

FCC Test Report

Product Name : Smart Display
Trade Name : Verizon
Model No. : LVD1
FCC ID : NKR-LVD1-IDU

Applicant : Wistron NeWeb Corporation

Address : No. 20, Yuanqu 2nd Rd., Baoshan Township,,Hsinchu
County 30844 Taiwan

Date of Receipt : May 06, 2021
Issued Date : Jun. 16, 2021
Report No. : 2150109R-E3032110113
Report Version : V1.0



The test results relate only to the samples tested.

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Test Report Certification

Issued Date : Jun. 16, 2021

Report No.: 2150109R-E3032110113



Product Name : Smart Display
Applicant : Wistron NeWeb Corporation
Address : No. 20, Yuanqu 2nd Rd., Baoshan Township,,Hsinchu County
30844 Taiwan
Manufacturer : Wistron NeWeb Corporation
Address : No. 20, Yuanqu 2nd Rd., Baoshan Township,,Hsinchu County
30844 Taiwan
Trade Name : Verizon
Model No. : LVD1
FCC ID : NKR-LVD1-IDU
EUT Voltage : 12 Vdc(from adapter)
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 :



(Demi Chang / Senior Engineering Adm. Specialist)

Tested By :



(Scott Chang / Senior Engineer)

Approved By :



(Louis Hsu / Deputy Manager)

Revision History

Version	Description	Issued Date
V1.0	Initial issue of report	Jun. 16, 2021

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1. General Information

1.1. EUT Description

Product Name	Smart Display	
Trade Name	Verizon	
Model No.	LVD1	
Frequency Range/ Channel Number	IEEE 802.11b/g	2412~2462MHz / 11 Channels
	IEEE 802.11n/ac (20MHz)	
	IEEE 802.11n/ac (40MHz)	2422~2452MHz / 7 Channels
Type of Modulation	IEEE 802.11b	Direct Sequence Spread Spectrum
	IEEE 802.11g/n	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/ac	Support a subset of the combination of GI, MCS 0~MCS 15 and bandwidth defined in 802.11n

Accessories Information	
Power Adapter 1	Delta, ADP-36DW B I/P: 100-120V~60Hz, 0.9A O/P: 12Vdc, 3.0A Cable Out: Shielded, 1.8m
Power Adapter 2	Lucent Trans, 1A100-US1230 I/P: 100-120V~60Hz, 0.9A O/P: 12Vdc, 3.0A Cable Out: Shielded, 1.8m

Ant. No.	Brand	Model No.	Antenna Type	Ant. Gain
0	WNC	N/A	PCB Antenna	1.11 dBi
1	WNC	N/A	PCB Antenna	0.89 dBi

For 802.11b/g mode (1TX/1RX):

The EUT supports the antenna with TX and RX diversity functions.

Both Ant. 0 and Ant. 1 support transmit and receive functions, but only one of them will be used at one time.

The Ant. 1 generated the worst case, so it was selected to test and record in the report.

For IEEE 802.11n/ac mode (2TX/2RX):

Both Ant. 0 and Ant. 1 can be used as transmitting/receiving antennas, and they can transmit/receive signal simultaneously.

ANT-TX / RX & Bandwidth

ANT-TX / RX	TX		RX	
	20MHz	40MHz	20MHz	40MHz
IEEE802.11b	✓		✓	
IEEE802.11g	✓		✓	
IEEE802.11n/ac	✓	✓	✓	✓

IEEE 802.11b/g & IEEE 802.11n/ac (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/ac (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 Smart Display including 2.4GHz b/g/n/ac and 5GHz a/n/ac and BT2.0 & BT 5.0 transmitting and receiving functions.
2. The device contains certified module (Brand: WNC, M/N: IMQ7, FCC ID: NKRIMQ7).
3. 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.
4. The EUT description is from the customer declaration.
5. The modulation and bandwidth are similar for 802.11n mode for HT20 / HT40 and 802.11ac mode for VHT20 / VHT40, therefore investigated worst case to representative mode in test report.

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_Adapter_ADP-36DW B Mode 2: Transmit_Adapter_1A100-US1230
-----------	--

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

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

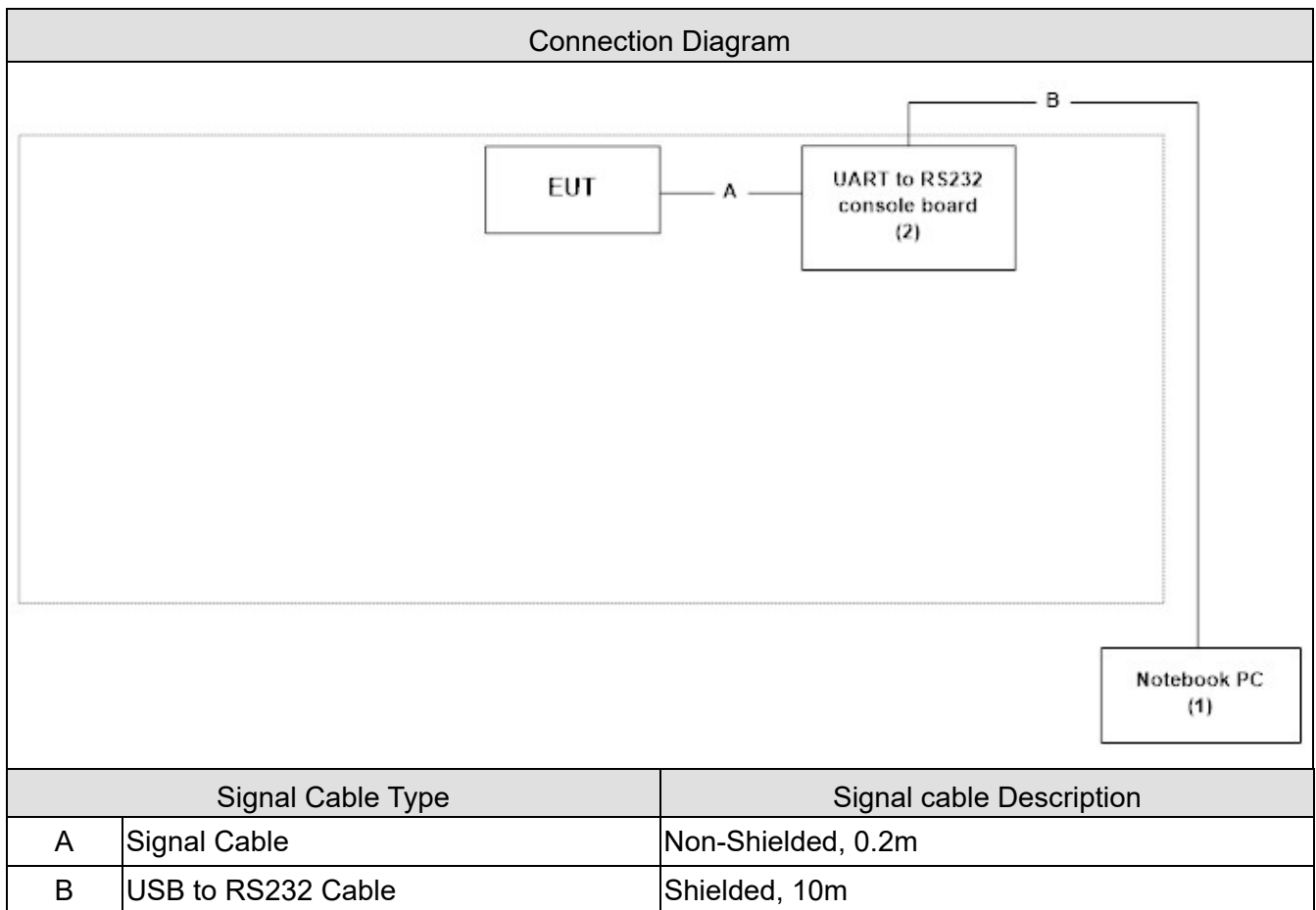
Note 2: Determining compliance shall be based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.

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	Lenove	80SJ	MP16Z7TB	DoC	Shielded, 1.8m
2 UART to RS232 console board	WNC	48.J53RS.SGA	--	DoC	--

1.4. Configuration of tested System



1.5. EUT Exercise Software

1	Set the EUT as shown.
2	Execute control command by software "TeraTerm".
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	15 - 35	1
Humidity (%RH)	Conducted Emission	25 - 75	
Temperature (°C)	FCC PART 15 C 15.247	15 - 35	1
Humidity (%RH)	Maximum peak conducted output power	25 - 75	
Temperature (°C)	FCC PART 15 C 15.247	15 - 35	1
Humidity (%RH)	Radiated Emission	25 - 75	
Temperature (°C)	FCC PART 15 C 15.247	15 - 35	1
Humidity (%RH)	RF antenna conducted test	25 - 75	
Temperature (°C)	FCC PART 15 C 15.247	15 - 35	1
Humidity (%RH)	Radiated Emission Band Edge	25 - 75	
Temperature (°C)	FCC PART 15 C 15.247	15 - 35	1
Humidity (%RH)	Occupied Bandwidth & DTS Bandwidth	25 - 75	
Temperature (°C)	FCC PART 15 C 15.247	15 - 35	1
Humidity (%RH)	Power Density	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	2020/12/24	2021/12/23
Test Receiver	R&S	ESCS 30	836858/022	2021/02/22	2022/02/21
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	2020/11/30	2021/11/29
Pulse Power Sensor	Anritsu	MA2411B	1531043	2020/11/30	2021/11/29
Pulse Power Sensor	Anritsu	MA2411B	1531044	2020/11/30	2021/11/29
Power Meter	Keysight	8990B	MY51000248	2021/05/21	2022/05/20
Power Sensor	Keysight	N1923A	MY57240005	2021/05/21	2022/05/20

Radiated Emission / CB2-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	2021/03/31	2022/03/30
Signal Analyzer	R&S	FSVA40	101435	2020/06/24	2021/06/23
EXA Signal Analyzer	Keysight	N9010A	MY51440132	2021/01/25	2022/01/24
Bilog Antenna	Teseq	CBL6112D	23191	2021/02/26	2022/02/25
Horn Antenna	Schwarzbeck	BBHA 9120D	639	2021/05/17	2022/05/16
Horn Antenna	Schwarzbeck	BBHA 9170	202	2020/12/16	2021/12/15
Pre-Amplifier	EMCI	EMC01820I	980365	2020/06/19	2021/06/18
Pre-Amplifier	EMEC	EM01G18GA	060741	2020/07/24	2021/07/23
Pre-Amplifier	DEKRA	AP-400C	201801231	2020/11/16	2021/11/15
Band Reject Filter	Micro-Tronics	BRM50702	G258	2020/12/16	2021/12/15
Wideband Radio Communication Tester	R&S	CMW500	106071	2021/01/27	2022/01/26
Wireless Conn. Tseter	R&S	CMW500	157118	2020/07/23	2021/07/22
Coaxial Cable(13m)	Huber+Suhner	SF104	CB2-H	2020/07/25	2021/07/24
DEKRA Testing System	DEKRA	Version 2.0	CB2-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	2021/05/14	2022/05/13
Spectrum Analyzer	Keysight	N9010B	MY57110159	2021/03/29	2022/03/28
Spectrum Analyzer	Agilent	N9010A	US47140172	2020/06/18	2021/06/17
Signal & Spectrum Analyzer	R&S	FSV40	101049	2021/03/31	2022/03/30

Radiated Emission Band Edge / CB2-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	2021/03/31	2022/03/30
Signal Analyzer	R&S	FSVA40	101435	2020/06/24	2021/06/23
EXA Signal Analyzer	Keysight	N9010A	MY51440132	2021/01/25	2022/01/24
Bilog Antenna	Teseq	CBL6112D	23191	2021/02/26	2022/02/25
Horn Antenna	Schwarzbeck	BBHA 9120D	639	2021/05/17	2022/05/16
Horn Antenna	Schwarzbeck	BBHA 9170	202	2020/12/16	2021/12/15
Pre-Amplifier	EMCI	EMC01820I	980365	2020/06/19	2021/06/18
Pre-Amplifier	EMEC	EM01G18GA	060741	2020/07/24	2021/07/23
Pre-Amplifier	DEKRA	AP-400C	201801231	2020/11/16	2021/11/15
Band Reject Filter	Micro-Tronics	BRM50702	G258	2020/12/16	2021/12/15
Wideband Radio Communication Tester	R&S	CMW500	106071	2021/01/27	2022/01/26
Wireless Conn. Tseter	R&S	CMW500	157118	2020/07/23	2021/07/22
Coaxial Cable(13m)	Huber+Suhner	SF104	CB2-H	2020/07/25	2021/07/24
DEKRA Testing System	DEKRA	Version 2.0	CB2-H	NA	NA

DTS Bandwidth / SR12-H

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date
Spectrum Analyzer	Keysight	N9030B	MY57140404	2021/05/14	2022/05/13
Spectrum Analyzer	Keysight	N9010B	MY57110159	2021/03/29	2022/03/28
Spectrum Analyzer	Agilent	N9010A	US47140172	2020/06/18	2021/06/17
Signal & Spectrum Analyzer	R&S	FSV40	101049	2021/03/31	2022/03/30

Occupied Bandwidth / SR12-H

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date
Spectrum Analyzer	Keysight	N9030B	MY57140404	2021/05/14	2022/05/13
Spectrum Analyzer	Keysight	N9010B	MY57110159	2021/03/29	2022/03/28
Spectrum Analyzer	Agilent	N9010A	US47140172	2020/06/18	2021/06/17
Signal & Spectrum Analyzer	R&S	FSV40	101049	2021/03/31	2022/03/30

Power Density / SR12-H

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date
Spectrum Analyzer	Keysight	N9030B	MY57140404	2021/05/14	2022/05/13
Spectrum Analyzer	Keysight	N9010B	MY57110159	2021/03/29	2022/03/28
Spectrum Analyzer	Agilent	N9010A	US47140172	2020/06/18	2021/06/17
Signal & Spectrum Analyzer	R&S	FSV40	101049	2021/03/31	2022/03/30

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

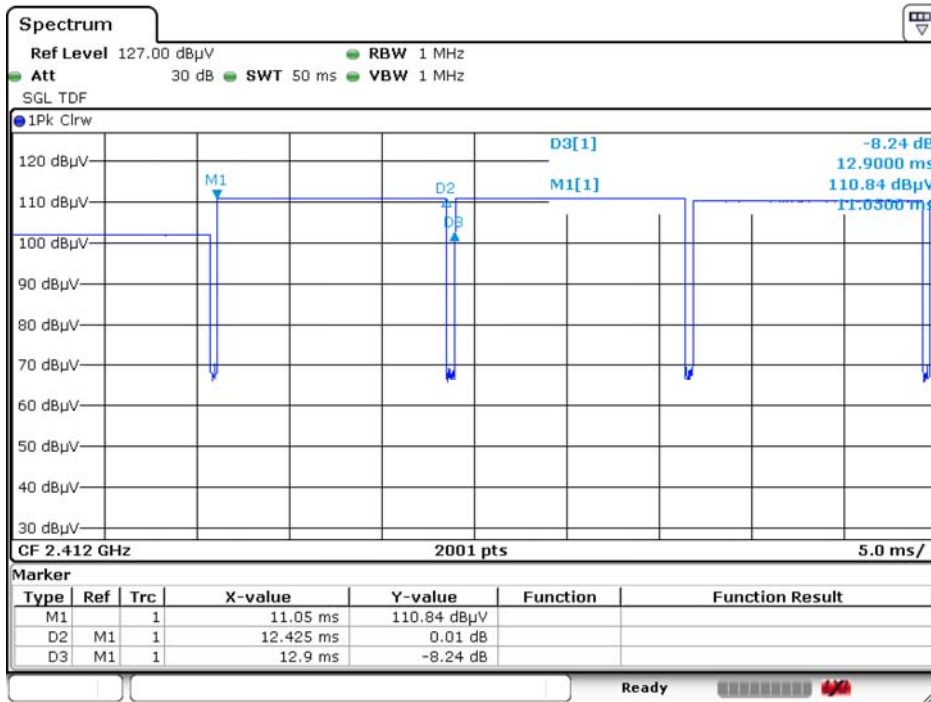
1.9. Uncertainty

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

1.10. Duty Cycle

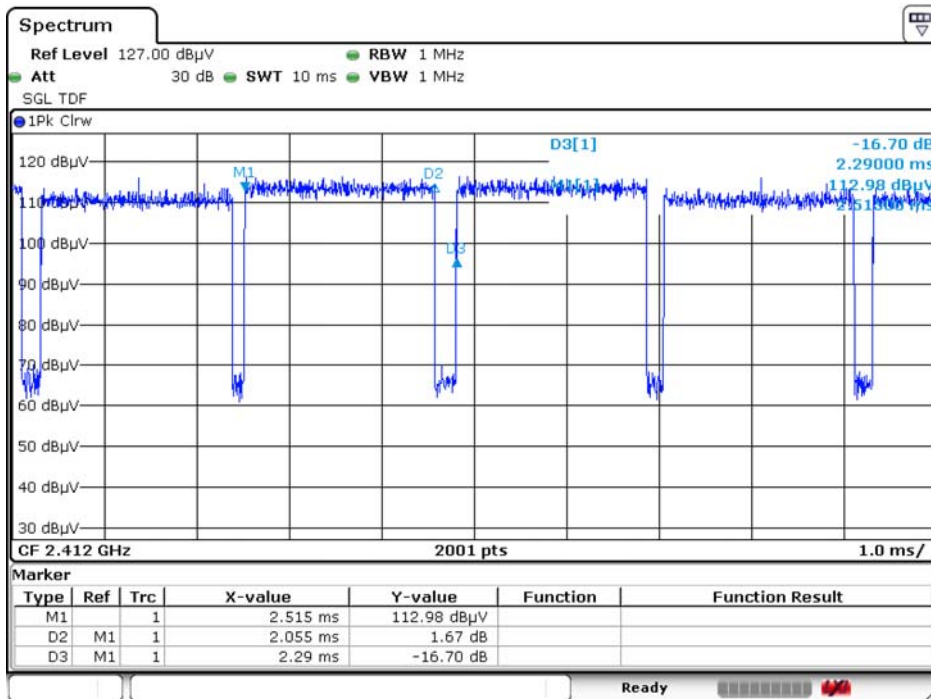
Mode	On Time (ms)	On+Off Time (ms)	Duty Cycle (%)	Duty Factor(dB) linear voltage	Duty Factor(dB) Power	1/T Minimum VBW (kHz)
802.11b	12.425	12.900	96.32%	0.325866	0.16	0.080
802.11g	2.055	2.290	89.74%	0.940473	0.47	0.487
802.11n (20M)	1.905	2.020	94.31%	0.509128	0.25	0.525
802.11n (40M)	0.917	1.085	84.52%	1.461208	0.73	1.091

802.11b



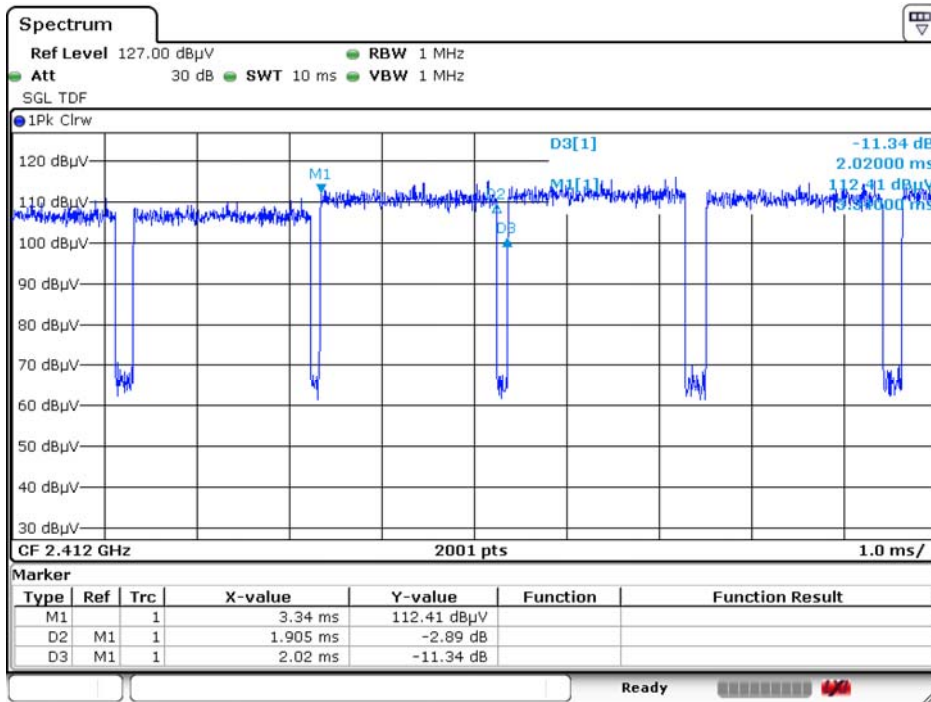
Date: 8.MAY.2021 10:56:25

802.11g



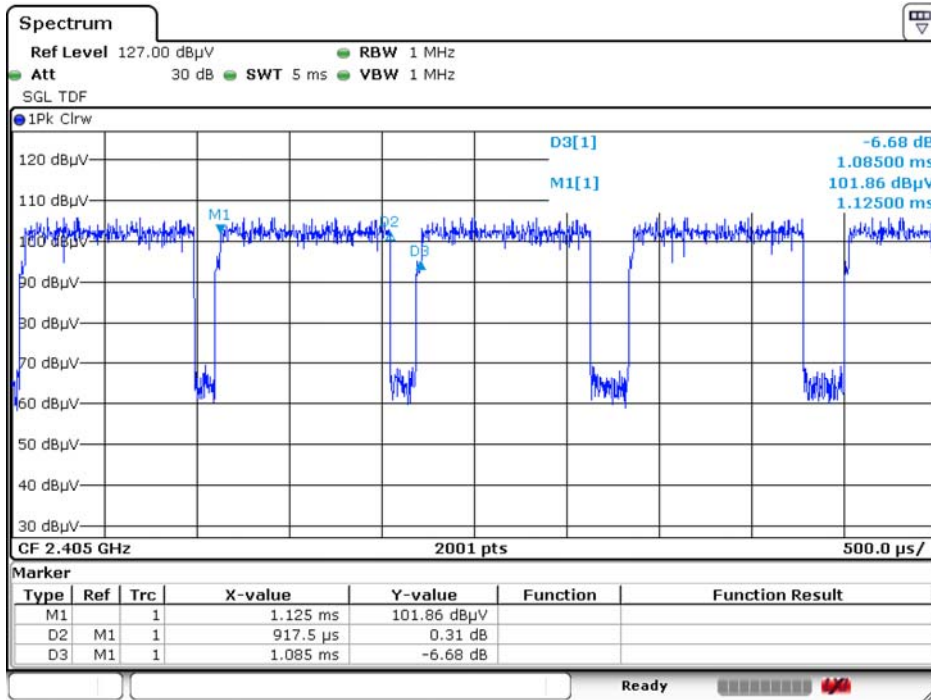
Date: 8.MAY.2021 13:56:17

802.11n (20M)



Date: 8.MAY.2021 16:33:19

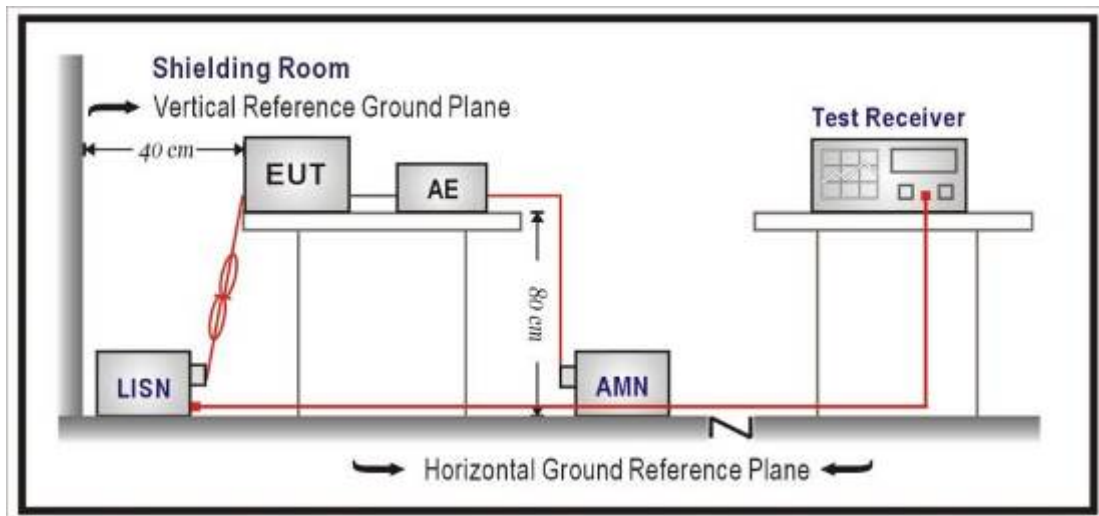
802.11n (40M)



Date: 8.MAY.2021 18:19:44

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.

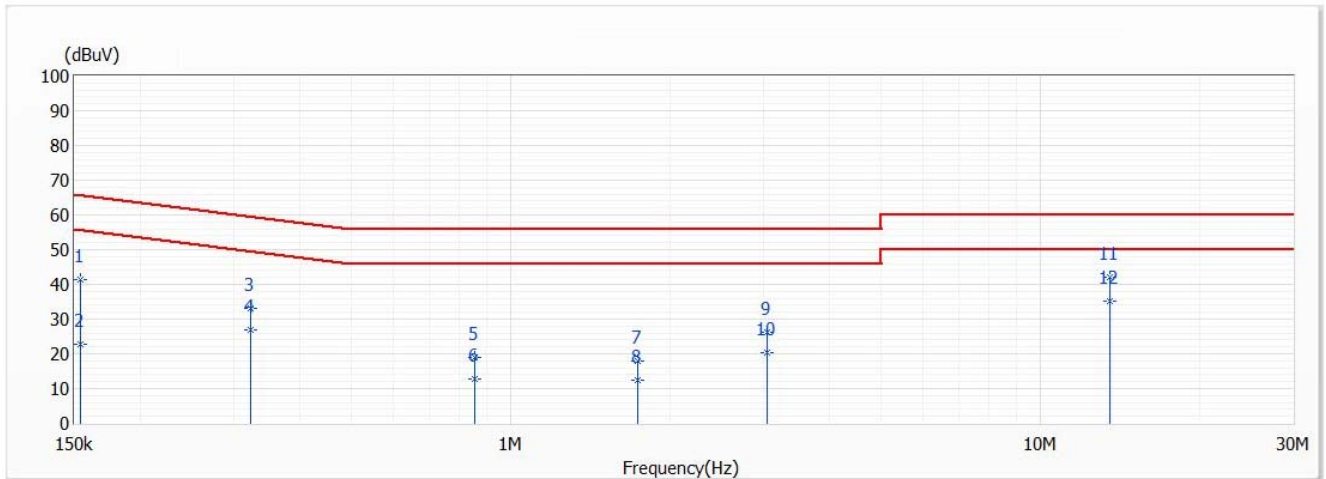
Conducted emissions were investigated over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9 kHz.

