



BUREAU  
VERITAS

Test Report No.: RF180606N077-4



# TEST REPORT

Applicant	Panasonic Corporation of North America
Address	Two Riverfront Plaza, 9th Floor, Newark, New Jersey 07102-5490, United States

Manufacturer or Supplier	Panasonic Corporation
Address	1-15 Matsuo-cho, Kadoma City, Osaka 571-8504, Japan
Product Name	Wireless Speaker System
Brand Name	Technics
Model	SC-C50
Additional Model & Model Difference	N/A
Date of tests	Jun. 06, 2018 ~ Jul. 20, 2018

The tests have been carried out according to the requirements of the following standard:

**FCC Part 15, Subpart E, Section 15.407**

**CONCLUSION: The submitted sample was found to COMPLY with the test requirement**

Tested by Andy Zhu  
Project Engineer/ EMC Department

Approved by Glyn He  
Supervisor / EMC Department

Date: Jul. 30, 2018

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# TABLE OF CONTENTS

**RELEASE CONTROL RECORD .....4**

**1. SUMMARY OF TEST RESULTS .....5**

    1.1 MEASUREMENT UNCERTAINTY .....5

**2. GENERAL INFORMATION.....6**

    2.1 GENERAL DESCRIPTION OF EUT.....6

    2.2 DESCRIPTION OF TEST MODES.....7

        2.2.1 TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL .....10

    2.3 DUTY CYCLE OF TEST SIGNAL .....12

    2.4 DESCRIPTION OF SUPPORT UNITS.....14

    2.5 GENERAL DESCRIPTION OF APPLIED STANDARDS.....14

**3. TEST TYPES AND RESULTS .....15**

    3.1 RADIATED EMISSION AND BANDEDGE MEASUREMENT.....15

        3.1.1 LIMITS OF RADIATED EMISSION AND BANDEDGE MEASUREMENT .....15

        3.1.2 LIMITS OF UNWANTED EMISSION OUT OF THE RESTRICTED BANDS .....16

        3.1.3 TEST INSTRUMENTS .....17

        3.1.4 TEST PROCEDURES.....18

        3.1.5 DEVIATION FROM TEST STANDARD.....18

        3.1.6 TEST SETUP.....19

        3.1.7 EUT OPERATING CONDITION.....20

        3.1.8 TEST RESULTS.....21

    3.2 CONDUCTED EMISSION MEASUREMENT .....60

        3.2.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT .....61

        3.2.2 TEST INSTRUMENTS .....61

        3.2.3 TEST PROCEDURES.....62

        3.2.4 DEVIATION FROM TEST STANDARD.....62

        3.2.5 TEST SETUP.....62

        3.2.6 EUT OPERATING CONDITIONS .....62

        3.2.7 TEST RESULTS.....63

    3.3 TRANSMIT POWER MEASUREMENT.....65



3.3.1	LIMITS OF TRANSMIT POWER MEASUREMENT.....	65
3.3.2	TEST SETUP.....	65
3.3.3	TEST INSTRUMENTS .....	66
3.3.4	TEST PROCEDURE .....	66
3.3.5	DEVIATION FROM TEST STANDARD.....	67
3.3.6	EUT OPERATING CONDITIONS .....	67
3.3.7	TEST RESULTS.....	68
3.4	PEAK POWER SPECTRAL DENSITY MEASUREMENT.....	82
3.4.1	LIMITS OF PEAK POWER SPECTRAL DENSITY MEASUREMENT.....	82
3.4.2	TEST SETUP.....	82
3.4.3	TEST INSTRUMENTS .....	82
3.4.4	TEST PROCEDURES.....	82
3.4.5	DEVIATION FROM TEST STANDARD.....	83
3.4.6	EUT OPERATING CONDITIONS .....	83
3.4.7	TEST RESULTS.....	84
3.5	FREQUENCY STABILITY.....	96
3.5.1	LIMITS OF FREQUENCY STABILITY MEASUREMENT.....	96
3.5.2	TEST SETUP.....	96
3.5.3	TEST INSTRUMENTS .....	96
3.5.4	TEST PROCEDURE .....	97
3.5.5	DEVIATION FROM TEST STANDARD.....	97
3.5.6	EUT OPERATING CONDITION.....	97
3.5.7	TEST RESULTS.....	98
<b>4.</b>	<b>PHOTOGRAPHS OF THE TEST CONFIGURATION.....</b>	<b>101</b>
<b>5.</b>	<b>APPENDIX A – MODIFICATIONS RECORDERS FOR ENGINEERING CHANGES TO THE EUT BY THE LAB .....</b>	<b>102</b>



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## RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
RF180606N077-4	Original release.	Jul. 30, 2018



# 1. SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

APPLIED STANDARD: FCC PART 15, SUBPART E (SECTION 15.407 UNDER NEW RULE)			
STANDARD SECTION	TEST TYPE	RESULT	REMARK
15.407(b)(6)	AC Power Conducted Emissions	PASS	Meet the requirement of limit.
15.407(b) (1/2/3/4/6)	Radiated Emissions & Band Edge Measurement	PASS	Meet the requirement of limit.
15.407(a)(1/2/3)	Max Average Transmit Power	PASS	Meet the requirement of limit.
15.407(a)(1/2/3)	Peak Power Spectral Density	PASS	Meet the requirement of limit.
15.407(g)	Frequency Stability	PASS	Meet the requirement of limit.
15.203	Antenna Requirement	PASS	No antenna connector is used

## 1.1 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	UNCERTAINTY
Conducted emissions	9kHz~30MHz	2.70dB
Radiated emissions	9KHz ~ 30MHz	2.90dB
	30MHz ~ 1GMHz	3.83dB
	1GHz ~ 18GHz	4.93dB
	18GHz ~ 40GHz	4.80dB

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k = 2.



## 2. GENERAL INFORMATION

### 2.1 GENERAL DESCRIPTION OF EUT

<b>PRODUCT NAME</b>	Wireless Speaker System
<b>MODEL NO.</b>	SC-C50
<b>FCC ID</b>	ACJ-SC-C50
<b>POWER SUPPLY</b>	AC 120V 60Hz
<b>MODULATION TYPE</b>	256QAM, 64QAM, 16QAM, QPSK, BPSK for OFDM
<b>MODULATION TECHNOLOGY</b>	OFDM
<b>TRANSFER RATE</b>	802.11a: 54.0/ 48.0/ 36.0/ 24.0/ 18.0/ 12.0/ 9.0/ 6.0Mbps 802.11n: up to 300.0Mbps 802.11ac : up to 866.6Mbps
<b>OPERATING FREQUENCY</b>	5180 ~ 5240MHz, 5260 ~ 5320MHz 5500 ~ 5700MHz, 5745 ~ 5825MHz
<b>NUMBER OF CHANNEL</b>	5180 ~ 5240MHz: 4 channels for 802.11a, 802.11n,11ac (20MHz) 2 channels for 802.11n,11ac (40MHz): 1 channel for 802.11ac 80MHz 5260 ~ 5320MHz: 4 channels for 802.11a, 802.11n,11ac (20MHz) 2 channels for 802.11n, 11ac (40MHz) 1 channel for 802.11ac (80MHz) 5500 ~ 5700MHz: 11 channels for 802.11a, 802.11n,11ac (20MHz) 5 channels for 802.11n (40MHz) 2 channel for 802.11ac (80MHz) 5745 ~ 5825MHz: 5 channels for 802.11a, 802.11n,11ac (20MHz) 2 channels for 802.11n,11ac (40MHz) 1 channel for 802.11ac (80MHz)
<b>CONDUCTED OUTPUT POWER</b>	17.67 dBm for 5150 ~ 5250MHz (Maximum AVG Power) 16.96 dBm for 5250 ~ 5350MHz (Maximum AVG Power) 17.00 dBm for 5470 ~ 5725MHz (Maximum AVG Power) 16.16 dBm for 5725 ~ 5850MHz (Maximum AVG Power)
<b>ANTENNA TYPE</b>	5180 ~ 5240MHz: PCB antenna with 0.25dBi gain 5260 ~ 5320MHz: PCB antenna with 0.25dBi gain 5500 ~ 5700MHz: PCB antenna with 0.76dBi gain 5745 ~ 5825MHz: PCB antenna with 1.34dBi gain
<b>I/O PORTS</b>	Refer to user's manual
<b>CABLE SUPPLIED</b>	AC Line: Unshielded, Detachable 1.5m



**NOTE:**

1. The EUT have MIMO function, provides 2 completed transmitters and 2 receivers.

<b>MODULATION MODE</b>	<b>TX FUNCTION</b>
802.11a	2TX/2RX
802.11n (HT20), 802.11ac (VHT20)	2TX/2RX
802.11n (HT40), 802.11ac (VHT40)	2TX/2RX
802.11ac (VHT80)	2TX/2RX

2. For a more detailed features description, please refer to the manufacturer's specifications or the user's manual.
3. For the test results, the EUT had been tested with all conditions. But only the worst case was shown in test report.
4. Please refer to the EUT photo document (Reference No.: 180606N077) for detailed product photo.



## 2.2 DESCRIPTION OF TEST MODES

### FOR 5150 ~ 5250MHz

4 channels are provided for 802.11a, 802.11ac 20MHz, 802.11n (20MHz):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
36	5180 MHz	40	5200 MHz
44	5220 MHz	48	5240 MHz

2 channels are provided for 802.11ac 40MHz, 802.11n (40MHz):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
38	5190 MHz	46	5230 MHz

1 channel is provided for 802.11ac (80MHz):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
42	5210MHz	--	--

### FOR 5250 ~ 5350MHz

4 channels are provided for 802.11a, 802.11ac 20MHz, 802.11n (20MHz):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
52	5260 MHz	56	5280 MHz
60	5300 MHz	64	5320 MHz

2 channels are provided for 802.11ac 40MHz, 802.11n (40MHz):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
54	5270 MHz	62	5310 MHz

1 channel is provided for 802.11ac (80MHz):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
58	5290MHz	--	--





**FOR 5470 ~ 5725MHz**

11 channels are provided for 802.11a, 802.11ac 20MHz, 802.11n (20MHz):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
100	5500 MHz	104	5520 MHz
108	5540 MHz	112	5560 MHz
116	5580 MHz	120	5600 MHz
124	5620 MHz	128	5640 MHz
132	5660 MHz	136	5680 MHz
140	5700 MHz	--	--

5 channels are provided for 802.11ac 40MHz, 802.11n (40MHz):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
102	5510 MHz	110	5550 MHz
118	5590 MHz	126	5630 MHz
134	5670 MHz		

2 channel is provided for 802.11ac (80MHz):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
106	5530MHz	122	5610MHz

**FOR 5725 ~ 5850MHz**

5 channels are provided for 802.11a, 802.11a c 20MHz, 802.11n (20MHz):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
149	5745MHz	153	5765MHz
157	5785MHz	161	5805MHz
165	5825MHz	--	--

2 channels are provided for 802.11a c 40MHz, 802.11n (40MHz):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
151	5755MHz	159	5795MHz

1 channel is provided for 802.11ac (80MHz):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
155	5775MHz	--	--



2.2.1 TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL

EUT CONFIGURE MODE	APPLICABLE TO				DESCRIPTION
	RE≥1G	RE<1G	PLC	APCM	
-	√	√	√	√	Powered by AC 120V/60Hz with wifi(5G) link

Where **RE≥1G**: Radiated Emission above 1GHz      **RE<1G**: Radiated Emission below 1GHz  
**PLC**: Power Line Conducted Emission      **APCM**: Antenna Port Conducted Measurement

NOTE:

- 1. The EUT had been pre-tested on the positioned of each 3 axis. The worst case was found when positioned on **X-plane**.  
**NOTE**: "-" means no effect.

**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	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
-	802.11a	5150-5250	36 to 48	36, 40, 48	OFDM	BPSK	6.0
-	802.11n (20MHz)		36 to 48	36, 40, 48	OFDM	BPSK	6.5
-	802.11n (40MHz)		38 to 46	38, 46	OFDM	BPSK	13.5
-	802.11ac 80MHz		42	42	OFDM	BPSK	29.3
-	802.11a	5250-5350	52 to 64	52, 60, 64	OFDM	BPSK	6.0
-	802.11n (20MHz)		52 to 64	52, 60, 64	OFDM	BPSK	6.5
-	802.11n (40MHz)		54 to 62	54, 62	OFDM	BPSK	13.5
-	802.11ac 80MHz		58	58	OFDM	BPSK	29.3
-	802.11a	5470-5725	100 to 140	100, 116, 140	OFDM	BPSK	6.0
-	802.11n (20MHz)		100 to 140	100, 116, 140	OFDM	BPSK	6.5
-	802.11n (40MHz)		102 to 134	102, 110, 134	OFDM	BPSK	13.5
-	802.11ac 80MHz		106, 122	106, 122	OFDM	BPSK	29.3
-	802.11a	5725-5850	149 to 165	149, 157, 165	OFDM	BPSK	6.0
-	802.11n (20MHz)		149 to 165	149, 157, 165	OFDM	BPSK	6.5
-	802.11n (40MHz)		151 to 159	151, 159	OFDM	BPSK	13.5
-	802.11ac 80MHz		155	155	OFDM	BPSK	29.3

**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	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
-	802.11a	5150-5250 5470-5725 5725-5850	36 to 48 100 to 140 149 to 165	36	OFDM	BPSK	6.0



**POWER LINE CONDUCTED EMISSION TEST:**

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

EUT CONFIGURE MODE	MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
-	802.11a	5150-5250 5470-5725 5725-5850	36 to 48 100 to 140 149 to 165	-	OFDM	BPSK	6.0

**ANTENNA PORT CONDUCTED MEASUREMENT:**

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

EUT CONFIGURE MODE	MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
-	802.11a	5150-5250	36 to 48	36, 40, 48	OFDM	BPSK	6.0
-	802.11n (20MHz)		36 to 48	36, 40, 48	OFDM	BPSK	6.5
-	802.11n (40MHz)		38 to 46	38, 46	OFDM	BPSK	13.5
-	802.11ac 80MHz		42	42	OFDM	BPSK	29.3
-	802.11a	5250-5350	52 to 64	52, 60, 64	OFDM	BPSK	6.0
-	802.11n (20MHz)		52 to 64	52, 60, 64	OFDM	BPSK	6.5
-	802.11n (40MHz)		54 to 62	54, 62	OFDM	BPSK	13.5
-	802.11ac 80MHz		58	58	OFDM	BPSK	29.3
-	802.11a	5470-5725	100 to 140	100, 116, 140	OFDM	BPSK	6.0
-	802.11n (20MHz)		100 to 140	100, 116, 140	OFDM	BPSK	6.5
-	802.11n (40MHz)		102 to 134	102, 110, 134	OFDM	BPSK	13.5
-	802.11ac 80MHz		106, 122	106, 122	OFDM	BPSK	29.3
-	802.11a	5725-5850	149 to 165	149, 157, 165	OFDM	BPSK	6.0
-	802.11n (20MHz)		149 to 165	149, 157, 165	OFDM	BPSK	6.5
-	802.11n (40MHz)		151 to 159	151, 159	OFDM	BPSK	13.5
-	802.11ac 80MHz		155	155	OFDM	BPSK	29.3

**TEST CONDITION:**

APPLICABLE TO	ENVIRONMENTAL CONDITIONS	INPUT POWER	TESTED BY
RE<1G	24deg. C, 55%RH	AC 120V/60Hz	Eric Fang
RE≥1G	24deg. C, 55%RH	AC 120V/60Hz	Eric Fang
PLC	20deg. C, 56%RH	AC 120V/60Hz	Yang
APCM	20deg. C, 55%RH	AC 120V/60Hz	Harry Li



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Test Report No.: RF180606N077-4

### 2.3 DUTY CYCLE OF TEST SIGNAL

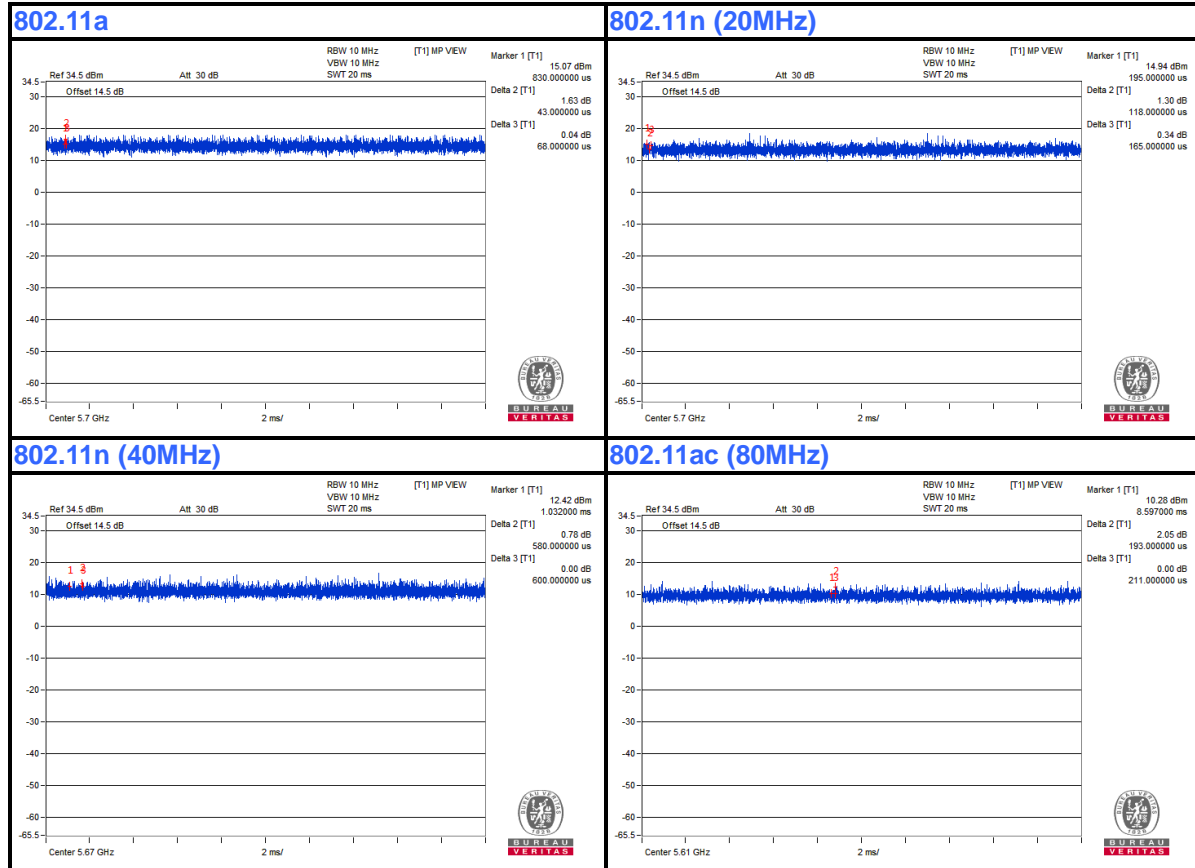
#### Chain 0:

802.11a: Duty cycle = 100 %

802.11n (20MHz): Duty cycle =100 %

802.11n (40MHz): Duty cycle =100 %

802.11ac (80MHz): Duty cycle =100 %





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Test Report No.: RF180606N077-4

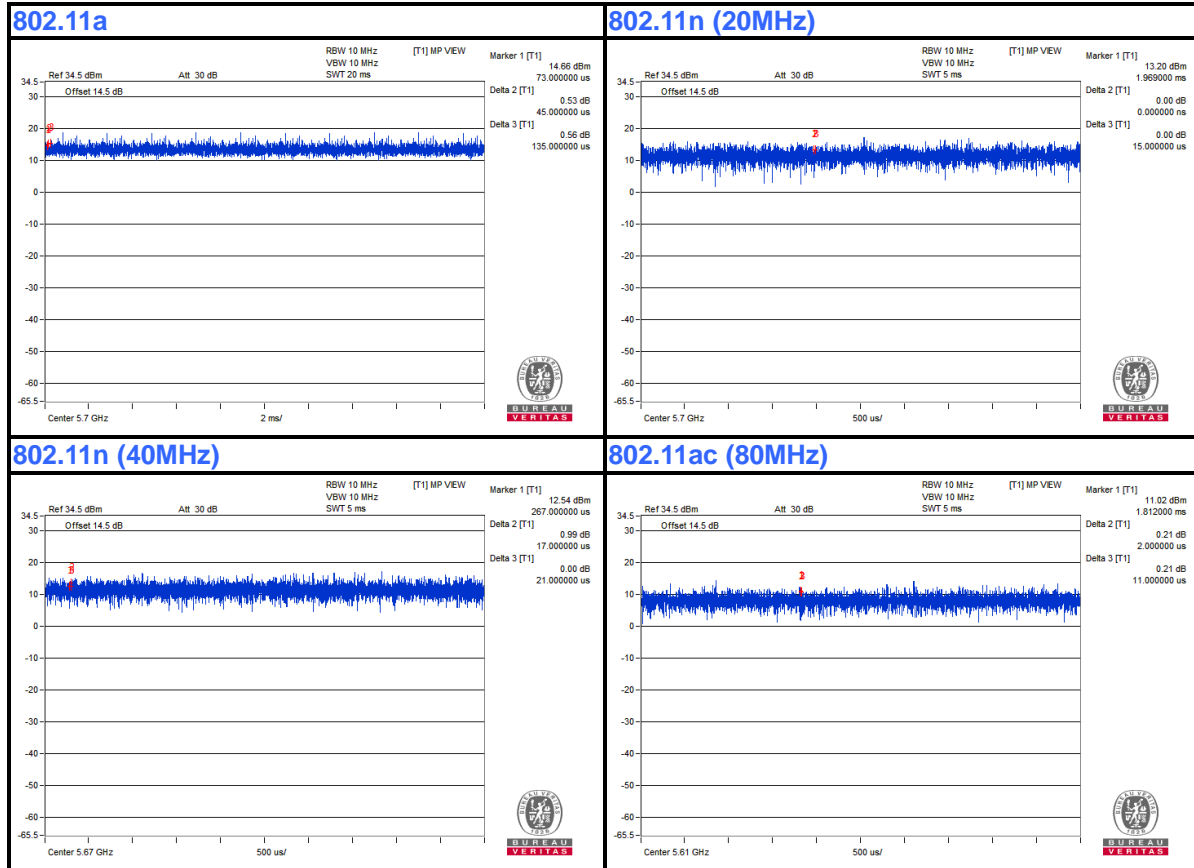
**Chain 1:**

**802.11a:** Duty cycle = 100 %

**802.11n (20MHz):** Duty cycle =100 %

**802.11n (40MHz):** Duty cycle =100 %

**802.11ac (80MHz):** Duty cycle =100 %





## 2.4 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.

NO.	PRODUCT	BRAND	MODEL NO.	SERIAL NO.	FCC ID
1	N/A	N/A	N/A	N/A	N/A

NO.	DESCRIPTION OF THE ABOVE SUPPORT UNITS
1	N/A

## 2.5 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:

**FCC Part 15, Subpart E (15.407)**

**789033 D02 General UNII Test Procedures New Rules v01r03**

**KDB 662911 D01 v02r01**

**ANSI C63.10-2013**

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



### 3. TEST TYPES AND RESULTS

#### 3.1 RADIATED EMISSION AND BANDEDGE MEASUREMENT

##### 3.1.1 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:

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 30dB under any condition of modulation.



### 3.1.2 LIMITS OF UNWANTED EMISSION OUT OF THE RESTRICTED BANDS

APPLICABLE TO	LIMIT	
789033 D02 General UNII Test Procedures New Rules v01r03	FIELD STRENGTH AT 3m	
	PK: 74 (dBµV/m)	AV: 54 (dBµV/m)
APPLICABLE TO	EIRP LIMIT	EQUIVALENT FIELD STRENGTH AT 3m
15.407(b)(1)	PK: -27 (dBm/MHz)	PK: 68.2 (dBµV/m)
15.407(b)(2)		
15.407(b)(3)		
15.407(b)(4)	Note	Note

**NOTE:** For transmitters operating in the 5.725-5.85 GHz band:

Section 15.407(b)(4) specifies the unwanted emissions limit for the U-NII-3 band. A band emissions mask is specified in Section 15.407(b)(4)(i). An alternative to the band emissions mask is specified in Section 15.407(b)(4)(ii). The alternative limits are based on the highest antenna gain specified in the filing. There are also marketing and importation restrictions for the alternative limit.

