

FCC Test Report

Product Name : Consumer Home Router
Trade Name : Verizon
Model No. : CR1000A
FCC ID : NKR-LVSK-R2

Applicant : Wistron NeWeb Corporation

Address : 20 Park Ave. II, Hsinchu Science Park, Hsinchu 308, Taiwan

Date of Receipt : Oct. 21, 2020
Issued Date : May 19, 2021
Report No. : 20A0549R-E3032110114
Report Version : V2.0



The test results relate only to the samples tested.

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Test Report Certification

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Applicant : Wistron NeWeb Corporation
Address : 20 Park Ave. II, Hsinchu Science Park, Hsinchu 308, Taiwan
Manufacturer : Wistron NeWeb Corporation
Address : 20 Park Ave. II, Hsinchu Science Park, Hsinchu 308, Taiwan
Trade Name : Verizon
Model No. : CR1000A
FCC ID : NKR-LVSK-R2
EUT Rated Voltage : AC 100-120V, 50-60Hz
Test Voltage : AC 120V/60Hz
Applicable Standard : FCC CFR Title 47 Part 15 Subpart C Section 15.247: 2019
ANSI C63.10: 2013
Laboratory Name : Hsin Chu Laboratory
Address : No.372-2, Sec. 4, Zhongxing Rd., Zhudong Township,
Hsinchu County 310, Taiwan, R.O.C.
TEL: +886-3-582-8001 / FAX: +886-3-582-8958
Test Result : Complied

Documented By :



(Carol Tsai / Senior Engineering Adm. Specialist)

Tested By :



(Elwin Lin / Engineer)

Approved By :



(Louis Hsu / Deputy Manager)

Revision History

Version	Description	Issued Date
V1.0	Initial issue of report	Feb. 19, 2021
V2.0	Update Model No.	May 19, 2021

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1. General Information

1.1. EUT Description

Product Name	Consumer Home Router	
Trade Name	Verizon	
Model No.	CR1000A	
Frequency Range/ Channel Number	IEEE 802.11b/g	2412~2462MHz / 11 Channels
	IEEE 802.11n/ax (20MHz)	
	IEEE 802.11n/ax (40MHz)	2422~2452MHz / 7 Channels
Type of Modulation	IEEE 802.11b	Direct Sequence Spread Spectrum
	IEEE 802.11g/n/ax	Orthogonal Frequency Division Multiplexing
Data Speed	IEEE 802.11b	1, 2, 5.5, 11Mbps
	IEEE 802.11g	6, 12, 18, 24, 36, 48, 54Mbps
	IEEE 802.11n	Support a subset of the combination of GI, MCS 0~MCS 32 and bandwidth defined in 802.11n
	IEEE 802.11ax	Support a subset of the combination of GI, MCS 0~MCS 11 and bandwidth defined in 802.11ax

Accessories Information	
LAN Cable	Non-Shielded, 3m
Power Adapter	MFR: LUCENT TRANS; M/N: 1A98-1250 I/P: 100-120V~1.6A, 50-60Hz, O/P: DC 12.0V ==5.0A, 60W Cable Out: Non-Shielded, 1.8m

Ant. No.	Manufacturer	PN	Ant. Type	Directional Gain
0	WNC	Dual Ant1	Dipole Antenna	4.64 dBi
1		Dual Ant2		
2		Dual Ant3		
3		Dual Ant4		

ANT-TX / RX & Bandwidth

ANT-TX / RX	TX			RX		
Mode/ Channel Bandwidth	20MHz	40MHz	80MHz	20MHz	40MHz	80MHz
IEEE802.11b	✓			✓		
IEEE802.11g	✓			✓		
IEEE802.11n/ax	✓	✓		✓	✓	

IEEE 802.11b/g & IEEE 802.11n/ax(20MHz)

Working Frequency of Each Channel							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
001	2412 MHz	002	2417 MHz	003	2422 MHz	004	2427 MHz
005	2432 MHz	006	2437 MHz	007	2442 MHz	008	2447 MHz
009	2452 MHz	010	2457 MHz	011	2462 MHz	-	-

IEEE 802.11n/ax(40MHz)

Working Frequency of Each Channel							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
003	2422 MHz	004	2427 MHz	005	2432 MHz	006	2437 MHz
007	2442 MHz	008	2447 MHz	009	2452 MHz	-	-

Note:

1. This device is a Consumer Home Router including 2.4GHz b/g/n/ax and 5GHz a/n/ac/ax and BLE transmitting and receiving functions.
2. Regards to the frequency band operation; the lowest 、middle and highest frequency of channel were selected to perform the test, and then shown on this report.
3. The EUT description is from the customer declaration.

1.2. Test Mode

DEKRA has verified the construction and function in typical operation. The preliminary tests were performed in different data rate, and to find the worst condition, which was shown in this test report. The following table is the final test mode.

Test Mode	Mode 1: Transmit CDD Mode Mode 2: Transmit RU Mode Mode 3: Transmit Beamforming Mode
-----------	--

Test Items	Modulation	Channel	Antenna	Result
Conducted Emission	11ax(40MHz)	6	0/1/2/3	Complies
Maximum peak conducted output power	11b	1/6/11	0/1/2/3	Complies
	11g	1/6/11	0/1/2/3	Complies
	11n/ax(20MHz)	1/6/11	0+1+2+3	Complies
	11n/ax(40MHz)	3/6/9	0+1+2+3	Complies
Radiated Emission	11b	1/6/11	0+1+2+3	Complies
	11g	1/6/11	0+1+2+3	Complies
	11n/ax(20MHz)	1/6/11	0+1+2+3	Complies
	11n/ax(40MHz)	3/6/9	0+1+2+3	Complies
RF antenna conducted test	11b	1/6/11	0/1/2/3	Complies
	11g	1/6/11	0/1/2/3	Complies
	11n/ax(20MHz)	1/6/11	0/1/2/3	Complies
	11n/ax(40MHz)	3/6/9	0/1/2/3	Complies
Radiated Emission Band Edge	11b	1/6/11	0+1+2+3	Complies
	11g	1/6/11	0+1+2+3	Complies
	11n/ax(20MHz)	1/6/11	0+1+2+3	Complies
	11n/ax(40MHz)	3/6/9	0+1+2+3	Complies
DTS Bandwidth	11b	1/6/11	0/1/2/3	Complies
	11g	1/6/11	0/1/2/3	Complies
	11n/ax(20MHz)	1/6/11	0/1/2/3	Complies
	11n/ax(40MHz)	3/6/9	0/1/2/3	Complies

Test Items	Modulation	Channel	Antenna	Result
Occupied Bandwidth	11b	1/6/11	0/1/2/3	Complies
	11g	1/6/11	0/1/2/3	Complies
	11n/ax(20MHz)	1/6/11	0/1/2/3	Complies
	11n/ax(40MHz)	3/6/9	0/1/2/3	Complies
Power Density	11b	1/6/11	0+1+2+3	Complies
	11g	1/6/11	0+1+2+3	Complies
	11n/ax(20MHz)	1/6/11	0+1+2+3	Complies
	11n/ax(40MHz)	3/6/9	0+1+2+3	Complies

Note 1: Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).

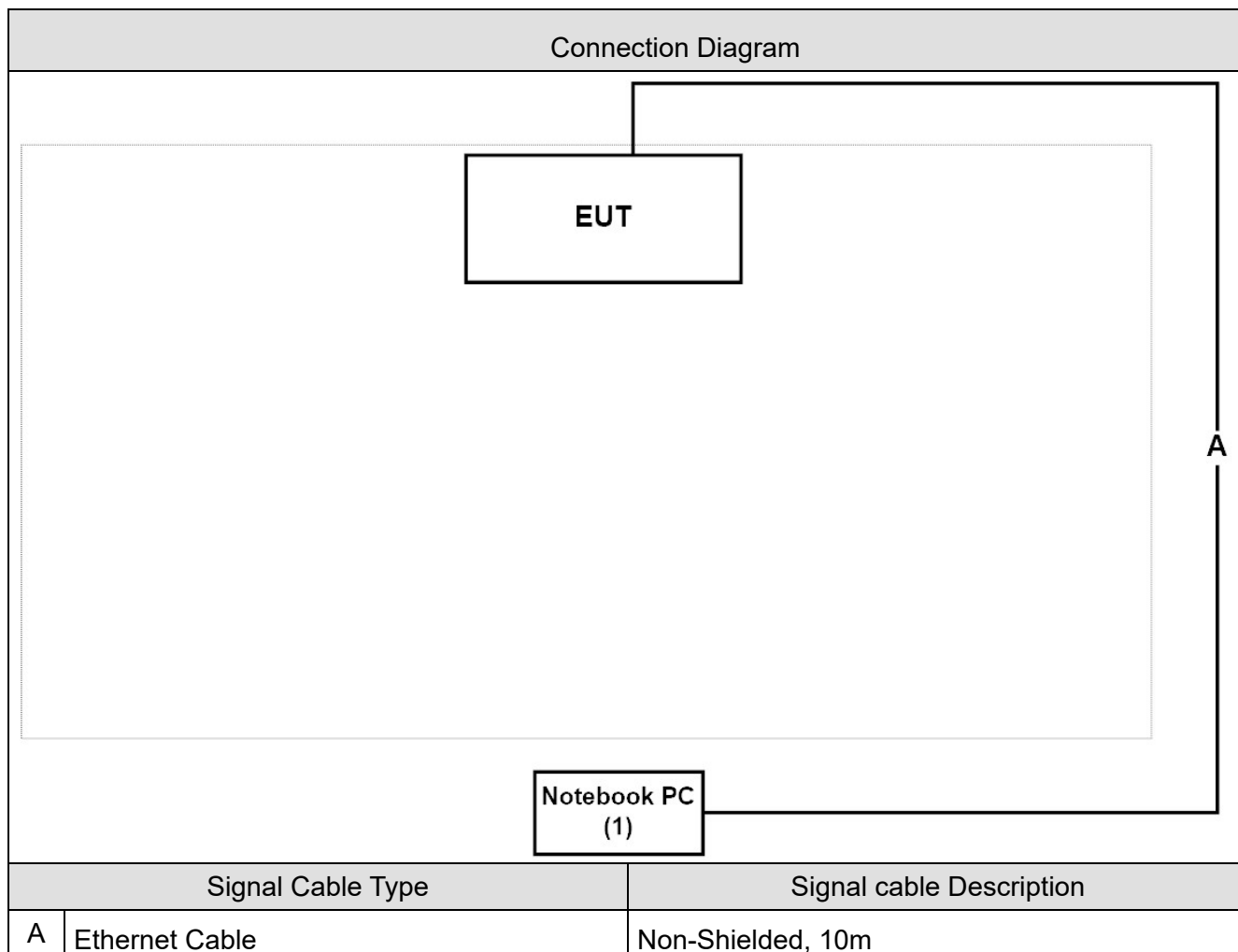
Note 2: Determining compliance shall be based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.

1.3. Tested System Details

The types for all equipments, plus descriptions of all cables used in the tested system (including inserted cards) are:

Product	Manufacturer	Model No.	Serial No.	FCC ID	Power Cord
1 Notebook PC	Dell	Latitude E6320	8611271467	DoC	Non-Shielded, 1.8m

1.4. Configuration of tested System



1.5. EUT Exercise Software

1	Set the EUT as shown in Section 1.4.
2	Open the control software QSPR.
3	Configure test mode, test channel and data rate.
4	Let the EUT start transmitting signal continuously.
5	Verify that device is working properly.

1.6. Comments and Remarks

The product specification and testing instructions for the EUT declared in the report are provided by the manufacturer who will take all responsibilities for the accuracy.

1.7. Test Facility

Ambient conditions in the laboratory:

Items	Test Item	Required	Test Site
Temperature (°C)	FCC PART 15 C 15.207 Conducted Emission	15 - 35	2
Humidity (%RH)		25 - 75	
Temperature (°C)	FCC PART 15 C 15.247 Maximum peak conducted output power	15 - 35	1
Humidity (%RH)		25 - 75	
Temperature (°C)	FCC PART 15 C 15.247 Radiated Emission	15 - 35	1
Humidity (%RH)		25 - 75	
Temperature (°C)	FCC PART 15 C 15.247 RF antenna conducted test	15 - 35	1
Humidity (%RH)		25 - 75	
Temperature (°C)	FCC PART 15 C 15.247 Radiated Emission Band Edge	15 - 35	1
Humidity (%RH)		25 - 75	
Temperature (°C)	FCC PART 15 C 15.247 Occupied Bandwidth & DTS Bandwidth	15 - 35	1
Humidity (%RH)		25 - 75	
Temperature (°C)	FCC PART 15 C 15.247 Power Density	15 - 35	1
Humidity (%RH)		25 - 75	

Note: Test site information refers to Laboratory Information.

Laboratory Information

USA : FCC Registration Number: TW3024

Canada : IC Registration Number: 22397-1 / 22397-2 / 22397-3

The address and introduction of DEKRA Testing and Certification Co., Ltd. laboratories can be founded in our Web site: <http://www.dekra.com.tw>

If you have any comments, please don't hesitate to contact us. Our test sites as below:

Test Laboratory	DEKRA Testing and Certification Co., Ltd.
Address	1. No.372, Sec. 4, Zhongxing Rd., Zhudong Township, Hsinchu County 31061, Taiwan, R.O.C. 2. No.372-2, Sec. 4, Zhongxing Rd., Zhudong Township, Hsinchu County 31061, Taiwan, R.O.C.
Phone number	1. +886-3-582-8001 2. +886-3-582-8001
Fax number	1. +886-3-582-8958 2. +886-3-582-8958
Email address	info.tw@dekra.com
Website	http://www.dekra.com.tw

1.8. List of Test Equipment

Conducted Emission / SR2-H

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date
Artificial Mains Network	R&S	ENV4200	848411/010	2020/01/08	2021/01/07
Test Receiver	R&S	ESCS 30	836858/022	2020/02/25	2021/02/24
LISN	R&S	ENV216	100092	2020/06/22	2021/06/21

Maximum peak conducted output power / SR12-H

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date
High Speed Peak Power Meter Dual Input	Anritsu	ML2496A	1602004	2019/12/02	2020/12/01
				2020/11/30	2021/11/29
Pulse Power Sensor	Anritsu	MA2411B	1531043	2019/12/02	2020/12/01
				2020/11/30	2021/11/29
Pulse Power Sensor	Anritsu	MA2411B	1531044	2019/12/02	2020/12/01
				2020/11/30	2021/11/29
Power Meter	Keysight	8990B	MY51000248	2020/05/20	2021/05/19
Power Sensor	Keysight	N1923A	MY57240005	2020/05/20	2021/05/19

Radiated Emission / CB4-H

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date
Signal Analyzer	R&S	FSVA40	101455	2020/10/12	2021/10/11
Signal & Spectrum Analyzer	R&S	FSV40	101049	2020/03/30	2021/03/29
EXA Signal Analyzer	Keysight	N9010A	MY51440132	2020/02/21	2021/02/20
Bilog Antenna	Teseq	CBL6112D	23191	2020/06/12	2021/06/11
Horn Antenna	Schwarzbeck	BBHA 9120D	639	2020/06/04	2021/06/03
Horn Antenna	Schwarzbeck	BBHA 9170	202	2019/12/27	2020/12/26
Pre-Amplifier	DEKRA	AP-025C	12183122	2020/09/03	2021/09/02
Pre-Amplifier	EMCI	EMC11830I	980366	2019/12/03	2020/12/02
				2020/11/30	2021/11/29
Pre-Amplifier	DEKRA	AP-400C	201801231	2019/12/03	2020/12/02
				2020/11/16	2021/11/15
Horn Antenna	Schwarzbeck	BBHA 9120D	01656	2020/10/14	2021/10/13
Band Reject Filter	Micro-Tronics	BRM50702	G192	2020/03/09	2021/03/08
Signal Analyzer	R&S	FSV40	101435	2020/06/24	2021/06/23
Coaxial Cable(10m)	Suhner	SF102_SF104	CB4-H	2020/04/25	2021/04/24
DEKRA Testing System	DEKRA	Version 1.2	CB4-H	NA	NA

RF antenna conducted test / SR12-H

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date
Spectrum Analyzer	Keysight	N9030B	MY57140404	2020/06/03	2021/06/02
Spectrum Analyzer	Keysight	N9010B	MY57110159	2020/04/15	2021/04/14
Spectrum Analyzer	Agilent	N9010A	US47140172	2020/06/18	2021/06/17
Signal & Spectrum Analyzer	R&S	FSV40	101049	2020/03/30	2021/03/29

Radiated Emission Band Edge / CB4-H

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date
Signal Analyzer	R&S	FSVA40	101455	2020/10/12	2021/10/11
Signal & Spectrum Analyzer	R&S	FSV40	101049	2020/03/30	2021/03/29
EXA Signal Analyzer	Keysight	N9010A	MY51440132	2020/02/21	2021/02/20
Bilog Antenna	Teseq	CBL6112D	23191	2020/06/12	2021/06/11
Horn Antenna	Schwarzbeck	BBHA 9120D	639	2020/06/04	2021/06/03
Horn Antenna	Schwarzbeck	BBHA 9170	202	2019/12/27	2020/12/26
Pre-Amplifier	DEKRA	AP-025C	12183122	2020/09/03	2021/09/02
Pre-Amplifier	EMCI	EMC11830I	980366	2019/12/03	2020/12/02
Pre-Amplifier	DEKRA	AP-400C	201801231	2019/12/03	2020/12/02
Horn Antenna	Schwarzbeck	BBHA 9120D	01656	2020/10/14	2021/10/13
Band Reject Filter	Micro-Tronics	BRM50702	G192	2020/03/09	2021/03/08
Signal Analyzer	R&S	FSV40	101435	2020/06/24	2021/06/23
Coaxial Cable(10m)	Suhner	SF102_SF104	CB4-H	2020/04/25	2021/04/24
DEKRA Testing System	DEKRA	Version 1.2	CB4-H	NA	NA

DTS Bandwidth / SR12-H

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date
Spectrum Analyzer	Keysight	N9030B	MY57140404	2020/06/03	2021/06/02
Spectrum Analyzer	Keysight	N9010B	MY57110159	2020/04/15	2021/04/14
Spectrum Analyzer	Agilent	N9010A	US47140172	2020/06/18	2021/06/17
Signal & Spectrum Analyzer	R&S	FSV40	101049	2020/03/30	2021/03/29

Occupied Bandwidth / SR12-H

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date
Spectrum Analyzer	Keysight	N9030B	MY57140404	2020/06/03	2021/06/02
Spectrum Analyzer	Keysight	N9010B	MY57110159	2020/04/15	2021/04/14
Spectrum Analyzer	Agilent	N9010A	US47140172	2020/06/18	2021/06/17
Signal & Spectrum Analyzer	R&S	FSV40	101049	2020/03/30	2021/03/29

Power Density / SR12-H

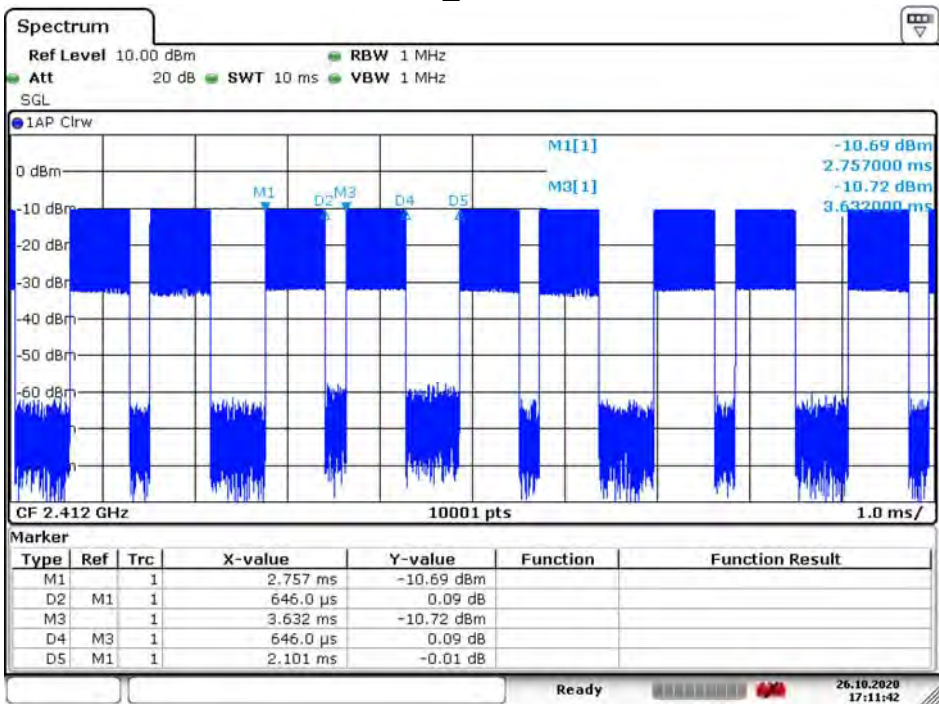
Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date
Spectrum Analyzer	Keysight	N9030B	MY57140404	2020/06/03	2021/06/02
Spectrum Analyzer	Keysight	N9010B	MY57110159	2020/04/15	2021/04/14
Spectrum Analyzer	Agilent	N9010A	US47140172	2020/06/18	2021/06/17
Signal & Spectrum Analyzer	R&S	FSV40	101049	2020/03/30	2021/03/29

Note: All equipment upon which need to calibrated are with calibration period of 1 year.

1.9. Duty Cycle

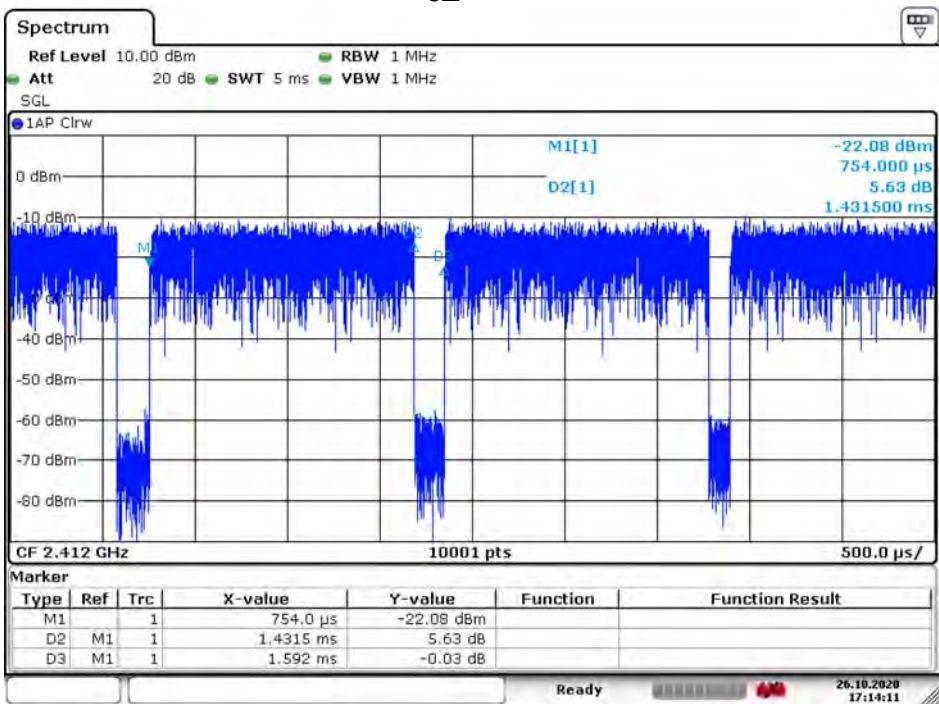
Mode		On Time(ms)	On+Off Time(ms)	Duty Cycle (%)	Duty Factor(dB) linear voltage	Duty Factor(dB) Power	1/T Minimum VBW (kHz)
CDD	11B	1.292	2.101	61.49%	4.223271	2.11	0.774
	11G	1.431	1.592	89.89%	0.926069	0.46	0.699
	X HE20	5.362	5.976	89.73%	0.941676	0.47	0.186
	X HE40	5.303	6.135	86.44%	1.265859	0.63	0.189
RU	AX HE20_edge	2.940	3.712	79.20%	2.025213	1.01	0.340
	AX HE40_edge	3.319	3.946	84.11%	1.503205	0.75	0.301
	AX HE20_Full	4.956	5.820	85.15%	1.395834	0.70	0.202
	AX HE40_Full	4.523	5.485	82.47%	1.674209	0.84	0.221
BF	X HE20	1.198	1.334	89.81%	0.933980	0.47	0.835
	X HE40	1.750	1.882	92.99%	0.631631	0.32	0.571

802.11b_CDD Mode



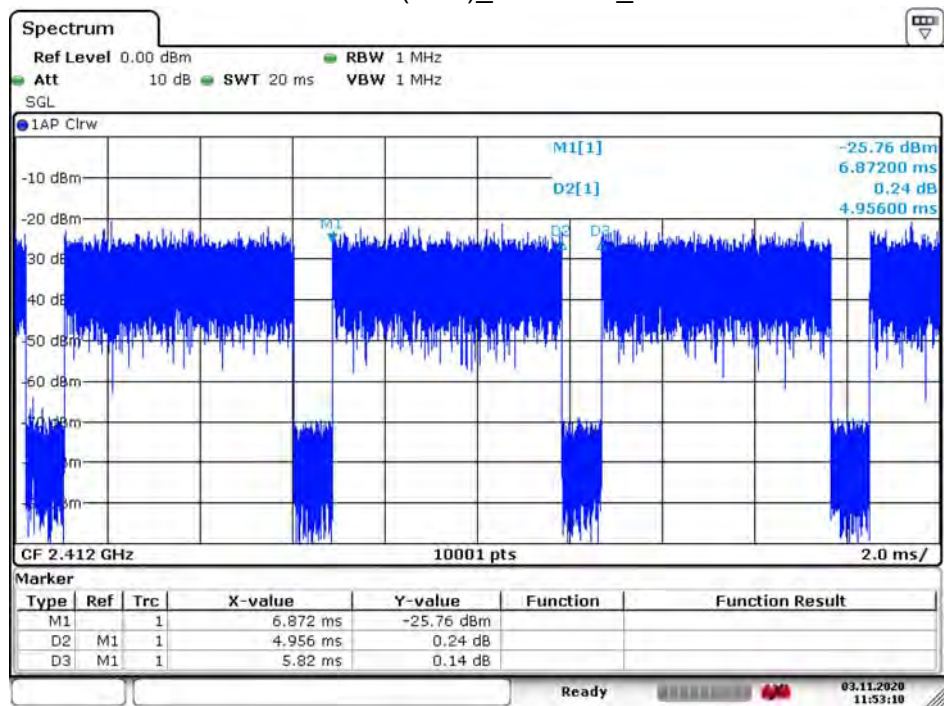
Date: 26.OCT.2020 17:11:42

802.11g_CDD Mode



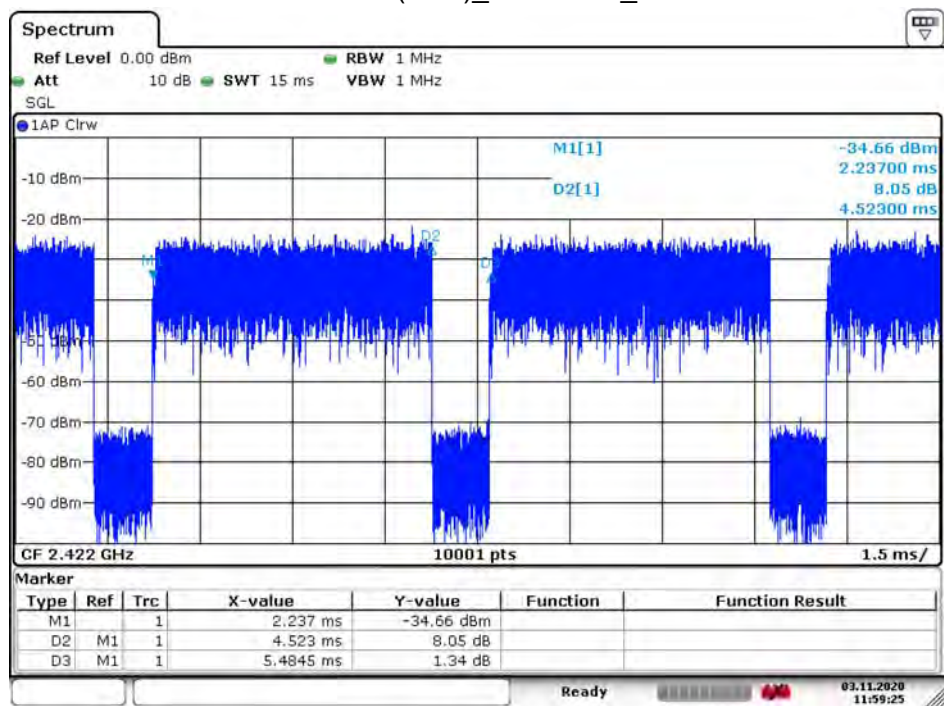
Date: 26.OCT.2020 17:14:11

802.11ax (20M)_RU Mode_Full



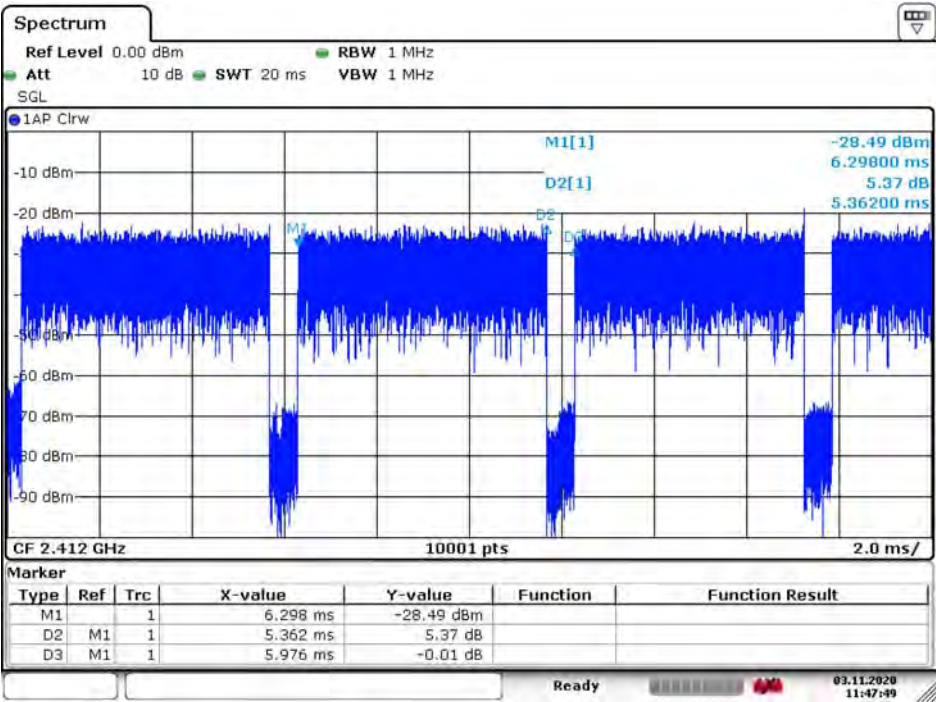
Date: 3.NOV.2020 11:53:10

802.11ax (40M)_RU Mode_Full



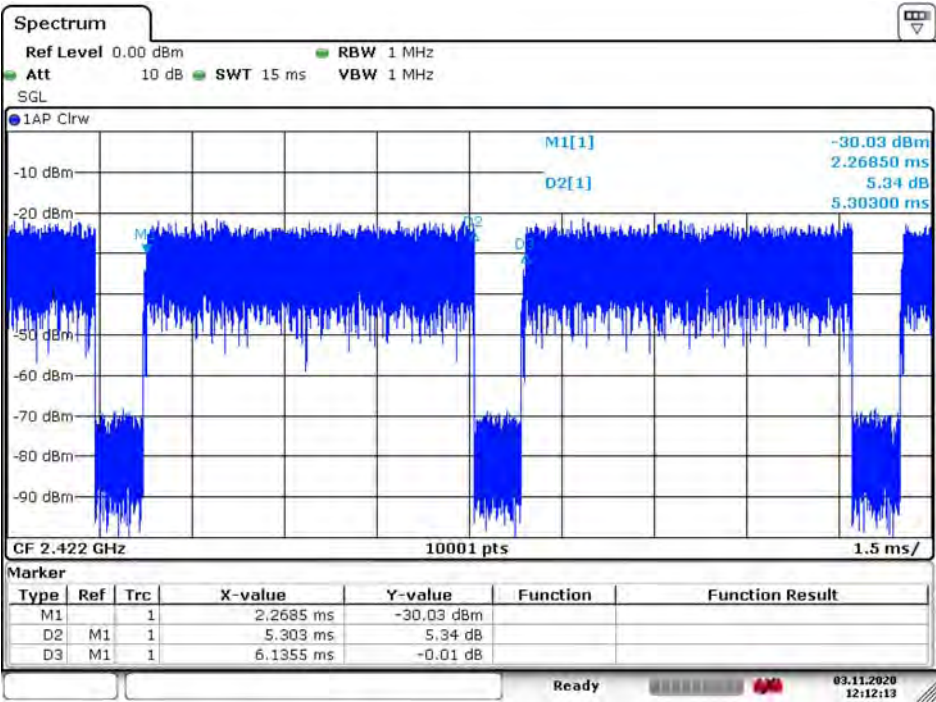
Date: 3.NOV.2020 11:59:25

802.11ax (20M)_RU Mode_Center



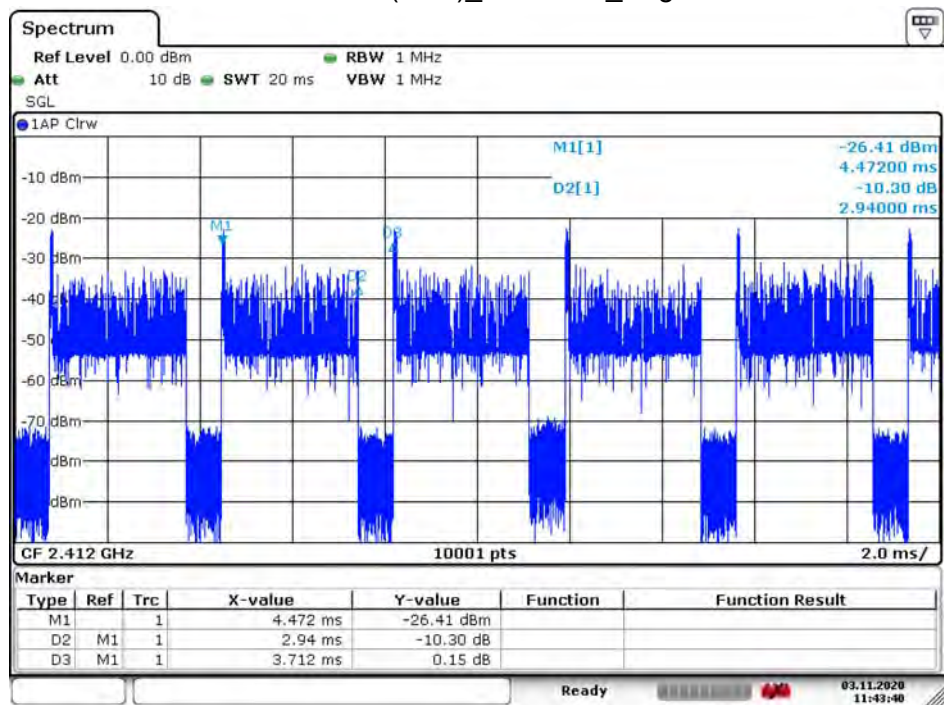
Date: 3 NOV 2020 11:47:50

802.11ax (40M)_RU Mode_Center



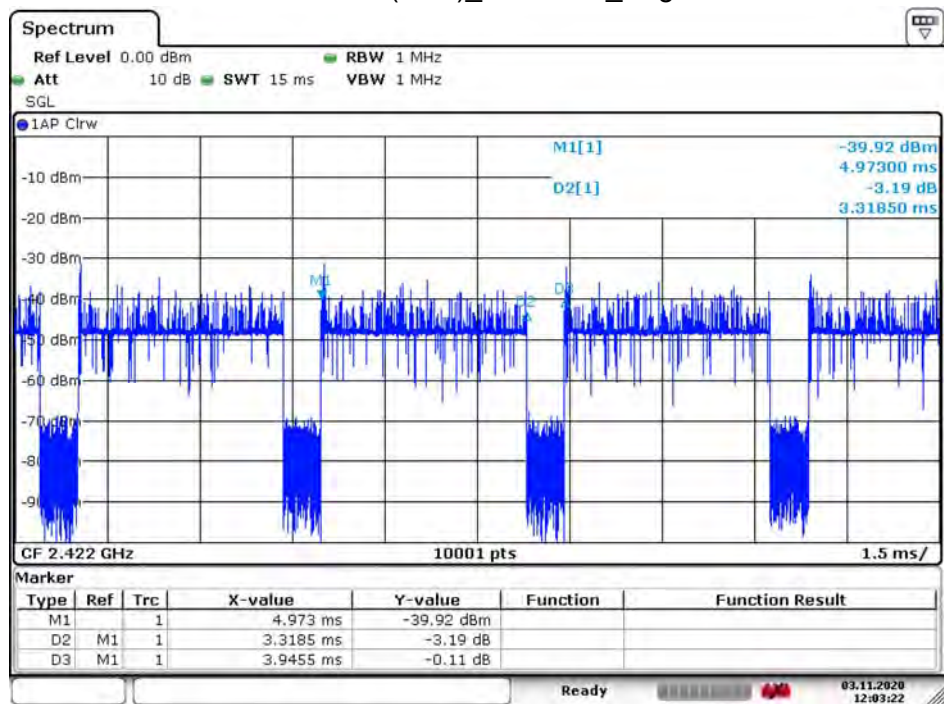
Date: 3 NOV 2020 12:12:13

802.11ax (20M)_RU Mode_Edge



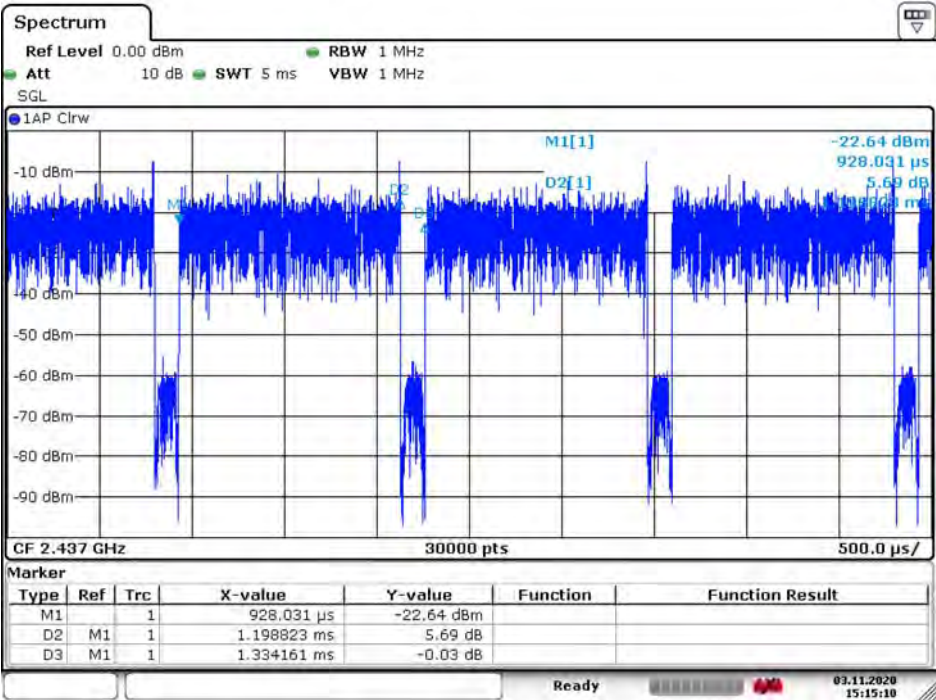
Date: 3.NOV 2020 11:43:40

802.11ax (40M)_RU Mode_Edge



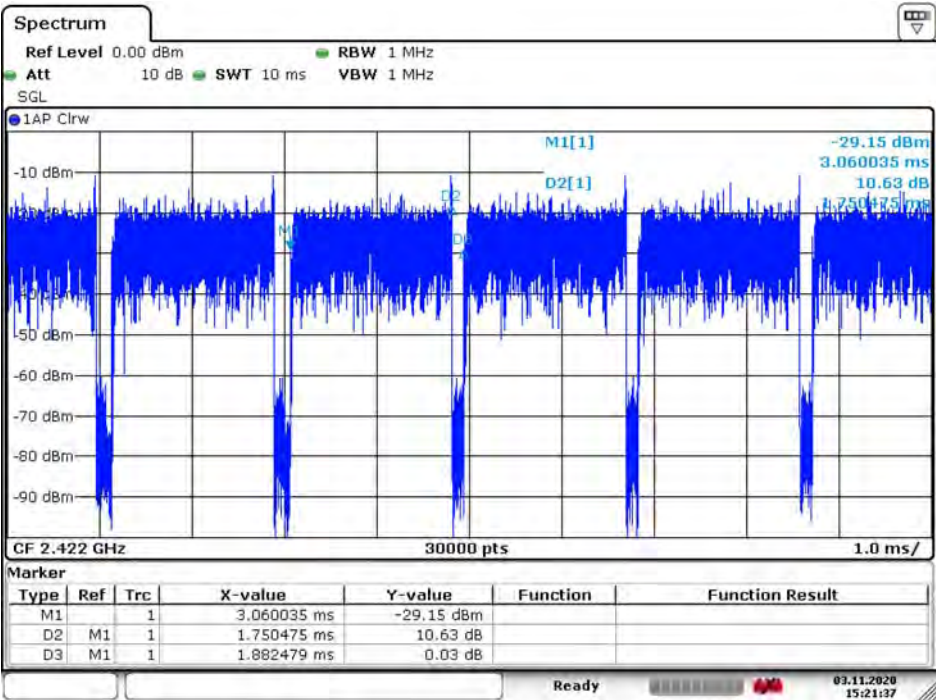
Date: 3.NOV 2020 12:03:23

802.11ax (20M)_Beamforming Mode



Date: 3.NOV.2020 15:15:10

802.11ax (40M)_Beamforming Mode



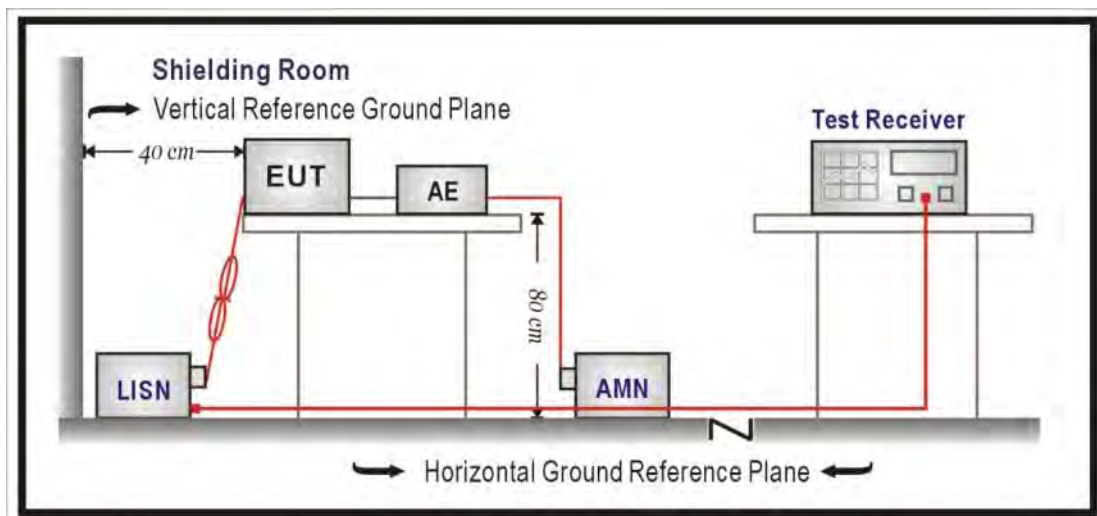
Date: 3.NOV.2020 15:21:37

1.10. Uncertainty

Test item	Uncertainty
Conducted Emission	± 2.26 dB
Maximum peak conducted output power	± 1.27 dB
Radiated Emission	30MHz~1GHz as ± 3.43 dB 1GHz~26.5GHz as ± 3.65 dB
RF antenna conducted test	± 1.27 dB
Radiated Emission Band Edge	± 3.9 dB
DTS Bandwidth	± 50 Hz
Occupied Bandwidth	± 50 Hz
Power Density	± 1.27 dB

2. Conducted Emission

2.1. Test Setup



2.2. Limits

FCC Part 15 Subpart C Paragraph 15.207 Limits (dBuV)		
Frequency MHz	QP	AV
0.15 - 0.50	66 - 56	56 - 46
0.50 - 5.0	56	46
5.0 - 30	60	50

Remarks: In the above table, the tighter limit applies at the band edges.

2.3. Test Procedure

The EUT was setup according to ANSI C63.4: 2013 and tested according to DTS test procedure of KDB 558074 for compliance to FCC 47CFR 15.247 requirements.

The EUT was placed on a platform of nominal size, 1 m by 1.5 m, raised 80 cm above the conducting ground plane. The vertical conducting plane was located 40 cm to the rear of the EUT. All other surfaces of EUT were at least 80 cm from any other grounded conducting surface. The EUT and simulators are connected to the main power through a line impedance stabilization network (LISN). The LISN provides a 50 ohm /50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN. (Please refer to the block diagram of the test setup and photographs.)

Each current-carrying conductor of the EUT power cord, except the ground (safety) conductor, was individually connected through a LISN to the input power source.

The excess length of the power cord between the EUT and the LISN receptacle were folded back and forth at the center of the lead to form a bundle not exceeding 40 cm in length.

