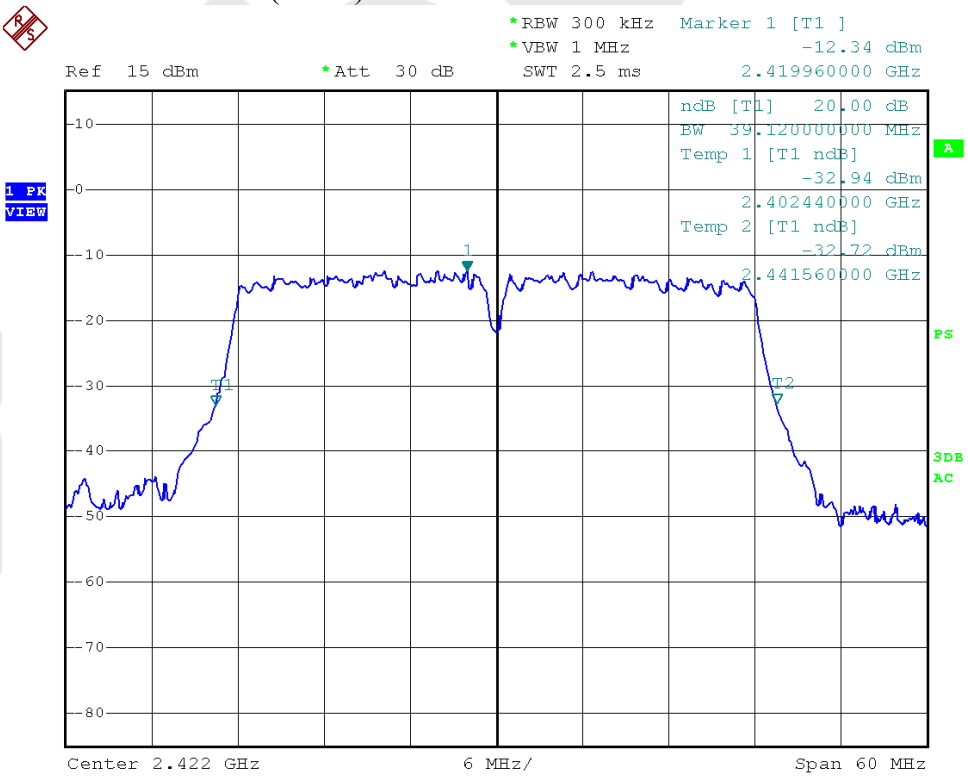
Test Mode: 802.11n (HT20)---Mid



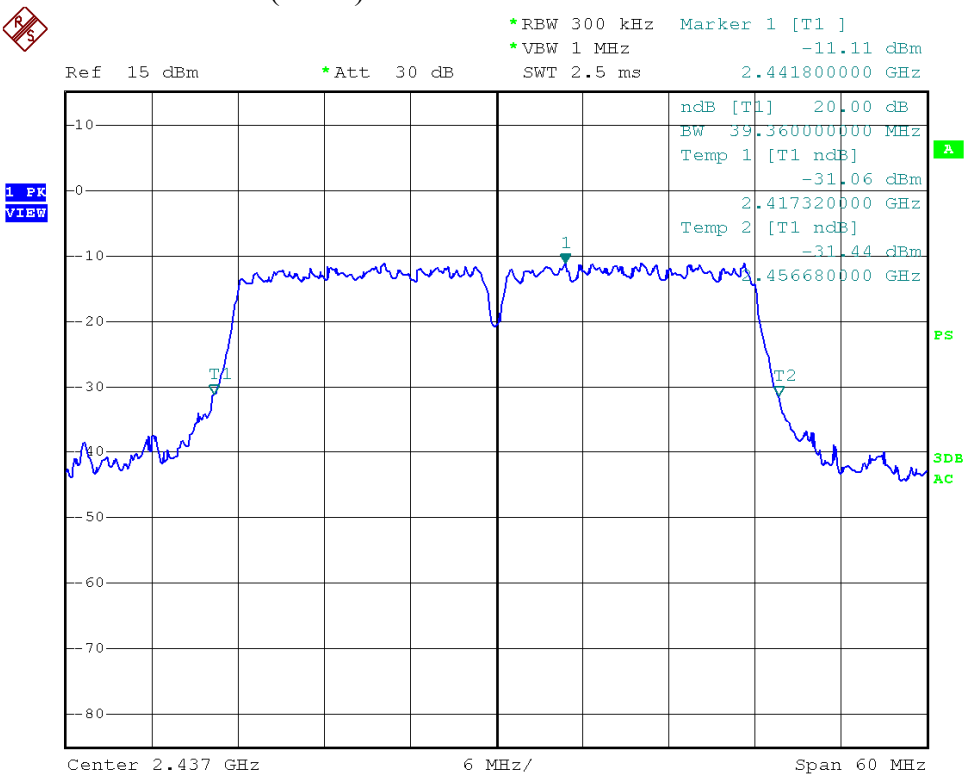
Test Mode: 802.11n (HT20)---High



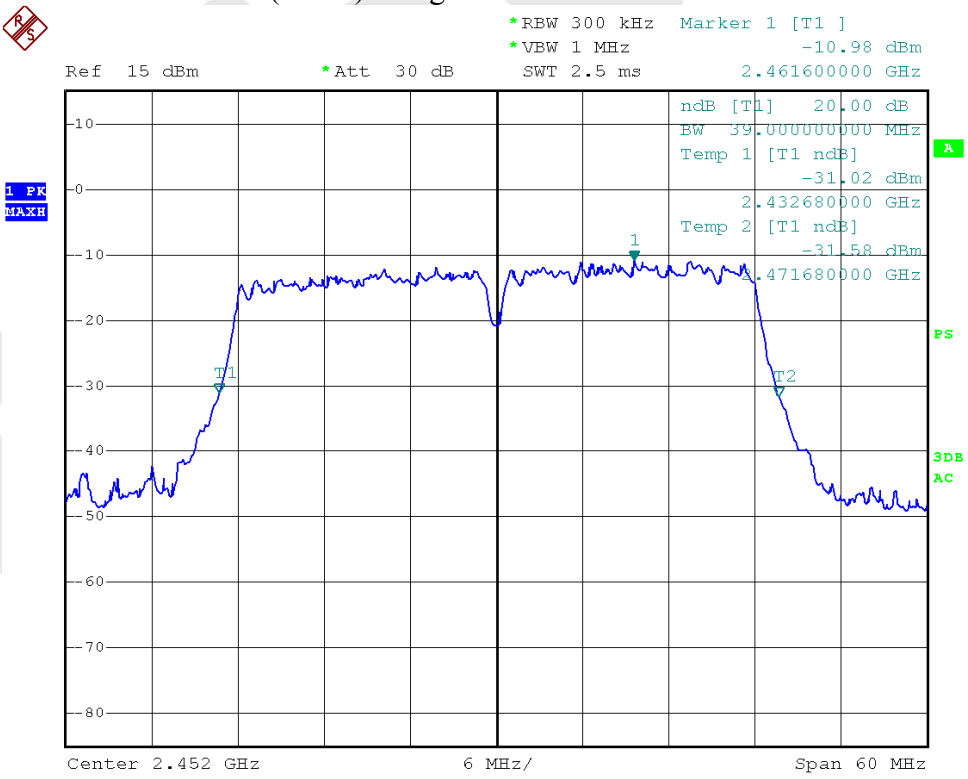
Test Mode: 802.11n (HT40)---Low



Test Mode: 802.11n (HT40)---Mid

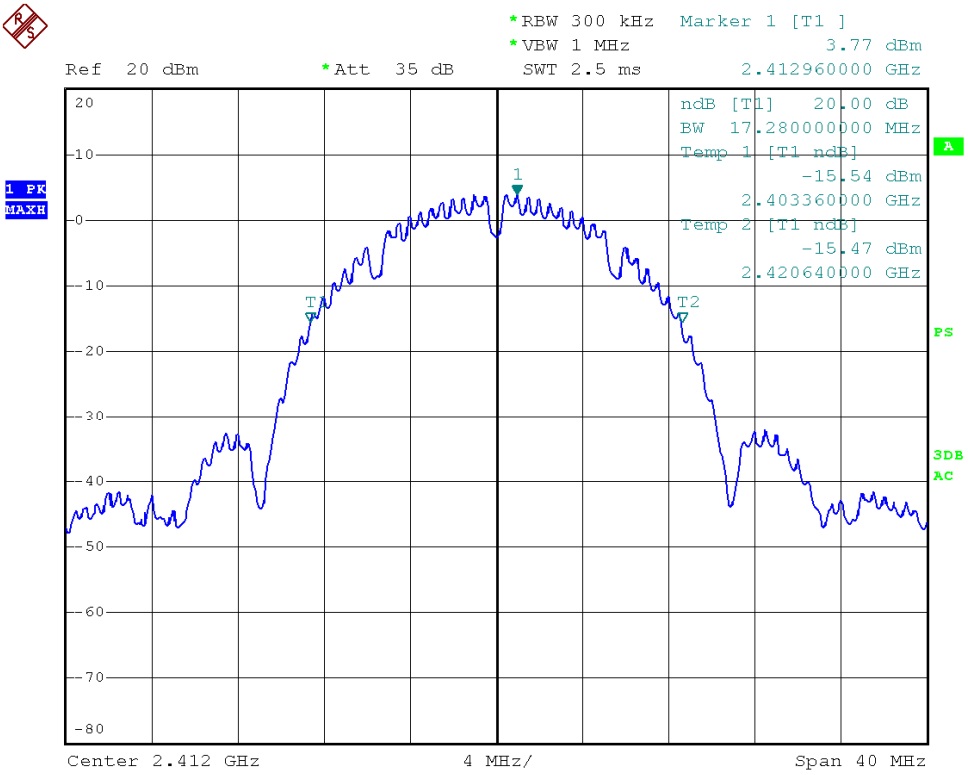


Test Mode: 802.11n (HT40)---High

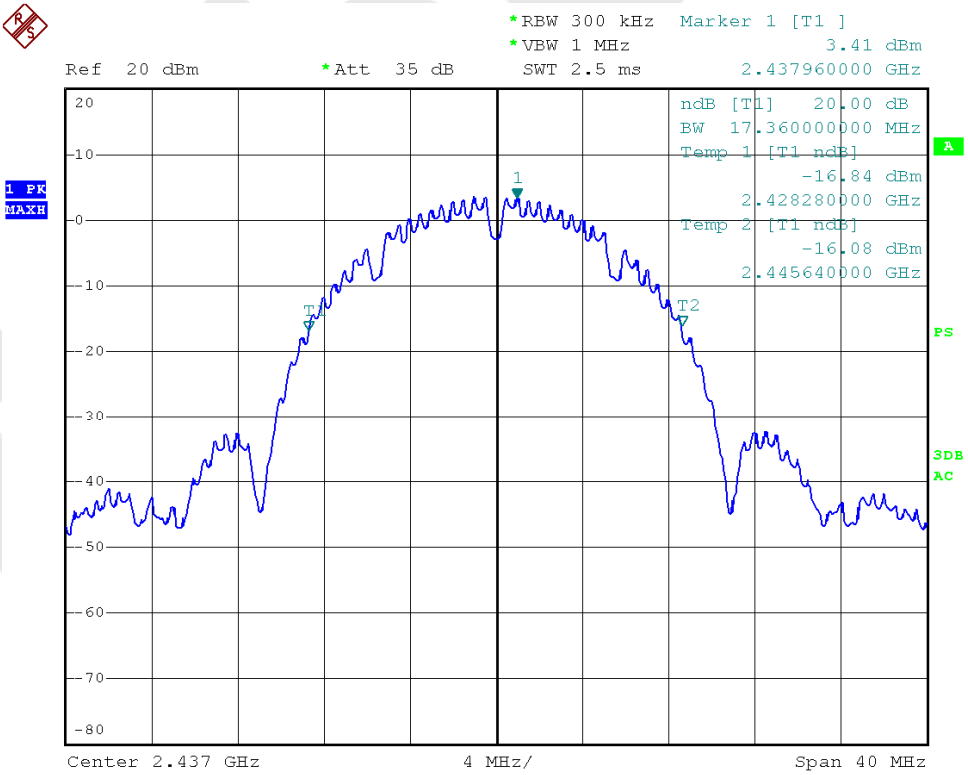


ANT B

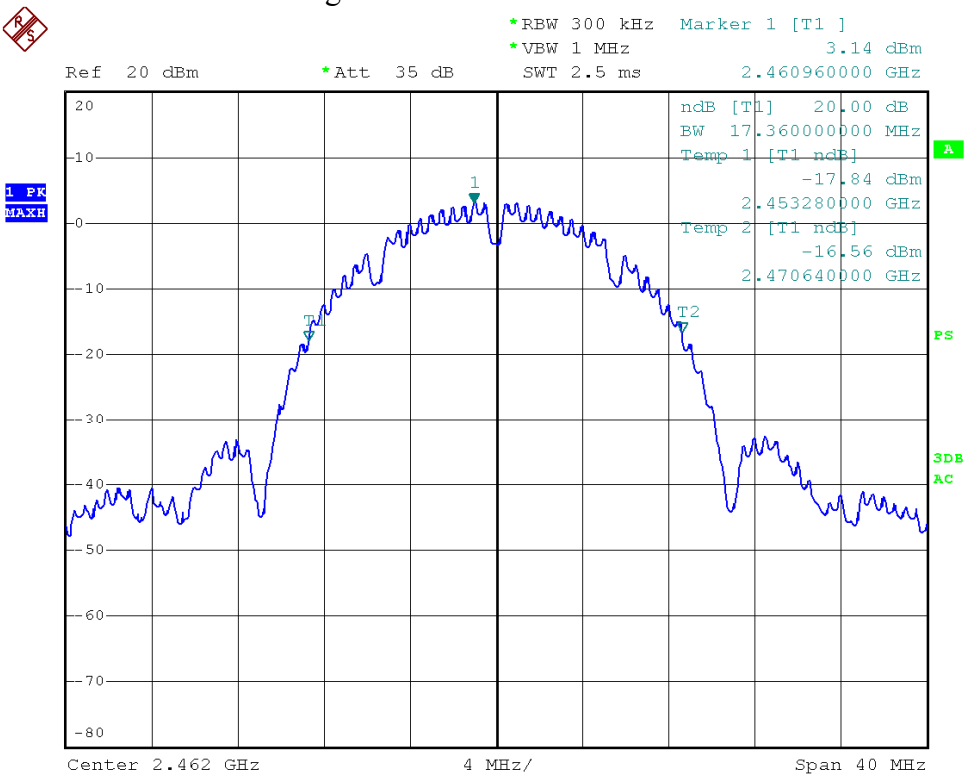
Test Mode: 802.11b---Low



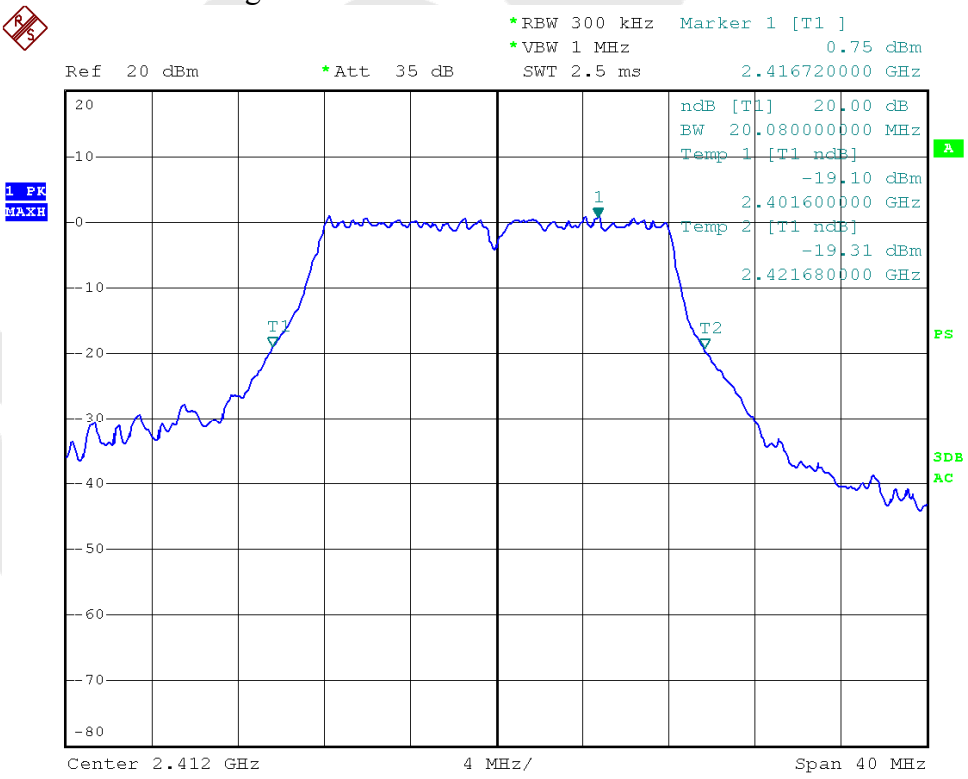
Test Mode: 802.11b---Mid



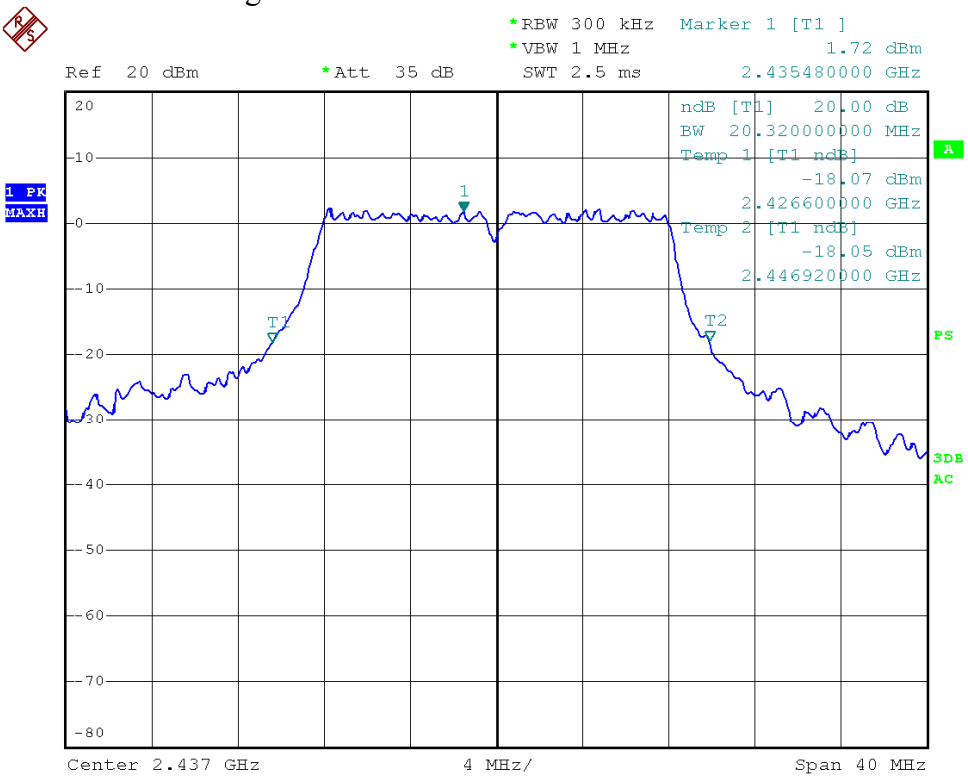
Test Mode: 802.11b---High



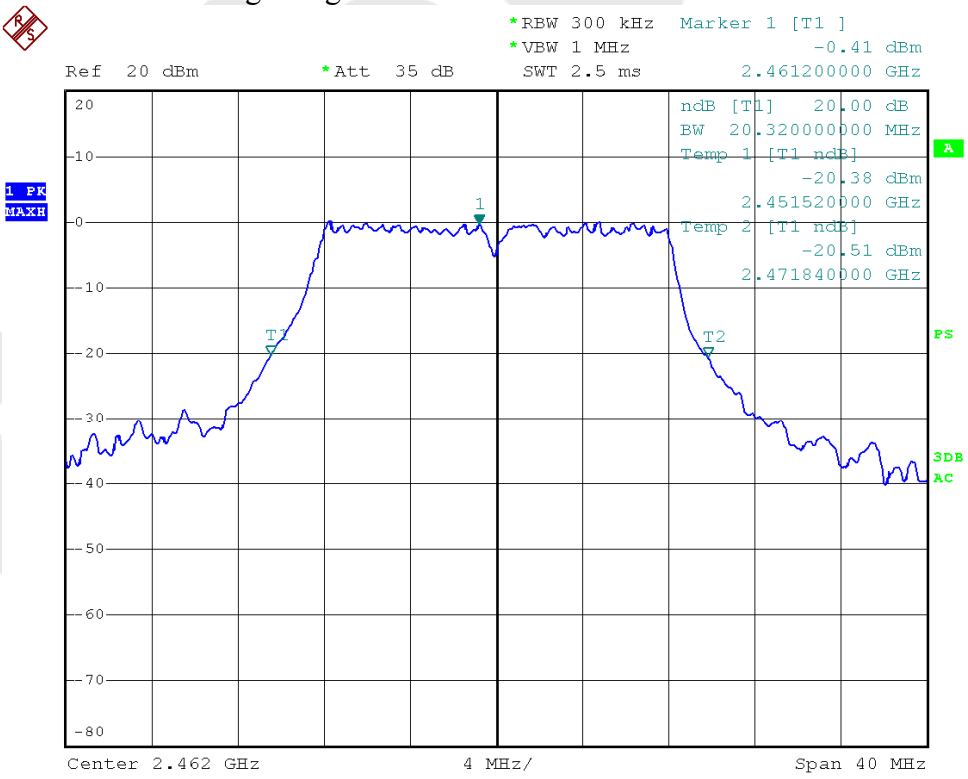
Test Mode: 802.11g---Low



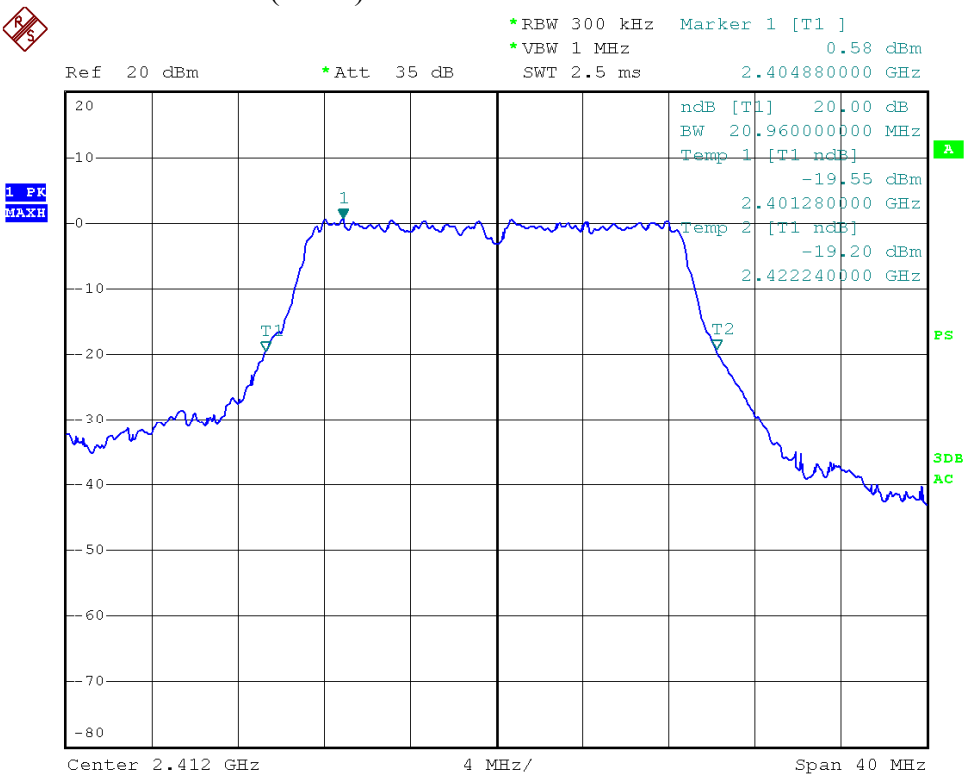
Test Mode: 802.11g---Mid



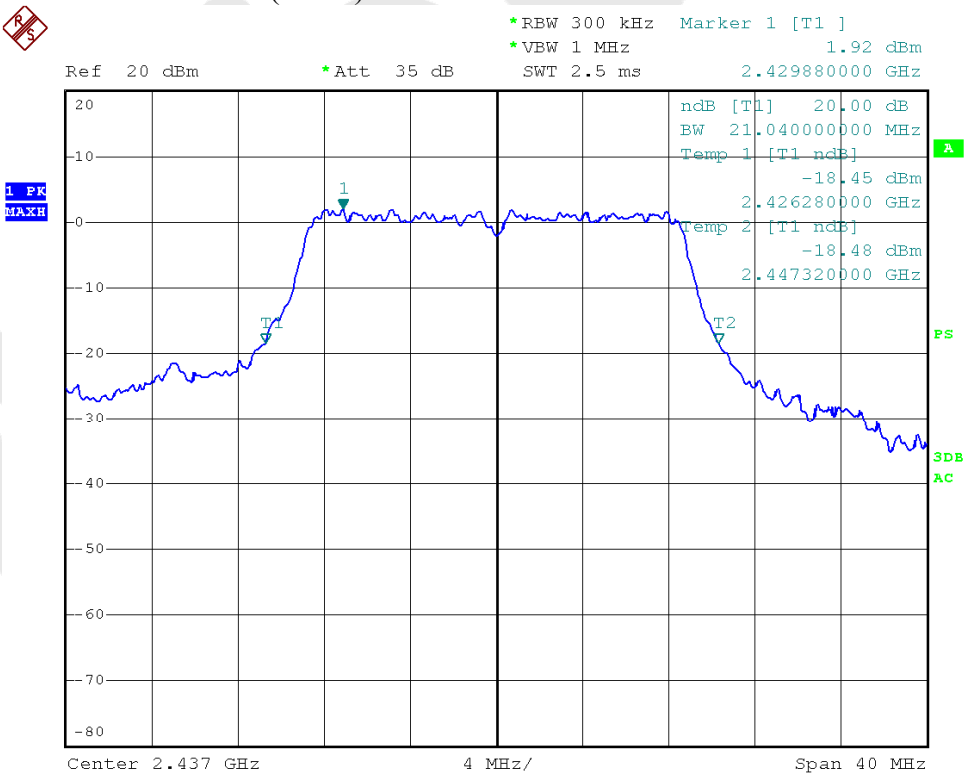
Test Mode: 802.11g---High



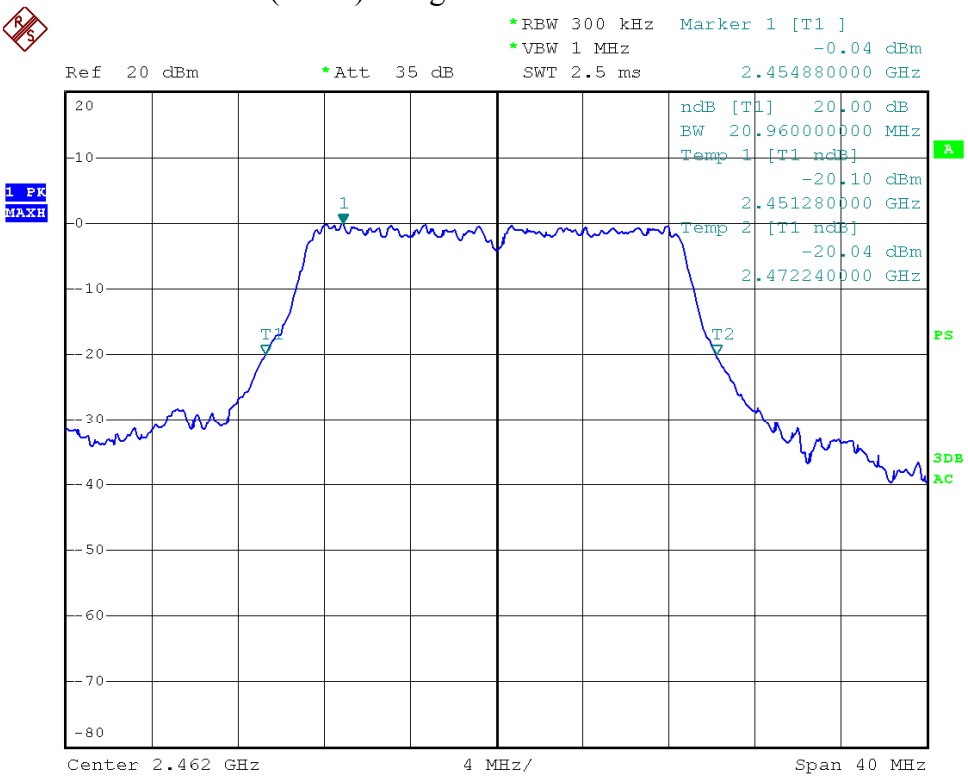
Test Mode: 802.11n (HT20)---Low



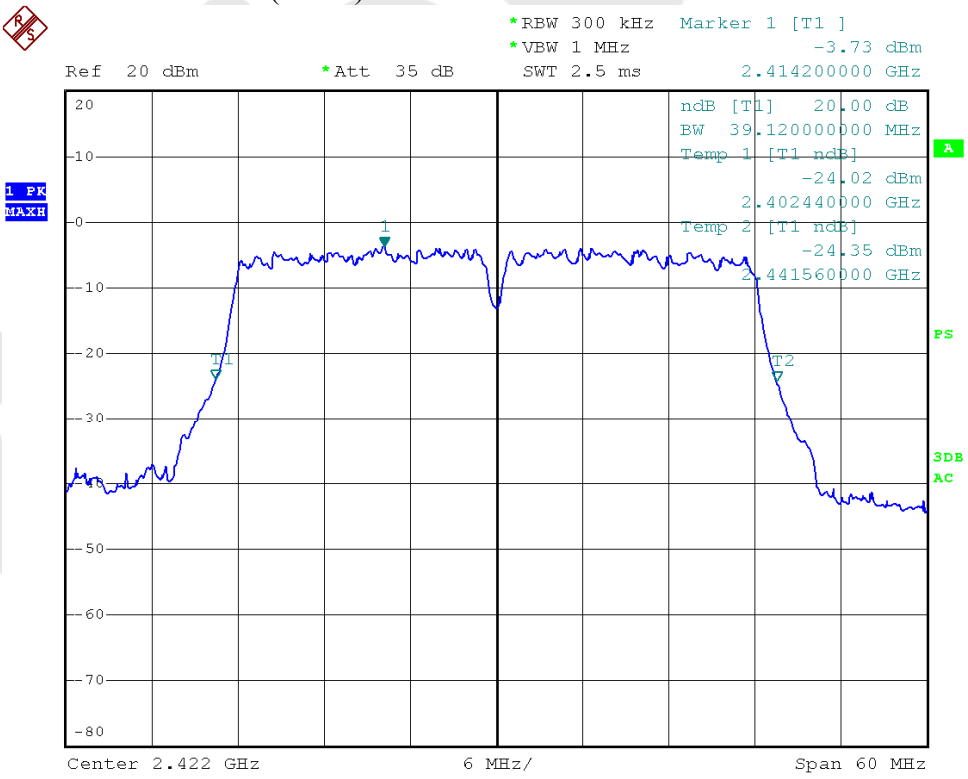
Test Mode: 802.11n (HT20)---Mid



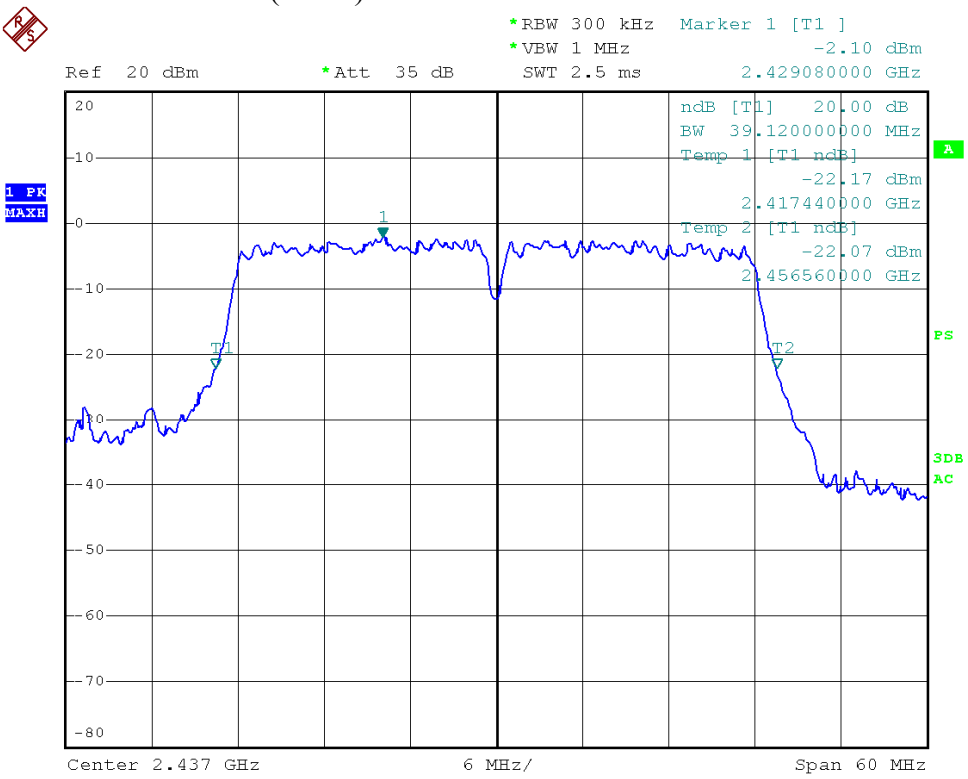
Test Mode: 802.11n (HT20)---High



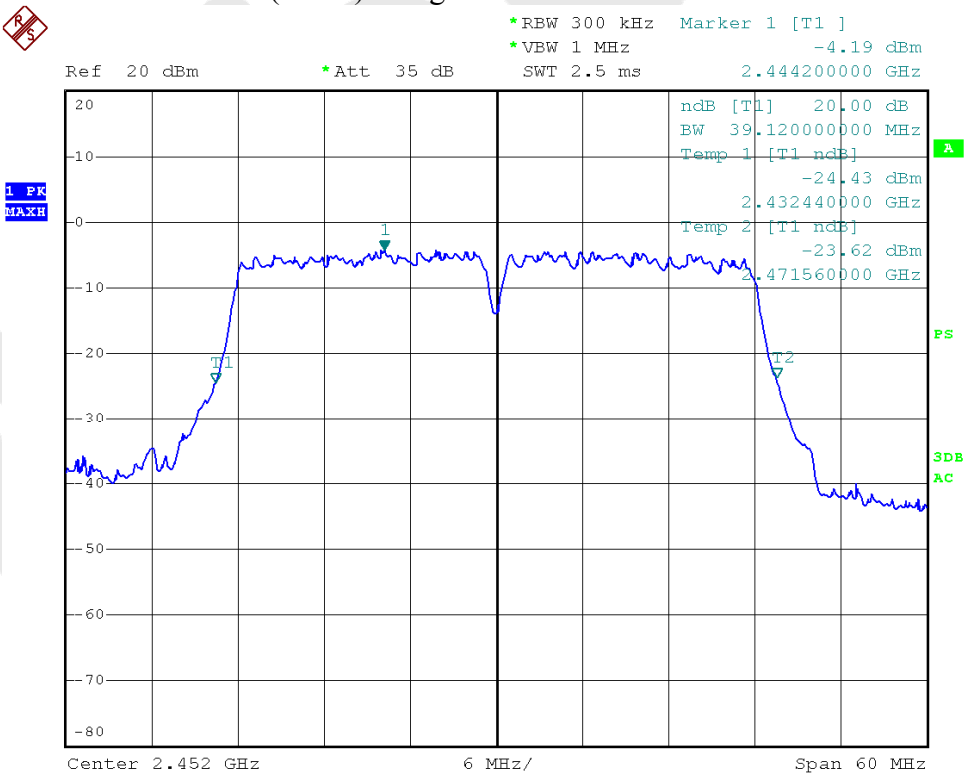
Test Mode: 802.11n (HT40)---Low



Test Mode: 802.11n (HT40)---Mid



Test Mode: 802.11n (HT40)---High

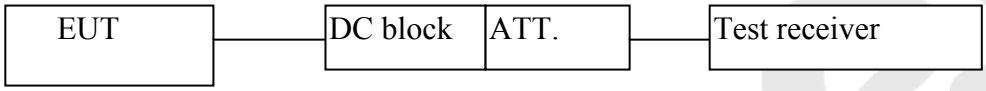


4.3. Maximum Output Power Test

a. Limit

The maximum peak output power of the intentional radiator shall not exceed the following:
1. For systems using digital modulation in the bands of 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz: 1 watt (30dBm).
2. Except as shown in paragraphs (b)(3) (i), (ii) and (iii) of this section, if transmitting antenna of directional gain greater than 6 dBi are used the peak output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(1) or (b)(2) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

b. Configuration of Measurement



c. Data Rates

IEEE802.11b: Channel 1(2412MHz), Channel 6(2437MHz) and Channel 11(2462MHz) with 1 Mbps data rate (worst case) are chosen for the final testing.
IEEE802.11g: Channel 1(2412MHz), Channel 6(2437MHz) and Channel 11(2462MHz) with 6 Mbps data rate (the worst case) are chosen for the final testing.
IEEE802.11n（HT20: Channel 1(2412MHz), Channel 6(2437MHz) and Channel 11(2462MHz) with 6.5Mbps data rate (the worst case) are chosen for the final testing.
IEEE802.11n（HT40: Channel 3(2422MHz), Channel 6(2437MHz) and Channel 9(2452MHz) with 13.5Mbps data rate (the worst case) are chosen for the final testing.

d. Test Procedure

This test was according the kDB 558074 9.2.2:
1. Set span to at least 1.5 times the OBW.
2. Set the RBW =1~5% of the OBW, not to exceed 1MHz.
3. Set VBW≥3*RBW.
4. Detector = Average.
5. Sweep time = auto couple.
6. Trace mode = max hold.
7. Allow trace to fully stabilize.

e. Test Equipment

Same as the equipment listed in 4.2.

f. Test Results

Pass.

g. Test Data

Antenna A Gain= 2 dBi
Antenna B Gain= 2 dBi
Array Gain= 5 dBi= 10*log((10^(2/10)+(10^(2/10)))

ANT A
Test mode: IEEE 802.11b

Channel	Frequency (MHz)	Maximum transmit power	Limit		Result
		(dBm)	(dBm)	(watts)	
Low	2412	7.11	30	1	Pass
Mid	2437	6.72			Pass
High	2462	6.83			Pass

Test mode: IEEE 802.11g

Channel	Frequency (MHz)	Maximum transmit power	Limit		Result
		(dBm)	(dBm)	(watts)	
Low	2412	7.42	30	1	Pass
Mid	2437	8.90			Pass
High	2462	7.71			Pass

Test mode: IEEE 802.11n (HT20)

Channel	Frequency (MHz)	Maximum transmit power	Limit		Result
		(dBm)	(dBm)	(watts)	
Low	2412	7.81	30	1	Pass
Mid	2437	9.35			Pass
High	2462	8.36			Pass

Test mode: IEEE 802.11n (HT40)

Channel	Frequency (MHz)	Maximum transmit power	Limit		Result
		(dBm)	(dBm)	(watts)	
Low	2422	8.03	30	1	Pass
Mid	2437	9.59			Pass
High	2452	8.07			Pass

ANT B

Test mode: IEEE 802.11b

Channel	Frequency (MHz)	Maximum transmit power	Limit		Result
		(dBm)	(dBm)	(watts)	
Low	2412	16.24	30	1	Pass
Mid	2437	16.12			Pass
High	2462	15.93			Pass

Test mode: IEEE 802.11g

Channel	Frequency (MHz)	Maximum transmit power	Limit		Result
		(dBm)	(dBm)	(watts)	
Low	2412	13.22	30	1	Pass
Mid	2437	14.88			Pass
High	2462	13.06			Pass

Test mode: IEEE 802.11n (HT20)

Channel	Frequency (MHz)	Maximum transmit power	Limit		Result
		(dBm)	(dBm)	(watts)	
Low	2412	13.34	30	1	Pass
Mid	2437	14.88			Pass
High	2462	13.13			Pass

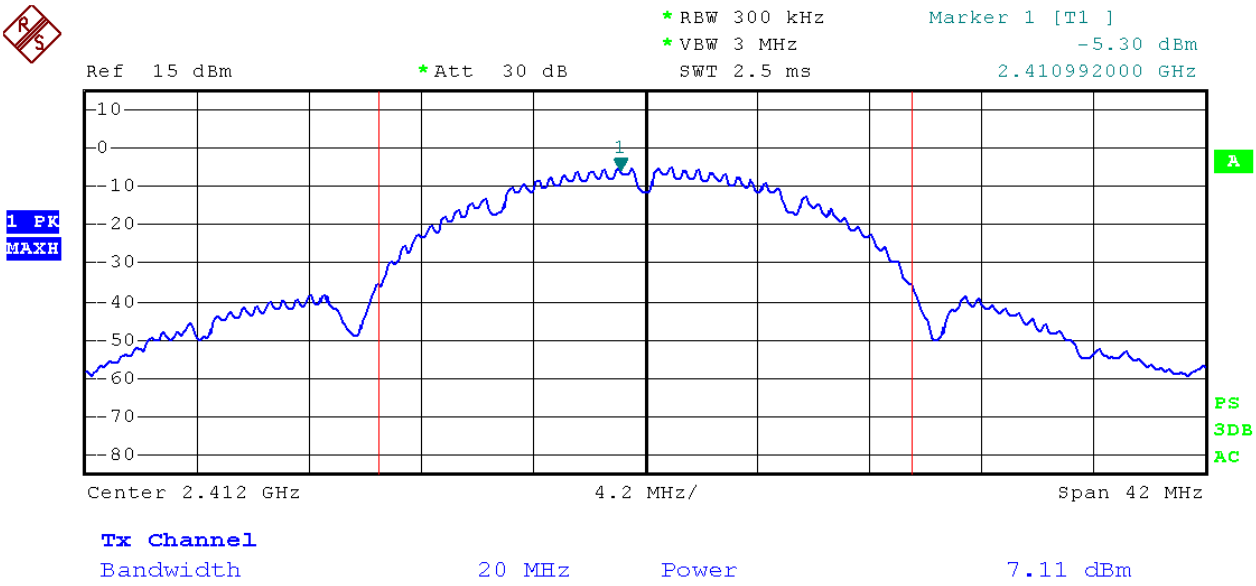
Test mode: IEEE 802.11n (HT40)

Channel	Frequency (MHz)	Maximum transmit power	Limit		Result
		(dBm)	(dBm)	(watts)	
Low	2422	9.93	30	1	Pass
Mid	2437	11.54			Pass
High	2452	9.82			Pass

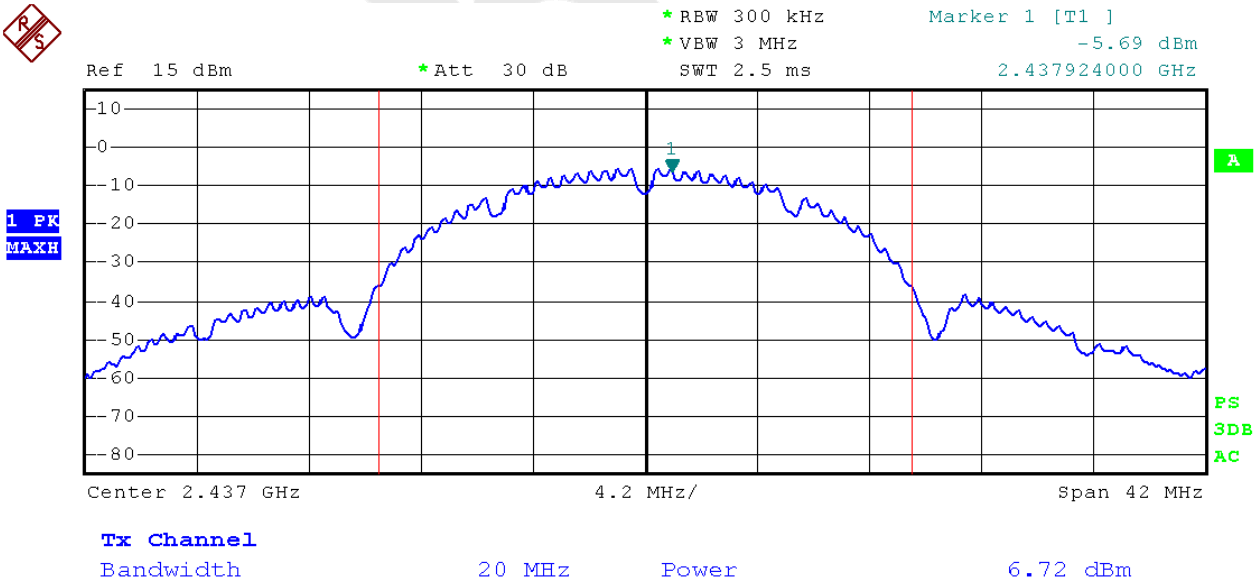
Channel	Channel Frequency (MHz)	ANT A Output Power (dBm)	ANT B Output Power (dBm)	Data Rate (Mbps)	MIMO Output Power (dBm)	Limit (dBm)
802.11n (20M MIMO) mode						
Low	2412	7.81	13.34	MCS0	14.41	30
Middle	2437	9.35	14.88	MCS0	15.95	30
High	2462	8.36	13.13	MCS0	14.38	30
802.11n (40M MIMO) mode						
Low	2422	8.03	9.93	MCS0	12.10	30
Middle	2437	9.59	11.54	MCS0	13.67	30
High	2452	8.07	9.82	MCS0	12.05	30