15.407(b)(4)(i) All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

The following formula is used to convert the equipment isotropic radiated power (eirp) to field strength:

$$E = \frac{1000000\sqrt{30P}}{3} \quad \mu\text{V/m, where } P \text{ is the eirp (Watts).}$$



**3.1.3 TEST INSTRUMENTS**

<b>Equipment</b>	<b>Manufacturer</b>	<b>Model No.</b>	<b>Serial No.</b>	<b>Last Cal.</b>	<b>Next Cal.</b>
EMI Test Receiver	Rohde&Schwarz	ESU40	100449	Mar. 21,18	Mar. 20,19
Signal and Spectrum Analyzer	Rohde&Schwarz	FSV40	101094	Mar. 21,18	Mar. 20,19
Bilog Antenna	Teseq	CBL 6111D	30643	Jul. 28, 17	Jul. 27, 18
Horn Antenna	ETS-Lindgren	3117	00062558	Jul. 02,18	Jul. 01,19
GPS Generator+ Antenna	TOJOIN	GNSS-5000A	E1-010119	Sep. 08,17	Sep. 07,18
3m Semi-anechoic Chamber	ETS-LINDGREN	9m*6m*6m	NSEMC003	Feb. 10,18	Feb. 09,19
Test Software	ADT	ADT_Radiated_V7.6.15.9.2	N/A	N/A	N/A
Horn Antenna (15GHz-40GHz)	SCHWARZBECK	BBHA 9170	BBHA9170147	May 05,18	May 04,19
Amplifier	Burgeon	BPA-530	100220	Apr. 18,18	Apr. 18,19
Broadband Preamplifier (1GHz~18GHz)	SCHWARZBECK	BBV9718	305	Apr. 18,18	Apr. 18,19
Pre-Amplifier (18GHz-40GHz)	EMCI	EMC 184045	980102	Nov. 08,17	Nov. 07,18
Test Software	ADT	ADT_Radiated_V7.6.15.9.2	N/A	N/A	N/A

**NOTE:**

1. The calibration interval of the above test instruments are 12 months and the calibrations are traceable to CEPREI/CHINA, GRGT/CHINA and NIM/CHINA.
2. The horn antenna is used only for the measurement of emission frequency above 1GHz if tested.
3. The FCC Site Registration No. is 749762.



### 3.1.4 TEST PROCEDURES

- a. The EUT was placed on the top of a rotating table 1.5 meters (above 1GHz) and 0.8 meters (below 1GHz) above the ground at a 3 meters semi-anechoic chamber. 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 antenna is a broadband antenna, and its height 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 Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- f. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

**NOTE:**

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection at frequency below 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection 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 > 98%) for Average detection (AV) at frequency above 1GHz.
4. All modes of operation were investigated and the worst-case emissions are reported.

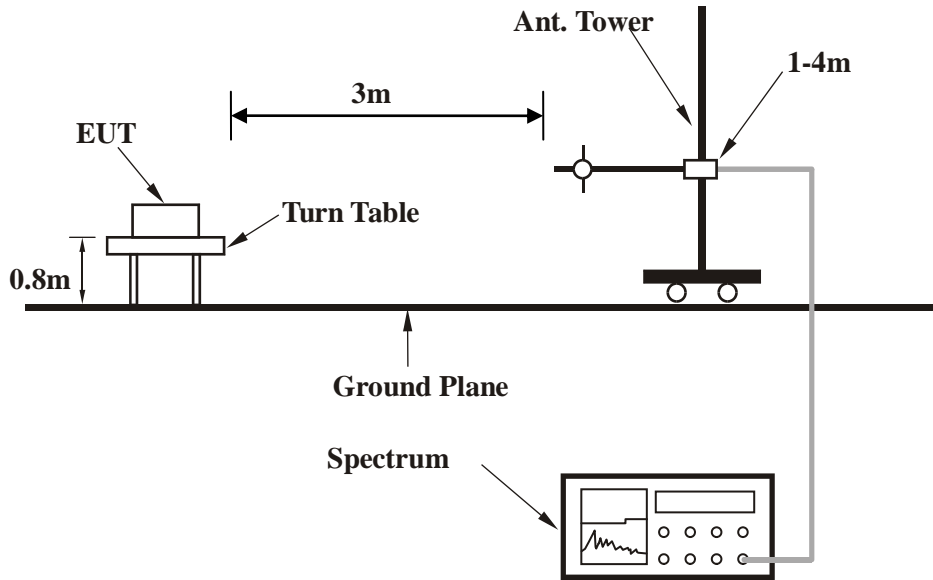
### 3.1.5 DEVIATION FROM TEST STANDARD

No deviation.



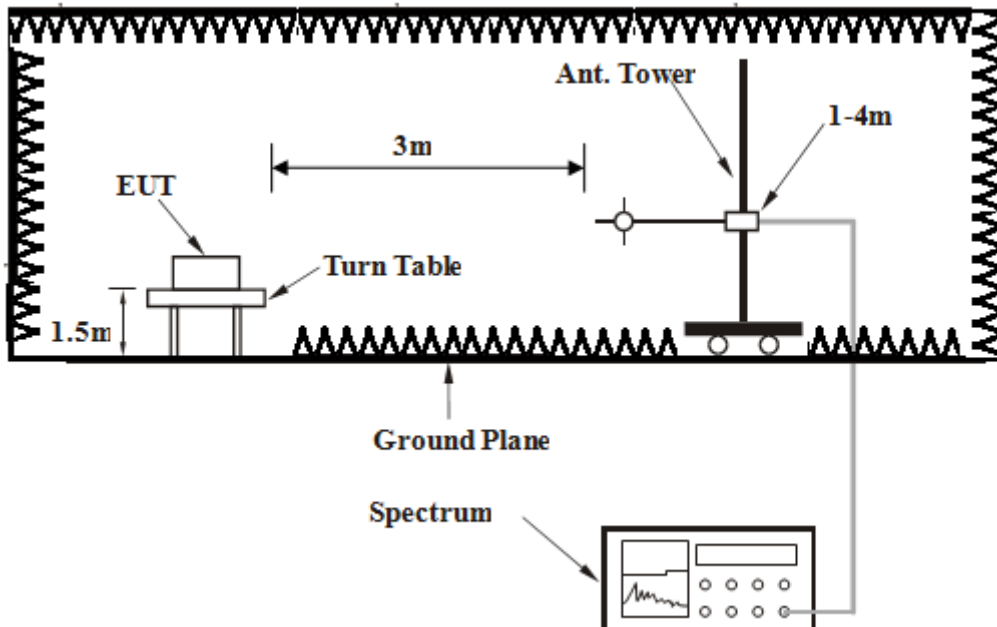
### 3.1.6 TEST SETUP

#### Below 1GHz test setup



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

#### Above 1GHz test setup



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



**BUREAU  
VERITAS**

**Test Report No.: RF180606N077-4**

### 3.1.7 EUT OPERATING CONDITION

- a. Set the EUT under full load condition and placed them on a testing table.
- b. Set the transmitter part of EUT under transmission condition continuously at specific channel frequency.
- c. The necessary accessories enable the EUT in full functions.



### 3.1.8 FTEST RESULTS

#### BELOW 1GHz WORST-CASE DATA

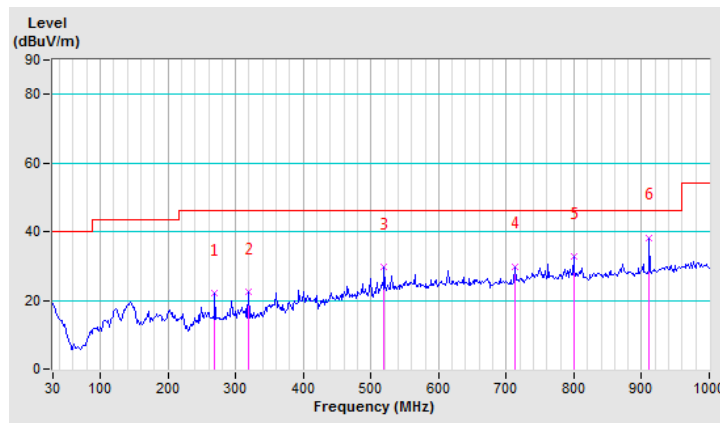
##### 802.11a

<b>CHANNEL</b>	TX Channel 36	<b>DETECTOR FUNCTION</b>	Quasi-Peak (QP)
<b>FREQUENCY RANGE</b>	30MHz ~ 1GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	269.39	22.17 QP	46.00	-23.83	1.00 H	152	35.85	-13.68
2	319.13	22.47 QP	46.00	-23.53	1.00 H	303	35.60	-13.13
3	519.66	29.86 QP	46.00	-16.14	1.00 H	179	35.75	-5.89
4	712.42	29.92 QP	46.00	-16.08	1.00 H	204	32.76	-2.84
5	799.47	32.91 QP	46.00	-13.09	1.00 H	82	33.92	-1.01
6	911.39	38.29 QP	46.00	-7.71	1.00 H	77	38.80	-0.51

**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).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.



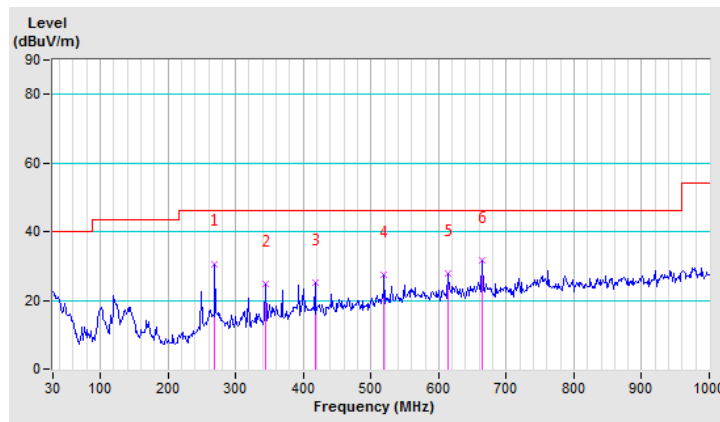


<b>CHANNEL</b>	TX Channel 36	<b>DETECTOR FUNCTION</b>	Quasi-Peak (QP)
<b>FREQUENCY RANGE</b>	30MHz ~ 1GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	269.39	30.67 QP	46.00	-15.33	1.00 V	192	44.35	-13.68
2	344.01	24.73 QP	46.00	-21.27	1.00 V	47	36.68	-11.95
3	417.07	25.13 QP	46.00	-20.87	1.00 V	122	34.23	-9.10
4	519.66	27.33 QP	46.00	-18.67	1.00 V	208	33.22	-5.89
5	614.49	27.98 QP	46.00	-18.02	1.00 V	242	31.85	-3.87
6	664.23	31.80 QP	46.00	-14.20	1.00 V	301	34.84	-3.04

**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).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.





**Band 1 (5150-5250MHz):**

**ABOVE 1GHz DATA**

**802.11a**

<b>CHANNEL</b>	TX Channel 36	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		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	5150.00	71.02 PK	74.00	-2.98	1.45 H	247	64.56	6.46
2	5150.00	51.48 AV	54.00	-2.52	1.45 H	247	45.02	6.46
3	*5180.00	104.98 PK			1.25 H	147	98.52	6.46
4	*5180.00	95.97 AV			1.25 H	147	89.51	6.46
5	#10360.00	52.58 PK	74.00	-21.42	1.45 H	214	36.95	15.63
6	#10360.00	41.25 AV	54.00	-12.75	1.45 H	214	25.62	15.63
7	15540.00	56.68 PK	74.00	-17.32	1.47 H	144	34.66	22.02
8	15540.00	50.85 AV	54.00	-3.15	1.47 H	144	28.83	22.02
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	5150.00	65.58 PK	74.00	-8.42	1.45 V	147	59.12	6.46
2	5150.00	51.02 AV	54.00	-2.98	1.45 V	147	44.56	6.46
3	*5180.00	110.58 PK			1.20 V	360	104.12	6.46
4	*5180.00	101.32 AV			1.20 V	360	94.86	6.46
5	#10360.00	57.58 PK	74.00	-16.42	1.58 V	211	41.95	15.63
6	#10360.00	46.98 AV	54.00	-7.02	1.58 V	211	31.35	15.63
7	15540.00	56.69 PK	74.00	-17.31	1.47 V	125	34.67	22.02
8	15540.00	50.01 AV	54.00	-3.99	1.47 V	125	27.99	22.02

**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).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " \* ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.



<b>CHANNEL</b>	TX Channel 40	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		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	5150.00	52.24 PK	74.00	-21.76	1.45 H	360	45.78	6.46
2	5150.00	41.16 AV	54.00	-12.84	1.45 H	360	34.70	6.46
3	*5200.00	106.88 PK			1.45 H	247	100.42	6.46
4	*5200.00	97.05 AV			1.45 H	247	90.59	6.46
5	#10400.00	58.57 PK	74.00	-15.43	1.50 H	147	42.82	15.75
6	#10400.00	46.69 AV	54.00	-7.31	1.50 H	147	30.94	15.75
7	15600.00	54.25 PK	74.00	-19.75	1.45 H	120	32.04	22.21
8	15600.00	50.01 AV	54.00	-3.99	1.45 H	120	27.80	22.21

**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	5150.00	61.24 PK	74.00	-12.76	1.20 V	114	54.78	6.46
2	5150.00	46.28 AV	54.00	-7.72	1.20 V	114	39.82	6.46
3	*5200.00	110.98 PK			1.40 V	158	104.52	6.46
4	*5200.00	102.58 AV			1.40 V	158	96.12	6.46
5	#10400.00	53.24 PK	74.00	-20.76	1.57 V	120	37.49	15.75
6	#10400.00	44.17 AV	54.00	-9.83	1.57 V	120	28.42	15.75
7	15600.00	56.25 PK	74.00	-17.75	1.47 V	158	34.04	22.21
8	15600.00	49.99 AV	54.00	-4.01	1.47 V	158	27.78	22.21

**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).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " \* ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.





<b>CHANNEL</b>	TX Channel 48	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		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	5150.00	53.24 PK	74.00	-20.76	1.45 H	247	46.78	6.46
2	5150.00	42.14 AV	54.00	-11.86	1.45 H	247	35.68	6.46
3	*5240.00	105.24 PK			1.25 H	147	98.78	6.46
4	*5240.00	95.68 AV			1.25 H	147	89.22	6.46
5	5350.00	52.24 PK	74.00	-21.76	1.20 H	143	45.77	6.47
6	5350.00	43.01 AV	54.00	-10.99	1.20 H	143	36.54	6.47
7	#10480.00	52.22 PK	74.00	-21.78	1.45 H	163	36.25	15.97
8	#10480.00	48.57 AV	54.00	-5.43	1.45 H	163	32.60	15.97
9	15720.00	56.69 PK	74.00	-17.31	1.47 H	158	34.11	22.58
10	15720.00	50.01 AV	54.00	-3.99	1.47 H	158	27.43	22.58

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	5150.00	53.24 PK	74.00	-20.76	1.25 V	140	46.78	6.46
2	5150.00	44.01 AV	54.00	-9.99	1.25 V	140	37.55	6.46
3	*5240.00	112.02 PK			N/A V	N/A	105.56	6.46
4	*5240.00	102.00 AV			N/A V	N/A	95.54	6.46
5	5350.00	52.24 PK	74.00	-21.76	1.58 V	147	45.77	6.47
6	5350.00	43.69 AV	54.00	-10.31	1.58 V	147	37.22	6.47
7	#10480.00	52.24 PK	74.00	-21.76	1.45 V	214	36.27	15.97
8	#10480.00	39.97 AV	54.00	-14.03	1.45 V	214	24.00	15.97
9	15720.00	53.24 PK	74.00	-20.76	1.45 V	147	30.66	22.58
10	15720.00	48.57 AV	54.00	-5.43	1.45 V	147	25.99	22.58

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).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " \* ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.



802.11n (20MHz)

CHANNEL	TX Channel 36	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		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	5150.00	66.68 PK	74.00	-7.32	1.58 H	147	60.22	6.46
2	5150.00	51.21 AV	54.00	-2.79	1.58 H	147	44.75	6.46
3	*5180.00	105.84 PK			1.50 H	214	99.38	6.46
4	*5180.00	95.99 AV			1.50 H	214	89.53	6.46
5	#10360.00	52.24 PK	74.00	-21.76	1.58 H	247	36.61	15.63
6	#10360.00	39.97 AV	54.00	-14.03	1.58 H	247	24.34	15.63
7	15540.00	56.68 PK	74.00	-17.32	1.40 H	212	34.66	22.02
8	15540.00	49.68 AV	54.00	-4.32	1.40 H	212	27.66	22.02
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	5150.00	69.55 PK	74.00	-4.45	1.47 V	158	63.09	6.46
2	5150.00	52.84 AV	54.00	-1.16	1.47 V	158	46.38	6.46
3	*5180.00	110.94 PK			1.25 V	147	104.48	6.46
4	*5180.00	99.88 AV			1.25 V	147	93.42	6.46
5	#10360.00	54.25 PK	74.00	-19.75	1.45 V	247	38.62	15.63
6	#10360.00	43.25 AV	54.00	-10.75	1.45 V	247	27.62	15.63
7	15540.00	57.88 PK	74.00	-16.12	1.59 V	45	35.86	22.02
8	15540.00	50.88 AV	54.00	-3.12	1.59 V	45	28.86	22.02

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).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " \* ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.



<b>CHANNEL</b>	TX Channel 40	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		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	5150.00	56.99 PK	74.00	-17.01	1.45 H	140	50.53	6.46
2	5150.00	43.27 AV	54.00	-10.73	1.45 H	140	36.81	6.46
3	*5200.00	105.88 PK			1.50 H	144	99.42	6.46
4	*5200.00	96.84 AV			1.50 H	144	90.38	6.46
5	#10400.00	54.24 PK	74.00	-19.76	1.60 H	247	38.49	15.75
6	#10400.00	39.58 AV	54.00	-14.42	1.60 H	247	23.83	15.75
7	15600.00	58.25 PK	74.00	-15.75	1.47 H	188	36.04	22.21
8	15600.00	51.25 AV	54.00	-2.75	1.47 H	188	29.04	22.21

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	5150.00	65.58 PK	74.00	-8.42	1.42 V	104	59.12	6.46
2	5150.00	45.58 AV	54.00	-8.42	1.42 V	104	39.12	6.46
3	*5200.00	111.65 PK			1.25 V	147	105.19	6.46
4	*5200.00	103.01 AV			1.25 V	147	96.55	6.46
5	#10400.00	53.26 PK	74.00	-20.74	1.20 V	140	37.51	15.75
6	#10400.00	44.18 AV	54.00	-9.82	1.20 V	140	28.43	15.75
7	15600.00	56.58 PK	74.00	-17.42	1.47 V	180	34.37	22.21
8	15600.00	49.88 AV	54.00	-4.12	1.47 V	180	27.67	22.21

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).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " \* ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.



<b>CHANNEL</b>	TX Channel 48	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		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	5150.00	51.24 PK	74.00	-22.76	1.58 H	147	44.78	6.46
2	5150.00	42.25 AV	54.00	-11.75	1.58 H	147	35.79	6.46
3	*5240.00	105.68 PK			1.40 H	150	99.22	6.46
4	*5240.00	96.84 AV			1.40 H	150	90.38	6.46
5	5350.00	52.57 PK	74.00	-21.43	1.99 H	247	46.10	6.47
6	5350.00	41.18 AV	54.00	-12.82	1.99 H	247	34.71	6.47
7	#10480.00	52.19 PK	74.00	-21.81	1.48 H	150	36.22	15.97
8	#10480.00	44.17 AV	54.00	-9.83	1.48 H	150	28.20	15.97
9	15720.00	58.27 PK	74.00	-15.73	1.58 H	147	35.69	22.58
10	15720.00	49.97 AV	54.00	-4.03	1.58 H	147	27.39	22.58

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	5150.00	51.69 PK	74.00	-22.31	1.47 V	188	45.23	6.46
2	5150.00	43.26 AV	54.00	-10.74	1.47 V	188	36.80	6.46
3	*5240.00	111.11 PK			1.58 V	147	104.65	6.46
4	*5240.00	101.62 AV			1.58 V	147	95.16	6.46
5	5350.00	52.25 PK	74.00	-21.75	1.20 V	130	45.78	6.47
6	5350.00	43.01 AV	54.00	-10.99	1.20 V	130	36.54	6.47
7	#10480.00	53.29 PK	74.00	-20.71	1.88 V	147	37.32	15.97
8	#10480.00	41.17 AV	54.00	-12.83	1.88 V	147	25.20	15.97
9	15720.00	58.57 PK	74.00	-15.43	1.88 V	140	35.99	22.58
10	15720.00	49.99 AV	54.00	-4.01	1.88 V	140	27.41	22.58

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).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " \* ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.



**802.11n (40MHz)**

<b>CHANNEL</b>	TX Channel 38	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		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	5150.00	61.58 PK	74.00	-12.42	1.47 H	120	55.12	6.46
2	5150.00	46.25 AV	54.00	-7.75	1.47 H	120	39.79	6.46
3	*5190.00	96.98 PK			1.47 H	121	90.51	6.47
4	*5190.00	87.58 AV			1.47 H	121	81.11	6.47
5	#10380.00	50.88 PK	74.00	-23.12	1.60 H	29	35.18	15.70
6	#10380.00	40.18 AV	54.00	-13.82	1.60 H	29	24.48	15.70
7	15570.00	57.48 PK	74.00	-16.52	1.60 H	270	35.37	22.11
8	15570.00	49.21 AV	54.00	-4.79	1.60 H	270	27.10	22.11

**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	5150.00	68.25 PK	74.00	-5.75	1.45 V	127	61.79	6.46
2	5150.00	52.74 AV	54.00	-1.26	1.45 V	127	46.28	6.46
3	*5190.00	103.69 PK			1.25 V	147	97.22	6.47
4	*5190.00	92.58 AV			1.25 V	147	86.11	6.47
5	#10380.00	52.36 PK	74.00	-21.64	1.40 V	150	36.66	15.70
6	#10380.00	41.78 AV	54.00	-12.22	1.40 V	150	26.08	15.70
7	15570.00	58.58 PK	74.00	-15.42	1.47 V	102	36.47	22.11
8	15570.00	50.84 AV	54.00	-3.16	1.47 V	102	28.73	22.11

**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).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " \* ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.



CHANNEL	TX Channel 46	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		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	5150.00	52.58 PK	74.00	-21.42	1.02 H	158	46.12	6.46
2	5150.00	43.01 AV	54.00	-10.99	1.02 H	158	36.55	6.46
3	*5230.00	104.21 PK			1.52 H	152	97.74	6.47
4	*5230.00	91.85 AV			1.52 H	152	85.38	6.47
5	#10460.00	52.16 PK	74.00	-21.84	1.50 H	160	36.24	15.92
6	#10460.00	41.17 AV	54.00	-12.83	1.50 H	160	25.25	15.92
7	15690.00	56.58 PK	74.00	-17.42	1.47 H	178	34.09	22.49
8	15690.00	48.47 AV	54.00	-5.53	1.47 H	178	25.98	22.49
9	15690.00	64.54 PK	74.00	-9.46	1.58 H	210	41.74	22.80
10	15690.00	49.14 AV	54.00	-4.86	1.58 H	210	26.34	22.80
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	5150.00	58.88 PK	74.00	-15.12	1.69 V	247	52.42	6.46
2	5150.00	44.19 AV	54.00	-9.81	1.69 V	247	37.73	6.46
3	*5230.00	108.87 PK			1.40 V	158	102.40	6.47
4	*5230.00	97.68 AV			1.40 V	158	91.21	6.47
5	#10460.00	52.25 PK	74.00	-21.75	1.65 V	148	36.33	15.92
6	#10460.00	41.03 AV	54.00	-12.97	1.65 V	148	25.11	15.92
7	15690.00	57.57 PK	74.00	-16.43	1.20 V	144	35.08	22.49
8	15690.00	49.21 AV	54.00	-4.79	1.20 V	144	26.72	22.49

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).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " \* ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.



802.11ac (80MHz)

<b>CHANNEL</b>	TX Channel 42	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		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	5150.00	58.54 PK	74.00	-15.46	1.20 H	125	52.08	6.46
2	5150.00	46.21 AV	54.00	-7.79	1.20 H	125	39.75	6.46
3	*5210.00	92.54 PK			1.47 H	158	86.07	6.47
4	*5210.00	80.28 AV			1.47 H	158	73.81	6.47
5	#10420.00	55.88 PK	74.00	-18.12	1.71 H	136	40.07	15.81
6	#10420.00	45.18 AV	54.00	-8.82	1.71 H	136	29.37	15.81
7	15630.00	62.21 PK	74.00	-11.79	1.47 H	158	39.91	22.30
8	15630.00	49.99 AV	54.00	-4.01	1.47 H	158	27.69	22.30

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	5150.00	69.88 PK	74.00	-4.12	1.45 V	120	63.42	6.46
2	5150.00	52.21 AV	54.00	-1.79	1.45 V	120	45.75	6.46
3	*5210.00	102.54 PK			1.45 V	120	96.07	6.47
4	*5210.00	90.84 AV			1.45 V	120	84.37	6.47
5	#10420.00	56.25 PK	74.00	-17.75	1.25 V	147	40.44	15.81
6	#10420.00	45.58 AV	54.00	-8.42	1.25 V	147	29.77	15.81
7	15630.00	58.58 PK	74.00	-15.42	1.45 V	180	36.28	22.30
8	15630.00	50.14 AV	54.00	-3.86	1.45 V	180	27.84	22.30

**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).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " \* ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.



