



FCC RADIO TEST REPORT

FCC ID: N28WT3020H

Product: Mini NAS Wireless Router

Trade Name: 

Model Name: WT3020H

Serial Model: WT3020A

Report No.: BZT-140311033F

Prepared for

Nexx Wireless Co., Ltd.

No.365, Xihu Road, Shimajing Community, Guanlan Town, Longhua new District,
Shenzhen, China.

Prepared by

BZT Testing Technology Co., Ltd

Add. : 1/F, Building E, Fenda Science Park, Sanwei Community, Xixiang Street, Bao'an District,
Shenzhen P.R. China.

TEST RESULT CERTIFICATION

Applicant's name : Nexx Wireless Co., Ltd.
Address : No.365, Xinhua Road, Shimajing Community, Guanlan Town, Longhua new District, Shenzhen, China.
Manufacture's Name..... : YONG SHENG PRECISION PATTERN(SHENZHEN) CO., LTD.
Address : A, NO.70, Shixin Road, Shier Residents, Shimajing Community, Guanlan Street, Bao'an District, Shenzhen City, Guangdong Province, P.R. China.

Product description

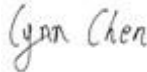
Product name : Mini NAS Wireless Router
Model and/or type reference : WT3020H
Serial Model..... : WT3020A
DIFF..... : All model's the function, software and electric circuit are the same, only with a product color and model named different. The test mode is WT3020H.
Standards : FCC Part15.247


Test procedure ANSI C63.4-2003

This device described above has been tested by BZT, and the test results show that the equipment under test (EUT) is in compliance with the FCC requirements. And it is applicable only to the tested sample identified in the report.

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Date of Test.....:
Date (s) of performance of tests : 15 March. 2014 ~20 March. 2014
Date of Issue : 21 March. 2014
Test Result : **Pass**

Testing Engineer : 
(Lynn Chen)

Technical Manager : 
(Carlen Liu)

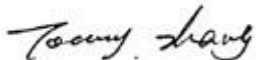
Authorized Signatory : 
(Tommy zhang)


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1 General Information

1.1 Description of Device (EUT)

Trade Name	:	
EUT	:	Mini NAS Wireless Router
Model No.	:	WT3020H, WT3020A
DIFF.	:	All model's the function, software and electric circuit are the same, only with a product color and model named different. Test sample model: WT3020H
Antenna Type	:	PCB Antenna 1, max gain 1.5 dBi PCB Antenna 2, max gain 1.5 dBi
Operation Frequency	:	IEEE 802.11b: 2412MHz-2462MHz IEEE 802.11g: 2412MHz-2462MHz IEEE 802.11n HT20: 2412-2462MHz IEEE 802.11n HT40:2422-2452MHz
Channel number	:	IEEE 802.11b,g,n/HT20: 11 Channels IEEE 802.11n HT40: 7Channels
Modulation type	:	IEEE 802.11b: DSSS(CCK,DQPSK,DBPSK) IEEE 802.11g: OFDM(64QAM, 16QAM, QPSK, BPSK) IEEE 802.11n :OFDM(64QAM, 16QAM, QPSK, BPSK)
Power Supply	:	DC 5V from adapter Manufacturer: YONG SHENG PRECISION PATTERN(SHENZHEN) CO., LTD.
Adapter	:	Model No.: HJ50600-10 Input: AC 100~240V,50/60Hz, 0.15A Output: DC 5V,1A
Applicant	:	Nexx Wireless Co., Ltd.
Address	:	No.365, Xihu Road, Shimajing Community , Guanlan Town, , Longhua new District, Shenzhen, China.
Manufacturer	:	Nexx Wireless Co., Ltd.
Address	:	No.365, Xihu Road, Shimajing Community , Guanlan Town, , Longhua new District, Shenzhen, China.
Note:	:	EUT has two antenna, port 1 and port 2 has simultaneously transmit WIFI, only simultaneously transmit with IEEE 802.11n/HT20 and IEEE 802.11n/HT40. Port 1 antenna and port 2 antenna see the EUT photo.

1.2 Description of Test Facility

BZT Testing Technology Co., Ltd

Add. : 1/F, Building E, Fenda Science Park, Sanwei Community,
Xixiang Street, Bao'an District, Shenzhen P.R. China.

FCC Registered No.: 701733

2 EMC Equipment List

Radiation Test equipment:

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	Agilent	E4407B	160400005	Jul. 06. 2014
2	Test Receiver	R&S	ESPI	101318	Jul. 06. 2014
3	Bilog Antenna	TESEQ	CBL6111D	31216	Nov.23. 2014
4	50Ω Coaxial Switch	Anritsu	MP59B	6200264416	Jul. 06. 2014
5	Spectrum Analyzer	ADVANTEST	R3132	150900201	Jul. 06. 2014
6	Horn Antenna	EM	EM-AH-10180	2011071402	Nov.23. 2014
7	Horn Ant	Schwarzbeck		BBHA 9170	9170-181
8	Amplifier	EM	EM-30180	060538	Jul. 06. 2014
9	Loop Antenna	ARA	PLA-1030/B	1029	Jul. 06. 2014
10	Power Meter	R&S	NRVS	100696	Jul. 06. 2014
11	Power Sensor (Peak)	R&S	NRV-Z31	0396.0101.1 9	Jul. 06. 2014

Conduction Test equipment:

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Test Receiver	R&S	ESCI	101160	Jul. 06. 2014
2	LISN	R&S	ENV216	101313	Jul. 06. 2014
3	LISN	EMCO	Feb-16	42990	Jul. 06. 2014
4	50Ω Coaxial Switch	Anritsu	MP59B	6.2E+09	Jul. 06. 2014
5	Passive Voltage Probe	R&S	ESH2-Z3	100196	Jul. 06. 2014
6	Absorbing clamp	R&S	MOS-21	100423	Jul. 06. 2014

3 Test Procedure

POWER LINE CONDUCTED INTERFERENCE: The test procedure used was ANSI Standard C63.4-2003 using a 50 u H LISN. Both Lines were observed. The bandwidth of the receiver was 10kHz with an appropriate sweep speed. The ambient temperature of the EUT was 25°C with a humidity of 58%.

RADIATION INTERFERENCE: The test procedure used was ANSI Standard C63.4-2003 using a ANRITSU spectrum analyzer with a pre-selector. The analyzer was calibrated in dB above a micro volt at the output of the antenna. The resolution bandwidth was 100kHz and the video bandwidth was 300 kHz up to 1 GHz and 1 MHz with a video BW of 3MHz above 1 GHz. The ambient temperature of the EUT was 25°C with a humidity of 58%.

FORMULA OF CONVERSION FACTORS: The Field Strength at 3m was established by adding the meter reading of the spectrum analyzer (which is set to read in units of dBuV) to the antenna correction factor supplied by the antenna manufacturer and cable loss. The antenna correction factors and cable loss are stated in terms of dB. The gain of the Pre-selector was accounted for in the Spectrum Analyzer Meter Reading.

Example:

Freq (MHz) METER READING + ACF + CABLE = FS

33.20 dBuV + 10.36 dB + 0.9 dB= 44.46 dBuV/m @ 3m

ANSI STANDARD C63.4-2003 10.1.7 MEASUREMENT PROCEDURES: The EUT was placed on a table 80 cm high and with dimensions of 1m by 1.5m. The EUT was placed in the center of the table (1.5m side). The table used for radiated measurements is capable of continuous rotation. When an emission was found, the table was rotated to produce the maximum signal strength. At this point, the antenna was raised and lowered from 1m to 4m. The antenna was placed in both the horizontal and vertical planes. The situation was similar for the conducted measurement except that the table did not rotate. The EUT was setup as described in ANSI Standard C63.4-2003 10.1.7 with the EUT 40 cm from the vertical ground wall.

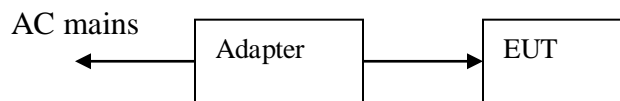
4 Summary of Measurement

4.1 Summary of test result

Test Item	Test Requirement	Standards Paragraph	Result
Spurious Emission	FCC PART 15 : 2012& IC RSS-210	Section 15.247&15.209 & A8	Compliance
Conduction Emission	FCC PART 15: 2012& IC RSS Gen	Section 15.207&7.2.4	Compliance
Bandwidth Test	FCC PART 15:2012& IC RSS-210 IC RSS Gen	Section 15.247& A8 & 4.6.1	Compliance
Peak Power	FCC PART 15:2012& IC RSS-210	Section 15.247& A8	Compliance
Power Density	FCC PART 15:2012& IC RSS-210	Section 15.247& A8	Compliance
Band Edge	FCC PART 15:2012& IC RSS-210	Section 15.247& A8	Compliance
Antenna Requirement	FCC PART 15 : 2012& IC RSS Gen	Section 15.203&7.1.4	Compliance

Note: The EUT has been tested as an independent unit. And Continual Transmitting in maximum power (The Adapter be used during Test)

4.2 Test connection



4.3 Assistant equipment used for test

Description	: Adapter
Manufacturer	: YONG SHENG PRECISION PATTERN(SHENZHEN) CO., LTD.
Model No.	: HJ50600-10

4.4 Test mode

Tested mode, channel, and data rate information			
Mode	data rate (Mbps)(see Note)	Channel	Frequency (MHz)
IEEE 802.11b	1	Low :CH1	2412
	1	Middle: CH6	2437
	1	High: CH11	2462
IEEE 802.11g	6	Low :CH1	2412
	6	Middle: CH6	2437
	6	High: CH11	2462
IEEE 802.11 n/HT20	6.5	Low :CH1	2412
	6.5	Middle: CH6	2437
	6.5	High: CH11	2462
IEEE 802.11 n/HT40	13.5	Low :CH1	2422
	13.5	Middle:CH4	2437
	13.5	High:CH7	2452

Note: According exploratory test, EUT will have maximum output power in those data rate. so those data rate were used for all test.

4.5 Channel list

For IEEE 802.11b/g and IEEE 802.11n/HT20					
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
CH1	2412	CH5	2432	CH9	2452
CH2	2417	CH6	2437	CH10	2457
CH3	2422	CH7	2442	CH11	2462
CH4	2427	CH8	2447		

For IEEE 802.11n/HT40					
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
CH1	2422	CH5	2442	/	
CH2	2427	CH6	2447	/	
CH3	2432	CH7	2452	/	
CH4	2437	/		/	

4.6 Test Conditions

Temperature range	21-25°C
Humidity range	40-75%
Pressure range	86-106kPa

4.7 Measurement Uncertainty (95% confidence levels, k=2)

No.	Item	Uncertainty
1	Conducted Emission Test	±1.38dB
2	RF power,conducted	±0.16dB
3	Spurious emissions,conducted	±0.21dB
4	All emissions,radiated(<1G)	±4.68dB
5	All emissions,radiated(>1G)	±4.89dB
6	Temperature	±0.5 °C
7	Humidity	±2%

5 Spurious Emission

5.1 Radiation Emission

5.1.1 Radiation Emission Limits(15.209)

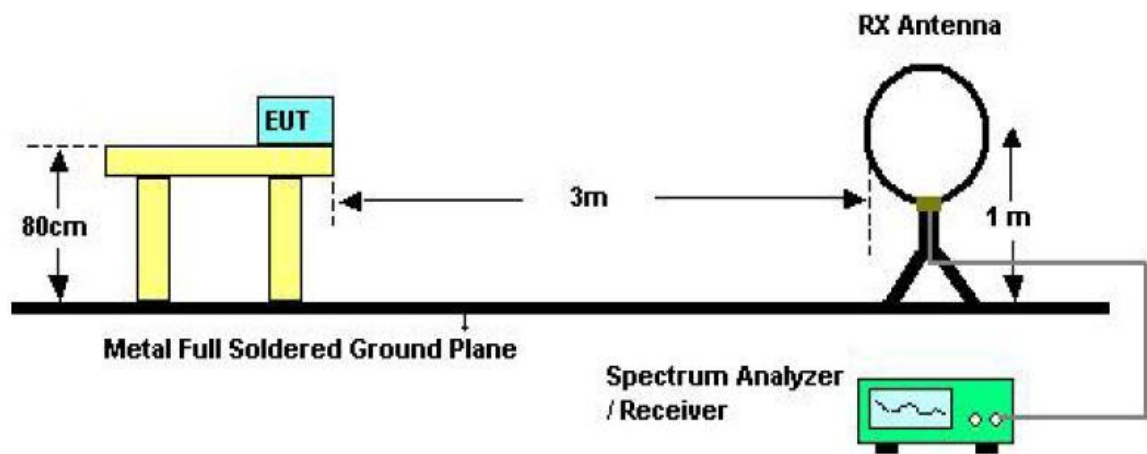
Frequencies (MHz)	Field Strength (microrvolts/meter)	Measurement Distance (meters)
0.009~0.490	2400/F(KHz)	300
0.490~1.705	24000/F(KHz)	30
1.705~30.0	30	30
30~88	100	3
88~216	150	3
216~960	200	3
Above 960	500	3

Harmonic emissions limits comply with below 54 dBuV/m at 3m. Other emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or comply with the radiated emissions limits specified in section 15.209(a) limit in the table below has to be followed.

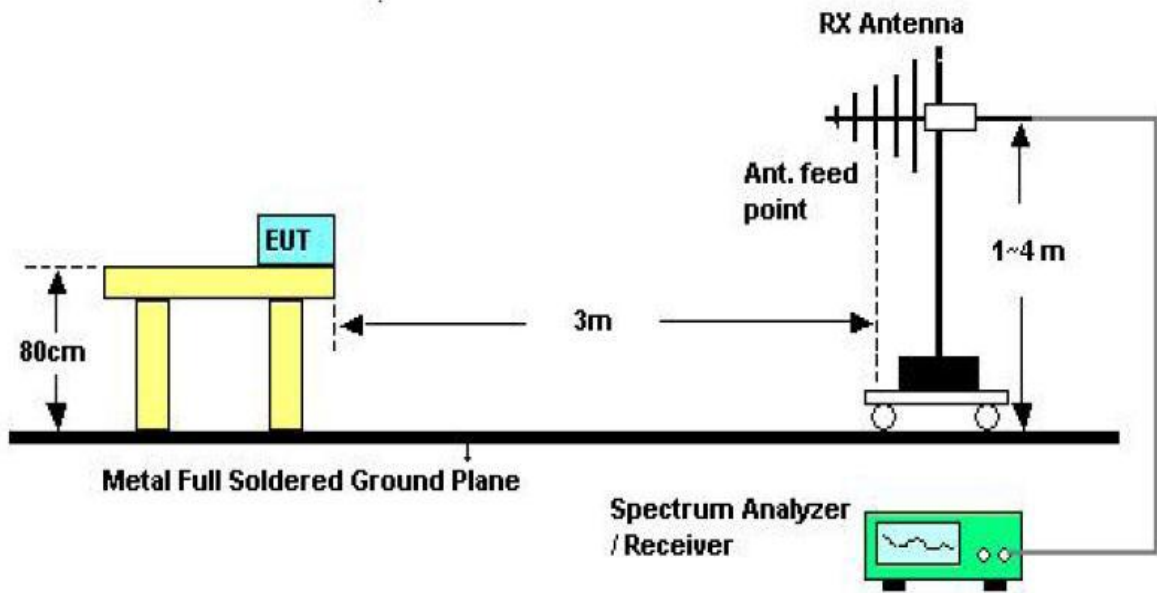
NOTE:

- a) The tighter limit applies at the band edges.
- b) Emission Level(dB uV/m)=20log Emission Level(Uv/m)

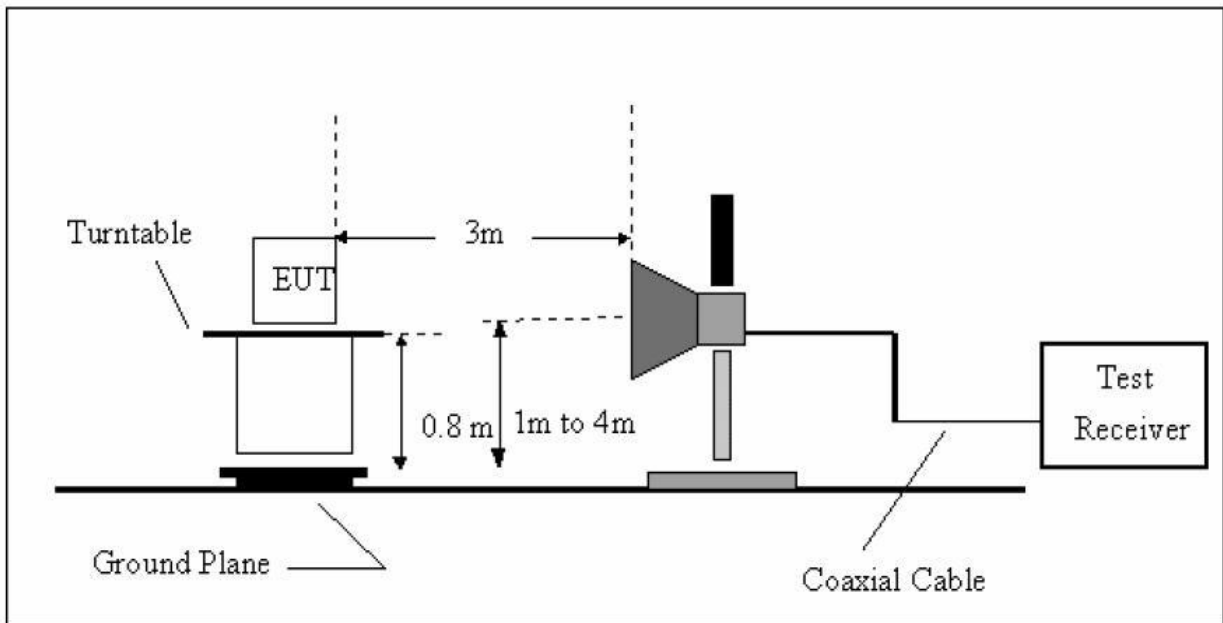
5.1.2 Test Setup



Below 30MHz Test Setup



Above 30MHz Test Setup



Above 1GHz Test Setup

5.1.3 Test Procedure

- a) The measuring distance of 3m shall be used for measurements at frequency up to 1GHz and above 1GHz, The EUT was placed on a rotating 0.8 m high above ground, The table was rotated 360 degrees to determine the position of the highest radiation
- b) The Test antenna shall vary between 1m and 4m,Both Horizontal and Vertical antenna are set of make measurement.
- c) The initial step in collecting conducted emission data is a spectrum analyzer Peak detector mode pre-scanning the measurement frequency range. Significant Peaks are then marked. and then Qusia Peak Detector mode premeasured
- d) If Peak value comply with QP limit Below 1GHz.The EUT deemed to comply with QP limit. But the Peak value and average value both need to comply with applicable limit above 1GHz.
- e) For the actual test configuration, please see the test setup photo.

5.1.4 Test Equipment Setting For emission test Result

9KHz~150KHz	RBW 200Hz	VBW1KHz
150KHz~30MHz	RBW 9KHz	VBW 30KHz
30MHz~1GHz	RBW 120KHz	VBW 300KHz
Above 1GHz	RBW 1MHz	VBW 3MHz

5.1.5 Test Condition

Continual Transmitting in maximum power.

5.1.6 Test Result

We have scanned the 9KHz from 25GHz to the EUT.

Detailed information please see the following page.

From 9KHz to 30MHz: Conclusion: PASS

Note: The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

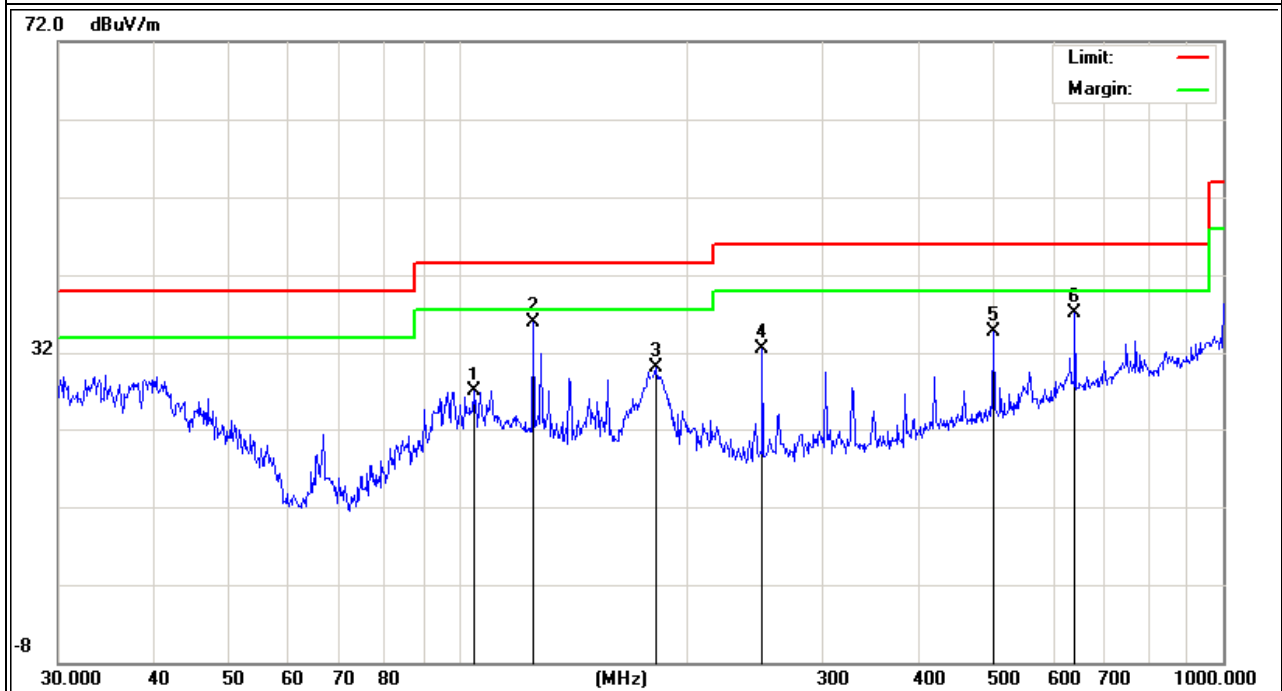
From 30MHz-1GHz:

EUT	Mini NAS Wireless Router	Model Name	WT3020H
Temperature	26°C	Relative Humidity	56%
Pressure	960hPa	Test voltage	DC 5V From Adapter
Test Mode	Link mode	Polarization :	Vertical

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
104.5361	15.97	10.91	26.88	43.5	-16.62	QP
125.0066	24	11.9	35.9	43.5	-7.6	QP
181.92	20.54	9.55	30.09	43.5	-13.41	QP
250.301	19.42	13.09	32.51	46	-13.49	QP
501.1788	15.31	19.43	34.74	46	-11.26	QP
640.6109	15.28	21.76	37.04	46	-8.96	QP

Remark:

1. Factor = Antenna Factor + Cable Loss – Pre-amplifier.

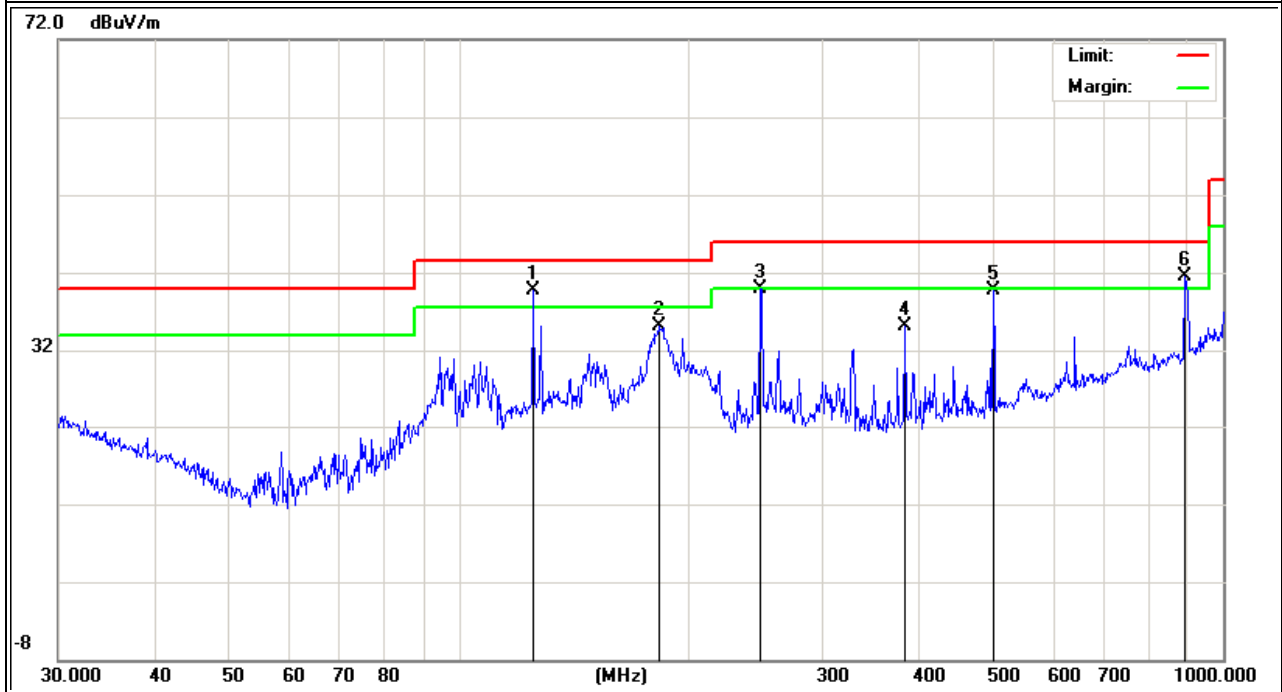


EUT	Mini NAS Wireless Router	Model Name	WT3020H
Temperature	26°C	Relative Humidity	56%
Pressure	960hPa	Test voltage	DC 5V From Adapter
Test Mode	Link mode	Polarization :	Horizontal

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
125.0066	27.74	11.9	39.64	43.5	-3.86	QP
183.2005	25.57	9.47	35.04	43.5	-8.46	QP
248.5517	27.07	12.83	39.9	46	-6.1	QP
383.9318	18.5	16.6	35.1	46	-10.9	QP
501.1788	20.36	19.43	39.79	46	-6.21	QP
890.7278	16.17	25.33	41.5	46	-4.5	QP

Remark:

1. Factor = Antenna Factor + Cable Loss – Pre-amplifier.



From 1G-25GHz with port 1 antenna

EUT	Mini NAS Wireless Router	Model Name	WT3020H
Temperature	26°C	Relative Humidity	56%
Pressure	960hPa	Test voltage	DC 5V From Adapter
Test Mode	TX Low		

IEEE 802.11b

Freq. (MHz)	Ant. Pol H/V	Peak Reading (dBuV)	AV Reading (dBuV)	Ant. / CL CF (dB)	Actual Fs		Peak Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Remark
					Peak (dBuV/m)	AV (dBuV/m)				
1120	V	54.96	---	-11.24	43.72	---	74.00	54.00	-10.28	Peak
1745	V	51.16	---	-9.53	41.63	---	74.00	54.00	-12.37	Peak
2289	V	52.58	---	-8.07	44.51	---	74.00	54.00	-9.49	Peak
4824	V	41.70	---	0.64	42.34	---	74.00	54.00	-11.66	Peak
N/A										

EUT	Mini NAS Wireless Router	Model Name	WT3020H
Temperature	26°C	Relative Humidity	56%
Pressure	960hPa	Test voltage	DC 5V From Adapter
Test Mode	TX Low		

Freq. (MHz)	Ant. Pol H/V	Peak Reading (dBuV)	AV Reading (dBuV)	Ant. / CL CF (dB)	Actual Fs		Peak Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Remark
					Peak (dBuV/m)	AV (dBuV/m)				
1295	H	51.52	---	-10.96	40.56	---	74.00	54.00	-13.44	Peak
1932	H	46.64	---	-8.86	37.78	---	74.00	54.00	-16.22	Peak
2913	H	45.82	---	-5.95	39.87	---	74.00	54.00	-14.13	Peak
4824	H	40.65	---	0.64	41.29	---	74.00	54.00	-12.71	Peak
N/A										

Notes: AV Means AV detector test data, Peak Means Peak detector test data.

Emissions attenuated more than 20 dB below the permissible value are not reported.

EUT	Mini NAS Wireless Router	Model Name	WT3020H
Temperature	26°C	Relative Humidity	56%
Pressure	960hPa	Test voltage	DC 5V From Adapter
Test Mode	TX Mid		

Freq. (MHz)	Ant. Pol H/V	Peak Reading (dBuV)	AV Reading (dBuV)	Ant. / CL CF (dB)	Actual Fs		Peak Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Remark
					Peak (dBuV/m)	AV (dBuV/m)				
1289	V	54.82	---	-10.96	43.86	---	74.00	54.00	-10.14	Peak
2042	V	53.64	---	-8.58	45.06	---	74.00	54.00	-8.94	Peak
2953	V	48.60	---	-5.86	42.74	---	74.00	54.00	-11.26	Peak
4874	V	40.22	---	0.76	40.98	---	74.00	54.00	-13.02	Peak

EUT	Mini NAS Wireless Router	Model Name	WT3020H
Temperature	26°C	Relative Humidity	56%
Pressure	960hPa	Test voltage	DC 5V From Adapter
Test Mode	TX Mid		

Freq. (MHz)	Ant. Pol H/V	Peak Reading (dBuV)	AV Reading (dBuV)	Ant. / CL CF (dB)	Actual Fs		Peak Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Remark
					Peak (dBuV/m)	AV (dBuV/m)				
1245	H	48.70	---	-11.52	37.18	---	74.00	54.00	-16.82	Peak
1959	H	49.90	---	-8.64	41.26	---	74.00	54.00	-12.74	Peak
3452	H	48.53	---	-4.95	43.58	---	74.00	54.00	-10.42	Peak
4874	H	39.63	---	0.76	40.39	---	74.00	54.00	-13.61	Peak

Notes: AV Means AV detector test data, Peak Means Peak detector test data.

Emissions attenuated more than 20 dB below the permissible value are not reported.

EUT	Mini NAS Wireless Router	Model Name	WT3020H
Temperature	26°C	Relative Humidity	56%
Pressure	960hPa	Test voltage	DC 5V From Adapter
Test Mode	TX High		

Freq. (MHz)	Ant. Pol H/V	Peak Reading (dBuV)	AV Reading (dBuV)	Ant. / CL CF (dB)	Actual Fs		Peak Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Remark
					Peak (dBuV/m)	AV (dBuV/m)				
1395	V	52.91	---	-10.43	42.48	---	74.00	54.00	-11.52	Peak
2276	V	48.90	---	-8.07	40.83	---	74.00	54.00	-13.17	Peak
3112	V	50.20	---	-5.63	44.57	---	74.00	54.00	-9.43	Peak
4924	V	40.81	---	0.87	41.68	---	74.00	54.00	-12.32	Peak

EUT	Mini NAS Wireless Router	Model Name	WT3020H
Temperature	26°C	Relative Humidity	56%
Pressure	960hPa	Test voltage	DC 5V From Adapter
Test Mode	TX High		

Freq. (MHz)	Ant. Pol H/V	Peak Reading (dBuV)	AV Reading (dBuV)	Ant. / CL CF (dB)	Actual Fs		Peak Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Remark
					Peak (dBuV/m)	AV (dBuV/m)				
1344	H	49.02	---	-10.84	38.18	---	74.00	54.00	-15.82	Peak
2387	H	49.08	---	-7.59	41.49	---	74.00	54.00	-12.51	Peak
3704	H	40.28	---	-4.24	36.04	---	74.00	54.00	-17.96	Peak
4924	H	39.55	---	0.87	40.42	---	74.00	54.00	-13.58	Peak

Notes: AV Means AV detector test data, Peak Means Peak detector test data.

Emissions attenuated more than 20 dB below the permissible value are not reported.

IEEE 802.11 g:

EUT	Mini NAS Wireless Router	Model Name	WT3020H
Temperature	26°C	Relative Humidity	56%
Pressure	960hPa	Test voltage	DC 5V From Adapter
Test Mode	TX Low		

Freq. (MHz)	Ant. Pol H/V	Peak Reading (dBuV)	AV Reading (dBuV)	Ant. / CL CF (dB)	Actual Fs		Peak Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Remark
					Peak (dBuV/m)	AV (dBuV/m)				
1145	V	51.43	---	-11.24	40.19	---	74.00	54.00	-13.81	Peak
2586	V	51.18	---	-7.13	44.05	---	74.00	54.00	-9.95	Peak
3062	V	48.35	---	-5.74	42.61	---	74.00	54.00	-11.39	Peak
4824	V	41.08	---	0.64	41.72	---	74.00	54.00	-12.28	Peak
N/A										

EUT	Mini NAS Wireless Router	Model Name	WT3020H
Temperature	26°C	Relative Humidity	56%
Pressure	960hPa	Test voltage	DC 5V From Adapter
Test Mode	TX Low		

Freq. (MHz)	Ant. Pol H/V	Peak Reading (dBuV)	AV Reading (dBuV)	Ant. / CL CF (dB)	Actual Fs		Peak Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Remark
					Peak (dBuV/m)	AV (dBuV/m)				
1294	H	48.01	---	-10.96	37.05	---	74.00	54.00	-16.95	Peak
2038	H	48.15	---	-8.58	39.57	---	74.00	54.00	-14.43	Peak
3483	H	46.32	---	-4.95	41.37	---	74.00	54.00	-12.63	Peak
4824	H	42.22	---	0.64	42.86	---	74.00	54.00	-11.14	Peak
N/A										

Notes: AV Means AV detector test data, Peak Means Peak detector test data.

Emissions attenuated more than 20 dB below the permissible value are not reported.

EUT	Mini NAS Wireless Router	Model Name	WT3020H
Temperature	26°C	Relative Humidity	56%
Pressure	960hPa	Test voltage	DC 5V From Adapter
Test Mode	TX Mid		

Freq. (MHz)	Ant. Pol H/V	Peak Reading (dBuV)	AV Reading (dBuV)	Ant. / CL CF (dB)	Actual Fs		Peak Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Remark
					Peak (dBuV/m)	AV (dBuV/m)				
1374	V	53.41	---	-10.43	42.98	---	74.00	54.00	-11.02	Peak
2589	V	51.55	---	-7.13	44.42	---	74.00	54.00	-9.58	Peak
3365	V	51.99	---	-5.18	46.81	---	74.00	54.00	-7.19	Peak
4874	V	42.85	---	0.76	43.61	---	74.00	54.00	-10.39	Peak

EUT	Mini NAS Wireless Router	Model Name	WT3020H
Temperature	26°C	Relative Humidity	56%
Pressure	960hPa	Test voltage	DC 5V From Adapter
Test Mode	TX Mid		

Freq. (MHz)	Ant. Pol H/V	Peak Reading (dBuV)	AV Reading (dBuV)	Ant. / CL CF (dB)	Actual Fs		Peak Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Remark
					Peak (dBuV/m)	AV (dBuV/m)				
1321	H	47.99	---	-10.84	37.15	---	74.00	54.00	-16.85	Peak
2314	H	50.11	---	-7.46	42.65	---	74.00	54.00	-11.35	Peak
3577	H	46.28	---	-4.76	41.52	---	74.00	54.00	-12.48	Peak
4874	H	39.19	---	0.76	39.95	---	74.00	54.00	-14.05	Peak

Notes: AV Means AV detector test data, Peak Means Peak detector test data.

Emissions attenuated more than 20 dB below the permissible value are not reported.

EUT	Mini NAS Wireless Router	Model Name	WT3020H
Temperature	26°C	Relative Humidity	56%
Pressure	960hPa	Test voltage	DC 5V From Adapter
Test Mode	TX High		

Freq. (MHz)	Ant. Pol H/V	Peak Reading (dBuV)	AV Reading (dBuV)	Ant. / CL CF (dB)	Actual Fs		Peak Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Remark
					Peak (dBuV/m)	AV (dBuV/m)				
1302	V	54.36	---	-10.84	43.52	---	74.00	54.00	-10.48	Peak
2982	V	46.69	---	-5.86	40.83	---	74.00	54.00	-13.17	Peak
3831	V	48.64	---	-3.96	44.68	---	74.00	54.00	-9.32	Peak
4924	V	40.58	---	0.87	41.45	---	74.00	54.00	-12.55	Peak

EUT	Mini NAS Wireless Router	Model Name	WT3020H
Temperature	26°C	Relative Humidity	56%
Pressure	960hPa	Test voltage	DC 5V From Adapter
Test Mode	TX High		

Freq. (MHz)	Ant. Pol H/V	Peak Reading (dBuV)	AV Reading (dBuV)	Ant. / CL CF (dB)	Actual Fs		Peak Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Remark
					Peak (dBuV/m)	AV (dBuV/m)				
1446	H	48.56	---	-10.29	38.27	---	74.00	54.00	-15.73	Peak
2198	H	44.42	---	-8.24	36.18	---	74.00	54.00	-17.82	Peak
3905	H	46.47	---	-3.68	42.79	---	74.00	54.00	-11.21	Peak
4924	H	40.72	---	0.87	41.59	---	74.00	54.00	-12.41	Peak

Notes: AV Means AV detector test data, Peak Means Peak detector test data.

Emissions attenuated more than 20 dB below the permissible value are not reported.

IEEE 802.11n/HT20

EUT	Mini NAS Wireless Router	Model Name	WT3020H
Temperature	26°C	Relative Humidity	56%
Pressure	960hPa	Test voltage	DC 5V From Adapter
Test Mode	TX Low		

Freq. (MHz)	Ant. Pol H/V	Peak Reading (dBuV)	AV Reading (dBuV)	Ant. / CL CF (dB)	Actual Fs		Peak Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Remark
					Peak (dBuV/m)	AV (dBuV/m)				
1492	V	52.62	---	-10.27	42.35	---	74.00	54.00	-11.65	Peak
2671	V	47.02	---	-6.94	40.08	---	74.00	54.00	-13.92	Peak
3948	V	48.81	---	-3.68	45.13	---	74.00	54.00	-8.87	Peak
4824	V	42.82	---	0.64	43.46	---	74.00	54.00	-10.54	Peak
N/A										

EUT	Mini NAS Wireless Router	Model Name	WT3020H
Temperature	26°C	Relative Humidity	56%
Pressure	960hPa	Test voltage	DC 5V From Adapter
Test Mode	TX Low		

Freq. (MHz)	Ant. Pol H/V	Peak Reading (dBuV)	AV Reading (dBuV)	Ant. / CL CF (dB)	Actual Fs		Peak Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Remark
					Peak (dBuV/m)	AV (dBuV/m)				
1451	H	51.14	---	-10.27	40.87	---	74.00	54.00	-13.13	Peak
2839	H	44.36	---	-6.17	38.19	---	74.00	54.00	-15.81	Peak
3607	H	47.76	---	-4.52	43.24	---	74.00	54.00	-10.76	Peak
4824	H	41.93	---	0.64	42.57	---	74.00	54.00	-11.43	Peak
N/A										

Notes: AV Means AV detector test data, Peak Means Peak detector test data.

Emissions attenuated more than 20 dB below the permissible value are not reported.

