Test Report No:
22A0297R-RFUSV01S-A

TEST REPORT
FCC Rules&Regulations

Product Name	Peplink Pepwave Wireless Product
Brand Name	peplink PEPWAVE
Model No.	MAX HD1, MAX HD2, MAX-HD1-5GH-T, MAX-HD1-5GH-T-PRM, MAX-HD2-5GH-T, MAX-HD2-5GH-T-PRM
FCC ID	U8G-P1AX17
Applicant´s Name / Address	PISMO LABS TECHNOLOGY LIMITED A8, 5/F, HK Spinners Industrial Building, Phase 6, 481 Castle Peak Road, Cheung Sha Wan, Hong Kong
Manufacturer's Name / Address	PISMO LABS TECHNOLOGY LIMITED A8, 5/F, HK Spinners Industrial Building, Phase 6, 481 Castle Peak Road, Cheung Sha Wan, Hong Kong
Test Method Requested, Standard	FCC CFR Title 47 Part 15 Subpart C Section 15.247 ANSI C63.10-2013
Verdict Summary	IN COMPLIANCE
Documented By	Amelia Wu Amelia Wu / Project Specialist
Approved By	Rueyyan Lin Rueyyan Lin / Supervisor
Date of Receipt	Oct. 13, 2022
Date of Issue	May 19, 2023
Report Version	V3.0

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Test Setup Photograph: Please refer to the file: 22A0297R-Test Setup Photograph

Competences and Guarantees

DEKRA is a testing laboratory competent to carry out the tests described in this report.
In order to assure the traceability to other national and international laboratories, DEKRA has a calibration and maintenance program for its measurement equipment.

DEKRA guarantees the reliability of the data presented in this report, which is the result of the measurements and the tests performed to the item under test on the date and under the conditions stated in the report and it is based on the knowledge and technical facilities available at DEKRA at the time of performance of the test.

DEKRA is liable to the client for the maintenance of the confidentiality of all information related to the item under test and the results of the test.

The results presented in this Test Report apply only to the particular item under test established in this document.

General Conditions

1. The test results relate only to the samples tested.
2. The test results shown in the test report are traceable to the national/international standard through the calibration report of the equipment and evaluated measurement uncertainty herein.
3. This report must not be used to claim product endorsement by TAF or any agency of the government.
4. The test report shall not be reproduced without the written approval of DEKRA Testing and Certification Co., Ltd.
5. Measurement uncertainties evaluated for each testing system and associated connections are given here to provide the system information for reference. Compliance determinations do not take into account measurement uncertainties for each testing system, but are based on the results of the compliance measurement.

Revision History

Version	Description	Issued Date
V10.	Initial issue of report	May 03, 2023
V2.0	Split the test setup photograph to separate file	May 18, 2023
V3.0	Revised the description of test setup photograph.	May 19, 2023

1. General Information

1.1. EUT Description

Product Name	Peplink Pepwave Wireless Product	
Brand Name	peplink PEPWAVE	
Model No.	MAX HD1, MAX HD2, MAX-HD1-5GH-T, MAX-HD1-5GH-T-PRM, MAX-HD2-5GH-T, MAX-HD2-5GH-T-PRM	
EUT Voltage	DC 12~56V	
Power Type	From power port (adapter / DC power supply) or terminal block port	
Frequency Range / Channel Number	IEEE 802.11b/g	2412 ~ 2462 MHz / 11 Channels
	IEEE 802.11n/ac/ax (20 MHz)	2412 ~ 2462 MHz / 11 Channels
	IEEE 802.11n/ac/ax (40 MHz)	2422 ~ 2452 MHz / 7 Channels
Type of Modulation	IEEE 802.11b	DSSS
	IEEE 802.11g/n/ac	OFDM
	IEEE 802.11ax	OFDMA
Data Rate	IEEE 802.11b	1, 2, 5.5, 11 Mbps
	IEEE 802.11g	6, 9, 12, 18, 24, 36, 48, 54 Mbps
	IEEE 802.11n	Support a subset of the combination of GI, MCS 0 ~ MCS 15 and bandwidth defined in 802.11n
	IEEE 802.11ac	Support a subset of the combination of GI, MCS 0 ~ MCS 9 and bandwidth defined in 802.11ac
	IEEE 802.11ax	Support a subset of the combination of GI, MCS 0 ~ MCS 11 and bandwidth defined in 802.11ax

Accessories Information				
No.	Equipment Name	Brand Name	Model No.	Rating
1	Adapter	DVE	DSA-36PFN-12 FUS 120300	INPUT: 100~240Vac, 50/60Hz, 1.0A OUTPUT: +12Vdc, 3.0A, 36.0W

The brand name/model number in the following table are all refer to the identical product.

Brand Name		Model No.	Cellular Module
peplink	PEPWAVE	MAX HD1	With a cellular module
		MAX HD2	With two cellular modules
		MAX-HD1-5GH-T	With a cellular module
		MAX-HD2-5GH-T	With two cellular modules
		MAX-HD1-5GH-T-PRM	With a cellular module
		MAX-HD2-5GH-T-PRM	With two cellular modules

From the above models, model: MAX HD2 was selected as representative model for the test and its data was recorded in this report.

Antenna Information				
Ant.	Brand Name	Model No.	Type	Antenna Gain (dBi)
0	Master Wave	98614PRSX000	Omni-directional	2.44
1	Master Wave	98614PRSX000	Omni-directional	2.44

For IEEE 802.11b/g/n/ac/ax Mode: (2TX, 2RX)

All of the antenna No. can be used as transmitting/receiving antennas, and them can transmit/receive signal simultaneously.

EUT Operational Condition		
Testing Voltage	Power by adapter	AC 120V/60Hz
	Power by DC-Powered	DC 12V

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

Working Frequency of Each Channel							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
01	2412 MHz	02	2417 MHz	03	2422 MHz	04	2427 MHz
05	2432 MHz	06	2437 MHz	07	2442 MHz	08	2447 MHz
09	2452 MHz	10	2457 MHz	11	2462 MHz	-	-

IEEE 802.11n/ac/ax (40 MHz)

Working Frequency of Each Channel							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
03	2422 MHz	04	2427 MHz	05	2432 MHz	06	2437 MHz
07	2442 MHz	08	2447 MHz	09	2452 MHz	-	-

Note:

1. 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.
2. The above EUT information is declared by the manufacturer.

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

Test Items	Test Mode	Modulation	Channel	Antenna	Result
AC Power Line Conducted Emission	Mode 1	11b	1	0+1	Pass
Maximum Conducted Output Power	Mode 1	11b	1/6/11	0+1	Pass
		11g	1/6/11	0+1	Pass
		11ax (20 MHz)	1/6/11	0+1	Pass
		11ax (40 MHz)	3/6/9	0+1	Pass
Maximum Conducted Output Power Reference Data	Mode 1	11n/ac (20 MHz)	1/6/11	0+1	Pass
		11n/ac (40 MHz)	3/6/9	0+1	Pass
Radiated Emission Below 1 GHz	Mode 1	11b	1	0+1	Pass
Radiated Emission Above 1 GHz	Mode 1	11b	1/6/11	0+1	Pass
		11g	1/6/11	0+1	Pass
		11ax (20 MHz)	1/6/11	0+1	Pass
		11ax (40 MHz)	3/6/9	0+1	Pass
Antenna Port Conducted Emission	Mode 1	11b	1/6/11	0+1	Pass
		11g	1/6/11	0+1	Pass
		11ax (20 MHz)	1/6/11	0+1	Pass
		11ax (40 MHz)	3/6/9	0+1	Pass
Radiated Emission Band Edge	Mode 1	11b	1/6/11	0+1	Pass
		11g	1/6/11	0+1	Pass
		11ax (20 MHz)	1/6/11	0+1	Pass
		11ax (40 MHz)	3/6/9	0+1	Pass
Occupied Bandwidth & DTS Bandwidth	Mode 1	11b	1/6/11	0+1	Pass
		11g	1/6/11	0+1	Pass
		11ax (20 MHz)	1/6/11	0+1	Pass
		11ax (40 MHz)	3/6/9	0+1	Pass
Maximum Power Spectral Density	Mode 1	11b	1/6/11	0+1	Pass
		11g	1/6/11	0+1	Pass
		11ax (20 MHz)	1/6/11	0+1	Pass
		11ax (40 MHz)	3/6/9	0+1	Pass

Note:

1. Determining compliance shall be based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.
2. The worst case of data rate for 802.11b is 1 Mbps, for 802.11g is 6 Mbps, for 802.11ax (20 MHz)/802.11ax (40 MHz) are MCS 0, Nss1.

3. The modulation and bandwidth are similar for 802.11n mode for HT20/HT40, 802.11ac mode for VHT20/VHT40 and 802.11ax mode for HE20/HE40, therefore investigated worst case to representative mode in test report. (Please refer to the test result of RF output power for detail.)
4. There are two modes of EUT, one is power by adapter, and the other is power by DC-Powered.
   (1) For radiated emission below 1 GHz test: Both power by adapter, and power by DC-Powered were to test and record in this test report.
   (2) For AC power line conducted emission test: The power by adapter was to test and record in this test report, and the power by DC-Powered is not necessary to apply to AC power line conducted emission test.
   (3) For other test: Power by adapter generated the worst test result for radiated emission below 1 GHz test, thus the measurement for other test will follow this same test configuration.
5. For radiated emission below 1 GHz and AC power line conducted emission have performed all modes of operation were investigated and the worst-case emissions are reported.
6. The EUT could be applied with 1. WiFi 2.4 GHz + WiFi 5 GHz + WWAN module 1: WCDMA + WWAN module 2: WCDMA function, 2. WiFi 2.4 GHz + WiFi 5 GHz + WWAN module 1: LTE + WWAN module 2: LTE function and 3. WiFi 2.4 GHz + WiFi 5 GHz + WWAN module 1: 5G NR + WWAN module 2: 5G NR function 4. WiFi 2.4 GHz + WiFi 5 GHz + WWAN module 1: LTE + WWAN module 2: 5G NR function; therefore Co-location Maximum Permissible Exposure (Please refer to DEKRA Report No.: 22A0297R-RFUSV17S-A) and Radiated Emission Co-location (Please refer to Appendix A) tests are added for simultaneously transmit with 1. WiFi 2.4 GHz + WiFi 5 GHz + WWAN module 1: WCDMA + WWAN module 2: WCDMA function, 2. WiFi 2.4 GHz + WiFi 5 GHz + WWAN module 1: LTE + WWAN module 2: LTE function and 3. WiFi 2.4 GHz + WiFi 5 GHz + WWAN module 1: 5G NR + WWAN module 2: 5G NR function 4. WiFi 2.4 GHz + WiFi 5 GHz + WWAN module 1: LTE + WWAN module 2: 5G NR function.
7. The EUT contains two of the same WWAN modules (brand name: AirPrime, model: EM9191, FCC ID: N7NEM91).

1.3. 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.

1.4. Tested System Details

The types for all equipment, plus descriptions of all cables used in the tested system.

<Power by adapter>

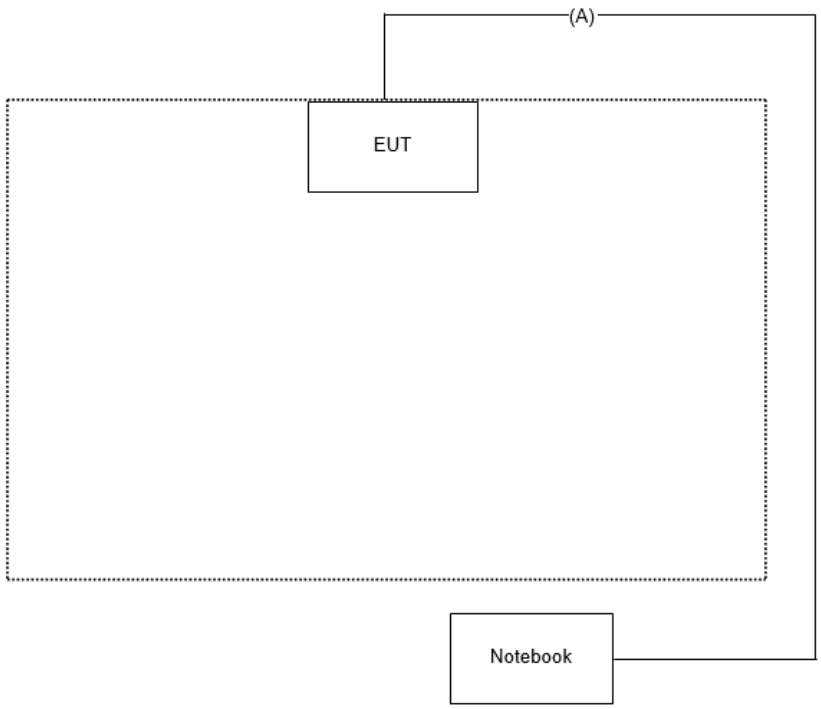
	Product	Manufacturer	Model No.	Serial No.
1	Notebook	Lenovo	Ideapad 110 15IBR	PF0MEEB0

<Power by DC-Powered>

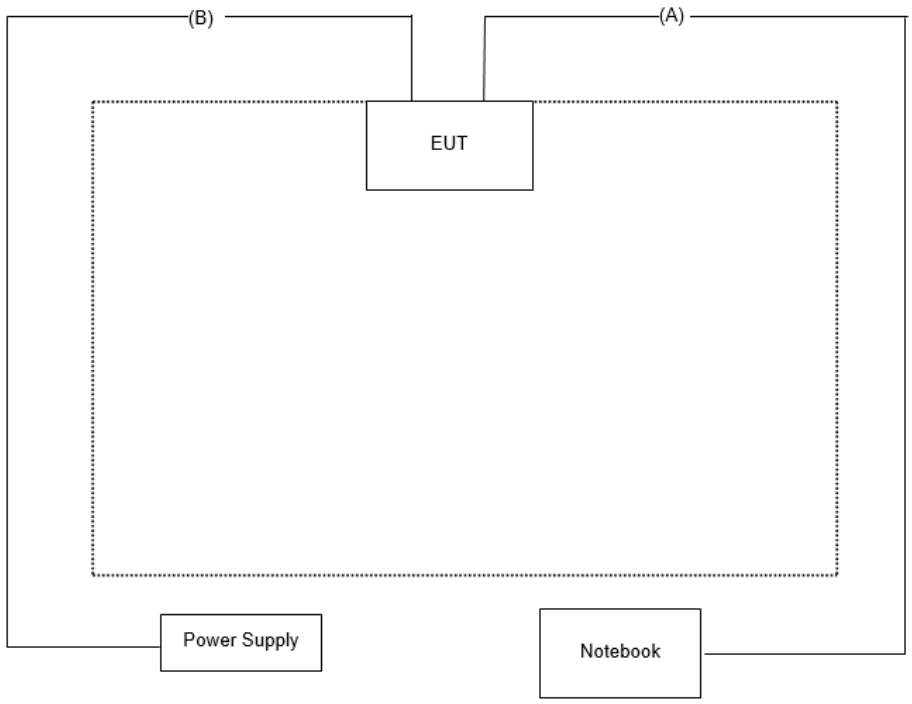
	Product	Manufacturer	Model No.	Serial No.
1	Notebook	Lenovo	Ideapad 110 15IBR	PF0MEEB0
2	Power Supply	Topward	6303D	8095908

1.5. Configuration of Tested System

Connection Diagram - power by adapter



	Signal Cable Type	Signal cable Description
A	Ethernet Cable	Non-Shielded, 10m

Connection Diagram - power by DC-Powered


Signal Cable Type		Signal cable Description
A	Ethernet Cable*1	Non-Shielded, 10m
B	DC Cable*2	Non-Shielded, 10m

1.6. EUT Operation of during Test

1	Execute control command by software “QSPR”.
2	Configure the test mode, the test channel, and the data rate.
3	Press “Start TX” to start the continuous transmitting.
4	Verify that the EUT works properly.

1.7. Test Facility

Ambient conditions in the laboratory:

Items	Test Item	Actually	Tested by	Test Date	Test Site
Temperature (°C)	AC Power Line Conducted Emission	23.5	Max Chang	2023/03/25	HC-SR02
Humidity (%RH)		55			
Temperature (°C)	Maximum Conducted Output Power	21	Clemens Fang	2022/11/17	HC-SR12
Humidity (%RH)		66			
Temperature (°C)	Radiated Emission	21.8 ~ 23	Cyril Chen Ling Chen	2022/10/31 ~ 2023/03/24	HC-CB04
Humidity (%RH)		58 ~ 61			
Temperature (°C)	Antenna Port Conducted Emission	22	Clemens Fang	2022/11/18	HC-SR12
Humidity (%RH)		66			
Temperature (°C)	Radiated Emission Band Edge	22.5	Gary Liao	2022/10/20	HC-CB04
Humidity (%RH)		55			
Temperature (°C)	Occupied Bandwidth & DTS Bandwidth	22	Clemens Fang	2022/11/18	HC-SR12
Humidity (%RH)		66			
Temperature (°C)	Maximum Power Spectral Density	22	Clemens Fang	2022/11/18	HC-SR12
Humidity (%RH)		66			

Note: Test site information refers to Laboratory Information.

Laboratory Information

USA	**:**	**FCC Registration Number: TW3024**
Canada	**:**	**CAB identifier : TW3024**

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.372-2, Sec. 4, Zhongxing Rd., Zhudong Township, Hsinchu County 31061, Taiwan, R.O.C. 2. No.372, 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
E mail address	info.tw@dekra.com
Website	http://www.dekra.com.tw
Note: Test site number for address 1 includes HC-SR02. Test site number for address 2 includes HC-CB02, HC-CB03, HC-CB04, HC-SR10 and HC-SR12.	

1.8. List of Test Equipment

HC-SR02

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date
Artificial Mains Network	R&S	ENV4200	848411/010	2022/12/19	2023/12/18
EMI Test Receiver	R&S	ESR3	102608	2022/05/30	2023/05/29
Two-Line V-Network	R&S	ENV216	100096	2022/05/17	2023/05/16
Coaxial Cable(9 m)	Harbour	RG-400	HC-SR02	2022/08/15	2023/08/14
EMI Testing System	AUDIX	e3 210616 dekra V9	HC-SR02	N/A	N/A

HC-SR12

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date
High Speed Peak Power Meter Dual Input	Anritsu	ML2496A	1602004	2022/11/02	2023/11/01
Pulse Power Sensor	Anritsu	MA2411B	1531043	2022/11/02	2023/11/01
Pulse Power Sensor	Anritsu	MA2411B	1531044	2022/11/02	2023/11/01
Signal and Spectrum Analyzer	R&S	FSVA40	101435	2022/05/30	2023/05/29

HC-CB04

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date
Signal Analyzer	R&S	FSVA40	101455	2022/09/29	2023/09/28
Trilog Broadband Antenna	Schwarzbeck	VULB 9168	1209	2022/06/14	2023/06/13
Horn Antenna	Schwarzbeck	BBHA 9120D	01640	2022/07/13	2023/07/12
Horn Antenna	Schwarzbeck	BBHA 9170	203	2023/02/13	2024/02/12
Pre-Amplifier	EMCI	EMC01820I	980364	2022/06/10	2023/06/09
Pre-Amplifier	EMEC	EM01G18GA	060835	2022/07/04	2023/07/03
Pre-Amplifier	DEKRA	AP-400C	201801231	2022/09/27	2023/09/26
EMI Test Receiver	R&S	ESR7	102260	2021/12/22	2022/12/21
EMI Test Receiver	R&S	ESR7	102260	2022/12/01	2023/11/30
Magnetic Loop Antenna	Teseq	HLA 6121	44287	2021/09/06	2022/09/05
Magnetic Loop Antenna	Teseq	HLA 6121	44287	2022/10/21	2023/10/20
Coaxial Cable(10m)	Suhner	SF102_SF104	HC-CB04	2022/08/08	2023/08/07
Coaxial Cable(3m)	Suhner,Rosnol	SF102_UP0264	HC-CB04_1	2022/08/14	2023/08/13
Radiated Software	AUDIX	e3 V9	HC-CB04_1	N/A	N/A

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

1.9. Measurement Uncertainty

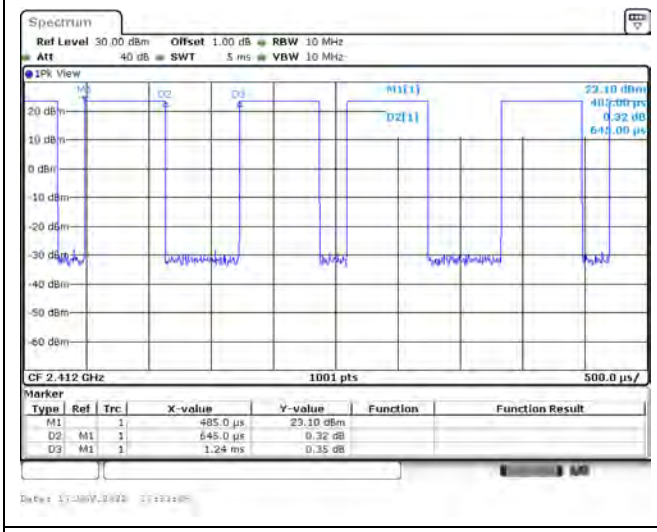
Uncertainties have been calculated according to the DEKRA internal document with the emissions test results be included in the report. The measurement uncertainties given below are based on a 95% confidence level (based on a coverage factor (k=2).

Test Item	Uncertainty
AC Power Line Conducted Emission	± 2.34 dB
Maximum Conducted Output Power	± 1.16 dB
Radiated Emission	± 3.52 dB below 1 GHz ± 3.56 dB above 1 GHz
Antenna Port Conducted Emission	± 2.47 dB
Radiated Emission Band Edge	± 3.56 dB
DTS Bandwidth	± 282.55 Hz
Occupied Bandwidth	± 282.55 Hz
Maximum Power Spectral Density	± 2.47 dB

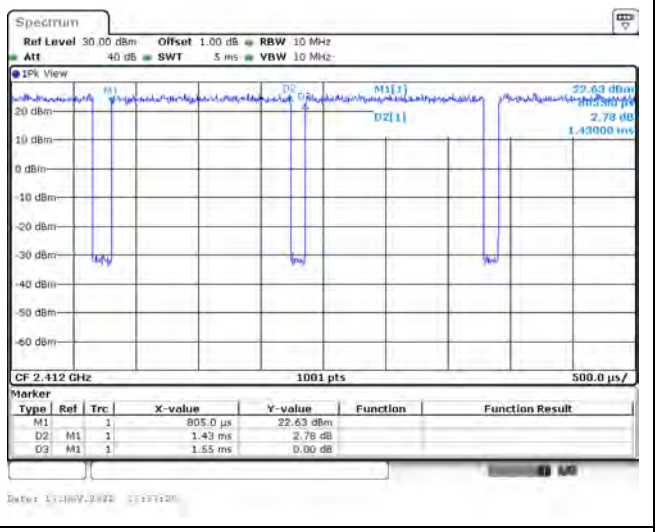
1.10. Duty Cycle

Modulation	On Times (ms)	On+Off Times (ms)	Duty Cycle (%)	Duty Factor (dB)	1/T Minimum VBW (kHz)
802.11b	0.645	1.240	52.02	2.839	1.550
802.11g	1.430	1.550	92.26	0.350	0.699
802.11ax (20 MHz)	5.440	5.740	94.77	0.233	0.184
802.11ax (40 MHz)	5.420	5.760	94.10	0.264	0.184

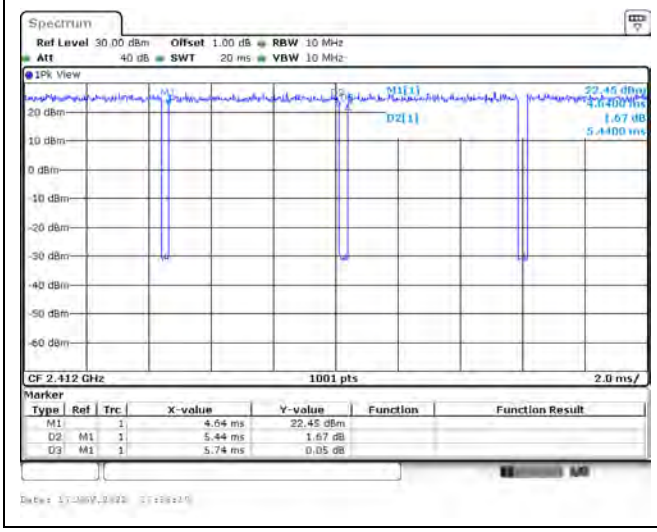
802.11b



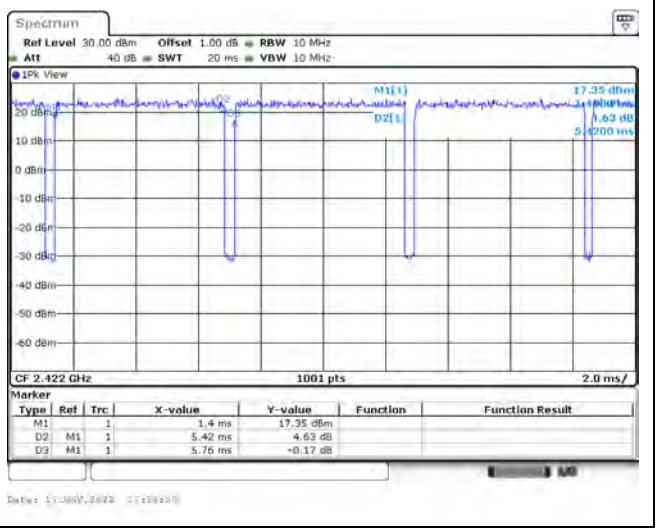
802.11g



802.11ax (20 MHz)

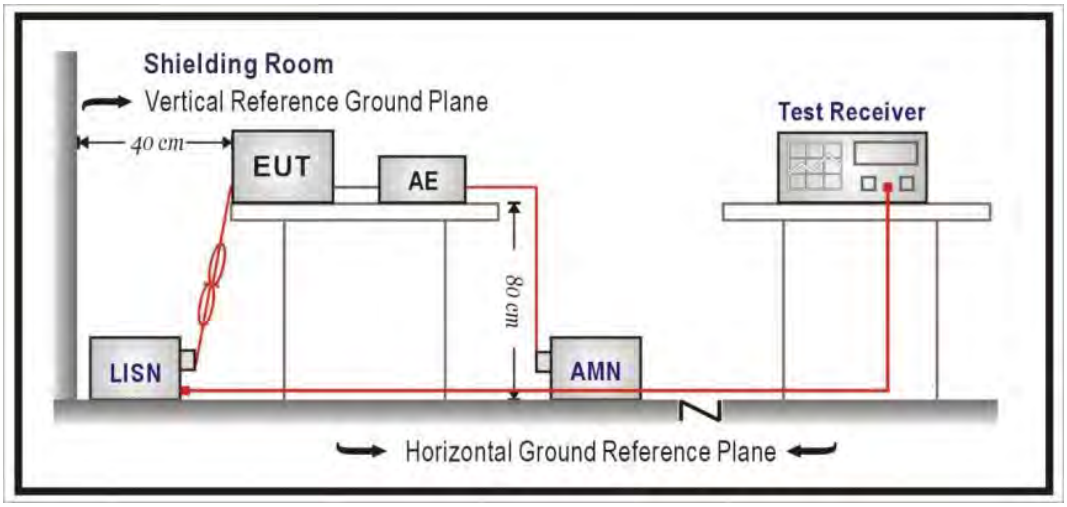


802.11ax (40 MHz)



2. AC Power Line Conducted Emission

2.1. Test Setup



2.2. Test Limit

Frequency (MHz)	QP (dBuV)	AV (dBuV)
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

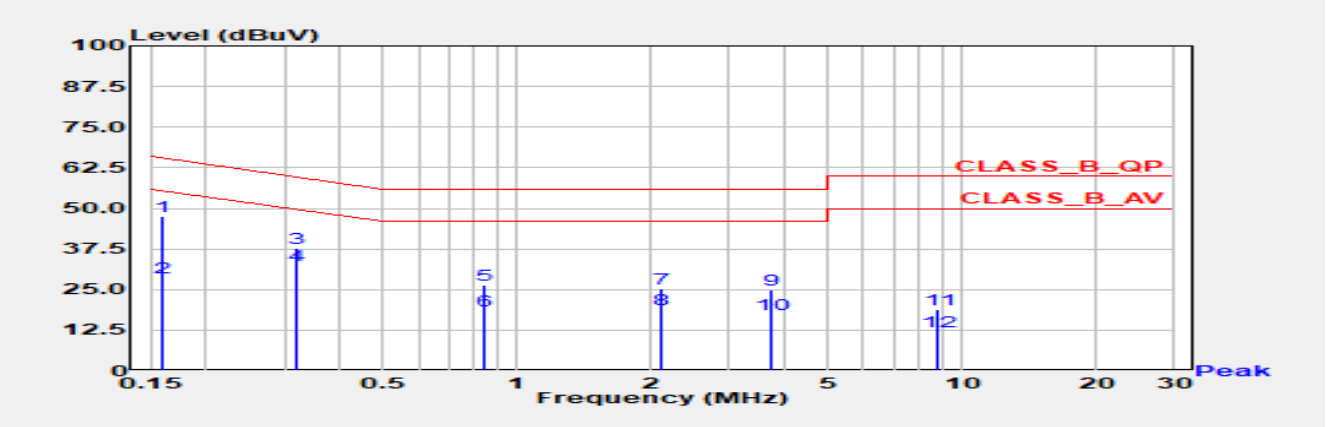
The EUT and simulators are connected to the main power through a line impedance stabilization network (L.I.S.N.). This provides a 50 ohm /50 uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN that provides a 50 ohm/50 uH coupling impedance with 50 ohm termination. (Please refer to the block diagram of the test setup and photographs.)
Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.10: 2013 on conducted measurement.
AC Power Line Conducted Emissions were invested over the frequency range from 0.15 MHz to 30 MHz using a receiver bandwidth of 9 kHz.