**Band 2 (5250-5350MHz):**

**ABOVE 1GHZ DATA**

**802.11a**

<b>CHANNEL</b>	TX Channel 52	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		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	5150.00	50.24 PK	74.00	-23.76	1.47 H	155	43.78	6.46
2	5150.00	39.88 AV	54.00	-14.12	1.47 H	155	33.42	6.46
3	*5260.00	106.54 PK			1.45 H	120	100.07	6.47
4	*5260.00	96.85 AV			1.45 H	120	90.38	6.47
5	5350.00	51.59 PK	74.00	-22.41	1.25 H	147	45.12	6.47
6	5350.00	42.16 AV	54.00	-11.84	1.25 H	147	35.69	6.47
7	#10520.00	56.69 PK	74.00	-17.31	1.47 H	150	40.61	16.08
8	#10520.00	46.21 AV	54.00	-7.79	1.47 H	150	30.13	16.08
9	15780.00	62.24 PK	74.00	-11.76	1.47 H	158	39.46	22.78
10	15780.00	50.47 AV	54.00	-3.53	1.47 H	158	27.69	22.78

**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	5150.00	50.96 PK	74.00	-23.04	1.40 V	150	44.50	6.46
2	5150.00	41.14 AV	54.00	-12.86	1.40 V	150	34.68	6.46
3	*5260.00	111.85 PK			1.58 V	N/A	105.38	6.47
4	*5260.00	101.62 AV			1.58 V	N/A	95.15	6.47
5	5350.00	52.00 PK	74.00	-22.00	1.44 V	151	45.53	6.47
6	5350.00	41.02 AV	54.00	-12.98	1.44 V	151	34.55	6.47
7	#10520.00	56.36 PK	74.00	-17.64	1.47 V	148	40.28	16.08
8	#10520.00	44.17 AV	54.00	-9.83	1.47 V	148	28.09	16.08
9	15780.00	63.25 PK	74.00	-10.75	1.45 V	122	40.47	22.78
10	15780.00	50.94 AV	54.00	-3.06	1.45 V	122	28.16	22.78

**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).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " \* " : Fundamental frequency.





<b>CHANNEL</b>	TX Channel 60	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		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	*5300.00	105.84 PK			1.45 H	120	99.37	6.47
2	*5300.00	96.54 AV			1.45 H	120	90.07	6.47
3	5350.00	56.69 PK	74.00	-17.31	1.40 H	150	50.22	6.47
4	5350.00	42.18 AV	54.00	-11.82	1.40 H	150	35.71	6.47
5	10600.00	56.58 PK	74.00	-17.42	1.40 H	180	40.30	16.28
6	10600.00	44.19 AV	54.00	-9.81	1.40 H	180	27.91	16.28
7	15900.00	62.14 PK	74.00	-11.86	1.47 H	140	38.99	23.15
8	15900.00	50.01 AV	54.00	-3.99	1.47 H	140	26.86	23.15

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	*5300.00	111.78 PK			1.50 V	144	105.31	6.47
2	*5300.00	103.59 AV			1.50 V	144	97.12	6.47
3	5350.00	56.85 PK	74.00	-17.15	1.50 V	140	50.38	6.47
4	5350.00	44.17 AV	54.00	-9.83	1.50 V	140	37.70	6.47
5	10600.00	56.98 PK	74.00	-17.02	1.48 V	120	40.70	16.28
6	10600.00	46.25 AV	54.00	-7.75	1.48 V	120	29.97	16.28
7	15900.00	62.15 PK	74.00	-11.85	1.41 V	111	39.00	23.15
8	15900.00	50.48 AV	54.00	-3.52	1.41 V	111	27.33	23.15

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).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " \* ": Fundamental frequency.



<b>CHANNEL</b>	TX Channel 64	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		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	*5320.00	104.78 PK			1.45 H	247	98.31	6.47
2	*5320.00	96.68 AV			1.45 H	247	90.21	6.47
3	5350.00	64.25 PK	74.00	-9.75	1.44 H	140	57.78	6.47
4	5350.00	45.01 AV	54.00	-8.99	1.44 H	140	38.54	6.47
5	10640.00	56.58 PK	74.00	-17.42	1.47 H	158	40.20	16.38
6	10640.00	48.21 AV	54.00	-5.79	1.47 H	158	31.83	16.38
7	15960.00	61.47 PK	74.00	-12.53	1.47 H	188	38.13	23.34
8	15960.00	49.87 AV	54.00	-4.13	1.47 H	188	26.53	23.34

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	*5320.00	110.69 PK			1.40 V	150	104.22	6.47
2	*5320.00	101.25 AV			1.40 V	150	94.78	6.47
3	5350.00	70.25 PK	74.00	-3.75	1.25 V	147	63.78	6.47
4	5350.00	51.36 AV	54.00	-2.64	1.25 V	147	44.89	6.47
5	10640.00	56.48 PK	74.00	-17.52	1.44 V	147	40.10	16.38
6	10640.00	46.02 AV	54.00	-7.98	1.44 V	147	29.64	16.38
7	15960.00	63.02 PK	74.00	-10.98	1.48 V	147	39.68	23.34
8	15960.00	51.11 AV	54.00	-2.89	1.48 V	147	27.77	23.34

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).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " \* ": Fundamental frequency.



802.11n (20MHz)

CHANNEL	TX Channel 52	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		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	5150.00	49.99 PK	74.00	-24.01	1.36 H	222	43.53	6.46
2	5150.00	40.00 AV	54.00	-14.00	1.36 H	222	33.54	6.46
3	*5260.00	105.21 PK			1.40 H	158	98.74	6.47
4	*5260.00	95.34 AV			1.40 H	158	88.87	6.47
5	5350.00	50.88 PK	74.00	-23.12	1.58 H	144	44.41	6.47
6	5350.00	41.16 AV	54.00	-12.84	1.58 H	144	34.69	6.47
7	#10520.00	56.25 PK	74.00	-17.75	1.82 H	198	40.17	16.08
8	#10520.00	43.98 AV	54.00	-10.02	1.82 H	198	27.90	16.08
9	15780.00	60.58 PK	74.00	-13.42	1.40 H	120	37.80	22.78
10	15780.00	48.77 AV	54.00	-5.23	1.40 H	120	25.99	22.78

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	5150.00	52.36 PK	74.00	-21.64	1.47 V	158	45.90	6.46
2	5150.00	43.26 AV	54.00	-10.74	1.47 V	158	36.80	6.46
3	*5260.00	112.88 PK			1.45 V	247	106.41	6.47
4	*5260.00	102.28 AV			1.45 V	247	95.81	6.47
5	5350.00	55.87 PK	74.00	-18.13	1.02 V	150	49.40	6.47
6	5350.00	44.49 AV	54.00	-9.51	1.02 V	150	38.02	6.47
7	#10520.00	56.69 PK	74.00	-17.31	1.44 V	100	40.61	16.08
8	#10520.00	44.88 AV	54.00	-9.12	1.44 V	100	28.80	16.08
9	15780.00	61.59 PK	74.00	-12.41	1.50 V	187	38.81	22.78
10	15780.00	49.98 AV	54.00	-4.02	1.50 V	187	27.20	22.78

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).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " \* ": Fundamental frequency.



<b>CHANNEL</b>	TX Channel 60	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		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	*5300.00	108.85 PK			1.02 H	155	102.38	6.47
2	*5300.00	96.29 AV			1.02 H	155	89.82	6.47
3	5350.00	61.25 PK	74.00	-12.75	1.98 H	247	54.78	6.47
4	5350.00	43.69 AV	54.00	-10.31	1.98 H	247	37.22	6.47
5	10600.00	55.87 PK	74.00	-18.13	1.65 H	100	39.59	16.28
6	10600.00	43.02 AV	54.00	-10.98	1.65 H	100	26.74	16.28
7	15900.00	59.87 PK	74.00	-14.13	1.44 H	150	36.72	23.15
8	15900.00	48.77 AV	54.00	-5.23	1.44 H	150	25.62	23.15
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	*5300.00	110.59 PK			1.25 V	147	104.12	6.47
2	*5300.00	102.54 AV			1.25 V	147	96.07	6.47
3	5350.00	65.84 PK	74.00	-8.16	1.20 V	14	59.37	6.47
4	5350.00	45.77 AV	54.00	-8.23	1.20 V	14	39.30	6.47
5	10600.00	56.88 PK	74.00	-17.12	1.00 V	210	40.60	16.28
6	10600.00	45.16 AV	54.00	-8.84	1.00 V	210	28.88	16.28
7	15900.00	63.58 PK	74.00	-10.42	1.69 V	288	40.43	23.15
8	15900.00	50.42 AV	54.00	-3.58	1.69 V	288	27.27	23.15

**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).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " \* ": Fundamental frequency.



<b>CHANNEL</b>	TX Channel 64	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		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	*5320.00	104.02 PK			1.58 H	147	97.55	6.47
2	*5320.00	94.87 AV			1.58 H	147	88.40	6.47
3	5350.00	65.78 PK	74.00	-8.22	1.55 H	147	59.31	6.47
4	5350.00	47.46 AV	54.00	-6.54	1.55 H	147	40.99	6.47
5	10640.00	57.45 PK	74.00	-16.55	1.30 H	210	41.07	16.38
6	10640.00	45.12 AV	54.00	-8.88	1.30 H	210	28.74	16.38
7	15960.00	65.58 PK	74.00	-8.42	1.36 H	210	42.24	23.34
8	15960.00	50.46 AV	54.00	-3.54	1.36 H	210	27.12	23.34

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	*5320.00	110.88 PK			1.02 V	140	104.41	6.47
2	*5320.00	101.39 AV			1.02 V	140	94.92	6.47
3	5350.00	70.99 PK	74.00	-3.01	1.45 V	120	64.52	6.47
4	5350.00	52.24 AV	54.00	-1.76	1.45 V	120	45.77	6.47
5	10640.00	57.25 PK	74.00	-16.75	1.30 V	247	40.87	16.38
6	10640.00	46.25 AV	54.00	-7.75	1.30 V	247	29.87	16.38
7	15960.00	64.58 PK	74.00	-9.42	1.58 V	142	41.24	23.34
8	15960.00	50.87 AV	54.00	-3.13	1.58 V	142	27.53	23.34

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).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " \* ": Fundamental frequency.



802.11n (40MHz)

CHANNEL	TX Channel 54	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		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	*5270.00	101.81 PK			1.44 H	158	95.35	6.46
2	*5270.00	91.87 AV			1.44 H	158	85.41	6.46
3	5350.00	52.58 PK	74.00	-21.42	1.69 H	277	46.11	6.47
4	5350.00	42.16 AV	54.00	-11.84	1.69 H	277	35.69	6.47
5	#10540.00	55.74 PK	74.00	-18.26	1.46 H	218	39.61	16.13
6	#10540.00	45.15 AV	54.00	-8.85	1.46 H	218	29.02	16.13
7	15810.00	66.36 PK	74.00	-7.64	1.50 H	144	43.49	22.87
8	15810.00	49.12 AV	54.00	-4.88	1.50 H	144	26.25	22.87

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	*5270.00	108.54 PK			1.58 V	158	102.08	6.46
2	*5270.00	99.43 AV			1.58 V	158	92.97	6.46
3	5350.00	62.25 PK	74.00	-11.75	1.87 V	177	55.78	6.47
4	5350.00	47.46 AV	54.00	-6.54	1.87 V	177	40.99	6.47
5	#10540.00	56.84 PK	74.00	-17.16	1.58 V	146	40.71	16.13
6	#10540.00	45.02 AV	54.00	-8.98	1.58 V	146	28.89	16.13
7	15810.00	63.58 PK	74.00	-10.42	1.48 V	158	40.71	22.87
8	15810.00	50.18 AV	54.00	-3.82	1.48 V	158	27.31	22.87

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).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " \* " : Fundamental frequency.



CHANNEL	TX Channel 62	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		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	*5310.00	99.96 PK			1.45 H	147	93.50	6.46
2	*5310.00	89.94 AV			1.45 H	147	83.48	6.46
3	5350.00	65.86 PK	74.00	-8.14	1.58 H	146	59.39	6.47
4	5350.00	48.45 AV	54.00	-5.55	1.58 H	146	41.98	6.47
5	10620.00	56.35 PK	74.00	-17.65	1.88 H	148	40.02	16.33
6	10620.00	46.25 AV	54.00	-7.75	1.88 H	148	29.92	16.33
7	15930.00	68.57 PK	74.00	-5.43	1.40 H	187	45.32	23.25
8	15930.00	49.45 AV	54.00	-4.55	1.40 H	187	26.20	23.25

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	*5310.00	105.45 PK			1.47 V	158	98.99	6.46
2	*5310.00	95.87 AV			1.47 V	158	89.41	6.46
3	5350.00	73.58 PK	74.00	-0.42	1.45 V	128	67.11	6.47
4	<b>5350.00</b>	<b>53.67 AV</b>	<b>54.00</b>	<b>-0.33</b>	<b>1.45 V</b>	<b>128</b>	<b>47.20</b>	<b>6.47</b>
5	10620.00	54.85 PK	74.00	-19.15	1.65 V	147	38.52	16.33
6	10620.00	43.25 AV	54.00	-10.75	1.65 V	147	26.92	16.33
7	15930.00	65.48 PK	74.00	-8.52	1.48 V	120	42.23	23.25
8	15930.00	50.01 AV	54.00	-3.99	1.48 V	120	26.76	23.25

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).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " \* ": Fundamental frequency.



**802.11ac 80MHz**

<b>CHANNEL</b>	TX Channel 58	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		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	*5290.00	93.25 PK			1.47 H	188	86.79	6.46
2	*5290.00	80.59 AV			1.47 H	188	74.13	6.46
3	5350.00	63.58 PK	74.00	-10.42	1.47 H	158	57.11	6.47
4	5350.00	47.23 AV	54.00	-6.77	1.47 H	158	40.76	6.47
5	#10580.00	54.77 PK	74.00	-19.23	1.40 H	127	38.54	16.23
6	#10580.00	45.25 AV	54.00	-8.75	1.40 H	127	29.02	16.23
7	15870.00	67.48 PK	74.00	-6.52	1.98 H	287	44.42	23.06
8	15870.00	48.79 AV	54.00	-5.21	1.98 H	287	25.73	23.06

**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	*5290.00	98.84 PK			1.50 V	258	92.38	6.46
2	*5290.00	86.36 AV			1.50 V	258	79.90	6.46
3	5350.00	69.56 PK	74.00	-4.44	1.45 V	188	63.09	6.47
4	5350.00	52.78 AV	54.00	-1.22	1.45 V	188	46.31	6.47
5	#10580.00	56.25 PK	74.00	-17.75	1.84 V	198	40.02	16.23
6	#10580.00	44.17 AV	54.00	-9.83	1.84 V	198	27.94	16.23
7	15870.00	63.69 PK	74.00	-10.31	1.48 V	177	40.63	23.06
8	15870.00	49.77 AV	54.00	-4.23	1.48 V	177	26.71	23.06

**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).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " \* ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.





**Band 3 (5470-5725MHz):**

**ABOVE 1GHz DATA**

**802.11a**

<b>CHANNEL</b>	TX Channel 100	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		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	#5470.00	67.02 PK	68.20	-1.18	1.47 H	120	60.55	6.47
2	*5500.00	105.84 PK			1.48 H	157	99.37	6.47
3	*5500.00	96.62 AV			1.48 H	157	90.15	6.47
4	11000.00	57.87 PK	74.00	-16.13	1.45 H	247	40.59	17.28
5	11000.00	46.21 AV	54.00	-7.79	1.45 H	247	28.93	17.28
6	#16500.00	66.98 PK	74.00	-7.02	1.87 H	154	42.47	24.51
7	#16500.00	50.78 AV	54.00	-3.22	1.87 H	154	26.27	24.51
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	#5470.00	67.24 PK	68.20	-0.96	1.45 V	247	60.77	6.47
2	*5500.00	110.25 PK			1.45 V	247	103.78	6.47
3	*5500.00	101.58 AV			1.45 V	247	95.11	6.47
4	11000.00	58.98 PK	74.00	-15.02	1.58 V	140	41.70	17.28
5	11000.00	46.25 AV	54.00	-7.75	1.58 V	140	28.97	17.28
6	#16500.00	65.87 PK	74.00	-8.13	1.40 V	158	41.36	24.51
7	#16500.00	50.46 AV	54.00	-3.54	1.40 V	158	25.95	24.51

**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).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " \* ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.



<b>CHANNEL</b>	TX Channel 116	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		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	#5470.00	51.25 PK	68.20	-16.95	1.00 H	14	44.78	6.47
2	*5580.00	103.58 PK			1.25 H	147	96.91	6.67
3	*5580.00	94.86 AV			1.25 H	147	88.19	6.67
4	11160.00	56.68 PK	74.00	-17.32	1.69 H	257	39.32	17.36
5	11160.00	46.35 AV	54.00	-7.65	1.69 H	257	28.99	17.36
6	#16740.00	68.59 PK	74.00	-5.41	1.47 H	150	43.66	24.93
7	#16740.00	50.84 AV	54.00	-3.16	1.47 H	150	25.91	24.93
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	#5470.00	51.24 PK	68.20	-16.96	1.58 V	147	44.77	6.47
2	*5580.00	112.88 PK			1.45 V	126	106.21	6.67
3	*5580.00	102.95 AV			1.45 V	126	96.28	6.67
4	11160.00	57.48 PK	74.00	-16.52	1.42 V	188	40.12	17.36
5	11160.00	45.18 AV	54.00	-8.82	1.42 V	188	27.82	17.36
6	#16740.00	67.48 PK	74.00	-6.52	1.49 V	260	42.55	24.93
7	#16740.00	50.28 AV	54.00	-3.72	1.49 V	260	25.35	24.93

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).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " \* ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.



<b>CHANNEL</b>	TX Channel 140	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		Average (AV)

<b>ANTENNA POLARITY &amp; TEST DISTANCE: HORIZONTAL AT 3 M</b>								
<b>NO.</b>	<b>FREQ. (MHz)</b>	<b>EMISSION LEVEL (dBuV/m)</b>	<b>LIMIT (dBuV/m)</b>	<b>MARGIN (dB)</b>	<b>ANTENNA HEIGHT (m)</b>	<b>TABLE ANGLE (Degree)</b>	<b>RAW VALUE (dBuV)</b>	<b>CORRECTION FACTOR (dB/m)</b>
1	*5700.00	106.54 PK			1.25 H	147	99.58	6.96
2	*5700.00	96.43 AV			1.25 H	147	89.47	6.96
3	#5725.00	67.54 PK	68.20	-0.66	1.25 H	148	60.52	7.02
4	11400.00	56.58 PK	74.00	-17.42	1.45 H	128	39.10	17.48
5	11400.00	45.48 AV	54.00	-8.52	1.45 H	128	28.00	17.48
6	#17100.00	66.96 PK	74.00	-7.04	1.14 H	125	41.48	25.48
7	#17100.00	50.48 AV	54.00	-3.52	1.14 H	125	25.00	25.48
<b>ANTENNA POLARITY &amp; TEST DISTANCE: VERTICAL AT 3 M</b>								
<b>NO.</b>	<b>FREQ. (MHz)</b>	<b>EMISSION LEVEL (dBuV/m)</b>	<b>LIMIT (dBuV/m)</b>	<b>MARGIN (dB)</b>	<b>ANTENNA HEIGHT (m)</b>	<b>TABLE ANGLE (Degree)</b>	<b>RAW VALUE (dBuV)</b>	<b>CORRECTION FACTOR (dB/m)</b>
1	*5700.00	109.58 PK			1.25 V	102	102.62	6.96
2	*5700.00	99.58 AV			1.25 V	102	92.62	6.96
3	#5725.00	65.98 PK	68.20	-2.22	1.25 V	144	58.96	7.02
4	11400.00	58.54 PK	74.00	-15.46	1.58 V	147	41.06	17.48
5	11400.00	46.69 AV	54.00	-7.31	1.58 V	147	29.21	17.48
6	#17100.00	68.49 PK	74.00	-5.51	1.47 V	196	43.01	25.48
7	#17100.00	50.88 AV	54.00	-3.12	1.47 V	196	25.40	25.48

**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).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " \* ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.



802.11n (20MHz)

CHANNEL	TX Channel 100	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		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	#5470.00	64.25 PK	68.20	-3.95	1.00 H	147	57.78	6.47
2	*5500.00	105.88 PK			1.58 H	140	99.41	6.47
3	*5500.00	95.69 AV			1.58 H	140	89.22	6.47
4	11000.00	55.28 PK	74.00	-18.72	1.58 H	144	38.00	17.28
5	11000.00	43.30 AV	54.00	-10.70	1.58 H	144	26.02	17.28
6	#16500.00	66.59 PK	74.00	-7.41	1.25 H	147	42.08	24.51
7	#16500.00	50.28 AV	54.00	-3.72	1.25 H	147	25.77	24.51

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	#5470.00	67.20 PK	68.20	-1.00	1.45 V	136	60.73	6.47
2	*5500.00	110.84 PK			1.45 V	136	104.37	6.47
3	*5500.00	100.78 AV			1.45 V	136	94.31	6.47
4	11000.00	57.48 PK	74.00	-16.52	1.25 V	114	40.20	17.28
5	11000.00	47.60 AV	54.00	-6.40	1.25 V	114	30.32	17.28
6	#16500.00	68.58 PK	74.00	-5.42	1.48 V	154	44.07	24.51
7	#16500.00	50.88 AV	54.00	-3.12	1.48 V	154	26.37	24.51

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).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " \* ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.



<b>CHANNEL</b>	TX Channel 116	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		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	#5470.00	54.56 PK	68.20	-13.64	1.00 H	148	48.09	6.47
2	*5580.00	104.52 PK			1.58 H	147	97.85	6.67
3	*5580.00	94.86 AV			1.58 H	147	88.19	6.67
4	11160.00	55.88 PK	74.00	-18.12	1.50 H	255	38.52	17.36
5	11160.00	45.16 AV	54.00	-8.84	1.50 H	255	27.80	17.36
6	#16740.00	68.25 PK	74.00	-5.75	1.45 H	120	43.32	24.93
7	#16740.00	50.48 AV	54.00	-3.52	1.45 H	120	25.55	24.93
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	#5470.00	52.58 PK	68.20	-15.62	1.68 V	249	46.11	6.47
2	*5580.00	112.88 PK			1.58 V	120	106.21	6.67
3	*5580.00	101.78 AV			1.58 V	120	95.11	6.67
4	11160.00	56.26 PK	74.00	-17.74	1.00 V	140	38.90	17.36
5	11160.00	45.19 AV	54.00	-8.81	1.00 V	140	27.83	17.36
6	#16740.00	66.59 PK	74.00	-7.41	1.45 V	147	41.66	24.93
7	#16740.00	50.57 AV	54.00	-3.43	1.45 V	147	25.64	24.93

**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).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " \* ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.



<b>CHANNEL</b>	TX Channel 140	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		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	*5700.00	99.78 PK			2.58 H	152	92.82	6.96
2	*5700.00	91.06 AV			2.58 H	152	84.10	6.96
3	#5725.00	59.36 PK	68.20	-8.84	1.58 H	140	52.34	7.02
4	11400.00	56.59 PK	74.00	-17.41	1.98 H	248	39.11	17.48
5	11400.00	43.56 AV	54.00	-10.44	1.98 H	248	26.08	17.48
6	#17100.00	66.23 PK	74.00	-7.77	1.20 H	150	40.75	25.48
7	#17100.00	50.10 AV	54.00	-3.90	1.20 H	150	24.62	25.48
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	*5700.00	108.59 PK			1.50 V	240	101.63	6.96
2	*5700.00	96.98 AV			1.50 V	240	90.02	6.96
3	#5725.00	66.65 PK	68.20	-1.55	1.25 V	148	59.63	7.02
4	11400.00	55.48 PK	74.00	-18.52	1.25 V	147	38.00	17.48
5	11400.00	41.19 AV	54.00	-12.81	1.25 V	147	23.71	17.48
6	#17100.00	56.58 PK	74.00	-17.42	1.02 V	140	31.10	25.48
7	#17100.00	50.57 AV	54.00	-3.43	1.02 V	140	25.09	25.48

**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).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " \* ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.