2.4. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.207: 2019

2.5. Test Result

Model No	LVD1	Site	SR2-H
Test Voltage	AC 120V/60Hz	Test Date	2021/5/25
Test Mode	Mode 1: Transmit_Adapter_ADP-36DW B	Engineer	Lion Wang
Phase	L	Temperature (°C)	26.7
Test Condition	802.11b,2.412G,BW20M	Humidity (%RH)	57.8

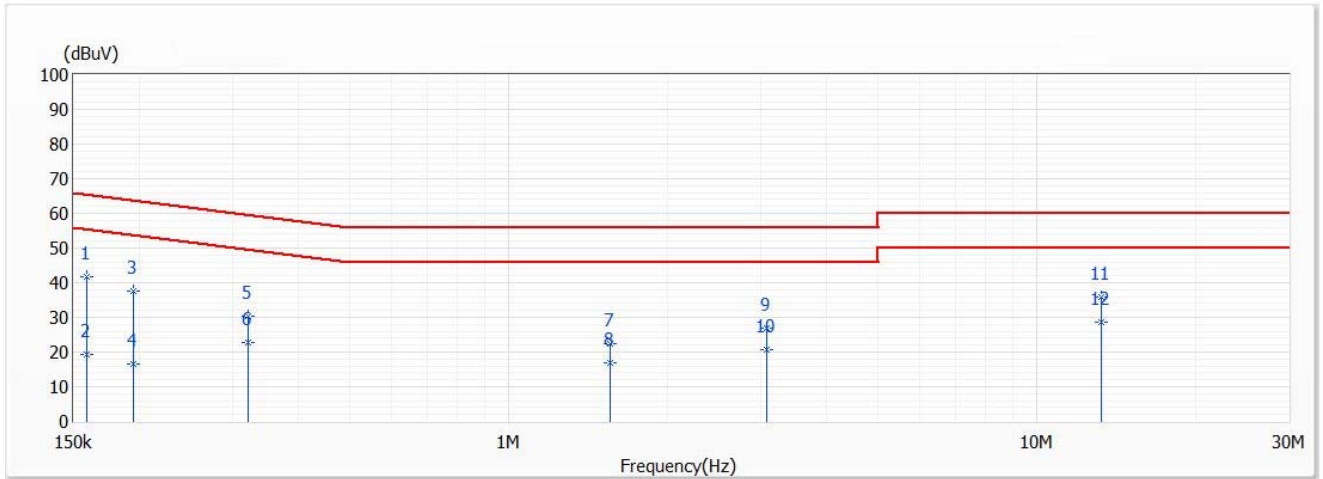


No	Frequency (MHz)	Emission Level (dBuV)	Limit (dBuV)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	0.154	41.29	65.77	-24.48	31.64	9.65	QP
2	0.154	22.87	55.77	-32.90	13.22	9.65	AV
3	0.322	33.22	59.65	-26.43	23.55	9.67	QP
4	0.322	27.06	49.65	-22.59	17.39	9.67	AV
5	0.857	19.11	56.00	-36.89	9.38	9.73	QP
6	0.857	12.87	46.00	-33.13	3.14	9.73	AV
7	1.736	17.82	56.00	-38.18	8.04	9.78	QP
8	1.736	12.34	46.00	-33.66	2.56	9.78	AV
9	3.051	26.30	56.00	-29.70	16.46	9.84	QP
10	3.051	20.27	46.00	-25.73	10.43	9.84	AV
11	13.493	42.01	60.00	-17.99	31.79	10.22	QP
*12	13.493	35.12	50.00	-14.88	24.90	10.22	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	LVD1	Site	SR2-H
Test Voltage	AC 120V/60Hz	Test Date	2021/5/25
Test Mode	Mode 1: Transmit_Adapter_ADP-36DW B	Engineer	Lion Wang
Phase	N	Temperature (°C)	26.7
Test Condition	802.11b,2.412G,BW20M	Humidity (%RH)	57.8

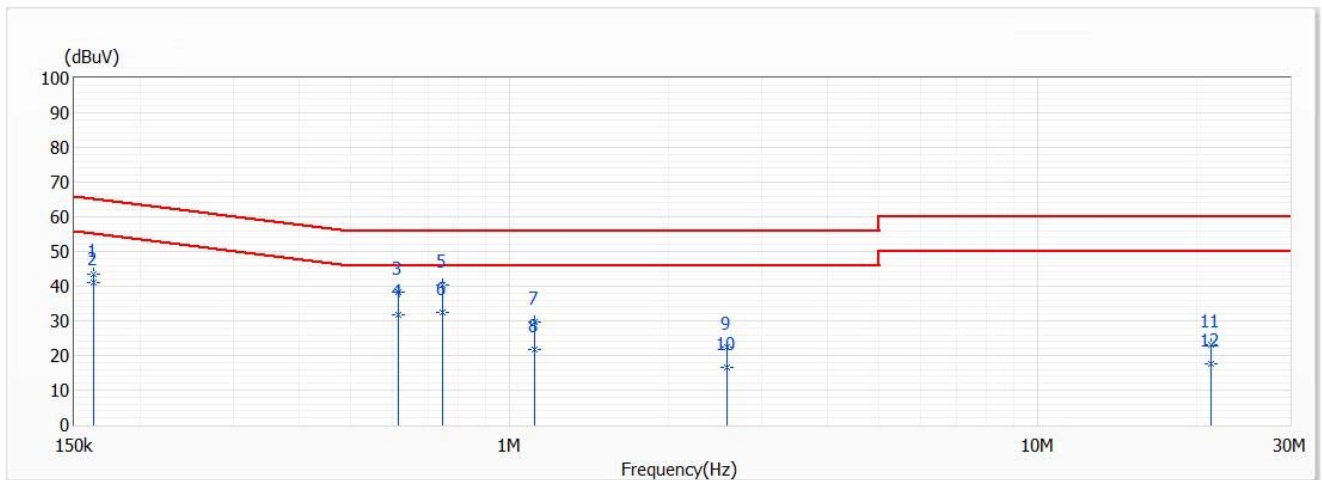


No	Frequency (MHz)	Emission Level (dBuV)	Limit (dBuV)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	0.159	41.81	65.53	-23.72	32.17	9.64	QP
2	0.159	19.43	55.53	-36.10	9.79	9.64	AV
3	0.194	37.62	63.84	-26.22	27.98	9.64	QP
4	0.194	16.67	53.84	-37.17	7.03	9.64	AV
5	0.321	30.30	59.67	-29.37	20.64	9.66	QP
6	0.321	22.80	49.67	-26.87	13.14	9.66	AV
7	1.554	22.46	56.00	-33.54	12.70	9.76	QP
8	1.554	16.90	46.00	-29.10	7.14	9.76	AV
9	3.072	26.76	56.00	-29.24	16.93	9.83	QP
10	3.072	20.76	46.00	-25.24	10.93	9.83	AV
11	13.271	36.02	60.00	-23.98	25.74	10.28	QP
*12	13.271	28.73	50.00	-21.27	18.45	10.28	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	LVD1	Site	SR2-H
Test Voltage	AC 120V/60Hz	Test Date	2021/5/25
Test Mode	Mode 2: Transmit_Adapter_1A100-US1230	Engineer	Lion Wang
Phase	L	Temperature (°C)	26.7
Test Condition	802.11b,2.412G,BW20M	Humidity (%RH)	57.8

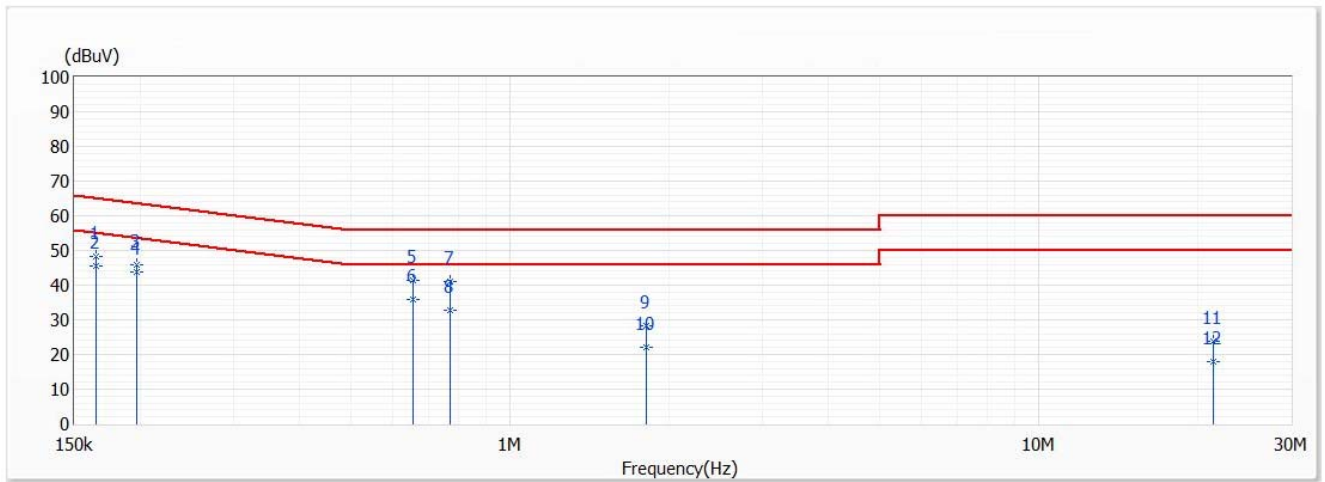


No	Frequency (MHz)	Emission Level (dBuV)	Limit (dBuV)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	0.163	43.30	65.32	-22.02	33.65	9.65	QP
2	0.163	40.91	55.32	-14.41	31.26	9.65	AV
3	0.617	38.28	56.00	-17.72	28.58	9.70	QP
4	0.617	31.88	46.00	-14.12	22.18	9.70	AV
5	0.745	40.29	56.00	-15.71	30.57	9.72	QP
*6	0.745	32.51	46.00	-13.49	22.79	9.72	AV
7	1.117	29.82	56.00	-26.18	20.07	9.75	QP
8	1.117	21.86	46.00	-24.14	12.11	9.75	AV
9	2.577	22.54	56.00	-33.46	12.72	9.82	QP
10	2.577	16.69	46.00	-29.31	6.87	9.82	AV
11	21.289	23.21	60.00	-36.79	12.81	10.40	QP
12	21.289	17.43	50.00	-32.57	7.03	10.40	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	LVD1	Site	SR2-H
Test Voltage	AC 120V/60Hz	Test Date	2021/5/25
Test Mode	Mode 2: Transmit_Adapter_1A100-US1230	Engineer	Lion Wang
Phase	N	Temperature (°C)	26.7
Test Condition	802.11b,2.412G,BW20M	Humidity (%RH)	57.8



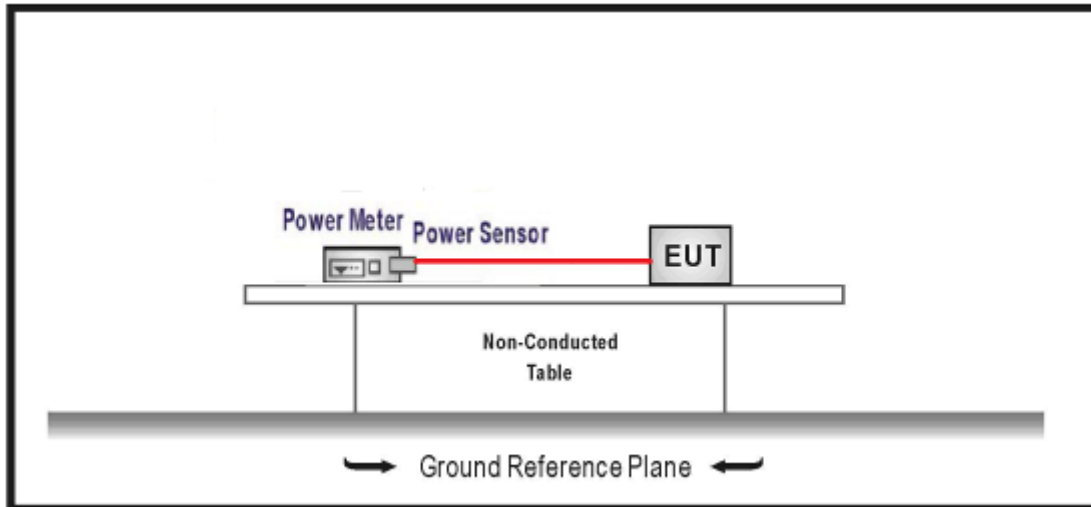
No	Frequency (MHz)	Emission Level (dBuV)	Limit (dBuV)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	0.165	48.16	65.20	-17.04	38.52	9.64	QP
*2	0.165	45.61	55.20	-9.59	35.97	9.64	AV
3	0.197	45.77	63.73	-17.96	36.13	9.64	QP
4	0.197	43.80	53.73	-9.93	34.16	9.64	AV
5	0.655	41.48	56.00	-14.52	31.79	9.69	QP
6	0.655	35.96	46.00	-10.04	26.27	9.69	AV
7	0.771	41.05	56.00	-14.95	31.35	9.70	QP
8	0.771	32.79	46.00	-13.21	23.09	9.70	AV
9	1.811	28.23	56.00	-27.77	18.46	9.77	QP
10	1.811	22.23	46.00	-23.77	12.46	9.77	AV
11	21.334	23.72	60.00	-36.28	13.16	10.56	QP
12	21.334	17.84	50.00	-32.16	7.28	10.56	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	Smart Display		
Test Item	Maximum peak conducted output power		
Test Mode	Mode 2: Transmit_Adapter_1A100-US1230		
Date of Test	2021/05/31	Test Site	SR12-H
Temperature (°C)	24.0	Humidity (%RH)	67.0

11b			
Channel No.	Frequency (MHz)	Maximum peak conducted output power (dBm)	Limit (dBm)
		Ant. 1	
1	2412	18.740	≤ 30
6	2437	23.240	≤ 30
11	2462	21.520	≤ 30

The worst emission of data rate is 1Mbps

11g			
Channel No.	Frequency (MHz)	Maximum peak conducted output power (dBm)	Limit (dBm)
		Ant. 1	
1	2412	14.930	≤ 30
6	2437	23.430	≤ 30
11	2462	19.520	≤ 30

The worst emission of data rate is 6Mbps

Product	Smart Display		
Test Item	Maximum peak conducted output power		
Test Mode	Mode 2: Transmit_Adapter_1A100-US1230		
Date of Test	2021/05/21	Test Site	SR12-H
Temperature (°C)	24.0	Humidity (%RH)	70.0

11n(20M)					
Channel No.	Frequency (MHz)	Maximum peak conducted output power (dBm)			Limit (dBm)
		Ant. 0	Ant. 1	Total	
1	2412	14.120	14.420	17.283	≤30
6	2437	21.960	22.060	25.021	≤30
11	2462	15.070	15.120	18.105	≤30

The worst emission of data rate is MCS 0

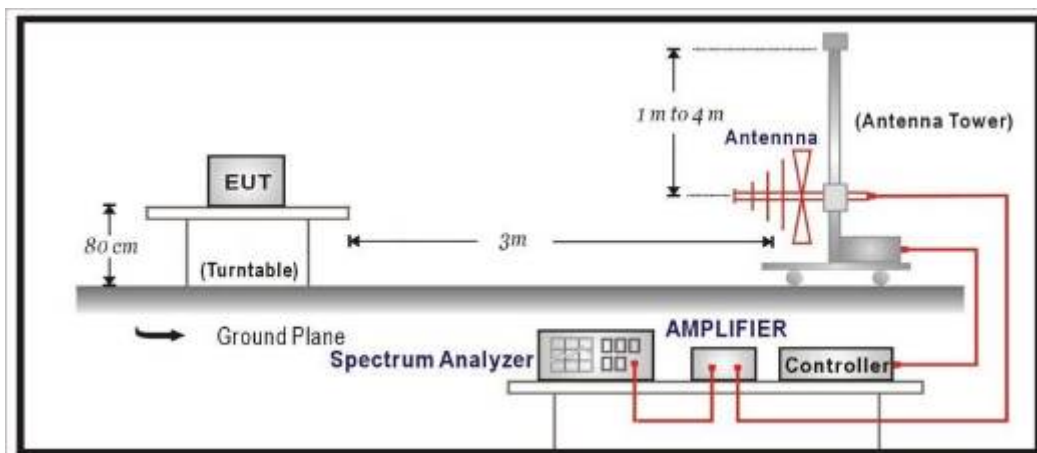
11n(40M)					
Channel No.	Frequency (MHz)	Maximum peak conducted output power (dBm)			Limit (dBm)
		Ant. 0	Ant. 1	Total	
3	2422	14.010	14.120	17.076	≤30
6	2437	16.860	16.740	19.811	≤30
9	2452	15.100	14.650	17.891	≤30

The worst emission of data rate is MCS 0

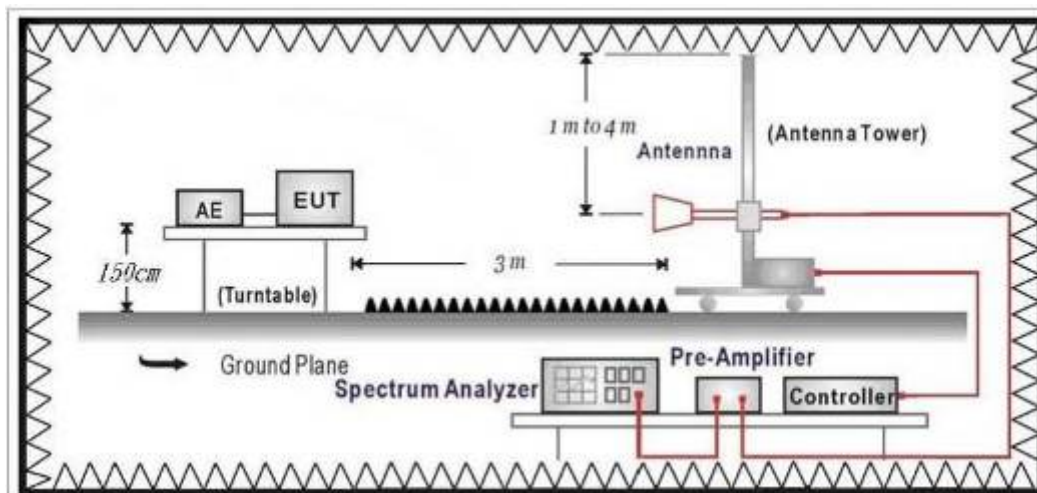
4. Radiated Emission

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)	uV/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.

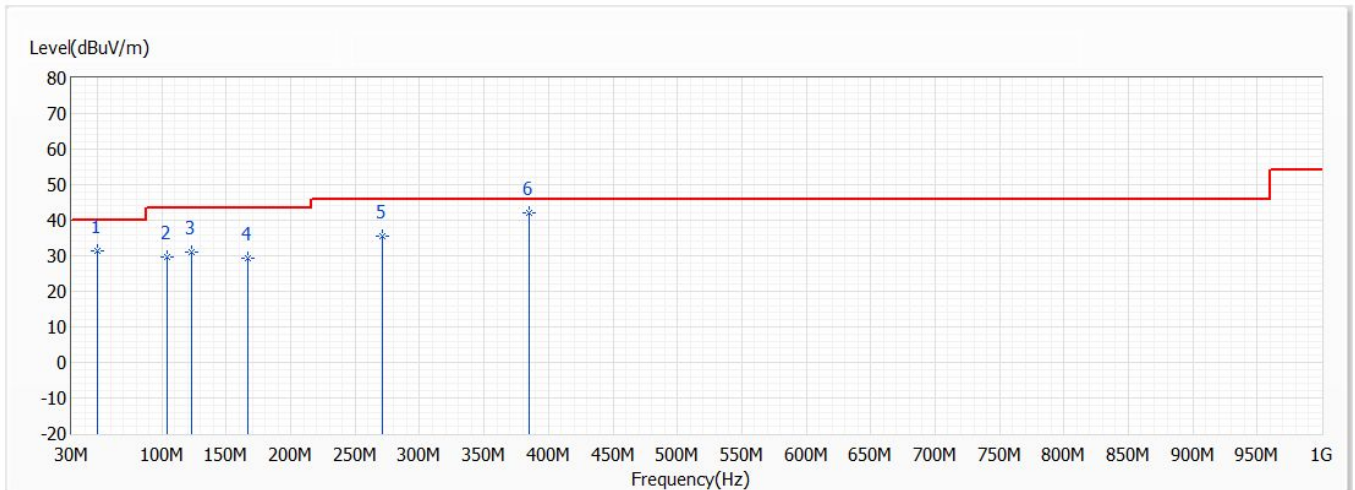
4.4. Test Specification

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

4.5. Test Result

30MHz-1GHz Spurious

Model No	LVD1	Site	CB2-H
Test Voltage	AC 120V/60Hz	Test Date	2021/5/24
Test Mode	Mode 1: Transmit_Adapter_ADP-36DW B	Engineer	Scott Chang
Polarity	Horizontal	Temperature (°C)	24.0
Test Condition	802.11b,Ant1,Ch 1,2.412G,BW20M	Humidity (%RH)	66.0

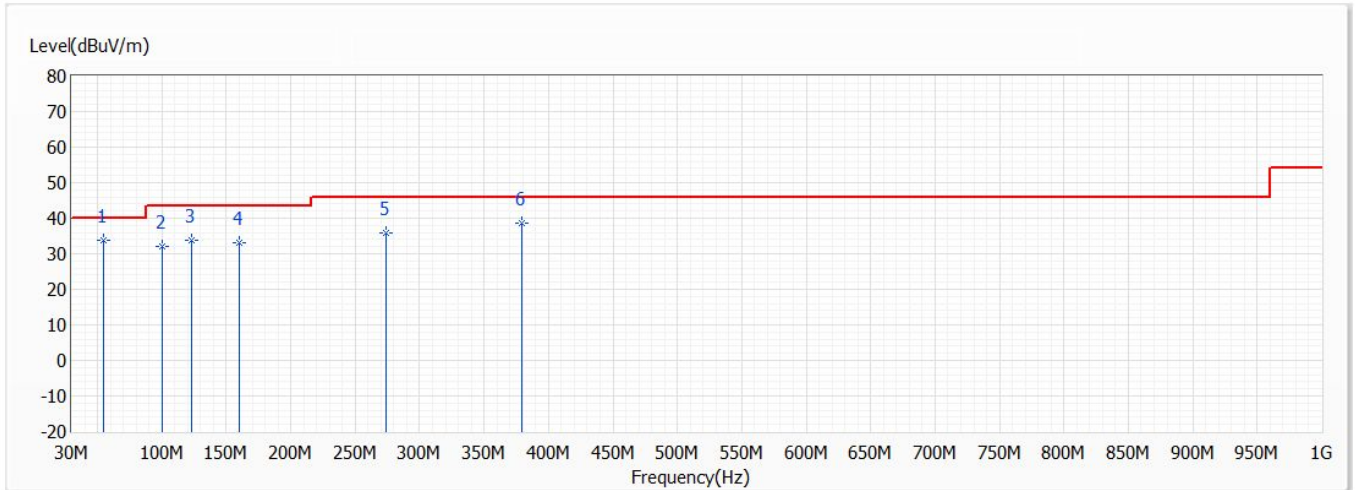


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	49.885	31.26	40.00	-8.74	36.83	-5.57	QP
2	103.720	29.61	43.50	-13.89	33.59	-3.98	QP
3	122.635	31.14	43.50	-12.36	33.59	-2.45	QP
4	166.285	29.38	43.50	-14.12	33.95	-4.57	QP
5	271.530	35.48	46.00	-10.52	37.17	-1.69	QP
* 6	385.020	41.90	46.00	-4.10	40.35	1.55	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	LVD1	Site	CB2-H
Test Voltage	AC 120V/60Hz	Test Date	2021/5/24
Test Mode	Mode 1: Transmit_Adapter_ADP-36DW B	Engineer	Scott Chang
Polarity	Vertical	Temperature (°C)	24.0
Test Condition	802.11b,Ant1,Ch 1,2.412G,BW20M	Humidity (%RH)	66.0

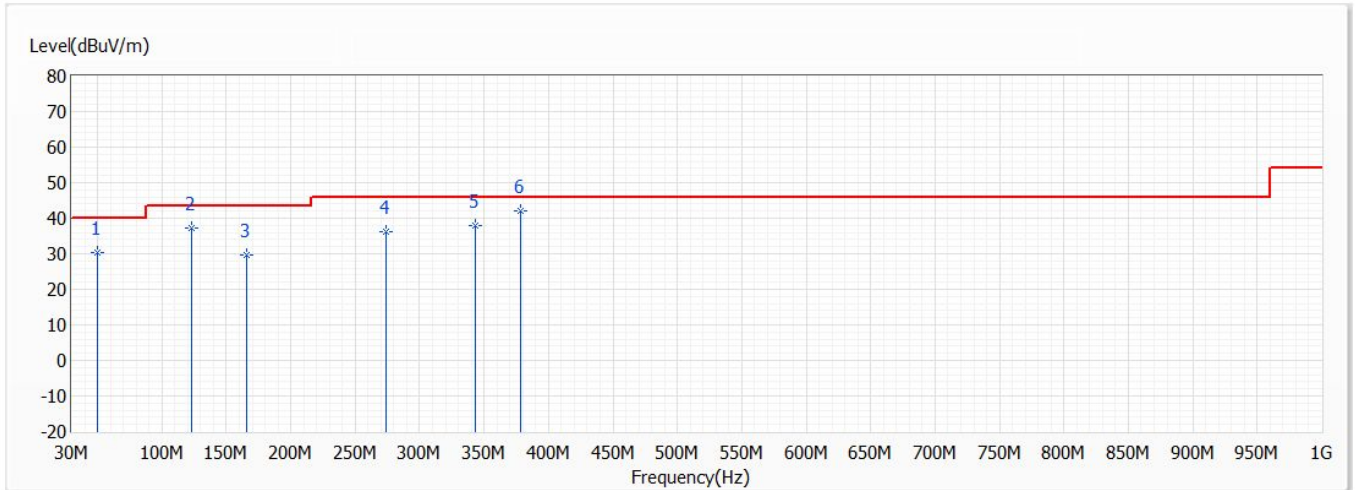


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
* 1	54.735	33.74	40.00	-6.26	40.86	-7.12	QP
2	99.840	31.96	43.50	-11.54	36.47	-4.51	QP
3	122.635	33.78	43.50	-9.72	36.23	-2.45	QP
4	159.980	33.15	43.50	-10.35	37.29	-4.14	QP
5	273.470	35.96	46.00	-10.04	37.61	-1.65	QP
6	379.200	38.45	46.00	-7.55	37.09	1.36	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	LVD1	Site	CB2-H
Test Voltage	AC 120V/60Hz	Test Date	2021/5/24
Test Mode	Mode 2: Transmit_Adapter_1A100-US1230	Engineer	Scott Chang
Polarity	Horizontal	Temperature (°C)	24.0
Test Condition	802.11b,Ant1,Ch 1,2.412G,BW20M	Humidity (%RH)	66.0

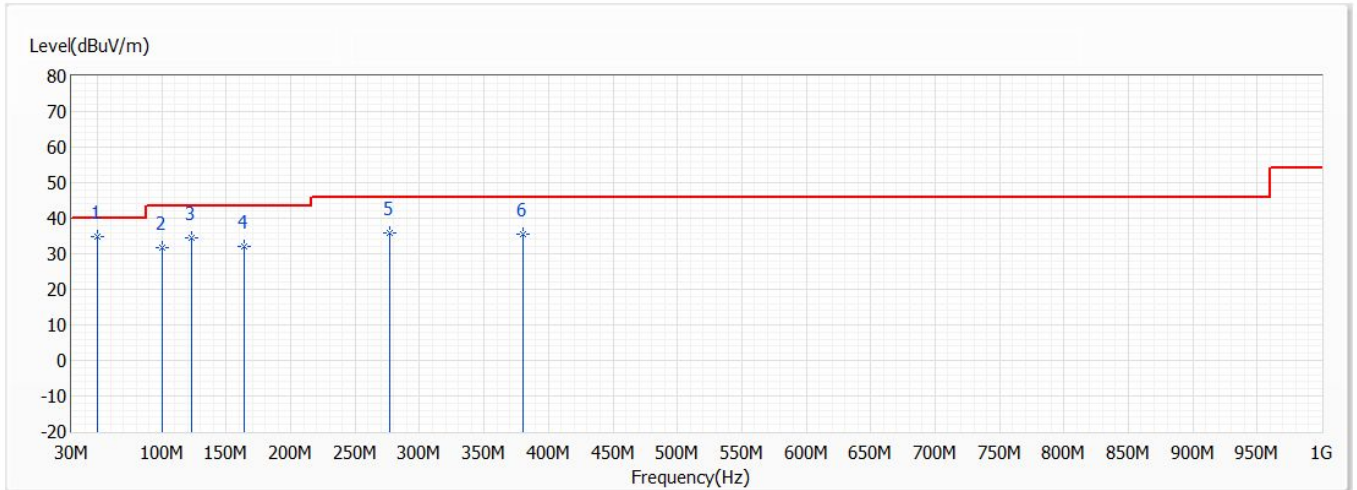


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	49.885	30.47	40.00	-9.53	36.04	-5.57	QP
2	122.635	37.34	43.50	-6.16	39.79	-2.45	QP
3	165.315	29.52	43.50	-13.98	34.02	-4.50	QP
4	273.470	36.18	46.00	-9.82	37.83	-1.65	QP
5	343.310	38.01	46.00	-7.99	37.82	0.19	QP
* 6	378.230	41.99	46.00	-4.01	40.66	1.33	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	LVD1	Site	CB2-H
Test Voltage	AC 120V/60Hz	Test Date	2021/5/24
Test Mode	Mode 2: Transmit_Adapter_1A100-US1230	Engineer	Scott Chang
Polarity	Vertical	Temperature (°C)	24.0
Test Condition	802.11b,Ant1,Ch 1,2.412G,BW20M	Humidity (%RH)	66.0



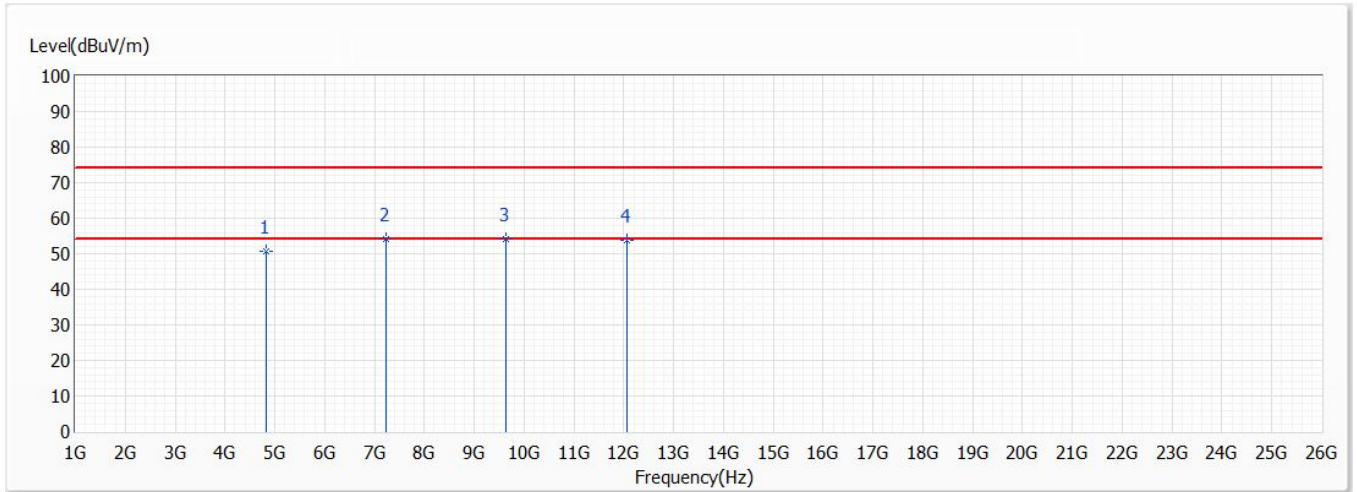
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
* 1	50.370	34.83	40.00	-5.17	40.56	-5.73	QP
2	99.840	31.88	43.50	-11.62	36.39	-4.51	QP
3	122.635	34.32	43.50	-9.18	36.77	-2.45	QP
4	163.375	32.02	43.50	-11.48	36.40	-4.38	QP
5	276.865	35.80	46.00	-10.20	37.40	-1.60	QP
6	380.655	35.67	46.00	-10.33	34.27	1.40	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	LVD1	Site	CB2-H
Test Voltage	AC 120V/60Hz	Test Date	2021/5/10
Test Mode	Mode 2: Transmit_Adapter_1A100-US1230	Engineer	Ling Chen
Polarity	Horizontal	Temperature (°C)	24.0
Test Condition	802.11b,Ant1,Ch 1,2.412G,BW20M	Humidity (%RH)	63.0

