FCC Test Report (WLAN)

Report No.:	RF170313E12
FCC ID:	2ACTO-APX320
Test Model:	APX 320
Received Date:	Mar. 13, 2017
Test Date:	Mar. 31 to May 04, 2017
Issued Date:	May 28, 2017
Applicant:	Sophos Ltd
Address:	The Pentagon, Abingdon Science Park, Abingdon, OX14 3YP, United Kingdom
Issued By:	Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch Hsin Chu Laboratory
Lab Address:	E-2, No.1, Li Hsin 1st Road, Hsinchu Science Park, Hsinchu City 300, Taiwan R.O.C.
Test Location (1):	E-2, No.1, Li Hsin 1st Road, Hsinchu Science Park, Hsinchu City 300, Taiwan R.O.C.
Test Location (2):	No. 49, Ln. 206, Wende Rd., Shangshan Tsuen, Chiung Lin Hsiang, Hsin Chu Hsien 307, Taiwan R.O.C.

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Release Control Record

Issue No.	Description	Date Issued
RF170313E12	Original release.	May 28, 2017

1 Certificate of Conformity

Product:	Sophos Access Point
Brand:	SOPHOS
Test Model:	APX 320
Sample Status:	ENGINEERING SAMPLE
Applicant:	Sophos Ltd
Test Date:	Mar. 31 to May 04, 2017
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 : Wendy Wu , **Date:** May 28, 2017

Wendy Wu / Specialist

Approved by : , **Date:** May 28, 2017

May Chen / 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 -4.8dB at 25.11719MHz.
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 2390.00MHz, 2483.50MHz, 4874.00MHz.
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(MHF) 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	Expanded Uncertainty (k=2) (±)
Conducted Emissions at mains ports	150kHz ~ 30MHz	1.84 dB
Radiated Emissions up to 1 GHz	30MHz ~ 1GHz	5.30 dB
Radiated Emissions above 1 GHz	1GHz ~ 6GHz	5.16 dB
	6GHz ~ 18GHz	4.91 dB
	18GHz ~ 40GHz	5.30 dB

2.2 Modification Record

There were no modifications required for compliance.

3 General Information

3.1 General Description of EUT

Product	Sophos Access Point
Brand	SOPHOS
Test Model	APX 320
Status of EUT	ENGINEERING SAMPLE
Power Supply Rating	DC 48V from POE
Modulation Type	CCK, DQPSK, DBPSK for DSSS 64QAM, 16QAM, QPSK, BPSK for OFDM 256QAM for OFDM in 11ac mode only
Modulation Technology	DSSS, OFDM
Transfer Rate	802.11b: up to 11Mbps 802.11a/g: up to 54Mbps 802.11n: up to 300Mbps 802.11ac: up to 866.7Mbps
Operating Frequency	**2.4GHz:** 2.412 ~ 2.462GHz **5GHz:** 5.18~ 5.24GHz, 5.745 ~ 5.825GHz
Number of Channel	**2.4GHz:** 802.11b, 802.11g, 802.11n (HT20): 11 802.11n (HT40): 7 **5GHz:** 802.11a, 802.11n (HT20), 802.11ac (VHT20): 9 802.11n (HT40), 802.11ac (VHT40): 4 802.11ac (VHT80): 2
Output Power	**2.4GHz:** **2TX** **CDD Mode:** 983.291mW **Beamforming Mode:** 857.609mW **1TX** 530.884mW **5.18 ~ 5.24GHz** **2TX** **CDD Mode:** 214.161mW **Beamforming Mode:** 207.745mW **1TX** 146.218mW **5.745 ~ 5.825GHz** **2TX** **CDD Mode:** 688.492mW **Beamforming Mode:** 414.046mW **1TX** 389.942mW
Antenna Type	Refer to Note
Antenna Connector	Refer to Note
Accessory Device	NA
Data Cable Supplied	NA

Note:

1. Simultaneously transmission condition.

Condition	Technology		
1	WLAN (Radio 1) (2.4GHz)	WLAN (Radio 2) (5GHz-UNII-1)	Bluetooth
2	WLAN (Radio 1) (5GHz-UNII-3)	WLAN (Radio 2) (5GHz-UNII-1)	Bluetooth
Note: The emission of the simultaneous operation has been evaluated and no non-compliance was found.			

2. The EUT must be supplied with a POE (only for test not for sale) as following table:

Brand	Model No.	Spec.
PowerDsine	PD-3501G/AC	Input: 100-240Vac, 50/60Hz, 0.43A Output: 48Vdc, 0.35A

3. The antennas provided to the EUT, please refer to the following table:

Radio 1							
WLAN - 2.4GHz + 5GHz							
Antenna No.	Transmitter Circuit	Brand	Model No.	Antenna Net Gain (dBi)	Frequency Range (GHz)	Antenna Type	Connecter Type
1	Chain (0)	WNC	NA	3.48 6.79	2.4~2.4835 5.47~5.85	PIFA	i-pex(MHF)
2	Chain (1)	WNC	NA	3.74 6.16	2.4~2.4835 5.47~5.85	PIFA	i-pex(MHF)
Radio 2							
WLAN 5GHz							
Antenna No.	Transmitter Circuit	Brand	Model No.	Antenna Net Gain (dBi)	Frequency Range (GHz)	Antenna Type	Connecter Type
1	Chain (0)	WNC	NA	4.87	5.15~5.35	PIFA	i-pex(MHF)
2	Chain (1)	WNC	NA	5.64	5.15~5.35	PIFA	i-pex(MHF)
Radio 3							
Bluetooth - 2.4GHz							
Antenna No.	Transmitter Circuit	Brand	Model No.	Antenna Net Gain (dBi)	Frequency Range (GHz)	Antenna Type	Connecter Type
1	Chain (0)	WNC	NA	1.87	2.4~2.4835	PIFA	i-pex(MHF)
Note: For 1TX configuration mode, max gain was selected for the final test.							

4. The EUT incorporates a MIMO function:

2.4GHz Band			
MODULATION MODE	**DATA RATE (MCS)**	**TX & RX CONFIGURATION**	
802.11b	1 ~ 11Mbps	2TX/1TX diversity	2RX
802.11g	6 ~ 54Mbps	2TX/1TX diversity	2RX
802.11n HT20	MCS 0~7	2TX/1TX diversity	2RX
	MCS 8~15	2TX	2RX
802.11n HT40	MCS 0~7	2TX/1TX diversity	2RX
	MCS 8~15	2TX	2RX
5GHz Band			
MODULATION MODE	**DATA RATE (MCS)**	**TX & RX CONFIGURATION**	
802.11a	6 ~ 54Mbps	2TX/1TX diversity	2RX
802.11n HT20	MCS 0~7	2TX/1TX diversity	2RX
	MCS 8~15	2TX	2RX
802.11n HT40	MCS 0~7	2TX/1TX diversity	2RX
	MCS 8~15	2TX	2RX
802.11ac VHT20	MCS0~8 Nss=1	2TX/1TX diversity	2RX
	MCS0~8 Nss=2	2TX	2RX
802.11ac VHT40	MCS0~9 Nss=1	2TX/1TX diversity	2RX
	MCS0~9 Nss=2	2TX	2RX
802.11ac VHT80	MCS0~9 Nss=1	2TX/1TX diversity	2RX
	MCS0~9 Nss=2	2TX	2RX

Note:
1. All of modulation mode support beamforming function except 802.11a/b/g modulation mode.
2. The EUT support Beamforming and CDD mode, therefore both mode were investigated and the worst case scenario was identified. The worst case data were presented in test report.

5. The above EUT information is declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications or user's manual.

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	
-	√	√	√	√	-

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: The EUT had been pre-tested on the positioned of each 3 axis. The worst case was found when positioned on **Z-plane**.

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.

2TX Configuration - CDD Mode					
MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
802.11b	1 to 11	1, 6, 11	DSSS	DBPSK	1
802.11g	1 to 11	1, 6, 11	OFDM	BPSK	6
802.11n (HT20)	1 to 11	1, 6, 11	OFDM	BPSK	6.5
802.11n (HT40)	3 to 9	3, 6, 9	OFDM	BPSK	13.5
1TX Configuration					
MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
802.11b	1 to 11	1, 6, 11	DSSS	DBPSK	1
802.11g	1 to 11	1, 6, 11	OFDM	BPSK	6
802.11n (HT20)	1 to 11	1, 6, 11	OFDM	BPSK	6.5
802.11n (HT40)	3 to 9	3, 6, 9	OFDM	BPSK	13.5

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.

2TX Configuration - CDD Mode					
MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
802.11g	1 to 11	6	OFDM	BPSK	6

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.

2TX Configuration - CDD Mode					
MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
802.11g	1 to 11	6	OFDM	BPSK	6

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.

2TX Configuration - CDD Mode					
MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
802.11b	1 to 11	1, 6, 11	DSSS	DBPSK	1
802.11g	1 to 11	1, 6, 11	OFDM	BPSK	6
802.11n (HT20)	1 to 11	1, 6, 11	OFDM	BPSK	6.5
802.11n (HT40)	3 to 9	3, 6, 9	OFDM	BPSK	13.5
Beamforming Mode (Output power only)					
MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
802.11n (HT20)	1 to 11	1, 6, 11	OFDM	BPSK	6.5
802.11n (HT40)	3 to 9	3, 6, 9	OFDM	BPSK	13.5
1TX Configuration					
MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
802.11b	1 to 11	1, 6, 11	DSSS	DBPSK	1
802.11g	1 to 11	1, 6, 11	OFDM	BPSK	6
802.11n (HT20)	1 to 11	1, 6, 11	OFDM	BPSK	6.5
802.11n (HT40)	3 to 9	3, 6, 9	OFDM	BPSK	13.5

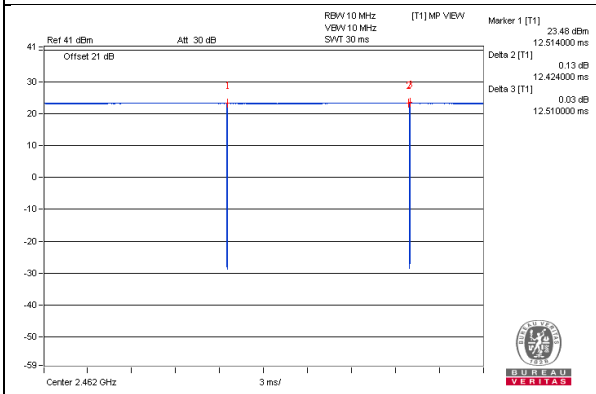
Test Condition:

APPLICABLE TO	ENVIRONMENTAL CONDITIONS	INPUT POWER (SYSTEM)	TESTED BY
RE≥1G	24deg. C, 65%RH	120Vac, 60Hz	Terry Huang
RE<1G	23deg. C, 62%RH	120Vac, 60Hz	Weiwei Lo
PLC	24deg. C, 74%RH	120Vac, 60Hz	Andy Ho
APCM	25deg. C, 60%RH	120Vac, 60Hz	Robert Cheng

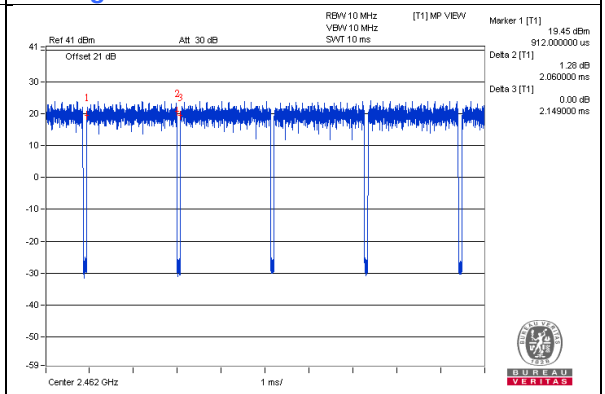
3.3 Duty Cycle of Test Signal

802.11b: Duty cycle = 12.424/12.51 = 0.993
802.11g: Duty cycle = 2.06/2.149 = 0.959, Duty factor = 10 * log(1/0.959) = 0.18
802.11n (HT20): Duty cycle = 4.991/5.101 = 0.978, Duty factor = 10 * log(1/0.978) = 0.09
802.11n (HT40): Duty cycle = 2.424/2.515 = 0.964, Duty factor = 10 * log(1/0.964) = 0.16

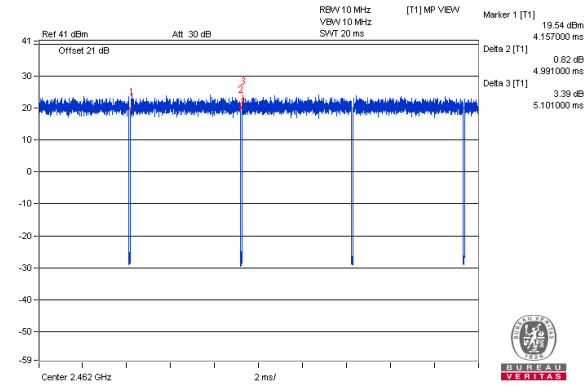
802.11b



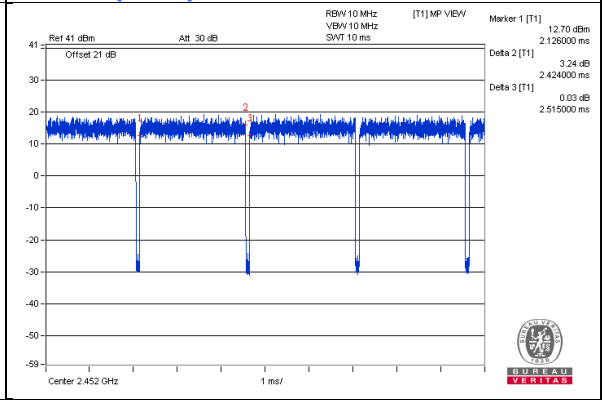
802.11g



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.	Laptop	DELL	E5430	HYV4VY1	FCC DoC	Provided by Lab
B.	POE	PowerDsine	PD-3501G/AC	NA	NA	Supplied by client

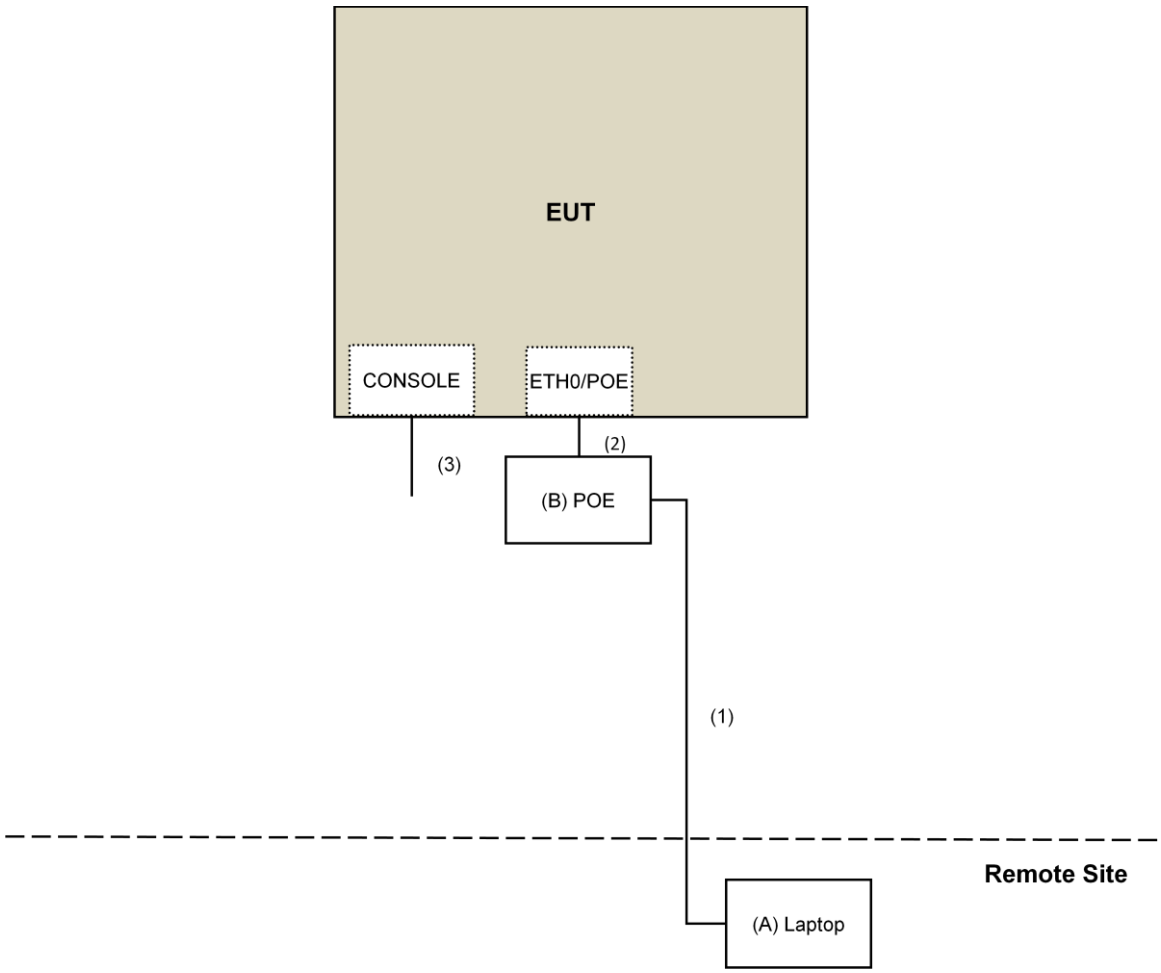
Note:

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

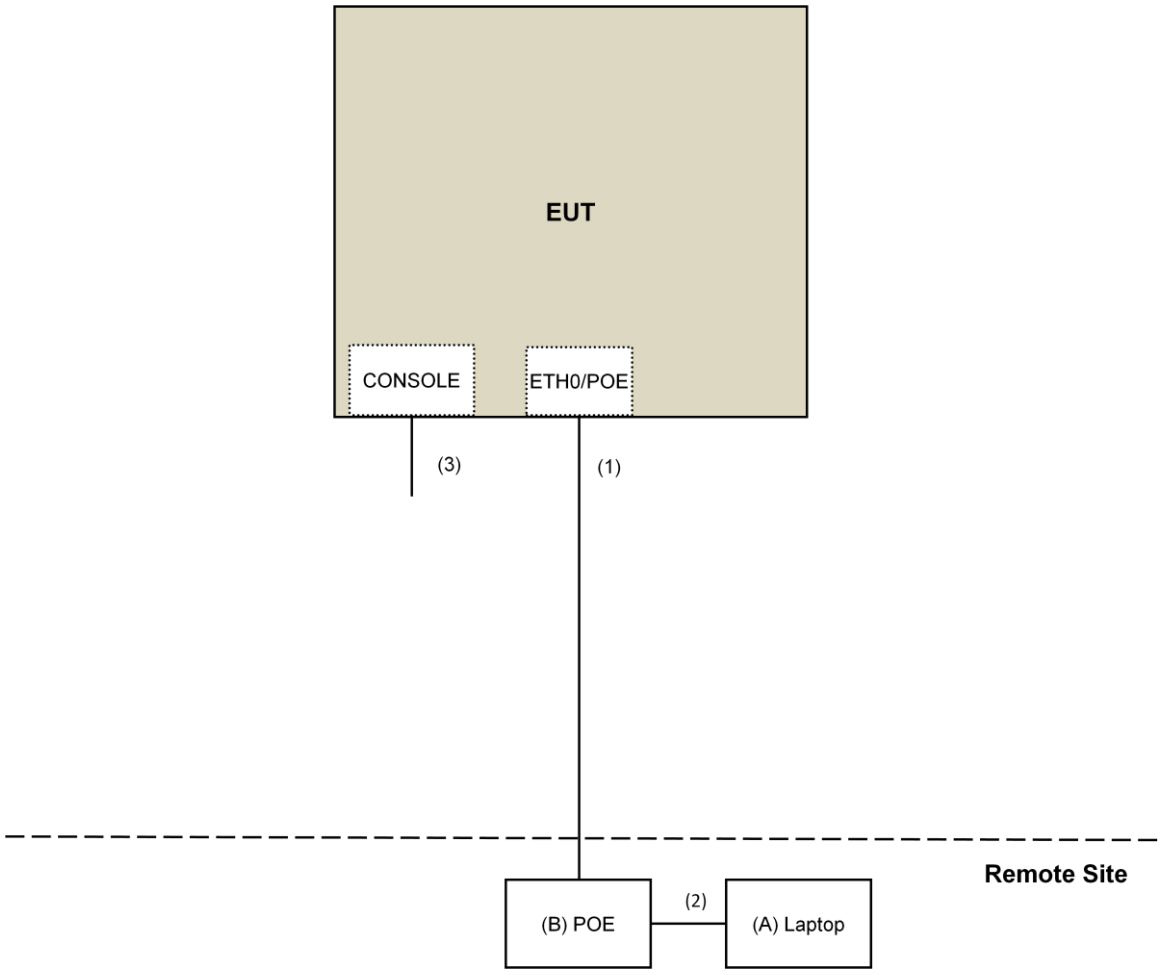
ID	Descriptions	Qty.	Length (m)	Shielding (Yes/No)	Cores (Qty.)	Remarks
1.	RJ-45 Cable	1	10	No	0	Provided by Lab
2.	RJ-45 Cable	1	3	No	0	Provided by Lab
3.	Console Cable	1	1.8	No	0	Provided by Lab

3.4.1 Configuration of System under Test

For Conducted Emission:



For other test:



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)
KDB 558074 D01 DTS Meas Guidance v04
KDB 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 20dB 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 20dB under any condition of modulation.

4.1.2 Test Instruments

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
Test Receiver Keysight	N9038A	MY54450088	July 20, 2016	July 19, 2017
Pre-Amplifier(*) EMCI	EMC001340	980142	Jan. 20, 2016	Jan. 19, 2018
Loop Antenna(*) Electro-Metrics	EM-6879	264	Dec. 16, 2016	Dec. 15, 2018
RF Cable	NA	LOOPCAB-001 LOOPCAB-002	Jan. 17, 2017	Jan. 16, 2018
Pre-Amplifier Mini-Circuits	ZFL-1000VH2B	AMP-ZFL-01	Nov. 10, 2016	Nov. 09, 2017
Trilog Broadband Antenna SCHWARZBECK	VULB 9168	9168-406	Dec. 13, 2016	Dec. 12, 2017
RF Cable	8D	966-4-1 966-4-2 966-4-3	Apr. 01, 2017	Mar. 31, 2018
Fixed attenuator Mini-Circuits	UNAT-5+	PAD-3m-4-01	Oct. 05, 2016	Oct. 04, 2017
Horn_Antenna SCHWARZBECK	BBHA 9120D	9120D-783	Dec. 27, 2016	Dec. 26, 2017
Pre-Amplifier EMCI	EMC12630SE	980385	Feb. 02, 2017	Feb. 01, 2018
RF Cable	EMC104-SM-SM-1200 EMC104-SM-SM-2000 EMC104-SM-SM-5000	160923 150318 150323	Feb. 02, 2017 Mar. 29, 2017 Mar. 29, 2017	Feb. 01, 2018 Mar. 28, 2018 Mar. 28, 2018
Pre-Amplifier EMCI	EMC184045SE	980387	Feb. 02, 2017	Feb. 01, 2018
Horn_Antenna SCHWARZBECK	BBHA 9170	BBHA9170608	Dec. 15, 2016	Dec. 14, 2017
RF Cable	SUCOFLEX 102	36432/2 36433/2	Jan. 15, 2017	Jan. 14, 2018
Software	ADT_Radiated_V8.7.08	NA	NA	NA
Antenna Tower & Turn Table Max-Full	MF-7802	MF780208410	NA	NA
Boresight Antenna Fixture	FBA-01	FBA-SIP02	NA	NA
Spectrum Analyzer R&S	FSv40	100964	June 28, 2016	June 27, 2017
Power meter Anritsu	ML2495A	1014008	May 5, 2016	May 4, 2017
Power sensor Anritsu	MA2411B	0917122	May 5, 2016	May 4, 2017

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 calibration interval of the above test instruments is 24 months and the calibrations are traceable to NML/ROC and NIST/USA.
3. The test was performed in 966 Chamber No. 4.
4. The FCC Site Registration No. is 292998
5. The CANADA Site Registration No. is 20331-2
6 Loop antenna was used for all emissions below 30 MHz.
7. Tested Date: Apr. 28 to May 04, 2017

4.1.3 Test Procedures

For Radiated emission below 30MHz

a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter chamber room. 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. Both X and Y axes of the antenna are set to make the measurement.

d. For each suspected emission, the EUT was arranged to its worst case 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.

