

TEST REPORT

Applicant	Zhiwei Robotics Corp.
Address	Room 603, 2 Boyun Road, Pudong, Shanghai P.R.China

Manufacturer or Supplier	Zhiwei Robotics Corp.
Address	Room 603, 2 Boyun Road, Pudong, Shanghai P.R.China
Product	LattePanda 3 Delta
Brand Name	LattePanda
Model	DFR0981
Additional Model & Model Difference	DFR0982, see item 3.1
Date of tests	Jun. 05, 2022 ~ Jul. 22, 2022

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

Tested by Lucas Chen Project Engineer / EMC Department	Approved by Glyn He Assistant Manager / EMC Department
	 Date: Aug. 03, 2022

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Test Report No.: RF2205WDG0306-3

RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
RF2205WDG0306-3	Original release	Aug. 03, 2022

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	PASS	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
Conducted emissions	9kHz~30MHz	3.05dB
Radiated emissions	9KHz ~ 30MHz	2.16dB
	30MHz ~ 1GMHz	3.63dB
	1GHz ~ 18GHz	4.96dB
	18GHz ~ 40GHz	4.37dB

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	LattePanda 3 Delta
BRAND	LattePanda
MODEL NO.	DFR0981
ADDITIONAL NO.	DFR0982
FCC ID	2AIDMLPDF0981
NOMINAL VOLTAGE	Powered by Adapter
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	2412-2462MHz for 11b/g/n(HT20)/ax(HE20) 2422-2452MHz for 11n(HT40)/ax(HE40)
PEAK OUTPUT POWER	195.511mW (Measured Max.)
ANTENNA TYPE	Chain 0: FPCB Antenna, with 1.56dBi gain Chain 1: FPCB Antenna, with 1.56dBi 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.: 2205WDG0306-1) for detailed product photo.
3. Additional model DFR0982 is identical with the test model DFR0981 except the system software version and model number for marketing purpose
4. The EUT was powered by the following Adapter:

ADAPTER	
BRAND:	N/A
MODEL:	XYX-PD45X
INPUT:	AC 100-240V 50/60HZ 1A
OUTPUT:	DC 5/9/12/15V 3A, DC 20V 2.25A
DC LINE:	Shielded, Non-detachable, 155cm, with two cores
AC LINE:	Unshielded, Detachable, 45cm

5. The working status of the two antennas is as follows.

MODULATION MODE	TX FUNCTION
802.11b	2 Chains (MIMO)
802.11g	2 Chains (MIMO)
802.11n (HT20)/ 802.11ax (HE20)	2 Chains (MIMO)
802.11n (HT40)/ 802.11ax (HE40)	2 Chains (MIMO)

*The modulation and bandwidth are similar for 802.11n mode for 20MHz (40MHz) and 802.11ax mode for 20MHz (40MHz), therefore the manufacturer will control the power for 802.11ax mode is the same as the 802.11n/ac mode or more lower than it and investigated worst case to representative mode in test report. (Final test mode refer to section 3.2.2)

3.2 DESCRIPTION OF TEST MODES

11 channels are provided for 802.11b, 802.11g and 802.11n (HT20), 802.11ax (HE20):

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), 802.11ax (HE40):

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	√	√	√	√	Powered by Adapter with WIFI function

Where **RE<1G**: Radiated Emission below 1GHz

PLC: Power Line Conducted Emission

RE≥1G: Radiated Emission above 1GHz

APCM: Antenna Port Conducted Measurement

POWER LINE CONDUCTED EMISSION TEST:

- ☒ 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	TESTED CONDITION
A	WIFI (2.4G) Link

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	OFDM	BPSK	6.5
A	802.11n HT40	3 to 9	3, 6, 9	OFDM	BPSK	13.5

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
A	802.11ax (HE20) Output power only	1 to 11	1, 6, 11	OFDMA	BPSK	8.0
A	802.11ax (HE40) Output power only	3 to 9	3, 6, 9	OFDMA	BPSK	16.0

TEST CONDITION:

APPLICABLE TO	ENVIRONMENTAL CONDITIONS	INPUT POWER	TESTED BY
RE<1G	25deg. C, 54%RH	Powered by Adapter Input AC 120V 60Hz	Jelly
RE≥1G	25deg. C, 54%RH	Powered by Adapter Input AC 120V 60Hz	Jelly
PLC	25deg. C, 58% RH	Powered by Adapter Input AC 120V 60Hz	Summer
APCM	25deg. C, 60% RH	Powered by Adapter Input AC 120V 60Hz	Vincent

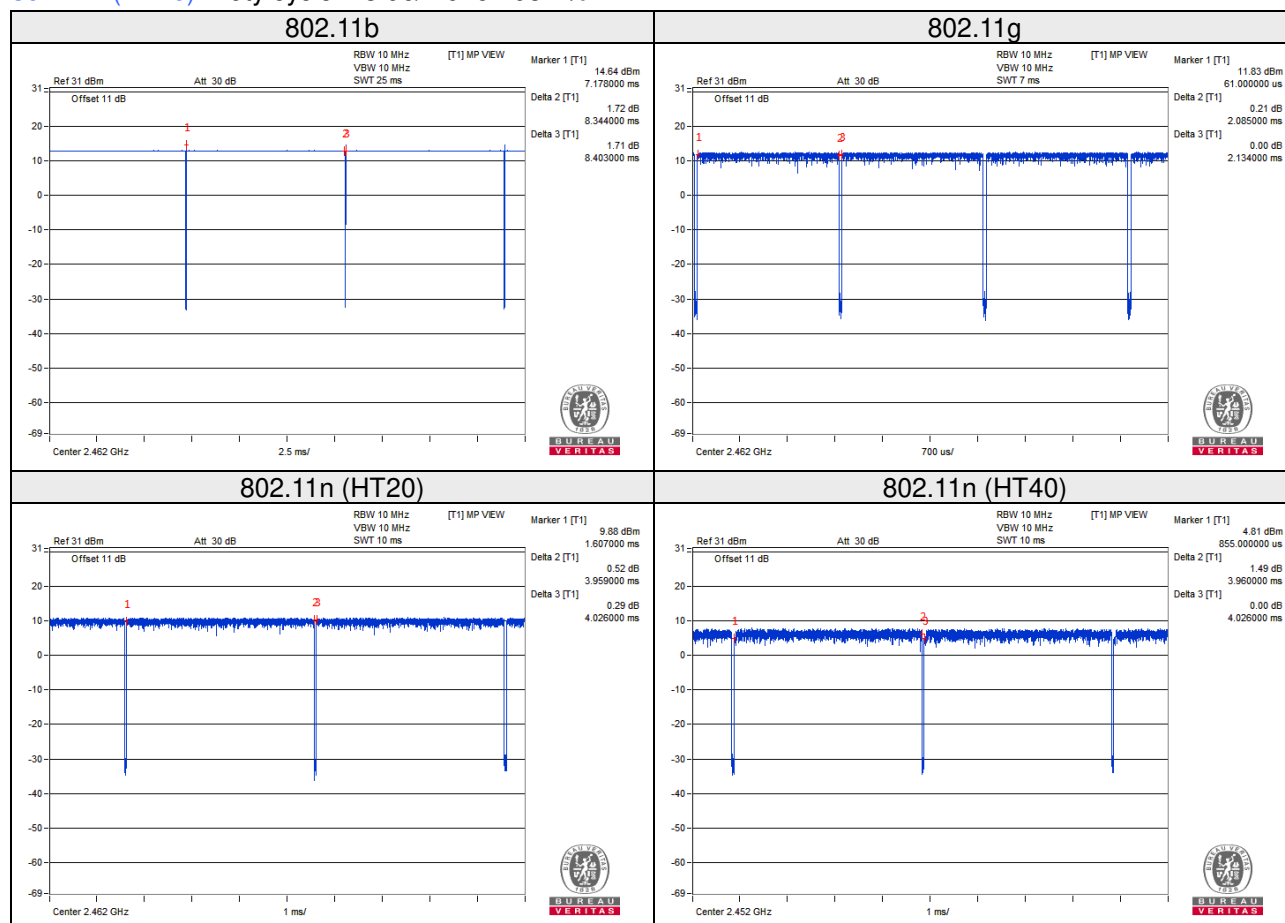
3.3 DUTY CYCLE OF TEST SIGNAL

802.11b: Duty cycle = $8.344/8.403 = 99.3\%$

802.11g: Duty cycle = $2.085/2.134 = 97.7\%$

802.11n (HT20): Duty cycle = $3.959/4.026 = 98.3\%$

802.11n (HT40): Duty cycle = $3.96/4.026 = 98.4\%$



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

KDB 662911 D01 Multiple Transmitter Output v02r01

ANSI C63.10-2013

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 with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

NO.	PRODUCT	BRAND	MODEL NO.	SERIAL NO.	FCC ID
1	Logitech	UE3600	1238CP529108	N/A	N/A
2	Wireless Router	TP-LINK	TL-WDR3310	1.24E+09	N/A
3	Mouse	A4TECH	N360	N/A	N/A
5	Mobile Phone	MEIZU	M3 NOTE	91QEBNJ25CKF	N/A
4	USB Driver 3.0(16G)	Kingston	DTSE9G2/16GB	YVLP9-B8HTAQ-XXAYB	N/A
5	Keyboard	DELL	KB212-B	CN-0N291F-71581-46L-00BB-A01	N/A
6	TF Card (32G)	Kingston	KN003773517	N/A	N/A
7	Monitor	DELL	U2720QM	4383185043	N/A

NO.	SIGNAL CABLE DESCRIPTION OF THE ABOVE SUPPORT UNITS
1	Earphone: Unshielded, Non-detachable 1.5m
2	DC Line: Unshielded, Detachable 1.2m
3	USB Line: Unshielded, Non-detachable 1.5m
5	N/A
4	N/A
5	USB: Unshielded, Non-detachable 1.8m
6	N/A

4 TEST TYPES AND RESULTS

4.1. CONDUCTED EMISSION MEASUREMENT

4.1.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT

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

- NOTES:**
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	Jan. 18, 23
Artificial Mains Network	Rohde&Schwarz	ENV216	101173	Jan. 23, 23
Artificial Mains Network	Rohde&Schwarz	ESH3-Z5	100317	Jan. 18, 23
Voltage probe	SCHWARZBECK	TK 9421	TK 9421-176	Aug. 05, 22
Coaxial RF Cable	/	CE CABLE	C2310066D G	Jul. 24, 23
Test software	ADT	ADT_Conc_V7.3.7	N/A	N/A

- NOTES:**
1. The test was performed in shielded room 553. (Chenwu)
 2. The calibration interval of the above test instruments is 12 months. And the calibrations are traceable to CEPREI/CHINA, GRGT/CHINA and NIM/CHINA.

4.1.3 TEST PROCEDURES

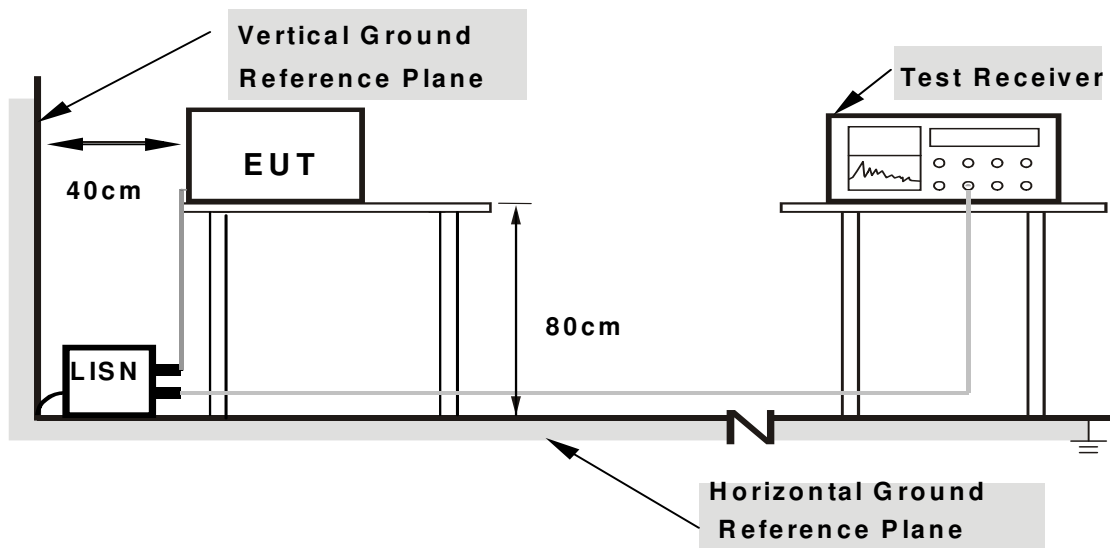
- a. The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling 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 cm 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

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

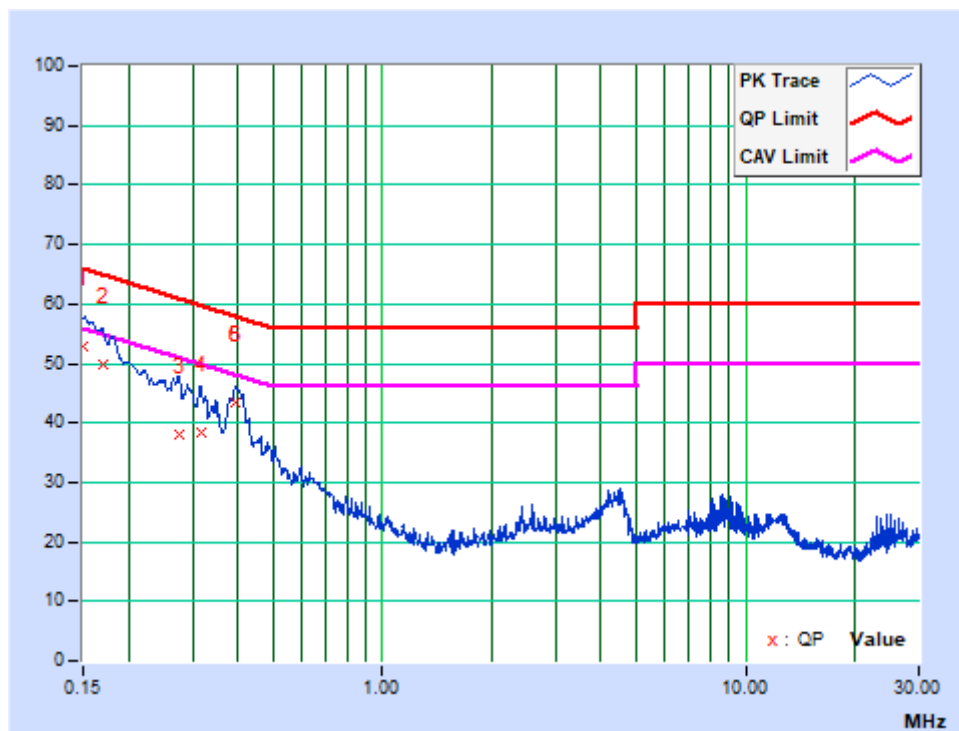
4.1.7 TEST RESULTS

CONDUCTED WORST-CASE DATA: WIFI Link

PHASE	Line	6dB BANDWIDTH	9kHz
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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	9.93	43.00	26.59	52.93	36.52	66.00	56.00	-13.07	-19.48
2	0.16966	9.97	39.89	23.94	49.86	33.91	64.98	54.98	-15.11	-21.06
3	0.27433	10.10	27.80	15.17	37.90	25.27	60.99	50.99	-23.09	-25.72
4	0.31553	10.11	28.35	20.35	38.46	30.46	59.82	49.82	-21.36	-19.36
5	0.39492	10.14	33.29	27.07	43.43	37.21	57.96	47.96	-14.53	-10.75
6	0.39492	10.14	33.23	27.25	43.37	37.39	57.96	47.96	-14.59	-10.57

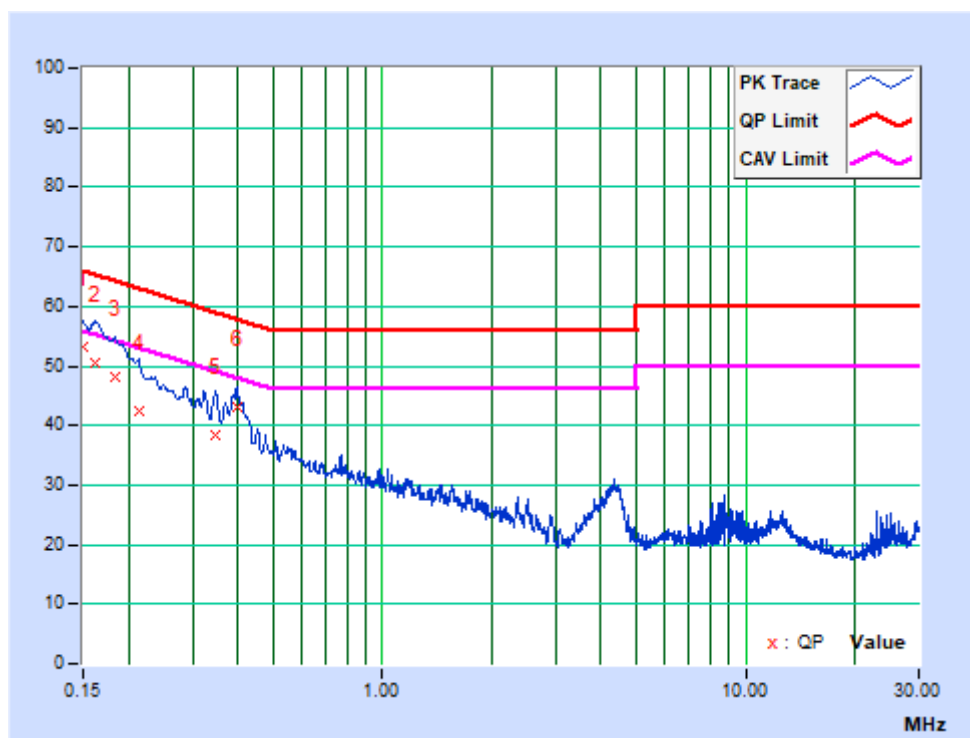
- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
 2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
 3. The emission levels of other frequencies were very low against the limit.
 4. Margin value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