2.4. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247.

2.5. Test Result of AC Power Line Conducted Emission

Test Mode	Mode 1: Transmit	Phase	Line
Test Condition	802.11b / Ant. 0 + Ant. 1 / 2412 MHz		



No	Frequency (MHz)	Emission Level (dBuV)	Limit (dBuV)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	0.159	47.71	65.52	-17.81	38.09	9.62	QP
2	0.159	28.62	55.52	-26.89	19.00	9.62	AV
3	0.321	37.67	59.68	-22.01	28.04	9.63	QP
*4	0.321	32.41	49.68	-17.27	22.78	9.63	AV
5	0.847	26.33	56.00	-29.67	16.64	9.69	QP
6	0.847	18.63	46.00	-27.37	8.94	9.69	AV
7	2.119	25.19	56.00	-30.81	15.43	9.76	QP
8	2.119	18.87	46.00	-27.13	9.12	9.76	AV
9	3.741	24.81	56.00	-31.19	14.98	9.83	QP
10	3.741	17.52	46.00	-28.48	7.69	9.83	AV
11	8.835	18.73	60.00	-41.27	8.69	10.04	QP
12	8.835	12.05	50.00	-37.95	2.01	10.04	AV

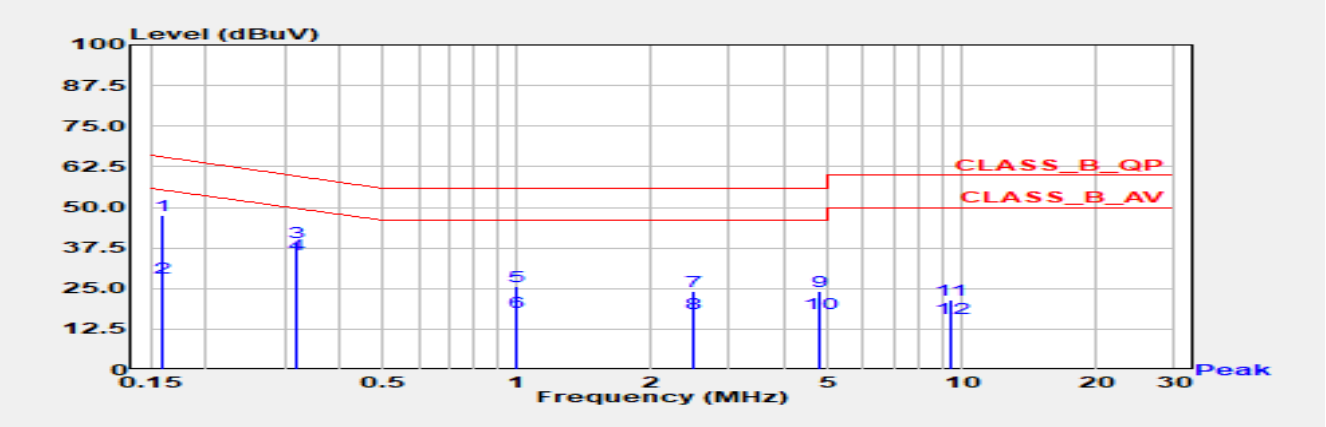
Remark:

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.

Test Mode	Mode 1: Transmit	Phase	Neutral
Test Condition	802.11b / Ant. 0 + Ant. 1 / 2412 MHz		



No	Frequency (MHz)	Emission Level (dBuV)	Limit (dBuV)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	0.159	47.73	65.52	-17.79	38.11	9.62	QP
2	0.159	28.48	55.52	-27.04	18.86	9.62	AV
3	0.321	39.41	59.68	-20.27	29.78	9.62	QP
*4	0.321	35.33	49.68	-14.35	25.71	9.62	AV
5	1.000	25.84	56.00	-30.16	16.14	9.70	QP
6	1.000	17.69	46.00	-28.31	7.99	9.70	AV
7	2.499	24.34	56.00	-31.66	14.56	9.78	QP
8	2.499	17.42	46.00	-28.58	7.65	9.78	AV
9	4.803	23.96	56.00	-32.04	14.07	9.90	QP
10	4.803	17.34	46.00	-28.66	7.45	9.90	AV
11	9.413	21.48	60.00	-38.52	11.38	10.09	QP
12	9.413	15.89	50.00	-34.11	5.79	10.09	AV

Remark:

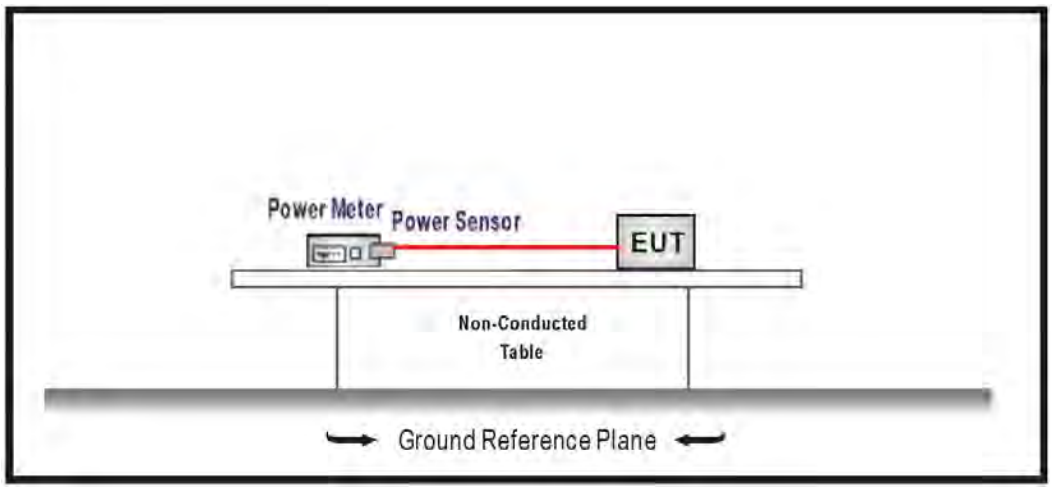
1. "*" means this data is the worst emission level.

2. Emission Level = Reading Level + Correct Factor (Correct Factor = LISN Insertion Loss + Cable Loss).

3. Margin = Emission Level - Limit.

3. Maximum Conducted Output Power

3.1. Test Setup



3.2. Test Limit

The maximum conducted output power shall be less 30 dBm (1 Watt).

3.3. Test Procedures

The EUT was setup according to ANSI C63.10: 2013; tested according to DTS test procedure of KDB 558074 D01 v05r02 for compliance to FCC 47CFR 15.247 requirements.

3.4. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247.

3.5. Test Result of Maximum Conducted Output Power

Modulation	Channel	Frequency (MHz)	Maximum Conducted Output Power (dBm)			Limit (dBm)	Result
			Ant. 0	Ant. 1	Total		
802.11b	1	2412	20.06	19.32	22.72	≦30.00	Pass
	6	2437	19.62	19.36	22.50	≦30.00	Pass
	11	2462	19.60	19.55	22.59	≦30.00	Pass
802.11g	1	2412	20.08	19.34	22.74	≦30.00	Pass
	6	2437	19.94	19.65	22.81	≦30.00	Pass
	11	2462	20.01	19.88	22.96	≦30.00	Pass
802.11ax (20 MHz)	1	2412	20.05	19.22	22.67	≦30.00	Pass
	6	2437	19.88	19.53	22.72	≦30.00	Pass
	11	2462	19.97	19.65	22.82	≦30.00	Pass
802.11ax (40 MHz)	3	2422	19.99	19.26	22.65	≦30.00	Pass
	6	2437	20.07	19.65	22.88	≦30.00	Pass
	9	2452	16.16	16.09	19.14	≦30.00	Pass

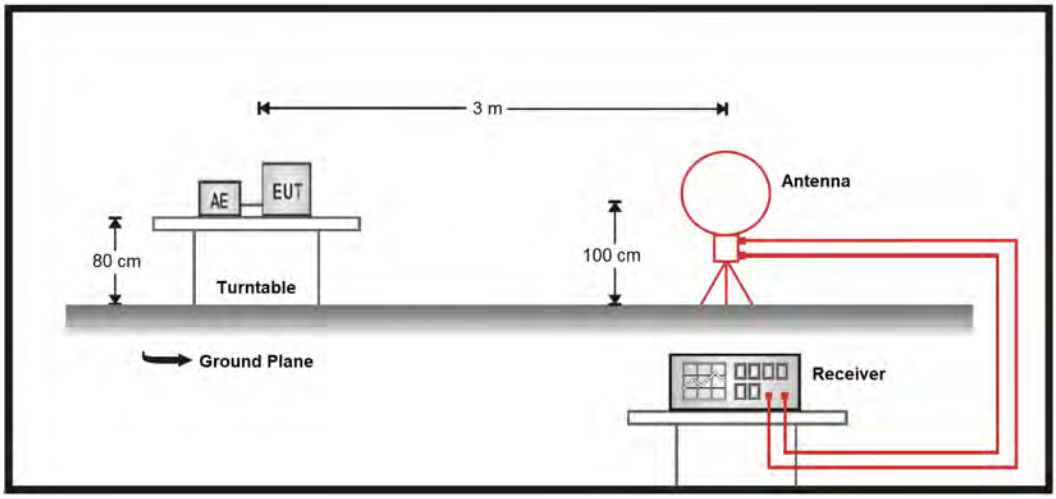
<Reference Data>

Modulation	Channel	Frequency (MHz)	Maximum Conducted Output Power (dBm)		
			Ant. 0	Ant. 1	Total
802.11n (20 MHz)	1	2412	19.85	19.06	22.48
	6	2437	19.70	19.33	22.53
	11	2462	19.80	19.45	22.64
802.11ac (20 MHz)	1	2412	19.84	19.09	22.49
	6	2437	19.74	19.41	22.59
	11	2462	19.81	19.51	22.67
802.11n (40 MHz)	3	2422	19.81	19.11	22.48
	6	2437	19.87	19.46	22.68
	9	2452	16.01	15.86	18.95
802.11ac (40 MHz)	3	2422	19.87	19.09	22.51
	6	2437	19.91	19.45	22.70
	9	2452	16.04	15.95	19.01

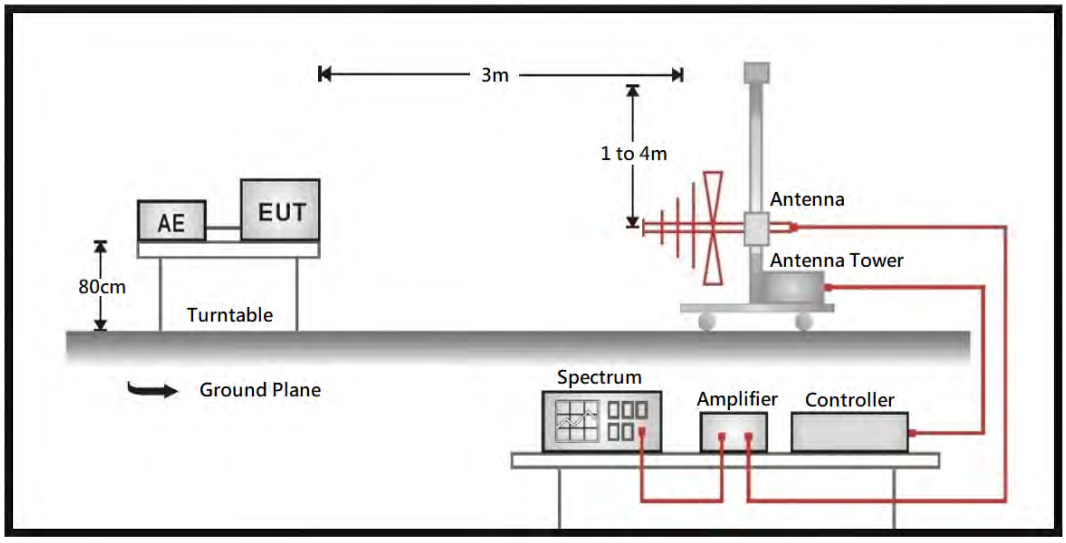
4. Radiated Emission

4.1. Test Setup

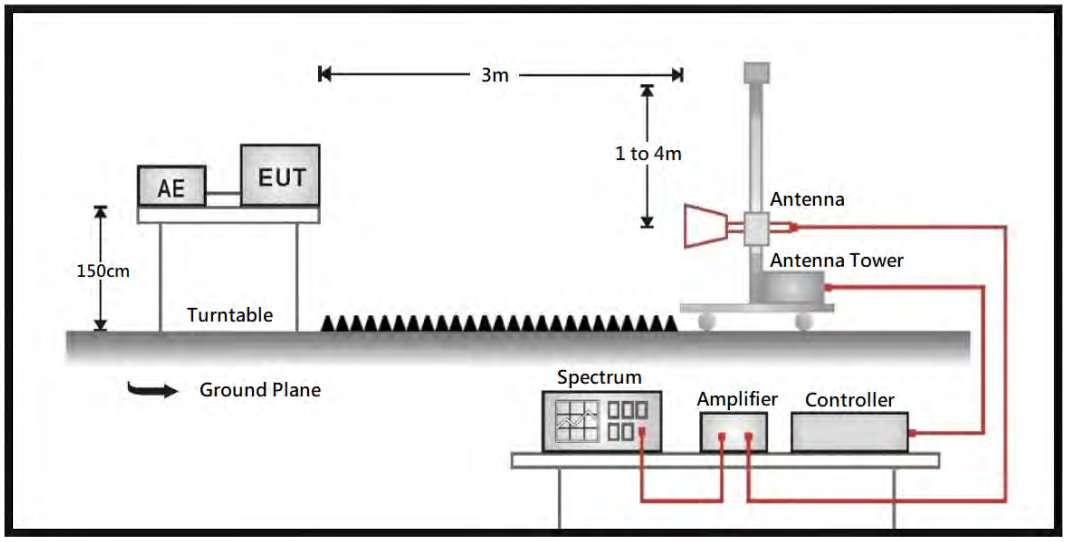
9 kHz ~ 30 MHz



30 MHz ~ 1 GHz



Above 1 GHz



4.2. Test Limit

Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 30dB below the level of the fundamental or to the general radiated emission limit in paragraph 15.209, whichever is the lesser attenuation.

Frequency (MHz)	Field strength (uV/m)	Field strength (dBuV/m)	Measurement distance (m)
0.009 – 0.490	2400/F(kHz)	20 log (2400/F(kHz))	300
0.490 – 1.705	24000/F(kHz)	20 log (24000/F(kHz))	30
1.705 - 30	30	29.5	30
30 - 88	100	40	3
88 - 216	150	43.5	3
216 - 960	200	46	3
Above 960	500	54	3

Remarks:

1. Field strength (dBuV/m) = 20 log Field strength (uV/m)
2. In the Above Table, the tighter limit applies at the band edges.
3. Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system

4.3. Test Procedure

The EUT was setup according to ANSI C63.10: 2013 and tested according to DTS test procedure of KDB 558074 D01V05r02 for compliance to FCC 47CFR 15.247 requirements.
The EUT and its simulators are placed on a turn table which is 0.8 or 1.5 meter above ground. 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 form 9 kHz(inculde The the lowest oscillator frequency generated within the device up to the 10th harmonic) to 1000 MHz, the limit shown are based on measuring equipment employing a quasi-peak detector function and on any frequency or frequencies above 1000 MHz the radiated limit 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 1 GHz setting on the field strength meter is 120 kHz and above 1 GHz is 1 MHz.

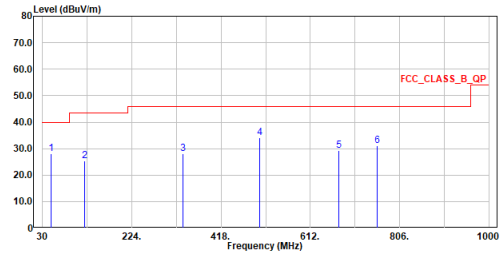
4.4. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247.

4.5. Test Result of Radiated Emissions (30 MHz ~ 1 GHz)

<Power by adapter>

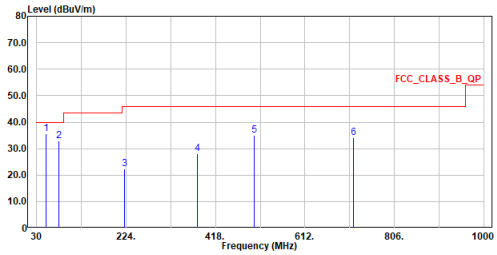
Site :HC-CB04
Condition :3m Horizontal
Mode :LF_b_TX_2412MHz_Adapter
Test By :Cyril



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	49.109	27.95	40.00	-12.05	30.38	-2.43	QP
2	122.053	25.30	43.50	-18.20	30.17	-4.87	QP
3	335.841	28.18	46.00	-17.82	29.57	-1.39	QP
4	501.614	34.11	46.00	-11.89	31.49	2.62	QP
5	673.498	29.23	46.00	-16.77	23.22	6.01	QP
6	757.403	31.08	46.00	-14.92	23.41	7.67	QP

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission under 30MHz was not included since the emission levels are very low against the limit.
5. The other emission levels were very low against the limit.

Site :HC-CB04
Condition :3m Vertical
Mode :LF_b_TX_2412MHz_Adapter
Test By :Cyril

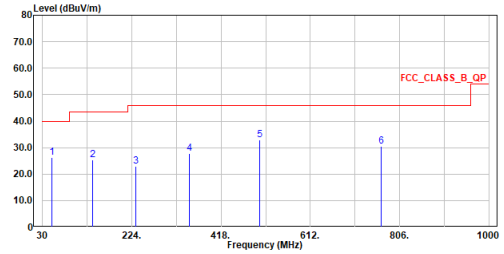


No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	49.982	35.54	40.00	-4.46	37.90	-2.36	QP
2	78.306	33.04	40.00	-6.96	39.64	-6.60	QP
3	220.896	22.22	46.00	-23.78	28.53	-6.31	QP
4	378.909	28.11	46.00	-17.89	28.45	-0.34	QP
5	501.711	35.09	46.00	-10.91	32.47	2.62	QP
6	716.663	34.00	46.00	-12.00	27.22	6.78	QP

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission under 30MHz was not included since the emission levels are very low against the limit.
5. The other emission levels were very low against the limit.

<Power by DC-Powered>

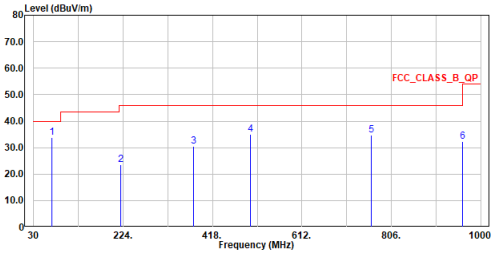
Site :HC-CB04
Condition :3m Horizontal
Mode :LF_b_TX_2412MHz_Power Supply
Test By :Cyril



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	49.982	26.31	40.00	-13.69	28.67	-2.36	QP
2	138.640	25.25	43.50	-18.25	28.85	-3.60	QP
3	233.506	22.83	46.00	-23.17	27.91	-5.08	QP
4	349.518	27.80	46.00	-18.20	29.05	-1.25	QP
5	501.711	32.81	46.00	-13.19	30.19	2.62	QP
6	765.842	30.43	46.00	-15.57	22.71	7.72	QP

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission under 30MHz was not included since the emission levels are very low against the limit.
5. The other emission levels were very low against the limit.

Site :HC-CB04
Condition :3m Vertical
Mode :LF_b_TX_2412MHz_Power Supply
Test By :Cyril

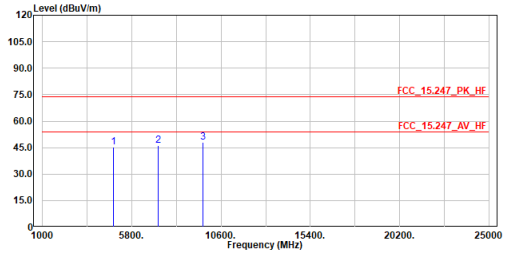


No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	69.867	33.67	40.00	-6.33	38.14	-4.47	QP
2	219.053	23.61	46.00	-22.39	29.99	-6.38	QP
3	377.648	30.42	46.00	-15.58	30.80	-0.38	QP
4	500.159	34.99	46.00	-11.01	32.40	2.59	QP
5	763.126	34.66	46.00	-11.34	26.97	7.69	QP
6	960.036	32.21	54.00	-21.79	22.16	10.05	QP

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission under 30MHz was not included since the emission levels are very low against the limit.
5. The other emission levels were very low against the limit.

4.6. Test Result of Radiated Emissions (1 GHz ~ 10th Harmonic)

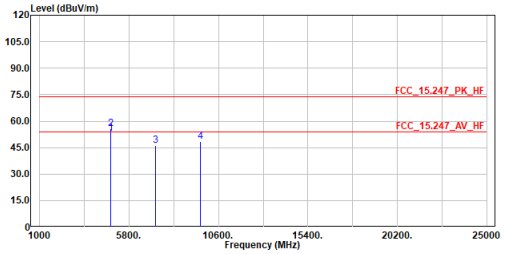
Site :HC-CB04
Condition :3m ,Horizontal
Mode :b_TX_2412MHz
Test By :Ling



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	4824.000	45.30	74.00	-28.70	61.77	-16.47	Peak
2	7236.000	46.04	74.00	-27.96	56.94	-10.90	Peak
3	9648.000	48.16	74.00	-25.84	53.51	-5.35	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

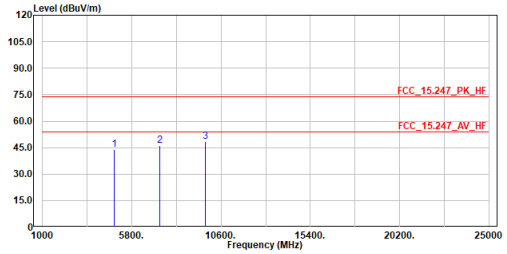
Site :HC-CB04
Condition :3m ,Vertical
Mode :b_TX_2412MHz
Test By :Ling



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	4824.000	52.76	54.00	-1.24	69.23	-16.47	Average
2	4824.000	55.60	74.00	-18.40	72.07	-16.47	Peak
3	7236.000	45.98	74.00	-28.02	56.88	-10.90	Peak
4	9648.000	48.65	74.00	-25.35	54.00	-5.35	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

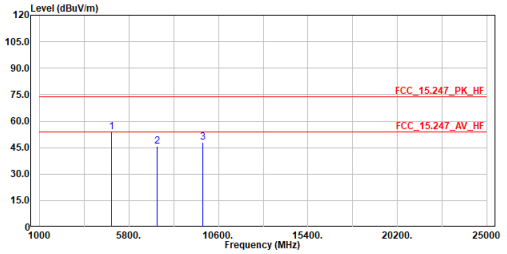
Site :HC-CB04
Condition :3m ,Horizontal
Mode :b_TX_2437MHz
Test By :Cyril



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	4874.000	43.88	74.00	-30.12	60.30	-16.42	Peak
2	7311.000	46.16	74.00	-27.84	56.96	-10.80	Peak
3	9748.000	48.31	74.00	-25.69	53.20	-4.89	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

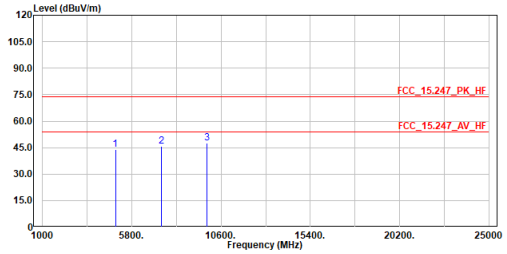
Site :HC-CB04
Condition :3m ,Vertical
Mode :b_TX_2437MHz
Test By :Cyril



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	4874.000	53.79	74.00	-20.21	70.21	-16.42	Peak
2	7311.000	45.77	74.00	-28.23	56.57	-10.80	Peak
3	9748.000	47.79	74.00	-26.21	52.68	-4.89	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

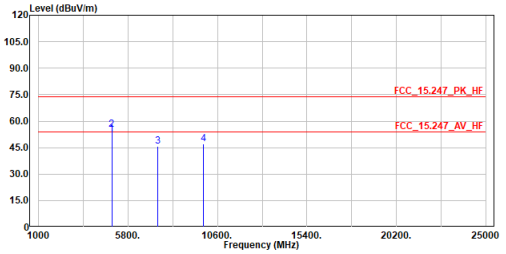
Site :HC-CB04
Condition :3m ,Horizontal
Mode :b_TX_2462MHz
Test By :Ling



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	4924.000	44.15	74.00	-29.85	60.58	-16.43	Peak
2	7386.000	45.67	74.00	-28.33	56.38	-10.71	Peak
3	9848.000	47.66	74.00	-26.34	52.21	-4.55	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

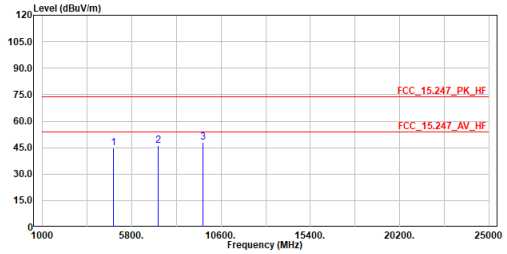
Site :HC-CB04
Condition :3m ,Vertical
Mode :b_TX_2462MHz
Test By :Ling



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	4924.000	52.60	54.00	-1.40	69.03	-16.43	Average
2	4924.000	55.32	74.00	-18.68	71.75	-16.43	Peak
3	7386.000	45.58	74.00	-28.42	56.29	-10.71	Peak
4	9848.000	47.30	74.00	-26.70	51.85	-4.55	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

