

FCC Test Report

Report No.: RFBENL-WTW-P21051124

FCC ID: RYK-WNFQ261ACNIBT

Test Model: WNFQ-261ACNI(BT)

Received Date: May 28, 2021

Test Date: July 10 to 19, 2021

Issued Date: Aug. 25, 2021

Applicant: SparkLAN Communications, Inc.

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

Lab Address: E-2, No.1, Li Hsin 1st Road, Hsinchu Science Park, Hsinchu City 300, Taiwan

Test Location: E-2, No.1, Li Hsin 1st Road, Hsinchu Science Park, Hsinchu City 300, Taiwan

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



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Release Control Record

Issue No.	Description	Date Issued
RFBENL-WTW-P21051124	Original release.	Aug. 25, 2021

1 Certificate of Conformity

Product: 802.11ac/a/b/g/n 2T2R Industrial-graded Wi-Fi / Bluetooth 4.2 Combo M.2 2230 Module

Brand: Sparklan

Test Model: WNFQ-261ACNI(BT)

Sample Status: R&D SAMPLE

Applicant: SparkLAN Communications, Inc.

Test Date: July 10 to 19, 2021

Standards: 47 CFR FCC Part 15, Subpart C (Section 15.247)
ANSI C63.10: 2013

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

Prepared by :  , **Date:** Aug. 25, 2021
Claire Kuan / Specialist

Approved by :  , **Date:** Aug. 25, 2021
Clark Lin / Technical Manager

2 Summary of Test Results

47 CFR FCC Part 15, Subpart C (Section 15.247)			
FCC Clause	Test Item	Result	Remarks
15.207	AC Power Conducted Emission	N/A	Refer to Note 3 below
15.205 / 15.209 / 15.247(d)	Radiated Emissions and Band Edge Measurement	PASS	Meet the requirement of limit. Minimum passing margin is -0.2dB at 4874.00MHz.
15.247(d)	Antenna Port Emission	N/A	Refer to Note 3 below
15.247(a)(2)	6dB bandwidth	N/A	Refer to Note 3 below
15.247(b)	Conducted power	PASS	Meet the requirement of limit.
15.247(e)	Power Spectral Density	N/A	Refer to Note 3 below
15.203	Antenna Requirement	PASS	Antenna connector is i-pex(MHF) not a standard connector.

Note:

1. For 2.4GHz band compliance with rule 15.247(d) of the band-edge items, the test plots were recorded in Annex A. Test Procedures refer to report 4.1.3.
2. Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.
3. Only Radiated Emissions and Conducted power were performed for this addendum. Other test items data refer to original test report.
4. N/A: Not Applicable.

2.1 Measurement Uncertainty

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

Measurement	Frequency	Expanded Uncertainty (k=2) (±)
Conducted emissions	-	2.5 dB
Radiated Emissions up to 1 GHz	9kHz ~ 30MHz	3.1 dB
	30MHz ~ 1GHz	5.5 dB
Radiated Emissions above 1 GHz	1GHz ~ 18GHz	5.1 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

Product	802.11ac/a/b/g/n 2T2R Industrial-graded Wi-Fi / Bluetooth 4.2 Combo M.2 2230 Module
Brand	Sparklan
Test Model	WNFQ-261ACNI(BT)
Status of EUT	R&D SAMPLE
Power Supply Rating	3.3Vdc form host equipment
Modulation Type	CCK, DQPSK, DBPSK for DSSS 64QAM, 16QAM, QPSK, BPSK for OFDM 256QAM for OFDM in 11ac mode
Modulation Technology	DSSS, OFDM
Transfer Rate	802.11b: up to 11Mbps 802.11g: up to 54Mbps 802.11n : up to 300Mbps
Operating Frequency	2.412 ~ 2.472 GHz
Number of Channel	802.11b, 802.11g, 802.11n (HT20), VHT20: 13 802.11n (HT40), VHT40: 9
Output Power	479.026 mW
Antenna Type	Refer to Note
Antenna Connector	Refer to Note
Accessory Device	NA
Data Cable Supplied	NA

Note:

- This report is prepared for FCC Class II permissive change. The difference compared with the Report No.: RF170816E06H design is as the following information:

◆ Added new antennas as below table:

Original										
Ant. Set.	Transmitter Circuit	Brand	Model	Ant. Type	2.4GHz Gain with cable loss (dBi)	5GHz Gain with cable loss (dBi)	2.4GHz Cable Loss (dBi)	5G Cable Loss (dBi)	Connector Type	Cable Length (mm)
1	Chain (0)	WNC	81-EBJ15.005	PIFA	3.00	Band 1&2: 2.56	1.15	Band 1&2: 1.70	IPEX	300
						Band 3: 4.76		Band 3: 1.74		
						Band 4: 4.76		Band 4: 1.79		
	Chain (1)	WNC	81-EBJ15.005	PIFA	3.62	Band 1&2: 3.08	1.15	Band 1&2: 1.70	IPEX	300
						Band 3: 3.31		Band 3: 1.74		
						Band 4: 2.42		Band 4: 1.79		

Ant. Set.	Transmitter Circuit	Brand	Model	Ant. Type	2.4GHz Gain with cable loss (dBi)	5GHz Gain with cable loss (dBi)	2.4GHz Cable Loss (dBi)	5G Cable Loss (dBi)	Connector Type	Cable Length (mm)
2	Chain (0)	INPAQ	DAM-I6-H-DB-800-10-17	Dipole	1.13	Band 1&2: 1.33	NA	NA	SMA RP Plug	900
						Band 3: - 0.63				
						Band 4: - 0.97				
	Chain (1)	INPAQ	DAM-I6-H-DB-800-10-17	Dipole	1.29	Band 1&2: 1.94	NA	NA	SMA RP Plug	900
						Band 3: - 0.49				
						Band 4: - 0.93				
Ant. Set.	Transmitter Circuit	Brand	Model	Ant. Type	2.4GHz Gain with cable loss (dBi)		5GHz Gain with cable loss (dBi)		Connector Type	Cable Length (mm)
3	Chain (0) Chain (1)	Sparklan	AD-301N	Dipole	4.4		Band 1&2: 5.2 Band 3&4: 5.8		IPEX MHF 4 at modular side & RP-SMA (M) at antenna side	150
4	Chain (0) Chain (1)	Sparklan	AD-103AG	Dipole	2.02		Band 1&2: 1.93 Band 3&4: 2.03			150
5	Chain (0) Chain (1)	Sparklan	AD-305N	Dipole	5.0		5.0			150
6	Chain (0) Chain (1)	Sparklan	AD-303N	Dipole	3.0		3.0			150
7	Chain (0) Chain (1)	Sparklan	AD-302N	Dipole	3.0		2.0			150
Newly										
Ant. Set.	Transmitter Circuit	Brand	Model	Ant. Type	2.4GHz Gain with cable loss (dBi)		5GHz Gain with cable loss (dBi)		Connector Type	Cable Length (mm)
8	Chain (0) Chain (1)	SANAV	GEPH-023 401GEPH16-022G000000032-001	PCB	4.78		4.73		IPEX4L MHF	320

2. According to above conditions, only Radiated Emissions and Conducted power test items need to be performed. And all data were verified to meet the requirements.

3. There are Bluetooth technology and WLAN technology used for the EUT.

4. The EUT incorporates a MIMO function.

MODULATION MODE	DATA RATE (MCS)	TX & RX CONFIGURATION	
802.11b	1 ~ 11Mbps	2TX	2RX
802.11g	6 ~ 54Mbps	2TX	2RX
802.11n (HT20)	MCS 0~7	2TX	2RX
	MCS 8~15	2TX	2RX
802.11n (HT40)	MCS 0~7	2TX	2RX
	MCS 8~15	2TX	2RX
VHT20	MCS 0~8, Nss=1	2TX	2RX
	MCS 0~8, Nss=2	2TX	2RX
VHT40	MCS 0~9, Nss=1	2TX	2RX
	MCS 0~9, Nss=2	2TX	2RX

Note: The modulation and bandwidth are similar for 802.11n mode for 20MHz (40MHz) and 802.11ac mode for 20MHz (40MHz), therefore investigated worst case to representative mode in test report. (Final test mode refer section 3.2.1)

5. The EUT was pre-tested under the following modes:

Test Mode	Data rate
Mode A	400ns GI
Mode B	800ns GI

From the above modes, the worst case was found in **Mode B**. Therefore only the test data of the mode was recorded in this report.

6. WLAN/BT coexistence mode:

◆ 2x2 WLAN + BT:

➤ 5GHz 802.11a/an (or 11ac) transmit concurrent with BT.

➤ 2.4GHz: timely shared coexistence.

7. The emission (conducted & radiated emission) of the simultaneous operation (WiFi <5GHz> & Bluetooth) have been evaluated and no non-compliance found. The detail combinations of transmitters / frequencies / modes as below table

Mode	Available Channel	Tested Channel	Modulation Technology
5 GHz (802.11ac (VHT20))	36 to 165	149	OFDM
+ Bluetooth (LE)	0 to 39	0	GFSK

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

9. The above Antenna information is declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications, the laboratory shall not be held responsible.

3.2 Description of Test Modes

13 channels are provided for 802.11b, 802.11g, 802.11n (HT20) and VHT20:

Channel	Frequency	Channel	Frequency
1	2412MHz	8	2447MHz
2	2417MHz	9	2452MHz
3	2422MHz	10	2457MHz
4	2427MHz	11	2462MHz
5	2432MHz	12	2467MHz
6	2437MHz	13	2472MHz
7	2442MHz		

9 channels are provided for 802.11n (HT40) and VHT40:

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

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

Radiated Emission Test (Above 1GHz):

- ☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
- ☒ Following channel(s) was (were) selected for the final test as listed below.

MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
802.11b	1 to 13	1, 6, 11, 12, 13	DSSS	DBPSK	1
802.11g	1 to 13	1, 2, 6, 10, 11, 12, 13	OFDM	BPSK	6
VHT20	1 to 13	1, 2, 6, 10, 11, 12, 13	OFDM	BPSK	6.5
VHT40	3 to 11	3, 6, 9, 10, 11	OFDM	BPSK	13.5

Radiated Emission Test (Below 1GHz):

- ☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
- ☒ Following channel(s) was (were) selected for the final test as listed below.

MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
802.11g	1 to 13	6	OFDM	BPSK	6

Antenna Port Conducted Measurement:

- ☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
- ☒ Following channel(s) was (were) selected for the final test as listed below.

MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
802.11b	1 to 13	1, 6, 11, 12, 13	DSSS	DBPSK	1
802.11g	1 to 13	1, 2, 6, 10, 11, 12, 13	OFDM	BPSK	6
VHT20	1 to 13	1, 2, 6, 10, 11, 12, 13	OFDM	BPSK	6.5
VHT40	3 to 11	3, 4, 6, 8, 9, 10, 11	OFDM	BPSK	13.5

Test Condition:

APPLICABLE TO	ENVIRONMENTAL CONDITIONS	Input Power (System)	Tested By
RE $\geq$ 1G	25deg. C, 66%RH	120Vac, 60Hz	Carter Lin
	25deg. C, 66%RH		Tom Yang
RE<1G	25deg. C, 65%RH	120Vac, 60Hz	Carter Lin
APCM	25deg. C, 60%RH	120Vac, 60Hz	Eric Peng

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.

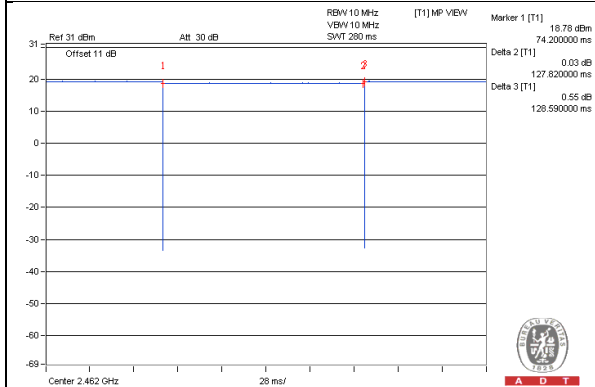
802.11b: Duty cycle = 127.82 ms/128.59 ms = 0.994

802.11g: Duty cycle = 21.45 ms/21.587 ms = 0.994

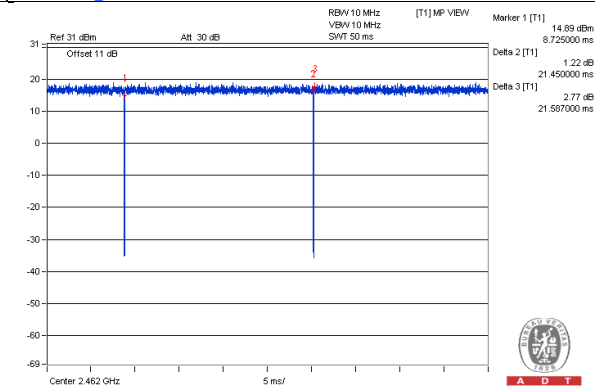
VHT20: Duty cycle = 19.787 ms/20.012 ms = 0.989

VHT40: Duty cycle = 9.5. ms/9.725 ms = 0.977, Duty factor = $10 * \log(1/0.977) = 0.1$

