FCC Test Report

(Co-Located)

Report No.: RFBCKS-WTW-P21010762-3

FCC ID: UXX-S5A107A

Test Model: S5A107A

Received Date: Jan. 27, 2021

Test Date: Apr. 08 ~ Apr. 09, 2021

Issued Date: Apr. 12, 2021

Applicant: Cradlepoint, Inc.

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

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FCC Registration / Designation Number: 788550 / TW0003

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Release Control Record

Issue No.	Description	Date Issued
RFBCKS-WTW-P21010762-3	Original release.	Apr. 12, 2021

1 Certificate of Conformity

Product: 5G Adapter

Brand: Cradlepoint, Inc.

Test Model: S5A107A

Sample Status: Engineering sample

Applicant: Cradlepoint, Inc.

Test Date: Apr. 08 ~ Apr. 09, 2021

Standards: 47 CFR FCC Part 15, Subpart C (Section 15.247)
ANSI C63.10:2013
47 CFR FCC Part 30
FCC Part 27, Subpart C, M

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 RF characteristics under the conditions specified in this report.

Prepared by : Pettie Chen , **Date:** Apr. 12, 2021

Pettie Chen / Senior Specialist

Approved by : Bruce Chen , **Date:** Apr. 12, 2021

Bruce Chen / Senior Project Engineer

2 Summary of Test Results

Applied Standard	47 CFR FCC Part 15, Subpart C (Section 15.247) ANSI C63.10:2013 47 CFR FCC Part 30 FCC Part 27, Subpart C, M		
FCC Clause	Test Item	Result	Remarks
15.205 / 15.209 / 15.247(d)	Radiated Emissions	Pass	Meet the requirement of limit. Minimum passing margin is -7.4dB at 62.01 MHz.
2.1053 27.53 (m)(4)(6)	Radiated Spurious Emissions	Pass	Meet the requirement of limit. Minimum passing margin is -19.90dB at 37.76MHz.
2.1051 30.203	Out-of-Band Spurious Emission	Pass	Meet the requirement of limit. Minimum passing margin is -12.70dB at 17990.65MHz.

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) (±)
Radiated Emissions up to 1 GHz	9 kHz ~ 30 MHz	3.04 dB
	30MHz ~ 200MHz	3.86 dB
	200MHz ~1000MHz	3.87 dB
Radiated Emissions above 1 GHz	1GHz ~ 18GHz	2.29 dB
	18GHz ~ 40GHz	2.29 dB

2.2 Modification Record

There were no modifications required for compliance.

3 General Information

3.1 General Description of EUT

Product	5G Adapter
Brand	Cradlepoint, Inc.
Test Model	S5A107A
Sample Status	Engineering sample
Power Supply rating	56 Vdc from POE adapter
Antenna Type	Refer to Note
Antenna Connector	Refer to Note
Accessory Device	POE Adapter x 1
Cable Supplied	NA

Note:

1. The EUT incorporates a MIMO function:

2.4GHz Band		
MODULATION MODE	TX & RX CONFIGURATION	
802.11b	4TX	4RX
802.11g	4TX	4RX
802.11n (HT20)	4TX	4RX
802.11n (HT40)	4TX	4RX
VHT20	4TX	4RX
VHT40	4TX	4RX
802.11ax (HE20)	4TX	4RX
802.11ax (HE40)	4TX	4RX

Note:
1. All of modulation mode support beamforming function except 802.11a/b/g/n modulation mode.
2. The EUT support Beamforming and CDD mode, therefore both mode were investigated and the worst case scenario was identified. The worst case data were presented in test report.
3. The modulation and bandwidth are similar for 802.11n mode for 20MHz (40MHz), VHT20 mode for 20MHz (40MHz) and 802.11ax mode for 20MHz (40MHz), therefore the manufacturer will control the power for 802.11n mode as same as the VHT mode and ax mode or more lower than it and investigated worst case to representative mode in test report. (Final test mode refer to section 3.2.1)

2. Simultaneously transmission condition.

Condition	Technology	
1	WLAN (2.4GHz)	WWAN (LTE+GPS)
2	WLAN (2.4GHz)	FR2

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

3. The EUT contains certified WWAN module which FCC ID: N7NEM91.

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

For Model: S5A107A					
Antenna No.	Antenna Net Gain(dBi)	Frequency range	Antenna Type	Connector Type	Cable Length
Ant 1	2.47	2.4~2.4835 GHz	Dipole	R-SMA	170mm
Ant 2	2.47	2.4~2.4835 GHz	Dipole	R-SMA	170mm
Ant 3	2.47	2.4~2.4835 GHz	Dipole	R-SMA	170mm
Ant 4	2.47	2.4~2.4835 GHz	Dipole	R-SMA	170mm
LTE Ant 1	2.5	700~960 MHz	Dipole	N-Type	204mm
	2.2	1428~1600 MHz			
	4.3	1700~2700 MHz			
	4.6	3300~3700 MHz			
	6.1	5150~5925 MHz			
LTE Ant 2 (GPS L1)	2.5	700~960 MHz	Dipole	N-Type	184mm
	2.2	1428~1600 MHz			
	4.3	1700~2700 MHz			
	4.6	3300~3700 MHz			
	6.1	5150~5925 MHz			
LTE Ant 3	2.5	700~960 MHz	Dipole	N-Type	187mm
	2.2	1428~1600 MHz			
	4.3	1700~2700 MHz			
	4.6	3300~3700 MHz			
	6.1	5150~5925 MHz			
LTE Ant 4 (GPS L5)	2.5	700~960 MHz	Dipole	N-Type	168mm
	2.2	1428~1600 MHz			
	4.3	1700~2700 MHz			
	4.6	3300~3700 MHz			
	6.1	5150~5925 MHz			

5. 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.

6. The EUT must be supplied from POE adapter as following table:

Brand	Model No.	Spec.
PHIHONG	POE90U-1BT-2	Input: 100-240Vac, 2.5A, 50/60Hz Output: 56V, 0.8A

3.1.1 Test Mode Applicability and Tested Channel Detail

EUT Configure Mode	Applicable to		Description
	RE≥1G	RE<1G	
-	√	√	-

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

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

Radiated Emission Test (Above 1GHz):

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

EUT Configure Mode	Mode	Tested Channel	Remark
-	802.11b	6	-
	LTE Band 41-HP	41490	Bandwidth: 20MHz, QPSK
-	802.11b	6	-
	FR2 (n260)	Middle	Beam (19+147), Bandwidth: 100MHz

Radiated Emission Test (Below 1GHz):

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

EUT Configure Mode	Mode	Tested Channel	Remark
-	802.11b	6	-
	LTE Band 41-HP	41490	Bandwidth: 20MHz, QPSK
-	802.11b	6	-
	FR2 (n260)	Middle	Beam (19+147), Bandwidth: 100MHz

Test Condition:

Applicable to	Environmental Conditions	Input Power	Tested by
RE≥1G	22 deg. C, 68% RH 22 deg. C, 66% RH	120Vac, 60Hz	Greg Lin Luis Lee
RE<1G	22 deg. C, 68% RH 22 deg. C, 66% RH 23 deg. C, 67% RH	120Vac, 60Hz	Greg Lin Luis Lee

3.2 Description of Support Units

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

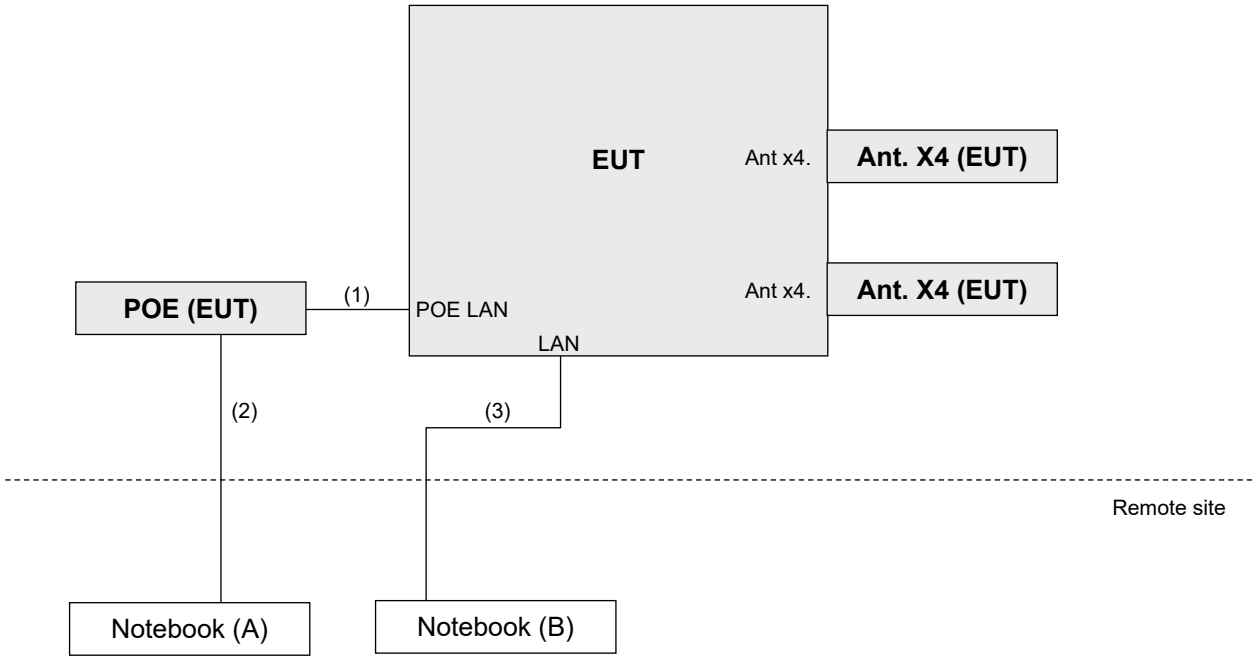
ID	Product	Brand	Model No.	Serial No.	FCC ID	Remarks
A.	Notebook	Lenovo	81A4	YD02TWF5	FCC DoC Approved	-
B.	Notebook	DELL	E5410	1HC2XM1	FCC DoC Approved	-

Note:

1. All power cords of the above support units are non shielded (1.8m).
2. Items A, B acted as communication partner to transfer data.

