

TEST REPORT

Applicant	Zhejiang Fudeer Electric Appliance Co.,Ltd.
Address	No.286, Kaifa Avenue, Jiaojiang District, Taizhou City, Zhejiang, China 318000

Manufacturer or Supplier	Zhejiang Fudeer Electric Appliance Co.,Ltd.
Address	No.286, Kaifa Avenue, Jiaojiang District, Taizhou City, Zhejiang, China 318000
Product	Digital Electric Smoker
Brand Name	N/A
Model	EKESC30L
Additional Model & Model Difference	27209001.; See item 3.1
Date of tests	Sep. 02, 2026 ~ Sep. 03, 2026

The tests have been carried out according to the requirements of the following standard:

☒ **FCC Part 15, Subpart C, Section 15.247**

CONCLUSION: The submitted sample was found to COMPLY with the test requirement

Prepared by Andrew Sha Project Engineer / EMC Department	Approved by Glyn He Assistant Manager / EMC Department
	 Date: Sep. 15, 2026

This report is governed by, and incorporates by reference, the Conditions of Testing as posted at the date of issuance of this report at <http://www.bureauveritas.com/home/about-us/our-business/cps/about-us/terms-conditions/> and is intended for your exclusive use. Any copying or replication of this report to or for any other person or entity, or use of our name or trademark, is permitted only with our prior written permission. This report sets forth our findings solely with respect to the test samples identified herein. The results set forth in this report are not indicative or representative of the quality or characteristics of the lot from which a test sample was taken or any similar or identical product unless specifically and expressly noted. Our report includes all of the tests requested by you and the results thereof based upon the information that you provided to us. Measurement uncertainty is only provided upon request for accredited tests. Statements of conformity are based on simple acceptance criteria without taking measurement uncertainty into account, unless otherwise requested in writing. You have 60 days from date of issuance of this report to notify us of any material error or omission caused by our negligence or if you require measurement uncertainty; provided, however, that such notice shall be in writing and shall specifically address the issue you wish to raise. A failure to raise such issue within the prescribed time shall constitute your unqualified acceptance of the completeness of this report, the tests conducted and the correctness of the report contents.

TABLE OF CONTENTS

RELEASE CONTROL RECORD	4
1 SUMMARY OF TEST RESULTS.....	5
2 MEASUREMENT UNCERTAINTY	5
3 GENERAL INFORMATION	6
3.1 GENERAL DESCRIPTION OF EUT	6
3.2 DESCRIPTION OF TEST MODES	7
3.2.1 CONFIGURATION OF SYSTEM UNDER TEST	8
3.2.2 TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL.....	8
3.3 DUTY CYCLE OF TEST SIGNAL	10
3.4 GENERAL DESCRIPTION OF APPLIED STANDARDS	11
3.5 DESCRIPTION OF SUPPORT UNITS	11
3.6 CONFIGURATION OF SYSTEM UNDER TEST	12
4 TEST TYPES AND RESULTS.....	13
4.1. CONDUCTED EMISSION MEASUREMENT	13
4.1.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT	13
4.1.2 TEST INSTRUMENTS.....	13
4.1.3 TEST PROCEDURES	14
4.1.4 DEVIATION FROM TEST STANDARD	14
4.1.5 TEST SETUP.....	15
4.1.6 EUT OPERATING CONDITIONS	15
4.1.7 TEST RESULTS	16
4.2. RADIATED EMISSION MEASUREMENT	18
4.2.1 LIMITS OF RADIATED EMISSION MEASUREMENT	18
4.2.2 TEST INSTRUMENTS.....	19
4.2.3 TEST PROCEDURES	20
4.2.4 DEVIATION FROM TEST STANDARD	21
4.2.5 TEST SETUP.....	21
4.2.6 EUT OPERATING CONDITIONS	22
4.2.7 TEST RESULTS	23
4.3 6DB BANDWIDTH MEASUREMENT	49
4.3.1 LIMITS OF 6DB BANDWIDTH MEASUREMENT	49
4.3.2 TEST INSTRUMENTS.....	49
4.3.3 TEST PROCEDURE.....	49
4.3.4 DEVIATION FROM TEST STANDARD	50
4.3.5 TEST SETUP.....	50

4.3.6	EUT OPERATING CONDITIONS	50
4.3.7	TEST RESULTS	50
4.4	CONDUCTED OUTPUT POWER.....	56
4.4.1	LIMITS OF CONDUCTED OUTPUT POWER MEASUREMENT	56
4.4.2	TEST SETUP	56
4.4.3	TEST INSTRUMENTS.....	56
4.4.4	TEST PROCEDURES	56
4.4.5	DEVIATION FROM TEST STANDARD	56
4.4.6	EUT OPERATING CONDITIONS	56
4.4.7	TEST RESULTS	57
4.5	POWER SPECTRAL DENSITY MEASUREMENT	59
4.5.1	LIMITS OF POWER SPECTRAL DENSITY MEASUREMENT	59
4.5.2	TEST SETUP	59
4.5.3	TEST INSTRUMENTS.....	59
4.5.4	TEST PROCEDURE	59
4.5.5	DEVIATION FROM TEST STANDARD	59
4.5.6	EUT OPERATING CONDITION	60
4.5.7	TEST RESULTS	60
4.6	OUT OF BAND EMISSION MEASUREMENT	62
4.6.1	LIMITS OF OUT OF BAND EMISSION MEASUREMENT	62
4.6.2	TEST SETUP	62
4.6.3	TEST INSTRUMENTS.....	62
4.6.4	TEST PROCEDURE	62
4.6.5	DEVIATION FROM TEST STANDARD	63
4.6.6	EUT OPERATING CONDITION	63
4.6.7	TEST RESULTS	64
5	PHOTOGRAPHS OF THE TEST CONFIGURATION	70
6	APPENDIX A - MODIFICATIONS RECORDERS FOR ENGINEERING CHANGES TO THE EUT BY THE LAB	71



Test Report No.: RF2607WDG0373-2

RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
RF2607WDG0373-2	Original release	Sep. 15, 2026

1 SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

APPLIED STANDARD: FCC PART 15, SUBPART C (SECTION 15.247)			
STANDARD SECTION	TEST TYPE AND LIMIT	RESULT	REMARK
15.207	AC Power Conducted Emission	N/A	Meet the requirement of limit.
15.247(d) 15.209	Radiated Emissions	PASS	Meet the requirement of limit.
15.247(d)	Band Edge Measurement	PASS	Meet the requirement of limit.
15.247(a)(2)	6dB bandwidth	PASS	Meet the requirement of limit.
15.247(b)	Conducted Output power	PASS	Meet the requirement of limit.
15.247(e)	Power Spectral Density	PASS	Meet the requirement of limit.
15.203	Antenna Requirement	PASS	Antenna connector is i-pex not a standard connector.

2 MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

MEASUREMENT	FREQUENCY	UNCERTAINTY
Radiated emissions	9KHz ~ 30MHz	+/- 3.02dB
	30MHz ~ 1GMHz	+/- 4.00dB
	1GHz ~ 18GHz	+/- 4.90dB
	18GHz ~ 40GHz	+/- 4.10dB

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of $k = 2$.

3 GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

PRODUCT	Digital Electric Smoker
MODEL NO.	EKESC30L
ADDITIONAL NO.	27209001
FCC ID	2AYYE-C30L
NOMINAL VOLTAGE	AC 120V 60Hz
MODULATION TECHNOLOGY	DSSS, OFDM, OFDMA
MODULATION TYPE	CCK, DQPSK, DBPSK for DSSS; 64QAM, 16QAM, QPSK, BPSK for OFDM; 1024QAM, 256QAM, 64QAM, 16QAM, QPSK, BPSK for OFDMA
OPERATING FREQUENCY	2412MHz ~ 2462MHz for 11b/g/n(HT20) 2422MHz ~ 2452MHz for 11n(HT40)
PEAK OUTPUT POWER	204.644mW (Measured Max.)
ANTENNA TYPE	FPC Antenna, 3dBi Gain
I/O PORTS	Refer to user's manual
CABLE SUPPLIED	Refer to user's manual

NOTES:

1. The above EUT information is declared by manufacturer and for more detailed features description, please refers to the manufacturer's specifications or user's manual.
2. Please refer to the EUT photo document (Reference No.: 2607WDG0373) for detailed product photo.
3. The additional models 27209001 is identical with the test model EKESC30L except the model name for marketing purposes.
4. The working status of the one antenna is as follows.

MODULATION MODE	TX FUNCTION
802.11b	1TX/1RX
802.11g	1TX/1RX
802.11n (HT20)	1TX/1RX
802.11n (HT40)	1TX/1RX

3.2 DESCRIPTION OF TEST MODES

11 channels are provided for 802.11b, 802.11g and 802.11n (HT20):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
1	2412 MHz	7	2442 MHz
2	2417 MHz	8	2447 MHz
3	2422 MHz	9	2452 MHz
4	2427 MHz	10	2457 MHz
5	2432 MHz	11	2462 MHz
6	2437 MHz		

7 channels are provided for 802.11n (HT40):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
3	2422MHz	7	2442MHz
4	2427MHz	8	2447MHz
5	2432MHz	9	2452MHz
6	2437MHz		

3.2.1 CONFIGURATION OF SYSTEM UNDER TEST

Please see section 5 photographs of the test configuration for reference.

3.2.2 TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL

Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates, XYZ axis, power supply voltage range and antenna ports. The worst case was found when positioned on X axis for radiated emission. Following test modes were selected for the final test, and the final worst case is marked in boldface and recorded in the report:

EUT CONFIGURE MODE	APPLICABLE TO				MODE
	RE<1G	RE≥1G	PLC	APCM	
A	√	√	√	√	AC 120V 60Hz

Where **RE<1G**: Radiated Emission below 1GHz
PLC: Power Line Conducted Emission

RE≥1G: Radiated Emission above 1GHz
APCM: Antenna Port Conducted Measurement

RADIATED EMISSION TEST (BELOW 1GHz):

- ☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates, XYZ axis and antenna ports (if EUT with antenna diversity architecture).
- ☒ Following channel(s) was (were) selected for the final test as listed below.

EUT CONFIGURE MODE	MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
A	802.11b	1 to 11	1	DSSS	DBPSK	1.0

For the test results, only the worst case was shown in test report.

RADIATED EMISSION TEST (ABOVE 1GHz):

- ☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates, XYZ axis and antenna ports (if EUT with antenna diversity architecture).
- ☒ Following channel(s) was (were) selected for the final test as listed below.

EUT CONFIGURE MODE	MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
A	802.11b	1 to 11	1, 6, 11	DSSS	DBPSK	1.0
A	802.11g	1 to 11	1, 6, 11	OFDM	BPSK	6.0
A	802.11n (HT20)	1 to 11	1, 6, 11	OFDMA	BPSK	8.0
A	802.11n (HT40)	3 to 9	3, 6, 9	OFDMA	BPSK	16.0

POWER LINE CONDUCTED EMISSION TEST:

- ☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, antenna ports (if EUT with antenna diversity architecture), and packet types.
- ☒ Following channel(s) was (were) selected for the final test as listed below.

EUT CONFIGURE MODE	TESTED CONDITION
2.4GHz Wi-Fi link	Wi-Fi link

ANTENNA PORT CONDUCTED MEASUREMENT:

- ☒ This item includes all test value of each mode, but only includes spectrum plot of worst value of each mode.
- ☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
- ☒ Following channel(s) was (were) selected for the final test as listed below.

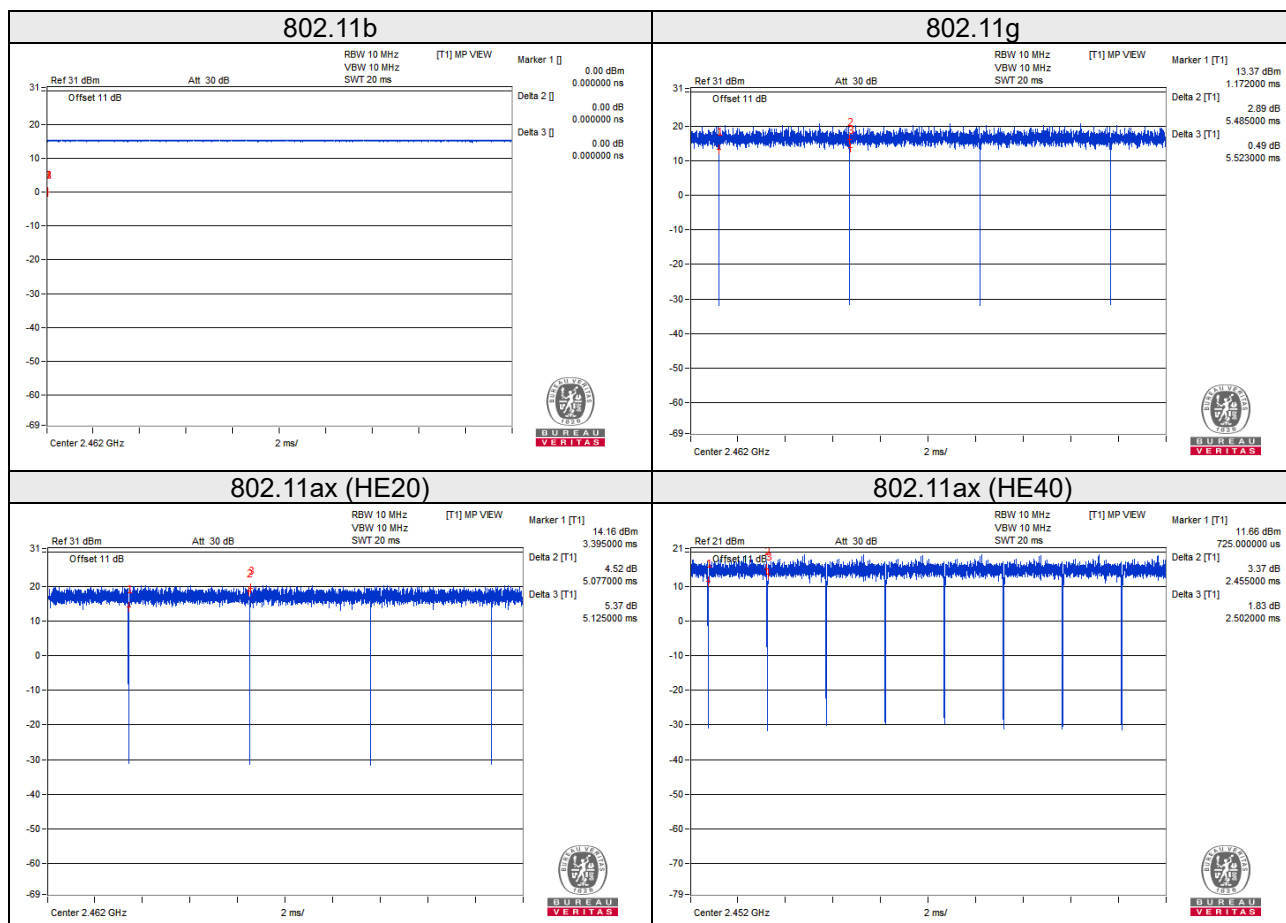
EUT CONFIGURE MODE	MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
A	802.11b	1 to 11	1, 6, 11	DSSS	DBPSK	1.0
A	802.11g	1 to 11	1, 6, 11	OFDM	BPSK	6.0
A	802.11n (HT20)	1 to 11	1, 6, 11	OFDM	BPSK	6.5
A	802.11n (HT40)	3 to 9	3, 6, 9	OFDM	BPSK	13.5

TEST CONDITION:

APPLICABLE TO	ENVIRONMENTAL CONDITIONS	INPUT POWER	TESTED BY
RE<1G	25deg. C, 53%RH	AC 120V 60Hz	Ludius
RE≥1G	25deg. C, 53%RH	AC 120V 60Hz	Ludius
PLC	25deg. C, 53%RH	AC 120V 60Hz	Ludius
APCM	25deg. C, 53%RH	AC 120V 60Hz	Leo

3.3 DUTY CYCLE OF TEST SIGNAL

Test Mode	On Time (ms)	Period (ms)	Duty Cycle (%)	1/T Min. VBW (KHz)	VBW Setting
802.11b	/	/	100	/	10Hz
802.11g	5.485	5.523	99.3	/	10Hz
802.11n (HT20)	5.077	5.125	99.1	/	10Hz
802.11n (HT40)	2.445	2.502	97.7	0.41	1KHz



3.4 GENERAL DESCRIPTION OF APPLIED STANDARDS

The EUT is a RF Product. According to the specifications of the manufacturer, it must comply with the requirements of the following standards:

FCC Part 15, Subpart C, Section 15.247

KDB 558074 D01 15.247 Meas Guidance v05r02

ANSI C63.10-2020

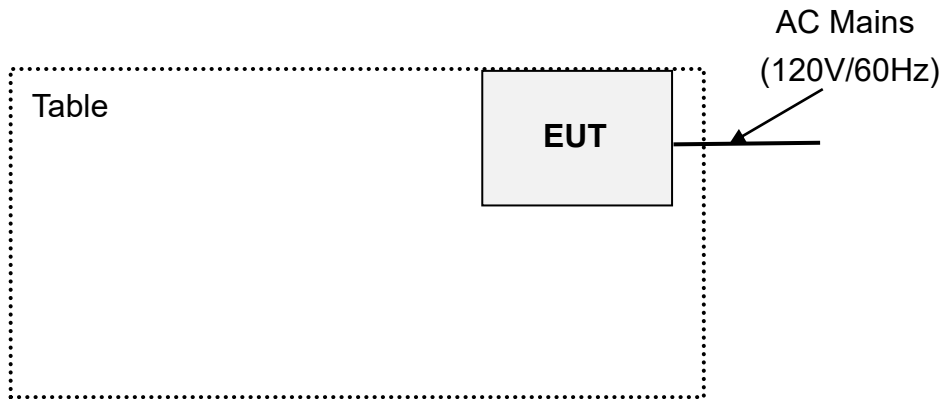
All test items have been performed and recorded as per the above standards.