NOTE:

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 9kHz at frequency below 30MHz.

For Radiated emission above 30MHz

a. The EUT was placed on the top of a rotating table 0.8 meters (for 30MHz ~ 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:

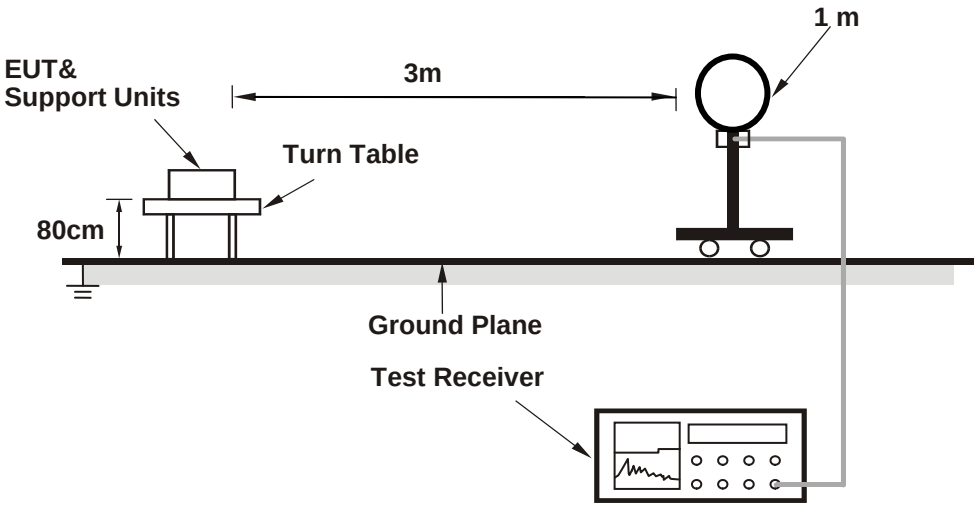
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection (QP) at frequency below 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz for Peak detection (PK) at frequency above 1GHz.
3. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz for Average detection (AV) at frequency above 1GHz. If duty cycle of test signal is < 98%, the duty factor need added to measured value.
4. All modes of operation were investigated and the worst-case emissions are reported.

4.1.4 Deviation from Test Standard

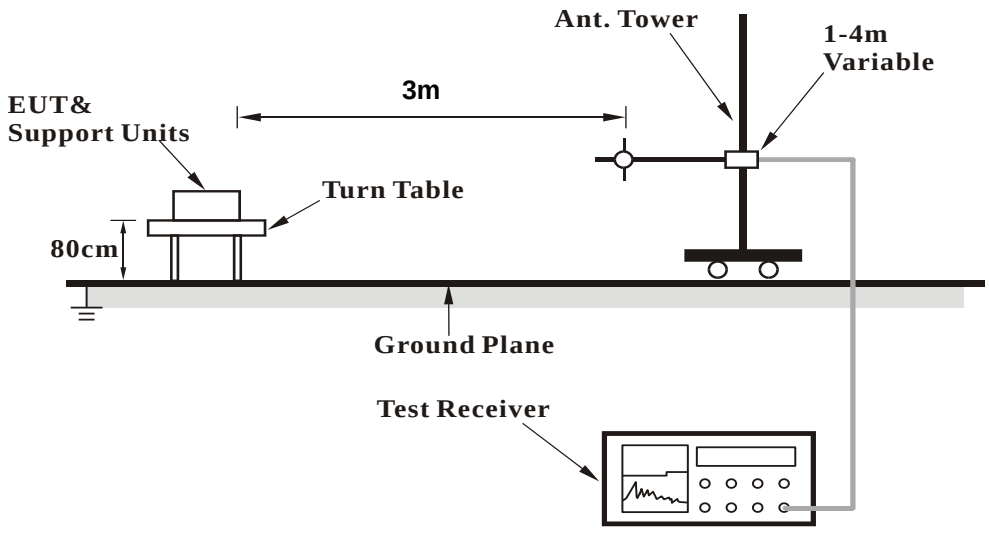
No deviation.

4.1.5 Test Setup

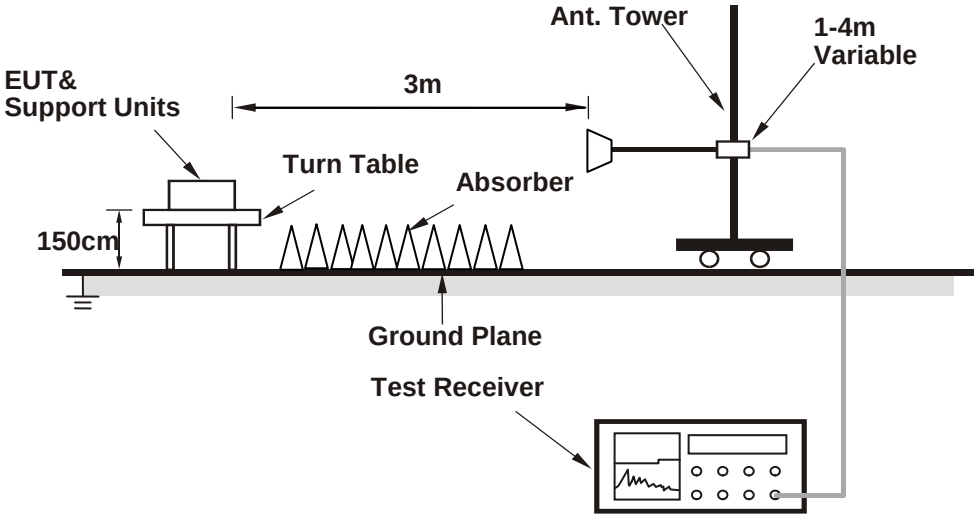
For Radiated emission below 30MHz



For Radiated emission 30MHz to 1GHz



For Radiated emission above 1GHz



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

4.1.6 EUT Operating Conditions

a. Connected the EUT with the Laptop which is placed on remote site.

b. Contorlling software (QRCT_3.0.219.0) has been activated to set the EUT on specific status.

4.1.7 Test Results

2TX Mode

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	2386.00	57.6 PK	74.0	-16.4	2.12 H	290	58.9	-1.3
2	2386.00	52.2 AV	54.0	-1.8	2.12 H	290	53.5	-1.3
3	*2412.00	112.7 PK			2.12 H	290	113.8	-1.1
4	*2412.00	110.0 AV			2.12 H	290	111.1	-1.1
5	4824.00	54.5 PK	74.0	-19.5	1.21 H	189	51.3	3.2
6	4824.00	53.7 AV	54.0	-0.3	1.21 H	189	50.5	3.2
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	2386.00	48.3 PK	74.0	-25.7	1.19 V	50	49.6	-1.3
2	2386.00	38.7 AV	54.0	-15.3	1.19 V	50	40.0	-1.3
3	*2412.00	106.5 PK			1.16 V	45	107.6	-1.1
4	*2412.00	105.0 AV			1.16 V	45	106.1	-1.1
5	4824.00	47.3 PK	74.0	-26.7	1.41 V	321	44.1	3.2
6	4824.00	43.9 AV	54.0	-10.1	1.41 V	321	40.7	3.2

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) – Pre-Amplifier 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)
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	48.2 PK	74.0	-25.8	2.07 H	288	49.5	-1.3
2	2390.00	35.5 AV	54.0	-18.5	2.07 H	288	36.8	-1.3
3	*2437.00	113.3 PK			2.07 H	288	114.5	-1.2
4	*2437.00	110.8 AV			2.07 H	288	112.0	-1.2
5	2496.00	52.1 PK	74.0	-21.9	2.08 H	287	53.0	-0.9
6	2496.00	43.4 AV	54.0	-10.6	2.08 H	287	44.3	-0.9
7	4874.00	54.6 PK	74.0	-19.4	1.21 H	190	51.3	3.3
8	**4874.00**	**53.9 AV**	**54.0**	**-0.1**	**1.21 H**	**190**	**50.6**	**3.3**
9	7311.00	45.7 PK	74.0	-28.3	3.36 H	213	35.9	9.8
10	7311.00	39.9 AV	54.0	-14.1	3.36 H	213	30.1	9.8
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	46.5 PK	74.0	-27.5	1.19 V	44	47.8	-1.3
2	2390.00	33.6 AV	54.0	-20.4	1.19 V	44	34.9	-1.3
3	*2437.00	106.9 PK			1.19 V	44	108.1	-1.2
4	*2437.00	105.0 AV			1.19 V	44	106.2	-1.2
5	2496.00	48.7 PK	74.0	-25.3	1.16 V	47	49.6	-0.9
6	2496.00	38.8 AV	54.0	-15.2	1.16 V	47	39.7	-0.9
7	4874.00	47.6 PK	74.0	-26.4	1.41 V	335	44.3	3.3
8	4874.00	44.2 AV	54.0	-9.8	1.41 V	335	40.9	3.3
9	7311.00	44.8 PK	74.0	-29.2	1.79 V	152	35.0	9.8
10	7311.00	39.5 AV	54.0	-14.5	1.79 V	152	29.7	9.8

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) – Pre-Amplifier 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	113.4 PK			2.08 H	277	114.5	-1.1
2	*2462.00	111.0 AV			2.08 H	277	112.1	-1.1
3	2483.50	53.6 PK	74.0	-20.4	2.08 H	277	54.6	-1.0
4	2483.50	46.6 AV	54.0	-7.4	2.08 H	277	47.6	-1.0
5	4924.00	54.3 PK	74.0	-19.7	1.27 H	181	50.8	3.5
6	4924.00	53.6 AV	54.0	-0.4	1.27 H	181	50.1	3.5
7	7386.00	46.2 PK	74.0	-27.8	3.13 H	172	36.3	9.9
8	7386.00	40.2 AV	54.0	-13.8	3.13 H	172	30.3	9.9
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	107.3 PK			1.18 V	60	108.4	-1.1
2	*2462.00	105.5 AV			1.18 V	60	106.6	-1.1
3	2483.50	48.1 PK	74.0	-25.9	1.18 V	60	49.1	-1.0
4	2483.50	38.5 AV	54.0	-15.5	1.18 V	60	39.5	-1.0
5	4924.00	47.3 PK	74.0	-26.7	1.39 V	326	43.8	3.5
6	4924.00	44.2 AV	54.0	-9.8	1.39 V	326	40.7	3.5
7	7386.00	45.1 PK	74.0	-28.9	1.76 V	140	35.2	9.9
8	7386.00	39.5 AV	54.0	-14.5	1.76 V	140	29.6	9.9

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) – Pre-Amplifier 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	67.8 PK	74.0	-6.2	2.82 H	284	69.1	-1.3
2	2390.00	53.8 AV	54.0	-0.2	2.82 H	284	55.1	-1.3
3	*2412.00	114.1 PK			2.82 H	284	115.2	-1.1
4	*2412.00	101.8 AV			2.82 H	284	102.9	-1.1
5	4824.00	43.3 PK	74.0	-30.7	1.39 H	200	40.1	3.2
6	4824.00	32.1 AV	54.0	-21.9	1.39 H	200	28.9	3.2
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	48.5 PK	74.0	-25.5	1.20 V	79	49.8	-1.3
2	2390.00	38.7 AV	54.0	-15.3	1.20 V	79	40.0	-1.3
3	*2412.00	107.8 PK			1.20 V	79	108.9	-1.1
4	*2412.00	95.1 AV			1.20 V	79	96.2	-1.1
5	4824.00	38.1 PK	74.0	-35.9	1.58 V	330	34.9	3.2
6	4824.00	26.9 AV	54.0	-27.1	1.58 V	330	23.7	3.2

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) – Pre-Amplifier 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)
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	64.1 PK	74.0	-9.9	2.77 H	284	65.4	-1.3
2	2390.00	50.4 AV	54.0	-3.6	2.77 H	284	51.7	-1.3
3	*2437.00	120.4 PK			2.77 H	284	121.6	-1.2
4	*2437.00	109.4 AV			2.77 H	284	110.6	-1.2
5	2483.50	69.0 PK	74.0	-5.0	2.77 H	284	70.0	-1.0
6	**2483.50**	**53.9 AV**	**54.0**	**-0.1**	**2.77 H**	**284**	**54.9**	**-1.0**
7	4874.00	51.1 PK	74.0	-22.9	1.35 H	189	47.8	3.3
8	4874.00	39.9 AV	54.0	-14.1	1.35 H	189	36.6	3.3
9	7311.00	51.3 PK	74.0	-22.7	1.73 H	217	41.5	9.8
10	7311.00	38.1 AV	54.0	-15.9	1.73 H	217	28.3	9.8
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	48.0 PK	74.0	-26.0	1.22 V	81	49.3	-1.3
2	2390.00	33.7 AV	54.0	-20.3	1.22 V	81	35.0	-1.3
3	*2437.00	113.4 PK			1.22 V	81	114.6	-1.2
4	*2437.00	102.5 AV			1.22 V	81	103.7	-1.2
5	2483.50	67.1 PK	74.0	-6.9	1.22 V	81	68.1	-1.0
6	2483.50	48.5 AV	54.0	-5.5	1.22 V	81	49.5	-1.0
7	4874.00	45.1 PK	74.0	-28.9	1.56 V	326	41.8	3.3
8	4874.00	33.9 AV	54.0	-20.1	1.56 V	326	30.6	3.3
9	7311.00	49.7 PK	74.0	-24.3	1.25 V	128	39.9	9.8
10	7311.00	37.9 AV	54.0	-16.1	1.25 V	128	28.1	9.8

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) – Pre-Amplifier 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	115.0 PK			2.75 H	286	116.1	-1.1
2	*2462.00	102.0 AV			2.75 H	286	103.1	-1.1
3	2483.50	71.6 PK	74.0	-2.4	2.75 H	286	72.6	-1.0
4	**2483.50**	**53.9 AV**	**54.0**	**-0.1**	**2.75 H**	**286**	**54.9**	**-1.0**
5	4924.00	42.9 PK	74.0	-31.1	1.44 H	184	39.4	3.5
6	4924.00	32.1 AV	54.0	-21.9	1.44 H	184	28.6	3.5
7	7386.00	44.5 PK	74.0	-29.5	1.81 H	220	34.6	9.9
8	7386.00	31.2 AV	54.0	-22.8	1.81 H	220	21.3	9.9
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	108.0 PK			1.23 V	73	109.1	-1.1
2	*2462.00	95.9 AV			1.23 V	73	97.0	-1.1
3	2483.50	66.5 PK	74.0	-7.5	1.23 V	73	67.5	-1.0
4	2483.50	48.1 AV	54.0	-5.9	1.23 V	73	49.1	-1.0
5	4924.00	37.7 PK	74.0	-36.3	1.64 V	320	34.2	3.5
6	4924.00	26.7 AV	54.0	-27.3	1.64 V	320	23.2	3.5
7	7386.00	43.1 PK	74.0	-30.9	1.27 V	129	33.2	9.9
8	7386.00	30.5 AV	54.0	-23.5	1.27 V	129	20.6	9.9

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) – Pre-Amplifier 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	67.2 PK	74.0	-6.8	2.40 H	288	68.5	-1.3
2	2390.00	53.8 AV	54.0	-0.2	2.40 H	288	55.1	-1.3
3	*2412.00	114.0 PK			2.40 H	288	115.1	-1.1
4	*2412.00	102.4 AV			2.40 H	288	103.5	-1.1
5	4824.00	43.3 PK	74.0	-30.7	1.44 H	201	40.1	3.2
6	4824.00	32.0 AV	54.0	-22.0	1.44 H	201	28.8	3.2
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	48.6 PK	74.0	-25.4	1.10 V	76	49.9	-1.3
2	2390.00	38.9 AV	54.0	-15.1	1.10 V	76	40.2	-1.3
3	*2412.00	107.7 PK			1.10 V	76	108.8	-1.1
4	*2412.00	95.0 AV			1.10 V	76	96.1	-1.1
5	4824.00	38.3 PK	74.0	-35.7	1.57 V	318	35.1	3.2
6	4824.00	27.3 AV	54.0	-26.7	1.57 V	318	24.1	3.2

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) – Pre-Amplifier 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)
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	67.8 PK	74.0	-6.2	2.50 H	283	69.1	-1.3
2	2390.00	49.9 AV	54.0	-4.1	2.50 H	283	51.2	-1.3
3	*2437.00	121.1 PK			2.50 H	283	122.3	-1.2
4	*2437.00	109.2 AV			2.50 H	283	110.4	-1.2
5	2483.50	70.6 PK	74.0	-3.4	2.50 H	283	71.6	-1.0
6	**2483.50**	**53.9 AV**	**54.0**	**-0.1**	**2.50 H**	**283**	**54.9**	**-1.0**
7	4874.00	50.9 PK	74.0	-23.1	1.33 H	184	47.6	3.3
8	4874.00	39.5 AV	54.0	-14.5	1.33 H	184	36.2	3.3
9	7311.00	51.0 PK	74.0	-23.0	1.74 H	204	41.2	9.8
10	7311.00	37.8 AV	54.0	-16.2	1.74 H	204	28.0	9.8
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	48.0 PK	74.0	-26.0	1.15 V	79	49.3	-1.3
2	2390.00	33.4 AV	54.0	-20.6	1.15 V	79	34.7	-1.3
3	*2437.00	113.1 PK			1.15 V	79	114.3	-1.2
4	*2437.00	102.1 AV			1.15 V	79	103.3	-1.2
5	2483.50	67.3 PK	74.0	-6.7	1.15 V	79	68.3	-1.0
6	2483.50	48.8 AV	54.0	-5.2	1.15 V	79	49.8	-1.0
7	4874.00	44.5 PK	74.0	-29.5	1.51 V	316	41.2	3.3
8	4874.00	33.4 AV	54.0	-20.6	1.51 V	316	30.1	3.3
9	7311.00	49.7 PK	74.0	-24.3	1.24 V	138	39.9	9.8
10	7311.00	38.1 AV	54.0	-15.9	1.24 V	138	28.3	9.8

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) – Pre-Amplifier 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	114.5 PK			2.95 H	283	115.6	-1.1
2	*2462.00	102.7 AV			2.95 H	283	103.8	-1.1
3	2483.50	71.4 PK	74.0	-2.6	2.50 H	283	72.4	-1.0
4	2483.50	53.8 AV	54.0	-0.2	2.50 H	283	54.8	-1.0
5	4924.00	43.0 PK	74.0	-31.0	1.42 H	185	39.5	3.5
6	4924.00	32.0 AV	54.0	-22.0	1.42 H	185	28.5	3.5
7	7386.00	44.6 PK	74.0	-29.4	1.80 H	231	34.7	9.9
8	7386.00	31.2 AV	54.0	-22.8	1.80 H	231	21.3	9.9
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	107.5 PK			1.20 V	62	108.6	-1.1
2	*2462.00	95.7 AV			1.20 V	62	96.8	-1.1
3	2483.50	66.5 PK	74.0	-7.5	1.20 V	62	67.5	-1.0
4	2483.50	48.4 AV	54.0	-5.6	1.20 V	62	49.4	-1.0
5	4924.00	37.5 PK	74.0	-36.5	1.59 V	313	34.0	3.5
6	4924.00	26.7 AV	54.0	-27.3	1.59 V	313	23.2	3.5
7	7386.00	43.5 PK	74.0	-30.5	1.33 V	140	33.6	9.9
8	7386.00	30.9 AV	54.0	-23.1	1.33 V	140	21.0	9.9

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) – Pre-Amplifier 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	68.9 PK	74.0	-5.1	1.11 H	280	70.2	-1.3
2	**2390.00**	**53.9 AV**	**54.0**	**-0.1**	**1.11 H**	**280**	**55.2**	**-1.3**
3	*2422.00	107.5 PK			1.11 H	280	108.8	-1.3
4	*2422.00	96.7 AV			1.11 H	280	98.0	-1.3
5	4844.00	37.4 PK	74.0	-36.6	2.50 H	316	34.1	3.3
6	4844.00	26.3 AV	54.0	-27.7	2.50 H	316	23.0	3.3
7	7266.00	44.1 PK	74.0	-29.9	1.18 H	266	34.3	9.8
8	7266.00	31.3 AV	54.0	-22.7	1.18 H	266	21.5	9.8
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	60.6 PK	74.0	-13.4	2.10 V	241	61.9	-1.3
2	2390.00	47.2 AV	54.0	-6.8	2.10 V	241	48.5	-1.3
3	*2422.00	101.7 PK			2.10 V	241	103.0	-1.3
4	*2422.00	91.1 AV			2.10 V	241	92.4	-1.3
5	4844.00	37.4 PK	74.0	-36.6	2.51 V	313	34.1	3.3
6	4844.00	26.2 AV	54.0	-27.8	2.51 V	313	22.9	3.3
7	7266.00	44.5 PK	74.0	-29.5	1.24 V	272	34.7	9.8
8	7266.00	31.4 AV	54.0	-22.6	1.24 V	272	21.6	9.8

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) – Pre-Amplifier 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)
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	2378.00	64.4 PK	74.0	-9.6	2.58 H	279	65.8	-1.4
2	2378.00	50.8 AV	54.0	-3.2	2.58 H	279	52.2	-1.4
3	*2437.00	111.3 PK			2.58 H	279	112.5	-1.2
4	*2437.00	100.0 AV			2.58 H	279	101.2	-1.2
5	2483.50	70.3 PK	74.0	-3.7	2.58 H	279	71.3	-1.0
6	2483.50	53.7 AV	54.0	-0.3	2.58 H	279	54.7	-1.0
7	4874.00	37.3 PK	74.0	-36.7	2.56 H	313	34.0	3.3
8	4874.00	26.1 AV	54.0	-27.9	2.56 H	313	22.8	3.3
9	7311.00	44.1 PK	74.0	-29.9	1.19 H	265	34.3	9.8
10	7311.00	31.1 AV	54.0	-22.9	1.19 H	265	21.3	9.8
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	2378.00	50.2 PK	74.0	-23.8	2.15 V	242	51.6	-1.4
2	2378.00	35.7 AV	54.0	-18.3	2.15 V	242	37.1	-1.4
3	*2437.00	106.0 PK			2.15 V	242	107.2	-1.2
4	*2437.00	94.7 AV			2.15 V	242	95.9	-1.2
5	2483.50	67.1 PK	74.0	-6.9	2.15 V	242	68.1	-1.0
6	2483.50	48.4 AV	54.0	-5.6	2.15 V	242	49.4	-1.0
7	4874.00	37.4 PK	74.0	-36.6	2.60 V	314	34.1	3.3
8	4874.00	26.4 AV	54.0	-27.6	2.60 V	314	23.1	3.3
9	7311.00	43.9 PK	74.0	-30.1	1.18 V	269	34.1	9.8
10	7311.00	30.9 AV	54.0	-23.1	1.18 V	269	21.1	9.8

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) – Pre-Amplifier 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	109.5 PK			2.54 H	284	110.6	-1.1
2	*2452.00	98.2 AV			2.54 H	284	99.3	-1.1
3	2483.50	72.1 PK	74.0	-1.9	2.54 H	284	73.1	-1.0
4	**2483.50**	**53.9 AV**	**54.0**	**-0.1**	**2.54 H**	**284**	**54.9**	**-1.0**
5	4904.00	37.2 PK	74.0	-36.8	2.60 H	319	33.7	3.5
6	4904.00	25.9 AV	54.0	-28.1	2.60 H	319	22.4	3.5
7	7356.00	44.1 PK	74.0	-29.9	1.18 H	267	34.2	9.9
8	7356.00	31.0 AV	54.0	-23.0	1.18 H	267	21.1	9.9
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	100.9 PK			2.09 V	238	102.0	-1.1
2	*2452.00	90.2 AV			2.09 V	238	91.3	-1.1
3	2483.50	65.8 PK	74.0	-8.2	2.09 V	238	66.8	-1.0
4	2483.50	48.1 AV	54.0	-5.9	2.09 V	238	49.1	-1.0
5	4904.00	36.9 PK	74.0	-37.1	2.59 V	319	33.4	3.5
6	4904.00	25.7 AV	54.0	-28.3	2.59 V	319	22.2	3.5
7	7356.00	44.5 PK	74.0	-29.5	1.16 V	260	34.6	9.9
8	7356.00	31.5 AV	54.0	-22.5	1.16 V	260	21.6	9.9

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) – Pre-Amplifier 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 Data:

802.11g

CHANNEL	TX Channel 6	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	31.89	33.8 QP	40.0	-6.2	1.00 H	57	43.2	-9.4
2	83.20	32.0 QP	40.0	-8.0	2.50 H	232	45.6	-13.6
3	139.44	30.8 QP	43.5	-12.7	2.00 H	269	39.2	-8.4
4	200.02	30.9 QP	43.5	-12.6	1.00 H	257	42.3	-11.4
5	375.00	34.9 QP	46.0	-11.1	1.00 H	234	40.7	-5.8
6	500.01	33.1 QP	46.0	-12.9	2.00 H	148	35.9	-2.8
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	38.03	37.3 QP	40.0	-2.7	1.00 V	225	45.6	-8.3
2	63.39	36.0 QP	40.0	-4.0	1.50 V	197	44.8	-8.8
3	83.88	35.0 QP	40.0	-5.0	1.50 V	185	48.7	-13.7
4	137.11	29.7 QP	43.5	-13.8	1.00 V	175	38.1	-8.4
5	375.00	33.8 QP	46.0	-12.2	1.00 V	178	39.6	-5.8
6	500.01	35.6 QP	46.0	-10.4	1.00 V	0	38.4	-2.8

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) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value

1TX Mode

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	2386.00	55.9 PK	74.0	-18.1	2.50 H	309	57.2	-1.3
2	2386.00	50.8 AV	54.0	-3.2	2.50 H	309	52.1	-1.3
3	*2412.00	111.3 PK			2.50 H	309	112.4	-1.1
4	*2412.00	108.8 AV			2.50 H	309	109.9	-1.1
5	4824.00	49.4 PK	74.0	-24.6	1.13 H	199	46.2	3.2
6	4824.00	47.3 AV	54.0	-6.7	1.13 H	199	44.1	3.2
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	2386.00	53.0 PK	74.0	-21.0	3.93 V	262	54.3	-1.3
2	2386.00	48.2 AV	54.0	-5.8	3.93 V	262	49.5	-1.3
3	*2412.00	107.7 PK			3.93 V	262	108.8	-1.1
4	*2412.00	106.2 AV			3.93 V	262	107.3	-1.1
5	4824.00	50.2 PK	74.0	-23.8	1.17 V	114	47.0	3.2
6	4824.00	48.5 AV	54.0	-5.5	1.17 V	114	45.3	3.2

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) – Pre-Amplifier 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)
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	46.9 PK	74.0	-27.1	2.56 H	299	48.2	-1.3
2	2390.00	36.2 AV	54.0	-17.8	2.56 H	299	37.5	-1.3
3	*2437.00	111.9 PK			2.56 H	299	113.1	-1.2
4	*2437.00	109.5 AV			2.56 H	299	110.7	-1.2
5	2485.00	49.1 PK	74.0	-24.9	2.56 H	299	50.1	-1.0
6	2485.00	36.6 AV	54.0	-17.4	2.56 H	299	37.6	-1.0
7	4874.00	50.3 PK	74.0	-23.7	1.13 H	196	47.0	3.3
8	4874.00	48.2 AV	54.0	-5.8	1.13 H	196	44.9	3.3
9	7311.00	50.9 PK	74.0	-23.1	1.41 H	220	41.1	9.8
10	7311.00	46.9 AV	54.0	-7.1	1.41 H	220	37.1	9.8
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	46.5 PK	74.0	-27.5	3.90 V	274	47.8	-1.3
2	2390.00	36.0 AV	54.0	-18.0	3.90 V	274	37.3	-1.3
3	*2437.00	107.9 PK			3.90 V	274	109.1	-1.2
4	*2437.00	106.4 AV			3.90 V	274	107.6	-1.2
5	2485.00	48.9 PK	74.0	-25.1	3.90 V	274	49.9	-1.0
6	2485.00	36.3 AV	54.0	-17.7	3.90 V	274	37.3	-1.0
7	4874.00	50.2 PK	74.0	-23.8	1.22 V	122	46.9	3.3
8	4874.00	48.5 AV	54.0	-5.5	1.22 V	122	45.2	3.3
9	7311.00	50.5 PK	74.0	-23.5	1.22 V	114	40.7	9.8
10	7311.00	46.2 AV	54.0	-7.8	1.22 V	114	36.4	9.8

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) – Pre-Amplifier 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	111.2 PK			2.30 H	316	112.3	-1.1
2	*2462.00	108.5 AV			2.30 H	316	109.6	-1.1
3	2489.00	55.3 PK	74.0	-18.7	2.30 H	316	56.3	-1.0
4	2489.00	50.2 AV	54.0	-3.8	2.30 H	316	51.2	-1.0
5	4924.00	49.6 PK	74.0	-24.4	1.22 H	76	46.1	3.5
6	4924.00	48.6 AV	54.0	-5.4	1.22 H	76	45.1	3.5
7	7386.00	52.9 PK	74.0	-21.1	1.44 H	220	43.0	9.9
8	7386.00	48.8 AV	54.0	-5.2	1.44 H	220	38.9	9.9
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	107.6 PK			3.95 V	277	108.7	-1.1
2	*2462.00	105.9 AV			3.95 V	277	107.0	-1.1
3	2489.00	52.6 PK	74.0	-21.4	3.95 V	277	53.6	-1.0
4	2489.00	47.6 AV	54.0	-6.4	3.95 V	277	48.6	-1.0
5	4924.00	50.2 PK	74.0	-23.8	1.21 V	126	46.7	3.5
6	4924.00	48.3 AV	54.0	-5.7	1.21 V	126	44.8	3.5
7	7386.00	50.6 PK	74.0	-23.4	1.21 V	126	40.7	9.9
8	7386.00	46.3 AV	54.0	-7.7	1.21 V	126	36.4	9.9

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) – Pre-Amplifier 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	70.8 PK	74.0	-3.2	2.40 H	296	72.1	-1.3
2	2390.00	53.8 AV	54.0	-0.2	2.40 H	296	55.1	-1.3
3	*2412.00	111.9 PK			2.40 H	296	113.0	-1.1
4	*2412.00	100.0 AV			2.40 H	296	101.1	-1.1
5	4824.00	42.5 PK	74.0	-31.5	1.26 H	287	39.3	3.2
6	4824.00	29.1 AV	54.0	-24.9	1.26 H	287	25.9	3.2
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	3.89 V	283	69.9	-1.3
2	2390.00	51.4 AV	54.0	-2.6	3.89 V	283	52.7	-1.3
3	*2412.00	108.3 PK			3.89 V	283	109.4	-1.1
4	*2412.00	97.4 AV			3.89 V	283	98.5	-1.1
5	4824.00	42.3 PK	74.0	-31.7	1.53 V	281	39.1	3.2
6	4824.00	28.8 AV	54.0	-25.2	1.53 V	281	25.6	3.2

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) – Pre-Amplifier 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)
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	64.2 PK	74.0	-9.8	2.44 H	297	65.5	-1.3
2	2390.00	46.4 AV	54.0	-7.6	2.44 H	297	47.7	-1.3
3	*2437.00	116.9 PK			2.44 H	297	118.1	-1.2
4	*2437.00	104.4 AV			2.44 H	297	105.6	-1.2
5	2483.50	64.6 PK	74.0	-9.4	2.44 H	297	65.6	-1.0
6	2483.50	46.3 AV	54.0	-7.7	2.44 H	297	47.3	-1.0
7	4874.00	46.0 PK	74.0	-28.0	1.25 H	301	42.7	3.3
8	4874.00	33.5 AV	54.0	-20.5	1.25 H	301	30.2	3.3
9	7311.00	52.3 PK	74.0	-21.7	1.65 H	240	42.5	9.8
10	7311.00	40.0 AV	54.0	-14.0	1.65 H	240	30.2	9.8
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	62.2 PK	74.0	-11.8	3.88 V	281	63.5	-1.3
2	2390.00	44.4 AV	54.0	-9.6	3.88 V	281	45.7	-1.3
3	*2437.00	114.1 PK			3.88 V	281	115.3	-1.2
4	*2437.00	102.1 AV			3.88 V	281	103.3	-1.2
5	2483.50	62.1 PK	74.0	-11.9	3.88 V	281	63.1	-1.0
6	2483.50	44.1 AV	54.0	-9.9	3.88 V	281	45.1	-1.0
7	4874.00	46.7 PK	74.0	-27.3	1.55 V	282	43.4	3.3
8	4874.00	34.0 AV	54.0	-20.0	1.55 V	282	30.7	3.3
9	7311.00	51.1 PK	74.0	-22.9	1.99 V	305	41.3	9.8
10	7311.00	38.1 AV	54.0	-15.9	1.99 V	305	28.3	9.8

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) – Pre-Amplifier 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	111.7 PK			2.32 H	297	112.8	-1.1
2	*2462.00	99.0 AV			2.32 H	297	100.1	-1.1
3	2483.50	72.6 PK	74.0	-1.4	2.32 H	297	73.6	-1.0
4	**2483.50**	**53.9 AV**	**54.0**	**-0.1**	**2.32 H**	**297**	**54.9**	**-1.0**
5	4924.00	43.7 PK	74.0	-30.3	1.28 H	289	40.2	3.5
6	4924.00	31.2 AV	54.0	-22.8	1.28 H	289	27.7	3.5
7	7386.00	49.0 PK	74.0	-25.0	1.65 H	251	39.1	9.9
8	7386.00	37.5 AV	54.0	-16.5	1.65 H	251	27.6	9.9
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	107.4 PK			3.87 V	273	108.5	-1.1
2	*2462.00	96.5 AV			3.87 V	273	97.6	-1.1
3	2483.50	69.1 PK	74.0	-4.9	3.87 V	273	70.1	-1.0
4	2483.50	51.6 AV	54.0	-2.4	3.87 V	273	52.6	-1.0
5	4924.00	44.0 PK	74.0	-30.0	1.48 V	275	40.5	3.5
6	4924.00	31.5 AV	54.0	-22.5	1.48 V	275	28.0	3.5
7	7386.00	46.5 PK	74.0	-27.5	1.89 V	301	36.6	9.9
8	7386.00	35.5 AV	54.0	-18.5	1.89 V	301	25.6	9.9

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) – Pre-Amplifier 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	68.9 PK	74.0	-5.1	2.40 H	294	70.2	-1.3
2	2390.00	53.7 AV	54.0	-0.3	2.40 H	294	55.0	-1.3
3	*2412.00	111.2 PK			2.40 H	294	112.3	-1.1
4	*2412.00	99.3 AV			2.40 H	294	100.4	-1.1
5	4824.00	43.5 PK	74.0	-30.5	1.30 H	317	40.3	3.2
6	4824.00	30.2 AV	54.0	-23.8	1.30 H	317	27.0	3.2
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	68.8 PK	74.0	-5.2	3.15 V	256	70.1	-1.3
2	2390.00	51.5 AV	54.0	-2.5	3.15 V	256	52.8	-1.3
3	*2412.00	107.3 PK			3.15 V	256	108.4	-1.1
4	*2412.00	96.7 AV			3.15 V	256	97.8	-1.1
5	4824.00	43.2 PK	74.0	-30.8	1.75 V	200	40.0	3.2
6	4824.00	30.0 AV	54.0	-24.0	1.75 V	200	26.8	3.2

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) – Pre-Amplifier 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)
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	65.3 PK	74.0	-8.7	2.37 H	294	66.6	-1.3
2	2390.00	48.6 AV	54.0	-5.4	2.37 H	294	49.9	-1.3
3	*2437.00	116.2 PK			2.37 H	294	117.4	-1.2
4	*2437.00	104.2 AV			2.37 H	294	105.4	-1.2
5	2483.50	63.5 PK	74.0	-10.5	2.37 H	294	64.5	-1.0
6	2483.50	47.3 AV	54.0	-6.7	2.37 H	294	48.3	-1.0
7	4874.00	45.6 PK	74.0	-28.4	1.30 H	307	42.3	3.3
8	4874.00	32.8 AV	54.0	-21.2	1.30 H	307	29.5	3.3
9	7311.00	51.9 PK	74.0	-22.1	1.67 H	241	42.1	9.8
10	7311.00	39.8 AV	54.0	-14.2	1.67 H	241	30.0	9.8
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	61.5 PK	74.0	-12.5	3.18 V	249	62.8	-1.3
2	2390.00	44.0 AV	54.0	-10.0	3.18 V	249	45.3	-1.3
3	*2437.00	113.8 PK			3.18 V	249	115.0	-1.2
4	*2437.00	101.5 AV			3.18 V	249	102.7	-1.2
5	2483.50	62.1 PK	74.0	-11.9	3.18 V	249	63.1	-1.0
6	2483.50	43.9 AV	54.0	-10.1	3.18 V	249	44.9	-1.0
7	4874.00	46.8 PK	74.0	-27.2	1.78 V	201	43.5	3.3
8	4874.00	33.5 AV	54.0	-20.5	1.78 V	201	30.2	3.3
9	7311.00	50.5 PK	74.0	-23.5	2.50 V	311	40.7	9.8
10	7311.00	36.1 AV	54.0	-17.9	2.50 V	311	26.3	9.8

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) – Pre-Amplifier 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	110.3 PK			2.32 H	295	111.4	-1.1
2	*2462.00	98.8 AV			2.32 H	295	99.9	-1.1
3	2483.50	69.3 PK	74.0	-4.7	2.32 H	295	70.3	-1.0
4	2483.50	53.7 AV	54.0	-0.3	2.32 H	295	54.7	-1.0
5	4924.00	41.3 PK	74.0	-32.7	1.27 H	320	37.8	3.5
6	4924.00	29.5 AV	54.0	-24.5	1.27 H	320	26.0	3.5
7	7386.00	48.6 PK	74.0	-25.4	1.61 H	227	38.7	9.9
8	7386.00	36.5 AV	54.0	-17.5	1.61 H	227	26.6	9.9
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	106.7 PK			3.18 V	243	107.8	-1.1
2	*2462.00	95.8 AV			3.18 V	243	96.9	-1.1
3	2483.50	68.3 PK	74.0	-5.7	3.18 V	243	69.3	-1.0
4	2483.50	50.7 AV	54.0	-3.3	3.18 V	243	51.7	-1.0
5	4924.00	43.0 PK	74.0	-31.0	1.75 V	211	39.5	3.5
6	4924.00	30.5 AV	54.0	-23.5	1.75 V	211	27.0	3.5
7	7386.00	47.1 PK	74.0	-26.9	2.54 V	325	37.2	9.9
8	7386.00	34.1 AV	54.0	-19.9	2.54 V	325	24.2	9.9

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) – Pre-Amplifier 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	71.7 PK	74.0	-2.3	2.80 H	288	73.0	-1.3
2	**2390.00**	**53.9 AV**	**54.0**	**-0.1**	**2.80 H**	**288**	**55.2**	**-1.3**
3	*2422.00	108.4 PK			2.80 H	288	109.7	-1.3
4	*2422.00	95.7 AV			2.80 H	288	97.0	-1.3
5	4844.00	39.9 PK	74.0	-34.1	1.20 H	332	36.6	3.3
6	4844.00	28.2 AV	54.0	-25.8	1.20 H	332	24.9	3.3
7	7266.00	48.6 PK	74.0	-25.4	1.56 H	240	38.8	9.8
8	7266.00	36.5 AV	54.0	-17.5	1.56 H	240	26.7	9.8
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	70.9 PK	74.0	-3.1	1.65 V	257	72.2	-1.3
2	2390.00	51.2 AV	54.0	-2.8	1.65 V	257	52.5	-1.3
3	*2422.00	102.7 PK			1.65 V	257	104.0	-1.3
4	*2422.00	91.6 AV			1.65 V	257	92.9	-1.3
5	4844.00	40.5 PK	74.0	-33.5	1.21 V	329	37.2	3.3
6	4844.00	29.8 AV	54.0	-24.2	1.21 V	329	26.5	3.3
7	7266.00	47.0 PK	74.0	-27.0	2.49 V	334	37.2	9.8
8	7266.00	33.8 AV	54.0	-20.2	2.49 V	334	24.0	9.8

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) – Pre-Amplifier 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)
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	2378.00	68.7 PK	74.0	-5.3	2.78 H	288	70.1	-1.4
2	2378.00	53.5 AV	54.0	-0.5	2.78 H	288	54.9	-1.4
3	*2437.00	110.2 PK			2.78 H	288	111.4	-1.2
4	*2437.00	98.7 AV			2.78 H	288	99.9	-1.2
5	2483.50	72.7 PK	74.0	-1.3	2.78 H	188	73.7	-1.0
6	**2483.50**	**53.9 AV**	**54.0**	**-0.1**	**2.78 H**	**188**	**54.9**	**-1.0**
7	4874.00	41.4 PK	74.0	-32.6	1.28 H	330	38.1	3.3
8	4874.00	29.5 AV	54.0	-24.5	1.28 H	330	26.2	3.3
9	7311.00	48.4 PK	74.0	-25.6	1.55 H	213	38.6	9.8
10	7311.00	36.4 AV	54.0	-17.6	1.55 H	213	26.6	9.8
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	2378.00	68.0 PK	74.0	-6.0	1.69 V	261	69.4	-1.4
2	2378.00	50.5 AV	54.0	-3.5	1.69 V	261	51.9	-1.4
3	*2437.00	105.4 PK			1.69 V	261	106.6	-1.2
4	*2437.00	94.4 AV			1.69 V	261	95.6	-1.2
5	2483.50	68.9 PK	74.0	-5.1	1.69 V	261	69.9	-1.0
6	2483.50	51.6 AV	54.0	-2.4	1.69 V	261	52.6	-1.0
7	4874.00	42.3 PK	74.0	-31.7	1.24 V	318	39.0	3.3
8	4874.00	30.5 AV	54.0	-23.5	1.24 V	318	27.2	3.3
9	7311.00	48.7 PK	74.0	-25.3	3.59 V	29	38.9	9.8
10	7311.00	36.8 AV	54.0	-17.2	3.59 V	29	27.0	9.8

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) – Pre-Amplifier 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	106.4 PK			2.78 H	296	107.5	-1.1
2	*2452.00	94.7 AV			2.78 H	296	95.8	-1.1
3	2483.50	73.1 PK	74.0	-0.9	2.78 H	296	74.1	-1.0
4	**2483.50**	**53.9 AV**	**54.0**	**-0.1**	**2.78 H**	**296**	**54.9**	**-1.0**
5	4904.00	40.5 PK	74.0	-33.5	1.24 H	318	37.0	3.5
6	4904.00	28.7 AV	54.0	-25.3	1.24 H	318	25.2	3.5
7	7356.00	47.8 PK	74.0	-26.2	1.58 H	229	37.9	9.9
8	7356.00	35.6 AV	54.0	-18.4	1.58 H	229	25.7	9.9
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	102.9 PK			1.62 V	249	104.0	-1.1
2	*2452.00	92.2 AV			1.62 V	249	93.3	-1.1
3	2483.50	68.9 PK	74.0	-5.1	1.62 V	249	69.9	-1.0
4	2483.50	51.5 AV	54.0	-2.5	1.62 V	249	52.5	-1.0
5	4904.00	41.4 PK	74.0	-32.6	1.22 V	310	37.9	3.5
6	4904.00	29.3 AV	54.0	-24.7	1.22 V	310	25.8	3.5
7	7356.00	47.0 PK	74.0	-27.0	3.57 V	40	37.1	9.9
8	7356.00	35.4 AV	54.0	-18.6	3.57 V	40	25.5	9.9

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) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

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

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
Test Receiver R&S	ESCS 30	847124/029	Oct. 24, 2016	Oct. 23, 2017
Line-Impedance Stabilization Network (for EUT) R&S	ESH3-Z5	848773/004	Oct. 26, 2016	Oct. 25, 2017
Line-Impedance Stabilization Network (for Peripheral) R&S	ENV216	100072	June 13, 2016	June 12, 2017
50 ohms Terminator	N/A	EMC-02	Sep. 29, 2016	Sep. 28, 2017
RF Cable	5D-FB	COCCAB-001	Sep. 30, 2016	Sep. 29, 2017
10 dB PAD Mini-Circuits	HAT-10+	CONATT-004	June 20, 2016	June 19, 2017
Software BVADT	BVADT_Cond_ V7.3.7.4	NA	NA	NA

Note:

1. The calibration interval of the above test instruments are 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. The test was performed in Shielded Room No. 1.
3 Tested Date: Mar. 31, 2017

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.

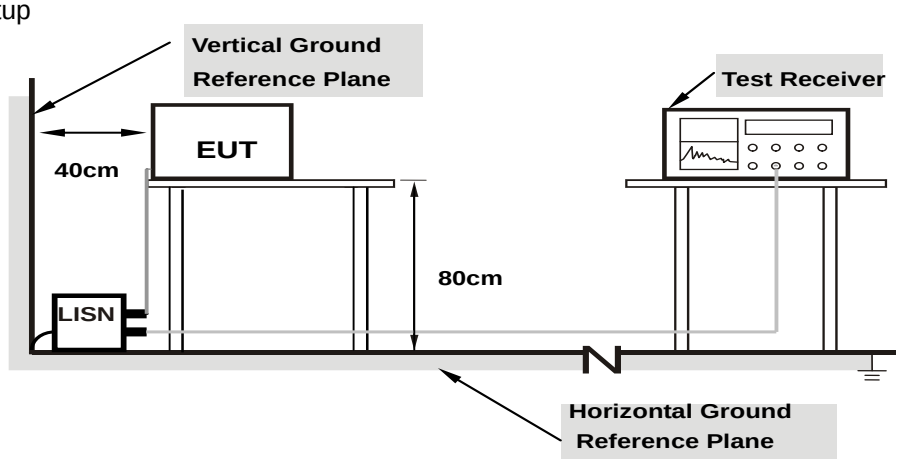
c. The frequency range from 150kHz to 30MHz was searched. Emission levels under (Limit - 20dB) was not recorded.

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



Note: 1.Support units were connected to second LISN.

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

4.2.6 EUT Operating Conditions

Same as 4.1.6.

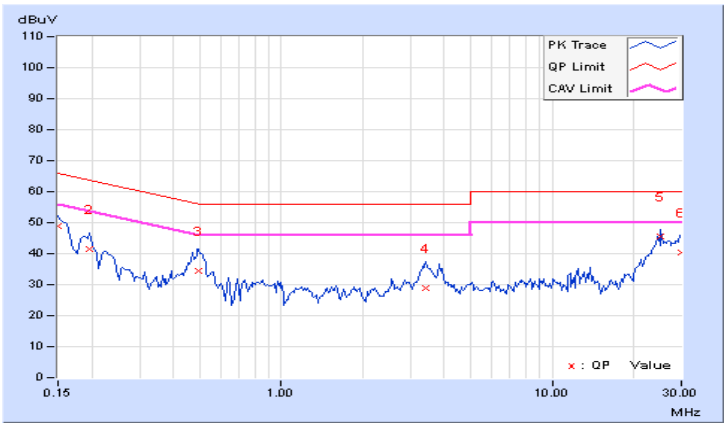
4.2.7 Test Results

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

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	0.15000	10.19	38.75	30.04	48.94	40.23	66.00	56.00	-17.06	-15.77
2	0.19687	10.19	31.23	11.22	41.42	21.41	63.74	53.74	-22.32	-32.33
3	0.49766	10.23	24.13	17.40	34.36	27.63	56.04	46.04	-21.68	-18.41
4	3.41797	10.24	18.83	12.10	29.07	22.34	56.00	46.00	-26.93	-23.66
5	**25.11719**	**11.43**	**33.98**	**33.77**	**45.41**	**45.20**	**60.00**	**50.00**	**-14.59**	**-4.80**
6	30.00000	11.47	28.85	23.15	40.32	34.62	60.00	50.00	-19.68	-15.38

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.

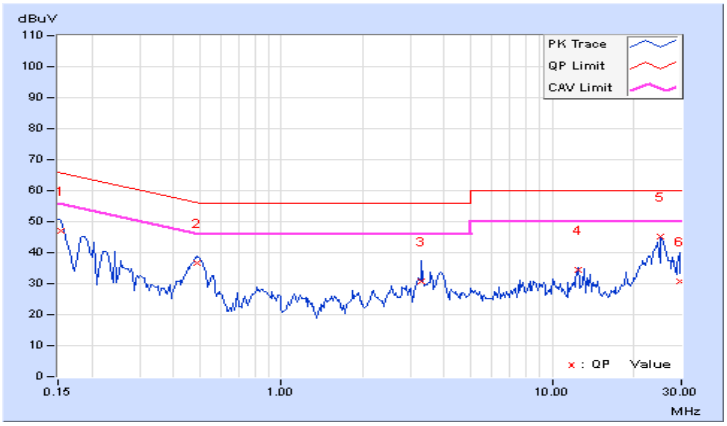


Phase	Neutral (N)	Detector Function	Quasi-Peak (QP) / Average (AV)

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	0.15391	10.18	36.95	25.89	47.13	36.07	65.79	55.79	-18.66	-19.72
2	0.48594	10.21	26.45	22.60	36.66	32.81	56.24	46.24	-19.58	-13.43
3	3.29297	10.20	20.52	12.03	30.72	22.23	56.00	46.00	-25.28	-23.77
4	12.43750	10.68	23.68	21.99	34.36	32.67	60.00	50.00	-25.64	-17.33
5	25.11719	11.07	34.02	33.78	45.09	44.85	60.00	50.00	-14.91	-5.15
6	29.58203	11.05	19.62	-1.01	30.67	10.04	60.00	50.00	-29.33	-39.96

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.