PHASE	Neutral	6dB BANDWIDTH	9kHz
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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	9.83	43.26	26.81	53.09	36.64	66.00	56.00	-12.91	-19.36
2	0.16136	9.85	40.66	25.03	50.51	34.88	65.39	55.39	-14.89	-20.52
3	0.18267	9.88	38.18	23.47	48.06	33.35	64.36	54.36	-16.30	-21.01
4	0.21291	9.93	32.56	18.99	42.49	28.92	63.09	53.09	-20.61	-24.18
5	0.34791	10.01	28.54	20.36	38.55	30.37	59.01	49.01	-20.46	-18.64
6	0.39750	10.02	33.09	27.28	43.11	37.30	57.91	47.91	-14.80	-10.61

- 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.
Spectrum Analyzer	Rohde&Schwarz	FSV40-N	101817	Jun 19, 23
Bilog Antenna	SCHWARZBECK	VULB 9168	01281	July 30, 22
Pre-Amplifier	Agilent	8447D	2944A10488	Aug. 08, 22
3m Semi-anechoic Chamber	ETS-Lindgren	9m*6m*6m	D3040003DG-1	July 30, 24
Coaxial RF Cable	Joinfront	JFAA6-NMNM-8000	2100033742	July. 11, 23
Coaxial RF Cable	Joinfront	JFAR-NMBNCM-2000	2100033742	July. 11, 23
Coaxial RF Cable	Joinfront	JFAR-BNCMSMM-500	2100033742	July. 11, 23
Test software	ADT	ADT_Radiated_V7.6.15.9.2	N/A	N/A
Horn Antenna	ETS-Lindgren	3117	00240041	July 22, 22
Horn Antenna	SCHWARZBECK	BBHA 9170	01024	Dec. 25, 22
Pre-Amplifier (1GHz-18GHz)	SCHWARZBECK	BBV 9718C	00142	Jun. 14, 23
Pre-Amplifier (18GHz-40GHz)	Rohde&Schwarz	SCU40	100437	Nov. 16, 22
Coaxial RF Cable	Joinfront	JFAA6-NMNM-8000	2100033742	July. 11, 23
Coaxial RF Cable	Joinfront	JFAA6-NMSMM-2000	2100033742	July. 11, 23
Coaxial RF Cable	Joinfront	JFAA6-NMSMM-800	2100033742	July. 11, 23

NOTES:

1. The test was performed in 966 Chamber-3 (Baodun)
2. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to CEPREI/CHINA, GRGT/CHINA and NIM/CHINA.
3. The horn antenna is used only for the measurement of emission frequency above 1GHz if tested.
4. The FCC Site Registration No. is 749762.

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 1m 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:

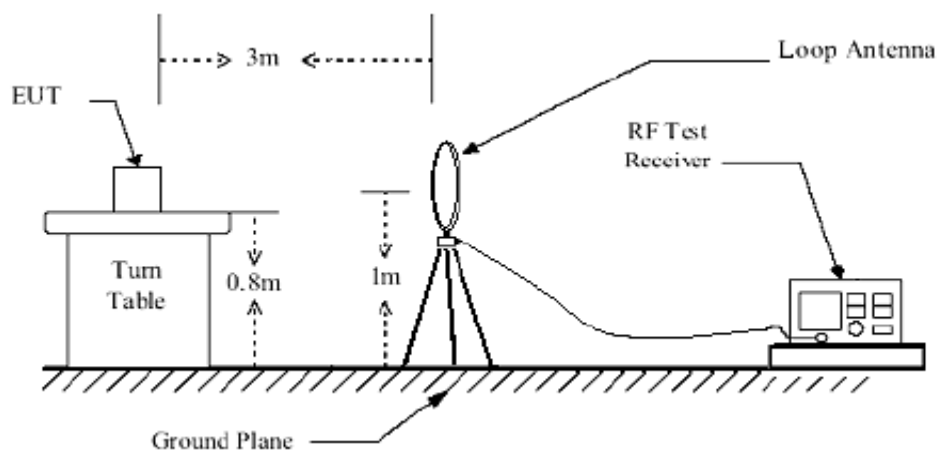
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection at frequency below 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
3. The resolution 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

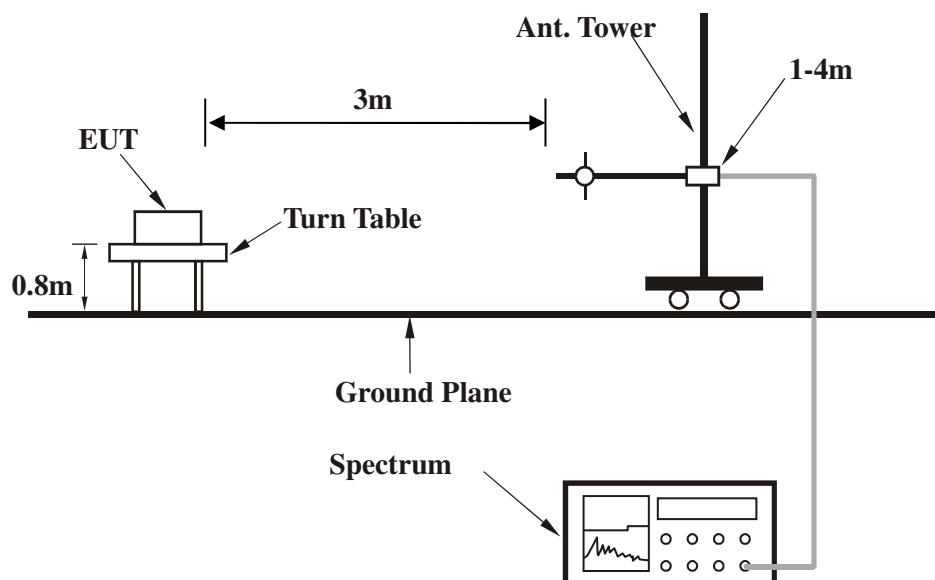
No deviation.

4.2.5 TEST SETUP

Below 30MHz test setup

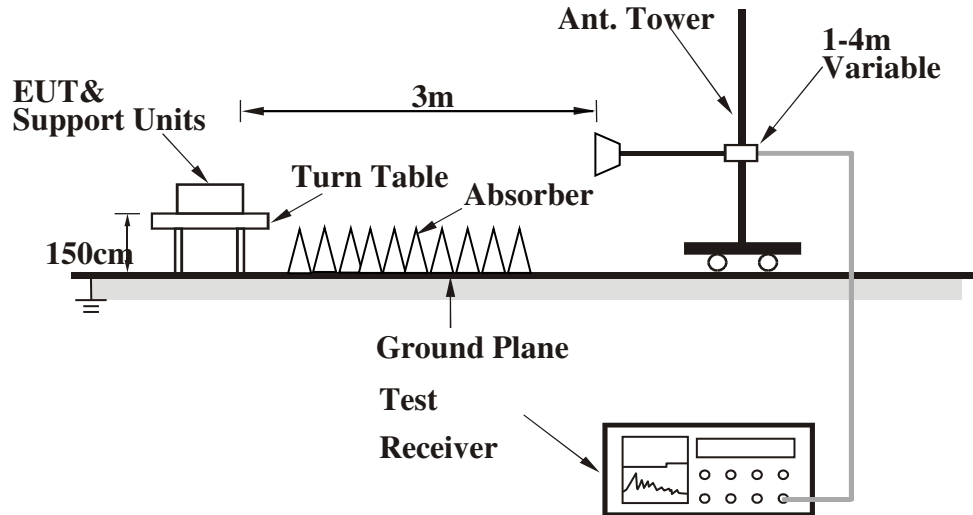


Below 1GHz test setup



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:

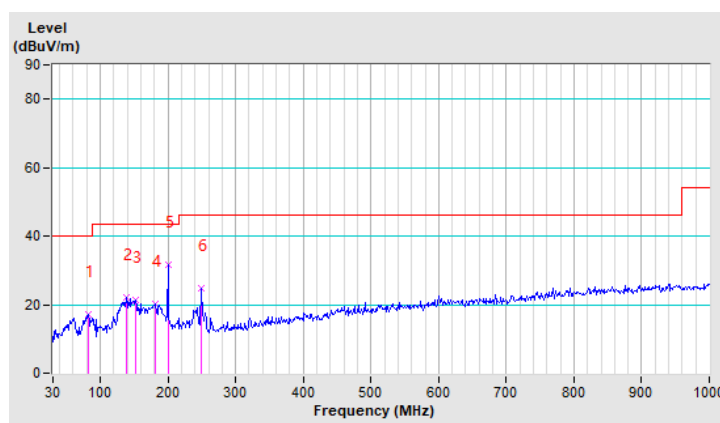
802.11b

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 (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	82.01	16.98 QP	40.00	-23.02	1.00 H	109	34.65	-17.67
2	138.25	21.99 QP	43.50	-21.51	1.00 H	45	36.16	-14.17
3	152.30	21.24 QP	43.50	-22.26	1.00 H	117	34.87	-13.63
4	180.42	20.20 QP	43.50	-23.30	1.00 H	303	35.10	-14.90
5	200.10	31.69 QP	43.50	-11.81	1.00 H	152	48.09	-16.40
6	249.30	24.66 QP	46.00	-21.34	1.00 H	217	38.91	-14.25

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.

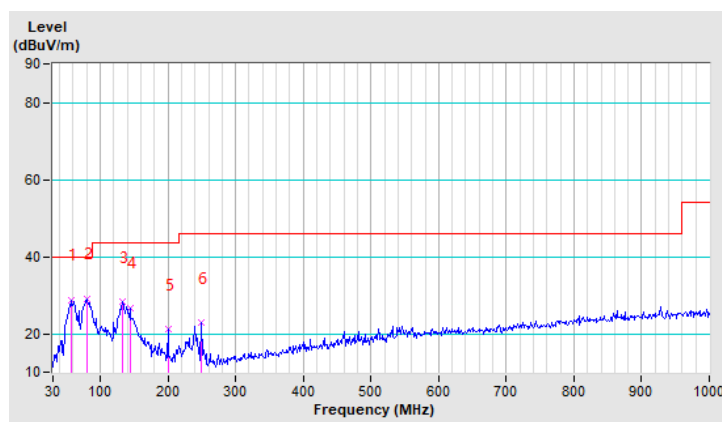


CHANNEL	TX Channel 1	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9KHz ~ 1GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	58.12	28.59 QP	40.00	-11.41	1.00 V	59	42.62	-14.03
2	80.61	28.95 QP	40.00	-11.05	1.00 V	178	46.33	-17.38
3	132.62	28.16 QP	43.50	-15.34	1.00 V	103	43.14	-14.98
4	143.87	26.57 QP	43.50	-16.93	1.00 V	47	40.39	-13.82
5	200.10	21.03 QP	43.50	-22.47	1.00 V	219	37.43	-16.40
6	249.30	22.77 QP	46.00	-23.23	1.00 V	56	37.02	-14.25

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 (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	53.22 PK	74.00	-20.78	1.15 H	28	52.21	1.01
2	2390.00	41.06 AV	54.00	-12.94	1.15 H	28	40.05	1.01
3	*2412.00	100.70 PK			1.15 H	28	99.62	1.08
4	*2412.00	90.37 AV			1.15 H	28	89.29	1.08
5	4824.00	48.37 PK	74.00	-25.63	2.00 H	109	44.06	4.31
6	4824.00	34.89 AV	54.00	-19.11	2.00 H	109	30.58	4.31
7	#7236.00	52.76 PK	74.00	-21.24	1.00 H	152	43.28	9.48
8	#7236.00	39.49 AV	54.00	-14.51	1.00 H	152	30.01	9.48
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	48.70 PK	74.00	-25.30	1.08 V	253	47.69	1.01
2	2390.00	36.28 AV	54.00	-17.72	1.08 V	253	35.27	1.01
3	*2412.00	97.13 PK			1.08 V	253	96.05	1.08
4	*2412.00	87.25 AV			1.08 V	253	86.17	1.08
5	4824.00	47.25 PK	74.00	-26.75	1.54 V	92	42.94	4.31
6	4824.00	33.43 AV	54.00	-20.57	1.54 V	92	29.12	4.31
7	#7236.00	51.19 PK	74.00	-22.81	2.00 V	54	41.71	9.48
8	#7236.00	38.22 AV	54.00	-15.78	2.00 V	54	28.74	9.48

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.

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 (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2437.00	100.22 PK			2.00 H	105	99.06	1.16
2	*2437.00	89.43 AV			2.00 H	105	88.27	1.16
3	4874.00	49.34 PK	74.00	-24.66	1.06 H	114	44.93	4.41
4	4874.00	35.17 AV	54.00	-18.83	1.06 H	114	30.76	4.41
5	7311.00	53.09 PK	74.00	-20.91	1.00 H	204	43.38	9.71
6	7311.00	40.15 AV	54.00	-13.85	1.00 H	204	30.44	9.71
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2437.00	97.45 PK			1.15 V	43	96.29	1.16
2	*2437.00	87.29 AV			1.15 V	43	86.13	1.16
3	4874.00	48.52 PK	74.00	-25.48	1.03 V	96	44.11	4.41
4	4874.00	34.25 AV	54.00	-19.75	1.03 V	96	29.84	4.41
5	7311.00	52.11 PK	74.00	-21.89	2.00 V	13	42.40	9.71
6	7311.00	39.20 AV	54.00	-14.80	2.00 V	13	29.49	9.71

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.

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 (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2462.00	99.63 PK			1.02 H	258	98.40	1.23
2	*2462.00	88.78 AV			1.02 H	258	87.55	1.23
3	2483.50	51.13 PK	74.00	-22.87	1.02 H	258	49.82	1.31
4	2483.50	35.45 AV	54.00	-18.55	1.02 H	258	34.14	1.31
5	4924.00	49.22 PK	74.00	-24.78	1.08 H	94	44.72	4.50
6	4924.00	35.29 AV	54.00	-18.71	1.08 H	94	30.79	4.50
7	7386.00	53.14 PK	74.00	-20.86	2.00 H	105	43.20	9.94
8	7386.00	40.27 AV	54.00	-13.73	2.00 H	105	30.33	9.94
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2462.00	97.09 PK			1.06 V	233	95.86	1.23
2	*2462.00	87.46 AV			1.06 V	233	86.23	1.23
3	2483.50	50.25 PK	74.00	-23.75	1.06 V	233	48.94	1.31
4	2483.50	34.81 AV	54.00	-19.19	1.06 V	233	33.50	1.31
5	4924.00	48.16 PK	74.00	-25.84	2.00 V	196	43.66	4.50
6	4924.00	34.11 AV	54.00	-19.89	2.00 V	196	29.61	4.50
7	7386.00	52.25 PK	74.00	-21.75	1.05 V	44	42.31	9.94
8	7386.00	39.19 AV	54.00	-14.81	1.05 V	44	29.25	9.94

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.

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 (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	53.41 PK	74.00	-20.59	1.16 H	142	52.40	1.01
2	2390.00	42.08 AV	54.00	-11.92	1.16 H	142	41.07	1.01
3	*2412.00	100.35 PK			1.16 H	142	99.27	1.08
4	*2412.00	90.22 AV			1.16 H	142	89.14	1.08
5	4824.00	48.25 PK	74.00	-25.75	1.39 H	174	43.94	4.31
6	4824.00	34.92 AV	54.00	-19.08	1.39 H	174	30.61	4.31
7	#7236.00	52.19 PK	74.00	-21.81	1.00 H	75	42.71	9.48
8	#7236.00	39.84 AV	54.00	-14.16	1.00 H	75	30.36	9.48
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	49.36 PK	74.00	-24.64	1.09 V	52	48.35	1.01
2	2390.00	36.49 AV	54.00	-17.51	1.09 V	52	35.48	1.01
3	*2412.00	97.22 PK			1.09 V	52	96.14	1.08
4	*2412.00	87.14 AV			1.09 V	52	86.06	1.08
5	4824.00	47.33 PK	74.00	-26.67	1.52 V	96	43.02	4.31
6	4824.00	33.26 AV	54.00	-20.74	1.52 V	96	28.95	4.31
7	#7236.00	51.17 PK	74.00	-22.83	1.00 V	305	41.69	9.48
8	#7236.00	38.42 AV	54.00	-15.58	1.00 V	305	28.94	9.48

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.

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 (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2437.00	100.19 PK			1.05 H	95	99.03	1.16
2	*2437.00	89.63 AV			1.05 H	95	88.47	1.16
3	4874.00	49.54 PK	74.00	-24.46	1.00 H	352	45.13	4.41
4	4874.00	35.29 AV	54.00	-18.71	1.00 H	352	30.88	4.41
5	7311.00	53.21 PK	74.00	-20.79	2.00 H	196	43.50	9.71
6	7311.00	40.60 AV	54.00	-13.40	2.00 H	196	30.89	9.71
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2437.00	97.69 PK			1.76 V	98	96.53	1.16
2	*2437.00	87.21 AV			1.76 V	98	86.05	1.16
3	4874.00	48.16 PK	74.00	-25.84	1.02 V	31	43.75	4.41
4	4874.00	34.45 AV	54.00	-19.55	1.02 V	31	30.04	4.41
5	7311.00	52.71 PK	74.00	-21.29	1.00 V	45	43.00	9.71
6	7311.00	39.51 AV	54.00	-14.49	1.00 V	45	29.80	9.71

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.