3.5 DESCRIPTION OF SUPPORT UNITS

The EUT has been tested as an independent unit together without other necessary accessories or support units.

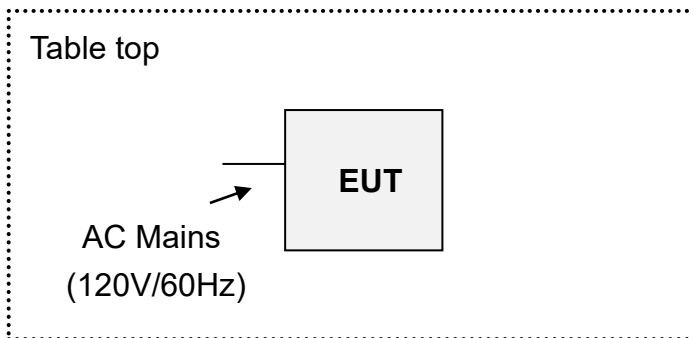
3.6 CONFIGURATION OF SYSTEM UNDER TEST

For Conducted Emission Test



Note: For the actual test configuration, please refer to the attached file (Test Setup Photo).

For Radiated Emission Test



Note: For the actual test configuration, please refer to the attached file (Test Setup Photo).

4 TEST TYPES AND RESULTS

4.1. CONDUCTED EMISSION MEASUREMENT

4.1.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT

FREQUENCY OF EMISSION (MHz)	CONDUCTED LIMIT (dB μ V)	
	Quasi-peak	Average
0.15 ~ 0.5	66 to 56	56 to 46
0.5 ~ 5	56	46
5 ~ 30	60	50

NOTE: 1. The lower limit shall apply at the transition frequencies.

2. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50MHz.

3. All emanations from a class A/B digital device or system, including any network of conductors and apparatus connected thereto, shall not exceed the level of field strengths specified above.

4.1.2 TEST INSTRUMENTS

Equipment	Manufacturer	Model No.	Serial No.	Next Cal.
EMI Test Receiver	Rohde&Schwarz	ESR7	101494	Oct. 10, 26
Artificial Mains Network	Rohde&Schwarz	ENV216	101173	Oct. 10, 26
Artificial Mains Network	Rohde&Schwarz	ESH3-Z5	100317	Oct. 09, 26
Voltage probe	SCHWARZBECK	TK 9421	TK 9421-176	Jul. 07, 27
Test software	ADT	ADT_Conc_V7.3.7	N/A	N/A

NOTES:

1. The test was performed in shielded room 553.
2. Equipment are calibrated by calibration laboratory accredited to ISO/IEC 17025 by a mutually recognized Accreditation and all tests are conducted within a valid calibration cycle.
3. The calibration interval of all test equipment are one year.

4.1.3 TEST PROCEDURES

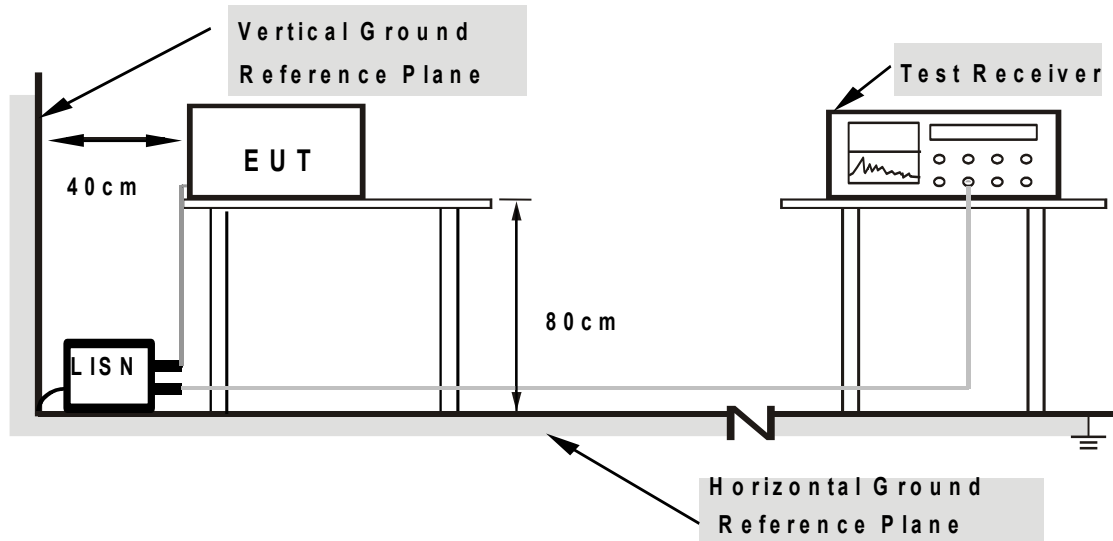
- a. The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling impedance for the measuring instrument.
- b. Both lines of the power mains connected to the EUT were checked for maximum conducted interference.
- c. The frequency range from 150kHz to 30MHz was searched. Emission levels under (Limit - 20dB) was not recorded.

NOTE: All modes of operation were investigated and the worst-case emissions are reported.

4.1.4 DEVIATION FROM TEST STANDARD

No deviation.

4.1.5 TEST SETUP



- Note: 1.Support units were connected to second LISN .
2.Both of LISNs (AMN) are 80 cm from EUT and at least 80
from other units and other metal planes

For the actual test configuration, please refer to the attached file (Test Setup Photo).

4.1.6 EUT OPERATING CONDITIONS

- Turned on the power and connected of all equipment.
- EUT was operated according to the type used was description in manufacturer's specifications or the User's Manual.

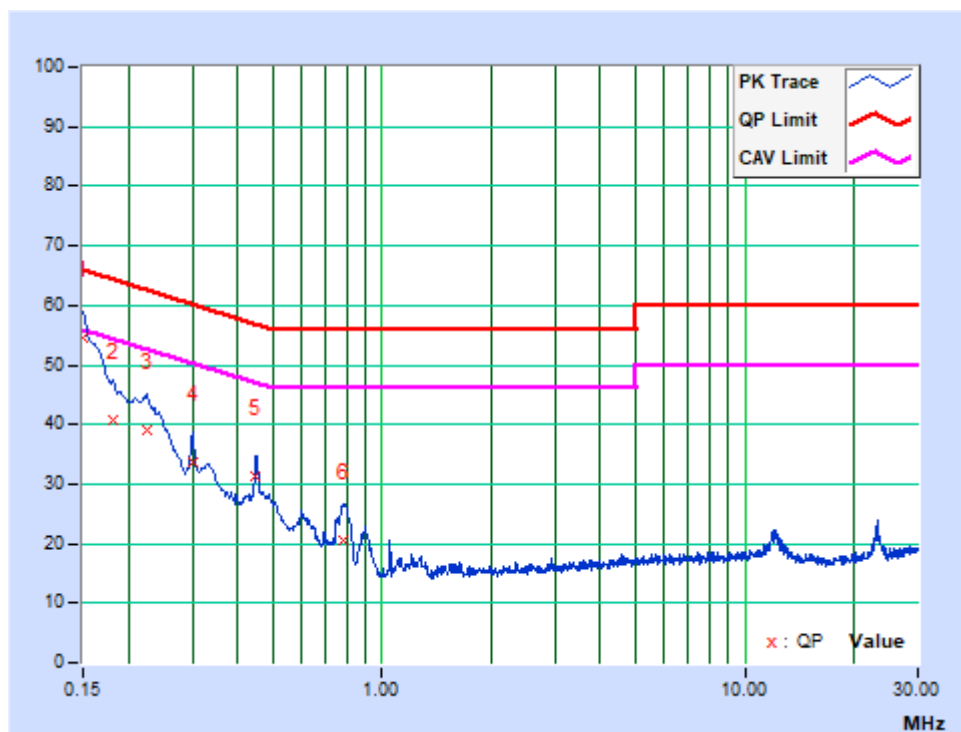
4.1.7 TEST RESULTS

CONDUCTED WORST-CASE DATA: BT Link

PHASE	Line	6dB BANDWIDTH	9kHz
-------	------	---------------	------

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15000	9.56	44.88	36.58	54.44	46.14	66.00	56.00	-11.56	-9.86
2	0.18123	9.57	31.06	19.14	40.63	28.71	64.43	54.43	-23.80	-25.72
3	0.22425	9.57	29.48	17.56	39.05	27.13	62.66	52.66	-23.61	-25.53
4	0.30075	9.58	23.93	21.97	33.51	31.55	60.22	50.22	-26.71	-18.67
5	0.44947	9.60	21.78	20.07	31.38	29.67	56.88	46.88	-25.51	-17.22
6	0.78253	9.61	10.83	3.89	20.44	13.50	56.00	46.00	-35.56	-32.50

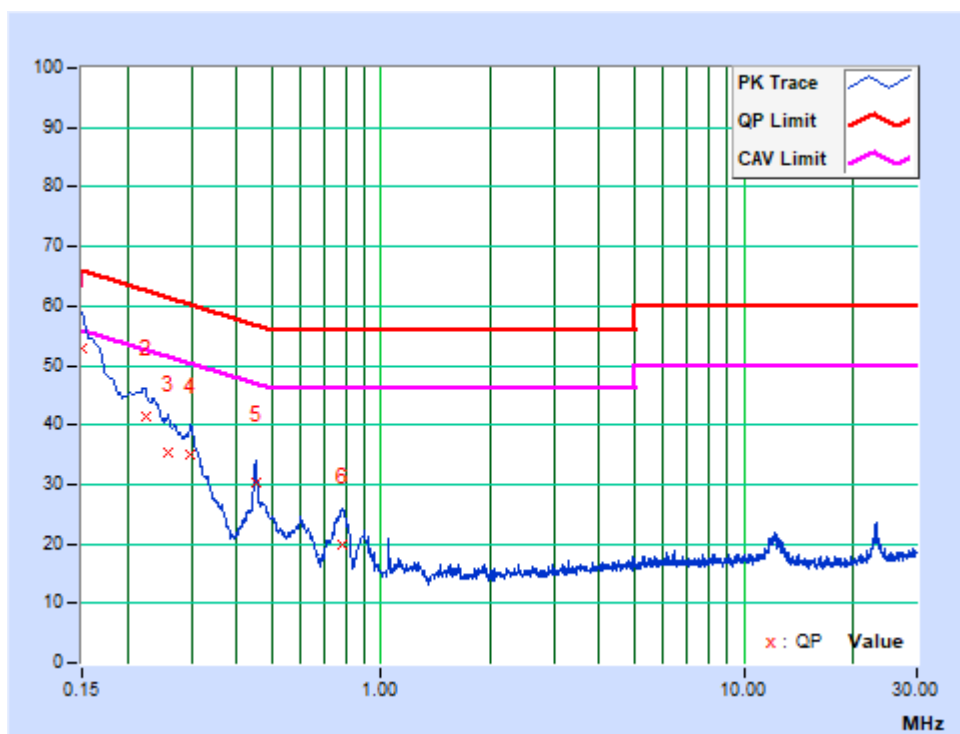
- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
 2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
 3. The emission levels of other frequencies were very low against the limit.
 4. Margin value = Emission level - Limit value
 5. Correction factor = Insertion loss + Cable loss
 6. Emission Level = Correction Factor + Reading Value.



PHASE	Neutral	6dB BANDWIDTH	9kHz
-------	---------	---------------	------

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15000	9.57	43.20	35.96	52.77	45.53	66.00	56.00	-13.23	-10.47
2	0.22425	9.58	31.69	21.67	41.27	31.25	62.66	52.66	-21.39	-21.41
3	0.25816	9.59	25.91	17.49	35.50	27.08	61.49	51.49	-25.99	-24.41
4	0.29851	9.59	25.38	21.62	34.97	31.21	60.28	50.28	-25.31	-19.07
5	0.45150	9.60	20.73	19.66	30.33	29.26	56.85	46.85	-26.51	-17.58
6	0.78460	9.62	10.23	2.12	19.85	11.74	56.00	46.00	-36.15	-34.26

- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
 2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
 3. The emission levels of other frequencies were very low against the limit.
 4. Margin value = Emission level - Limit value
 5. Correction factor = Insertion loss + Cable loss
 6. Emission Level = Correction Factor + Reading Value.



4.2. RADIATED EMISSION MEASUREMENT

4.2.1 LIMITS OF RADIATED EMISSION MEASUREMENT

Radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a).

FREQUENCIES (MHz)	FIELD STRENGTH (microvolts/meter)	MEASUREMENT DISTANCE (meters)
0.009 ~ 0.490	2400/F(kHz)	300
0.490 ~ 1.705	24000/F(kHz)	30
1.705 ~ 30.0	30	30
30 ~ 88	100	3
88 ~ 216	150	3
216 ~ 960	200	3
Above 960	500	3

NOTES:

1. The lower limit shall apply at the transition frequencies.
2. Emission level (dBuV/m) = 20 log Emission level (uV/m).
3. As shown in 15.35(b), for frequencies above 1000MHz, the field strength limits are based on average detector, however, the peak field strength of any emission shall not exceed the maximum permitted average limits, specified above by more than 20dB under any condition of modulation.

4.2.2 TEST INSTRUMENTS

Equipment	Manufacturer	Model No.	Serial No.	Next Cal.
EMI Test Receiver	Rohde&Schwarz	ESU40	100449	Oct. 09, 26
Signal and Spectrum Analyzer	Rohde&Schwarz	FSV7	102331	Apr. 08, 27
Active Loop Antenna (9KHz -30MHz)	SCHWARZBECK	FMZB 1519B	1519B-045	Apr. 13, 27
Amplifier (9KHz -1GHz)	Burgeon	BPA-530	100210	Feb. 12, 27
Trilog-Broadband Antenna	SCHWARZBECK	VULB 9168	9168-554	Dec. 14, 26
Horn Antenna (1GHz -18GHz)	ETS -Lindgren	3117	0085519	Oct. 11, 26
Horn Antenna (18GHz -40GHz)	SCHWARZBECK	BBHA 9170	BBHA9170147	Apr. 19, 27
3m Semi-anechoic Chamber	ETS-LINDGREN	9m*6m*6m	NSEMC003	May 16, 27
Test Software	ADT	ADT_Radiated_V7.6.15.9.2	N/A	N/A
Broadband Preamplifier (1GHz~18GHz)	SCHWARZBECK	BBV9718	305	Feb. 12, 27
Pre-Amplifier (18GHz-40GHz)	EMCI	EMC 184045	980102	Oct. 10, 26

NOTES:

1. The test was performed in 966 Chamber.
2. Equipment are calibrated by calibration laboratory accredited to ISO/IEC 17025 by a mutually recognized Accreditation and all tests are conducted within a valid calibration cycle.
3. The FCC Site registration No. is 749762, and the designation number is CN1174.
4. The calibration interval of all test equipment are one year.

4.2.3 TEST PROCEDURES

- a. The EUT was placed on the top of a rotating table 1.5 meters (above 1GHz) and 0.8 meters (below 1GHz) above the ground at a 3 meters semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. For below 1GHz was used bilog antenna, and above 1GHz was used horn antenna, and its height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- f. For below 30MHz, a loop antenna with its vertical plane is place 3m from the EUT and rotated about its vertical axis for maximum response at each azimuth about the EUT. And the centre of the loop shall be 1.3m above the ground.
- g. During the test, each emission was maximized by: having the EUT continuously working, investigated all operating modes, rotated about all 3 axis (X, Y & Z) and considered typical configuration to obtain worst position, manipulating interconnecting cables, For battery operated equipment, the equipment tests shall be perform using fresh batteries. The turntable was rotated to maximize the emission level.

NOTES:

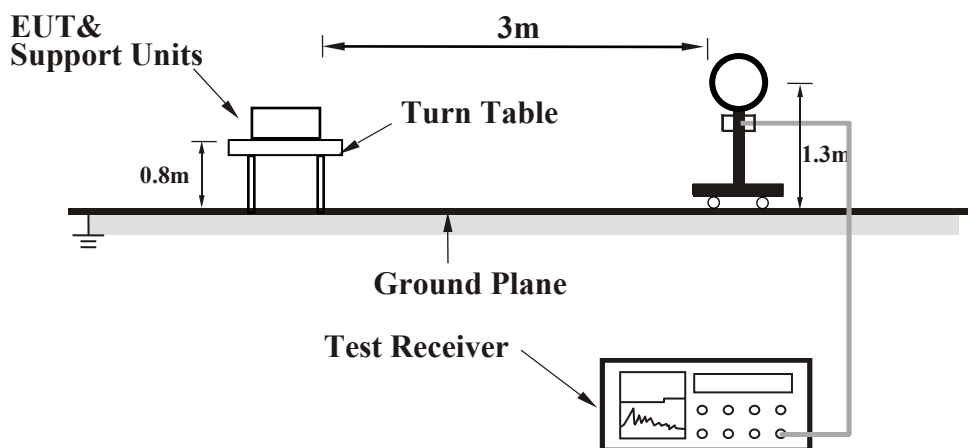
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection at frequency below 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
3. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is $\geq 1/T$ (Duty cycle < 98%) or 10Hz(Duty cycle > 98%) for Average detection (AV) at frequency above 1GHz.
4. All modes of operation were investigated and the worst-case emissions are reported.
5. The testing of the EUT was performed on all 3 orthogonal axes, the worst-case test configuration was reported on the file test setup photo.