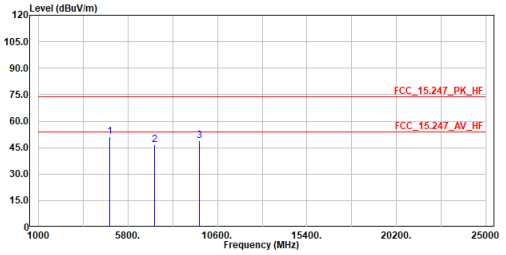
Site :HC-CB04
Condition :3m ,Horizontal
Mode :g_TX_2412MHz
Test By :Ling



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	4824.000	44.91	74.00	-29.09	61.38	-16.47	Peak
2	7236.000	46.01	74.00	-27.99	56.91	-10.90	Peak
3	9648.000	48.02	74.00	-25.98	53.37	-5.35	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

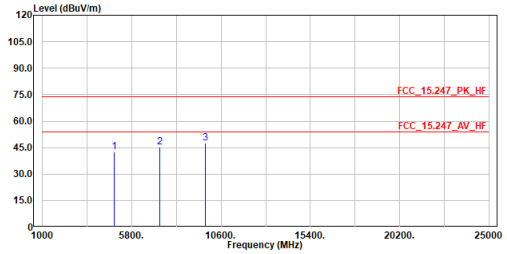
Site :HC-CB04
Condition :3m ,Vertical
Mode :g_TX_2412MHz
Test By :Ling



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	4824.000	51.20	74.00	-22.80	67.67	-16.47	Peak
2	7236.000	46.49	74.00	-27.51	57.39	-10.90	Peak
3	9648.000	49.06	74.00	-24.94	54.41	-5.35	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

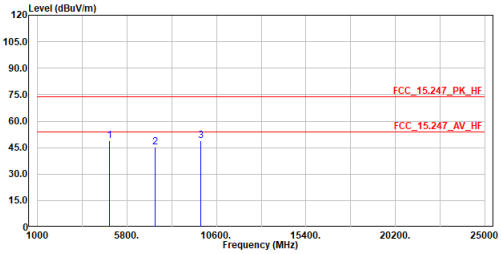
Site :HC-CB04
Condition :3m ,Horizontal
Mode :g_TX_2437MHz
Test By :Cyril



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	4874.000	42.65	74.00	-31.35	59.07	-16.42	Peak
2	7311.000	45.43	74.00	-28.57	56.23	-10.80	Peak
3	9748.000	47.76	74.00	-26.24	52.65	-4.89	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

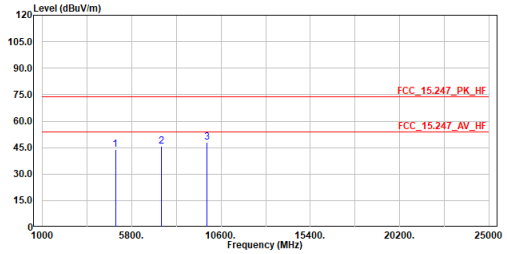
Site :HC-CB04
Condition :3m ,Vertical
Mode :g_TX_2437MHz
Test By :Cyril



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	4874.000	48.75	74.00	-25.25	65.17	-16.42	Peak
2	7311.000	45.30	74.00	-28.70	56.10	-10.80	Peak
3	9748.000	48.99	74.00	-25.01	53.88	-4.89	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

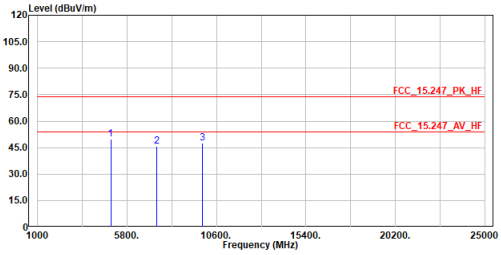
Site :HC-CB04
Condition :3m ,Horizontal
Mode :g_TX_2462MHz
Test By :Ling



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	4924.000	44.04	74.00	-29.96	60.47	-16.43	Peak
2	7386.000	45.56	74.00	-28.44	56.27	-10.71	Peak
3	9848.000	47.82	74.00	-26.18	52.37	-4.55	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

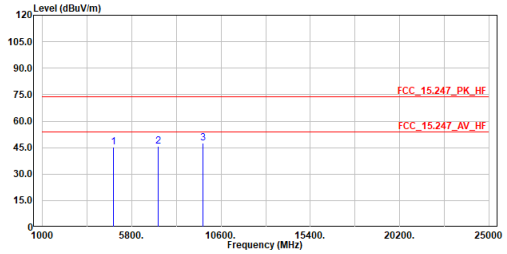
Site :HC-CB04
Condition :3m ,Vertical
Mode :g_TX_2462MHz
Test By :Ling



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	4924.000	49.94	74.00	-24.06	66.37	-16.43	Peak
2	7386.000	45.95	74.00	-28.05	56.66	-10.71	Peak
3	9848.000	47.60	74.00	-26.40	52.15	-4.55	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

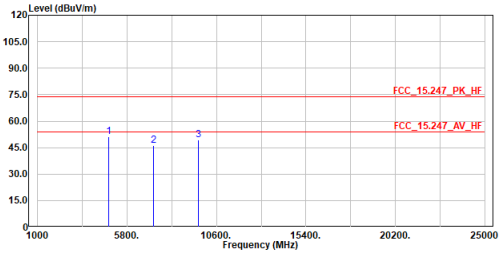
Site :HC-CB04
Condition :3m ,Horizontal
Mode :ax20_TX_2412MHz
Test By :Ling



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	4824.000	45.36	74.00	-28.64	61.83	-16.47	Peak
2	7236.000	45.80	74.00	-28.20	56.70	-10.90	Peak
3	9648.000	47.55	74.00	-26.45	52.90	-5.35	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

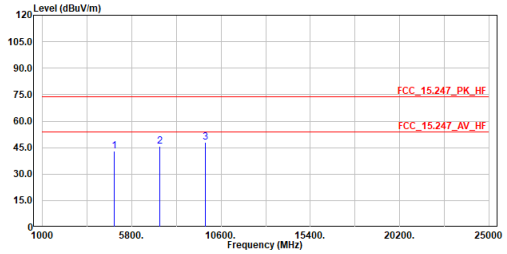
Site :HC-CB04
Condition :3m ,Vertical
Mode :ax20_TX_2412MHz
Test By :Ling



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	4824.000	51.08	74.00	-22.92	67.55	-16.47	Peak
2	7236.000	46.37	74.00	-27.63	57.27	-10.90	Peak
3	9648.000	49.57	74.00	-24.43	54.92	-5.35	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

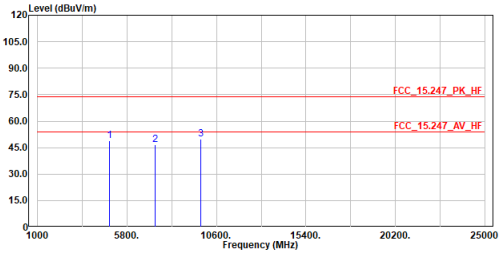
Site :HC-CB04
Condition :3m ,Horizontal
Mode :ax20_TX_2437MHz
Test By :Cyril



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	4874.000	42.82	74.00	-31.18	59.24	-16.42	Peak
2	7311.000	45.94	74.00	-28.06	56.74	-10.80	Peak
3	9748.000	48.05	74.00	-25.95	52.94	-4.89	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

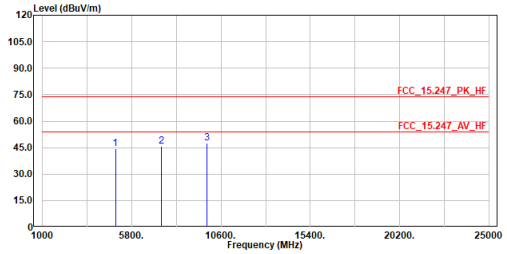
Site :HC-CB04
Condition :3m ,Vertical
Mode :ax20_TX_2437MHz
Test By :Cyril



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	4874.000	48.77	74.00	-25.23	65.19	-16.42	Peak
2	7311.000	46.74	74.00	-27.26	57.54	-10.80	Peak
3	9748.000	49.67	74.00	-24.33	54.56	-4.89	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

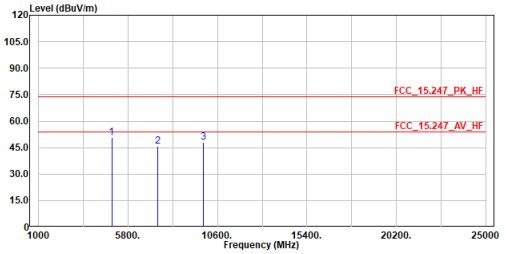
Site :HC-CB04
Condition :3m ,Horizontal
Mode :ax20_TX_2462MHz
Test By :Ling



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	4924.000	44.23	74.00	-29.77	60.66	-16.43	Peak
2	7386.000	45.71	74.00	-28.29	56.42	-10.71	Peak
3	9848.000	47.34	74.00	-26.66	51.89	-4.55	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

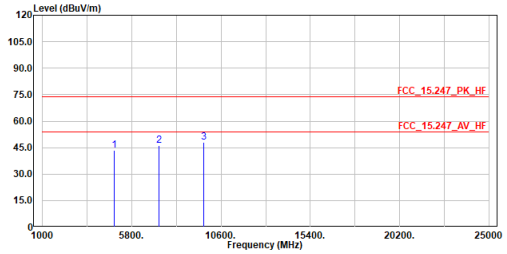
Site :HC-CB04
Condition :3m ,Vertical
Mode :ax20_TX_2462MHz
Test By :Ling



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	4924.000	50.74	74.00	-23.26	67.17	-16.43	Peak
2	7386.000	45.63	74.00	-28.37	56.34	-10.71	Peak
3	9848.000	48.17	74.00	-25.83	52.72	-4.55	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

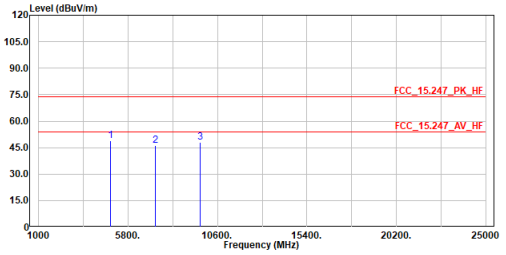
Site :HC-CB04
Condition :3m ,Horizontal
Mode :ax40_TX_2422MHz
Test By :Ling



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	4844.000	43.34	74.00	-30.66	59.71	-16.37	Peak
2	7266.000	46.10	74.00	-27.90	57.02	-10.92	Peak
3	9688.000	48.15	74.00	-25.85	53.47	-5.32	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

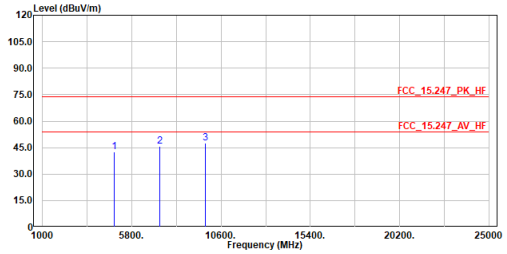
Site :HC-CB04
Condition :3m ,Vertical
Mode :ax40_TX_2422MHz
Test By :Ling



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	4844.000	49.12	74.00	-24.88	65.49	-16.37	Peak
2	7266.000	46.24	74.00	-27.76	57.16	-10.92	Peak
3	9688.000	47.97	74.00	-26.03	53.29	-5.32	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

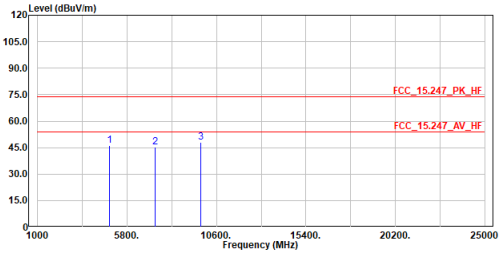
Site :HC-CB04
Condition :3m ,Horizontal
Mode :ax40_TX_2437MHz
Test By :Cyril



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	4874.000	42.68	74.00	-31.32	59.10	-16.42	Peak
2	7311.000	45.87	74.00	-28.13	56.67	-10.80	Peak
3	9748.000	47.57	74.00	-26.43	52.46	-4.89	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

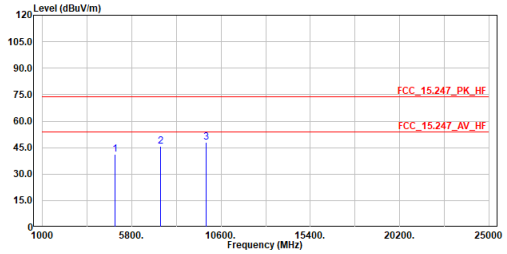
Site :HC-CB04
Condition :3m ,Vertical
Mode :ax40_TX_2437MHz
Test By :Cyril



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	4874.000	46.33	74.00	-27.67	62.75	-16.42	Peak
2	7311.000	45.43	74.00	-28.57	56.23	-10.80	Peak
3	9748.000	48.06	74.00	-25.94	52.95	-4.89	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

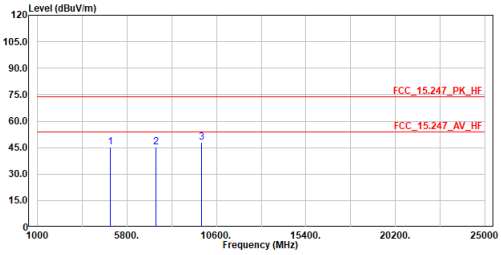
Site :HC-CB04
Condition :3m ,Horizontal
Mode :ax40_TX_2452MHz
Test By :Ling



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	4904.000	41.13	74.00	-32.87	57.62	-16.49	Peak
2	7356.000	45.83	74.00	-28.17	56.58	-10.75	Peak
3	9808.000	48.19	74.00	-25.81	52.83	-4.64	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

Site :HC-CB04
Condition :3m ,Vertical
Mode :ax40_TX_2452MHz
Test By :Ling

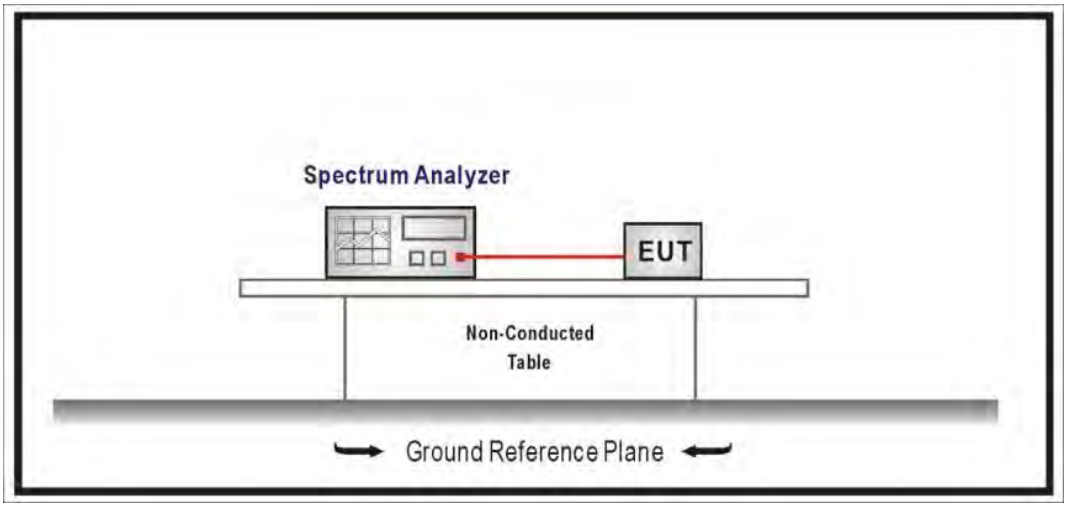


No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	4904.000	45.32	74.00	-28.68	61.81	-16.49	Peak
2	7356.000	45.20	74.00	-28.80	55.95	-10.75	Peak
3	9808.000	48.01	74.00	-25.99	52.65	-4.64	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

5. Antenna Port Conducted Emission

5.1. Test Setup



5.2. Test Limit

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

5.3. Test Procedure

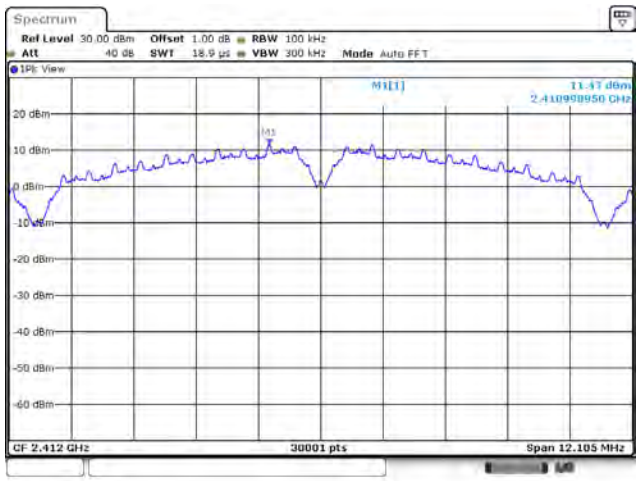
The EUT was setup according to ANSI C63.10: 2013 and tested according to DTS test procedure of KDB 558074 D01 V05r02 for compliance to FCC 47CFR 15.247 requirements.
Set RBW = 100 kHz, Set VBW> RBW, scan up through 10th harmonic.

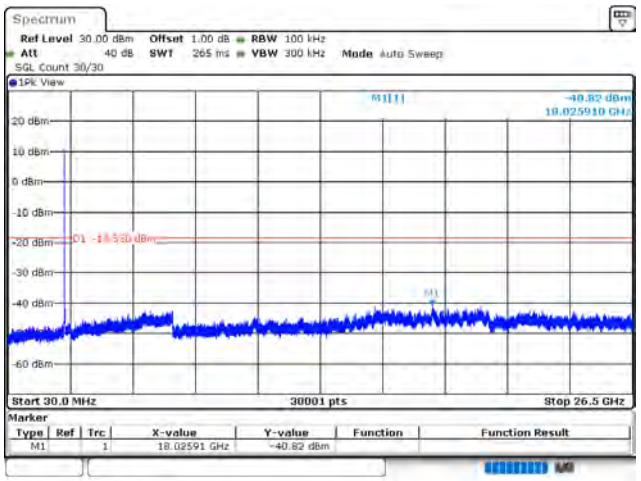
5.4. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247.

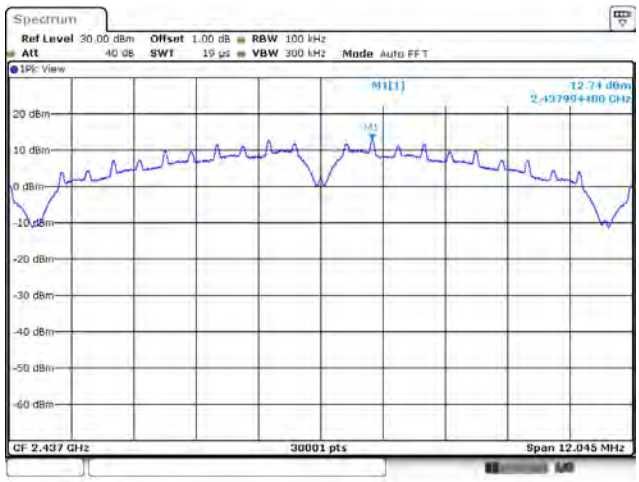
5.5. Test Result of Antenna Port Conducted Emission