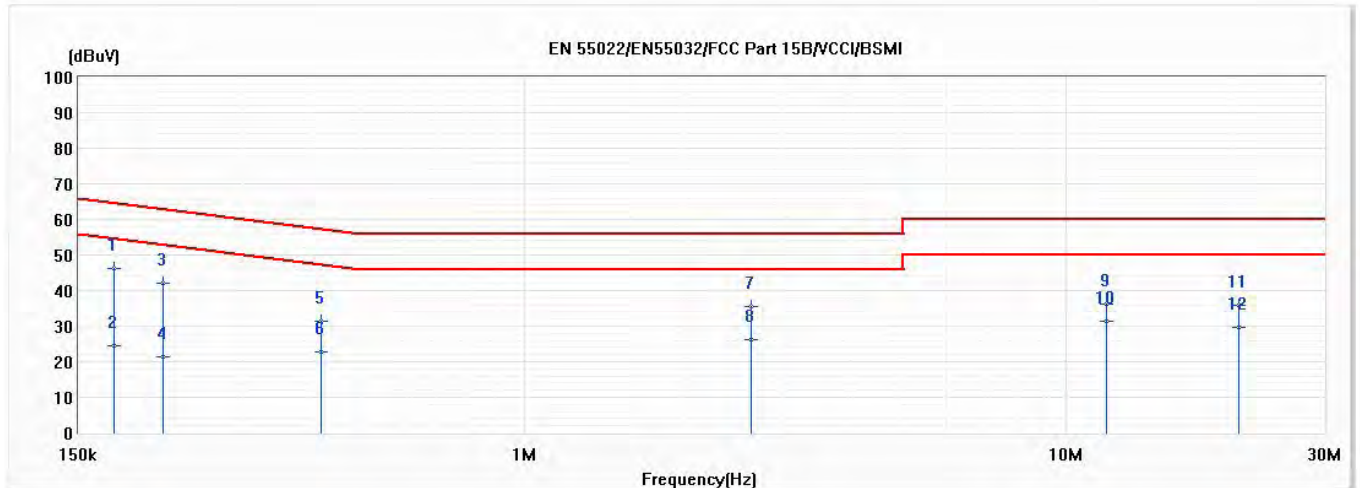
Conducted emissions were investigated over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9 kHz.

2.4. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.207: 2019

2.5. Test Result

Model No	CR1000A	Site	SR2-H
Test Voltage	AC 120V/60Hz	Test Date	2020/12/18
Test Mode	Mode 2: Transmit RU Mode_Full	Engineer	Lion Wang
Phase	L	Temperature (°C)	20.1
Test Condition	802.11ax, Ch6,2.437G,BW40M	Humidity (%RH)	54.2

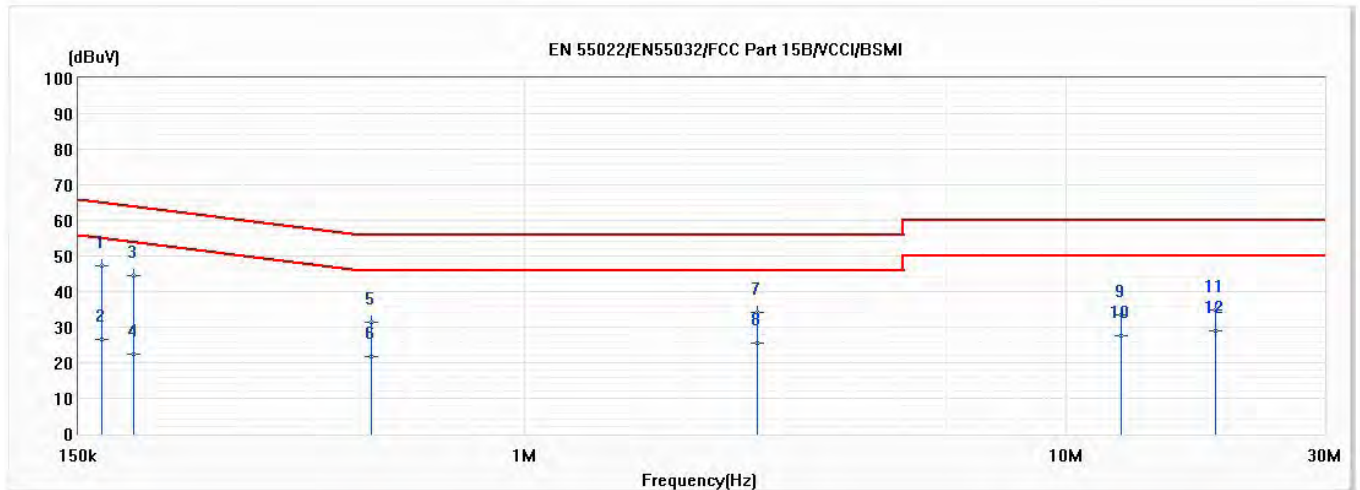


No	Frequency (MHz)	Emission Level (dBuV)	Limit (dBuV)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
*1	0.174	46.31	64.76	-18.45	36.66	9.65	QP
2	0.174	24.50	54.76	-30.25	14.85	9.65	AV
3	0.215	42.04	63.01	-20.97	32.39	9.65	QP
4	0.215	21.49	53.01	-31.52	11.85	9.65	AV
5	0.421	31.36	57.42	-26.06	21.68	9.68	QP
6	0.421	22.68	47.42	-24.73	13.00	9.68	AV
7	2.625	35.61	56.00	-20.39	25.79	9.82	QP
8	2.625	26.21	46.00	-19.79	16.39	9.82	AV
9	11.862	36.37	60.00	-23.63	26.20	10.17	QP
10	11.862	31.29	50.00	-18.71	21.12	10.17	AV
11	20.860	35.96	60.00	-24.04	25.57	10.39	QP
12	20.860	29.69	50.00	-20.31	19.30	10.39	AV

Remark:

1. "*" means this data is the worst emission level.
2. Emission Level = Reading Level + Correct Factor (Correct Factor = LISN Insertion Loss + Cable Loss).
3. Margin = Emission Level - Limit.

Model No	CR1000A	Site	SR2-H
Test Voltage	AC 120V/60Hz	Test Date	2020/12/18
Test Mode	Mode 2: Transmit RU Mode_Full	Engineer	Lion Wang
Phase	N	Temperature (°C)	20.1
Test Condition	802.11ax, Ch6,2.437G,BW40M	Humidity (%RH)	54.2



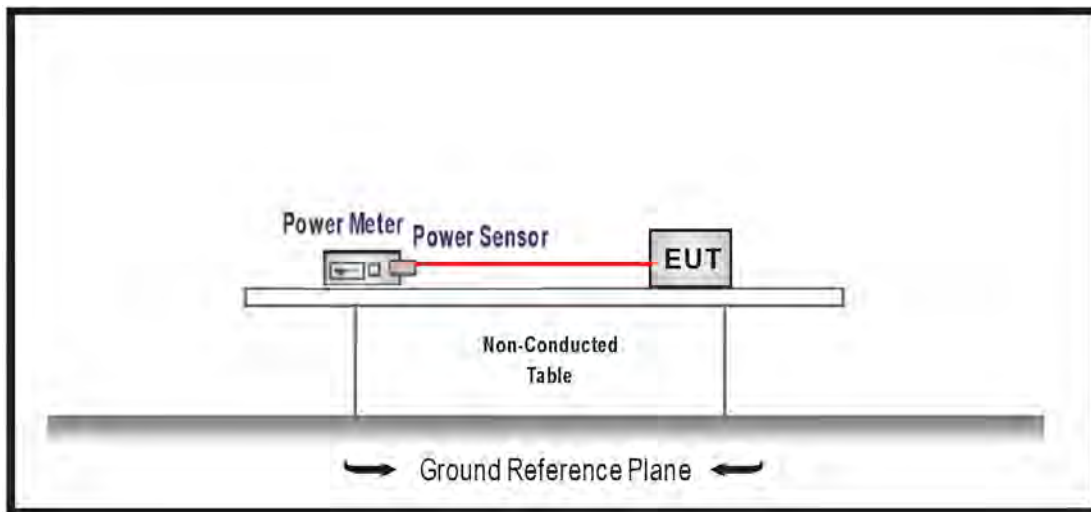
No	Frequency (MHz)	Emission Level (dBuV)	Limit (dBuV)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
*1	0.166	47.12	65.18	-18.06	37.48	9.64	QP
2	0.166	26.47	55.18	-28.71	16.84	9.64	AV
3	0.189	44.43	64.07	-19.64	34.79	9.63	QP
4	0.189	22.28	54.07	-31.80	12.64	9.63	AV
5	0.521	31.38	56.00	-24.62	21.70	9.68	QP
6	0.521	21.76	46.00	-24.24	12.07	9.68	AV
7	2.691	34.15	56.00	-21.85	24.33	9.82	QP
8	2.691	25.64	46.00	-20.36	15.83	9.82	AV
9	12.629	33.47	60.00	-26.53	23.22	10.25	QP
10	12.629	27.54	50.00	-22.46	17.29	10.25	AV
11	18.909	34.69	60.00	-25.31	24.20	10.49	QP
12	18.909	29.05	50.00	-20.95	18.56	10.49	AV

Remark:

1. "*" means this data is the worst emission level.
2. Emission Level = Reading Level + Correct Factor (Correct Factor = LISN Insertion Loss + Cable Loss).
3. Margin = Emission Level - Limit.

3. Maximum peak conducted output power

3.1. Test Setup



3.2. Test procedures

The EUT was tested according to DTS test procedure section 8.3.1.3 of KDB 558074 D01 v05r02 & Subclause 11.9.1.3 of ANSI C63.10 Measurement to FCC 47CFR 15.247 requirements.

3.3. Limits

The maximum peak power shall be less 1 Watt.

3.4. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247: 2019.

3.5. Test Result

Product	Consumer Home Router		
Test Item	Maximum peak conducted output power		
Test Mode	Mode 1: Transmit CDD Mode		
Date of Test	2020/11/07	Test Site	SR12-H
Test Temperature	23.0°C	Test Humidity	58.0%

11b							
Channel No.	Frequency (MHz)	Maximum peak conducted output power (dBm)					Limit (dBm)
		Ant. 0	Ant. 1	Ant. 2	Ant. 3	Total	
1	2412	23.560	24.160	23.990	23.560	29.846	≤ 30
6	2437	23.210	23.840	23.760	23.110	29.513	≤ 30
11	2462	23.390	24.040	23.890	23.090	29.640	≤ 30

The worst emission of data rate is 1Mbps

11g							
Channel No.	Frequency (MHz)	Maximum peak conducted output power (dBm)					Limit (dBm)
		Ant. 0	Ant. 1	Ant. 2	Ant. 3	Total	
1	2412	22.630	22.650	22.610	22.390	28.592	≤ 30
6	2437	23.660	23.890	23.820	23.570	29.757	≤ 30
11	2462	23.230	23.450	23.300	23.000	29.269	≤ 30

The worst emission of data rate is 6Mbps

Product	Consumer Home Router		
Test Item	Maximum peak conducted output power		
Test Mode	Mode 2: Transmit RU Mode_Full		
Date of Test	2020/11/07	Test Site	SR12-H
Test Temperature	23.0°C	Test Humidity	58.0%

11ax(20M)							
Channel No.	Frequency (MHz)	Maximum peak conducted output power (dBm)					Limit (dBm)
		Ant. 0	Ant. 1	Ant. 2	Ant. 3	Total	
1	2412	16.990	17.010	17.180	16.970	23.059	≤30
6	2437	23.910	24.010	24.090	23.630	29.934	≤30
11	2462	18.650	18.890	19.100	18.580	24.830	≤30

The worst emission of data rate is MCS 0

11ax(40M)							
Channel No.	Frequency (MHz)	Maximum peak conducted output power (dBm)					Limit (dBm)
		Ant. 0	Ant. 1	Ant. 2	Ant. 3	Total	
3	2422	18.040	18.180	18.200	18.020	24.131	≤30
6	2437	20.280	20.690	20.720	20.230	26.506	≤30
9	2452	19.070	19.150	19.100	18.840	25.062	≤30

The worst emission of data rate is MCS 0

Product	Consumer Home Router		
Test Item	Maximum peak conducted output power		
Test Mode	Mode 2: Transmit RU Mode_Center		
Date of Test	2020/11/21	Test Site	SR12-H
Test Temperature	22.0°C	Test Humidity	58.0%

11ax(20M)							
Channel No.	Frequency (MHz)	Maximum peak conducted output power (dBm)					Limit (dBm)
		Ant. 0	Ant. 1	Ant. 2	Ant. 3	Total	
1	2412	15.660	15.960	16.030	15.640	21.847	≤ 30
6	2437	23.660	24.070	24.010	23.470	29.830	≤ 30
11	2462	16.710	16.900	17.020	16.460	22.798	≤ 30

The worst emission of data rate is MCS 0

11ax(40M)							
Channel No.	Frequency (MHz)	Maximum peak conducted output power (dBm)					Limit (dBm)
		Ant. 0	Ant. 1	Ant. 2	Ant. 3	Total	
3	2422	18.920	19.050	18.960	18.430	24.867	≤ 30
6	2437	19.240	19.300	19.260	18.870	25.191	≤ 30
9	2452	19.590	19.930	19.730	19.450	25.699	≤ 30

The worst emission of data rate is MCS 0

Product	Consumer Home Router		
Test Item	Maximum peak conducted output power		
Test Mode	Mode 2: Transmit RU Mode_Edge		
Date of Test	2020/11/07	Test Site	SR12-H
Test Temperature	23.0°C	Test Humidity	58.0%

11ax(20M)							
Channel No.	Frequency (MHz)	Maximum peak conducted output power (dBm)					Limit (dBm)
		Ant. 0	Ant. 1	Ant. 2	Ant. 3	Total	
1	2412	16.030	15.830	15.980	15.860	21.946	≤30
6	2437	23.660	23.880	23.930	23.610	29.793	≤30
11	2462	16.530	16.610	16.680	16.470	22.594	≤30

The worst emission of data rate is MCS 0

11ax(40M)							
Channel No.	Frequency (MHz)	Maximum peak conducted output power (dBm)					Limit (dBm)
		Ant. 0	Ant. 1	Ant. 2	Ant. 3	Total	
3	2422	18.430	18.530	18.710	18.150	24.480	≤30
6	2437	19.060	19.140	19.190	19.020	25.124	≤30
9	2452	19.280	19.300	19.560	19.020	25.315	≤30

The worst emission of data rate is MCS 0

Product	Consumer Home Router		
Test Item	Maximum peak conducted output power		
Test Mode	Mode 3: Transmit Beamforming Mode		
Date of Test	2020/11/21	Test Site	SR12-H
Test Temperature	22.0°C	Test Humidity	58.0%

11ax(20M)							
Channel No.	Frequency (MHz)	Maximum peak conducted output power (dBm)					Limit (dBm)
		Ant. 0	Ant. 1	Ant. 2	Ant. 3	Total	
1	2412	22.580	22.650	22.750	22.600	28.666	≤ 30
6	2437	23.820	23.900	23.920	23.660	29.847	≤ 30
11	2462	23.680	23.720	23.810	23.440	29.685	≤ 30

The worst emission of data rate is MCS 0

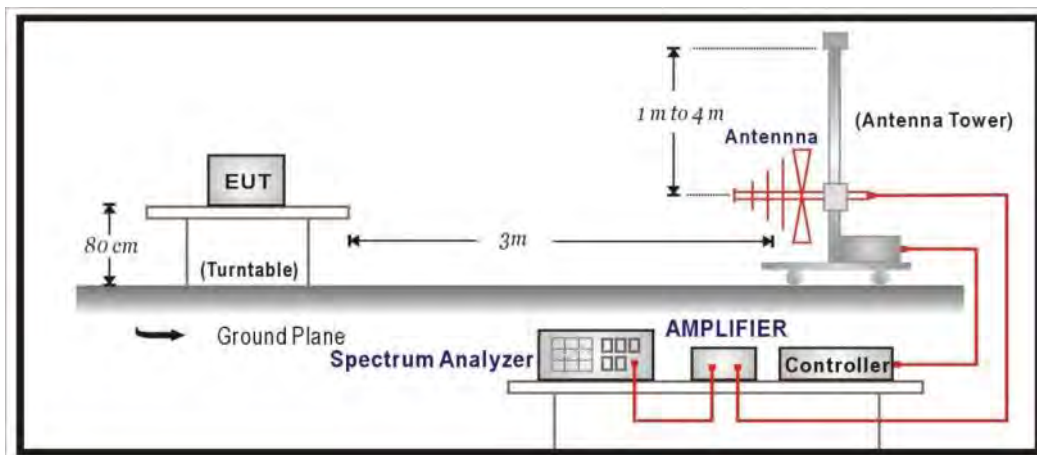
11ax(40M)							
Channel No.	Frequency (MHz)	Maximum peak conducted output power (dBm)					Limit (dBm)
		Ant. 0	Ant. 1	Ant. 2	Ant. 3	Total	
3	2422	20.680	20.880	20.830	20.650	26.782	≤ 30
6	2437	23.000	23.130	23.010	22.850	29.019	≤ 30
9	2452	21.600	21.760	21.780	21.480	27.677	≤ 30

The worst emission of data rate is MCS 0

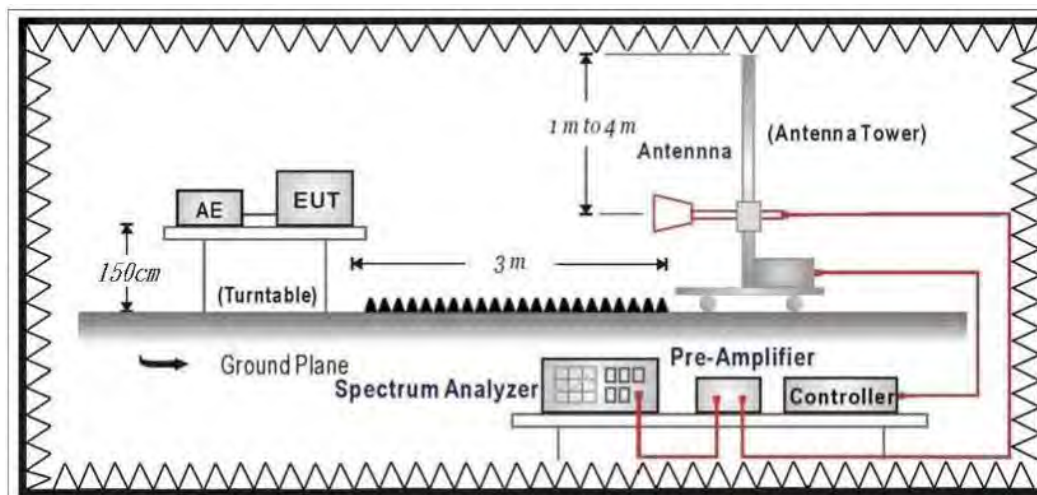
4. Radiated Emission

4.1. Test Setup

Under 1GHz Test Setup:



Above 1GHz Test Setup:



4.2. Limits

Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 20dB below the level of the fundamental or to the general radiated emission limits in paragraph 15.209, whichever is the lesser attenuation.

FCC Part 15 Subpart C Paragraph 15.209 Limits		
Frequency MHz	dBuV/m	dBuV/m
30 - 88	100	40
88 - 216	150	43.5
216 - 960	200	46
Above 960	500	54

Remarks: E field strength (dBuV/m) = 20 log E field strength (uV/m)

4.3. Test Procedure

The EUT was setup according to ANSI C63.10:2013 and tested according to DTS test procedure of KDB 558074 D01 v05r02 for compliance to FCC 47CFR 15.247 requirements. The EUT and its simulators are placed on a turn table which is 1.5 meter above ground (under 1GHz) or 1.5 meter above ground (above 1GHz). The turn table can rotate 360 degrees to determine the position of the maximum emission level.

The antenna can move up and down between 1 meter and 4 meters to find out the maximum emission level.

Both horizontal and vertical polarization of the antenna are set on measurement. In order to find the maximum emission, all of the interface cables must be manipulated according to ANSI C63.10:2013 on radiated measurement.

On any frequency or frequencies below or equal to 1000 MHz, the limits shown are based on measuring equipment employing a quasi-peak detector function and on any frequency or frequencies above 1000 MHz the radiated limits shown are based upon the use of measurement instrumentation employing an average detector function. When average radiated emission measurement are included emission measurement below 1000 MHz, there also is a limit on the radio frequency emissions, as measured using instrumentation with a peak detector function, corresponding to 20 dB above the maximum permitted average limit.

The bandwidth below 1GHz setting on the field strength meter is 120 kHz and above 1GHz is 1MHz.

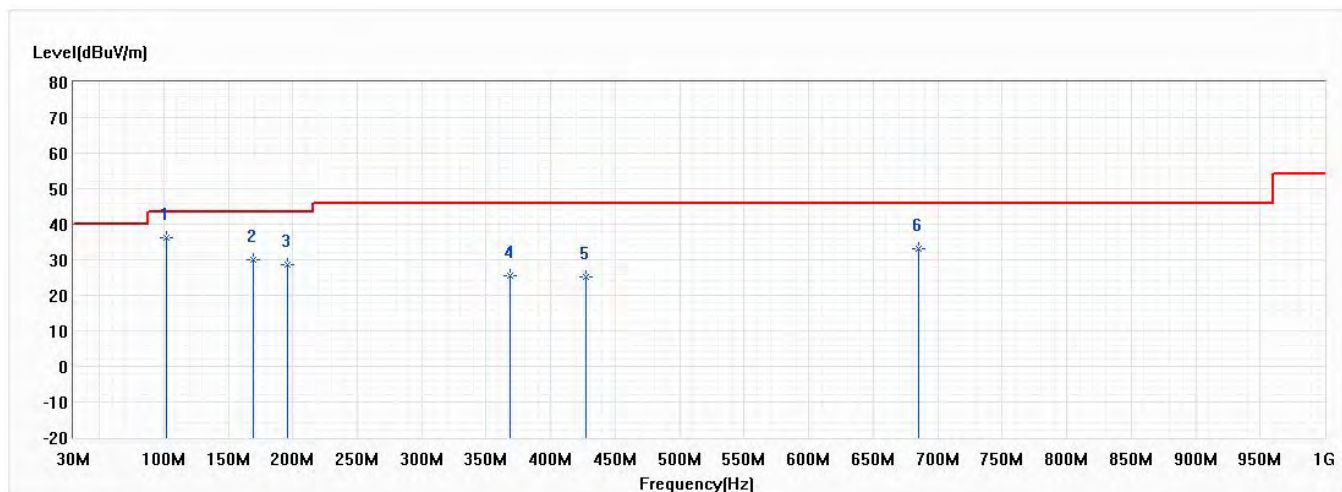
4.4. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247: 2019.

4.5. Test Result

30MHz-1GHz Spurious

Model No	CR1000A	Site	CB4-H
Test Voltage	AC 120V/60Hz	Test Date	2020/12/14
Test Mode	Mode 1: Transmit CDD Mode	Engineer	Marisa Chen
Polarity	Horizontal	Temperature (°C)	23.0
Test Condition	802.11b, Ch 11, 2.462G, BW20M	Humidity (%RH)	58.0

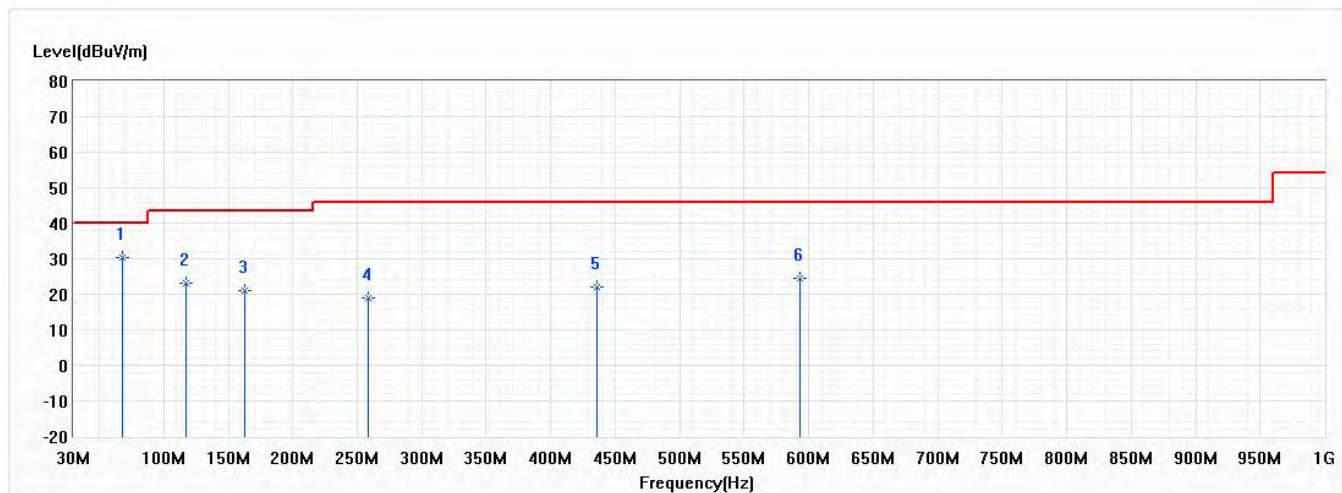


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
* 1	102.265	36.16	43.50	-7.34	39.97	-3.81	QP
2	169.680	30.02	43.50	-13.48	35.48	-5.46	QP
3	195.870	28.76	43.50	-14.74	34.40	-5.64	QP
4	368.530	25.63	46.00	-20.37	24.99	0.64	QP
5	427.700	25.13	46.00	-20.87	22.94	2.19	QP
6	685.235	33.00	46.00	-13.00	27.18	5.82	QP

Note:

1. All reading levels is Quasi-Peak value.
2. " * ", means this data is the worst value.
3. Emission Level = Reading Level + Correct Factor
4. The emission under 30MHz were not included is because their levels are lower than 20dB from limit.

Model No	CR1000A	Site	CB4-H
Test Voltage	AC 120V/60Hz	Test Date	2020/12/14
Test Mode	Mode 1: Transmit CDD Mode	Engineer	Marisa Chen
Polarity	Vertical	Temperature (°C)	23.0
Test Condition	802.11b, Ch 11,2.462G,BW20M	Humidity (%RH)	58.0



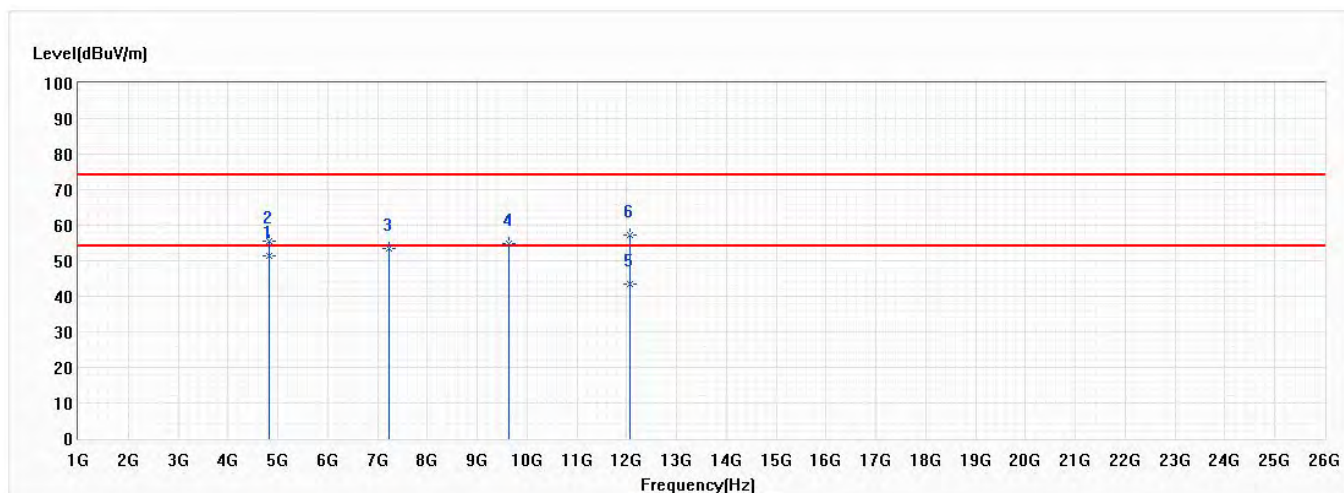
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
* 1	68.315	30.25	40.00	-9.75	39.46	-9.21	QP
2	116.815	23.18	43.50	-20.32	25.70	-2.52	QP
3	162.405	21.16	43.50	-22.34	26.25	-5.09	QP
4	258.435	18.81	46.00	-27.19	20.42	-1.61	QP
5	435.945	21.93	46.00	-24.07	19.73	2.20	QP
6	593.570	24.58	46.00	-21.42	19.75	4.83	QP

Note:

1. All reading levels is Quasi-Peak value.
2. “ * ”, means this data is the worst value.
3. Emission Level = Reading Level + Correct Factor
4. The emission under 30MHz were not included is because their levels are lower than 20dB from limit.

Above 1GHz Spurious

Model No	CR1000A	Site	CB4-H
Test Voltage	AC 120V/60Hz	Test Date	2020/10/31
Test Mode	Mode 1: Transmit CDD Mode	Engineer	Elwin Lin
Polarity	Horizontal	Temperature (°C)	24.0
Test Condition	802.11b,Ch 1,2.412G,BW20M	Humidity (%RH)	50.0

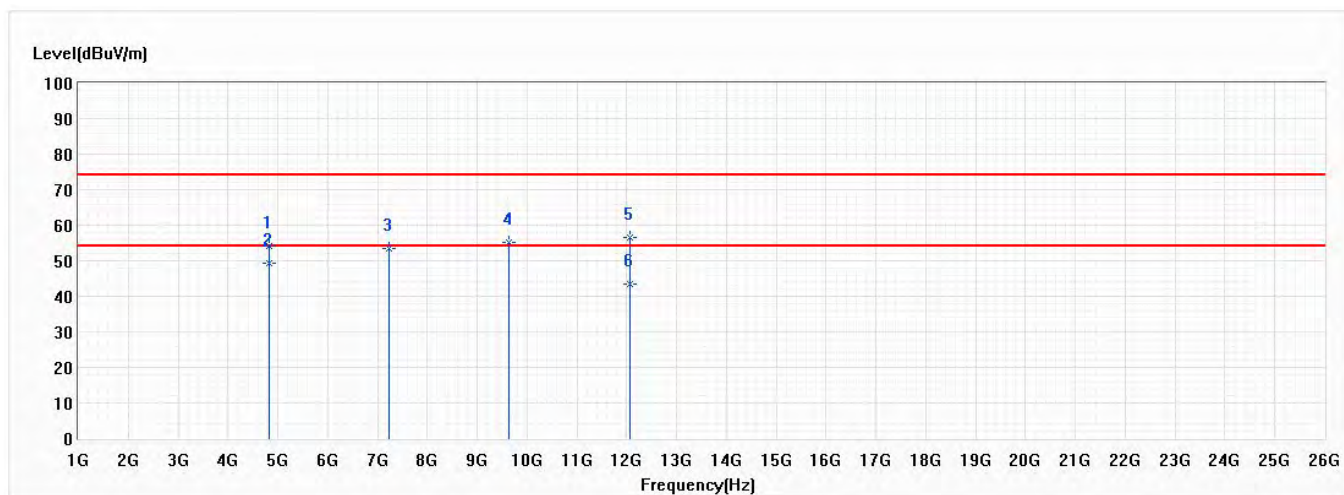


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
* 1	4824.000	51.39	54.00	-2.61	63.37	-11.98	AV
2	4824.000	55.50	74.00	-18.50	67.48	-11.98	PK
3	7236.000	53.43	74.00	-20.57	58.03	-4.60	PK
4	9648.000	54.90	74.00	-19.10	56.21	-1.31	PK
5	12060.000	43.28	54.00	-10.72	40.53	2.75	AV
6	12060.000	57.08	74.00	-16.92	54.33	2.75	PK

Note:

- 1.All reading above 1GHz is performed with peak and/or average measurements as necessary.
2. “ * ”, means this data is the worst value.
- 3.Emission Level = Reading Level + Correct Factor.
- 4.The average measurement was not performed when the peak measured data under the limit of average detection.
- 5.The emission above 13GHz were not included is because their levels are lower than 20dB form limit.

Model No	CR1000A	Site	CB4-H
Test Voltage	AC 120V/60Hz	Test Date	2020/10/31
Test Mode	Mode 1: Transmit CDD Mode	Engineer	Elwin Lin
Polarity	Vertical	Temperature (°C)	24.0
Test Condition	802.11b,Ch 1,2.412G,BW20M	Humidity (%RH)	50.0

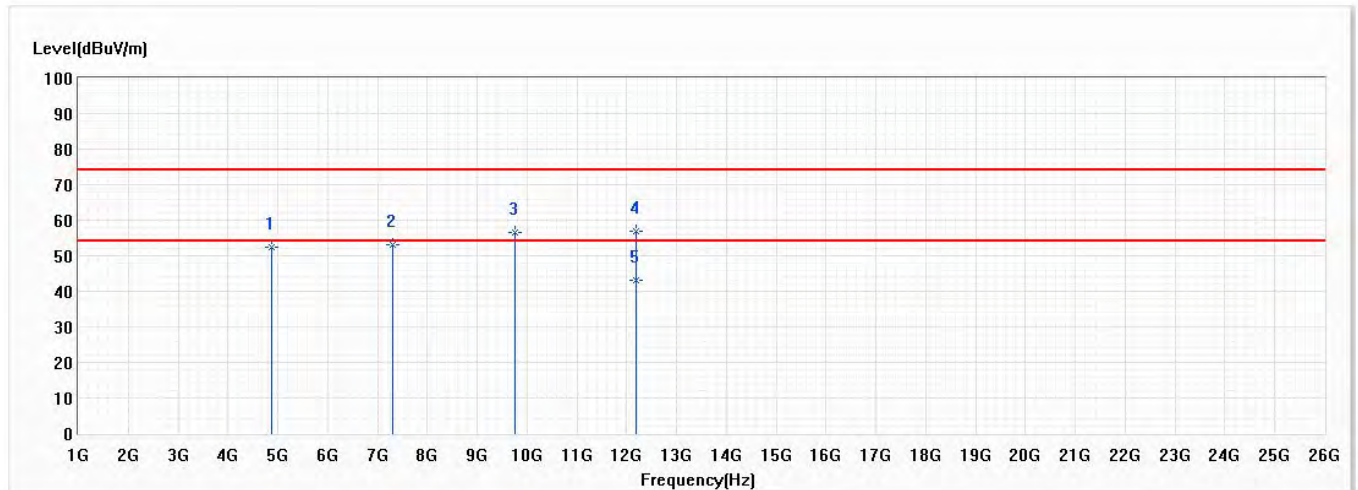


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4824.000	54.28	74.00	-19.72	66.26	-11.98	PK
* 2	4824.000	49.45	54.00	-4.55	61.43	-11.98	AV
3	7236.000	53.44	74.00	-20.56	58.04	-4.60	PK
4	9648.000	55.31	74.00	-18.69	56.62	-1.31	PK
5	12060.000	56.63	74.00	-17.37	53.88	2.75	PK
6	12060.000	43.47	54.00	-10.53	40.72	2.75	AV

Note:

- 1.All reading above 1GHz is performed with peak and/or average measurements as necessary.
2. “ * ”, means this data is the worst value.
- 3.Emission Level = Reading Level + Correct Factor.
- 4.The average measurement was not performed when the peak measured data under the limit of average detection.
- 5.The emission above 13GHz were not included is because their levels are lower than 20dB form limit.

Model No	CR1000A	Site	CB4-H
Test Voltage	AC 120V/60Hz	Test Date	2020/10/31
Test Mode	Mode 1: Transmit CDD Mode	Engineer	Elwin Lin
Polarity	Horizontal	Temperature (°C)	24.0
Test Condition	802.11b,Ch 6,2.437G,BW20M	Humidity (%RH)	50.0

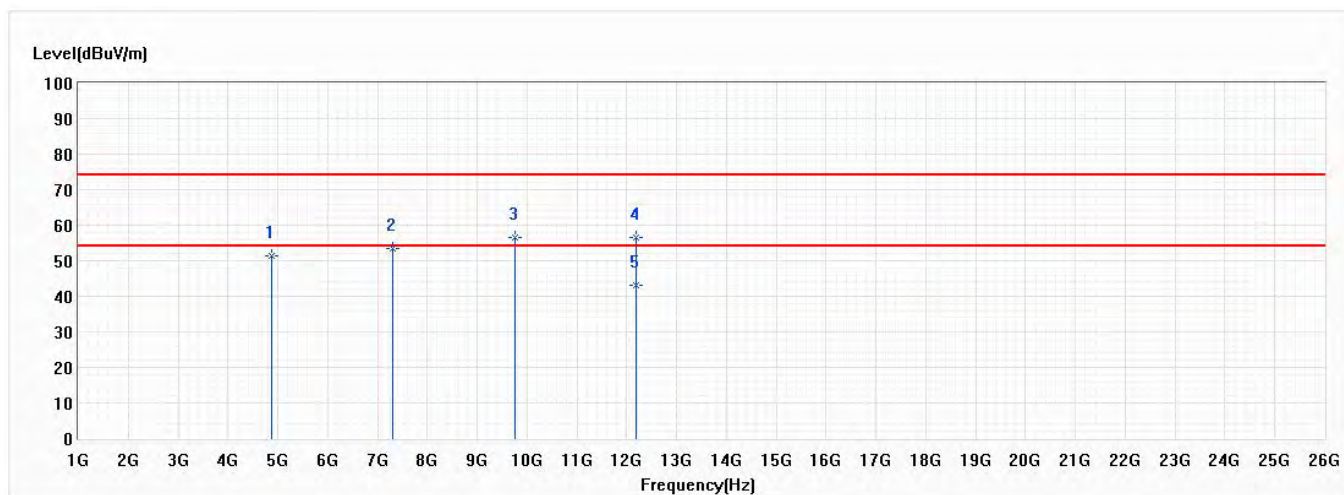


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4874.000	52.54	74.00	-21.46	64.38	-11.84	PK
2	7311.000	53.15	74.00	-20.85	57.53	-4.38	PK
3	9748.000	56.44	74.00	-17.56	57.71	-1.27	PK
4	12185.000	56.94	74.00	-17.06	54.34	2.60	PK
* 5	12185.000	43.22	54.00	-10.78	40.62	2.60	AV

Note:

- 1.All reading above 1GHz is performed with peak and/or average measurements as necessary.
2. “ * ”, means this data is the worst value.
- 3.Emission Level = Reading Level + Correct Factor.
- 4.The average measurement was not performed when the peak measured data under the limit of average detection.
- 5.The emission above 13GHz were not included is because their levels are lower than 20dB form limit.

Model No	CR1000A	Site	CB4-H
Test Voltage	AC 120V/60Hz	Test Date	2020/10/31
Test Mode	Mode 1: Transmit CDD Mode	Engineer	Elwin Lin
Polarity	Vertical	Temperature (°C)	24.0
Test Condition	802.11b,Ch 6,2.437G,BW20M	Humidity (%RH)	50.0

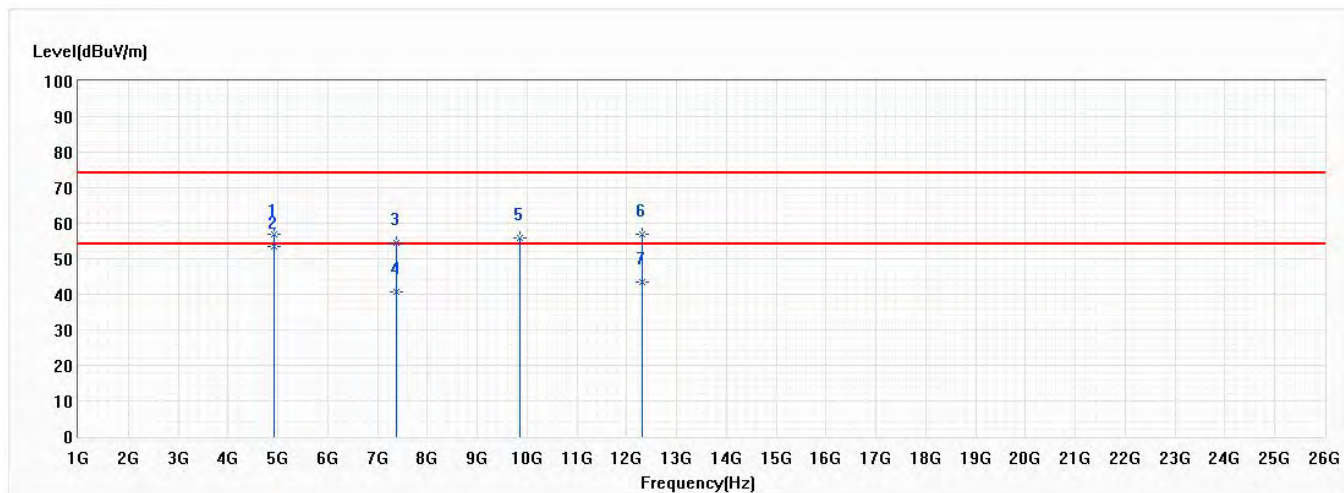


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4874.000	51.26	74.00	-22.74	63.10	-11.84	PK
2	7311.000	53.34	74.00	-20.66	57.72	-4.38	PK
3	9748.000	56.40	74.00	-17.60	57.67	-1.27	PK
4	12185.000	56.64	74.00	-17.36	54.04	2.60	PK
* 5	12185.000	43.15	54.00	-10.85	40.55	2.60	AV

Note:

- 1.All reading above 1GHz is performed with peak and/or average measurements as necessary.
2. “ * ”, means this data is the worst value.
- 3.Emission Level = Reading Level + Correct Factor.
- 4.The average measurement was not performed when the peak measured data under the limit of average detection.
- 5.The emission above 13GHz were not included is because their levels are lower than 20dB form limit.

Model No	CR1000A	Site	CB4-H
Test Voltage	AC 120V/60Hz	Test Date	2020/10/31
Test Mode	Mode 1: Transmit CDD Mode	Engineer	Elwin Lin
Polarity	Horizontal	Temperature (°C)	24.0
Test Condition	802.11b,Ch 11,2.462G,BW20M	Humidity (%RH)	50.0

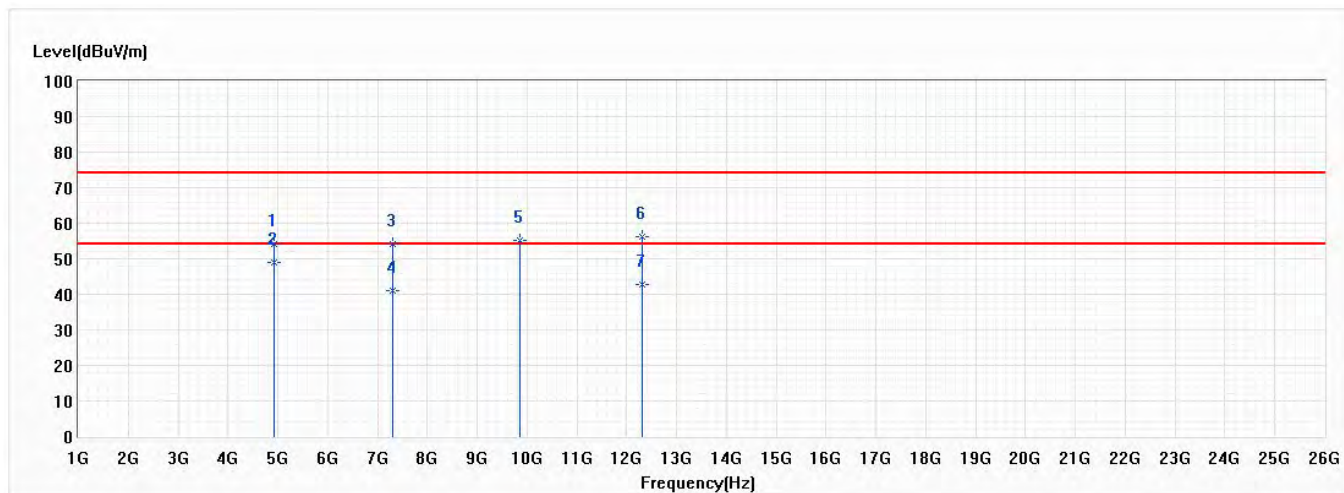


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4924.000	57.03	74.00	-16.97	68.73	-11.70	PK
* 2	4924.000	53.54	54.00	-0.46	65.24	-11.70	AV
3	7386.000	54.39	74.00	-19.61	58.56	-4.17	PK
4	7386.000	40.76	54.00	-13.24	44.93	-4.17	AV
5	9848.000	55.98	74.00	-18.02	57.20	-1.22	PK
6	12310.000	56.82	74.00	-17.18	54.36	2.46	PK
7	12310.000	43.34	54.00	-10.66	40.88	2.46	AV

Note:

- 1.All reading above 1GHz is performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst value.
- 3.Emission Level = Reading Level + Correct Factor.
- 4.The average measurement was not performed when the peak measured data under the limit of average detection.
- 5.The emission above 13GHz were not included is because their levels are lower than 20dB form limit.

Model No	CR1000A	Site	CB4-H
Test Voltage	AC 120V/60Hz	Test Date	2020/10/31
Test Mode	Mode 1: Transmit CDD Mode	Engineer	Elwin Lin
Polarity	Vertical	Temperature (°C)	24.0
Test Condition	802.11b,Ch 11,2.462G,BW20M	Humidity (%RH)	50.0

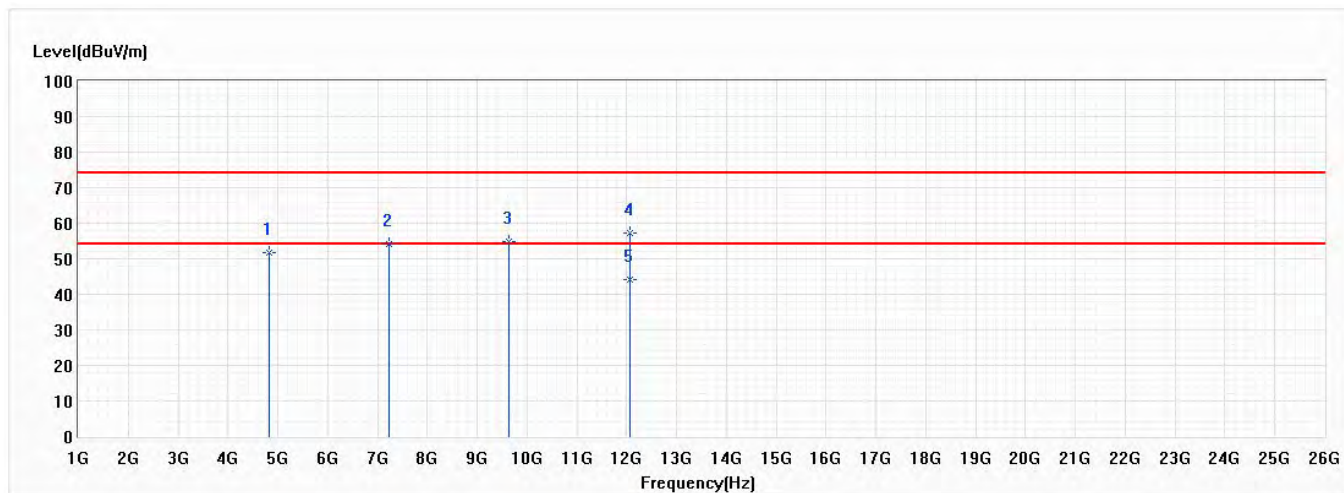


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4924.000	54.01	74.00	-19.99	65.71	-11.70	PK
* 2	4924.000	49.02	54.00	-4.98	60.72	-11.70	AV
3	7306.000	54.16	74.00	-19.84	58.55	-4.39	PK
4	7306.000	40.99	54.00	-13.01	45.38	-4.39	AV
5	9848.000	55.20	74.00	-18.80	56.42	-1.22	PK
6	12310.000	56.07	74.00	-17.93	53.61	2.46	PK
7	12310.000	42.68	54.00	-11.32	40.22	2.46	AV

Note:

- 1.All reading above 1GHz is performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst value.
- 3.Emission Level = Reading Level + Correct Factor.
- 4.The average measurement was not performed when the peak measured data under the limit of average detection.
- 5.The emission above 13GHz were not included is because their levels are lower than 20dB form limit.

