

FCC Test Report (WLAN)

Report No.: RF190614E02 R1

FCC ID: B94SNPRC1950

Test Model: SNPRC-1950

Received Date: June 14, 2019

Test Date: Aug. 21 to 30, 2019

Issued Date: Sep. 23, 2019

Applicant: HP Inc.

Address: 3390 East Harmony Road, MS 66 Fort Collins, CO 80528

Manufacturer: HP Singapore (Private) Limited

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

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



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Release Control Record

Issue No.	Description	Date Issued
RF190614E02	Original release.	Sep. 18, 2019
RF190614E02 R1	1. Modify the applicant and manufacturer information. 2. Modify the description of section 3.1.	Sep. 23, 2019

1 Certificate of Conformity

Product: 802.11a/b/g/n/ac (2.4 / 5 GHz) Wi-Fi radio + BT Radio Module

Brand:



Test Model: SNPRC-1950

Sample Status: ENGINEERING SAMPLE

Applicant: HP Inc.

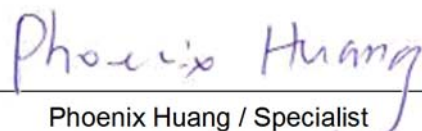
Manufacturer: HP Singapore (Private) Limited

Test Date: Aug. 21 to 30, 2019

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.

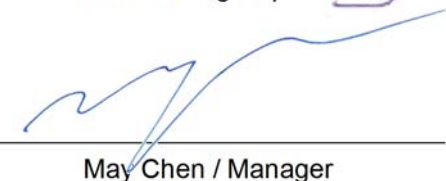
Prepared by :


Phoenix Huang / Specialist

Date:

Sep. 23, 2019

Approved by :


May Chen / Manager

Date:

Sep. 23, 2019

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 -16.55dB at 0.36875MHz.
15.205 / 15.209 / 15.247(d)	Radiated Emissions and Band Edge Measurement	PASS	Meet the requirement of limit. Minimum passing margin is -3dB 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	Internal antenna no antenna connector is used. External antenna connector is i-pex(MHF) not a standard connector.

Note:

Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.

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) ($\pm$)
Conducted Emissions at mains ports	150kHz ~ 30MHz	1.8 dB
Radiated Emissions up to 1 GHz	9kHz ~ 30MHz	3.0 dB
	30MHz ~ 1GHz	4.8 dB
Radiated Emissions above 1 GHz	1GHz ~ 6GHz	5.0 dB
	6GHz ~ 18GHz	5.0 dB
	18GHz ~ 40GHz	5.3 dB

2.2 Modification Record

There were no modifications required for compliance.

3 General Information

3.1 General Description of EUT (WLAN)

Product	802.11a/b/g/n/ac (2.4 / 5 GHz) Wi-Fi radio + BT Radio Module
Brand	
Test Model	SNPRC-1950
Status of EUT	ENGINEERING SAMPLE
Manufacturer	HP Singapore (Private) Limited
Power Supply Rating	DC 3.3V from host equipment
Temperature Operating Range	0°C ~ 70°C
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 150Mbps 802.11ac: up to 433.3Mbps
Operating Frequency Band	2.4GHz: 2.4 ~ 2.4835 GHz 5GHz: 5.15 ~ 5.25 GHz, 5.25 ~ 5.35 GHz, 5.47 ~ 5.725 GHz, 5.725 ~ 5.85 GHz
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): 25 802.11n (HT40), 802.11ac (VHT40): 12 802.11ac (VHT80): 6
Output Power	2.412 ~ 2.462GHz: 516.416 mW 5.18 ~ 5.24GHz: 156.315 mW 5.26 ~ 5.32GHz: 156.675 mW 5.5 ~ 5.72GHz: 164.816 mW 5.745 ~ 5.825GHz: 145.546 mW
Antenna Type	Refer to Note
Antenna Connector	Refer to Note
Accessory Device	NA
Data Cable Supplied	NA

Note:

1. 2.4GHz & 5GHz technology can't transmit at same time.
2. Simultaneously transmission condition.

Condition	Technology	
1	WLAN (2.4GHz)	Bluetooth
2	WLAN (5GHz)	Bluetooth

Note: The emission of the simultaneous operation has been evaluated and no non-compliance was found.

3. The EUT has the below configurations:

Part Numbers	Description
0960-4628	straight connector
0960-4622	straight connector
0960-4630	FFC connector

Note: From the above conditions, the worst case radiated emissions was found to be with FFC connector config, therefore only the test data of this config was recorded in this report.

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

Internal Antenna						
Antenna No.	Brand	Model	Ant. Net Gain (dBi)	Frequency range (GHz)	Antenna Type	Connector Type
1	HP Inc.	SNPRC-1950	3.5	2.4-2.5	PCB	None
			4.5	5-6		
External Antenna						
2	Yageo	ANTX300P002B24553	0.9	2.4-2.5	PCB	i-pex(MHF)
			2.3	5.150-5.875		
3	Pulse	SZ0595D	2.5	2.4-2.5	PIFA	i-pex(MHF)
			3	4.9-5.9		
4	Yageo	ANTX200P002B24553	0.9	2.4-2.5	PCB	i-pex(MHF)
			2.3	5.150-5.875		
5	Pulse	SZ07751	2.5	2.4-2.5	PIFA	i-pex(MHF)
			3	4.9-5.9		

Note:

1. The external antenna will fix transmission on Chain 1
2. The Bluetooth technology will fix transmission on Chain 1
3. For radiated emissions test from the above antennas, the Ant. No.: 1, 2, 5 were selected as representative model for the test and its data was recorded in this report.

5. The EUT incorporates a SIMO function.

2.4GHz Band		
MODULATION MODE	TX & RX CONFIGURATION	
802.11b	1TX (Diversity)	2RX
802.11g	1TX (Diversity)	2RX
802.11n (HT20)	1TX (Diversity)	2RX
802.11n (HT40)	1TX (Diversity)	2RX
5GHz Band		
MODULATION MODE	TX & RX CONFIGURATION	
802.11a	1TX (Diversity)	2RX
802.11n (HT20)	1TX (Diversity)	2RX
802.11n (HT40)	1TX (Diversity)	2RX
802.11ac (VHT20)	1TX (Diversity)	2RX
802.11ac (VHT40)	1TX (Diversity)	2RX
802.11ac (VHT80)	1TX (Diversity)	2RX

6. 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		

7 channels are provided for 802.11n (HT40):

Channel	Frequency (MHz)	Channel	Frequency (MHz)
3	2422	7	2442
4	2427	8	2447
5	2432	9	2452
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 internal Ant. No.: 1 (Chain 0) PCB antenna had been pre-tested on the positioned of each 3 axis. The worst case was found when positioned on **X-plane (Below 1GHz) & Y-plane (Above 1GHz)**.
- The EUT's internal Ant. No.: 1 (Chain 1) PCB antenna had been pre-tested on the positioned of each 3 axis. The worst case was found when positioned on **X-plane (Below 1GHz) & Y-plane (Above 1GHz)**.
- The EUT's external Ant. No.: 2 (Chain 1) PCB antenna had been pre-tested on the positioned of each 3 axis. The worst case was found when positioned on **X-plane (Below 1GHz) & Y-plane (Above 1GHz)**.
- The EUT's external Ant. No.: 5 (Chain 1) PIFA antenna had been pre-tested on the positioned of each 3 axis. The worst case was found when positioned on **X-plane (Below 1GHz) & Y-plane (Above 1GHz)**.

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, configurations (Header pin and FFC), antenna types (integrated and external antennas of different vendor and different length), 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, 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, configurations (Header pin and FFC), antenna types (integrated and external antennas of different vendor and different length), 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, configurations (Header pin and FFC), antenna types (integrated and external antennas of different vendor and different length), 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, configurations (Header pin and FFC), antenna types (integrated and external antennas of different vendor and different length), 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, 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 $\geq$ 1G	22deg. C, 66%RH	120Vac, 60Hz	Robert Cheng
RE<1G	25deg. C, 65%RH	120Vac, 60Hz	Nelson Teng
PLC	24deg. C, 75%RH	120Vac, 60Hz	Andy Ho
APCM	25deg. C, 60%RH	120Vac, 60Hz	Anderson Chen

3.3 Duty Cycle of Test Signal

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

If duty cycle of test signal is $< 98\%$, duty factor shall be considered.

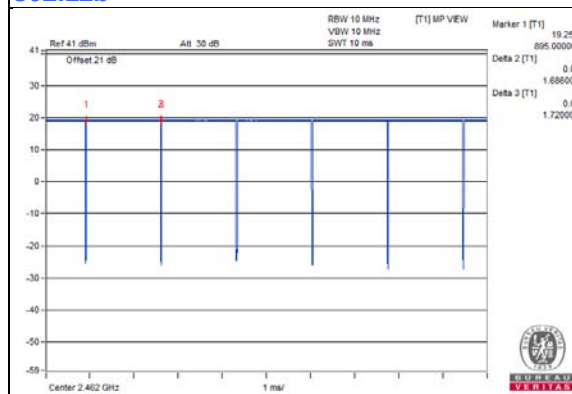
802.11b: Duty cycle = $1.686 \text{ ms} / 1.72 \text{ ms} = 0.98$

802.11g: Duty cycle = $2.022 \text{ ms} / 2.065 \text{ ms} = 0.979$, Duty factor = $10 * \log (1/\text{Duty cycle}) = 0.09$

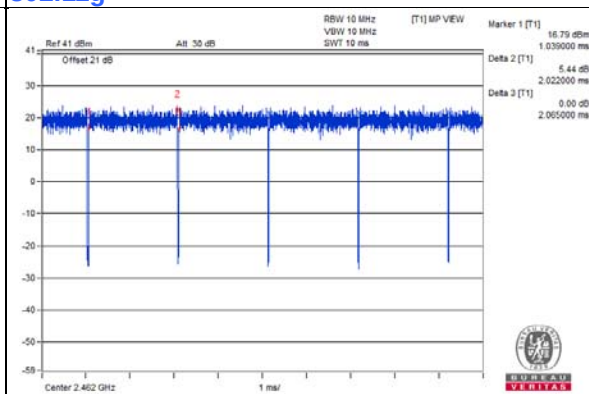
802.11n (HT20): Duty cycle = $1.887 \text{ ms} / 1.915 \text{ ms} = 0.985$

802.11n (HT40): Duty cycle = $0.927 \text{ ms} / 0.955 \text{ ms} = 0.971$, Duty factor = $10 * \log (1/\text{Duty cycle}) = 0.13$

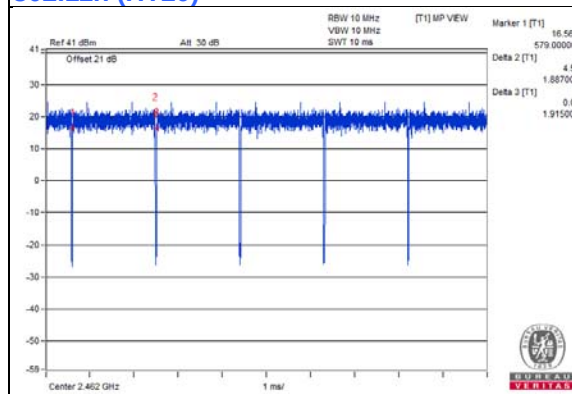
802.11b



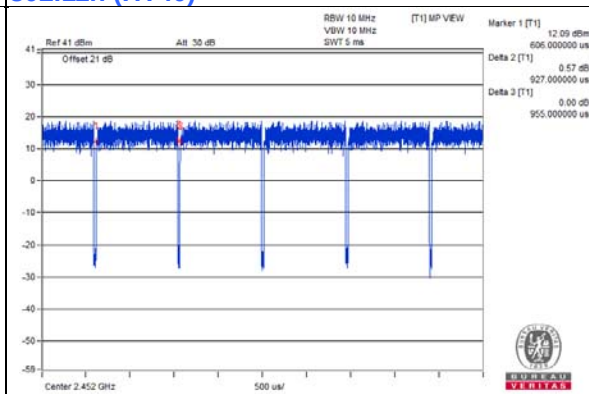
802.11g



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.

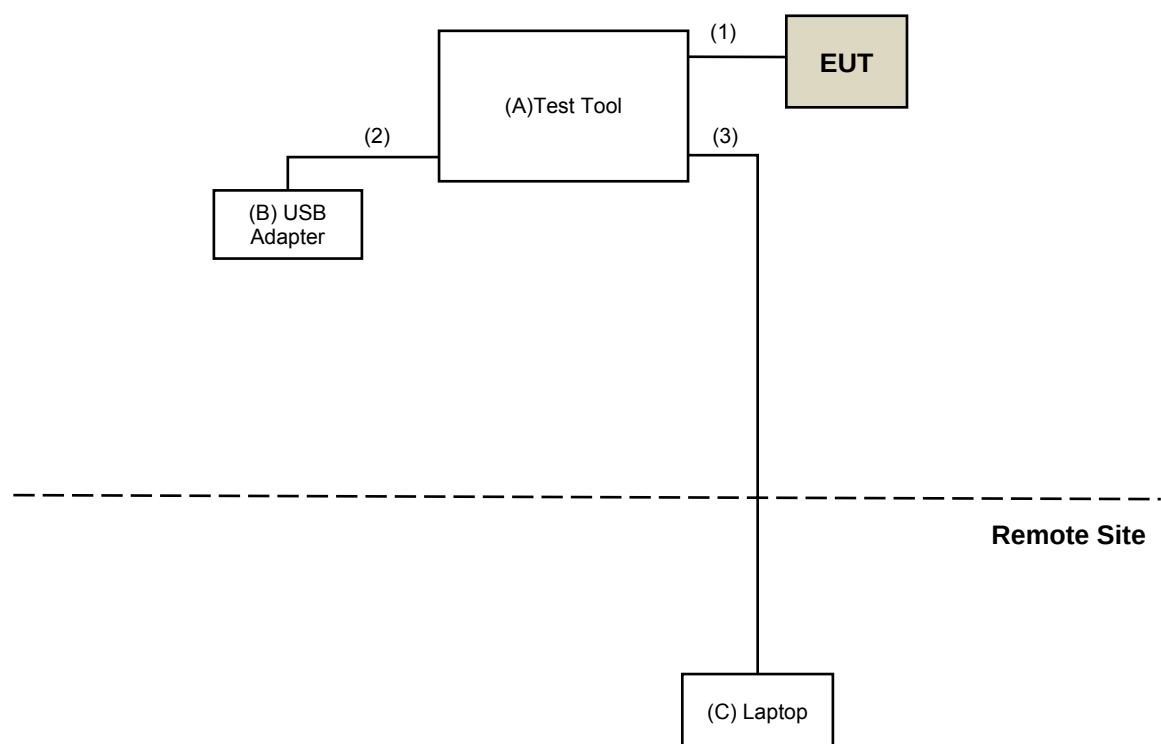
ID	Product	Brand	Model No.	Serial No.	FCC ID	Remarks
A.	Test Tool	Realtek	NA	NA	NA	Supplied by client
B.	USB Adapter	ASUS	EXA1205UA	NA	NA	Provided by Lab
C.	Laptop	Dell	Inspiron 15-3567	FV34LJ2	NA	Provided by Lab

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.	Data Cable	1	0.05	No	0	Supplied by client
2.	Micro USB Cable	1	1	Yes	0	Provided by Lab
3.	RJ-45 Cable	1	10	No	0	Provided by Lab

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 15.247 Meas Guidance v05r02

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 ESR7 R&S	ESR7	102026	Apr. 24, 2019	Apr. 23, 2020
Spectrum Analyzer Keysight	N9030B	MY57141948	May 25, 2019	May 24, 2020
Pre-Amplifier EMCI	EMC001340	980142	May 30, 2019	May 29, 2020
Loop Antenna Electro-Metrics	EM-6879	264	Jan. 22, 2019	Jan. 21, 2020
RF Cable	NA	LOOPCAB-001	Jan. 14, 2019	Jan. 13, 2020
RF Cable	NA	LOOPCAB-002	Jan. 14, 2019	Jan. 13, 2020
Pre-Amplifier EMCI	EMC330N	980538	Apr. 30, 2019	Apr. 29, 2020
Trilog Broadband Antenna SCHWARZBECK	VULB9168	9168-0842	Nov. 21, 2018	Nov. 20, 2019
RF Cable	8D	966-5-1	May 03, 2019	May 02, 2020
RF Cable	8D	966-5-2	May 03, 2019	May 02, 2020
RF Cable	8D	966-5-3	May 03, 2019	May 02, 2020
Fixed attenuator Mini-Circuits	UNAT-5+	PAD-ATT5-02	Jan. 28, 2019	Jan. 27, 2020
Horn Antenna SCHWARZBECK	BBHA 9120D	9120D-1819	Nov. 25, 2018	Nov. 24, 2019
Pre-Amplifier EMCI	EMC12630SE	980509	May 03, 2019	May 02, 2020
RF Cable EMCI	EMC104-SM-SM-1500	180503	May 03, 2019	May 02, 2020
RF Cable EMCI	EMC104-SM-SM-2000	180501	May 03, 2019	May 02, 2020
RF Cable EMCI	EMC104-SM-SM-6000	180505	May 03, 2019	May 02, 2020
Pre-Amplifier EMCI	EMC184045SE	980387	Jan. 28, 2019	Jan. 27, 2020
Horn Antenna SCHWARZBECK	BBHA 9170	BBHA9170519	Nov. 25, 2018	Nov. 24, 2019
RF Cable	EMC102-KM-KM-1200	160924	Jan. 28, 2019	Jan. 27, 2020
RF Cable	EMC102-KM-KM-1200	160925	Jan. 28, 2019	Jan. 27, 2020
Software	ADT_Radiated_V8.7.08	NA	NA	NA
Boresight Antenna Tower & Turn Table Max-Full	MF-7802BS	MF780208530	NA	NA
Spectrum Analyzer R&S	FSV40	100964	June 04, 2019	June 03, 2020
Power meter Anritsu	ML2495A	1014008	May 13, 2019	May 12, 2020
Power sensor Anritsu	MA2411B	0917122	May 13, 2019	May 12, 2020
Fixed Attenuator Mini-Circuits	MDCS18N-10	MDCS18N-10-01	Apr. 15, 2019	Apr. 14, 2020

Note:

1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. The test was performed in 966 Chamber No. 5.
3. Loop antenna was used for all emissions below 30 MHz.
4. Tested Date: Aug. 24 to 30, 2019

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:

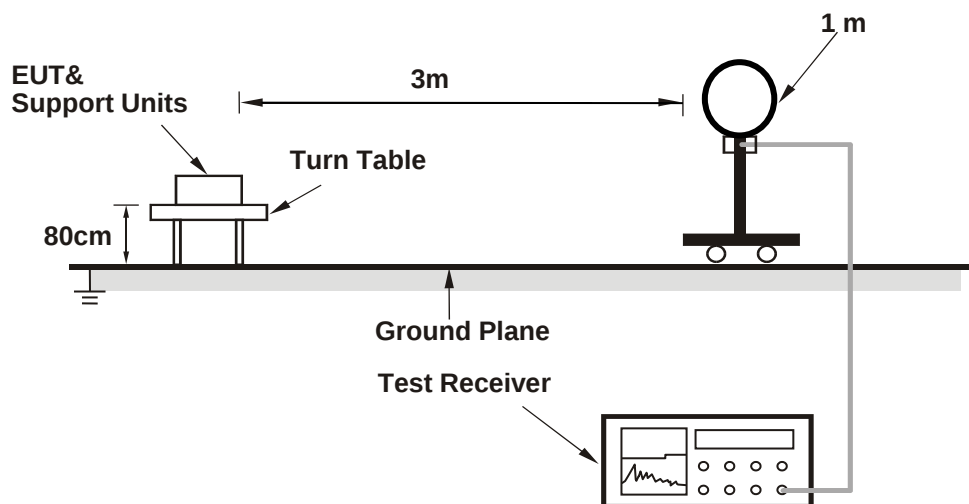
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection (QP) at frequency below 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz for Peak detection (PK) at frequency above 1GHz.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

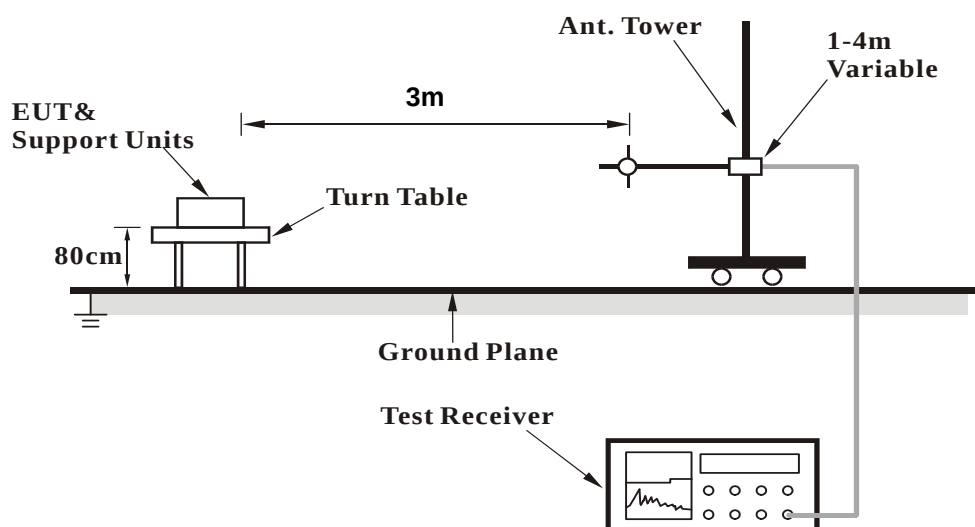
No deviation.