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 (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2462.00	100.02 PK			1.08 H	57	98.79	1.23
2	*2462.00	89.15 AV			1.08 H	57	87.92	1.23
3	2483.50	51.42 PK	74.00	-22.58	1.08 H	57	50.11	1.31
4	2483.50	35.69 AV	54.00	-18.31	1.08 H	57	34.38	1.31
5	4924.00	49.82 PK	74.00	-24.18	2.00 H	155	45.32	4.50
6	4924.00	36.21 AV	54.00	-17.79	2.00 H	155	31.71	4.50
7	7386.00	53.49 PK	74.00	-20.51	1.00 H	304	43.55	9.94
8	7386.00	40.66 AV	54.00	-13.34	1.00 H	304	30.72	9.94
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2462.00	98.11 PK			1.05 V	46	96.88	1.23
2	*2462.00	88.24 AV			1.05 V	46	87.01	1.23
3	2483.50	50.14 PK	74.00	-23.86	1.05 V	46	48.83	1.31
4	2483.50	34.27 AV	54.00	-19.73	1.05 V	46	32.96	1.31
5	4924.00	48.44 PK	74.00	-25.56	2.00 V	175	43.94	4.50
6	4924.00	35.19 AV	54.00	-18.81	2.00 V	175	30.69	4.50
7	7386.00	52.35 PK	74.00	-21.65	1.00 V	53	42.41	9.94
8	7386.00	39.27 AV	54.00	-14.73	1.00 V	53	29.33	9.94

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.

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 (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	50.47 PK	74.00	-23.53	1.08 H	199	49.46	1.01
2	2390.00	40.81 AV	54.00	-13.19	1.08 H	199	39.80	1.01
3	*2412.00	99.35 PK			1.08 H	199	98.27	1.08
4	*2412.00	88.41 AV			1.08 H	199	87.33	1.08
5	4824.00	48.54 PK	74.00	-25.46	1.55 H	30	44.23	4.31
6	4824.00	35.16 AV	54.00	-18.84	1.55 H	30	30.85	4.31
7	#7236.00	52.77 PK	74.00	-21.23	1.00 H	79	43.29	9.48
8	#7236.00	39.54 AV	54.00	-14.46	1.00 H	79	30.06	9.48
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	49.37 PK	74.00	-24.63	1.49 V	35	48.36	1.01
2	2390.00	39.61 AV	54.00	-14.39	1.49 V	35	38.60	1.01
3	*2412.00	96.52 PK			1.49 V	35	95.44	1.08
4	*2412.00	85.42 AV			1.49 V	35	84.34	1.08
5	4824.00	47.25 PK	74.00	-26.75	1.00 V	105	42.94	4.31
6	4824.00	34.22 AV	54.00	-19.78	1.00 V	105	29.91	4.31
7	#7236.00	51.91 PK	74.00	-22.09	1.00 V	51	42.43	9.48
8	#7236.00	38.27 AV	54.00	-15.73	1.00 V	51	28.79	9.48

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.

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 (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2437.00	98.46 PK			1.04 H	46	97.30	1.16
2	*2437.00	87.31 AV			1.04 H	46	86.15	1.16
3	4874.00	49.35 PK	74.00	-24.65	1.51 H	95	44.94	4.41
4	4874.00	35.26 AV	54.00	-18.74	1.51 H	95	30.85	4.41
5	7311.00	53.11 PK	74.00	-20.89	1.00 H	325	43.40	9.71
6	7311.00	40.27 AV	54.00	-13.73	1.00 H	325	30.56	9.71
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2437.00	95.31 PK			2.00 V	162	94.15	1.16
2	*2437.00	84.92 AV			2.00 V	162	83.76	1.16
3	4874.00	48.17 PK	74.00	-25.83	1.02 V	304	43.76	4.41
4	4874.00	34.32 AV	54.00	-19.68	1.02 V	304	29.91	4.41
5	7311.00	52.49 PK	74.00	-21.51	1.00 V	75	42.78	9.71
6	7311.00	39.20 AV	54.00	-14.80	1.00 V	75	29.49	9.71

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.

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 (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2462.00	98.43 PK			2.00 H	154	97.20	1.23
2	*2462.00	86.29 AV			2.00 H	154	85.06	1.23
3	2483.50	50.46 PK	74.00	-23.54	2.00 H	154	49.15	1.31
4	2483.50	35.27 AV	54.00	-18.73	2.00 H	154	33.96	1.31
5	4924.00	49.34 PK	74.00	-24.66	1.07 H	85	44.84	4.50
6	4924.00	35.46 AV	54.00	-18.54	1.07 H	85	30.96	4.50
7	7386.00	53.22 PK	74.00	-20.78	1.00 H	106	43.28	9.94
8	7386.00	40.84 AV	54.00	-13.16	1.00 H	106	30.90	9.94
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2462.00	95.49 PK			1.05 V	63	94.26	1.23
2	*2462.00	84.31 AV			1.05 V	63	83.08	1.23
3	2483.50	49.86 PK	74.00	-24.14	1.05 V	63	48.55	1.31
4	2483.50	34.39 AV	54.00	-19.61	1.05 V	63	33.08	1.31
5	4924.00	48.56 PK	74.00	-25.44	1.12 V	167	44.06	4.50
6	4924.00	34.27 AV	54.00	-19.73	1.12 V	167	29.77	4.50
7	7386.00	52.19 PK	74.00	-21.81	1.00 V	251	42.25	9.94
8	7386.00	39.67 AV	54.00	-14.33	1.00 V	251	29.73	9.94

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.

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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 (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	49.35 PK	74.00	-24.65	2.00 H	105	48.34	1.01
2	2390.00	34.29 AV	54.00	-19.71	2.00 H	105	33.28	1.01
3	*2422.00	96.17 PK			2.00 H	105	95.06	1.11
4	*2422.00	83.94 AV			2.00 H	105	82.83	1.11
5	4844.00	49.81 PK	74.00	-24.19	1.08 H	95	45.46	4.35
6	4844.00	35.47 AV	54.00	-18.53	1.08 H	95	31.12	4.35
7	7266.00	53.41 PK	74.00	-20.59	1.00 H	319	43.84	9.57
8	7266.00	40.26 AV	54.00	-13.74	1.00 H	319	30.69	9.57
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	48.76 PK	74.00	-25.24	1.06 V	311	47.75	1.01
2	2390.00	33.17 AV	54.00	-20.83	1.06 V	311	32.16	1.01
3	*2422.00	93.29 PK			1.06 V	311	92.18	1.11
4	*2422.00	81.15 AV			1.06 V	311	80.04	1.11
5	4844.00	48.52 PK	74.00	-25.48	1.25 V	51	44.17	4.35
6	4844.00	34.29 AV	54.00	-19.71	1.25 V	51	29.94	4.35
7	7266.00	52.51 PK	74.00	-21.49	1.00 V	36	42.94	9.57
8	7266.00	39.08 AV	54.00	-14.92	1.00 V	36	29.51	9.57

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.

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 (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2437.00	96.94 PK			2.00 H	47	95.78	1.16
2	*2437.00	84.11 AV			2.00 H	47	82.95	1.16
3	4874.00	49.52 PK	74.00	-24.48	1.05 H	205	45.11	4.41
4	4874.00	36.27 AV	54.00	-17.73	1.05 H	205	31.86	4.41
5	7311.00	53.49 PK	74.00	-20.51	1.00 H	74	43.78	9.71
6	7311.00	40.85 AV	54.00	-13.15	1.00 H	74	31.14	9.71
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2437.00	93.41 PK			1.05 V	49	92.25	1.16
2	*2437.00	81.48 AV			1.05 V	49	80.32	1.16
3	4874.00	48.16 PK	74.00	-25.84	1.09 V	288	43.75	4.41
4	4874.00	35.42 AV	54.00	-18.58	1.09 V	288	31.01	4.41
5	7311.00	52.17 PK	74.00	-21.83	1.00 V	203	42.46	9.71
6	7311.00	39.44 AV	54.00	-14.56	1.00 V	203	29.73	9.71

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.

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 (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2452.00	97.12 PK			1.15 H	23	95.92	1.20
2	*2452.00	84.59 AV			1.15 H	23	83.39	1.20
3	2483.50	50.39 PK	74.00	-23.61	1.15 H	23	49.08	1.31
4	2483.50	35.27 AV	54.00	-18.73	1.15 H	23	33.96	1.31
5	4904.00	49.34 PK	74.00	-24.66	1.03 H	315	44.88	4.46
6	4904.00	35.49 AV	54.00	-18.51	1.03 H	315	31.03	4.46
7	7356.00	54.18 PK	74.00	-19.82	1.00 H	174	44.34	9.84
8	7356.00	41.55 AV	54.00	-12.45	1.00 H	174	31.71	9.84
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2452.00	93.89 PK			1.13 V	25	92.69	1.20
2	*2452.00	81.77 AV			1.13 V	25	80.57	1.20
3	2483.50	49.27 PK	74.00	-24.73	1.13 V	25	47.96	1.31
4	2483.50	34.15 AV	54.00	-19.85	1.13 V	25	32.84	1.31
5	4904.00	48.16 PK	74.00	-25.84	2.00 V	175	43.70	4.46
6	4904.00	34.27 AV	54.00	-19.73	2.00 V	175	29.81	4.46
7	7356.00	53.22 PK	74.00	-20.78	1.00 V	56	43.38	9.84
8	7356.00	40.19 AV	54.00	-13.81	1.00 V	56	30.35	9.84

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.

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.
Wireless Connectivity Tester	Rohde&Schwarz	CMW270	101601	Nov. 21, 22
MXA signal analyzer	Agilent	N9020A	MY49100060	Apr. 18, 23
Spectrum Analyzer	Rohde&Schwarz	FSV40	101094	Jan. 16, 23
Frequency Analyzer	Keysight	N9010B	MY60240432	Nov. 25, 22
Programmable Temperature&Humidity Chamber	Hongjin	HYC-TH-225DH	DG-180746	Feb. 16, 23
DC Source	Agilent	E3640A	MY40004013	Feb. 23, 23
Test software	ADT	ADT_RF Test Software V6.6.5.3	N/A	N/A
Test software	ADT	ADT_RF Test Software V6.6.5.4	N/A	N/A

NOTES: 1. The test was performed in RF Test Shielded Room (Baodun)
 2. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to CEPREI/CHINA, GRGT/CHINA and NIM/CHINA.

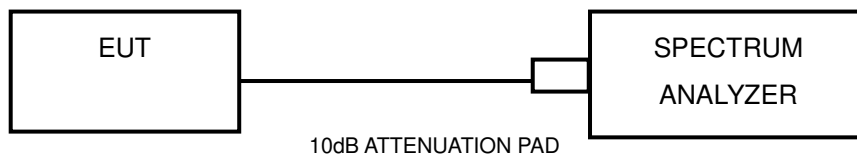
4.3.3 TEST PROCEDURE

1. Set resolution bandwidth (RBW) = 100KHz
2. Set the video bandwidth (VBW) $\geq 3 \times$ RBW, Detector = Peak.
3. Trace mode = max hold.
4. Sweep = auto couple.
5. Measure the maximum width of the emission that is constrained by the frequencies associated with the two amplitude points (upper and lower) 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
		Chain0	Chain1		
1	2412	9.05	9.07	0.5	PASS
6	2437	9.06	9.07	0.5	PASS
11	2462	9.08	8.62	0.5	PASS

802.11g

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)		MINIMUM LIMIT (MHz)	PASS / FAIL
		Chain0	Chain1		
1	2412	15.18	15.16	0.5	PASS
6	2437	15.17	15.17	0.5	PASS
11	2462	15.19	15.13	0.5	PASS

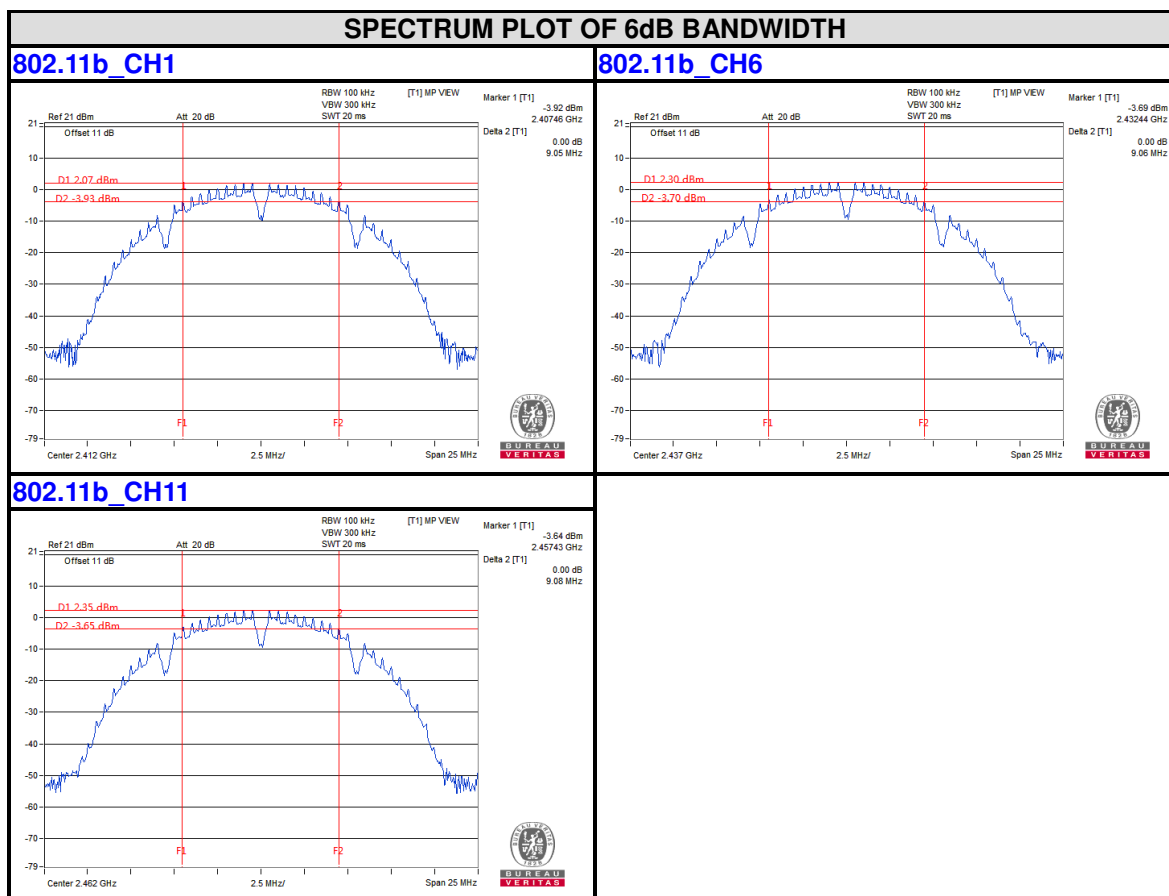
802.11n HT20

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)		MINIMUM LIMIT (MHz)	PASS / FAIL
		Chain0	Chain1		
1	2412	17.26	16.27	0.5	PASS
6	2437	16.89	16.97	0.5	PASS
11	2462	17.38	16.24	0.5	PASS

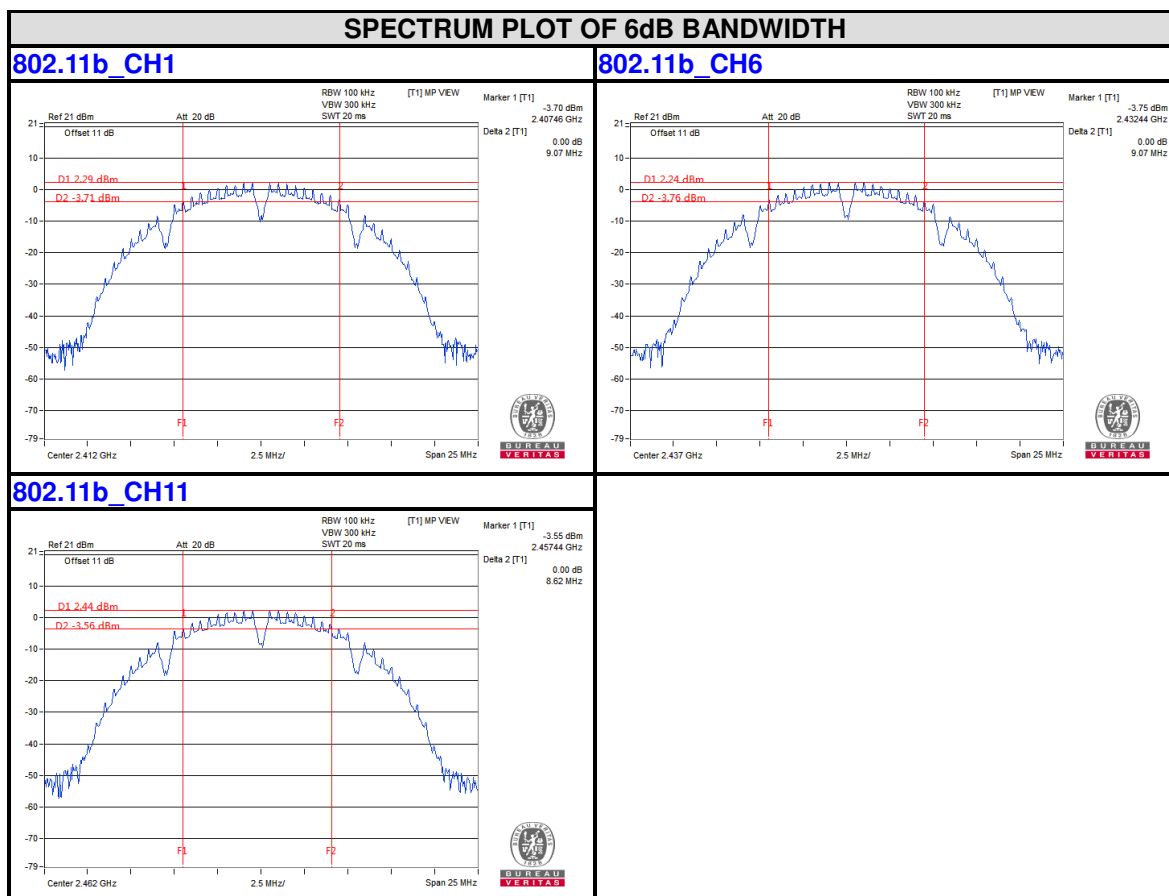
802.11n HT40

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)		MINIMUM LIMIT (MHz)	PASS / FAIL
		Chain0	Chain1		
3	2422	34.67	35.30	0.5	PASS
6	2437	35.65	35.13	0.5	PASS
9	2452	35.62	31.44	0.5	PASS