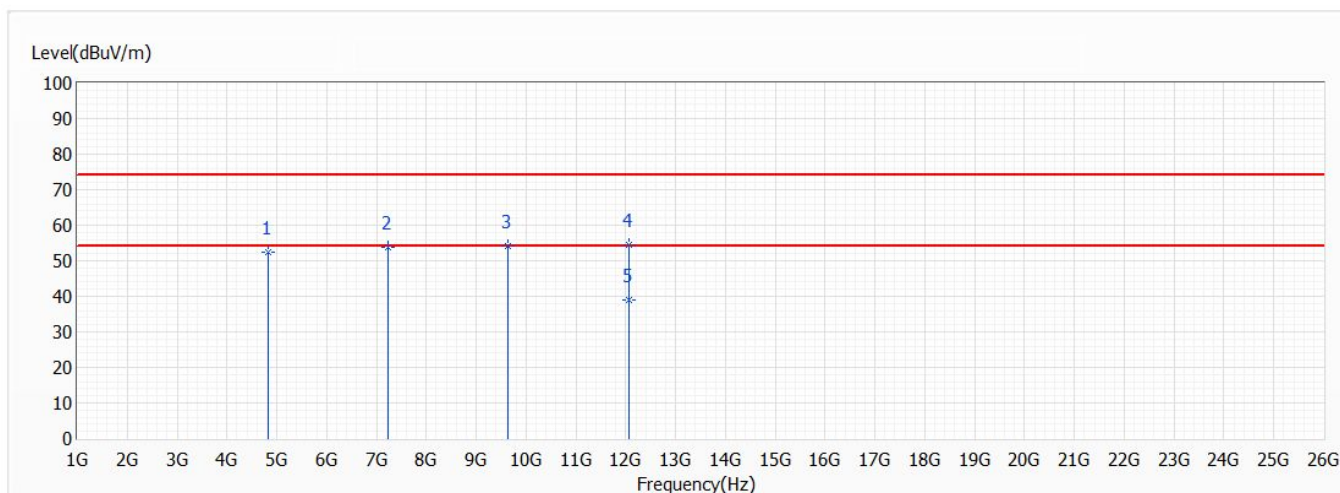


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4824.000	50.78	74.00	-23.22	62.76	-11.98	PK
* 2	7236.000	54.13	74.00	-19.87	58.73	-4.60	PK
3	9648.000	53.98	74.00	-20.02	55.29	-1.31	PK
4	12060.000	53.91	74.00	-20.09	51.16	2.75	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	LVD1	Site	CB2-H
Test Voltage	AC 120V/60Hz	Test Date	2021/5/10
Test Mode	Mode 2: Transmit_Adapter_1A100-US1230	Engineer	Ling Chen
Polarity	Vertical	Temperature (°C)	24.0
Test Condition	802.11b,Ant1,Ch 1,2.412G,BW20M	Humidity (%RH)	63.0

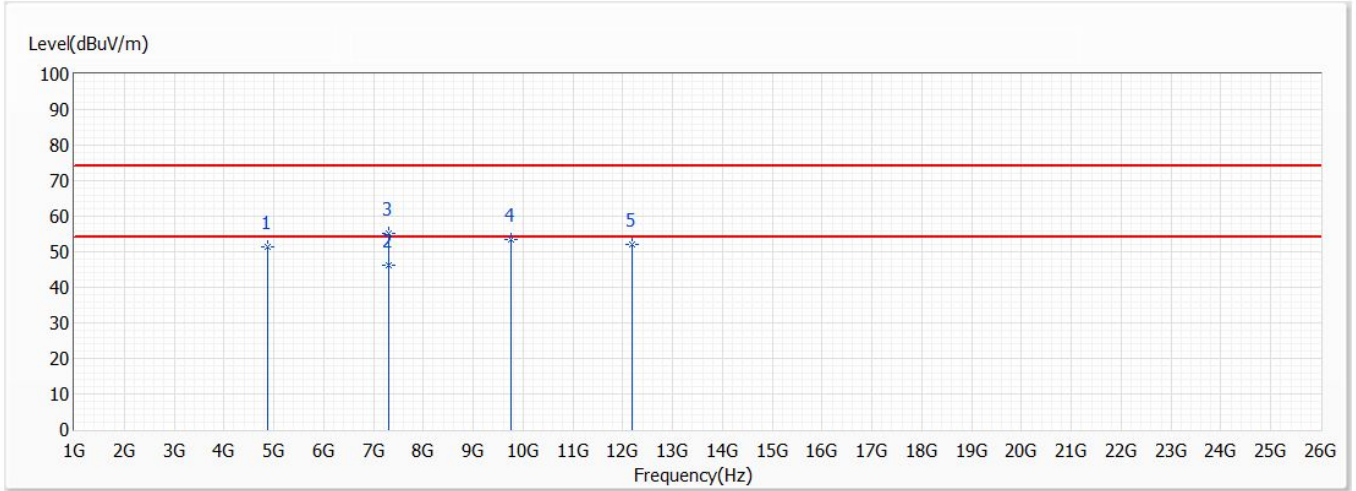


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4824.000	52.52	74.00	-21.48	64.50	-11.98	PK
2	7236.000	53.66	74.00	-20.34	58.26	-4.60	PK
3	9648.000	54.06	74.00	-19.94	55.37	-1.31	PK
4	12060.000	54.57	74.00	-19.43	51.82	2.75	PK
* 5	12060.000	38.84	54.00	-15.16	36.09	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	LVD1	Site	CB2-H
Test Voltage	AC 120V/60Hz	Test Date	2021/5/10
Test Mode	Mode 2: Transmit_Adapter_1A100-US1230	Engineer	Ling Chen
Polarity	Horizontal	Temperature (°C)	24.0
Test Condition	802.11b,Ant1,Ch 6,2.437G,BW20M	Humidity (%RH)	63.0

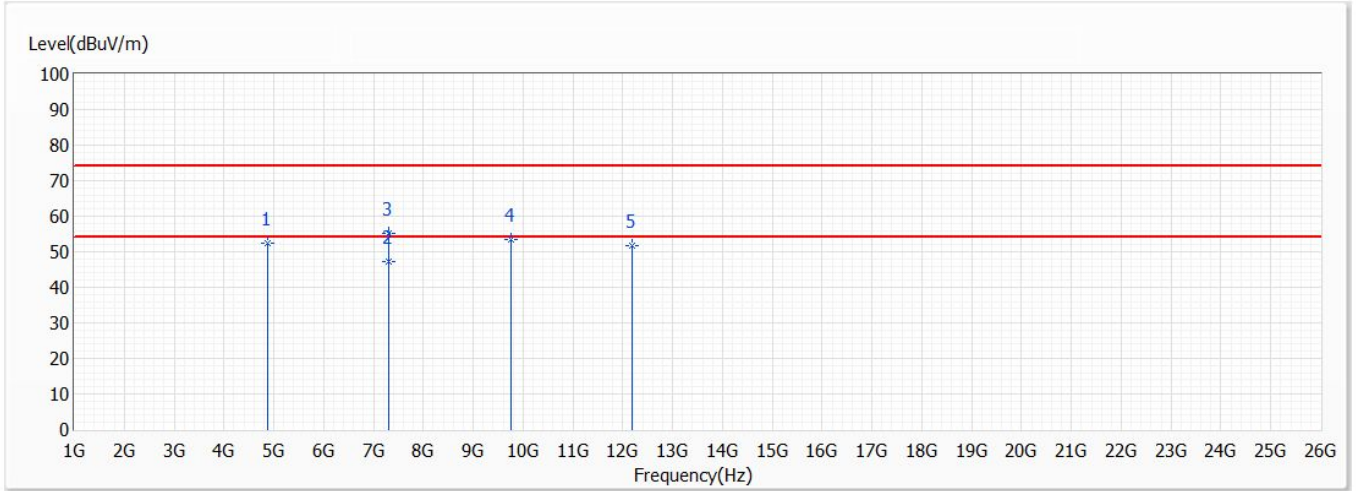


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4874.000	51.38	74.00	-22.62	63.22	-11.84	PK
* 2	7311.000	46.36	54.00	-7.64	50.74	-4.38	AV
3	7311.000	55.05	74.00	-18.95	59.43	-4.38	PK
4	9748.000	53.29	74.00	-20.71	54.56	-1.27	PK
5	12185.000	52.01	74.00	-21.99	49.41	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	LVD1	Site	CB2-H
Test Voltage	AC 120V/60Hz	Test Date	2021/5/10
Test Mode	Mode 2: Transmit_Adapter_1A100-US1230	Engineer	Ling Chen
Polarity	Vertical	Temperature (°C)	24.0
Test Condition	802.11b,Ant1,Ch 6,2.437G,BW20M	Humidity (%RH)	63.0

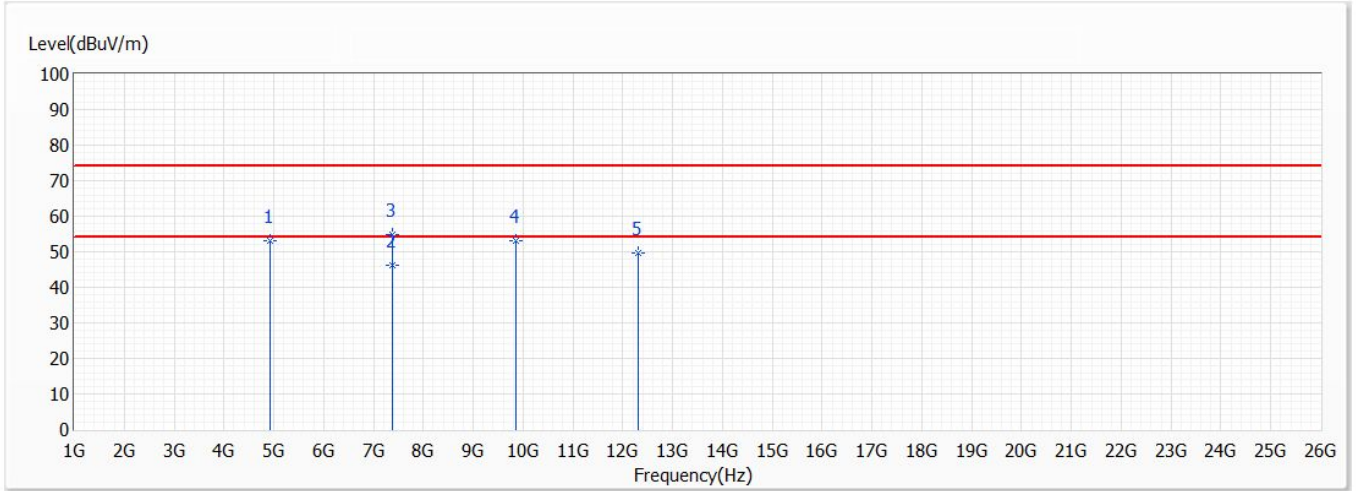


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4874.000	52.42	74.00	-21.58	64.26	-11.84	PK
* 2	7311.000	47.36	54.00	-6.64	51.74	-4.38	AV
3	7311.000	55.31	74.00	-18.69	59.69	-4.38	PK
4	9748.000	53.41	74.00	-20.59	54.68	-1.27	PK
5	12185.000	51.83	74.00	-22.17	49.23	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	LVD1	Site	CB2-H
Test Voltage	AC 120V/60Hz	Test Date	2021/5/10
Test Mode	Mode 2: Transmit_Adapter_1A100-US1230	Engineer	Ling Chen
Polarity	Horizontal	Temperature (°C)	24.0
Test Condition	802.11b,Ant1,Ch 11,2.462G,BW20M	Humidity (%RH)	63.0

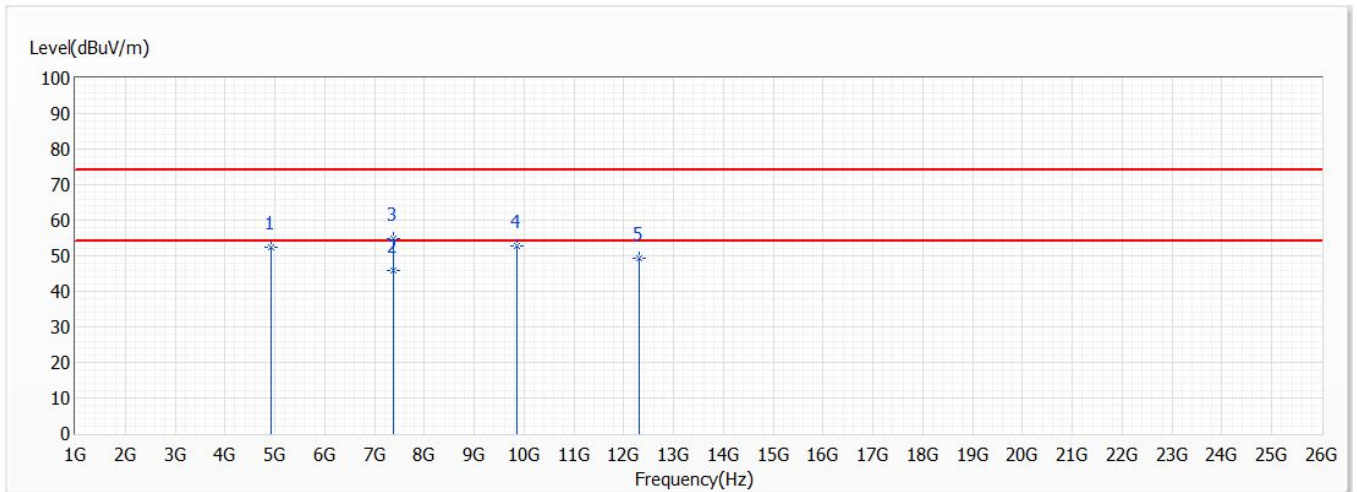


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4924.000	53.26	74.00	-20.74	64.96	-11.70	PK
* 2	7386.000	46.35	54.00	-7.65	50.52	-4.17	AV
3	7386.000	54.85	74.00	-19.15	59.02	-4.17	PK
4	9848.000	53.18	74.00	-20.82	54.40	-1.22	PK
5	12310.000	49.82	74.00	-24.18	47.36	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	LVD1	Site	CB2-H
Test Voltage	AC 120V/60Hz	Test Date	2021/5/10
Test Mode	Mode 2: Transmit_Adapter_1A100-US1230	Engineer	Ling Chen
Polarity	Vertical	Temperature (°C)	24.0
Test Condition	802.11b,Ant1,Ch 11,2.462G,BW20M	Humidity (%RH)	63.0

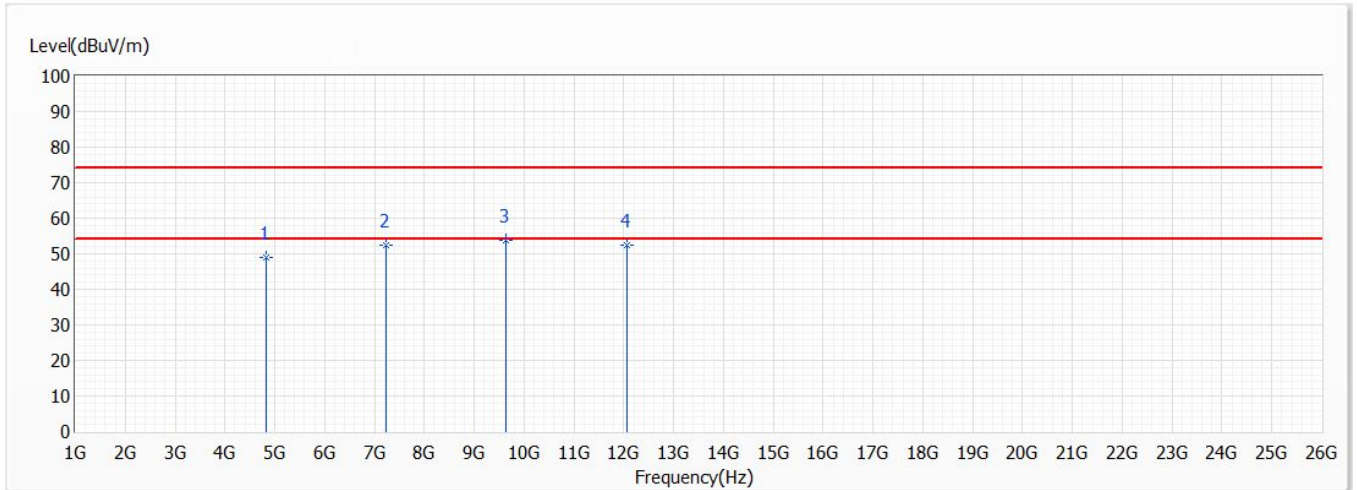


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4924.000	52.55	74.00	-21.45	64.25	-11.70	PK
* 2	7386.000	45.82	54.00	-8.18	49.99	-4.17	AV
3	7386.000	54.78	74.00	-19.22	58.95	-4.17	PK
4	9848.000	52.74	74.00	-21.26	53.96	-1.22	PK
5	12310.000	49.32	74.00	-24.68	46.86	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	LVD1	Site	CB2-H
Test Voltage	AC 120V/60Hz	Test Date	2021/5/10
Test Mode	Mode 2: Transmit_Adapter_1A100-US1230	Engineer	Ling Chen
Polarity	Horizontal	Temperature (°C)	24.0
Test Condition	802.11g,Ant1,Ch 1,2.412G,BW20M	Humidity (%RH)	63.0

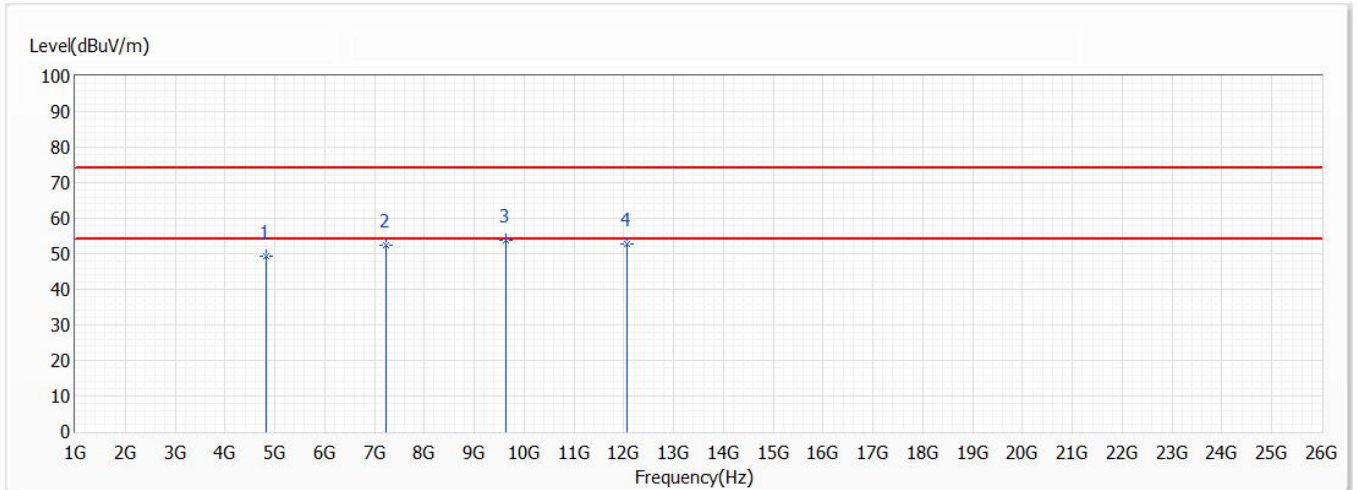


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4824.000	49.04	74.00	-24.96	61.02	-11.98	PK
2	7236.000	52.42	74.00	-21.58	57.02	-4.60	PK
* 3	9648.000	53.79	74.00	-20.21	55.10	-1.31	PK
4	12060.000	52.38	74.00	-21.62	49.63	2.75	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	LVD1	Site	CB2-H
Test Voltage	AC 120V/60Hz	Test Date	2021/5/10
Test Mode	Mode 2: Transmit_Adapter_1A100-US1230	Engineer	Ling Chen
Polarity	Vertical	Temperature (°C)	24.0
Test Condition	802.11g,Ant1,Ch 1,2.412G,BW20M	Humidity (%RH)	63.0

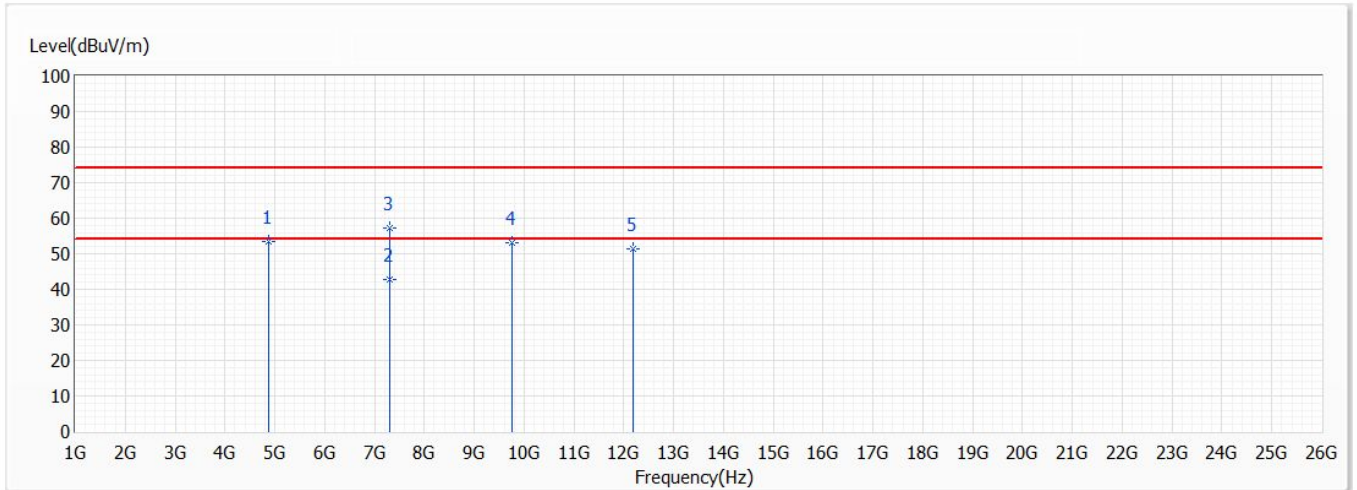


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4824.000	49.47	74.00	-24.53	61.45	-11.98	PK
2	7236.000	52.35	74.00	-21.65	56.95	-4.60	PK
* 3	9648.000	53.92	74.00	-20.08	55.23	-1.31	PK
4	12060.000	52.78	74.00	-21.22	50.03	2.75	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	LVD1	Site	CB2-H
Test Voltage	AC 120V/60Hz	Test Date	2021/5/10
Test Mode	Mode 2: Transmit_Adapter_1A100-US1230	Engineer	Ling Chen
Polarity	Horizontal	Temperature (°C)	24.0
Test Condition	802.11g,Ant1,Ch 6,2.437G,BW20M	Humidity (%RH)	63.0

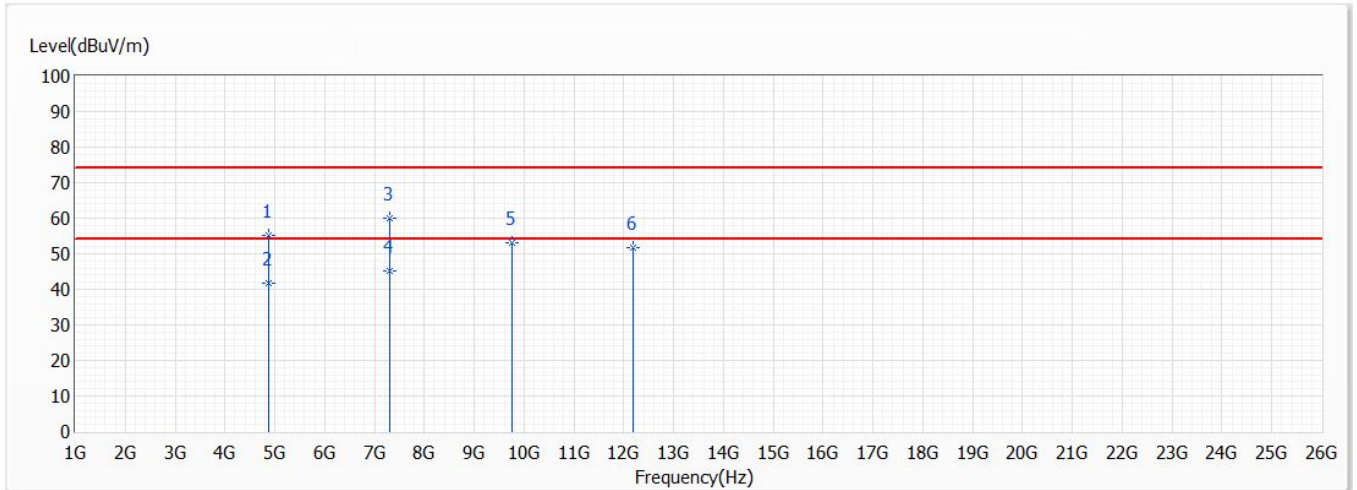


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4874.000	53.56	74.00	-20.44	65.40	-11.84	PK
* 2	7311.000	42.78	54.00	-11.22	47.16	-4.38	AV
3	7311.000	57.31	74.00	-16.69	61.69	-4.38	PK
4	9748.000	53.27	74.00	-20.73	54.54	-1.27	PK
5	12185.000	51.39	74.00	-22.61	48.79	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	LVD1	Site	CB2-H
Test Voltage	AC 120V/60Hz	Test Date	2021/5/10
Test Mode	Mode 2: Transmit_Adapter_1A100-US1230	Engineer	Ling Chen
Polarity	Horizontal	Temperature (°C)	24.0
Test Condition	802.11g,Ant1,Ch 6,2.437G,BW20M	Humidity (%RH)	63.0

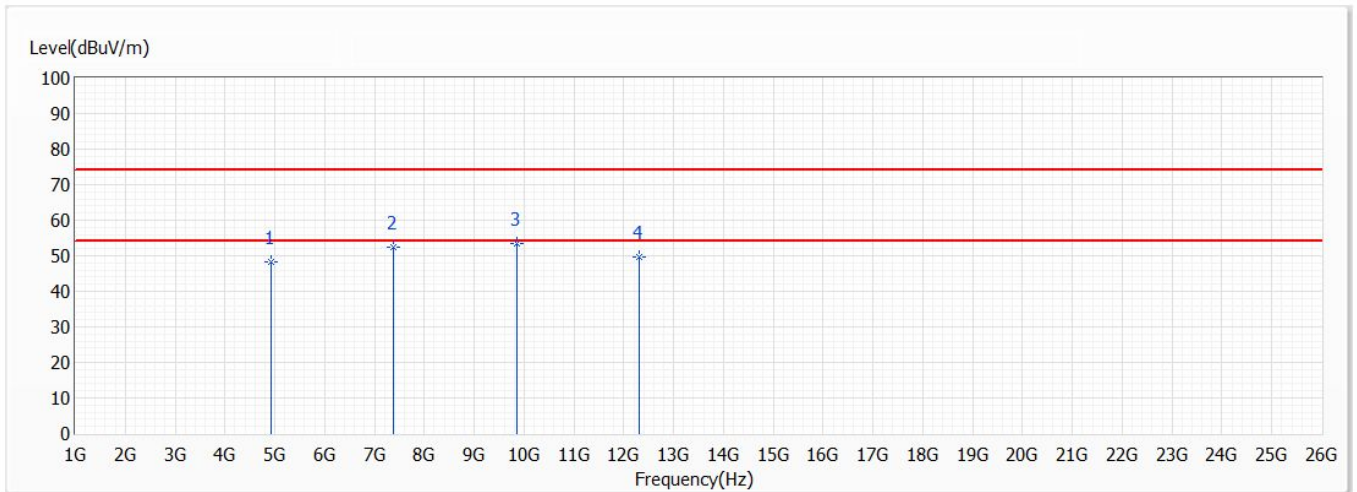


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4874.000	55.14	74.00	-18.86	66.98	-11.84	PK
2	4874.000	41.76	54.00	-12.24	53.60	-11.84	AV
3	7311.000	59.92	74.00	-14.08	64.30	-4.38	PK
* 4	7311.000	45.32	54.00	-8.68	49.70	-4.38	AV
5	9748.000	53.11	74.00	-20.89	54.38	-1.27	PK
6	12185.000	51.72	74.00	-22.28	49.12	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	LVD1	Site	CB2-H
Test Voltage	AC 120V/60Hz	Test Date	2021/5/10
Test Mode	Mode 2: Transmit_Adapter_1A100-US1230	Engineer	Ling Chen
Polarity	Horizontal	Temperature (°C)	24.0
Test Condition	802.11g,Ant1,Ch 11,2.462G,BW20M	Humidity (%RH)	63.0

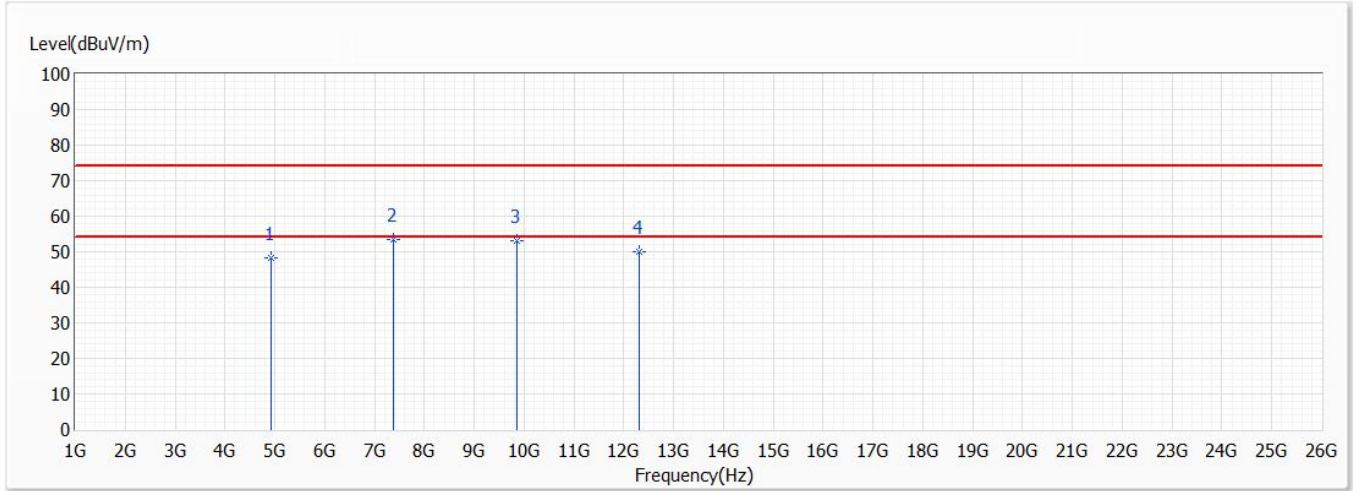


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4924.000	48.25	74.00	-25.75	59.95	-11.70	PK
2	7386.000	52.42	74.00	-21.58	56.59	-4.17	PK
* 3	9848.000	53.34	74.00	-20.66	54.56	-1.22	PK
4	12310.000	49.65	74.00	-24.35	47.19	2.46	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	LVD1	Site	CB2-H
Test Voltage	AC 120V/60Hz	Test Date	2021/5/10
Test Mode	Mode 2: Transmit_Adapter_1A100-US1230	Engineer	Ling Chen
Polarity	Vertical	Temperature (°C)	24.0
Test Condition	802.11g,Ant1,Ch 11,2.462G,BW20M	Humidity (%RH)	63.0