4.1.5 Test Setup

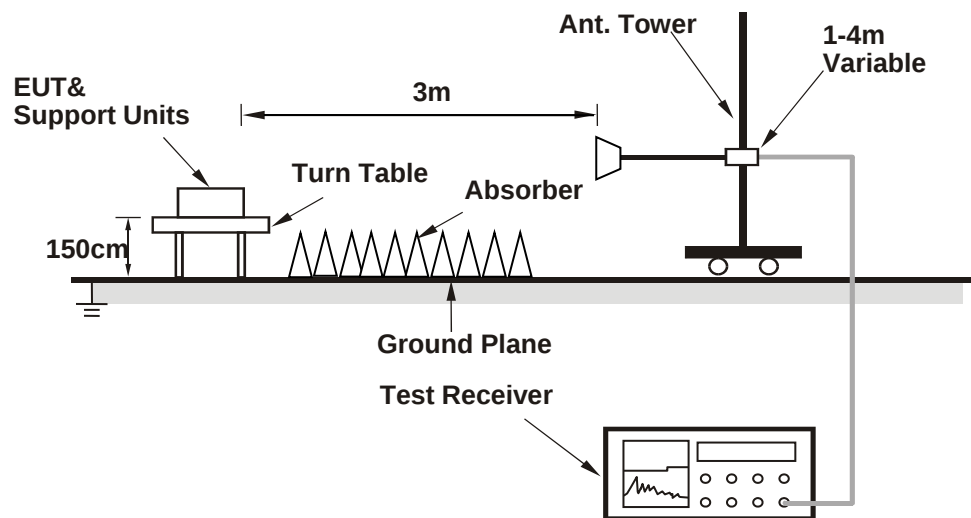
For Radiated emission below 30MHz



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

- a. Connected the EUT with the Laptop which is placed on remote site.
- b. Controlling software (Hyper Terminal paste RTL8821DS_Wifi SOP_190618.txt command) has been activated to set the EUT under transmission condition continuously.

4.1.7 Test Results

For internal Ant. No.: 1 (Chain 0) PCB antenna (Model: SNPRC-1950)

Above 1GHz Data:

802.11b

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	58.8 PK	74.0	-15.2	1.55 H	315	61.9	-3.1
2	2390.00	50.8 AV	54.0	-3.2	1.55 H	315	53.9	-3.1
3	*2412.00	104.2 PK			1.55 H	315	107.3	-3.1
4	*2412.00	102.0 AV			1.55 H	315	105.1	-3.1
5	4824.00	42.6 PK	74.0	-31.4	2.74 H	342	41.4	1.2
6	4824.00	34.6 AV	54.0	-19.4	2.74 H	342	33.4	1.2
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	56.7 PK	74.0	-17.3	1.23 V	6	59.8	-3.1
2	2390.00	46.9 AV	54.0	-7.1	1.23 V	6	50.0	-3.1
3	*2412.00	100.2 PK			1.23 V	6	103.3	-3.1
4	*2412.00	97.7 AV			1.23 V	6	100.8	-3.1
5	4824.00	42.1 PK	74.0	-31.9	1.64 V	42	40.9	1.2
6	4824.00	33.1 AV	54.0	-20.9	1.64 V	42	31.9	1.2

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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
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	56.6 PK	74.0	-17.4	1.80 H	348	59.7	-3.1
2	2390.00	45.2 AV	54.0	-8.8	1.80 H	348	48.3	-3.1
3	*2437.00	107.2 PK			1.80 H	348	110.3	-3.1
4	*2437.00	105.1 AV			1.80 H	348	108.2	-3.1
5	2483.50	58.4 PK	74.0	-15.6	1.80 H	348	61.5	-3.1
6	2483.50	49.2 AV	54.0	-4.8	1.80 H	348	52.3	-3.1
7	4874.00	44.2 PK	74.0	-29.8	3.17 H	163	43.0	1.2
8	4874.00	38.4 AV	54.0	-15.6	3.17 H	163	37.2	1.2
9	7311.00	48.8 PK	74.0	-25.2	1.60 H	206	41.6	7.2
10	7311.00	39.2 AV	54.0	-14.8	1.60 H	206	32.0	7.2

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	55.7 PK	74.0	-18.3	1.29 V	11	58.8	-3.1
2	2390.00	44.2 AV	54.0	-9.8	1.29 V	11	47.3	-3.1
3	*2437.00	102.1 PK			1.29 V	11	105.2	-3.1
4	*2437.00	99.8 AV			1.29 V	11	102.9	-3.1
5	2483.50	57.2 PK	74.0	-16.8	1.29 V	11	60.3	-3.1
6	2483.50	47.9 AV	54.0	-6.1	1.29 V	11	51.0	-3.1
7	4874.00	43.8 PK	74.0	-30.2	1.78 V	186	42.6	1.2
8	4874.00	37.1 AV	54.0	-16.9	1.78 V	186	35.9	1.2
9	7311.00	47.3 PK	74.0	-26.7	1.52 V	77	40.1	7.2
10	7311.00	37.3 AV	54.0	-16.7	1.52 V	77	30.1	7.2

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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
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	105.0 PK			1.63 H	348	108.1	-3.1
2	*2462.00	102.9 AV			1.63 H	348	106.0	-3.1
3	2483.50	59.4 PK	74.0	-14.6	1.63 H	348	62.5	-3.1
4	2483.50	50.4 AV	54.0	-3.6	1.63 H	348	53.5	-3.1
5	4924.00	46.1 PK	74.0	-27.9	1.86 H	216	44.8	1.3
6	4924.00	41.0 AV	54.0	-13.0	1.86 H	216	39.7	1.3
7	7386.00	50.0 PK	74.0	-24.0	1.60 H	209	42.7	7.3
8	7386.00	40.0 AV	54.0	-14.0	1.60 H	209	32.7	7.3
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	*2462.00	100.2 PK			1.19 V	2	103.3	-3.1
2	*2462.00	97.7 AV			1.19 V	2	100.8	-3.1
3	2483.50	57.0 PK	74.0	-17.0	1.19 V	2	60.1	-3.1
4	2483.50	47.1 AV	54.0	-6.9	1.19 V	2	50.2	-3.1
5	4924.00	45.1 PK	74.0	-28.9	1.53 V	184	43.8	1.3
6	4924.00	38.1 AV	54.0	-15.9	1.53 V	184	36.8	1.3
7	7386.00	48.1 PK	74.0	-25.9	1.56 V	80	40.8	7.3
8	7386.00	37.3 AV	54.0	-16.7	1.56 V	80	30.0	7.3

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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
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	68.4 PK	74.0	-5.6	2.10 H	137	71.5	-3.1
2	2390.00	50.9 AV	54.0	-3.1	2.10 H	137	54.0	-3.1
3	*2412.00	109.8 PK			2.10 H	137	112.9	-3.1
4	*2412.00	98.4 AV			2.10 H	137	101.5	-3.1
5	4824.00	43.7 PK	74.0	-30.3	3.18 H	159	42.5	1.2
6	4824.00	38.2 AV	54.0	-15.8	3.18 H	159	37.0	1.2
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	65.8 PK	74.0	-8.2	1.22 V	4	68.9	-3.1
2	2390.00	48.2 AV	54.0	-5.8	1.22 V	4	51.3	-3.1
3	*2412.00	105.5 PK			1.22 V	4	108.6	-3.1
4	*2412.00	94.5 AV			1.22 V	4	97.6	-3.1
5	4824.00	42.7 PK	74.0	-31.3	1.79 V	192	41.5	1.2
6	4824.00	36.4 AV	54.0	-17.6	1.79 V	192	35.2	1.2

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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
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	67.4 PK	74.0	-6.6	1.75 H	150	70.5	-3.1
2	2390.00	48.4 AV	54.0	-5.6	1.75 H	150	51.5	-3.1
3	*2437.00	114.2 PK			1.75 H	150	117.3	-3.1
4	*2437.00	103.4 AV			1.75 H	150	106.5	-3.1
5	2483.50	70.4 PK	74.0	-3.6	1.75 H	150	73.5	-3.1
6	2483.50	48.9 AV	54.0	-5.1	1.75 H	150	52.0	-3.1
7	4874.00	44.4 PK	74.0	-29.6	3.22 H	173	43.2	1.2
8	4874.00	38.7 AV	54.0	-15.3	3.22 H	173	37.5	1.2
9	7311.00	48.3 PK	74.0	-25.7	1.55 H	217	41.1	7.2
10	7311.00	38.8 AV	54.0	-15.2	1.55 H	217	31.6	7.2

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	64.9 PK	74.0	-9.1	1.89 V	1	68.0	-3.1
2	2390.00	47.9 AV	54.0	-6.1	1.89 V	1	51.0	-3.1
3	*2437.00	110.1 PK			1.19 V	1	113.2	-3.1
4	*2437.00	99.3 AV			1.19 V	1	102.4	-3.1
5	2483.50	66.2 PK	74.0	-7.8	1.89 V	1	69.3	-3.1
6	2483.50	46.4 AV	54.0	-7.6	1.89 V	1	49.5	-3.1
7	4874.00	43.4 PK	74.0	-30.6	1.80 V	178	42.2	1.2
8	4874.00	36.8 AV	54.0	-17.2	1.80 V	178	35.6	1.2
9	7311.00	47.4 PK	74.0	-26.6	1.49 V	84	40.2	7.2
10	7311.00	37.4 AV	54.0	-16.6	1.49 V	84	30.2	7.2

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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
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	109.1 PK			1.98 H	151	112.2	-3.1
2	*2462.00	97.8 AV			1.98 H	151	100.9	-3.1
3	2483.50	69.0 PK	74.0	-5.0	1.98 H	151	72.1	-3.1
4	2483.50	50.3 AV	54.0	-3.7	1.98 H	151	53.4	-3.1
5	4924.00	44.4 PK	74.0	-29.6	3.19 H	156	43.1	1.3
6	4924.00	38.3 AV	54.0	-15.7	3.19 H	156	37.0	1.3
7	7386.00	49.3 PK	74.0	-24.7	1.58 H	221	42.0	7.3
8	7386.00	39.6 AV	54.0	-14.4	1.58 H	221	32.3	7.3
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	*2462.00	105.3 PK			1.07 V	2	108.4	-3.1
2	*2462.00	94.2 AV			1.07 V	2	97.3	-3.1
3	2483.50	67.4 PK	74.0	-6.6	1.07 V	2	70.5	-3.1
4	2483.50	47.9 AV	54.0	-6.1	1.07 V	2	51.0	-3.1
5	4924.00	43.3 PK	74.0	-30.7	1.80 V	175	42.0	1.3
6	4924.00	36.5 AV	54.0	-17.5	1.80 V	175	35.2	1.3
7	7386.00	47.8 PK	74.0	-26.2	1.52 V	99	40.5	7.3
8	7386.00	37.7 AV	54.0	-16.3	1.52 V	99	30.4	7.3

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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
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	67.3 PK	74.0	-6.7	2.15 H	143	70.4	-3.1
2	2390.00	50.9 AV	54.0	-3.1	2.15 H	143	54.0	-3.1
3	*2412.00	108.7 PK			2.15 H	143	111.8	-3.1
4	*2412.00	98.4 AV			2.15 H	143	101.5	-3.1
5	4824.00	44.3 PK	74.0	-29.7	3.18 H	152	43.1	1.2
6	4824.00	38.1 AV	54.0	-15.9	3.18 H	152	36.9	1.2
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	66.3 PK	74.0	-7.7	1.42 V	3	69.4	-3.1
2	2390.00	49.7 AV	54.0	-4.3	1.42 V	3	52.8	-3.1
3	*2412.00	104.1 PK			1.42 V	3	107.2	-3.1
4	*2412.00	94.0 AV			1.42 V	3	97.1	-3.1
5	4824.00	42.2 PK	74.0	-31.8	1.90 V	191	41.0	1.2
6	4824.00	35.7 AV	54.0	-18.3	1.90 V	191	34.5	1.2

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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
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	66.9 PK	74.0	-7.1	1.81 H	140	70.0	-3.1
2	2390.00	48.1 AV	54.0	-5.9	1.81 H	140	51.2	-3.1
3	*2437.00	113.9 PK			1.81 H	140	117.0	-3.1
4	*2437.00	103.1 AV			1.81 H	140	106.2	-3.1
5	2483.50	70.3 PK	74.0	-3.7	1.81 H	140	73.4	-3.1
6	2483.50	48.9 AV	54.0	-5.1	1.81 H	140	52.0	-3.1
7	4874.00	44.7 PK	74.0	-29.3	3.20 H	168	43.5	1.2
8	4874.00	38.8 AV	54.0	-15.2	3.20 H	168	37.6	1.2
9	7311.00	48.3 PK	74.0	-25.7	1.64 H	220	41.1	7.2
10	7311.00	38.7 AV	54.0	-15.3	1.64 H	220	31.5	7.2

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	64.2 PK	74.0	-9.8	1.25 V	15	67.3	-3.1
2	2390.00	47.4 AV	54.0	-6.6	1.25 V	15	50.5	-3.1
3	*2437.00	110.3 PK			1.25 V	15	113.4	-3.1
4	*2437.00	99.5 AV			1.25 V	15	102.6	-3.1
5	2483.50	66.4 PK	74.0	-7.6	1.25 V	15	69.5	-3.1
6	2483.50	46.4 AV	54.0	-7.6	1.25 V	15	49.5	-3.1
7	4874.00	42.5 PK	74.0	-31.5	1.84 V	182	41.3	1.2
8	4874.00	36.1 AV	54.0	-17.9	1.84 V	182	34.9	1.2
9	7311.00	47.9 PK	74.0	-26.1	1.58 V	79	40.7	7.2
10	7311.00	37.4 AV	54.0	-16.6	1.58 V	79	30.2	7.2

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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
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	108.2 PK			1.96 H	151	111.3	-3.1
2	*2462.00	98.2 AV			1.96 H	151	101.3	-3.1
3	2483.50	68.8 PK	74.0	-5.2	1.96 H	151	71.9	-3.1
4	2483.50	50.7 AV	54.0	-3.3	1.96 H	151	53.8	-3.1
5	4924.00	44.8 PK	74.0	-29.2	3.12 H	150	43.5	1.3
6	4924.00	38.8 AV	54.0	-15.2	3.12 H	150	37.5	1.3
7	7386.00	48.7 PK	74.0	-25.3	1.57 H	214	41.4	7.3
8	7386.00	38.9 AV	54.0	-15.1	1.57 H	214	31.6	7.3
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	*2462.00	103.3 PK			1.10 V	340	106.4	-3.1
2	*2462.00	92.9 AV			1.10 V	340	96.0	-3.1
3	2483.50	63.6 PK	74.0	-10.4	1.10 V	340	66.7	-3.1
4	2483.50	46.8 AV	54.0	-7.2	1.10 V	340	49.9	-3.1
5	4924.00	42.4 PK	74.0	-31.6	1.82 V	182	41.1	1.3
6	4924.00	35.9 AV	54.0	-18.1	1.82 V	182	34.6	1.3
7	7386.00	47.3 PK	74.0	-26.7	1.61 V	75	40.0	7.3
8	7386.00	37.0 AV	54.0	-17.0	1.61 V	75	29.7	7.3

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

802.11n (HT40)

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	70.1 PK	74.0	-3.9	2.14 H	144	73.2	-3.1
2	2390.00	50.4 AV	54.0	-3.6	2.14 H	144	53.5	-3.1
3	*2422.00	104.0 PK			2.14 H	144	107.1	-3.1
4	*2422.00	94.2 AV			2.14 H	144	97.3	-3.1
5	4844.00	43.9 PK	74.0	-30.1	3.19 H	154	42.7	1.2
6	4844.00	38.2 AV	54.0	-15.8	3.19 H	154	37.0	1.2
7	7266.00	49.0 PK	74.0	-25.0	1.65 H	192	41.9	7.1
8	7266.00	39.2 AV	54.0	-14.8	1.65 H	192	32.1	7.1
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	67.1 PK	74.0	-6.9	1.42 V	1	70.2	-3.1
2	2390.00	48.9 AV	54.0	-5.1	1.42 V	1	52.0	-3.1
3	*2422.00	99.1 PK			1.42 V	1	102.2	-3.1
4	*2422.00	89.7 AV			1.42 V	1	92.8	-3.1
5	4844.00	42.9 PK	74.0	-31.1	1.77 V	162	41.7	1.2
6	4844.00	36.6 AV	54.0	-17.4	1.77 V	162	35.4	1.2
7	7266.00	47.2 PK	74.0	-26.8	1.53 V	109	40.1	7.1
8	7266.00	36.8 AV	54.0	-17.2	1.53 V	109	29.7	7.1

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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
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	59.5 PK	74.0	-14.5	1.09 H	195	62.6	-3.1
2	2390.00	47.2 AV	54.0	-6.8	1.09 H	195	50.3	-3.1
3	*2437.00	101.2 PK			1.09 H	195	104.3	-3.1
4	*2437.00	92.0 AV			1.09 H	195	95.1	-3.1
5	2483.50	64.9 PK	74.0	-9.1	1.09 H	195	68.0	-3.1
6	2483.50	50.2 AV	54.0	-3.8	1.09 H	195	53.3	-3.1
7	4874.00	44.0 PK	74.0	-30.0	3.21 H	155	42.8	1.2
8	4874.00	38.3 AV	54.0	-15.7	3.21 H	155	37.1	1.2
9	7311.00	48.9 PK	74.0	-25.1	1.60 H	193	41.7	7.2
10	7311.00	39.1 AV	54.0	-14.9	1.60 H	193	31.9	7.2

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	58.2 PK	74.0	-15.8	1.08 V	348	61.3	-3.1
2	2390.00	45.8 AV	54.0	-8.2	1.08 V	348	48.9	-3.1
3	*2437.00	100.6 PK			1.08 V	348	103.7	-3.1
4	*2437.00	89.3 AV			1.08 V	348	92.4	-3.1
5	2483.50	63.5 PK	74.0	-10.5	1.08 V	348	66.6	-3.1
6	2483.50	48.8 AV	54.0	-5.2	1.08 V	348	51.9	-3.1
7	4874.00	43.0 PK	74.0	-31.0	1.80 V	148	41.8	1.2
8	4874.00	37.0 AV	54.0	-17.0	1.80 V	148	35.8	1.2
9	7311.00	47.6 PK	74.0	-26.4	1.49 V	109	40.4	7.2
10	7311.00	37.2 AV	54.0	-16.8	1.49 V	109	30.0	7.2