ID	Cable Descriptions	Qty.	Length (m)	Shielding (Yes/No)	Cores (Qty.)	Remarks
1.	LAN cable	1	0.9	N	0	RJ45, Cat5e
2.	LAN cable	1	10	N	0	RJ45, Cat5e
3.	LAN cable	1	10	N	0	RJ45, Cat5e

3.2.1 Configuration of System under Test



3.3 General Description of Applied Standards

The EUT is a RF Product. According to the specification of the EUT declared by the manufacturer, it must comply with the requirements of the following standards and References:

47 CFR FCC Part 15, Subpart C (Section 15.247)
ANSI C63.10:2013
47 CFR FCC Part 30
ANSI 63.26-2015
FCC Part 27, Subpart C, M

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
KDB 842590 D01 Upper Microwave Flexible Use Service v01

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

For WLAN 2.4G:

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.

For LTE Band 41-HP:

In the FCC 27.53(m)(4),On any frequency outside a licensee’s frequency block, The power of any emission shall be attenuated below the transmitter power (P) by at least 55 + 10 log (P) dB. The emission limit equal to –25dBm.

For FR2:

The conducted power or the total radiated power of any emission outside a licensee's frequency block shall be −13 dBm/MHz or lower. However, in the bands immediately outside and adjacent to the licensee's frequency block, having a bandwidth equal to 10 percent of the channel bandwidth, the conducted power or the total radiated power of any emission shall be −5 dBm/MHz or lower.

4.1.2 Test Instruments

Description & Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Due
Test Receiver ROHDE & SCHWARZ	ESIB7	100187	May 25, 2020	May 24, 2021
Spectrum Analyzer KEYSIGHT	N9030A	MY54490561	Jul. 30, 2020	Jul. 29, 2021
Spectrum Analyzer KEYSIGHT	N9030B	MY57140953	Jul. 02, 2020	Jul. 01, 2021
*Biconical antenna SCHWARZBECK	VHBB9124	9124-546	Jan. 14, 2019	Jan. 13, 2022
*LOG Antenna SCHWARZBECK	VUSLP 9111	9111-363	Jan. 14, 2019	Jan. 13, 2022
BILOG Antenna SCHWARZBECK	VULB9168	9168-155	Nov. 03, 2020	Nov. 02, 2021
HORN Antenna SCHWARZBECK	BBHA 9120D	9120D-1170	Nov. 22, 2020	Nov. 21, 2021
HORN Antenna ETS	3117	00034126	Nov. 22, 2020	Nov. 21, 2021
HORN Antenna SCHWARZBECK	BBHA 9170	BBHA9170241	Nov. 22, 2020	Nov. 21, 2021
HORN Antenna SCHWARZBECK	BBHA 9170	BBHA9170243	Nov. 22, 2020	Nov. 21, 2021
Signal Generator	N5173B	MY53270724	Apr. 01, 2020	Mar. 31, 2021
Preamplifier (Below 1GHz) Agilent	8447D	2944A10631	Jun. 08, 2020	Jun. 07, 2021
Preamplifier (1GHz-18GHz) KEYSIGHT	83017A	MY53270295	Jun. 08, 2020	Jun. 07, 2021
Pre-amplifier (18GHz-40GHz) EMC	EMC184045B	980116	Oct. 07, 2020	Oct. 06, 2021
RF signal cable HUBER+SUHNER	SUCOFLEX 104	MY 13380+295012/04	Jun. 08, 2020	Jun. 07, 2021
RF signal cable HUBER+SUHNER	SUCOFLEX 104	Cable-CH4-03 (250724)	Jun. 08, 2020	Jun. 07, 2021
RF signal cable HUBER+SUHNER	EMC102-KM-KM-600	150928	Aug. 16, 2020	Aug. 15, 2021
RF signal cable HUBER+SUHNER	EMC102-KM-KM-3000	150929	Aug. 16, 2020	Aug. 15, 2021
RF signal cable Rosnal	K1K50-UP0279-K 1K50-3000	181129-1	Sep. 04, 2020	Sep. 03, 2021
Software BV ADT	ADT_Radiated_ V7.6.15.9.5	NA	NA	NA
Antenna Tower inn-co GmbH	MA 4000	010303	NA	NA
Antenna Tower Controller BV ADT	AT100	AT93021703	NA	NA
Turn Table BV ADT	TT100	TT93021703	NA	NA
Turn Table Controller BV ADT	SC100	SC93021703	NA	NA
Boresight Antenna Fixture	FBA-01	FBA-SIP01	NA	NA
WIT Standard Temperature And Humidity Chamber	TH-4S-C	W981030	Jun. 01, 2020	May 31, 2021
JFW 20dB attenuation	50HF-020-SMA	NA	NA	NA
True RMS Clamp Meter Fluke	325	31130711WS	Jun. 06, 2020	Jun. 05, 2021

Note: 1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. *The calibration interval of the above test instruments is 36 months and the calibrations are traceable to NML/ROC and NIST/USA.
3. The test was performed in HwaYa Chamber 4.

4.1.3 Test Procedures

For WLAN 2.4G:

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 detect function and specified bandwidth with maximum hold mode when the test frequency is above 1 GHz. If the peak reading value also meets average limit, measurement with the average detector is unnecessary.

Note:

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

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

3. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is ≥ 1/T (Duty cycle < 98%) or 10Hz (Duty cycle ≥ 98%) for Average detection (AV) at frequency above 1GHz.

4. All modes of operation were investigated and the worst-case emissions are reported.

For LTE Band 41-HP:

a. Substitution method is used for E.I.R.P measurement. In the semi-anechoic chamber, EUT placed on the 0.8m(below or equal 1GHz) and/or 1.5m(above 1GHz) height of Turn Table, rotated the table around 360 degrees to search the maximum radiation power and receiver antenna shall be rotated vertical and horizontal polarization and moved height from 1m to 4m to find the maximum polar radiated power. The "Read Value" is the spectrum reading the maximum power value.
b. 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.
c. Perform a field strength measurement and record the worse read value, is the field strength value via a spectrum reading obtained corrected for antenna factor, cable loss and pre-amplifier factor and then mathematically convert the measured field strength level to EIRP/ERP level.
d. Following C63.26 section 5.5 and 5.2.7
   - EIRP (dBm) = E (dBμV/m) + 20log(D) - 104.8; where D is the measurement distance (in the far field region) in m.
   - ERP (dBm) = E (dBμV/m) + 20log(D) - 104.8 - 2.15; where D is the measurement distance (in the far field region) in m.

Note:
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 1MHz/3MHz.
2. The emission levels were against the limit of frequency range 9 kHz ~ 30 MHz:
   The amplitude of spurious emissions attenuated more than 20 dB below the permissible value is not required to be report.

For FR2:
Equivalent Isotropic Radiated Power (EIRP) measurement s are performed using broadband horn antennas. All measurements are performed as RMS average measurements while the EUT is operating at its maximum duty cycle, at maximum power, and at the appropriate frequencies.

The average power of the sum of all antenna elements is limited to a maximum EIRP of +55dBm.

Test Procedures Used
ANSI C63.26-2015 Section 5.2.4.4.1
KDB 842590 D01 v01 Section 4.2

Measurement Distance

EUT antenna of far field distance		
Measurement Frequency range	Far Field calculation distance	Measurement Distance (Far field)
Below 18GHz	0.279m	2m
18GHz to 40GHz	0.621m	2m
40GHz to 170GHz	2.646m	3m
170GHz to 200GHz	3.104m	3.5m
Note: EUT Antenna Dimension is 48.25mm length.		
Measurement antenna of far field distance		
Measurement Frequency range	Far Field calculation distance	Measurement Distance (Far field)
40GHz-50GHz	30mm	1m
50GHz-75GHz	25mm	1m
75GHz-110GHz	18mm	1m
110GHz-170GHz	12mm	1m
170GHz-200GHz	8mm	1m

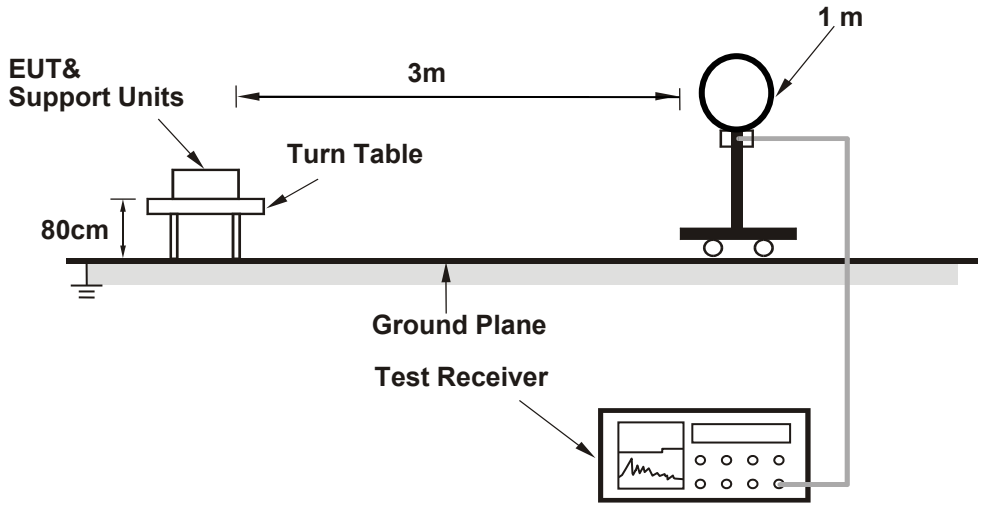
4.1.4 Deviation from Test Standard

No deviation.

