



Test Report No.:  
FCC2025-0008-RF2

## TEST REPORT

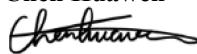
**FCC ID** : 2BOP508182020  
**Applicant** : Open Launch LLC  
**Product Name** : Nova  
**Model No.** : Nova

**CVC Testing Technology Co., Ltd.**

<b>Product Name</b>	Nova					
<b>Type/Model</b>	Nova	<b>Trade Mark</b>	<b>NOVA</b>			
<b>Applicant</b>	Open Launch LLC					
<b>Applicant Address</b>	103 Forrest St Lafayette LA 70501					
<b>Manufacturer</b>	Huizhou Boshijie Technology Co., Ltd					
<b>Manufacturer Address</b>	Boshijie Industrial Park, No. 1 Hufeng West Third Road, Zhongkai High-tech Zone, Huizhou City, Guangdong, China. 516006					
<b>Factory</b>	Huizhou Boshijie Technology Co., Ltd					
<b>Factory Address</b>	Boshijie Industrial Park, No. 1 Hufeng West Third Road, Zhongkai High-tech Zone, Huizhou City, Guangdong, China. 516006					
<b>Sample Identification</b>	1-1	<b>Test Item</b>	See page 8			
<b>Tested According To</b>	FCC CFR47 Part 15E ANSI C63.10-2020 KDB 789033 D02 General UNII Test Procedures New Rules v01r04 KDB 662911 D01 Multiple Transmitter Output v02r01 KDB905462 D02 UNII DFS Compliance Procedures New Rules v02 KDB 905462 D03 UNII Clients Without Radar Detection New Rules v01r02					
<b>Receiving Date</b>	2025-02-19	<b>Completing Date</b>	2025-04-26			
<b>Test conclusion</b>	<p>The equipment under test was found to comply with the requirements of the standards applied.</p> <p>Final Verdict: Pass.</p> <p>Seal of CVC</p> <p>Date of issue: <b>2025-06-06</b></p>					
Abbreviations: / Pass= passed Fail = failed N/A= not applicable						
This test report relates only to the EUT, and shall not be reproduced except in full, without written approval of CVC.						

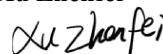
Approved by:

Chen Huawen



Reviewed by:

Xu Zhenfei



Tested by:

Lu Weiji



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**RELEASE CONTROL RECORD**

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
FCC2025-0008-RF2	Original release	June.06,2025

# 1. General Product Information

## 1.1 General information

Product Name	Nova
Model No.	Nova
Additional model	/
Power Supply	DC 12.0V === 5.0A From Adapter
Serial Number(SN)	B110C460
Software version	2024-Dec-05
Hardware version	REV-F
specific power settings	IEEE 802.11a: 13 IEEE 802.11n(20MHz)/11n(40MHz): 14 IEEE 802.11ac(20MHz)/11ac (40MHz)/11ac (80MHz): 14
Antenna Type	Internal antenna
Antenna Gain	U-NII-1: Ant1:7.0 dBi, Ant2:7.0 dBi (provided by client) U-NII-2A: Ant1:7.0 dBi, Ant2:7.0 dBi (provided by client) U-NII-2C: Ant1:7.0 dBi, Ant2:7.0 dBi (provided by client) U-NII-3: Ant1:7.0 dBi, Ant2:7.0 dBi (provided by client)
Beamforming gain	Unsupported
Frequency Range	U-NII-1: For 20MHz:5180-5240MHz For 40MHz:5190-5230MHz For 80MHz:5210MHz U-NII-2A: For 20MHz:5260-5320MHz For 40MHz:5270-5310MHz For 80MHz:5290MHz U-NII-2C: For 20MHz:5500-5700MHz For 40MHz:5510-5670MHz For 80MHz:5530-5610MHz U-NII-3: For 20MHz:5745-5825MHz For 40MHz:5755-5795MHz For 80MHz:5775MHz
Modulation Type	802.11a/n(HT20/HT40): 64QAM, 16QAM, QPSK, BPSK for OFDM 802.11ac(VHT20/VHT40/VHT80): 256QAM,64QAM,16QAM, QPSK,BPSK for OFDM
Max. Conducted Power	U-NII-1: 15.94 dBm U-NII-2A: 14.60 dBm U-NII-2C: 18.16 dBm U-NII-3: 20.01 dBm
DFS device type	<input type="checkbox"/> Master <input type="checkbox"/> Slave with radar detection <input checked="" type="checkbox"/> Slave without radar detection
TPC Function	<input type="checkbox"/> Support <input checked="" type="checkbox"/> Not support
TDWR Band	<input type="checkbox"/> Support <input checked="" type="checkbox"/> Not support
Operate Temp.Range	-15°C~+45°C

**Note:**

1. The information of the EUT is declared by the manufacturer.
2. The laboratory is not responsible for the product technical specification provided by the client.
3. The product models of this application are: Nova. All the tests carried out on model Nova.
4. EUT photo refer to report (Report NO.:FCC2025-0008-EUT).
5. There are two power supplies, from different manufacturers.

<b>Power supply information</b>		
<b>No.</b>	<b>Manufacturer</b>	<b>MODEL</b>
1	MOSO Power	MS-Z5000R120-060B0-Q
2	Yingyuan	CGSW65C-120-5000II

6. The EUT have MIMO function, provides 2 completed transmitter and 2 receiver.

## 2. Test Sites

### 2.1 Test Facilities

The tests and measurements refer to this report were performed by RF testing Lab of CVC Testing Technology Co., Ltd.

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Telephone : +86-20-32293888

Fax : +86-20-32293889

FCC(Test firm designation number: CN1282)

IC(Test firm CAB identifier number: CN0103)

CNAS(Test firm designation number: L0095)

### 2.2 Description of Non-standard Method and Deviations

The testing and measurement methods used in this report are applied by all standard methods. Not any non-standard method or deviation from the used standards was used.

### 2.3 List of Test and Measurement Instruments

Refer to **Appendix X**.

## 3. Test Configuration

### 3.1 Test Mode

The EUT has been associated with peripherals and configuration operated in a manner tended to maximize its emission characteristics in a typical application.

Test Mode	Antenna Delivery	Test Channel
IEEE 802.11A	1TX / 1RX	36,40,48,52,56,64,100,116,140,149,157,165
IEEE 802.11N 20 MIMO	2TX / 2RX	36,40,48,52,56,64,100,116,140,149,157,165
IEEE 802.11N 40 MIMO	2TX / 2RX	38,46,54,62,102,110,134,151,159
IEEE 802.11AC 20 MIMO	2TX / 2RX	36,40,48,52,56,64,100,116,140,149,157,165
IEEE 802.11AC 40 MIMO	2TX / 2RX	38,46,54,62,102,110,134,151,159
IEEE 802.11AC 80 MIMO	2TX / 2RX	42,58,106,122,155

The radiated emission was measured in the following position: EUT stand-up position (Z axis), lie-down position (X, Y axis). The worst emission was found in lie-down position (X axis) and the worst case was recorded.

In order to find the worst case condition, Pre-tests are needed at the presence of different data rate and different channels.. Preliminary tests have been done on all the configurations for confirming worst case. Data rate below means worst-case rate of each test item.

Worst-case data rates and channels are shown as following table.

Test Mode	Antenna Delivery	Data Rate		
		Antenna 1	Antenna 2	MIMO
IEEE 802.11A	1TX / 1RX	6	6	/
IEEE 802.11N 20MHz	2TX / 2RX	MCS 0	MCS 0	MCS 8
IEEE 802.11N 40MHz	2TX / 2RX	MCS 0	MCS 0	MCS 8
IEEE 802.11AC 20MHz	2TX / 2RX	MCS 0	MCS 0	MCS 8
IEEE 802.11AC 40MHz	2TX / 2RX	MCS 0	MCS 0	MCS 8
IEEE 802.11AC 80MHz	2TX / 2RX	MCS 0	MCS 0	MCS 8

Test Items	Test Antennas	Test Modes	Test Channels
Maximum conducted output power	Antenna 1, Antenna 2, MIMO	IEEE 802.11A/ IEEE 802.11N 20/ IEEE 802.11N 40/ IEEE 802.11AC 20/ IEEE 802.11AC 40/ IEEE 802.11AC 80	36,40,48,52,56,64,100,116,140,149,157,165/ 36,40,48,52,56,64,100,116,140,149,157,165/ 38,46,54,62,102,110,134,151,159/ 36,40,48,52,56,64,100,116,140,149,157,165/ 38,46,54,62,102,110,134,151,159/ 42,58,106,122,155
Maximum Power spectral density	Antenna 1, Antenna 2, MIMO	IEEE 802.11A/ IEEE 802.11N 20/ IEEE 802.11N 40/ IEEE 802.11AC 20/ IEEE 802.11AC 40/ IEEE 802.11AC 80	36,40,48,52,56,64,100,116,140,149,157,165/ 36,40,48,52,56,64,100,116,140,149,157,165/ 38,46,54,62,102,110,134,151,159/ 36,40,48,52,56,64,100,116,140,149,157,165/ 38,46,54,62,102,110,134,151,159/ 42,58,106,122,155
Unwanted Emissions (Band Edge Measurement)	MIMO	IEEE 802.11AX 20	36,48,52,64, 100,140,149,165
Unwanted Emissions (Spurious Emissions)	MIMO	IEEE 802.11AX 20	36,40,48,52,56,64, 100,116,140,149,157,165
Min Emission Bandwidth and Emission Bandwidth and Occupied Bandwidth	Antenna 1, Antenna 2	IEEE 802.11A/ IEEE 802.11N 20/ IEEE 802.11N 40/ IEEE 802.11AC 20/ IEEE 802.11AC 40/ IEEE 802.11AC 80	36,40,48,52,56,64,100,116,140,149,157,165/ 36,40,48,52,56,64,100,116,140,149,157,165/ 38,46,54,62,102,110,134,151,159/ 36,40,48,52,56,64,100,116,140,149,157,165/ 38,46,54,62,102,110,134,151,159/ 42,58,106,122,155
Frequency stability	Antenna 1, Antenna 2	IEEE 802.11A/ IEEE 802.11N 20/ IEEE 802.11N 40/ IEEE 802.11AC 20/ IEEE 802.11AC 40/ IEEE 802.11AC 80	36,40,48,52,56,64,100,116,140,149,157,165/ 36,40,48,52,56,64,100,116,140,149,157,165/ 38,46,54,62,102,110,134,151,159/ 36,40,48,52,56,64,100,116,140,149,157,165/ 38,46,54,62,102,110,134,151,159/ 42,58,106,122,155

## 3.2 Duty cycle

TestMode	Antenna	Freq(MHz)	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	Limit	Verdict
11A	Ant1	5180	27.00	27.00	100.00	---	---
	Ant2	5180	27.00	27.00	100.00	---	---
	Ant1	5200	27.00	27.00	100.00	---	---
	Ant2	5200	27.00	27.00	100.00	---	---
	Ant1	5240	27.00	27.00	100.00	---	---
	Ant2	5240	27.00	27.00	100.00	---	---
	Ant1	5260	27.00	27.00	100.00	---	---
	Ant2	5260	27.00	27.00	100.00	---	---
	Ant1	5280	27.00	27.00	100.00	---	---
	Ant2	5280	27.00	27.00	100.00	---	---
	Ant1	5320	27.00	27.00	100.00	---	---
	Ant2	5320	27.00	27.00	100.00	---	---
	Ant1	5500	27.00	27.00	100.00	---	---
	Ant2	5500	27.00	27.00	100.00	---	---
	Ant1	5580	27.00	27.00	100.00	---	---
	Ant2	5580	27.00	27.00	100.00	---	---
	Ant1	5700	27.00	27.00	100.00	---	---
	Ant2	5700	27.00	27.00	100.00	---	---
	Ant1	5745	27.00	27.00	100.00	---	---
	Ant2	5745	27.00	27.00	100.00	---	---
	Ant1	5785	27.00	27.00	100.00	---	---
	Ant2	5785	27.00	27.00	100.00	---	---
	Ant1	5825	27.00	27.00	100.00	---	---
	Ant2	5825	27.00	27.00	100.00	---	---
11N20MIMO	Ant1	5180	27.00	27.00	100.00	---	---
	Ant2	5180	27.00	27.00	100.00	---	---
	Ant1	5200	27.00	27.00	100.00	---	---
	Ant2	5200	27.00	27.00	100.00	---	---
	Ant1	5240	27.00	27.00	100.00	---	---
	Ant2	5240	27.00	27.00	100.00	---	---
	Ant1	5260	27.00	27.00	100.00	---	---
	Ant2	5260	27.00	27.00	100.00	---	---
	Ant1	5280	27.00	27.00	100.00	---	---
	Ant2	5280	27.00	27.00	100.00	---	---
	Ant1	5320	27.00	27.00	100.00	---	---
	Ant2	5320	27.00	27.00	100.00	---	---
	Ant1	5500	27.00	27.00	100.00	---	---
	Ant2	5500	27.00	27.00	100.00	---	---
	Ant1	5580	27.00	27.00	100.00	---	---
	Ant2	5580	27.00	27.00	100.00	---	---
	Ant1	5700	27.00	27.00	100.00	---	---
	Ant2	5700	27.00	27.00	100.00	---	---
	Ant1	5745	27.00	27.00	100.00	---	---
	Ant2	5745	27.00	27.00	100.00	---	---
	Ant1	5785	27.00	27.00	100.00	---	---
	Ant2	5785	27.00	27.00	100.00	---	---
	Ant1	5825	27.00	27.00	100.00	---	---
	Ant2	5825	27.00	27.00	100.00	---	---
11N40MIMO	Ant1	5190	27.00	27.00	100.00	---	---
	Ant2	5190	27.00	27.00	100.00	---	---
	Ant1	5230	27.00	27.00	100.00	---	---
	Ant2	5230	27.00	27.00	100.00	---	---
	Ant1	5270	27.00	27.00	100.00	---	---
	Ant2	5270	27.00	27.00	100.00	---	---
	Ant1	5310	27.00	27.00	100.00	---	---
	Ant2	5310	27.00	27.00	100.00	---	---
	Ant1	5510	27.00	27.00	100.00	---	---
	Ant2	5510	27.00	27.00	100.00	---	---
	Ant1	5550	27.00	27.00	100.00	---	---

	Ant2	5550	27.00	27.00	100.00	---	---
	Ant1	5670	27.00	27.00	100.00	---	---
	Ant2	5670	27.00	27.00	100.00	---	---
	Ant1	5755	27.00	27.00	100.00	---	---
	Ant2	5755	27.00	27.00	100.00	---	---
	Ant1	5795	27.00	27.00	100.00	---	---
	Ant2	5795	27.00	27.00	100.00	---	---
11AC20MIMO	Ant1	5180	27.00	27.00	100.00	---	---
	Ant2	5180	27.00	27.00	100.00	---	---
	Ant1	5200	27.00	27.00	100.00	---	---
	Ant2	5200	27.00	27.00	100.00	---	---
	Ant1	5240	27.00	27.00	100.00	---	---
	Ant2	5240	27.00	27.00	100.00	---	---
	Ant1	5260	27.00	27.00	100.00	---	---
	Ant2	5260	27.00	27.00	100.00	---	---
	Ant1	5280	27.00	27.00	100.00	---	---
	Ant2	5280	27.00	27.00	100.00	---	---
	Ant1	5320	27.00	27.00	100.00	---	---
	Ant2	5320	27.00	27.00	100.00	---	---
	Ant1	5500	27.00	27.00	100.00	---	---
	Ant2	5500	27.00	27.00	100.00	---	---
	Ant1	5580	27.00	27.00	100.00	---	---
	Ant2	5580	27.00	27.00	100.00	---	---
	Ant1	5700	27.00	27.00	100.00	---	---
	Ant2	5700	27.00	27.00	100.00	---	---
	Ant1	5745	27.00	27.00	100.00	---	---
	Ant2	5745	27.00	27.00	100.00	---	---
	Ant1	5785	27.00	27.00	100.00	---	---
	Ant2	5785	27.00	27.00	100.00	---	---
	Ant1	5825	27.00	27.00	100.00	---	---
	Ant2	5825	27.00	27.00	100.00	---	---
11AC40MIMO	Ant1	5190	27.00	27.00	100.00	---	---
	Ant2	5190	27.00	27.00	100.00	---	---
	Ant1	5230	27.00	27.00	100.00	---	---
	Ant2	5230	27.00	27.00	100.00	---	---
	Ant1	5270	27.00	27.00	100.00	---	---
	Ant2	5270	27.00	27.00	100.00	---	---
	Ant1	5310	27.00	27.00	100.00	---	---
	Ant2	5310	27.00	27.00	100.00	---	---
	Ant1	5510	27.00	27.00	100.00	---	---
	Ant2	5510	27.00	27.00	100.00	---	---
	Ant1	5550	27.00	27.00	100.00	---	---
	Ant2	5550	27.00	27.00	100.00	---	---
	Ant1	5670	27.00	27.00	100.00	---	---
	Ant2	5670	27.00	27.00	100.00	---	---
	Ant1	5755	27.00	27.00	100.00	---	---
	Ant2	5755	27.00	27.00	100.00	---	---
	Ant1	5795	27.00	27.00	100.00	---	---
	Ant2	5795	27.00	27.00	100.00	---	---
11AC80MIMO	Ant1	5210	27.00	27.00	100.00	---	---
	Ant2	5210	27.00	27.00	100.00	---	---
	Ant1	5290	27.00	27.00	100.00	---	---
	Ant2	5290	27.00	27.00	100.00	---	---
	Ant1	5530	27.00	27.00	100.00	---	---
	Ant2	5530	27.00	27.00	100.00	---	---
	Ant1	5610	27.00	27.00	100.00	---	---
	Ant2	5610	27.00	27.00	100.00	---	---
	Ant1	5775	27.00	27.00	100.00	---	---
	Ant2	5775	27.00	27.00	100.00	---	---

## 4. Summary of measurement results

Summary of measurements of results	Clause in FCC rules	Verdict	Note
Conducted Emissions	15.207	PASS	/
Maximum conducted output power	15.407(a)	PASS	Appendix C of WIFI5G_diagram
Maximum Power spectral density	15.407(a)	PASS	Appendix D of WIFI5G_diagram
Unwanted Emissions	15.407(b)	PASS	/
Min Emission Bandwidth and Emission Bandwidth and Occupied Bandwidth	15.407(e), 15.407(a)	PASS	Appendix A of WIFI5G_diagram
Frequency stability	15.407(g)	PASS	Appendix E of WIFI5G_diagram
Dynamic Frequency Selection (DFS)	15.407(h)	PASS	/
Antenna Requirement	15.203	PASS	See note 1

Note 1: According to 15.203, it is considered sufficient to comply with the provisions of this section.

## 5. Measurement procedure

### 5.1 Conducted Emission

Ambient condition:

Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.2kPa

Method of Measurement:

The EUT IS placed on a non-metallic table of 80cm height above the horizontal metal reference ground plane. During the test, the EUT was operating in its typical mode. The test method is according to ANSI C63.10-2020. Connect the AC power line of the EUT to the LISN Use EMI receiver to detect the average and Quasi-peak value. RBW is set to 9kHz, VBW is set to 30kHz The measurement result should include both L line and N line.

The test is in transmitting mode.

Limits:

Frequency (MHz)	Conducted Limits(dB $\mu$ V)	
	Quasi-peak	Average
0.15 - 0.5	66 to 56 *	56 to 46*
0.5 - 5	56	46
5 - 30	60	50

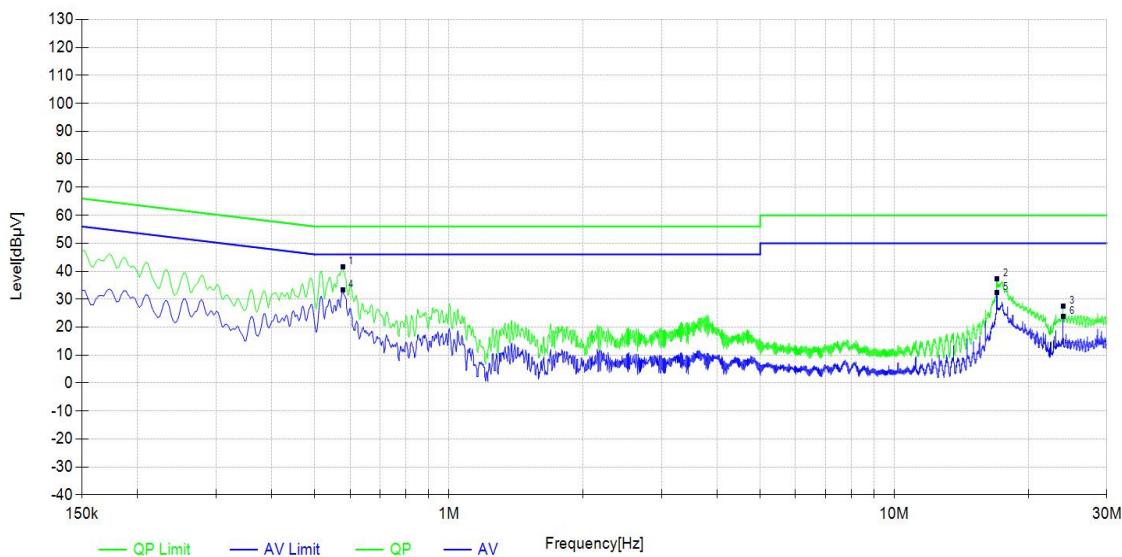
Note 1: The lower limit shall apply at the transition frequencies.

Note 2: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.

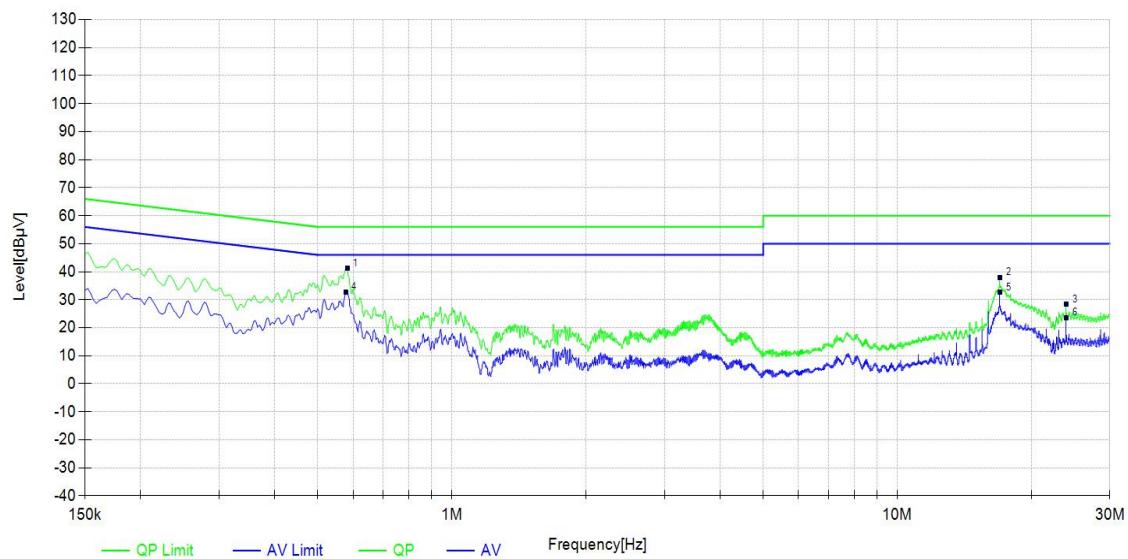
## Test Results:

During the test, the Conducted Emission from 150kHz to 30MHz was carried out in 2 power modes, in all modes of WIFI, on all channels and all antennas. Power supply 1#, 802.11ac20, Channel 36, MIMO are selected as the worst condition. The test data of the worst-case condition was recorded in this report.

Radiates Emission	150k~30MHz							
Power Line	L							
Test channel	Worst-Case							
<b>Suspected List</b>								
Freq. [MHz]	Factor [dB]	Reading [dB $\mu$ V]	Level [dB $\mu$ V]	Limit [dB $\mu$ V]	Margin [dB]	Detector	Type	Pass/Fail
0.5775	10.23	31.30	41.53	56.00	14.47	QP	L	PASS
17.034	11.64	25.64	37.28	60.00	22.72	QP	L	PASS
24	11.69	15.86	27.55	60.00	32.45	QP	L	PASS
0.5775	10.23	23.21	33.44	46.00	12.56	AV	L	PASS
17.034	11.64	20.71	32.35	50.00	17.65	AV	L	PASS
24	11.69	12.21	23.90	50.00	26.10	AV	L	PASS



Radiates Emission		150k~30MHz						
Power Line		N						
Test channel		Worst-Case						
<b>Suspected List</b>								
Freq. [MHz]	Factor [dB]	Reading [dB $\mu$ V]	Level [dB $\mu$ V]	Limit [dB $\mu$ V]	Margin [dB]	Detector	Type	Pass/Fail
0.582	10.21	30.91	41.12	56.00	14.88	QP	N	PASS
17.00475	11.60	26.35	37.95	60.00	22.05	QP	N	PASS
24	11.58	16.76	28.34	60.00	31.66	QP	N	PASS
0.5775	10.21	22.56	32.77	46.00	13.23	AV	N	PASS
17.00475	11.60	20.96	32.56	50.00	17.44	AV	N	PASS
24	11.58	11.99	23.57	50.00	26.43	AV	N	PASS



## 5.2 Unwanted Emission

Ambient condition:

Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.2kPa

### Method of Measurement:

The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.

The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.

The antenna 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.

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 (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rotatable was turned from 0 degrees to 360 degrees to find the maximum reading.

The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.

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.

Above 1GHz test procedure as below:

Different between above is the test site, change from Semi- Anechoic Chamber to fully Anechoic Chamber and change form table 0.8 meter to 1.5 meter( Above 18GHz the distance is 1 meter and table is 1.5 meter)..

Test the EUT in the lowest channel ,the middle channel ,the Highest channel

The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is worse case.

Repeat above procedures until all frequencies measured was complete.

**Limits:**

1. For transmitters operating in the 5725-5850 MHz band: 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.
2. For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz(68.2dB $\mu$ V/m).
3. For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz(68.2dB $\mu$ V/m).
4. For transmitters operating in the 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz(68.2dB $\mu$ V/m).

Note: the following formula is used to convert the EIRP to field strength

§1、 $E[\text{dB}\mu\text{V}/\text{m}] = \text{EIRP}[\text{dBm}] - 20 \log(d[\text{meters}]) + 104.77$ , where  $E$  = field strength and

$d$  = distance at which field strength limit is specified in the rules;

§2、 $E[\text{dB}\mu\text{V}/\text{m}] = \text{EIRP}[\text{dBm}] + 95.2$ , for  $d = 3$  meters

5. Unwanted spurious emissions fallen in restricted bands per FCC Part15.205 shall comply with the general field strength limits set forth in § 15.209 as below table.