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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
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	103.7 PK			2.03 H	148	106.8	-3.1
2	*2452.00	94.1 AV			2.03 H	148	97.2	-3.1
3	2483.50	68.0 PK	74.0	-6.0	2.03 H	148	71.1	-3.1
4	2483.50	51.0 AV	54.0	-3.0	2.03 H	148	54.1	-3.1
5	4904.00	44.4 PK	74.0	-29.6	3.17 H	149	43.1	1.3
6	4904.00	38.3 AV	54.0	-15.7	3.17 H	149	37.0	1.3
7	7356.00	49.2 PK	74.0	-24.8	1.57 H	203	42.0	7.2
8	7356.00	39.6 AV	54.0	-14.4	1.57 H	203	32.4	7.2
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	*2452.00	98.8 PK			1.19 V	117	101.9	-3.1
2	*2452.00	89.2 AV			1.19 V	117	92.3	-3.1
3	2483.50	63.3 PK	74.0	-10.7	1.19 V	117	66.4	-3.1
4	2483.50	49.1 AV	54.0	-4.9	1.19 V	117	52.2	-3.1
5	4904.00	42.5 PK	74.0	-31.5	1.82 V	148	41.2	1.3
6	4904.00	36.6 AV	54.0	-17.4	1.82 V	148	35.3	1.3
7	7356.00	48.0 PK	74.0	-26.0	1.55 V	122	40.8	7.2
8	7356.00	37.4 AV	54.0	-16.6	1.55 V	122	30.2	7.2

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

Below 1GHz Data:

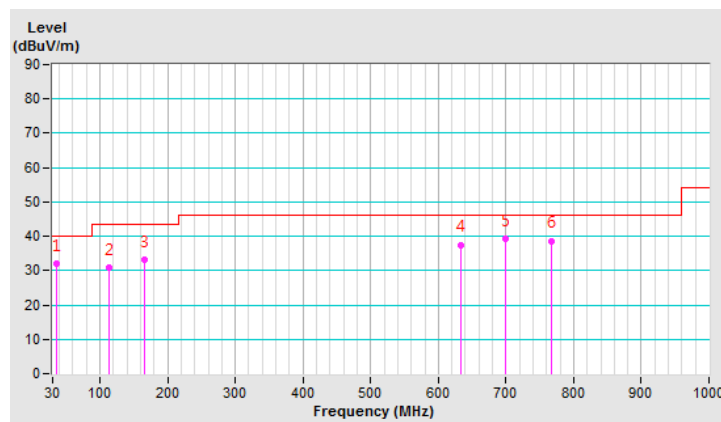
802.11g

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	35.17	31.9 QP	40.0	-8.1	4.00 H	357	51.1	-19.2
2	112.50	30.9 QP	43.5	-12.6	3.00 H	351	51.6	-20.7
3	166.67	33.3 QP	43.5	-10.2	2.00 H	58	51.6	-18.3
4	633.36	37.6 QP	46.0	-8.4	3.00 H	264	47.6	-10.0
5	700.00	39.4 QP	46.0	-6.6	1.00 H	97	48.4	-9.0
6	766.67	38.7 QP	46.0	-7.3	1.00 H	130	46.5	-7.8

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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit of frequency range 30MHz~1000MHz.
5. The emission levels were very low against the limit of frequency range 9kHz~30MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report.

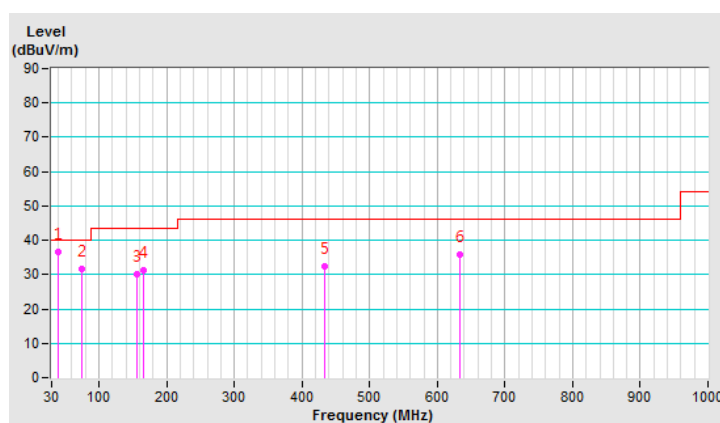


CHANNEL	TX Channel 6	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9kHz ~ 1GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	40.57	36.7 QP	40.0	-3.3	1.00 V	360	55.1	-18.4
2	74.06	31.5 QP	40.0	-8.5	1.00 V	335	52.8	-21.3
3	155.69	30.1 QP	43.5	-13.4	1.00 V	146	47.9	-17.8
4	166.67	31.2 QP	43.5	-12.3	1.00 V	360	49.5	-18.3
5	433.33	32.3 QP	46.0	-13.7	1.00 V	360	46.3	-14.0
6	633.34	35.9 QP	46.0	-10.1	1.00 V	360	45.9	-10.0

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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit of frequency range 30MHz~1000MHz.
5. The emission levels were very low against the limit of frequency range 9kHz~30MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report.



For internal Ant. No.: 1 (Chain 1) PCB antenna (Model: SNPRC-1950)

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	2385.20	59.0 PK	74.0	-15.0	1.06 H	228	62.1	-3.1
2	2385.20	50.9 AV	54.0	-3.1	1.06 H	228	54.0	-3.1
3	2390.00	55.9 PK	74.0	-18.1	1.06 H	228	59.0	-3.1
4	2390.00	47.7 AV	54.0	-6.3	1.06 H	228	50.8	-3.1
5	*2412.00	104.5 PK			1.06 H	228	107.6	-3.1
6	*2412.00	102.3 AV			1.06 H	228	105.4	-3.1
7	4824.00	42.7 PK	74.0	-31.3	2.75 H	351	41.5	1.2
8	4824.00	35.0 AV	54.0	-19.0	2.75 H	351	33.8	1.2

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	2385.20	56.7 PK	74.0	-17.3	1.18 V	24	59.8	-3.1
2	2385.20	47.1 AV	54.0	-6.9	1.18 V	24	50.2	-3.1
3	2390.00	53.6 PK	74.0	-20.4	1.18 V	24	56.7	-3.1
4	2390.00	45.2 AV	54.0	-8.8	1.18 V	24	48.3	-3.1
5	*2412.00	100.4 PK			1.18 V	24	103.5	-3.1
6	*2412.00	97.7 AV			1.18 V	24	100.8	-3.1
7	4824.00	41.9 PK	74.0	-32.1	1.59 V	51	40.7	1.2
8	4824.00	33.2 AV	54.0	-20.8	1.59 V	51	32.0	1.2

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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
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	2335.17	58.0 PK	74.0	-16.0	2.18 H	217	60.8	-2.8
2	2335.17	47.4 AV	54.0	-6.6	2.18 H	217	50.2	-2.8
3	2390.00	56.8 PK	74.0	-17.2	2.18 H	217	59.9	-3.1
4	2390.00	45.4 AV	54.0	-8.6	2.18 H	217	48.5	-3.1
5	*2437.00	108.3 PK			2.18 H	217	111.4	-3.1
6	*2437.00	105.6 AV			2.18 H	217	108.7	-3.1
7	2483.50	56.5 PK	74.0	-17.5	2.18 H	217	59.6	-3.1
8	2483.50	43.6 AV	54.0	-10.4	2.18 H	217	46.7	-3.1
9	4874.00	44.4 PK	74.0	-29.6	3.13 H	174	43.2	1.2
10	4874.00	38.6 AV	54.0	-15.4	3.13 H	174	37.4	1.2
11	7311.00	49.1 PK	74.0	-24.9	1.57 H	199	41.9	7.2
12	7311.00	39.6 AV	54.0	-14.4	1.57 H	199	32.4	7.2

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	2335.17	56.5 PK	74.0	-17.5	1.14 V	37	59.3	-2.8
2	2335.17	46.0 AV	54.0	-8.0	1.14 V	37	48.8	-2.8
3	2390.00	55.9 PK	74.0	-18.1	1.14 V	37	59.0	-3.1
4	2390.00	44.7 AV	54.0	-9.3	1.14 V	37	47.8	-3.1
5	*2437.00	102.5 PK			1.14 V	37	105.6	-3.1
6	*2437.00	100.1 AV			1.14 V	37	103.2	-3.1
7	2483.50	56.3 PK	74.0	-17.7	1.14 V	37	59.4	-3.1
8	2483.50	43.4 AV	54.0	-10.6	1.14 V	37	46.5	-3.1
9	4874.00	43.9 PK	74.0	-30.1	1.79 V	201	42.7	1.2
10	4874.00	37.0 AV	54.0	-17.0	1.79 V	201	35.8	1.2
11	7311.00	47.8 PK	74.0	-26.2	1.52 V	80	40.6	7.2
12	7311.00	37.7 AV	54.0	-16.3	1.52 V	80	30.5	7.2

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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
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	105.5 PK			1.88 H	215	108.6	-3.1
2	*2462.00	103.4 AV			1.88 H	215	106.5	-3.1
3	2483.50	57.6 PK	74.0	-16.4	1.88 H	215	60.7	-3.1
4	2483.50	47.2 AV	54.0	-6.8	1.88 H	215	50.3	-3.1
5	2486.77	58.9 PK	74.0	-15.1	1.88 H	215	62.0	-3.1
6	2486.77	50.4 AV	54.0	-3.6	1.88 H	215	53.5	-3.1
7	4924.00	44.5 PK	74.0	-29.5	3.14 H	178	43.2	1.3
8	4924.00	38.5 AV	54.0	-15.5	3.14 H	178	37.2	1.3
9	7386.00	49.1 PK	74.0	-24.9	1.62 H	209	41.8	7.3
10	7386.00	39.4 AV	54.0	-14.6	1.62 H	209	32.1	7.3

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	*2462.00	100.0 PK			1.18 V	49	103.1	-3.1
2	*2462.00	97.5 AV			1.18 V	49	100.6	-3.1
3	2483.50	56.2 PK	74.0	-17.8	1.18 V	49	59.3	-3.1
4	2483.50	43.1 AV	54.0	-10.9	1.18 V	49	46.2	-3.1
5	2486.77	56.8 PK	74.0	-17.2	1.18 V	49	59.9	-3.1
6	2486.77	46.7 AV	54.0	-7.3	1.18 V	49	49.8	-3.1
7	4924.00	44.7 PK	74.0	-29.3	1.77 V	196	43.4	1.3
8	4924.00	37.5 AV	54.0	-16.5	1.77 V	196	36.2	1.3
9	7386.00	47.6 PK	74.0	-26.4	1.52 V	83	40.3	7.3
10	7386.00	37.3 AV	54.0	-16.7	1.52 V	83	30.0	7.3

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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
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	69.0 PK	74.0	-5.0	2.01 H	216	72.1	-3.1
2	2390.00	51.0 AV	54.0	-3.0	2.01 H	216	54.1	-3.1
3	*2412.00	110.1 PK			2.01 H	216	113.2	-3.1
4	*2412.00	98.5 AV			2.01 H	216	101.6	-3.1
5	4824.00	42.9 PK	74.0	-31.1	2.72 H	2	41.7	1.2
6	4824.00	35.1 AV	54.0	-18.9	2.72 H	2	33.9	1.2
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	66.0 PK	74.0	-8.0	1.25 V	26	69.1	-3.1
2	2390.00	48.1 AV	54.0	-5.9	1.25 V	26	51.2	-3.1
3	*2412.00	105.6 PK			1.25 V	26	108.7	-3.1
4	*2412.00	94.4 AV			1.25 V	26	97.5	-3.1
5	4824.00	42.2 PK	74.0	-31.8	1.62 V	56	41.0	1.2
6	4824.00	33.5 AV	54.0	-20.5	1.62 V	56	32.3	1.2

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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
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	66.4 PK	74.0	-7.6	2.20 H	219	69.5	-3.1
2	2390.00	49.0 AV	54.0	-5.0	2.20 H	219	52.1	-3.1
3	*2437.00	114.1 PK			2.20 H	219	117.2	-3.1
4	*2437.00	103.1 AV			2.20 H	219	106.2	-3.1
5	2483.50	68.7 PK	74.0	-5.3	2.20 H	219	71.8	-3.1
6	2483.50	47.2 AV	54.0	-6.8	2.20 H	219	50.3	-3.1
7	4874.00	44.5 PK	74.0	-29.5	3.09 H	184	43.3	1.2
8	4874.00	38.3 AV	54.0	-15.7	3.09 H	184	37.1	1.2
9	7311.00	48.9 PK	74.0	-25.1	1.66 H	201	41.7	7.2
10	7311.00	39.2 AV	54.0	-14.8	1.66 H	201	32.0	7.2

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	65.0 PK	74.0	-9.0	1.21 V	13	68.1	-3.1
2	2390.00	47.8 AV	54.0	-6.2	1.21 V	13	50.9	-3.1
3	*2437.00	110.1 PK			1.21 V	13	113.2	-3.1
4	*2437.00	99.3 AV			1.21 V	13	102.4	-3.1
5	2483.50	66.8 PK	74.0	-7.2	1.21 V	13	69.9	-3.1
6	2483.50	46.8 AV	54.0	-7.2	1.21 V	13	49.9	-3.1
7	4874.00	44.7 PK	74.0	-29.3	1.72 V	194	43.5	1.2
8	4874.00	37.5 AV	54.0	-16.5	1.72 V	194	36.3	1.2
9	7311.00	48.2 PK	74.0	-25.8	1.52 V	72	41.0	7.2
10	7311.00	37.8 AV	54.0	-16.2	1.52 V	72	30.6	7.2

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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
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	108.7 PK			2.16 H	217	111.8	-3.1
2	*2462.00	97.7 AV			2.16 H	217	100.8	-3.1
3	2483.50	69.5 PK	74.0	-4.5	2.16 H	217	72.6	-3.1
4	2483.50	50.7 AV	54.0	-3.3	2.16 H	217	53.8	-3.1
5	4924.00	44.5 PK	74.0	-29.5	3.08 H	179	43.2	1.3
6	4924.00	38.3 AV	54.0	-15.7	3.08 H	179	37.0	1.3
7	7386.00	49.0 PK	74.0	-25.0	1.62 H	190	41.7	7.3
8	7386.00	39.4 AV	54.0	-14.6	1.62 H	190	32.1	7.3
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	*2462.00	105.0 PK			1.09 V	12	108.1	-3.1
2	*2462.00	94.0 AV			1.09 V	12	97.1	-3.1
3	2483.50	67.4 PK	74.0	-6.6	1.09 V	12	70.5	-3.1
4	2483.50	47.9 AV	54.0	-6.1	1.09 V	12	51.0	-3.1
5	4924.00	44.5 PK	74.0	-29.5	1.77 V	195	43.2	1.3
6	4924.00	37.6 AV	54.0	-16.4	1.77 V	195	36.3	1.3
7	7386.00	48.1 PK	74.0	-25.9	1.55 V	66	40.8	7.3
8	7386.00	37.6 AV	54.0	-16.4	1.55 V	66	30.3	7.3

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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
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	67.1 PK	74.0	-6.9	2.15 H	236	70.2	-3.1
2	2390.00	50.9 AV	54.0	-3.1	2.15 H	236	54.0	-3.1
3	*2412.00	108.6 PK			2.15 H	236	111.7	-3.1
4	*2412.00	98.4 AV			2.15 H	236	101.5	-3.1
5	4824.00	43.3 PK	74.0	-30.7	2.68 H	7	42.1	1.2
6	4824.00	35.3 AV	54.0	-18.7	2.68 H	7	34.1	1.2
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	66.4 PK	74.0	-7.6	1.43 V	31	69.5	-3.1
2	2390.00	49.8 AV	54.0	-4.2	1.43 V	31	52.9	-3.1
3	*2412.00	103.9 PK			1.43 V	31	107.0	-3.1
4	*2412.00	93.9 AV			1.43 V	31	97.0	-3.1
5	4824.00	41.8 PK	74.0	-32.2	1.62 V	72	40.6	1.2
6	4824.00	33.0 AV	54.0	-21.0	1.62 V	72	31.8	1.2

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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
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	66.6 PK	74.0	-7.4	1.78 H	128	69.7	-3.1
2	2390.00	47.9 AV	54.0	-6.1	1.78 H	128	51.0	-3.1
3	*2437.00	114.4 PK			1.78 H	128	117.5	-3.1
4	*2437.00	103.4 AV			1.78 H	128	106.5	-3.1
5	2483.50	70.4 PK	74.0	-3.6	1.78 H	128	73.5	-3.1
6	2483.50	48.9 AV	54.0	-5.1	1.78 H	128	52.0	-3.1
7	4874.00	45.1 PK	74.0	-28.9	3.12 H	175	43.9	1.2
8	4874.00	38.6 AV	54.0	-15.4	3.12 H	175	37.4	1.2
9	7311.00	48.7 PK	74.0	-25.3	1.71 H	194	41.5	7.2
10	7311.00	38.9 AV	54.0	-15.1	1.71 H	194	31.7	7.2

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	64.7 PK	74.0	-9.3	1.31 V	24	67.8	-3.1
2	2390.00	47.7 AV	54.0	-6.3	1.31 V	24	50.8	-3.1
3	*2437.00	110.5 PK			1.31 V	24	113.6	-3.1
4	*2437.00	99.5 AV			1.31 V	24	102.6	-3.1
5	2483.50	66.0 PK	74.0	-8.0	1.31 V	24	69.1	-3.1
6	2483.50	46.2 AV	54.0	-7.8	1.31 V	24	49.3	-3.1
7	4874.00	44.6 PK	74.0	-29.4	1.67 V	209	43.4	1.2
8	4874.00	37.7 AV	54.0	-16.3	1.67 V	209	36.5	1.2
9	7311.00	47.9 PK	74.0	-26.1	1.57 V	87	40.7	7.2
10	7311.00	37.6 AV	54.0	-16.4	1.57 V	87	30.4	7.2

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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
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	108.6 PK			2.11 H	238	111.7	-3.1
2	*2462.00	98.7 AV			2.11 H	238	101.8	-3.1
3	2483.50	68.6 PK	74.0	-5.4	2.11 H	238	71.7	-3.1
4	2483.50	50.4 AV	54.0	-3.6	2.11 H	238	53.5	-3.1
5	4924.00	45.1 PK	74.0	-28.9	3.06 H	179	43.8	1.3
6	4924.00	38.8 AV	54.0	-15.2	3.06 H	179	37.5	1.3
7	7386.00	49.6 PK	74.0	-24.4	1.63 H	176	42.3	7.3
8	7386.00	39.8 AV	54.0	-14.2	1.63 H	176	32.5	7.3
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	*2462.00	103.7 PK			1.12 V	347	106.8	-3.1
2	*2462.00	93.3 AV			1.12 V	347	96.4	-3.1
3	2483.50	63.3 PK	74.0	-10.7	1.12 V	347	66.4	-3.1
4	2483.50	46.5 AV	54.0	-7.5	1.12 V	347	49.6	-3.1
5	4924.00	44.4 PK	74.0	-29.6	1.74 V	191	43.1	1.3
6	4924.00	37.5 AV	54.0	-16.5	1.74 V	191	36.2	1.3
7	7386.00	48.1 PK	74.0	-25.9	1.53 V	58	40.8	7.3
8	7386.00	37.4 AV	54.0	-16.6	1.53 V	58	30.1	7.3

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

802.11n (HT40)