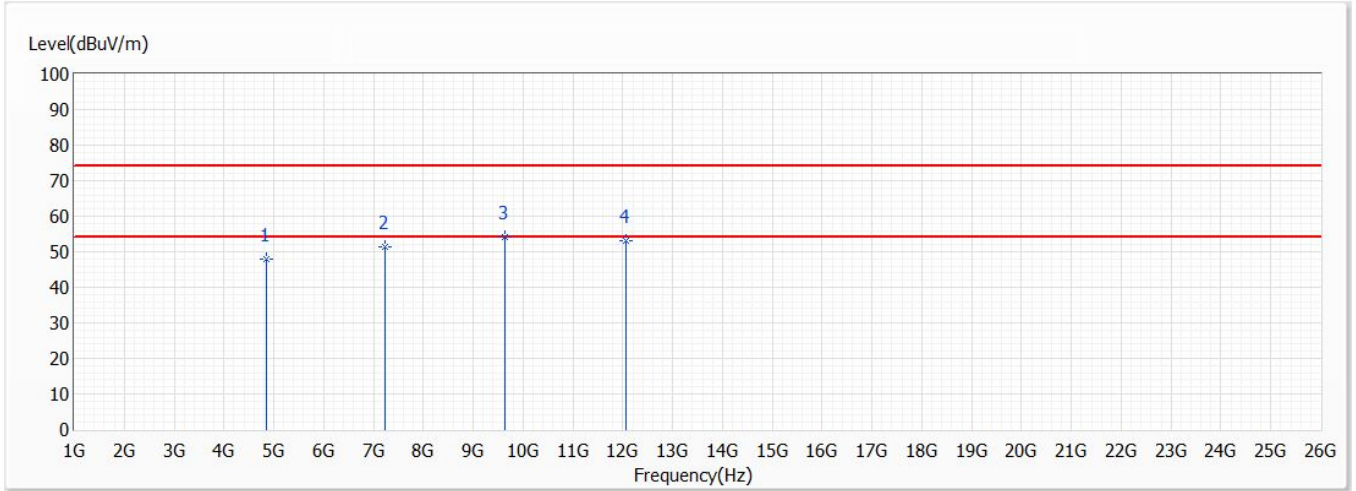


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4924.000	48.38	74.00	-25.62	60.08	-11.70	PK
* 2	7386.000	53.31	74.00	-20.69	57.48	-4.17	PK
3	9848.000	52.96	74.00	-21.04	54.18	-1.22	PK
4	12310.000	49.98	74.00	-24.02	47.52	2.46	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	LVD1	Site	CB2-H
Test Voltage	AC 120V/60Hz	Test Date	2021/5/10
Test Mode	Mode 2: Transmit_Adapter_1A100-US1230	Engineer	Ling Chen
Polarity	Horizontal	Temperature (°C)	24.0
Test Condition	802.11n,Ant0+1,Ch 1,2.412G,BW20M	Humidity (%RH)	63.0

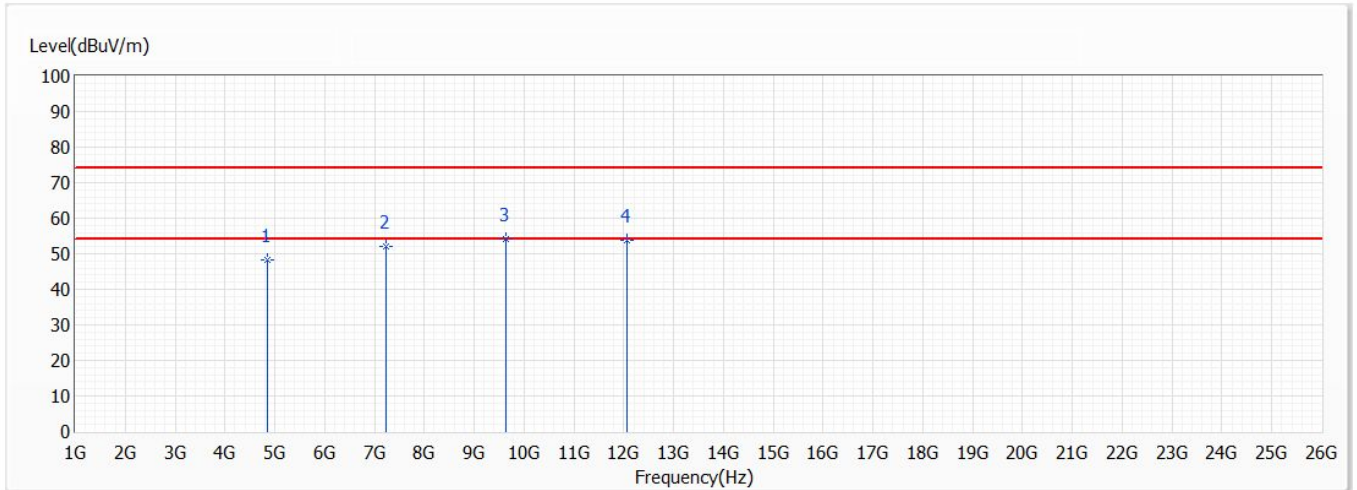


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4848.000	47.83	74.00	-26.17	59.74	-11.91	PK
2	7236.000	51.55	74.00	-22.45	56.15	-4.60	PK
* 3	9648.000	54.27	74.00	-19.73	55.58	-1.31	PK
4	12060.000	53.08	74.00	-20.92	50.33	2.75	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	LVD1	Site	CB2-H
Test Voltage	AC 120V/60Hz	Test Date	2021/5/10
Test Mode	Mode 2: Transmit_Adapter_1A100-US1230	Engineer	Ling Chen
Polarity	Vertical	Temperature (°C)	24.0
Test Condition	802.11n,Ant0+1,Ch 1,2.412G,BW20M	Humidity (%RH)	63.0

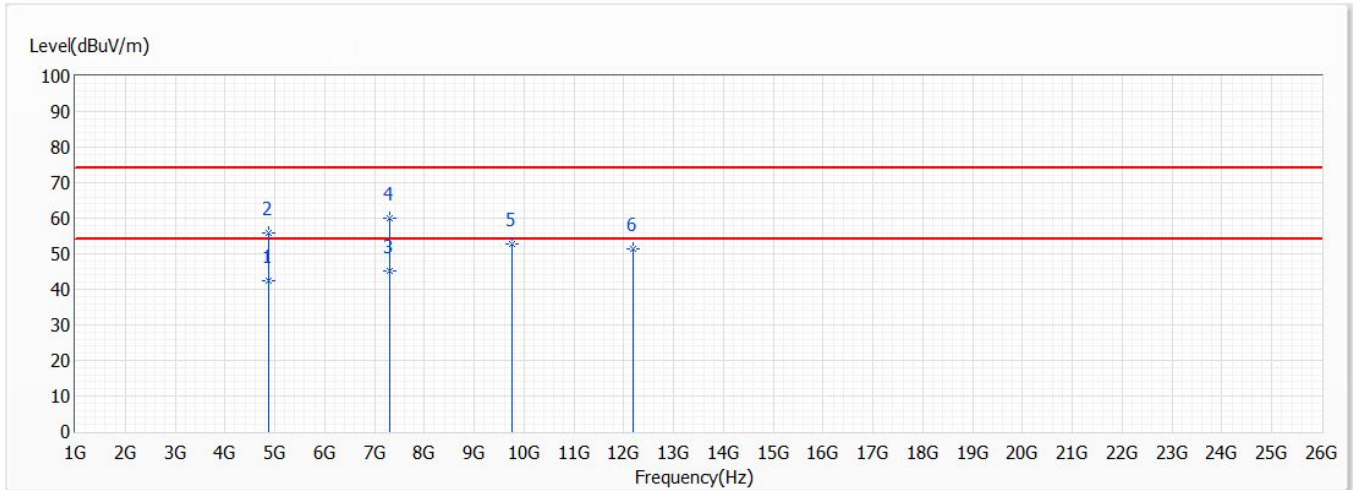


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4848.000	48.25	74.00	-25.75	60.16	-11.91	PK
2	7236.000	52.13	74.00	-21.87	56.73	-4.60	PK
* 3	9648.000	54.23	74.00	-19.77	55.54	-1.31	PK
4	12060.000	53.88	74.00	-20.12	51.13	2.75	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	LVD1	Site	CB2-H
Test Voltage	AC 120V/60Hz	Test Date	2021/5/10
Test Mode	Mode 2: Transmit_Adapter_1A100-US1230	Engineer	Ling Chen
Polarity	Horizontal	Temperature (°C)	24.0
Test Condition	802.11n,Ant0+1,Ch 6,2.437G,BW20M	Humidity (%RH)	63.0

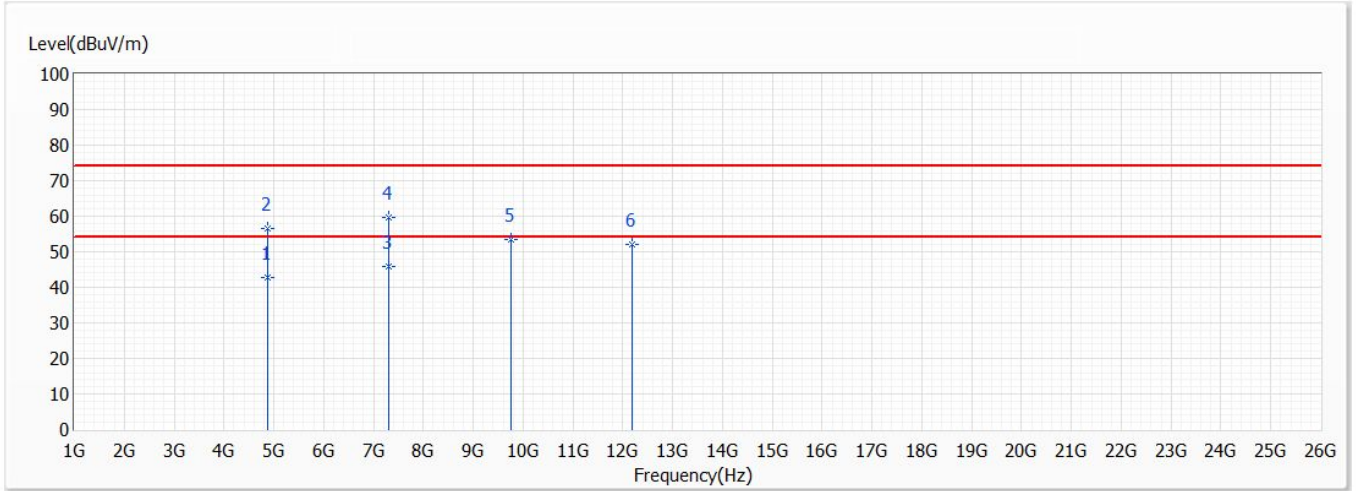


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4874.000	42.45	54.00	-11.55	54.29	-11.84	AV
2	4874.000	55.75	74.00	-18.25	67.59	-11.84	PK
* 3	7311.000	45.21	54.00	-8.79	49.59	-4.38	AV
4	7311.000	59.83	74.00	-14.17	64.21	-4.38	PK
5	9748.000	52.86	74.00	-21.14	54.13	-1.27	PK
6	12185.000	51.53	74.00	-22.47	48.93	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	LVD1	Site	CB2-H
Test Voltage	AC 120V/60Hz	Test Date	2021/5/10
Test Mode	Mode 2: Transmit_Adapter_1A100-US1230	Engineer	Ling Chen
Polarity	Vertical	Temperature (°C)	24.0
Test Condition	802.11n,Ant0+1,Ch 6,2.437G,BW20M	Humidity (%RH)	63.0

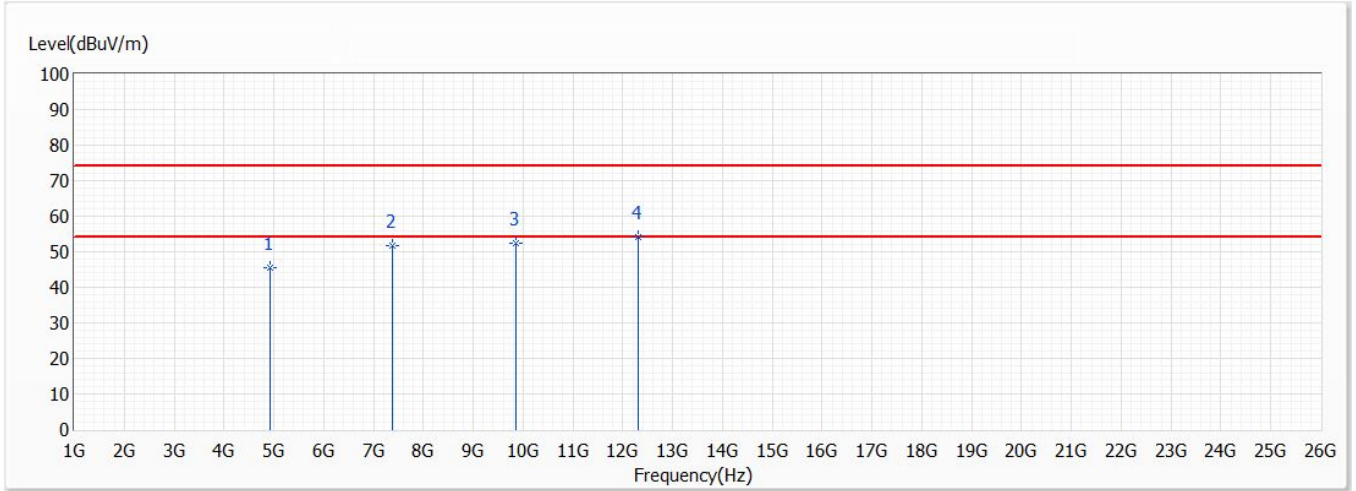


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4874.000	42.88	54.00	-11.12	54.72	-11.84	AV
2	4874.000	56.65	74.00	-17.35	68.49	-11.84	PK
* 3	7311.000	45.78	54.00	-8.22	50.16	-4.38	AV
4	7311.000	59.63	74.00	-14.37	64.01	-4.38	PK
5	9748.000	53.42	74.00	-20.58	54.69	-1.27	PK
6	12185.000	52.04	74.00	-21.96	49.44	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	LVD1	Site	CB2-H
Test Voltage	AC 120V/60Hz	Test Date	2021/5/10
Test Mode	Mode 2: Transmit_Adapter_1A100-US1230	Engineer	Ling Chen
Polarity	Horizontal	Temperature (°C)	24.0
Test Condition	802.11n,Ant0+1,Ch 11,2.462G,BW20M	Humidity (%RH)	63.0

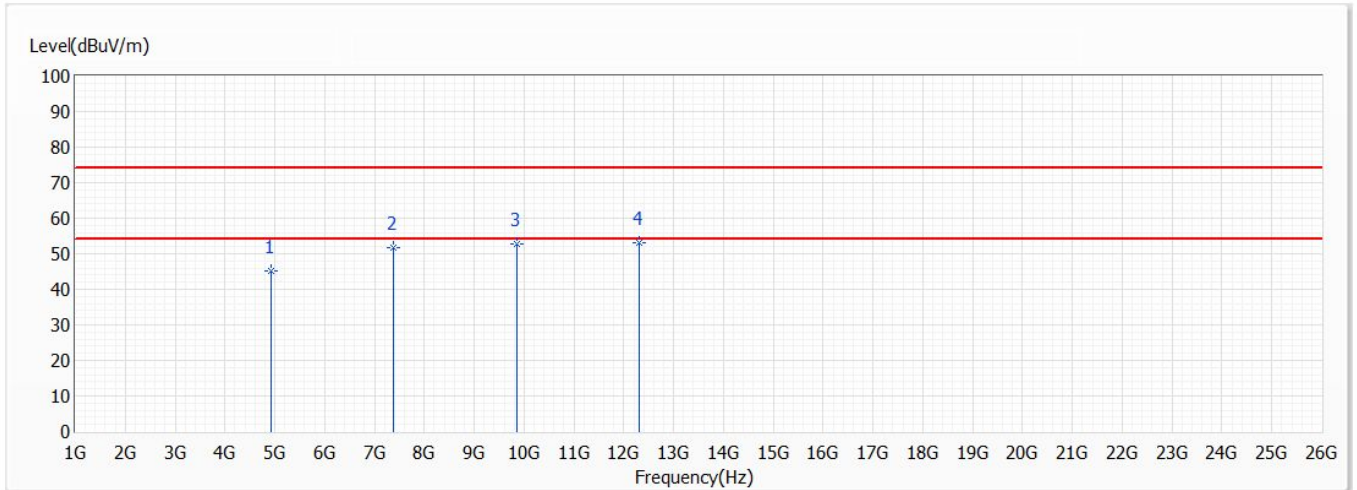


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4924.000	45.68	74.00	-28.32	57.38	-11.70	PK
2	7386.000	51.75	74.00	-22.25	55.92	-4.17	PK
3	9848.000	52.54	74.00	-21.46	53.76	-1.22	PK
* 4	12310.000	53.97	74.00	-20.03	51.51	2.46	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	LVD1	Site	CB2-H
Test Voltage	AC 120V/60Hz	Test Date	2021/5/10
Test Mode	Mode 2: Transmit_Adapter_1A100-US1230	Engineer	Ling Chen
Polarity	Vertical	Temperature (°C)	24.0
Test Condition	802.11n,Ant0+1,Ch 11,2.462G,BW20M	Humidity (%RH)	63.0

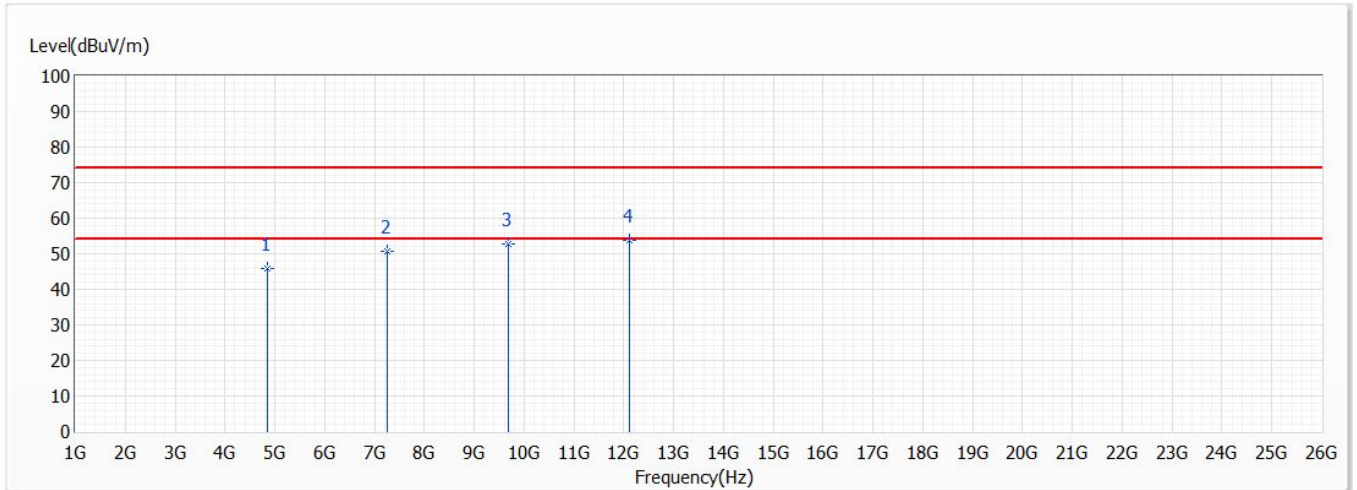


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4924.000	45.12	74.00	-28.88	56.82	-11.70	PK
2	7386.000	51.58	74.00	-22.42	55.75	-4.17	PK
3	9848.000	52.61	74.00	-21.39	53.83	-1.22	PK
* 4	12310.000	53.25	74.00	-20.75	50.79	2.46	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	LVD1	Site	CB2-H
Test Voltage	AC 120V/60Hz	Test Date	2021/5/10
Test Mode	Mode 2: Transmit_Adapter_1A100-US1230	Engineer	Ling Chen
Polarity	Horizontal	Temperature (°C)	24.0
Test Condition	802.11n,Ant0+1,Ch 3,2.422G,BW40M	Humidity (%RH)	63.0

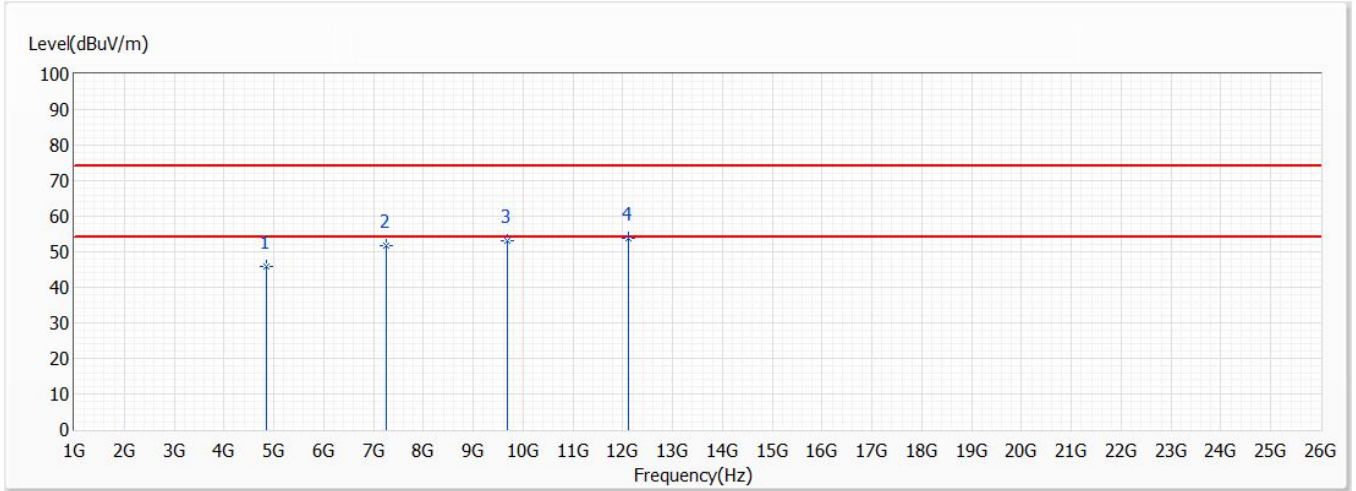


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4844.000	45.75	74.00	-28.25	57.68	-11.93	PK
2	7266.000	50.83	74.00	-23.17	55.34	-4.51	PK
3	9688.000	52.84	74.00	-21.16	54.14	-1.30	PK
* 4	12110.000	53.94	74.00	-20.06	51.26	2.68	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	LVD1	Site	CB2-H
Test Voltage	AC 120V/60Hz	Test Date	2021/5/10
Test Mode	Mode 2: Transmit_Adapter_1A100-US1230	Engineer	Ling Chen
Polarity	Vertical	Temperature (°C)	24.0
Test Condition	802.11n,Ant0+1,Ch 3,2.422G,BW40M	Humidity (%RH)	63.0

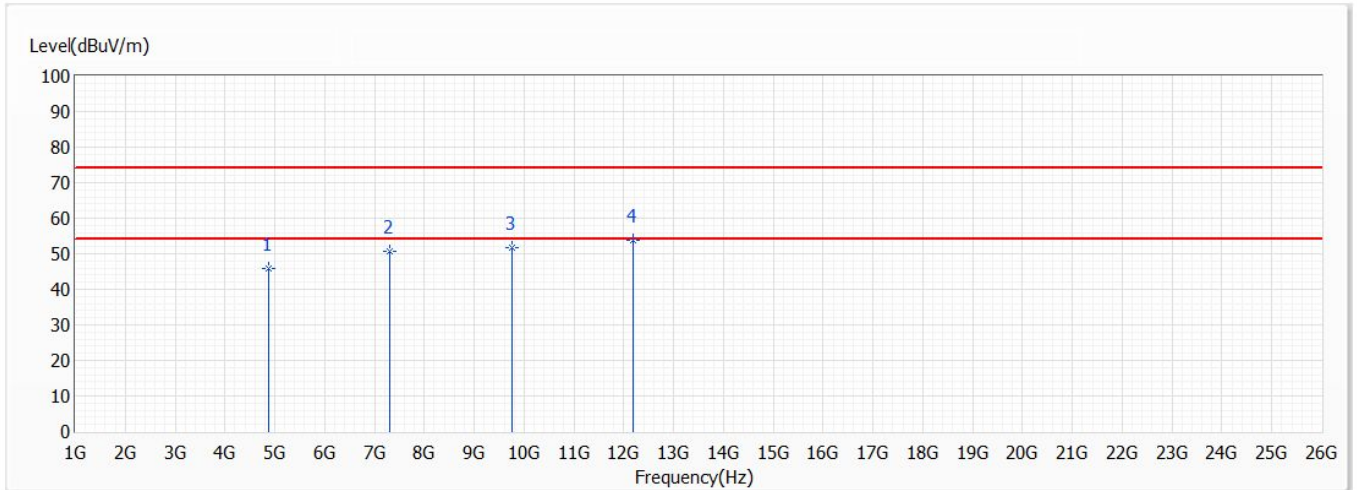


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4844.000	45.85	74.00	-28.15	57.78	-11.93	PK
2	7266.000	51.70	74.00	-22.30	56.21	-4.51	PK
3	9688.000	53.04	74.00	-20.96	54.34	-1.30	PK
* 4	12110.000	53.65	74.00	-20.35	50.97	2.68	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	LVD1	Site	CB2-H
Test Voltage	AC 120V/60Hz	Test Date	2021/5/10
Test Mode	Mode 2: Transmit_Adapter_1A100-US1230	Engineer	Ling Chen
Polarity	Horizontal	Temperature (°C)	24.0
Test Condition	802.11n,Ant0+1,Ch 6,2.437G,BW40M	Humidity (%RH)	63.0

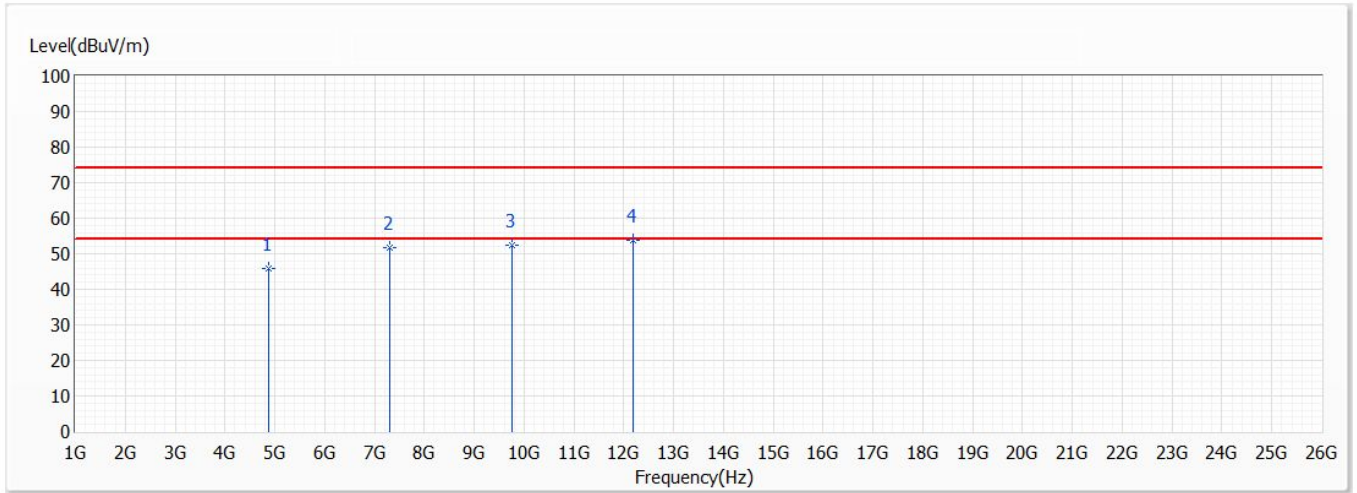


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4874.000	46.02	74.00	-27.98	57.86	-11.84	PK
2	7311.000	50.66	74.00	-23.34	55.04	-4.38	PK
3	9748.000	51.85	74.00	-22.15	53.12	-1.27	PK
* 4	12185.000	53.68	74.00	-20.32	51.08	2.60	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	LVD1	Site	CB2-H
Test Voltage	AC 120V/60Hz	Test Date	2021/5/10
Test Mode	Mode 2: Transmit_Adapter_1A100-US1230	Engineer	Ling Chen
Polarity	Vertical	Temperature (°C)	24.0
Test Condition	802.11n,Ant0+1,Ch 6,2.437G,BW40M	Humidity (%RH)	63.0

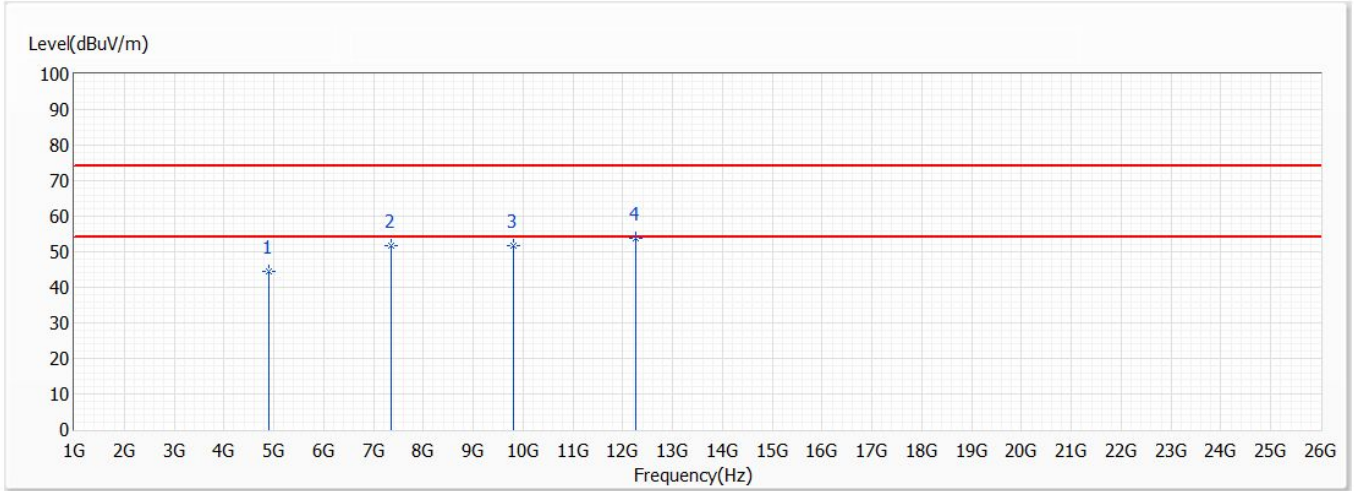


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4874.000	45.74	74.00	-28.26	57.58	-11.84	PK
2	7311.000	51.59	74.00	-22.41	55.97	-4.38	PK
3	9748.000	52.56	74.00	-21.44	53.83	-1.27	PK
* 4	12185.000	53.75	74.00	-20.25	51.15	2.60	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	LVD1	Site	CB2-H
Test Voltage	AC 120V/60Hz	Test Date	2021/5/10
Test Mode	Mode 2: Transmit_Adapter_1A100-US1230	Engineer	Ling Chen
Polarity	Horizontal	Temperature (°C)	24.0
Test Condition	802.11n,Ant0+1,Ch 9,2.452G,BW40M	Humidity (%RH)	63.0