Frequency	Limit ( $\mu\text{V}/\text{m}$ )	Limit ( $\text{dB}\mu\text{V}/\text{m}$ @3m)	Remark
0.009MHz-0.490MHz	2400/F(kHz)@300m	20lg(24000000/F(kHz))	Quasi-peak Level
0.490MHz~1.705MHz	24000/F(kHz)@30m	20lg(2400000/F(kHz))	Quasi-peak Level
1.705MHz~30.0MHz	30@30m	69.54	Quasi-peak Level
30MHz-88MHz	100@3m	40.0	Quasi-peak Level
88MHz-216MHz	150@3m	43.5	Quasi-peak Level
216MHz-960MHz	200@3m	46.0	Quasi-peak Level
960MHz-1GHz	500@3m	54.0	Quasi-peak Level
Above 1GHz	500@3m	54.0	Average Level
	5000@3m	74.0	Peak Level

**Measurement Data**

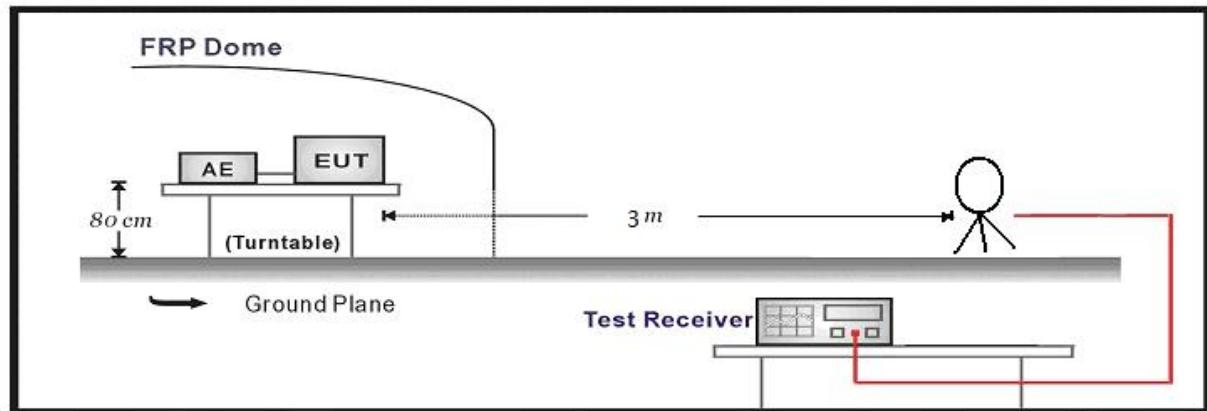
The field strength is calculated by adding the Antenna Factor, Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows:

Final Test Level =Receiver Reading - Correct Factor

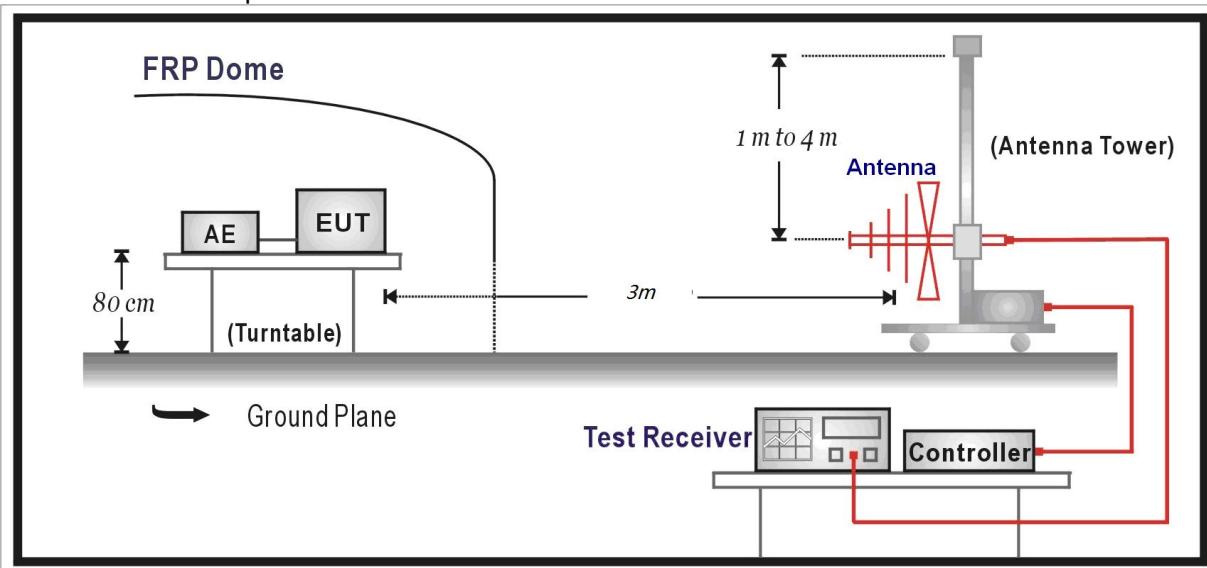
Correct Factor = Preamplifier Factor - Antenna Factor - Cable Factor

## Test Setup:

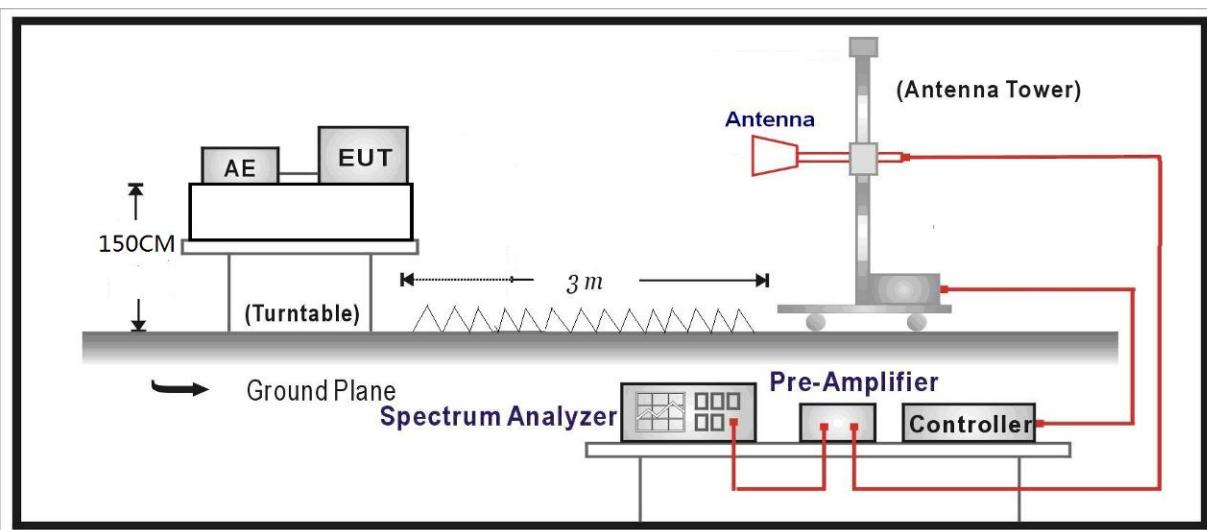
Below 30MHz Test Setup:



Below 1GHz Test Setup:



Above 1GHz Test Setup:



## Measurement Uncertainty:

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor  $k = 1.96$ .

Frequency	Uncertainty
9KHz-30MHz	3.55 dB
30MHz-200MHz	4.19 dB
200MHz-1GHz	3.63 dB
1GHz-26.5G	3.68 dB
26.5G-40GHz	4.76dB

## 5.2.1 SPURIOUS EMISSIONS:

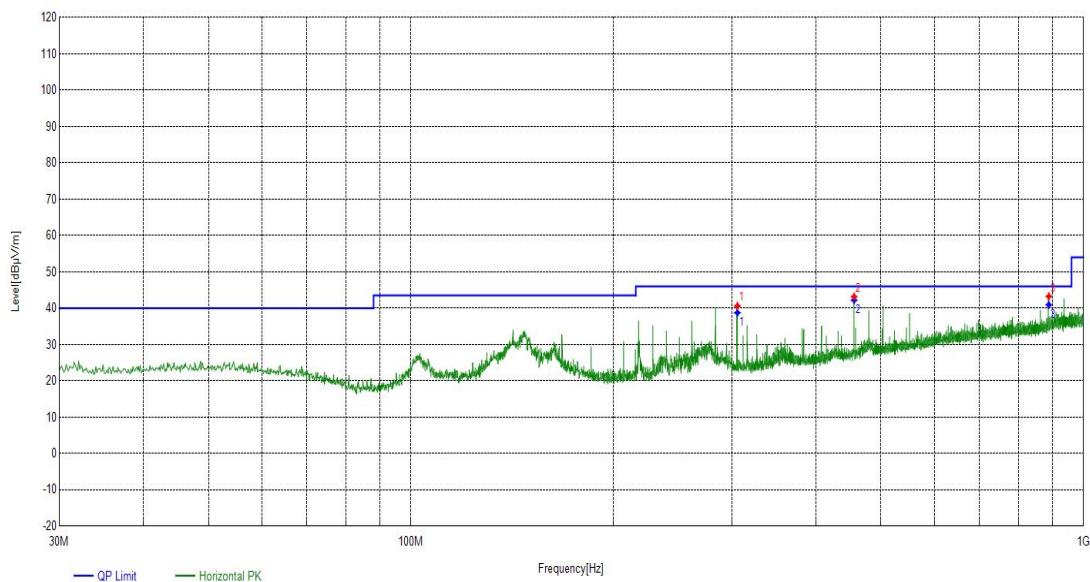
### 5.2.1.1 Below 1GHz:

During the test, the Radiates Emission from 9kHz to 1GHz was carried out in 2 power modes, in all modes of WIFI, on all channels and all antennas. Power supply 1#, 802.11ac20, Channel 36, MIMO are selected as the worst condition. The test data of the worst-case condition was recorded in this report.

Radiates Emission	9k~1G								
Test channel	Worst-Case								
Polarity	Horizontal								
<b>Suspected List</b>									
Frequency [MHz]	Factor [dB]	Reading [dB $\mu$ V/m]	Level [dB $\mu$ V/m]	Limit [dB $\mu$ V/m]	Margin [dB]	Detect or	Height [cm]	Angle deg	Pass/Fail
305.7225	21.43	19.19	40.62	46.00	5.38	PK	100	215	PASS
455.9512	25.29	17.87	43.16	46.00	2.84	PK	100	40	PASS
888.0862	32.74	10.51	43.25	46.00	2.75	PK	100	254	PASS

Note: 9kHz~30MHz have been test and test data more than 20dB margin.

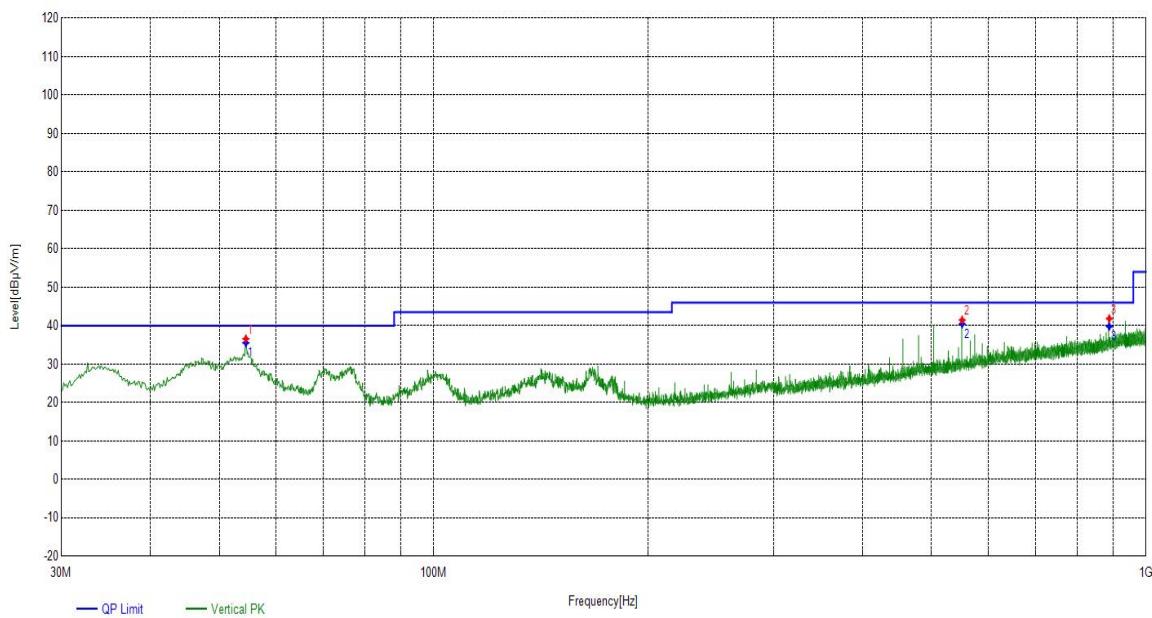
<b>Final Data List</b>							
Frequency [MHz]	Factor [dB]	QP Value [dB $\mu$ V/m]	QP Limit [dB $\mu$ V/m]	QP Margin [dB]	Height [cm]	Angle [°]	Pass/Fail
305.7225	21.43	38.75	46.00	7.25	130	215	PASS
455.9512	25.29	42.19	46.00	3.81	170	40	PASS
888.0862	32.74	40.92	46.00	5.08	200	254	PASS



Radiates Emission	9k~1G								
Test channel	Worst-Case								
Polarity	Vertical								
<b>Suspected List</b>									
Frequency [MHz]	Factor [dB]	Reading [dB $\mu$ V/m]	Level [dB $\mu$ V/m]	Limit [dB $\mu$ V/m]	Margin [dB]	Detect or	Height [cm]	Angle deg	Pass/Fail
54.4925	20.32	16.26	36.58	40.00	3.42	PK	100	292	PASS
551.9812	27.69	13.79	41.48	46.00	4.52	PK	100	210	PASS
888.0862	32.74	9.10	41.84	46.00	4.16	PK	100	228	PASS

Note: 9kHz~30MHz have been test and test data more than 20dB margin.

<b>Final Data List</b>							
Frequency [MHz]	Factor [dB]	QP Value [dB $\mu$ V/m]	QP Limit [dB $\mu$ V/m]	QP Margin [dB]	Height [cm]	Angle [°]	Pass/Fail
54.4925	20.32	35.52	40.00	4.48	150	292	PASS
551.9812	27.69	40.46	46.00	5.54	110	210	PASS
888.0862	32.74	39.82	46.00	6.18	180	228	PASS



### 5.2.1.2 Above 1GHz:

During the test, the Radiates Emission from 1GHz to 40GHz was carried out in 2 power modes, in all modes of WIFI, on all channels and all antennas. Power supply 1#, 802.11ac20, Highest, medium, lowest channels, MIMO are selected as the worst condition. The test data of the worst-case condition was recorded in this report.

#### 5.2.1.2.1 U-NII-1:

Radiates Emission		Above 1GHz							
Test channel		Lowest							
polarization		Horizontal							
<b>Suspected List</b>									
Frequency [MHz]	Factor [dB]	Reading [dB $\mu$ V/m]	Level [dB $\mu$ V/m]	Limit [dB $\mu$ V/m]	Margin [dB]	Detector	Height [cm]	Angle deg	Pass/Fail
7518.151815	9.06	33.48	42.54	74.00	31.46	PK	150	100	PASS
9000.30003	10.40	32.87	43.27	74.00	30.73	PK	150	220	PASS
11033.30333	12.57	32.94	45.51	74.00	28.49	PK	150	210	PASS
7370.537054	8.99	23.89	32.88	54.00	21.12	AV	150	350	PASS
8936.693669	10.31	22.82	33.13	54.00	20.87	AV	150	350	PASS
10992.49925	12.56	22.58	35.14	54.00	18.86	AV	150	350	PASS
Radiates Emission		Above 1GHz							
Test channel		Lowest							
polarization		Vertical							
<b>Suspected List</b>									
Frequency [MHz]	Factor [dB]	Reading [dB $\mu$ V/m]	Level [dB $\mu$ V/m]	Limit [dB $\mu$ V/m]	Margin [dB]	Detector	Height [cm]	Angle deg	Pass/Fail
8354.635464	9.77	35.10	44.87	74.00	29.13	PK	150	260	PASS
10472.84728	12.85	32.62	45.47	74.00	28.53	PK	150	310	PASS
11669.36693	11.78	34.37	46.15	74.00	27.85	PK	150	110	PASS
8605.460546	10.11	23.78	33.89	54.00	20.11	AV	150	160	PASS
10585.65856	12.70	22.12	34.82	54.00	19.18	AV	150	210	PASS
11281.72817	12.35	23.88	36.23	54.00	17.77	AV	150	80	PASS

Note: The emission levels of other frequencies were greater than 20dB margin.

Radiates Emission	Above 1GHz							
Test channel	Medium							
polarization	Horizontal							

### Suspected List

Frequency [MHz]	Factor [dB]	Reading [dB $\mu$ V/m]	Level [dB $\mu$ V/m]	Limit [dB $\mu$ V/m]	Margin [dB]	Detect or	Height [cm]	Angle deg	Pass/ Fail
8251.425143	9.60	33.40	43.00	74.00	31.00	PK	150	180	PASS
9693.969397	12.39	32.38	44.77	74.00	29.23	PK	150	10	PASS
11688.56885	11.75	33.63	45.38	74.00	28.62	PK	150	120	PASS
8343.834383	9.74	23.39	33.13	54.00	20.87	AV	150	350	PASS
9716.771677	12.40	22.01	34.41	54.00	19.59	AV	150	350	PASS
11299.72997	12.30	23.23	35.53	54.00	18.47	AV	150	350	PASS

Radiates Emission	Above 1GHz							
Test channel	Medium							
polarization	Vertical							

### Suspected List

Frequency [MHz]	Factor [dB]	Reading [dB $\mu$ V/m]	Level [dB $\mu$ V/m]	Limit [dB $\mu$ V/m]	Margin [dB]	Detect or	Height [cm]	Angle deg	Pass/ Fail
7425.742574	9.00	34.52	43.52	74.00	30.48	PK	150	180	PASS
8508.250825	10.00	33.79	43.79	74.00	30.21	PK	150	200	PASS
10686.46864	12.71	32.37	45.08	74.00	28.92	PK	150	50	PASS
7346.534654	8.99	23.66	32.65	54.00	21.35	AV	150	120	PASS
8929.492949	10.31	23.74	34.05	54.00	19.95	AV	150	158	PASS
10718.87188	12.73	22.94	35.67	54.00	18.33	AV	150	251	PASS

Note: The emission levels of other frequencies were greater than 20dB margin.

Radiates Emission	Above 1GHz							
Test channel	Highest							
polarization	Horizontal							

### Suspected List

Frequency [MHz]	Factor [dB]	Reading [dB $\mu$ V/m]	Level [dB $\mu$ V/m]	Limit [dB $\mu$ V/m]	Margin [dB]	Detect or	Height [cm]	Angle deg	Pass/ Fail
8309.030903	9.69	33.38	43.07	74.00	30.93	PK	150	290	PASS
8918.691869	10.29	33.58	43.87	74.00	30.13	PK	150	110	PASS
11159.31593	12.59	33.66	46.25	74.00	27.75	PK	150	20	PASS
7999.39994	9.25	23.44	32.69	54.00	21.31	AV	150	350	PASS
9475.547555	12.22	22.73	34.95	54.00	19.05	AV	150	350	PASS
10969.69697	12.60	22.49	35.09	54.00	18.91	AV	150	350	PASS

Radiates Emission	Above 1GHz							
Test channel	Highest							
polarization	Vertical							

### Suspected List

Frequency [MHz]	Factor [dB]	Reading [dB $\mu$ V/m]	Level [dB $\mu$ V/m]	Limit [dB $\mu$ V/m]	Margin [dB]	Detect or	Height [cm]	Angle deg	Pass/ Fail
7851.785179	9.24	34.07	43.31	74.00	30.69	PK	150	330	PASS
10096.00960	12.47	31.77	44.24	74.00	29.76	PK	150	270	PASS
11566.15661	11.91	33.73	45.64	74.00	28.36	PK	150	170	PASS
8049.804981	9.32	24.03	33.35	54.00	20.65	AV	150	69	PASS
10114.01140	12.50	22.16	34.66	54.00	19.34	AV	150	115	PASS
11194.11941	12.59	23.01	35.60	54.00	18.40	AV	150	235	PASS

Note: The emission levels of other frequencies were greater than 20dB margin.

## 5.2.1.2.2 U-NII-2:

Radiates Emission		Above 1GHz							
Test channel		Lowest							
polarization		Horizontal							
<b>Suspected List</b>									
Frequency [MHz]	Factor [dB]	Reading [dB $\mu$ V/m]	Level [dB $\mu$ V/m]	Limit [dB $\mu$ V/m]	Margin [dB]	Detect or	Height [cm]	Angle deg	Pass/ Fail
4143.114311	0.47	38.48	38.95	74.00	35.05	PK	150	220	PASS
6972.39724	8.81	33.94	42.75	74.00	31.25	PK	150	20	PASS
9656.165617	12.40	31.83	44.23	74.00	29.77	PK	150	220	PASS
4099.609961	0.49	28.43	28.92	54.00	25.08	AV	150	350	PASS
7474.947495	9.03	23.97	33.00	54.00	21.00	AV	150	350	PASS
8855.085509	10.20	23.85	34.05	54.00	19.95	AV	150	350	PASS
Radiates Emission		Above 1GHz							
Test channel		Lowest							
polarization		Vertical							
<b>Suspected List</b>									
Frequency [MHz]	Factor [dB]	Reading [dB $\mu$ V/m]	Level [dB $\mu$ V/m]	Limit [dB $\mu$ V/m]	Margin [dB]	Detect or	Height [cm]	Angle deg	Pass/ Fail
4045.604561	0.52	38.25	38.77	74.00	35.23	PK	150	290	PASS
5446.744675	3.33	35.46	38.79	74.00	35.21	PK	150	50	PASS
7572.457246	9.08	34.95	44.03	74.00	29.97	PK	150	250	PASS
3883.588359	0.32	28.04	28.36	54.00	25.64	AV	150	89	PASS
4936.693669	1.82	26.76	28.58	54.00	25.42	AV	150	167	PASS
6994.89949	8.91	23.13	32.04	54.00	21.96	AV	150	218	PASS

Note: The emission levels of other frequencies were greater than 20dB margin.

Radiates Emission	Above 1GHz							
Test channel	Medium							
polarization	Horizontal							

### Suspected List

Frequency [MHz]	Factor [dB]	Reading [dB $\mu$ V/m]	Level [dB $\mu$ V/m]	Limit [dB $\mu$ V/m]	Margin [dB]	Detect or	Height [cm]	Angle deg	Pass/ Fail
4014.10141	0.53	38.43	38.96	74.00	35.04	PK	150	130	PASS
6219.321932	5.96	33.96	39.92	74.00	34.08	PK	150	300	PASS
10659.76597	12.70	33.45	46.15	74.00	27.85	PK	150	189	PASS
4110.111011	0.50	28.23	28.73	54.00	25.27	AV	150	350	PASS
7147.914792	8.99	23.54	32.53	54.00	21.47	AV	150	258	PASS
10394.23942	12.87	22.07	34.94	54.00	19.06	AV	150	323	PASS

Radiates Emission	Above 1GHz							
Test channel	Medium							
polarization	Vertical							

### Suspected List

Frequency [MHz]	Factor [dB]	Reading [dB $\mu$ V/m]	Level [dB $\mu$ V/m]	Limit [dB $\mu$ V/m]	Margin [dB]	Detect or	Height [cm]	Angle deg	Pass/ Fail
3867.086709	0.28	38.28	38.56	74.00	35.44	PK	150	240	PASS
7993.9994	9.25	34.58	43.83	74.00	30.17	PK	150	230	PASS
9471.647165	12.20	31.92	44.12	74.00	29.88	PK	150	130	PASS
3925.592559	0.40	28.01	28.41	54.00	25.59	AV	150	190	PASS
7852.985299	9.24	24.24	33.48	54.00	20.52	AV	150	110	PASS
9005.10051	10.42	23.78	34.20	54.00	19.80	AV	150	210	PASS

Note: The emission levels of other frequencies were greater than 20dB margin.

Radiates Emission	Above 1GHz							
Test channel	Highest							
polarization	Horizontal							

### Suspected List

Frequency [MHz]	Factor [dB]	Reading [dB $\mu$ V/m]	Level [dB $\mu$ V/m]	Limit [dB $\mu$ V/m]	Margin [dB]	Detect or	Height [cm]	Angle deg	Pass/ Fail
4108.610861	0.50	38.76	39.26	74.00	34.74	PK	150	20	PASS
6039.30393	5.74	34.64	40.38	74.00	33.62	PK	150	250	PASS
8046.504651	9.32	34.48	43.80	74.00	30.20	PK	150	130	PASS
4488.148815	-0.05	27.63	27.58	54.00	26.42	AV	150	330	PASS
5761.776178	4.56	25.19	29.75	54.00	24.25	AV	150	260	PASS
7903.990399	9.24	24.16	33.40	54.00	20.60	AV	150	360	PASS

Radiates Emission	Above 1GHz							
Test channel	Highest							
polarization	Vertical							

### Suspected List

Frequency [MHz]	Factor [dB]	Reading [dB $\mu$ V/m]	Level [dB $\mu$ V/m]	Limit [dB $\mu$ V/m]	Margin [dB]	Detect or	Height [cm]	Angle deg	Pass/ Fail
4186.618662	0.45	37.54	37.99	74.00	36.01	PK	150	260	PASS
5263.726373	2.93	35.85	38.78	74.00	35.22	PK	150	20	PASS
9083.108311	10.67	33.66	44.33	74.00	29.67	PK	150	150	PASS
4404.140414	0.04	28.03	28.07	54.00	25.93	AV	150	214	PASS
7068.406841	8.97	23.88	32.85	54.00	21.15	AV	150	184	PASS
8168.016802	9.47	24.53	34.00	54.00	20.00	AV	150	256	PASS

Note: The emission levels of other frequencies were greater than 20dB margin.

## 5.2.1.2.3 U-NII-3:

Radiates Emission		Above 1GHz							
Test channel		Lowest							
polarization		Horizontal							
<b>Suspected List</b>									
Frequency [MHz]	Factor [dB]	Reading [dB $\mu$ V/m]	Level [dB $\mu$ V/m]	Limit [dB $\mu$ V/m]	Margin [dB]	Detect or	Height [cm]	Angle deg	Pass/ Fail
3996.09961	0.53	38.69	39.22	74.00	34.78	PK	150	70	PASS
5283.228323	2.98	37.67	40.65	74.00	33.35	PK	150	180	PASS
6790.879088	7.89	33.16	41.05	74.00	32.95	PK	150	310	PASS
4105.610561	0.49	28.57	29.06	54.00	24.94	AV	150	290	PASS
5257.725773	2.93	26.11	29.04	54.00	24.96	AV	150	310	PASS
7020.40204	8.95	24.02	32.97	54.00	21.03	AV	150	350	PASS
Radiates Emission		Above 1GHz							
Test channel		Lowest							
polarization		Vertical							
<b>Suspected List</b>									
Frequency [MHz]	Factor [dB]	Reading [dB $\mu$ V/m]	Level [dB $\mu$ V/m]	Limit [dB $\mu$ V/m]	Margin [dB]	Detect or	Height [cm]	Angle deg	Pass/ Fail
4287.128713	0.27	38.44	38.71	74.00	35.29	PK	150	310	PASS
6154.815482	5.89	33.99	39.88	74.00	34.12	PK	150	260	PASS
7812.481248	9.23	33.88	43.11	74.00	30.89	PK	150	120	PASS
4237.623762	0.36	28.79	29.15	54.00	24.85	AV	150	19	PASS
6324.332433	5.97	25.79	31.76	54.00	22.24	AV	150	115	PASS
7638.463846	9.12	23.95	33.07	54.00	20.93	AV	150	219	PASS

Note: The emission levels of other frequencies were greater than 20dB margin.

Radiates Emission	Above 1GHz							
Test channel	Medium							
polarization	Horizontal							

### Suspected List

Frequency [MHz]	Factor [dB]	Reading [dB $\mu$ V/m]	Level [dB $\mu$ V/m]	Limit [dB $\mu$ V/m]	Margin [dB]	Detect or	Height [cm]	Angle deg	Pass/ Fail
4932.193219	1.80	36.87	38.67	74.00	35.33	PK	150	330	PASS
6577.857786	6.71	34.05	40.76	74.00	33.24	PK	150	260	PASS
7644.464446	9.12	34.18	43.30	74.00	30.70	PK	150	320	PASS
4747.674768	1.00	27.08	28.08	54.00	25.92	AV	150	278	PASS
6726.372637	7.54	23.09	30.63	54.00	23.37	AV	150	310	PASS
8189.018902	9.50	23.75	33.25	54.00	20.75	AV	150	350	PASS

Radiates Emission	Above 1GHz							
Test channel	Medium							
polarization	Vertical							

### Suspected List

Frequency [MHz]	Factor [dB]	Reading [dB $\mu$ V/m]	Level [dB $\mu$ V/m]	Limit [dB $\mu$ V/m]	Margin [dB]	Detect or	Height [cm]	Angle deg	Pass/ Fail
4584.158416	0.30	38.04	38.34	74.00	35.66	PK	150	140	PASS
6051.305131	5.76	34.80	40.56	74.00	33.44	PK	150	270	PASS
7569.456946	9.08	34.30	43.38	74.00	30.62	PK	150	160	PASS
4941.194119	1.85	28.20	30.05	54.00	23.95	AV	150	267	PASS
6066.306631	5.78	24.95	30.73	54.00	23.27	AV	150	67	PASS
7885.988599	9.24	24.72	33.96	54.00	20.04	AV	150	198	PASS

Note: The emission levels of other frequencies were greater than 20dB margin.

