

FCC Test Report

Product Name : Asset Tracker
Brand Name : Samsara
Model No. : 010-2057, 010-2058, 010-2059
FCC ID : 2AIHD2057

Applicant : SAMSARA NETWORKS INC
Address : 1 De Haro St, San Francisco, CA 94107

Date of Receipt : Aug. 05, 2022
Issued Date : Aug. 31, 2022
Report No. : 2280191R-RFUSWL2V01-A
Report Version : V1.0



The test results relate only to the samples tested.

The test results shown in the test report are traceable to the national/international standard through the calibration of the equipment and evaluated measurement uncertainty herein.

This report must not be used to claim product endorsement by TAF or any agency of the government.

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.

The test report shall not be reproduced except in full without the written approval of DEKRA Testing and Certification Co., Ltd.

Revision History

Version	Description	Issued Date
V1.0	Initial issue of report	Aug. 31, 2022

TABLE OF CONTENTS

Description	Page
1. General Information.....	6
1.1. EUT Description	6
1.2. Test Mode.....	10
1.3. Comments and Remarks.....	11
1.4. Tested System Details	12
1.5. Configuration of Tested System.....	12
1.6. EUT Operation of during Test	13
1.7. Test Facility	14
1.8. List of Test Equipment	15
1.9. Measurement Uncertainty	16
1.10. Duty Cycle.....	17
2. Maximum Conducted Output Power.....	18
2.1. Test Setup	18
2.2. Test Limit.....	18
2.3. Test Procedures	18
2.4. Test Specification	18
2.5. Test Result of Maximum Conducted Output Power.....	19
3. Radiated Emission	20
3.1. Test Setup	20
3.2. Test Limit.....	21
3.3. Test Procedure	21
3.4. Test Specification	21
3.5. Test Result of Radiated Emissions (30 MHz ~ 1 GHz).....	22
3.6. Test Result of Radiated Emissions (1 GHz ~ 10 th Harmonic).....	27
4. Antenna Port Conducted Emission.....	37
4.1. Test Setup	37
4.2. Test Limit.....	37
4.3. Test Procedure	37
4.4. Test Specification	37
4.5. Test Result of Antenna Port Conducted Emission.....	38
5. Radiated Emission Band Edge.....	50
5.1. Test Setup	50
5.2. Test Limit.....	50
5.3. Test Procedure	51
5.4. Test Specification	51
5.5. Test Result of Radiated Emission Band Edge.....	52
6. Occupied Bandwidth & DTS Bandwidth.....	72
6.1. Test Setup	72
6.2. Test Limit.....	72
6.3. Test Procedures	72
6.4. Test Specification	72
6.5. Test Result of Occupied Bandwidth	73
6.6. Test Result of DTS Bandwidth.....	75
7. Maximum Power Spectral Density.....	77
7.1. Test Setup	77
7.2. Test Limit.....	77
7.3. Test Procedures	77
7.4. Test Specification	77
7.5. Test Result of Maximum Power Spectral Density.....	78

Appendix A.....	80
<input type="checkbox"/> Test Setup Photograph.....	80

1. General Information

1.1. EUT Description

Product Name	Asset Tracker	
Brand Name	Samsara	
Model No.	010-2057, 010-2058, 010-2059	
Frequency Range / Channel Number	IEEE 802.11b/g	2412 ~ 2472 MHz / 13 Channels
	IEEE 802.11n (20 MHz)	2412 ~ 2472 MHz / 13 Channels
	IEEE 802.11n (40 MHz)	2422 ~ 2462 MHz / 9 Channels
Type of Modulation	IEEE 802.11b	DSSS
	IEEE 802.11g/n	OFDM
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 7 and bandwidth defined in 802.11n

EUT	3	2	1		
Model	010-2057	010-2058	010-2059		
Type	Crevasse*	Serac*	Avalanche*		
Key ICs					
Battery End-of-Service Monitoring	N/A	MAX17260	MAX17260		
CAN transceiver	N/A	MCP25625 or MCP2515	MCP25625 or MCP2515		
ADC Input	N/A	2x	2x		
Output	N/A	1x	1x		
CAN Bus	N/A	N/A	1x		
Power					
Primary Power source	3x Primary Cell L91	EVE	Secondary Cell (Lithium-ion) 18650 pack (3.6V)	EVE	Secondary Cell (Lithium-ion) 18650 pack (3.6V)
		LISON ERGY	Secondary Cell (Lithium-ion) 18650 pack (3.65V)	LISON ERGY	Secondary Cell (Lithium-ion) 18650 pack (3.65V)
External Power source	4.5 VDC	9~36 VDC	9~36 VDC		
Enclosure					
Rough dimensions	81 x 110 x 31 mm	124 x 81 x 35 mm	124 x 81 x 35 mm		
LTEAntenna	Monopole Antenna (Antenna-AG51)	Monopole Antenna (Antenna-AG52/AG53)	Monopole Antenna (Antenna-AG52/AG53)		
Ambient Temp Rating	-40°C ~+60°C	-20°C ~+60°C	-20°C ~+60°C		
Screw	Phillips	Hexalobular socket	Hexalobular socket		
The manufacturer declares that RF-related parts and software are unchanged for three models.					

The EUT 1 (model: 010-2059) and EUT 2 (model: 010-2058) has two sources of battery for marketing:

Sources of Battery	Main Source	Second Source
Brand Name	EVE	LISONERGY
Model No.	A0679B	LS.11110D01
Nominal Voltage	3.6V	3.65V
Typical Capacity	3100mAh	3000mAh
MAX Charge Current	3.1A	0.9A
Typical Over Charge	4.28V	4.275V
Typical Over Charge Release	4.080V	4.075V
Typical Over Charge Delay Time	1.2s	1s
Typical Over Discharge	2.3V	2.5V
Typical Over Discharge Release	2.3V	2.9V
Typical Over Discharge Delay Time	150ms	128ms

Antenna Information				
Ant.	Brand Name	Model No.	Type	Antenna Gain (dBi)
0	WNC	Antenna-BT/WLAN	PCB	3

EUT Operational Condition		
Testing Voltage	EUT 1 and EUT 2	DC 12V
	EUT 3	DC 4.5V

IEEE 802.11b/g & IEEE 802.11n (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	12	2467 MHz
13	2472 MHz	-	-	-	-	-	-

IEEE 802.11n (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	10	2457 MHz
11	2462 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: EUT 1 with main source of battery Mode 2: EUT 1 with second source of battery Mode 3: EUT 2 with main source of battery Mode 4: EUT 2 with second source of battery Mode 5: EUT 3 with AA battery
	Mode 1 generated the worst test result for radiated emission below 1GHz test, thus the measurement for other test items will follow this same test configuration.

Test Items	Test Mode	Modulation	Channel	Result
AC Power Line Conducted Emission	The EUT was DC-powered, it's not necessary to apply to AC power line conducted emission test.			
Maximum Conducted Output Power	Mode 1	11b	1/6/11/12/13	Pass
		11g	1/6/11/12/13	Pass
		11n (20 MHz)	1/6/11/12/13	Pass
		11n (40 MHz)	3/6/9/10/11	Pass
Radiated Emission Below 1 GHz	Mode 1	11n (20 MHz)	11	Pass
	Mode 2	11n (20 MHz)	11	Pass
	Mode 3	11n (20 MHz)	11	Pass
	Mode 4	11n (20 MHz)	11	Pass
	Mode 5	11n (20 MHz)	11	Pass
Radiated Emission Above 1 GHz	Mode 1	11b	1/6/11/12/13	Pass
		11g	1/6/11/12/13	Pass
		11n (20 MHz)	1/6/11/12/13	Pass
		11n (40 MHz)	3/6/9/10/11	Pass
Antenna Port Conducted Emission	Mode 1	11b	1/6/11/12/13	Pass
		11g	1/6/11/12/13	Pass
		11n (20 MHz)	1/6/11/12/13	Pass
		11n (40 MHz)	3/6/9/10/11	Pass
Radiated Emission Band Edge	Mode 1	11b	1/6/11/12/13	Pass
		11g	1/6/11/12/13	Pass
		11n (20 MHz)	1/6/11/12/13	Pass
		11n (40 MHz)	3/6/9/10/11	Pass
Occupied Bandwidth & DTS Bandwidth	Mode 1	11b	1/6/11/12/13	Pass
		11g	1/6/11/12/13	Pass
		11n (20 MHz)	1/6/11/12/13	Pass
		11n (40 MHz)	3/6/9/10/11	Pass

Maximum Power Spectral Density	Mode 1	11b	1/6/11/12/13	Pass
		11g	1/6/11/12/13	Pass
		11n (20 MHz)	1/6/11/12/13	Pass
		11n (40 MHz)	3/6/9/10/11	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 802.11n (20 MHz)/802.11n (40 MHz) are MCS 0, Nss1.
3. For radiated emission below 1 GHz have performed all modes of operation were investigated and the worst-case emissions are reported.
4. The EUT was performed at X axis, Y axis and Z axis position for radiated emission and band edge tests. The worst case was found at Y axis, so the measurement will follow this same test configuration.

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.

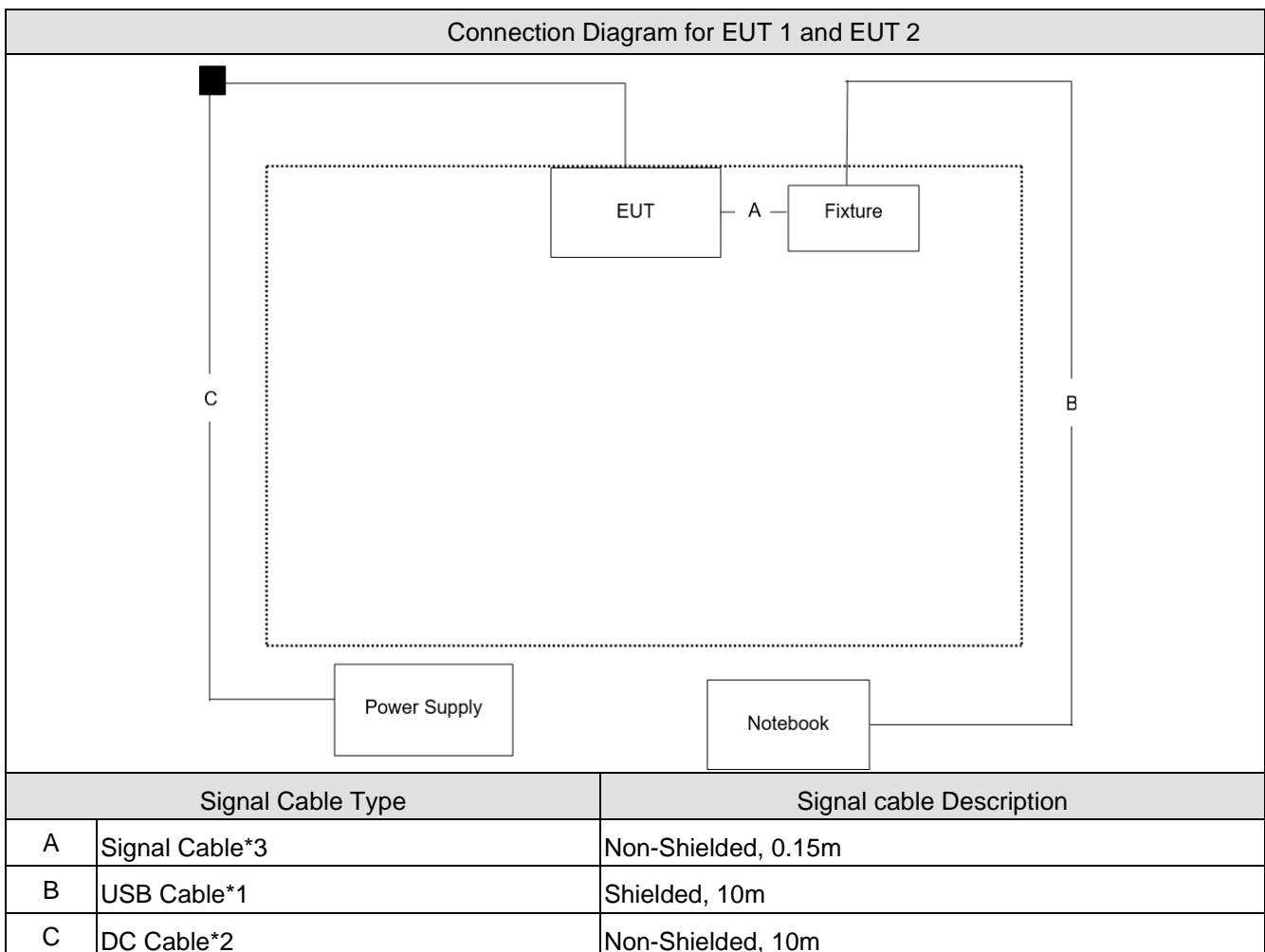
For EUT 1 and EUT 2:

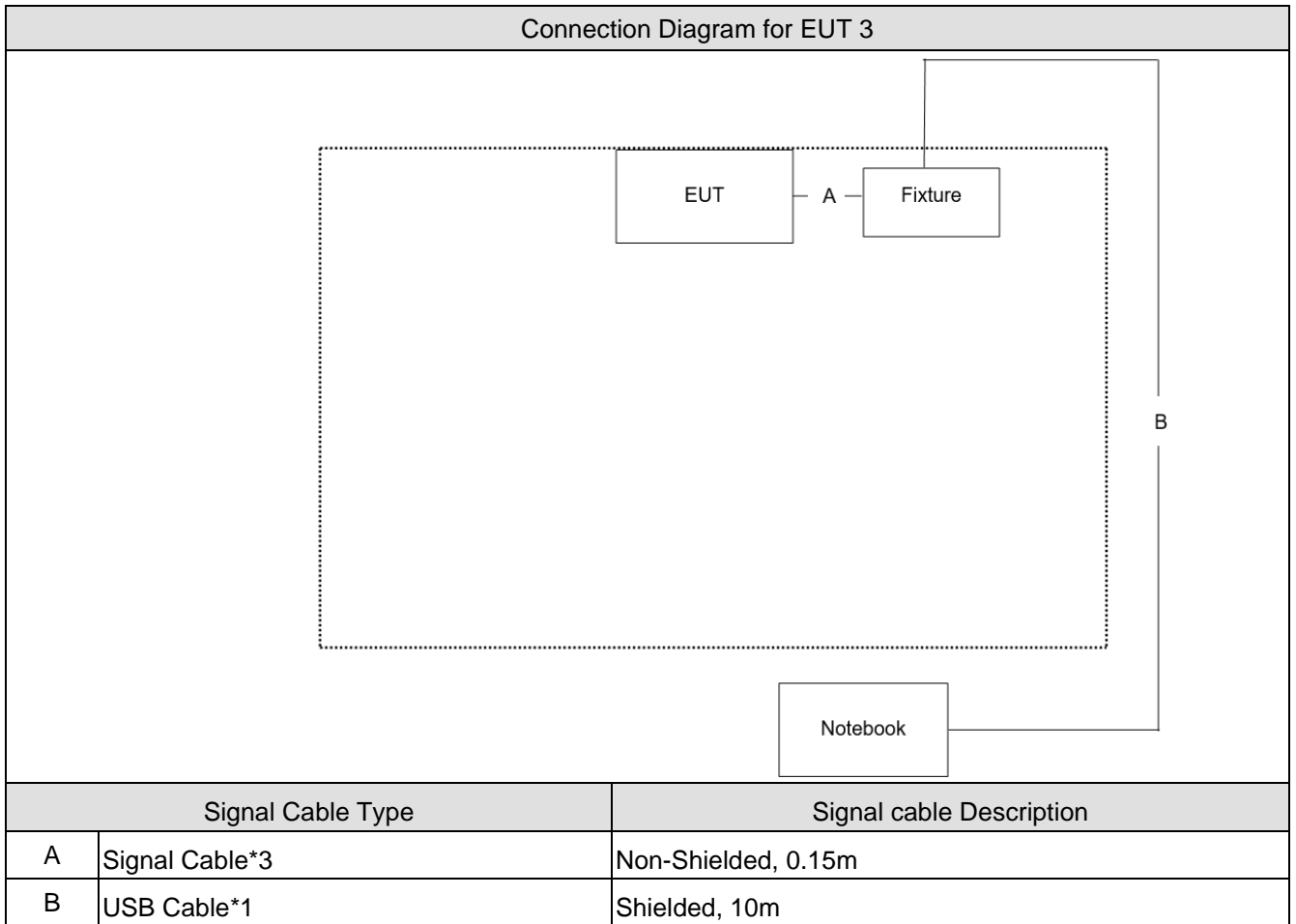
	Product	Manufacturer	Model No.	Serial No.
1	Fixture	Oneping	OP-1010C18V-PBAM04D1	N/A
2	Notebook	DELL	Latitude E6320	8611271467
3	Power Supply	Topward	6303D	8095908

For EUT 3:

	Product	Manufacturer	Model No.	Serial No.
1	Fixture	Oneping	OP-1010C18V-PBAM04D1	N/A
2	Notebook	DELL	Latitude E6320	8611271467

1.5. Configuration of Tested System





1.6. EUT Operation of during Test

1	Execute control command by software “EspRFTestTool_v2.8”.
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)	Maximum Conducted Output Power	23	Clemens Fang	2022/08/24	HC-SR12
Humidity (%RH)		64			
Temperature (°C)	Radiated Emission	22 ~ 23	Cyril Chen	2022/08/17 ~ 2022/08/23	HC-CB04
Humidity (%RH)		60 ~ 63			
Temperature (°C)	Antenna Port Conducted Emission	23	Clemens Fang	2022/08/24	HC-SR12
Humidity (%RH)		64			
Temperature (°C)	Radiated Emission Band Edge	22	Cyril Chen	2022/08/16	HC-CB04
Humidity (%RH)		59			
Temperature (°C)	Occupied Bandwidth & DTS Bandwidth	23	Clemens Fang	2022/08/24	HC-SR12
Humidity (%RH)		64			
Temperature (°C)	Maximum Power Spectral Density	23	Clemens Fang	2022/08/24	HC-SR12
Humidity (%RH)		64			

Note: Test site information refers to 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, SR10-H and HC-SR12.	

1.8. List of Test Equipment

HC-SR12

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date
High Speed Peak Power Meter Dual Input	Anritsu	ML2496A	1602004	2021/11/12	2022/11/11
Pulse Power Sensor	Anritsu	MA2411B	1531043	2021/11/12	2022/11/11
EXA Signal Analyzer	Keysight	N9010A	MY51440132	2022/01/07	2023/01/06
Pulse Power Sensor	Anritsu	MA2411B	1531044	2021/11/12	2022/11/11
Power Meter	Keysight	8990B	MY51000248	2022/05/06	2023/05/05
Power Sensor	Keysight	N1923A	MY57240005	2022/05/06	2023/05/05
Signal & Spectrum Analyzer	R&S	FSV40	101049	2022/04/25	2023/04/24

HC-CB04

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date
Signal Analyzer	R&S	FSVA40	101455	2021/10/22	2022/10/21
EXA Signal Analyzer	Keysight	N9010A	MY51440132	2022/01/07	2023/01/06
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	2022/02/23	2023/02/22
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	2021/12/24	2022/12/23
EMI Test Receiver	R&S	ESR7	102260	2021/12/22	2022/12/21
Magnetic Loop Antenna	Teseq	HLA 6121	44287	2021/09/06	2022/09/05
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.

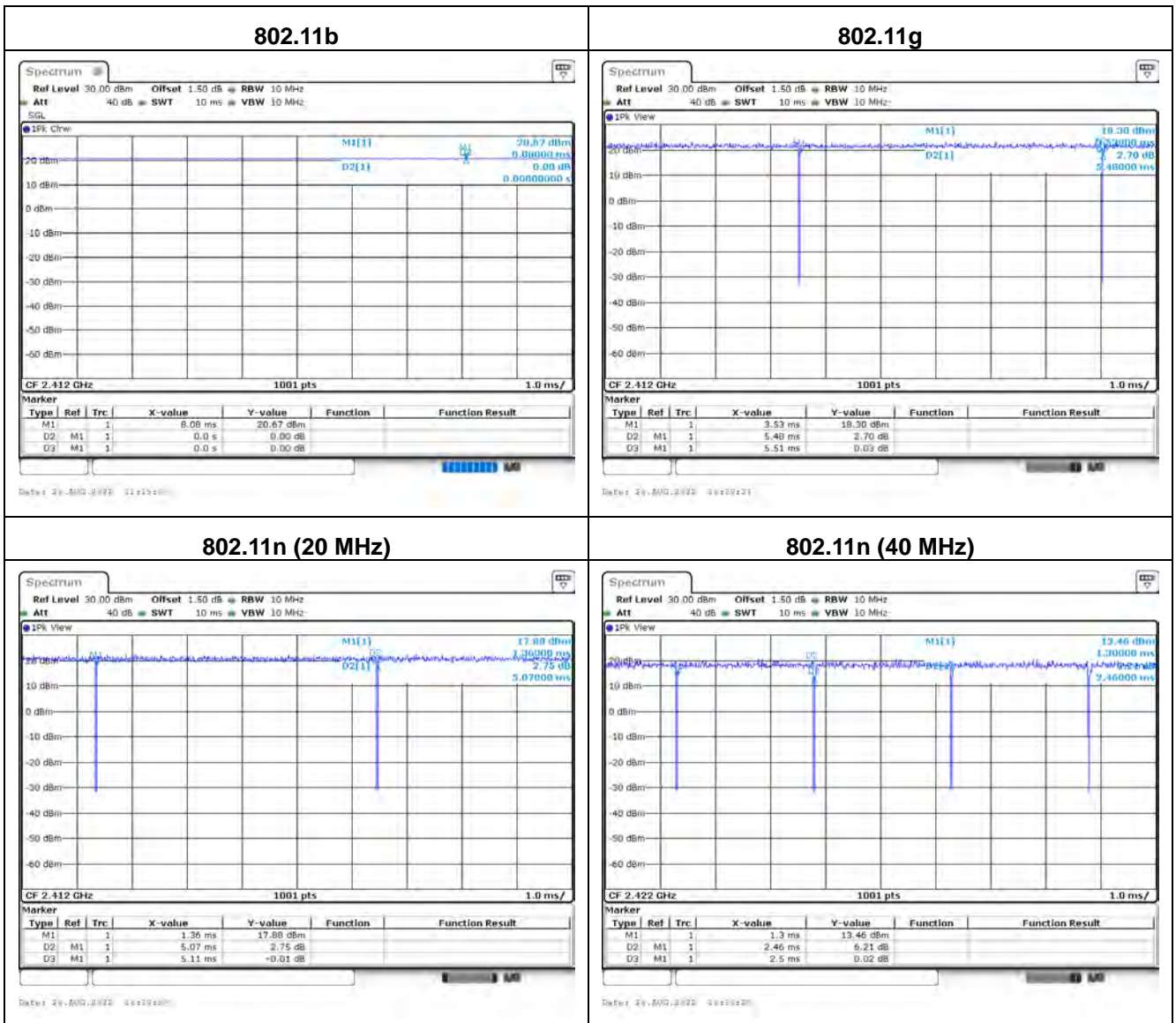
1.9. Measurement Uncertainty

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
Maximum Conducted Output Power	± 1.16 dB
Radiated Emission	± 3.25 dB below 1 GHz ± 3.32 dB above 1 GHz
Antenna Port Conducted Emission	± 1.60 dB
Radiated Emission Band Edge	± 3.32 dB above 1GHz
DTS Bandwidth	± 282.55 Hz
Occupied Bandwidth	± 282.55 Hz
Maximum Power Spectral Density	± 1.60 dB

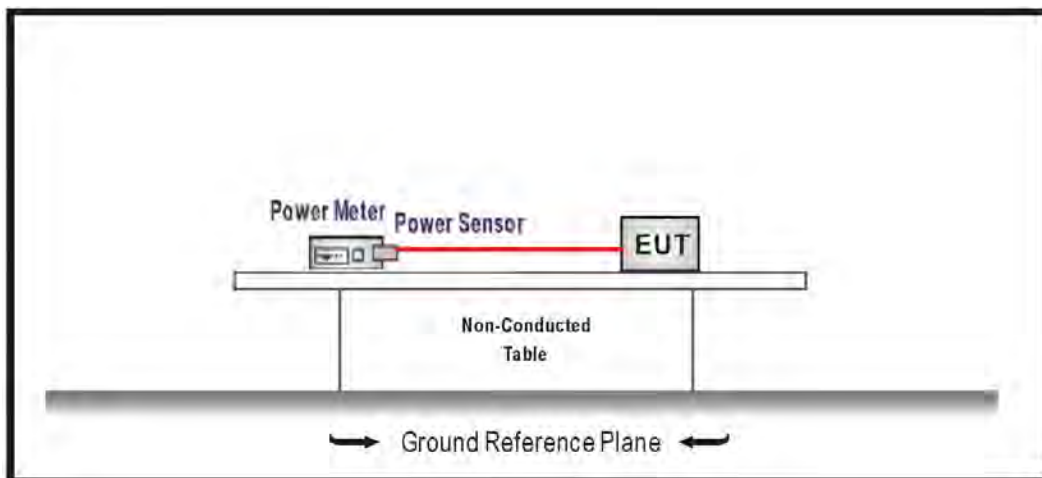
1.10. Duty Cycle

Modulation	On Times (ms)	On+Off Times (ms)	Duty Cycle (%)	Duty Factor (dB)	1/T Minimum VBW (kHz)
802.11b	-	-	-	-	-
802.11g	5.480	5.510	99.46	0.024	0.010
802.11n (20 MHz)	5.070	5.110	99.22	0.034	0.010
802.11n (40 MHz)	2.460	2.500	98.40	0.070	0.010



2. Maximum Conducted Output Power

2.1. Test Setup



2.2. Test Limit

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

2.3. 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.

2.4. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247.

2.5. Test Result of Maximum Conducted Output Power

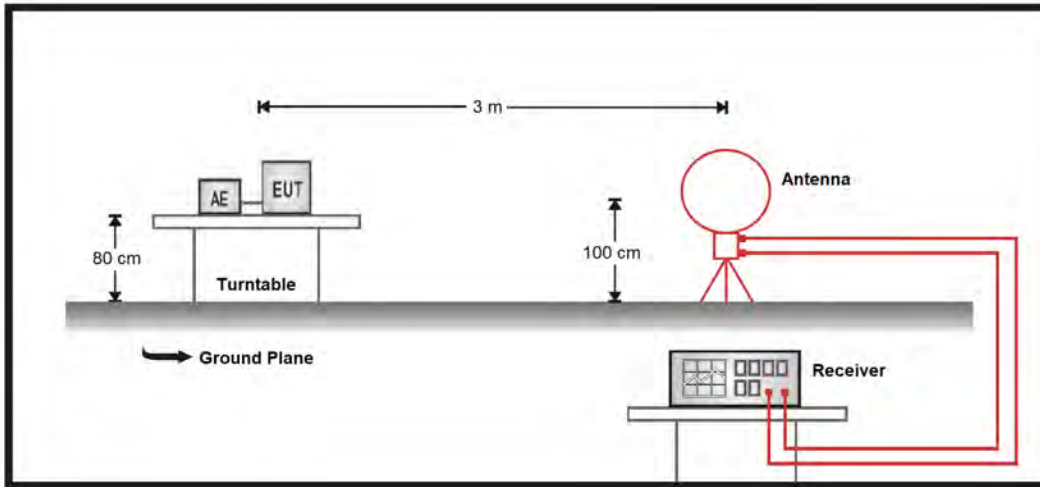
Mode 1: EUT 1 with main source of battery

Modulation	Channel	Frequency (MHz)	Maximum Conducted Output Power (dBm)	Limit (dBm)	Result
802.11b	1	2412	18.480	≤ 30.00	Pass
	6	2437	18.560	≤ 30.00	Pass
	11	2462	19.050	≤ 30.00	Pass
	12	2467	16.430	≤ 30.00	Pass
	13	2472	12.640	≤ 30.00	Pass
802.11g	1	2412	17.550	≤ 30.00	Pass
	6	2437	17.600	≤ 30.00	Pass
	11	2462	15.380	≤ 30.00	Pass
	12	2467	13.240	≤ 30.00	Pass
	13	2472	0.630	≤ 30.00	Pass
802.11n (20 MHz)	1	2412	16.610	≤ 30.00	Pass
	6	2437	16.740	≤ 30.00	Pass
	11	2462	15.820	≤ 30.00	Pass
	12	2467	13.620	≤ 30.00	Pass
	13	2472	-0.190	≤ 30.00	Pass
802.11n (40 MHz)	3	2422	16.080	≤ 30.00	Pass
	6	2437	16.040	≤ 30.00	Pass
	9	2452	15.270	≤ 30.00	Pass
	10	2457	14.460	≤ 30.00	Pass
	11	2462	13.730	≤ 30.00	Pass

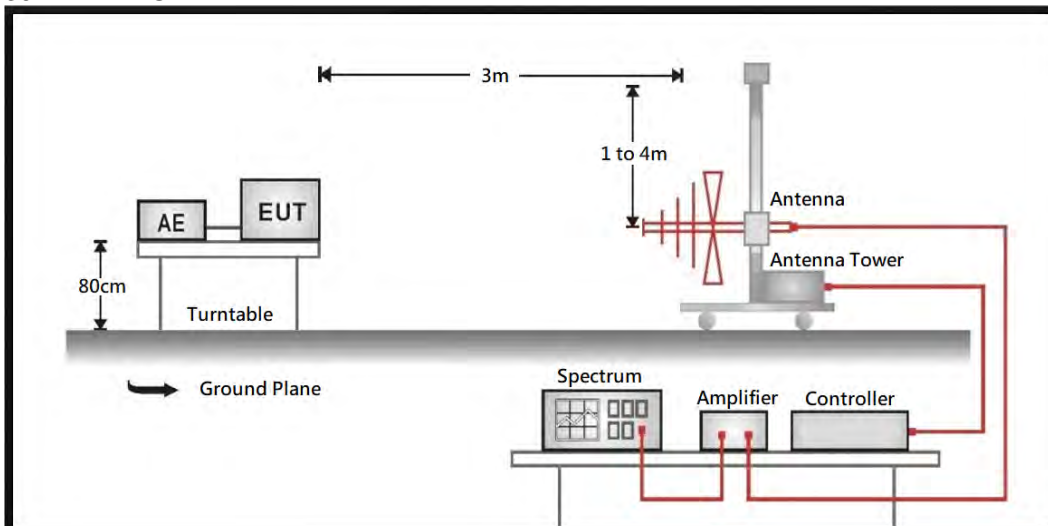
3. Radiated Emission

3.1. Test Setup

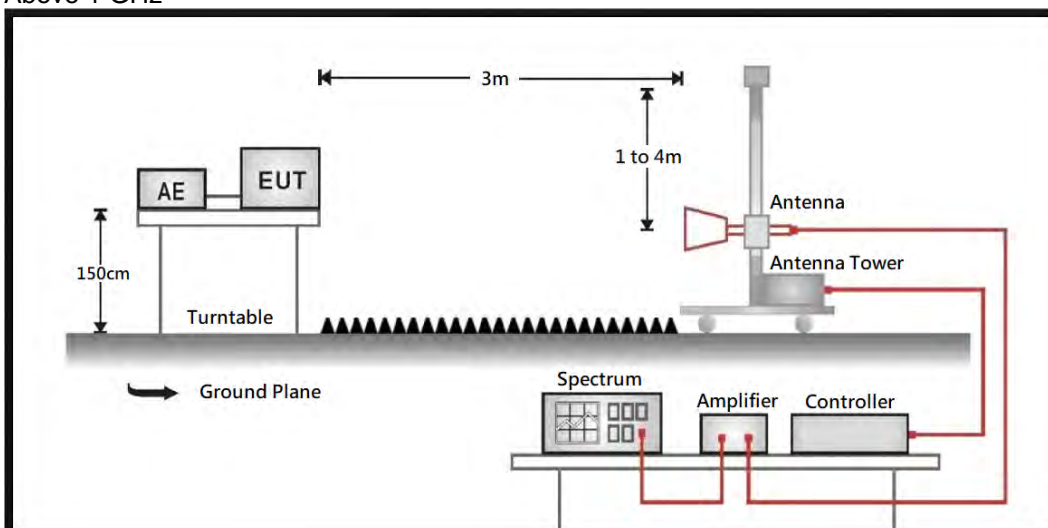
9 kHz ~ 30 MHz



30 MHz ~ 1 GHz



Above 1 GHz



3.2. 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

3.3. 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 from 9 kHz(include 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.