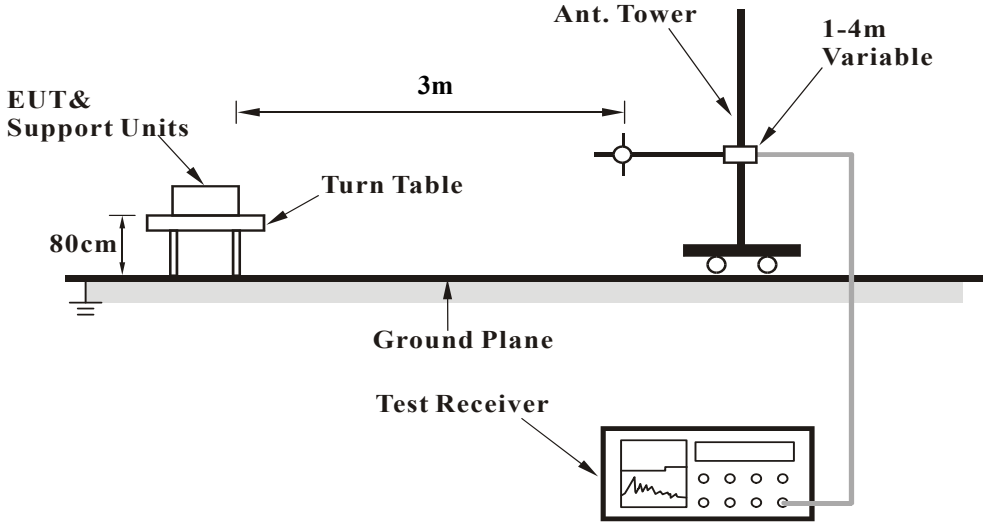
4.1.5 Test Setup

For WLAN 2.4G, LTE Band 41-HP:

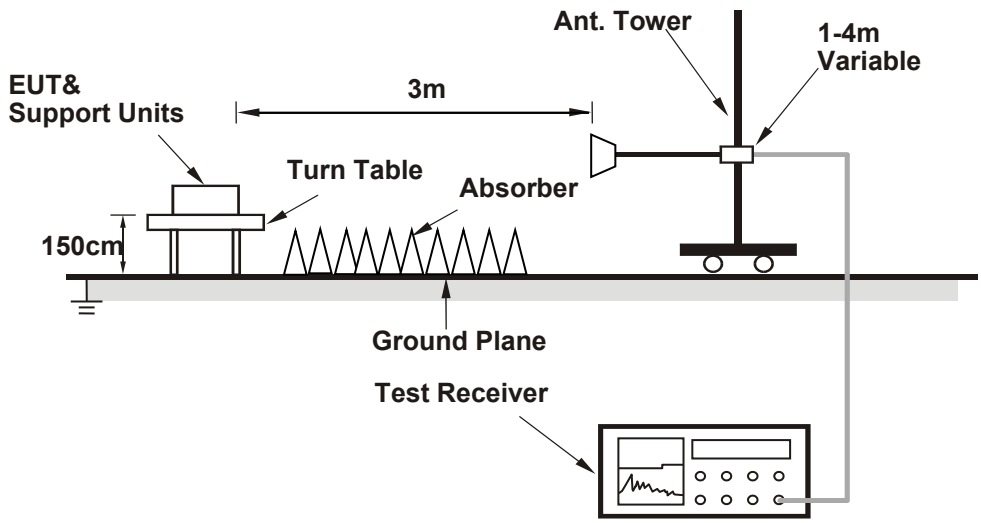
For Radiated emission below 30MHz



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).

For FR2:

a. Radiated power measurements were performed using the spectrum analyzer's channel power measurement function.

b. Set the RBW =1~5% of the anticipated RBW=1MHz, and the VBW ≥ 3 x RBW.

c. Set spectrum analyzer detection mode to RMS

d. Span = 2x to 3x the OBW

e. No. of sweep points ≥ 2 x span / RBW

f. Trigger is set to "free run" for test signals with continuous operation with the sweep times set to "auto". Trigger is set to enable triggering only on full power bursts with the sweep time set less that or equal to the transmission burst duration.

g. The integration bandwidth was roughly set equal to the measured OBW of the signal for signals with continuous operation. For signal with burst transmission, the "gating" function was enabled to ensure that measurements were performed during times in which the transmitter is operating at its maximum power.

h. Trace mode = trace averaging (RMS) over 100 sweeps.

i. The trace was allowed to stabilize.

Note:

1. EIRP measurements were taken at 2m test distance.

2. The average EIRP reported below is calculated per section 5.2.7 of ANSI C63.26-2015 which states: EIRP (dBm) = E (dBμV/m) + 20log(D) – 104.8; where D is the measurement distance (in the far field region) in m. The field strength E is calculated E (dBμV/m) = Spectrum Analyzer Channel Power Level (dBm) + Antenna Factor (dB/m) + Cable Loss (dB) + 107.

4.1.6 EUT Operating Conditions

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

b. Controlling software has been activated to set the EUT under transmission condition continuously at specific channel frequency.

4.1.7 Test Results

Above 1GHz data:

WLAN 2.4G 802.11b_Ch 6+LTE Band 41-HP_Ch 41490

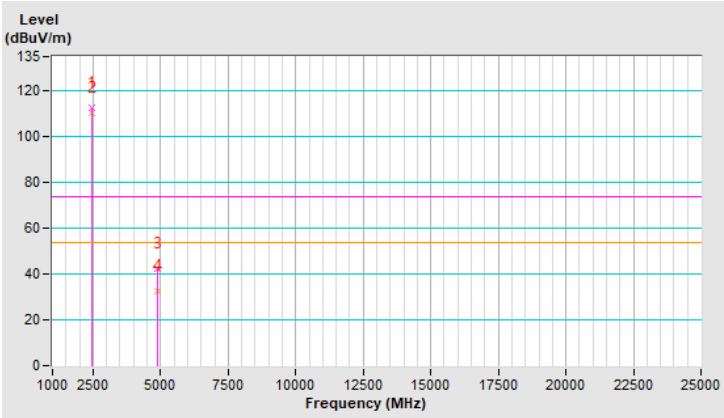
WLAN 2.4G 802.11b_Ch 6

Frequency Range	1GHz ~ 25GHz	Detector Function	Peak (PK) 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	*2437.00	112.8 PK			1.21 H	80	81.7	31.1
2	*2437.00	110.3 AV			1.21 H	80	79.2	31.1
3	4874.00	42.6 PK	74.0	-31.4	1.76 H	54	40.5	2.1
4	4874.00	32.8 AV	54.0	-21.2	1.76 H	54	30.7	2.1

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. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

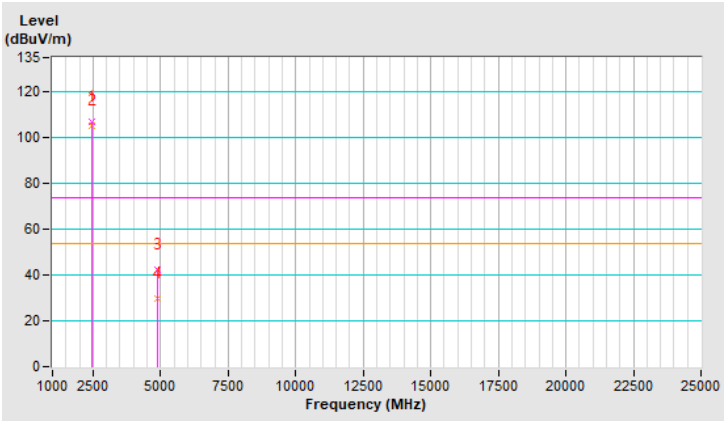


Frequency Range	1GHz ~ 25GHz	Detector Function	Peak (PK) Average (AV)

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2437.00	107.2 PK			2.52 V	76	76.1	31.1
2	*2437.00	105.4 AV			2.52 V	76	74.3	31.1
3	4874.00	42.3 PK	74.0	-31.7	1.13 V	54	40.2	2.1
4	4874.00	30.0 AV	54.0	-24.0	1.13 V	54	27.9	2.1

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. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.