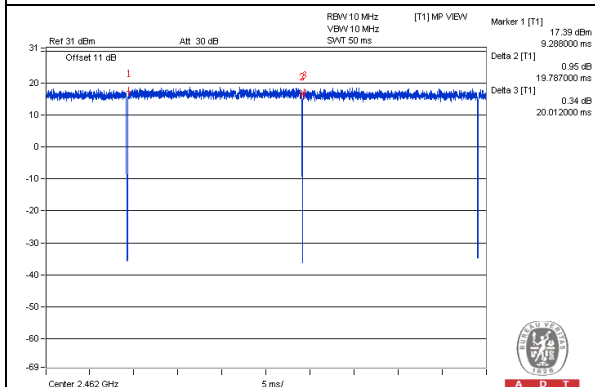
802.11b



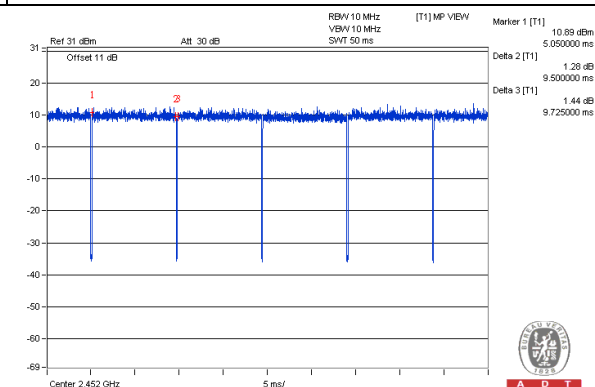
802.11g



VHT20



VHT40



3.4 Description of Support Units

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

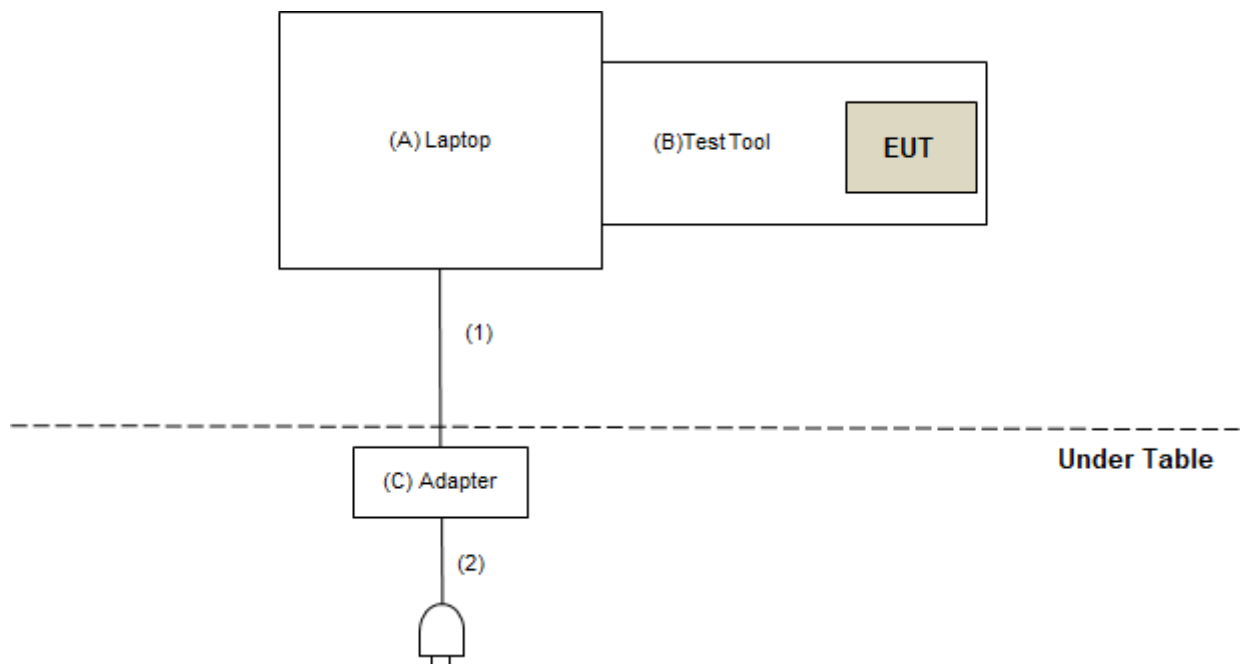
ID	Product	Brand	Model No.	Serial No	FCC ID	Remarks
A.	Laptop	Dell	E5430	NA	NA	Provided by Lab
B.	Test Tool	Qualcomm Atheros	NA	NA	NA	Supplied by client
C.	Adapter	Dell	FA65NE0-00	NA	NA	Provided by Lab

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.	DC Cable	1	1.8	No	0	Provided by Lab
2.	AC Cable	1	1	No	0	Provided by Lab

3.4.1 Configuration of System under Test



3.5 General Description of Applied Standards and References

The EUT is a RF Product. According to the specifications of the manufacturer, it must comply with the requirements of the following standards and references:

Test Standard:

FCC Part 15, Subpart C (15.247)

ANSI C63.10-2013

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

References Test Guidance:

KDB 558074 D01 15.247 Meas Guidance v05r02

KDB 662911 D01 Multiple Transmitter Output v02r01

All test items have been performed as a reference to the above KDB test guidance.

4 Test Types and Results

4.1 Radiated Emission and Bandedge Measurement

4.1.1 Limits of Radiated Emission and Bandedge Measurement

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

Frequencies (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
0.009 ~ 0.490	2400/F(kHz)	300
0.490 ~ 1.705	24000/F(kHz)	30
1.705 ~ 30.0	30	30
30 ~ 88	100	3
88 ~ 216	150	3
216 ~ 960	200	3
Above 960	500	3

NOTE:

1. The lower limit shall apply at the transition frequencies.
2. Emission level (dBuV/m) = 20 log Emission level (uV/m).
3. For frequencies above 1000MHz, the field strength limits are based on average detector, however, the peak field strength of any emission shall not exceed the maximum permitted average limits, specified above by more than 20dB under any condition of modulation.

4.1.2 Test Instruments

For Radiated emission & Bandedge test:

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
Test Receiver Agilent	N9038A	MY51210202	Dec. 01, 2020	Nov. 30, 2021
Pre-Amplifier EMCI	EMC001340	980142	May 24, 2021	May 23, 2022
Loop Antenna Electro-Metrics	EM-6879	264	Mar. 05, 2021	Mar. 04, 2022
RF Cable	5D-FB	LOOPCAB-001	Jan. 07, 2021	Jan. 06, 2022
RF Cable	5D-FB	LOOPCAB-002	Jan. 07, 2021	Jan. 06, 2022
Pre-Amplifier EMCI	EMC330N	980701	Mar. 10, 2021	Mar. 09, 2022
Trilog Broadband Antenna SCHWARZBECK	VULB 9168	9168-406	Nov. 06, 2020	Nov. 05, 2021
RF Cable	8D	966-4-1	Mar. 17, 2021	Mar. 16, 2022
RF Cable	8D	966-4-2	Mar. 17, 2021	Mar. 16, 2022
RF Cable	8D	966-4-3	Mar. 17, 2021	Mar. 16, 2022
Fixed attenuator Mini-Circuits	UNAT-5+	PAD-ATT5-03	Jan. 11, 2021	Jan. 10, 2022
Horn_Antenna SCHWARZBECK	BBHA 9120D	9120D-783	Nov. 22, 2020	Nov. 21, 2021
Pre-Amplifier EMCI	EMC 12630 SE	980638	Apr. 07, 2021	Apr. 06, 2022
RF Cable	EMC104-SM-SM-1200	160922	Dec. 25, 2020	Dec. 24, 2021
RF Cable	EMC104-SM-SM-2000	180502	Apr. 26, 2021	Apr. 25, 2022
RF Cable	EMC104-SM-SM-6000	180418	Apr. 26, 2021	Apr. 25, 2022
Pre-Amplifier EMCI	EMC184045SE	980387	Jan. 11, 2021	Jan. 10, 2022
Horn_Antenna SCHWARZBECK	BBHA 9170	BBHA9170519	Nov. 22, 2020	Nov. 21, 2021
RF Cable	EMC102-KM-KM-1200	160924	Jan. 11, 2021	Jan. 10, 2022
RF Cable	EMC-KM-KM-4000	200214	Mar. 10, 2021	Mar. 09, 2022
Software	ADT_Radiated_V8.7.08	NA	NA	NA
Boresight Antenna Tower & Turn Table Max-Full	MF-7802BS	MF780208530	NA	NA

Note:

1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. The test was performed in 966 Chamber No. 4.
3. Tested Date: July 10 to 16, 2021

For other test

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
Power meter Anritsu	ML2495A	1529002	June 21, 2021	June 20, 2022
Power sensor Anritsu	MA2411B	1339443	May 31, 2021	May 30, 2022
10dB Attenuator Woken	MDCS18N-10	MDCS18N-10-01	Apr. 13, 2021	Apr. 12, 2022
Software	ADT_RF Test Software V6.6.5.4	NA	NA	NA

- NOTE:**
1. The test was performed in Oven room 2.
 2. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
 3. Tested Date: July 19, 2021

4.1.3 Test Procedures

For Radiated emission below 30MHz

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter chamber room. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. Parallel, perpendicular, and ground-parallel orientations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to Quasi-Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.

NOTE:

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

For Radiated emission above 30MHz

- a. The EUT was placed on the top of a rotating table 0.8 meters (for 30MHz ~ 1GHz) / 1.5 meters (for above 1GHz) above the ground at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. The height of antenna is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to quasi-peak detect function and specified bandwidth with maximum hold mode when the test frequency is below 1 GHz.
- f. The test-receiver system was set to peak and average detects function and specified bandwidth with maximum hold mode when the test frequency is above 1 GHz. If the peak reading value also meets average limit, measurement with the average detector is unnecessary.

Note:

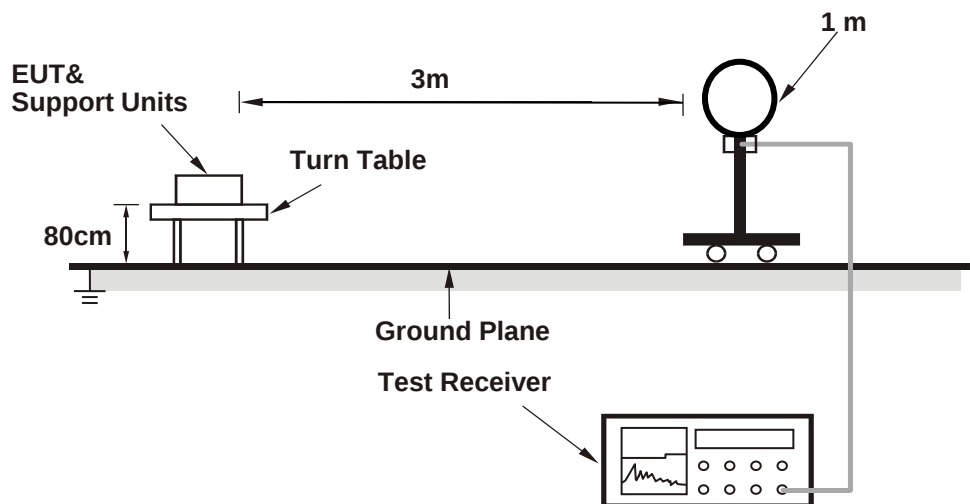
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection (QP) at frequency below 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz for Peak detection (PK) at frequency above 1GHz.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

4.1.4 Deviation from Test Standard

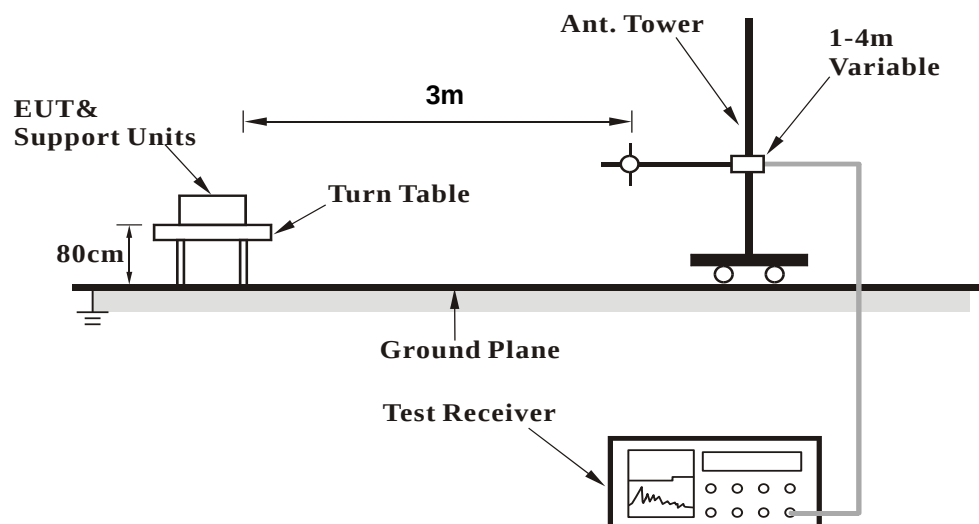
No deviation.

4.1.5 Test Setup

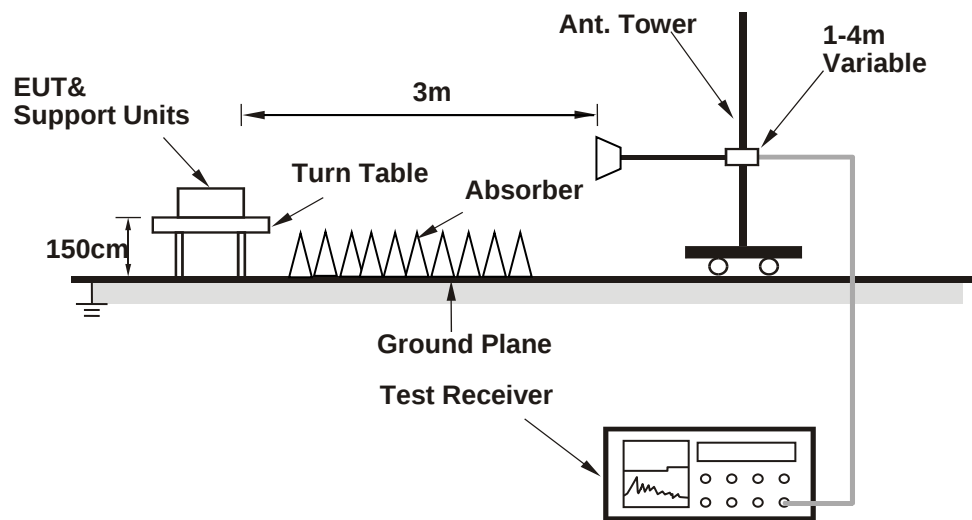
For Radiated emission below 30MHz



For Radiated emission 30MHz to 1GHz



For Radiated emission above 1GHz



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

4.1.6 EUT Operating Conditions

- Connected the EUT with the Laptop which is placed on remote site.
- Controlling software (QDART 1.0.38) has been activated to set the EUT under transmission condition continuously at specific channel frequency.

4.1.7 Test Results

Above 1GHz Data :

RF Mode	TX 802.11b	Channel	CH 1 : 2412 MHz
Frequency Range	1GHz ~ 25GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2388.40	57.7 PK	74.0	-16.3	1.98 H	15	62.1	-4.4
2	2388.40	45.0 AV	54.0	-9.0	1.98 H	15	49.4	-4.4
3	*2412.00	111.3 PK			1.98 H	15	115.7	-4.4
4	*2412.00	108.9 AV			1.98 H	15	113.3	-4.4
5	4824.00	53.4 PK	74.0	-20.6	3.05 H	234	53.3	0.1
6	4824.00	53.2 AV	54.0	-0.8	3.05 H	234	53.1	0.1
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (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	2.57 V	49	61.3	-4.5
2	2390.00	44.9 AV	54.0	-9.1	2.57 V	49	49.4	-4.5
3	*2412.00	110.9 PK			2.57 V	49	115.3	-4.4
4	*2412.00	108.5 AV			2.57 V	49	112.9	-4.4
5	4824.00	51.5 PK	74.0	-22.5	1.33 V	266	51.4	0.1
6	4824.00	49.4 AV	54.0	-4.6	1.33 V	266	49.3	0.1

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.

