FCC Test Report

Report No.: RF151105C02

FCC ID: TE7C50V2

Test Model: Archer C50

Received Date: Nov. 05, 2015

Test Date: Nov. 18, 2015 ~ Feb. 17, 2016

Issued Date: Feb. 25, 2016

Applicant: TP-LINK TECHNOLOGIES CO., LTD.

Address: Building 24 (floors 1,3,4,5) and 28 (floors1-4) Central Science and Technology Park,Shennan Rd, Nanshan, Shenzhen,China

Issued By: Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch

Lab Address: No. 47-2, 14th Ling, Chia Pau Vil., Lin Kou Dist., New Taipei City, Taiwan, R.O.C.

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Table of Contents

Release Control Record

Issue No.	Description	Date Issued
RF151105C02	Original release	Feb. 25, 2016

1 Certificate of Conformity

Product:	AC1200 Wireless Dual Band Router
Brand:	TP-LINK
Test Model:	Archer C50
Sample Status:	Prototype
Applicant:	TP-LINK TECHNOLOGIES CO., LTD.
Test Date:	Nov. 18, 2015 ~ Feb. 17, 2016
Standards:	47 CFR FCC Part 15, Subpart C (Section 15.247) ANSI C63.10:2013

The above equipment has been tested by **Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's EMC characteristics under the conditions specified in this report.

Prepared by : , **Date:** Feb. 25, 2016

Ivy Lin / Specialist

Approved by : , **Date:** Feb. 25, 2016

Ken Liu / Senior Manager

2 Summary of Test Results

47 CFR FCC Part 15, Subpart C (Section 15.247)			
FCC Clause	Test Item	Result	Remarks
15.207	AC Power Conducted Emission	Pass	Meet the requirement of limit. Minimum passing margin is -1.83dB at 0.40391MHz
15.205 / 15.209 / 15.247(d)	Radiated Emissions and Band Edge Measurement	Pass	Meet the requirement of limit. Minimum passing margin is -0.1dB at 2483.50MHz, 2390.00MHz
15.247(d)	Antenna Port Emission	Pass	Meet the requirement of limit.
15.247(a)(2)	6dB bandwidth	Pass	Meet the requirement of limit.
15.247(b)	Conducted 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.

2.1 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	Expended Uncertainty (k=2) (

3 General Information

3.1 General Description of EUT

Product	AC1200 Wireless Dual Band Router
Brand	TP-LINK
Test Model	Archer C50
Status of EUT	Prototype
Power Supply Rating	12Vdc from adapter
Modulation Type	CCK, DQPSK, DBPSK for DSSS 64QAM, 16QAM, QPSK, BPSK for OFDM
Modulation Technology	DSSS, OFDM
Transfer Rate	802.11b:11.0/ 5.5/ 2.0/ 1.0Mbps 802.11g: 54.0/ 48.0/ 36.0/ 24.0/ 18.0/ 12.0/ 9.0/ 6.0Mbps 802.11n: up to 300Mbps
Operating Frequency	2412 ~ 2462MHz
Number of Channel	11 for 802.11b, 802.11g, 802.11n (HT20) 7 for 802.11n (HT40)
Output Power	837.608mW
Antenna Type	Refer to Note
Antenna Connector	Refer to Note
Accessory Device	Adapter
Data Cable Supplied	N/A

Note:

1. The EUT incorporates a MIMO function. Physically, the EUT provides 2 completed transmitters and 2 receivers.

Modulation Mode	TX Function
802.11b	2TX
802.11g	2TX
802.11n (HT20)	2TX
802.11n (HT40)	2TX

2. The following antennas were provided to the EUT.

Antenna	Type	Gain(dBi)	Connector
1	Omni-Directional	1.64	I-PEX
2	Omni-Directional	2.41	I-PEX

3. The EUT uses following adapters.

Adapter 1	
Brand	Huntkey
Model	HKA02412020-2N
Input Power	100-240Vac, 0.8A, 50/60Hz
Output Power	12.0Vdc, 2.0A
Power Line	1.8m DC cable with 1 core attached on adapter

Adapter 2	
Brand	TP-LINK TECHNOLOGIES CO., LTD.
Model	T120200-2B1
Input Power	100-240Vac, 50/60Hz, 0.8A
Output Power	12.0Vdc, 2A
Power Line	1.45m DC cable without core attached on adapter

3.2 Description of Test Modes

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

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

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 Test Mode Applicability and Tested Channel Detail

EUT CONFIGURE MODE	APPLICABLE TO				DESCRIPTION
	RE≥1G	RE<1G	PLC	APCM	
A	√	√	√	√	Power form adapter 1
B	-	√	√	-	Power form adapter 2

Where **RE≥1G:** Radiated Emission above 1GHz & Bandedge Measurement **RE<1G:** Radiated Emission below 1GHz

PLC: Power Line Conducted Emission **APCM:** Antenna Port Conducted Measurement

Note:
1. The EUT had been pre-tested on the positioned of X-plane and Z-plane. The worst case was found when positioned on **X-plane**.
2. "-"means no effect.

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 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	7.2
A	802.11n (HT40)	3 to 9	3, 6, 9	OFDM	BPSK	15.0

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 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, B	802.11g	1 to 11	6	OFDM	BPSK	6.0

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	MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
A, B	802.11g	1 to 11	6	OFDM	BPSK	6.0

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	7.2
A	802.11n (HT40)	3 to 9	3, 6, 9	OFDM	BPSK	15.0

Test Condition:

APPLICABLE TO	ENVIRONMENTAL CONDITIONS	INPUT POWER	TESTED BY
RE≥1G	24deg. C, 45%RH	120Vac, 60Hz	Nick Chen
RE<1G	24deg. C, 45%RH, 25deg. C, 55%RH	120Vac, 60Hz	Nick Chen
PLC	25deg. C, 65%RH, 16deg. C, 70%RH	120Vac, 60Hz	Nick Chen, Nick Hsu
APCM	25deg. C, 60%RH	120Vac, 60Hz	Nick Chen

3.3 Duty Cycle of Test Signal

Duty cycle of test signal is > 98%, duty factor is not required.

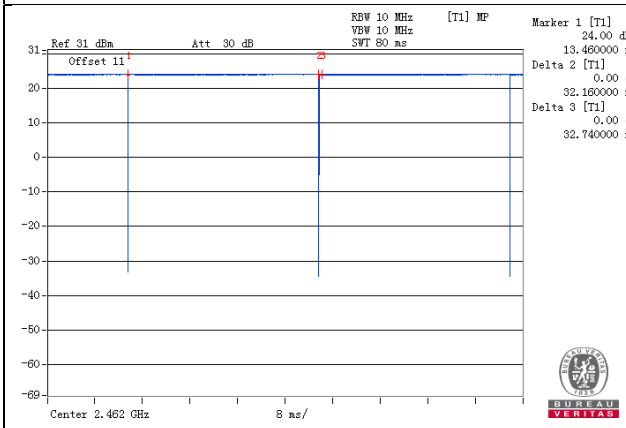
802.11b: Duty cycle = 32.16/32.74 = 0.982

802.11g: Duty cycle = 5.353/5.423 = 0.987

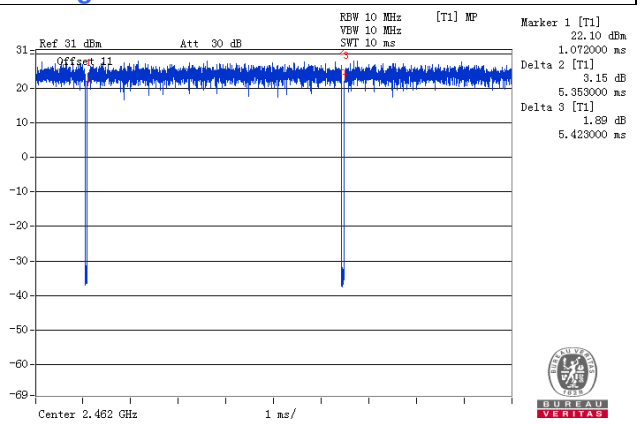
802.11n (HT20): Duty cycle = 4.955/5.015 = 0.988

802.11n (HT40): Duty cycle = 2.406/2.446 = 0.984

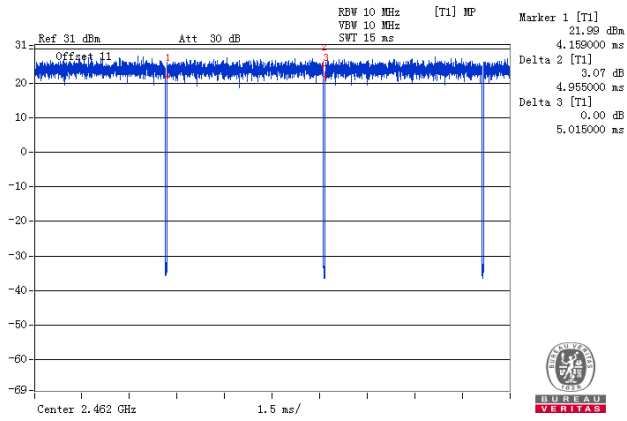
802.11b



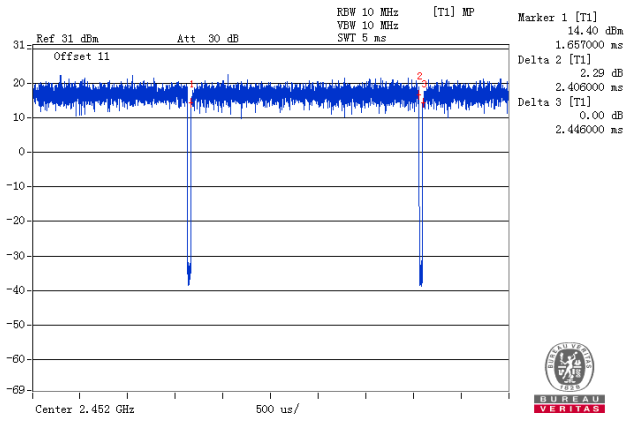
802.11g



802.11n (HT20)



802.11n (HT40)



3.4 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.

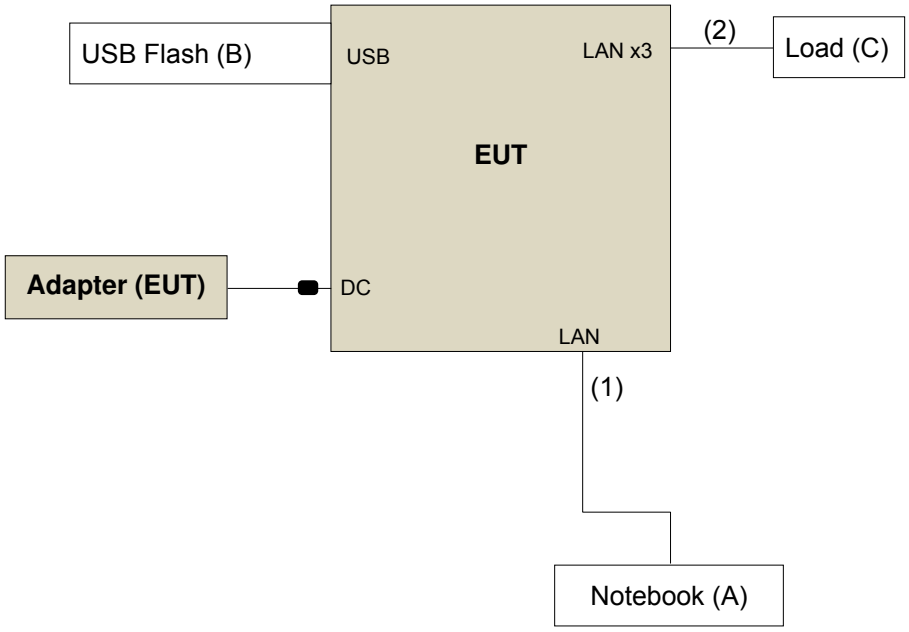
ID	Product	Brand	Model No.	Serial No.	FCC ID	Remarks
A.	Notebook	dell	E5430	79ZGLX1	FCC DoC Approved	-
B.	USB FLASH	HP	v250W	01	FCC DoC Approved	-
C.	Load	N/A	N/A	N/A	N/A	-

Note: All power cords of the above support units are non-shielded (1.8m).

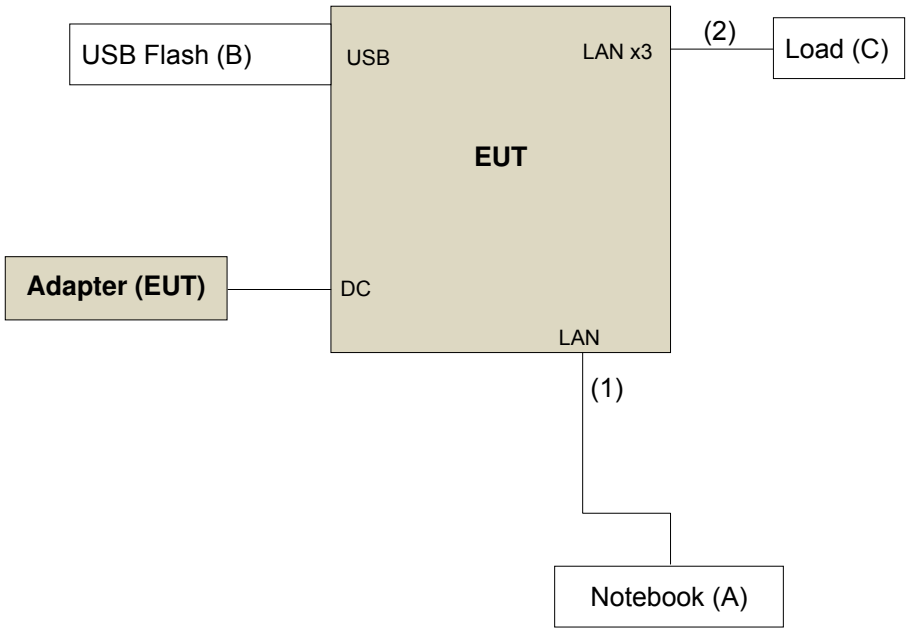
ID	Descriptions	Qty.	Length (m)	Shielding (Yes/No)	Cores (Qty.)	Remarks
1.	LAN cable	1	10	N	0	Cat5e
2.	LAN cable	4	1.8	N	0	Cat.5e

3.4.1 Configuration of System under Test

Mode A



Mode B


USB Flash (B)
USB
LAN x3
(2)
Load (C)
EUT
Adapter (EUT)
DC
LAN
(1)
Notebook (A)

3.5 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 (15.247)
558074 D01 DTS Meas Guidance v03r04
662911 D01 Multiple Transmitter Output v02r01
ANSI C63.10-2013

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

NOTE: The EUT has been verified to comply with the requirements of FCC Part 15, Subpart B, Class B (DoC). The test report has been issued separately.

4 Test Types and Results

4.1 Radiated Emission and Bandedge Measurement

4.1.1 Limits of Radiated Emission and Bandedge Measurement

Radiated emissions which fall in the restricted bands must comply with the radiated emission limits specified as below table. Other emissions shall be at least 30dB below the highest level of the desired power:

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

Note:

1. The lower limit shall apply at the transition frequencies.
2. Emission level (dBuV/m) = 20 log Emission level (uV/m).
3. 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 30dB under any condition of modulation.