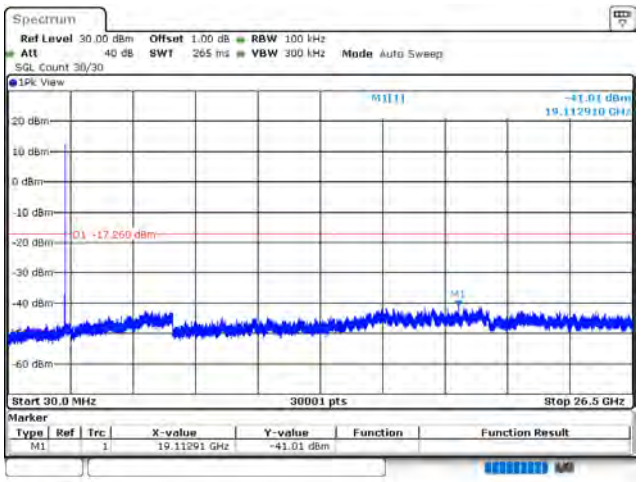
802.11b / Ant. 0 / 2412 MHz



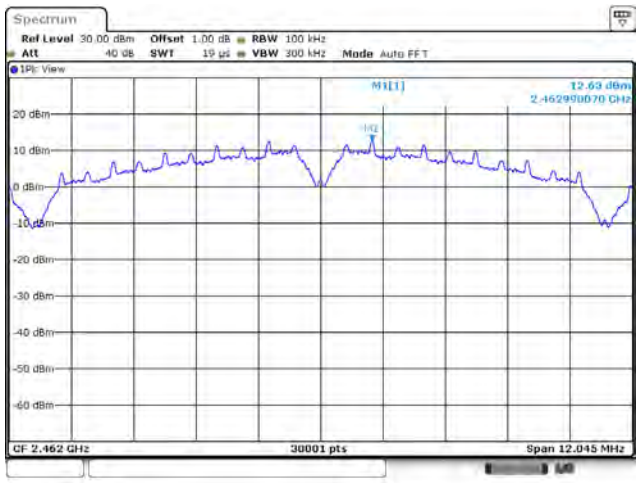


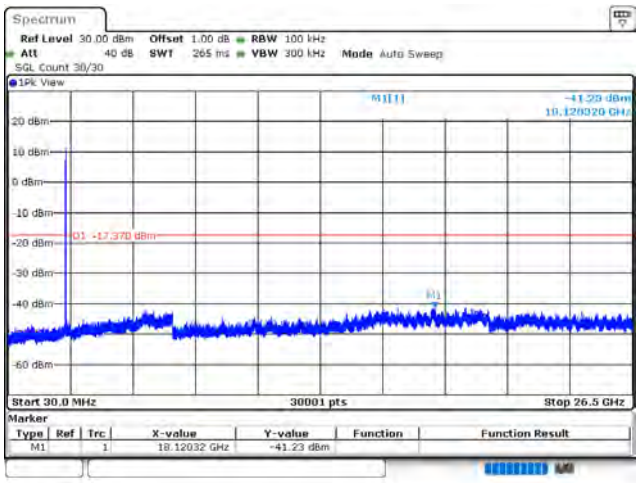
802.11b / Ant. 0 / 2437 MHz



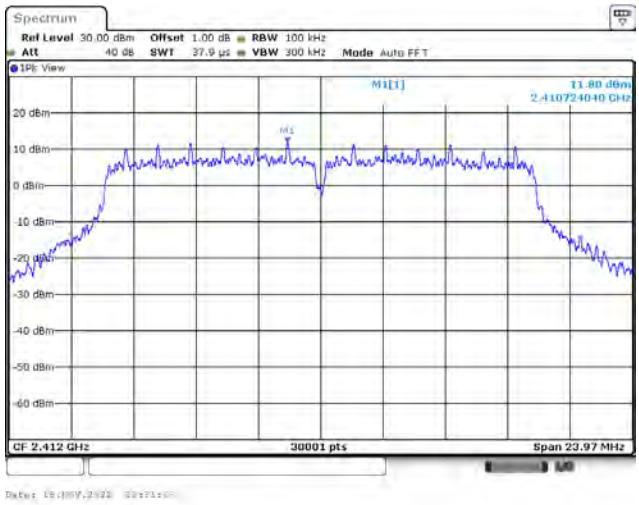


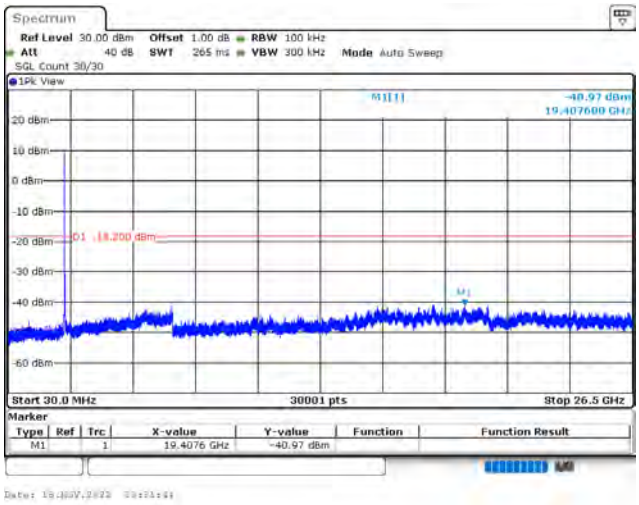
802.11b / Ant. 0 / 2462 MHz



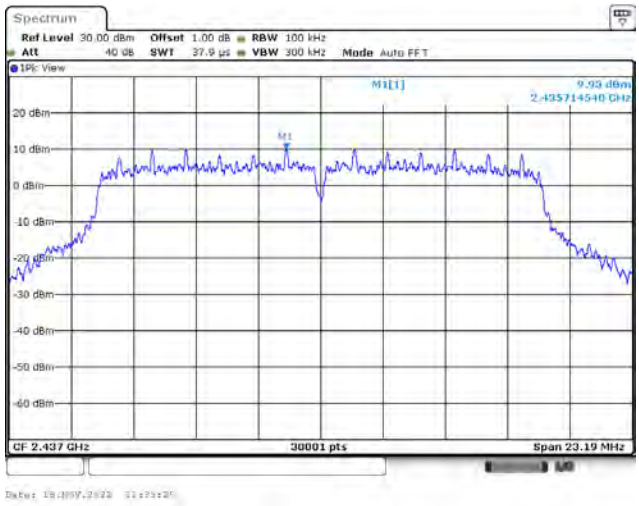


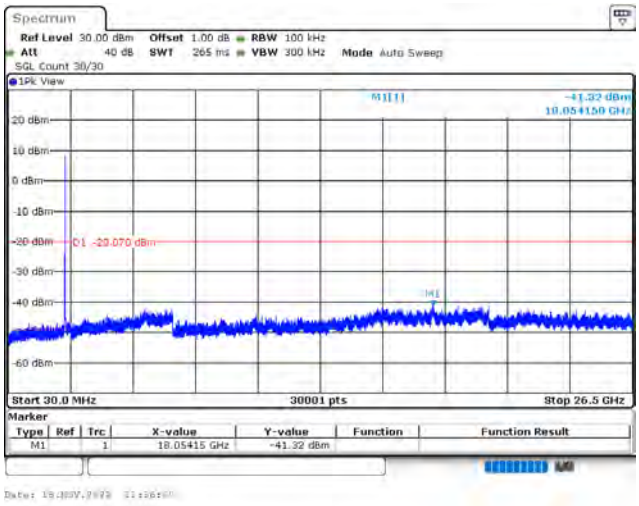
802.11g / Ant. 0 / 2412 MHz



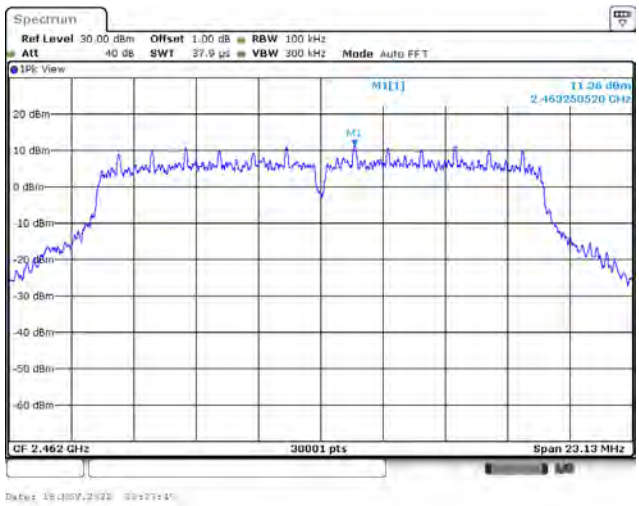


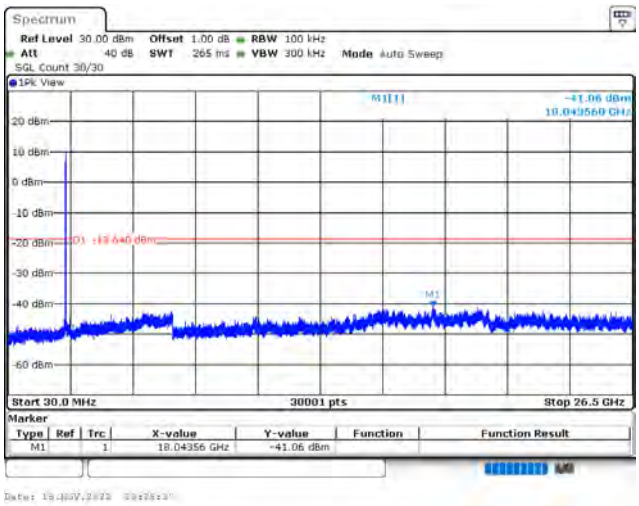
802.11g / Ant. 0 / 2437 MHz



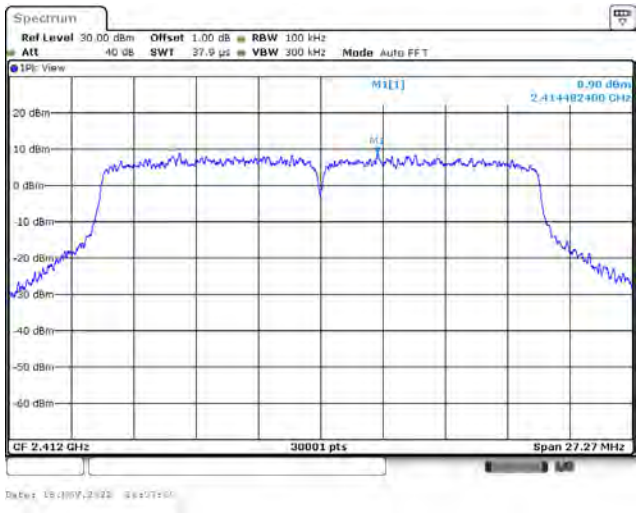


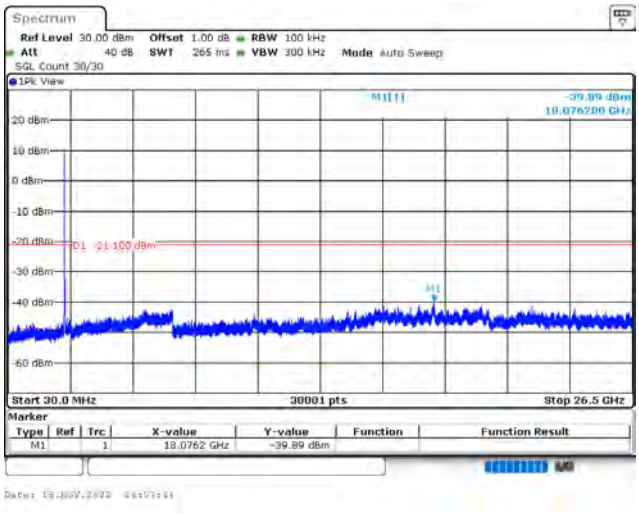
802.11g / Ant. 0 / 2462 MHz



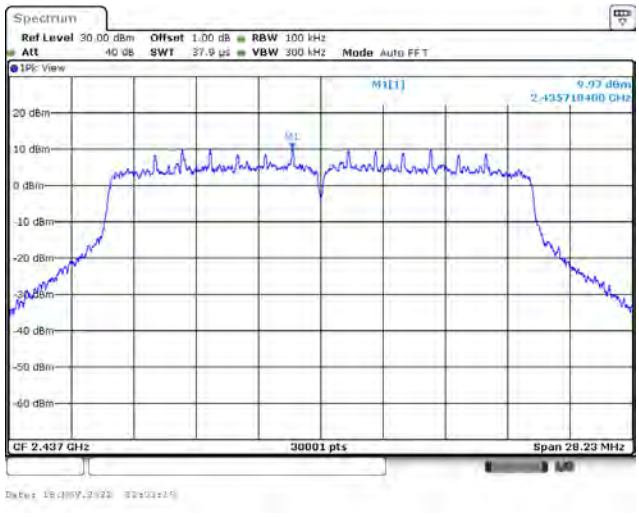


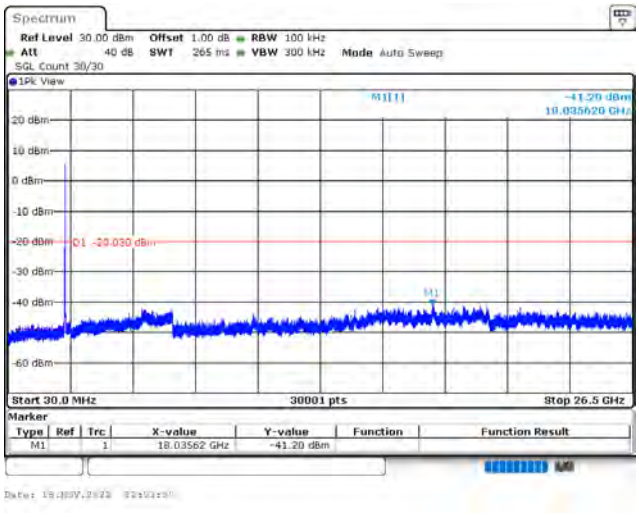
802.11ax (20 MHz) / Ant. 0 / 2412 MHz



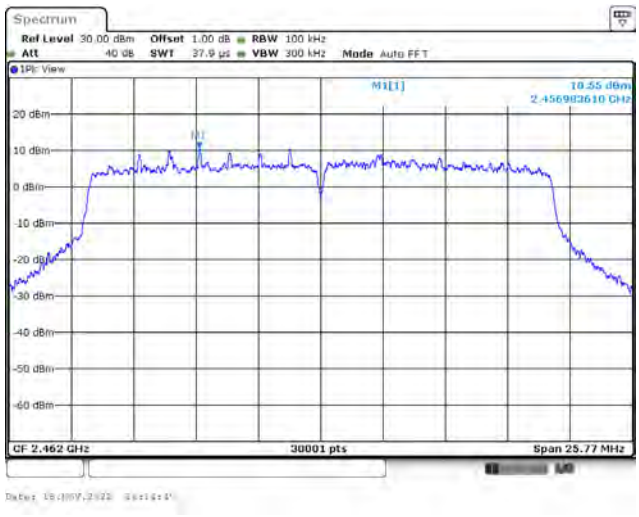


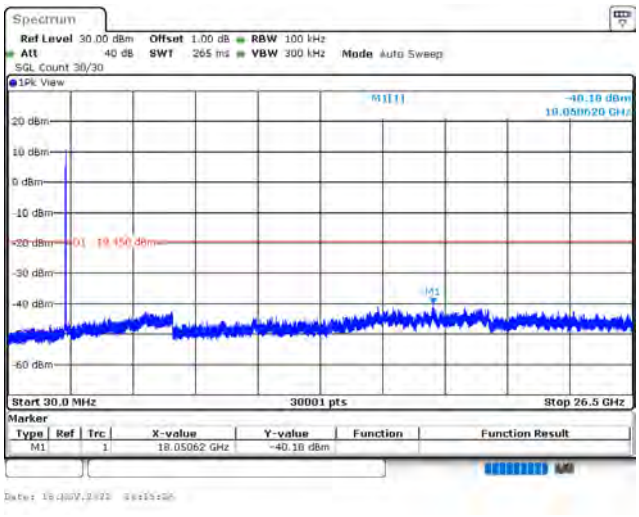
802.11ax (20 MHz) / Ant. 0 / 2437 MHz



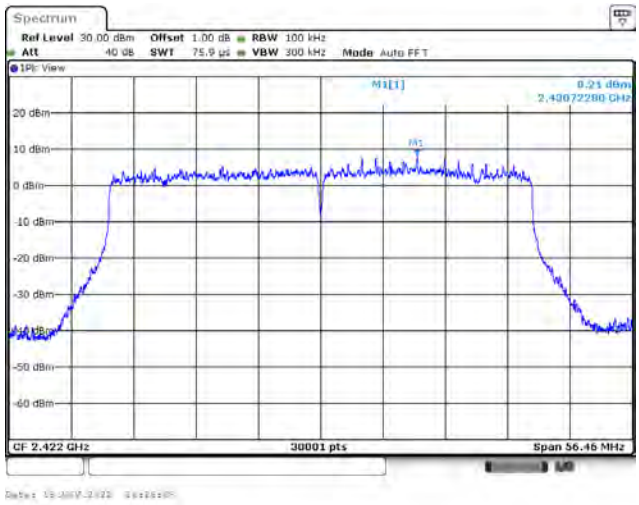


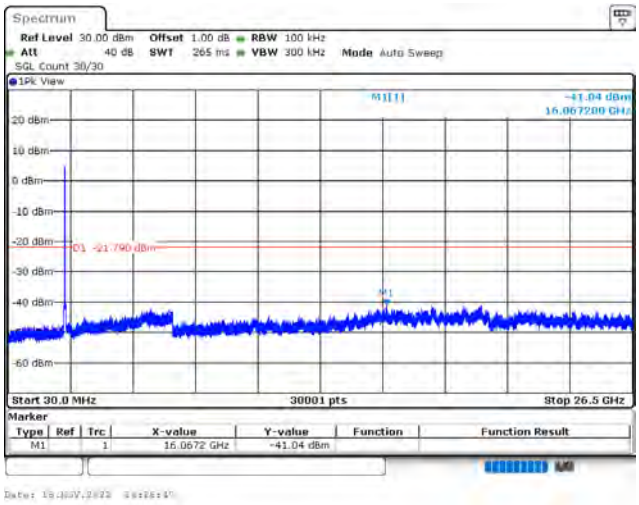
802.11ax (20 MHz) / Ant. 0 / 2462 MHz



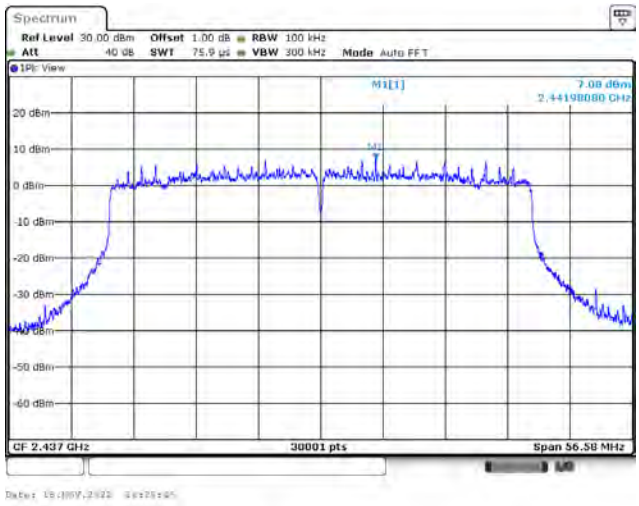


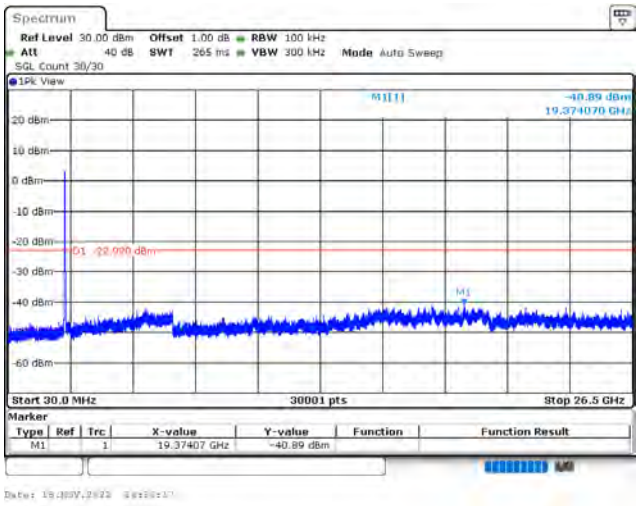
802.11ax (40 MHz) / Ant. 0 / 2422 MHz



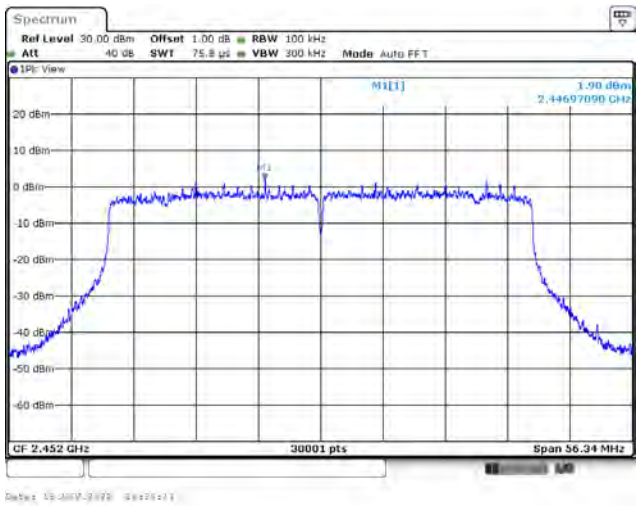


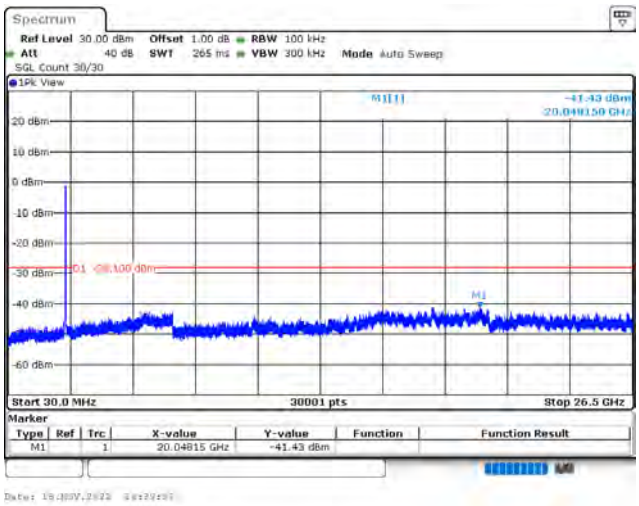
802.11ax (40 MHz) / Ant. 0 / 2437 MHz



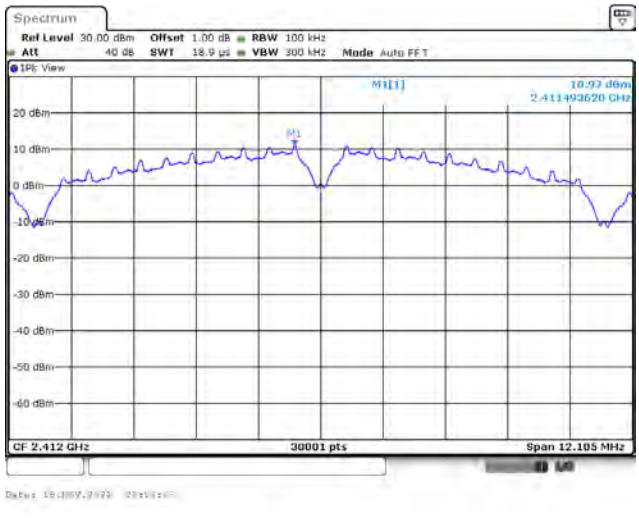


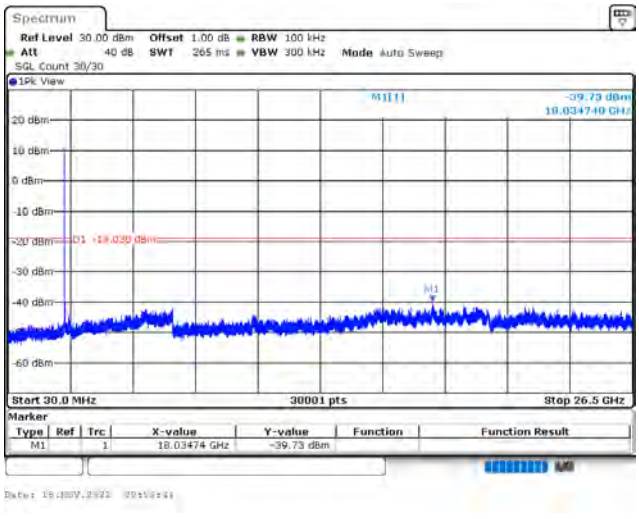
802.11ax (40 MHz) / Ant. 0 / 2452 MHz



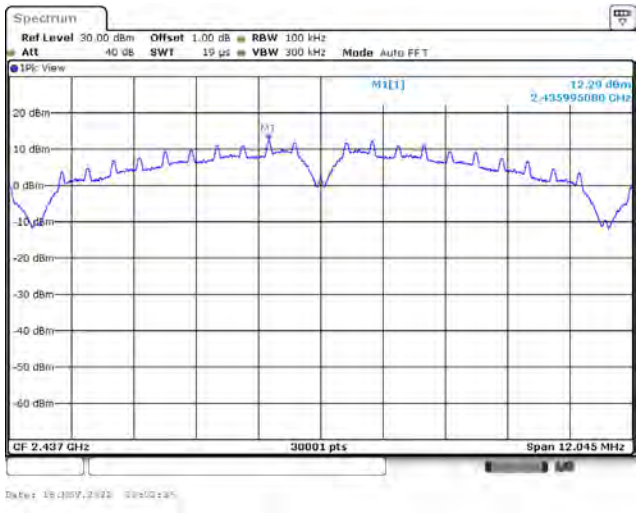


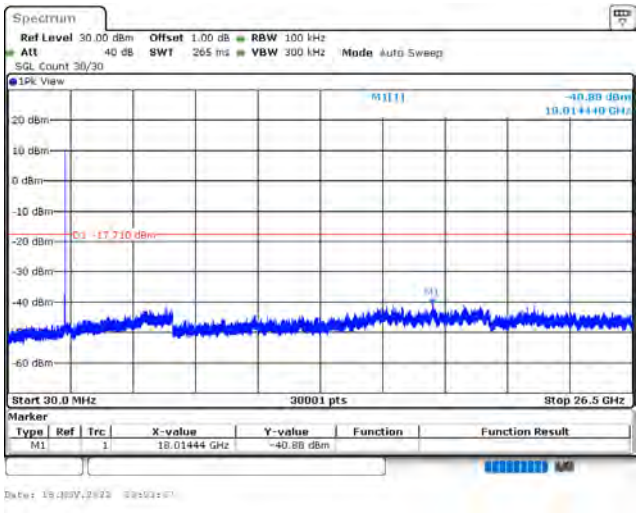
802.11b / Ant. 1 / 2412 MHz



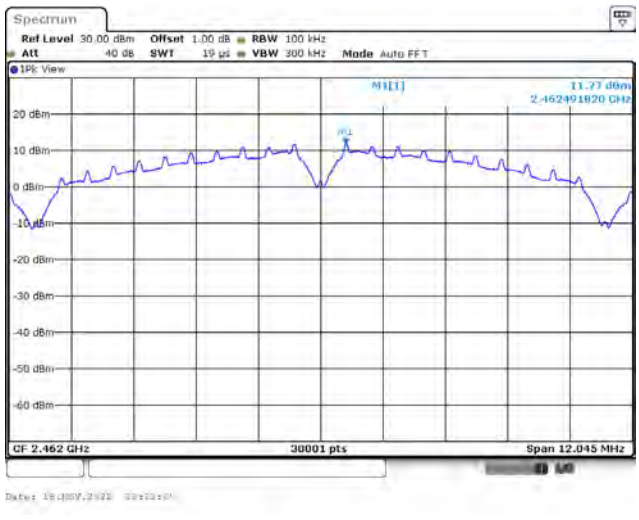


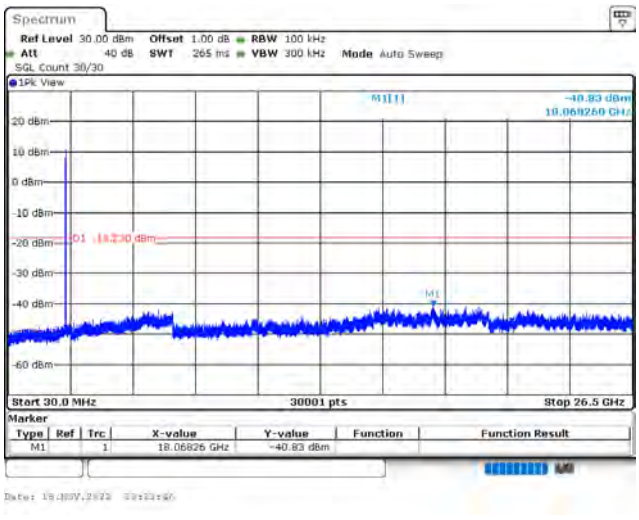
802.11b / Ant. 1 / 2437 MHz



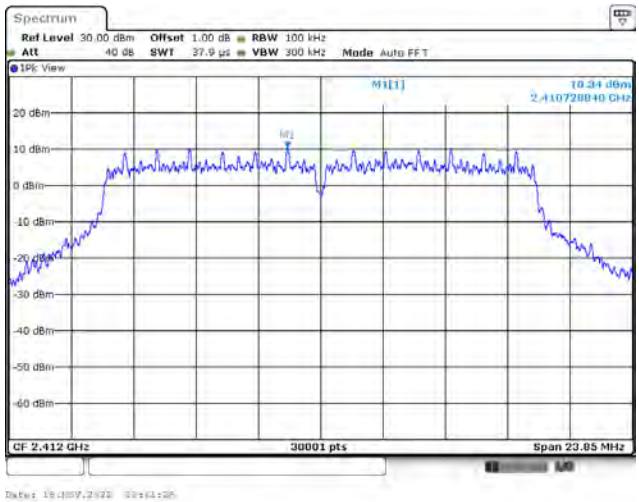


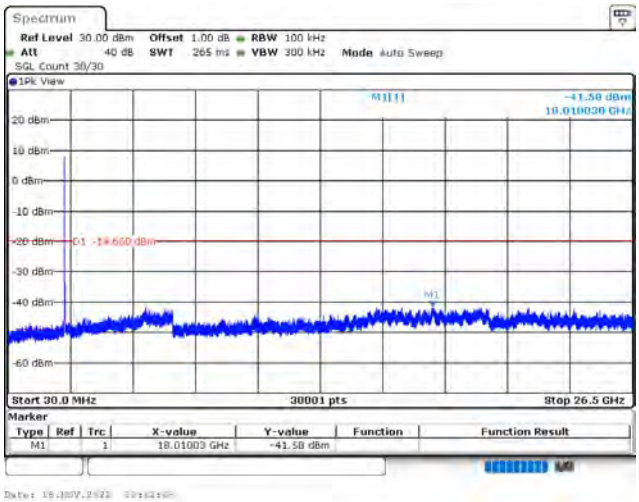