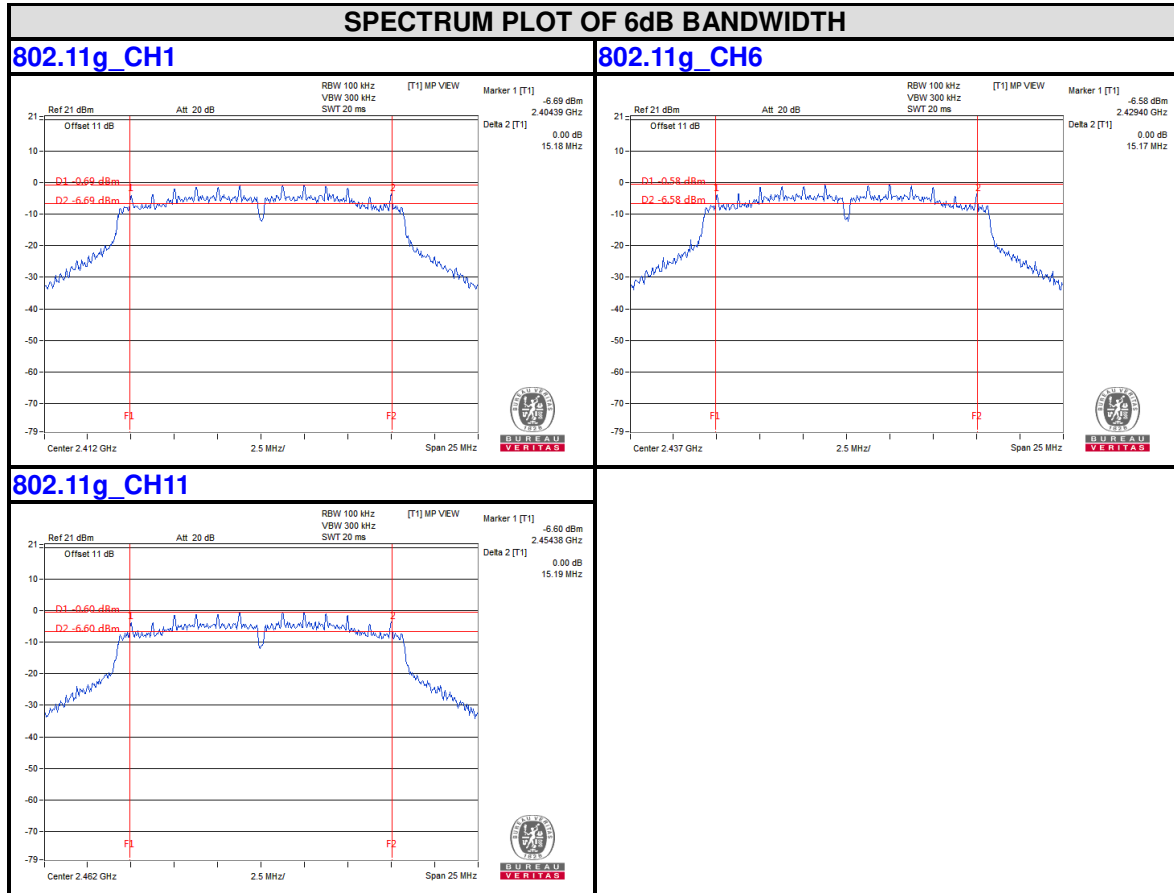
Chain 0



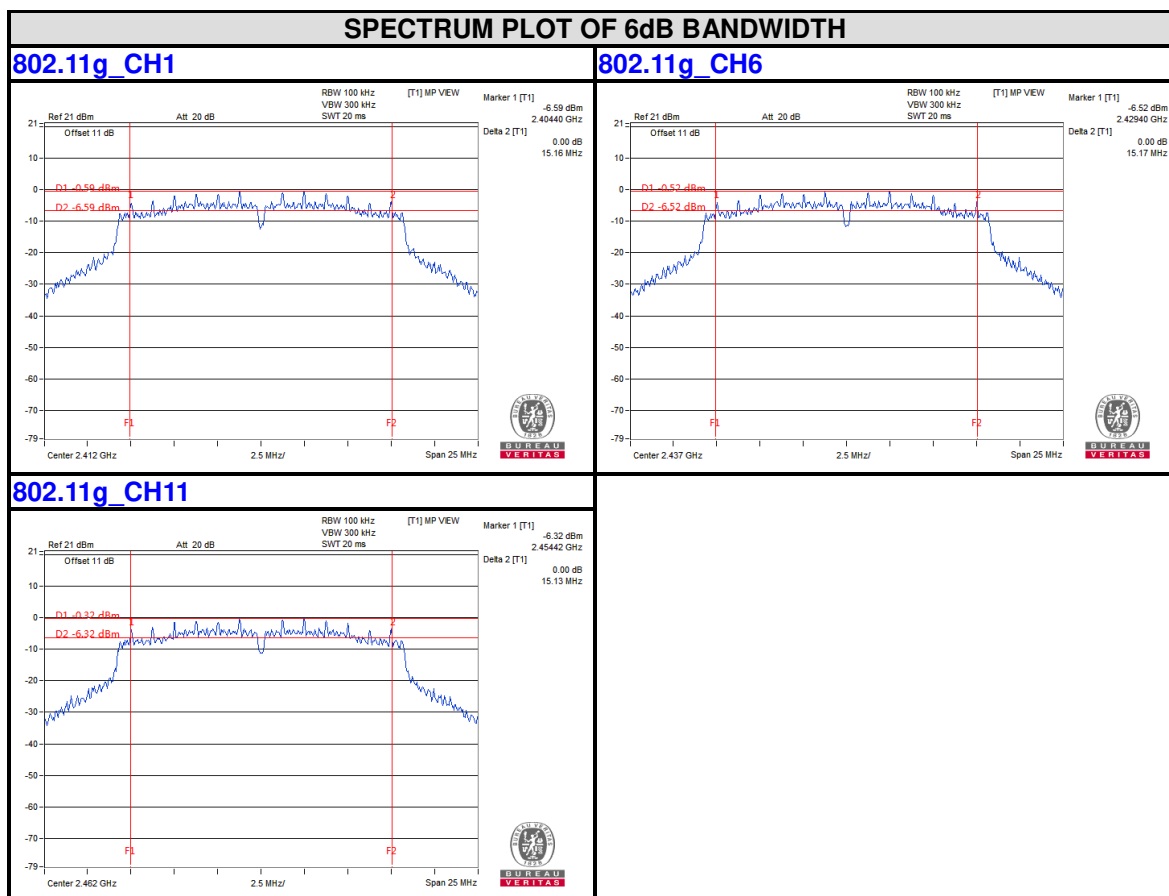
Chain 1



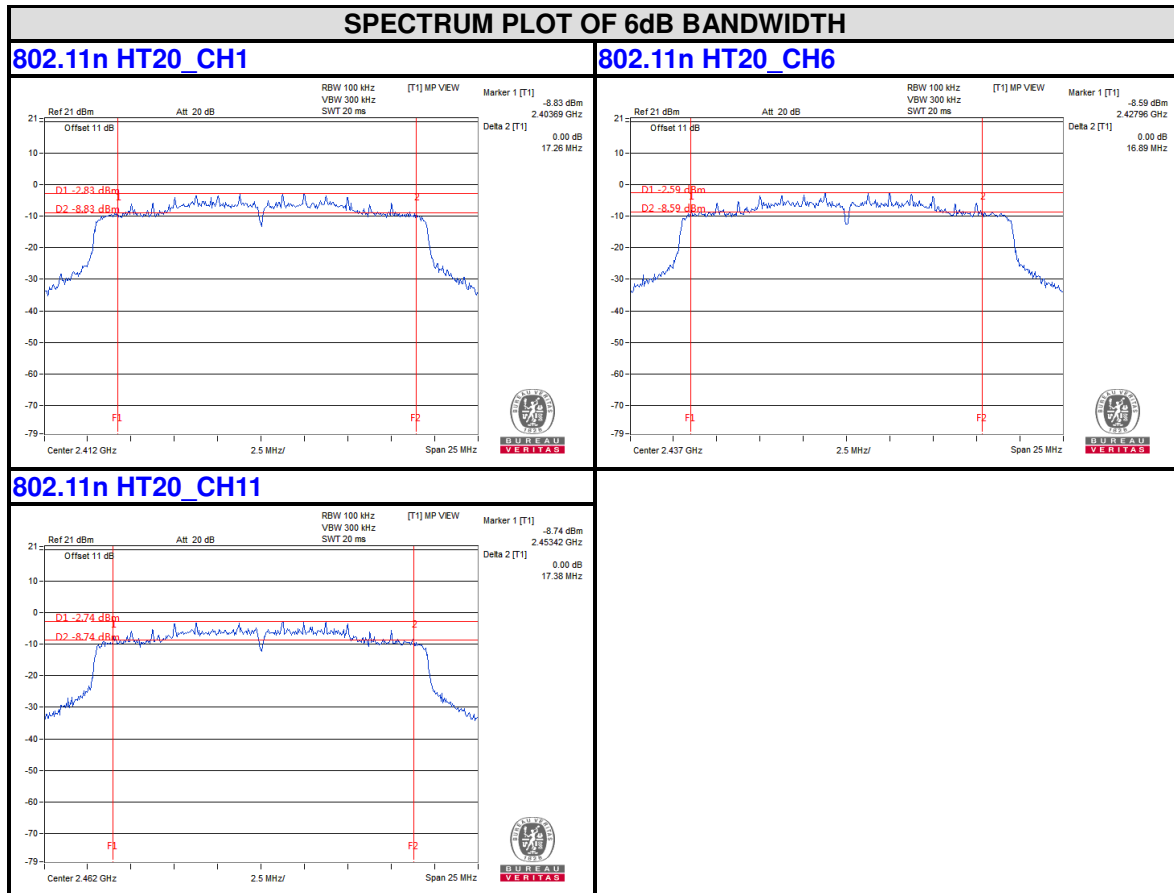
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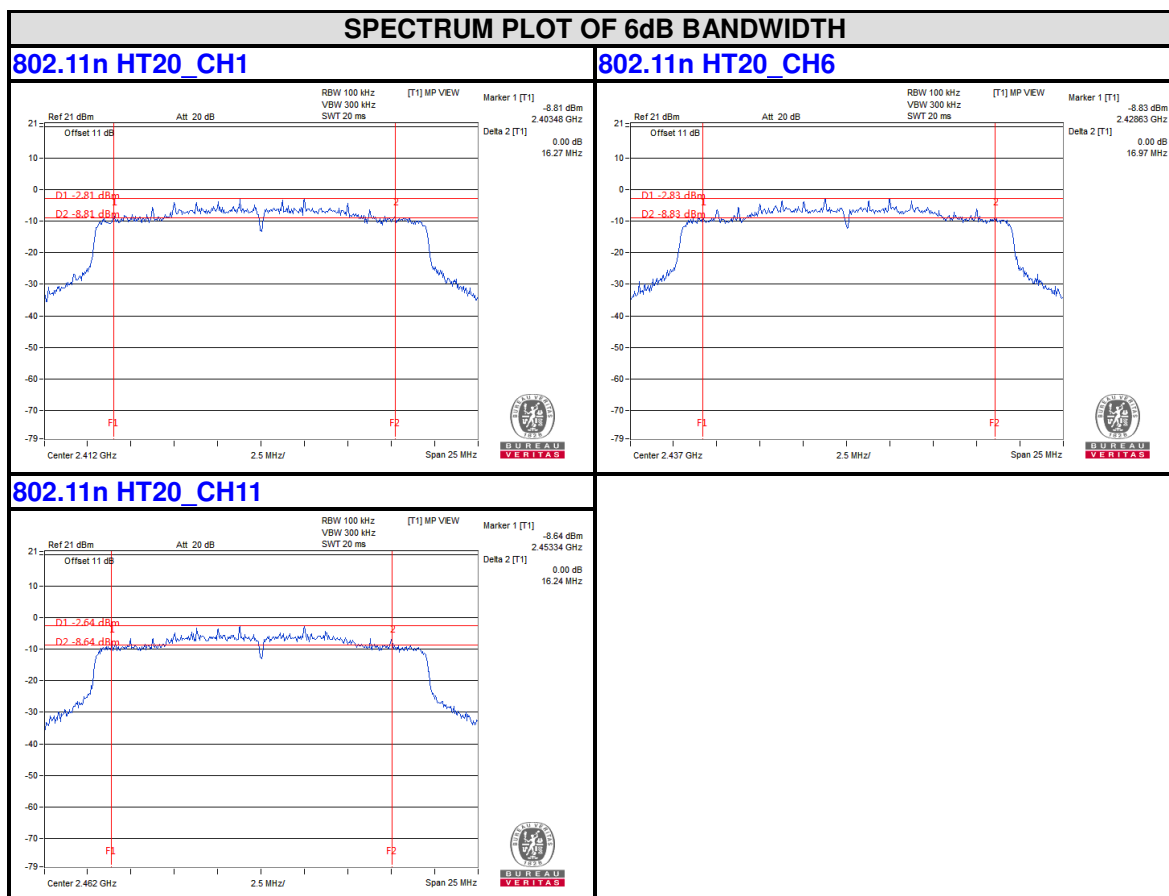
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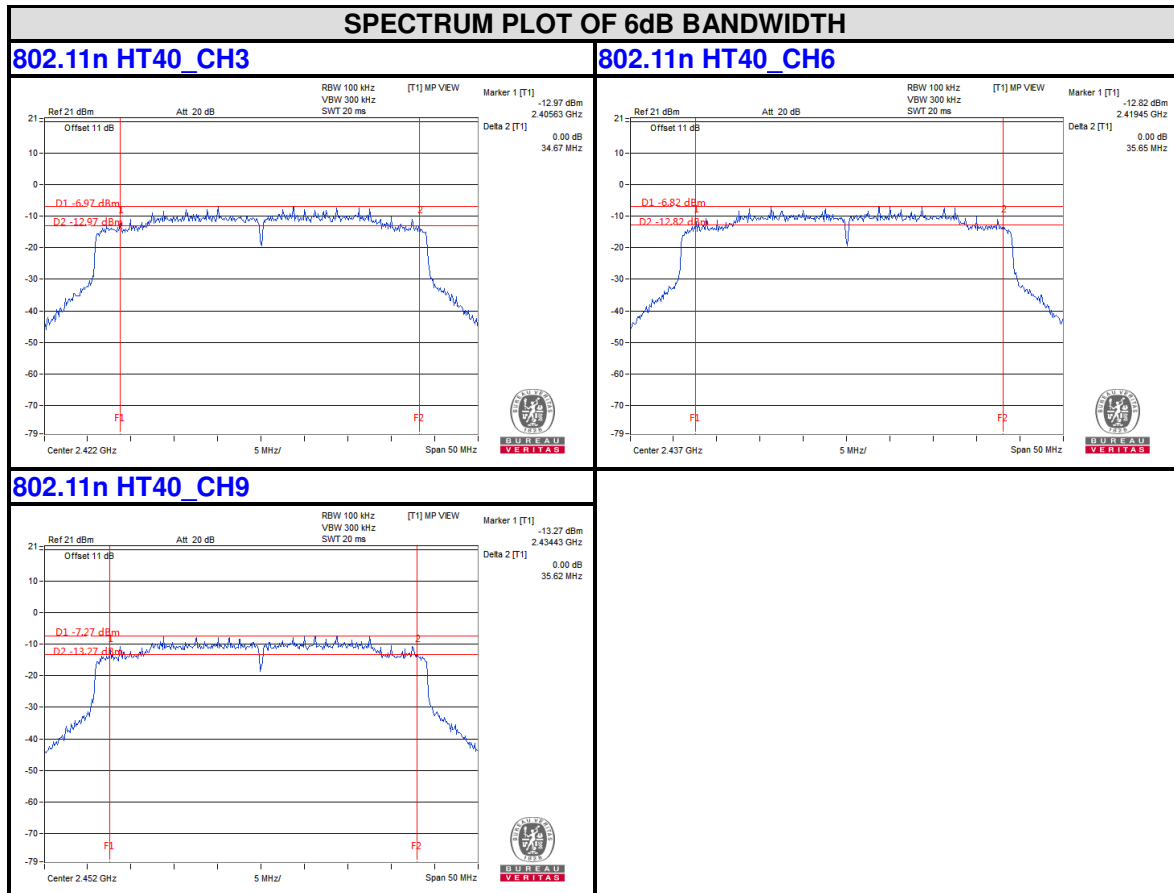
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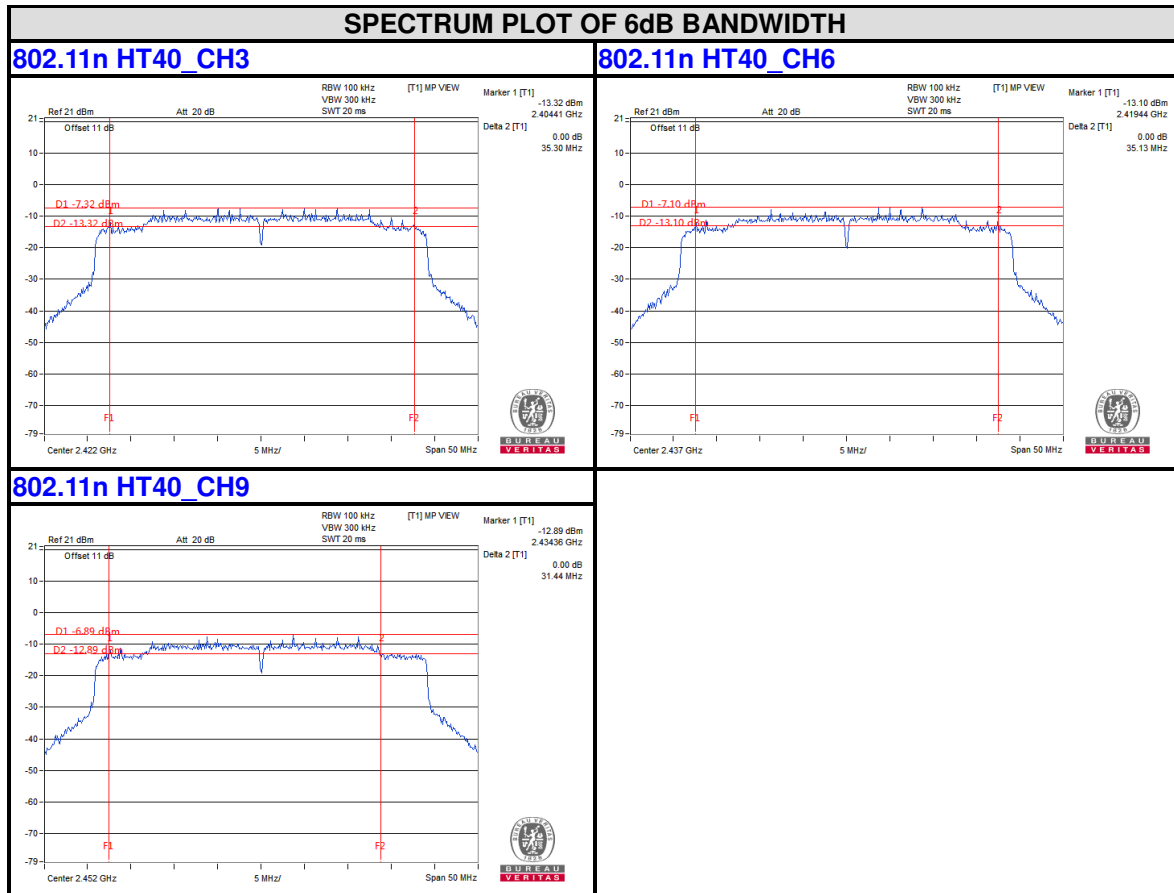
Chain 1