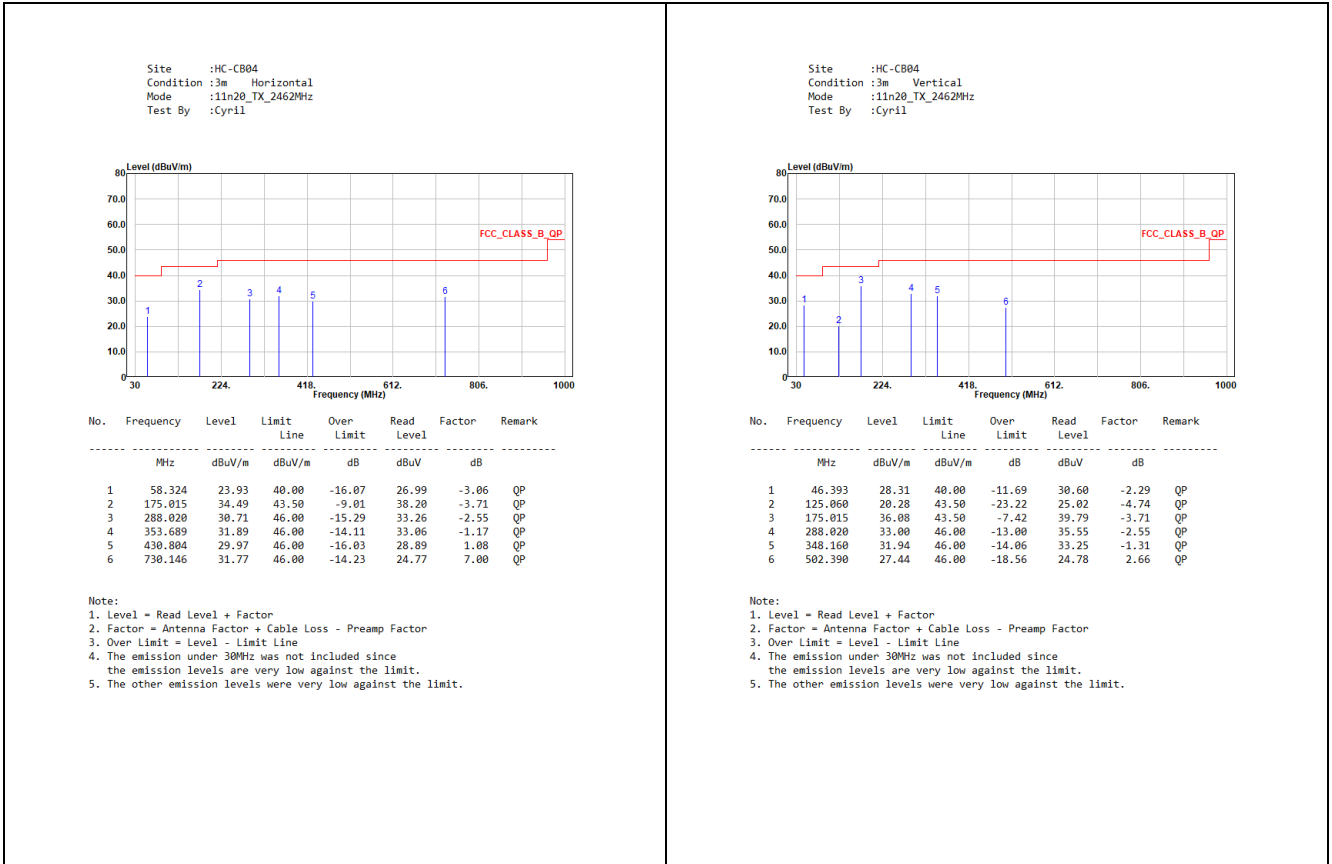
The bandwidth below 1 GHz setting on the field strength meter is 120 kHz and above 1 GHz is 1 MHz.

3.4. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247.

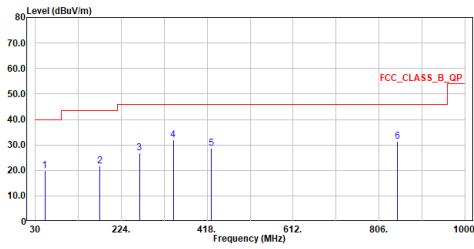
3.5. Test Result of Radiated Emissions (30 MHz ~ 1 GHz)

Mode 1: EUT 1 with main source of battery



Mode 2: EUT 1 with second source of battery

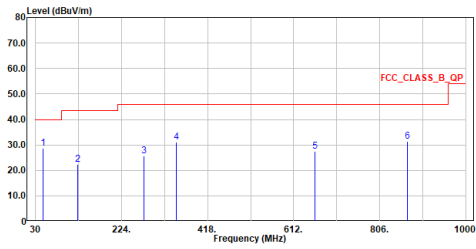
Site :HC-CB04
 Condition :3m Horizontal
 Mode :11n20_TX_2462MHz
 Test By :Cyril



No.	Frequency MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	51.437	19.80	40.00	-20.20	22.42	-2.62	QP
2	175.015	21.75	43.50	-21.75	25.46	-3.71	QP
3	265.031	27.01	46.00	-18.99	30.50	-3.49	QP
4	341.370	32.02	46.00	-13.98	33.41	-1.39	QP
5	427.215	28.60	46.00	-17.40	27.66	0.94	QP
6	847.419	31.34	46.00	-14.66	22.87	8.47	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 :11n20_TX_2462MHz
 Test By :Cyril

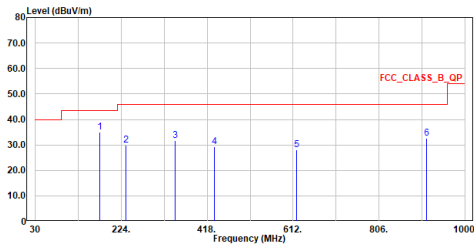


No.	Frequency MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	47.460	28.65	40.00	-11.35	30.82	-2.17	QP
2	125.060	22.24	43.50	-21.26	26.98	-4.74	QP
3	275.022	25.81	46.00	-20.19	28.87	-3.06	QP
4	347.675	30.97	46.00	-15.03	32.29	-1.32	QP
5	659.433	27.50	46.00	-18.50	21.81	5.69	QP
6	868.371	31.33	46.00	-14.67	22.59	8.74	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.

Mode 3: EUT 2 with main source of battery

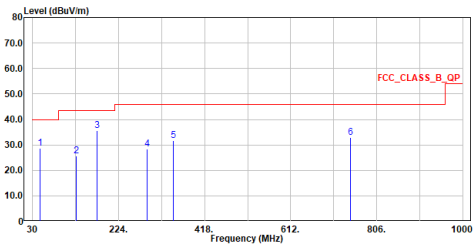
Site :HC-CB04
 Condition :3m Horizontal
 Mode :11n20_TX_2462MHz
 Test By :Cyril



No.	Frequency MHz	Level dBuV/m	Limit dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	175.015	35.06	43.50	-8.44	38.77	-3.71	QP
2	235.155	29.86	46.00	-16.14	34.76	-4.90	QP
3	345.444	31.71	46.00	-14.29	33.08	-1.37	QP
4	433.520	29.42	46.00	-16.58	28.21	1.21	QP
5	619.469	28.07	46.00	-17.93	22.76	5.31	QP
6	913.767	32.61	46.00	-13.39	23.25	9.36	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 :11n20_TX_2462MHz
 Test By :Cyril

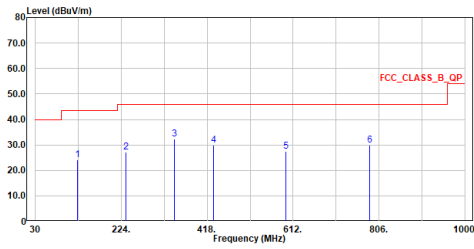


No.	Frequency MHz	Level dBuV/m	Limit dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	46.781	28.76	40.00	-11.24	30.91	-2.15	QP
2	128.843	25.54	43.50	-17.96	29.89	-4.35	QP
3	175.015	35.50	43.50	-8.00	39.21	-3.71	QP
4	287.923	28.48	46.00	-17.52	31.03	-2.55	QP
5	347.384	31.62	46.00	-14.38	32.94	-1.32	QP
6	746.927	33.05	46.00	-12.95	25.50	7.55	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.

Mode 4: EUT 2 with second source of battery

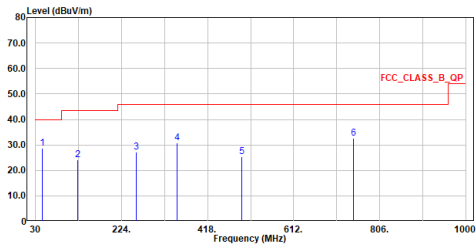
Site :HC-CB04
 Condition :3m Horizontal
 Mode :11n20_TX_2462MHz
 Test By :Cyril



No.	Frequency MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	125.060	24.06	43.50	-19.44	28.80	-4.74	QP
2	234.961	27.03	46.00	-18.97	31.94	-4.91	QP
3	343.310	32.20	46.00	-13.80	33.59	-1.39	QP
4	432.647	29.89	46.00	-16.11	28.71	1.18	QP
5	595.784	27.32	46.00	-18.68	22.34	4.98	QP
6	785.727	29.81	46.00	-16.19	22.02	7.79	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 :11n20_TX_2462MHz
 Test By :Cyril

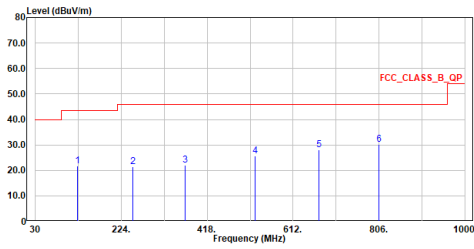


No.	Frequency MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	45.908	28.80	40.00	-11.20	31.24	-2.44	QP
2	125.060	24.30	43.50	-19.20	29.04	-4.74	QP
3	256.883	27.24	46.00	-18.76	31.26	-4.02	QP
4	349.421	30.92	46.00	-15.08	32.20	-1.28	QP
5	495.794	25.41	46.00	-20.59	22.90	2.51	QP
6	746.927	32.62	46.00	-13.38	25.07	7.55	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.

Mode 5: EUT 3 with AA battery

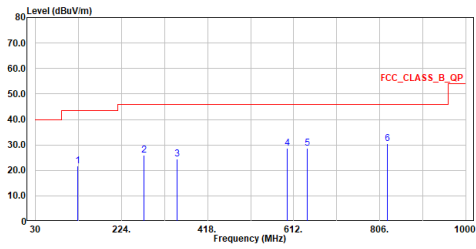
Site :HC-CB04
 Condition :3m Horizontal
 Mode :11n20_TX_2462MHz
 Test By :Cyril



No.	Frequency MHz	Level dBuV/m	Limit dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	125.060	21.68	43.50	-21.82	26.42	-4.74	QP
2	249.996	21.37	46.00	-24.63	25.62	-4.25	QP
3	368.433	22.08	46.00	-23.92	22.72	-0.64	QP
4	526.349	25.60	46.00	-20.40	22.40	3.20	QP
5	669.812	28.09	46.00	-17.91	22.10	5.99	QP
6	805.515	30.33	46.00	-15.67	22.38	7.95	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 :11n20_TX_2462MHz
 Test By :Cyril



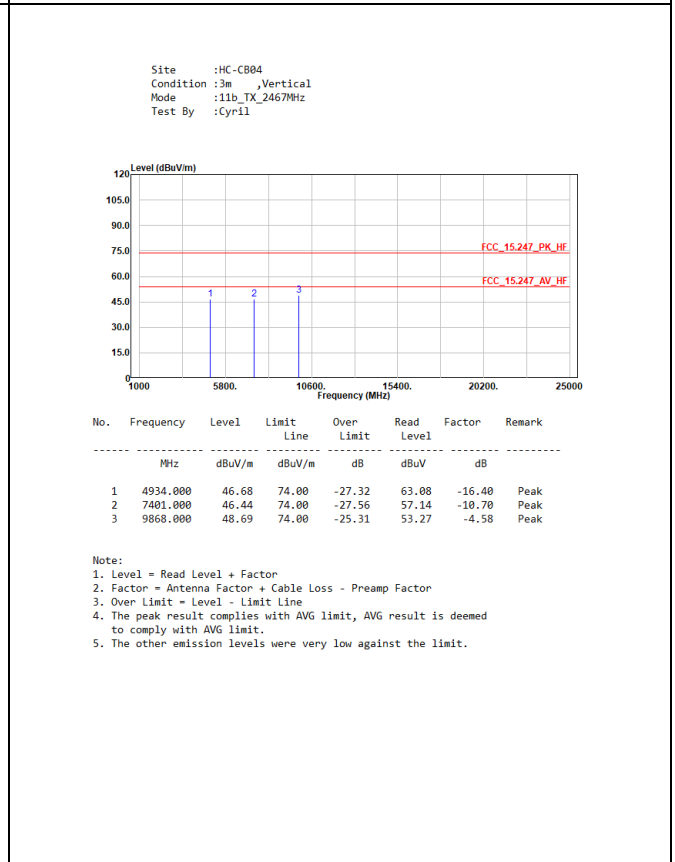
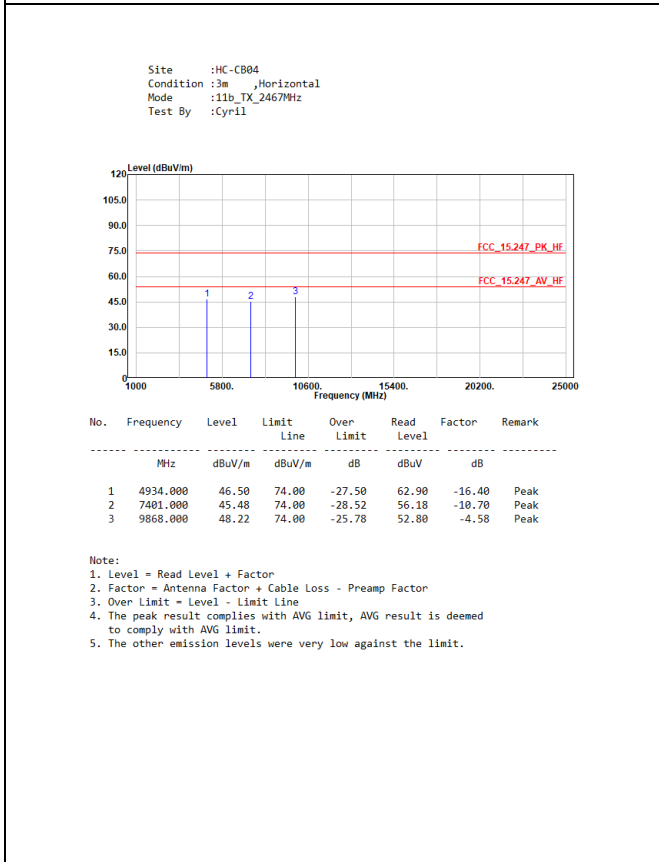
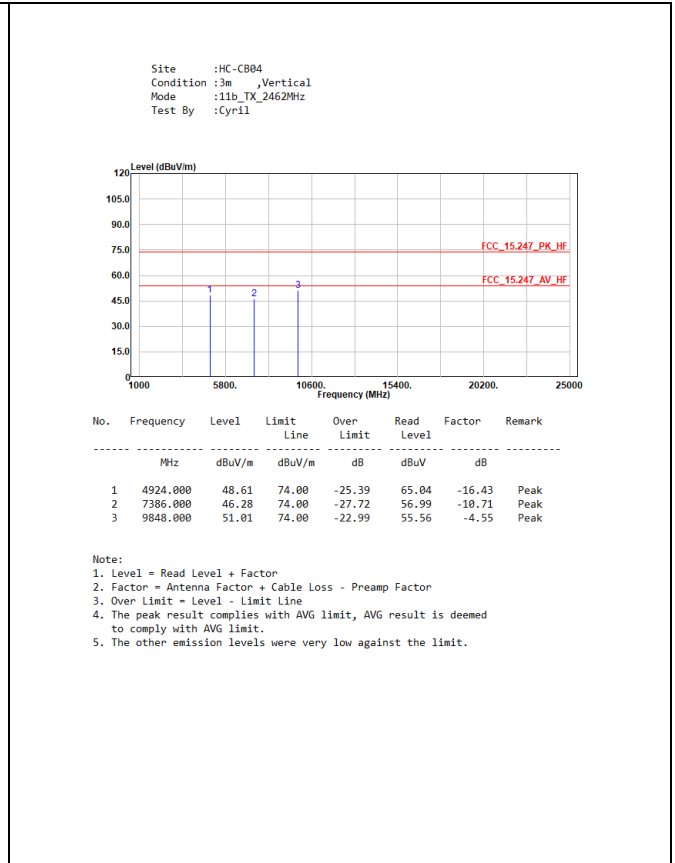
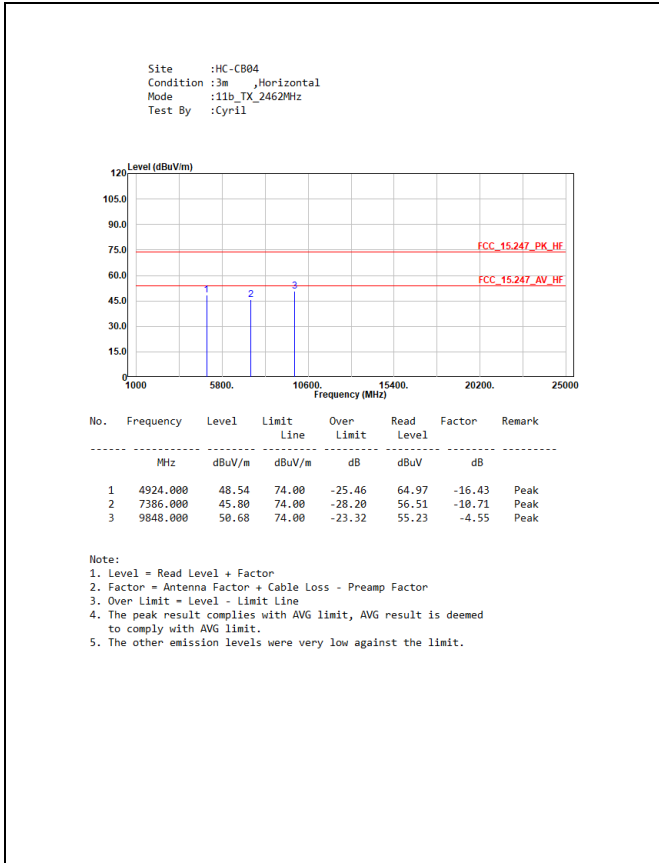
No.	Frequency MHz	Level dBuV/m	Limit dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	125.060	21.60	43.50	-21.90	26.34	-4.74	QP
2	275.022	25.94	46.00	-20.06	29.00	-3.06	QP
3	350.003	24.42	46.00	-21.58	25.67	-1.25	QP
4	596.868	28.68	46.00	-17.32	23.66	5.02	QP
5	642.264	28.81	46.00	-17.19	22.96	5.85	QP
6	823.654	30.46	46.00	-15.54	22.26	8.20	QP

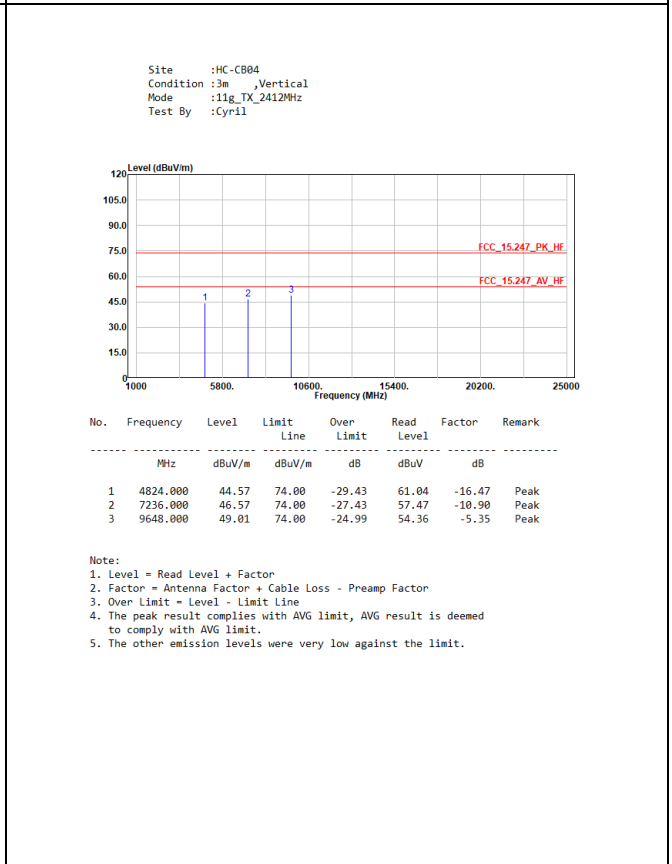
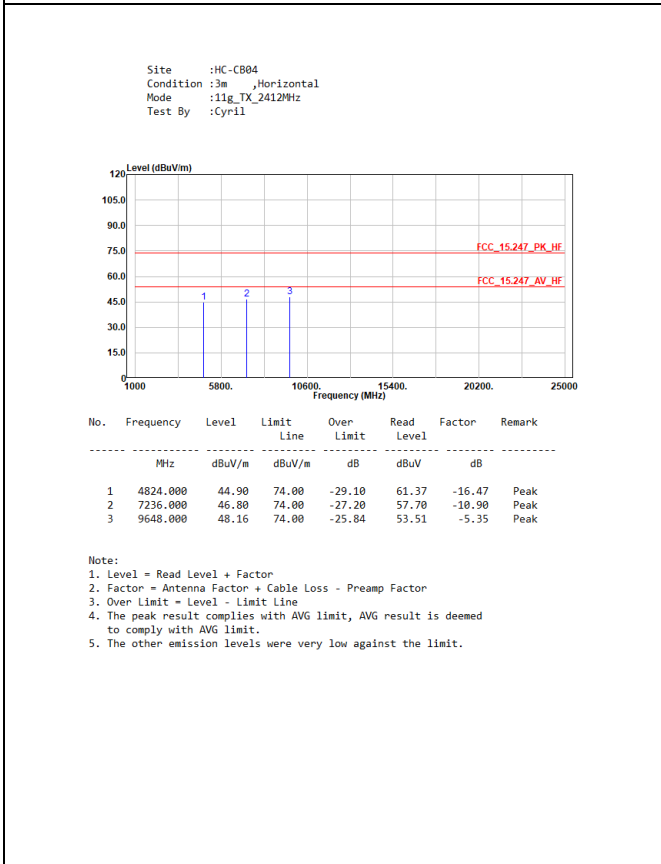
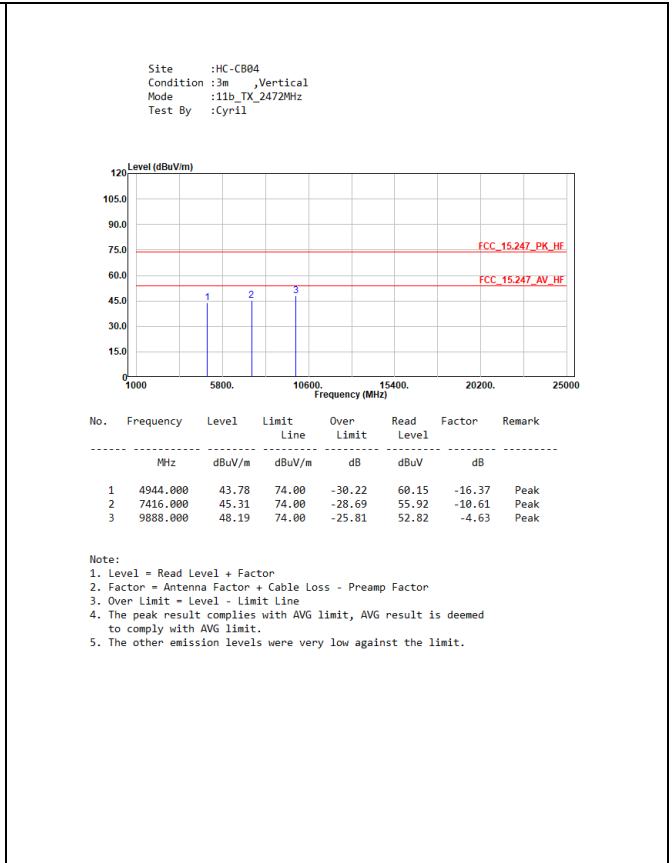
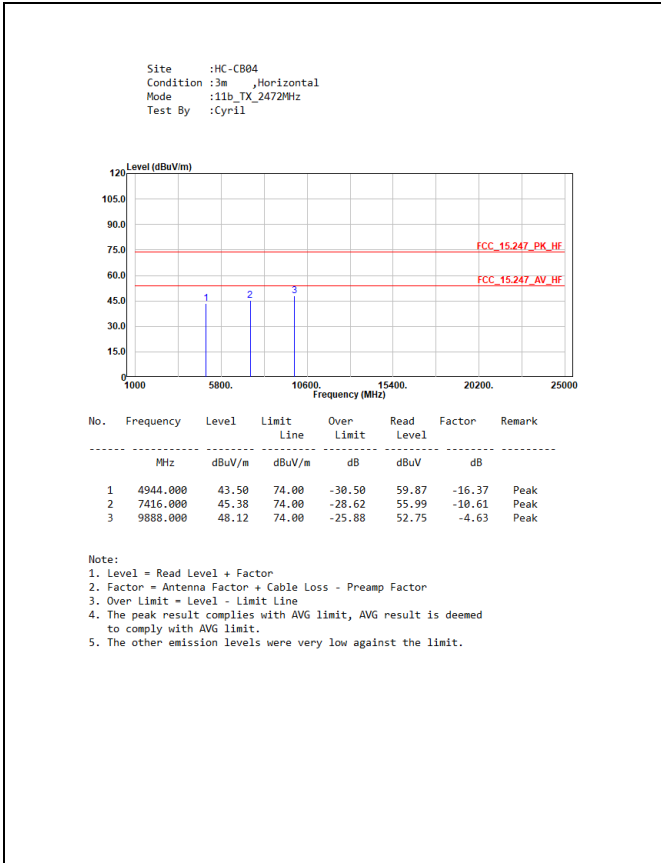
Note:
 1. Level = Read Level + Factor
 2. Factor = Antenna Factor + Cable Loss - Preamp Factor
 3. Over Limit = Level - Limit Line
 4. The emission under 30MHz was not included since the emission levels are very low against the limit.
 5. The other emission levels were very low against the limit.