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	70.4 PK	74.0	-3.6	2.12 H	227	73.5	-3.1
2	2390.00	50.7 AV	54.0	-3.3	2.12 H	227	53.8	-3.1
3	*2422.00	104.1 PK			2.12 H	227	107.2	-3.1
4	*2422.00	94.5 AV			2.12 H	227	97.6	-3.1
5	4844.00	43.5 PK	74.0	-30.5	3.16 H	166	42.3	1.2
6	4844.00	37.9 AV	54.0	-16.1	3.16 H	166	36.7	1.2
7	7266.00	49.2 PK	74.0	-24.8	1.62 H	203	42.1	7.1
8	7266.00	39.3 AV	54.0	-14.7	1.62 H	203	32.2	7.1
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	67.5 PK	74.0	-6.5	1.41 V	3	70.6	-3.1
2	2390.00	49.4 AV	54.0	-4.6	1.41 V	3	52.5	-3.1
3	*2422.00	99.1 PK			1.41 V	3	102.2	-3.1
4	*2422.00	89.9 AV			1.41 V	3	93.0	-3.1
5	4844.00	43.0 PK	74.0	-31.0	1.79 V	164	41.8	1.2
6	4844.00	36.4 AV	54.0	-17.6	1.79 V	164	35.2	1.2
7	7266.00	47.1 PK	74.0	-26.9	1.57 V	104	40.0	7.1
8	7266.00	36.9 AV	54.0	-17.1	1.57 V	104	29.8	7.1

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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
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	59.6 PK	74.0	-14.4	1.15 H	195	62.7	-3.1
2	2390.00	47.3 AV	54.0	-6.7	1.15 H	195	50.4	-3.1
3	*2437.00	101.4 PK			1.15 H	195	104.5	-3.1
4	*2437.00	92.1 AV			1.15 H	195	95.2	-3.1
5	2483.50	64.9 PK	74.0	-9.1	1.15 H	195	68.0	-3.1
6	2483.50	50.4 AV	54.0	-3.6	1.15 H	195	53.5	-3.1
7	4874.00	43.4 PK	74.0	-30.6	3.22 H	162	42.2	1.2
8	4874.00	37.9 AV	54.0	-16.1	3.22 H	162	36.7	1.2
9	7311.00	48.9 PK	74.0	-25.1	1.58 H	205	41.7	7.2
10	7311.00	39.2 AV	54.0	-14.8	1.58 H	205	32.0	7.2

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	58.4 PK	74.0	-15.6	1.13 V	11	61.5	-3.1
2	2390.00	46.2 AV	54.0	-7.8	1.13 V	11	49.3	-3.1
3	*2437.00	100.7 PK			1.13 V	11	103.8	-3.1
4	*2437.00	89.3 AV			1.13 V	11	92.4	-3.1
5	2483.50	62.8 PK	74.0	-11.2	1.13 V	11	65.9	-3.1
6	2483.50	48.4 AV	54.0	-5.6	1.13 V	11	51.5	-3.1
7	4874.00	42.9 PK	74.0	-31.1	1.82 V	158	41.7	1.2
8	4874.00	37.1 AV	54.0	-16.9	1.82 V	158	35.9	1.2
9	7311.00	47.7 PK	74.0	-26.3	1.46 V	122	40.5	7.2
10	7311.00	37.2 AV	54.0	-16.8	1.46 V	122	30.0	7.2

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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
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	103.4 PK			2.14 H	236	106.5	-3.1
2	*2452.00	93.7 AV			2.14 H	236	96.8	-3.1
3	2483.50	67.6 PK	74.0	-6.4	2.14 H	236	70.7	-3.1
4	2483.50	50.5 AV	54.0	-3.5	2.14 H	236	53.6	-3.1
5	4904.00	44.1 PK	74.0	-29.9	3.16 H	137	42.8	1.3
6	4904.00	37.9 AV	54.0	-16.1	3.16 H	137	36.6	1.3
7	7356.00	49.2 PK	74.0	-24.8	1.58 H	216	42.0	7.2
8	7356.00	39.6 AV	54.0	-14.4	1.58 H	216	32.4	7.2
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	*2452.00	98.8 PK			1.17 V	102	101.9	-3.1
2	*2452.00	89.5 AV			1.17 V	102	92.6	-3.1
3	2483.50	62.8 PK	74.0	-11.2	1.17 V	102	65.9	-3.1
4	2483.50	48.7 AV	54.0	-5.3	1.17 V	102	51.8	-3.1
5	4904.00	42.8 PK	74.0	-31.2	1.79 V	155	41.5	1.3
6	4904.00	37.0 AV	54.0	-17.0	1.79 V	155	35.7	1.3
7	7356.00	48.0 PK	74.0	-26.0	1.60 V	123	40.8	7.2
8	7356.00	37.4 AV	54.0	-16.6	1.60 V	123	30.2	7.2

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

Below 1GHz Data:

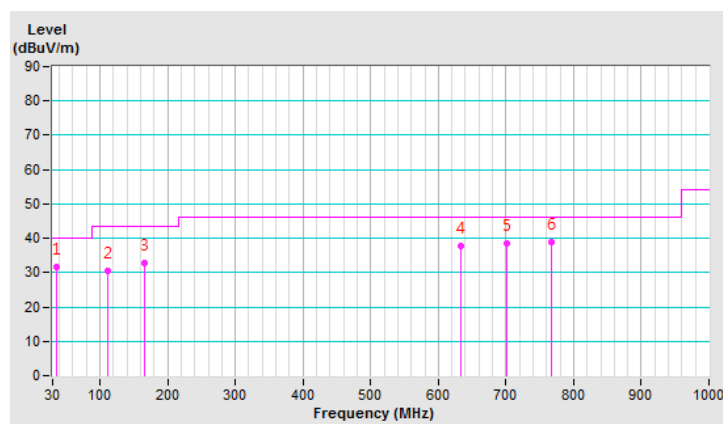
802.11g

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	35.61	31.6 QP	40.0	-8.4	4.00 H	349	50.7	-19.1
2	112.34	30.6 QP	43.5	-12.9	2.75 H	318	51.3	-20.7
3	166.63	32.9 QP	43.5	-10.6	2.50 H	92	51.1	-18.2
4	633.48	37.6 QP	46.0	-8.4	3.00 H	308	47.6	-10.0
5	700.48	38.4 QP	46.0	-7.6	1.00 H	97	47.4	-9.0
6	766.87	39.0 QP	46.0	-7.0	1.00 H	130	46.8	-7.8

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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit of frequency range 30MHz~1000MHz.
5. The emission levels were very low against the limit of frequency range 9kHz~30MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report.

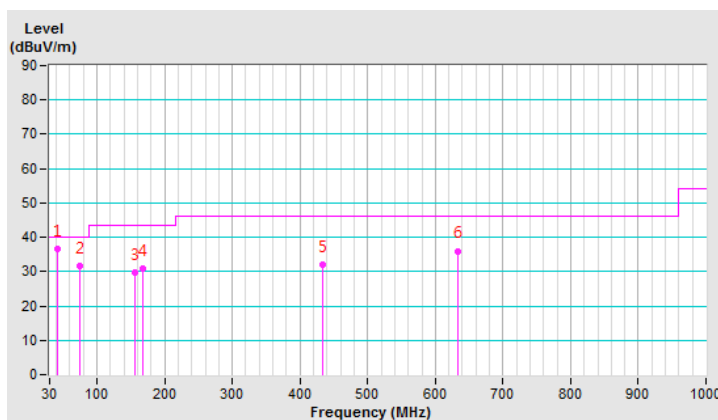


CHANNEL	TX Channel 6	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9kHz ~ 1GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	40.92	36.5 QP	40.0	-3.5	1.00 V	351	54.8	-18.3
2	74.46	31.8 QP	40.0	-8.2	1.50 V	320	53.2	-21.4
3	155.88	29.7 QP	43.5	-13.8	1.00 V	140	47.6	-17.9
4	167.10	31.0 QP	43.5	-12.5	2.00 V	360	49.3	-18.3
5	433.05	31.9 QP	46.0	-14.1	2.00 V	359	45.9	-14.0
6	632.85	36.0 QP	46.0	-10.0	1.01 V	360	46.0	-10.0

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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit of frequency range 30MHz~1000MHz.
5. The emission levels were very low against the limit of frequency range 9kHz~30MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report.



For external Ant. No.: 2 (Chain 1) PCB antenna (Model: ANT300P002B24553)

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	2375.27	58.9 PK	74.0	-15.1	2.38 H	287	61.9	-3.0
2	2375.27	50.2 AV	54.0	-3.8	2.38 H	287	53.2	-3.0
3	2390.00	57.2 PK	74.0	-16.8	2.38 H	287	60.3	-3.1
4	2390.00	48.4 AV	54.0	-5.6	2.38 H	287	51.5	-3.1
5	*2412.00	104.2 PK			2.38 H	287	107.3	-3.1
6	*2412.00	101.9 AV			2.38 H	287	105.0	-3.1
7	4824.00	42.3 PK	74.0	-31.7	2.75 H	336	41.1	1.2
8	4824.00	34.3 AV	54.0	-19.7	2.75 H	336	33.1	1.2

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	2375.27	56.8 PK	74.0	-17.2	2.14 V	16	59.8	-3.0
2	2375.27	46.8 AV	54.0	-7.2	2.14 V	16	49.8	-3.0
3	2390.00	54.9 PK	74.0	-19.1	2.14 V	16	58.0	-3.1
4	2390.00	44.9 AV	54.0	-9.1	2.14 V	16	48.0	-3.1
5	*2412.00	99.6 PK			2.14 V	16	102.7	-3.1
6	*2412.00	97.4 AV			2.14 V	16	100.5	-3.1
7	4824.00	41.6 PK	74.0	-32.4	1.67 V	36	40.4	1.2
8	4824.00	32.6 AV	54.0	-21.4	1.67 V	36	31.4	1.2

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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
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	56.8 PK	74.0	-17.2	1.10 H	179	59.9	-3.1
2	2390.00	45.6 AV	54.0	-8.4	1.10 H	179	48.7	-3.1
3	*2437.00	110.7 PK			1.10 H	179	113.8	-3.1
4	*2437.00	108.5 AV			1.10 H	179	111.6	-3.1
5	2483.50	57.7 PK	74.0	-16.3	1.10 H	179	60.8	-3.1
6	2483.50	44.6 AV	54.0	-9.4	1.10 H	179	47.7	-3.1
7	4874.00	42.2 PK	74.0	-31.8	2.71 H	353	41.0	1.2
8	4874.00	34.5 AV	54.0	-19.5	2.71 H	353	33.3	1.2
9	7311.00	49.1 PK	74.0	-24.9	1.56 H	197	41.9	7.2
10	7311.00	39.4 AV	54.0	-14.6	1.56 H	197	32.2	7.2

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	55.5 PK	74.0	-18.5	2.12 V	30	58.6	-3.1
2	2390.00	44.2 AV	54.0	-9.8	2.12 V	30	47.3	-3.1
3	*2437.00	106.4 PK			2.12 V	30	109.5	-3.1
4	*2437.00	104.1 AV			2.12 V	30	107.2	-3.1
5	2483.50	57.0 PK	74.0	-17.0	2.12 V	30	60.1	-3.1
6	2483.50	43.8 AV	54.0	-10.2	2.12 V	30	46.9	-3.1
7	4874.00	42.9 PK	74.0	-31.1	1.59 V	44	41.7	1.2
8	4874.00	33.8 AV	54.0	-20.2	1.59 V	44	32.6	1.2
9	7311.00	47.6 PK	74.0	-26.4	1.58 V	96	40.4	7.2
10	7311.00	37.4 AV	54.0	-16.6	1.58 V	96	30.2	7.2

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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
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	105.6 PK			2.34 H	272	108.7	-3.1
2	*2462.00	103.5 AV			2.34 H	272	106.6	-3.1
3	2483.50	57.6 PK	74.0	-16.4	2.34 H	272	60.7	-3.1
4	2483.50	47.2 AV	54.0	-6.8	2.34 H	272	50.3	-3.1
5	2488.65	59.9 PK	74.0	-14.1	2.34 H	272	63.0	-3.1
6	2488.65	50.4 AV	54.0	-3.6	2.34 H	272	53.5	-3.1
7	4924.00	42.5 PK	74.0	-31.5	2.68 H	354	41.2	1.3
8	4924.00	34.8 AV	54.0	-19.2	2.68 H	354	33.5	1.3
9	7386.00	49.0 PK	74.0	-25.0	1.51 H	213	41.7	7.3
10	7386.00	39.3 AV	54.0	-14.7	1.51 H	213	32.0	7.3

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	*2462.00	101.7 PK			2.16 V	26	104.8	-3.1
2	*2462.00	99.1 AV			2.16 V	26	102.2	-3.1
3	2483.50	56.8 PK	74.0	-17.2	2.16 V	26	59.9	-3.1
4	2483.50	46.3 AV	54.0	-7.7	2.16 V	26	49.4	-3.1
5	2488.65	59.1 PK	74.0	-14.9	2.16 V	26	62.2	-3.1
6	2488.65	49.5 AV	54.0	-4.5	2.16 V	26	52.6	-3.1
7	4924.00	43.4 PK	74.0	-30.6	1.57 V	52	42.1	1.3
8	4924.00	34.2 AV	54.0	-19.8	1.57 V	52	32.9	1.3
9	7386.00	47.4 PK	74.0	-26.6	1.53 V	107	40.1	7.3
10	7386.00	37.3 AV	54.0	-16.7	1.53 V	107	30.0	7.3

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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
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	66.6 PK	74.0	-7.4	2.36 H	261	69.7	-3.1
2	2390.00	51.0 AV	54.0	-3.0	2.36 H	261	54.1	-3.1
3	*2412.00	110.5 PK			2.36 H	261	113.6	-3.1
4	*2412.00	100.9 AV			2.36 H	261	104.0	-3.1
5	4824.00	43.8 PK	74.0	-30.2	2.66 H	352	42.6	1.2
6	4824.00	35.9 AV	54.0	-18.1	2.66 H	352	34.7	1.2
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	63.2 PK	74.0	-10.8	2.15 V	32	66.3	-3.1
2	2390.00	47.6 AV	54.0	-6.4	2.15 V	32	50.7	-3.1
3	*2412.00	106.7 PK			2.15 V	32	109.8	-3.1
4	*2412.00	97.0 AV			2.15 V	32	100.1	-3.1
5	4824.00	43.4 PK	74.0	-30.6	1.57 V	64	42.2	1.2
6	4824.00	34.3 AV	54.0	-19.7	1.57 V	64	33.1	1.2

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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
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	68.7 PK	74.0	-5.3	1.10 H	179	71.8	-3.1
2	2390.00	49.7 AV	54.0	-4.3	1.10 H	179	52.8	-3.1
3	*2437.00	114.8 PK			1.10 H	179	117.9	-3.1
4	*2437.00	106.0 AV			1.10 H	179	109.1	-3.1
5	2483.50	68.5 PK	74.0	-5.5	1.10 H	179	71.6	-3.1
6	2483.50	49.3 AV	54.0	-4.7	1.10 H	179	52.4	-3.1
7	4874.00	43.8 PK	74.0	-30.2	2.68 H	360	42.6	1.2
8	4874.00	35.8 AV	54.0	-18.2	2.68 H	360	34.6	1.2
9	7311.00	50.5 PK	74.0	-23.5	1.60 H	215	43.3	7.2
10	7311.00	39.8 AV	54.0	-14.2	1.60 H	215	32.6	7.2

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	63.7 PK	74.0	-10.3	2.18 V	20	66.8	-3.1
2	2390.00	47.6 AV	54.0	-6.4	2.18 V	20	50.7	-3.1
3	*2437.00	110.9 PK			2.18 V	20	114.0	-3.1
4	*2437.00	102.3 AV			2.18 V	20	105.4	-3.1
5	2483.50	63.2 PK	74.0	-10.8	2.18 V	20	66.3	-3.1
6	2483.50	47.7 AV	54.0	-6.3	2.18 V	20	50.8	-3.1
7	4874.00	43.3 PK	74.0	-30.7	1.58 V	50	42.1	1.2
8	4874.00	34.1 AV	54.0	-19.9	1.58 V	50	32.9	1.2
9	7311.00	47.7 PK	74.0	-26.3	1.59 V	97	40.5	7.2
10	7311.00	37.4 AV	54.0	-16.6	1.59 V	97	30.2	7.2

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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
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	109.1 PK			2.31 H	267	112.2	-3.1
2	*2462.00	99.7 AV			2.31 H	267	102.8	-3.1
3	2483.50	67.3 PK	74.0	-6.7	2.31 H	267	70.4	-3.1
4	2483.50	50.1 AV	54.0	-3.9	2.31 H	267	53.2	-3.1
5	4924.00	43.8 PK	74.0	-30.2	2.73 H	360	42.5	1.3
6	4924.00	35.9 AV	54.0	-18.1	2.73 H	360	34.6	1.3
7	7386.00	51.3 PK	74.0	-22.7	1.65 H	229	44.0	7.3
8	7386.00	40.3 AV	54.0	-13.7	1.65 H	229	33.0	7.3
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	*2462.00	106.4 PK			2.16 V	25	109.5	-3.1
2	*2462.00	96.2 AV			2.16 V	25	99.3	-3.1
3	2483.50	64.5 PK	74.0	-9.5	1.00 V	25	67.6	-3.1
4	2483.50	47.4 AV	54.0	-6.6	1.00 V	25	50.5	-3.1
5	4924.00	43.7 PK	74.0	-30.3	1.61 V	65	42.4	1.3
6	4924.00	34.3 AV	54.0	-19.7	1.61 V	65	33.0	1.3
7	7386.00	47.7 PK	74.0	-26.3	1.56 V	94	40.4	7.3
8	7386.00	37.4 AV	54.0	-16.6	1.56 V	94	30.1	7.3

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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
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	63.9 PK	74.0	-10.1	2.31 H	256	67.0	-3.1
2	2390.00	50.3 AV	54.0	-3.7	2.31 H	256	53.4	-3.1
3	*2412.00	107.4 PK			2.31 H	256	110.5	-3.1
4	*2412.00	99.5 AV			2.31 H	256	102.6	-3.1
5	4824.00	43.8 PK	74.0	-30.2	2.66 H	11	42.6	1.2
6	4824.00	35.4 AV	54.0	-18.6	2.66 H	11	34.2	1.2
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	62.0 PK	74.0	-12.0	2.30 V	38	65.1	-3.1
2	2390.00	47.7 AV	54.0	-6.3	2.30 V	38	50.8	-3.1
3	*2412.00	103.6 PK			2.30 V	38	106.7	-3.1
4	*2412.00	95.7 AV			2.30 V	38	98.8	-3.1
5	4824.00	42.9 PK	74.0	-31.1	1.52 V	39	41.7	1.2
6	4824.00	33.5 AV	54.0	-20.5	1.52 V	39	32.3	1.2

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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
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	62.3 PK	74.0	-11.7	1.11 H	194	65.4	-3.1
2	2390.00	49.5 AV	54.0	-4.5	1.11 H	194	52.6	-3.1
3	*2437.00	114.7 PK			1.11 H	194	117.8	-3.1
4	*2437.00	106.2 AV			1.11 H	194	109.3	-3.1
5	2483.50	62.0 PK	74.0	-12.0	1.11 H	194	65.1	-3.1
6	2483.50	49.4 AV	54.0	-4.6	1.11 H	194	52.5	-3.1
7	4874.00	43.5 PK	74.0	-30.5	2.66 H	31	42.3	1.2
8	4874.00	35.3 AV	54.0	-18.7	2.66 H	31	34.1	1.2
9	7311.00	50.8 PK	74.0	-23.2	1.63 H	225	43.6	7.2
10	7311.00	39.9 AV	54.0	-14.1	1.63 H	225	32.7	7.2