Chain 0



Chain 1

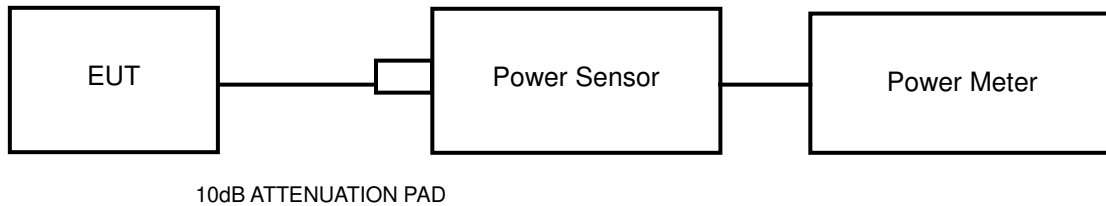


4.4 CONDUCTED OUTPUT POWER

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

CHAN.	FRE. (MHz)	PEAK POWER (dBm)		PEAK POWER (mW)		TOTAL POWER (mW)	TOTAL POWER (dBm)	PEAK POWER LIMIT (W)	PASS/ FAIL
		CHAIN 0	CHAIN 1	CHAIN 0	CHAIN 1				
1	2412	16.11	15.71	40.832	37.239	78.071	18.92	1	PASS
6	2437	16.34	15.89	43.053	38.815	81.868	19.13	1	PASS
11	2462	16.37	16.02	43.351	39.994	83.345	19.21	1	PASS

Note: 1. Directional Gain = $1.56 + 10 \cdot \log(1.56) = 3.49\text{dBi}$, less 6dBi, so the limit is
no need to be reduced.

802.11g

CHAN.	FRE. (MHz)	PEAK POWER (dBm)		PEAK POWER (mW)		TOTAL POWER (mW)	TOTAL POWER (dBm)	PEAK POWER LIMIT (W)	PASS/ FAIL
		CHAIN 0	CHAIN 1	CHAIN 0	CHAIN 1				
1	2412	19.45	19.33	88.105	85.704	173.809	22.40	1	PASS
6	2437	19.78	19.42	95.06	87.498	182.558	22.61	1	PASS
11	2462	19.75	19.55	94.406	90.157	184.563	22.66	1	PASS

Note: 1. Directional Gain = $1.56 + 10 \cdot \log(1.56) = 3.49\text{dBi}$, less 6dBi, so the limit is
no need to be reduced.

802.11n HT20

CHAN.	FRE. (MHz)	PEAK POWER (dBm)		PEAK POWER (mW)		TOTAL POWER (mW)	TOTAL POWER (dBm)	PEAK POWER LIMIT (W)	PASS/ FAIL
		CHAIN 0	CHAIN 1	CHAIN 0	CHAIN 1				
1	2412	19.68	19.55	92.897	90.157	183.054	22.63	1	PASS
6	2437	19.88	19.68	97.275	92.897	190.172	22.79	1	PASS
11	2462	20.01	19.79	100.23	95.28	195.511	22.91	1	PASS

Note: 1. Directional Gain = $1.56 + 10 \cdot \log(1.56) = 3.49\text{dBi}$, less 6dBi, so the limit is
no need to be reduced.

802.11n HT40

CHAN.	FRE. (MHz)	PEAK POWER (dBm)		PEAK POWER (mW)		TOTAL POWER (mW)	TOTAL POWER (dBm)	PEAK POWER LIMIT (W)	PASS/ FAIL
		CHAIN 0	CHAIN 1	CHAIN 0	CHAIN 1				
3	2422	19.26	19.05	84.333	80.353	164.686	22.17	1	PASS
6	2437	19.18	19.11	82.794	81.47	164.264	22.16	1	PASS
9	2452	19.28	19.31	84.723	85.31	170.033	22.31	1	PASS

Note: 1. Directional Gain = $1.56 + 10 \cdot \log(1.56) = 3.49\text{dBi}$, less 6dBi, so the limit is
no need to be reduced.

802.11ax HE20

CHAN.	FRE. (MHz)	PEAK POWER (dBm)		PEAK POWER (mW)		TOTAL POWER (mW)	TOTAL POWER (dBm)	PEAK POWER LIMIT (W)	PASS/ FAIL
		CHAIN 0	CHAIN 1	CHAIN 0	CHAIN 1				
1	2412	18.82	18.68	76.208	73.79	149.998	21.76	1	PASS
6	2437	19.01	18.78	79.616	75.509	155.125	21.91	1	PASS
11	2462	19.03	18.97	79.983	78.886	158.869	22.01	1	PASS

Note: 1. Directional Gain = $1.56 + 10 \cdot \log(1.56) = 3.49\text{dBi}$, less 6dBi, so the limit is
no need to be reduced.

802.11ax HE40

CHAN.	FRE. (MHz)	PEAK POWER (dBm)		PEAK POWER (mW)		TOTAL POWER (mW)	TOTAL POWER (dBm)	PEAK POWER LIMIT (W)	PASS/ FAIL
		CHAIN 0	CHAIN 1	CHAIN 0	CHAIN 1				
3	2422	18.78	18.38	75.509	68.865	144.374	21.59	1	PASS
6	2437	18.94	18.88	78.343	77.268	155.611	21.92	1	PASS
9	2452	19.21	18.68	83.368	73.790	157.158	21.96	1	PASS

Note: 1. Directional Gain = $1.56 + 10 \cdot \log(1.56) = 3.49\text{dBi}$, less 6dBi, so the limit is
no need to be reduced.

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)		TOTAL POWER (mW)	TOTAL POWER (dBm)
		CHAIN 0	CHAIN 1	CHAIN 0	CHAIN 1		
1	2412	11.98	11.98	15.776	15.776	31.552	14.99
6	2437	12.18	12.11	16.520	16.255	32.775	15.16
11	2462	12.24	12.28	16.749	16.904	33.653	15.27

802.11g

CHANNEL	CHANNEL FREQUENCY (MHz)	AVERAGE POWER (dBm)		AVG. POWER (mW)		TOTAL POWER (mW)	TOTAL POWER (dBm)
		CHAIN 0	CHAIN 1	CHAIN 0	CHAIN 1		
1	2412	10.89	10.88	12.274	12.246	24.520	13.90
6	2437	11.12	10.89	12.942	12.274	25.216	14.02
11	2462	11.15	11.15	13.032	13.032	26.064	14.16

802.11n HT20

CHANNEL	CHANNEL FREQUENCY (MHz)	AVERAGE POWER (dBm)		AVG. POWER (mW)		TOTAL POWER (mW)	TOTAL POWER (dBm)
		CHAIN 0	CHAIN 1	CHAIN 0	CHAIN 1		
1	2412	8.72	8.78	7.447	7.551	14.998	11.76
6	2437	9.02	8.95	7.98	7.852	15.832	12.00
11	2462	9.03	9.02	7.998	7.98	15.978	12.04

802.11n HT40

CHANNEL	CHANNEL FREQUENCY (MHz)	AVERAGE POWER (dBm)		AVG. POWER (mW)		TOTAL POWER (mW)	TOTAL POWER (dBm)
		CHAIN 0	CHAIN 1	CHAIN 0	CHAIN 1		
3	2422	7.98	8.15	6.281	6.531	12.812	11.08
6	2437	8.28	8.11	6.73	6.471	13.201	11.21
9	2452	8.18	8.33	6.577	6.808	13.385	11.27

802.11ax HE20

CHANNEL	CHANNEL FREQUENCY (MHz)	AVERAGE POWER (dBm)		AVG. POWER (mW)		TOTAL POWER (mW)	TOTAL POWER (dBm)
		CHAIN 0	CHAIN 1	CHAIN 0	CHAIN 1		
1	2412	8.01	8.01	6.324	6.324	12.648	11.02
6	2437	8.35	8.38	6.839	6.887	13.726	11.38
11	2462	8.53	8.45	7.129	6.998	14.127	11.50

802.11ax HE40

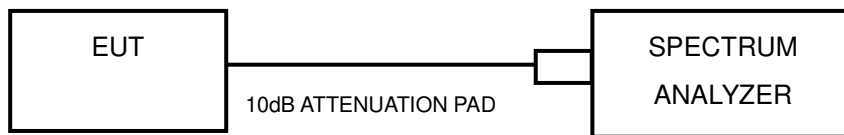
CHANNEL	CHANNEL FREQUENCY (MHz)	AVERAGE POWER (dBm)		AVG. POWER (mW)		TOTAL POWER (mW)	TOTAL POWER (dBm)
		CHAIN 0	CHAIN 1	CHAIN 0	CHAIN 1		
3	2422	8.02	7.85	6.339	6.095	12.434	10.95
6	2437	8.08	8.15	6.427	6.531	12.958	11.13
9	2452	8.34	8.08	6.823	6.427	13.250	11.22

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 to 1.5 times the DTS bandwidth.
- c) Set RBW to: 3KHz
- d) Set VBW $\geq 3 \times$ RBW.
- e) Detector = peak
- f) Ensure that the number of measurement points in the sweep $\geq 2 \times$ span/RBW.
- g) Sweep time = auto couple.
- h) Use the peak marker function to determine the maximum amplitude level.

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)		TOTAL (dBm/3kHz)	Limit (dBm/3kHz)	PASS /FAIL
		Chain 0	Chain 1			
1	2412	-11.74	-11.61	-8.66	8.00	PASS
6	2437	-11.46	-11.33	-8.38	8.00	PASS
11	2462	-11.98	-11.45	-8.70	8.00	PASS

Note: 1.Directiona Gain=1.56 +10*log(1.56)=3.49dBi, less 6dBi, so the limit is
no need to be reduced.

802.11g

Channel	FREQ. (MHz)	PSD (dBm/3kHz)		TOTAL (dBm/3kHz)	Limit (dBm/3kHz)	PASS /FAIL
		Chain 0	Chain 1			
1	2412	-15.66	-15.45	-12.54	8.00	PASS
6	2437	-15.82	-13.15	-11.27	8.00	PASS
11	2462	-14.99	-13.13	-10.95	8.00	PASS

Note: 1.Directiona Gain=1.56 +10*log(1.56)=3.49dBi, less 6dBi, so the limit is
no need to be reduced.

802.11n HT20

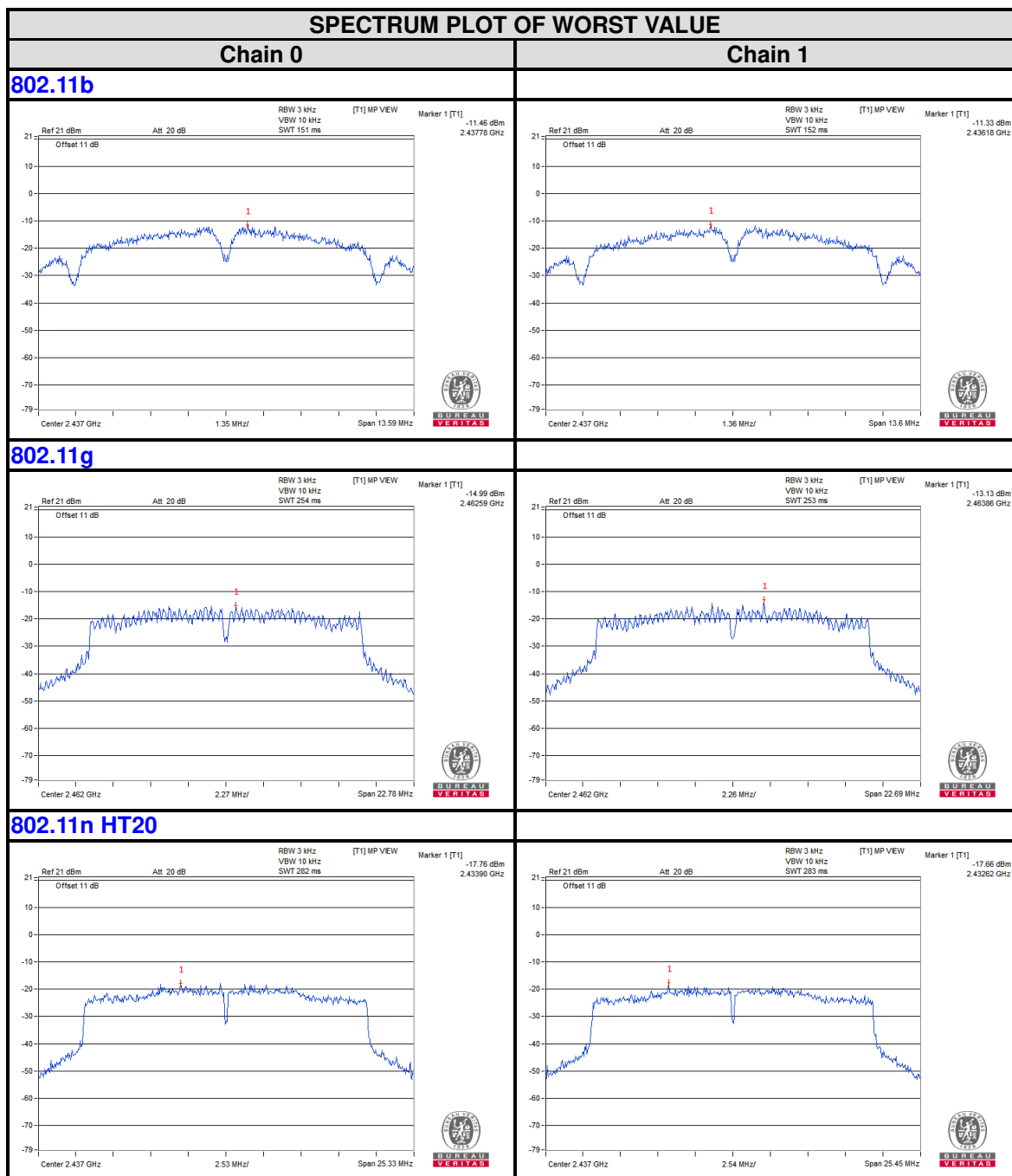
Channel	FREQ. (MHz)	PSD (dBm/3kHz)		TOTAL (dBm/3kHz)	Limit (dBm/3kHz)	PASS /FAIL
		Chain 0	Chain 1			
1	2412	-18.40	-18.93	-15.65	8.00	PASS
6	2437	-17.76	-17.66	-14.70	8.00	PASS
11	2462	-17.84	-18.07	-14.94	8.00	PASS

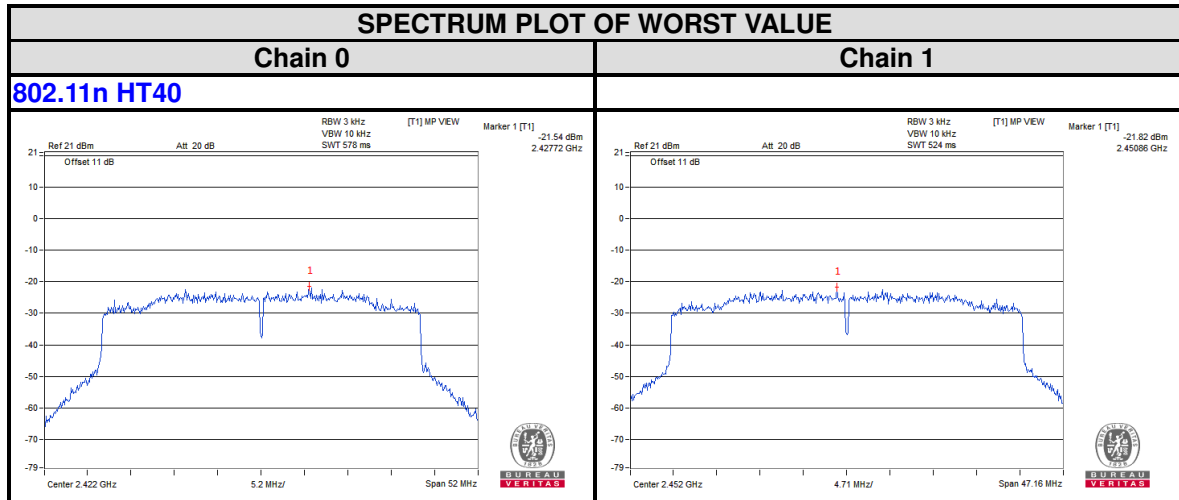
Note: 1.Directiona Gain=1.56 +10*log(1.56)=3.49dBi, less 6dBi, so the limit is
no need to be reduced.

