

FCC Test Report

Report No.: RF171218E02B

FCC ID: TLZ-NM333

Test Model: AW-NM333

Received Date: Mar. 31, 2018

Test Date: Apr. 14 to 20, 2018

Issued Date: Apr. 30, 2018

Applicant: AzureWave Technologies, Inc.

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

**FCC Registration /
Designation Number:** 723255 / TW2022



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Release Control Record

Issue No.	Description	Date Issued
RF171218E02B	Original release.	Apr. 30, 2018

1 Certificate of Conformity

Product: IEEE 802.11 1X1 b/g/n Wireless LAN Module

Brand: AzureWave

Test Model: AW-NM333

Sample Status: ENGINEERING SAMPLE

Applicant: AzureWave Technologies, Inc.

Test Date: Apr. 14 to 20, 2018

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 : Phoenix Huang, **Date:** Apr. 30, 2018
Phoenix Huang / Specialist

Approved by : May Chen, **Date:** Apr. 30, 2018
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 -20.68dB at 0.16284MHz.
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.
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 mini Murata 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	5.33 dB
Radiated Emissions above 1 GHz	1GHz ~ 6GHz	5.10 dB
	6GHz ~ 18GHz	4.85 dB
	18GHz ~ 40GHz	5.24 dB

2.2 Modification Record

There were no modifications required for compliance.

3 General Information

3.1 General Description of EUT

Product	IEEE 802.11 1X1 b/g/n Wireless LAN Module
Brand	AzureWave
Test Model	AW-NM333
Status of EUT	ENGINEERING SAMPLE
Power Supply Rating	3.3Vdc from host equipment
Modulation Type	CCK, DQPSK, DBPSK for DSSS 64QAM, 16QAM, QPSK, BPSK for OFDM
Modulation Technology	DSSS, OFDM
Transfer Rate	802.11b: up to 11Mbps 802.11g: up to 54Mbps 802.11n: up to 72.2Mbps
Operating Frequency	2.412 ~ 2.462GHz
Number of Channel	802.11b, 802.11g, 802.11n (HT20): 11
Output Power	381.944mW
Antenna Type	Refer to Note
Antenna Connector	Refer to Note
Accessory Device	NA
Data Cable Supplied	NA

Note:

1. The antenna provided to the EUT, please refer to the following table:

Antenna Gain(dBi)	Frequency range (GHz to GHz)	Antenna Type	Antenna Connector
2.01	2.4~2.4835	PCB	NA

2. The EUT incorporates a SISO function.

MODULATION MODE	DATA RATE (MCS)	TX & RX CONFIGURATION	
802.11b	1 ~ 11Mbps	1TX	1RX
802.11g	6 ~ 54Mbps	1TX	1RX
802.11n (HT20)	MCS 0~7	1TX	1RX

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

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's antenna (PCB) had been pre-tested on the positioned of each 3 axis. The worst case was found when positioned on X-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.

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, 2, 6, 9, 10, 11	OFDM	BPSK	6
802.11n (HT20)	1 to 11	1, 2, 6, 10, 11	OFDM	BPSK	6.5

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.

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.

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.

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, 2, 6, 9, 10, 11	OFDM	BPSK	6
802.11n (HT20)	1 to 11	1, 2, 6, 10, 11	OFDM	BPSK	6.5

Test Condition:

APPLICABLE TO	ENVIRONMENTAL CONDITIONS	INPUT POWER (System)	TESTED BY
RE $\geq$ 1G	24deg. C, 68%RH	120Vac, 60Hz	Frank Chuang
RE $<$ 1G	23deg. C, 68%RH	120Vac, 60Hz	Frank Chuang
PLC	25deg. C, 75%RH	120Vac, 60Hz	Andy Ho
APCM	25deg. C, 60%RH	120Vac, 60Hz	Anderson Chen

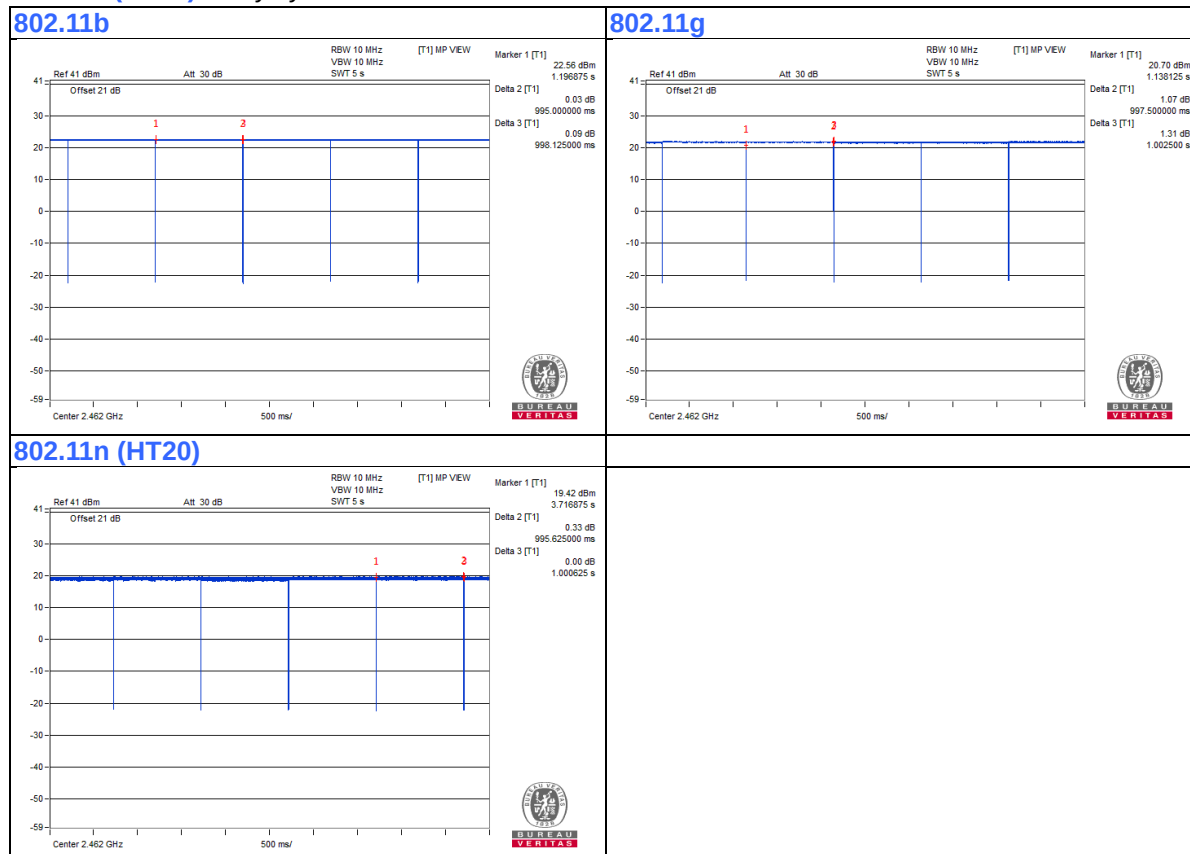
3.3 Duty Cycle of Test Signal

Duty cycle of test signal is $\geq 98\%$, duty factor is not required.

802.11b: Duty cycle = 995 ms/998.125 ms = 0.997

802.11g: Duty cycle = 997.5 ms/1002.5 ms = 0.995

802.11n (HT20): Duty cycle = 995.625 ms/1000.625 ms = 0.995



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.

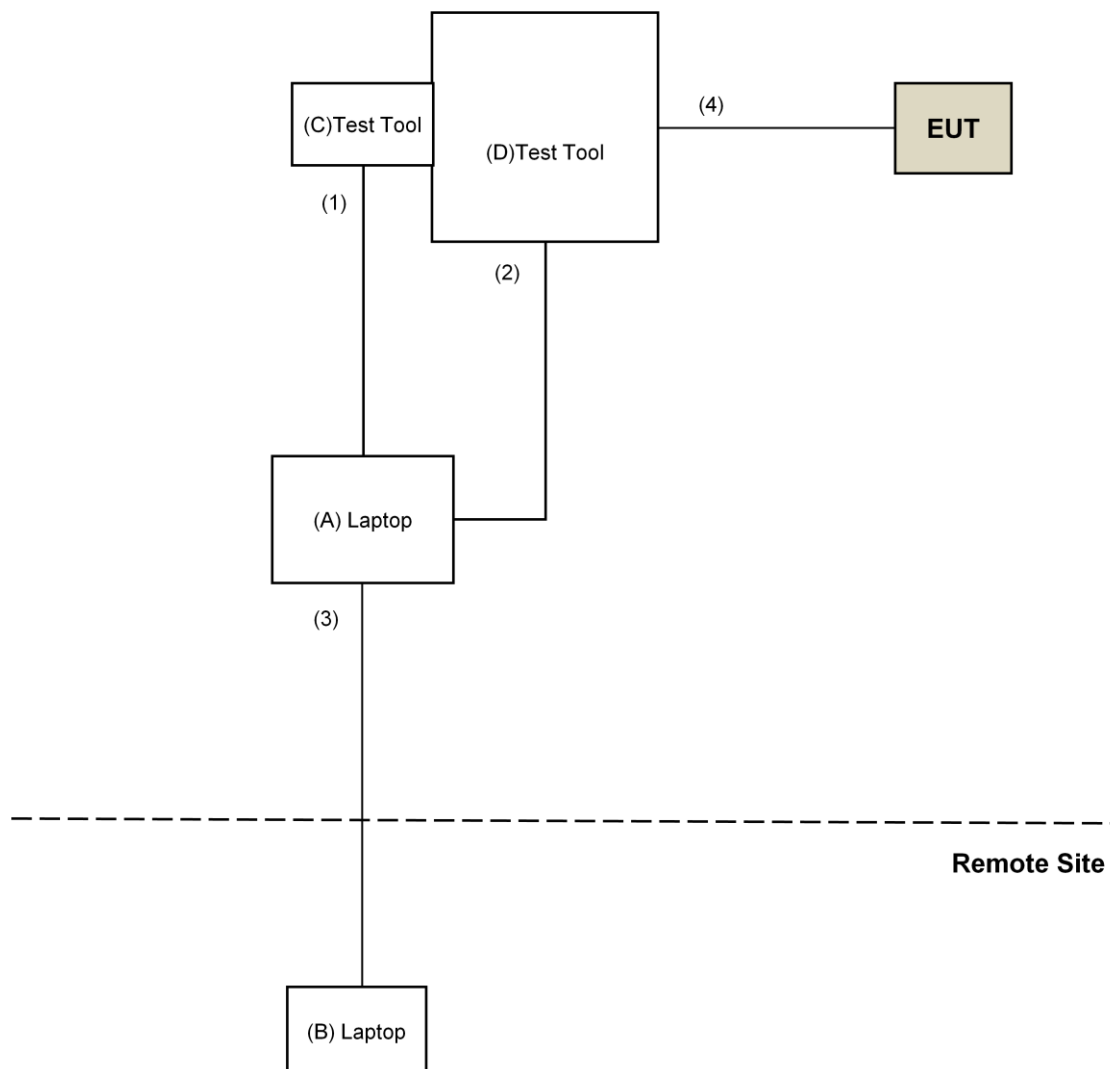
ID	Product	Brand	Model No.	Serial No.	FCC ID	Remarks
A.	Laptop	DELL	E6420	B92T3R1	FCC DoC	Provided by Lab
B.	Laptop	DELL	E6420	482T3R1	FCC DoC	Provided by Lab
C.	Test Tool	NA	NA	NA	NA	Supplied by client
D.	Test Tool	NA	NA	NA	NA	Supplied by client