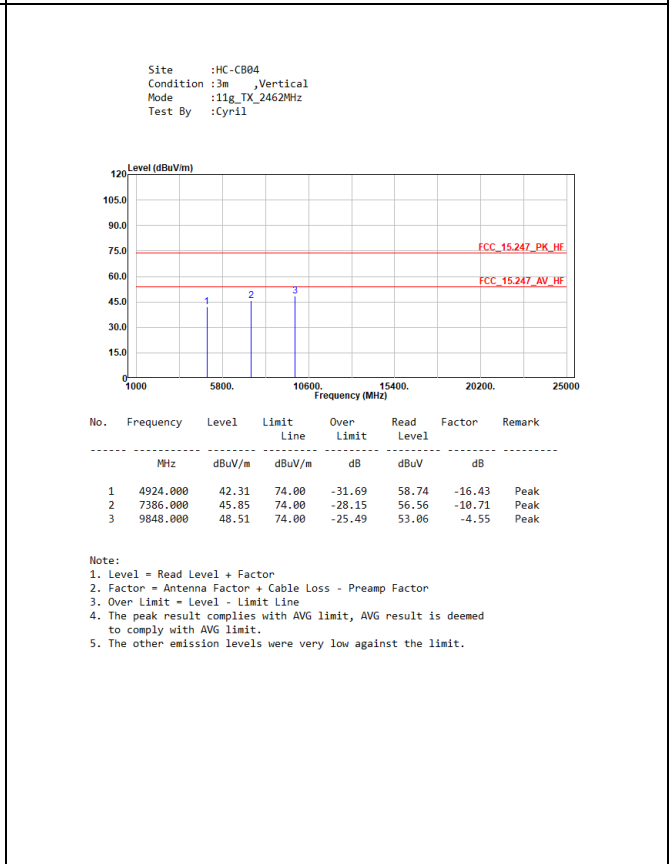
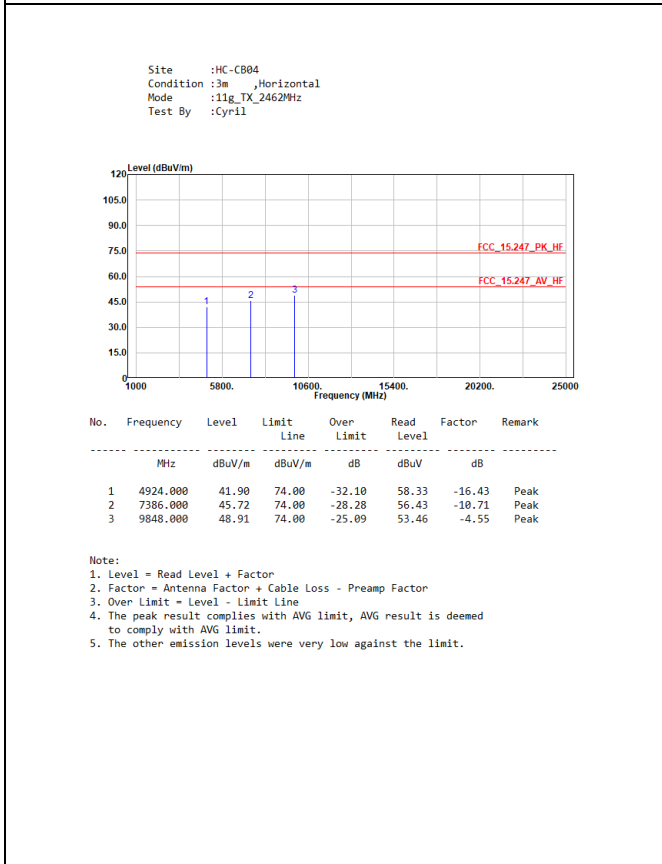
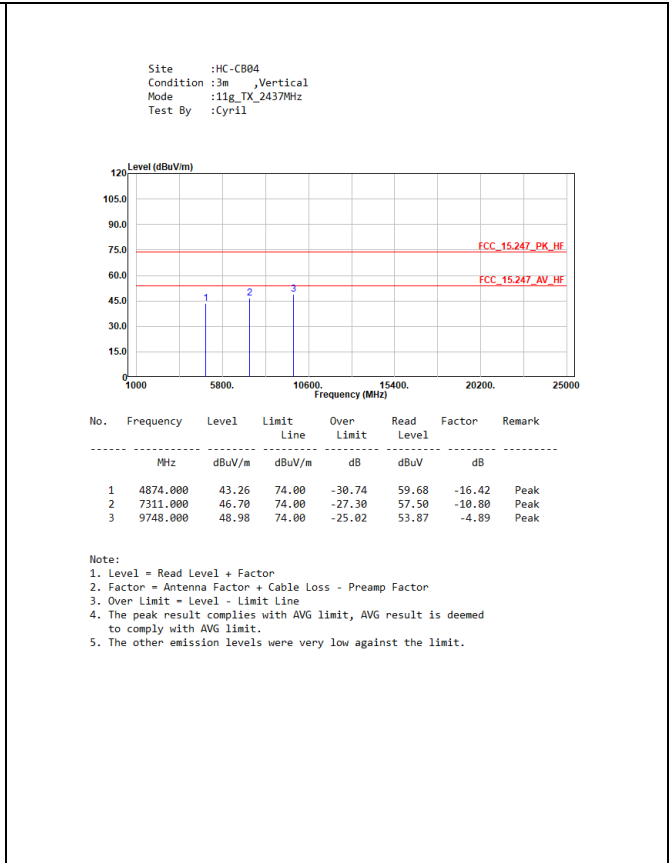
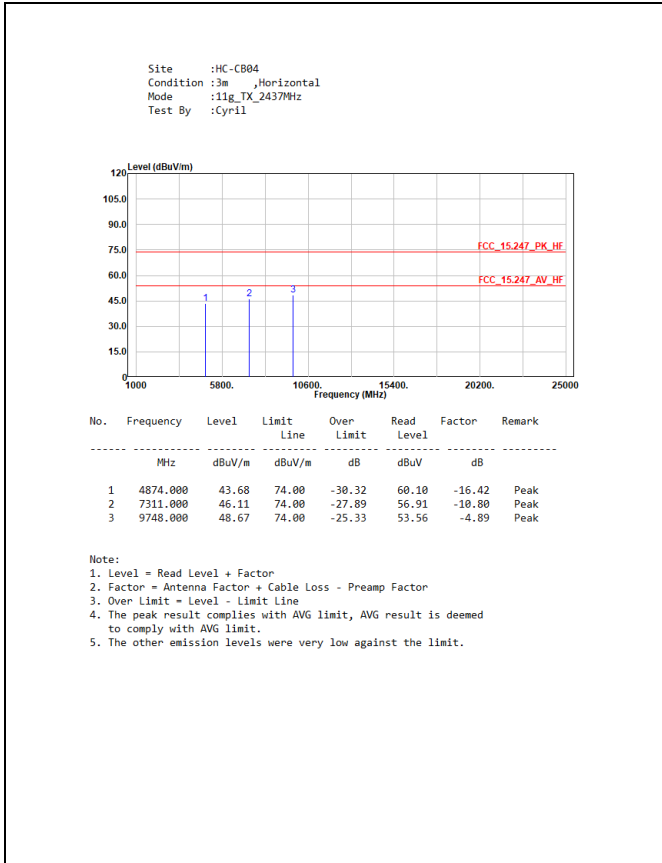
3.6. Test Result of Radiated Emissions (1 GHz ~ 10th Harmonic)

Mode 1: EUT 1 with main source of battery

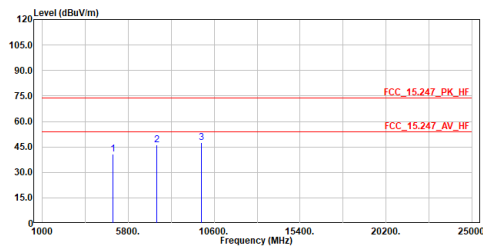
<p>Site :HC-CB04 Condition :3m ,Horizontal Mode :11b_TX_2412MHz Test By :Cyril</p> <table border="1"> <thead> <tr> <th>No.</th> <th>Frequency</th> <th>Level</th> <th>Limit</th> <th>Over</th> <th>Read</th> <th>Factor</th> <th>Remark</th> </tr> <tr> <th></th> <th>MHz</th> <th>dBuV/m</th> <th>dBuV/m</th> <th>dB</th> <th>dBuV</th> <th>dB</th> <th></th> </tr> </thead> <tbody> <tr> <td>1</td> <td>4824.000</td> <td>50.72</td> <td>74.00</td> <td>-23.28</td> <td>67.19</td> <td>-16.47</td> <td>Peak</td> </tr> <tr> <td>2</td> <td>7236.000</td> <td>47.19</td> <td>74.00</td> <td>-26.81</td> <td>58.09</td> <td>-10.90</td> <td>Peak</td> </tr> <tr> <td>3</td> <td>9648.000</td> <td>49.91</td> <td>74.00</td> <td>-24.09</td> <td>55.26</td> <td>-5.35</td> <td>Peak</td> </tr> </tbody> </table> <p>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.</p>	No.	Frequency	Level	Limit	Over	Read	Factor	Remark		MHz	dBuV/m	dBuV/m	dB	dBuV	dB		1	4824.000	50.72	74.00	-23.28	67.19	-16.47	Peak	2	7236.000	47.19	74.00	-26.81	58.09	-10.90	Peak	3	9648.000	49.91	74.00	-24.09	55.26	-5.35	Peak	<p>Site :HC-CB04 Condition :3m ,Vertical Mode :11b_TX_2412MHz Test By :Cyril</p> <table border="1"> <thead> <tr> <th>No.</th> <th>Frequency</th> <th>Level</th> <th>Limit</th> <th>Over</th> <th>Read</th> <th>Factor</th> <th>Remark</th> </tr> <tr> <th></th> <th>MHz</th> <th>dBuV/m</th> <th>dBuV/m</th> <th>dB</th> <th>dBuV</th> <th>dB</th> <th></th> </tr> </thead> <tbody> <tr> <td>1</td> <td>4824.000</td> <td>49.46</td> <td>74.00</td> <td>-24.54</td> <td>65.93</td> <td>-16.47</td> <td>Peak</td> </tr> <tr> <td>2</td> <td>7236.000</td> <td>47.29</td> <td>74.00</td> <td>-26.71</td> <td>58.19</td> <td>-10.90</td> <td>Peak</td> </tr> <tr> <td>3</td> <td>9648.000</td> <td>50.26</td> <td>74.00</td> <td>-23.74</td> <td>55.61</td> <td>-5.35</td> <td>Peak</td> </tr> </tbody> </table> <p>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.</p>	No.	Frequency	Level	Limit	Over	Read	Factor	Remark		MHz	dBuV/m	dBuV/m	dB	dBuV	dB		1	4824.000	49.46	74.00	-24.54	65.93	-16.47	Peak	2	7236.000	47.29	74.00	-26.71	58.19	-10.90	Peak	3	9648.000	50.26	74.00	-23.74	55.61	-5.35	Peak
No.	Frequency	Level	Limit	Over	Read	Factor	Remark																																																																										
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB																																																																											
1	4824.000	50.72	74.00	-23.28	67.19	-16.47	Peak																																																																										
2	7236.000	47.19	74.00	-26.81	58.09	-10.90	Peak																																																																										
3	9648.000	49.91	74.00	-24.09	55.26	-5.35	Peak																																																																										
No.	Frequency	Level	Limit	Over	Read	Factor	Remark																																																																										
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB																																																																											
1	4824.000	49.46	74.00	-24.54	65.93	-16.47	Peak																																																																										
2	7236.000	47.29	74.00	-26.71	58.19	-10.90	Peak																																																																										
3	9648.000	50.26	74.00	-23.74	55.61	-5.35	Peak																																																																										
<p>Site :HC-CB04 Condition :3m ,Horizontal Mode :11b_TX_2437MHz Test By :Cyril</p> <table border="1"> <thead> <tr> <th>No.</th> <th>Frequency</th> <th>Level</th> <th>Limit</th> <th>Over</th> <th>Read</th> <th>Factor</th> <th>Remark</th> </tr> <tr> <th></th> <th>MHz</th> <th>dBuV/m</th> <th>dBuV/m</th> <th>dB</th> <th>dBuV</th> <th>dB</th> <th></th> </tr> </thead> <tbody> <tr> <td>1</td> <td>4874.000</td> <td>51.99</td> <td>74.00</td> <td>-22.01</td> <td>68.41</td> <td>-16.42</td> <td>Peak</td> </tr> <tr> <td>2</td> <td>7311.000</td> <td>47.52</td> <td>74.00</td> <td>-26.48</td> <td>58.32</td> <td>-10.80</td> <td>Peak</td> </tr> <tr> <td>3</td> <td>9748.000</td> <td>50.99</td> <td>74.00</td> <td>-23.01</td> <td>55.88</td> <td>-4.89</td> <td>Peak</td> </tr> </tbody> </table> <p>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.</p>	No.	Frequency	Level	Limit	Over	Read	Factor	Remark		MHz	dBuV/m	dBuV/m	dB	dBuV	dB		1	4874.000	51.99	74.00	-22.01	68.41	-16.42	Peak	2	7311.000	47.52	74.00	-26.48	58.32	-10.80	Peak	3	9748.000	50.99	74.00	-23.01	55.88	-4.89	Peak	<p>Site :HC-CB04 Condition :3m ,Vertical Mode :11b_TX_2437MHz Test By :Cyril</p> <table border="1"> <thead> <tr> <th>No.</th> <th>Frequency</th> <th>Level</th> <th>Limit</th> <th>Over</th> <th>Read</th> <th>Factor</th> <th>Remark</th> </tr> <tr> <th></th> <th>MHz</th> <th>dBuV/m</th> <th>dBuV/m</th> <th>dB</th> <th>dBuV</th> <th>dB</th> <th></th> </tr> </thead> <tbody> <tr> <td>1</td> <td>4874.000</td> <td>52.84</td> <td>74.00</td> <td>-21.16</td> <td>69.26</td> <td>-16.42</td> <td>Peak</td> </tr> <tr> <td>2</td> <td>7311.000</td> <td>46.93</td> <td>74.00</td> <td>-27.07</td> <td>57.73</td> <td>-10.80</td> <td>Peak</td> </tr> <tr> <td>3</td> <td>9748.000</td> <td>51.42</td> <td>74.00</td> <td>-22.58</td> <td>56.31</td> <td>-4.89</td> <td>Peak</td> </tr> </tbody> </table> <p>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.</p>	No.	Frequency	Level	Limit	Over	Read	Factor	Remark		MHz	dBuV/m	dBuV/m	dB	dBuV	dB		1	4874.000	52.84	74.00	-21.16	69.26	-16.42	Peak	2	7311.000	46.93	74.00	-27.07	57.73	-10.80	Peak	3	9748.000	51.42	74.00	-22.58	56.31	-4.89	Peak
No.	Frequency	Level	Limit	Over	Read	Factor	Remark																																																																										
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB																																																																											
1	4874.000	51.99	74.00	-22.01	68.41	-16.42	Peak																																																																										
2	7311.000	47.52	74.00	-26.48	58.32	-10.80	Peak																																																																										
3	9748.000	50.99	74.00	-23.01	55.88	-4.89	Peak																																																																										
No.	Frequency	Level	Limit	Over	Read	Factor	Remark																																																																										
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB																																																																											
1	4874.000	52.84	74.00	-21.16	69.26	-16.42	Peak																																																																										
2	7311.000	46.93	74.00	-27.07	57.73	-10.80	Peak																																																																										
3	9748.000	51.42	74.00	-22.58	56.31	-4.89	Peak																																																																										







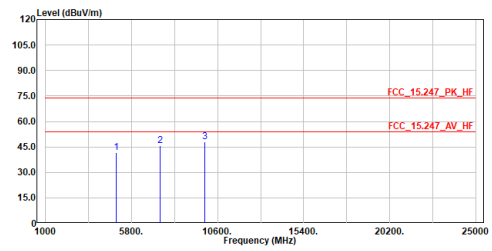
Site :HC-CB04
 Condition :3m ,Horizontal
 Mode :11g_TX_2467MHz
 Test By :Cyril



No.	Frequency MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	4934.000	40.93	74.00	-33.07	57.33	-16.40	Peak
2	7401.000	46.02	74.00	-27.98	56.72	-10.70	Peak
3	9868.000	47.74	74.00	-26.26	52.32	-4.58	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.

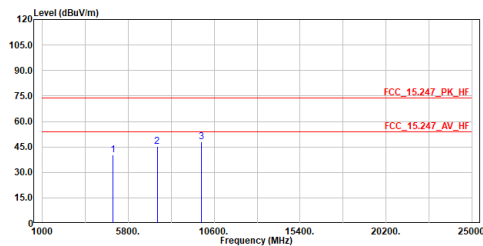
Site :HC-CB04
 Condition :3m ,Vertical
 Mode :11g_TX_2467MHz
 Test By :Cyril



No.	Frequency MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	4934.000	41.68	74.00	-32.32	58.08	-16.40	Peak
2	7401.000	45.56	74.00	-28.44	56.26	-10.70	Peak
3	9868.000	47.82	74.00	-26.18	52.40	-4.58	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.

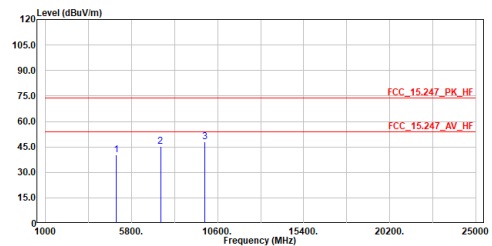
Site :HC-CB04
 Condition :3m ,Horizontal
 Mode :11g_TX_2472MHz
 Test By :Cyril



No.	Frequency MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	4944.000	40.40	74.00	-33.60	56.77	-16.37	Peak
2	7416.000	45.29	74.00	-28.71	55.90	-10.61	Peak
3	9888.000	48.13	74.00	-25.87	52.76	-4.63	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.

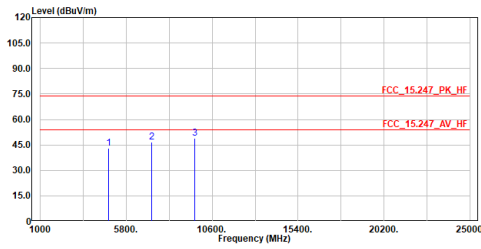
Site :HC-CB04
 Condition :3m ,Vertical
 Mode :11g_TX_2472MHz
 Test By :Cyril



No.	Frequency MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	4944.000	40.38	74.00	-33.62	56.75	-16.37	Peak
2	7416.000	45.47	74.00	-28.53	56.08	-10.61	Peak
3	9888.000	48.12	74.00	-25.88	52.75	-4.63	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.

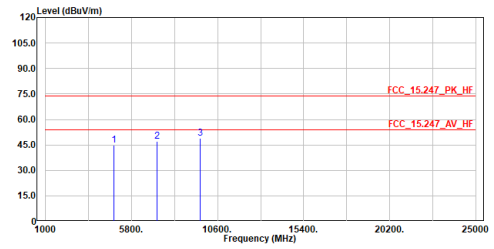
Site :HC-CB04
 Condition :3m ,Horizontal
 Mode :11n20_TX_2412MHz
 Test By :Cyril



No.	Frequency MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	4824.000	43.10	74.00	-30.90	59.57	-16.47	Peak
2	7236.000	46.65	74.00	-27.35	57.55	-10.90	Peak
3	9648.000	48.71	74.00	-25.29	54.06	-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.

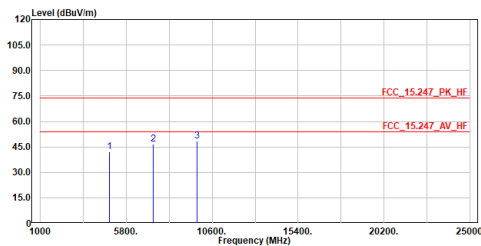
Site :HC-CB04
 Condition :3m ,Vertical
 Mode :11n20_TX_2412MHz
 Test By :Cyril



No.	Frequency MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	4824.000	44.83	74.00	-29.17	61.30	-16.47	Peak
2	7236.000	47.12	74.00	-26.88	58.02	-10.90	Peak
3	9648.000	48.81	74.00	-25.19	54.16	-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.

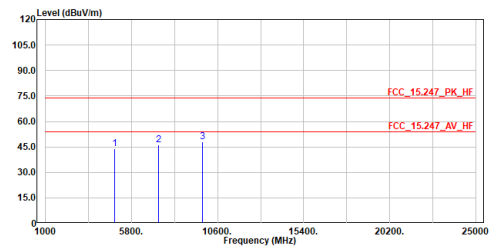
Site :HC-CB04
 Condition :3m ,Horizontal
 Mode :11n20_TX_2437MHz
 Test By :Cyril



No.	Frequency MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	4874.000	41.96	74.00	-32.04	58.38	-16.42	Peak
2	7311.000	46.48	74.00	-27.52	57.28	-10.80	Peak
3	9748.000	48.40	74.00	-25.60	53.29	-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.

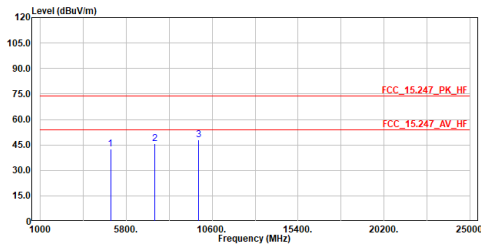
Site :HC-CB04
 Condition :3m ,Vertical
 Mode :11n20_TX_2437MHz
 Test By :Cyril



No.	Frequency MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	4874.000	44.15	74.00	-29.85	60.57	-16.42	Peak
2	7311.000	46.32	74.00	-27.68	57.12	-10.80	Peak
3	9748.000	47.90	74.00	-26.10	52.79	-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.

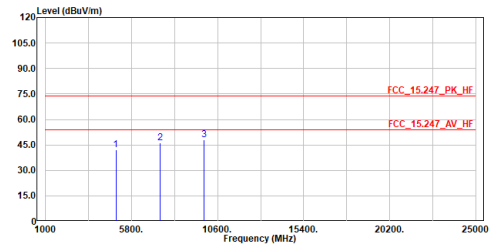
Site :HC-CB04
 Condition :3m ,Horizontal
 Mode :11n20_TX_2462MHz
 Test By :Cyril



No.	Frequency MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	4924.000	42.77	74.00	-31.23	59.20	-16.43	Peak
2	7386.000	45.62	74.00	-28.38	56.33	-10.71	Peak
3	9848.000	48.09	74.00	-25.91	52.64	-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.

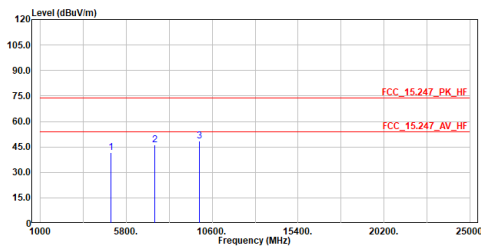
Site :HC-CB04
 Condition :3m ,Vertical
 Mode :11n20_TX_2462MHz
 Test By :Cyril



No.	Frequency MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	4924.000	42.32	74.00	-31.68	58.75	-16.43	Peak
2	7386.000	46.11	74.00	-27.89	56.82	-10.71	Peak
3	9848.000	48.11	74.00	-25.89	52.66	-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.

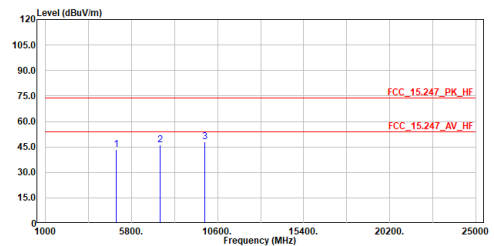
Site :HC-CB04
 Condition :3m ,Horizontal
 Mode :11n20_TX_2467MHz
 Test By :Cyril



No.	Frequency MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	4934.000	41.84	74.00	-32.16	58.24	-16.40	Peak
2	7401.000	46.04	74.00	-27.96	56.74	-10.70	Peak
3	9868.000	48.25	74.00	-25.75	52.83	-4.58	Peak

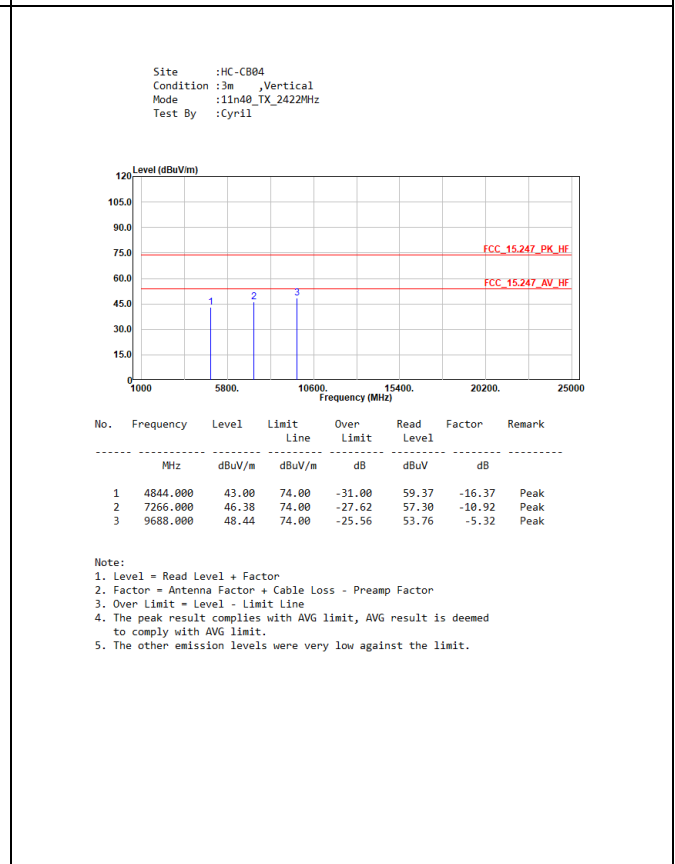
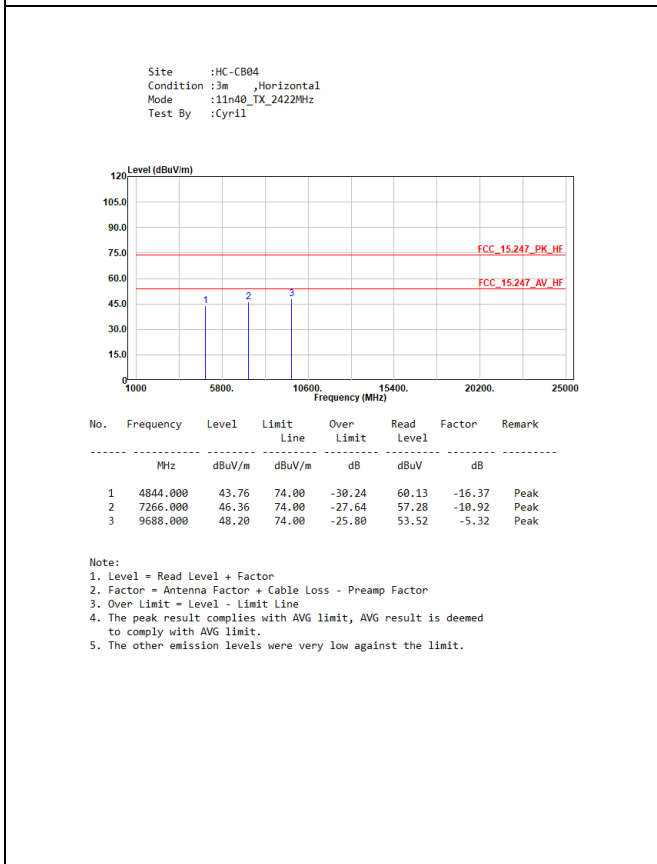
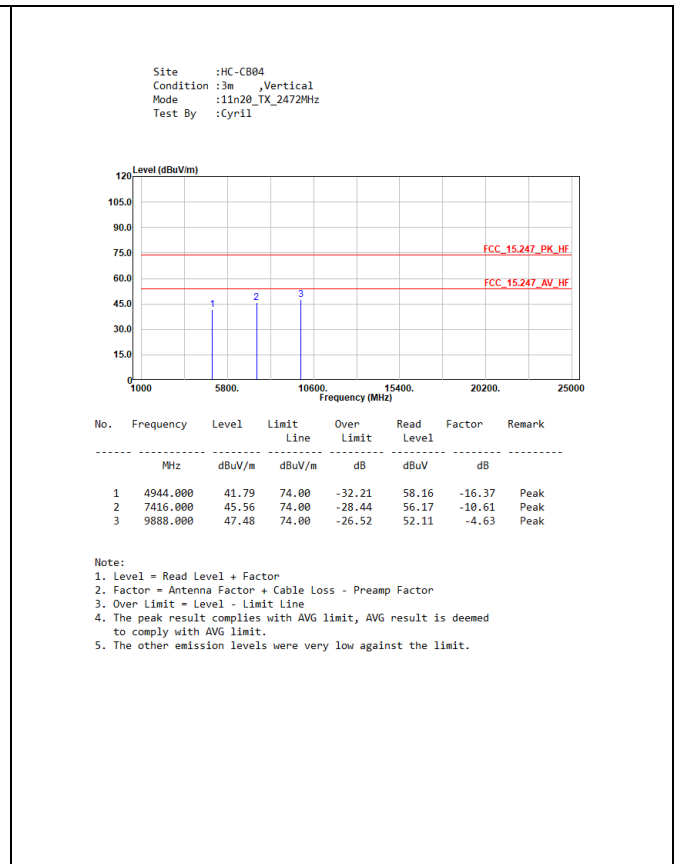
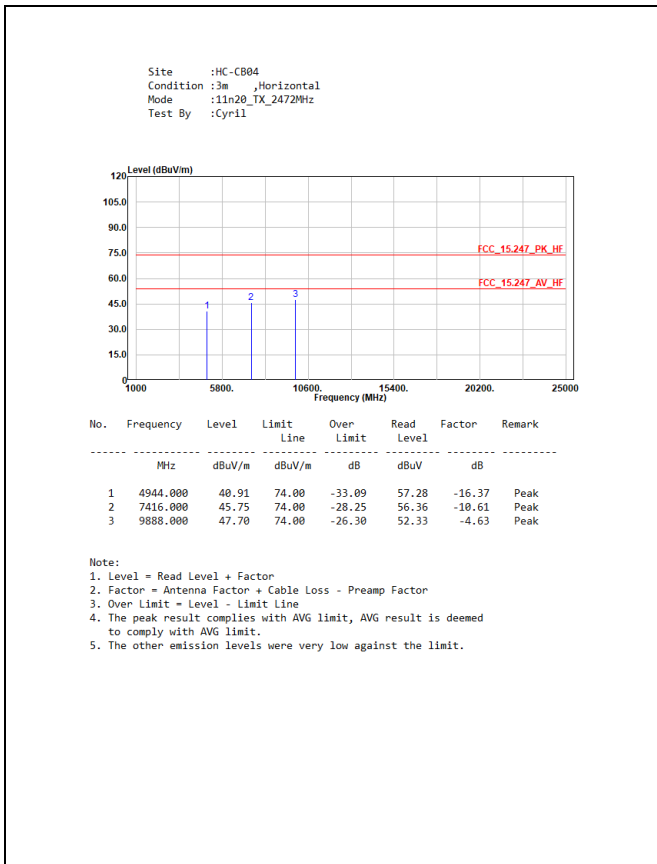
Note:
 1. Level = Read Level + Factor
 2. Factor = Antenna Factor + Cable Loss - Preamp Factor
 3. Over Limit = Level - Limit Line
 4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
 5. The other emission levels were very low against the limit.