Radiates Emission	Above 1GHz							
Test channel	Highest							
polarization	Horizontal							

### Suspected List

Frequency [MHz]	Factor [dB]	Reading [dB $\mu$ V/m]	Level [dB $\mu$ V/m]	Limit [dB $\mu$ V/m]	Margin [dB]	Detect or	Height [cm]	Angle deg	Pass/ Fail
4188.118812	0.44	38.75	39.19	74.00	34.81	PK	150	30	PASS
5676.267627	4.20	34.85	39.05	74.00	34.95	PK	150	210	PASS
7540.954095	9.06	33.88	42.94	74.00	31.06	PK	150	90	PASS
4114.611461	0.48	28.19	28.67	54.00	25.33	AV	150	340	PASS
5775.277528	4.62	24.41	29.03	54.00	24.97	AV	150	353	PASS
7767.476748	9.21	24.05	33.26	54.00	20.74	AV	150	310	PASS

Radiates Emission	Above 1GHz							
Test channel	Highest							
polarization	Vertical							

### Suspected List

Frequency [MHz]	Factor [dB]	Reading [dB $\mu$ V/m]	Level [dB $\mu$ V/m]	Limit [dB $\mu$ V/m]	Margin [dB]	Detect or	Height [cm]	Angle deg	Pass/ Fail
4551.155116	0.15	38.21	38.36	74.00	35.64	PK	150	30	PASS
5409.240924	3.23	35.93	39.16	74.00	34.84	PK	150	110	PASS
7123.912391	8.98	33.87	42.85	74.00	31.15	PK	150	320	PASS
4198.619862	0.44	27.84	28.28	54.00	25.72	AV	150	236	PASS
5325.232523	3.05	26.09	29.14	54.00	24.86	AV	150	159	PASS
7195.919592	9.01	24.02	33.03	54.00	20.97	AV	150	75	PASS

Note: The emission levels of other frequencies were greater than 20dB margin.

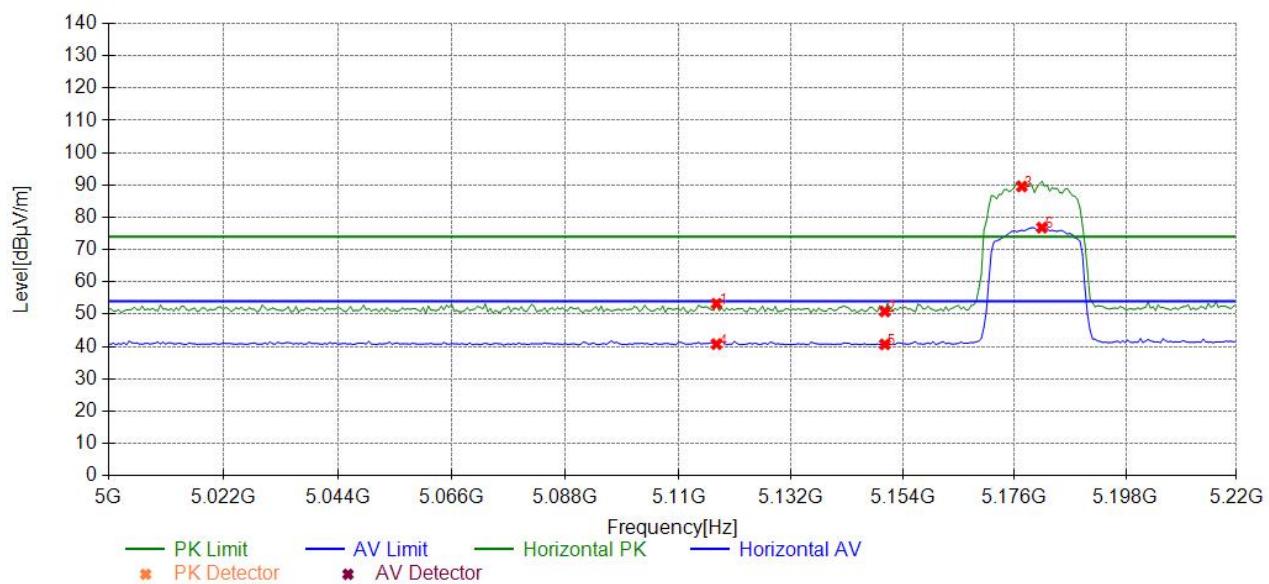
## 5.2.2 Band edge measurements (Radiates):

### Test Results:

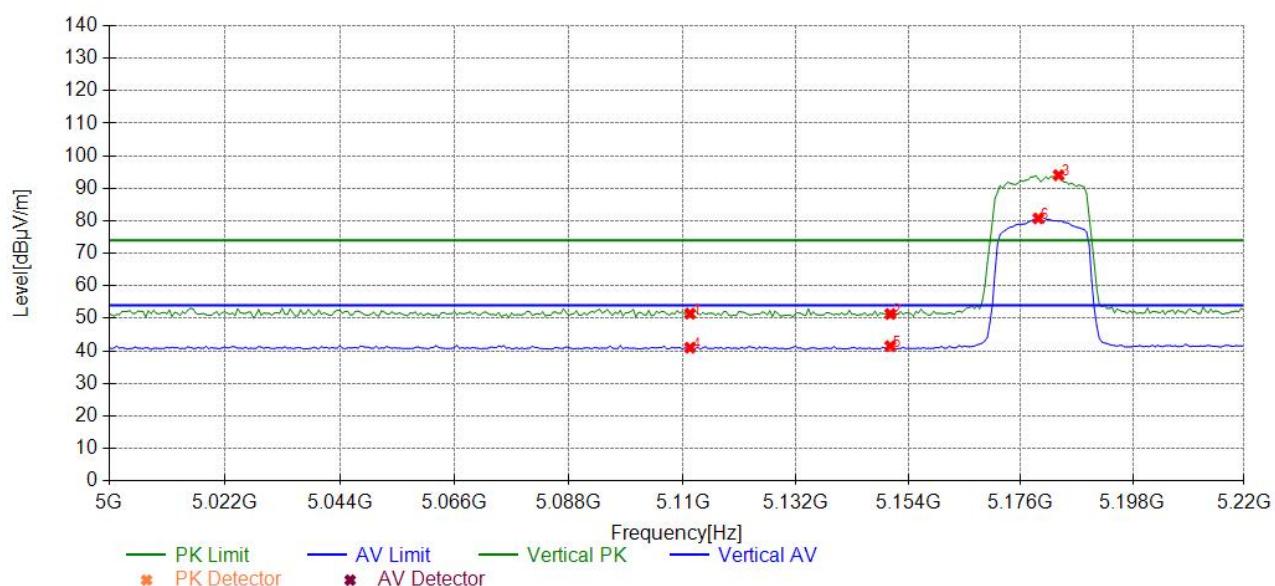
U-NII-1: 5150-5350MHz:

During the test, the Band Edge was performed in WIFI all modes with all channels and all antennas. 802.11ac20, MIMO are selected as the worst condition. The test data of the worst-case condition was recorded in this report.

Test mode		802.11ac20							
Test channel		Lowest channel							
polarization		Horizontal							
<b>Suspected List</b>									
Frequency [MHz]	Factor [dB]	Reading [dB $\mu$ V/m]	Level [dB $\mu$ V/m]	Limit [dB $\mu$ V/m]	Margin [dB]	Detect or	Height [cm]	Angle deg	Pass/ Fail
5117.4117	2.04	51.20	53.24	74.00	20.76	PK	150	162	PASS
5150.4150	2.14	48.71	50.85	74.00	23.15	PK	150	25	PASS
5177.4177	2.22	87.35	89.57	---	---	PK	150	234	---
5117.4117	2.04	38.70	40.74	54.00	13.26	AV	150	357	PASS
5150.4150	2.14	38.51	40.65	54.00	13.35	AV	150	19	PASS
5181.4181	2.24	74.56	76.80	---	---	AV	150	260	---



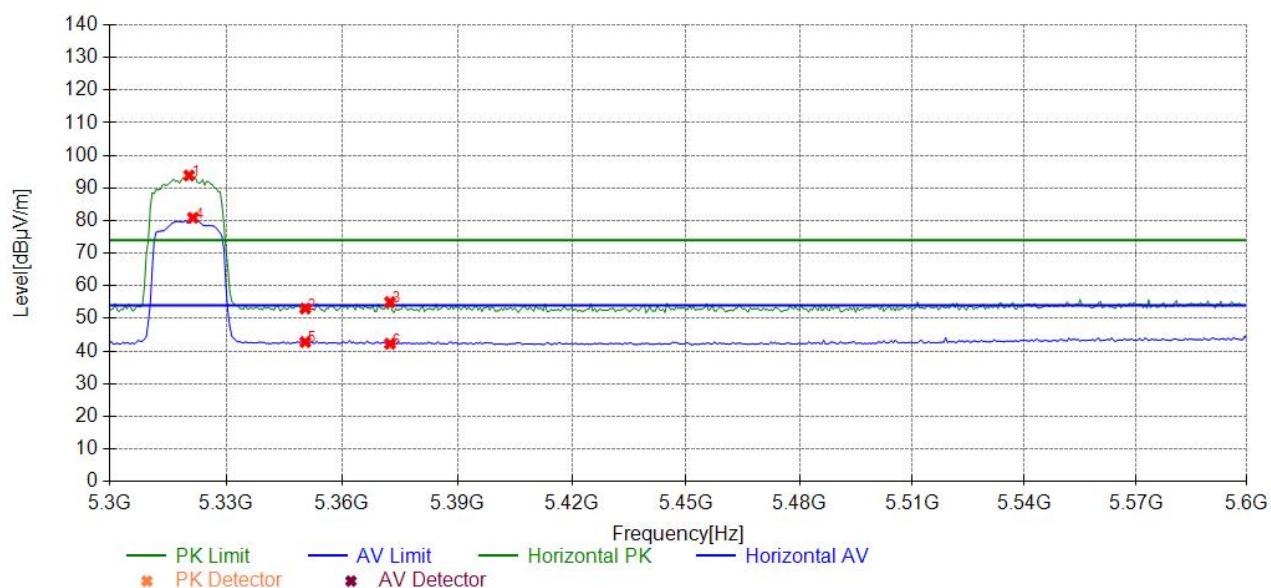
Test mode		802.11ac20							
Test channel		Lowest channel							
polarization		Vertical							
<b>Suspected List</b>									
Frequency [MHz]	Factor [dB]	Reading [dB $\mu$ V/m]	Level [dB $\mu$ V/m]	Limit [dB $\mu$ V/m]	Margin [dB]	Detector	Height [cm]	Angle deg	Pass/Fail
5111.4111	2.03	49.43	51.46	74.00	22.54	PK	150	243	PASS
5150.4150	2.14	49.22	51.36	74.00	22.64	PK	150	189	PASS
5183.4183	2.24	91.80	94.04	---	---	PK	150	163	---
5111.4111	2.03	38.94	40.97	54.00	13.03	AV	150	348	PASS
5150.4150	2.14	39.31	41.45	54.00	12.55	AV	150	359	PASS
5179.4179	2.23	78.53	80.76	---	---	AV	150	354	---



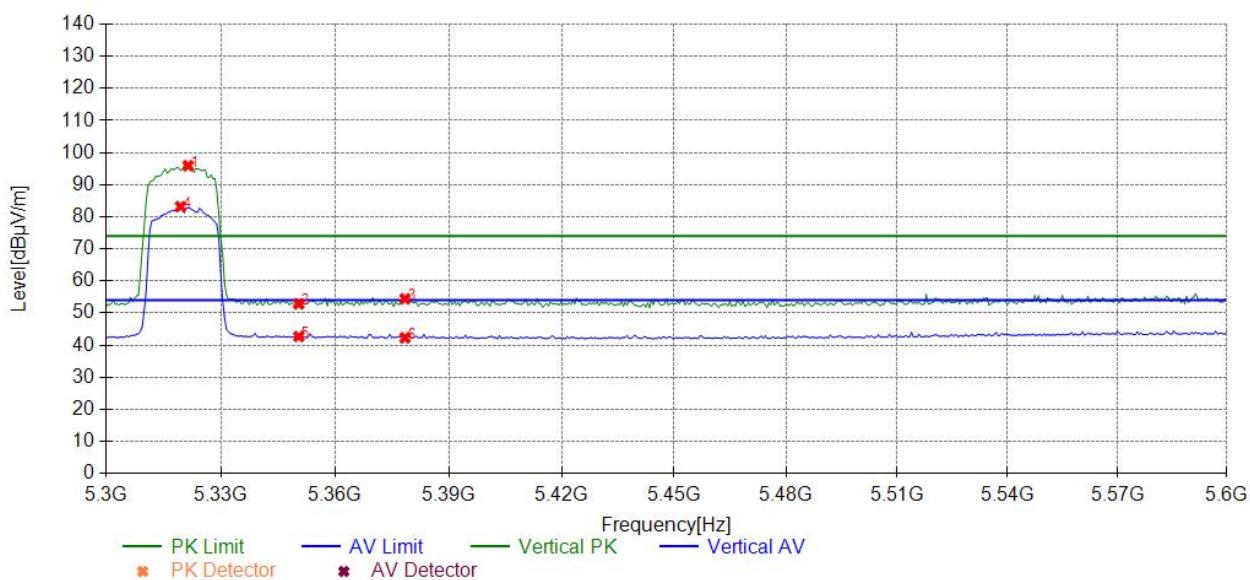
Test mode	802.11ac20
Test channel	Highest channel
polarization	Horizontal

### Suspected List

Frequency [MHz]	Factor [dB]	Reading [dB $\mu$ V/m]	Level [dB $\mu$ V/m]	Limit [dB $\mu$ V/m]	Margin [dB]	Detect or	Height [cm]	Angle deg	Pass/ Fail
5320.4320	2.61	91.24	93.85	---	---	PK	150	205	---
5350.4350	2.69	50.35	53.04	74.00	20.96	PK	150	192	PASS
5372.4372	2.75	52.29	55.04	74.00	18.96	PK	150	250	PASS
5321.4321	2.62	78.25	80.87	---	---	AV	150	100	---
5350.4350	2.69	40.09	42.78	54.00	11.22	AV	150	354	PASS
5372.4372	2.75	39.47	42.22	54.00	11.78	AV	150	159	PASS



Suspected List									
Frequency [MHz]	Factor [dB]	Reading [dB $\mu$ V/m]	Level [dB $\mu$ V/m]	Limit [dB $\mu$ V/m]	Margin [dB]	Detect or	Height [cm]	Angle deg	Pass/ Fail
5321.4321	2.62	93.29	95.91	---	---	PK	150	187	---
5350.4350	2.69	50.16	52.85	74.00	21.15	PK	150	213	PASS
5378.4378	2.76	51.69	54.45	74.00	19.55	PK	150	253	PASS
5319.4319	2.61	80.57	83.18	---	---	AV	150	1	---
5350.4350	2.69	40.00	42.69	54.00	11.31	AV	150	6	PASS
5378.4378	2.76	39.53	42.29	54.00	11.71	AV	150	331	PASS



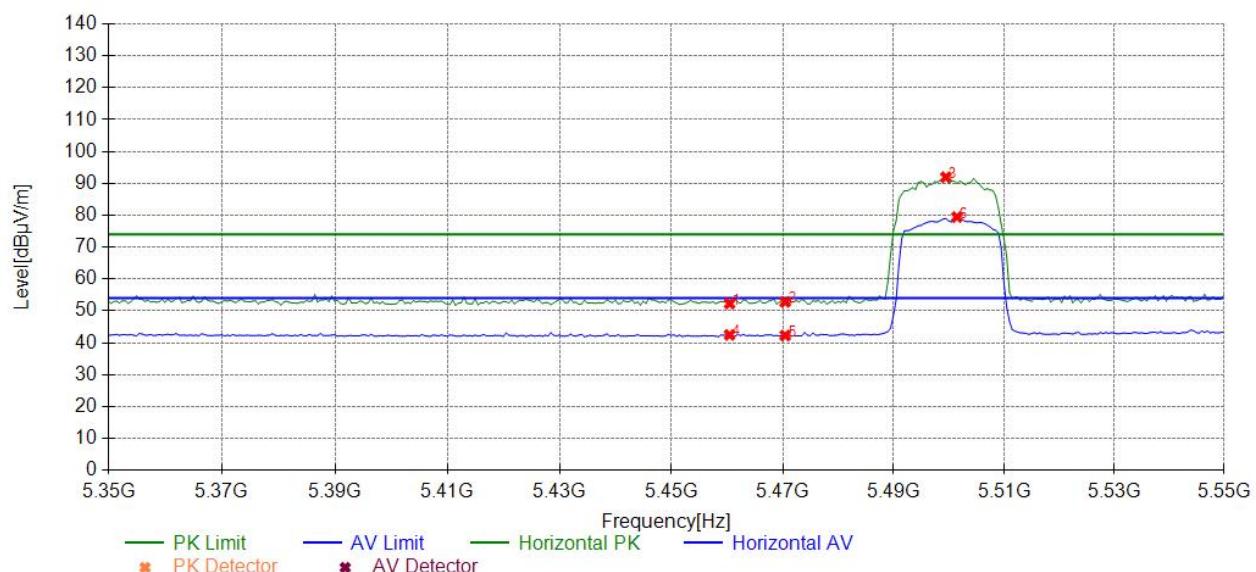
U-NII-2: 5470-5725MHz:

During the test, the Band Edge was performed in WIFI all modes with all channels and all antennas. 802.11ac20, MIMO are selected as the worst condition. The test data of the worst-case condition was recorded in this report.

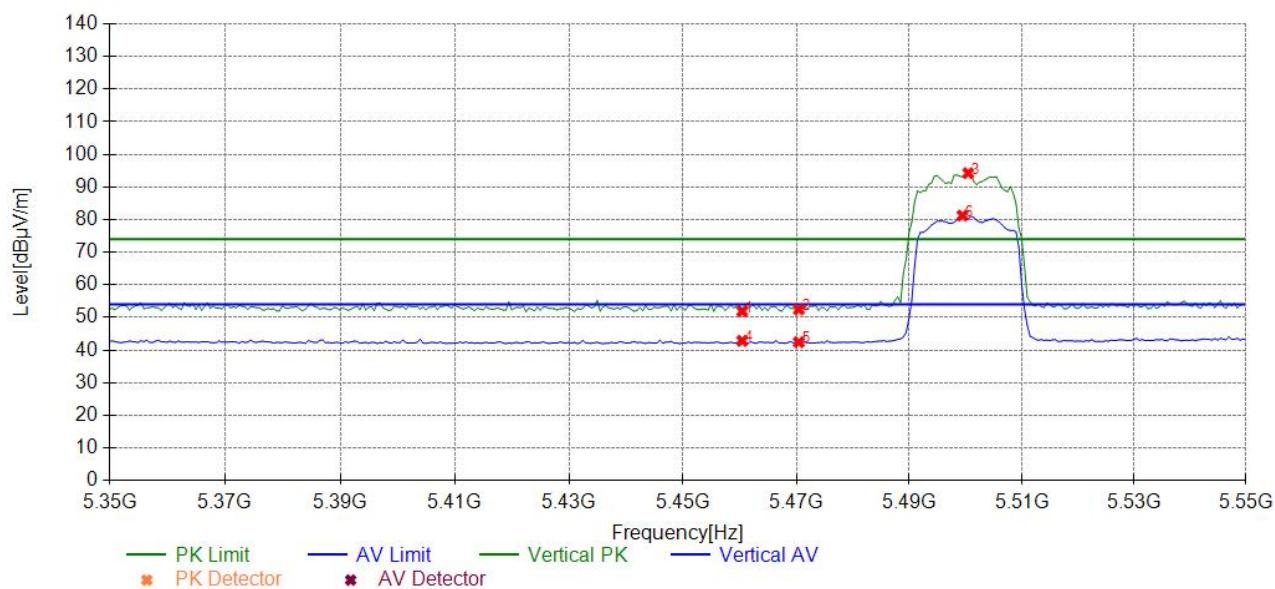
Test mode	802.11ac20							
Test channel	Lowest channel							
polarization	Horizontal							

### Suspected List

Frequency [MHz]	Factor [dB]	Reading [dB $\mu$ V/m]	Level [dB $\mu$ V/m]	Limit [dB $\mu$ V/m]	Margin [dB]	Detect or	Height [cm]	Angle deg	Pass/ Fail
5460.4460	2.97	49.33	52.30	74.00	21.70	PK	150	360	PASS
5470.4470	3.00	49.82	52.82	74.00	21.18	PK	150	286	PASS
5499.4499	3.07	88.87	91.94	---	---	PK	150	169	---
5460.4460	2.97	39.48	42.45	54.00	11.55	AV	150	1	PASS
5470.4470	3.00	39.26	42.26	54.00	11.74	AV	150	19	PASS
5501.4501	3.06	76.39	79.45	---	---	AV	150	208	---



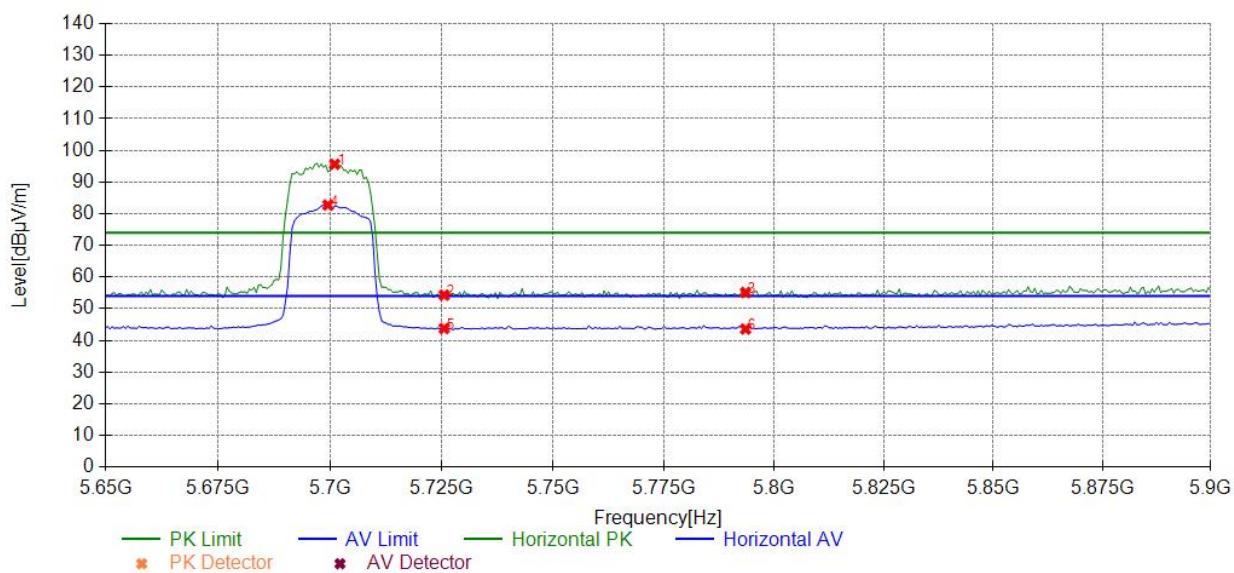
Test mode		802.11ac20							
Test channel		Lowest channel							
polarization		Vertical							
<b>Suspected List</b>									
Frequency [MHz]	Factor [dB]	Reading [dB $\mu$ V/m]	Level [dB $\mu$ V/m]	Limit [dB $\mu$ V/m]	Margin [dB]	Detector	Height [cm]	Angle deg	Pass/Fail
5460.4460	2.97	48.95	51.92	74.00	22.08	PK	150	321	PASS
5470.4470	3.00	49.47	52.47	74.00	21.53	PK	150	276	PASS
5500.4500	3.06	91.20	94.26	---	---	PK	150	185	---
5460.4460	2.97	39.83	42.80	54.00	11.20	AV	150	359	PASS
5470.4470	3.00	39.42	42.42	54.00	11.58	AV	150	354	PASS
5499.4499	3.07	78.18	81.25	---	---	AV	150	159	---



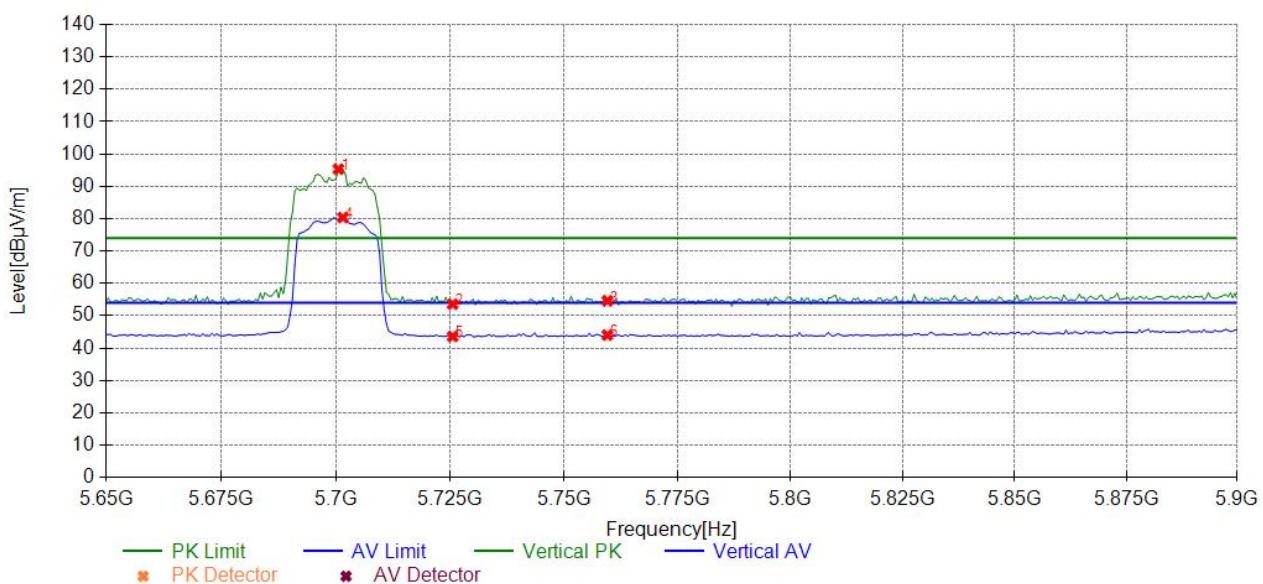
Test mode	802.11ac20
Test channel	Highest channel
polarization	Horizontal

### Suspected List

Frequency [MHz]	Factor [dB]	Reading [dB $\mu$ V/m]	Level [dB $\mu$ V/m]	Limit [dB $\mu$ V/m]	Margin [dB]	Detect or	Height [cm]	Angle deg	Pass/ Fail
5697.4697	3.90	90.84	94.74	---	---	PK	150	203	---
5725.4725	4.02	50.28	54.30	74.00	19.70	PK	150	132	PASS
5793.4793	4.31	50.82	55.13	74.00	18.87	PK	150	334	PASS
5699.4699	3.91	78.85	82.76	---	---	AV	150	138	---
5725.4725	4.02	39.74	43.76	54.00	10.24	AV	150	359	PASS
5793.4793	4.31	39.28	43.59	54.00	10.41	AV	150	106	PASS