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	61.7 PK	74.0	-12.3	2.21 V	35	64.8	-3.1
2	2390.00	47.2 AV	54.0	-6.8	2.21 V	35	50.3	-3.1
3	*2437.00	111.3 PK			2.21 V	35	114.4	-3.1
4	*2437.00	102.4 AV			2.21 V	35	105.5	-3.1
5	2483.50	62.2 PK	74.0	-11.8	2.21 V	35	65.3	-3.1
6	2483.50	47.9 AV	54.0	-6.1	2.21 V	35	51.0	-3.1
7	4874.00	43.2 PK	74.0	-30.8	1.60 V	43	42.0	1.2
8	4874.00	34.0 AV	54.0	-20.0	1.60 V	43	32.8	1.2
9	7311.00	47.7 PK	74.0	-26.3	1.54 V	102	40.5	7.2
10	7311.00	37.6 AV	54.0	-16.4	1.54 V	102	30.4	7.2

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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
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	106.9 PK			2.32 H	276	110.0	-3.1
2	*2462.00	99.1 AV			2.32 H	276	102.2	-3.1
3	2483.50	65.8 PK	74.0	-8.2	2.32 H	276	68.9	-3.1
4	2483.50	50.6 AV	54.0	-3.4	2.32 H	276	53.7	-3.1
5	4924.00	43.8 PK	74.0	-30.2	2.71 H	32	42.5	1.3
6	4924.00	35.8 AV	54.0	-18.2	2.71 H	32	34.5	1.3
7	7386.00	50.0 PK	74.0	-24.0	1.66 H	239	42.7	7.3
8	7386.00	39.3 AV	54.0	-14.7	1.66 H	239	32.0	7.3
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	*2462.00	103.6 PK			2.15 V	15	106.7	-3.1
2	*2462.00	96.2 AV			2.15 V	15	99.3	-3.1
3	2483.50	62.3 PK	74.0	-11.7	2.15 V	15	65.4	-3.1
4	2483.50	48.5 AV	54.0	-5.5	2.15 V	15	51.6	-3.1
5	4924.00	42.6 PK	74.0	-31.4	1.62 V	44	41.3	1.3
6	4924.00	33.7 AV	54.0	-20.3	1.62 V	44	32.4	1.3
7	7386.00	47.0 PK	74.0	-27.0	1.50 V	93	39.7	7.3
8	7386.00	37.2 AV	54.0	-16.8	1.50 V	93	29.9	7.3

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

802.11n (HT40)

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	64.6 PK	74.0	-9.4	2.66 H	287	67.7	-3.1
2	2390.00	50.7 AV	54.0	-3.3	2.66 H	287	53.8	-3.1
3	*2422.00	103.2 PK			2.66 H	287	106.3	-3.1
4	*2422.00	95.3 AV			2.66 H	287	98.4	-3.1
5	4844.00	43.6 PK	74.0	-30.4	2.69 H	27	42.4	1.2
6	4844.00	35.8 AV	54.0	-18.2	2.69 H	27	34.6	1.2
7	7266.00	50.1 PK	74.0	-23.9	1.70 H	246	43.0	7.1
8	7266.00	39.5 AV	54.0	-14.5	1.70 H	246	32.4	7.1

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	62.1 PK	74.0	-11.9	2.21 V	7	65.2	-3.1
2	2390.00	47.8 AV	54.0	-6.2	2.21 V	7	50.9	-3.1
3	*2422.00	99.2 PK			2.21 V	7	102.3	-3.1
4	*2422.00	90.1 AV			2.21 V	7	93.2	-3.1
5	4844.00	42.6 PK	74.0	-31.4	1.65 V	33	41.4	1.2
6	4844.00	33.9 AV	54.0	-20.1	1.65 V	33	32.7	1.2
7	7266.00	46.6 PK	74.0	-27.4	1.45 V	95	39.5	7.1
8	7266.00	37.1 AV	54.0	-16.9	1.45 V	95	30.0	7.1

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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
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	64.6 PK	74.0	-9.4	1.38 H	192	67.7	-3.1
2	2390.00	48.5 AV	54.0	-5.5	1.38 H	192	51.6	-3.1
3	*2437.00	103.8 PK			1.38 H	192	106.9	-3.1
4	*2437.00	95.1 AV			1.38 H	192	98.2	-3.1
5	2483.50	65.2 PK	74.0	-8.8	1.38 H	192	68.3	-3.1
6	2483.50	50.2 AV	54.0	-3.8	1.38 H	192	53.3	-3.1
7	4874.00	43.4 PK	74.0	-30.6	2.74 H	41	42.2	1.2
8	4874.00	35.7 AV	54.0	-18.3	2.74 H	41	34.5	1.2
9	7311.00	50.0 PK	74.0	-24.0	1.69 H	242	42.8	7.2
10	7311.00	39.2 AV	54.0	-14.8	1.69 H	242	32.0	7.2

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	60.9 PK	74.0	-13.1	2.20 V	23	64.0	-3.1
2	2390.00	47.0 AV	54.0	-7.0	2.20 V	23	50.1	-3.1
3	*2437.00	99.1 PK			2.20 V	23	102.2	-3.1
4	*2437.00	89.9 AV			2.20 V	23	93.0	-3.1
5	2483.50	62.3 PK	74.0	-11.7	2.20 V	23	65.4	-3.1
6	2483.50	47.9 AV	54.0	-6.1	2.20 V	23	51.0	-3.1
7	4874.00	42.2 PK	74.0	-31.8	1.64 V	23	41.0	1.2
8	4874.00	33.4 AV	54.0	-20.6	1.64 V	23	32.2	1.2
9	7311.00	46.6 PK	74.0	-27.4	1.47 V	100	39.4	7.2
10	7311.00	37.0 AV	54.0	-17.0	1.47 V	100	29.8	7.2

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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
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	101.8 PK			1.62 H	199	104.9	-3.1
2	*2452.00	94.1 AV			1.62 H	199	97.2	-3.1
3	2483.50	64.4 PK	74.0	-9.6	1.62 H	199	67.5	-3.1
4	2483.50	50.7 AV	54.0	-3.3	1.62 H	199	53.8	-3.1
5	4904.00	43.4 PK	74.0	-30.6	2.70 H	28	42.1	1.3
6	4904.00	35.5 AV	54.0	-18.5	2.70 H	28	34.2	1.3
7	7356.00	49.7 PK	74.0	-24.3	1.65 H	235	42.5	7.2
8	7356.00	38.9 AV	54.0	-15.1	1.65 H	235	31.7	7.2
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	*2452.00	98.3 PK			2.22 V	36	101.4	-3.1
2	*2452.00	89.0 AV			2.22 V	36	92.1	-3.1
3	2483.50	61.5 PK	74.0	-12.5	2.22 V	36	64.6	-3.1
4	2483.50	47.4 AV	54.0	-6.6	2.22 V	36	50.5	-3.1
5	4904.00	41.9 PK	74.0	-32.1	1.62 V	9	40.6	1.3
6	4904.00	33.4 AV	54.0	-20.6	1.62 V	9	32.1	1.3
7	7356.00	46.8 PK	74.0	-27.2	1.52 V	97	39.6	7.2
8	7356.00	37.1 AV	54.0	-16.9	1.52 V	97	29.9	7.2

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

Below 1GHz Data:

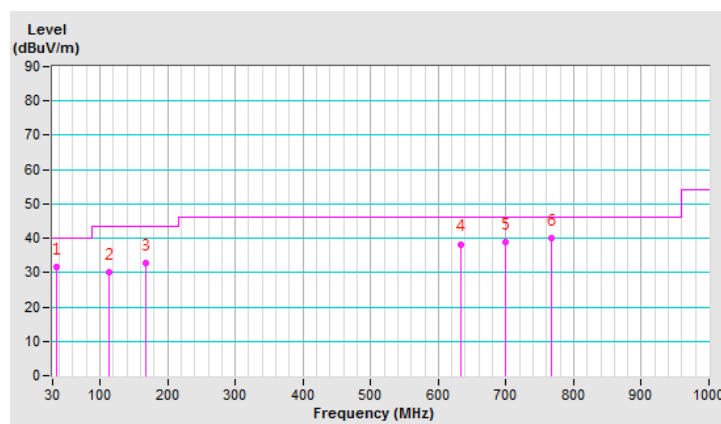
802.11g

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	35.72	31.5 QP	40.0	-8.5	4.00 H	351	50.5	-19.0
2	112.61	30.1 QP	43.5	-13.4	3.00 H	322	50.8	-20.7
3	167.24	32.9 QP	43.5	-10.6	2.50 H	94	51.2	-18.3
4	632.95	38.3 QP	46.0	-7.7	3.00 H	302	48.3	-10.0
5	700.25	39.0 QP	46.0	-7.0	1.25 H	91	48.0	-9.0
6	766.66	40.0 QP	46.0	-6.0	1.00 H	119	47.8	-7.8

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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit of frequency range 30MHz~1000MHz.
5. The emission levels were very low against the limit of frequency range 9kHz~30MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report.

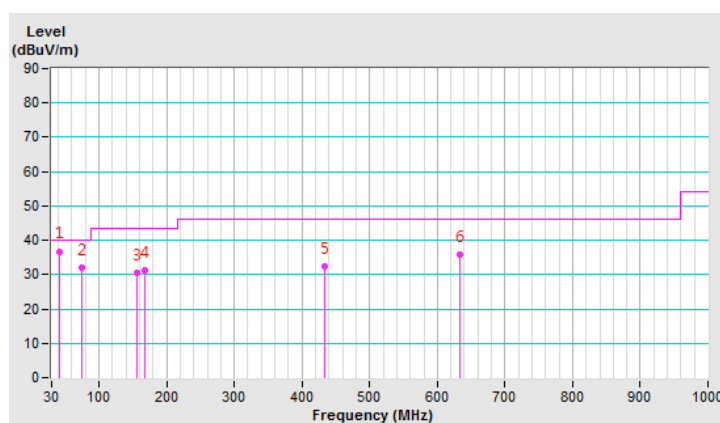


CHANNEL	TX Channel 6	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9kHz ~ 1GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	40.95	36.8 QP	40.0	-3.2	1.00 V	346	55.0	-18.2
2	74.64	32.0 QP	40.0	-8.0	1.50 V	300	53.4	-21.4
3	156.25	30.4 QP	43.5	-13.1	1.00 V	119	48.3	-17.9
4	167.09	31.1 QP	43.5	-12.4	2.00 V	350	49.4	-18.3
5	433.41	32.5 QP	46.0	-13.5	2.00 V	351	46.5	-14.0
6	632.66	35.7 QP	46.0	-10.3	1.25 V	352	45.7	-10.0

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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit of frequency range 30MHz~1000MHz.
5. The emission levels were very low against the limit of frequency range 9kHz~30MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report.



For external Ant. No.: 5 (Chain 1) PIFA antenna (Model: SZ07751)

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	2385.40	57.5 PK	74.0	-16.5	1.00 H	43	60.6	-3.1
2	2385.40	47.2 AV	54.0	-6.8	1.00 H	43	50.3	-3.1
3	*2412.00	98.9 PK			1.00 H	43	102.0	-3.1
4	*2412.00	95.9 AV			1.00 H	43	99.0	-3.1
5	4824.00	40.6 PK	74.0	-33.4	1.36 H	221	39.4	1.2
6	4824.00	31.9 AV	54.0	-22.1	1.36 H	221	30.7	1.2
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	2385.40	60.3 PK	74.0	-13.7	1.52 V	22	63.4	-3.1
2	2385.40	50.4 AV	54.0	-3.6	1.52 V	22	53.5	-3.1
3	2390.00	58.0 PK	74.0	-16.0	1.52 V	22	61.1	-3.1
4	2390.00	48.0 AV	54.0	-6.0	1.52 V	22	51.1	-3.1
5	*2412.00	107.5 PK			1.52 V	22	110.6	-3.1
6	*2412.00	104.3 AV			1.52 V	22	107.4	-3.1
7	4824.00	41.2 PK	74.0	-32.8	1.19 V	91	40.0	1.2
8	4824.00	33.1 AV	54.0	-20.9	1.19 V	91	31.9	1.2

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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
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	55.9 PK	74.0	-18.1	1.19 H	55	59.0	-3.1
2	2390.00	44.6 AV	54.0	-9.4	1.19 H	55	47.7	-3.1
3	*2437.00	101.7 PK			1.19 H	55	104.8	-3.1
4	*2437.00	98.6 AV			1.19 H	55	101.7	-3.1
5	2483.50	57.0 PK	74.0	-17.0	1.19 H	55	60.1	-3.1
6	2483.50	44.1 AV	54.0	-9.9	1.19 H	55	47.2	-3.1
7	4874.00	41.0 PK	74.0	-33.0	1.32 H	217	39.8	1.2
8	4874.00	32.2 AV	54.0	-21.8	1.32 H	217	31.0	1.2
9	7311.00	43.4 PK	74.0	-30.6	1.63 H	224	36.2	7.2
10	7311.00	30.3 AV	54.0	-23.7	1.63 H	224	23.1	7.2

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	56.7 PK	74.0	-17.3	1.04 V	58	59.8	-3.1
2	2390.00	45.5 AV	54.0	-8.5	1.04 V	58	48.6	-3.1
3	*2437.00	108.8 PK			1.04 V	58	111.9	-3.1
4	*2437.00	106.7 AV			1.04 V	58	109.8	-3.1
5	2483.50	57.6 PK	74.0	-16.4	1.04 V	58	60.7	-3.1
6	2483.50	44.7 AV	54.0	-9.3	1.04 V	58	47.8	-3.1
7	4874.00	41.4 PK	74.0	-32.6	1.17 V	111	40.2	1.2
8	4874.00	33.5 AV	54.0	-20.5	1.17 V	111	32.3	1.2
9	7311.00	43.1 PK	74.0	-30.9	1.75 V	248	35.9	7.2
10	7311.00	30.8 AV	54.0	-23.2	1.75 V	248	23.6	7.2

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2462.00	99.2 PK			1.20 H	61	102.3	-3.1
2	*2462.00	96.0 AV			1.20 H	61	99.1	-3.1
3	2483.50	57.0 PK	74.0	-17.0	1.20 H	61	60.1	-3.1
4	2483.50	45.6 AV	54.0	-8.4	1.20 H	61	48.7	-3.1
5	2488.70	57.5 PK	74.0	-16.5	1.20 H	61	60.6	-3.1
6	2488.70	47.5 AV	54.0	-6.5	1.20 H	61	50.6	-3.1
7	4924.00	40.7 PK	74.0	-33.3	1.36 H	222	39.4	1.3
8	4924.00	31.8 AV	54.0	-22.2	1.36 H	222	30.5	1.3
9	7386.00	44.2 PK	74.0	-29.8	1.65 H	212	36.9	7.3
10	7386.00	30.9 AV	54.0	-23.1	1.65 H	212	23.6	7.3

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	*2462.00	106.5 PK			1.41 V	31	109.6	-3.1
2	*2462.00	103.6 AV			1.41 V	31	106.7	-3.1
3	2483.50	57.4 PK	74.0	-16.6	1.41 V	31	60.5	-3.1
4	2483.50	48.7 AV	54.0	-5.3	1.41 V	31	51.8	-3.1
5	2488.70	59.1 PK	74.0	-14.9	1.41 V	31	62.2	-3.1
6	2488.70	50.6 AV	54.0	-3.4	1.41 V	31	53.7	-3.1
7	4924.00	40.5 PK	74.0	-33.5	1.13 V	91	39.2	1.3
8	4924.00	32.7 AV	54.0	-21.3	1.13 V	91	31.4	1.3
9	7386.00	43.4 PK	74.0	-30.6	1.65 V	245	36.1	7.3
10	7386.00	31.1 AV	54.0	-22.9	1.65 V	245	23.8	7.3

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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
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	2385.40	68.7 PK	74.0	-5.3	1.19 H	69	71.8	-3.1
2	2385.40	48.7 AV	54.0	-5.3	1.19 H	69	51.8	-3.1
3	2390.00	66.6 PK	74.0	-7.4	1.19 H	69	69.7	-3.1
4	2390.00	46.9 AV	54.0	-7.1	1.19 H	69	50.0	-3.1
5	*2412.00	105.1 PK			1.19 H	69	108.2	-3.1
6	*2412.00	94.3 AV			1.19 H	69	97.4	-3.1
7	4824.00	40.1 PK	74.0	-33.9	1.38 H	228	38.9	1.2
8	4824.00	31.4 AV	54.0	-22.6	1.38 H	228	30.2	1.2
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	2385.40	70.4 PK	74.0	-3.6	1.35 V	110	73.5	-3.1
2	2385.40	50.2 AV	54.0	-3.8	1.35 V	110	53.3	-3.1
3	2390.00	68.5 PK	74.0	-5.5	1.35 V	110	71.6	-3.1
4	2390.00	48.7 AV	54.0	-5.3	1.35 V	110	51.8	-3.1
5	*2412.00	109.0 PK			1.35 V	110	112.1	-3.1
6	*2412.00	97.5 AV			1.35 V	110	100.6	-3.1
7	4824.00	40.1 PK	74.0	-33.9	1.14 V	76	38.9	1.2
8	4824.00	32.5 AV	54.0	-21.5	1.14 V	76	31.3	1.2

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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
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	66.3 PK	74.0	-7.7	1.25 H	55	69.4	-3.1
2	2390.00	46.5 AV	54.0	-7.5	1.25 H	55	49.6	-3.1
3	*2437.00	109.8 PK			1.25 H	55	112.9	-3.1
4	*2437.00	98.8 AV			1.25 H	55	101.9	-3.1
5	2483.50	64.4 PK	74.0	-9.6	1.25 H	55	67.5	-3.1
6	2483.50	47.7 AV	54.0	-6.3	1.25 H	55	50.8	-3.1
7	4874.00	41.1 PK	74.0	-32.9	1.31 H	233	39.9	1.2
8	4874.00	32.5 AV	54.0	-21.5	1.31 H	233	31.3	1.2
9	7311.00	44.0 PK	74.0	-30.0	1.66 H	203	36.8	7.2
10	7311.00	30.8 AV	54.0	-23.2	1.66 H	203	23.6	7.2

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	68.2 PK	74.0	-5.8	1.30 V	59	71.3	-3.1
2	2390.00	50.1 AV	54.0	-3.9	1.30 V	59	53.2	-3.1
3	*2437.00	114.9 PK			1.30 V	59	118.0	-3.1
4	*2437.00	103.7 AV			1.30 V	59	106.8	-3.1
5	2483.50	69.9 PK	74.0	-4.1	1.30 V	59	73.0	-3.1
6	2483.50	50.5 AV	54.0	-3.5	1.30 V	59	53.6	-3.1
7	4874.00	41.1 PK	74.0	-32.9	1.18 V	88	39.9	1.2
8	4874.00	33.3 AV	54.0	-20.7	1.18 V	88	32.1	1.2
9	7311.00	43.5 PK	74.0	-30.5	1.70 V	259	36.3	7.2
10	7311.00	30.8 AV	54.0	-23.2	1.70 V	259	23.6	7.2

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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
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	104.8 PK			1.19 H	43	107.9	-3.1
2	*2462.00	93.7 AV			1.19 H	43	96.8	-3.1
3	2483.50	69.0 PK	74.0	-5.0	1.19 H	43	72.1	-3.1
4	2483.50	48.5 AV	54.0	-5.5	1.19 H	43	51.6	-3.1
5	4924.00	40.6 PK	74.0	-33.4	1.36 H	249	39.3	1.3
6	4924.00	31.7 AV	54.0	-22.3	1.36 H	249	30.4	1.3
7	7386.00	43.4 PK	74.0	-30.6	1.67 H	218	36.1	7.3
8	7386.00	30.1 AV	54.0	-23.9	1.67 H	218	22.8	7.3
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	*2462.00	107.7 PK			1.34 V	111	110.8	-3.1
2	*2462.00	96.4 AV			1.34 V	111	99.5	-3.1
3	2483.50	70.2 PK	74.0	-3.8	1.34 V	111	73.3	-3.1
4	2483.50	48.6 AV	54.0	-5.4	1.34 V	111	51.7	-3.1
5	4924.00	40.9 PK	74.0	-33.1	1.18 V	80	39.6	1.3
6	4924.00	33.4 AV	54.0	-20.6	1.18 V	80	32.1	1.3
7	7386.00	43.4 PK	74.0	-30.6	1.69 V	277	36.1	7.3
8	7386.00	31.1 AV	54.0	-22.9	1.69 V	277	23.8	7.3