ANT A

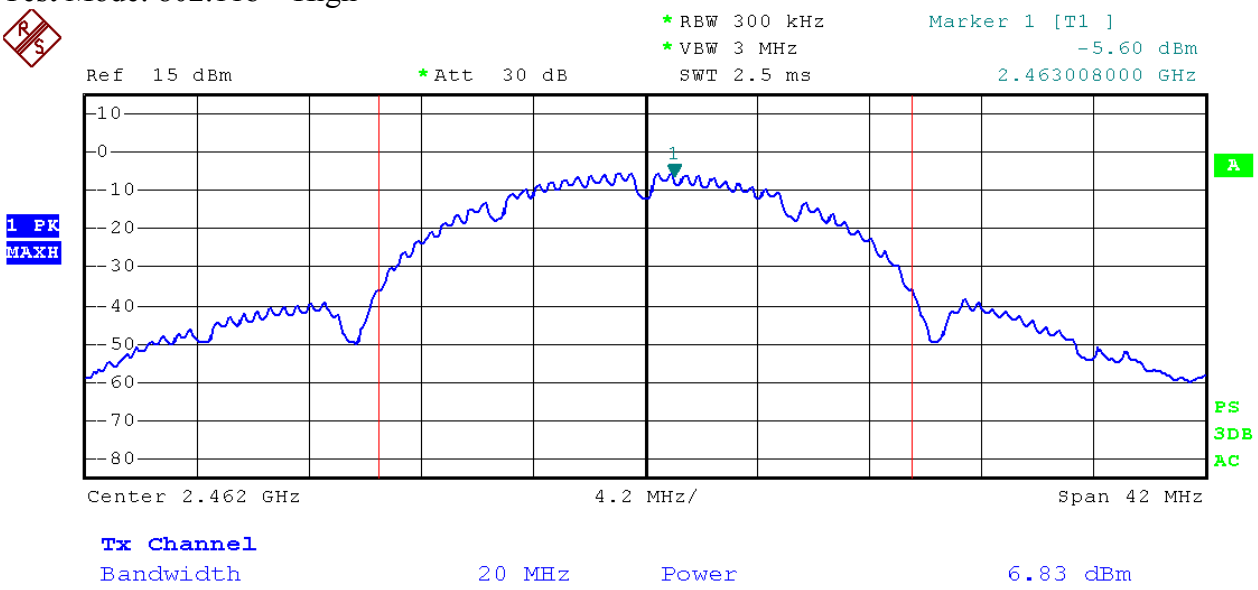
Test Mode: 802.11b---Low



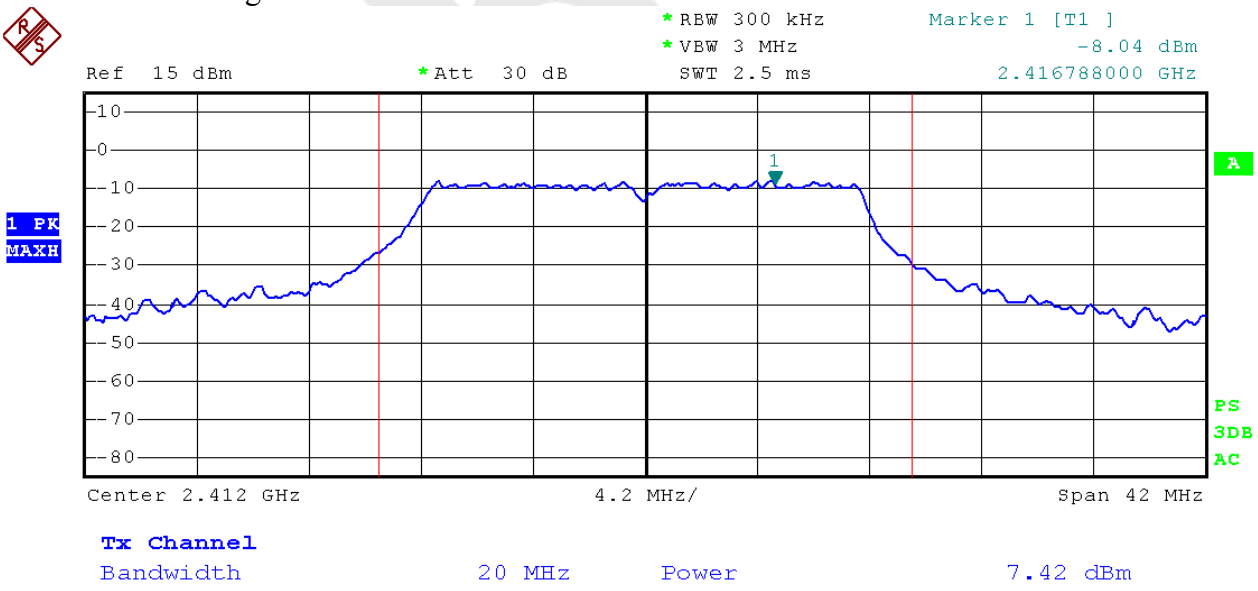
Test Mode: 802.11b---Mid



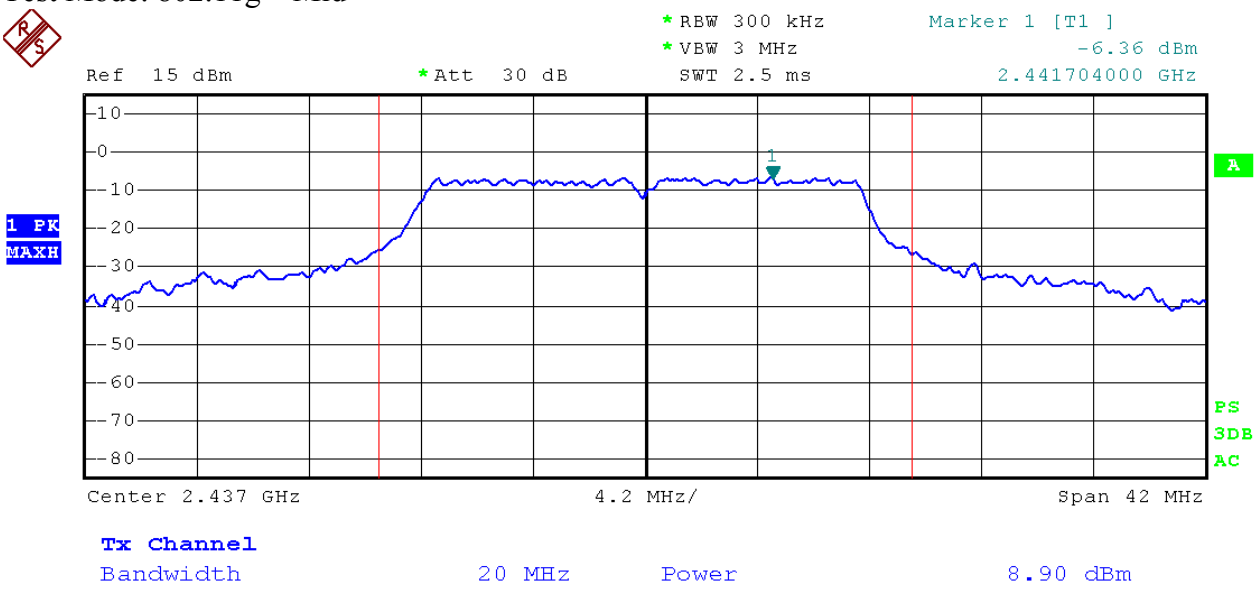
Test Mode: 802.11b---High



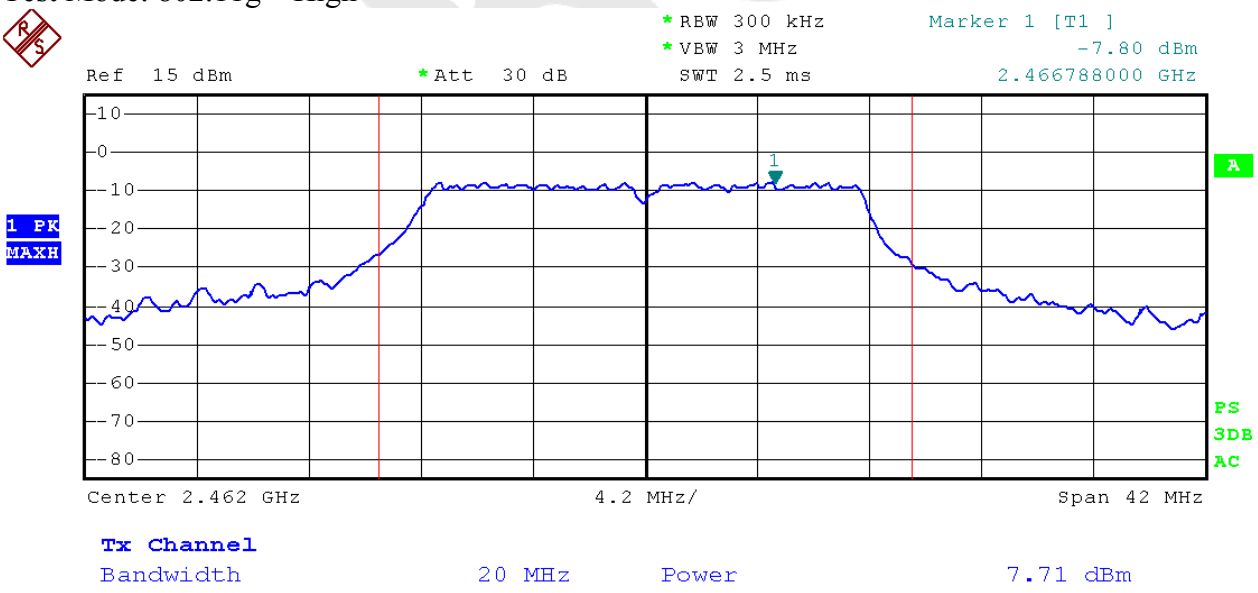
Test Mode: 802.11g---Low



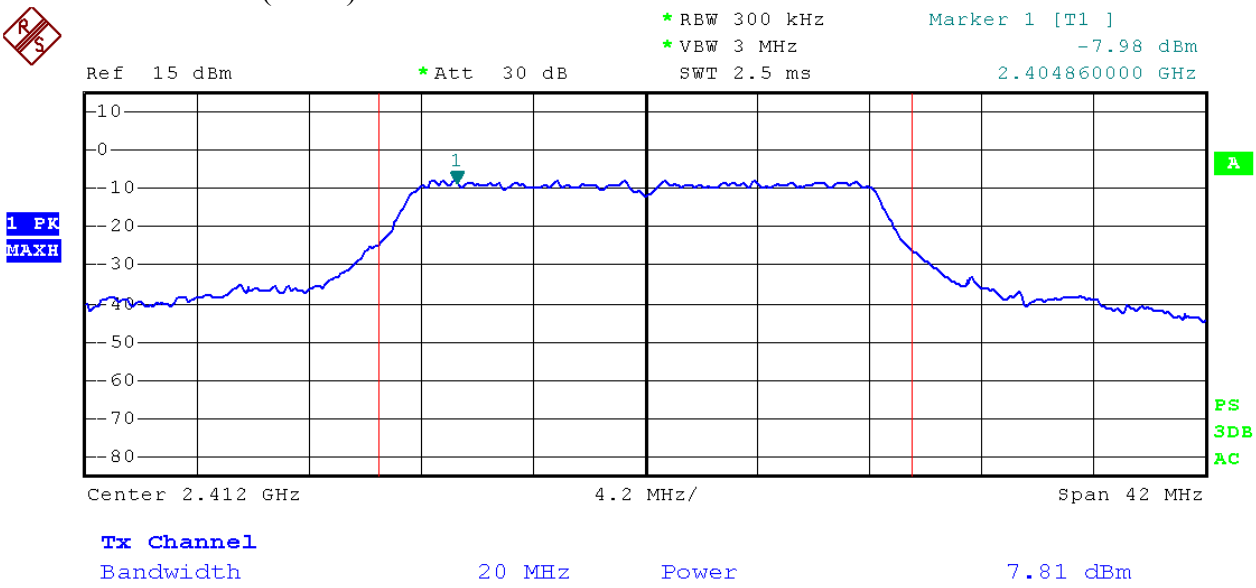
Test Mode: 802.11g---Mid



Test Mode: 802.11g---High



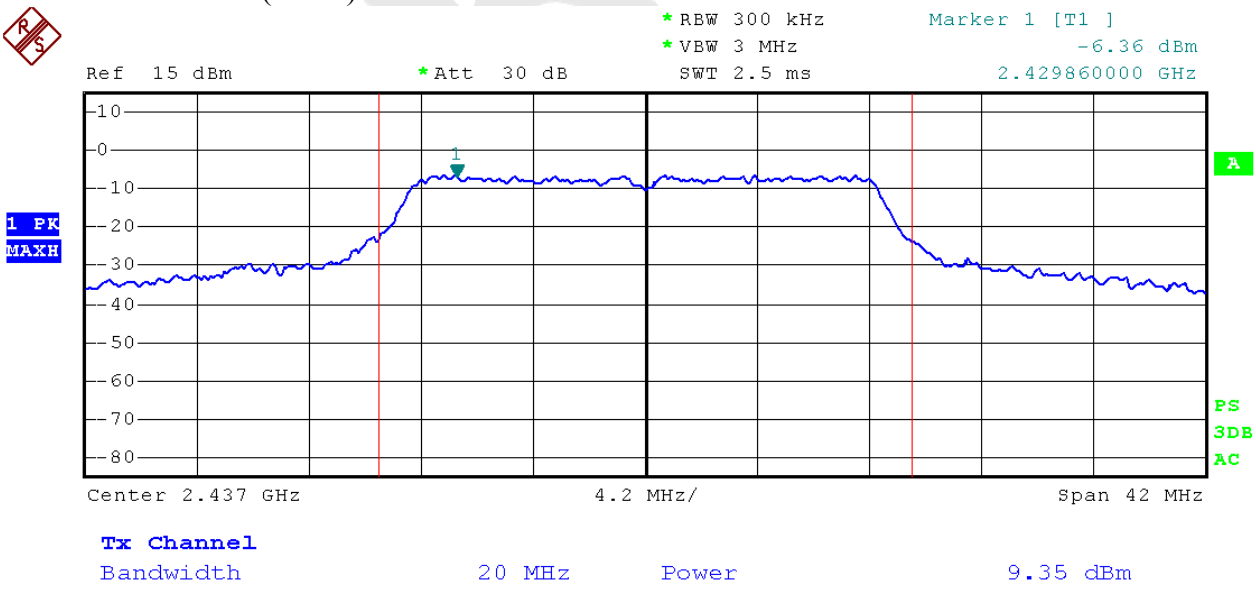
Test Mode: 802.11n(HT20)---Low



Tx Channel

Bandwidth	20 MHz	Power	7.81 dBm

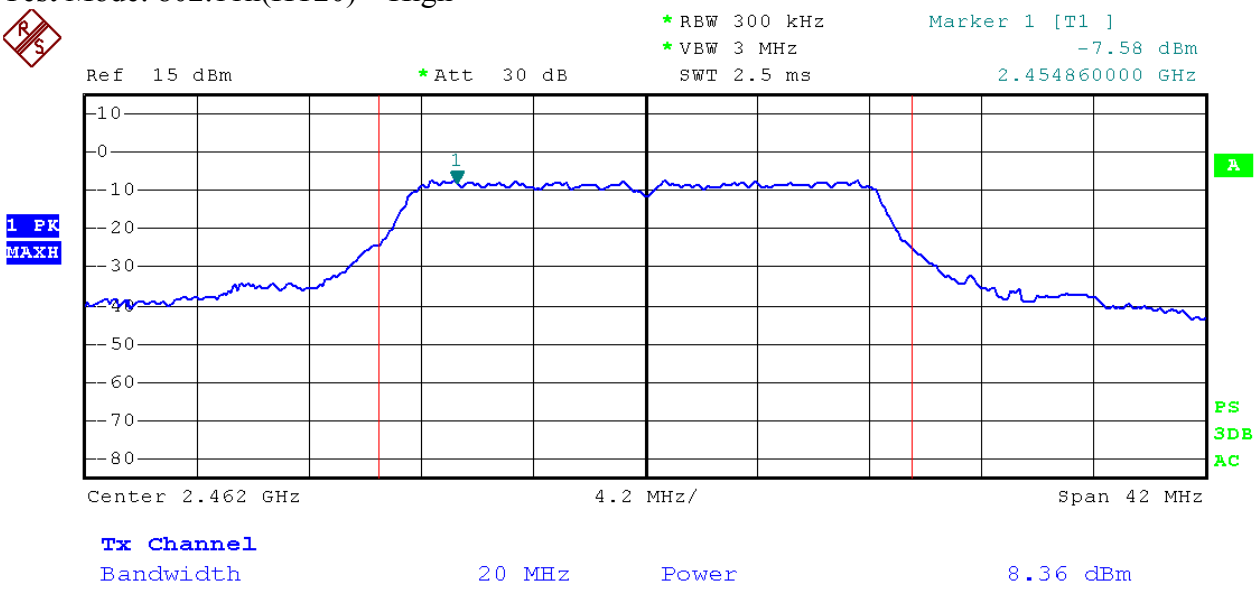
Test Mode: 802.11n(HT20)---Mid



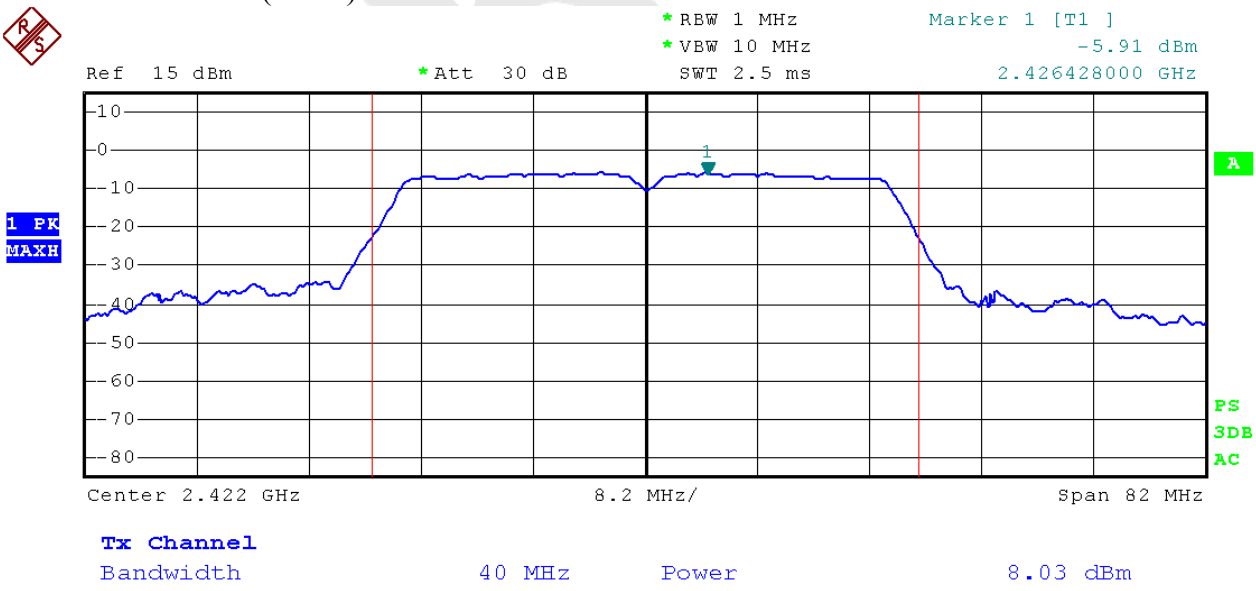
Tx Channel

Bandwidth	20 MHz	Power	9.35 dBm

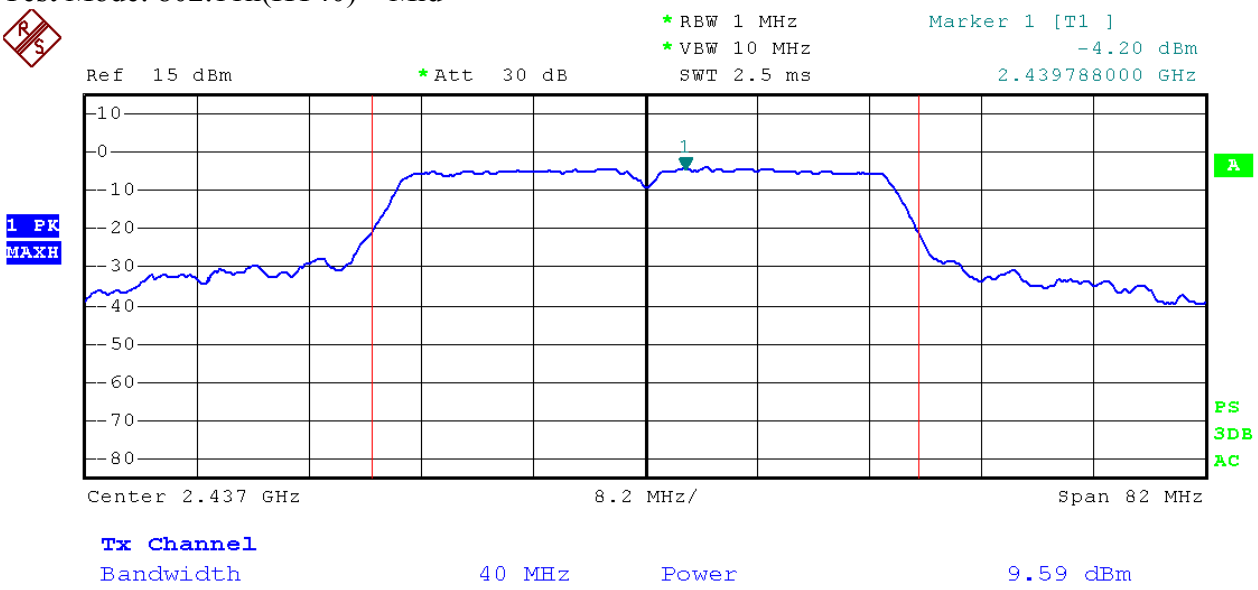
Test Mode: 802.11n(HT20)---High



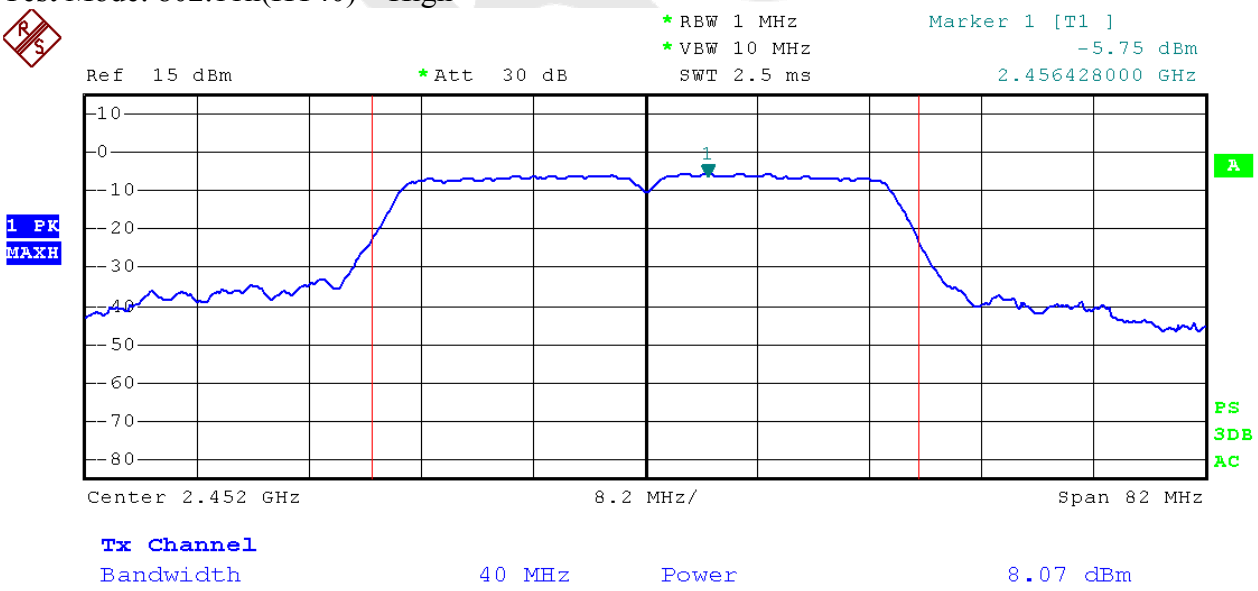
Test Mode: 802.11n(HT40)---Low



Test Mode: 802.11n(HT40)---Mid

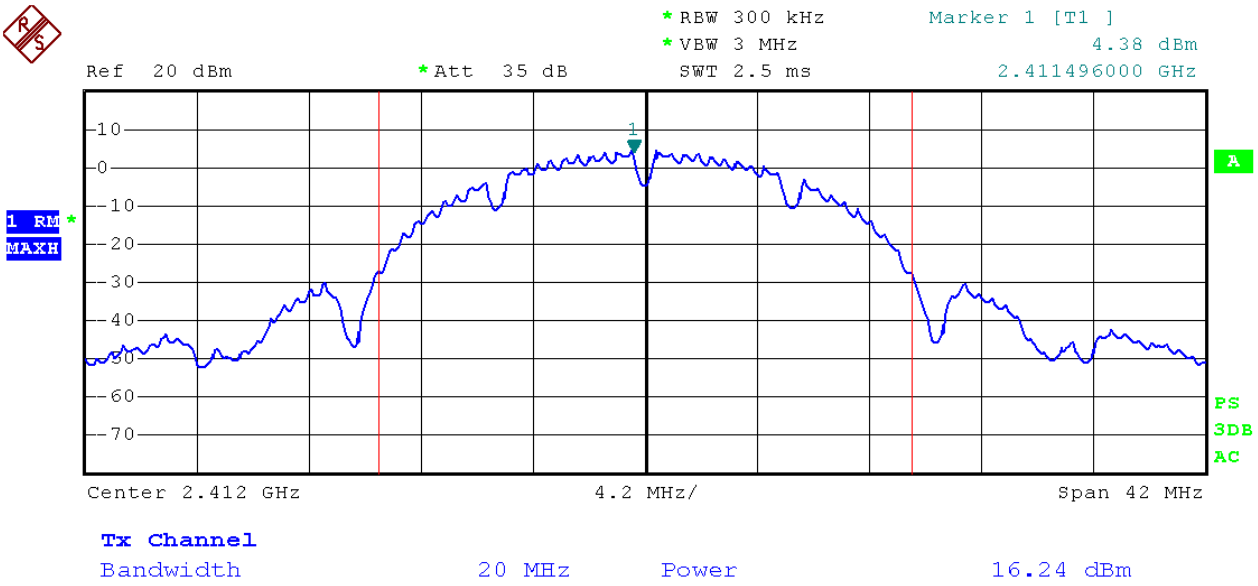


Test Mode: 802.11n(HT40)---High

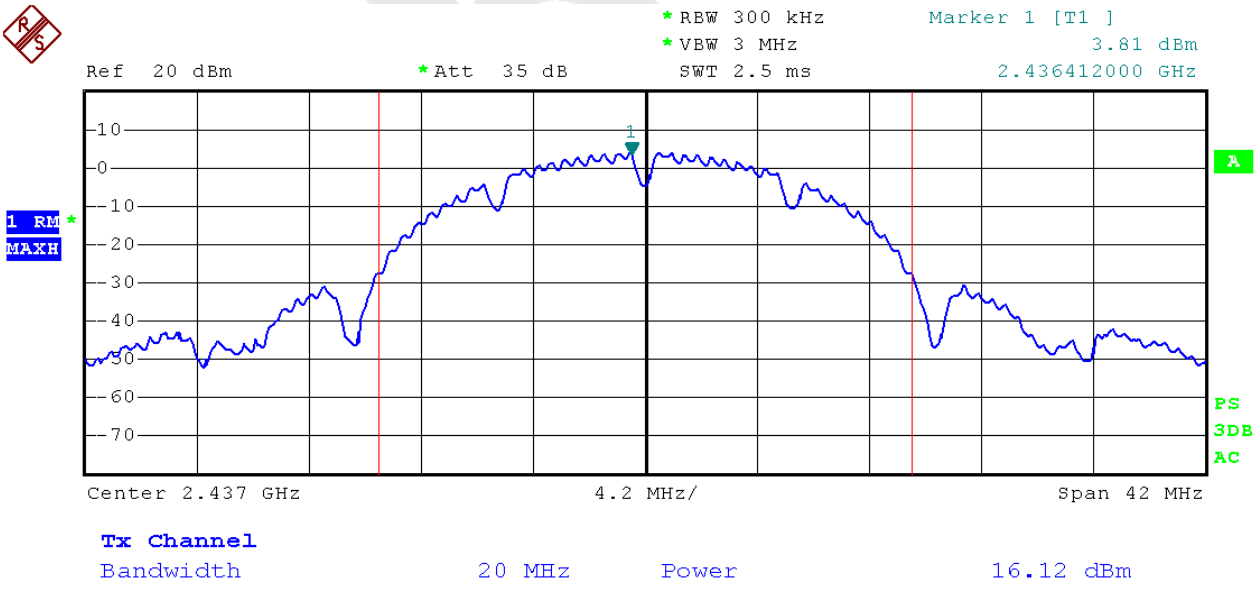


ANT B

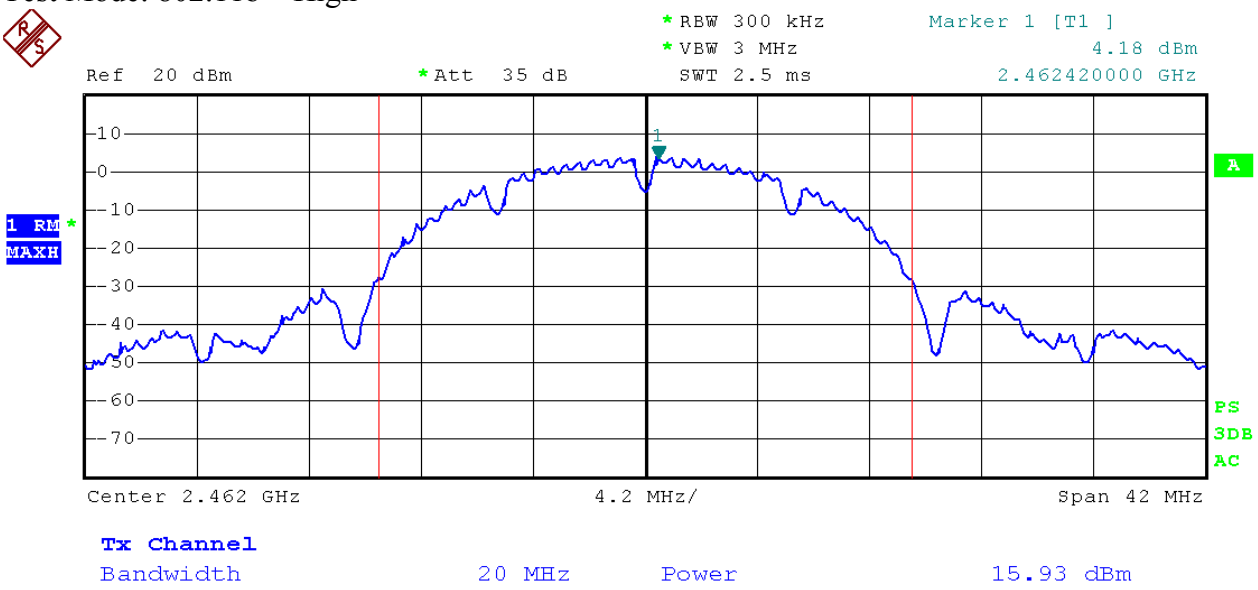
Test Mode: 802.11b---Low



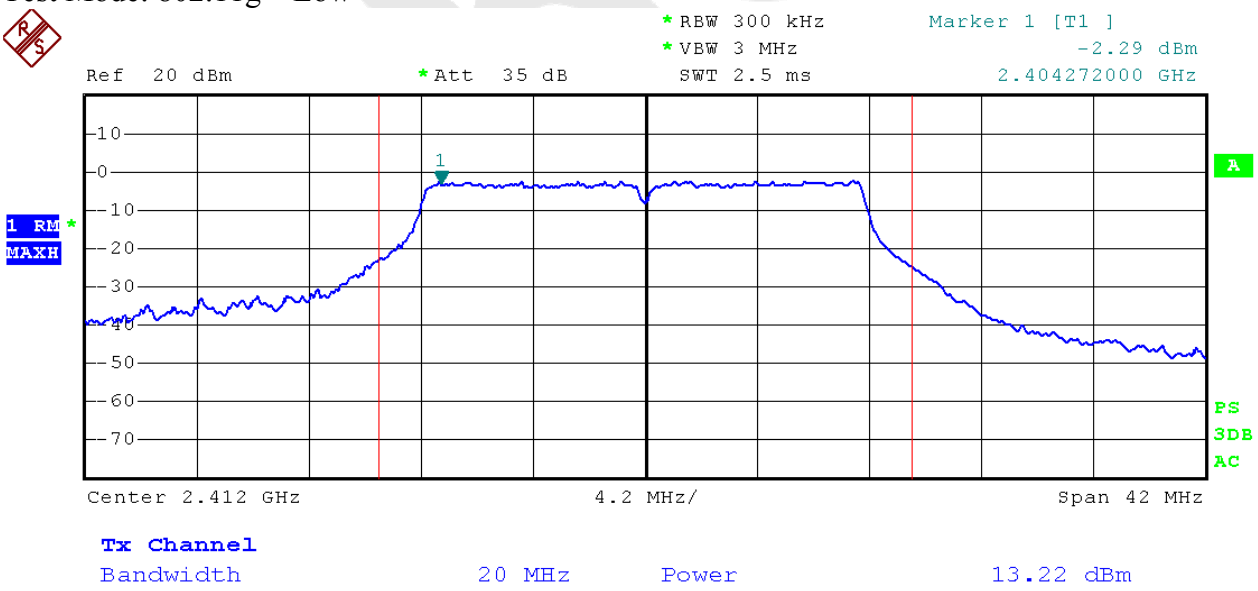
Test Mode: 802.11b---Mid



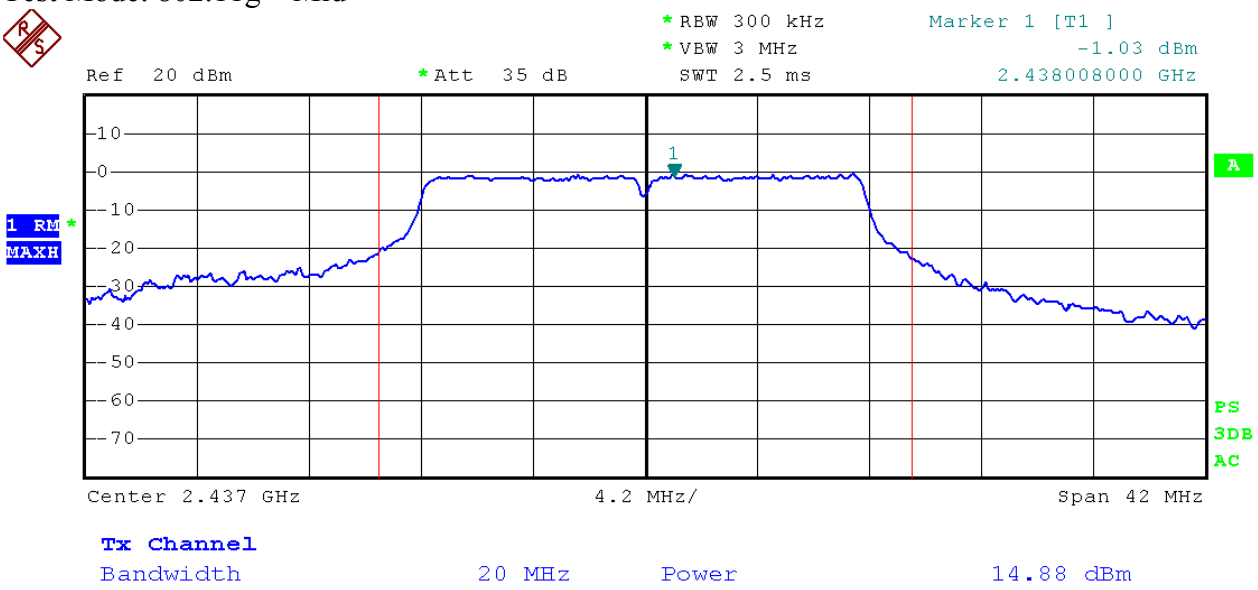
Test Mode: 802.11b---High



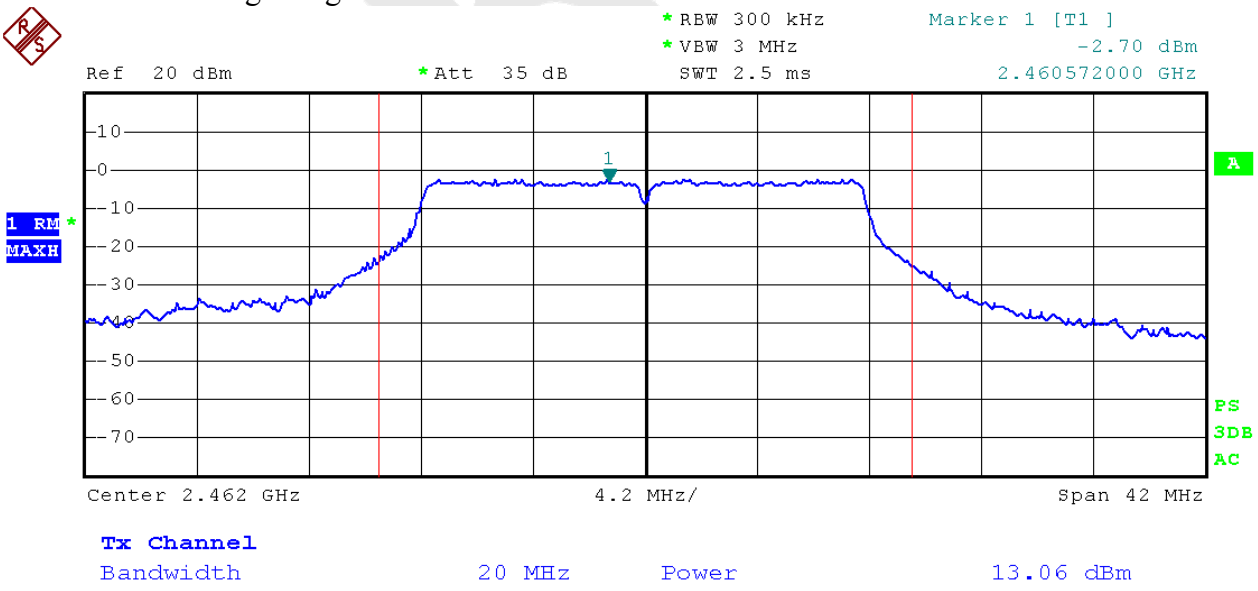
Test Mode: 802.11g---Low



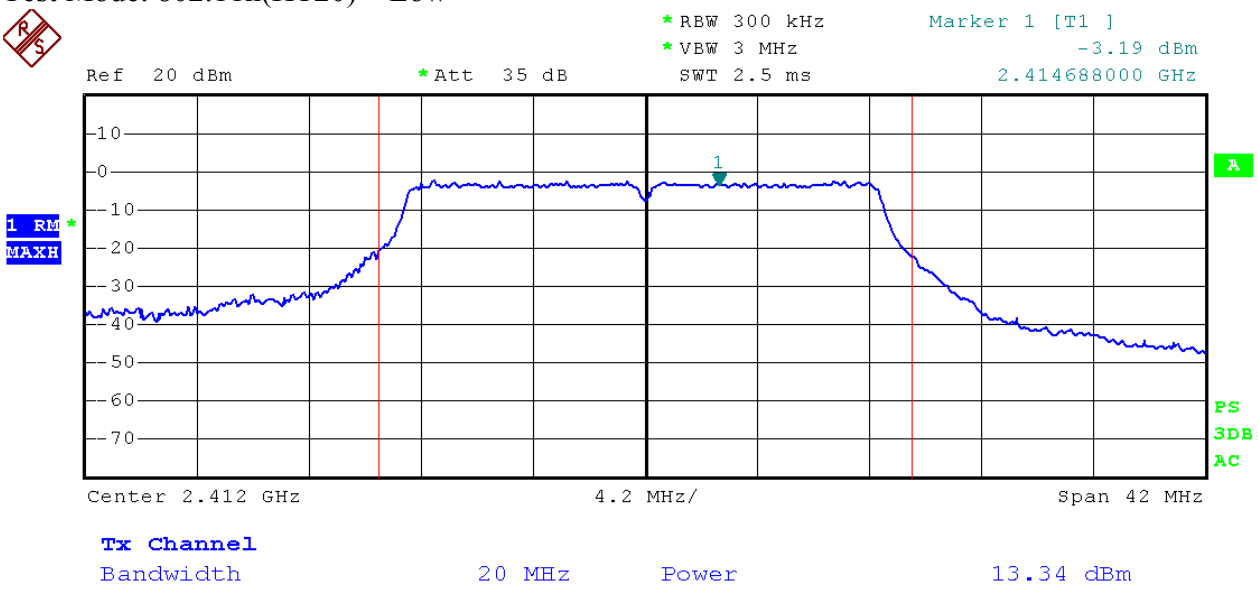
Test Mode: 802.11g---Mid



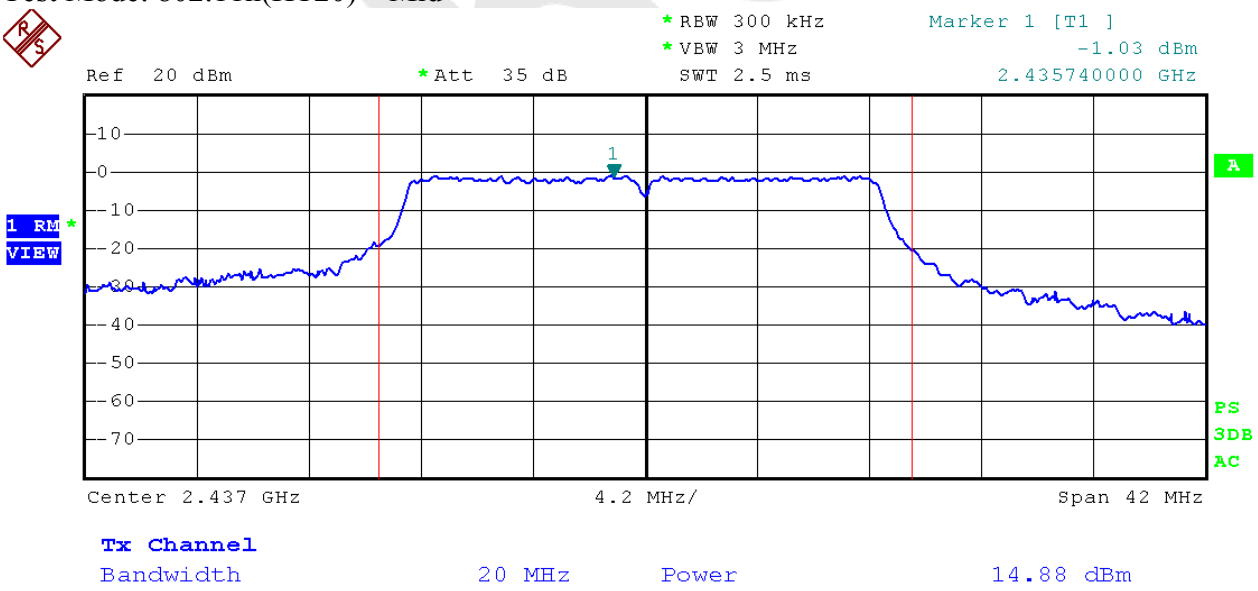
Test Mode: 802.11g---High



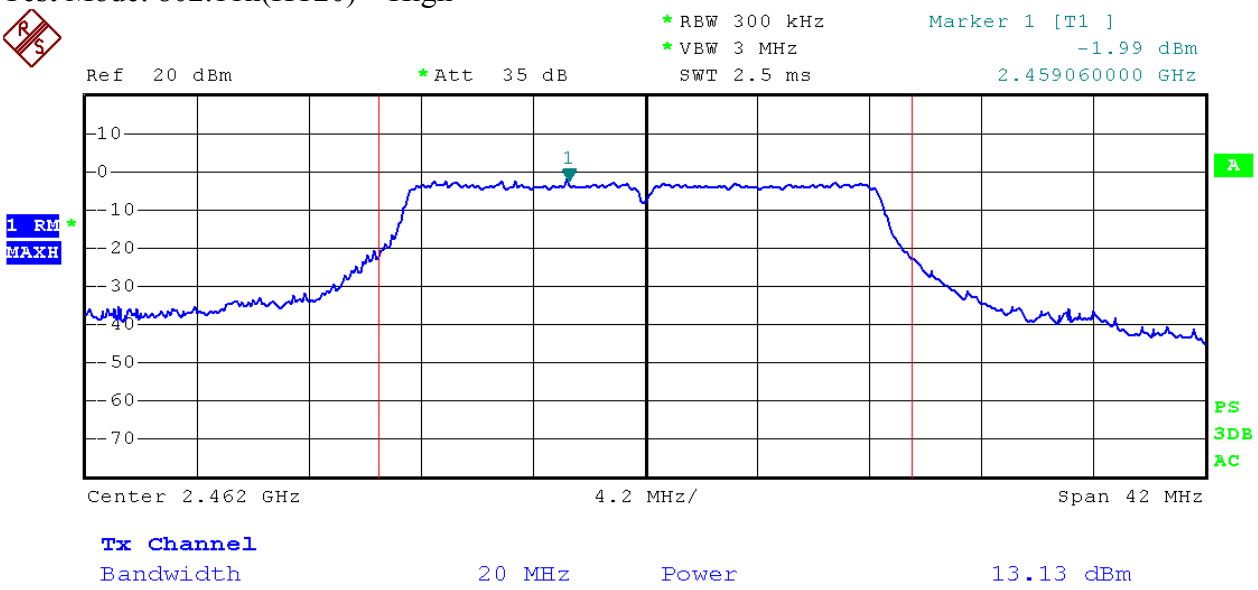
Test Mode: 802.11n(HT20)---Low



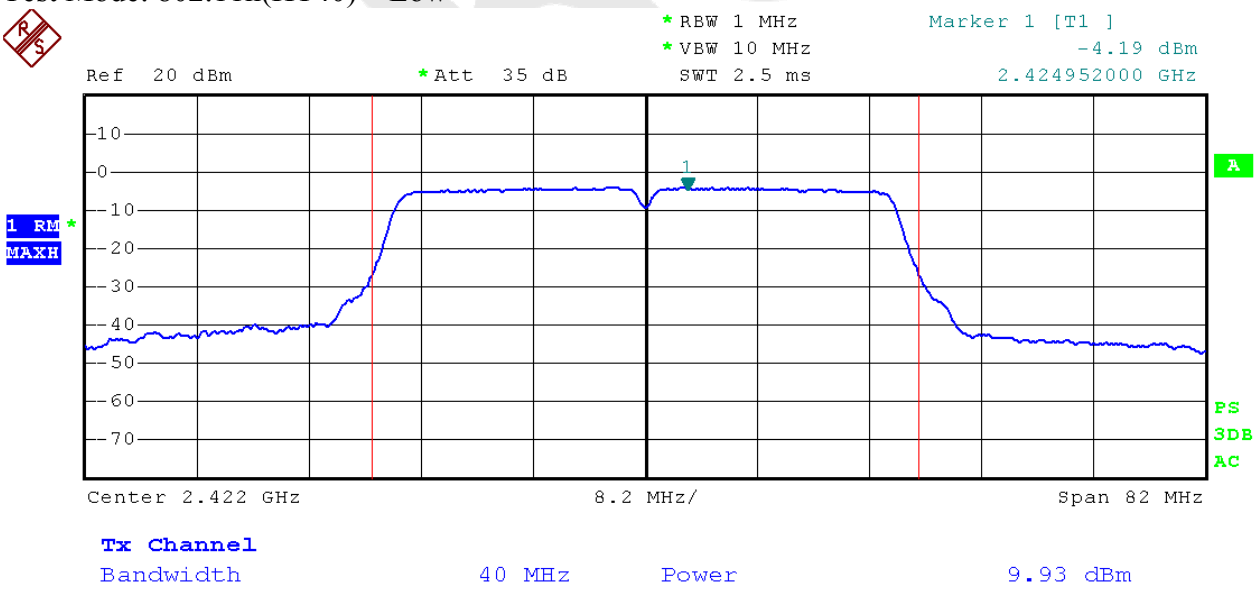
Test Mode: 802.11n(HT20)---Mid



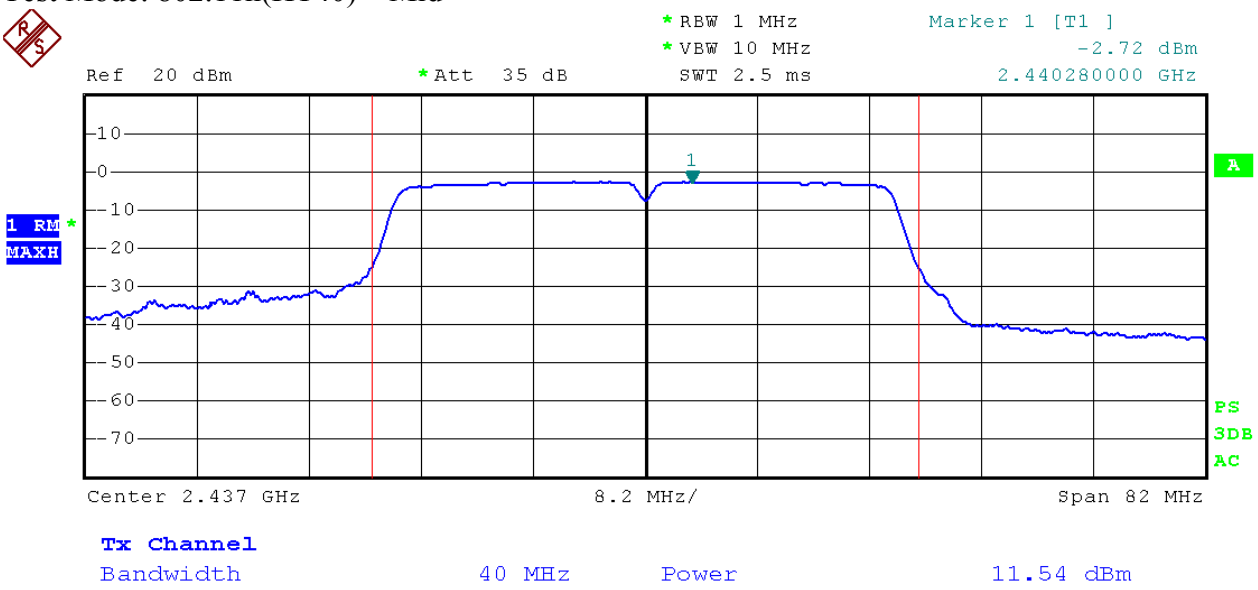
Test Mode: 802.11n(HT20)---High



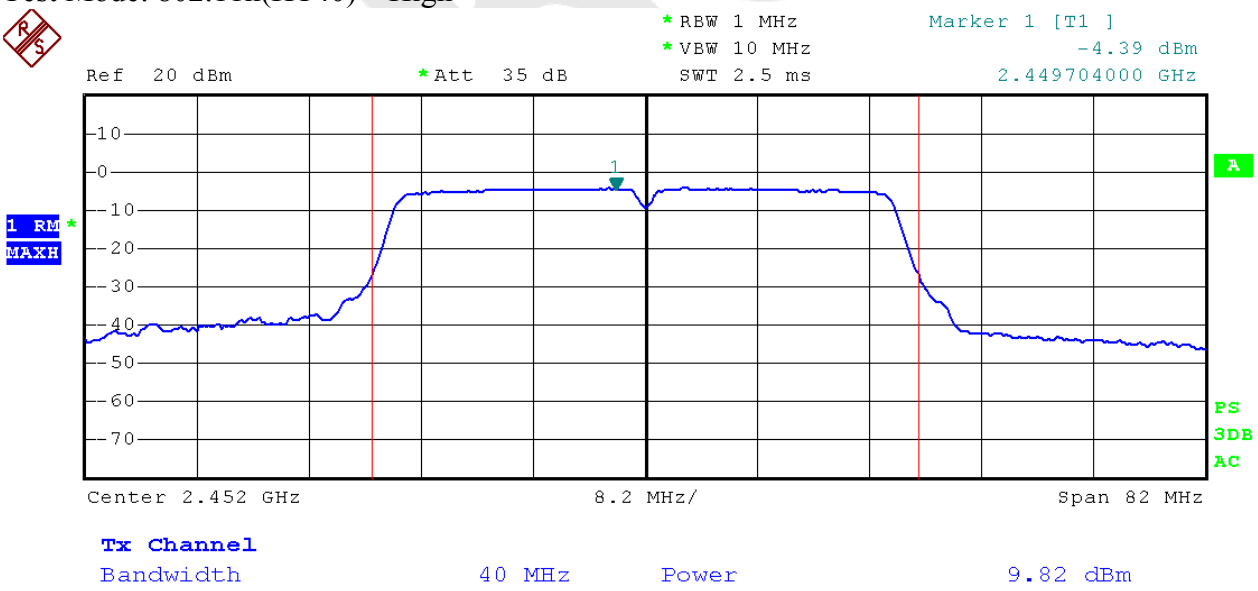
Test Mode: 802.11n(HT40)---Low



Test Mode: 802.11n(HT40)---Mid



Test Mode: 802.11n(HT40)---High



4.4. Band Edges Measurement

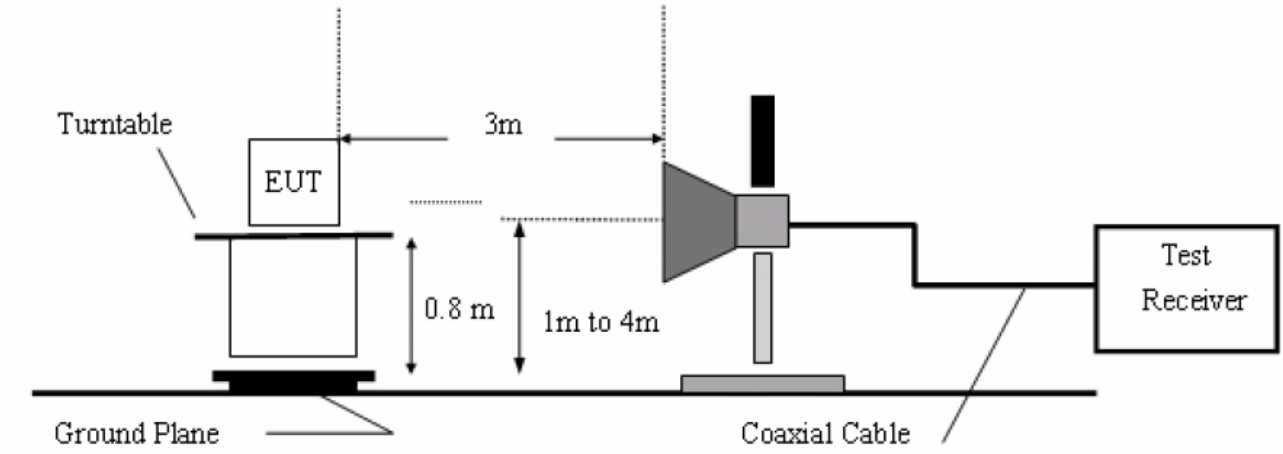
a. Limit

According to §15.247(c), in any 100 kHz bandwidth outside the frequency bands in which the spread spectrum intentional radiator in operating, the radio frequency power that is produced by the intentional radiator shall be at least 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power, 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 in15.209(a).

b. Test Procedure

1. Conducted Method:
1) Set RBW=100KHz, VBW=300KHz
2) Detector=peak
3) Sweep time= auto
4) Trace mode=max hold.

1) The EUT is placed on a turntable, which is 0.8m above the ground plane. The EUT is tested in 9*6*6 Chamber.
2) The turntable shall be rotated for 360 degrees to determine the position of maximum emission level.
3) EUT is set 3m away from the receiving antenna, which is varied from 1m to 4m to find out the highest emission.
4) Set both RBW and VBW of spectrum analyzer to 100kHz with a convenient frequency span including 100kHz bandwidth from band edge, check the emission of EUT. If pass then set Spectrum Analyzer as below:
For below 1GHz:
The resolution bandwidth and video bandwidth of test receiver/ spectrum analyzer is 120kHz.
Detector: **Quasi-Peak**
For above 1GHz Peak measurement:
The resolution bandwidth of test receiver/ spectrum analyzer is 1MHz and video bandwidth is 3MHz.
Detector: **Peak**
For above 1GHz average measurement:
The resolution bandwidth of test receiver/ spectrum analyzer is 1MHz and the video bandwidth is 10kHz.
Detector: **Peak**
5) Repeat the procedures until all the PEAK and AVERAGE versus POLARIZATION are measured.



c. Test Equipment

Same as the equipment listed in 4.2.

d. Test Results

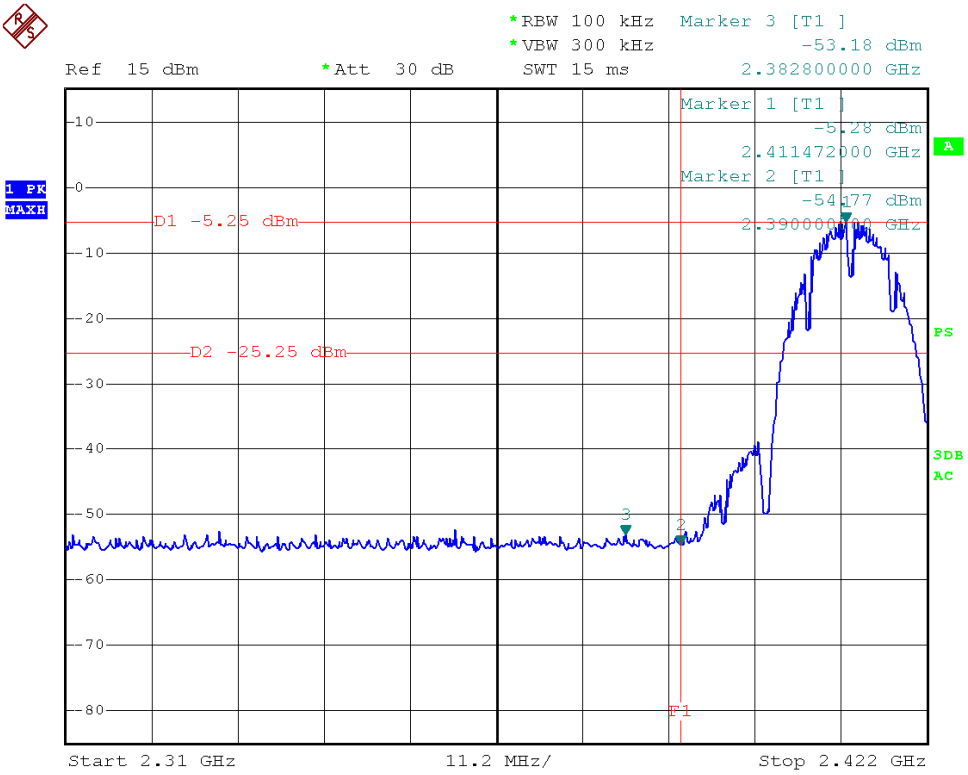
Pass.

e. Test Plots

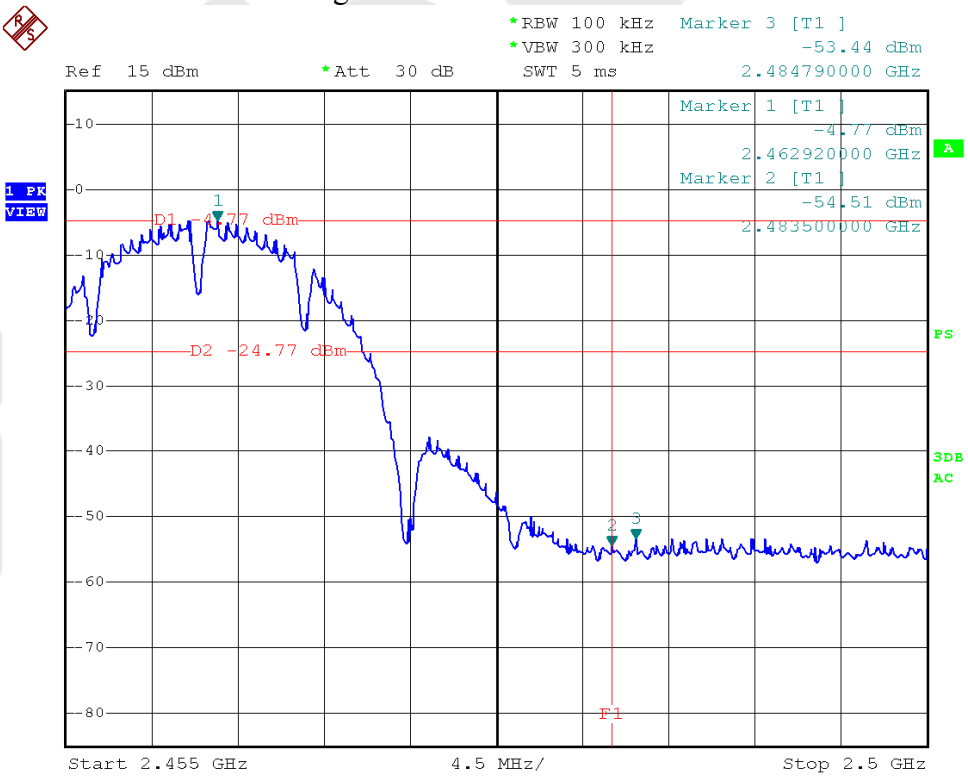
See the following page.