Model No	CR1000A	Site	CB4-H
Test Voltage	AC 120V/60Hz	Test Date	2020/10/31
Test Mode	Mode 1: Transmit CDD Mode	Engineer	Elwin Lin
Polarity	Horizontal	Temperature (°C)	24.0
Test Condition	802.11g,Ch 1,2.412G,BW20M	Humidity (%RH)	50.0

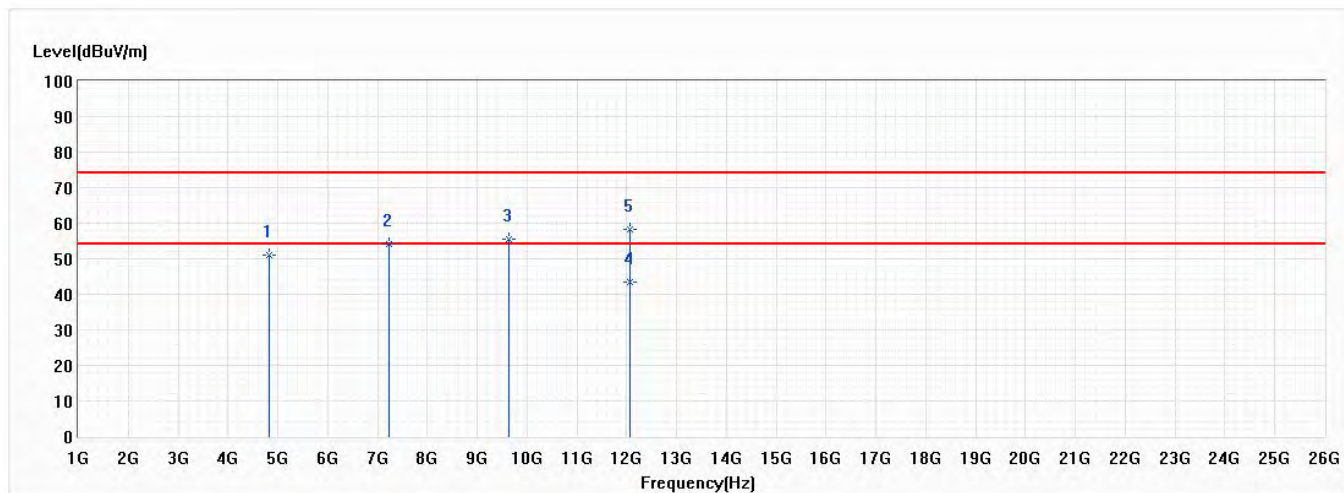


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4824.000	51.62	74.00	-22.38	63.60	-11.98	PK
2	7236.000	54.24	74.00	-19.76	58.84	-4.60	PK
3	9648.000	54.84	74.00	-19.16	56.15	-1.31	PK
4	12060.000	57.09	74.00	-16.91	54.34	2.75	PK
* 5	12060.000	44.09	54.00	-9.91	41.34	2.75	AV

Note:

- 1.All reading above 1GHz is performed with peak and/or average measurements as necessary.
2. “ * ”, means this data is the worst value.
- 3.Emission Level = Reading Level + Correct Factor.
- 4.The average measurement was not performed when the peak measured data under the limit of average detection.
- 5.The emission above 13GHz were not included is because their levels are lower than 20dB form limit.

Model No	CR1000A	Site	CB4-H
Test Voltage	AC 120V/60Hz	Test Date	2020/10/31
Test Mode	Mode 1: Transmit CDD Mode	Engineer	Elwin Lin
Polarity	Vertical	Temperature (°C)	24.0
Test Condition	802.11g,Ch 1,2.412G,BW20M	Humidity (%RH)	50.0

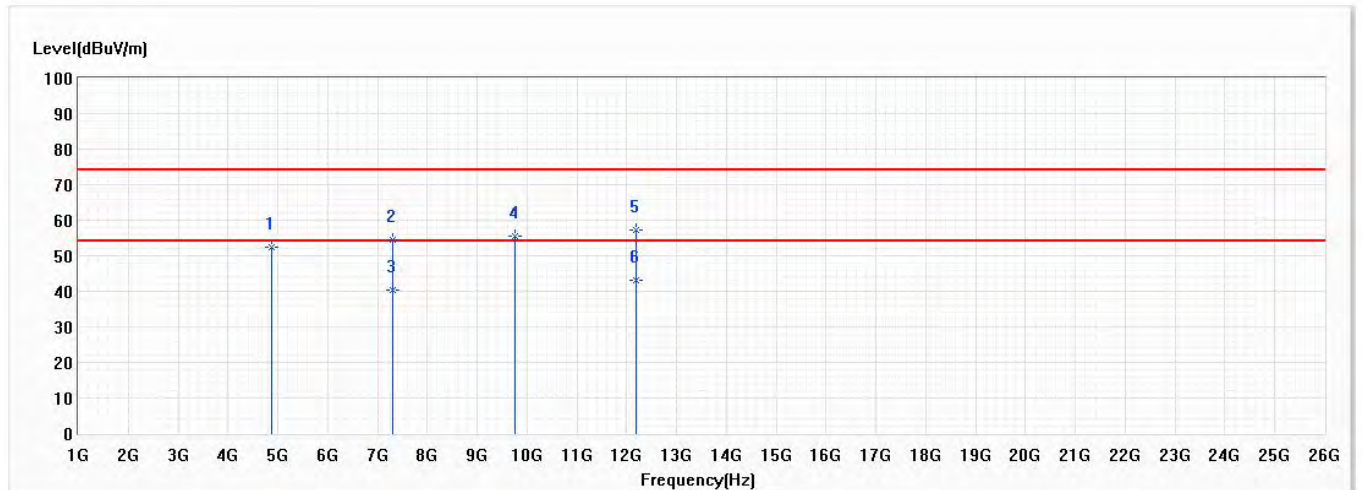


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4824.000	50.99	74.00	-23.01	62.97	-11.98	PK
2	7236.000	54.31	74.00	-19.69	58.91	-4.60	PK
3	9648.000	55.36	74.00	-18.64	56.67	-1.31	PK
* 4	12060.000	43.59	54.00	-10.41	40.84	2.75	AV
5	12060.000	58.24	74.00	-15.76	55.49	2.75	PK

Note:

- 1.All reading above 1GHz is performed with peak and/or average measurements as necessary.
2. “ * ”, means this data is the worst value.
- 3.Emission Level = Reading Level + Correct Factor.
- 4.The average measurement was not performed when the peak measured data under the limit of average detection.
- 5.The emission above 13GHz were not included is because their levels are lower than 20dB form limit.

Model No	CR1000A	Site	CB4-H
Test Voltage	AC 120V/60Hz	Test Date	2020/10/31
Test Mode	Mode 1: Transmit CDD Mode	Engineer	Elwin Lin
Polarity	Horizontal	Temperature (°C)	24.0
Test Condition	802.11g,Ch 6,2.437G,BW20M	Humidity (%RH)	50.0

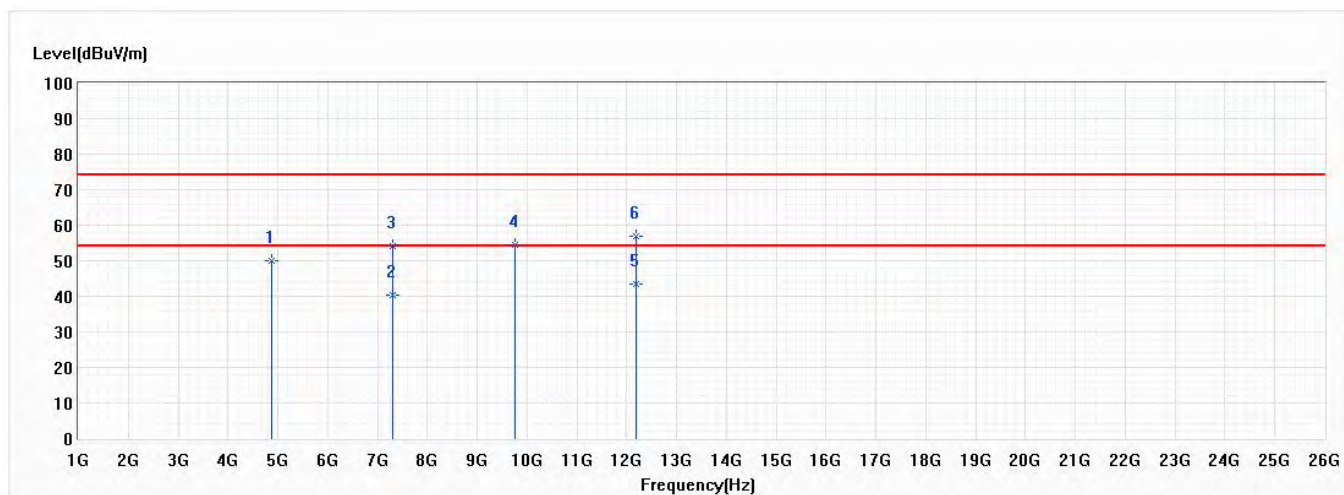


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4874.000	52.45	74.00	-21.55	64.29	-11.84	PK
2	7311.000	54.43	74.00	-19.57	58.81	-4.38	PK
3	7311.000	40.38	54.00	-13.62	44.76	-4.38	AV
4	9748.000	55.45	74.00	-18.55	56.72	-1.27	PK
5	12185.000	57.40	74.00	-16.60	54.80	2.60	PK
* 6	12185.000	43.27	54.00	-10.73	40.67	2.60	AV

Note:

- 1.All reading above 1GHz is performed with peak and/or average measurements as necessary.
2. “ * ”, means this data is the worst value.
- 3.Emission Level = Reading Level + Correct Factor.
- 4.The average measurement was not performed when the peak measured data under the limit of average detection.
- 5.The emission above 13GHz were not included is because their levels are lower than 20dB form limit.

Model No	CR1000A	Site	CB4-H
Test Voltage	AC 120V/60Hz	Test Date	2020/10/31
Test Mode	Mode 1: Transmit CDD Mode	Engineer	Elwin Lin
Polarity	Vertical	Temperature (°C)	24.0
Test Condition	802.11g,Ch 6,2.437G,BW20M	Humidity (%RH)	50.0

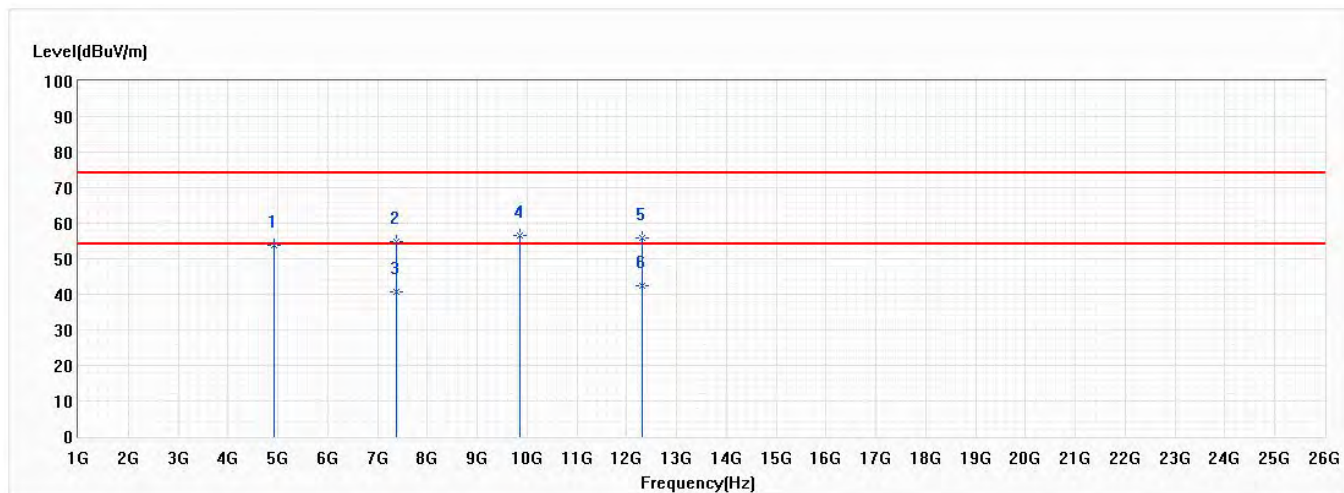


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4874.000	49.96	74.00	-24.04	61.80	-11.84	PK
2	7311.000	40.19	54.00	-13.81	44.57	-4.38	AV
3	7311.000	54.15	74.00	-19.85	58.53	-4.38	PK
4	9748.000	54.54	74.00	-19.46	55.81	-1.27	PK
* 5	12185.000	43.31	54.00	-10.69	40.71	2.60	AV
6	12185.000	56.83	74.00	-17.17	54.23	2.60	PK

Note:

- 1.All reading above 1GHz is performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst value.
- 3.Emission Level = Reading Level + Correct Factor.
- 4.The average measurement was not performed when the peak measured data under the limit of average detection.
- 5.The emission above 13GHz were not included is because their levels are lower than 20dB form limit.

Model No	CR1000A	Site	CB4-H
Test Voltage	AC 120V/60Hz	Test Date	2020/10/31
Test Mode	Mode 1: Transmit CDD Mode	Engineer	Elwin Lin
Polarity	Horizontal	Temperature (°C)	24.0
Test Condition	802.11g,Ch 11,2.462G,BW20M	Humidity (%RH)	50.0

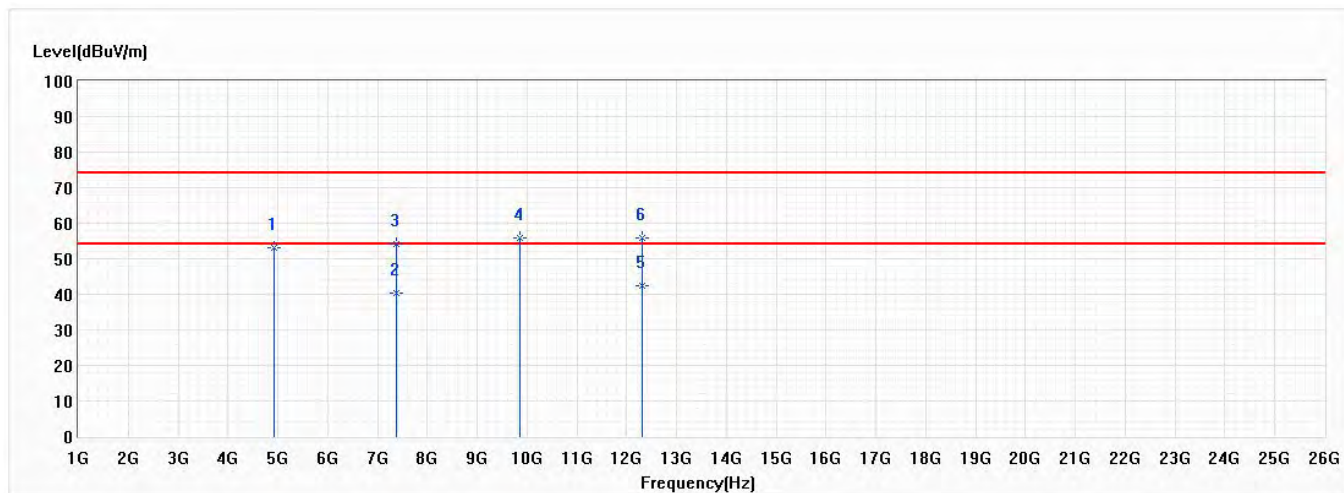


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4924.000	53.90	74.00	-20.10	65.60	-11.70	PK
2	7386.000	54.88	74.00	-19.12	59.05	-4.17	PK
3	7386.000	40.60	54.00	-13.40	44.77	-4.17	AV
4	9848.000	56.60	74.00	-17.40	57.82	-1.22	PK
5	12310.000	56.02	74.00	-17.98	53.56	2.46	PK
* 6	12310.000	42.49	54.00	-11.51	40.03	2.46	AV

Note:

- 1.All reading above 1GHz is performed with peak and/or average measurements as necessary.
2. “ * ”, means this data is the worst value.
- 3.Emission Level = Reading Level + Correct Factor.
- 4.The average measurement was not performed when the peak measured data under the limit of average detection.
- 5.The emission above 13GHz were not included is because their levels are lower than 20dB form limit.

Model No	CR1000A	Site	CB4-H
Test Voltage	AC 120V/60Hz	Test Date	2020/10/31
Test Mode	Mode 1: Transmit CDD Mode	Engineer	Elwin Lin
Polarity	Vertical	Temperature (°C)	24.0
Test Condition	802.11g,Ch 11,2.462G,BW20M	Humidity (%RH)	50.0

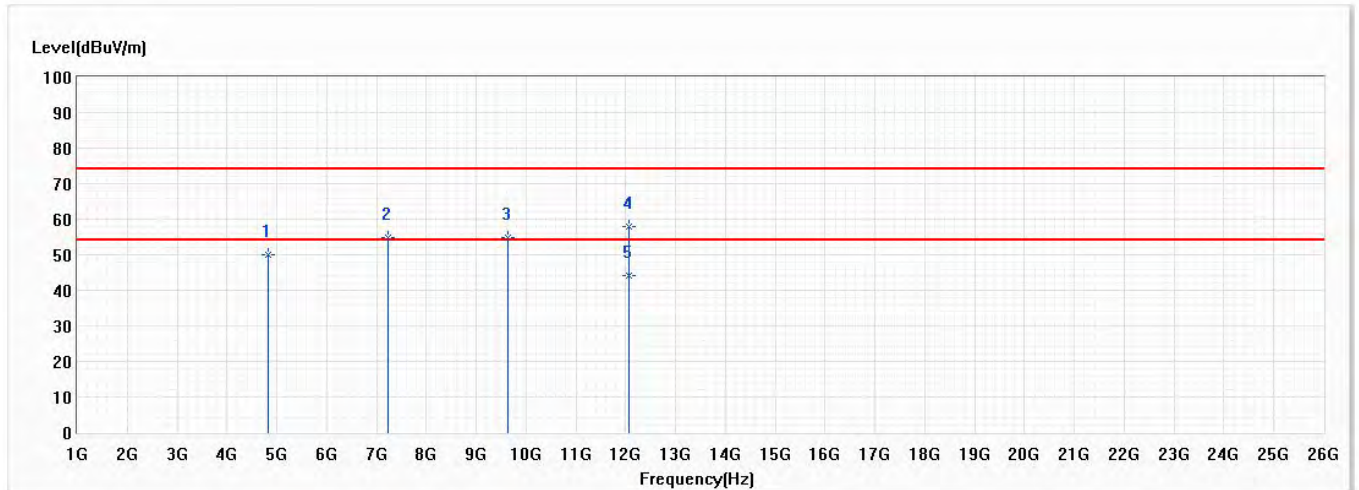


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4924.000	53.12	74.00	-20.88	64.82	-11.70	PK
2	7386.000	40.49	54.00	-13.51	44.66	-4.17	AV
3	7386.000	54.28	74.00	-19.72	58.45	-4.17	PK
4	9848.000	55.72	74.00	-18.28	56.94	-1.22	PK
* 5	12310.000	42.52	54.00	-11.48	40.06	2.46	AV
6	12310.000	55.88	74.00	-18.12	53.42	2.46	PK

Note:

- 1.All reading above 1GHz is performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst value.
- 3.Emission Level = Reading Level + Correct Factor.
- 4.The average measurement was not performed when the peak measured data under the limit of average detection.
- 5.The emission above 13GHz were not included is because their levels are lower than 20dB form limit.

Model No	CR1000A	Site	CB4-H
Test Voltage	AC 120V/60Hz	Test Date	2020/11/7
Test Mode	Mode 2: Transmit RU Mode_Full	Engineer	Elwin Lin
Polarity	Horizontal	Temperature (°C)	24.0
Test Condition	802.11ax,Ch 1,2.412G,BW20M	Humidity (%RH)	50.0

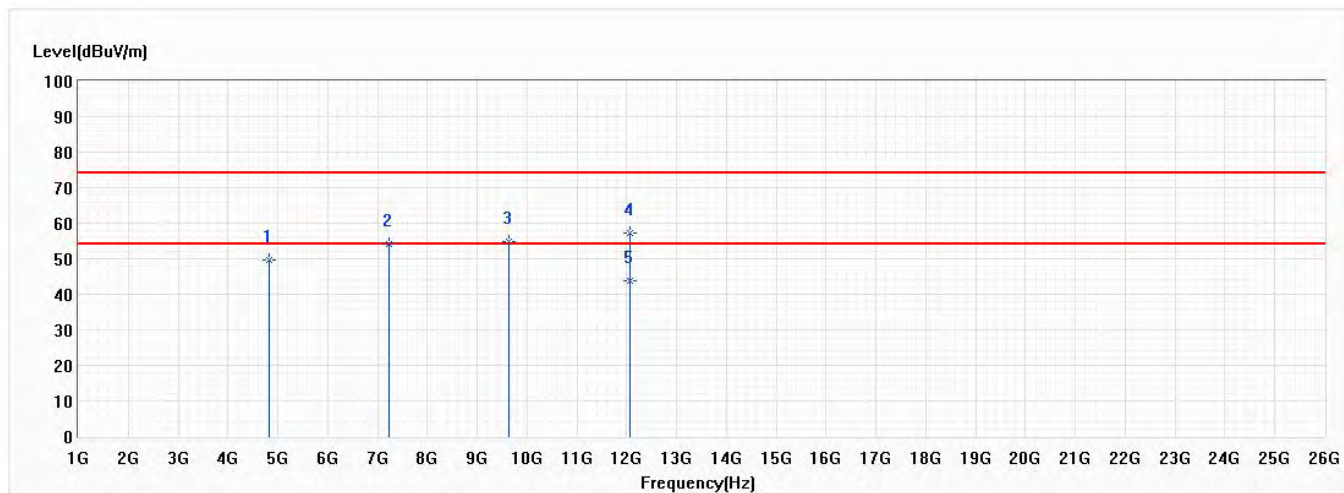


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4824.000	50.12	74.00	-23.88	62.10	-11.98	PK
2	7236.000	54.84	74.00	-19.16	59.44	-4.60	PK
3	9648.000	54.79	74.00	-19.21	56.10	-1.31	PK
4	12060.000	57.89	74.00	-16.11	55.14	2.75	PK
* 5	12060.000	44.01	54.00	-9.99	41.26	2.75	AV

Note:

1. All reading above 1GHz is performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst value.
3. Emission Level = Reading Level + Correct Factor.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission above 13GHz were not included is because their levels are lower than 20dB form limit.

Model No	CR1000A	Site	CB4-H
Test Voltage	AC 120V/60Hz	Test Date	2020/11/7
Test Mode	Mode 2: Transmit RU Mode_Full	Engineer	Elwin Lin
Polarity	Vertical	Temperature (°C)	24.0
Test Condition	802.11ax,Ch 1,2.412G,BW20M	Humidity (%RH)	50.0

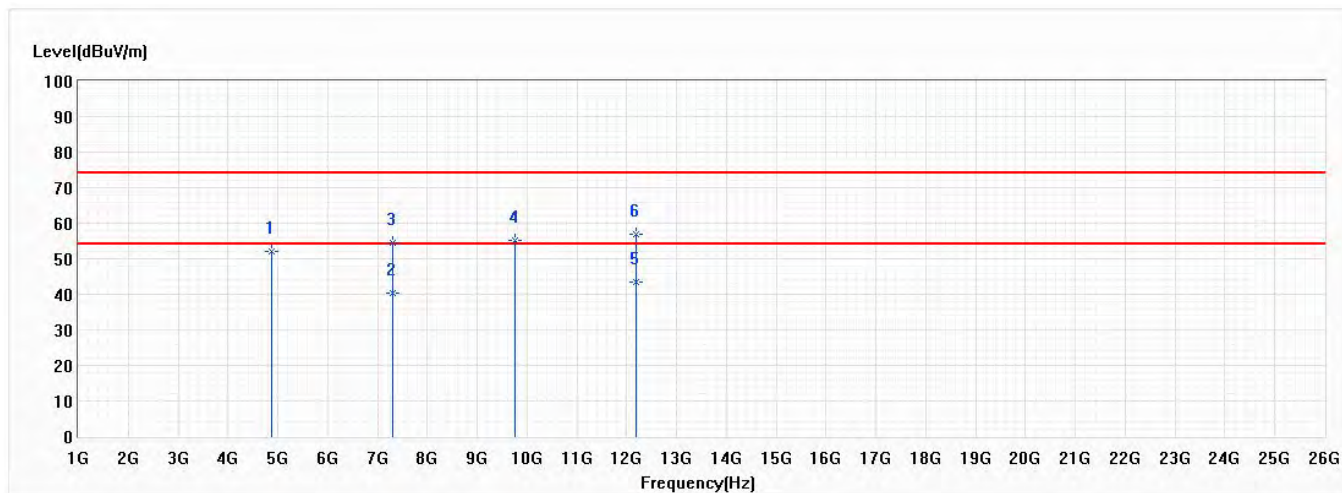


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4824.000	49.76	74.00	-24.24	61.74	-11.98	PK
2	7236.000	54.11	74.00	-19.89	58.71	-4.60	PK
3	9648.000	54.84	74.00	-19.16	56.15	-1.31	PK
4	12060.000	57.20	74.00	-16.80	54.45	2.75	PK
* 5	12060.000	43.86	54.00	-10.14	41.11	2.75	AV

Note:

- 1.All reading above 1GHz is performed with peak and/or average measurements as necessary.
2. “ * ”, means this data is the worst value.
- 3.Emission Level = Reading Level + Correct Factor.
- 4.The average measurement was not performed when the peak measured data under the limit of average detection.
- 5.The emission above 13GHz were not included is because their levels are lower than 20dB form limit.

Model No	CR1000A	Site	CB4-H
Test Voltage	AC 120V/60Hz	Test Date	2020/11/7
Test Mode	Mode 2: Transmit RU Mode_Full	Engineer	Elwin Lin
Polarity	Horizontal	Temperature (°C)	24.0
Test Condition	802.11ax,Ch 6,2.437G,BW20M	Humidity (%RH)	50.0

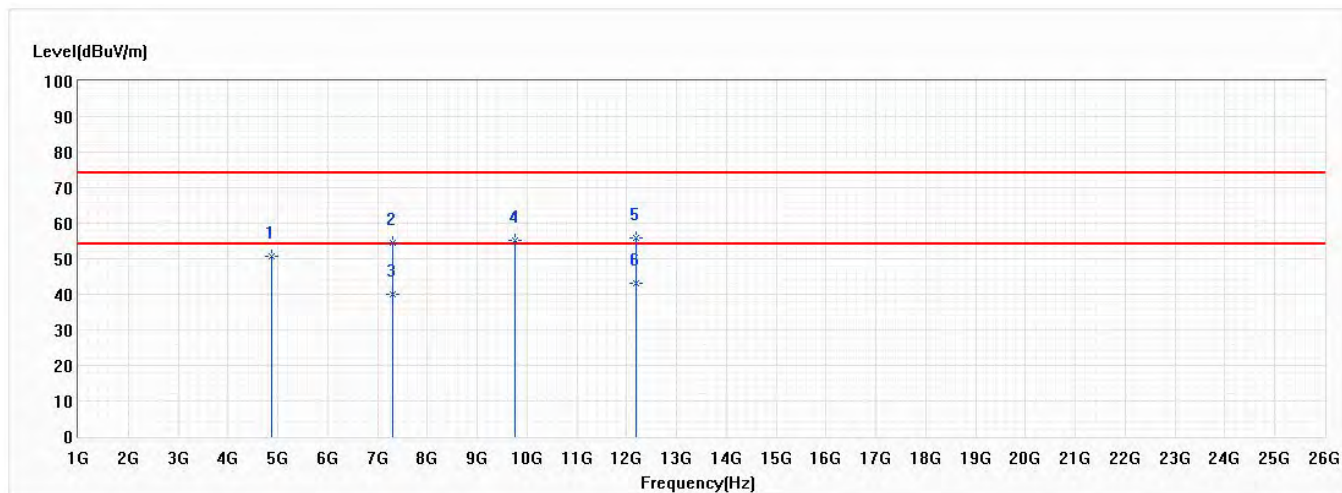


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4874.000	51.93	74.00	-22.07	63.77	-11.84	PK
2	7311.000	40.31	54.00	-13.69	44.69	-4.38	AV
3	7311.000	54.64	74.00	-19.36	59.02	-4.38	PK
4	9748.000	55.11	74.00	-18.89	56.38	-1.27	PK
* 5	12185.000	43.41	54.00	-10.59	40.81	2.60	AV
6	12185.000	56.93	74.00	-17.07	54.33	2.60	PK

Note:

- 1.All reading above 1GHz is performed with peak and/or average measurements as necessary.
2. “ * ”, means this data is the worst value.
- 3.Emission Level = Reading Level + Correct Factor.
- 4.The average measurement was not performed when the peak measured data under the limit of average detection.
- 5.The emission above 13GHz were not included is because their levels are lower than 20dB form limit.

Model No	CR1000A	Site	CB4-H
Test Voltage	AC 120V/60Hz	Test Date	2020/11/7
Test Mode	Mode 2: Transmit RU Mode_Full	Engineer	Elwin Lin
Polarity	Vertical	Temperature (°C)	24.0
Test Condition	802.11ax,Ch 6,2.437G,BW20M	Humidity (%RH)	50.0

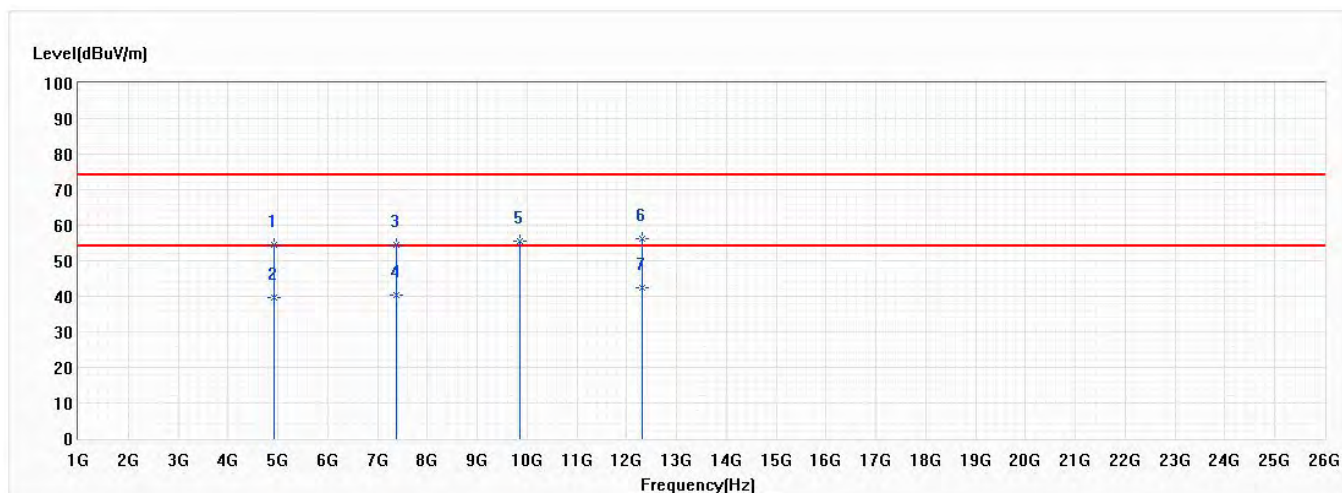


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4874.000	50.62	74.00	-23.38	62.46	-11.84	PK
2	7311.000	54.37	74.00	-19.63	58.75	-4.38	PK
3	7311.000	40.03	54.00	-13.97	44.41	-4.38	AV
4	9748.000	55.04	74.00	-18.96	56.31	-1.27	PK
5	12185.000	55.89	74.00	-18.11	53.29	2.60	PK
* 6	12185.000	42.98	54.00	-11.02	40.38	2.60	AV

Note:

- 1.All reading above 1GHz is performed with peak and/or average measurements as necessary.
2. “ * ”, means this data is the worst value.
- 3.Emission Level = Reading Level + Correct Factor.
- 4.The average measurement was not performed when the peak measured data under the limit of average detection.
- 5.The emission above 13GHz were not included is because their levels are lower than 20dB form limit.

Model No	CR1000A	Site	CB4-H
Test Voltage	AC 120V/60Hz	Test Date	2020/11/7
Test Mode	Mode 2: Transmit RU Mode_Full	Engineer	Elwin Lin
Polarity	Horizontal	Temperature (°C)	24.0
Test Condition	802.11ax,Ch 11,2.462G,BW20M	Humidity (%RH)	50.0

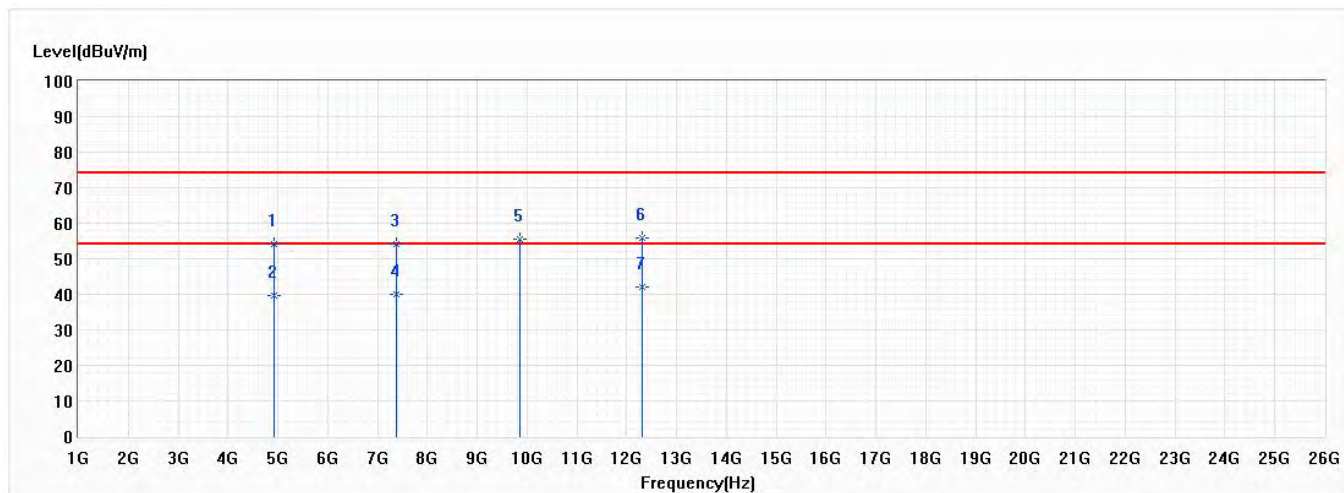


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4924.000	54.61	74.00	-19.39	66.31	-11.70	PK
2	4924.000	39.82	54.00	-14.18	51.52	-11.70	AV
3	7386.000	54.59	74.00	-19.41	58.76	-4.17	PK
4	7386.000	40.50	54.00	-13.50	44.67	-4.17	AV
5	9848.000	55.43	74.00	-18.57	56.65	-1.22	PK
6	12310.000	56.11	74.00	-17.89	53.65	2.46	PK
* 7	12310.000	42.43	54.00	-11.57	39.97	2.46	AV

Note:

- 1.All reading above 1GHz is performed with peak and/or average measurements as necessary.
2. “ * ”, means this data is the worst value.
- 3.Emission Level = Reading Level + Correct Factor.
- 4.The average measurement was not performed when the peak measured data under the limit of average detection.
- 5.The emission above 13GHz were not included is because their levels are lower than 20dB form limit.

Model No	CR1000A	Site	CB4-H
Test Voltage	AC 120V/60Hz	Test Date	2020/11/7
Test Mode	Mode 2: Transmit RU Mode_Full	Engineer	Elwin Lin
Polarity	Vertical	Temperature (°C)	24.0
Test Condition	802.11ax,Ch 11,2.462G,BW20M	Humidity (%RH)	50.0

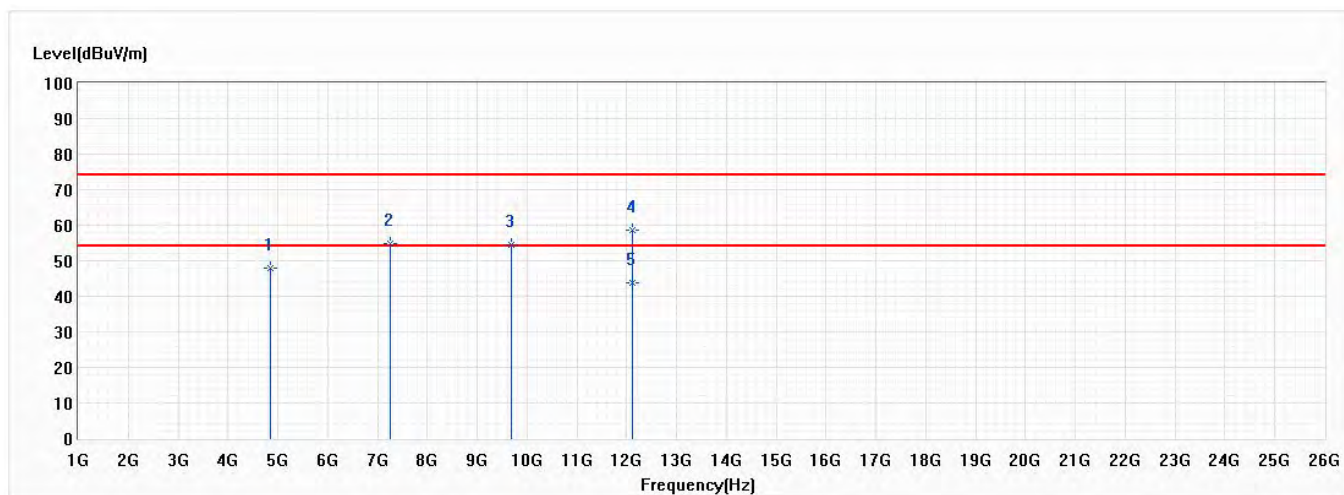


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4924.000	54.28	74.00	-19.72	65.98	-11.70	PK
2	4924.000	39.50	54.00	-14.50	51.20	-11.70	AV
3	7386.000	54.15	74.00	-19.85	58.32	-4.17	PK
4	7386.000	39.96	54.00	-14.04	44.13	-4.17	AV
5	9848.000	55.67	74.00	-18.33	56.89	-1.22	PK
6	12310.000	55.86	74.00	-18.14	53.40	2.46	PK
* 7	12310.000	41.92	54.00	-12.08	39.46	2.46	AV

Note:

- 1.All reading above 1GHz is performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst value.
- 3.Emission Level = Reading Level + Correct Factor.
- 4.The average measurement was not performed when the peak measured data under the limit of average detection.
- 5.The emission above 13GHz were not included is because their levels are lower than 20dB form limit.

Model No	CR1000A	Site	CB4-H
Test Voltage	AC 120V/60Hz	Test Date	2020/11/7
Test Mode	Mode 2: Transmit RU Mode_Full	Engineer	Elwin Lin
Polarity	Horizontal	Temperature (°C)	24.0
Test Condition	802.11ax,Ch3,2.422G,BW40M	Humidity (%RH)	50.0

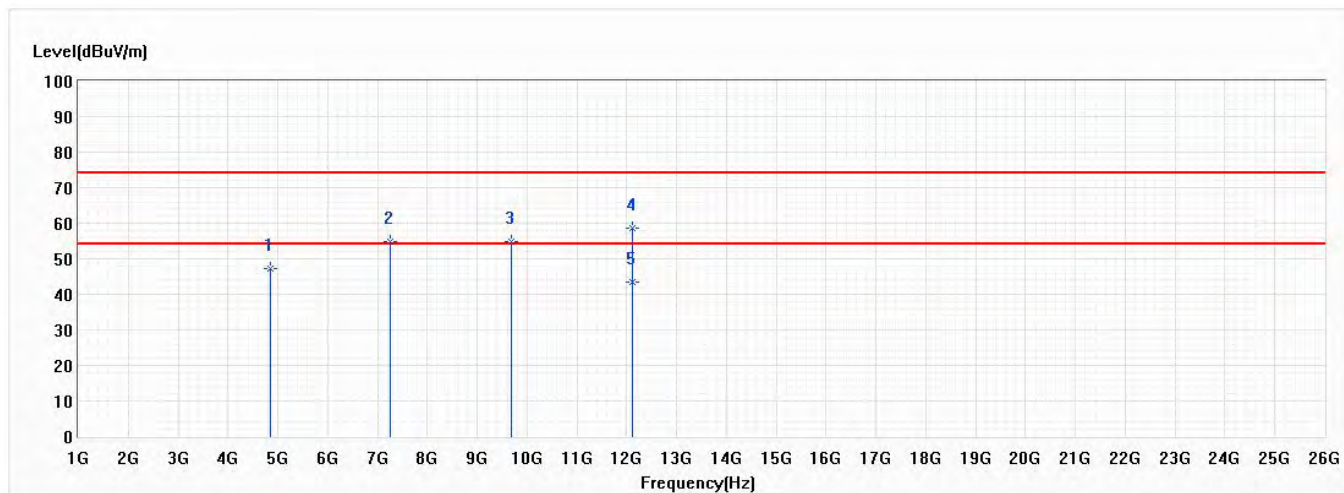


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4844.000	47.88	74.00	-26.12	59.81	-11.93	PK
2	7266.000	54.98	74.00	-19.02	59.49	-4.51	PK
3	9688.000	54.58	74.00	-19.42	55.88	-1.30	PK
4	12110.000	58.64	74.00	-15.36	55.96	2.68	PK
* 5	12110.000	43.90	54.00	-10.10	41.22	2.68	AV

Note:

- 1.All reading above 1GHz is performed with peak and/or average measurements as necessary.
2. “ * ”, means this data is the worst value.
- 3.Emission Level = Reading Level + Correct Factor.
- 4.The average measurement was not performed when the peak measured data under the limit of average detection.
- 5.The emission above 13GHz were not included is because their levels are lower than 20dB form limit.

Model No	CR1000A	Site	CB4-H
Test Voltage	AC 120V/60Hz	Test Date	2020/11/7
Test Mode	Mode 2: Transmit RU Mode_Full	Engineer	Elwin Lin
Polarity	Vertical	Temperature (°C)	24.0
Test Condition	802.11ax,Ch3,2.422G,BW40M	Humidity (%RH)	50.0

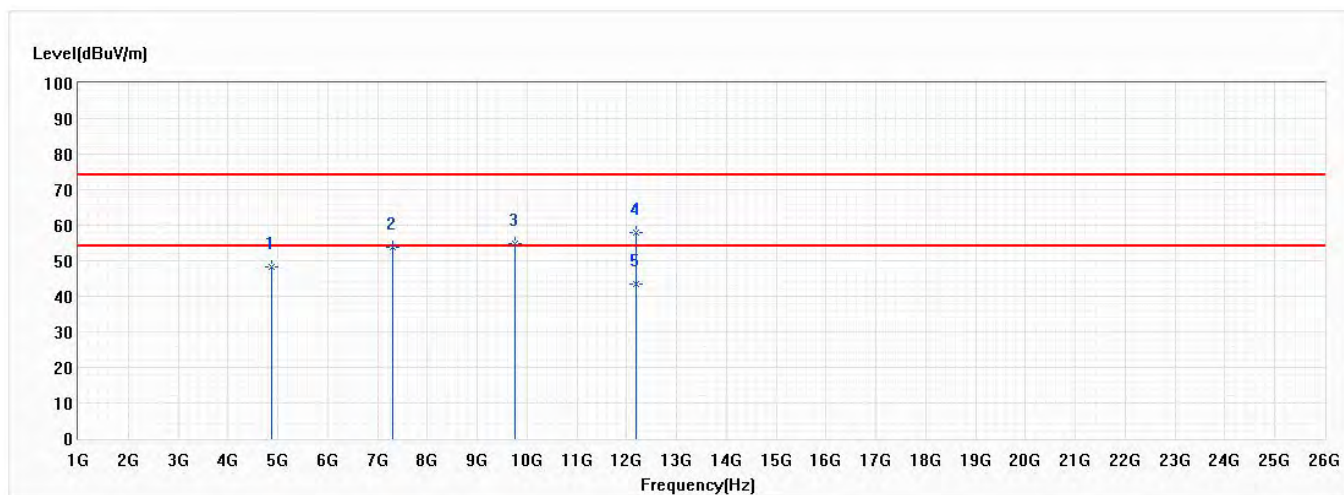


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4844.000	47.21	74.00	-26.79	59.14	-11.93	PK
2	7266.000	54.82	74.00	-19.18	59.33	-4.51	PK
3	9688.000	54.67	74.00	-19.33	55.97	-1.30	PK
4	12110.000	58.47	74.00	-15.53	55.79	2.68	PK
* 5	12110.000	43.55	54.00	-10.45	40.87	2.68	AV

Note:

- 1.All reading above 1GHz is performed with peak and/or average measurements as necessary.
2. “ * ”, means this data is the worst value.
- 3.Emission Level = Reading Level + Correct Factor.
- 4.The average measurement was not performed when the peak measured data under the limit of average detection.
- 5.The emission above 13GHz were not included is because their levels are lower than 20dB form limit.