4.2.4 DEVIATION FROM TEST STANDARD

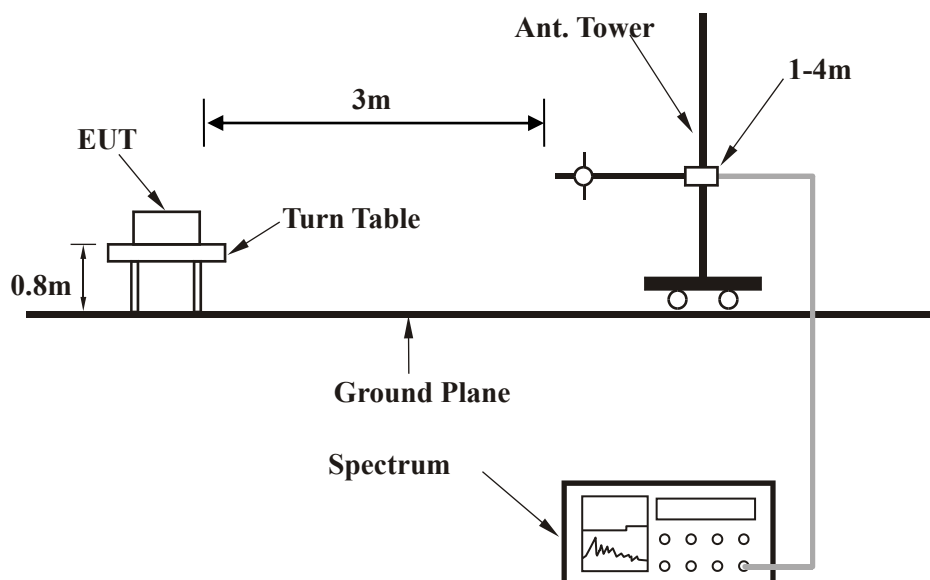
No deviation.

4.2.5 TEST SETUP

Below 30MHz test setup

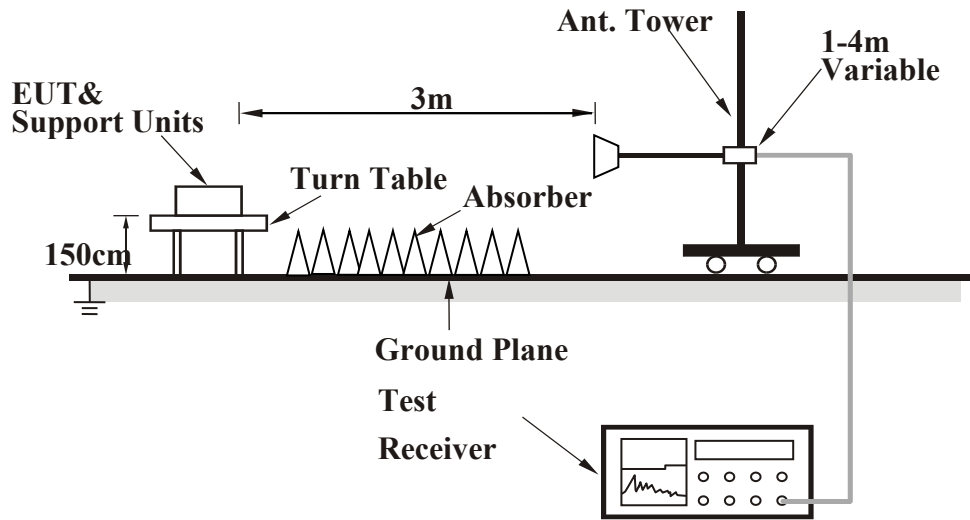


Below 1GHz test setup



Note: For the actual test configuration, please refer to the attached file (Test Setup Photo).

Above 1GHz test setup



Note: For the actual test configuration, please refer to the attached file (Test Setup Photo).

4.2.6 EUT OPERATING CONDITIONS

- Placed the EUT on a testing table.
- Set the transmitter part of EUT under transmission condition continuously at specific channel frequency.
- The necessary accessories enable the EUT in full functions.

4.2.7 TEST RESULTS

BELOW 1GHz WORST-CASE DATA:

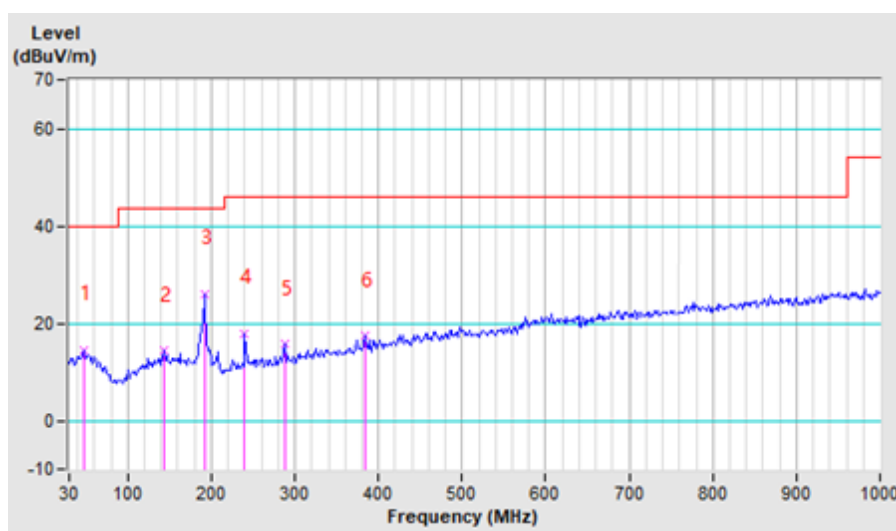
802.11b

CHANNEL	TX Channel 1	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9KHz ~ 1GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	47.10	-16.68	31.14	14.46	40.00	-25.54	200	260
2	143.48	-16.69	30.97	14.28	43.50	-29.22	200	192
3	191.67	-19.43	45.52	26.08	43.50	-17.42	200	306
4	239.86	-18.10	35.90	17.80	46.00	-28.20	350	288
5	288.04	-16.26	31.86	15.60	46.00	-30.40	300	235
6	384.42	-13.53	30.90	17.37	46.00	-28.63	250	214

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were greater than 20dB margin.
4. 9KHz~30MHz have been test and test data more than 20dB margin.
5. Margin value = Emission level – Limit value.

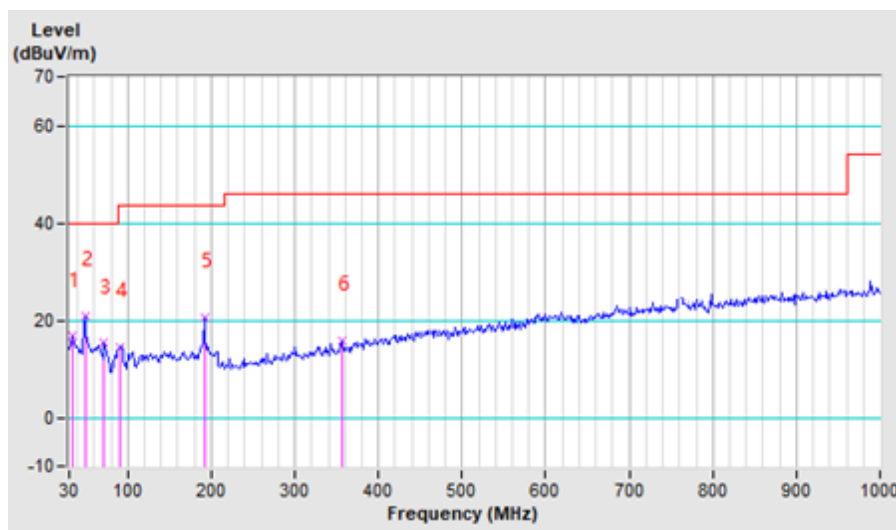


CHANNEL	TX Channel 1	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9KHz ~ 1GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	33.11	-17.69	34.37	16.68	40.00	-23.32	200	223
2	48.65	-16.63	37.48	20.85	40.00	-19.15	100	309
3	71.97	-19.04	34.31	15.27	40.00	-24.73	200	170
4	90.62	-21.81	36.25	14.44	43.50	-29.06	350	286
5	191.67	-19.43	40.05	20.61	43.50	-22.89	150	334
6	356.44	-14.34	30.11	15.77	46.00	-30.23	300	193

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were greater than 20dB margin.
4. 9KHz~30MHz have been test and test data more than 20dB margin.
5. Margin value = Emission level – Limit value.



ABOVE 1GHz DATA

802.11b

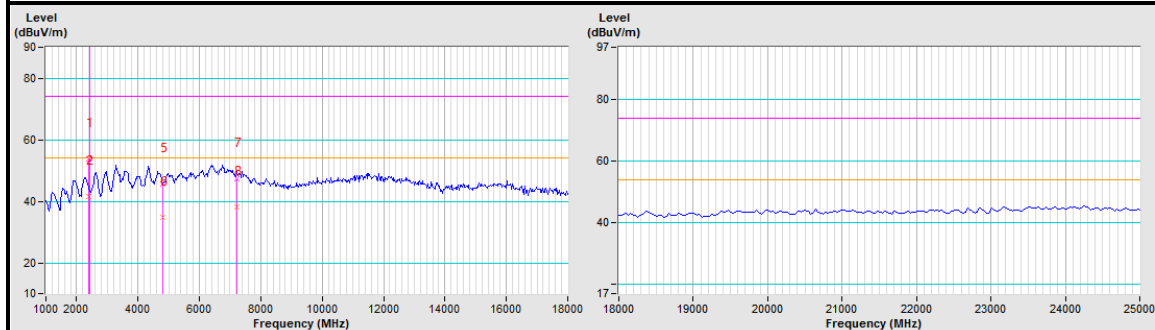
CHANNEL	TX Channel 1	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 25GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE : HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	53.72 PK	74.00	-20.28	193	58	51.47	2.25
2	2390.00	41.62 AV	54.00	-12.38	193	58	39.37	2.25
3	*2412.00	107.15 PK			146	69	104.86	2.29
4	*2412.00	93.86 AV			146	69	91.57	2.29
5	4824.00	45.61 PK	74.00	-28.39	231	174	39.76	5.85
6	4824.00	34.88 AV	54.00	-19.12	231	174	29.03	5.85
7	#7236.00	47.42 PK	74.00	-26.58	251	317	39.58	7.84
8	#7236.00	38.12 AV	54.00	-15.88	251	317	30.28	7.84
ANTENNA POLARITY & TEST DISTANCE : VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	49.35 PK	74.00	-24.65	169	81	47.10	2.25
2	2390.00	38.38 AV	54.00	-15.62	169	81	36.13	2.25
3	*2412.00	101.19 PK			132	65	98.90	2.29
4	*2412.00	91.79 AV			132	65	89.50	2.29
5	4824.00	45.35 PK	74.00	-28.65	123	214	39.50	5.85
6	4824.00	34.75 AV	54.00	-19.25	123	214	28.90	5.85
7	#7236.00	47.71 PK	74.00	-26.29	105	245	39.87	7.84
8	#7236.00	38.14 AV	54.00	-15.86	105	245	30.30	7.84

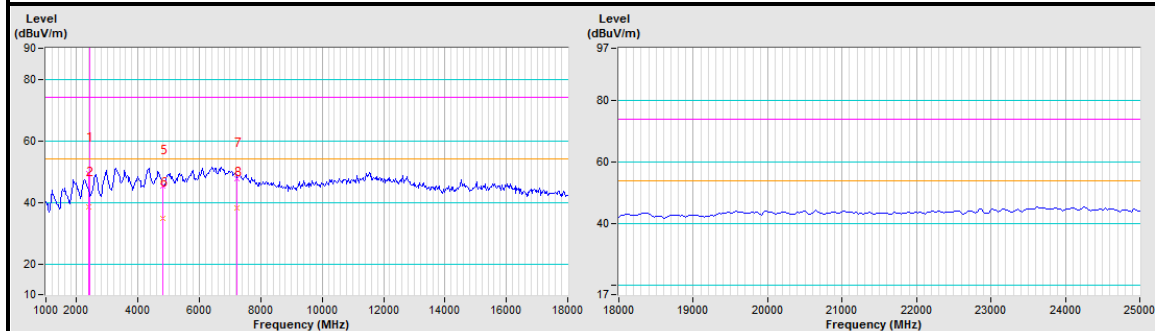
REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were greater than 20dB margin.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

Horizontal



Vertical



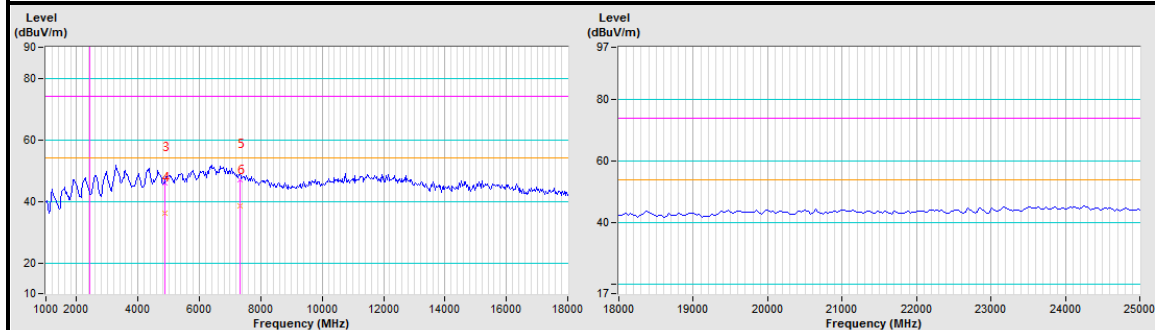
CHANNEL	TX Channel 6	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 25GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE : HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2437.00	107.62 PK			182	66	105.31	2.31
2	*2437.00	94.23 AV			182	66	91.92	2.31
3	4874.00	45.92 PK	74.00	-28.08	176	341	40.18	5.74
4	4874.00	36.02 AV	54.00	-17.98	176	341	30.28	5.74
5	7311.00	47.06 PK	74.00	-26.94	192	251	39.47	7.59
6	7311.00	38.51 AV	54.00	-15.49	192	251	30.92	7.59
ANTENNA POLARITY & TEST DISTANCE : VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2437.00	101.71 PK			143	61	99.40	2.31
2	*2437.00	92.54 AV			143	61	90.23	2.31
3	4874.00	45.62 PK	74.00	-28.38	145	74	39.88	5.74
4	4874.00	34.86 AV	54.00	-19.14	145	74	29.12	5.74
5	7311.00	47.59 PK	74.00	-26.41	133	214	40.00	7.59
6	7311.00	37.42 AV	54.00	-16.58	133	214	29.83	7.59

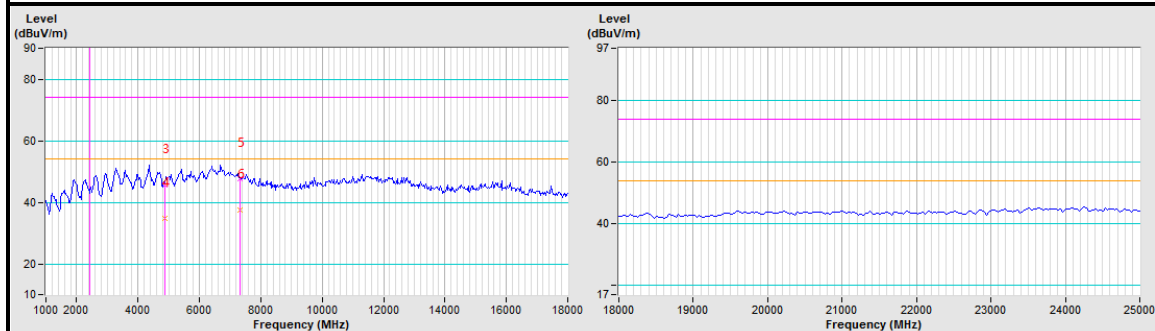
REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were greater than 20dB margin.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.

Horizontal



Vertical



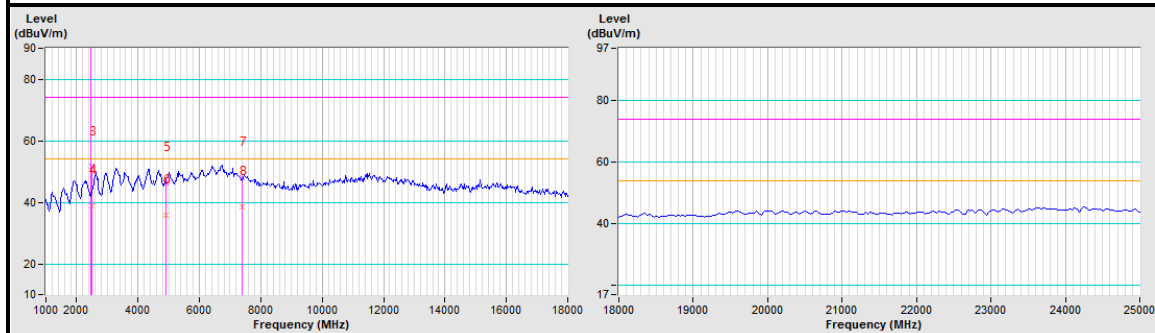
CHANNEL	TX Channel 11	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 25GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE : HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2462.00	107.80 PK			145	354	105.46	2.34
2	*2462.00	94.67 AV			145	354	92.33	2.34
3	2483.50	51.55 PK	74.00	-22.45	184	76	49.19	2.36
4	2483.50	38.76 AV	54.00	-15.24	184	76	36.40	2.36
5	4924.00	46.33 PK	74.00	-27.67	176	51	40.69	5.64
6	4924.00	35.81 AV	54.00	-18.19	176	51	30.17	5.64
7	7386.00	48.06 PK	74.00	-25.94	147	31	40.71	7.35
8	7386.00	38.46 AV	54.00	-15.54	147	31	31.11	7.35
ANTENNA POLARITY & TEST DISTANCE : VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2462.00	101.93 PK			142	174	99.59	2.34
2	*2462.00	92.38 AV			142	174	90.04	2.34
3	2483.50	50.71 PK	74.00	-23.29	123	52	48.35	2.36
4	2483.50	37.62 AV	54.00	-16.38	123	52	35.26	2.36
5	4924.00	47.84 PK	74.00	-26.16	112	130	42.20	5.64
6	4924.00	37.61 AV	54.00	-16.39	112	130	31.97	5.64
7	7386.00	47.47 PK	74.00	-26.53	143	351	40.12	7.35
8	7386.00	37.84 AV	54.00	-16.16	143	351	30.49	7.35

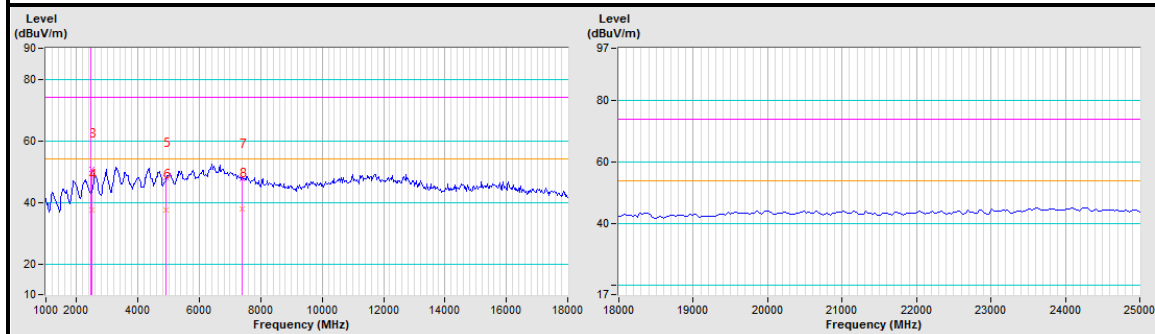
REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were greater than 20dB margin.
4. Margin value = Emission level – Limit value.
5. "* ": Fundamental frequency.