EUT	Mini NAS Wireless Router	Model Name	WT3020H
Temperature	26°C	Relative Humidity	56%
Pressure	960hPa	Test voltage	DC 5V From Adapter
Test Mode	TX Mid		

Freq. (MHz)	Ant. Pol H/V	Peak Reading (dBuV)	AV Reading (dBuV)	Ant. / CL CF (dB)	Actual Fs		Peak Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Remark
					Peak (dBuV/m)	AV (dBuV/m)				
1262	V	54.53	---	-10.96	43.57	---	74.00	54.00	-10.43	Peak
2013	V	48.86	---	-8.58	40.28	---	74.00	54.00	-13.72	Peak
3798	V	48.18	---	-4.07	44.11	---	74.00	54.00	-9.89	Peak
4874	V	41.59	---	0.76	42.35	---	74.00	54.00	-11.65	Peak

EUT	Mini NAS Wireless Router	Model Name	WT3020H
Temperature	26°C	Relative Humidity	56%
Pressure	960hPa	Test voltage	DC 5V From Adapter
Test Mode	TX Mid		

Freq. (MHz)	Ant. Pol H/V	Peak Reading (dBuV)	AV Reading (dBuV)	Ant. / CL CF (dB)	Actual Fs		Peak Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Remark
					Peak (dBuV/m)	AV (dBuV/m)				
1511	H	49.30	---	-10.14	39.16	---	74.00	54.00	-14.84	Peak
2353	H	50.02	---	-7.59	42.43	---	74.00	54.00	-11.57	Peak
3266	H	45.43	---	-5.39	40.04	---	74.00	54.00	-13.96	Peak
4874	H	37.75	---	0.76	38.51	---	74.00	54.00	-15.49	Peak

Notes: AV Means AV detector test data, Peak Means Peak detector test data.
Emissions attenuated more than 20 dB below the permissible value are not reported.

EUT	Mini NAS Wireless Router	Model Name	WT3020H
Temperature	26°C	Relative Humidity	56%
Pressure	960hPa	Test voltage	DC 5V From Adapter
Test Mode	TX High		

Freq. (MHz)	Ant. Pol H/V	Peak Reading (dBuV)	AV Reading (dBuV)	Ant. / CL CF (dB)	Actual Fs		Peak Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Remark
					Peak (dBuV/m)	AV (dBuV/m)				
1477	V	52.79	---	-10.27	42.52	---	74.00	54.00	-11.48	Peak
2703	V	46.69	---	-6.43	40.26	---	74.00	54.00	-13.74	Peak
3561	V	47.82	---	-4.76	43.06	---	74.00	54.00	-10.94	Peak
4924	V	44.10	---	0.87	44.97	---	74.00	54.00	-9.03	Peak

EUT	Mini NAS Wireless Router	Model Name	WT3020H
Temperature	26°C	Relative Humidity	56%
Pressure	960hPa	Test voltage	DC 5V From Adapter
Test Mode	TX High		

Freq. (MHz)	Ant. Pol H/V	Peak Reading (dBuV)	AV Reading (dBuV)	Ant. / CL CF (dB)	Actual Fs		Peak Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Remark
					Peak (dBuV/m)	AV (dBuV/m)				
1503	H	50.02	---	-10.14	39.88	---	74.00	54.00	-14.12	Peak
3588	H	41.11	---	-4.96	36.15	---	74.00	54.00	-17.85	Peak
4153	H	43.69	---	-2.48	41.21	---	74.00	54.00	-12.79	Peak
4924	H	42.50	---	0.87	43.37	---	74.00	54.00	-10.63	Peak

Notes: AV Means AV detector test data, Peak Means Peak detector test data.

Emissions attenuated more than 20 dB below the permissible value are not reported.

IEEE 802.11n/HT40 with 2.4G

EUT	Mini NAS Wireless Router	Model Name	WT3020H
Temperature	26°C	Relative Humidity	56%
Pressure	960hPa	Test voltage	DC 5V From Adapter
Test Mode	TX Low		

Freq. (MHz)	Ant. Pol H/V	Peak Reading (dBuV)	AV Reading (dBuV)	Ant. / CL CF (dB)	Actual Fs		Peak Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Remark
					Peak (dBuV/m)	AV (dBuV/m)				
1551	V	53.66	---	-10.07	43.59	---	74.00	54.00	-10.41	Peak
2695	V	51.96	---	-6.94	45.02	---	74.00	54.00	-8.98	Peak
3463	V	47.31	---	-4.95	42.36	---	74.00	54.00	-11.64	Peak
4844	V	40.05	---	0.64	40.69	---	74.00	54.00	-13.31	Peak
N/A										

EUT	Mini NAS Wireless Router	Model Name	WT3020H
Temperature	26°C	Relative Humidity	56%
Pressure	960hPa	Test voltage	DC 5V From Adapter
Test Mode	TX Low		

Freq. (MHz)	Ant. Pol H/V	Peak Reading (dBuV)	AV Reading (dBuV)	Ant. / CL CF (dB)	Actual Fs		Peak Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Remark
					Peak (dBuV/m)	AV (dBuV/m)				
1542	H	48.55	---	-10.14	38.41	---	74.00	54.00	-15.59	Peak
2358	H	51.15	---	-7.59	43.56	---	74.00	54.00	-10.44	Peak
3096	H	46.93	---	-5.74	41.19	---	74.00	54.00	-12.81	Peak
4844	H	39.62	---	0.64	40.26	---	74.00	54.00	-13.74	Peak
N/A										

Notes: AV Means AV detector test data, Peak Means Peak detector test data.

Emissions attenuated more than 20 dB below the permissible value are not reported.

EUT	Mini NAS Wireless Router	Model Name	WT3020H
Temperature	26°C	Relative Humidity	56%
Pressure	960hPa	Test voltage	DC 5V From Adapter
Test Mode	TX Mid		

Freq. (MHz)	Ant. Pol H/V	Peak Reading (dBuV)	AV Reading (dBuV)	Ant. / CL CF (dB)	Actual Fs		Peak Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Remark
					Peak (dBuV/m)	AV (dBuV/m)				
1628	V	52.22	---	-9.84	42.38	---	74.00	54.00	-11.62	Peak
2593	V	51.64	---	-7.13	44.51	---	74.00	54.00	-9.49	Peak
3301	V	48.48	---	-5.31	43.17	---	74.00	54.00	-10.83	Peak
4874	V	40.67	---	0.76	41.43	---	74.00	54.00	-12.57	Peak

EUT	Mini NAS Wireless Router	Model Name	WT3020H
Temperature	26°C	Relative Humidity	56%
Pressure	960hPa	Test voltage	DC 5V From Adapter
Test Mode	TX Mid		

Freq. (MHz)	Ant. Pol H/V	Peak Reading (dBuV)	AV Reading (dBuV)	Ant. / CL CF (dB)	Actual Fs		Peak Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Remark
					Peak (dBuV/m)	AV (dBuV/m)				
1564	H	49.40	---	-10.07	39.33	---	74.00	54.00	-14.67	Peak
2248	H	49.31	---	-8.13	41.18	---	74.00	54.00	-12.82	Peak
3159	H	48.77	---	-5.52	43.25	---	74.00	54.00	-10.75	Peak
4874	H	37.60	---	0.76	38.36	---	74.00	54.00	-15.64	Peak

Notes: AV Means AV detector test data, Peak Means Peak detector test data.

Emissions attenuated more than 20 dB below the permissible value are not reported.

EUT	Mini NAS Wireless Router	Model Name	WT3020H
Temperature	26°C	Relative Humidity	56%
Pressure	960hPa	Test voltage	DC 5V From Adapter
Test Mode	TX High		

Freq. (MHz)	Ant. Pol H/V	Peak Reading (dBuV)	AV Reading (dBuV)	Ant. / CL CF (dB)	Actual Fs		Peak Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Remark
					Peak (dBuV/m)	AV (dBuV/m)				
1645	V	52.92	---	-9.84	43.08	---	74.00	54.00	-10.92	Peak
2590	V	47.55	---	-7.13	40.42	---	74.00	54.00	-13.58	Peak
3851	V	48.77	---	-3.84	44.93	---	74.00	54.00	-9.07	Peak
4904	V	42.01	---	0.87	42.88	---	74.00	54.00	-11.12	Peak

EUT	Mini NAS Wireless Router	Model Name	WT3020H
Temperature	26°C	Relative Humidity	56%
Pressure	960hPa	Test voltage	DC 5V From Adapter
Test Mode	TX High		

Freq. (MHz)	Ant. Pol H/V	Peak Reading (dBuV)	AV Reading (dBuV)	Ant. / CL CF (dB)	Actual Fs		Peak Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Remark
					Peak (dBuV/m)	AV (dBuV/m)				
1792	H	49.66	---	-9.27	40.39	---	74.00	54.00	-13.61	Peak
2804	H	43.63	---	-6.17	37.46	---	74.00	54.00	-16.54	Peak
3743	H	45.48	---	-4.24	41.24	---	74.00	54.00	-12.76	Peak
4904	H	41.24	---	0.87	42.11	---	74.00	54.00	-11.89	Peak

Notes: AV Means AV detector test data, Peak Means Peak detector test data.

Emissions attenuated more than 20 dB below the permissible value are not reported.

From 1G-25GHz with port 2 antenna
IEEE 802.11b

EUT	Mini NAS Wireless Router	Model Name	WT3020H
Temperature	26°C	Relative Humidity	56%
Pressure	960hPa	Test voltage	DC 5V From Adapter
Test Mode	TX Low		

Freq. (MHz)	Ant. Pol H/V	Peak Reading (dBuV)	AV Reading (dBuV)	Ant. / CL CF (dB)	Actual Fs		Peak Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Remark
					Peak (dBuV/m)	AV (dBuV/m)				
1120	V	54.92	---	-11.24	43.68	---	74.00	54.00	-10.32	Peak
1745	V	50.64	---	-9.53	41.11	---	74.00	54.00	-12.89	Peak
2289	V	47.90	---	-8.07	39.83	---	74.00	54.00	-14.17	Peak
4824	V	43.38	---	0.64	44.02	---	74.00	54.00	-9.98	Peak
N/A										

EUT	Mini NAS Wireless Router	Model Name	WT3020H
Temperature	26°C	Relative Humidity	56%
Pressure	960hPa	Test voltage	DC 5V From Adapter
Test Mode	TX Low		

Freq. (MHz)	Ant. Pol H/V	Peak Reading (dBuV)	AV Reading (dBuV)	Ant. / CL CF (dB)	Actual Fs		Peak Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Remark
					Peak (dBuV/m)	AV (dBuV/m)				
1295	H	52.39	---	-10.96	41.43	---	74.00	54.00	-12.57	Peak
1932	H	46.02	---	-8.86	37.16	---	74.00	54.00	-16.84	Peak
2913	H	48.86	---	-5.95	42.91	---	74.00	54.00	-11.09	Peak
4824	H	39.11	---	0.64	39.75	---	74.00	54.00	-14.25	Peak
N/A										

Notes: AV Means AV detector test data, Peak Means Peak detector test data.

Emissions attenuated more than 20 dB below the permissible value are not reported.

EUT	Mini NAS Wireless Router	Model Name	WT3020H
Temperature	26°C	Relative Humidity	56%
Pressure	960hPa	Test voltage	DC 5V From Adapter
Test Mode	TX Mid		

Freq. (MHz)	Ant. Pol H/V	Peak Reading (dBuV)	AV Reading (dBuV)	Ant. / CL CF (dB)	Actual Fs		Peak Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Remark
					Peak (dBuV/m)	AV (dBuV/m)				
1289	V	55.59	---	-10.96	44.63	---	74.00	54.00	-9.37	Peak
2042	V	51.45	---	-8.58	42.87	---	74.00	54.00	-11.13	Peak
2953	V	47.37	---	-5.86	41.51	---	74.00	54.00	-12.49	Peak
4874	V	43.16	---	0.76	43.92	---	74.00	54.00	-10.08	Peak

EUT	Mini NAS Wireless Router	Model Name	WT3020H
Temperature	26°C	Relative Humidity	56%
Pressure	960hPa	Test voltage	DC 5V From Adapter
Test Mode	TX Mid		

Freq. (MHz)	Ant. Pol H/V	Peak Reading (dBuV)	AV Reading (dBuV)	Ant. / CL CF (dB)	Actual Fs		Peak Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Remark
					Peak (dBuV/m)	AV (dBuV/m)				
1245	H	51.27	---	-11.52	39.75	---	74.00	54.00	-14.25	Peak
1959	H	43.97	---	-8.64	35.33	---	74.00	54.00	-18.67	Peak
3452	H	46.81	---	-4.95	41.86	---	74.00	54.00	-12.14	Peak
4874	H	37.92	---	0.76	38.68	---	74.00	54.00	-15.32	Peak

Notes: AV Means AV detector test data, Peak Means Peak detector test data.

Emissions attenuated more than 20 dB below the permissible value are not reported.

EUT	Mini NAS Wireless Router	Model Name	WT3020H
Temperature	26°C	Relative Humidity	56%
Pressure	960hPa	Test voltage	DC 5V From Adapter
Test Mode	TX High		

Freq. (MHz)	Ant. Pol H/V	Peak Reading (dBuV)	AV Reading (dBuV)	Ant. / CL CF (dB)	Actual Fs		Peak Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Remark
					Peak (dBuV/m)	AV (dBuV/m)				
1395	V	55.67	---	-10.43	45.24	---	74.00	54.00	-8.76	Peak
2276	V	50.69	---	-8.07	42.62	---	74.00	54.00	-11.38	Peak
3112	V	49.74	---	-5.63	44.11	---	74.00	54.00	-9.89	Peak
4924	V	39.49	---	0.87	40.36	---	74.00	54.00	-13.64	Peak

EUT	Mini NAS Wireless Router	Model Name	WT3020H
Temperature	26°C	Relative Humidity	56%
Pressure	960hPa	Test voltage	DC 5V From Adapter
Test Mode	TX High		

Freq. (MHz)	Ant. Pol H/V	Peak Reading (dBuV)	AV Reading (dBuV)	Ant. / CL CF (dB)	Actual Fs		Peak Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Remark
					Peak (dBuV/m)	AV (dBuV/m)				
1344	H	49.11	---	-10.84	38.27	---	74.00	54.00	-15.73	Peak
2387	H	49.11	---	-7.59	41.52	---	74.00	54.00	-12.48	Peak
3704	H	44.49	---	-4.24	40.25	---	74.00	54.00	-13.75	Peak
4924	H	42.51	---	0.87	43.38	---	74.00	54.00	-10.62	Peak

Notes: AV Means AV detector test data, Peak Means Peak detector test data.

Emissions attenuated more than 20 dB below the permissible value are not reported.

IEEE 802.11 g:

EUT	Mini NAS Wireless Router	Model Name	WT3020H
Temperature	26°C	Relative Humidity	56%
Pressure	960hPa	Test voltage	DC 5V From Adapter
Test Mode	TX Low		

Freq. (MHz)	Ant. Pol H/V	Peak Reading (dBuV)	AV Reading (dBuV)	Ant. / CL CF (dB)	Actual Fs		Peak Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Remark
					Peak (dBuV/m)	AV (dBuV/m)				
1145	V	53.70	---	-11.24	42.46	---	74.00	54.00	-11.54	Peak
2586	V	47.04	---	-7.13	39.91	---	74.00	54.00	-14.09	Peak
3062	V	46.93	---	-5.74	41.19	---	74.00	54.00	-12.81	Peak
4824	V	42.90	---	0.64	43.54	---	74.00	54.00	-10.46	Peak
N/A										

EUT	Mini NAS Wireless Router	Model Name	WT3020H
Temperature	26°C	Relative Humidity	56%
Pressure	960hPa	Test voltage	DC 5V From Adapter
Test Mode	TX Low		

Freq. (MHz)	Ant. Pol H/V	Peak Reading (dBuV)	AV Reading (dBuV)	Ant. / CL CF (dB)	Actual Fs		Peak Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Remark
					Peak (dBuV/m)	AV (dBuV/m)				
1294	H	49.42	---	-10.96	38.46	---	74.00	54.00	-15.54	Peak
2038	H	49.69	---	-8.58	41.11	---	74.00	54.00	-12.89	Peak
3483	H	44.32	---	-4.95	39.37	---	74.00	54.00	-14.63	Peak
4824	H	36.61	---	0.64	37.25	---	74.00	54.00	-16.75	Peak
N/A										

Notes: AV Means AV detector test data, Peak Means Peak detector test data.

Emissions attenuated more than 20 dB below the permissible value are not reported.

EUT	Mini NAS Wireless Router	Model Name	WT3020H
Temperature	26°C	Relative Humidity	56%
Pressure	960hPa	Test voltage	DC 5V From Adapter
Test Mode	TX Mid		

Freq. (MHz)	Ant. Pol H/V	Peak Reading (dBuV)	AV Reading (dBuV)	Ant. / CL CF (dB)	Actual Fs		Peak Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Remark
					Peak (dBuV/m)	AV (dBuV/m)				
1374	V	51.61	---	-10.43	41.18	---	74.00	54.00	-12.82	Peak
2589	V	51.86	---	-7.13	44.73	---	74.00	54.00	-9.27	Peak
3365	V	45.57	---	-5.18	40.39	---	74.00	54.00	-13.61	Peak
4874	V	41.75	---	0.76	42.51	---	74.00	54.00	-11.49	Peak

EUT	Mini NAS Wireless Router	Model Name	WT3020H
Temperature	26°C	Relative Humidity	56%
Pressure	960hPa	Test voltage	DC 5V From Adapter
Test Mode	TX Mid		

Freq. (MHz)	Ant. Pol H/V	Peak Reading (dBuV)	AV Reading (dBuV)	Ant. / CL CF (dB)	Actual Fs		Peak Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Remark
					Peak (dBuV/m)	AV (dBuV/m)				
1321	H	49.97	---	-10.84	39.13	---	74.00	54.00	-14.87	Peak
2314	H	49.88	---	-7.46	42.42	---	74.00	54.00	-11.58	Peak
3577	H	42.50	---	-4.76	37.74	---	74.00	54.00	-16.26	Peak
4874	H	39.50	---	0.76	40.26	---	74.00	54.00	-13.74	Peak

Notes: AV Means AV detector test data, Peak Means Peak detector test data.

Emissions attenuated more than 20 dB below the permissible value are not reported.

EUT	Mini NAS Wireless Router	Model Name	WT3020H
Temperature	26°C	Relative Humidity	56%
Pressure	960hPa	Test voltage	DC 5V From Adapter
Test Mode	TX High		

Freq. (MHz)	Ant. Pol H/V	Peak Reading (dBuV)	AV Reading (dBuV)	Ant. / CL CF (dB)	Actual Fs		Peak Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Remark
					Peak (dBuV/m)	AV (dBuV/m)				
1302	V	53.76	---	-10.84	42.92	---	74.00	54.00	-11.08	Peak
2982	V	46.07	---	-5.86	40.21	---	74.00	54.00	-13.79	Peak
3831	V	48.69	---	-3.96	44.73	---	74.00	54.00	-9.27	Peak
4924	V	40.52	---	0.87	41.39	---	74.00	54.00	-12.61	Peak

EUT	Mini NAS Wireless Router	Model Name	WT3020H
Temperature	26°C	Relative Humidity	56%
Pressure	960hPa	Test voltage	DC 5V From Adapter
Test Mode	TX High		

Freq. (MHz)	Ant. Pol H/V	Peak Reading (dBuV)	AV Reading (dBuV)	Ant. / CL CF (dB)	Actual Fs		Peak Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Remark
					Peak (dBuV/m)	AV (dBuV/m)				
1446	H	48.91	---	-10.29	38.62	---	74.00	54.00	-15.38	Peak
2198	H	49.51	---	-8.24	41.27	---	74.00	54.00	-12.73	Peak
3905	H	47.49	---	-3.68	43.81	---	74.00	54.00	-10.19	Peak
4924	H	39.56	---	0.87	40.43	---	74.00	54.00	-13.57	Peak

Notes: AV Means AV detector test data, Peak Means Peak detector test data.

Emissions attenuated more than 20 dB below the permissible value are not reported.

EUT	Mini NAS Wireless Router	Model Name	WT3020H
Temperature	26°C	Relative Humidity	56%
Pressure	960hPa	Test voltage	DC 5V From Adapter
Test Mode	TX Low		

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Freq. (MHz)	Ant. Pol H/V	Peak Reading (dBuV)	AV Reading (dBuV)	Ant. / CL CF (dB)	Actual Fs		Peak Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Remark
					Peak (dBuV/m)	AV (dBuV/m)				
1492	V	51.76	---	-10.27	41.49	---	74.00	54.00	-12.51	Peak
2671	V	46.86	---	-6.94	39.92	---	74.00	54.00	-14.08	Peak
3948	V	47.55	---	-3.68	43.87	---	74.00	54.00	-10.13	Peak
4824	V	43.41	---	0.64	44.05	---	74.00	54.00	-9.95	Peak
N/A										

EUT	Mini NAS Wireless Router	Model Name	WT3020H
Temperature	26°C	Relative Humidity	56%
Pressure	960hPa	Test voltage	DC 5V From Adapter
Test Mode	TX Low		

Freq. (MHz)	Ant. Pol H/V	Peak Reading (dBuV)	AV Reading (dBuV)	Ant. / CL CF (dB)	Actual Fs		Peak Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Remark
					Peak (dBuV/m)	AV (dBuV/m)				
1451	H	49.38	---	-10.27	39.11	---	74.00	54.00	-14.89	Peak
2839	H	48.59	---	-6.17	42.42	---	74.00	54.00	-11.58	Peak
3607	H	44.75	---	-4.52	40.23	---	74.00	54.00	-13.77	Peak
4824	H	36.68	---	0.64	37.32	---	74.00	54.00	-16.68	Peak
N/A										

Notes: AV Means AV detector test data, Peak Means Peak detector test data.

Emissions attenuated more than 20 dB below the permissible value are not reported.

EUT	Mini NAS Wireless Router	Model Name	WT3020H
Temperature	26°C	Relative Humidity	56%
Pressure	960hPa	Test voltage	DC 5V From Adapter
Test Mode	TX Mid		

Freq. (MHz)	Ant. Pol H/V	Peak Reading (dBuV)	AV Reading (dBuV)	Ant. / CL CF (dB)	Actual Fs		Peak Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Remark
					Peak (dBuV/m)	AV (dBuV/m)				
1262	V	53.29	---	-10.96	42.33	---	74.00	54.00	-11.67	Peak
2013	V	53.16	---	-8.58	44.58	---	74.00	54.00	-9.42	Peak
3798	V	44.21	---	-4.07	40.14	---	74.00	54.00	-13.86	Peak
4874	V	42.52	---	0.76	43.28	---	74.00	54.00	-10.72	Peak

EUT	Mini NAS Wireless Router	Model Name	WT3020H
Temperature	26°C	Relative Humidity	56%
Pressure	960hPa	Test voltage	DC 5V From Adapter
Test Mode	TX Mid		

Freq. (MHz)	Ant. Pol H/V	Peak Reading (dBuV)	AV Reading (dBuV)	Ant. / CL CF (dB)	Actual Fs		Peak Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Remark
					Peak (dBuV/m)	AV (dBuV/m)				
1511	H	49.06	---	-10.14	38.92	---	74.00	54.00	-15.08	Peak
2353	H	49.13	---	-7.59	41.54	---	74.00	54.00	-12.46	Peak
3266	H	49.08	---	-5.39	43.69	---	74.00	54.00	-10.31	Peak
4874	H	41.40	---	0.76	42.16	---	74.00	54.00	-11.84	Peak

Notes: AV Means AV detector test data, Peak Means Peak detector test data.

Emissions attenuated more than 20 dB below the permissible value are not reported.

EUT	Mini NAS Wireless Router	Model Name	WT3020H
Temperature	26°C	Relative Humidity	56%
Pressure	960hPa	Test voltage	DC 5V From Adapter
Test Mode	TX High		

Freq. (MHz)	Ant. Pol H/V	Peak Reading (dBuV)	AV Reading (dBuV)	Ant. / CL CF (dB)	Actual Fs		Peak Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Remark
					Peak (dBuV/m)	AV (dBuV/m)				
1477	V	52.52	---	-10.27	42.25	---	74.00	54.00	-11.75	Peak
2703	V	45.75	---	-6.43	39.32	---	74.00	54.00	-14.68	Peak
3561	V	49.49	---	-4.76	44.73	---	74.00	54.00	-9.27	Peak
4924	V	41.00	---	0.87	41.87	---	74.00	54.00	-12.13	Peak

EUT	Mini NAS Wireless Router	Model Name	WT3020H
Temperature	26°C	Relative Humidity	56%
Pressure	960hPa	Test voltage	DC 5V From Adapter
Test Mode	TX High		

Freq. (MHz)	Ant. Pol H/V	Peak Reading (dBuV)	AV Reading (dBuV)	Ant. / CL CF (dB)	Actual Fs		Peak Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Remark
					Peak (dBuV/m)	AV (dBuV/m)				
1503	H	51.67	---	-10.14	41.53	---	74.00	54.00	-12.47	Peak
3588	H	44.14	---	-4.96	39.18	---	74.00	54.00	-14.82	Peak
4153	H	46.41	---	-2.48	43.93	---	74.00	54.00	-10.07	Peak
4924	H	39.59	---	0.87	40.46	---	74.00	54.00	-13.54	Peak

Notes: AV Means AV detector test data, Peak Means Peak detector test data.

Emissions attenuated more than 20 dB below the permissible value are not reported.

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EUT	Mini NAS Wireless Router	Model Name	WT3020H
Temperature	26°C	Relative Humidity	56%
Pressure	960hPa	Test voltage	DC 5V From Adapter
Test Mode	TX Low		

Freq. (MHz)	Ant. Pol H/V	Peak Reading (dBuV)	AV Reading (dBuV)	Ant. / CL CF (dB)	Actual Fs		Peak Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Remark
					Peak (dBuV/m)	AV (dBuV/m)				
1551	V	53.34	---	-10.07	43.27	---	74.00	54.00	-10.73	Peak
2695	V	48.65	---	-6.94	41.71	---	74.00	54.00	-12.29	Peak
3463	V	49.14	---	-4.95	44.19	---	74.00	54.00	-9.81	Peak
4844	V	44.68	---	0.64	45.32	---	74.00	54.00	-8.68	Peak
N/A										

EUT	Mini NAS Wireless Router	Model Name	WT3020H
Temperature	26°C	Relative Humidity	56%
Pressure	960hPa	Test voltage	DC 5V From Adapter
Test Mode	TX Low		

Freq. (MHz)	Ant. Pol H/V	Peak Reading (dBuV)	AV Reading (dBuV)	Ant. / CL CF (dB)	Actual Fs		Peak Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Remark
					Peak (dBuV/m)	AV (dBuV/m)				
1542	H	48.41	---	-10.14	38.27	---	74.00	54.00	-15.73	Peak
2358	H	50.12	---	-7.59	42.53	---	74.00	54.00	-11.47	Peak
3096	H	50.12	---	-5.74	44.38	---	74.00	54.00	-9.62	Peak
4844	H	40.17	---	0.64	40.81	---	74.00	54.00	-13.19	Peak
N/A										

Notes: AV Means AV detector test data, Peak Means Peak detector test data.

Emissions attenuated more than 20 dB below the permissible value are not reported.

EUT	Mini NAS Wireless Router	Model Name	WT3020H
Temperature	26°C	Relative Humidity	56%
Pressure	960hPa	Test voltage	DC 5V From Adapter
Test Mode	TX Mid		

Freq. (MHz)	Ant. Pol H/V	Peak Reading (dBuV)	AV Reading (dBuV)	Ant. / CL CF (dB)	Actual Fs		Peak Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Remark
					Peak (dBuV/m)	AV (dBuV/m)				
1628	V	52.67	---	-9.84	42.83	---	74.00	54.00	-11.17	Peak
2593	V	47.75	---	-7.13	40.62	---	74.00	54.00	-13.38	Peak
3301	V	51.22	---	-5.31	45.91	---	74.00	54.00	-8.09	Peak
4874	V	42.61	---	0.76	43.37	---	74.00	54.00	-10.63	Peak

EUT	Mini NAS Wireless Router	Model Name	WT3020H
Temperature	26°C	Relative Humidity	56%
Pressure	960hPa	Test voltage	DC 5V From Adapter
Test Mode	TX Mid		

Freq. (MHz)	Ant. Pol H/V	Peak Reading (dBuV)	AV Reading (dBuV)	Ant. / CL CF (dB)	Actual Fs		Peak Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Remark
					Peak (dBuV/m)	AV (dBuV/m)				
1564	H	50.35	---	-10.07	40.28	---	74.00	54.00	-13.72	Peak
2248	H	50.56	---	-8.13	42.43	---	74.00	54.00	-11.57	Peak
3159	H	44.44	---	-5.52	38.92	---	74.00	54.00	-15.08	Peak
4874	H	42.66	---	0.76	43.42	---	74.00	54.00	-10.58	Peak

Notes: AV Means AV detector test data, Peak Means Peak detector test data.

Emissions attenuated more than 20 dB below the permissible value are not reported.

EUT	Mini NAS Wireless Router	Model Name	WT3020H
Temperature	26°C	Relative Humidity	56%
Pressure	960hPa	Test voltage	DC 5V From Adapter
Test Mode	TX High		

Freq. (MHz)	Ant. Pol H/V	Peak Reading (dBuV)	AV Reading (dBuV)	Ant. / CL CF (dB)	Actual Fs		Peak Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Remark
					Peak (dBuV/m)	AV (dBuV/m)				
1645	V	54.02	---	-9.84	44.18	---	74.00	54.00	-9.82	Peak
2590	V	49.38	---	-7.13	42.25	---	74.00	54.00	-11.75	Peak
3851	V	47.15	---	-3.84	43.31	---	74.00	54.00	-10.69	Peak
4904	V	39.31	---	0.87	40.18	---	74.00	54.00	-13.82	Peak

EUT	Mini NAS Wireless Router	Model Name	WT3020H
Temperature	26°C	Relative Humidity	56%
Pressure	960hPa	Test voltage	DC 5V From Adapter
Test Mode	TX High		

Freq. (MHz)	Ant. Pol H/V	Peak Reading (dBuV)	AV Reading (dBuV)	Ant. / CL CF (dB)	Actual Fs		Peak Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Remark
					Peak (dBuV/m)	AV (dBuV/m)				
1792	H	52.56	---	-9.27	43.29	---	74.00	54.00	-10.71	Peak
2804	H	43.69	---	-6.17	37.52	---	74.00	54.00	-16.48	Peak
3743	H	46.08	---	-4.24	41.84	---	74.00	54.00	-12.16	Peak
4904	H	38.15	---	0.87	39.02	---	74.00	54.00	-14.98	Peak

Notes: AV Means AV detector test data, Peak Means Peak detector test data.

Emissions attenuated more than 20 dB below the permissible value are not reported.

From 1G-25GHz with port 1 antenna and port 2 antenna simultaneously transmit:
simultaneously transmit with IEEE 802.11n/HT20:

EUT	Mini NAS Wireless Router	Model Name	WT3020H
Temperature	26°C	Relative Humidity	56%
Pressure	960hPa	Test voltage	DC 5V From Adapter
Test Mode	simultaneously transmit for port 1 and port 2 with TX Low 2412MHz		

Freq. (MHz)	Ant. Pol H/V	Peak Reading (dBuV)	AV Reading (dBuV)	Ant. / CL CF (dB)	Actual Fs		Peak Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Remark
					Peak (dBuV/m)	AV (dBuV/m)				
1492	V	53.69	---	-10.27	43.42	---	74.00	54.00	-10.58	Peak
2671	V	47.20	---	-6.94	40.26	---	74.00	54.00	-13.74	Peak
3948	V	41.99	---	-3.68	38.31	---	74.00	54.00	-15.69	Peak
4824	V	38.89	---	0.64	39.53	---	74.00	54.00	-14.47	Peak
N/A										

EUT	Mini NAS Wireless Router	Model Name	WT3020H
Temperature	26°C	Relative Humidity	56%
Pressure	960hPa	Test voltage	DC 5V From Adapter
Test Mode	simultaneously transmit for port 1 and port 2 with TX Low 2412MHz		

Freq. (MHz)	Ant. Pol H/V	Peak Reading (dBuV)	AV Reading (dBuV)	Ant. / CL CF (dB)	Actual Fs		Peak Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Remark
					Peak (dBuV/m)	AV (dBuV/m)				
1451	H	49.89	---	-10.27	39.62	---	74.00	54.00	-14.38	Peak
2839	H	42.64	---	-6.17	36.47	---	74.00	54.00	-17.53	Peak
3607	H	48.44	---	-4.52	43.92	---	74.00	54.00	-10.08	Peak
4824	H	41.20	---	0.64	41.84	---	74.00	54.00	-12.16	Peak
N/A										

Notes: AV Means AV detector test data, Peak Means Peak detector test data.

Emissions attenuated more than 20 dB below the permissible value are not reported.

EUT	Mini NAS Wireless Router	Model Name	WT3020H
Temperature	26°C	Relative Humidity	56%
Pressure	960hPa	Test voltage	DC 5V From Adapter
Test Mode	simultaneously transmit for port 1 and port 2 with TX Mid 2437MHz		

Freq. (MHz)	Ant. Pol H/V	Peak Reading (dBuV)	AV Reading (dBuV)	Ant. / CL CF (dB)	Actual Fs		Peak Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Remark
					Peak (dBuV/m)	AV (dBuV/m)				
1262	V	54.24	---	-10.96	43.28	---	74.00	54.00	-10.72	Peak
2013	V	48.62	---	-8.58	40.04	---	74.00	54.00	-13.96	Peak
3798	V	49.26	---	-4.07	45.19	---	74.00	54.00	-8.81	Peak
4874	V	41.57	---	0.76	42.33	---	74.00	54.00	-11.67	Peak

EUT	Mini NAS Wireless Router	Model Name	WT3020H
Temperature	26°C	Relative Humidity	56%
Pressure	960hPa	Test voltage	DC 5V From Adapter
Test Mode	simultaneously transmit for port 1 and port 2 with TX Mid 2437MHz		

Freq. (MHz)	Ant. Pol H/V	Peak Reading (dBuV)	AV Reading (dBuV)	Ant. / CL CF (dB)	Actual Fs		Peak Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Remark
					Peak (dBuV/m)	AV (dBuV/m)				
1511	H	50.39	---	-10.14	40.25	---	74.00	54.00	-13.75	Peak
2353	H	45.77	---	-7.59	38.18	---	74.00	54.00	-15.82	Peak
3266	H	48.63	---	-5.39	43.24	---	74.00	54.00	-10.76	Peak
4874	H	43.80	---	0.76	44.56	---	74.00	54.00	-9.44	Peak

Notes: AV Means AV detector test data, Peak Means Peak detector test data.

Emissions attenuated more than 20 dB below the permissible value are not reported.

EUT	Mini NAS Wireless Router	Model Name	WT3020H
Temperature	26°C	Relative Humidity	56%
Pressure	960hPa	Test voltage	DC 5V From Adapter
Test Mode	simultaneously transmit for port 1 and port 2 with TX High 2462MHz		

Freq. (MHz)	Ant. Pol H/V	Peak Reading (dBuV)	AV Reading (dBuV)	Ant. / CL CF (dB)	Actual Fs		Peak Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Remark
					Peak (dBuV/m)	AV (dBuV/m)				
1477	V	51.29	---	-10.27	41.02	---	74.00	54.00	-12.98	Peak
2703	V	50.70	---	-6.43	44.27	---	74.00	54.00	-9.73	Peak
3561	V	47.60	---	-4.76	42.84	---	74.00	54.00	-11.16	Peak
4924	V	39.39	---	0.87	40.26	---	74.00	54.00	-13.74	Peak

EUT	Mini NAS Wireless Router	Model Name	WT3020H
Temperature	26°C	Relative Humidity	56%
Pressure	960hPa	Test voltage	DC 5V From Adapter
Test Mode	simultaneously transmit for port 1 and port 2 with TX High 2462MHz		

Freq. (MHz)	Ant. Pol H/V	Peak Reading (dBuV)	AV Reading (dBuV)	Ant. / CL CF (dB)	Actual Fs		Peak Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Remark
					Peak (dBuV/m)	AV (dBuV/m)				
1503	H	49.31	---	-10.14	39.17	---	74.00	54.00	-14.83	Peak
3588	H	46.33	---	-4.96	41.37	---	74.00	54.00	-12.63	Peak
4153	H	46.00	---	-2.48	43.52	---	74.00	54.00	-10.48	Peak
4924	H	36.21	---	0.87	37.08	---	74.00	54.00	-16.92	Peak

Notes: AV Means AV detector test data, Peak Means Peak detector test data.

Emissions attenuated more than 20 dB below the permissible value are not reported.

simultaneously transmit with IEEE 802.11n/HT40

EUT	Mini NAS Wireless Router	Model Name	WT3020H
Temperature	26°C	Relative Humidity	56%
Pressure	960hPa	Test voltage	DC 5V From Adapter
Test Mode	simultaneously transmit for port 1 and port 2 with TX Low 2422MHz		

Freq. (MHz)	Ant. Pol H/V	Peak Reading (dBuV)	AV Reading (dBuV)	Ant. / CL CF (dB)	Actual Fs		Peak Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Remark
					Peak (dBuV/m)	AV (dBuV/m)				
1551	V	54.76	---	-10.07	44.69	---	74.00	54.00	-9.31	Peak
2695	V	48.18	---	-6.94	41.24	---	74.00	54.00	-12.76	Peak
3463	V	48.69	---	-4.95	43.74	---	74.00	54.00	-10.26	Peak
4844	V	37.47	---	0.64	38.11	---	74.00	54.00	-15.89	Peak
N/A										

EUT	Mini NAS Wireless Router	Model Name	WT3020H
Temperature	26°C	Relative Humidity	56%
Pressure	960hPa	Test voltage	DC 5V From Adapter
Test Mode	simultaneously transmit for port 1 and port 2 with TX Low 2422MHz		

Freq. (MHz)	Ant. Pol H/V	Peak Reading (dBuV)	AV Reading (dBuV)	Ant. / CL CF (dB)	Actual Fs		Peak Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Remark
					Peak (dBuV/m)	AV (dBuV/m)				
1542	H	50.40	---	-10.14	40.26	---	74.00	54.00	-13.74	Peak
2358	H	50.01	---	-7.59	42.42	---	74.00	54.00	-11.58	Peak
3096	H	41.89	---	-5.74	36.15	---	74.00	54.00	-17.85	Peak
4844	H	40.61	---	0.64	41.25	---	74.00	54.00	-12.75	Peak
N/A										

Notes: AV Means AV detector test data, Peak Means Peak detector test data.

Emissions attenuated more than 20 dB below the permissible value are not reported.