802.11b / Ant. 1 / 2462 MHz



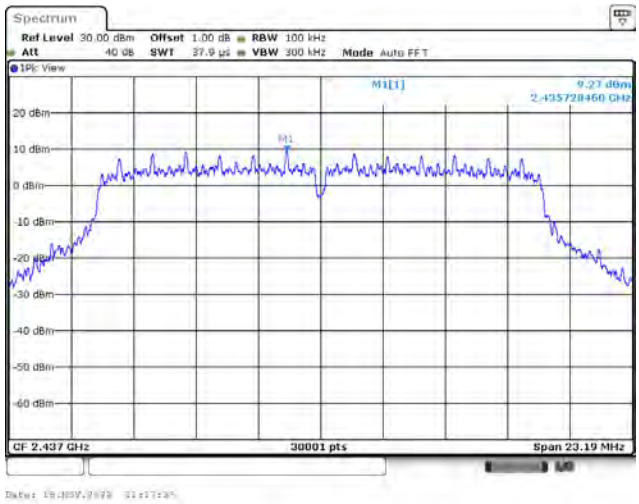


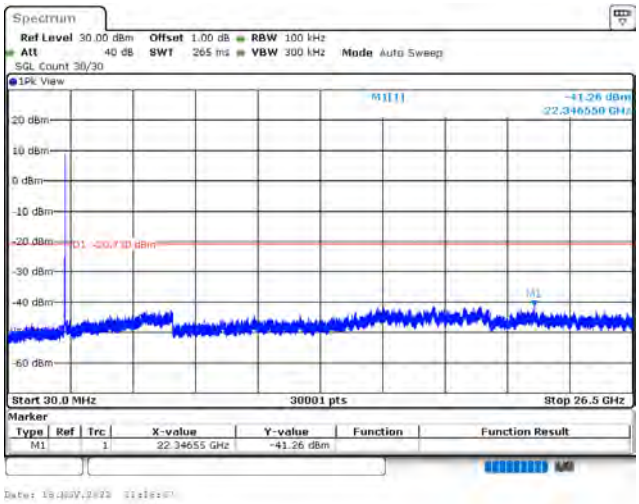
802.11g / Ant. 1 / 2412 MHz



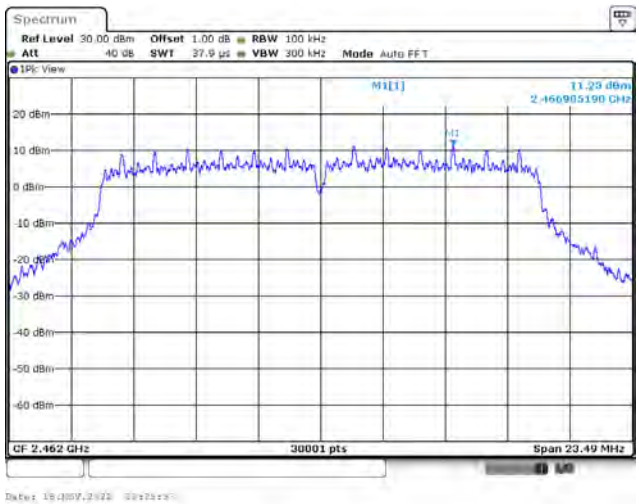


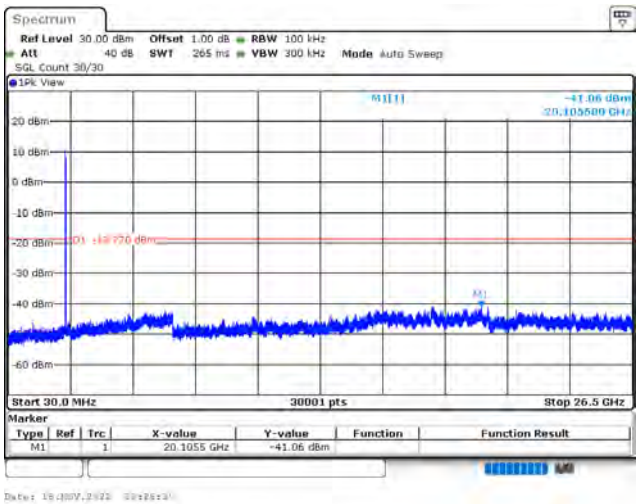
802.11g / Ant. 1 / 2437 MHz



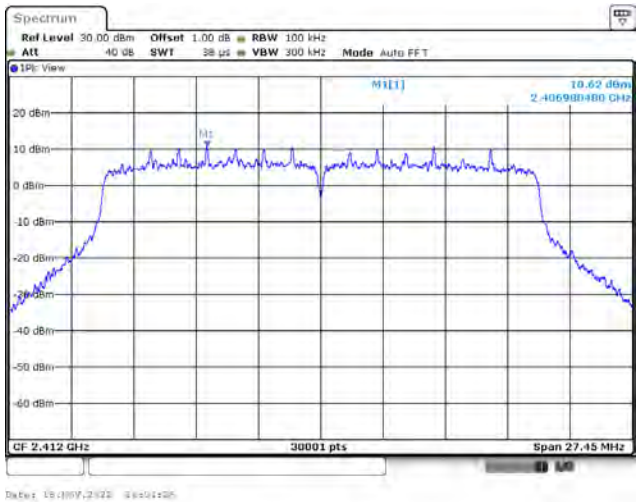


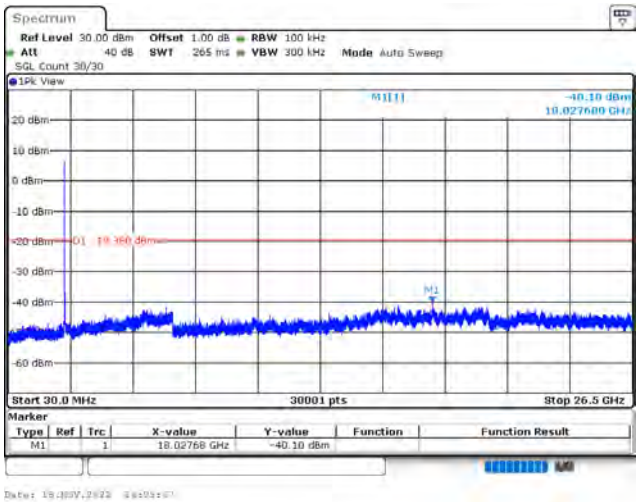
802.11g / Ant. 1 / 2462 MHz



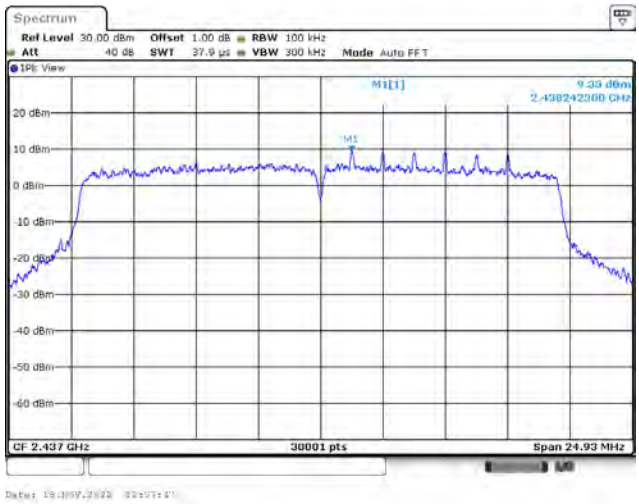


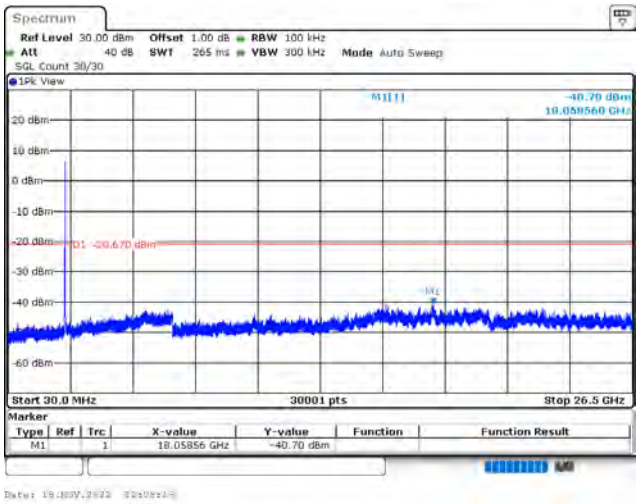
802.11ax (20 MHz) / Ant. 1 / 2412 MHz



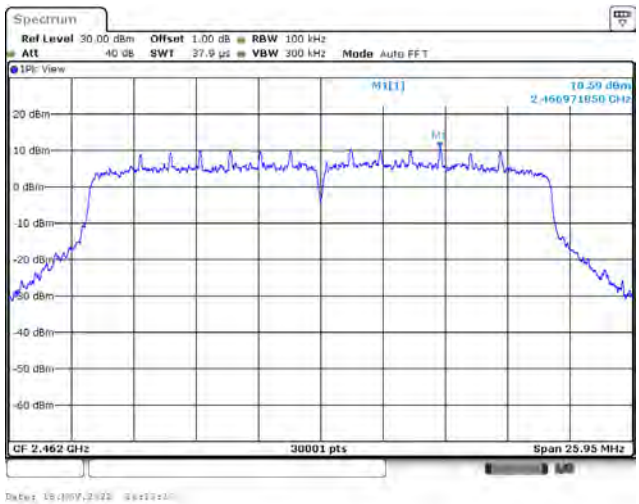


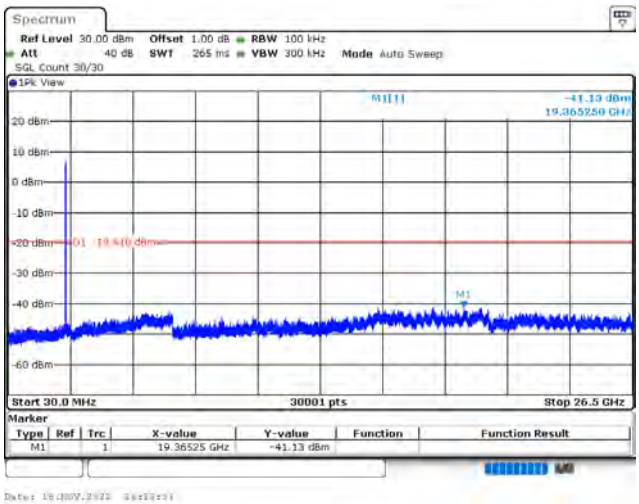
802.11ax (20 MHz) / Ant. 1 / 2437 MHz



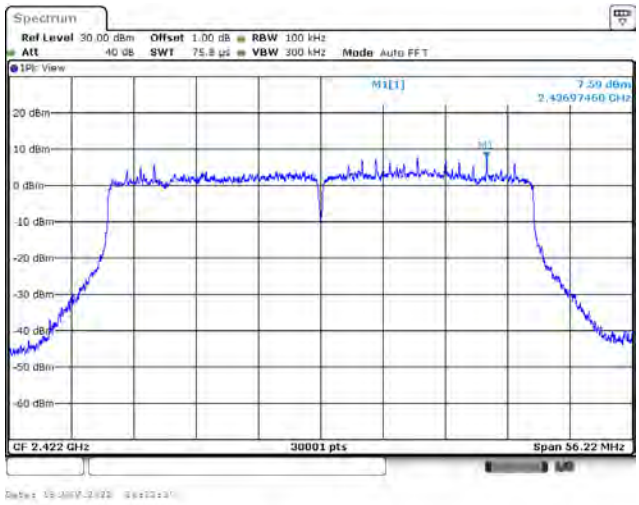


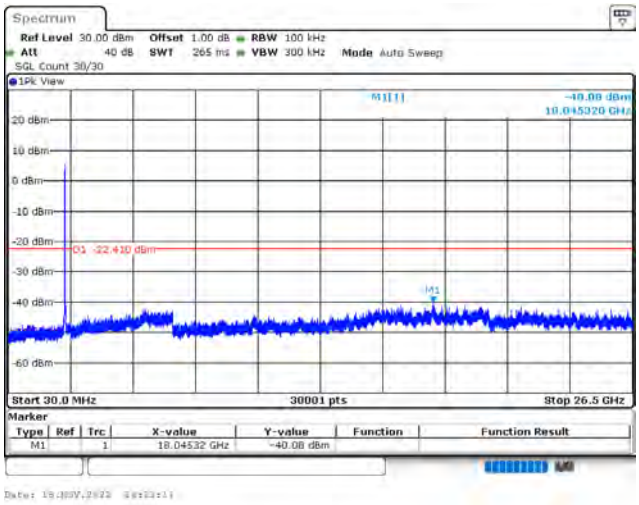
802.11ax (20 MHz) / Ant. 1 / 2462 MHz



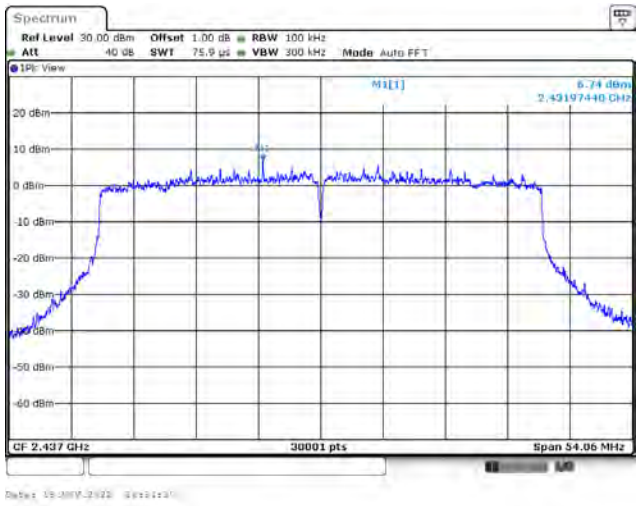


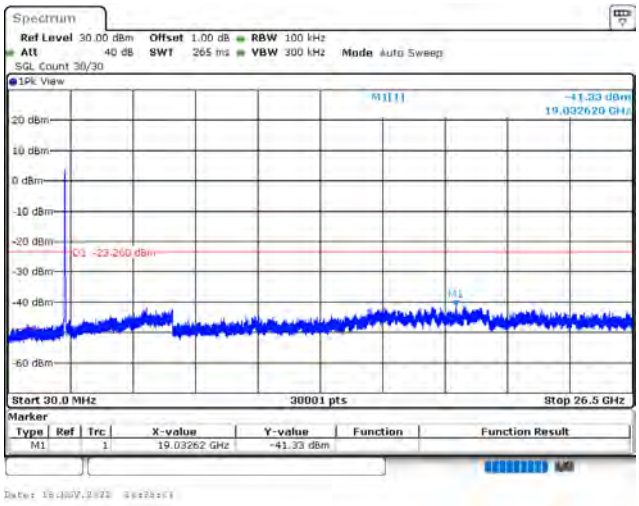
802.11ax (40 MHz) / Ant. 1 / 2422 MHz



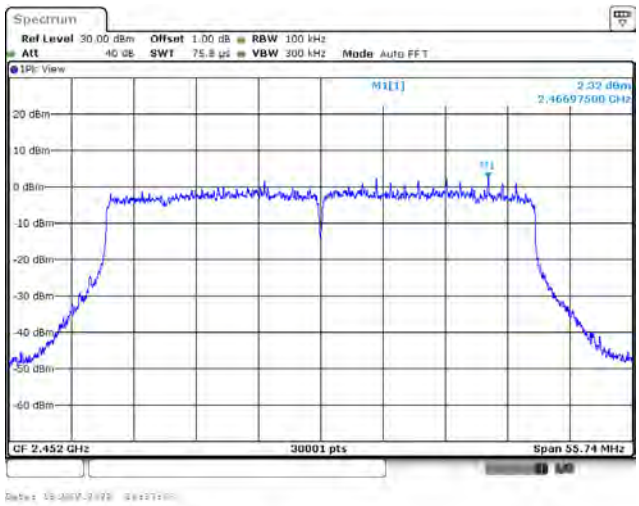


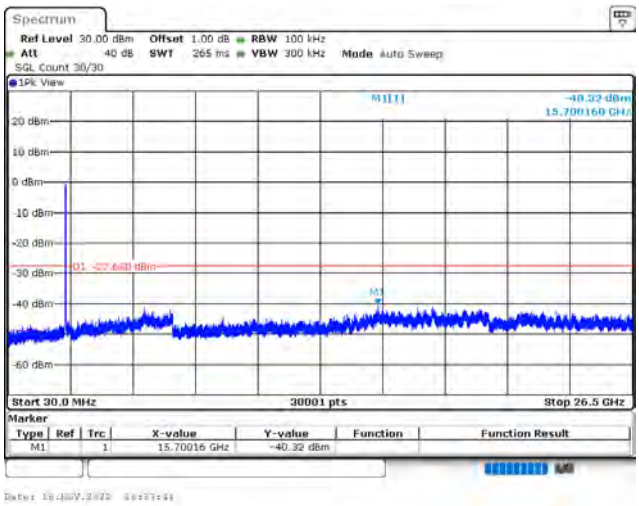
802.11ax (40 MHz) / Ant. 1 / 2437 MHz

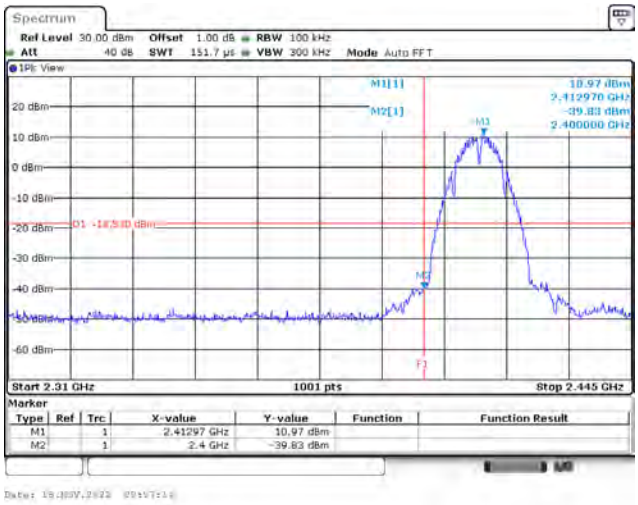
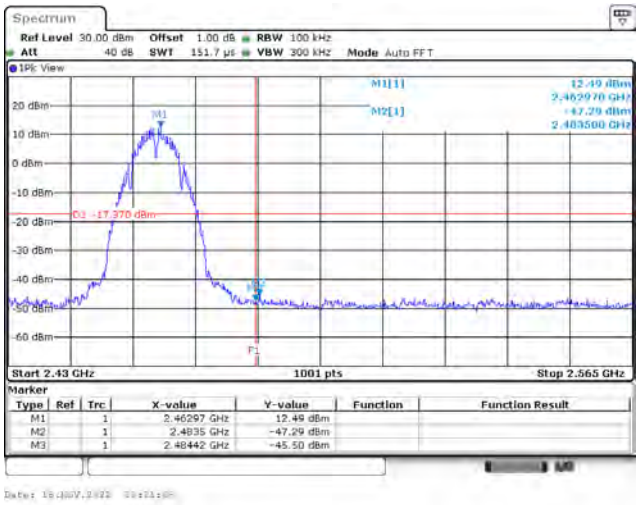
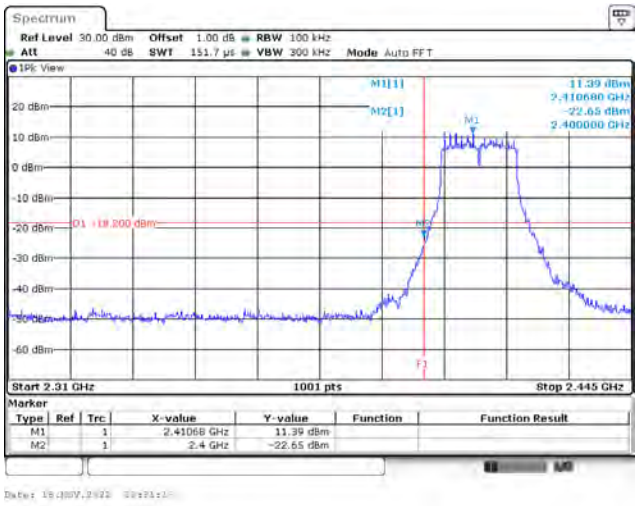
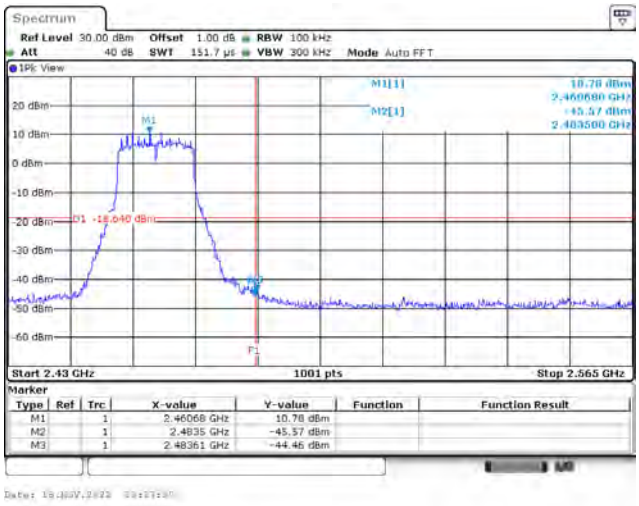
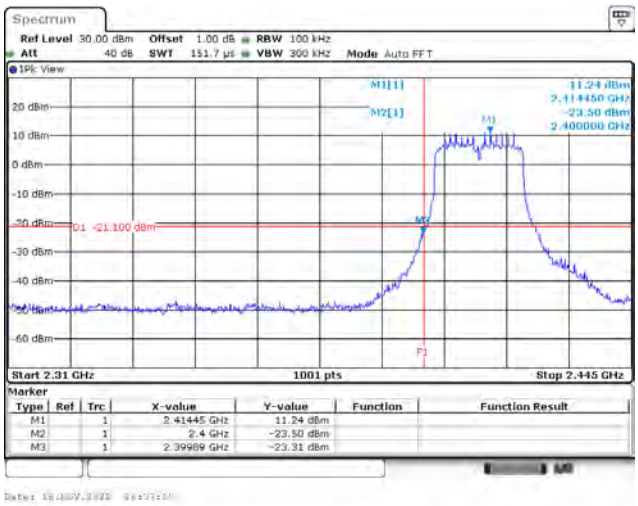
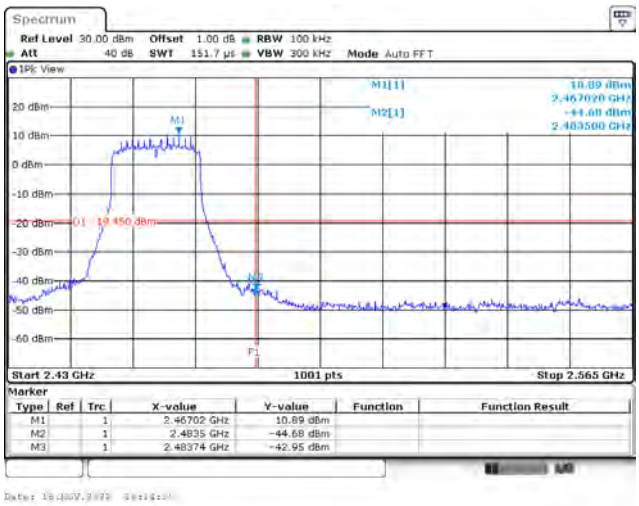


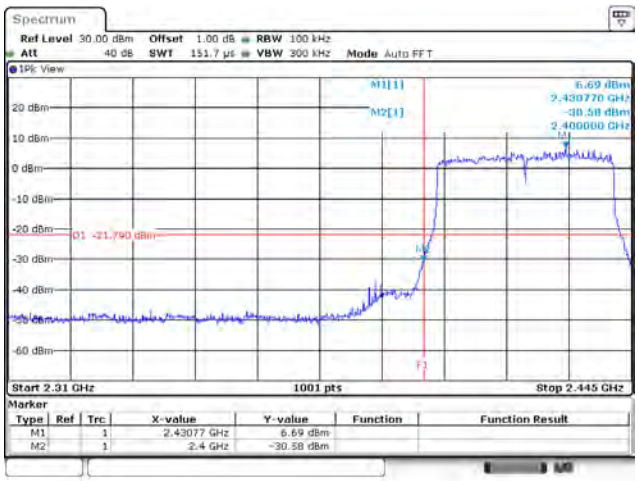
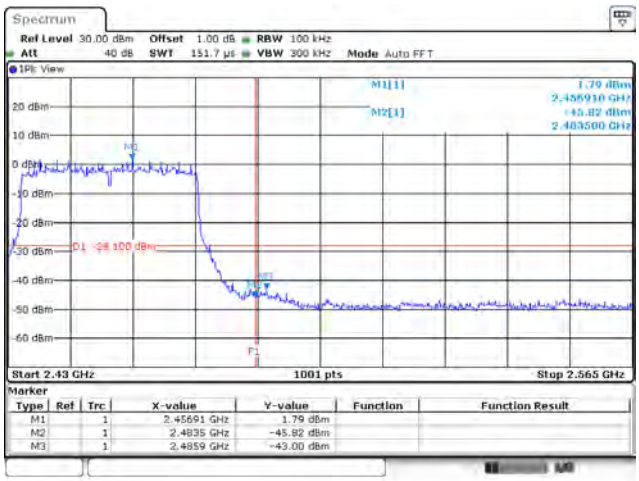
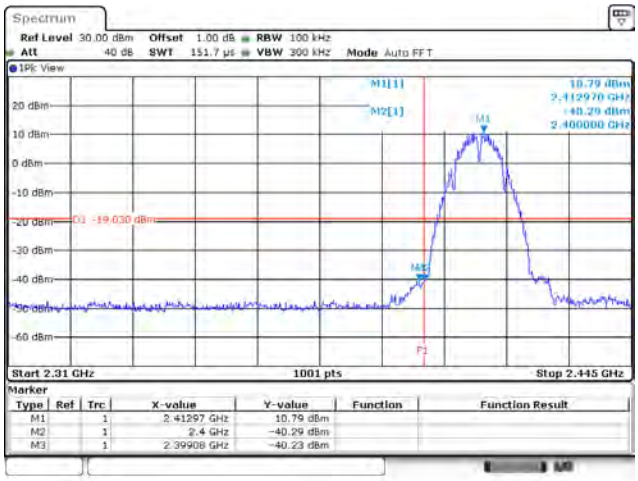
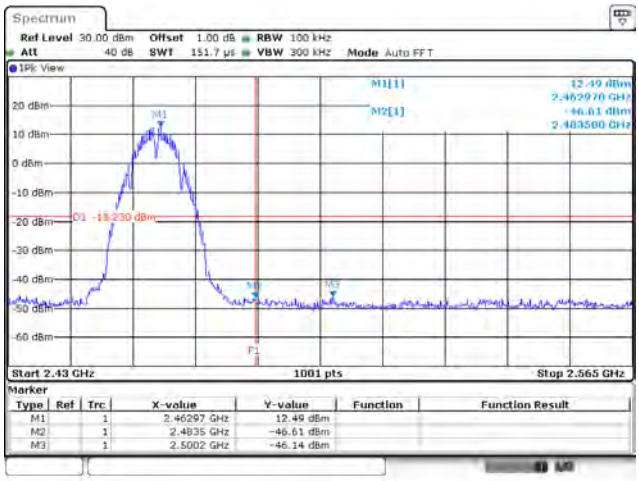
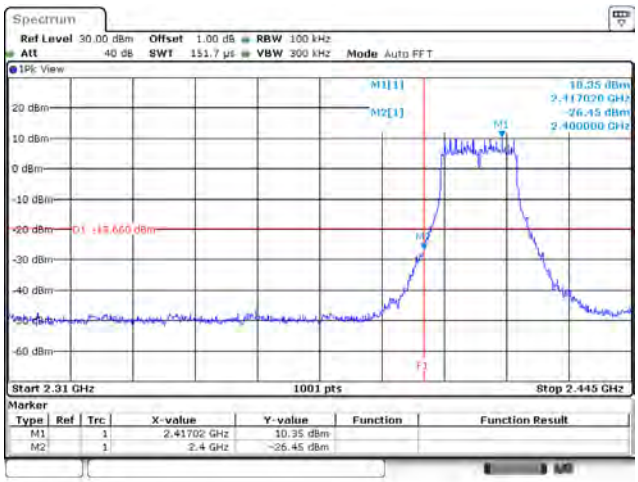
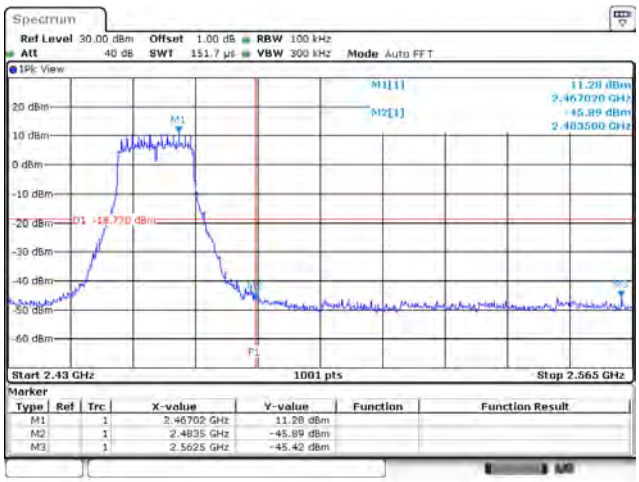


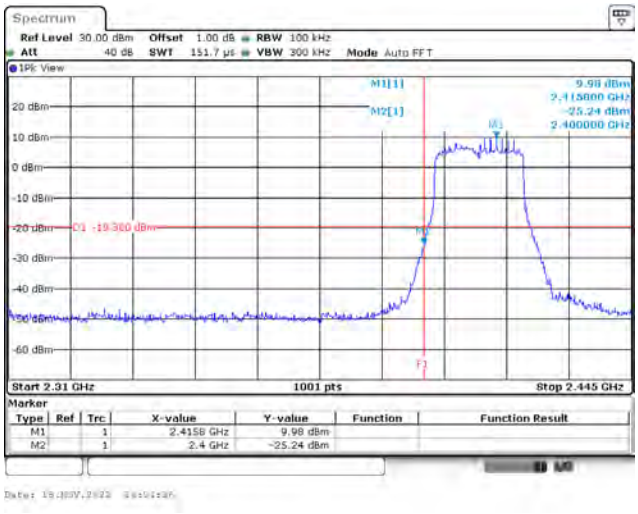
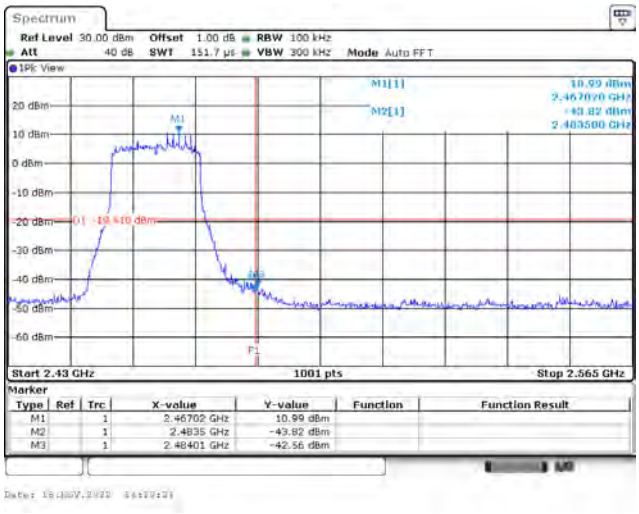
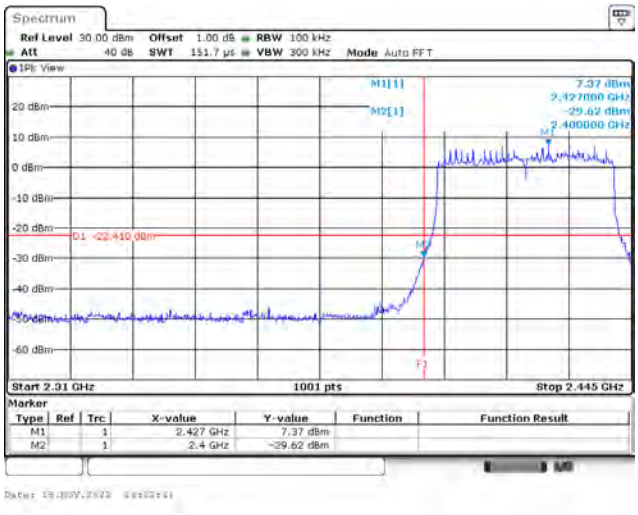
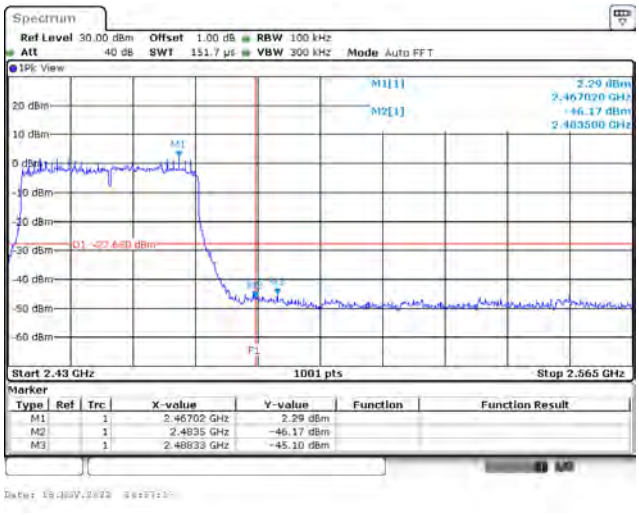
802.11ax (40 MHz) / Ant. 1 / 2452 MHz