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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
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	68.1 PK	74.0	-5.9	1.24 H	53	71.2	-3.1
2	2390.00	47.0 AV	54.0	-7.0	1.24 H	53	50.1	-3.1
3	*2412.00	103.9 PK			1.24 H	53	107.0	-3.1
4	*2412.00	93.6 AV			1.24 H	53	96.7	-3.1
5	4824.00	40.7 PK	74.0	-33.3	1.31 H	257	39.5	1.2
6	4824.00	31.9 AV	54.0	-22.1	1.31 H	257	30.7	1.2
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	69.0 PK	74.0	-5.0	1.13 V	111	72.1	-3.1
2	2390.00	48.0 AV	54.0	-6.0	1.13 V	111	51.1	-3.1
3	*2412.00	107.5 PK			1.13 V	111	110.6	-3.1
4	*2412.00	97.3 AV			1.13 V	111	100.4	-3.1
5	4824.00	41.2 PK	74.0	-32.8	1.15 V	85	40.0	1.2
6	4824.00	33.7 AV	54.0	-20.3	1.15 V	85	32.5	1.2

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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
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	63.9 PK	74.0	-10.1	1.37 H	43	67.0	-3.1
2	2390.00	47.3 AV	54.0	-6.7	1.37 H	43	50.4	-3.1
3	*2437.00	110.6 PK			1.37 H	43	113.7	-3.1
4	*2437.00	99.8 AV			1.37 H	43	102.9	-3.1
5	2483.50	66.3 PK	74.0	-7.7	1.37 H	43	69.4	-3.1
6	2483.50	46.1 AV	54.0	-7.9	1.37 H	43	49.2	-3.1
7	4874.00	39.6 PK	74.0	-34.4	1.38 H	245	38.4	1.2
8	4874.00	30.9 AV	54.0	-23.1	1.38 H	245	29.7	1.2
9	7311.00	44.6 PK	74.0	-29.4	1.72 H	215	37.4	7.2
10	7311.00	30.9 AV	54.0	-23.1	1.72 H	215	23.7	7.2

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	67.1 PK	74.0	-6.9	1.10 V	118	70.2	-3.1
2	2390.00	48.1 AV	54.0	-5.9	1.10 V	118	51.2	-3.1
3	*2437.00	114.3 PK			1.10 V	118	117.4	-3.1
4	*2437.00	103.5 AV			1.10 V	118	106.6	-3.1
5	2483.50	69.9 PK	74.0	-4.1	1.10 V	118	73.0	-3.1
6	2483.50	49.3 AV	54.0	-4.7	1.10 V	118	52.4	-3.1
7	4874.00	41.9 PK	74.0	-32.1	1.23 V	51	40.7	1.2
8	4874.00	34.1 AV	54.0	-19.9	1.23 V	51	32.9	1.2
9	7311.00	43.9 PK	74.0	-30.1	1.65 V	275	36.7	7.2
10	7311.00	31.8 AV	54.0	-22.2	1.65 V	275	24.6	7.2

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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
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	104.8 PK			1.38 H	41	107.9	-3.1
2	*2462.00	94.3 AV			1.38 H	41	97.4	-3.1
3	2483.50	67.6 PK	74.0	-6.4	1.38 H	41	70.7	-3.1
4	2483.50	45.9 AV	54.0	-8.1	1.38 H	41	49.0	-3.1
5	4924.00	39.8 PK	74.0	-34.2	1.36 H	223	38.5	1.3
6	4924.00	31.0 AV	54.0	-23.0	1.36 H	223	29.7	1.3
7	7386.00	45.0 PK	74.0	-29.0	1.70 H	214	37.7	7.3
8	7386.00	31.2 AV	54.0	-22.8	1.70 H	214	23.9	7.3
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	*2462.00	108.1 PK			1.06 V	12	111.2	-3.1
2	*2462.00	97.1 AV			1.06 V	12	100.2	-3.1
3	2483.50	70.0 PK	74.0	-4.0	1.06 V	12	73.1	-3.1
4	2483.50	47.7 AV	54.0	-6.3	1.06 V	12	50.8	-3.1
5	4924.00	42.5 PK	74.0	-31.5	1.29 V	51	41.2	1.3
6	4924.00	34.3 AV	54.0	-19.7	1.29 V	51	33.0	1.3
7	7386.00	43.9 PK	74.0	-30.1	1.67 V	272	36.6	7.3
8	7386.00	31.9 AV	54.0	-22.1	1.67 V	272	24.6	7.3

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

802.11n (HT40)

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	66.0 PK	74.0	-8.0	1.37 H	34	69.1	-3.1
2	2390.00	46.3 AV	54.0	-7.7	1.37 H	34	49.4	-3.1
3	*2422.00	98.9 PK			1.37 H	34	102.0	-3.1
4	*2422.00	89.4 AV			1.37 H	34	92.5	-3.1
5	4844.00	39.8 PK	74.0	-34.2	1.43 H	232	38.6	1.2
6	4844.00	31.1 AV	54.0	-22.9	1.43 H	232	29.9	1.2
7	7266.00	45.5 PK	74.0	-28.5	1.66 H	205	38.4	7.1
8	7266.00	31.6 AV	54.0	-22.4	1.66 H	205	24.5	7.1
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	68.5 PK	74.0	-5.5	1.32 V	34	71.6	-3.1
2	2390.00	48.8 AV	54.0	-5.2	1.32 V	34	51.9	-3.1
3	*2422.00	104.2 PK			1.32 V	34	107.3	-3.1
4	*2422.00	95.2 AV			1.32 V	34	98.3	-3.1
5	4844.00	41.7 PK	74.0	-32.3	1.31 V	50	40.5	1.2
6	4844.00	33.8 AV	54.0	-20.2	1.31 V	50	32.6	1.2
7	7266.00	43.9 PK	74.0	-30.1	1.61 V	251	36.8	7.1
8	7266.00	32.2 AV	54.0	-21.8	1.61 V	251	25.1	7.1

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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
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	63.2 PK	74.0	-10.8	1.40 H	56	66.3	-3.1
2	2390.00	47.7 AV	54.0	-6.3	1.40 H	56	50.8	-3.1
3	*2437.00	98.9 PK			1.40 H	56	102.0	-3.1
4	*2437.00	89.6 AV			1.40 H	56	92.7	-3.1
5	2483.50	63.6 PK	74.0	-10.4	1.40 H	56	66.7	-3.1
6	2483.50	47.9 AV	54.0	-6.1	1.40 H	56	51.0	-3.1
7	4874.00	40.5 PK	74.0	-33.5	1.34 H	240	39.3	1.2
8	4874.00	31.5 AV	54.0	-22.5	1.34 H	240	30.3	1.2
9	7311.00	45.1 PK	74.0	-28.9	1.71 H	234	37.9	7.2
10	7311.00	30.9 AV	54.0	-23.1	1.71 H	234	23.7	7.2

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	65.1 PK	74.0	-8.9	2.65 V	124	68.2	-3.1
2	2390.00	49.7 AV	54.0	-4.3	2.65 V	124	52.8	-3.1
3	*2437.00	104.7 PK			2.65 V	124	107.8	-3.1
4	*2437.00	95.4 AV			2.65 V	124	98.5	-3.1
5	2483.50	67.3 PK	74.0	-6.7	2.65 V	124	70.4	-3.1
6	2483.50	50.0 AV	54.0	-4.0	2.65 V	124	53.1	-3.1
7	4874.00	42.5 PK	74.0	-31.5	1.28 V	51	41.3	1.2
8	4874.00	34.6 AV	54.0	-19.4	1.28 V	51	33.4	1.2
9	7311.00	43.3 PK	74.0	-30.7	1.60 V	268	36.1	7.2
10	7311.00	31.5 AV	54.0	-22.5	1.60 V	268	24.3	7.2

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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
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	99.2 PK			1.41 H	45	102.3	-3.1
2	*2452.00	90.0 AV			1.41 H	45	93.1	-3.1
3	2483.50	63.9 PK	74.0	-10.1	1.41 H	45	67.0	-3.1
4	2483.50	48.0 AV	54.0	-6.0	1.41 H	45	51.1	-3.1
5	4904.00	40.6 PK	74.0	-33.4	1.33 H	227	39.3	1.3
6	4904.00	31.8 AV	54.0	-22.2	1.33 H	227	30.5	1.3
7	7356.00	45.3 PK	74.0	-28.7	1.72 H	232	38.1	7.2
8	7356.00	31.1 AV	54.0	-22.9	1.72 H	232	23.9	7.2
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	*2452.00	104.4 PK			1.25 V	34	107.5	-3.1
2	*2452.00	95.4 AV			1.25 V	34	98.5	-3.1
3	2483.50	70.6 PK	74.0	-3.4	1.25 V	34	73.7	-3.1
4	2483.50	50.2 AV	54.0	-3.8	1.25 V	34	53.3	-3.1
5	4904.00	42.9 PK	74.0	-31.1	1.29 V	62	41.6	1.3
6	4904.00	35.0 AV	54.0	-19.0	1.29 V	62	33.7	1.3
7	7356.00	43.0 PK	74.0	-31.0	1.61 V	256	35.8	7.2
8	7356.00	31.0 AV	54.0	-23.0	1.61 V	256	23.8	7.2

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

Below 1GHz Data:

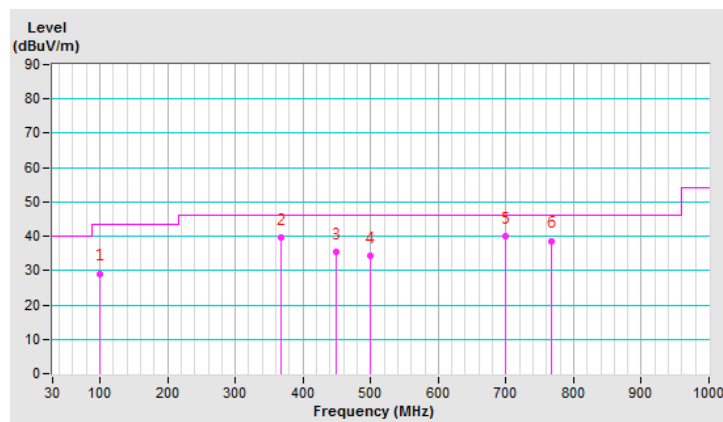
802.11g

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	100.01	29.2 QP	43.5	-14.3	2.00 H	325	51.5	-22.3
2	366.66	39.8 QP	46.0	-6.2	1.00 H	349	55.7	-15.9
3	448.41	35.4 QP	46.0	-10.6	2.00 H	39	48.9	-13.5
4	500.01	34.4 QP	46.0	-11.6	2.00 H	1	47.2	-12.8
5	700.03	39.9 QP	46.0	-6.1	2.00 H	0	48.9	-9.0
6	766.69	38.7 QP	46.0	-7.3	1.00 H	214	46.5	-7.8

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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit of frequency range 30MHz~1000MHz.
5. The emission levels were very low against the limit of frequency range 9kHz~30MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report.

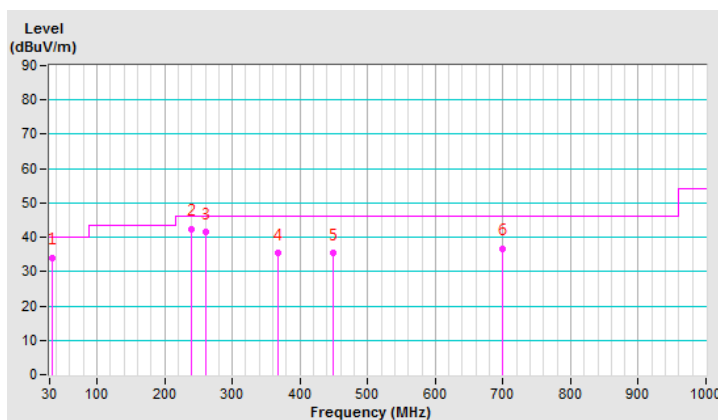


CHANNEL	TX Channel 6	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9kHz ~ 1GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	33.40	34.1 QP	40.0	-5.9	1.00 V	360	53.4	-19.3
2	238.94	42.5 QP	46.0	-3.5	1.00 V	176	61.8	-19.3
3	261.32	41.5 QP	46.0	-4.5	2.00 V	360	60.1	-18.6
4	366.66	35.5 QP	46.0	-10.5	2.00 V	360	51.4	-15.9
5	448.31	35.4 QP	46.0	-10.6	1.00 V	360	48.9	-13.5
6	700.00	36.8 QP	46.0	-9.2	2.00 V	360	45.8	-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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit of frequency range 30MHz~1000MHz.
5. The emission levels were very low against the limit of frequency range 9kHz~30MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report.



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, 2018	Oct. 23, 2019
Line-Impedance Stabilization Network (for EUT) R&S	ESH3-Z5	848773/004	Oct. 22, 2018	Oct. 21, 2019
Line-Impedance Stabilization Network (for Peripheral) R&S	ESH3-Z5	835239/001	Mar. 17, 2019	Mar. 16, 2020
50 ohms Terminator	N/A	3	Oct. 22, 2018	Oct. 21, 2019
RF Cable	5D-FB	COCCAB-001	Sep. 28, 2018	Sep. 27, 2019
Fixed attenuator EMCI	STI02-2200-10	003	Mar. 14, 2019	Mar. 13, 2020
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: Aug. 21, 2019

4.2.3 Test Procedures

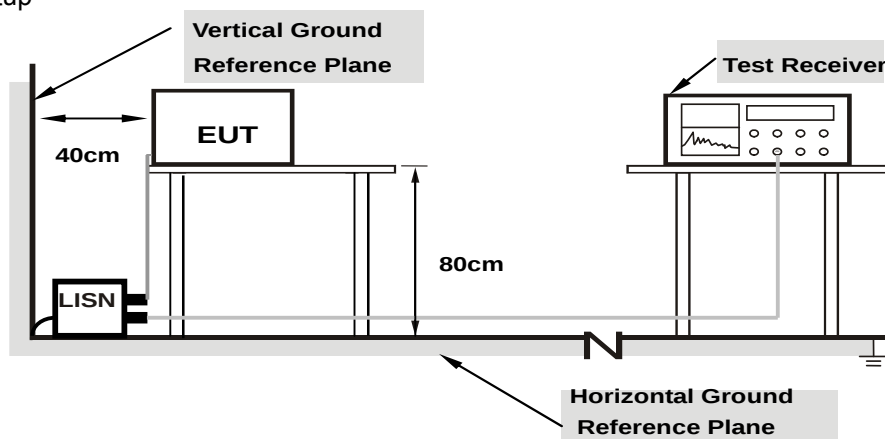
- The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling impedance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

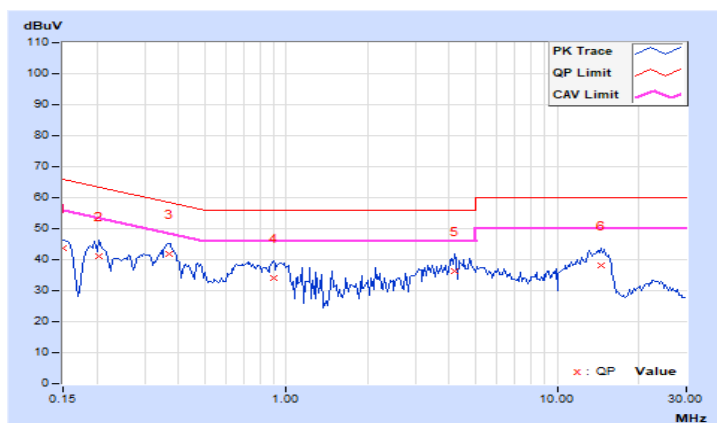
4.2.7 Test Results

Phase	Line (L)	Detector Function	Quasi-Peak (QP) / Average (AV)
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Phase Of Power : Line (L)										
No	Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)		Emission Level (dBuV)		Limit (dBuV)		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15000	9.96	33.62	24.37	43.58	34.33	66.00	56.00	-22.42	-21.67
2	0.20469	9.97	31.16	18.02	41.13	27.99	63.42	53.42	-22.29	-25.43
3	0.36875	9.98	32.00	19.89	41.98	29.87	58.53	48.53	-16.55	-18.66
4	0.89609	10.02	24.03	11.18	34.05	21.20	56.00	46.00	-21.95	-24.80
5	4.20313	10.27	25.99	13.10	36.26	23.37	56.00	46.00	-19.74	-22.63
6	14.61328	10.97	27.02	18.81	37.99	29.78	60.00	50.00	-22.01	-20.22

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

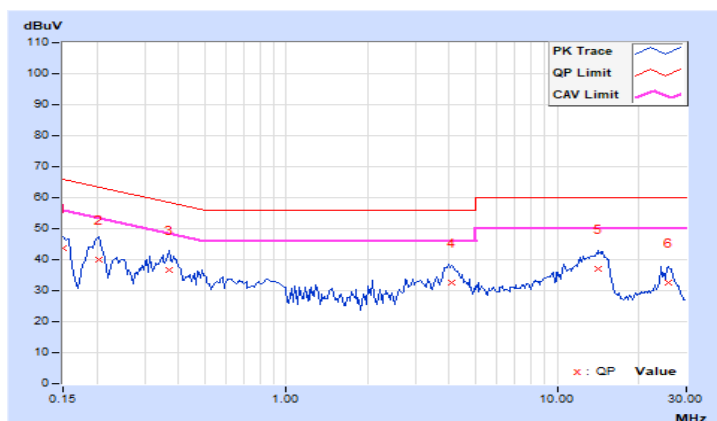


Phase	Neutral (N)	Detector Function	Quasi-Peak (QP) / Average (AV)
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Phase Of Power : Neutral (N)										
No	Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)		Emission Level (dBuV)		Limit (dBuV)		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15000	9.94	33.66	20.26	43.60	30.20	66.00	56.00	-22.40	-25.80
2	0.20469	9.95	30.18	16.01	40.13	25.96	63.42	53.42	-23.29	-27.46
3	0.36875	9.97	26.79	13.72	36.76	23.69	58.53	48.53	-21.77	-24.84
4	4.06250	10.19	22.58	8.87	32.77	19.06	56.00	46.00	-23.23	-26.94
5	14.09766	10.77	26.22	15.64	36.99	26.41	60.00	50.00	-23.01	-23.59
6	25.80469	11.21	21.30	9.95	32.51	21.16	60.00	50.00	-27.49	-28.84

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

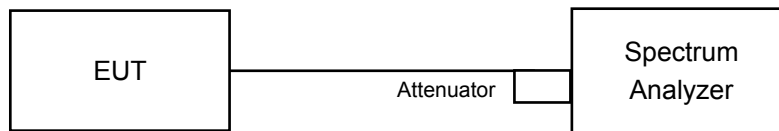


4.3 6dB Bandwidth Measurement

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 lowest, middle and highest channel frequencies individually.