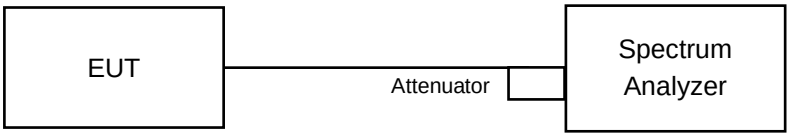


4.3 6dB Bandwidth Measurement

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

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 from Test 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

2TX Mode

802.11b

Channel	Frequency (MHz)	6dB Bandwidth (MHz)		Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1		
1	2412	7.64	8.15	0.5	PASS
6	2437	8.07	8.12	0.5	PASS
11	2462	8.12	8.12	0.5	PASS

802.11g

Channel	Frequency (MHz)	6dB Bandwidth (MHz)		Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1		
1	2412	16.41	16.39	0.5	PASS
6	2437	16.35	16.35	0.5	PASS
11	2462	16.37	16.37	0.5	PASS

802.11n (HT20)

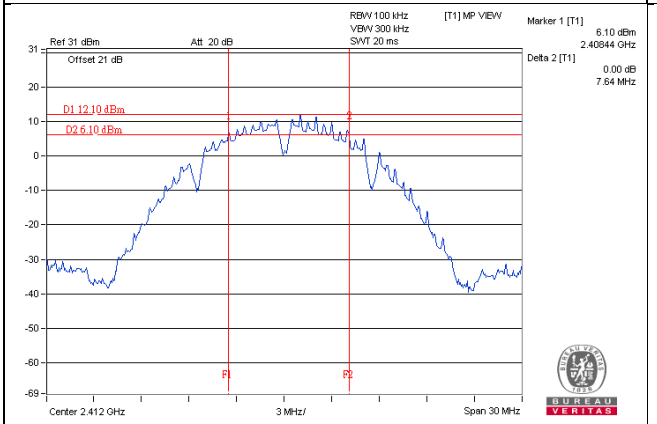
Channel	Frequency (MHz)	6dB Bandwidth (MHz)		Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1		
1	2412	17.62	17.64	0.5	Pass
6	2437	17.64	17.59	0.5	Pass
11	2462	17.65	17.65	0.5	Pass

802.11n (HT40)

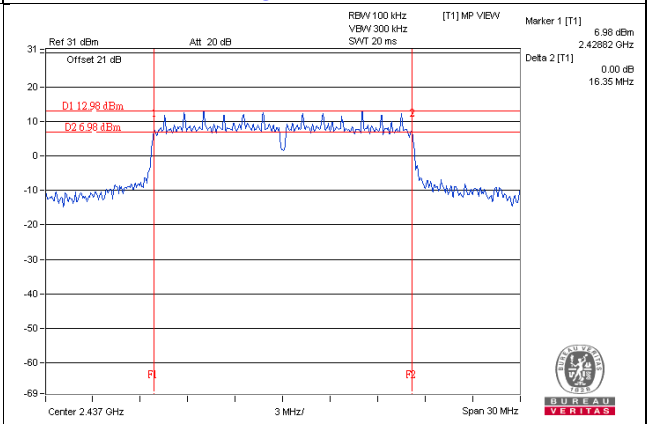
Channel	Frequency (MHz)	6dB Bandwidth (MHz)		Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1		
3	2422	35.22	35.05	0.5	Pass
6	2437	35.31	35.34	0.5	Pass
9	2452	35.22	35.32	0.5	Pass

Spectrum Plot of Worst Value

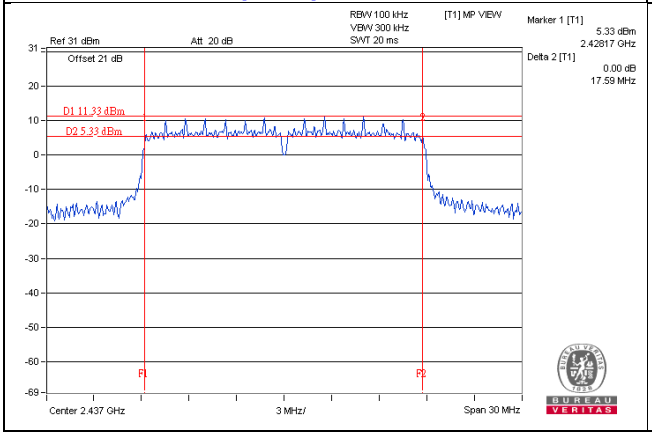
802.11b / Chain 0 : CH1



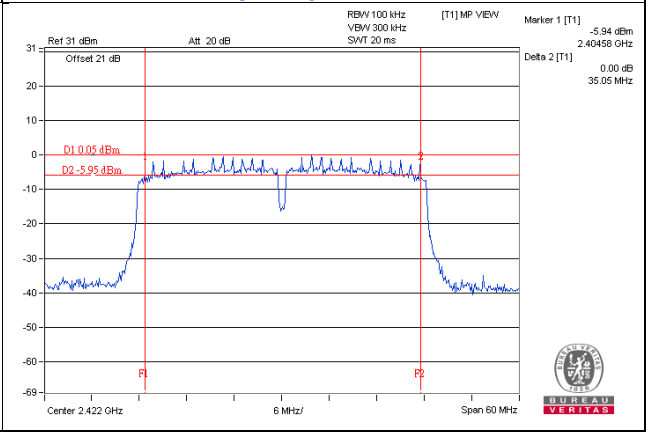
802.11g / Chain 0 : CH6



802.11n (HT20) / Chain 1 : CH6



802.11n (HT40) / Chain 1 : CH3



1TX Mode

802.11b

Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Minimum Limit (MHz)	Pass / Fail
1	2412	9.06	0.5	PASS
6	2437	9.10	0.5	PASS
11	2462	9.09	0.5	PASS

802.11g

Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Minimum Limit (MHz)	Pass / Fail
1	2412	16.40	0.5	PASS
6	2437	16.37	0.5	PASS
11	2462	16.38	0.5	PASS

802.11n (HT20)

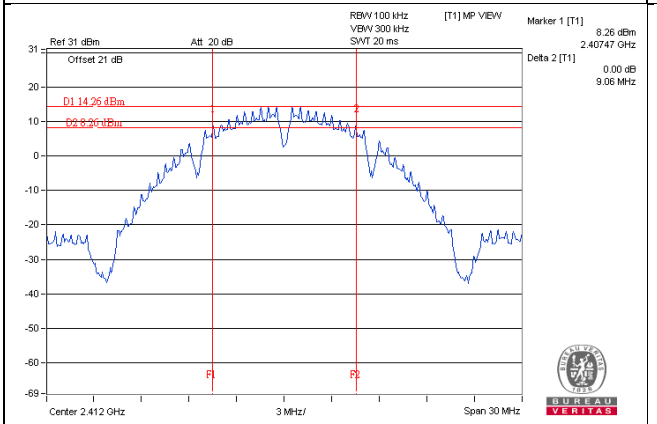
Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Minimum Limit (MHz)	Pass / Fail
1	2412	17.63	0.5	PASS
6	2437	17.64	0.5	PASS
11	2462	17.65	0.5	PASS

802.11n (HT40)

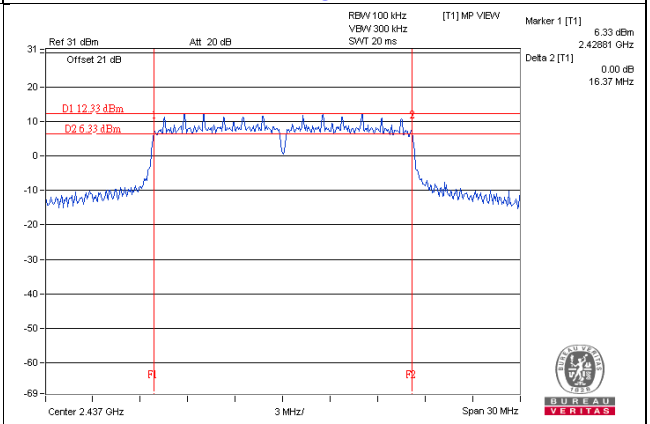
Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Minimum Limit (MHz)	Pass / Fail
3	2422	35.25	0.5	Pass
6	2437	35.41	0.5	Pass
9	2452	35.35	0.5	Pass

Spectrum Plot of Worst Value

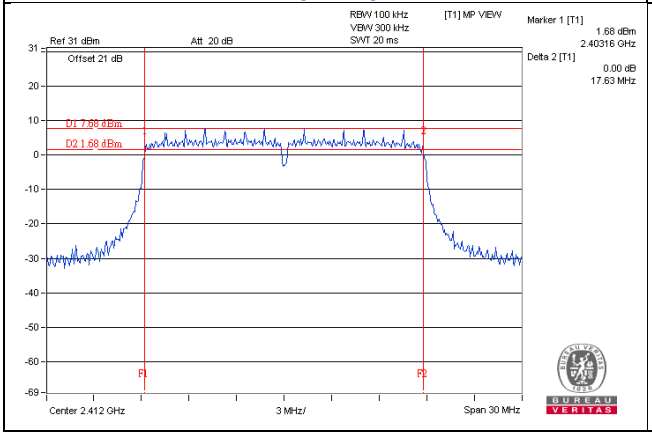
802.11b : CH1



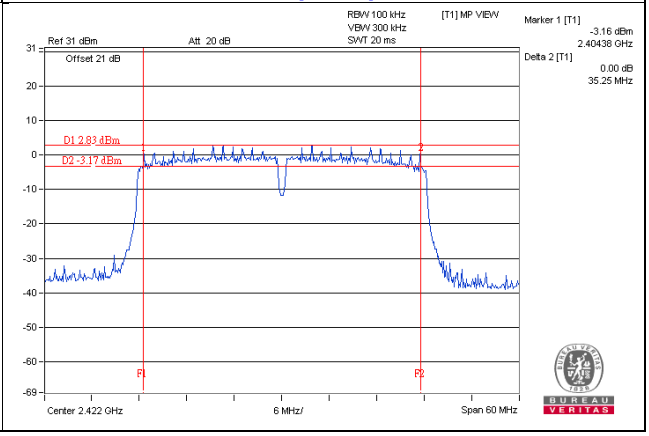
802.11g : CH6



802.11n (HT20) : CH1



802.11n (HT40) : CH3



4.4 Conducted Output Power Measurement

4.4.1 Limits of Conducted Output Power Measurement

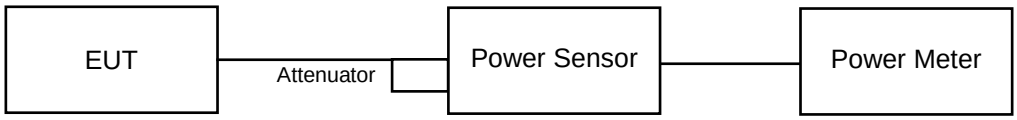
For systems using digital modulation in the 2400–2483.5 MHz bands: 1 Watt (30dBm)

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

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

2TX Mode

CDD Mode

FOR PEAK POWER

802.11b

Chan.	Freq. (MHz)	Peak Power (dBm)		Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
1	2412	22.42	21.32	310.101	24.92	30.00	Pass
6	2437	22.51	21.20	310.064	24.91	30.00	Pass
11	2462	22.55	21.37	316.975	25.01	30.00	Pass

802.11g

Chan.	Freq. (MHz)	Peak Power (dBm)		Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
1	2412	25.17	24.35	601.122	27.79	30.00	Pass
6	2437	27.03	26.80	983.291	29.93	30.00	Pass
11	2462	25.63	24.72	662.078	28.21	30.00	Pass

802.11n (HT20)

Chan.	Freq. (MHz)	Peak Power (dBm)		Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
1	2412	25.43	23.92	595.744	27.75	30.00	Pass
6	2437	27.04	26.74	977.888	29.90	30.00	Pass
11	2462	25.42	25.00	664.565	28.23	30.00	Pass

802.11n (HT40)

Chan.	Freq. (MHz)	Peak Power (dBm)		Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
3	2422	23.02	22.04	360.403	25.57	30.00	Pass
6	2437	25.33	24.32	611.589	27.86	30.00	Pass
9	2452	23.90	22.66	429.973	26.33	30.00	Pass

FOR AVERAGE POWER

802.11b

Chan.	Frequency (MHz)	Avg. Power (dBm)		Total Power (mW)	Total Power (dBm)
		Chain 0	Chain 1		
1	2412	20.17	19.02	183.791	22.64
6	2437	20.22	18.88	182.464	22.61
11	2462	20.27	18.94	184.757	22.67

802.11g

Chan.	Frequency (MHz)	Avg. Power (dBm)		Total Power (mW)	Total Power (dBm)
		Chain 0	Chain 1		
1	2412	16.73	15.70	84.252	19.26
6	2437	23.12	22.03	364.704	25.62
11	2462	17.52	16.31	99.25	19.97

802.11n (HT20)

Chan.	Frequency (MHz)	Avg. Power (dBm)		Total Power (mW)	Total Power (dBm)
		Chain 0	Chain 1		
1	2412	16.82	15.77	85.841	19.34
6	2437	23.21	22.05	369.736	25.68
11	2462	17.56	16.26	99.283	19.97

802.11n (HT40)

Chan.	Frequency (MHz)	Avg. Power (dBm)		Total Power (mW)	Total Power (dBm)
		Chain 0	Chain 1		
3	2422	15.01	13.95	56.527	17.52
6	2437	18.04	16.78	111.323	20.47
9	2452	16.22	14.83	72.288	18.59

Beamforming Mode

FOR PEAK POWER

802.11n (HT20)

Chan.	Freq. (MHz)	Peak Power (dBm)		Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
1	2412	25.43	23.92	595.744	27.75	29.38	Pass
6	2437	26.47	26.17	857.609	29.33	29.38	Pass
11	2462	25.42	25.00	664.565	28.23	29.38	Pass

Note: 1. Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20})^2$ / 2] = 6.62dBi > 6dBi , so the power limit shall be reduced to 30-(6.62-6) = 29.38dBm.

802.11n (HT40)

Chan.	Freq. (MHz)	Peak Power (dBm)		Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
3	2422	23.02	22.04	360.403	25.57	29.38	Pass
6	2437	25.33	24.32	611.589	27.86	29.38	Pass
9	2452	23.90	22.66	429.973	26.33	29.38	Pass

Note: 1. Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20})^2$ / 2] = 6.62dBi > 6dBi , so the power limit shall be reduced to 30-(6.62-6) = 29.38dBm.

FOR AVERAGE POWER

802.11n (HT20)

Chan.	Frequency (MHz)	Avg. Power (dBm)		Total Power (mW)	Total Power (dBm)
		Chain 0	Chain 1		
1	2412	16.82	15.77	85.841	19.34
6	2437	22.17	20.95	289.267	24.61
11	2462	17.56	16.26	99.283	19.97

802.11n (HT40)

Chan.	Frequency (MHz)	Avg. Power (dBm)		Total Power (mW)	Total Power (dBm)
		Chain 0	Chain 1		
3	2422	15.01	13.95	56.527	17.52
6	2437	18.04	16.78	111.323	20.47
9	2452	16.22	14.83	72.288	18.59

1TX Mode

FOR PEAK POWER

802.11b

Channel	Frequency (MHz)	Peak Power (mW)	Peak Power (dBm)	Limit (dBm)	Pass/Fail
1	2412	338.844	25.30	30	Pass
6	2437	328.095	25.16	30	Pass
11	2462	337.287	25.28	30	Pass

802.11g

Channel	Frequency (MHz)	Peak Power (mW)	Peak Power (dBm)	Limit (dBm)	Pass/Fail
1	2412	378.443	25.78	30	Pass
6	2437	530.884	27.25	30	Pass
11	2462	328.095	25.16	30	Pass

802.11n (HT20)

Channel	Frequency (MHz)	Peak Power (mW)	Peak Power (dBm)	Limit (dBm)	Pass/Fail
1	2412	331.894	25.21	30	Pass
6	2437	522.396	27.18	30	Pass
11	2462	307.61	24.88	30	Pass

802.11n (HT40)

Channel	Frequency (MHz)	Peak Power (mW)	Peak Power (dBm)	Limit (dBm)	Pass/Fail
3	2422	349.14	25.43	30	Pass
6	2437	386.367	25.87	30	Pass
9	2452	287.74	24.59	30	Pass

FOR AVERAGE POWER

802.11b

Channel	Frequency (MHz)	Average Power (mW)	Average Power (dBm)
1	2412	210.863	23.24
6	2437	204.174	23.10
11	2462	206.538	23.15

802.11g

Channel	Frequency (MHz)	Average Power (mW)	Average Power (dBm)
1	2412	89.743	19.53
6	2437	200.447	23.02
11	2462	69.183	18.40

802.11n (HT20)

Channel	Frequency (MHz)	Average Power (mW)	Average Power (dBm)
1	2412	77.446	18.89
6	2437	198.609	22.98
11	2462	60.395	17.81

802.11n (HT40)

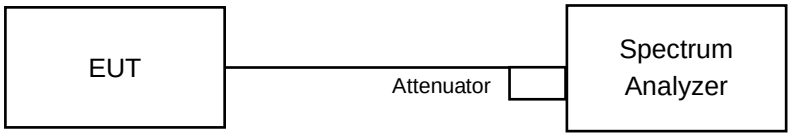
Channel	Frequency (MHz)	Average Power (mW)	Average Power (dBm)
3	2422	48.417	16.85
6	2437	108.643	20.36
9	2452	54.075	17.33

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

a. Set analyzer center frequency to DTS channel center frequency.
b. Set the span to 1.5 times the DTS bandwidth.
c. Set the RBW to: 3 kHz ≤ RBW ≤ 100 kHz.
d. Set the VBW ≥ 3 × RBW.
e. Detector = peak.
f. Sweep time = auto couple.
g. Trace mode = max hold.
h. Allow trace to fully stabilize.
i. Use the peak marker function to determine the maximum amplitude level within the RBW.

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

2TX Mode

802.11b

TX chain	Channel	Freq. (MHz)	PSD (dBm/3kHz)	10 log (N=2) dB	Total PSD (dBm/3kHz)	Limit (dBm/3kHz)	Pass /Fail
0	1	2412	-6.21	3.01	-3.20	7.38	Pass
	6	2437	-5.76	3.01	-2.75	7.38	Pass
	11	2462	-4.78	3.01	-1.77	7.38	Pass
1	1	2412	-6.19	3.01	-3.18	7.38	Pass
	6	2437	-6.20	3.01	-3.19	7.38	Pass
	11	2462	-6.48	3.01	-3.47	7.38	Pass

Note: 1. Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20})^2$ / 2] = 6.62dBi > 6dBi , so the power density limit shall be reduced to 8-(6.62-6) = 7.38dBm.

802.11g

TX chain	Channel	Freq. (MHz)	PSD (dBm/3kHz)	10 log (N=2) dB	Total PSD (dBm/3kHz)	Limit (dBm/3kHz)	Pass /Fail
0	1	2412	-10.95	3.01	-7.94	7.38	Pass
	6	2437	-4.64	3.01	-1.63	7.38	Pass
	11	2462	-10.17	3.01	-7.16	7.38	Pass
1	1	2412	-10.46	3.01	-7.45	7.38	Pass
	6	2437	-4.00	3.01	-0.99	7.38	Pass
	11	2462	-11.34	3.01	-8.33	7.38	Pass

Note: 1. Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20})^2$ / 2] = 6.62dBi > 6dBi , so the power density limit shall be reduced to 8-(6.62-6) = 7.38dBm.

802.11n (HT20)

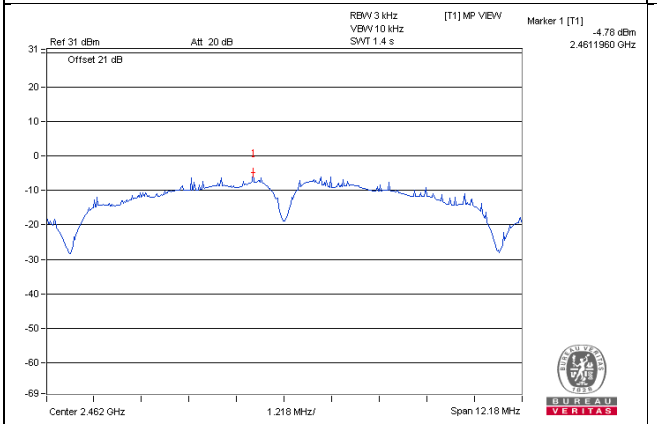
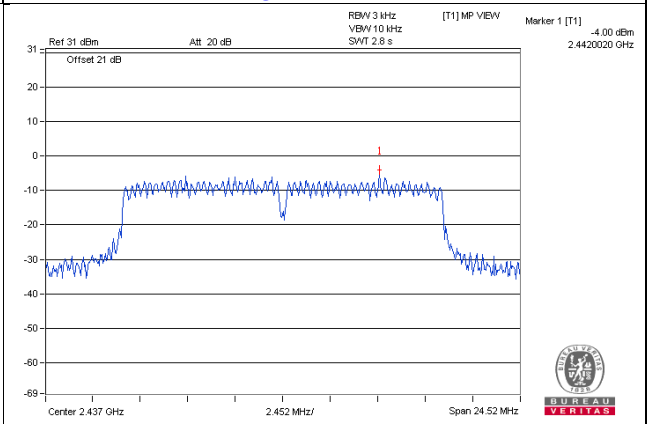
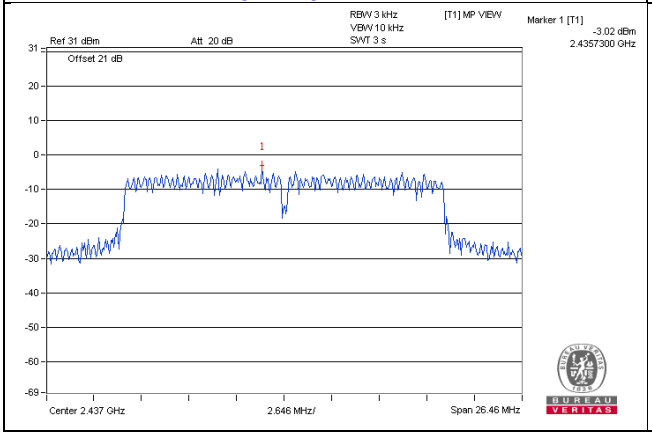
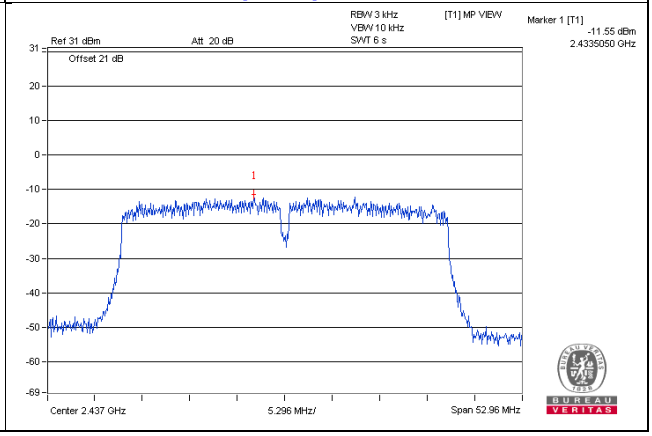
TX chain	Channel	Freq. (MHz)	PSD (dBm/3kHz)	10 log (N=2) dB	Total PSD (dBm/3kHz)	Limit (dBm/3kHz)	Pass /Fail
0	1	2412	-9.64	3.01	-6.63	7.38	Pass
	6	2437	-3.02	3.01	-0.01	7.38	Pass
	11	2462	-9.42	3.01	-6.41	7.38	Pass
1	1	2412	-12.22	3.01	-9.21	7.38	Pass
	6	2437	-5.94	3.01	-2.93	7.38	Pass
	11	2462	-11.67	3.01	-8.66	7.38	Pass

Note: 1. Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20})^2$ / 2] = 6.62dBi > 6dBi , so the power density limit shall be reduced to 8-(6.62-6) = 7.38dBm.