4.1.2 Test Instruments

Test date: Dec. 03 ~ Dec. 11, 2015 & Jan. 25, 2016

Description & Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Due
Test Receiver ROHDE & SCHWARZ	ESCI	100424	Oct. 12, 2015	Oct. 11, 2016
Spectrum Analyzer ROHDE & SCHWARZ	FSP40	100269	Mar. 30, 2015	Mar. 29, 2016
BILOG Antenna SCHWARZBECK	VULB9168	9168-150	Feb. 02, 2015	Feb. 01, 2016
			Jan. 04, 2016	Jan. 03, 2017
HORN Antenna SCHWARZBECK	BBHA 9120 D	9120D-1169	Feb. 09, 2015	Feb. 08, 2016
			Jan. 08, 2016	Jan. 07, 2017
HORN Antenna SCHWARZBECK	BBHA 9170	BBHA9170241	Feb. 09, 2015	Feb. 08, 2016
			Jan. 18, 2016	Jan. 17, 2017
Preamplifier Agilent	8449B	3008A01911	Aug. 09, 2015	Aug. 08, 2016
Preamplifier Agilent	8447D	2944A10638	Aug. 09, 2015	Aug. 08, 2016
RF signal cable HUBER+SUHNER	SUCOFLEX 104	CABLE-CH9-02(309222 +248780)	Aug. 09, 2015	Aug. 08, 2016
RF signal cable HUBER+SUHNER	SUCOFLEX 104	CABLE-CH9-03(274092)	Aug. 09, 2015	Aug. 08, 2016
RF signal cable Woken	8D-FB	Cable-CH9-01	Aug. 11, 2015	Aug. 10, 2016
Software BV ADT	ADT_Radiated_ V7.6.15.9.4	NA	NA	NA
Antenna Tower EMCO	2070/2080	512.835.4684	NA	NA
Turn Table EMCO	2087-2.03	NA	NA	NA
Antenna Tower &Turn BV ADT	AT100	AT93021705	NA	NA
Turn Table BV ADT	TT100	TT93021705	NA	NA
Turn Table Controller BV ADT	SC100	SC93021705	NA	NA
High Speed Peak Power Meter	ML2495A	0824011	Jul. 09, 2015	Jul. 08, 2016
Power Sensor	MA2411B	0738171	Jul. 09, 2015	Jul. 08, 2016

Note: 1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. The test was performed in HwaYa Chamber 9.
3. The horn antenna and preamplifier (model: 8449B) are used only for the measurement of emission frequency above 1GHz if tested.
4. The FCC Site Registration No. is 215374.
5. The IC Site Registration No. is IC 7450F-9.

4.1.3 Test Procedures

a. The EUT was placed on the top of a rotating table 0.8 meters (for below 1GHz) / 1.5 meters (for above 1GHz) above the ground at 3 meter chamber room for test. 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. The height of antenna 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 quasi-peak detect function and specified bandwidth with maximum hold mode when the test frequency is below 1 GHz.

f. The test-receiver system was set to peak and average detect function and specified bandwidth with maximum hold mode when the test frequency is above 1 GHz. If the peak reading value also meets average limit, measurement with the average detector is unnecessary.

Note:

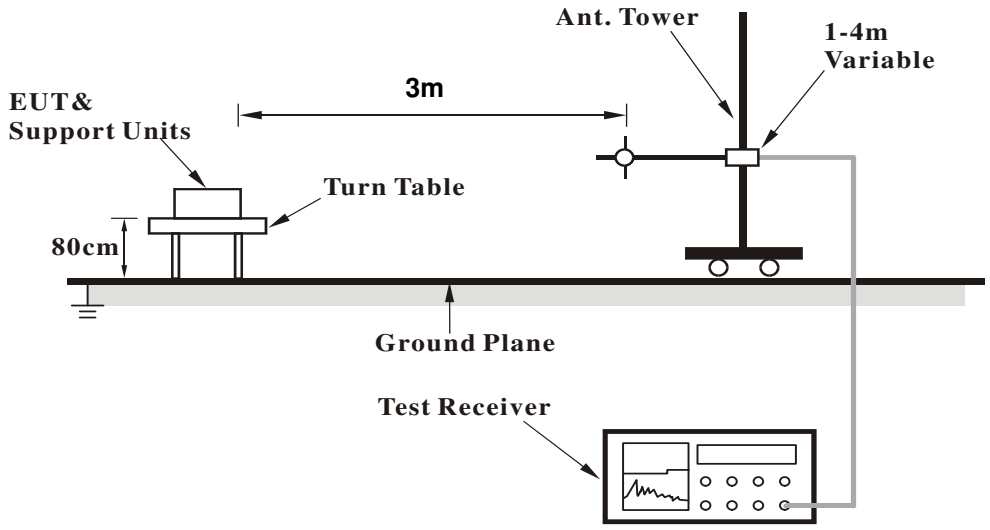
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection (QP) at frequency below 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz for Peak detection (PK) at frequency above 1GHz.
3. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is 3MHz for RMS Average (Duty cycle < 98%) for Average detection (AV) at frequency above 1GHz, then the measurement results was added to a correction factor (10 log(1/duty cycle)).
4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is 10Hz (Duty cycle ≥ 98%) for Average detection (AV) at frequency above 1GHz.
5. All modes of operation were investigated and the worst-case emissions are reported.

4.1.4 Deviation from Test Standard

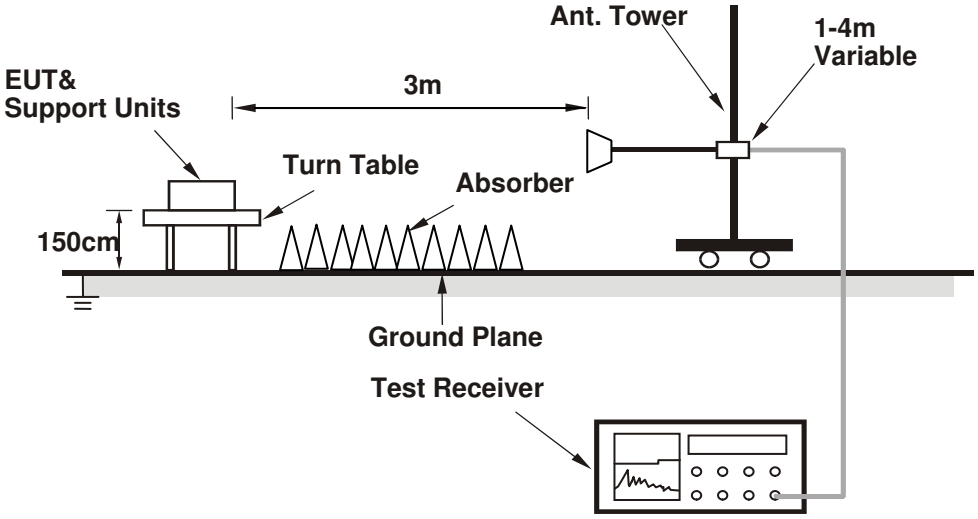
No deviation.

4.1.5 Test Set Up

<Frequency Range below 1GHz>



<Frequency Range above 1GHz>



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

4.1.6 EUT Operating Conditions

a. Placed the EUT on the testing table.
b. Prepared notebook to act as communication partner and placed it outside of testing area.
c. The communication partner connected with EUT via a RJ45 cable and ran a test program (provided by manufacturer) to enable EUT under transmission condition continuously at specific channel frequency.
d. The communication partner sent data to EUT by command "PING".
e. The necessary accessories enable the system in full functions.

4.1.7 Test Results

Above 1GHz data:

802.11b

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

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	55.0 PK	74.0	-19.0	1.42 H	136	20.20	34.80
2	2390.00	48.7 AV	54.0	-5.3	1.42 H	136	13.90	34.80
3	*2412.00	105.9 PK			1.34 H	251	71.00	34.90
4	*2412.00	102.9 AV			1.34 H	251	68.00	34.90
5	4824.00	57.0 PK	74.0	-17.0	1.25 H	179	52.60	4.40
6	4824.00	43.3 AV	54.0	-10.7	1.25 H	179	38.90	4.40
7	#7236.00	62.9 PK	75.9	-13.0	1.46 H	226	52.90	10.00
8	#7236.00	49.5 AV	72.9	-23.4	1.46 H	226	39.50	10.00
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	62.9 PK	74.0	-11.1	1.65 V	64	28.10	34.80
2	2390.00	53.7 AV	54.0	-0.3	1.65 V	64	18.90	34.80
3	*2412.00	120.0 PK			1.00 V	61	85.10	34.90
4	*2412.00	116.2 AV			1.00 V	61	81.30	34.90
5	4824.00	55.8 PK	74.0	-18.2	1.67 V	188	51.40	4.40
6	4824.00	45.6 AV	54.0	-8.4	1.67 V	188	41.20	4.40
7	#7236.00	62.8 PK	90.0	-27.2	1.20 V	103	52.80	10.00
8	#7236.00	49.4 AV	86.2	-36.8	1.20 V	103	39.40	10.00

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 other emission levels were very low against the limit.
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) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

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	111.6 PK			1.38 H	52	76.60	35.00
2	*2437.00	108.5 AV			1.38 H	52	73.50	35.00
3	4874.00	49.4 PK	74.0	-24.6	1.91 H	21	44.90	4.50
4	4874.00	36.7 AV	54.0	-17.3	1.91 H	21	32.20	4.50
5	7311.00	51.7 PK	74.0	-22.3	1.06 H	293	41.60	10.10
6	7311.00	37.9 AV	54.0	-16.1	1.06 H	293	27.80	10.10
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	122.7 PK			1.01 V	356	87.70	35.00
2	*2437.00	118.9 AV			1.01 V	356	83.90	35.00
3	4874.00	52.4 PK	74.0	-21.6	1.64 V	294	47.90	4.50
4	4874.00	46.2 AV	54.0	-7.8	1.64 V	294	41.70	4.50
5	7311.00	55.3 PK	74.0	-18.7	1.54 V	229	45.20	10.10
6	7311.00	38.7 AV	54.0	-15.3	1.54 V	229	28.60	10.10

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 other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

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

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	107.8 PK			1.03 H	295	72.60	35.20
2	*2462.00	104.5 AV			1.03 H	295	69.30	35.20
3	2483.50	57.0 PK	74.0	-17.0	1.63 H	98	21.80	35.20
4	2483.50	48.4 AV	54.0	-5.6	1.63 H	98	13.20	35.20
5	4924.00	48.3 PK	74.0	-25.7	1.92 H	14	43.60	4.70
6	4924.00	35.7 AV	54.0	-18.3	1.92 H	14	31.00	4.70
7	7386.00	50.4 PK	74.0	-23.6	1.41 H	209	40.40	10.00
8	7386.00	38.1 AV	54.0	-15.9	1.41 H	209	28.10	10.00
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	118.8 PK			1.16 V	24	83.60	35.20
2	*2462.00	115.9 AV			1.16 V	24	80.70	35.20
3	2483.50	63.5 PK	74.0	-10.5	1.79 V	327	28.30	35.20
4	**2483.50**	**53.9 AV**	**54.0**	**-0.1**	**1.79 V**	**327**	**18.70**	**35.20**
5	4924.00	48.2 PK	74.0	-25.8	1.24 V	218	43.50	4.70
6	4924.00	36.1 AV	54.0	-17.9	1.24 V	218	31.40	4.70
7	7386.00	51.2 PK	74.0	-22.8	1.89 V	25	41.20	10.00
8	7386.00	38.7 AV	54.0	-15.3	1.89 V	25	28.70	10.00

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 other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

802.11g

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

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	60.5 PK	74.0	-13.5	1.03 H	74	25.70	34.80
2	2390.00	46.9 AV	54.0	-7.1	1.03 H	74	12.10	34.80
3	*2412.00	110.1 PK			1.04 H	184	75.20	34.90
4	*2412.00	101.6 AV			1.04 H	184	66.70	34.90
5	4824.00	47.7 PK	74.0	-26.3	1.61 H	20	43.30	4.40
6	4824.00	37.2 AV	54.0	-16.8	1.61 H	20	32.80	4.40
7	#7236.00	50.3 PK	80.1	-29.8	1.12 H	304	40.30	10.00
8	#7236.00	38.5 AV	71.6	-33.1	1.12 H	304	28.50	10.00
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	67.5 PK	74.0	-6.5	1.35 V	24	32.70	34.80
2	**2390.00**	**53.9 AV**	**54.0**	**-0.1**	**1.35 V**	**24**	**19.10**	**34.80**
3	*2412.00	119.9 PK			1.05 V	338	85.00	34.90
4	*2412.00	112.1 AV			1.05 V	338	77.20	34.90
5	4824.00	47.6 PK	74.0	-26.4	1.99 V	58	43.20	4.40
6	4824.00	36.8 AV	54.0	-17.2	1.99 V	58	32.40	4.40
7	#7236.00	51.3 PK	89.9	-38.6	1.20 V	118	41.30	10.00
8	#7236.00	38.9 AV	82.1	-43.2	1.20 V	118	28.90	10.00

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 other emission levels were very low against the limit.
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) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

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	114.3 PK			1.38 H	54	79.30	35.00
2	*2437.00	107.0 AV			1.38 H	54	72.00	35.00
3	4874.00	49.6 PK	74.0	-24.4	1.18 H	40	45.10	4.50
4	4874.00	38.7 AV	54.0	-15.3	1.18 H	40	34.20	4.50
5	7311.00	51.2 PK	74.0	-22.8	1.78 H	105	41.10	10.10
6	7311.00	38.5 AV	54.0	-15.5	1.78 H	105	28.40	10.10
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	126.1 PK			1.24 V	351	91.10	35.00
2	*2437.00	119.2 AV			1.24 V	351	84.20	35.00
3	4874.00	53.7 PK	74.0	-20.3	1.37 V	236	49.20	4.50
4	4874.00	45.3 AV	54.0	-8.7	1.37 V	236	40.80	4.50
5	7311.00	52.5 PK	74.0	-21.5	1.87 V	111	42.40	10.10
6	7311.00	39.6 AV	54.0	-14.4	1.87 V	111	29.50	10.10

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 other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

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

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	110.5 PK			1.33 H	221	75.30	35.20
2	*2462.00	104.4 AV			1.33 H	221	69.20	35.20
3	2483.50	57.3 PK	74.0	-16.7	1.38 H	22	22.10	35.20
4	2483.50	47.3 AV	54.0	-6.7	1.38 H	22	12.10	35.20
5	4924.00	48.3 PK	74.0	-25.7	1.84 H	273	43.60	4.70
6	4924.00	35.0 AV	54.0	-19.0	1.84 H	273	30.30	4.70
7	7386.00	50.8 PK	74.0	-23.2	1.64 H	15	40.80	10.00
8	7386.00	37.7 AV	54.0	-16.3	1.64 H	15	27.70	10.00
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	119.4 PK			1.22 V	272	84.20	35.20
2	*2462.00	112.8 AV			1.22 V	272	77.60	35.20
3	2483.50	69.6 PK	74.0	-4.4	1.64 V	32	34.40	35.20
4	2483.50	53.8 AV	54.0	-0.2	1.64 V	32	18.60	35.20
5	4924.00	48.2 PK	74.0	-25.8	1.87 V	25	43.50	4.70
6	4924.00	36.9 AV	54.0	-17.1	1.87 V	25	32.20	4.70
7	7386.00	51.0 PK	74.0	-23.0	1.66 V	51	41.00	10.00
8	7386.00	38.6 AV	54.0	-15.4	1.66 V	51	28.60	10.00

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 other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

802.11n (HT20)

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

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	59.1 PK	74.0	-14.9	1.36 H	95	24.30	34.80
2	2390.00	48.3 AV	54.0	-5.7	1.36 H	95	13.50	34.80
3	*2412.00	108.6 PK			1.00 H	293	73.70	34.90
4	*2412.00	97.1 AV			1.00 H	293	62.20	34.90
5	4824.00	48.8 PK	74.0	-25.2	1.84 H	214	44.40	4.40
6	4824.00	36.6 AV	54.0	-17.4	1.84 H	214	32.20	4.40
7	#7236.00	50.8 PK	78.6	-27.8	1.34 H	20	40.80	10.00
8	#7236.00	38.7 AV	67.1	-28.4	1.34 H	20	28.70	10.00
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	68.6 PK	74.0	-5.4	2.01 V	27	33.80	34.80
2	2390.00	53.3 AV	54.0	-0.7	2.01 V	27	18.50	34.80
3	*2412.00	118.9 PK			1.01 V	336	84.00	34.90
4	*2412.00	108.5 AV			1.01 V	336	73.60	34.90
5	4824.00	48.7 PK	74.0	-25.3	1.82 V	122	44.30	4.40
6	4824.00	36.5 AV	54.0	-17.5	1.82 V	122	32.10	4.40
7	#7236.00	51.2 PK	88.9	-37.7	1.45 V	164	41.20	10.00
8	#7236.00	38.8 AV	78.5	-39.7	1.45 V	164	28.80	10.00