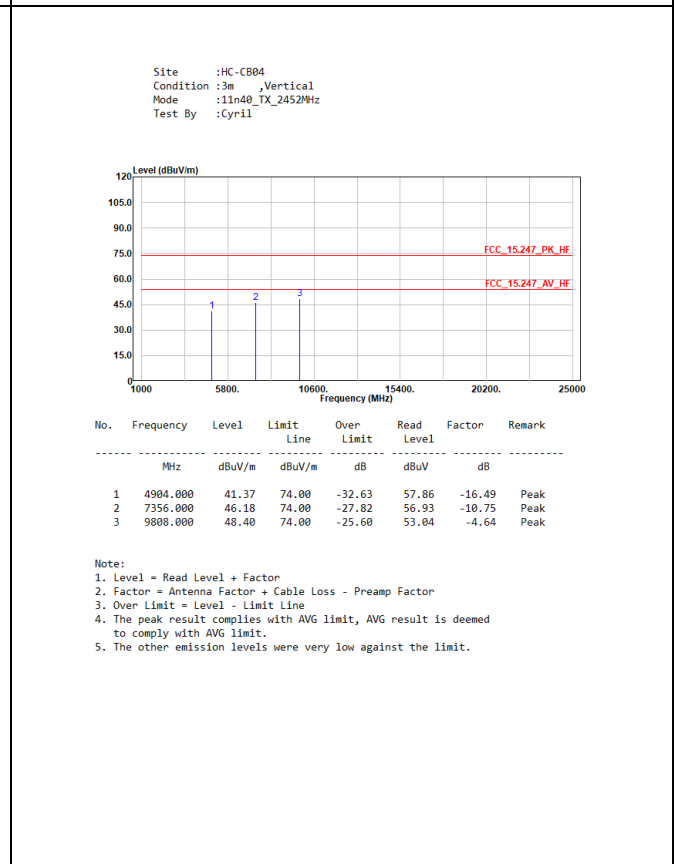
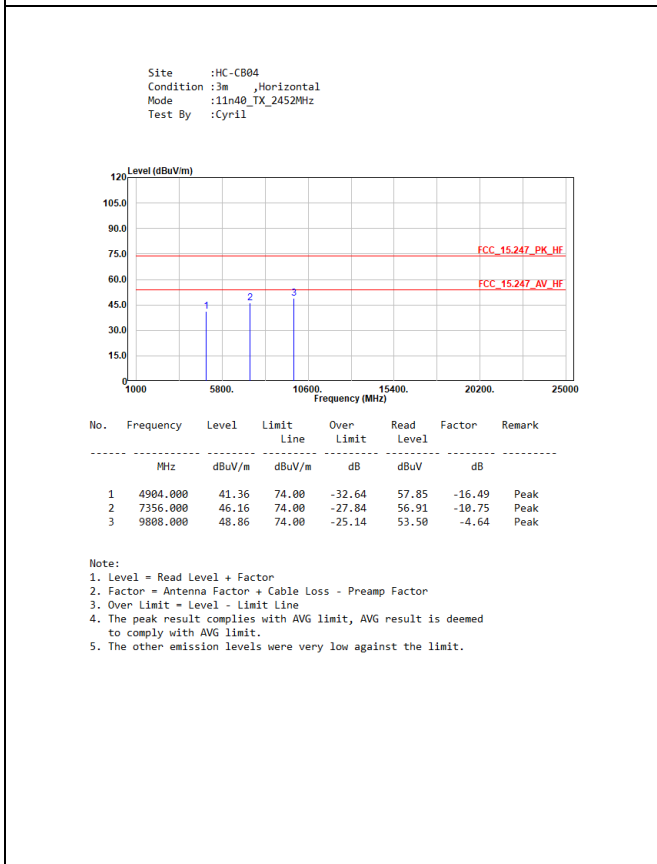
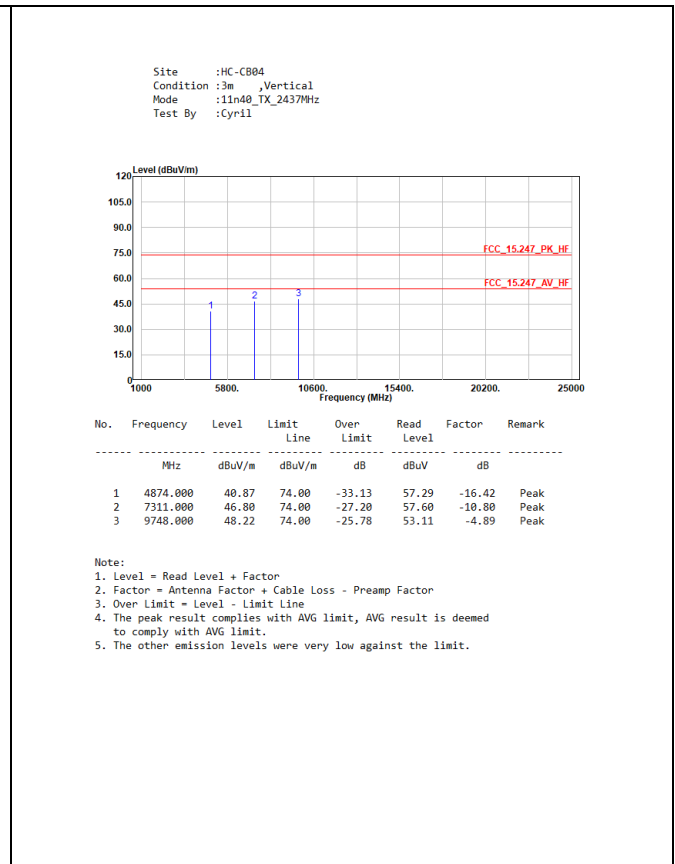
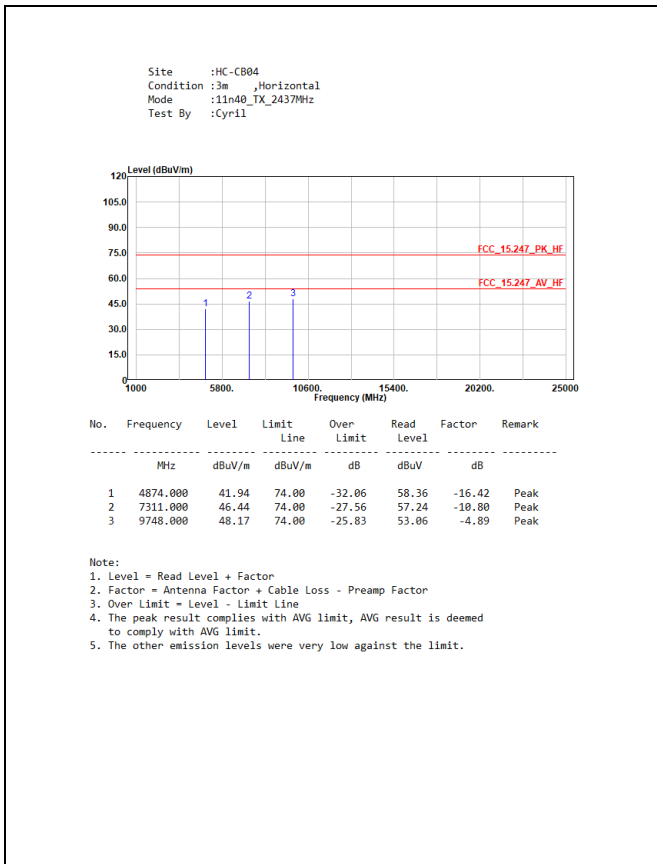
Site :HC-CB04
 Condition :3m ,Vertical
 Mode :11n20_TX_2467MHz
 Test By :Cyril

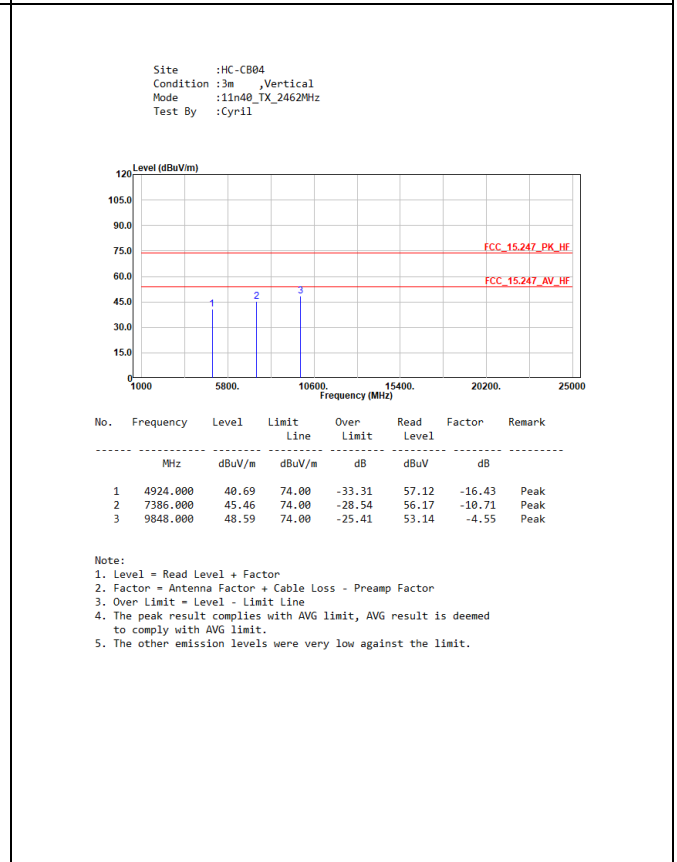
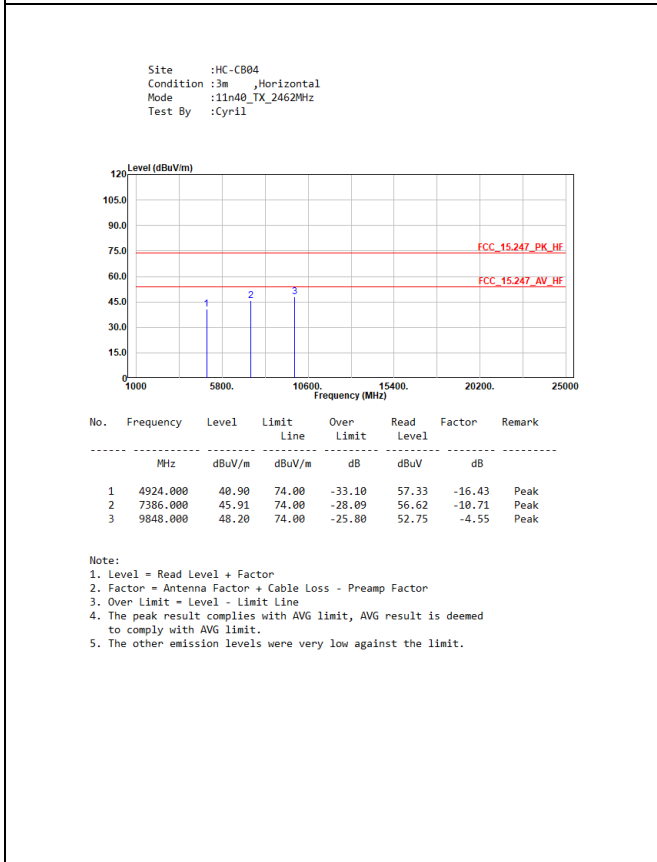
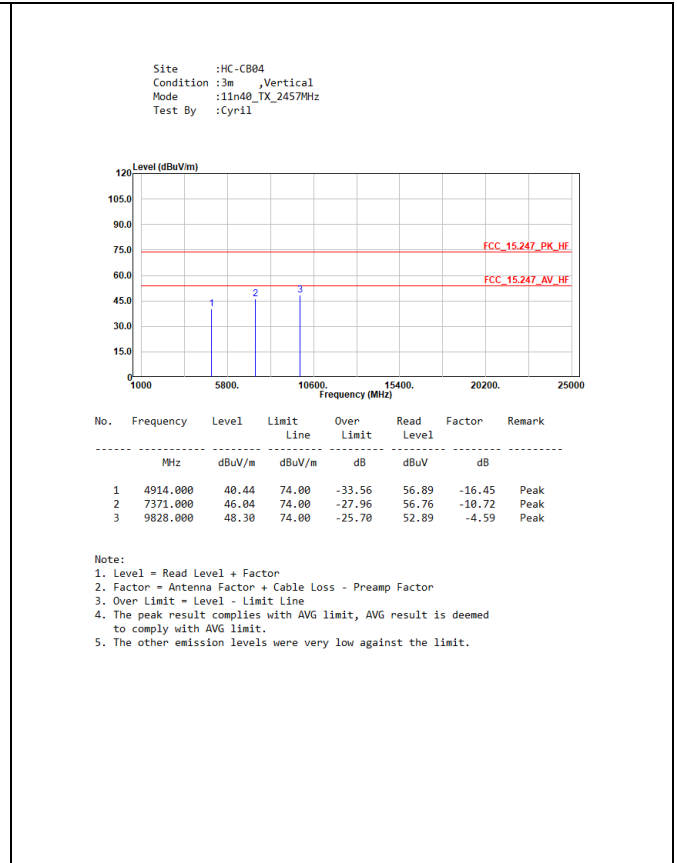
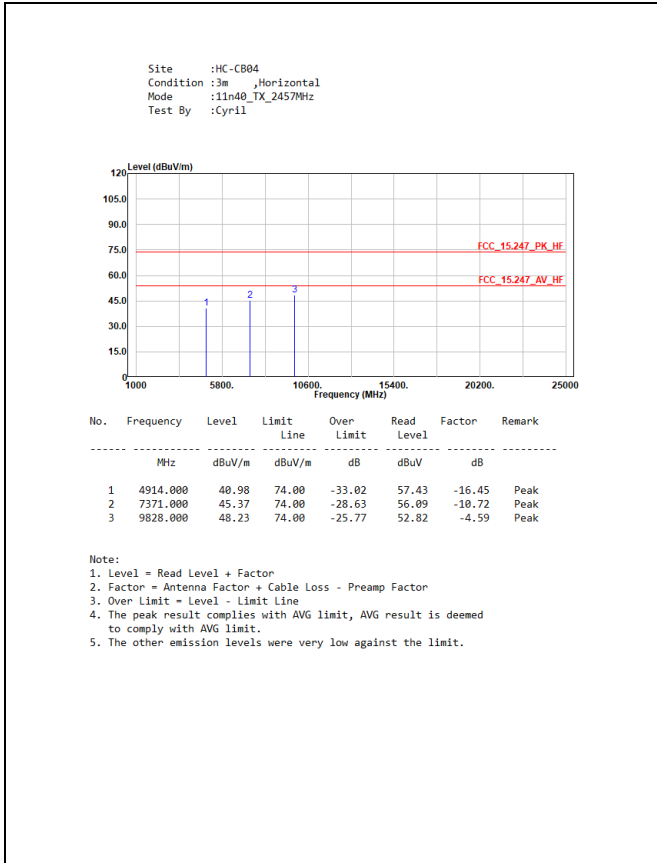


No.	Frequency MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	4934.000	43.33	74.00	-30.67	59.73	-16.40	Peak
2	7401.000	46.08	74.00	-27.92	56.78	-10.70	Peak
3	9868.000	48.11	74.00	-25.89	52.69	-4.58	Peak

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.

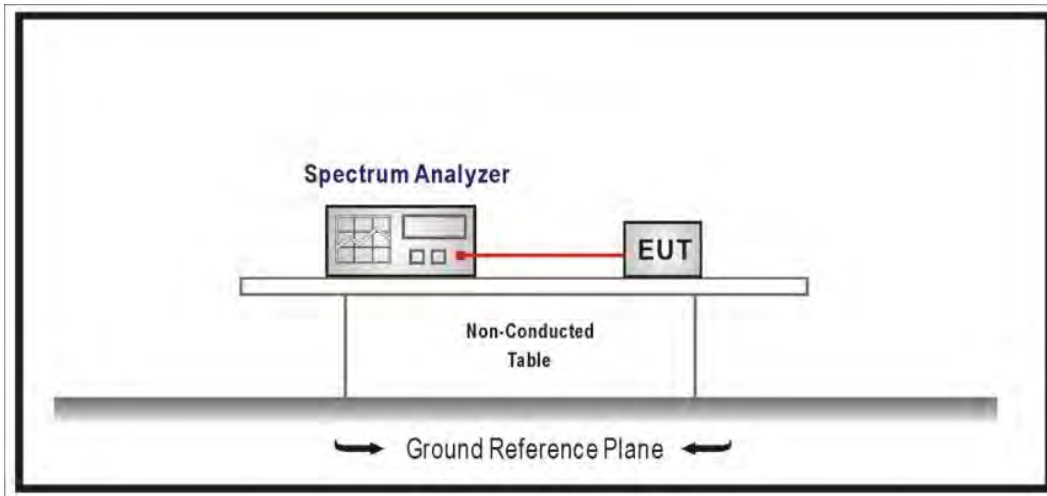






4. Antenna Port Conducted Emission

4.1. Test Setup



4.2. 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)).

4.3. Test Procedure

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

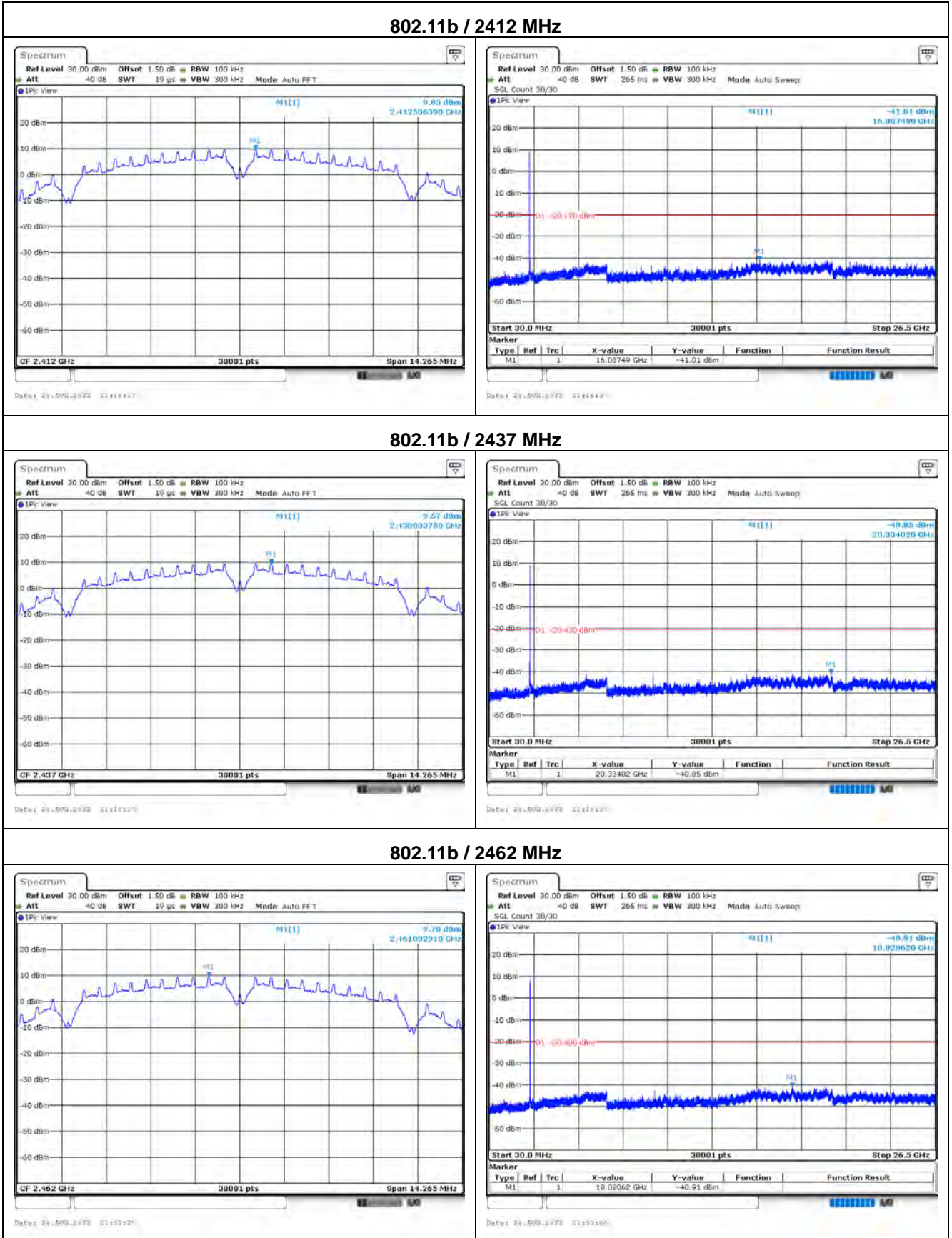
Set RBW = 100 kHz, Set VBW > RBW, scan up through 10th harmonic.

4.4. Test Specification

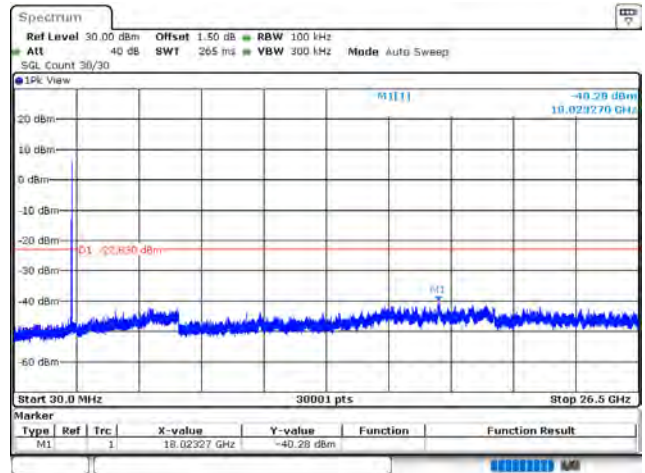
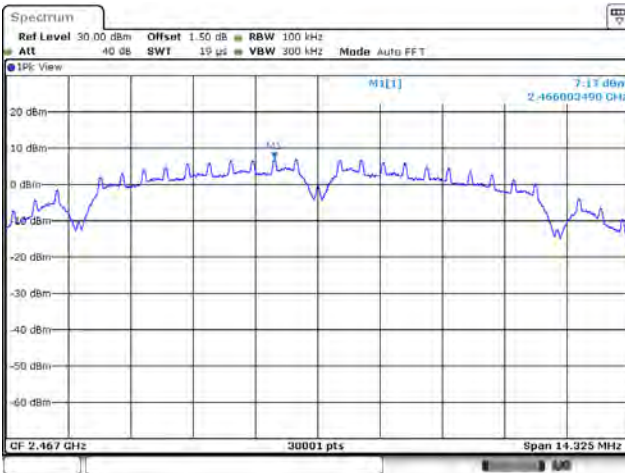
According to FCC Part 15 Subpart C Paragraph 15.247.

4.5. Test Result of Antenna Port Conducted Emission

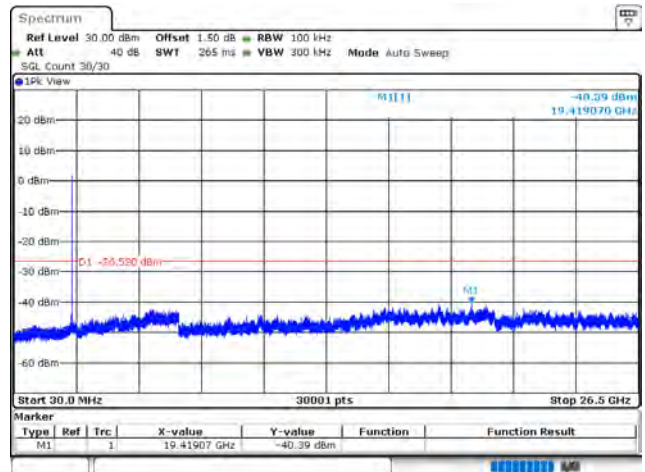
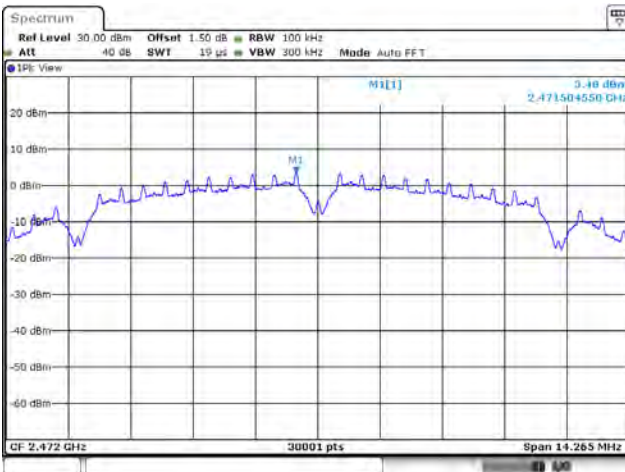
Mode 1: EUT 1 with main source of battery



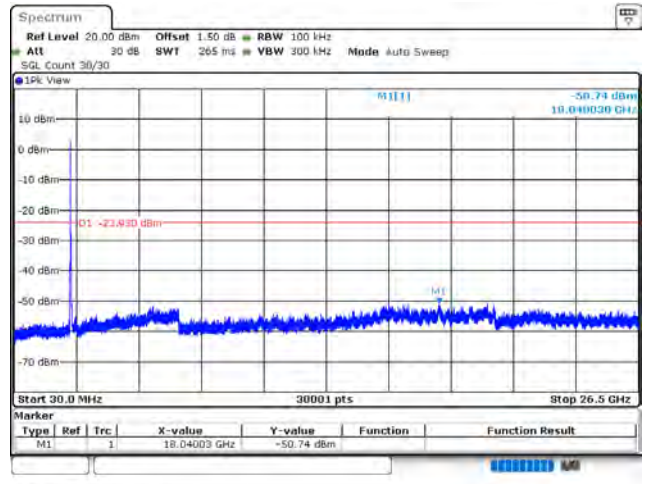
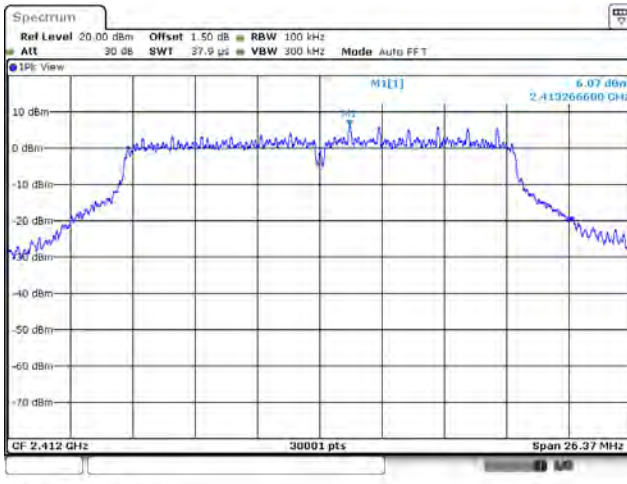
802.11b / 2467 MHz



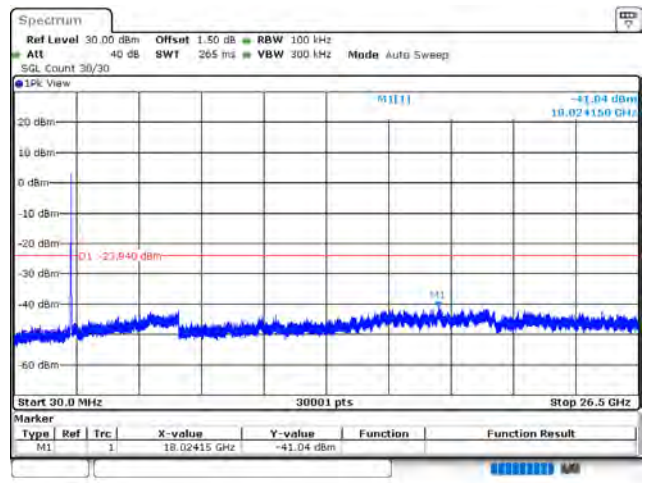
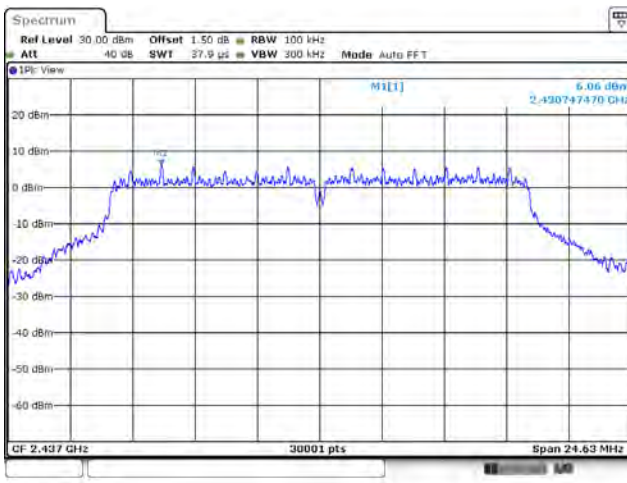
802.11b / 2472 MHz



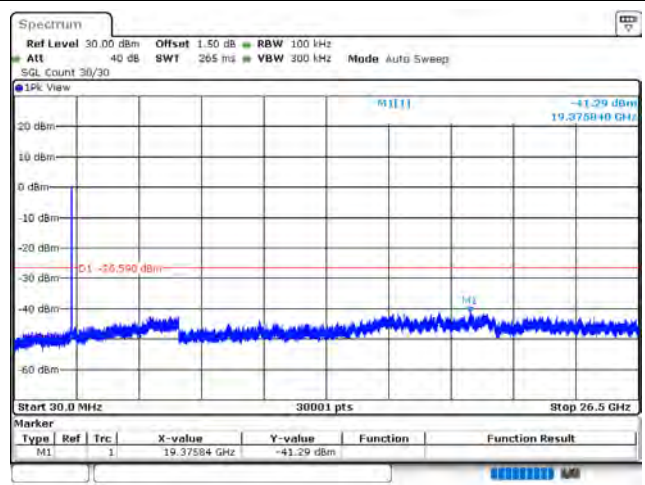
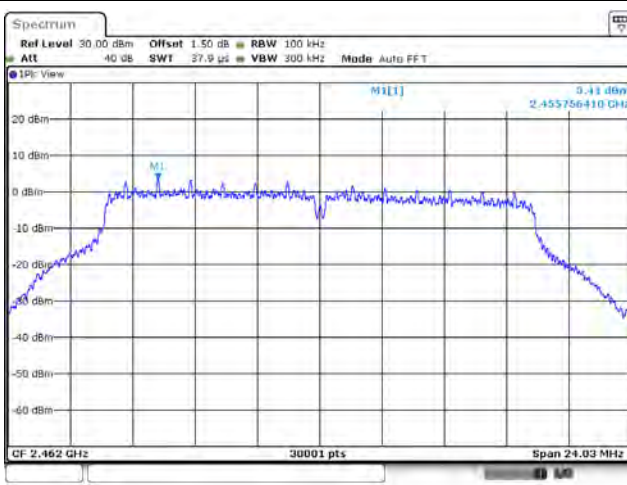
802.11g / 2412 MHz



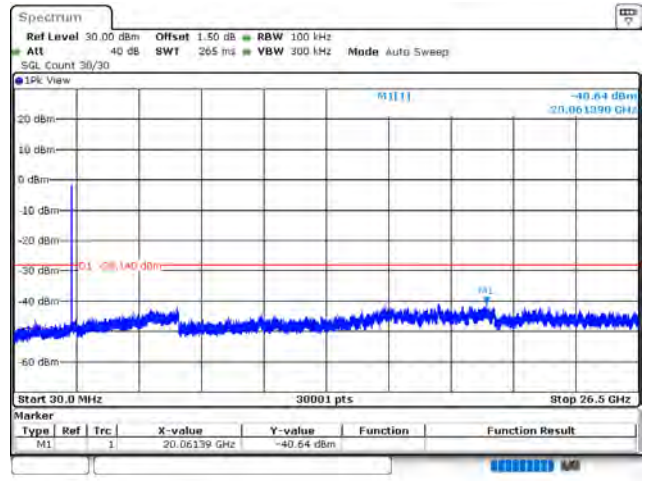
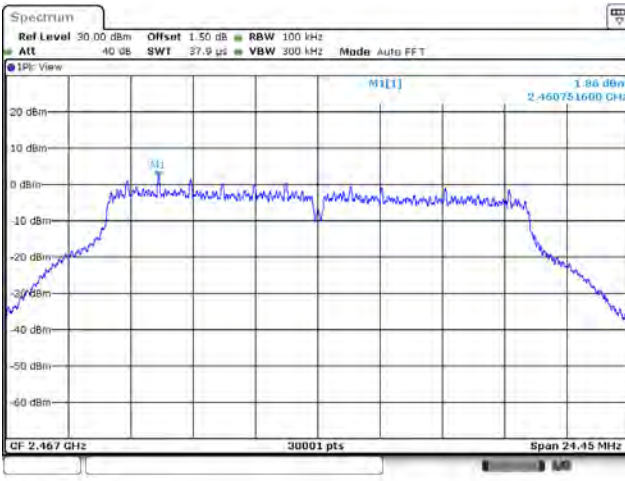
802.11g / 2437 MHz