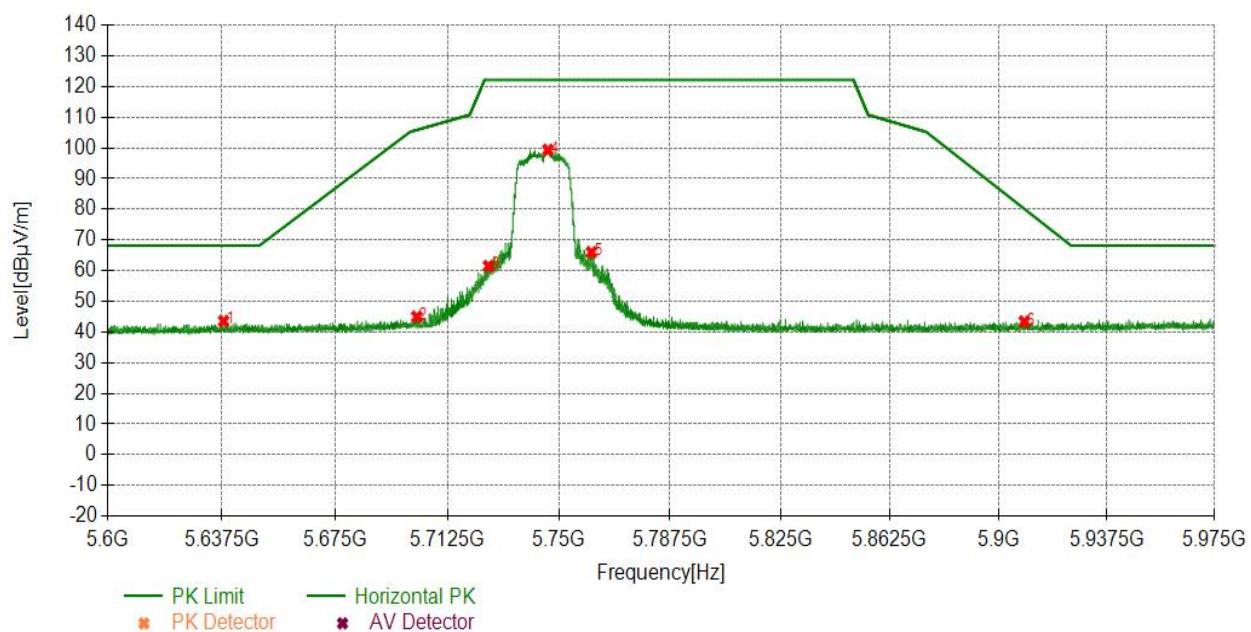
Suspected List									
Test mode	802.11ac20								
Test channel	Highest channel								
polarization	Vertical								
Frequency [MHz]	Factor [dB]	Reading [dB $\mu$ V/m]	Level [dB $\mu$ V/m]	Limit [dB $\mu$ V/m]	Margin [dB]	Detect or	Height [cm]	Angle deg	Pass/ Fail
5700.4700	3.91	91.40	95.31	---	---	PK	150	196	---
5725.4725	4.02	49.56	53.58	74.00	20.42	PK	150	313	PASS
5759.4759	4.16	50.44	54.60	74.00	19.40	PK	150	144	PASS
5701.4701	3.92	76.45	80.37	---	---	AV	150	222	---
5725.4725	4.02	39.58	43.60	54.00	10.40	AV	150	1	PASS
5759.4759	4.16	39.85	44.01	54.00	9.99	AV	150	6	PASS



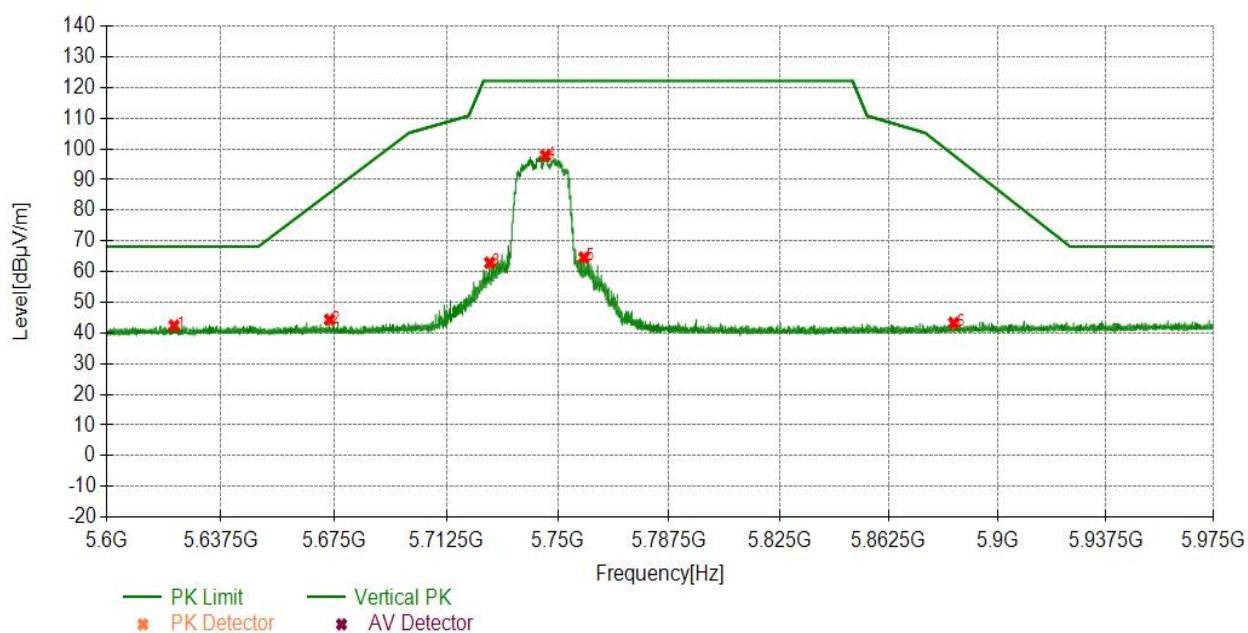
## U-NII-3 5725-5850MHz:

During the test, the Band Edge was performed in WIFI all modes with all channels and all antennas. 802.11ac20, MIMO are selected as the worst condition. The test data of the worst-case condition was recorded in this report.

Test mode		802.11ac20							
Test channel		Lowest channel							
polarization		Horizontal							
<b>Suspected List</b>									
Frequency [MHz]	Factor [dB]	Reading [dB $\mu$ V/m]	Level [dB $\mu$ V/m]	Limit [dB $\mu$ V/m]	Margin [dB]	Detect or	Height [cm]	Angle deg	Pass/Fail
5638.1413	3.37	40.20	43.57	68.20	24.63	PK	150	159	PASS
5702.3102	3.66	41.32	44.98	105.85	60.87	PK	150	179	PASS
5726.3126	3.78	57.70	61.48	122.20	60.72	PK	150	244	PASS
5746.2646	3.85	95.51	99.36	122.20	22.84	PK	150	205	PASS
5760.9285	3.94	62.04	65.98	122.20	56.22	PK	150	121	PASS
5908.8058	4.57	38.82	43.39	80.15	36.76	PK	150	224	PASS



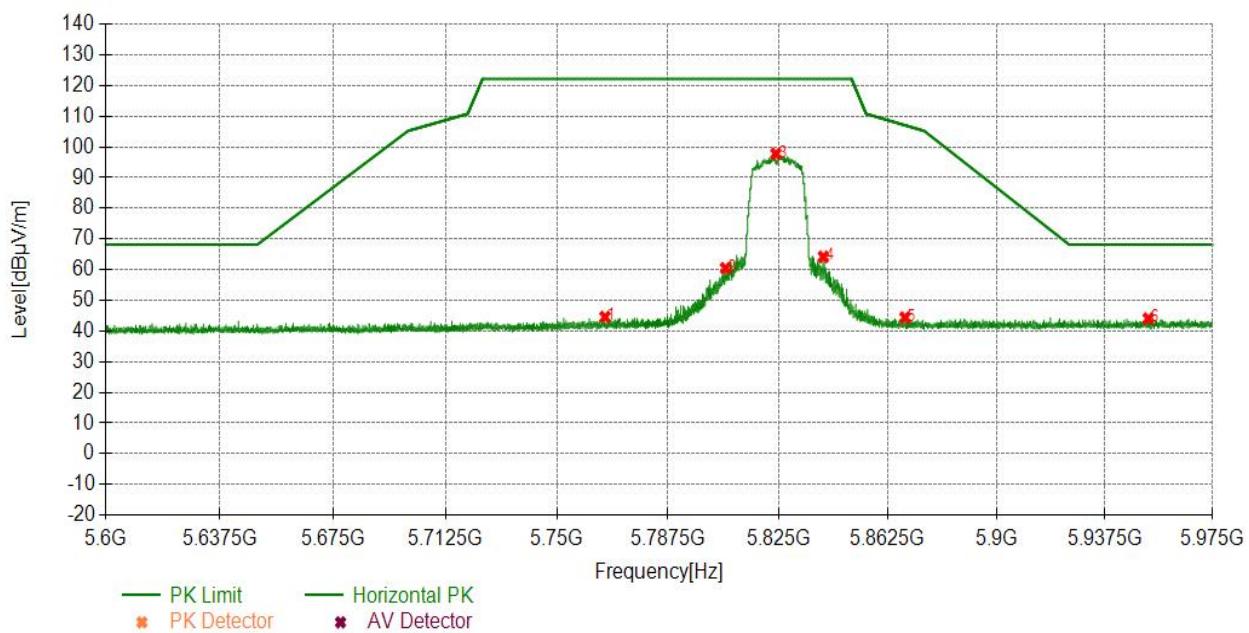
Test mode		802.11ac20							
Test channel		Lowest channel							
polarization		Vertical							
<b>Suspected List</b>									
Frequency [MHz]	Factor [dB]	Reading [dB $\mu$ V/m]	Level [dB $\mu$ V/m]	Limit [dB $\mu$ V/m]	Margin [dB]	Detect or	Height [cm]	Angle deg	Pass/ Fail
5622.1647	3.30	39.14	42.44	68.20	25.76	PK	150	218	PASS
5673.5823	3.53	40.80	44.33	85.69	41.36	PK	150	212	PASS
5727.0627	3.78	59.11	62.89	122.20	59.31	PK	150	193	PASS
5745.7395	3.85	93.97	97.82	122.20	24.38	PK	150	199	PASS
5758.7158	3.92	60.68	64.60	122.20	57.60	PK	150	212	PASS
5884.8034	4.47	38.81	43.28	97.92	54.64	PK	150	44	PASS



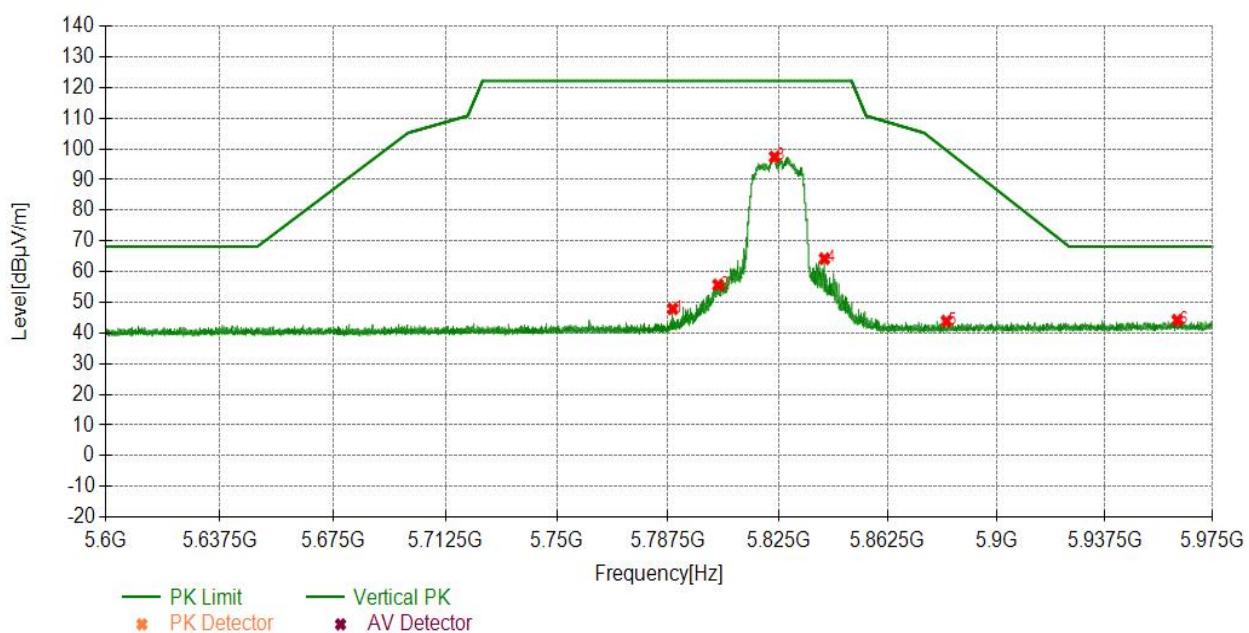
Test mode	802.11ac20
Test channel	Highest channel
polarization	Horizontal

### Suspected List

Frequency [MHz]	Factor [dB]	Reading [dB $\mu$ V/m]	Level [dB $\mu$ V/m]	Limit [dB $\mu$ V/m]	Margin [dB]	Detect or	Height [cm]	Angle deg	Pass/ Fail
5766.1791	3.95	40.61	44.56	122.20	77.64	PK	150	214	PASS
5807.0207	4.14	56.34	60.48	122.20	61.72	PK	150	247	PASS
5824.1599	4.21	93.52	97.73	122.20	24.47	PK	150	214	PASS
5840.3990	4.28	59.91	64.19	122.20	58.01	PK	150	175	PASS
5868.3768	4.40	39.98	44.38	107.05	62.67	PK	150	175	PASS
5952.5727	4.75	39.31	44.06	68.20	24.14	PK	150	142	PASS



Test mode		802.11ac20							
Test channel		Highest channel							
polarization		Vertical							
<b>Suspected List</b>									
Frequency [MHz]	Factor [dB]	Reading [dB $\mu$ V/m]	Level [dB $\mu$ V/m]	Limit [dB $\mu$ V/m]	Margin [dB]	Detect or	Height [cm]	Angle deg	Pass/ Fail
5789.0939	4.06	43.82	47.88	122.20	74.32	PK	150	206	PASS
5804.4329	4.13	51.56	55.69	122.20	66.51	PK	150	128	PASS
5823.6723	4.21	93.16	97.37	122.20	24.83	PK	150	199	PASS
5840.7740	4.28	59.96	64.24	122.20	57.96	PK	150	186	PASS
5882.6282	4.46	39.42	43.88	99.53	55.65	PK	150	206	PASS
5962.6237	4.80	39.38	44.18	68.20	24.02	PK	150	212	PASS



## 5.3 Maximum conducted output power

Ambient condition:

Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.2kPa

Method of Measurement:

During the process of the testing, The EUT was connected to spectrum analyzer through an external attenuator and a known loss cable. The EUT is max power transmission with proper modulation. Use the Peak detector.

The conducted Power is measured at each antenna port. The measured results at the various antenna ports are then summed mathematically.

Limits:

For client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or  $11 \text{ dBm} + 10 \log B$ , where B is the 26 dB emission bandwidth in megahertz. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

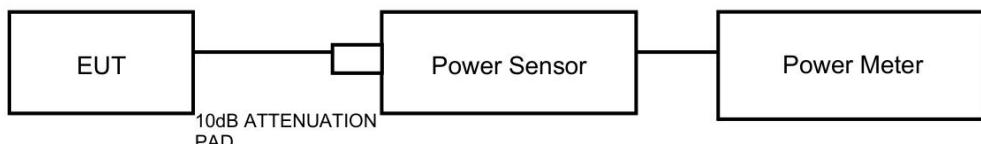
For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

Frequency(MHz)	Antenna Gain(dBi)		Directional gain	Power Limit Reduction
	Antenna 1	Antenna 2		
5150-5250	7.0	7.0	10.01	19.97
5250-5350	7.0	7.0	10.01	19.97 or 11 + 10 log B <sup>*</sup> -(Directional gain-6)
5470-5725	7.0	7.0	10.01	
5725-5825	7.0	7.0	10.01	25.99

Note: B is the 26 dB emission bandwidth in megahertz.  
 Refer to KDB662911 D01 Multiple Transmitter Output v02r01.  
 Note: B is the 26 dB emission bandwidth in megahertz.  
 Directional gain is to be computed as follows:  
 transmit signals are correlated, then  

$$\text{Directional gain} = 10 \log[(10^{G_1/20} + 10^{G_2/20} + \dots + 10^{G_N/20})^2 / N_{\text{ANT}}] \text{ dBi}$$
 [Note the "20"s in the denominator of each exponent and the square of the sum of terms; the object is to combine the signal levels coherently.]

## Test Setup:



## Measurement Uncertainty:

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor  $k = 2$ ,  $U = 0.44$  dB.

## Test Results:

Test Mode	Antenna	Freq(MHz)	Result [dBm]	Limit [dBm]	Verdict
11A	Ant1	5180	14.45	≤22.98	PASS
	Ant2	5180	12.09	≤22.98	PASS
	Ant1	5200	14.07	≤22.98	PASS
	Ant2	5200	12.35	≤22.98	PASS
	Ant1	5240	13.74	≤22.98	PASS
	Ant2	5240	11.11	≤22.98	PASS
	Ant1	5260	13.53	≤22.98	PASS
	Ant2	5260	11.27	≤22.98	PASS
	Ant1	5280	13.78	≤22.98	PASS
	Ant2	5280	11.18	≤22.98	PASS
	Ant1	5320	13.15	≤22.98	PASS
	Ant2	5320	9.83	≤22.98	PASS
	Ant1	5500	13.53	≤22.98	PASS
	Ant2	5500	13.95	≤22.95	PASS
	Ant1	5580	12.60	≤22.98	PASS
	Ant2	5580	16.01	≤22.98	PASS
	Ant1	5700	13.33	≤22.98	PASS
	Ant2	5700	13.87	≤22.98	PASS
	Ant1	5745	14.61	≤29.00	PASS
	Ant2	5745	16.82	≤29.00	PASS
	Ant1	5785	14.78	≤29.00	PASS
	Ant2	5785	16.25	≤29.00	PASS
	Ant1	5825	14.02	≤29.00	PASS
	Ant2	5825	16.25	≤29.00	PASS
11N20MIMO	Ant1	5180	12.67	≤19.97	PASS
	Ant2	5180	11.44	≤19.97	PASS
	total	5180	15.11	≤19.97	PASS
	Ant1	5200	12.41	≤19.97	PASS
	Ant2	5200	11.28	≤19.97	PASS
	total	5200	14.89	≤19.97	PASS
	Ant1	5240	12.77	≤19.97	PASS
	Ant2	5240	9.21	≤19.97	PASS
	total	5240	14.36	≤19.97	PASS
	Ant1	5260	12.66	≤19.97	PASS
	Ant2	5260	10.18	≤19.97	PASS
	total	5260	14.60	≤19.97	PASS
	Ant1	5280	12.65	≤19.97	PASS
	Ant2	5280	9.35	≤19.97	PASS
	total	5280	14.32	≤19.97	PASS
	Ant1	5320	11.93	≤19.97	PASS
	Ant2	5320	7.71	≤19.97	PASS
	total	5320	13.32	≤19.97	PASS
	Ant1	5500	11.89	≤19.97	PASS
	Ant2	5500	13.04	≤19.97	PASS
	total	5500	15.51	≤19.97	PASS
	Ant1	5580	11.31	≤19.97	PASS
	Ant2	5580	14.73	≤19.97	PASS
	total	5580	16.36	≤19.97	PASS
	Ant1	5700	12.65	≤19.97	PASS
	Ant2	5700	13.45	≤19.97	PASS
	total	5700	16.08	≤19.97	PASS
	Ant1	5745	13.99	≤25.99	PASS
	Ant2	5745	18.34	≤25.99	PASS
	total	5745	19.70	≤25.99	PASS
	Ant1	5785	14.19	≤25.99	PASS
	Ant2	5785	16.01	≤25.99	PASS
	total	5785	18.20	≤25.99	PASS
	Ant1	5825	13.28	≤25.99	PASS
	Ant2	5825	17.37	≤25.99	PASS
	total	5825	18.80	≤25.99	PASS

Test Mode	Antenna	Freq(MHz)	Result [dBm]	Limit [dBm]	Verdict
11N40MIMO	Ant1	5190	13.83	≤19.97	PASS
	Ant2	5190	11.79	≤19.97	PASS
	total	5190	15.94	≤19.97	PASS
	Ant1	5230	13.01	≤19.97	PASS
	Ant2	5230	9.38	≤19.97	PASS
	total	5230	14.57	≤19.97	PASS
	Ant1	5270	12.57	≤19.97	PASS
	Ant2	5270	9.49	≤19.97	PASS
	total	5270	14.31	≤19.97	PASS
	Ant1	5310	12.19	≤19.97	PASS
	Ant2	5310	7.81	≤19.97	PASS
	total	5310	13.54	≤19.97	PASS
	Ant1	5510	11.49	≤19.97	PASS
	Ant2	5510	13.22	≤19.97	PASS
	total	5510	15.45	≤19.97	PASS
	Ant1	5550	11.84	≤19.97	PASS
	Ant2	5550	14.46	≤19.97	PASS
	total	5550	16.35	≤19.97	PASS
	Ant1	5670	12.52	≤19.97	PASS
	Ant2	5670	16.77	≤19.97	PASS
	total	5670	18.16	≤19.97	PASS
	Ant1	5755	13.87	≤25.99	PASS
	Ant2	5755	18.80	≤25.99	PASS
	total	5755	20.01	≤25.99	PASS
	Ant1	5795	14.36	≤25.99	PASS
	Ant2	5795	16.30	≤25.99	PASS
	total	5795	18.45	≤25.99	PASS
11AC20MIMO	Ant1	5180	12.82	≤19.97	PASS
	Ant2	5180	11.30	≤19.97	PASS
	total	5180	15.14	≤19.97	PASS
	Ant1	5200	12.49	≤19.97	PASS
	Ant2	5200	10.98	≤19.97	PASS
	total	5200	14.81	≤19.97	PASS
	Ant1	5240	12.82	≤19.97	PASS
	Ant2	5240	8.80	≤19.97	PASS
	total	5240	14.27	≤19.97	PASS
	Ant1	5260	12.64	≤19.97	PASS
	Ant2	5260	9.78	≤19.97	PASS
	total	5260	14.45	≤19.97	PASS
	Ant1	5280	12.54	≤19.97	PASS
	Ant2	5280	9.04	≤19.97	PASS
	total	5280	14.14	≤19.97	PASS
	Ant1	5320	12.20	≤19.97	PASS
	Ant2	5320	8.02	≤19.97	PASS
	total	5320	13.60	≤19.97	PASS
	Ant1	5500	11.88	≤19.97	PASS
	Ant2	5500	13.04	≤19.97	PASS
	total	5500	15.51	≤19.97	PASS
	Ant1	5580	11.41	≤19.97	PASS
	Ant2	5580	14.85	≤19.97	PASS
	total	5580	16.47	≤19.97	PASS
	Ant1	5700	12.52	≤19.97	PASS
	Ant2	5700	13.59	≤19.97	PASS
	total	5700	16.10	≤19.97	PASS
	Ant1	5745	13.89	≤25.99	PASS
	Ant2	5745	18.36	≤25.99	PASS
	total	5745	19.69	≤25.99	PASS
	Ant1	5785	16.36	≤25.99	PASS
	Ant2	5785	16.20	≤25.99	PASS
	total	5785	19.29	≤25.99	PASS
	Ant1	5825	15.82	≤25.99	PASS
	Ant2	5825	17.90	≤25.99	PASS

Test Mode	Antenna	Freq(MHz)	Result [dBm]	Limit [dBm]	Verdict
11AC40MIMO	total	5825	19.99	≤25.99	PASS
	Ant1	5190	10.25	≤19.97	PASS
	Ant2	5190	10.19	≤19.97	PASS
	total	5190	13.23	≤19.97	PASS
	Ant1	5230	10.50	≤19.97	PASS
	Ant2	5230	10.75	≤19.97	PASS
	total	5230	13.64	≤19.97	PASS
	Ant1	5270	10.41	≤19.97	PASS
	Ant2	5270	10.56	≤19.97	PASS
	total	5270	13.50	≤19.97	PASS
	Ant1	5310	9.80	≤19.97	PASS
	Ant2	5310	10.09	≤19.97	PASS
	total	5310	12.96	≤19.97	PASS
	Ant1	5510	10.05	≤19.97	PASS
	Ant2	5510	10.23	≤19.97	PASS
	total	5510	13.15	≤19.97	PASS
	Ant1	5550	10.30	≤19.97	PASS
	Ant2	5550	10.46	≤19.97	PASS
	total	5550	13.39	≤19.97	PASS
	Ant1	5670	8.21	≤19.97	PASS
	Ant2	5670	8.36	≤19.97	PASS
	total	5670	11.30	≤19.97	PASS
	Ant1	5755	8.35	≤25.99	PASS
	Ant2	5755	8.58	≤25.99	PASS
	total	5755	11.48	≤25.99	PASS
	Ant1	5795	8.53	≤25.99	PASS
	Ant2	5795	8.70	≤25.99	PASS
	total	5795	11.63	≤25.99	PASS
11AC80MIMO	Ant1	5210	10.88	≤19.97	PASS
	Ant2	5210	11.19	≤19.97	PASS
	total	5210	14.05	≤19.97	PASS
	Ant1	5290	10.12	≤19.97	PASS
	Ant2	5290	10.41	≤19.97	PASS
	total	5290	13.28	≤19.97	PASS
	Ant1	5530	6.00	≤19.97	PASS
	Ant2	5530	10.42	≤19.97	PASS
	total	5530	11.76	≤19.97	PASS
	Ant1	5610	9.10	≤19.97	PASS
	Ant2	5610	9.39	≤19.97	PASS
	total	5610	12.26	≤19.97	PASS
	Ant1	5775	8.12	≤25.99	PASS
	Ant2	5775	8.27	≤25.99	PASS
	total	5775	11.21	≤25.99	PASS

## 5.4 Min Emission Bandwidth and Emission Bandwidth and Occupied Bandwidth

Ambient condition:

Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.2kPa

Method of Measurement:

The EUT was connected to the spectrum analyzer through an external attenuator (20dB) and a known loss cable.

For U-NII-1, set RBW  $\approx$ 1% OCB kHz, VBW  $\geq$  3  $\times$  RBW, 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 26 dB relative to the maximum level measured in the fundamental emission.

For U-NII-3, Set RBW = 100 kHz, VBW  $\geq$  3  $\times$  RBW, 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.

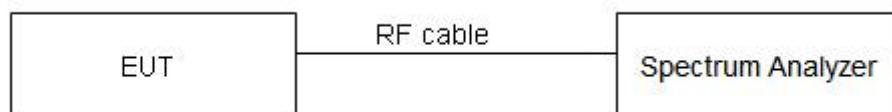
Note: The automatic bandwidth measurement capability of a spectrum analyzer or EMI receiver may be employed if it implements the functionality described above.

Use the 99 % power bandwidth function of the instrument.

Limits:

Within the 5.725-5.85 GHz band, the minimum 6 dB bandwidth of U-NII devices shall be at least 500 kHz.

Test Setup:



Measurement Uncertainty:

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor k = 2, U= 936 Hz.