Horizontal



Vertical



802.11g

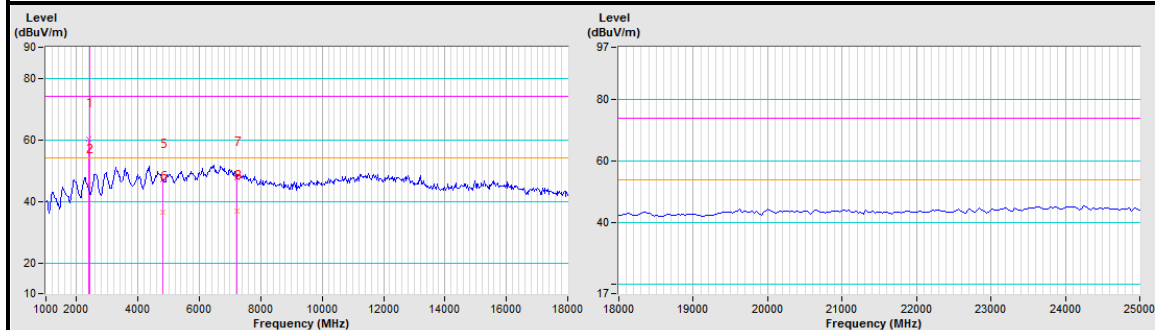
CHANNEL	TX Channel 1	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 25GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE : HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	60.23 PK	74.00	-13.77	114	232	57.98	2.25
2	2390.00	45.41 AV	54.00	-8.59	114	232	43.16	2.25
3	*2412.00	103.33 PK			142	58	101.04	2.29
4	*2412.00	92.00 AV			142	58	89.71	2.29
5	4824.00	47.01 PK	74.00	-26.99	172	62	41.16	5.85
6	4824.00	36.58 AV	54.00	-17.42	172	62	30.73	5.85
7	#7236.00	47.64 PK	74.00	-26.36	175	46	39.80	7.84
8	#7236.00	36.88 AV	54.00	-17.12	175	46	29.04	7.84
ANTENNA POLARITY & TEST DISTANCE : VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	56.82 PK	74.00	-17.18	197	47	54.57	2.25
2	2390.00	39.29 AV	54.00	-14.71	197	47	37.04	2.25
3	*2412.00	98.07 PK			142	136	95.78	2.29
4	*2412.00	86.63 AV			142	136	84.34	2.29
5	4824.00	47.25 PK	74.00	-26.75	106	61	41.40	5.85
6	4824.00	36.99 AV	54.00	-17.01	106	61	31.14	5.85
7	#7236.00	47.46 PK	74.00	-26.54	132	149	39.62	7.84
8	#7236.00	37.57 AV	54.00	-16.43	132	149	29.73	7.84

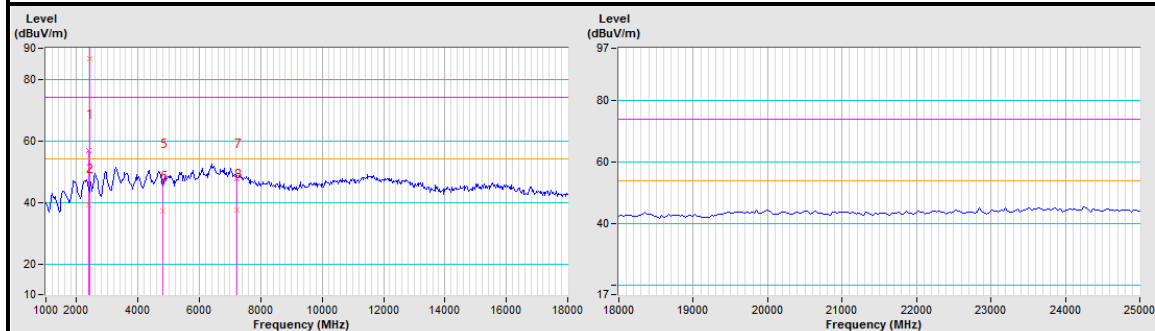
REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were greater than 20dB margin.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

Horizontal



Vertical



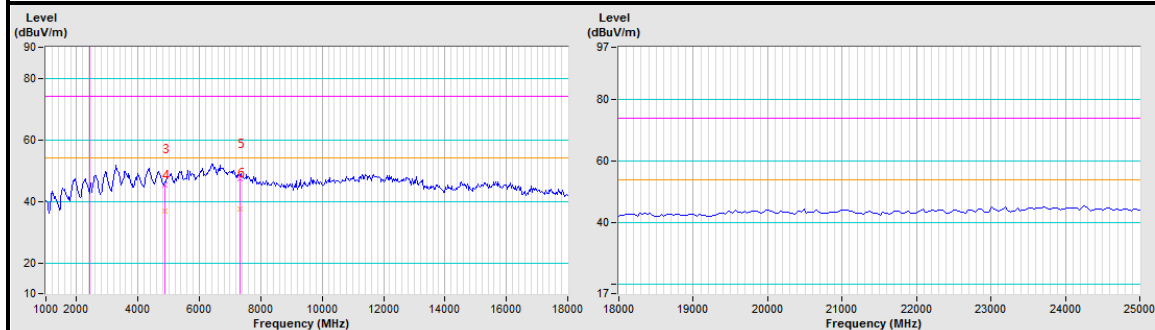
CHANNEL	TX Channel 6	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 25GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE : HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2437.00	105.92 PK			174	54	103.61	2.31
2	*2437.00	94.64 AV			174	54	92.33	2.31
3	4874.00	45.33 PK	74.00	-28.67	149	60	39.59	5.74
4	4874.00	36.81 AV	54.00	-17.19	149	60	31.07	5.74
5	7311.00	47.13 PK	74.00	-26.87	163	231	39.54	7.59
6	7311.00	37.45 AV	54.00	-16.55	163	231	29.86	7.59
ANTENNA POLARITY & TEST DISTANCE : VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2437.00	100.24 PK			158	83	97.93	2.31
2	*2437.00	88.89 AV			158	83	86.58	2.31
3	4874.00	45.11 PK	74.00	-28.89	175	31	39.37	5.74
4	4874.00	35.26 AV	54.00	-18.74	175	31	29.52	5.74
5	7311.00	47.59 PK	74.00	-26.41	133	153	40.00	7.59
6	7311.00	37.91 AV	54.00	-16.09	133	153	30.32	7.59

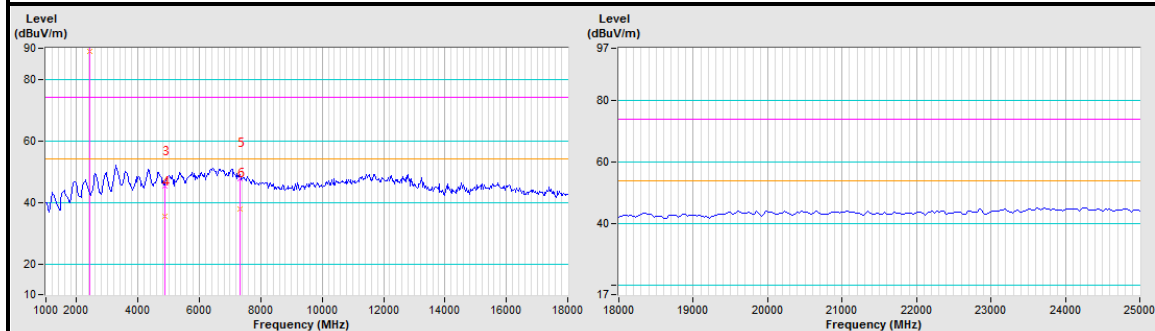
REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were greater than 20dB margin.
4. Margin value = Emission level – Limit value.
5. " * " : Fundamental frequency.

Horizontal



Vertical



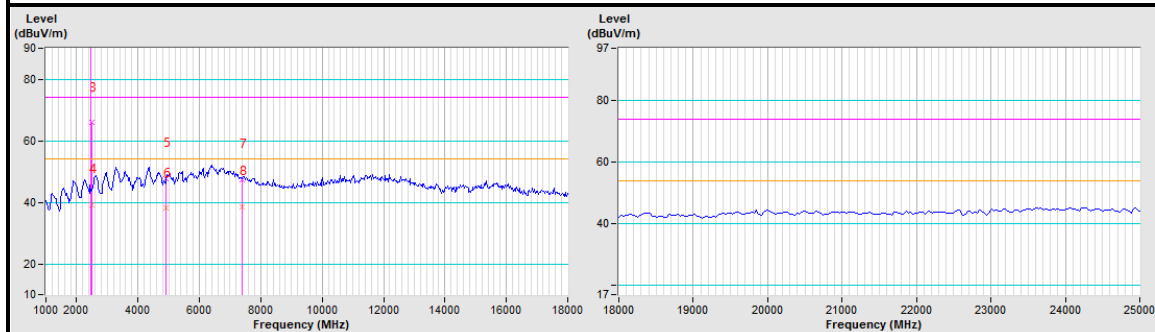
CHANNEL	TX Channel 11	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 25GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE : HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2462.00	104.50 PK			154	21	102.16	2.34
2	*2462.00	94.33 AV			154	21	91.99	2.34
3	2483.50	65.82 PK	74.00	-8.18	174	54	63.46	2.36
4	2483.50	39.11 AV	54.00	-14.89	174	54	36.75	2.36
5	4924.00	47.71 PK	74.00	-26.29	135	74	42.07	5.64
6	4924.00	38.02 AV	54.00	-15.98	135	74	32.38	5.64
7	7386.00	47.39 PK	74.00	-26.61	163	20	40.04	7.35
8	7386.00	38.51 AV	54.00	-15.49	163	20	31.16	7.35
ANTENNA POLARITY & TEST DISTANCE : VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2462.00	99.35 PK			141	253	97.01	2.34
2	*2462.00	87.79 AV			141	253	85.45	2.34
3	2483.50	52.36 PK	74.00	-21.64	119	231	50.00	2.36
4	2483.50	38.43 AV	54.00	-15.57	119	231	36.07	2.36
5	4924.00	45.66 PK	74.00	-28.34	135	321	40.02	5.64
6	4924.00	34.83 AV	54.00	-19.17	135	321	29.19	5.64
7	7386.00	47.37 PK	74.00	-26.63	123	178	40.02	7.35
8	7386.00	38.52 AV	54.00	-15.48	123	178	31.17	7.35

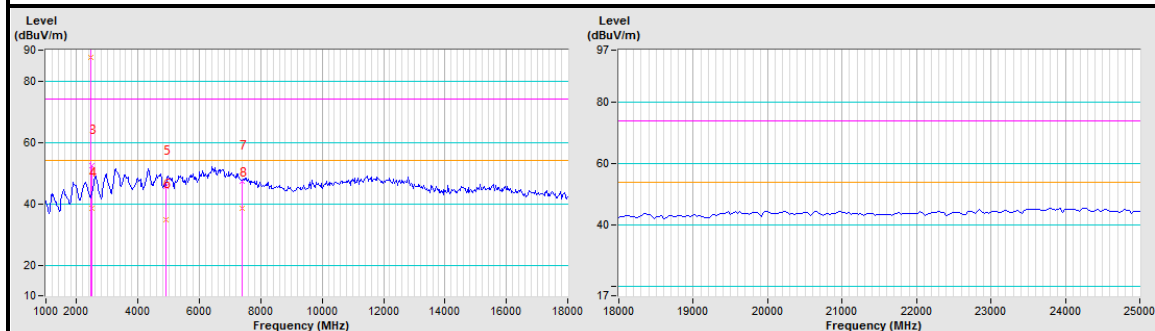
REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were greater than 20dB margin.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.

Horizontal



Vertical



802.11n HT20

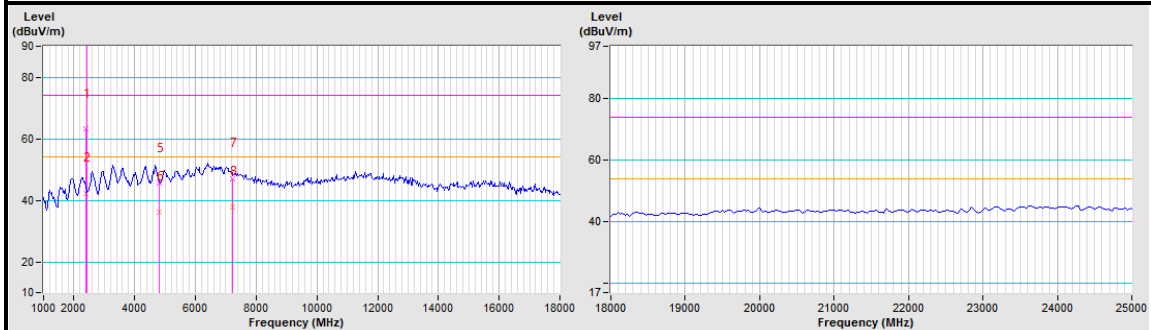
CHANNEL	TX Channel 1	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 25GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE : HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	63.07 PK	74.00	-10.93	145	63	60.82	2.25
2	2390.00	42.19 AV	54.00	-11.81	145	63	39.94	2.25
3	*2412.00	103.06 PK			175	46	100.77	2.29
4	*2412.00	92.51 AV			175	46	90.22	2.29
5	4824.00	45.49 PK	74.00	-28.51	176	61	39.64	5.85
6	4824.00	36.24 AV	54.00	-17.76	176	61	30.39	5.85
7	#7236.00	47.11 PK	74.00	-26.89	131	20	39.27	7.84
8	#7236.00	37.89 AV	54.00	-16.11	131	20	30.05	7.84
ANTENNA POLARITY & TEST DISTANCE : VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	58.60 PK	74.00	-15.40	191	243	56.35	2.25
2	2390.00	40.31 AV	54.00	-13.69	191	243	38.06	2.25
3	*2412.00	97.58 PK			133	261	95.29	2.29
4	*2412.00	87.24 VA			133	261	84.95	2.29
5	4824.00	45.39 PK	74.00	-28.61	143	36	39.54	5.85
6	4824.00	35.77 AV	54.00	-18.23	143	36	29.92	5.85
7	#7236.00	47.84 PK	74.00	-26.16	146	62	40.00	7.84
8	#7236.00	37.61 AV	54.00	-16.39	146	62	29.77	7.84

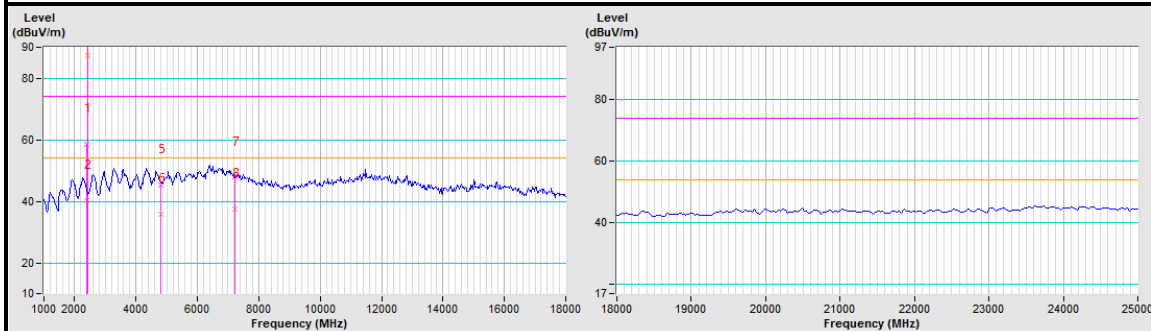
REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were greater than 20dB margin.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