802.11n (HT40)

TX chain	Channel	Freq. (MHz)	PSD (dBm/3kHz)	10 log (N=2) dB	Total PSD (dBm/3kHz)	Limit (dBm/3kHz)	Pass /Fail
0	3	2422	-14.96	3.01	-11.95	7.38	Pass
	6	2437	-11.55	3.01	-8.54	7.38	Pass
	9	2452	-14.33	3.01	-11.32	7.38	Pass
1	3	2422	-16.48	3.01	-13.47	7.38	Pass
	6	2437	-12.91	3.01	-9.90	7.38	Pass
	9	2452	-13.89	3.01	-10.88	7.38	Pass

Note: 1. Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20})^2$ / 2] = 6.62dBi > 6dBi , so the power density limit shall be reduced to 8-(6.62-6) = 7.38dBm.

Spectrum Plot of Worst Value	
802.11b / Chain 0 : CH11	**802.11g / Chain 1 : CH6**
	
802.11n (HT20) / Chain 0 : CH6	**802.11n (HT40) / Chain 0 : CH6**
	

1TX Mode

802.11b

Channel	Freq. (MHz)	PSD (dBm/3kHz)	Limit (dBm/3kHz)	Pass /Fail
1	2412	0.28	8	Pass
6	2437	-0.68	8	Pass
11	2462	0.20	8	Pass

802.11g

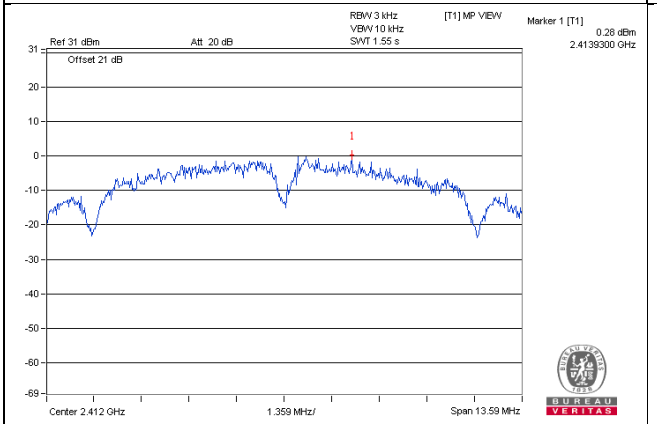
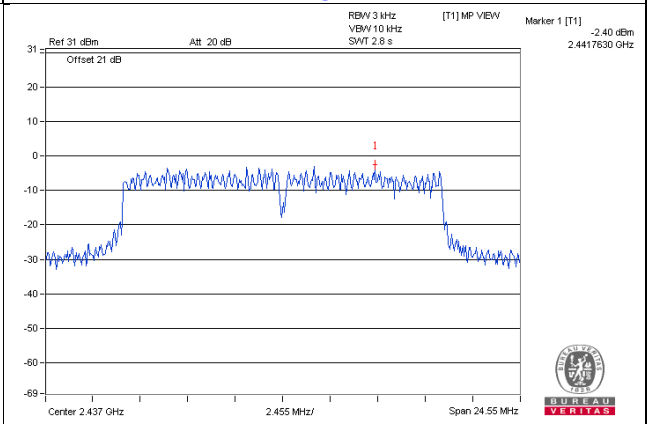
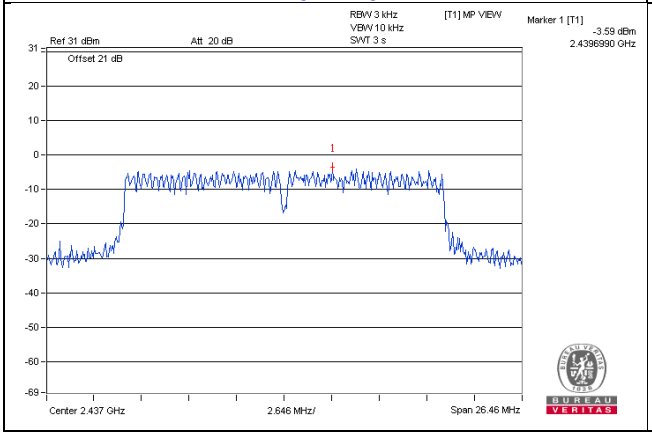
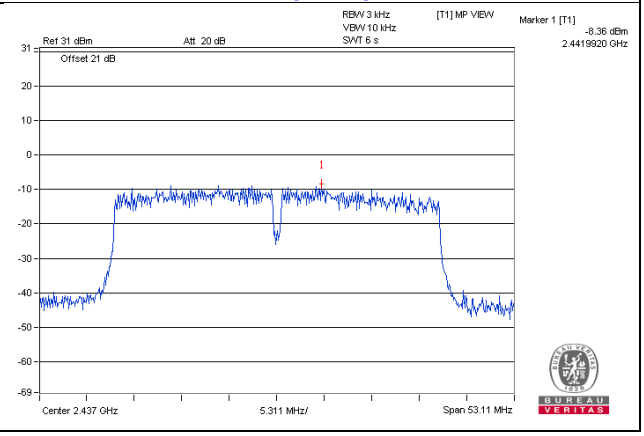
Channel	Freq. (MHz)	PSD (dBm/3kHz)	Limit (dBm/3kHz)	Pass /Fail
1	2412	-6.19	8	Pass
6	2437	-2.40	8	Pass
11	2462	-7.67	8	Pass

802.11n (HT20)

Channel	Freq. (MHz)	PSD (dBm/3kHz)	Limit (dBm/3kHz)	Pass /Fail
1	2412	-6.95	8	Pass
6	2437	-3.59	8	Pass
11	2462	-8.89	8	Pass

802.11n (HT40)

Channel	Freq. (MHz)	PSD (dBm/3kHz)	Limit (dBm/3kHz)	Pass /Fail
3	2422	-11.82	8	Pass
6	2437	-8.36	8	Pass
9	2452	-10.82	8	Pass

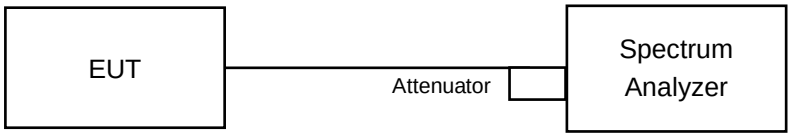
Spectrum Plot of Worst Value	
802.11b : CH1	**802.11g : CH6**
	
802.11n (HT20) : CH6	**802.11n (HT40) : CH6**
	

4.6 Conducted Out of Band Emission Measurement

4.6.1 Limits of Conducted 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 4.1.2 to get information of above instrument.

4.6.4 Test Procedure

MEASUREMENT PROCEDURE REF

1. Set the RBW = 100 kHz.
2. Set the VBW ≥ 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 OOBE

1. Set RBW = 100 kHz.
2. Set VBW ≥ 300 kHz.
3. Detector = peak.
4. Sweep = auto couple.
5. Trace Mode = max hold.
6. Allow trace to fully stabilize.
7. Use the peak marker function to determine the maximum amplitude level.

4.6.5 Deviation from Test Standard

No deviation.

4.6.6 EUT Operating Condition

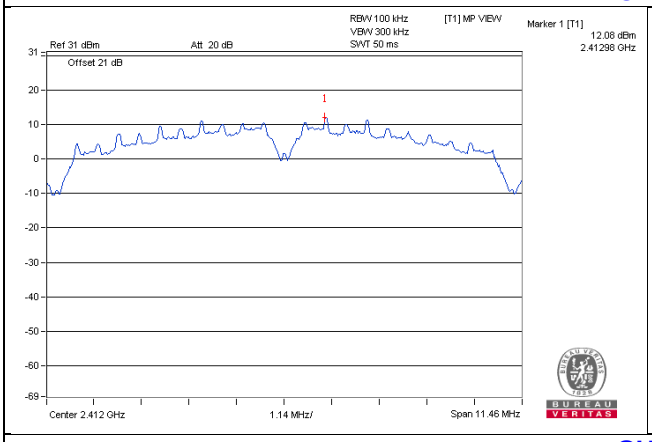
Same as Item 4.3.6

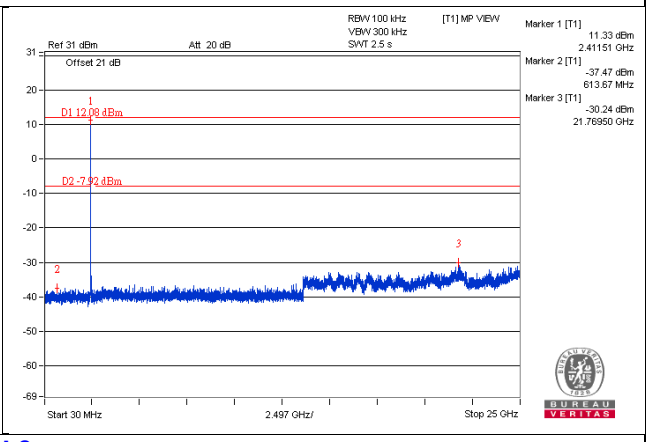
4.6.7 Test Results

The spectrum plots are attached on the following pages. D1 line indicates the highest level, and D2 line indicates the 20dB offset below D1. It shows compliance with the requirement.