## Test Results: Min emission bandwidth

TestMode	Antenna	Freq(MHz)	6db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5745	16.320	5736.720	5753.040	$\geq 0.5$	PASS
	Ant2	5745	16.320	5736.720	5753.040	$\geq 0.5$	PASS
	Ant1	5785	16.320	5776.720	5793.040	$\geq 0.5$	PASS
	Ant2	5785	16.320	5776.720	5793.040	$\geq 0.5$	PASS
	Ant1	5825	16.320	5816.720	5833.040	$\geq 0.5$	PASS
	Ant2	5825	16.320	5816.720	5833.040	$\geq 0.5$	PASS
11N20MIMO	Ant1	5745	17.560	5736.120	5753.680	$\geq 0.5$	PASS
	Ant2	5745	17.560	5736.080	5753.640	$\geq 0.5$	PASS
	Ant1	5785	17.600	5776.080	5793.680	$\geq 0.5$	PASS
	Ant2	5785	17.600	5776.080	5793.680	$\geq 0.5$	PASS
	Ant1	5825	17.600	5816.080	5833.680	$\geq 0.5$	PASS
	Ant2	5825	17.560	5816.080	5833.640	$\geq 0.5$	PASS
11N40MIMO	Ant1	5755	36.240	5736.760	5773.000	$\geq 0.5$	PASS
	Ant2	5755	36.240	5736.760	5773.000	$\geq 0.5$	PASS
	Ant1	5795	36.240	5776.760	5813.000	$\geq 0.5$	PASS
	Ant2	5795	36.240	5776.760	5813.000	$\geq 0.5$	PASS
11AC20MIMO	Ant1	5745	17.600	5736.080	5753.680	$\geq 0.5$	PASS
	Ant2	5745	17.520	5736.120	5753.640	$\geq 0.5$	PASS
	Ant1	5785	17.600	5776.080	5793.680	$\geq 0.5$	PASS
	Ant2	5785	17.600	5776.080	5793.680	$\geq 0.5$	PASS
	Ant1	5825	17.600	5816.080	5833.680	$\geq 0.5$	PASS
	Ant2	5825	17.600	5816.080	5833.680	$\geq 0.5$	PASS
11AC40MIMO	Ant1	5755	36.240	5736.760	5773.000	$\geq 0.5$	PASS
	Ant2	5755	36.240	5736.760	5773.000	$\geq 0.5$	PASS
	Ant1	5795	36.000	5776.760	5812.760	$\geq 0.5$	PASS
	Ant2	5795	36.240	5776.760	5813.000	$\geq 0.5$	PASS
11AC80MIMO	Ant1	5775	76.320	5736.760	5813.080	$\geq 0.5$	PASS
	Ant2	5775	76.320	5736.760	5813.080	$\geq 0.5$	PASS

## Test Results: Emission Bandwidth

TestMode	Antenna	Freq(MHz)	26db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	19.960	5169.840	5189.800	---	---
	Ant2	5180	19.760	5170.080	5189.840	---	---
	Ant1	5200	19.920	5189.800	5209.720	---	---
	Ant2	5200	20.160	5189.760	5209.920	---	---
	Ant1	5240	19.920	5230.080	5250.000	---	---
	Ant2	5240	20.040	5229.880	5249.920	---	---
	Ant1	5260	19.840	5249.920	5269.760	---	---
	Ant2	5260	19.920	5249.920	5269.840	---	---
	Ant1	5280	19.880	5270.040	5289.920	---	---
	Ant2	5280	19.960	5269.880	5289.840	---	---
	Ant1	5320	19.920	5310.040	5329.960	---	---
	Ant2	5320	20.080	5309.920	5330.000	---	---
	Ant1	5500	20.040	5489.880	5509.920	---	---
	Ant2	5500	19.720	5490.040	5509.760	---	---
	Ant1	5580	20.240	5569.640	5589.880	---	---
	Ant2	5580	20.360	5569.680	5590.040	---	---
	Ant1	5700	20.400	5689.800	5710.200	---	---
	Ant2	5700	20.000	5689.840	5709.840	---	---
	Ant1	5745	20.080	5734.680	5754.760	---	---
	Ant2	5745	19.840	5735.040	5754.880	---	---
	Ant1	5785	19.760	5775.000	5794.760	---	---
	Ant2	5785	20.080	5774.800	5794.880	---	---
	Ant1	5825	19.960	5814.880	5834.840	---	---
	Ant2	5825	19.880	5814.920	5834.800	---	---
11N20MIMO	Ant1	5180	20.280	5169.760	5190.040	---	---
	Ant2	5180	20.320	5169.720	5190.040	---	---
	Ant1	5200	20.240	5189.720	5209.960	---	---
	Ant2	5200	20.200	5189.720	5209.920	---	---
	Ant1	5240	20.360	5229.640	5250.000	---	---
	Ant2	5240	20.520	5229.600	5250.120	---	---
	Ant1	5260	20.080	5249.880	5269.960	---	---
	Ant2	5260	20.200	5249.880	5270.080	---	---
	Ant1	5280	20.360	5269.560	5289.920	---	---
	Ant2	5280	20.200	5269.720	5289.920	---	---
	Ant1	5320	20.320	5309.640	5329.960	---	---
	Ant2	5320	20.360	5309.640	5330.000	---	---
	Ant1	5500	20.240	5489.760	5510.000	---	---
	Ant2	5500	20.000	5489.960	5509.960	---	---
	Ant1	5580	20.400	5569.800	5590.200	---	---
	Ant2	5580	20.320	5569.640	5589.960	---	---
	Ant1	5700	20.400	5689.640	5710.040	---	---
	Ant2	5700	20.200	5689.920	5710.120	---	---
	Ant1	5745	20.120	5734.840	5754.960	---	---
	Ant2	5745	20.400	5734.760	5755.160	---	---
	Ant1	5785	20.240	5774.840	5795.080	---	---
	Ant2	5785	20.160	5774.640	5794.800	---	---
	Ant1	5825	20.400	5814.680	5835.080	---	---
	Ant2	5825	20.240	5814.640	5834.880	---	---
11N40MIMO	Ant1	5190	40.720	5169.440	5210.160	---	---
	Ant2	5190	40.240	5169.520	5209.760	---	---
	Ant1	5230	40.560	5209.840	5250.400	---	---
	Ant2	5230	40.560	5209.600	5250.160	---	---
	Ant1	5270	40.320	5249.760	5290.080	---	---
	Ant2	5270	39.600	5249.920	5289.520	---	---
	Ant1	5310	40.080	5289.840	5329.920	---	---
	Ant2	5310	40.880	5289.200	5330.080	---	---
	Ant1	5510	40.560	5489.600	5530.160	---	---
	Ant2	5510	39.600	5490.240	5529.840	---	---
	Ant1	5550	40.400	5529.680	5570.080	---	---
	Ant2	5550	40.000	5530.000	5570.000	---	---

TestMode	Antenna	Freq(MHz)	26db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11AC20MIMO	Ant1	5670	40.400	5649.760	5690.160	---	---
	Ant2	5670	40.400	5649.840	5690.240	---	---
	Ant1	5755	40.560	5734.760	5775.320	---	---
	Ant2	5755	40.160	5735.080	5775.240	---	---
	Ant1	5795	40.320	5774.840	5815.160	---	---
	Ant2	5795	41.280	5774.280	5815.560	---	---
11AC40MIMO	Ant1	5180	20.560	5169.680	5190.240	---	---
	Ant2	5180	20.120	5169.760	5189.880	---	---
	Ant1	5200	20.120	5189.800	5209.920	---	---
	Ant2	5200	20.240	5189.800	5210.040	---	---
	Ant1	5240	20.160	5229.720	5249.880	---	---
	Ant2	5240	20.480	5229.760	5250.240	---	---
	Ant1	5260	20.080	5249.840	5269.920	---	---
	Ant2	5260	20.120	5249.800	5269.920	---	---
	Ant1	5280	20.240	5269.800	5290.040	---	---
	Ant2	5280	20.240	5269.720	5289.960	---	---
	Ant1	5320	20.080	5309.800	5329.880	---	---
	Ant2	5320	20.400	5309.640	5330.040	---	---
	Ant1	5500	20.040	5489.800	5509.840	---	---
	Ant2	5500	20.120	5489.840	5509.960	---	---
	Ant1	5580	20.360	5569.680	5590.040	---	---
	Ant2	5580	20.440	5569.600	5590.040	---	---
	Ant1	5700	20.480	5689.520	5710.000	---	---
	Ant2	5700	20.200	5689.840	5710.040	---	---
	Ant1	5745	20.120	5734.800	5754.920	---	---
	Ant2	5745	20.240	5734.760	5755.000	---	---
	Ant1	5785	20.400	5774.640	5795.040	---	---
	Ant2	5785	20.200	5774.760	5794.960	---	---
	Ant1	5825	20.360	5814.760	5835.120	---	---
	Ant2	5825	20.440	5814.800	5835.240	---	---
11AC80MIMO	Ant1	5190	40.640	5169.520	5210.160	---	---
	Ant2	5190	40.400	5169.520	5209.920	---	---
	Ant1	5230	40.720	5209.360	5250.080	---	---
	Ant2	5230	40.560	5209.600	5250.160	---	---
	Ant1	5270	40.160	5249.760	5289.920	---	---
	Ant2	5270	41.040	5249.440	5290.480	---	---
	Ant1	5310	40.640	5289.360	5330.000	---	---
	Ant2	5310	40.400	5289.760	5330.160	---	---
	Ant1	5510	40.160	5489.680	5529.840	---	---
	Ant2	5510	40.400	5489.680	5530.080	---	---
	Ant1	5550	40.960	5529.280	5570.240	---	---
	Ant2	5550	40.960	5529.360	5570.320	---	---
	Ant1	5670	40.560	5649.600	5690.160	---	---
	Ant2	5670	41.280	5649.360	5690.640	---	---
	Ant1	5755	40.400	5734.680	5775.080	---	---
	Ant2	5755	40.720	5734.600	5775.320	---	---
	Ant1	5795	41.040	5774.280	5815.320	---	---
	Ant2	5795	40.720	5774.520	5815.240	---	---

## Test Results: Occupied channel bandwidth

TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	16.817	5171.6079	5188.4249	---	---
	Ant2	5180	16.847	5171.5777	5188.4247	---	---
	Ant1	5200	16.772	5191.6106	5208.3826	---	---
	Ant2	5200	16.737	5191.5883	5208.3253	---	---
	Ant1	5240	16.856	5231.5446	5248.4006	---	---
	Ant2	5240	16.650	5231.6667	5248.3167	---	---
	Ant1	5260	16.886	5251.5739	5268.4599	---	---
	Ant2	5260	16.699	5251.6264	5268.3254	---	---
	Ant1	5280	16.852	5271.5615	5288.4135	---	---
	Ant2	5280	16.734	5271.5835	5288.3175	---	---
	Ant1	5320	16.868	5311.5469	5328.4149	---	---
	Ant2	5320	16.721	5311.6503	5328.3713	---	---
	Ant1	5500	16.873	5491.5598	5508.4328	---	---
	Ant2	5500	16.690	5491.6432	5508.3332	---	---
	Ant1	5580	16.849	5571.6044	5588.4534	---	---
	Ant2	5580	16.741	5571.6093	5588.3503	---	---
	Ant1	5700	16.850	5691.5562	5708.4062	---	---
	Ant2	5700	16.707	5691.6672	5708.3742	---	---
	Ant1	5745	16.780	5736.6121	5753.3921	---	---
	Ant2	5745	16.651	5736.6683	5753.3193	---	---
	Ant1	5785	16.823	5776.5905	5793.4135	---	---
	Ant2	5785	16.686	5776.6411	5793.3271	---	---
	Ant1	5825	16.849	5816.5807	5833.4297	---	---
	Ant2	5825	16.676	5816.6551	5833.3311	---	---
11N20MIMO	Ant1	5180	17.783	5171.0999	5188.8829	---	---
	Ant2	5180	17.719	5171.1890	5188.9080	---	---
	Ant1	5200	17.813	5191.1139	5208.9269	---	---
	Ant2	5200	17.735	5191.1436	5208.8786	---	---
	Ant1	5240	17.795	5231.0982	5248.8932	---	---
	Ant2	5240	17.759	5231.0785	5248.8375	---	---
	Ant1	5260	17.837	5251.0841	5268.9211	---	---
	Ant2	5260	17.727	5251.1443	5268.8713	---	---
	Ant1	5280	17.762	5271.1109	5288.8729	---	---
	Ant2	5280	17.670	5271.2158	5288.8858	---	---
	Ant1	5320	17.791	5311.0722	5328.8632	---	---
	Ant2	5320	17.767	5311.0615	5328.8285	---	---
	Ant1	5500	17.782	5491.0779	5508.8599	---	---
	Ant2	5500	17.697	5491.1534	5508.8504	---	---
	Ant1	5580	17.869	5571.0532	5588.9222	---	---
	Ant2	5580	17.727	5571.1421	5588.8691	---	---
	Ant1	5700	17.841	5691.0941	5708.9351	---	---
	Ant2	5700	17.782	5691.0719	5708.8539	---	---
	Ant1	5745	17.801	5736.0738	5753.8748	---	---
	Ant2	5745	17.746	5736.1516	5753.8976	---	---
	Ant1	5785	17.772	5776.1195	5793.8915	---	---
	Ant2	5785	17.763	5776.0519	5793.8149	---	---
	Ant1	5825	17.817	5816.0821	5833.8991	---	---
	Ant2	5825	17.731	5816.1673	5833.8983	---	---
11N40MIMO	Ant1	5190	36.070	5171.9591	5208.0291	---	---
	Ant2	5190	36.052	5171.9973	5208.0493	---	---
	Ant1	5230	36.110	5211.9236	5248.0336	---	---
	Ant2	5230	36.131	5211.8870	5248.0180	---	---
	Ant1	5270	36.089	5251.9451	5288.0341	---	---
	Ant2	5270	36.110	5252.0376	5288.1476	---	---
	Ant1	5310	36.178	5291.9236	5328.1016	---	---
	Ant2	5310	36.203	5291.9497	5328.1527	---	---
	Ant1	5510	36.184	5491.8765	5528.0605	---	---
	Ant2	5510	36.184	5491.8424	5528.0264	---	---
	Ant1	5550	36.307	5531.8438	5568.1508	---	---

TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11AC20MIMO	Ant2	5550	36.073	5532.0006	5568.0736	---	---
	Ant1	5670	36.265	5651.9118	5688.1768	---	---
	Ant2	5670	36.065	5651.9320	5687.9970	---	---
	Ant1	5755	36.325	5736.8916	5773.2166	---	---
	Ant2	5755	36.094	5736.9212	5773.0152	---	---
	Ant1	5795	36.213	5776.8914	5813.1044	---	---
	Ant2	5795	36.384	5776.8272	5813.2112	---	---
11AC40MIMO	Ant1	5180	17.761	5171.1165	5188.8775	---	---
	Ant2	5180	17.713	5171.2186	5188.9316	---	---
	Ant1	5200	17.808	5191.0613	5208.8693	---	---
	Ant2	5200	17.757	5191.1425	5208.8995	---	---
	Ant1	5240	17.808	5231.0819	5248.8899	---	---
	Ant2	5240	17.783	5231.0848	5248.8678	---	---
	Ant1	5260	17.783	5251.1083	5268.8913	---	---
	Ant2	5260	17.716	5251.1588	5268.8748	---	---
	Ant1	5280	17.749	5271.1236	5288.8726	---	---
	Ant2	5280	17.642	5271.2121	5288.8541	---	---
	Ant1	5320	17.749	5311.1171	5328.8661	---	---
	Ant2	5320	17.803	5311.0404	5328.8434	---	---
	Ant1	5500	17.842	5491.0826	5508.9246	---	---
	Ant2	5500	17.741	5491.0958	5508.8368	---	---
	Ant1	5580	17.840	5571.0736	5588.9136	---	---
	Ant2	5580	17.744	5571.1325	5588.8765	---	---
	Ant1	5700	17.819	5691.0906	5708.9096	---	---
	Ant2	5700	17.694	5691.1228	5708.8168	---	---
	Ant1	5745	17.844	5736.0358	5753.8798	---	---
	Ant2	5745	17.732	5736.1675	5753.8995	---	---
	Ant1	5785	17.831	5776.0776	5793.9086	---	---
	Ant2	5785	17.746	5776.0554	5793.8014	---	---
	Ant1	5825	17.799	5816.0779	5833.8769	---	---
	Ant2	5825	17.689	5816.1687	5833.8577	---	---
11AC80MIMO	Ant1	5190	36.169	5171.9314	5208.1004	---	---
	Ant2	5190	36.117	5171.9439	5208.0609	---	---
	Ant1	5230	36.195	5211.8138	5248.0088	---	---
	Ant2	5230	36.148	5211.8796	5248.0276	---	---
	Ant1	5270	36.207	5251.8446	5288.0516	---	---
	Ant2	5270	36.140	5251.8860	5288.0260	---	---
	Ant1	5310	36.216	5291.8096	5328.0256	---	---
	Ant2	5310	36.194	5291.8566	5328.0506	---	---
	Ant1	5510	36.192	5491.8540	5528.0460	---	---
	Ant2	5510	36.144	5492.0052	5528.1492	---	---
	Ant1	5550	36.075	5531.9638	5568.0388	---	---
	Ant2	5550	36.045	5532.0205	5568.0655	---	---
	Ant1	5670	36.216	5651.9755	5688.1915	---	---
	Ant2	5670	36.080	5651.9171	5687.9971	---	---
	Ant1	5755	36.184	5736.9120	5773.0960	---	---
	Ant2	5755	35.969	5736.9904	5772.9594	---	---
	Ant1	5795	36.140	5776.9352	5813.0752	---	---
	Ant2	5795	36.398	5776.7987	5813.1967	---	---

## 5.5 Maximum Power Spectral Density

Ambient condition:

Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.2kPa

### Method of Measurement:

The EUT was connected to the spectrum analyzer through an external attenuator (20dB) and a known loss cable.

Set RBW = 300 kHz, VBW =1.5MHz for the band 5.725-5.85 GHz

Set RBW = 1 MHz, VBW =3MHz for the band 5.150-5.250 GHz

The conducted PSD is measured at each antenna port. The measured results at the various antenna ports are then summed mathematically.

### Limits:

For client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

For the band 5.725-5.85 GHz, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

Frequency Bands/MHz	Limits
5150-5250	11dBm/MHz
5.25-5.35 GHz and 5.47-5.725 GHz	11dBm/MHz
5725-5850	30dBm/500kHz

Frequency(MHz)	Antenna Gain(dBi)		Directional gain	Limit
	Antenna 1	Antenna 2		
5150-5250	7.0	7.0	10.01	6.99dBm/MHz
5250-5350	7.0	7.0	10.01	6.99dBm/MHz
5470-5725	7.0	7.0	10.01	
5725-5825	7.0	7.0	10.01	25.99dBm/500kHz

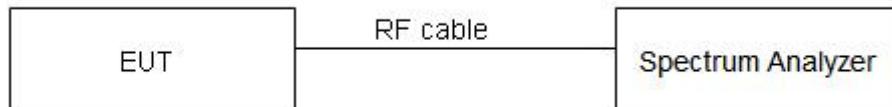
Refer to KDB662911 D01 Multiple Transmitter Output v02r01.

Directional gain is to be computed as follows:

transmit signals are correlated, then

Directional gain =  $10 \log[(10^{G_1/20} + 10^{G_2/20} + \dots + 10^{G_N/20})^2 / N_{ANT}] \text{ dBi}$  [Note the "20"s in the denominator of each exponent and the square of the sum of terms; the object is to combine the signal levels coherently.]

## Test Setup:



## Measurement Uncertainty:

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor  $k = 2$ ,  $U = 0.75\text{dB}$ .

## Test Results:

TestMode	Antenna	Freq(MHz)	Result [dBm/MHz] [dBm/500kHz for W58 Band]	Limit[dBm/MHz]	Verdict
11A	Ant1	5180	4.41	≤10.00	PASS
	Ant2	5180	2.13	≤10.00	PASS
	Ant1	5200	3.95	≤10.00	PASS
	Ant2	5200	2.57	≤10.00	PASS
	Ant1	5240	3.65	≤10.00	PASS
	Ant2	5240	0.96	≤10.00	PASS
	Ant1	5260	3.58	≤10.00	PASS
	Ant2	5260	1.26	≤10.00	PASS
	Ant1	5280	3.82	≤10.00	PASS
	Ant2	5280	1.18	≤10.00	PASS
	Ant1	5320	3.08	≤10.00	PASS
	Ant2	5320	-0.17	≤10.00	PASS
	Ant1	5500	3.46	≤10.00	PASS
	Ant2	5500	3.67	≤10.00	PASS
	Ant1	5580	2.77	≤10.00	PASS
	Ant2	5580	5.88	≤10.00	PASS

TestMode	Antenna	Freq(MHz)	Result [dBm/MHz] [dBm/500kHz for W58 Band]	Limit[dBm/MHz]	Verdict
11N20MIMO	Ant1	5700	3.30	≤10.00	PASS
	Ant2	5700	3.26	≤10.00	PASS
	Ant1	5745	1.76	≤29.00	PASS
	Ant2	5745	4.06	≤29.00	PASS
	Ant1	5785	1.93	≤29.00	PASS
	Ant2	5785	3.13	≤29.00	PASS
	Ant1	5825	1.16	≤29.00	PASS
	Ant2	5825	3.37	≤29.00	PASS
11N40MIMO	Ant1	5180	3.46	≤6.99	PASS
	Ant2	5180	1.16	≤6.99	PASS
	total	5180	5.47	≤6.99	PASS
	Ant1	5200	3.18	≤6.99	PASS
	Ant2	5200	1.18	≤6.99	PASS
	total	5200	5.30	≤6.99	PASS
	Ant1	5240	2.46	≤6.99	PASS
	Ant2	5240	-1.01	≤6.99	PASS
	total	5240	4.07	≤6.99	PASS
	Ant1	5260	2.61	≤6.99	PASS
	Ant2	5260	0.01	≤6.99	PASS
	total	5260	4.51	≤6.99	PASS
	Ant1	5280	2.42	≤6.99	PASS
	Ant2	5280	-0.89	≤6.99	PASS
	total	5280	4.08	≤6.99	PASS
	Ant1	5320	1.52	≤6.99	PASS
	Ant2	5320	-2.60	≤6.99	PASS
	total	5320	2.94	≤6.99	PASS
	Ant1	5500	1.57	≤6.99	PASS
	Ant2	5500	2.84	≤6.99	PASS
	total	5500	5.26	≤6.99	PASS
	Ant1	5580	1.03	≤6.99	PASS
	Ant2	5580	4.51	≤6.99	PASS
	total	5580	6.12	≤6.99	PASS
	Ant1	5700	2.36	≤6.99	PASS
	Ant2	5700	2.70	≤6.99	PASS
	total	5700	5.54	≤6.99	PASS
	Ant1	5745	0.84	≤25.99	PASS
	Ant2	5745	5.47	≤25.99	PASS
	total	5745	6.76	≤25.99	PASS
	Ant1	5785	0.87	≤25.99	PASS
	Ant2	5785	2.54	≤25.99	PASS
	total	5785	4.80	≤25.99	PASS
	Ant1	5825	0.22	≤25.99	PASS
	Ant2	5825	4.18	≤25.99	PASS
	total	5825	5.65	≤25.99	PASS

TestMode	Antenna	Freq(MHz)	Result [dBm/MHz] [dBm/500kHz for W58 Band]	Limit[dBm/MHz]	Verdict
11AC20MIMO	Ant2	5270	-3.38	≤6.99	PASS
	total	5270	1.28	≤6.99	PASS
	Ant1	5310	-1.18	≤6.99	PASS
	Ant2	5310	-5.40	≤6.99	PASS
	total	5310	0.21	≤6.99	PASS
	Ant1	5510	-1.90	≤6.99	PASS
	Ant2	5510	0.63	≤6.99	PASS
	total	5510	2.56	≤6.99	PASS
	Ant1	5550	-1.29	≤6.99	PASS
	Ant2	5550	1.37	≤6.99	PASS
	total	5550	3.25	≤6.99	PASS
	Ant1	5670	-0.36	≤6.99	PASS
	Ant2	5670	3.82	≤6.99	PASS
	total	5670	5.22	≤6.99	PASS
	Ant1	5755	-2.13	≤25.99	PASS
	Ant2	5755	2.75	≤25.99	PASS
	total	5755	3.97	≤25.99	PASS
	Ant1	5795	-1.33	≤25.99	PASS
	Ant2	5795	-0.31	≤25.99	PASS
	total	5795	2.22	≤25.99	PASS
11AC20MIMO	Ant1	5180	3.72	≤6.99	PASS
	Ant2	5180	1.20	≤6.99	PASS
	total	5180	5.65	≤6.99	PASS
	Ant1	5200	3.53	≤6.99	PASS
	Ant2	5200	0.78	≤6.99	PASS
	total	5200	5.38	≤6.99	PASS
	Ant1	5240	2.64	≤6.99	PASS
	Ant2	5240	-1.22	≤6.99	PASS
	total	5240	4.14	≤6.99	PASS
	Ant1	5260	2.36	≤6.99	PASS
	Ant2	5260	-0.35	≤6.99	PASS
	total	5260	4.22	≤6.99	PASS
	Ant1	5280	2.36	≤6.99	PASS
	Ant2	5280	-1.17	≤6.99	PASS
	total	5280	3.95	≤6.99	PASS
	Ant1	5320	1.82	≤6.99	PASS
	Ant2	5320	-2.31	≤6.99	PASS
	total	5320	3.24	≤6.99	PASS
	Ant1	5500	1.48	≤6.99	PASS
	Ant2	5500	2.75	≤6.99	PASS
	total	5500	5.17	≤6.99	PASS
	Ant1	5580	1.19	≤6.99	PASS
	Ant2	5580	4.73	≤6.99	PASS
	total	5580	6.32	≤6.99	PASS
	Ant1	5700	2.37	≤6.99	PASS
	Ant2	5700	3.19	≤6.99	PASS
	total	5700	5.81	≤6.99	PASS
	Ant1	5745	0.64	≤25.99	PASS
	Ant2	5745	5.21	≤25.99	PASS
	total	5745	6.51	≤25.99	PASS
	Ant1	5785	3.06	≤25.99	PASS

TestMode	Antenna	Freq(MHz)	Result [dBm/MHz] [dBm/500kHz for W58 Band]	Limit[dBm/MHz]	Verdict
11AC40MIMO	Ant2	5785	2.75	≤25.99	PASS
	total	5785	5.92	≤25.99	PASS
	Ant1	5825	2.67	≤25.99	PASS
	Ant2	5825	4.81	≤25.99	PASS
	total	5825	6.88	≤25.99	PASS
11AC80MIMO	Ant1	5190	-2.84	≤6.99	PASS
	Ant2	5190	-2.95	≤6.99	PASS
	total	5190	0.12	≤6.99	PASS
	Ant1	5230	-2.48	≤6.99	PASS
	Ant2	5230	-2.42	≤6.99	PASS
	total	5230	0.56	≤6.99	PASS
	Ant1	5270	-2.92	≤6.99	PASS
	Ant2	5270	-2.61	≤6.99	PASS
	total	5270	0.25	≤6.99	PASS
	Ant1	5310	-3.34	≤6.99	PASS
	Ant2	5310	-2.97	≤6.99	PASS
	total	5310	-0.14	≤6.99	PASS
	Ant1	5510	-3.15	≤6.99	PASS
	Ant2	5510	-2.78	≤6.99	PASS
	total	5510	0.05	≤6.99	PASS
	Ant1	5550	-2.88	≤6.99	PASS
	Ant2	5550	-2.62	≤6.99	PASS
	total	5550	0.26	≤6.99	PASS
	Ant1	5670	-4.76	≤6.99	PASS
	Ant2	5670	-4.93	≤6.99	PASS
	total	5670	-1.83	≤6.99	PASS
	Ant1	5755	-7.81	≤25.99	PASS
	Ant2	5755	-7.33	≤25.99	PASS
	total	5755	-4.55	≤25.99	PASS
	Ant1	5795	-7.52	≤25.99	PASS
	Ant2	5795	-7.33	≤25.99	PASS
	total	5795	-4.41	≤25.99	PASS
11AC80MIMO	Ant1	5210	-5.17	≤6.99	PASS
	Ant2	5210	-4.97	≤6.99	PASS
	total	5210	-2.06	≤6.99	PASS
	Ant1	5290	-5.94	≤6.99	PASS
	Ant2	5290	-5.66	≤6.99	PASS
	total	5290	-2.79	≤6.99	PASS
	Ant1	5530	-10.59	≤6.99	PASS
	Ant2	5530	-6.05	≤6.99	PASS
	total	5530	-4.74	≤6.99	PASS
	Ant1	5610	-6.95	≤6.99	PASS
	Ant2	5610	-6.84	≤6.99	PASS
	total	5610	-3.88	≤6.99	PASS
	Ant1	5775	-11.34	≤25.99	PASS
	Ant2	5775	-10.93	≤25.99	PASS
	total	5775	-8.12	≤25.99	PASS

Note: 1.The Result and Limit Unit is dBm/500 kHz in the band 5.725–5.85 GHz.

2.The duty cycle is 100%.