Horizontal



Vertical



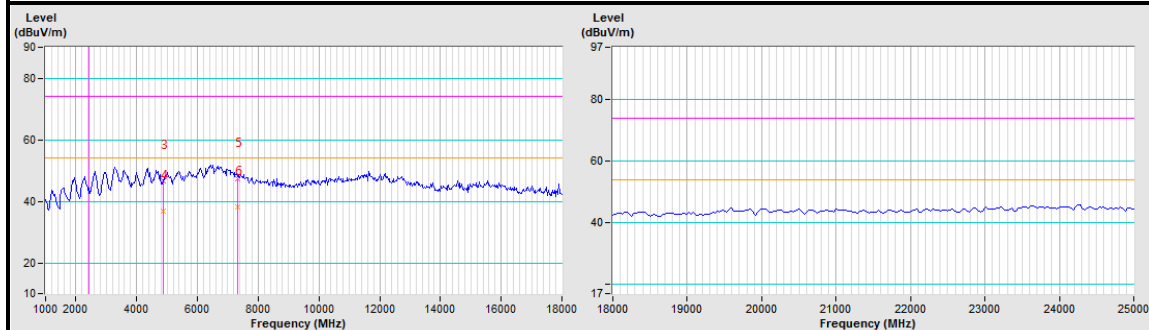
CHANNEL	TX Channel 6	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 25GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE : HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2437.00	105.73 PK			142	116	103.42	2.31
2	*2437.00	94.17 AV			142	116	91.86	2.31
3	4874.00	46.66 PK	74.00	-27.34	130	214	40.92	5.74
4	4874.00	36.84 AV	54.00	-17.16	130	214	31.10	5.74
5	7311.00	47.38 PK	74.00	-26.62	148	251	39.79	7.59
6	7311.00	38.22 AV	54.00	-15.78	148	251	30.63	7.59
ANTENNA POLARITY & TEST DISTANCE : VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2437.00	98.75 PK			172	62	96.44	2.31
2	*2437.00	87.26 AV			172	62	84.95	2.31
3	4874.00	45.43 PK	74.00	-28.57	136	258	39.69	5.74
4	4874.00	34.77 AV	54.00	-19.23	136	258	29.03	5.74
5	7311.00	47.18 PK	74.00	-26.82	156	241	39.59	7.59
6	7311.00	37.84 AV	54.00	-16.16	156	241	30.25	7.59

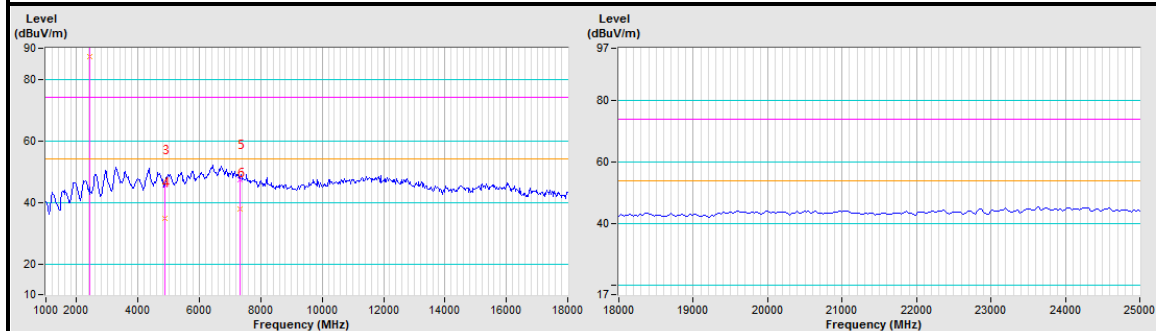
REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were greater than 20dB margin.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.

Horizontal



Vertical



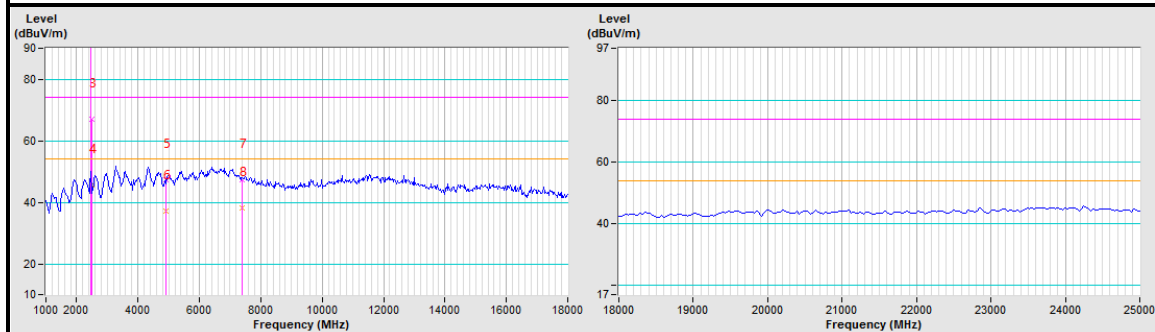
CHANNEL	TX Channel 11	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 25GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE : HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2462.00	107.16 PK			151	26	104.82	2.34
2	*2462.00	95.32 AV			151	26	92.98	2.34
3	2483.50	67.01 PK	74.00	-6.99	135	13	64.65	2.36
4	2483.50	45.69 AV	54.00	-8.31	135	13	43.33	2.36
5	4924.00	47.33 PK	74.00	-26.67	194	58	41.69	5.64
6	4924.00	37.04 AV	54.00	-16.96	194	58	31.40	5.64
7	7386.00	47.37 PK	74.00	-26.63	193	32	40.02	7.35
8	7386.00	38.22 AV	54.00	-15.78	193	32	30.87	7.35
ANTENNA POLARITY & TEST DISTANCE : VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2462.00	100.46 PK			163	251	98.12	2.34
2	*2462.00	89.77 AV			163	251	87.43	2.34
3	2483.50	58.24 PK	74.00	-15.76	123	62	55.88	2.36
4	2483.50	44.73 AV	54.00	-9.27	123	62	42.37	2.36
5	4924.00	47.02 PK	74.00	-26.98	182	314	41.38	5.64
6	4924.00	38.42 AV	54.00	-15.58	182	314	32.78	5.64
7	7386.00	47.51 PK	74.00	-26.49	143	14	40.16	7.35
8	7386.00	38.16 AV	54.00	-15.84	143	14	30.81	7.35

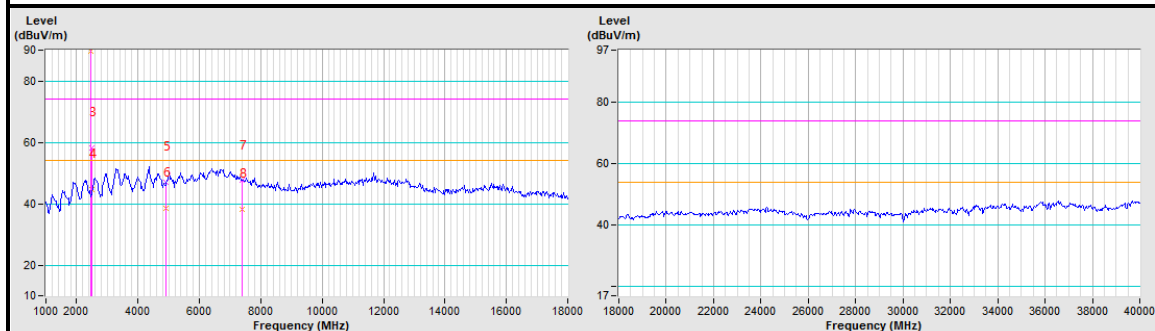
REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were greater than 20dB margin.
4. Margin value = Emission level – Limit value.
5. "*" : Fundamental frequency.

Horizontal



Vertical



802.11n HT40

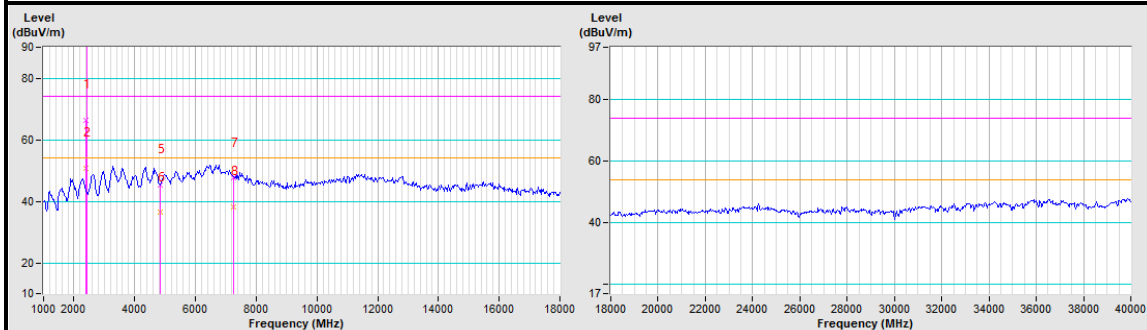
CHANNEL	TX Channel 3	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 25GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE : HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	66.25 PK	74.00	-7.75	162	158	64.00	2.25
2	2390.00	50.64 AV	54.00	-3.36	162	158	48.39	2.25
3	*2422.00	101.52 PK			152	163	99.23	2.29
4	*2422.00	91.89 AV			152	163	89.60	2.29
5	4844.00	45.26 PK	74.00	-28.74	147	41	39.45	5.81
6	4844.00	36.29 AV	54.00	-17.71	147	41	30.48	5.81
7	#7266.00	47.54 PK	74.00	-26.46	106	312	39.80	7.74
8	#7266.00	38.16 AV	54.00	-15.84	106	312	30.42	7.74
ANTENNA POLARITY & TEST DISTANCE : VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	62.14 PK	74.00	-11.86	186	35	59.89	2.25
2	2390.00	48.24 AV	54.00	-5.76	186	35	45.99	2.25
3	*2422.00	96.91 PK			124	113	94.62	2.29
4	*2422.00	87.08 AV			124	113	84.79	2.29
5	4844.00	45.62 PK	74.00	-28.38	106	37	39.81	5.81
6	4844.00	36.91 AV	54.00	-17.09	106	37	31.10	5.81
7	#7266.00	47.61 PK	74.00	-26.39	109	94	39.87	7.74
8	#7266.00	38.21 AV	54.00	-15.79	109	94	30.47	7.74

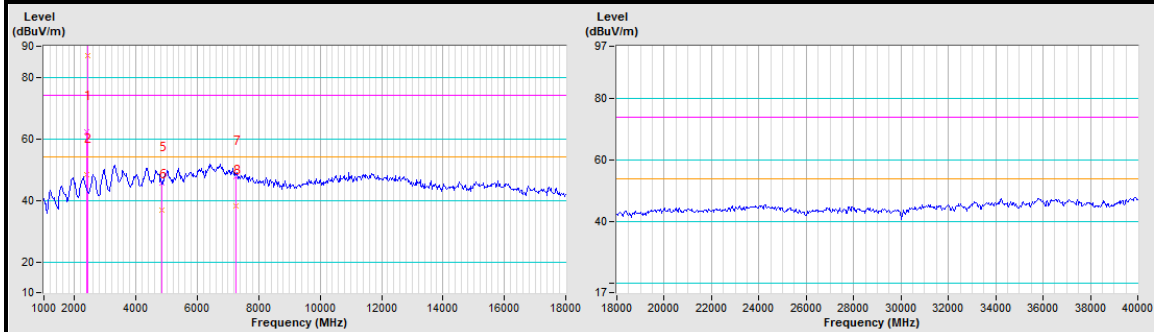
REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were greater than 20dB margin.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.

Horizontal



Vertical



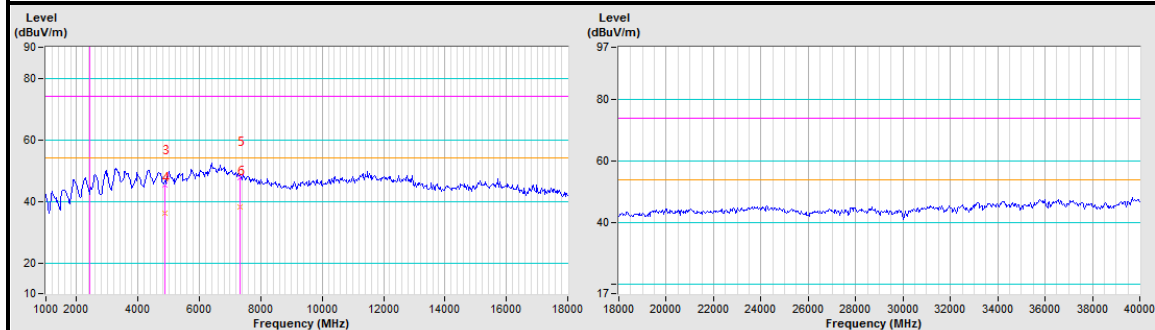
CHANNEL	TX Channel 6	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 25GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE : HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2437.00	104.09 PK			152	36	101.78	2.31
2	*2437.00	94.36 AV			152	36	92.05	2.31
3	4874.00	45.11 PK	74.00	-28.89	174	231	39.37	5.74
4	4874.00	36.09 AV	54.00	-17.91	174	231	30.35	5.74
5	7311.00	47.61 PK	74.00	-26.39	164	103	40.02	7.59
6	7311.00	38.28 AV	54.00	-15.72	164	103	30.69	7.59
ANTENNA POLARITY & TEST DISTANCE : VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2437.00	98.64 PK			131	251	96.33	2.31
2	*2437.00	88.96 AV			131	251	86.65	2.31
3	4874.00	47.39 PK	74.00	-26.61	184	183	41.65	5.74
4	4874.00	37.12 AV	54.00	-16.88	184	183	31.38	5.74
5	7311.00	47.25 PK	74.00	-26.75	161	204	39.66	7.59
6	7311.00	37.58 AV	54.00	-16.42	161	204	29.99	7.59

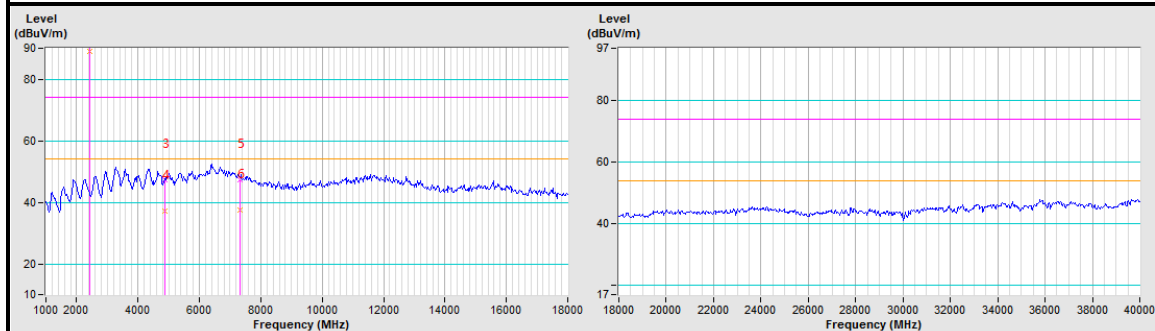
REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were greater than 20dB margin.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.

Horizontal



Vertical



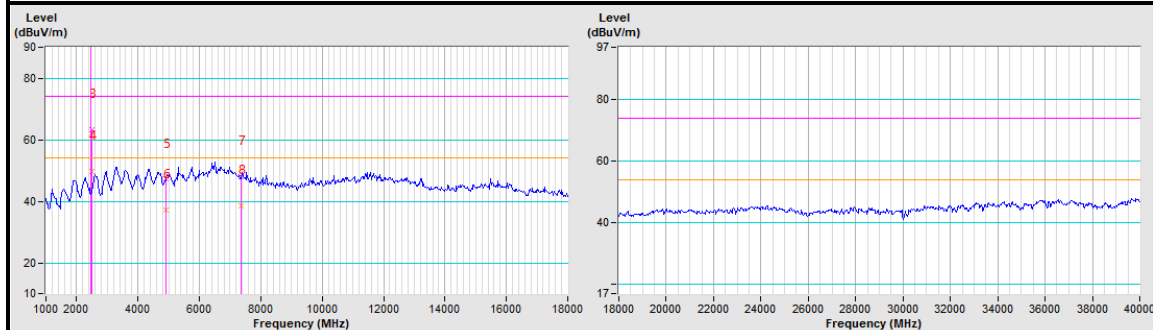
CHANNEL	TX Channel 9	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 25GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE : HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2452.00	103.67 PK			158	46	101.34	2.33
2	*2452.00	94.11 AV			158	46	91.78	2.33
3	2483.50	63.24 PK	74.00	-10.76	199	54	60.88	2.36
4	2483.50	49.78 AV	54.00	-4.22	199	54	47.42	2.36
5	4904.00	47.14 PK	74.00	-26.86	131	20	41.46	5.68
6	4904.00	37.09 AV	54.00	-16.91	131	20	31.41	5.68
7	7356.00	48.06 PK	74.00	-25.94	199	61	40.62	7.44
8	7356.00	38.57 AV	54.00	-15.43	199	61	31.13	7.44
ANTENNA POLARITY & TEST DISTANCE : VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2452.00	99.45 PK			156	312	97.12	2.33
2	*2452.00	89.97 AV			156	312	87.64	2.33
3	2483.50	60.21 PK	74.00	-13.79	168	64	57.85	2.36
4	2483.50	47.71 AV	54.00	-6.29	168	64	45.35	2.36
5	4904.00	47.55 PK	74.00	-26.45	231	316	41.87	5.68
6	4904.00	38.51 AV	54.00	-15.49	231	316	32.83	5.68
7	7356.00	48.22 PK	74.00	-25.78	143	314	40.78	7.44
8	7356.00	39.15 AV	54.00	-14.85	143	314	31.71	7.44

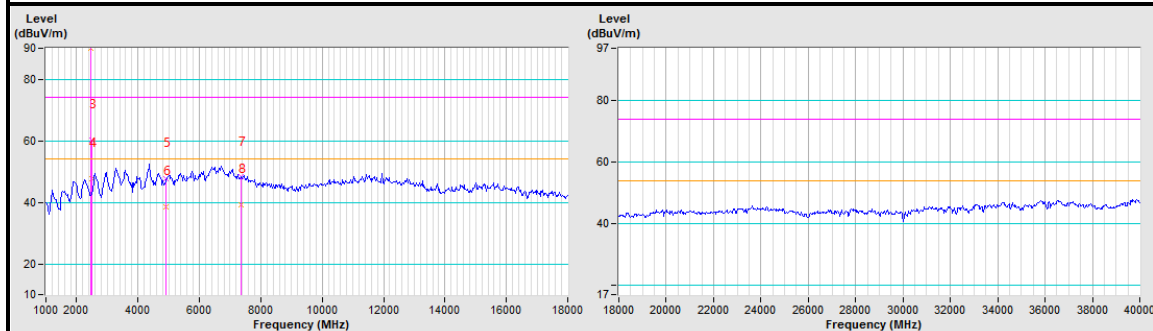
REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were greater than 20dB margin.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.