RF Mode	TX 802.11b	Channel	CH 6 : 2437 MHz
Frequency Range	1GHz ~ 25GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2390.00	50.6 PK	74.0	-23.4	1.96 H	30	55.1	-4.5
2	2390.00	40.1 AV	54.0	-13.9	1.96 H	30	44.6	-4.5
3	*2437.00	111.9 PK			1.96 H	30	116.3	-4.4
4	*2437.00	109.5 AV			1.96 H	30	113.9	-4.4
5	2483.50	50.3 PK	74.0	-23.7	1.96 H	30	54.8	-4.5
6	2483.50	40.7 AV	54.0	-13.3	1.96 H	30	45.2	-4.5
7	4874.00	54.7 PK	74.0	-19.3	3.12 H	253	54.6	0.1
8	4874.00	53.8 AV	54.0	-0.2	3.12 H	253	53.7	0.1
9	7311.00	42.0 PK	74.0	-32.0	1.49 H	324	35.7	6.3
10	7311.00	29.8 AV	54.0	-24.2	1.49 H	324	23.5	6.3
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2390.00	50.4 PK	74.0	-23.6	2.66 V	59	54.9	-4.5
2	2390.00	39.7 AV	54.0	-14.3	2.66 V	59	44.2	-4.5
3	*2437.00	110.4 PK			2.66 V	59	114.8	-4.4
4	*2437.00	108.5 AV			2.66 V	59	112.9	-4.4
5	2483.50	50.0 PK	74.0	-24.0	2.66 V	59	54.5	-4.5
6	2483.50	39.6 AV	54.0	-14.4	2.66 V	59	44.1	-4.5
7	4874.00	51.5 PK	74.0	-22.5	1.36 V	249	51.4	0.1
8	4874.00	50.2 AV	54.0	-3.8	1.36 V	249	50.1	0.1
9	7311.00	44.3 PK	74.0	-29.7	1.74 V	68	38.0	6.3
10	7311.00	33.9 AV	54.0	-20.1	1.74 V	68	27.6	6.3

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.

RF Mode	TX 802.11b	Channel	CH 11 : 2462 MHz
Frequency Range	1GHz ~ 25GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2462.00	111.7 PK			1.91 H	13	116.1	-4.4
2	*2462.00	109.3 AV			1.91 H	13	113.7	-4.4
3	2483.50	57.6 PK	74.0	-16.4	1.91 H	13	62.1	-4.5
4	2483.50	46.1 AV	54.0	-7.9	1.91 H	13	50.6	-4.5
5	4924.00	53.4 PK	74.0	-20.6	3.10 H	248	53.1	0.3
6	4924.00	53.0 AV	54.0	-1.0	3.10 H	248	52.7	0.3
7	7386.00	42.0 PK	74.0	-32.0	1.51 H	311	35.4	6.6
8	7386.00	29.6 AV	54.0	-24.4	1.51 H	311	23.0	6.6
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2462.00	110.6 PK			2.72 V	53	115.0	-4.4
2	*2462.00	108.3 AV			2.72 V	53	112.7	-4.4
3	2483.50	56.3 PK	74.0	-17.7	2.72 V	53	60.8	-4.5
4	2483.50	44.5 AV	54.0	-9.5	2.72 V	53	49.0	-4.5
5	4924.00	51.1 PK	74.0	-22.9	1.38 V	264	50.8	0.3
6	4924.00	49.6 AV	54.0	-4.4	1.38 V	264	49.3	0.3
7	7386.00	44.5 PK	74.0	-29.5	1.72 V	63	37.9	6.6
8	7386.00	33.8 AV	54.0	-20.2	1.72 V	63	27.2	6.6

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.

RF Mode	TX 802.11b	Channel	CH 12 : 2467 MHz
Frequency Range	1GHz ~ 25GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2467.00	108.1 PK			2.19 H	354	112.5	-4.4
2	*2467.00	105.9 AV			2.19 H	354	110.3	-4.4
3	2489.14	56.8 PK	74.0	-17.2	2.19 H	354	61.3	-4.5
4	2489.14	45.7 AV	54.0	-8.3	2.19 H	354	50.2	-4.5
5	4934.00	49.1 PK	74.0	-24.9	3.08 H	258	48.7	0.4
6	4934.00	48.6 AV	54.0	-5.4	3.08 H	258	48.2	0.4
7	7401.00	41.5 PK	74.0	-32.5	1.48 H	308	34.8	6.7
8	7401.00	29.3 AV	54.0	-24.7	1.48 H	308	22.6	6.7
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2467.00	107.5 PK			1.27 V	12	111.9	-4.4
2	*2467.00	103.8 AV			1.27 V	12	108.2	-4.4
3	2495.26	55.2 PK	74.0	-18.8	1.27 V	12	59.7	-4.5
4	2495.26	44.5 AV	54.0	-9.5	1.27 V	12	49.0	-4.5
5	4934.00	45.6 PK	74.0	-28.4	1.38 V	249	45.2	0.4
6	4934.00	44.3 AV	54.0	-9.7	1.38 V	249	43.9	0.4
7	7401.00	41.2 PK	74.0	-32.8	1.73 V	68	34.5	6.7
8	7401.00	28.8 AV	54.0	-25.2	1.73 V	68	22.1	6.7

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency.

RF Mode	TX 802.11b	Channel	CH 13 : 2472 MHz
Frequency Range	1GHz ~ 25GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2472.00	103.2 PK			2.17 H	352	107.6	-4.4
2	*2472.00	100.6 AV			2.17 H	352	105.0	-4.4
3	2483.50	56.3 PK	74.0	-17.7	2.17 H	352	60.8	-4.5
4	2483.50	46.9 AV	54.0	-7.1	2.17 H	352	51.4	-4.5
5	4944.00	45.7 PK	74.0	-28.3	3.13 H	266	45.2	0.5
6	4944.00	43.4 AV	54.0	-10.6	3.13 H	266	42.9	0.5
7	7416.00	41.2 PK	74.0	-32.8	1.48 H	294	34.5	6.7
8	7416.00	28.9 AV	54.0	-25.1	1.48 H	294	22.2	6.7
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2472.00	100.3 PK			1.27 V	20	104.7	-4.4
2	*2472.00	97.4 AV			1.27 V	20	101.8	-4.4
3	2483.50	54.8 PK	74.0	-19.2	1.27 V	20	59.3	-4.5
4	2483.50	45.7 AV	54.0	-8.3	1.27 V	20	50.2	-4.5
5	4944.00	40.1 PK	74.0	-33.9	1.37 V	249	39.6	0.5
6	4944.00	38.7 AV	54.0	-15.3	1.37 V	249	38.2	0.5
7	7416.00	41.0 PK	74.0	-33.0	1.69 V	63	34.3	6.7
8	7416.00	28.7 AV	54.0	-25.3	1.69 V	63	22.0	6.7

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency.

RF Mode	TX 802.11g	Channel	CH 1 : 2412 MHz
Frequency Range	1GHz ~ 25GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (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	58.3 PK	74.0	-15.7	1.99 H	12	62.8	-4.5
2	2390.00	46.1 AV	54.0	-7.9	1.99 H	12	50.6	-4.5
3	*2412.00	109.8 PK			1.99 H	12	114.2	-4.4
4	*2412.00	99.7 AV			1.99 H	12	104.1	-4.4
5	4824.00	46.1 PK	74.0	-27.9	3.01 H	264	46.0	0.1
6	4824.00	35.6 AV	54.0	-18.4	3.01 H	264	35.5	0.1
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (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	57.4 PK	74.0	-16.6	2.84 V	47	61.9	-4.5
2	2390.00	46.0 AV	54.0	-8.0	2.84 V	47	50.5	-4.5
3	*2412.00	107.4 PK			2.84 V	47	111.8	-4.4
4	*2412.00	97.5 AV			2.84 V	47	101.9	-4.4
5	4824.00	41.8 PK	74.0	-32.2	1.40 V	253	41.7	0.1
6	4824.00	30.3 AV	54.0	-23.7	1.40 V	253	30.2	0.1

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.

RF Mode	TX 802.11g	Channel	CH 2 : 2417 MHz
Frequency Range	1GHz ~ 25GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2390.00	59.0 PK	74.0	-15.0	2.00 H	14	63.5	-4.5
2	2390.00	47.4 AV	54.0	-6.6	2.00 H	14	51.9	-4.5
3	*2417.00	115.1 PK			2.00 H	14	119.5	-4.4
4	*2417.00	104.7 AV			2.00 H	14	109.1	-4.4
5	4834.00	51.9 PK	74.0	-22.1	2.94 H	264	51.8	0.1
6	4834.00	41.0 AV	54.0	-13.0	2.94 H	264	40.9	0.1
7	7251.00	41.7 PK	74.0	-32.3	1.53 H	316	35.5	6.2
8	7251.00	29.6 AV	54.0	-24.4	1.53 H	316	23.4	6.2
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (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	59.8 PK	74.0	-14.2	2.74 V	49	64.3	-4.5
2	2390.00	47.2 AV	54.0	-6.8	2.74 V	49	51.7	-4.5
3	*2417.00	111.6 PK			2.74 V	49	116.0	-4.4
4	*2417.00	102.2 AV			2.74 V	49	106.6	-4.4
5	4834.00	47.8 PK	74.0	-26.2	1.37 V	249	47.7	0.1
6	4834.00	36.0 AV	54.0	-18.0	1.37 V	249	35.9	0.1
7	7251.00	40.7 PK	74.0	-33.3	1.73 V	73	34.5	6.2
8	7251.00	28.4 AV	54.0	-25.6	1.73 V	73	22.2	6.2

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.

RF Mode	TX 802.11g	Channel	CH 6 : 2437 MHz
Frequency Range	1GHz ~ 25GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (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	54.4 PK	74.0	-19.6	1.95 H	7	58.9	-4.5
2	2390.00	42.4 AV	54.0	-11.6	1.95 H	7	46.9	-4.5
3	*2437.00	114.0 PK			1.95 H	7	118.4	-4.4
4	*2437.00	105.0 AV			1.95 H	7	109.4	-4.4
5	2483.50	54.3 PK	74.0	-19.7	1.95 H	7	58.8	-4.5
6	2483.50	42.8 AV	54.0	-11.2	1.95 H	7	47.3	-4.5
7	4874.00	51.2 PK	74.0	-22.8	2.98 H	249	51.1	0.1
8	4874.00	40.5 AV	54.0	-13.5	2.98 H	249	40.4	0.1
9	7311.00	41.6 PK	74.0	-32.4	1.54 H	307	35.3	6.3
10	7311.00	29.4 AV	54.0	-24.6	1.54 H	307	23.1	6.3
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2390.00	55.0 PK	74.0	-19.0	2.75 V	59	59.5	-4.5
2	2390.00	42.8 AV	54.0	-11.2	2.75 V	59	47.3	-4.5
3	*2437.00	111.6 PK			2.75 V	59	116.0	-4.4
4	*2437.00	102.0 AV			2.75 V	59	106.4	-4.4
5	2483.50	54.3 PK	74.0	-19.7	2.75 V	59	58.8	-4.5
6	2483.50	42.9 AV	54.0	-11.1	2.75 V	59	47.4	-4.5
7	4874.00	47.3 PK	74.0	-26.7	1.34 V	233	47.2	0.1
8	4874.00	35.7 AV	54.0	-18.3	1.34 V	233	35.6	0.1
9	7311.00	41.3 PK	74.0	-32.7	1.69 V	62	35.0	6.3
10	7311.00	28.8 AV	54.0	-25.2	1.69 V	62	22.5	6.3

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.

RF Mode	TX 802.11g	Channel	CH 10 : 2457 MHz
Frequency Range	1GHz ~ 25GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2457.00	113.9 PK			2.18 H	10	118.3	-4.4
2	*2457.00	104.2 AV			2.18 H	10	108.6	-4.4
3	2483.50	61.7 PK	74.0	-12.3	2.18 H	10	66.2	-4.5
4	2483.50	48.1 AV	54.0	-5.9	2.18 H	10	52.6	-4.5
5	4914.00	50.1 PK	74.0	-23.9	3.01 H	245	49.8	0.3
6	4914.00	38.9 AV	54.0	-15.1	3.01 H	245	38.6	0.3
7	7371.00	41.8 PK	74.0	-32.2	1.51 H	296	35.3	6.5
8	7371.00	29.5 AV	54.0	-24.5	1.51 H	296	23.0	6.5
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2457.00	111.2 PK			2.74 V	50	115.6	-4.4
2	*2457.00	101.5 AV			2.74 V	50	105.9	-4.4
3	2483.50	57.5 PK	74.0	-16.5	2.74 V	50	62.0	-4.5
4	2483.50	44.6 AV	54.0	-9.4	2.74 V	50	49.1	-4.5
5	4914.00	46.5 PK	74.0	-27.5	1.34 V	232	46.2	0.3
6	4914.00	34.7 AV	54.0	-19.3	1.34 V	232	34.4	0.3
7	7371.00	41.3 PK	74.0	-32.7	1.63 V	61	34.8	6.5
8	7371.00	28.5 AV	54.0	-25.5	1.63 V	61	22.0	6.5

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.

RF Mode	TX 802.11g	Channel	CH 11 : 2462 MHz
Frequency Range	1GHz ~ 25GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (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			2.17 H	355	112.1	-4.4
2	*2462.00	98.1 AV			2.17 H	355	102.5	-4.4
3	2484.33	57.7 PK	74.0	-16.3	2.17 H	355	62.2	-4.5
4	2484.33	45.7 AV	54.0	-8.3	2.17 H	355	50.2	-4.5
5	4924.00	46.1 PK	74.0	-27.9	3.03 H	233	45.8	0.3
6	4924.00	34.4 AV	54.0	-19.6	3.03 H	233	34.1	0.3
7	7386.00	41.9 PK	74.0	-32.1	1.47 H	303	35.3	6.6
8	7386.00	29.5 AV	54.0	-24.5	1.47 H	303	22.9	6.6
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (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			1.27 V	0	109.2	-4.4
2	*2462.00	95.5 AV			1.27 V	0	99.9	-4.4
3	2484.63	55.9 PK	74.0	-18.1	1.27 V	0	60.4	-4.5
4	2484.63	44.1 AV	54.0	-9.9	1.27 V	0	48.6	-4.5
5	4924.00	41.7 PK	74.0	-32.3	1.38 V	251	41.4	0.3
6	4924.00	30.4 AV	54.0	-23.6	1.38 V	251	30.1	0.3
7	7386.00	41.0 PK	74.0	-33.0	1.60 V	67	34.4	6.6
8	7386.00	28.4 AV	54.0	-25.6	1.60 V	67	21.8	6.6

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.

RF Mode	TX 802.11g	Channel	CH 12 : 2467 MHz
Frequency Range	1GHz ~ 25GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2467.00	104.0 PK			2.13 H	349	108.4	-4.4
2	*2467.00	94.9 AV			2.13 H	349	99.3	-4.4
3	2485.16	56.5 PK	74.0	-17.5	2.13 H	349	61.0	-4.5
4	2485.16	45.1 AV	54.0	-8.9	2.13 H	349	49.6	-4.5
5	4934.00	41.8 PK	74.0	-32.2	2.99 H	235	41.4	0.4
6	4934.00	30.7 AV	54.0	-23.3	2.99 H	235	30.3	0.4
7	7401.00	42.2 PK	74.0	-31.8	1.42 H	297	35.5	6.7
8	7401.00	29.7 AV	54.0	-24.3	1.42 H	297	23.0	6.7
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2467.00	101.3 PK			1.29 V	23	105.7	-4.4
2	*2467.00	91.6 AV			1.29 V	23	96.0	-4.4
3	2488.78	55.0 PK	74.0	-19.0	1.29 V	23	59.5	-4.5
4	2488.78	43.6 AV	54.0	-10.4	1.29 V	23	48.1	-4.5
5	4934.00	38.2 PK	74.0	-35.8	1.34 V	249	37.8	0.4
6	4934.00	27.6 AV	54.0	-26.4	1.34 V	249	27.2	0.4
7	7401.00	40.6 PK	74.0	-33.4	1.63 V	59	33.9	6.7
8	7401.00	27.9 AV	54.0	-26.1	1.63 V	59	21.2	6.7

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency.