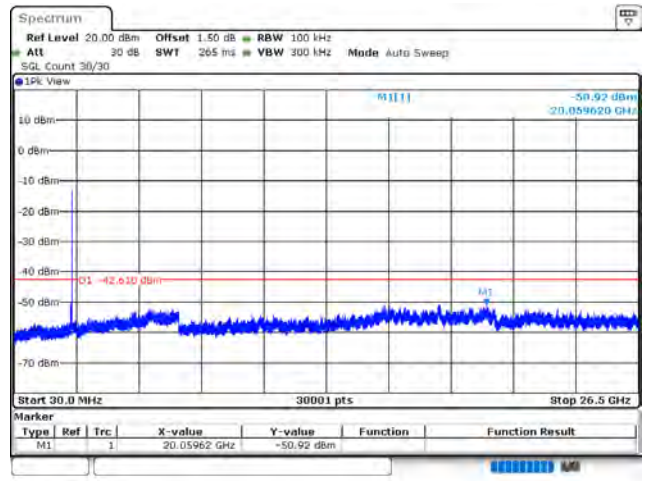
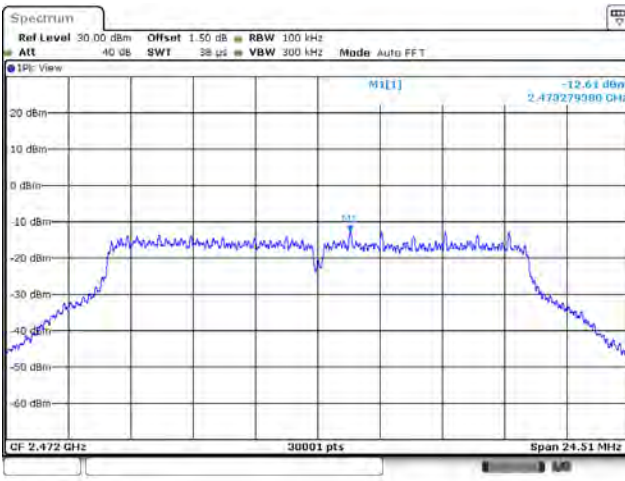
802.11g / 2462 MHz



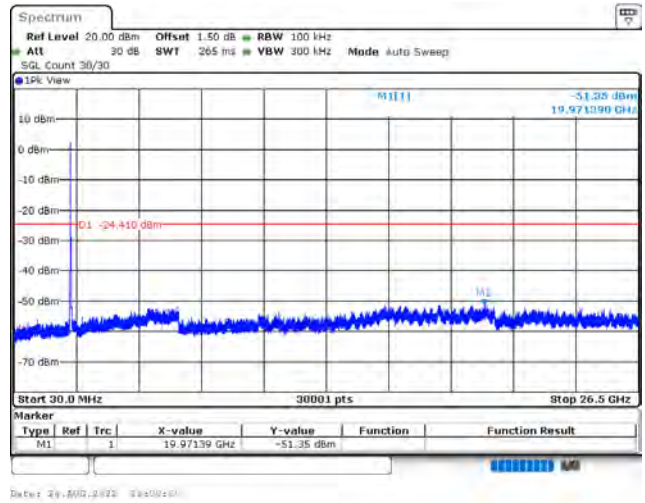
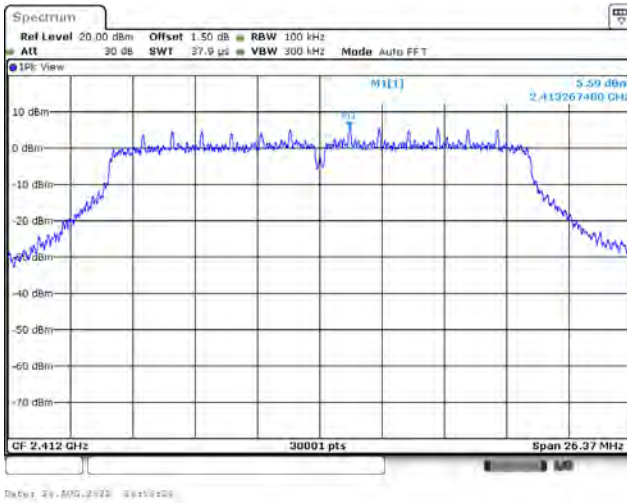
802.11g / 2467 MHz



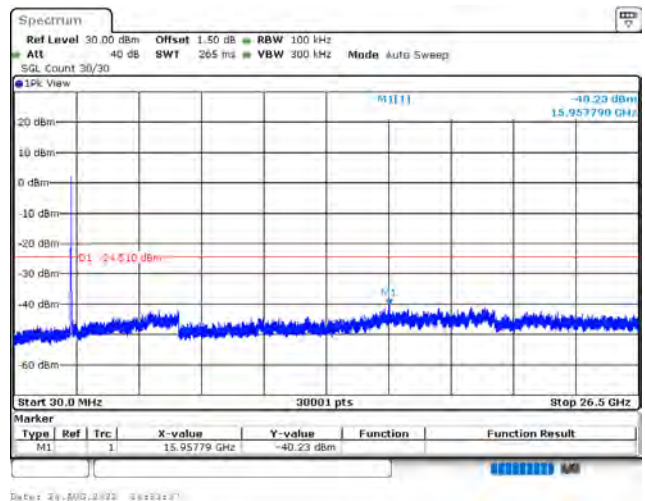
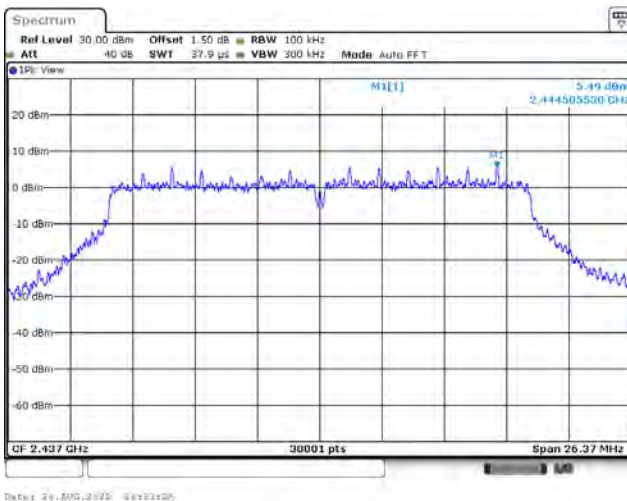
802.11g / 2472 MHz



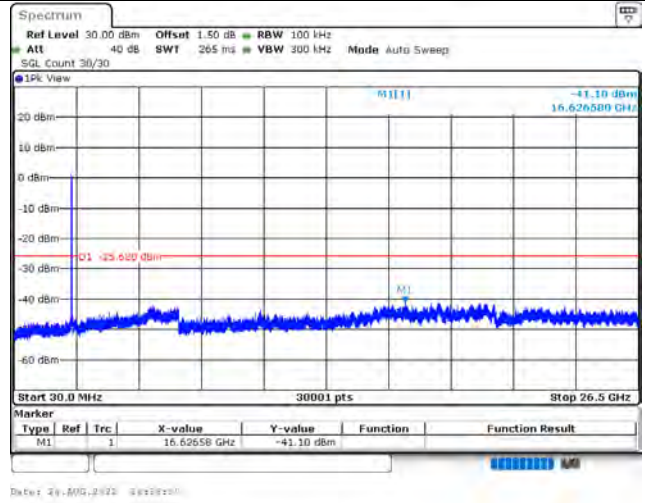
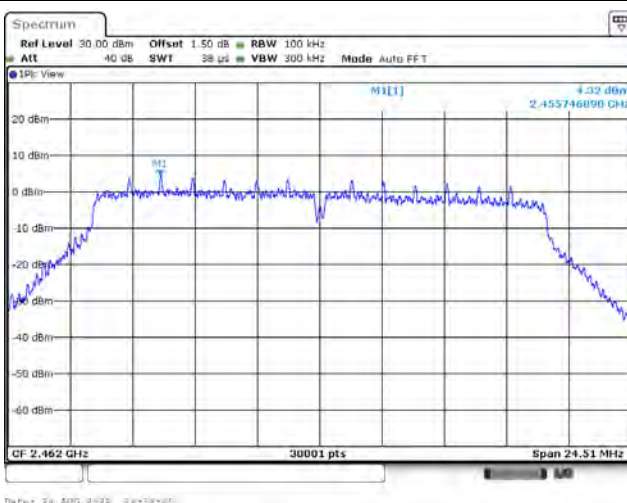
802.11n (20 MHz) / 2412 MHz



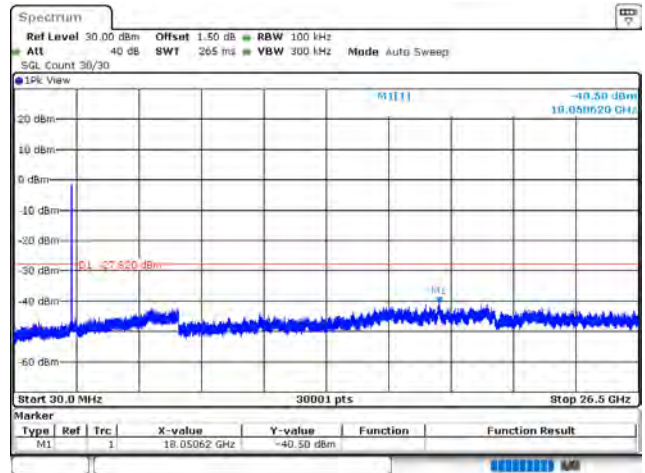
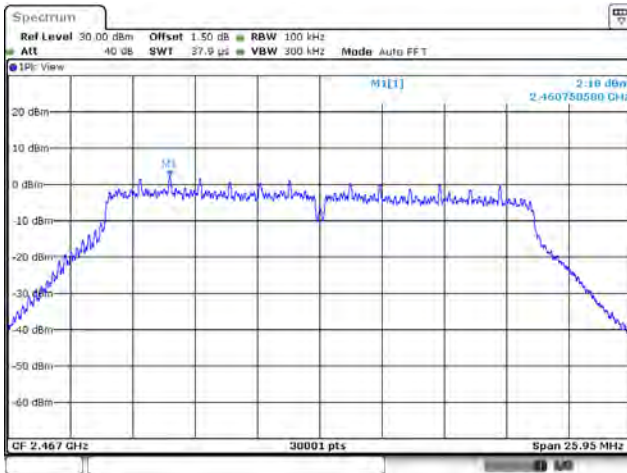
802.11n (20 MHz) / 2437 MHz



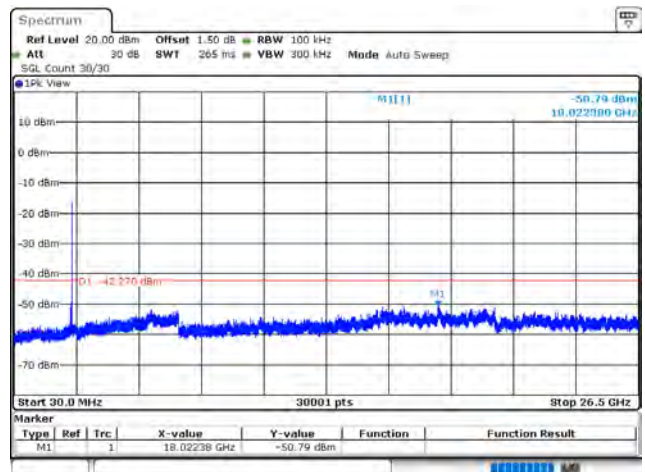
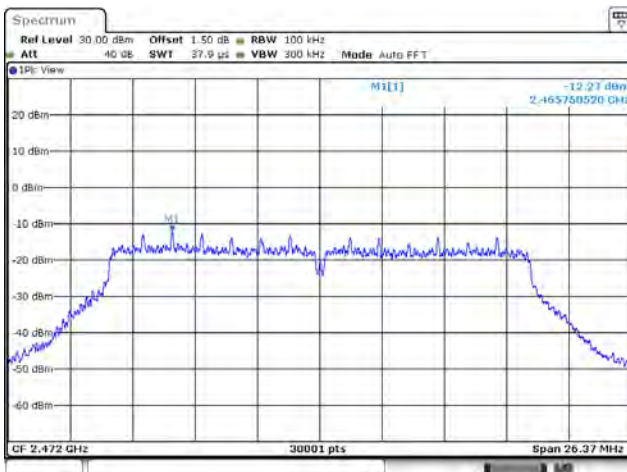
802.11n (20 MHz) / 2462 MHz



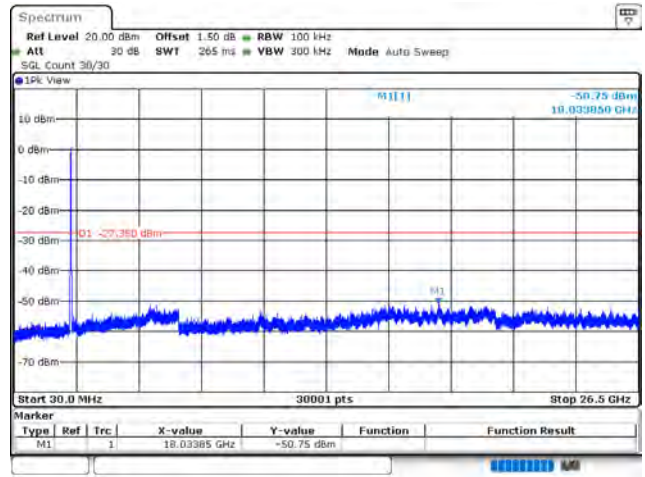
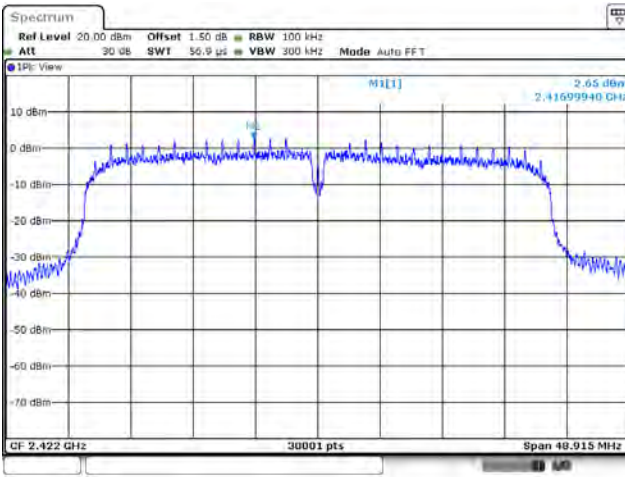
802.11n (20 MHz) / 2467 MHz



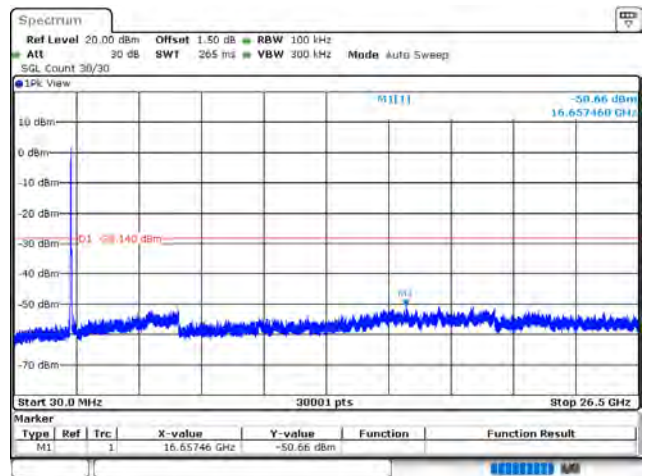
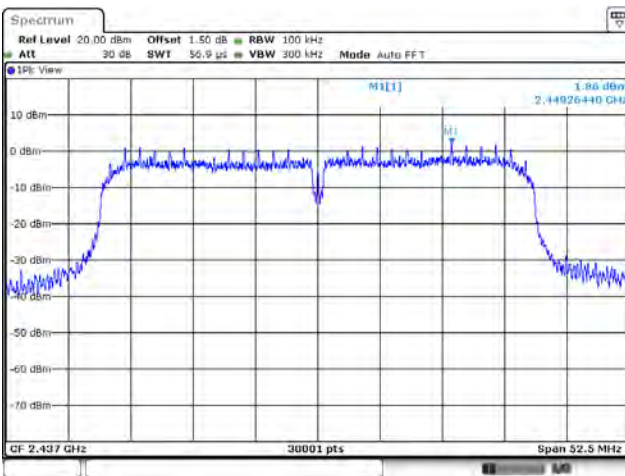
802.11n (20 MHz) / 2472 MHz



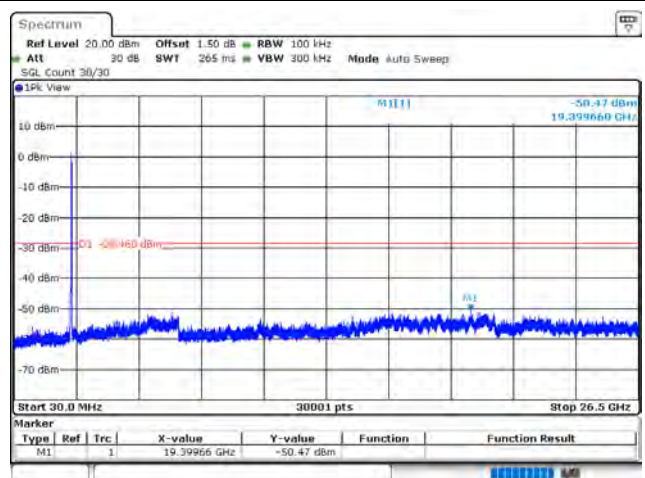
802.11n (40 MHz) / 2422 MHz



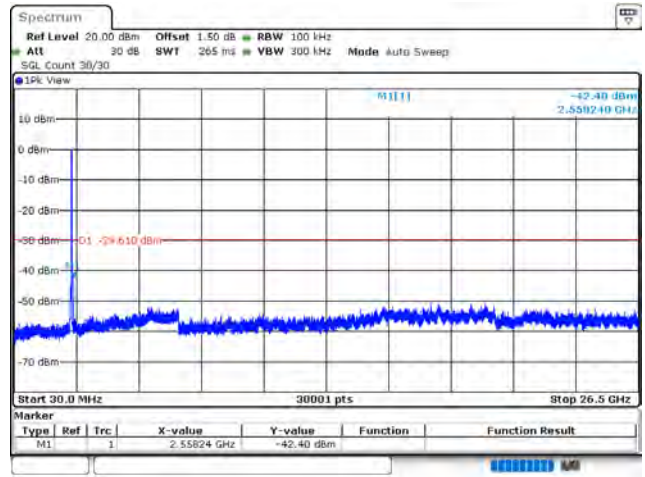
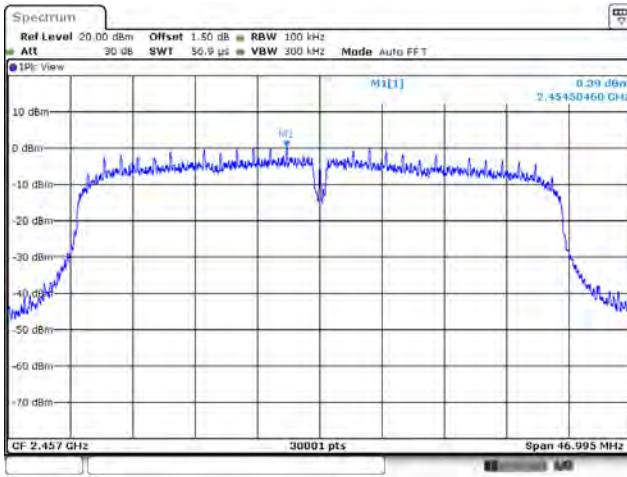
802.11n (40 MHz) / 2437 MHz



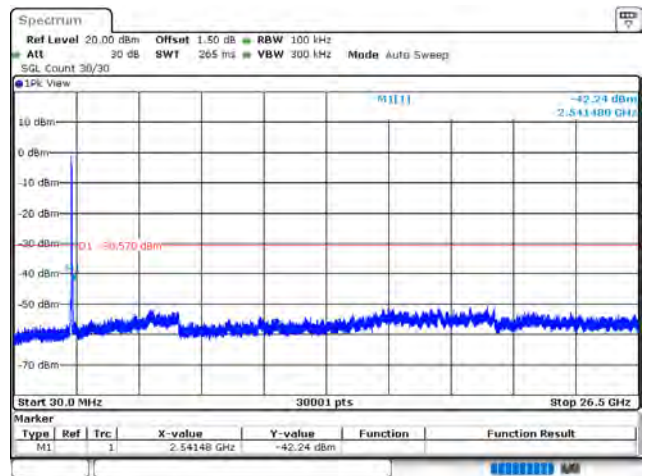
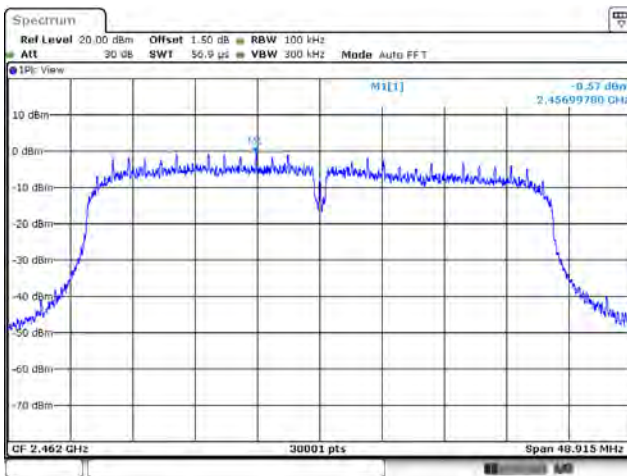
802.11n (40 MHz) / 2452 MHz

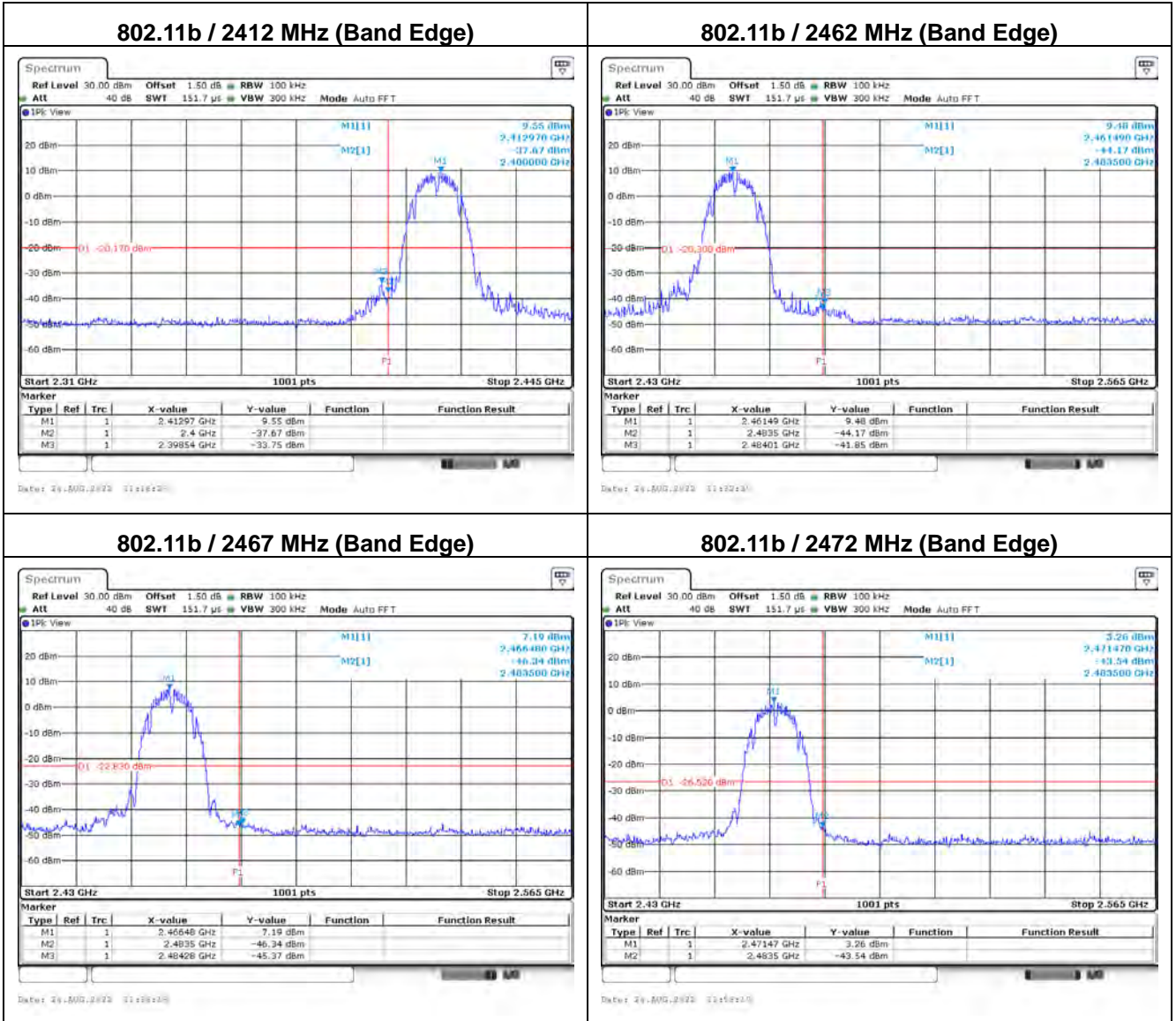


802.11n (40 MHz) / 2457 MHz

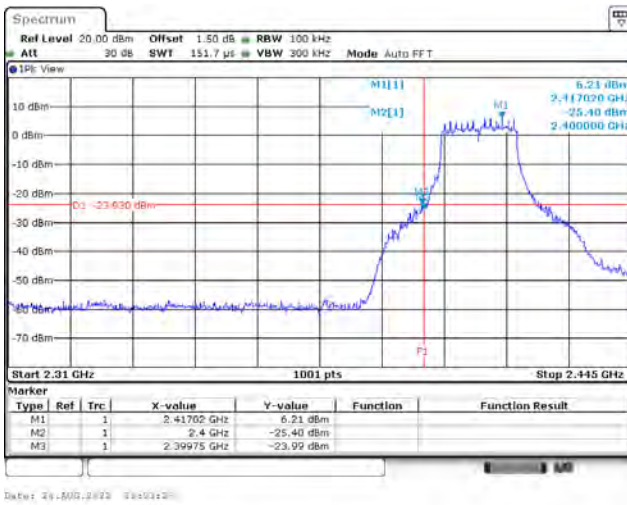


802.11n (40 MHz) / 2462 MHz

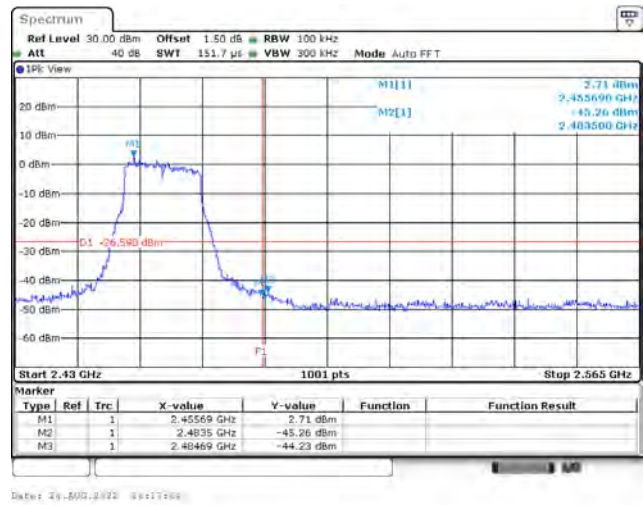




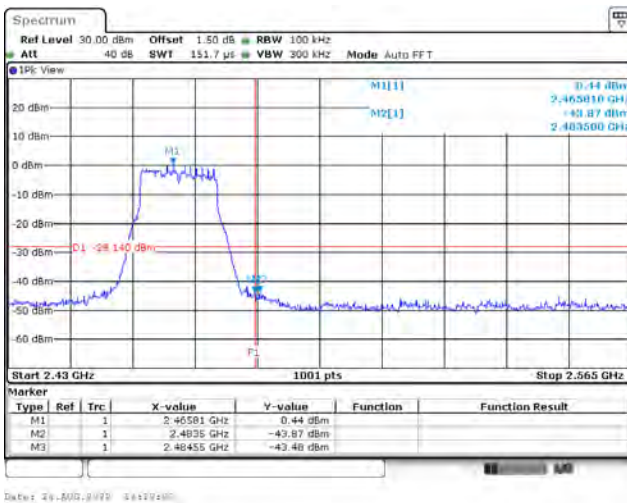
802.11g / 2412 MHz (Band Edge)



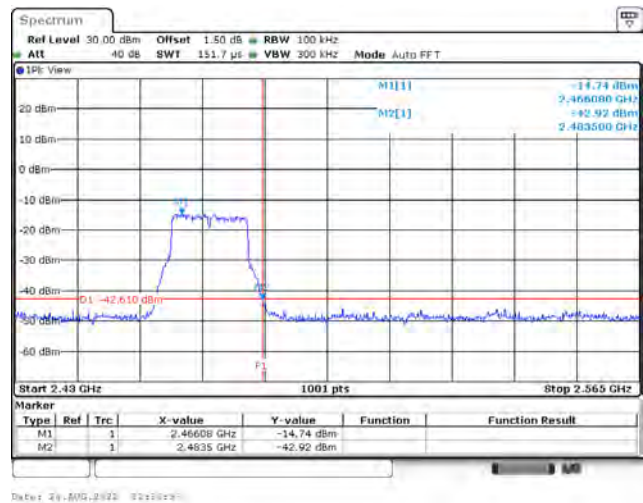
802.11g / 2462 MHz (Band Edge)