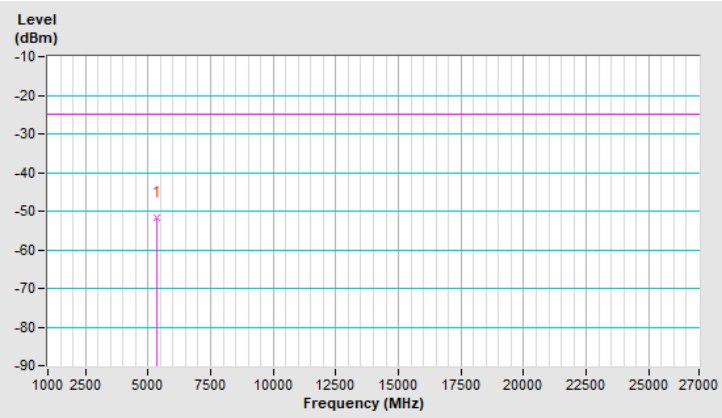
LTE Band 41-HP_Ch 41490

Mode	TX channel 41490 (2680.0MHz)	Frequency Range	1GHz ~ 27GHz

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5360.00	-51.80	-25.00	-26.80	1.62 H	171	41.50	-93.30

Remarks:

1. EIRP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.

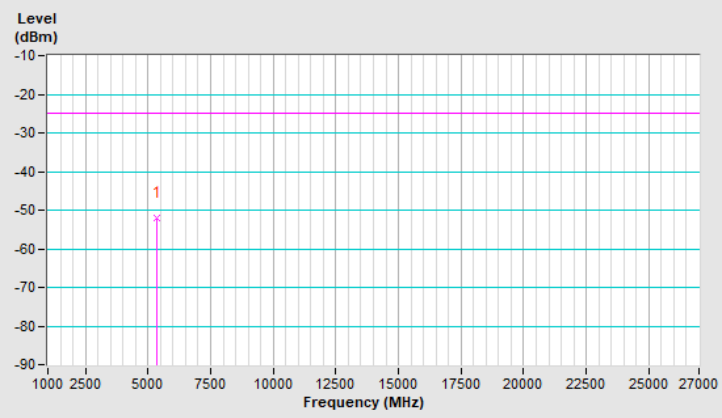


Mode	TX channel 41490 (2680.0MHz)	Frequency Range	1GHz ~ 27GHz

Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5360.00	-52.10	-25.00	-27.10	1.51 V	206	41.20	-93.30

Remarks:

1. EIRP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.



WLAN 2.4G 802.11b_Ch 6+FR2 (n260)_Middle Channel

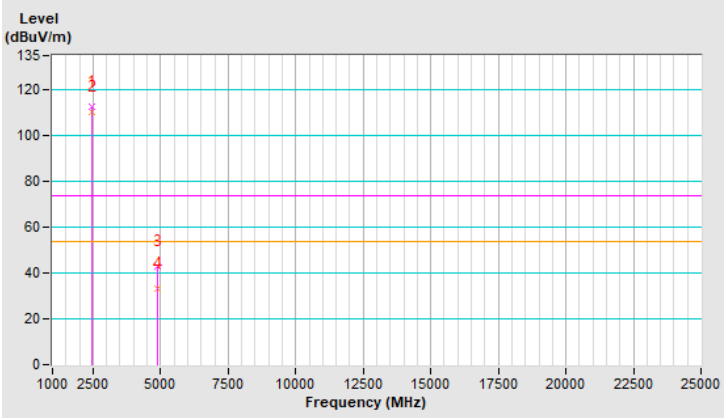
WLAN 2.4G 802.11b_Ch 6

Frequency Range	1GHz ~ 25GHz	Detector Function	Peak (PK) 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	*2437.00	112.7 PK			1.28 H	84	81.6	31.1
2	*2437.00	110.2 AV			1.28 H	84	79.1	31.1
3	4874.00	42.8 PK	74.0	-31.2	1.73 H	51	40.7	2.1
4	4874.00	33.0 AV	54.0	-21.0	1.73 H	51	30.9	2.1

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. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

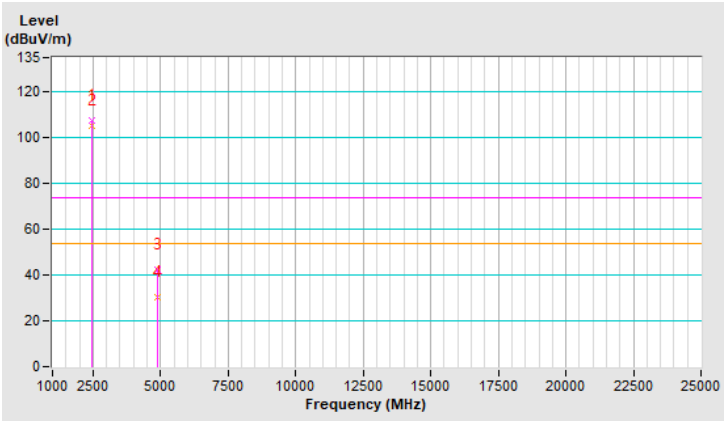


Frequency Range	1GHz ~ 25GHz	Detector Function	Peak (PK) Average (AV)

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2437.00	107.3 PK			2.57 V	72	76.2	31.1
2	*2437.00	105.4 AV			2.57 V	72	74.3	31.1
3	4874.00	42.5 PK	74.0	-31.5	1.18 V	56	40.4	2.1
4	4874.00	30.1 AV	54.0	-23.9	1.18 V	56	28.0	2.1

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. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.



FR2 (n260)_Middle Channel

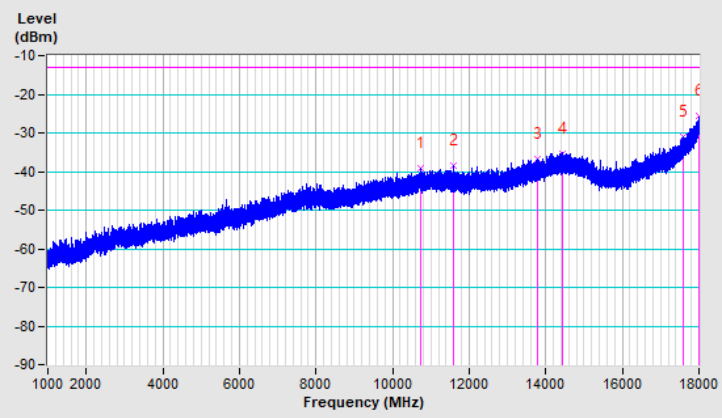
1GHz ~ 18GHz:

Beam ID	19	Frequency Range	1GHz ~ 18GHz
Channel	Mid	Polarity	Vertical

Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	10720.60	-39.30	-13.00	-26.30	1.50 V	312	46.90	-86.20
2	11590.58	-38.50	-13.00	-25.50	1.50 V	101	47.80	-86.30
3	13793.77	-36.80	-13.00	-23.80	1.00 V	88	49.40	-86.20
4	14427.02	-35.30	-13.00	-22.30	1.50 V	89	50.00	-85.30
5	17601.35	-31.10	-13.00	-18.10	1.50 V	288	52.70	-83.80
6	**17990.65**	**-25.70**	**-13.00**	**-12.70**	**1.00 V**	**241**	**52.90**	**-78.60**

Remarks:

1. EIRP(dBm) = Raw Value(dBuV) + Antenna Factor(dB/m) +Cable Factor(dB) – Pre-Amplifier Factor(dB)+ 20log(D) – 104.8.
2. Margin value = EIRP – Limit value
3. The other EIRP levels were very low against the limit.

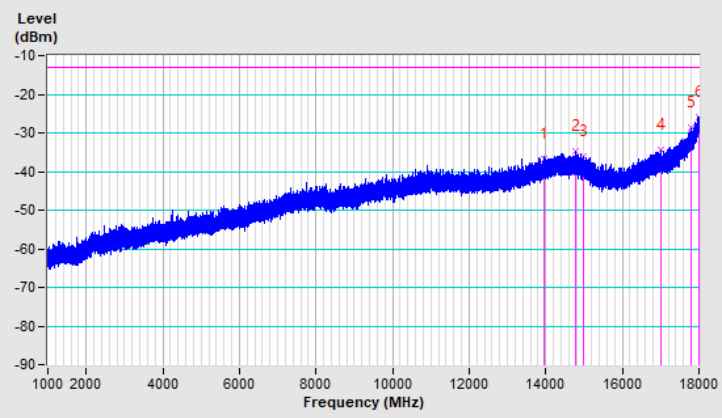


Beam ID	147	Frequency Range	1GHz ~ 18GHz
Channel	Mid	Polarity	Horizontal

Antenna Polarity & Test Distance : Horizontal at 3m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	13956.98	-36.80	-13.00	-23.80	1.00 H	152	49.10	-85.90
2	14767.87	-34.80	-13.00	-21.80	1.00 H	233	51.10	-85.90
3	14987.60	-36.20	-13.00	-23.20	1.50 H	297	50.60	-86.80
4	17010.17	-34.30	-13.00	-21.30	2.00 H	173	51.80	-86.10
5	17790.05	-28.80	-13.00	-15.80	1.00 H	227	53.50	-82.30
6	18000.00	-25.80	-13.00	-12.80	1.50 H	103	52.50	-78.30

Remarks:

1. EIRP(dBm) = Raw Value(dBuV) + Antenna Factor(dB/m) +Cable Factor(dB) – Pre-Amplifier Factor(dB)+ 20log(D) – 104.8.
2. Margin value = EIRP – Limit value
3. The other EIRP levels were very low against the limit.