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 other emission levels were very low against the limit.
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) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

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	117.2 PK			1.48 H	213	82.20	35.00
2	*2437.00	107.6 AV			1.48 H	213	72.60	35.00
3	4874.00	50.6 PK	74.0	-23.4	1.09 H	47	46.10	4.50
4	4874.00	40.8 AV	54.0	-13.2	1.09 H	47	36.30	4.50
5	7311.00	53.6 PK	74.0	-20.4	1.73 H	221	43.50	10.10
6	7311.00	37.5 AV	54.0	-16.5	1.73 H	221	27.40	10.10
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	124.9 PK			1.54 V	202	89.90	35.00
2	*2437.00	115.5 AV			1.54 V	202	80.50	35.00
3	4874.00	52.5 PK	74.0	-21.5	1.23 V	27	48.00	4.50
4	4874.00	46.6 AV	54.0	-7.4	1.23 V	27	42.10	4.50
5	7311.00	55.2 PK	74.0	-18.8	1.62 V	179	45.10	10.10
6	7311.00	41.2 AV	54.0	-12.8	1.62 V	179	31.10	10.10

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 other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

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

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	109.1 PK			1.24 H	66	73.90	35.20
2	*2462.00	97.8 AV			1.24 H	66	62.60	35.20
3	2483.50	60.1 PK	74.0	-13.9	1.52 H	139	24.90	35.20
4	2483.50	48.5 AV	54.0	-5.5	1.52 H	139	13.30	35.20
5	4924.00	48.5 PK	74.0	-25.5	1.28 H	47	43.80	4.70
6	4924.00	35.5 AV	54.0	-18.5	1.28 H	47	30.80	4.70
7	7386.00	50.5 PK	74.0	-23.5	1.03 H	254	40.50	10.00
8	7386.00	37.7 AV	54.0	-16.3	1.03 H	254	27.70	10.00
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	120.4 PK			1.01 V	275	85.20	35.20
2	*2462.00	109.6 AV			1.01 V	275	74.40	35.20
3	2483.50	70.7 PK	74.0	-3.3	1.02 V	48	35.50	35.20
4	**2483.50**	**53.9 AV**	**54.0**	**-0.1**	**1.02 V**	**48**	**18.70**	**35.20**
5	4924.00	48.8 PK	74.0	-25.2	1.62 V	201	44.10	4.70
6	4924.00	36.5 AV	54.0	-17.5	1.62 V	201	31.80	4.70
7	7386.00	50.9 PK	74.0	-23.1	1.14 V	271	40.90	10.00
8	7386.00	38.5 AV	54.0	-15.5	1.14 V	271	28.50	10.00

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 other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

802.11n (HT40)

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

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	59.0 PK	74.0	-15.0	1.36 H	125	24.20	34.80
2	2390.00	46.4 AV	54.0	-7.6	1.36 H	125	11.60	34.80
3	*2422.00	102.6 PK			1.43 H	35	67.60	35.00
4	*2422.00	93.0 AV			1.43 H	35	58.00	35.00
5	4844.00	47.5 PK	74.0	-26.5	1.84 H	118	43.00	4.50
6	4844.00	35.9 AV	54.0	-18.1	1.84 H	118	31.40	4.50
7	7266.00	50.5 PK	74.0	-23.5	1.54 H	214	40.50	10.00
8	7266.00	37.9 AV	54.0	-16.1	1.54 H	214	27.90	10.00
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	68.1 PK	74.0	-5.9	1.88 V	33	33.30	34.80
2	2390.00	53.3 AV	54.0	-0.7	1.88 V	33	18.50	34.80
3	*2422.00	113.4 PK			1.09 V	354	78.40	35.00
4	*2422.00	103.8 AV			1.09 V	354	68.80	35.00
5	4844.00	48.6 PK	74.0	-25.4	1.22 V	40	44.10	4.50
6	4844.00	36.4 AV	54.0	-17.6	1.22 V	40	31.90	4.50
7	7266.00	51.5 PK	74.0	-22.5	1.69 V	172	41.50	10.00
8	7266.00	38.6 AV	54.0	-15.4	1.69 V	172	28.60	10.00

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 other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

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

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	110.8 PK			1.44 H	20	75.80	35.00
2	*2437.00	99.7 AV			1.44 H	20	64.70	35.00
3	4874.00	49.7 PK	74.0	-24.3	1.28 H	240	45.20	4.50
4	4874.00	37.5 AV	54.0	-16.5	1.28 H	240	33.00	4.50
5	7311.00	53.5 PK	74.0	-20.5	1.87 H	248	43.40	10.10
6	7311.00	40.6 AV	54.0	-13.4	1.87 H	248	30.50	10.10
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	119.2 PK			1.04 V	297	84.20	35.00
2	*2437.00	110.1 AV			1.04 V	297	75.10	35.00
3	4874.00	48.7 PK	74.0	-25.3	1.49 V	58	44.20	4.50
4	4874.00	37.6 AV	54.0	-16.4	1.49 V	58	33.10	4.50
5	7311.00	55.1 PK	74.0	-18.9	1.77 V	41	45.00	10.10
6	7311.00	41.0 AV	54.0	-13.0	1.77 V	41	30.90	10.10

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 other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

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

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	105.0 PK			1.48 H	341	73.10	31.90
2	*2452.00	96.6 AV			1.48 H	341	64.70	31.90
3	2483.50	59.2 PK	74.0	-14.8	1.16 H	87	27.30	31.90
4	2483.50	47.4 AV	54.0	-6.6	1.16 H	87	15.50	31.90
5	4904.00	46.5 PK	74.0	-27.5	1.52 H	208	12.10	34.40
6	4904.00	35.2 AV	54.0	-18.8	1.52 H	208	0.80	34.40
7	7356.00	50.2 PK	74.0	-23.8	1.64 H	22	15.00	35.20
8	7356.00	37.5 AV	54.0	-16.5	1.64 H	22	2.30	35.20
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	114.4 PK			1.49 V	199	79.40	35.00
2	*2452.00	104.1 AV			1.49 V	199	69.10	35.00
3	2483.50	69.5 PK	74.0	-4.5	1.95 V	154	34.30	35.20
4	2483.50	53.4 AV	54.0	-0.6	1.95 V	154	18.20	35.20
5	4904.00	48.5 PK	74.0	-25.5	1.82 V	217	43.80	4.70
6	4904.00	36.6 AV	54.0	-17.4	1.82 V	217	31.90	4.70
7	7356.00	51.2 PK	74.0	-22.8	1.48 V	14	41.20	10.00
8	7356.00	38.8 AV	54.0	-15.2	1.48 V	14	28.80	10.00

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 other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

Below 1GHz worst-case data: 802.11g

CHANNEL	TX Channel 6	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	30MHz ~ 1GHz		
TEST MODE	A		

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	30.00	25.2 QP	40.0	-14.8	2.00 H	0	40.80	-15.60
2	93.26	25.0 QP	43.5	-18.5	2.00 H	0	44.30	-19.30
3	299.91	27.0 QP	46.0	-19.0	2.00 H	0	39.40	-12.40
4	374.42	29.3 QP	46.0	-16.7	2.00 H	0	40.10	-10.80
5	499.54	29.9 QP	46.0	-16.1	2.00 H	0	38.10	-8.20
6	624.65	33.3 QP	46.0	-12.7	2.00 H	0	39.10	-5.80
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	30.41	36.6 QP	40.0	-3.4	1.00 V	1	52.30	-15.70
2	58.12	31.5 QP	40.0	-8.5	1.00 V	0	46.10	-14.60
3	101.70	27.5 QP	43.5	-16.0	1.00 V	0	46.20	-18.70
4	142.46	27.0 QP	43.5	-16.5	1.00 V	0	41.20	-14.20
5	374.42	30.8 QP	46.0	-15.2	1.00 V	0	41.60	-10.80
6	499.54	29.3 QP	46.0	-16.7	1.00 V	0	37.50	-8.20

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 other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value

CHANNEL	TX Channel 6	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	30MHz ~ 1GHz		
TEST MODE	B		

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	31.41	25.2 QP	40.0	-14.8	1.00 H	162	39.10	-13.90
2	93.26	25.0 QP	43.5	-18.5	1.25 H	210	46.90	-21.90
3	159.33	22.5 QP	43.5	-21.0	1.00 H	11	43.30	-20.80
4	288.67	24.7 QP	46.0	-21.3	2.00 H	166	42.80	-18.10
5	360.36	21.9 QP	46.0	-24.1	1.49 H	339	38.00	-16.10
6	756.80	28.4 QP	46.0	-17.6	1.25 H	8	36.50	-8.10
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	31.41	28.2 QP	40.0	-11.8	1.00 V	211	42.10	-13.90
2	69.36	20.2 QP	40.0	-19.8	1.25 V	119	46.00	-25.80
3	188.86	15.7 QP	43.5	-27.8	1.00 V	339	38.20	-22.50
4	312.57	19.2 QP	46.0	-26.8	1.25 V	89	36.40	-17.20
5	496.72	19.2 QP	46.0	-26.8	1.00 V	147	31.70	-12.50
6	700.57	24.5 QP	46.0	-21.5	1.49 V	33	33.90	-9.40

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 other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value

4.2 Conducted Emission Measurement

4.2.1 Limits of Conducted Emission Measurement

Frequency (MHz)	Conducted Limit (dBuV)	
	Quasi-peak	Average
0.15 - 0.5	66 - 56	56 - 46
0.50 - 5.0	56	46
5.0 - 30.0	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.

4.2.2 Test Instruments

Mode A: Test date: Nov. 18, 2015

Description & Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Due
Test Receiver ROHDE & SCHWARZ	ESCS 30	100288	Apr. 27, 2015	Apr. 26, 2016
RF signal cable (with 10dB PAD) Woken	5D-FB	Cable-cond2-01	Dec. 26, 2014	Dec. 25, 2015
LISN ROHDE & SCHWARZ (EUT)	ESH2-Z5	100100	Dec. 30, 2014	Dec. 29, 2015
LISN ROHDE & SCHWARZ (Peripheral)	ESH3-Z5	100312	Jul. 21, 2015	Jul. 20, 2016
Software ADT	BV ADT_Cond_ V7.3.7.3	NA	NA	NA

Note: 1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. The test was performed in HwaYa Shielded Room 2.
3. The VCCI Site Registration No. is C-2047.

Mode B: Test date: Feb. 17, 2016

Description & Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Due
Test Receiver ROHDE & SCHWARZ	ESCI	100613	Nov. 16, 2015	Nov. 15, 2016
RF signal cable (with 10dB PAD) Woken	5D-FB	Cable-cond1-01	Dec. 26, 2015	Dec. 25, 2016
LISN ROHDE & SCHWARZ (EUT)	ESH3-Z5	835239/001	Feb. 26, 2015	Feb. 25, 2016
LISN ROHDE & SCHWARZ (Peripheral)	ESH3-Z5	100311	Jul. 24, 2015	Jul. 23, 2016
Software ADT	BV ADT_Cond_ V7.3.7.3	NA	NA	NA

Note: 1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. The test was performed in HwaYa Shielded Room 1.
3. The VCCI Site Registration No. is C-2040.

4.2.3 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: The resolution bandwidth and video bandwidth of test receiver is 9kHz for quasi-peak detection (QP) and average detection (AV) at frequency 0.15MHz-30MHz.

4.2.4 Deviation from Test Standard

No deviation.

4.2.5 Test Setup

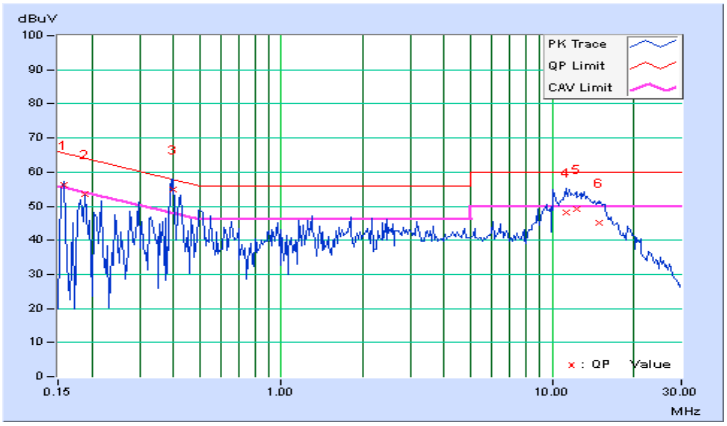
4.2.7 Test Results

Phase	Line (L)	Detector Function	Quasi-Peak (QP) / Average (AV)
Test Mode	A		

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15781	10.13	46.14	37.09	56.27	47.22	65.58	55.58	-9.31	-8.36
2	0.18906	10.15	43.25	32.24	53.40	42.39	64.08	54.08	-10.68	-11.69
3	0.40000	10.19	44.59	31.53	54.78	41.72	57.85	47.85	-3.07	-6.13
4	11.24609	10.50	37.64	30.87	48.14	41.37	60.00	50.00	-11.86	-8.63
5	12.32422	10.51	38.75	32.26	49.26	42.77	60.00	50.00	-10.74	-7.23
6	14.86328	10.53	34.61	28.53	45.14	39.06	60.00	50.00	-14.86	-10.94

Remarks:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value.

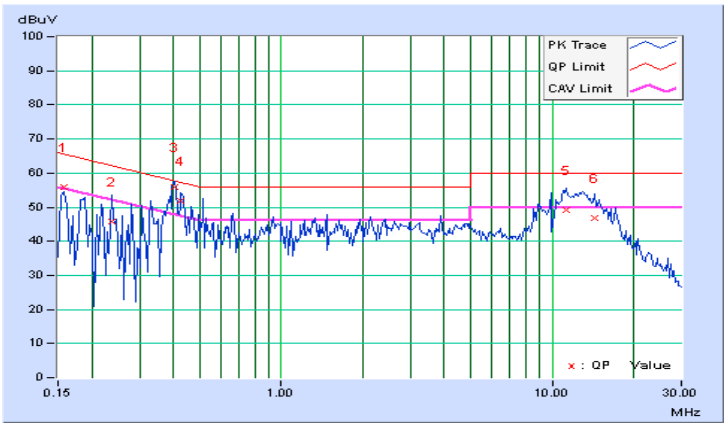


Phase	Neutral (N)	Detector Function	Quasi-Peak (QP) / Average (AV)
Test Mode	A		

No	Freq.	Corr. Factor	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15781	10.13	45.73	37.76	55.86	47.89	65.58	55.58	-9.71	-7.68
2	0.23594	10.17	35.48	16.65	45.65	26.82	62.24	52.24	-16.59	-25.42
3	**0.40391**	**10.19**	**45.75**	**34.07**	**55.94**	**44.26**	**57.77**	**47.77**	**-1.83**	**-3.51**
4	0.42734	10.19	41.53	28.70	51.72	38.89	57.30	47.30	-5.58	-8.41
5	11.34766	10.58	38.44	31.50	49.02	42.08	60.00	50.00	-10.98	-7.92
6	14.35938	10.64	36.06	29.17	46.70	39.81	60.00	50.00	-13.30	-10.19

Remarks:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value.