802.11n HT40

Channel	FREQ. (MHz)	PSD (dBm/3kHz)		TOTAL (dBm/3kHz)	Limit (dBm/3kHz)	PASS /FAIL
		Chain 0	Chain 1			
3	2422	-21.54	-23.05	-19.22	8.00	PASS
6	2437	-22.24	-22.93	-19.56	8.00	PASS
9	2452	-23.01	-21.82	-19.36	8.00	PASS

Note: 1.Directiona Gain=1.56 +10*log(1.56)=3.49dBi, less 6dBi, so the limit is
no need to be reduced.





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 the RBW = 100 kHz.
2. Set the VBW $\geq$ 300 kHz.
3. Detector = peak.
4. Sweep time = auto couple.
5. Trace mode = max hold.
6. Allow trace to fully stabilize.
7. Use the peak marker function to determine the maximum power level in any 100 kHz band segment within the fundamental EBW.

Measurement Procedure –Unwanted Emission Level

1. Set RBW = 100 kHz.
2. Set VBW $\geq$ 300 kHz.
3. Set span to encompass the spectrum to be examined
4. Detector = peak.
5. Trace Mode = max hold.
6. Sweep = auto couple.

4.6.5 DEVIATION FROM TEST STANDARD

No deviation.

4.6.6 EUT OPERATING CONDITION