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.	USB Cable	1	1.5	Yes	0	Supplied by client
2.	USB Cable	1	1.5	Yes	0	Supplied by client
3.	RJ-45 Cable	1	10	No	0	Provided by Lab
4.	Data Cable	1	0.1	No	0	Supplied by client

3.4.1 Configuration of System under 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

ANSI C63.10-2013

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

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 08, 2017	July 07, 2018
Pre-Amplifier EMCI	EMC001340	980142	Feb. 09, 2018	Feb. 08, 2019
Loop Antenna(*) Electro-Metrics	EM-6879	264	Dec. 16, 2016	Dec. 15, 2018
RF Cable	NA	LOOPCAB-00 1 LOOPCAB-00 2	Jan. 15, 2018	Jan. 14, 2019
Pre-Amplifier Mini-Circuits	ZFL-1000VH2 B	AMP-ZFL-01	Nov. 09, 2017	Nov. 08, 2018
Trilog Broadband Antenna SCHWARZBECK	VULB 9168	9168-406	Nov. 29, 2017	Nov. 28, 2018
RF Cable	8D	966-4-1 966-4-2 966-4-3	Mar. 21, 2018	Mar. 20, 2019
Fixed attenuator Mini-Circuits	UNAT-5+	PAD-3m-4-01	Oct. 03, 2017	Oct. 02, 2018
Horn Antenna SCHWARZBECK	BBHA 9120D	9120D-783	Dec. 12, 2017	Dec. 11, 2018
Pre-Amplifier EMCI	EMC12630SE	980385	Jan. 29, 2018	Jan. 28, 2019
RF Cable	EMC104-SM- SM-1200 EMC104-SM- SM-2000 EMC104-SM- SM-5000	160923 150318 150321	Jan. 29, 2018	Jan. 28, 2019
Pre-Amplifier EMCI	EMC184045S E	980387	Jan. 29, 2018	Jan. 28, 2019
Horn Antenna SCHWARZBECK	BBHA 9170	BBHA9170608	Dec. 14, 2017	Dec. 13, 2018
RF Cable	EMC102-KM- KM-1200	160925	Jan. 29, 2018	Jan. 28, 2019
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	July 1, 2017	June 30, 2018
Power meter Anritsu	ML2495A	1014008	May 11, 2017	May 10, 2018
Power sensor Anritsu	MA2411B	0917122	May 11, 2017	May 10, 2018

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 CANADA Site Registration No. is 20331-2
5. Loop antenna was used for all emissions below 30 MHz.
6. Tested Date: Apr. 19 to 20, 2018

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. Parallel, perpendicular, and ground-parallel orientations 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 detects function and specified bandwidth with maximum hold mode when the test frequency is above 1 GHz. If the peak reading value also meets average limit, measurement with the average detector is unnecessary.

Note:

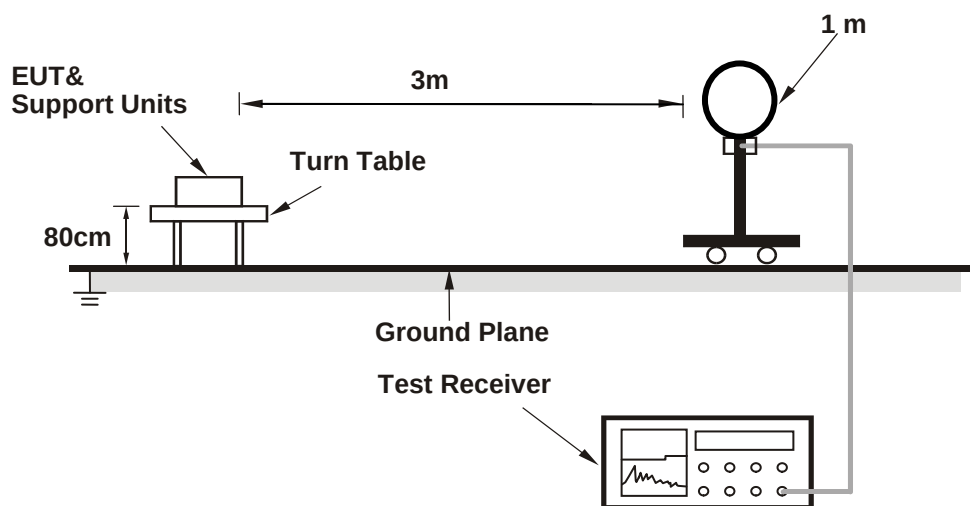
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection (QP) at frequency below 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz for Peak detection (PK) at frequency above 1GHz.
3. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is $\geq 1/T$ (Duty cycle $< 98\%$) or 10Hz (Duty cycle $\geq 98\%$) for Average detection (AV) at frequency above 1GHz.
4. All modes of operation were investigated and the worst-case emissions are reported.

4.1.4 Deviation from Test Standard

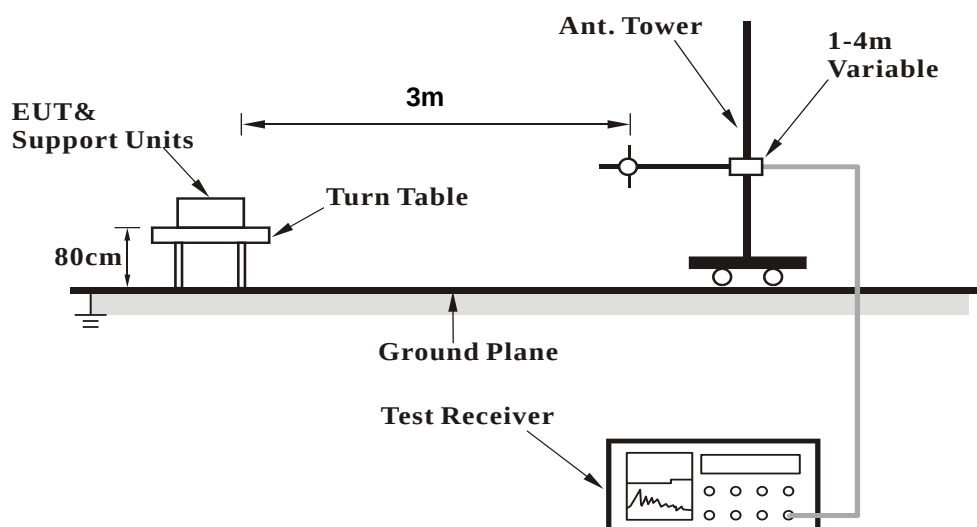
No deviation.

4.1.5 Test Setup

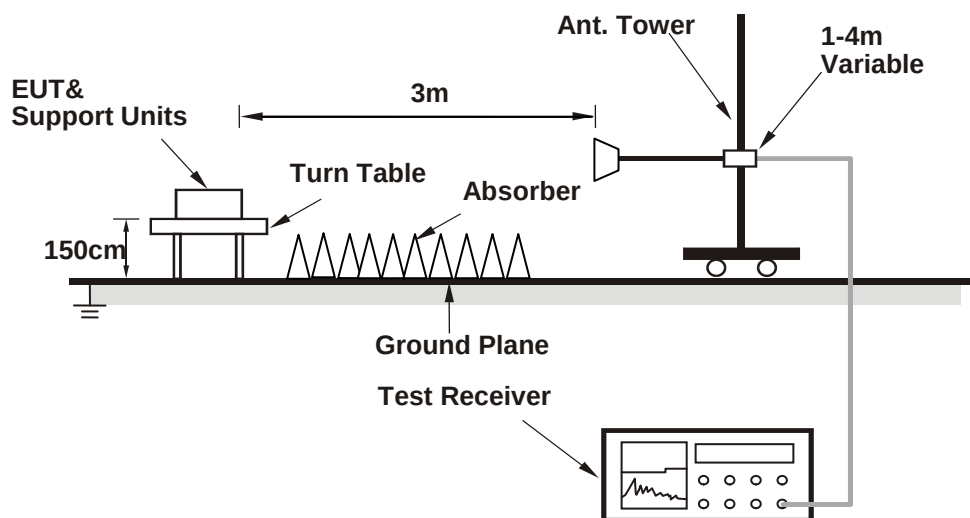
For Radiated emission below 30MHz



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

- Connected the EUT with the Laptop which is placed on the testing table.
- Controlling software (Labtool.exe [Ver 2.0.0.89]) has been activated to set the EUT on specific status.

4.1.7 Test Results

Above 1GHz Data:

802.11b

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2385.80	60.5 PK	74.0	-13.5	1.50 H	85	62.5	-2.0
2	2385.80	53.5 AV	54.0	-0.5	1.50 H	85	55.5	-2.0
3	2390.00	59.2 PK	74.0	-14.8	1.50 H	29	61.2	-2.0
4	2390.00	52.1 AV	54.0	-1.9	1.50 H	29	54.1	-2.0
5	*2412.00	109.3 PK			1.50 H	29	111.4	-2.1
6	*2412.00	106.6 AV			1.50 H	29	108.7	-2.1
7	4824.00	44.4 PK	74.0	-29.6	1.46 H	22	41.7	2.7
8	4824.00	40.9 AV	54.0	-13.1	1.46 H	22	38.2	2.7

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	2385.80	57.3 PK	74.0	-16.7	3.41 V	150	59.3	-2.0
2	2385.80	49.0 AV	54.0	-5.0	3.41 V	150	51.0	-2.0
3	2390.00	56.1 PK	74.0	-17.9	3.41 V	150	58.1	-2.0
4	2390.00	47.9 AV	54.0	-6.1	3.41 V	150	49.9	-2.0
5	*2412.00	106.6 PK			3.41 V	150	108.7	-2.1
6	*2412.00	104.1 AV			3.41 V	150	106.2	-2.1
7	4824.00	45.6 PK	74.0	-28.4	2.62 V	200	42.9	2.7
8	4824.00	44.0 AV	54.0	-10.0	2.62 V	200	41.3	2.7

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	2389.20	56.2 PK	74.0	-17.8	1.50 H	29	58.2	-2.0
2	2389.20	47.0 AV	54.0	-7.0	1.50 H	29	49.0	-2.0
3	2390.00	55.1 PK	74.0	-18.9	1.50 H	29	57.1	-2.0
4	2390.00	45.8 AV	54.0	-8.2	1.50 H	29	47.8	-2.0
5	*2437.00	111.8 PK			1.50 H	29	114.1	-2.3
6	*2437.00	109.5 AV			1.50 H	29	111.8	-2.3
7	2483.50	57.4 PK	74.0	-16.6	1.50 H	29	59.6	-2.2
8	2483.50	48.0 AV	54.0	-6.0	1.50 H	29	50.2	-2.2
9	2484.80	58.8 PK	74.0	-15.2	1.50 H	29	61.0	-2.2
10	2484.80	49.1 AV	54.0	-4.9	1.50 H	29	51.3	-2.2
11	4874.00	45.8 PK	74.0	-28.2	1.50 H	0	42.9	2.9
12	4874.00	41.9 AV	54.0	-12.1	1.50 H	0	39.0	2.9
13	7311.00	44.1 PK	74.0	-29.9	1.52 H	21	34.8	9.3
14	7311.00	31.4 AV	54.0	-22.6	1.52 H	21	22.1	9.3