RF Mode	TX 802.11g	Channel	CH 13 : 2472 MHz
Frequency Range	1GHz ~ 25GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2472.00	97.5 PK			2.10 H	353	101.9	-4.4
2	*2472.00	88.3 AV			2.10 H	353	92.7	-4.4
3	2483.50	61.1 PK	74.0	-12.9	2.10 H	353	65.6	-4.5
4	2483.50	49.2 AV	54.0	-4.8	2.10 H	353	53.7	-4.5
5	4944.00	34.0 PK	74.0	-40.0	2.97 H	238	33.5	0.5
6	4944.00	24.1 AV	54.0	-29.9	2.97 H	238	23.6	0.5
7	7416.00	42.5 PK	74.0	-31.5	1.39 H	283	35.8	6.7
8	7416.00	30.0 AV	54.0	-24.0	1.39 H	283	23.3	6.7
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2472.00	94.5 PK			1.23 V	9	98.9	-4.4
2	*2472.00	85.4 AV			1.23 V	9	89.8	-4.4
3	2483.50	59.8 PK	74.0	-14.2	1.23 V	9	64.3	-4.5
4	2483.50	46.7 AV	54.0	-7.3	1.23 V	9	51.2	-4.5
5	4944.00	33.7 PK	74.0	-40.3	1.38 V	242	33.2	0.5
6	4944.00	23.8 AV	54.0	-30.2	1.38 V	242	23.3	0.5
7	7416.00	40.7 PK	74.0	-33.3	1.58 V	69	34.0	6.7
8	7416.00	28.0 AV	54.0	-26.0	1.58 V	69	21.3	6.7

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency.

RF Mode	TX 802.11n (HT20)	Channel	CH 1 : 2412 MHz
Frequency Range	1GHz ~ 25GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (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	58.9 PK	74.0	-15.1	2.01 H	13	63.4	-4.5
2	2390.00	46.0 AV	54.0	-8.0	2.01 H	13	50.5	-4.5
3	*2412.00	107.8 PK			2.01 H	13	112.2	-4.4
4	*2412.00	97.9 AV			2.01 H	13	102.3	-4.4
5	4824.00	45.3 PK	74.0	-28.7	3.01 H	264	45.2	0.1
6	4824.00	35.1 AV	54.0	-18.9	3.01 H	264	35.0	0.1
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (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	56.9 PK	74.0	-17.1	2.57 V	73	61.4	-4.5
2	2390.00	45.0 AV	54.0	-9.0	2.57 V	73	49.5	-4.5
3	*2412.00	104.7 PK			2.57 V	73	109.1	-4.4
4	*2412.00	94.1 AV			2.57 V	73	98.5	-4.4
5	4824.00	41.5 PK	74.0	-32.5	1.42 V	256	41.4	0.1
6	4824.00	30.1 AV	54.0	-23.9	1.42 V	256	30.0	0.1

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.

RF Mode	TX 802.11n (HT20)	Channel	CH 2 : 2417 MHz
Frequency Range	1GHz ~ 25GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (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	2.02 H	11	61.2	-4.5
2	2390.00	45.3 AV	54.0	-8.7	2.02 H	11	49.8	-4.5
3	*2417.00	113.9 PK			2.02 H	11	118.3	-4.4
4	*2417.00	103.4 AV			2.02 H	11	107.8	-4.4
5	4834.00	50.3 PK	74.0	-23.7	3.05 H	241	50.2	0.1
6	4834.00	39.1 AV	54.0	-14.9	3.05 H	241	39.0	0.1
7	7251.00	42.3 PK	74.0	-31.7	1.46 H	294	36.1	6.2
8	7251.00	29.9 AV	54.0	-24.1	1.46 H	294	23.7	6.2
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (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	55.4 PK	74.0	-18.6	1.25 V	16	59.9	-4.5
2	2390.00	43.5 AV	54.0	-10.5	1.25 V	16	48.0	-4.5
3	*2417.00	110.7 PK			1.25 V	16	115.1	-4.4
4	*2417.00	100.1 AV			1.25 V	16	104.5	-4.4
5	4834.00	46.1 PK	74.0	-27.9	1.32 V	219	46.0	0.1
6	4834.00	34.3 AV	54.0	-19.7	1.32 V	219	34.2	0.1
7	7251.00	40.9 PK	74.0	-33.1	1.63 V	69	34.7	6.2
8	7251.00	28.3 AV	54.0	-25.7	1.63 V	69	22.1	6.2

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.

RF Mode	TX 802.11n (HT20)	Channel	CH 6 : 2437 MHz
Frequency Range	1GHz ~ 25GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (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	54.3 PK	74.0	-19.7	2.06 H	8	58.8	-4.5
2	2390.00	42.5 AV	54.0	-11.5	2.06 H	8	47.0	-4.5
3	*2437.00	115.0 PK			2.06 H	8	119.4	-4.4
4	*2437.00	104.3 AV			2.06 H	8	108.7	-4.4
5	2483.50	54.1 PK	74.0	-19.9	2.06 H	8	58.6	-4.5
6	2483.50	42.7 AV	54.0	-11.3	2.06 H	8	47.2	-4.5
7	4874.00	51.6 PK	74.0	-22.4	3.02 H	254	51.5	0.1
8	4874.00	40.7 AV	54.0	-13.3	3.02 H	254	40.6	0.1
9	7311.00	41.4 PK	74.0	-32.6	1.48 H	304	35.1	6.3
10	7311.00	29.1 AV	54.0	-24.9	1.48 H	304	22.8	6.3
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2390.00	53.7 PK	74.0	-20.3	1.28 V	31	58.2	-4.5
2	2390.00	41.9 AV	54.0	-12.1	1.28 V	31	46.4	-4.5
3	*2437.00	111.6 PK			1.28 V	31	116.0	-4.4
4	*2437.00	101.6 AV			1.28 V	31	106.0	-4.4
5	2483.50	53.7 PK	74.0	-20.3	1.28 V	31	58.2	-4.5
6	2483.50	42.4 AV	54.0	-11.6	1.28 V	31	46.9	-4.5
7	4874.00	47.6 PK	74.0	-26.4	1.32 V	237	47.5	0.1
8	4874.00	36.1 AV	54.0	-17.9	1.32 V	237	36.0	0.1
9	7311.00	41.1 PK	74.0	-32.9	1.71 V	60	34.8	6.3
10	7311.00	28.4 AV	54.0	-25.6	1.71 V	60	22.1	6.3

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.

RF Mode	TX 802.11n (HT20)	Channel	CH 10 : 2457 MHz
Frequency Range	1GHz ~ 25GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2457.00	112.0 PK			1.49 H	179	116.4	-4.4
2	*2457.00	102.3 AV			1.49 H	179	106.7	-4.4
3	2487.30	57.1 PK	74.0	-16.9	1.49 H	179	61.6	-4.5
4	2487.30	46.0 AV	54.0	-8.0	1.49 H	179	50.5	-4.5
5	4914.00	49.8 PK	74.0	-24.2	3.05 H	239	49.5	0.3
6	4914.00	38.5 AV	54.0	-15.5	3.05 H	239	38.2	0.3
7	7371.00	41.9 PK	74.0	-32.1	1.46 H	296	35.4	6.5
8	7371.00	29.4 AV	54.0	-24.6	1.46 H	296	22.9	6.5
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2457.00	109.3 PK			1.27 V	15	113.7	-4.4
2	*2457.00	99.6 AV			1.27 V	15	104.0	-4.4
3	2487.30	56.0 PK	74.0	-18.0	1.27 V	15	60.5	-4.5
4	2487.30	44.2 AV	54.0	-9.8	1.27 V	15	48.7	-4.5
5	4914.00	47.3 PK	74.0	-26.7	1.27 V	234	47.0	0.3
6	4914.00	35.8 AV	54.0	-18.2	1.27 V	234	35.5	0.3
7	7371.00	40.9 PK	74.0	-33.1	1.73 V	72	34.4	6.5
8	7371.00	28.0 AV	54.0	-26.0	1.73 V	72	21.5	6.5

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.

RF Mode	TX 802.11n (HT20)	Channel	CH 11 : 2462 MHz
Frequency Range	1GHz ~ 25GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (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			1.49 H	180	111.3	-4.4
2	*2462.00	96.9 AV			1.49 H	180	101.3	-4.4
3	2494.76	58.1 PK	74.0	-15.9	1.49 H	180	62.6	-4.5
4	2494.76	45.8 AV	54.0	-8.2	1.49 H	180	50.3	-4.5
5	4924.00	46.1 PK	74.0	-27.9	3.02 H	222	45.8	0.3
6	4924.00	34.4 AV	54.0	-19.6	3.02 H	222	34.1	0.3
7	7386.00	42.1 PK	74.0	-31.9	1.50 H	316	35.5	6.6
8	7386.00	29.9 AV	54.0	-24.1	1.50 H	316	23.3	6.6
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (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	104.0 PK			1.32 V	21	108.4	-4.4
2	*2462.00	94.0 AV			1.32 V	21	98.4	-4.4
3	2494.76	57.0 PK	74.0	-17.0	1.32 V	21	61.5	-4.5
4	2494.76	44.2 AV	54.0	-9.8	1.32 V	21	48.7	-4.5
5	4924.00	41.8 PK	74.0	-32.2	1.39 V	252	41.5	0.3
6	4924.00	30.2 AV	54.0	-23.8	1.39 V	252	29.9	0.3
7	7386.00	41.0 PK	74.0	-33.0	1.65 V	65	34.4	6.6
8	7386.00	28.4 AV	54.0	-25.6	1.65 V	65	21.8	6.6

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.

RF Mode	TX 802.11n (HT20)	Channel	CH 12 : 2467 MHz
Frequency Range	1GHz ~ 25GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2467.00	103.0 PK			1.54 H	168	107.4	-4.4
2	*2467.00	93.5 AV			1.54 H	168	97.9	-4.4
3	2485.37	57.5 PK	74.0	-16.5	1.54 H	168	62.0	-4.5
4	2485.37	44.6 AV	54.0	-9.4	1.54 H	168	49.1	-4.5
5	4934.00	41.3 PK	74.0	-32.7	2.94 H	240	40.9	0.4
6	4934.00	30.5 AV	54.0	-23.5	2.94 H	240	30.1	0.4
7	7401.00	42.6 PK	74.0	-31.4	1.45 H	308	35.9	6.7
8	7401.00	30.0 AV	54.0	-24.0	1.45 H	308	23.3	6.7
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2467.00	100.6 PK			1.29 V	16	105.0	-4.4
2	*2467.00	90.8 AV			1.29 V	16	95.2	-4.4
3	2497.80	55.8 PK	74.0	-18.2	1.29 V	16	60.3	-4.5
4	2497.80	43.6 AV	54.0	-10.4	1.29 V	16	48.1	-4.5
5	4934.00	38.5 PK	74.0	-35.5	1.37 V	262	38.1	0.4
6	4934.00	28.1 AV	54.0	-25.9	1.37 V	262	27.7	0.4
7	7401.00	40.3 PK	74.0	-33.7	1.62 V	45	33.6	6.7
8	7401.00	27.9 AV	54.0	-26.1	1.62 V	45	21.2	6.7

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency.

RF Mode	TX 802.11n (HT20)	Channel	CH 13 : 2472 MHz
Frequency Range	1GHz ~ 25GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2472.00	96.5 PK			1.46 H	174	100.9	-4.4
2	*2472.00	87.5 AV			1.46 H	174	91.9	-4.4
3	2483.50	62.1 PK	74.0	-11.9	1.46 H	174	66.6	-4.5
4	2483.50	48.6 AV	54.0	-5.4	1.46 H	174	53.1	-4.5
5	4944.00	34.1 PK	74.0	-39.9	2.94 H	232	33.6	0.5
6	4944.00	24.2 AV	54.0	-29.8	2.94 H	232	23.7	0.5
7	7416.00	41.9 PK	74.0	-32.1	1.37 H	281	35.2	6.7
8	7416.00	29.5 AV	54.0	-24.5	1.37 H	281	22.8	6.7
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2472.00	93.8 PK			1.30 V	2	98.2	-4.4
2	*2472.00	84.4 AV			1.30 V	2	88.8	-4.4
3	2483.50	60.5 PK	74.0	-13.5	1.30 V	2	65.0	-4.5
4	2483.50	46.4 AV	54.0	-7.6	1.30 V	2	50.9	-4.5
5	4944.00	34.1 PK	74.0	-39.9	1.39 V	229	33.6	0.5
6	4944.00	24.3 AV	54.0	-29.7	1.39 V	229	23.8	0.5
7	7416.00	41.2 PK	74.0	-32.8	1.52 V	80	34.5	6.7
8	7416.00	28.2 AV	54.0	-25.8	1.52 V	80	21.5	6.7

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency.

RF Mode	TX 802.11n (HT40)	Channel	CH 3 : 2422 MHz
Frequency Range	1GHz ~ 25GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2383.82	56.9 PK	74.0	-17.1	1.46 H	41	61.3	-4.4
2	2383.82	45.2 AV	54.0	-8.8	1.46 H	41	49.6	-4.4
3	*2422.00	99.7 PK			1.46 H	41	104.1	-4.4
4	*2422.00	91.6 AV			1.46 H	41	96.0	-4.4
5	4844.00	34.6 PK	74.0	-39.4	2.93 H	235	34.5	0.1
6	4844.00	24.5 AV	54.0	-29.5	2.93 H	235	24.4	0.1
7	7266.00	41.5 PK	74.0	-32.5	1.36 H	290	35.3	6.2
8	7266.00	29.0 AV	54.0	-25.0	1.36 H	290	22.8	6.2
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2383.82	55.1 PK	74.0	-18.9	1.27 V	27	59.5	-4.4
2	2383.82	44.4 AV	54.0	-9.6	1.27 V	27	48.8	-4.4
3	*2422.00	96.1 PK			1.27 V	27	100.5	-4.4
4	*2422.00	87.8 AV			1.27 V	27	92.2	-4.4
5	4844.00	33.8 PK	74.0	-40.2	1.43 V	234	33.7	0.1
6	4844.00	23.9 AV	54.0	-30.1	1.43 V	234	23.8	0.1
7	7266.00	41.0 PK	74.0	-33.0	1.56 V	79	34.8	6.2
8	7266.00	28.0 AV	54.0	-26.0	1.56 V	79	21.8	6.2

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.