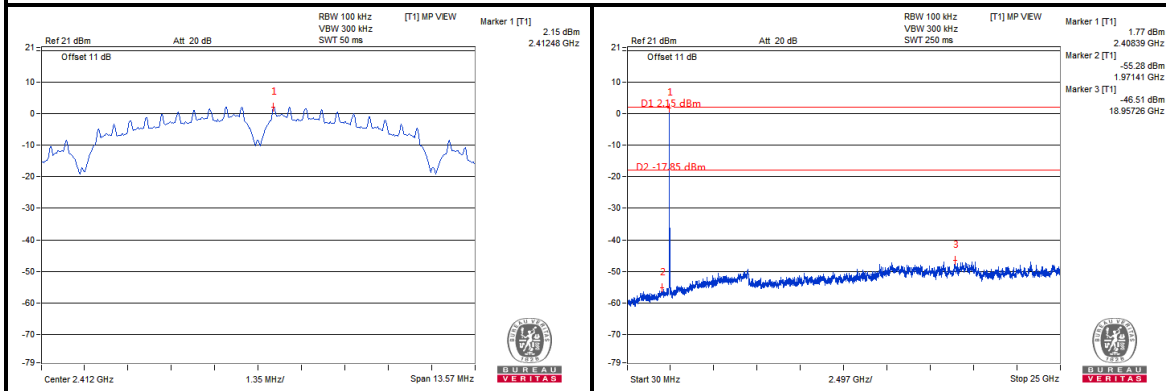
Same as item 4.3.6

4.6.7 TEST RESULTS

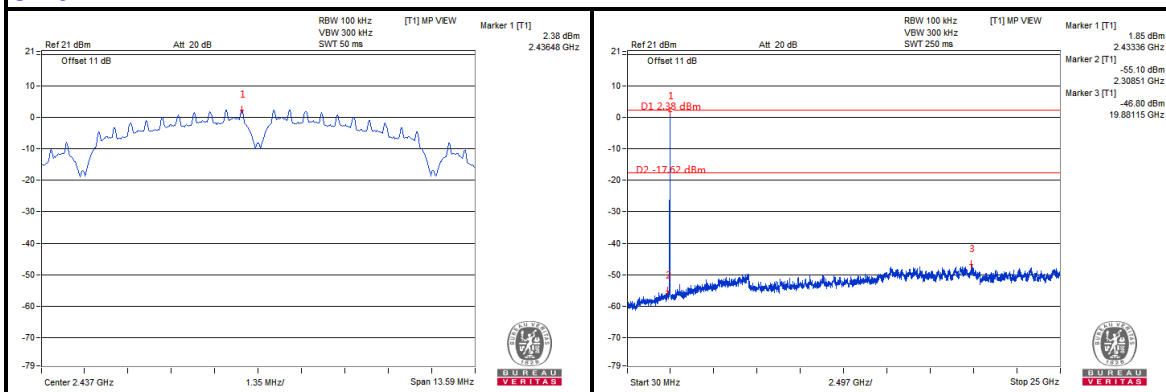
802.11b

Chain 0

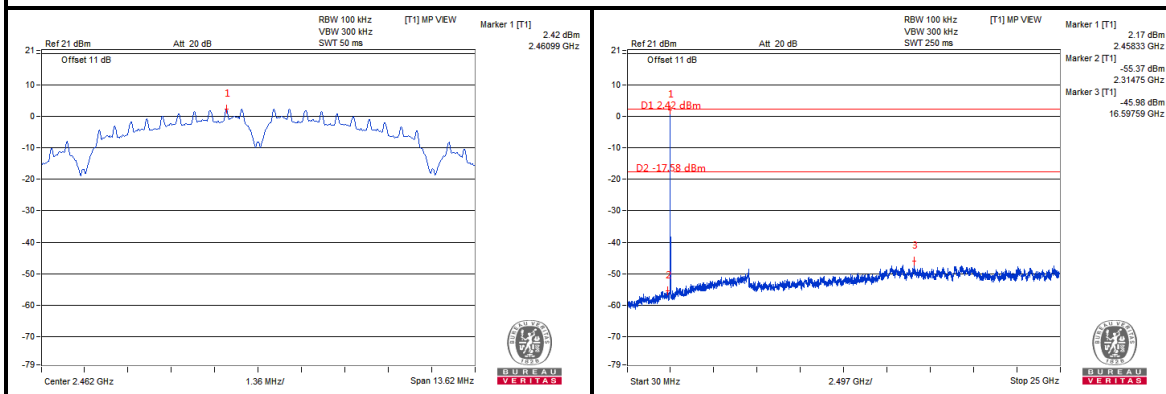
CH 1



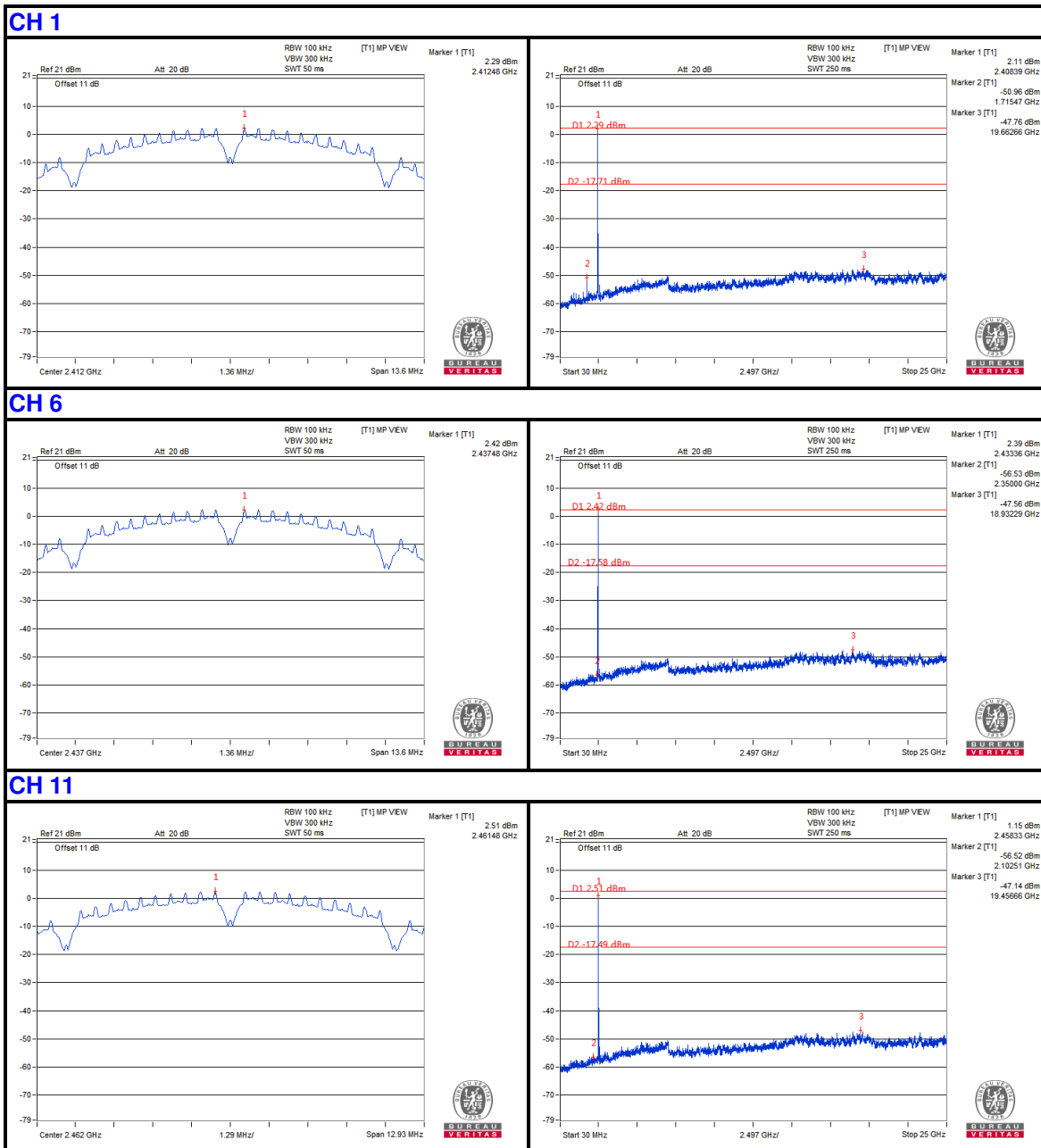
CH 6



CH 11

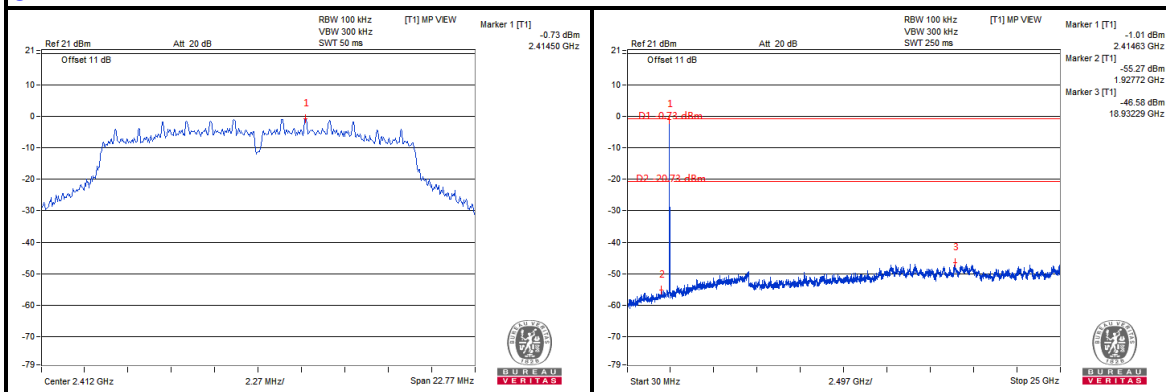


Chain 1

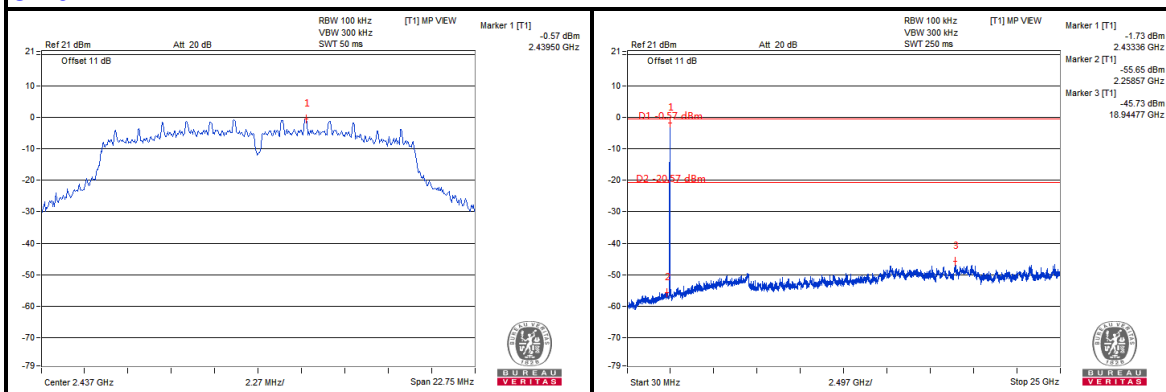


802.11g
Chain 0

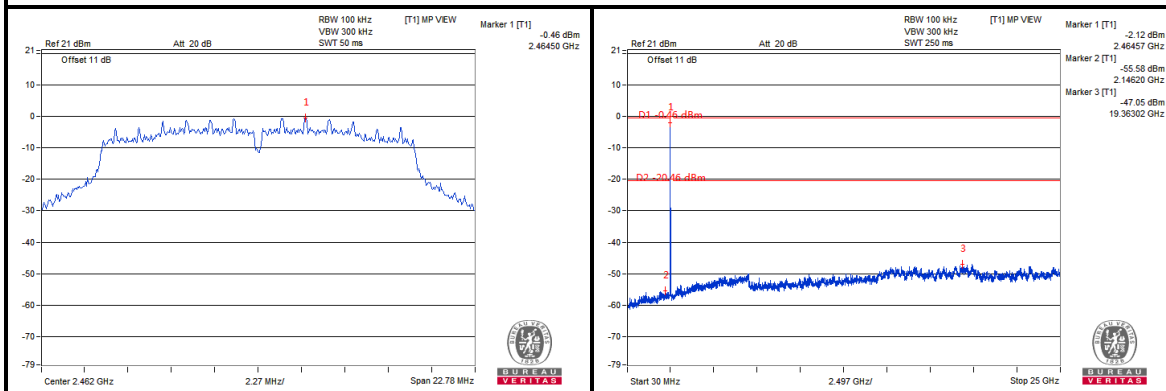
CH 1



CH 6

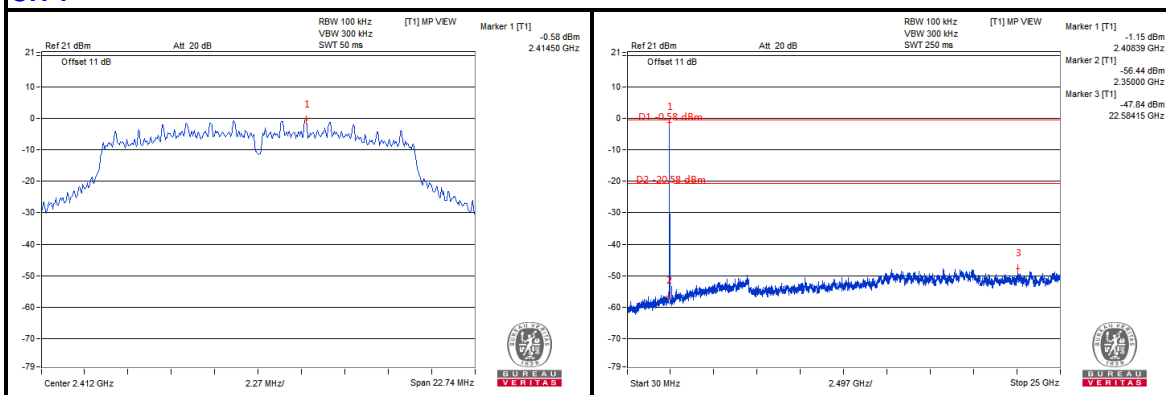


CH 11

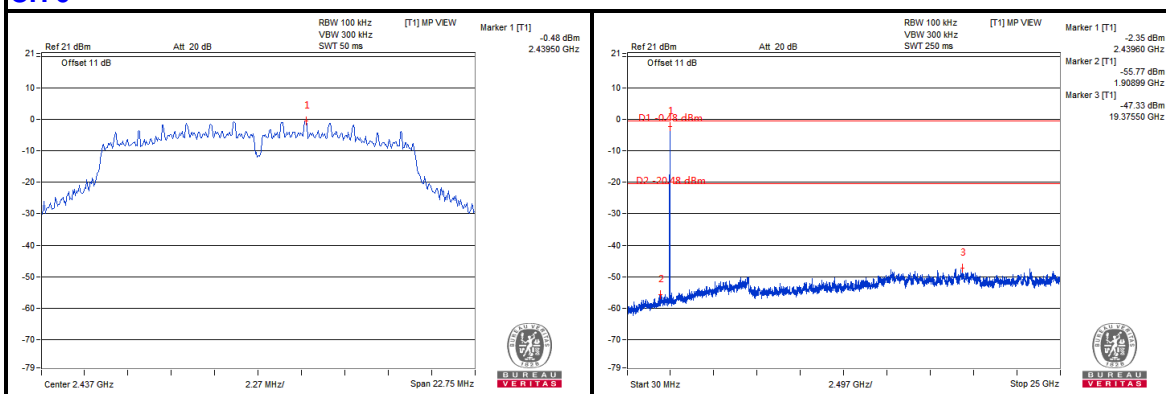


Chain 1

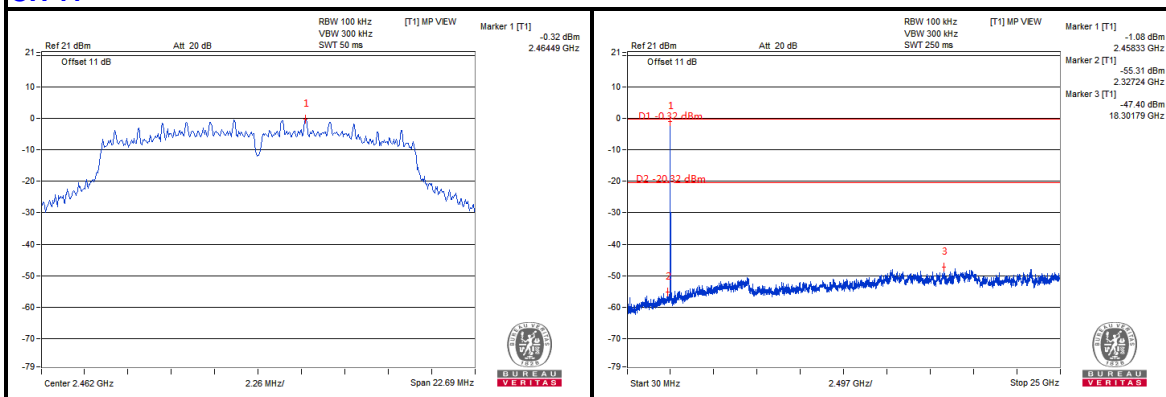
CH 1



CH 6



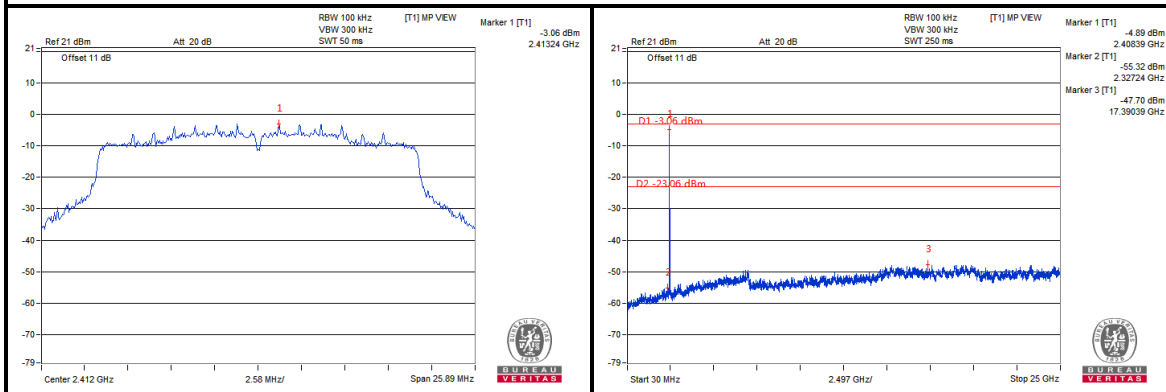
CH 11



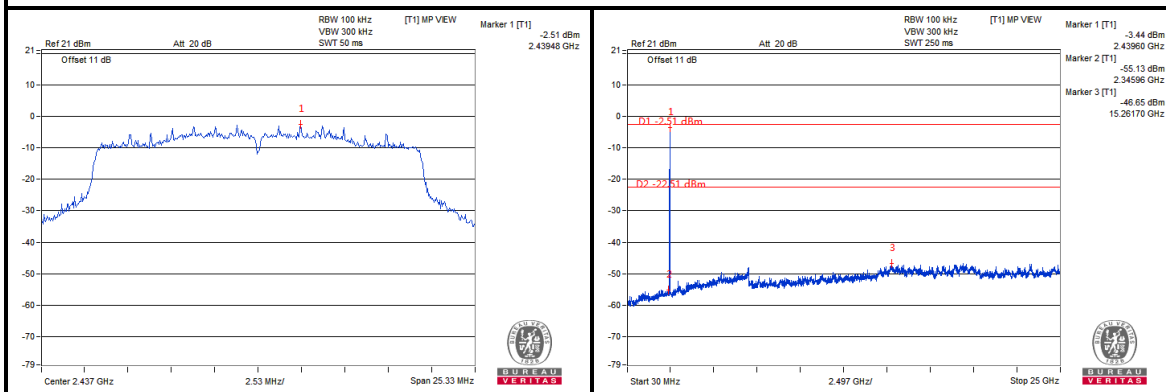
802.11n HT20

Chain 0

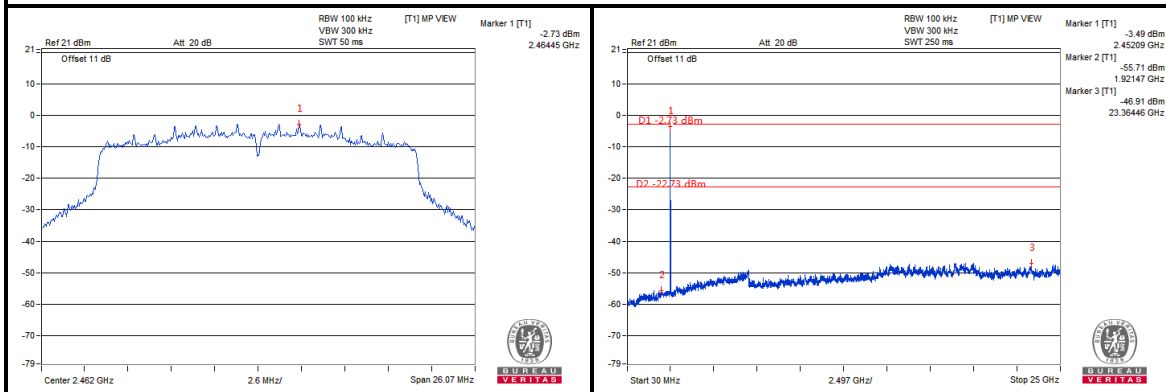
CH 1



CH 6

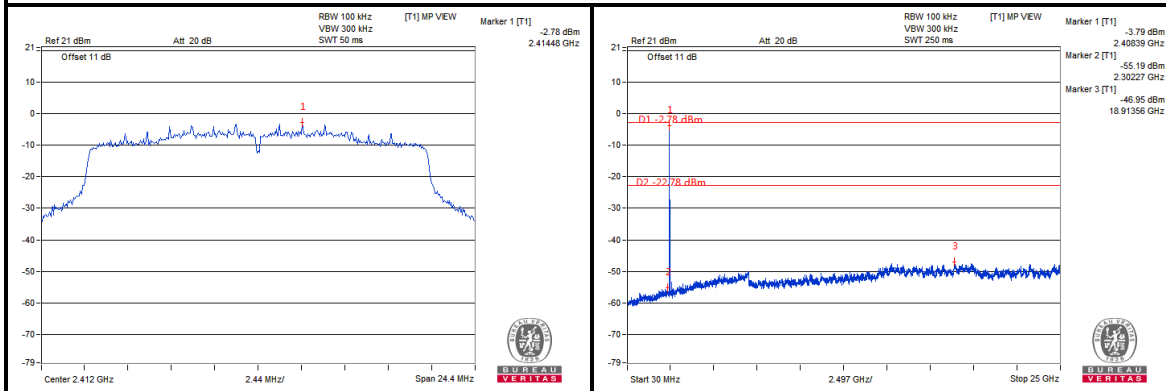


CH 11

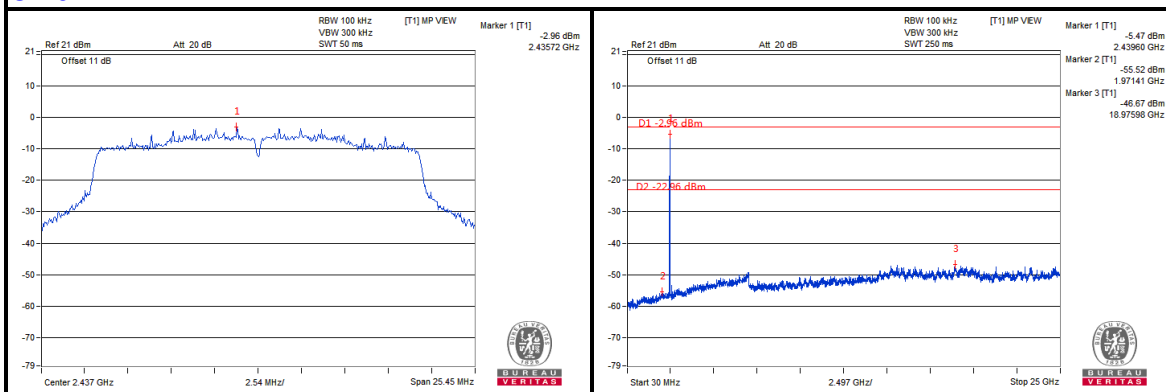


Chain 1

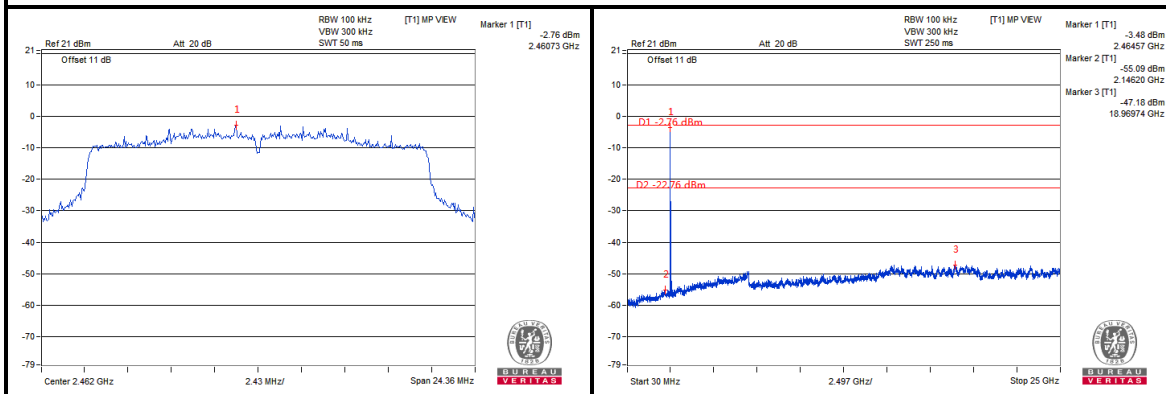
CH 1



CH 6

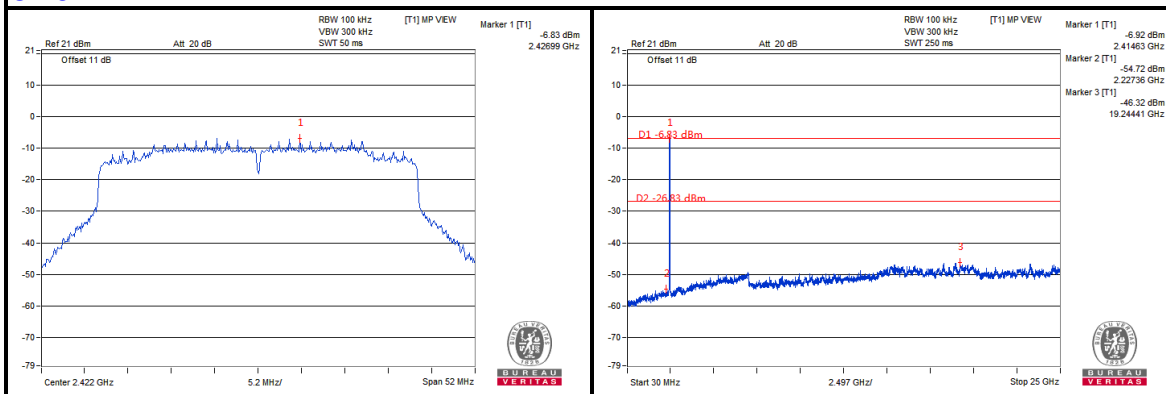


CH 11