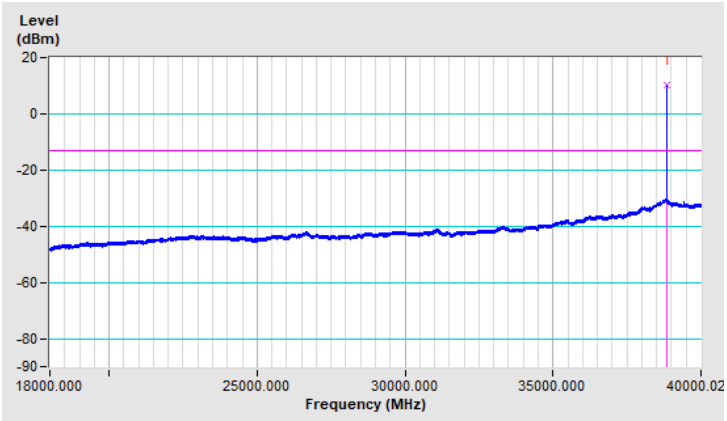
18GHz ~ 40.025GHz:

Beam ID	19	Frequency Range	18GHz ~ 40.025GHz
Channel	Mid	Polarity	Vertical

Antenna Polarity & Test Distance : Vertical at 2m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*38848.87	10.27			1.42 V	357	101.08	-90.81

Remarks:

1. EIRP(dBm) = Raw Value(dBuV) + Antenna Factor(dB/m) +Cable Factor(dB) – Pre-Amplifier Factor(dB)+ 20log(D) – 104.8.
2. Margin value = EIRP – Limit value
3. The other EIRP levels were very low against the limit.
4. *: Fundamental frequency

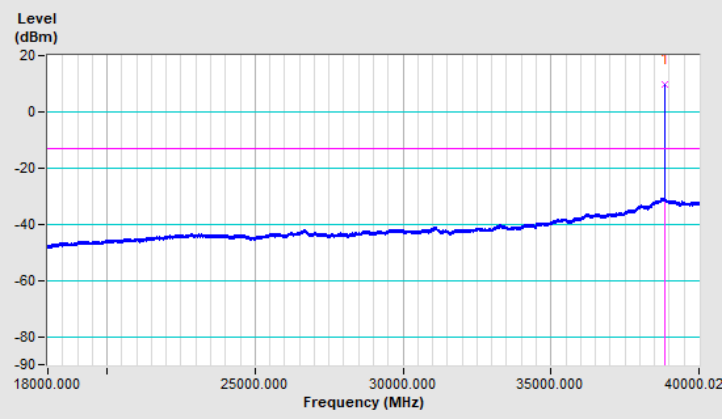


Beam ID	147	Frequency Range	18GHz ~ 40.025GHz
Channel	Mid	Polarity	Horizontal

Antenna Polarity & Test Distance : Horizontal at 2m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*38848.87	9.94			1.48 H	358	100.75	-90.81

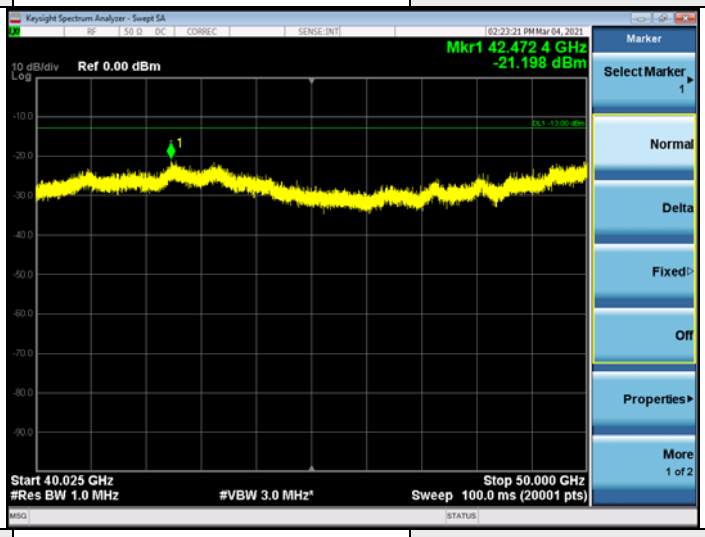
Remarks:

1. EIRP(dBm) = Raw Value(dBuV) + Antenna Factor(dB/m) +Cable Factor(dB) – Pre-Amplifier Factor(dB)+ 20log(D) – 104.8.
2. Margin value = EIRP – Limit value
3. The other EIRP levels were very low against the limit.
4. *: Fundamental frequency

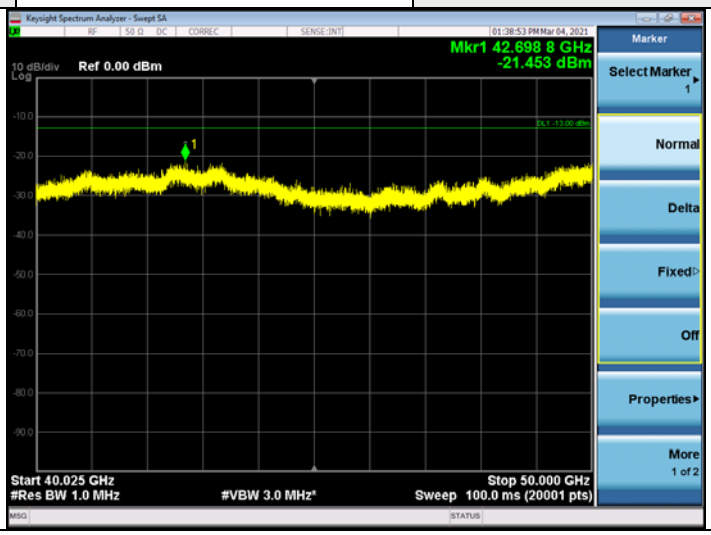


40.025GHz ~ 50GHz:

Band	n260	Beam ID	19
Frequency Range	40.025GHz-50GHz	Channel	Middle
Antenna polarity	Vertical	Test distance	3m



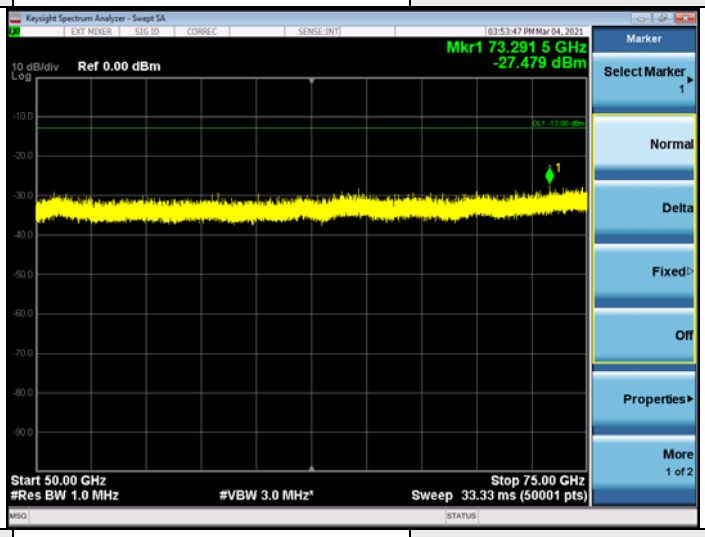
Band	n260	Beam ID	147
Frequency Range	40.025GHz-50GHz	Channel	Middle
Antenna polarity	Horizontal	Test distance	3m



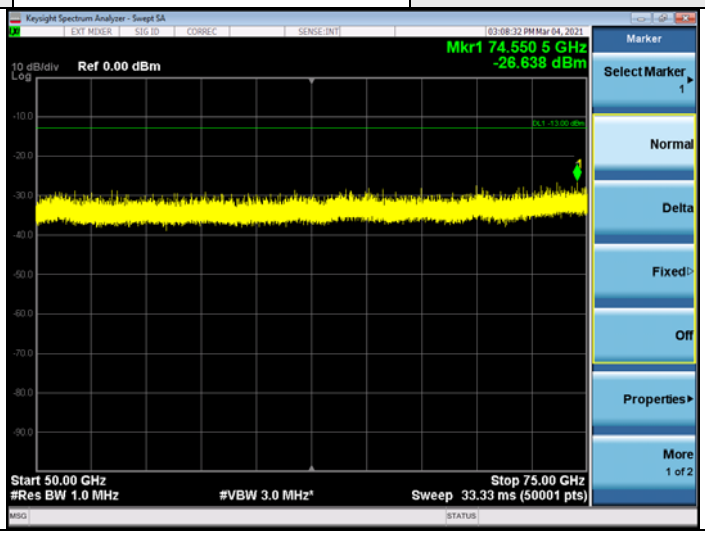
Note:
1. The test results already include the correction factor (corrections: On).
2. EIRP(dBm) = Raw Value(dBm) +107+ Antenna Factor(dB/m) +Cable Factor(dB) – Pre-Amplifier Factor(dB)+ 20log(D) – 104.8.