4.3.7 Test Result

802.11b

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

802.11g

Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Minimum Limit (MHz)	Pass / Fail
1	2412	16.10	0.5	Pass
6	2437	15.75	0.5	Pass
11	2462	16.12	0.5	Pass

802.11n (HT20)

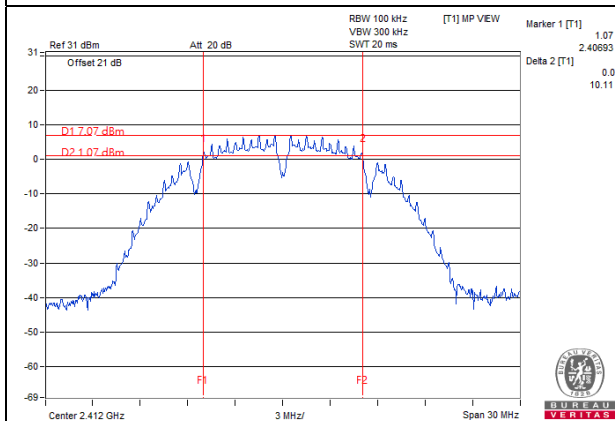
Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Minimum Limit (MHz)	Pass / Fail
1	2412	17.00	0.5	Pass
6	2437	16.35	0.5	Pass
11	2462	17.03	0.5	Pass

802.11n (HT40)

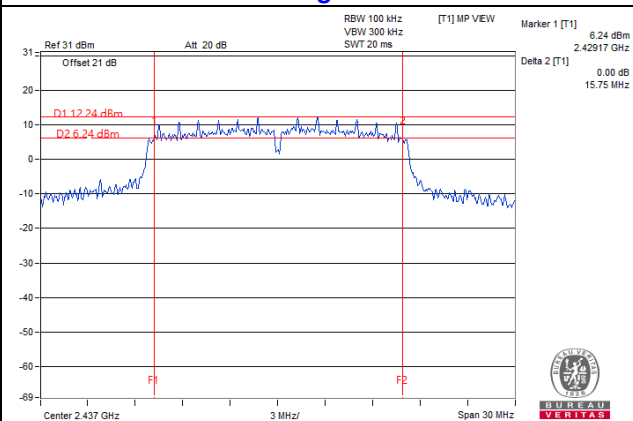
Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Minimum Limit (MHz)	Pass / Fail
3	2422	35.81	0.5	Pass
6	2437	35.68	0.5	Pass
9	2452	35.75	0.5	Pass

Spectrum Plot of Worst Value

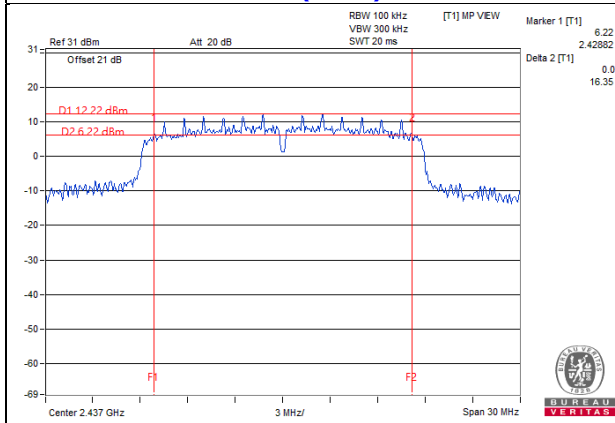
802.11b / CH1



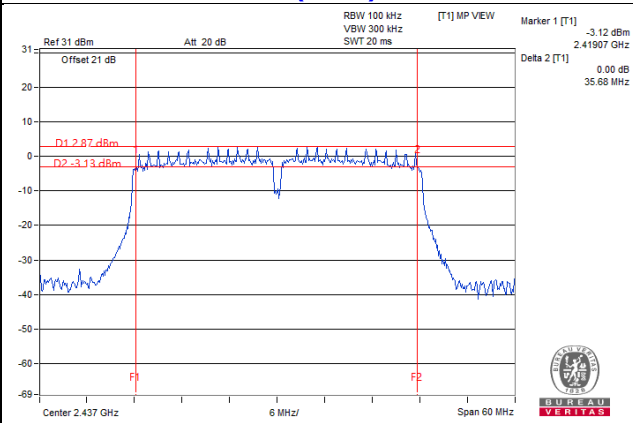
802.11g / CH6



802.11n (HT20) / CH6



802.11n (HT40) / CH6

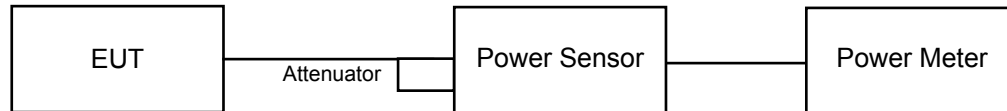


4.4 Conducted Output Power Measurement

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	79.25	18.99	30	Pass
6	2437	262.422	24.19	30	Pass
11	2462	82.035	19.14	30	Pass

802.11g

Channel	Frequency (MHz)	Peak Power (mW)	Peak Power (dBm)	Limit (dBm)	Pass/Fail
1	2412	340.408	25.32	30	Pass
6	2437	516.416	27.13	30	Pass
11	2462	307.61	24.88	30	Pass

802.11n (HT20)

Channel	Frequency (MHz)	Peak Power (mW)	Peak Power (dBm)	Limit (dBm)	Pass/Fail
1	2412	353.183	25.48	30	Pass
6	2437	514.044	27.11	30	Pass
11	2462	330.37	25.19	30	Pass

802.11n (HT40)

Channel	Frequency (MHz)	Peak Power (mW)	Peak Power (dBm)	Limit (dBm)	Pass/Fail
3	2422	185.78	22.69	30	Pass
6	2437	271.019	24.33	30	Pass
9	2452	190.985	22.81	30	Pass

FOR AVERAGE POWER

802.11b

Channel	Frequency (MHz)	Average Power (mW)	Average Power (dBm)
1	2412	53.088	17.25
6	2437	182.39	22.61
11	2462	51.642	17.13

802.11g

Channel	Frequency (MHz)	Average Power (mW)	Average Power (dBm)
1	2412	45.92	16.62
6	2437	189.671	22.78
11	2462	32.659	15.14

802.11n (HT20)

Channel	Frequency (MHz)	Average Power (mW)	Average Power (dBm)
1	2412	44.463	16.48
6	2437	171.791	22.35
11	2462	32.961	15.18

802.11n (HT40)

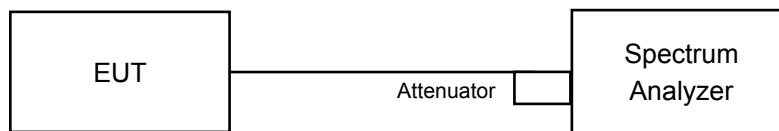
Channel	Frequency (MHz)	Average Power (mW)	Average Power (dBm)
3	2422	26.792	14.28
6	2437	38.815	15.89
9	2452	27.416	14.38

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	-6.58	8	Pass
6	2437	-0.43	8	Pass
11	2462	-5.57	8	Pass

802.11g

Channel	Frequency (MHz)	PSD (dBm/3kHz)	Limit (dBm/3kHz)	Pass /Fail
1	2412	-8.22	8	Pass
6	2437	-2.51	8	Pass
11	2462	-9.64	8	Pass

802.11n (HT20)

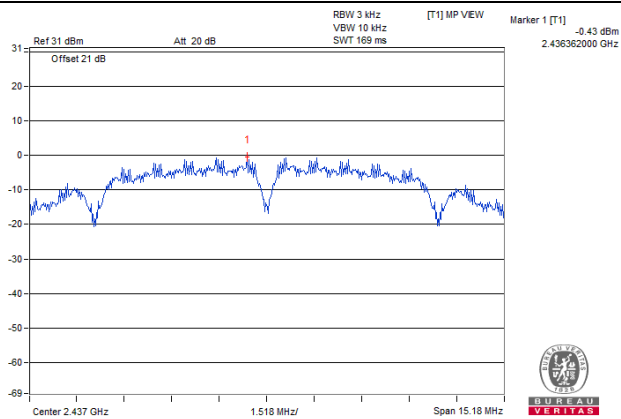
Channel	Frequency (MHz)	PSD (dBm/3kHz)	Limit (dBm/3kHz)	Pass /Fail
1	2412	-8.19	8	Pass
6	2437	-2.12	8	Pass
11	2462	-9.45	8	Pass

802.11n (HT40)

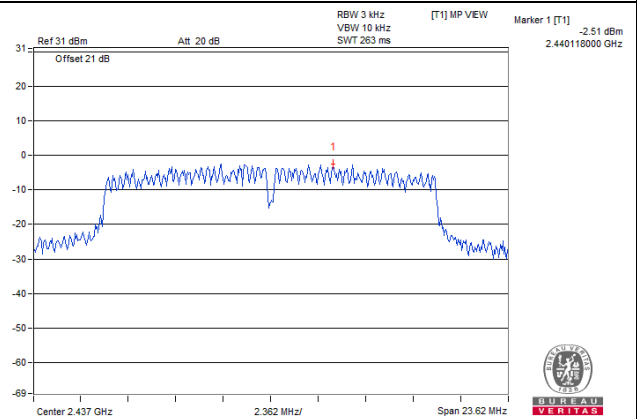
Channel	Frequency (MHz)	PSD (dBm/3kHz)	Limit (dBm/3kHz)	Pass /Fail
3	2422	-13.27	8	Pass
6	2437	-10.42	8	Pass
9	2452	-12.53	8	Pass

Spectrum Plot of Worst Value

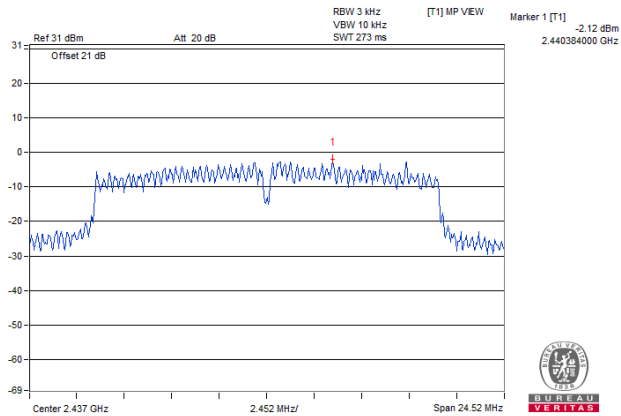
802.11b / CH6



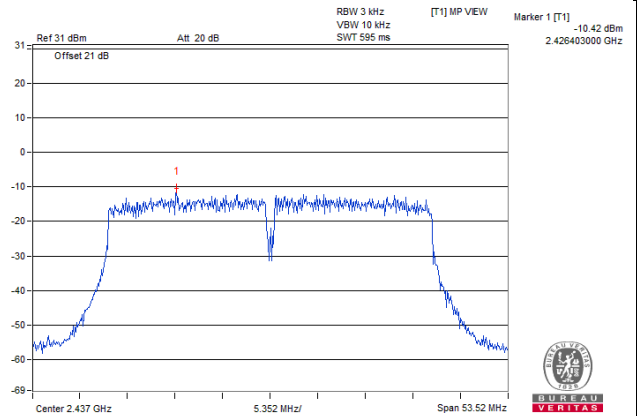
802.11g / CH6



802.11n (HT20) / CH6



802.11n (HT40) / CH6

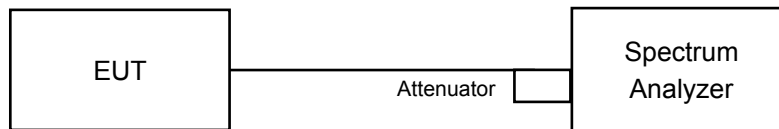


4.6 Conducted Out of Band Emission Measurement

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 $\geq$ 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

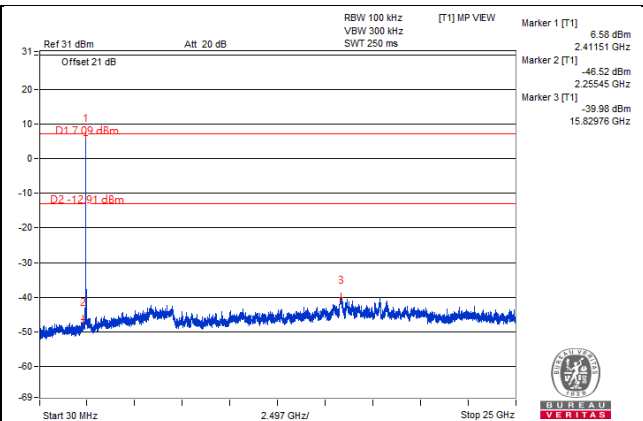
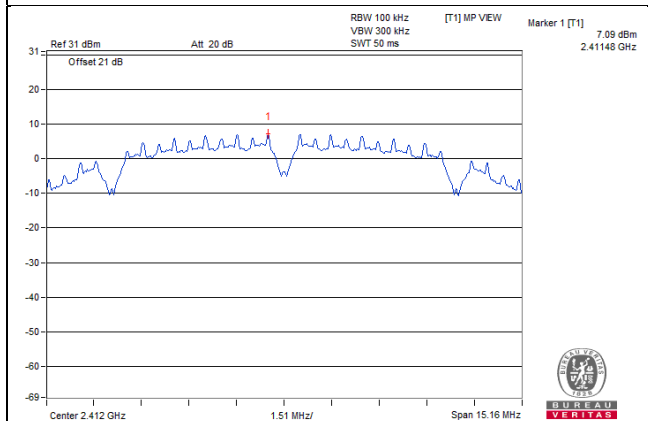
Same as Item 4.3.6

4.6.7 Test Results

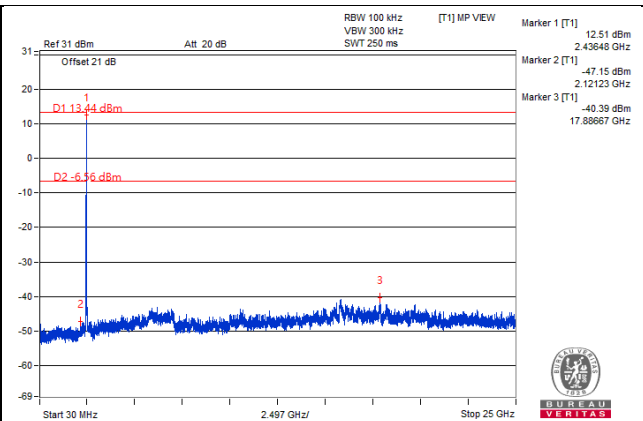
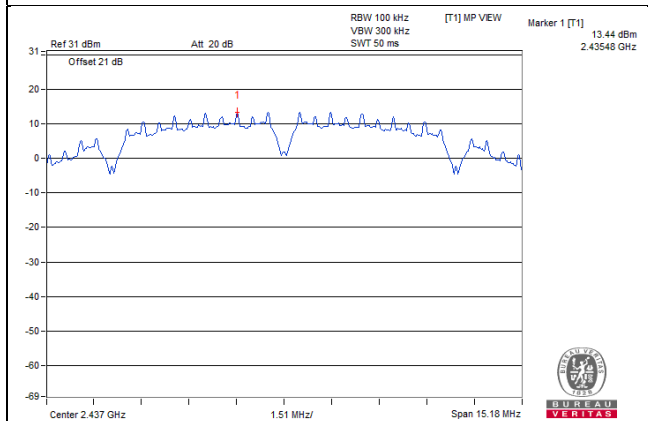
The spectrum plots are attached on the following pages. D1 line indicates the highest level, and D2 line indicates the 20dB offset below D1. It shows compliance with the requirement.

802.11b

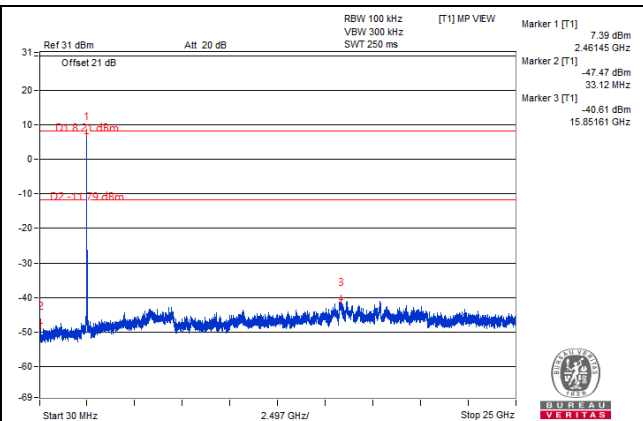
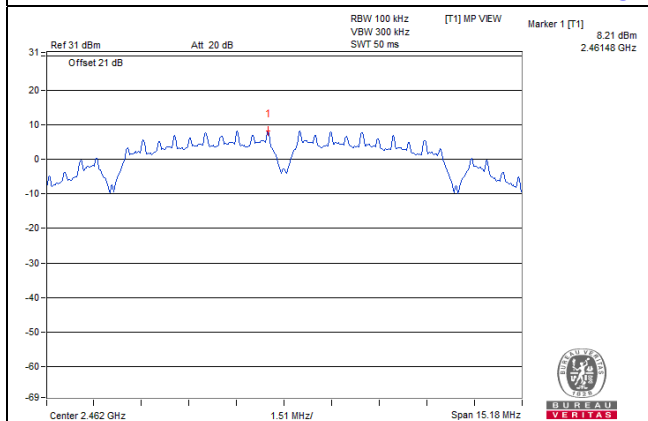
CH 1



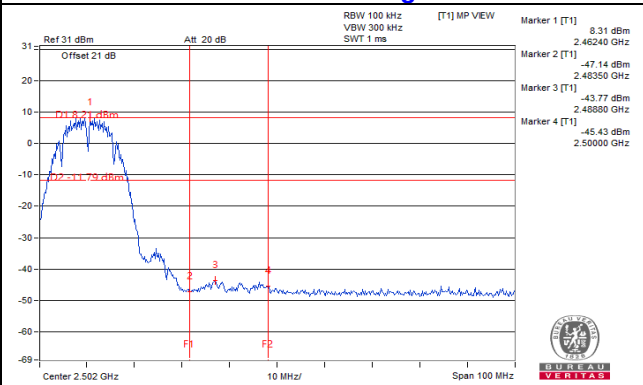
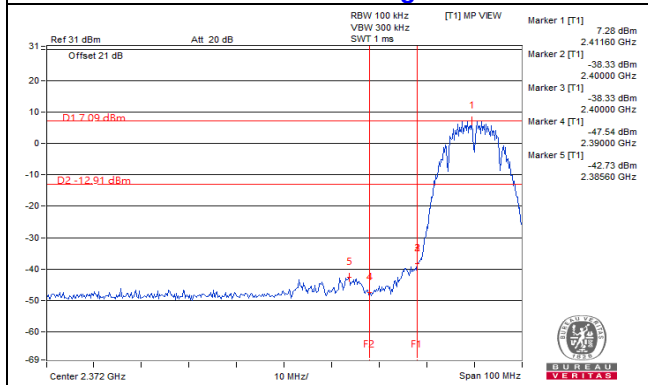
CH 6