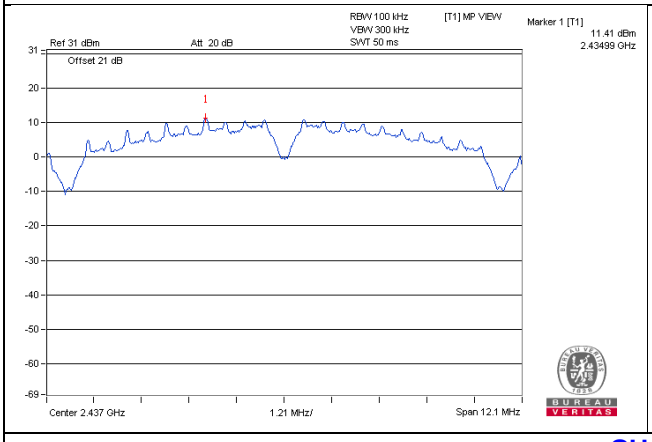
2TX Mode: 802.11b - CHAIN 0

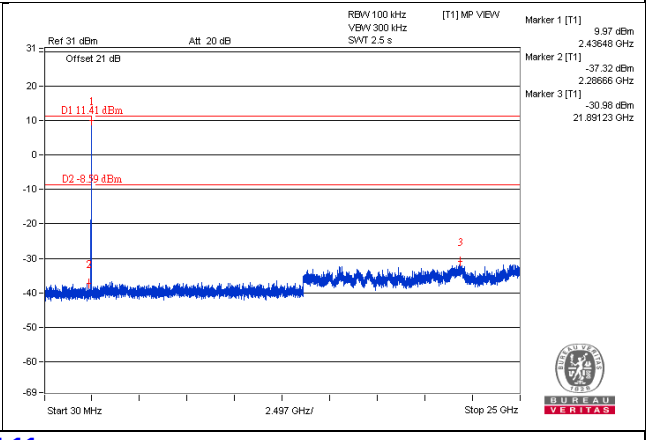
CH 1



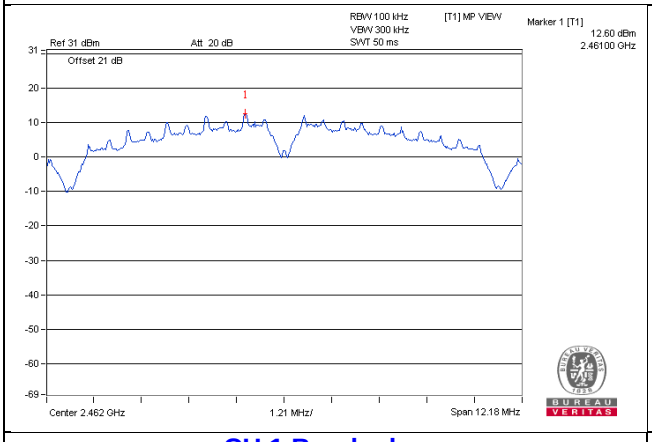


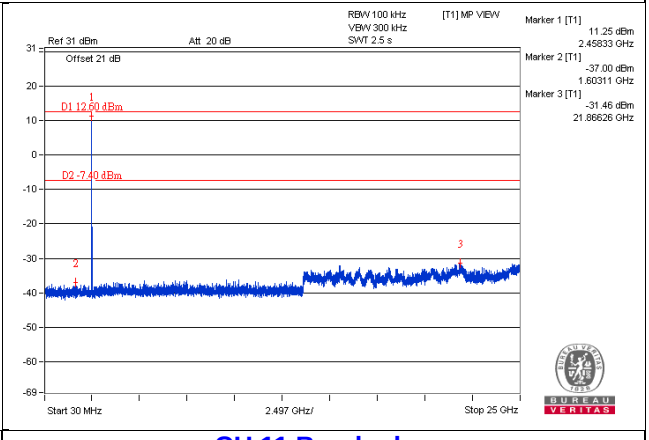
CH 6



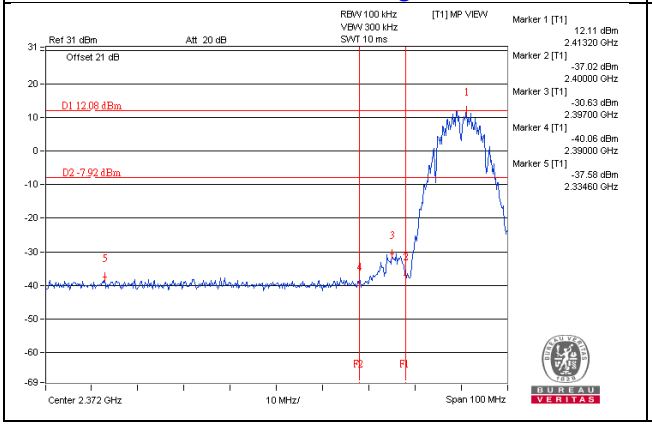


CH 11

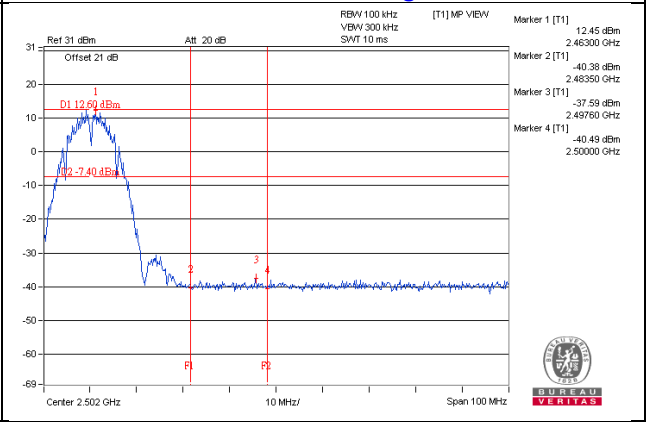




CH 1 Band edge

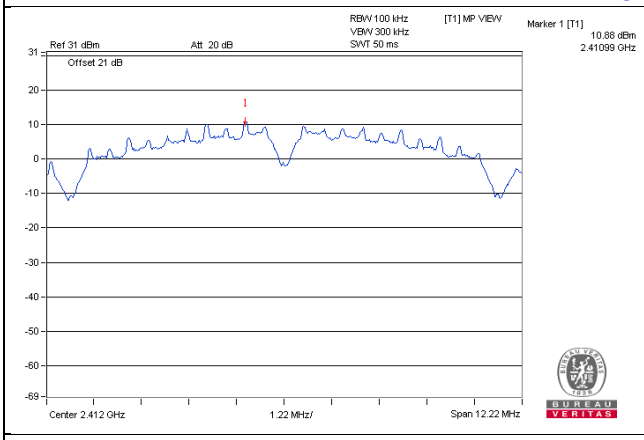


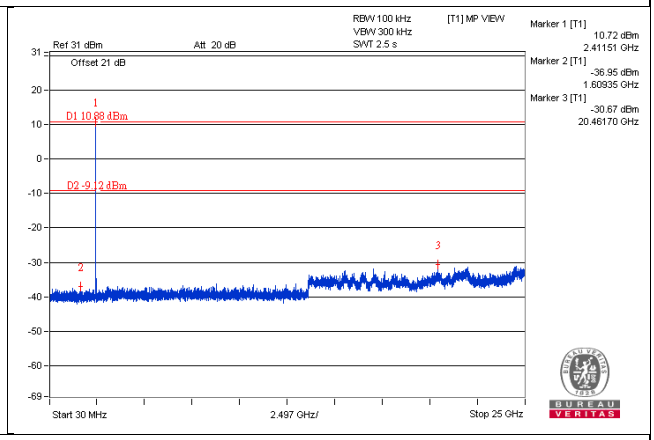
CH 11 Band edge



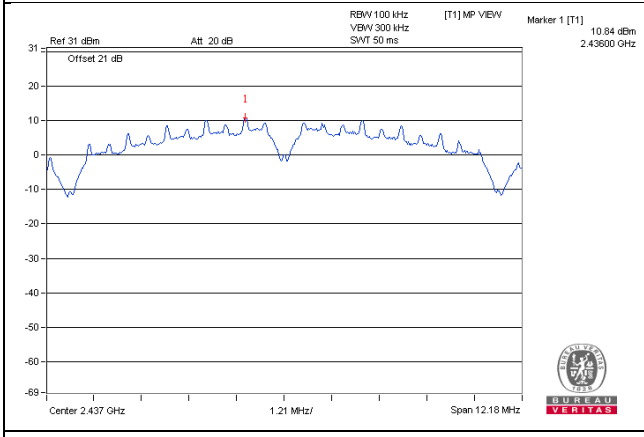
CHAIN 1

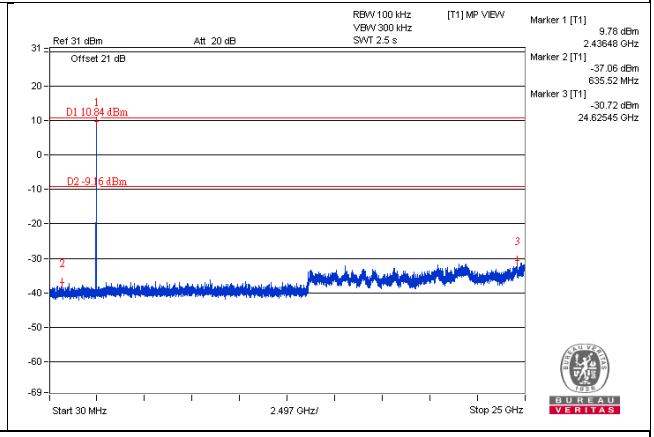
CH 1



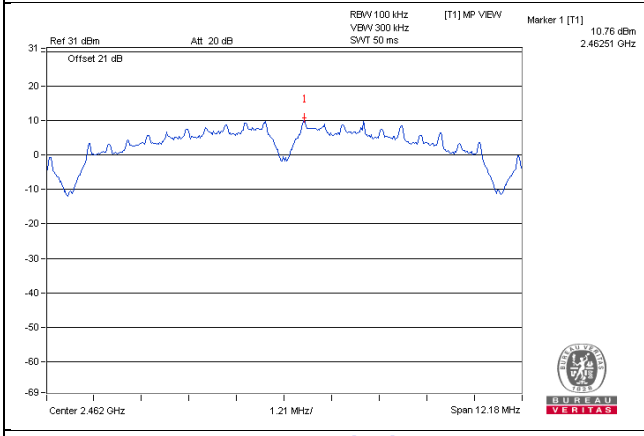


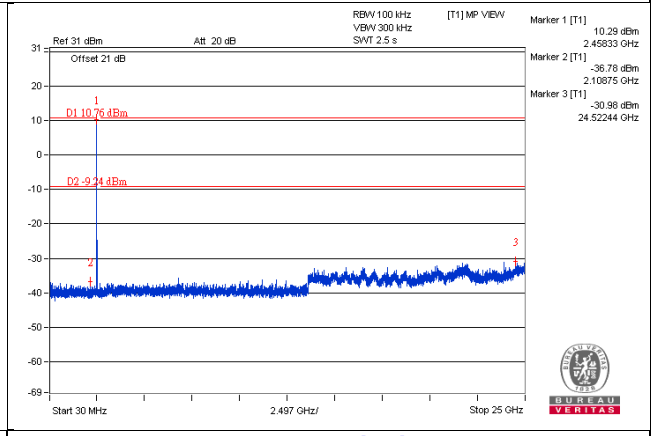
CH 6



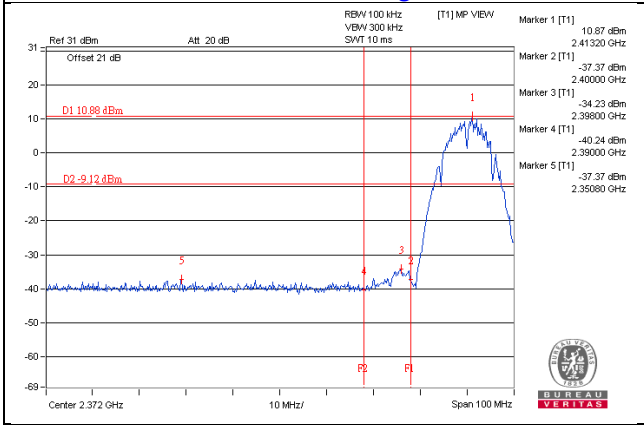


CH 11

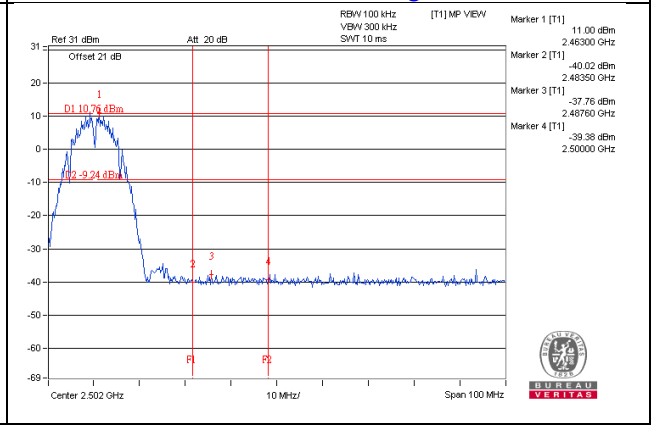




CH 1 Band edge

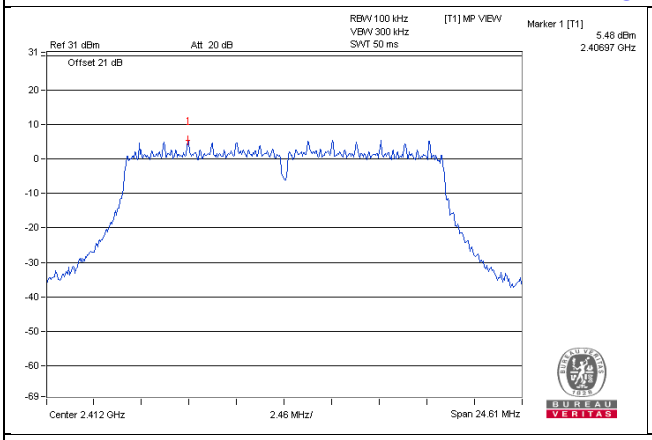


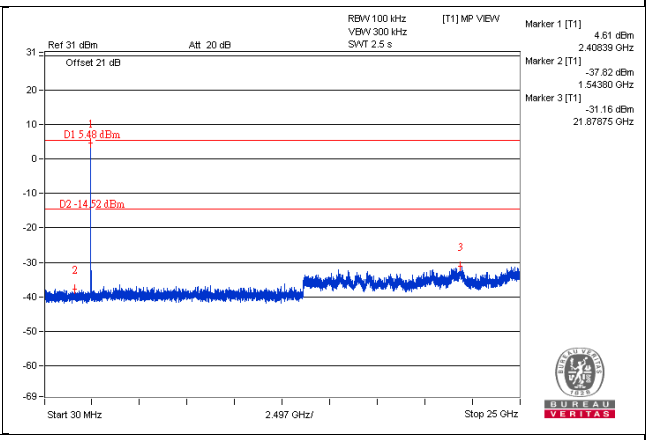
CH 11 Band edge



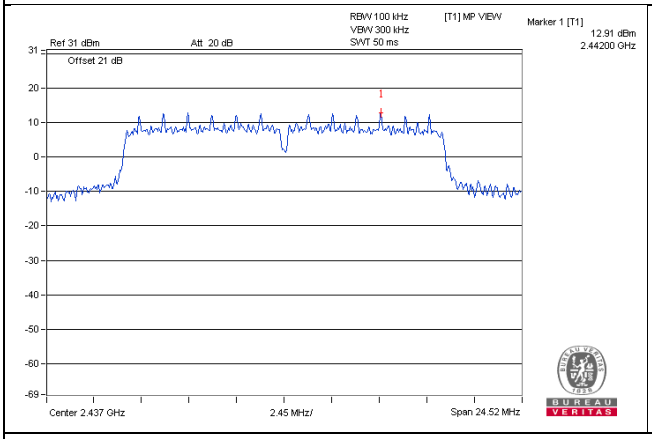
802.11g - CHAIN 0

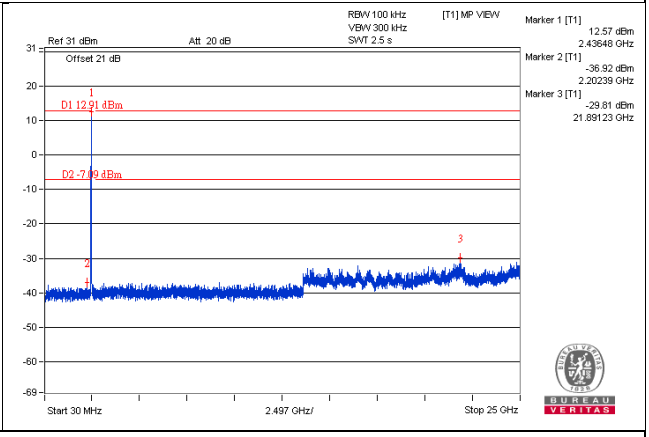
CH 1



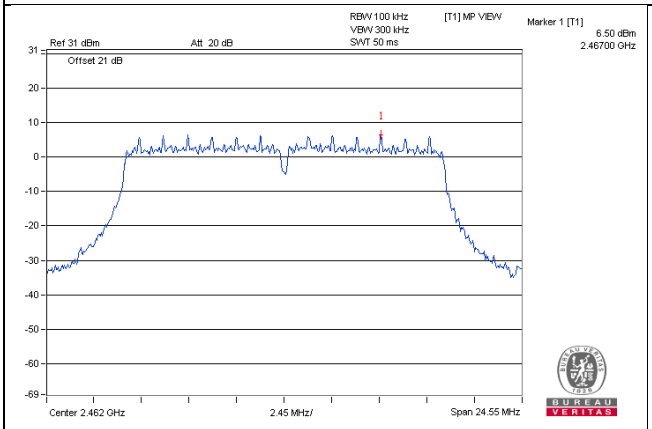


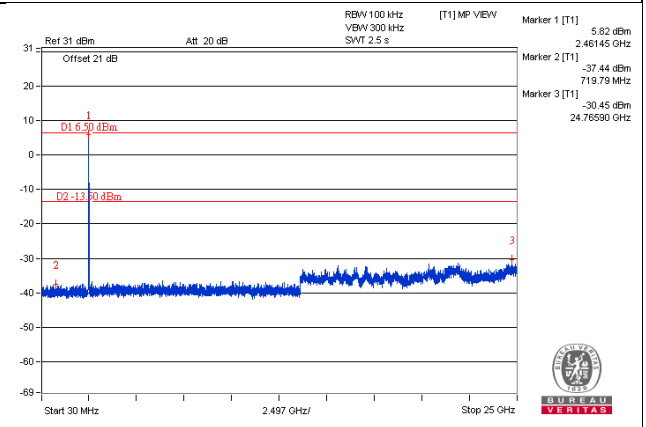
CH 6



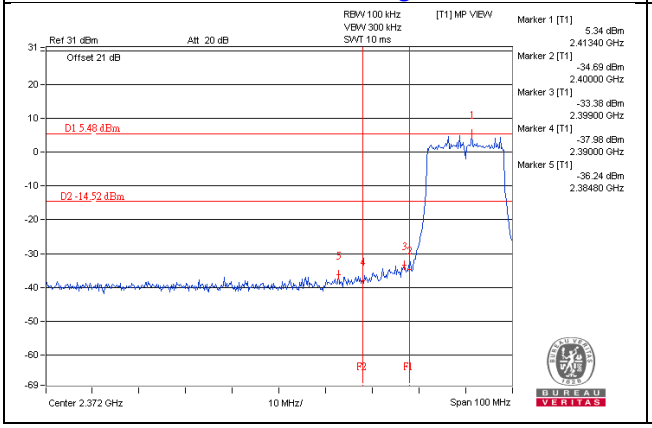


CH 11

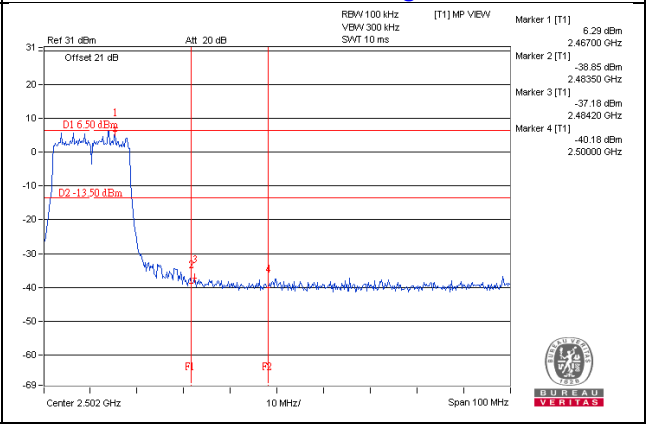




CH 1 Band edge

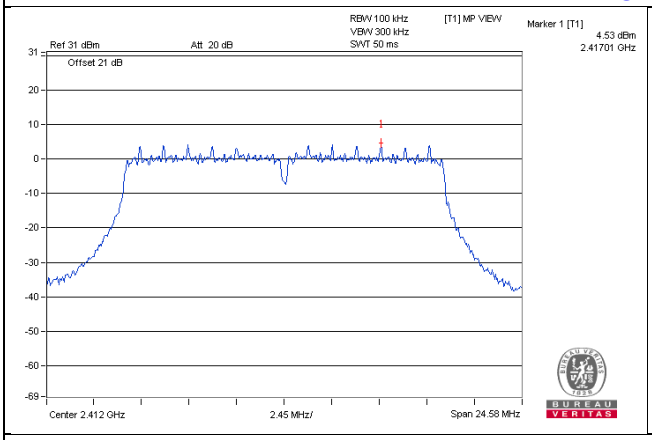


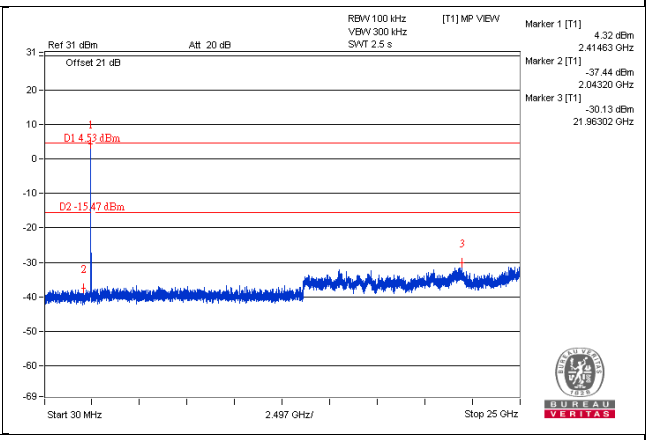
CH 11 Band edge



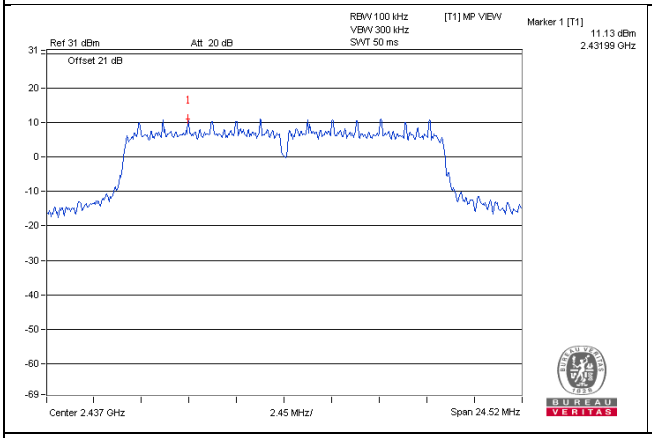
CHAIN 1

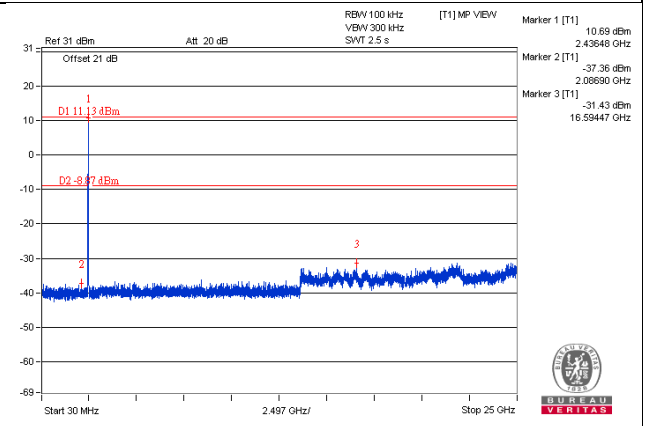
CH 1



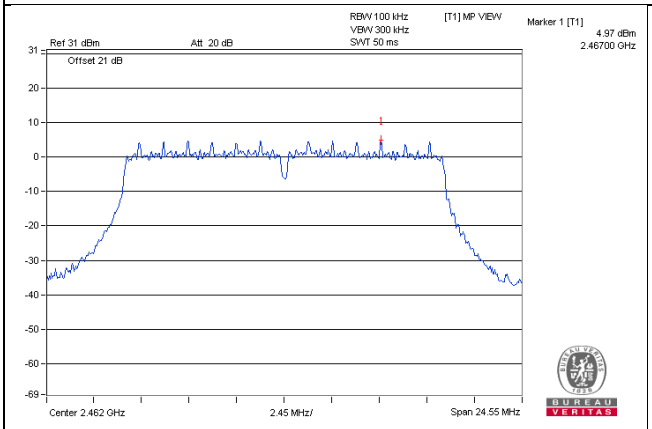


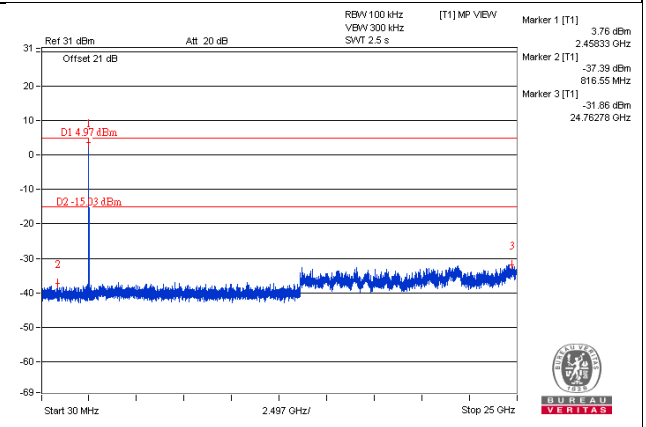
CH 6



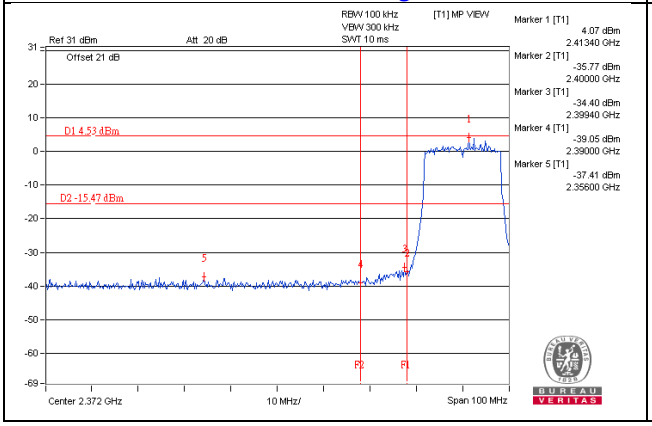


CH 11

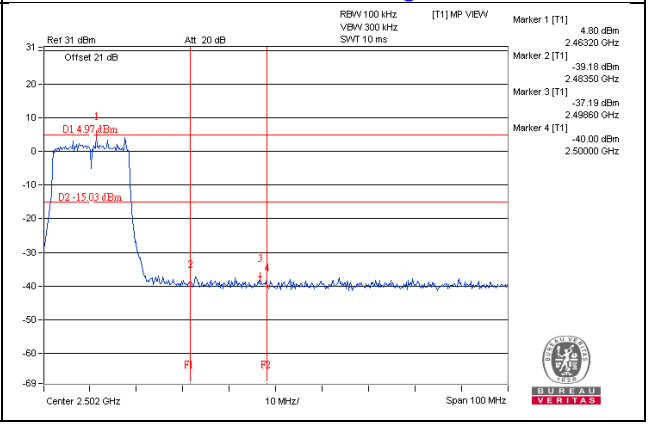




CH 1 Band edge

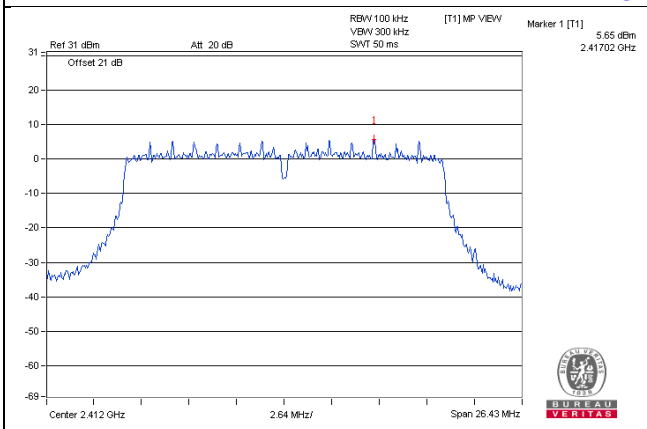


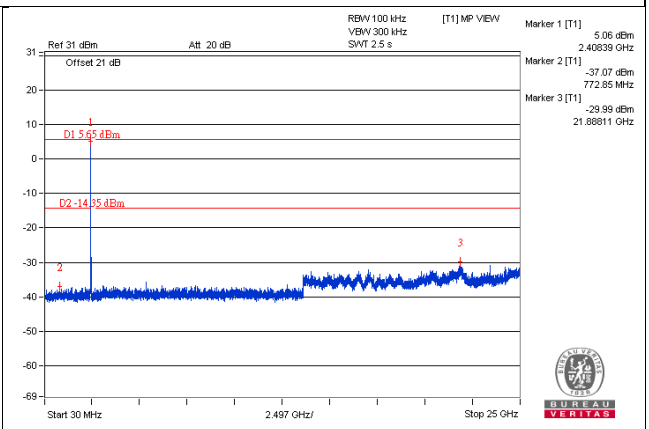
CH 11 Band edge



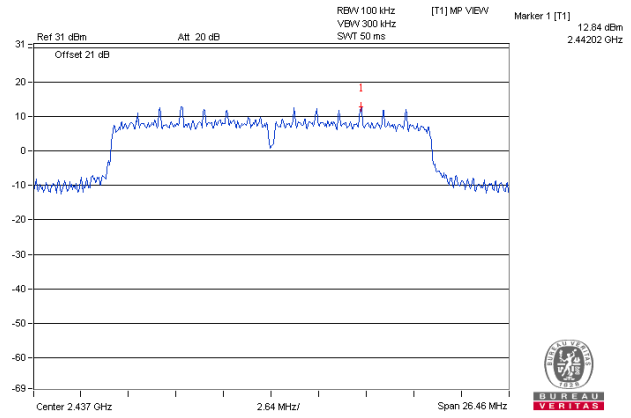
802.11n (HT20) - CHAIN 0

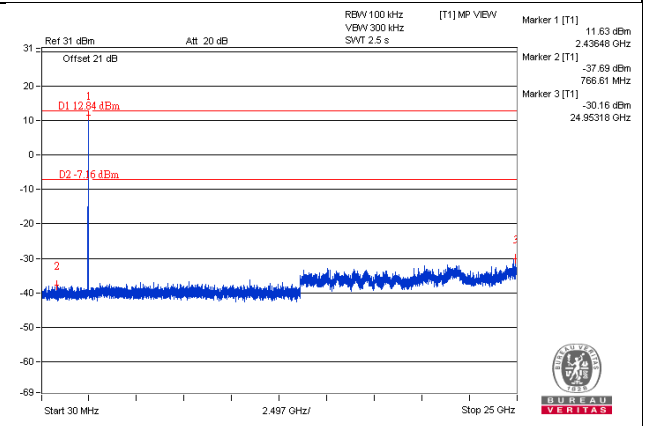
CH 1



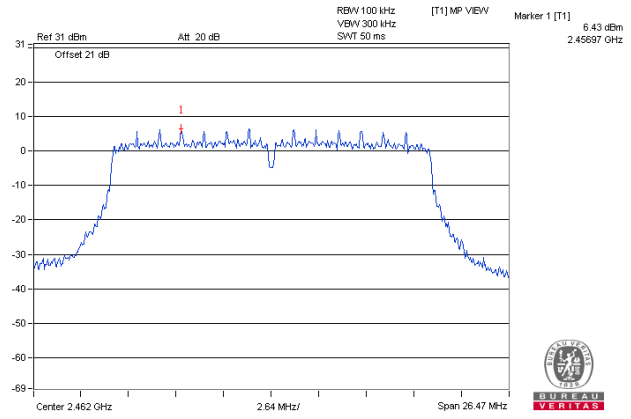


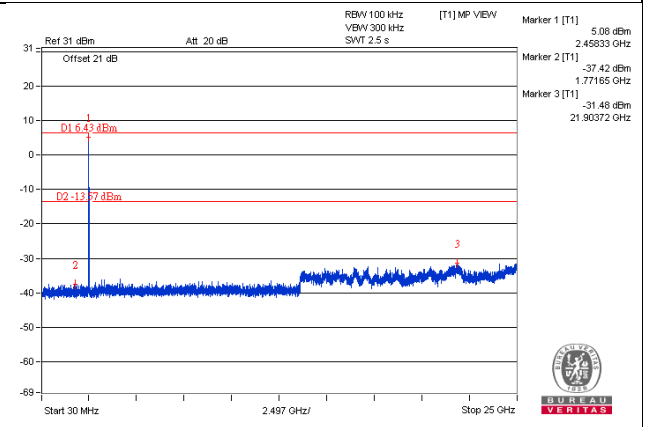
CH 6



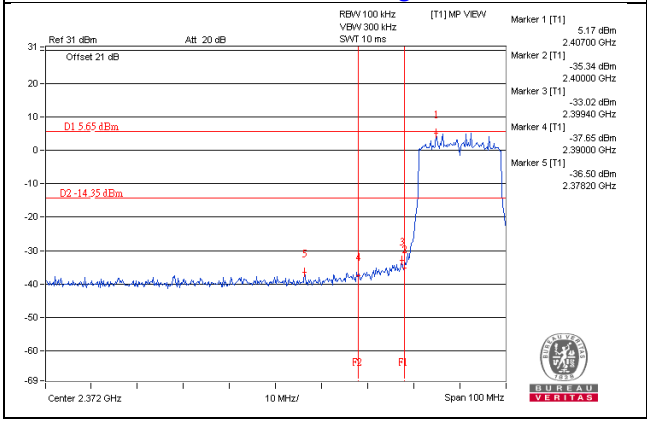


CH 11

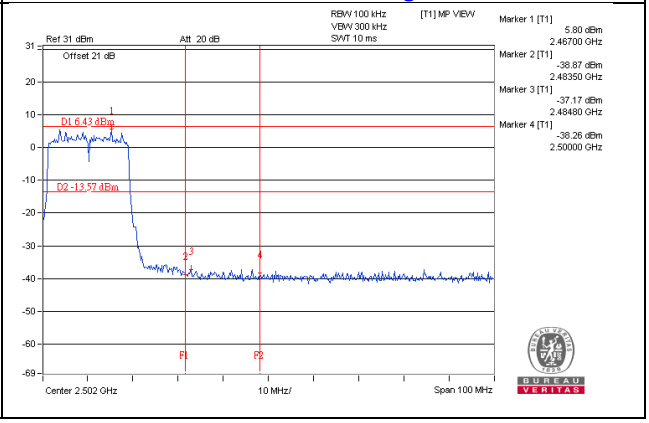