802.11n (40MHz)

CHANNEL	TX Channel 102	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		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	#5470.00	67.21 PK	68.20	-0.99	1.45 H	148	60.74	6.47
2	*5510.00	100.87 PK			1.40 H	158	94.38	6.49
3	*5510.00	91.54 AV			1.40 H	158	85.05	6.49
4	11020.00	56.58 PK	74.00	-17.42	1.58 H	147	39.30	17.28
5	11020.00	46.99 AV	54.00	-7.01	1.58 H	147	29.71	17.28
6	#16530.00	68.58 PK	74.00	-5.42	1.45 H	149	44.02	24.56
7	#16530.00	50.48 AV	54.00	-3.52	1.45 H	149	25.92	24.56

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	#5470.00	66.01 PK	68.20	-2.19	1.58 V	147	59.54	6.47
2	*5510.00	103.84 PK			1.58 V	214	97.35	6.49
3	*5510.00	94.36 AV			1.58 V	214	87.87	6.49
4	11020.00	56.25 PK	74.00	-17.75	2.45 V	120	38.97	17.28
5	11020.00	45.48 AV	54.00	-8.52	2.45 V	120	28.20	17.28
6	#16530.00	68.45 PK	74.00	-5.55	1.00 V	120	43.89	24.56
7	#16530.00	50.79 AV	54.00	-3.21	1.00 V	120	26.23	24.56

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).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " \* ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.



<b>CHANNEL</b>	TX Channel 110	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		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	*5550.00	103.69 PK			1.51 H	120	97.10	6.59
2	*5550.00	92.68 AV			1.51 H	120	86.09	6.59
3	#5725.00	56.69 PK	68.20	-11.51	1.25 H	148	49.67	7.02
4	11100.00	56.84 PK	74.00	-17.16	1.30 H	210	39.52	17.32
5	11100.00	45.19 AV	54.00	-8.81	1.30 H	210	27.87	17.32
6	#16650.00	65.48 PK	74.00	-8.52	1.30 H	240	40.71	24.77
7	#16650.00	50.49 AV	54.00	-3.51	1.30 H	240	25.72	24.77
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	*5550.00	108.55 PK			1.58 V	120	101.96	6.59
2	*5550.00	98.75 AV			1.58 V	120	92.16	6.59
3	#5725.00	49.66 PK	68.20	-18.54	1.52 V	144	42.64	7.02
4	11100.00	56.25 PK	74.00	-17.75	1.20 V	144	38.93	17.32
5	11100.00	46.23 AV	54.00	-7.77	1.20 V	144	28.91	17.32
6	#16650.00	67.12 PK	74.00	-6.88	1.48 V	130	42.35	24.77
7	#16650.00	50.68 AV	54.00	-3.32	1.48 V	130	25.91	24.77

**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).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " \* ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.





<b>CHANNEL</b>	TX Channel 134	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		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	*5670.00	106.58 PK			1.45 H	210	99.69	6.89
2	*5670.00	92.14 AV			1.45 H	210	85.25	6.89
3	#5725.00	58.48 PK	68.20	-9.72	1.25 H	148	51.46	7.02
4	11340.00	57.26 PK	74.00	-16.74	1.02 H	144	39.82	17.44
5	11340.00	45.49 AV	54.00	-8.51	1.02 H	144	28.05	17.44
6	#17010.00	68.49 PK	74.00	-5.51	1.36 H	208	43.09	25.40
7	#17010.00	50.40 AV	54.00	-3.60	1.36 H	208	25.00	25.40
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	*5670.00	108.39 PK			1.52 V	120	101.50	6.89
2	*5670.00	98.69 AV			1.52 V	120	91.80	6.89
3	#5725.00	66.54 PK	68.20	-1.66	1.25 V	148	59.52	7.02
4	11340.00	56.69 PK	74.00	-17.31	1.87 V	148	39.25	17.44
5	11340.00	46.28 AV	54.00	-7.72	1.87 V	148	28.84	17.44
6	#17010.00	68.49 PK	74.00	-5.51	1.56 V	350	43.09	25.40
7	#17010.00	50.41 AV	54.00	-3.59	1.56 V	350	25.01	25.40

**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).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " \* ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.



**802.11ac 80MHz**

<b>CHANNEL</b>	TX Channel 106	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		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	#5470.00	65.88 PK	68.20	-2.32	1.40 H	158	59.41	6.47
2	*5530.00	95.68 PK			1.25 H	148	89.14	6.54
3	*5530.00	84.78 AV			1.25 H	148	78.24	6.54
4	#5725.00	51.58 PK	68.20	-16.62	1.50 H	178	44.56	7.02
5	11060.00	56.28 PK	74.00	-17.72	1.45 H	180	38.98	17.30
6	11060.00	43.16 AV	54.00	-10.84	1.45 H	180	25.86	17.30
7	#16590.00	68.49 PK	74.00	-5.51	1.48 H	185	43.82	24.67
8	#16590.00	50.48 AV	54.00	-3.52	1.48 H	185	25.81	24.67

**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	#5470.00	67.15 PK	68.20	-1.05	1.25 V	147	63.68	6.47
2	*5530.00	99.87 PK			1.45 V	218	93.33	6.54
3	*5530.00	88.95 AV			1.45 V	218	82.41	6.54
4	#5725.00	56.58 PK	68.20	-11.62	1.58 V	147	49.56	7.02
5	11060.00	57.15 PK	74.00	-16.85	1.82 V	170	39.85	17.30
6	11060.00	46.26 AV	54.00	-7.74	1.82 V	170	28.96	17.30
7	#16590.00	68.49 PK	74.00	-5.51	1.45 V	147	43.82	24.67
8	#16590.00	50.88 AV	54.00	-3.12	1.45 V	147	26.21	24.67

**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).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " \* ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.



<b>CHANNEL</b>	TX Channel 122	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		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	*5610.00	96.32 PK			1.25 H	147	89.58	6.74
2	*5610.00	84.59 AV			1.25 H	147	77.85	6.74
3	#5725.00	63.25 PK	68.20	-4.95	1.45 H	248	56.23	7.02
4	11220.00	57.15 PK	74.00	-16.85	1.58 H	174	39.77	17.38
5	11220.00	46.58 AV	54.00	-7.42	1.58 H	174	29.20	17.38
6	#16830.00	67.48 PK	74.00	-6.52	1.69 H	250	42.39	25.09
7	#16830.00	50.39 AV	54.00	-3.61	1.69 H	250	25.30	25.09
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	*5610.00	104.88 PK			1.25 V	147	98.14	6.74
2	*5610.00	91.68 AV			1.25 V	147	84.94	6.74
3	#5725.00	66.94 PK	68.20	-1.26	1.25 V	147	59.92	7.02
4	11220.00	56.35 PK	74.00	-17.65	1.25 V	147	38.97	17.38
5	11220.00	45.87 AV	54.00	-8.13	1.25 V	147	28.49	17.38
6	#16830.00	68.45 PK	74.00	-5.55	1.20 V	158	43.36	25.09
7	#16830.00	50.15 AV	54.00	-3.85	1.20 V	158	25.06	25.09

**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).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " \* ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.



Band 4 (5725-5850MHz):

ABOVE 1GHz DATA

802.11a

CHANNEL	TX Channel 149	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		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	#5650.00	47.55 PK	68.20	-20.65	1.00 H	41	40.71	6.84
2	#5700.00	58.33 PK	105.20	-46.87	1.00 H	41	51.37	6.96
3	#5720.00	67.25 PK	110.80	-43.55	1.58 H	146	60.24	7.01
4	#5725.00	75.75 PK	122.20	-46.45	1.25 H	148	68.73	7.02
5	*5745.00	105.31 PK			1.25 H	147	98.24	7.07
6	*5745.00	95.32 AV			1.25 H	147	88.25	7.07
7	11490.00	56.35 PK	74.00	-17.65	1.87 H	149	38.84	17.51
8	11490.00	46.25 AV	54.00	-7.75	1.87 H	149	28.74	17.51
9	#17235.00	68.45 PK	74.00	-5.55	1.48 H	140	42.85	25.60
10	#17235.00	50.78 AV	54.00	-3.22	1.48 H	140	25.18	25.60

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	#5650.00	49.95 PK	68.20	-18.25	1.00 V	76	43.11	6.84
2	#5700.00	59.49 PK	105.20	-45.71	1.00 V	76	52.53	6.96
3	#5720.00	71.78 PK	110.80	-39.02	1.00 V	76	64.77	7.01
4	#5725.00	78.79 PK	122.20	-43.41	1.00 V	76	71.77	7.02
5	*5745.00	110.84 PK			1.25 V	147	103.77	7.07
6	*5745.00	101.80 AV			1.25 V	147	94.73	7.07
7	11490.00	57.02 PK	74.00	-16.98	1.20 V	147	39.51	17.51
8	11490.00	46.25 AV	54.00	-7.75	1.20 V	147	28.74	17.51
9	#17235.00	68.49 PK	74.00	-5.51	1.69 V	257	42.89	25.60
10	#17235.00	50.79 AV	54.00	-3.21	1.69 V	257	25.19	25.60

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).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " \* ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.



CHANNEL	TX Channel 157	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		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	#5650.00	48.45 PK	68.20	-19.75	1.00 H	45	41.61	6.84
2	#5700.00	47.23 PK	105.20	-57.97	1.00 H	45	40.27	6.96
3	#5720.00	46.58 PK	110.80	-64.22	1.00 H	45	39.57	7.01
4	#5725.00	45.44 PK	122.20	-76.76	1.00 H	45	38.42	7.02
5	*5785.00	105.21 PK			1.50 H	140	98.05	7.16
6	*5785.00	95.68 AV			1.50 H	140	88.52	7.16
7	#5850.00	46.42 PK	122.20	-75.78	1.00 H	45	39.10	7.32
8	#5855.00	48.26 PK	110.80	-62.54	1.00 H	45	40.93	7.33
9	#5875.00	47.16 PK	105.20	-58.04	1.00 H	45	39.78	7.38
10	#5887.50	45.36 PK	95.92	-50.56	1.00 H	45	37.95	7.41
11	11570.00	56.25 PK	74.00	-17.75	1.40 H	158	38.63	17.62
12	11570.00	45.18 AV	54.00	-8.82	1.40 H	158	27.56	17.62
13	#17355.00	67.48 PK	74.00	-6.52	1.02 H	140	41.77	25.71
14	#17355.00	50.42 AV	54.00	-3.58	1.02 H	140	24.71	25.71

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

1	#5650.00	48.69 PK	68.20	-19.51	1.00 V	308	41.85	6.84
2	#5700.00	47.71 PK	105.20	-57.49	1.00 V	308	40.75	6.96
3	#5720.00	51.78 PK	110.80	-59.02	1.00 V	308	44.77	7.01
4	#5725.00	54.58 PK	122.20	-67.62	1.00 V	308	47.56	7.02
5	*5785.00	112.84 PK			1.20 V	158	105.68	7.16
6	*5785.00	102.77 AV			1.20 V	158	95.61	7.16
7	#5850.00	50.56 PK	122.20	-71.64	1.00 V	308	43.24	7.32
8	#5855.00	57.88 PK	110.80	-52.92	1.00 V	308	50.55	7.33
9	#5875.00	51.67 PK	105.20	-53.53	1.00 V	308	44.29	7.38
10	#5925.00	48.73 PK	68.20	-19.47	1.00 V	308	41.22	7.51
11	11570.00	57.15 PK	74.00	-16.85	1.50 V	144	39.53	17.62
12	11570.00	47.12 AV	54.00	-6.88	1.50 V	144	29.50	17.62
13	#17355.00	68.15 PK	74.00	-5.85	1.69 V	277	42.44	25.71
14	#17355.00	50.73 AV	54.00	-3.27	1.69 V	277	25.02	25.71

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).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " \* ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.



<b>CHANNEL</b>	TX Channel 165	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		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	*5825.00	104.88 PK			1.25 H	141	97.62	7.26
2	*5825.00	95.68 AV			1.25 H	141	88.42	7.26
3	#5850.00	71.00 PK	122.20	-51.20	1.00 H	43	63.68	7.32
4	#5855.00	66.64 PK	110.80	-44.16	1.00 H	43	59.31	7.33
5	#5875.00	50.13 PK	105.20	-55.07	1.00 H	43	42.75	7.38
6	#5925.00	47.50 PK	68.20	-20.70	1.00 H	43	39.99	7.51
7	11650.00	57.15 PK	74.00	-16.85	1.42 H	180	39.41	17.74
8	11650.00	46.69 AV	54.00	-7.31	1.42 H	180	28.95	17.74
9	#17475.00	65.58 PK	74.00	-8.42	1.30 H	260	39.75	25.83
10	#17475.00	50.48 AV	54.00	-3.52	1.30 H	260	24.65	25.83

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	*5825.00	111.58 PK			1.20 V	145	104.32	7.26
2	*5825.00	102.58 AV			1.20 V	145	95.32	7.26
3	#5850.00	66.79 PK	122.20	-55.41	1.00 V	122	59.47	7.32
4	#5855.00	64.14 PK	110.80	-46.66	1.00 V	104	56.81	7.33
5	#5875.00	56.08 PK	105.20	-49.12	1.00 V	69	48.70	7.38
6	#5925.00	48.37 PK	68.20	-19.83	1.00 V	14	40.86	7.51
7	11650.00	57.15 PK	74.00	-16.85	1.42 V	158	39.41	17.74
8	11650.00	47.15 AV	54.00	-6.85	1.42 V	158	29.41	17.74
9	#17475.00	69.25 PK	74.00	-4.75	1.47 V	158	43.42	25.83
10	#17475.00	50.88 AV	54.00	-3.12	1.47 V	158	25.05	25.83

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).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " \* ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.



802.11n (20MHz)

CHANNEL	TX Channel 149	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		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	#5650.00	48.68 PK	68.20	-19.52	1.00 H	164	41.84	6.84
2	#5700.00	57.35 PK	105.20	-47.85	1.00 H	130	50.39	6.96
3	#5720.00	66.70 PK	110.80	-44.10	1.00 H	99	59.69	7.01
4	#5725.00	77.04 PK	122.20	-45.16	1.00 H	69	70.02	7.02
5	*5745.00	104.84 PK			1.58 H	142	97.77	7.07
6	*5745.00	95.68 AV			1.58 H	142	88.61	7.07
7	11490.00	56.69 PK	74.00	-17.31	1.20 H	158	39.18	17.51
8	11490.00	45.16 AV	54.00	-8.84	1.20 H	158	27.65	17.51
9	#17235.00	67.35 PK	74.00	-6.65	1.20 H	128	41.75	25.60
10	#17235.00	50.69 AV	54.00	-3.31	1.20 H	128	25.09	25.60

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	#5650.00	49.87 PK	68.20	-18.33	1.00 V	78	43.03	6.84
2	#5700.00	57.03 PK	105.20	-48.17	1.00 V	78	50.07	6.96
3	#5720.00	69.42 PK	110.80	-41.38	1.00 V	78	62.41	7.01
4	#5725.00	83.29 PK	122.20	-38.91	1.00 V	78	76.27	7.02
5	*5745.00	112.21 PK			1.00 V	147	105.14	7.07
6	*5745.00	101.68 AV			1.00 V	147	94.61	7.07
7	11490.00	57.15 PK	74.00	-16.85	1.69 V	247	39.64	17.51
8	11490.00	46.26 AV	54.00	-7.74	1.69 V	247	28.75	17.51
9	#17235.00	68.49 PK	74.00	-5.51	1.20 V	102	42.89	25.60
10	#17235.00	50.47 AV	54.00	-3.53	1.20 V	104	24.87	25.60

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).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " \* ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.



<b>CHANNEL</b>	TX Channel 157	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		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	#5650.00	48.52 PK	68.20	-19.68	1.00 H	108	41.68	6.84
2	#5700.00	47.64 PK	105.20	-57.56	1.00 H	79	40.68	6.96
3	#5720.00	47.96 PK	110.80	-62.84	1.00 H	50	40.95	7.01
4	#5725.00	49.05 PK	122.20	-73.15	1.00 H	45	42.03	7.02
5	*5785.00	104.88 PK			1.20 H	158	97.72	7.16
6	*5785.00	94.87 AV			1.20 H	158	87.71	7.16
7	#5850.00	45.39 PK	122.20	-76.81	1.00 H	286	38.07	7.32
8	#5855.00	46.52 PK	110.80	-64.28	1.00 H	316	39.19	7.33
9	#5875.00	47.15 PK	105.20	-58.05	1.00 H	344	39.77	7.38
10	#5925.00	46.55 PK	68.20	-21.65	1.00 H	359	39.04	7.51
11	11570.00	55.98 PK	74.00	-18.02	1.45 H	188	38.36	17.62
12	11570.00	46.21 AV	54.00	-7.79	1.45 H	188	28.59	17.62
13	#17355.00	68.49 PK	74.00	-5.51	1.42 H	120	42.78	25.71
14	#17355.00	50.74 AV	54.00	-3.26	1.42 H	120	25.03	25.71
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
1	#5650.00	48.07 PK	68.20	-20.13	1.00 V	233	41.23	6.84
2	#5700.00	47.91 PK	105.20	-57.29	1.00 V	272	40.95	6.96
3	#5720.00	51.35 PK	110.80	-59.45	1.00 V	300	44.34	7.01
4	#5725.00	50.69 PK	122.20	-71.51	1.00 V	308	43.67	7.02
5	*5785.00	112.54 PK			1.50 V	147	105.38	7.16
6	*5785.00	102.68 AV			1.50 V	147	95.52	7.16
7	#5850.00	46.56 PK	122.20	-75.64	1.00 V	110	39.24	7.32
8	#5855.00	48.85 PK	110.80	-61.95	1.00 V	75	41.52	7.33
9	#5875.00	48.63 PK	105.20	-56.57	1.00 V	45	41.25	7.38
10	#5925.00	47.51 PK	68.20	-20.69	1.00 V	12	40.00	7.51
11	11570.00	56.25 PK	74.00	-17.75	1.50 V	124	38.63	17.62
12	11570.00	46.25 AV	54.00	-7.75	1.50 V	124	28.63	17.62
13	#17355.00	62.25 PK	74.00	-11.75	1.58 V	147	36.54	25.71
14	#17355.00	49.25 AV	54.00	-4.75	1.58 V	147	23.54	25.71

**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).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " \* " : Fundamental frequency.
6. " # " : The radiated frequency is out of the restricted band.





<b>CHANNEL</b>	TX Channel 165	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		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	*5825.00	105.80 PK			1.25 H	168	98.54	7.26
2	*5825.00	96.05 AV			1.25 H	168	88.79	7.26
3	#5850.00	69.57 PK	122.20	-52.63	1.00 H	43	62.25	7.32
4	#5855.00	64.33 PK	110.80	-46.47	1.00 H	43	57.00	7.33
5	#5875.00	54.08 PK	105.20	-51.12	1.00 H	43	46.70	7.38
6	#5925.00	47.77 PK	68.20	-20.43	1.00 H	43	40.26	7.51
7	11650.00	54.25 PK	74.00	-19.75	1.20 H	147	36.51	17.74
8	11650.00	46.26 AV	54.00	-7.74	1.20 H	147	28.52	17.74
9	#17475.00	65.25 PK	74.00	-8.75	1.47 H	188	39.42	25.83
10	#17475.00	48.17 AV	54.00	-5.83	1.47 H	188	22.34	25.83

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	*5825.00	111.02 PK			1.52 V	158	103.76	7.26
2	*5825.00	101.52 AV			1.52 V	158	94.26	7.26
3	#5850.00	75.53 PK	122.20	-46.67	1.00 V	310	68.21	7.32
4	#5855.00	72.29 PK	110.80	-38.51	1.00 V	310	64.96	7.33
5	#5875.00	62.91 PK	105.20	-42.29	1.00 V	310	55.53	7.38
6	#5925.00	49.07 PK	68.20	-19.13	1.00 V	310	41.56	7.51
7	11650.00	55.58 PK	74.00	-18.42	1.47 V	158	37.84	17.74
8	11650.00	45.15 AV	54.00	-8.85	1.47 V	158	27.41	17.74
9	#17475.00	67.15 PK	74.00	-6.85	1.58 V	147	41.32	25.83
10	#17475.00	49.58 AV	54.00	-4.42	1.58 V	147	23.75	25.83

**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).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " \* ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.



802.11n (40MHz)

CHANNEL	TX Channel 151	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		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	#5650.00	48.56 PK	68.20	-19.64	1.00 H	40	41.72	6.84
2	#5700.00	58.02 PK	105.20	-47.18	1.00 H	40	51.06	6.96
3	#5720.00	68.99 PK	110.80	-41.81	1.00 H	40	61.98	7.01
4	#5725.00	74.16 PK	122.20	-48.04	1.00 H	40	67.14	7.02
5	*5755.00	101.58 PK			1.25 H	147	94.49	7.09
6	*5755.00	92.25 AV			1.25 H	147	85.16	7.09
7	11510.00	54.26 PK	74.00	-19.74	1.58 H	147	36.72	17.54
8	11510.00	43.26 AV	54.00	-10.74	1.58 H	147	25.72	17.54
9	#17265.00	65.26 PK	74.00	-8.74	1.28 H	47	39.62	25.64
10	#17265.00	49.57 AV	54.00	-4.43	1.28 H	47	23.93	25.64

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	#5650.00	50.36 PK	68.20	-17.84	1.00 V	197	43.52	6.84
2	#5700.00	61.94 PK	105.20	-43.26	1.00 V	232	54.98	6.96
3	#5720.00	74.01 PK	110.80	-36.79	1.00 V	276	67.00	7.01
4	#5725.00	75.25 PK	122.20	-46.95	1.00 V	300	68.23	7.02
5	*5755.00	106.20 PK			1.00 V	360	99.11	7.09
6	*5755.00	96.79 AV			1.00 V	360	89.70	7.09
7	11510.00	55.58 PK	74.00	-18.42	1.26 V	214	38.04	17.54
8	11510.00	44.16 AV	54.00	-9.84	1.26 V	214	26.62	17.54
9	#17265.00	64.58 PK	74.00	-9.42	1.25 V	147	38.94	25.64
10	#17265.00	49.88 AV	54.00	-4.12	1.25 V	147	24.24	25.64

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).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " \* ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.



<b>CHANNEL</b>	TX Channel 159	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		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	*5795.00	103.26 PK			1.50 H	140	96.07	7.19
2	*5795.00	92.68 AV			1.50 H	140	85.49	7.19
3	#5850.00	54.79 PK	122.20	-67.41	1.00 H	81	47.47	7.32
4	#5855.00	55.44 PK	110.80	-55.36	1.00 H	118	48.11	7.33
5	#5875.00	49.71 PK	105.20	-55.49	1.00 H	146	42.33	7.38
6	#5925.00	47.09 PK	68.20	-21.11	1.00 H	180	39.58	7.51
7	11590.00	55.15 PK	74.00	-18.85	1.25 H	147	37.50	17.65
8	11590.00	46.20 AV	54.00	-7.80	1.25 H	147	28.55	17.65
9	#17385.00	62.58 PK	74.00	-11.42	1.88 H	177	36.84	25.74
10	#17385.00	48.17 AV	54.00	-5.83	1.88 H	177	22.43	25.74

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	*5795.00	107.08 PK			1.45 V	247	99.89	7.19
2	*5795.00	98.58 AV			1.45 V	247	91.39	7.19
3	#5850.00	63.88 PK	122.20	-58.32	1.00 V	293	56.56	7.32
4	#5855.00	61.38 PK	110.80	-49.42	1.00 V	262	54.05	7.33
5	#5875.00	55.61 PK	105.20	-49.59	1.00 V	222	48.23	7.38
6	#5925.00	48.45 PK	68.20	-19.75	1.00 V	188	40.94	7.51
7	11590.00	56.21 PK	74.00	-17.79	1.20 V	147	38.56	17.65
8	11590.00	43.26 AV	54.00	-10.74	1.20 V	147	25.61	17.65
9	#17385.00	64.58 PK	74.00	-9.42	1.40 V	170	38.84	25.74
10	#17385.00	48.47 AV	54.00	-5.53	1.40 V	170	22.73	25.74

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).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " \* ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.