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	2389.20	54.8 PK	74.0	-19.2	3.43 V	145	56.8	-2.0
2	2389.20	45.5 AV	54.0	-8.5	3.43 V	145	47.5	-2.0
3	2390.00	53.3 PK	74.0	-20.7	3.43 V	145	55.3	-2.0
4	2390.00	44.2 AV	54.0	-9.8	3.43 V	145	46.2	-2.0
5	*2437.00	109.5 PK			3.43 V	145	111.8	-2.3
6	*2437.00	107.2 AV			3.43 V	145	109.5	-2.3
7	2483.50	55.2 PK	74.0	-18.8	3.43 V	145	57.4	-2.2
8	2483.50	45.3 AV	54.0	-8.7	3.43 V	145	47.5	-2.2
9	2484.80	56.4 PK	74.0	-17.6	3.43 V	145	58.6	-2.2
10	2484.80	46.6 AV	54.0	-7.4	3.43 V	145	48.8	-2.2
11	4874.00	46.2 PK	74.0	-27.8	2.64 V	186	43.3	2.9
12	4874.00	44.4 AV	54.0	-9.6	2.64 V	186	41.5	2.9
13	7311.00	44.6 PK	74.0	-29.4	1.66 V	24	35.3	9.3
14	7311.00	31.3 AV	54.0	-22.7	1.66 V	24	22.0	9.3

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)
FREQUENCY RANGE	1GHz ~ 25GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2462.00	110.0 PK			1.19 H	26	112.3	-2.3
2	*2462.00	107.7 AV			1.19 H	26	110.0	-2.3
3	2483.50	59.1 PK	74.0	-14.9	1.19 H	26	61.3	-2.2
4	2483.50	53.4 AV	54.0	-0.6	1.19 H	26	55.6	-2.2
5	4924.00	44.1 PK	74.0	-29.9	1.50 H	14	41.1	3.0
6	4924.00	40.8 AV	54.0	-13.2	1.50 H	14	37.8	3.0
7	7386.00	43.5 PK	74.0	-30.5	1.50 H	14	33.8	9.7
8	7386.00	31.1 AV	54.0	-22.9	1.50 H	14	21.4	9.7
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	106.0 PK			3.42 V	147	108.3	-2.3
2	*2462.00	103.4 AV			3.42 V	147	105.7	-2.3
3	2483.50	57.3 PK	74.0	-16.7	3.42 V	147	59.5	-2.2
4	2483.50	49.2 AV	54.0	-4.8	3.42 V	147	51.4	-2.2
5	4924.00	47.6 PK	74.0	-26.4	2.64 V	352	44.6	3.0
6	4924.00	45.7 AV	54.0	-8.3	2.64 V	352	42.7	3.0
7	7386.00	44.7 PK	74.0	-29.3	1.64 V	24	35.0	9.7
8	7386.00	31.4 AV	54.0	-22.6	1.64 V	24	21.7	9.7

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)
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	72.7 PK	74.0	-1.3	1.24 H	87	74.7	-2.0
2	2390.00	53.9 AV	54.0	-0.1	1.24 H	87	55.9	-2.0
3	*2412.00	106.5 PK			1.24 H	87	108.6	-2.1
4	*2412.00	97.6 AV			1.24 H	87	99.7	-2.1
5	4824.00	44.2 PK	74.0	-29.8	1.55 H	96	41.5	2.7
6	4824.00	41.0 AV	54.0	-13.0	1.55 H	96	38.3	2.7
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	58.8 PK	74.0	-15.2	3.40 V	158	60.8	-2.0
2	2390.00	50.2 AV	54.0	-3.8	3.40 V	158	52.2	-2.0
3	*2412.00	102.5 PK			3.40 V	158	104.6	-2.1
4	*2412.00	94.2 AV			3.40 V	158	96.3	-2.1
5	4824.00	46.3 PK	74.0	-27.7	1.52 V	213	43.6	2.7
6	4824.00	42.9 AV	54.0	-11.1	1.52 V	213	40.2	2.7

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 2	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	72.8 PK	74.0	-1.2	1.00 H	87	74.8	-2.0
2	2390.00	53.6 AV	54.0	-0.4	1.00 H	87	55.6	-2.0
3	*2417.00	109.6 PK			1.00 H	87	111.7	-2.1
4	*2417.00	101.0 AV			1.00 H	87	103.1	-2.1
5	4834.00	44.1 PK	74.0	-29.9	1.55 H	87	41.4	2.7
6	4834.00	41.1 AV	54.0	-12.9	1.55 H	87	38.4	2.7
7	7251.00	43.5 PK	74.0	-30.5	1.16 H	174	34.5	9.0
8	7251.00	30.8 AV	54.0	-23.2	1.16 H	174	21.8	9.0
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	59.4 PK	74.0	-14.6	3.48 V	135	61.4	-2.0
2	2390.00	50.5 AV	54.0	-3.5	3.48 V	135	52.5	-2.0
3	*2417.00	106.5 PK			3.48 V	135	108.6	-2.1
4	*2417.00	97.9 AV			3.48 V	135	100.0	-2.1
5	4834.00	46.3 PK	74.0	-27.7	1.52 V	202	43.6	2.7
6	4834.00	43.2 AV	54.0	-10.8	1.52 V	202	40.5	2.7
7	7251.00	44.5 PK	74.0	-29.5	1.62 V	177	35.5	9.0
8	7251.00	31.1 AV	54.0	-22.9	1.62 V	177	22.1	9.0

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	62.1 PK	74.0	-11.9	1.50 H	28	64.1	-2.0
2	2390.00	46.3 AV	54.0	-7.7	1.50 H	28	48.3	-2.0
3	*2437.00	113.0 PK			1.50 H	28	115.3	-2.3
4	*2437.00	103.2 AV			1.50 H	28	105.5	-2.3
5	2483.50	64.3 PK	74.0	-9.7	1.50 H	28	66.5	-2.2
6	2483.50	48.4 AV	54.0	-5.6	1.50 H	28	50.6	-2.2
7	4874.00	46.5 PK	74.0	-27.5	1.55 H	77	43.6	2.9
8	4874.00	43.2 AV	54.0	-10.8	1.55 H	77	40.3	2.9
9	7311.00	44.5 PK	74.0	-29.5	1.19 H	172	35.2	9.3
10	7311.00	32.2 AV	54.0	-21.8	1.19 H	172	22.9	9.3

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	60.5 PK	74.0	-13.5	3.43 V	139	62.5	-2.0
2	2390.00	44.5 AV	54.0	-9.5	3.43 V	139	46.5	-2.0
3	*2437.00	109.7 PK			3.43 V	139	112.0	-2.3
4	*2437.00	100.8 AV			3.43 V	139	103.1	-2.3
5	2483.50	62.1 PK	74.0	-11.9	3.43 V	139	64.3	-2.2
6	2483.50	46.8 AV	54.0	-7.2	3.43 V	139	49.0	-2.2
7	4874.00	47.3 PK	74.0	-26.7	1.54 V	212	44.4	2.9
8	4874.00	45.4 AV	54.0	-8.6	1.54 V	212	42.5	2.9
9	7311.00	44.2 PK	74.0	-29.8	1.65 V	182	34.9	9.3
10	7311.00	31.0 AV	54.0	-23.0	1.65 V	182	21.7	9.3

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)
FREQUENCY RANGE	1GHz ~ 25GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2452.00	110.1 PK			1.50 H	29	112.4	-2.3
2	*2452.00	101.2 AV			1.50 H	29	103.5	-2.3
3	2483.50	73.9 PK	74.0	-0.1	1.50 H	29	76.1	-2.2
4	2483.50	53.8 AV	54.0	-0.2	1.50 H	29	56.0	-2.2
5	4904.00	46.0 PK	74.0	-28.0	1.52 H	72	43.1	2.9
6	4904.00	42.8 AV	54.0	-11.2	1.52 H	72	39.9	2.9
7	7356.00	44.8 PK	74.0	-29.2	1.16 H	180	35.1	9.7
8	7356.00	32.5 AV	54.0	-21.5	1.16 H	180	22.8	9.7
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	106.9 PK			3.46 V	145	109.2	-2.3
2	*2452.00	98.2 AV			3.46 V	145	100.5	-2.3
3	2483.50	59.8 PK	74.0	-14.2	3.46 V	145	62.0	-2.2
4	2483.50	51.0 AV	54.0	-3.0	3.46 V	145	53.2	-2.2
5	4904.00	46.2 PK	74.0	-27.8	1.56 V	191	43.3	2.9
6	4904.00	43.1 AV	54.0	-10.9	1.56 V	191	40.2	2.9
7	7356.00	45.2 PK	74.0	-28.8	1.59 V	176	35.5	9.7
8	7356.00	31.5 AV	54.0	-22.5	1.59 V	176	21.8	9.7

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 10	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	*2457.00	109.0 PK			1.50 H	28	111.3	-2.3
2	*2457.00	100.1 AV			1.50 H	28	102.4	-2.3
3	2483.50	72.6 PK	74.0	-1.4	1.50 H	28	74.8	-2.2
4	2483.50	53.5 AV	54.0	-0.5	1.50 H	28	55.7	-2.2
5	4914.00	42.1 PK	74.0	-31.9	1.57 H	98	39.2	2.9
6	4914.00	38.7 AV	54.0	-15.3	1.57 H	98	35.8	2.9
7	7371.00	43.0 PK	74.0	-31.0	1.16 H	160	33.3	9.7
8	7371.00	30.5 AV	54.0	-23.5	1.16 H	160	20.8	9.7
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	*2457.00	106.5 PK			3.49 V	145	108.8	-2.3
2	*2457.00	97.8 AV			3.49 V	145	100.1	-2.3
3	2483.50	59.7 PK	74.0	-14.3	3.49 V	145	61.9	-2.2
4	2483.50	50.7 AV	54.0	-3.3	3.49 V	145	52.9	-2.2
5	4914.00	46.6 PK	74.0	-27.4	1.51 V	185	43.7	2.9
6	4914.00	43.4 AV	54.0	-10.6	1.51 V	185	40.5	2.9
7	7371.00	45.7 PK	74.0	-28.3	1.62 V	182	36.0	9.7
8	7371.00	31.8 AV	54.0	-22.2	1.62 V	182	22.1	9.7

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)
FREQUENCY RANGE	1GHz ~ 25GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2462.00	107.2 PK			1.00 H	23	109.5	-2.3
2	*2462.00	98.1 AV			1.00 H	23	100.4	-2.3
3	2483.50	72.8 PK	74.0	-1.2	1.00 H	23	75.0	-2.2
4	2483.50	53.9 AV	54.0	-0.1	1.00 H	23	56.1	-2.2
5	4924.00	42.6 PK	74.0	-31.4	1.62 H	95	39.6	3.0
6	4924.00	38.9 AV	54.0	-15.1	1.62 H	95	35.9	3.0
7	7386.00	42.9 PK	74.0	-31.1	1.15 H	170	33.2	9.7
8	7386.00	30.1 AV	54.0	-23.9	1.15 H	170	20.4	9.7
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	104.8 PK			3.39 V	164	107.1	-2.3
2	*2462.00	95.5 AV			3.39 V	164	97.8	-2.3
3	2483.50	58.5 PK	74.0	-15.5	3.39 V	164	60.7	-2.2
4	2483.50	49.7 AV	54.0	-4.3	3.39 V	164	51.9	-2.2
5	4924.00	47.0 PK	74.0	-27.0	1.47 V	219	44.0	3.0
6	4924.00	43.4 AV	54.0	-10.6	1.47 V	219	40.4	3.0
7	7386.00	45.6 PK	74.0	-28.4	1.57 V	196	35.9	9.7
8	7386.00	31.5 AV	54.0	-22.5	1.57 V	196	21.8	9.7