EUT	Mini NAS Wireless Router	Model Name	WT3020H
Temperature	26°C	Relative Humidity	56%
Pressure	960hPa	Test voltage	DC 5V From Adapter
Test Mode	simultaneously transmit for port 1 and port 2 with TX Mid 2437MHz		

Freq. (MHz)	Ant. Pol H/V	Peak Reading (dBuV)	AV Reading (dBuV)	Ant. / CL CF (dB)	Actual Fs		Peak Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Remark
					Peak (dBuV/m)	AV (dBuV/m)				
1628	V	51.09	---	-9.84	41.25	---	74.00	54.00	-12.75	Peak
2593	V	50.44	---	-7.13	43.31	---	74.00	54.00	-10.69	Peak
3301	V	49.47	---	-5.31	44.16	---	74.00	54.00	-9.84	Peak
4874	V	39.81	---	0.76	40.57	---	74.00	54.00	-13.43	Peak

EUT	Mini NAS Wireless Router	Model Name	WT3020H
Temperature	26°C	Relative Humidity	56%
Pressure	960hPa	Test voltage	DC 5V From Adapter
Test Mode	simultaneously transmit for port 1 and port 2 with TX Mid 2437MHz		

Freq. (MHz)	Ant. Pol H/V	Peak Reading (dBuV)	AV Reading (dBuV)	Ant. / CL CF (dB)	Actual Fs		Peak Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Remark
					Peak (dBuV/m)	AV (dBuV/m)				
1564	H	48.93	---	-10.07	38.86	---	74.00	54.00	-15.14	Peak
2248	H	50.40	---	-8.13	42.27	---	74.00	54.00	-11.73	Peak
3159	H	46.44	---	-5.52	40.92	---	74.00	54.00	-13.08	Peak
4874	H	38.75	---	0.76	39.51	---	74.00	54.00	-14.49	Peak

Notes: AV Means AV detector test data, Peak Means Peak detector test data.

Emissions attenuated more than 20 dB below the permissible value are not reported.

EUT	Mini NAS Wireless Router	Model Name	WT3020H
Temperature	26°C	Relative Humidity	56%
Pressure	960hPa	Test voltage	DC 5V From Adapter
Test Mode	simultaneously transmit for port 1 and port 2 with TX High 2452MHz		

Freq. (MHz)	Ant. Pol H/V	Peak Reading (dBuV)	AV Reading (dBuV)	Ant. / CL CF (dB)	Actual Fs		Peak Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Remark
					Peak (dBuV/m)	AV (dBuV/m)				
1645	V	51.27	---	-9.84	41.43	---	74.00	54.00	-12.57	Peak
2590	V	50.29	---	-7.13	43.16	---	74.00	54.00	-10.84	Peak
3851	V	48.48	---	-3.84	44.64	---	74.00	54.00	-9.36	Peak
4904	V	41.72	---	0.87	42.59	---	74.00	54.00	-11.41	Peak

EUT	Mini NAS Wireless Router	Model Name	WT3020H
Temperature	26°C	Relative Humidity	56%
Pressure	960hPa	Test voltage	DC 5V From Adapter
Test Mode	simultaneously transmit for port 1 and port 2 with TX High 2452MHz		

Freq. (MHz)	Ant. Pol H/V	Peak Reading (dBuV)	AV Reading (dBuV)	Ant. / CL CF (dB)	Actual Fs		Peak Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Remark
					Peak (dBuV/m)	AV (dBuV/m)				
1792	H	46.43	---	-9.27	37.16	---	74.00	54.00	-16.84	Peak
2804	H	46.60	---	-6.17	40.43	---	74.00	54.00	-13.57	Peak
3743	H	47.55	---	-4.24	43.31	---	74.00	54.00	-10.69	Peak
4904	H	38.26	---	0.87	39.13	---	74.00	54.00	-14.87	Peak

Notes: AV Means AV detector test data, Peak Means Peak detector test data.

Emissions attenuated more than 20 dB below the permissible value are not reported.

6 POWER LINE CONDUCTED EMISSION

6.1 Conducted Emission Limits(15.207)

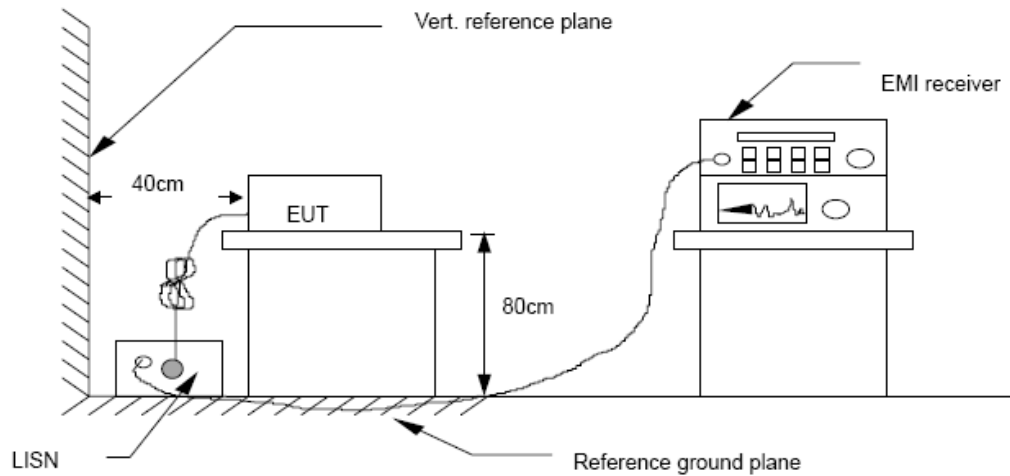
Frequency MHz	Limits dB(μ V)	
	Quasi-peak Level	Average Level
0.15 -0.50	66 -56*	56 - 46*
0.50 -5.00	56	46
5.00 -30.00	60	50

Notes: 1. *Decreasing linearly with logarithm of frequency.

2. The lower limit shall apply at the transition frequencies.

3.The limit decreases in line with the logarithm of the frequency in the rang of 0.15 to 0.50 MHz.

6.2 Test Setup



6.3 Test Procedure

The EUT is put on the plane 0.8m high above the ground by insulating support and 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 lines 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 ANSI C63.4-2003 on Conducted Emission Measurement. The bandwidth of test receiver (R & S ESCI) is set at 9 kHz.

6.4 Test Results

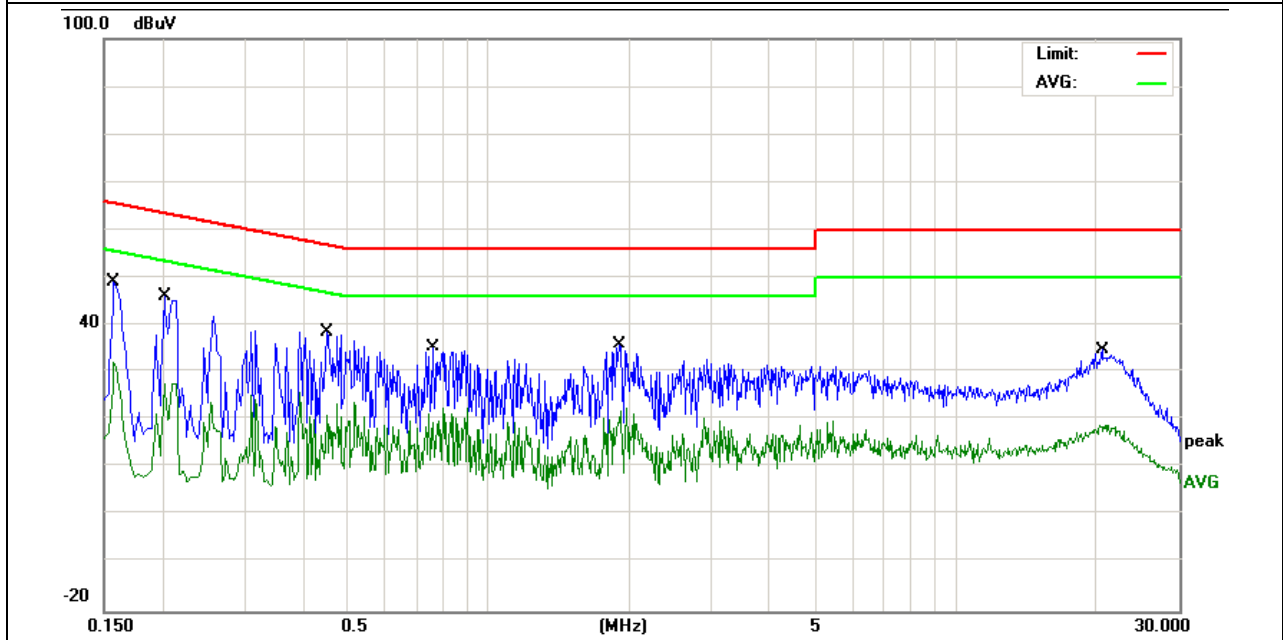
PASS

Detailed information please see the following page.

EUT	Mini NAS Wireless Router	Model Name	WT3020H
Temperature	26°C	Relative Humidity	56%
Pressure	960hPa	Test voltage	DC 5V From Adapter
Test Mode	Link mode	Phase	L

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
0.158	37.86	11.36	49.22	65.56	-16.34	QP
0.158	20.66	11.36	32.02	55.56	-23.54	AVG
0.202	35.34	10.68	46.02	63.52	-17.5	QP
0.202	16.91	10.68	27.59	53.52	-25.93	AVG
0.45	27.96	10.64	38.6	56.87	-18.27	QP
0.45	12.86	10.64	23.5	46.87	-23.37	AVG
0.762	24.8	10.53	35.33	56	-20.67	QP
0.762	12.04	10.53	22.57	46	-23.43	AVG
1.898	25.4	10.52	35.92	56	-20.08	QP
1.898	12.05	10.52	22.57	46	-23.43	AVG
20.51	23.68	11.07	34.75	60	-25.25	QP
20.51	7.79	11.07	18.86	50	-31.14	AVG

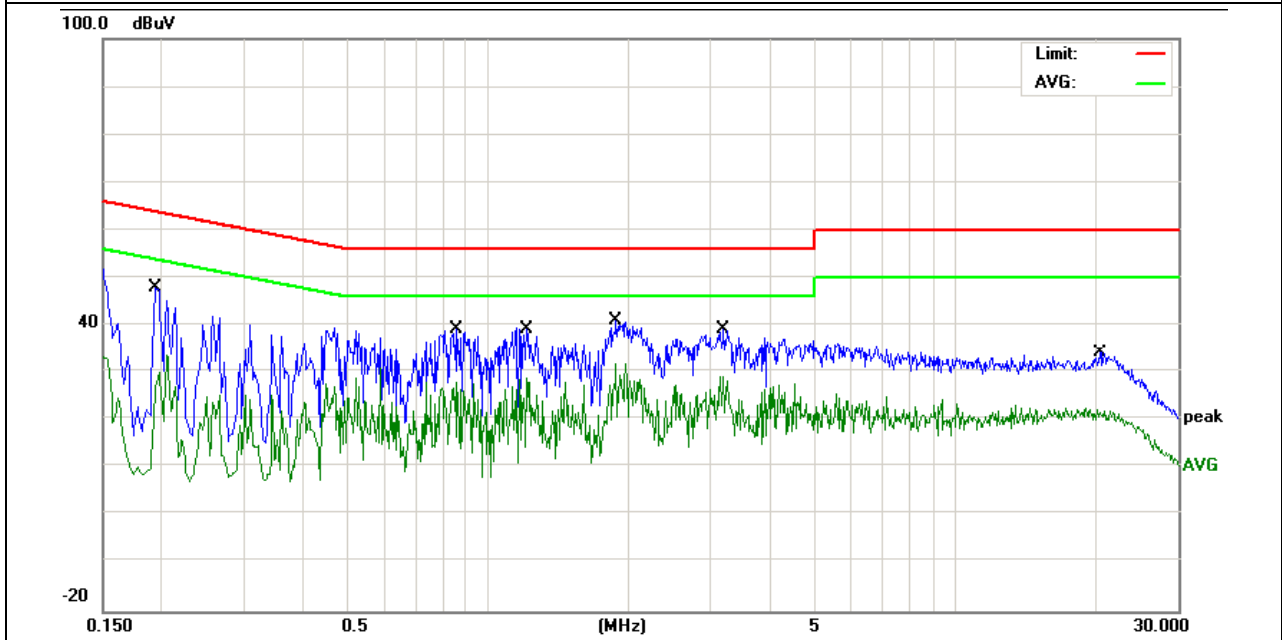
Remark: 1. Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT	Mini NAS Wireless Router	Model Name	WT3020H
Temperature	26°C	Relative Humidity	56%
Pressure	960hPa	Test voltage	DC 5V From Adapter
Test Mode	Link mode	Phase	L

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
0.194	37.33	10.76	48.09	63.86	-15.77	QP
0.194	22.87	10.76	33.63	53.86	-20.23	AVG
0.854	28.85	10.53	39.38	56	-16.62	QP
0.854	17.41	10.53	27.94	46	-18.06	AVG
1.21	28.7	10.52	39.22	56	-16.78	QP
1.21	18.31	10.52	28.83	46	-17.17	AVG
1.882	30.39	10.52	40.91	56	-15.09	QP
1.882	21.22	10.52	31.74	46	-14.26	AVG
3.206	28.58	10.57	39.15	56	-16.85	QP
3.206	18.62	10.57	29.19	46	-16.81	AVG
20.426	22.95	11.07	34.02	60	-25.98	QP
20.426	11.23	11.07	22.3	50	-27.7	AVG

Remark: 1. Factor = Antenna Factor + Cable Loss – Pre-amplifier.



7 Conducted Maximum Output Power

7.1 Test limit

Please refer section 15.247.

Regulation 15.247(b) The limit of Maximum Peak Output Power Measurement is 1W(30dBm)

7.2 Test Procedure

Details see the KDB558074 Meas Guidance V03

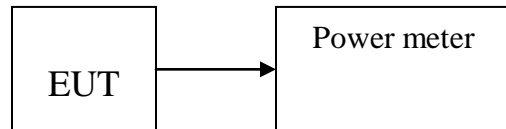
7.2.1 Place the EUT on the table and set it in transmitting mode.

7.2.2 Connected the EUT's antenna port to peak power meter by 20dB attenuator.

7.2.3 Measure out each mode and each bands peak output power of EUT.

Note: The cable loss and attenuator loss were offset into measure device as amplitude offset.

7.3 Test Setup



7.4 Test Results

PASS

Detailed information please see the following page.

EUT: Mini NAS Wireless Router		M/N: WT3020H		
Test date: 2014-03-18		Test site: RF site	Tested by: Simple Guan	
Mode	Frequency (MHz)	PK Output power (dBm)	Limit (dBm)	Margin (dB)
IEEE 802.11 b	CH1: 2412	13.82	30	16.18
	CH6: 2437	13.17	30	16.83
	CH11: 2462	13.39	30	16.61
IEEE 802.11 g	CH1: 2412	12.98	30	17.02
	CH6: 2437	12.75	30	17.25
	CH11: 2462	12.31	30	17.69
IEEE 802.11 n/HT20	CH1: 2412	11.83	30	18.17
	CH6: 2437	11.48	30	18.52
	CH11: 2462	11.46	30	18.54
IEEE 802.11 n/HT40	CH1: 2422	10.93	30	19.07
	CH4: 2437	10.74	30	19.26
	CH7: 2452	10.68	30	19.32
Note: This test with port 1 antenna.				
Conclusion: PASS				

EUT: Mini NAS Wireless Router		M/N: WT3020H		
Test date: 2014-03-18		Test site: RF site	Tested by: Simple Guan	
Mode	Frequency (MHz)	PK Output power (dBm)	Limit (dBm)	Margin (dB)
IEEE 802.11 b	CH1: 2412	12.49	30	17.51
	CH6: 2437	12.37	30	17.63
	CH11: 2462	12.28	30	17.72
IEEE 802.11 g	CH1: 2412	11.53	30	18.47
	CH6: 2437	11.47	30	18.53
	CH11: 2462	11.32	30	18.68
IEEE 802.11 n/HT20	CH1: 2412	10.22	30	19.78
	CH6: 2437	10.09	30	19.91
	CH11: 2462	9.85	30	20.15
IEEE 802.11 n/HT40	CH1: 2422	9.41	30	20.59
	CH4: 2437	9.32	30	20.68
	CH7: 2452	9.26	30	20.74
Note: This test with port 2 antenna.				
Conclusion: PASS				

EUT: Mini NAS Wireless Router		M/N: WT3020H		
Test date: 2014-03-18		Test site: RF site		Tested by: Simple Guan
Mode	Frequency (MHz)	PK Output power (dBm)	Limit (dBm)	Margin (dB)
IEEE 802.11 n/HT20	CH1: 2412	14.11	30	15.89
	CH6: 2437	13.85	30	16.15
	CH11: 2462	13.74	30	16.26
IEEE 802.11 n/HT40	CH1: 2422	13.25	30	16.75
	CH4: 2437	13.10	30	16.90
	CH7: 2452	13.04	30	16.96
Note: 1 This result with port 1 and port 2 antenna. 2 According to KDB 662911, Result power = $10\log(10^{\text{ant1}/10} + 10^{\text{ant2}/10})$ 3 Result unit: W, The end PK Output power result is converted to units of dBm.				
Conclusion: PASS				

8 PEAK POWER SPECTRAL DENSITY

8.1 Test limit

8.1.1 Please refer section 15.247.

8.1.2 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.

8.1.3 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.

8.2 Method of measurement

Details see the KDB558074 DTS Meas Guidance V03

8.2.1 Place the EUT on the table and set it in transmitting mode.

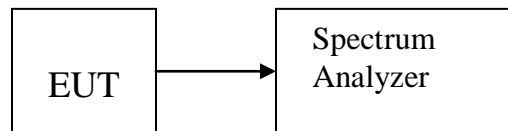
8.2.2 Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to the spectrum analyzer.

8.2.3 Set the spectrum analyzer as RBW = 3kHz, VBW = 10kHz, span=5-30%EBW, detail see the test plot.

8.2.4 Record the max reading.

8.2.5 Repeat the above procedure until the measurements for all frequencies are completed.

8.3 Test Setup



8.4 Test Results

PASS.

Detailed information please see the following page.

Channel	Frequency (MHz)	Power Spectral Density (dBm)	Limit (dBm)	Result
IEEE 802.11b:				
Low	2412	-12.60	8	PASS
Mid	2437	-11.93	8	PASS
High	2462	-11.18	8	PASS
IEEE 802.11g:				
Low	2412	-19.42	8	PASS
Mid	2437	-17.40	8	PASS
High	2462	-19.05	8	PASS
IEEE 802.11n/HT20				
Low	2412	-19.01	8	PASS
Mid	2437	-18.17	8	PASS
High	2462	-16.79	8	PASS
IEEE 802.11n/HT40				
Low	2422	-21.40	8	PASS
Mid	2437	-21.84	8	PASS
High	2452	-20.56	8	PASS
Note: This test with port 1 antenna.				

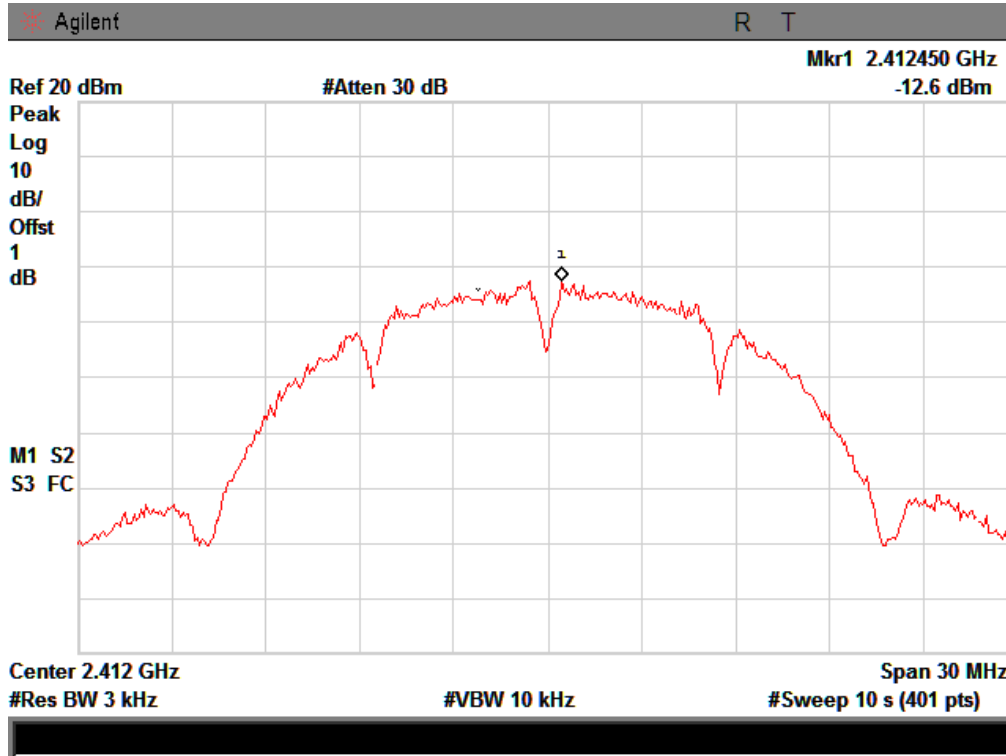
Channel	Frequency (MHz)	Power Spectral Density (dBm)	Limit (dBm)	Result
IEEE 802.11b:				
Low	2412	-15.39	8	PASS
Mid	2437	-14.09	8	PASS
High	2462	-14.20	8	PASS
IEEE 802.11g:				
Low	2412	-19.60	8	PASS
Mid	2437	-18.47	8	PASS
High	2462	-19.87	8	PASS
IEEE 802.11n/HT20				
Low	2412	-21.46	8	PASS
Mid	2437	-20.75	8	PASS
High	2462	-20.69	8	PASS
IEEE 802.11n/HT40 with 2.4G:				
Low	2422	-22.82	8	PASS
Mid	2437	-22.39	8	PASS
High	2452	-22.96	8	PASS
Note: This test with port 2 antenna.				

Channel	Frequency (MHz)	Power Spectral Density (dBm)	Limit (dBm)	Result
IEEE 802.11n/HT20				
Low	2412	-17.05	8	PASS
Mid	2437	-16.26	8	PASS
High	2462	-15.31	8	PASS
IEEE 802.11n/HT40 with 2.4G:				
Low	2422	-19.04	8	PASS
Mid	2437	-19.10	8	PASS
High	2452	-18.59	8	PASS
Note: 1 This result with port 1 and port 2 antenna. 2 According to KDB 662911, Result power = $10\log(10^{\text{ant1}/10} + 10^{\text{ant2}/10})$ 3 Result unit: W, The end PK Output power result is converted to units of dBm.				

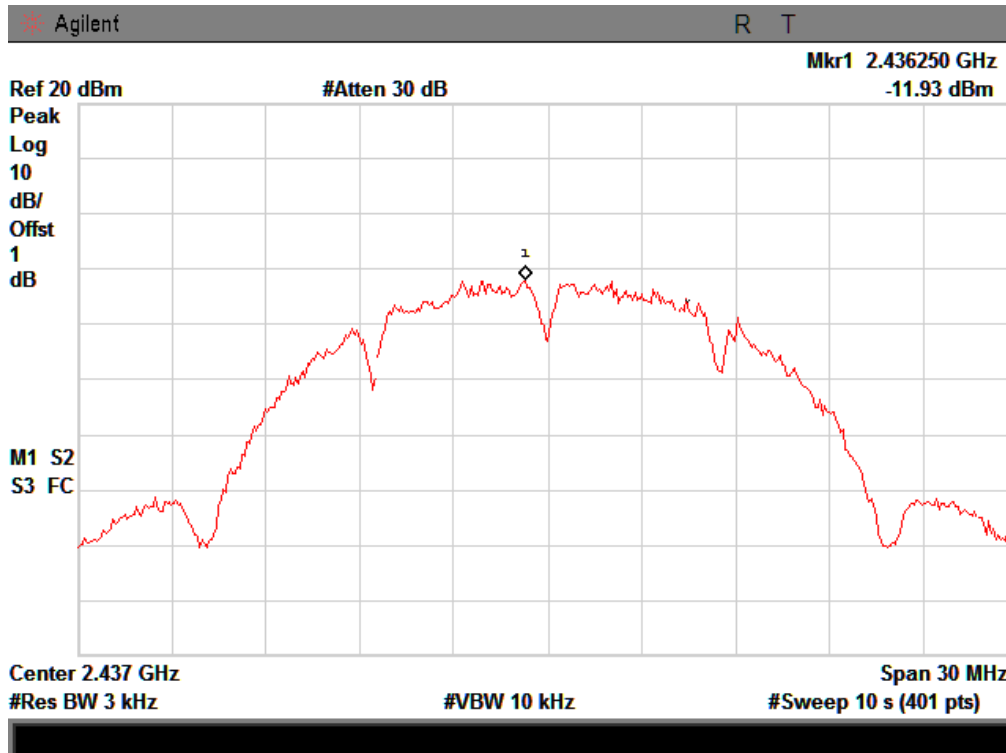
With port 1 antenna

IEEE 802.11b:

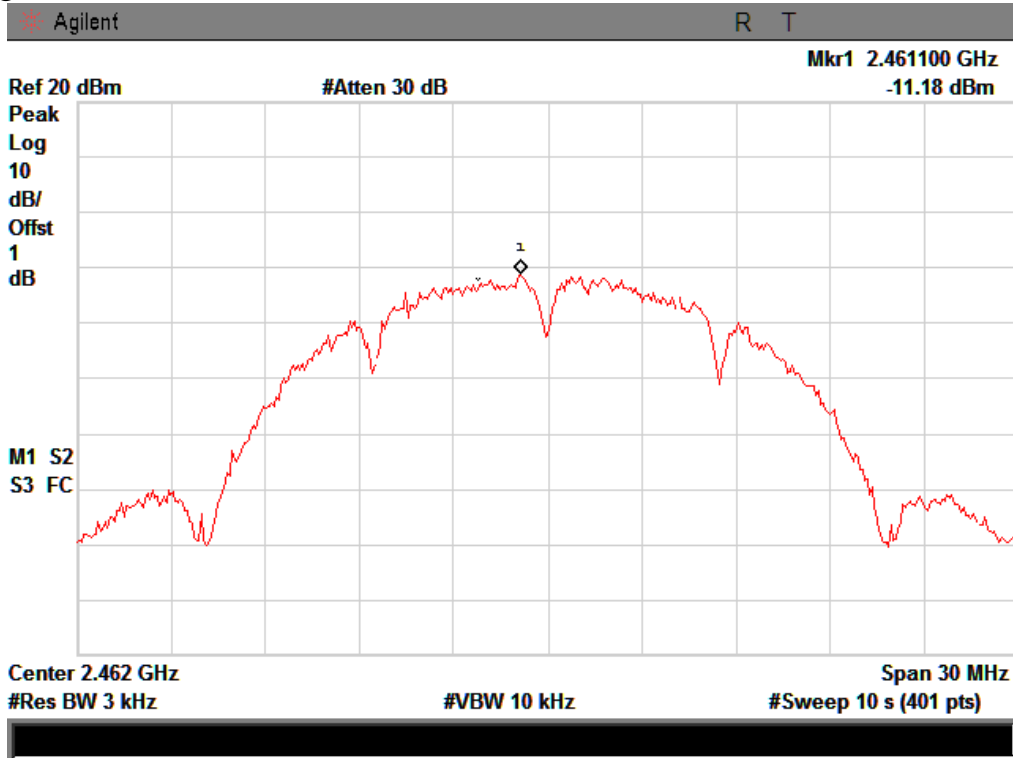
CH Low :



CH Mid :

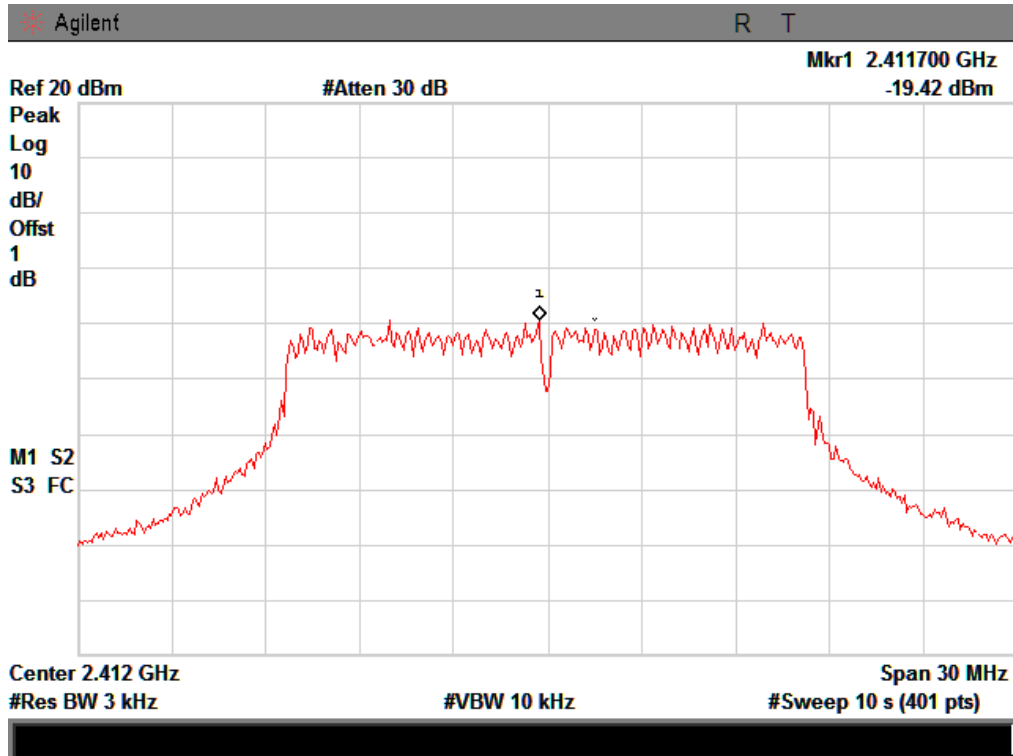


CH High :

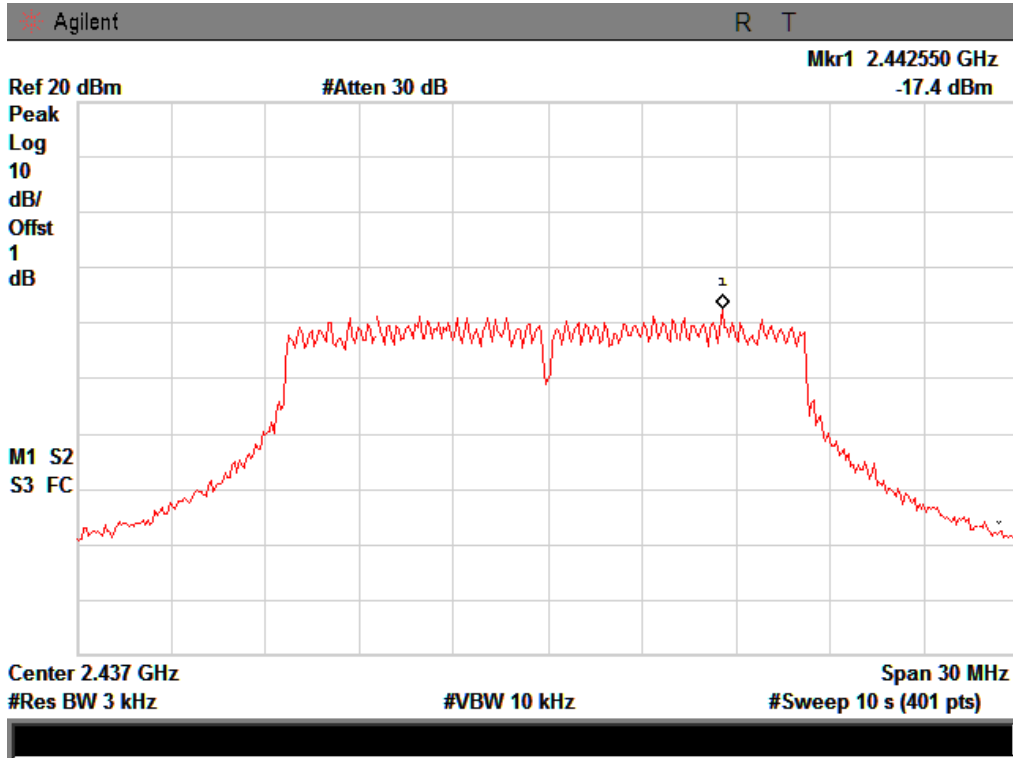


IEEE 802.11g:

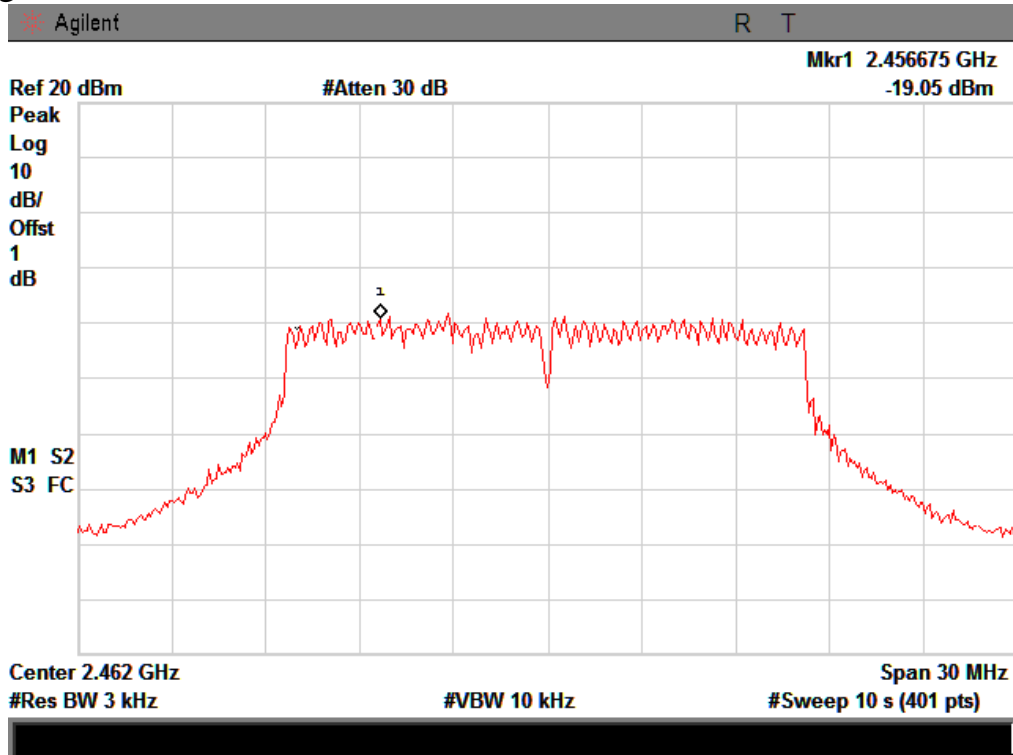
CH Low :



CH Mid :

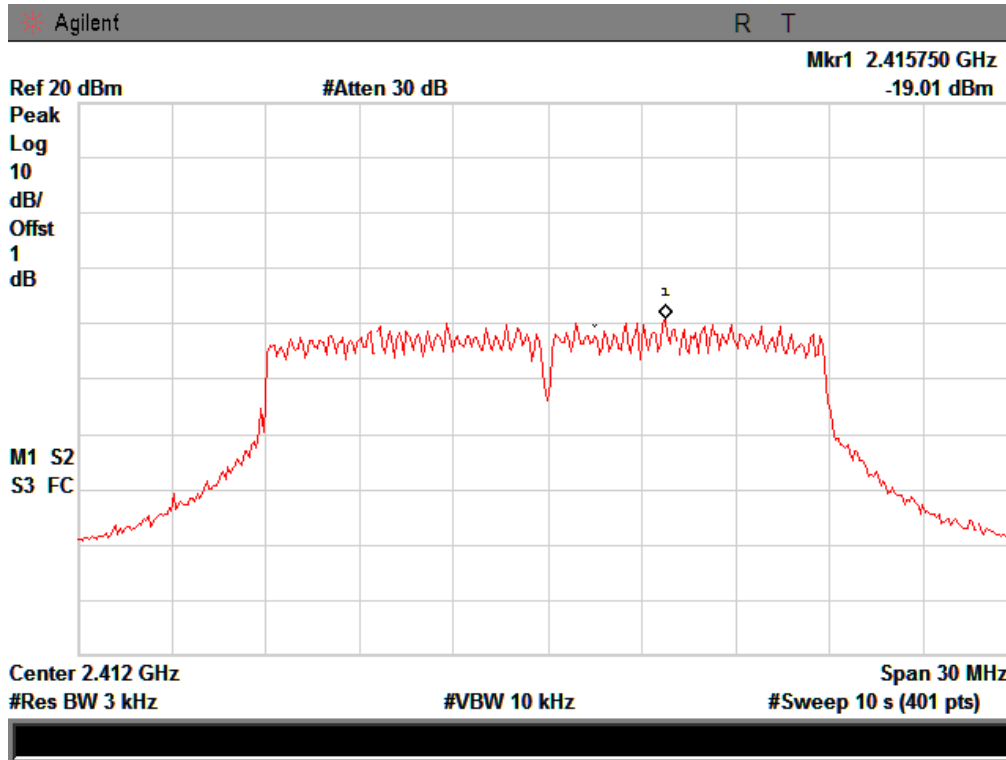


CH High :

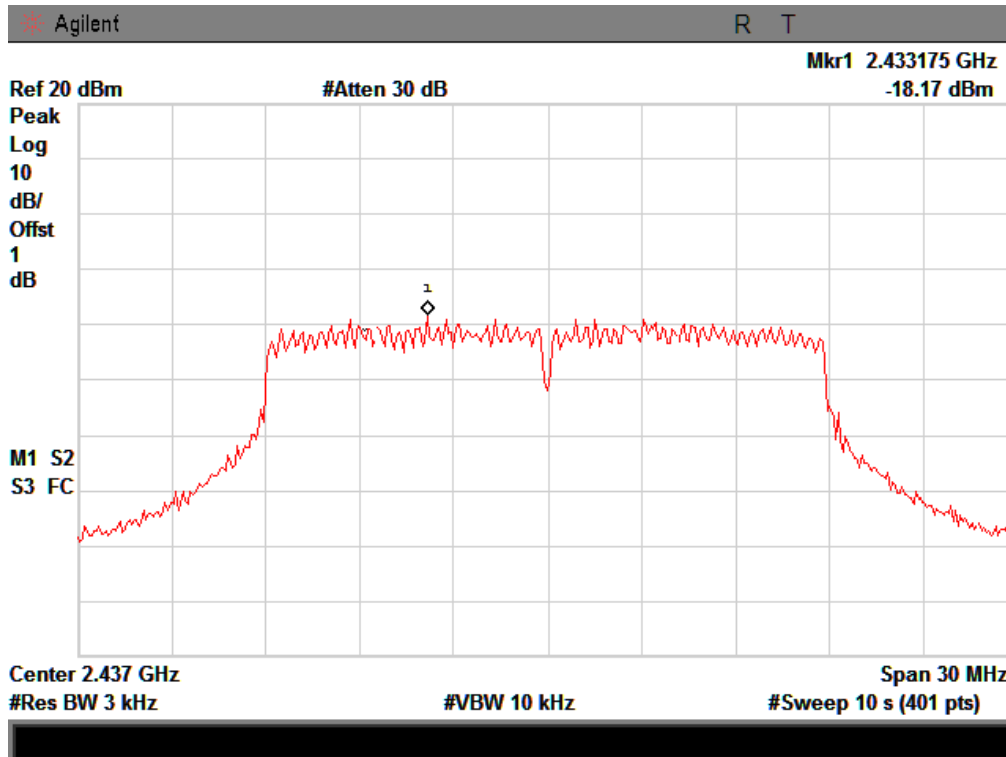


IEEE 802.11n/HT20:

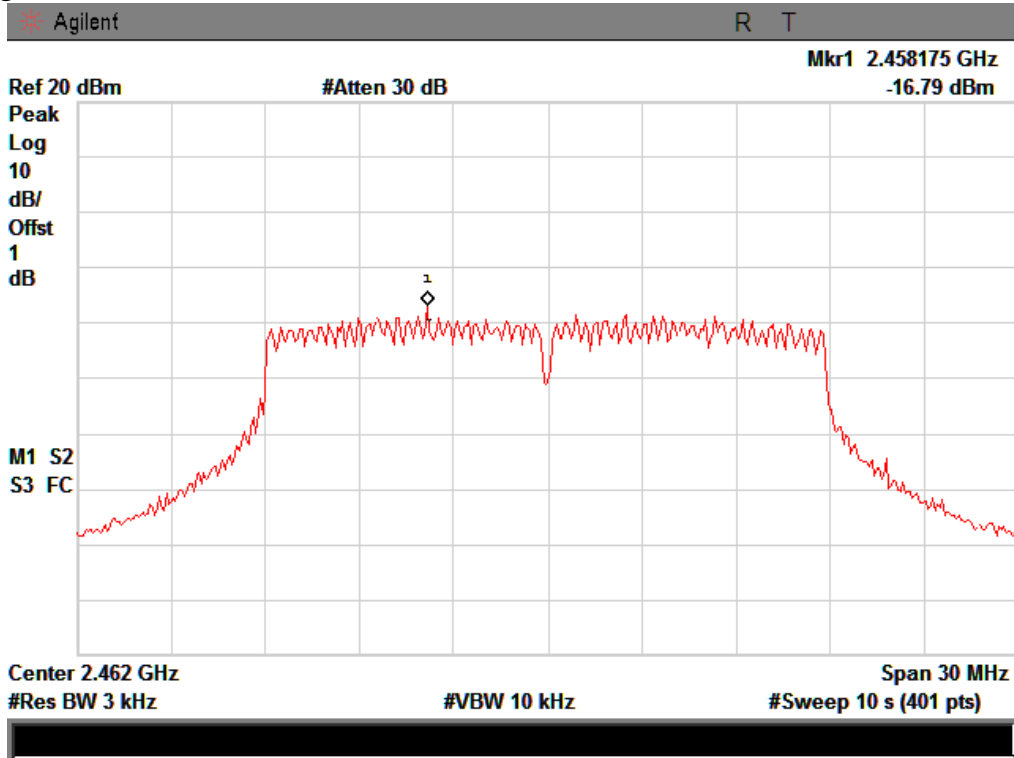
CH Low :



CH Mid :

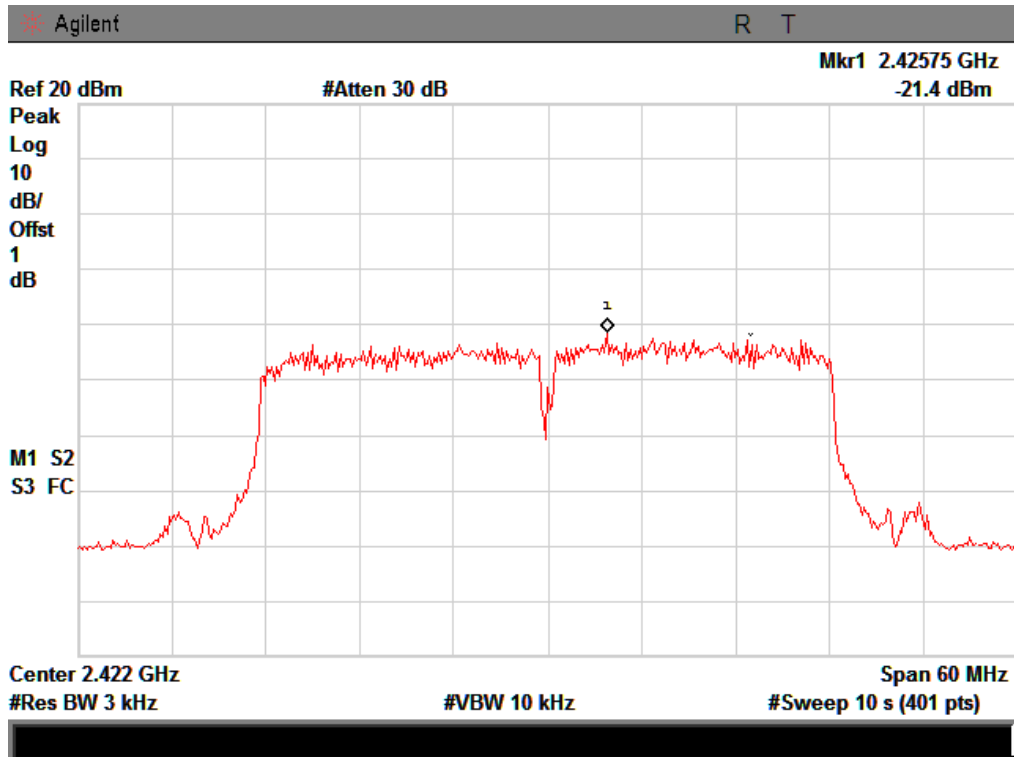


CH High :

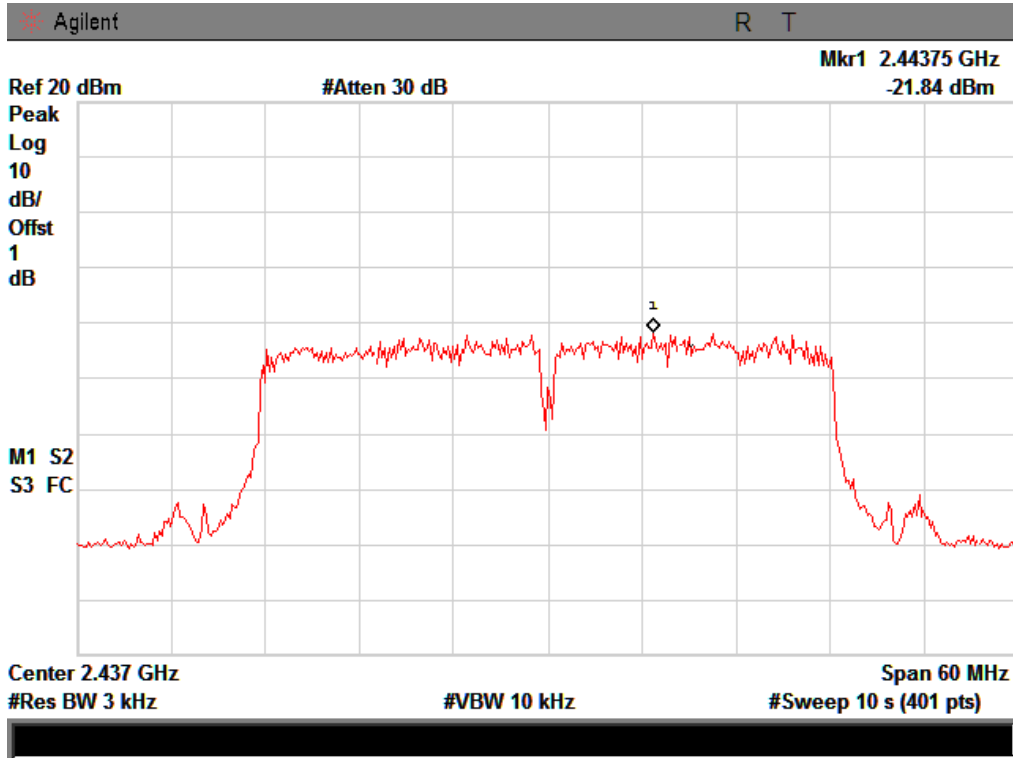


IEEE 802.11n/HT40:

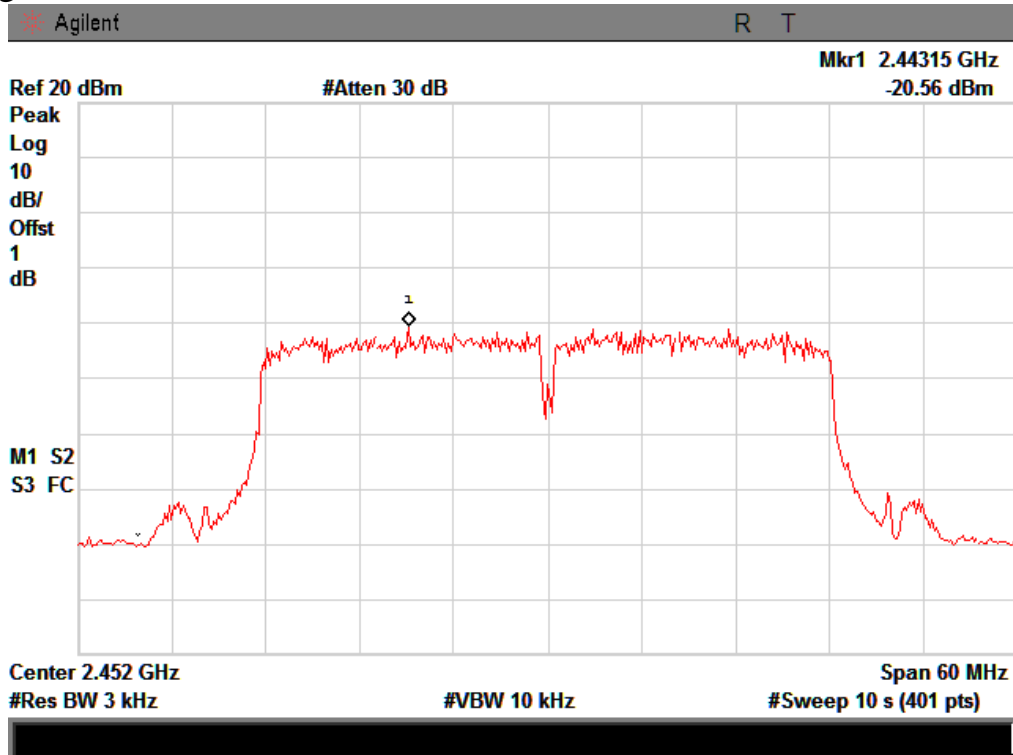
CH Low :



CH Mid :



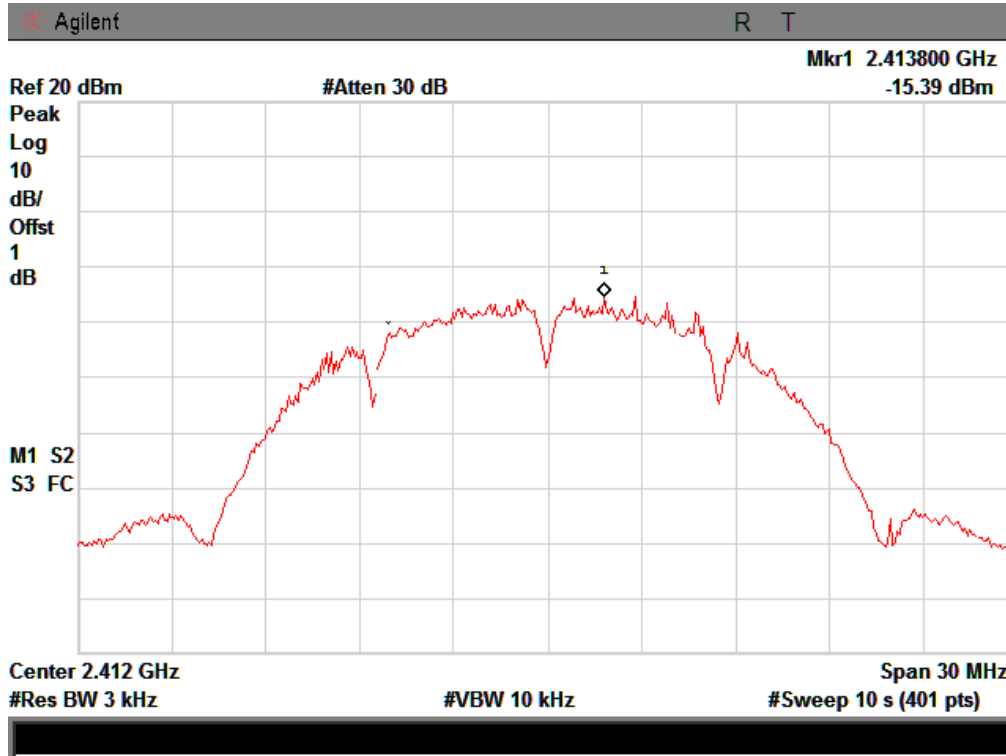
CH High :



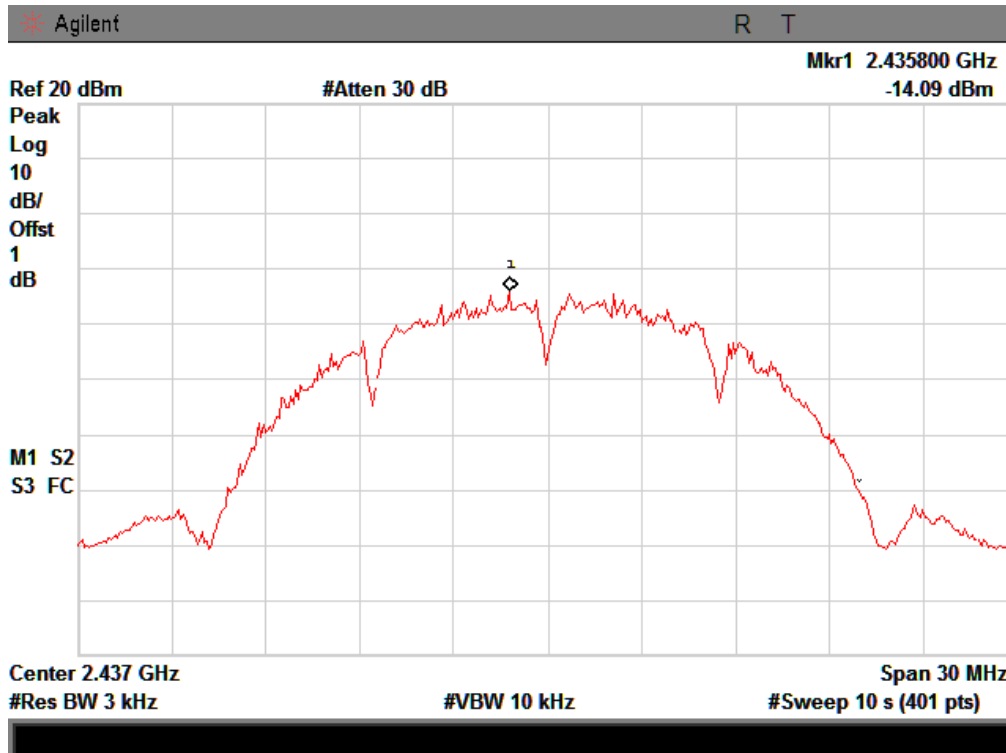
With port 2 antenna

IEEE 802.11b:

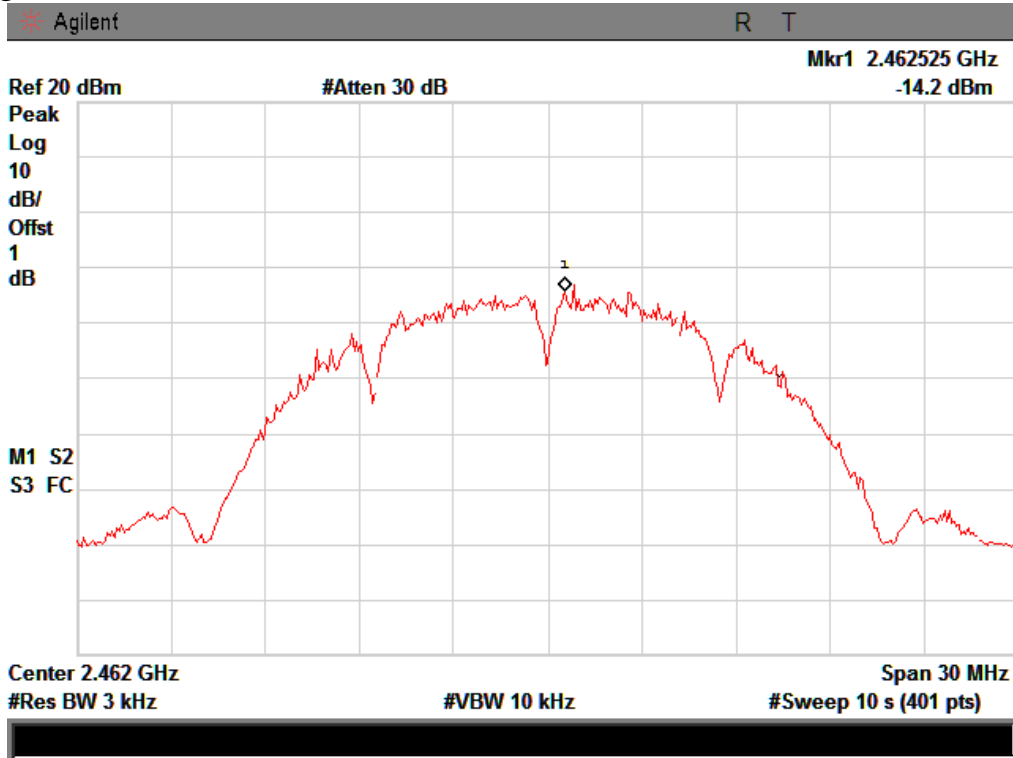
CH Low :



CH Mid :

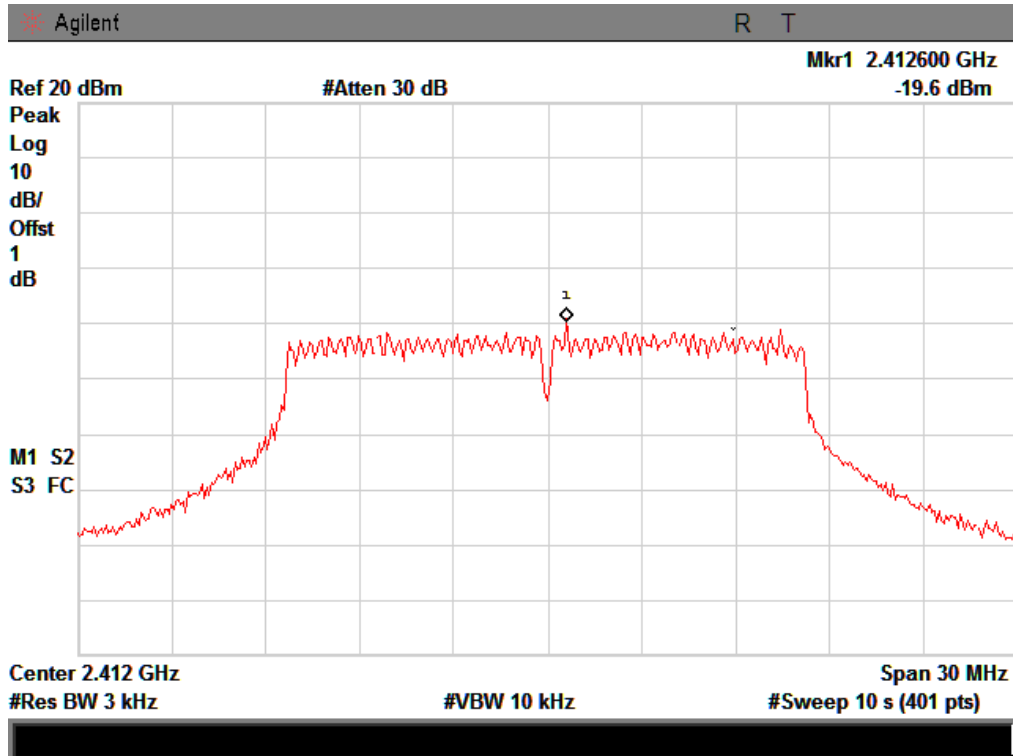


CH High :

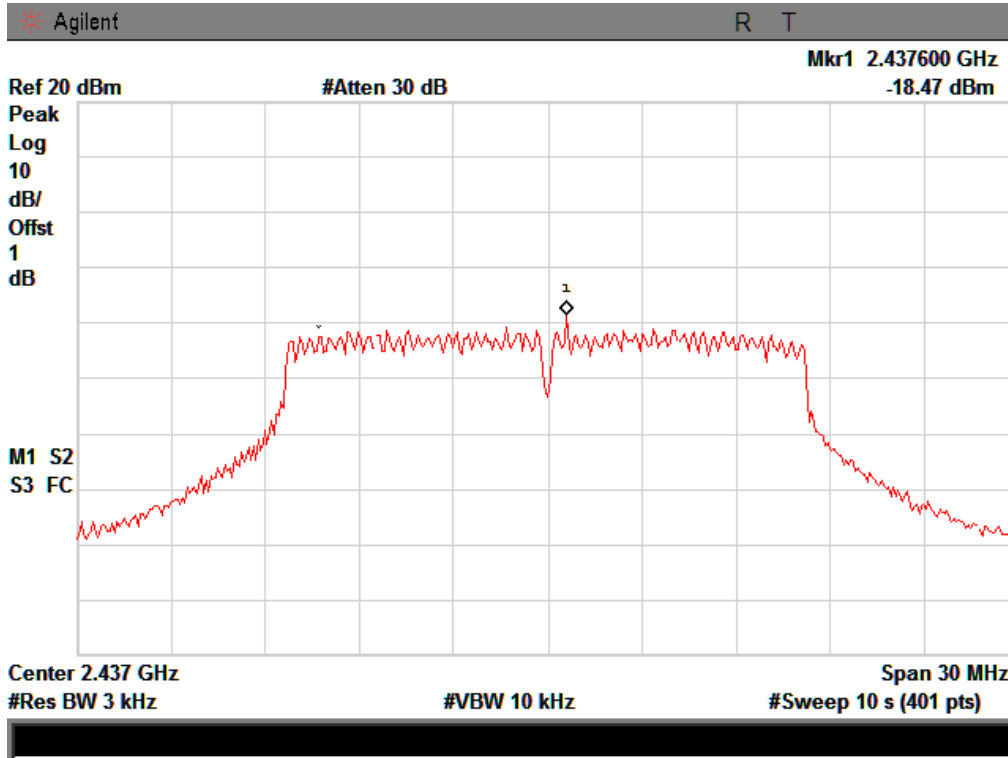


IEEE 802.11g:

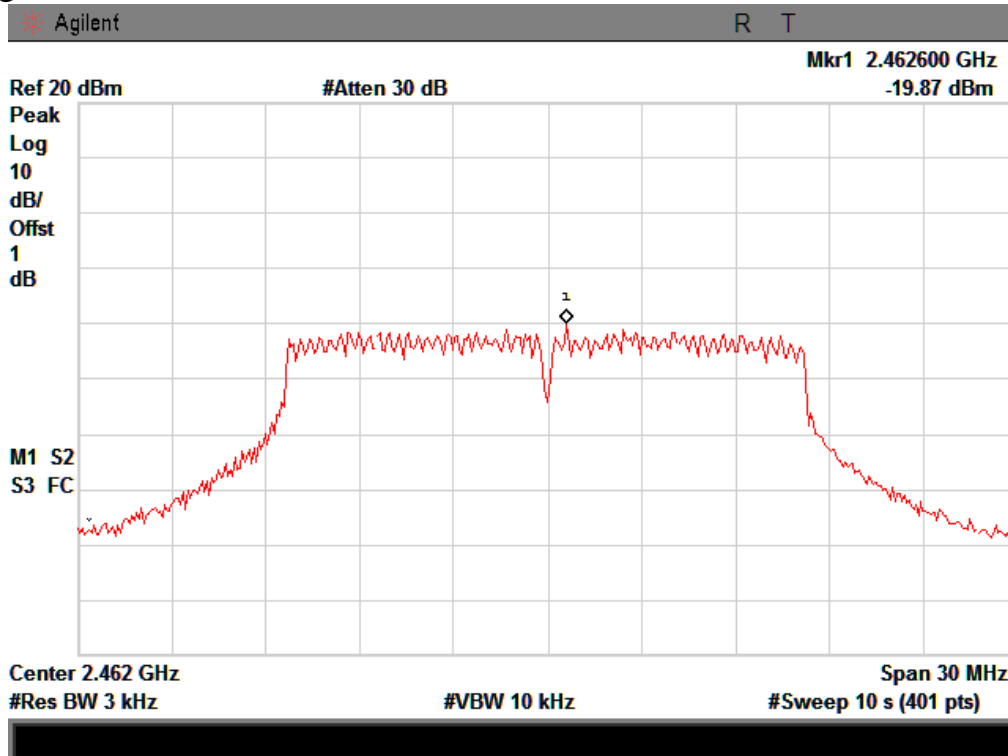
CH Low :



CH Mid :

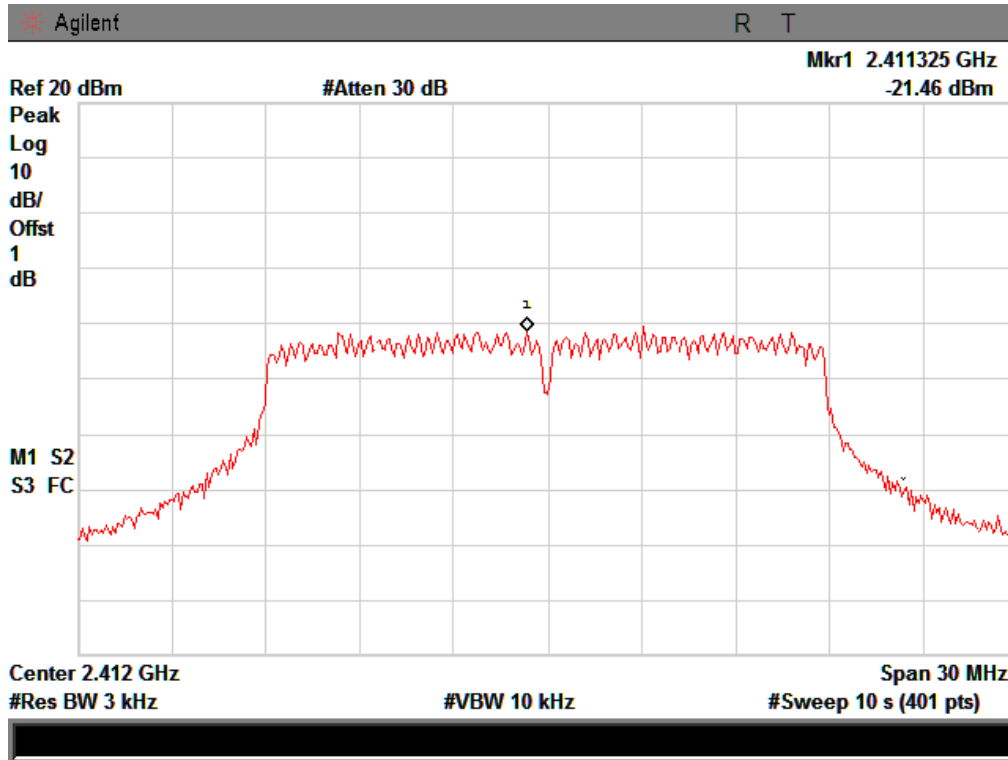


CH High :

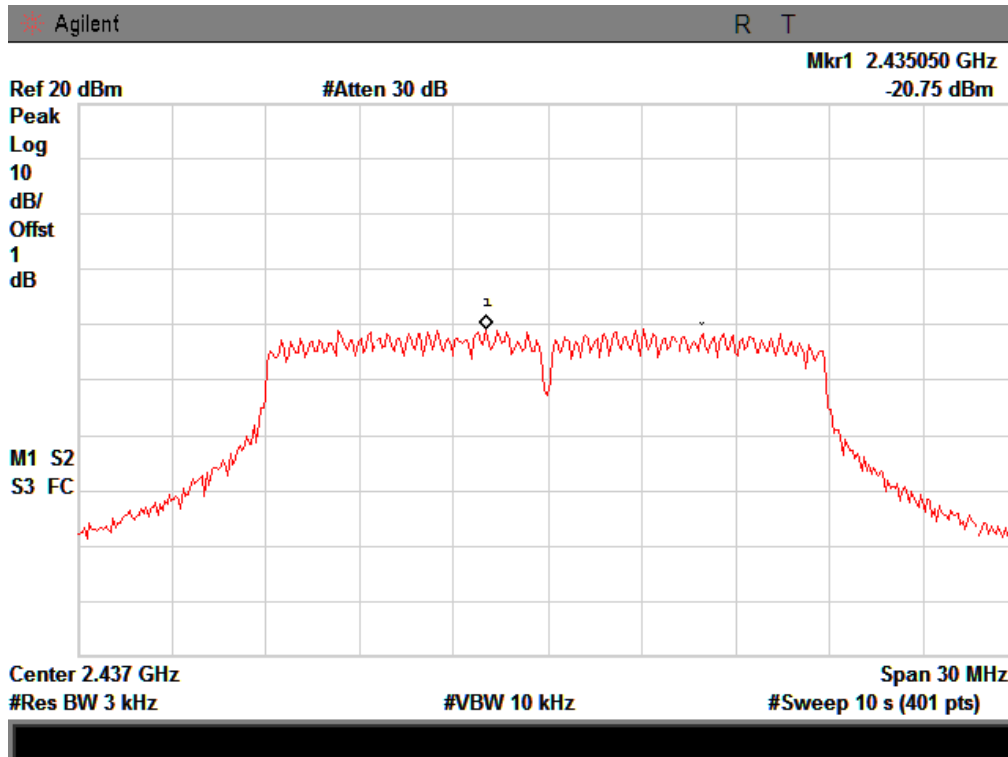


IEEE 802.11 n/HT20:

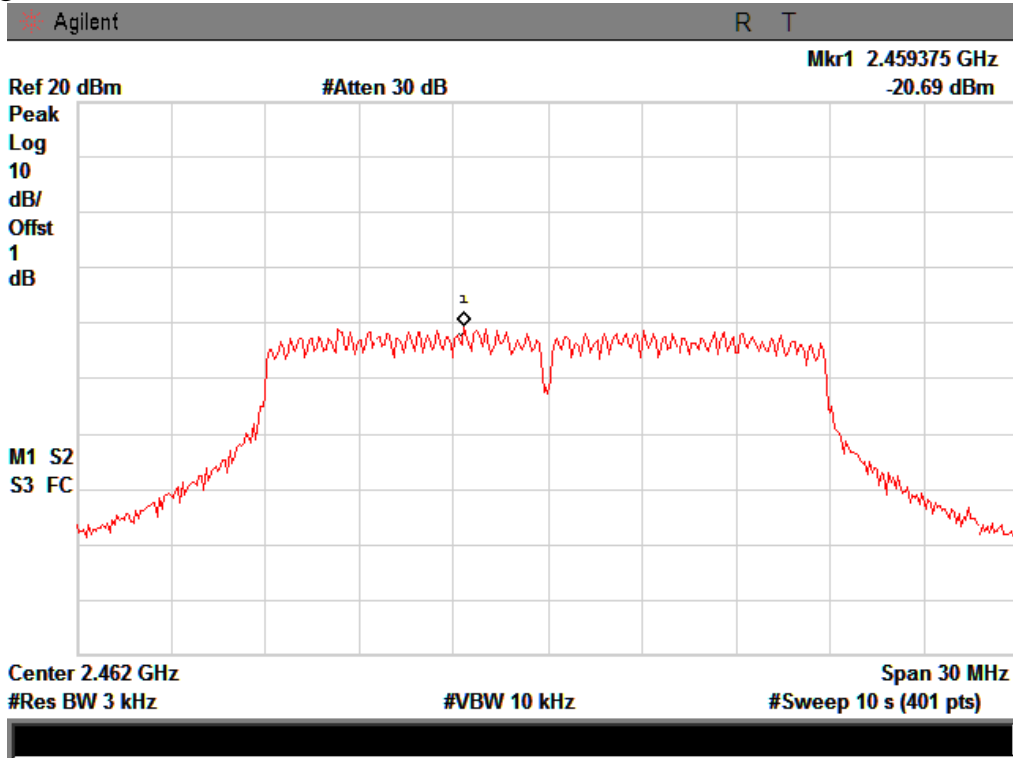
CH Low :



CH Mid :

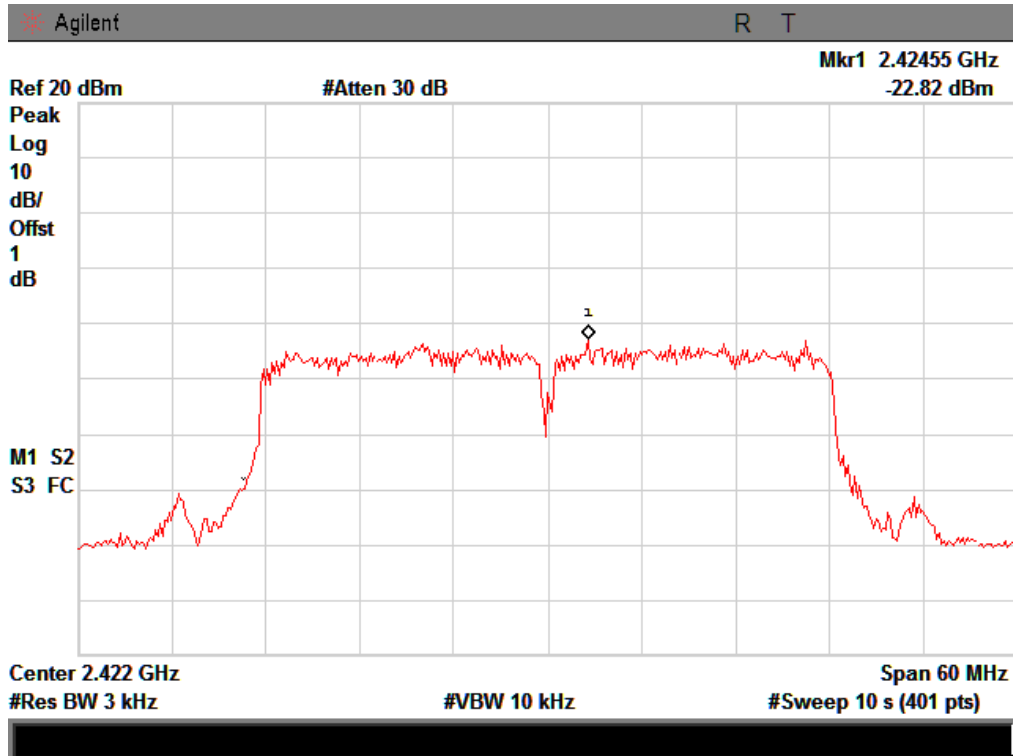


CH High :

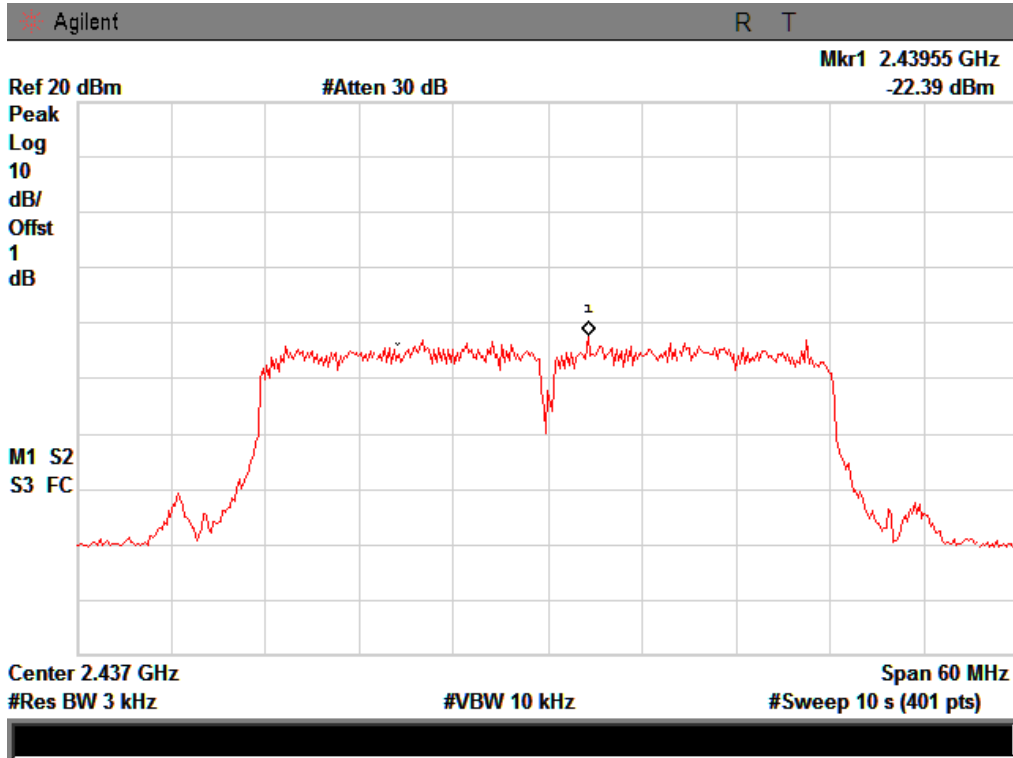


IEEE 802.11n/HT40:

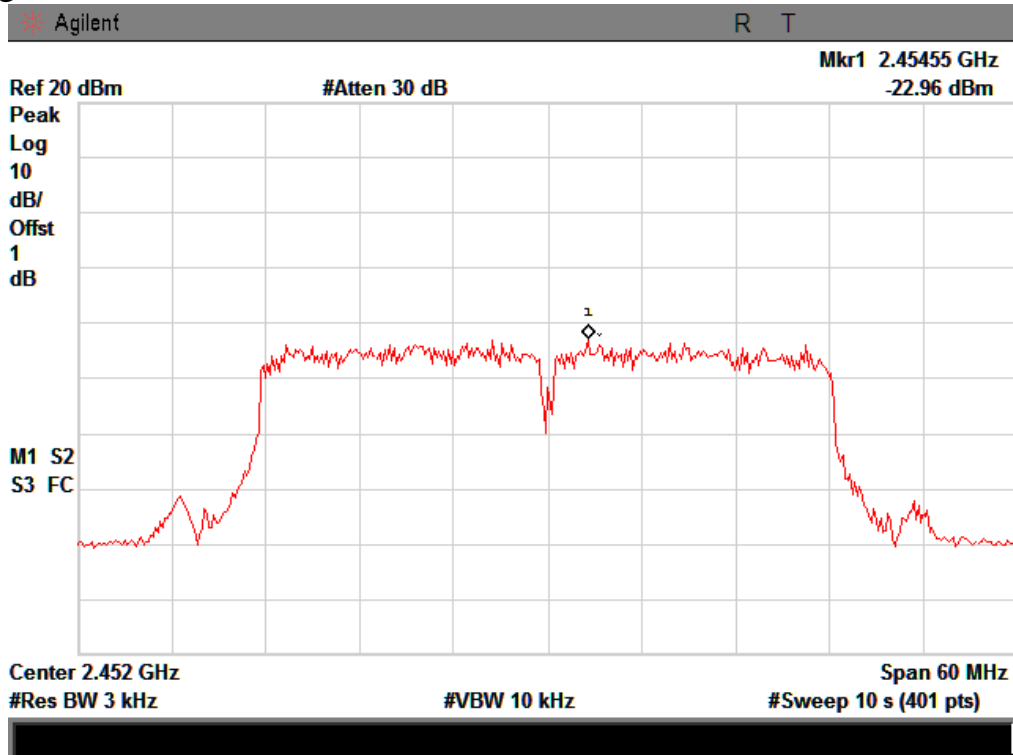
CH Low :



CH Mid :



CH High :



9 Bandwidth

9.1 Test limit

Please refer section 15.247

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

9.2 Method of measurement

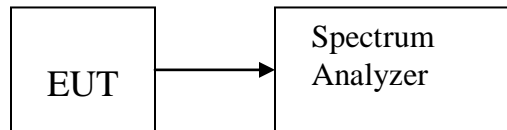
Details see the KDB558074 D01 Meas Guidance

a) The bandwidth is measured at an amplitude level reduced 20dB from the reference level.