RF Mode	TX 802.11n (HT40)	Channel	CH 6 : 2437 MHz
Frequency Range	1GHz ~ 25GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2379.62	58.0 PK	74.0	-16.0	1.47 H	56	62.4	-4.4
2	2379.62	47.0 AV	54.0	-7.0	1.47 H	56	51.4	-4.4
3	*2437.00	102.6 PK			1.47 H	56	107.0	-4.4
4	*2437.00	95.1 AV			1.47 H	56	99.5	-4.4
5	2485.13	58.1 PK	74.0	-15.9	1.47 H	56	62.6	-4.5
6	2485.13	48.0 AV	54.0	-6.0	1.47 H	56	52.5	-4.5
7	4874.00	41.2 PK	74.0	-32.8	3.07 H	214	41.1	0.1
8	4874.00	30.7 AV	54.0	-23.3	3.07 H	214	30.6	0.1
9	7311.00	42.3 PK	74.0	-31.7	1.50 H	300	36.0	6.3
10	7311.00	29.8 AV	54.0	-24.2	1.50 H	300	23.5	6.3

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2379.62	56.1 PK	74.0	-17.9	1.32 V	14	60.5	-4.4
2	2379.62	45.0 AV	54.0	-9.0	1.32 V	14	49.4	-4.4
3	*2437.00	99.5 PK			1.32 V	14	103.9	-4.4
4	*2437.00	92.7 AV			1.32 V	14	97.1	-4.4
5	2486.35	56.1 PK	74.0	-17.9	1.32 V	14	60.6	-4.5
6	2486.35	46.5 AV	54.0	-7.5	1.32 V	14	51.0	-4.5
7	4874.00	38.5 PK	74.0	-35.5	1.34 V	245	38.4	0.1
8	4874.00	27.8 AV	54.0	-26.2	1.34 V	245	27.7	0.1
9	7311.00	40.3 PK	74.0	-33.7	1.63 V	61	34.0	6.3
10	7311.00	27.9 AV	54.0	-26.1	1.63 V	61	21.6	6.3

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.

RF Mode	TX 802.11n (HT40)	Channel	CH 9 : 2452 MHz
Frequency Range	1GHz ~ 25GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2452.00	100.2 PK			1.50 H	34	104.6	-4.4
2	*2452.00	92.3 AV			1.50 H	34	96.7	-4.4
3	2492.21	56.2 PK	74.0	-17.8	1.00 H	0	60.7	-4.5
4	2492.21	45.2 AV	54.0	-8.8	1.00 H	0	49.7	-4.5
5	2499.91	55.2 PK	74.0	-18.8	1.50 H	34	59.7	-4.5
6	2499.91	44.8 AV	54.0	-9.2	1.50 H	34	49.3	-4.5
7	4904.00	33.6 PK	74.0	-40.4	2.94 H	220	33.4	0.2
8	4904.00	23.9 AV	54.0	-30.1	2.94 H	220	23.7	0.2
9	7356.00	41.9 PK	74.0	-32.1	1.32 H	280	35.5	6.4
10	7356.00	29.6 AV	54.0	-24.4	1.32 H	280	23.2	6.4
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2452.00	97.6 PK			1.32 V	19	102.0	-4.4
2	*2452.00	90.4 AV			1.32 V	19	94.8	-4.4
3	2485.56	56.4 PK	74.0	-17.6	1.32 V	19	60.9	-4.5
4	2485.56	45.5 AV	54.0	-8.5	1.32 V	19	50.0	-4.5
5	4904.00	34.2 PK	74.0	-39.8	1.44 V	231	34.0	0.2
6	4904.00	24.2 AV	54.0	-29.8	1.44 V	231	24.0	0.2
7	7356.00	41.0 PK	74.0	-33.0	1.54 V	66	34.6	6.4
8	7356.00	27.9 AV	54.0	-26.1	1.54 V	66	21.5	6.4

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.

RF Mode	TX 802.11n (HT40)	Channel	CH 10 : 2457 MHz
Frequency Range	1GHz ~ 25GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2457.00	99.5 PK			1.43 H	38	103.9	-4.4
2	*2457.00	91.1 AV			1.43 H	38	95.5	-4.4
3	2483.50	57.0 PK	74.0	-17.0	1.43 H	38	61.5	-4.5
4	2483.50	47.4 AV	54.0	-6.6	1.43 H	38	51.9	-4.5
5	4914.00	34.0 PK	74.0	-40.0	2.91 H	219	33.7	0.3
6	4914.00	24.1 AV	54.0	-29.9	2.91 H	219	23.8	0.3
7	7371.00	41.7 PK	74.0	-32.3	1.33 H	271	35.2	6.5
8	7371.00	29.3 AV	54.0	-24.7	1.33 H	271	22.8	6.5
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2457.00	96.4 PK			1.33 V	4	100.8	-4.4
2	*2457.00	89.8 AV			1.33 V	4	94.2	-4.4
3	2483.50	57.0 PK	74.0	-17.0	1.33 V	4	61.5	-4.5
4	2483.50	46.7 AV	54.0	-7.3	1.33 V	4	51.2	-4.5
5	4914.00	34.7 PK	74.0	-39.3	1.41 V	245	34.4	0.3
6	4914.00	24.8 AV	54.0	-29.2	1.41 V	245	24.5	0.3
7	7371.00	40.5 PK	74.0	-33.5	1.48 V	83	34.0	6.5
8	7371.00	27.8 AV	54.0	-26.2	1.48 V	83	21.3	6.5

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.

RF Mode	TX 802.11n (HT40)	Channel	CH 11 : 2462 MHz
Frequency Range	1GHz ~ 25GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (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	92.0 PK			1.47 H	32	96.4	-4.4
2	*2462.00	83.6 AV			1.47 H	32	88.0	-4.4
3	2483.50	62.4 PK	74.0	-11.6	1.47 H	32	66.9	-4.5
4	2483.50	47.6 AV	54.0	-6.4	1.47 H	32	52.1	-4.5
5	4924.00	33.6 PK	74.0	-40.4	2.93 H	230	33.3	0.3
6	4924.00	23.8 AV	54.0	-30.2	2.93 H	230	23.5	0.3
7	7386.00	42.5 PK	74.0	-31.5	1.40 H	273	35.9	6.6
8	7386.00	29.9 AV	54.0	-24.1	1.40 H	273	23.3	6.6
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (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	89.1 PK			1.33 V	20	93.5	-4.4
2	*2462.00	80.6 AV			1.33 V	20	85.0	-4.4
3	2483.50	57.5 PK	74.0	-16.5	1.33 V	20	62.0	-4.5
4	2483.50	47.7 AV	54.0	-6.3	1.33 V	20	52.2	-4.5
5	4924.00	34.1 PK	74.0	-39.9	1.41 V	215	33.8	0.3
6	4924.00	24.0 AV	54.0	-30.0	1.41 V	215	23.7	0.3
7	7386.00	41.5 PK	74.0	-32.5	1.56 V	81	34.9	6.6
8	7386.00	28.2 AV	54.0	-25.8	1.56 V	81	21.6	6.6

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.

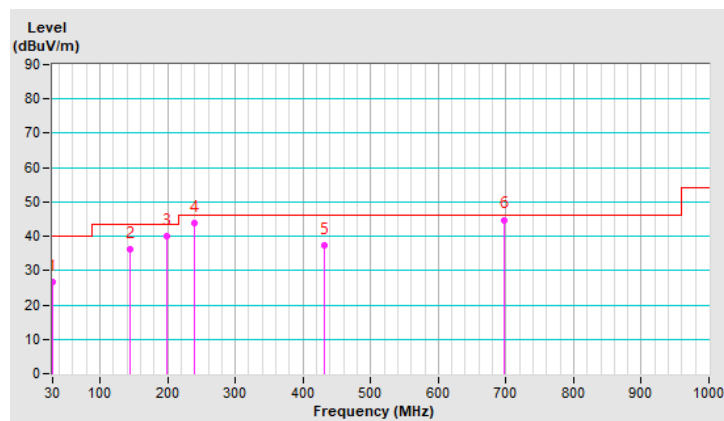
Below 1GHz Data:

RF Mode	TX 802.11g	Channel	CH 6 : 2437 MHz
Frequency Range	9kHz ~ 1GHz	Detector Function	Quasi-Peak (QP)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	30.00	26.8 QP	40.0	-13.2	1.00 H	4	40.3	-13.5
2	144.00	36.2 QP	43.5	-7.3	1.00 H	201	48.3	-12.1
3	199.53	39.9 QP	43.5	-3.6	1.00 H	356	54.9	-15.0
4	239.98	43.9 QP	46.0	-2.1	1.00 H	155	57.0	-13.1
5	431.99	37.3 QP	46.0	-8.7	1.00 H	183	43.9	-6.6
6	697.02	44.8 QP	46.0	-1.2	1.00 H	55	45.3	-0.5

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.

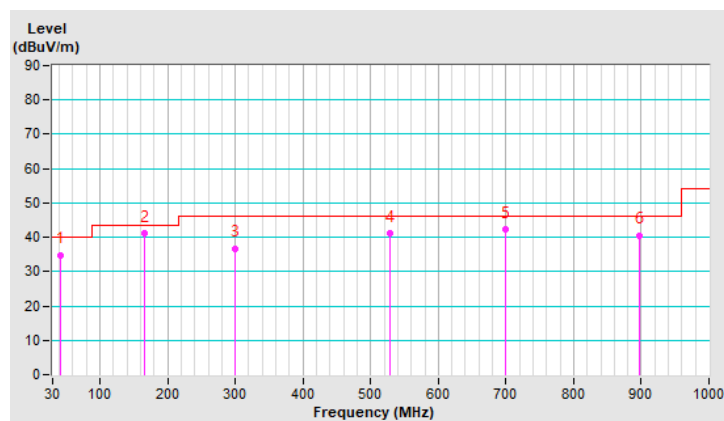


RF Mode	TX 802.11g	Channel	CH 6 : 2437 MHz
Frequency Range	9kHz ~ 1GHz	Detector Function	Quasi-Peak (QP)

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	41.52	34.9 QP	40.0	-5.1	1.00 V	195	47.6	-12.7
2	165.99	41.0 QP	43.5	-2.5	1.00 V	231	53.3	-12.3
3	299.30	36.8 QP	46.0	-9.2	1.00 V	102	47.5	-10.7
4	528.00	41.0 QP	46.0	-5.0	1.00 V	248	45.3	-4.3
5	698.43	42.3 QP	46.0	-3.7	1.00 V	85	42.7	-0.4
6	897.96	40.6 QP	46.0	-5.4	1.00 V	75	37.1	3.5

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 Output Power Measurement

4.2.1 Limits of Conducted Output Power Measurement

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

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

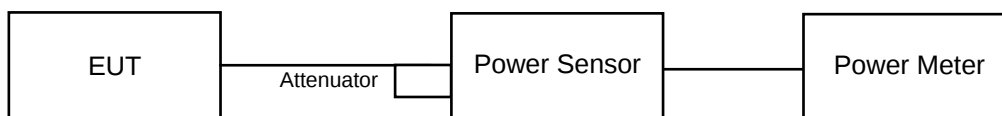
Array Gain = 0 dB (i.e., no array gain) for $N_{ANT} \leq 4$;

Array Gain = 0 dB (i.e., no array gain) for channel widths ≥ 40 MHz for any N_{ANT} ;

Array Gain = $5 \log(N_{ANT}/N_{SS})$ dB or 3 dB, whichever is less for 20-MHz channel widths with $N_{ANT} \geq 5$.

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

4.2.2 Test Setup



4.2.3 Test Instruments

Refer to section 4.1.2 to get information of above instrument.

4.2.4 Test Procedures

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.

4.2.5 Deviation from Test Standard

No deviation.

4.2.6 EUT Operating Conditions

Same as Item 4.3.6.

4.2.7 Test Results

FOR PEAK POWER

802.11b

Chan.	Chan. Freq. (MHz)	Peak Power (dBm)		Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
1	2412	20.56	20.70	231.252	23.64	30.00	Pass
6	2437	20.22	21.63	250.742	23.99	30.00	Pass
11	2462	20.28	21.31	241.867	23.84	30.00	Pass
12	2467	16.65	17.66	104.583	20.19	30.00	Pass
13	2472	11.87	13.12	35.893	15.55	30.00	Pass

802.11g

Chan.	Chan. Freq. (MHz)	Peak Power (dBm)		Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
1	2412	19.02	19.79	175.079	22.43	30.00	Pass
2	2417	22.87	23.85	436.303	26.40	30.00	Pass
6	2437	22.78	23.84	431.773	26.35	30.00	Pass
10	2457	22.86	23.32	407.98	26.11	30.00	Pass
11	2462	17.01	18.35	118.625	20.74	30.00	Pass
12	2467	14.17	15.37	60.557	17.82	30.00	Pass
13	2472	7.42	8.52	12.633	11.02	30.00	Pass

VHT20

Chan.	Chan. Freq. (MHz)	Peak Power (dBm)		Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
1	2412	18.12	18.42	134.366	21.28	30.00	Pass
2	2417	22.52	23.36	395.419	25.97	30.00	Pass
6	2437	23.44	24.12	479.026	26.80	30.00	Pass
10	2457	22.64	23.32	398.437	26.00	30.00	Pass
11	2462	16.77	18.18	113.299	20.54	30.00	Pass
12	2467	13.97	15.21	58.135	17.64	30.00	Pass
13	2472	6.71	8.37	11.559	10.63	30.00	Pass

VHT40

Chan.	Chan. Freq. (MHz)	Peak Power (dBm)		Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
3	2422	14.31	15.02	58.746	17.69	30.00	Pass
4	2427	14.85	16.01	70.452	18.48	30.00	Pass
6	2437	17.66	19.01	137.96	21.40	30.00	Pass
8	2447	16.83	18.44	118.018	20.72	30.00	Pass
9	2452	16.21	17.32	95.734	19.81	30.00	Pass
10	2457	15.49	16.48	79.863	19.02	30.00	Pass
11	2462	7.25	8.91	13.089	11.17	30.00	Pass

FOR AVERAGE POWER

802.11b

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)
		Chain 0	Chain 1		
1	2412	18.23	18.20	132.597	21.23
6	2437	18.01	19.19	146.226	21.65
11	2462	17.96	18.97	141.403	21.50
12	2467	14.12	15.17	58.708	17.69
13	2472	9.37	10.65	20.264	13.07

802.11g

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)
		Chain 0	Chain 1		
1	2412	12.49	13.42	39.72	15.99
2	2417	17.32	18.32	121.871	20.86
6	2437	17.35	18.62	127.103	21.04
10	2457	16.82	17.97	110.745	20.44
11	2462	10.82	11.84	27.354	14.37
12	2467	7.85	9.01	14.057	11.48
13	2472	12.49	13.42	39.72	15.99

VHT20

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)
		Chain 0	Chain 1		
1	2412	11.43	11.87	29.281	14.67
2	2417	16.82	17.62	105.894	20.25
6	2437	18.22	18.64	139.488	21.45
10	2457	16.62	17.86	107.014	20.29
11	2462	10.64	11.43	25.487	14.06
12	2467	7.53	8.72	13.11	11.18
13	2472	11.43	11.87	29.281	14.67