50GHz ~ 75GHz:

Band	n260	Beam ID	19
Frequency Range	50GHz-75GHz	Channel	Middle
Antenna polarity	Vertical	Test distance	3m



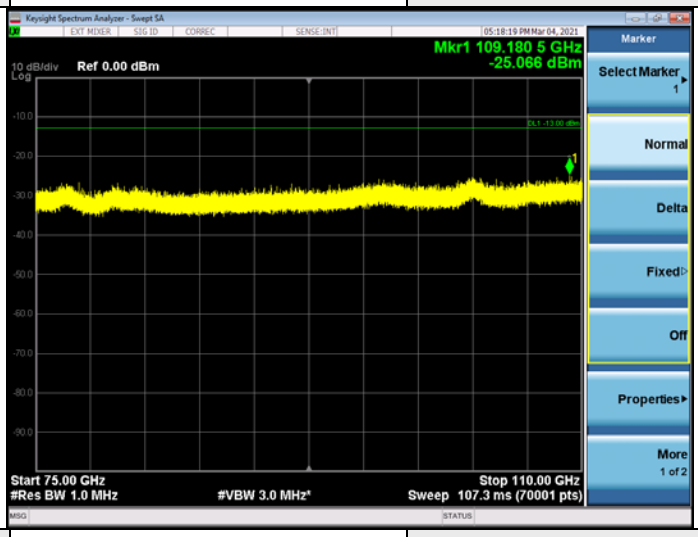
Band	n260	Beam ID	147
Frequency Range	50GHz-75GHz	Channel	Middle
Antenna polarity	Horizontal	Test distance	3m



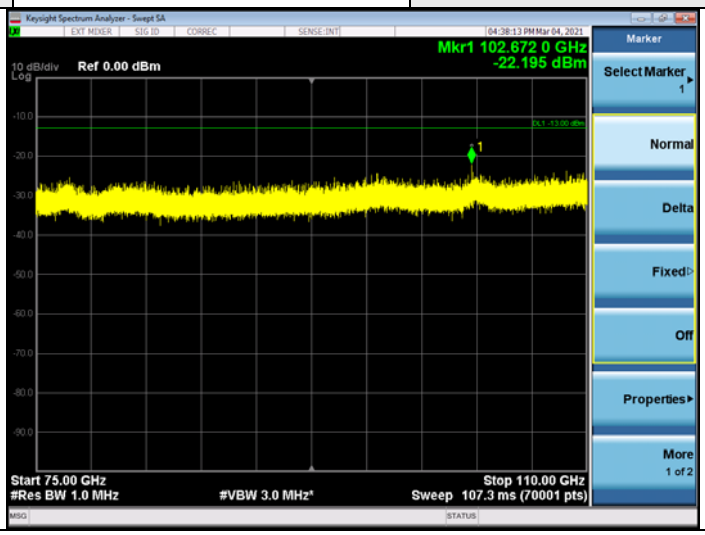
Note:
1. The test results already include the correction factor (corrections: On).
2. EIRP(dBm) = Raw Value(dBm) +107+ Antenna Factor(dB/m) +Cable Factor(dB) – Pre-Amplifier Factor(dB)+ 20log(D) – 104.8+Harmonic Mixer Conversion Loss (dB).

75GHz ~ 110GHz:

Band	n260	Beam ID	19
Frequency Range	75GHz-110GHz	Channel	Middle
Antenna polarity	Vertical	Test distance	3m



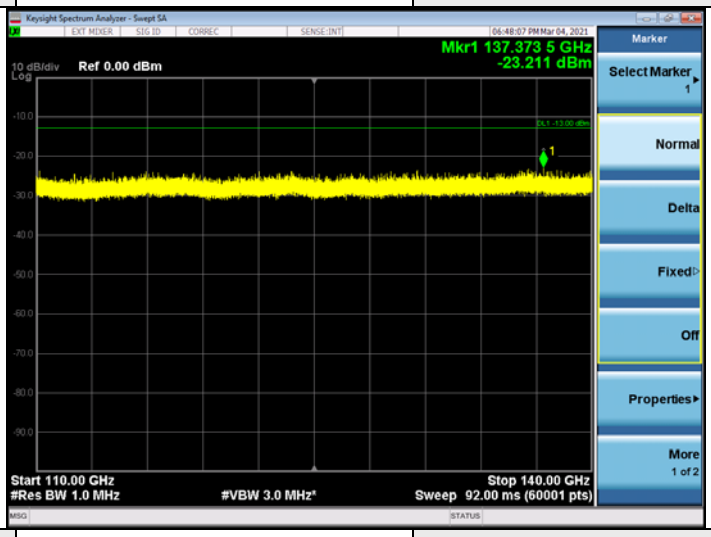
Band	n260	Beam ID	147
Frequency Range	75GHz-110GHz	Channel	Middle
Antenna polarity	Horizontal	Test distance	3m



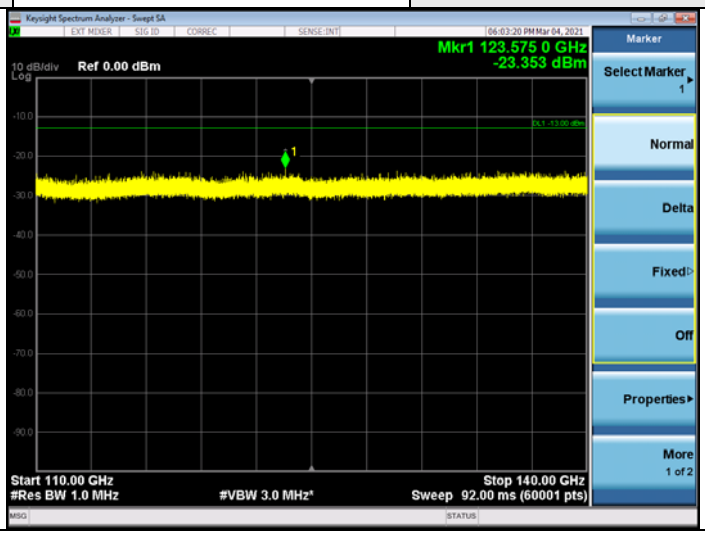
Note:
1. The test results already include the correction factor (corrections: On).
2. EIRP(dBm) = Raw Value(dBm) +107+ Antenna Factor(dB/m) +Cable Factor(dB) – Pre-Amplifier Factor(dB)+ 20log(D) – 104.8+Harmonic Mixer Conversion Loss (dB).

110GHz ~ 140GHz:

Band	n260	Beam ID	19
Frequency Range	110GHz-140GHz	Channel	Middle
Antenna polarity	Vertical	Test distance	3m



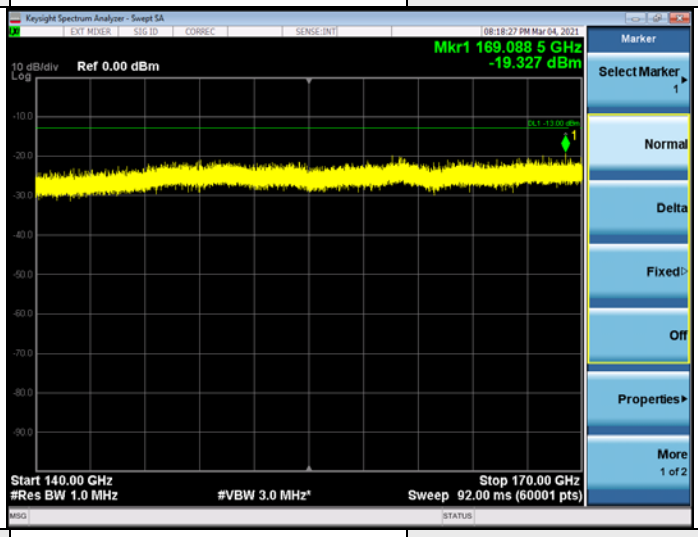
Band	n260	Beam ID	147
Frequency Range	110GHz-140GHz	Channel	Middle
Antenna polarity	Horizontal	Test distance	3m



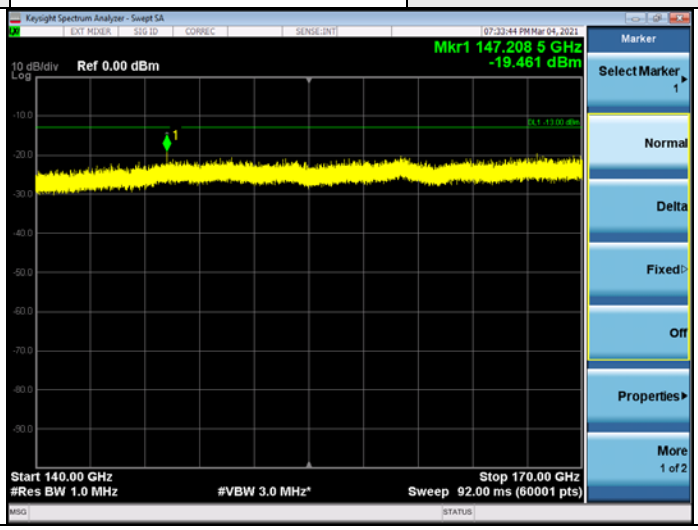
Note:
1. The test results already include the correction factor (corrections: On).
2. EIRP(dBm) = Raw Value(dBm) +107+ Antenna Factor(dB/m) +Cable Factor(dB) – Pre-Amplifier Factor(dB)+ 20log(D) – 104.8+Harmonic Mixer Conversion Loss (dB).