The reference level is the level of the highest amplitude signal observed from the transmitter at the fundamental frequency. Once the reference level is established, the equipment is conditioned with typical modulating signal to produce the worst-case (i.e. the widest) bandwidth.

b) The test receiver set $RBW = 1-5 \% EBW$, $VBW \geq 3RBW$, Sweep time set auto, detail see the test plot.

9.3 Test Setup



9.4 Test Results

PASS.

Detailed information please see the following page.

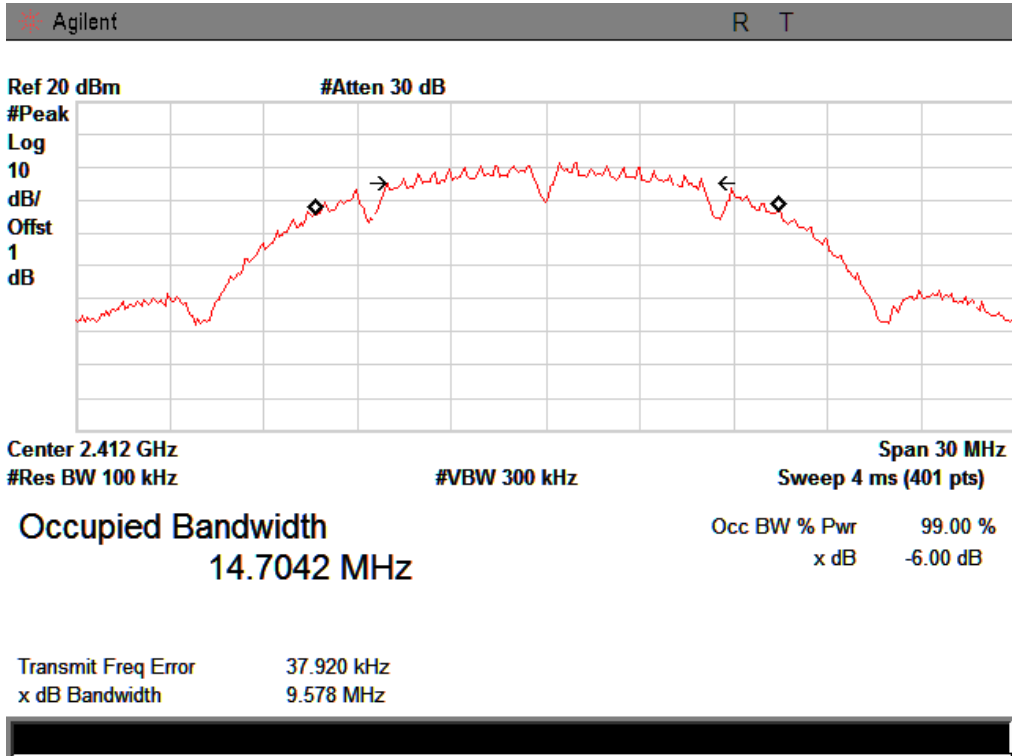
Channel	Frequency (MHz)	6dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)	Limit (MHz)	Result
IEEE 802.11b:					
Low	2412	9.58	14.70	0.5	PASS
Mid	2437	10.06	14.71	0.5	PASS
High	2462	10.09	14.76	0.5	PASS
IEEE 802.11g:					
Low	2412	16.31	16.42	0.5	PASS
Mid	2437	16.29	16.44	0.5	PASS
High	2462	16.33	16.42	0.5	PASS
IEEE 802.11n/HT20:					
Low	2412	17.18	17.58	0.5	PASS
Mid	2437	17.09	17.59	0.5	PASS
High	2462	17.30	17.58	0.5	PASS
IEEE 802.11n/HT40:					
Low	2422	35.40	35.76	0.5	PASS
Mid	2437	35.53	35.75	0.5	PASS
High	2452	35.68	35.77	0.5	PASS
Note: This test with port 1 antenna.					

Channel	Frequency (MHz)	6dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)	Limit (MHz)	Result
IEEE 802.11b:					
Low	2412	9.20	14.73	0.5	PASS
Mid	2437	10.11	14.59	0.5	PASS
High	2462	9.19	14.72	0.5	PASS
IEEE 802.11g:					
Low	2412	16.32	16.41	0.5	PASS
Mid	2437	16.33	16.42	0.5	PASS
High	2462	16.34	16.42	0.5	PASS
IEEE 802.11n/HT20:					
Low	2412	16.99	17.59	0.5	PASS
Mid	2437	17.15	17.61	0.5	PASS
High	2462	17.18	17.61	0.5	PASS
IEEE 802.11n/HT40:					
Low	2422	35.43	35.79	0.5	PASS
Mid	2437	35.40	35.83	0.5	PASS
High	2452	35.44	35.81	0.5	PASS
Note: This test with port 2 antenna.					

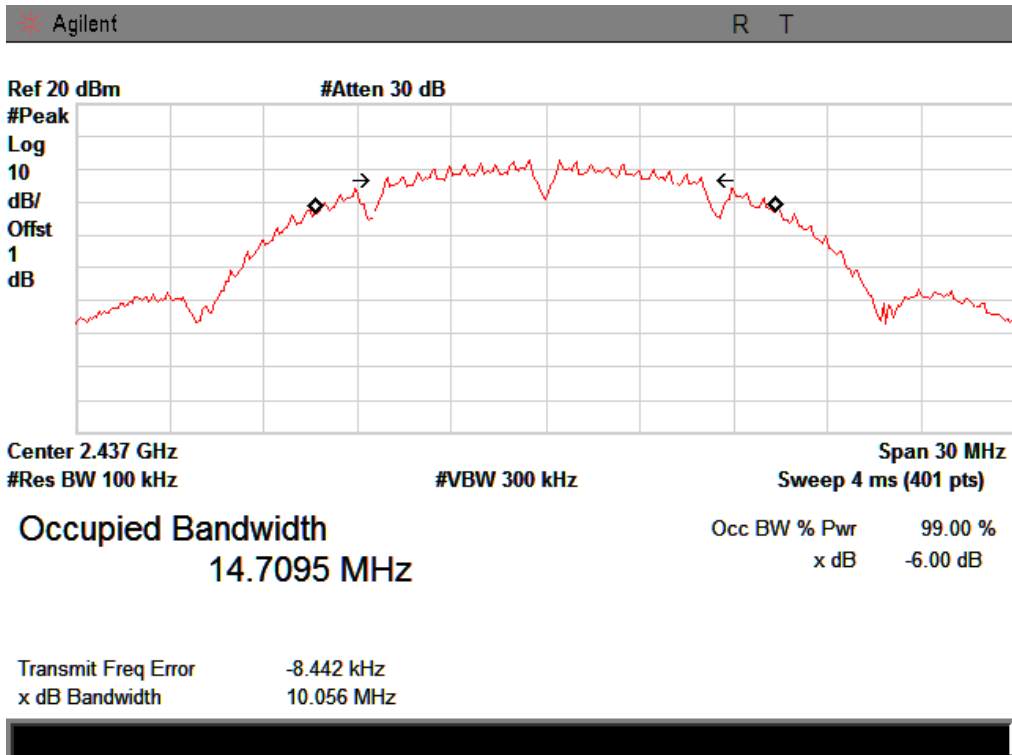
With port 1 antenna

IEEE 802.11b:

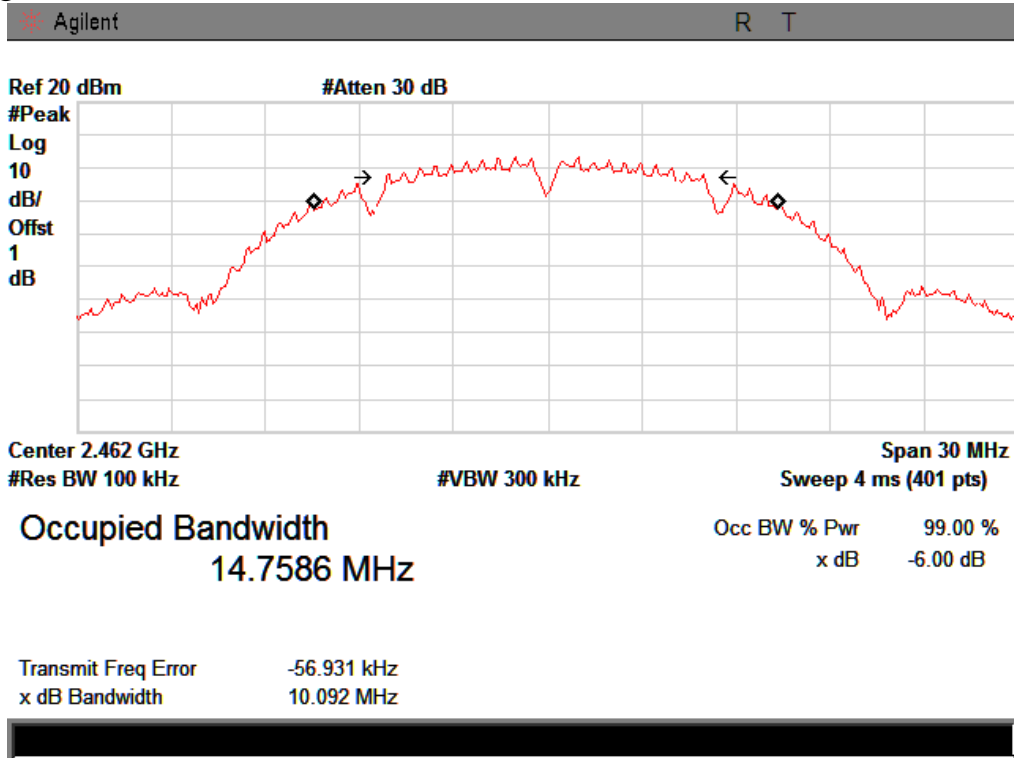
CH Low :



CH Mid :

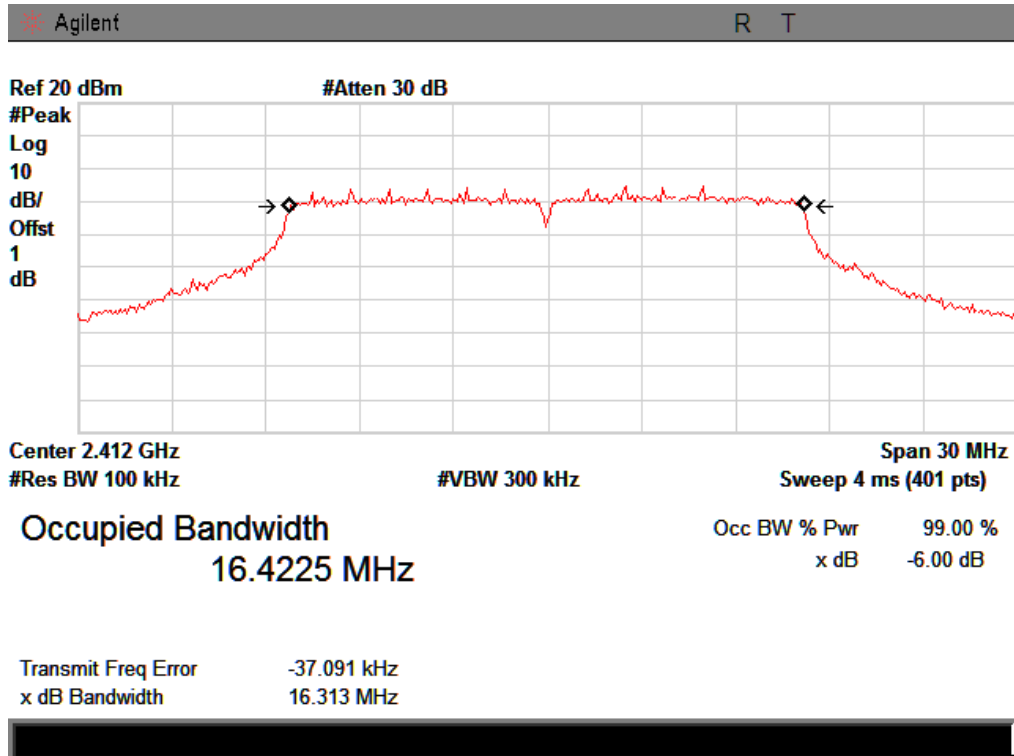


CH High :

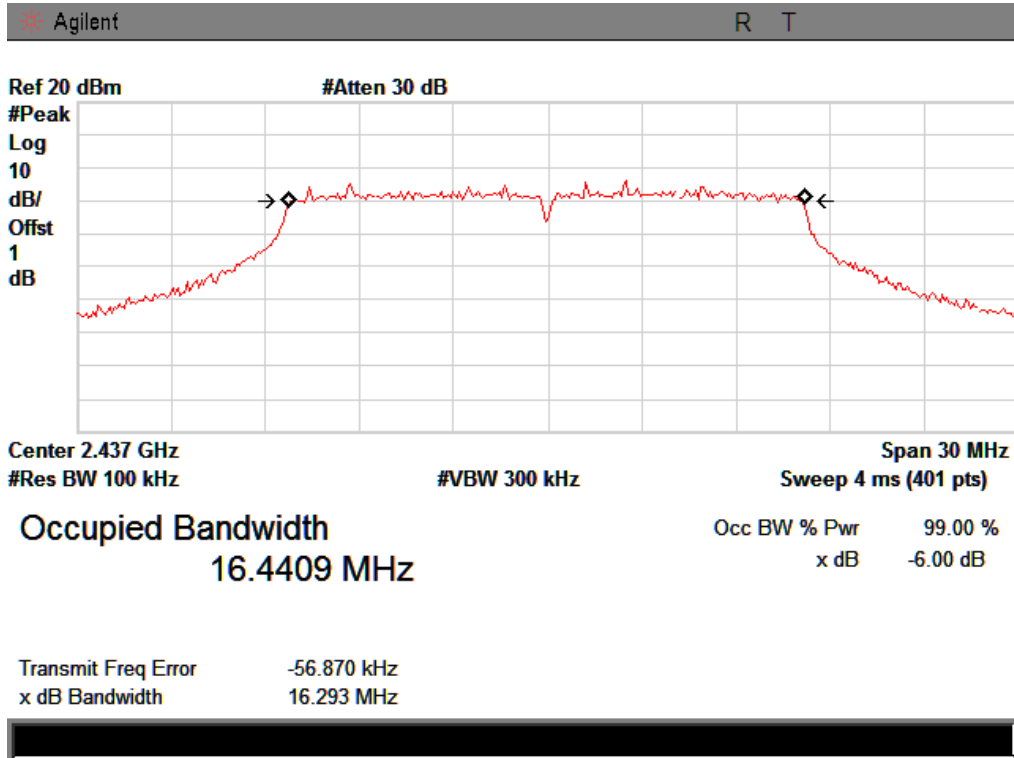


IEEE 802.11g:

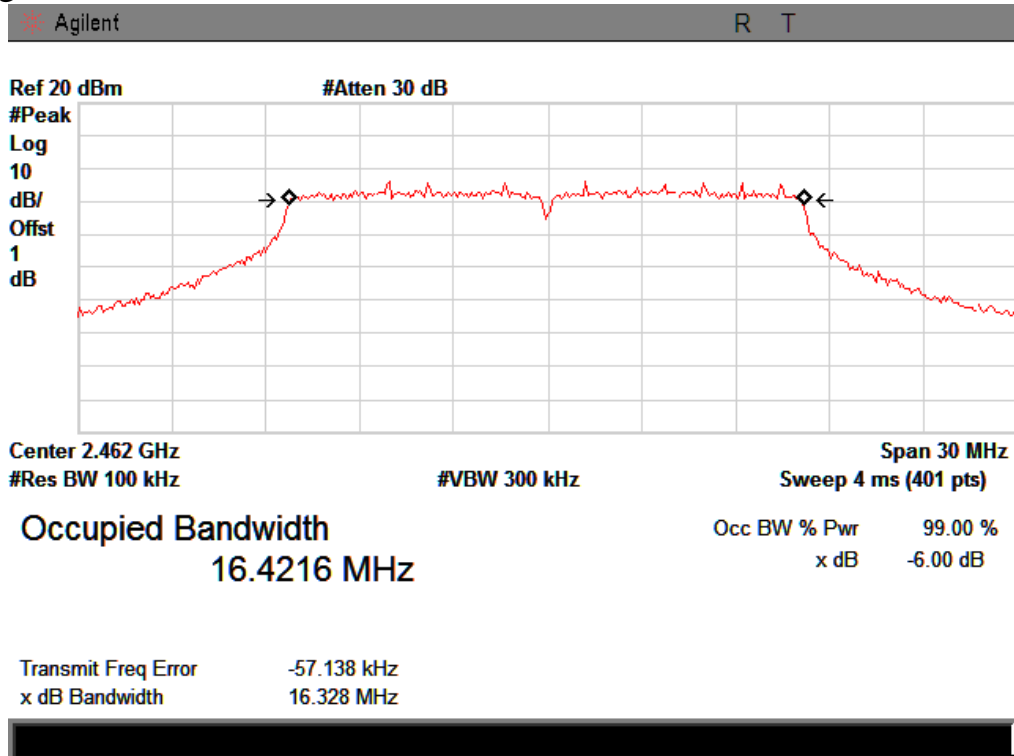
CH Low :



CH Mid :

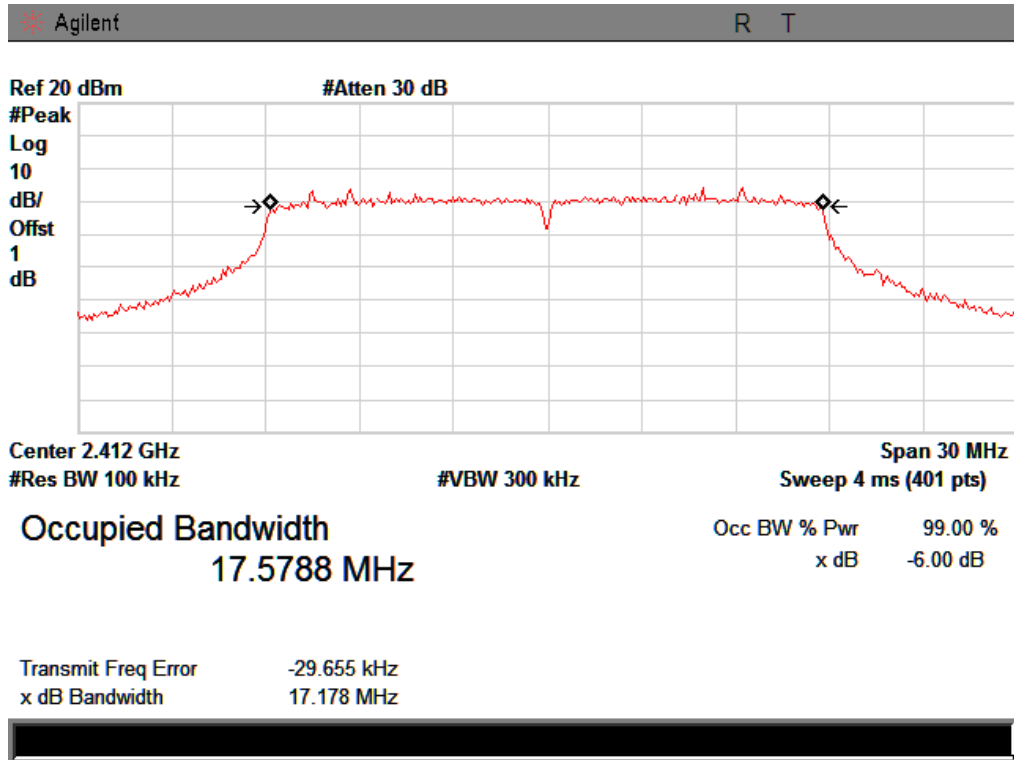


CH High :

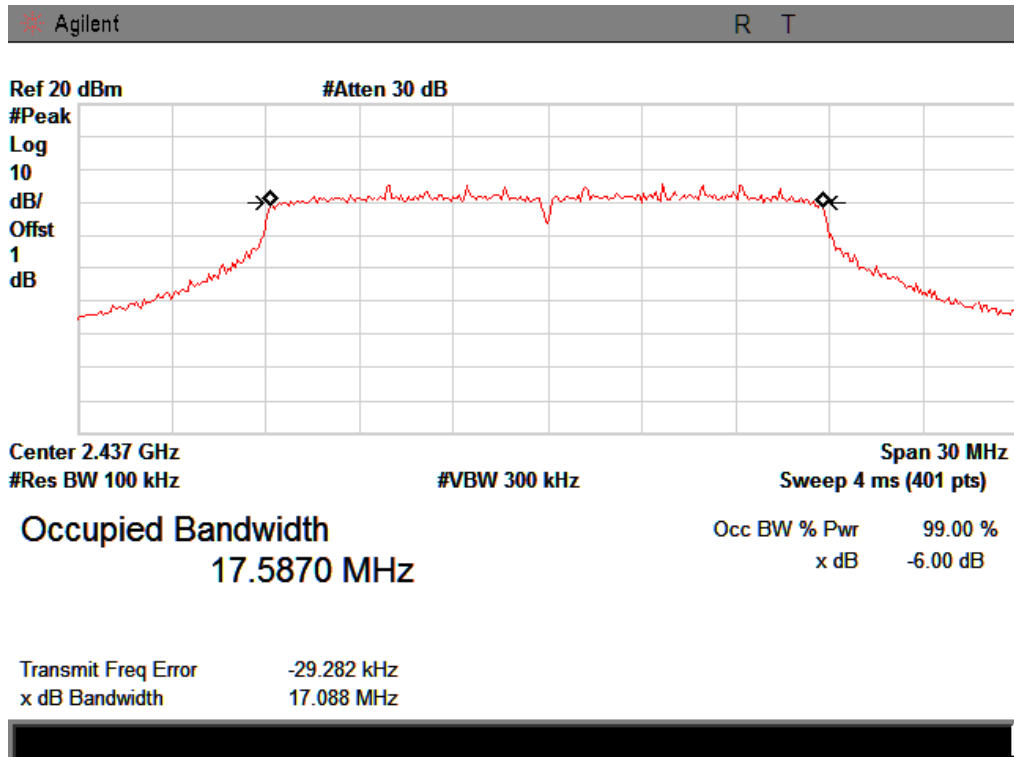


IEEE 802.11 n/HT20:

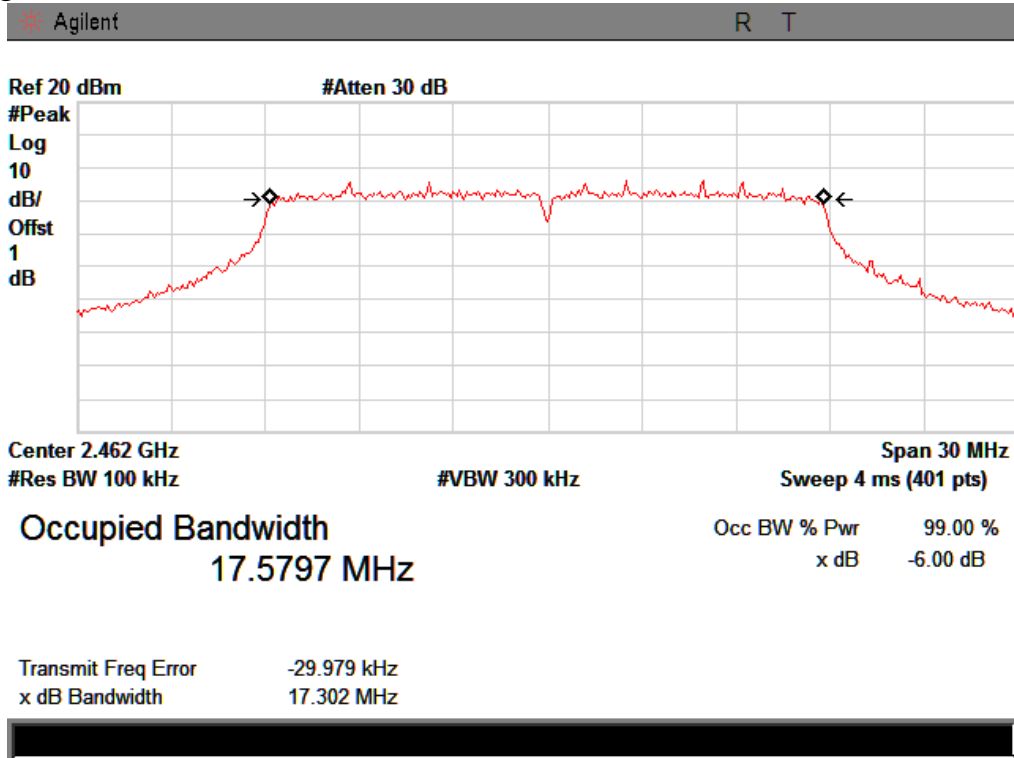
CH Low :



CH Mid :

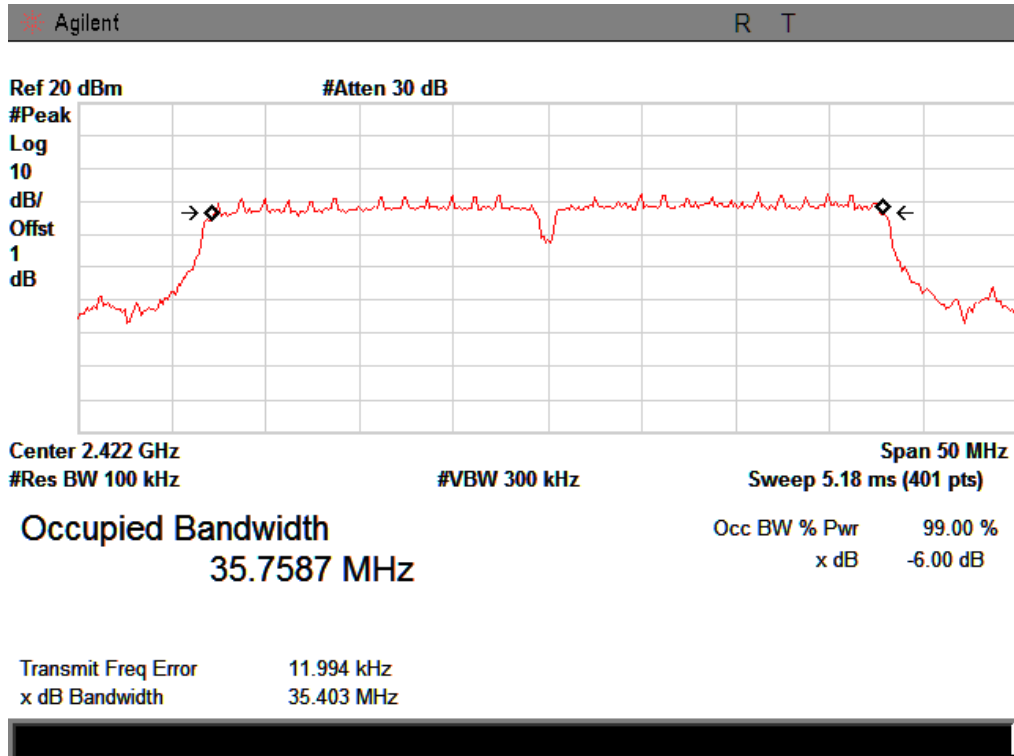


CH High :

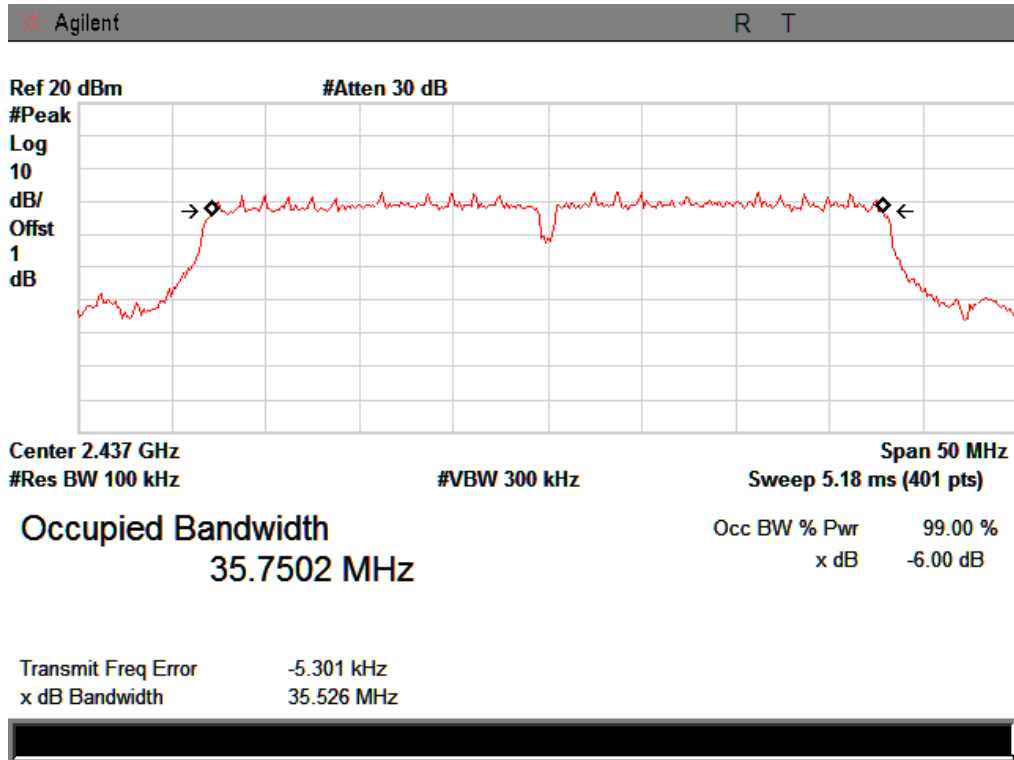


IEEE 802.11n/HT40:

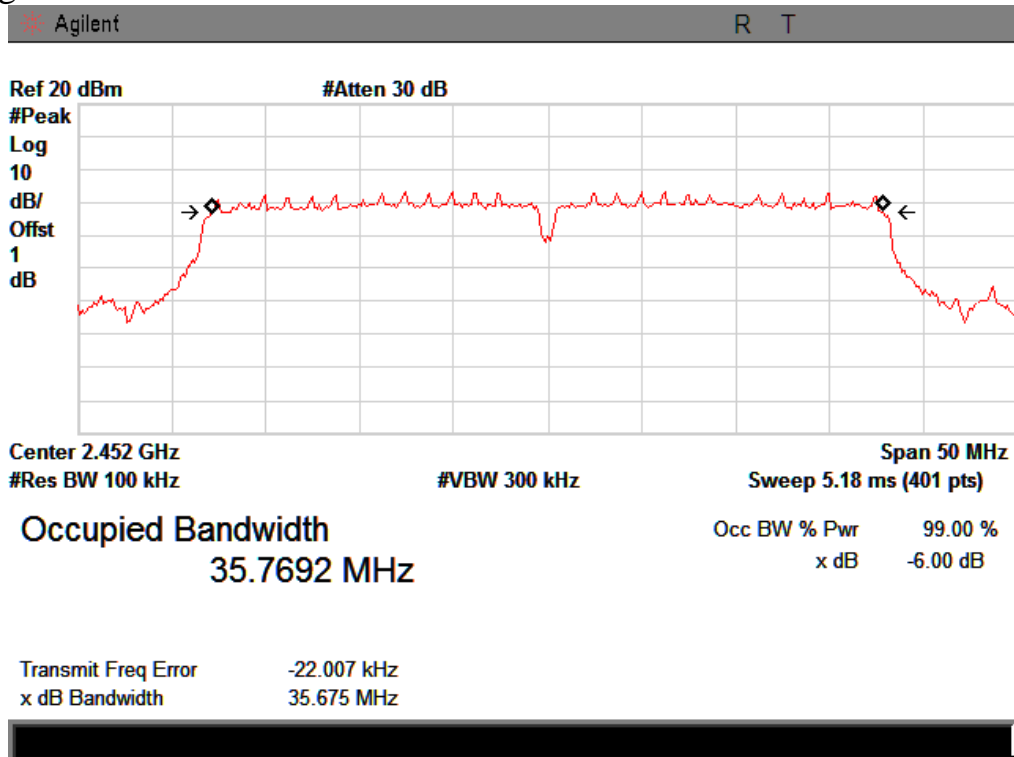
CH Low :



CH Mid :



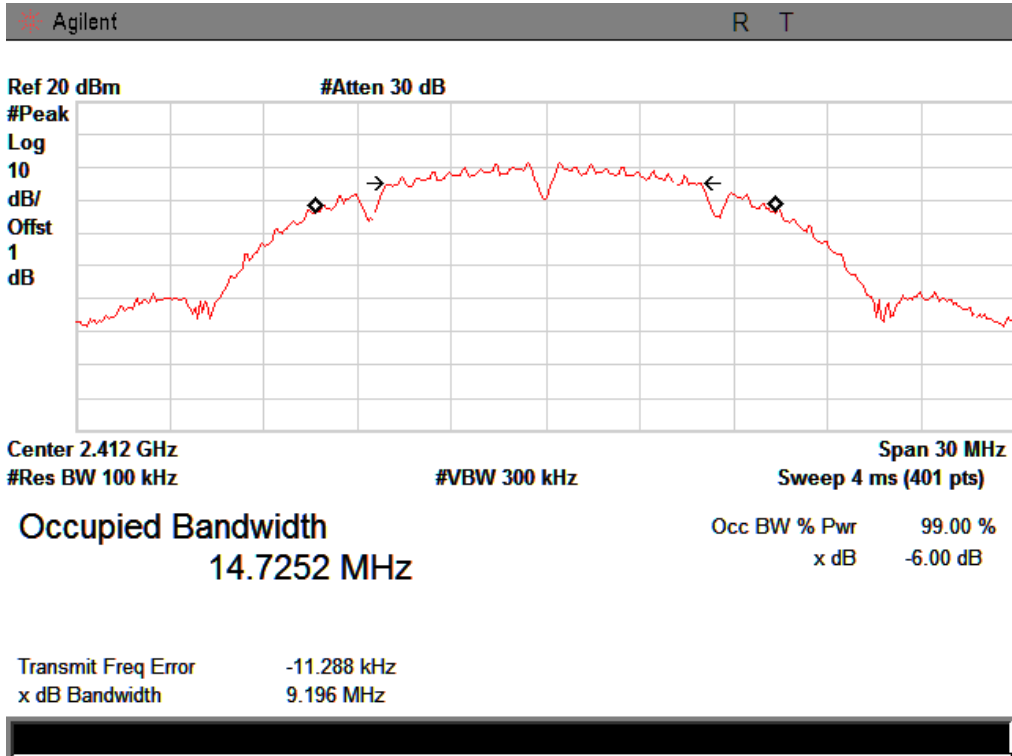
CH High :



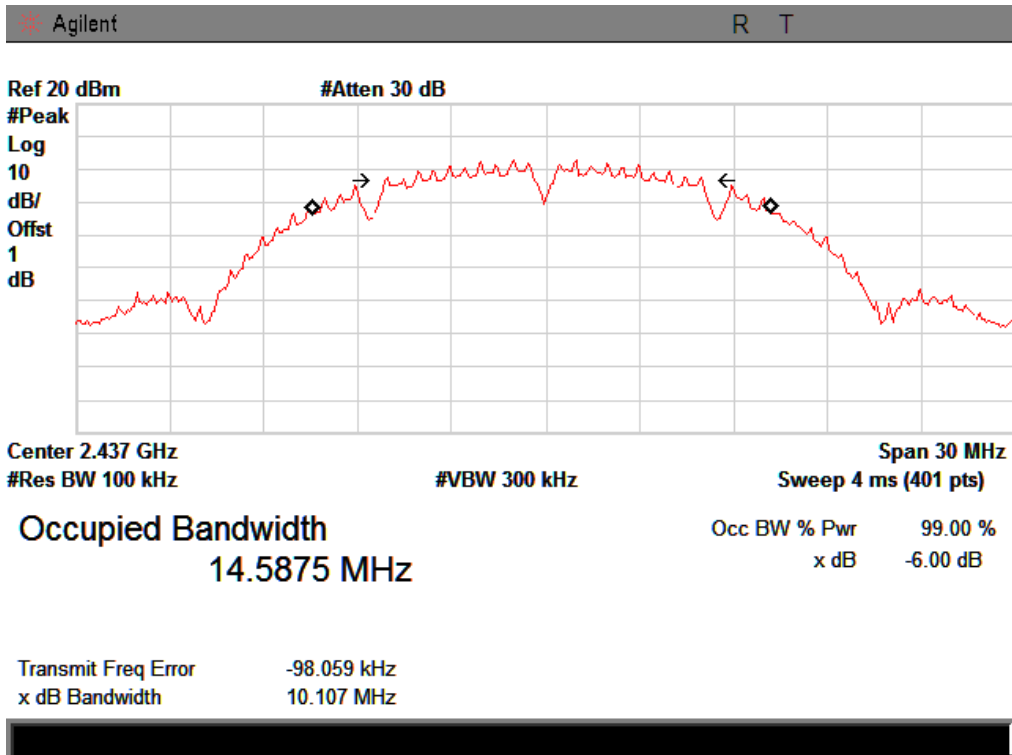
With port 2 antenna

IEEE 802.11b:

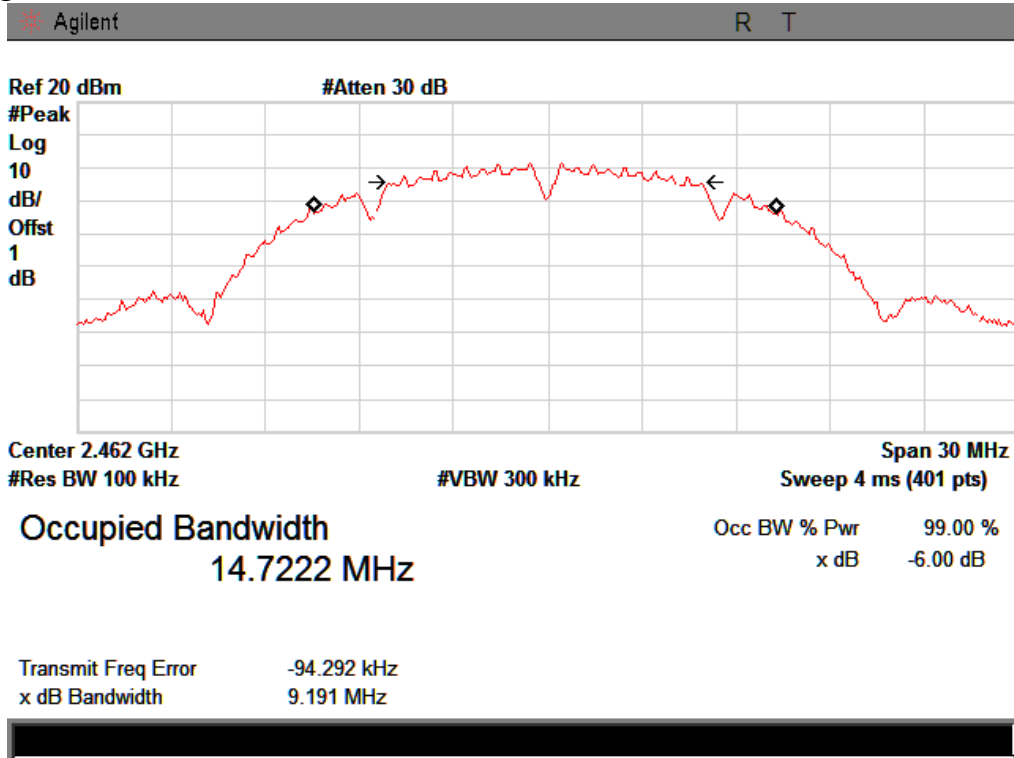
CH Low :



CH Mid :

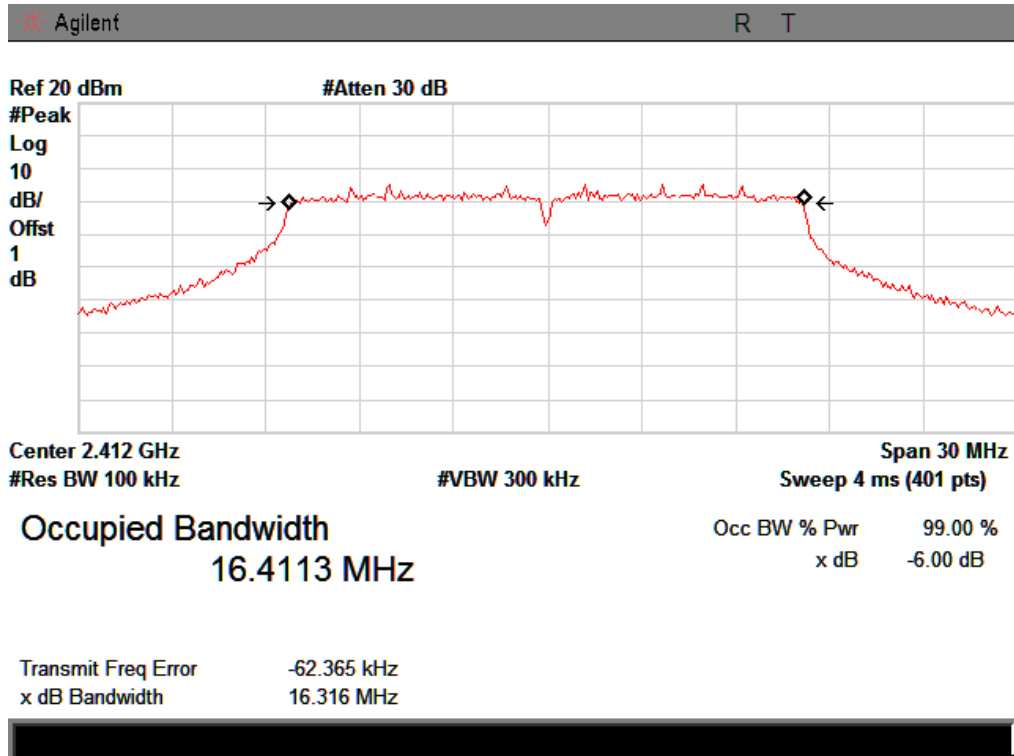


CH High :

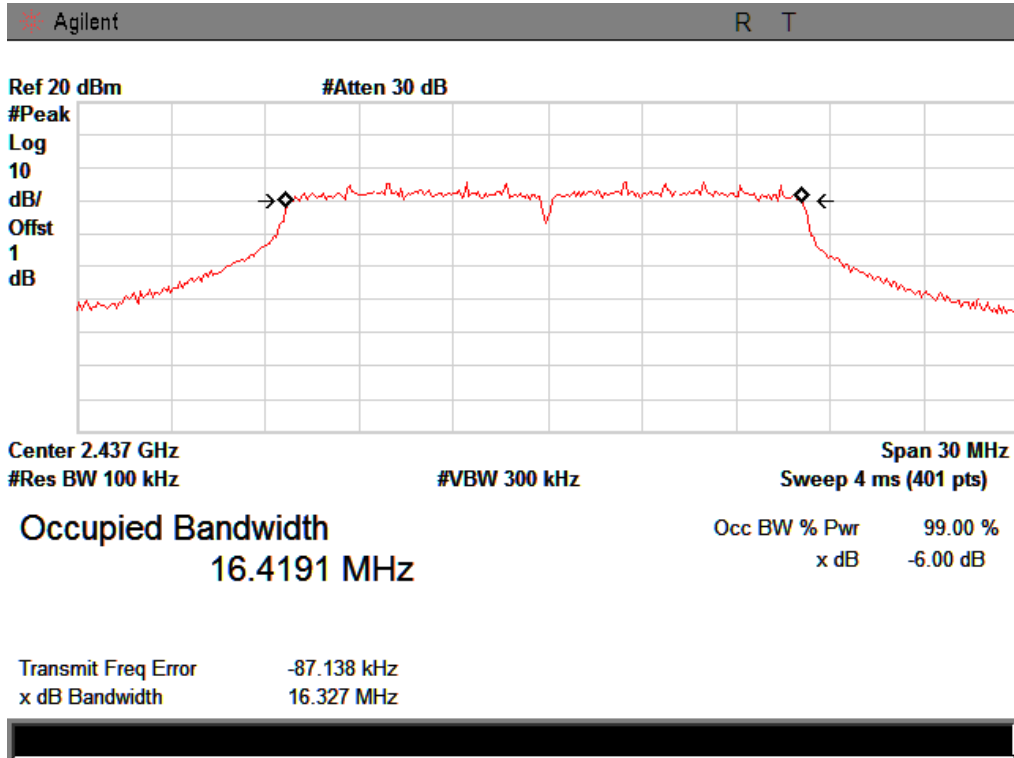


IEEE 802.11g:

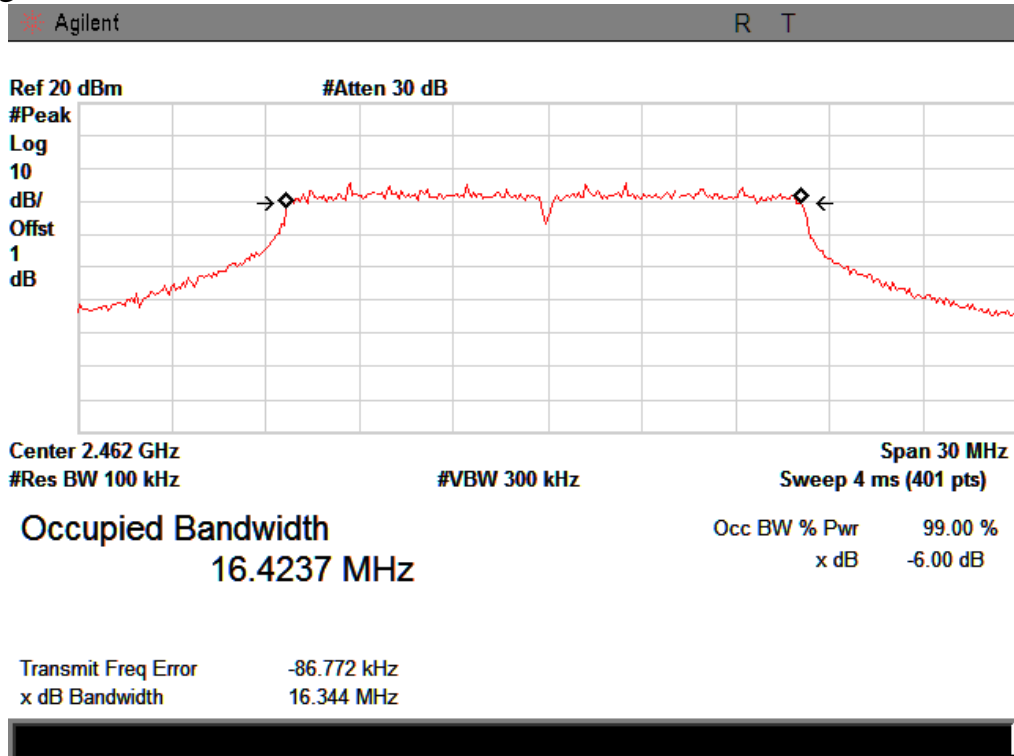
CH Low :



CH Mid :

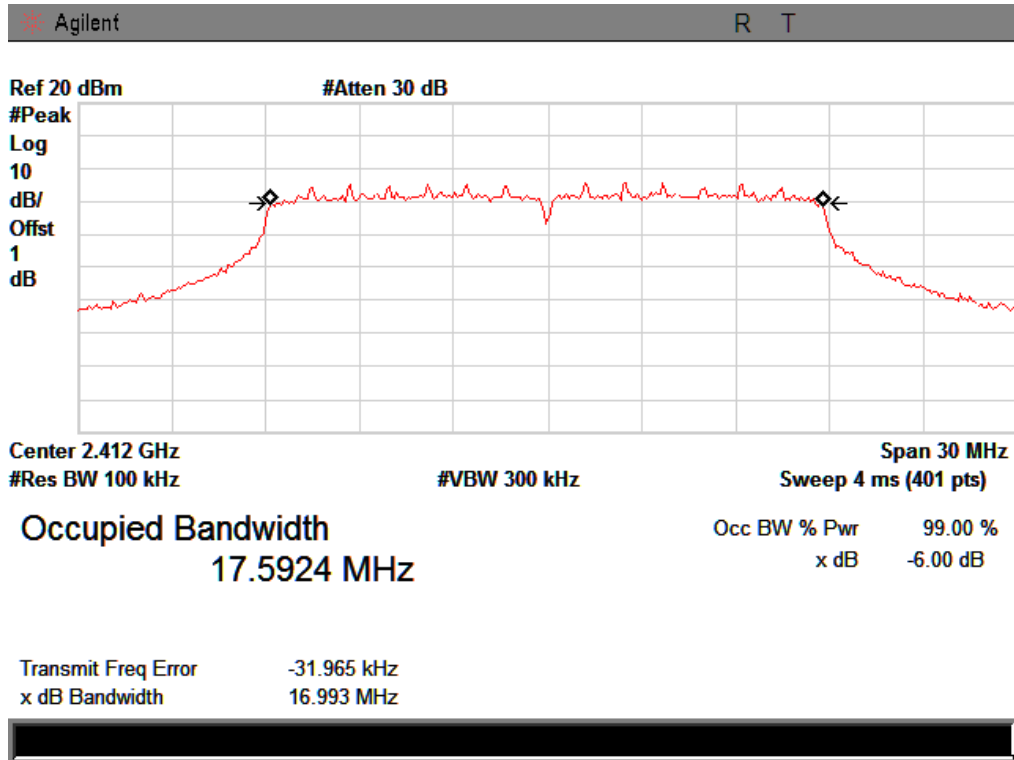


CH High :

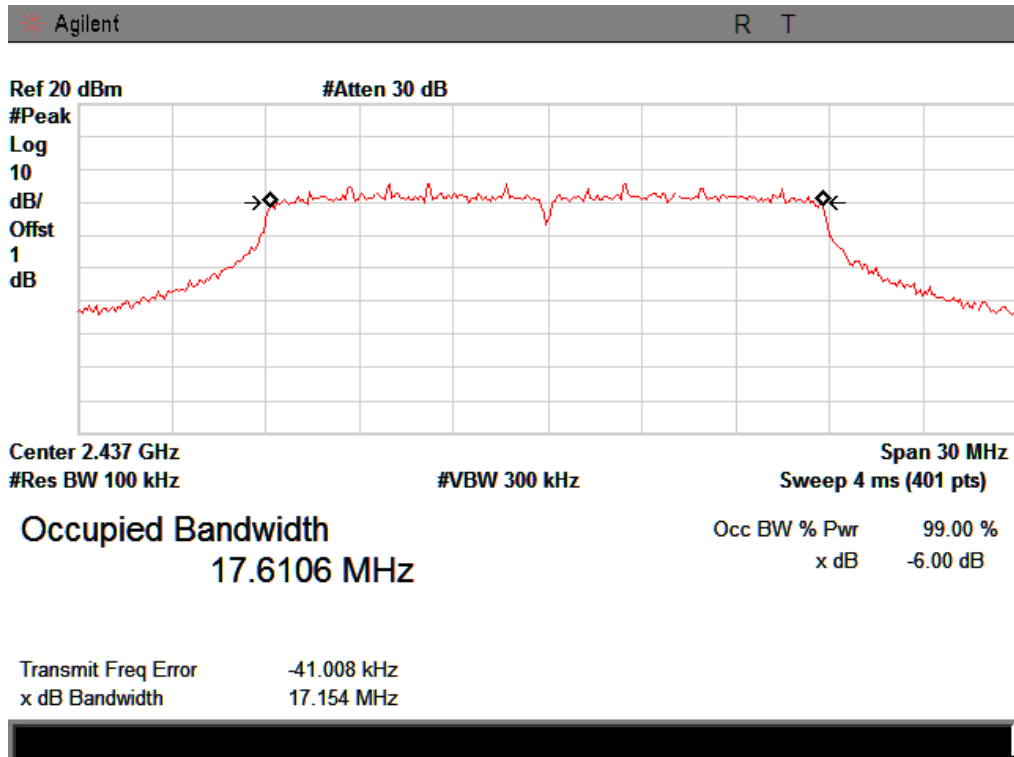


IEEE 802.11 n/HT20:

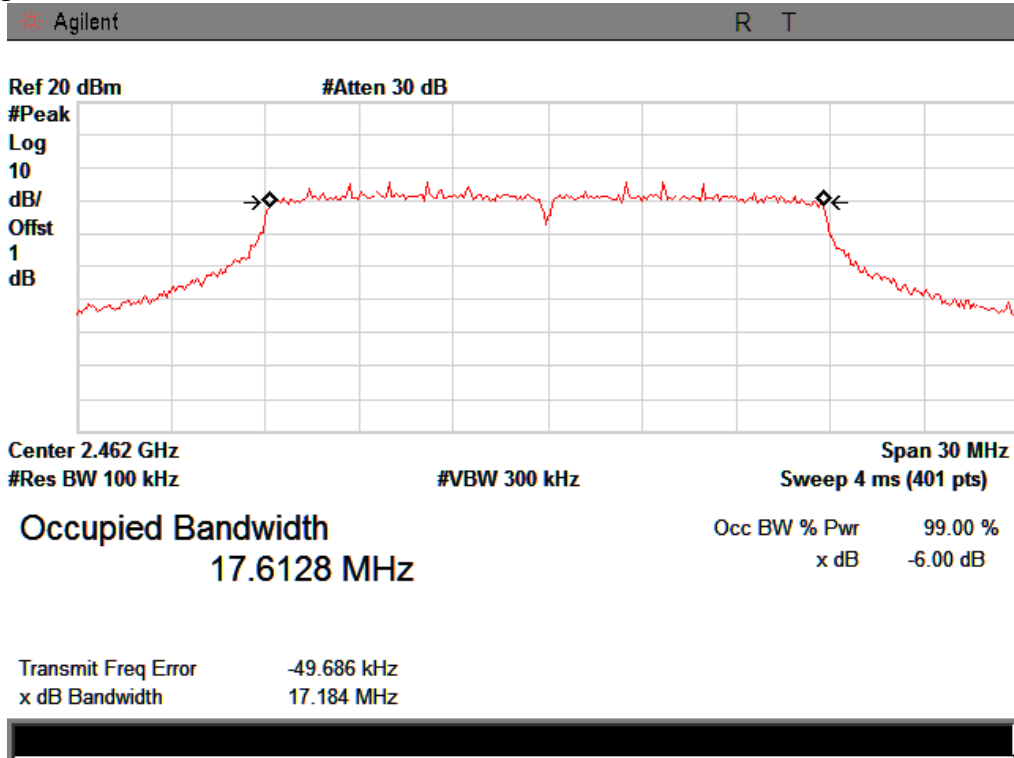
CH Low :



CH Mid :

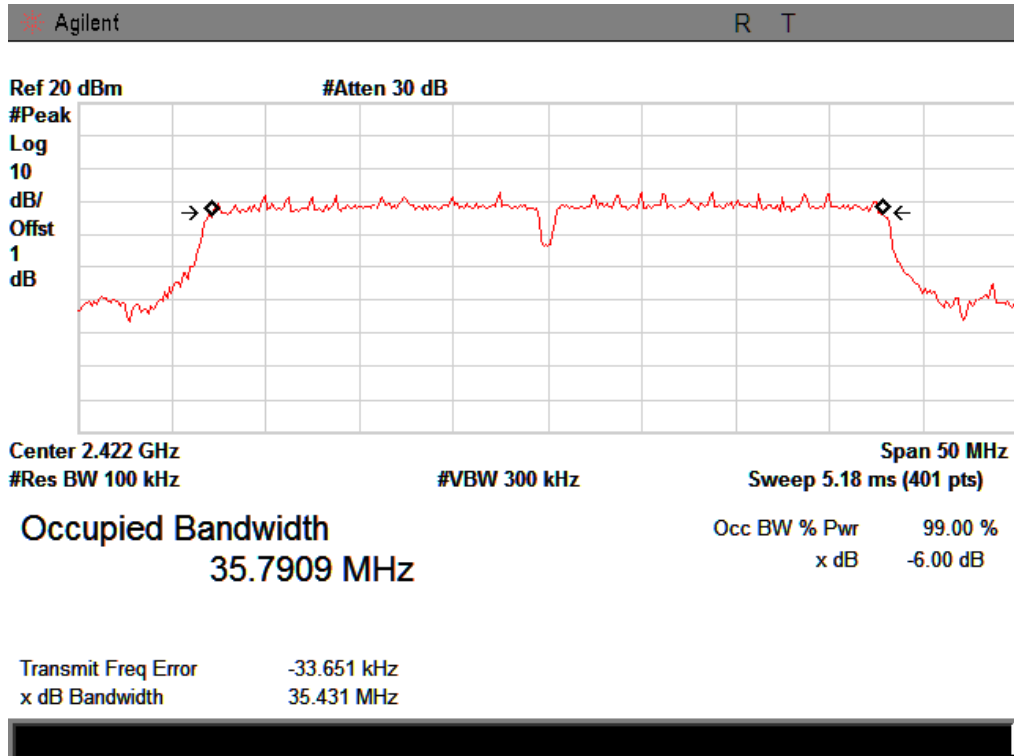


CH High :

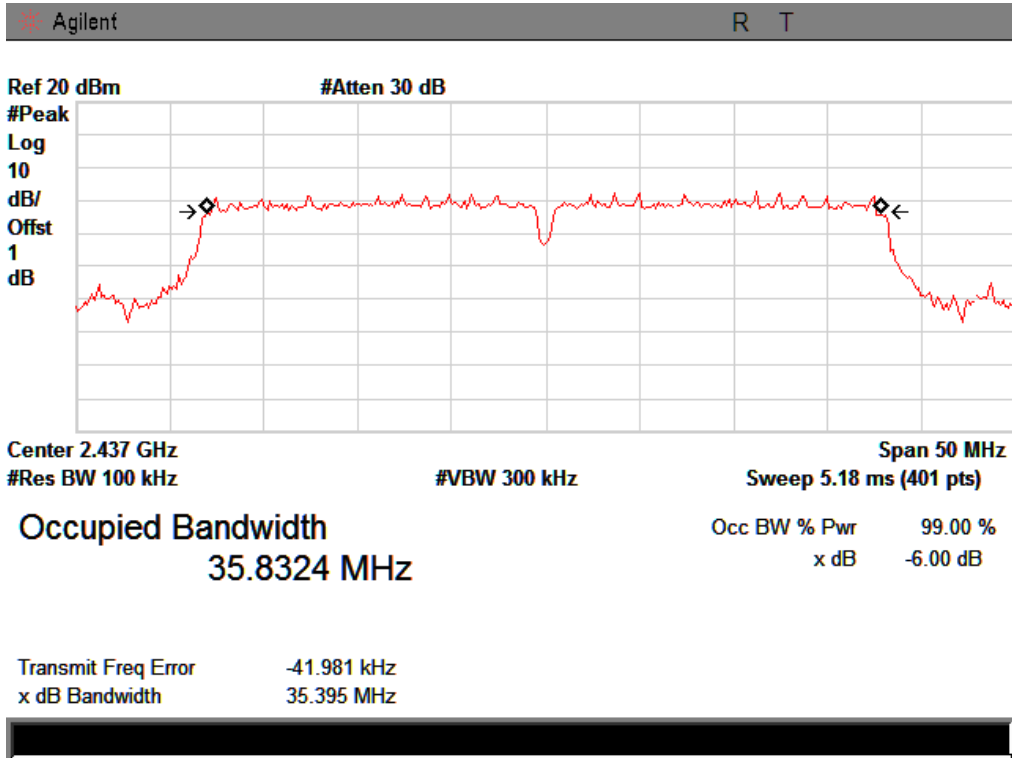


IEEE 802.11n/HT40:

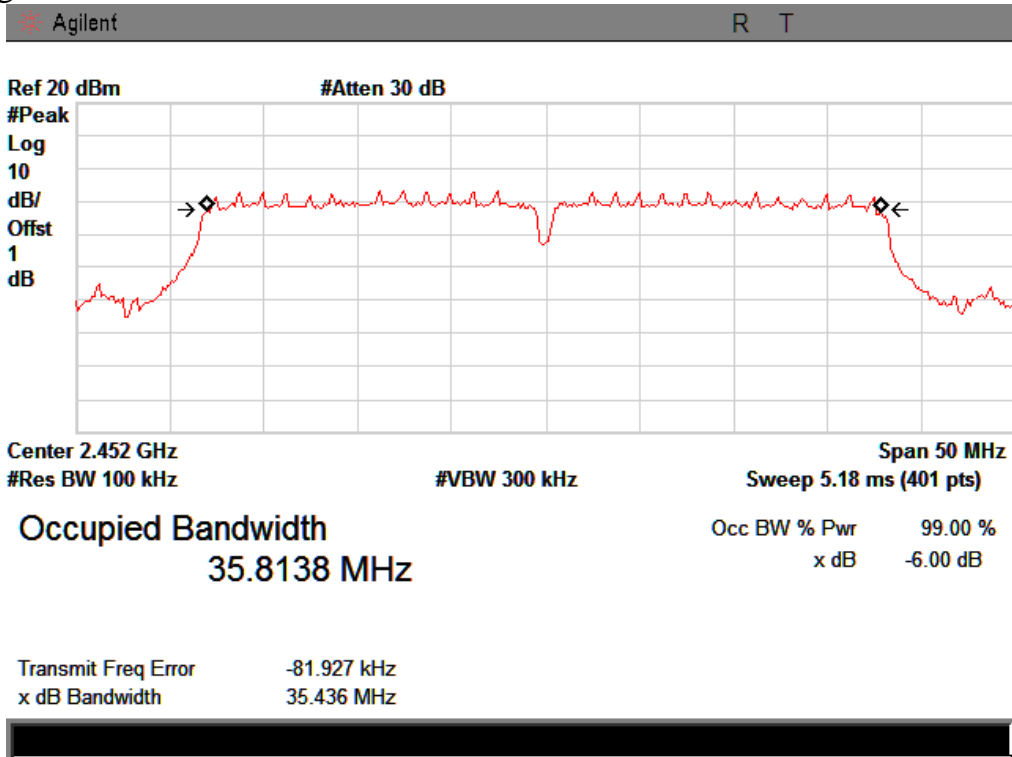
CH Low :



CH Mid :



CH High :



10 Band Edge Check

10.1 Test limit

Please refer section 15.247

All the lower and upper band-edges emissions appearing within 2310MHz to 2390MHz and 2483.5MHz to 2500MHz restricted frequency bands shall not exceed the limits shown in 15.209, all the other emissions outside operation frequency band 2400MHz to 2483.5MHz and 5725MHz to 5850MHz shall be at least 20dB below the fundamental emissions, or comply with 15.209 limits.

10.2 Test Procedure

- 12.2.1 Put the EUT on a 0.8m high table, power on the EUT. Emissions were scanned and measured rotating the EUT to 360 degrees, Find the maximum Emission
- 12.2.2 Check the spurious emissions out of band.
- 12.2.3 RBW,VBW Setting, please see the following test plot.

10.3 Test Setup

Same as 5.2.2.

10.4 Test Result

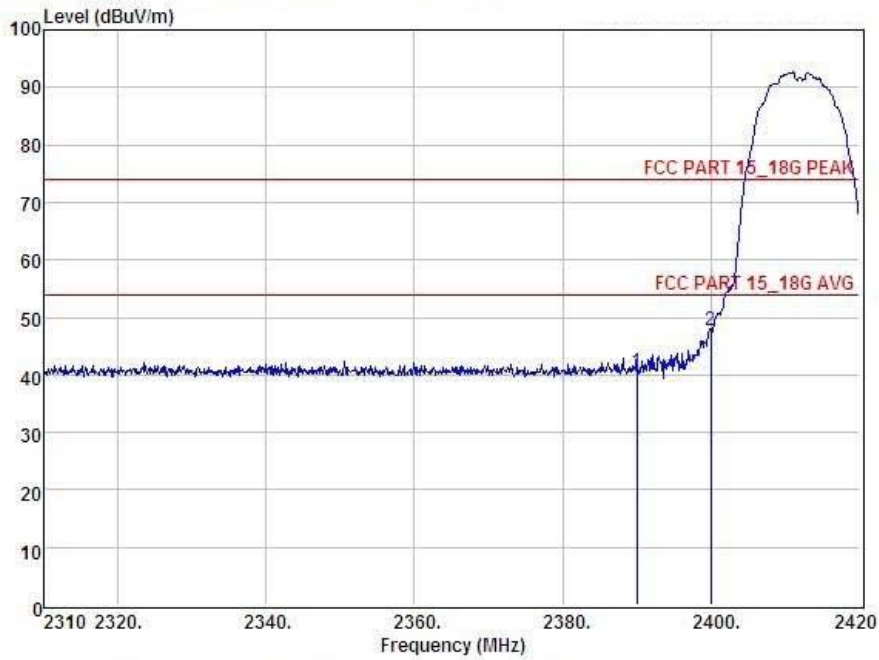
PASS.

Detailed information please see the following page.

With port 1 antenna

IEEE 802.11b :

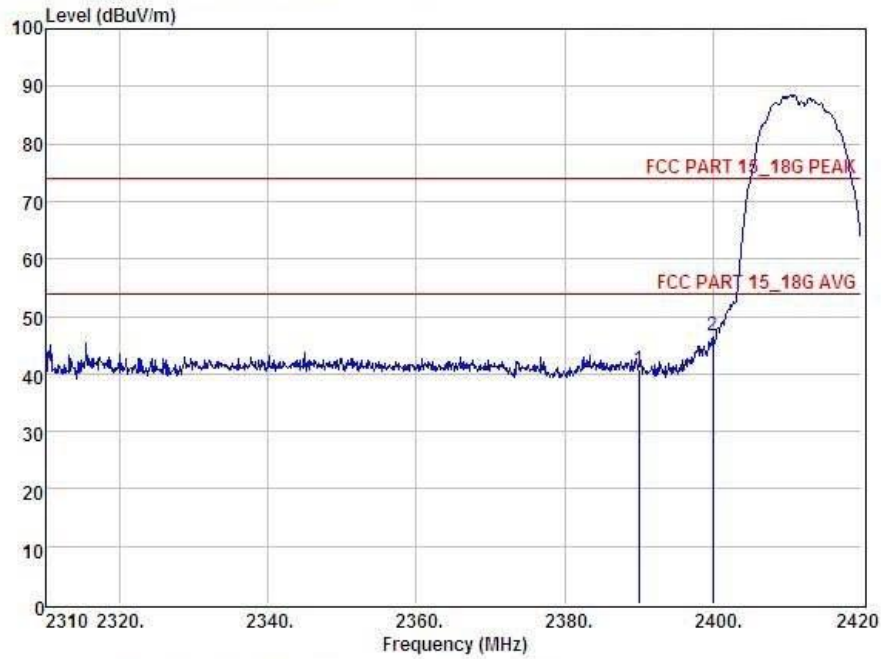
CH LOW :



Condition : FCC PART 15_18G PEAK 3m POL: HORIZONTAL

Item	Freq MHz	Read Level dBuV	Antenna Factor dB	Preamp Factor dB	Cable Loss dB	Level dBuV	Limit dBuV	Margin dBuV	Remark
1	2390.00	43.78	27.62	34.97	3.92	40.35	74.00	-33.65	Peak
2	2400.00	51.09	27.62	34.97	3.94	47.68	74.00	-26.32	Peak

Remark: Level = Read Level + Antenna Factor - Preamp Factor + Cable Loss

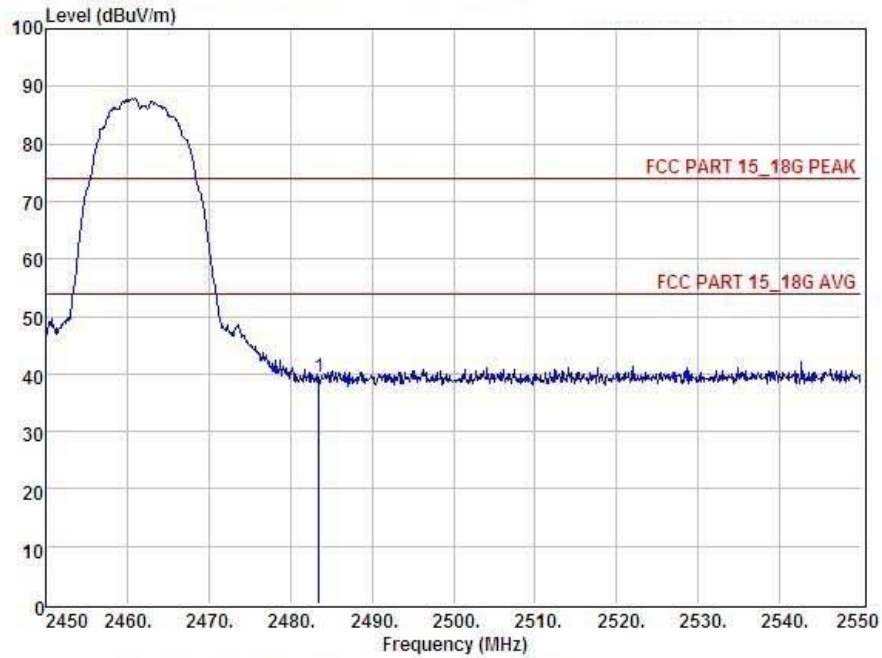


Condition : FCC PART 15_18G PEAK 3m POL: VERTICAL

Item	Freq MHz	Read Level dBuV	Antenna Factor dB	Preamp Factor dB	Cable Loss dB	Level dBuV	Limit dBuV	Margin dBuV	Remark
1	2390.00	44.06	27.62	34.97	3.92	40.63	74.00	-33.37	Peak
2	2400.00	49.95	27.62	34.97	3.94	46.54	74.00	-27.46	Peak

Remark: Level = Read Level + Antenna Factor - Preamp Factor + Cable Loss

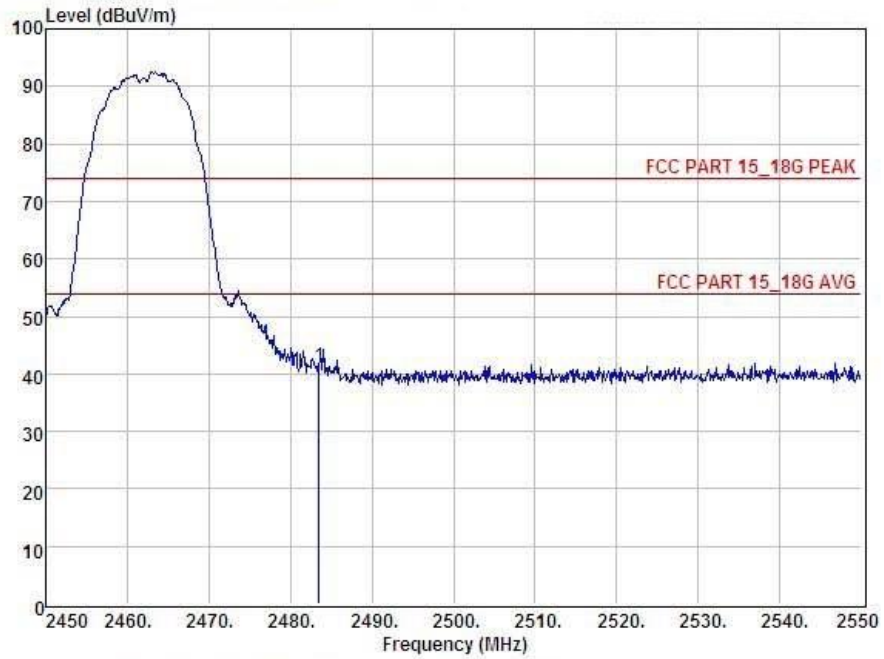
CH High :



Condition : FCC PART 15_18G PEAK 3m POL: HORIZONTAL

Item	Freq MHz	Read Level dBuV	Antenna Factor dB	Preamp Factor dB	Cable Loss dB	Level dBuV	Limit dBuV	Margin dBuV	Remark
1	2483.50	42.85	27.59	34.97	4.00	39.47	74.00	-34.53	Peak

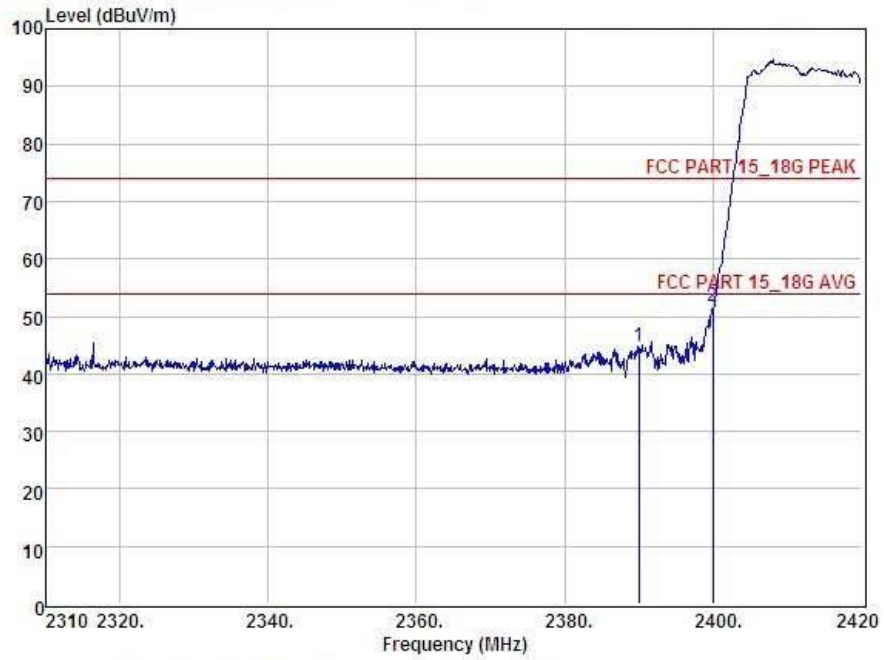
Remark: Level = Read Level + Antenna Factor - Preamp Factor + Cable Loss



Condition : FCC PART 15_18G PEAK Sm POL: VERTICAL									
Item	Freq	Read	Antenna	Preamp	Cable	Level	Limit	Margin	Remark
	MHz	Level	Factor	Factor	Loss	dBuV	dBuV	dBuV	
		dBuV	dB	dB	dB				
1	2483.50	44.76	27.59	34.97	4.00	41.38	74.00	-32.62	Peak

Remark: Level = Read Level + Antenna Factor - Preamp Factor + Cable Loss

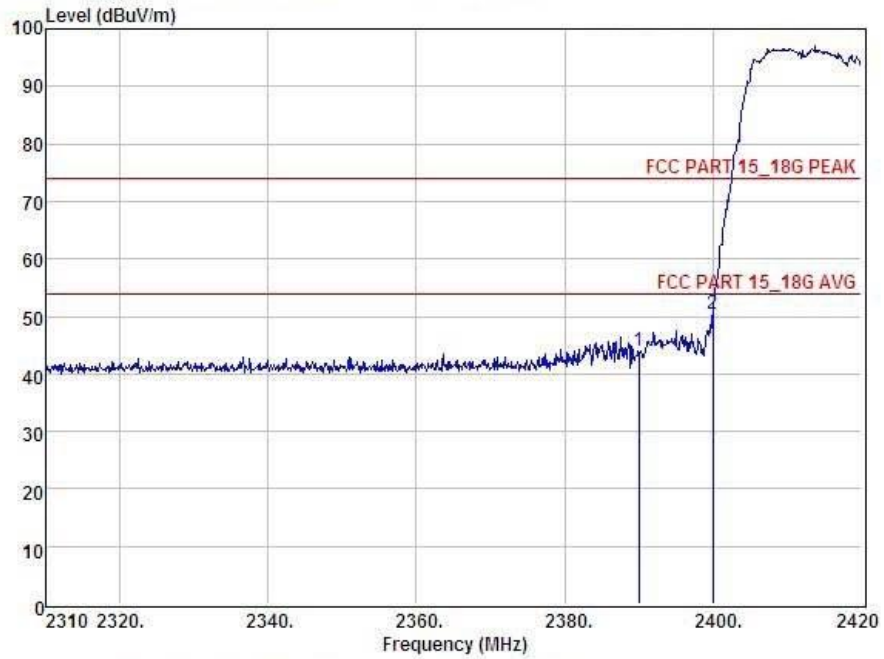
IEEE 802.11g:
CH LOW :



Condition : FCC PART 15_18G PEAK 3m POL: VERTICAL

Item	Freq MHz	Read Level dBuV	Antenna Factor dB	Preamp Factor dB	Cable Loss dB	Level dBuV	Limit dBuV	Margin dBuV	Remark
1	2390.00	48.22	27.62	34.97	3.92	44.79	74.00	-29.21	Peak
2	2400.00	55.10	27.62	34.97	3.94	51.69	74.00	-22.31	Peak