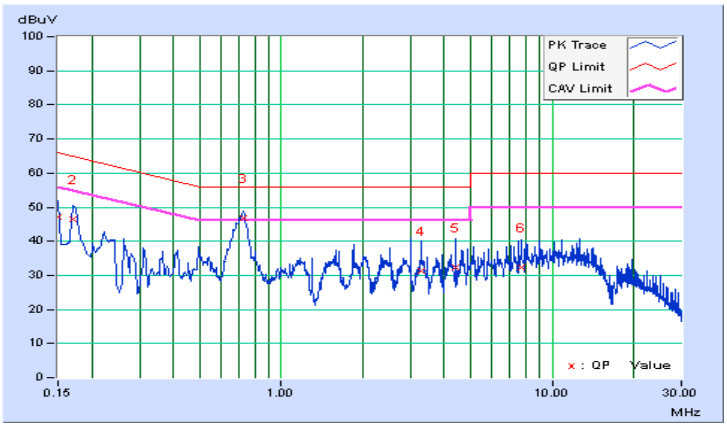


Phase	Line (L)	Detector Function	Quasi-Peak (QP) / Average (AV)
Test Mode	B		

No	Freq.	Corr. Factor	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15000	10.01	37.18	26.27	47.19	36.28	66.00	56.00	-18.81	-19.72
2	0.17022	10.06	36.38	24.67	46.44	34.73	64.95	54.95	-18.51	-20.22
3	0.72685	10.22	36.54	30.93	46.76	41.15	56.00	46.00	-9.24	-4.85
4	3.29000	10.37	21.03	16.46	31.40	26.83	56.00	46.00	-24.60	-19.17
5	4.40200	10.45	21.79	8.25	32.24	18.70	56.00	46.00	-23.76	-27.30
6	7.68600	10.61	21.73	16.87	32.34	27.48	60.00	50.00	-27.66	-22.52

Remarks:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value.

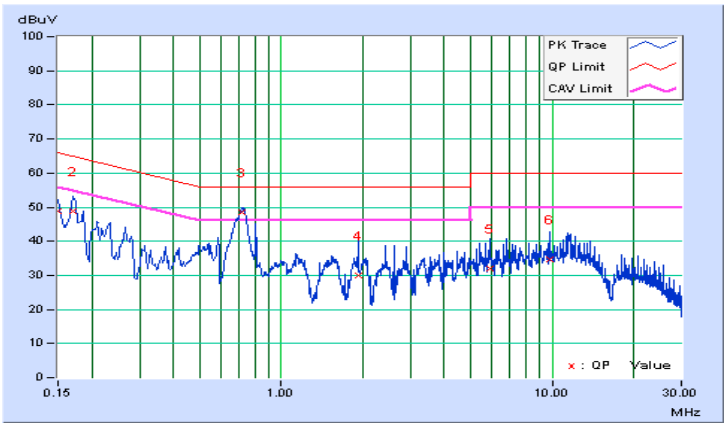


Phase	Neutral (N)	Detector Function	Quasi-Peak (QP) / Average (AV)
Test Mode	B		

No	Freq.	Corr. Factor	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15000	10.00	38.97	28.42	48.97	38.42	66.00	56.00	-17.03	-17.58
2	0.17022	10.02	38.64	28.58	48.66	38.60	64.95	54.95	-16.29	-16.35
3	0.71923	10.19	38.32	31.17	48.51	41.36	56.00	46.00	-7.49	-4.64
4	1.93000	10.28	19.65	13.70	29.93	23.98	56.00	46.00	-26.07	-22.02
5	5.88200	10.50	21.49	16.72	31.99	27.22	60.00	50.00	-28.01	-22.78
6	9.85800	10.61	24.02	18.43	34.63	29.04	60.00	50.00	-25.37	-20.96

Remarks:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value.

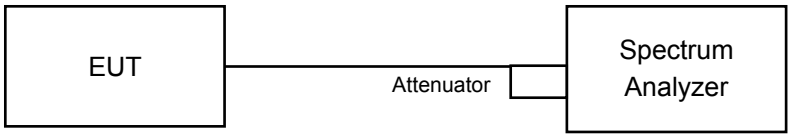


4.3 6dB Bandwidth Measurement

4.3.1 Limits of 6dB Bandwidth Measurement

The minimum of 6dB Bandwidth Measurement is 0.5 MHz.

4.3.2 Test Setup



4.3.3 Test Instruments

Refer to section 4.1.2 to get information of above instrument.

4.3.4 Test Procedure

558074 D01 DTS Meas Guidance v03r04 section 8.1

a. Set resolution bandwidth (RBW) = 100kHz

b. Set the video bandwidth (VBW) ≥ 3 x RBW, Detector = Peak.

c. Trace mode = max hold.

d. Sweep = auto couple.

e. 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

4.3.5 Deviation fromTest Standard

No deviation.

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 Result

802.11b

Channel	Frequency (MHz)	6dB Bandwidth (MHz)		Minimum Limit (MHz)	Pass / Fail
		CHAIN 0	CHAIN 1		
1	2412	9.08	10.05	0.5	PASS
6	2437	10.07	10.07	0.5	PASS
11	2462	10.05	10.08	0.5	PASS

802.11g

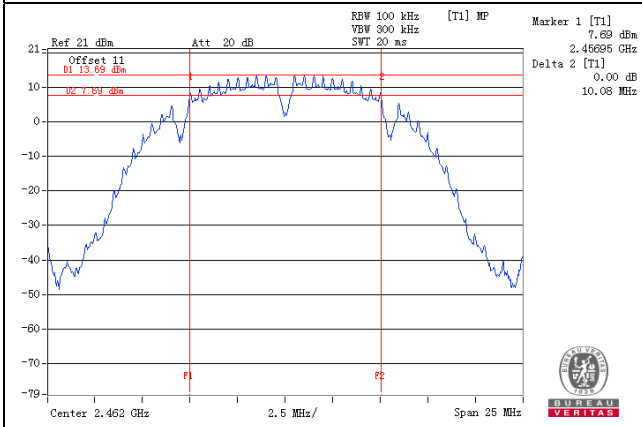
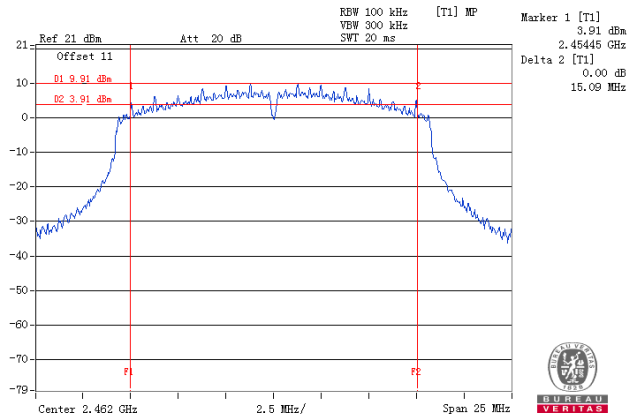
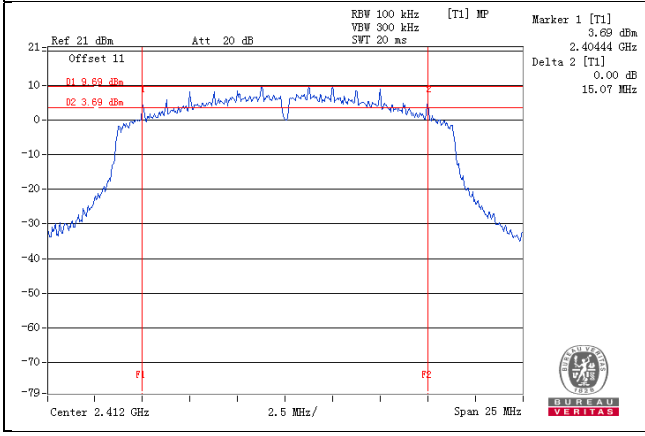
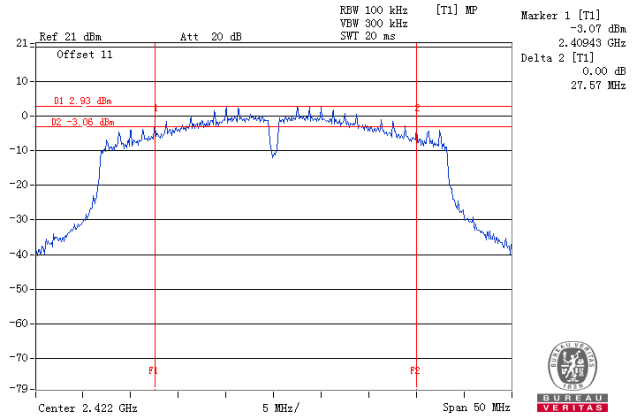
Channel	Frequency (MHz)	6dB Bandwidth (MHz)		Minimum Limit (MHz)	Pass / Fail
		CHAIN 0	CHAIN 1		
1	2412	12.64	15.07	0.5	PASS
6	2437	13.86	15.03	0.5	PASS
11	2462	13.81	15.09	0.5	PASS

802.11n (HT20)

Channel	Frequency (MHz)	6dB Bandwidth (MHz)		Minimum Limit (MHz)	Pass / Fail
		CHAIN 0	CHAIN 1		
1	2412	13.79	15.07	0.5	PASS
6	2437	12.63	15.05	0.5	PASS
11	2462	13.84	15.05	0.5	PASS

802.11n (HT40)

Channel	Frequency (MHz)	6dB Bandwidth (MHz)		Minimum Limit (MHz)	Pass / Fail
		CHAIN 0	CHAIN 1		
3	2422	25.11	27.57	0.5	PASS
6	2437	26.33	23.86	0.5	PASS
9	2452	26.35	26.26	0.5	PASS

Spectrum Plot of Worst Value	
802.11b	**802.11g**
	
802.11n (HT20)	**802.11n (HT40)**
	

4.4 Conducted Output Power Measurement

4.4.1 Limits of Conducted Output Power Measurement

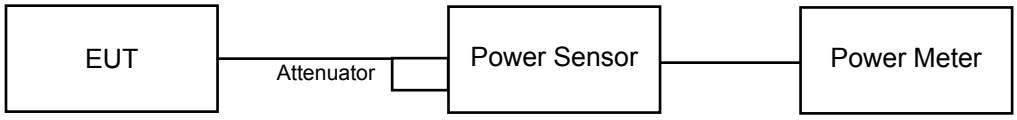
For systems using digital modulation in the 2400–2483.5 MHz bands: 1 Watt (30dBm)

Per KDB 662911 D01 Multiple Transmitter Output Method of conducted output power measurement on IEEE 802.11 devices,

Array Gain = 0 dB (i.e., no array gain) for $N_{ANT} \leq 4$;
Array Gain = 0 dB (i.e., no array gain) for channel widths ≥ 40 MHz for any N_{ANT};
Array Gain = 5 log(N_{ANT}/N_{SS}) dB or 3 dB, whichever is less for 20-MHz channel widths with $N_{ANT} \geq 5$.

For power measurements on all other devices: Array Gain = 10 log(N_{ANT}/N_{SS}) dB.

4.4.2 Test Setup



4.4.3 Test Instruments

Refer to section 4.1.2 to get information of above instrument.

4.4.4 Test Procedures

558074 D01 DTS Meas Guidance v03r04 section 9.2.3.2

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

4.4.5 Deviation from Test Standard

No deviation.

4.4.6 EUT Operating Conditions

Same as Item 4.3.6.

4.4.7 Test Results

802.11b

Chan.	Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
1	2412	22.81	22.66	375.487	25.75	30	Pass
6	2437	26.19	26.25	**837.608**	29.23	30	Pass
11	2462	22.61	22.42	356.972	25.53	30	Pass

802.11g

Chan.	Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
1	2412	20.90	20.71	240.788	23.82	30	Pass
6	2437	26.01	26.15	811.123	29.09	30	Pass
11	2462	20.19	20.13	207.511	23.17	30	Pass

802.11n (HT20)

Chan.	Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
1	2412	20.54	20.36	221.883	23.46	30	Pass
6	2437	26.11	26.07	812.895	29.10	30	Pass
11	2462	20.27	20.13	209.453	23.21	30	Pass

802.11n (HT40)

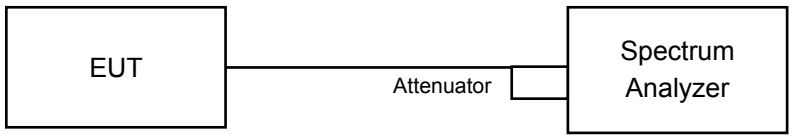
Chan.	Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
3	2422	15.68	15.55	72.875	18.63	30	Pass
6	2437	21.12	21.33	265.251	24.24	30	Pass
9	2452	16.01	15.80	77.921	18.92	30	Pass

4.5 Power Spectral Density Measurement

4.5.1 Limits of Power Spectral Density Measurement

The Maximum of Power Spectral Density Measurement is 8dBm.

4.5.2 Test Setup



4.5.3 Test Instruments

Refer to section 4.1.2 to get information of above instrument.

4.5.4 Test Procedure

558074 D01 DTS Meas Guidance v03r04 section 10.3

a. Set instrument center frequency to DTS channel center frequency.
b. Set span to at least 1.5 times the OBW.
c. Set RBW to: 3 kHz ≤ RBW ≤ 100 kHz. .
d. Set VBW ≥3 x RBW.
e. Detector = power averaging (RMS) or sample detector (when RMS not available).
f. Ensure that the number of measurement points in the sweep ≥ 2 x span/RBW.
g. Sweep time = auto couple.
h. Employ trace averaging (RMS) mode over a minimum of 100 traces.
i. 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

TX chain	Channel	Freq. (MHz)	PSD (dBm)	10 log (N=2) dB	Total PSD (dBm)	Limit (dBm)	Pass /Fail
0	1	2412	-5.49	3.01	-2.48	8.00	Pass
	6	2437	-4.66	3.01	-1.65	8.00	Pass
	11	2462	-6.23	3.01	-3.22	8.00	Pass
1	1	2412	-6.09	3.01	-3.08	8.00	Pass
	6	2437	-4.71	3.01	-1.70	8.00	Pass
	11	2462	-6.15	3.01	-3.14	8.00	Pass

Note:

1. Power Density measurement of KDB 662911 is using section E(2)(c) to calculating total power density.
2. Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20})^2 / N_{ANT}$] = 5.04dBi < 6dBi, so the power density limit shall be not reduced.

802.11g

TX chain	Channel	Freq. (MHz)	PSD (dBm)	10 log (N=2) dB	Total PSD (dBm)	Limit (dBm)	Pass /Fail
0	1	2412	-9.10	3.01	-6.09	8.00	Pass
	6	2437	-6.19	3.01	-3.18	8.00	Pass
	11	2462	-9.19	3.01	-6.18	8.00	Pass
1	1	2412	-9.51	3.01	-6.50	8.00	Pass
	6	2437	-5.88	3.01	-2.87	8.00	Pass
	11	2462	-9.17	3.01	-6.16	8.00	Pass

Note:

1. Power Density measurement of KDB 662911 is using section E(2)(c) to calculating total power density.
2. Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20})^2 / N_{ANT}$] = 5.04dBi < 6dBi, so the power density limit shall be not reduced.