CHANNEL		TX Channel 155			DETECTOR FUNCTION		Peak (PK)	
FREQUENCY RANGE		1GHz ~ 40GHz					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	#5650.00	51.10 PK	68.20	-17.10	1.00 H	288	44.26	6.84
2	#5700.00	62.00 PK	105.20	-43.20	1.00 H	257	55.04	6.96
3	#5720.00	56.81 PK	110.80	-53.99	1.00 H	218	49.80	7.01
4	#5725.00	46.19 PK	122.20	-76.01	1.00 H	183	39.17	7.02
5	*5775.00	96.21 PK			1.55 H	147	89.07	7.14
6	*5775.00	85.69 AV			1.55 H	147	78.55	7.14
7	#5850.00	69.60 PK	122.20	-52.60	1.00 H	46	62.28	7.32
8	#5855.00	71.57 PK	110.80	-39.23	1.00 H	46	64.24	7.33
9	#5875.00	63.89 PK	105.20	-41.31	1.00 H	47	56.51	7.38
10	#5887.50	47.20 PK	95.92	-48.72	1.00 H	121	39.79	7.41
11	11550.00	53.26 PK	74.00	-20.74	1.45 H	128	35.67	17.59
12	11550.00	45.55 AV	54.00	-8.45	1.45 H	128	27.96	17.59
13	#17325.00	64.58 PK	74.00	-9.42	1.00 H	120	38.89	25.69
14	#17325.00	48.02 AV	54.00	-5.98	1.00 H	120	22.33	25.69
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	#5650.00	62.54 PK	68.20	-5.66	1.00 V	219	55.70	6.84
2	#5700.00	74.62 PK	105.20	-30.58	1.00 V	192	67.66	6.96
3	#5720.00	70.37 PK	110.80	-40.43	1.00 V	139	63.36	7.01
4	#5725.00	70.45 PK	122.20	-51.75	1.00 V	104	63.43	7.02
5	*5775.00	102.02 PK			1.25 V	148	94.88	7.14
6	*5775.00	90.88 AV			1.25 V	148	83.74	7.14
7	#5850.00	73.17 PK	122.20	-49.03	1.00 V	222	65.85	7.32
8	#5855.00	73.06 PK	110.80	-37.74	1.00 V	223	65.73	7.33
9	#5875.00	65.63 PK	105.20	-39.57	1.00 V	247	58.25	7.38
10	#5925.00	55.34 PK	68.20	-12.86	1.00 V	275	47.83	7.51
11	11550.00	54.26 PK	74.00	-19.74	1.58 V	144	36.67	17.59
12	11550.00	44.68 AV	54.00	-9.32	1.58 V	144	27.09	17.59
13	#17325.00	65.69 PK	74.00	-8.31	1.60 V	210	40.00	25.69
14	#17325.00	48.19 AV	54.00	-5.81	1.60 V	210	22.50	25.69

**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).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " \* " : Fundamental frequency.
6. " # " : The radiated frequency is out of the restricted band.



### 3.2 CONDUCTED EMISSION MEASUREMENT

#### 3.2.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT

FREQUENCY OF EMISSION (MHz)	CONDUCTED LIMIT (dBµV)	
	Quasi-peak	Average
0.15 ~ 0.5	66 to 56	56 to 46
0.5 ~ 5	56	46
5 ~ 30	60	50

- NOTE:**
1. The lower limit shall apply at the transition frequencies.
  2. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50MHz.
  3. All emanations from a class A/B digital device or system, including any network of conductors and apparatus connected thereto, shall not exceed the level of field strengths specified above.

#### 3.2.2 TEST INSTRUMENTS

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
EMI Test Receiver	Rohde&Schwarz	ESR7	101494	Mar. 21,18	Mar. 20,19
Artificial Mains Network	Rohde&Schwarz	ENV216	101173	Mar. 03,18	Mar. 02,19
Artificial Mains Network	Rohde&Schwarz	ESH3-Z5	100317	Apr. 11,18	Apr. 10,19
Voltage probe	SCHWARZBEC K	TK 9421	TK 9421-176	Jan. 17,18	Jan. 16,19
Test software	ADT	ADT_Cond_ V7.3.7	N/A	N/A	N/A

- NOTE:**
1. The test was performed in shielded room 553.
  2. The calibration interval of the above test instruments is 12 months. And the calibrations are traceable to CEPREI/CHINA, GRGT/CHINA and NIM/CHINA.



### 3.2.3 TEST PROCEDURES

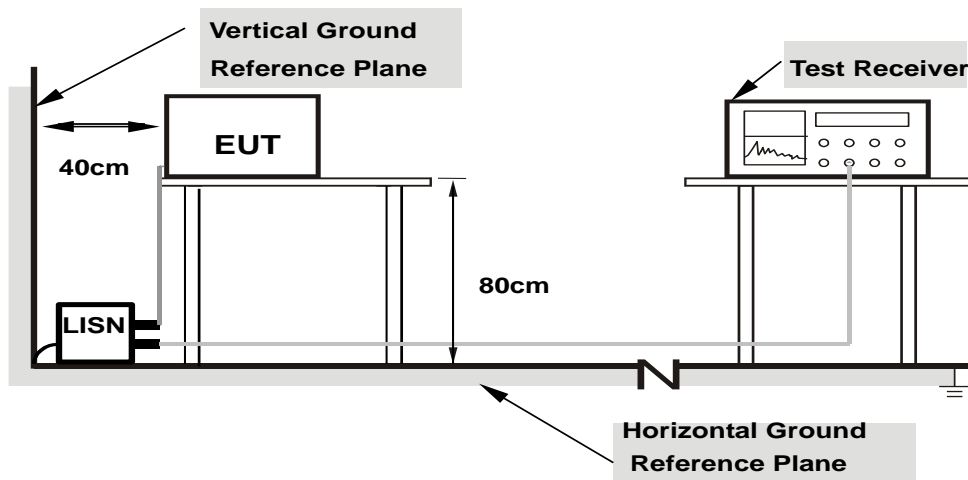
- a. The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling impedance for the measuring instrument.
- b. Both lines of the power mains connected to the EUT were checked for maximum conducted interference.
- c. The frequency range from 150kHz to 30MHz was searched. Emission levels under (Limit - 20dB) were not recorded.

**NOTE:** All modes of operation were investigated and the worst-case emissions are reported.

### 3.2.4 DEVIATION FROM TEST STANDARD

No deviation.

### 3.2.5 TEST SETUP



- Note:**
- 1.Support units were connected to second LISN.
  - 2.Both of LISNs (AMN) are 80 cm from EUT and at least 80 from other units and other metal planes

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

### 3.2.6 EUT OPERATING CONDITIONS

Same as 3.1.6



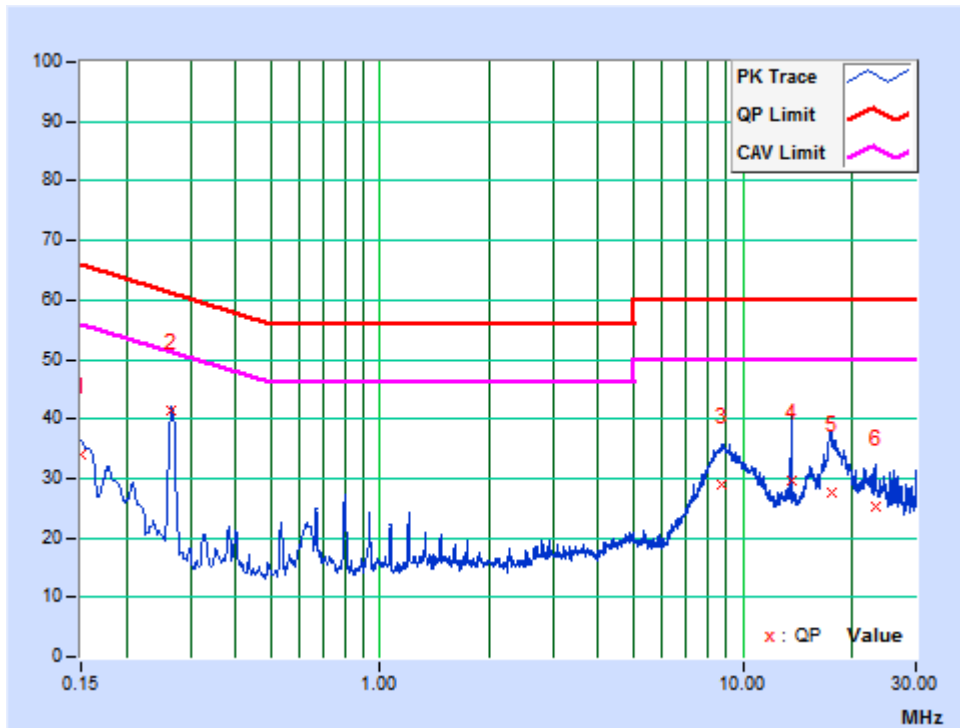
### 3.2.7 TEST RESULTS

**CONDUCTED WORST-CASE DATA: 802.11a**

<b>PHASE</b>	Line	<b>6dB BANDWIDTH</b>	9kHz
--------------	------	----------------------	------

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15000	9.90	23.97	16.78	33.87	26.68	66.00	56.00	-32.13	-29.32
2	0.26718	9.72	31.61	31.47	41.33	41.19	61.21	51.21	-19.88	-10.02
3	8.75625	10.33	18.50	14.67	28.83	25.00	60.00	50.00	-31.17	-25.00
4	13.56000	10.07	19.70	4.47	29.77	14.54	60.00	50.00	-30.23	-35.46
5	17.49300	10.16	17.55	9.16	27.71	19.32	60.00	50.00	-32.29	-30.68
6	23.12925	10.29	14.91	8.70	25.20	18.99	60.00	50.00	-34.80	-31.01

- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
  2. The emission levels of other frequencies were very low against the limit.
  3. Margin value = Emission level - Limit value
  4. Correction factor = Insertion loss + Cable loss
  5. Emission Level = Correction Factor + Reading Value.

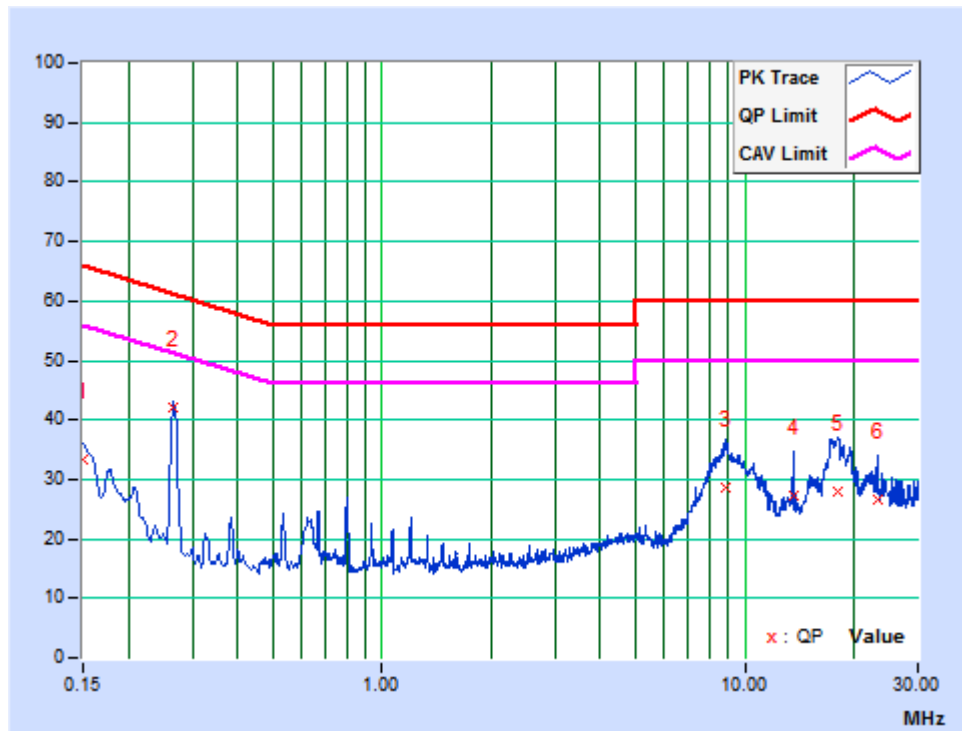




<b>PHASE</b>	Neutral	<b>6dB BANDWIDTH</b>	9kHz
--------------	---------	----------------------	------

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15000	9.63	23.66	16.70	33.29	26.33	66.00	56.00	-32.71	-29.67
<b>2</b>	<b>0.26718</b>	<b>10.20</b>	<b>31.97</b>	<b>31.69</b>	<b>42.17</b>	<b>41.89</b>	<b>61.21</b>	<b>51.21</b>	<b>-19.04</b>	<b>-9.32</b>
3	8.85300	9.90	18.88	13.69	28.78	23.59	60.00	50.00	-31.22	-26.41
4	13.56000	9.96	17.34	2.91	27.30	12.87	60.00	50.00	-32.70	-37.13
5	18.01500	10.15	17.74	8.56	27.89	18.71	60.00	50.00	-32.11	-31.29
6	23.12925	10.22	16.28	8.67	26.50	18.89	60.00	50.00	-33.50	-31.11

- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
  2. The emission levels of other frequencies were very low against the limit.
  3. Margin value = Emission level - Limit value
  4. Correction factor = Insertion loss + Cable loss
  5. Emission Level = Correction Factor + Reading Value.







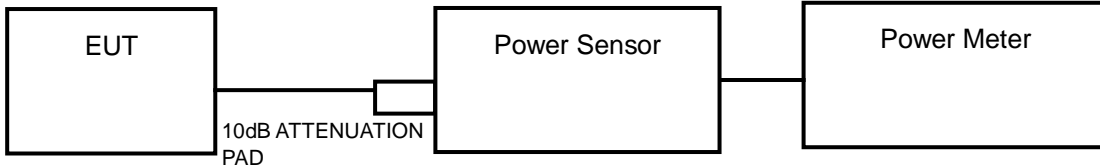
### 3.3 TRANSMIT POWER MEASUREMENT

#### 3.3.1 LIMITS OF TRANSMIT POWER MEASUREMENT

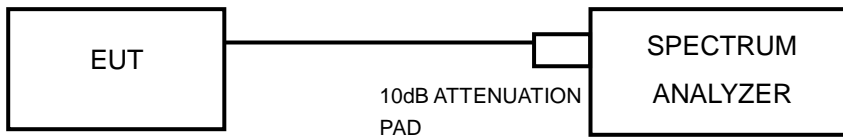
Operation Band	EUT Category		LIMIT
U-NII-1		Outdoor Access Point	1 Watt (30 dBm) (Max. e.i.r.p $\leq$ 125mW(21 dBm) at any elevation angle above 30 degrees as measured from the horizon)
		Fixed point-to-point Access Point	1 Watt (30 dBm)
		Indoor Access Point	1 Watt (30 dBm)
	√	Mobile and Portable client device	250mW (24 dBm)
U-NII-2A	√		250mW(24dBm) or 11 dBm+10LogB*
U-NII-2C	√		250mW(24dBm) or 11 dBm+10LogB*
U-NII-3	√		1 Watt (30 dBm)

**NOTE:** 1. Where B is the 26dB emission bandwidth in MHz.

#### 3.3.2 TEST SETUP



#### FOR 6/26dB BANDWIDTH





### 3.3.3 TEST INSTRUMENTS

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
Power Sensor	Keysight	U2021XA	MY55060016	May 19,18	May 18,19
Power Sensor	Keysight	U2021XA	MY55060018	May 19,18	May 18,19
Digital Multimeter	FLUKE	15B	A1220010DG	Oct. 21, 17	Oct.20, 18
Humid & Temp Programmable Tester	Haida	HD-2257	110807201	Sep.05,17	Sep. 04,18
Oscilloscope	Agilent	DSO9254A	MY51260160	Nov. 08,17	Nov. 07,18
Signal and Spectrum Analyzer	Rohde&Schwarz	FSV7	102331	Nov. 04,17	Nov. 03,18
Spectrum Analyzer	Keysight	N9020A	MY55400499	Mar. 21,18	Mar. 20,19
Signal Generator	Agilent	N5183A	MY50140980	Jan. 02,18	Jan. 01,19
MXG-B RF Vector Signal Generator	Keysight	N5182B	MY56200288	Jan. 02,18	Jan. 01,19
Wireless Connectivity Tester	Rohde&Schwarz	CMW270	100908	Jan. 10, 18	Jan. 09, 19
Vector Signal Generator	Rohde&Schwarz	SMBV100A	257199	Apr. 18, 18	Apr. 17, 19
Attenuator	MINI	BW-S10W2 +	S130129FGE2	N/A	N/A

**NOTE:**

1. The test was performed in RF Oven room.
2. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to CEPREI/CHINA, GRGT/CHINA and NIM/CHINA.

### 3.3.4 TEST PROCEDURE

#### FOR AVERAGE POWER MEASUREMENT

Method PM is 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.

#### FOR 26dB BANDWIDTH

- 1) Set RBW = approximately 1% of the emission bandwidth.
- 2) Set the VBW > RBW.
- 3) Detector = RMS.
- 4) Trace mode = max hold.
- 5) Measure the maximum width of the emission that is 26 dB down from the peak of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.



#### FOR 6dB BANDWIDTH

- 1) Set RBW = 100 kHz.
- 2) Set the video bandwidth (VBW)  $\geq 3$  RBW.
- 3) Detector = Peak.
- 4) Trace mode = max hold.
- 5) Sweep = auto couple.
- 6) Allow the trace to stabilize.
- 7) Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

#### 3.3.5 DEVIATION FROM TEST STANDARD

No deviation.

#### 3.3.6 EUT OPERATING CONDITIONS

The software provided by client to enable the EUT under transmission condition continuously at specific channel frequencies individually.



### 3.3.7 TEST RESULTS

#### OUTPUT POWER:

##### 802.11a

Channel Number	FREQ. (MHz)	AVG. CONDUCTED POWER (dBm)		AVG. CONDUCTED POWER (mW)		Total Max. power output		LIMIT (dBm)	PASS /FAIL
		Chain 0	Chain 1	Chain 0	Chain 1	mW	dBm		
36	5180	13.84	13.75	24.210	23.714	47.924	16.81	24.00	PASS
40	5200	14.45	14.63	27.861	29.040	56.901	17.55	24.00	PASS
48	5240	13.97	14.36	24.946	27.290	52.236	17.18	24.00	PASS
52	5260	13.76	13.77	23.768	23.823	47.591	16.78	24.00	PASS
60	5300	13.75	13.83	23.714	24.155	47.869	16.80	24.00	PASS
64	5320	12.97	12.81	19.815	19.099	38.914	15.90	24.00	PASS
100	5500	11.41	11.71	13.836	14.825	28.661	14.57	24.00	PASS
116	5580	13.95	14.02	24.831	25.235	50.066	17.00	24.00	PASS
140	5700	10.57	10.65	11.402	11.614	23.016	13.62	24.00	PASS
149	5745	12.55	12.34	17.989	17.140	35.129	15.46	30.00	PASS
157	5785	12.43	12.56	17.498	18.030	35.528	15.51	30.00	PASS
165	5825	12.75	13.11	18.836	20.464	39.300	15.94	30.00	PASS

For Band 2~Band 3: Limit = 11dBm+10log(26 BW)=11+10log(26.65)=25.26dBm > 24dBm



802.11n (20MHz)

Channel Number	FREQ. (MHz)	AVG. CONDUCTED POWER (dBm)		AVG. CONDUCTED POWER (mW)		Total Max. power output		LIMIT (dBm)	PASS /FAIL
		Chain 0	Chain 1	Chain 0	Chain 1	mW	dBm		
36	5180	13.64	14.48	23.121	28.054	51.175	17.09	24.00	PASS
40	5200	14.71	14.61	29.580	28.907	58.487	<b>17.67</b>	24.00	PASS
48	5240	14.15	14.54	26.002	28.445	54.447	17.36	24.00	PASS
52	5260	13.85	14.04	24.266	25.351	49.617	16.96	24.00	PASS
60	5300	13.71	14.07	23.496	25.527	49.023	16.90	24.00	PASS
64	5320	13.92	13.91	24.660	24.604	49.264	16.93	24.00	PASS
100	5500	11.38	11.82	13.740	15.205	28.945	14.62	24.00	PASS
116	5580	13.81	14.16	24.044	26.062	50.106	17.00	24.00	PASS
140	5700	8.57	9.11	7.194	8.147	15.341	11.86	24.00	PASS
149	5745	11.76	11.78	14.997	15.066	30.063	14.78	30.00	PASS
157	5785	12.42	12.34	17.458	17.140	34.598	15.39	30.00	PASS
165	5825	13.06	13.24	20.23	21.086	41.316	16.16	30.00	PASS

For Band 2~Band 3: Limit = 11dBm+10log(26 BW)=11+10log(28.32)=25.52dBm > 24dBm



**802.11n (40MHz)**

Channel Number	FREQ. (MHz)	AVG. CONDUCTED POWER (dBm)		AVG. CONDUCTED POWER (mW)		Total Max. power output		LIMIT (dBm)	PASS /FAIL
		Chain 0	Chain 1	Chain 0	Chain 1	mW	dBm		
38	5190	9.15	8.90	8.222	7.762	15.984	12.04	24.00	PASS
46	5230	12.87	12.89	19.364	19.454	38.818	15.89	24.00	PASS
54	5270	12.10	12.58	16.218	18.113	34.331	15.36	24.00	PASS
62	5310	9.27	9.46	8.453	8.831	17.284	12.38	24.00	PASS
102	5510	8.28	8.04	6.730	6.368	13.098	11.17	24.00	PASS
118	5590	11.59	11.27	14.421	13.397	27.818	14.44	24.00	PASS
134	5670	12.34	12.11	17.140	16.255	33.395	15.24	24.00	PASS
151	5755	11.65	11.43	14.622	13.900	28.522	14.55	24.00	PASS
159	5795	11.03	10.82	12.677	12.078	24.755	13.94	30.00	PASS

**802.11ac (80MHz)**

Channel Number	FREQ. (MHz)	AVG. CONDUCTED POWER (dBm)		AVG. CONDUCTED POWER (mW)		Total Max. power output		LIMIT (dBm)	PASS /FAIL
		Chain 0	Chain 1	Chain 0	Chain 1	mW	dBm		
42	5210	8.92	9.01	7.798	7.962	15.760	11.98	24.00	PASS
58	5290	7.14	7.81	5.176	6.039	11.215	10.50	24.00	PASS
106	5530	8.45	9.16	6.998	8.241	15.239	11.83	24.00	PASS
122	5610	12.33	12.42	17.100	17.458	34.558	15.39	24.00	PASS
155	5775	12.53	12.74	17.906	18.793	36.699	15.65	30.00	PASS



**26dB BANDWIDTH:**

**802.11a**

Channel Number	Freq. (MHz)	26dB DOWN BANDWIDTH (MHz)		PASS /FAIL
		Chain 0	Chain 1	
36	5180	20.71	20.59	PASS
40	5200	21.19	24.88	PASS
48	5240	21.75	21.14	PASS
52	5260	20.79	20.30	PASS
60	5300	20.55	20.15	PASS
64	5320	20.46	20.38	PASS
100	5500	<b>26.65</b>	23.07	PASS
132	5660	20.67	19.75	PASS
140	5700	19.83	19.81	PASS

**802.11n (20MHz)**

Channel Number	Freq. (MHz)	26dB DOWN BANDWIDTH (MHz)		PASS /FAIL
		Chain 0	Chain 1	
36	5180	20.79	20.62	PASS
40	5200	23.77	20.67	PASS
48	5240	27.76	20.63	PASS
52	5260	21.79	21.12	PASS
60	5300	20.88	21.62	PASS
64	5320	23.76	20.64	PASS
100	5500	24.28	<b>28.32</b>	PASS
132	5660	21.28	20.64	PASS
140	5700	20.27	20.38	PASS



802.11n (40MHz)

Channel Number	Freq. (MHz)	26dB DOWN BANDWIDTH (MHz)		PASS /FAIL
		Chain 0	Chain 1	
38	5190	41.19	41.39	PASS
46	5230	46.67	41.47	PASS
54	5270	41.66	41.38	PASS
62	5310	41.18	41.11	PASS
102	5510	42.27	41.36	PASS
118	5590	42.18	44.92	PASS
134	5670	41.53	41.14	PASS

802.11ac (80MHz)

Channel Number	Freq. (MHz)	26dB DOWN BANDWIDTH (MHz)		PASS /FAIL
		Chain 0	Chain 1	
42	5210	81.92	82.02	PASS
58	5290	81.87	81.80	PASS
106	5530	81.74	81.82	PASS
122	5610	157.31	155.08	PASS





**6dB BANDWIDTH For 5725-5850MHz**

**802.11a**

Channel Number	Freq. (MHz)	6dB DOWN BANDWIDTH (MHz)		PASS /FAIL
		Chain 0	Chain 1	
149	5745	16.41	16.43	PASS
157	5785	16.59	16.62	PASS
165	5825	16.60	16.59	PASS