Remark: Level = Read Level + Antenna Factor - Preamp Factor + Cable Loss

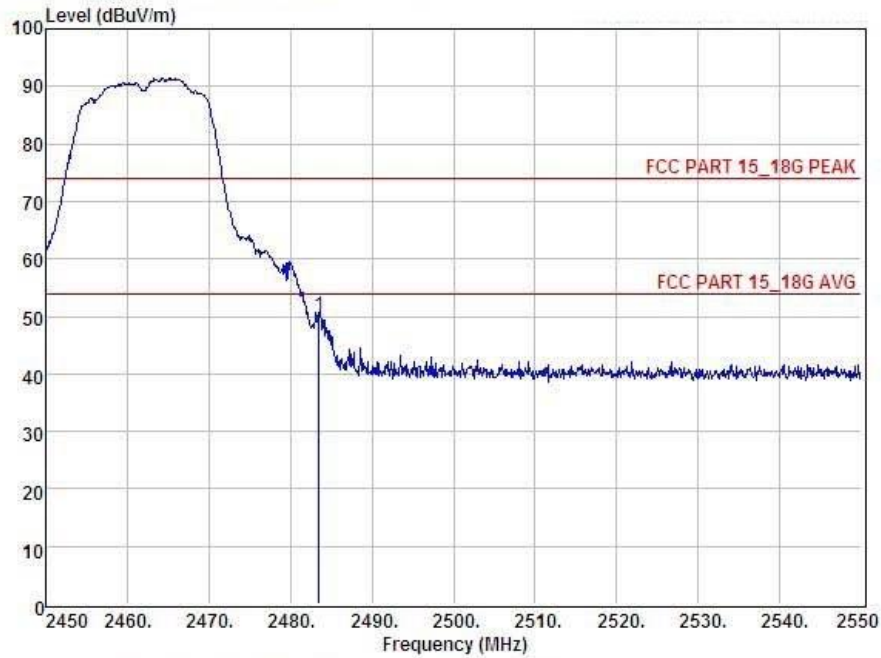


Condition : FCC PART 15_18G PEAK 3m POL: HORIZONTAL

Item	Freq MHz	Read Level dBuV	Antenna Factor dB	Preamp Factor dB	Cable Loss dB	Level dBuV	Limit dBuV	Margin dBuV	Remark
1	2390.00	47.35	27.62	34.97	3.92	43.92	74.00	-30.08	Peak
2	2400.00	53.83	27.62	34.97	3.94	50.42	74.00	-23.58	Peak

Remark: Level = Read Level + Antenna Factor - Preamp Factor + Cable Loss

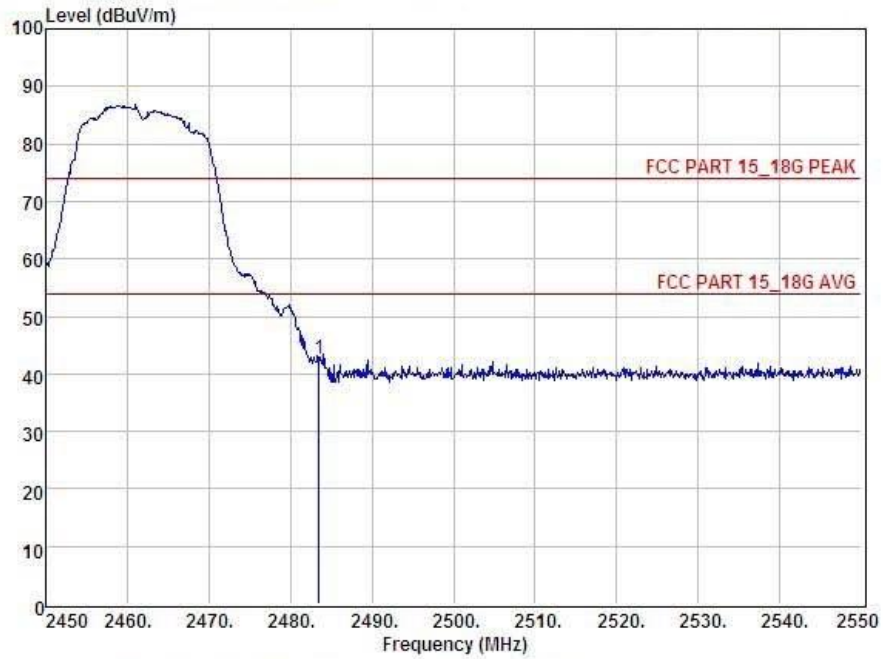
CH High :



Condition : FCC PART 15_18G PEAK 3m POL: VERTICAL

Item	Freq MHz	Read Level dBuV	Antenna Factor dB	Preamp Factor dB	Cable Loss dB	Level dBuV	Limit dBuV	Margin dBuV	Remark
1	2483.50	53.52	27.59	34.97	4.00	50.14	74.00	-23.86	Peak

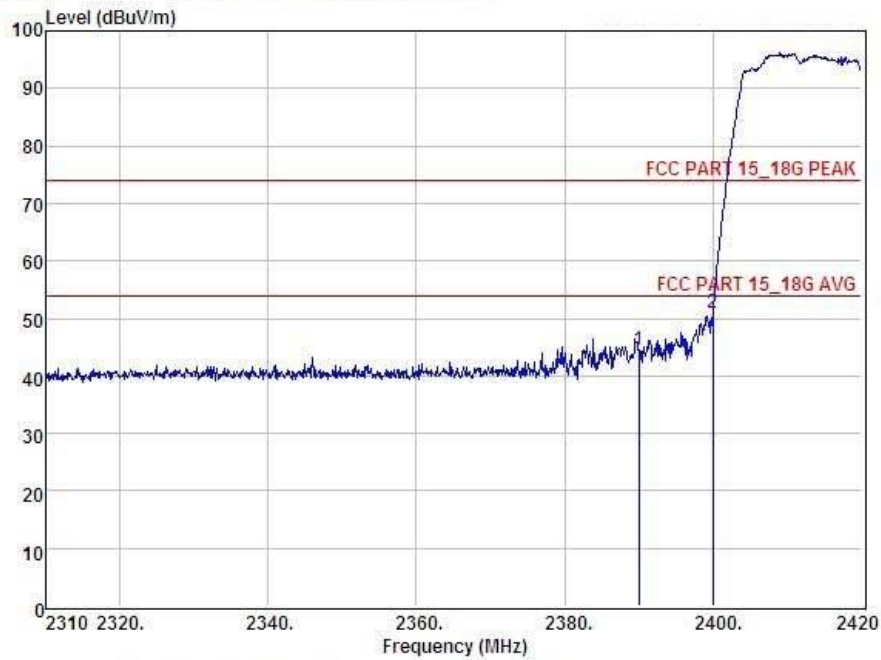
Remark: Level = Read Level + Antenna Factor - Preamp Factor + Cable Loss



Condition : FCC PART 15_18G PEAK 3m POL: HORIZONTAL									
Item	Freq	Read	Antenna	Preamp	Cable	Level	Limit	Margin	Remark
	MHz	Level	Factor	Factor	Loss	dBuV	dBuV	dBuV	
		dBuV	dB	dB	dB				
1	2483.50	46.09	27.59	34.97	4.00	42.71	74.00	-31.29	Peak

Remark: Level = Read Level + Antenna Factor - Preamp Factor + Cable Loss

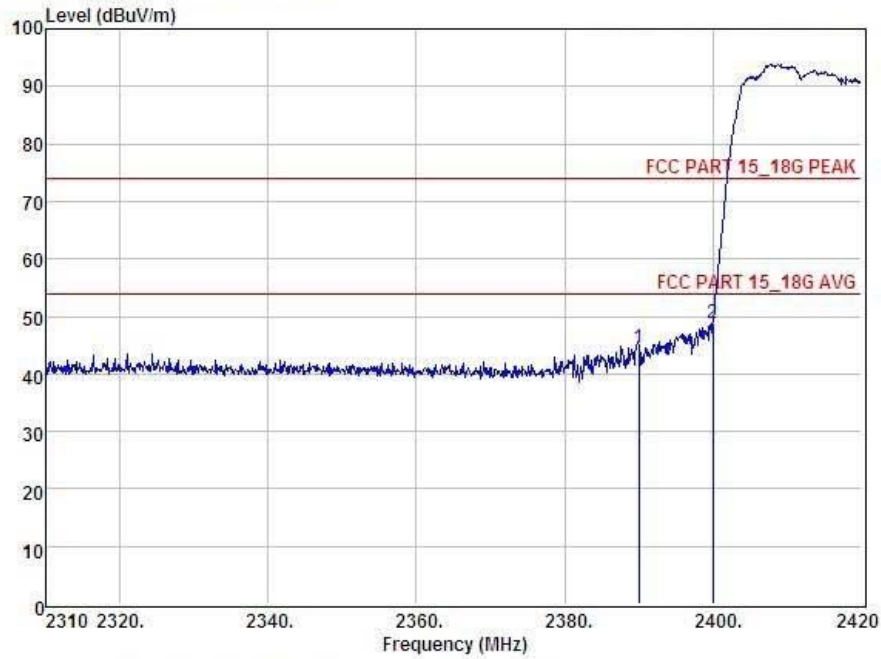
IEEE 802.11n/HT20:
CH LOW :



Condition : FCC PART 15_18G PEAK 3m POL: HORIZONTAL

Item	Freq MHz	Read Level dBuV	Antenna Factor dB	Preamp Factor dB	Cable Loss dB	Level dBuV	Limit dBuV	Margin dBuV	Remark
1	2390.00	48.02	27.62	34.97	3.92	44.59	74.00	-29.41	Peak
2	2400.00	54.35	27.62	34.97	3.94	50.94	74.00	-23.06	Peak

Remark: Level = Read Level + Antenna Factor - Preamp Factor + Cable Loss

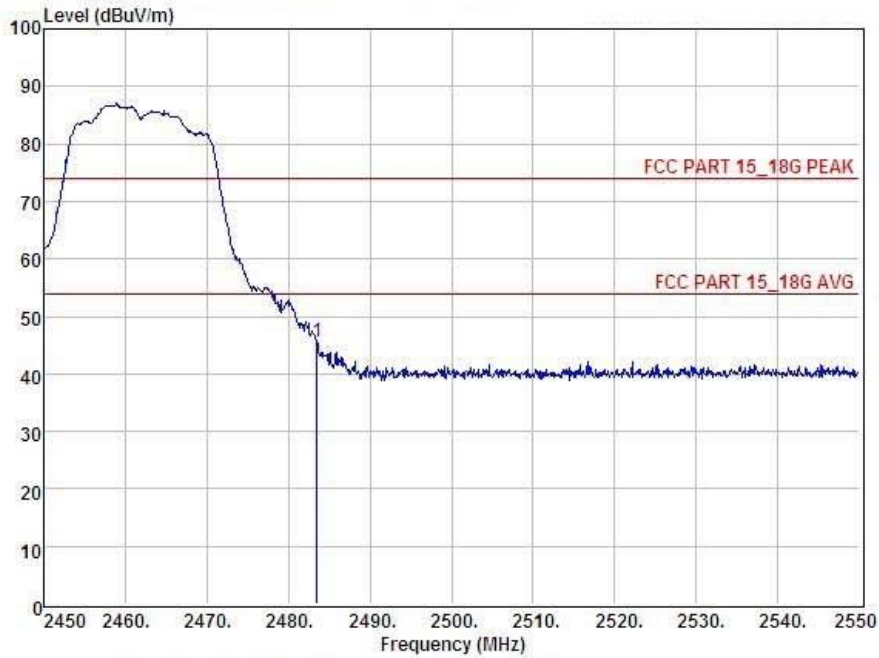


Condition : FCC PART 15_18G PEAK Sm POL: VERTICAL

Item	Freq MHz	Read Level dBuV	Antenna Factor dB	Preamp Factor dB	Cable Loss dB	Level dBuV	Limit dBuV	Margin dBuV	Remark
1	2390.00	48.00	27.62	34.97	3.92	44.57	74.00	-29.43	Peak
2	2400.00	52.22	27.62	34.97	3.94	48.81	74.00	-25.19	Peak

Remark: Level = Read Level + Antenna Factor - Preamp Factor + Cable Loss

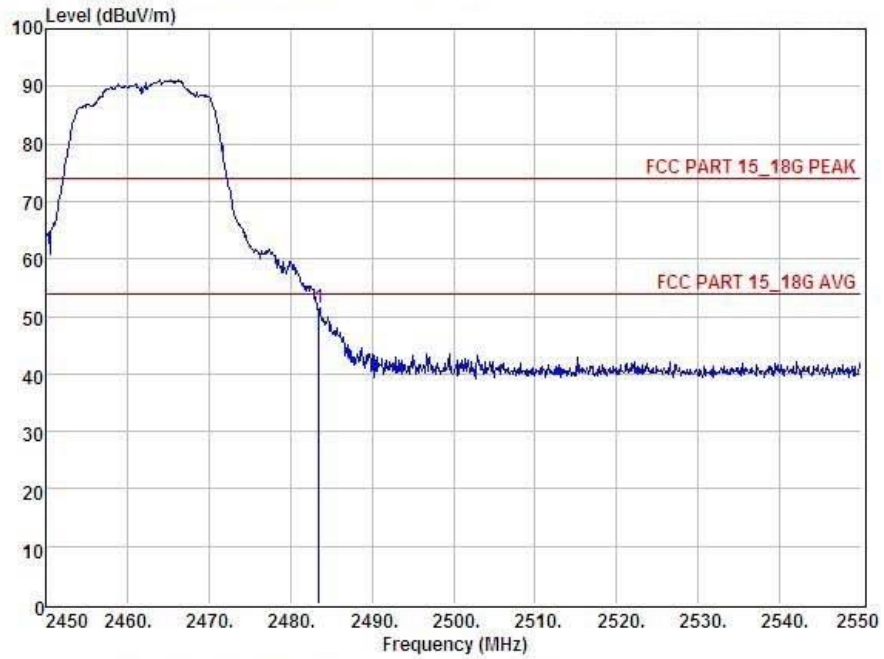
CH High :



Condition : FCC PART 15_18G PEAK 3m POL: HORIZONTAL

Item	Freq MHz	Read Level dBuV	Antenna Factor dB	Preamp Factor dB	Cable Loss dB	Level dBuV	Limit dBuV	Margin dBuV	Remark
1	2483.50	48.93	27.59	34.97	4.00	45.55	74.00	-28.45	Peak

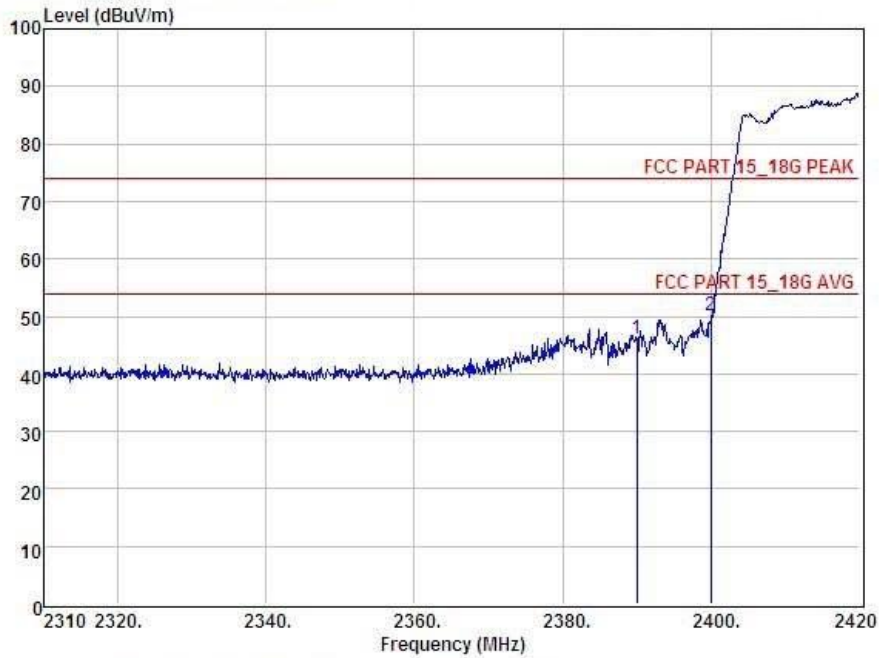
Remark: Level = Read Level + Antenna Factor - Preamp Factor + Cable Loss



Condition : FCC PART 15_18G PEAK 3m POL: VERTICAL									
Item	Freq	Read	Antenna	Preamp	Cable	Level	Limit	Margin	Remark
	MHz	Level	Factor	Factor	Loss	dBuV	dBuV	dBuV	
		dBuV	dB	dB	dB				
1	2483.50	54.96	27.59	34.97	4.00	51.58	74.00	-22.42	Peak

Remark: Level = Read Level + Antenna Factor - Preamp Factor + Cable Loss

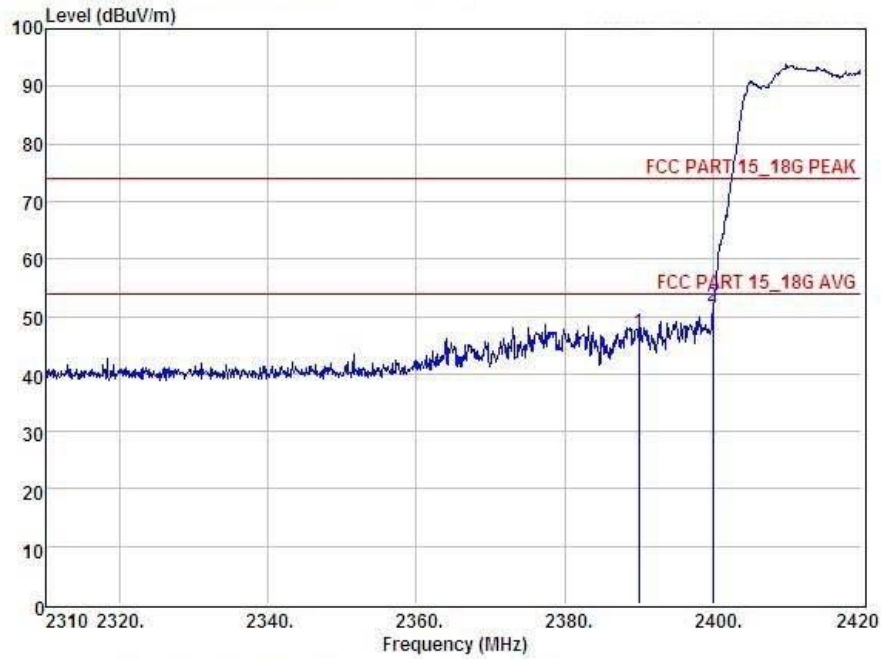
IEEE 802.11 n/HT40:
CH LOW :



Condition : FCC PART 15_18G PEAK 3m POL: VERTICAL

Item	Freq MHz	Read Level dBuV	Antenna Factor dB	Preamp Factor dB	Cable Loss dB	Level dBuV	Limit dBuV	Margin dBuV	Remark
1	2390.00	49.45	27.62	34.97	3.92	46.02	74.00	-27.98	Peak
2	2400.00	53.47	27.62	34.97	3.94	50.06	74.00	-23.94	Peak

Remark: Level = Read Level + Antenna Factor - Preamp Factor + Cable Loss

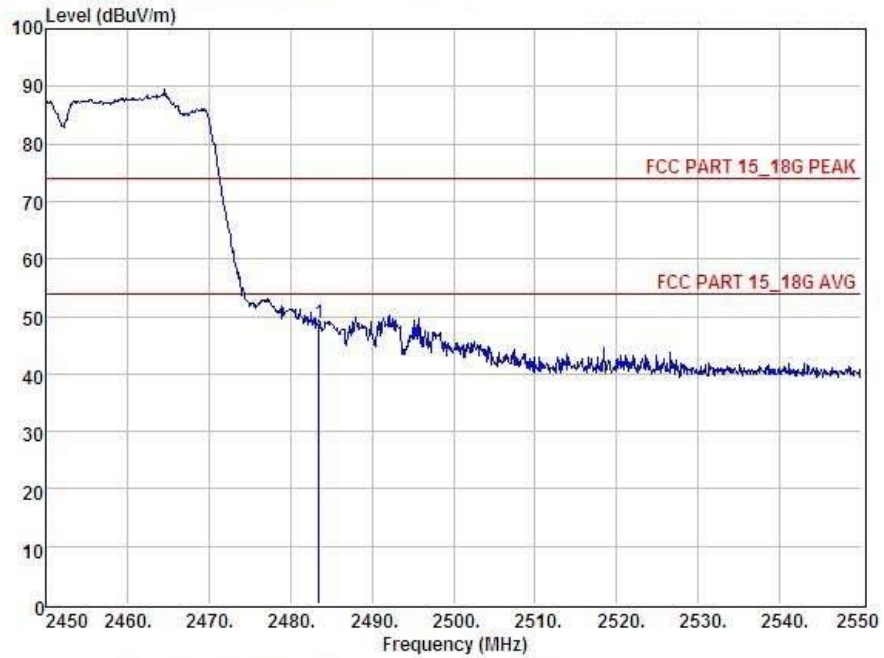


Condition : FCC PART 15_18G PEAK 3m POL: HORIZONTAL

Item	Freq MHz	Read Level dBuV	Antenna Factor dB	Preamp Factor dB	Cable Loss dB	Level dBuV	Limit dBuV	Margin dBuV	Remark
1	2390.00	50.69	27.62	34.97	3.92	47.26	74.00	-26.74	Peak
2	2400.00	55.08	27.62	34.97	3.94	51.67	74.00	-22.33	Peak

Remark: Level = Read Level + Antenna Factor - Preamp Factor + Cable Loss

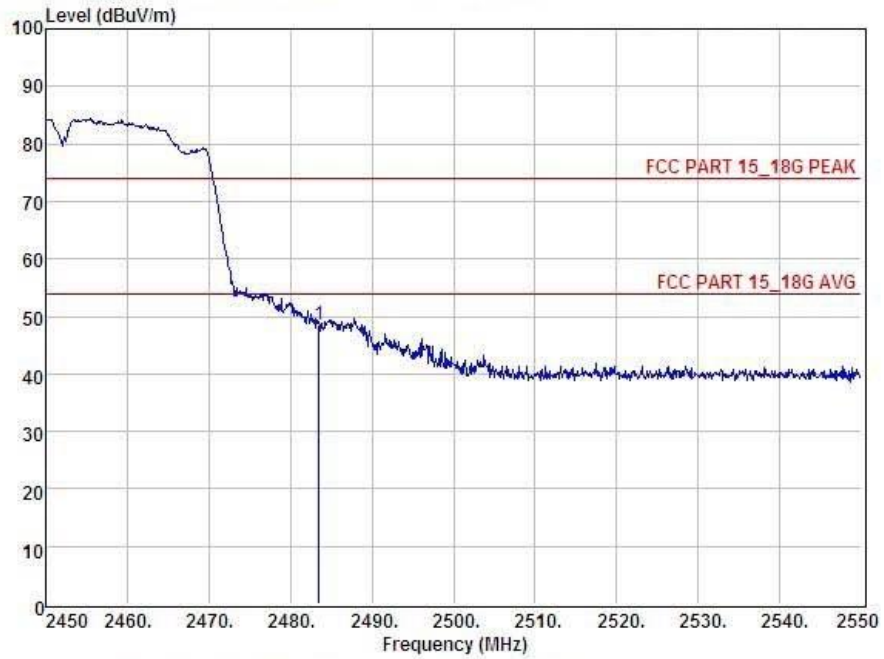
CH High :



Condition : FCC PART 15_18G PEAK 3m POL: VERTICAL

Item	Freq MHz	Read Level dBuV	Antenna Factor dB	Preamp Factor dB	Cable Loss dB	Level dBuV	Limit dBuV	Margin dBuV	Remark
1	2483.50	52.25	27.59	34.97	4.00	48.87	74.00	-25.13	Peak

Remark: Level = Read Level + Antenna Factor - Preamp Factor + Cable Loss



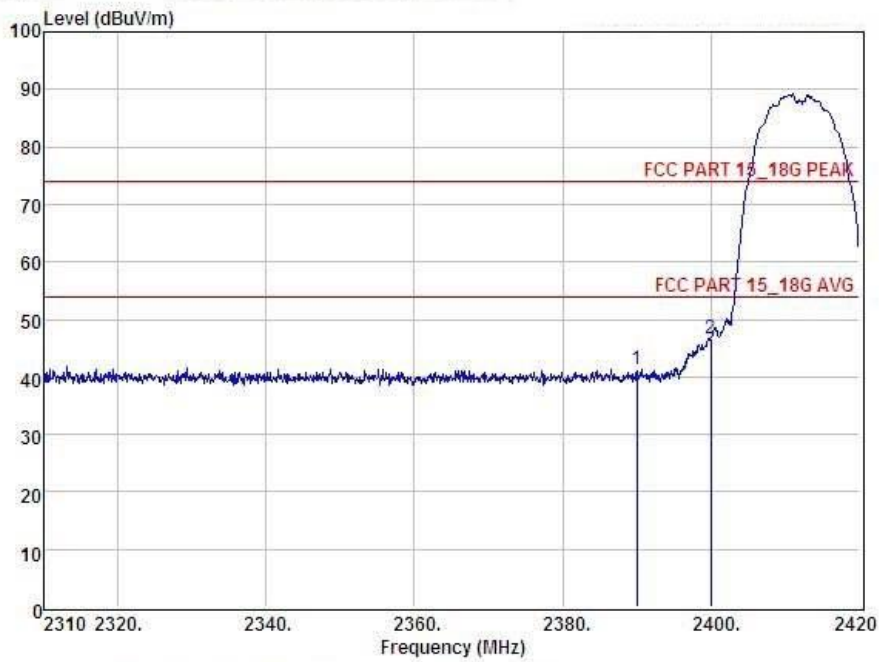
Condition : FCC PART 15_18G PEAK Sm POL: HORIZONTAL									
Item	Freq	Read	Antenna	Preamp	Cable	Level	Limit	Margin	Remark
	MHz	Level	Factor	Factor	Loss	dBuV	dBuV	dBuV	
		dBuV	dB	dB	dB				
1	2483.50	51.95	27.59	34.97	4.00	48.57	74.00	-25.43	Peak

Remark: Level = Read Level + Antenna Factor - Preamp Factor + Cable Loss

With port 2 antenna

IEEE 802.11b:

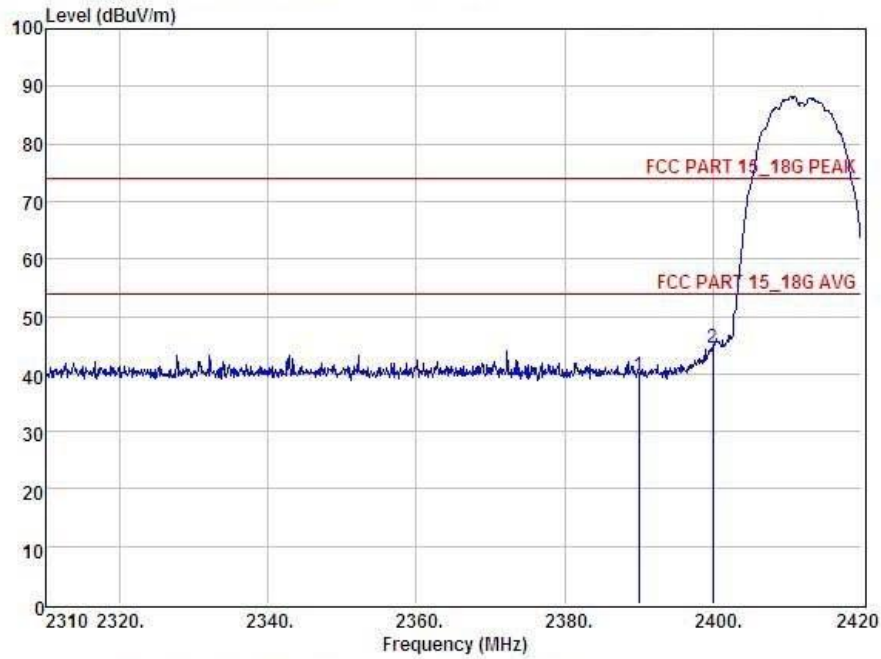
CH LOW :



Condition : FCC PART 15_18G PEAK 3m POL: VERTICAL

Item	Freq MHz	Read Level dBuV	Antenna Factor dB	Preamp Factor dB	Cable Loss dB	Level dBuV	Limit dBuV	Margin dBuV	Remark
1	2390.00	44.66	27.62	34.97	3.92	41.23	74.00	-32.77	Peak
2	2400.00	50.09	27.62	34.97	3.94	46.68	74.00	-27.32	Peak

Remark: Level = Read Level + Antenna Factor - Preamp Factor + Cable Loss

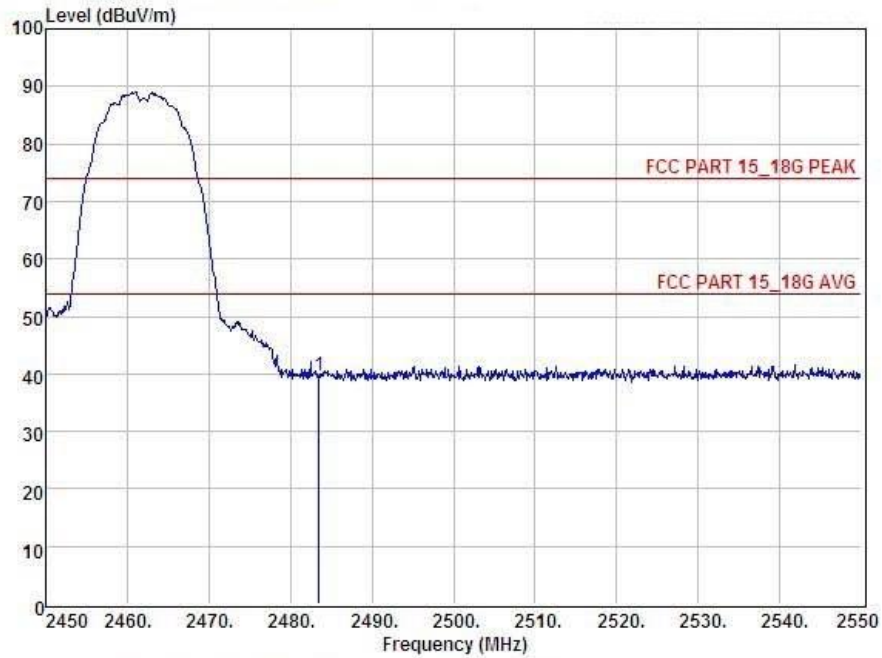


Condition : FCC PART 15_18G PEAK 3m POL: HORIZONTAL

Item	Freq MHz	Read Level dBuV	Antenna Factor dB	Preamp Factor dB	Cable Loss dB	Level dBuV	Limit dBuV	Margin dBuV	Remark
1	2390.00	43.08	27.62	34.97	3.92	39.65	74.00	-34.35	Peak
2	2400.00	47.83	27.62	34.97	3.94	44.42	74.00	-29.58	Peak

Remark: Level = Read Level + Antenna Factor - Preamp Factor + Cable Loss

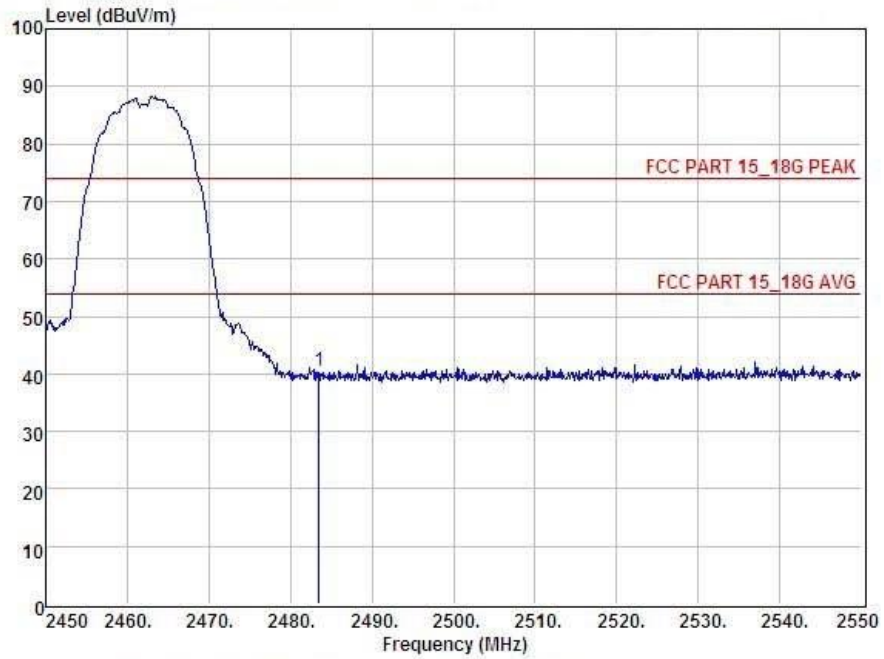
CH High :



Condition : FCC PART 15_18G PEAK 3m POL: VERTICAL

Item	Freq MHz	Read Level dBuV	Antenna Factor dB	Preamp Factor dB	Cable Loss dB	Level dBuV	Limit dBuV	Margin dBuV	Remark
1	2483.50	43.10	27.59	34.97	4.00	39.72	74.00	-34.28	Peak

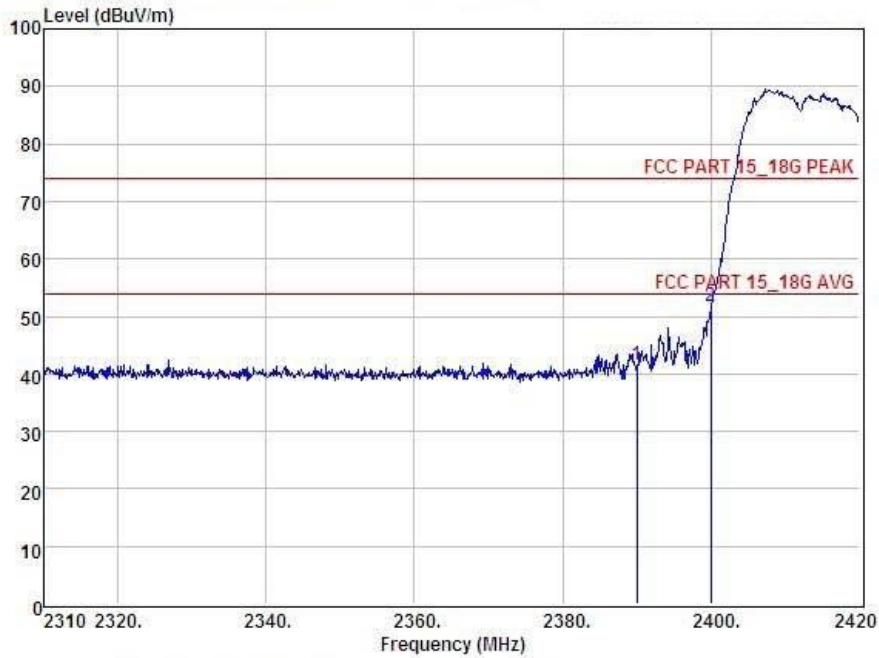
Remark: Level = Read Level + Antenna Factor - Preamp Factor + Cable Loss



Condition : FCC PART 15_18G PEAK 3m POL: HORIZONTAL									
Item	Freq	Read	Antenna	Preamp	Cable	Level	Limit	Margin	Remark
	MHz	Level	Factor	Factor	Loss	dBuV	dBuV	dBuV	
		dBuV	dB	dB	dB				
1	2483.50	43.74	27.59	34.97	4.00	40.36	74.00	-33.64	Peak

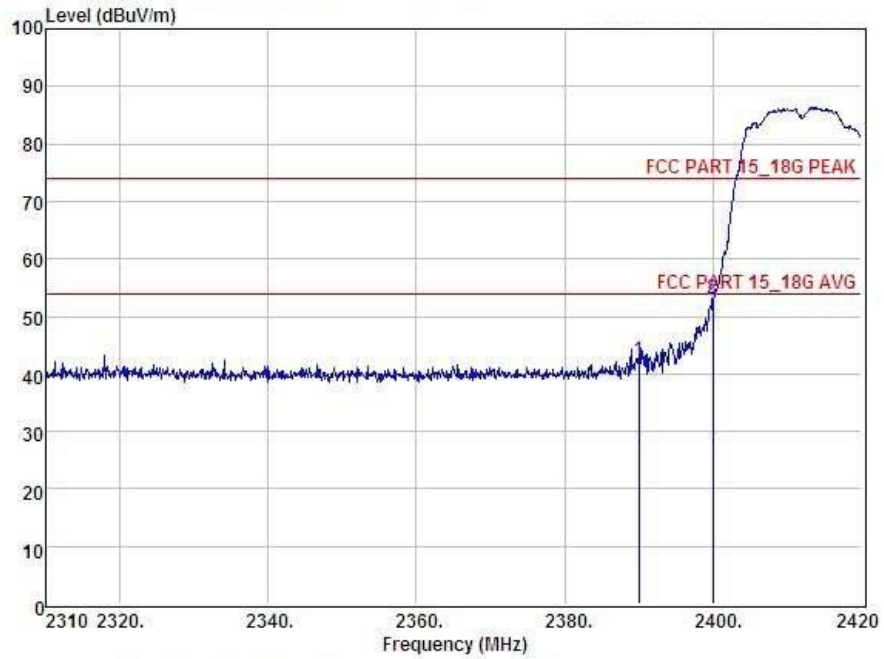
Remark: Level = Read Level + Antenna Factor - Preamp Factor + Cable Loss

IEEE 802.11g:
CH LOW :



Condition	: FCC PART 15 18G PEAK 3m							POL: VERTICAL		
Item	Freq	Read	Antenna	Preamp	Cable	Level	Limit	Margin	Remark	
	MHz	dBuV	dB	dB	dB	dBuV	dBuV	dBuV		
1	2390.00	45.01	27.62	34.97	3.92	41.58	74.00	-32.42	Peak	
2	2400.00	55.14	27.62	34.97	3.94	51.73	74.00	-22.27	Peak	