ANTA

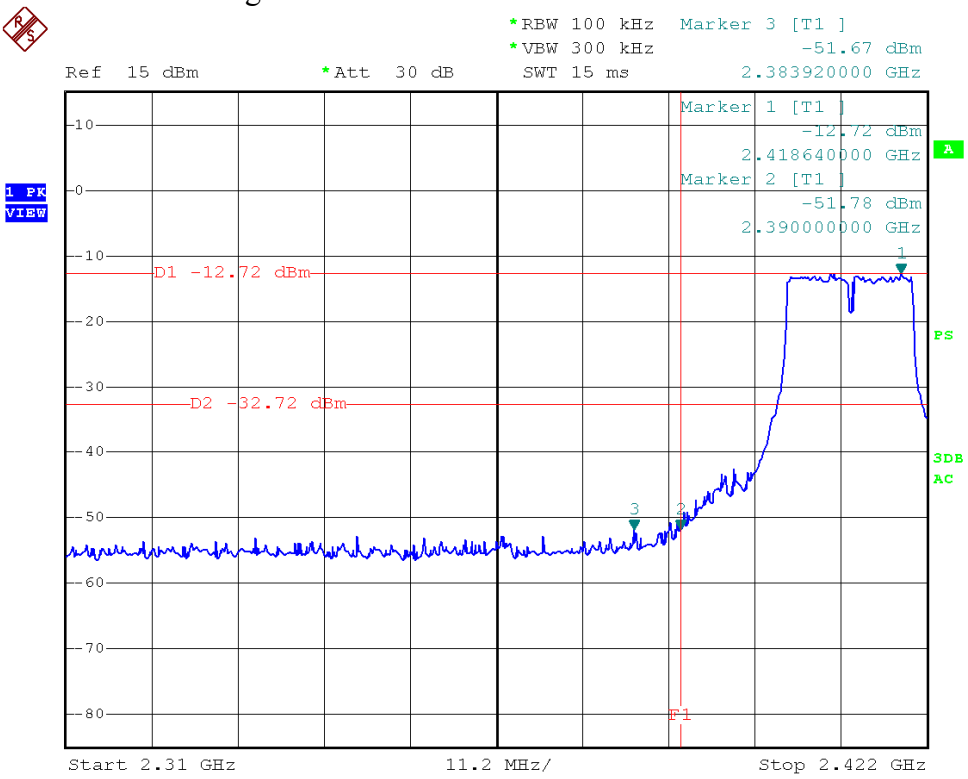
Test Mode: 802.11b ---Low



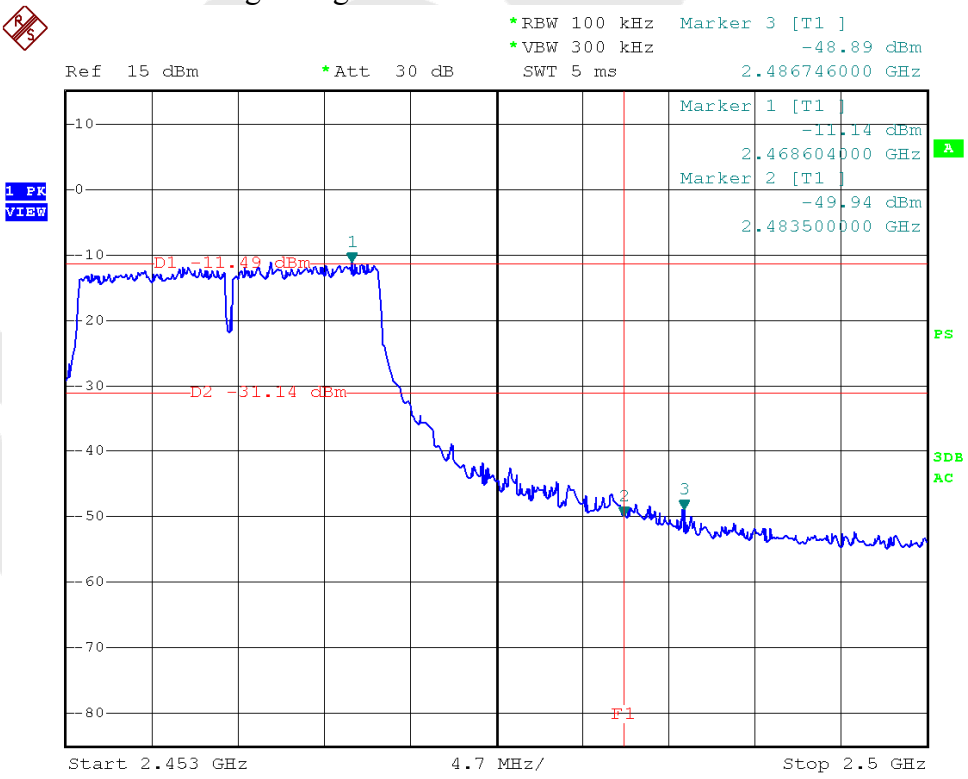
Test Mode: 802.11b ---High



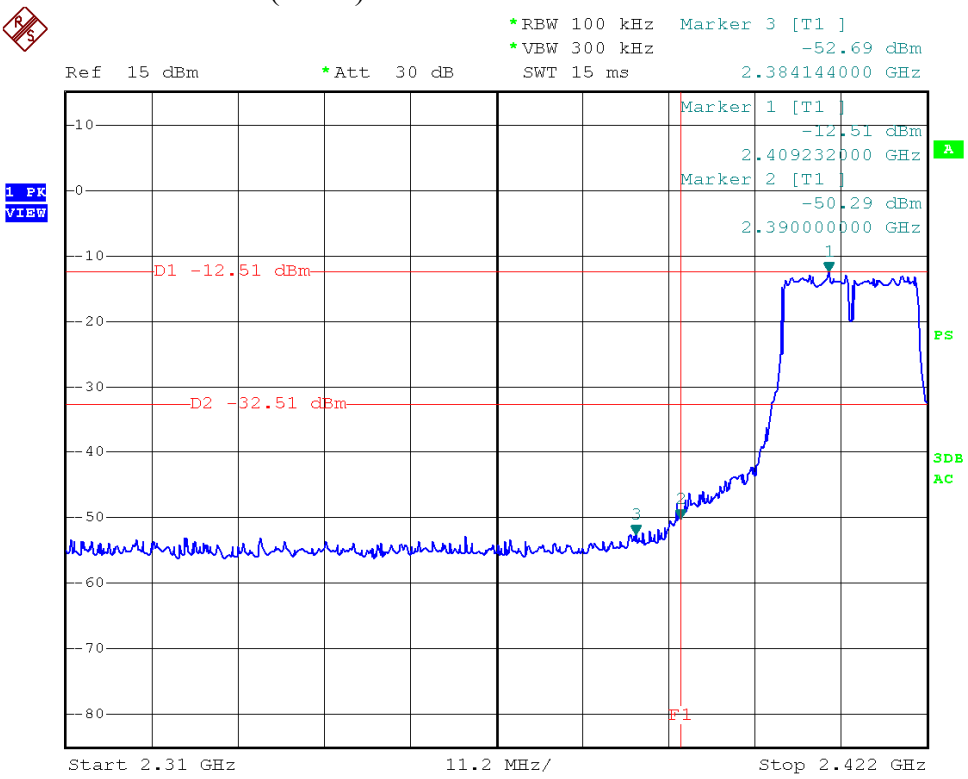
Test Mode: 802.11g ---Low



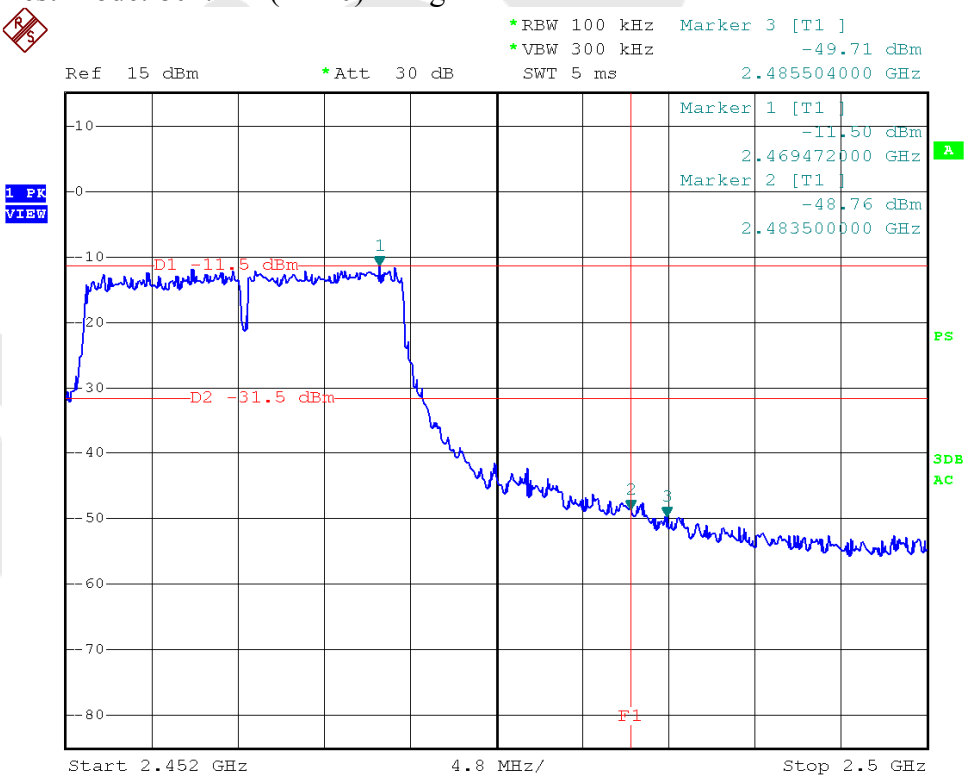
Test Mode: 802.11g ---High



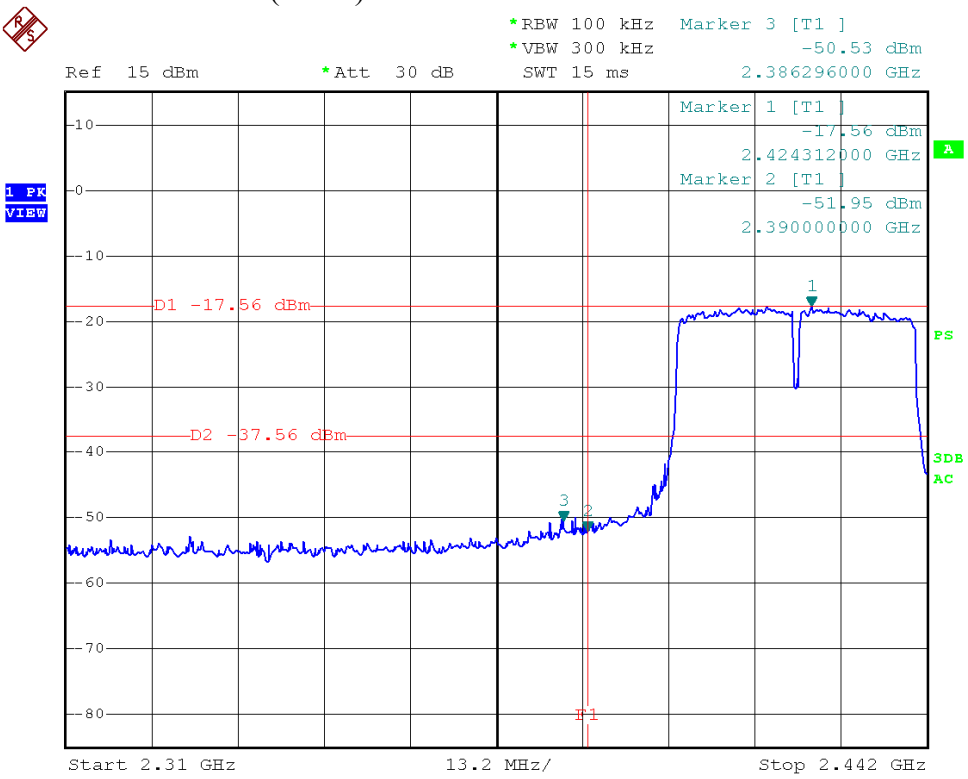
Test Mode: 802.11n (HT20) ---Low



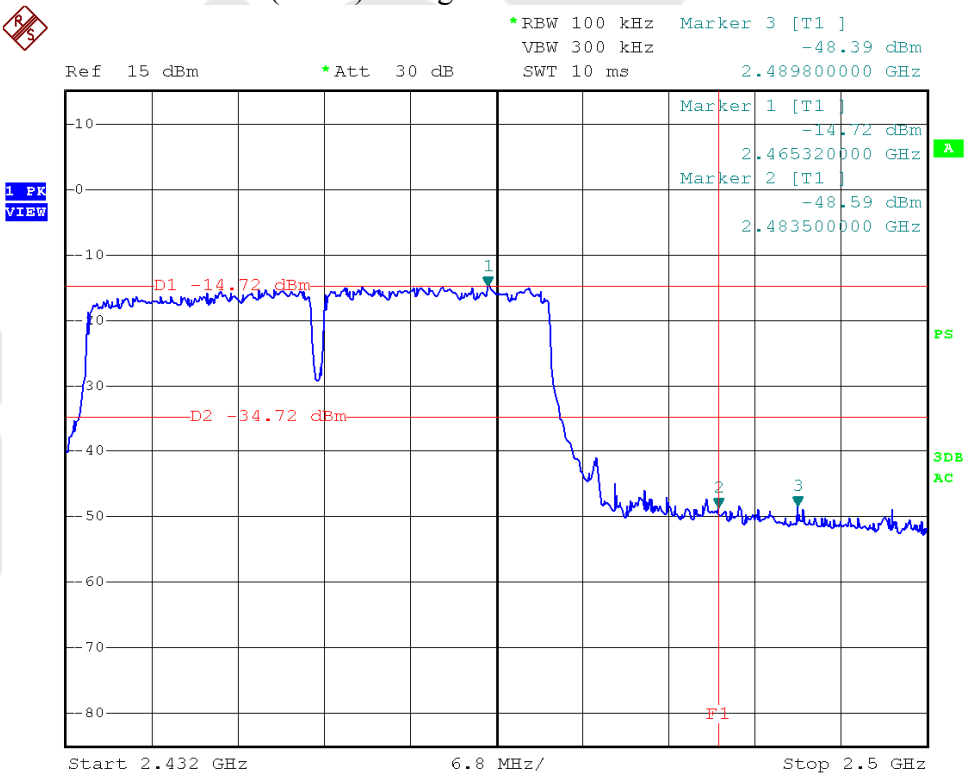
Test Mode: 802.11n (HT20)---High



Test Mode: 802.11n (HT40) ---Low

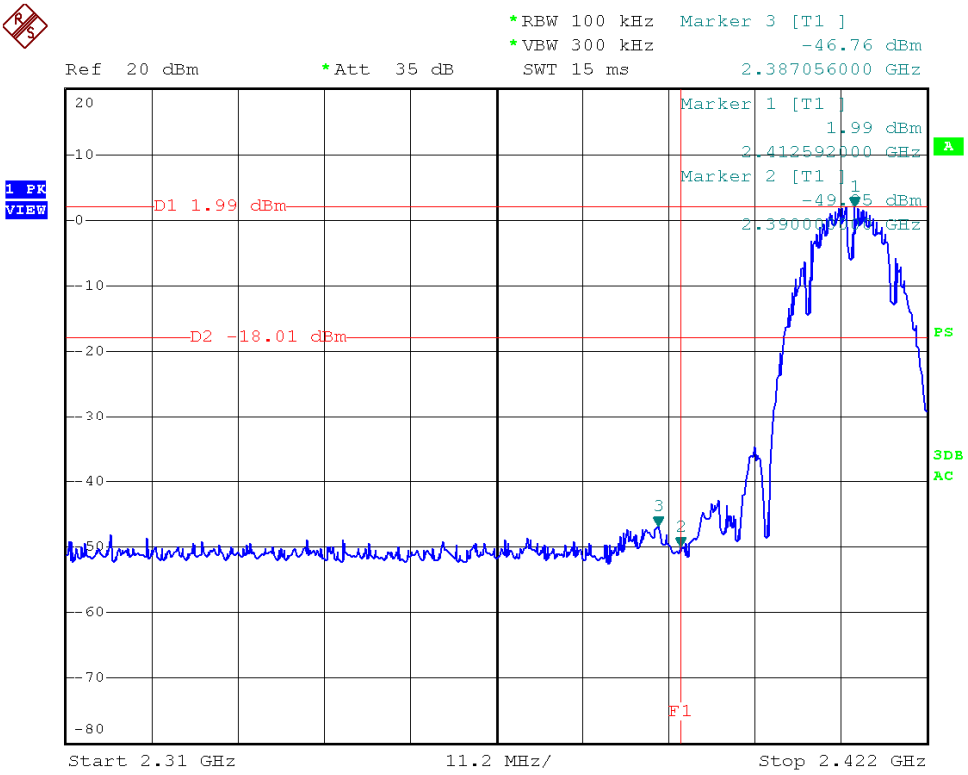


Test Mode: 802.11n (HT40) ---High

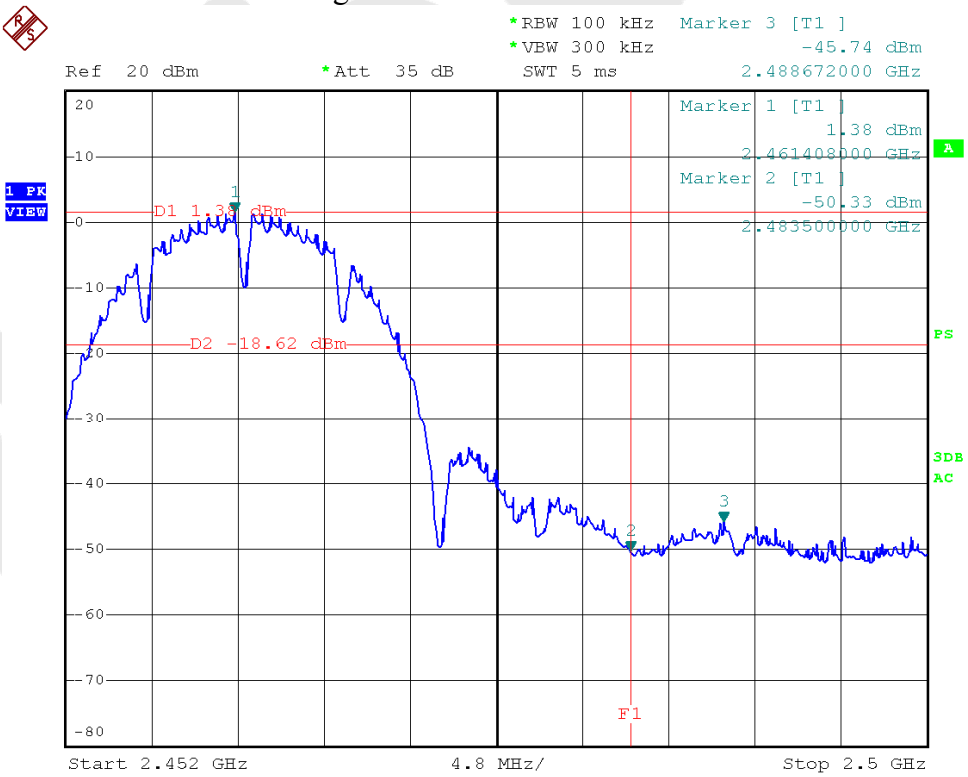


ANTB

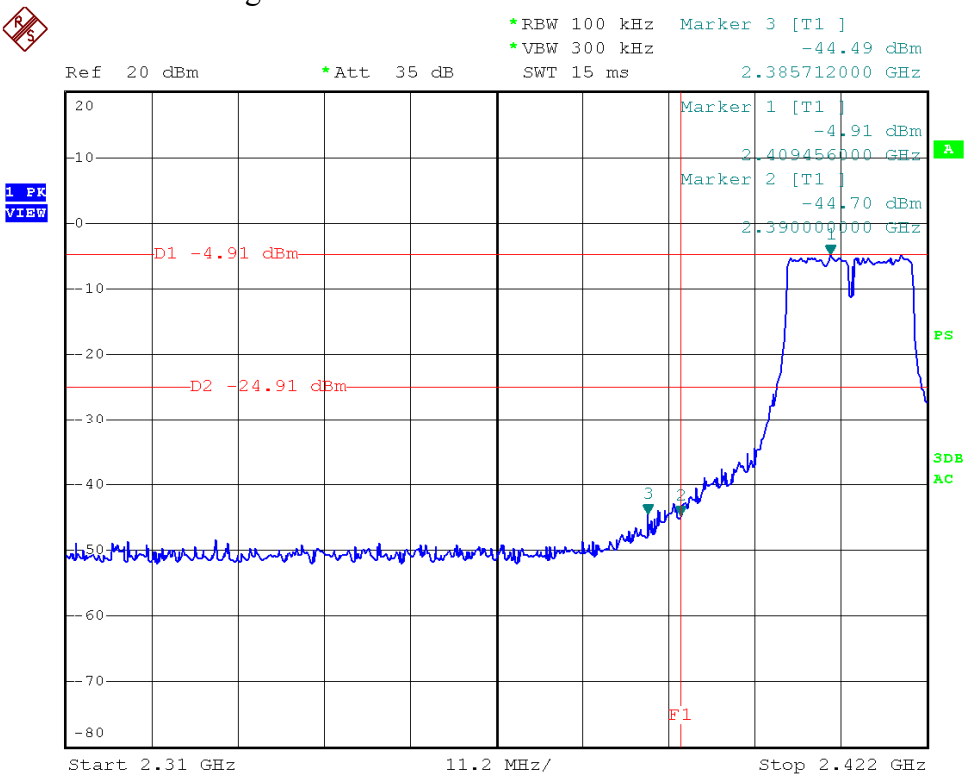
Test Mode: 802.11b ---Low



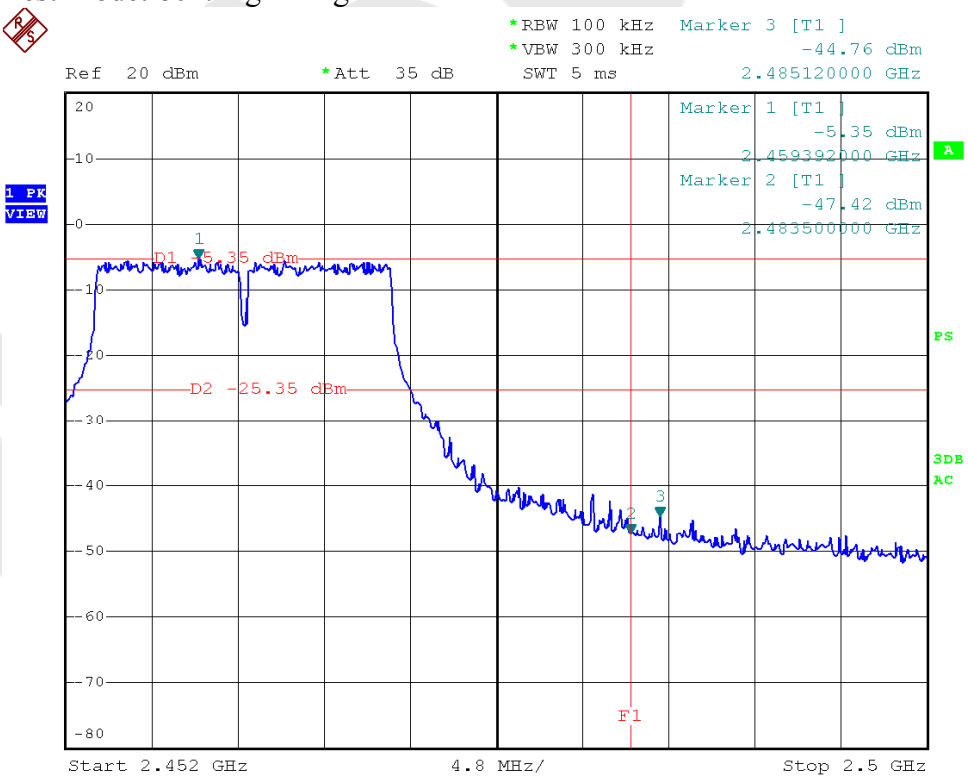
Test Mode: 802.11b ---High



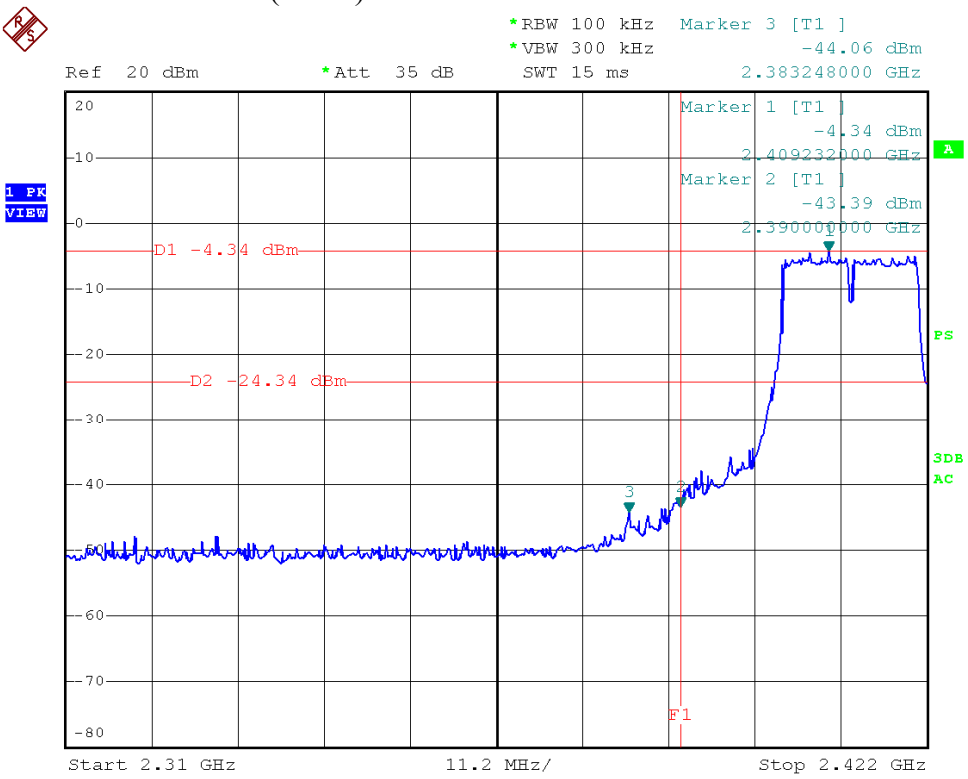
Test Mode: 802.11g ---Low



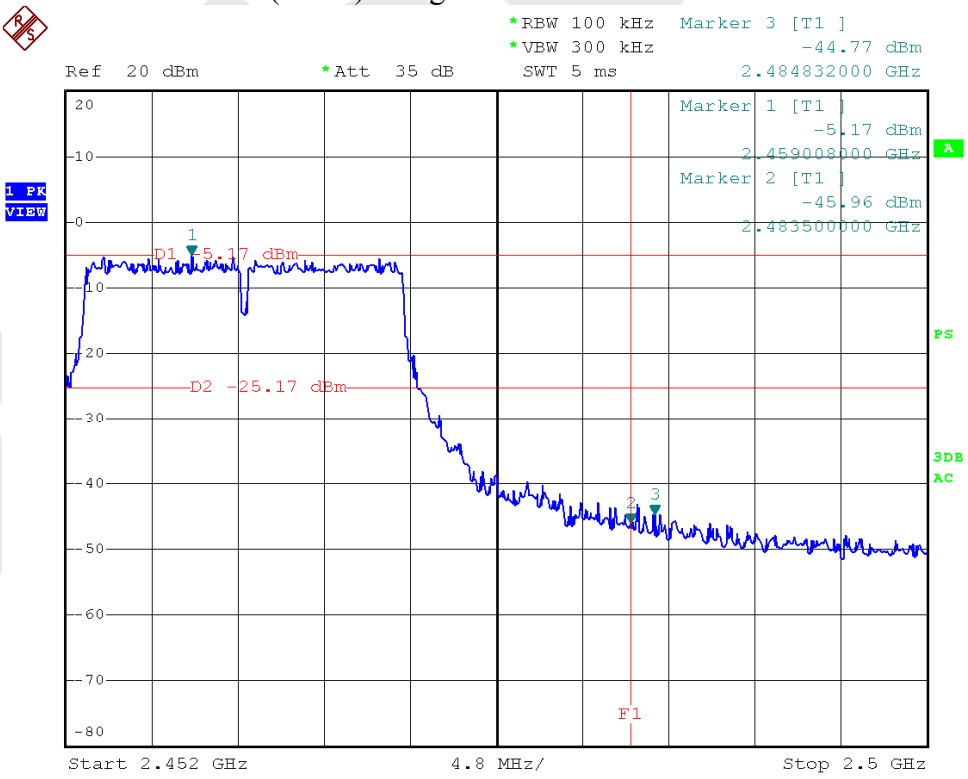
Test Mode: 802.11g ---High



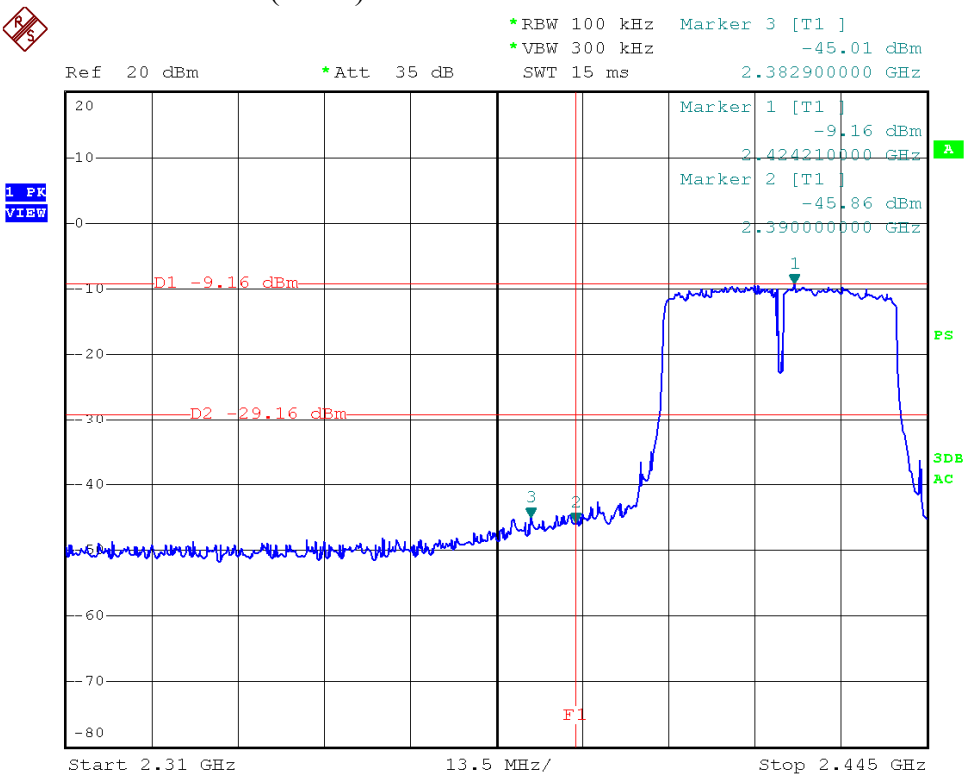
Test Mode: 802.11n (HT20) ---Low



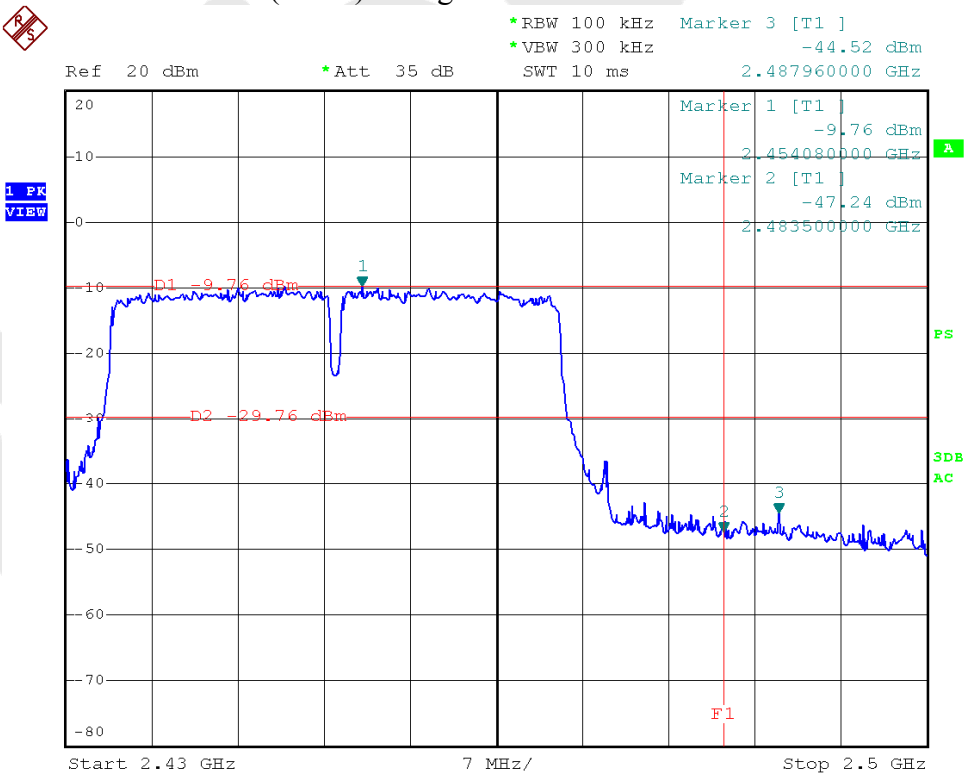
Test Mode: 802.11n (HT20)---High



Test Mode: 802.11n (HT40) ---Low



Test Mode: 802.11n (HT40) ---High

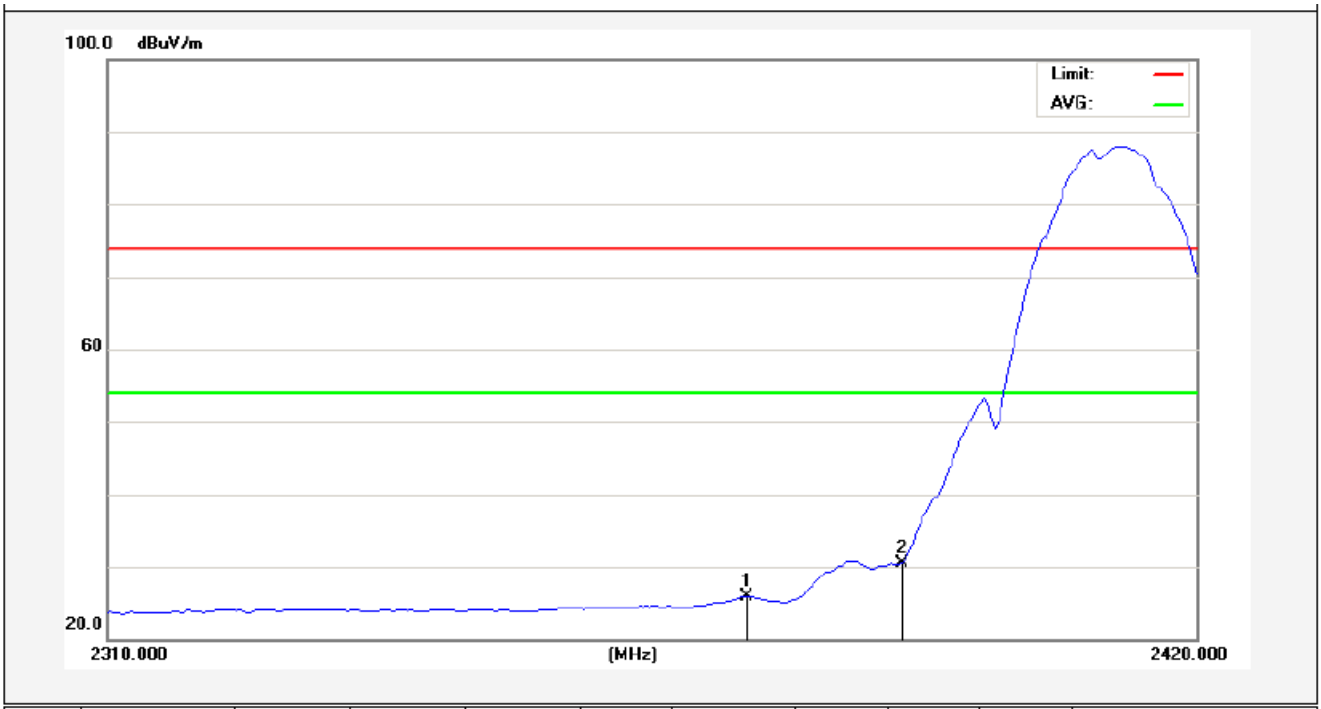


ANT A

Test Mode: 802.11b
2412MHz
Horizontal-PEAK:

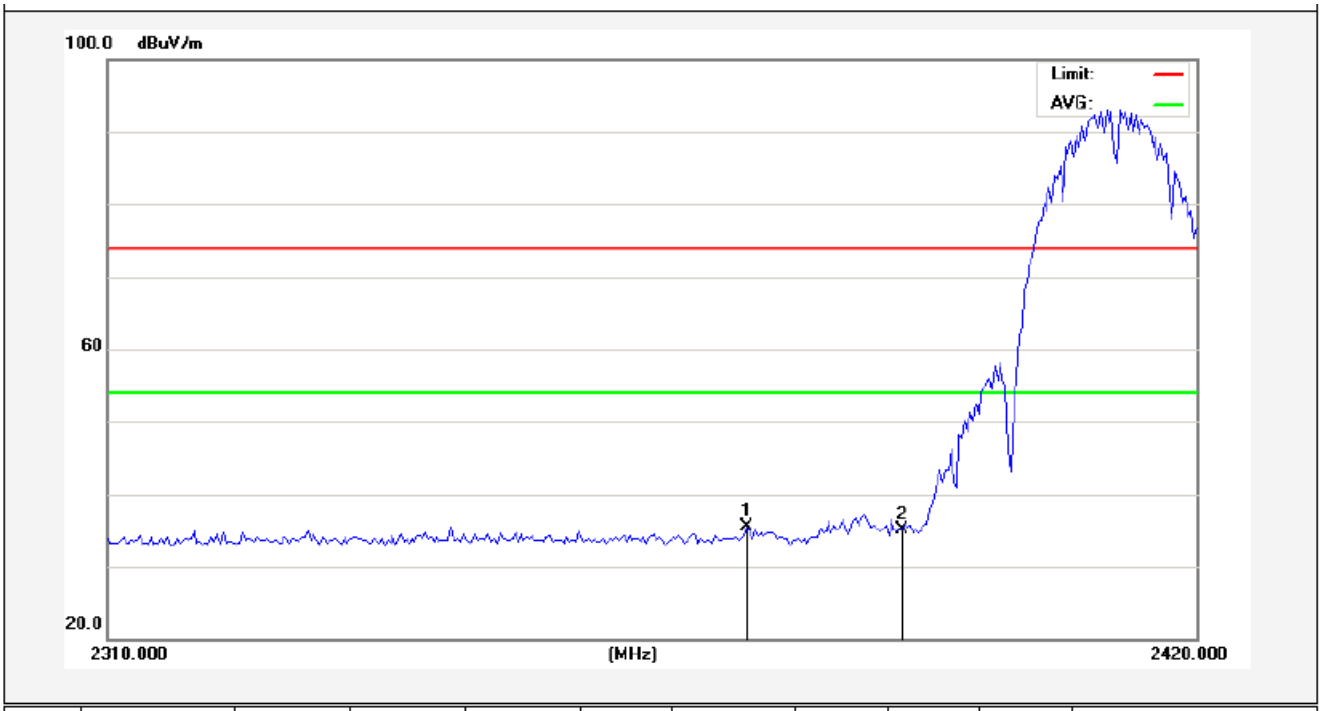
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2370.225	36.91	-2.56	34.35	74.00	-39.65	peak			
2	2390.000	40.11	-2.51	37.60	74.00	-36.40	peak			

Horizontal-AV:



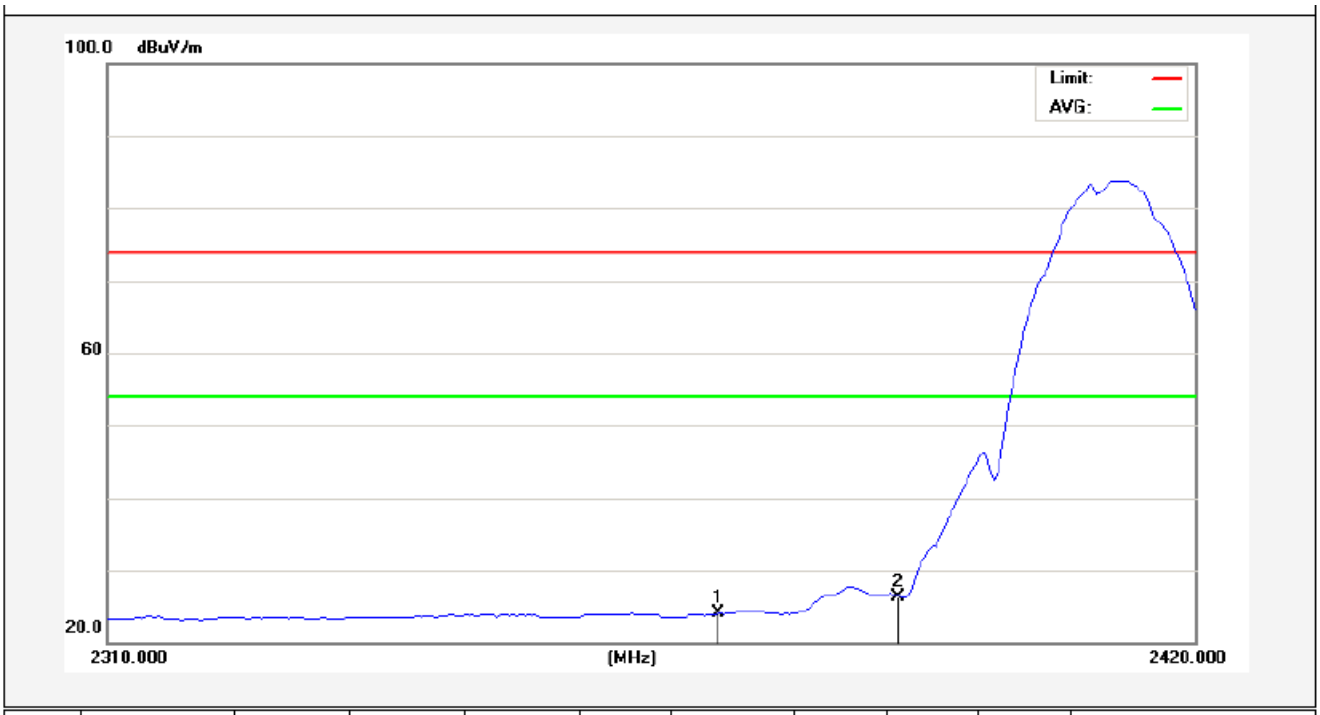
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2374.075	28.47	-2.55	25.92	54.00	-28.08	AVG			
2	2390.000	33.07	-2.51	30.56	54.00	-23.44	AVG			

Test Mode: 802.11b
2412MHz
Vertical-PEAK:



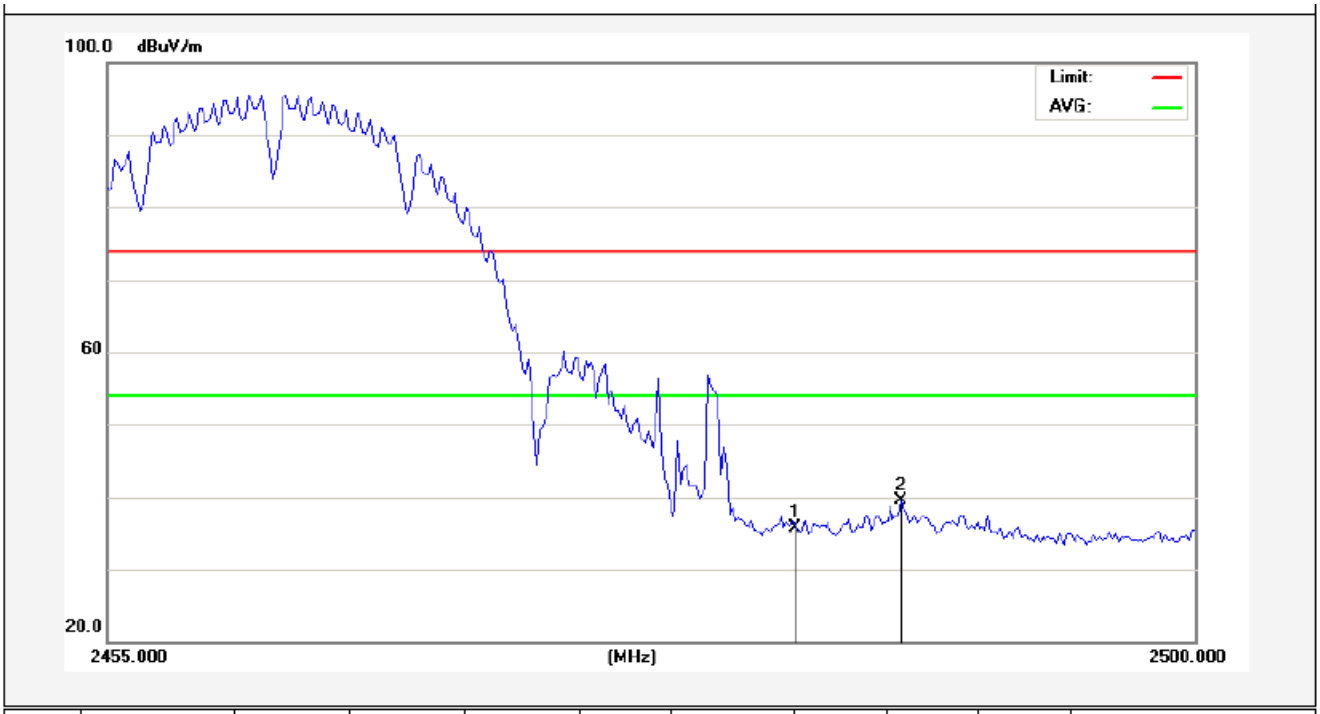
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2374.075	37.99	-2.55	35.44	74.00	-38.56	peak			
2	2390.000	37.69	-2.51	35.18	74.00	-38.82	peak			

Vertical-AV:



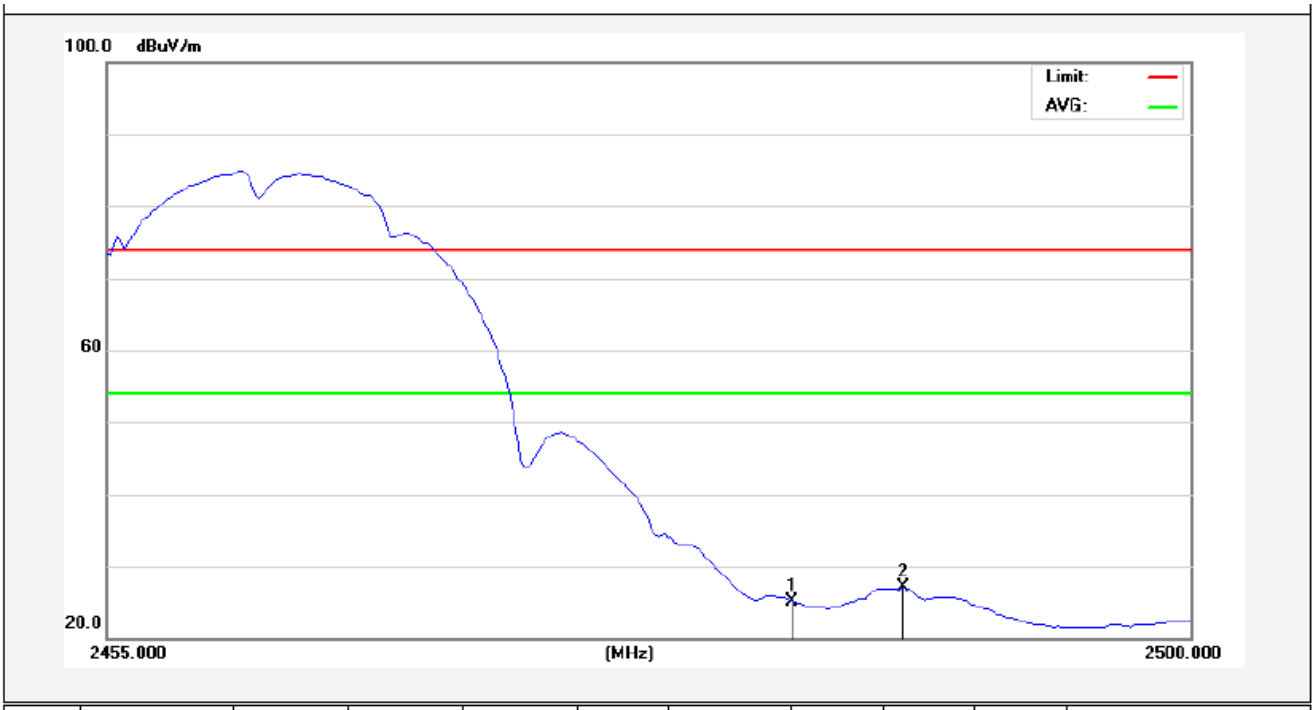
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2371.325	26.64	-2.56	24.08	54.00	-29.92	AVG			
2	2390.000	28.84	-2.51	26.33	54.00	-27.67	AVG			

Test Mode: 802.11b
2462MHz
Horizontal-PEAK:



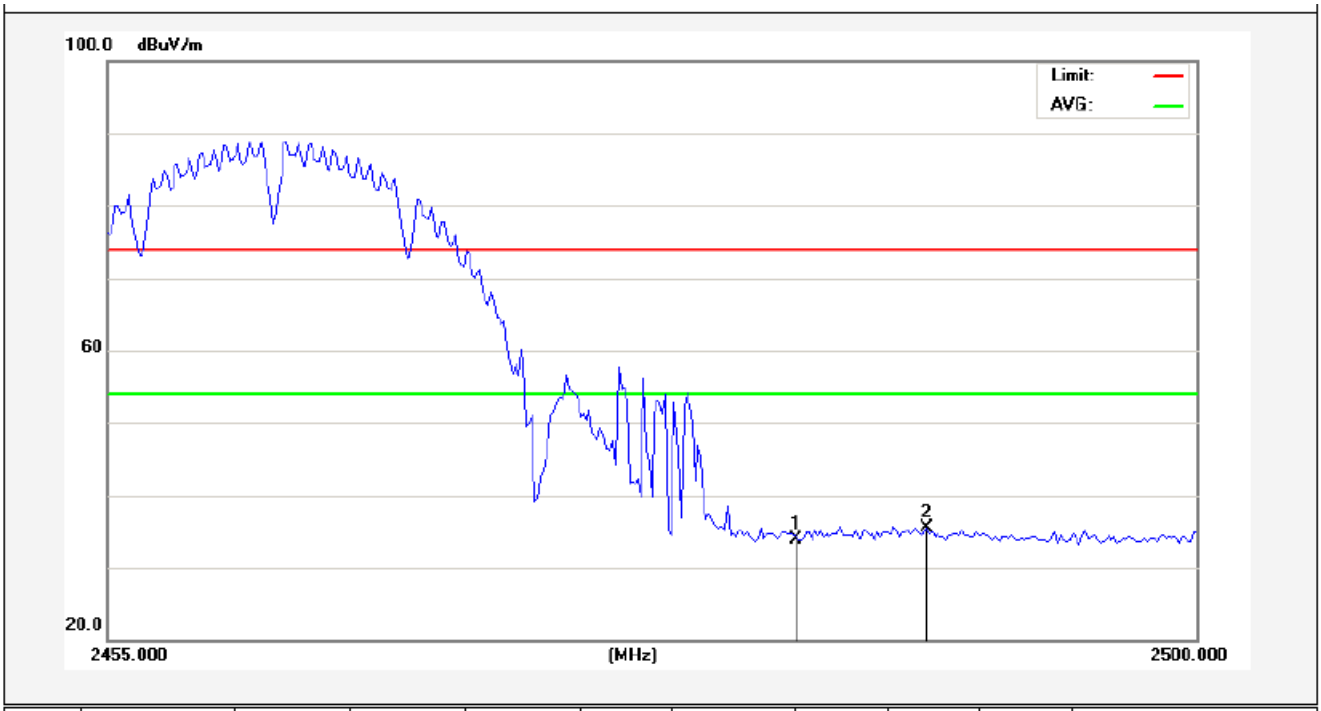
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2483.500	38.06	-2.31	35.75	74.00	-38.25	peak			
2	2487.850	41.78	-2.30	39.48	74.00	-34.52	peak			

Horizontal-AV:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2483.500	27.39	-2.31	25.08	54.00	-28.92	AVG			
2	2488.075	29.32	-2.30	27.02	54.00	-26.98	AVG			

Test Mode: 802.11b
2462MHz
Vertical-PEAK:

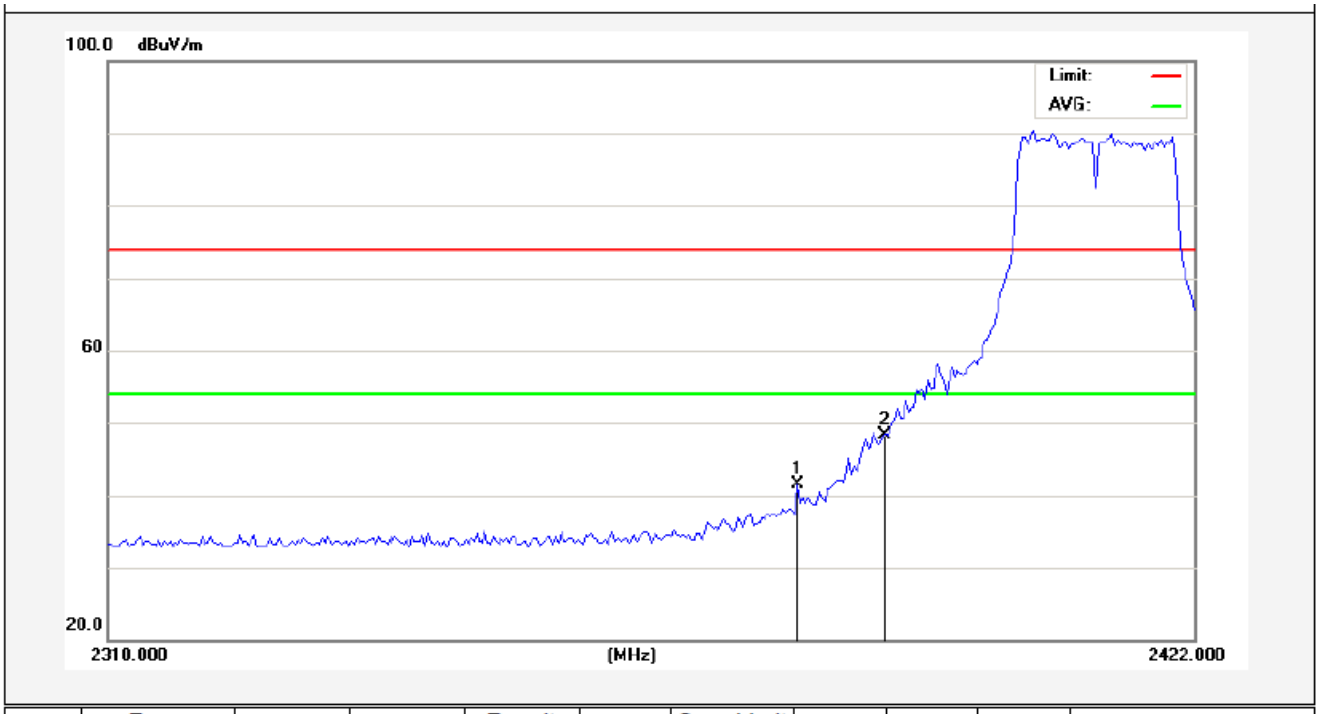


No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2483.500	36.29	-2.31	33.98	74.00	-40.02	peak			
2	2488.863	37.88	-2.29	35.59	74.00	-38.41	peak			

Vertical-AV:

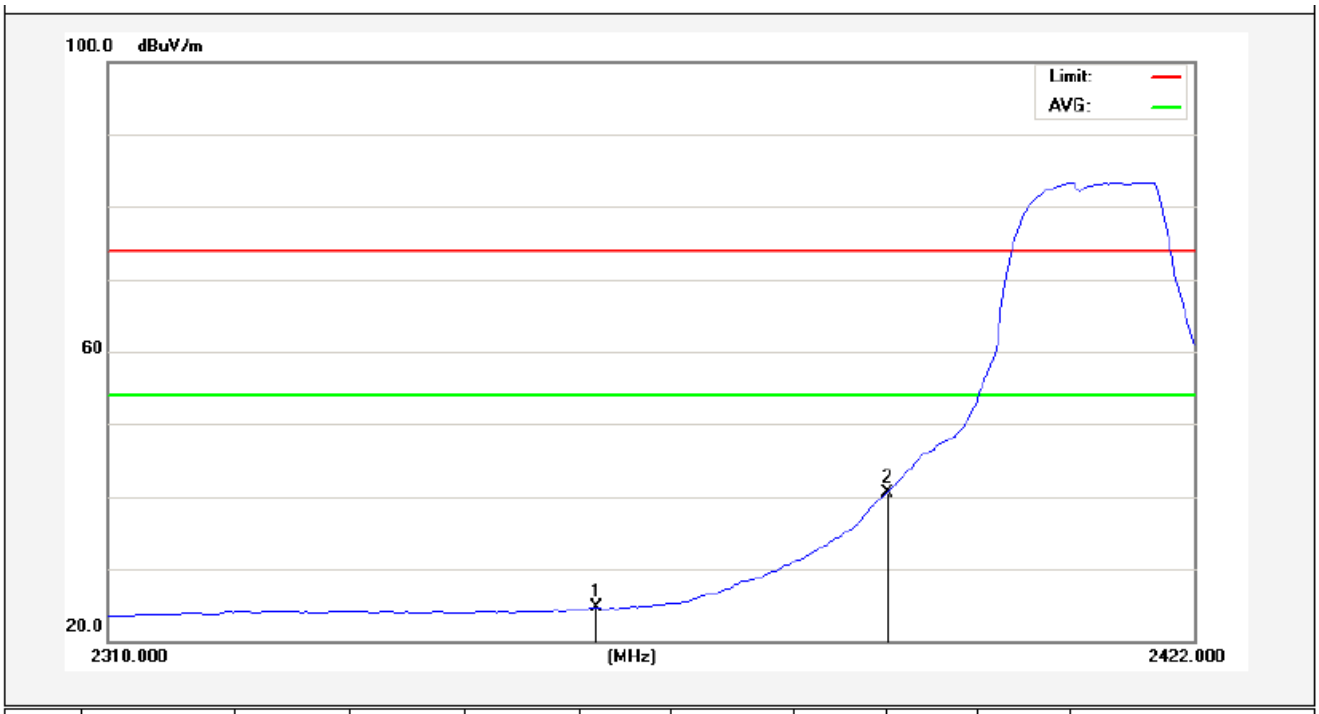
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2483.500	27.27	-2.31	24.96	54.00	-29.04	AVG			
2	2487.850	28.61	-2.30	26.31	54.00	-27.69	AVG			

Test Mode: 802.11g
2412MHz
Horizontal-PEAK:



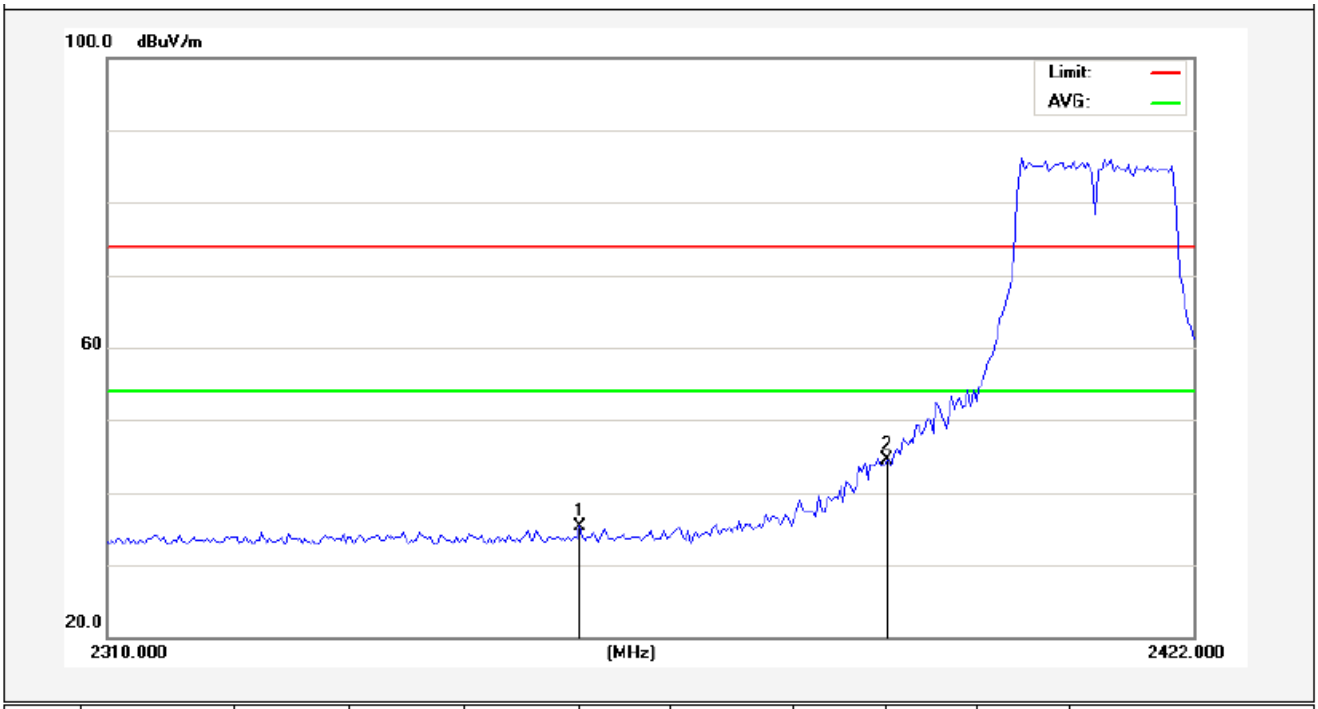
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2380.560	43.98	-2.54	41.44	74.00	-32.56	peak			
2	2390.000	50.78	-2.51	48.27	74.00	-25.73	peak			

Horizontal-AV:



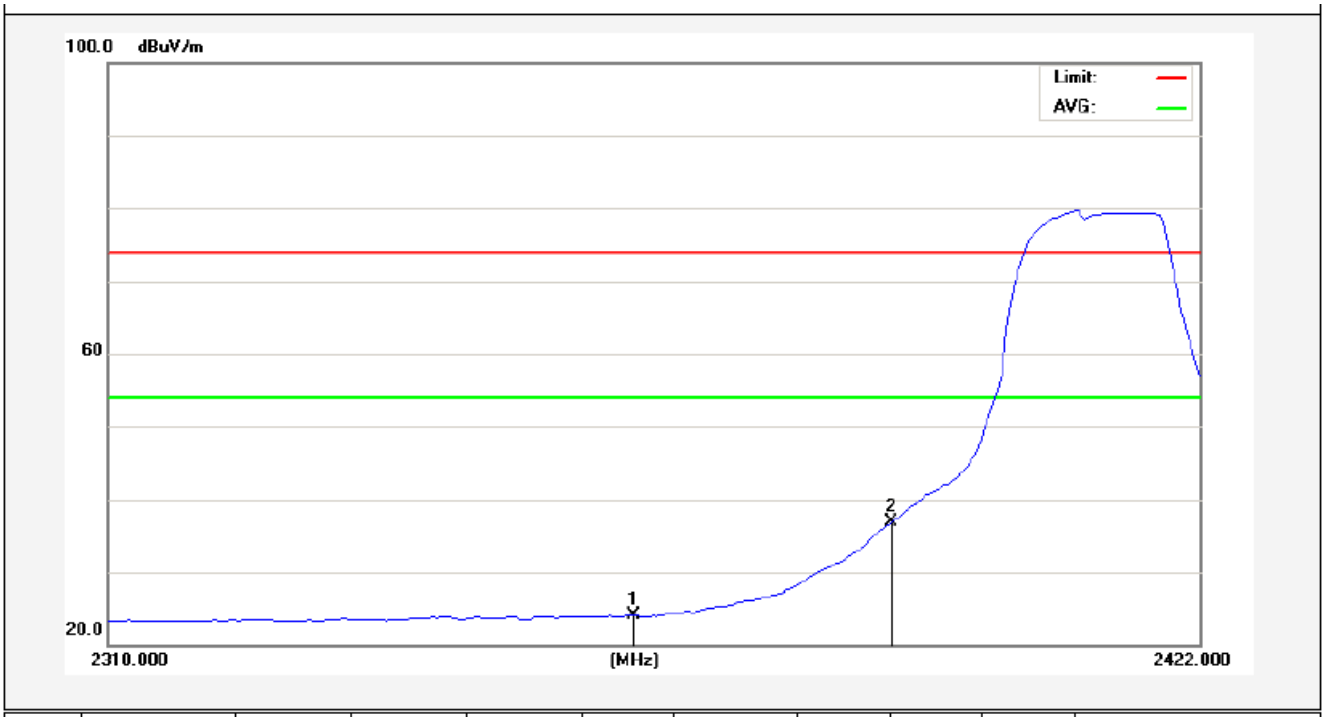
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2359.840	27.24	-2.58	24.66	54.00	-29.34	AVG			
2	2390.000	43.11	-2.51	40.60	54.00	-13.40	AVG			

Test Mode: 802.11g
2412MHz
Vertical-PEAK:



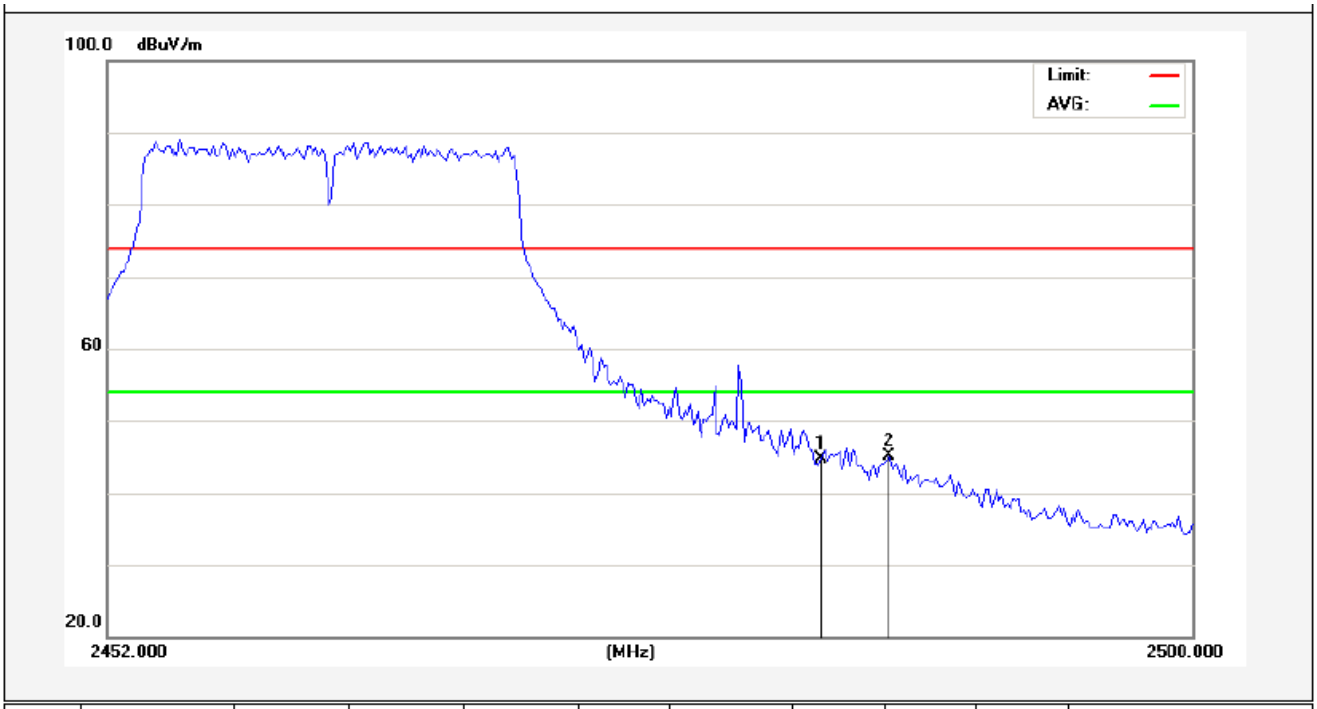
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2358.160	37.98	-2.58	35.40	74.00	-38.60	peak			
2	2390.000	46.92	-2.51	44.41	74.00	-29.59	peak			