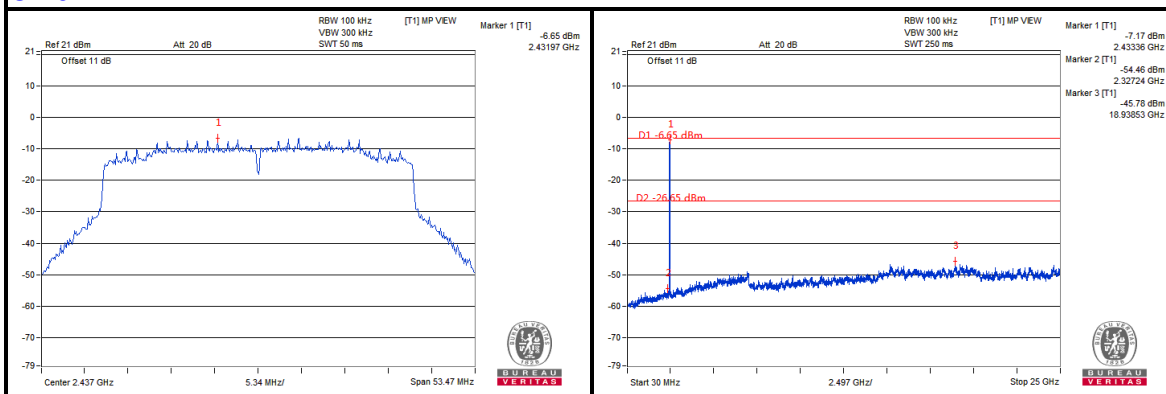


802.11n HT40
Chain 0

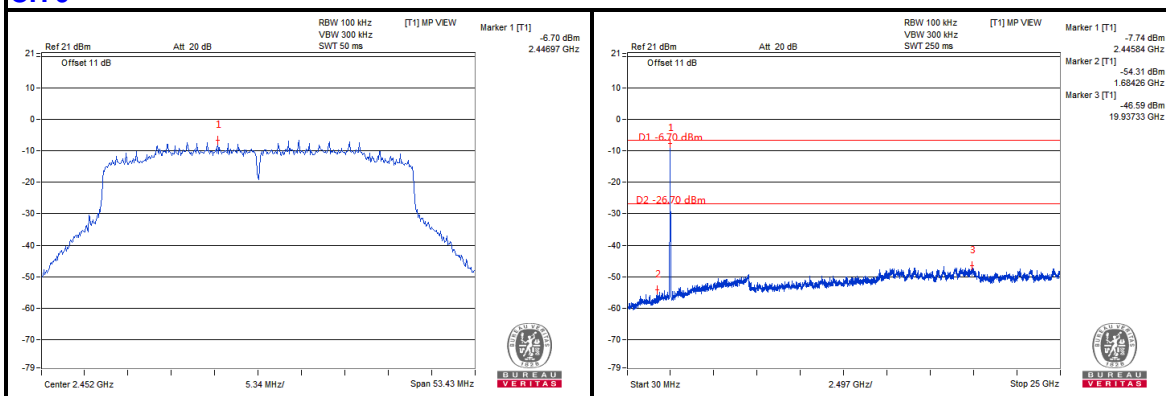
CH 3



CH 6

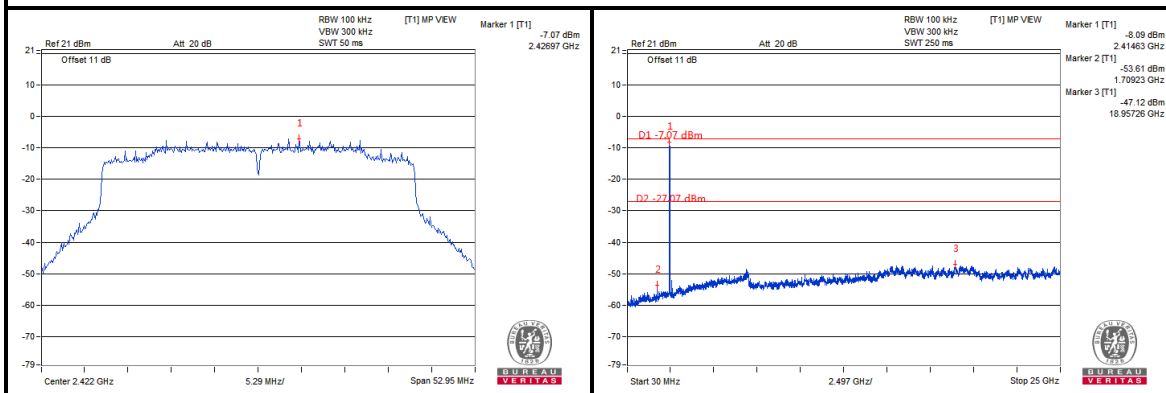


CH 9

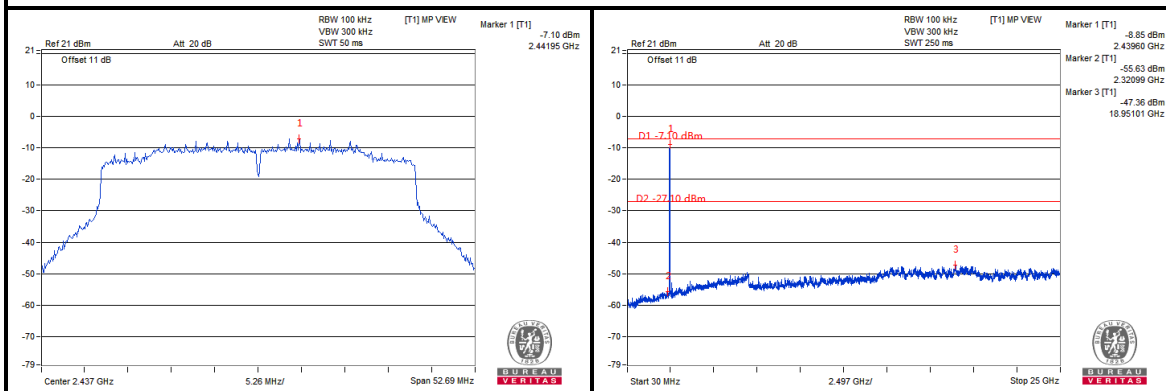


Chain 1

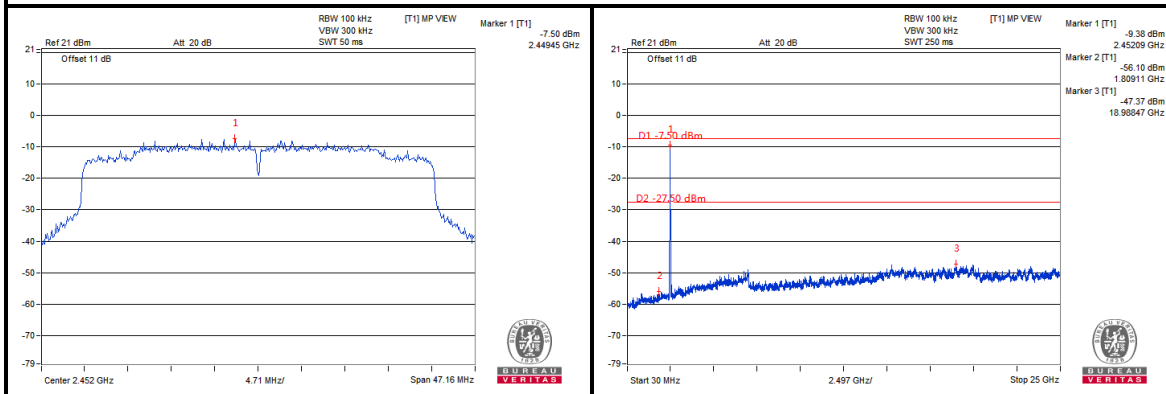
CH 3



CH 6

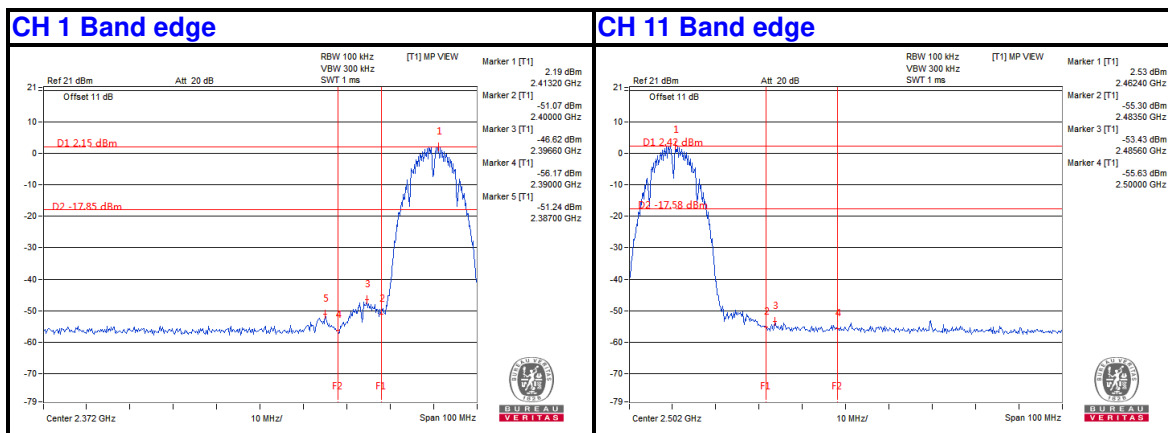


CH 9

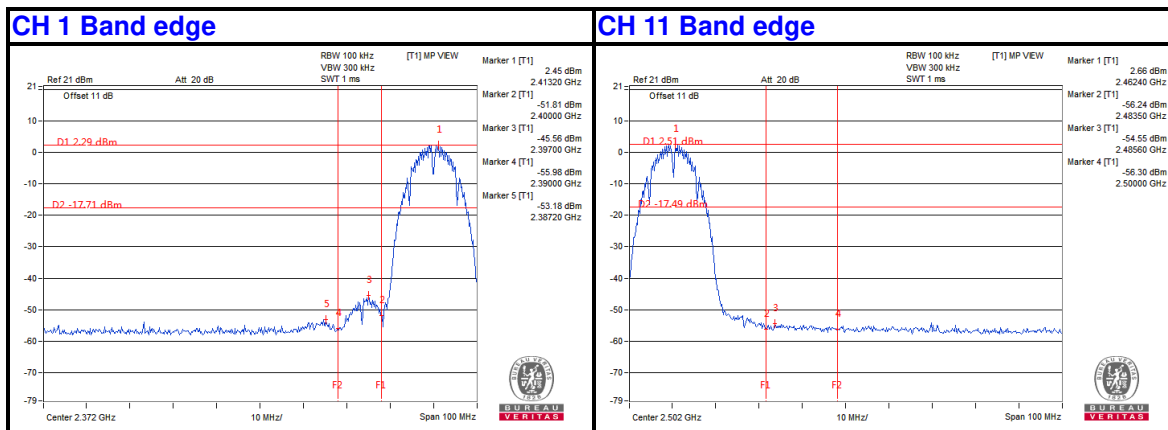


802.11b.

Chain 0

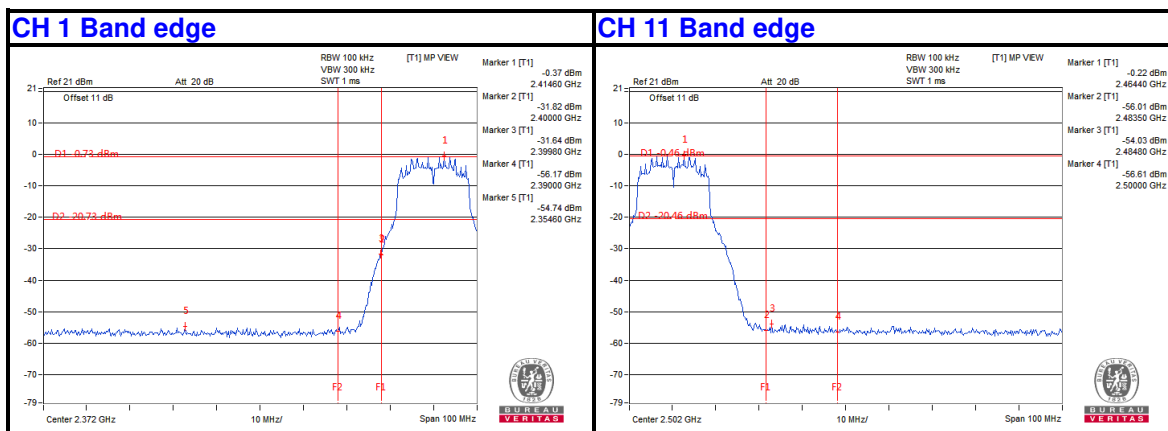


Chain 1

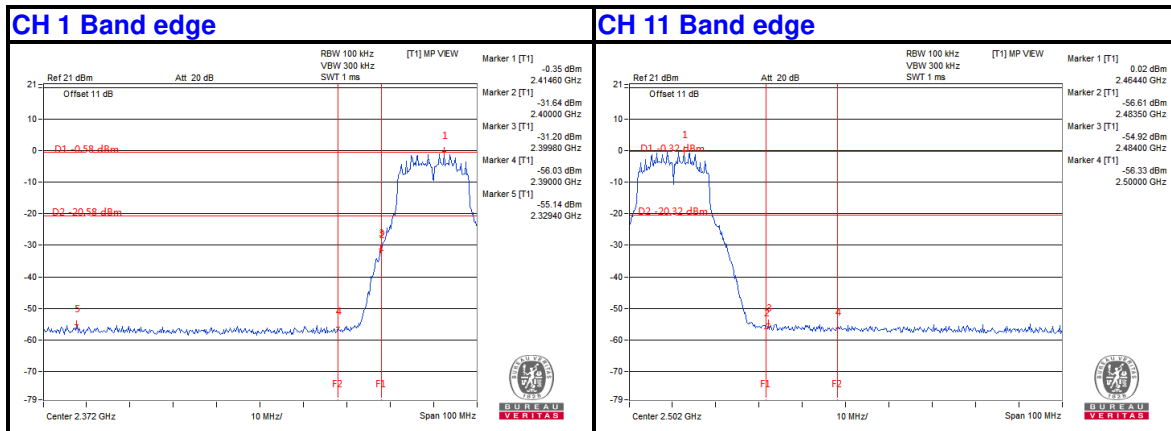


802.11g

Chain 0

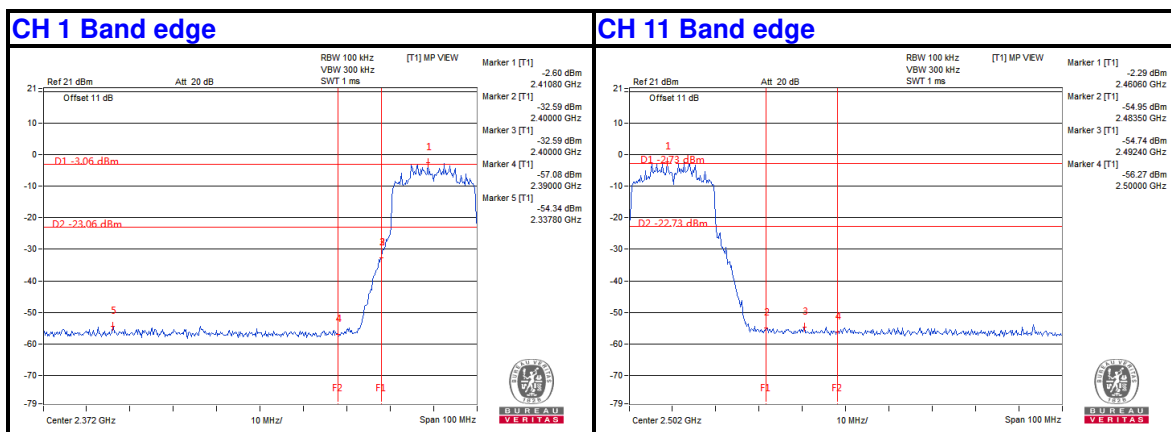


Chain 1

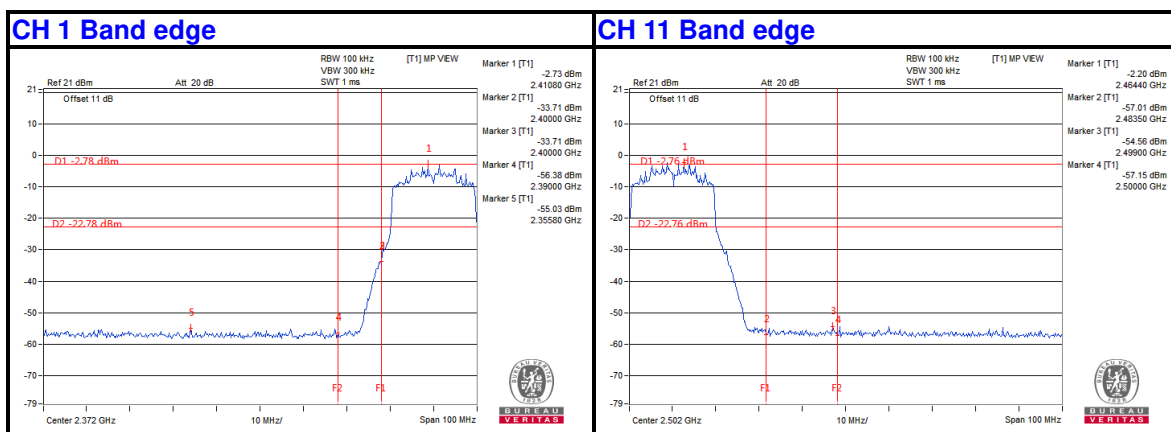


802.11n HT20

Chain 0



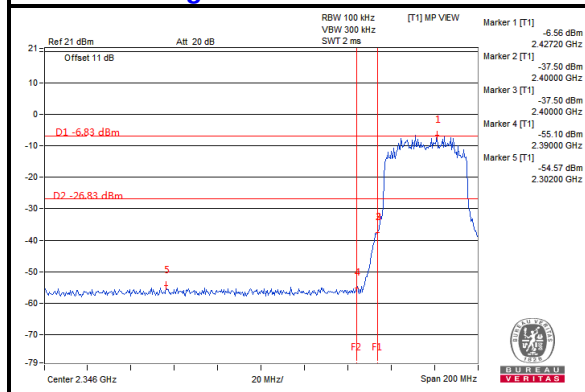
Chain 1



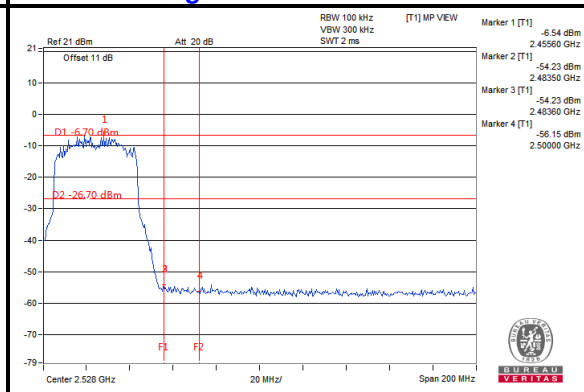
802.11n HT40

Chain 0

CH 3 Band edge

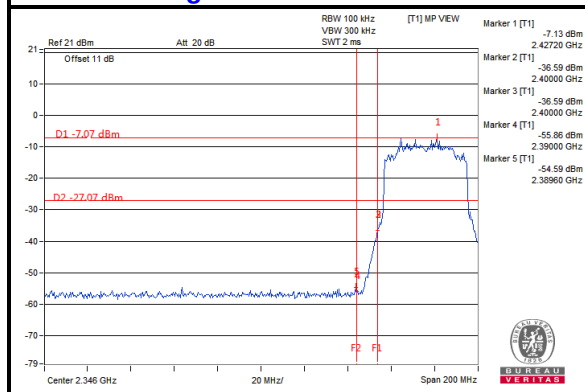


CH 9 Band edge

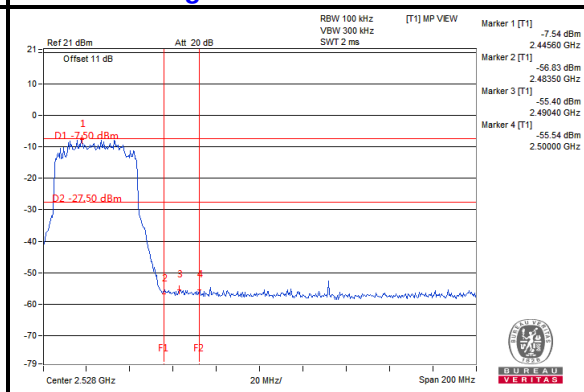


Chain 1

CH 3 Band edge



CH 9 Band edge





Test Report No.: RF2205WDG0306-3

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---