## 5.6 Frequency Stability

Ambient condition:

Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.2kPa

Method of Measurement:

1. Frequency stability with respect to ambient temperature
  - a) Supply the EUT with a nominal ac voltage or install a new or fully charged battery in the EUT. If possible, a dummy load shall be connected to the EUT because an antenna near the metallic walls of an environmental test chamber could affect the output frequency of the EUT. If the EUT is equipped with a permanently attached, adjustable-length antenna, then the EUT shall be placed in the center of the chamber with the antenna adjusted to the shortest length possible. Turn ON the EUT and tune it to one of the number of frequencies shown in 5.6.
  - b) Couple the unlicensed wireless device output to the measuring instrument by connecting an antenna to the measuring instrument with a suitable length of coaxial cable and placing the measuring antenna near the EUT (e.g., 15 cm away), or by connecting a dummy load to the measuring instrument, through an attenuator if necessary.
  - c) Adjust the location of the measurement antenna and the controls on the measurement instrument to obtain a suitable signal level (i.e., a level that will not overload the measurement instrument but is strong enough to allow measurement of the operating or fundamental frequency of the EUT).
  - d) Turn the EUT OFF and place it inside the environmental temperature chamber. For devices that have oscillator heaters, energize only the heater circuit.
  - e) Set the temperature control on the chamber to the highest specified in the regulatory requirements for the type of device and allow the oscillator heater and the chamber temperature to stabilize.
  - f) While maintaining a constant temperature inside the environmental chamber, turn the EUT ON and record the operating frequency at startup, and at 2 minutes, 5 minutes, and 10 minutes after the EUT is energized. Four measurements in total are made.
  - g) Measure the frequency at each of frequencies specified in 5.6.
  - h) Switch OFF the EUT but do not switch OFF the oscillator heater.
  - i) Lower the chamber temperature by not more than 10 C, and allow the temperature inside the chamber to stabilize.
  - j) Repeat step f) through step i) down to the lowest specified temperature.
2. Frequency stability when varying supply voltage

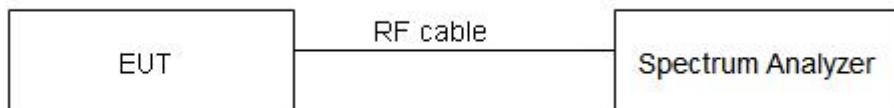
Unless otherwise specified, these tests shall be made at ambient room temperature (+15 °C to +25 °C). An antenna shall be connected to the antenna output terminals of the EUT if possible. If the EUT is equipped with or uses an adjustable-length antenna, then it shall be fully extended.

- a) Supply the EUT with nominal voltage or install a new or fully charged battery in the EUT. Turn ON the EUT and couple its output to a frequency counter or other frequency-measuring instrument.
- b) Tune the EUT to one of the number of frequencies required in 5.6. Adjust the location of the measurement antenna and the controls on the measurement instrument to obtain a suitable signal level (i.e., a level that will not overload the measurement instrument but is strong enough to allow measurement of the operating or fundamental frequency of the EUT).
- c) Measure the frequency at each of the frequencies specified in 5.6.
- d) Repeat the above procedure at 85% and 115% of the nominal supply voltage.

### Limits:

Manufacturers of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the user's manual.

### Test Setup:



### Measurement Uncertainty:

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor  $k = 2$ ,  $U = 936$  Hz.

## Test Results:

Voltage								
TestMode	Antenna	Freq(MHz)	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
11A	Ant1	5180	NV	NT	11000.00	2.123552	within the operation band	PASS
			LV	NT	-11000.00	-2.123552	within the operation band	PASS
			HV	NT	11000.00	2.123552	within the operation band	PASS
	Ant2	5180	NV	NT	-22000.00	-3.859649	within the operation band	PASS
			LV	NT	0.00	0.000000	within the operation band	PASS
			HV	NT	-11000.00	-2.123552	within the operation band	PASS
	Ant1	5200	NV	NT	-11000.00	-2.115385	within the operation band	PASS
			LV	NT	0.00	0.000000	within the operation band	PASS
			HV	NT	-22000.00	-4.230769	within the operation band	PASS
	Ant2	5200	NV	NT	0.00	0.000000	within the operation band	PASS
			LV	NT	11000.00	2.115385	within the operation band	PASS
			HV	NT	-11000.00	-2.115385	within the operation band	PASS
	Ant1	5240	NV	NT	0.00	0.000000	within the operation band	PASS
			LV	NT	-33000.00	-6.297710	within the operation band	PASS
			HV	NT	-11000.00	-2.099237	within the operation band	PASS
	Ant2	5240	NV	NT	-33000.00	-6.297710	within the operation band	PASS
			LV	NT	-22000.00	-3.859649	within the operation band	PASS
			HV	NT	-11000.00	-2.099237	within the operation band	PASS
	Ant1	5260	NV	NT	22000.00	4.182510	within the operation band	PASS
			LV	NT	0.00	0.000000	within the operation band	PASS
			HV	NT	22000.00	4.182510	within the operation band	PASS
	Ant2	5260	NV	NT	-11000.00	-2.091255	within the operation band	PASS
			LV	NT	11000.00	2.091255	within the operation band	PASS
			HV	NT	-11000.00	-2.091255	within the operation band	PASS
	Ant1	5280	NV	NT	11000.00	2.083333	within the operation band	PASS
			LV	NT	-11000.00	-2.083333	within the operation band	PASS
			HV	NT	-11000.00	-2.083333	within the operation band	PASS
	Ant2	5280	NV	NT	0.00	0.000000	within the operation band	PASS
			LV	NT	-22000.00	-3.859649	within the operation band	PASS
			HV	NT	-22000.00	-4.166667	within the operation band	PASS

TestMode	Antenna	Freq(MHz )	Voltage						Limit (ppm)	Verdict
			Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)				
Ant1	Ant1	5320	NV	NT	-22000.00	-4.135338	within the operation band		PASS	
			LV	NT	0.00	0.000000	within the operation band		PASS	
			HV	NT	0.00	0.000000	within the operation band		PASS	
	Ant2	5320	NV	NT	0.00	0.000000	within the operation band		PASS	
			LV	NT	11000.00	2.067669	within the operation band		PASS	
			HV	NT	-22000.00	-3.859649	within the operation band		PASS	
	Ant1	5500	NV	NT	-11000.00	-2.000000	within the operation band		PASS	
			LV	NT	-11000.00	-2.000000	within the operation band		PASS	
			HV	NT	-22000.00	-3.859649	within the operation band		PASS	
	Ant2	5500	NV	NT	0.00	0.000000	within the operation band		PASS	
			LV	NT	-11000.00	-2.000000	within the operation band		PASS	
			HV	NT	11000.00	2.000000	within the operation band		PASS	
Ant1	Ant1	5580	NV	NT	-11000.00	-2.123552	within the operation band		PASS	
			LV	NT	-11000.00	-2.123552	within the operation band		PASS	
			HV	NT	0.00	0.000000	within the operation band		PASS	
	Ant2	5580	NV	NT	-22000.00	-3.942652	within the operation band		PASS	
			LV	NT	-11000.00	-1.971326	within the operation band		PASS	
			HV	NT	-11000.00	-1.971326	within the operation band		PASS	
	Ant1	5700	NV	NT	11000.00	1.929825	within the operation band		PASS	
			LV	NT	0.00	0.000000	within the operation band		PASS	
			HV	NT	-22000.00	-3.859649	within the operation band		PASS	
	Ant2	5700	NV	NT	-22000.00	-3.859649	within the operation band		PASS	
			LV	NT	11000.00	1.929825	within the operation band		PASS	
			HV	NT	11000.00	1.929825	within the operation band		PASS	
Ant1	Ant1	5745	NV	NT	-11000.00	-2.123552	within the operation band		PASS	
			LV	NT	0.00	0.000000	within the operation band		PASS	
			HV	NT	-11000.00	-1.914708	within the operation band		PASS	
	Ant2	5745	NV	NT	0.00	0.000000	within the operation band		PASS	
			LV	NT	-11000.00	-1.914708	within the operation band		PASS	
			HV	NT	11000.00	1.914708	within the operation band		PASS	
	Ant1	5785	NV	NT	0.00	0.000000	within the operation band		PASS	

Voltage								
TestMode	Antenna	Freq(MHz)	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
11N20MIMO			LV	NT	-33000.00	-5.704408	within the operation band	PASS
			HV	NT	-11000.00	-1.901469	within the operation band	PASS
	Ant2	5785	NV	NT	-11000.00	-1.901469	within the operation band	PASS
			LV	NT	-11000.00	-2.123552	within the operation band	PASS
			HV	NT	-22000.00	-3.802939	within the operation band	PASS
	Ant1	5825	NV	NT	-22000.00	-3.776824	within the operation band	PASS
			LV	NT	-22000.00	-3.776824	within the operation band	PASS
			HV	NT	22000.00	3.776824	within the operation band	PASS
	Ant2	5825	NV	NT	-11000.00	-1.888412	within the operation band	PASS
			LV	NT	-11000.00	-2.123552	within the operation band	PASS
			HV	NT	-11000.00	-1.888412	within the operation band	PASS
11N20MIMO	Ant1	5180	NV	NT	-11000.00	-2.123552	within the operation band	PASS
			LV	NT	-11000.00	-2.123552	within the operation band	PASS
			HV	NT	-22000.00	-4.247104	within the operation band	PASS
	Ant2	5180	NV	NT	-11000.00	-2.123552	within the operation band	PASS
			LV	NT	22000.00	4.247104	within the operation band	PASS
			HV	NT	22000.00	4.247104	within the operation band	PASS
	Ant1	5200	NV	NT	-33000.00	-6.346154	within the operation band	PASS
			LV	NT	0.00	0.000000	within the operation band	PASS
			HV	NT	-11000.00	-2.115385	within the operation band	PASS
	Ant2	5200	NV	NT	22000.00	4.000000	within the operation band	PASS
			LV	NT	22000.00	4.230769	within the operation band	PASS
			HV	NT	0.00	0.000000	within the operation band	PASS
	Ant1	5240	NV	NT	22000.00	4.000000	within the operation band	PASS
			LV	NT	-22000.00	-4.000000	within the operation band	PASS
			HV	NT	22000.00	4.000000	within the operation band	PASS
	Ant2	5240	NV	NT	-22000.00	-4.000000	within the operation band	PASS
			LV	NT	-22000.00	-4.198473	within the operation band	PASS
			HV	NT	-22000.00	-4.198473	within the operation band	PASS
	Ant1	5260	NV	NT	-11000.00	-2.091255	within the operation band	PASS
			LV	NT	22000.00	4.000000	within the operation band	PASS

Voltage										
TestMode	Antenna	Freq(MHz)	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict		
	Ant2	5260	HV	NT	-22000.00	-4.000000	within the operation band	PASS		
			NV	NT	33000.00	6.273764	within the operation band	PASS		
			LV	NT	-11000.00	-2.091255	within the operation band	PASS		
			HV	NT	22000.00	4.182510	within the operation band	PASS		
	Ant1	5280	NV	NT	-11000.00	-2.083333	within the operation band	PASS		
			LV	NT	-11000.00	-2.083333	within the operation band	PASS		
			HV	NT	-22000.00	-4.166667	within the operation band	PASS		
			NV	NT	-11000.00	-2.083333	within the operation band	PASS		
	Ant2	5280	LV	NT	-11000.00	-2.083333	within the operation band	PASS		
			HV	NT	11000.00	2.083333	within the operation band	PASS		
	Ant1	5320	NV	NT	-11000.00	-2.067669	within the operation band	PASS		
			LV	NT	-11000.00	-2.067669	within the operation band	PASS		
			HV	NT	-11000.00	-1.971326	within the operation band	PASS		
	Ant2	5320	NV	NT	-22000.00	-4.135338	within the operation band	PASS		
			LV	NT	-11000.00	-2.067669	within the operation band	PASS		
			HV	NT	-33000.00	-6.203008	within the operation band	PASS		
	Ant1	5500	NV	NT	22000.00	4.000000	within the operation band	PASS		
			LV	NT	-22000.00	-4.000000	within the operation band	PASS		
			HV	NT	-33000.00	-6.000000	within the operation band	PASS		
Ant2	5500	NV	NT	11000.00	2.000000	within the operation band	PASS			
					LV	NT	-11000.00	-2.000000	within the operation band	PASS
					HV	NT	-11000.00	-1.971326	within the operation band	PASS
	Ant1	5580	NV	NT	-11000.00	-1.971326	within the operation band	PASS		
			LV	NT	0.00	0.000000	within the operation band	PASS		
			HV	NT	-11000.00	-1.971326	within the operation band	PASS		
	Ant2	5580	NV	NT	-11000.00	-1.971326	within the operation band	PASS		
			LV	NT	-11000.00	-1.971326	within the operation band	PASS		
			HV	NT	-11000.00	-1.971326	within the operation band	PASS		
	Ant1	5700	NV	NT	0.00	0.000000	within the operation band	PASS		
			LV	NT	-11000.00	-1.929825	within the operation band	PASS		
			HV	NT	-22000.00	-3.859649	within the operation band	PASS		

TestMode	Antenna	Freq(MHz)	Voltage						Limit (ppm)	Verdict
			Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)				
11N40MIMO	Ant2	5700	NV	NT	-11000.00	-1.929825	within the operation band		PASS	
			LV	NT	-22000.00	-3.859649	within the operation band		PASS	
			HV	NT	-22000.00	-3.859649	within the operation band		PASS	
	Ant1	5745	NV	NT	0.00	0.000000	within the operation band		PASS	
			LV	NT	11000.00	1.914708	within the operation band		PASS	
			HV	NT	0.00	0.000000	within the operation band		PASS	
	Ant2	5745	NV	NT	-11000.00	-1.914708	within the operation band		PASS	
			LV	NT	11000.00	1.914708	within the operation band		PASS	
			HV	NT	11000.00	1.914708	within the operation band		PASS	
	Ant1	5785	NV	NT	-22000.00	-3.802939	within the operation band		PASS	
			LV	NT	-11000.00	-1.901469	within the operation band		PASS	
			HV	NT	22000.00	3.802939	within the operation band		PASS	
	Ant2	5785	NV	NT	-11000.00	-1.901469	within the operation band		PASS	
			LV	NT	-11000.00	-1.901469	within the operation band		PASS	
			HV	NT	0.00	0.000000	within the operation band		PASS	
	Ant1	5825	NV	NT	0.00	0.000000	within the operation band		PASS	
			LV	NT	0.00	0.000000	within the operation band		PASS	
			HV	NT	-11000.00	-1.888412	within the operation band		PASS	
	Ant2	5825	NV	NT	11000.00	1.888412	within the operation band		PASS	
			LV	NT	11000.00	1.888412	within the operation band		PASS	
			HV	NT	-11000.00	-1.888412	within the operation band		PASS	
	Ant1	5190	NV	NT	-11000.00	-2.123552	within the operation band		PASS	
			LV	NT	-11000.00	-2.123552	within the operation band		PASS	
			HV	NT	-22000.00	-4.247104	within the operation band		PASS	
	Ant2	5190	NV	NT	-11000.00	-2.123552	within the operation band		PASS	
			LV	NT	22000.00	4.247104	within the operation band		PASS	
			HV	NT	22000.00	4.247104	within the operation band		PASS	
	Ant1	5230	NV	NT	0.00	0.000000	within the operation band		PASS	
			LV	NT	0.00	0.000000	within the operation band		PASS	
			HV	NT	-11000.00	-2.115385	within the operation band		PASS	
	Ant2	5230	NV	NT	-33000.00	-6.346154	within the operation band		PASS	

TestMode	Antenna	Freq(MHz)	Voltage						Limit (ppm)	Verdict
			Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)				
Ant1			LV	NT	22000.00	4.230769	within the operation band		PASS	
			HV	NT	22000.00	4.182510	within the operation band		PASS	
	Ant1	5270	NV	NT	22000.00	4.182510	within the operation band		PASS	
			LV	NT	-33000.00	-6.297710	within the operation band		PASS	
			HV	NT	-33000.00	-6.297710	within the operation band		PASS	
	Ant2	5270	NV	NT	0.00	0.000000	within the operation band		PASS	
			LV	NT	-22000.00	-4.198473	within the operation band		PASS	
			HV	NT	-22000.00	-4.198473	within the operation band		PASS	
Ant1	Ant1	5310	NV	NT	-11000.00	-2.091255	within the operation band		PASS	
			LV	NT	22000.00	4.182510	within the operation band		PASS	
			HV	NT	22000.00	4.182510	within the operation band		PASS	
	Ant2	5310	NV	NT	33000.00	6.273764	within the operation band		PASS	
			LV	NT	-11000.00	-2.091255	within the operation band		PASS	
			HV	NT	22000.00	4.182510	within the operation band		PASS	
Ant1	Ant1	5510	NV	NT	-11000.00	-2.083333	within the operation band		PASS	
			LV	NT	-11000.00	-2.083333	within the operation band		PASS	
			HV	NT	-22000.00	-4.166667	within the operation band		PASS	
	Ant2	5510	NV	NT	-11000.00	-2.083333	within the operation band		PASS	
			LV	NT	-11000.00	-2.083333	within the operation band		PASS	
			HV	NT	-11000.00	-1.971326	within the operation band		PASS	
Ant1	Ant1	5550	NV	NT	-11000.00	-2.067669	within the operation band		PASS	
			LV	NT	-11000.00	-2.067669	within the operation band		PASS	
			HV	NT	22000.00	4.135338	within the operation band		PASS	
	Ant2	5550	NV	NT	-22000.00	-4.135338	within the operation band		PASS	
			LV	NT	-11000.00	-2.067669	within the operation band		PASS	
			HV	NT	-33000.00	-6.203008	within the operation band		PASS	
Ant1	Ant1	5670	NV	NT	-11000.00	-1.971326	within the operation band		PASS	
			LV	NT	-22000.00	-4.000000	within the operation band		PASS	
			HV	NT	-33000.00	-6.000000	within the operation band		PASS	
	Ant2	5670	NV	NT	11000.00	2.000000	within the operation band		PASS	
			LV	NT	-11000.00	-2.000000	within the operation band		PASS	

Voltage								
TestMode	Antenna	Freq(MHz)	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
11AC20MI MO	Ant1	5755	HV	NT	0.00	0.000000	within the operation band	PASS
			NV	NT	0.00	0.000000	within the operation band	PASS
			LV	NT	0.00	0.000000	within the operation band	PASS
			HV	NT	-11000.00	-1.971326	within the operation band	PASS
	Ant2	5755	NV	NT	33000.00	5.913978	within the operation band	PASS
			LV	NT	-11000.00	-1.971326	within the operation band	PASS
			HV	NT	-11000.00	-1.971326	within the operation band	PASS
	Ant1	5795	NV	NT	-22000.00	-4.247104	within the operation band	PASS
			LV	NT	-11000.00	-2.123552	within the operation band	PASS
			HV	NT	-22000.00	-3.859649	within the operation band	PASS
	Ant2	5795	NV	NT	-22000.00	-4.247104	within the operation band	PASS
			LV	NT	-11000.00	-2.123552	within the operation band	PASS
			HV	NT	-22000.00	-3.859649	within the operation band	PASS
11AC20MI MO	Ant1	5180	NV	NT	-11000.00	-2.123552	within the operation band	PASS
			LV	NT	-11000.00	-2.123552	within the operation band	PASS
			HV	NT	-22000.00	-4.247104	within the operation band	PASS
	Ant2	5180	NV	NT	-11000.00	-2.123552	within the operation band	PASS
			LV	NT	22000.00	4.247104	within the operation band	PASS
			HV	NT	22000.00	4.247104	within the operation band	PASS
	Ant1	5200	NV	NT	-33000.00	-6.346154	within the operation band	PASS
			LV	NT	-11000.00	-2.083333	within the operation band	PASS
			HV	NT	-11000.00	-2.083333	within the operation band	PASS
	Ant2	5200	NV	NT	-33000.00	-6.346154	within the operation band	PASS
			LV	NT	22000.00	4.230769	within the operation band	PASS
			HV	NT	-11000.00	-2.083333	within the operation band	PASS
	Ant1	5240	NV	NT	-11000.00	-2.083333	within the operation band	PASS
			LV	NT	-33000.00	-6.297710	within the operation band	PASS
			HV	NT	-33000.00	-6.297710	within the operation band	PASS
	Ant2	5240	NV	NT	0.00	0.000000	within the operation band	PASS
			LV	NT	-22000.00	-4.198473	within the operation band	PASS
			HV	NT	-22000.00	-4.198473	within the operation band	PASS

TestMode	Antenna	Freq(MHz)	Voltage						Limit (ppm)	Verdict
			Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)				
5260	Ant1	5260	NV	NT	-11000.00	-2.091255	within the operation band		PASS	
			LV	NT	-11000.00	-2.083333	within the operation band		PASS	
			HV	NT	-11000.00	-2.083333	within the operation band		PASS	
	Ant2	5260	NV	NT	33000.00	6.273764	within the operation band		PASS	
			LV	NT	-11000.00	-2.091255	within the operation band		PASS	
			HV	NT	22000.00	4.182510	within the operation band		PASS	
	Ant1	5280	NV	NT	-11000.00	-2.083333	within the operation band		PASS	
			LV	NT	-11000.00	-2.083333	within the operation band		PASS	
			HV	NT	-22000.00	-4.166667	within the operation band		PASS	
	Ant2	5280	NV	NT	-11000.00	-2.083333	within the operation band		PASS	
			LV	NT	-11000.00	-2.083333	within the operation band		PASS	
			HV	NT	11000.00	2.083333	within the operation band		PASS	
5320	Ant1	5320	NV	NT	-11000.00	-2.067669	within the operation band		PASS	
			LV	NT	-11000.00	-2.067669	within the operation band		PASS	
			HV	NT	-11000.00	-1.971326	within the operation band		PASS	
	Ant2	5320	NV	NT	33000.00	5.913978	within the operation band		PASS	
			LV	NT	-11000.00	-2.067669	within the operation band		PASS	
			HV	NT	-11000.00	-2.067669	within the operation band		PASS	
	Ant1	5500	NV	NT	22000.00	4.000000	within the operation band		PASS	
			LV	NT	-22000.00	-4.000000	within the operation band		PASS	
			HV	NT	-33000.00	-6.000000	within the operation band		PASS	
5500	Ant2	5500	NV	NT	11000.00	2.000000	within the operation band		PASS	
			LV	NT	-11000.00	-1.971326	within the operation band		PASS	
			HV	NT	33000.00	5.913978	within the operation band		PASS	
	Ant1	5580	NV	NT	0.00	0.000000	within the operation band		PASS	
			LV	NT	0.00	0.000000	within the operation band		PASS	
			HV	NT	-11000.00	-1.971326	within the operation band		PASS	
	Ant2	5580	NV	NT	33000.00	5.913978	within the operation band		PASS	
			LV	NT	-11000.00	-1.971326	within the operation band		PASS	
			HV	NT	-11000.00	-1.971326	within the operation band		PASS	
	Ant1	5700	NV	NT	0.00	0.000000	within the operation band		PASS	

TestMode	Antenna	Freq(MHz)	Voltage						Limit (ppm)	Verdict
			Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)				
11AC40MI MO			LV	NT	-11000.00	-1.929825	within the operation band		PASS	
			HV	NT	-22000.00	-3.859649	within the operation band		PASS	
	Ant2	5700	NV	NT	-11000.00	-1.901469	within the operation band		PASS	
			LV	NT	-11000.00	-1.901469	within the operation band		PASS	
			HV	NT	-22000.00	-3.859649	within the operation band		PASS	
	Ant1	5745	NV	NT	22000.00	3.829417	within the operation band		PASS	
			LV	NT	11000.00	1.914708	within the operation band		PASS	
			HV	NT	-11000.00	-1.901469	within the operation band		PASS	
	Ant2	5745	NV	NT	-11000.00	-1.901469	within the operation band		PASS	
			LV	NT	11000.00	1.914708	within the operation band		PASS	
			HV	NT	11000.00	1.914708	within the operation band		PASS	
	Ant1	5785	NV	NT	-22000.00	-3.802939	within the operation band		PASS	
			LV	NT	-11000.00	-1.901469	within the operation band		PASS	
			HV	NT	22000.00	3.802939	within the operation band		PASS	
	Ant2	5785	NV	NT	-11000.00	-1.901469	within the operation band		PASS	
			LV	NT	-11000.00	-1.901469	within the operation band		PASS	
			HV	NT	-33000.00	-5.704408	within the operation band		PASS	
	Ant1	5825	NV	NT	0.00	0.000000	within the operation band		PASS	
			LV	NT	-22000.00	-3.776824	within the operation band		PASS	
			HV	NT	-11000.00	-1.888412	within the operation band		PASS	
	Ant2	5825	NV	NT	0.00	0.000000	within the operation band		PASS	
			LV	NT	-22000.00	-4.198473	within the operation band		PASS	
			HV	NT	-11000.00	-1.888412	within the operation band		PASS	
11AC40MI MO	Ant1	5190	NV	NT	-11000.00	-2.123552	within the operation band		PASS	
			LV	NT	-11000.00	-2.123552	within the operation band		PASS	
			HV	NT	-22000.00	-4.247104	within the operation band		PASS	
	Ant2	5190	NV	NT	0.00	0.000000	within the operation band		PASS	
			LV	NT	-22000.00	-4.198473	within the operation band		PASS	
			HV	NT	22000.00	4.247104	within the operation band		PASS	
	Ant1	5230	NV	NT	-33000.00	-6.346154	within the operation band		PASS	
			LV	NT	0.00	0.000000	within the operation band		PASS	

Voltage								
TestMode	Antenna	Freq(MHz)	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Ant2	5230		HV	NT	-11000.00	-2.115385	within the operation band	PASS
			NV	NT	0.00	0.000000	within the operation band	PASS
			LV	NT	-22000.00	-4.198473	within the operation band	PASS
			HV	NT	0.00	0.000000	within the operation band	PASS
Ant1	5270		NV	NT	0.00	0.000000	within the operation band	PASS
			LV	NT	-33000.00	-6.297710	within the operation band	PASS
			HV	NT	-33000.00	-6.297710	within the operation band	PASS
Ant2	5270		NV	NT	0.00	0.000000	within the operation band	PASS
			LV	NT	-22000.00	-4.198473	within the operation band	PASS
			HV	NT	-22000.00	-4.198473	within the operation band	PASS
Ant1	5310		NV	NT	-11000.00	-2.091255	within the operation band	PASS
			LV	NT	-44000.00	-8.365019	within the operation band	PASS
			HV	NT	-22000.00	-4.182510	within the operation band	PASS
Ant2	5310		NV	NT	33000.00	6.273764	within the operation band	PASS
			LV	NT	-11000.00	-2.091255	within the operation band	PASS
			HV	NT	33000.00	5.913978	within the operation band	PASS
Ant1	5510		NV	NT	-11000.00	-1.971326	within the operation band	PASS
			LV	NT	-11000.00	-2.083333	within the operation band	PASS
			HV	NT	33000.00	5.913978	within the operation band	PASS
Ant2	5510		NV	NT	-11000.00	-1.971326	within the operation band	PASS
			LV	NT	-11000.00	-2.083333	within the operation band	PASS
			HV	NT	11000.00	2.083333	within the operation band	PASS
Ant1	5550		NV	NT	-11000.00	-2.067669	within the operation band	PASS
			LV	NT	-11000.00	-2.067669	within the operation band	PASS
			HV	NT	22000.00	4.135338	within the operation band	PASS
Ant2	5550		NV	NT	-22000.00	-4.135338	within the operation band	PASS
			LV	NT	-11000.00	-2.067669	within the operation band	PASS
			HV	NT	33000.00	5.913978	within the operation band	PASS
Ant1	5670		NV	NT	-11000.00	-1.971326	within the operation band	PASS
			LV	NT	-22000.00	-4.000000	within the operation band	PASS
			HV	NT	-33000.00	-6.000000	within the operation band	PASS

Voltage								
TestMode	Antenna	Freq(MHz)	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
11AC80MI MO	Ant2	5670	NV	NT	11000.00	2.000000	within the operation band	PASS
			LV	NT	-11000.00	-2.000000	within the operation band	PASS
			HV	NT	0.00	0.000000	within the operation band	PASS
	Ant1	5755	NV	NT	0.00	0.000000	within the operation band	PASS
			LV	NT	0.00	0.000000	within the operation band	PASS
			HV	NT	-11000.00	-1.971326	within the operation band	PASS
	Ant2	5755	NV	NT	33000.00	5.913978	within the operation band	PASS
			LV	NT	-11000.00	-1.971326	within the operation band	PASS
			HV	NT	-11000.00	-1.971326	within the operation band	PASS
	Ant1	5795	NV	NT	0.00	0.000000	within the operation band	PASS
			LV	NT	-11000.00	-1.929825	within the operation band	PASS
			HV	NT	-22000.00	-3.859649	within the operation band	PASS
	Ant2	5795	NV	NT	-11000.00	-1.929825	within the operation band	PASS
			LV	NT	-22000.00	-3.859649	within the operation band	PASS
			HV	NT	-22000.00	-3.859649	within the operation band	PASS
11AC80MI MO	Ant1	5210	NV	NT	-11000.00	-2.123552	within the operation band	PASS
			LV	NT	-33000.00	-6.346154	within the operation band	PASS
			HV	NT	0.00	0.000000	within the operation band	PASS
	Ant2	5210	NV	NT	-11000.00	-2.123552	within the operation band	PASS
			LV	NT	22000.00	4.247104	within the operation band	PASS
			HV	NT	22000.00	4.247104	within the operation band	PASS
	Ant1	5290	NV	NT	-33000.00	-6.346154	within the operation band	PASS
			LV	NT	0.00	0.000000	within the operation band	PASS
			HV	NT	-11000.00	-2.115385	within the operation band	PASS
	Ant2	5290	NV	NT	-33000.00	-6.346154	within the operation band	PASS
			LV	NT	22000.00	4.230769	within the operation band	PASS
			HV	NT	0.00	0.000000	within the operation band	PASS
	Ant1	5530	NV	NT	0.00	0.000000	within the operation band	PASS
			LV	NT	-33000.00	-6.297710	within the operation band	PASS
			HV	NT	-33000.00	-6.297710	within the operation band	PASS
	Ant2	5530	NV	NT	0.00	0.000000	within the operation band	PASS