Model No	CR1000A	Site	CB4-H
Test Voltage	AC 120V/60Hz	Test Date	2020/11/7
Test Mode	Mode 2: Transmit RU Mode_Full	Engineer	Elwin Lin
Polarity	Horizontal	Temperature (°C)	24.0
Test Condition	802.11ax,Ch6,2.437G,BW40M	Humidity (%RH)	50.0

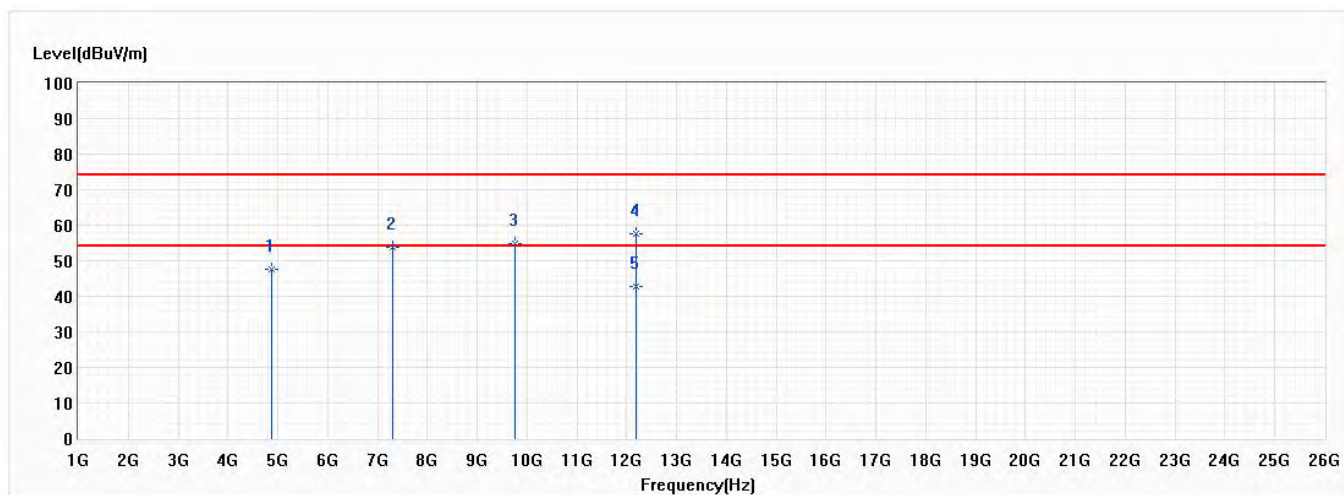


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4874.000	48.29	74.00	-25.71	60.13	-11.84	PK
2	7311.000	53.95	74.00	-20.05	58.33	-4.38	PK
3	9748.000	54.76	74.00	-19.24	56.03	-1.27	PK
4	12185.000	57.76	74.00	-16.24	55.16	2.60	PK
* 5	12185.000	43.33	54.00	-10.67	40.73	2.60	AV

Note:

- 1.All reading above 1GHz is performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst value.
- 3.Emission Level = Reading Level + Correct Factor.
- 4.The average measurement was not performed when the peak measured data under the limit of average detection.
- 5.The emission above 13GHz were not included is because their levels are lower than 20dB form limit.

Model No	CR1000A	Site	CB4-H
Test Voltage	AC 120V/60Hz	Test Date	2020/11/7
Test Mode	Mode 2: Transmit RU Mode_Full	Engineer	Elwin Lin
Polarity	Vertical	Temperature (°C)	24.0
Test Condition	802.11ax,Ch6,2.437G,BW40M	Humidity (%RH)	50.0

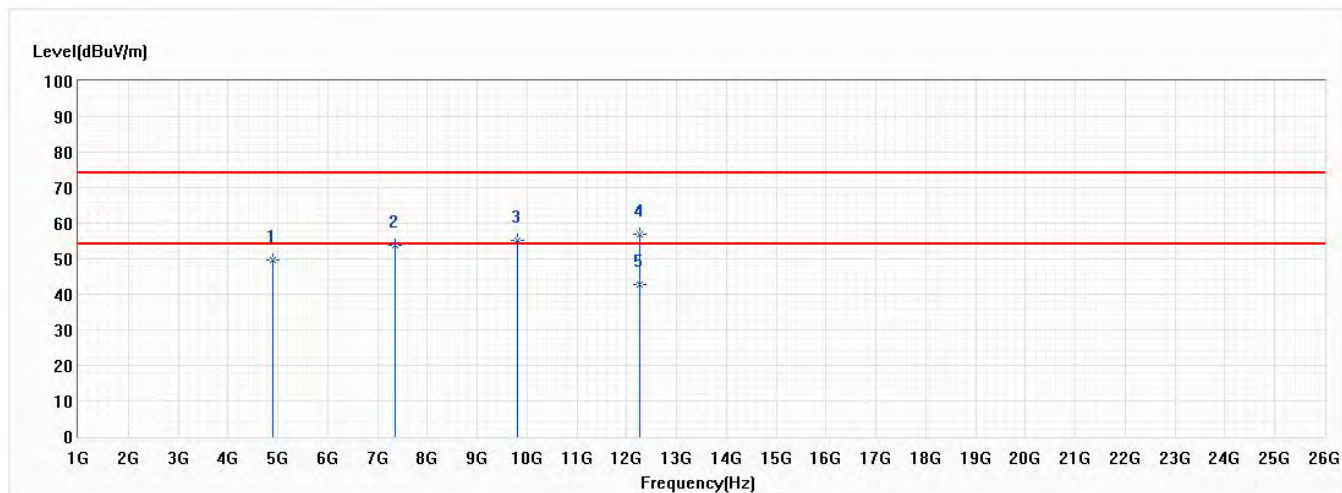


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4874.000	47.63	74.00	-26.37	59.47	-11.84	PK
2	7311.000	53.73	74.00	-20.27	58.11	-4.38	PK
3	9748.000	54.87	74.00	-19.13	56.14	-1.27	PK
4	12185.000	57.50	74.00	-16.50	54.90	2.60	PK
* 5	12185.000	42.86	54.00	-11.14	40.26	2.60	AV

Note:

- 1.All reading above 1GHz is performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst value.
- 3.Emission Level = Reading Level + Correct Factor.
- 4.The average measurement was not performed when the peak measured data under the limit of average detection.
- 5.The emission above 13GHz were not included is because their levels are lower than 20dB form limit.

Model No	CR1000A	Site	CB4-H
Test Voltage	AC 120V/60Hz	Test Date	2020/11/7
Test Mode	Mode 2: Transmit RU Mode_Full	Engineer	Elwin Lin
Polarity	Horizontal	Temperature (°C)	24.0
Test Condition	802.11ax,Ch9,2.452G,BW40M	Humidity (%RH)	50.0

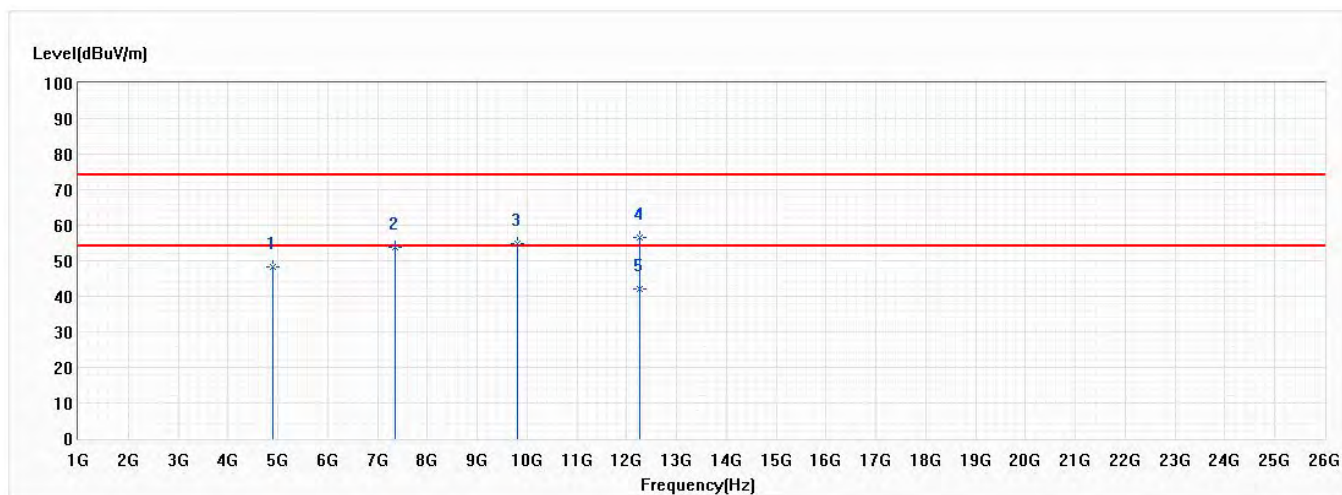


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4904.000	49.76	74.00	-24.24	61.52	-11.76	PK
2	7356.000	53.89	74.00	-20.11	58.14	-4.25	PK
3	9808.000	55.05	74.00	-18.95	56.29	-1.24	PK
4	12260.000	56.74	74.00	-17.26	54.23	2.51	PK
* 5	12260.000	42.84	54.00	-11.16	40.33	2.51	AV

Note:

- 1.All reading above 1GHz is performed with peak and/or average measurements as necessary.
2. “ * ”, means this data is the worst value.
- 3.Emission Level = Reading Level + Correct Factor.
- 4.The average measurement was not performed when the peak measured data under the limit of average detection.
- 5.The emission above 13GHz were not included is because their levels are lower than 20dB form limit.

Model No	CR1000A	Site	CB4-H
Test Voltage	AC 120V/60Hz	Test Date	2020/11/7
Test Mode	Mode 2: Transmit RU Mode_Full	Engineer	Elwin Lin
Polarity	Vertical	Temperature (°C)	24.0
Test Condition	802.11ax,Ch9,2.452G,BW40M	Humidity (%RH)	50.0

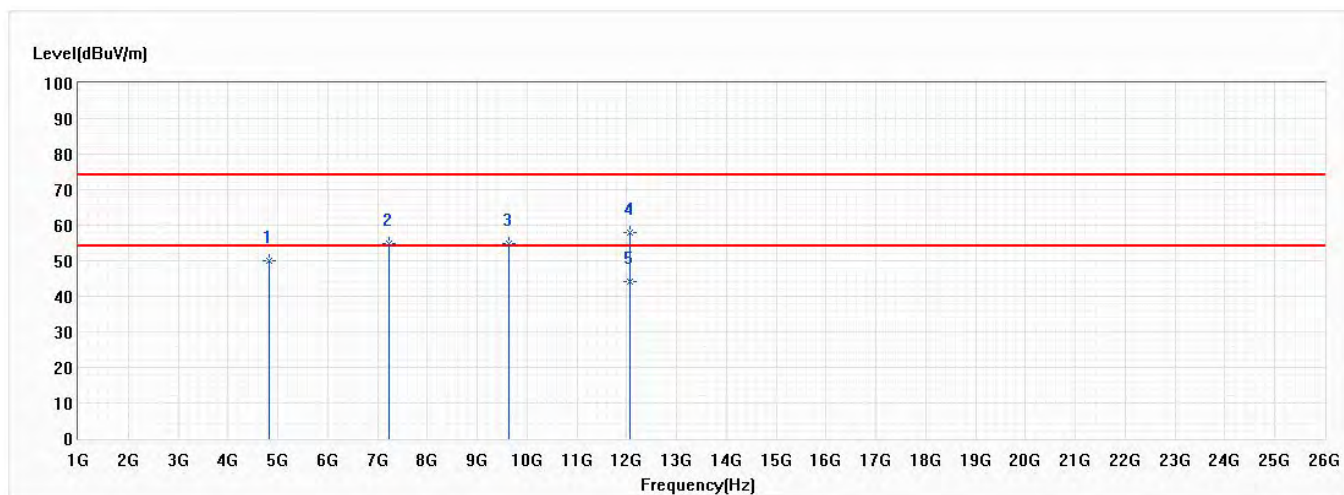


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4904.000	48.36	74.00	-25.64	60.12	-11.76	PK
2	7356.000	53.77	74.00	-20.23	58.02	-4.25	PK
3	9808.000	54.99	74.00	-19.01	56.23	-1.24	PK
4	12260.000	56.50	74.00	-17.50	53.99	2.51	PK
* 5	12260.000	42.19	54.00	-11.81	39.68	2.51	AV

Note:

- 1.All reading above 1GHz is performed with peak and/or average measurements as necessary.
2. “ * ”, means this data is the worst value.
- 3.Emission Level = Reading Level + Correct Factor.
- 4.The average measurement was not performed when the peak measured data under the limit of average detection.
- 5.The emission above 13GHz were not included is because their levels are lower than 20dB form limit.

Model No	CR1000A	Site	CB4-H
Test Voltage	AC 120V/60Hz	Test Date	2020/11/19
Test Mode	Mode 3: Transmit Beamforming Mode	Engineer	Elwin Lin
Polarity	Horizontal	Temperature (°C)	24.0
Test Condition	802.11ax,Ch1,2.412G,BW20M	Humidity (%RH)	50.0

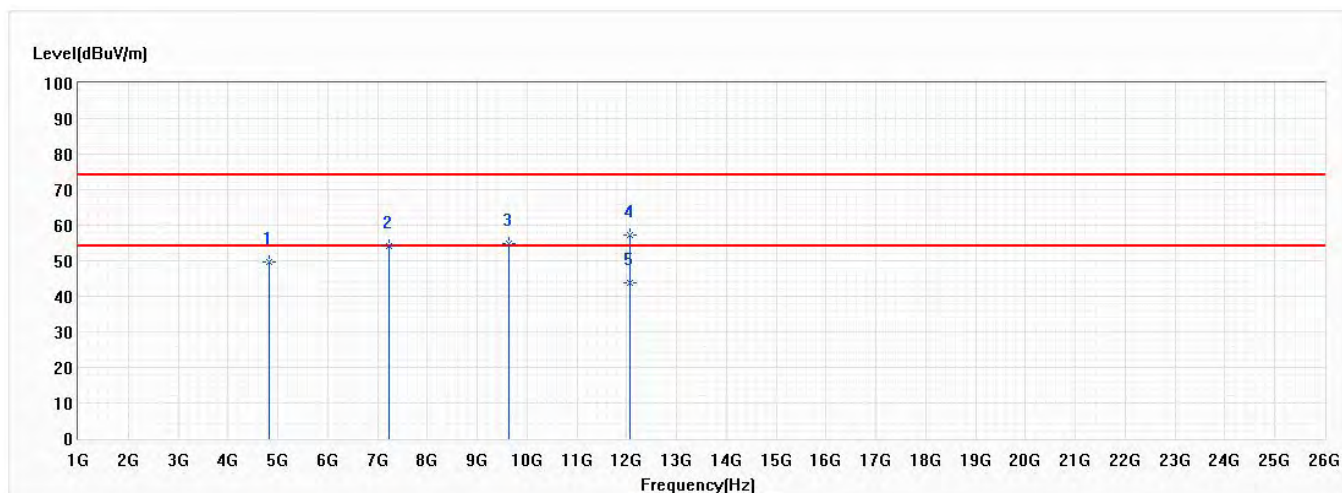


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4824.000	50.08	74.00	-23.92	62.06	-11.98	PK
2	7236.000	54.71	74.00	-19.29	59.31	-4.60	PK
3	9648.000	54.75	74.00	-19.25	56.06	-1.31	PK
4	12060.000	57.86	74.00	-16.14	55.11	2.75	PK
* 5	12060.000	43.98	54.00	-10.02	41.23	2.75	AV

Note:

1. All reading above 1GHz is performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.
4. The fundamental for reference only, it's not restricted by unwanted emission limit.

Model No	CR1000A	Site	CB4-H
Test Voltage	AC 120V/60Hz	Test Date	2020/11/19
Test Mode	Mode 3: Transmit Beamforming Mode	Engineer	Elwin Lin
Polarity	Vertical	Temperature (°C)	24.0
Test Condition	802.11ax,Ch1,2.412G,BW20M	Humidity (%RH)	50.0

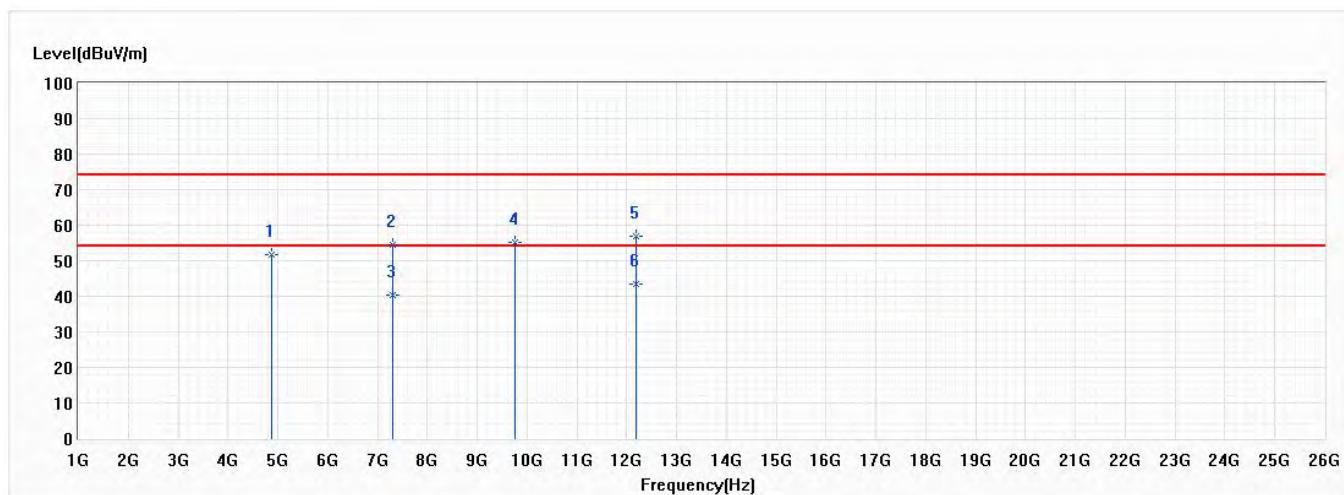


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4824.000	49.68	74.00	-24.32	61.66	-11.98	PK
2	7236.000	54.02	74.00	-19.98	58.62	-4.60	PK
3	9648.000	54.68	74.00	-19.32	55.99	-1.31	PK
4	12060.000	57.16	74.00	-16.84	54.41	2.75	PK
* 5	12060.000	43.72	54.00	-10.28	40.97	2.75	AV

Note:

1. All reading above 1GHz is performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.
4. The fundamental for reference only, it's not restricted by unwanted emission limit.

Model No	CR1000A	Site	CB4-H
Test Voltage	AC 120V/60Hz	Test Date	2020/11/19
Test Mode	Mode 3: Transmit Beamforming Mode	Engineer	Elwin Lin
Polarity	Horizontal	Temperature (°C)	24.0
Test Condition	802.11ax,Ch6,2.437G,BW20M	Humidity (%RH)	50.0

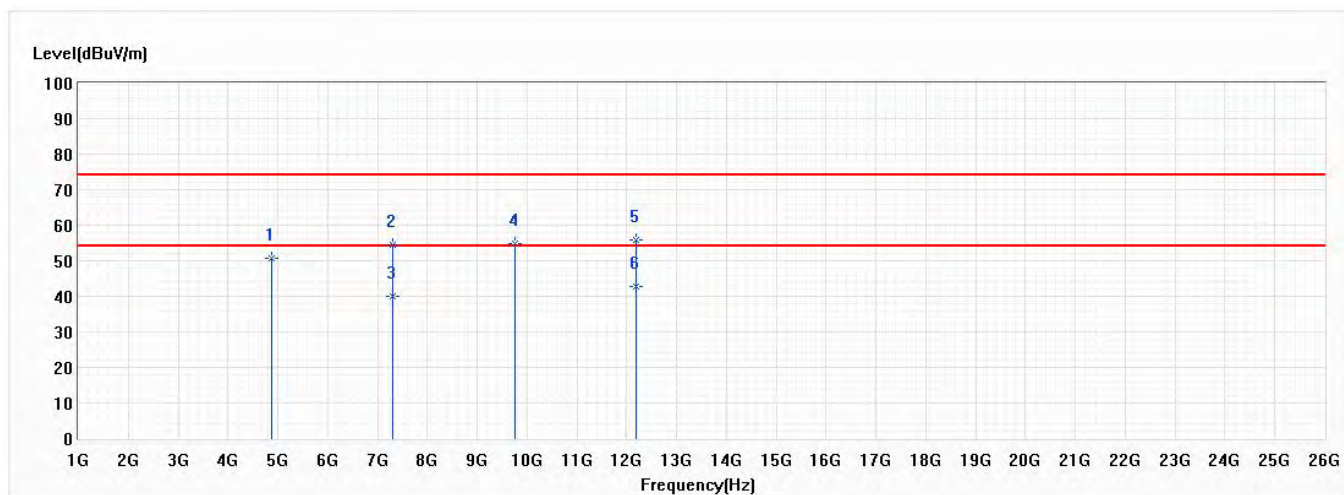


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4874.000	51.88	74.00	-22.12	63.72	-11.84	PK
2	7311.000	54.52	74.00	-19.48	58.90	-4.38	PK
3	7311.000	40.28	54.00	-13.72	44.66	-4.38	AV
4	9748.000	55.08	74.00	-18.92	56.35	-1.27	PK
5	12185.000	56.90	74.00	-17.10	54.30	2.60	PK
* 6	12185.000	43.37	54.00	-10.63	40.77	2.60	AV

Note:

1. All reading above 1GHz is performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.
4. The fundamental for reference only, it's not restricted by unwanted emission limit.

Model No	CR1000A	Site	CB4-H
Test Voltage	AC 120V/60Hz	Test Date	2020/11/19
Test Mode	Mode 3: Transmit Beamforming Mode	Engineer	Elwin Lin
Polarity	Vertical	Temperature (°C)	24.0
Test Condition	802.11ax,Ch6,2.437G,BW20M	Humidity (%RH)	50.0

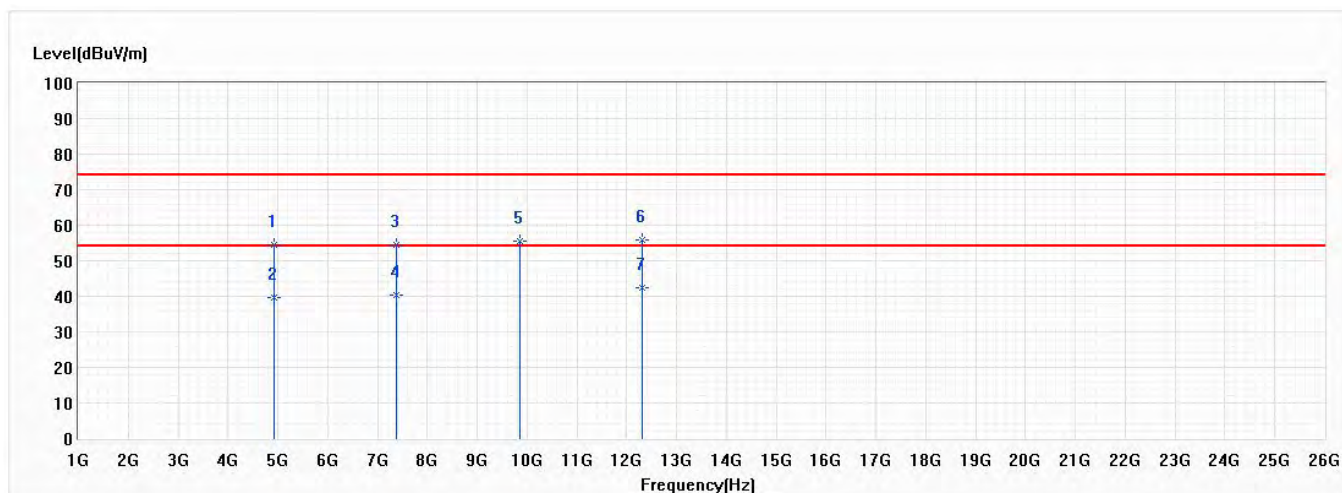


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4874.000	50.56	74.00	-23.44	62.40	-11.84	PK
2	7311.000	54.34	74.00	-19.66	58.72	-4.38	PK
3	7311.000	39.94	54.00	-14.06	44.32	-4.38	AV
4	9748.000	54.96	74.00	-19.04	56.23	-1.27	PK
5	12185.000	55.75	74.00	-18.25	53.15	2.60	PK
* 6	12185.000	42.89	54.00	-11.11	40.29	2.60	AV

Note:

1. All reading above 1GHz is performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.
4. The fundamental for reference only, it's not restricted by unwanted emission limit.

Model No	CR1000A	Site	CB4-H
Test Voltage	AC 120V/60Hz	Test Date	2020/11/19
Test Mode	Mode 3: Transmit Beamforming Mode	Engineer	Elwin Lin
Polarity	Horizontal	Temperature (°C)	24.0
Test Condition	802.11ax,Ch11,2.462G,BW20M	Humidity (%RH)	50.0

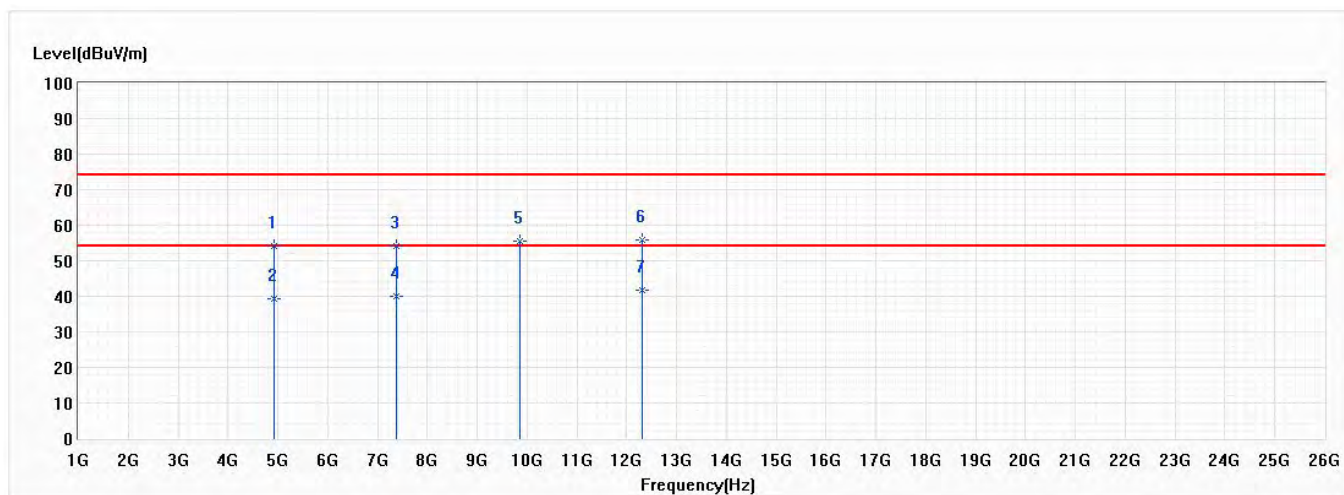


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4924.000	54.49	74.00	-19.51	66.19	-11.70	PK
2	4924.000	39.77	54.00	-14.23	51.47	-11.70	AV
3	7386.000	54.49	74.00	-19.51	58.66	-4.17	PK
4	7386.000	40.39	54.00	-13.61	44.56	-4.17	AV
5	9848.000	55.37	74.00	-18.63	56.59	-1.22	PK
6	12310.000	56.02	74.00	-17.98	53.56	2.46	PK
* 7	12310.000	42.37	54.00	-11.63	39.91	2.46	AV

Note:

1. All reading above 1GHz is performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.
4. The fundamental for reference only, it's not restricted by unwanted emission limit.

Model No	CR1000A	Site	CB4-H
Test Voltage	AC 120V/60Hz	Test Date	2020/11/19
Test Mode	Mode 3: Transmit Beamforming Mode	Engineer	Elwin Lin
Polarity	Vertical	Temperature (°C)	24.0
Test Condition	802.11ax,Ch11,2.462G,BW20M	Humidity (%RH)	50.0

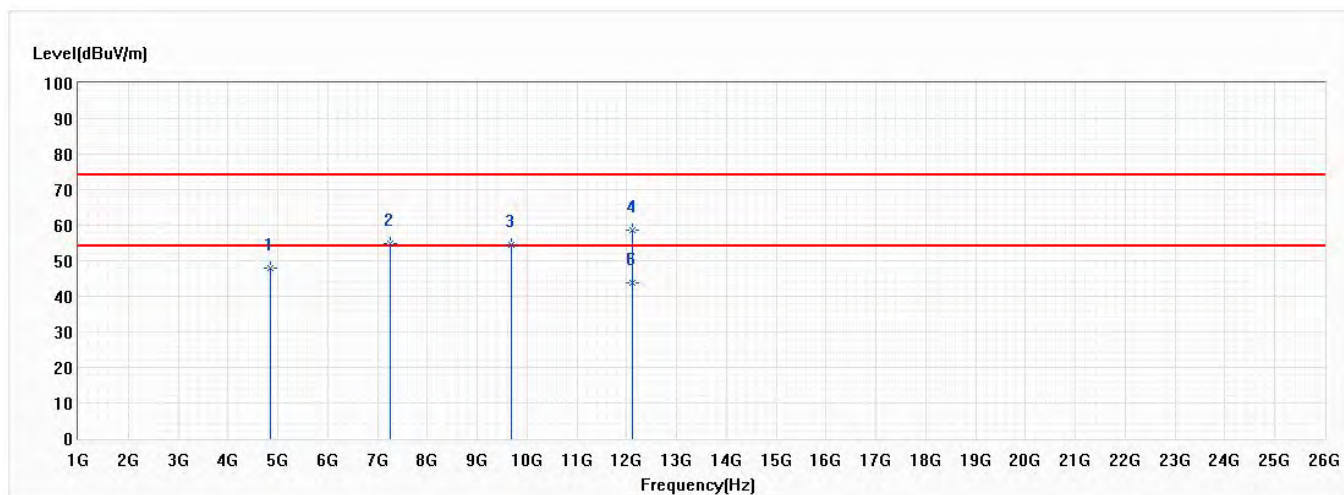


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4924.000	54.19	74.00	-19.81	65.89	-11.70	PK
2	4924.000	39.48	54.00	-14.52	51.18	-11.70	AV
3	7386.000	54.07	74.00	-19.93	58.24	-4.17	PK
4	7386.000	39.86	54.00	-14.14	44.03	-4.17	AV
5	9848.000	55.55	74.00	-18.45	56.77	-1.22	PK
6	12310.000	55.83	74.00	-18.17	53.37	2.46	PK
* 7	12310.000	41.89	54.00	-12.11	39.43	2.46	AV

Note:

1. All reading above 1GHz is performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.
4. The fundamental for reference only, it's not restricted by unwanted emission limit.

Model No	CR1000A	Site	CB4-H
Test Voltage	AC 120V/60Hz	Test Date	2020/11/19
Test Mode	Mode 3: Transmit Beamforming Mode	Engineer	Elwin Lin
Polarity	Horizontal	Temperature (°C)	24.0
Test Condition	802.11ax,Ch3,2.422G,BW40M	Humidity (%RH)	50.0

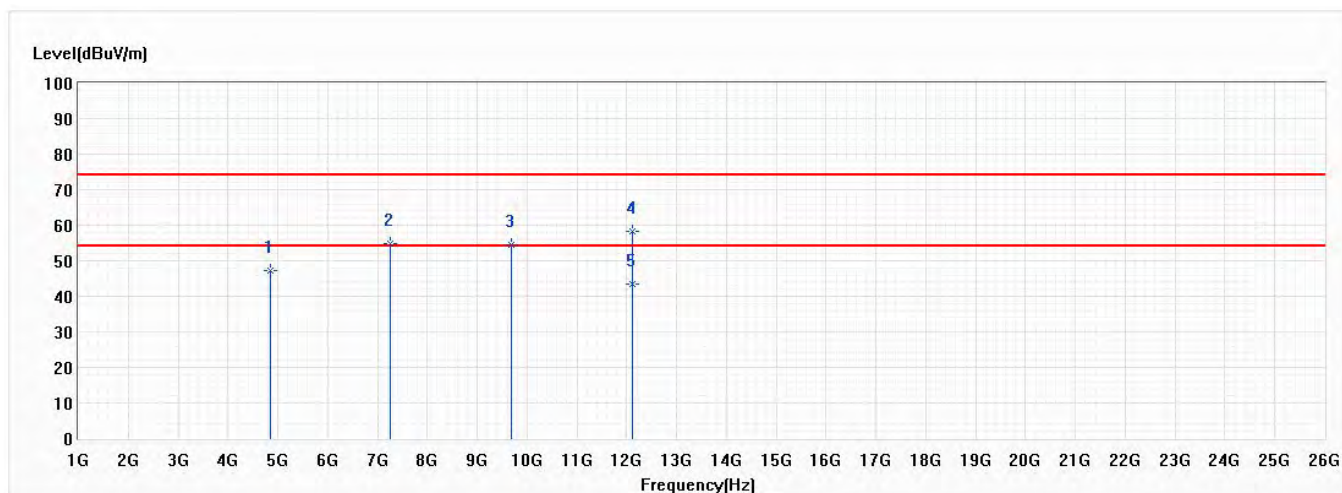


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4844.000	47.85	74.00	-26.15	59.78	-11.93	PK
2	7266.000	54.84	74.00	-19.16	59.35	-4.51	PK
3	9688.000	54.52	74.00	-19.48	55.82	-1.30	PK
4	12110.000	58.51	74.00	-15.49	55.83	2.68	PK
5	12110.000	43.88	54.00	-10.12	41.20	2.68	AV
* 6	12110.000	43.90	54.00	-10.10	41.22	2.68	AV

Note:

1. All reading above 1GHz is performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.
4. The fundamental for reference only, it's not restricted by unwanted emission limit.

Model No	CR1000A	Site	CB4-H
Test Voltage	AC 120V/60Hz	Test Date	2020/11/19
Test Mode	Mode 3: Transmit Beamforming Mode	Engineer	Elwin Lin
Polarity	Vertical	Temperature (°C)	24.0
Test Condition	802.11ax,Ch3,2.422G,BW40M	Humidity (%RH)	50.0

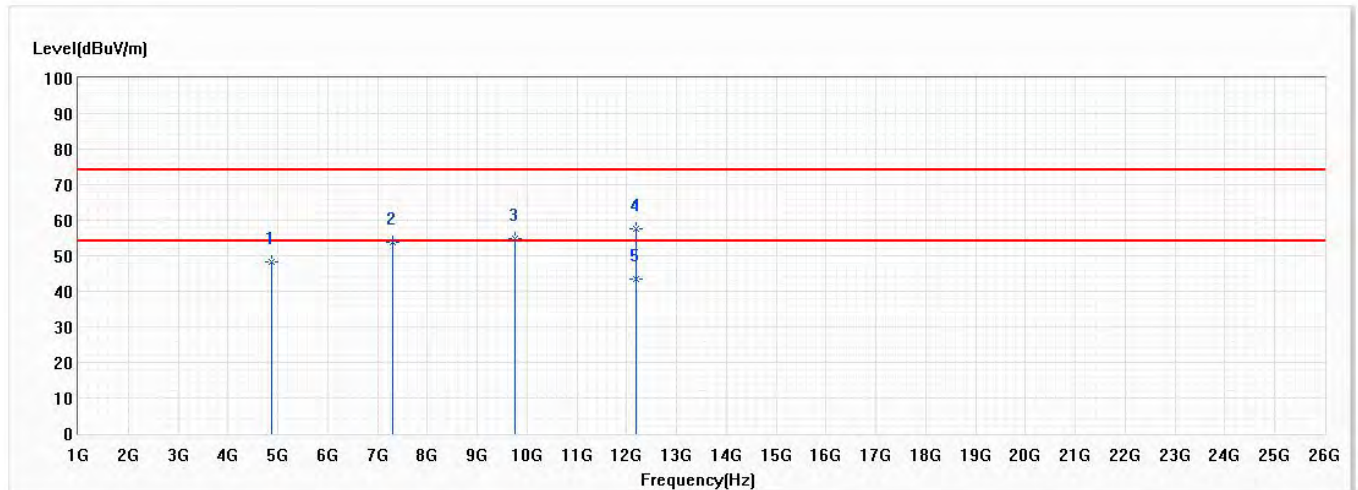


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4844.000	47.18	74.00	-26.82	59.11	-11.93	PK
2	7266.000	54.71	74.00	-19.29	59.22	-4.51	PK
3	9688.000	54.65	74.00	-19.35	55.95	-1.30	PK
4	12110.000	58.41	74.00	-15.59	55.73	2.68	PK
* 5	12110.000	43.50	54.00	-10.50	40.82	2.68	AV

Note:

1. All reading above 1GHz is performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.
4. The fundamental for reference only, it's not restricted by unwanted emission limit.

Model No	CR1000A	Site	CB4-H
Test Voltage	AC 120V/60Hz	Test Date	2020/11/19
Test Mode	Mode 3: Transmit Beamforming Mode	Engineer	Elwin Lin
Polarity	Horizontal	Temperature (°C)	24.0
Test Condition	802.11ax,Ch6,2.437G,BW40M	Humidity (%RH)	50.0

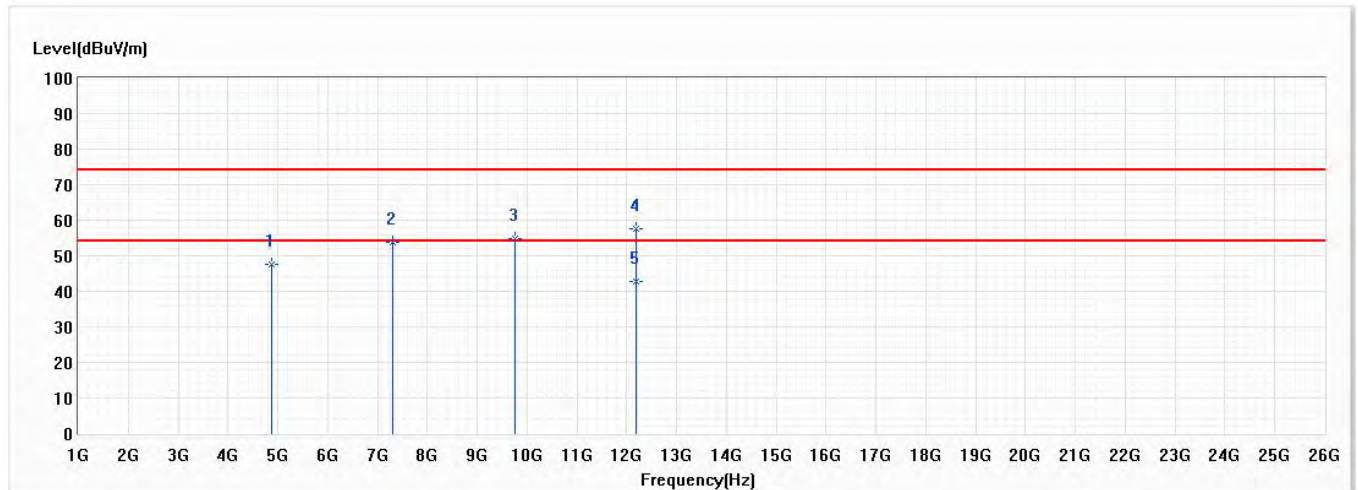


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4874.000	48.25	74.00	-25.75	60.09	-11.84	PK
2	7311.000	53.94	74.00	-20.06	58.32	-4.38	PK
3	9748.000	54.70	74.00	-19.30	55.97	-1.27	PK
4	12185.000	57.68	74.00	-16.32	55.08	2.60	PK
* 5	12185.000	43.28	54.00	-10.72	40.68	2.60	AV

Note:

1. All reading above 1GHz is performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.
4. The fundamental for reference only, it's not restricted by unwanted emission limit.

Model No	CR1000A	Site	CB4-H
Test Voltage	AC 120V/60Hz	Test Date	2020/11/19
Test Mode	Mode 3: Transmit Beamforming Mode	Engineer	Elwin Lin
Polarity	Vertical	Temperature (°C)	24.0
Test Condition	802.11ax,Ch6,2.437G,BW40M	Humidity (%RH)	50.0

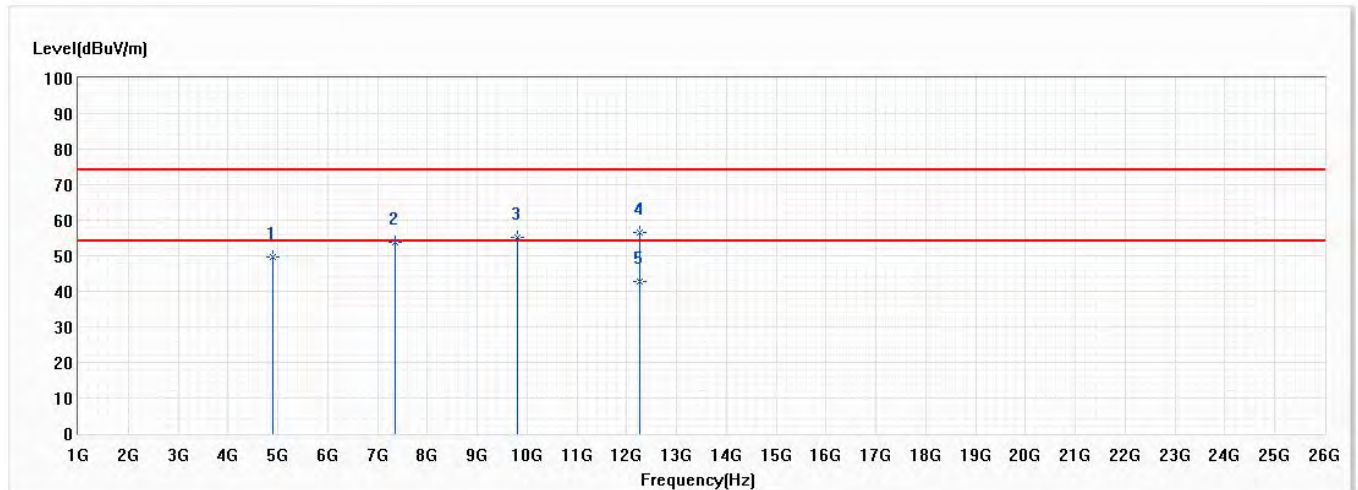


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4874.000	47.60	74.00	-26.40	59.44	-11.84	PK
2	7311.000	53.69	74.00	-20.31	58.07	-4.38	PK
3	9748.000	54.81	74.00	-19.19	56.08	-1.27	PK
4	12185.000	57.48	74.00	-16.52	54.88	2.60	PK
* 5	12185.000	42.70	54.00	-11.30	40.10	2.60	AV

Note:

1. All reading above 1GHz is performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.
4. The fundamental for reference only, it's not restricted by unwanted emission limit.

Model No	CR1000A	Site	CB4-H
Test Voltage	AC 120V/60Hz	Test Date	2020/11/19
Test Mode	Mode 3: Transmit Beamforming Mode	Engineer	Elwin Lin
Polarity	Horizontal	Temperature (°C)	24.0
Test Condition	802.11ax,Ch9,2.452G,BW40M	Humidity (%RH)	50.0

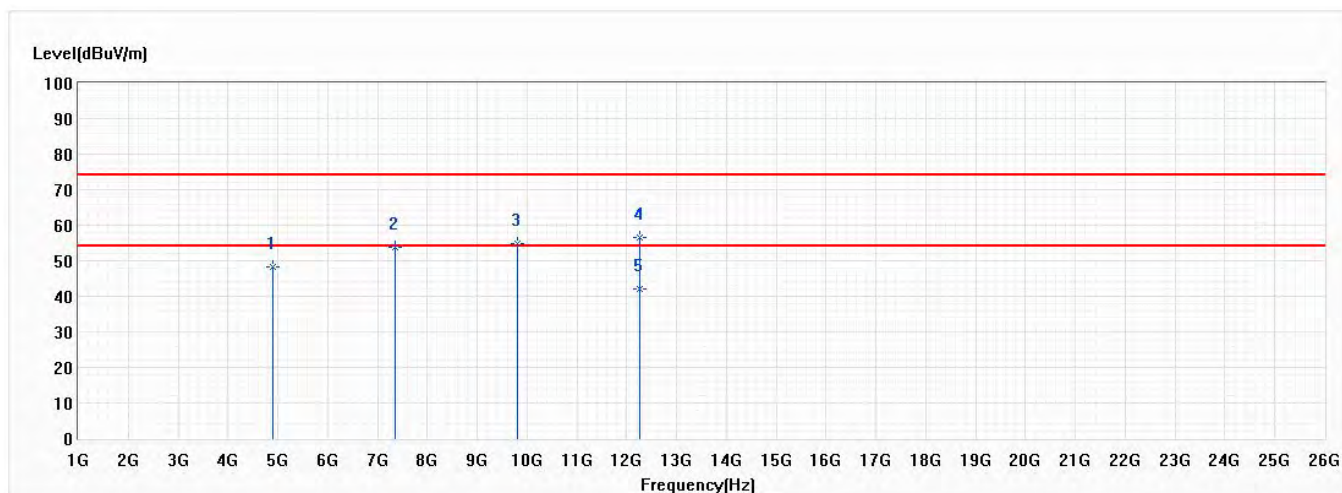


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4904.000	49.73	74.00	-24.27	61.49	-11.76	PK
2	7356.000	53.76	74.00	-20.24	58.01	-4.25	PK
3	9808.000	55.03	74.00	-18.97	56.27	-1.24	PK
4	12260.000	56.66	74.00	-17.34	54.15	2.51	PK
* 5	12260.000	42.69	54.00	-11.31	40.18	2.51	AV

Note:

1. All reading above 1GHz is performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.
4. The fundamental for reference only, it's not restricted by unwanted emission limit.