Vertical-AV:



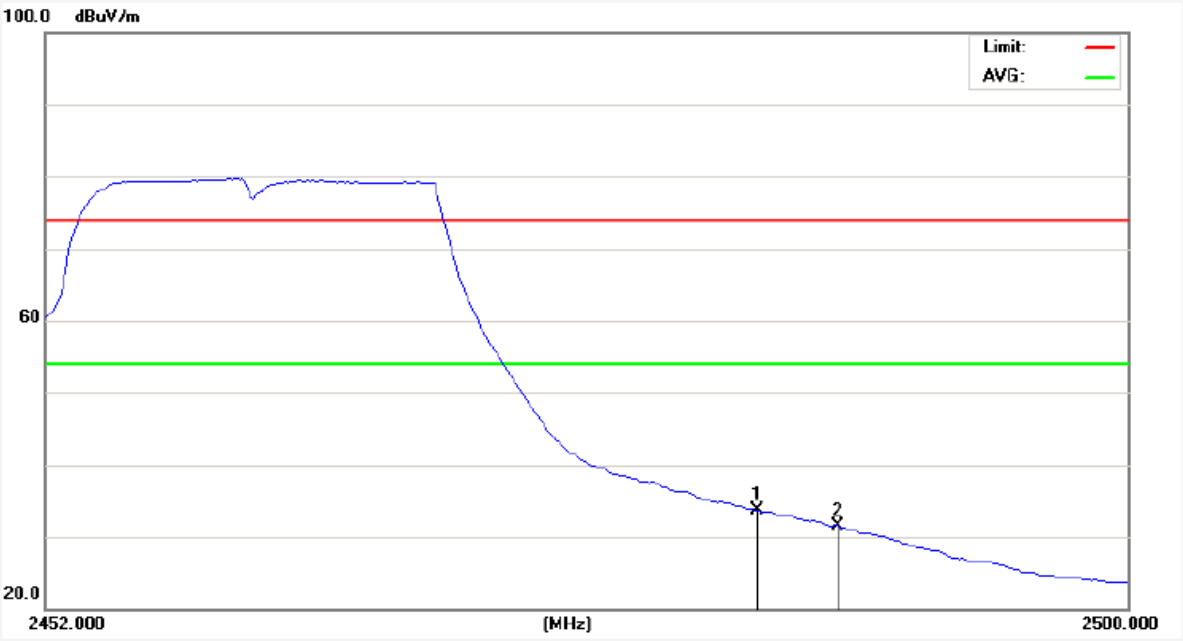
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2363.480	26.69	-2.57	24.12	54.00	-29.88	AVG			
2	2390.000	39.39	-2.51	36.88	54.00	-17.12	AVG			

Test Mode: 802.11g
2462MHz
Horizontal-PEAK:



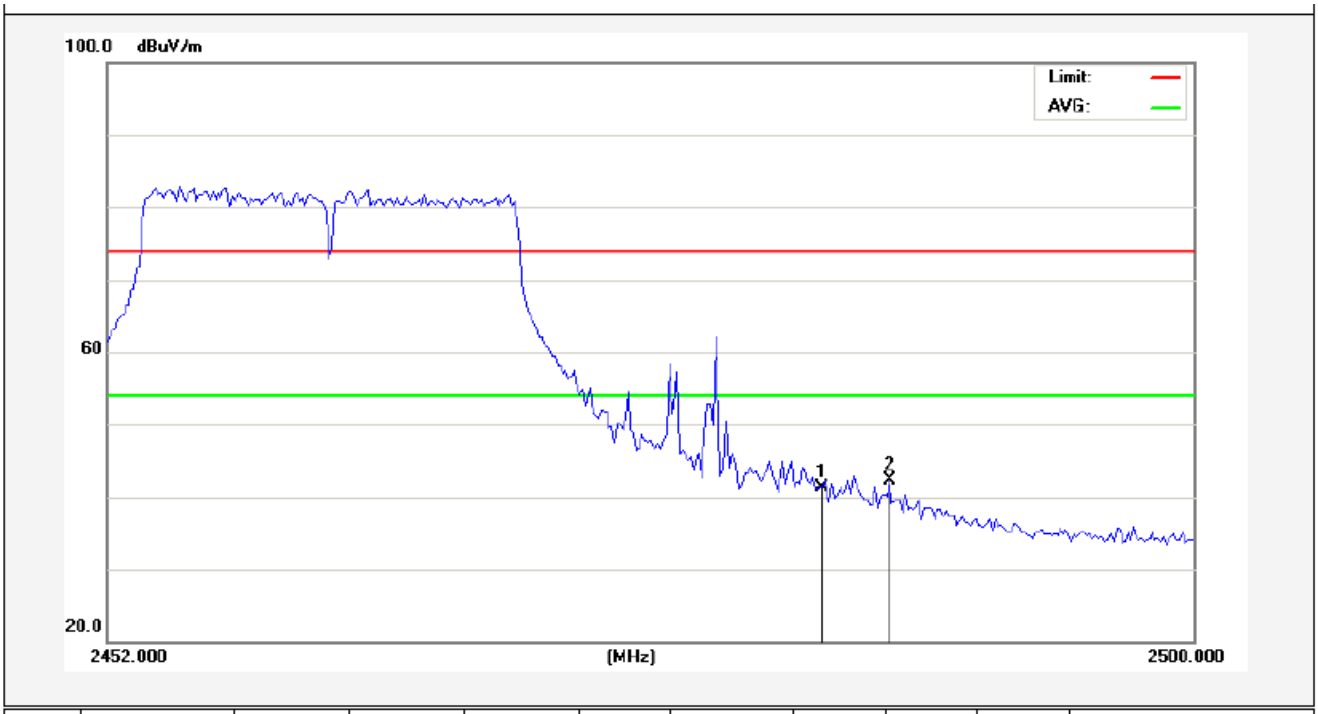
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2483.500	46.93	-2.31	44.62	74.00	-29.38	peak			
2	2486.560	47.48	-2.30	45.18	74.00	-28.82	peak			

Horizontal-AV:



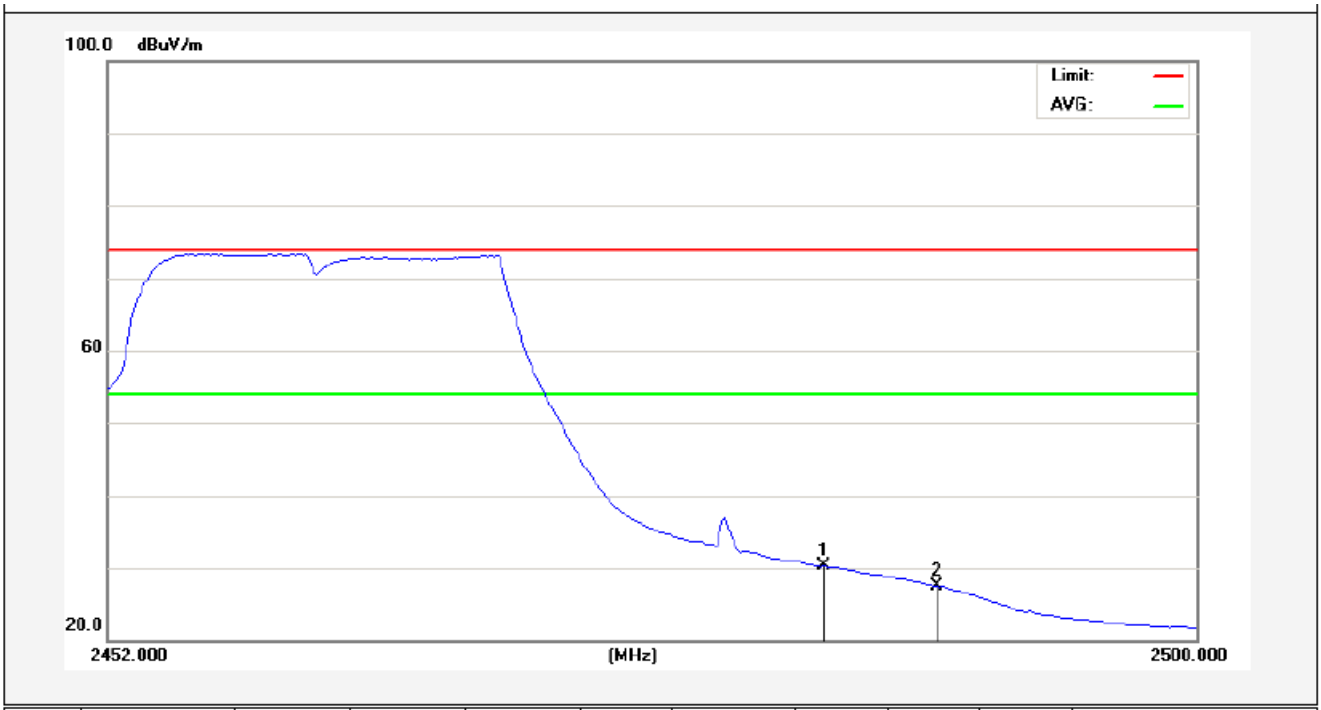
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2483.500	36.00	-2.31	33.69	54.00	-20.31	AVG			
2	2487.160	33.76	-2.30	31.46	54.00	-22.54	AVG			

Test Mode: 802.11g
2462MHz
Vertical-PEAK:



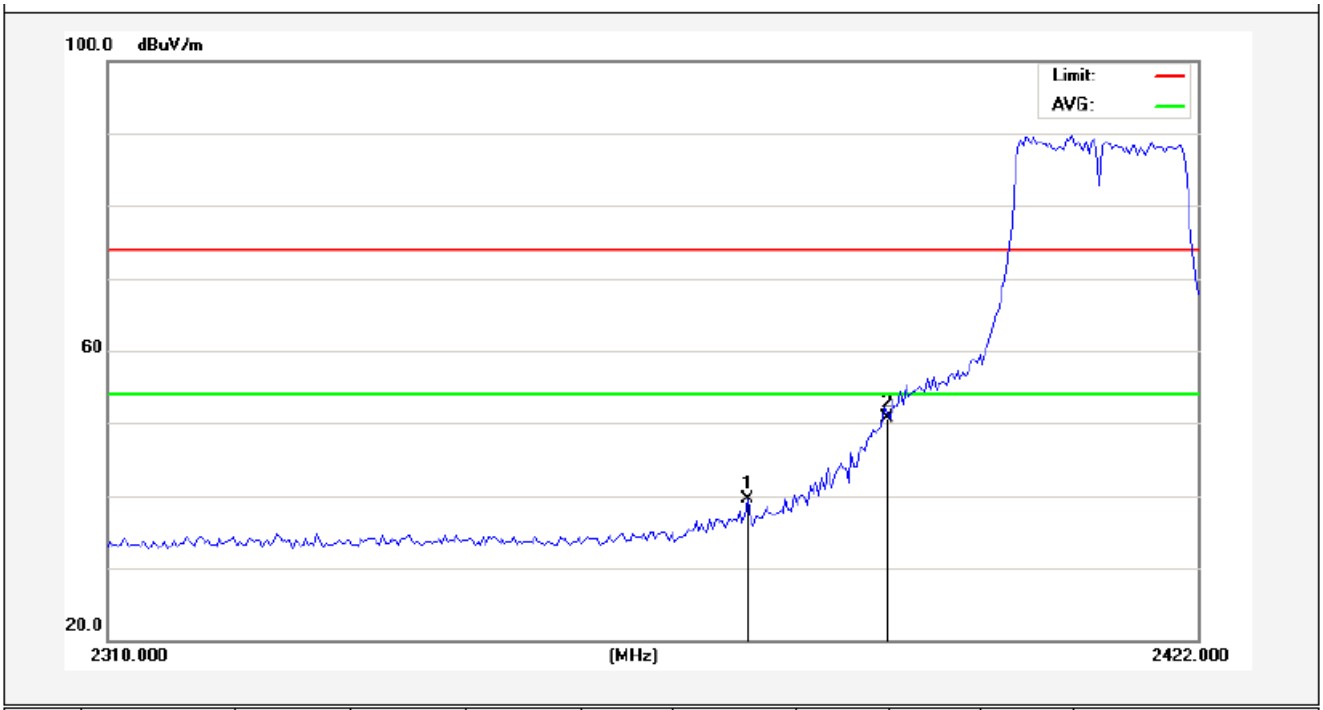
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2483.500	43.57	-2.31	41.26	74.00	-32.74	peak			
2	2486.560	44.56	-2.30	42.26	74.00	-31.74	peak			

Vertical-AV:



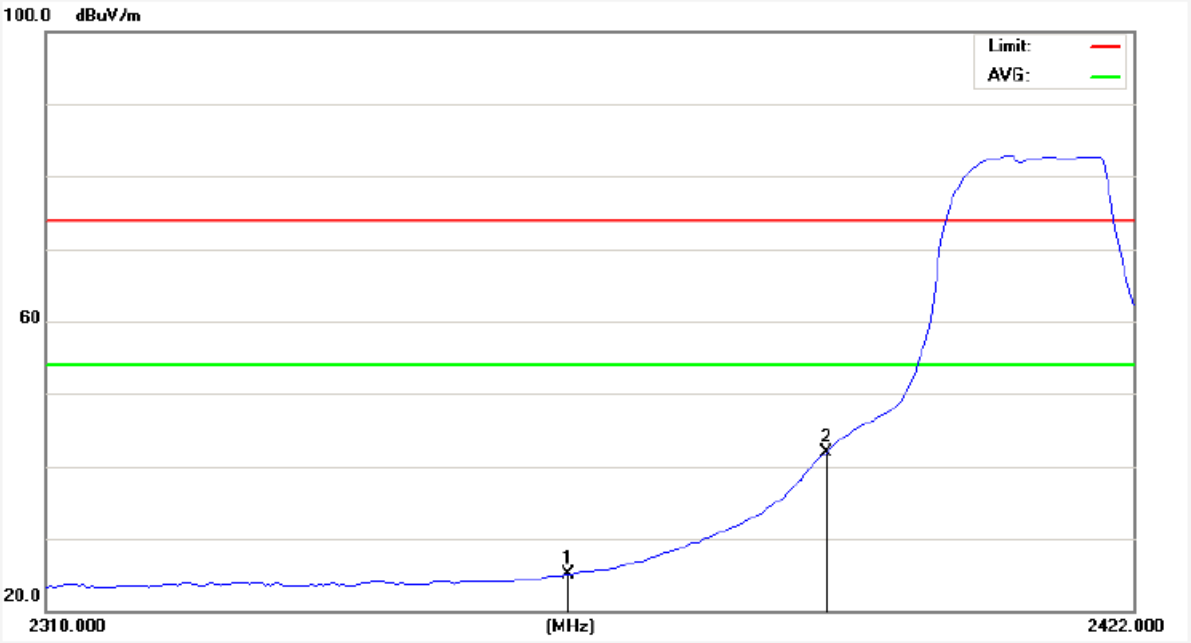
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2483.500	32.54	-2.31	30.23	54.00	-23.77	AVG			
2	2488.600	29.76	-2.30	27.46	54.00	-26.54	AVG			

Test Mode: 802.11n (HT20)
2412MHz
Horizontal-PEAK:



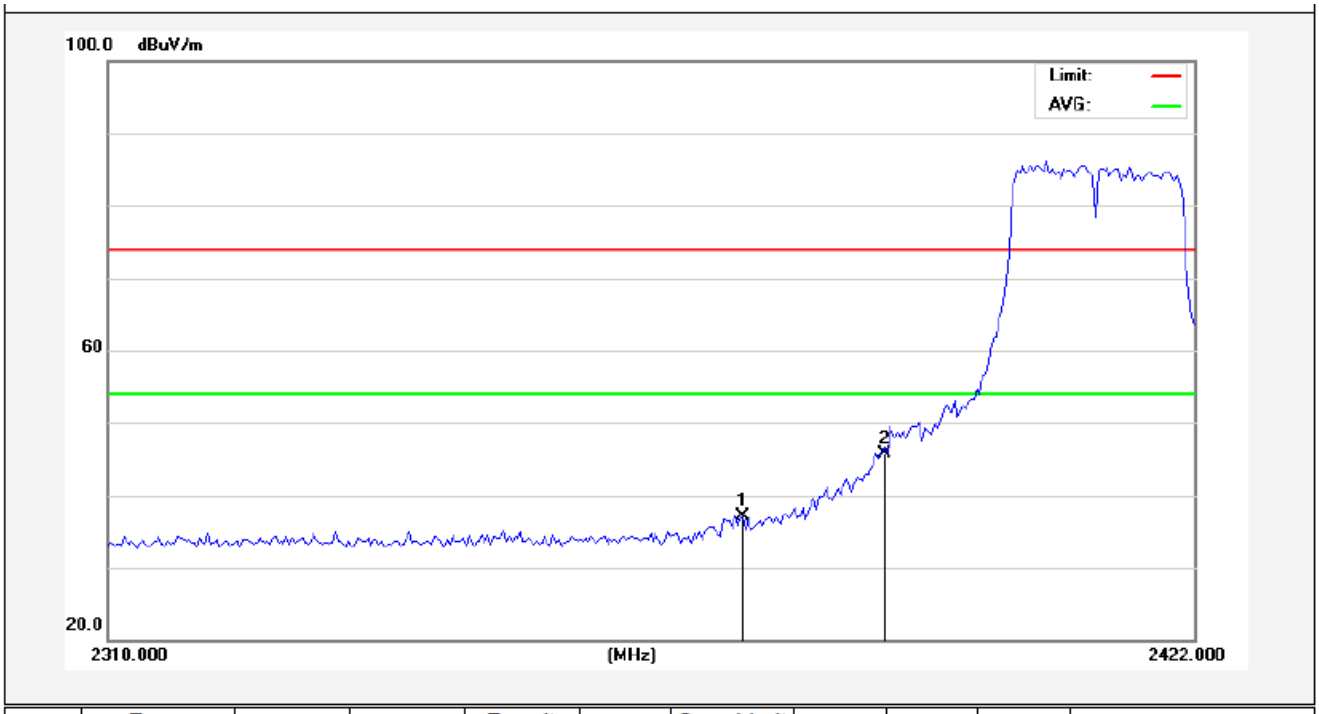
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2375.240	42.11	-2.55	39.56	74.00	-34.44	peak			
2	2390.000	53.18	-2.51	50.67	74.00	-23.33	peak			

Horizontal-AV:



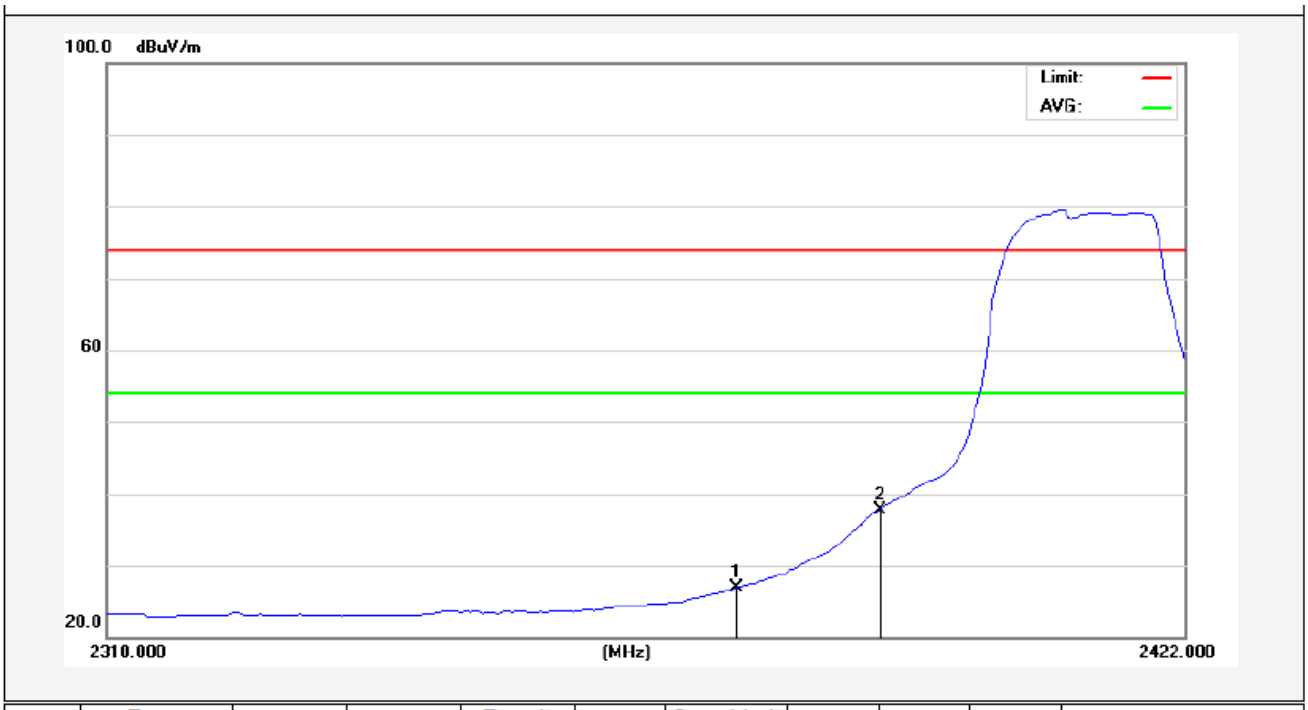
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2363.200	27.74	-2.57	25.17	54.00	-28.83	AVG			
2	2390.000	44.34	-2.51	41.83	54.00	-12.17	AVG			

Test Mode: 802.11n (HT20)
2412MHz
Vertical-PEAK:



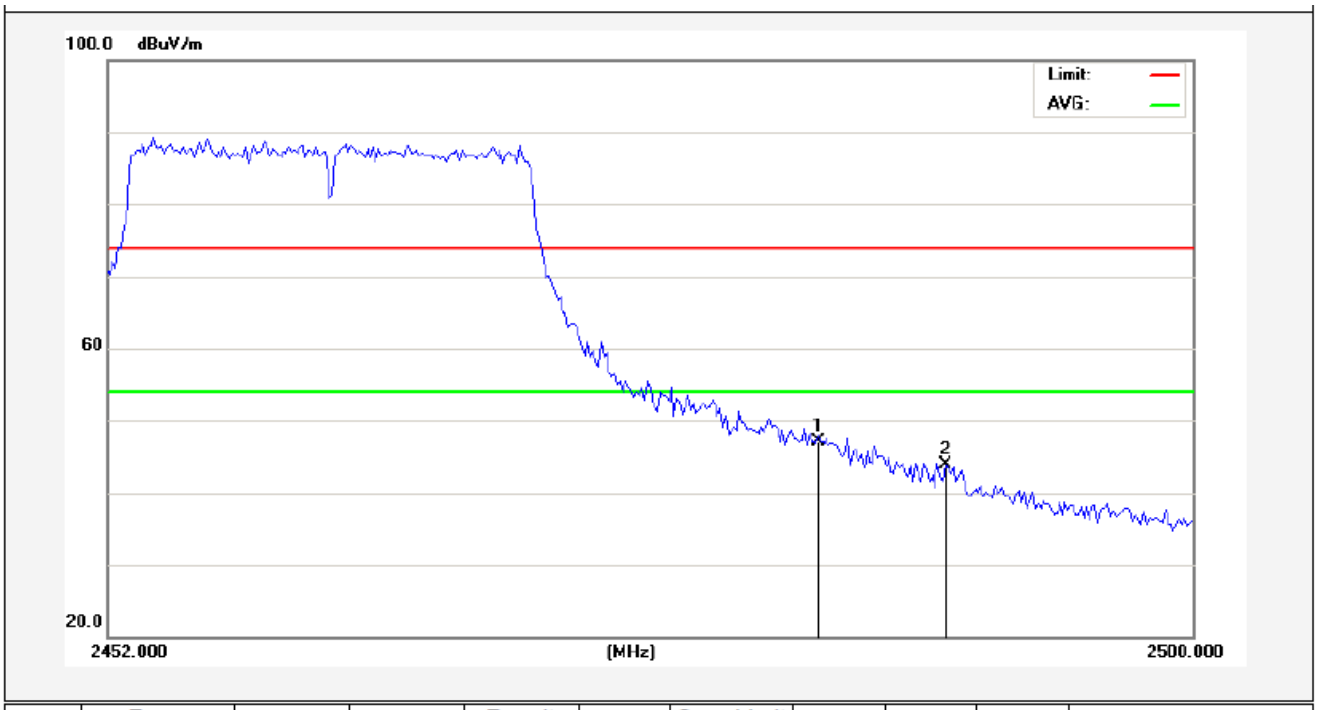
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2374.960	39.71	-2.55	37.16	74.00	-36.84	peak			
2	2390.000	48.17	-2.51	45.66	74.00	-28.34	peak			

Vertical-AV:



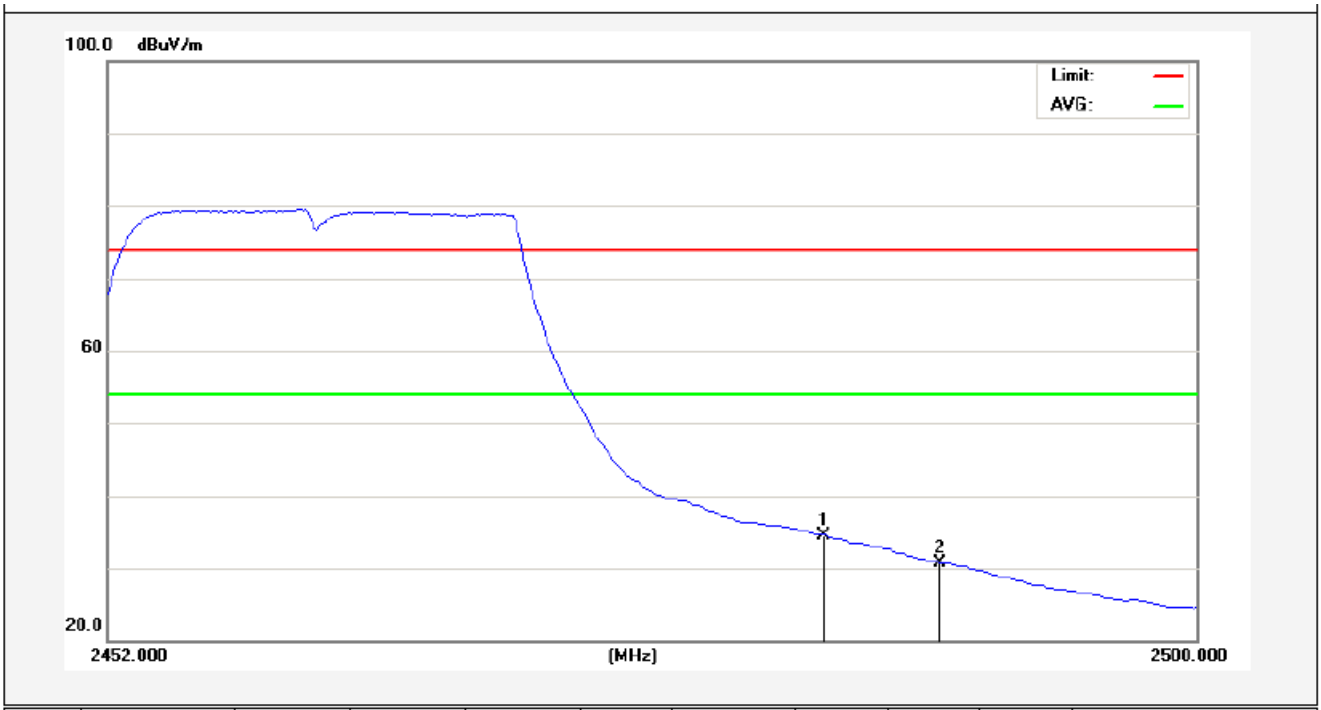
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2374.960	29.38	-2.55	26.83	54.00	-27.17	AVG			
2	2390.000	40.25	-2.51	37.74	54.00	-16.26	AVG			

Test Mode: 802.11n (HT20)
2462MHz
Horizontal-PEAK:



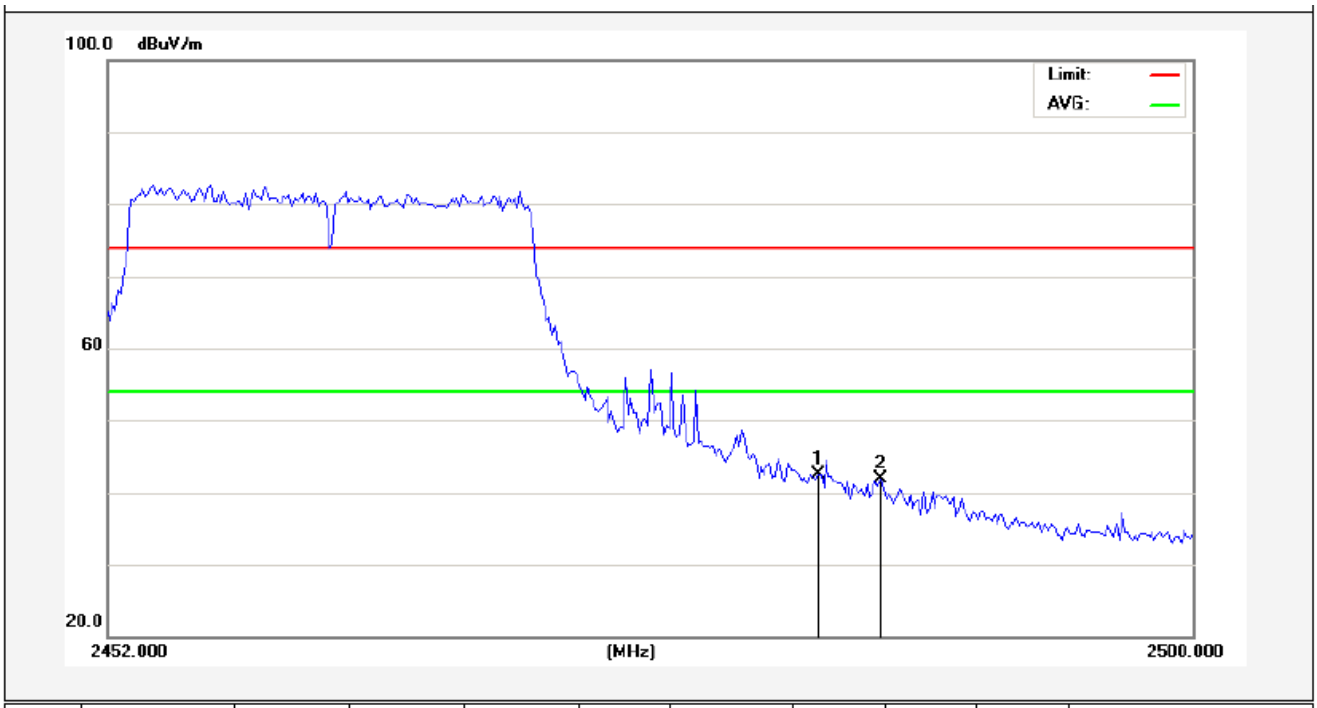
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2483.500	49.46	-2.31	47.15	74.00	-26.85	peak			
2	2489.080	46.27	-2.29	43.98	74.00	-30.02	peak			

Horizontal-AV:



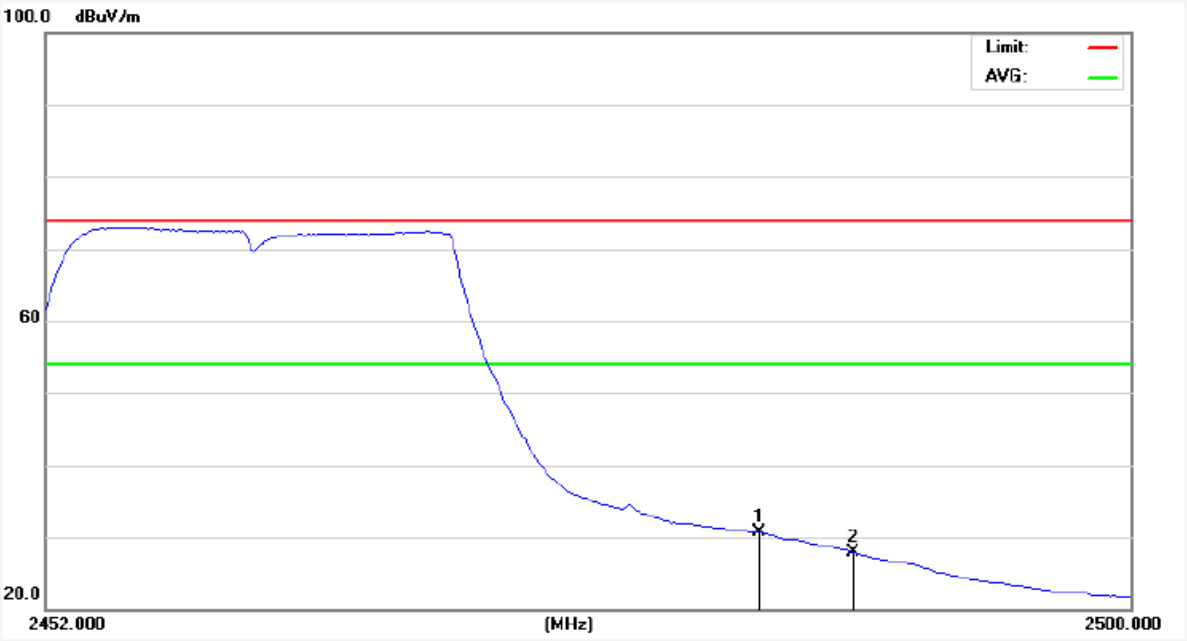
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2483.500	36.91	-2.31	34.60	54.00	-19.40	AVG			
2	2488.720	33.06	-2.30	30.76	54.00	-23.24	AVG			

Test Mode: 802.11n (HT20)
2462MHz
Vertical-PEAK:



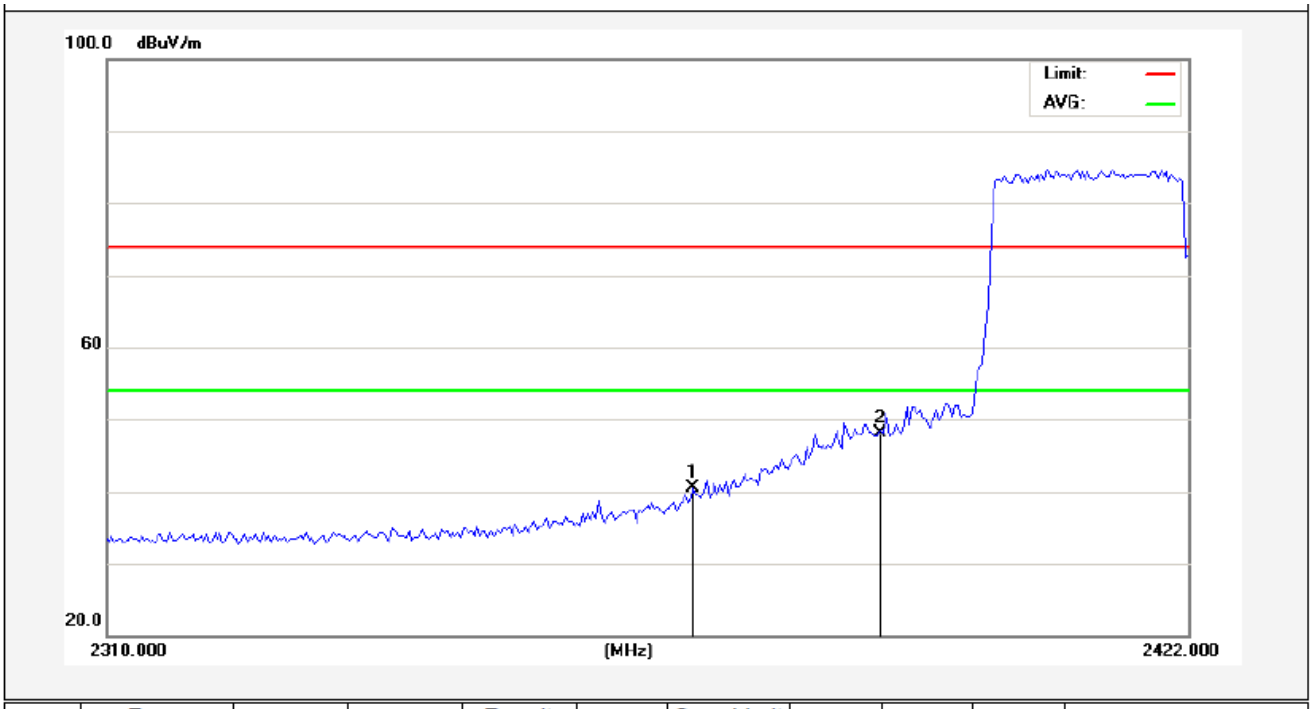
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2483.500	44.79	-2.31	42.48	74.00	-31.52	peak			
2	2486.200	44.18	-2.30	41.88	74.00	-32.12	peak			

Vertical-AV:



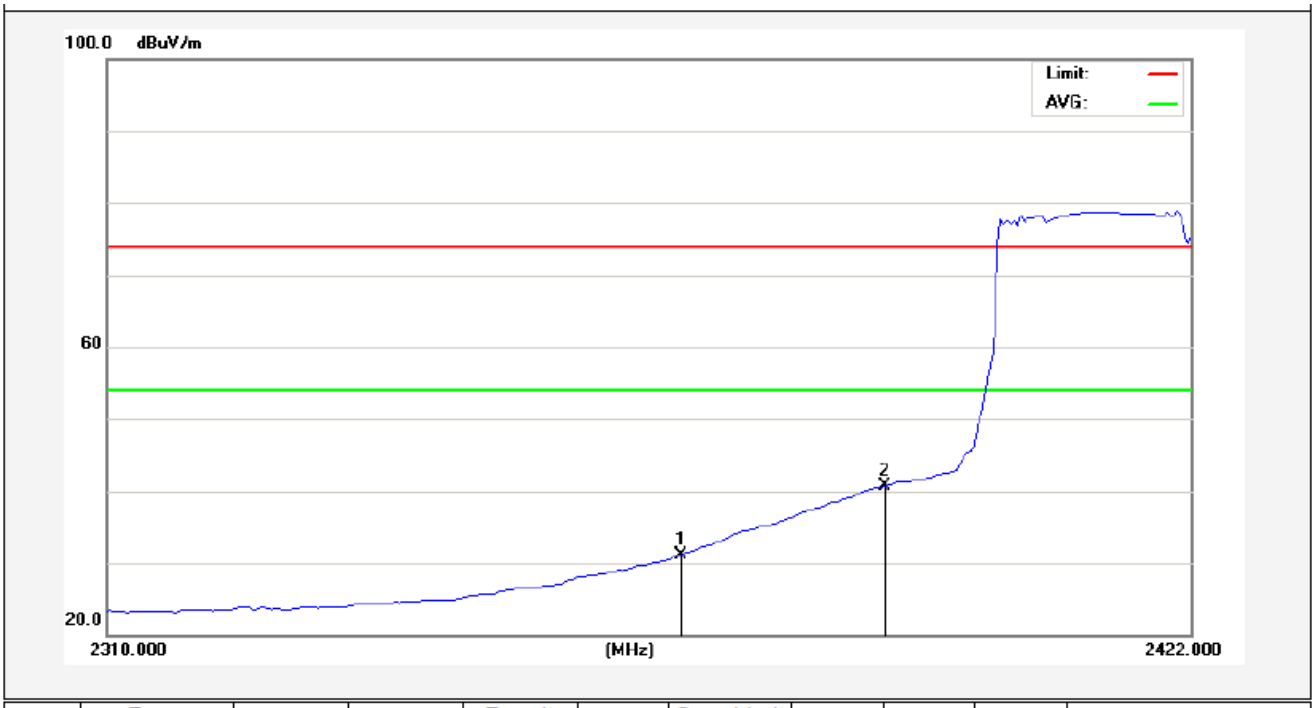
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2483.500	33.06	-2.31	30.75	54.00	-23.25	AVG			
2	2487.760	30.15	-2.30	27.85	54.00	-26.15	AVG			

Test Mode: 802.11n (HT40)
2422MHz
Horizontal-PEAK:



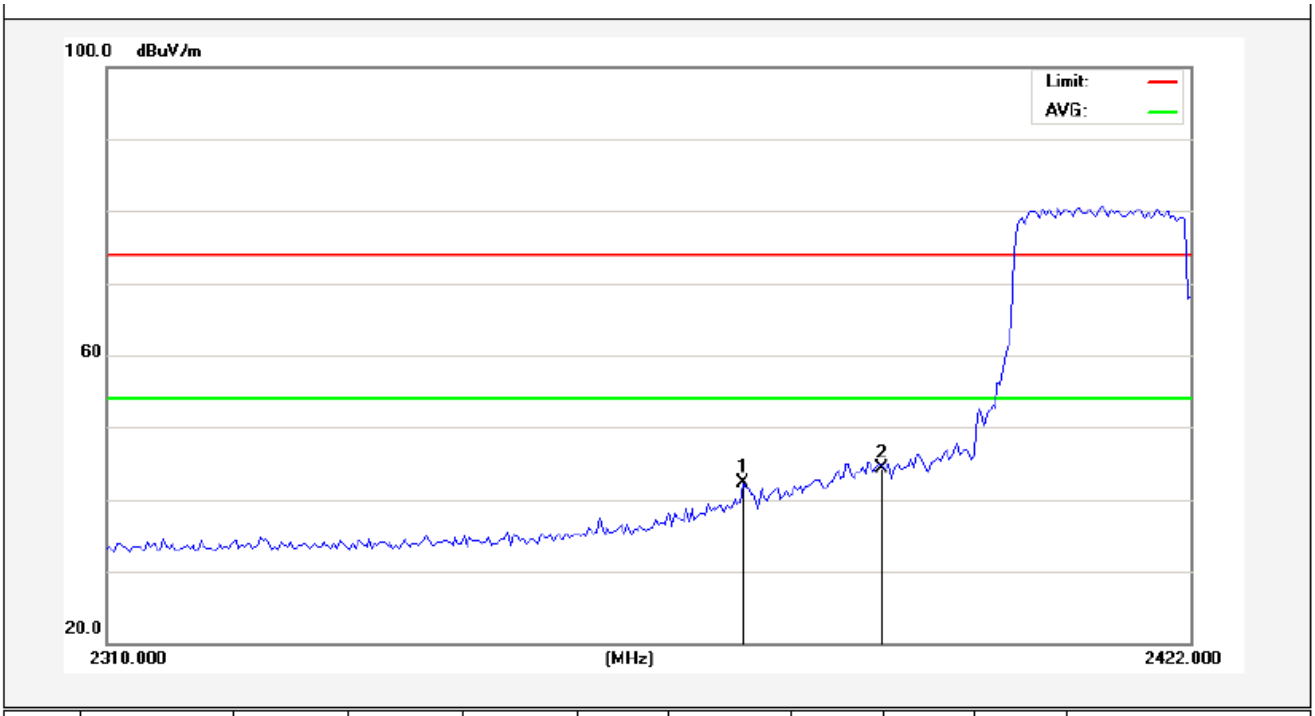
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2370.200	43.11	-2.56	40.55	74.00	-33.45	peak			
2	2390.000	50.56	-2.51	48.05	74.00	-25.95	peak			

Horizontal-AV:



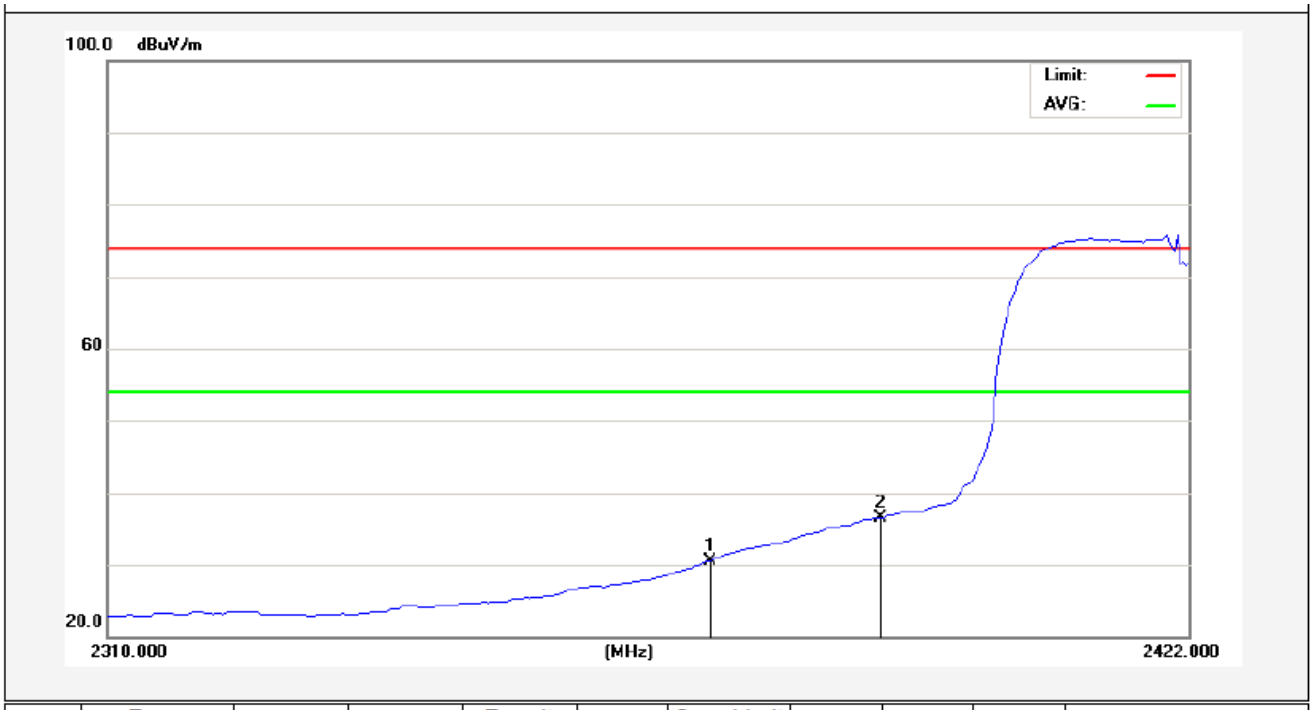
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2368.520	33.64	-2.56	31.08	54.00	-22.92	AVG			
2	2390.000	43.15	-2.51	40.64	54.00	-13.36	AVG			

Test Mode: 802.11n (HT40)
2422MHz
Vertical-PEAK:



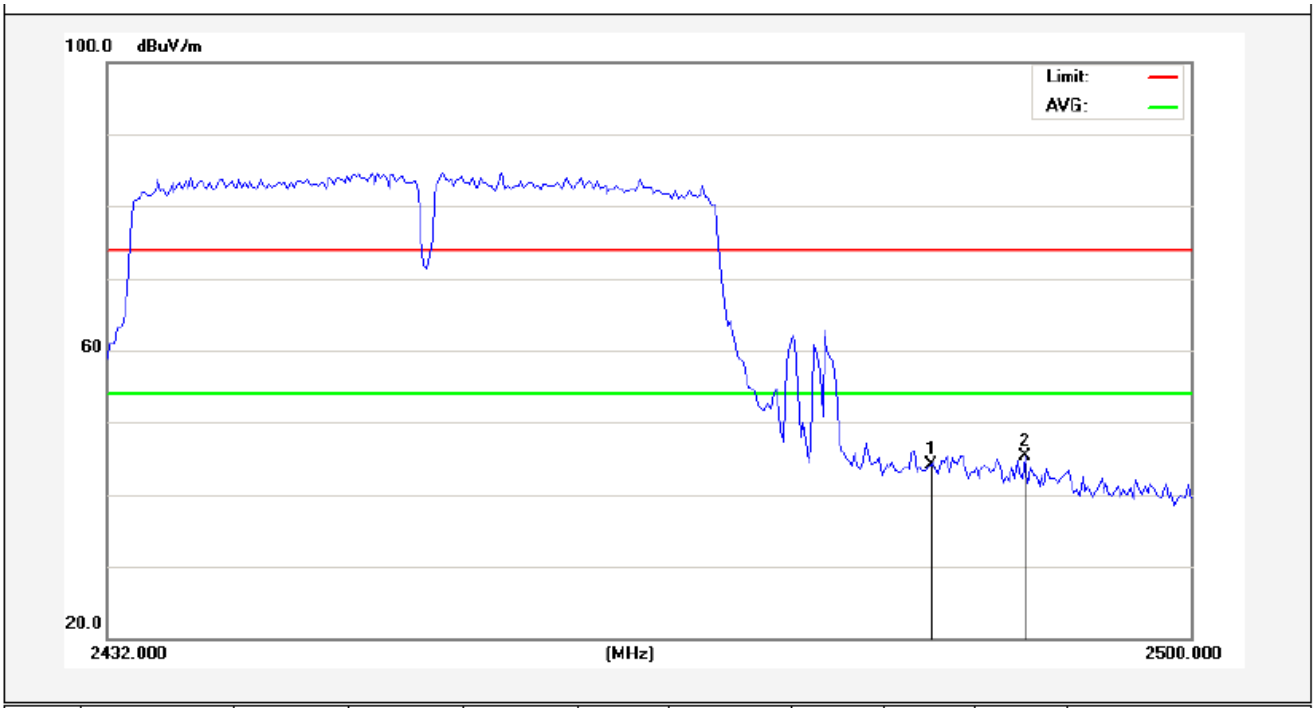
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2375.240	44.82	-2.55	42.27	74.00	-31.73	peak			
2	2390.000	46.86	-2.51	44.35	74.00	-29.65	peak			

Vertical-AV:



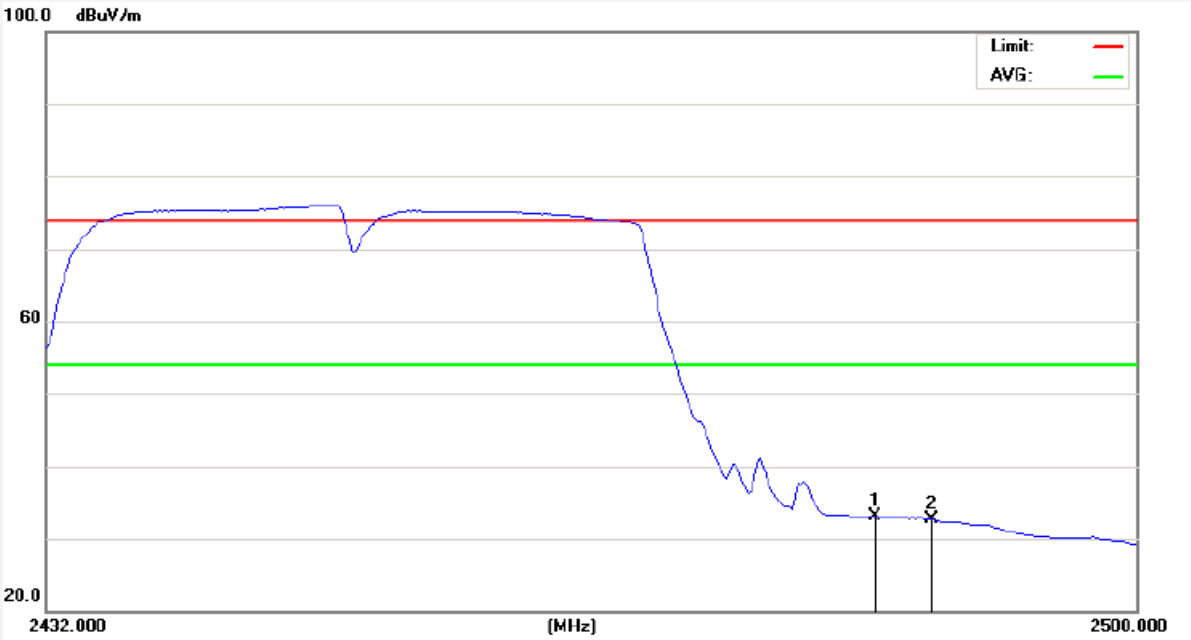
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2371.600	33.03	-2.56	30.47	54.00	-23.53	AVG			
2	2390.000	39.04	-2.51	36.53	54.00	-17.47	AVG			

Test Mode: 802.11n (HT40)
2452MHz
Horizontal-PEAK:



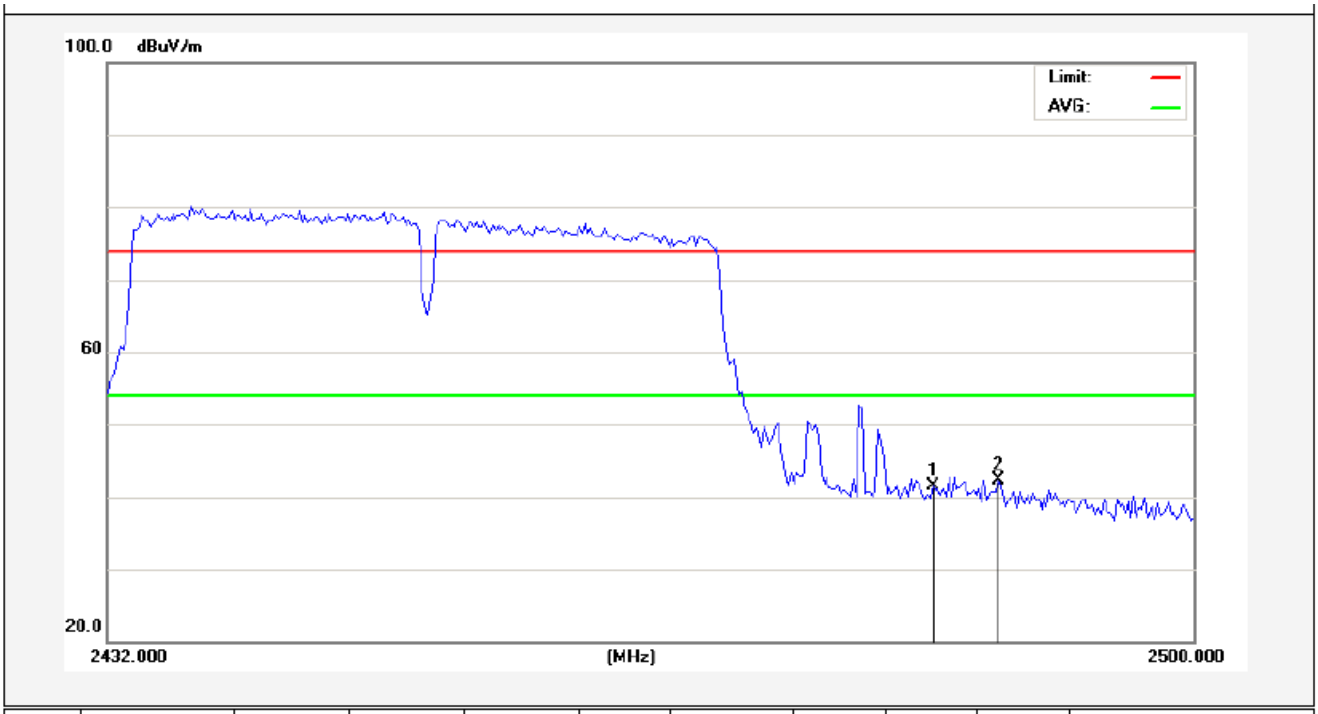
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2483.500	46.39	-2.31	44.08	74.00	-29.92	peak			
2	2489.630	47.57	-2.29	45.28	74.00	-28.72	peak			

Horizontal-AV:



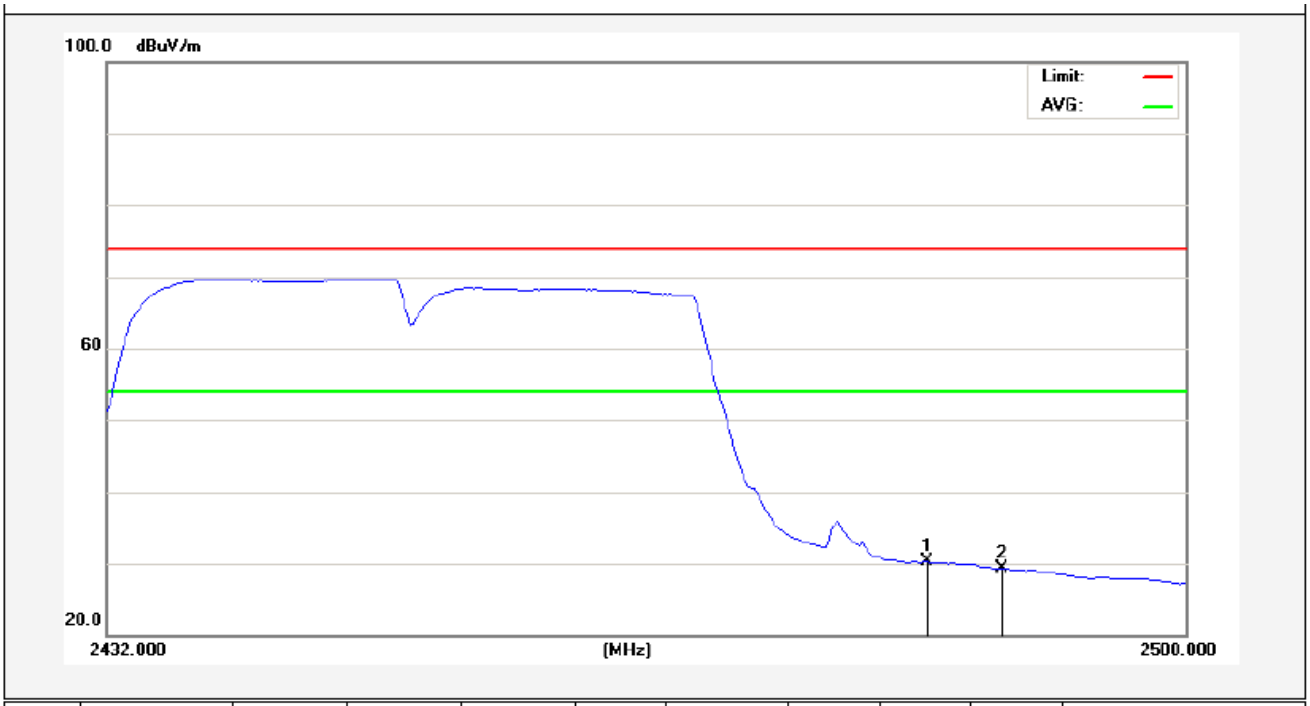
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2483.500	35.48	-2.31	33.17	54.00	-20.83	AVG			
2	2487.250	34.94	-2.30	32.64	54.00	-21.36	AVG			