Voltage								
TestMode	Antenna	Freq(MHz)	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
			LV	NT	-22000.00	-4.198473	within the operation band	PASS
			HV	NT	-22000.00	-4.198473	within the operation band	PASS
	Ant1	5610	NV	NT	-11000.00	-2.091255	within the operation band	PASS
			LV	NT	-11000.00	-2.091255	within the operation band	PASS
			HV	NT	-11000.00	-2.091255	within the operation band	PASS
	Ant2	5610	NV	NT	33000.00	6.273764	within the operation band	PASS
			LV	NT	-11000.00	-2.091255	within the operation band	PASS
			HV	NT	22000.00	4.182510	within the operation band	PASS
	Ant1	5775	NV	NT	-11000.00	-2.091255	within the operation band	PASS
			LV	NT	45000.00	7.792208	within the operation band	PASS
			HV	NT	45000.00	7.792208	within the operation band	PASS
	Ant2	5775	NV	NT	45000.00	7.792208	within the operation band	PASS
			LV	NT	45000.00	7.792208	within the operation band	PASS
			HV	NT	45000.00	7.792208	within the operation band	PASS

Temperature								
TestMode	Antenna	Freq(MHz)	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
11A	Ant1	5180	NV	-30	-11000.00	-2.123552	within the operation band	PASS
			NV	-20	-11000.00	-2.123552	within the operation band	PASS
			NV	-10	-11000.00	-2.123552	within the operation band	PASS
			NV	0	0.00	0.000000	within the operation band	PASS
			NV	10	-22000.00	-4.247104	within the operation band	PASS
			NV	20	11000.00	2.123552	within the operation band	PASS
			NV	30	11000.00	2.123552	within the operation band	PASS
			NV	40	11000.00	2.123552	within the operation band	PASS
			NV	50	0.00	0.000000	within the operation band	PASS
	Ant2	5180	NV	-30	-22000.00	-4.247104	within the operation band	PASS
			NV	-20	11000.00	2.123552	within the operation band	PASS
			NV	-10	-11000.00	-2.123552	within the operation band	PASS
			NV	0	22000.00	4.247104	within the operation band	PASS
			NV	10	11000.00	2.123552	within the operation band	PASS
			NV	20	-11000.00	-2.123552	within the	PASS

Temperature								
TestMode	Antenna	Freq(MHz)	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Ant1	5200		NV	30	11000.00	2.123552	within the operation band	PASS
			NV	40	0.00	0.000000	within the operation band	PASS
			NV	50	-22000.00	-4.247104	within the operation band	PASS
			NV	-30	-11000.00	-2.115385	within the operation band	PASS
			NV	-20	11000.00	2.115385	within the operation band	PASS
			NV	-10	11000.00	2.115385	within the operation band	PASS
			NV	0	0.00	0.000000	within the operation band	PASS
			NV	10	-22000.00	-3.859649	within the operation band	PASS
			NV	20	-11000.00	-1.929825	within the operation band	PASS
			NV	30	-22000.00	-3.859649	within the operation band	PASS
Ant2	5200		NV	40	-22000.00	-3.859649	within the operation band	PASS
			NV	50	-22000.00	-4.230769	within the operation band	PASS
			NV	-30	-11000.00	-2.115385	within the operation band	PASS
			NV	-20	11000.00	2.115385	within the operation band	PASS
			NV	-10	22000.00	4.230769	within the operation band	PASS
			NV	0	0.00	0.000000	within the operation band	PASS
			NV	10	0.00	0.000000	within the operation band	PASS
			NV	20	-22000.00	-4.230769	within the operation band	PASS
			NV	30	11000.00	2.115385	within the operation band	PASS
			NV	40	-22000.00	-4.230769	within the operation band	PASS
Ant1	5240		NV	50	-11000.00	-2.115385	within the operation band	PASS
			NV	-30	-22000.00	-4.198473	within the operation band	PASS
			NV	-20	-22000.00	-3.859649	within the operation band	PASS
			NV	-10	-11000.00	-1.929825	within the operation band	PASS
			NV	0	-22000.00	-3.859649	within the operation band	PASS
			NV	10	-22000.00	-3.859649	within the operation band	PASS
			NV	20	-11000.00	-1.929825	within the operation band	PASS
			NV	30	-11000.00	-2.099237	within the operation band	PASS
			NV	40	-22000.00	-4.198473	within the operation band	PASS
			NV	50	0.00	0.000000	within the operation band	PASS
Ant2	5240	NV	-30	-22000.00	-4.198473	within the		PASS

Temperature								
TestMode	Antenna	Freq(MHz)	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
							operation band	
			NV	-20	-11000.00	-2.099237	within the operation band	PASS
			NV	-10	-22000.00	-4.198473	within the operation band	PASS
			NV	0	-11000.00	-2.099237	within the operation band	PASS
			NV	10	-11000.00	-2.099237	within the operation band	PASS
			NV	20	-11000.00	-2.099237	within the operation band	PASS
			NV	30	0.00	0.000000	within the operation band	PASS
			NV	40	-22000.00	-4.198473	within the operation band	PASS
			NV	50	0.00	0.000000	within the operation band	PASS
		5260	NV	-30	0.00	0.000000	within the operation band	PASS
			NV	-20	11000.00	2.091255	within the operation band	PASS
			NV	-10	-11000.00	-2.091255	within the operation band	PASS
			NV	0	-11000.00	-2.091255	within the operation band	PASS
			NV	10	11000.00	2.091255	within the operation band	PASS
			NV	20	11000.00	2.091255	within the operation band	PASS
			NV	30	-22000.00	-3.859649	within the operation band	PASS
			NV	40	-11000.00	-1.929825	within the operation band	PASS
			NV	50	0.00	0.000000	within the operation band	PASS
		5260	NV	-30	11000.00	2.091255	within the operation band	PASS
			NV	-20	-22000.00	-4.182510	within the operation band	PASS
			NV	-10	0.00	0.000000	within the operation band	PASS
			NV	0	11000.00	2.091255	within the operation band	PASS
			NV	10	0.00	0.000000	within the operation band	PASS
			NV	20	-11000.00	-2.091255	within the operation band	PASS
			NV	30	0.00	0.000000	within the operation band	PASS
			NV	40	0.00	0.000000	within the operation band	PASS
			NV	50	0.00	0.000000	within the operation band	PASS
		5280	NV	-30	11000.00	2.083333	within the operation band	PASS
			NV	-20	-33000.00	-6.250000	within the operation band	PASS
			NV	-10	-22000.00	-3.859649	within the operation band	PASS
			NV	0	-11000.00	-1.929825	within the operation band	PASS
			NV	10	-22000.00	-3.859649	within the	PASS

Temperature								
TestMode	Antenna	Freq(MHz)	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
							operation band	
			NV	20	-11000.00	-2.083333	within the operation band	PASS
			NV	30	11000.00	2.083333	within the operation band	PASS
			NV	40	0.00	0.000000	within the operation band	PASS
			NV	50	11000.00	2.083333	within the operation band	PASS
	Ant2	5280	NV	-30	11000.00	2.083333	within the operation band	PASS
			NV	-20	-22000.00	-4.166667	within the operation band	PASS
			NV	-10	-22000.00	-4.166667	within the operation band	PASS
			NV	0	11000.00	2.083333	within the operation band	PASS
			NV	10	-22000.00	-3.859649	within the operation band	PASS
	Ant1	5320	NV	20	-11000.00	-1.929825	within the operation band	PASS
			NV	30	-22000.00	-3.859649	within the operation band	PASS
			NV	40	-22000.00	-3.859649	within the operation band	PASS
			NV	50	-11000.00	-1.929825	within the operation band	PASS
			NV	-30	-22000.00	-3.859649	within the operation band	PASS
	Ant2	5320	NV	-20	-33000.00	-6.203008	within the operation band	PASS
			NV	-10	-11000.00	-2.067669	within the operation band	PASS
			NV	0	0.00	0.000000	within the operation band	PASS
			NV	10	-11000.00	-2.067669	within the operation band	PASS
			NV	20	-11000.00	-2.067669	within the operation band	PASS
			NV	30	-22000.00	-4.135338	within the operation band	PASS
			NV	40	-22000.00	-4.135338	within the operation band	PASS
			NV	50	-33000.00	-6.203008	within the operation band	PASS
			NV	-30	-22000.00	-3.859649	within the operation band	PASS
			NV	-20	-11000.00	-1.929825	within the operation band	PASS

Temperature								
TestMode	Antenna	Freq(MHz)	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Ant1	5500	5500	NV	-30	22000.00	4.000000	within the operation band	operation band
			NV	-20	-11000.00	-2.000000	within the operation band	PASS
			NV	-10	-22000.00	-4.000000	within the operation band	PASS
			NV	0	-11000.00	-2.000000	within the operation band	PASS
			NV	10	0.00	0.000000	within the operation band	PASS
			NV	20	-11000.00	-2.000000	within the operation band	PASS
			NV	30	0.00	0.000000	within the operation band	PASS
			NV	40	-11000.00	-2.000000	within the operation band	PASS
			NV	50	0.00	0.000000	within the operation band	PASS
			NV	-30	-22000.00	-4.000000	within the operation band	PASS
Ant2	5500	5500	NV	-20	11000.00	2.000000	within the operation band	PASS
			NV	-10	-22000.00	-3.859649	within the operation band	PASS
			NV	0	-11000.00	-1.929825	within the operation band	PASS
			NV	10	0.00	0.000000	within the operation band	PASS
			NV	20	-22000.00	-3.859649	within the operation band	PASS
			NV	30	-11000.00	-1.929825	within the operation band	PASS
			NV	40	-22000.00	-3.859649	within the operation band	PASS
			NV	50	-11000.00	-2.000000	within the operation band	PASS
			NV	-30	0.00	0.000000	within the operation band	PASS
			NV	-20	0.00	0.000000	within the operation band	PASS
Ant1	5580	5580	NV	-10	11000.00	1.971326	within the operation band	PASS
			NV	0	22000.00	3.942652	within the operation band	PASS
			NV	10	-22000.00	-3.942652	within the operation band	PASS
			NV	20	11000.00	1.971326	within the operation band	PASS
			NV	30	-11000.00	-1.971326	within the operation band	PASS
			NV	40	-22000.00	-3.859649	within the operation band	PASS
			NV	50	-11000.00	-1.929825	within the operation band	PASS
			NV	-30	-22000.00	-3.859649	within the operation band	PASS
			NV	-20	-11000.00	-1.971326	within the operation band	PASS
			NV	-10	11000.00	1.971326	within the operation band	PASS
Ant2	5580	5580	NV	0	0.00	0.000000	within the	PASS

Temperature								
TestMode	Antenna	Freq(MHz)	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
							operation band	
			NV	10	-22000.00	-3.859649	within the operation band	PASS
			NV	20	-11000.00	-1.929825	within the operation band	PASS
			NV	30	-22000.00	-3.859649	within the operation band	PASS
			NV	40	11000.00	1.971326	within the operation band	PASS
			NV	50	0.00	0.000000	within the operation band	PASS
		Ant1	NV	-30	-11000.00	-1.929825	within the operation band	PASS
			NV	-20	-22000.00	-3.859649	within the operation band	PASS
			NV	-10	-11000.00	-1.929825	within the operation band	PASS
			NV	0	-22000.00	-3.859649	within the operation band	PASS
			NV	10	11000.00	1.929825	within the operation band	PASS
			NV	20	-11000.00	-1.929825	within the operation band	PASS
			NV	30	11000.00	1.929825	within the operation band	PASS
			NV	40	0.00	0.000000	within the operation band	PASS
			NV	50	22000.00	3.859649	within the operation band	PASS
		Ant2	NV	-30	0.00	0.000000	within the operation band	PASS
			NV	-20	0.00	0.000000	within the operation band	PASS
			NV	-10	0.00	0.000000	within the operation band	PASS
			NV	0	-11000.00	-1.929825	within the operation band	PASS
			NV	10	0.00	0.000000	within the operation band	PASS
			NV	20	-11000.00	-1.929825	within the operation band	PASS
			NV	30	0.00	0.000000	within the operation band	PASS
			NV	40	11000.00	1.929825	within the operation band	PASS
			NV	50	-11000.00	-1.929825	within the operation band	PASS
		Ant1	NV	-30	0.00	0.000000	within the operation band	PASS
			NV	-20	-11000.00	-1.914708	within the operation band	PASS
			NV	-10	0.00	0.000000	within the operation band	PASS
			NV	0	0.00	0.000000	within the operation band	PASS
			NV	10	-22000.00	-3.829417	within the operation band	PASS
			NV	20	22000.00	3.802939	within the operation band	PASS
			NV	30	11000.00	1.901469	within the operation band	PASS
			NV	40	11000.00	1.914708	within the	PASS

Temperature								
TestMode	Antenna	Freq(MHz)	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Ant2	5745	5745	NV	50	0.00	0.000000	operation band within the operation band	PASS
			NV	-30	0.00	0.000000	within the operation band	PASS
			NV	-20	11000.00	1.914708	within the operation band	PASS
			NV	-10	-11000.00	-1.914708	within the operation band	PASS
			NV	0	22000.00	3.802939	within the operation band	PASS
			NV	10	11000.00	1.901469	within the operation band	PASS
			NV	20	0.00	0.000000	within the operation band	PASS
			NV	30	0.00	0.000000	within the operation band	PASS
			NV	40	-22000.00	-3.829417	within the operation band	PASS
			NV	50	0.00	0.000000	within the operation band	PASS
Ant1	5785	5785	NV	-30	0.00	0.000000	within the operation band	PASS
			NV	-20	-33000.00	-5.704408	within the operation band	PASS
			NV	-10	22000.00	3.802939	within the operation band	PASS
			NV	0	11000.00	1.901469	within the operation band	PASS
			NV	10	0.00	0.000000	within the operation band	PASS
			NV	20	22000.00	4.247104	within the operation band	PASS
			NV	30	11000.00	2.123552	within the operation band	PASS
			NV	40	0.00	0.000000	within the operation band	PASS
			NV	50	22000.00	3.802939	within the operation band	PASS
Ant2	5785	5785	NV	-30	11000.00	1.901469	within the operation band	PASS
			NV	-20	11000.00	1.901469	within the operation band	PASS
			NV	-10	-11000.00	-1.901469	within the operation band	PASS
			NV	0	0.00	0.000000	within the operation band	PASS
			NV	10	22000.00	4.247104	within the operation band	PASS
			NV	20	11000.00	2.123552	within the operation band	PASS
			NV	30	0.00	0.000000	within the operation band	PASS
			NV	40	22000.00	4.247104	within the operation band	PASS
			NV	50	11000.00	2.123552	within the operation band	PASS
Ant1	5825	5825	NV	-30	22000.00	4.247104	within the operation band	PASS
			NV	-20	0.00	0.000000	within the operation band	PASS
			NV	-10	-22000.00	-3.776824	within the	PASS

Temperature								
TestMode	Antenna	Freq(MHz)	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
11N20MIMO	Ant2	5825					operation band	
			NV	0	-11000.00	-1.888412	within the operation band	PASS
			NV	10	11000.00	1.888412	within the operation band	PASS
			NV	20	0.00	0.000000	within the operation band	PASS
			NV	30	11000.00	1.888412	within the operation band	PASS
			NV	40	22000.00	4.247104	within the operation band	PASS
			NV	50	11000.00	2.123552	within the operation band	PASS
	Ant1	5180	NV	-30	22000.00	4.247104	within the operation band	PASS
			NV	-20	0.00	0.000000	within the operation band	PASS
			NV	-10	-22000.00	-3.776824	within the operation band	PASS
			NV	0	-11000.00	-1.888412	within the operation band	PASS
			NV	10	22000.00	4.247104	within the operation band	PASS
			NV	20	11000.00	2.123552	within the operation band	PASS
			NV	30	-11000.00	-1.888412	within the operation band	PASS
	Ant2	5180	NV	40	-11000.00	-1.888412	within the operation band	PASS
			NV	50	0.00	0.000000	within the operation band	PASS
			NV	-30	-11000.00	-2.123552	within the operation band	PASS
			NV	-20	-22000.00	-4.247104	within the operation band	PASS
			NV	-10	11000.00	2.123552	within the operation band	PASS
			NV	0	22000.00	4.247104	within the operation band	PASS
			NV	10	11000.00	2.123552	within the operation band	PASS

Temperature								
TestMode	Antenna	Freq(MHz)	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Ant1	5200						operation band	
			NV	40	22000.00	4.247104	within the operation band	PASS
			NV	50	11000.00	2.123552	within the operation band	PASS
			NV	-30	-11000.00	-2.115385	within the operation band	PASS
			NV	-20	-22000.00	-4.230769	within the operation band	PASS
			NV	-10	0.00	0.000000	within the operation band	PASS
			NV	0	-44000.00	-8.461538	within the operation band	PASS
			NV	10	0.00	0.000000	within the operation band	PASS
			NV	20	-22000.00	-4.230769	within the operation band	PASS
			NV	30	-11000.00	-2.099237	within the operation band	PASS
Ant2	5200		NV	40	-11000.00	-2.099237	within the operation band	PASS
			NV	50	-22000.00	-4.230769	within the operation band	PASS
			NV	-30	22000.00	4.230769	within the operation band	PASS
			NV	-20	22000.00	4.230769	within the operation band	PASS
			NV	-10	22000.00	4.230769	within the operation band	PASS
			NV	0	22000.00	4.230769	within the operation band	PASS
			NV	10	11000.00	2.115385	within the operation band	PASS
			NV	20	-11000.00	-2.115385	within the operation band	PASS
			NV	30	-11000.00	-2.099237	within the operation band	PASS
Ant1	5240		NV	40	-11000.00	-2.099237	within the operation band	PASS
			NV	50	-11000.00	-2.099237	within the operation band	PASS
			NV	-30	0.00	0.000000	within the operation band	PASS
			NV	-20	0.00	0.000000	within the operation band	PASS
			NV	-10	-11000.00	-2.099237	within the operation band	PASS
			NV	0	-11000.00	-2.099237	within the operation band	PASS
			NV	10	0.00	0.000000	within the operation band	PASS
			NV	20	-22000.00	-4.198473	within the operation band	PASS
			NV	30	0.00	0.000000	within the operation band	PASS
Ant2	5240		NV	40	-11000.00	-2.099237	within the operation band	PASS
			NV	50	-11000.00	-2.099237	within the operation band	PASS

Temperature								
TestMode	Antenna	Freq(MHz)	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
							operation band	
			NV	-10	-11000.00	-2.000000	within the operation band	PASS
			NV	0	22000.00	4.198473	within the operation band	PASS
			NV	10	-11000.00	-2.099237	within the operation band	PASS
			NV	20	-11000.00	-2.099237	within the operation band	PASS
			NV	30	11000.00	2.099237	within the operation band	PASS
			NV	40	-11000.00	-2.099237	within the operation band	PASS
			NV	50	-22000.00	-4.198473	within the operation band	PASS
			NV	-30	0.00	0.000000	within the operation band	PASS
			NV	-20	-22000.00	-4.182510	within the operation band	PASS
	Ant1	5260	NV	-10	22000.00	4.182510	within the operation band	PASS
			NV	0	-11000.00	-2.091255	within the operation band	PASS
			NV	10	-22000.00	-4.182510	within the operation band	PASS
			NV	20	-11000.00	-2.091255	within the operation band	PASS
			NV	30	-22000.00	-4.182510	within the operation band	PASS
			NV	40	-22000.00	-4.135338	within the operation band	PASS
			NV	50	-11000.00	-2.000000	within the operation band	PASS
			NV	-30	11000.00	2.091255	within the operation band	PASS
			NV	-20	11000.00	2.091255	within the operation band	PASS
			NV	-10	-22000.00	-4.135338	within the operation band	PASS
	Ant2	5260	NV	0	-11000.00	-2.000000	within the operation band	PASS
			NV	10	-22000.00	-4.135338	within the operation band	PASS
			NV	20	11000.00	2.091255	within the operation band	PASS
			NV	30	22000.00	4.182510	within the operation band	PASS
			NV	40	11000.00	2.091255	within the operation band	PASS
			NV	50	11000.00	2.091255	within the operation band	PASS
			NV	-30	-22000.00	-4.135338	within the operation band	PASS
			NV	-20	-11000.00	-2.000000	within the operation band	PASS
			NV	-10	-22000.00	-4.135338	within the operation band	PASS
			NV	0	-22000.00	-4.166667	within the operation band	PASS
	Ant1	5280	NV	10	-44000.00	-8.333333	within the operation band	PASS
			NV	20	11000.00	2.083333	within the	PASS

Temperature								
TestMode	Antenna	Freq(MHz)	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Ant2	5280		NV	30	-11000.00	-2.083333	within the operation band	PASS
			NV	40	-22000.00	-4.166667	within the operation band	PASS
			NV	50	-11000.00	-2.083333	within the operation band	PASS
			NV	-30	-11000.00	-2.083333	within the operation band	PASS
			NV	-20	11000.00	2.083333	within the operation band	PASS
			NV	-10	-22000.00	-4.135338	within the operation band	PASS
			NV	0	-11000.00	-2.000000	within the operation band	PASS
			NV	10	33000.00	6.250000	within the operation band	PASS
			NV	20	0.00	0.000000	within the operation band	PASS
			NV	30	-11000.00	-2.083333	within the operation band	PASS
Ant1	5320		NV	40	-11000.00	-2.083333	within the operation band	PASS
			NV	50	11000.00	2.083333	within the operation band	PASS
			NV	-30	-11000.00	-2.067669	within the operation band	PASS
			NV	-20	-11000.00	-2.067669	within the operation band	PASS
			NV	-10	11000.00	2.067669	within the operation band	PASS
			NV	0	-22000.00	-4.135338	within the operation band	PASS
			NV	10	-11000.00	-2.000000	within the operation band	PASS
			NV	20	11000.00	2.067669	within the operation band	PASS
			NV	30	-11000.00	-2.067669	within the operation band	PASS
			NV	40	11000.00	2.067669	within the operation band	PASS
Ant2	5320		NV	50	-33000.00	-6.203008	within the operation band	PASS
			NV	-30	-11000.00	-2.067669	within the operation band	PASS
			NV	-20	-22000.00	-4.135338	within the operation band	PASS
			NV	-10	11000.00	2.067669	within the operation band	PASS
			NV	0	-22000.00	-4.135338	within the operation band	PASS
			NV	10	-22000.00	-4.135338	within the operation band	PASS
			NV	20	-11000.00	-2.000000	within the operation band	PASS
			NV	30	-22000.00	-4.135338	within the operation band	PASS
			NV	40	0.00	0.000000	within the operation band	PASS
			NV	50	-22000.00	-4.135338	within the operation band	PASS
Ant1	5500	NV	-30	-11000.00	-2.000000	within the		PASS

Temperature								
TestMode	Antenna	Freq(MHz)	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
							operation band	
			NV	-20	11000.00	2.000000	within the operation band	PASS
			NV	-10	22000.00	4.000000	within the operation band	PASS
			NV	0	-33000.00	-6.000000	within the operation band	PASS
			NV	10	-11000.00	-2.000000	within the operation band	PASS
			NV	20	-33000.00	-6.000000	within the operation band	PASS
			NV	30	0.00	0.000000	within the operation band	PASS
			NV	40	-22000.00	-4.000000	within the operation band	PASS
			NV	50	-11000.00	-2.000000	within the operation band	PASS
		5500	NV	-30	-22000.00	-4.000000	within the operation band	PASS
			NV	-20	33000.00	6.000000	within the operation band	PASS
			NV	-10	-22000.00	-4.000000	within the operation band	PASS
			NV	0	0.00	0.000000	within the operation band	PASS
			NV	10	-11000.00	-2.000000	within the operation band	PASS
			NV	20	0.00	0.000000	within the operation band	PASS
			NV	30	33000.00	6.000000	within the operation band	PASS
			NV	40	-22000.00	-4.000000	within the operation band	PASS
			NV	50	0.00	0.000000	within the operation band	PASS
		5580	NV	-30	22000.00	3.942652	within the operation band	PASS
			NV	-20	11000.00	1.971326	within the operation band	PASS
			NV	-10	33000.00	6.000000	within the operation band	PASS
			NV	0	-22000.00	-4.000000	within the operation band	PASS
			NV	10	0.00	0.000000	within the operation band	PASS
			NV	20	11000.00	1.971326	within the operation band	PASS
			NV	30	-11000.00	-1.971326	within the operation band	PASS
			NV	40	0.00	0.000000	within the operation band	PASS
			NV	50	11000.00	1.971326	within the operation band	PASS
		5580	NV	-30	11000.00	1.971326	within the operation band	PASS
			NV	-20	11000.00	1.971326	within the operation band	PASS
			NV	-10	-11000.00	-1.971326	within the operation band	PASS
			NV	0	11000.00	1.971326	within the operation band	PASS
			NV	10	0.00	0.000000	within the	PASS

Temperature								
TestMode	Antenna	Freq(MHz)	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Ant1	5700	5700	NV	20	-11000.00	-2.123552	within the operation band	PASS
			NV	30	-22000.00	-4.247104	within the operation band	PASS
			NV	40	11000.00	1.971326	within the operation band	PASS
			NV	50	-33000.00	-5.913978	within the operation band	PASS
			NV	-30	-11000.00	-2.123552	within the operation band	PASS
	5700	5700	NV	-20	-22000.00	-4.247104	within the operation band	PASS
			NV	-10	-33000.00	-5.789474	within the operation band	PASS
			NV	0	-22000.00	-3.859649	within the operation band	PASS
			NV	10	-11000.00	-1.929825	within the operation band	PASS
			NV	20	0.00	0.000000	within the operation band	PASS
Ant2	5700	5700	NV	30	11000.00	1.929825	within the operation band	PASS
			NV	40	11000.00	1.929825	within the operation band	PASS
			NV	50	22000.00	3.859649	within the operation band	PASS
			NV	-30	0.00	0.000000	within the operation band	PASS
			NV	-20	-22000.00	-3.859649	within the operation band	PASS
	5700	5700	NV	-10	-11000.00	-1.929825	within the operation band	PASS
			NV	0	-33000.00	-5.789474	within the operation band	PASS
			NV	10	0.00	0.000000	within the operation band	PASS
			NV	20	-33000.00	-5.789474	within the operation band	PASS
			NV	30	-11000.00	-1.929825	within the operation band	PASS
Ant1	5745	5745	NV	40	-11000.00	-2.123552	within the operation band	PASS
			NV	50	-22000.00	-4.247104	within the operation band	PASS
			NV	-30	22000.00	3.829417	within the operation band	PASS
			NV	-20	22000.00	3.829417	within the operation band	PASS
			NV	-10	-11000.00	-1.914708	within the operation band	PASS
	5745	5745	NV	0	-22000.00	-3.829417	within the operation band	PASS
			NV	10	11000.00	1.914708	within the operation band	PASS
			NV	20	0.00	0.000000	within the operation band	PASS
			NV	30	11000.00	1.914708	within the operation band	PASS
			NV	40	0.00	0.000000	within the operation band	PASS
			NV	50	-33000.00	-5.744125	within the	PASS