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)
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	73.9 PK	74.0	-0.1	1.00 H	88	75.9	-2.0
2	2390.00	52.4 AV	54.0	-1.6	1.00 H	88	54.4	-2.0
3	*2412.00	104.9 PK			1.00 H	88	107.0	-2.1
4	*2412.00	96.1 AV			1.00 H	88	98.2	-2.1
5	4824.00	42.2 PK	74.0	-31.8	1.57 H	88	39.5	2.7
6	4824.00	37.8 AV	54.0	-16.2	1.57 H	88	35.1	2.7
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	58.8 PK	74.0	-15.2	3.37 V	166	60.8	-2.0
2	2390.00	50.1 AV	54.0	-3.9	3.37 V	166	52.1	-2.0
3	*2412.00	102.6 PK			3.37 V	166	104.7	-2.1
4	*2412.00	94.2 AV			3.37 V	166	96.3	-2.1
5	4824.00	45.5 PK	74.0	-28.5	1.53 V	218	42.8	2.7
6	4824.00	40.5 AV	54.0	-13.5	1.53 V	218	37.8	2.7

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 2	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	73.9 PK	74.0	-0.1	1.00 H	89	75.9	-2.0
2	2390.00	53.8 AV	54.0	-0.2	1.00 H	89	55.8	-2.0
3	*2417.00	110.0 PK			1.00 H	89	112.1	-2.1
4	*2417.00	100.2 AV			1.00 H	89	102.3	-2.1
5	4834.00	42.4 PK	74.0	-31.6	1.59 H	90	39.7	2.7
6	4834.00	38.7 AV	54.0	-15.3	1.59 H	90	36.0	2.7
7	7251.00	42.8 PK	74.0	-31.2	1.12 H	161	33.8	9.0
8	7251.00	30.1 AV	54.0	-23.9	1.12 H	161	21.1	9.0
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	58.7 PK	74.0	-15.3	3.34 V	159	60.7	-2.0
2	2390.00	49.9 AV	54.0	-4.1	3.34 V	159	51.9	-2.0
3	*2417.00	105.2 PK			3.34 V	159	107.3	-2.1
4	*2417.00	96.3 AV			3.34 V	159	98.4	-2.1
5	4834.00	46.6 PK	74.0	-27.4	1.49 V	222	43.9	2.7
6	4834.00	43.2 AV	54.0	-10.8	1.49 V	222	40.5	2.7
7	7251.00	46.1 PK	74.0	-27.9	1.55 V	191	37.1	9.0
8	7251.00	31.9 AV	54.0	-22.1	1.55 V	191	22.9	9.0

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	1.50 H	28	69.8	-2.0
2	2390.00	46.1 AV	54.0	-7.9	1.50 H	28	48.1	-2.0
3	*2437.00	111.9 PK			1.50 H	28	114.2	-2.3
4	*2437.00	102.5 AV			1.50 H	28	104.8	-2.3
5	2483.50	73.4 PK	74.0	-0.6	1.50 H	28	75.6	-2.2
6	2483.50	48.4 AV	54.0	-5.6	1.50 H	28	50.6	-2.2
7	4874.00	46.7 PK	74.0	-27.3	1.49 H	81	43.8	2.9
8	4874.00	43.0 AV	54.0	-11.0	1.49 H	81	40.1	2.9
9	7311.00	46.4 PK	74.0	-27.6	1.54 H	208	37.1	9.3
10	7311.00	32.2 AV	54.0	-21.8	1.54 H	208	22.9	9.3

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	60.2 PK	74.0	-13.8	3.52 V	142	62.2	-2.0
2	2390.00	44.2 AV	54.0	-9.8	3.52 V	142	46.2	-2.0
3	*2437.00	108.4 PK			3.46 V	135	110.7	-2.3
4	*2437.00	99.5 AV			3.46 V	135	101.8	-2.3
5	2483.50	60.6 PK	74.0	-13.4	3.46 V	135	62.8	-2.2
6	2483.50	44.6 AV	54.0	-9.4	3.46 V	135	46.8	-2.2
7	4874.00	47.2 PK	74.0	-26.8	1.55 V	211	44.3	2.9
8	4874.00	45.1 AV	54.0	-8.9	1.55 V	211	42.2	2.9
9	7311.00	44.0 PK	74.0	-30.0	3.46 V	135	34.7	9.3
10	7311.00	31.1 AV	54.0	-22.9	3.46 V	135	21.8	9.3

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 10	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	*2457.00	110.0 PK			1.01 H	26	112.3	-2.3
2	*2457.00	100.1 AV			1.01 H	26	102.4	-2.3
3	2483.50	73.7 PK	74.0	-0.3	1.01 H	26	75.9	-2.2
4	2483.50	53.4 AV	54.0	-0.6	1.01 H	26	55.6	-2.2
5	4914.00	42.9 PK	74.0	-31.1	1.61 H	109	40.0	2.9
6	4914.00	39.2 AV	54.0	-14.8	1.61 H	109	36.3	2.9
7	7371.00	42.3 PK	74.0	-31.7	1.17 H	168	32.6	9.7
8	7371.00	29.8 AV	54.0	-24.2	1.17 H	168	20.1	9.7
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	*2457.00	105.5 PK			3.30 V	158	107.8	-2.3
2	*2457.00	96.7 AV			3.30 V	158	99.0	-2.3
3	2483.50	58.6 PK	74.0	-15.4	3.30 V	158	60.8	-2.2
4	2483.50	49.9 AV	54.0	-4.1	3.30 V	158	52.1	-2.2
5	4914.00	47.0 PK	74.0	-27.0	1.48 V	222	44.1	2.9
6	4914.00	43.4 AV	54.0	-10.6	1.48 V	222	40.5	2.9
7	7371.00	46.1 PK	74.0	-27.9	1.54 V	191	36.4	9.7
8	7371.00	32.0 AV	54.0	-22.0	1.54 V	191	22.3	9.7

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)
FREQUENCY RANGE	1GHz ~ 25GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2462.00	105.2 PK			1.50 H	24	107.5	-2.3
2	*2462.00	95.7 AV			1.50 H	24	98.0	-2.3
3	2483.50	72.1 PK	74.0	-1.9	1.50 H	24	74.3	-2.2
4	2483.50	53.4 AV	54.0	-0.6	1.50 H	24	55.6	-2.2
5	4924.00	41.5 PK	74.0	-32.5	1.60 H	115	38.5	3.0
6	4924.00	37.5 AV	54.0	-16.5	1.60 H	115	34.5	3.0
7	7386.00	42.5 PK	74.0	-31.5	1.15 H	161	32.8	9.7
8	7386.00	29.8 AV	54.0	-24.2	1.15 H	161	20.1	9.7
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	102.8 PK			3.43 V	162	105.1	-2.3
2	*2462.00	94.4 AV			3.43 V	162	96.7	-2.3
3	2483.50	58.9 PK	74.0	-15.1	3.43 V	162	61.1	-2.2
4	2483.50	50.2 AV	54.0	-3.8	3.43 V	162	52.4	-2.2
5	4924.00	45.8 PK	74.0	-28.2	1.58 V	227	42.8	3.0
6	4924.00	40.8 AV	54.0	-13.2	1.58 V	227	37.8	3.0
7	7386.00	46.4 PK	74.0	-27.6	1.57 V	185	36.7	9.7
8	7386.00	32.1 AV	54.0	-21.9	1.57 V	185	22.4	9.7

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	168.01	38.2 QP	43.5	-5.3	2.00 H	20	46.4	-8.2
2	263.99	40.5 QP	46.0	-5.5	1.00 H	301	48.9	-8.4
3	323.98	41.3 QP	46.0	-4.7	1.00 H	210	47.5	-6.2
4	491.96	38.7 QP	46.0	-7.3	2.00 H	326	40.7	-2.0
5	647.99	35.2 QP	46.0	-10.8	1.50 H	329	33.8	1.4
6	840.00	36.2 QP	46.0	-9.8	1.00 H	159	31.7	4.5
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	65.74	28.7 QP	40.0	-11.3	1.00 V	8	37.7	-9.0
2	167.98	36.0 QP	43.5	-7.5	1.00 V	274	44.2	-8.2
3	263.96	36.4 QP	46.0	-9.6	1.50 V	324	44.8	-8.4
4	323.98	35.3 QP	46.0	-10.7	1.50 V	0	41.5	-6.2
5	491.94	38.4 QP	46.0	-7.6	1.00 V	338	40.4	-2.0
6	768.00	39.0 QP	46.0	-7.0	2.00 V	246	35.7	3.3

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

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	Nov. 01, 2017	Oct. 31, 2018
Line-Impedance Stabilization Network (for EUT) R&S	ESH3-Z5	848773/004	Nov. 15, 2017	Nov. 14, 2018
Line-Impedance Stabilization Network (for Peripheral) R&S	ENV216	100072	June 03, 2017	June 02, 2018
50 ohms Terminator	N/A	EMC-02	Sep. 22, 2017	Sep. 21, 2018
RF Cable	5D-FB	COCCAB-001	Sep. 29, 2017	Sep. 28, 2018
Fixed attenuator EMEC	STI02-2200-10	003	Mar. 16, 2018	Mar. 15, 2019
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 Conduction 1.
- 3 Tested Date: Apr. 14, 2018

4.2.3 Test Procedures

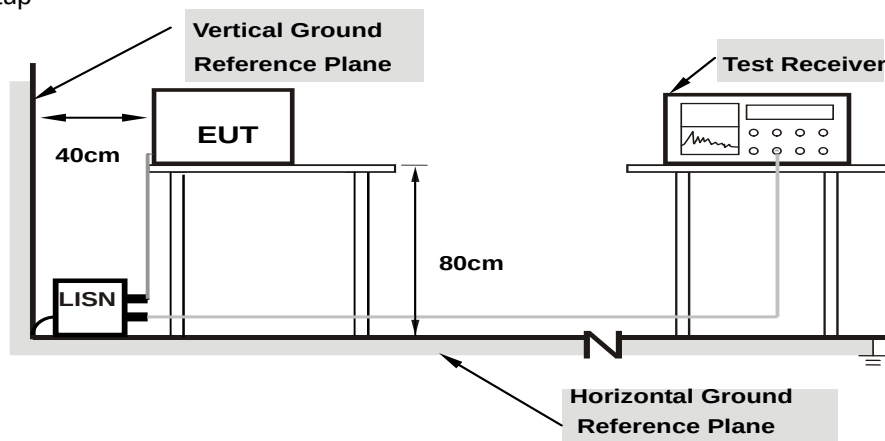
- The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling impedance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