**802.11n (20M)**

Channel Number	Freq. (MHz)	6dB DOWN BANDWIDTH (MHz)		PASS /FAIL
		Chain 0	Chain 1	
149	5745	17.77	17.75	PASS
157	5785	17.74	17.68	PASS
165	5825	17.73	17.68	PASS

**802.11n (40M)**

Channel Number	Freq. (MHz)	6dB DOWN BANDWIDTH (MHz)		PASS /FAIL
		Chain 0	Chain 1	
151	5755	36.53	36.56	PASS
159	5795	35.53	36.46	PASS

**802.11ac (80MHz)**

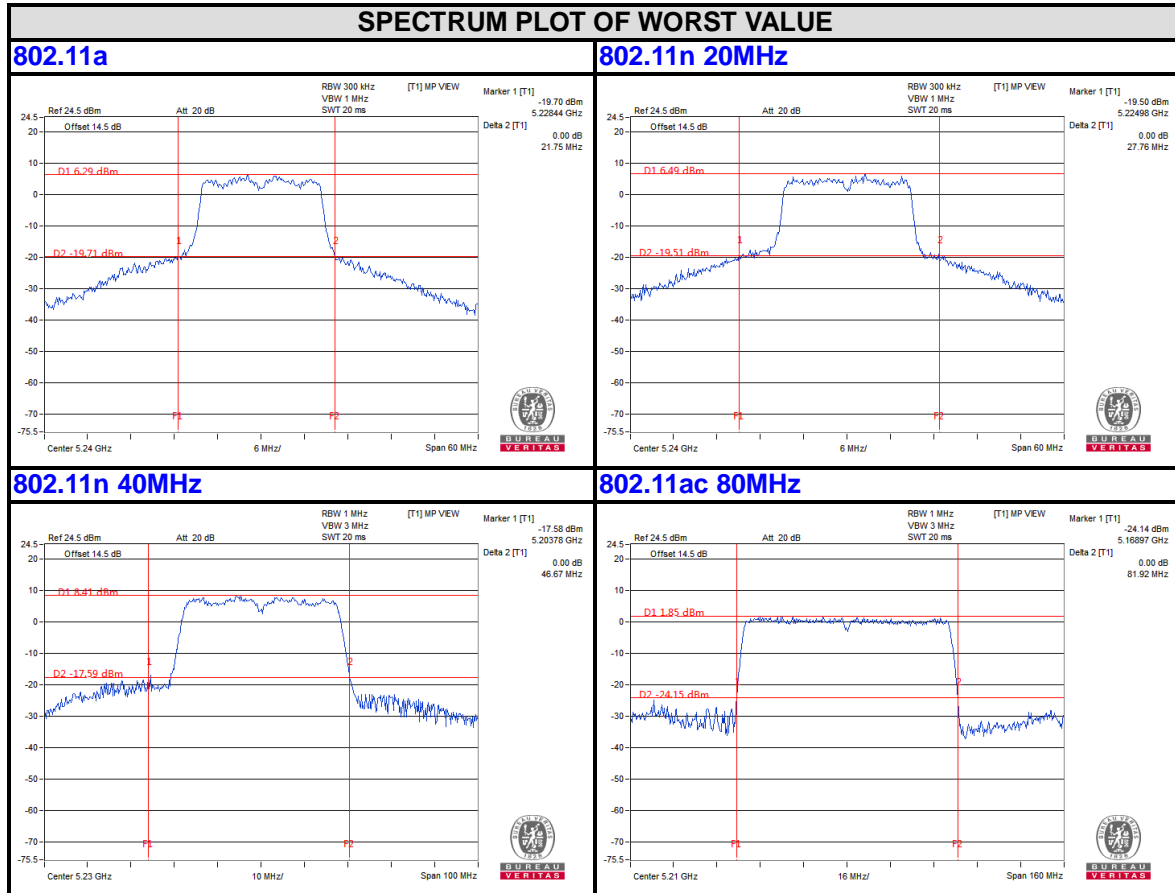
Channel Number	Freq. (MHz)	6dB DOWN BANDWIDTH (MHz)		PASS /FAIL
		Chain 0	Chain 1	
155	5775	76.59	76.52	PASS



**BUREAU VERITAS**

Test Report No.: RF180606N077-4

**26dB bandwidth Test Plot  
For 5150-5250MHz worst plot  
Chain 0**





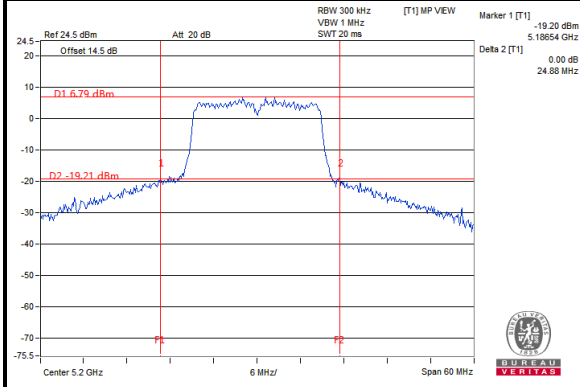
BUREAU VERITAS

Test Report No.: RF180606N077-4

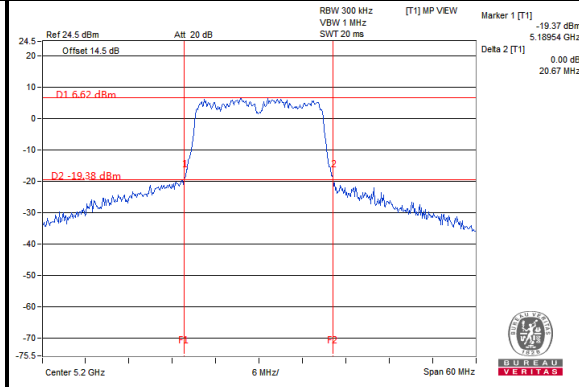
Chain 1

SPECTRUM PLOT OF WORST VALUE

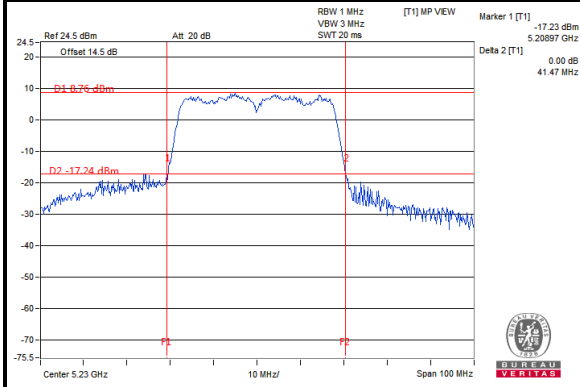
802.11a



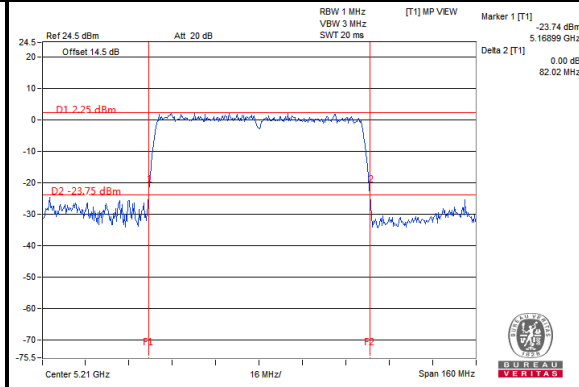
802.11n 20MHz



802.11n 40MHz



802.11ac 80MHz





**BUREAU  
VERITAS**

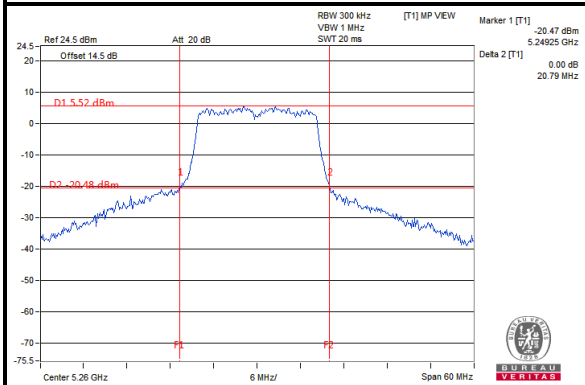
Test Report No.: RF180606N077-4

For 5250-5350MHz

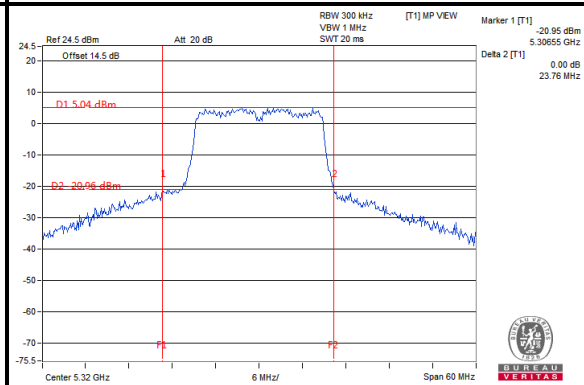
Chain 0

### SPECTRUM PLOT OF WORST VALUE

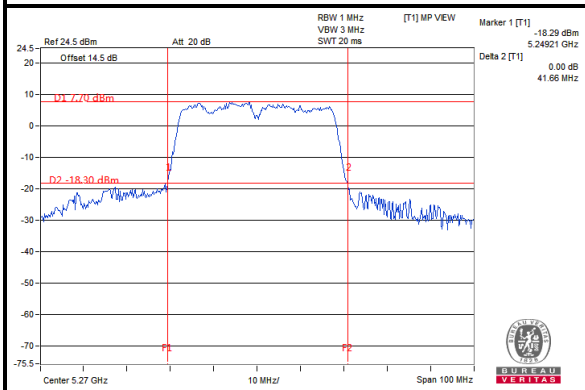
**802.11a**



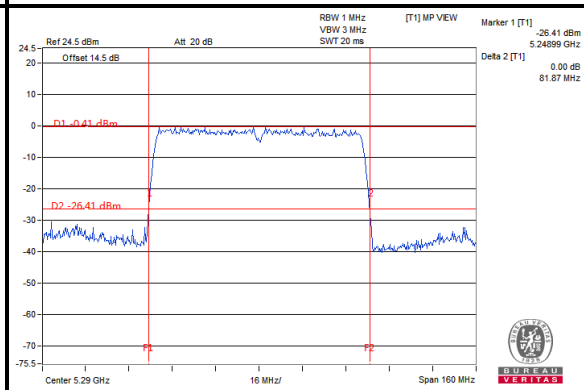
**802.11n 20MHz**



**802.11n 40MHz**



**802.11ac 80MHz**



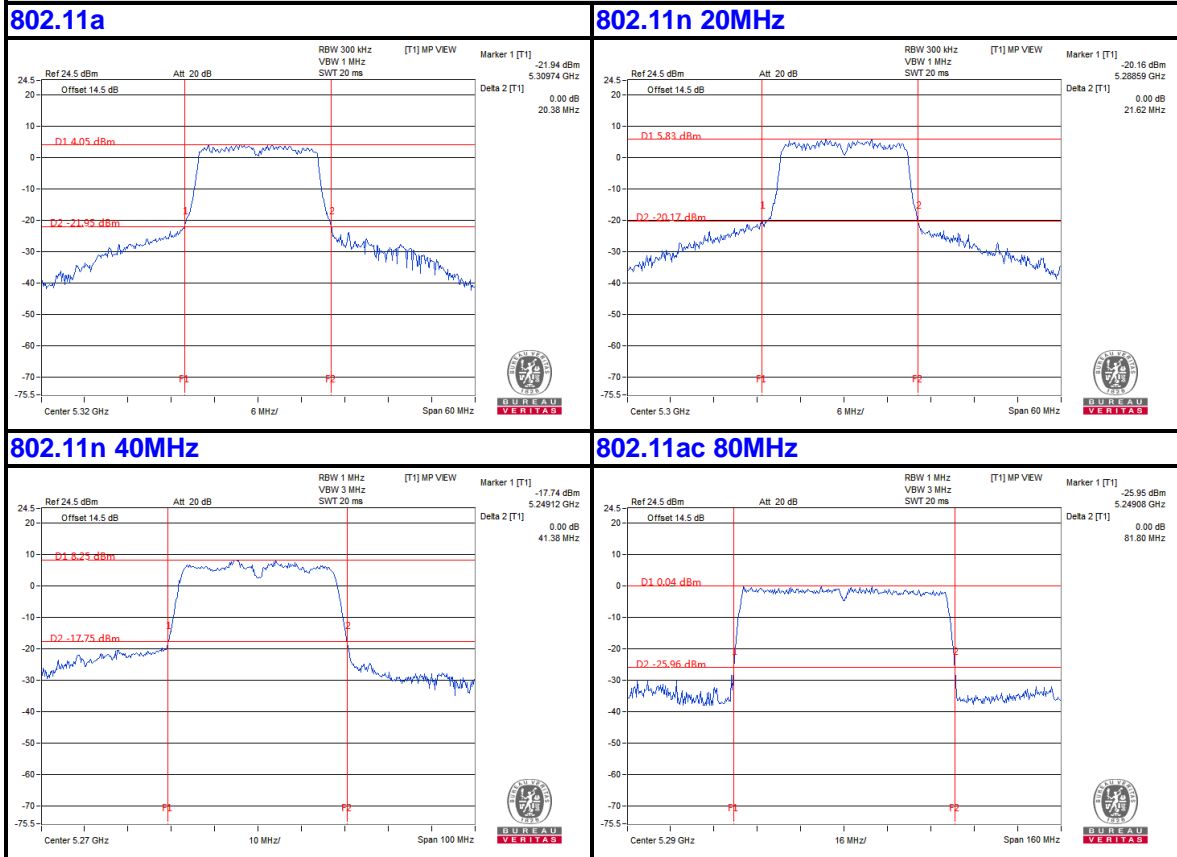


**BUREAU  
VERITAS**

Test Report No.: RF180606N077-4

Chain 1

**SPECTRUM PLOT OF WORST VALUE**



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**BUREAU  
VERITAS**

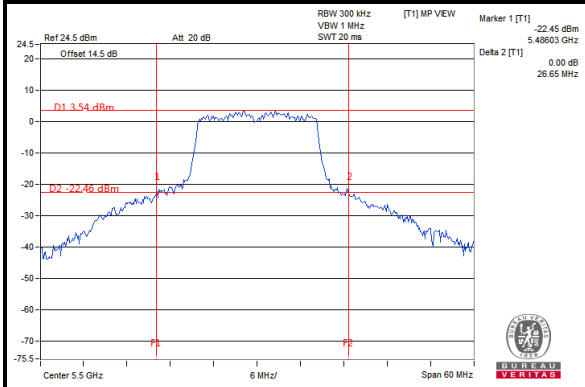
Test Report No.: RF180606N077-4

For 5470-5725MHz

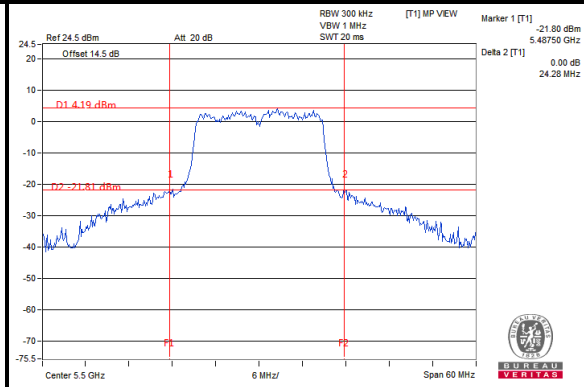
Chain 0

### SPECTRUM PLOT OF WORST VALUE

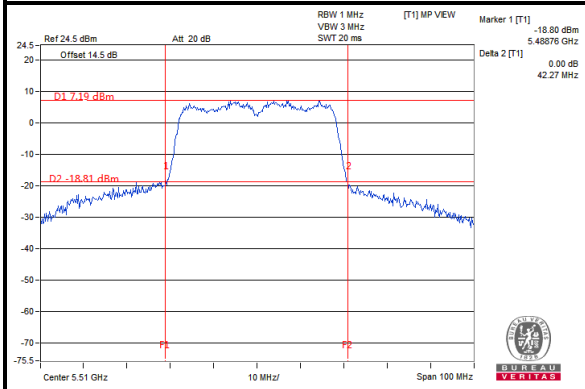
**802.11a**



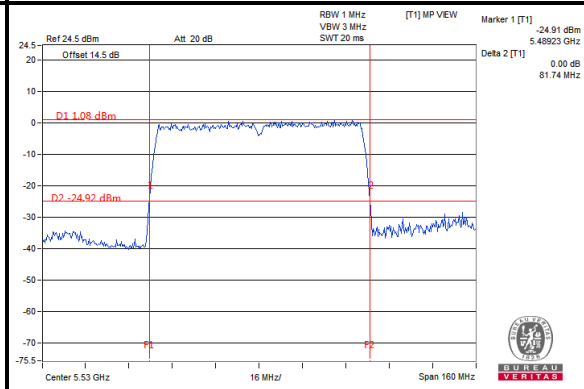
**802.11n 20MHz**



**802.11n 40MHz**



**802.11ac 80MHz**





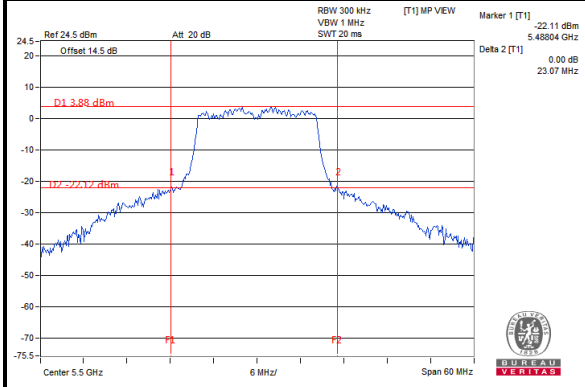
BUREAU VERITAS

Test Report No.: RF180606N077-4

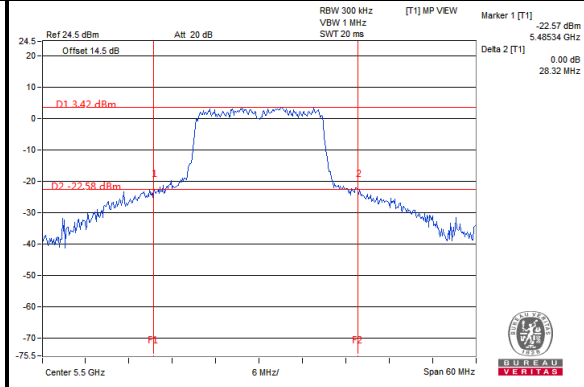
Chain 1

SPECTRUM PLOT OF WORST VALUE

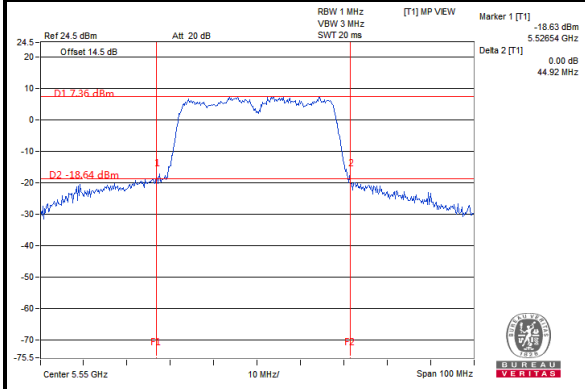
802.11a



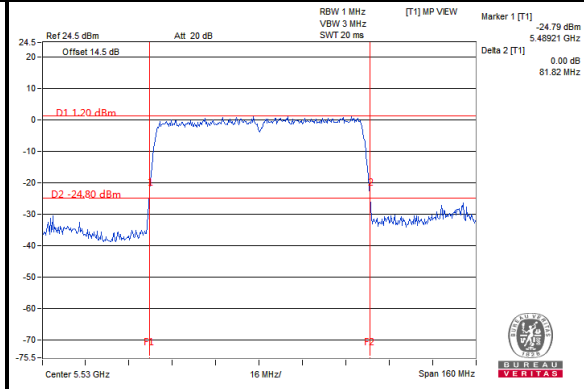
802.11n 20MHz



802.11n 40MHz



802.11ac 80MHz



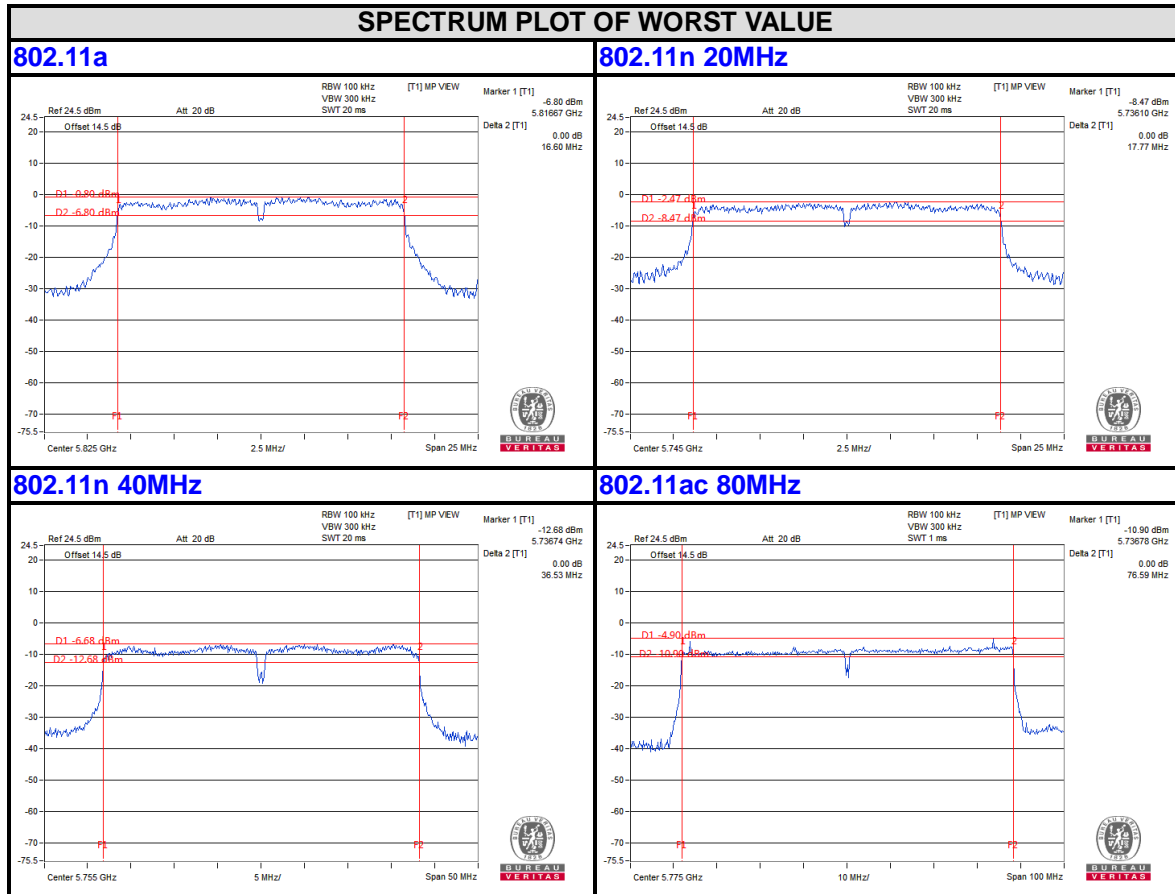


BUREAU VERITAS

Test Report No.: RF180606N077-4

### 6dB BANDWIDTH For 5725-5850MHz

Chain 0



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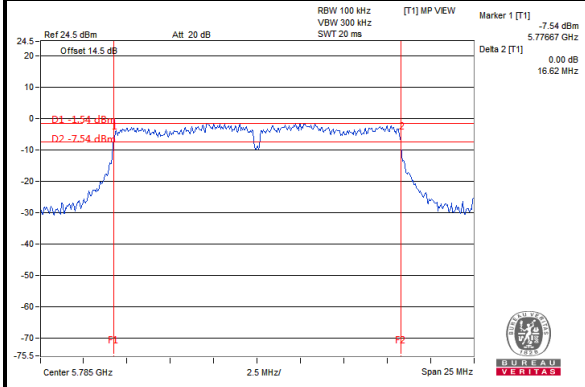
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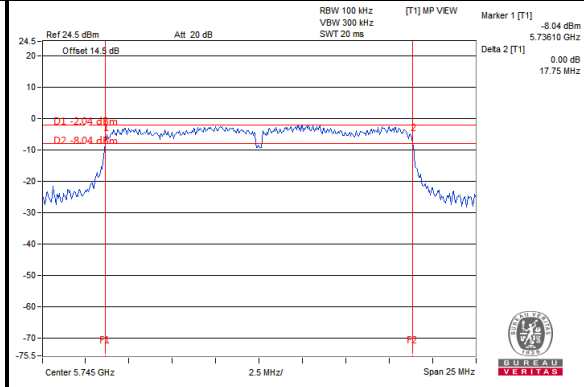
Chain 1

SPECTRUM PLOT OF WORST VALUE

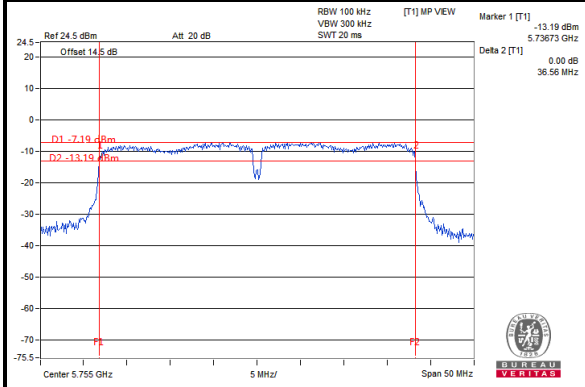
802.11a



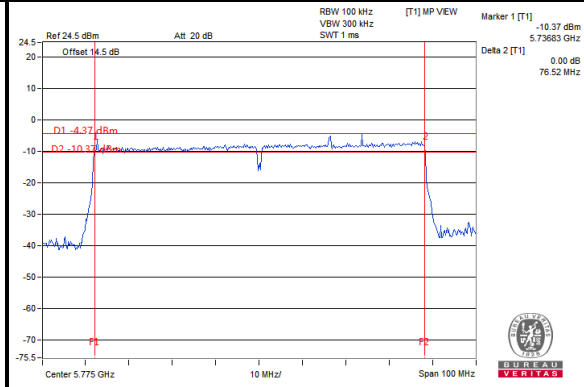
802.11n 20MHz



802.11n 40MHz



802.11ac 80MHz



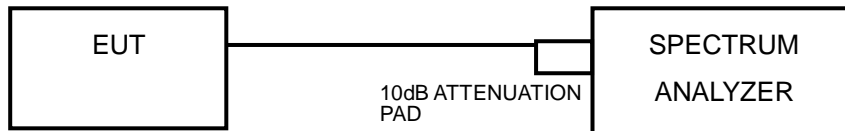


### 3.4 PEAK POWER SPECTRAL DENSITY MEASUREMENT

#### 3.4.1 LIMITS OF PEAK POWER SPECTRAL DENSITY MEASUREMENT

Operation Band	EUT Category		LIMIT
U-NII-1		Outdoor Access Point	17dBm/ MHz
		Fixed point-to-point Access Point	
		Indoor Access Point	
	√	Mobile and Portable client device	11dBm/ MHz
U-NII-2A	√		11dBm/ MHz
U-NII-2C	√		11dBm/ MHz
U-NII-3	√		30dBm/ 500kHz

#### 3.4.2 TEST SETUP



#### 3.4.3 TEST INSTRUMENTS

Refer to section 3.3.3 to get information of above instrument.