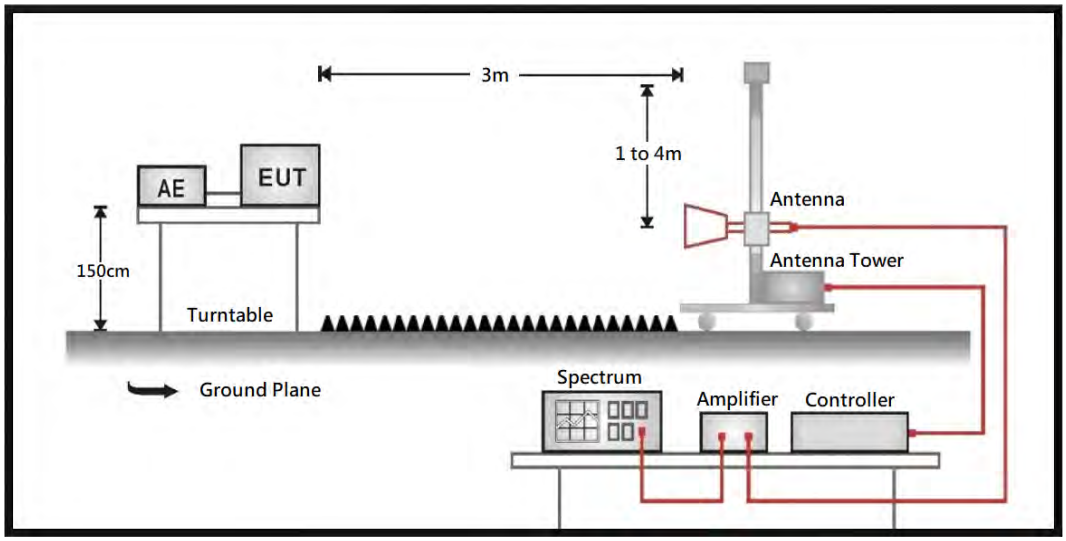
802.11b / Ant. 0 / 2412 MHz (Band Edge)	802.11b / Ant. 0 / 2462 MHz (Band Edge)
	
802.11g / Ant. 0 / 2412 MHz (Band Edge)	**802.11g / Ant. 0 / 2462 MHz (Band Edge)**
	
802.11ax (20 MHz) / Ant. 0 / 2412 MHz (Band Edge)	**802.11ax (20 MHz) / Ant. 0 / 2462 MHz (Band Edge)**
	

802.11ax (40 MHz) / Ant. 0 / 2422 MHz (Band Edge)	802.11ax (40 MHz) / Ant. 0 / 2452 MHz (Band Edge)
	
802.11b / Ant. 1 / 2412 MHz (Band Edge)	**802.11b / Ant. 1 / 2462 MHz (Band Edge)**
	
802.11g / Ant. 1 / 2412 MHz (Band Edge)	**802.11g / Ant. 1 / 2462 MHz (Band Edge)**
	

802.11ax (20 MHz) / Ant. 1 / 2412 MHz (Band Edge)	802.11ax (20 MHz) / Ant. 1 / 2462 MHz (Band Edge)
	
802.11ax (40 MHz) / Ant. 1 / 2422 MHz (Band Edge)	**802.11ax (40 MHz) / Ant. 1 / 2452 MHz (Band Edge)**
	

6. Radiated Emission Band Edge

6.1. Test Setup



6.2. Test Limit

Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 30 dB below the level of the fundamental or to the general radiated emission limit in paragraph 15.209, whichever is the lesser attenuation.

Frequency (MHz)	Field strength (uV/m)	Field strength (dBuV/m)	Measurement distance (m)
30 - 88	100	40	3
88 - 216	150	43.5	3
216 - 960	200	46	3
Above 960	500	54	3

Remarks:

1. Field strength (dBuV/m) = 20 log Field strength (uV/m)
2. In the Above Table, the tighter limit applies at the band edges.
3. Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system

6.3. Test Procedure

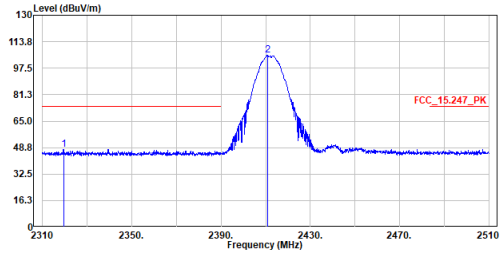
The EUT was setup according to ANSI C63.10: 2013 and tested according to the FCC KDB 558074 D01 v05r02 for compliance to FCC 47CFR 15.247 requirements.
The EUT and its simulators are placed on a turn table which is 1.5 meter above ground. The turn table can rotate 360 degrees to determine the position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

6.5. Test Result of Radiated Emission Band Edge

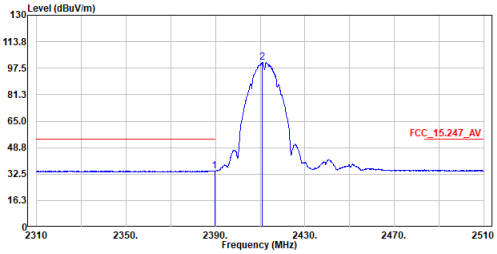
Site :HC-CB04
Condition :3m ,Horizontal
Mode :b_TX_2412MHz
Test By :Gary



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	2319.500	47.40	74.00	-26.60	34.07	13.33	Peak
2	2410.900	105.29	------	------	92.16	13.13	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

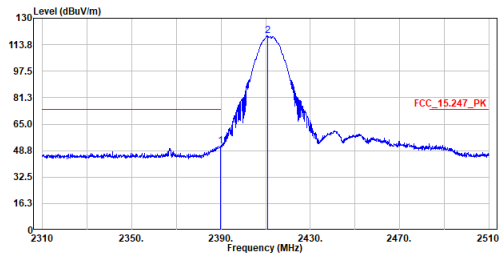
Site :HC-CB04
Condition :3m ,Horizontal
Mode :b_TX_2412MHz
Test By :Gary



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	2389.600	34.54	54.00	-19.46	21.38	13.16	Average
2	2411.000	100.99	------	------	87.86	13.13	Average

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

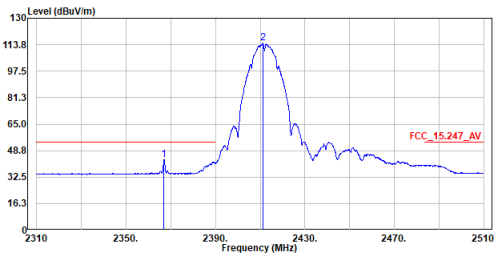
Site :HC-CB04
Condition :3m ,Vertical
Mode :b_TX_2412MHz
Test By :Gary



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	2389.800	51.58	74.00	-22.42	38.42	13.16	Peak
2	2410.900	119.03	------	------	105.90	13.13	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

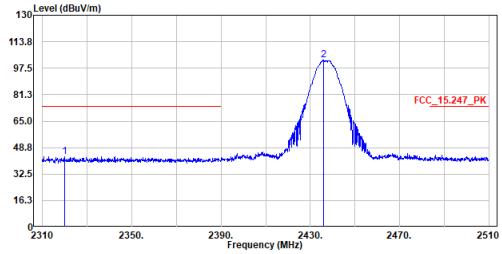
Site :HC-CB04
Condition :3m ,Vertical
Mode :b_TX_2412MHz
Test By :Gary



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	2367.000	43.12	54.00	-10.88	29.87	13.25	Average
2	2411.200	114.65	------	------	101.52	13.13	Average

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

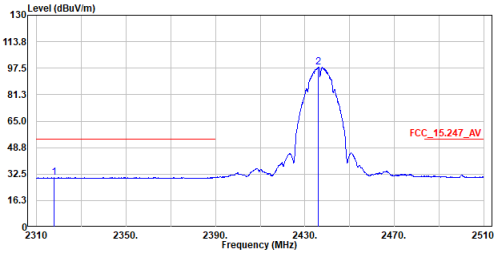
Site :HC-CB04
Condition :3m ,Horizontal
Mode :b_TX_2437MHz
Test By :Gary



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	2319.800	43.15	74.00	-30.85	29.82	13.33	Peak
2	2435.900	102.41	------	------	89.31	13.10	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

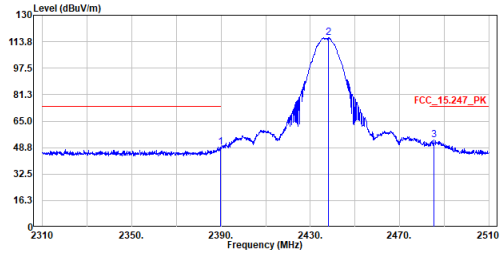
Site :HC-CB04
Condition :3m ,Horizontal
Mode :b_TX_2437MHz
Test By :Gary



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	2317.800	30.52	54.00	-23.48	17.18	13.34	Average
2	2436.100	98.20	------	------	85.10	13.10	Average

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

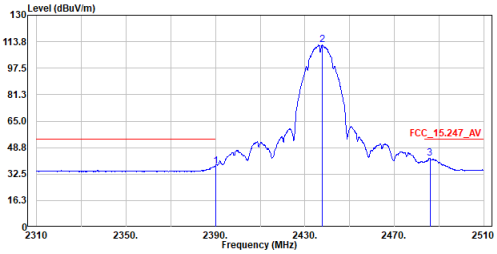
Site :HC-CB04
Condition :3m ,Vertical
Mode :b_TX_2437MHz
Test By :Gary



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	2389.800	48.92	74.00	-25.08	35.76	13.16	Peak
2	2438.200	116.06	------	------	102.97	13.09	Peak
3	2485.400	53.49	74.00	-20.51	40.18	13.31	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

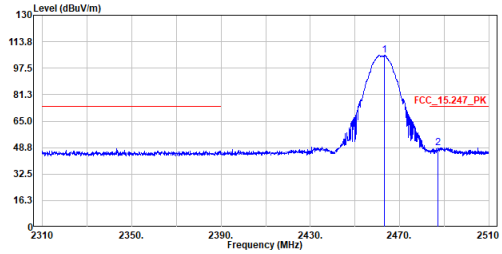
Site :HC-CB04
Condition :3m ,Vertical
Mode :b_TX_2437MHz
Test By :Gary



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	2390.000	37.52	54.00	-16.48	24.36	13.16	Average
2	2437.700	111.78	------	------	98.69	13.09	Average
3	2485.900	42.19	54.00	-11.81	28.88	13.31	Average

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

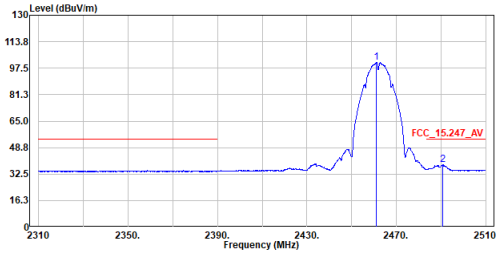
Site :HC-CB04
Condition :3m ,Horizontal
Mode :b_TX_2462MHz
Test By :Gary



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	2463.200	105.32	------	------	92.16	13.16	Peak
2	2487.300	48.71	74.00	-25.29	35.38	13.33	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

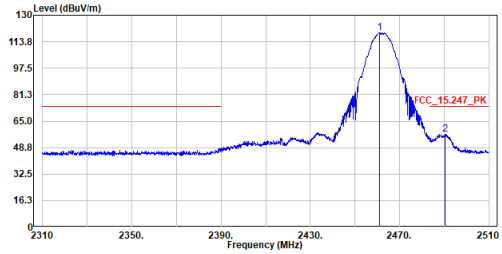
Site :HC-CB04
Condition :3m ,Horizontal
Mode :b_TX_2462MHz
Test By :Gary



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	2461.100	101.13	------	------	87.99	13.14	Average
2	2490.900	38.23	54.00	-15.77	24.88	13.35	Average

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

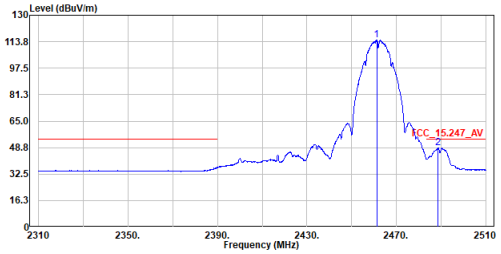
Site :HC-CB04
Condition :3m ,Vertical
Mode :b_TX_2462MHz
Test By :Gary



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	2461.000	119.21	------	------	106.07	13.14	Peak
2	2490.400	56.95	74.00	-17.05	43.61	13.34	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

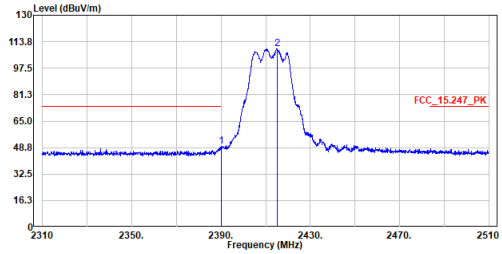
Site :HC-CB04
Condition :3m ,Vertical
Mode :b_TX_2462MHz
Test By :Gary



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	2461.200	114.94	------	------	101.80	13.14	Average
2	2488.700	48.64	54.00	-5.36	35.31	13.33	Average

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

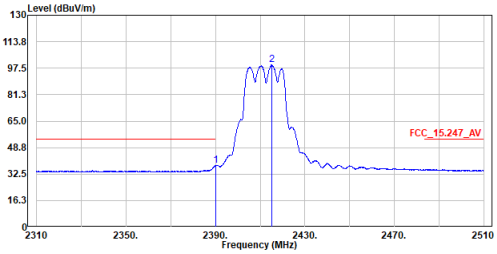
Site :HC-CB04
Condition :3m ,Horizontal
Mode :g_TX_2412MHz
Test By :Gary



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	2390.000	49.45	74.00	-24.55	36.29	13.16	Peak
2	2415.100	109.39	------	------	96.28	13.11	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

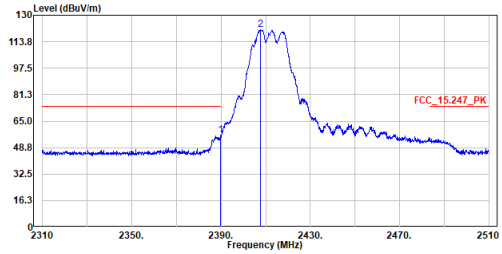
Site :HC-CB04
Condition :3m ,Horizontal
Mode :g_TX_2412MHz
Test By :Gary



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	2390.000	37.65	54.00	-16.35	24.49	13.16	Average
2	2415.200	99.47	------	------	86.36	13.11	Average

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

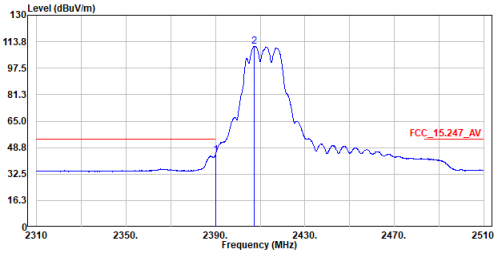
Site :HC-CB04
Condition :3m ,Vertical
Mode :g_TX_2412MHz
Test By :Gary



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	2389.900	56.22	74.00	-17.78	43.06	13.16	Peak
2	2407.600	120.97	------	------	107.85	13.12	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

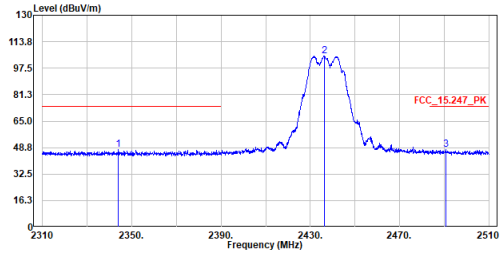
Site :HC-CB04
Condition :3m ,Vertical
Mode :g_TX_2412MHz
Test By :Gary



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	2390.000	44.39	54.00	-9.61	31.23	13.16	Average
2	2407.400	110.96	------	------	97.84	13.12	Average

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

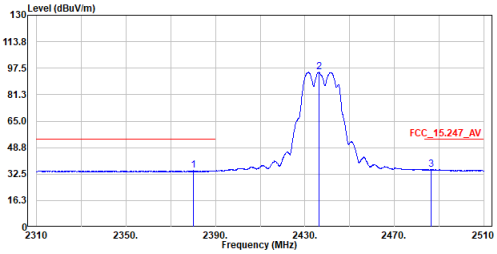
Site :HC-CB04
Condition :3m ,Horizontal
Mode :g_TX_2437MHz
Test By :Gary



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	2344.100	47.35	74.00	-26.65	34.05	13.30	Peak
2	2436.300	105.21	------	------	92.12	13.09	Peak
3	2490.600	47.61	74.00	-26.39	34.27	13.34	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

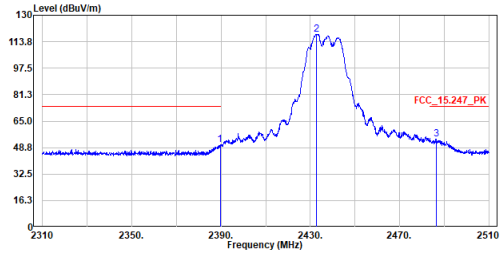
Site :HC-CB04
Condition :3m ,Horizontal
Mode :g_TX_2437MHz
Test By :Gary



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	2380.000	34.59	54.00	-19.41	21.39	13.20	Average
2	2436.200	95.03	------	------	81.93	13.10	Average
3	2486.500	35.26	54.00	-18.74	21.94	13.32	Average

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

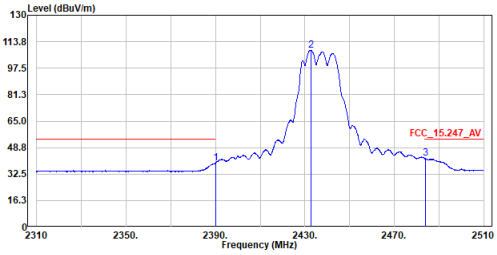
Site :HC-CB04
Condition :3m ,Vertical
Mode :g_TX_2437MHz
Test By :Gary



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	2389.600	50.49	74.00	-23.51	37.33	13.16	Peak
2	2432.600	118.42	------	------	105.33	13.09	Peak
3	2486.600	54.04	74.00	-19.96	40.72	13.32	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

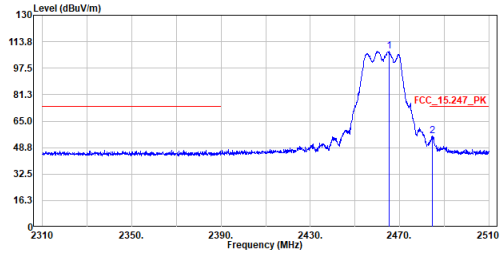
Site :HC-CB04
Condition :3m ,Vertical
Mode :g_TX_2437MHz
Test By :Gary



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	2390.000	39.31	54.00	-14.69	26.15	13.16	Average
2	2432.600	108.41	------	------	95.32	13.09	Average
3	2483.800	42.13	54.00	-11.87	28.83	13.30	Average

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

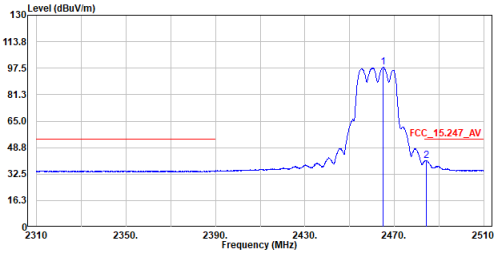
Site :HC-CB04
Condition :3m ,Horizontal
Mode :g_TX_2462MHz
Test By :Gary



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	2465.200	108.16	------	------	94.99	13.17	Peak
2	2484.600	55.69	74.00	-18.31	42.38	13.31	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

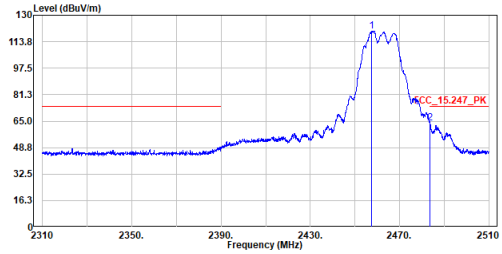
Site :HC-CB04
Condition :3m ,Horizontal
Mode :g_TX_2462MHz
Test By :Gary



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	2465.100	98.09	------	------	84.92	13.17	Average
2	2484.200	40.94	54.00	-13.06	27.64	13.30	Average

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

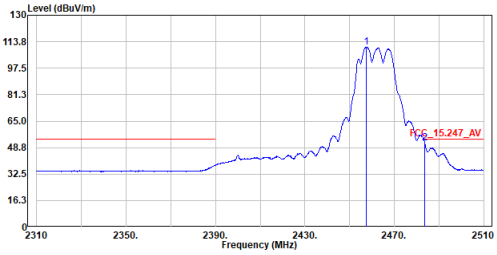
Site :HC-CB04
Condition :3m ,Vertical
Mode :g_TX_2462MHz
Test By :Gary



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	2457.500	120.36	------	------	107.24	13.12	Peak
2	2483.600	63.71	74.00	-10.29	50.42	13.29	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

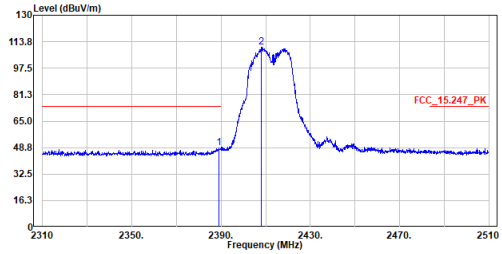
Site :HC-CB04
Condition :3m ,Vertical
Mode :g_TX_2462MHz
Test By :Gary



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	2457.400	110.47	------	------	97.35	13.12	Average
2	2483.600	51.55	54.00	-2.45	38.26	13.29	Average

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

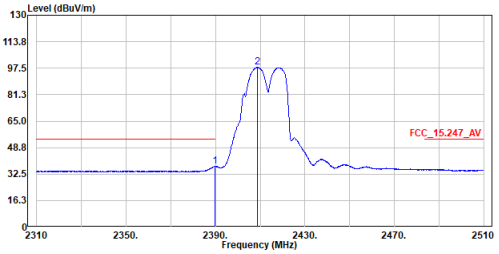
Site :HC-CB04
Condition :3m ,Horizontal
Mode :ax20_TX_2412MHz
Test By :Gary



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	2389.100	48.56	74.00	-25.44	35.39	13.17	Peak
2	2408.200	110.24	------	------	97.12	13.12	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

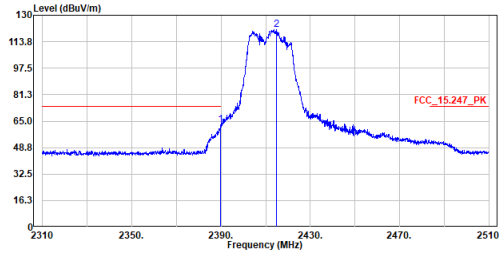
Site :HC-CB04
Condition :3m ,Horizontal
Mode :ax20_TX_2412MHz
Test By :Gary



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	2389.900	37.28	54.00	-16.72	24.12	13.16	Average
2	2408.600	97.97	------	------	84.85	13.12	Average

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

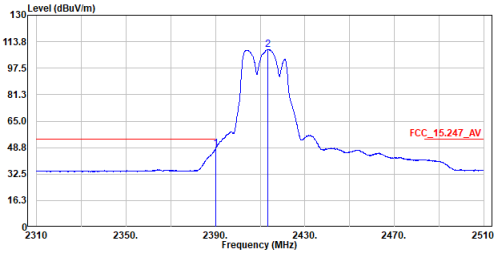
Site :HC-CB04
Condition :3m ,Vertical
Mode :ax20_TX_2412MHz
Test By :Gary



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	2389.800	62.57	74.00	-11.43	49.41	13.16	Peak
2	2414.800	121.38	------	------	108.27	13.11	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

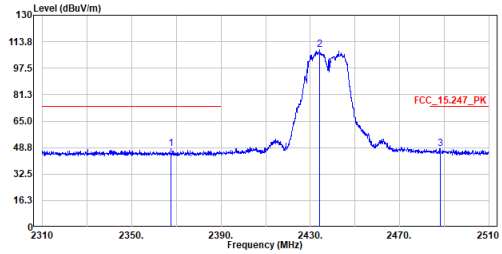
Site :HC-CB04
Condition :3m ,Vertical
Mode :ax20_TX_2412MHz
Test By :Gary



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	2390.000	48.17	54.00	-5.83	35.01	13.16	Average
2	2413.500	109.11	------	------	95.99	13.12	Average

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

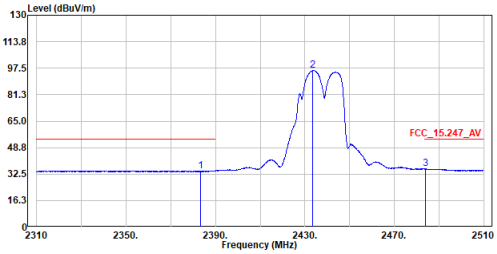
Site :HC-CB04
Condition :3m ,Horizontal
Mode :ax20_TX_2437MHz
Test By :Gary



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	2367.500	48.14	74.00	-25.86	34.89	13.25	Peak
2	2434.200	108.72	------	------	95.64	13.08	Peak
3	2488.100	48.22	74.00	-25.78	34.89	13.33	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

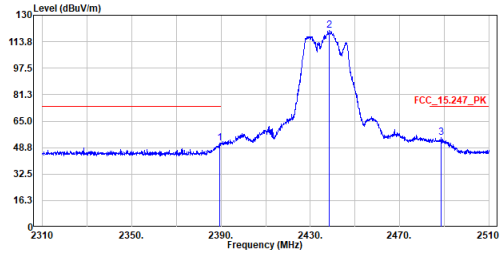
Site :HC-CB04
Condition :3m ,Horizontal
Mode :ax20_TX_2437MHz
Test By :Gary



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	2383.400	34.54	54.00	-19.46	21.36	13.18	Average
2	2433.600	96.13	------	------	83.04	13.09	Average
3	2483.800	35.60	54.00	-18.40	22.30	13.30	Average