Horizontal



Vertical



Note: For 18GHz to 25GHz, the amplitude of spurious emissions from the radiator which are attenuated more than 20dB below the limit need not be recorded.

4.3 6dB BANDWIDTH MEASUREMENT

4.3.1 LIMITS OF 6dB BANDWIDTH MEASUREMENT

The minimum of 6dB Bandwidth Measurement is 0.5 MHz.

4.3.2 TEST INSTRUMENTS

Equipment	Manufacturer	Model No.	Serial No.	Next Cal.
Power Sensor	Keysight	U2021XA	MY57320002	Apr. 08, 27
Digital Multimeter	FLUKE	15B	12151063	Apr. 07, 27
Humid & Temp Programmable Tester	Haida	HD-225T	110807201	Oct. 10, 26
Signal and Spectrum Analyzer	Rohde&Schwarz	FSV40	101003	Oct. 09, 26
Signal Generator	Agilent	N5183A	MY50140980	Jul. 02, 27
MXG-B RF Vector Signal Generator	Keysight	N5182B	MY56200288	Jul. 02, 27
Attenuator	MINI	BW-S10W2+	S130129FGE2	Jul. 02, 27
DC Source	Rohde&Schwarz	HMP2020	101295	Apr. 07, 27
Power Sensor	Keysight	U2021XA	MY57320002	Apr. 08, 27
Test software	ADT	ADT_RF Test Software V6.6.5.3	N/A	N/A

NOTES: 1. The test was performed in RF Test Shielded Room.

2. Equipment are calibrated by calibration laboratory accredited to ISO/IEC 17025 by a mutually recognized Accreditation and all tests are conducted within a valid calibration cycle.

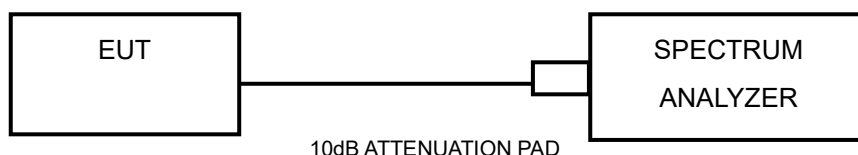
4.3.3 TEST PROCEDURE

1. Set RBW = 100K(shall be in the range of 1% to 5% of OBW, but not less than 100kHz).
2. Set the video bandwidth (VBW) ≥ 3 RBW.
3. Detector = Peak.
4. Trace mode = max hold.
5. Sweep = No faster than coupled(auto) time.
6. Allow the trace to stabilize.
7. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

4.3.4 DEVIATION FROM TEST STANDARD

No deviation.

4.3.5 TEST SETUP



4.3.6 EUT OPERATING CONDITIONS

The software provided by client to enable the EUT under transmission condition continuously at lowest, middle and highest channel frequencies individually.

4.3.7 TEST RESULTS

802.11b

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS / FAIL
1	2412	10.06	0.5	PASS
6	2437	10.02	0.5	PASS
11	2462	9.54	0.5	PASS

802.11g

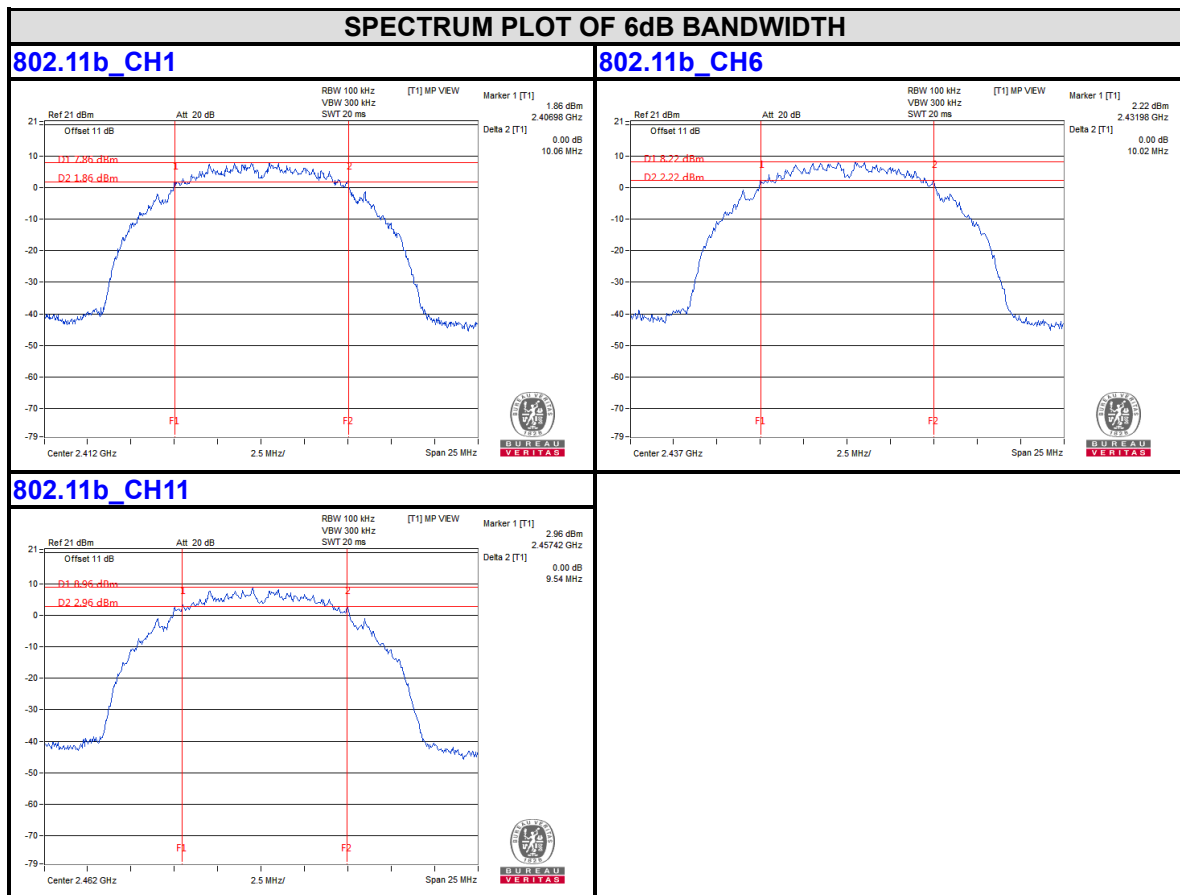
CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS / FAIL
1	2412	16.44	0.5	PASS
6	2437	16.43	0.5	PASS
11	2462	16.43	0.5	PASS

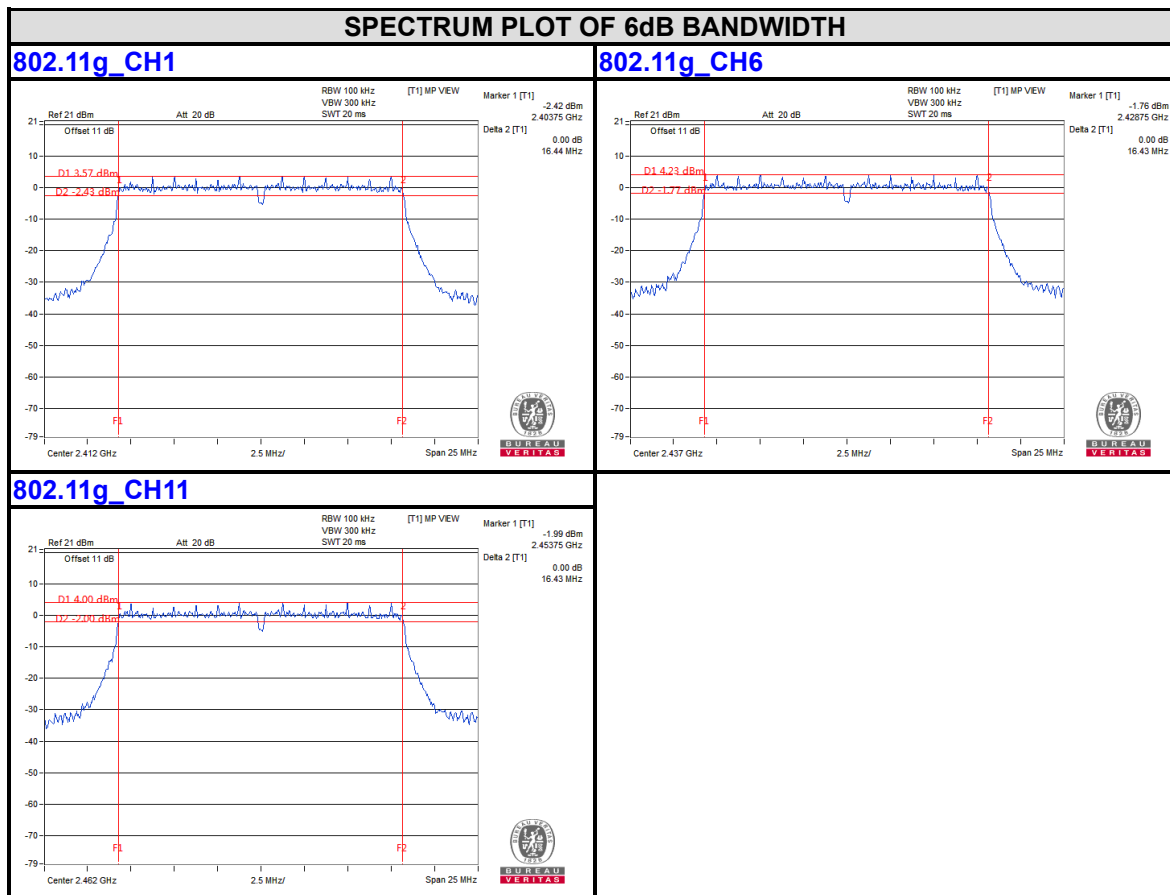
802.11n HT20

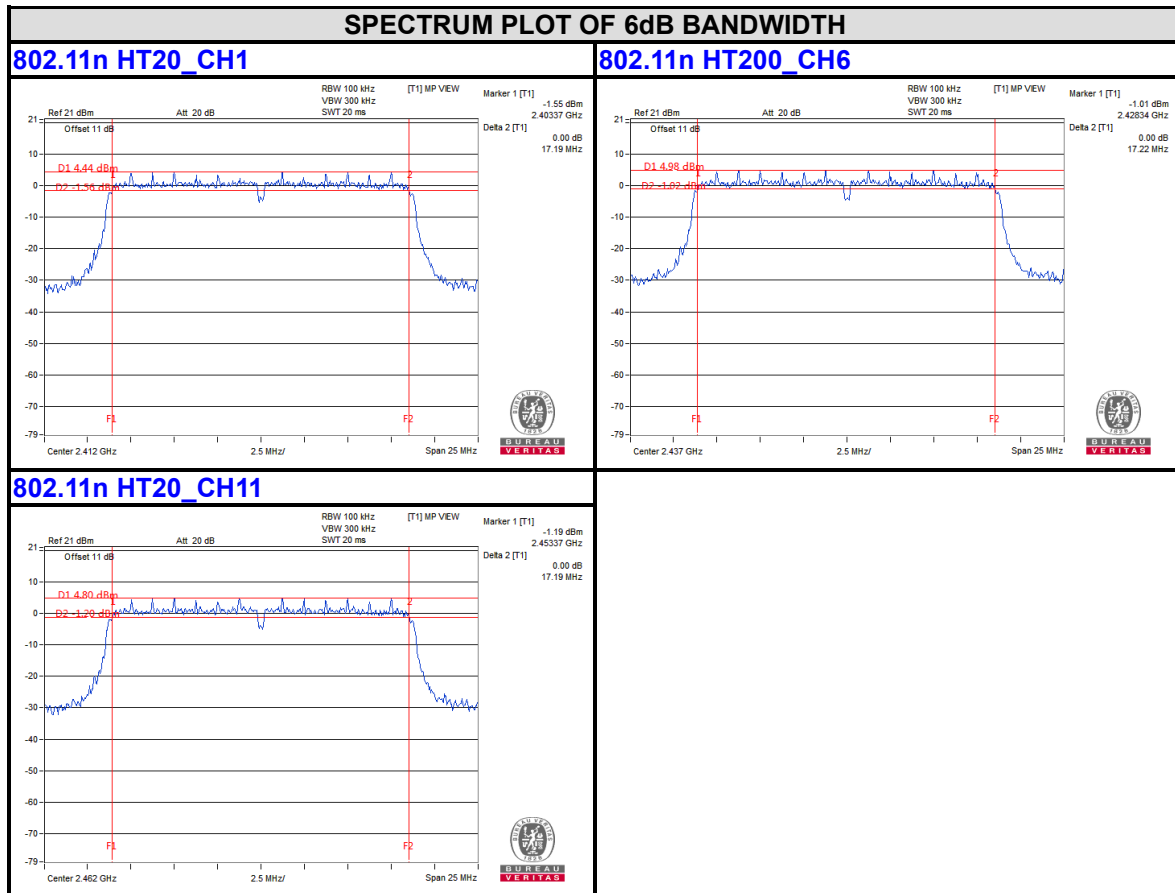
CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS / FAIL
1	2412	17.19	0.5	PASS
6	2437	17.22	0.5	PASS
11	2462	17.19	0.5	PASS

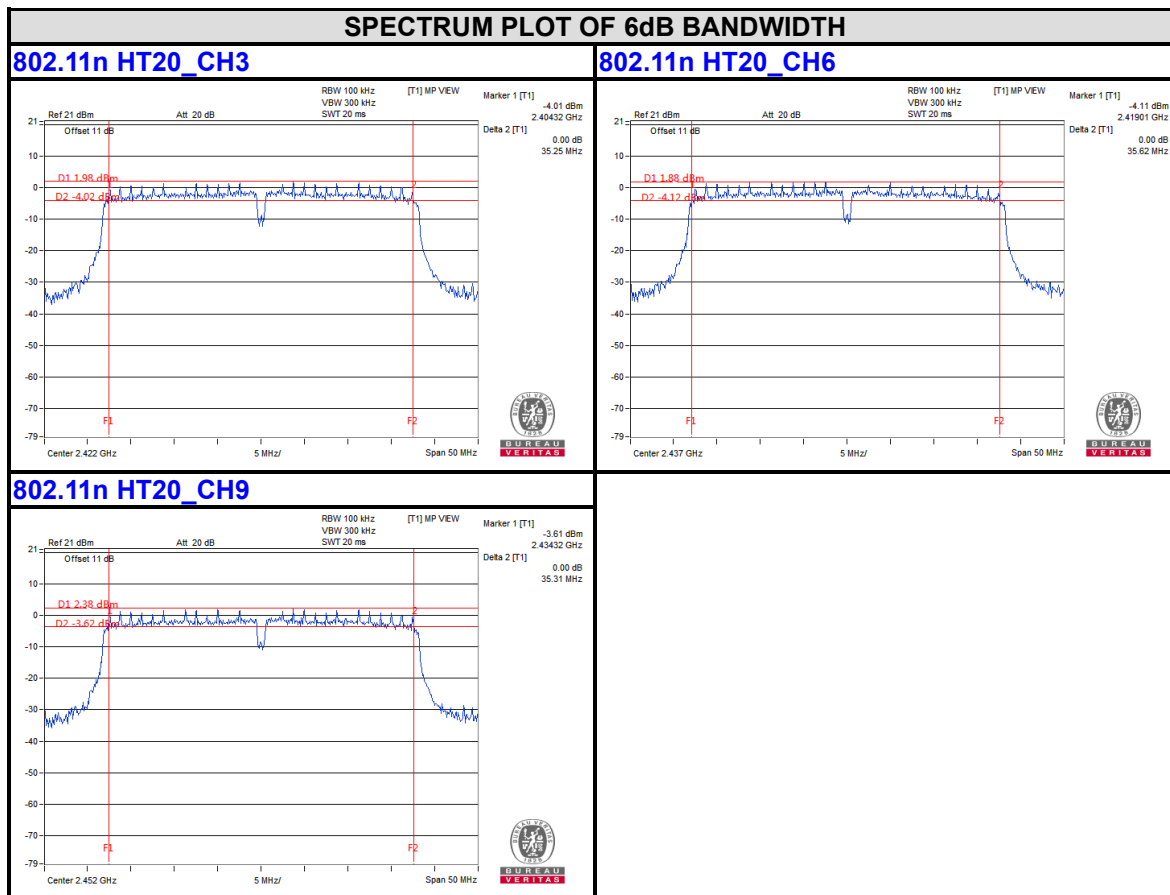
802.11n HT40

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS / FAIL
3	2422	35.25	0.5	PASS
6	2437	35.62	0.5	PASS
9	2452	35.31	0.5	PASS







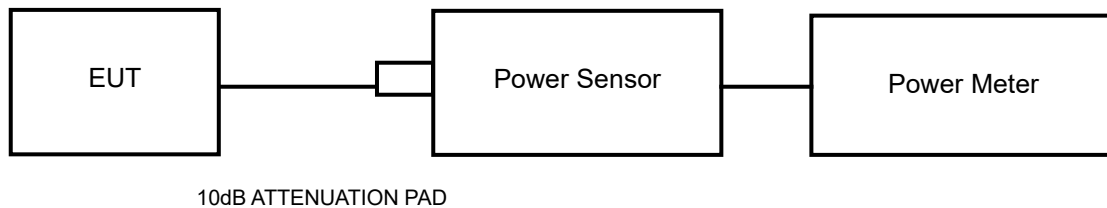


4.4 CONDUCTED OUTPUT POWER

4.4.1 LIMITS OF CONDUCTED OUTPUT POWER MEASUREMENT

For systems using digital modulation in the 2400–2483.5 MHz band: 1 Watt (30dBm).