Test Mode: 802.11n (HT40)
2452MHz
Vertical-PEAK:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2483.500	43.80	-2.31	41.49	74.00	-32.51	peak			
2	2487.760	44.57	-2.30	42.27	74.00	-31.73	peak			

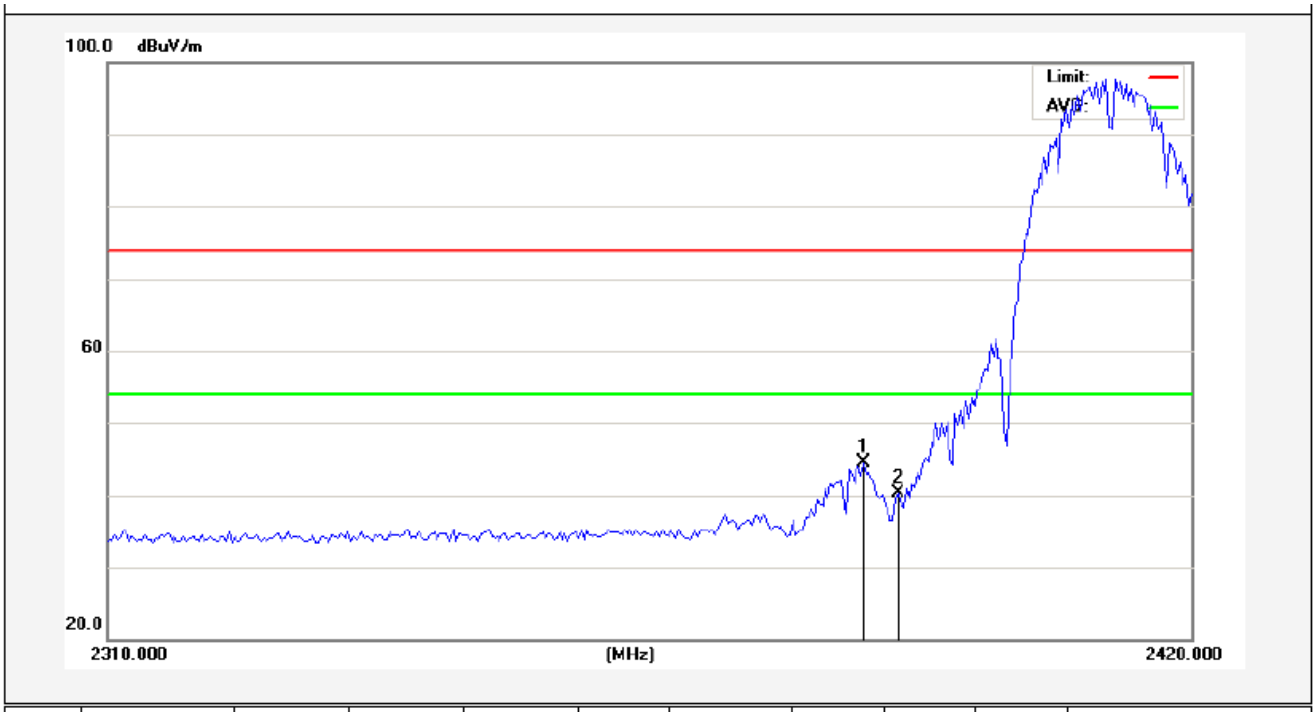
Vertical-AV:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2483.500	32.57	-2.31	30.26	54.00	-23.74	AVG			
2	2488.440	31.58	-2.30	29.28	54.00	-24.72	AVG			

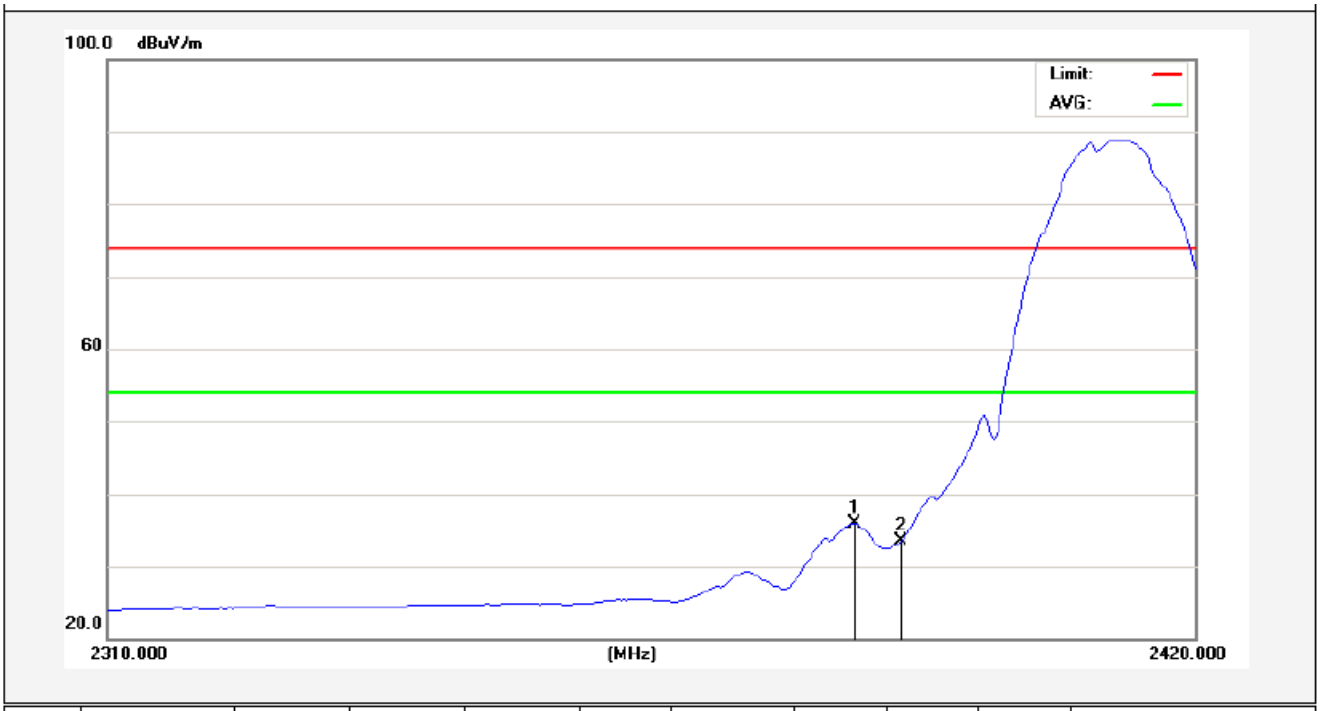
ANT B

Test Mode: 802.11b
2412MHz
Horizontal-PEAK:



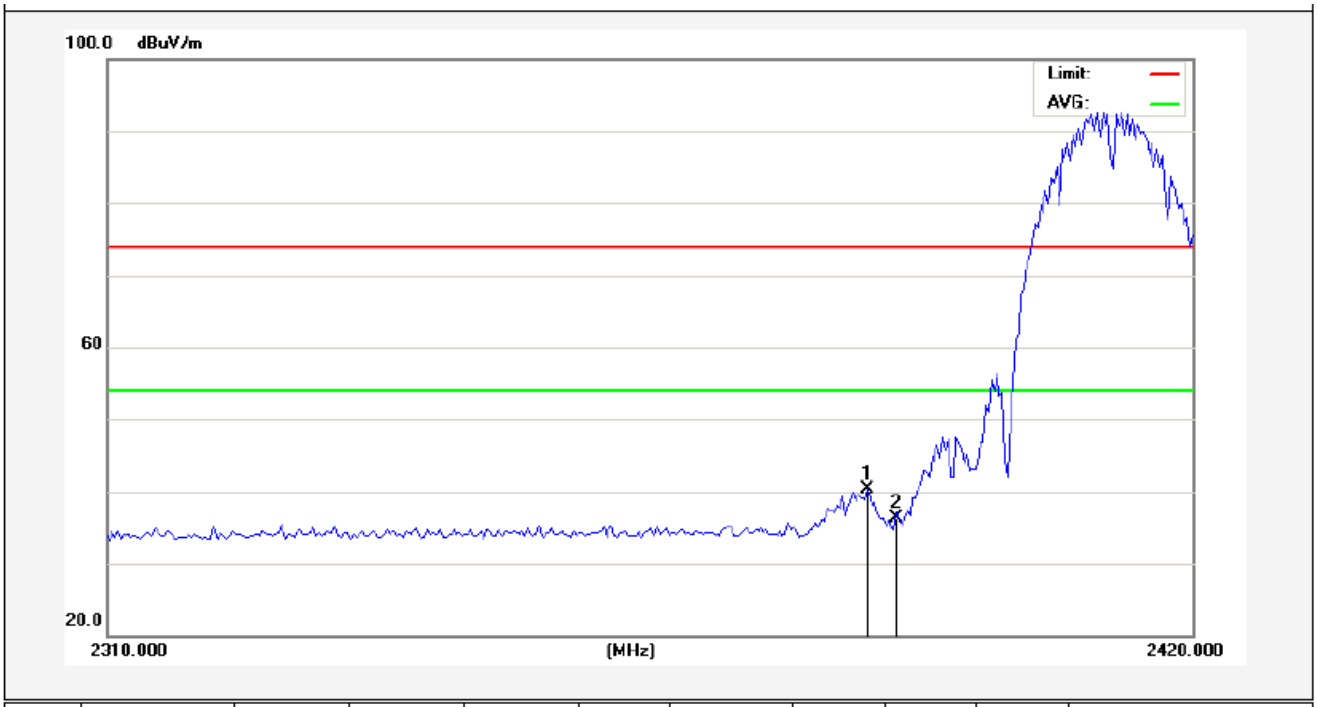
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2386.450	46.94	-2.52	44.42	74.00	-29.58	peak			
2	2390.000	42.73	-2.51	40.22	74.00	-33.78	peak			

Horizontal-AV:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2385.075	38.44	-2.53	35.91	54.00	-18.09	AVG			
2	2390.000	35.99	-2.51	33.48	54.00	-20.52	AVG			

Test Mode: 802.11b
2412MHz
Vertical-PEAK:

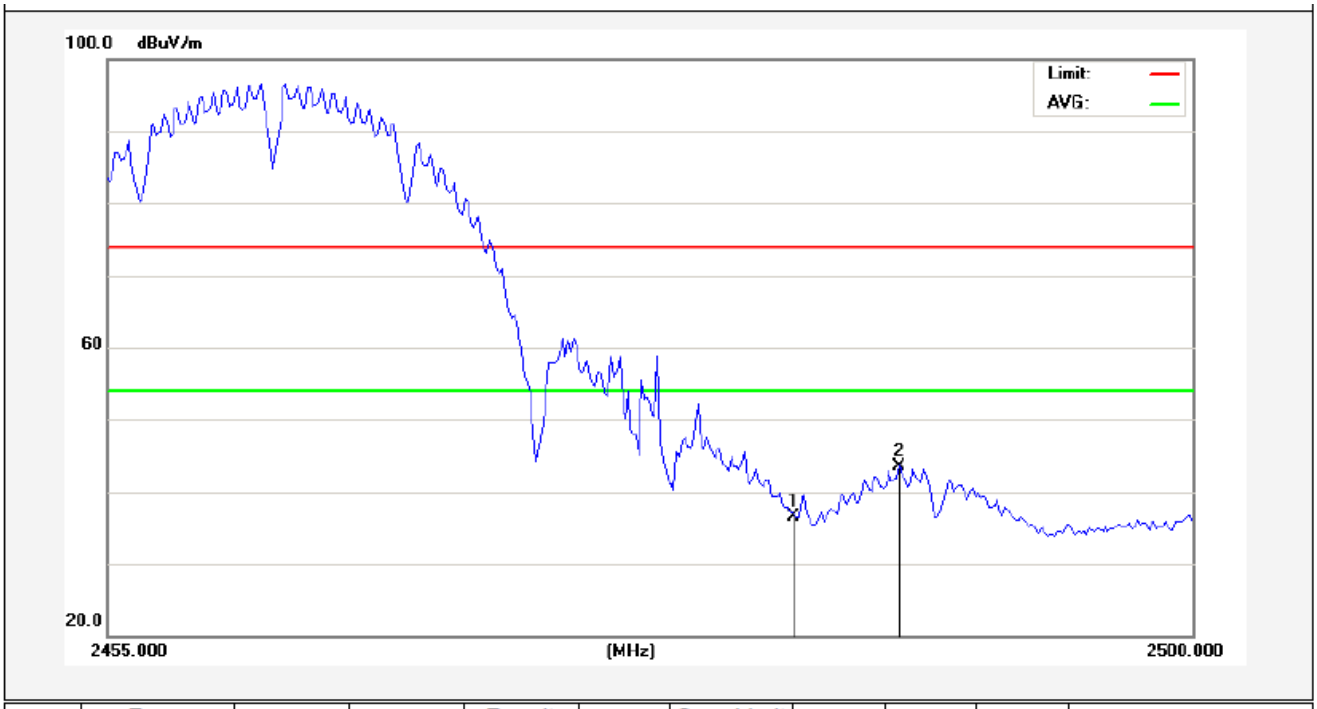


No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2386.725	42.79	-2.52	40.27	74.00	-33.73	peak			
2	2390.000	38.84	-2.51	36.33	74.00	-37.67	peak			

Vertical-AV:

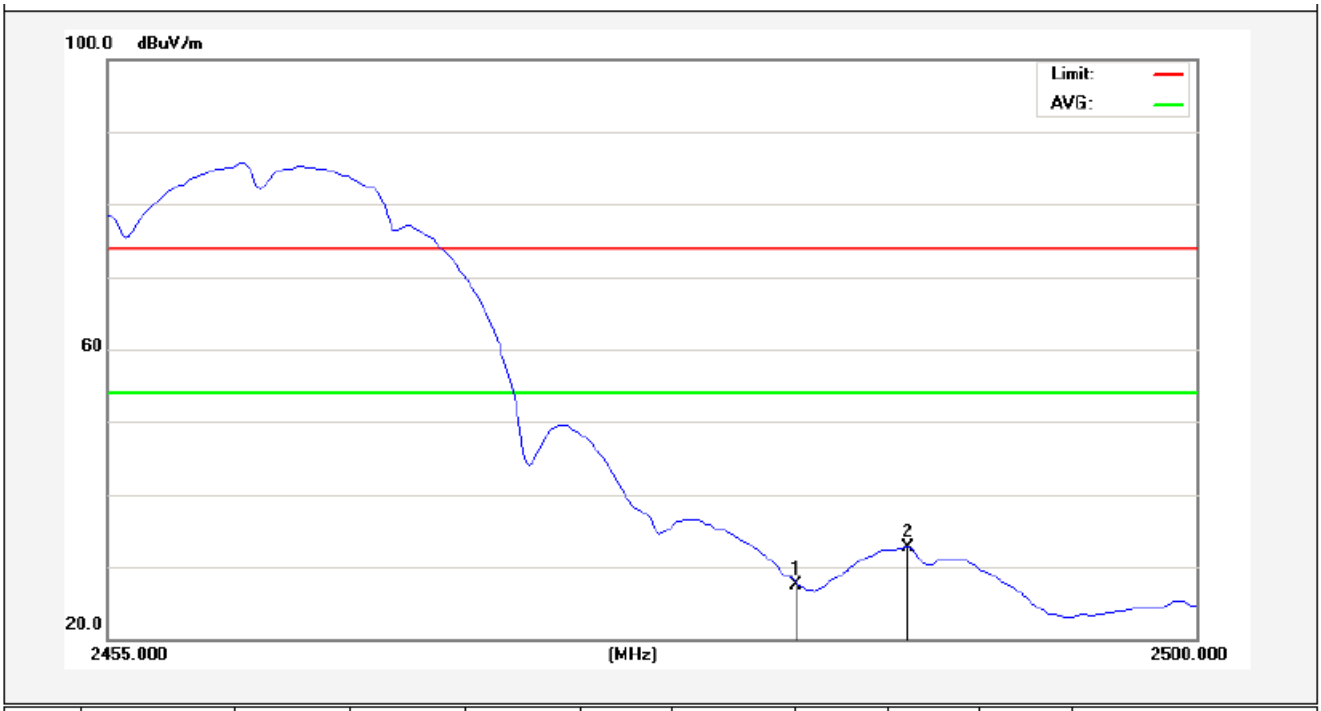
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2385.350	34.68	-2.52	32.16	54.00	-21.84	AVG			
2	2390.000	33.45	-2.51	30.94	54.00	-23.06	AVG			

Test Mode: 802.11b
2462MHz
Horizontal-PEAK:



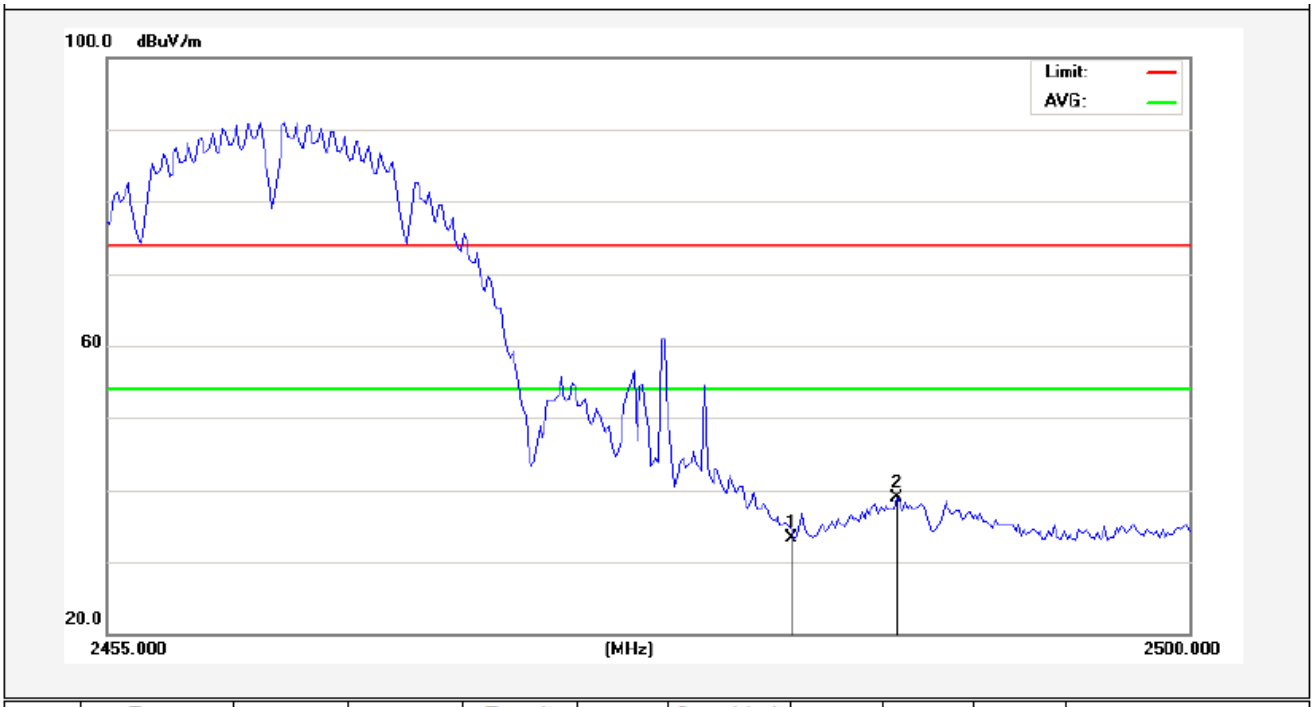
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2483.500	38.76	-2.31	36.45	74.00	-37.55	peak			
2	2487.850	45.90	-2.30	43.60	74.00	-30.40	peak			

Horizontal-AV:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2483.500	29.90	-2.31	27.59	54.00	-26.41	AVG			
2	2488.075	34.91	-2.30	32.61	54.00	-21.39	AVG			

Test Mode: 802.11b
2462MHz
Vertical-PEAK:

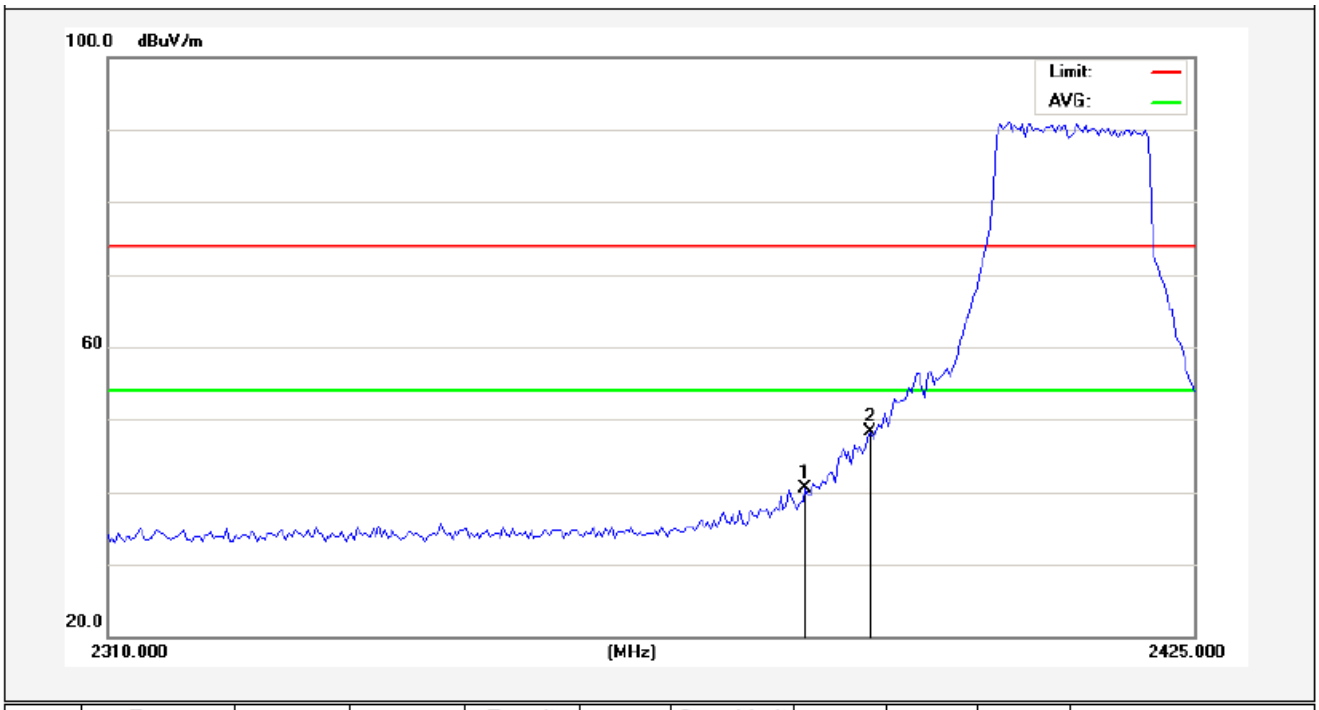


No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2483.500	35.59	-2.31	33.28	74.00	-40.72	peak			
2	2487.850	41.29	-2.30	38.99	74.00	-35.01	peak			

Vertical-AV:

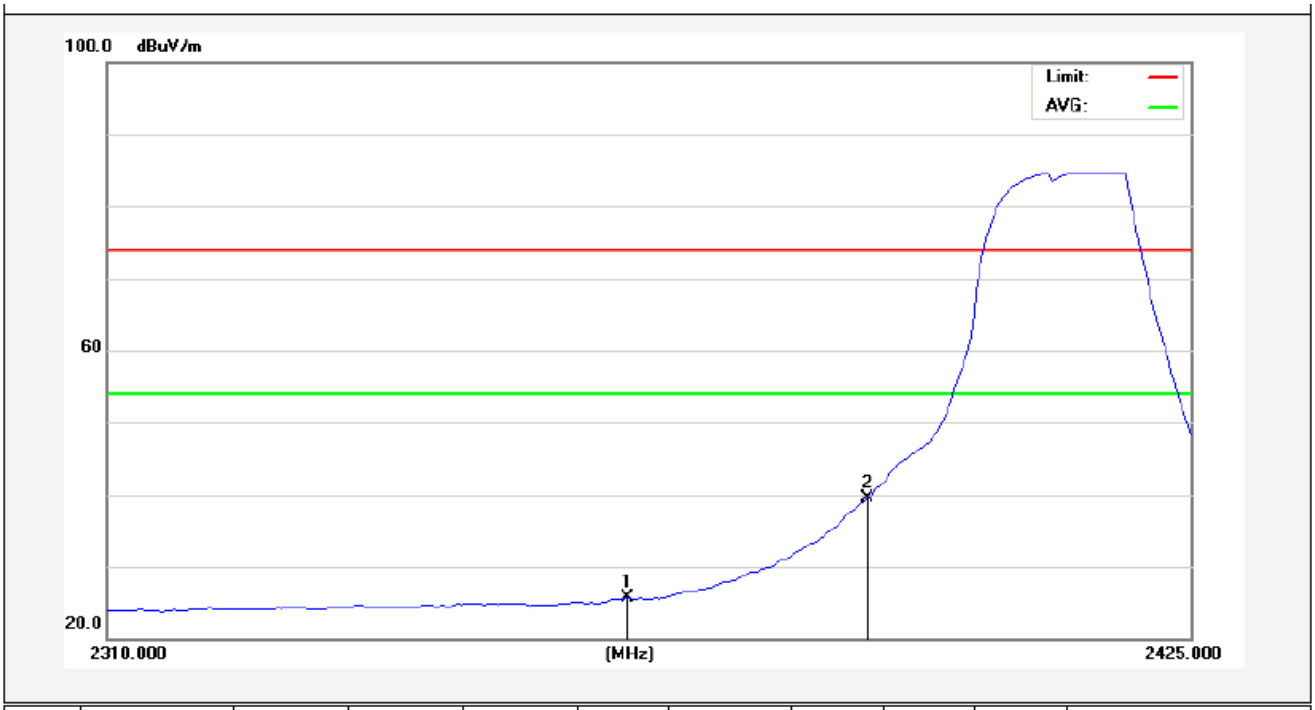
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2483.500	29.47	-2.31	27.16	54.00	-26.84	AVG			
2	2488.075	33.83	-2.30	31.53	54.00	-22.47	AVG			

Test Mode: 802.11g
2412MHz
Horizontal-PEAK:



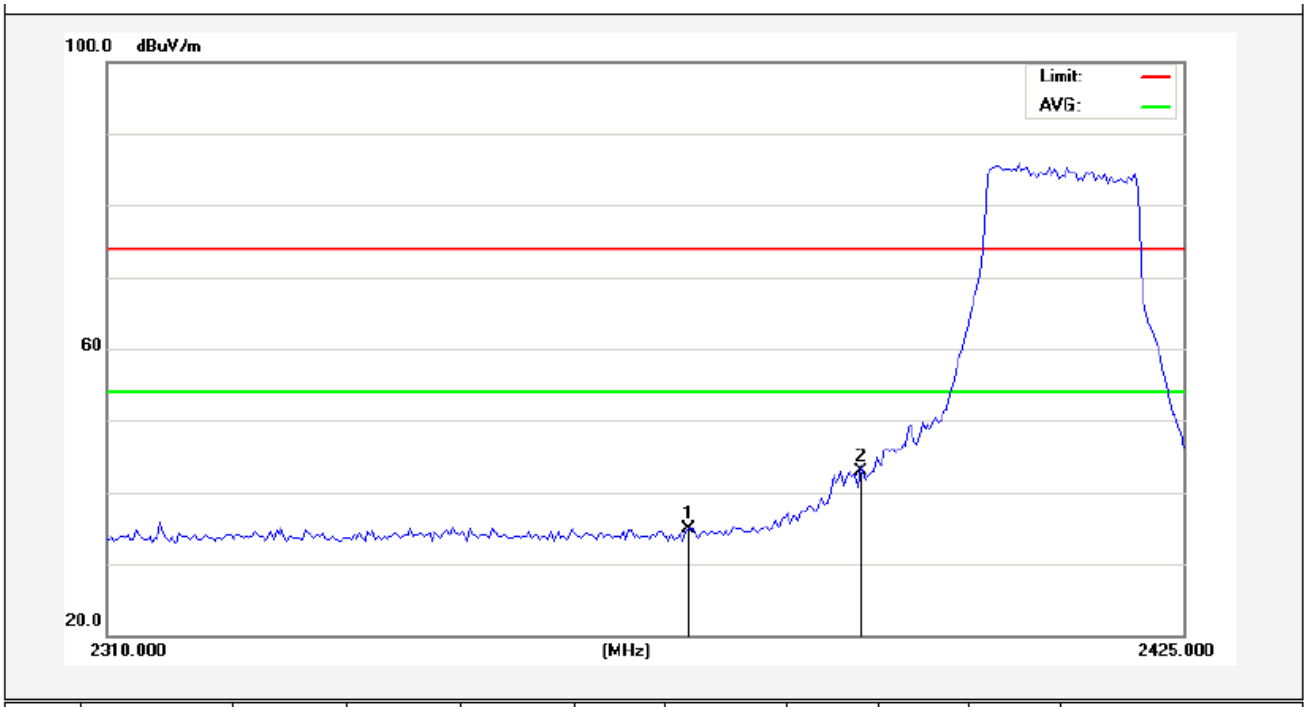
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2383.313	43.04	-2.53	40.51	74.00	-33.49	peak			
2	2390.000	50.72	-2.51	48.21	74.00	-25.79	peak			

Horizontal-AV:



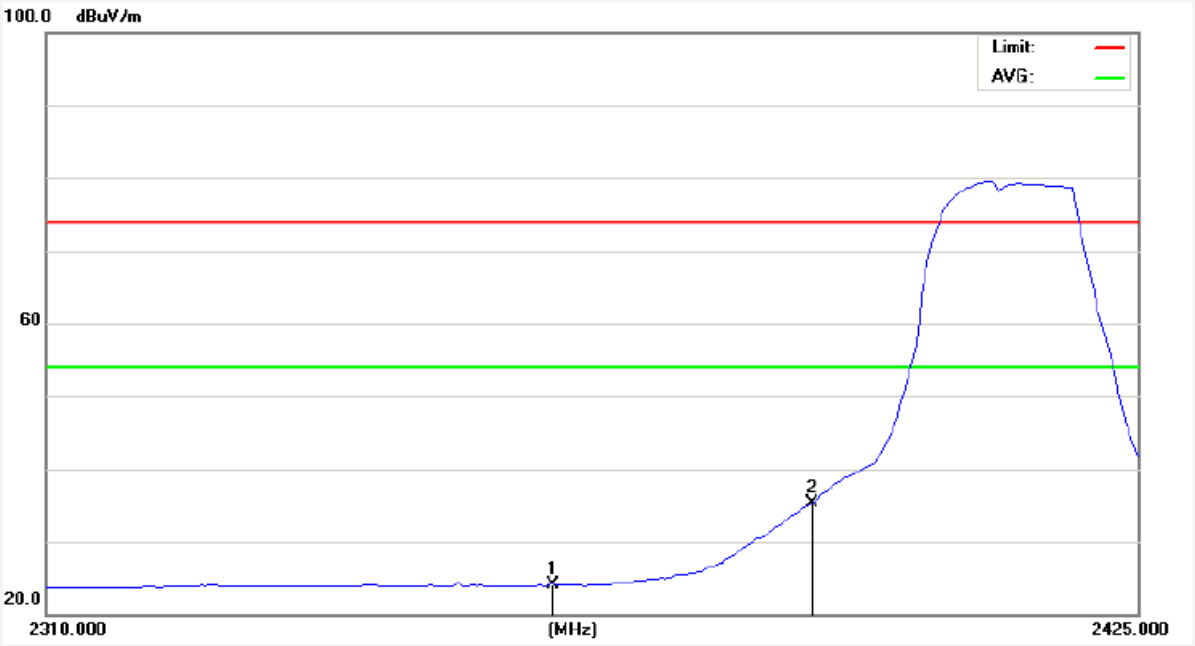
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2364.625	28.22	-2.57	25.65	54.00	-28.35	AVG			
2	2390.000	42.00	-2.51	39.49	54.00	-14.51	AVG			

Test Mode: 802.11g
2412MHz
Vertical-PEAK:



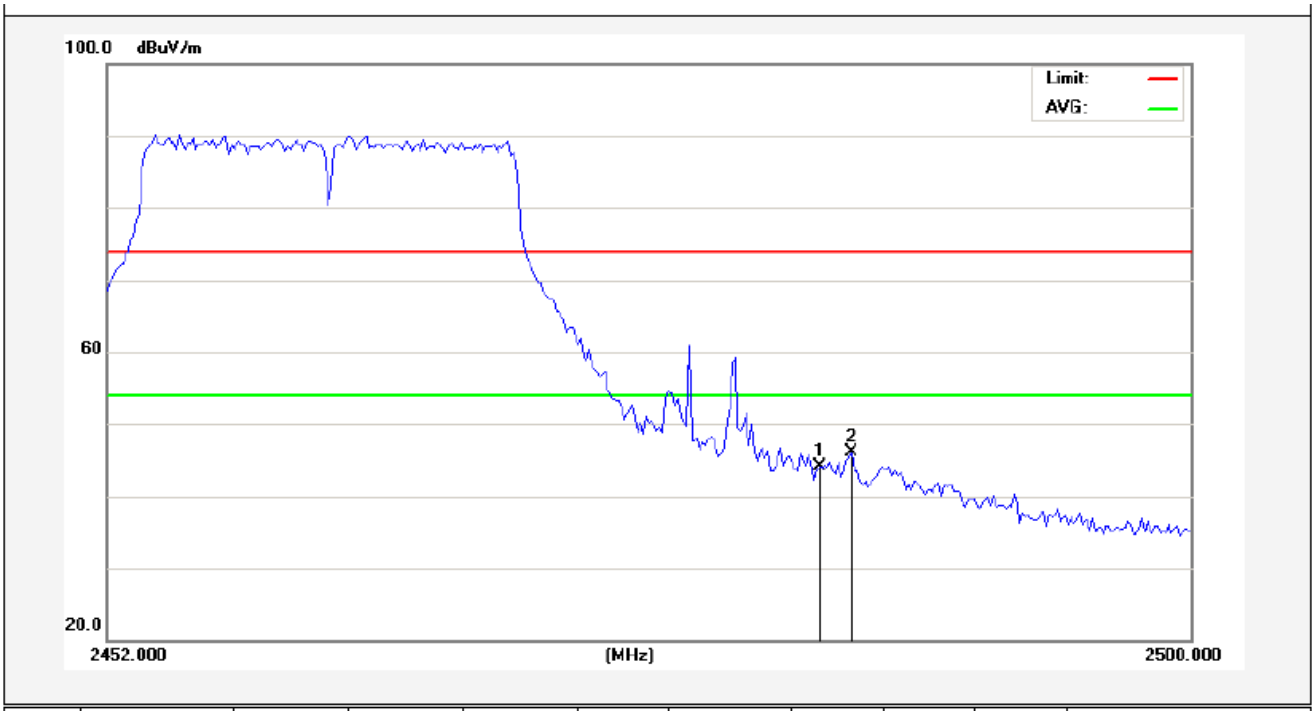
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2371.525	37.46	-2.56	34.90	74.00	-39.10	peak			
2	2390.000	45.38	-2.51	42.87	74.00	-31.13	peak			

Vertical-AV:



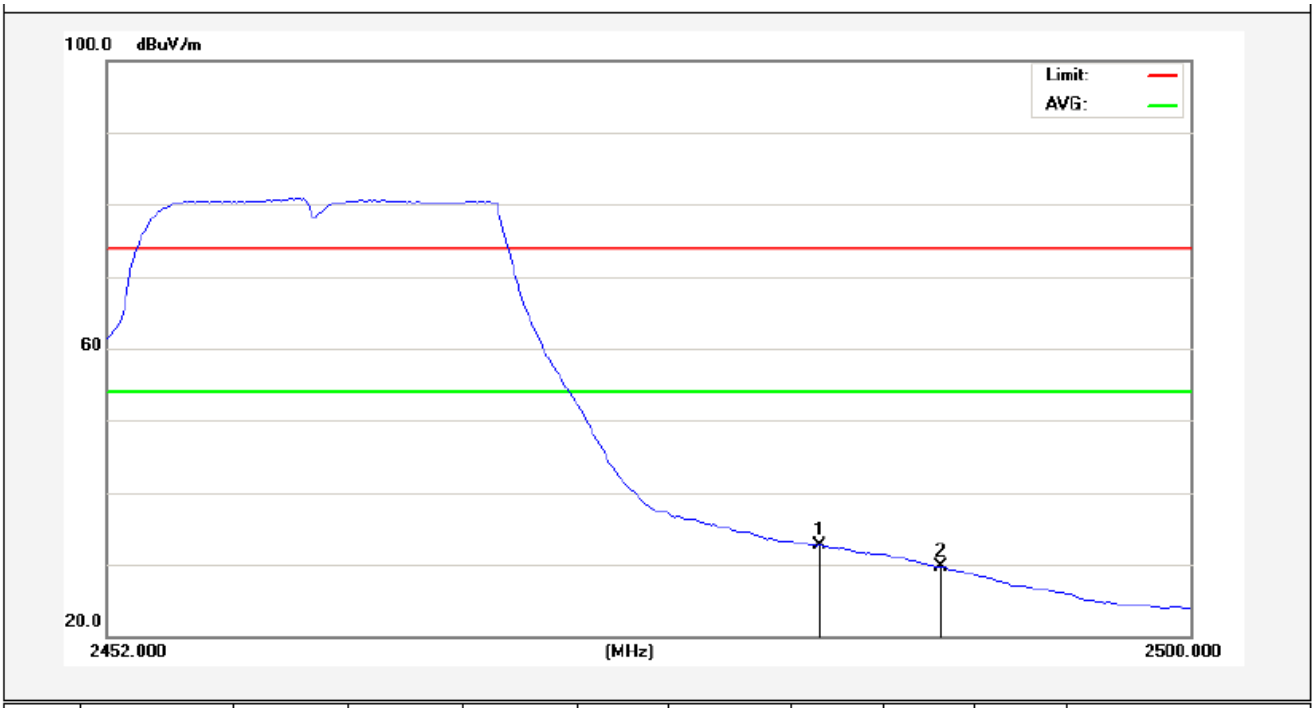
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2362.900	26.77	-2.57	24.20	54.00	-29.80	AVG			
2	2390.000	37.89	-2.51	35.38	54.00	-18.62	AVG			

Test Mode: 802.11g
2462MHz
Horizontal-PEAK:



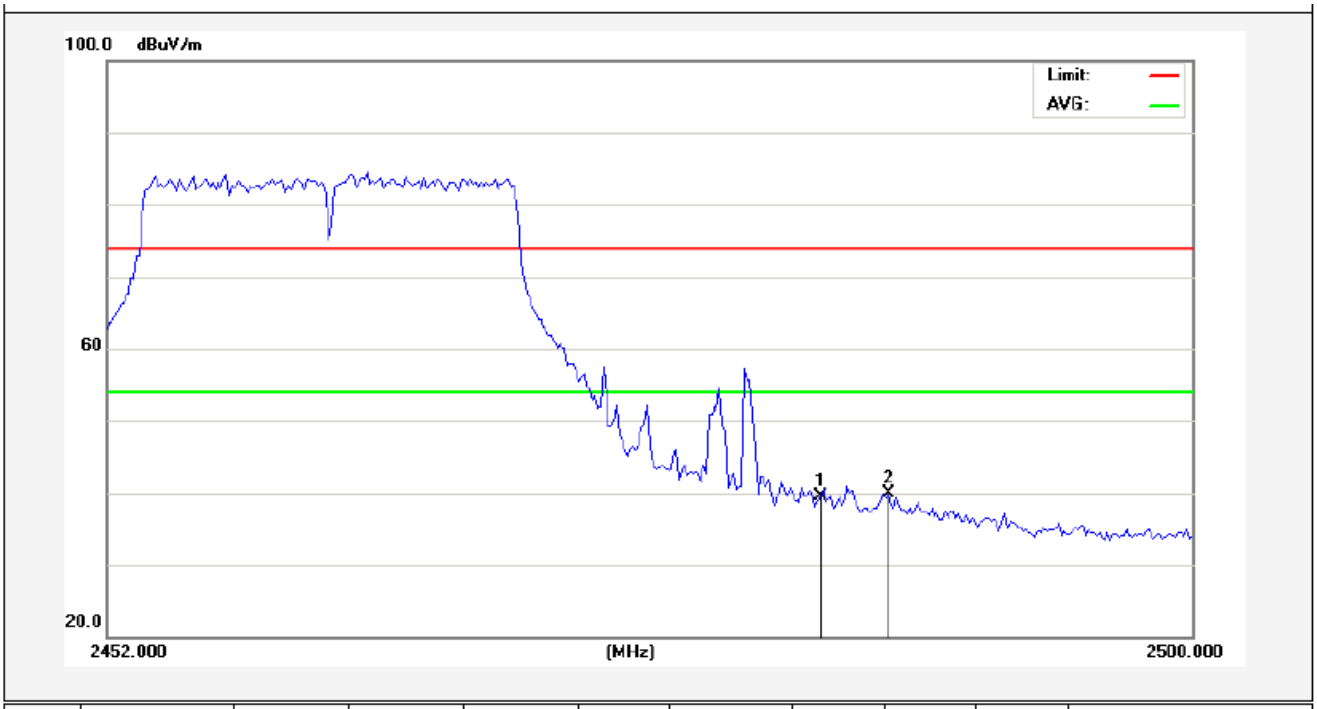
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2483.500	46.44	-2.31	44.13	74.00	-29.87	peak			
2	2485.000	48.47	-2.30	46.17	74.00	-27.83	peak			

Horizontal-AV:



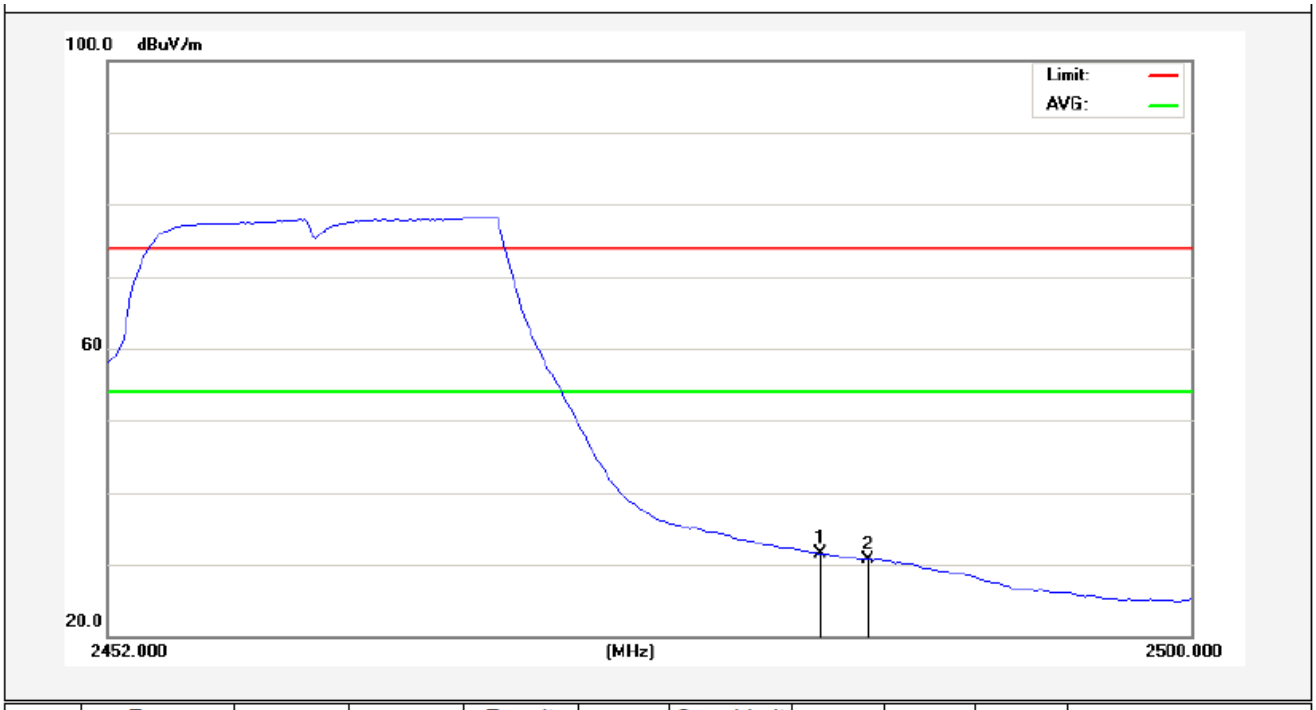
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2483.500	34.93	-2.31	32.62	54.00	-21.38	AVG			
2	2488.960	31.99	-2.29	29.70	54.00	-24.30	AVG			

Test Mode: 802.11g
2462MHz
Vertical-PEAK:



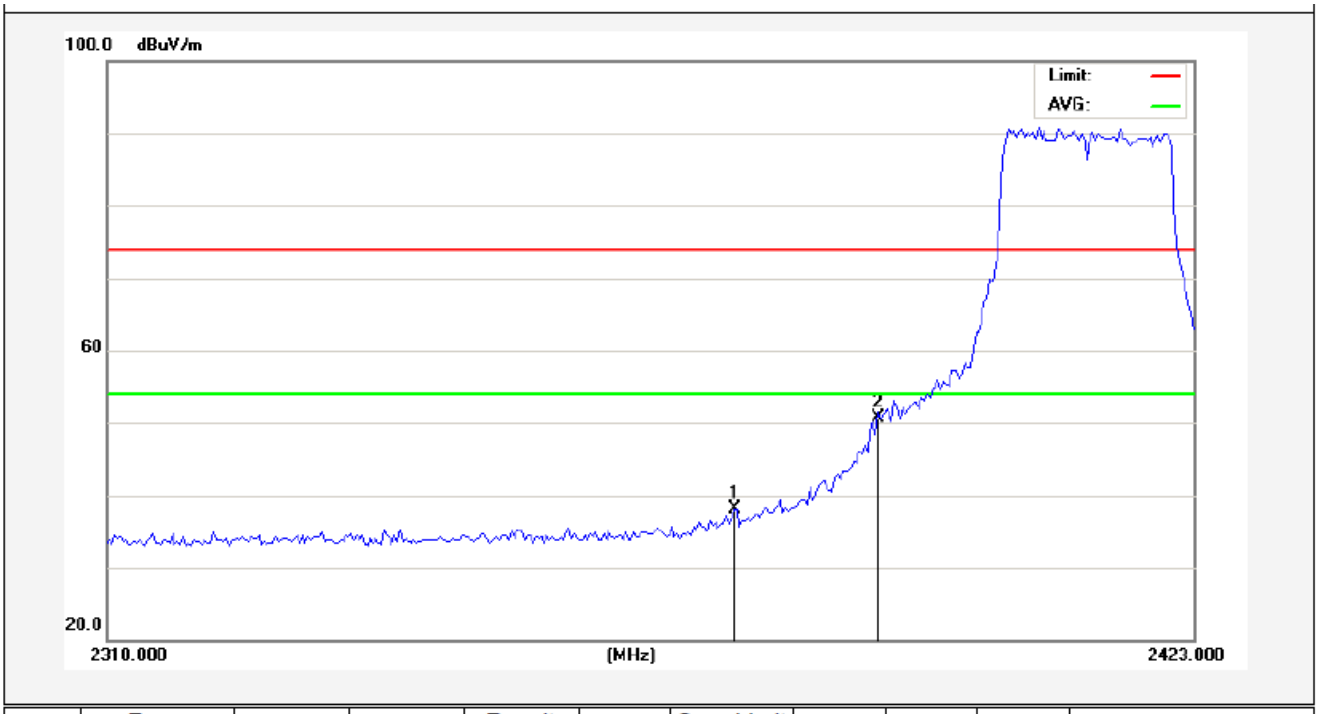
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2483.500	41.84	-2.31	39.53	74.00	-34.47	peak			
2	2486.560	42.21	-2.30	39.91	74.00	-34.09	peak			

Vertical-AV:



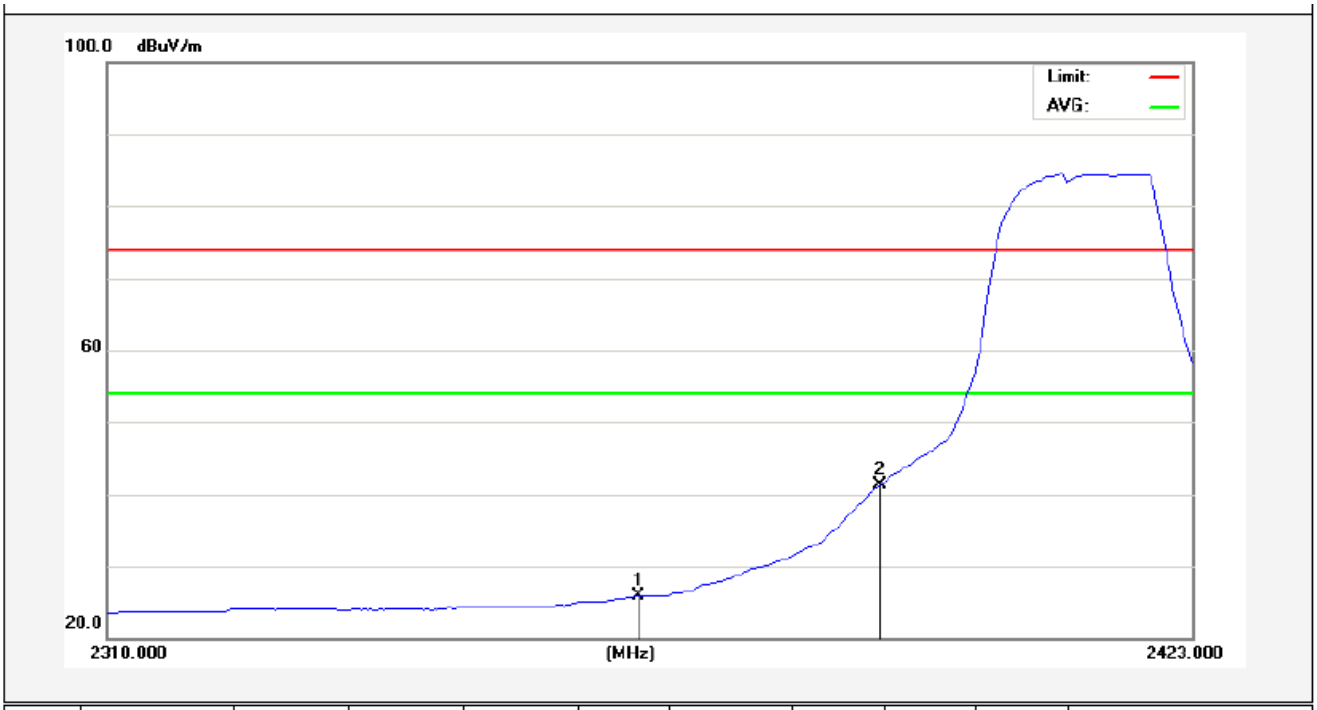
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2483.500	33.89	-2.31	31.58	54.00	-22.42	AVG			
2	2485.720	32.99	-2.30	30.69	54.00	-23.31	AVG			

Test Mode: 802.11n (HT20)
2412MHz
Horizontal-PEAK:



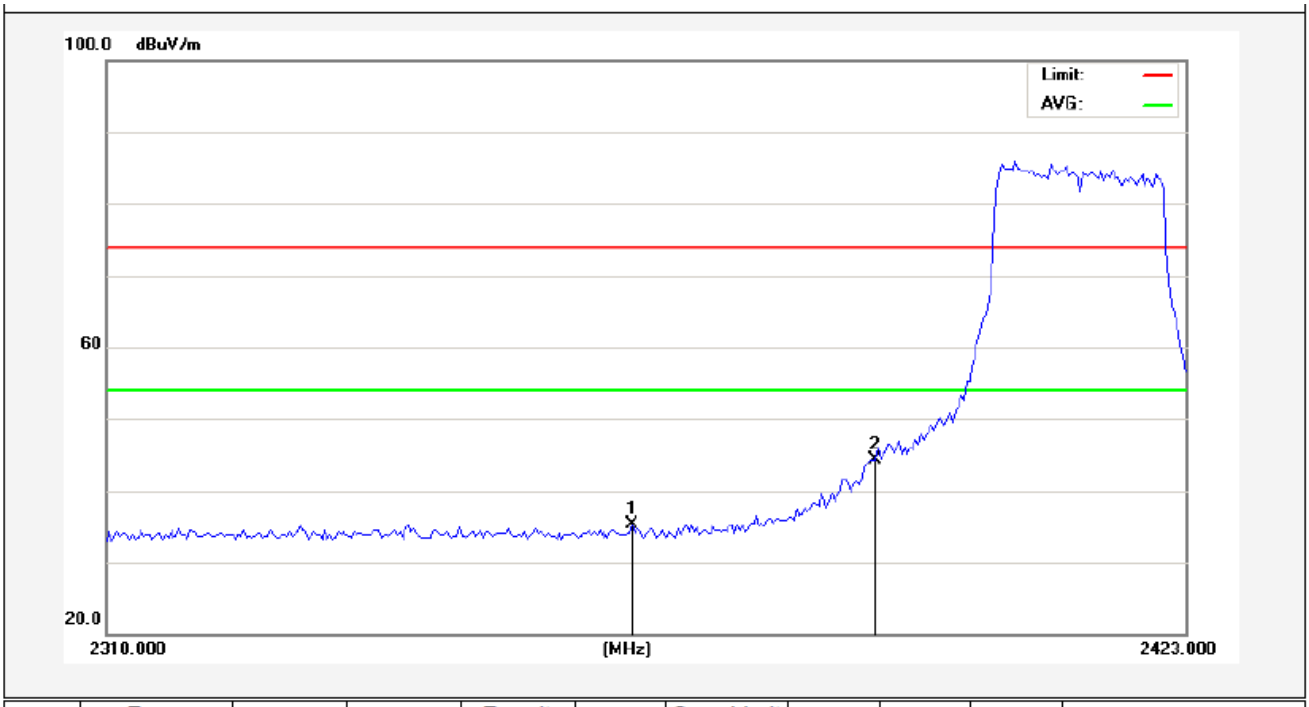
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2374.693	40.72	-2.55	38.17	74.00	-35.83	peak			
2	2390.000	53.15	-2.51	50.64	74.00	-23.36	peak			

Horizontal-AV:



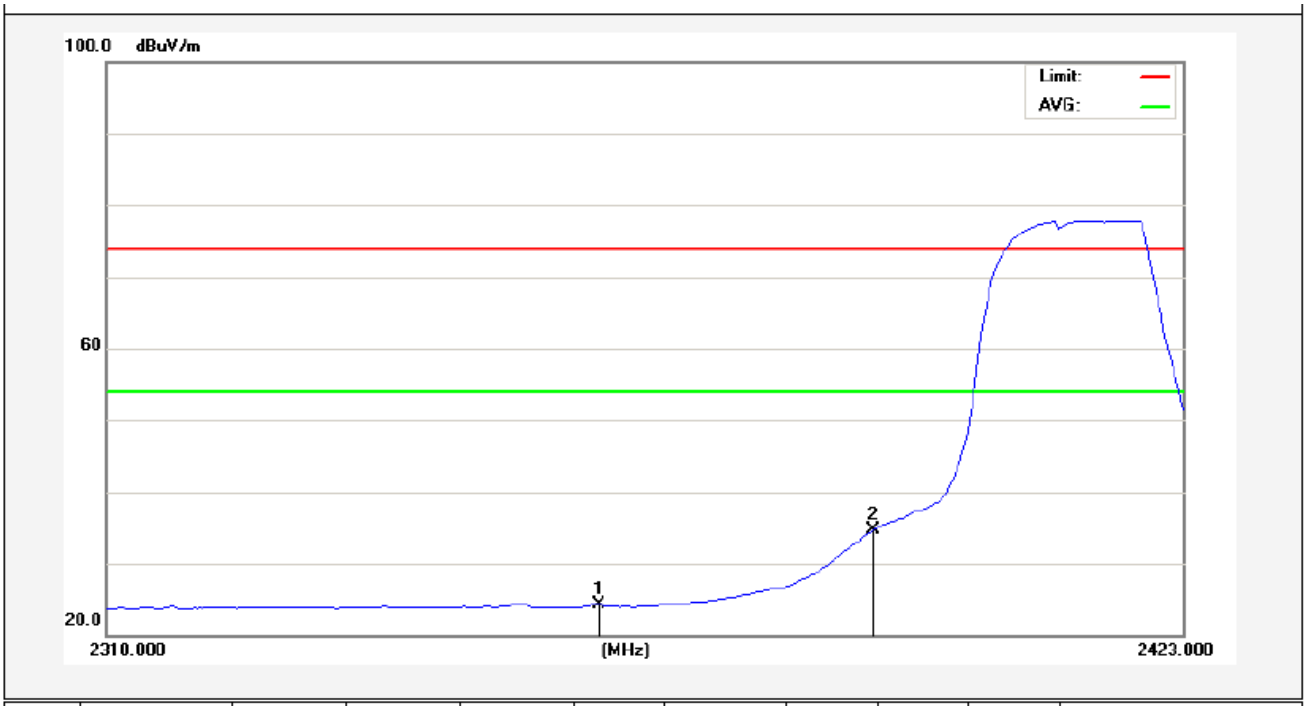
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2364.805	28.44	-2.57	25.87	54.00	-28.13	AVG			
2	2390.000	43.75	-2.51	41.24	54.00	-12.76	AVG			