CH 1 Band edge

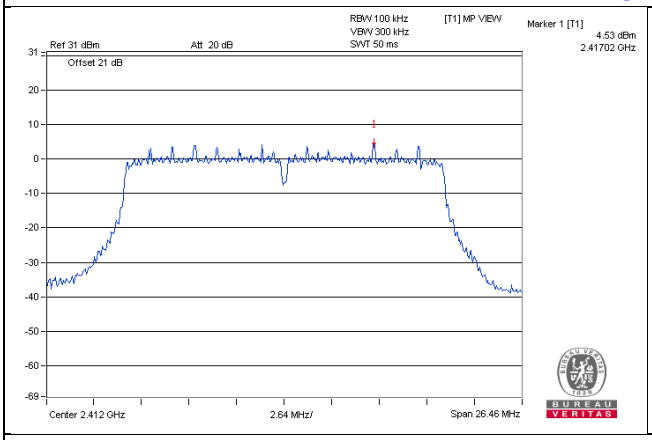


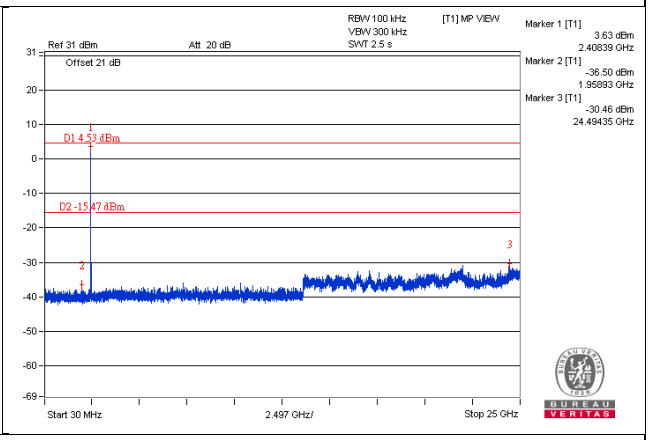
CH 11 Band edge



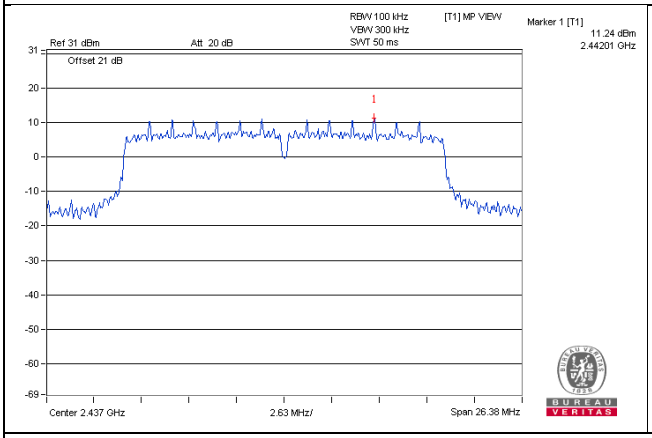
CHAIN 1

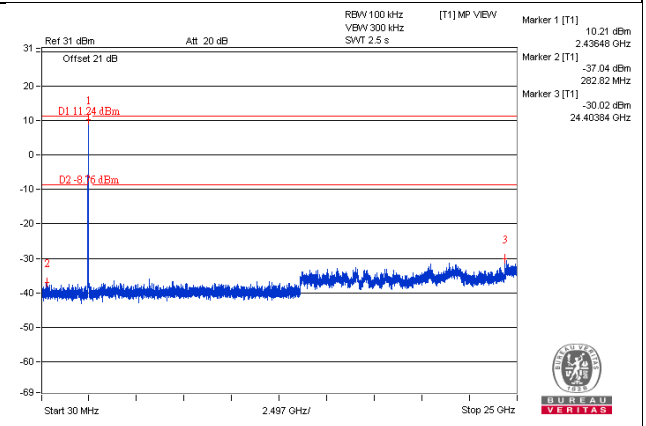
CH 1



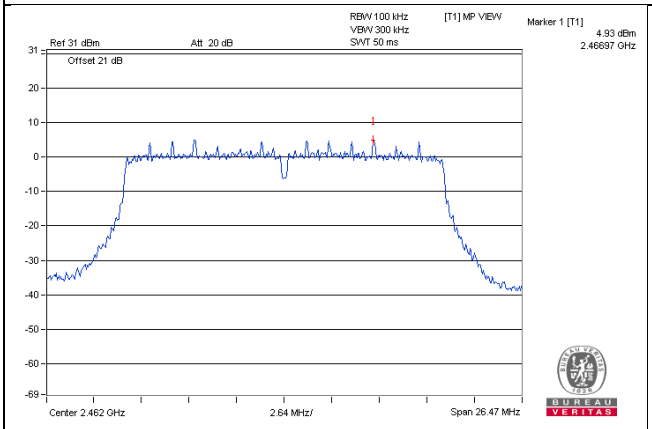


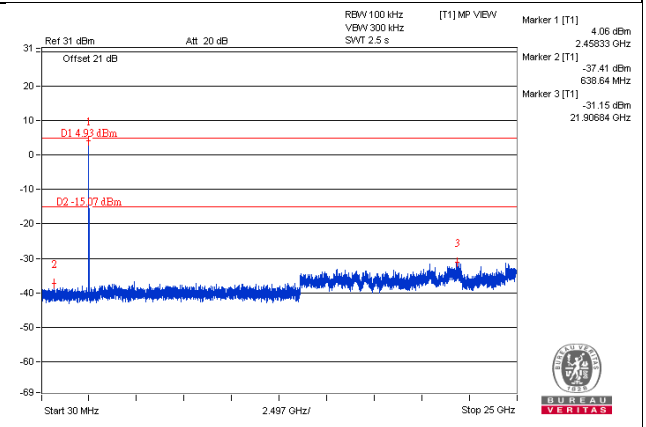
CH 6



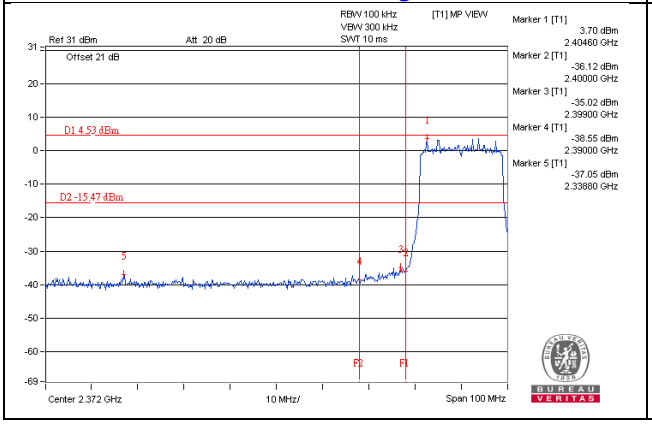


CH 11





CH 1 Band edge



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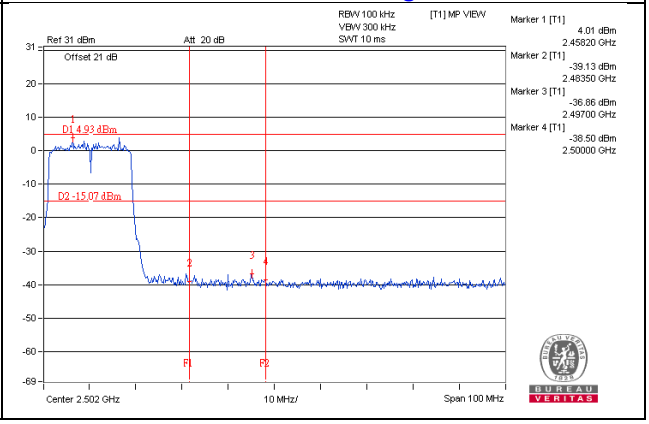
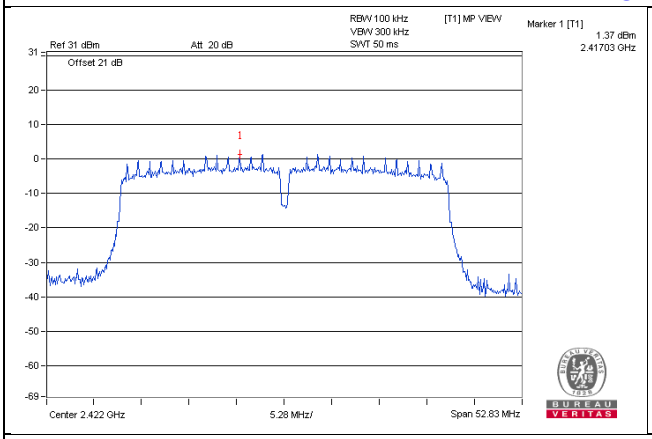
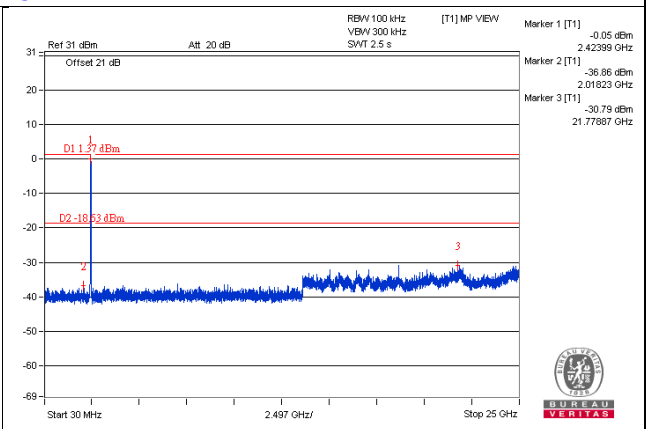


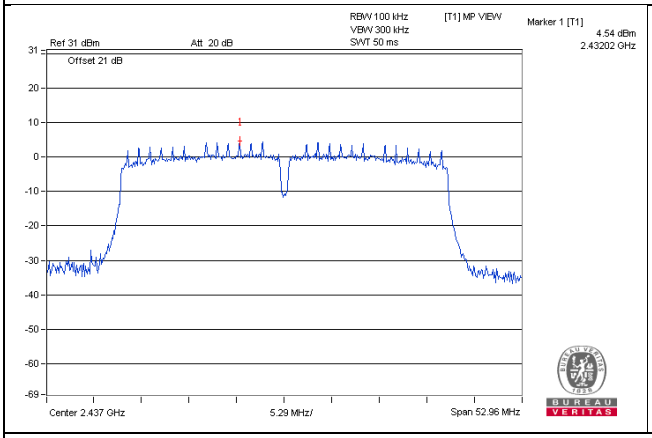
802.11n (HT40) - Chain 0

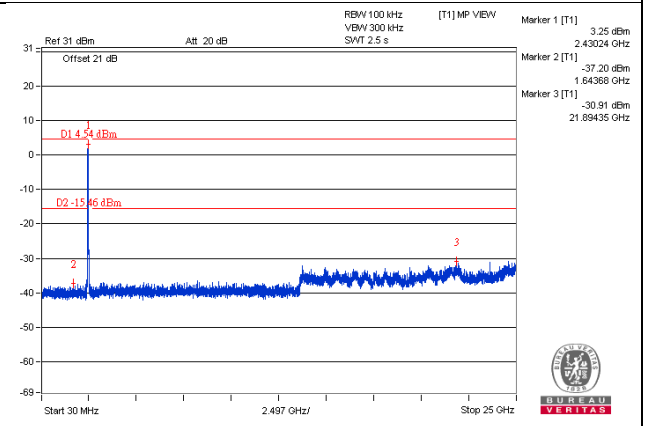
CH 3



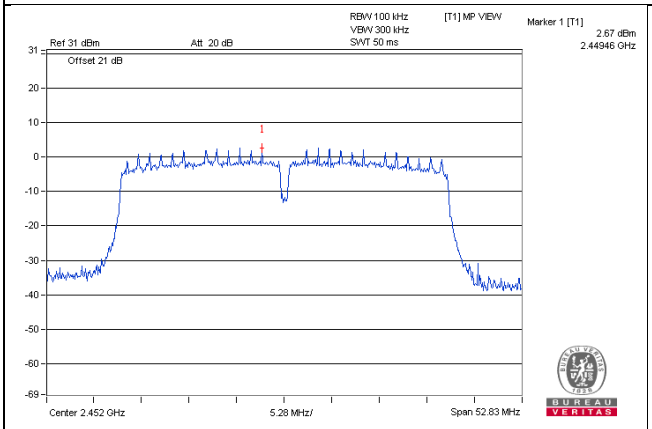


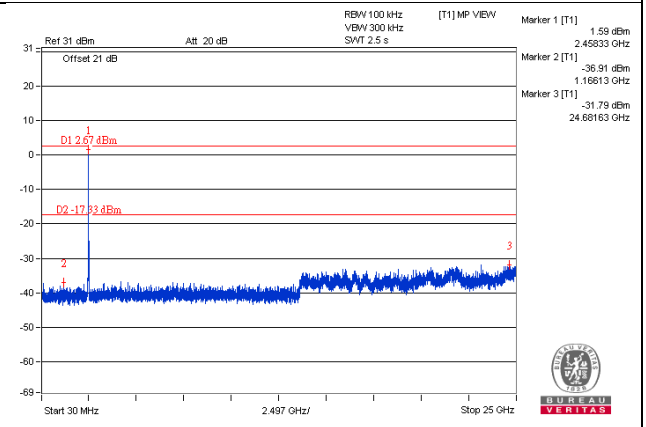
CH 6



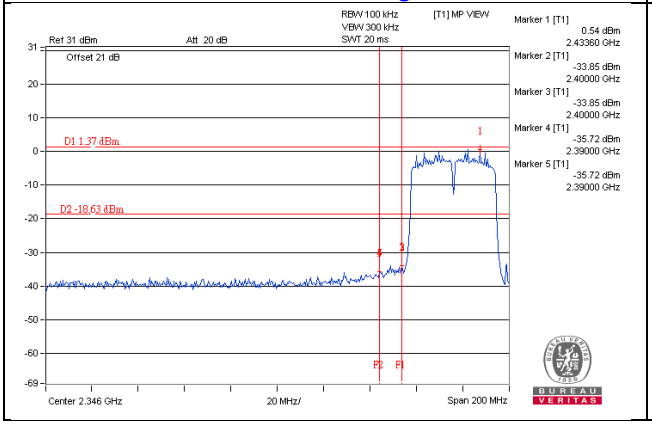


CH 9

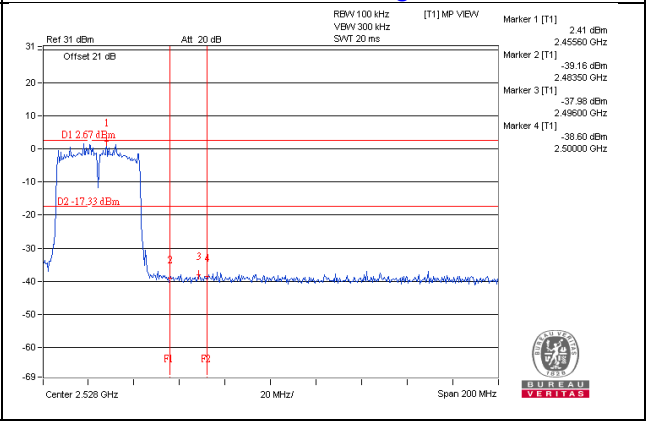




CH 3 Band edge

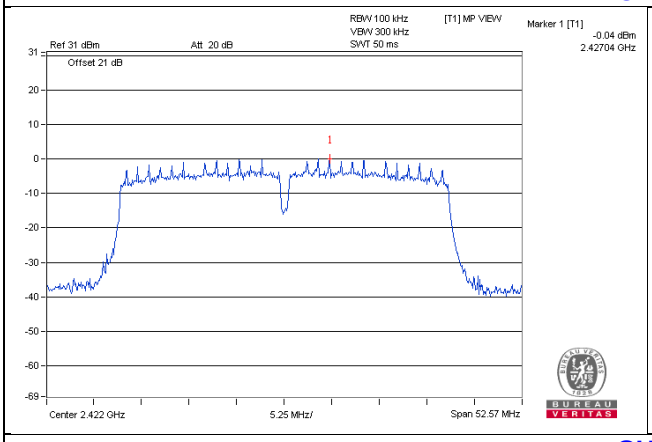


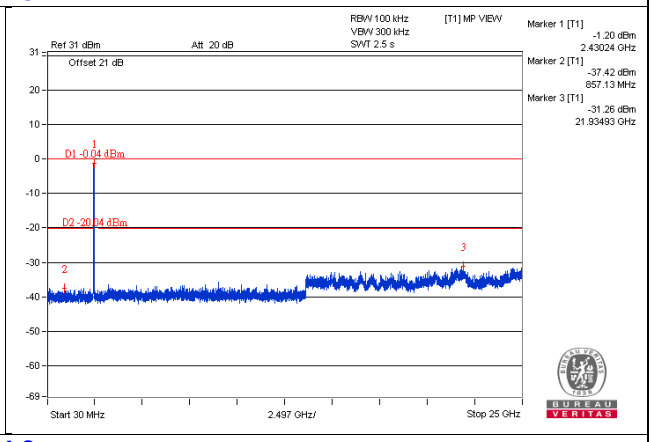
CH 9 Band edge



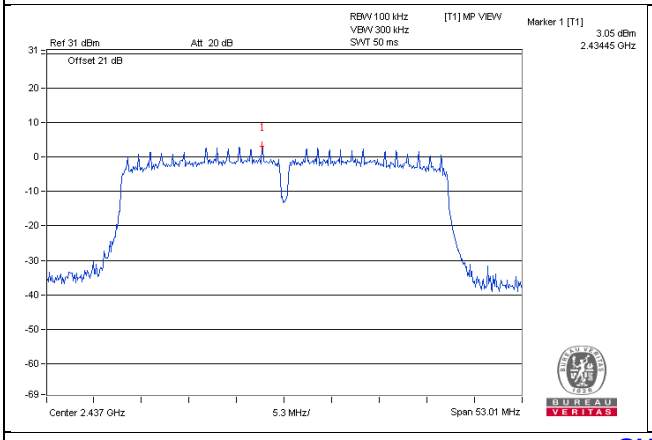
Chain 1

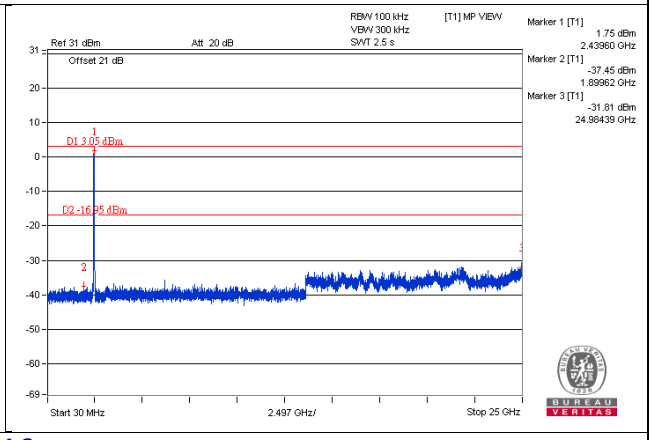
CH 3





CH 6





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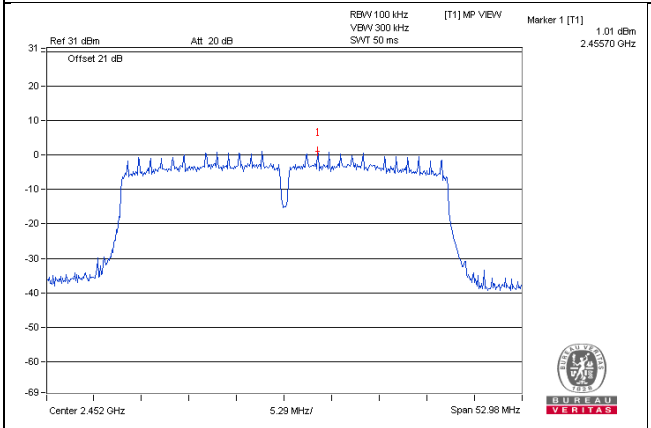
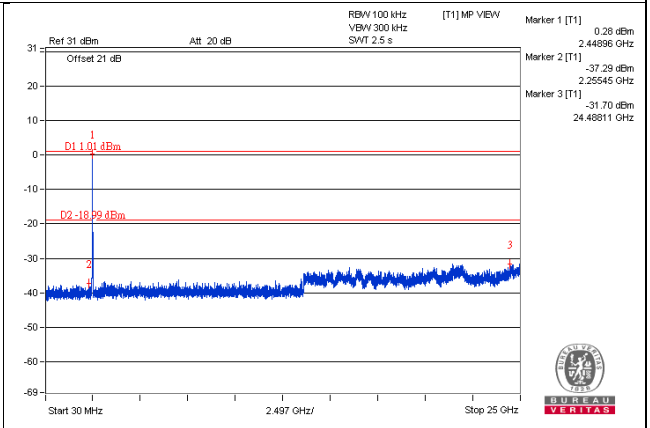
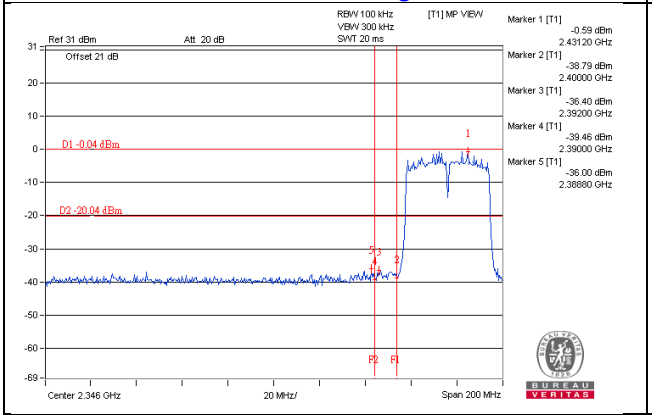




CH 3 Band edge



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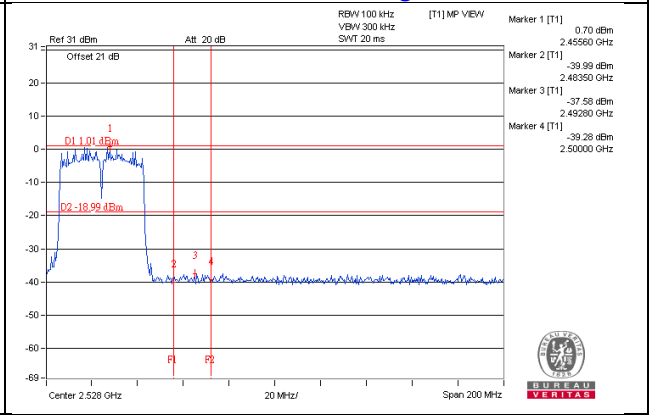
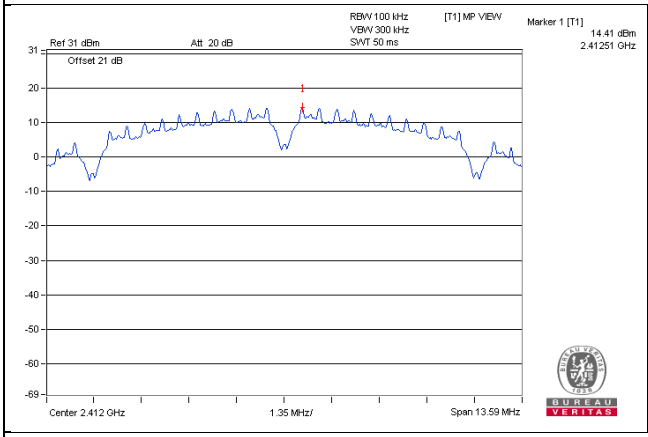
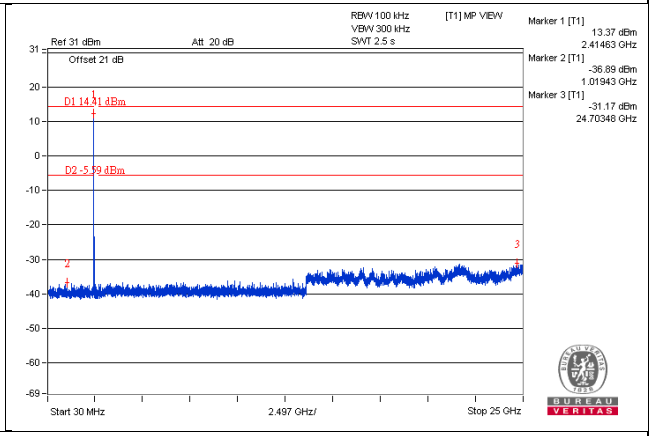


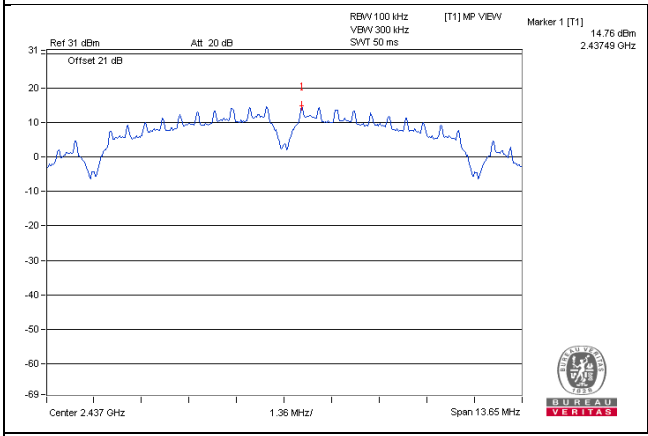
1TX Mode: 802.11b

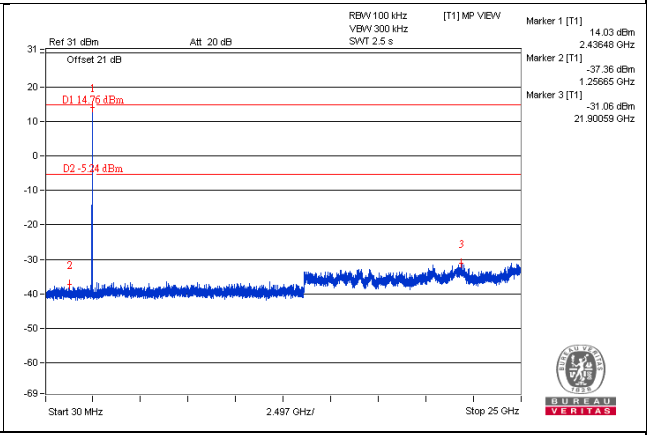
CH 1



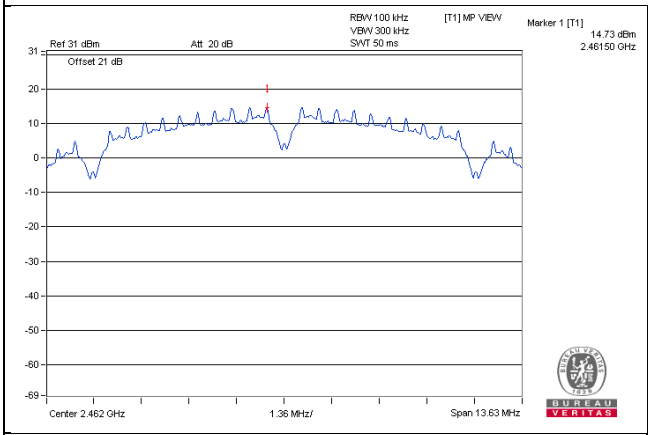


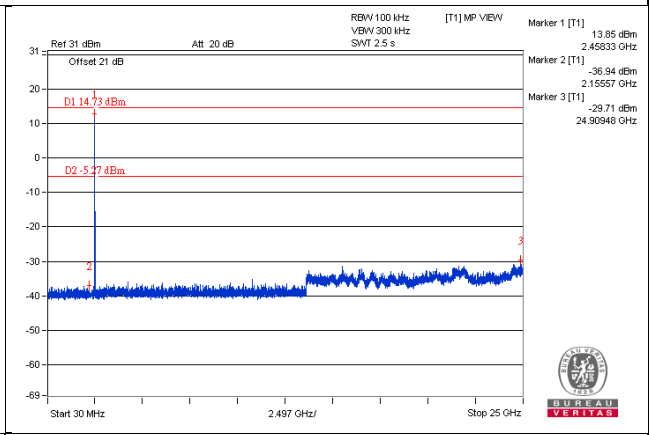
CH 6



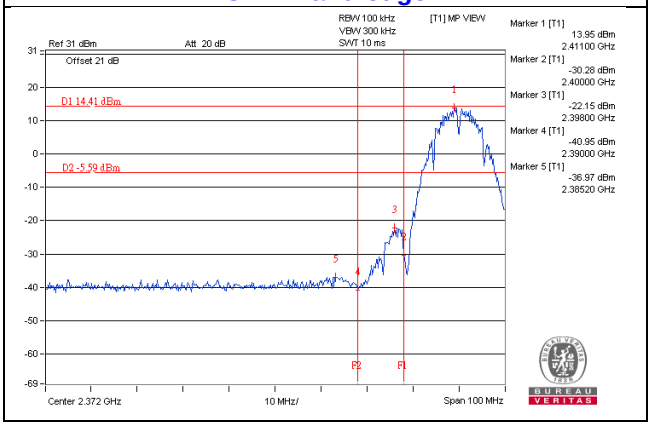


CH 11





CH 1 Band edge



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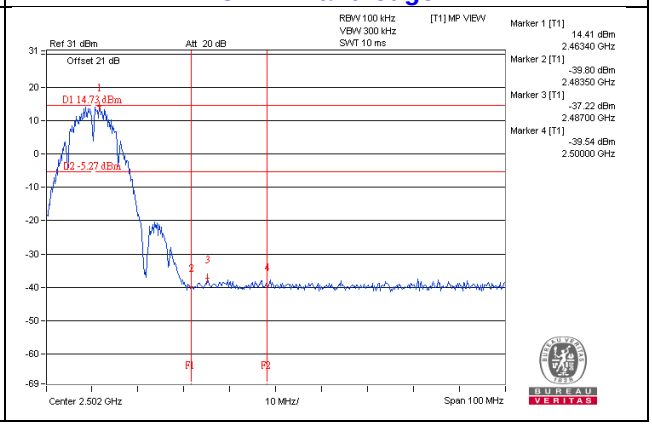
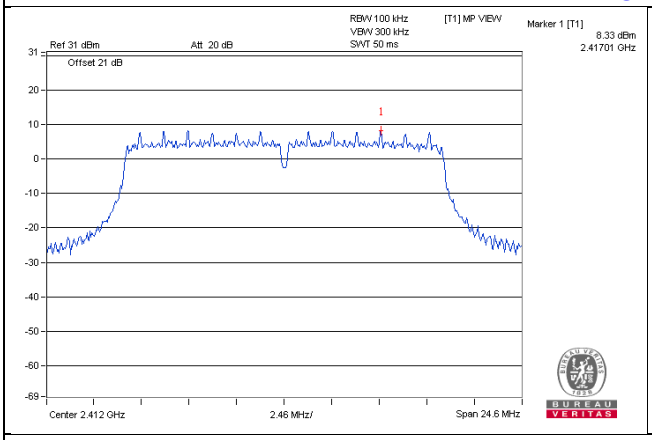
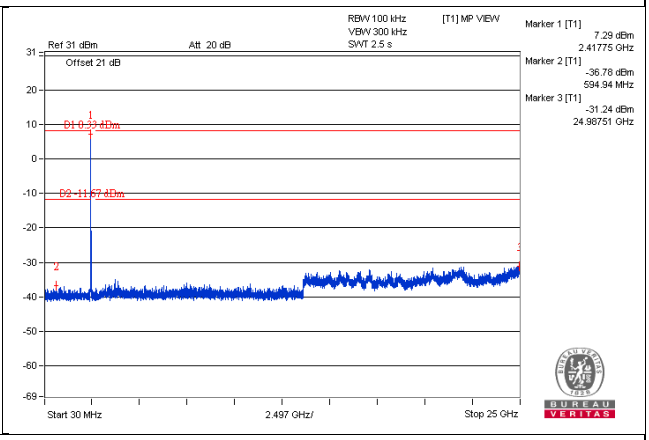