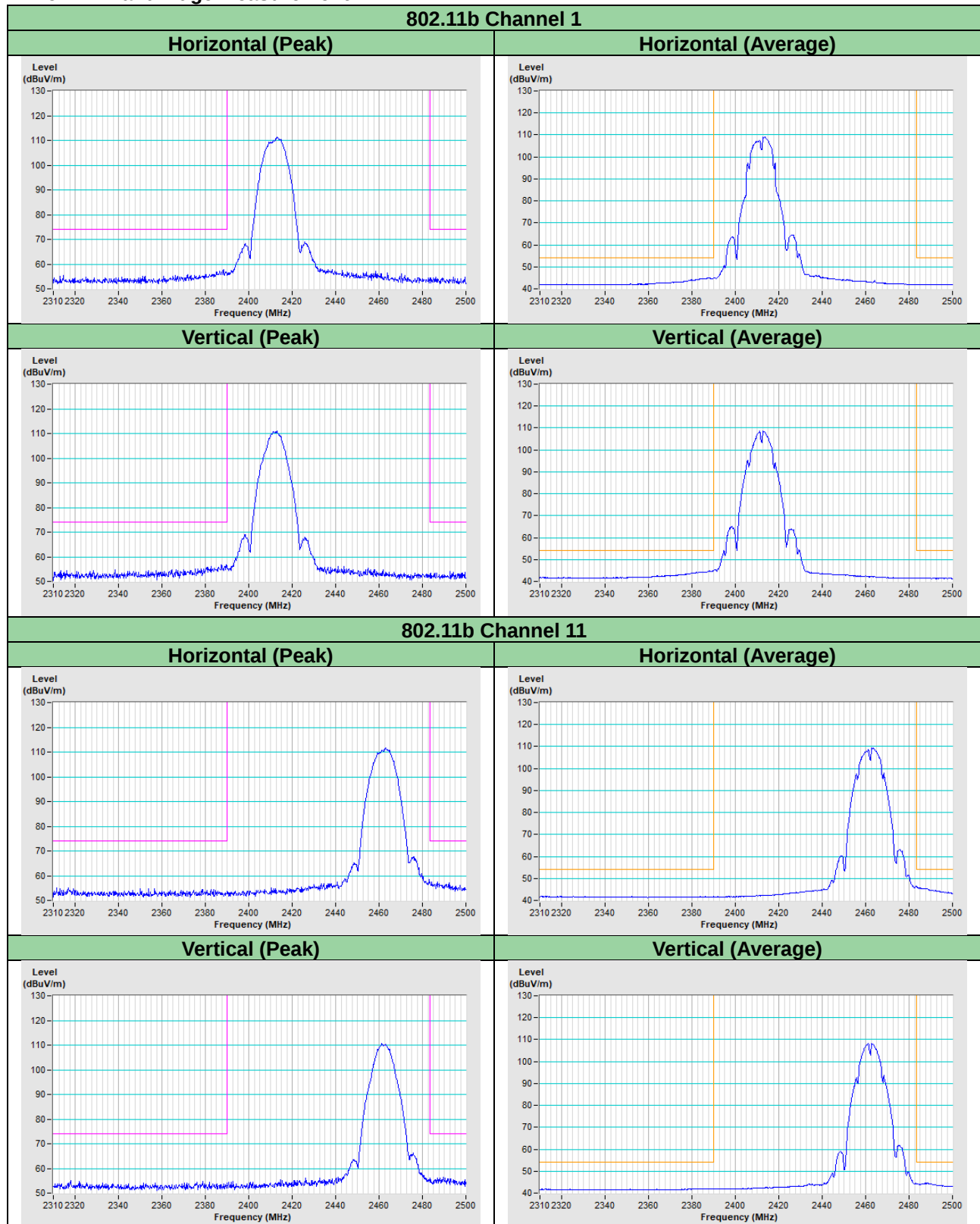
VHT40

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)
		Chain 0	Chain 1		
3	2422	7.53	8.17	12.224	10.87
4	2427	8.27	9.43	15.484	11.90
6	2437	10.76	12.43	29.411	14.69
8	2447	9.98	11.62	24.475	13.89
9	2452	9.28	10.62	20.007	13.01
10	2457	8.43	9.62	16.128	12.08
11	2462	0.79	1.55	2.628	4.20

5 Pictures of Test Arrangements

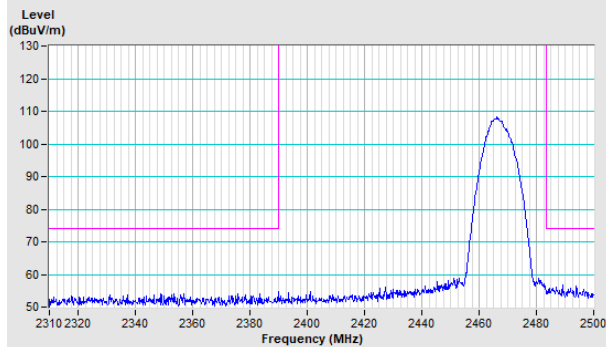
Please refer to the attached file (Test Setup Photo).

Annex A - Band-Edge Measurement

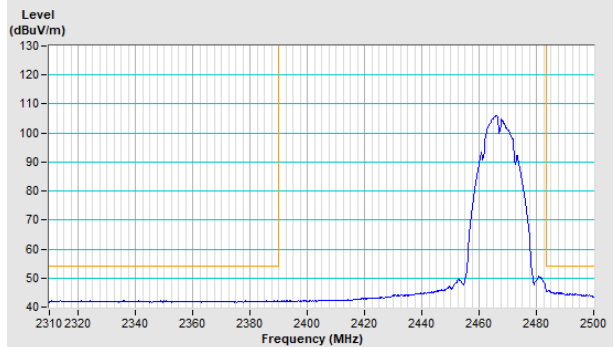


802.11b Channel 12

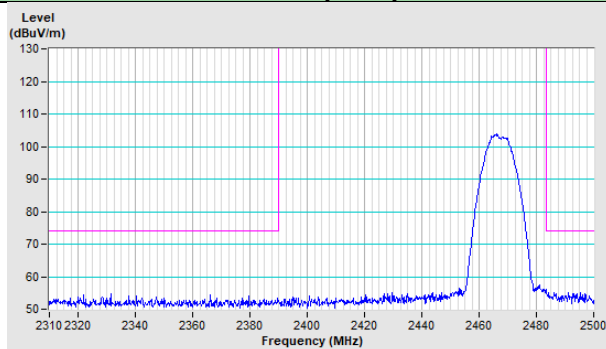
Horizontal (Peak)



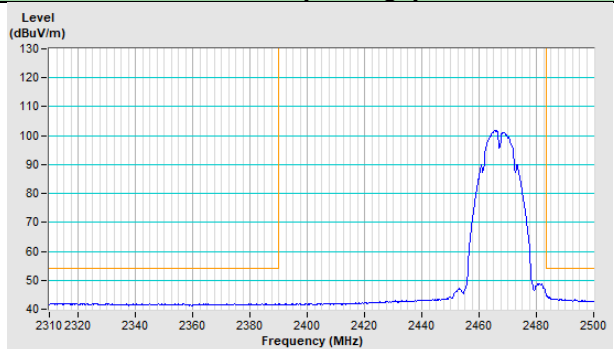
Horizontal (Average)



Vertical (Peak)

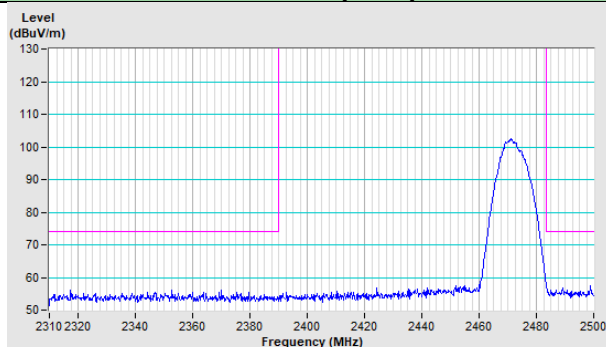


Vertical (Average)

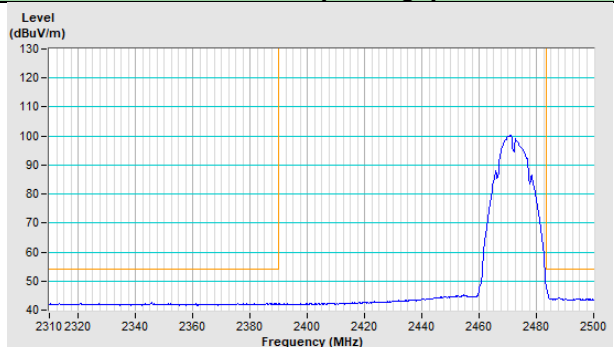


802.11b Channel 13

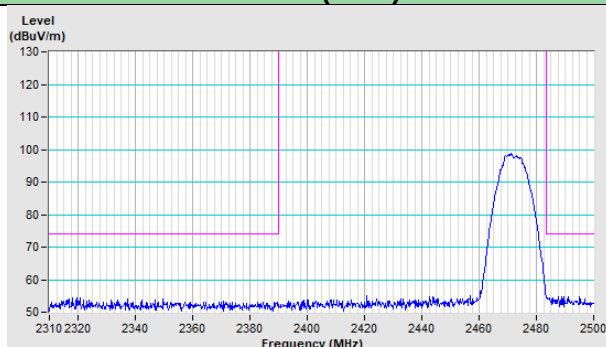
Horizontal (Peak)



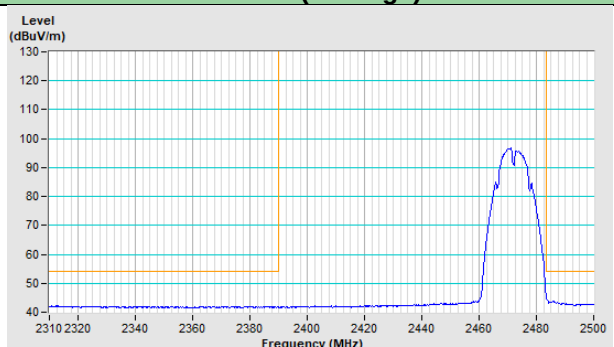
Horizontal (Average)



Vertical (Peak)

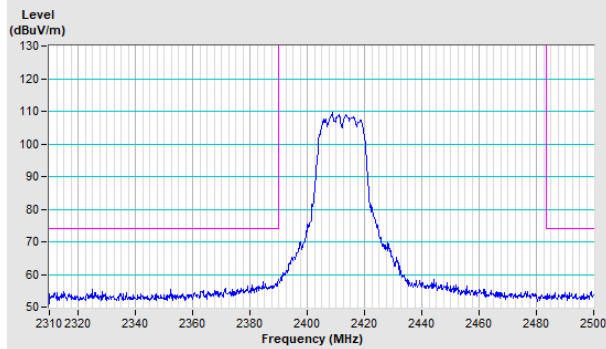


Vertical (Average)

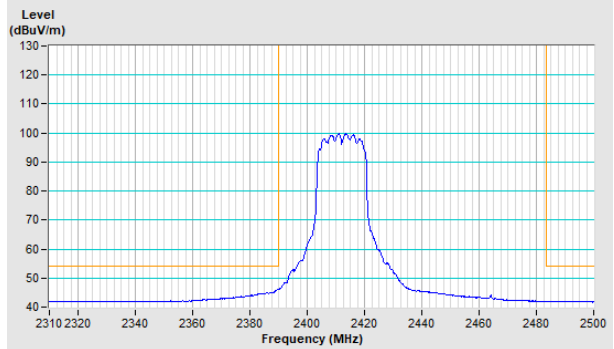


802.11g Channel 1

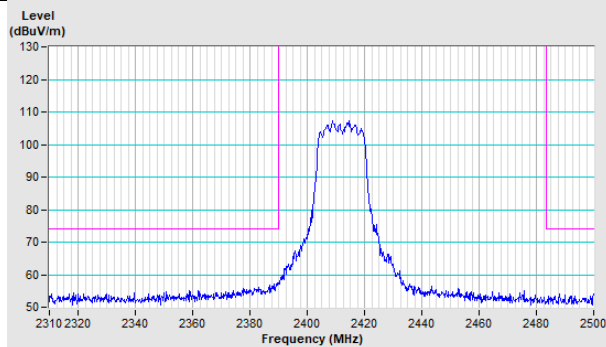
Horizontal (Peak)



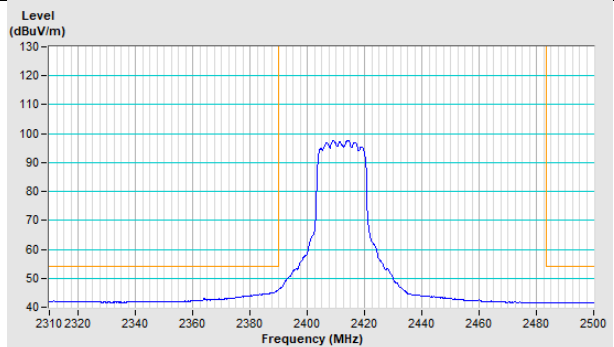
Horizontal (Average)



Vertical (Peak)

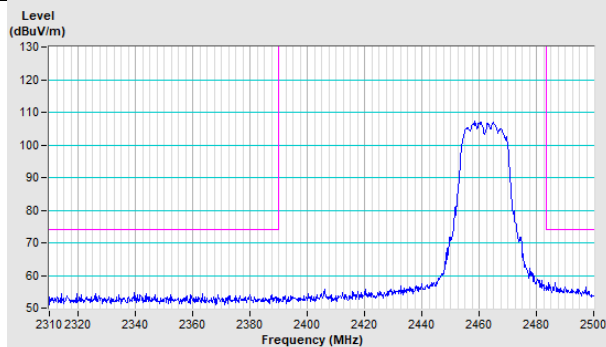


Vertical (Average)

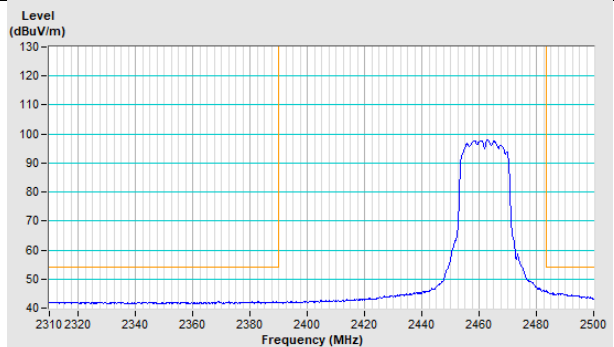


802.11g Channel 11

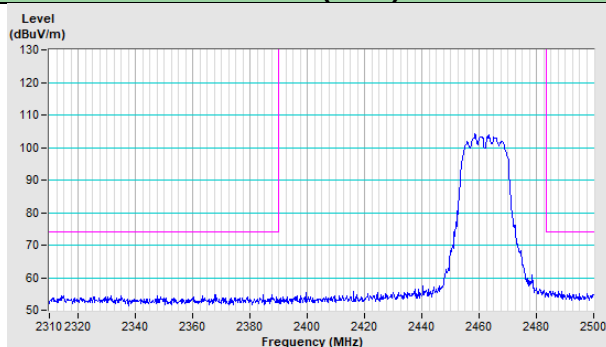
Horizontal (Peak)