Model No	CR1000A	Site	CB4-H
Test Voltage	AC 120V/60Hz	Test Date	2020/11/19
Test Mode	Mode 3: Transmit Beamforming Mode	Engineer	Elwin Lin
Polarity	Vertical	Temperature (°C)	24.0
Test Condition	802.11ax,Ch9,2.452G,BW40M	Humidity (%RH)	50.0



No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4904.000	48.35	74.00	-25.65	60.11	-11.76	PK
2	7356.000	53.73	74.00	-20.27	57.98	-4.25	PK
3	9808.000	54.84	74.00	-19.16	56.08	-1.24	PK
4	12260.000	56.46	74.00	-17.54	53.95	2.51	PK
* 5	12260.000	42.16	54.00	-11.84	39.65	2.51	AV

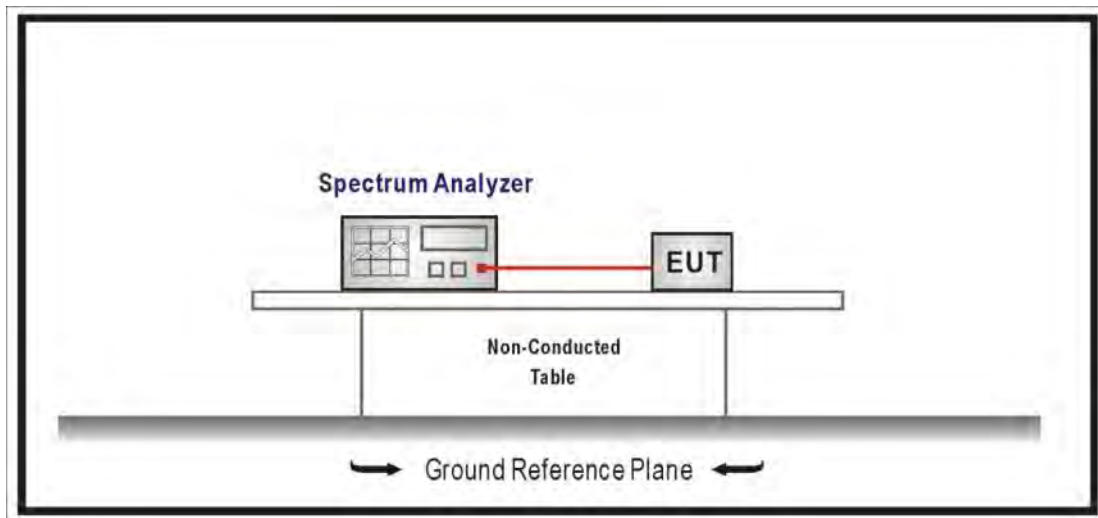
Note:

1. All reading above 1GHz is performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.
4. The fundamental for reference only, it's not restricted by unwanted emission limit.

5. RF antenna conducted test

5.1. Test Setup

RF Antenna Conducted Measurement:



5.2. Limits

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

5.3. Test Procedure

The EUT was setup according to ANSI C63.10: 2013 and tested according to DTS test procedure section 11.2 of KDB 558074 D01 v05r02 for compliance to FCC 47CFR 15.247 requirements. Set RBW = 100 kHz, Set VBW > RBW, scan up through 10th harmonic.

5.4. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247: 2019

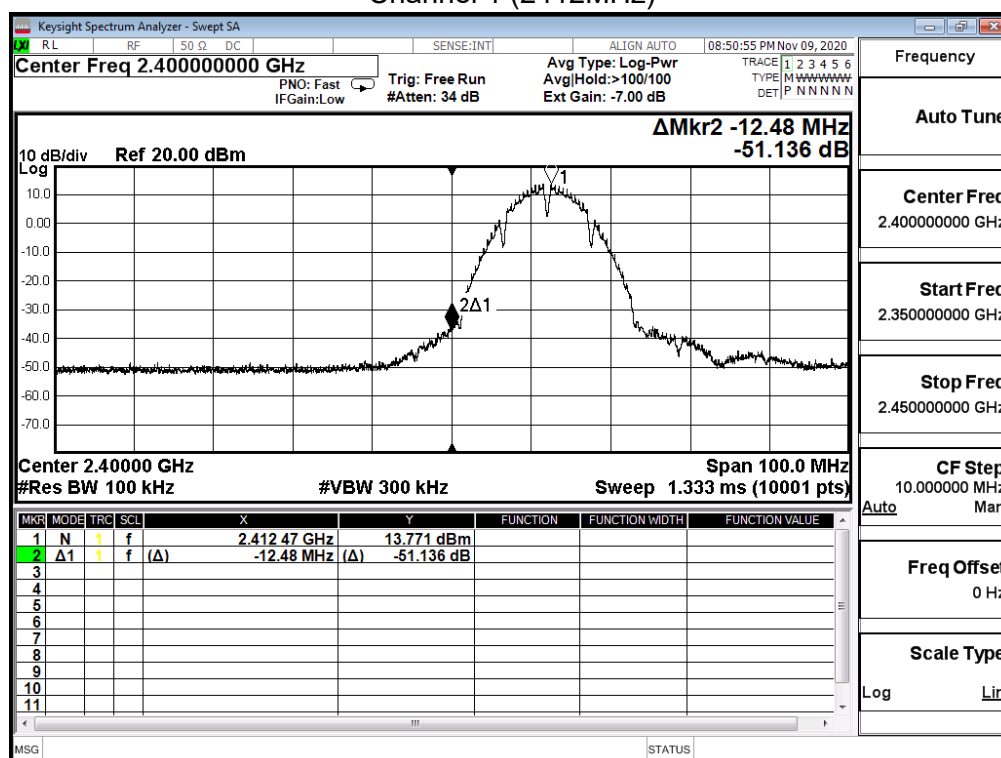
5.5. Test Result

Product	Consumer Home Router		
Test Item	RF antenna conducted test		
Test Mode	Mode 1: Transmit CDD Mode		
Date of Test	2020/11/09	Test Site	SR12-H
Test Temperature	23.0°C	Test Humidity	61.0%

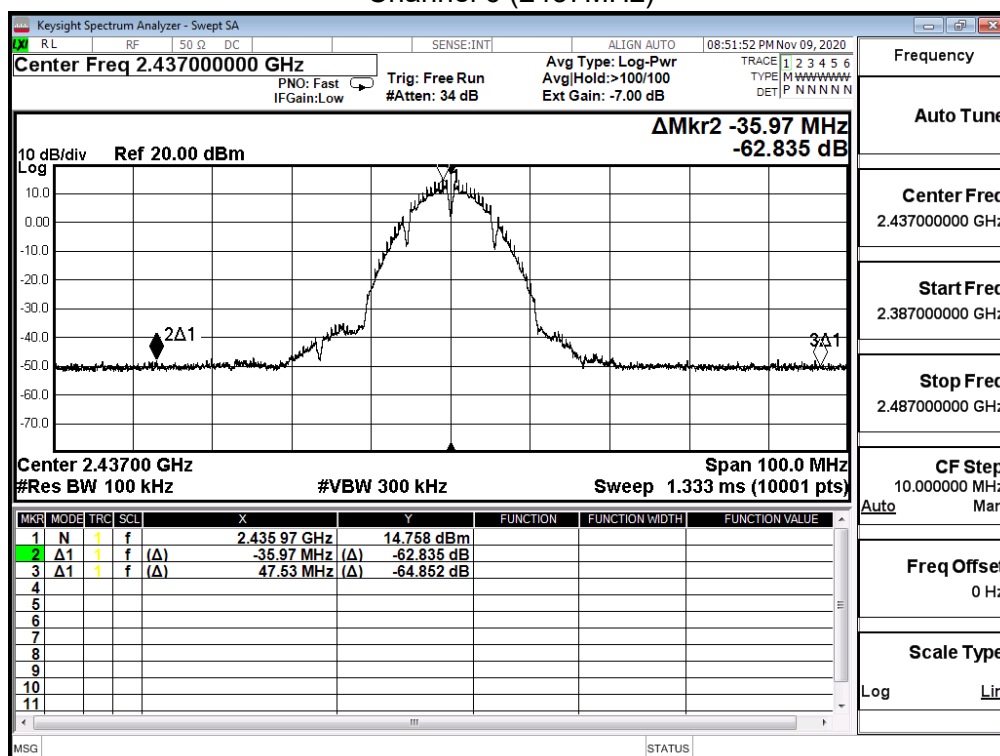
IEEE 802.11b (ANT 0)

Channel	Frequency (MHz)	Measure Level (dBc)	Limit (dBc)	Result
1	2412	51.136	≥ 30	Pass
6	2437	56.627	≥ 30	Pass
11	2462	57.241	≥ 30	Pass

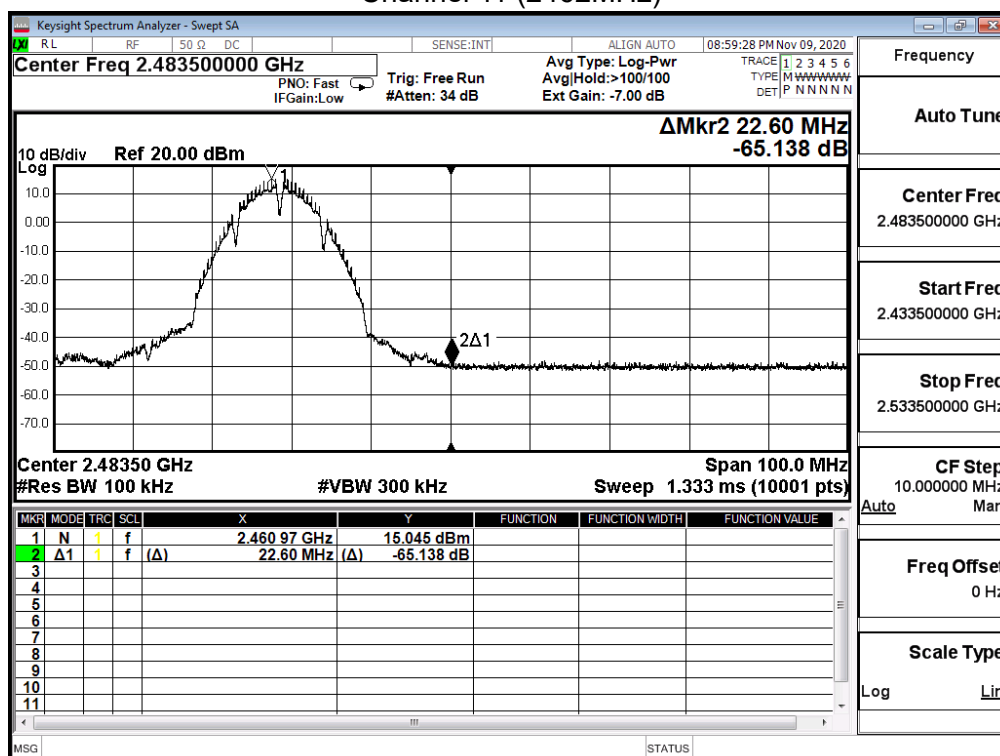
Channel 1 (2412MHz)



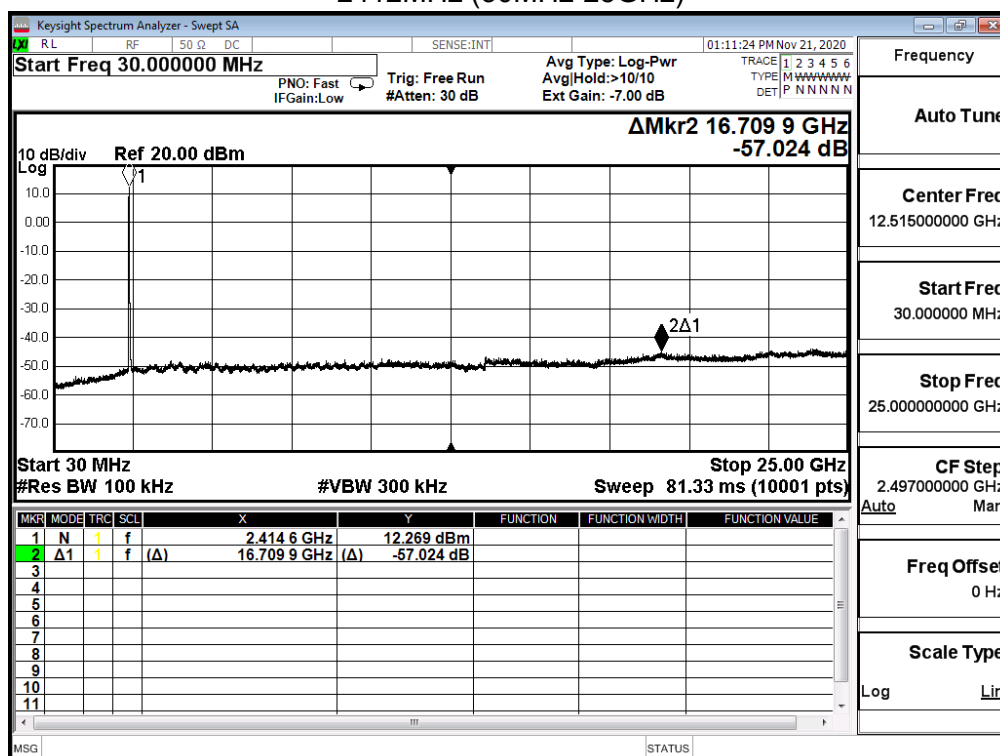
Channel 6 (2437MHz)



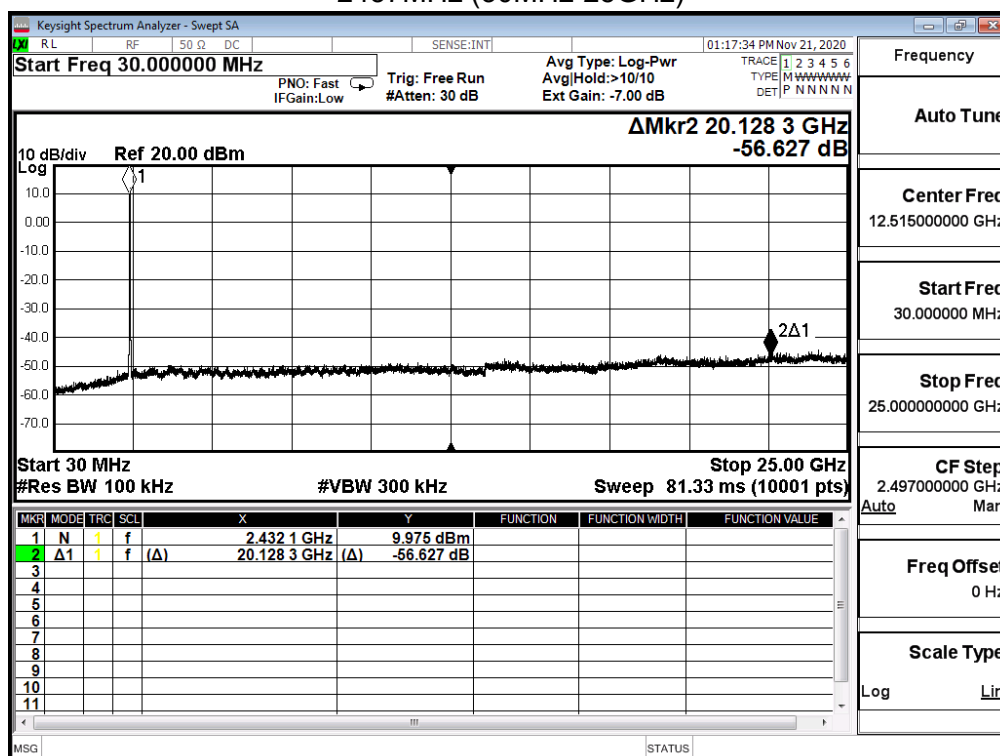
Channel 11 (2462MHz)



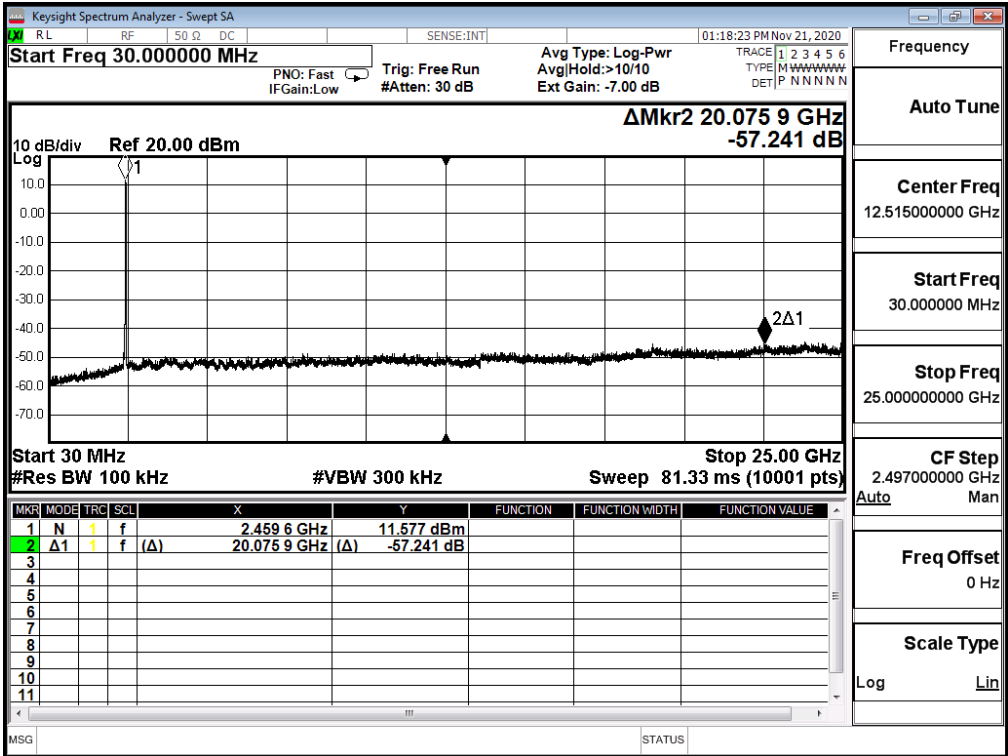
2412MHz (30MHz-25GHz)



2437MHz (30MHz-25GHz)



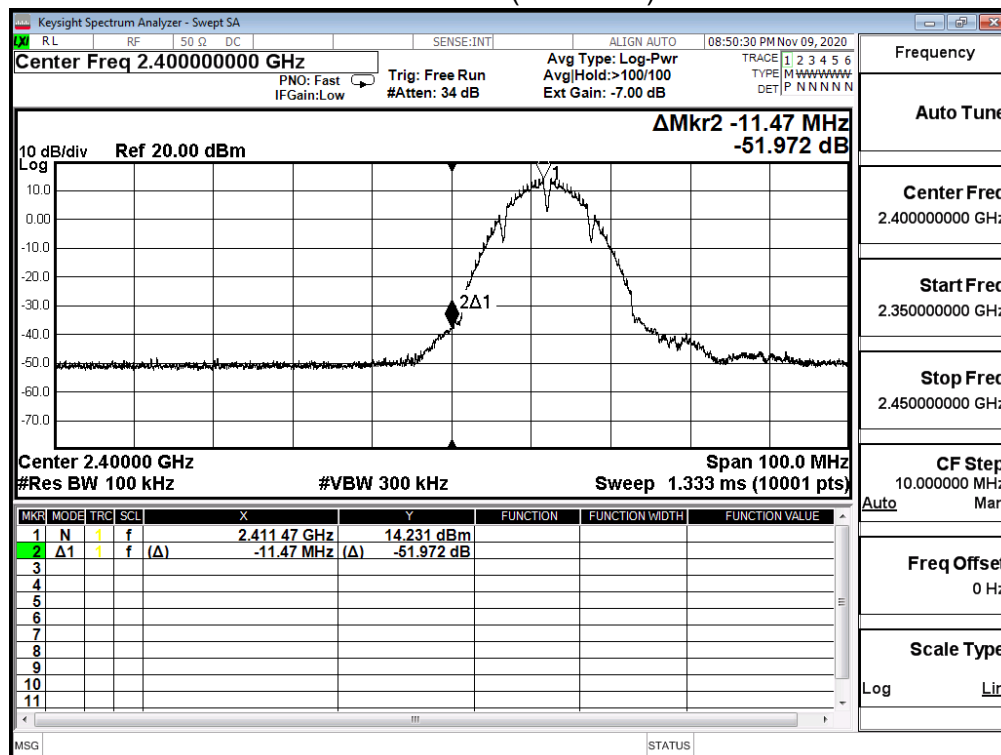
2462MHz (30MHz-25GHz)



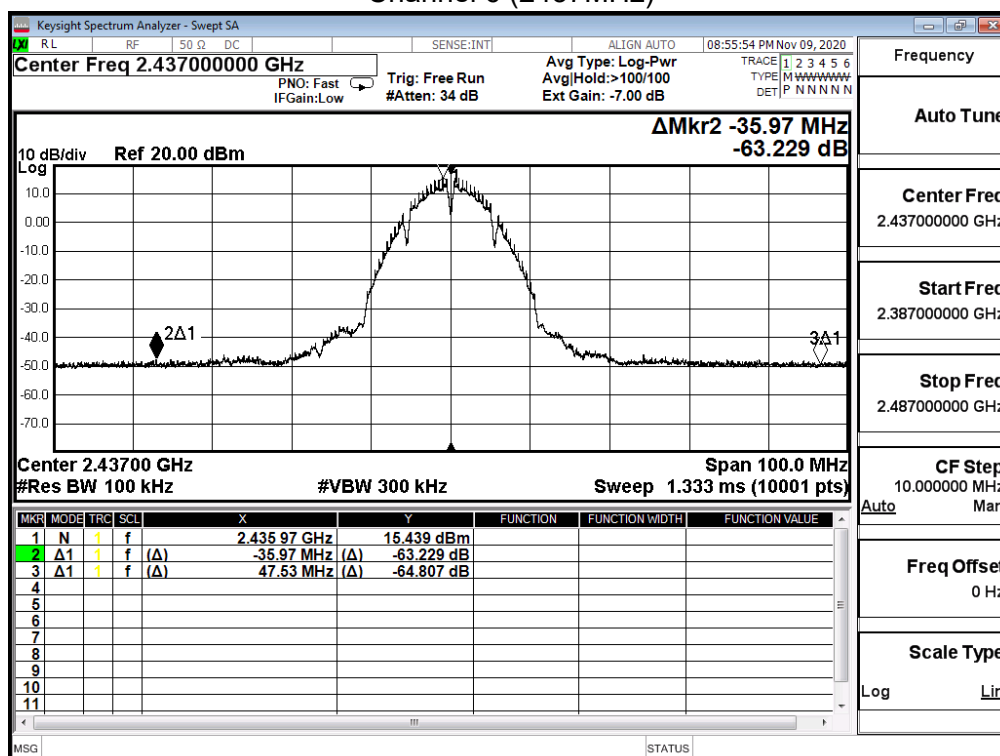
Product	Consumer Home Router		
Test Item	RF antenna conducted test		
Test Mode	Mode 1: Transmit CDD Mode		
Date of Test	2020/11/09	Test Site	SR12-H
Test Temperature	23.0°C	Test Humidity	61.0%

IEEE 802.11b (ANT 1)				
Channel	Frequency (MHz)	Measure Level (dBc)	Limit (dBc)	Result
1	2412	51.972	≥ 30	Pass
6	2437	54.369	≥ 30	Pass
11	2462	58.390	≥ 30	Pass

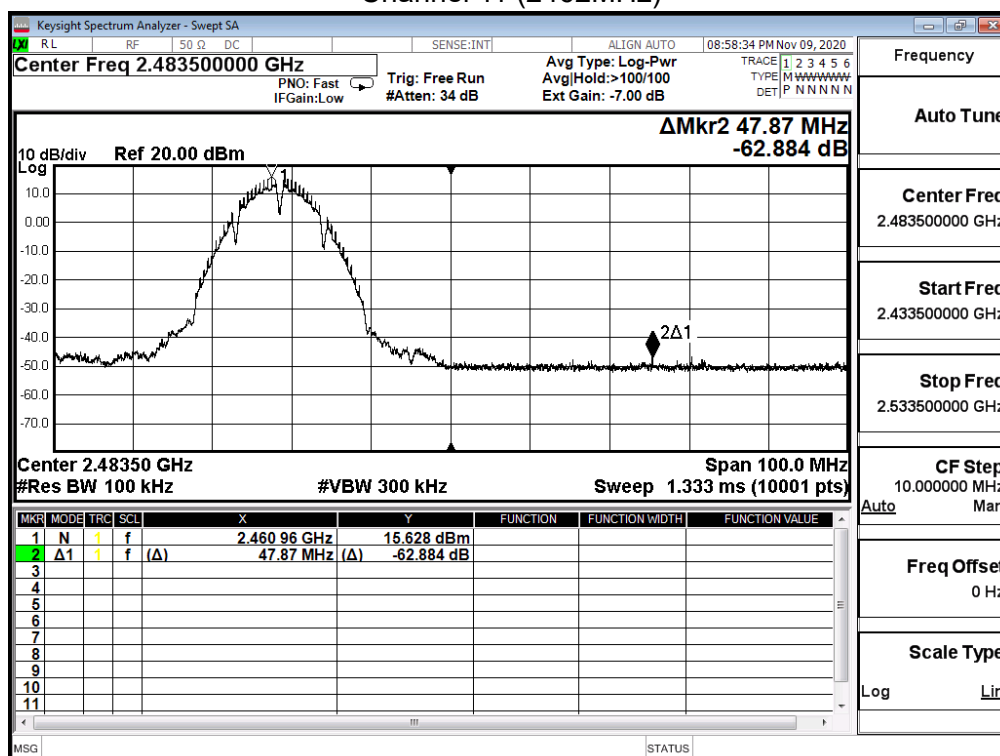
Channel 1 (2412MHz)



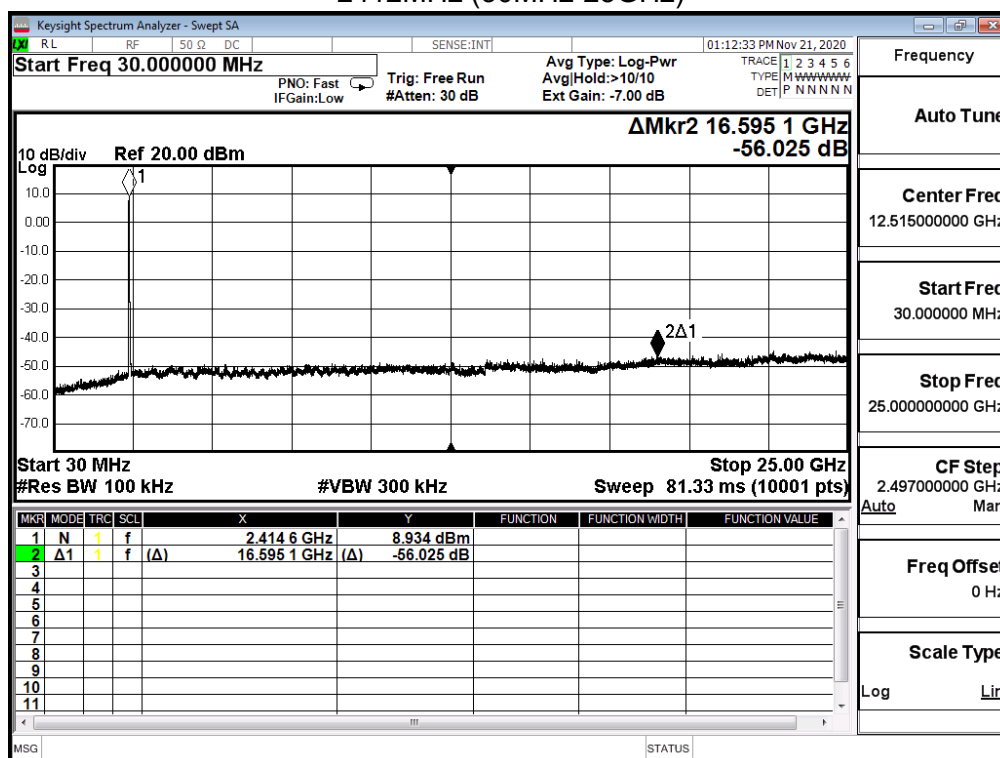
Channel 6 (2437MHz)



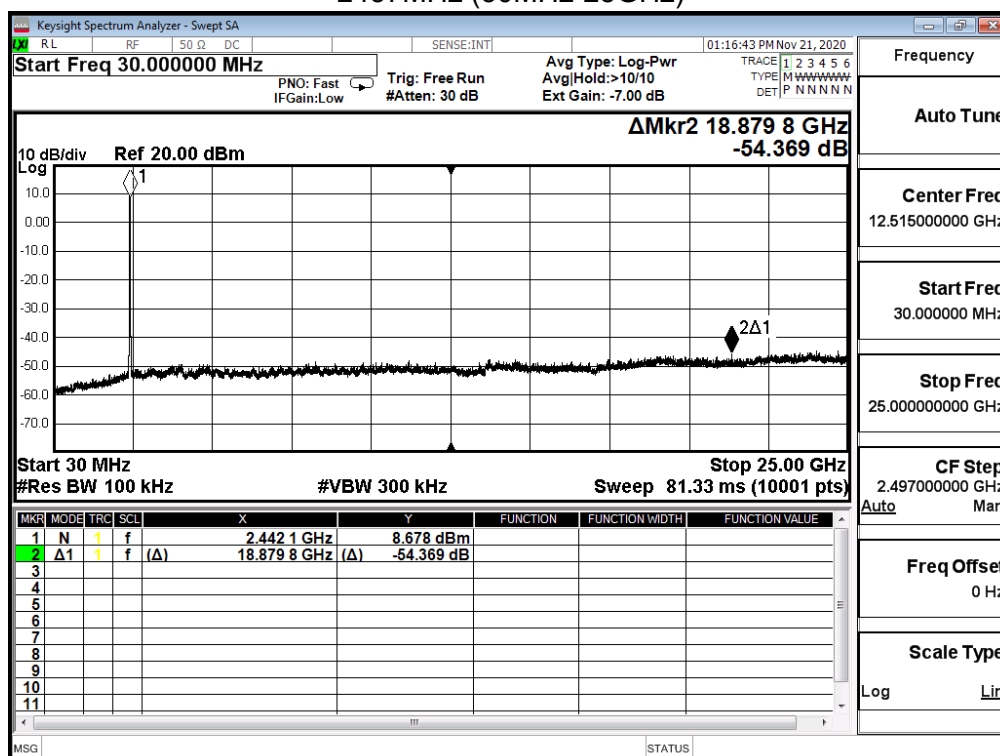
Channel 11 (2462MHz)



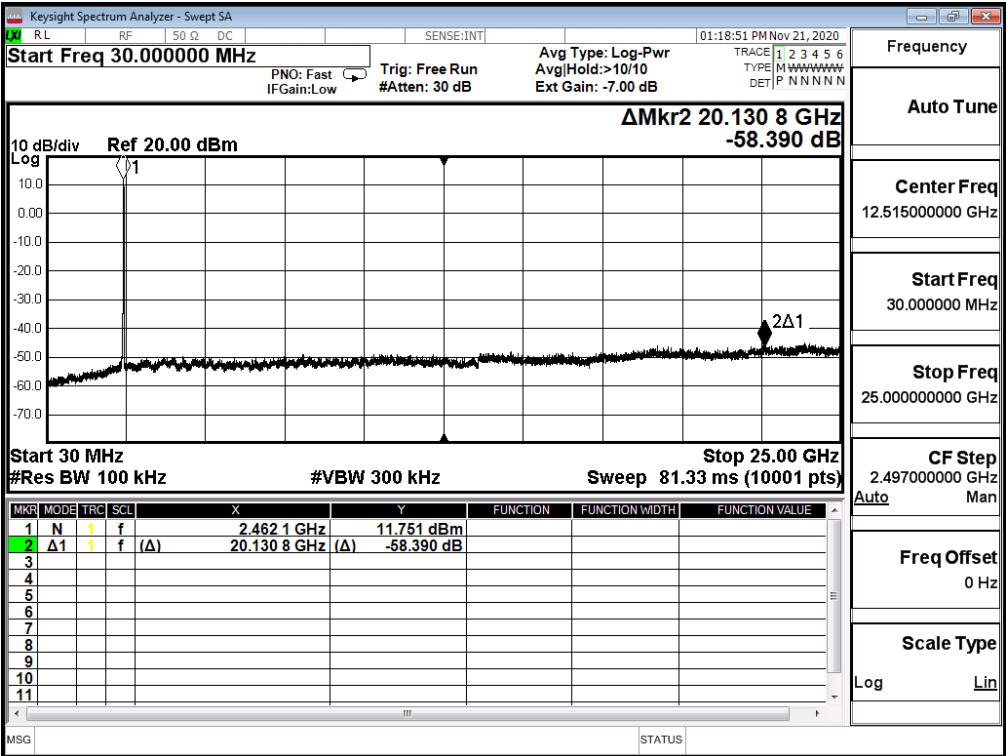
2412MHz (30MHz-25GHz)



2437MHz (30MHz-25GHz)



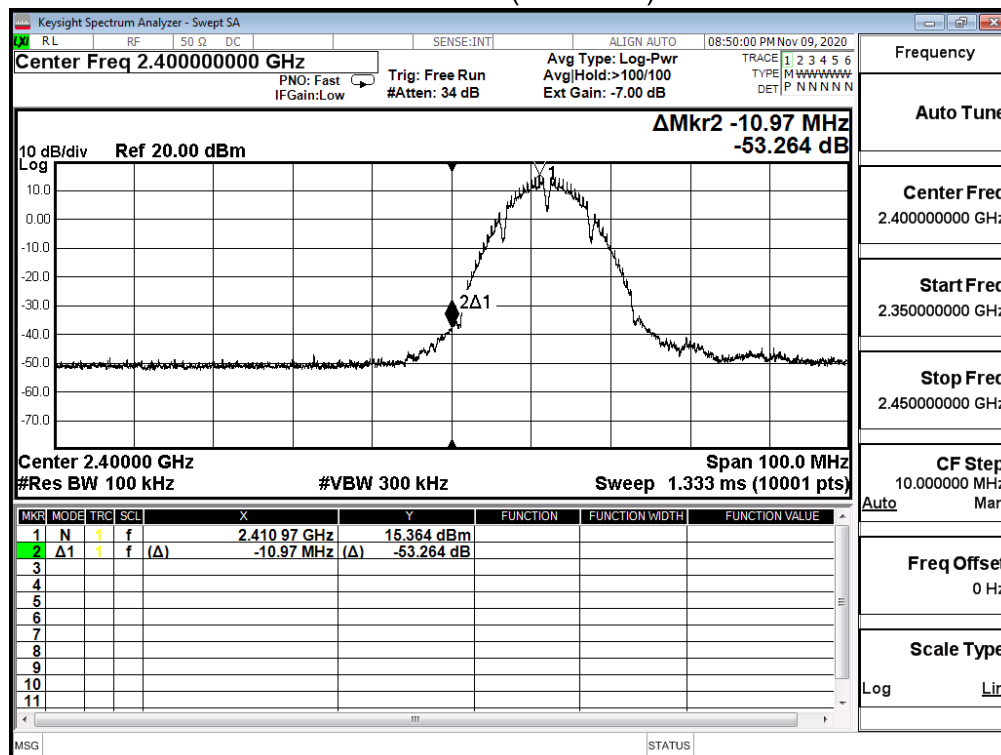
2462MHz (30MHz-25GHz)



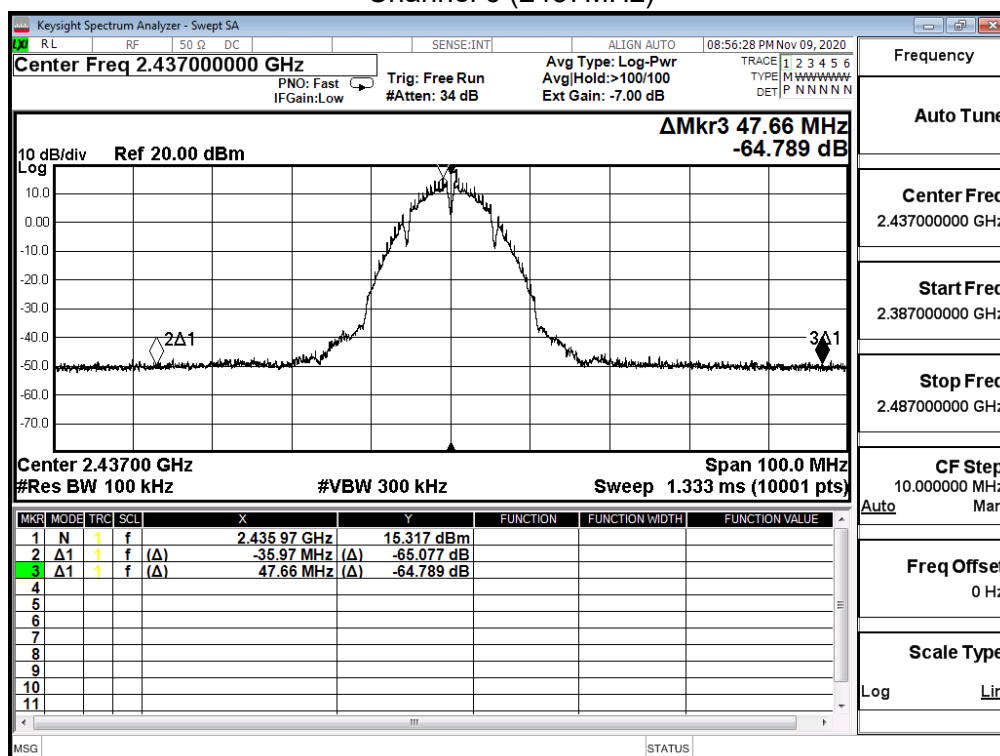
Product	Consumer Home Router		
Test Item	RF antenna conducted test		
Test Mode	Mode 1: Transmit CDD Mode		
Date of Test	2020/11/09	Test Site	SR12-H
Test Temperature	23.0°C	Test Humidity	61.0%

IEEE 802.11b (ANT 2)				
Channel	Frequency (MHz)	Measure Level (dBc)	Limit (dBc)	Result
1	2412	53.264	≥ 30	Pass
6	2437	58.042	≥ 30	Pass
11	2462	54.761	≥ 30	Pass

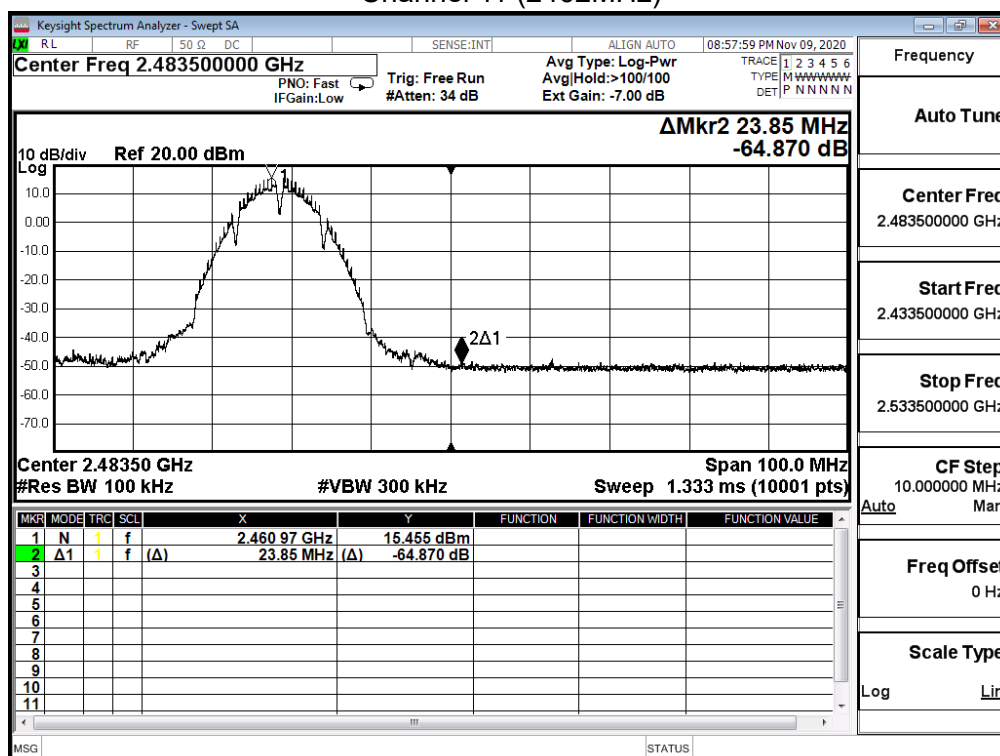
Channel 1 (2412MHz)



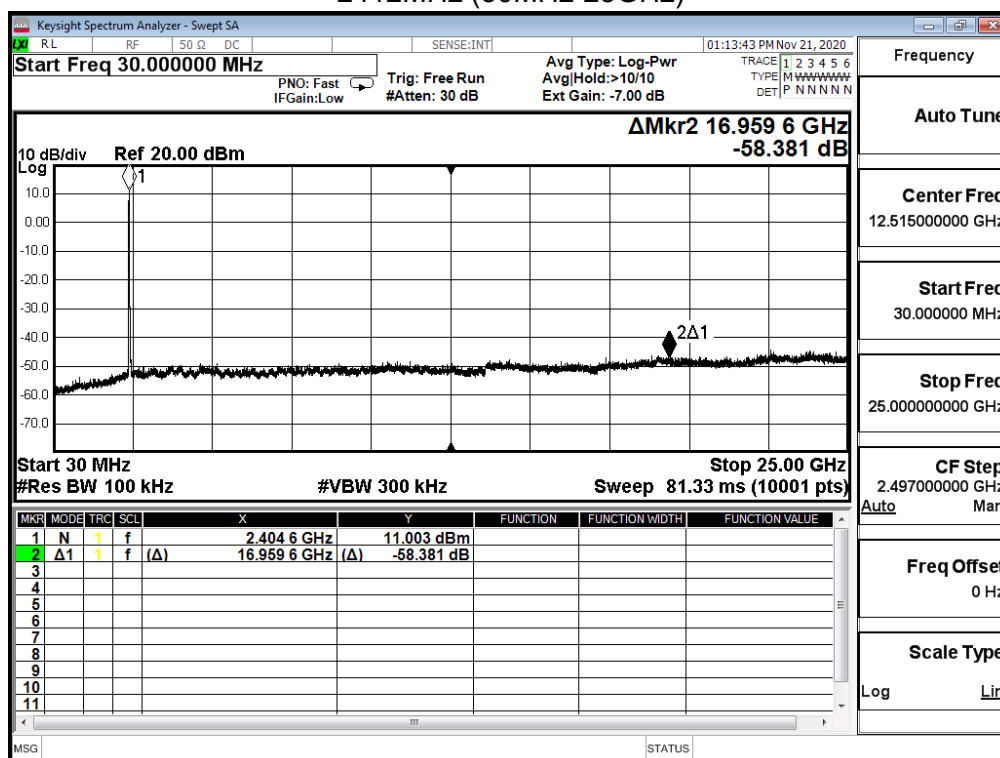
Channel 6 (2437MHz)



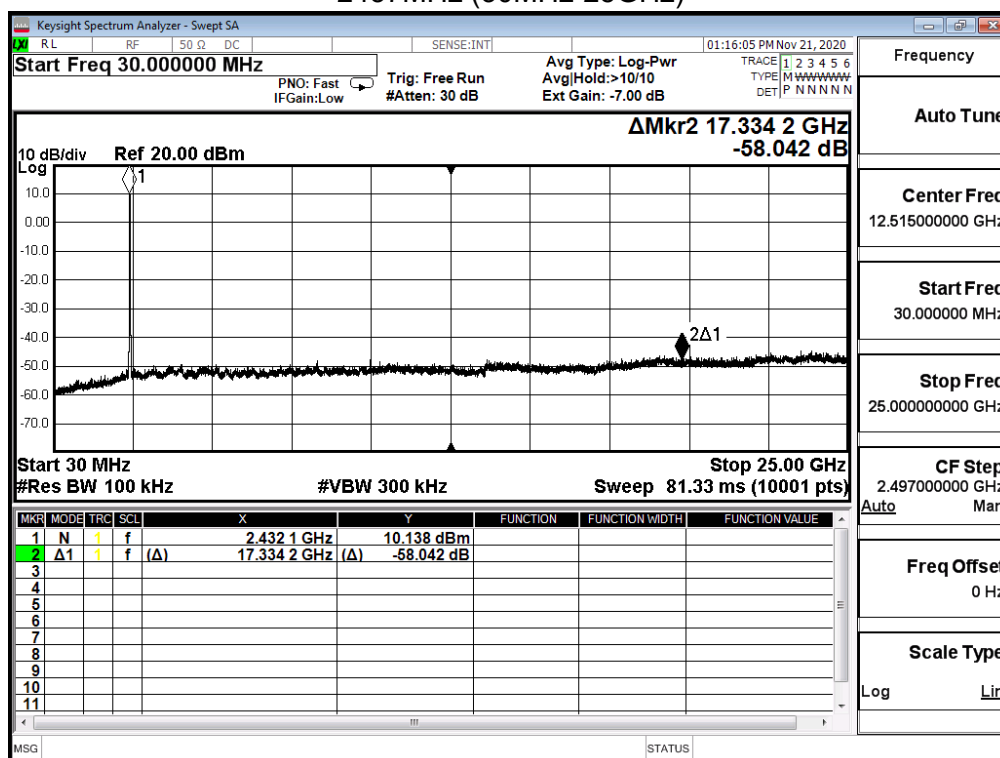
Channel 11 (2462MHz)



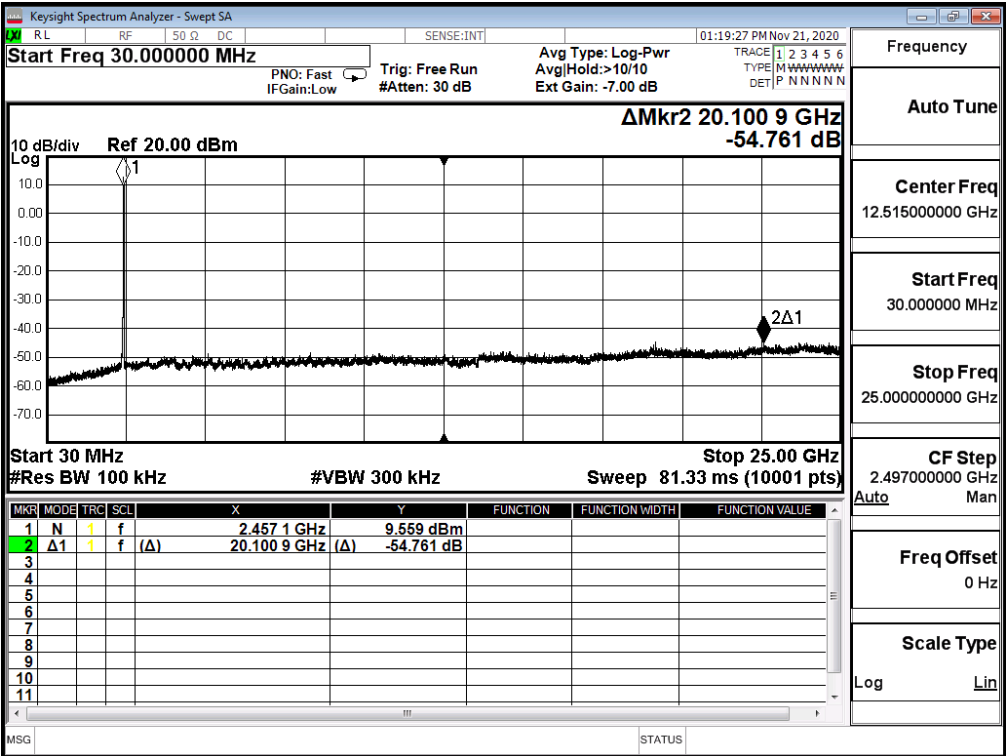
2412MHz (30MHz-25GHz)