Test Mode: 802.11n (HT20)
2412MHz
Vertical-PEAK:



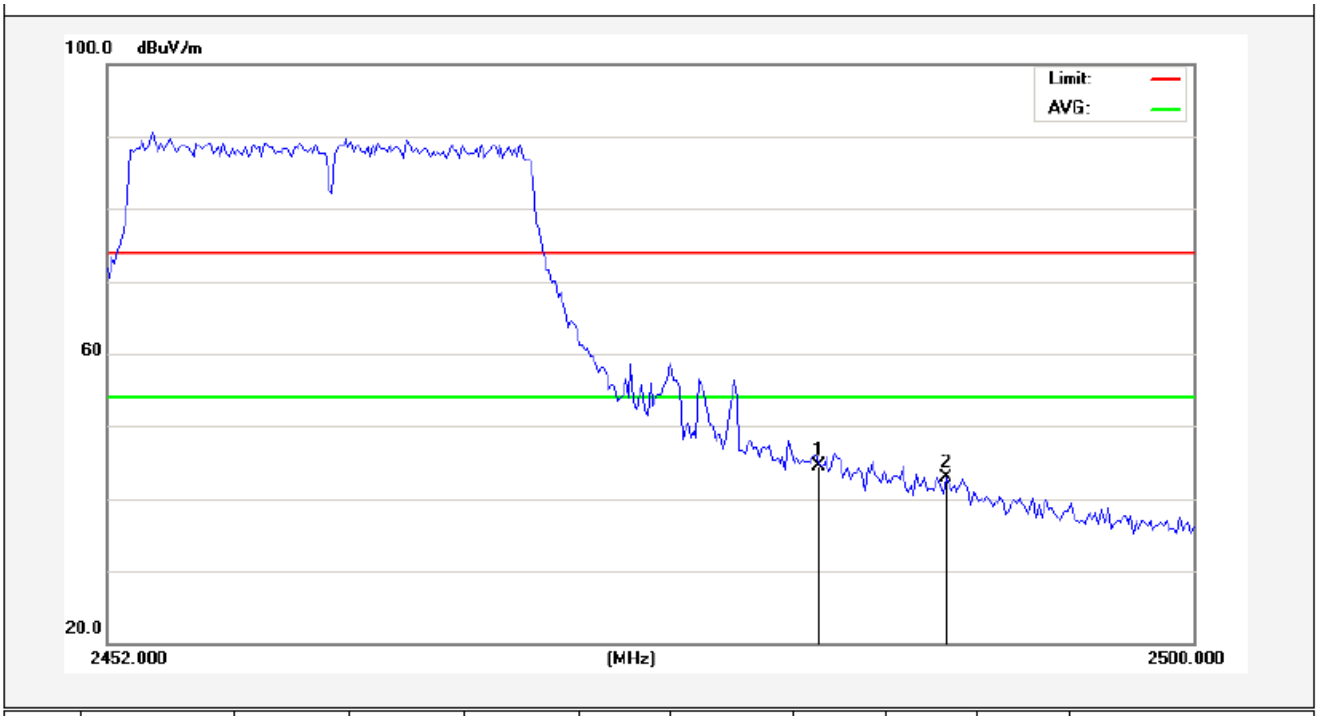
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2364.523	37.84	-2.57	35.27	74.00	-38.73	peak			
2	2390.000	46.83	-2.51	44.32	74.00	-29.68	peak			

Vertical-AV:



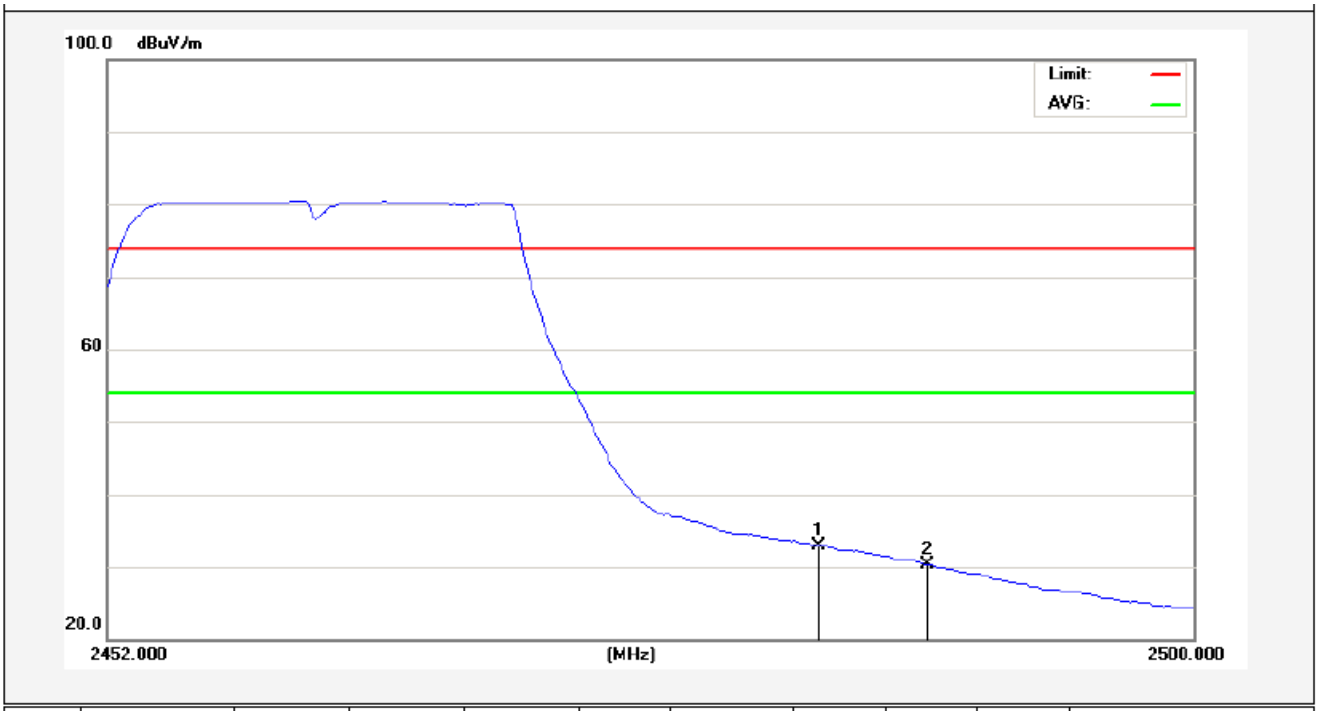
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2360.850	26.80	-2.58	24.22	54.00	-29.78	AVG			
2	2390.000	37.15	-2.51	34.64	54.00	-19.36	AVG			

Test Mode: 802.11n (HT20)
2462MHz
Horizontal-PEAK:



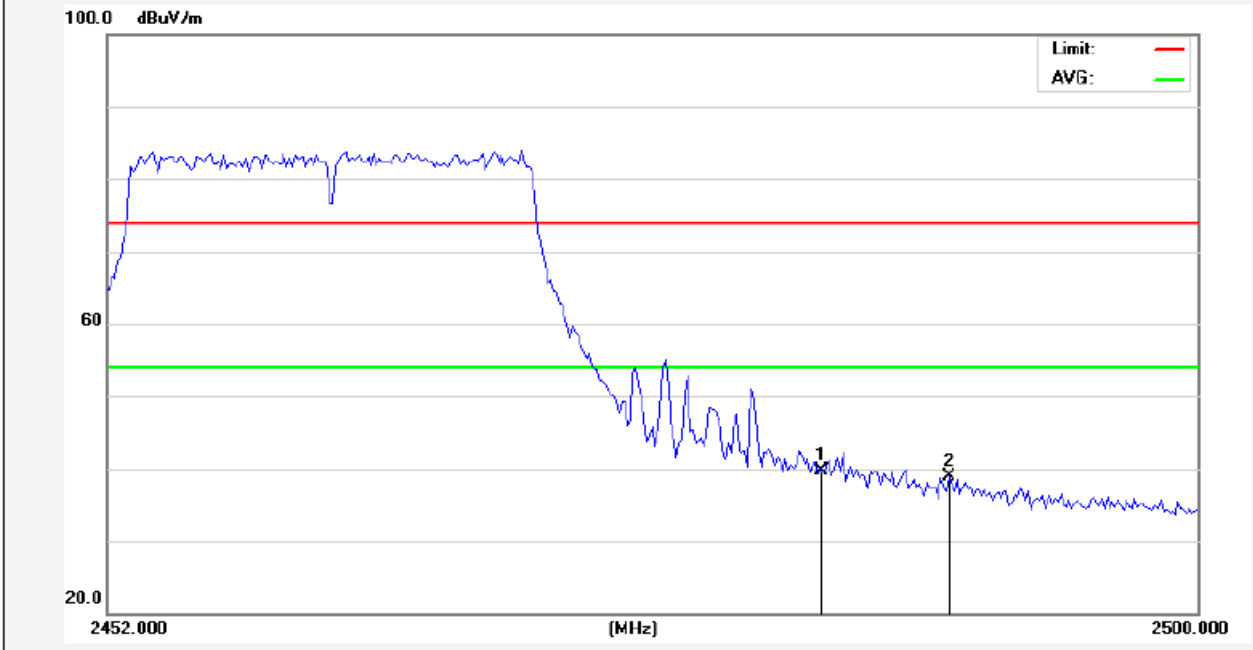
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2483.500	46.87	-2.31	44.56	74.00	-29.44	peak			
2	2489.080	45.25	-2.29	42.96	74.00	-31.04	peak			

Horizontal-AV:



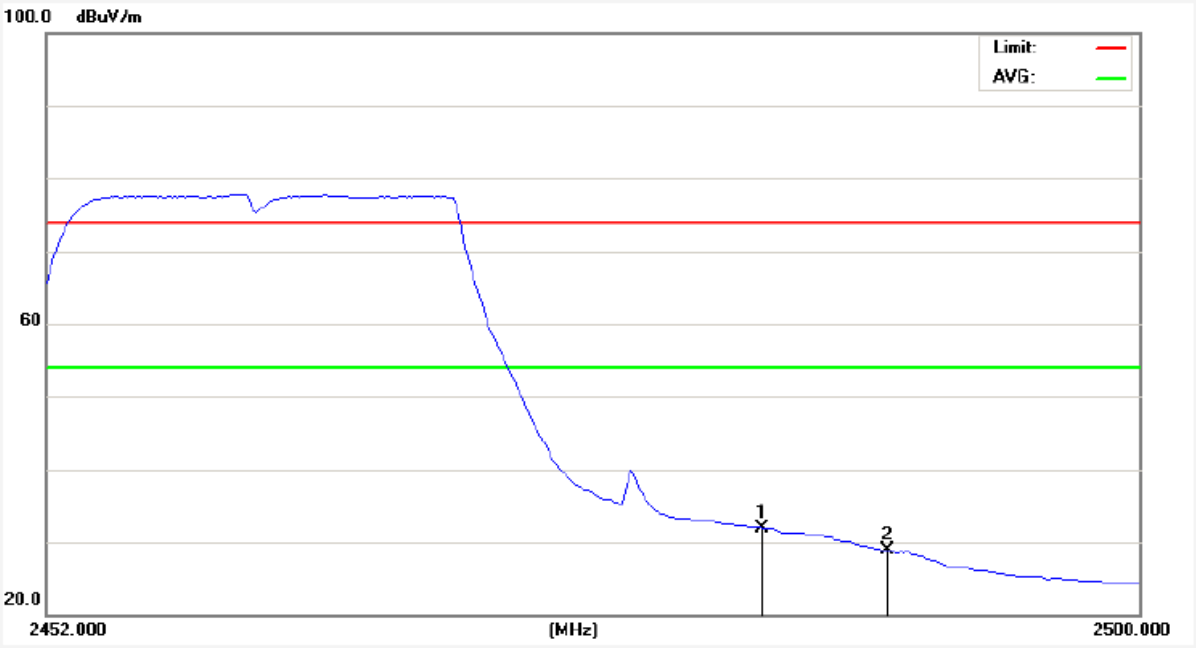
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2483.500	35.28	-2.31	32.97	54.00	-21.03	AVG			
2	2488.240	32.62	-2.30	30.32	54.00	-23.68	AVG			

Test Mode: 802.11n (HT20)
2462MHz
Vertical-PEAK:



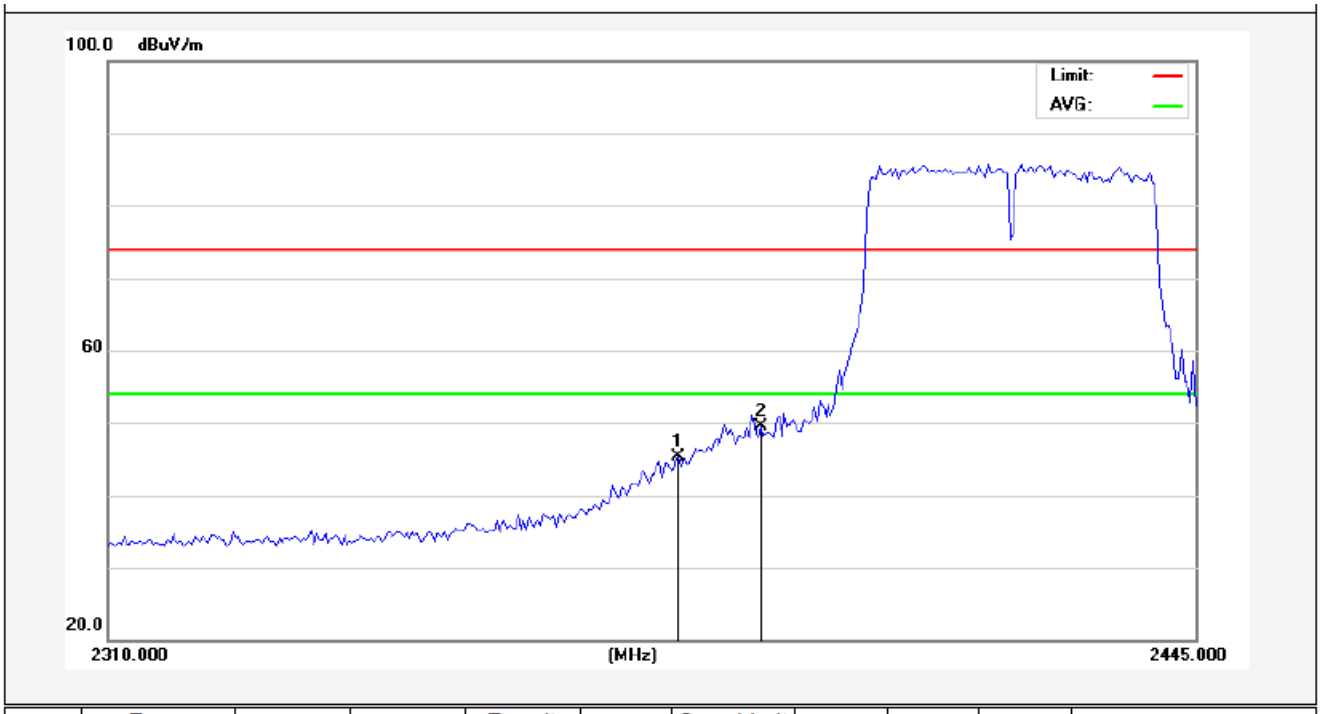
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2483.500	41.94	-2.31	39.63	74.00	-34.37	peak			
2	2489.080	41.29	-2.29	39.00	74.00	-35.00	peak			

Vertical-AV:



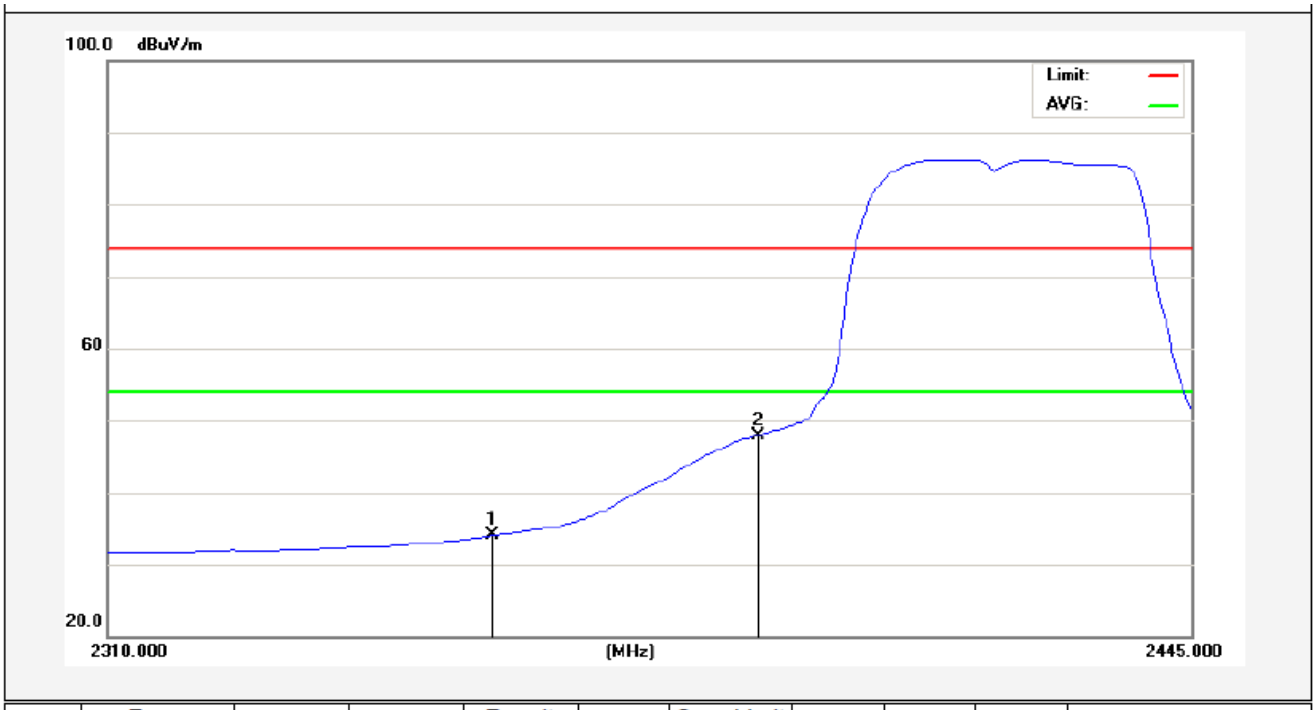
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2483.500	34.29	-2.31	31.98	54.00	-22.02	AVG			
2	2488.960	31.17	-2.29	28.88	54.00	-25.12	AVG			

Test Mode: 802.11n (HT40)
2422MHz
Horizontal-PEAK:



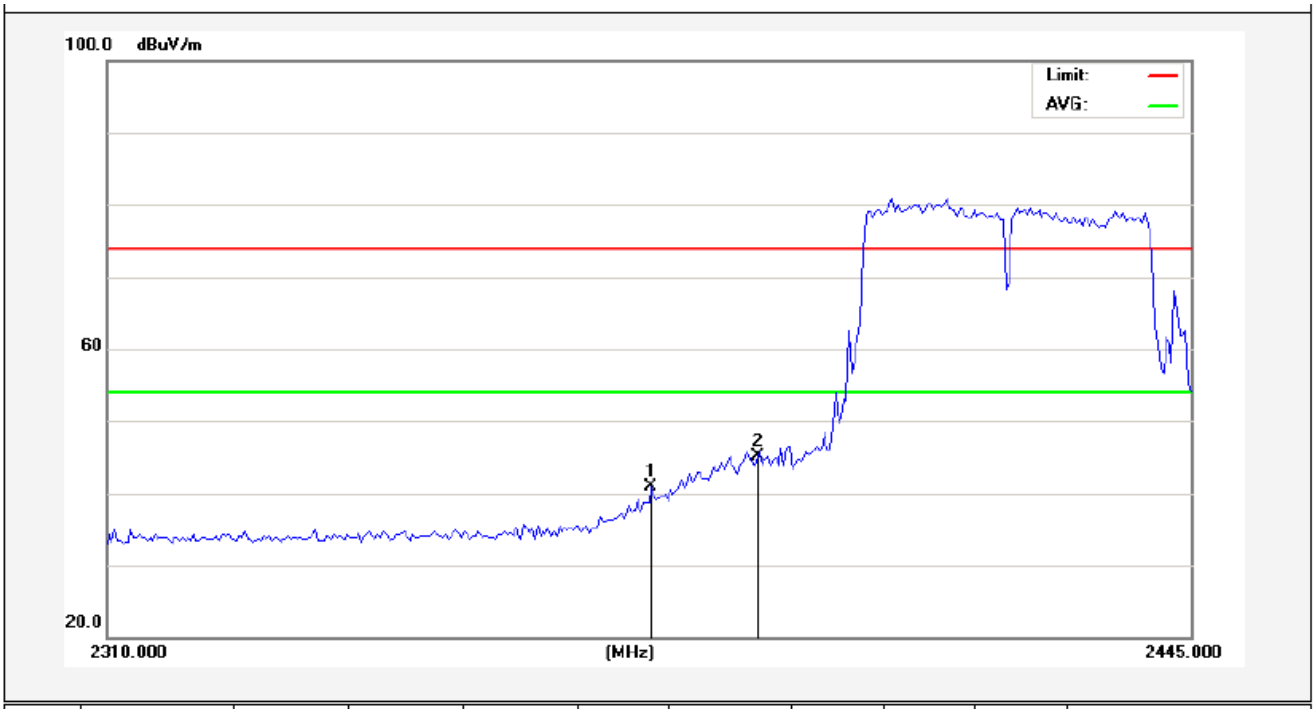
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2380.200	47.87	-2.54	45.33	74.00	-28.67	peak			
2	2390.000	52.06	-2.51	49.55	74.00	-24.45	peak			

Horizontal-AV:



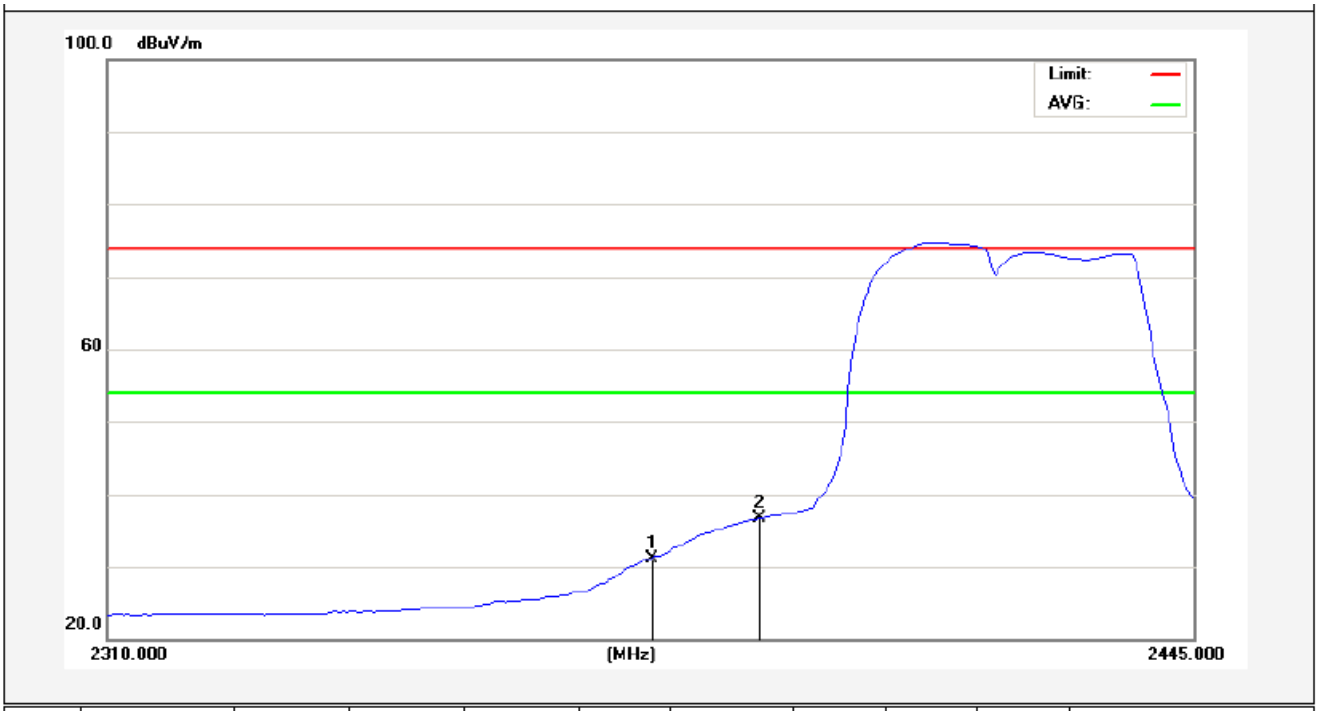
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2357.250	36.63	-2.59	34.04	54.00	-19.96	AVG			
2	2390.000	50.44	-2.51	47.93	54.00	-6.07	AVG			

Test Mode: 802.11n (HT40)
2422MHz
Vertical-PEAK:



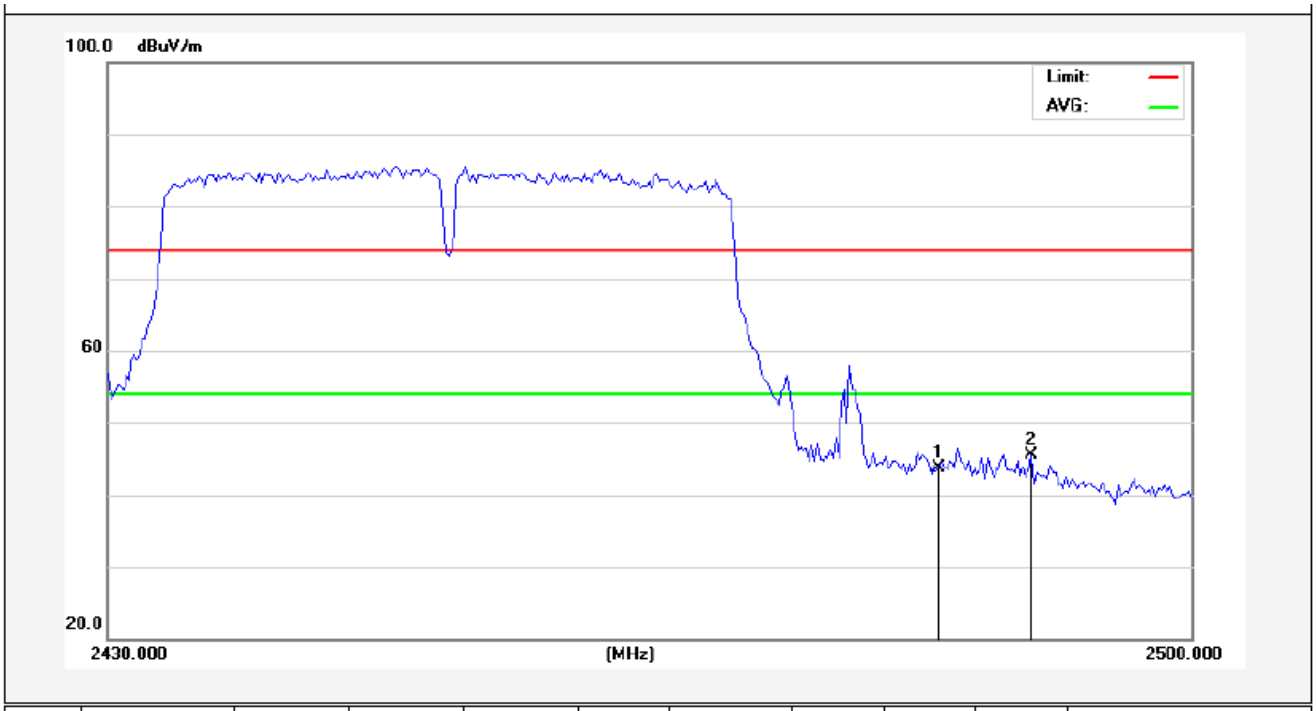
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2377.162	43.37	-2.54	40.83	74.00	-33.17	peak			
2	2390.000	47.67	-2.51	45.16	74.00	-28.84	peak			

Vertical-AV:



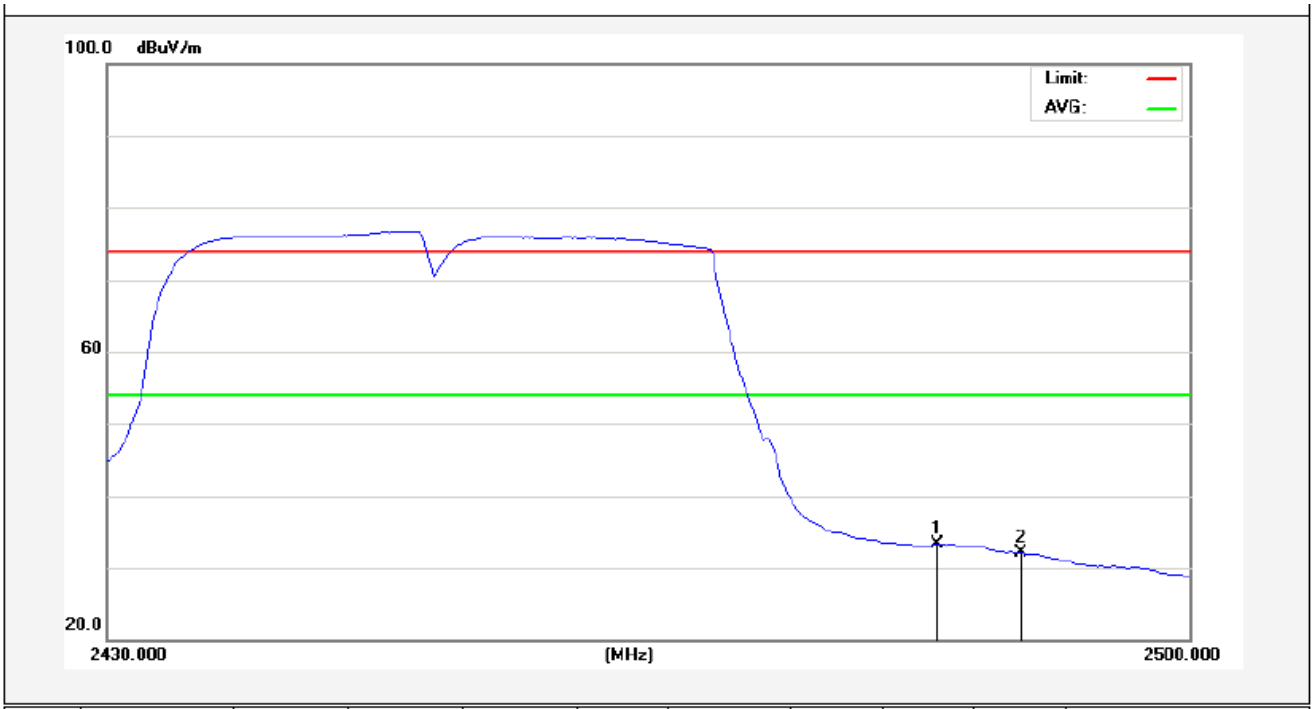
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2376.825	33.67	-2.54	31.13	54.00	-22.87	AVG			
2	2390.000	39.13	-2.51	36.62	54.00	-17.38	AVG			

Test Mode: 802.11n (HT40)
2452MHz
Horizontal-PEAK:



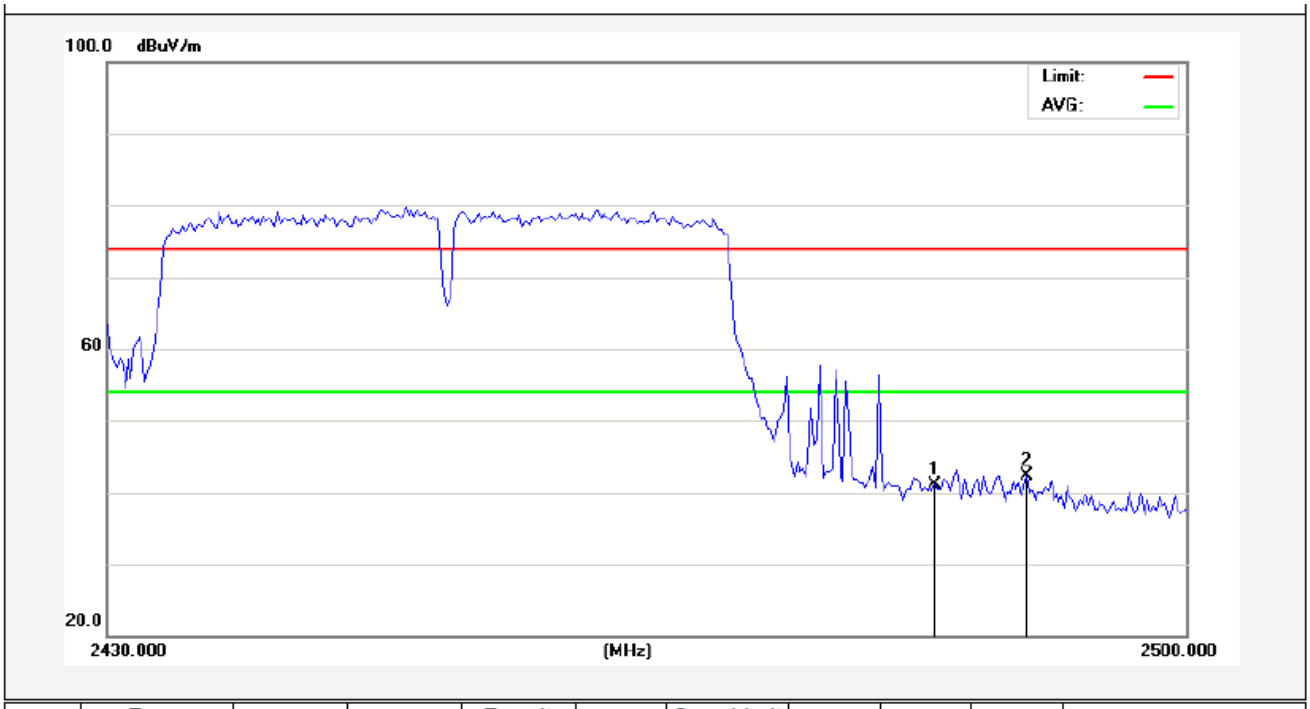
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2483.500	46.07	-2.31	43.76	74.00	-30.24	peak			
2	2489.675	47.73	-2.29	45.44	74.00	-28.56	peak			

Horizontal-AV:



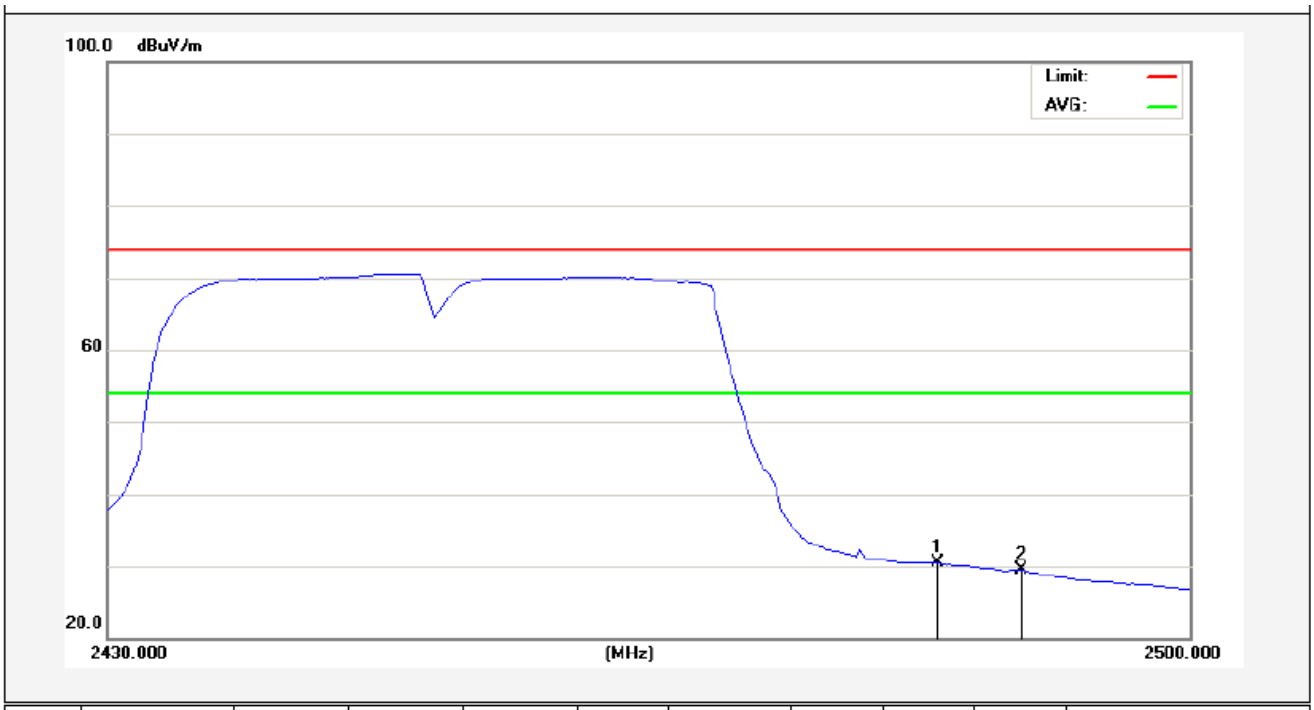
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2483.500	35.59	-2.31	33.28	54.00	-20.72	AVG			
2	2489.150	34.36	-2.29	32.07	54.00	-21.93	AVG			

Test Mode: 802.11n (HT40)
2452MHz
Vertical-PEAK:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2483.500	43.44	-2.31	41.13	74.00	-32.87	peak			
2	2489.675	44.63	-2.29	42.34	74.00	-31.66	peak			

Vertical-AV:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2483.500	32.78	-2.31	30.47	54.00	-23.53	AVG			
2	2489.150	31.75	-2.29	29.46	54.00	-24.54	AVG			

4.5. Peak Power Spectral Density

a. Limit

1. For direct sequence systems, the peak power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8dBm in any 3kHz band during any time interval of continuous transmission.
2. The direct sequence operating of the hybrid system, with the frequency hopping operation turned off, shall comply with the power density requirements of paragraph (d) of this section.

b. Test Procedure

1. Place the EUT on the table and set it in transmitting mode. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to the spectrum analyzer.
2. Set the spectrum analyzer as RBW = 3kHz, VBW = 10kHz, Span = 1.5 times DTS BW, Sweep=500s
3. Record the max. reading.
4. Repeat the above procedure until the measurements for all frequencies are completed.

c. Test Equipment

Same as the equipment listed in 4.2.

d. Test Setup

See 4.1

e. Test Results

Pass

f. Test Data

Please refer to the following data.

g. Test Plot See the following pages

ANT A

Test mode: IEEE 802.11b

Channel	Frequency (MHz)	PPSD (dBm/3KHz)	∑PPSD (dBm/3KHz)	Limit (dBm)	Result
Low	2412	-26.82	-		Pass
Mid	2437	-28.11	-	8.00	Pass
High	2462	-25.97	-		Pass

Test mode: IEEE 802.11g

Channel	Frequency (MHz)	PPSD (dBm)	∑PPSD (dBm)	Limit (dBm)	Result
Low	2412	-27.88	-		Pass
Mid	2437	-27.52	-	8.00	Pass
High	2462	-27.16	-		Pass

Test mode: IEEE 802.11n (HT20)

Channel	Frequency (MHz)	PPSD (dBm/3KHz)	∑PPSD (dBm/3KHz)	Limit (dBm)	Result
Low	2412	-28.00	-		Pass
Mid	2437	-26.83	-	8.00	Pass
High	2462	-26.49	-		Pass

Test mode: IEEE 802.11n (HT40)

Channel	Frequency (MHz)	PPSD (dBm/3KHz)	∑PPSD (dBm/3KHz)	Limit (dBm)	Result
Low	2422	-31.38	-		Pass
Mid	2437	-28.76	-	8.00	Pass
High	2452	-29.17	-		Pass

ANT B

Test mode: IEEE 802.11b

Channel	Frequency (MHz)	PPSD (dBm/3KHz)	∑PPSD (dBm/3KHz)	Limit (dBm)	Result
Low	2412	-17.83	-		Pass
Mid	2437	-18.21	-	8.00	Pass
High	2462	-18.60	-		Pass

Test mode: IEEE 802.11g

Channel	Frequency (MHz)	PPSD (dBm)	∑PPSD (dBm)	Limit (dBm)	Result
Low	2412	-19.12	-		Pass
Mid	2437	-17.52	-	8.00	Pass
High	2462	-19.75	-		Pass

Test mode: IEEE 802.11n (HT20)

Channel	Frequency (MHz)	PPSD (dBm/3KHz)	∑PPSD (dBm/3KHz)	Limit (dBm)	Result
Low	2412	-18.38	-		Pass
Mid	2437	-18.00	-	8.00	Pass
High	2462	-19.78	-		Pass

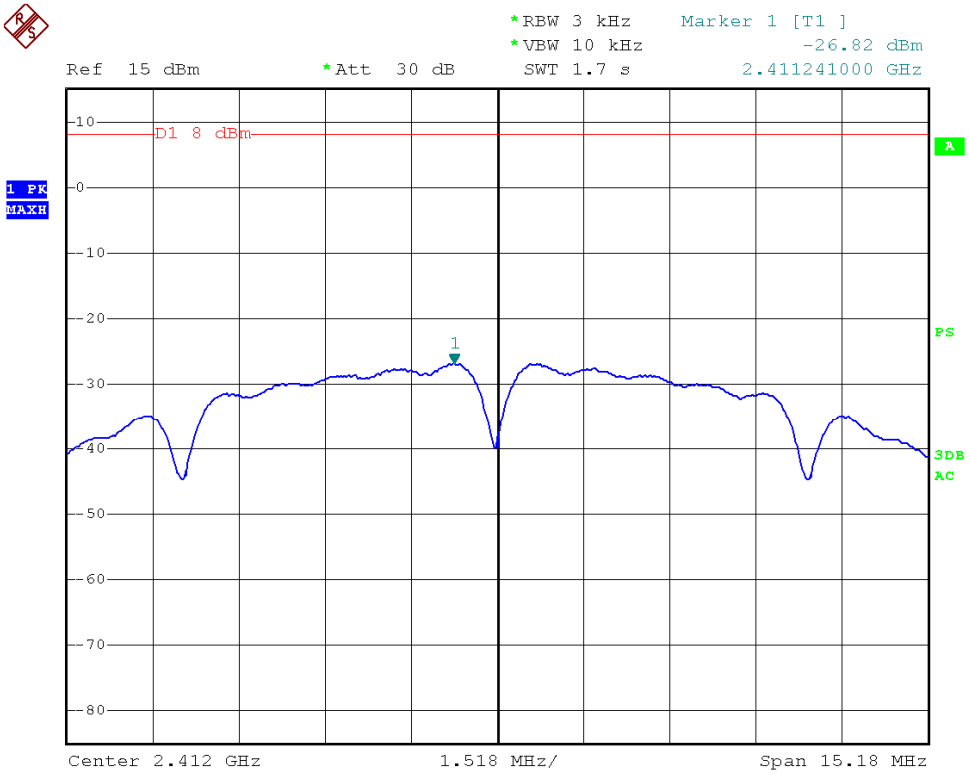
Test mode: IEEE 802.11n (HT40)

Channel	Frequency (MHz)	PPSD (dBm/3KHz)	∑PPSD (dBm/3KHz)	Limit (dBm)	Result
Low	2422	-19.65	-		Pass
Mid	2437	-20.79	-	8.00	Pass
High	2452	-23.92	-		Pass

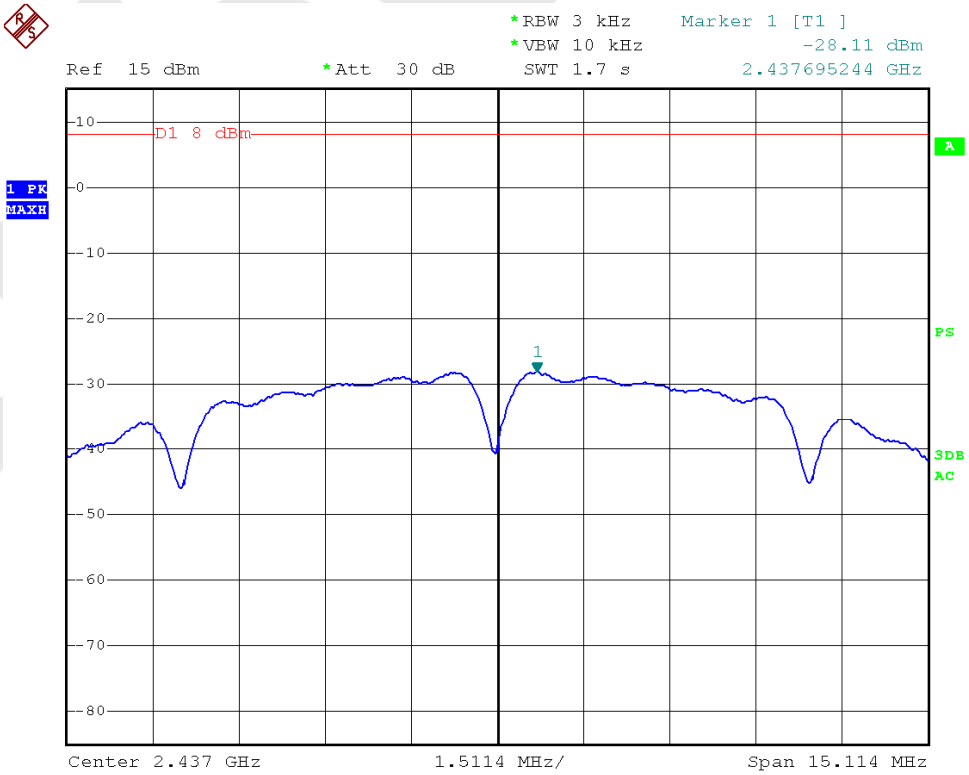
Channel	Channel Frequency (MHz)	ANT A PSD (dBm)	ANT B PSD (dBm)	Data Rate (Mbps)	MIMO PSD (dBm)	Limit (dBm)
802.11n (20M MIMO) mode						
Low	2412	-28.00	-18.38	MCS0	-17.93	8
Middle	2437	-26.83	-18.00	MCS0	-17.46	8
High	2462	-26.49	-19.78	MCS0	-18.94	8
802.11n (40M MIMO) mode						
Low	2422	-31.38	-19.65	MCS0	-17.42	8
Middle	2437	-28.76	-20.73	MCS0	-19.14	8
High	2452	-29.17	-23.92	MCS0	-22.78	8