140GHz ~ 170GHz:

Band	n260	Beam ID	19
Frequency Range	140GHz-170GHz	Channel	Middle
Antenna polarity	Vertical	Test distance	3m



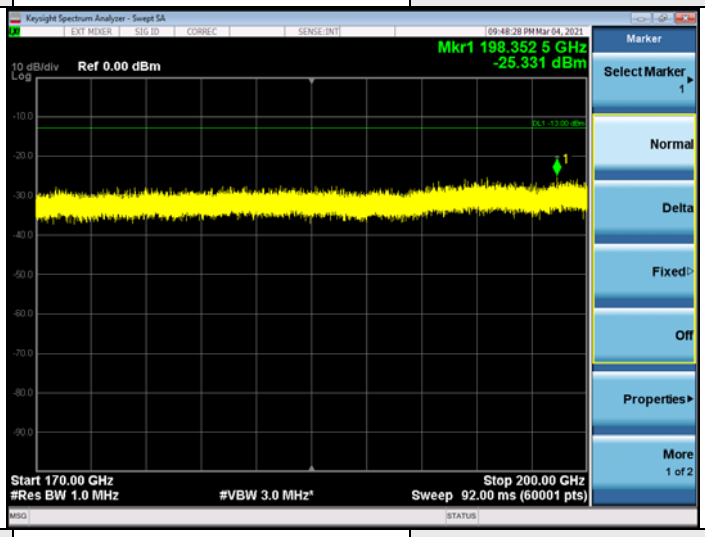
Band	n260	Beam ID	147
Frequency Range	140GHz-170GHz	Channel	Middle
Antenna polarity	Horizontal	Test distance	3m



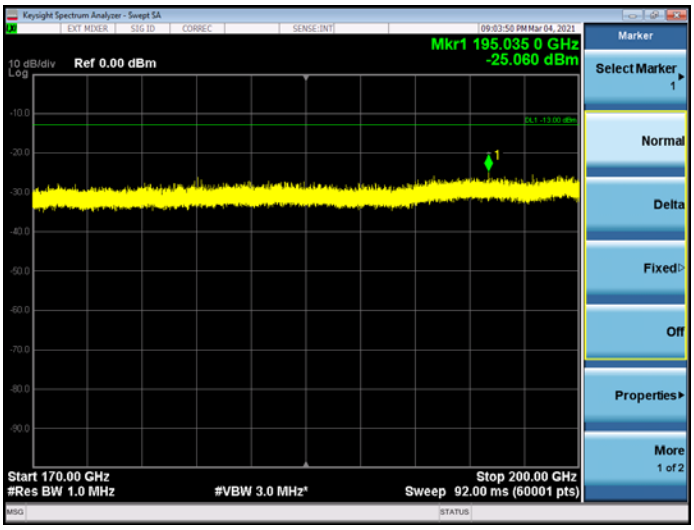
Note:
1. The test results already include the correction factor (corrections: On).
2. EIRP(dBm) = Raw Value(dBm) +107+ Antenna Factor(dB/m) +Cable Factor(dB) – Pre-Amplifier Factor(dB)+ 20log(D) – 104.8+Harmonic Mixer Conversion Loss (dB).

170GHz ~ 200GHz:

Band	n260	Beam ID	19
Frequency Range	170GHz-200GHz	Channel	Middle
Antenna polarity	Vertical	Test distance	3.5m



Band	n260	Beam ID	147
Frequency Range	170GHz-200GHz	Channel	Middle
Antenna polarity	Horizontal	Test distance	3.5m



Note:
1. The test results already include the correction factor (corrections: On).
2. EIRP(dBm) = Raw Value(dBm) +107+ Antenna Factor(dB/m) +Cable Factor(dB) – Pre-Amplifier Factor(dB)+ 20log(D) – 104.8+Harmonic Mixer Conversion Loss (dB).

Summary of MIMO Out-of-Band Spurious Emission EIRP:

To address compliance of MIMO spurious emission per KDB 662911 D01, the MIMO spurious emission EIRP is calculated by summing the worst case H Beam EIRP and V Beam EIRP in linear powers units then converted back to dBm.

EIRP(V Beam) + EIRP(H Beam) = EIRP(MIMO)						
Test Frequency Range	Channel	EIRP (V Beam)	EIRP (H Beam)	EIRP (MIMO)	Limit (dBm)	Margin (dB)
1GHz to 18GHz	2259997	-25.70	-25.80	-22.74	-13	-9.74
18GHz to 40.025GHz	2259997	10.27	9.94	13.12	-	-
40.025GHz to 50GHz	2259997	-21.198	-21.453	-18.31	-13	-5.31
50GHz to 75GHz	2259997	-27.479	-26.638	-24.03	-13	-11.03
75GHz to 110GHz	2259997	-25.066	-22.195	-20.39	-13	-7.39
110GHz to 140GHz	2259997	-23.211	-23.353	-20.27	-13	-7.27
140GHz to 170GHz	2259997	-19.327	-19.461	-16.38	-13	-3.38
170GHz to 200GHz	2259997	-25.331	-25.060	-22.18	-13	-9.18

Below 1GHz Data:

WLAN 2.4G 802.11b_Ch 6+LTE Band 41-HP_Ch 41490

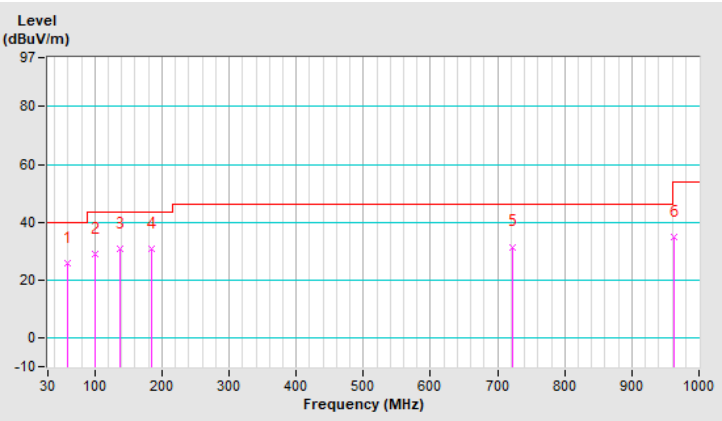
WLAN 2.4G 802.11b_Ch 6

Frequency Range	9kHz ~ 1GHz	Detector Function	Quasi-Peak (QP)

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	60.07	25.9 QP	40.0	-14.1	1.25 H	80	35.2	-9.3
2	100.81	29.1 QP	43.5	-14.4	1.25 H	84	41.9	-12.8
3	137.67	30.6 QP	43.5	-12.9	1.00 H	262	39.6	-9.0
4	184.23	30.7 QP	43.5	-12.8	1.50 H	291	40.9	-10.2
5	721.61	31.5 QP	46.0	-14.5	1.00 H	324	30.0	1.5
6	962.17	34.8 QP	54.0	-19.2	1.25 H	249	28.8	6.0

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 emission levels were very low against the limit of frequency range 9kHz~30MHz: the amplitude of spurious emissions attenuated more than 20dB below the permissible value to be report.

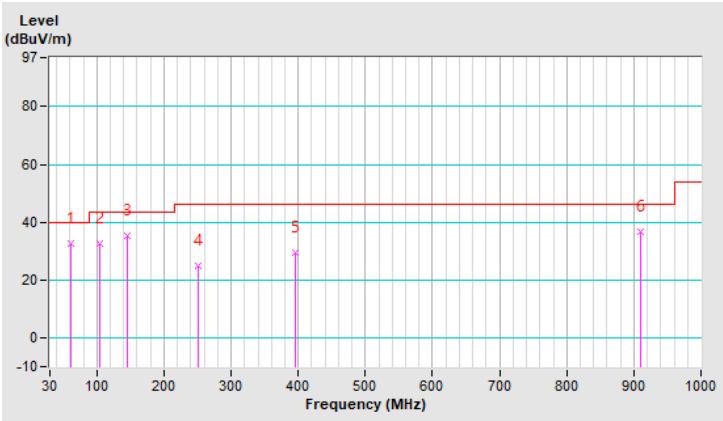


Frequency Range	9kHz ~ 1GHz	Detector Function	Quasi-Peak (QP)

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	**62.01**	**32.6 QP**	**40.0**	**-7.4**	**1.25 V**	**99**	**42.4**	**-9.8**
2	104.69	32.6 QP	43.5	-10.9	1.50 V	182	44.8	-12.2
3	144.46	35.5 QP	43.5	-8.0	1.25 V	342	44.1	-8.6
4	251.16	24.9 QP	46.0	-21.1	1.00 V	173	33.6	-8.7
5	395.69	29.4 QP	46.0	-16.6	1.50 V	213	34.2	-4.8
6	909.79	36.8 QP	46.0	-9.2	1.00 V	9	31.4	5.4

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 emission levels were very low against the limit of frequency range 9kHz~30MHz: the amplitude of spurious emissions attenuated more than 20dB below the permissible value to be report.



LTE Band 41-HP_Ch 41490

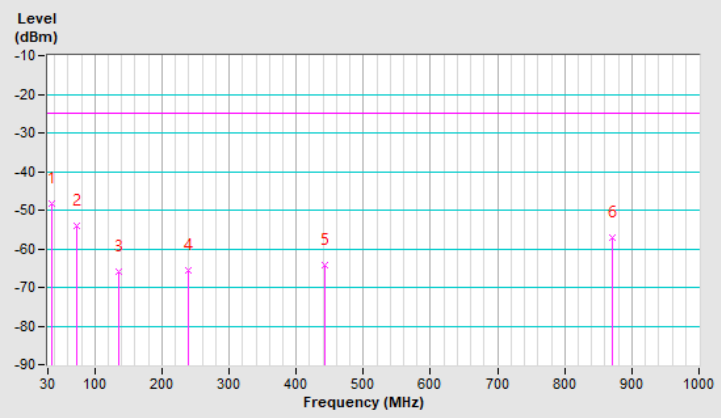
LTE Band 41, Channel Bandwidth 20MHz

Mode	TX channel 41490 (2680.0MHz)	Frequency Range	Below 1000 MHz

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	35.82	-48.30	-25.00	-23.30	1.25 H	96	57.10	-105.40
2	73.65	-54.20	-25.00	-29.20	1.00 H	185	52.80	-107.00
3	135.73	-66.00	-25.00	-41.00	1.50 H	179	38.60	-104.60
4	239.52	-65.50	-25.00	-40.50	1.00 H	55	39.00	-104.50
5	442.25	-64.40	-25.00	-39.40	1.25 H	257	34.60	-99.00
6	870.99	-57.10	-25.00	-32.10	1.00 H	154	33.90	-91.00