802.11n (HT20)

TX chain	Channel	Freq. (MHz)	PSD (dBm)	10 log (N=2) dB	Total PSD (dBm)	Limit (dBm)	Pass /Fail
0	1	2412	-9.12	3.01	-6.11	8.00	Pass
	6	2437	-6.57	3.01	-3.56	8.00	Pass
	11	2462	-9.61	3.01	-6.60	8.00	Pass
1	1	2412	-9.27	3.01	-6.26	8.00	Pass
	6	2437	-6.57	3.01	-3.56	8.00	Pass
	11	2462	-9.39	3.01	-6.38	8.00	Pass

Note:

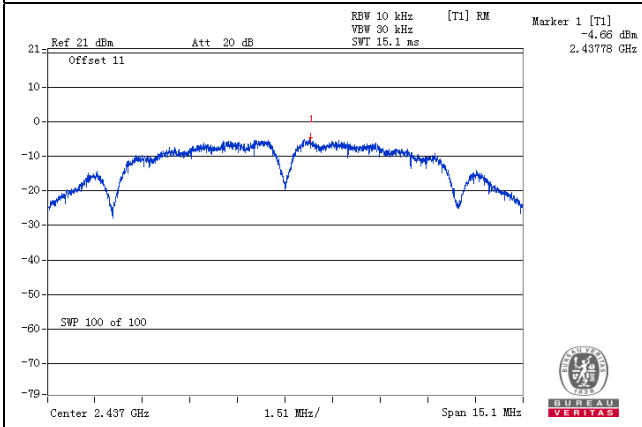
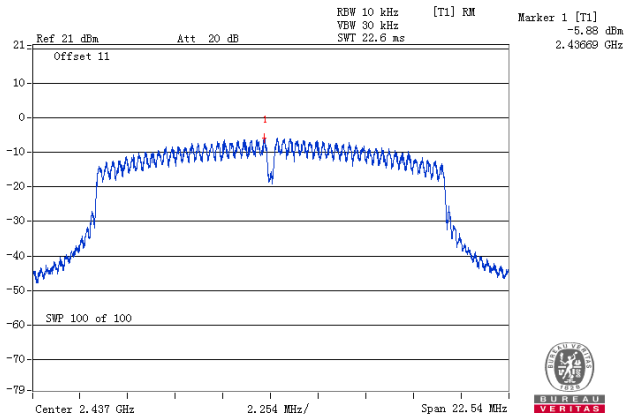
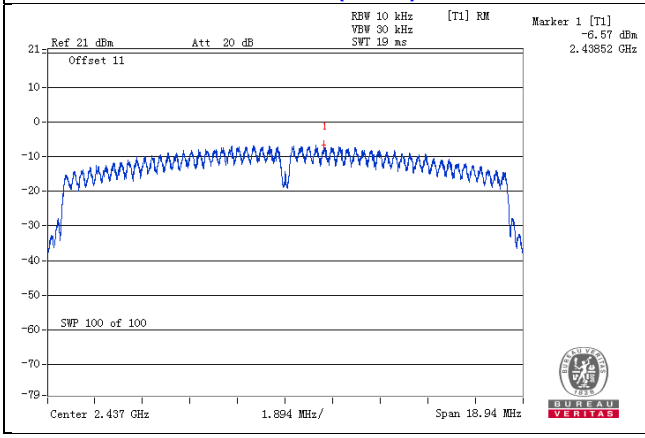
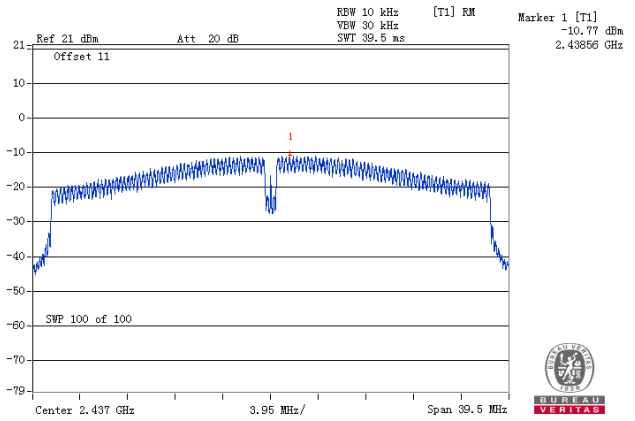
1. Power Density measurement of KDB 662911 is using section E(2)(c) to calculating total power density.
2. Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20})^2 / N_{ANT}$] = 5.04dBi < 6dBi, so the power density limit shall be not reduced.

802.11n (HT40)

TX chain	Channel	Freq. (MHz)	PSD (dBm)	10 log (N=2) dB	Total PSD (dBm)	Limit (dBm)	Pass /Fail
0	3	2422	-16.35	3.01	-13.34	8.00	Pass
	6	2437	-10.77	3.01	-7.76	8.00	Pass
	9	2452	-15.96	3.01	-12.95	8.00	Pass
1	3	2422	-16.86	3.01	-13.85	8.00	Pass
	6	2437	-11.11	3.01	-8.10	8.00	Pass
	9	2452	-15.87	3.01	-12.86	8.00	Pass

Note:

1. Power Density measurement of KDB 662911 is using section E(2)(c) to calculating total power density.
2. Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20})^2 / N_{ANT}$] = 5.04dBi < 6dBi, so the power density limit shall be not reduced.

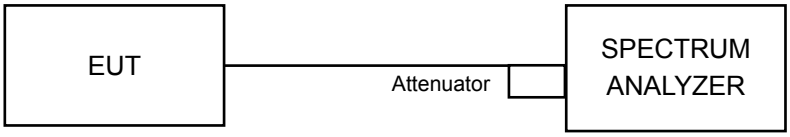
Spectrum Plot of Worst Value	
802.11b	**802.11g**
	
802.11n (HT20)	**802.11n (HT40)**
	

4.6 Conducted Out of Band Emission Measurement

4.6.1 Limits of Conducted Out of Band Emission Measurement

Below 30dB 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 4.1.2 to get information of above instrument.

4.6.4 Test Procedure

MEASUREMENT PROCEDURE REF

558074 D01 DTS Meas Guidance v03r04 section 11.2

a. Set the RBW = 100 kHz.

b. Set the VBW ≥ 300 kHz.

c. Detector = average.

d. Sweep time = auto couple.

e. Trace mode = max hold.

f. Allow trace to fully stabilize.

g. Use the peak marker function to determine the maximum power level in any 100 kHz band segment within the fundamental EBW.

MEASUREMENT PROCEDURE OOBE

558074 D01 DTS Meas Guidance v03r04 section 11.3

a. Set RBW = 100 kHz.

b. Set VBW ≥ 300 kHz.

c. Ensure that the number of measurement points ≥ span/RBW

d. According to measurement points to set differ measurement span.

e. Detector = average.

f. Trace Mode = max hold.

g. Sweep = auto couple.

4.6.5 Deviation from Test Standard

No deviation.

4.6.6 EUT Operating Condition

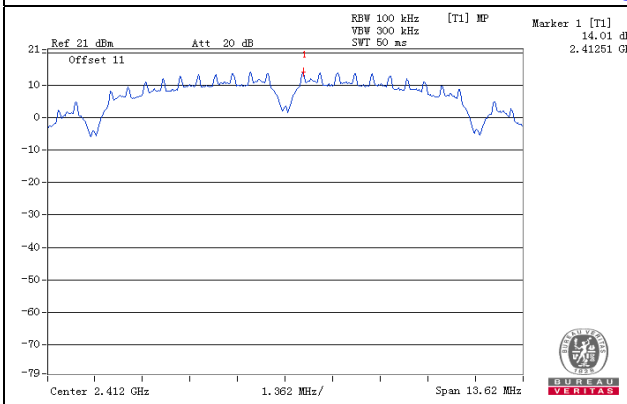
Same as Item 4.3.6

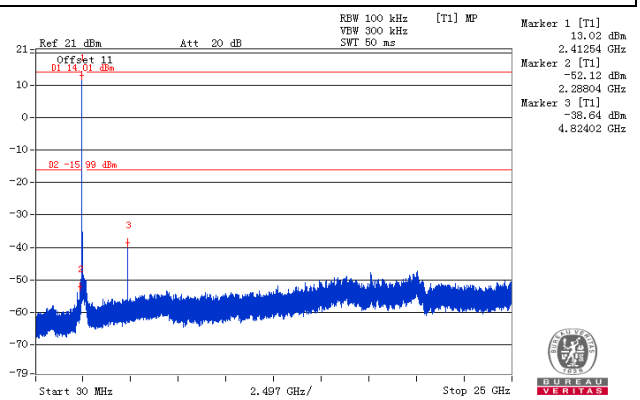
4.6.7 Test Results

The spectrum plots are attached on the following pages. D1 line indicates the highest level, and D2 line indicates the 30dB offset below D1. It shows compliance with the requirement.