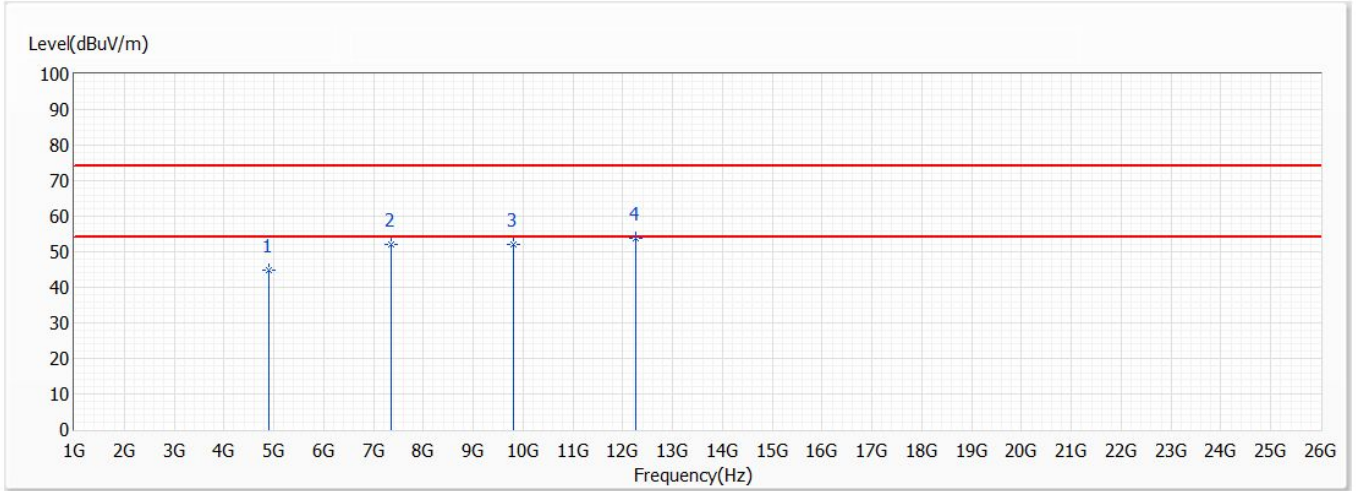


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4904.000	44.49	74.00	-29.51	56.25	-11.76	PK
2	7356.000	51.68	74.00	-22.32	55.93	-4.25	PK
3	9808.000	51.84	74.00	-22.16	53.08	-1.24	PK
* 4	12260.000	53.90	74.00	-20.10	51.39	2.51	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	LVD1	Site	CB2-H
Test Voltage	AC 120V/60Hz	Test Date	2021/5/10
Test Mode	Mode 2: Transmit_Adapter_1A100-US1230	Engineer	Ling Chen
Polarity	Vertical	Temperature (°C)	24.0
Test Condition	802.11n,Ant0+1,Ch 9,2.452G,BW40M	Humidity (%RH)	63.0



No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4904.000	44.69	74.00	-29.31	56.45	-11.76	PK
2	7356.000	51.91	74.00	-22.09	56.16	-4.25	PK
3	9808.000	52.21	74.00	-21.79	53.45	-1.24	PK
* 4	12260.000	53.96	74.00	-20.04	51.45	2.51	PK

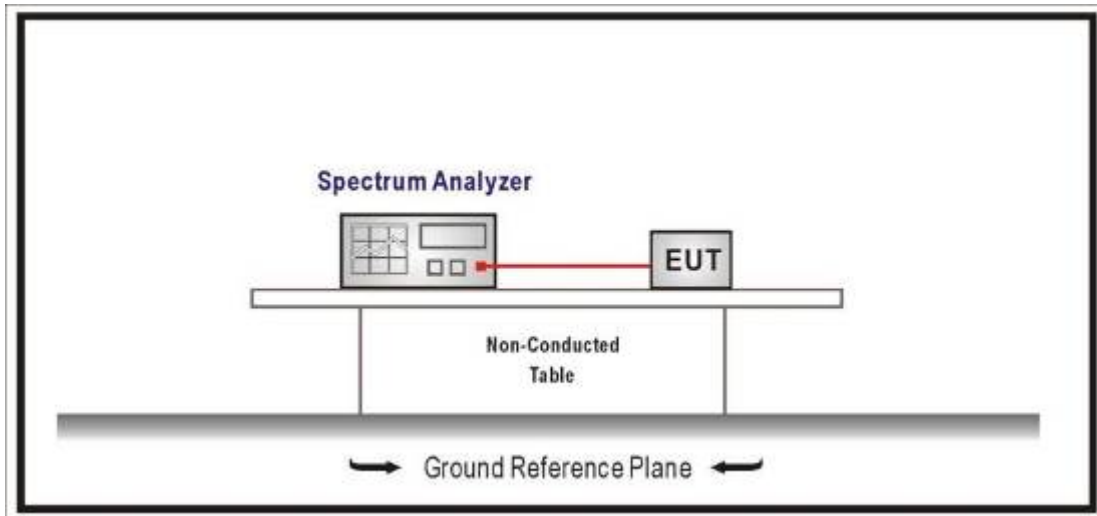
Note:

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.

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

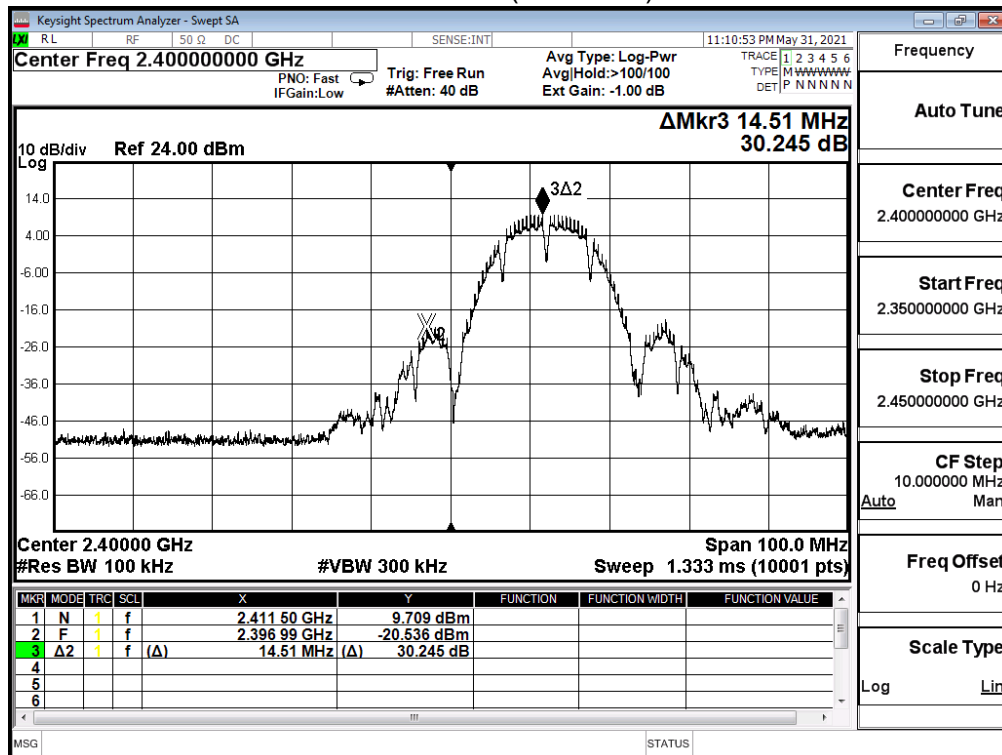
According to FCC Part 15 Subpart C Paragraph 15.247: 2019

5.5. Test Result

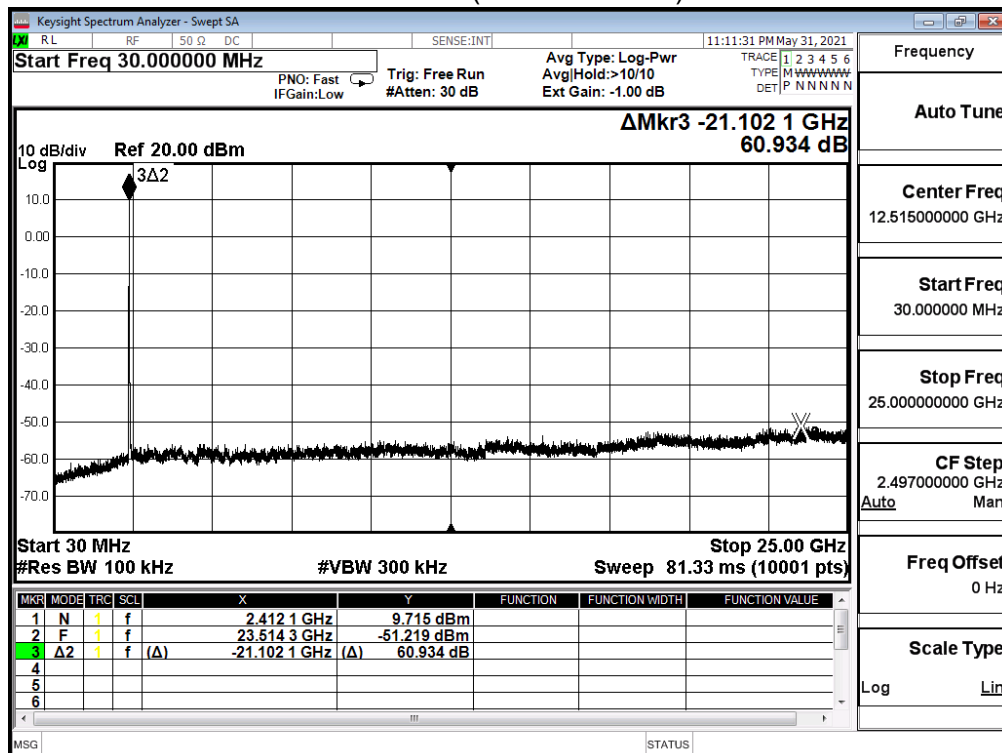
Product	Smart Display		
Test Item	RF antenna conducted test		
Test Mode	Mode 2: Transmit_Adapter_1A100-US1230		
Date of Test	2021/05/31	Test Site	SR12-H
Temperature (°C)	24.0	Humidity (%RH)	67.0

IEEE 802.11b (ANT 1)				
Channel	Frequency (MHz)	Measure Level (dBc)	Limit (dBc)	Result
1	2412	30.245	≥ 30	Pass
6	2437	47.010	≥ 30	Pass
11	2462	59.409	≥ 30	Pass

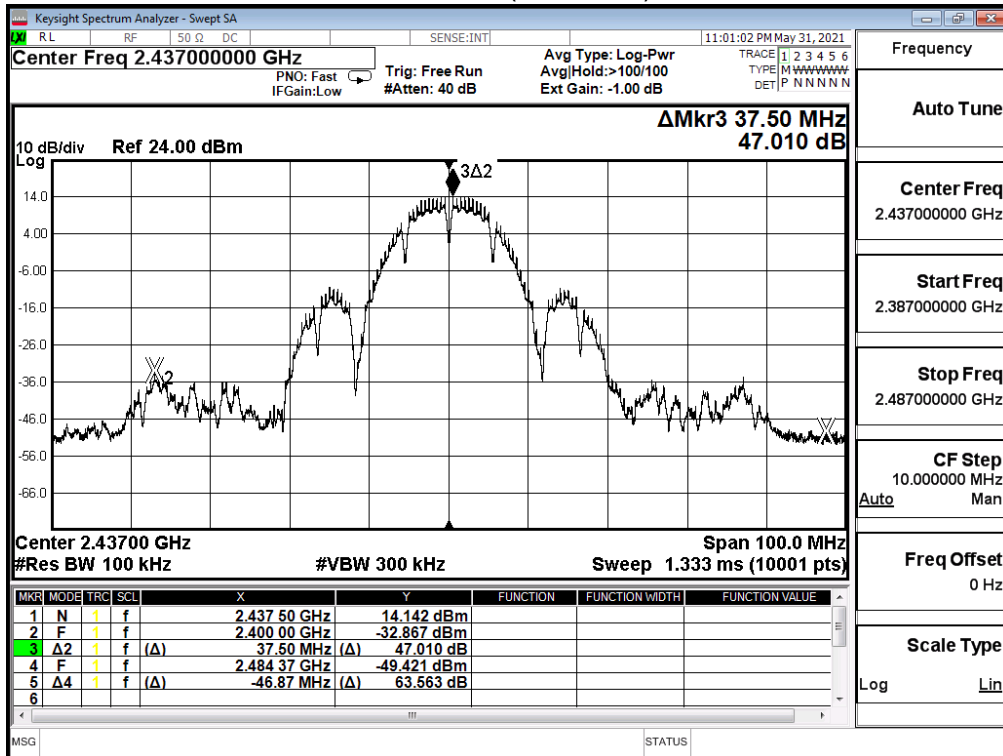
Channel 1 (2412MHz)



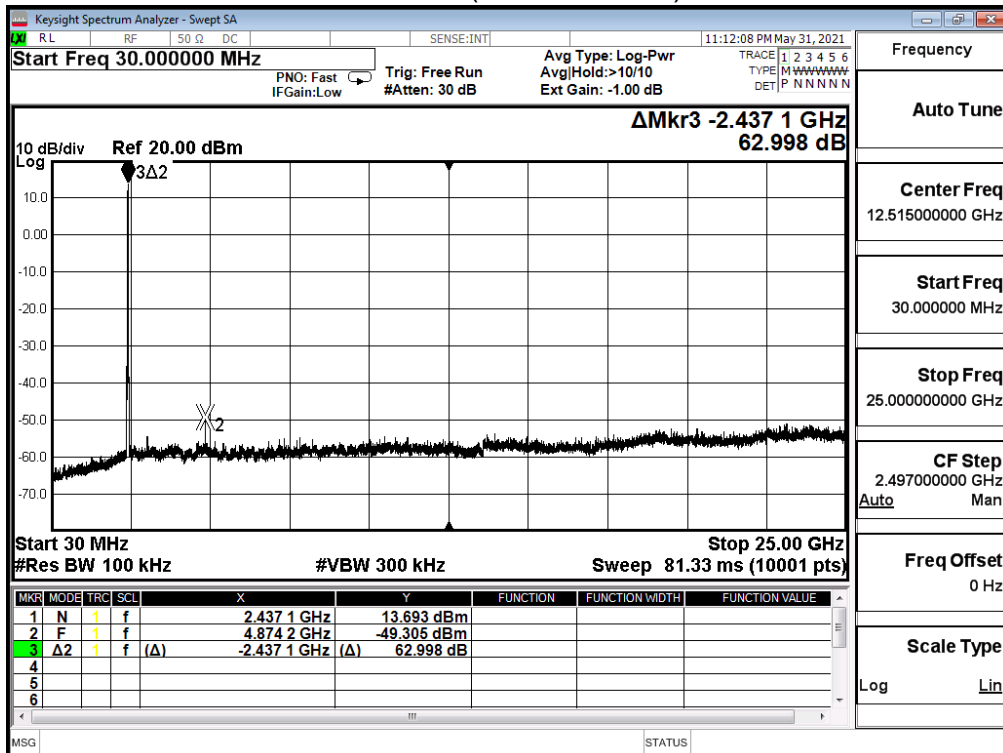
2412MHz (30MHz-25GHz)



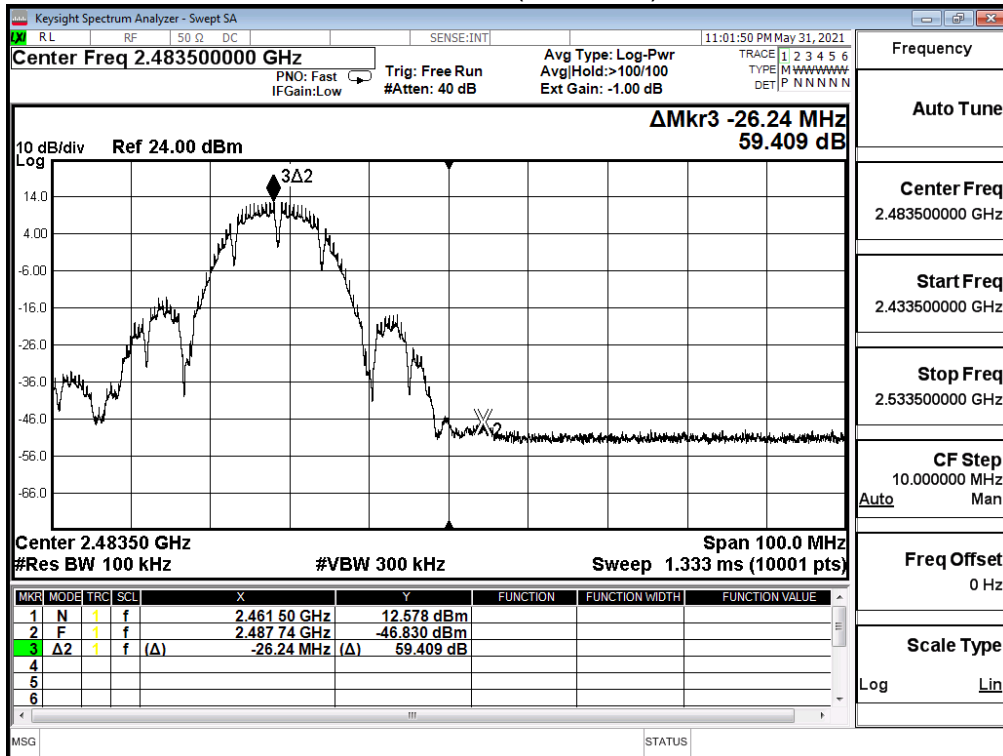
Channel 6 (2437MHz)



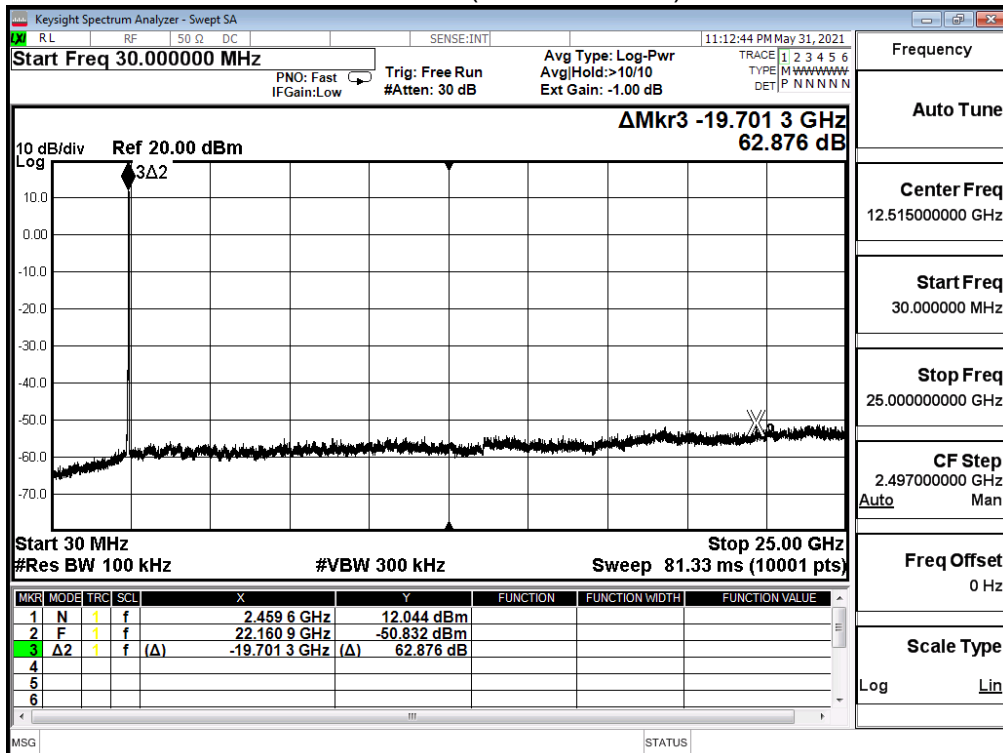
2437MHz (30MHz-25GHz)



Channel 11 (2462MHz)



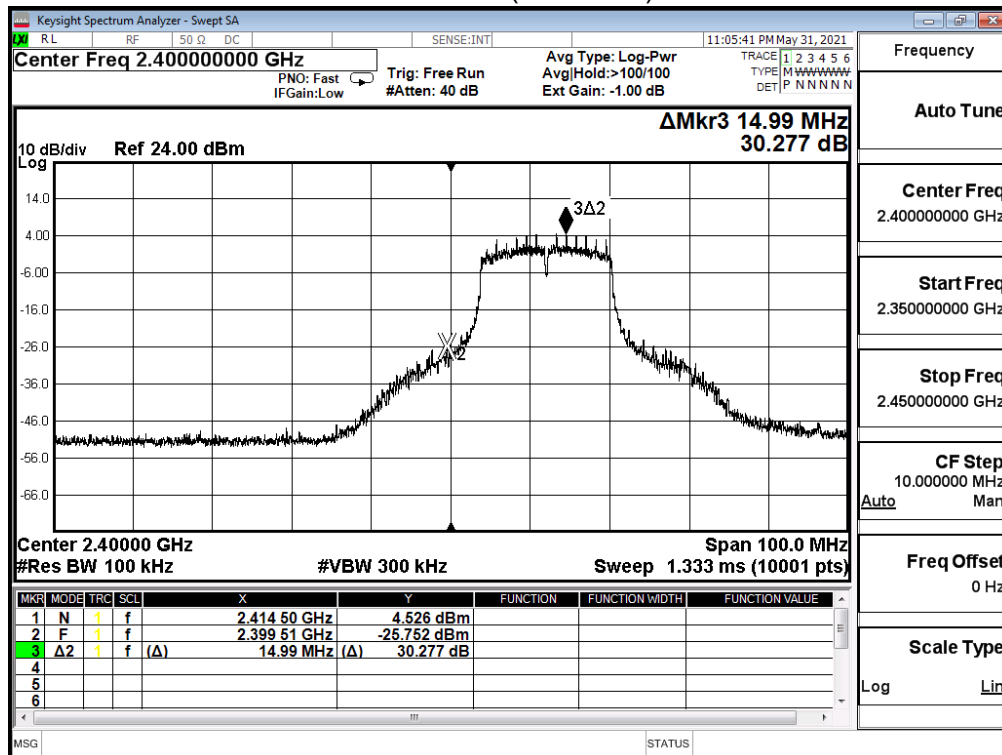
2462MHz (30MHz-25GHz)



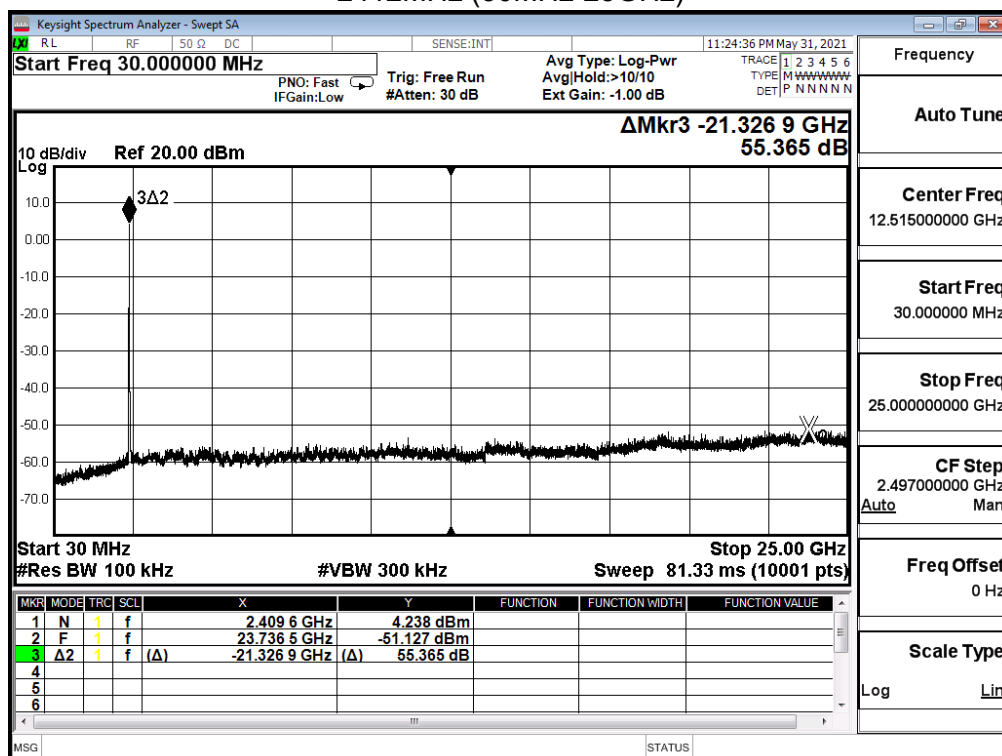
Product	Smart Display		
Test Item	RF antenna conducted test		
Test Mode	Mode 2: Transmit_Adapter_1A100-US1230		
Date of Test	2021/05/31	Test Site	SR12-H
Temperature (°C)	24.0	Humidity (%RH)	67.0

IEEE 802.11g (ANT 1)				
Channel	Frequency (MHz)	Measure Level (dBc)	Limit (dBc)	Result
1	2412	30.277	≥ 30	Pass
6	2437	43.734	≥ 30	Pass
11	2462	47.355	≥ 30	Pass

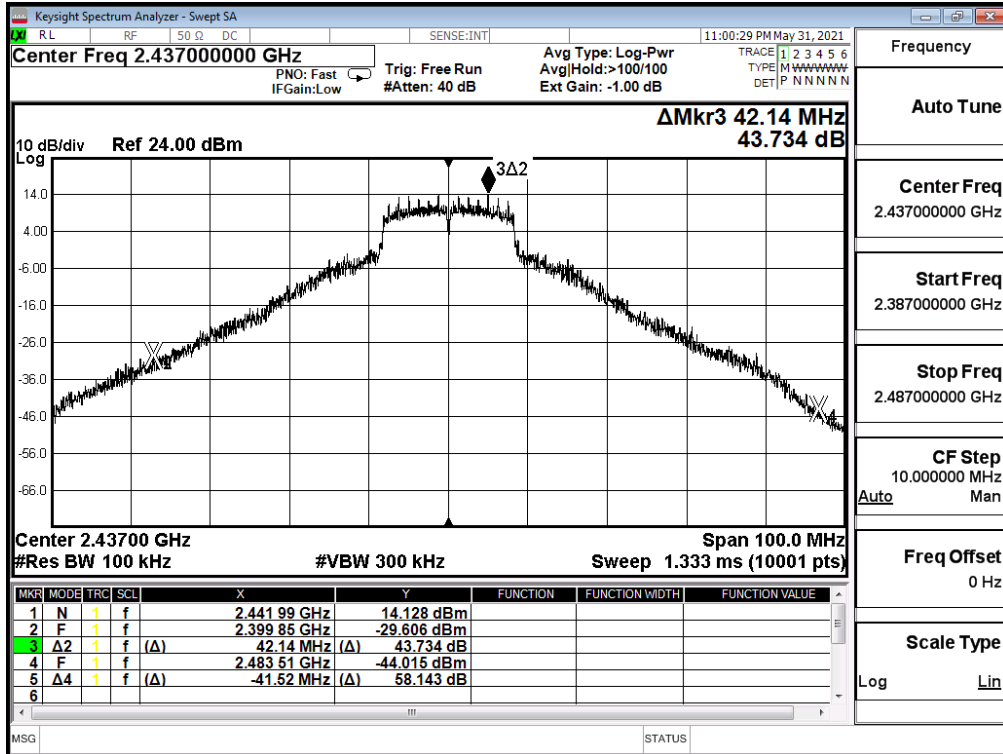
Channel 1 (2412MHz)



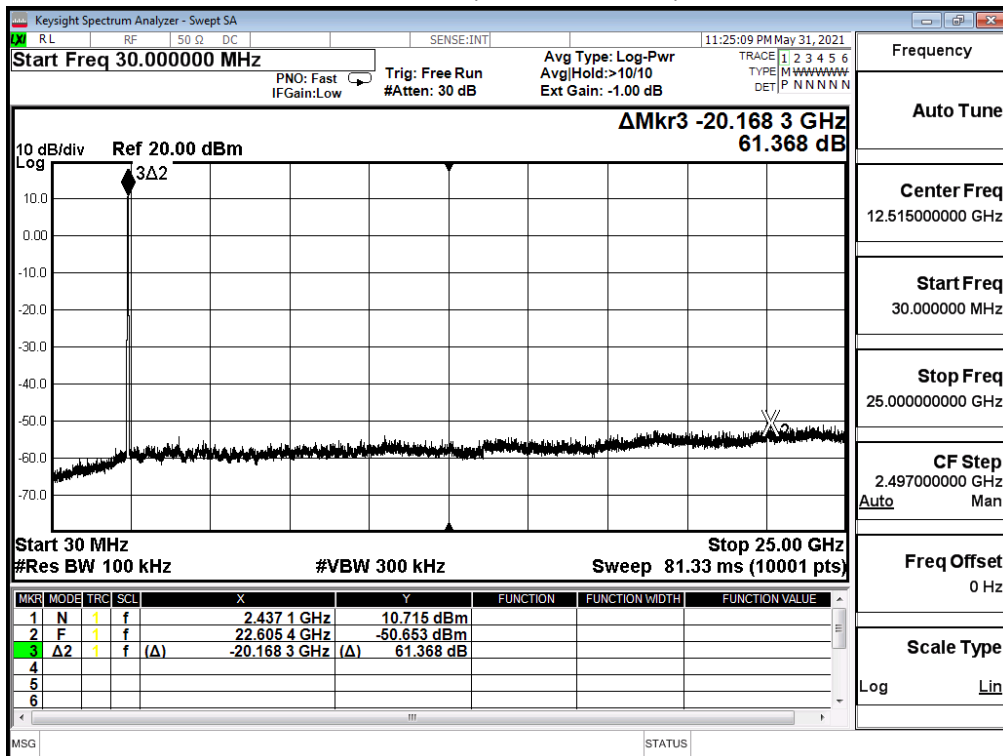
2412MHz (30MHz-25GHz)