4.4.2 TEST SETUP



4.4.3 TEST INSTRUMENTS

Refer to section 4.3.2 to get information of above instrument.

4.4.4 TEST PROCEDURES

A peak power sensor was used on the output port of the EUT. A peak power meter was used to read the response of the peak power sensor. Record the peak power level.

4.4.5 DEVIATION FROM TEST STANDARD

No deviation.

4.4.6 EUT OPERATING CONDITIONS

The software provided by client to enable the EUT under transmission condition continuously at lowest, middle and highest channel frequencies individually.

4.4.7 TEST RESULTS

MAXIMUM PEAK OUTPUT POWER

802.11b

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER (dBm)	PEAK POWER (mW)	PEAK POWER LIMIT (W)	PASS/FAIL
1	2412	21.52	141.906	1	PASS
6	2437	21.95	156.675	1	PASS
11	2462	21.47	140.281	1	PASS

802.11g

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER (dBm)	PEAK POWER (mW)	PEAK POWER LIMIT (W)	PASS/FAIL
1	2412	22.24	167.494	1	PASS
6	2437	22.70	186.209	1	PASS
11	2462	22.30	169.824	1	PASS

802.11n HT20

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER (dBm)	PEAK POWER (mW)	PEAK POWER LIMIT (W)	PASS/FAIL
1	2412	22.84	192.309	1	PASS
6	2437	23.10	204.174	1	PASS
11	2462	22.76	188.799	1	PASS

802.11n HT40

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER (dBm)	PEAK POWER (mW)	PEAK POWER LIMIT (W)	PASS/FAIL
3	2422	22.76	188.799	1	PASS
6	2437	23.11	204.644	1	PASS
9	2452	22.80	190.546	1	PASS

AVERAGE OUTPUT POWER (FOR REFERENCE)

The average power sensor was used on the output port of the EUT. A power meter was used to read the response of the power sensor. Record the power level.

802.11b

CHANNEL	CHANNEL FREQUENCY (MHz)	AVERAGE POWER (dBm)	AVG. POWER (mW)
1	2412	13.84	24.210
6	2437	13.75	23.714
11	2462	13.77	23.823

802.11g

CHANNEL	CHANNEL FREQUENCY (MHz)	AVERAGE POWER (dBm)	AVG. POWER (mW)
1	2412	13.17	20.749
6	2437	13.11	20.464
11	2462	13.09	20.37

802.11n HT20

CHANNEL	CHANNEL FREQUENCY (MHz)	AVERAGE POWER (dBm)	AVG. POWER (mW)
1	2412	13.88	24.434
6	2437	13.71	23.496
11	2462	13.71	23.496

802.11n HT40

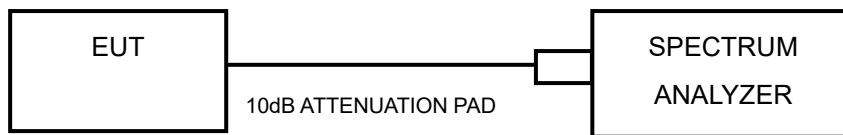
CHANNEL	CHANNEL FREQUENCY (MHz)	AVERAGE POWER (dBm)	AVG. POWER (mW)
3	2422	13.79	23.933
6	2437	13.67	23.281
9	2452	13.73	23.605

4.5 POWER SPECTRAL DENSITY MEASUREMENT

4.5.1 LIMITS OF POWER SPECTRAL DENSITY MEASUREMENT

The Maximum of Power Spectral Density Measurement is 8dBm/3KHz.

4.5.2 TEST SETUP



4.5.3 TEST INSTRUMENTS

Refer to section 4.3.2 to get information of above instrument.

4.5.4 TEST PROCEDURE

- a) Set instrument center frequency to DTS channel center frequency.
- b) Set span > 1.5 times the DTS bandwidth.
- c) Set RBW to $3 \text{ kHz} \leq \text{RBW} \leq 100\text{KHz}$
- d) Set VBW $\geq 3 \times \text{RBW}$
- e) Detector = peak
- f) Sweep time = No faster than coupled(auto) time,
- g) Trace mode = max hold
- h) allow trace to fully stabilize.
- i) Use the peak marker function to determine the maximum amplitude level within the RBW.
- j) If measured value exceeds requirement, then reduce RBW(but no less than 3KHz) and repeat.

4.5.5 DEVIATION FROM TEST STANDARD

No deviation.

4.5.6 EUT OPERATING CONDITION

Same as item 4.3.6.

4.5.7 TEST RESULTS

802.11b

Channel	FREQ. (MHz)	PSD (dBm/3kHz)	Limit (dBm/3kHz)	PASS /FAIL
1	2412	-6.88	8.00	PASS
6	2437	-5.91	8.00	PASS
11	2462	-5.45	8.00	PASS

802.11g

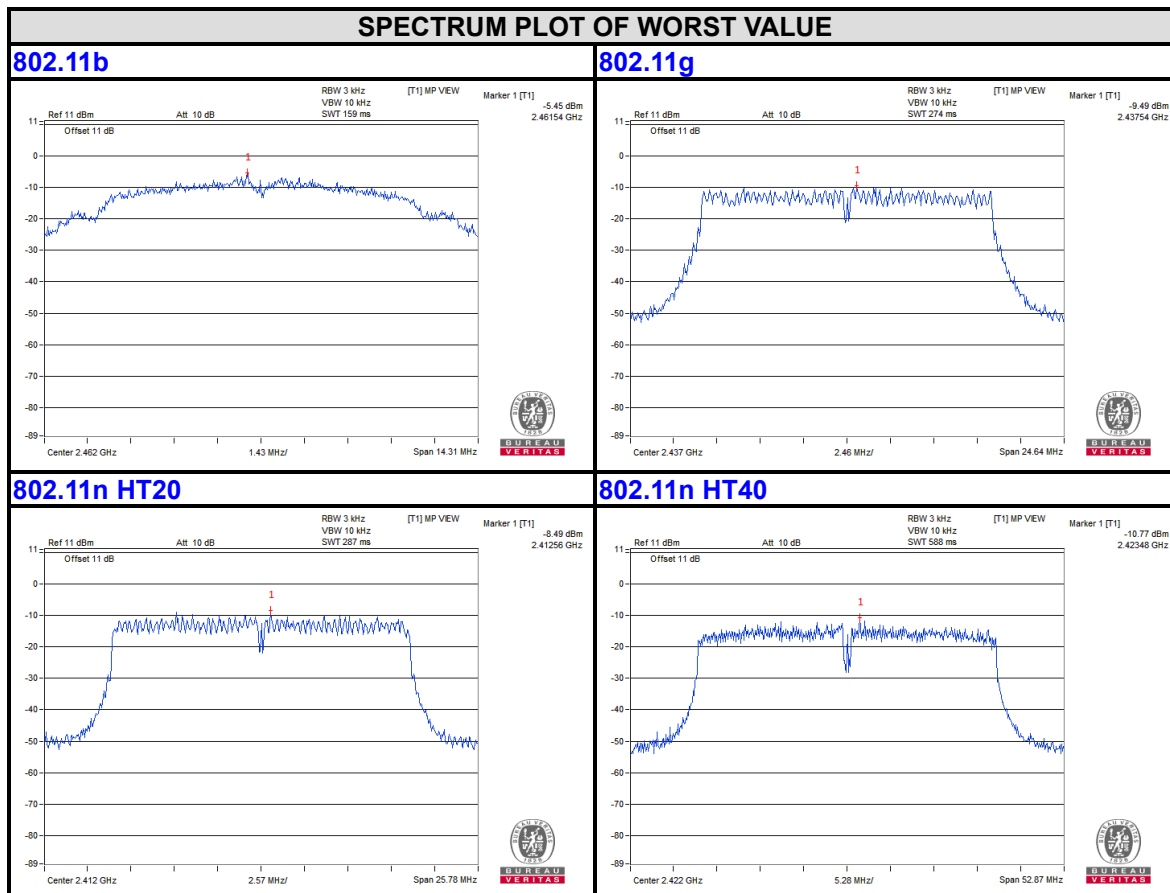
Channel	FREQ. (MHz)	PSD (dBm/3kHz)	Limit (dBm/3kHz)	PASS /FAIL
1	2412	-10.72	8.00	PASS
6	2437	-9.49	8.00	PASS
11	2462	-9.69	8.00	PASS

802.11n HT20

Channel	FREQ. (MHz)	PSD (dBm/3kHz)	Limit (dBm/3kHz)	PASS /FAIL
1	2412	-8.49	8.00	PASS
6	2437	-9.19	8.00	PASS
11	2462	-8.62	8.00	PASS

802.11n HT40

Channel	FREQ. (MHz)	PSD (dBm/3kHz)	Limit (dBm/3kHz)	PASS /FAIL
3	2422	-10.77	8.00	PASS
6	2437	-11.52	8.00	PASS
9	2452	-12.50	8.00	PASS



4.6 OUT OF BAND EMISSION MEASUREMENT

4.6.1 LIMITS OF OUT OF BAND EMISSION MEASUREMENT

Below -20dB of the highest emission level of operating band (in 100kHz Resolution Bandwidth).

4.6.2 TEST SETUP



4.6.3 TEST INSTRUMENTS

Refer to section 4.3.2 to get information of above instrument.

4.6.4 TEST PROCEDURE

Measurement Procedure - Reference Level

1. Set instrument center frequency to DTS channel center frequency.
2. Set the span to 1.5 times the DTS bandwidth.
3. Set the RBW = 100 kHz.
4. Set the VBW $\geq$ 100KHz(3x RBW).
5. Detector = peak.
6. Sweep time = No faster than coupled(auto) time.
7. Trace mode = max hold.
8. Allow trace to fully stabilize.
9. Use the peak marker function to determine the maximum PSD level.

Measurement Procedure –Unwanted Emission Level

1. Set the center frequency and span to encompass frequency range to be measured.
2. Set RBW = 100 kHz.
3. Set VBW $\geq$ 300 kHz.
4. Detector = peak.
5. Sweep = No faster than coupled(auto) time.
6. Trace Mode = max hold.
7. Allow trace to fully stabilize.
8. Use the peak marker function to determine the maximum amplitude level.

4.6.5 DEVIATION FROM TEST STANDARD

No deviation.