2437MHz (30MHz-25GHz)



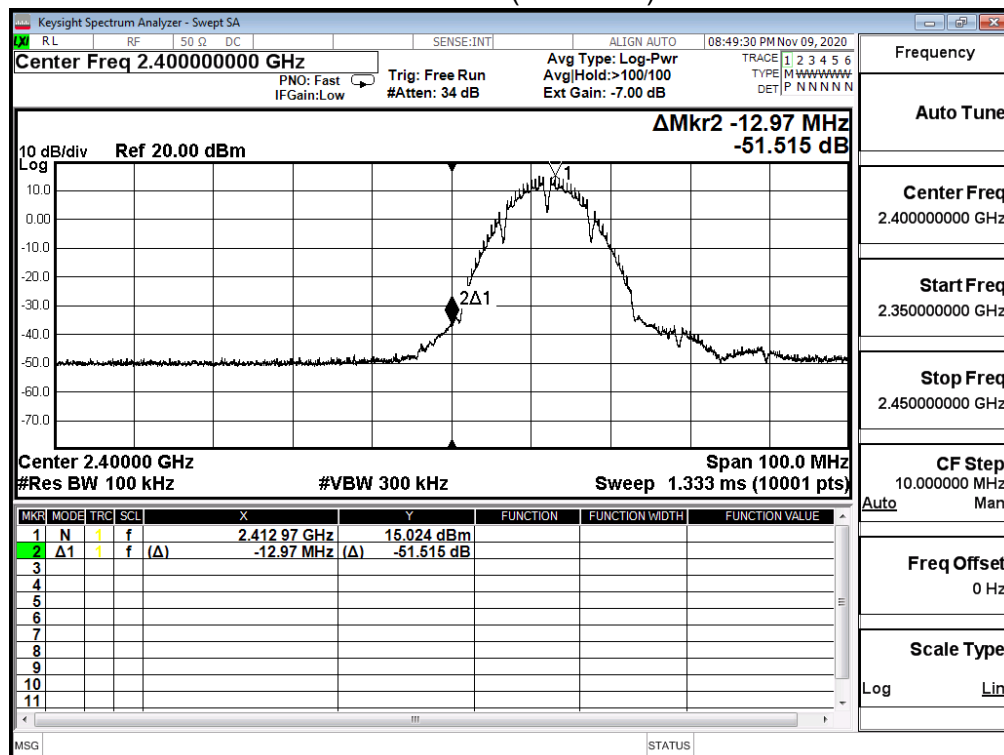
2462MHz (30MHz-25GHz)



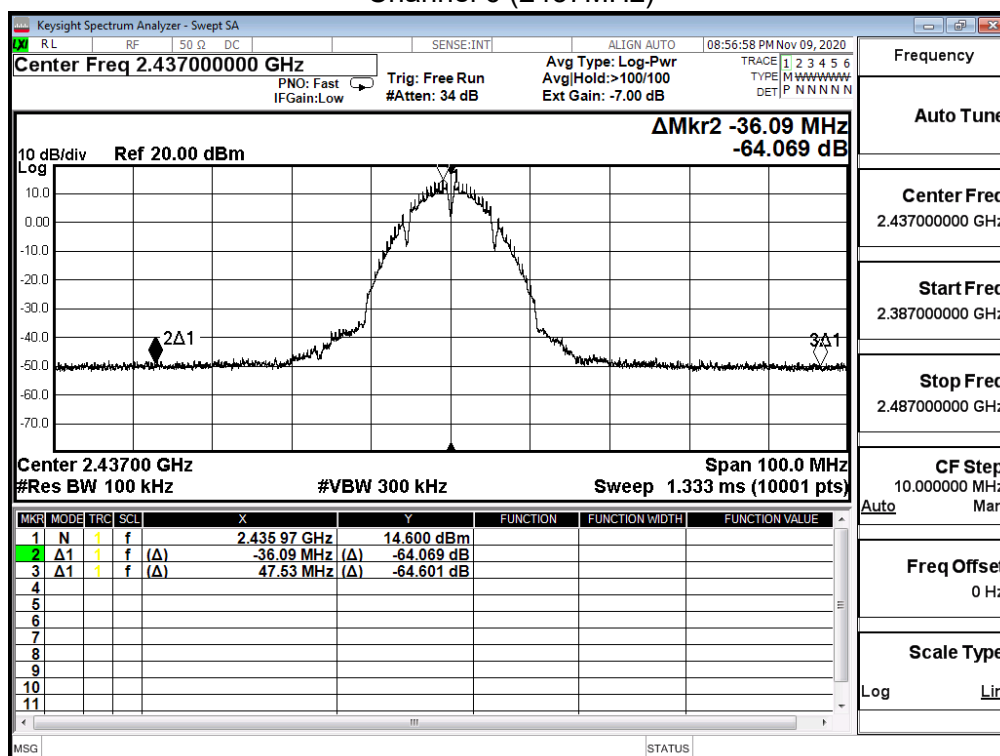
Product	Consumer Home Router		
Test Item	RF antenna conducted test		
Test Mode	Mode 1: Transmit CDD Mode		
Date of Test	2020/11/09	Test Site	SR12-H
Test Temperature	23.0°C	Test Humidity	61.0%

IEEE 802.11b (ANT 3)				
Channel	Frequency (MHz)	Measure Level (dBc)	Limit (dBc)	Result
1	2412	51.515	≥ 30	Pass
6	2437	58.943	≥ 30	Pass
11	2462	55.940	≥ 30	Pass

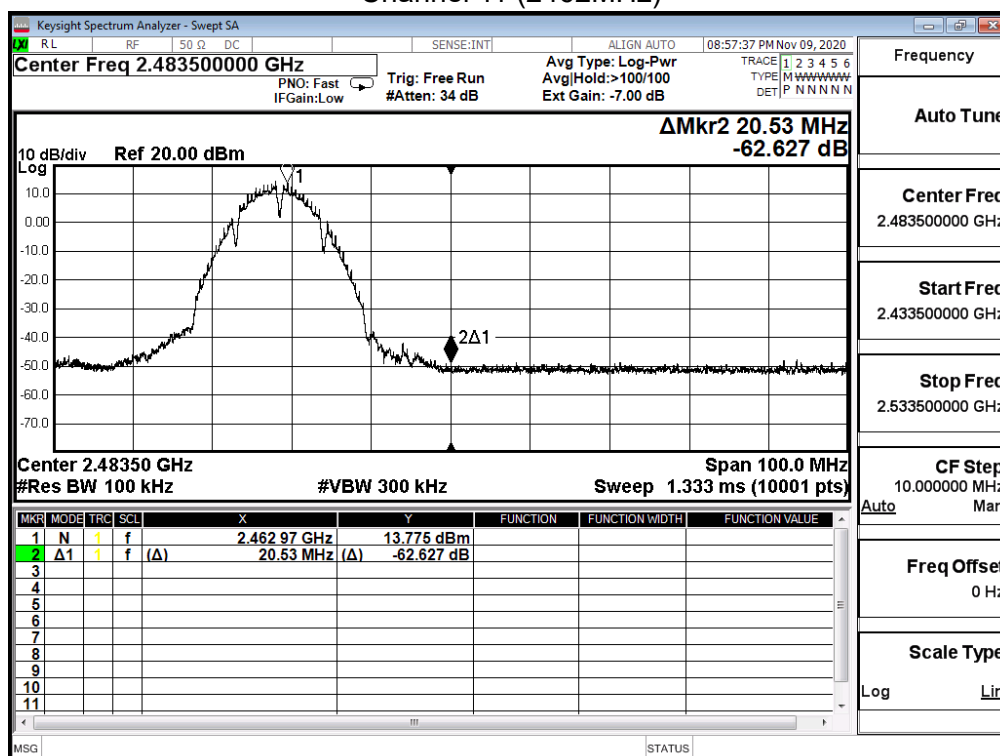
Channel 1 (2412MHz)



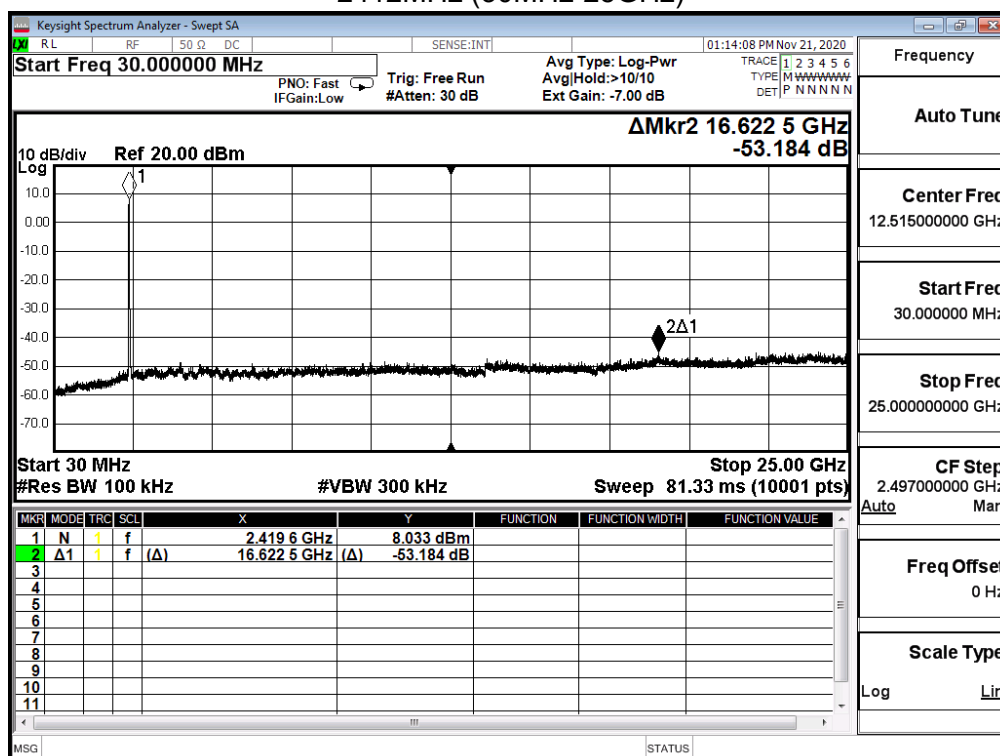
Channel 6 (2437MHz)



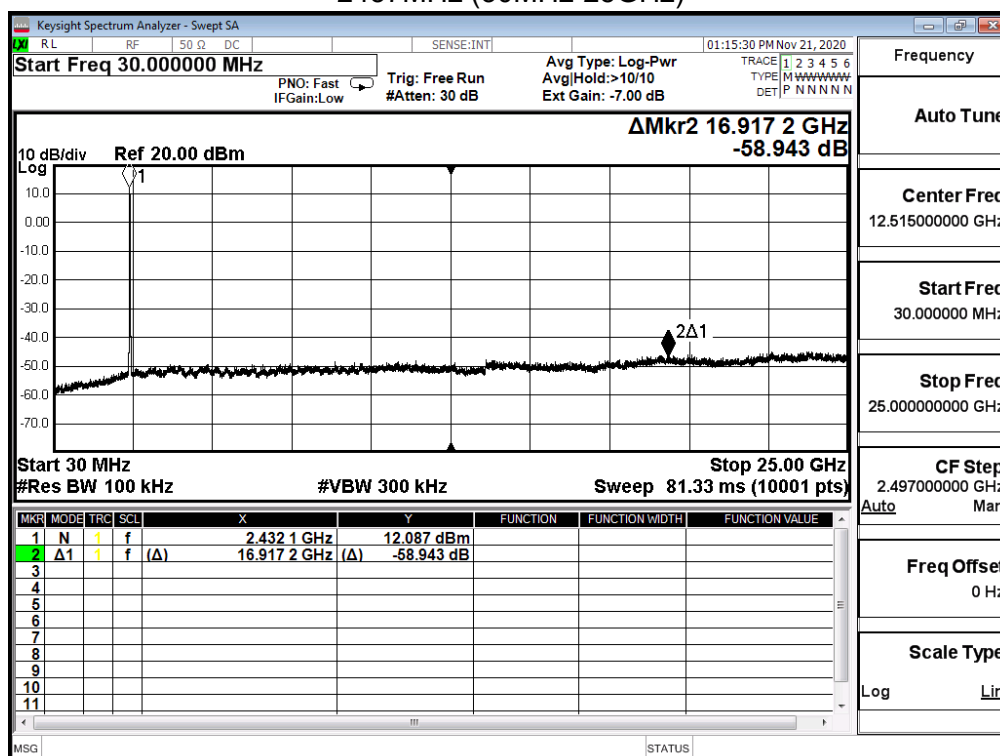
Channel 11 (2462MHz)



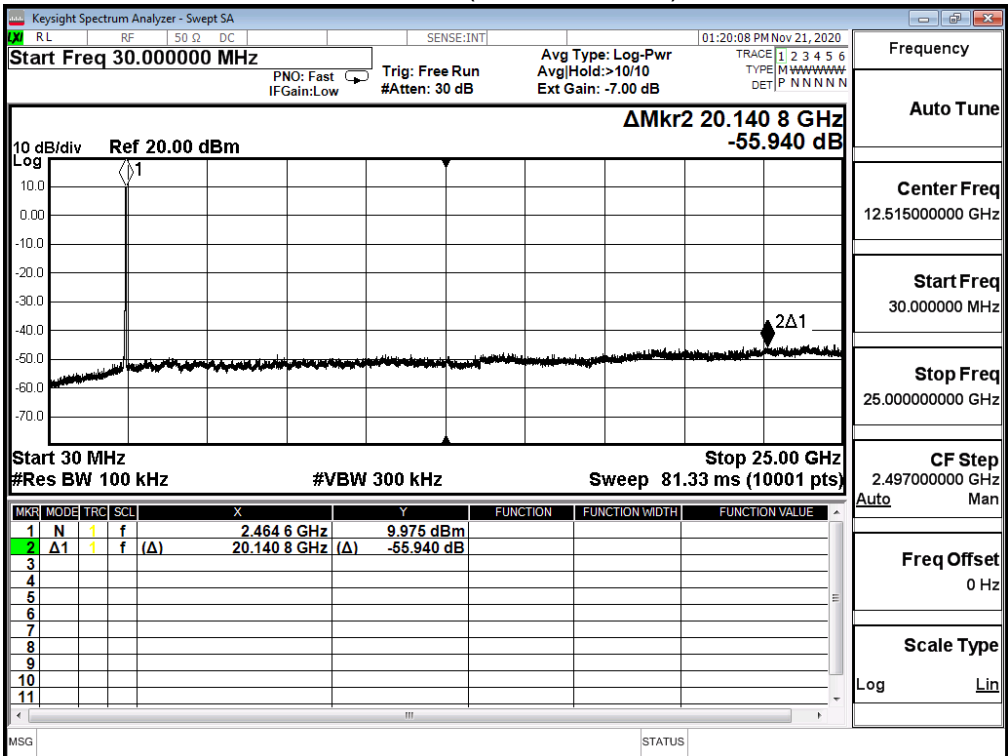
2412MHz (30MHz-25GHz)



2437MHz (30MHz-25GHz)



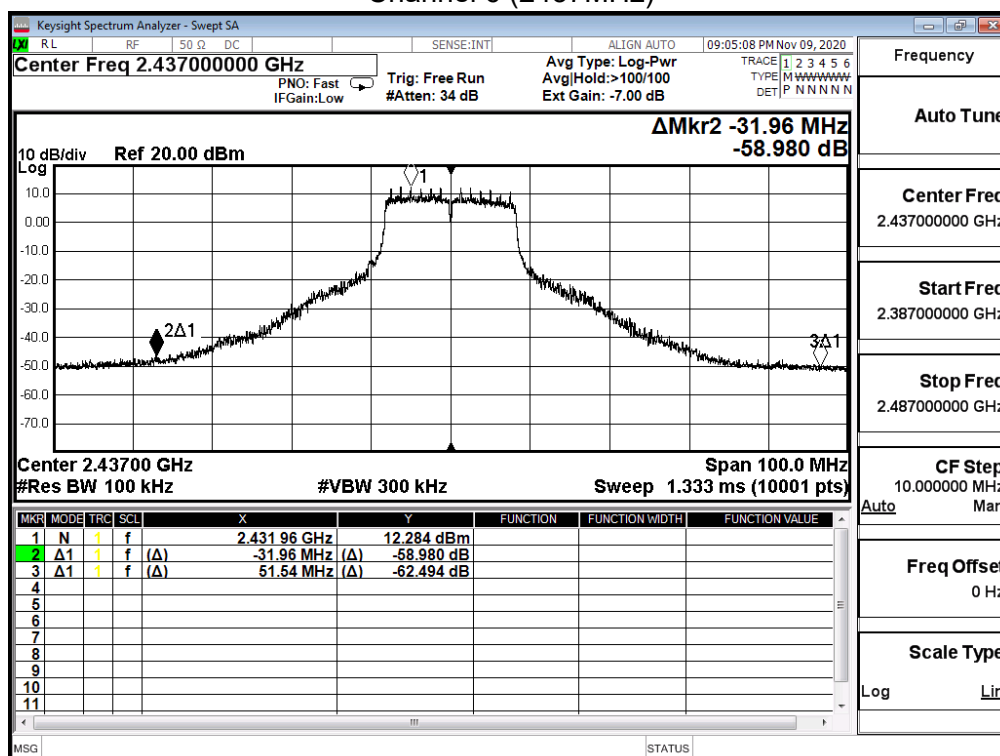
2462MHz (30MHz-25GHz)



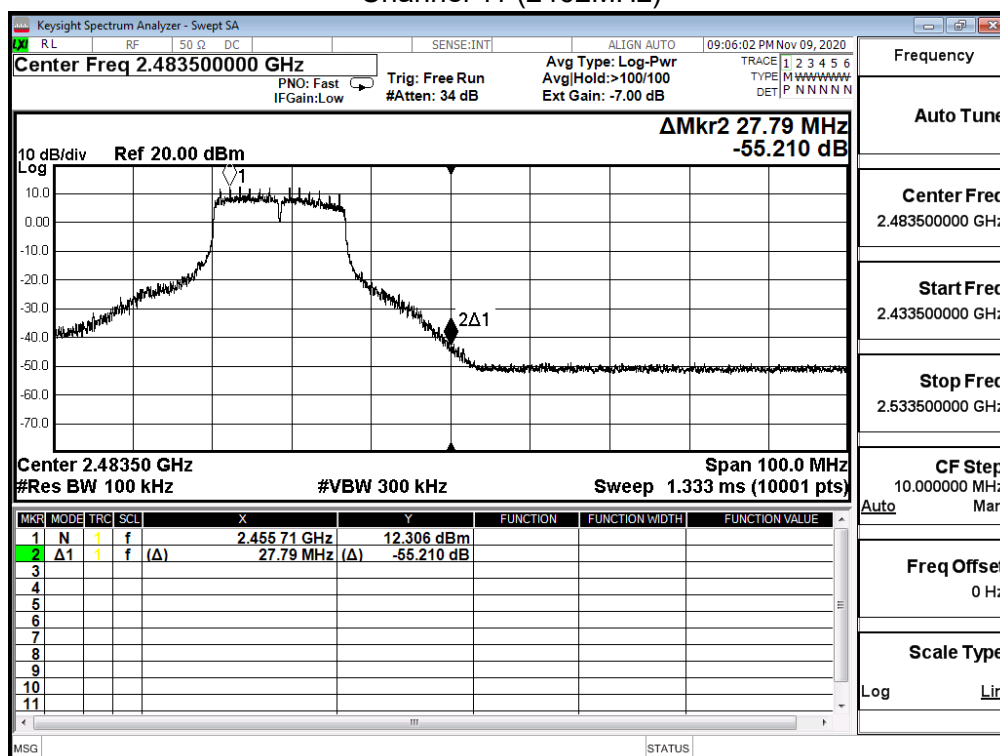
IEEE 802.11g (ANT 0)				
Channel	Frequency (MHz)	Measure Level (dBc)	Limit (dBc)	Result
1	2412	34.942	≥30	Pass
6	2437	58.858	≥30	Pass
11	2462	55.210	≥30	Pass

[illegible]

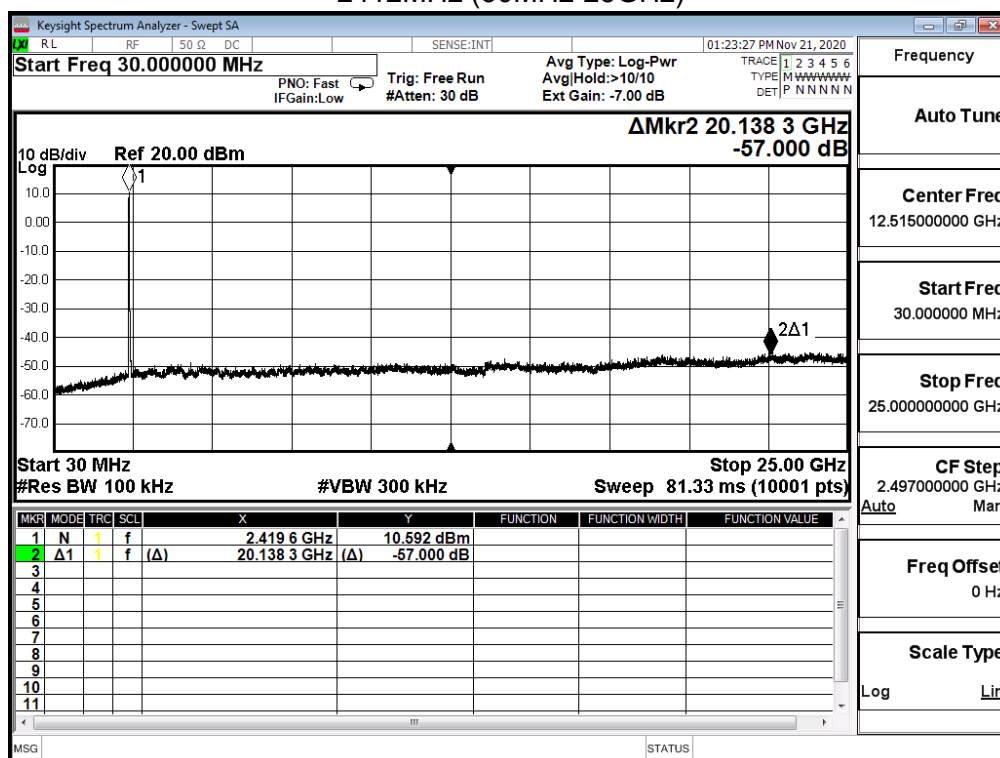
Channel 6 (2437MHz)



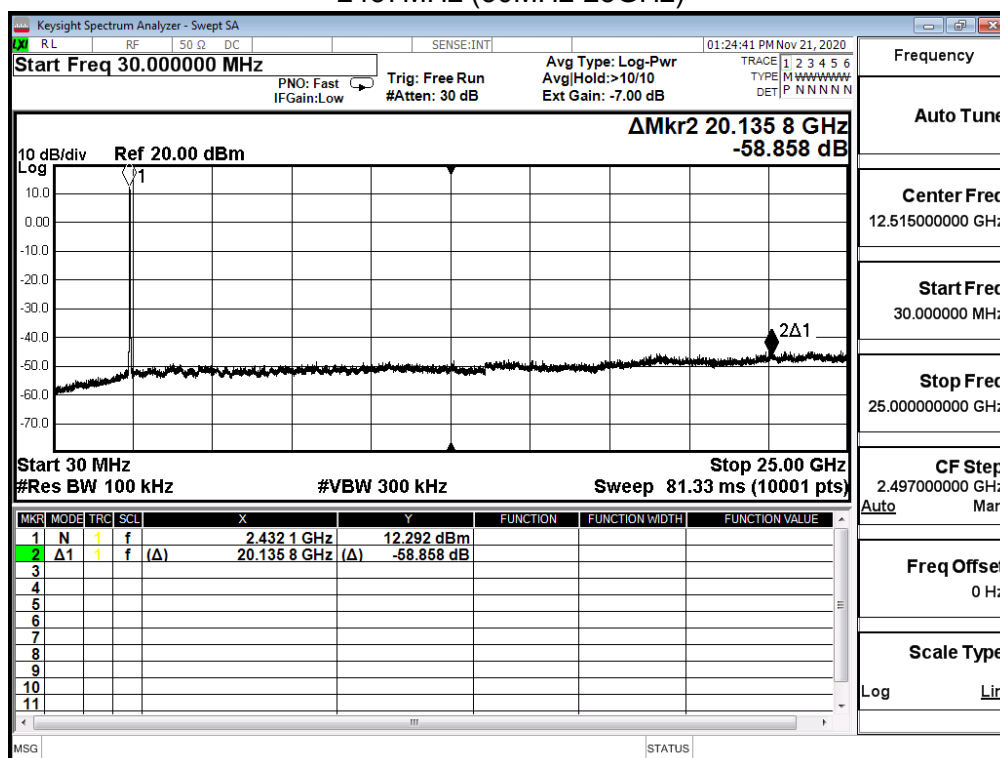
Channel 11 (2462MHz)



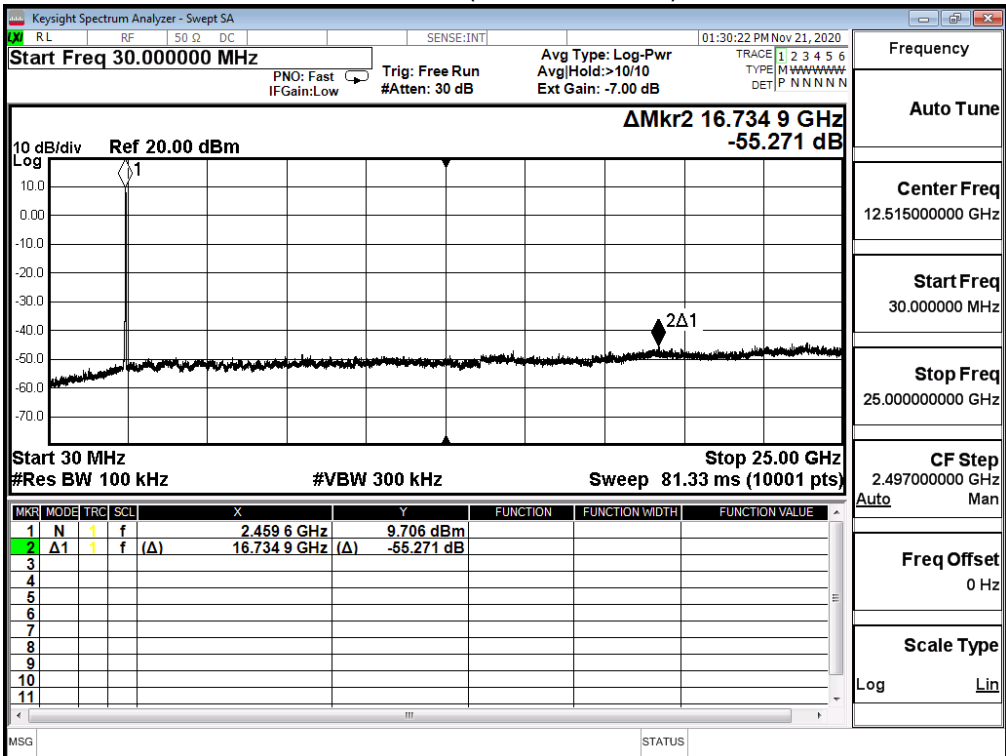
2412MHz (30MHz-25GHz)



2437MHz (30MHz-25GHz)



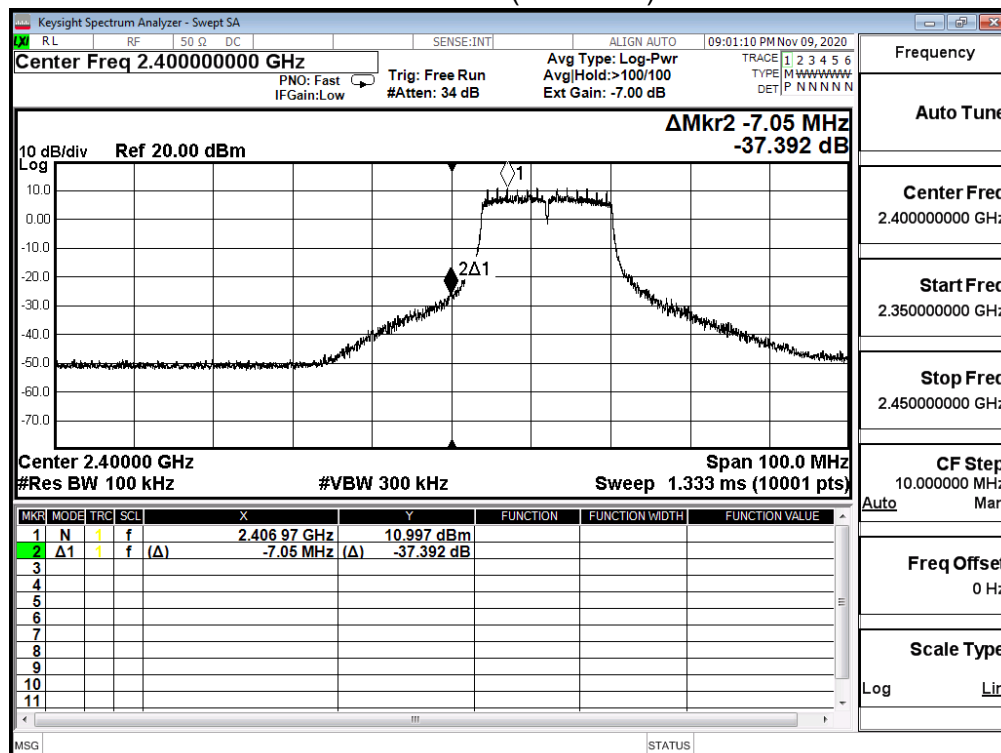
2462MHz (30MHz-25GHz)



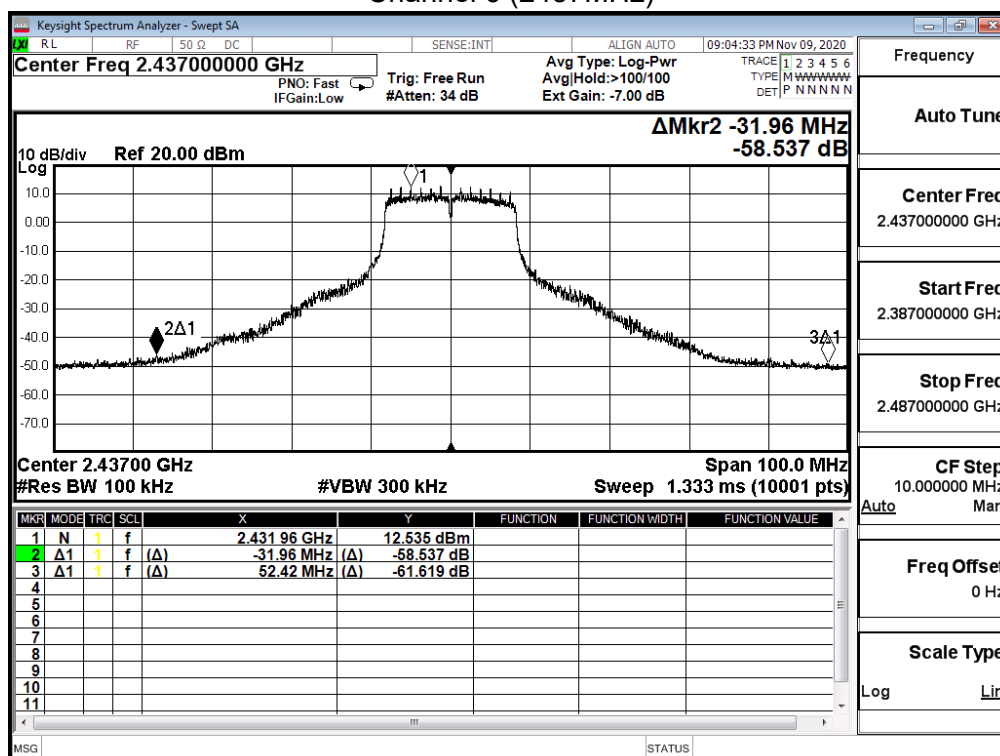
Product	Consumer Home Router		
Test Item	RF antenna conducted test		
Test Mode	Mode 1: Transmit CDD Mode		
Date of Test	2020/11/09	Test Site	SR12-H
Test Temperature	23.0°C	Test Humidity	61.0%

IEEE 802.11g (ANT 1)				
Channel	Frequency (MHz)	Measure Level (dBc)	Limit (dBc)	Result
1	2412	37.392	≥ 30	Pass
6	2437	57.226	≥ 30	Pass
11	2462	52.817	≥ 30	Pass

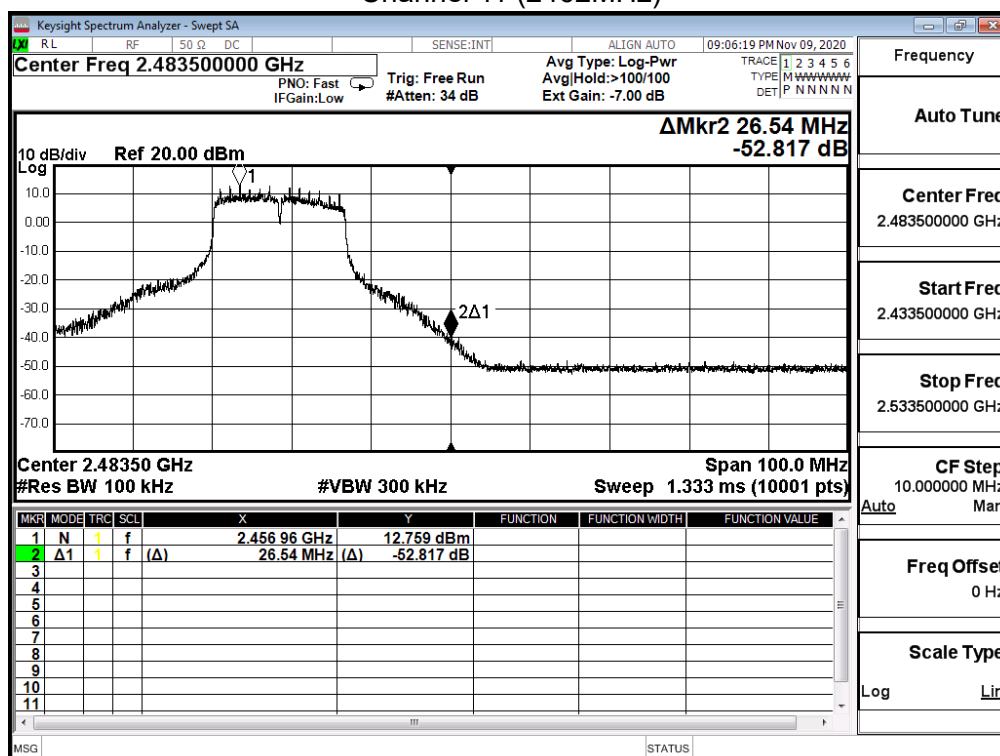
Channel 1 (2412MHz)



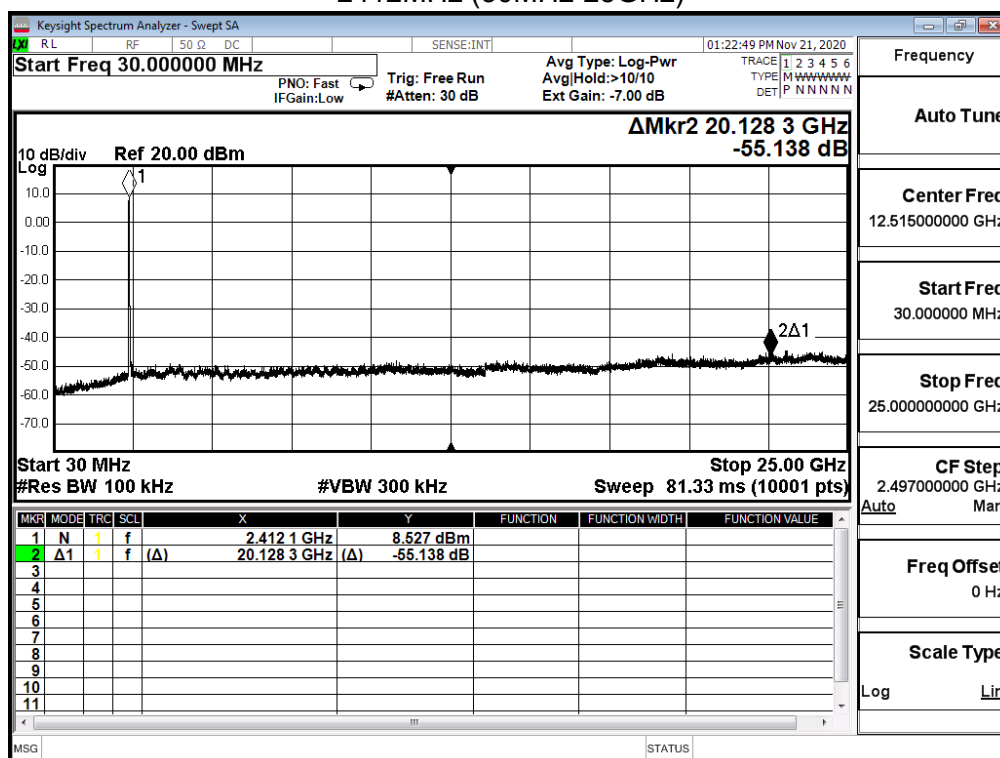
Channel 6 (2437MHz)



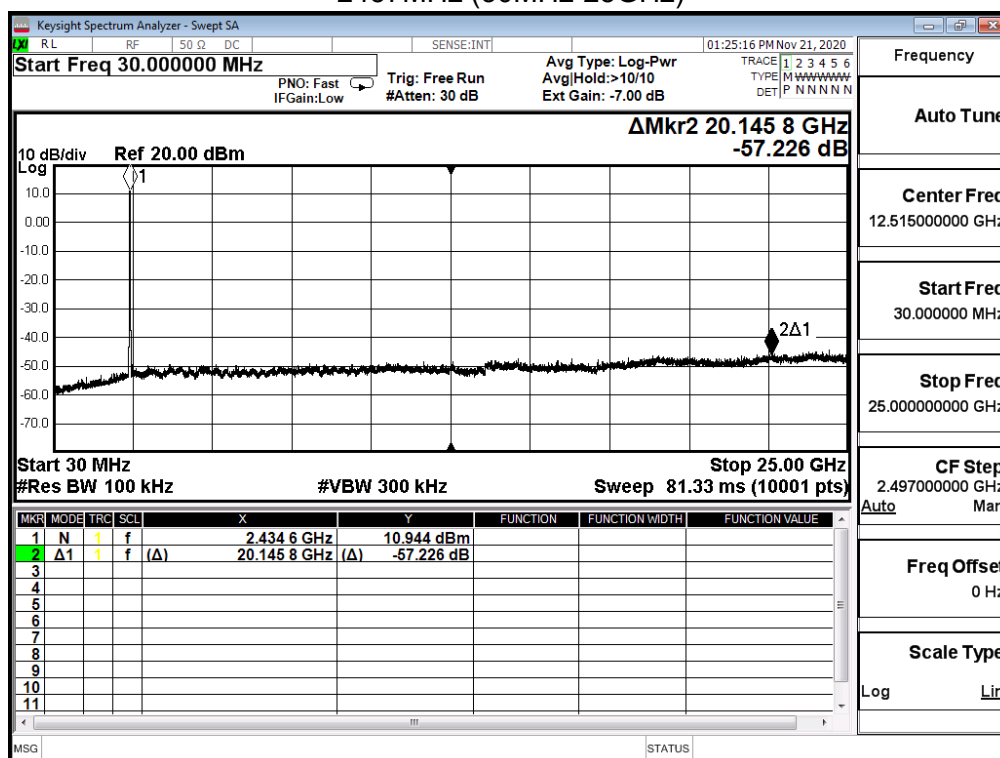
Channel 11 (2462MHz)



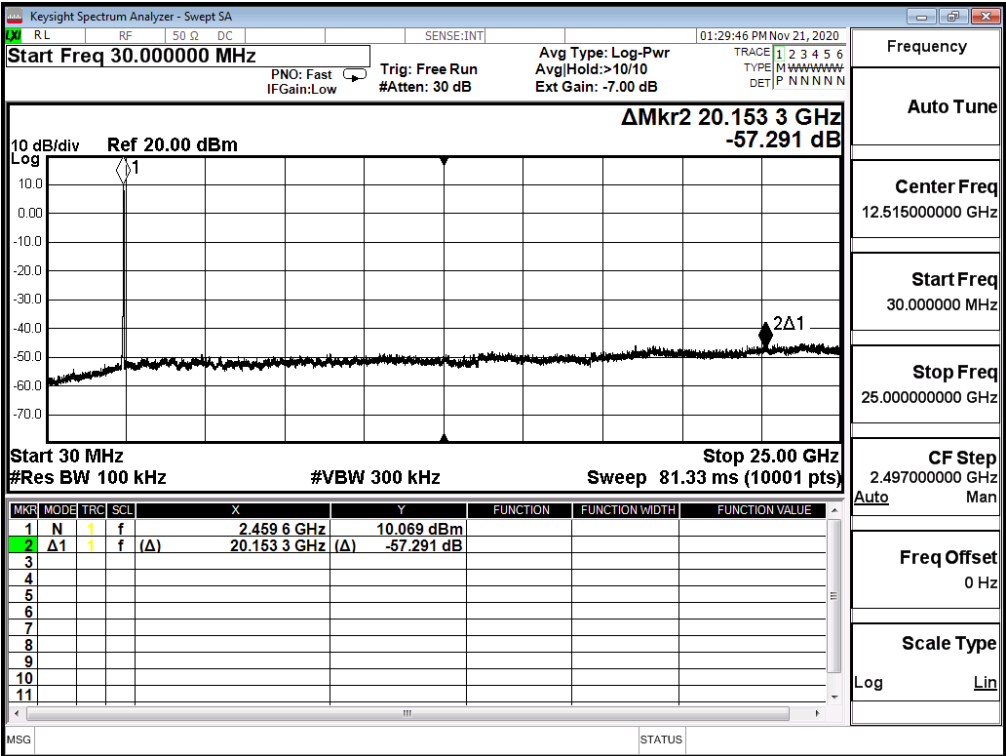
2412MHz (30MHz-25GHz)



2437MHz (30MHz-25GHz)



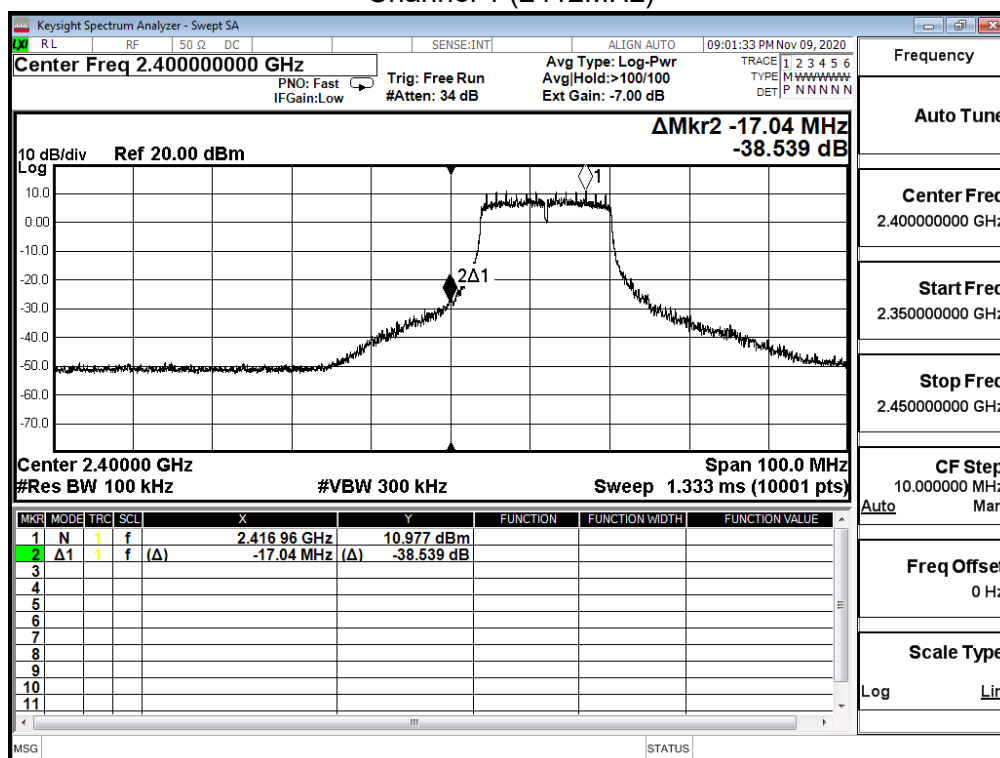
2462MHz (30MHz-25GHz)