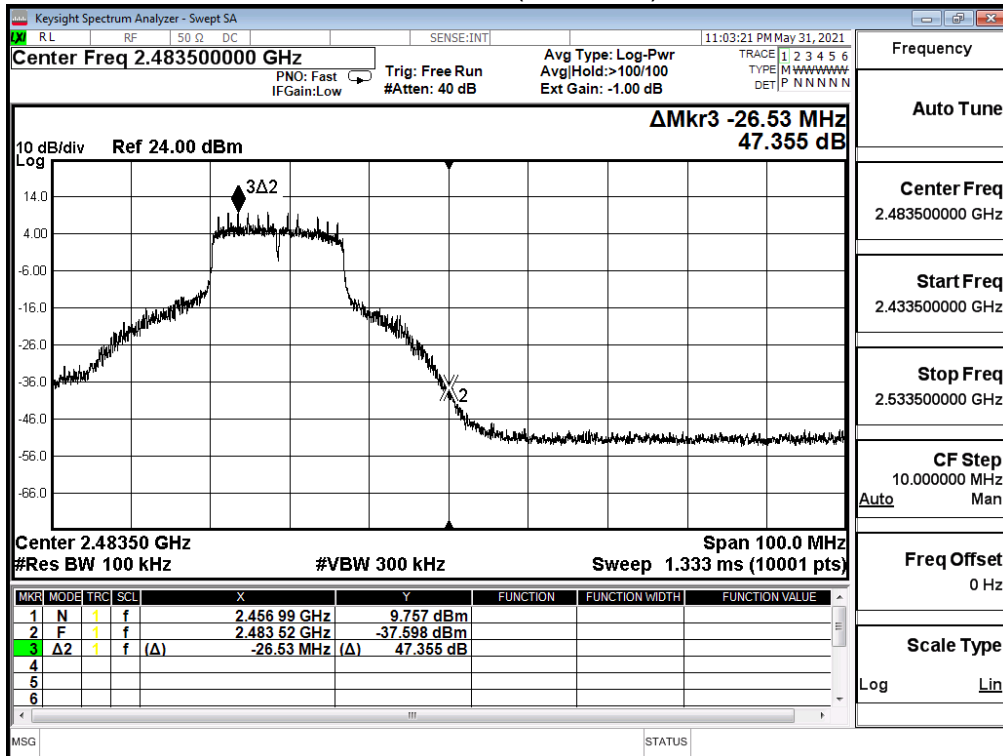
Channel 6 (2437MHz)



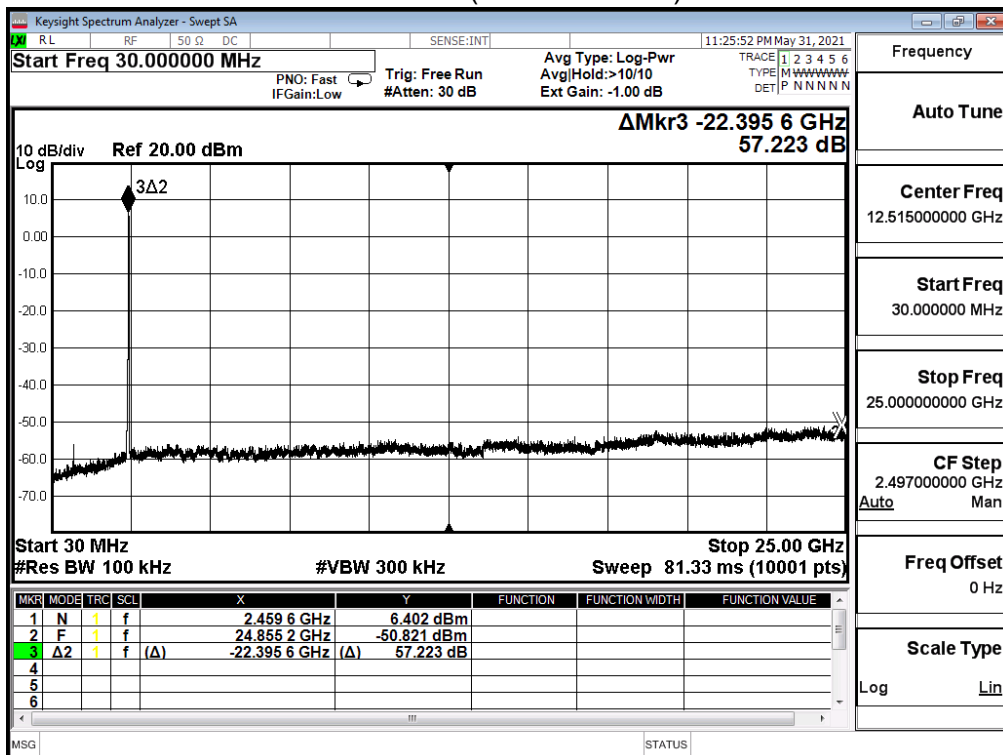
2437MHz (30MHz-25GHz)



Channel 11 (2462MHz)



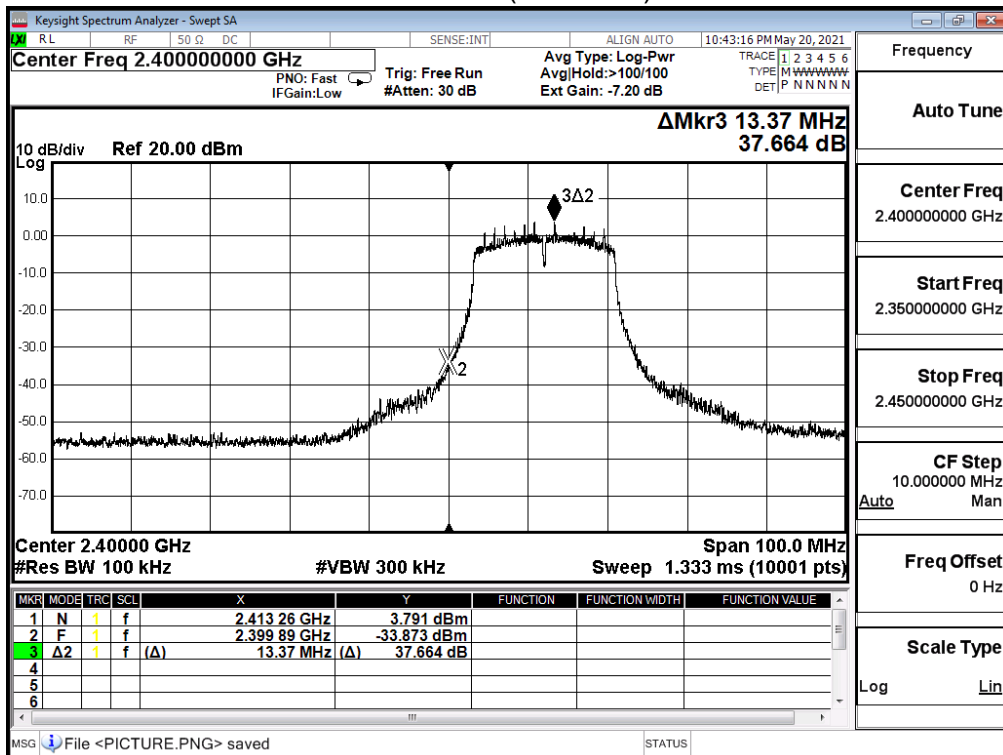
2462MHz (30MHz-25GHz)



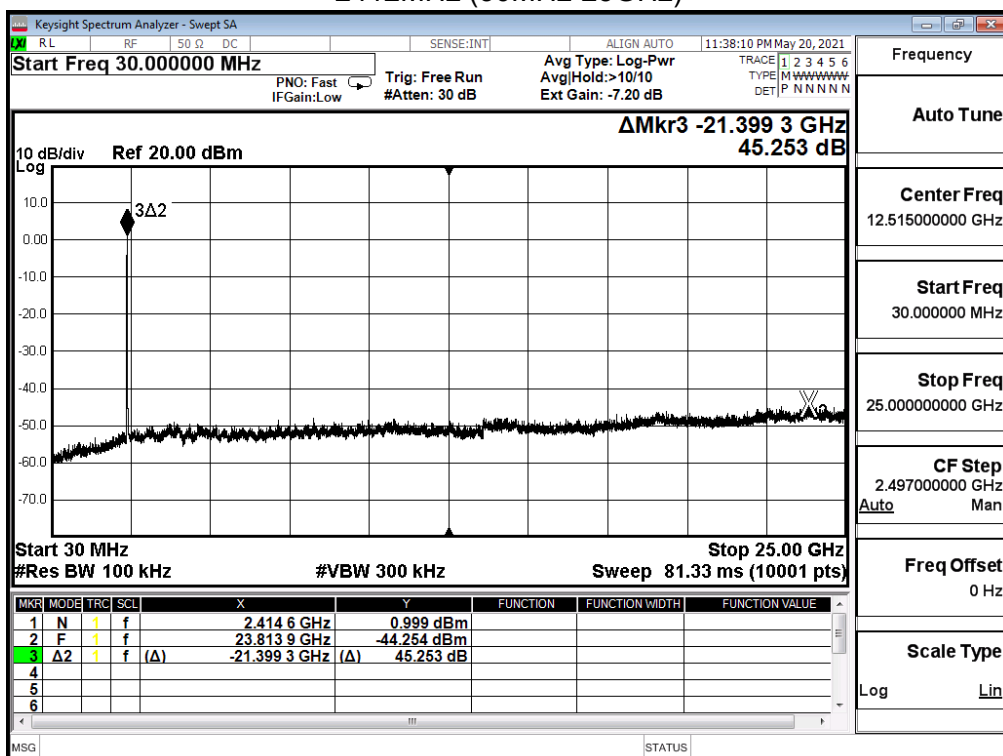
Product	Smart Display		
Test Item	RF antenna conducted test		
Test Mode	Mode 2: Transmit_Adapter_1A100-US1230		
Date of Test	2021/05/20	Test Site	SR12-H
Test Temperature	24.0	Humidity (%RH)	56.0

IEEE 802.11n(20M)(ANT 0)				
Channel	Frequency (MHz)	Measure Level (dBc)	Limit (dBc)	Result
1	2412	37.664	≥ 30	Pass
6	2437	53.116	≥ 30	Pass
11	2462	46.930	≥ 30	Pass

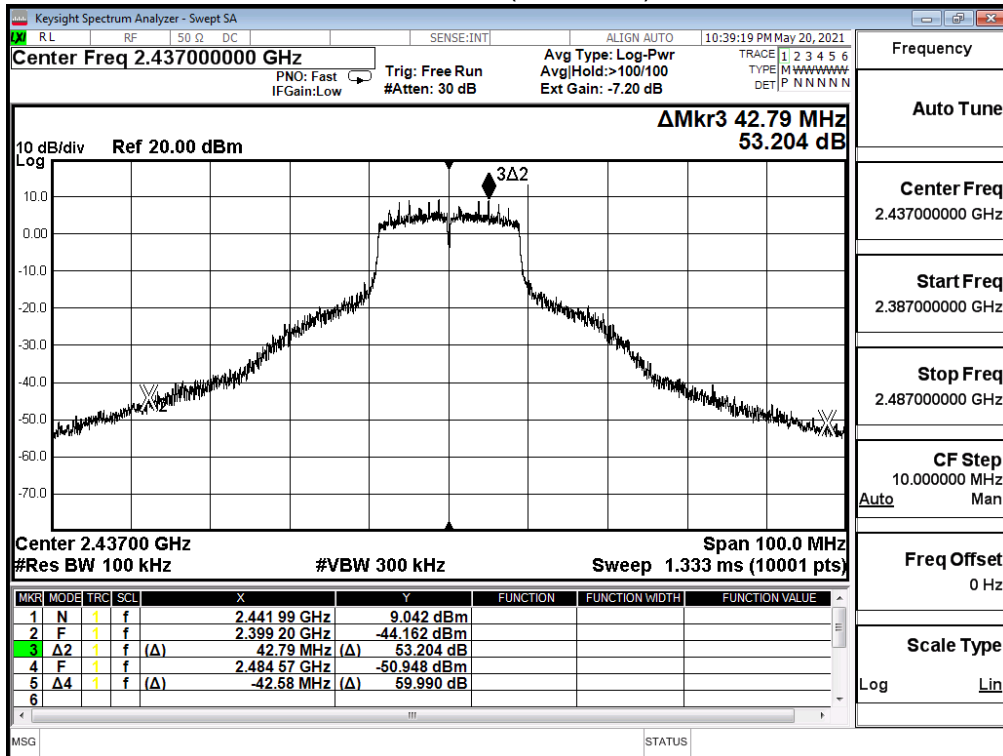
Channel 1 (2412MHz)



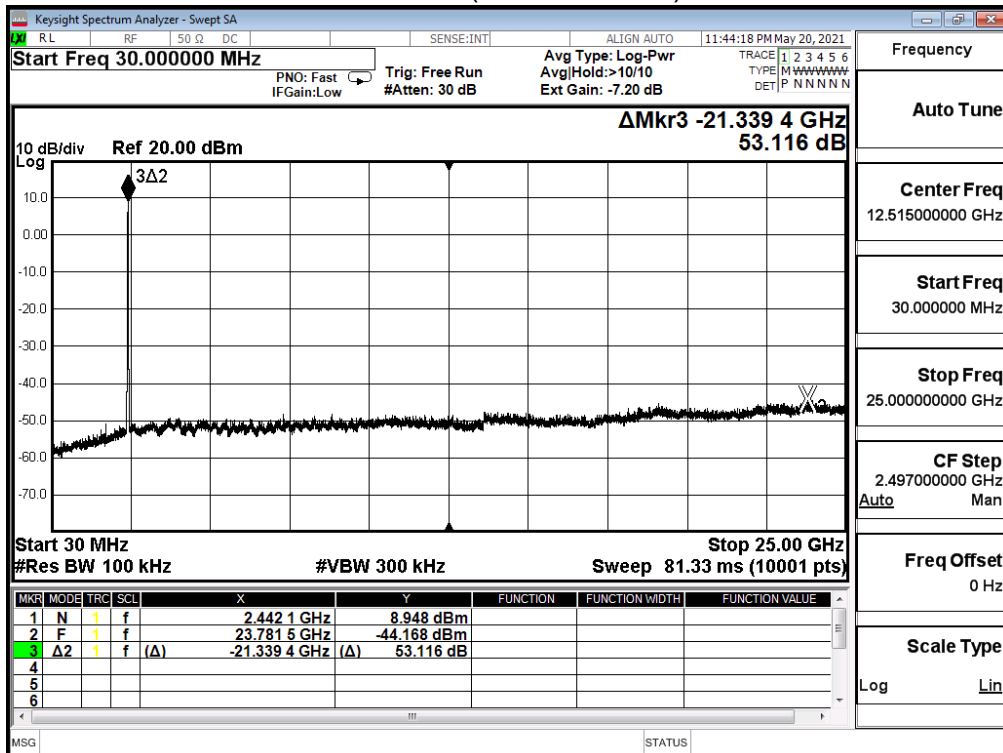
2412MHz (30MHz-25GHz)



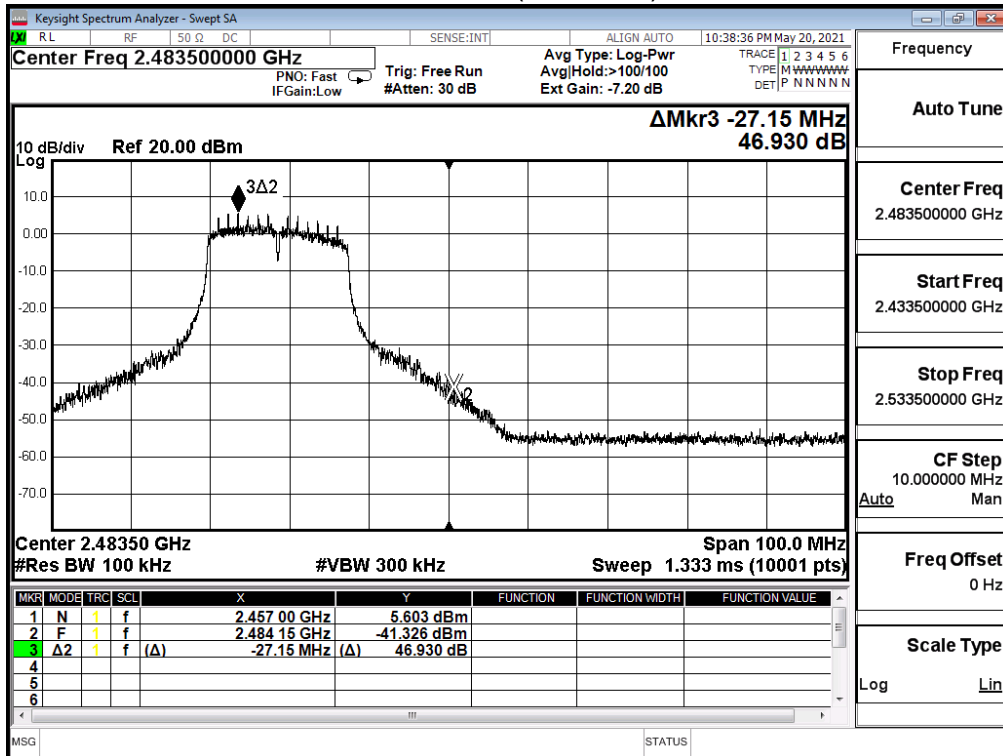
Channel 6 (2437MHz)



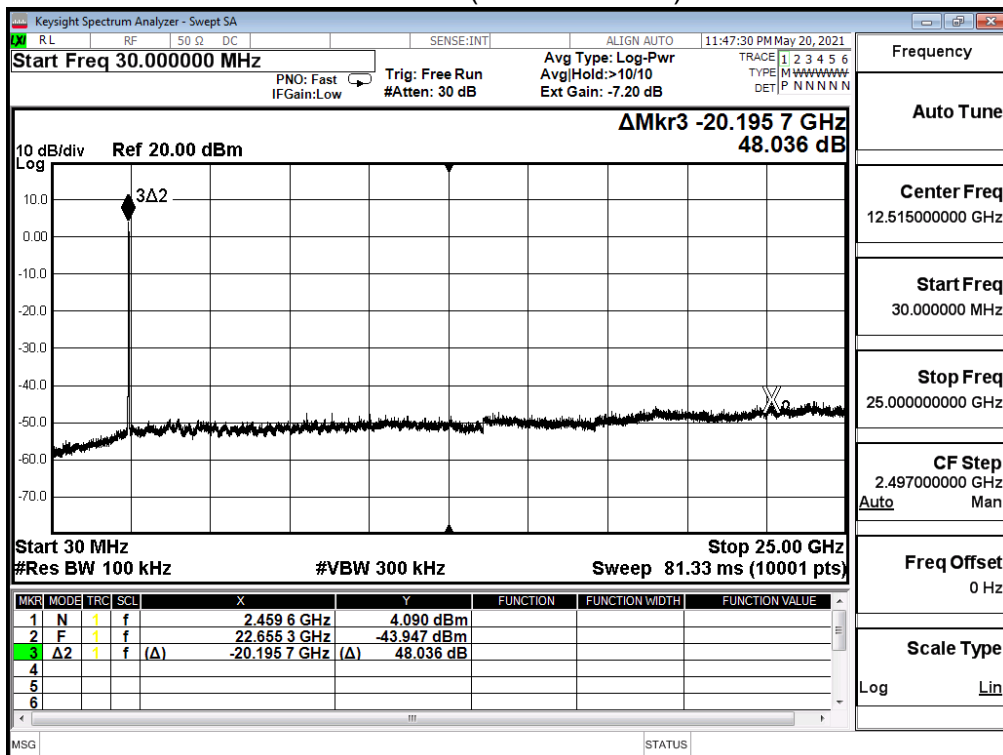
2437MHz (30MHz-25GHz)



Channel 11 (2462MHz)



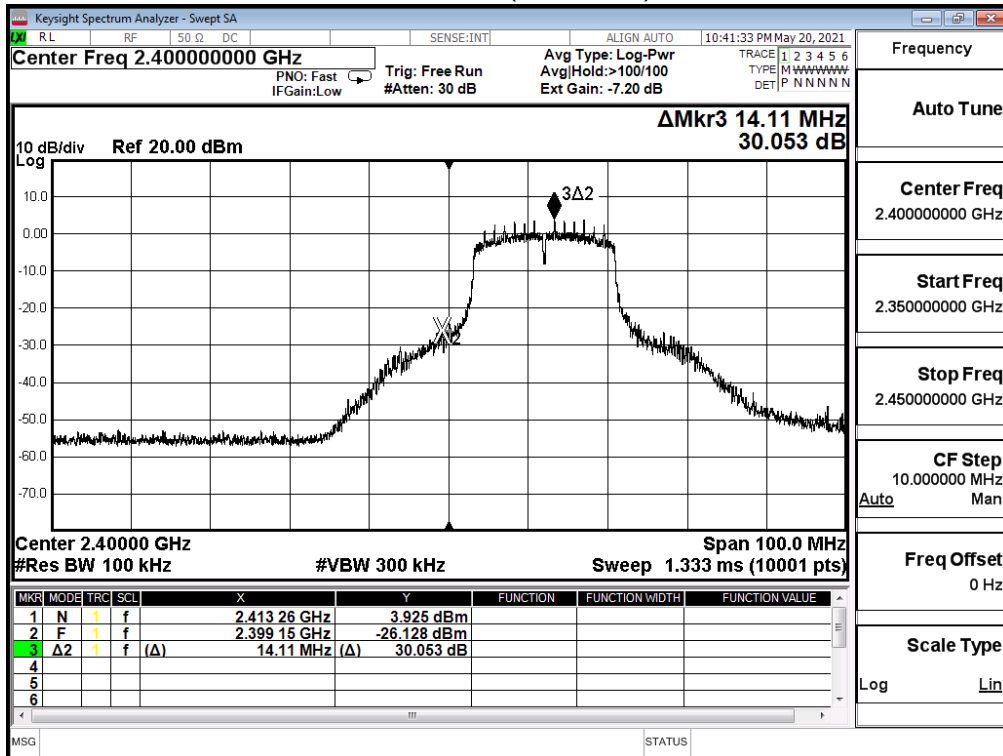
2462MHz (30MHz-25GHz)



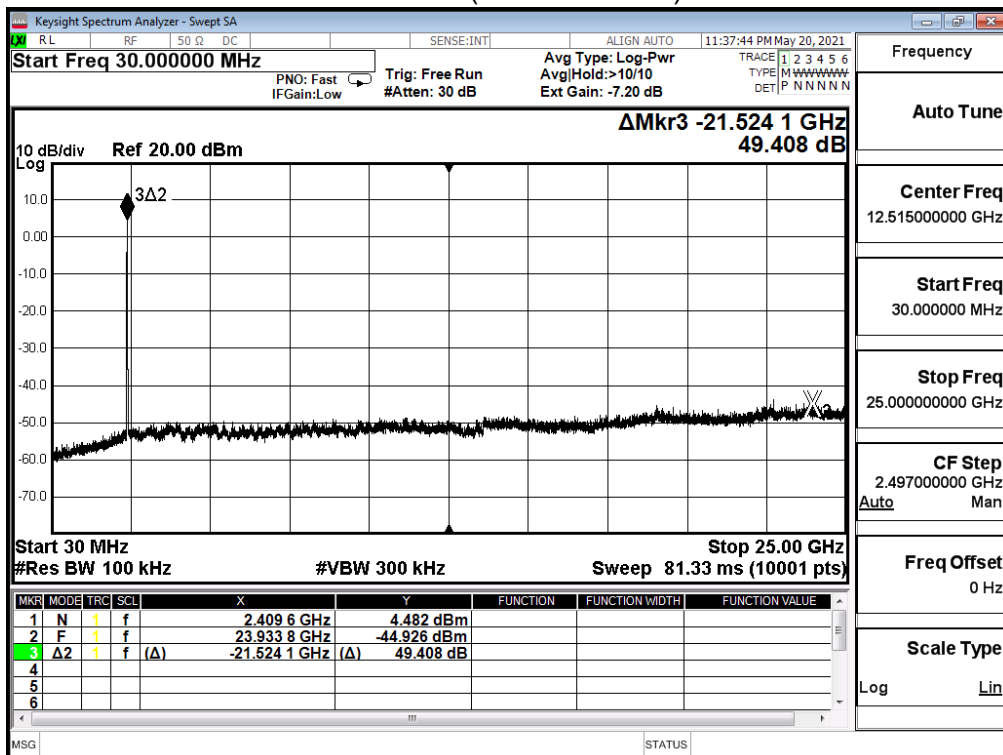
Product	Smart Display		
Test Item	RF antenna conducted test		
Test Mode	Mode 2: Transmit_Adapter_1A100-US1230		
Date of Test	2021/05/20	Test Site	SR12-H
Test Temperature	24.0	Humidity (%RH)	56.0

IEEE 802.11n(20M)(ANT 1)				
Channel	Frequency (MHz)	Measure Level (dBc)	Limit (dBc)	Result
1	2412	30.053	≥ 30	Pass
6	2437	51.576	≥ 30	Pass
11	2462	49.058	≥ 30	Pass

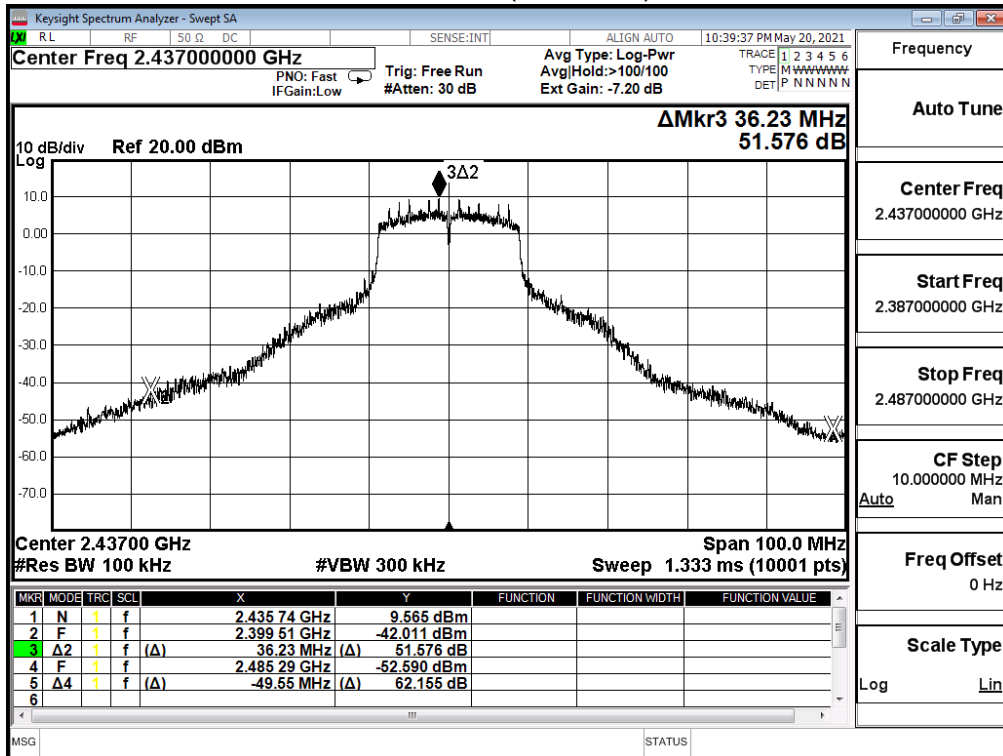
Channel 1 (2412MHz)



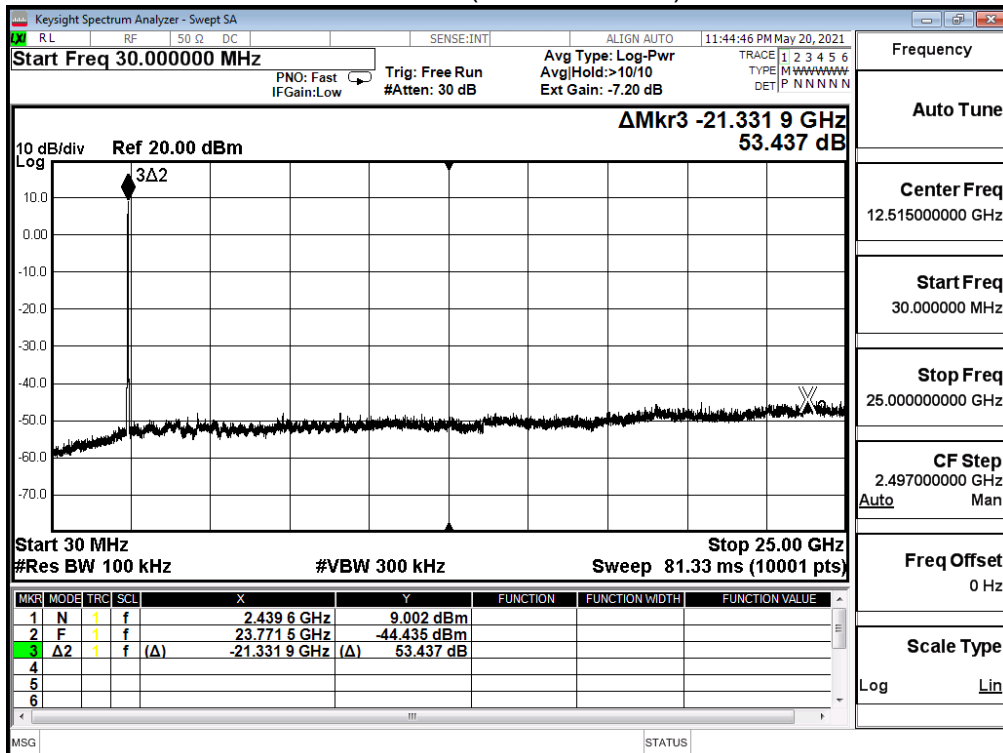
2412MHz (30MHz-25GHz)