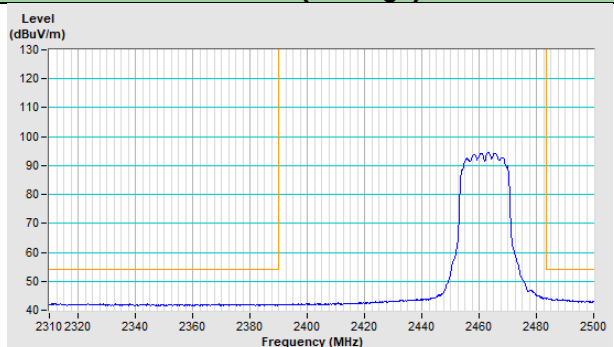
Horizontal (Average)



Vertical (Peak)

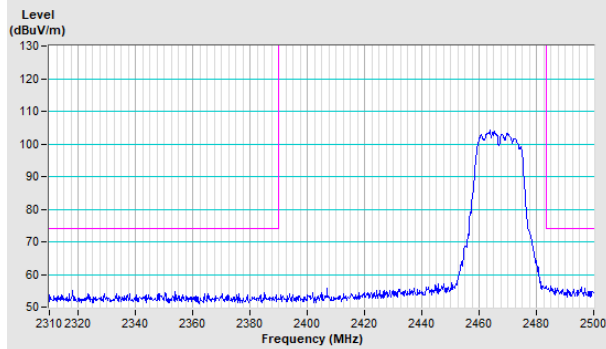


Vertical (Average)

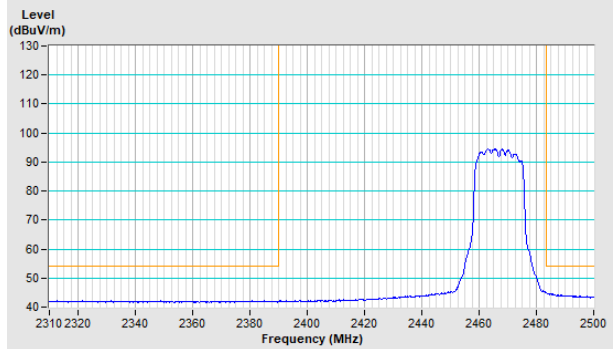


802.11g Channel 12

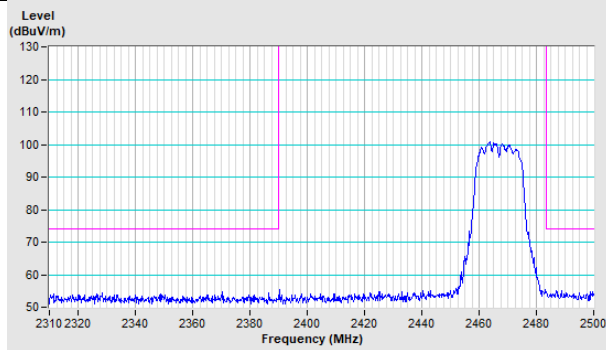
Horizontal (Peak)



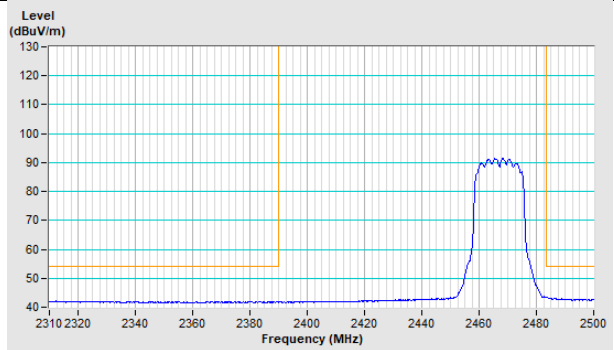
Horizontal (Average)



Vertical (Peak)

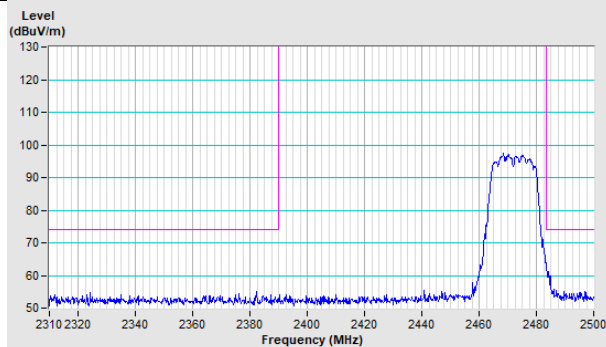


Vertical (Average)

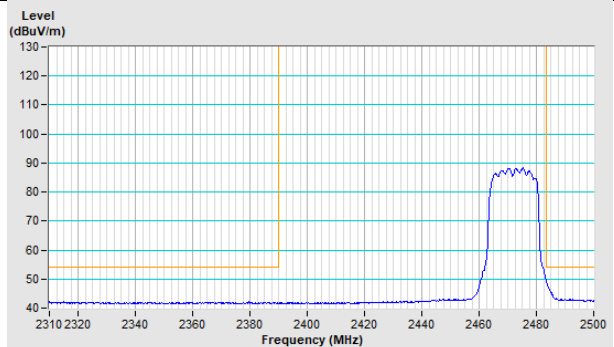


802.11g Channel 13

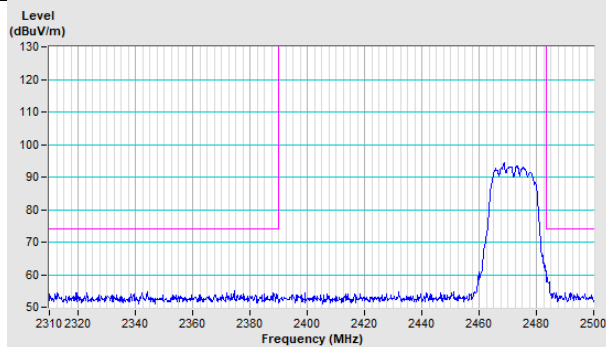
Horizontal (Peak)



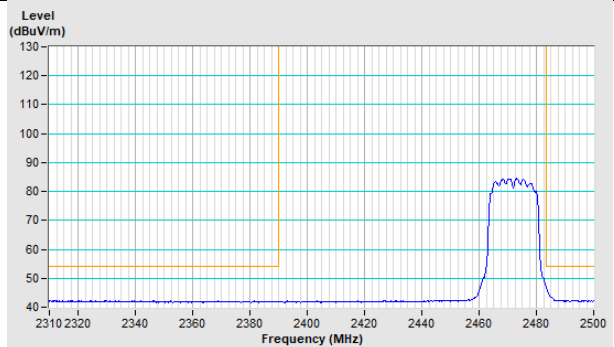
Horizontal (Average)



Vertical (Peak)

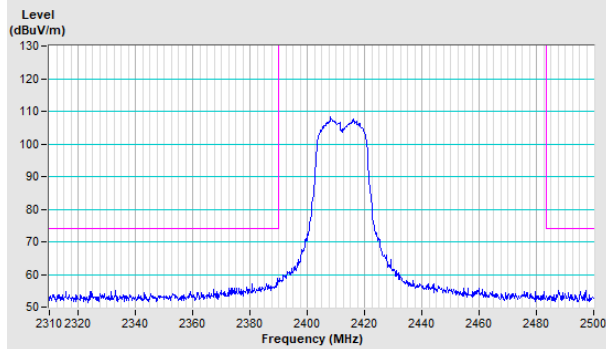


Vertical (Average)

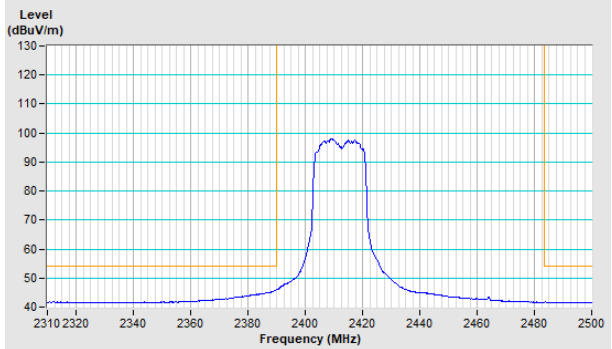


802.11n (HT20) Channel 1

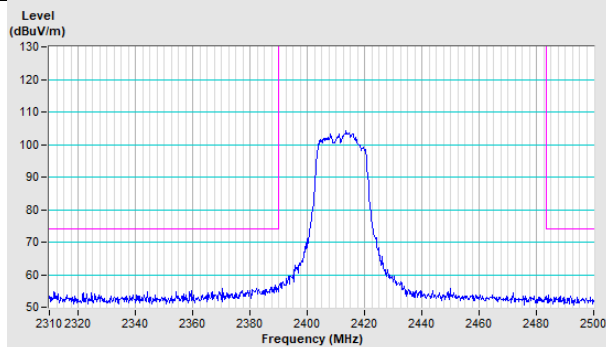
Horizontal (Peak)



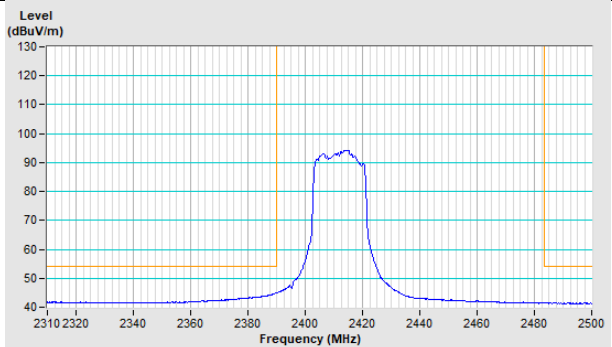
Horizontal (Average)



Vertical (Peak)

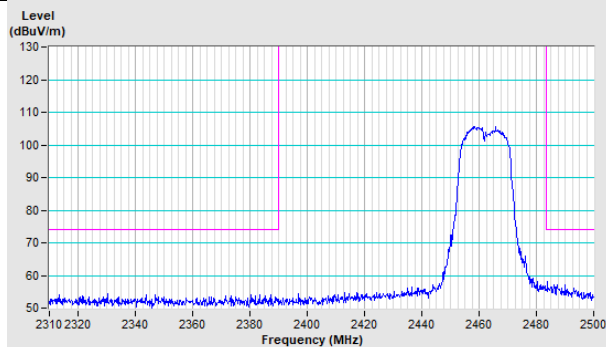


Vertical (Average)

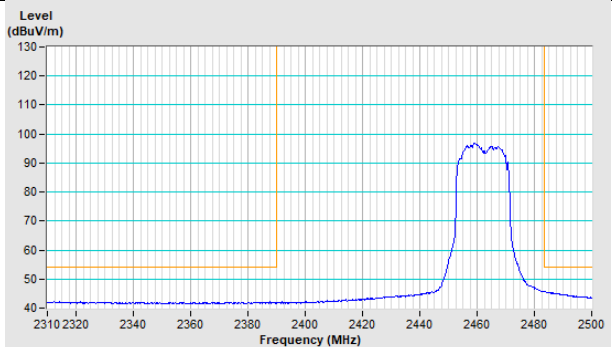


802.11n (HT20) Channel 11

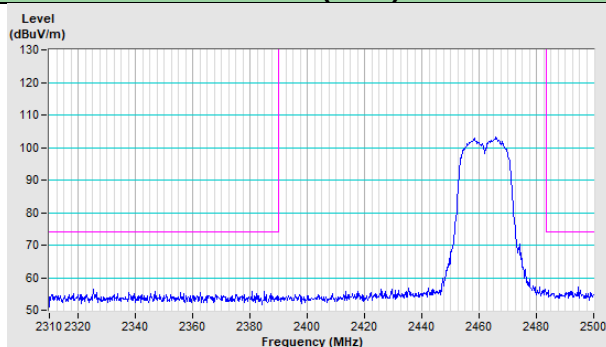
Horizontal (Peak)



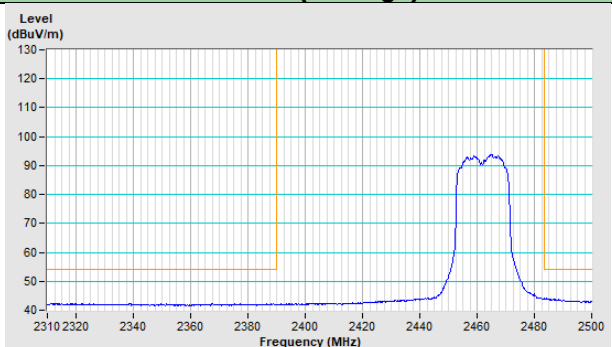
Horizontal (Average)



Vertical (Peak)

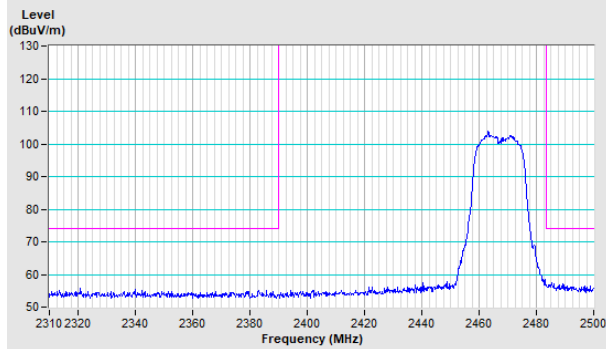


Vertical (Average)

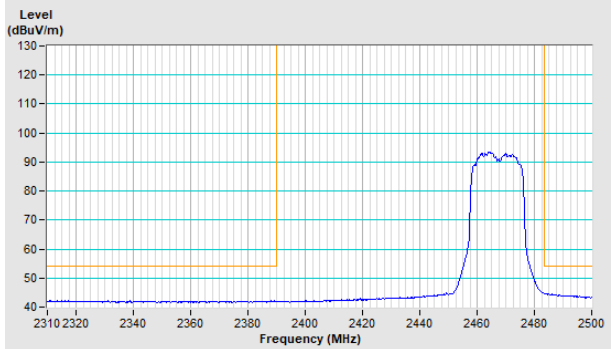


802.11n (HT20) Channel 12

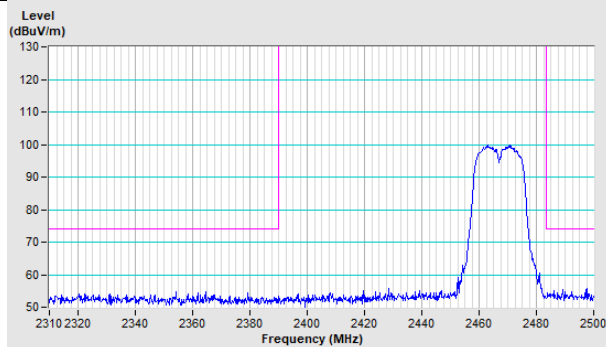
Horizontal (Peak)



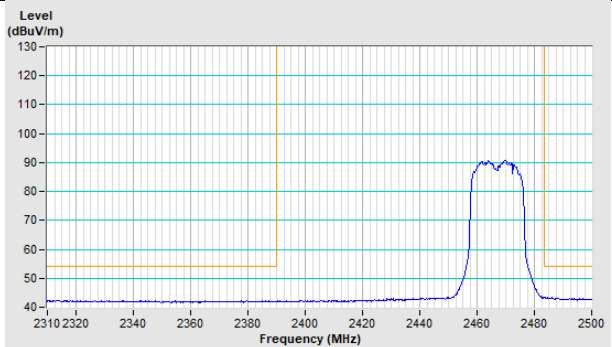
Horizontal (Average)