#### 3.4.4 TEST PROCEDURES

##### For U-NII-1, U-NII-2A, U-NII-2C band:

Using method SA-2

- 1) Set span to encompass the entire emission bandwidth (EBW) of the signal.
- 2) Set RBW = 1MHz, Set VBW =3 MHz, Detector = RMS
- 3) Set Channel power measure = 1MHz
- 4) Sweep time = auto, trigger set to “free run”.
- 5) Trace average at least 100 traces in power averaging mode.
- 6) Record the max value and add 10 log (1/duty cycle)



**For U-NII-3 band:**

Using method SA-2

- 1) Set span to encompass the entire emission bandwidth (EBW) of the signal.
- 2) Set RBW = 300 kHz, Set VBW = 1 MHz, Detector = RMS
- 3) Set Channel power measure = 1MHz
- 4) Sweep time = auto, trigger set to “free run”.
- 5) Trace average at least 100 traces in power averaging mode.
- 6) Record the max value and add 10 log (1/duty cycle)

**3.4.5 DEVIATION FROM TEST STANDARD**

No deviation.

**3.4.6 EUT OPERATING CONDITIONS**

Same as 3.3.6



3.4.7 TEST RESULTS

For U-NII-1, U-NII-2A & U-NII-2C, For U-NII-3:  
802.11a

Channel Number	Frequency (MHz)	RF Power Level in 1MHz BW (dBm)		RF Power Level in 1MHz BW (mW)		Total power density		MAX. Limit (dBm)	PASS / FAIL
		Chain 0	Chain 1	Chain 0	Chain 1	mW	dBm		
36	5180	0.43	-0.34	1.1041	0.9247	2.0288	3.07	11.00	PASS
40	5200	0.25	-0.36	1.0593	0.9204	1.9797	2.97	11.00	PASS
48	5240	-0.28	-0.36	0.9376	0.9204	1.8580	2.69	11.00	PASS
52	5260	-0.12	-0.05	0.9727	0.9886	1.9613	2.93	11.00	PASS
60	5300	-0.48	-0.35	0.8954	0.9226	1.8180	2.60	11.00	PASS
64	5320	-1.28	-1.83	0.7447	0.6561	1.4008	1.46	11.00	PASS
100	5500	-2.69	-2.84	0.5383	0.5200	1.0583	0.25	11.00	PASS
116	5580	-0.56	0.52	0.879	1.1272	2.0062	3.02	11.00	PASS
140	5700	-3.92	-4.64	0.4055	0.3436	0.7491	-1.25	11.00	PASS

Channel Number	Frequency (MHz)	RF Power Level in 300kHz BW (dBm)		RF Power Level in 500kHz BW (dBm)		Total PSD (dBm/500kHz)	MAX. Limit (dBm/500k)	PASS / FAIL
		Chain 0	Chain 1	Chain 0	Chain 1			
149	5745	-11.17	-10.60	-8.95	-8.38	-5.37	30.00	PASS
157	5785	-11.59	-9.89	-9.37	-7.67	-4.66	30.00	PASS
165	5825	-10.20	-9.21	-7.98	-6.99	-3.98	30.00	PASS



802.11n (20MHz)

Channel Number	Frequency (MHz)	RF Power Level in 1MHz BW (dBm)		RF Power Level in 1MHz BW (mW)		Total power density		MAX. Limit (dBm)	PASS / FAIL
		Chain 0	Chain 1	Chain 0	Chain 1	mW	dBm		
36	5180	-0.22	0.55	0.9506	1.135	2.0856	3.19	11.00	PASS
40	5200	0.30	0.56	1.0715	1.1376	2.2091	3.44	11.00	PASS
48	5240	-0.71	-0.04	0.8492	0.9908	1.84	2.65	11.00	PASS
52	5260	-0.87	-0.10	0.8185	0.9772	1.7957	2.54	11.00	PASS
60	5300	-0.60	-0.84	0.8710	0.8241	1.6951	2.29	11.00	PASS
64	5320	-1.02	-0.60	0.7907	0.8710	1.6617	2.21	11.00	PASS
100	5500	-2.68	-2.64	0.5395	0.5445	1.084	0.35	11.00	PASS
116	5600	-0.88	-0.40	0.8166	0.9120	1.7286	2.38	11.00	PASS
140	5700	-5.00	-4.86	0.3162	0.3266	0.6428	-1.92	11.00	PASS

Channel Number	Frequency (MHz)	RF Power Level in 300kHz BW (dBm)		RF Power Level in 500kHz BW (dBm)		Total PSD (dBm/500kHz)	MAX. Limit (dBm/500k)	PASS / FAIL
		Chain 0	Chain 1	Chain 0	Chain 1			
149	5745	-11.35	-10.66	-9.13	-8.44	-6.12	30.00	PASS
157	5785	-10.93	-11.39	-8.71	-9.17	-5.70	30.00	PASS
165	5825	-9.69	-10.13	-7.47	-7.91	-4.46	30.00	PASS



802.11n (40MHz)

Channel Number	Frequency (MHz)	RF Power Level in 1MHz BW (dBm)		RF Power Level in 1MHz BW (mW)		Total power density		MAX. Limit (dBm)	PASS / FAIL
		Chain 0	Chain 1	Chain 0	Chain 1	mW	dBm		
38	5190	-8.97	-8.05	0.1268	0.1567	0.2835	-5.47	11.00	PASS
46	5230	-4.53	-3.91	0.3524	0.4064	0.7588	-1.20	11.00	PASS
54	5270	-4.53	-4.01	0.3524	0.3972	0.7496	-1.25	11.00	PASS
62	5310	-8.02	-7.38	0.1578	0.1828	0.3406	-4.68	11.00	PASS
102	5510	-6.03	-10.59	0.24946	0.0873	0.33676	-4.73	11.00	PASS
118	5590	-5.88	-5.96	0.2582	0.2535	0.5117	-2.91	11.00	PASS
134	5670	-5.73	-4.85	0.2673	0.3273	0.5946	-2.26	11.00	PASS

Channel Number	Frequency (MHz)	RF Power Level in 300kHz BW (dBm)		RF Power Level in 500kHz BW (dBm)		Total PSD (dBm/500kHz)	MAX. Limit (dBm/500k)	PASS / FAIL
		Chain 0	Chain 1	Chain 0	Chain 1			
151	5755	-16.47	-15.54	-14.25	-13.32	-10.31	30.00	PASS
159	5795	-16.27	-14.11	-14.05	-11.89	-8.88	30.00	PASS



802.11ac (80MHz)

Channel Number	Frequency (MHz)	RF Power Level in 1MHz BW (dBm)		RF Power Level in 1MHz BW (mW)		Total power density		MAX. Limit (dBm)	PASS / FAIL
		Chain 0	Chain 1	Chain 0	Chain 1	mW	dBm		
42	5210	-11.05	-10.89	0.07852	0.08147	0.15999	-7.96	11.00	PASS
58	5290	-13.00	-12.43	0.05012	0.05715	0.10727	-9.70	11.00	PASS
106	5530	-11.91	-11.30	0.06442	0.07413	0.13855	-8.58	11.00	PASS
122	5610	-8.64	-8.38	0.13680	0.1452	0.28200	-5.50	11.00	PASS

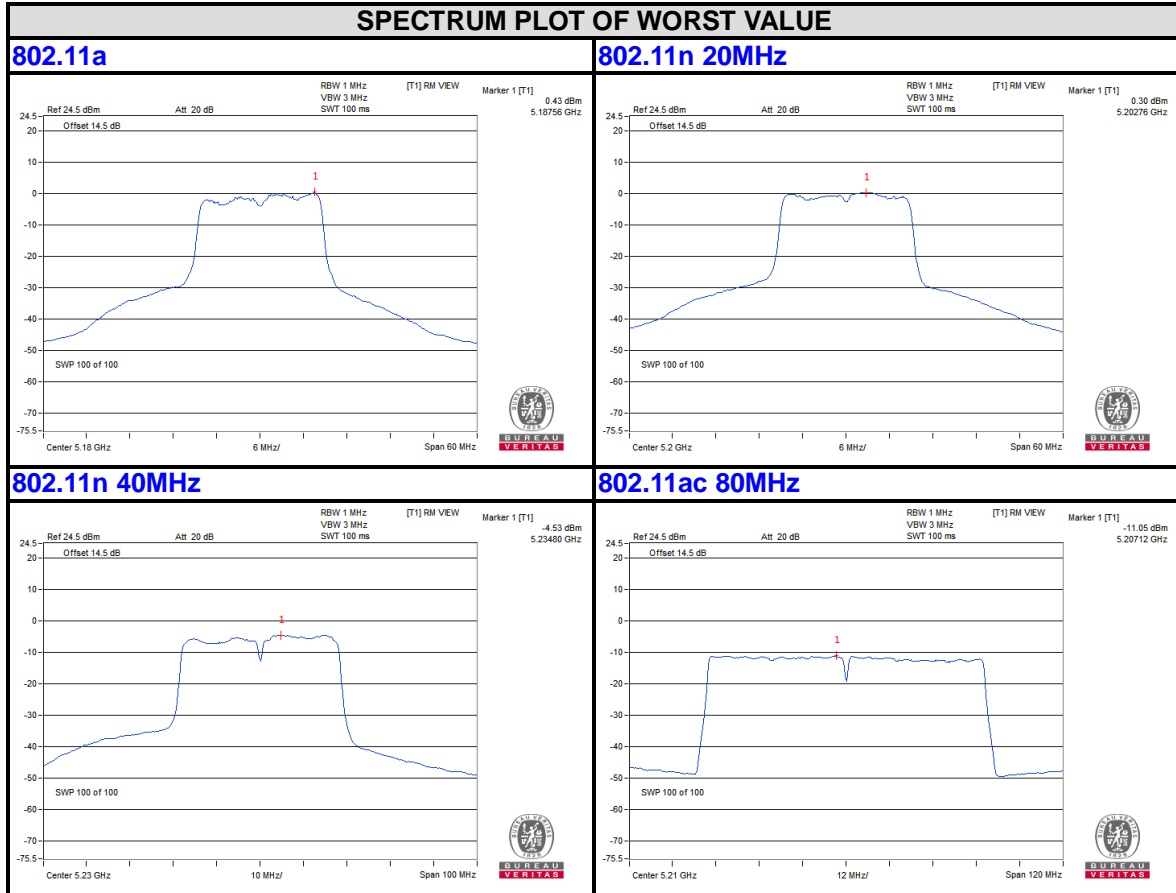
Channel Number	Frequency (MHz)	RF Power Level in 300kHz BW (dBm)		RF Power Level in 500kHz BW (dBm)		Total PSD (dBm/500kHz)	MAX. Limit (dBm/500k)	PASS / FAIL
		Chain 0	Chain 1	Chain 0	Chain 1			
155	5775	-16.05	-17.22	-13.83	-15.00	-10.82	30.00	PASS



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PSD Test Plot  
BAND 1  
5150-5250MHz  
Chain 0



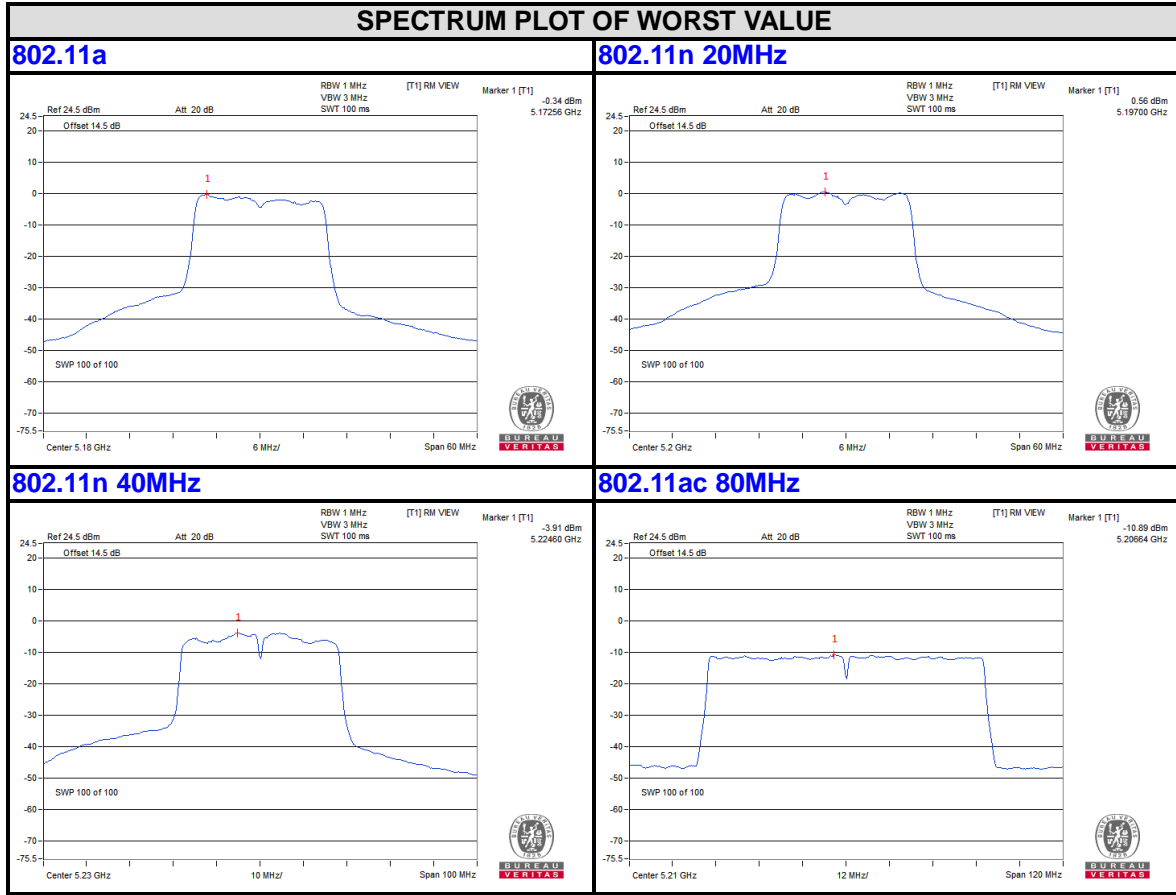




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Chain 1



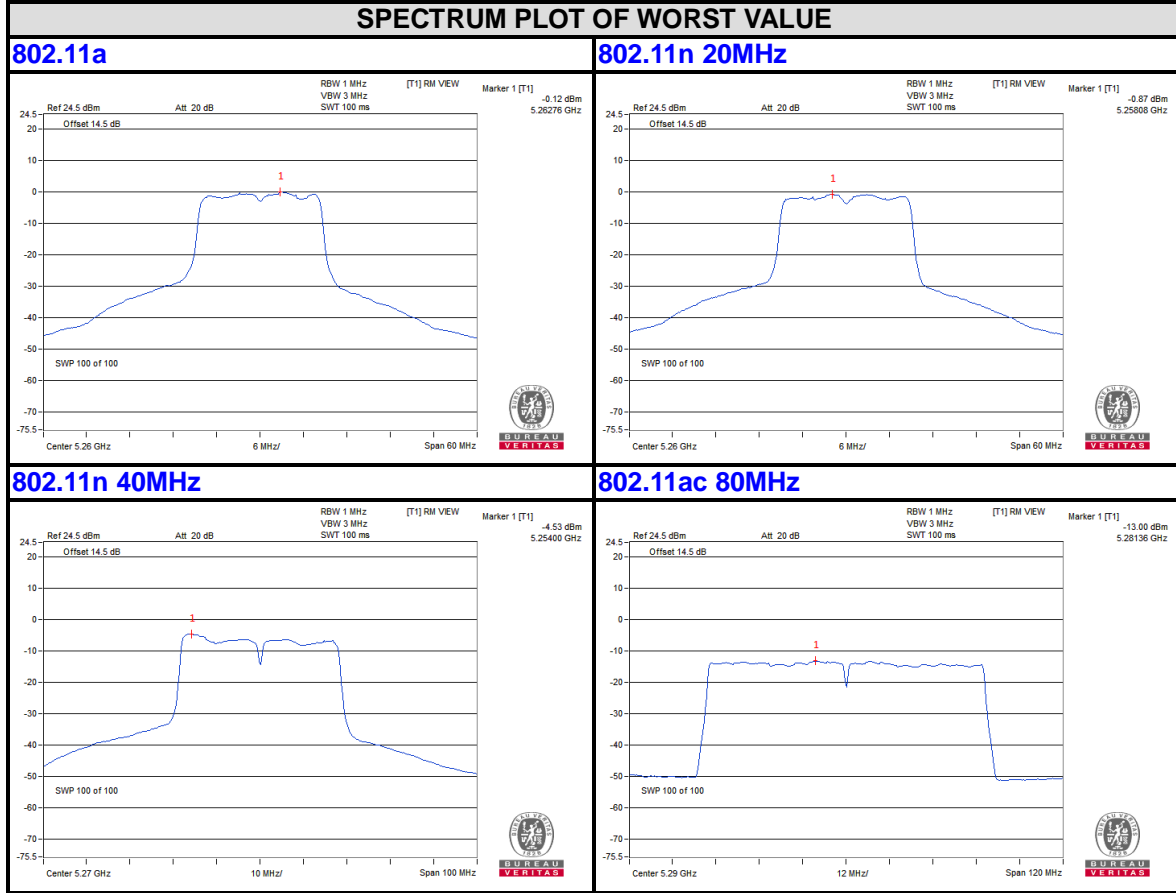


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BAND 2  
5250-5350MHz

Chain 0



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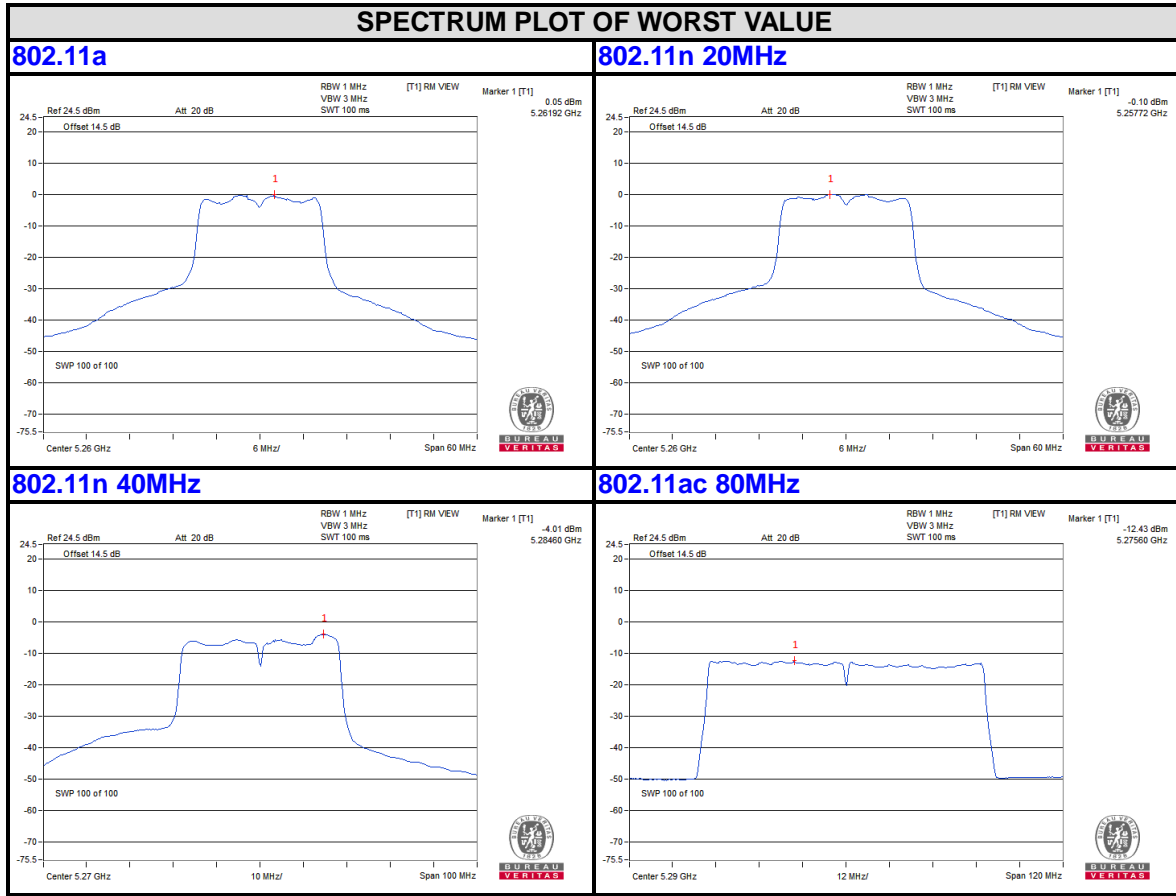
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Chain 1