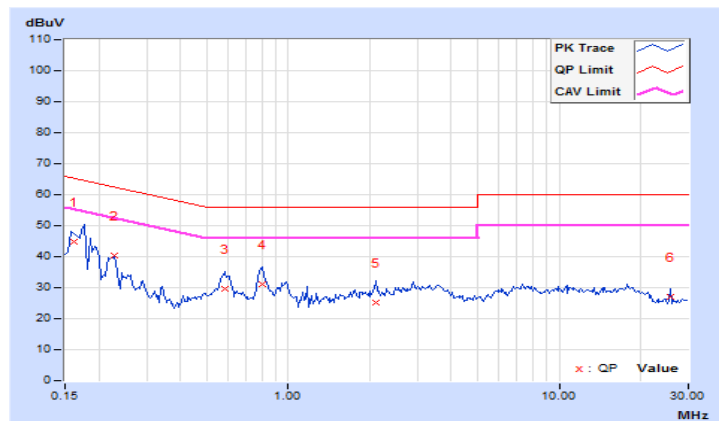
4.2.7 Test Results

Phase	Line (L)	Detector Function	Quasi-Peak (QP) / Average (AV)
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No	Freq.	Corr.	Reading Value		Emission Level		Limit		Margin	
	[MHz]	Factor	[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
		(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.16284	10.05	34.59	23.68	44.64	33.73	65.32	55.32	-20.68	-21.59
2	0.22812	10.08	30.37	18.41	40.45	28.49	62.52	52.52	-22.07	-24.03
3	0.58359	10.14	19.34	9.90	29.48	20.04	56.00	46.00	-26.52	-25.96
4	0.79844	10.15	21.04	10.16	31.19	20.31	56.00	46.00	-24.81	-25.69
5	2.09766	10.23	15.10	7.98	25.33	18.21	56.00	46.00	-30.67	-27.79
6	25.87500	11.50	15.57	14.73	27.07	26.23	60.00	50.00	-32.93	-23.77

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

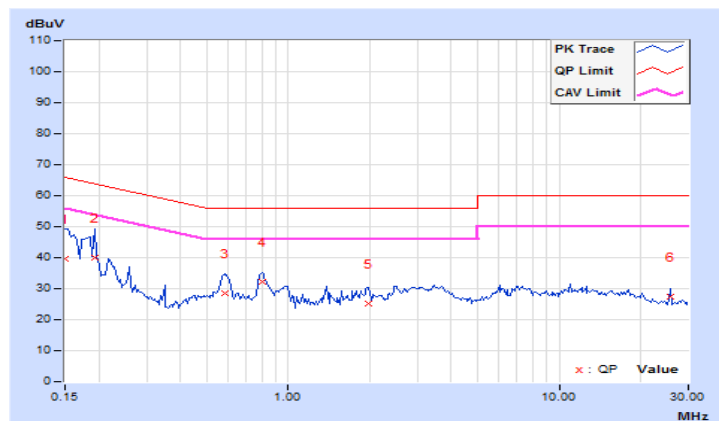


Phase	Neutral (N)	Detector Function	Quasi-Peak (QP) / Average (AV)
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No	Freq. [MHz]	Corr.	Reading Value		Emission Level		Limit		Margin	
		Factor	[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
		(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15000	9.95	29.60	15.05	39.55	25.00	66.00	56.00	-26.45	-31.00
2	0.19297	9.97	30.05	21.03	40.02	31.00	63.91	53.91	-23.89	-22.91
3	0.58750	10.03	18.52	7.36	28.55	17.39	56.00	46.00	-27.45	-28.61
4	0.80234	10.03	22.36	11.26	32.39	21.29	56.00	46.00	-23.61	-24.71
5	1.97266	10.10	15.00	9.57	25.10	19.67	56.00	46.00	-30.90	-26.33
6	25.87500	11.24	16.15	15.27	27.39	26.51	60.00	50.00	-32.61	-23.49

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

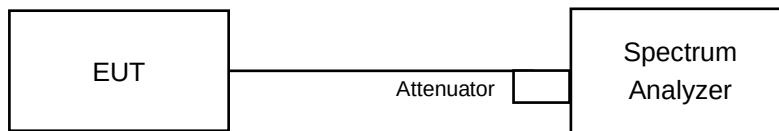


4.3 6dB Bandwidth Measurement

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

- Set resolution bandwidth (RBW) = 100kHz
- Set the video bandwidth (VBW) $\geq 3 \times$ RBW, Detector = Peak.
- Trace mode = max hold.
- Sweep = auto couple.
- 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 specific channel frequencies individually.

4.3.7 Test Result

802.11b

Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Minimum Limit (MHz)	Pass / Fail
1	2412	10.12	0.5	Pass
6	2437	10.14	0.5	Pass
11	2462	10.11	0.5	Pass

802.11g

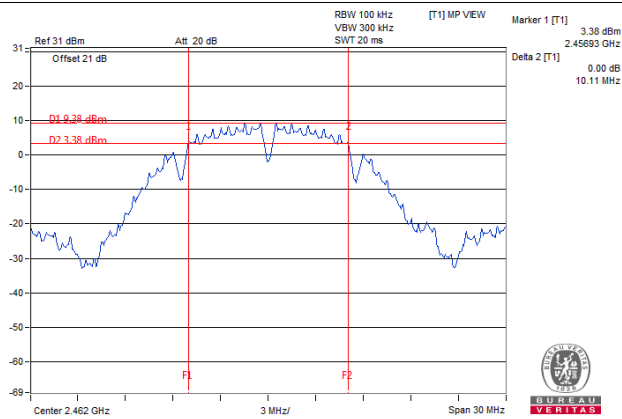
Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Minimum Limit (MHz)	Pass / Fail
1	2412	16.59	0.5	Pass
2	2417	16.45	0.5	Pass
6	2437	16.58	0.5	Pass
9	2452	16.61	0.5	Pass
10	2457	16.64	0.5	Pass
11	2462	16.63	0.5	Pass

802.11n (HT20)

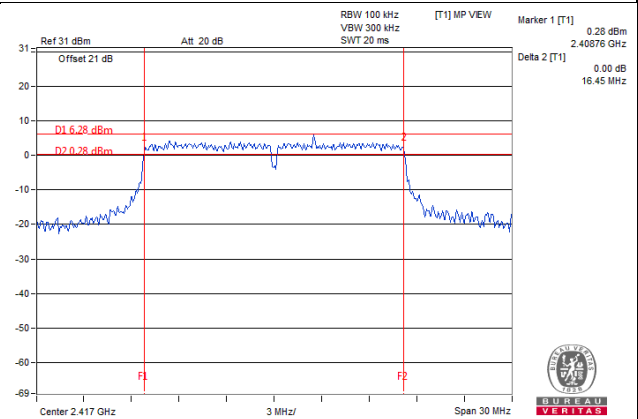
Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Minimum Limit (MHz)	Pass / Fail
1	2412	17.69	0.5	Pass
2	2417	17.75	0.5	Pass
6	2437	17.74	0.5	Pass
10	2457	17.87	0.5	Pass
11	2462	17.89	0.5	Pass

Spectrum Plot of Worst Value

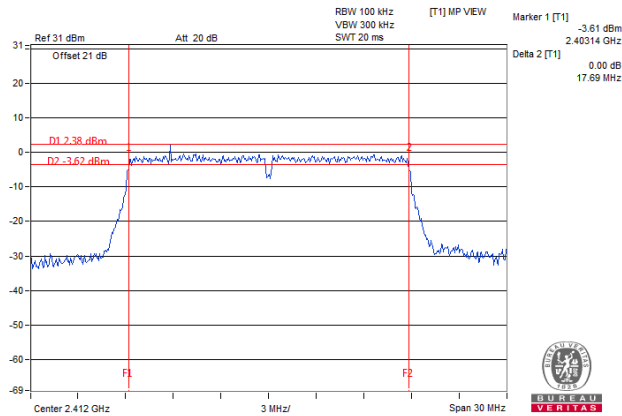
802.11b / CH11



802.11g / CH2



802.11n (HT20) / CH1

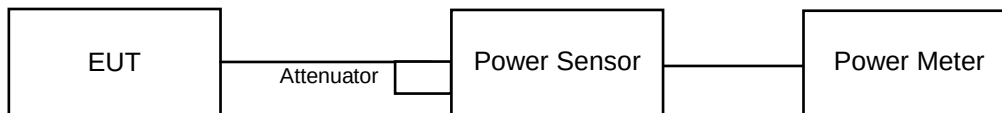


4.4 Conducted Output Power Measurement

4.4.1 Limits of Conducted Output Power Measurement

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

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

Average power sensor was used to perform output power measurement, trigger and gating function of wide band power meter is enabled to measure max output power of TX on burst. Duty factor is not added to measured value.

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

FOR PEAK POWER

802.11b

Channel	Frequency (MHz)	Peak Power (mW)	Peak Power (dBm)	Limit (dBm)	Pass/Fail
1	2412	274.157	24.38	30	Pass
6	2437	359.749	25.56	30	Pass
11	2462	224.388	23.51	30	Pass

802.11g

Channel	Frequency (MHz)	Peak Power (mW)	Peak Power (dBm)	Limit (dBm)	Pass/Fail
1	2412	257.04	24.10	30	Pass
2	2417	330.37	25.19	30	Pass
6	2437	381.944	25.82	30	Pass
9	2452	363.915	25.61	30	Pass
10	2457	334.195	25.24	30	Pass
11	2462	283.792	24.53	30	Pass

802.11n (HT20)

Channel	Frequency (MHz)	Peak Power (mW)	Peak Power (dBm)	Limit (dBm)	Pass/Fail
1	2412	153.462	21.86	30	Pass
2	2417	310.456	24.92	30	Pass
6	2437	376.704	25.76	30	Pass
10	2457	326.588	25.14	30	Pass
11	2462	181.134	22.58	30	Pass

FOR AVERAGE POWER

802.11b

Channel	Frequency (MHz)	Average Power (mW)	Average Power (dBm)
1	2412	176.604	22.47
6	2437	270.396	24.32
11	2462	135.207	21.31

802.11g

Channel	Frequency (MHz)	Average Power (mW)	Average Power (dBm)
1	2412	38.019	15.80
2	2417	70.146	18.46
6	2437	181.97	22.60
9	2452	104.713	20.20
10	2457	68.549	18.36
11	2462	40.272	16.05

802.11n (HT20)

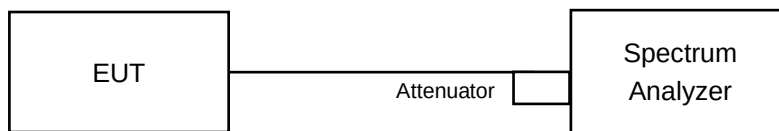
Channel	Frequency (MHz)	Average Power (mW)	Average Power (dBm)
1	2412	23.442	13.70
2	2417	69.343	18.41
6	2437	151.356	21.80
10	2457	72.611	18.61
11	2462	26.303	14.20

4.5 Power Spectral Density Measurement

4.5.1 Limits of Power Spectral Density Measurement

The Maximum of Power Spectral Density Measurement is 8dBm in any 3 kHz.