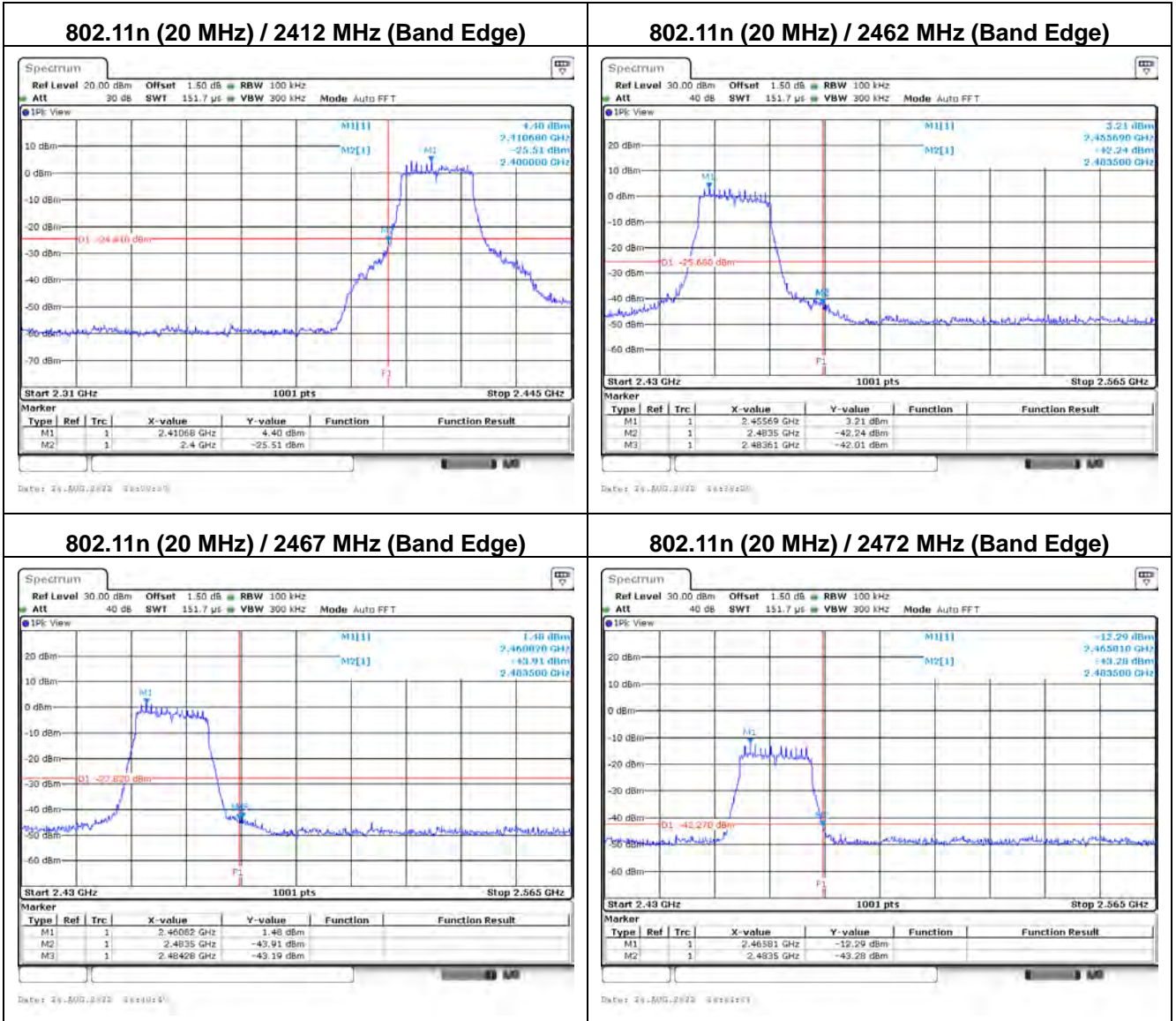


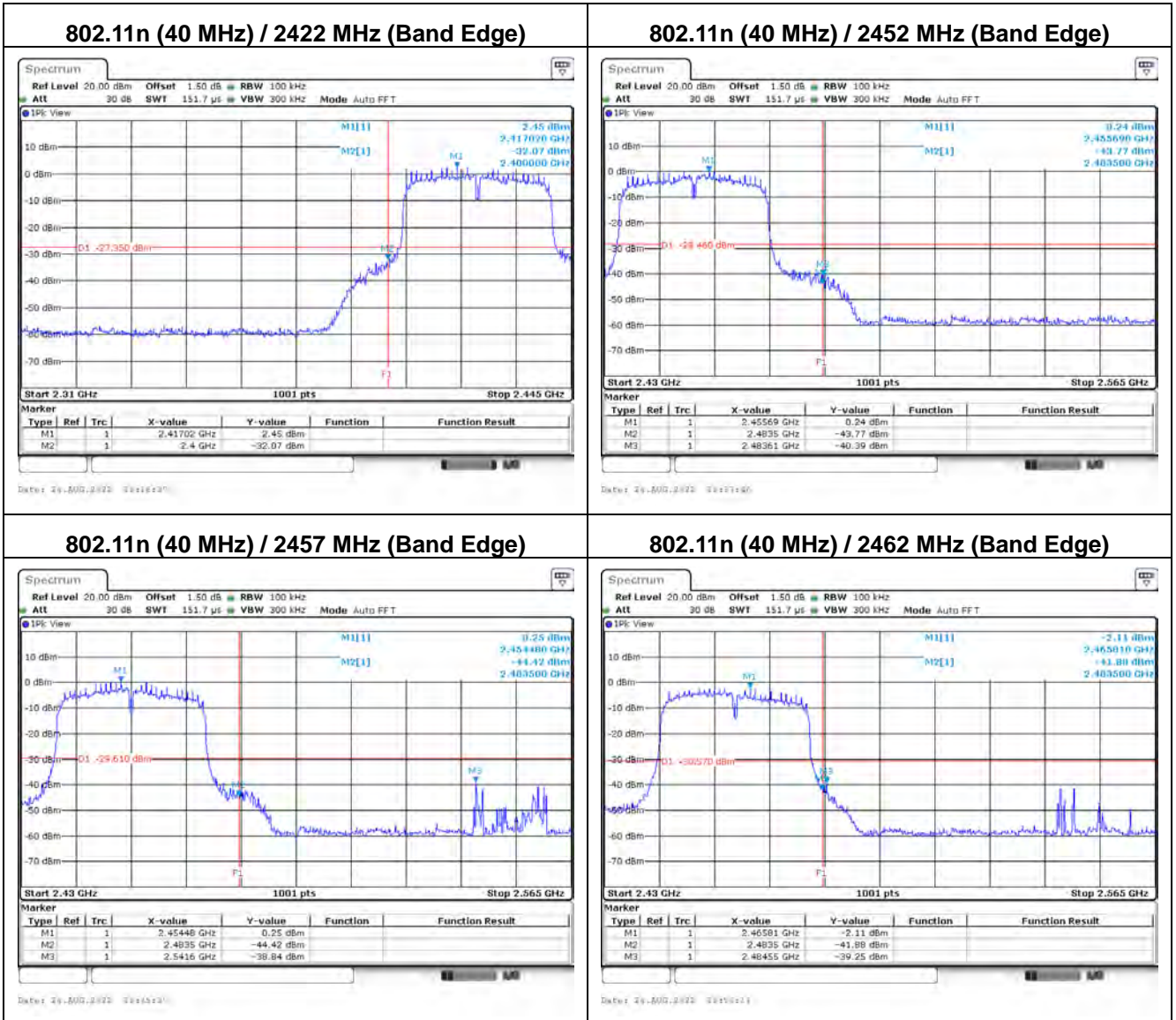
802.11g / 2467 MHz (Band Edge)



802.11g / 2472 MHz (Band Edge)

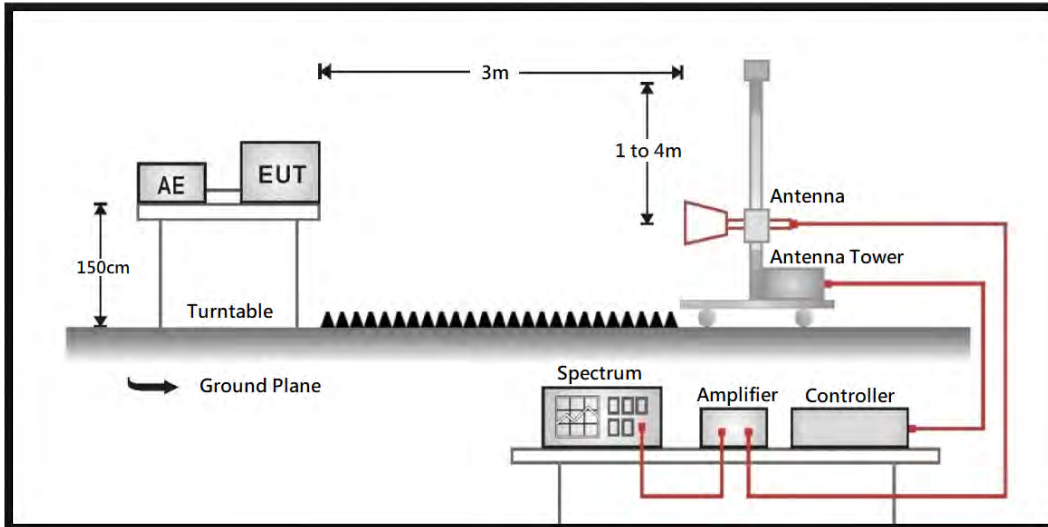






5. Radiated Emission Band Edge

5.1. Test Setup



5.2. 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

5.3. 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.

5.4. Test Specification

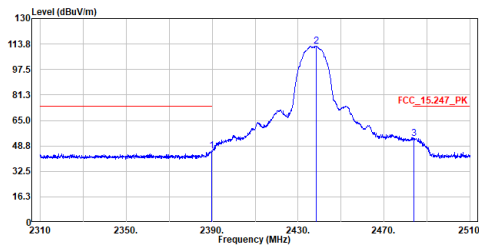
According to FCC Part 15 Subpart C Paragraph 15.247.

5.5. Test Result of Radiated Emission Band Edge

Mode 1: EUT 1 with main source of battery

<p>Site :HC-CB04 Condition :3m ,Horizontal Mode :11b_TX_2412MHz Test By :Cyril</p> <table border="1"> <thead> <tr> <th>No.</th> <th>Frequency MHz</th> <th>Level dBuV/m</th> <th>Limit Line dBuV/m</th> <th>Over Limit dB</th> <th>Read Level dBuV</th> <th>Factor dB</th> <th>Remark</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>2390.000</td> <td>52.28</td> <td>74.00</td> <td>-21.72</td> <td>39.12</td> <td>13.16</td> <td>Peak</td> </tr> <tr> <td>2</td> <td>2410.900</td> <td>112.12</td> <td>-----</td> <td>-----</td> <td>98.99</td> <td>13.13</td> <td>Peak</td> </tr> </tbody> </table> <p>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.</p>	No.	Frequency MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark	1	2390.000	52.28	74.00	-21.72	39.12	13.16	Peak	2	2410.900	112.12	-----	-----	98.99	13.13	Peak	<p>Site :HC-CB04 Condition :3m ,Horizontal Mode :11b_TX_2412MHz Test By :Cyril</p> <table border="1"> <thead> <tr> <th>No.</th> <th>Frequency MHz</th> <th>Level dBuV/m</th> <th>Limit Line dBuV/m</th> <th>Over Limit dB</th> <th>Read Level dBuV</th> <th>Factor dB</th> <th>Remark</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>2390.000</td> <td>41.26</td> <td>54.00</td> <td>-12.74</td> <td>28.72</td> <td>12.54</td> <td>Average</td> </tr> <tr> <td>2</td> <td>2411.200</td> <td>108.47</td> <td>-----</td> <td>-----</td> <td>95.80</td> <td>12.67</td> <td>Average</td> </tr> </tbody> </table> <p>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.</p>	No.	Frequency MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark	1	2390.000	41.26	54.00	-12.74	28.72	12.54	Average	2	2411.200	108.47	-----	-----	95.80	12.67	Average
No.	Frequency MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark																																										
1	2390.000	52.28	74.00	-21.72	39.12	13.16	Peak																																										
2	2410.900	112.12	-----	-----	98.99	13.13	Peak																																										
No.	Frequency MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark																																										
1	2390.000	41.26	54.00	-12.74	28.72	12.54	Average																																										
2	2411.200	108.47	-----	-----	95.80	12.67	Average																																										
<p>Site :HC-CB04 Condition :3m ,Vertical Mode :11b_TX_2412MHz Test By :Cyril</p> <table border="1"> <thead> <tr> <th>No.</th> <th>Frequency MHz</th> <th>Level dBuV/m</th> <th>Limit Line dBuV/m</th> <th>Over Limit dB</th> <th>Read Level dBuV</th> <th>Factor dB</th> <th>Remark</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>2390.000</td> <td>48.52</td> <td>74.00</td> <td>-25.48</td> <td>35.36</td> <td>13.16</td> <td>Peak</td> </tr> <tr> <td>2</td> <td>2410.700</td> <td>106.56</td> <td>-----</td> <td>-----</td> <td>93.43</td> <td>13.13</td> <td>Peak</td> </tr> </tbody> </table> <p>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.</p>	No.	Frequency MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark	1	2390.000	48.52	74.00	-25.48	35.36	13.16	Peak	2	2410.700	106.56	-----	-----	93.43	13.13	Peak	<p>Site :HC-CB04 Condition :3m ,Vertical Mode :11b_TX_2412MHz Test By :Cyril</p> <table border="1"> <thead> <tr> <th>No.</th> <th>Frequency MHz</th> <th>Level dBuV/m</th> <th>Limit Line dBuV/m</th> <th>Over Limit dB</th> <th>Read Level dBuV</th> <th>Factor dB</th> <th>Remark</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>2390.000</td> <td>36.85</td> <td>54.00</td> <td>-17.15</td> <td>23.69</td> <td>13.16</td> <td>Average</td> </tr> <tr> <td>2</td> <td>2411.200</td> <td>103.35</td> <td>-----</td> <td>-----</td> <td>90.22</td> <td>13.13</td> <td>Average</td> </tr> </tbody> </table> <p>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.</p>	No.	Frequency MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark	1	2390.000	36.85	54.00	-17.15	23.69	13.16	Average	2	2411.200	103.35	-----	-----	90.22	13.13	Average
No.	Frequency MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark																																										
1	2390.000	48.52	74.00	-25.48	35.36	13.16	Peak																																										
2	2410.700	106.56	-----	-----	93.43	13.13	Peak																																										
No.	Frequency MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark																																										
1	2390.000	36.85	54.00	-17.15	23.69	13.16	Average																																										
2	2411.200	103.35	-----	-----	90.22	13.13	Average																																										

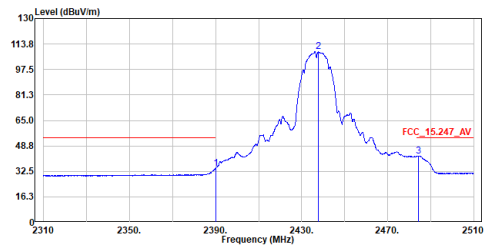
Site :HC-CB04
 Condition :3m ,Horizontal
 Mode :11b_TX_2437MHz
 Test By :Cyril



No.	Frequency MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	2389.700	45.71	74.00	-28.29	32.55	13.16	Peak
2	2438.300	112.48	-----	-----	99.39	13.09	Peak
3	2484.000	53.69	74.00	-20.31	40.39	13.30	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.

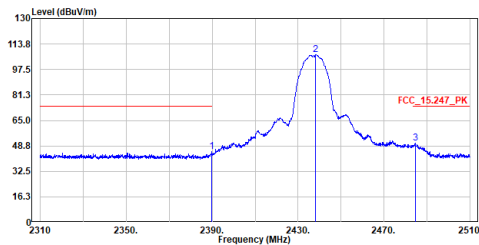
Site :HC-CB04
 Condition :3m ,Horizontal
 Mode :11b_TX_2437MHz
 Test By :Cyril



No.	Frequency MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	2390.000	34.54	54.00	-19.46	22.00	12.54	Average
2	2437.800	108.81	-----	-----	95.98	12.83	Average
3	2484.400	42.42	54.00	-11.58	29.32	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.

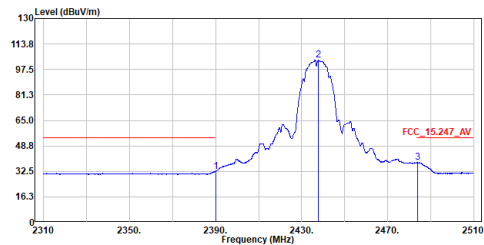
Site :HC-CB04
 Condition :3m ,Vertical
 Mode :11b_TX_2437MHz
 Test By :Cyril



No.	Frequency MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	2389.900	45.25	74.00	-28.75	32.09	13.16	Peak
2	2438.200	106.82	-----	-----	93.73	13.09	Peak
3	2484.500	50.33	74.00	-23.67	37.02	13.31	Peak

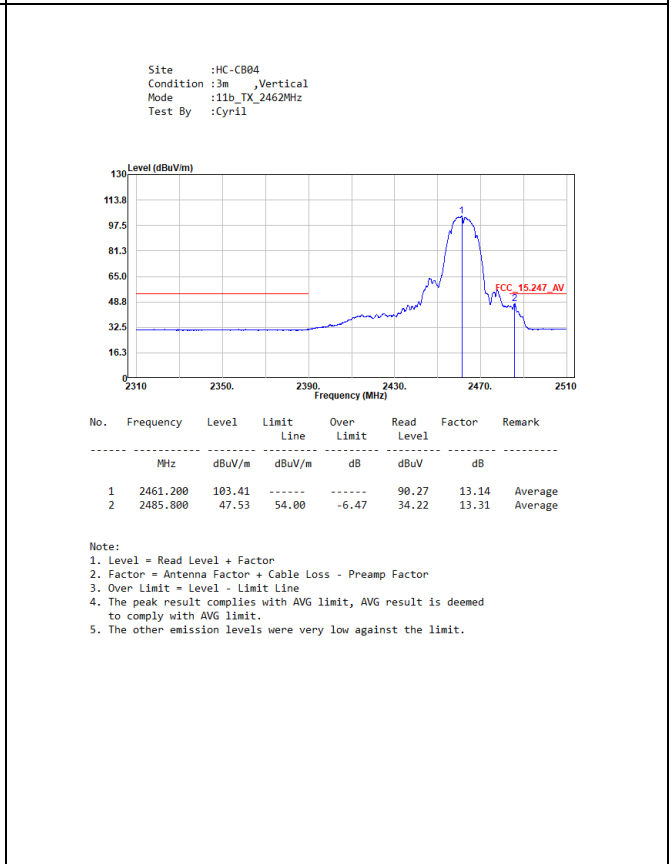
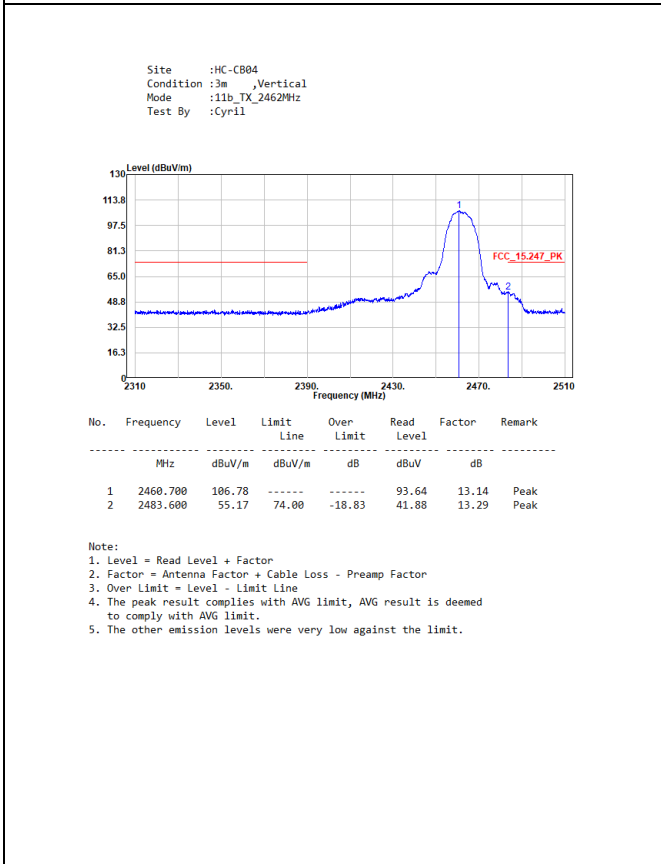
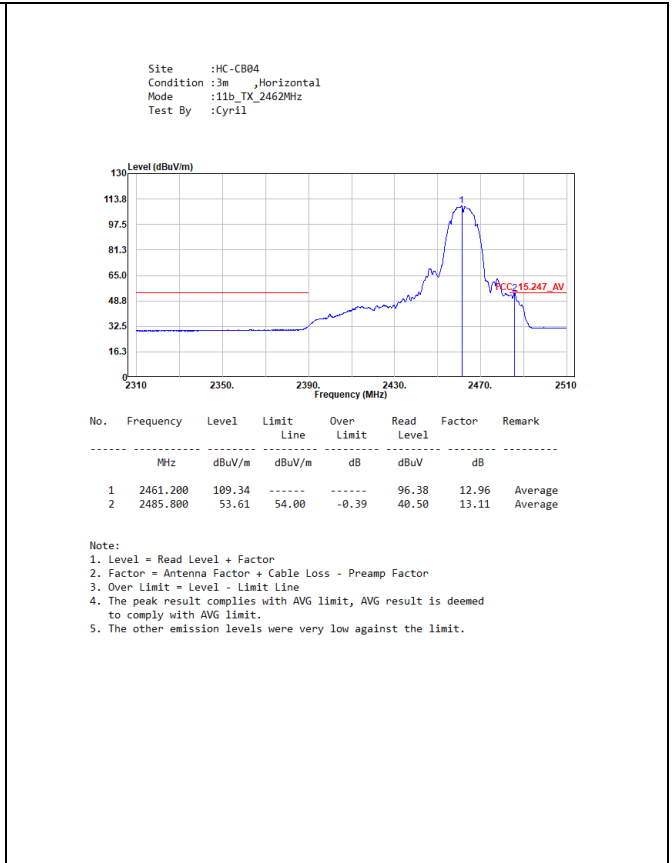
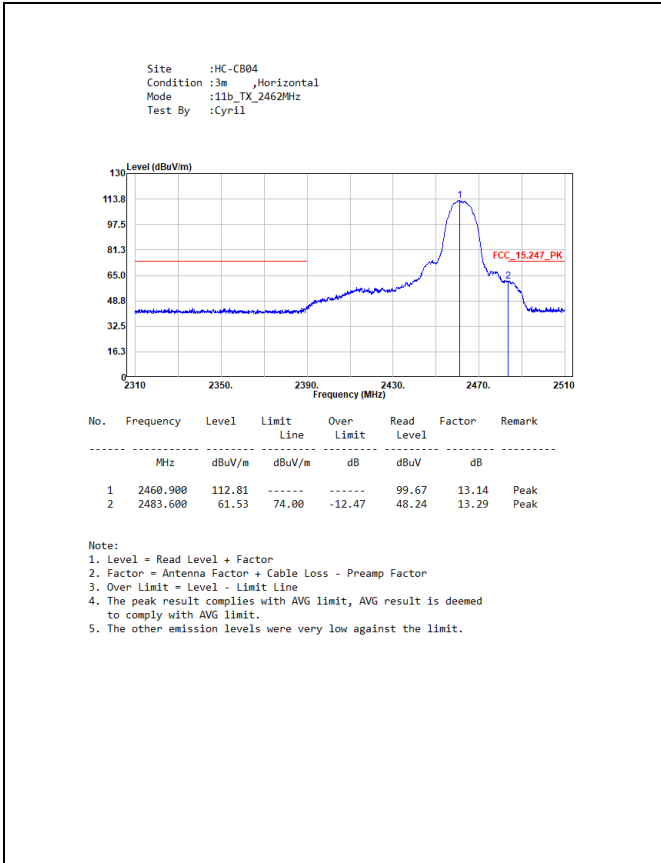
Note:
 1. Level = Read Level + Factor
 2. Factor = Antenna Factor + Cable Loss - Preamp Factor
 3. Over Limit = Level - Limit Line
 4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
 5. The other emission levels were very low against the limit.

Site :HC-CB04
 Condition :3m ,Vertical
 Mode :11b_TX_2437MHz
 Test By :Cyril

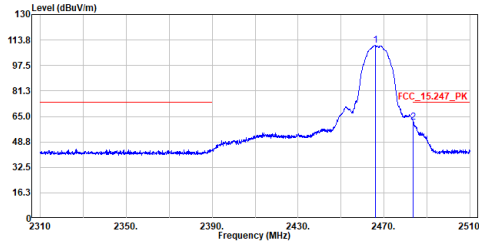


No.	Frequency MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	2390.000	32.47	54.00	-21.53	19.31	13.16	Average
2	2437.800	103.43	-----	-----	90.34	13.09	Average
3	2484.000	38.14	54.00	-15.86	24.84	13.30	Average

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.



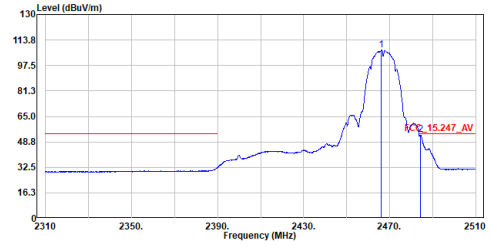
Site :HC-CB04
 Condition :3m ,Horizontal
 Mode :11b_TX_2467MHz
 Test By :Cyril



No.	Frequency	Level	Limit	Over	Read	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	2465.900	110.29	-----	-----	97.11	13.18	Peak
2	2483.600	61.55	74.00	-12.45	48.26	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.

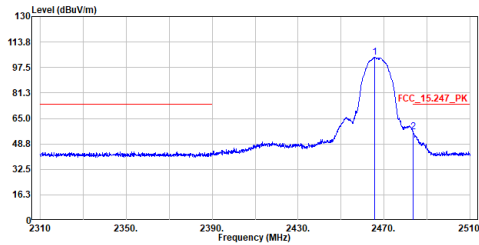
Site :HC-CB04
 Condition :3m ,Horizontal
 Mode :11b_TX_2467MHz
 Test By :Cyril



No.	Frequency	Level	Limit	Over	Read	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	2466.200	107.27	-----	-----	94.27	13.00	Average
2	2484.200	53.51	54.00	-0.49	40.41	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.

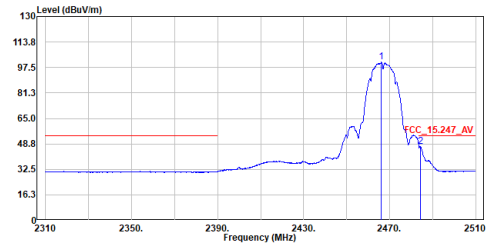
Site :HC-CB04
 Condition :3m ,Vertical
 Mode :11b_TX_2467MHz
 Test By :Cyril



No.	Frequency	Level	Limit	Over	Read	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	2465.700	104.09	-----	-----	90.91	13.18	Peak
2	2483.600	56.35	74.00	-17.65	43.06	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.

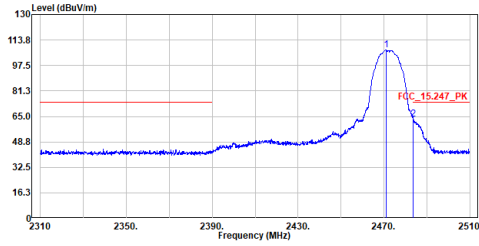
Site :HC-CB04
 Condition :3m ,Vertical
 Mode :11b_TX_2467MHz
 Test By :Cyril



No.	Frequency	Level	Limit	Over	Read	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	2466.200	100.82	-----	-----	87.64	13.18	Average
2	2484.300	46.97	54.00	-7.03	33.67	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.

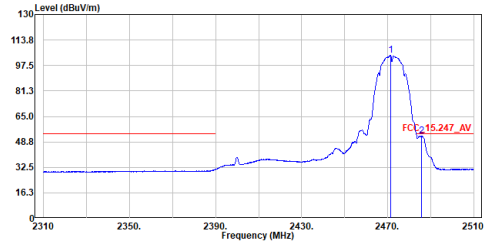
Site :HC-CB04
 Condition :3m ,Horizontal
 Mode :11b_TX_2472MHz
 Test By :Cyril



No.	Frequency	Level	Limit	Over	Read	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	2470.900	107.29	-----	-----	94.08	13.21	Peak
2	2483.600	63.47	74.00	-10.53	50.18	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.

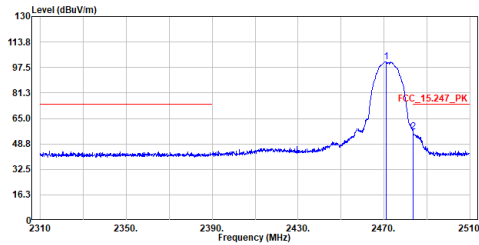
Site :HC-CB04
 Condition :3m ,Horizontal
 Mode :11b_TX_2472MHz
 Test By :Cyril



No.	Frequency	Level	Limit	Over	Read	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	2471.300	103.94	-----	-----	90.91	13.03	Average
2	2485.700	52.67	54.00	-1.33	39.56	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.

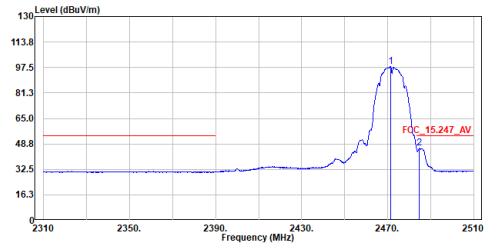
Site :HC-CB04
 Condition :3m ,Vertical
 Mode :11b_TX_2472MHz
 Test By :Cyril



No.	Frequency	Level	Limit	Over	Read	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	2470.900	101.24	-----	-----	88.03	13.21	Peak
2	2483.700	56.44	74.00	-17.56	43.15	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.

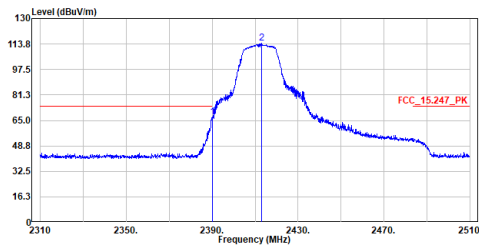
Site :HC-CB04
 Condition :3m ,Vertical
 Mode :11b_TX_2472MHz
 Test By :Cyril



No.	Frequency	Level	Limit	Over	Read	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	2471.300	98.05	-----	-----	84.83	13.22	Average
2	2484.800	45.87	54.00	-8.13	32.56	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.

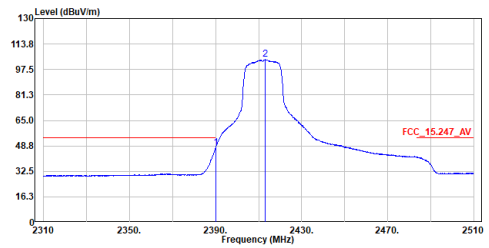
Site :HC-CB04
 Condition :3m ,Horizontal
 Mode :11g_TX_2412MHz
 Test By :Cyril



No.	Frequency	Level	Limit	Over	Read	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	2390.000	67.04	74.00	-6.96	53.88	13.16	Peak
2	2413.000	114.08	-----	-----	100.96	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.