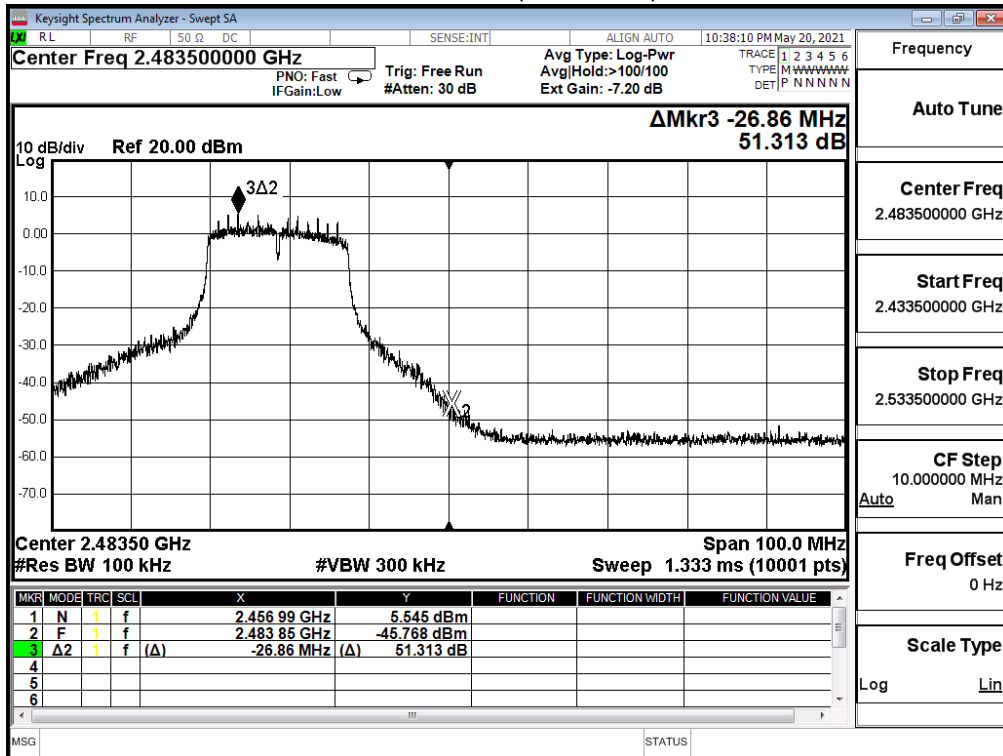
Channel 6 (2437MHz)



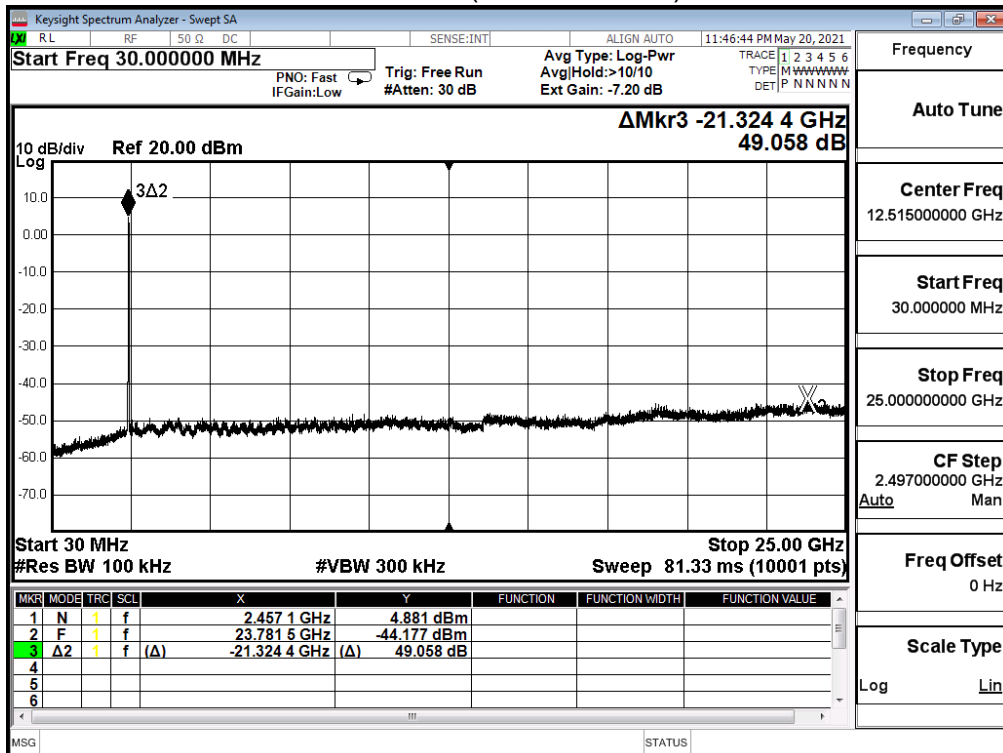
2437MHz (30MHz-25GHz)



Channel 11 (2462MHz)



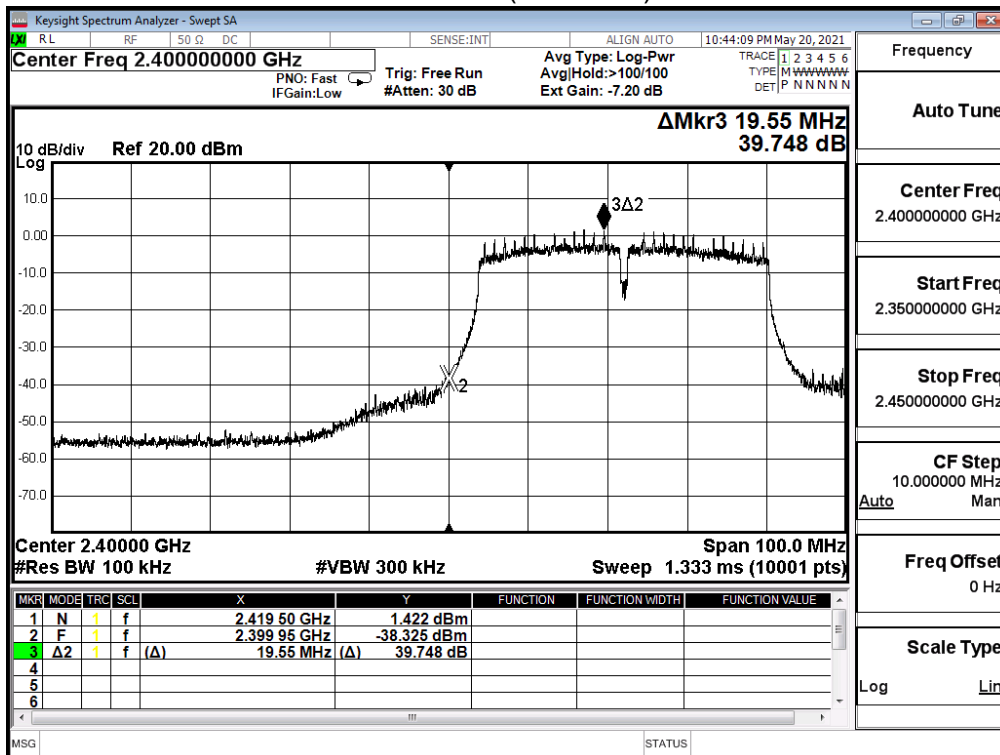
2462MHz (30MHz-25GHz)



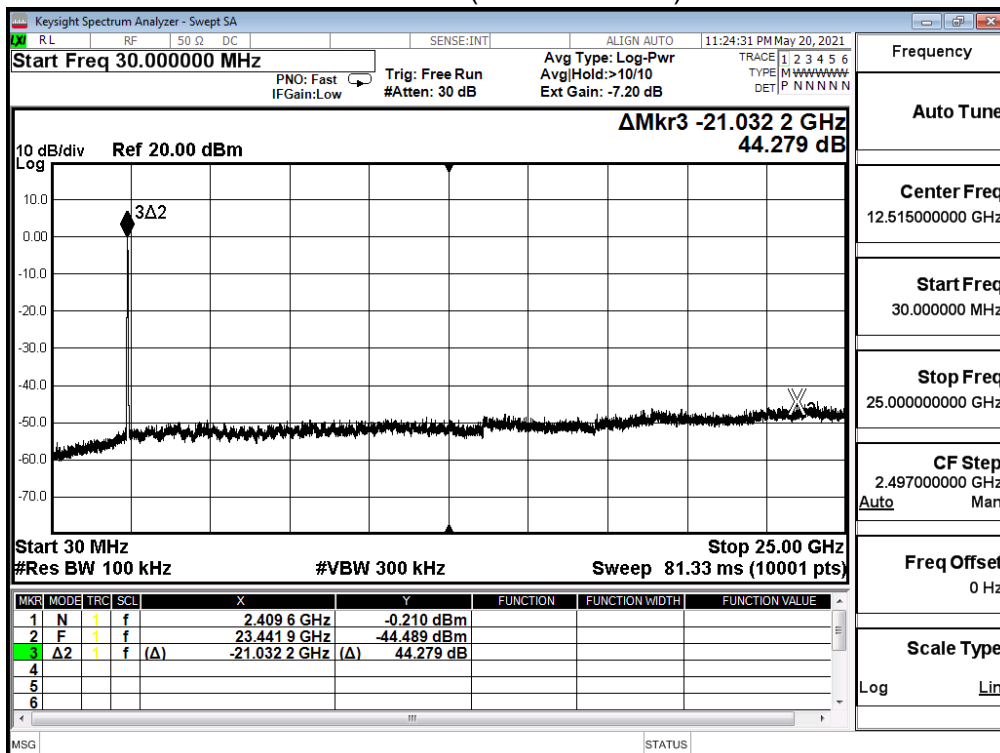
Product	Smart Display		
Test Item	RF antenna conducted test		
Test Mode	Mode 2: Transmit_Adapter_1A100-US1230		
Date of Test	2021/05/20	Test Site	SR12-H
Test Temperature	24.0	Humidity (%RH)	56.0

IEEE 802.11n(40M)(ANT 0)				
Channel	Frequency (MHz)	Measure Level (dBc)	Limit (dBc)	Result
3	2422	39.748	≥ 30	Pass
6	2437	35.793	≥ 30	Pass
9	2452	43.872	≥ 30	Pass

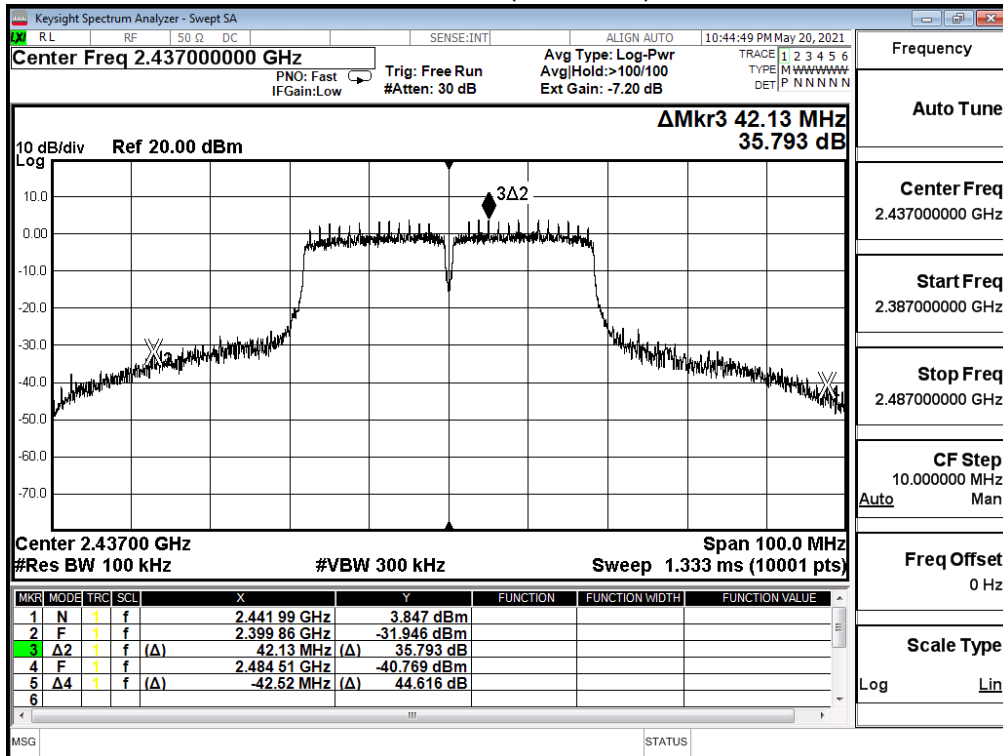
Channel 3 (2422MHz)



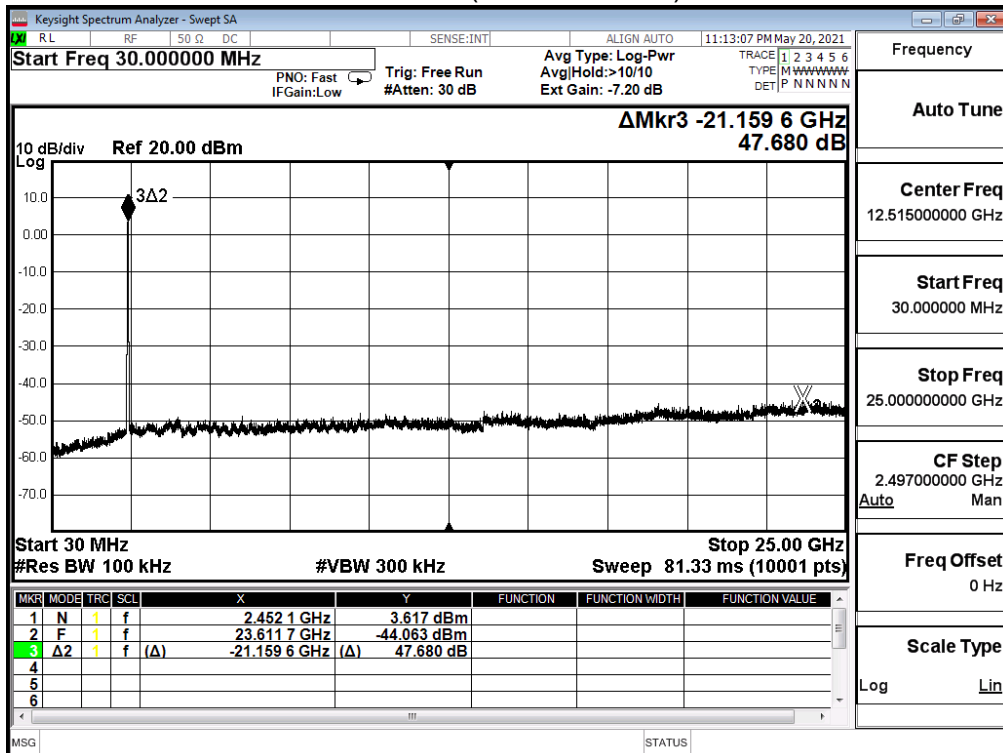
2422MHz (30MHz-25GHz)



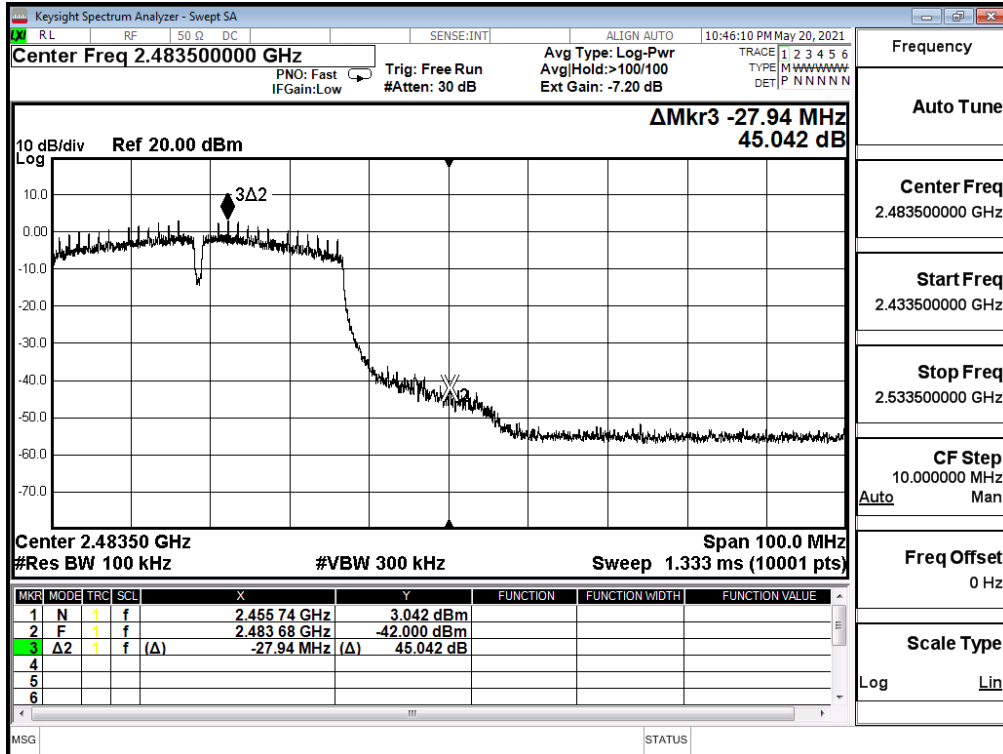
Channel 6 (2437MHz)



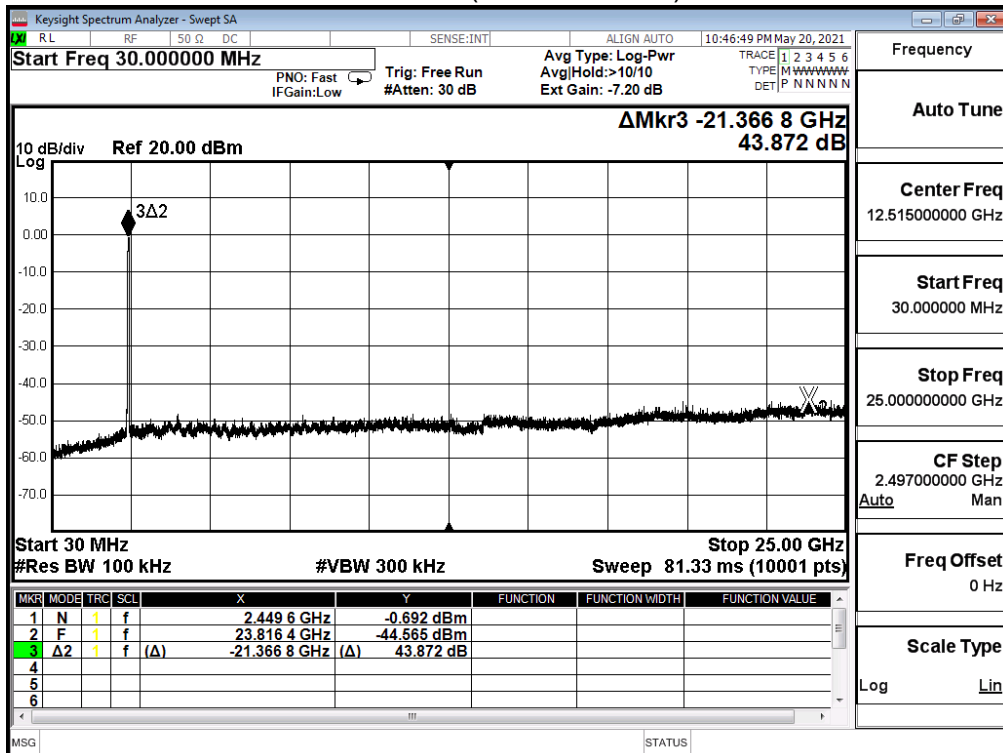
2437MHz (30MHz-25GHz)



Channel 9 (2452MHz)



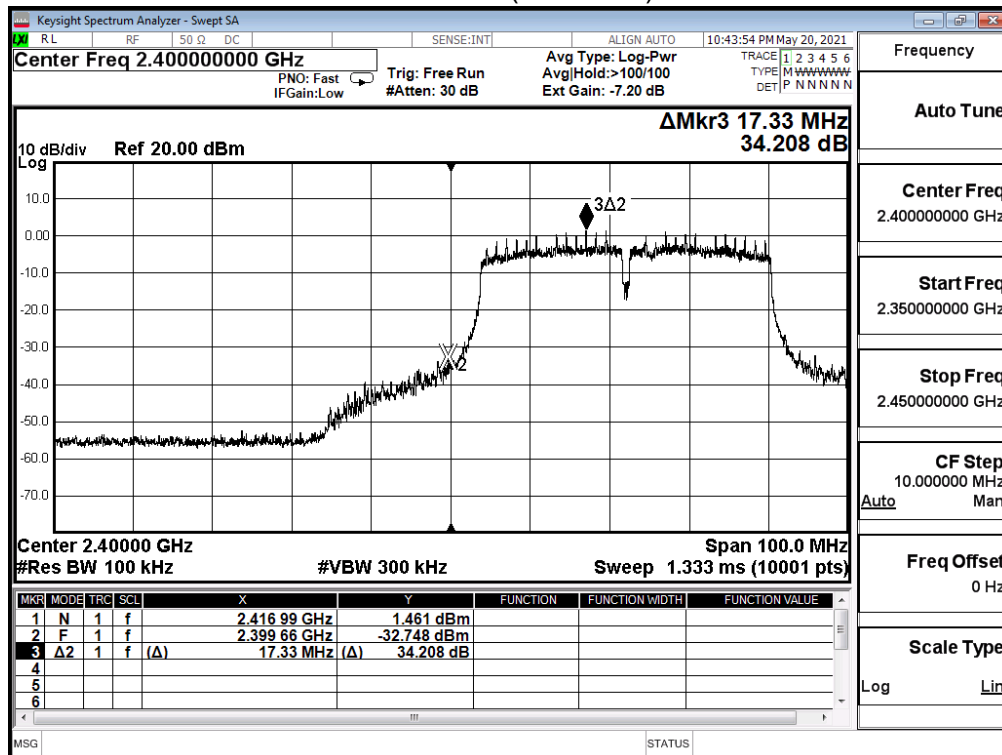
2452MHz (30MHz-25GHz)



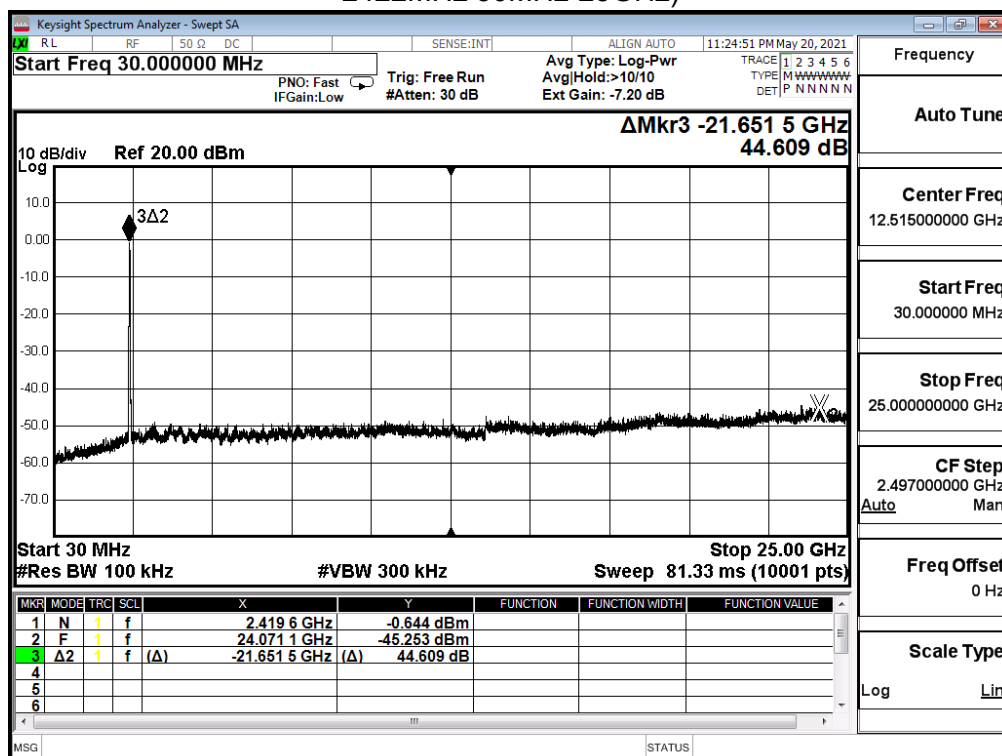
Product	Smart Display		
Test Item	RF antenna conducted test		
Test Mode	Mode 2: Transmit_Adapter_1A100-US1230		
Date of Test	2021/05/20	Test Site	SR12-H
Test Temperature	24.0	Humidity (%RH)	56.0

IEEE 802.11n(40M)(ANT 1)				
Channel	Frequency (MHz)	Measure Level (dBc)	Limit (dBc)	Result
3	2422	34.208	≥ 30	Pass
6	2437	35.578	≥ 30	Pass
9	2452	44.325	≥ 30	Pass

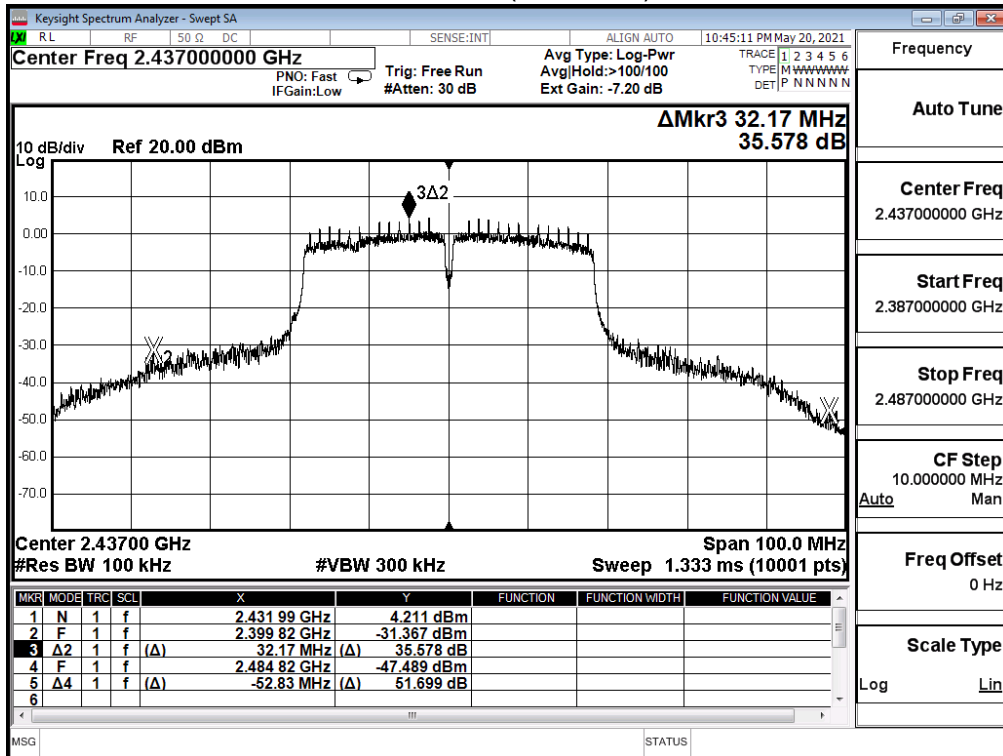
Channel 3 (2422MHz)



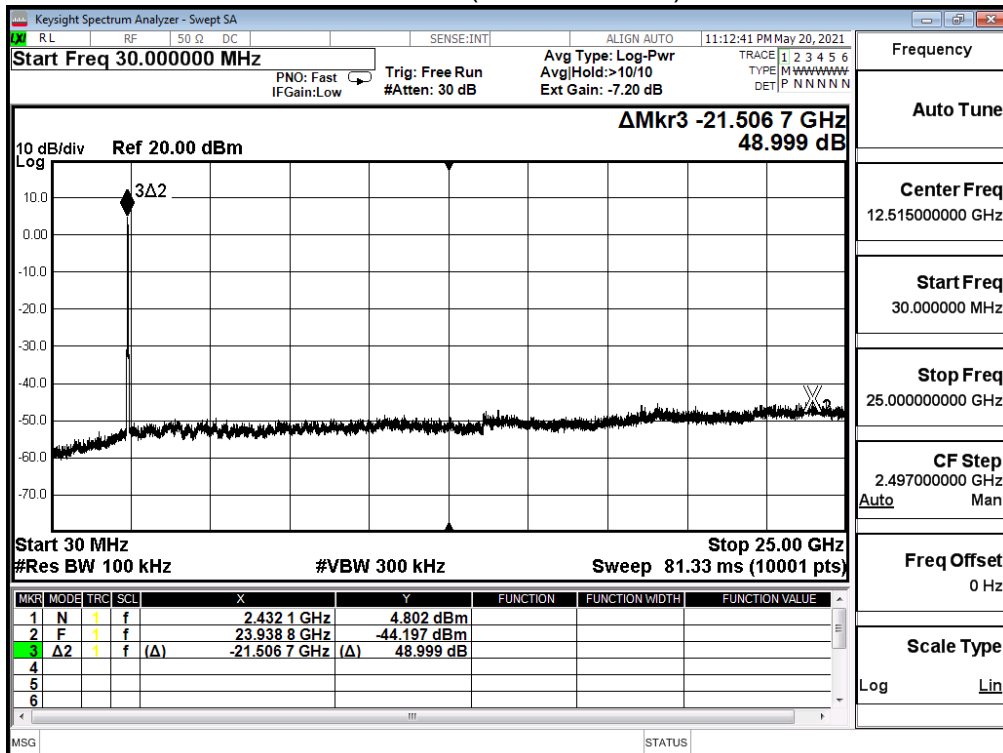
2422MHz 30MHz-25GHz)