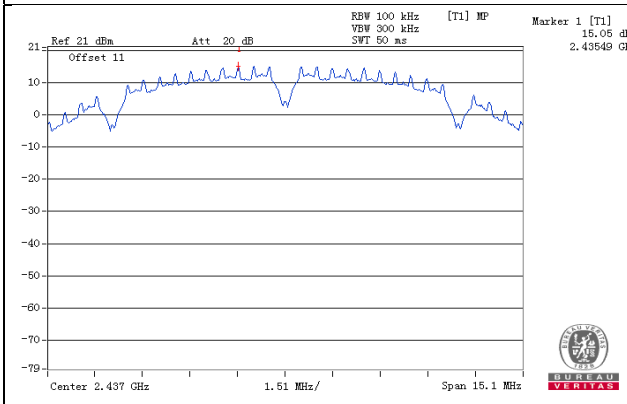
802.11b_CHAIN 0

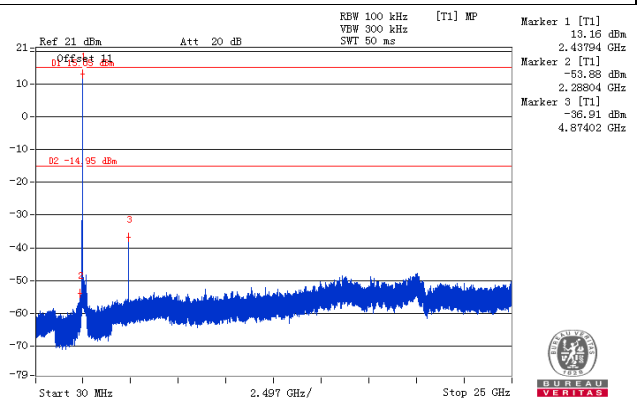
CH 1



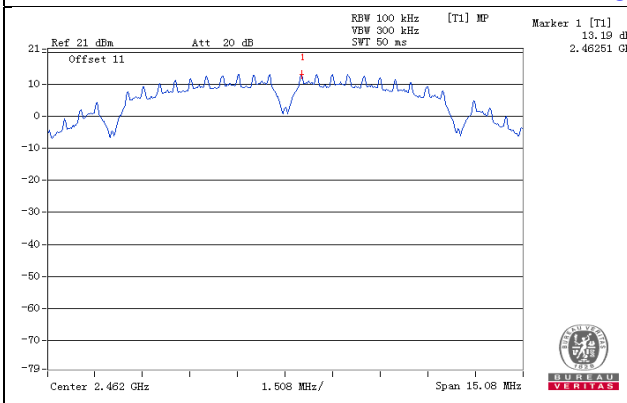


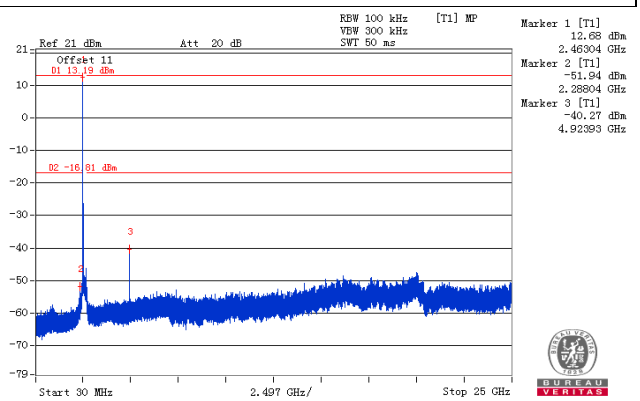
CH 6



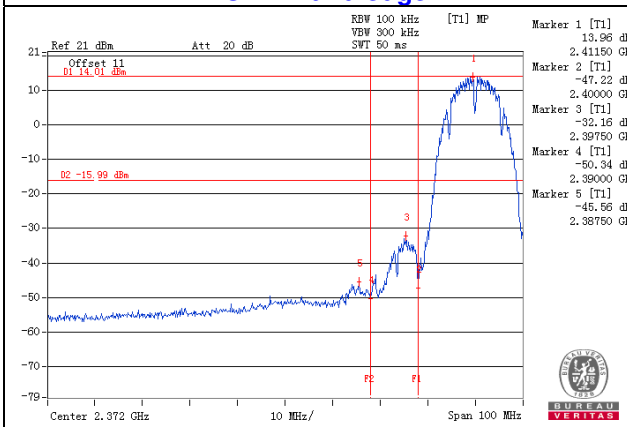


CH 11

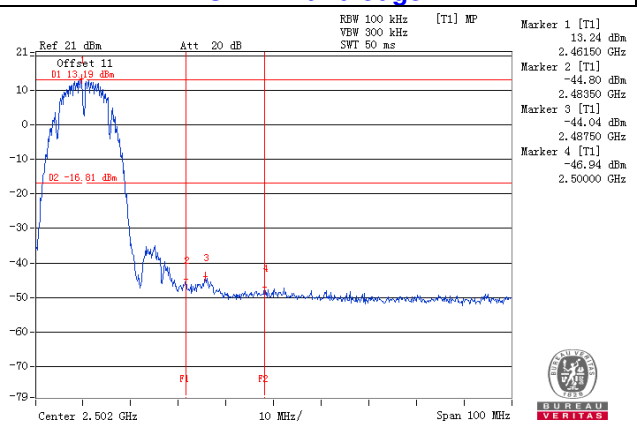




CH 1 Band edge

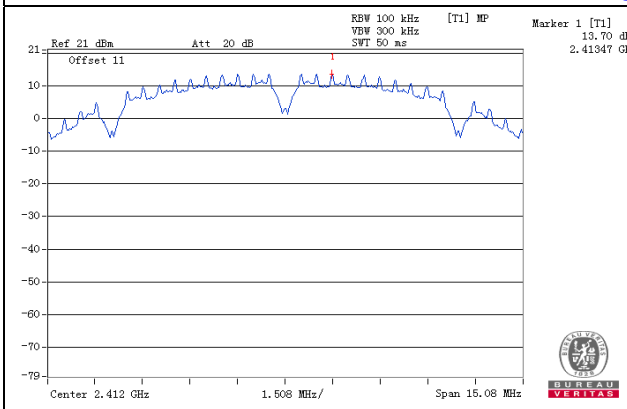


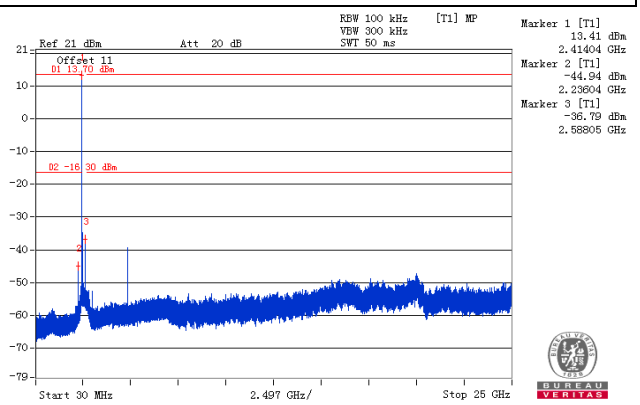
CH 11 Band edge



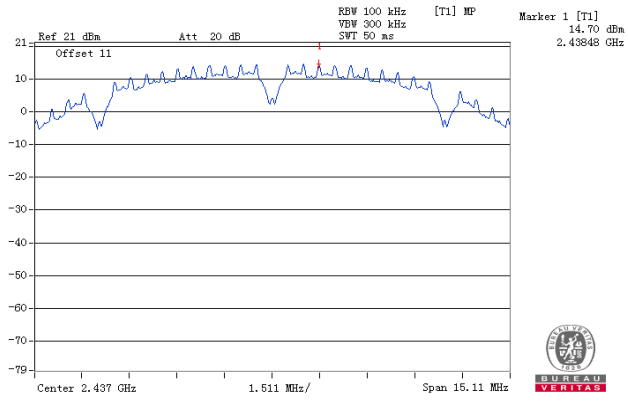
CHAIN 1

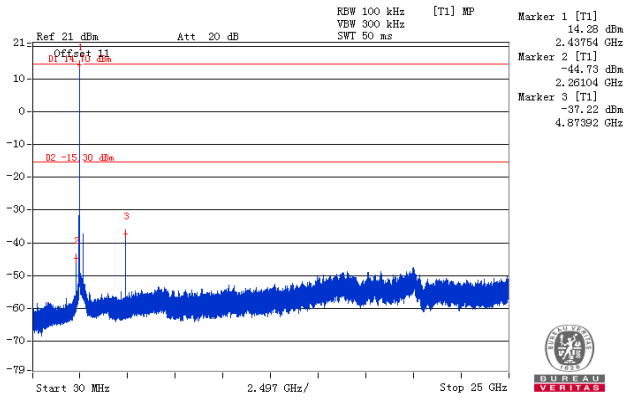
CH 1



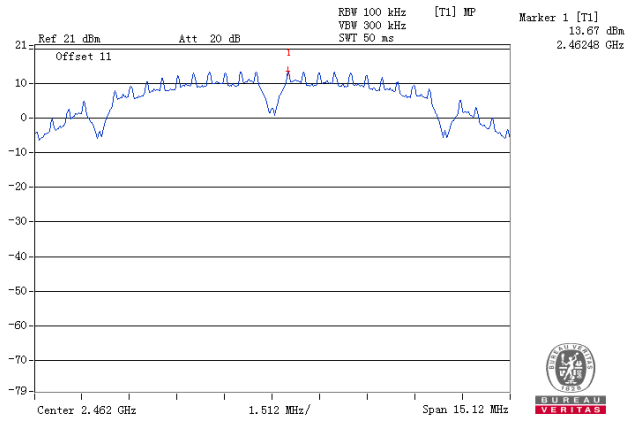


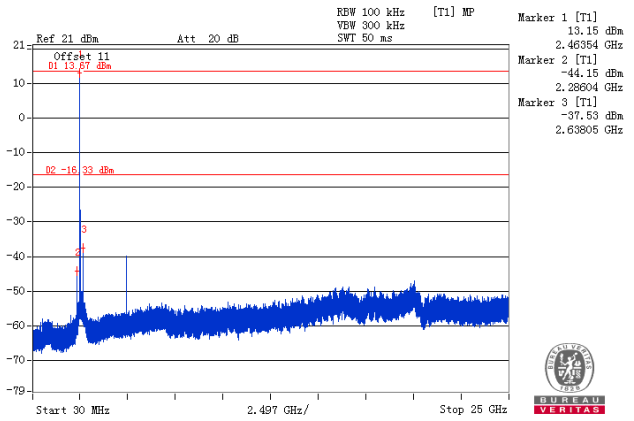
CH 6



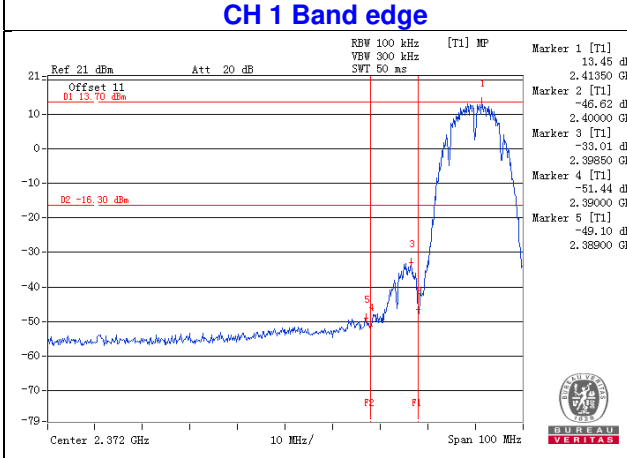


CH 11

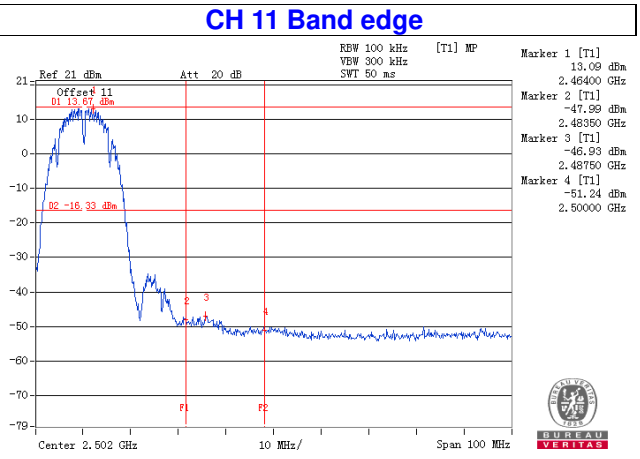




CH 1 Band edge

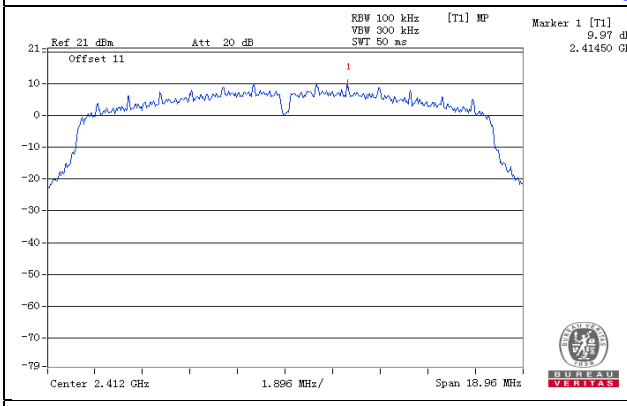


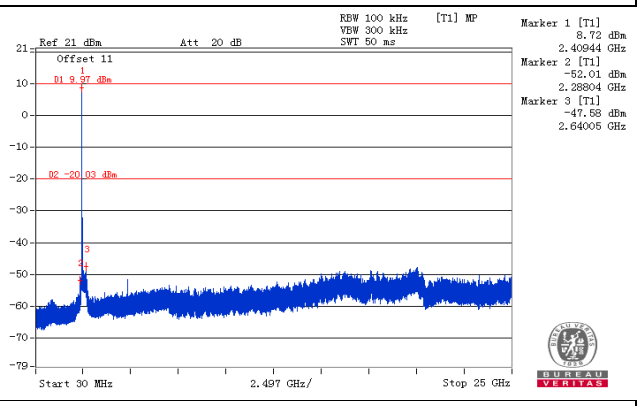
CH 11 Band edge



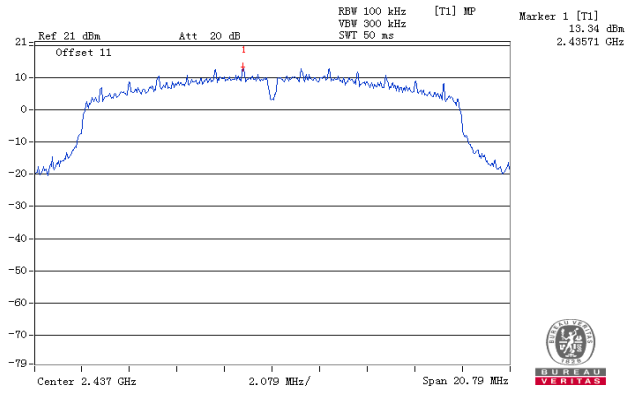
802.11g_CHAIN 0

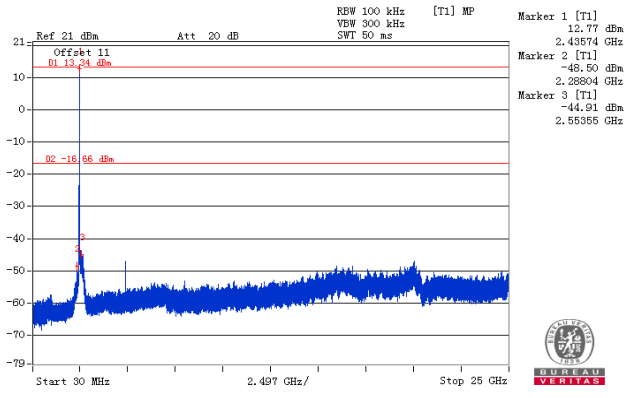
CH 1



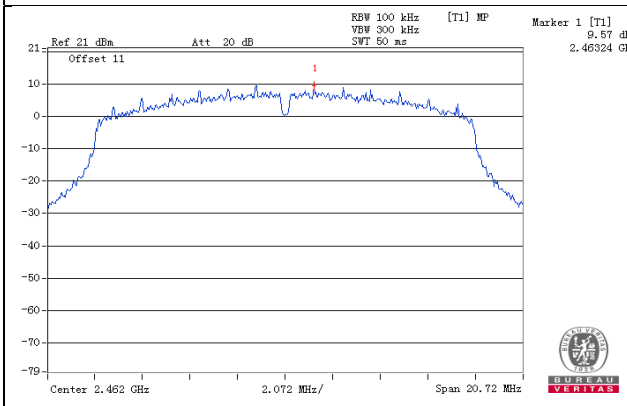


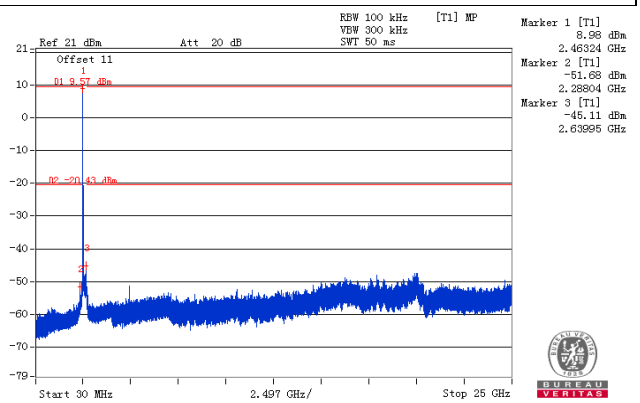
CH 6



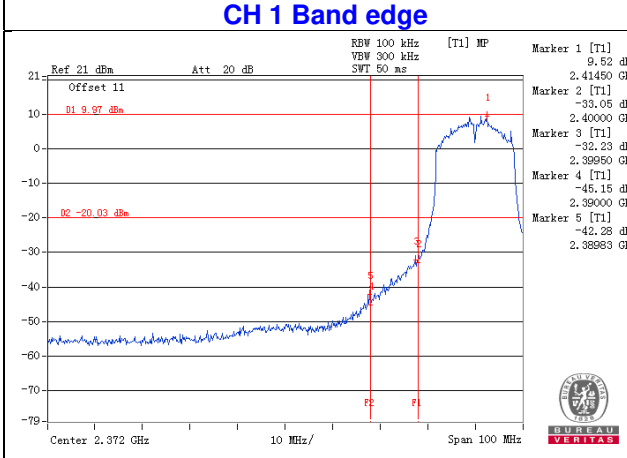


CH 11

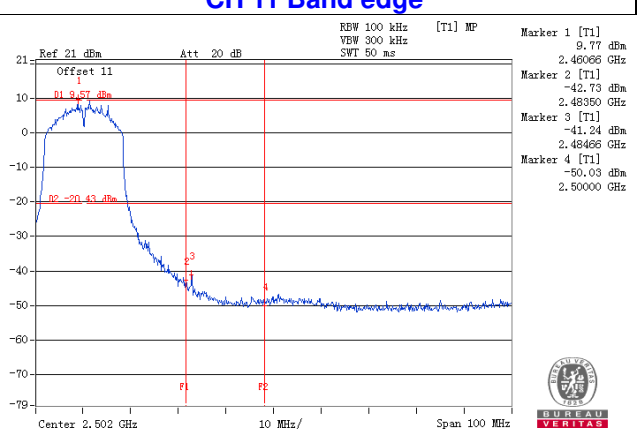




CH 1 Band edge

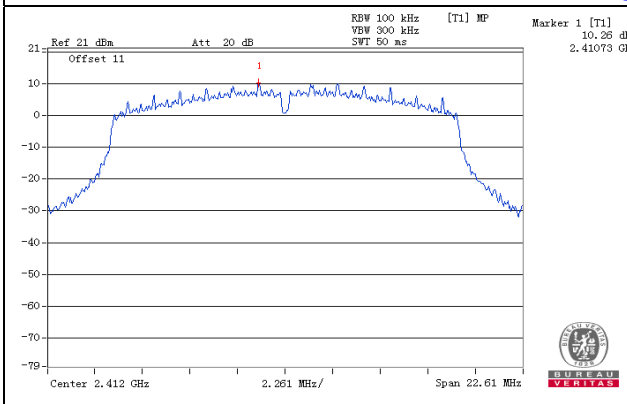


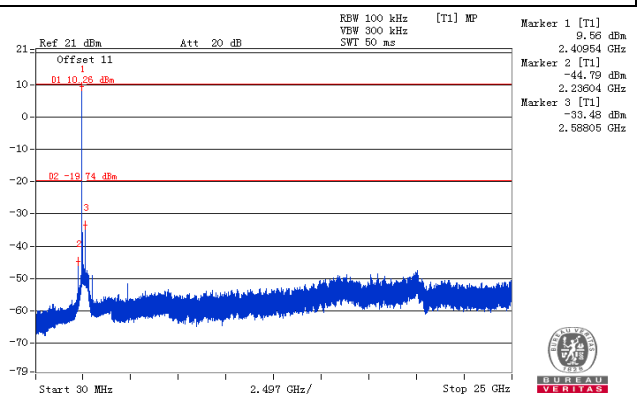
CH 11 Band edge



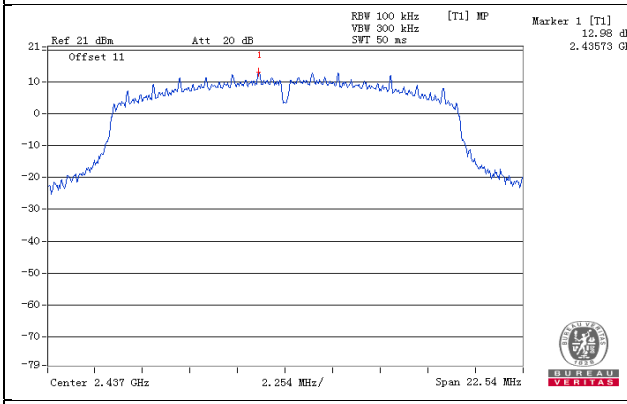
CHAIN 1

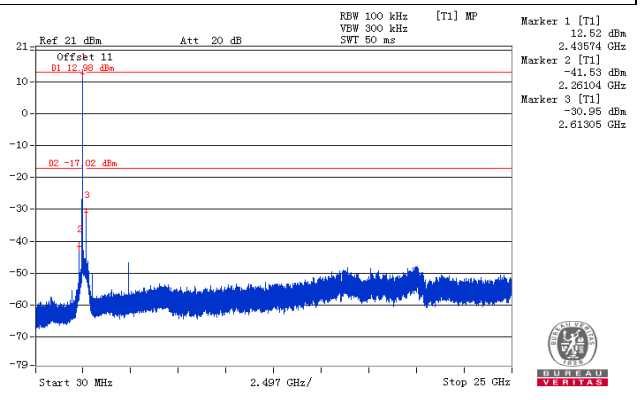