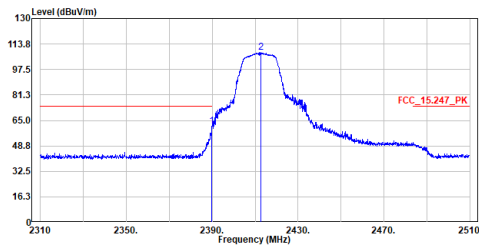
Site :HC-CB04
 Condition :3m ,Horizontal
 Mode :11g_TX_2412MHz
 Test By :Cyril



No.	Frequency	Level	Limit	Over	Read	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	2390.000	47.49	54.00	-6.51	34.95	12.54	Average
2	2413.100	103.88	-----	-----	91.20	12.68	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.

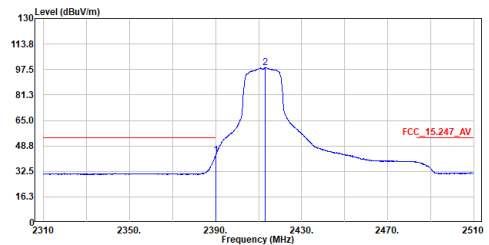
Site :HC-CB04
 Condition :3m ,Vertical
 Mode :11g_TX_2412MHz
 Test By :Cyril



No.	Frequency	Level	Limit	Over	Read	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	2389.900	61.53	74.00	-12.47	48.37	13.16	Peak
2	2412.800	108.60	-----	-----	95.48	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.

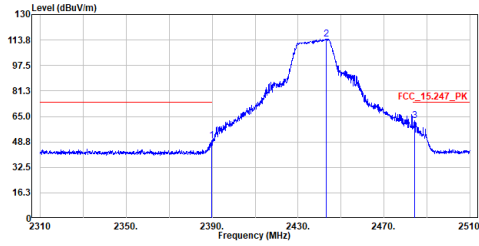
Site :HC-CB04
 Condition :3m ,Vertical
 Mode :11g_TX_2412MHz
 Test By :Cyril



No.	Frequency	Level	Limit	Over	Read	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	2390.000	42.87	54.00	-11.13	29.71	13.16	Average
2	2413.100	98.79	-----	-----	85.67	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.

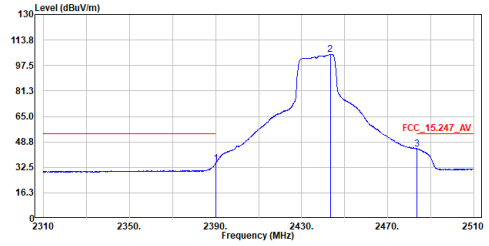
Site :HC-CB04
 Condition :3m ,Horizontal
 Mode :11g_TX_2437MHz
 Test By :Cyril



No.	Frequency MHz	Level dBuV/m	Limit dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	2389.700	49.69	74.00	-24.31	36.53	13.16	Peak
2	2443.000	114.45	-----	-----	101.37	13.08	Peak
3	2484.200	62.48	74.00	-11.52	49.18	13.30	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.

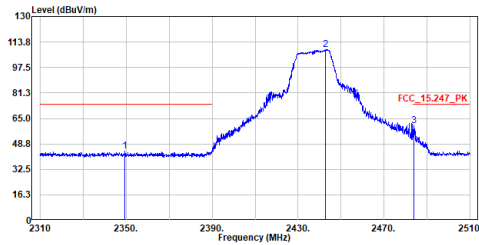
Site :HC-CB04
 Condition :3m ,Horizontal
 Mode :11g_TX_2437MHz
 Test By :Cyril



No.	Frequency MHz	Level dBuV/m	Limit dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	2390.000	35.01	54.00	-18.99	22.47	12.54	Average
2	2443.300	104.62	-----	-----	91.76	12.86	Average
3	2483.600	44.34	54.00	-9.66	31.24	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.

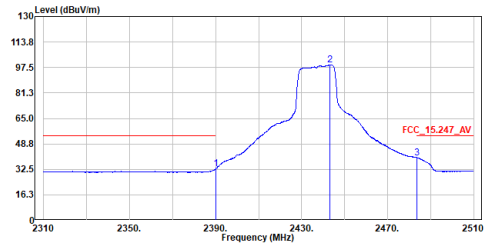
Site :HC-CB04
 Condition :3m ,Vertical
 Mode :11g_TX_2437MHz
 Test By :Cyril



No.	Frequency MHz	Level dBuV/m	Limit dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	2349.400	44.17	74.00	-29.83	30.87	13.30	Peak
2	2442.900	108.89	-----	-----	95.81	13.08	Peak
3	2483.800	60.51	74.00	-13.49	47.21	13.30	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.

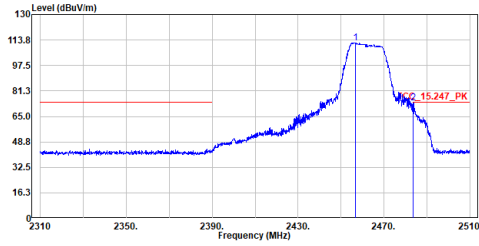
Site :HC-CB04
 Condition :3m ,Vertical
 Mode :11g_TX_2437MHz
 Test By :Cyril



No.	Frequency MHz	Level dBuV/m	Limit dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	2390.000	32.76	54.00	-21.24	19.60	13.16	Average
2	2443.200	99.30	-----	-----	86.22	13.08	Average
3	2483.600	39.89	54.00	-14.11	26.60	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.

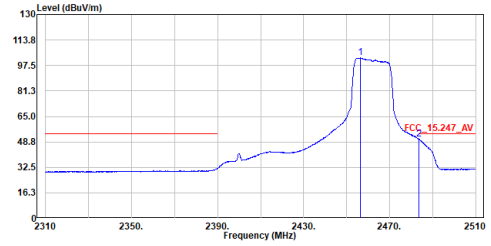
Site :HC-CB04
 Condition :3m ,Horizontal
 Mode :11g_TX_2462MHz
 Test By :Cyril



No.	Frequency MHz	Level dBuV/m	Limit dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	2456.600	111.93	-----	-----	98.81	13.12	Peak
2	2483.700	73.83	74.00	-0.17	60.54	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.

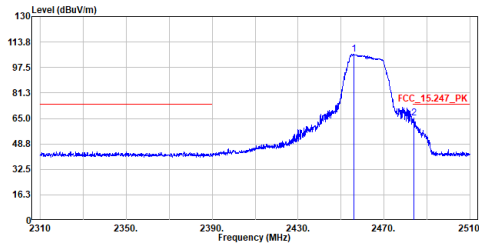
Site :HC-CB04
 Condition :3m ,Horizontal
 Mode :11g_TX_2462MHz
 Test By :Cyril



No.	Frequency MHz	Level dBuV/m	Limit dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	2456.500	102.29	-----	-----	89.35	12.94	Average
2	2483.600	50.49	54.00	-3.51	37.39	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.

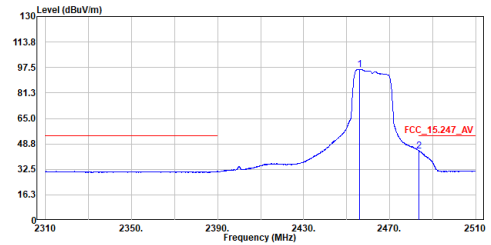
Site :HC-CB04
 Condition :3m ,Vertical
 Mode :11g_TX_2462MHz
 Test By :Cyril



No.	Frequency MHz	Level dBuV/m	Limit dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	2456.000	105.80	-----	-----	92.69	13.11	Peak
2	2483.800	65.45	74.00	-8.55	52.15	13.30	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.

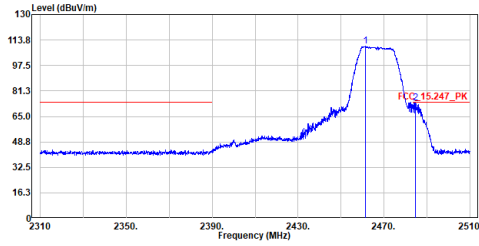
Site :HC-CB04
 Condition :3m ,Vertical
 Mode :11g_TX_2462MHz
 Test By :Cyril



No.	Frequency MHz	Level dBuV/m	Limit dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	2455.900	96.38	-----	-----	83.27	13.11	Average
2	2483.700	44.34	54.00	-9.66	31.05	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.

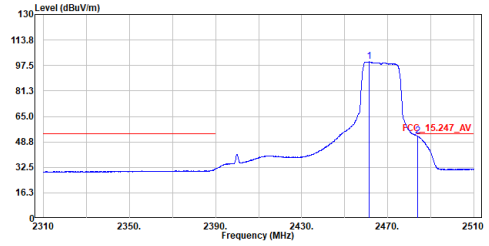
Site :HC-CB04
 Condition :3m ,Horizontal
 Mode :11g_TX_2467MHz
 Test By :Cyril



No.	Frequency	Level	Limit	Over	Read	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	2461.400	109.68	81.30	28.38	96.52	13.16	Peak
2	2484.700	73.68	74.00	-0.32	60.37	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.

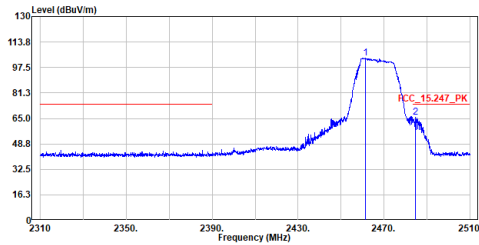
Site :HC-CB04
 Condition :3m ,Horizontal
 Mode :11g_TX_2467MHz
 Test By :Cyril



No.	Frequency	Level	Limit	Over	Read	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	2461.400	99.87	81.30	18.57	86.90	12.97	Average
2	2483.800	52.54	54.00	-1.46	39.44	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.

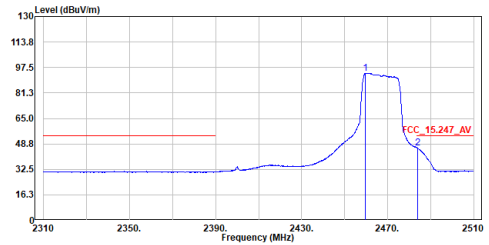
Site :HC-CB04
 Condition :3m ,Vertical
 Mode :11g_TX_2467MHz
 Test By :Cyril



No.	Frequency	Level	Limit	Over	Read	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	2461.300	103.33	81.30	22.03	90.17	13.16	Peak
2	2484.600	65.91	74.00	-8.09	52.60	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.

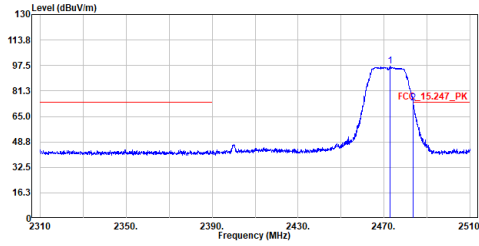
Site :HC-CB04
 Condition :3m ,Vertical
 Mode :11g_TX_2467MHz
 Test By :Cyril



No.	Frequency	Level	Limit	Over	Read	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	2459.700	93.86	81.30	12.56	80.72	13.14	Average
2	2483.800	46.18	54.00	-7.82	32.88	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.

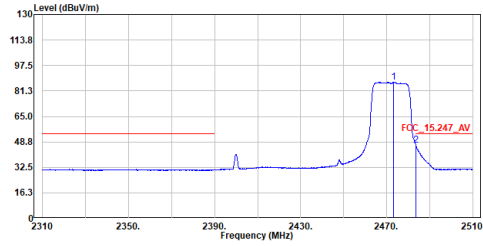
Site :HC-CB04
 Condition :3m ,Horizontal
 Mode :11g_TX_2472MHz
 Test By :Cyril



No.	Frequency	Level	Limit	Over	Read	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	2472.800	97.07	-----	-----	83.84	13.23	Peak
2	2483.600	73.77	74.00	-0.23	60.48	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.

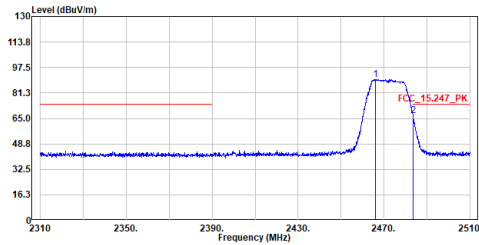
Site :HC-CB04
 Condition :3m ,Horizontal
 Mode :11g_TX_2472MHz
 Test By :Cyril



No.	Frequency	Level	Limit	Over	Read	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	2473.100	86.84	-----	-----	73.61	13.23	Average
2	2483.600	46.50	54.00	-7.50	33.21	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.

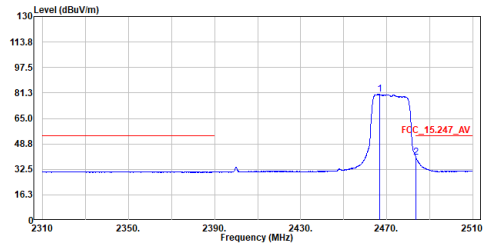
Site :HC-CB04
 Condition :3m ,Vertical
 Mode :11g_TX_2472MHz
 Test By :Cyril



No.	Frequency	Level	Limit	Over	Read	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	2466.200	89.79	-----	-----	76.61	13.18	Peak
2	2483.600	66.86	74.00	-7.14	53.57	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.

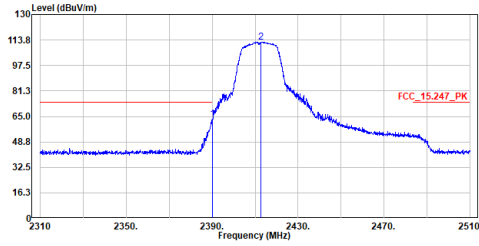
Site :HC-CB04
 Condition :3m ,Vertical
 Mode :11g_TX_2472MHz
 Test By :Cyril



No.	Frequency	Level	Limit	Over	Read	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	2466.700	80.31	-----	-----	67.12	13.19	Average
2	2483.600	40.03	54.00	-13.97	26.74	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.

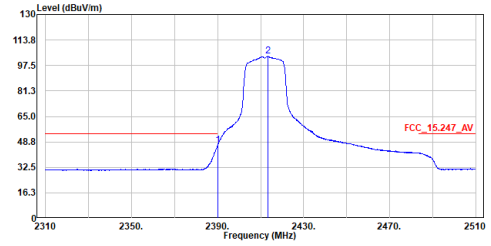
Site :HC-CB04
 Condition :3m ,Horizontal
 Mode :11n20_TX_2412MHz
 Test By :Cyril



No.	Frequency	Level	Limit	Over	Read	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	2390.000	63.12	74.00	-10.88	49.96	13.16	Peak
2	2412.800	112.58	-----	-----	99.46	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.

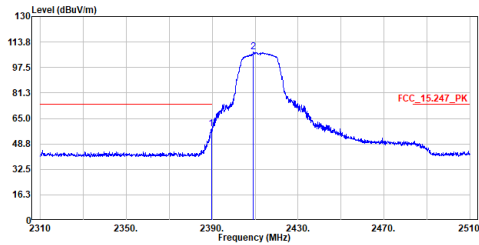
Site :HC-CB04
 Condition :3m ,Horizontal
 Mode :11n20_TX_2412MHz
 Test By :Cyril



No.	Frequency	Level	Limit	Over	Read	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	2390.000	46.39	54.00	-7.61	33.23	13.16	Average
2	2413.400	103.29	-----	-----	90.17	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.

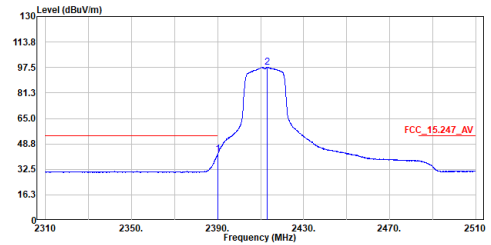
Site :HC-CB04
 Condition :3m ,Vertical
 Mode :11n20_TX_2412MHz
 Test By :Cyril



No.	Frequency	Level	Limit	Over	Read	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	2389.600	58.43	74.00	-15.57	45.27	13.16	Peak
2	2409.200	107.37	-----	-----	94.26	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.

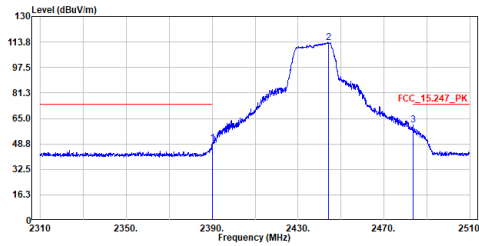
Site :HC-CB04
 Condition :3m ,Vertical
 Mode :11n20_TX_2412MHz
 Test By :Cyril



No.	Frequency	Level	Limit	Over	Read	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	2390.000	42.04	54.00	-11.96	28.88	13.16	Average
2	2413.200	97.82	-----	-----	84.70	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.

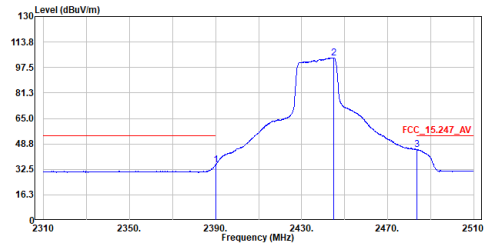
Site :HC-CB04
 Condition :3m ,Horizontal
 Mode :11n20_TX_2437MHz
 Test By :Cyril



No.	Frequency MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	2390.000	49.17	74.00	-24.83	36.01	13.16	Peak
2	2444.100	113.19	-----	-----	100.11	13.08	Peak
3	2483.700	60.99	74.00	-13.01	47.70	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.

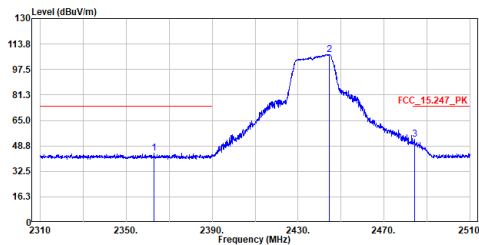
Site :HC-CB04
 Condition :3m ,Horizontal
 Mode :11n20_TX_2437MHz
 Test By :Cyril



No.	Frequency MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	2390.000	35.33	54.00	-18.67	22.17	13.16	Average
2	2444.900	103.72	-----	-----	90.64	13.08	Average
3	2483.700	45.08	54.00	-8.92	31.79	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.

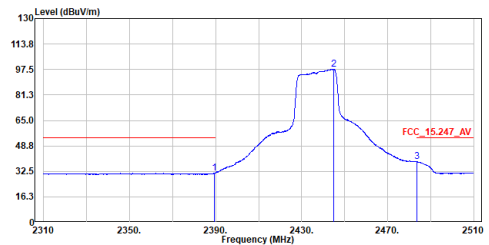
Site :HC-CB04
 Condition :3m ,Vertical
 Mode :11n20_TX_2437MHz
 Test By :Cyril



No.	Frequency MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	2363.000	44.12	74.00	-29.88	30.87	13.25	Peak
2	2444.600	107.06	-----	-----	93.98	13.08	Peak
3	2484.300	52.87	74.00	-21.13	39.57	13.30	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.

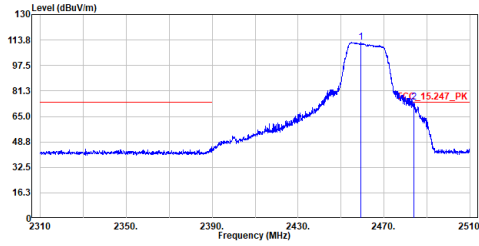
Site :HC-CB04
 Condition :3m ,Vertical
 Mode :11n20_TX_2437MHz
 Test By :Cyril



No.	Frequency MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	2389.300	31.46	54.00	-22.54	18.30	13.16	Average
2	2444.900	97.65	-----	-----	84.57	13.08	Average
3	2483.600	38.74	54.00	-15.26	25.45	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.

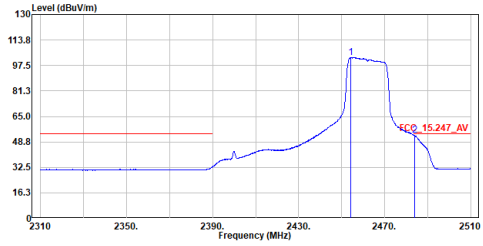
Site :HC-CB04
 Condition :3m ,Horizontal
 Mode :11n20_TX_2462MHz
 Test By :Cyril



No.	Frequency MHz	Level dBuV/m	Limit dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	2459.200	112.51	-----	-----	99.38	13.13	Peak
2	2483.900	73.96	74.00	-0.04	60.66	13.30	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.

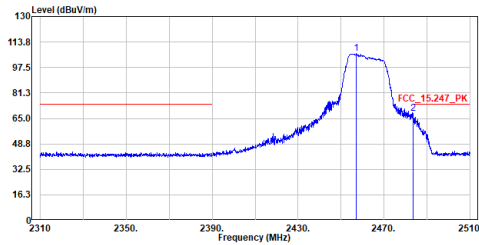
Site :HC-CB04
 Condition :3m ,Horizontal
 Mode :11n20_TX_2462MHz
 Test By :Cyril



No.	Frequency MHz	Level dBuV/m	Limit dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	2454.300	102.55	-----	-----	89.44	13.11	Average
2	2483.800	53.03	54.00	-0.97	39.73	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.

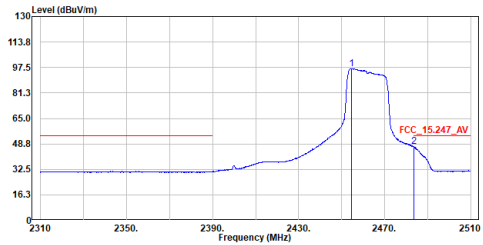
Site :HC-CB04
 Condition :3m ,Vertical
 Mode :11n20_TX_2462MHz
 Test By :Cyril



No.	Frequency MHz	Level dBuV/m	Limit dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	2457.200	106.22	-----	-----	93.10	13.12	Peak
2	2483.600	68.12	74.00	-5.88	54.83	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.

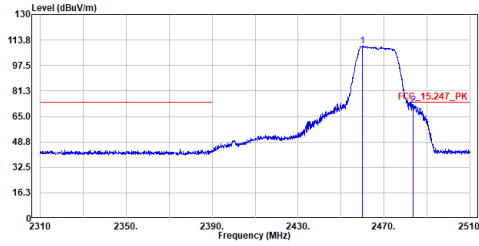
Site :HC-CB04
 Condition :3m ,Vertical
 Mode :11n20_TX_2462MHz
 Test By :Cyril



No.	Frequency MHz	Level dBuV/m	Limit dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	2454.500	96.65	-----	-----	83.54	13.11	Average
2	2483.700	46.87	54.00	-7.13	33.58	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.

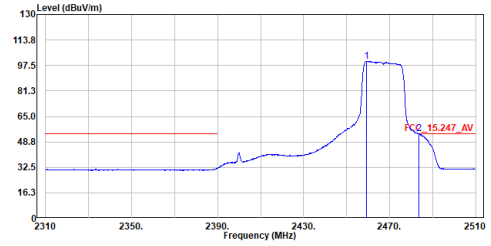
Site :HC-CB04
 Condition :3m ,Horizontal
 Mode :11n20_TX_2467MHz
 Test By :Cyril



No.	Frequency MHz	Level dBuV/m	Limit dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	2459.900	109.68	-----	-----	96.54	13.14	Peak
2	2483.600	72.06	74.00	-1.94	58.77	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.

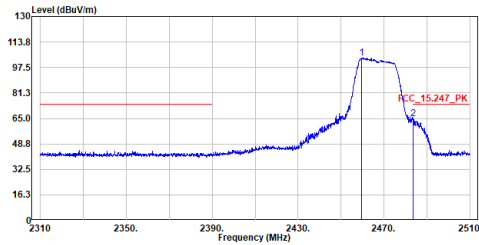
Site :HC-CB04
 Condition :3m ,Horizontal
 Mode :11n20_TX_2467MHz
 Test By :Cyril



No.	Frequency MHz	Level dBuV/m	Limit dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	2459.200	100.14	-----	-----	87.01	13.13	Average
2	2483.600	53.94	54.00	-0.06	40.65	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.

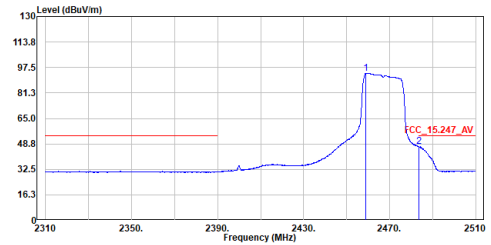
Site :HC-CB04
 Condition :3m ,Vertical
 Mode :11n20_TX_2467MHz
 Test By :Cyril



No.	Frequency MHz	Level dBuV/m	Limit dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	2459.700	103.43	-----	-----	90.29	13.14	Peak
2	2483.600	64.83	74.00	-9.17	51.54	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.

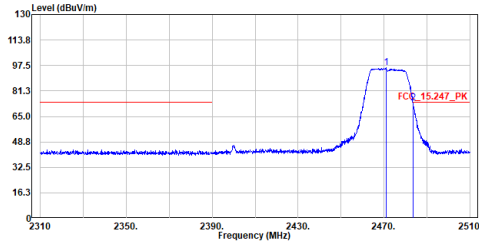
Site :HC-CB04
 Condition :3m ,Vertical
 Mode :11n20_TX_2467MHz
 Test By :Cyril



No.	Frequency MHz	Level dBuV/m	Limit dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	2459.000	93.92	-----	-----	80.79	13.13	Average
2	2483.600	47.19	54.00	-6.81	33.90	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.

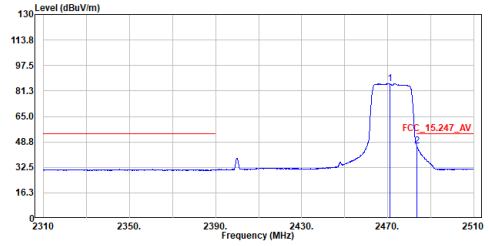
Site :HC-CB04
 Condition :3m ,Horizontal
 Mode :11n20_TX_2472MHz
 Test By :Cyril



No.	Frequency	Level	Limit	Over	Read	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	2470.900	96.05	-----	-----	82.84	13.21	Peak
2	2483.600	73.56	74.00	-0.44	60.27	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.

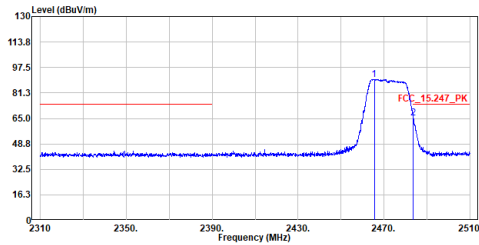
Site :HC-CB04
 Condition :3m ,Horizontal
 Mode :11n20_TX_2472MHz
 Test By :Cyril



No.	Frequency	Level	Limit	Over	Read	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	2471.000	85.94	-----	-----	72.73	13.21	Average
2	2483.600	45.95	54.00	-8.05	32.66	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.

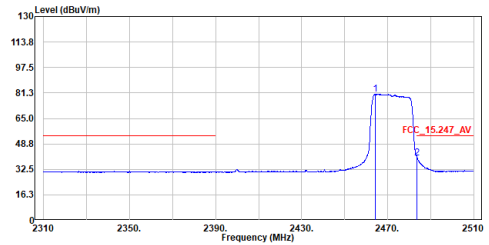
Site :HC-CB04
 Condition :3m ,Vertical
 Mode :11n20_TX_2472MHz
 Test By :Cyril



No.	Frequency	Level	Limit	Over	Read	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	2465.500	89.95	-----	-----	76.78	13.17	Peak
2	2483.600	65.25	74.00	-8.75	51.96	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.

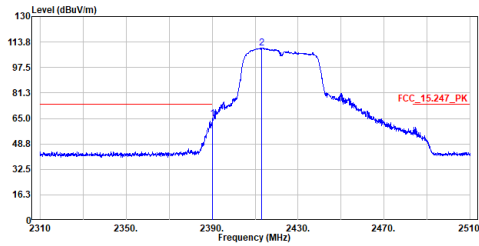
Site :HC-CB04
 Condition :3m ,Vertical
 Mode :11n20_TX_2472MHz
 Test By :Cyril



No.	Frequency	Level	Limit	Over	Read	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	2464.200	80.37	-----	-----	67.20	13.17	Average
2	2483.600	39.94	54.00	-14.06	26.65	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.

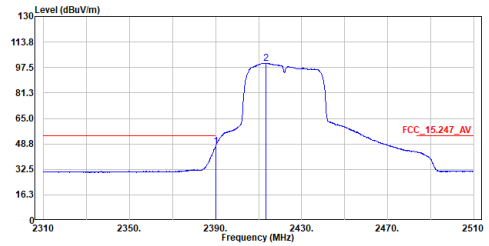
Site :HC-CB04
 Condition :3m ,Horizontal
 Mode :11n40_TX_2422MHz
 Test By :Cyril



No.	Frequency MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	2390.000	64.89	74.00	-9.11	51.73	13.16	Peak
2	2413.000	110.09	-----	-----	96.97	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.

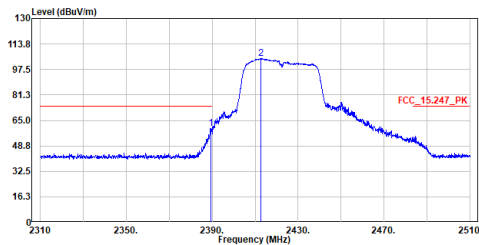
Site :HC-CB04
 Condition :3m ,Horizontal
 Mode :11n40_TX_2422MHz
 Test By :Cyril



No.	Frequency MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	2390.000	47.22	54.00	-6.78	34.06	13.16	Average
2	2413.500	100.26	-----	-----	87.14	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.

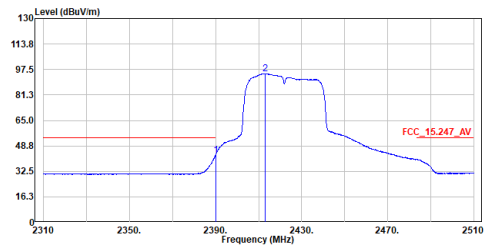
Site :HC-CB04
 Condition :3m ,Vertical
 Mode :11n40_TX_2422MHz
 Test By :Cyril



No.	Frequency MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	2389.400	59.89	74.00	-14.11	46.73	13.16	Peak
2	2412.700	104.39	-----	-----	91.27	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.