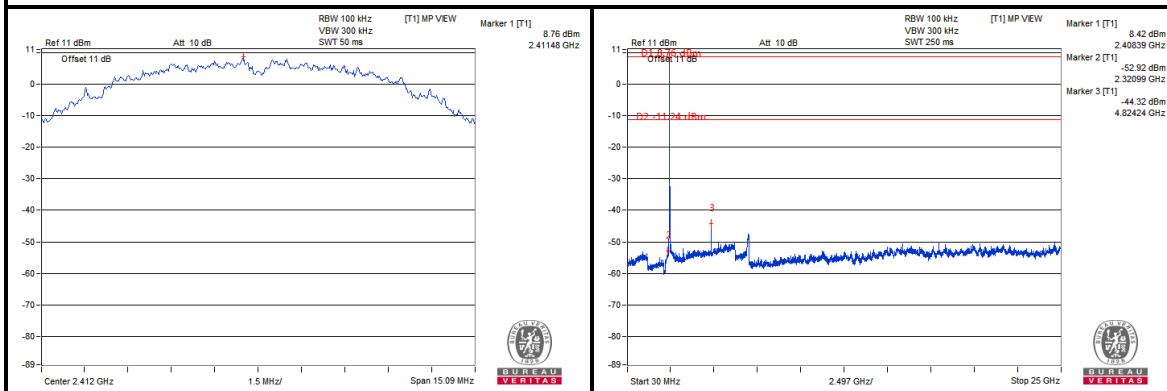
4.6.6 EUT OPERATING CONDITION

Same as item 4.3.6

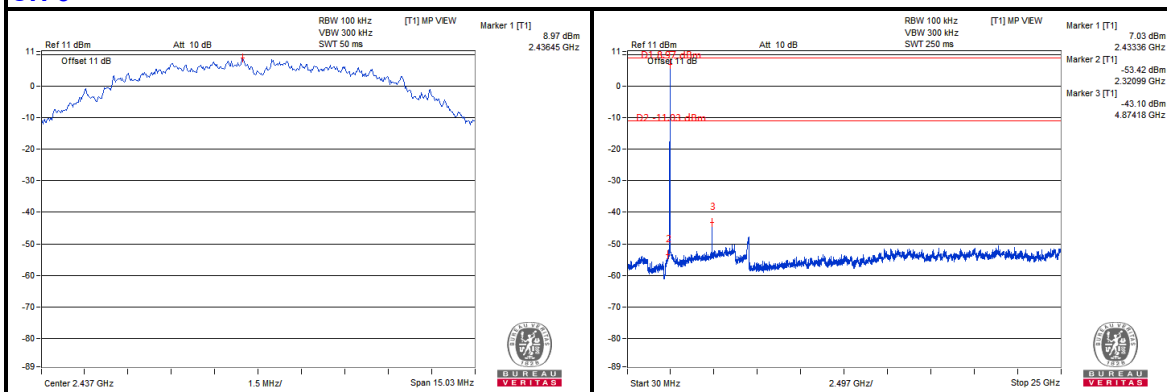
4.6.7 TEST RESULTS

802.11b

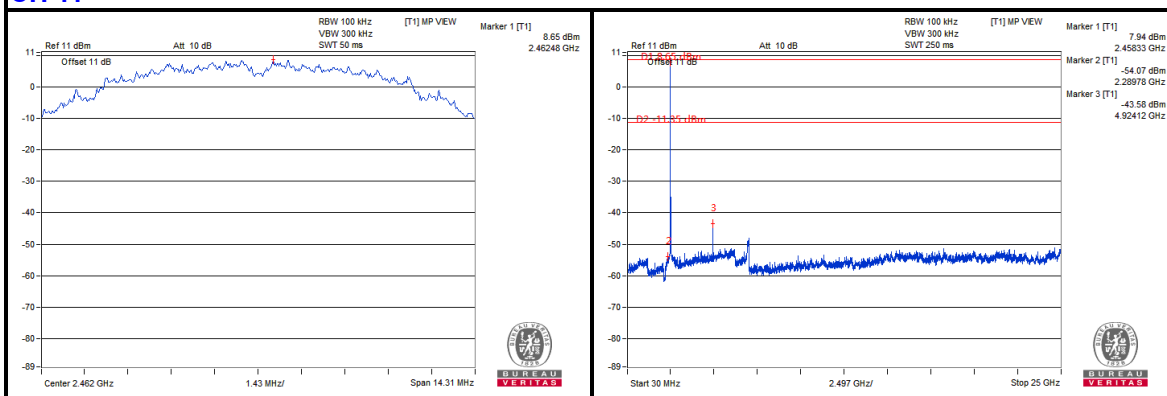
CH 1



CH 6

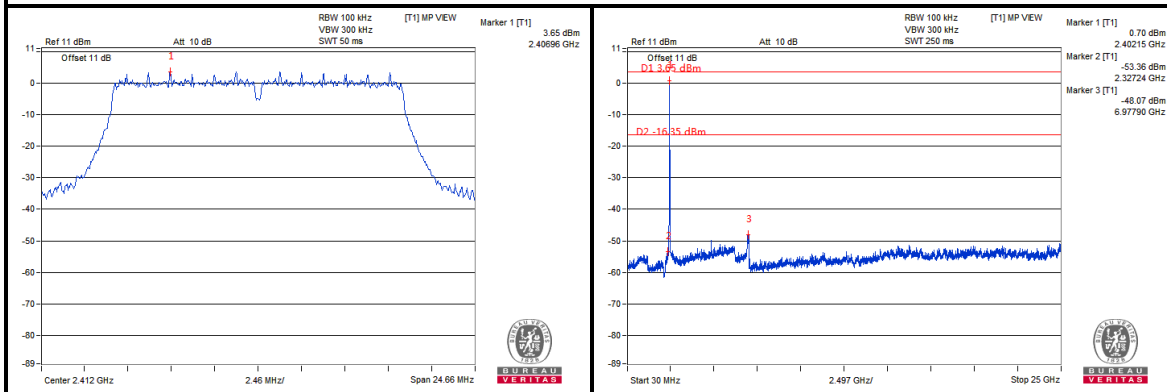


CH 11

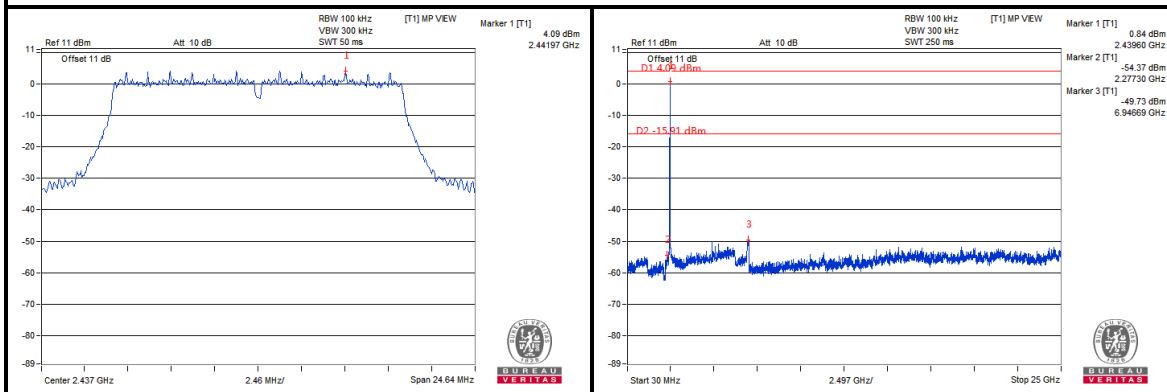


802.11g

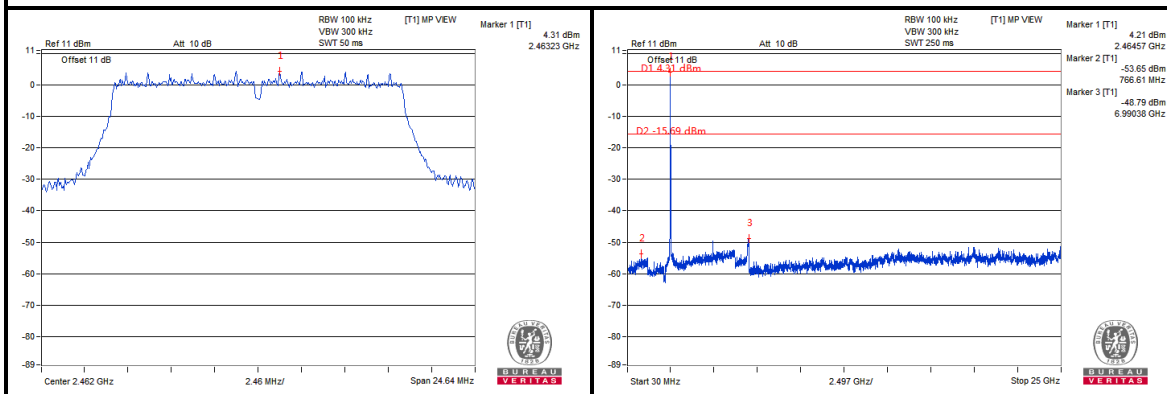
CH 1



CH 6

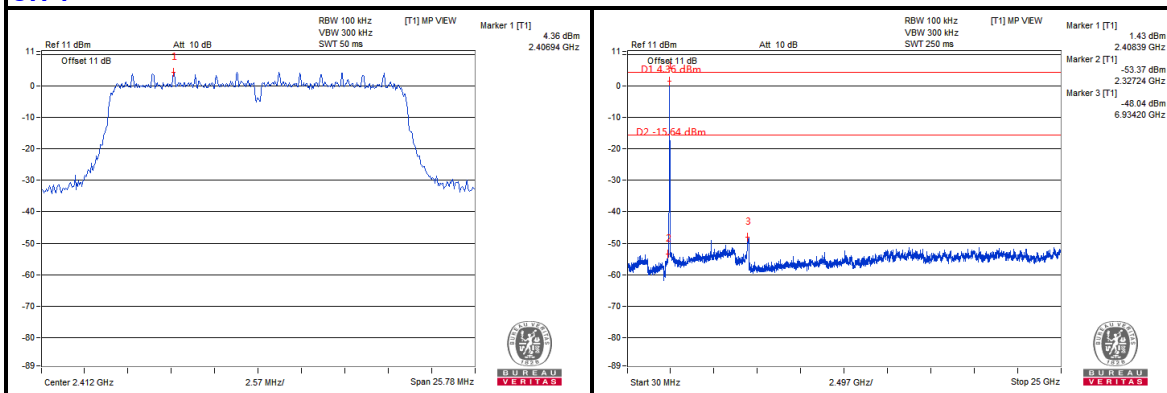


CH 11

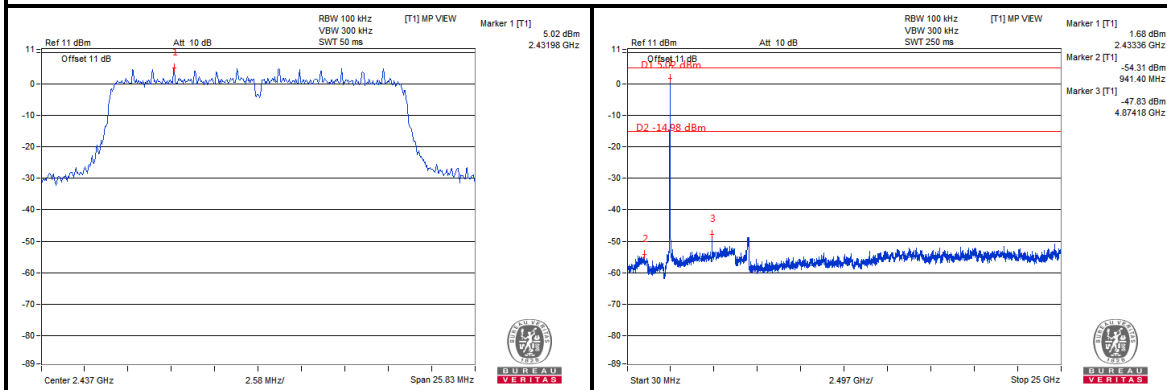


802.11n HT20

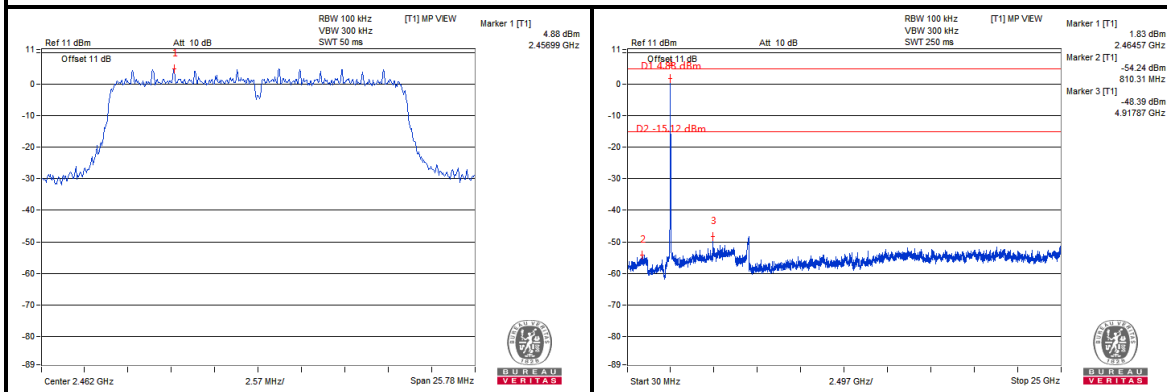
CH 1



CH 6

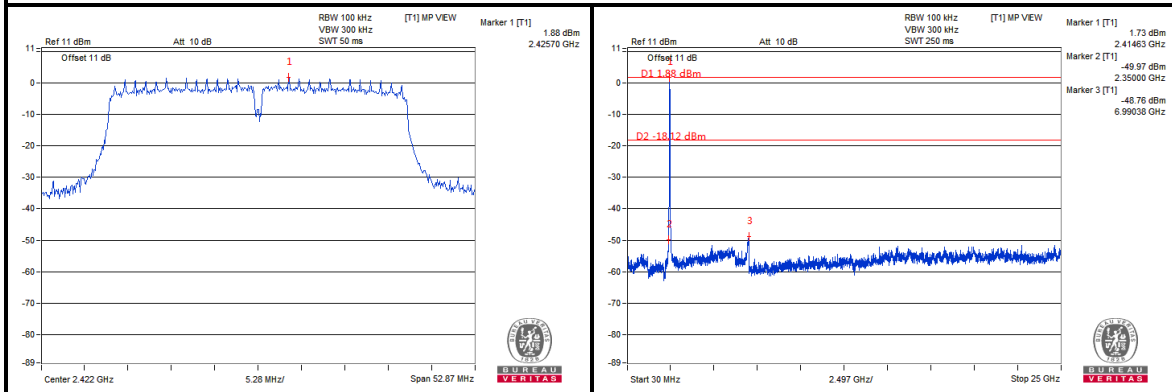


CH 11

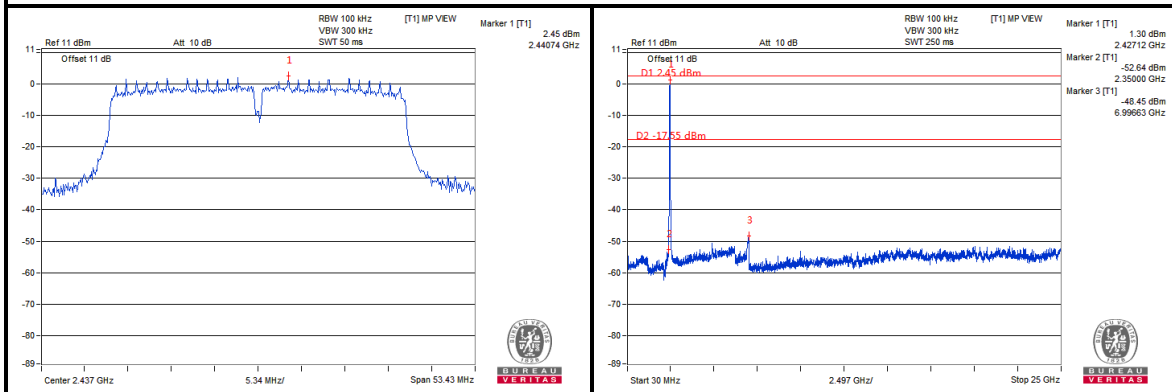


802.11n HT20

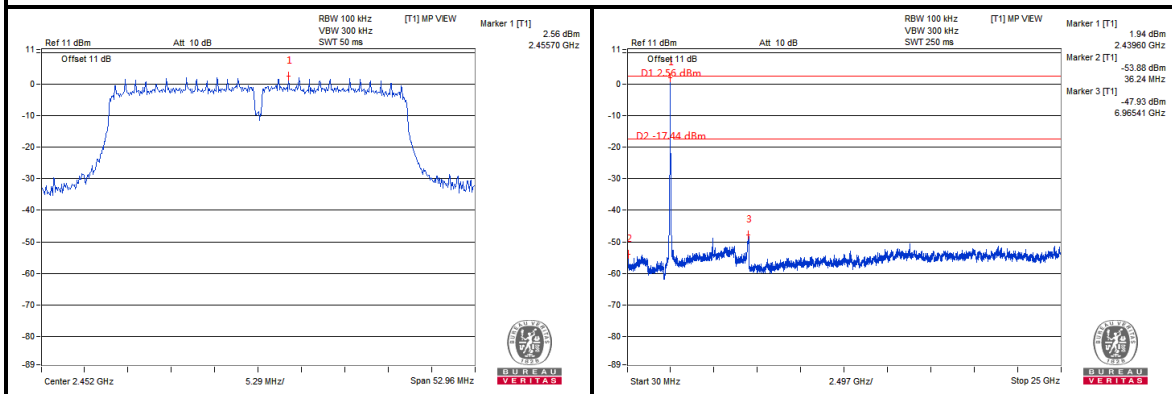
CH 3



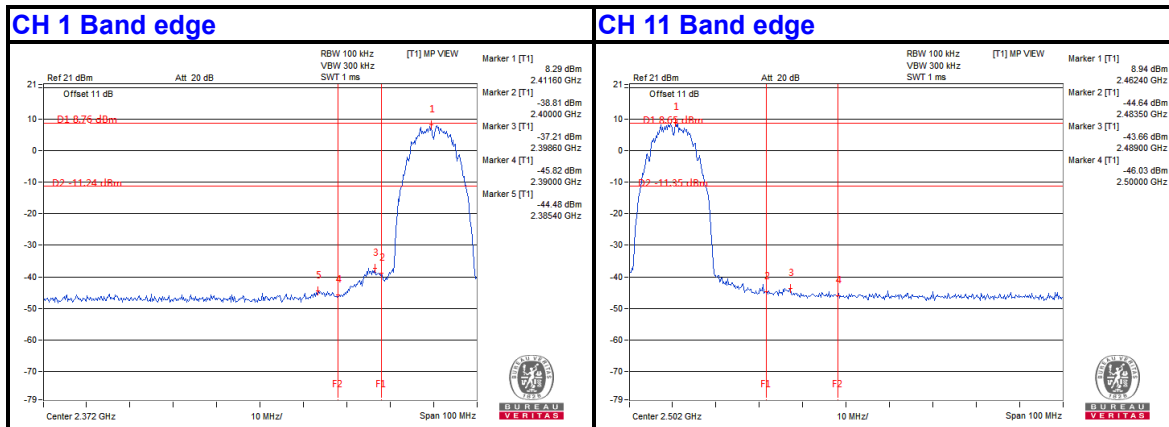
CH 6



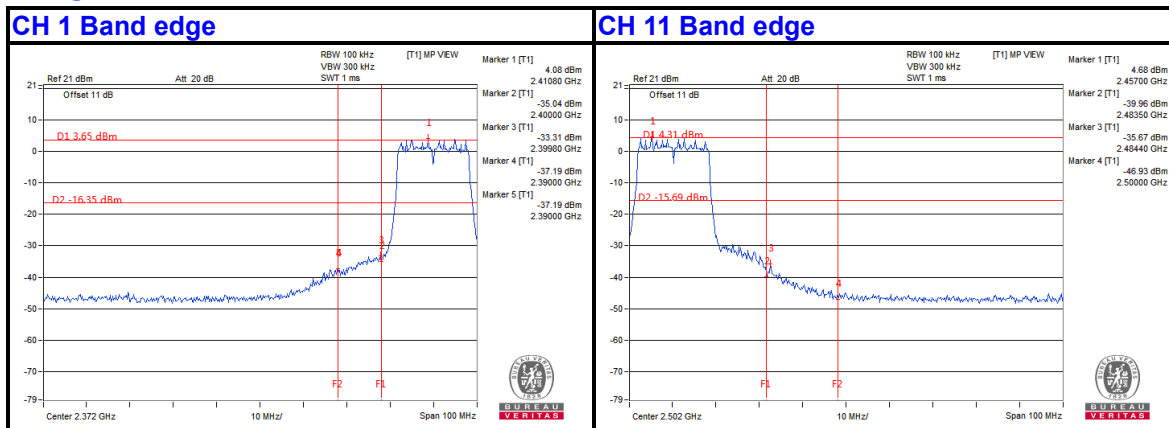
CH 9



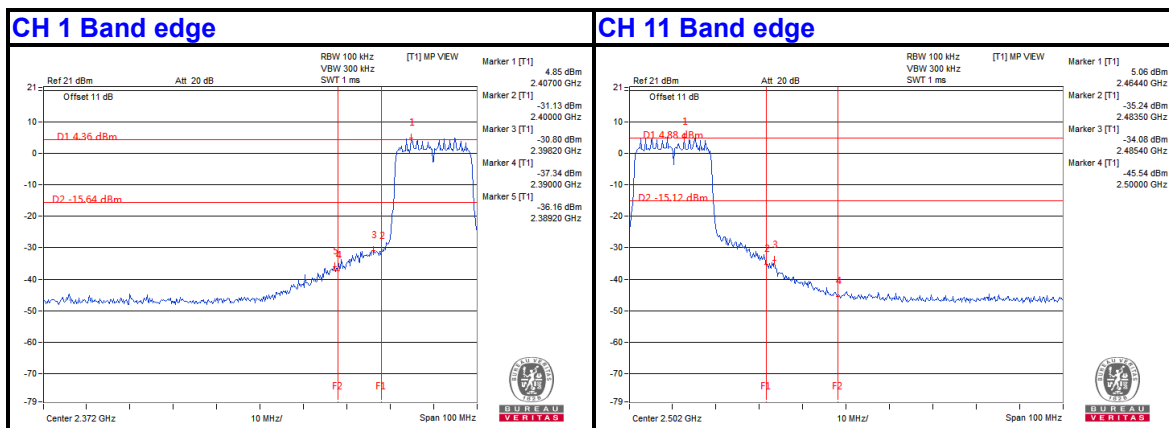
802.11b.



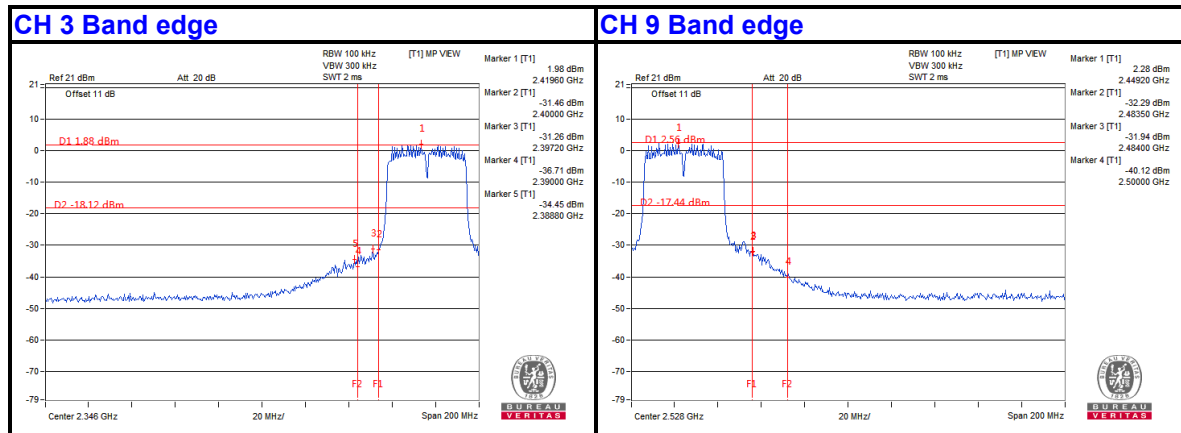
802.11g



802.11n HT20



802.11n HT40





Test Report No.: RF2607WDG0373-2

5 PHOTOGRAPHS OF THE TEST CONFIGURATION

Please refer to the attached file (Test Setup Photo).

6 APPENDIX A - MODIFICATIONS RECORDERS FOR ENGINEERING CHANGES TO THE EUT BY THE LAB

No any modifications are made to the EUT by the lab during the test.

---END---