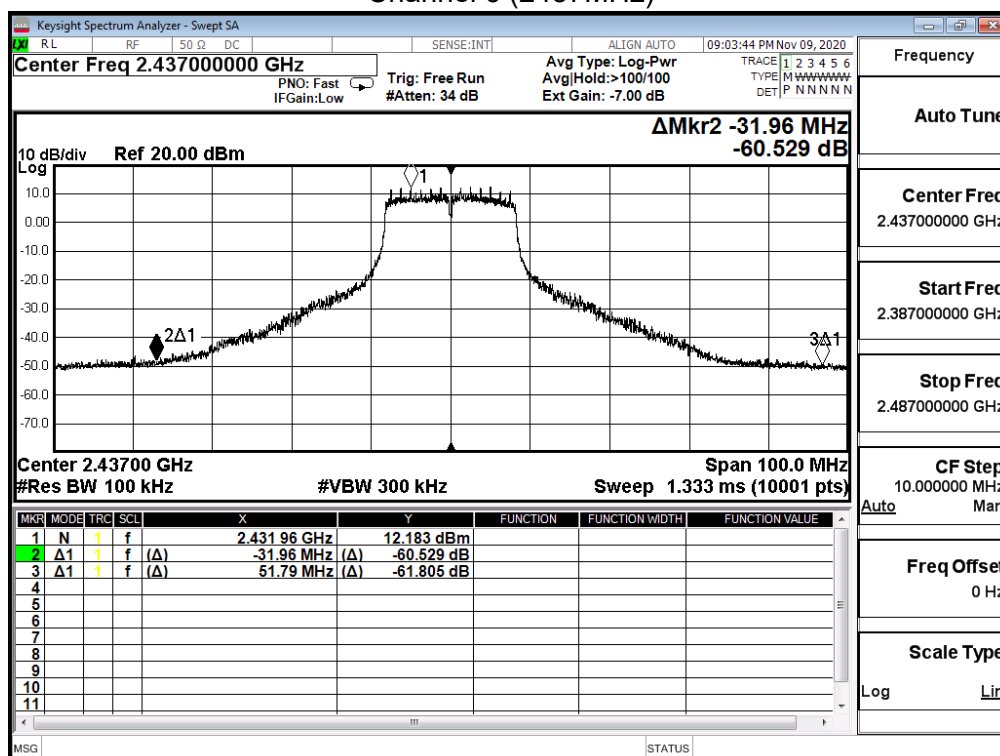
Product	Consumer Home Router		
Test Item	RF antenna conducted test		
Test Mode	Mode 1: Transmit CDD Mode		
Date of Test	2020/11/09	Test Site	SR12-H
Test Temperature	23.0°C	Test Humidity	61.0%

IEEE 802.11g (ANT 2)				
Channel	Frequency (MHz)	Measure Level (dBc)	Limit (dBc)	Result
1	2412	38.539	≥ 30	Pass
6	2437	55.389	≥ 30	Pass
11	2462	52.961	≥ 30	Pass

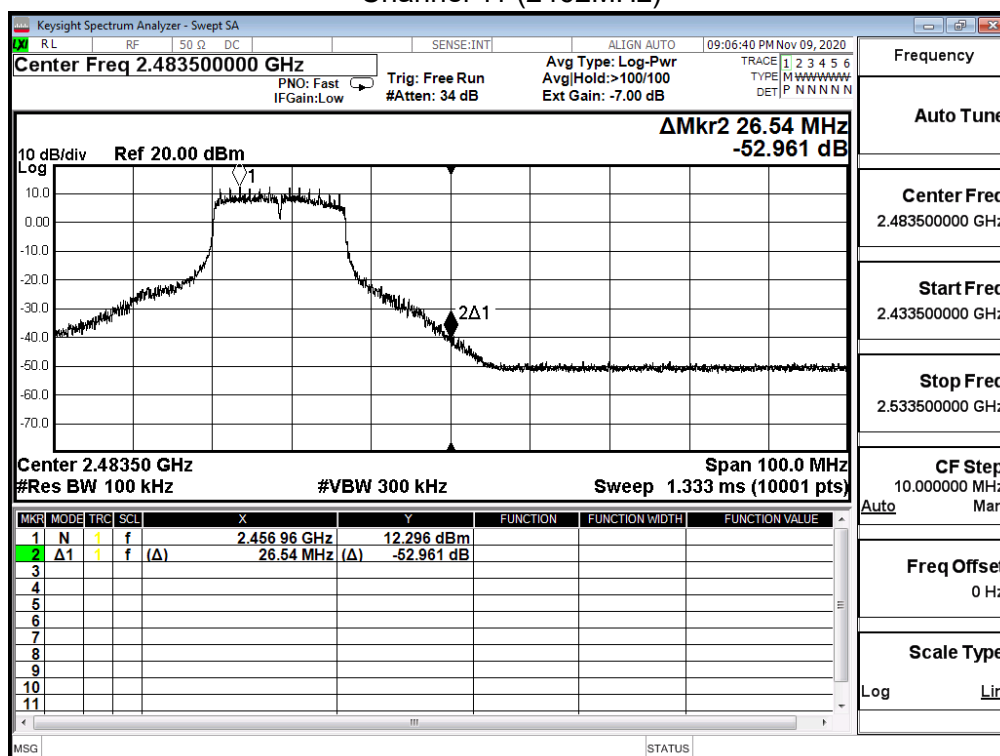
Channel 1 (2412MHz)



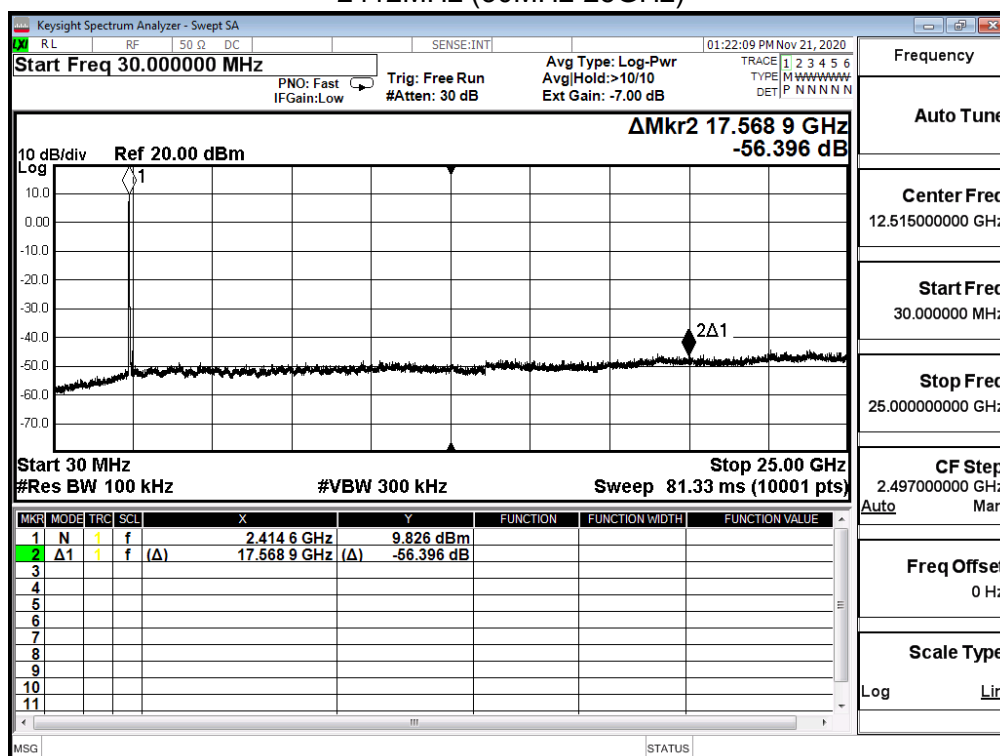
Channel 6 (2437MHz)



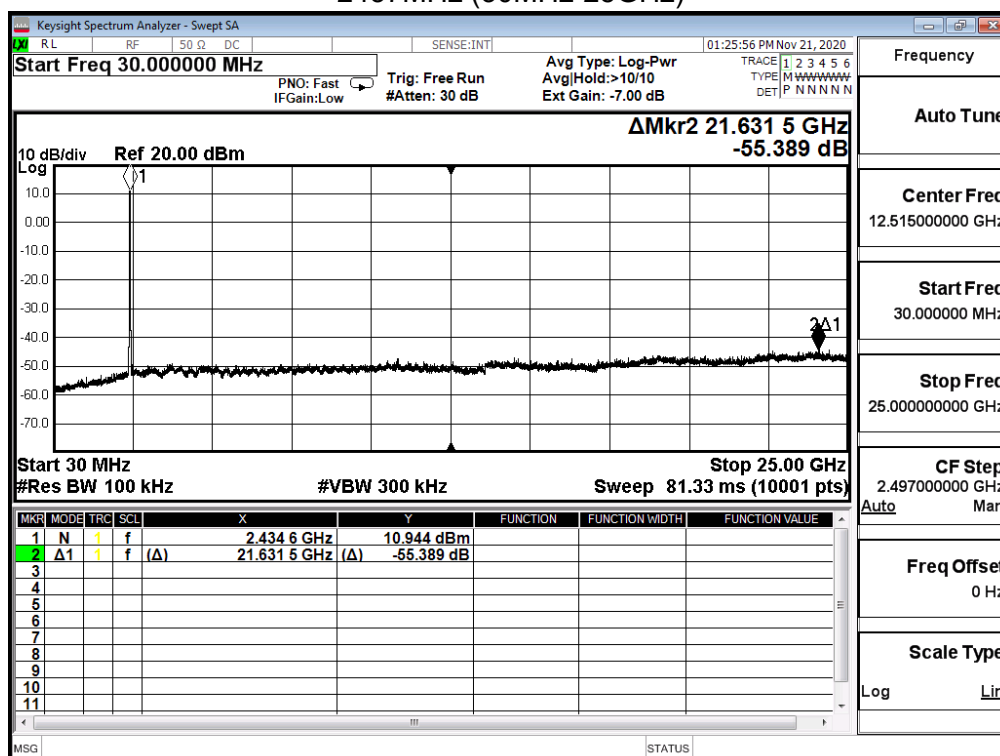
Channel 11 (2462MHz)



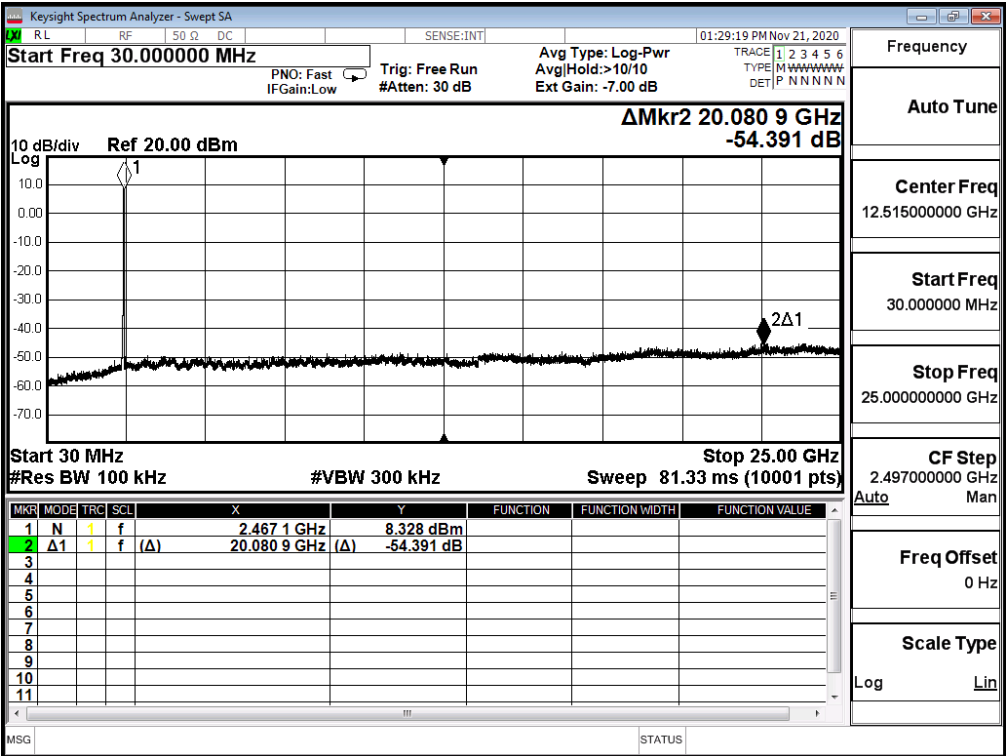
2412MHz (30MHz-25GHz)



2437MHz (30MHz-25GHz)



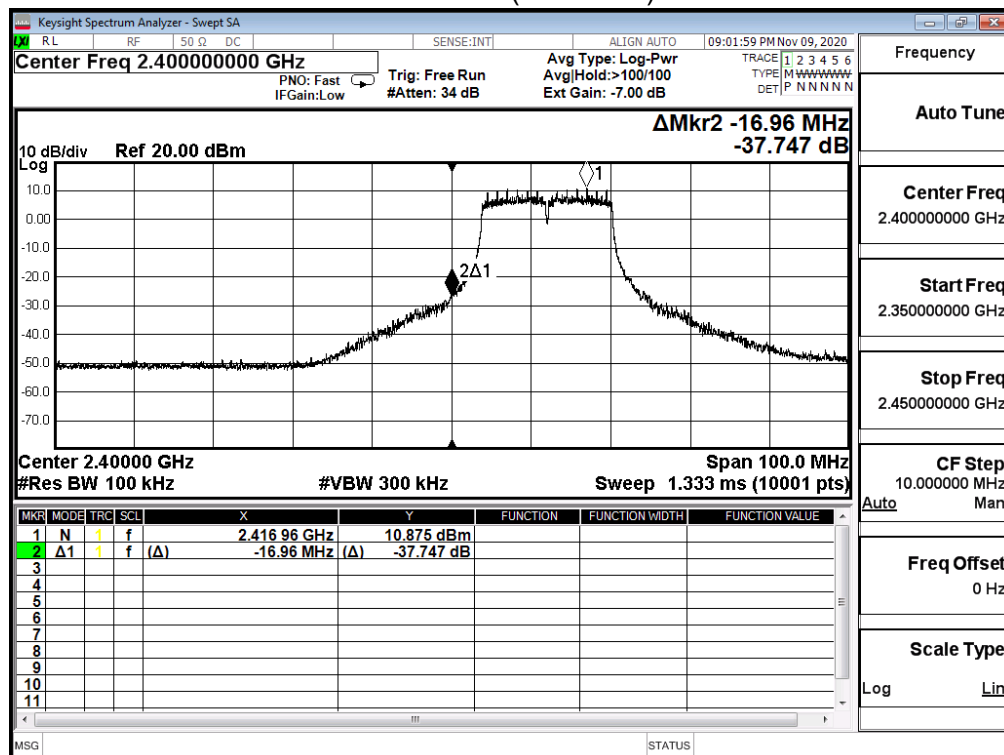
2462MHz (30MHz-25GHz)



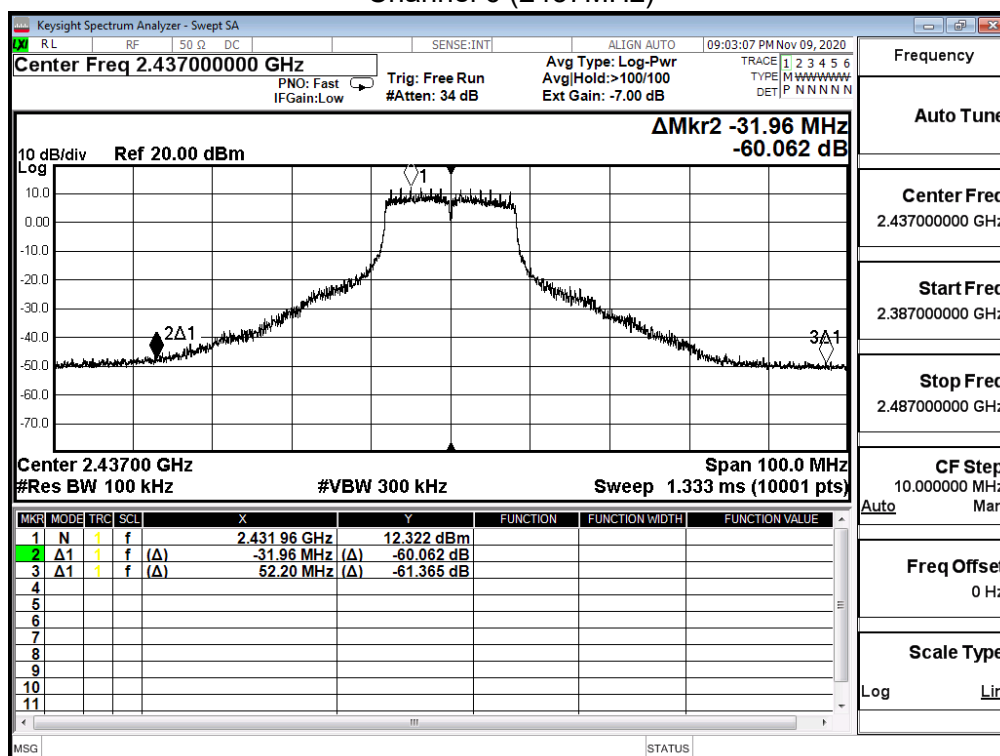
Product	Consumer Home Router		
Test Item	RF antenna conducted test		
Test Mode	Mode 1: Transmit CDD Mode		
Date of Test	2020/11/09	Test Site	SR12-H
Test Temperature	23.0°C	Test Humidity	61.0%

IEEE 802.11g (ANT 3)				
Channel	Frequency (MHz)	Measure Level (dBc)	Limit (dBc)	Result
1	2412	37.747	≥ 30	Pass
6	2437	59.218	≥ 30	Pass
11	2462	45.831	≥ 30	Pass

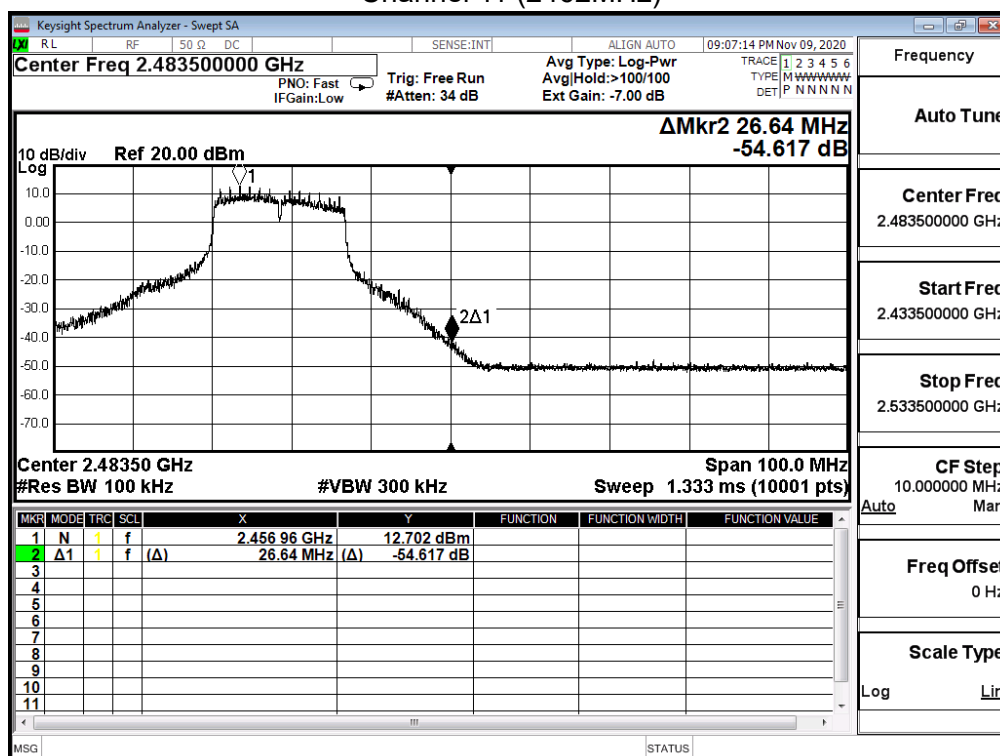
Channel 1 (2412MHz)



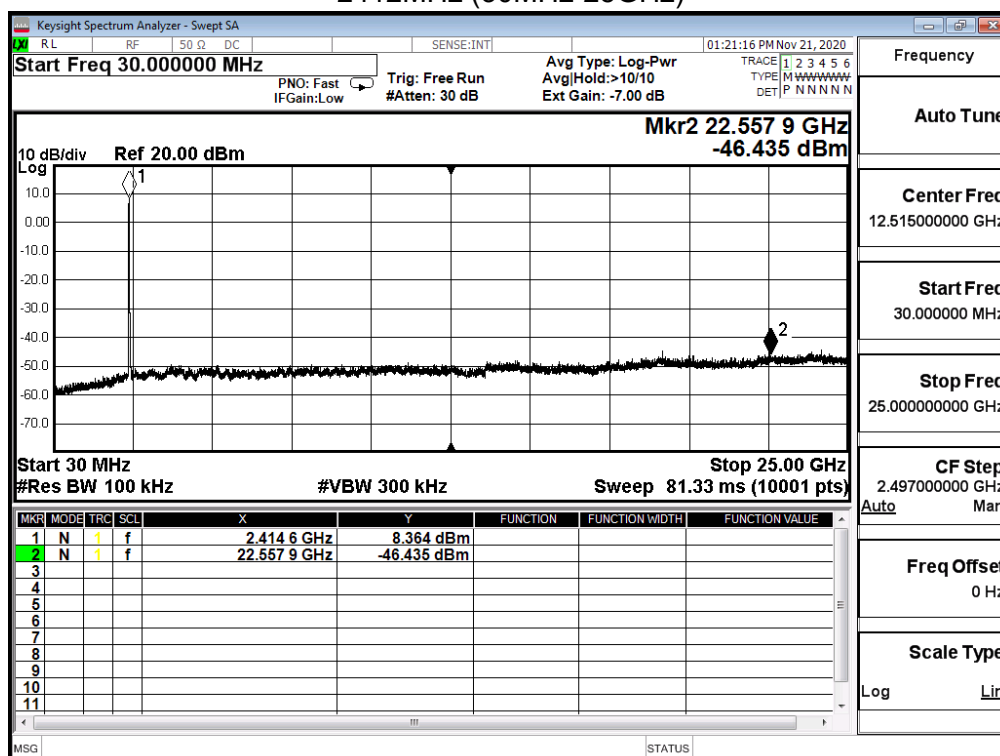
Channel 6 (2437MHz)



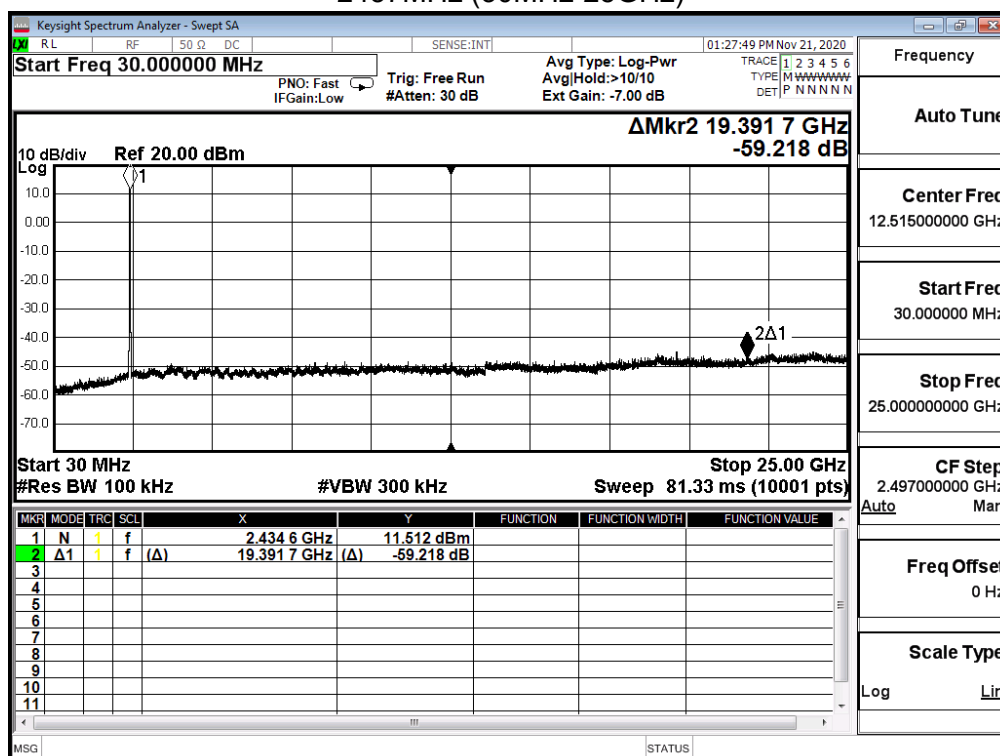
Channel 11 (2462MHz)



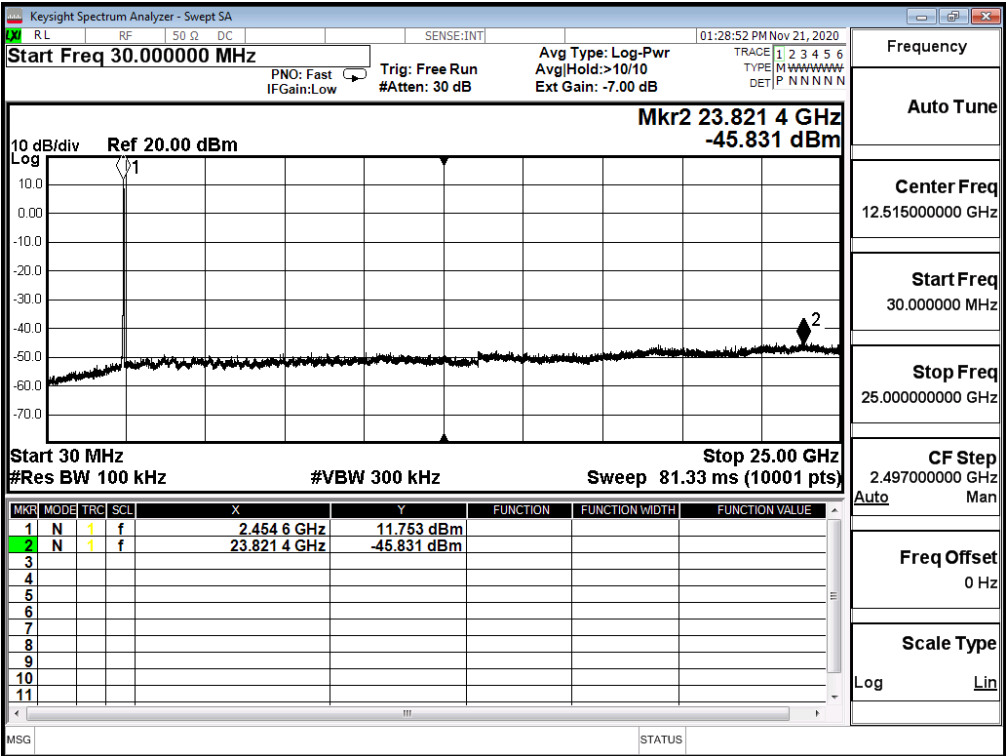
2412MHz (30MHz-25GHz)



2437MHz (30MHz-25GHz)



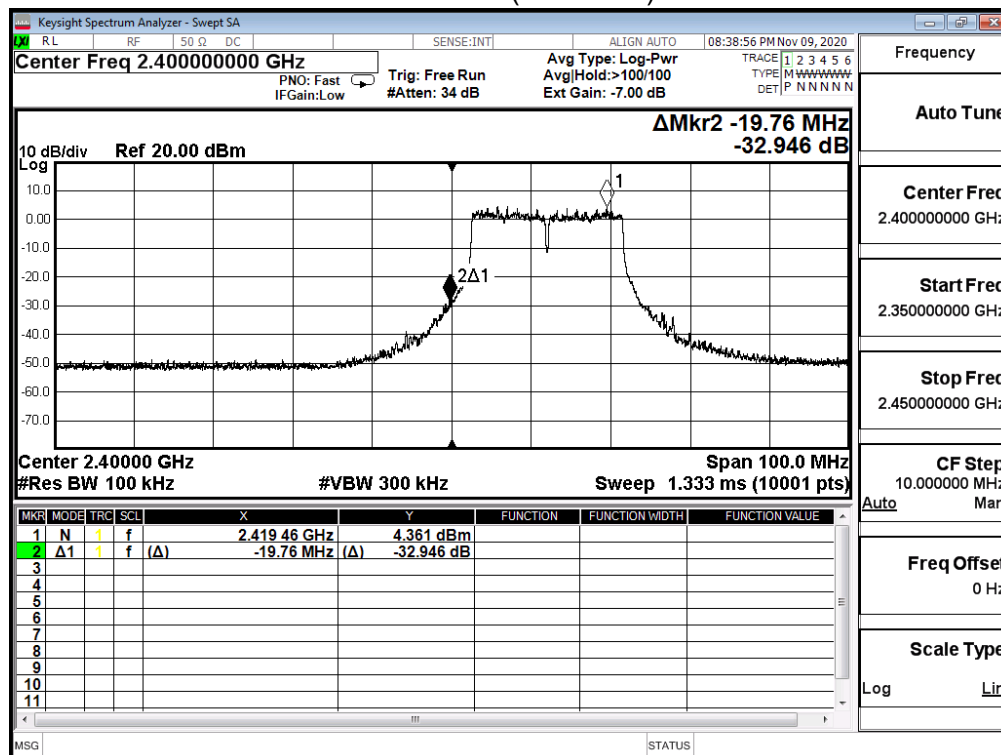
2462MHz (30MHz-25GHz)



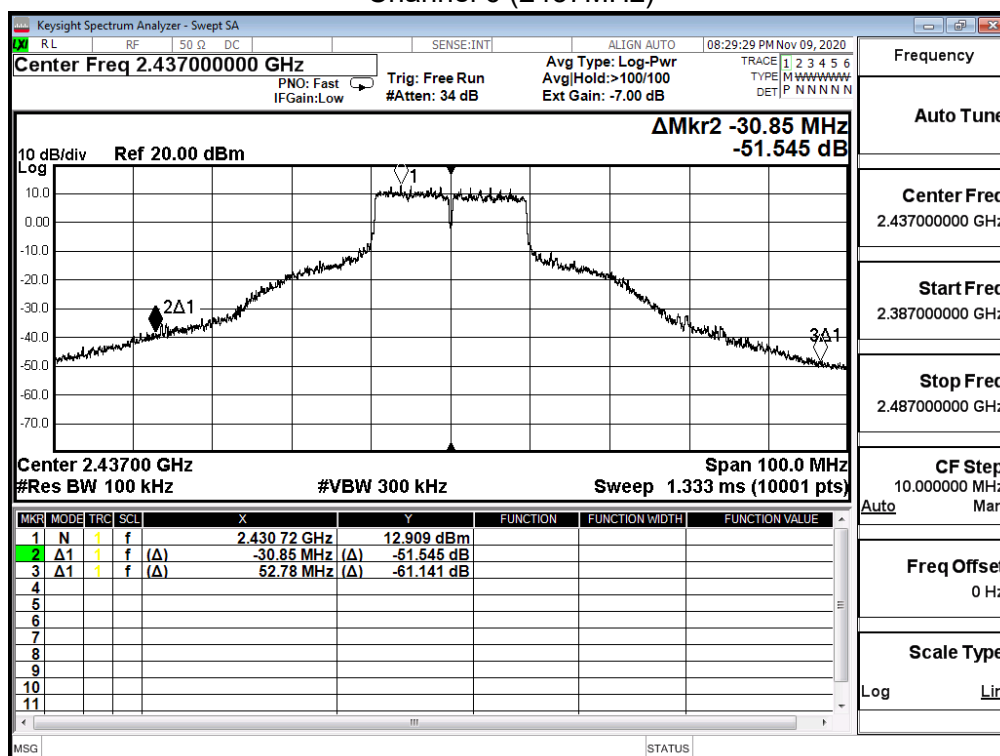
Product	Consumer Home Router		
Test Item	RF antenna conducted test		
Test Mode	Mode 2: Transmit RU Mode_Full		
Date of Test	2020/11/09	Test Site	SR12-H
Test Temperature	23.0°C	Test Humidity	61.0%

IEEE 802.11ax(20M)(ANT 0)				
Channel	Frequency (MHz)	Measure Level (dBc)	Limit (dBc)	Result
1	2412	32.946	≥ 30	Pass
6	2437	51.545	≥ 30	Pass
11	2462	53.412	≥ 30	Pass

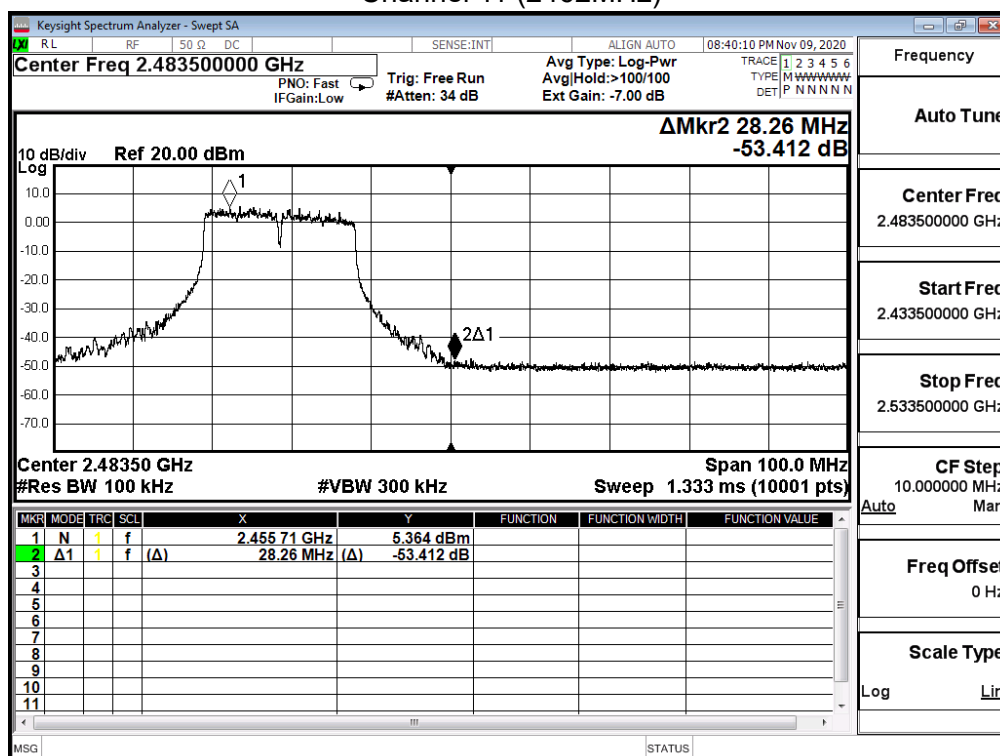
Channel 1 (2412MHz)



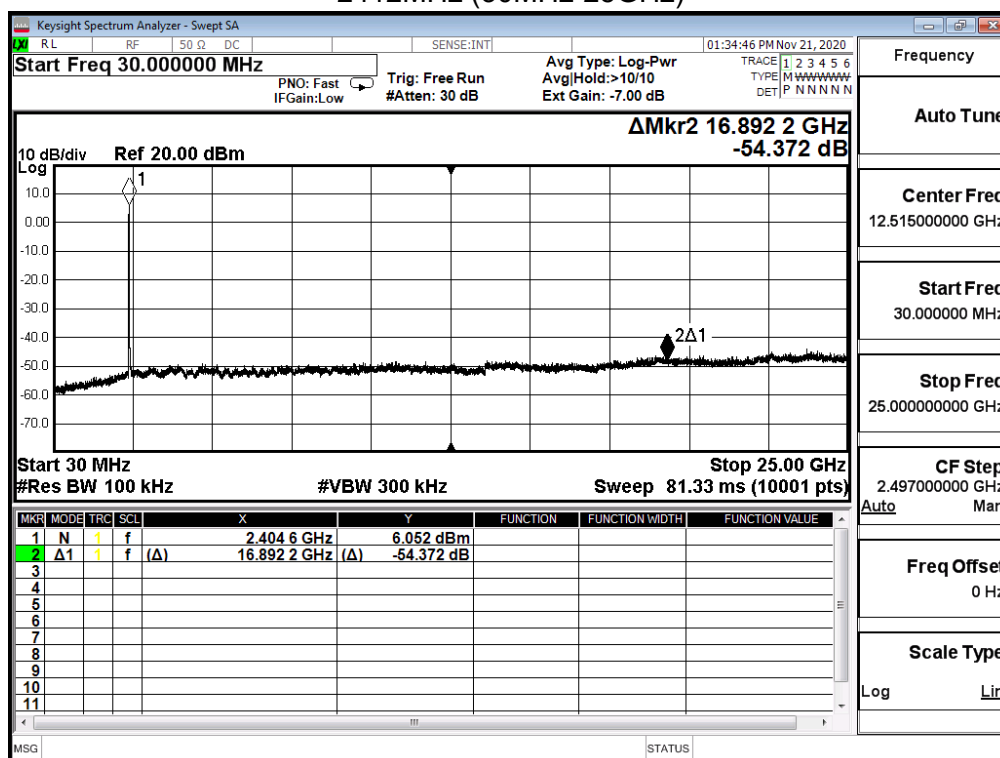
Channel 6 (2437MHz)



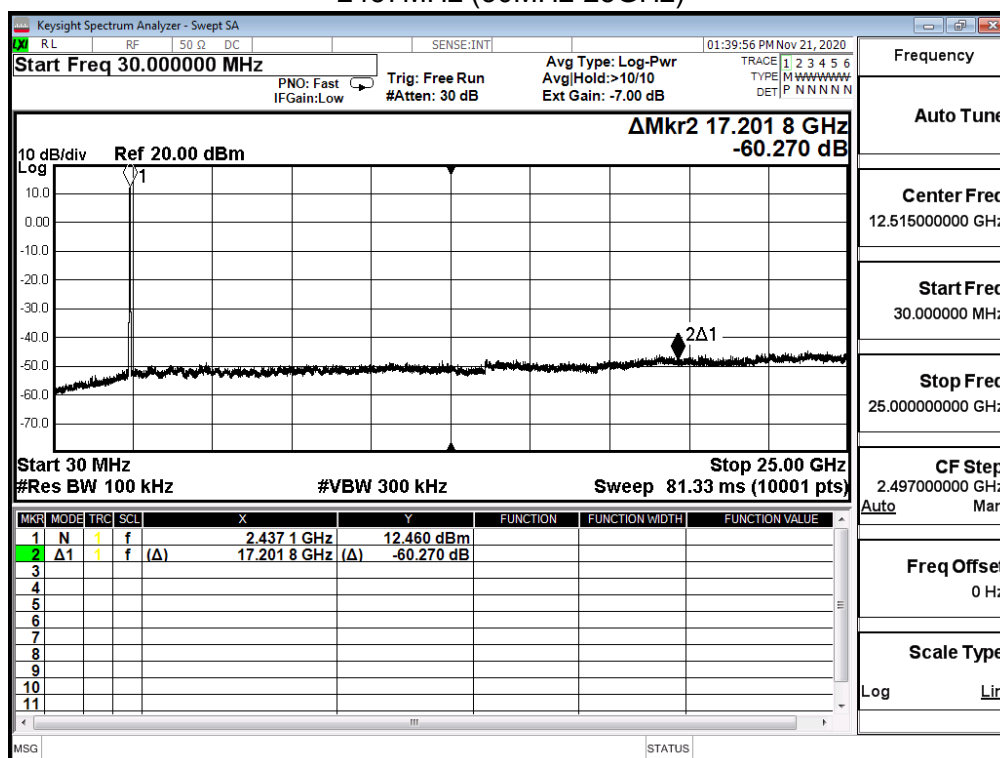
Channel 11 (2462MHz)



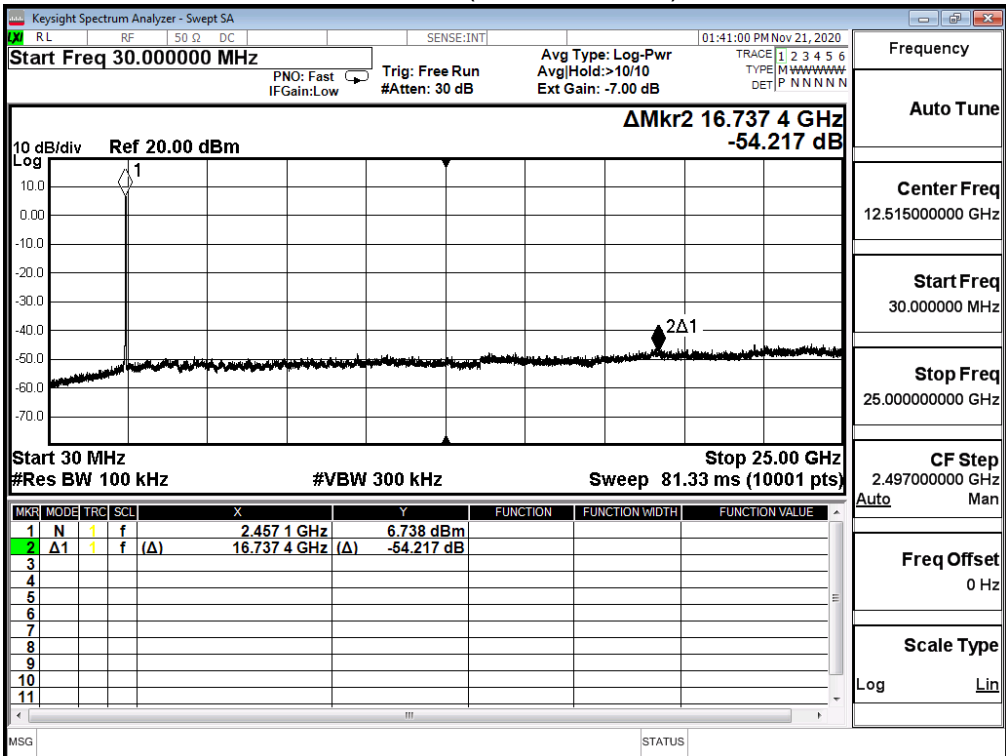
2412MHz (30MHz-25GHz)



2437MHz (30MHz-25GHz)



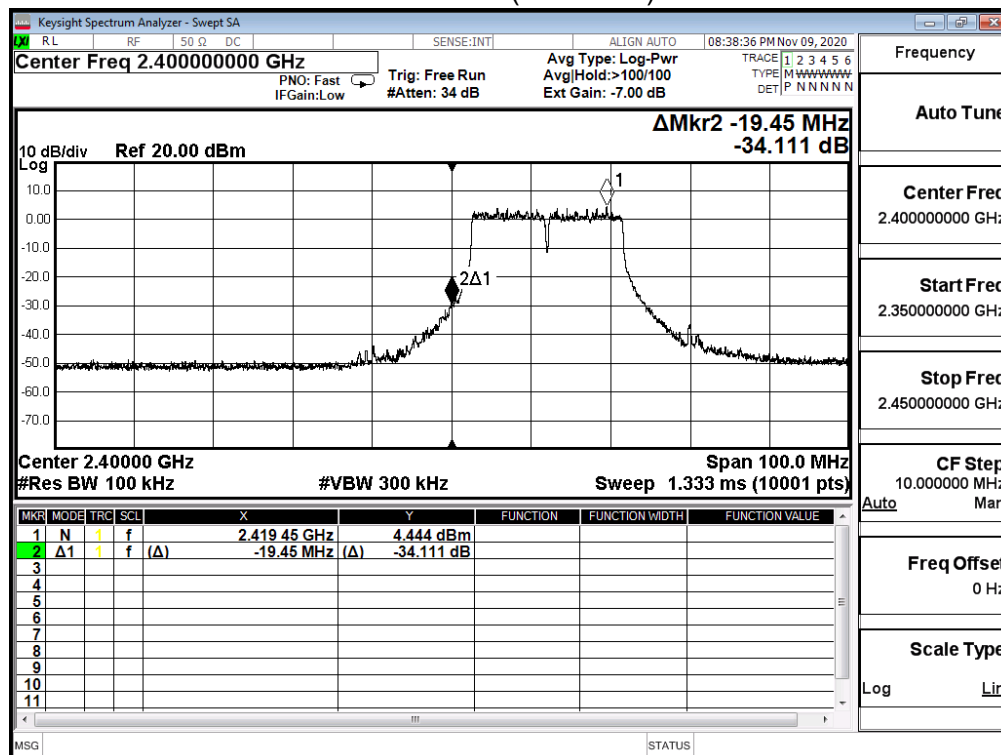
2462MHz (30MHz-25GHz)



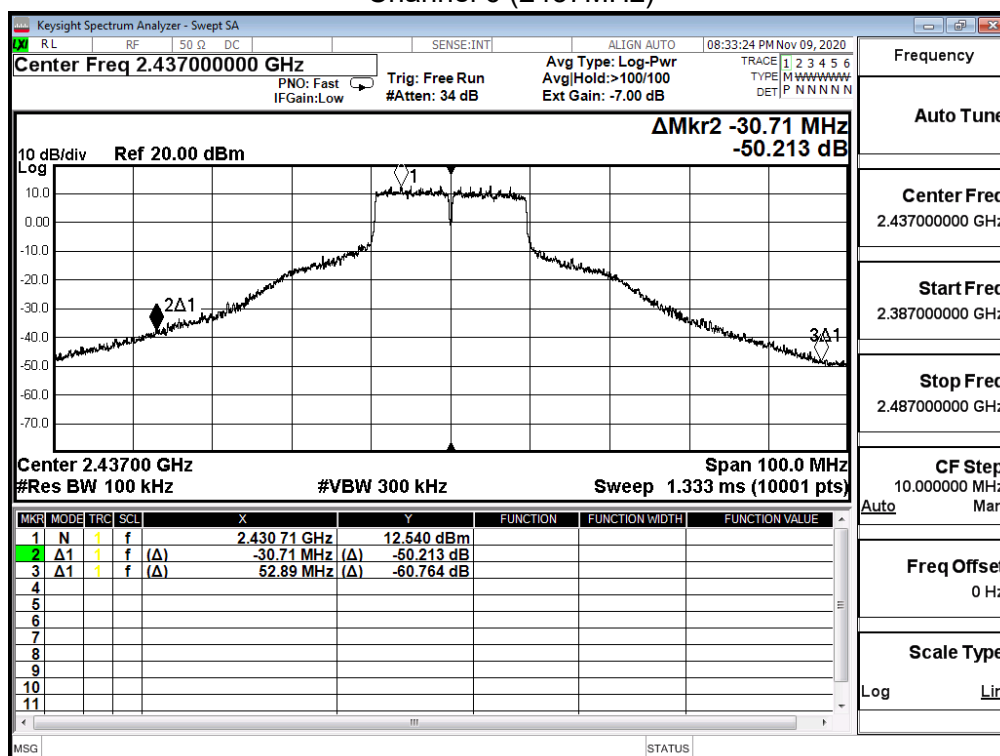
Product	Consumer Home Router		
Test Item	RF antenna conducted test		
Test Mode	Mode 2: Transmit RU Mode_Full		
Date of Test	2020/11/09	Test Site	SR12-H
Test Temperature	23.0°C	Test Humidity	61.0%

IEEE 802.11ax(20M)(ANT 1)				
Channel	Frequency (MHz)	Measure Level (dBc)	Limit (dBc)	Result
1	2412	34.111	≥ 30	Pass
6	2437	50.213	≥ 30	Pass
11	2462	52.589	≥ 30	Pass