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

- Set analyzer center frequency to DTS channel center frequency.
- Set the span to 1.5 times the DTS bandwidth.
- Set the RBW to: $3 \text{ kHz} \leq \text{RBW} \leq 100 \text{ kHz}$.
- Set the VBW $\geq 3 \times \text{RBW}$.
- Detector = peak.
- Sweep time = auto couple.
- Trace mode = max hold.
- Allow trace to fully stabilize.
- 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

802.11b

Channel	Frequency (MHz)	PSD (dBm/3kHz)	Limit (dBm/3kHz)	Pass /Fail
1	2412	-7.21	8	Pass
6	2437	-6.08	8	Pass
11	2462	-7.43	8	Pass

802.11g

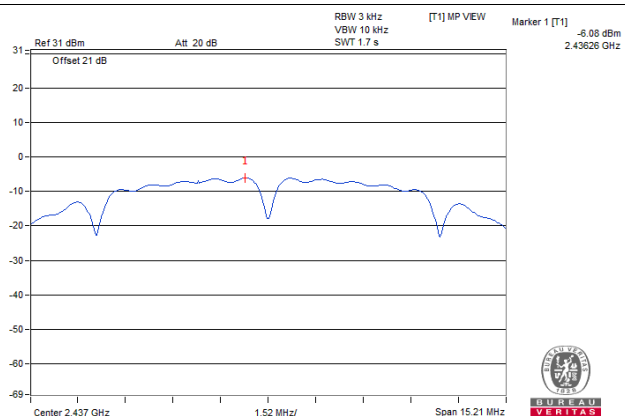
Channel	Frequency (MHz)	PSD (dBm/3kHz)	Limit (dBm/3kHz)	Pass /Fail
1	2412	-12.77	8	Pass
2	2417	-10.40	8	Pass
6	2437	-6.90	8	Pass
9	2452	-8.97	8	Pass
10	2457	-10.57	8	Pass
11	2462	-12.21	8	Pass

802.11n (HT20)

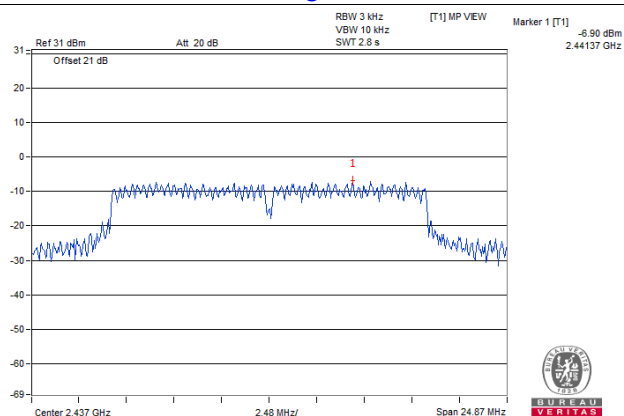
Channel	Frequency (MHz)	PSD (dBm/3kHz)	Limit (dBm/3kHz)	Pass /Fail
1	2412	-12.39	8	Pass
2	2417	-8.36	8	Pass
6	2437	-5.64	8	Pass
10	2457	-7.77	8	Pass
11	2462	-12.58	8	Pass

Spectrum Plot of Worst Value

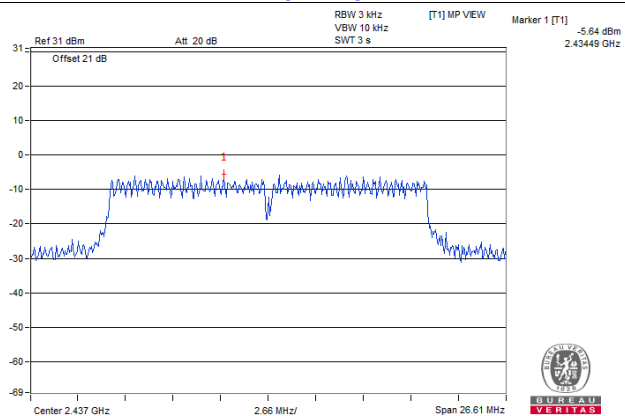
802.11b / CH6



802.11g / CH6



802.11n (HT20) / CH6

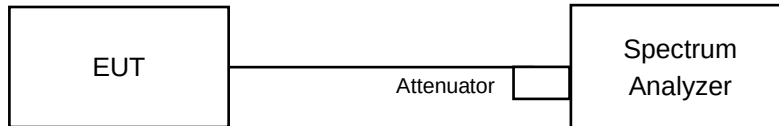


4.6 Conducted Out of Band Emission Measurement

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

MEASUREMENT PROCEDURE OOB

1. Set RBW = 100 kHz.
2. Set VBW $\geq$ 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

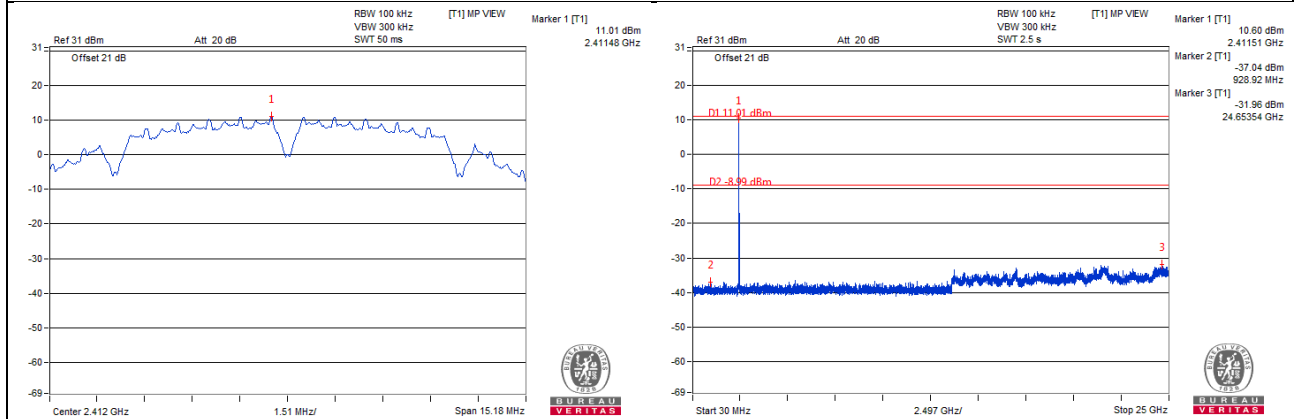
Same as Item 4.3.6

4.6.7 Test Results

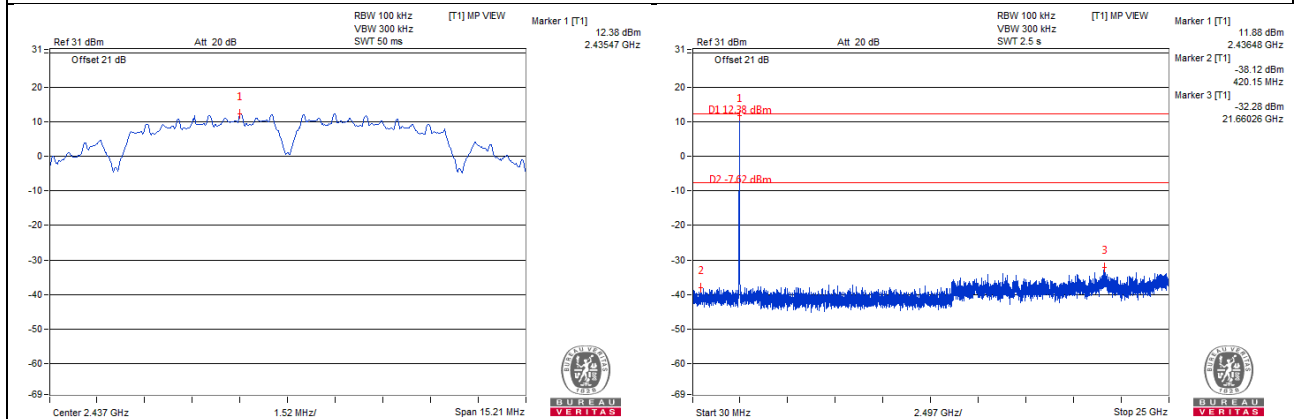
The spectrum plots are attached on the following pages. D1 line indicates the highest level, and D2 line indicates the 20dB offset below D1. It shows compliance with the requirement.