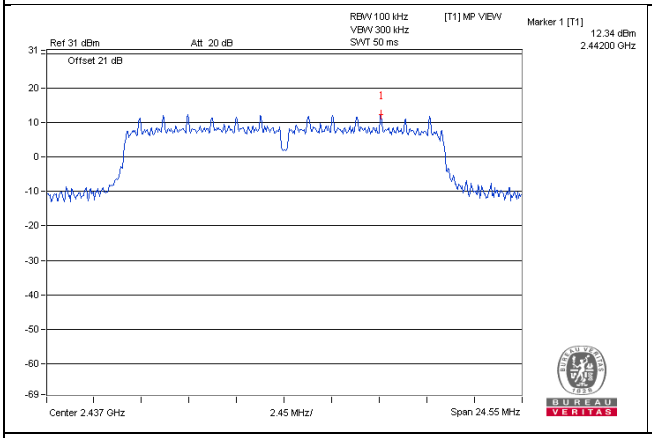
802.11g

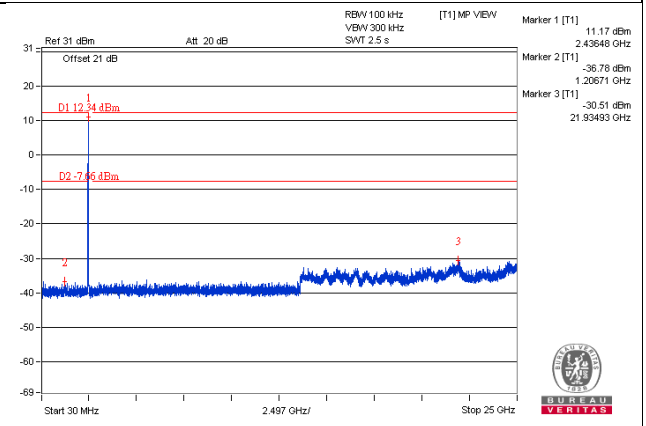
CH 1





CH 6





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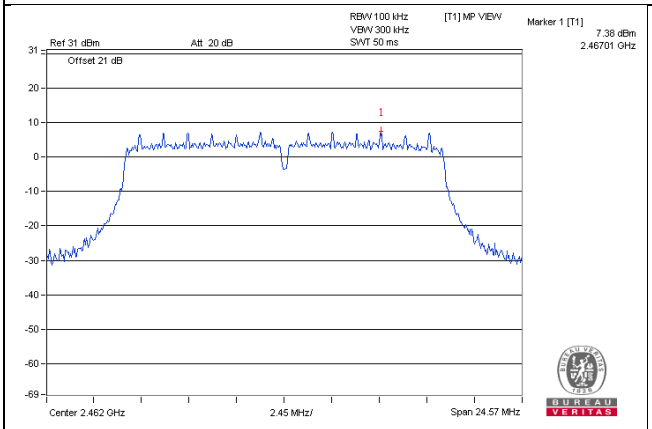
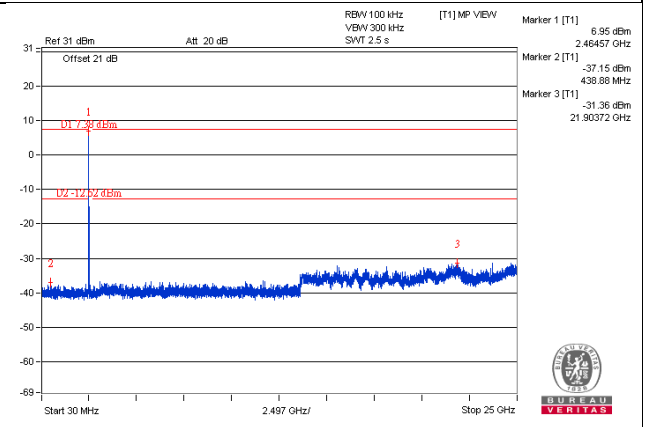
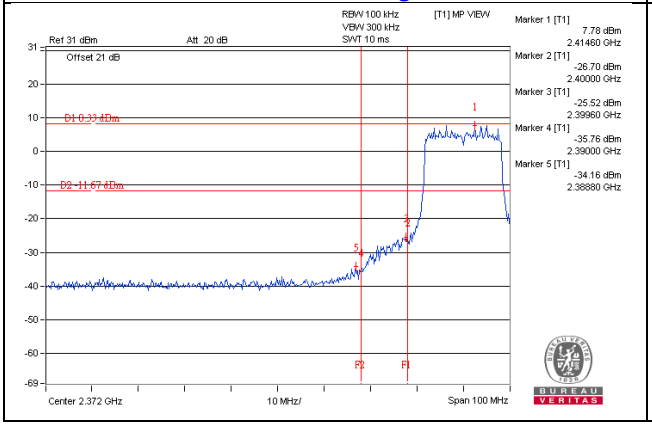




CH 1 Band edge



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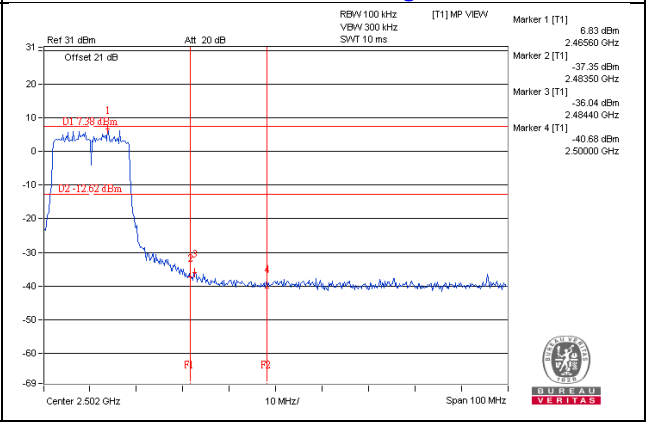
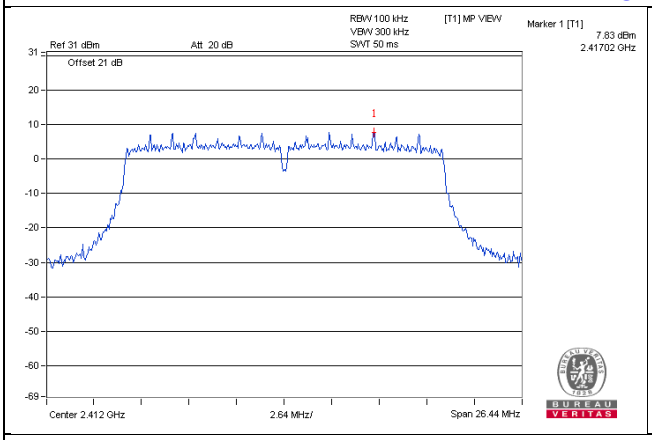
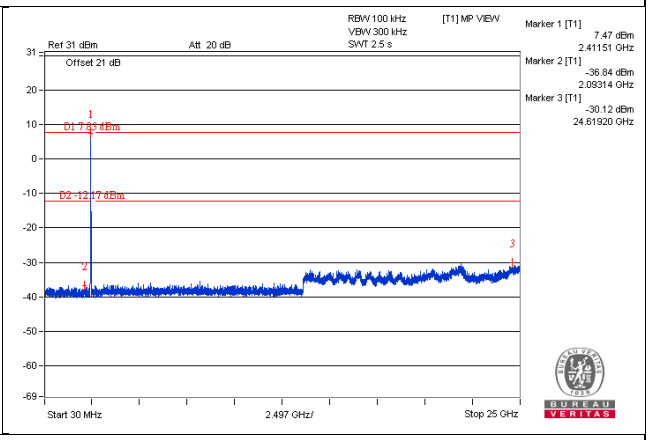


802.11n (HT20)

CH 1





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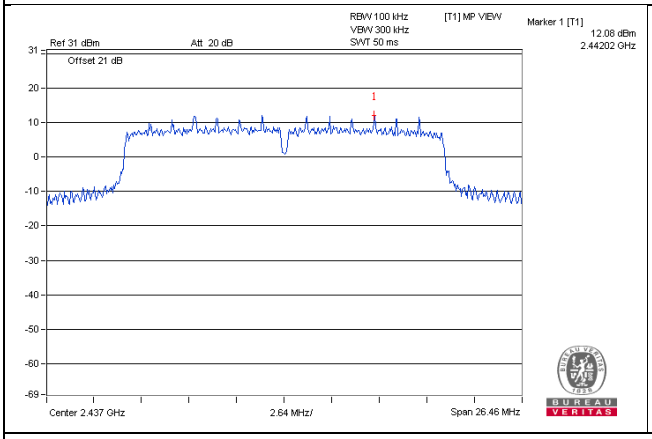

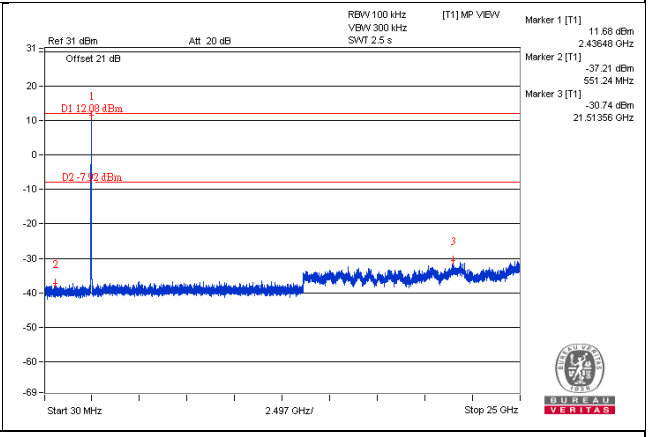

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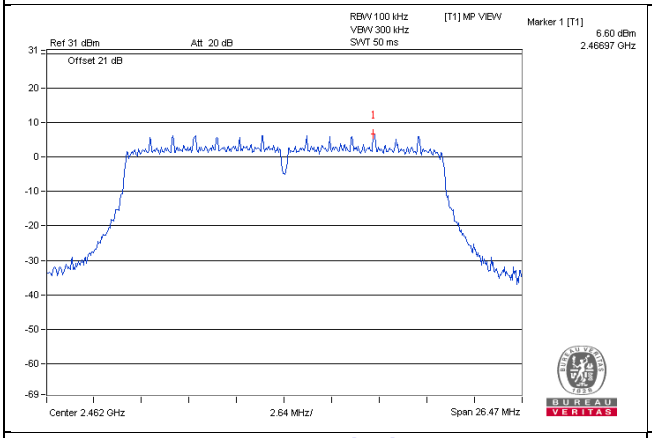

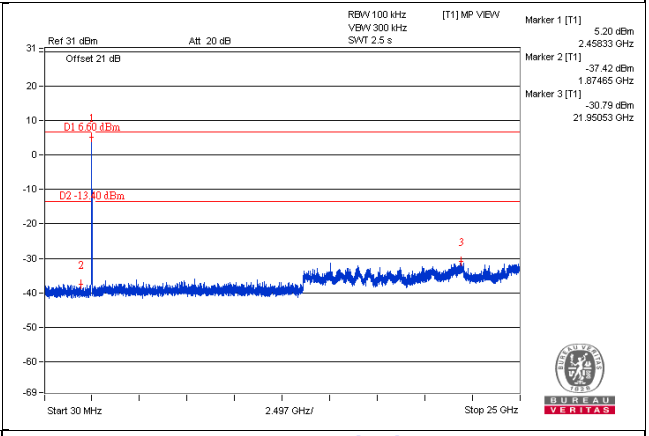

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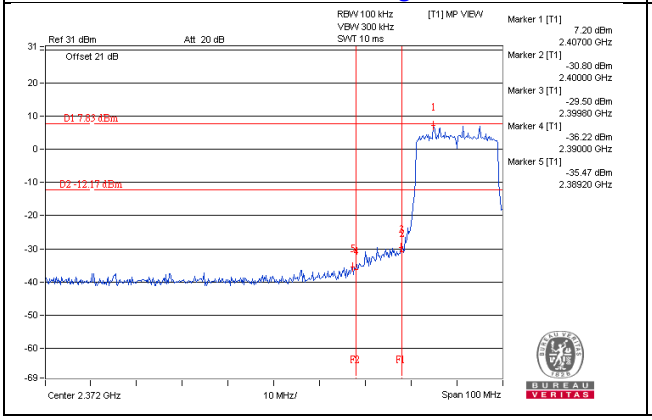
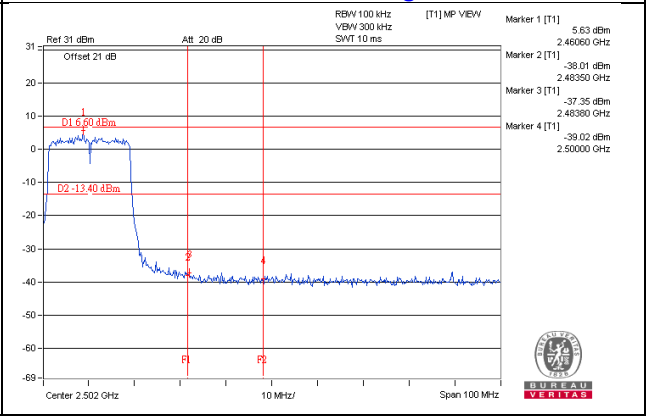
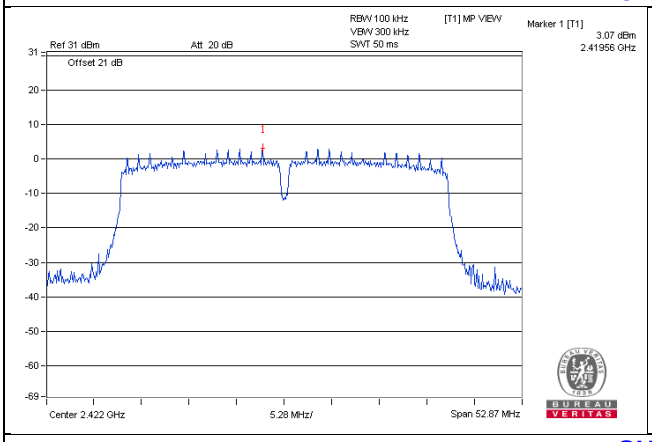


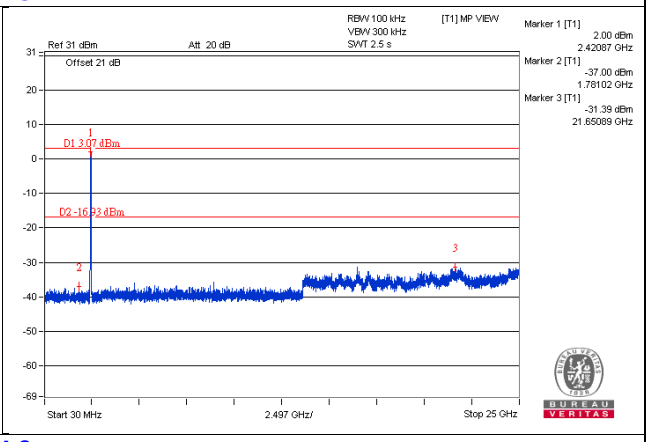
CH 11 Band edge



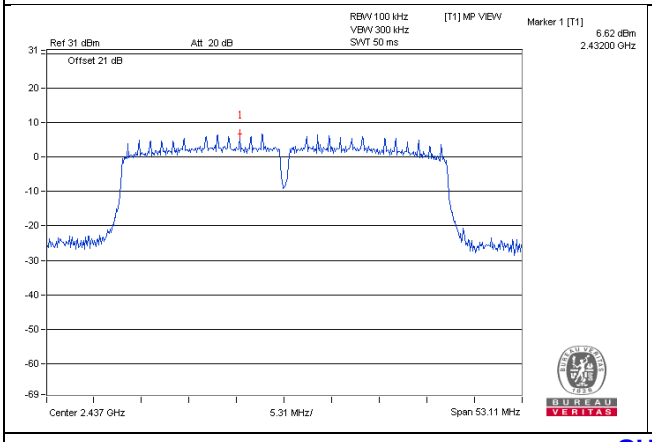
802.11n (HT40)

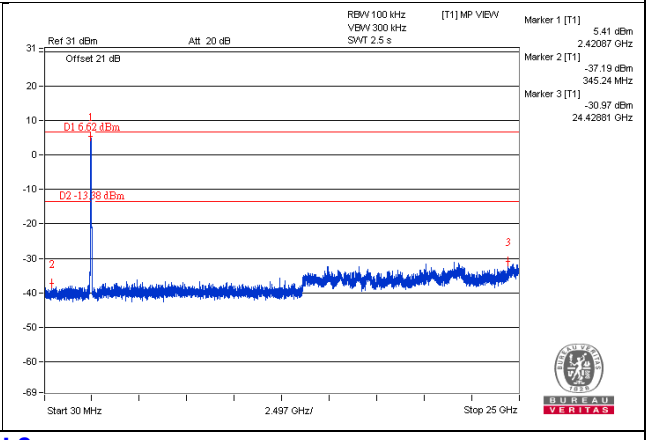
CH 3





CH 6





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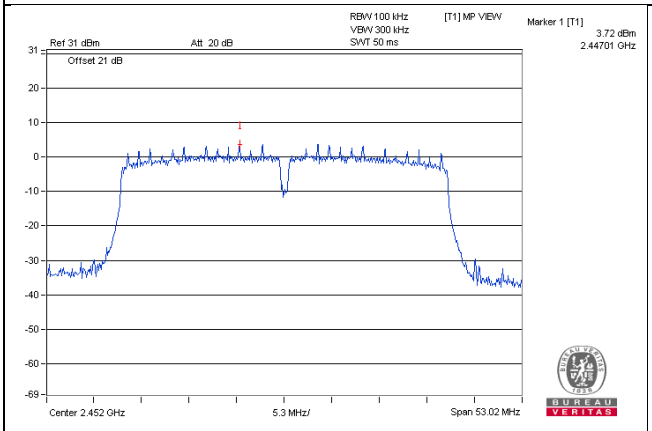
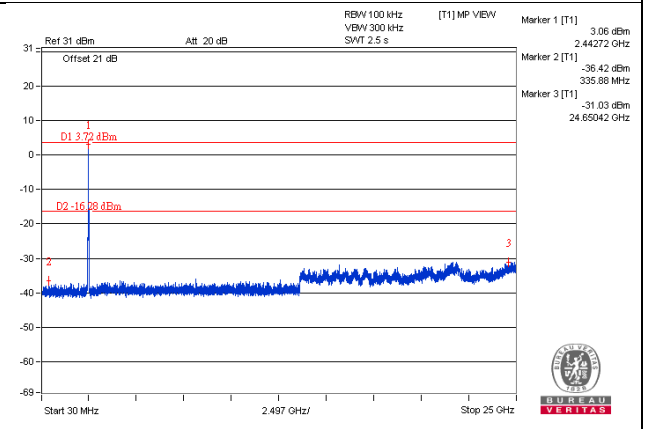
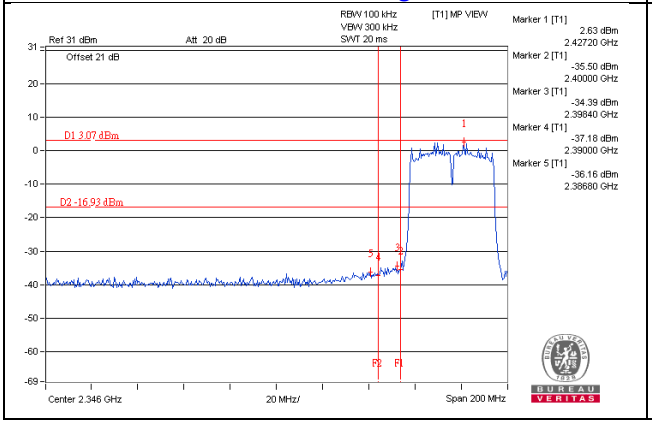
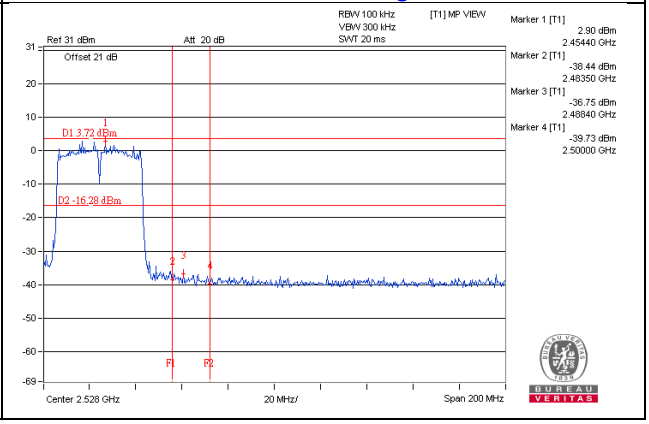




CH 3 Band edge



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:

Linko EMC/RF Lab
Tel: 886-2-26052180
Fax: 886-2-26051924

Hsin Chu EMC/RF/Telecom Lab
Tel: 886-3-6668565
Fax: 886-3-6668323

Hwa Ya EMC/RF/Safety Lab
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Fax: 886-3-3270892

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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