CH 1



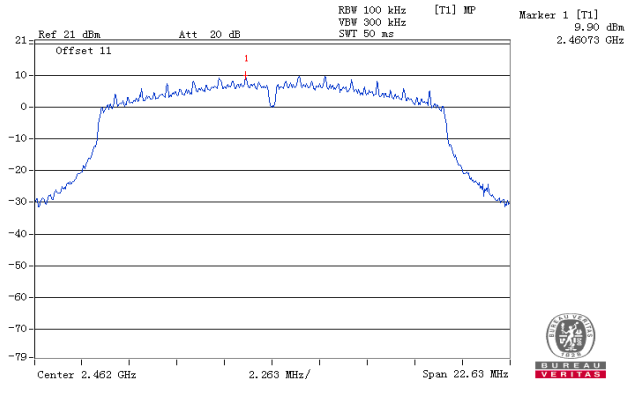


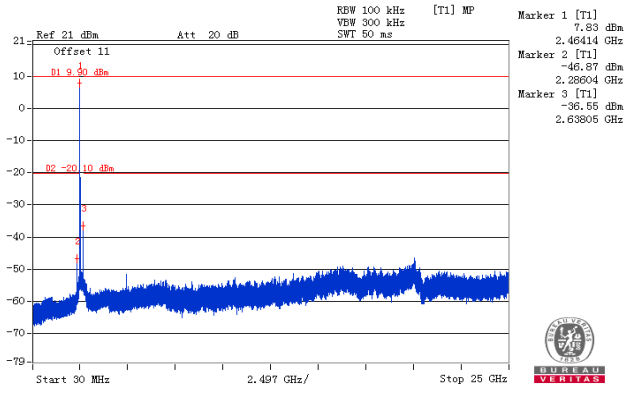
CH 6



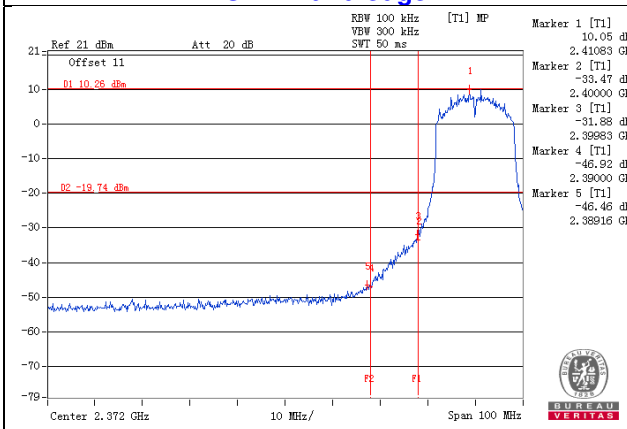


CH 11

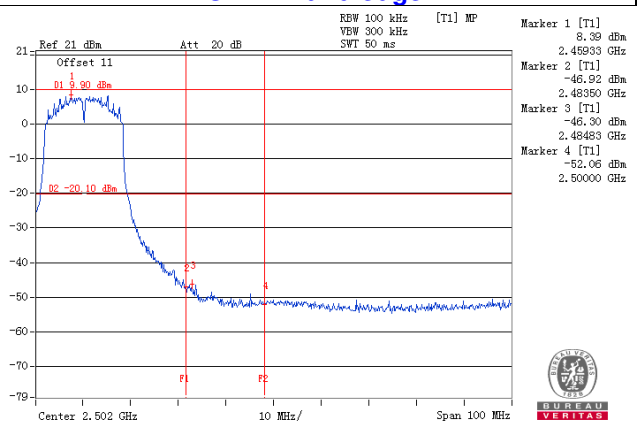




CH 1 Band edge

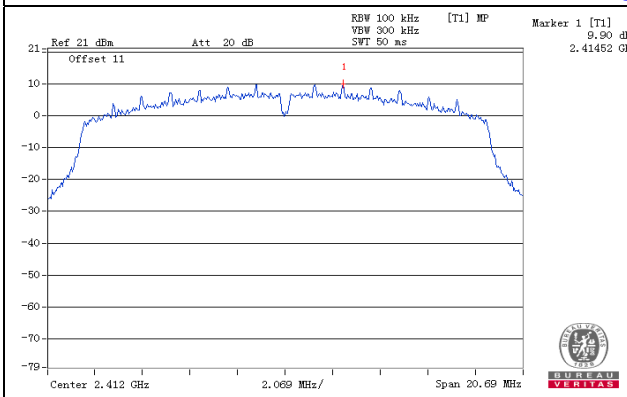


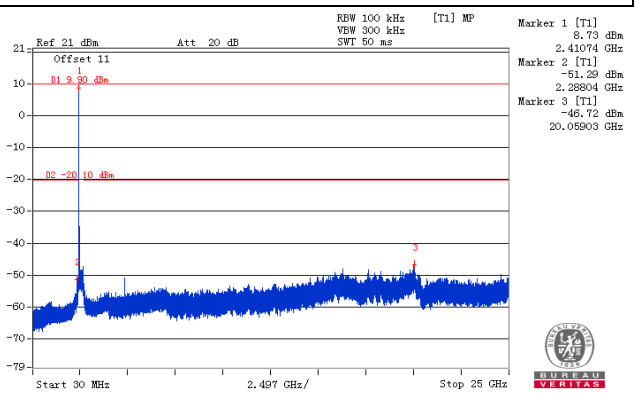
CH 11 Band edge



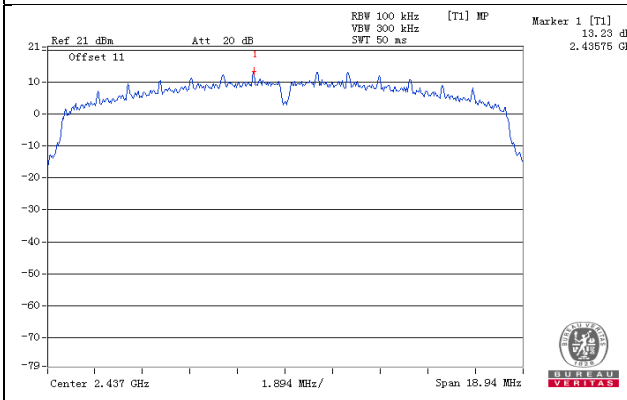
802.11n (HT20)_CHAIN 0

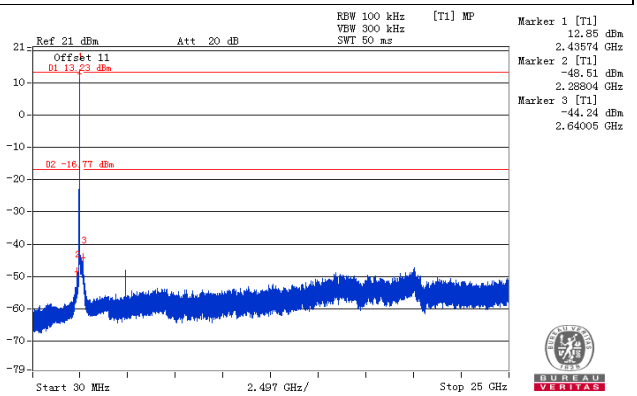
CH 1



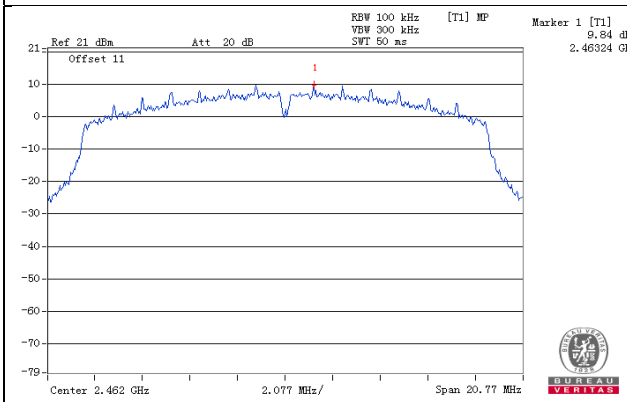


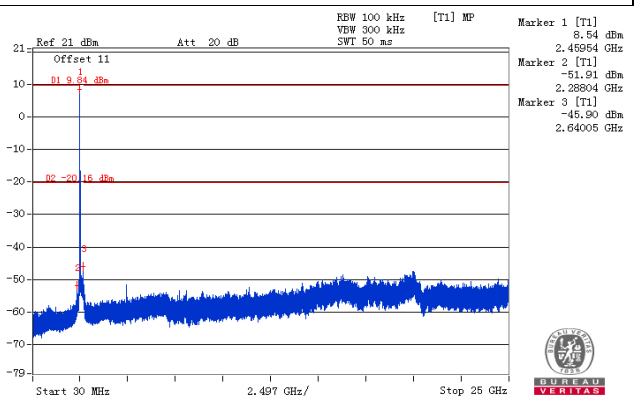
CH 6



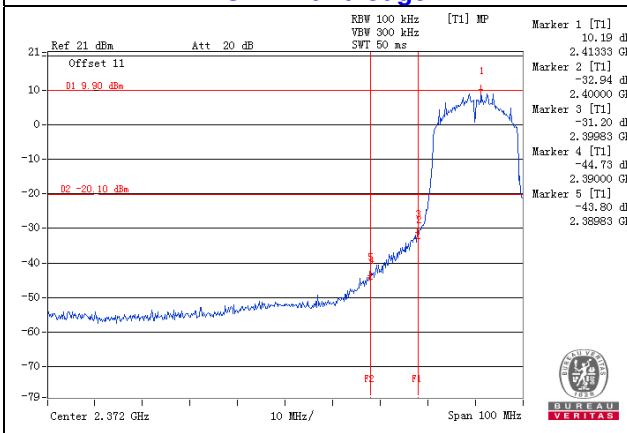


CH 11

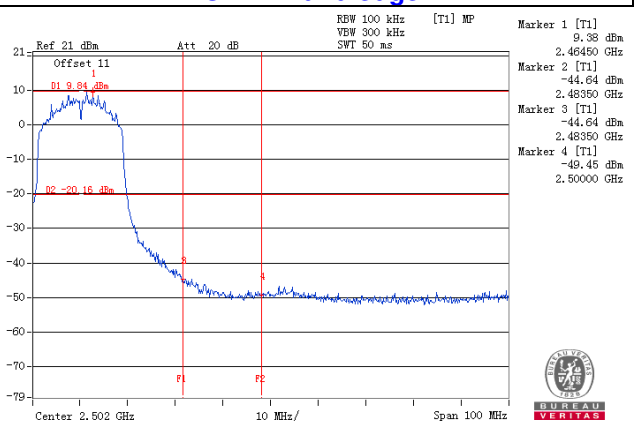




CH 1 Band edge

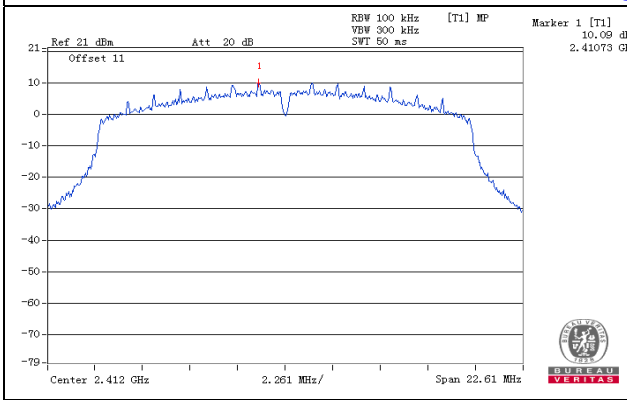


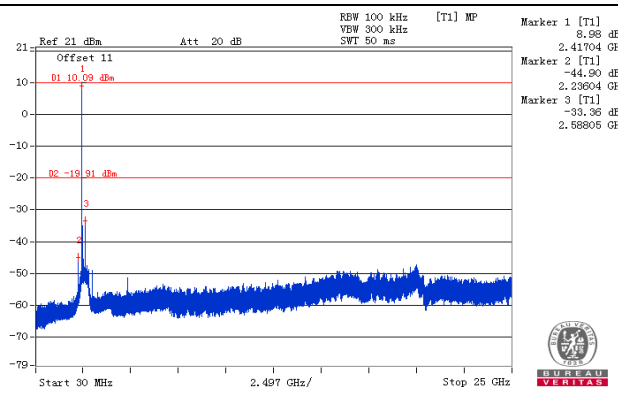
CH 11 Band edge



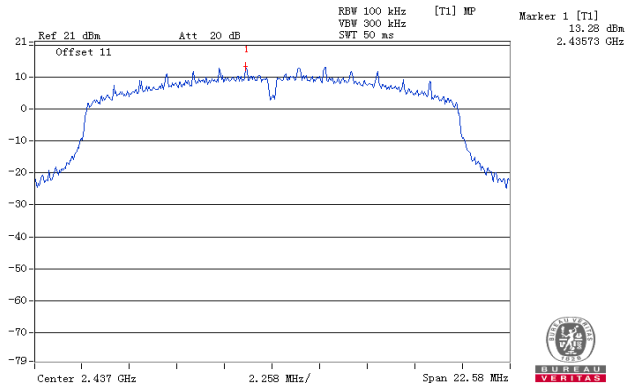
CHAIN 1

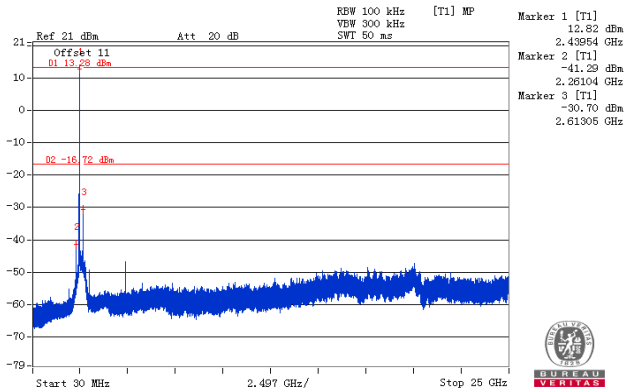
CH 1



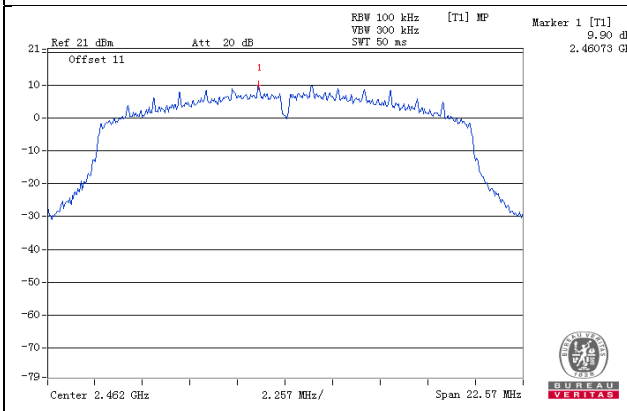


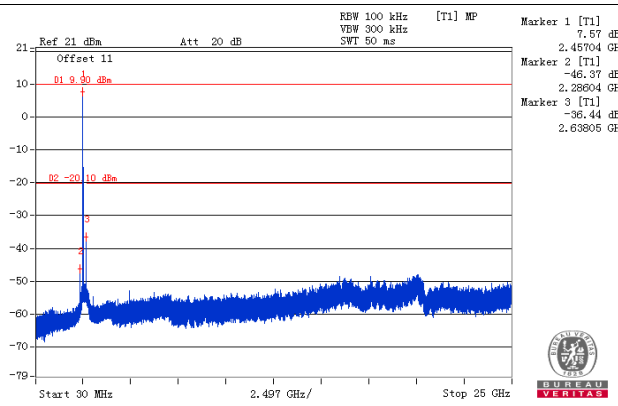
CH 6



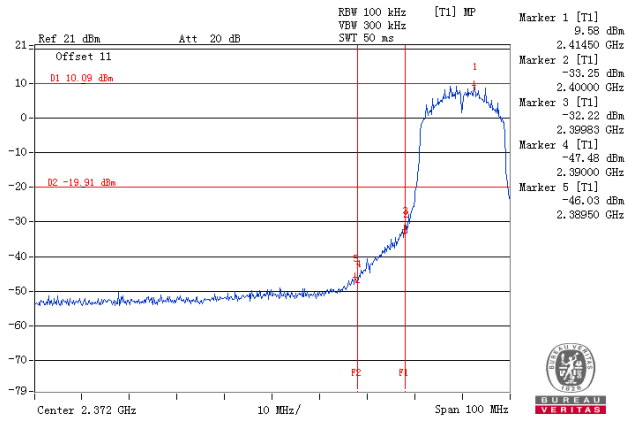


CH 11





CH 1 Band edge



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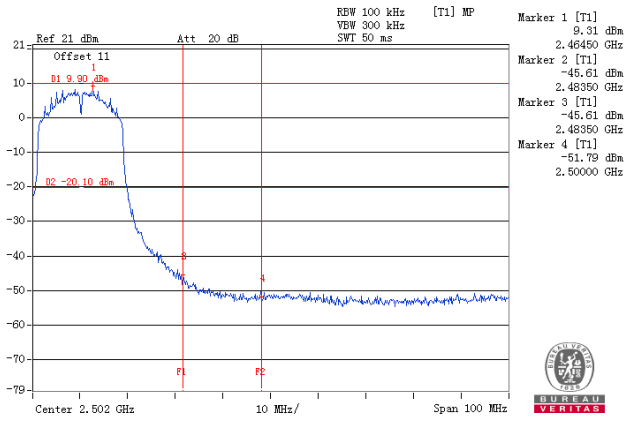
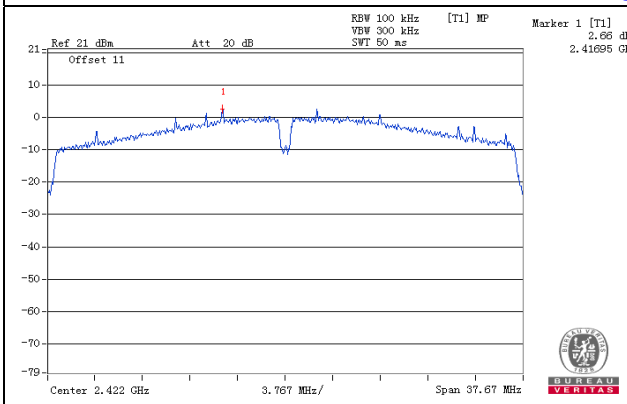
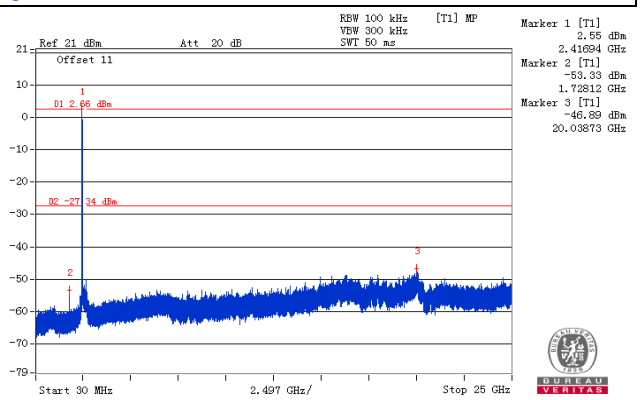


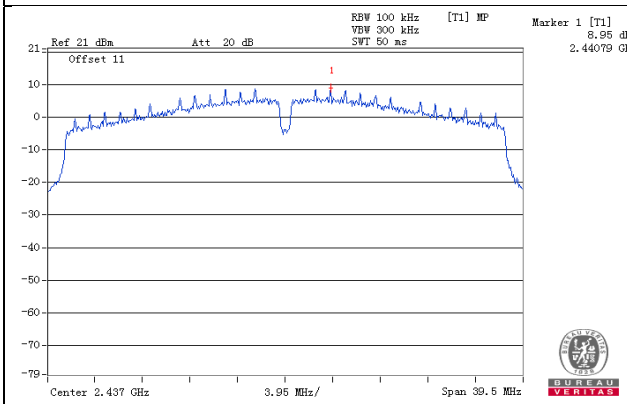
802.11n (HT40)_CHAIN 0

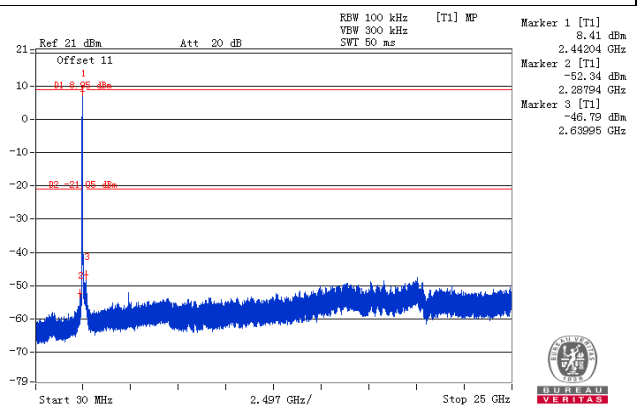
CH 3