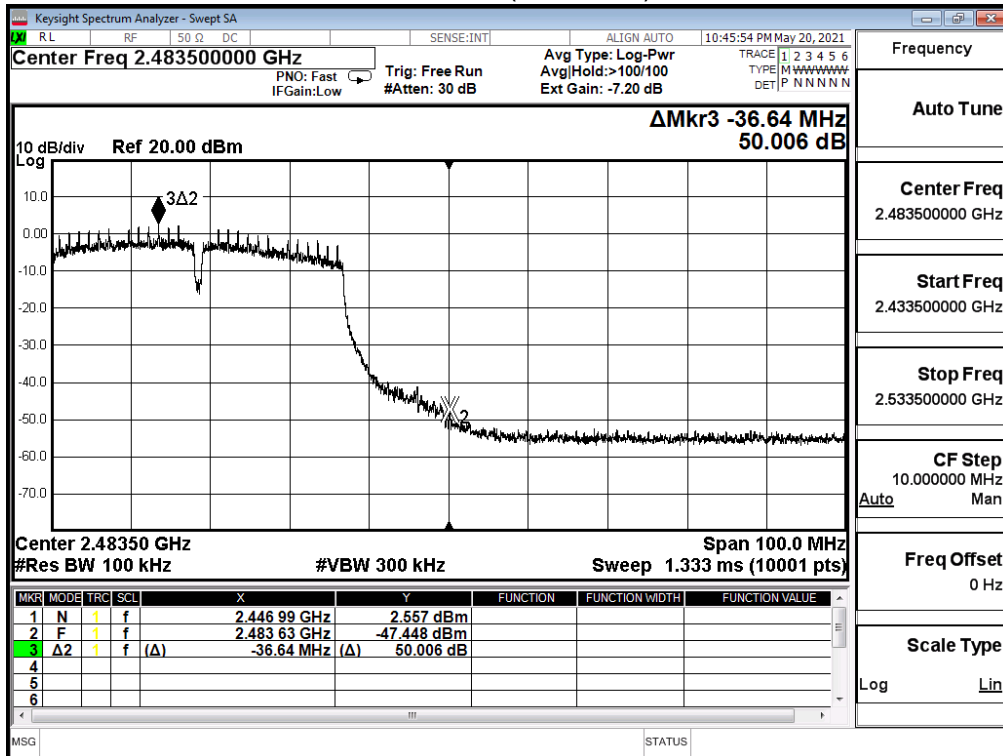
Channel 6 (2437MHz)



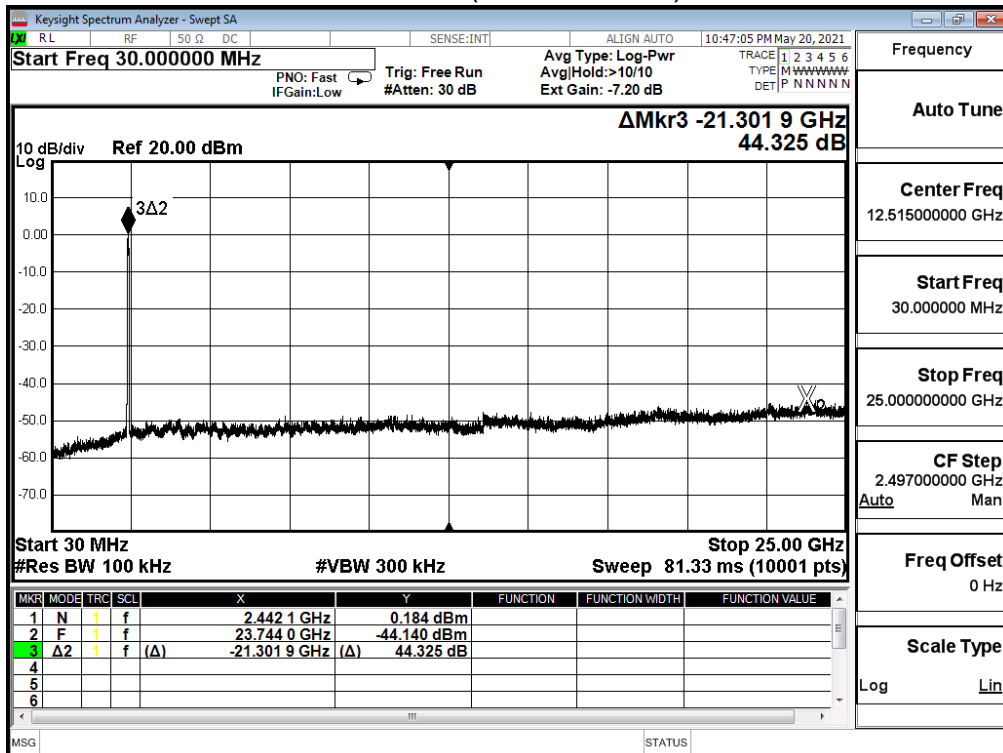
2437MHz (30MHz-25GHz)



Channel 9 (2452MHz)

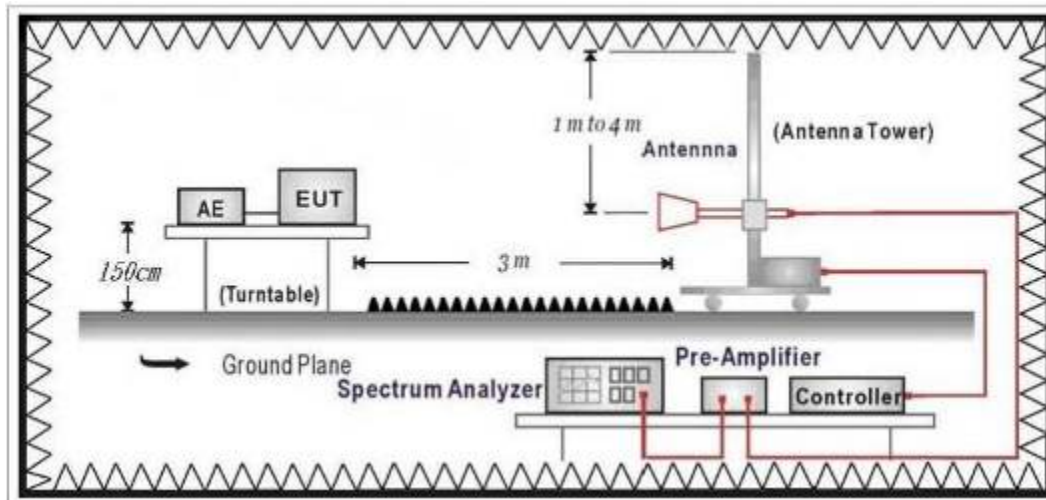


2452MHz (30MHz-25GHz)



6. Radiated Emission Band Edge

6.1. Test Setup



6.2. 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.

6.3. 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. The turn table can rotate 360 degrees to determine the position of the maximum emission level. The EUT was positioned such that the distance from antenna to the EUT was 3 meters. The antenna can move up and down between 1 meter and 4 meters to find out the maximum emission level.

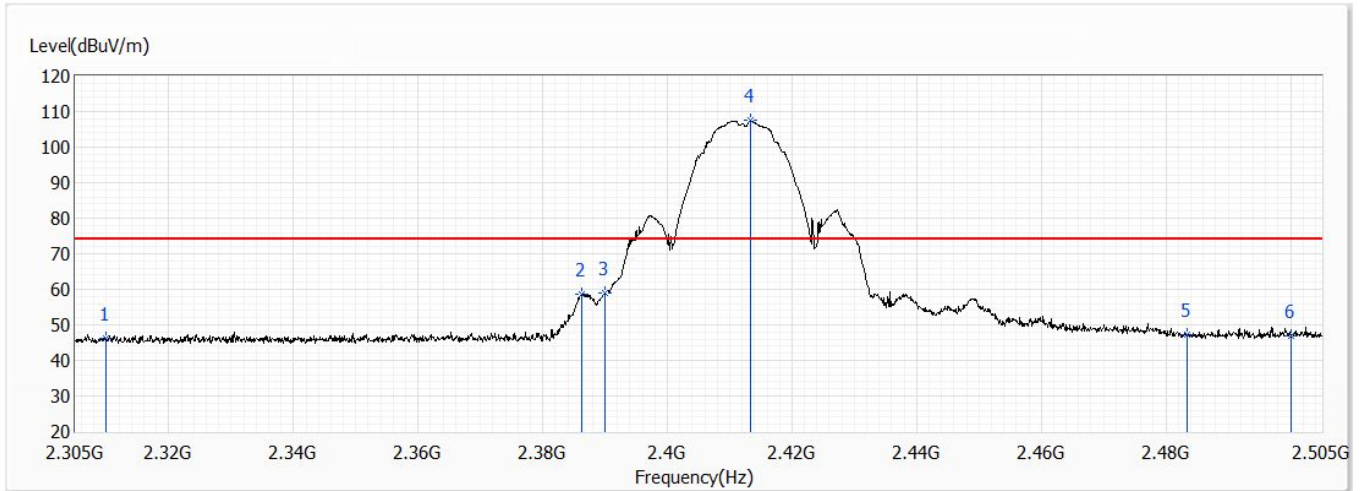
Both horizontal and vertical polarization of the antenna are set on measurement. In order to find the maximum emission, all of the interface cables must be manipulated according to ANSI C63.10: 2013 on radiated measurement.

6.4. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247: 2019

6.5. Test Result

Model No	LVD1	Site	CB2-H
Test Voltage	AC 120V	Test Date	2021/5/29
Test Mode	Mode 2: Transmit_Adapter_1A100-US1230	Engineer	Elwin Lin
Polarity	Horizontal	Temperature (°C)	24.0
Test Condition	802.11b,Ant1,Ch1,2.412G,BW20M	Humidity (%RH)	66.0

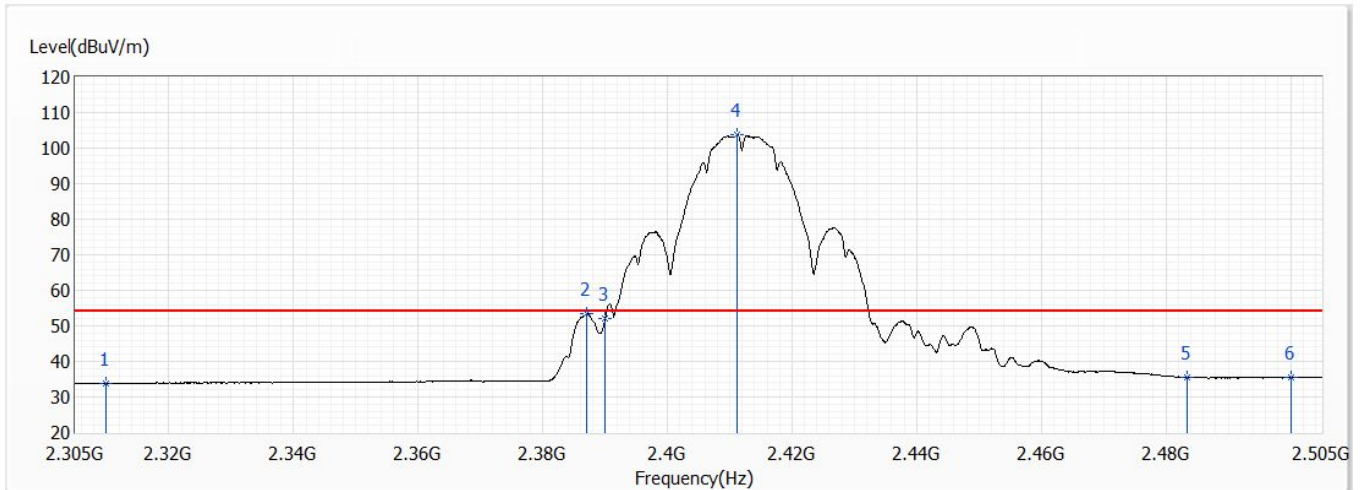


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2310.000	46.21	74.00	-27.79	33.35	12.86	PK
2	2386.300	58.50	74.00	-15.50	45.16	13.34	PK
3	2390.000	59.08	74.00	-14.92	45.71	13.37	PK
! 4	2413.300	107.58	74.00	33.58	94.05	13.53	PK
5	2483.500	47.32	74.00	-26.68	33.35	13.97	PK
6	2500.000	46.99	74.00	-27.01	32.91	14.08	PK

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	LVD1	Site	CB2-H
Test Voltage	AC 120V	Test Date	2021/5/29
Test Mode	Mode 2: Transmit_Adapter_1A100-US1230	Engineer	Elwin Lin
Polarity	Horizontal	Temperature (°C)	24.0
Test Condition	802.11b,Ant1,Ch1,2.412G,BW20M	Humidity (%RH)	66.0

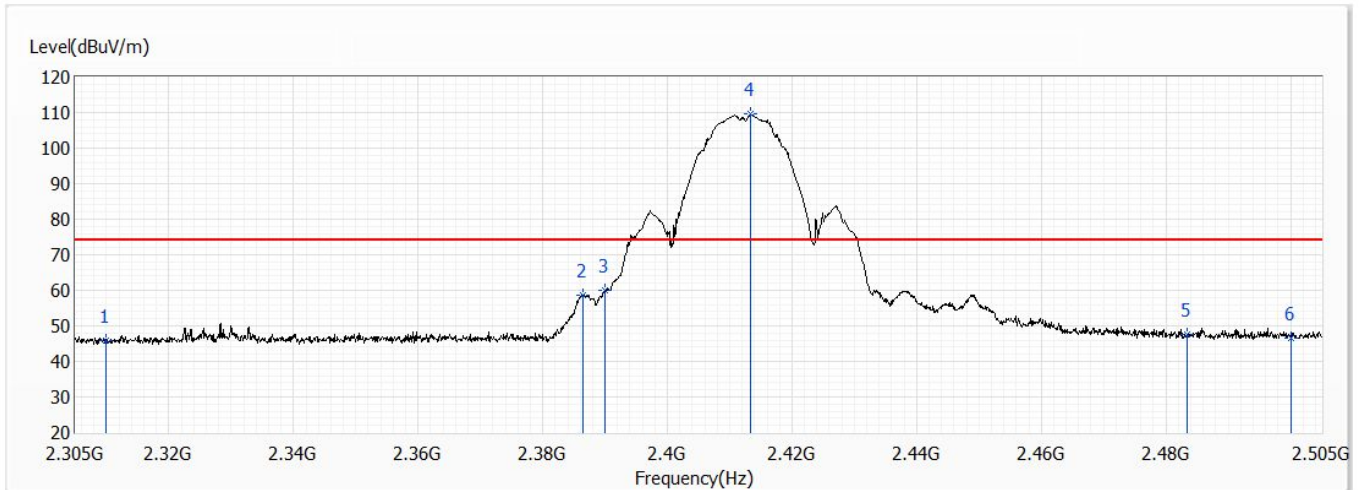


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2310.000	33.80	54.00	-20.20	20.94	12.86	AV
2	2387.000	53.50	54.00	-0.50	40.16	13.34	AV
3	2390.000	51.93	54.00	-2.07	38.56	13.37	AV
! 4	2411.200	103.73	54.00	49.73	90.23	13.50	AV
5	2483.500	35.43	54.00	-18.57	21.46	13.97	AV
6	2500.000	35.47	54.00	-18.53	21.39	14.08	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	LVD1	Site	CB2-H
Test Voltage	AC 120V	Test Date	2021/5/29
Test Mode	Mode 2: Transmit_Adapter_1A100-US1230	Engineer	Elwin Lin
Polarity	Vertical	Temperature (°C)	24.0
Test Condition	802.11b,Ant1,Ch1,2.412G,BW20M	Humidity (%RH)	66.0

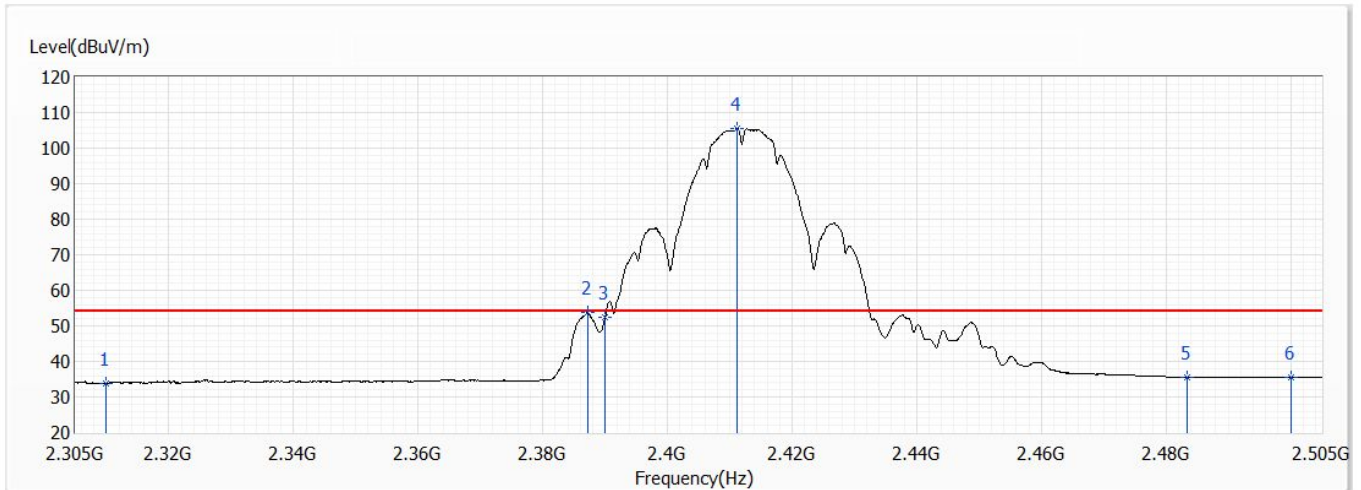


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2310.000	45.92	74.00	-28.08	33.06	12.86	PK
2	2386.500	58.77	74.00	-15.23	45.43	13.34	PK
3	2390.000	60.03	74.00	-13.97	46.66	13.37	PK
! 4	2413.400	109.68	74.00	35.68	96.15	13.53	PK
5	2483.500	47.65	74.00	-26.35	33.68	13.97	PK
6	2500.000	46.46	74.00	-27.54	32.38	14.08	PK

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	LVD1	Site	CB2-H
Test Voltage	AC 120V	Test Date	2021/5/29
Test Mode	Mode 2: Transmit_Adapter_1A100-US1230	Engineer	Elwin Lin
Polarity	Vertical	Temperature (°C)	24.0
Test Condition	802.11b,Ant1,Ch1,2.412G,BW20M	Humidity (%RH)	66.0

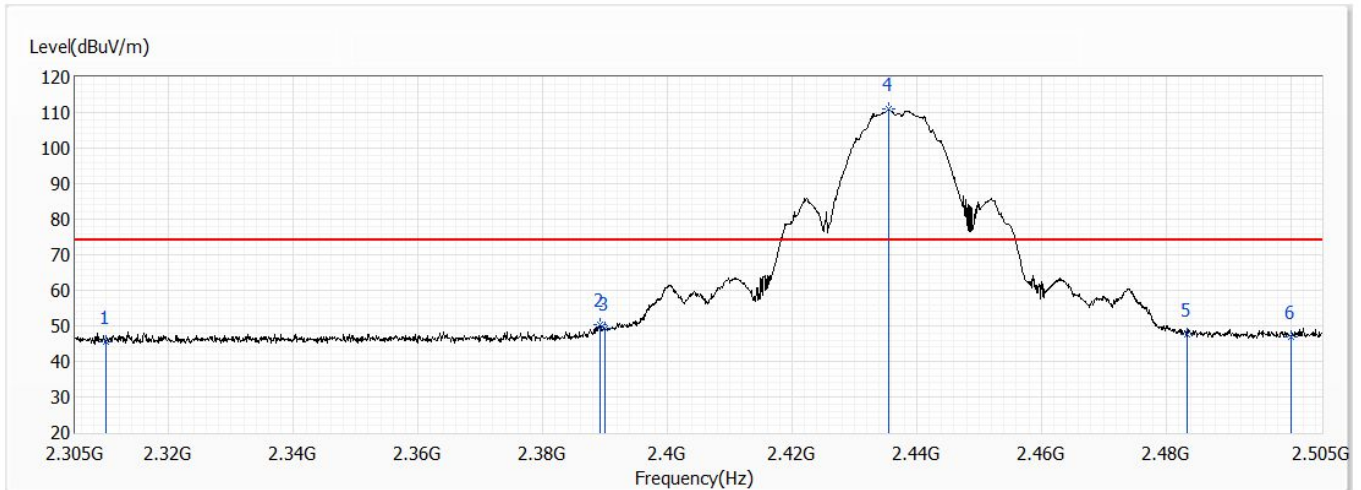


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2310.000	33.88	54.00	-20.12	21.02	12.86	AV
2	2387.200	53.64	54.00	-0.36	40.29	13.35	AV
3	2390.000	52.54	54.00	-1.46	39.17	13.37	AV
! 4	2411.200	105.50	54.00	51.50	92.00	13.50	AV
5	2483.500	35.49	54.00	-18.51	21.52	13.97	AV
6	2500.000	35.45	54.00	-18.55	21.37	14.08	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	LVD1	Site	CB2-H
Test Voltage	AC 120V	Test Date	2021/5/29
Test Mode	Mode 2: Transmit_Adapter_1A100-US1230	Engineer	Elwin Lin
Polarity	Horizontal	Temperature (°C)	24.0
Test Condition	802.11b,Ant1,Ch6,2.437G,BW20M	Humidity (%RH)	66.0

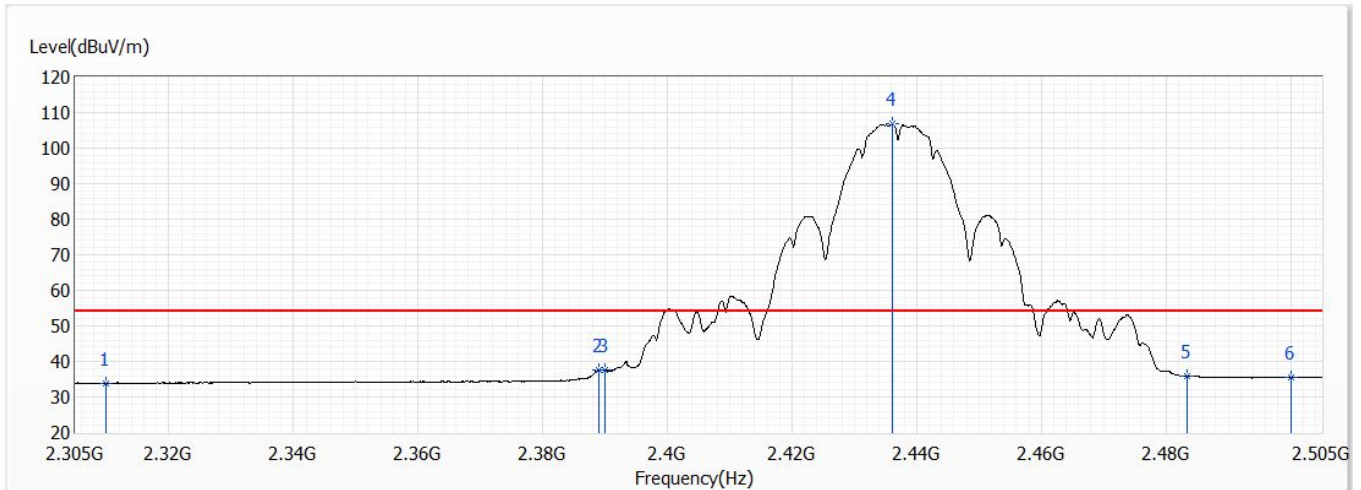


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2310.000	45.48	74.00	-28.52	32.62	12.86	PK
2	2389.200	50.25	74.00	-23.75	36.88	13.37	PK
3	2390.000	49.42	74.00	-24.58	36.05	13.37	PK
! 4	2435.500	110.92	74.00	36.92	97.26	13.66	PK
5	2483.500	47.57	74.00	-26.43	33.60	13.97	PK
6	2500.000	46.77	74.00	-27.23	32.69	14.08	PK

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	LVD1	Site	CB2-H
Test Voltage	AC 120V	Test Date	2021/5/29
Test Mode	Mode 2: Transmit_Adapter_1A100-US1230	Engineer	Elwin Lin
Polarity	Horizontal	Temperature (°C)	24.0
Test Condition	802.11b,Ant1,Ch6,2.437G,BW20M	Humidity (%RH)	66.0

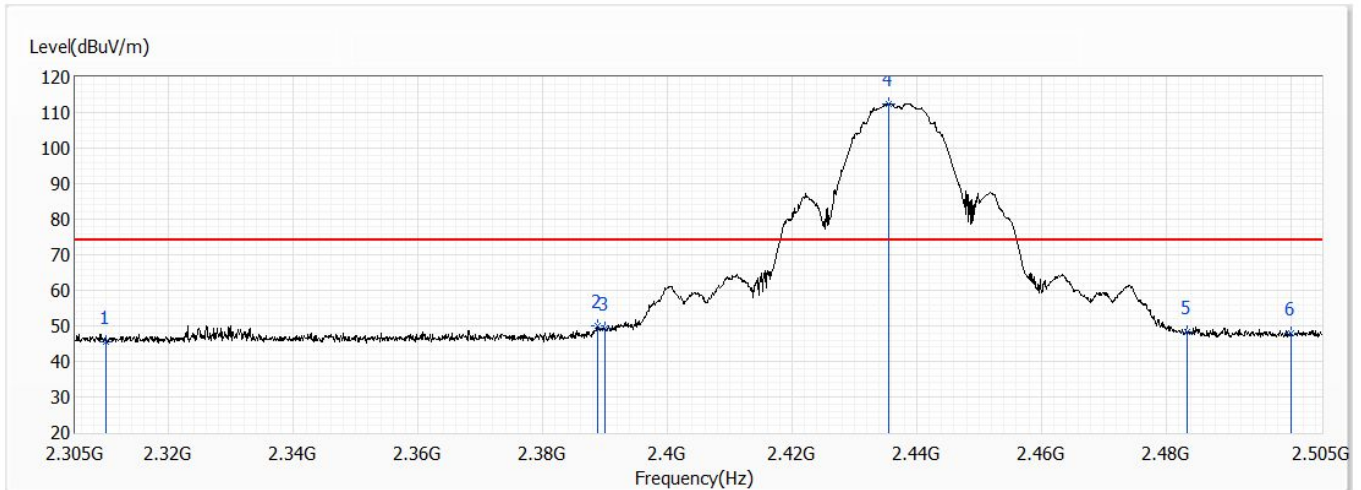


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2310.000	33.80	54.00	-20.20	20.94	12.86	AV
2	2389.000	37.58	54.00	-16.42	24.21	13.37	AV
3	2390.000	37.51	54.00	-16.49	24.14	13.37	AV
! 4	2436.200	106.81	54.00	52.81	93.14	13.67	AV
5	2483.500	35.85	54.00	-18.15	21.88	13.97	AV
6	2500.000	35.40	54.00	-18.60	21.32	14.08	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	LVD1	Site	CB2-H
Test Voltage	AC 120V	Test Date	2021/5/29
Test Mode	Mode 2: Transmit_Adapter_1A100-US1230	Engineer	Elwin Lin
Polarity	Vertical	Temperature (°C)	24.0
Test Condition	802.11b,Ant1,Ch6,2.437G,BW20M	Humidity (%RH)	66.0

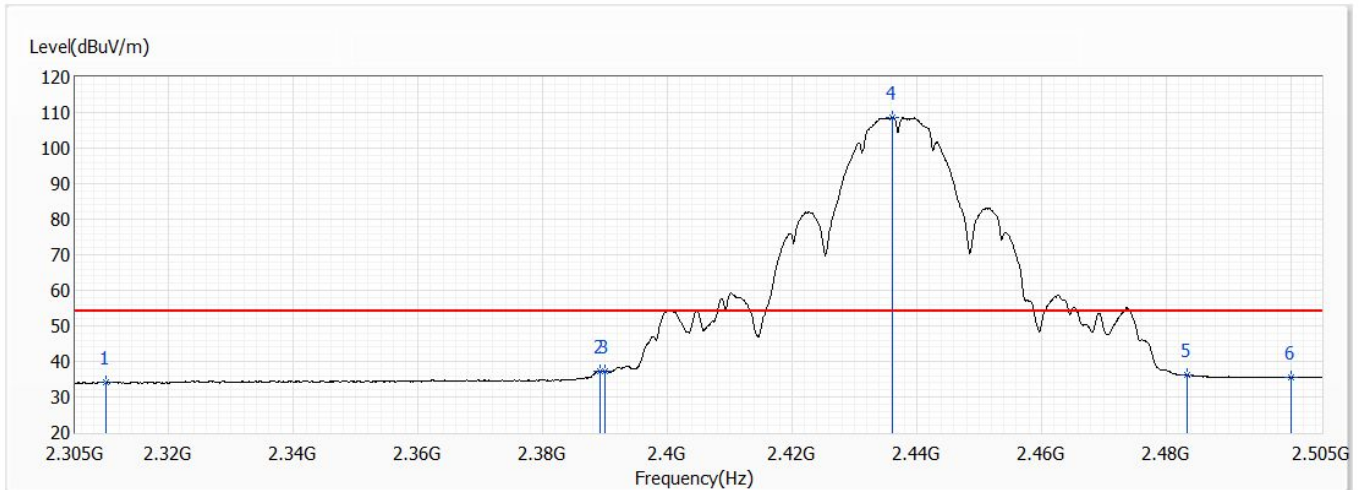


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2310.000	45.48	74.00	-28.52	32.62	12.86	PK
2	2388.800	50.09	74.00	-23.91	36.72	13.37	PK
3	2390.000	49.44	74.00	-24.56	36.07	13.37	PK
! 4	2435.600	112.54	74.00	38.54	98.88	13.66	PK
5	2483.500	48.26	74.00	-25.74	34.29	13.97	PK
6	2500.000	47.82	74.00	-26.18	33.74	14.08	PK

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	LVD1	Site	CB2-H
Test Voltage	AC 120V	Test Date	2021/5/29
Test Mode	Mode 2: Transmit_Adapter_1A100-US1230	Engineer	Elwin Lin
Polarity	Vertical	Temperature (°C)	24.0
Test Condition	802.11b,Ant1,Ch6,2.437G,BW20M	Humidity (%RH)	66.0



No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2310.000	34.09	54.00	-19.91	21.23	12.86	AV
2	2389.200	37.37	54.00	-16.63	24.00	13.37	AV
3	2390.000	37.34	54.00	-16.66	23.97	13.37	AV
! 4	2436.200	108.75	54.00	54.75	95.08	13.67	AV
5	2483.500	36.06	54.00	-17.94	22.09	13.97	AV
6	2500.000	35.48	54.00	-18.52	21.40	14.08	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.