802.11b

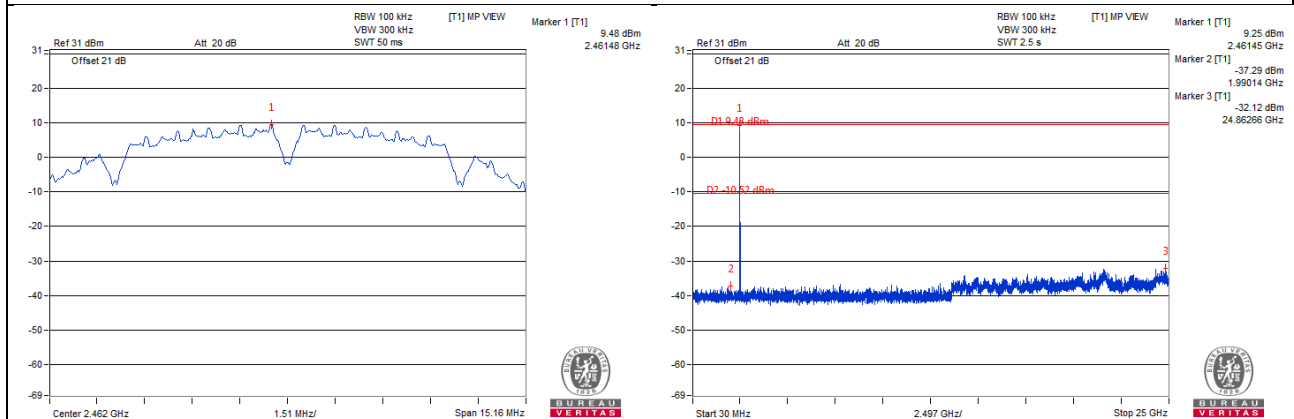
CH 1



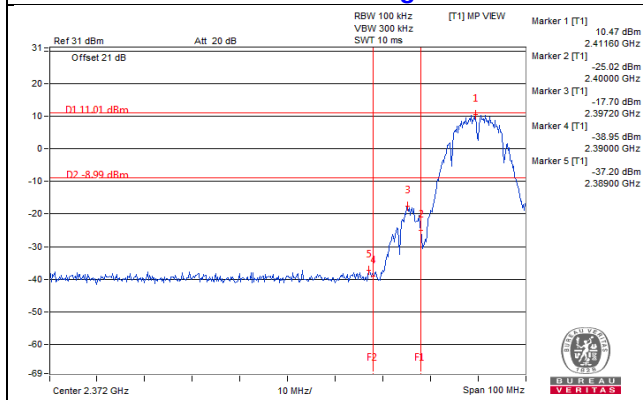
CH 6



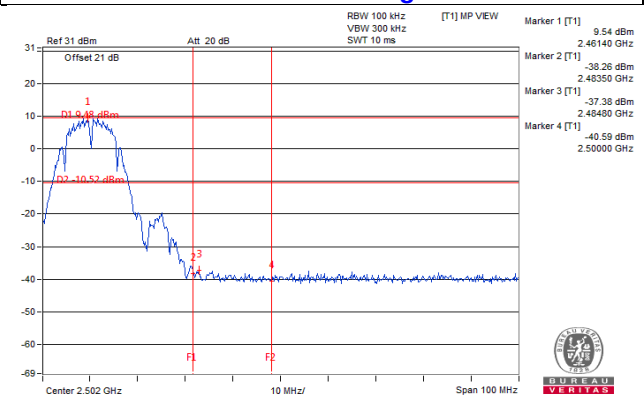
CH 11



CH 1 Band edge

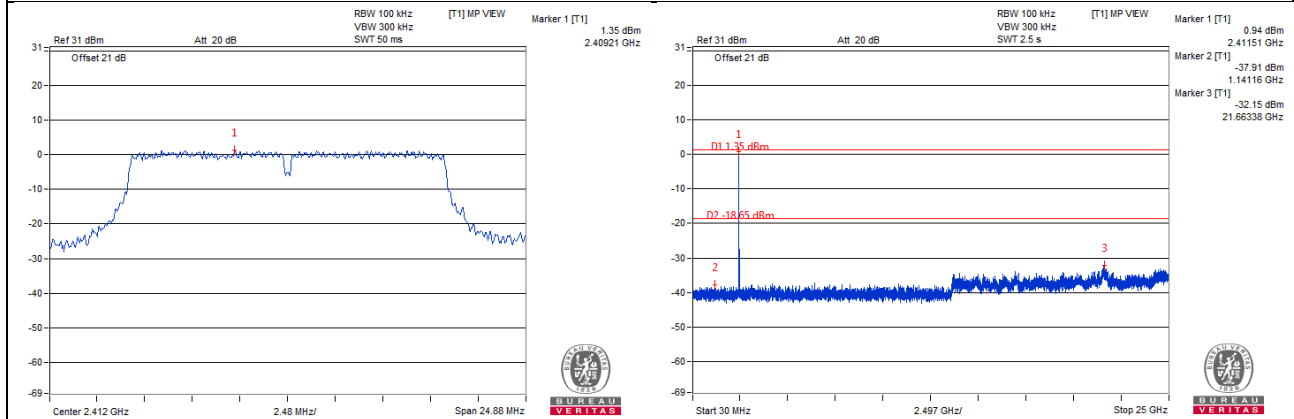


CH 11 Band edge

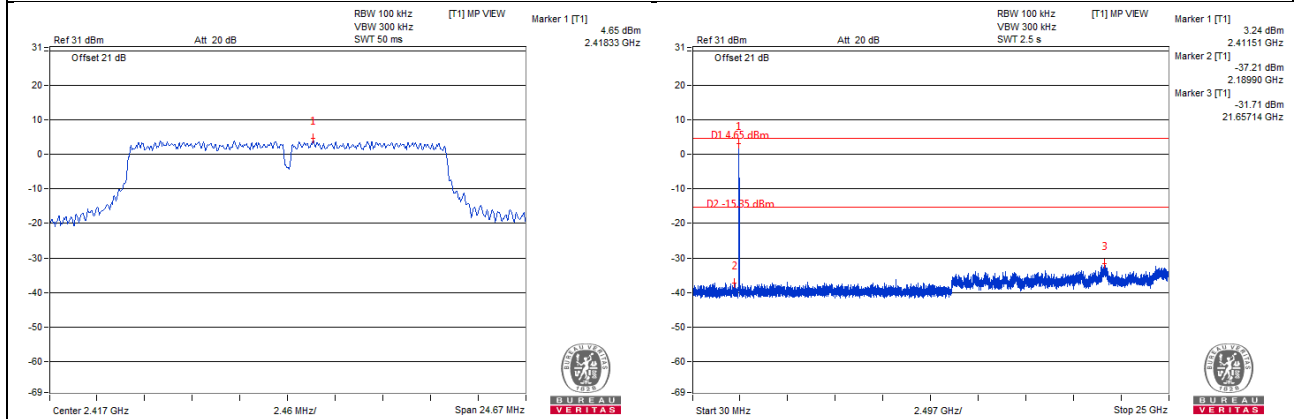


802.11g

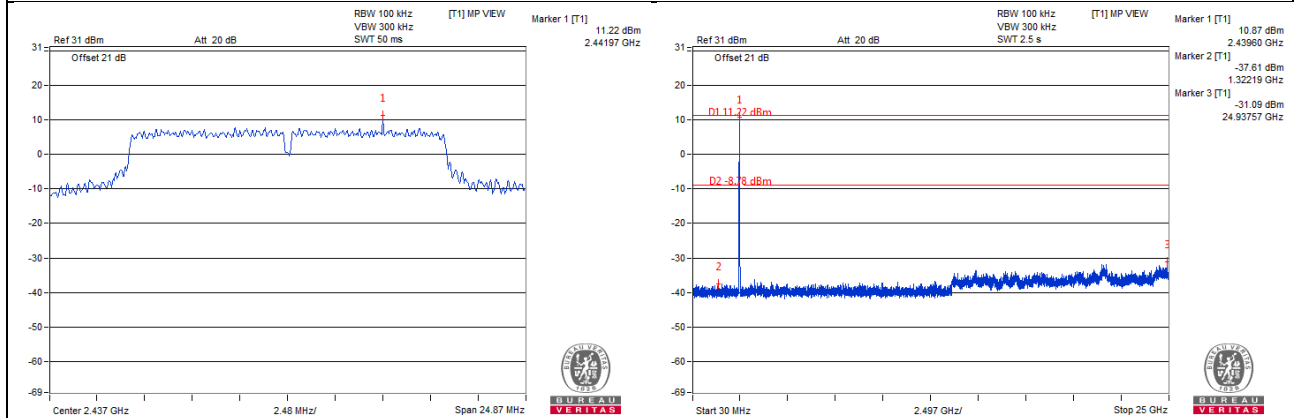
CH 1



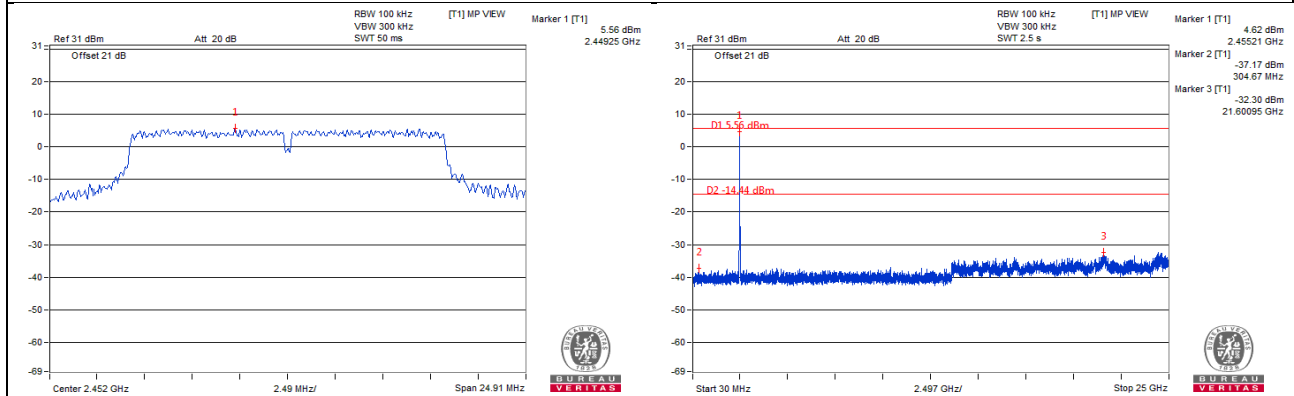
CH 2



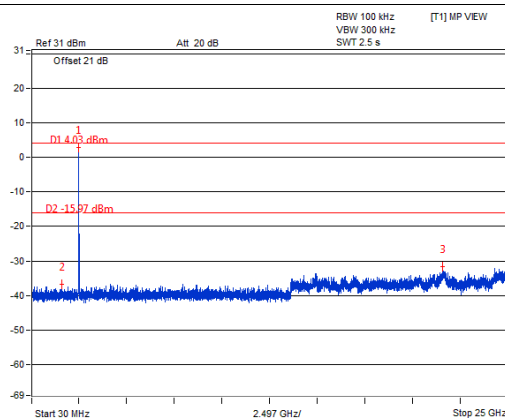
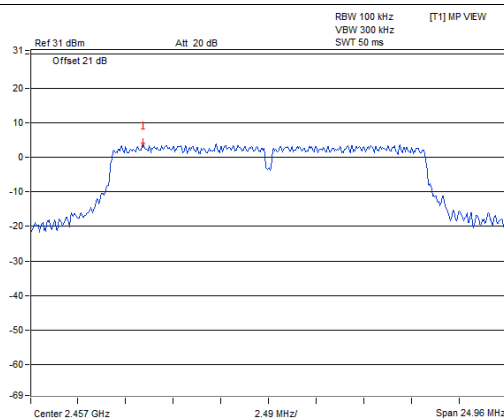
CH 6



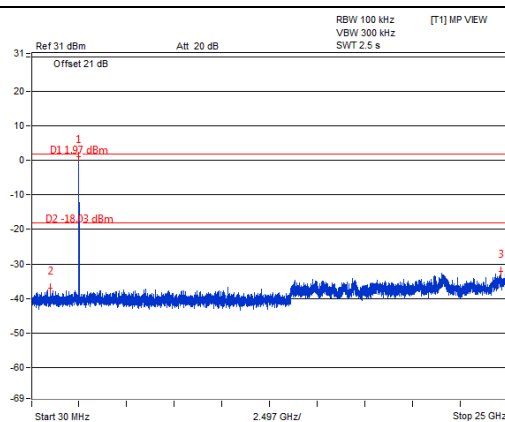
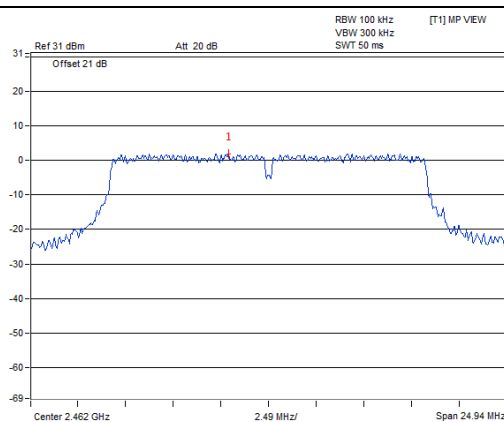
CH 9