Vertical (Peak)

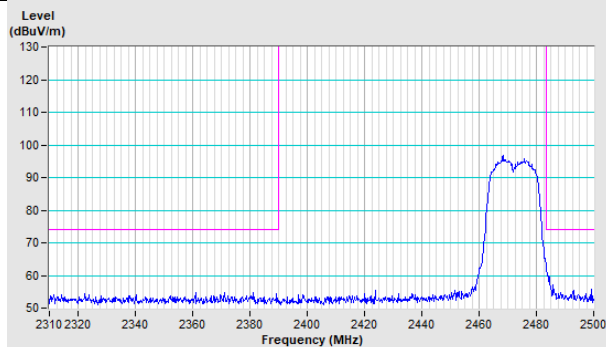


Vertical (Average)

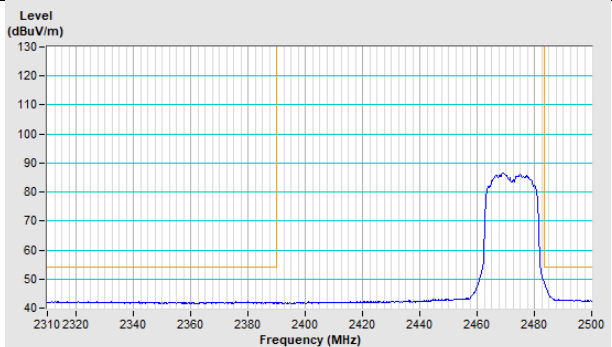


802.11n (HT20) Channel 13

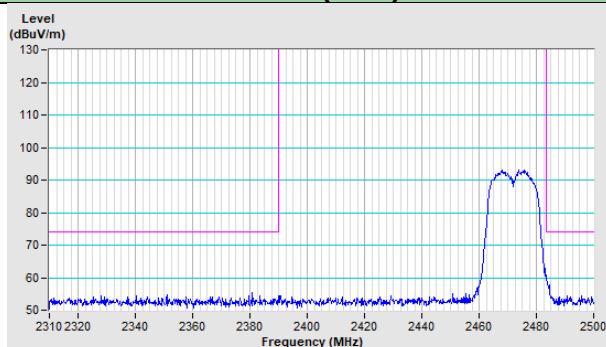
Horizontal (Peak)



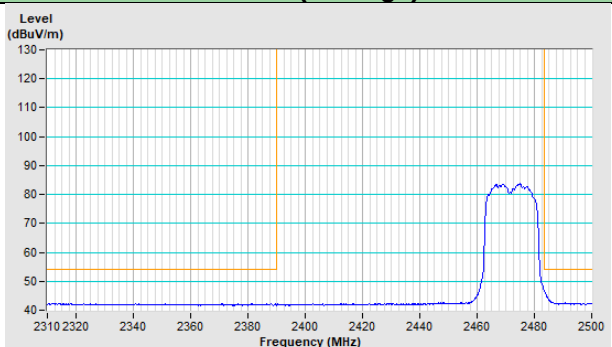
Horizontal (Average)



Vertical (Peak)

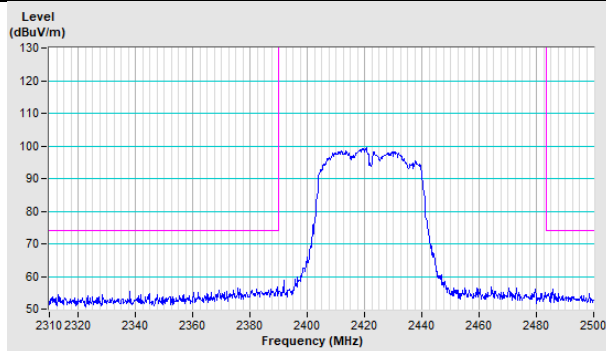


Vertical (Average)

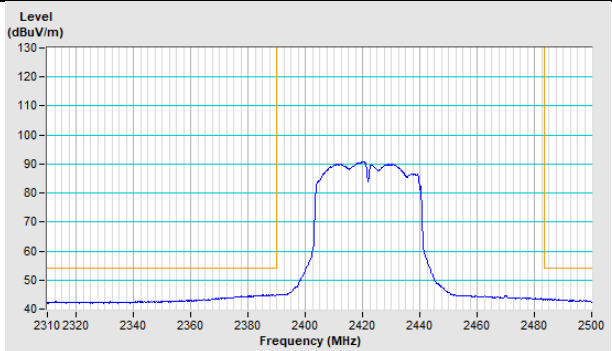


802.11n (HT40) Channel 3

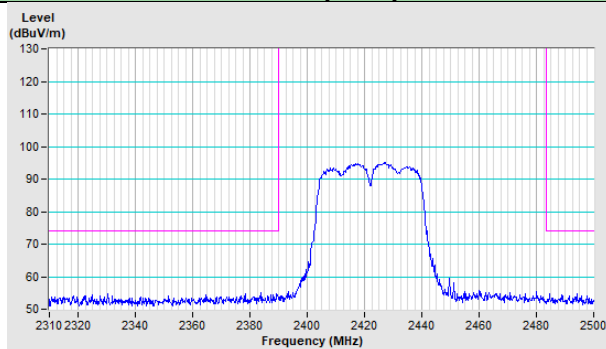
Horizontal (Peak)



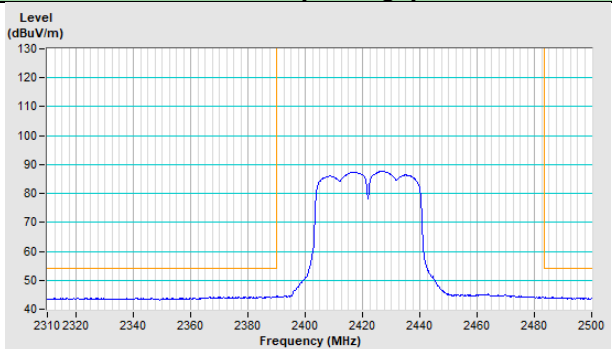
Horizontal (Average)



Vertical (Peak)

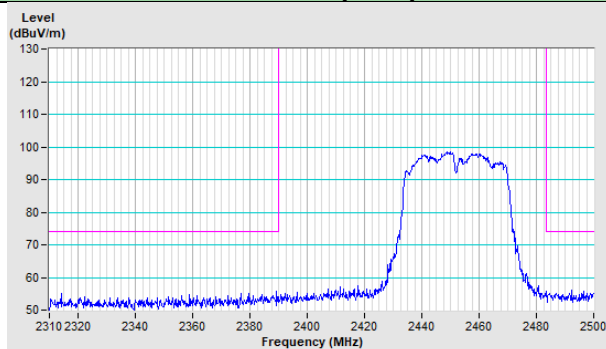


Vertical (Average)

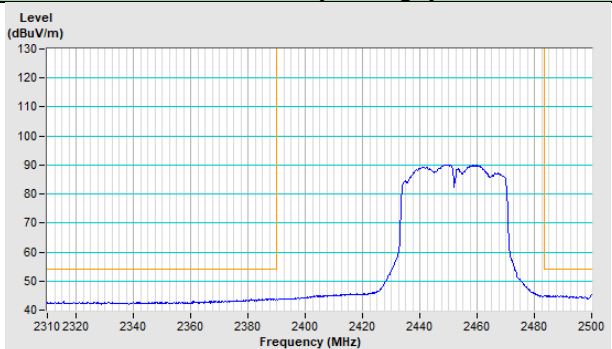


802.11n (HT40) Channel 9

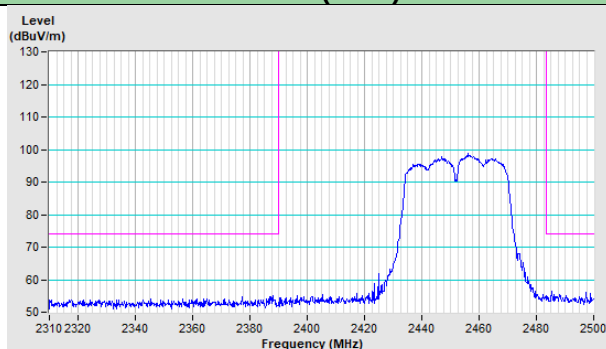
Horizontal (Peak)



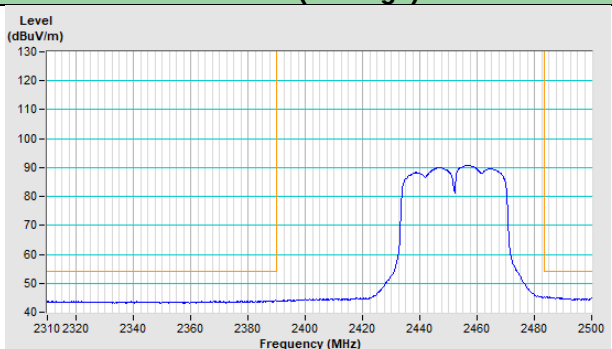
Horizontal (Average)



Vertical (Peak)

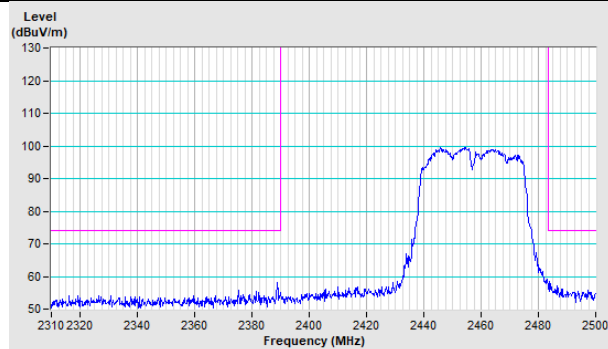


Vertical (Average)

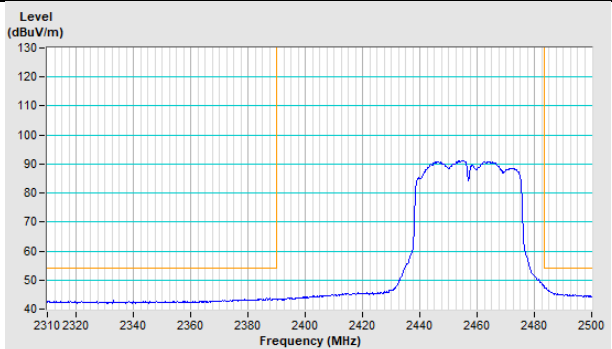


802.11n (HT40) Channel 10

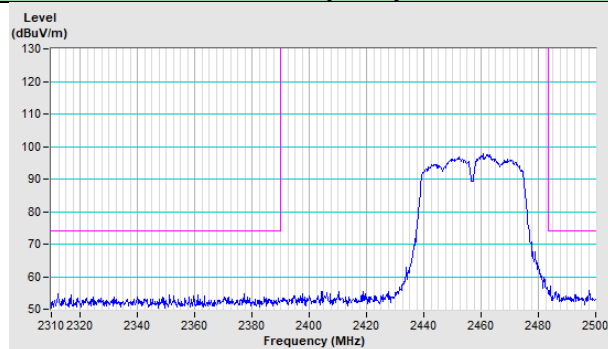
Horizontal (Peak)



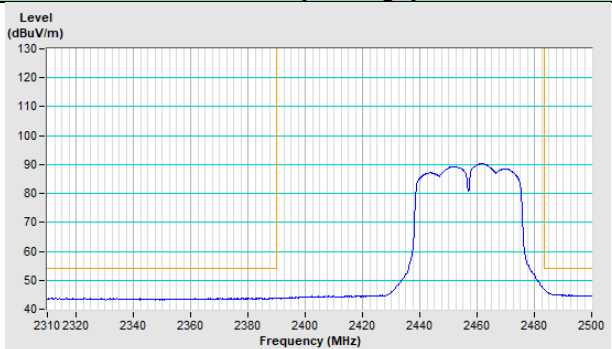
Horizontal (Average)



Vertical (Peak)

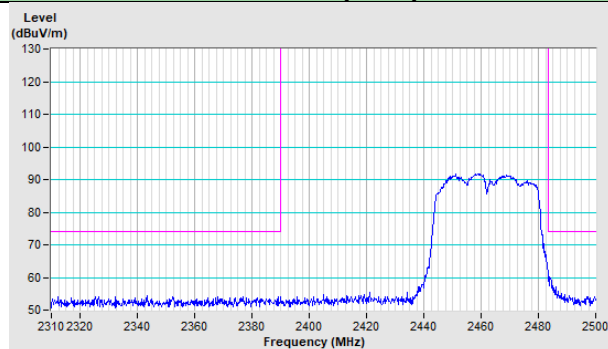


Vertical (Average)

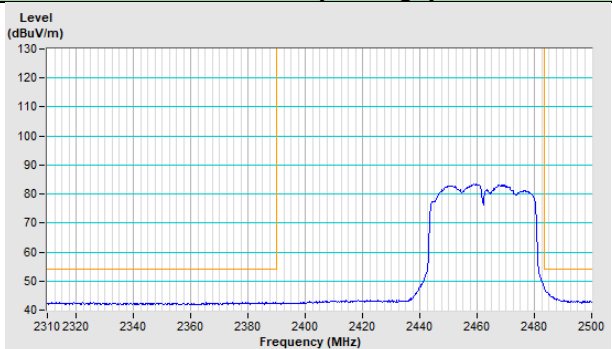


802.11n (HT40) Channel 11

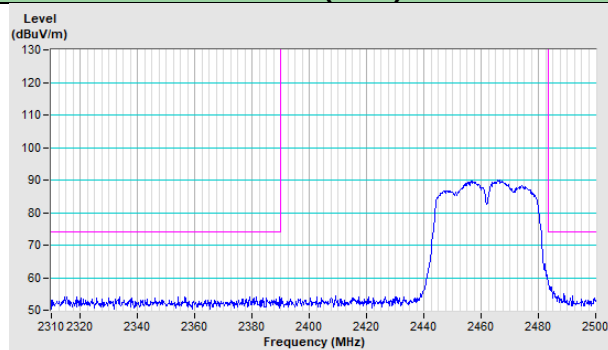
Horizontal (Peak)



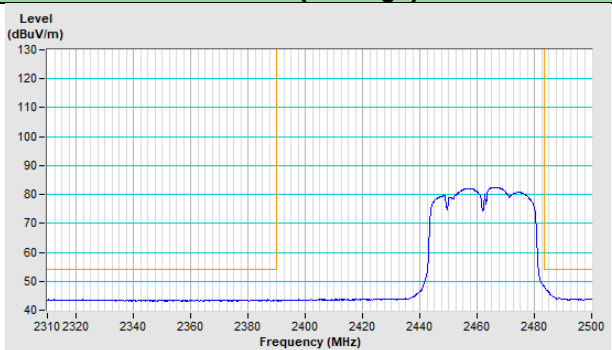
Horizontal (Average)



Vertical (Peak)



Vertical (Average)



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 accredited and approved according to ISO/IEC 17025.

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

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Email: service.adt@tw.bureauveritas.com

Web Site: www.bureauveritas-adt.com

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

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