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

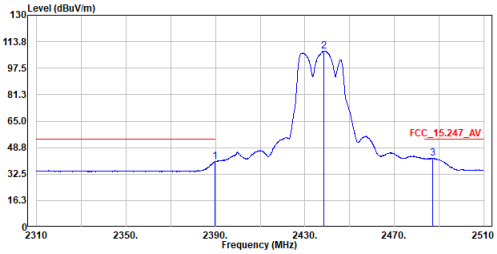
Site :HC-CB04
Condition :3m ,Vertical
Mode :ax20_TX_2437MHz
Test By :Gary



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	2389.300	51.46	74.00	-22.54	38.30	13.16	Peak
2	2438.400	120.72	------	------	107.63	13.09	Peak
3	2488.500	54.75	74.00	-19.25	41.42	13.33	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

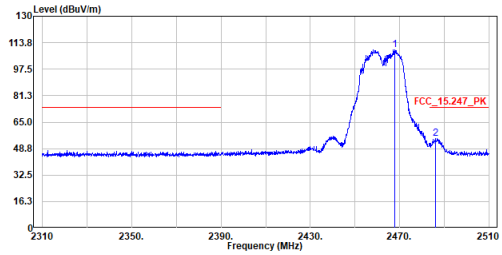
Site :HC-CB04
Condition :3m ,Vertical
Mode :ax20_TX_2437MHz
Test By :Gary



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	2389.900	40.13	54.00	-13.87	26.97	13.16	Average
2	2438.600	108.14	------	------	95.05	13.09	Average
3	2487.000	42.26	54.00	-11.74	28.94	13.32	Average

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

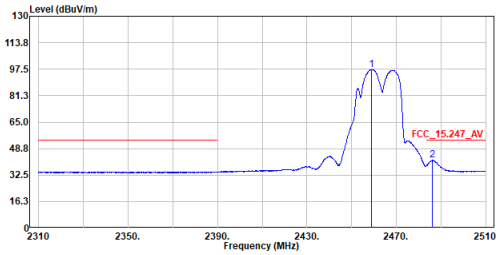
Site :HC-CB04
Condition :3m ,Horizontal
Mode :ax20_TX_2462MHz
Test By :Gary



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	2467.700	109.29	------	------	96.10	13.19	Peak
2	2486.200	54.79	74.00	-19.21	41.48	13.31	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

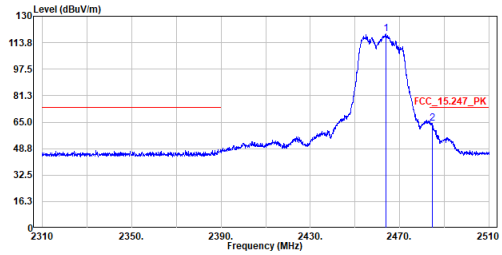
Site :HC-CB04
Condition :3m ,Horizontal
Mode :ax20_TX_2462MHz
Test By :Gary



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	2458.900	97.29	------	------	84.16	13.13	Average
2	2486.200	41.56	54.00	-12.44	28.25	13.31	Average

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

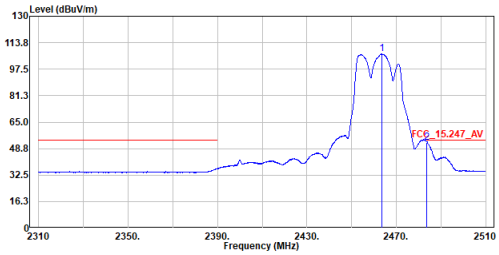
Site :HC-CB04
Condition :3m ,Vertical
Mode :ax20_TX_2462MHz
Test By :Gary



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	2463.900	119.22	------	------	106.05	13.17	Peak
2	2484.500	64.32	74.00	-9.68	51.01	13.31	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

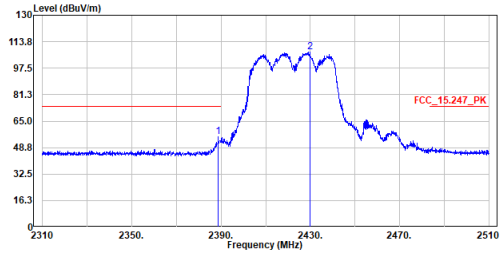
Site :HC-CB04
Condition :3m ,Vertical
Mode :ax20_TX_2462MHz
Test By :Gary



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	2463.500	106.87	------	------	93.71	13.16	Average
2	2483.600	52.66	54.00	-1.34	39.37	13.29	Average

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

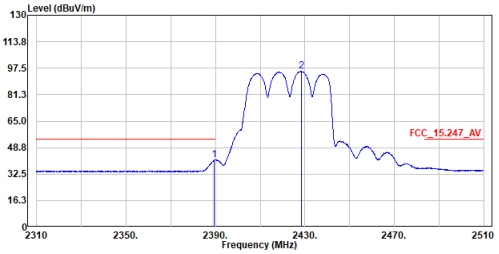
Site :HC-CB04
Condition :3m ,Horizontal
Mode :ax40_TX_2422MHz
Test By :Gary



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	2388.700	55.37	74.00	-18.63	42.20	13.17	Peak
2	2429.800	107.57	------	------	94.47	13.10	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

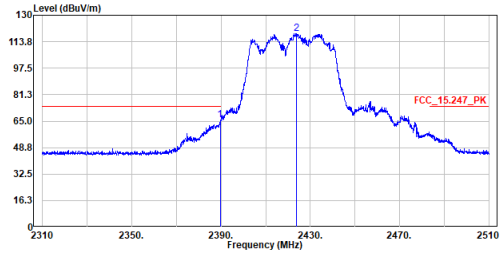
Site :HC-CB04
Condition :3m ,Horizontal
Mode :ax40_TX_2422MHz
Test By :Gary



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	2389.500	41.35	54.00	-12.65	28.19	13.16	Average
2	2428.400	95.61	------	------	82.50	13.11	Average

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

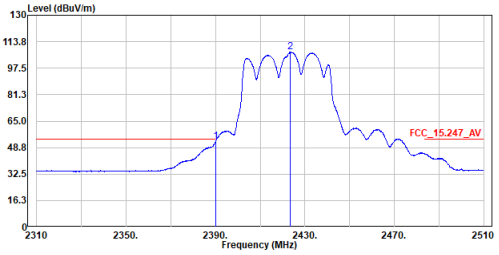
Site :HC-CB04
Condition :3m ,Vertical
Mode :ax40_TX_2422MHz
Test By :Gary



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	2389.600	65.92	74.00	-8.08	52.76	13.16	Peak
2	2423.700	118.89	------	------	105.78	13.11	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

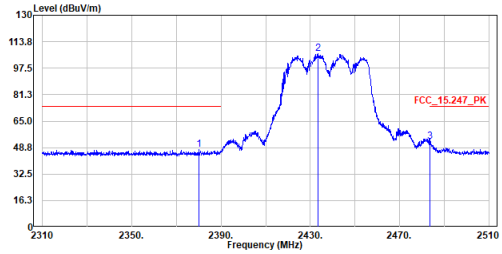
Site :HC-CB04
Condition :3m ,Vertical
Mode :ax40_TX_2422MHz
Test By :Gary



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	2390.000	52.55	54.00	-1.45	39.39	13.16	Average
2	2423.300	107.27	------	------	94.16	13.11	Average

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

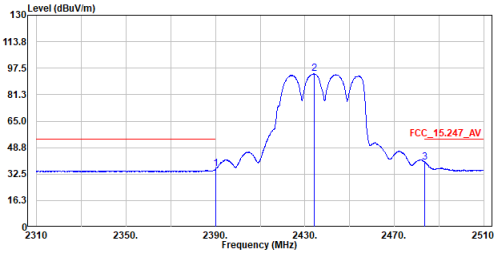
Site :HC-CB04
Condition :3m ,Horizontal
Mode :ax40_TX_2437MHz
Test By :Gary



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	2380.000	47.39	74.00	-26.61	34.19	13.20	Peak
2	2433.500	106.24	------	------	93.15	13.09	Peak
3	2483.700	52.42	74.00	-21.58	39.13	13.29	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

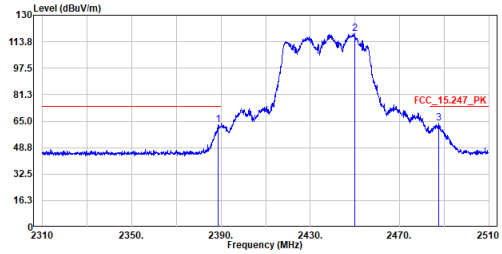
Site :HC-CB04
Condition :3m ,Horizontal
Mode :ax40_TX_2437MHz
Test By :Gary



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	2390.000	35.64	54.00	-18.36	22.48	13.16	Average
2	2434.100	94.05	------	------	80.97	13.08	Average
3	2483.600	39.90	54.00	-14.10	26.61	13.29	Average

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

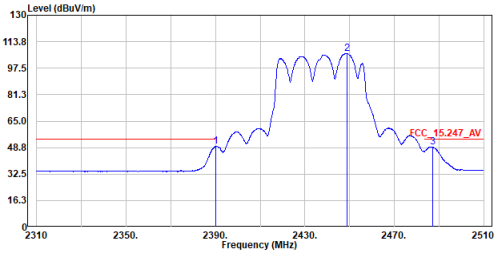
Site :HC-CB04
Condition :3m ,Vertical
Mode :ax40_TX_2437MHz
Test By :Gary



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	2388.800	62.96	74.00	-11.04	49.79	13.17	Peak
2	2449.900	118.89	------	------	105.82	13.07	Peak
3	2487.600	63.76	74.00	-10.24	50.43	13.33	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

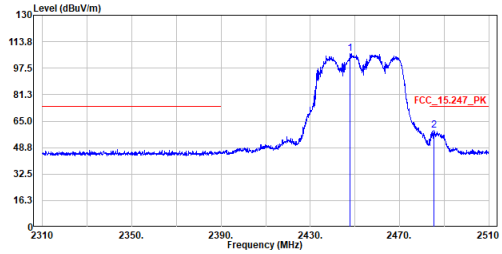
Site :HC-CB04
Condition :3m ,Vertical
Mode :ax40_TX_2437MHz
Test By :Gary



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	2390.000	49.38	54.00	-4.62	36.22	13.16	Average
2	2448.800	106.63	------	------	93.56	13.07	Average
3	2487.100	49.20	54.00	-4.80	35.87	13.33	Average

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

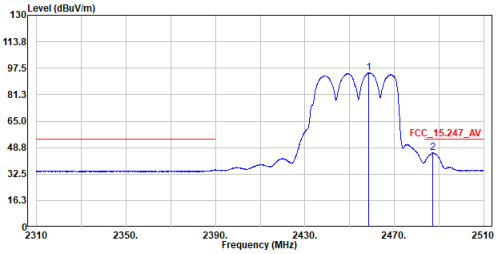
Site :HC-CB04
Condition :3m ,Horizontal
Mode :ax40_TX_2452MHz
Test By :Gary



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	2447.900	106.67	------	------	93.59	13.08	Peak
2	2485.300	59.23	74.00	-14.77	45.92	13.31	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

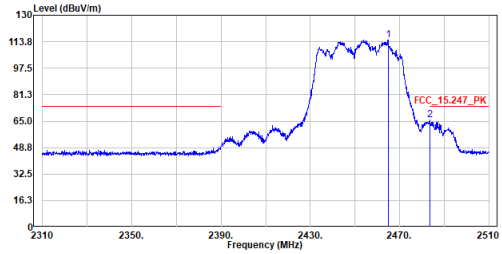
Site :HC-CB04
Condition :3m ,Horizontal
Mode :ax40_TX_2452MHz
Test By :Gary



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	2458.600	94.53	------	------	81.41	13.12	Average
2	2487.300	45.72	54.00	-8.28	32.39	13.33	Average

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

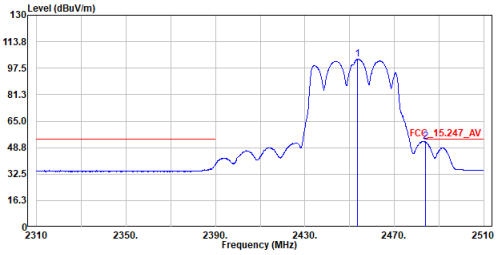
Site :HC-CB04
Condition :3m ,Vertical
Mode :ax40_TX_2452MHz
Test By :Gary



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	2464.900	114.94	------	------	101.77	13.17	Peak
2	2483.600	65.58	74.00	-8.42	52.29	13.29	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

Site :HC-CB04
Condition :3m ,Vertical
Mode :ax40_TX_2452MHz
Test By :Gary

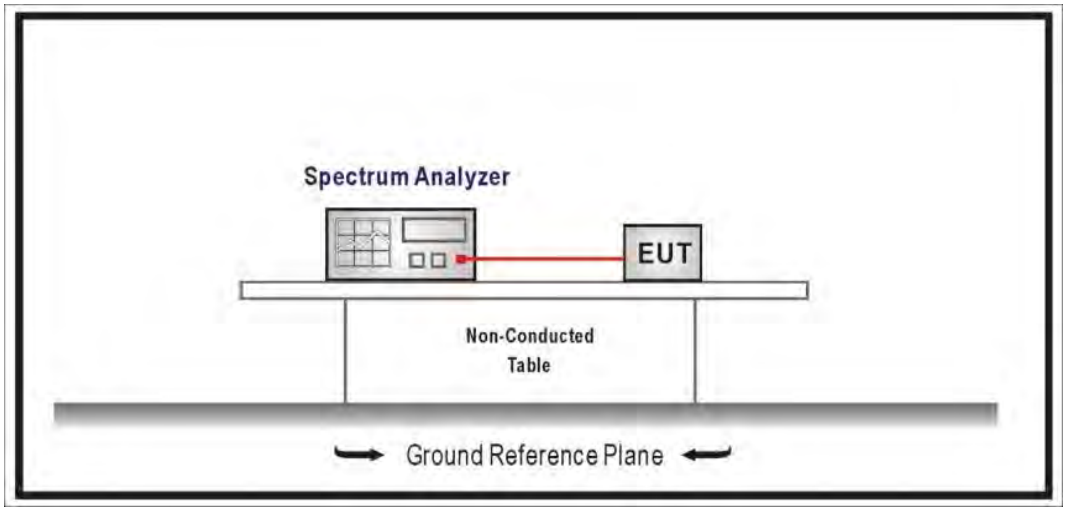


No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	2453.600	103.02	------	------	89.92	13.10	Average
2	2483.800	52.52	54.00	-1.48	39.22	13.30	Average

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

7. Occupied Bandwidth & DTS Bandwidth

7.1. Test Setup



7.2. Test Limit

The 6 dB bandwidth: ≧ 0.50 MHz.

Occupied Bandwidth: NA

7.3. Test Procedures

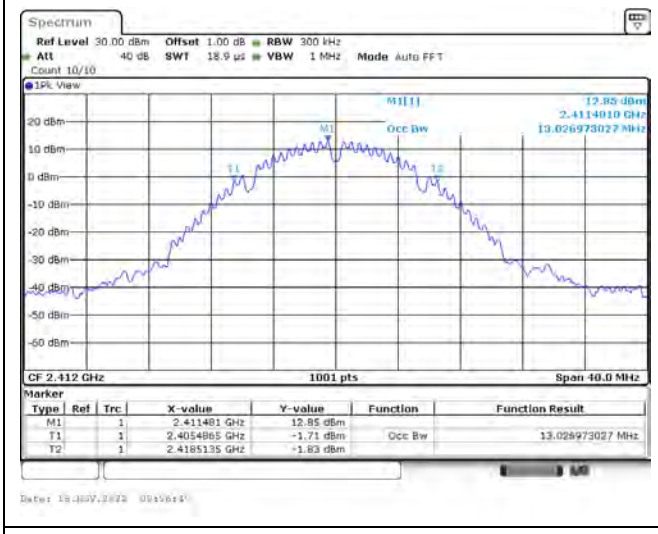
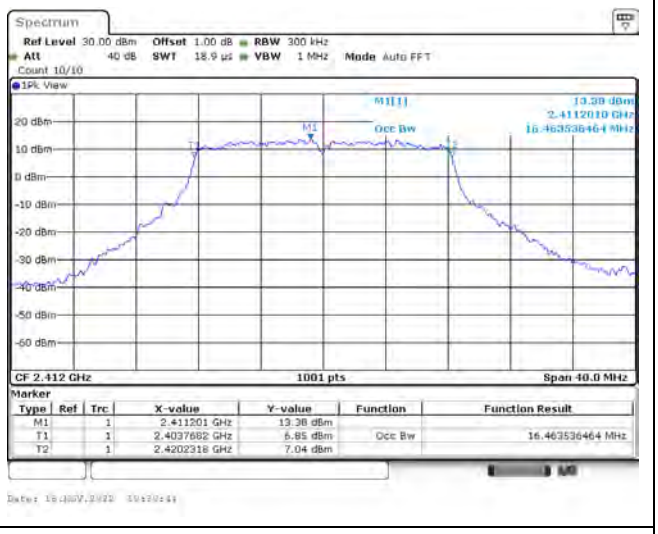
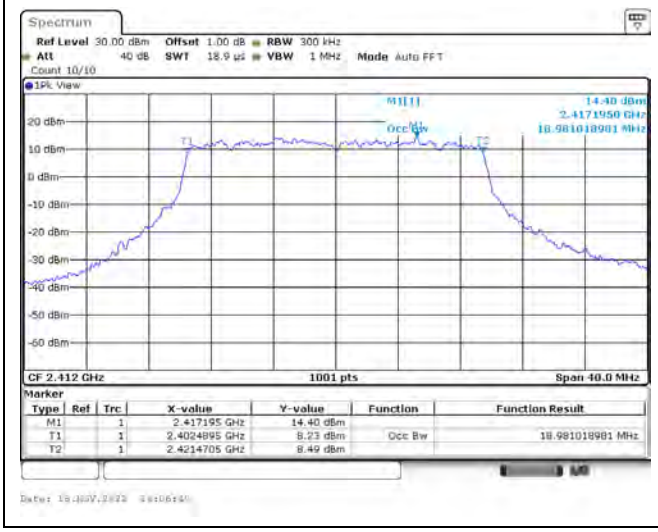
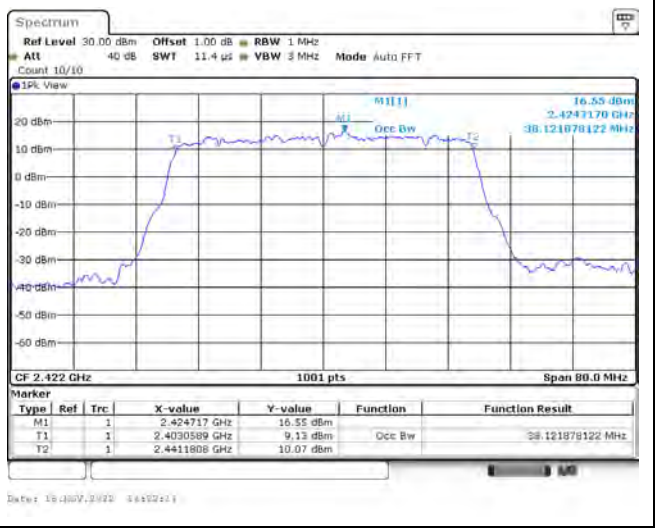
The EUT was setup according to ANSI C63.10: 2013; tested according to DTS test procedure of KDB 558074 D01 V05r02 for compliance to FCC 47CFR 15.247 requirements.

7.4. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247.

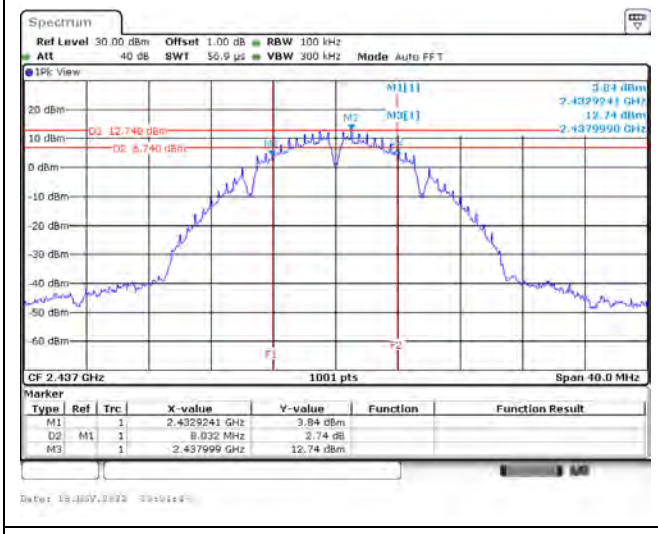
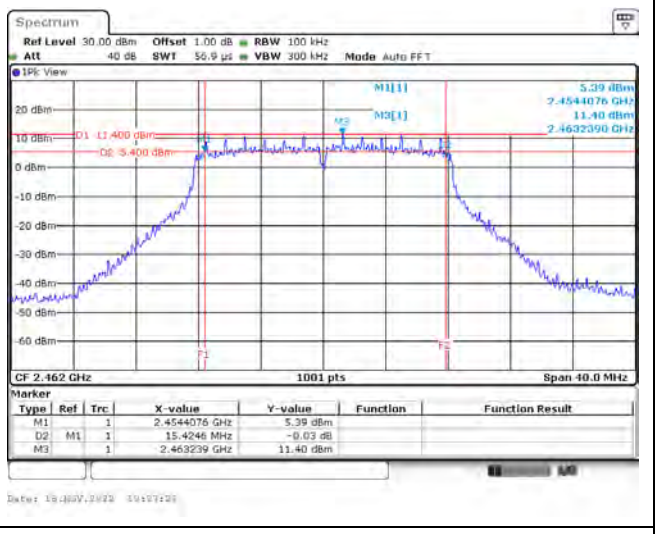
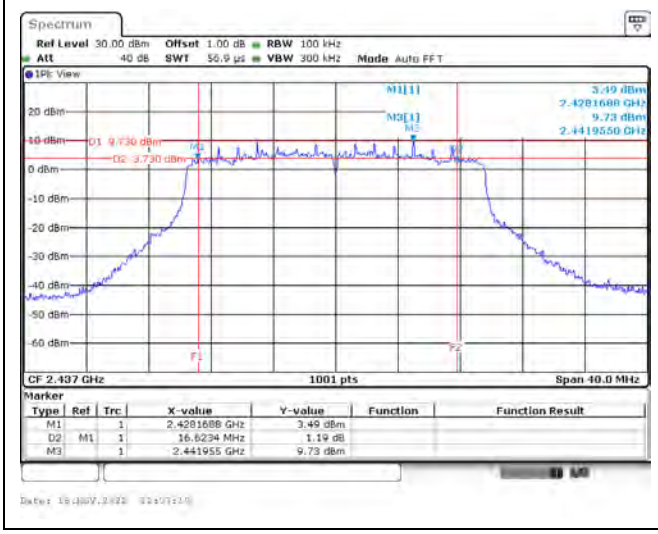
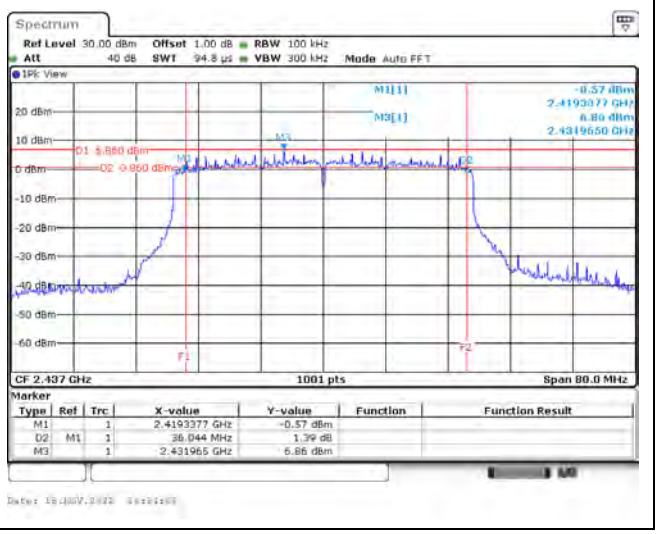
7.5. Test Result of Occupied Bandwidth

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)		Limit (MHz)
			Ant. 0	Ant. 1	
802.11b	1	2412	13.026	12.987	-
	6	2437	12.907	12.867	-
	11	2462	12.947	12.867	-
802.11g	1	2412	16.463	16.463	-
	6	2437	16.383	16.423	-
	11	2462	16.423	16.423	-
802.11ax (20 MHz)	1	2412	18.981	18.941	-
	6	2437	18.941	18.901	-
	11	2462	18.981	18.941	-
802.11ax (40 MHz)	3	2422	37.882	38.121	-
	6	2437	37.962	37.722	-
	9	2452	37.882	37.882	-

Spectrum plot of maximum value	
802.11b / Ant. 0 / 2412 MHz	802.11g / Ant. 0 / 2412 MHz
	
802.11ax (20 MHz) / Ant. 0 / 2412 MHz	802.11ax (40 MHz) / Ant. 1 / 2422 MHz
	

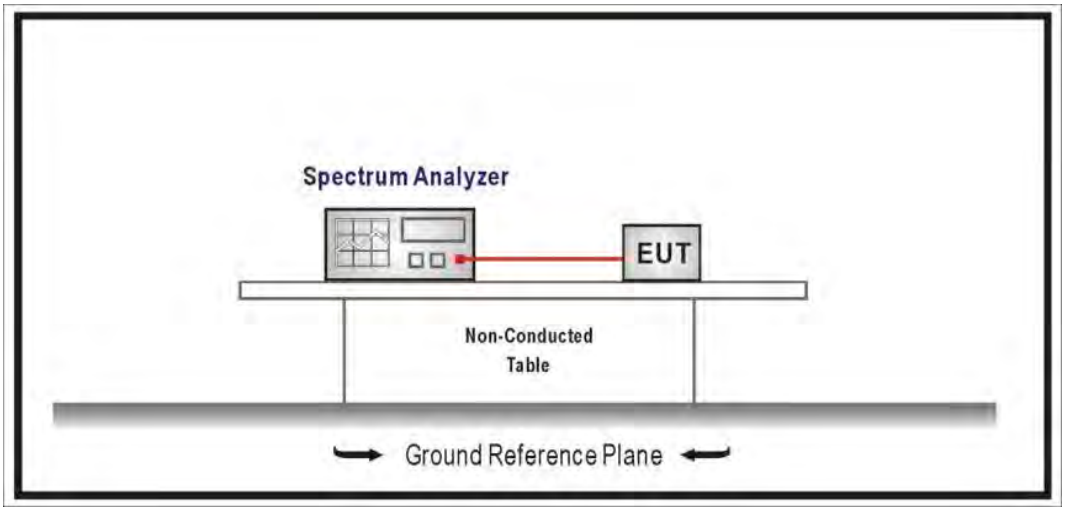
7.6. Test Result of DTS Bandwidth

Modulation	Channel	Frequency (MHz)	DTS Bandwidth (MHz)		Limit (MHz)	Result
			Ant. 0	Ant. 1		
802.11b	1	2412	8.071	8.071	≧0.50	Pass
	6	2437	8.032	8.032	≧0.50	Pass
	11	2462	8.032	8.032	≧0.50	Pass
802.11g	1	2412	15.984	15.904	≧0.50	Pass
	6	2437	15.464	15.464	≧0.50	Pass
	11	2462	15.424	15.664	≧0.50	Pass
802.11ax (20 MHz)	1	2412	18.181	18.301	≧0.50	Pass
	6	2437	18.821	16.623	≧0.50	Pass
	11	2462	17.182	17.302	≧0.50	Pass
802.11ax (40 MHz)	3	2422	37.642	37.482	≧0.50	Pass
	6	2437	37.722	36.044	≧0.50	Pass
	9	2452	37.562	37.162	≧0.50	Pass

Spectrum plot of worst value	
802.11b / Ant. 0 / 2437 MHz	802.11g / Ant. 0 / 2462 MHz
	
802.11ax (20 MHz) / Ant. 1 / 2437 MHz	802.11ax (40 MHz) / Ant. 1 / 2437 MHz
	

8. Maximum Power Spectral Density

8.1. Test Setup



8.2. Test Limit

The peak power spectral density conducted from the intentional radiated to the antenna shall not be greater than +8 dBm in any 3 kHz band during any time interval of continuous transmission.