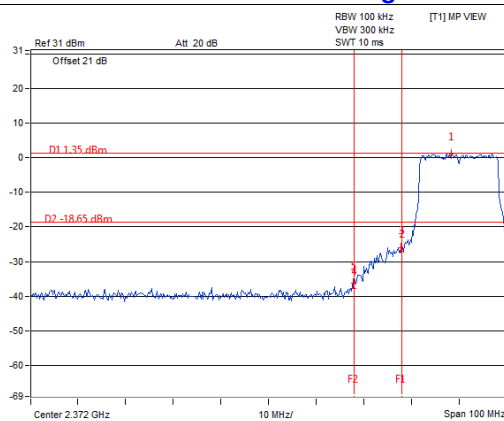
CH 10



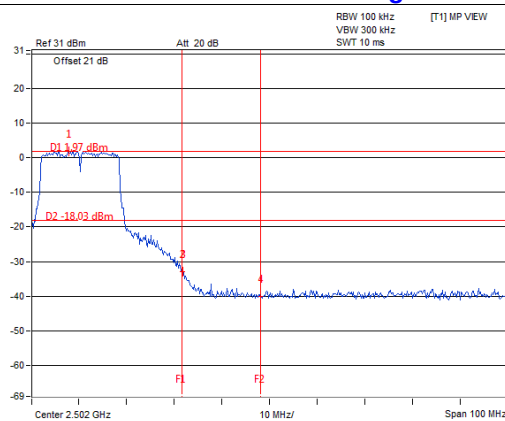
CH 11



CH 1 Band edge

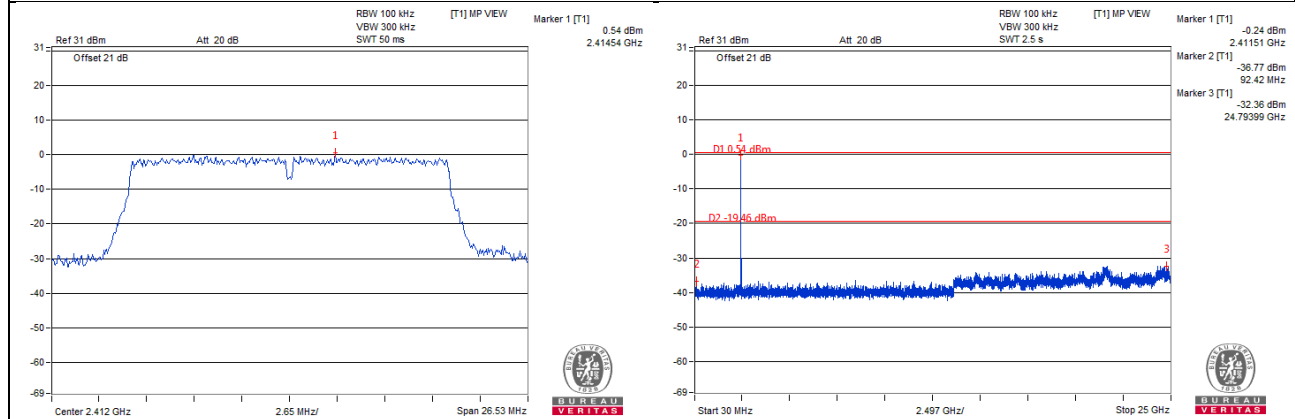


CH 11 Band edge

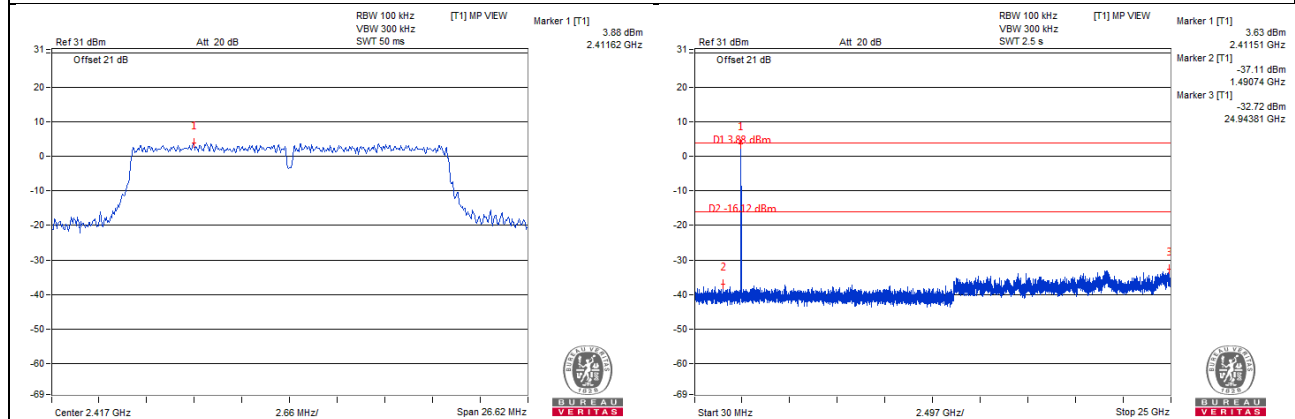


802.11n (HT20)

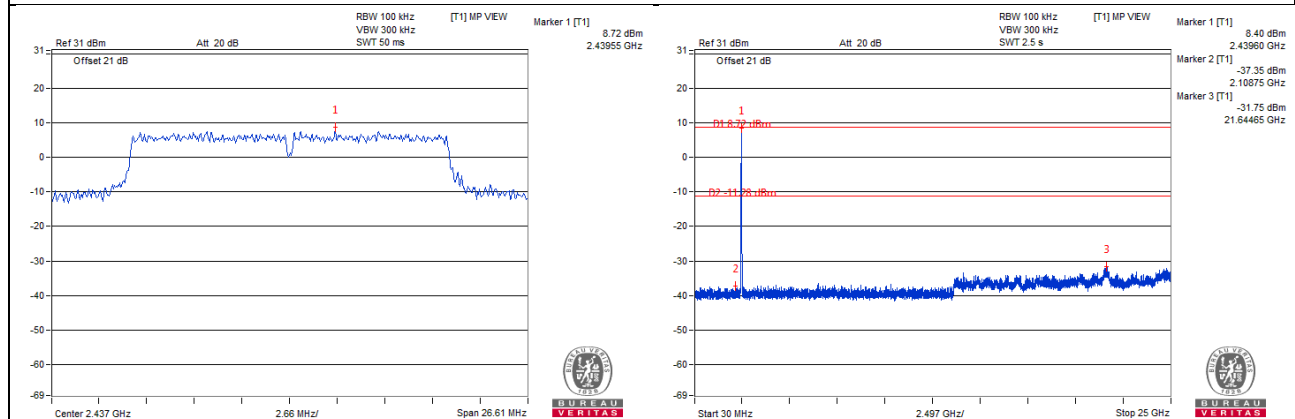
CH 1



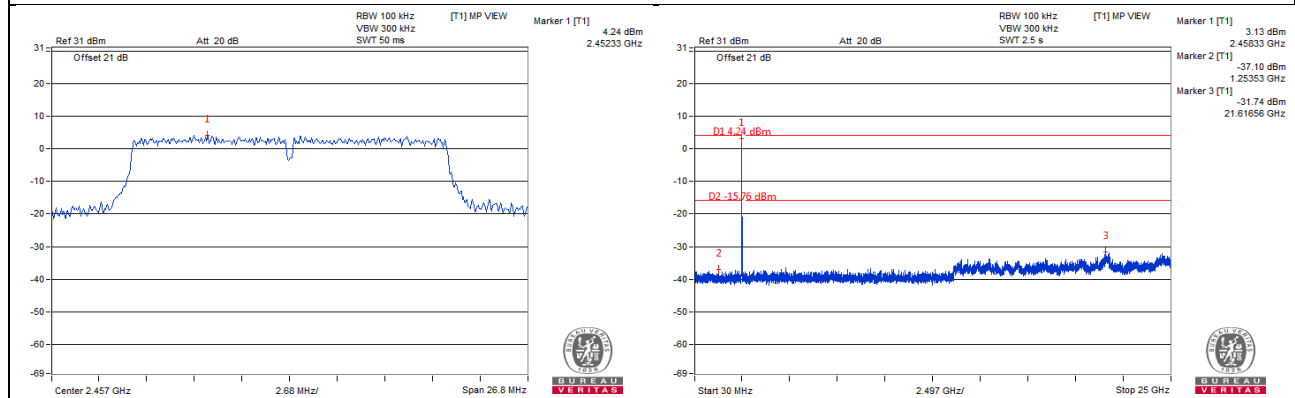
CH 2



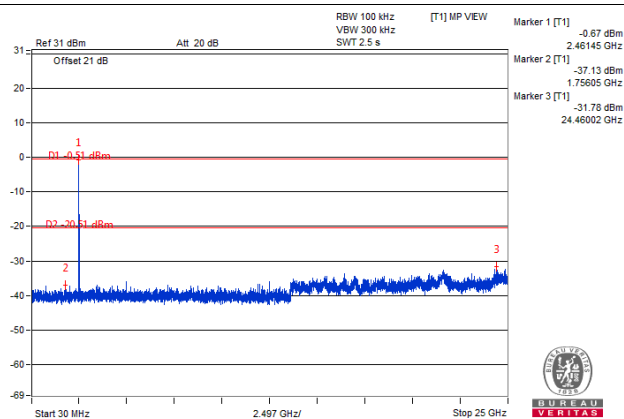
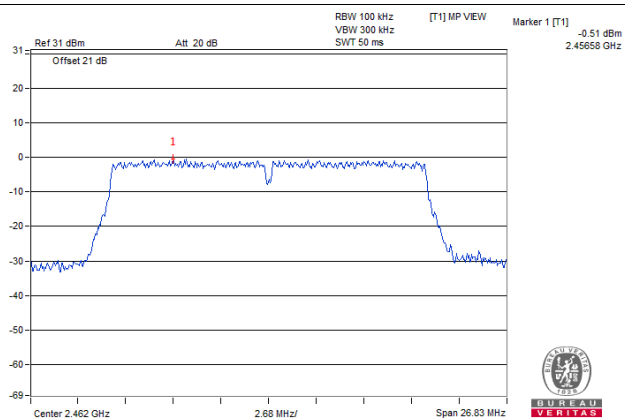
CH 6



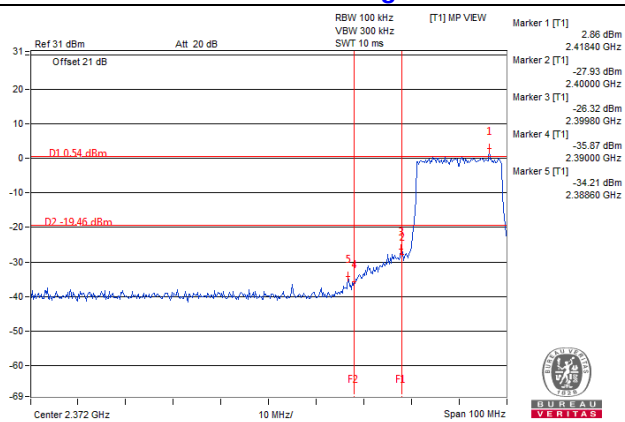
CH 10



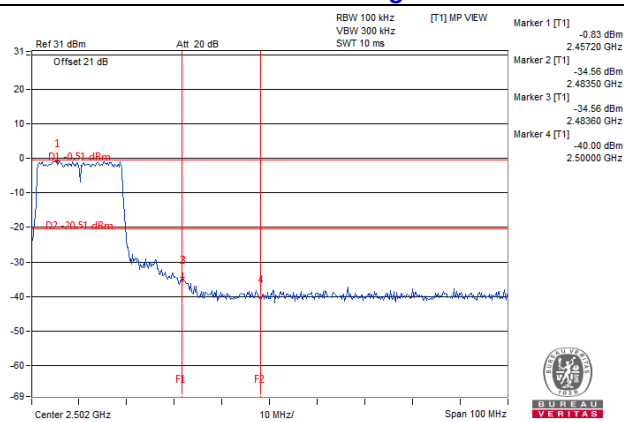
CH 11



CH 1 Band edge



CH 11 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 FCC recognized accredited test firms and accredited according to ISO/IEC 17025.

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

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Email: service.adt@tw.bureauveritas.com

Web Site: www.bureauveritas-adt.com

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

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