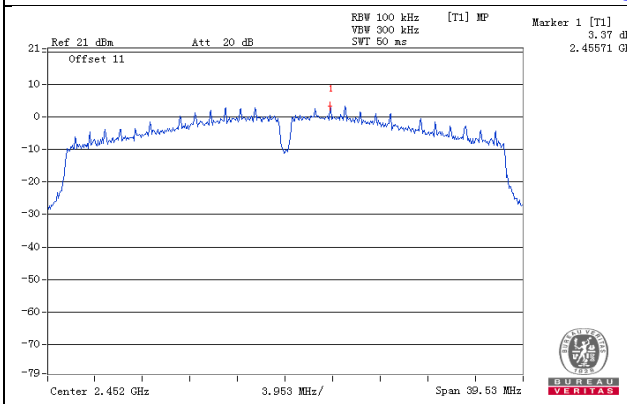


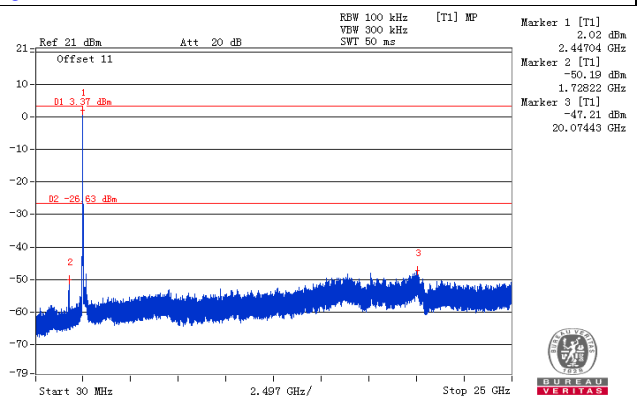
CH 6



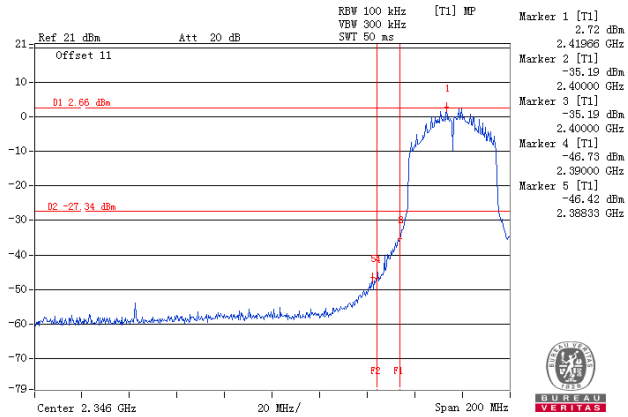


CH 9

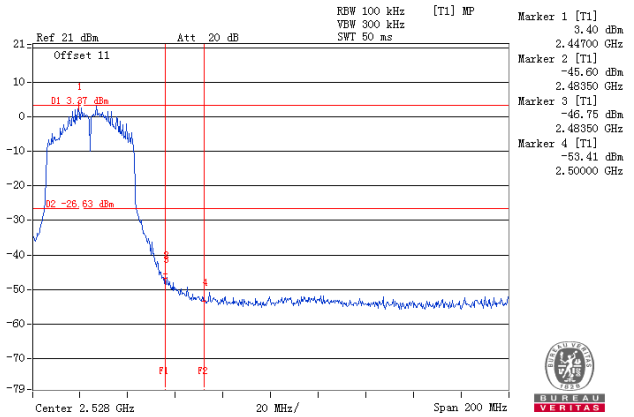




CH 3 Band edge

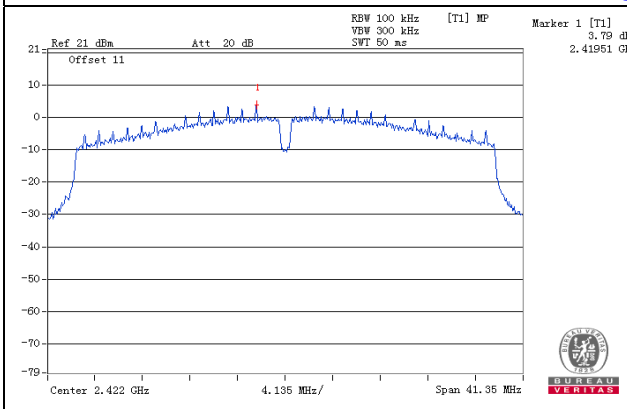


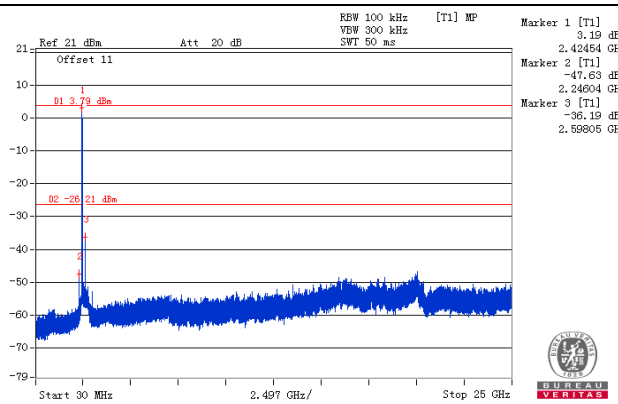
CH 9 Band edge



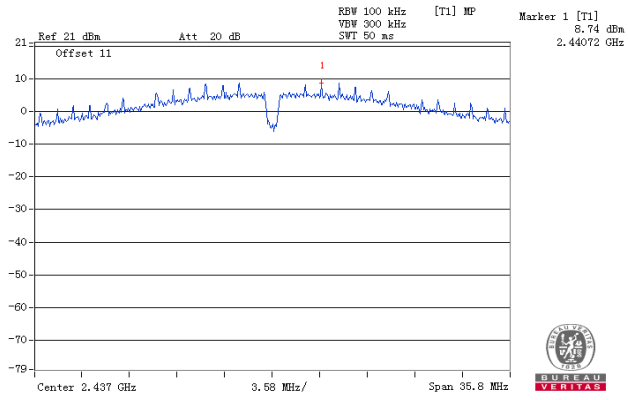
CHAIN 1

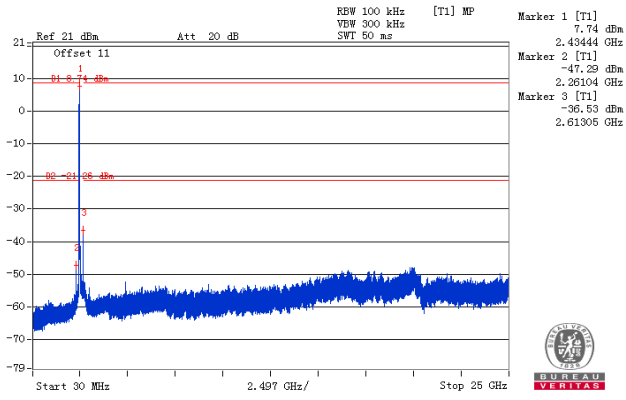
CH 3



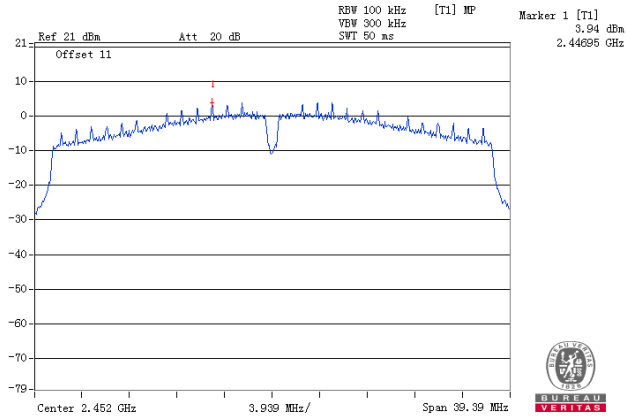


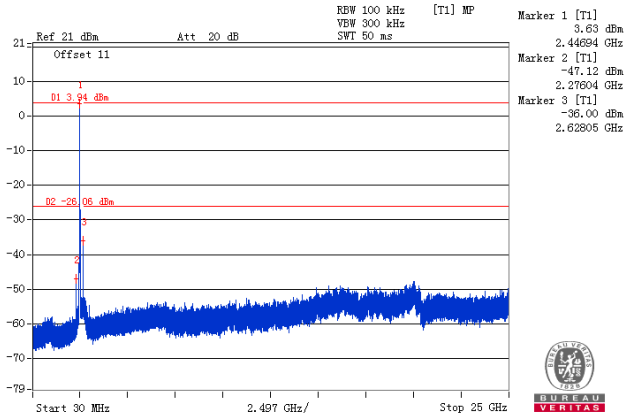
CH 6



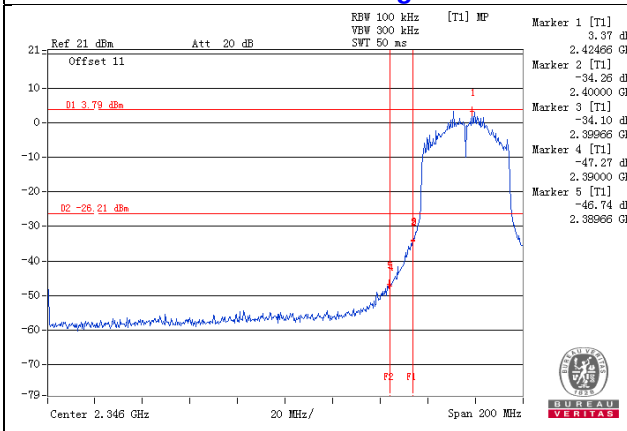


CH 9

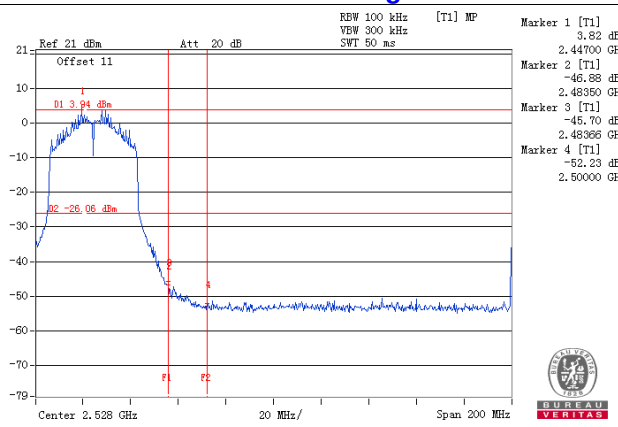




CH 3 Band edge



CH 9 Band edge



5 Pictures of Test Arrangements

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

Appendix – Information on the Testing Laboratories

We, Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch, were founded in 1988 to provide our best service in EMC, Radio, Telecom and Safety consultation. Our laboratories are accredited and approved according to ISO/IEC 17025.

If you have any comments, please feel free to contact us at the following:

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Email: service.adt@tw.bureauveritas.com
Web Site: www.bureauveritas-adt.com

The address and road map of all our labs can be found in our web site also.

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