8.3. Test Procedures

The EUT was setup according to ANSI C63.10: 2013; tested according to DTS test procedure of KDB 558074 D01 V05r02 for compliance to FCC 47CFR 15.247 requirements.

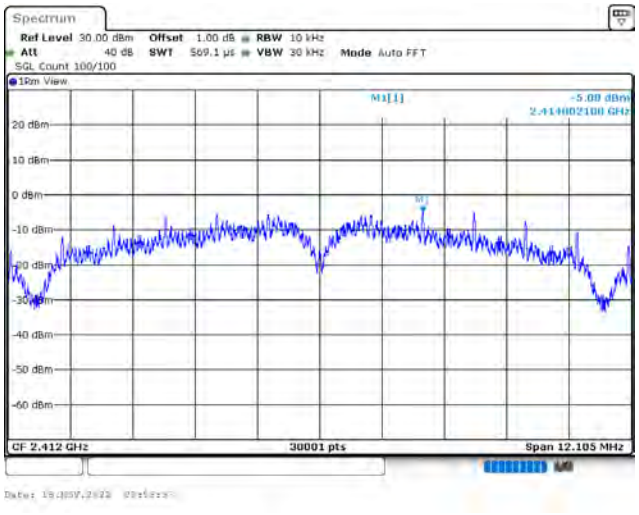
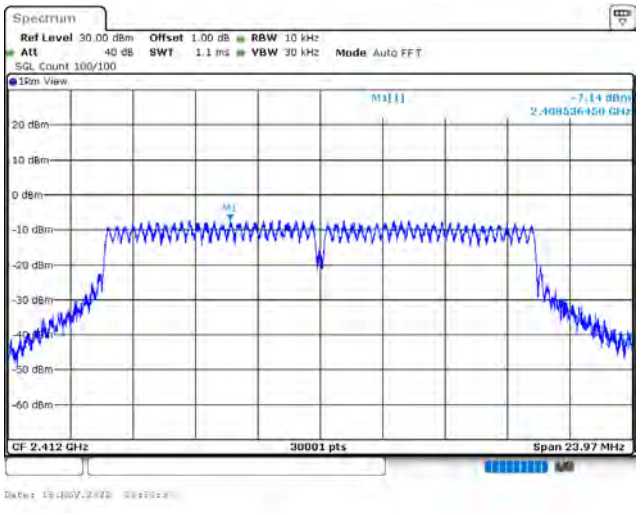
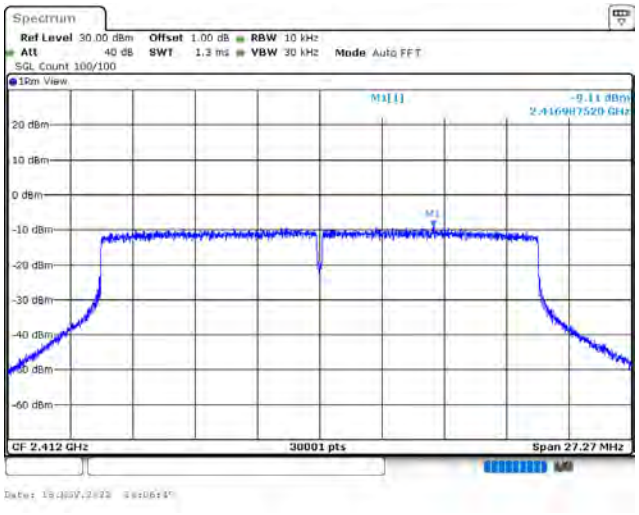
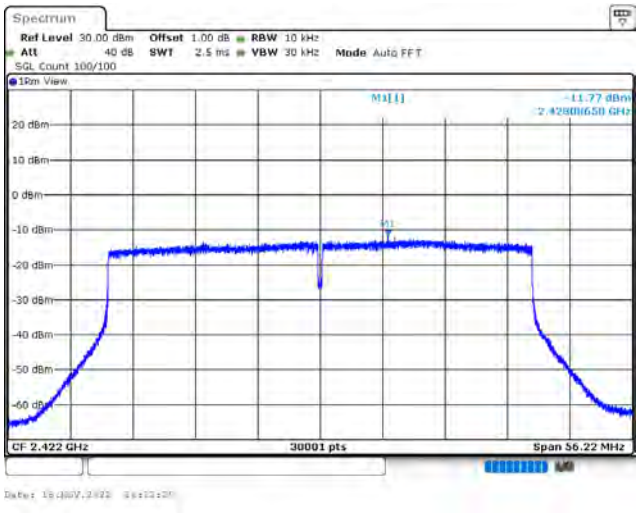
8.4. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247.

8.5. Test Result of Maximum Power Spectral Density

Modulation	Channel	Frequency (MHz)	Power Spectral Density (dBm / 3kHz)			Limit (dBm / 3kHz)	Result
			Ant. 0	Ant. 1	Total		
802.11b	1	2412	-5.220	-5.080	0.699	≦8.00	Pass
	6	2437	-6.310	-6.320	-0.466	≦8.00	Pass
	11	2462	-5.130	-5.260	0.654	≦8.00	Pass
802.11g	1	2412	-7.140	-8.210	-4.282	≦8.00	Pass
	6	2437	-8.430	-9.110	-5.396	≦8.00	Pass
	11	2462	-7.140	-7.590	-3.999	≦8.00	Pass
802.11ax (20 MHz)	1	2412	-9.110	-10.060	-5.922	≦8.00	Pass
	6	2437	-10.590	-11.040	-7.172	≦8.00	Pass
	11	2462	-9.840	-10.050	-6.307	≦8.00	Pass
802.11ax (40 MHz)	3	2422	-11.850	-11.770	-8.173	≦8.00	Pass
	6	2437	-12.810	-13.460	-9.486	≦8.00	Pass
	9	2452	-17.580	-17.580	-13.943	≦8.00	Pass

Note: Total power spectral density = power spectral density + duty factor, and the duty factor refer to section 1.10.

Spectrum plot of worst value	
802.11b / Ant. 1 / 2412 MHz	802.11g / Ant. 0 / 2412 MHz
	
802.11ax (20 MHz) / Ant. 0 / 2412 MHz	802.11ax (40 MHz) / Ant. 1 / 2422 MHz
	

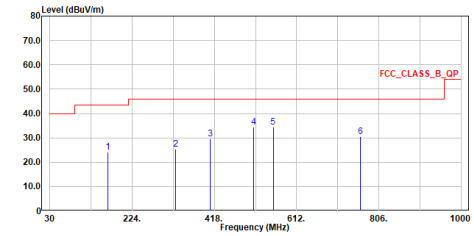
Appendix A

➢ Test Result of Radiated Emissions Co-location

1. WiFi 2.4 GHz + WiFi 5 GHz + WWAN module 1: WCDMA + WWAN module 2: WCDMA function

30 MHz ~ 1 GHz:

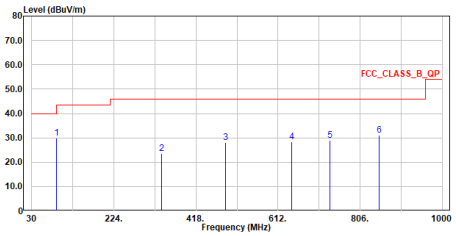
Site :HC-CB04
Condition :3m Horizontal
Mode :LF_WiFi_2.4G+WiFi_5G+WCDMA_B2_+WCDMA_B2
Test By :Scott



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	166.770	24.27	43.50	-19.23	27.35	-3.08	QP
2	325.850	25.22	46.00	-20.78	26.82	-1.60	QP
3	408.300	29.46	46.00	-16.54	29.18	0.28	QP
4	511.120	34.45	46.00	-11.55	31.51	2.94	QP
5	556.710	34.34	46.00	-11.66	30.70	3.64	QP
6	762.350	30.51	46.00	-15.49	22.83	7.68	QP

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission under 30MHz was not included since the emission levels are very low against the limit.
5. The other emission levels were very low against the limit.

Site :HC-CB04
Condition :3m Vertical
Mode :LF_WiFi_2.4G+WiFi_5G+WCDMA_B2_+WCDMA_B2
Test By :Scott

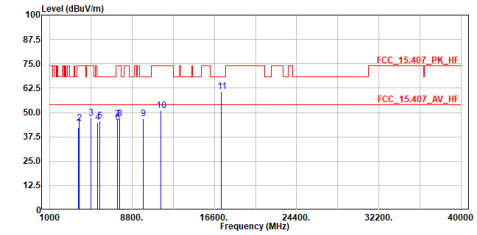


No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	89.170	30.02	43.50	-13.48	38.75	-8.73	QP
2	337.490	23.52	46.00	-22.48	24.90	-1.38	QP
3	487.840	28.19	46.00	-17.81	25.88	2.31	QP
4	644.010	28.45	46.00	-17.55	22.55	5.90	QP
5	735.190	28.97	46.00	-17.03	21.75	7.22	QP
6	851.590	31.11	46.00	-14.89	22.62	8.49	QP

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission under 30MHz was not included since the emission levels are very low against the limit.
5. The other emission levels were very low against the limit.

Above 1 GHz:

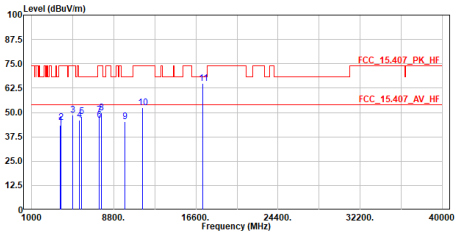
Site :HC-CB04
Condition :3m ,Horizontal
Mode :WiFi_2.4G+WiFi_5G+WCDMA_B2+WCDMA_B2
Test By :Scott



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	3704.800	42.35	74.00	-31.65	61.49	-19.14	Peak
2	3815.200	44.49	74.00	-29.51	63.09	-18.60	Peak
3	4924.000	47.27	74.00	-26.73	62.77	-15.50	Peak
4	5557.200	44.89	68.20	-23.31	60.13	-15.24	Peak
5	5722.800	45.74	68.20	-22.46	60.53	-14.79	Peak
6	7386.000	45.04	74.00	-28.96	55.17	-10.13	Peak
7	7409.600	46.28	74.00	-27.72	56.36	-10.08	Peak
8	7630.400	46.88	74.00	-27.12	56.73	-9.85	Peak
9	9848.000	46.95	68.20	-21.25	53.07	-6.12	Peak
10	11510.000	51.01	74.00	-22.99	54.46	-3.45	Peak
11	17265.000	60.89	68.20	-7.31	60.12	0.77	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

Site :HC-CB04
Condition :3m ,Vertical
Mode :WiFi_2.4G+WiFi_5G+WCDMA_B2+WCDMA_B2
Test By :Scott



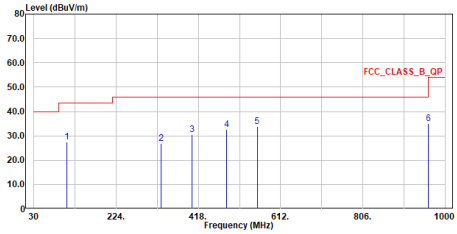
No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	3704.800	43.56	74.00	-30.44	62.70	-19.14	Peak
2	3815.200	45.05	74.00	-28.95	63.65	-18.60	Peak
3	4924.000	48.77	74.00	-25.23	64.27	-15.50	Peak
4	5557.200	46.18	68.20	-22.02	61.42	-15.24	Peak
5	5722.800	47.94	68.20	-20.26	62.73	-14.79	Peak
6	7386.000	46.03	74.00	-27.97	56.16	-10.13	Peak
7	7409.600	48.70	74.00	-25.30	58.78	-10.08	Peak
8	7630.400	49.82	74.00	-24.18	59.67	-9.85	Peak
9	9848.000	45.10	68.20	-23.10	51.22	-6.12	Peak
10	11510.000	52.58	74.00	-21.42	56.03	-3.45	Peak
11	17265.000	64.81	68.20	-3.39	64.04	0.77	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

2. WiFi 2.4 GHz + WiFi 5 GHz + WWAN module 1: LTE + WWAN module 2: LTE function

30 MHz ~ 1 GHz:

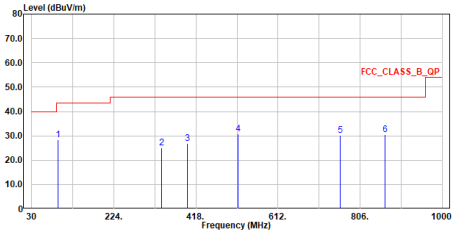
Site :HC-CB04
Condition :3m Horizontal
Mode :LF_WiFi_2.4G+WiFi_5G+LTE_B41+LTE_B41
Test By :Scott



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	108.570	27.50	43.50	-16.00	33.85	-6.35	QP
2	329.730	26.95	46.00	-19.05	28.47	-1.52	QP
3	402.480	30.34	46.00	-15.66	30.13	0.21	QP
4	483.960	32.53	46.00	-13.47	30.29	2.24	QP
5	556.710	33.91	46.00	-12.09	30.27	3.64	QP
6	960.230	34.90	54.00	-19.10	24.85	10.05	QP

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission under 30MHz was not included since the emission levels are very low against the limit.
5. The other emission levels were very low against the limit.

Site :HC-CB04
Condition :3m Vertical
Mode :LF_WiFi_2.4G+WiFi_5G+LTE_B41+LTE_B41
Test By :Scott

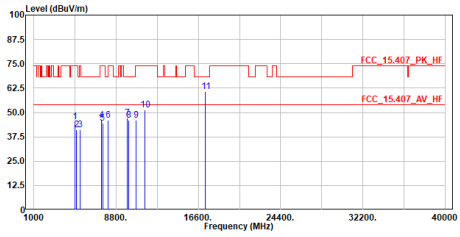


No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	92.080	28.29	43.50	-15.21	37.02	-8.73	QP
2	337.490	25.01	46.00	-20.99	26.39	-1.38	QP
3	398.600	26.95	46.00	-19.05	26.83	0.12	QP
4	517.910	30.71	46.00	-15.29	27.63	3.08	QP
5	759.440	30.17	46.00	-15.83	22.49	7.68	QP
6	865.170	30.53	46.00	-15.47	21.83	8.70	QP

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission under 30MHz was not included since the emission levels are very low against the limit.
5. The other emission levels were very low against the limit.

Above 1 GHz:

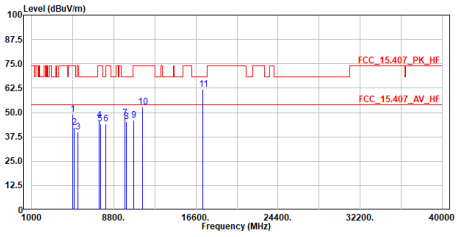
Site :HC-CB04
Condition :3m ,Horizontal
Mode :WiFi_2.4G+WiFi_5G+LTE_B41+LTE_B41
Test By :Scott



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	4924.000	45.29	74.00	-28.71	60.79	-15.50	Peak
2	5012.000	41.28	74.00	-32.72	56.51	-15.23	Peak
3	5360.000	41.18	74.00	-32.82	56.52	-15.34	Peak
4	7386.000	46.03	74.00	-27.97	56.16	-10.13	Peak
5	7518.000	44.49	74.00	-29.51	54.39	-9.90	Peak
6	8040.000	45.99	74.00	-28.01	55.57	-9.58	Peak
7	9848.000	46.99	68.20	-21.21	53.11	-6.12	Peak
8	10024.000	45.92	68.20	-22.28	51.80	-5.88	Peak
9	10720.000	46.12	74.00	-27.88	51.01	-4.89	Peak
10	11510.000	51.21	74.00	-22.79	54.66	-3.45	Peak
11	17265.000	60.64	68.20	-7.56	59.87	0.77	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

Site :HC-CB04
Condition :3m ,Vertical
Mode :WiFi_2.4G+WiFi_5G+LTE_B41+LTE_B41
Test By :Scott



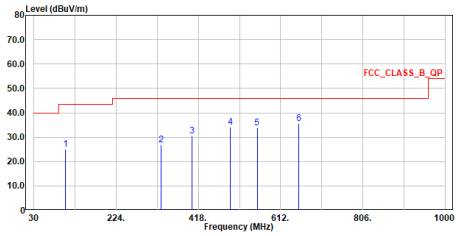
No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	4924.000	48.95	74.00	-25.05	64.45	-15.50	Peak
2	5012.000	42.08	74.00	-31.92	57.31	-15.23	Peak
3	5360.000	39.93	74.00	-34.07	55.27	-15.34	Peak
4	7386.000	46.01	74.00	-27.99	56.14	-10.13	Peak
5	7518.000	44.34	74.00	-29.66	54.24	-9.90	Peak
6	8040.000	44.18	74.00	-29.82	53.76	-9.58	Peak
7	9848.000	47.29	68.20	-20.91	53.41	-6.12	Peak
8	10024.000	45.10	68.20	-23.10	50.98	-5.88	Peak
9	10720.000	45.89	74.00	-28.11	50.78	-4.89	Peak
10	11510.000	52.95	74.00	-21.05	56.40	-3.45	Peak
11	17265.000	61.91	68.20	-6.29	61.14	0.77	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

3. WiFi 2.4 GHz + WiFi 5 GHz + WWAN module 1: 5G NR + WWAN module 2: 5G NR function

30 MHz ~ 1 GHz:

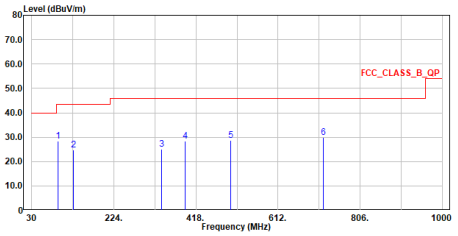
Site :HC-CB04
Condition :3m Horizontal
Mode :LF_WiFi_2.4G+WiFi_5G+5GNR_N2+5GNR_N2
Test By :Scott



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	104.690	25.08	43.50	-18.42	31.80	-6.72	QP
2	329.730	26.95	46.00	-19.05	28.47	-1.52	QP
3	402.480	30.34	46.00	-15.66	30.13	0.21	QP
4	493.660	34.13	46.00	-11.87	31.70	2.43	QP
5	556.710	33.91	46.00	-12.09	30.27	3.64	QP
6	655.100	35.61	46.00	-10.39	29.66	5.95	QP

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission under 30MHz was not included since the emission levels are very low against the limit.
5. The other emission levels were very low against the limit.

Site :HC-CB04
Condition :3m Vertical
Mode :LF_WiFi_2.4G+WiFi_5G+5GNR_N2+5GNR_N2
Test By :Scott

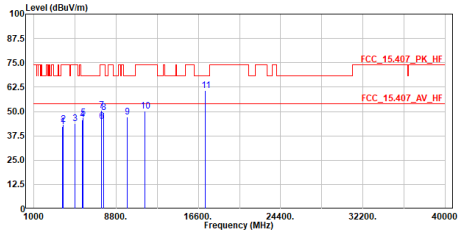


No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	92.080	28.29	43.50	-15.21	37.02	-8.73	QP
2	127.970	24.68	43.50	-18.82	29.05	-4.37	QP
3	337.490	25.01	46.00	-20.99	26.39	-1.38	QP
4	391.810	28.41	46.00	-17.59	28.45	-0.04	QP
5	499.480	28.73	46.00	-17.27	26.15	2.58	QP
6	718.700	29.76	46.00	-16.24	22.93	6.83	QP

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission under 30MHz was not included since the emission levels are very low against the limit.
5. The other emission levels were very low against the limit.

Above 1 GHz:

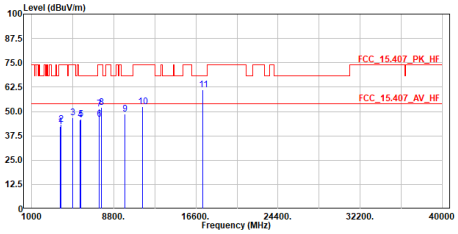
Site :HC-CB04
Condition :3m ,Horizontal
Mode :WiFi_2.4G+WiFi_5G+5GNR_N2+5GNR_N2
Test By :Scott



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	3720.000	42.26	74.00	-31.74	61.32	-19.06	Peak
2	3800.000	43.29	74.00	-30.71	61.96	-18.67	Peak
3	4924.000	43.78	74.00	-30.22	59.28	-15.50	Peak
4	5580.000	45.79	68.20	-22.41	60.96	-15.17	Peak
5	5700.000	46.63	68.20	-21.57	61.48	-14.85	Peak
6	7386.000	45.06	74.00	-28.94	55.19	-10.13	Peak
7	7440.000	50.40	74.00	-23.60	60.43	-10.03	Peak
8	7600.000	49.50	74.00	-24.50	59.37	-9.87	Peak
9	9848.000	47.19	68.20	-21.01	53.31	-6.12	Peak
10	11510.000	50.00	74.00	-24.00	53.45	-3.45	Peak
11	17265.000	60.66	68.20	-7.54	59.89	0.77	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

Site :HC-CB04
Condition :3m ,Vertical
Mode :WiFi_2.4G+WiFi_5G+5GNR_N2+5GNR_N2
Test By :Scott



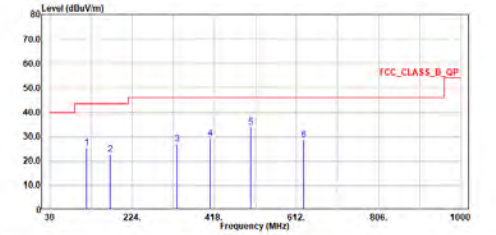
No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	3720.000	42.18	74.00	-31.82	61.24	-19.06	Peak
2	3800.000	43.47	74.00	-30.53	62.14	-18.67	Peak
3	4924.000	46.81	74.00	-27.19	62.31	-15.50	Peak
4	5580.000	45.58	68.20	-22.62	60.75	-15.17	Peak
5	5700.000	45.92	68.20	-22.28	60.77	-14.85	Peak
6	7386.000	46.01	74.00	-27.99	56.14	-10.13	Peak
7	7440.000	51.23	74.00	-22.77	61.26	-10.03	Peak
8	7600.000	52.24	74.00	-21.76	62.11	-9.87	Peak
9	9848.000	48.55	68.20	-19.65	54.67	-6.12	Peak
10	11510.000	52.45	74.00	-21.55	55.90	-3.45	Peak
11	17265.000	61.24	68.20	-6.96	60.47	0.77	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

4. WiFi 2.4 GHz + WiFi 5 GHz + WWAN module 1: LTE + WWAN module 2: 5G NR function

30 MHz ~ 1 GHz:

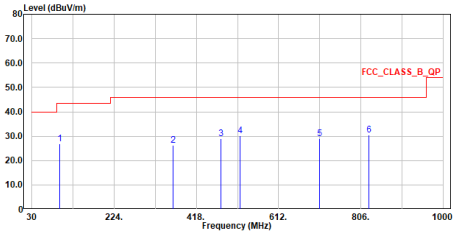
Site :HC-CB04
Condition :3m Horizontal
Mode :LF_WiFi_2.4G+WiFi_5G+LTE_B41+5GNR_N2
Test By :Scott



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	116.330	25.44	43.50	-18.06	30.84	-5.40	QP
2	172.590	22.68	43.50	-20.82	26.20	-3.52	QP
3	329.730	26.81	46.00	-19.19	28.33	-1.52	QP
4	488.300	29.37	46.00	-16.63	29.09	0.28	QP
5	583.360	33.96	46.00	-12.04	31.29	2.67	QP
6	628.490	28.60	46.00	-17.40	23.09	5.51	QP

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission under 30MHz was not included since the emission levels are very low against the limit.
5. The other emission levels were very low against the limit.

Site :HC-CB04
Condition :3m Vertical
Mode :LF_WiFi_2.4G+WiFi_5G+LTE_B41+5GNR_N2
Test By :Scott

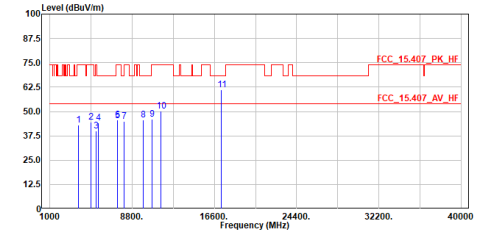


No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	95.960	26.88	43.50	-16.62	35.22	-8.34	QP
2	363.680	26.17	46.00	-19.83	27.00	-0.83	QP
3	476.200	28.86	46.00	-17.14	26.65	2.21	QP
4	521.790	30.27	46.00	-15.73	27.10	3.17	QP
5	709.000	29.06	46.00	-16.94	22.35	6.71	QP
6	824.430	30.49	46.00	-15.51	22.31	8.18	QP

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission under 30MHz was not included since the emission levels are very low against the limit.
5. The other emission levels were very low against the limit.

Above 1 GHz:

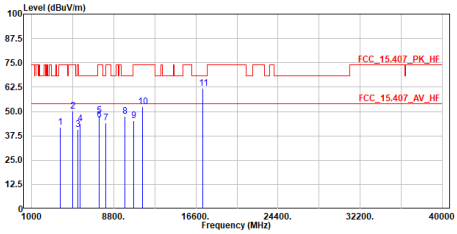
Site :HC-CB04
Condition :3m ,Horizontal
Mode :WiFi_2.4G+WiFi_5G+LTE_B41+5GNR_N2
Test By :Scott



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	3720.000	43.01	74.00	-30.99	62.07	-19.06	Peak
2	4924.000	44.35	74.00	-29.65	59.85	-15.50	Peak
3	5360.000	39.93	74.00	-34.07	55.27	-15.34	Peak
4	5580.000	44.34	68.20	-23.86	59.51	-15.17	Peak
5	7386.000	45.19	74.00	-28.81	55.32	-10.13	Peak
6	7440.000	45.60	74.00	-28.40	55.63	-10.03	Peak
7	8040.000	44.72	74.00	-29.28	54.30	-9.58	Peak
8	9848.000	45.81	68.20	-22.39	51.93	-6.12	Peak
9	10720.000	45.93	74.00	-28.07	50.82	-4.89	Peak
10	11510.000	50.08	74.00	-23.92	53.53	-3.45	Peak
11	17265.000	60.99	68.20	-7.21	60.22	0.77	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

Site :HC-CB04
Condition :3m ,Vertical
Mode :WiFi_2.4G+WiFi_5G+LTE_B41+5GNR_N2
Test By :Scott



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	3720.000	41.80	74.00	-32.20	60.86	-19.06	Peak
2	4924.000	50.32	74.00	-23.68	65.82	-15.50	Peak
3	5360.000	40.87	74.00	-33.13	56.21	-15.34	Peak
4	5580.000	43.72	68.20	-24.48	58.89	-15.17	Peak
5	7386.000	47.87	74.00	-26.13	58.00	-10.13	Peak
6	7440.000	45.60	74.00	-28.40	55.63	-10.03	Peak
7	8040.000	44.11	74.00	-29.89	53.69	-9.58	Peak
8	9848.000	47.73	68.20	-20.47	53.85	-6.12	Peak
9	10720.000	45.28	74.00	-28.72	50.17	-4.89	Peak
10	11510.000	52.42	74.00	-21.58	55.87	-3.45	Peak
11	17265.000	61.96	68.20	-6.24	61.19	0.77	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.