Remarks:

1. EIRP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.

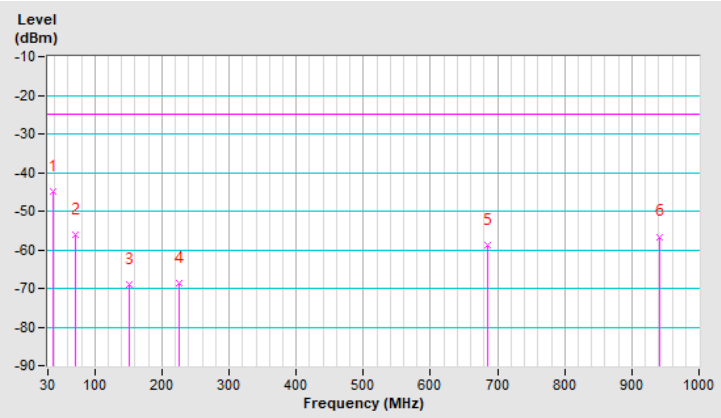


Mode	TX channel 41490 (2680.0MHz)	Frequency Range	Below 1000 MHz

Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	**37.76**	**-44.90**	**-25.00**	**-19.90**	**1.00 V**	**19**	**60.30**	**-105.20**
2	70.74	-56.10	-25.00	-31.10	1.25 V	178	50.10	-106.20
3	152.22	-68.90	-25.00	-43.90	1.25 V	125	34.80	-103.70
4	225.94	-68.60	-25.00	-43.60	1.00 V	258	37.60	-106.20
5	685.72	-58.90	-25.00	-33.90	1.50 V	103	35.40	-94.30
6	941.80	-56.60	-25.00	-31.60	1.00 V	26	33.00	-89.60

Remarks:

1. EIRP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.



WLAN 2.4G 802.11b_Ch 6+FR2 (n260)_Middle Channel

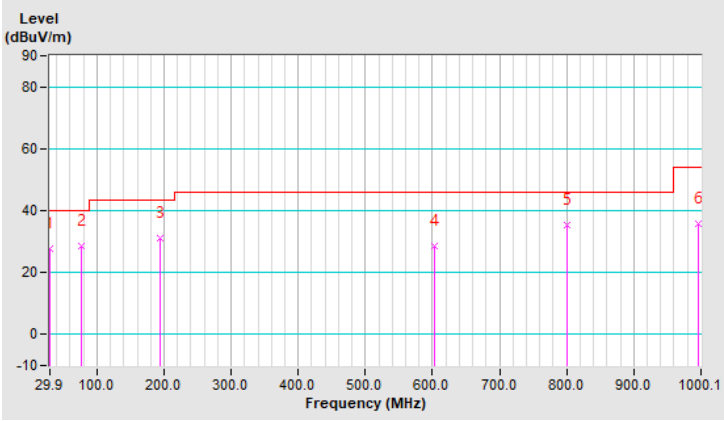
WLAN 2.4G 802.11b_Ch 6

Frequency Range	9kHz ~ 1GHz	Detector Function	Quasi-Peak (QP)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	30.00	27.6 QP	40.0	-12.4	1.00 H	154	37.9	-10.3
2	77.53	28.7 QP	40.0	-11.3	1.00 H	5	41.4	-12.7
3	194.90	31.2 QP	43.5	-12.3	1.50 H	279	42.4	-11.2
4	602.30	28.7 QP	46.0	-17.3	1.00 H	247	29.2	-0.5
5	800.18	35.4 QP	46.0	-10.6	1.00 H	5	32.0	3.4
6	997.09	35.6 QP	54.0	-18.4	2.00 H	19	29.4	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 emission levels were very low against the limit of frequency range 9kHz~30MHz: the amplitude of spurious emissions attenuated more than 20dB below the permissible value to be report.

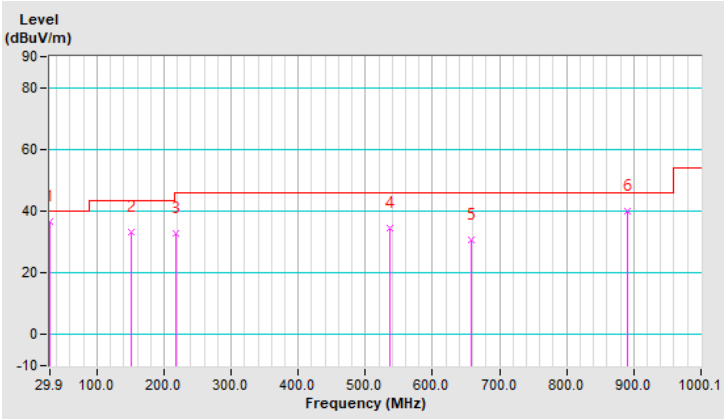


Frequency Range	9kHz ~ 1GHz	Detector Function	Quasi-Peak (QP)

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	30.00	36.5 QP	40.0	-3.5	1.00 V	229	46.8	-10.3
2	150.25	33.3 QP	43.5	-10.2	1.00 V	10	41.7	-8.4
3	217.21	32.9 QP	46.0	-13.1	1.00 V	135	43.7	-10.8
4	536.34	34.7 QP	46.0	-11.3	2.00 V	125	36.8	-2.1
5	658.56	30.8 QP	46.0	-15.2	1.00 V	121	30.4	0.4
6	890.36	40.1 QP	46.0	-5.9	1.50 V	182	35.5	4.6

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 emission levels were very low against the limit of frequency range 9kHz~30MHz: the amplitude of spurious emissions attenuated more than 20dB below the permissible value to be report.



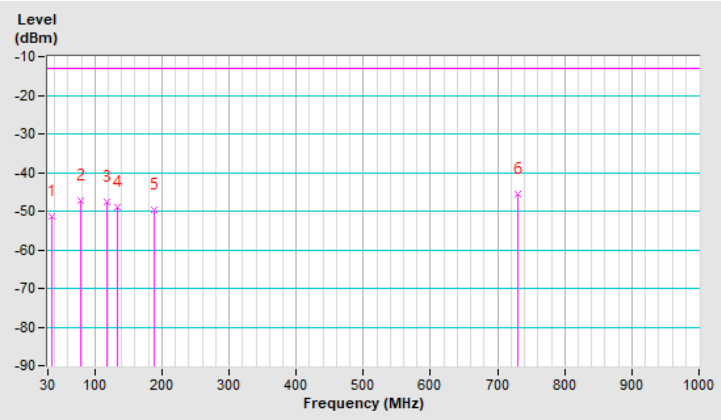
FR2 (n260)_Middle Channel

Beam ID	19	Frequency Range	Below 1000 MHz
Channel	Mid	Polarity	Vertical

Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	35.62	-51.40	-13.00	-38.40	1.00 V	94	63.40	-114.80
2	79.20	-47.40	-13.00	-34.40	1.50 V	253	71.20	-118.60
3	118.57	-47.50	-13.00	-34.50	2.00 V	104	68.30	-115.80
4	134.03	-49.00	-13.00	-36.00	2.00 V	89	65.40	-114.40
5	187.45	-49.60	-13.00	-36.60	1.00 V	283	66.30	-115.90
6	730.09	-45.70	-13.00	-32.70	1.00 V	49	58.00	-103.70

Remarks:

1. EIRP(dBm) = Raw Value(dBuV) + Antenna Factor(dB/m) +Cable Factor(dB) – Pre-Amplifier Factor(dB)+ 20log(D) – 104.8.
2. Margin value = EIRP – Limit value
3. The other EIRP levels were very low against the limit.

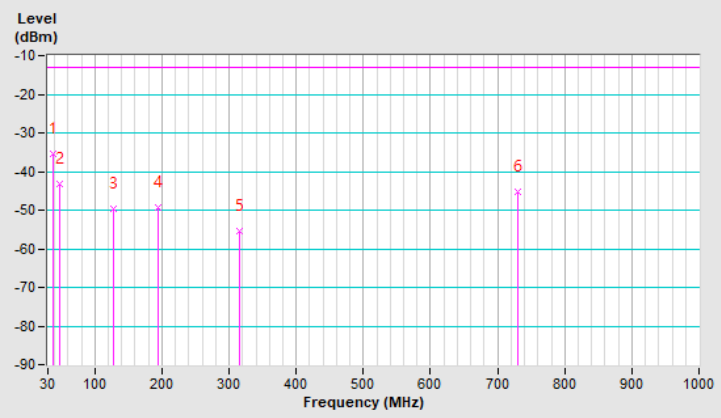


Beam ID	147	Frequency Range	Below 1000 MHz
Channel	Mid	Polarity	Horizontal

Antenna Polarity & Test Distance : Horizontal at 3m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	37.03	-35.50	-13.00	-22.50	1.50 H	131	79.00	-114.50
2	46.87	-43.10	-13.00	-30.10	1.00 H	269	70.80	-113.90
3	128.41	-49.80	-13.00	-36.80	1.00 H	255	65.20	-115.00
4	194.48	-49.40	-13.00	-36.40	1.50 H	190	67.40	-116.80
5	315.38	-55.30	-13.00	-42.30	2.00 H	256	57.20	-112.50
6	730.09	-45.10	-13.00	-32.10	2.00 H	29	58.60	-103.70

Remarks:

1. EIRP(dBm) = Raw Value(dBuV) + Antenna Factor(dB/m) +Cable Factor(dB) – Pre-Amplifier Factor(dB)+ 20log(D) – 104.8.
2. Margin value = EIRP – Limit value
3. The other EIRP levels were very low against the limit.



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 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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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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