Remark: Level = Read Level + Antenna Factor - Preamp Factor + Cable Loss

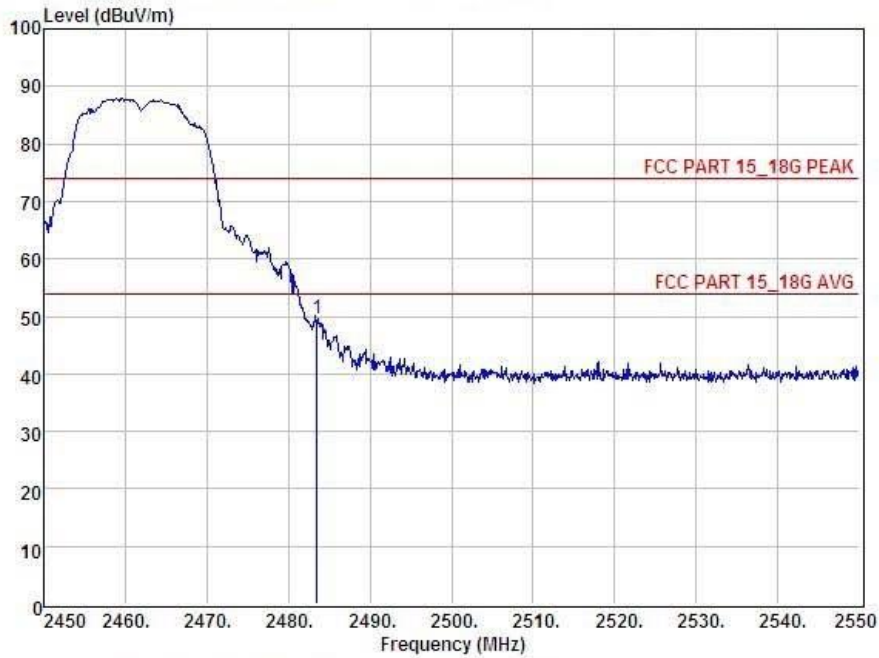


Condition : FCC PART 15_18G PEAK 3m POL: HORIZONTAL

Item	Freq MHz	Read Level dBuV	Antenna Factor dB	Preamp Factor dB	Cable Loss dB	Level dBuV	Limit dBuV	Margin dBuV	Remark
1	2390.00	45.80	27.62	34.97	3.92	42.37	74.00	-31.63	Peak
2	2400.00	56.55	27.62	34.97	3.94	53.14	74.00	-20.86	Peak

Remark: Level = Read Level + Antenna Factor - Preamp Factor + Cable Loss

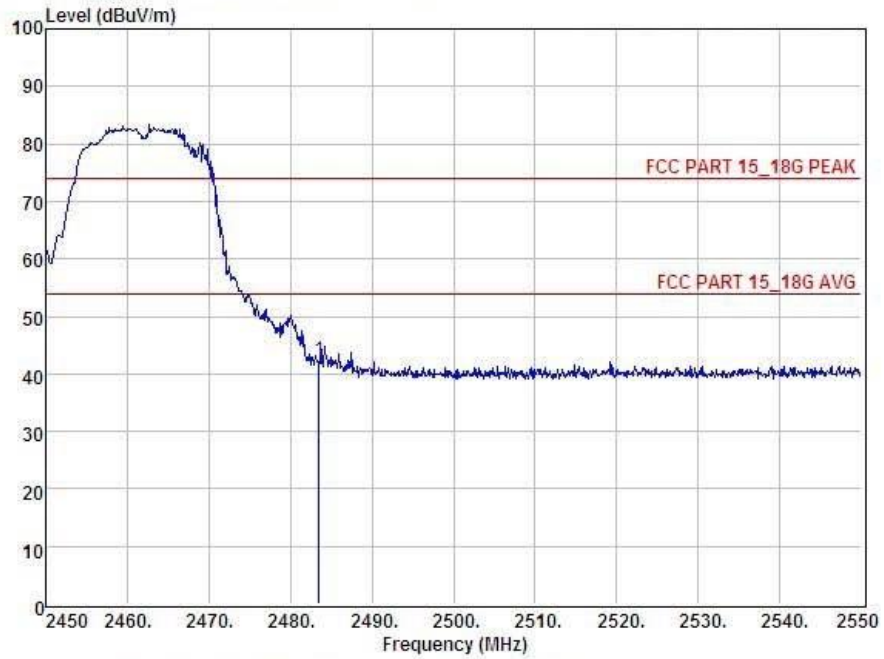
CH High :



Condition : FCC PART 15_18G PEAK 3m POL: VERTICAL

Item	Freq MHz	Read Level dBuV	Antenna Factor dB	Preamp Factor dB	Cable Loss dB	Level dBuV	Limit dBuV	Margin dBuV	Remark
1	2483.50	53.03	27.59	34.97	4.00	49.65	74.00	-24.35	Peak

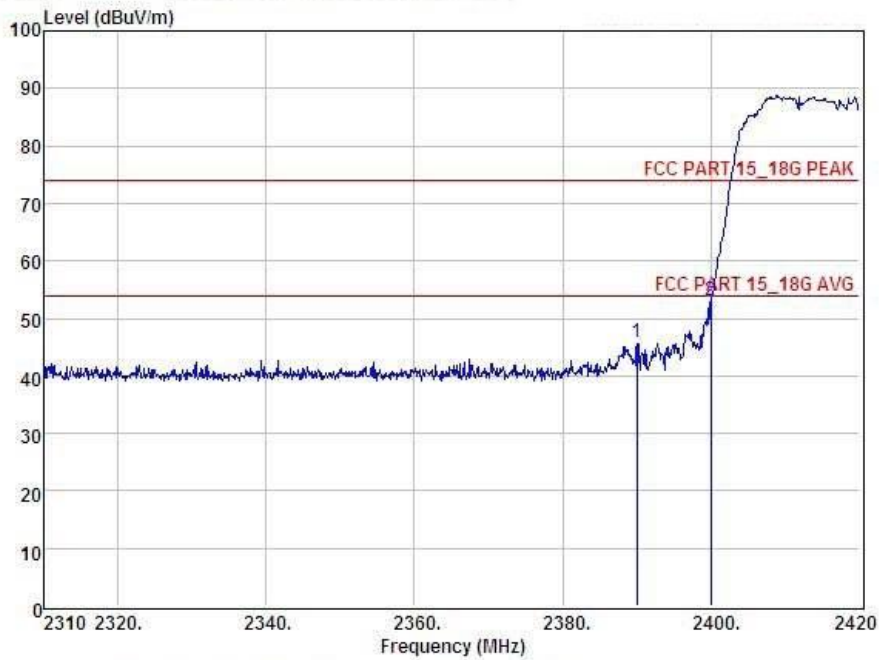
Remark: Level = Read Level + Antenna Factor - Preamp Factor + Cable Loss



Condition : FCC PART 15_18G PEAK Sm POL: HORIZONTAL									
Item	Freq	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Level	Limit	Margin	Remark
	MHz	dBuV	dB	dB	dB	dBuV	dBuV	dBuV	
1	2483.50	45.71	27.59	34.97	4.00	42.33	74.00	-31.67	Peak

Remark: Level = Read Level + Antenna Factor - Preamp Factor + Cable Loss

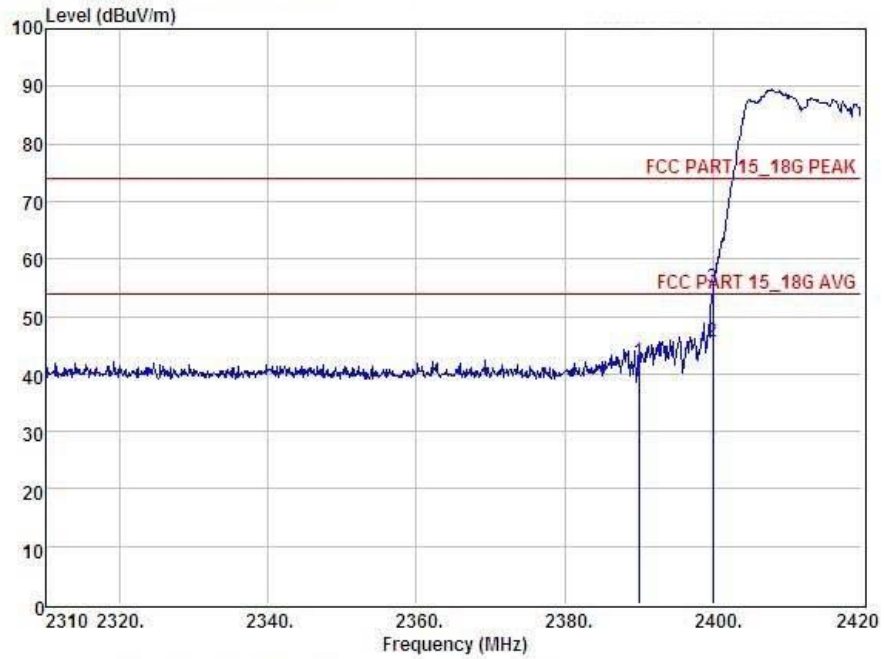
IEEE 802.11 n/HT20:
CH LOW :



Condition : FCC PART 15_18G PEAK 3m POL: HORIZONTAL

Item	Freq MHz	Read Level dBuV	Antenna Factor dB	Preamp Factor dB	Cable Loss dB	Level dBuV	Limit dBuV	Margin dBuV	Remark
1	2390.00	49.16	27.62	34.97	3.92	45.73	74.00	-28.27	Peak
2	2400.00	56.52	27.62	34.97	3.94	53.11	74.00	-20.89	Peak

Remark: Level = Read Level + Antenna Factor - Preamp Factor + Cable Loss

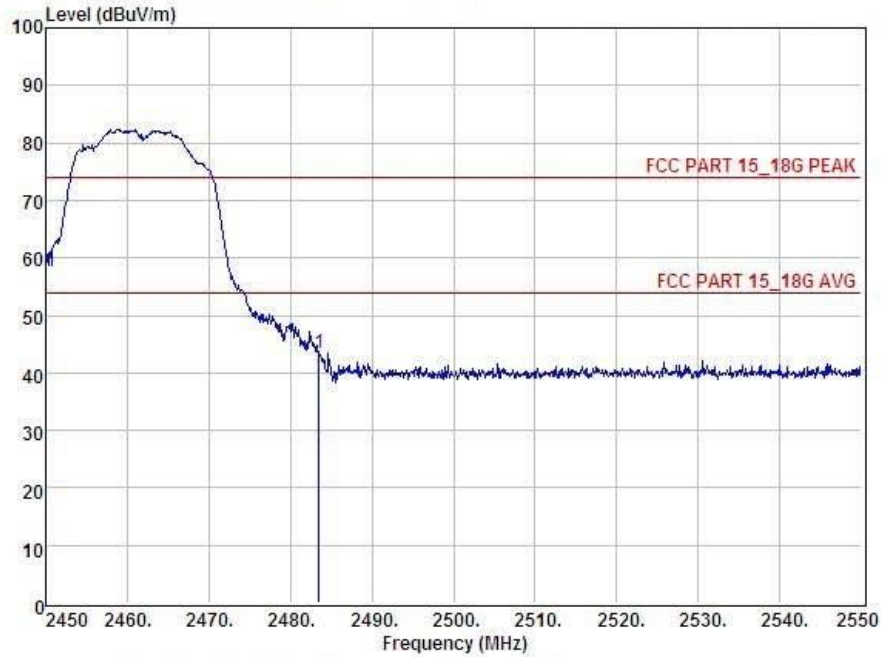


Condition : FCC PART 15_18G PEAK 3m POL: VERTICAL

Item	Freq MHz	Read Level dBuV	Antenna Factor dB	Preamp Factor dB	Cable Loss dB	Level dBuV	Limit dBuV	Margin dBuV	Remark
1	2390.00	45.57	27.62	34.97	3.92	42.14	74.00	-31.86	Peak
2	2400.00	48.88	27.62	34.97	3.94	45.47	54.00	-8.53	Average
3	2400.00	86.34	27.62	34.97	3.94	54.93	74.00	-19.07	Peak

Remark: Level = Read Level + Antenna Factor - Preamp Factor + Cable Loss

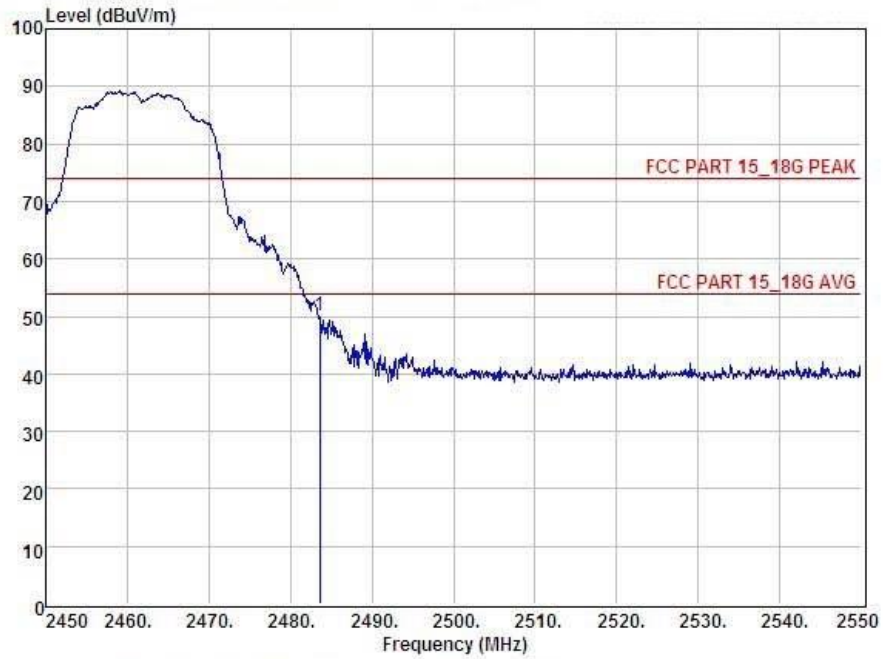
CH High :



Condition : FCC PART 15_18G PEAK 3m POL: HORIZONTAL

Item	Freq MHz	Read Level dBuV	Antenna Factor dB	Preamp Factor dB	Cable Loss dB	Level dBuV	Limit dBuV	Margin dBuV	Remark
1	2483.50	46.86	27.59	34.97	4.00	43.48	74.00	-30.52	Peak

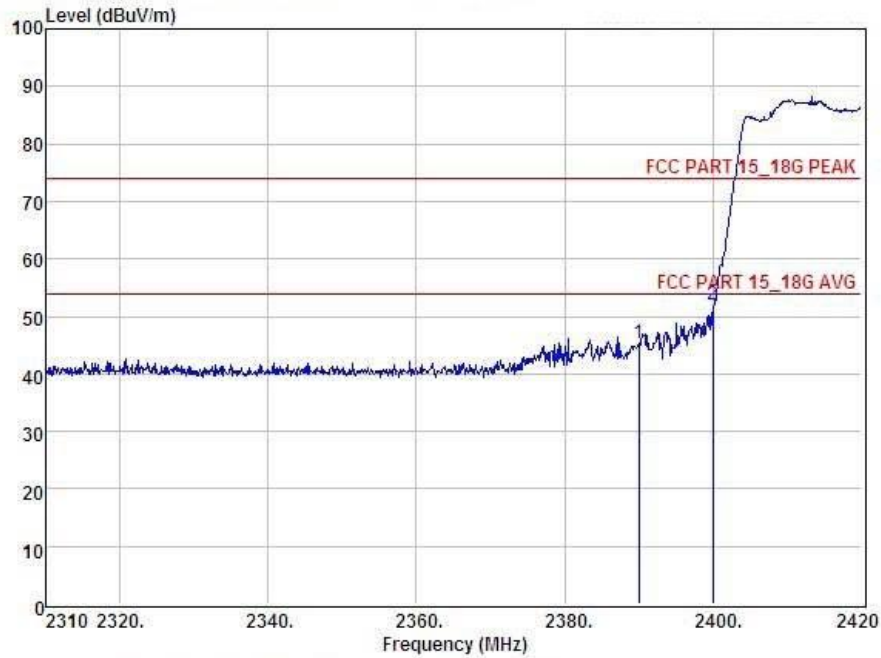
Remark: Level = Read Level + Antenna Factor - Preamp Factor + Cable Loss



Condition : FCC PART 15_18G PEAK 3m POL: VERTICAL									
Item	Freq	Read	Antenna	Preamp	Cable	Level	Limit	Margin	Remark
	MHz	Level	Factor	Factor	Loss	dBuV	dBuV	dBuV	
		dBuV	dB	dB	dB				
1	2483.60	53.47	27.59	34.97	4.00	50.09	74.00	-23.91	Peak

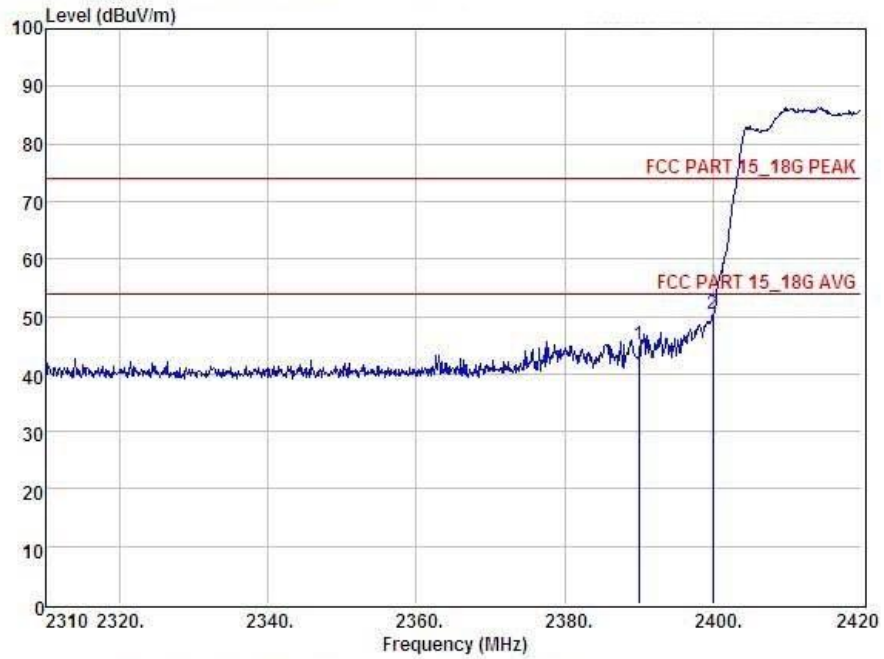
Remark: Level = Read Level + Antenna Factor - Preamp Factor + Cable Loss

IEEE 802.11 n/HT40:
CH LOW :



Condition : FCC PART 15_18G PEAK 3m POL: VERTICAL									
Item	Freq	Read	Antenna	Preamp	Cable	Level	Limit	Margin	Remark
	MHz	Level	Factor	Factor	Loss	dBuV	dBuV	dBuV	
		dBuV	dB	dB	dB				
1	2390.00	48.74	27.62	34.97	3.92	45.31	74.00	-28.69	Peak
2	2400.00	55.35	27.62	34.97	3.94	51.94	74.00	-22.06	Peak

Remark: Level = Read Level + Antenna Factor - Preamp Factor + Cable Loss

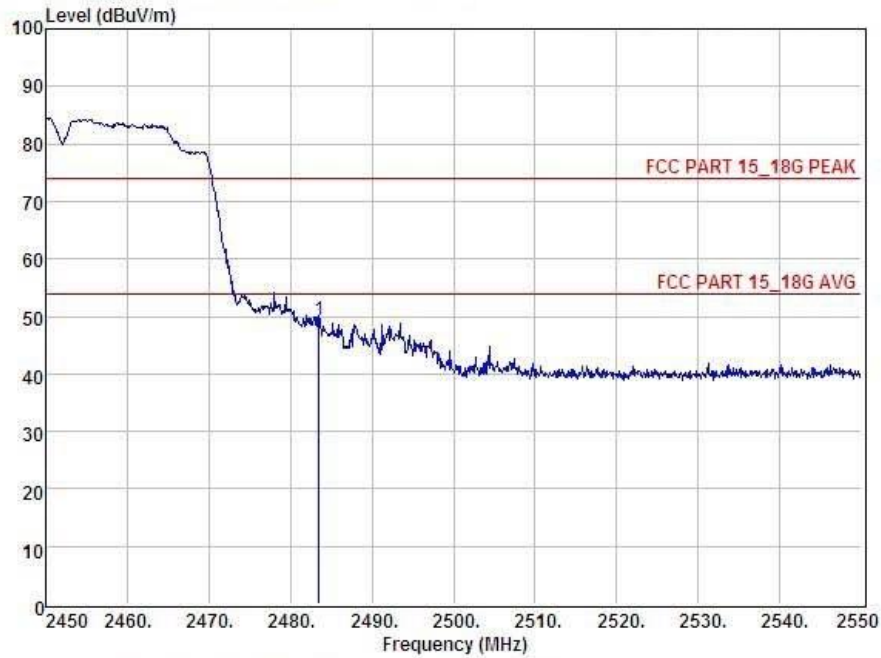


Condition : FCC PART 15_18G PEAK 3m POL: HORIZONTAL

Item	Freq MHz	Read Level dBuV	Antenna Factor dB	Preamp Factor dB	Cable Loss dB	Level dBuV	Limit dBuV	Margin dBuV	Remark
1	2390.00	48.51	27.62	34.97	3.92	45.08	74.00	-28.92	Peak
2	2400.00	53.80	27.62	34.97	3.94	50.39	74.00	-23.61	Peak

Remark: Level = Read Level + Antenna Factor - Preamp Factor + Cable Loss

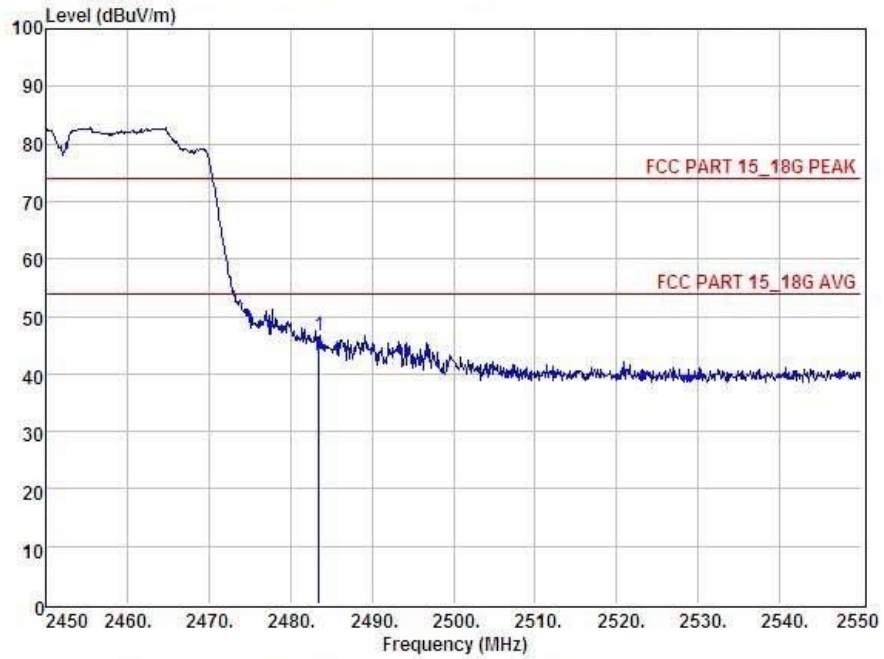
CH High :



Condition : FCC PART 15_18G PEAK 3m POL: VERTICAL

Item	Freq MHz	Read Level dBuV	Antenna Factor dB	Preamp Factor dB	Cable Loss dB	Level dBuV	Limit dBuV	Margin dBuV	Remark
1	2483.50	52.77	27.59	34.97	4.00	49.39	74.00	-24.61	Peak

Remark: Level = Read Level + Antenna Factor - Preamp Factor + Cable Loss



Condition : FCC PART 15_18G PEAK Sm POL: HORIZONTAL									
Item	Freq	Read	Antenna	Preamp	Cable	Level	Limit	Margin	Remark
	MHz	Level	Factor	Factor	Loss	dBuV	dBuV	dBuV	
		dBuV	dB	dB	dB				
1	2483.50	50.02	27.59	34.97	4.00	46.64	74.00	-27.36	Peak

Remark: Level = Read Level + Antenna Factor - Preamp Factor + Cable Loss

11 Antenna Requirement

11.1 Standard Requirement

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this Section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

11.2 Antenna Connected Construction

The directional gains of antenna used for transmitting is 1.5 dBi for port 1 and 1.5dBi for port 2, and the antenna connector is de-signed with permanent attachment and no consideration of replacement. Please see EUT photo for details.

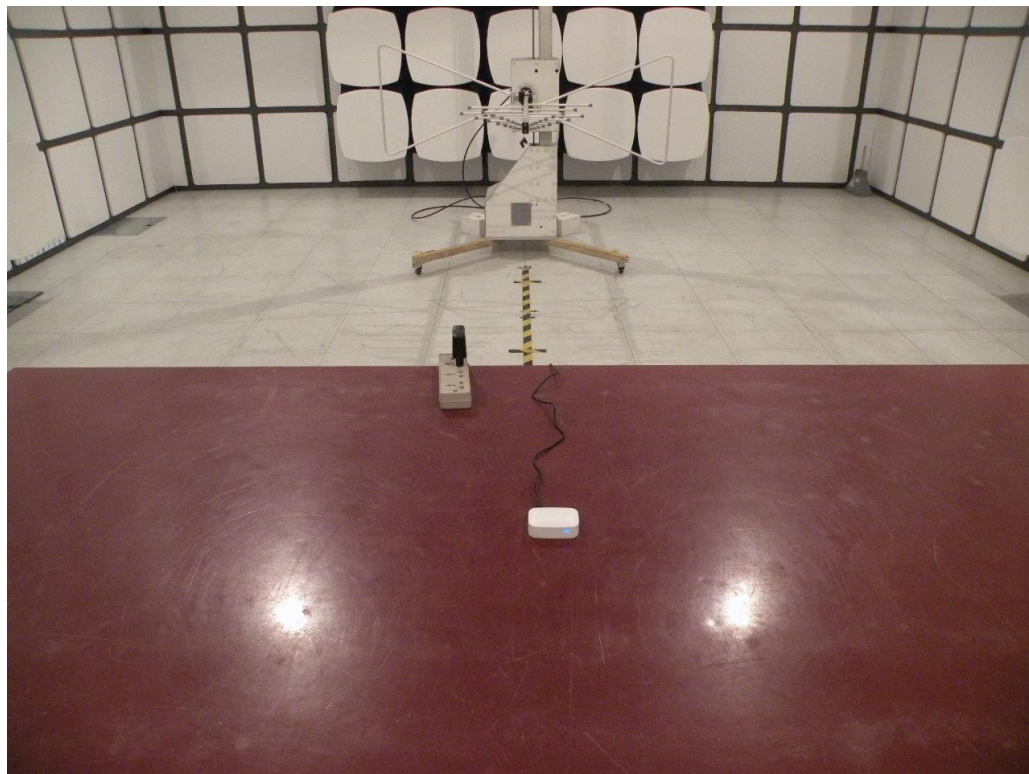
11.3 Result

The EUT antenna is antenna 1 for PCB Antenna and antenna 2 for PCB Antenna. It comply with the standard requirement.

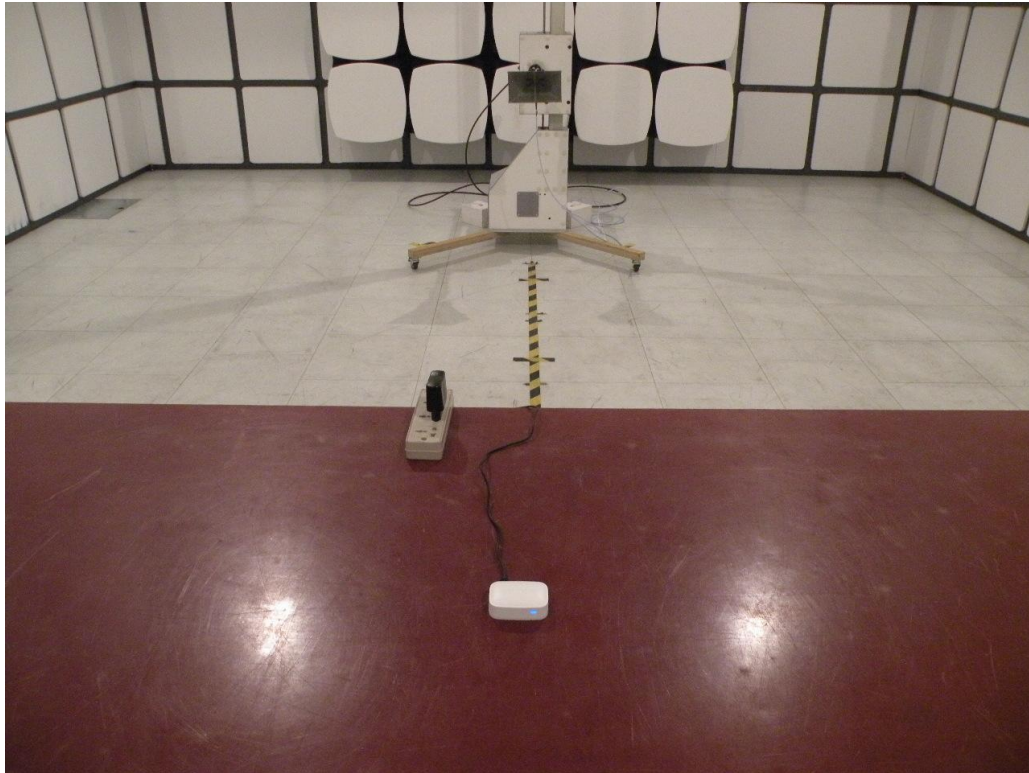
12 Photographs of Test Setup

Photographs-Radiated Emission Test Setup in Chamber

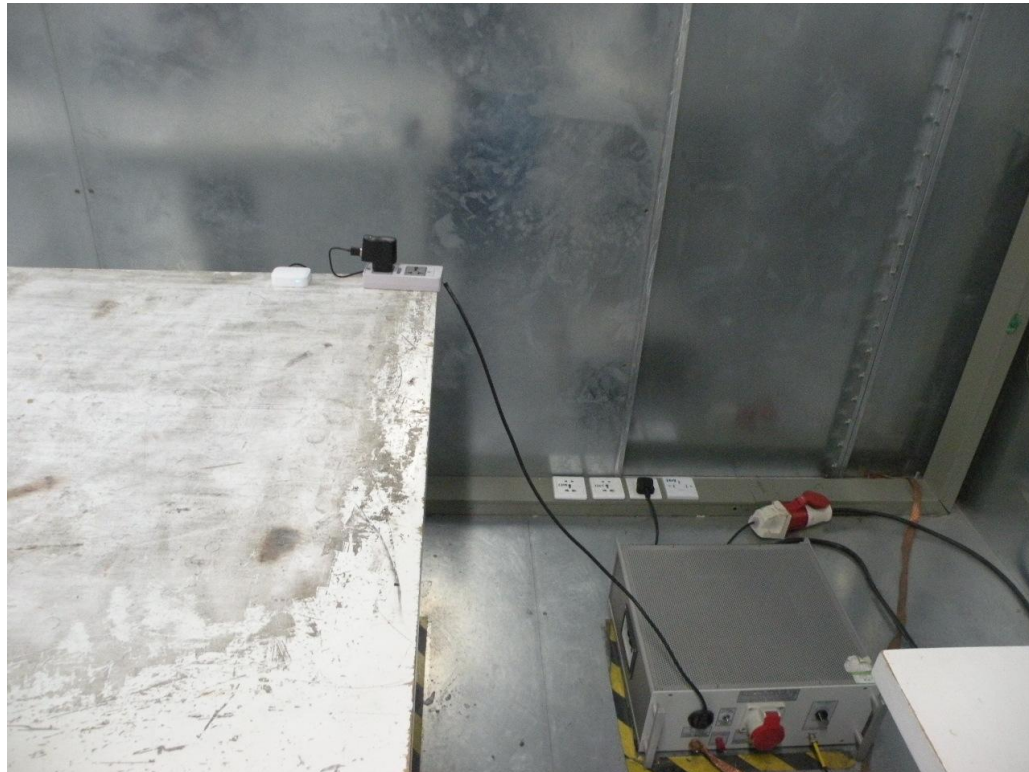
Below 1G



Above 1G



Photographs-Conducted Emission Test Setup

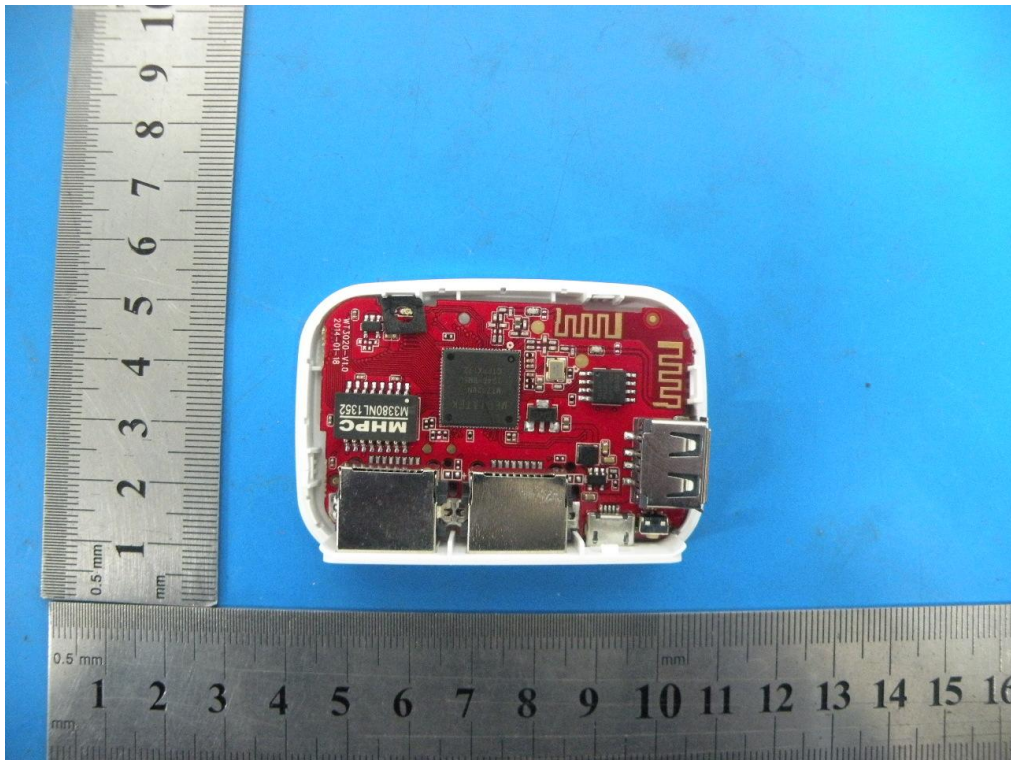


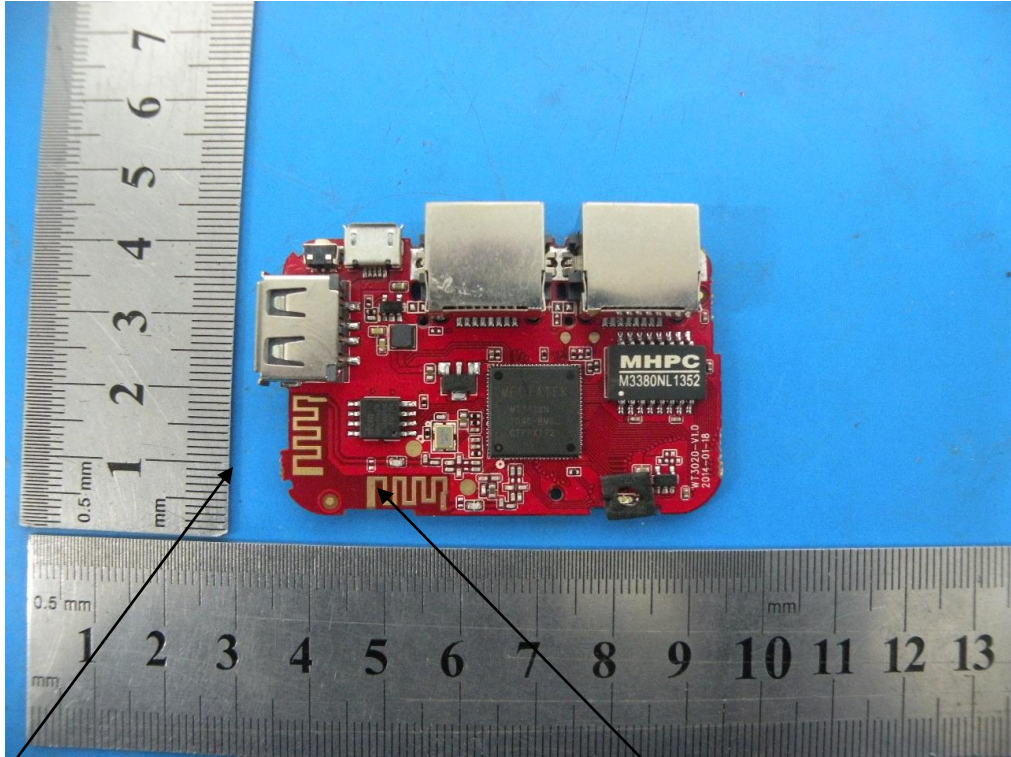
13 Photographs of EUT





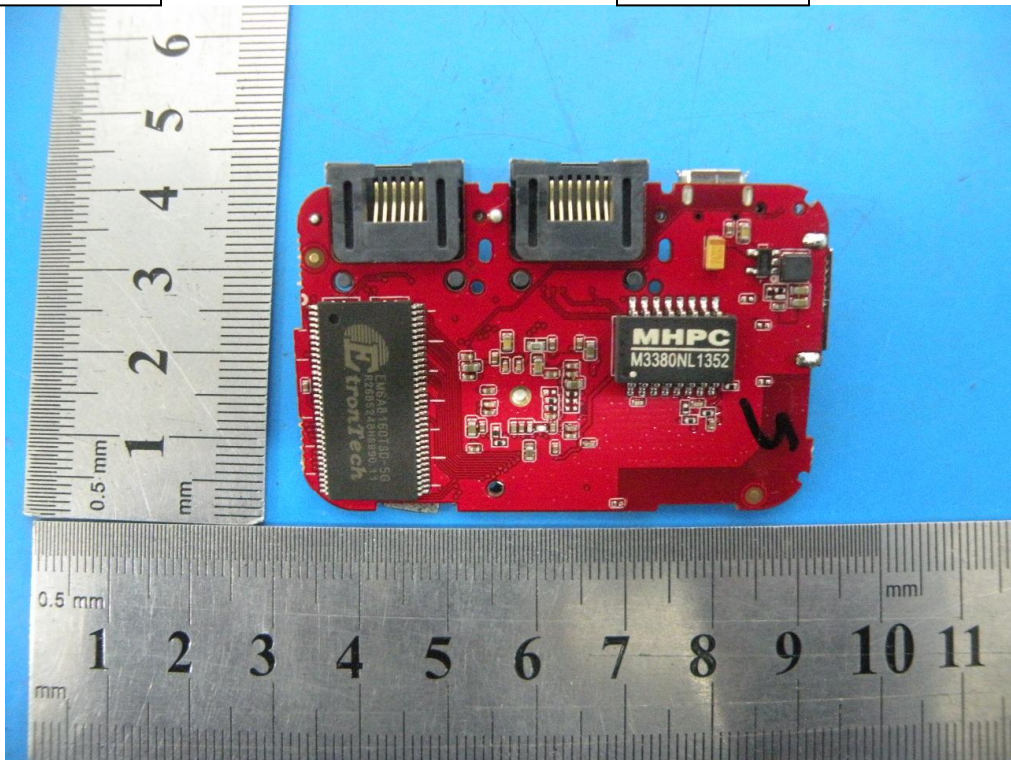






Antenna 1

Antenna 2



-----END OF THE REPORT-----