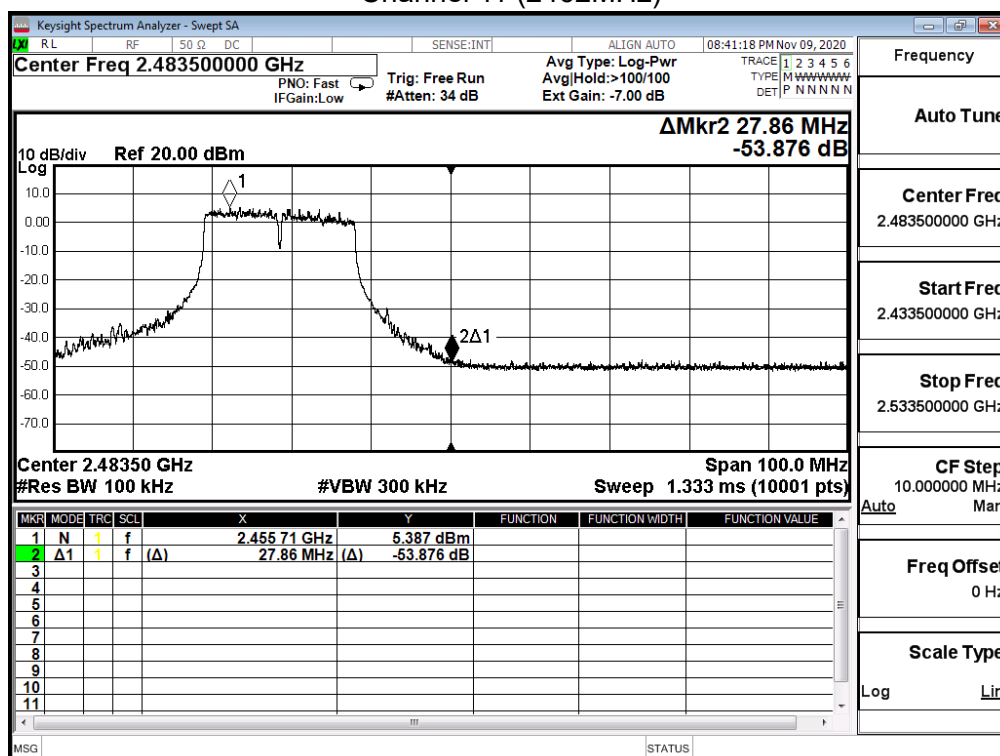
Channel 1 (2412MHz)



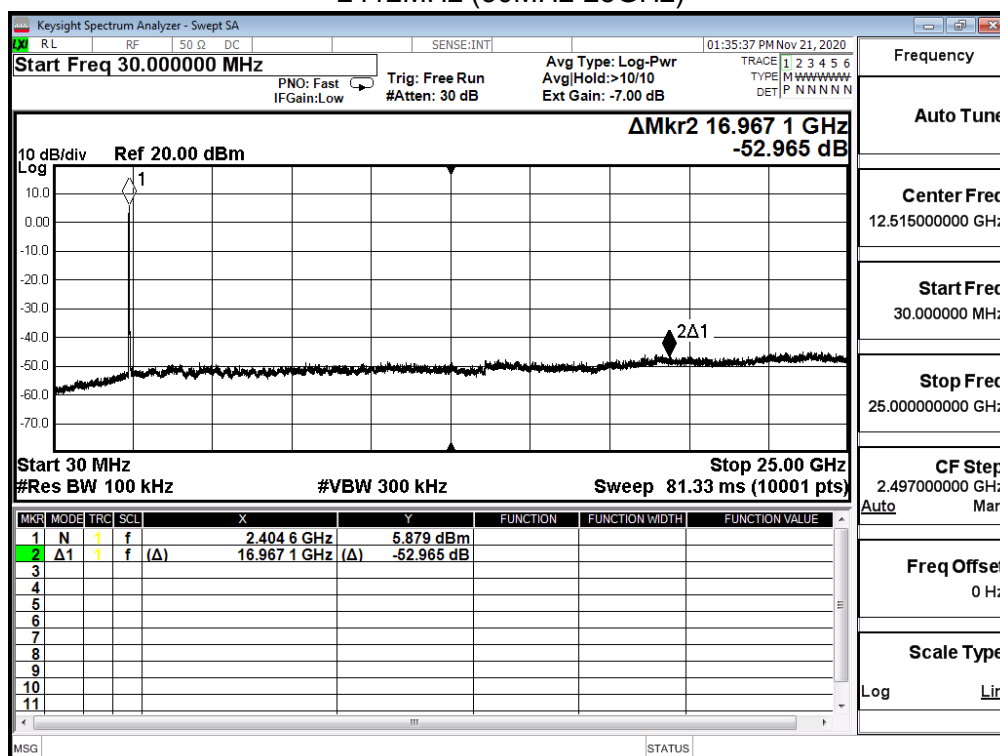
Channel 6 (2437MHz)



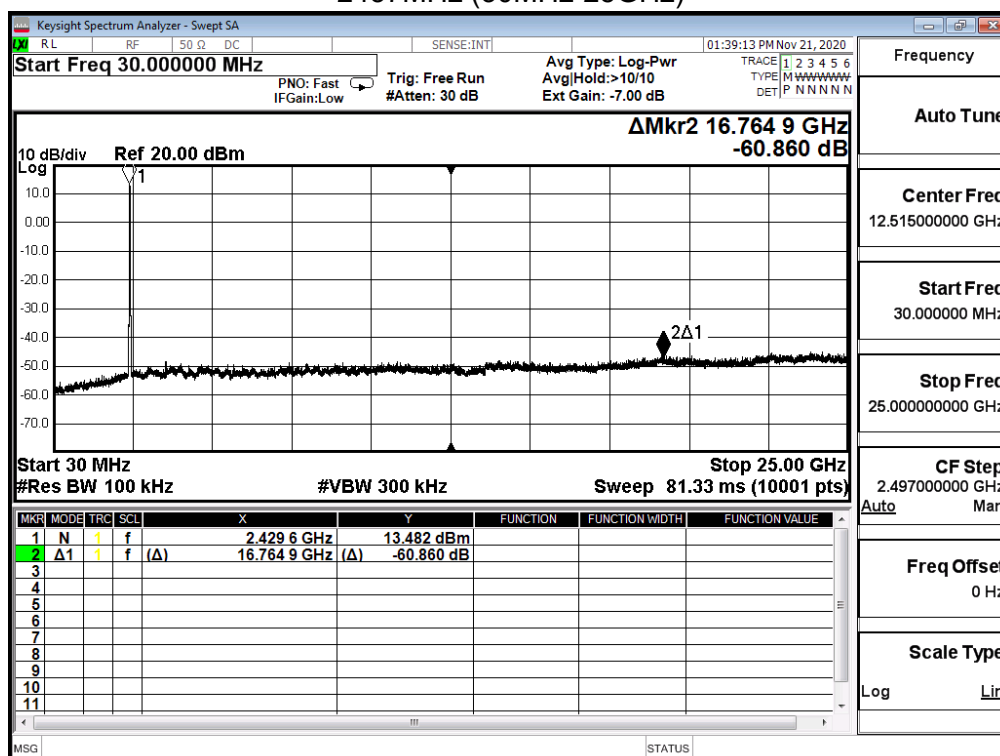
Channel 11 (2462MHz)



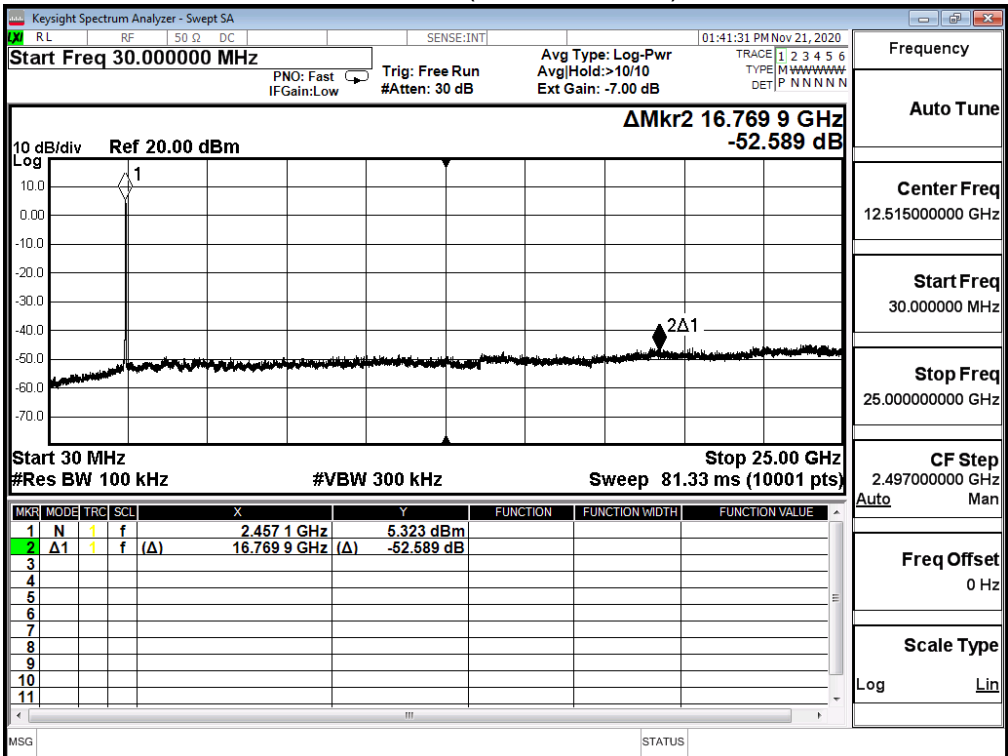
2412MHz (30MHz-25GHz)



2437MHz (30MHz-25GHz)



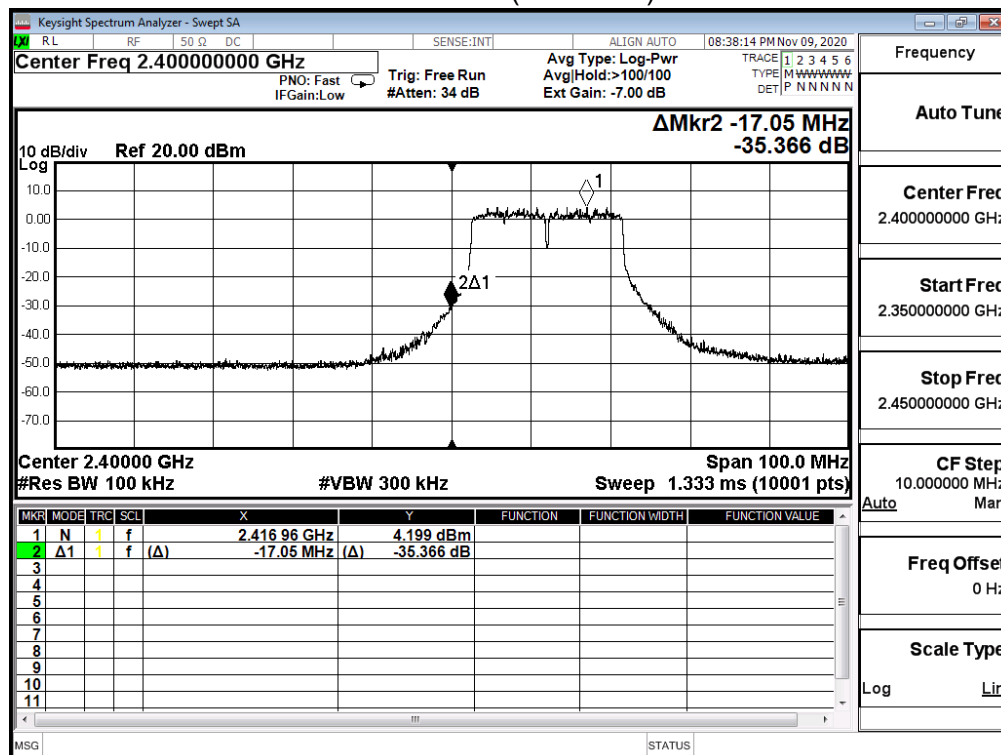
2462MHz (30MHz-25GHz)



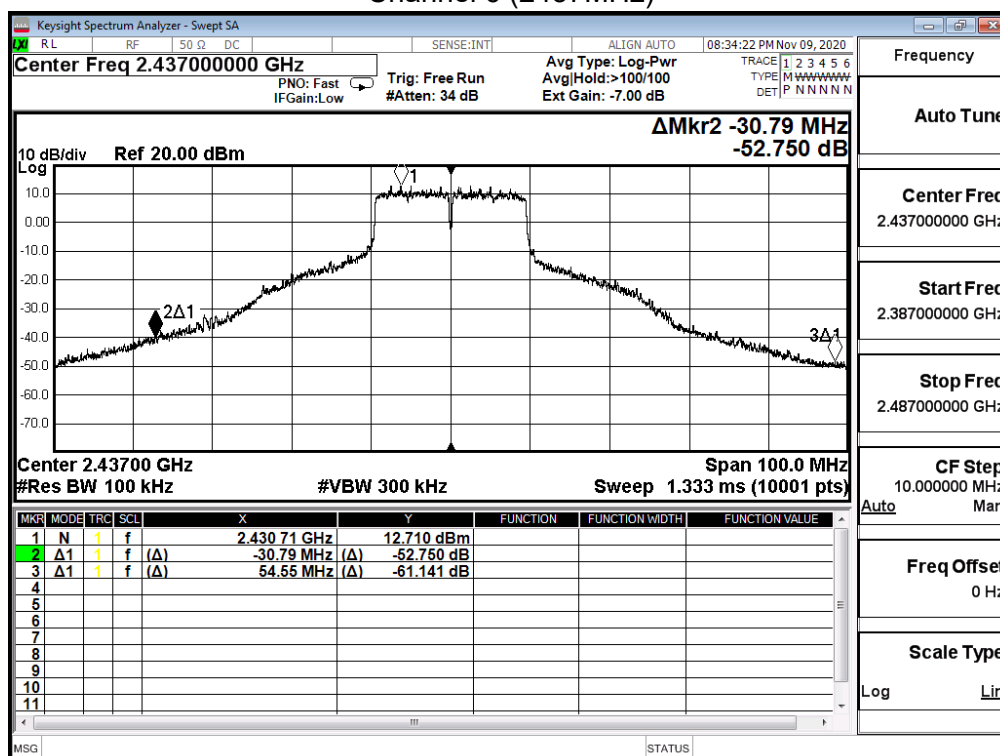
Product	Consumer Home Router		
Test Item	RF antenna conducted test		
Test Mode	Mode 2: Transmit RU Mode_Full		
Date of Test	2020/11/09	Test Site	SR12-H
Test Temperature	23.0°C	Test Humidity	61.0%

IEEE 802.11ax(20M)(ANT 2)				
Channel	Frequency (MHz)	Measure Level (dBc)	Limit (dBc)	Result
1	2412	35.366	≥ 30	Pass
6	2437	52.750	≥ 30	Pass
11	2462	51.149	≥ 30	Pass

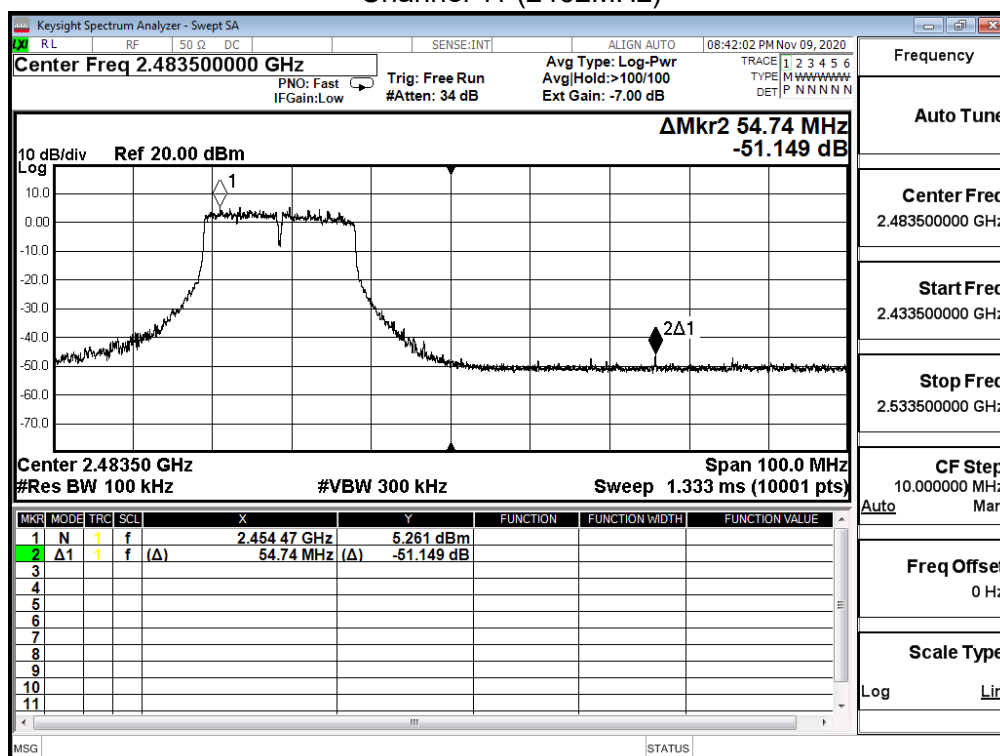
Channel 1 (2412MHz)



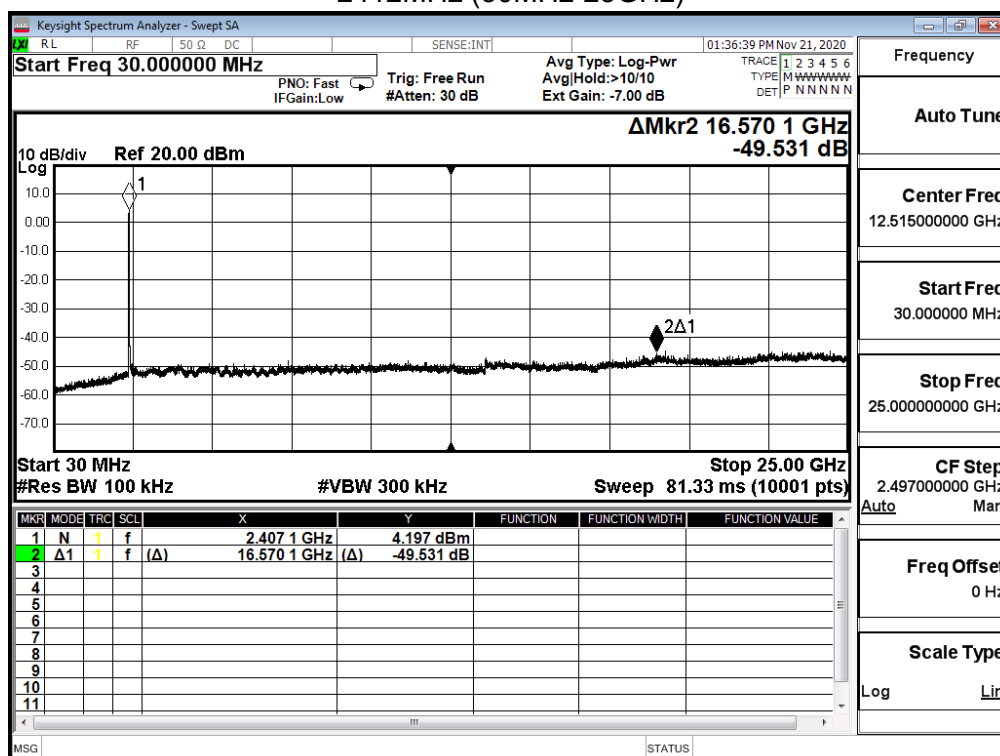
Channel 6 (2437MHz)



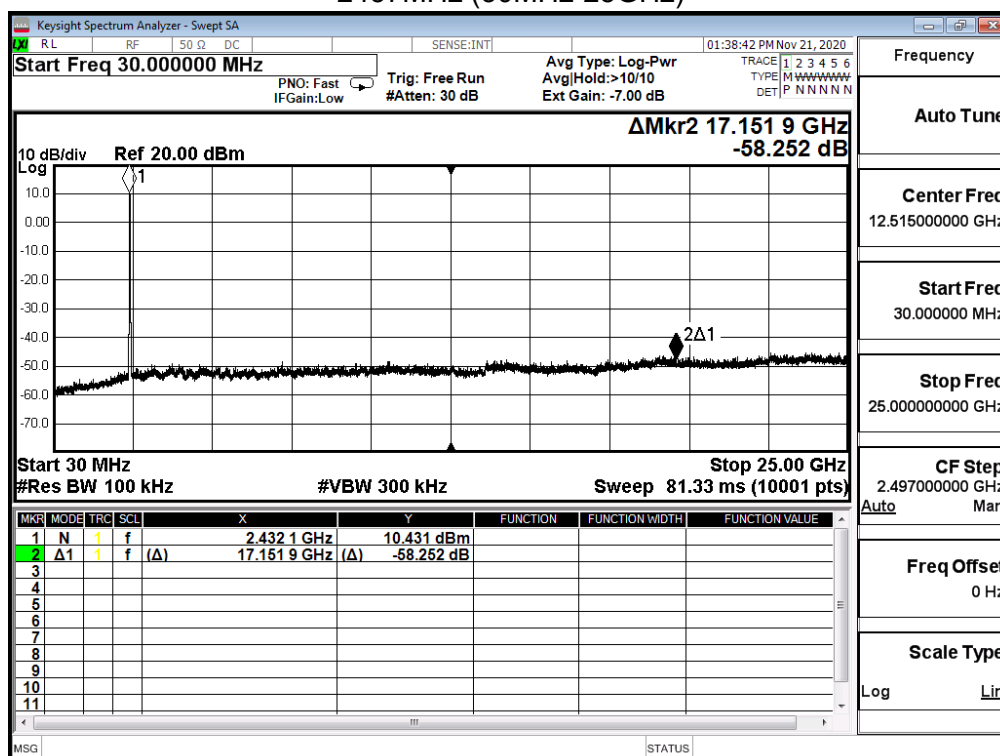
Channel 11 (2462MHz)



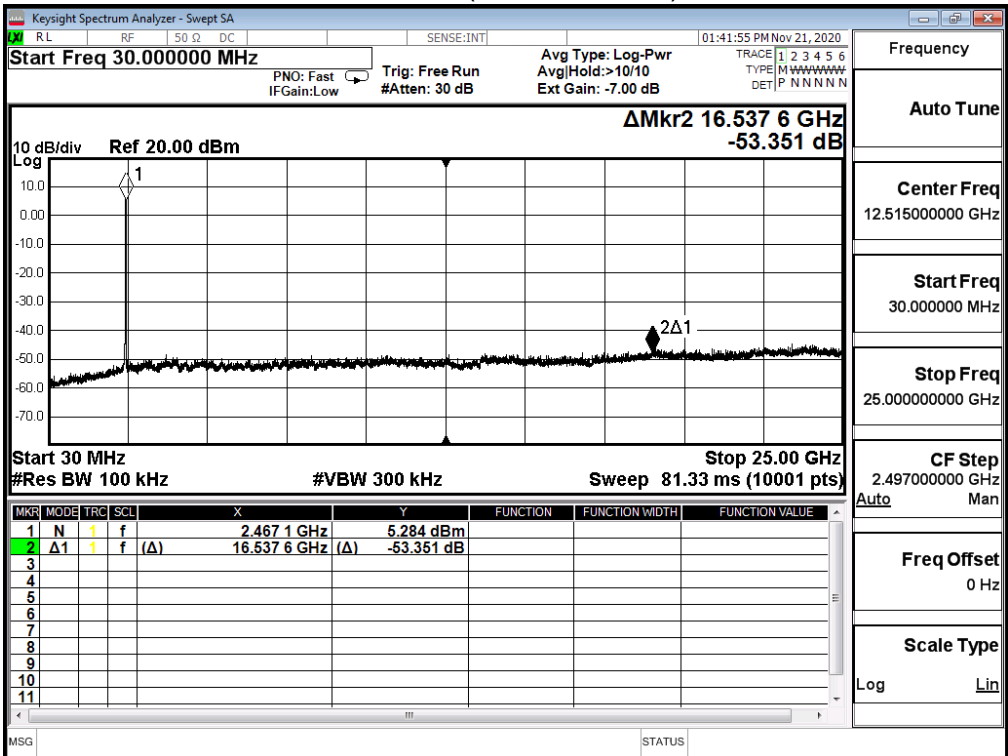
2412MHz (30MHz-25GHz)



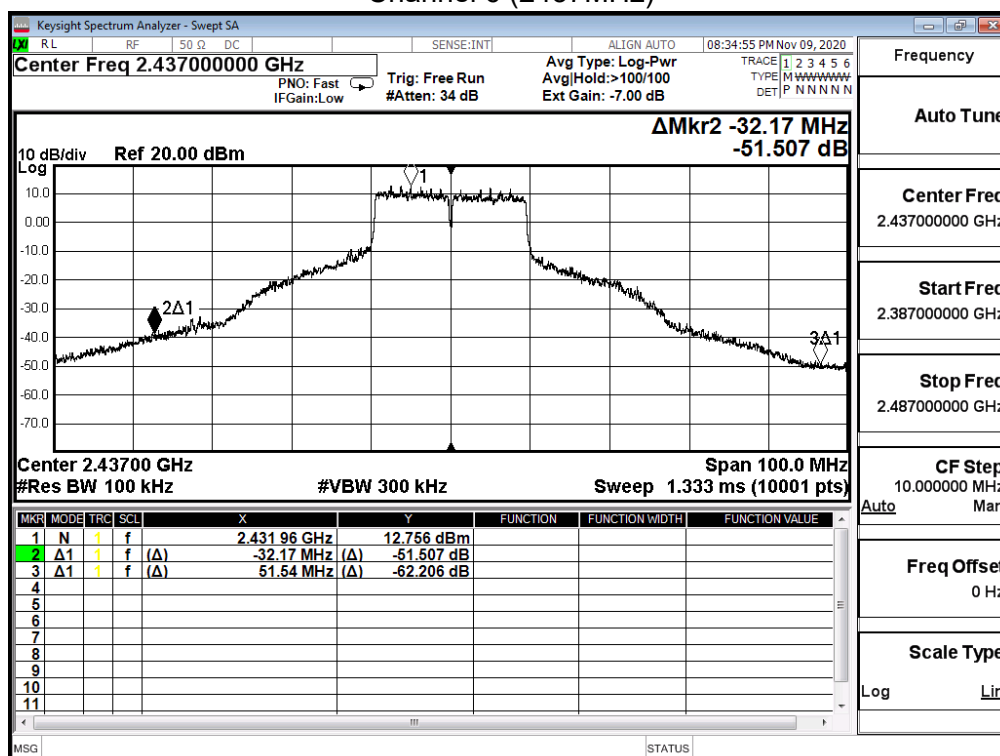
2437MHz (30MHz-25GHz)



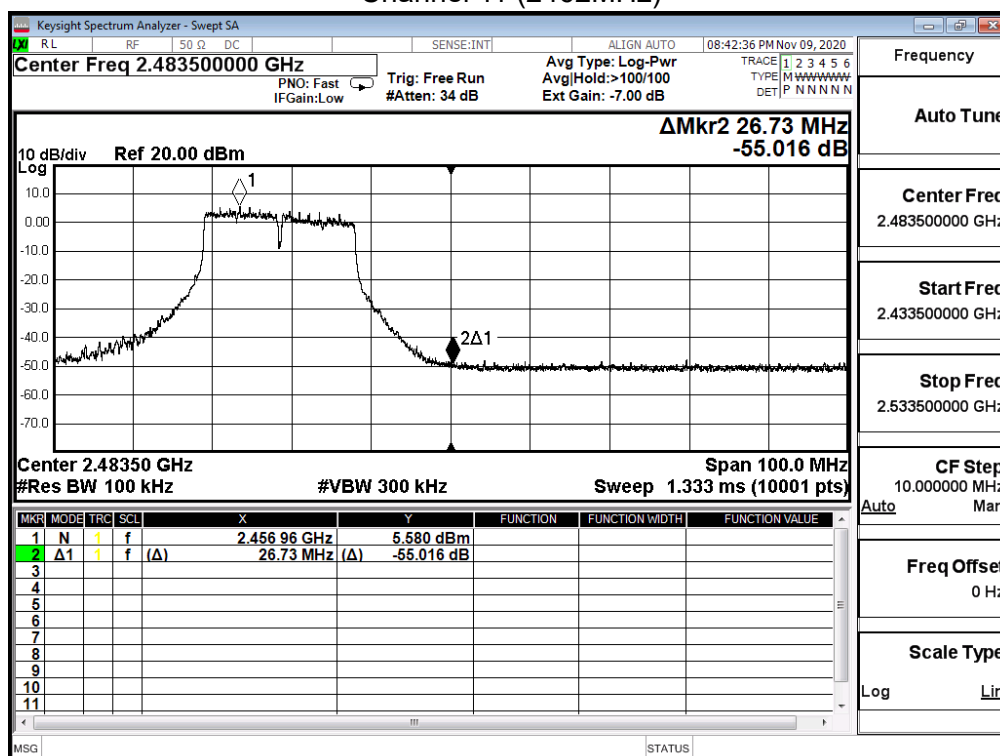
2462MHz (30MHz-25GHz)



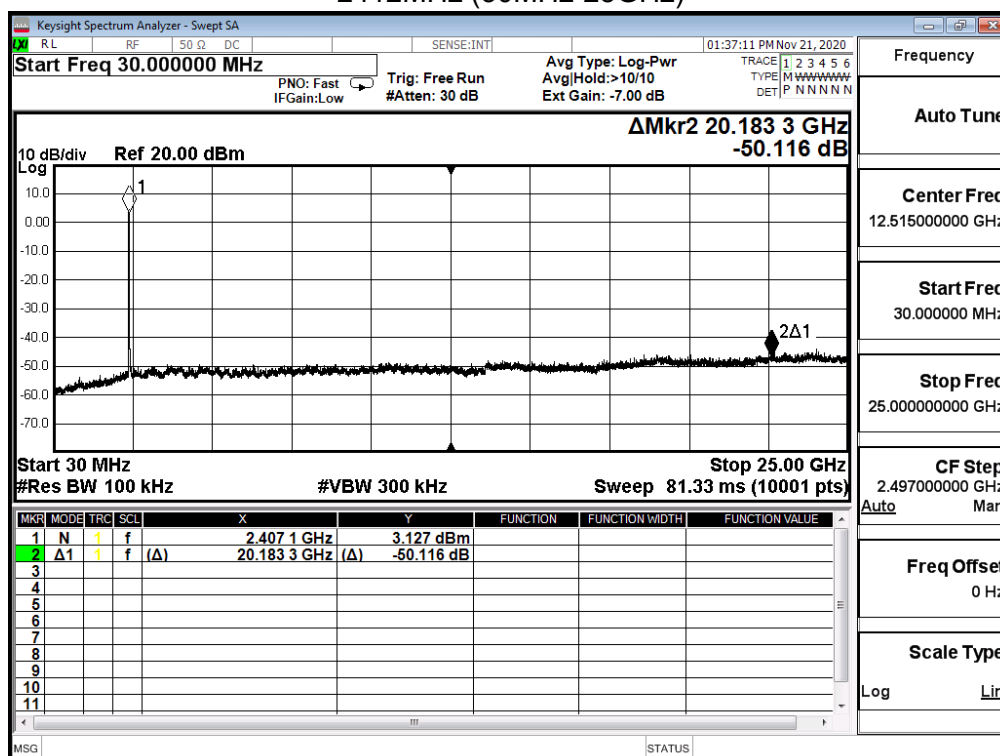
Channel 6 (2437MHz)



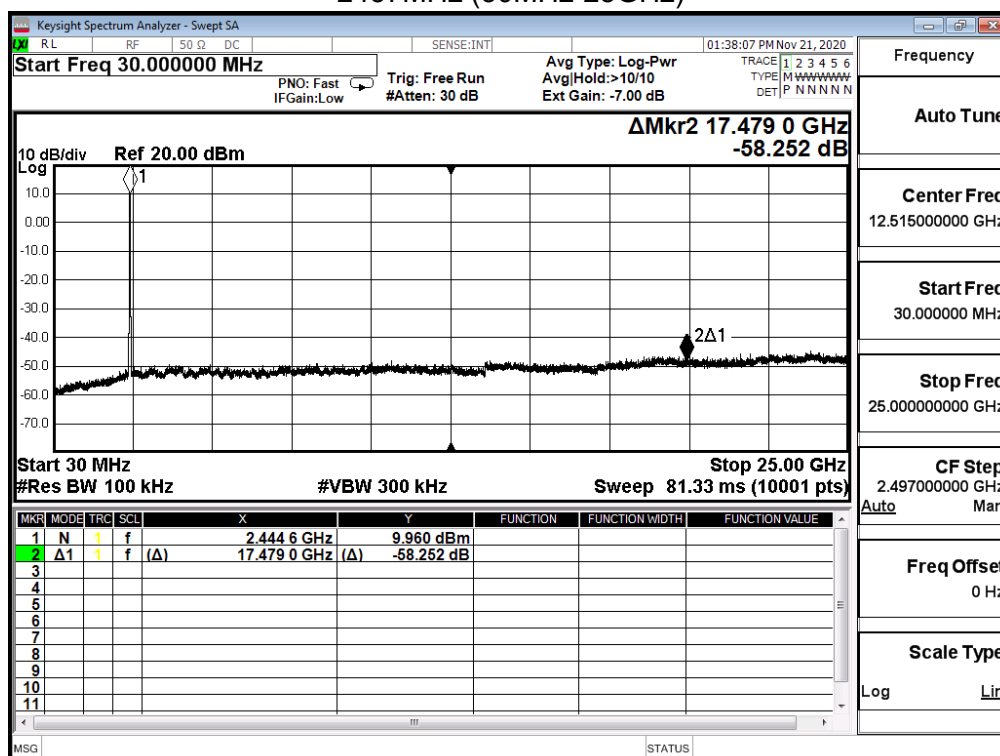
Channel 11 (2462MHz)



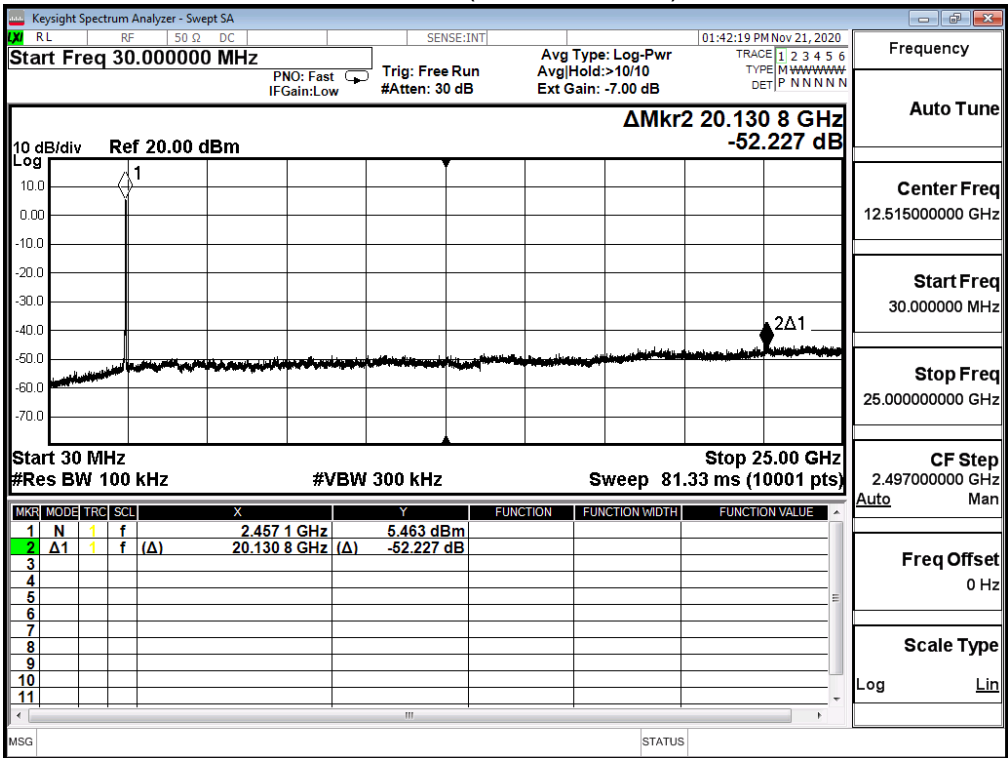
2412MHz (30MHz-25GHz)



2437MHz (30MHz-25GHz)



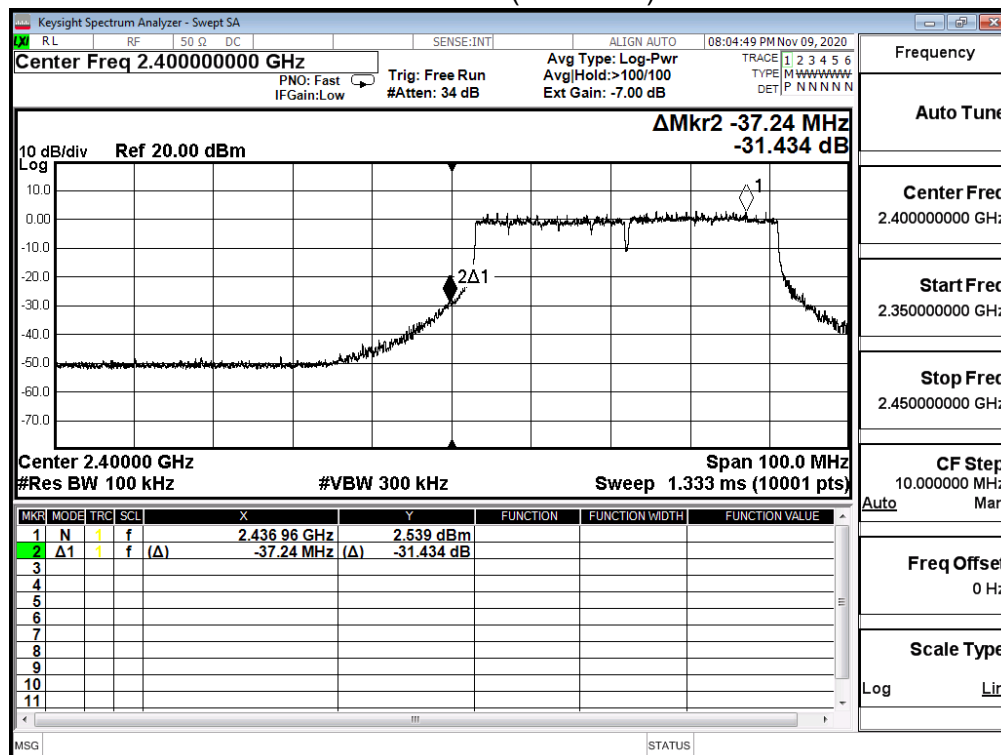
2462MHz (30MHz-25GHz)



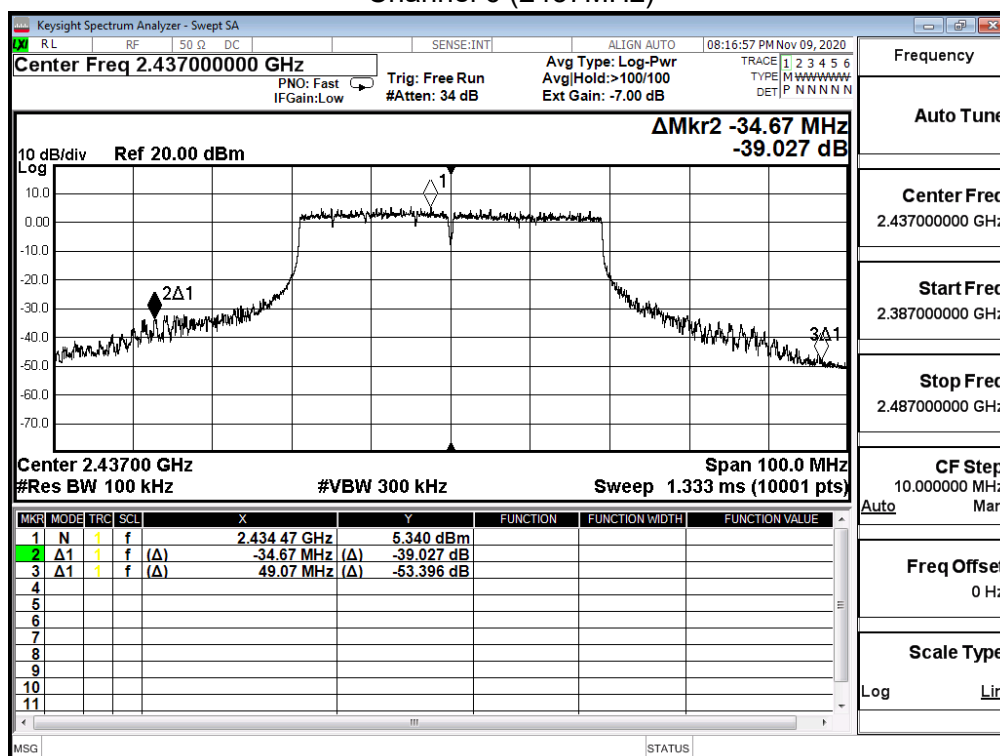
Product	Consumer Home Router		
Test Item	RF antenna conducted test		
Test Mode	Mode 2: Transmit RU Mode_Full		
Date of Test	2020/11/09	Test Site	SR12-H
Test Temperature	23.0°C	Test Humidity	61.0%

IEEE 802.11ax(40M)(ANT 0)				
Channel	Frequency (MHz)	Measure Level (dBc)	Limit (dBc)	Result
3	2422	31.434	≥ 30	Pass
6	2437	39.027	≥ 30	Pass
9	2452	48.989	≥ 30	Pass

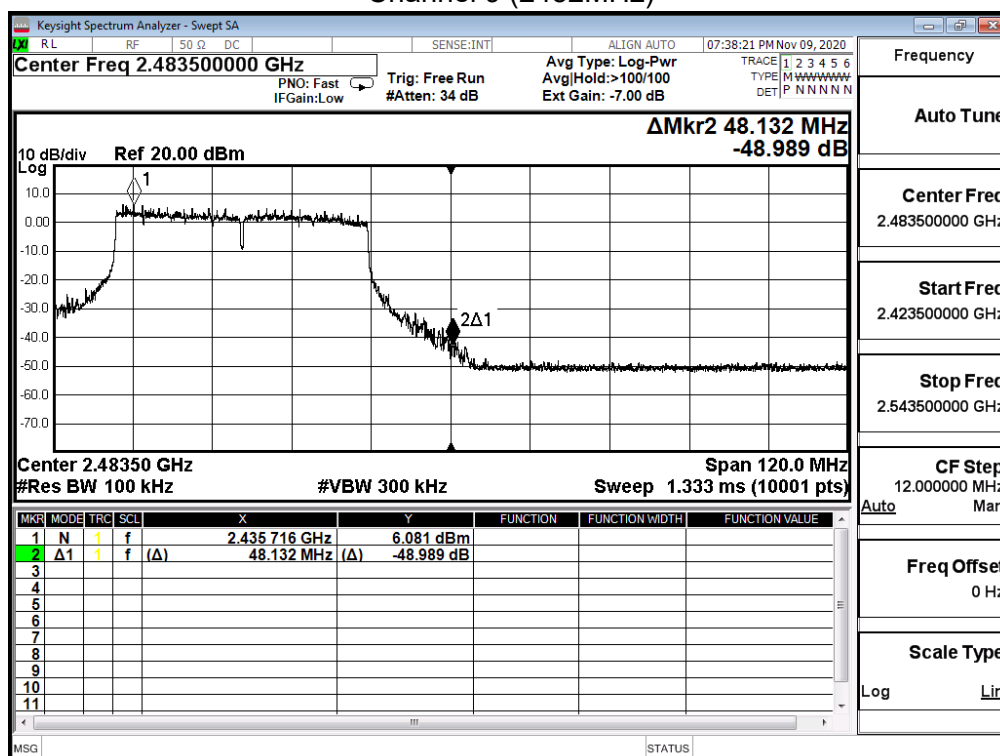
Channel 3 (2422MHz)



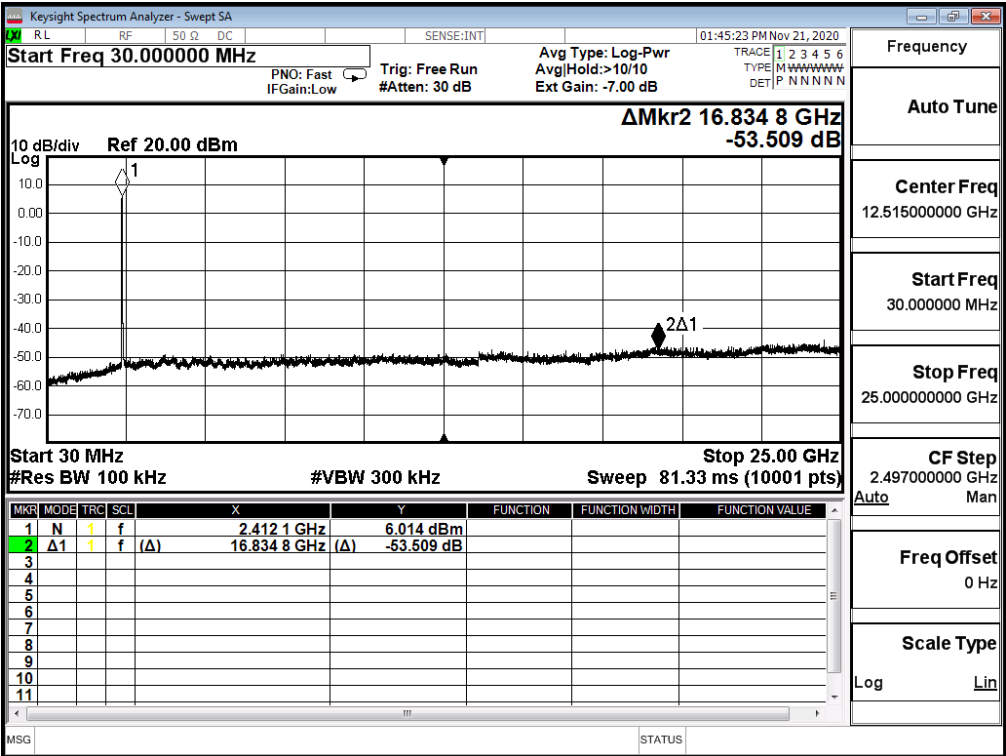
Channel 6 (2437MHz)



Channel 9 (2452MHz)



2422MHz 30MHz-25GHz)



2437MHz (30MHz-25GHz)