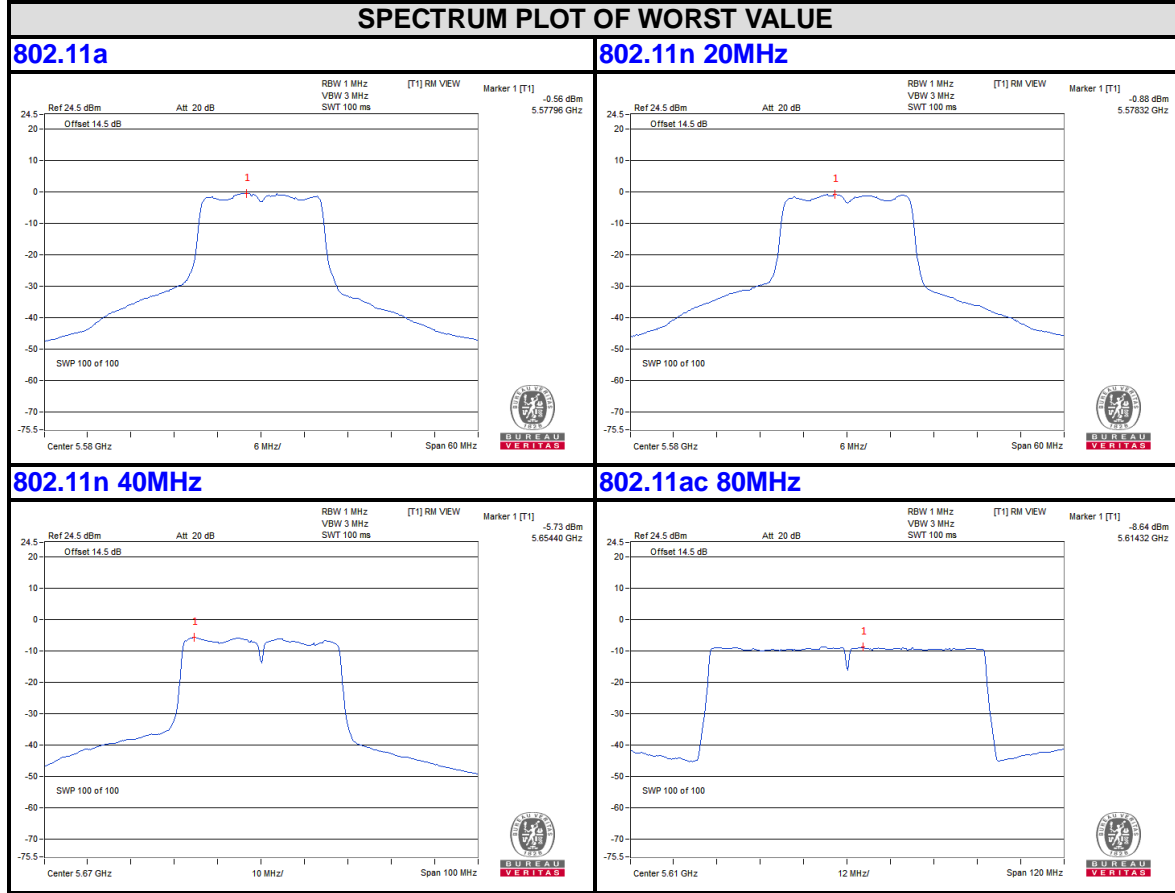


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BAND 3  
5470-5725MHz

Chain 0

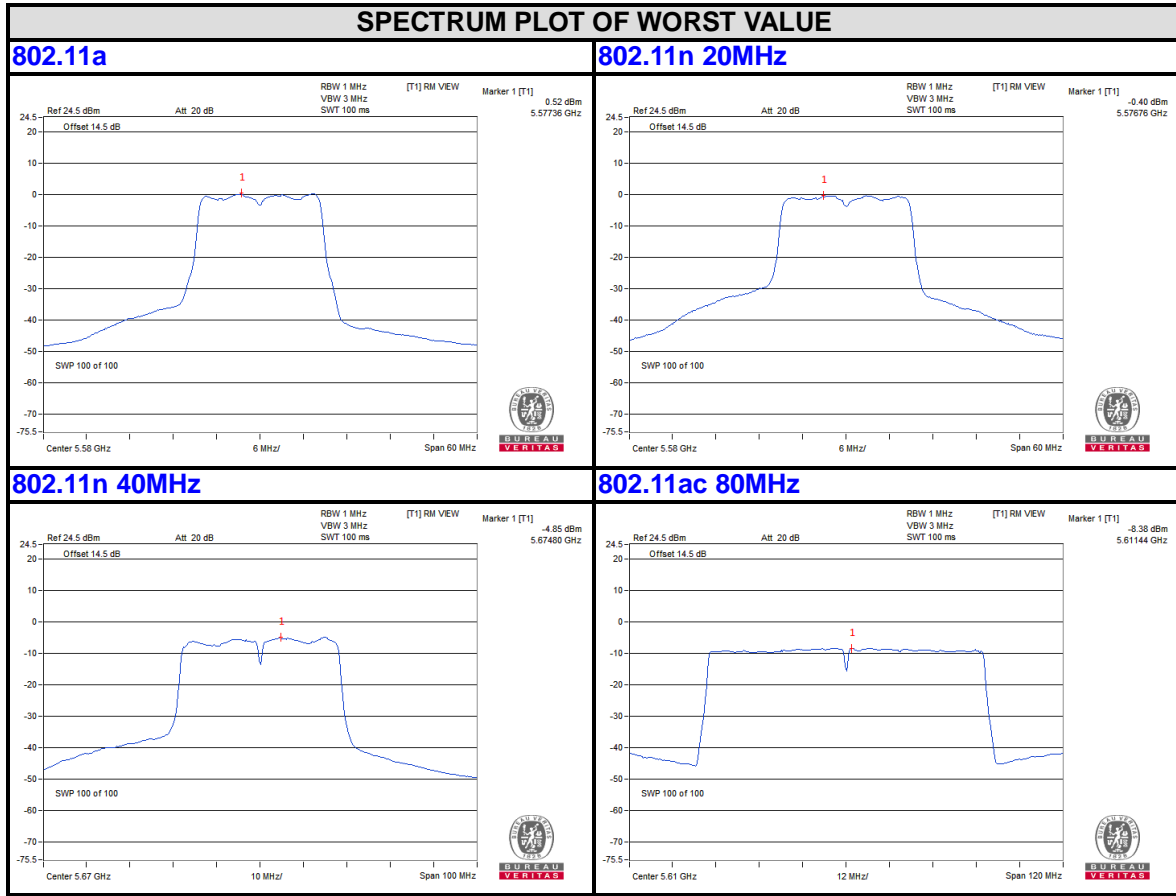




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**Chain 1**



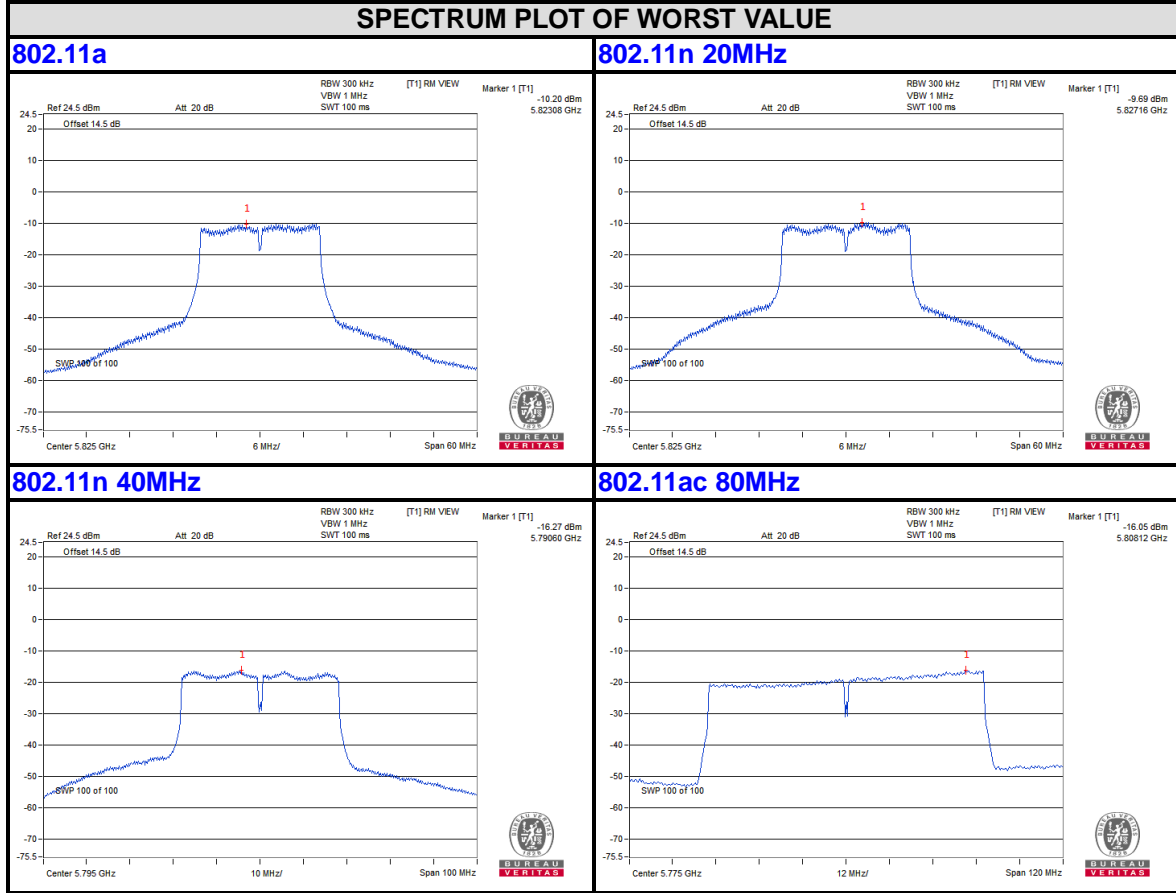


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BAND4  
5725-5850MHz

Chain 0



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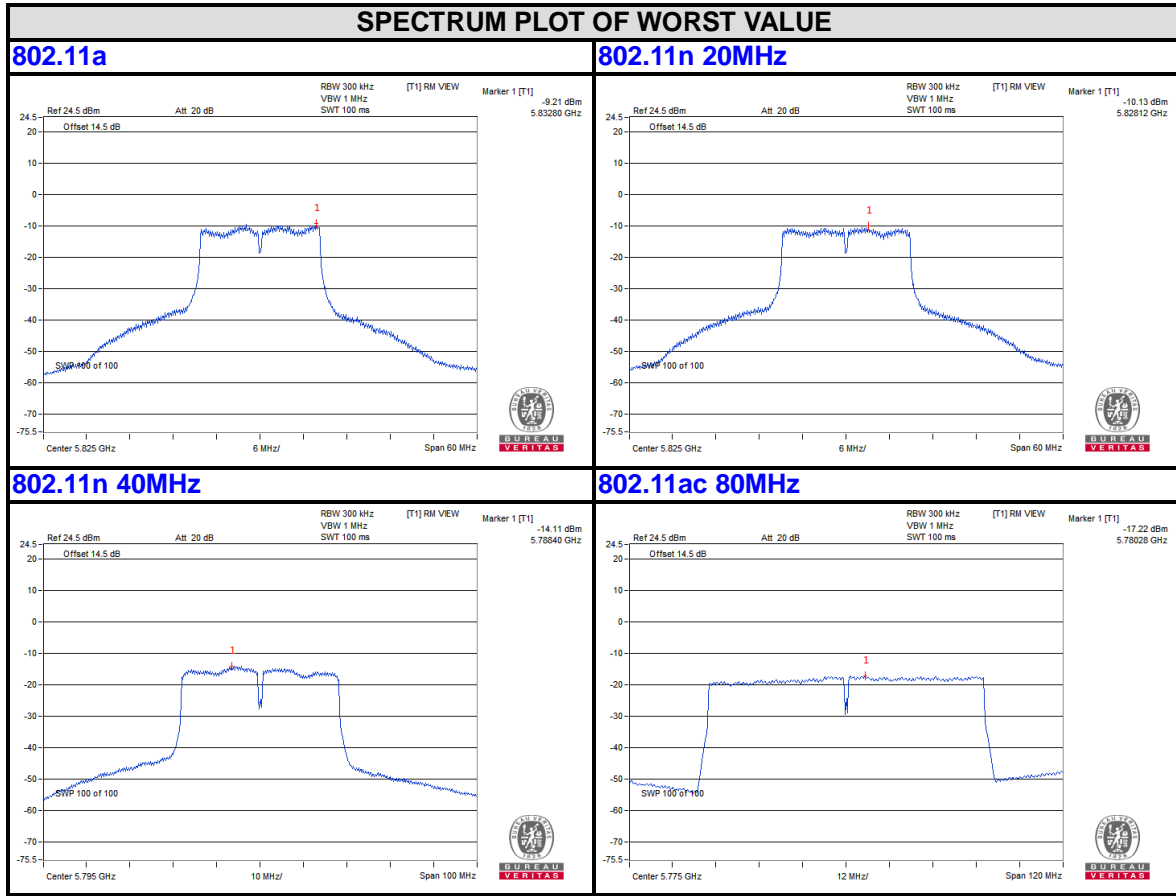
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Chain 1



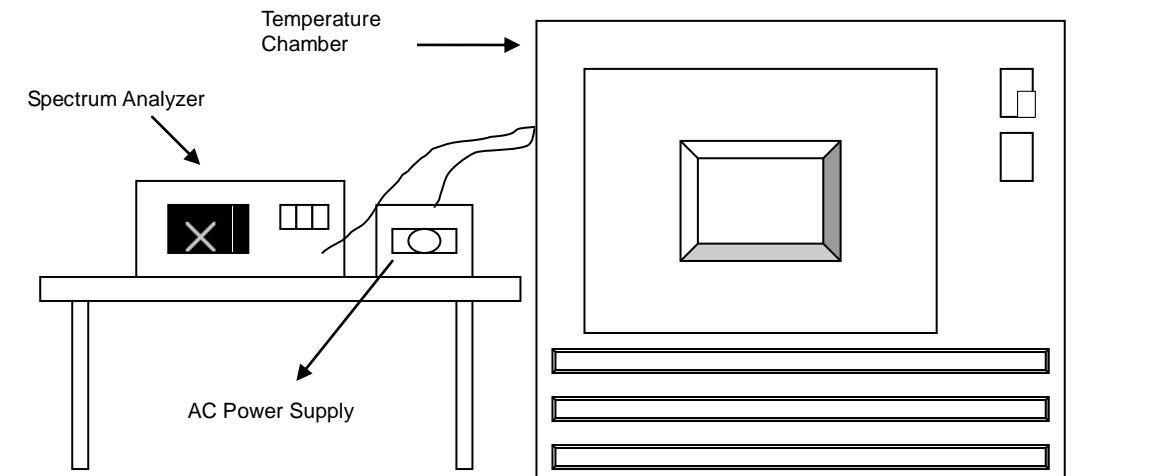


### 3.5 FREQUENCY STABILITY

#### 3.5.1 LIMITS OF FREQUENCY STABILITY MEASUREMENT

The frequency of the carrier signal shall be maintained within band of operation.

#### 3.5.2 TEST SETUP



#### 3.5.3 TEST INSTRUMENTS

Refer to section 3.3.3 to get information of above instrument.





### 3.5.4 TEST PROCEDURE

- a. The EUT was placed inside the environmental test chamber and powered by nominal AC voltage.
- b. Turn the EUT on and couple its output to a spectrum analyzer.
- c. Turn the EUT off and set the chamber to the highest temperature specified.
- d. Allow sufficient time (approximately 30 min) for the temperature of the chamber to stabilize, turn the EUT on and measure the operating frequency after 2, 5, and 10 minutes.
- e. Repeat step 2 and 3 with the temperature chamber set to the lowest temperature.
- f. The test chamber was allowed to stabilize at +20 degree C for a minimum of 30 minutes. The supply voltage was then adjusted on the EUT from 85% to 115% and the frequency record.

### 3.5.5 DEVIATION FROM TEST STANDARD

No deviation.

### 3.5.6 EUT OPERATING CONDITION

Set the EUT transmit at un-modulation mode to test frequency stability.



3.5.7 TEST RESULTS

FREQUENCY STABILITY VERSUS TEMP.									
OPERATING FREQUENCY: 5180MHz									
TEMP. (°C)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Frequency Drift	Measured Frequency (MHz)	Frequency Drift	Measured Frequency (MHz)	Frequency Drift	Measured Frequency (MHz)	Frequency Drift
50	120	5180.0044	-0.00041	5180.0073	-0.00035	5180.0062	-0.00041	5180.0055	-0.00036
40	120	5179.9762	-0.00028	5179.9794	-0.00022	5179.9772	-0.00025	5179.9769	-0.00019
30	120	5180.0106	0.00009	5180.0083	0.00005	5180.0095	0.00008	5180.0084	0.00009
20	120	5180.0228	-0.00020	5180.0204	-0.00010	5180.0202	-0.00014	5180.0192	-0.00016
10	120	5179.991	-0.00020	5179.993	-0.00019	5179.9921	-0.00025	5179.9929	-0.00016
0	120	5179.9861	0.00018	5179.9874	0.00025	5179.9879	0.00022	5179.9888	0.00021
-10	120	5179.9801	-0.00043	5179.9794	-0.00045	5179.978	-0.00046	5179.9784	-0.00040
-20	120	5180.0238	0.00040	5180.0189	0.00042	5180.0193	0.00043	5180.0218	0.00036
-30	120	5180.0122	0.00036	5180.0112	0.00040	5180.0091	0.00043	5180.0139	0.00039

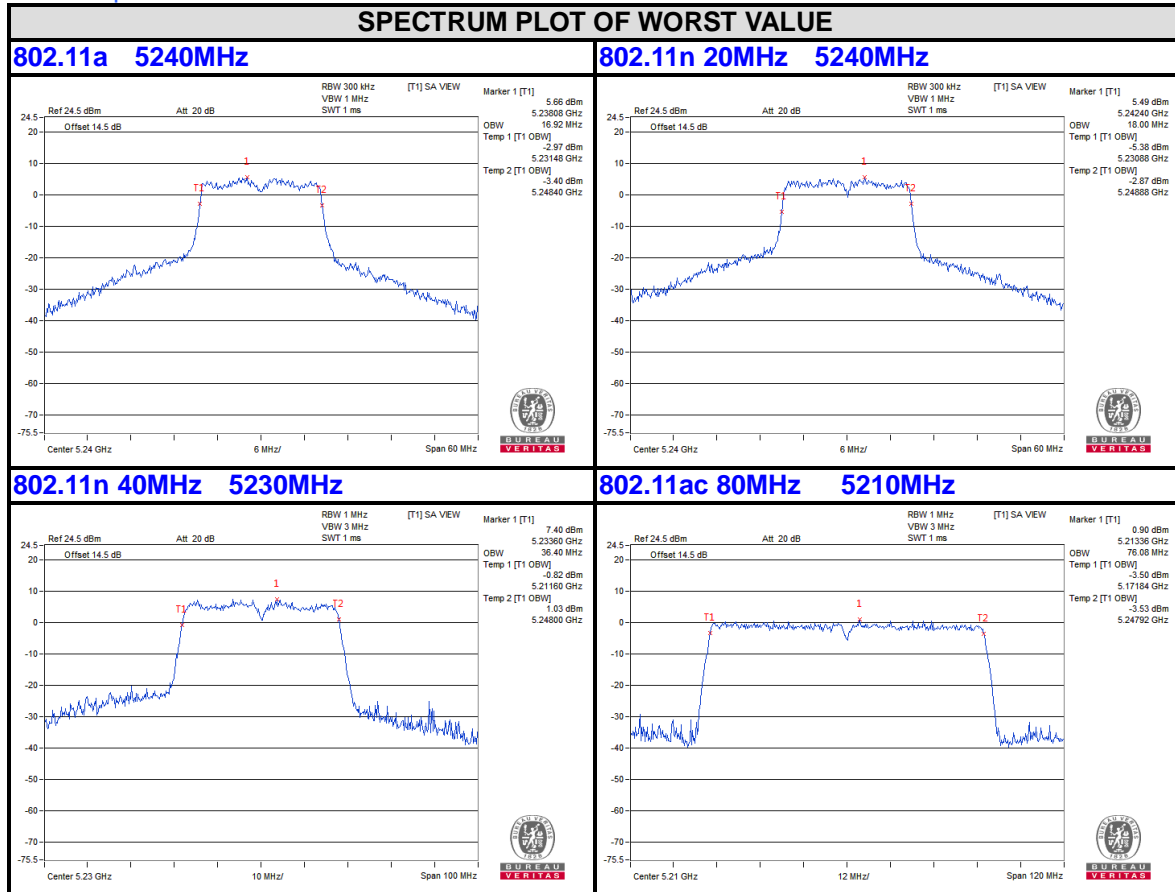
FREQUENCY STABILITY VERSUS TEMP.									
OPERATING FREQUENCY: 5180MHz									
TEMP. (°C)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Frequency Drift	Measured Frequency (MHz)	Frequency Drift	Measured Frequency (MHz)	Frequency Drift	Measured Frequency (MHz)	Frequency Drift
20	138	5180.0238	-0.00020	5180.0196	-0.00011	5180.0207	-0.00015	5180.0187	-0.00018
	120	5180.0228	-0.00020	5180.0204	-0.00010	5180.0202	-0.00014	5180.0192	-0.00016
	102	5180.023	-0.00018	5180.0198	-0.00011	5180.0207	-0.00015	5180.0201	-0.00016



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Band 1  
5150-5250MHz  
99% Occupied Bandwidth Without over DFS Band



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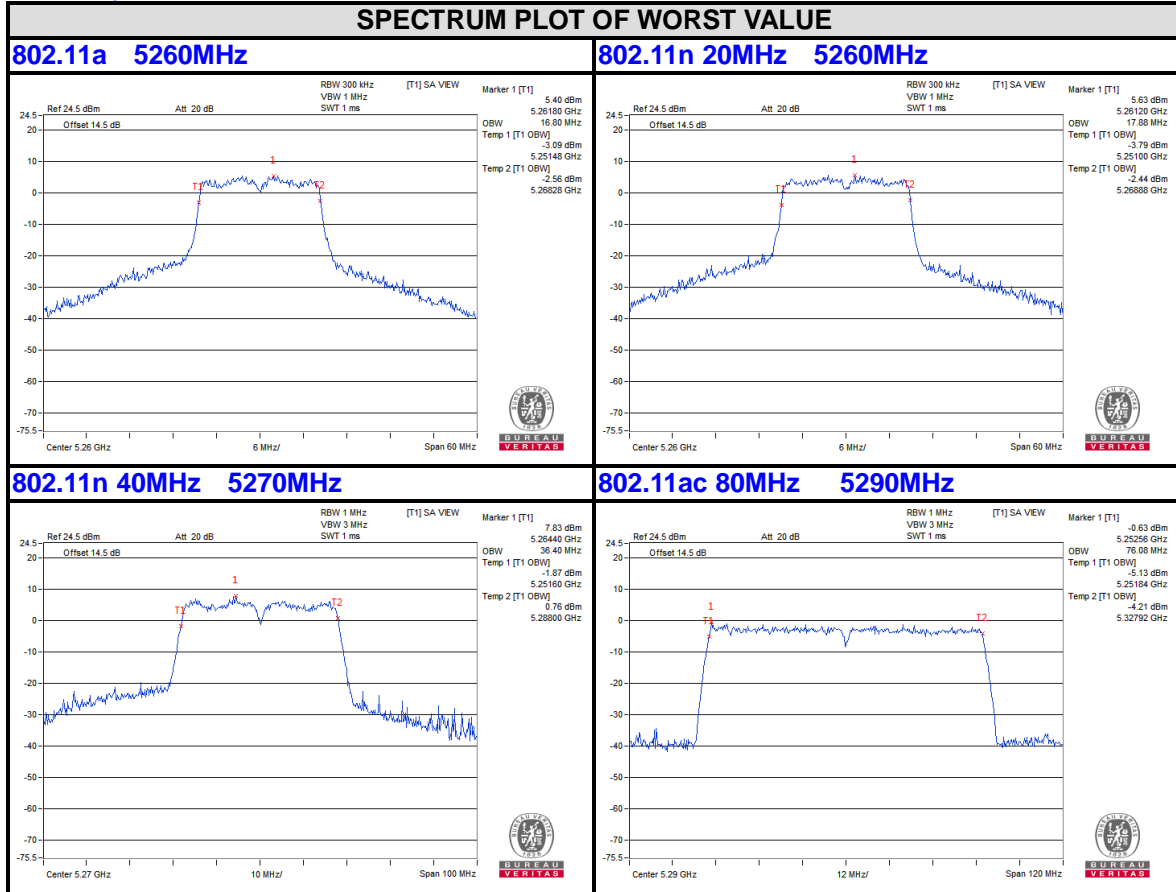
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Band 2  
5250-5350MHz  
99% Occupied Bandwidth Without over Band 1





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#### **4. PHOTOGRAPHS OF THE TEST CONFIGURATION**

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



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## 5. APPENDIX A – MODIFICATIONS RECORDERS FOR ENGINEERING CHANGES TO THE EUT BY THE LAB

No modifications were made to the EUT by the lab during the test.

---END---