CH 11

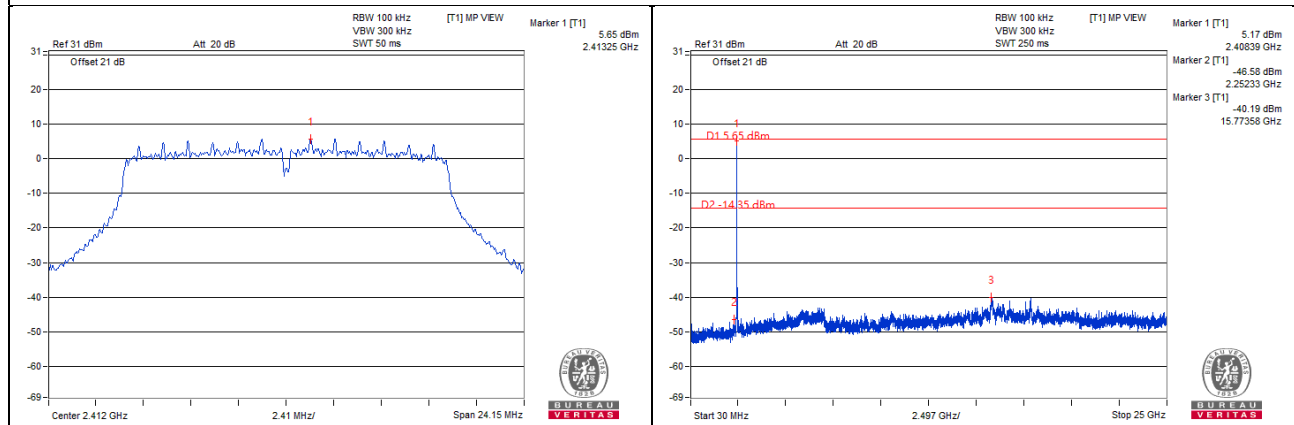


CH 1 Band edge

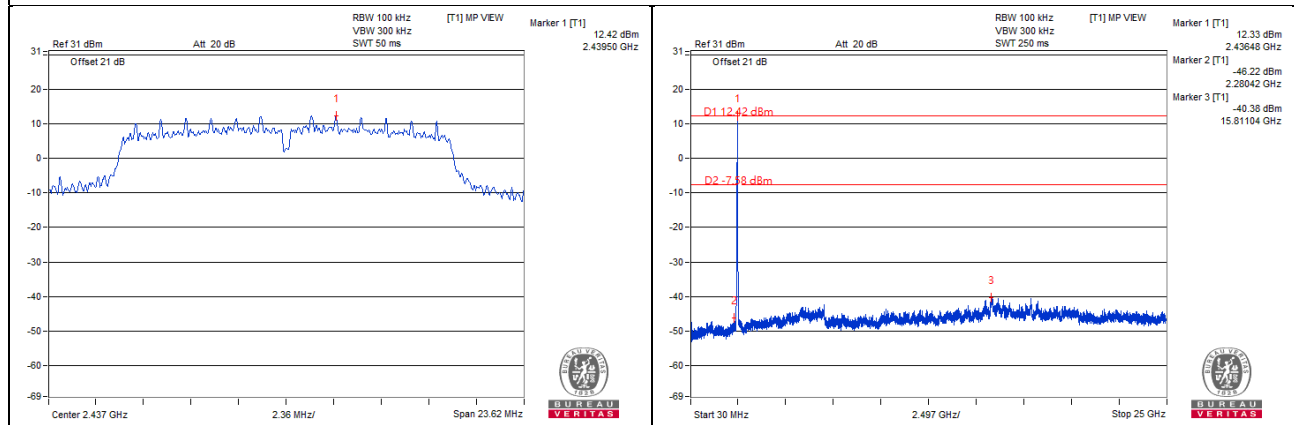


802.11g

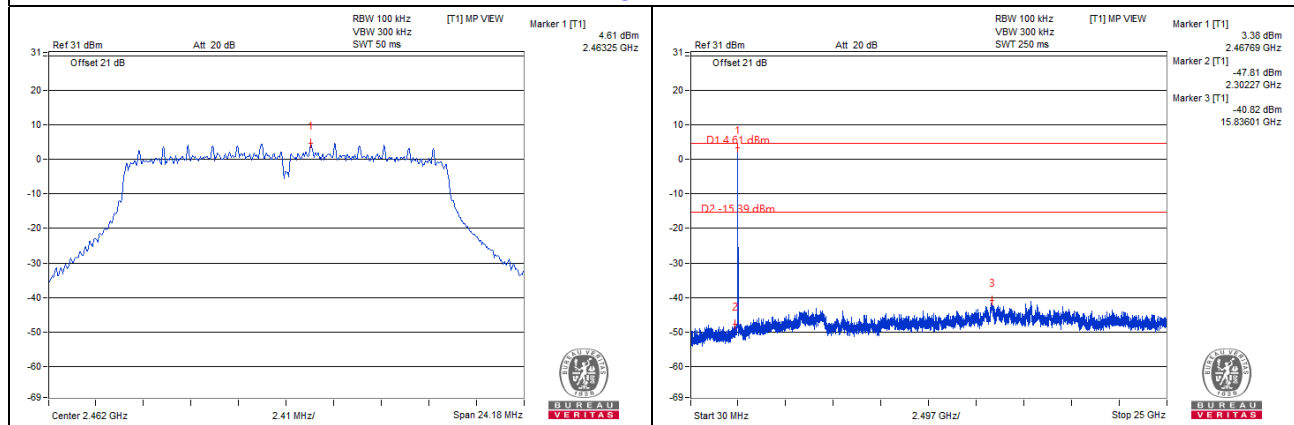
CH 1



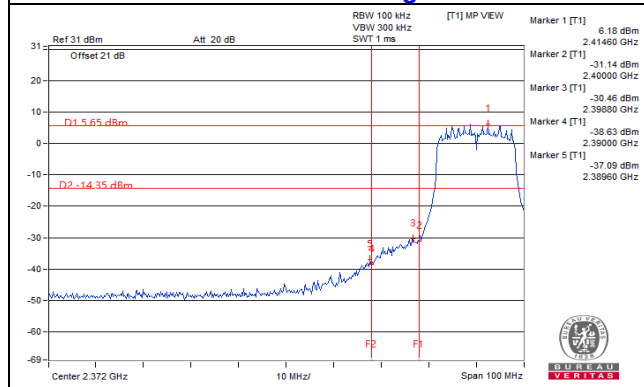
CH 6



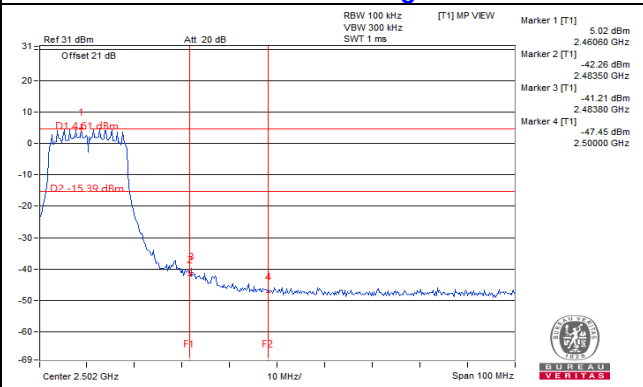
CH 11



CH 1 Band edge

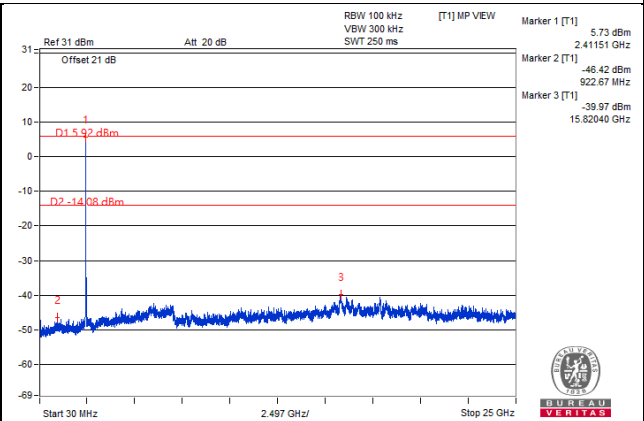
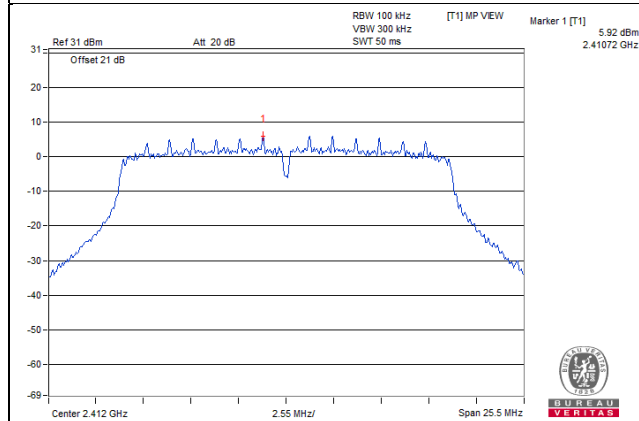


CH 11 Band edge

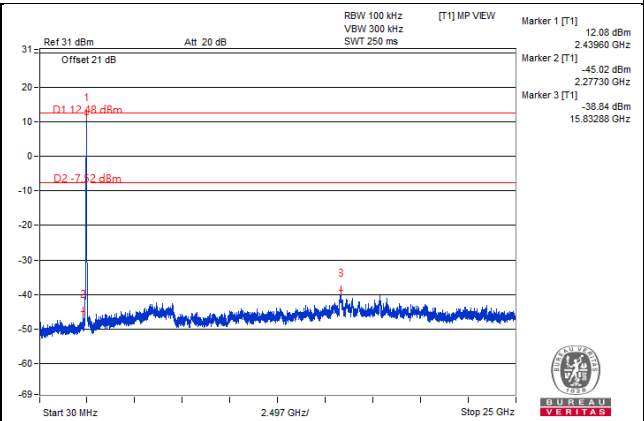
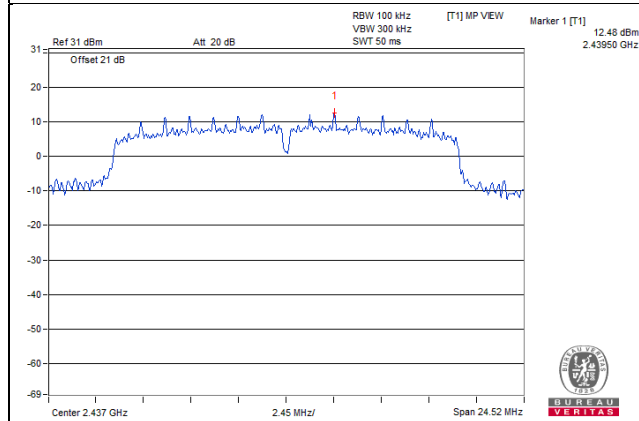


802.11n (HT20)

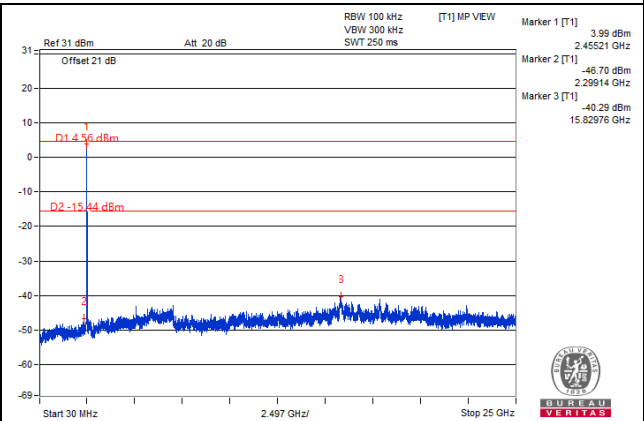
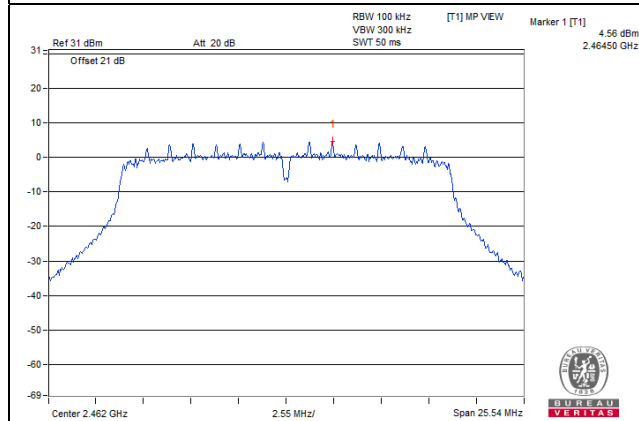
CH 1



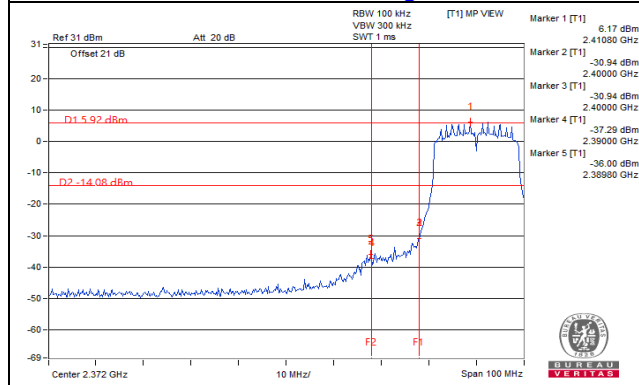
CH 6



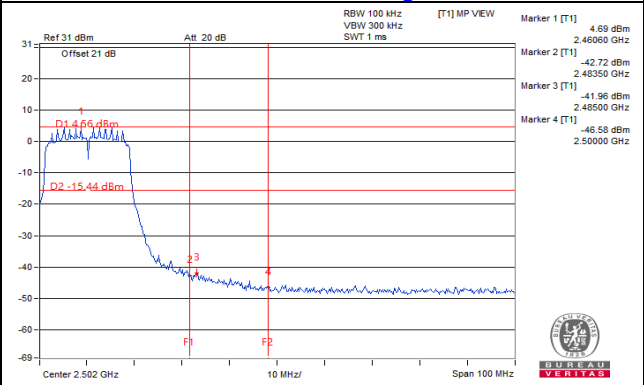
CH 11



CH 1 Band edge

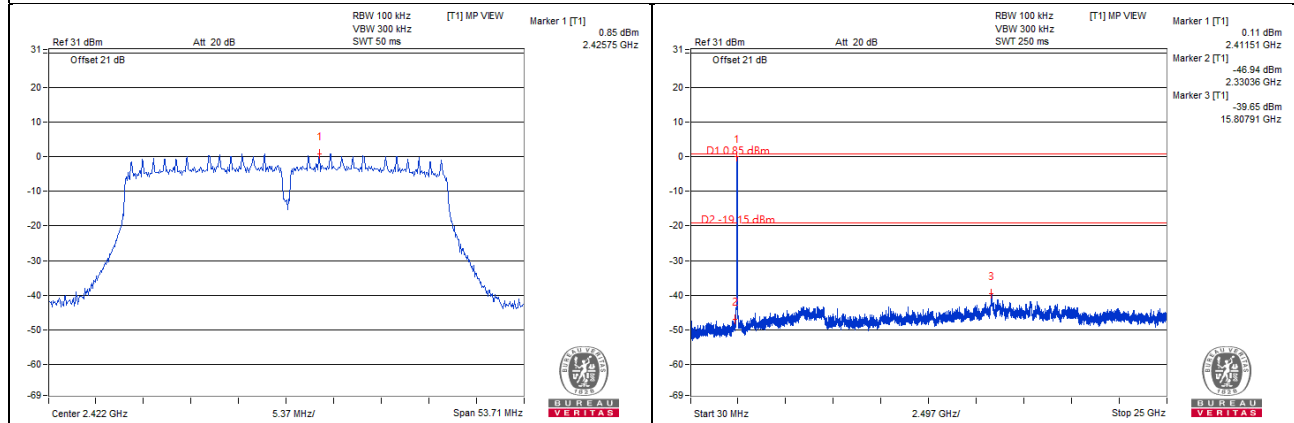


CH 11 Band edge

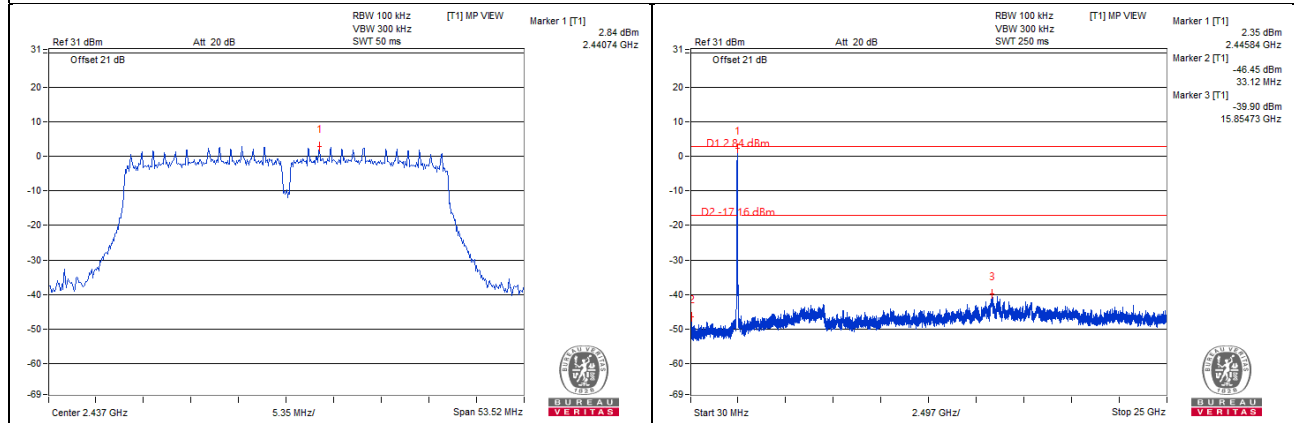


802.11n (HT40)

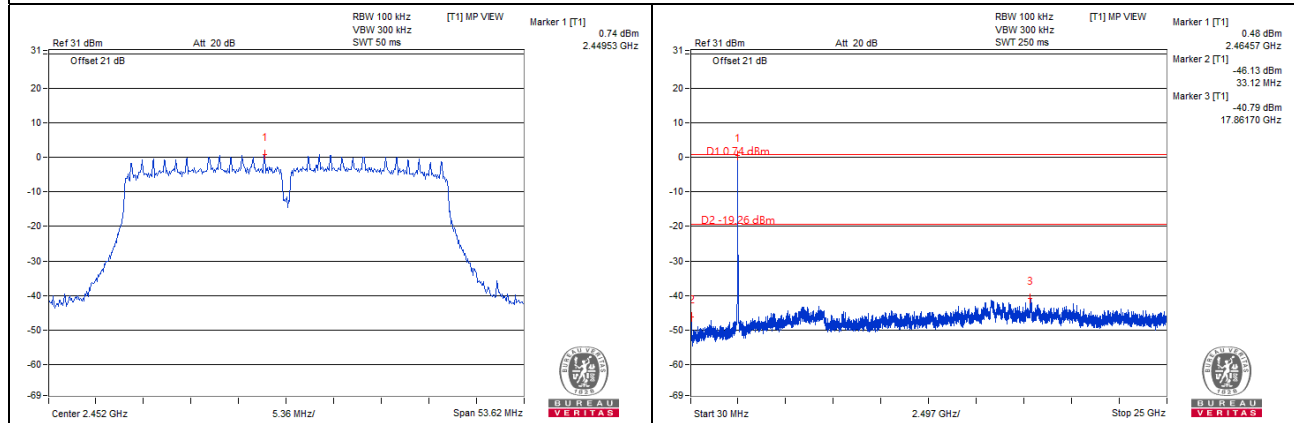
CH 3



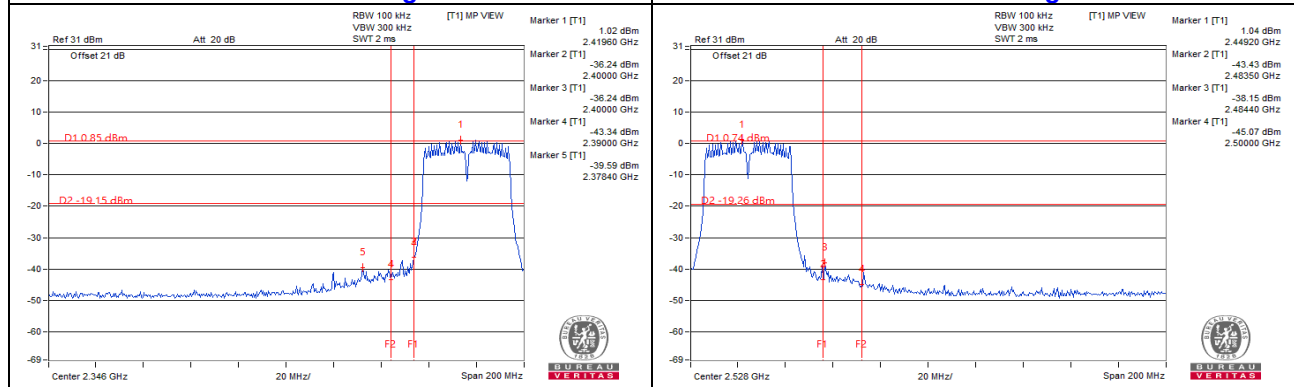
CH 6



CH 9



CH 3 Band edge



5 Pictures of Test Arrangements

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

Appendix – Information of 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.

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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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