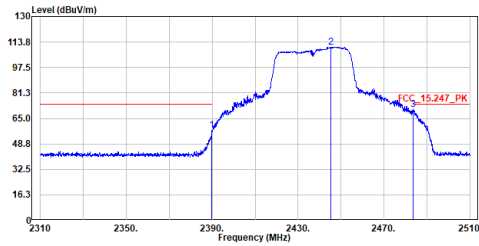
Site :HC-CB04
 Condition :3m ,Vertical
 Mode :11n40_TX_2422MHz
 Test By :Cyril



No.	Frequency MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	2390.000	42.85	54.00	-11.15	29.69	13.16	Average
2	2413.100	94.79	-----	-----	81.67	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.

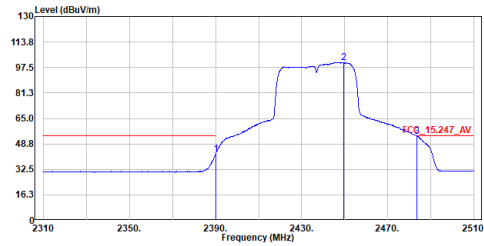
Site :HC-CB04
 Condition :3m ,Horizontal
 Mode :11n40_TX_2437MHz
 Test By :Cyril



No.	Frequency MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	2389.900	57.19	74.00	-16.81	44.03	13.16	Peak
2	2445.400	110.57	-----	-----	97.49	13.08	Peak
3	2483.700	70.55	74.00	-3.45	57.26	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.

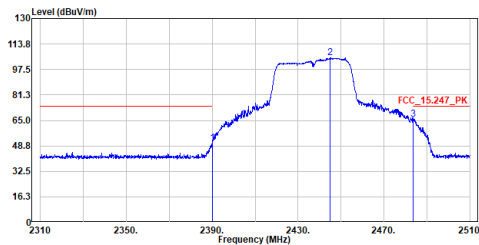
Site :HC-CB04
 Condition :3m ,Horizontal
 Mode :11n40_TX_2437MHz
 Test By :Cyril



No.	Frequency MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	2390.000	42.11	54.00	-11.89	28.95	13.16	Average
2	2449.400	100.74	-----	-----	87.67	13.07	Average
3	2483.600	53.57	54.00	-0.43	40.28	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.

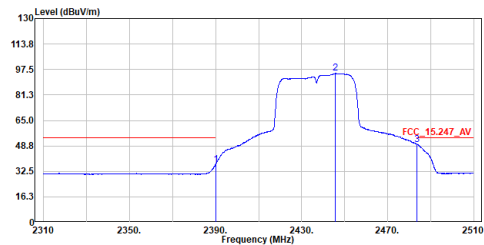
Site :HC-CB04
 Condition :3m ,Vertical
 Mode :11n40_TX_2437MHz
 Test By :Cyril



No.	Frequency MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	2390.000	50.55	74.00	-23.45	37.39	13.16	Peak
2	2445.000	105.10	-----	-----	92.02	13.08	Peak
3	2483.600	65.88	74.00	-8.12	52.59	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.

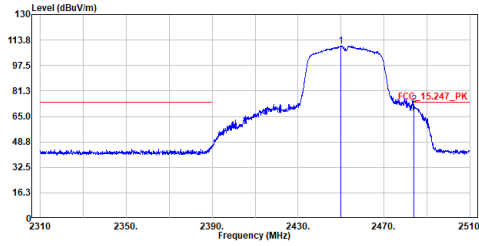
Site :HC-CB04
 Condition :3m ,Vertical
 Mode :11n40_TX_2437MHz
 Test By :Cyril



No.	Frequency MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	2390.000	36.93	54.00	-17.07	23.77	13.16	Average
2	2445.600	94.97	-----	-----	81.89	13.08	Average
3	2483.600	49.74	54.00	-4.26	36.45	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.

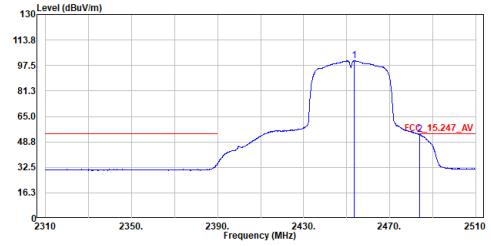
Site :HC-CB04
 Condition :3m ,Horizontal
 Mode :11n40_TX_2452MHz
 Test By :Cyril



No.	Frequency MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	2449.800	109.89	-----	-----	96.82	13.07	Peak
2	2483.900	72.63	74.00	-1.37	59.33	13.30	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.

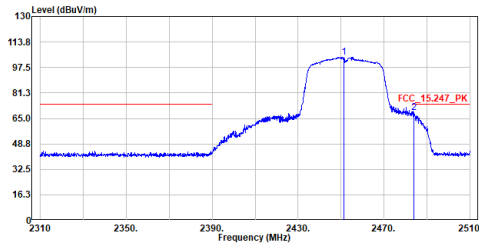
Site :HC-CB04
 Condition :3m ,Horizontal
 Mode :11n40_TX_2452MHz
 Test By :Cyril



No.	Frequency MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	2453.600	100.53	-----	-----	87.43	13.10	Average
2	2483.800	53.51	54.00	-0.49	40.21	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.

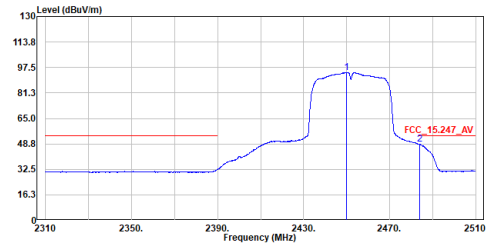
Site :HC-CB04
 Condition :3m ,Vertical
 Mode :11n40_TX_2452MHz
 Test By :Cyril



No.	Frequency MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	2451.200	104.05	-----	-----	90.98	13.07	Peak
2	2483.900	68.74	74.00	-5.26	55.44	13.30	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.

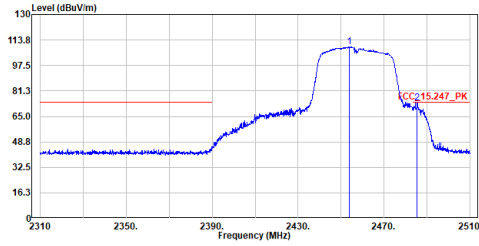
Site :HC-CB04
 Condition :3m ,Vertical
 Mode :11n40_TX_2452MHz
 Test By :Cyril



No.	Frequency MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	2449.900	94.30	-----	-----	81.23	13.07	Average
2	2484.100	48.59	54.00	-5.41	35.29	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.

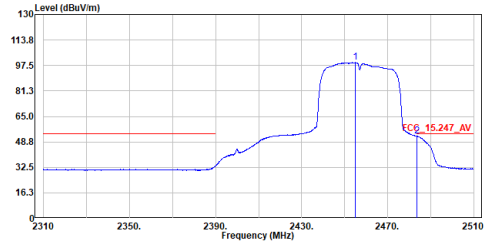
Site :HC-CB04
 Condition :3m ,Horizontal
 Mode :11n40_TX_2457MHz
 Test By :Cyril



No.	Frequency MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	2453.700	109.50	-----	-----	96.40	13.10	Peak
2	2485.300	73.77	74.00	-0.23	60.46	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.

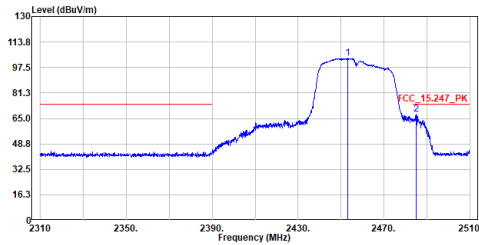
Site :HC-CB04
 Condition :3m ,Horizontal
 Mode :11n40_TX_2457MHz
 Test By :Cyril



No.	Frequency MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	2454.900	99.43	-----	-----	86.32	13.11	Average
2	2483.700	52.47	54.00	-1.53	39.18	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.

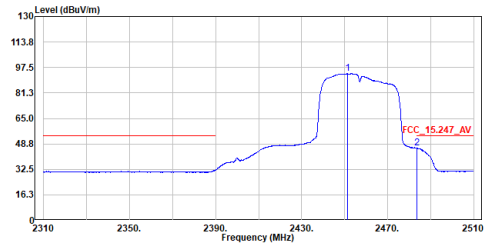
Site :HC-CB04
 Condition :3m ,Vertical
 Mode :11n40_TX_2457MHz
 Test By :Cyril



No.	Frequency MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	2453.300	103.31	-----	-----	90.21	13.10	Peak
2	2485.100	67.61	74.00	-6.39	54.30	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.

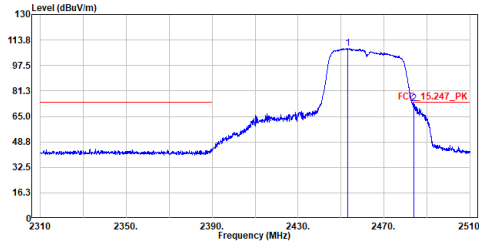
Site :HC-CB04
 Condition :3m ,Vertical
 Mode :11n40_TX_2457MHz
 Test By :Cyril



No.	Frequency MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	2451.200	93.55	-----	-----	80.48	13.07	Average
2	2483.600	46.27	54.00	-7.73	32.98	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.

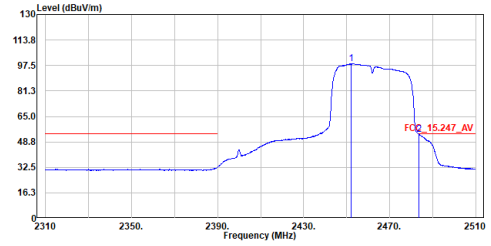
Site :HC-CB04
 Condition :3m ,Horizontal
 Mode :11n40_TX_2462MHz
 Test By :Cyril



No.	Frequency MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	2453.100	108.43	-----	-----	95.34	13.09	Peak
2	2484.000	73.06	74.00	-0.94	59.76	13.30	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.

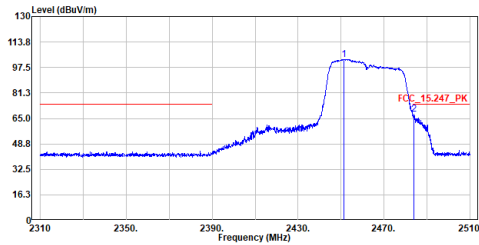
Site :HC-CB04
 Condition :3m ,Horizontal
 Mode :11n40_TX_2462MHz
 Test By :Cyril



No.	Frequency MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	2452.200	98.50	-----	-----	85.42	13.08	Average
2	2483.700	53.58	54.00	-0.42	40.29	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.

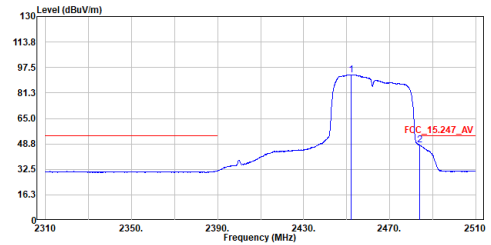
Site :HC-CB04
 Condition :3m ,Vertical
 Mode :11n40_TX_2462MHz
 Test By :Cyril



No.	Frequency MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	2451.200	102.71	-----	-----	89.64	13.07	Peak
2	2483.900	67.51	74.00	-6.49	54.21	13.30	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 :11n40_TX_2462MHz
 Test By :Cyril

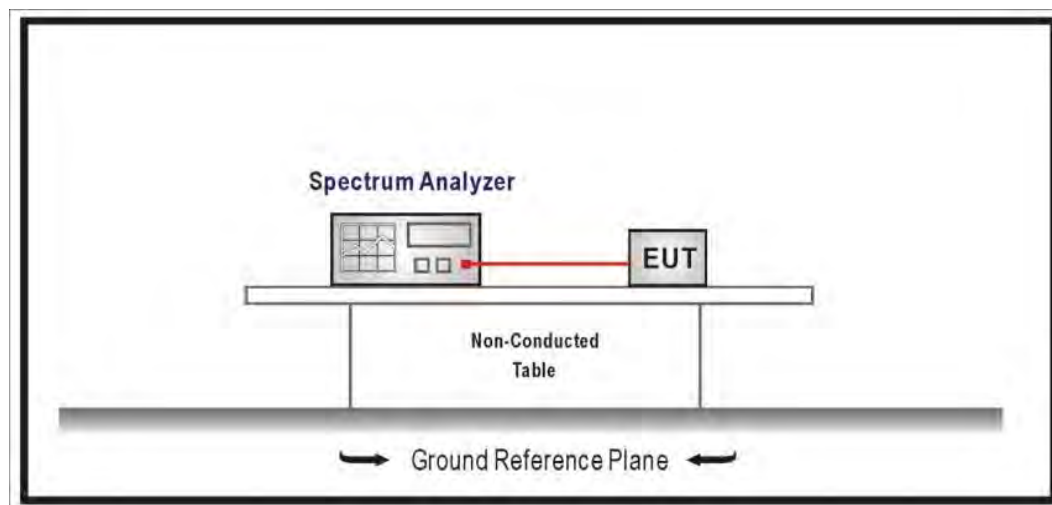


No.	Frequency MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	2452.200	92.94	-----	-----	79.86	13.08	Average
2	2484.000	48.27	54.00	-5.73	34.97	13.30	Average

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.

6. Occupied Bandwidth & DTS Bandwidth

6.1. Test Setup



6.2. Test Limit

The 6 dB bandwidth: ≥ 0.50 MHz.

Occupied Bandwidth: NA

6.3. 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.

6.4. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247.

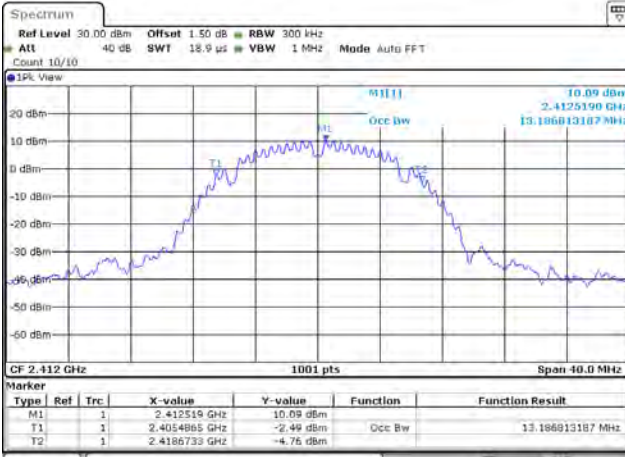
6.5. Test Result of Occupied Bandwidth

Mode 1: EUT 1 with main source of battery

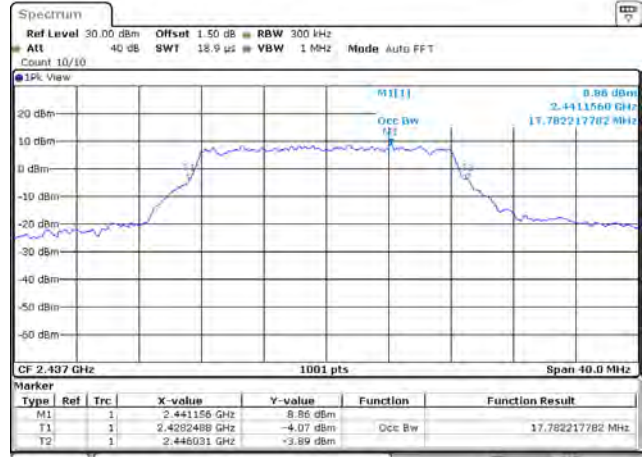
Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	Limit (MHz)
802.11b	1	2412	13.186	-
	6	2437	13.066	-
	11	2462	13.066	-
	12	2467	13.026	-
	13	2472	13.186	-
802.11g	1	2412	17.342	-
	6	2437	17.782	-
	11	2462	17.062	-
	12	2467	17.342	-
	13	2472	17.342	-
802.11n (20 MHz)	1	2412	18.221	-
	6	2437	18.421	-
	11	2462	18.141	-
	12	2467	18.261	-
	13	2472	18.701	-
802.11n (40 MHz)	3	2422	35.244	-
	6	2437	35.564	-
	9	2452	35.004	-
	10	2457	35.084	-
	11	2462	35.164	-

Spectrum plot of maximum value

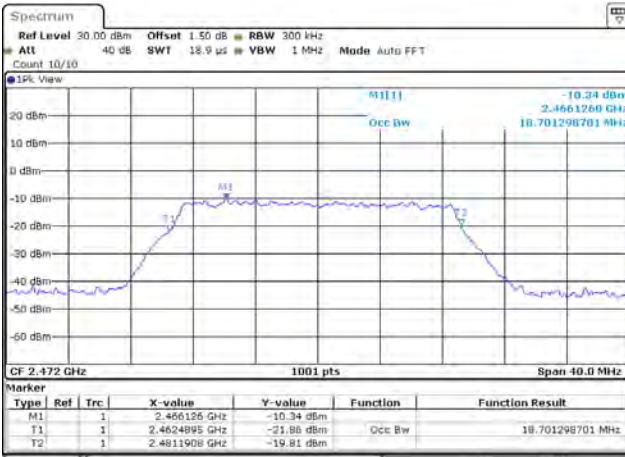
802.11b / 2412 MHz



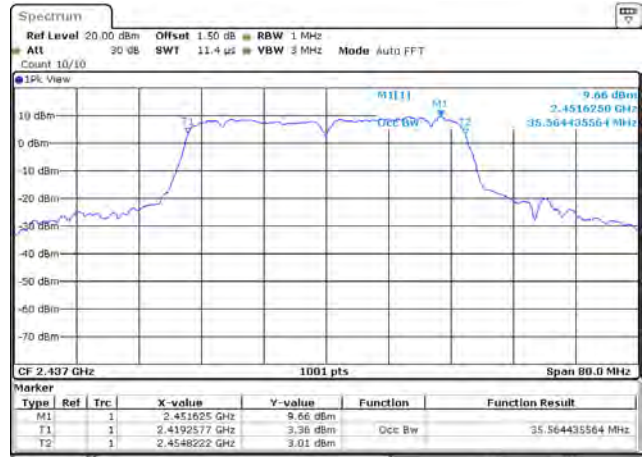
802.11g / 2437 MHz



802.11n (20 MHz) / 2472 MHz



802.11n (40 MHz) / 2437 MHz



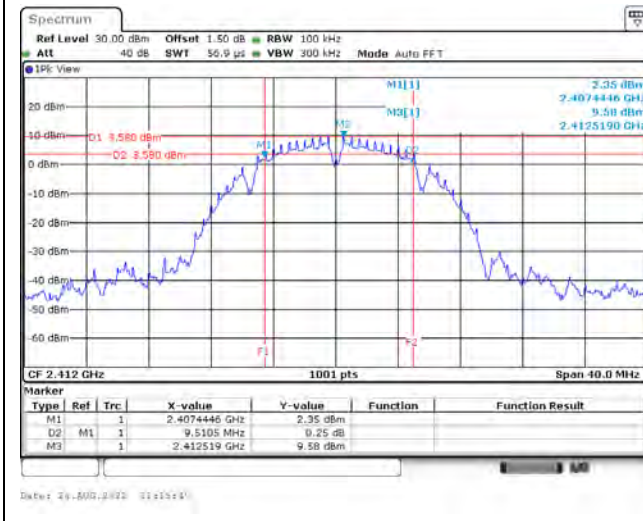
6.6. Test Result of DTS Bandwidth

Mode 1: EUT 1 with main source of battery

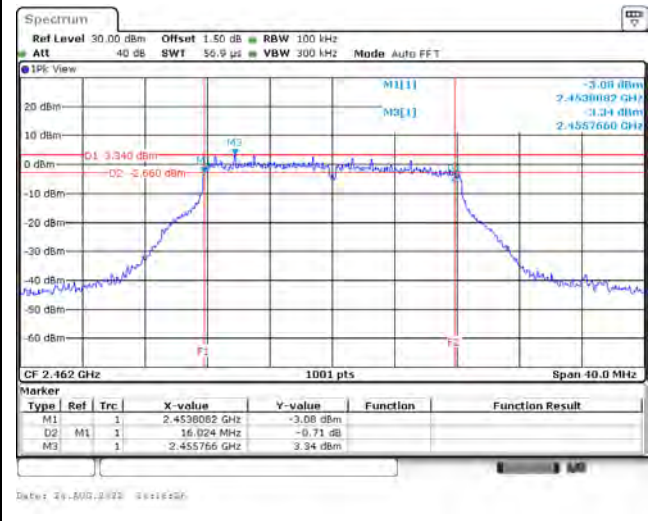
Modulation	Channel	Frequency (MHz)	DTS Bandwidth (MHz)	Limit (MHz)	Result
802.11b	1	2412	9.510	≥ 0.50	Pass
	6	2437	9.510	≥ 0.50	Pass
	11	2462	9.510	≥ 0.50	Pass
	12	2467	9.550	≥ 0.50	Pass
	13	2472	9.510	≥ 0.50	Pass
802.11g	1	2412	16.343	≥ 0.50	Pass
	6	2437	16.423	≥ 0.50	Pass
	11	2462	16.024	≥ 0.50	Pass
	12	2467	16.303	≥ 0.50	Pass
	13	2472	16.343	≥ 0.50	Pass
802.11n (20 MHz)	1	2412	17.542	≥ 0.50	Pass
	6	2437	17.582	≥ 0.50	Pass
	11	2462	17.182	≥ 0.50	Pass
	12	2467	17.302	≥ 0.50	Pass
	13	2472	17.582	≥ 0.50	Pass
802.11n (40 MHz)	3	2422	32.607	≥ 0.50	Pass
	6	2437	35.005	≥ 0.50	Pass
	9	2452	32.607	≥ 0.50	Pass
	10	2457	31.328	≥ 0.50	Pass
	11	2462	32.607	≥ 0.50	Pass

Spectrum plot of worst value

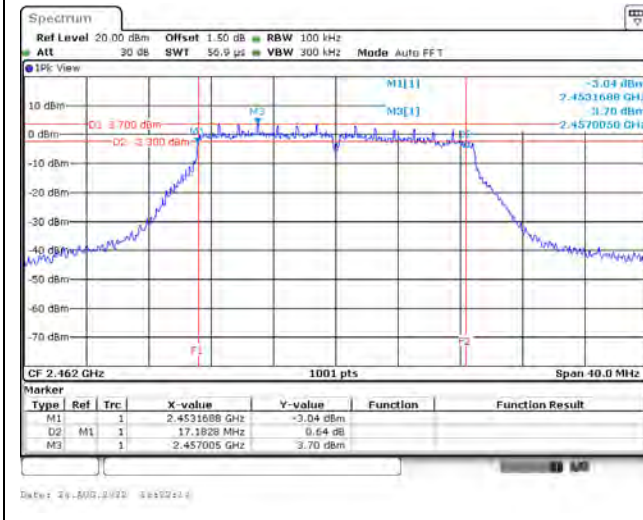
802.11b / 2412 MHz



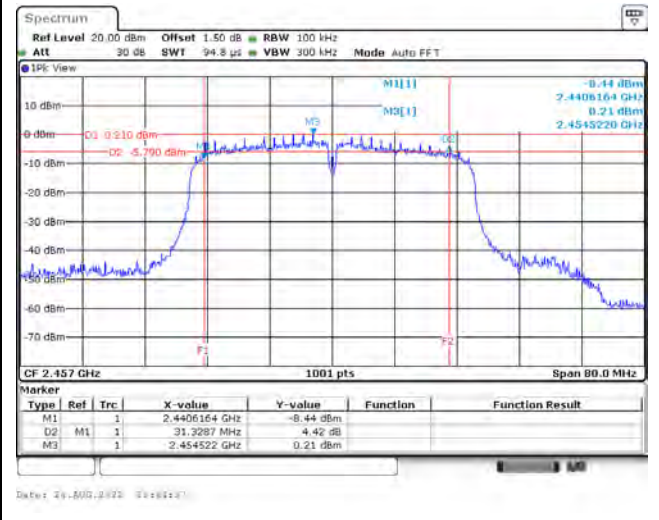
802.11g / 2462 MHz



802.11n (20 MHz) / 2462 MHz

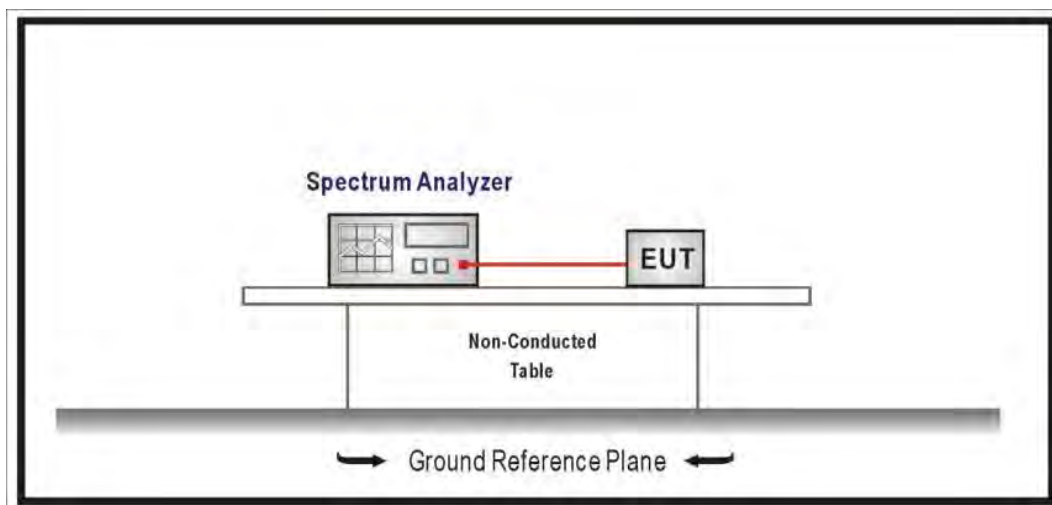


802.11n (40 MHz) / 2457 MHz



7. Maximum Power Spectral Density

7.1. Test Setup



7.2. 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.

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 Maximum Power Spectral Density

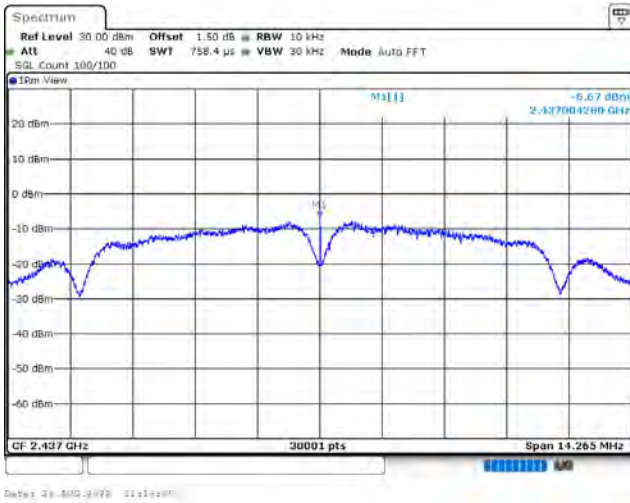
Mode 1: EUT 1 with main source of battery

Modulation	Channel	Frequency (MHz)	Power Spectral Density (dBm / 3kHz)		Limit (dBm / 3kHz)	Result
			Ant. 0	Total		
802.11b	1	2412	-7.780	-7.780	≤ 8.00	Pass
	6	2437	-6.670	-6.670	≤ 8.00	Pass
	11	2462	-7.040	-7.040	≤ 8.00	Pass
	12	2467	-10.070	-10.070	≤ 8.00	Pass
	13	2472	-14.540	-14.540	≤ 8.00	Pass
802.11g	1	2412	-5.880	-5.856	≤ 8.00	Pass
	6	2437	-5.680	-5.656	≤ 8.00	Pass
	11	2462	-9.520	-9.496	≤ 8.00	Pass
	12	2467	-11.910	-11.886	≤ 8.00	Pass
	13	2472	-26.320	-26.296	≤ 8.00	Pass
802.11n (20 MHz)	1	2412	-8.070	-8.036	≤ 8.00	Pass
	6	2437	-5.990	-5.956	≤ 8.00	Pass
	11	2462	-9.510	-9.476	≤ 8.00	Pass
	12	2467	-12.300	-12.266	≤ 8.00	Pass
	13	2472	-26.130	-26.096	≤ 8.00	Pass
802.11n (40 MHz)	3	2422	-8.410	-8.340	≤ 8.00	Pass
	6	2437	-8.800	-8.730	≤ 8.00	Pass
	9	2452	-9.160	-9.090	≤ 8.00	Pass
	10	2457	-9.270	-9.200	≤ 8.00	Pass
	11	2462	-11.770	-11.700	≤ 8.00	Pass

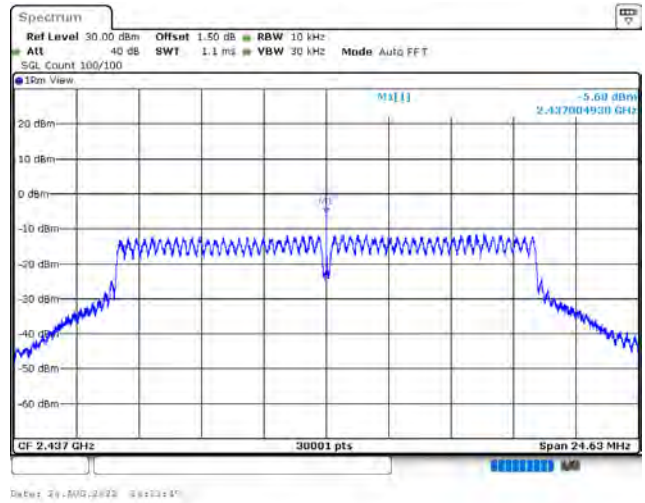
Note: Total power spectral density = power spectral density + duty factor, and the duty factor refer to section 1.10.

Spectrum plot of worst value

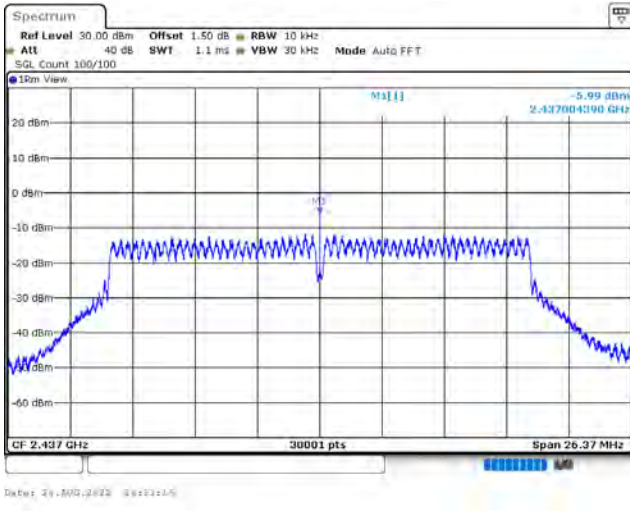
802.11b / 2437 MHz



802.11g / 2437 MHz



802.11n (20 MHz) / 2437 MHz



802.11n (40 MHz) / 2422 MHz