ANT A

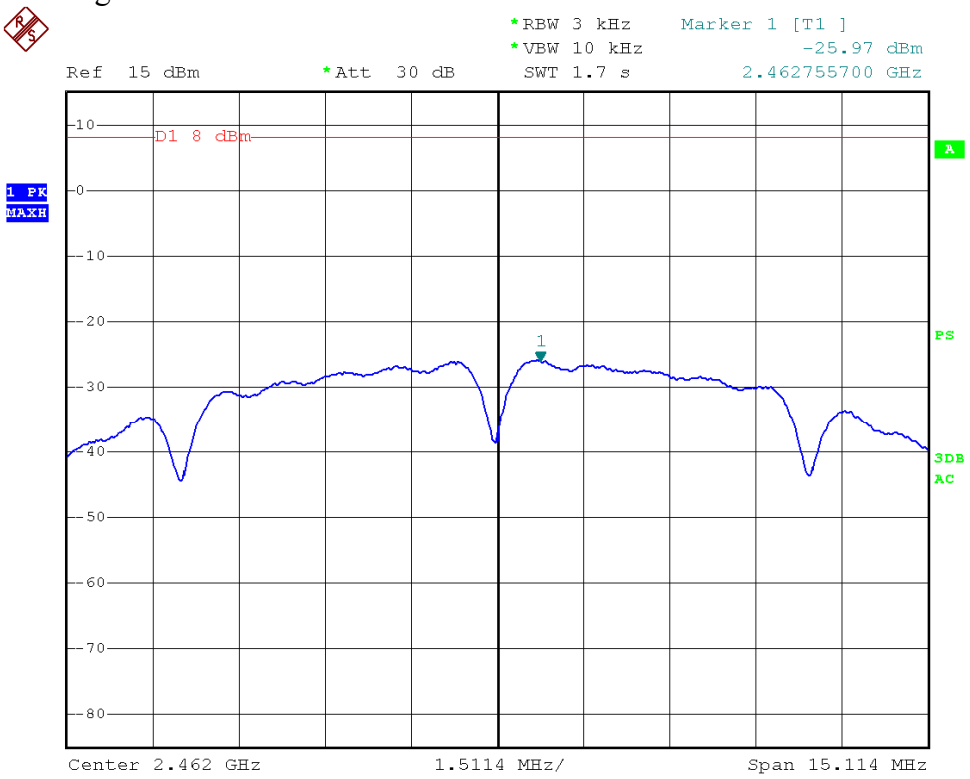
802.11 b CH--Low



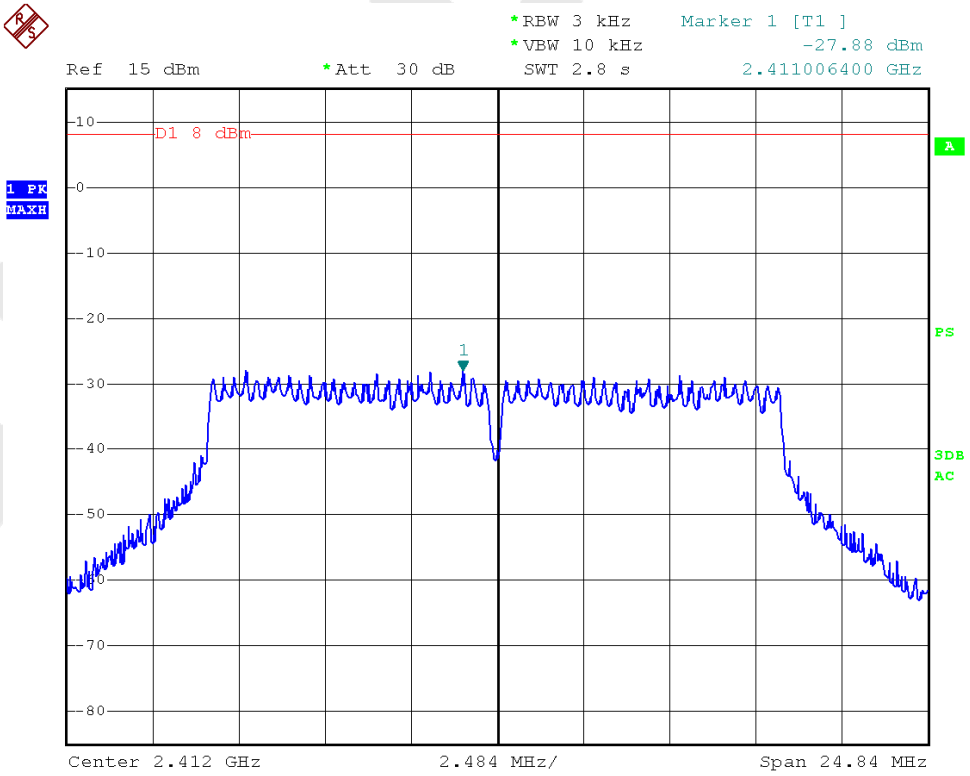
802.11 b CH--Mid



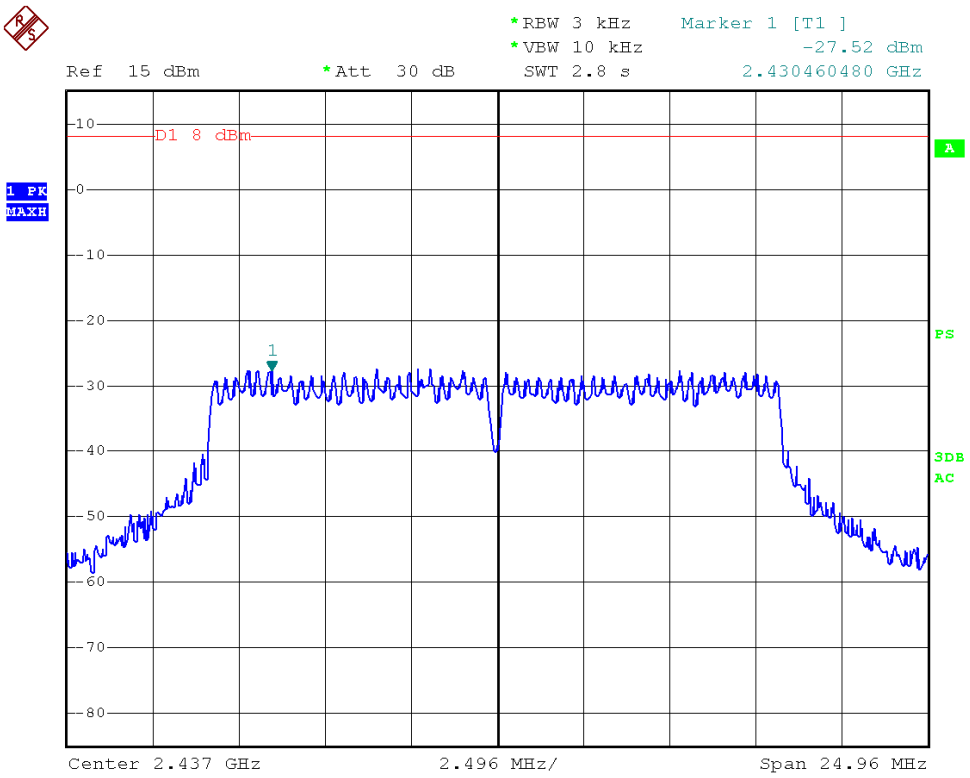
802.11 b CH--High



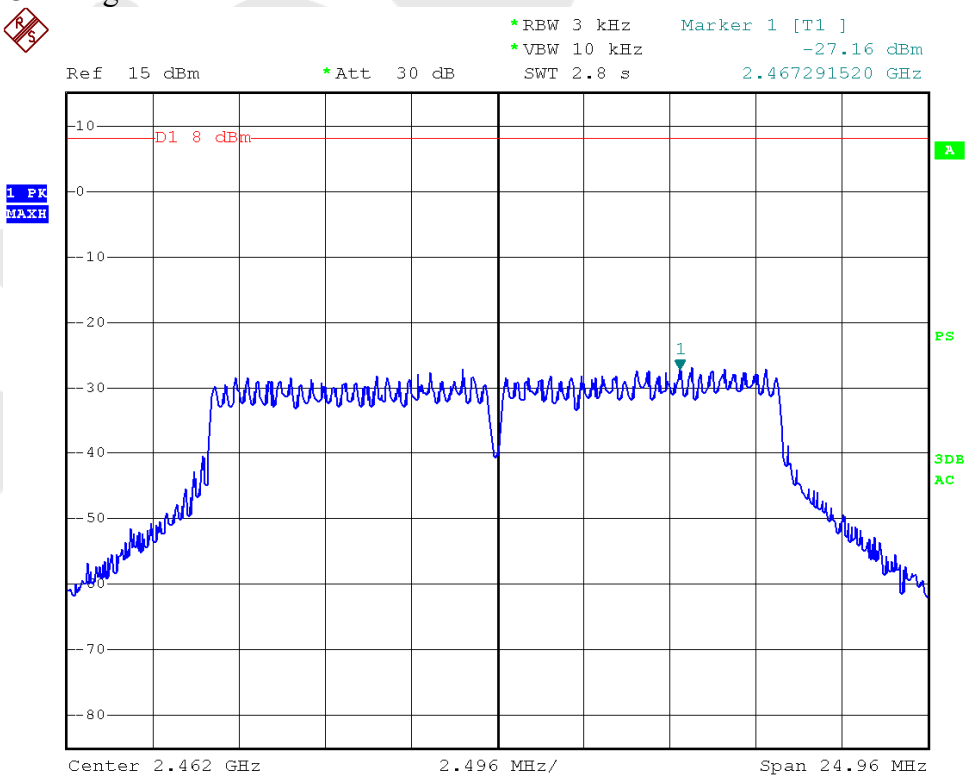
802.11g CH--Low



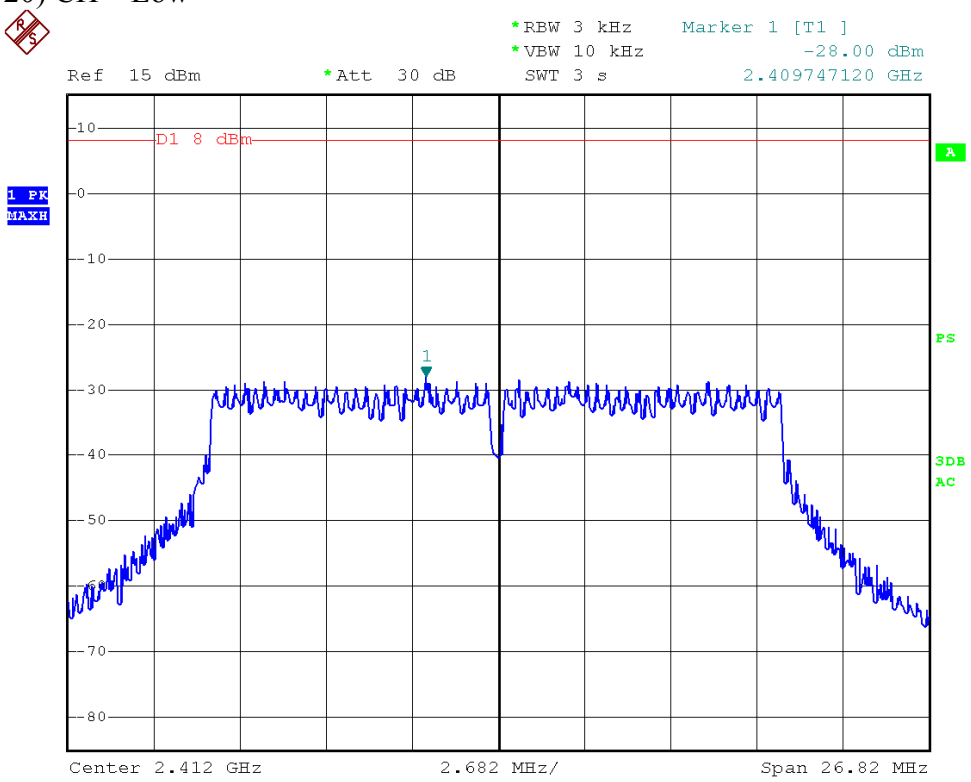
802.11g CH--Mid



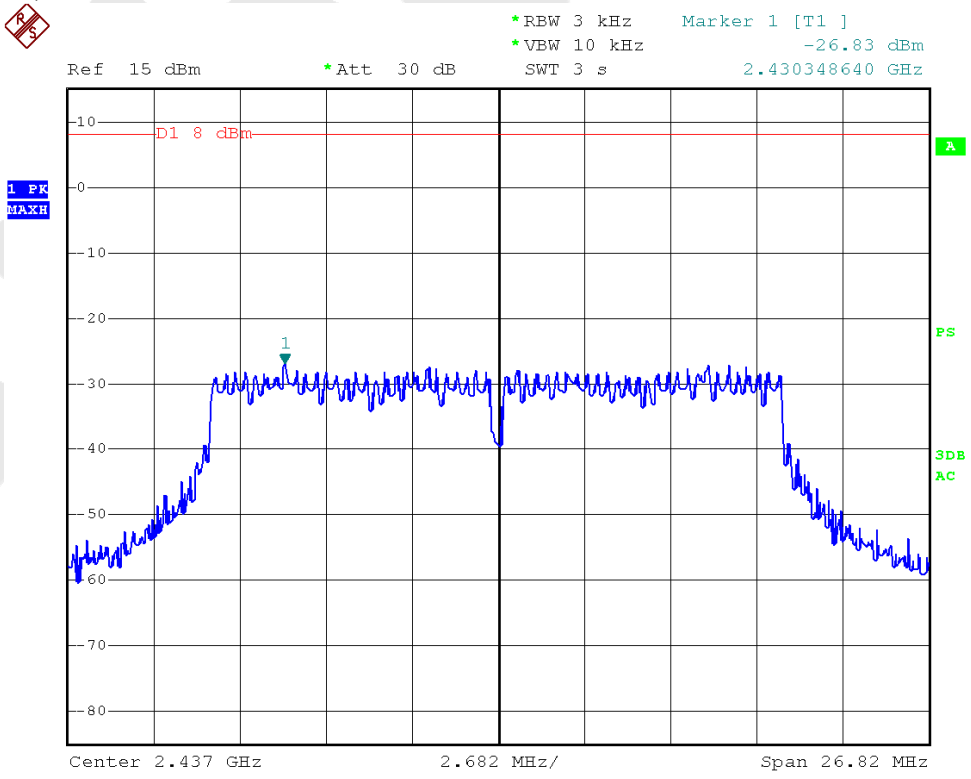
802.11g CH--High



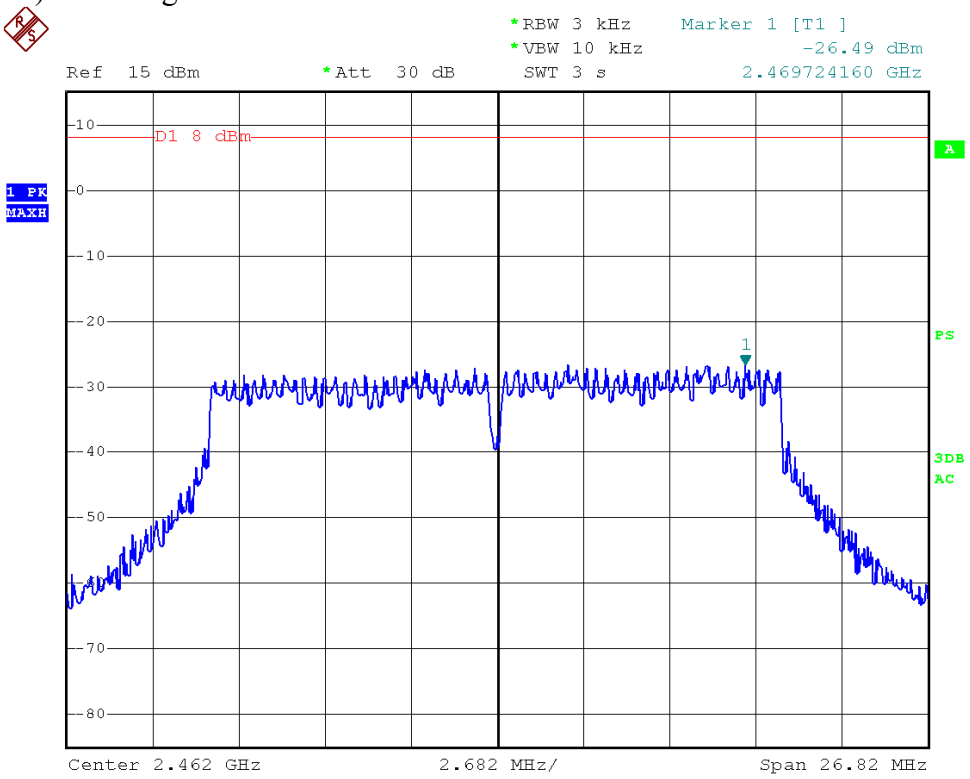
802.11n (HT20) CH—Low



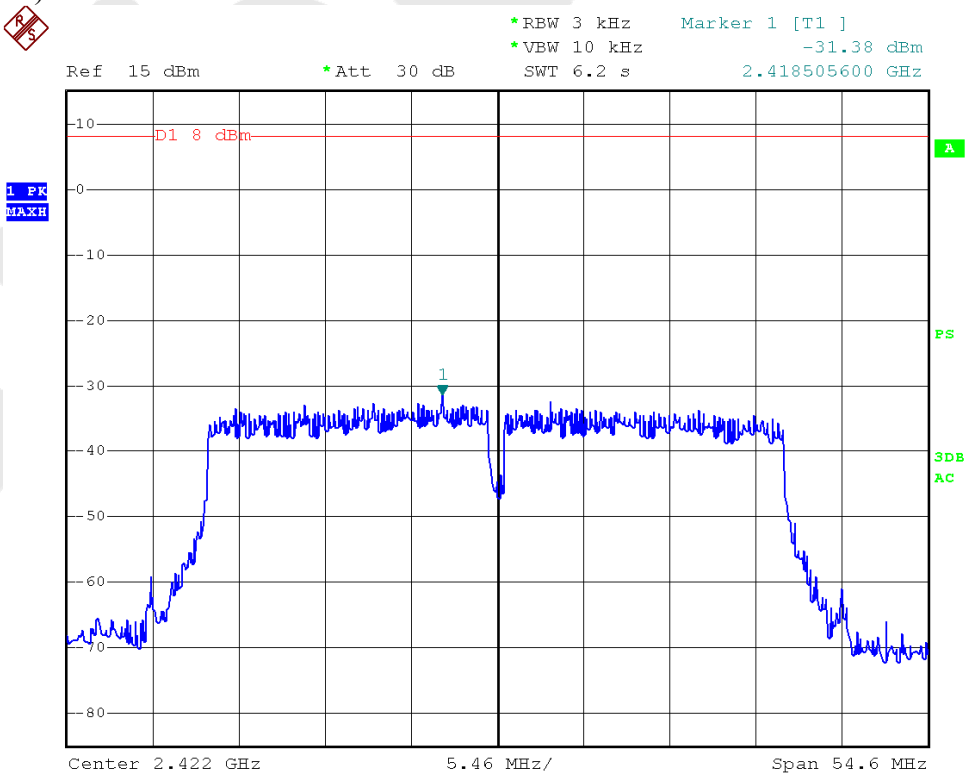
802.11n (HT20) CH—Mid



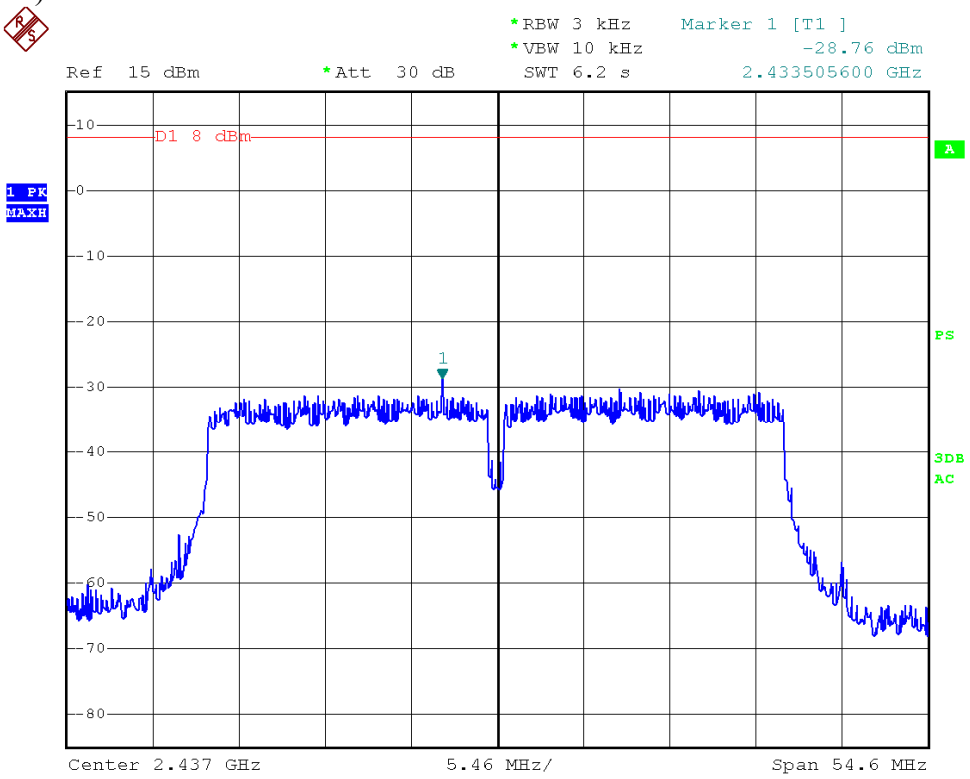
802.11n (HT20) CH—High



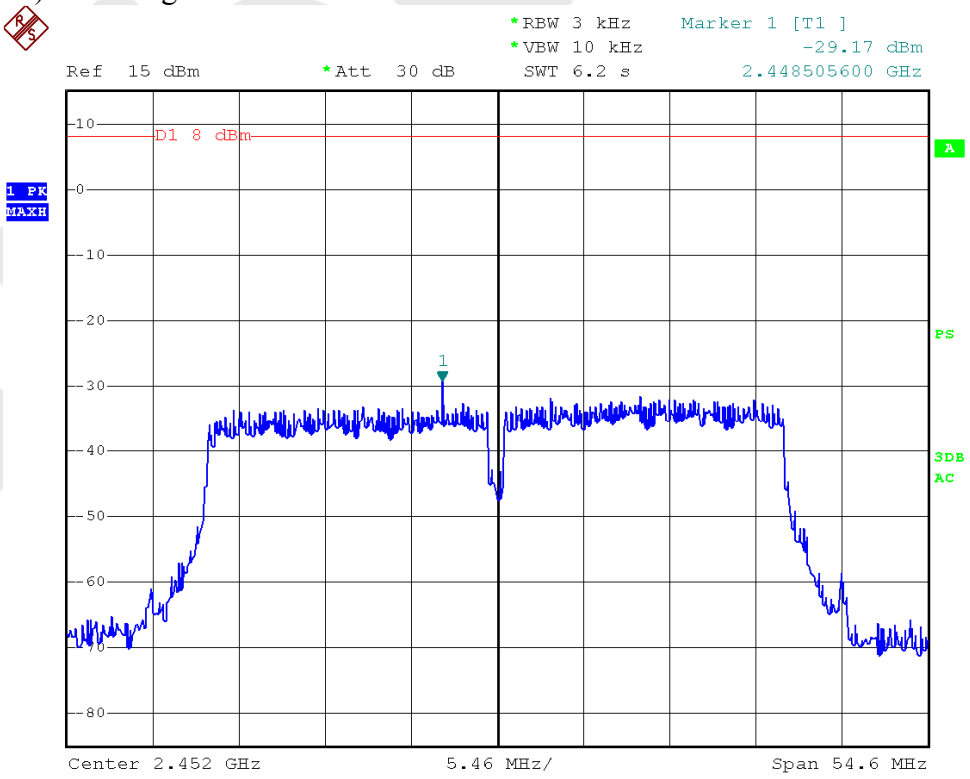
802.11n (HT40) CH—Low



802.11n (HT40) CH—Mid

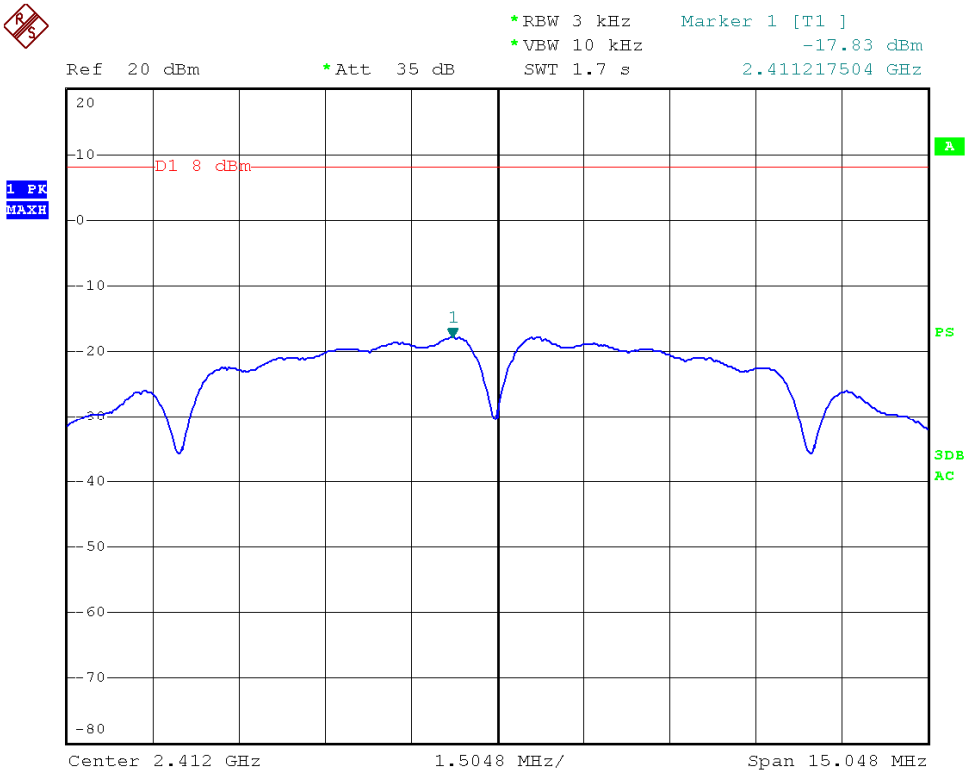


802.11n (HT40) CH—High

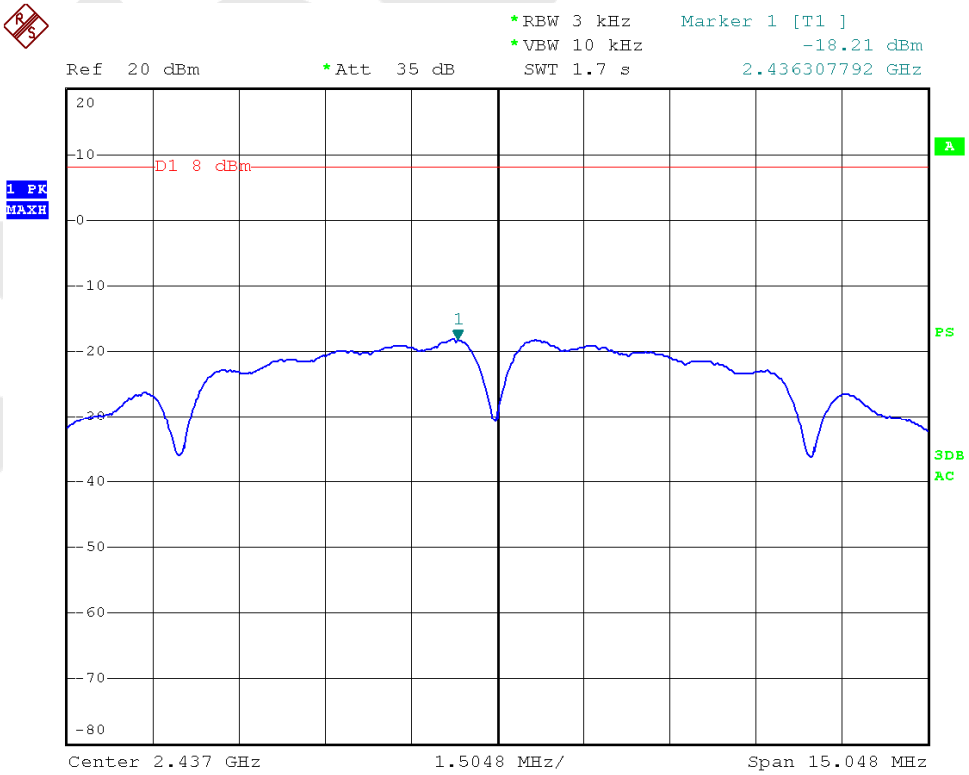


ANT B

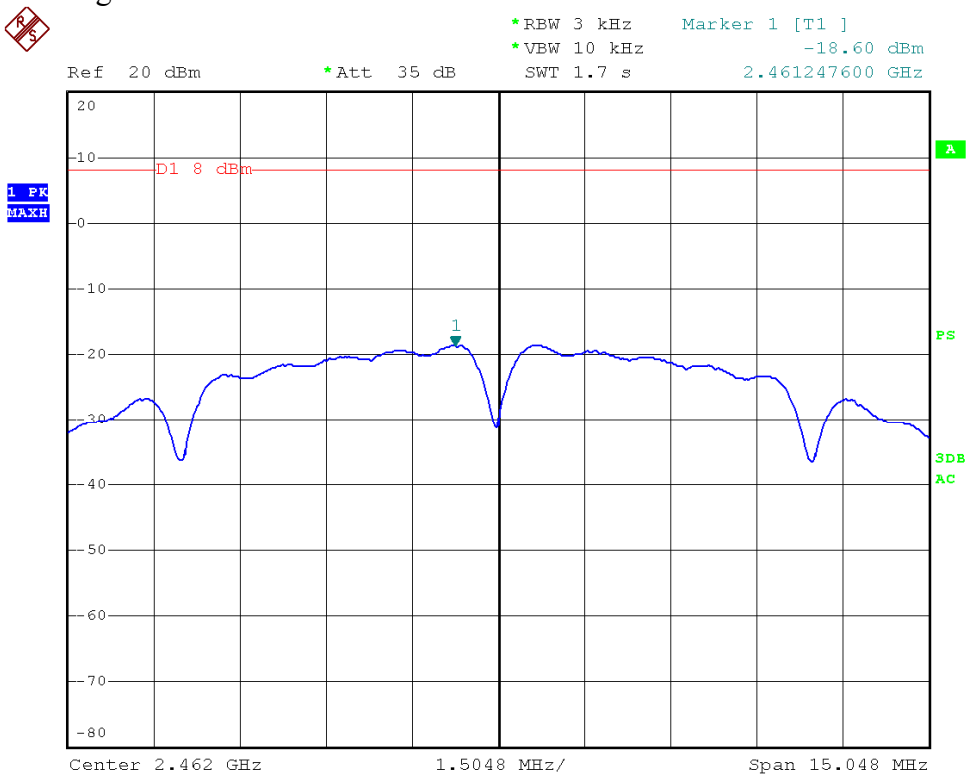
802.11 b CH--Low



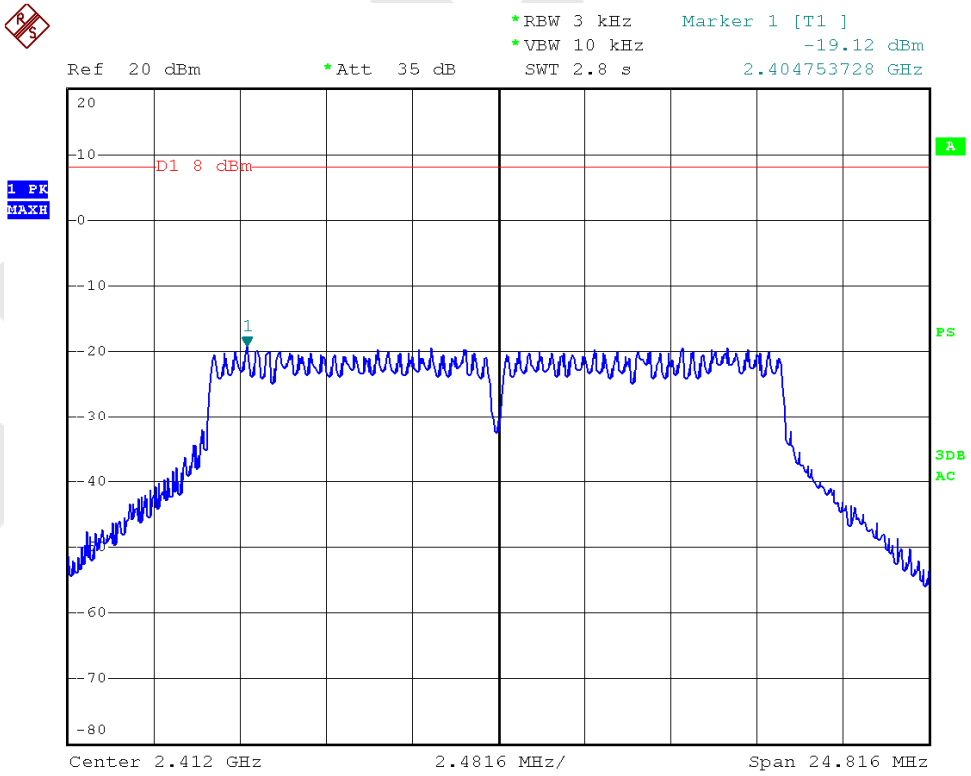
802.11 b CH--Mid



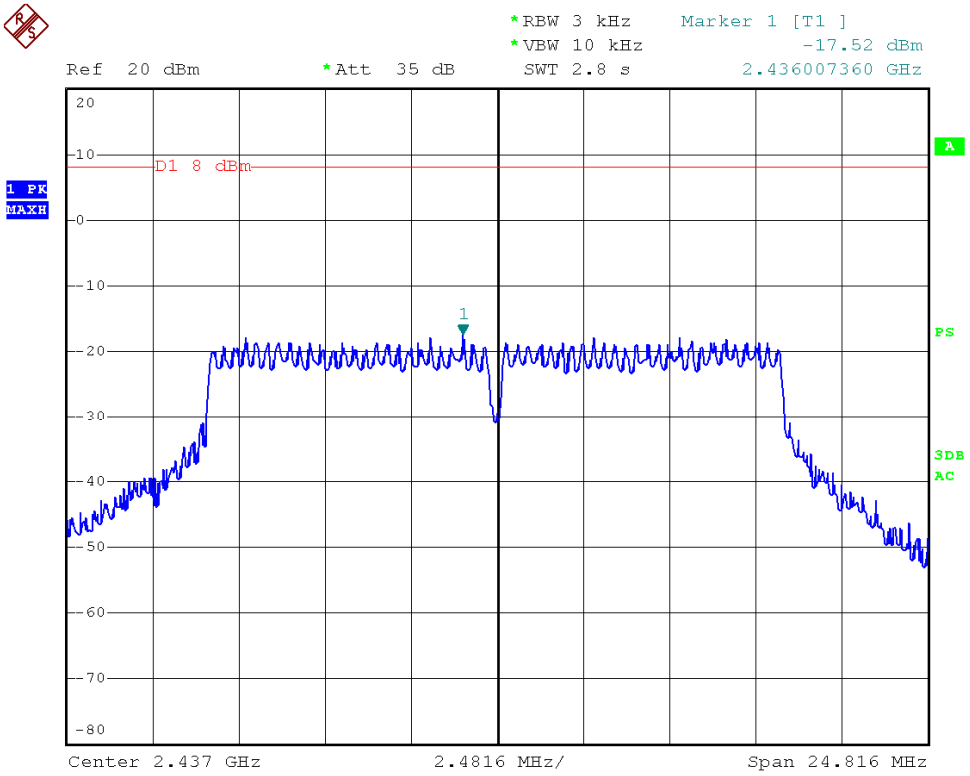
802.11 b CH--High



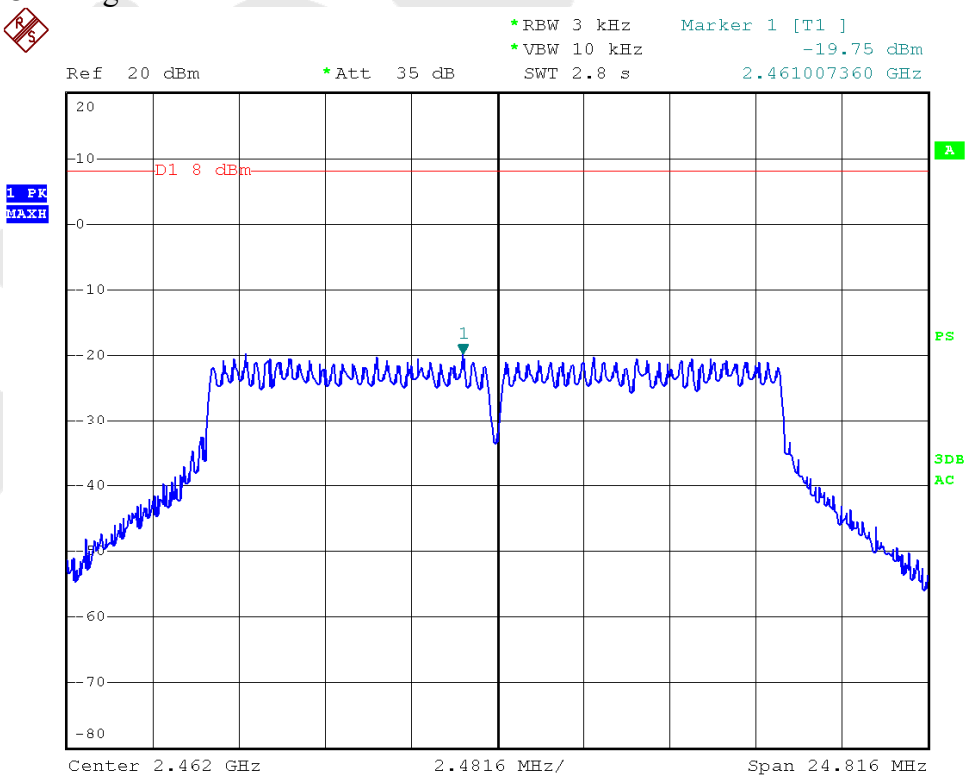
802.11g CH--Low



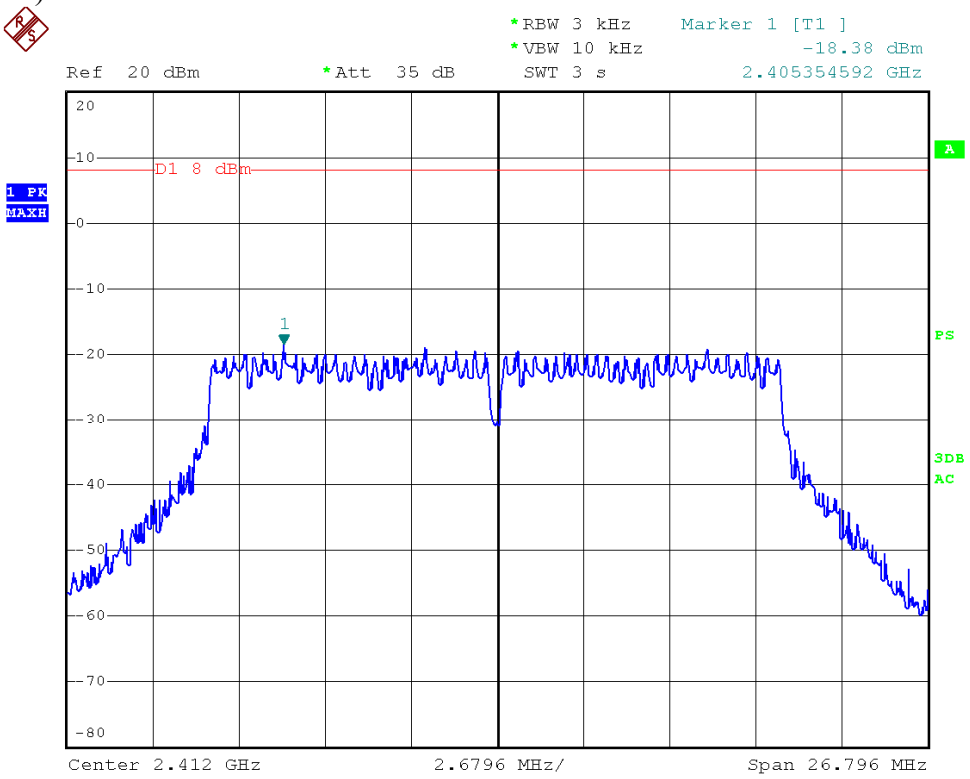
802.11g CH--Mid



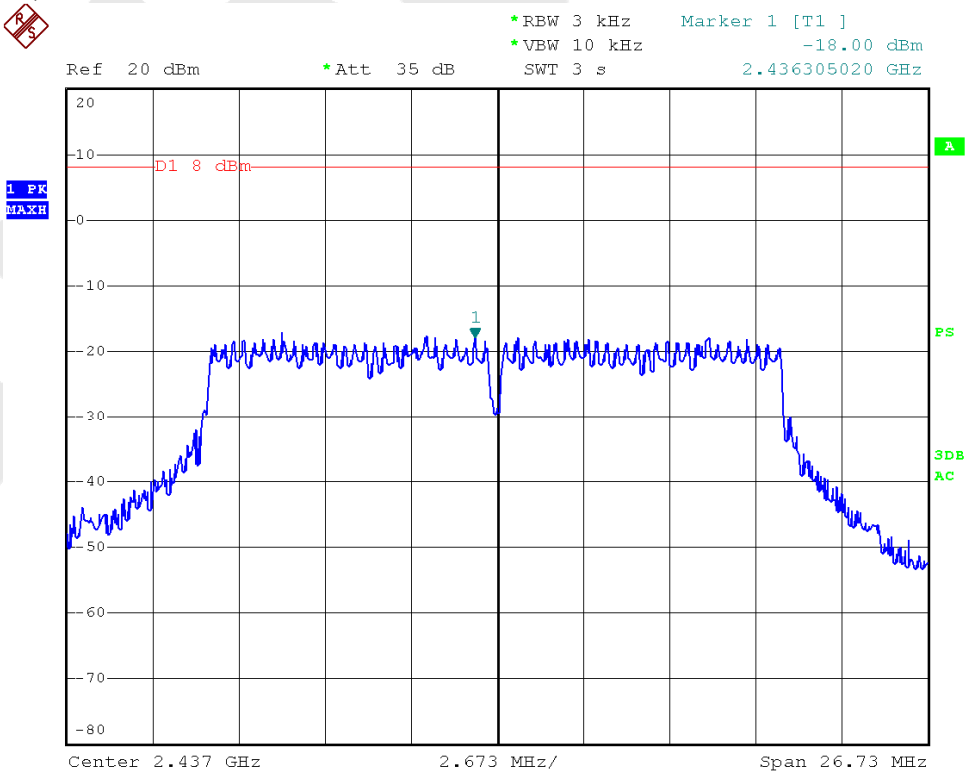
802.11g CH--High



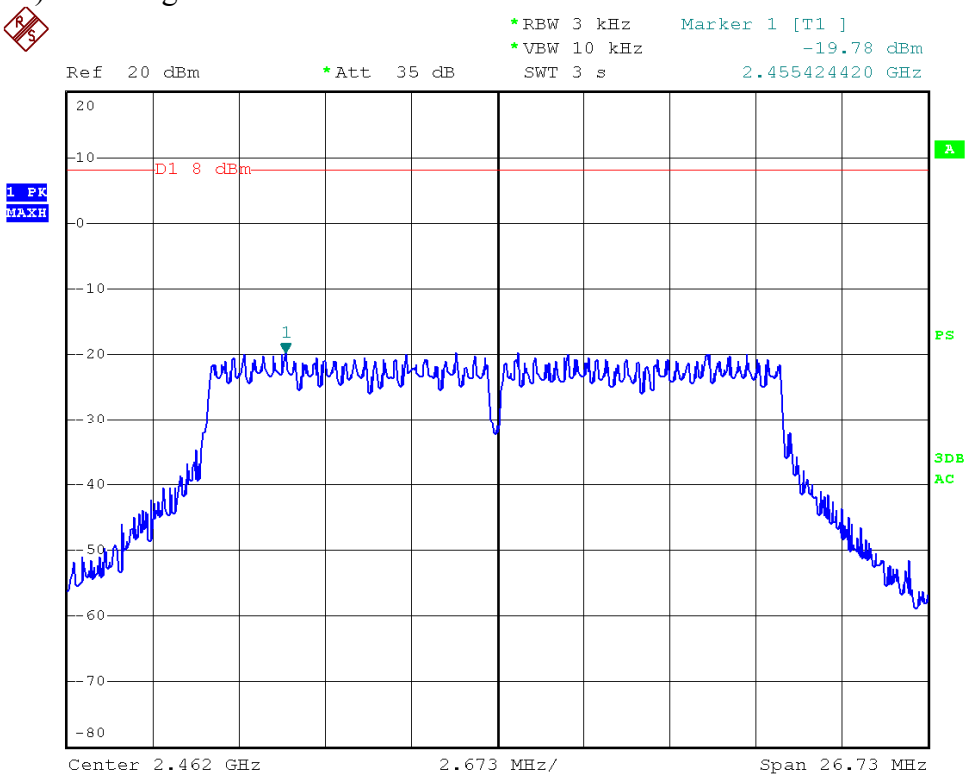
802.11n (HT20) CH—Low



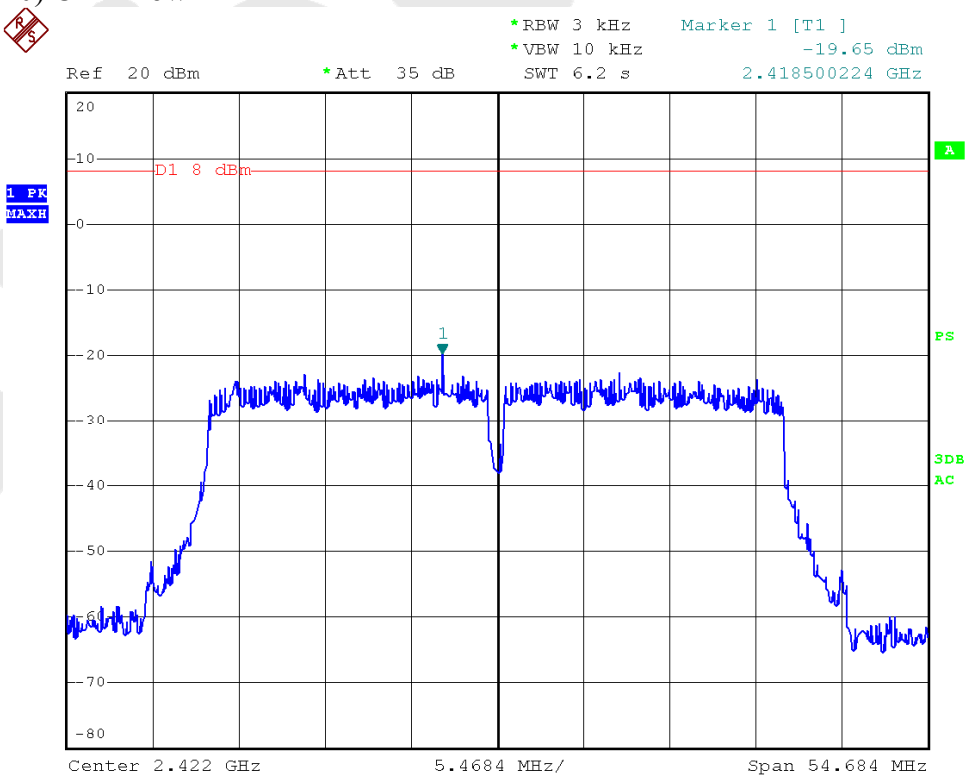
802.11n (HT20) CH—Mid



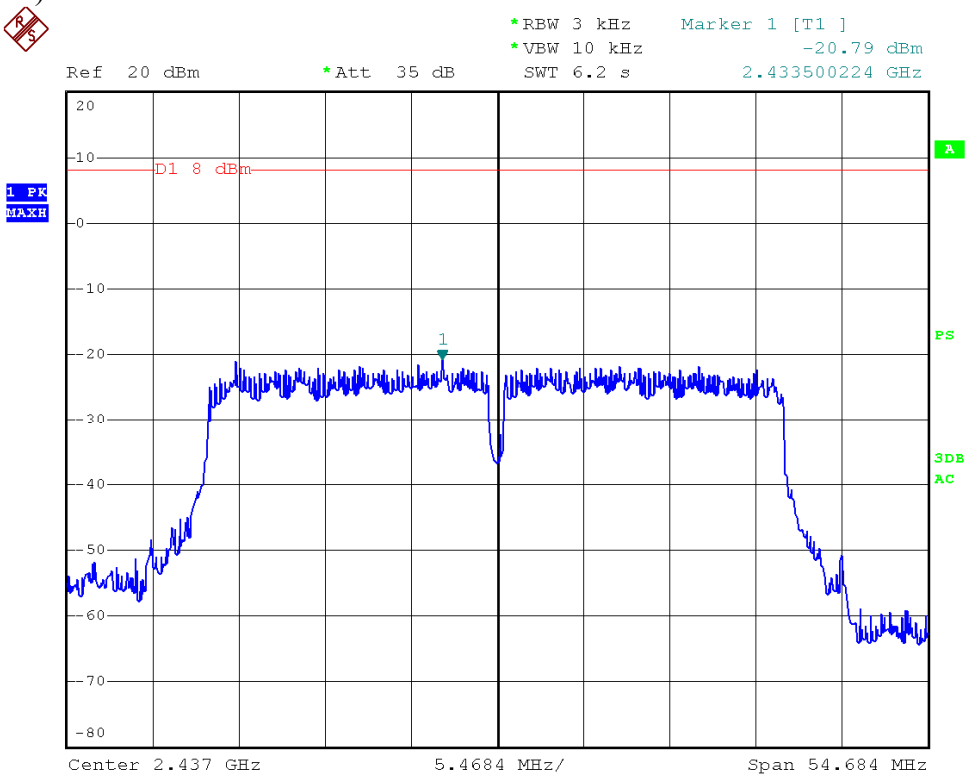
802.11n (HT20) CH—High



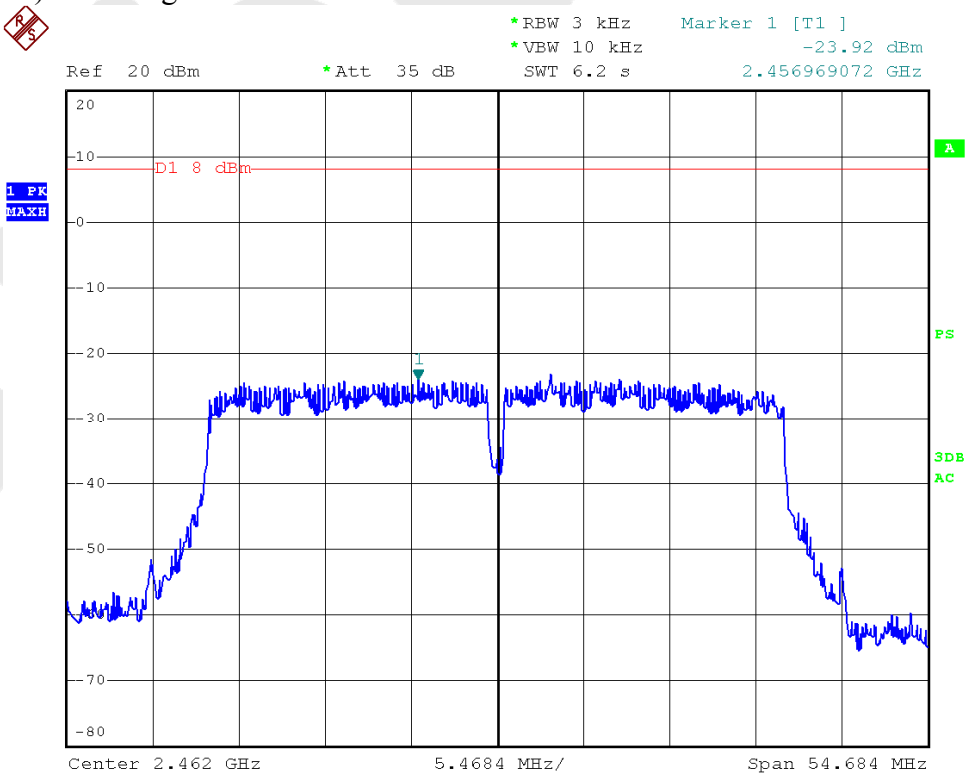
802.11n (HT40) CH—Low



802.11n (HT40) CH—Mid



802.11n (HT40) CH—High



4.6. Radiated Emissions

4.6.1.1. Test Limits (< 30 MHZ)

Frequency (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meter)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30

4.6.1.2. Test Limits (≥ 30 MHZ)

FIELD STRENGTH of Fundamental: @3M	FIELD STRENGTH of Harmonics	S15.209 30 - 88 MHz	40 dBuV/m
902-928 MHZ		88 - 216 MHz	43.5
2.4-2.4835 GHz		216 - 960 MHz	46
94 dBμV/m @3m	54 dBμV/m @3m	ABOVE 960 MHz	54dBuV/m

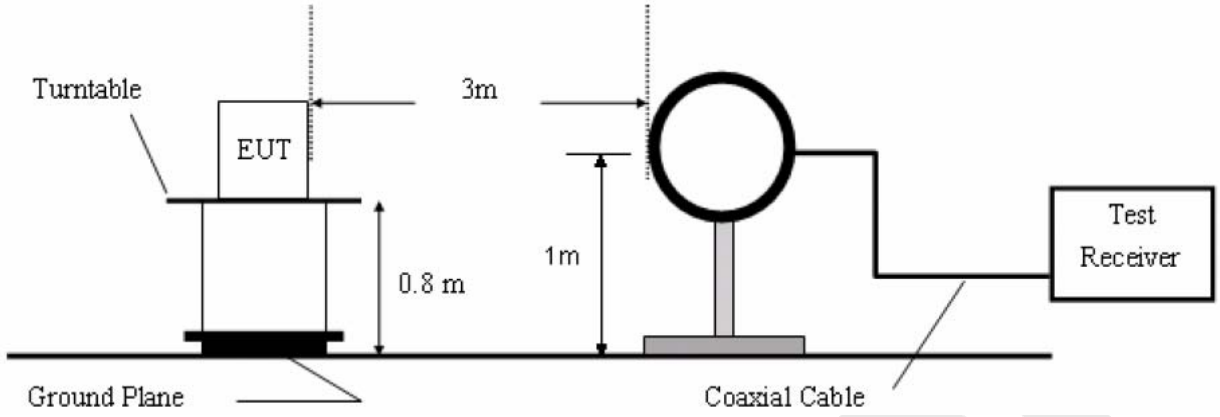
In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement. Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a) (see Section 15.205(c)).

Test Equipment

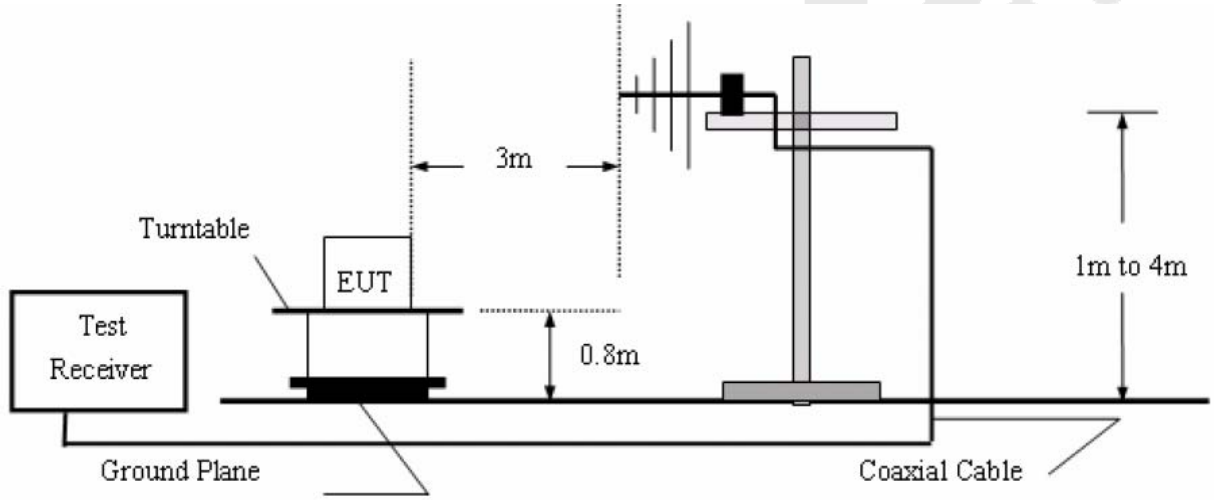
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum Analysis	Agilent	E4407B	US39390582	Aug. 08, 2014	1 Year
2.	Preamplifier	Instruments corporation	EMC011830	980100	Aug. 08, 2014	1 Year
3.	EMI Test Receiver	Rohde & Schwarz	ESPI	101604	Apr. 22, 2014	1 Year
4.	Double Ridged Horn Antenna	Instruments corporation	GTH-0118	351600	Apr. 04, 2014	1 Year
5.	Bilog Broadband Antenna	Schwarzbeck	VULB9163	VULB 9163-289	Apr. 24, 2014	1 Year
6.	Pre-amplifier	SONOMA	310N	186860	Aug. 08, 2014	1 Year
7.	EMI Test Software EZ-EMC	SHURPLE	N/A	N/A	N/A	N/A

4.6.2. Test Configuration:

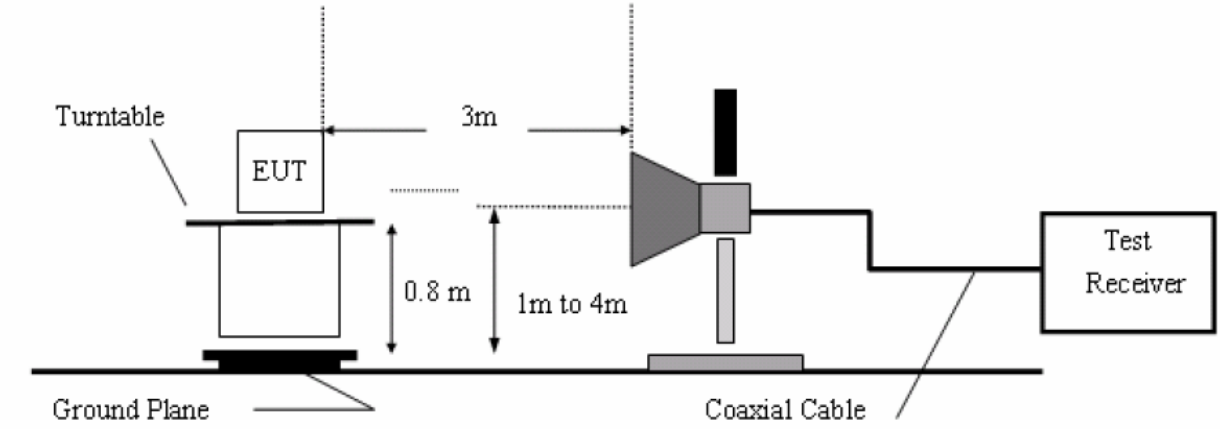
4.6.2.1. 9k to 30MHz emissions:



4.6.2.2. 30M to 1G emissions:



4.6.2.3. 1G to 40G emissions:



4.6.3. Test Procedure

The EUT is placed on a turn table which is 0.8 meter high above the ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. The EUT is set 3 meters away from the receiving antenna which is mounted on a antenna tower. The antenna can be moved up and down from 1 to 4 meters to find out the maximum emission level. Both horizontal and vertical polarization of the antenna are set on test.

Measurements are made on 9KHz to 30MHz and 30MHz to 26GHz range with the transmitter set to the lowest, middle, and highest channels.

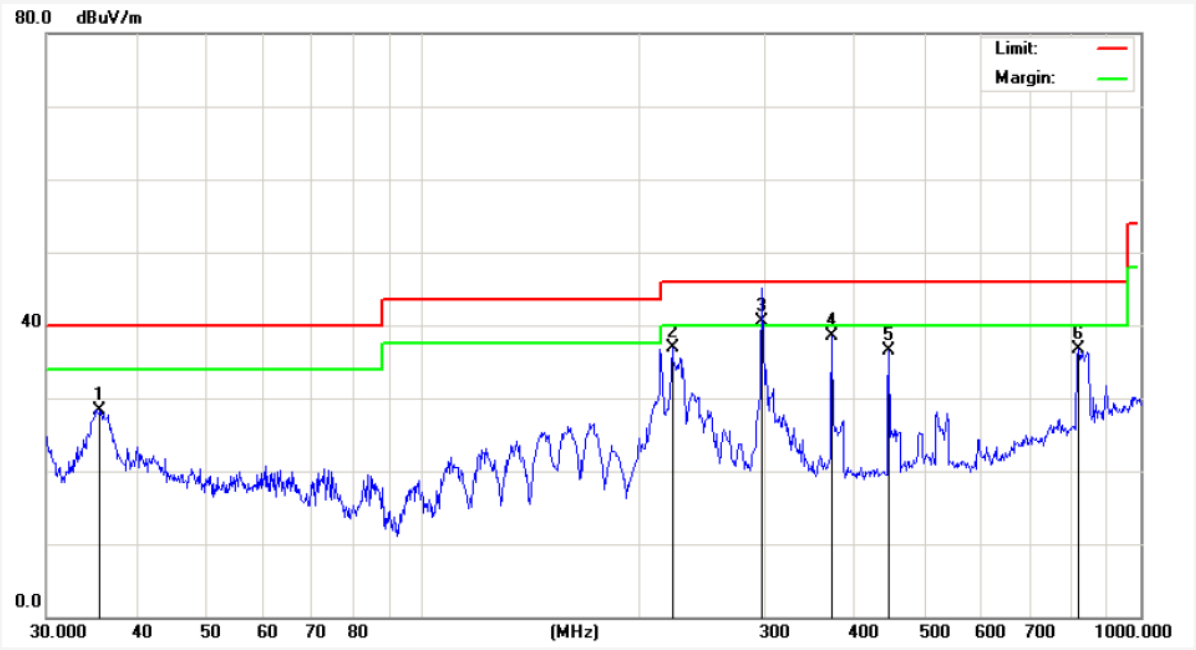
All readings from 30MHz to 1GHz are quasi-peak values with a resolution bandwidth of 120kHz. All reading are above 1GHz, peak & average values with a resolution bandwidth of 1MHz.
The EUT is tested in 9*6*6 Chamber.
Set both RBW and VBW of spectrum analyzer to 100kHz with a convenient frequency span including 100kHz bandwidth from band edge, check the emission of EUT. If pass then set Spectrum Analyzer as below:
For below 1GHz:
The resolution bandwidth and video bandwidth of test receiver/ spectrum analyzer is 120kHz.
Detector: Quasi-Peak
For above 1GHz Peak measurement:
The resolution bandwidth of test receiver/ spectrum analyzer is 1MHz and video bandwidth is 3MHz.
Detector: Peak
For above 1GHz average measurement:
The resolution bandwidth of test receiver/ spectrum analyzer is 1MHz and the video bandwidth is 10kHz.
Detector: Peak

The test results are listed in Section 4.6.4.

4.6.4. Test Results

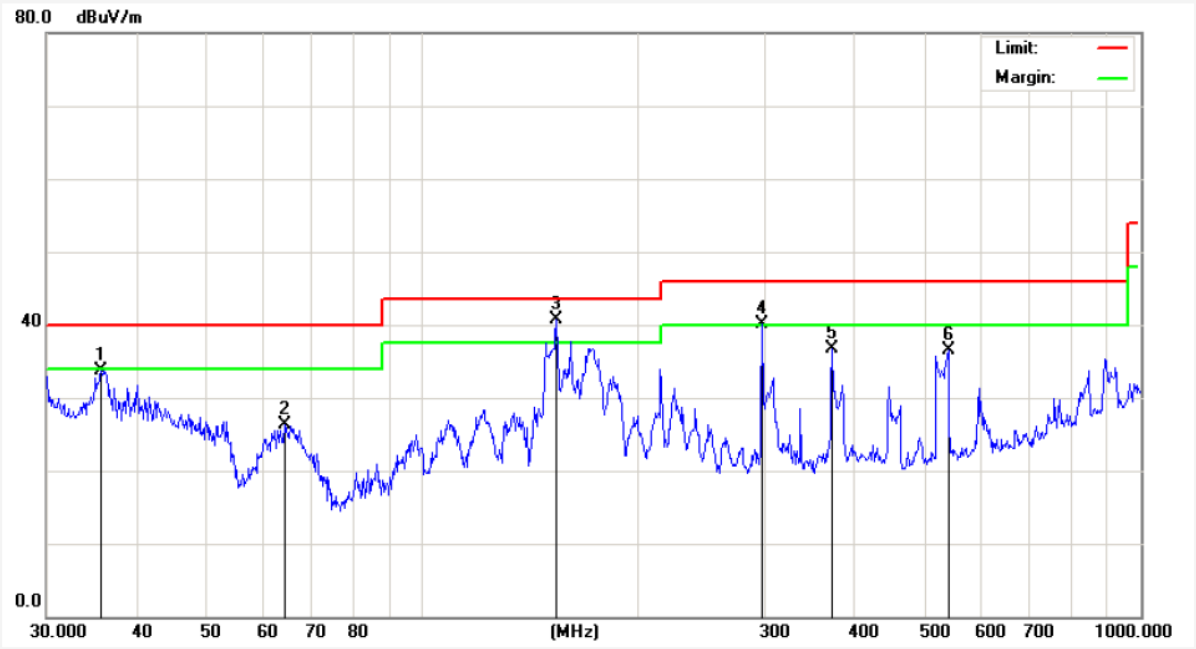
The EUT was tested on (HDMI, MHL) modes, only the worst data of (MHL) is attached in the following pages.

Job No.:	**011408190E**	**Polarization:**	**Horizontal**
Standard:	**(RE)FCC PART15 C _3m**	**Power Source:**	**DC 5V via USB Port**
Test item:	**Radiation Test**	**Temp.(C)/Hum.(%RH):**	**24.3(C)/55%RH**
Test Mode:	**MHL**	**Distance:**	**3m**



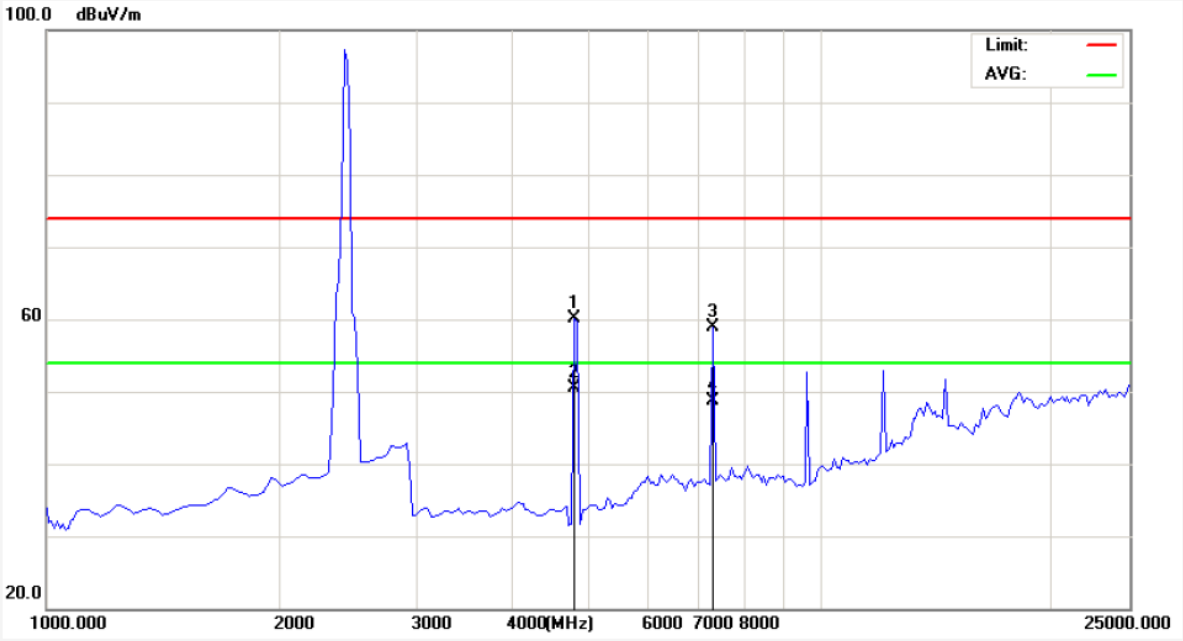
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	35.6240	42.15	-13.81	28.34	40.00	-11.66	peak			
2	222.9502	56.80	-19.82	36.98	46.00	-9.02	peak			
3	296.9841	58.34	-17.77	40.57	46.00	-5.43	QP	300	360	
4	372.0045	51.96	-13.43	38.53	46.00	-7.47	peak			
5	446.4141	48.58	-12.17	36.41	46.00	-9.59	peak			
6	818.8341	42.97	-6.22	36.75	46.00	-9.25	peak			

Job No.:	**011408190E**	**Polarization:**	**Vertical**
Standard:	**(RE)FCC PART15 C _3m**	**Power Source:**	**DC 5V via USB Port**
Test item:	**Radiation Test**	**Temp.(C)/Hum.(%RH):**	**24.3(C)/55%RH**
Test Mode:	**MHL**	**Distance:**	**3m**



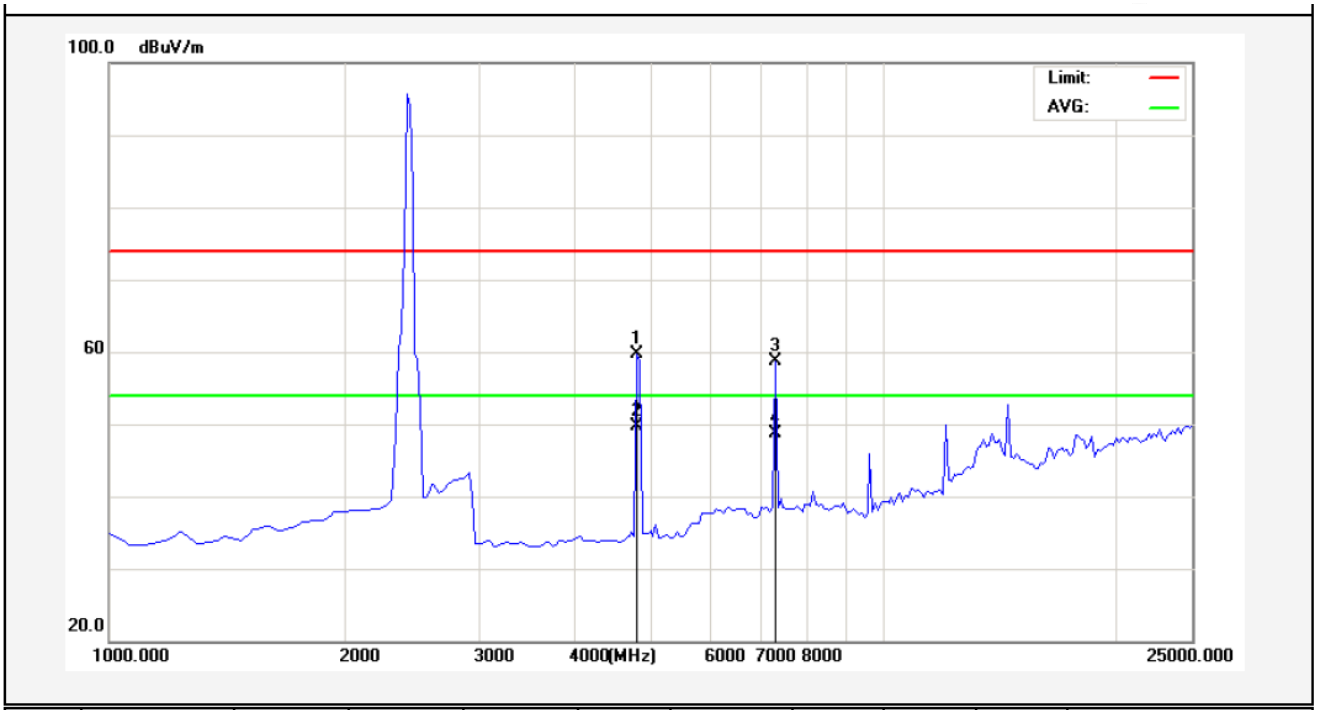
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	35.7490	47.46	-13.70	33.76	40.00	-6.24	peak			
2	64.4331	43.45	-17.24	26.21	40.00	-13.79	peak			
3	153.7385	58.90	-18.17	40.73	43.50	-2.77	peak			
4	297.2241	54.81	-14.76	40.05	46.00	-5.95	peak			
5	372.0045	49.09	-12.43	36.66	46.00	-9.34	peak			
6	539.4775	46.69	-10.28	36.41	46.00	-9.59	peak			

Job No.:	**011408190E**	**Polarization:**	**Horizontal**
Standard:	**(RE)FCC PART15 C _3m**	**Power Source:**	**DC 5V via USB Port**
Test item:	**Radiation Test**	**Temp.(C)/Hum.(%RH):**	**24.3(C)/55%RH**
Note:	**ANT A 802.11b(2412MHz)**	**Distance:**	**3m**



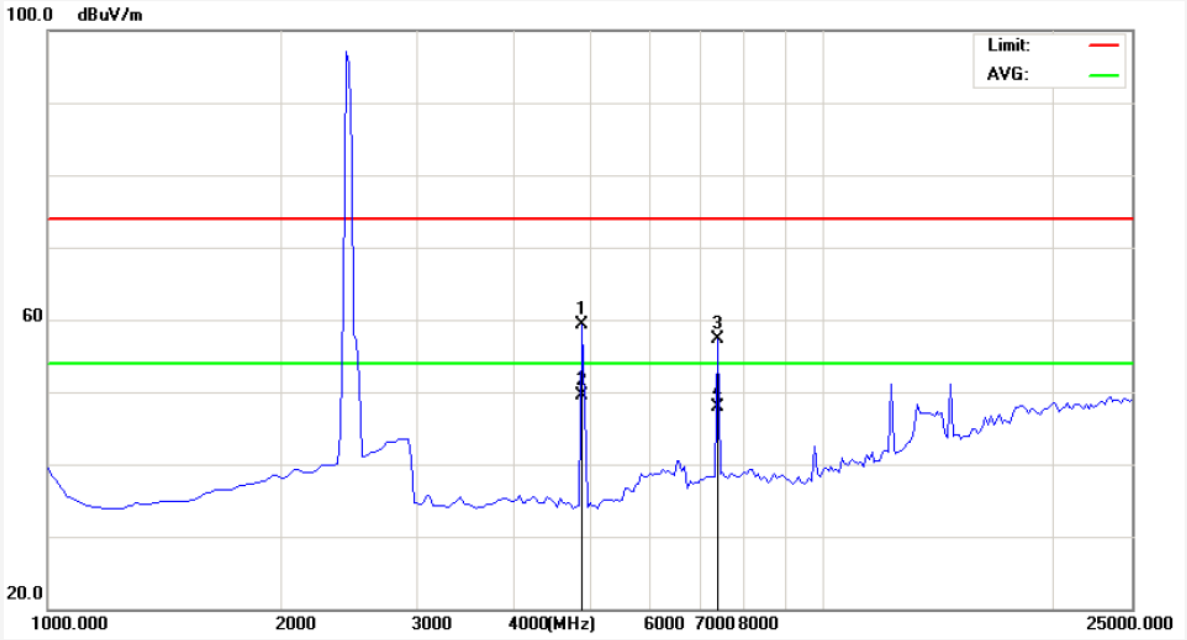
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	4840.000	56.76	3.37	60.13	74.00	-13.87	peak			
2	4840.000	47.20	3.37	50.57	54.00	-3.43	AVG			
3	7240.000	50.47	8.47	58.94	74.00	-15.06	peak			
4	7240.000	40.27	8.47	48.74	54.00	-5.26	AVG			

Job No.:	**011408190E**	**Polarization:**	**Vertical**
Standard:	**(RE)FCC PART15 C _3m**	**Power Source:**	**DC 5V via USB Port**
Test item:	**Radiation Test**	**Temp.(C)/Hum.(%RH):**	**24.3(C)/55%RH**
Note:	**ANT A 802.11b(2412MHz)**	**Distance:**	**3m**



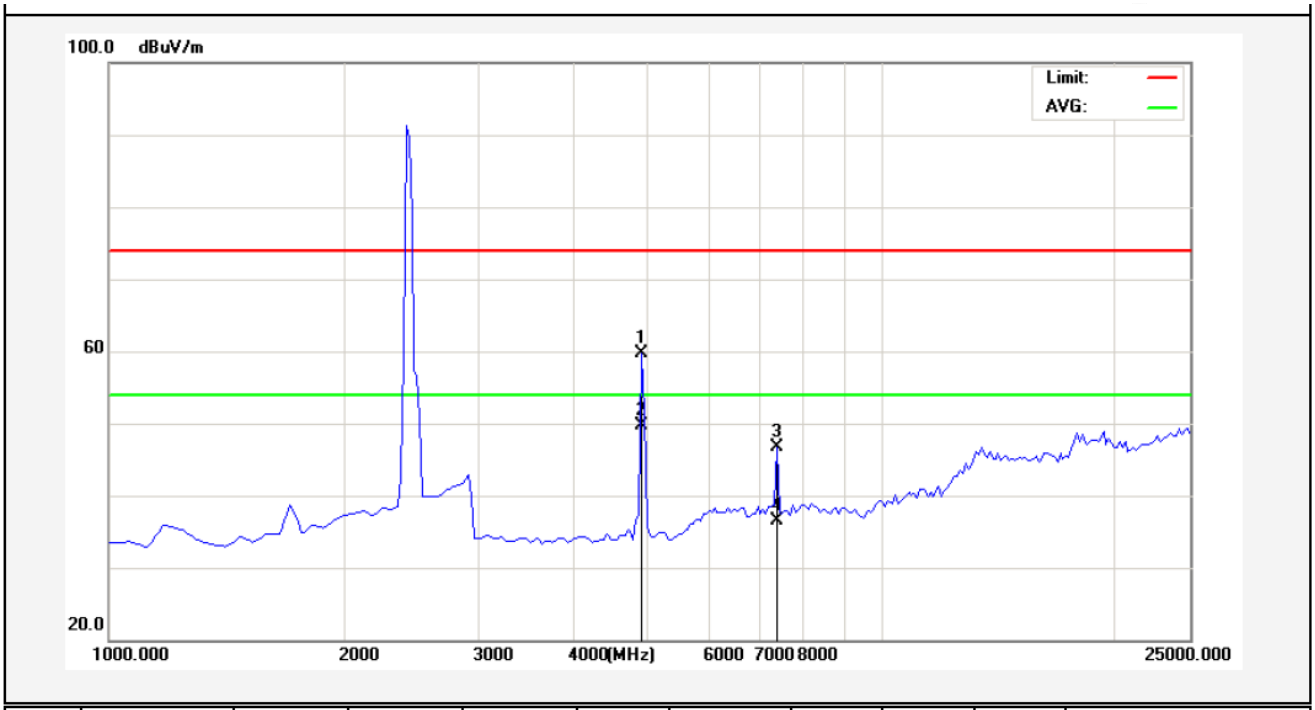
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	4840.000	56.38	3.37	59.75	74.00	-14.25	peak			
2	4840.000	46.31	3.37	49.68	54.00	-4.32	AVG			
3	7240.000	50.19	8.47	58.66	74.00	-15.34	peak			
4	7240.000	40.27	8.47	48.74	54.00	-5.26	AVG			

Job No.:	**011408190E**	**Polarization:**	**Horizontal**
Standard:	**(RE)FCC PART15 C _3m**	**Power Source:**	**DC 5V via USB Port**
Test item:	**Radiation Test**	**Temp.(C)/Hum.(%RH):**	**24.3(C)/55%RH**
Note:	**ANT A 802.11b(2437MHz)**	**Distance:**	**3m**



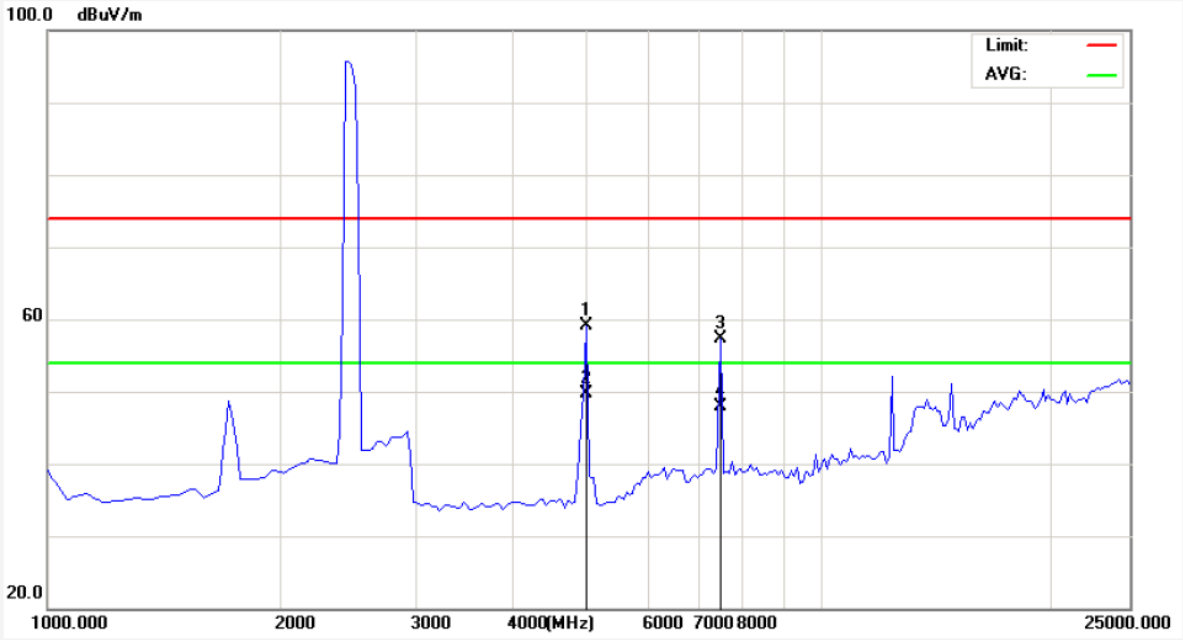
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	4900.000	55.78	3.47	59.25	74.00	-14.75	peak			
2	4900.000	45.99	3.47	49.46	54.00	-4.54	AVG			
3	7300.000	48.75	8.54	57.29	74.00	-16.71	peak			
4	7300.000	39.28	8.54	47.82	54.00	-6.18	AVG			

Job No.:	**011408190E**	**Polarization:**	**Vertical**
Standard:	**(RE)FCC PART15 C _3m**	**Power Source:**	**DC 5V via USB Port**
Test item:	**Radiation Test**	**Temp.(C)/Hum.(%RH):**	**24.3(C)/55%RH**
Note:	**ANT A 802.11b(2437MHz)**	**Distance:**	**3m**



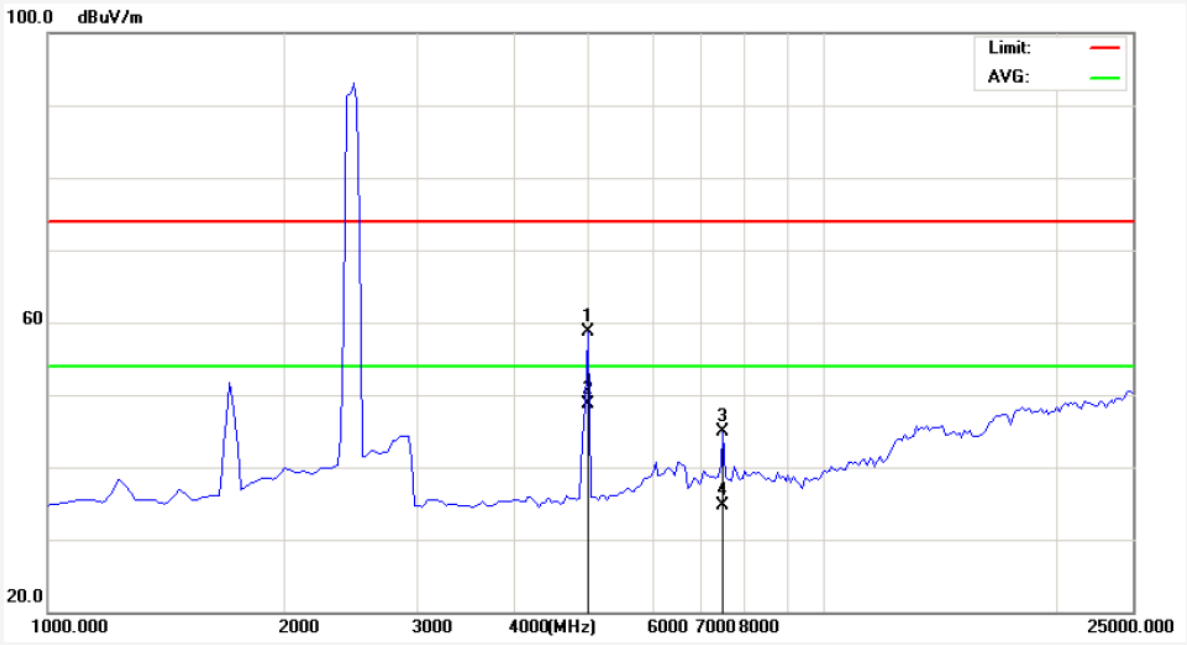
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	4900.000	56.21	3.47	59.68	74.00	-14.32	peak			
2	4900.000	46.28	3.47	49.75	54.00	-4.25	AVG			
3	7300.000	38.16	8.54	46.70	74.00	-27.30	peak			
4	7300.000	27.94	8.54	36.48	54.00	-17.52	AVG			

Job No.:	**011408190E**	**Polarization:**	**Horizontal**
Standard:	**(RE)FCC PART15 C _3m**	**Power Source:**	**DC 5V via USB Port**
Test item:	**Radiation Test**	**Temp.(C)/Hum.(%RH):**	**24.3(C)/55%RH**
Note:	**ANT A 802.11b(2462MHz)**	**Distance:**	**3m**



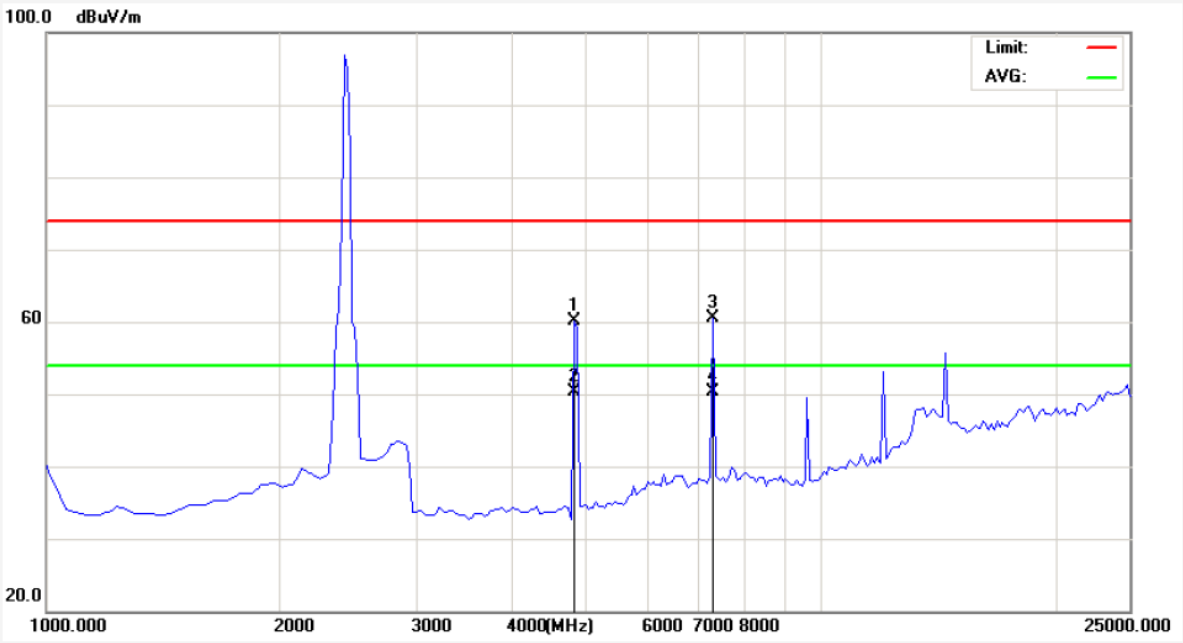
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	4960.000	55.46	3.58	59.04	74.00	-14.96	peak			
2	4960.000	46.10	3.58	49.68	54.00	-4.32	AVG			
3	7420.000	48.52	8.69	57.21	74.00	-16.79	peak			
4	7420.000	39.18	8.69	47.87	54.00	-6.13	AVG			

Job No.:	**011408190E**	**Polarization:**	**Vertical**
Standard:	**(RE)FCC PART15 C _3m**	**Power Source:**	**DC 5V via USB Port**
Test item:	**Radiation Test**	**Temp.(C)/Hum.(%RH):**	**24.3(C)/55%RH**
Note:	**ANT A 802.11b(2462MHz)**	**Distance:**	**3m**



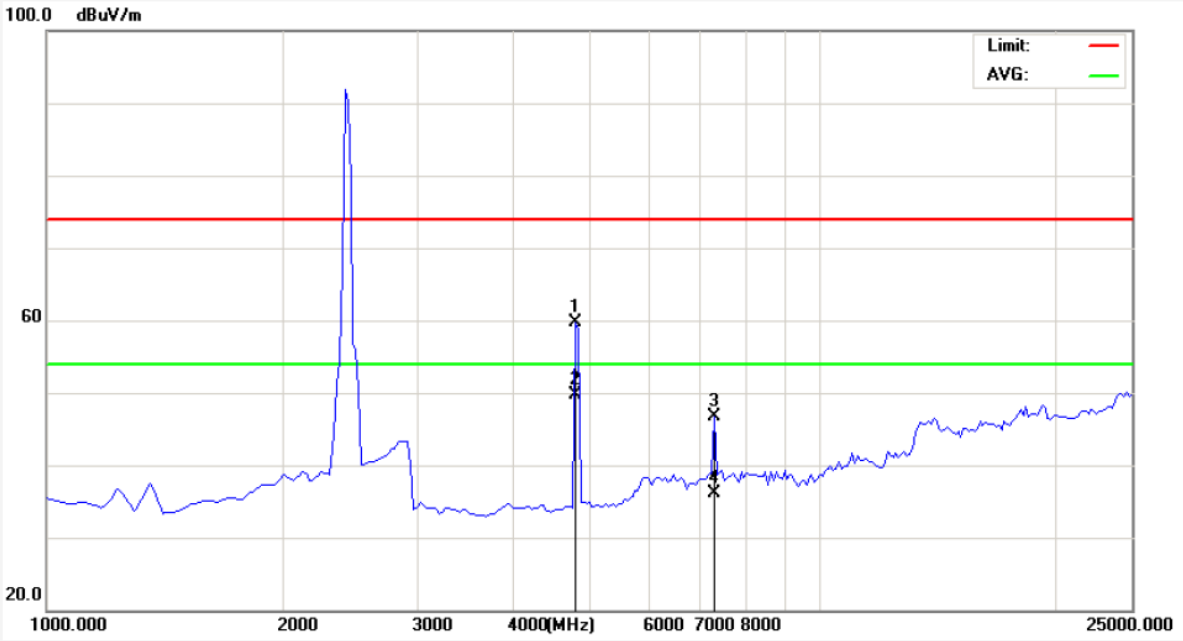
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	4960.000	55.17	3.58	58.75	74.00	-15.25	peak			
2	4960.000	45.20	3.58	48.78	54.00	-5.22	AVG			
3	7420.000	36.14	8.69	44.83	74.00	-29.17	peak			
4	7420.000	26.09	8.69	34.78	54.00	-19.22	AVG			

Job No.:	**011408190E**	**Polarization:**	**Horizontal**
Standard:	**(RE)FCC PART15 C _3m**	**Power Source:**	**DC 5V via USB Port**
Test item:	**Radiation Test**	**Temp.(C)/Hum.(%RH):**	**24.3(C)/55%RH**
Note:	**ANT B 802.11b(2412MHz)**	**Distance:**	**3m**



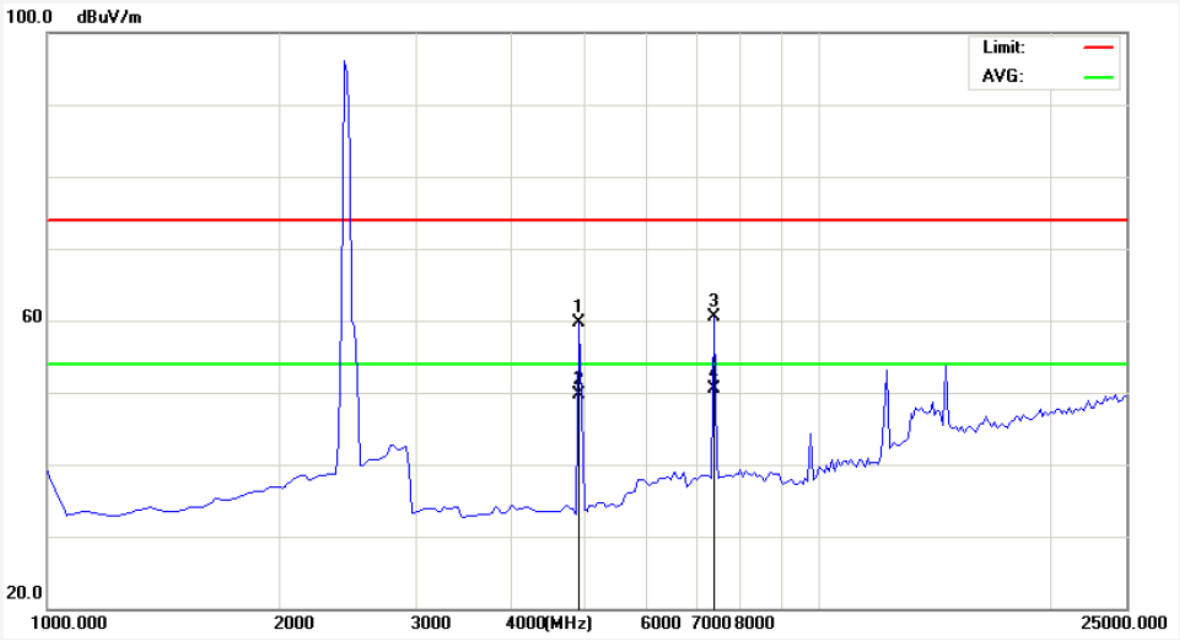
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	4840.000	56.75	3.37	60.12	74.00	-13.88	peak			
2	4840.000	46.94	3.37	50.31	54.00	-3.69	AVG			
3	7240.000	52.09	8.47	60.56	74.00	-13.44	peak			
4	7240.000	41.81	8.47	50.28	54.00	-3.72	AVG			

Job No.:	**011408190E**	**Polarization:**	**Vertical**
Standard:	**(RE)FCC PART15 C _3m**	**Power Source:**	**DC 5V via USB Port**
Test item:	**Radiation Test**	**Temp.(C)/Hum.(%RH):**	**24.3(C)/55%RH**
Note:	**ANT B 802.11b(2412MHz)**	**Distance:**	**3m**



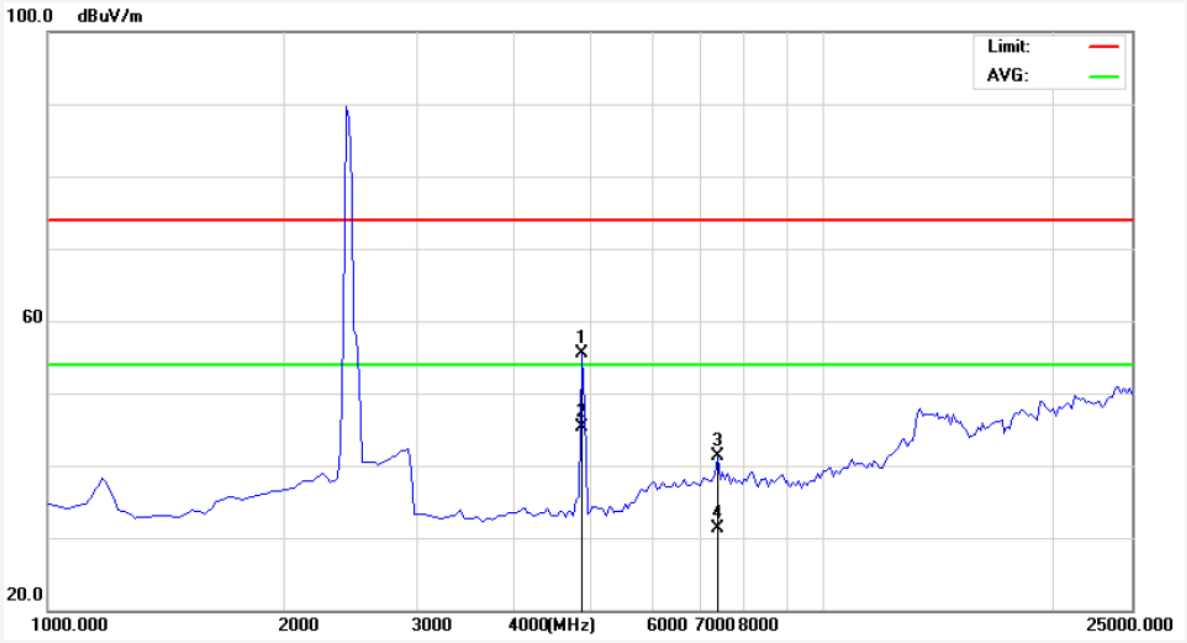
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	4840.000	56.30	3.37	59.67	74.00	-14.33	peak			
2	4840.000	46.32	3.37	49.69	54.00	-4.31	AVG			
3	7240.000	38.25	8.47	46.72	74.00	-27.28	peak			
4	7240.000	27.72	8.47	36.19	54.00	-17.81	AVG			

Job No.:	**011408190E**	**Polarization:**	**Horizontal**
Standard:	**(RE)FCC PART15 C _3m**	**Power Source:**	**DC 5V via USB Port**
Test item:	**Radiation Test**	**Temp.(C)/Hum.(%RH):**	**24.3(C)/55%RH**
Note:	**ANT B 802.11b(2437MHz)**	**Distance:**	**3m**



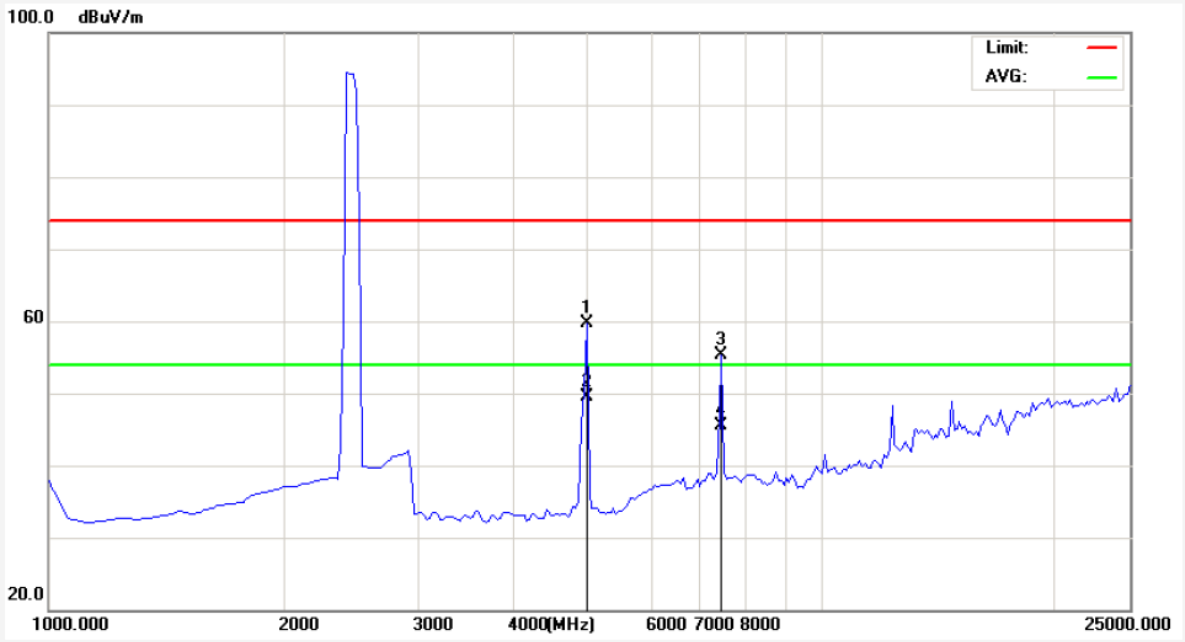
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	4900.000	56.14	3.47	59.61	74.00	-14.39	peak			
2	4900.000	46.21	3.47	49.68	54.00	-4.32	AVG			
3	7300.000	52.03	8.54	60.57	74.00	-13.43	peak			
4	7300.000	42.00	8.54	50.54	54.00	-3.46	AVG			

Job No.:	**011408190E**	**Polarization:**	**Vertical**
Standard:	**(RE)FCC PART15 C _3m**	**Power Source:**	**DC 5V via USB Port**
Test item:	**Radiation Test**	**Temp.(C)/Hum.(%RH):**	**24.3(C)/55%RH**
Note:	**ANT B 802.11b(2437MHz)**	**Distance:**	**3m**



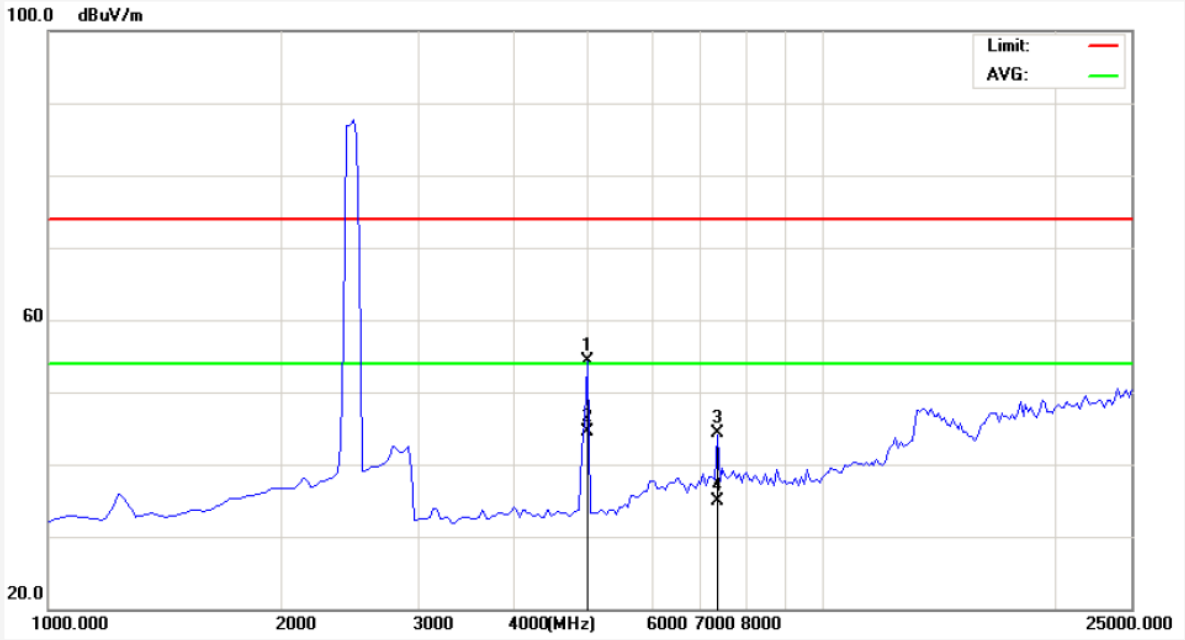
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	4900.000	51.95	3.47	55.42	74.00	-18.58	peak			
2	4900.000	41.85	3.47	45.32	54.00	-8.68	AVG			
3	7300.000	32.78	8.54	41.32	74.00	-32.68	peak			
4	7300.000	22.73	8.54	31.27	54.00	-22.73	AVG			

Job No.:	**011408190E**	**Polarization:**	**Horizontal**
Standard:	**(RE)FCC PART15 C _3m**	**Power Source:**	**DC 5V via USB Port**
Test item:	**Radiation Test**	**Temp.(C)/Hum.(%RH):**	**24.3(C)/55%RH**
Note:	**ANT B 802.11b(2462MHz)**	**Distance:**	**3m**



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	4960.000	56.17	3.58	59.75	74.00	-14.25	peak			
2	4960.000	45.83	3.58	49.41	54.00	-4.59	AVG			
3	7420.000	46.67	8.69	55.36	74.00	-18.64	peak			
4	7420.000	36.77	8.69	45.46	54.00	-8.54	AVG			

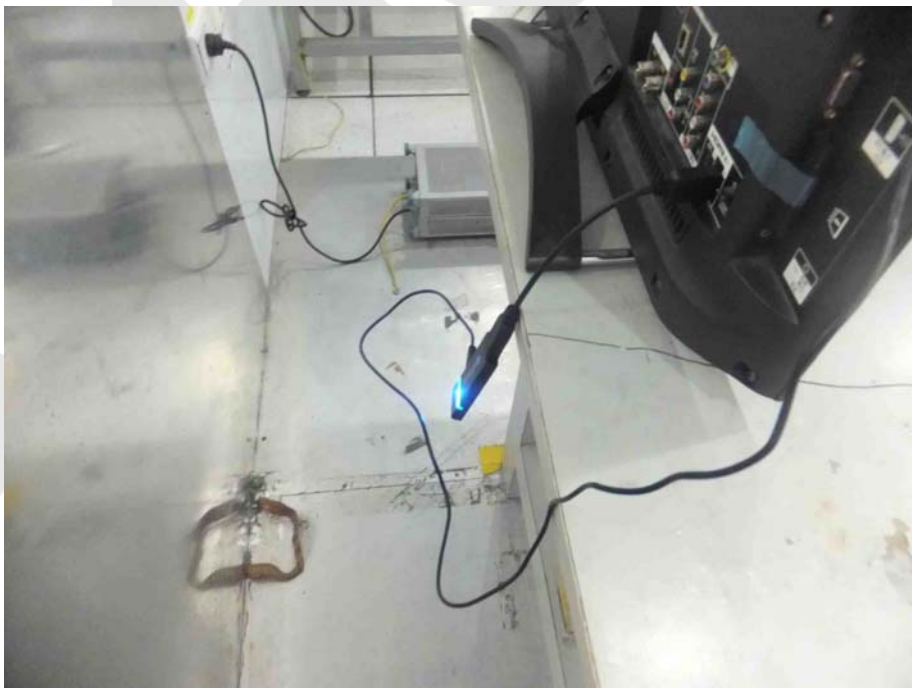
Job No.:	**011408190E**	**Polarization:**	**Vertical**
Standard:	**(RE)FCC PART15 C _3m**	**Power Source:**	**DC 5V via USB Port**
Test item:	**Radiation Test**	**Temp.(C)/Hum.(%RH):**	**24.3(C)/55%RH**
Note:	**ANT B 802.11b(2462MHz)**	**Distance:**	**3m**



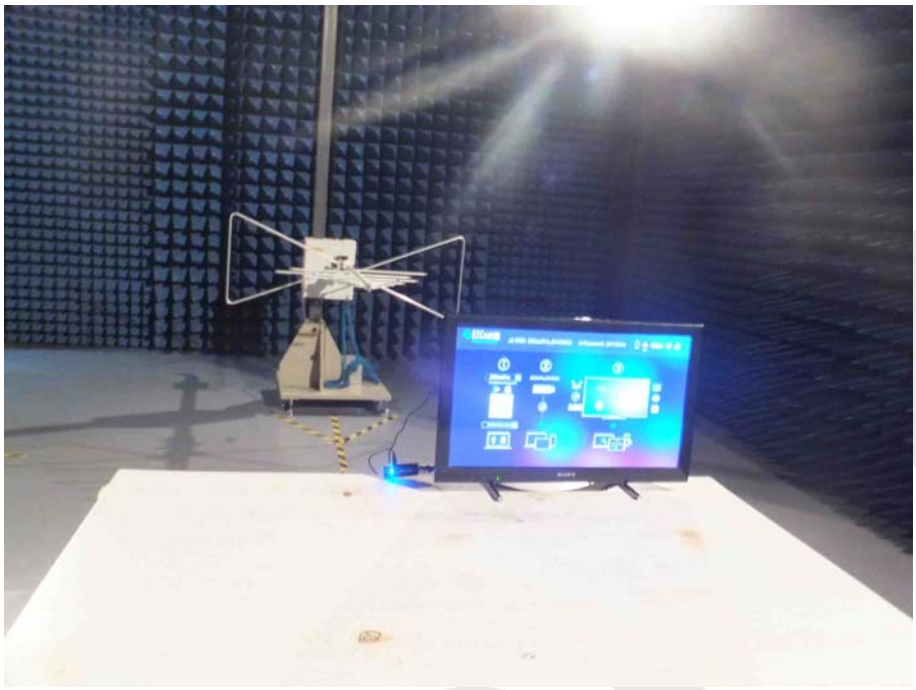
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	4960.000	50.73	3.58	54.31	74.00	-19.69	peak			
2	4960.000	40.89	3.58	44.47	54.00	-9.53	AVG			
3	7300.000	35.66	8.54	44.20	74.00	-29.80	peak			
4	7300.000	26.35	8.54	34.89	54.00	-19.11	AVG			

5. PHOTOGRAPH

5.1. Photo of Conducted Emission Measurement



5.2. Photo of Radiation Emission Test



APPENDIX I (EXTERNAL PHOTOS)

Figure 1
The EUT-Overall View

Figure 2
The EUT-Front View

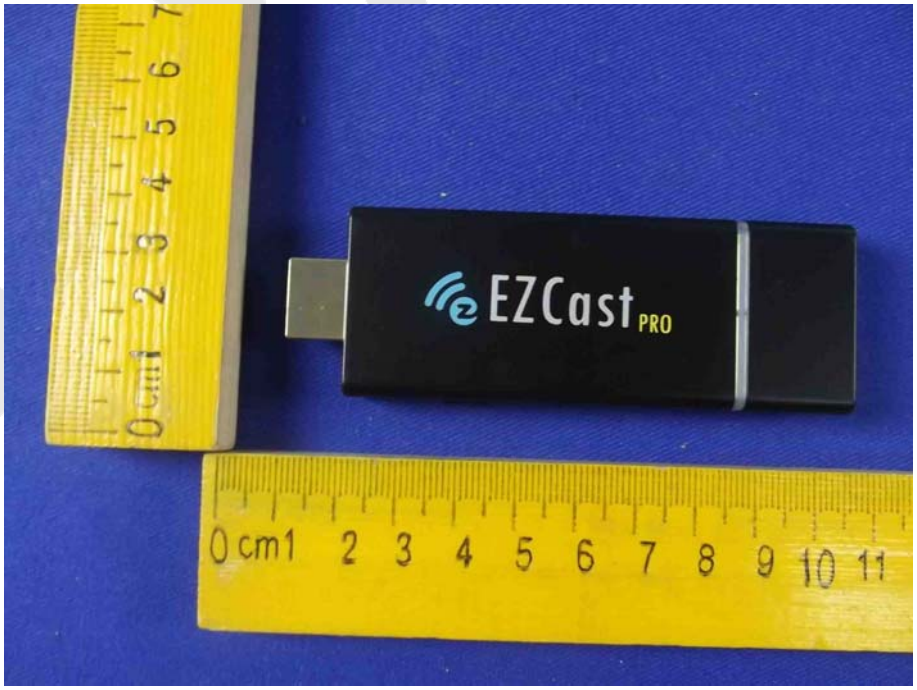


Figure 3
The EUT-Back View

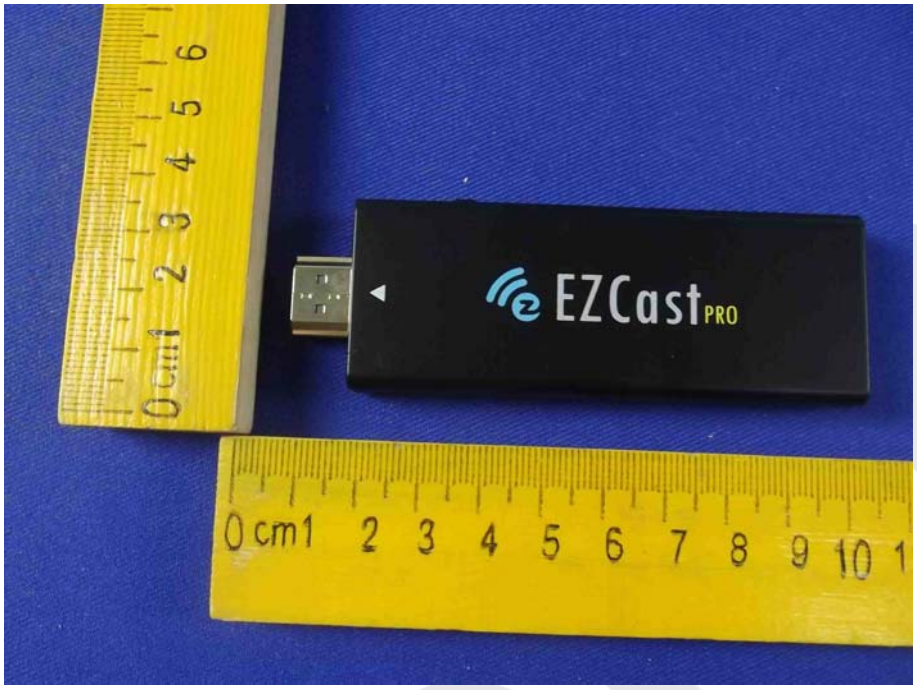


Figure 4
The EUT-Top View

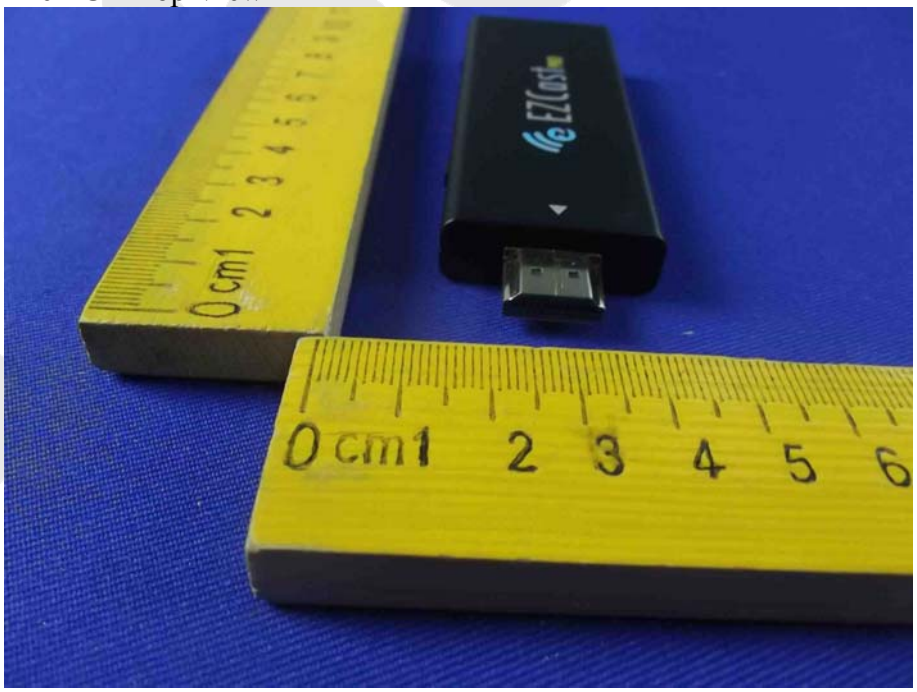


Figure 5
The EUT-Bottom View

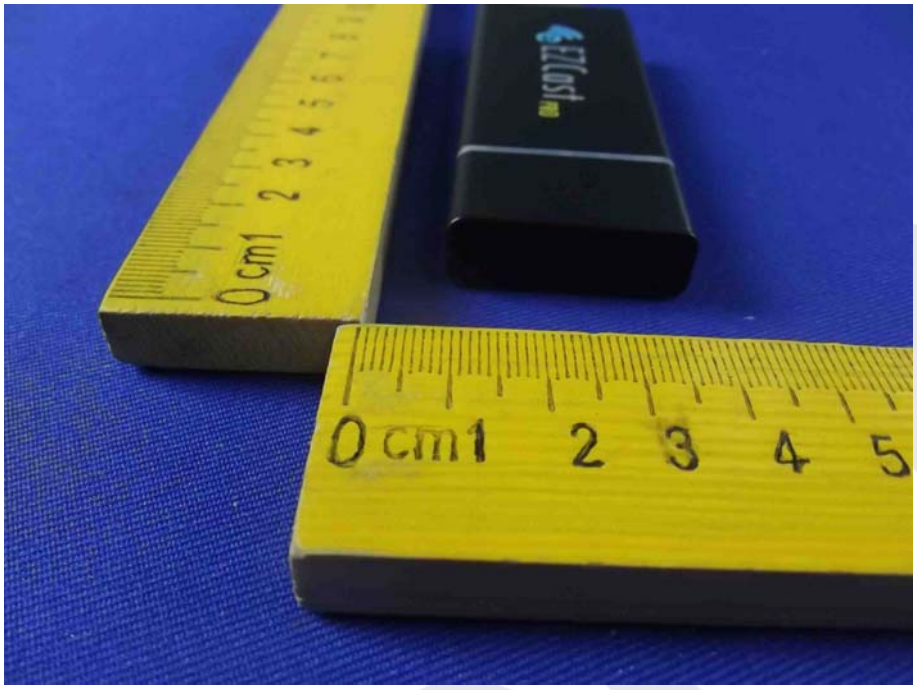
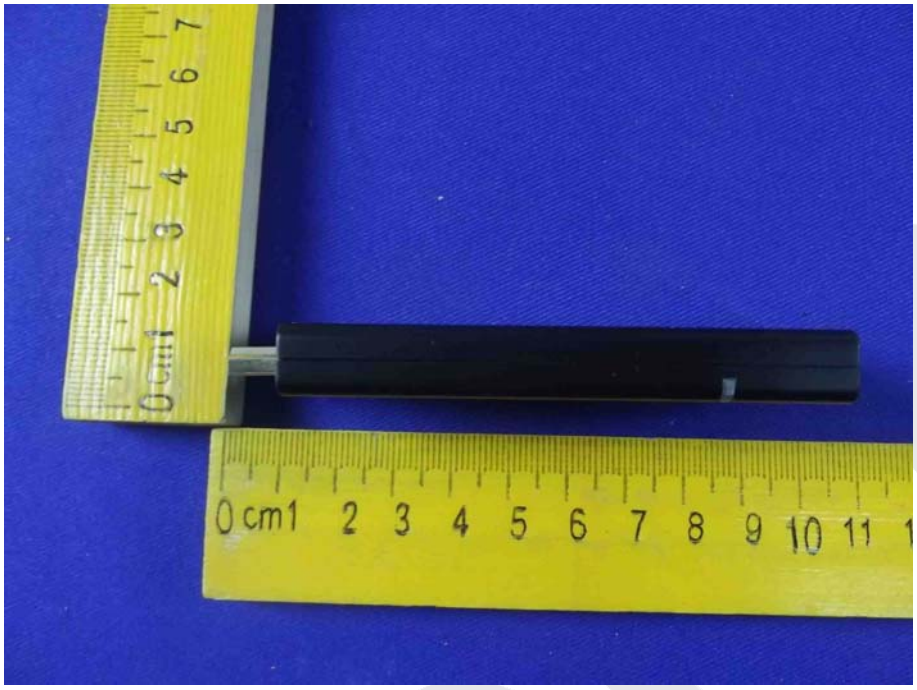


Figure 6
The EUT-Right Side View

Figure 7
The EUT-Left Side View



APPENDIX Ⅱ(INTERNAL PHOTOS)

Figure 8
The EUT-Inside View

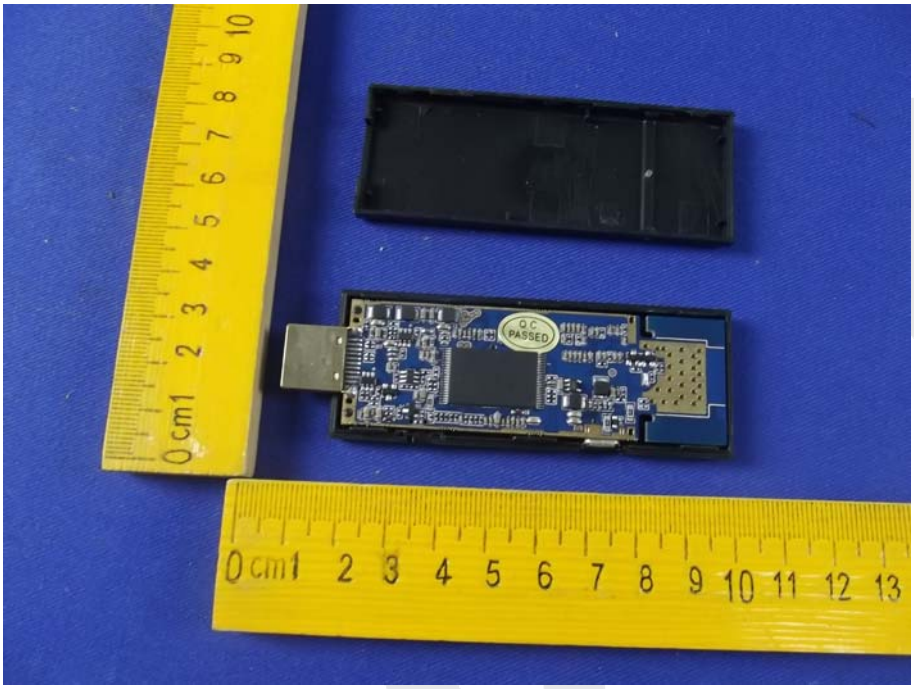


Figure 9
PCB of the EUT-Front View

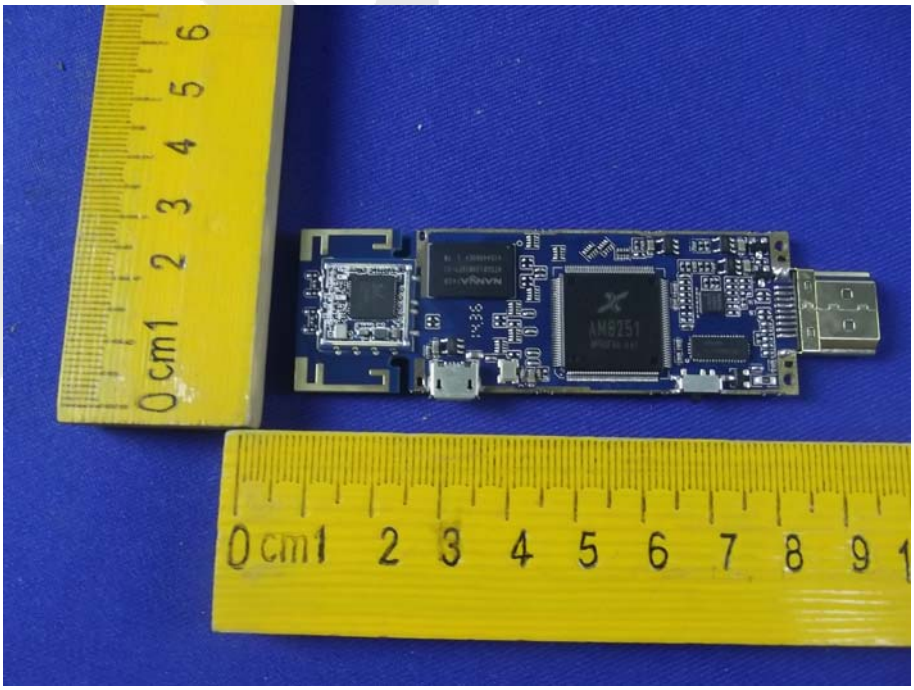


Figure 10
PCB of the EUT-Back View

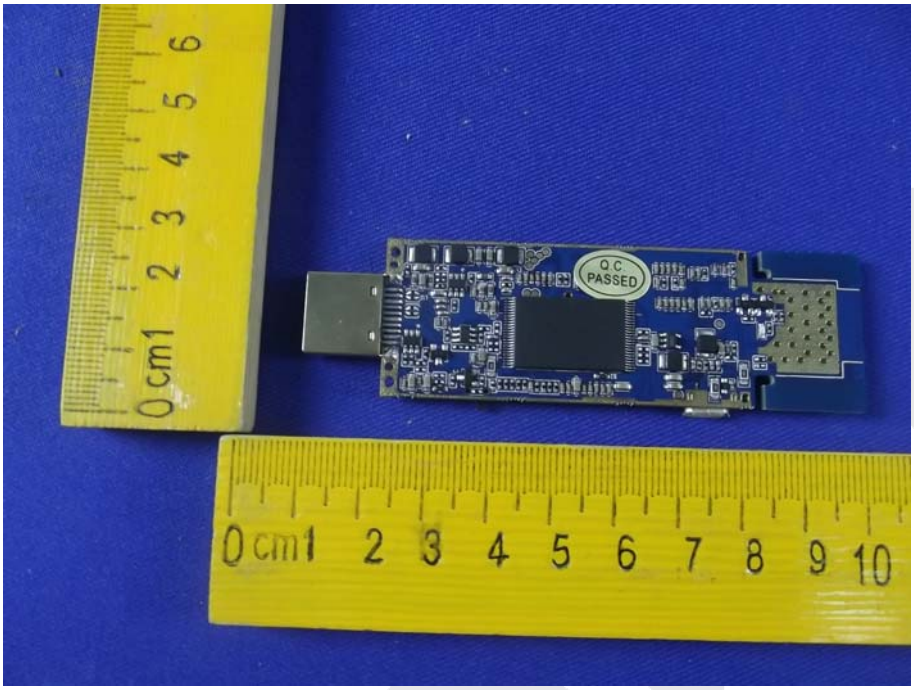


Figure 11
PCB of the EUT-Front View

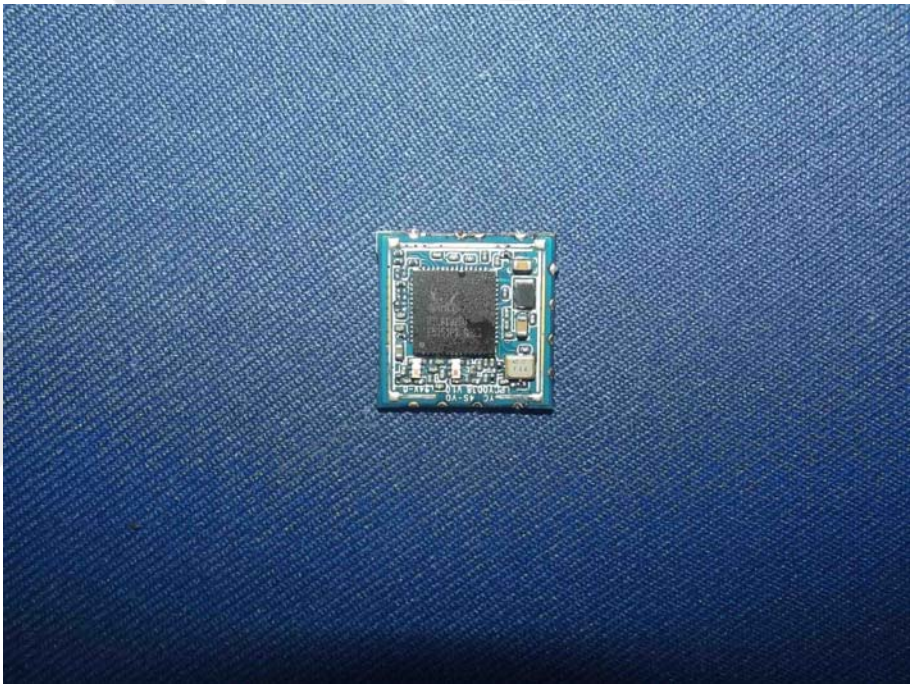


Figure 12
PCB of the EUT-Back View