Temperature								
TestMode	Antenna	Freq(MHz)	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Ant2	5745	5745	NV	-30	0.00	0.000000	within the operation band	operation band
			NV	-20	11000.00	1.914708	within the operation band	PASS
			NV	-10	-22000.00	-3.829417	within the operation band	PASS
			NV	0	0.00	0.000000	within the operation band	PASS
			NV	10	-11000.00	-2.123552	within the operation band	PASS
			NV	20	-22000.00	-4.247104	within the operation band	PASS
			NV	30	-33000.00	-5.744125	within the operation band	PASS
			NV	40	33000.00	5.744125	within the operation band	PASS
			NV	50	11000.00	1.914708	within the operation band	PASS
			NV	-30	-22000.00	-3.802939	within the operation band	PASS
Ant1	5785	5785	NV	-20	-11000.00	-1.901469	within the operation band	PASS
			NV	-10	-11000.00	-1.901469	within the operation band	PASS
			NV	0	22000.00	3.802939	within the operation band	PASS
			NV	10	0.00	0.000000	within the operation band	PASS
			NV	20	0.00	0.000000	within the operation band	PASS
			NV	30	0.00	0.000000	within the operation band	PASS
			NV	40	-11000.00	-2.123552	within the operation band	PASS
			NV	50	-22000.00	-4.247104	within the operation band	PASS
			NV	-30	-11000.00	-1.901469	within the operation band	PASS
			NV	-20	-44000.00	-7.605877	within the operation band	PASS
Ant2	5785	5785	NV	-10	-22000.00	-3.802939	within the operation band	PASS
			NV	0	0.00	0.000000	within the operation band	PASS
			NV	10	-11000.00	-2.123552	within the operation band	PASS
			NV	20	-22000.00	-4.247104	within the operation band	PASS
			NV	30	-22000.00	-3.802939	within the operation band	PASS
			NV	40	11000.00	1.901469	within the operation band	PASS
			NV	50	0.00	0.000000	within the operation band	PASS
			NV	-30	11000.00	1.888412	within the operation band	PASS
			NV	-20	-11000.00	-2.123552	within the operation band	PASS
			NV	-10	-22000.00	-4.247104	within the operation band	PASS
Ant1	5825	5825	NV	0	-11000.00	-1.888412	within the	PASS

Temperature								
TestMode	Antenna	Freq(MHz)	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
11N40MIMO	Ant2	5825	NV	10	11000.00	1.888412	within the operation band	PASS
			NV	20	0.00	0.000000	within the operation band	PASS
			NV	30	11000.00	1.888412	within the operation band	PASS
			NV	40	-11000.00	-1.888412	within the operation band	PASS
			NV	50	22000.00	3.776824	within the operation band	PASS
			NV	-30	-11000.00	-2.123552	within the operation band	PASS
		5190	NV	-20	-22000.00	-4.247104	within the operation band	PASS
			NV	-10	11000.00	1.888412	within the operation band	PASS
			NV	0	0.00	0.000000	within the operation band	PASS
			NV	10	11000.00	1.888412	within the operation band	PASS
11N40MIMO	Ant1	5190	NV	20	0.00	0.000000	within the operation band	PASS
			NV	30	11000.00	2.123552	within the operation band	PASS
			NV	40	-11000.00	-2.115385	within the operation band	PASS
			NV	50	11000.00	1.888412	within the operation band	PASS
			NV	-30	-11000.00	-2.123552	within the operation band	PASS
			NV	-20	-22000.00	-4.247104	within the operation band	PASS
			NV	-10	11000.00	2.123552	within the operation band	PASS
			NV	0	-11000.00	-2.115385	within the operation band	PASS
			NV	10	22000.00	4.247104	within the operation band	PASS
11N40MIMO	Ant2	5190	NV	20	0.00	0.000000	within the operation band	PASS
			NV	30	11000.00	2.123552	within the operation band	PASS
			NV	40	-22000.00	-4.247104	within the operation band	PASS
			NV	50	-33000.00	-6.370656	within the operation band	PASS
			NV	-30	33000.00	6.370656	within the operation band	PASS
			NV	-20	0.00	0.000000	within the operation band	PASS
			NV	-10	22000.00	4.247104	within the operation band	PASS
			NV	0	11000.00	2.123552	within the operation band	PASS
			NV	10	-11000.00	-2.115385	within the operation band	PASS
			NV	20	0.00	0.000000	within the operation band	PASS

Temperature								
TestMode	Antenna	Freq(MHz)	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Ant1	5230	NV	50	11000.00	2.123552	within the operation band	operation band	PASS
Ant2	5230	NV	-30	-11000.00	-2.115385	within the operation band	operation band	PASS
Ant1	5270	NV	-30	22000.00	4.230769	within the operation band	operation band	PASS
Ant2	5270	NV	30	-22000.00	-4.230769	within the operation band	operation band	PASS

Temperature								
TestMode	Antenna	Freq(MHz)	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
							operation band	
			NV	0	22000.00	4.182510	within the operation band	PASS
			NV	10	-11000.00	-2.091255	within the operation band	PASS
			NV	20	-11000.00	-2.099237	within the operation band	PASS
			NV	30	11000.00	2.099237	within the operation band	PASS
			NV	40	-11000.00	-2.099237	within the operation band	PASS
			NV	50	-22000.00	-4.198473	within the operation band	PASS
		5310	NV	-30	0.00	0.000000	within the operation band	PASS
			NV	-20	-22000.00	-4.182510	within the operation band	PASS
			NV	-10	22000.00	4.182510	within the operation band	PASS
			NV	0	-11000.00	-2.091255	within the operation band	PASS
			NV	10	-22000.00	-4.182510	within the operation band	PASS
			NV	20	-11000.00	-2.091255	within the operation band	PASS
			NV	30	-22000.00	-4.182510	within the operation band	PASS
			NV	40	11000.00	2.091255	within the operation band	PASS
			NV	50	-11000.00	-2.091255	within the operation band	PASS
		5310	NV	-30	11000.00	2.091255	within the operation band	PASS
			NV	-20	11000.00	2.091255	within the operation band	PASS
			NV	-10	11000.00	2.091255	within the operation band	PASS
			NV	0	-11000.00	-2.091255	within the operation band	PASS
			NV	10	-22000.00	-4.166667	within the operation band	PASS
			NV	20	-44000.00	-8.333333	within the operation band	PASS
			NV	30	22000.00	4.182510	within the operation band	PASS
			NV	40	11000.00	2.091255	within the operation band	PASS
			NV	50	11000.00	2.091255	within the operation band	PASS
		5510	NV	-30	-11000.00	-2.067669	within the operation band	PASS
			NV	-20	-22000.00	-4.135338	within the operation band	PASS
			NV	-10	11000.00	2.067669	within the operation band	PASS
			NV	0	-22000.00	-4.166667	within the operation band	PASS
			NV	10	-44000.00	-8.333333	within the operation band	PASS
			NV	20	11000.00	2.083333	within the operation band	PASS
			NV	30	-11000.00	-2.083333	within the	PASS

Temperature								
TestMode	Antenna	Freq(MHz)	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Ant2	5510		NV	40	-22000.00	-4.166667	within the operation band	PASS
			NV	50	-11000.00	-2.083333	within the operation band	PASS
			NV	-30	-11000.00	-2.083333	within the operation band	PASS
			NV	-20	11000.00	2.083333	within the operation band	PASS
			NV	-10	22000.00	4.166667	within the operation band	PASS
			NV	0	-11000.00	-2.067669	within the operation band	PASS
			NV	10	-22000.00	-4.135338	within the operation band	PASS
			NV	20	11000.00	2.067669	within the operation band	PASS
			NV	30	-11000.00	-2.083333	within the operation band	PASS
			NV	40	-11000.00	-2.083333	within the operation band	PASS
Ant1	5550		NV	-30	-11000.00	-2.067669	within the operation band	PASS
			NV	-20	-11000.00	-2.067669	within the operation band	PASS
			NV	-10	-11000.00	-2.067669	within the operation band	PASS
			NV	0	-22000.00	-4.135338	within the operation band	PASS
			NV	10	11000.00	2.067669	within the operation band	PASS
			NV	20	11000.00	2.067669	within the operation band	PASS
			NV	30	-11000.00	-2.067669	within the operation band	PASS
			NV	40	11000.00	2.067669	within the operation band	PASS
			NV	50	-33000.00	-6.203008	within the operation band	PASS
			NV	-30	-11000.00	-2.067669	within the operation band	PASS
Ant2	5550		NV	-20	-22000.00	-4.135338	within the operation band	PASS
			NV	-10	11000.00	2.067669	within the operation band	PASS
			NV	0	-22000.00	-4.135338	within the operation band	PASS
			NV	10	0.00	0.000000	within the operation band	PASS
			NV	20	-11000.00	-2.067669	within the operation band	PASS
			NV	30	-22000.00	-4.135338	within the operation band	PASS
			NV	40	0.00	0.000000	within the operation band	PASS
			NV	50	-22000.00	-4.135338	within the operation band	PASS
			NV	-30	-11000.00	-2.000000	within the operation band	PASS
Ant1	5670		NV	-20	11000.00	2.000000	within the	PASS

Temperature								
TestMode	Antenna	Freq(MHz)	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
							operation band	
			NV	-10	22000.00	4.000000	within the operation band	PASS
			NV	0	-33000.00	-6.000000	within the operation band	PASS
			NV	10	-11000.00	-2.000000	within the operation band	PASS
			NV	20	-33000.00	-6.000000	within the operation band	PASS
			NV	30	0.00	0.000000	within the operation band	PASS
			NV	40	-22000.00	-4.000000	within the operation band	PASS
			NV	50	-11000.00	-2.000000	within the operation band	PASS
			NV	-30	-22000.00	-4.000000	within the operation band	PASS
			NV	-20	-22000.00	-4.000000	within the operation band	PASS
	Ant2	5670	NV	-10	0.00	0.000000	within the operation band	PASS
			NV	0	-11000.00	-2.000000	within the operation band	PASS
			NV	10	-11000.00	-2.000000	within the operation band	PASS
			NV	20	0.00	0.000000	within the operation band	PASS
			NV	30	33000.00	6.000000	within the operation band	PASS
			NV	40	-22000.00	-4.000000	within the operation band	PASS
			NV	50	0.00	0.000000	within the operation band	PASS
			NV	-30	22000.00	3.942652	within the operation band	PASS
			NV	-20	11000.00	1.971326	within the operation band	PASS
			NV	-10	0.00	0.000000	within the operation band	PASS
	Ant1	5755	NV	0	11000.00	1.971326	within the operation band	PASS
			NV	10	11000.00	1.971326	within the operation band	PASS
			NV	20	11000.00	1.971326	within the operation band	PASS
			NV	30	-11000.00	-1.971326	within the operation band	PASS
			NV	40	0.00	0.000000	within the operation band	PASS
			NV	50	11000.00	1.971326	within the operation band	PASS
			NV	-30	-33000.00	-5.789474	within the operation band	PASS
			NV	-20	-11000.00	-1.929825	within the operation band	PASS
			NV	-10	-11000.00	-1.971326	within the operation band	PASS
			NV	0	11000.00	1.971326	within the operation band	PASS
	Ant2	5755	NV	10	0.00	0.000000	within the operation band	PASS
			NV	20	33000.00	5.913978	within the	PASS

Temperature								
TestMode	Antenna	Freq(MHz)	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
							operation band	
			NV	30	-33000.00	-5.913978	within the operation band	PASS
			NV	40	11000.00	1.971326	within the operation band	PASS
			NV	50	-33000.00	-5.913978	within the operation band	PASS
		Ant1	5795	NV	-30	0.00	0.000000	within the operation band
				NV	-20	-33000.00	-5.789474	within the operation band
				NV	-10	-11000.00	-1.929825	within the operation band
				NV	0	-22000.00	-3.859649	within the operation band
				NV	10	-33000.00	-5.789474	within the operation band
				NV	20	-11000.00	-1.929825	within the operation band
				NV	30	11000.00	1.929825	within the operation band
				NV	40	11000.00	1.929825	within the operation band
				NV	50	22000.00	3.859649	within the operation band
		Ant2	5795	NV	-30	-33000.00	-5.789474	within the operation band
				NV	-20	-11000.00	-1.929825	within the operation band
				NV	-10	-11000.00	-1.929825	within the operation band
				NV	0	-33000.00	-5.789474	within the operation band
				NV	10	0.00	0.000000	within the operation band
				NV	20	-33000.00	-5.789474	within the operation band
				NV	30	-11000.00	-1.929825	within the operation band
				NV	40	-22000.00	-3.859649	within the operation band
				NV	50	0.00	0.000000	within the operation band
	11AC20MI MO	Ant1	5180	NV	-30	-11000.00	-2.123552	within the operation band
				NV	-20	-22000.00	-4.247104	within the operation band
				NV	-10	11000.00	2.123552	within the operation band
				NV	0	-22000.00	-4.247104	within the operation band
				NV	10	22000.00	4.247104	within the operation band
				NV	20	0.00	0.000000	within the operation band
				NV	30	11000.00	2.123552	within the operation band
				NV	40	-11000.00	-2.115385	within the operation band
				NV	50	-11000.00	-2.115385	within the operation band
		Ant2	5180	NV	-30	33000.00	6.370656	within the

Temperature								
TestMode	Antenna	Freq(MHz)	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
							operation band	
			NV	-20	0.00	0.000000	within the operation band	PASS
			NV	-10	22000.00	4.247104	within the operation band	PASS
			NV	0	22000.00	4.247104	within the operation band	PASS
			NV	10	0.00	0.000000	within the operation band	PASS
			NV	20	55000.00	10.617761	within the operation band	PASS
			NV	30	11000.00	2.123552	within the operation band	PASS
			NV	40	22000.00	4.247104	within the operation band	PASS
			NV	50	11000.00	2.123552	within the operation band	PASS
		5200	NV	-30	-11000.00	-2.115385	within the operation band	PASS
			NV	-20	-22000.00	-4.230769	within the operation band	PASS
			NV	-10	0.00	0.000000	within the operation band	PASS
			NV	0	-11000.00	-2.115385	within the operation band	PASS
			NV	10	0.00	0.000000	within the operation band	PASS
			NV	20	0.00	0.000000	within the operation band	PASS
			NV	30	0.00	0.000000	within the operation band	PASS
			NV	40	-11000.00	-2.115385	within the operation band	PASS
			NV	50	-22000.00	-4.230769	within the operation band	PASS
		5200	NV	-30	22000.00	4.230769	within the operation band	PASS
			NV	-20	22000.00	4.230769	within the operation band	PASS
			NV	-10	22000.00	4.230769	within the operation band	PASS
			NV	0	22000.00	4.230769	within the operation band	PASS
			NV	10	11000.00	2.115385	within the operation band	PASS
			NV	20	-11000.00	-2.115385	within the operation band	PASS
			NV	30	0.00	0.000000	within the operation band	PASS
			NV	40	0.00	0.000000	within the operation band	PASS
			NV	50	-11000.00	-2.115385	within the operation band	PASS
		5240	NV	-30	0.00	0.000000	within the operation band	PASS
			NV	-20	0.00	0.000000	within the operation band	PASS
			NV	-10	-22000.00	-4.198473	within the operation band	PASS
			NV	0	0.00	0.000000	within the operation band	PASS
			NV	10	0.00	0.000000	within the	PASS

Temperature								
TestMode	Antenna	Freq(MHz)	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
							operation band	
			NV	20	-22000.00	-4.198473	within the operation band	PASS
			NV	30	0.00	0.000000	within the operation band	PASS
			NV	40	-11000.00	-2.099237	within the operation band	PASS
			NV	50	-11000.00	-2.099237	within the operation band	PASS
	Ant2	5240	NV	-30	0.00	0.000000	within the operation band	PASS
			NV	-20	-11000.00	-2.099237	within the operation band	PASS
			NV	-10	-11000.00	-2.099237	within the operation band	PASS
			NV	0	22000.00	4.198473	within the operation band	PASS
			NV	10	0.00	0.000000	within the operation band	PASS
	Ant1	5260	NV	20	0.00	0.000000	within the operation band	PASS
			NV	30	11000.00	2.099237	within the operation band	PASS
			NV	40	-11000.00	-2.099237	within the operation band	PASS
			NV	50	-22000.00	-4.198473	within the operation band	PASS
			NV	-30	0.00	0.000000	within the operation band	PASS
	Ant2	5260	NV	-20	-22000.00	-4.182510	within the operation band	PASS
			NV	-10	22000.00	4.182510	within the operation band	PASS
			NV	0	-11000.00	-2.091255	within the operation band	PASS
			NV	10	-22000.00	-4.182510	within the operation band	PASS
			NV	20	-11000.00	-2.091255	within the operation band	PASS
			NV	30	-22000.00	-4.182510	within the operation band	PASS
			NV	40	11000.00	2.091255	within the operation band	PASS
			NV	50	-11000.00	-2.091255	within the operation band	PASS
			NV	-30	11000.00	2.091255	within the operation band	PASS
			NV	-20	11000.00	2.091255	within the operation band	PASS

Temperature								
TestMode	Antenna	Freq(MHz)	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Ant1	5280	5280	NV	-30	11000.00	2.083333	within the operation band	PASS
			NV	-20	-11000.00	-2.083333	within the operation band	PASS
			NV	-10	-11000.00	-2.083333	within the operation band	PASS
			NV	0	-22000.00	-4.166667	within the operation band	PASS
			NV	10	-44000.00	-8.333333	within the operation band	PASS
			NV	20	11000.00	2.083333	within the operation band	PASS
			NV	30	-11000.00	-2.083333	within the operation band	PASS
			NV	40	-22000.00	-4.166667	within the operation band	PASS
			NV	50	-11000.00	-2.083333	within the operation band	PASS
			NV	-30	-11000.00	-2.083333	within the operation band	PASS
Ant2	5280	5280	NV	-20	11000.00	2.083333	within the operation band	PASS
			NV	-10	22000.00	4.166667	within the operation band	PASS
			NV	0	-11000.00	-2.067669	within the operation band	PASS
			NV	10	-11000.00	-2.067669	within the operation band	PASS
			NV	20	-11000.00	-2.067669	within the operation band	PASS
			NV	30	-11000.00	-2.083333	within the operation band	PASS
			NV	40	-11000.00	-2.083333	within the operation band	PASS
			NV	50	11000.00	2.083333	within the operation band	PASS
			NV	-30	-11000.00	-2.067669	within the operation band	PASS
			NV	-20	-11000.00	-2.067669	within the operation band	PASS
Ant1	5320	5320	NV	-10	11000.00	2.067669	within the operation band	PASS
			NV	0	0.00	0.000000	within the operation band	PASS
			NV	10	-33000.00	-6.203008	within the operation band	PASS
			NV	20	11000.00	2.067669	within the operation band	PASS
			NV	30	-11000.00	-2.067669	within the operation band	PASS
			NV	40	11000.00	2.067669	within the operation band	PASS
			NV	50	-11000.00	-2.067669	within the operation band	PASS
			NV	-30	-11000.00	-2.067669	within the operation band	PASS
			NV	-20	-22000.00	-4.135338	within the operation band	PASS
			NV	-10	11000.00	2.067669	within the operation band	PASS
Ant2	5320	5320	NV	0	-22000.00	-4.135338	within the	PASS

Temperature								
TestMode	Antenna	Freq(MHz)	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
							operation band	
			NV	10	-11000.00	-2.067669	within the operation band	PASS
			NV	20	-11000.00	-2.067669	within the operation band	PASS
			NV	30	-22000.00	-4.135338	within the operation band	PASS
			NV	40	0.00	0.000000	within the operation band	PASS
			NV	50	-22000.00	-4.135338	within the operation band	PASS
	Ant1	5500	NV	-30	-11000.00	-2.000000	within the operation band	PASS
			NV	-20	11000.00	2.000000	within the operation band	PASS
			NV	-10	22000.00	4.000000	within the operation band	PASS
			NV	0	-33000.00	-6.000000	within the operation band	PASS
			NV	10	-11000.00	-2.000000	within the operation band	PASS
			NV	20	11000.00	1.971326	within the operation band	PASS
			NV	30	11000.00	1.971326	within the operation band	PASS
			NV	40	-22000.00	-4.000000	within the operation band	PASS
			NV	50	-11000.00	-2.000000	within the operation band	PASS
	Ant2	5500	NV	-30	-22000.00	-4.000000	within the operation band	PASS
			NV	-20	11000.00	1.971326	within the operation band	PASS
			NV	-10	11000.00	1.971326	within the operation band	PASS
			NV	0	-11000.00	-2.000000	within the operation band	PASS
			NV	10	-11000.00	-2.000000	within the operation band	PASS
			NV	20	0.00	0.000000	within the operation band	PASS
			NV	30	11000.00	1.971326	within the operation band	PASS
			NV	40	-22000.00	-4.000000	within the operation band	PASS
			NV	50	0.00	0.000000	within the operation band	PASS
	Ant1	5580	NV	-30	22000.00	3.942652	within the operation band	PASS
			NV	-20	11000.00	1.971326	within the operation band	PASS
			NV	-10	0.00	0.000000	within the operation band	PASS
			NV	0	0.00	0.000000	within the operation band	PASS
			NV	10	0.00	0.000000	within the operation band	PASS
			NV	20	11000.00	1.971326	within the operation band	PASS
			NV	30	-11000.00	-1.971326	within the operation band	PASS
			NV	40	0.00	0.000000	within the	PASS

Temperature								
TestMode	Antenna	Freq(MHz)	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Ant2	5580	NV	50	0.00	0.000000	within the operation band	operation band	PASS
Ant1	5700	NV	-30	0.00	0.000000	within the operation band	operation band	PASS
Ant2	5700	NV	-20	-22000.00	-3.859649	within the operation band	operation band	PASS
Ant1	5745	NV	-10	0.00	0.000000	within the operation band	operation band	PASS

Temperature								
TestMode	Antenna	Freq(MHz)	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
							operation band	
			NV	0	-22000.00	-3.829417	within the operation band	PASS
			NV	10	11000.00	1.914708	within the operation band	PASS
			NV	20	0.00	0.000000	within the operation band	PASS
			NV	30	0.00	0.000000	within the operation band	PASS
			NV	40	0.00	0.000000	within the operation band	PASS
			NV	50	-33000.00	-5.744125	within the operation band	PASS
Ant2	5745		NV	-30	0.00	0.000000	within the operation band	PASS
			NV	-20	11000.00	1.914708	within the operation band	PASS
			NV	-10	-22000.00	-3.829417	within the operation band	PASS
			NV	0	0.00	0.000000	within the operation band	PASS
			NV	10	-22000.00	-3.829417	within the operation band	PASS
			NV	20	22000.00	4.247104	within the operation band	PASS
			NV	30	22000.00	4.247104	within the operation band	PASS
			NV	40	33000.00	5.744125	within the operation band	PASS
			NV	50	11000.00	1.914708	within the operation band	PASS
			NV	-30	-22000.00	-3.802939	within the operation band	PASS
Ant1	5785		NV	-20	-11000.00	-1.901469	within the operation band	PASS
			NV	-10	-11000.00	-1.901469	within the operation band	PASS
			NV	0	22000.00	3.802939	within the operation band	PASS
			NV	10	0.00	0.000000	within the operation band	PASS
			NV	20	22000.00	4.247104	within the operation band	PASS
			NV	30	22000.00	4.247104	within the operation band	PASS
			NV	40	-11000.00	-1.901469	within the operation band	PASS
			NV	50	-33000.00	-5.704408	within the operation band	PASS
			NV	-30	-11000.00	-1.901469	within the operation band	PASS
			NV	-20	-44000.00	-7.605877	within the operation band	PASS
Ant2	5785		NV	-10	-22000.00	-3.802939	within the operation band	PASS
			NV	0	0.00	0.000000	within the operation band	PASS
			NV	10	22000.00	4.247104	within the operation band	PASS
			NV	20	22000.00	4.247104	within the operation band	PASS
			NV	30	-22000.00	-3.802939	within the	PASS

Temperature								
TestMode	Antenna	Freq(MHz)	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
	Ant1	5825					operation band	
			NV	40	11000.00	1.901469	within the operation band	PASS
			NV	50	0.00	0.000000	within the operation band	PASS
			NV	-30	11000.00	1.888412	within the operation band	PASS
			NV	-20	0.00	0.000000	within the operation band	PASS
			NV	-10	11000.00	1.888412	within the operation band	PASS
			NV	0	-11000.00	-1.888412	within the operation band	PASS
			NV	10	11000.00	1.888412	within the operation band	PASS
			NV	20	0.00	0.000000	within the operation band	PASS
			NV	30	11000.00	1.888412	within the operation band	PASS
	Ant2	5825	NV	40	-11000.00	-1.888412	within the operation band	PASS
			NV	50	22000.00	3.776824	within the operation band	PASS
			NV	-30	11000.00	1.888412	within the operation band	PASS
			NV	-20	22000.00	4.247104	within the operation band	PASS
			NV	-10	11000.00	1.888412	within the operation band	PASS
			NV	0	0.00	0.000000	within the operation band	PASS
			NV	10	11000.00	1.888412	within the operation band	PASS
			NV	20	0.00	0.000000	within the operation band	PASS
			NV	30	0.00	0.000000	within the operation band	PASS
			NV	40	0.00	0.000000	within the operation band	PASS
11AC40MI MO	Ant1	5190	NV	50	11000.00	1.888412	within the operation band	PASS
			NV	-30	-11000.00	-2.123552	within the operation band	PASS
			NV	-20	22000.00	4.247104	within the operation band	PASS
			NV	-10	22000.00	4.247104	within the operation band	PASS
			NV	0	-22000.00	-4.247104	within the operation band	PASS
			NV	10	22000.00	4.247104	within the operation band	PASS
			NV	20	0.00	0.000000	within the operation band	PASS
			NV	30	11000.00	2.123552	within the operation band	PASS
			NV	40	-22000.00	-4.247104	within the operation band	PASS
			NV	50	-33000.00	-6.370656	within the operation band	PASS
	Ant2	5190	NV	-30	33000.00	6.370656	within the operation band	PASS
	NV	-20	0.00	0.000000	within the	PASS		

Temperature								
TestMode	Antenna	Freq(MHz)	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
							operation band	
			NV	-10	22000.00	4.247104	within the operation band	PASS
			NV	0	22000.00	4.247104	within the operation band	PASS
			NV	10	0.00	0.000000	within the operation band	PASS
			NV	20	0.00	0.000000	within the operation band	PASS
			NV	30	11000.00	2.123552	within the operation band	PASS
			NV	40	22000.00	4.247104	within the operation band	PASS
			NV	50	11000.00	2.123552	within the operation band	PASS
	Ant1	5230	NV	-30	-11000.00	-2.115385	within the operation band	PASS
			NV	-20	-22000.00	-4.230769	within the operation band	PASS
			NV	-10	0.00	0.000000	within the operation band	PASS
			NV	0	-44000.00	-8.461538	within the operation band	PASS
			NV	10	0.00	0.000000	within the operation band	PASS
			NV	20	-22000.00	-4.230769	within the operation band	PASS
			NV	30	0.00	0.000000	within the operation band	PASS
			NV	40	-11000.00	-2.115385	within the operation band	PASS
			NV	50	-22000.00	-4.230769	within the operation band	PASS
	Ant2	5230	NV	-30	22000.00	4.230769	within the operation band	PASS
			NV	-20	22000.00	4.230769	within the operation band	PASS
			NV	-10	22000.00	4.230769	within the operation band	PASS
			NV	0	22000.00	4.230769	within the operation band	PASS
			NV	10	0.00	0.000000	within the operation band	PASS
			NV	20	0.00	0.000000	within the operation band	PASS
			NV	30	0.00	0.000000	within the operation band	PASS
			NV	40	0.00	0.000000	within the operation band	PASS
			NV	50	-11000.00	-2.115385	within the operation band	PASS
	Ant1	5270	NV	-30	0.00	0.000000	within the operation band	PASS
			NV	-20	0.00	0.000000	within the operation band	PASS
			NV	-10	-22000.00	-4.198473	within the operation band	PASS
			NV	0	-44000.00	-8.396947	within the operation band	PASS
			NV	10	0.00	0.000000	within the operation band	PASS
			NV	20	-22000.00	-4.198473	within the	PASS

Temperature								
TestMode	Antenna	Freq(MHz)	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Ant2	5270		NV	30	0.00	0.000000	operation band within the operation band	PASS
			NV	40	0.00	0.000000	within the operation band	PASS
			NV	50	0.00	0.000000	within the operation band	PASS
			NV	-30	-11000.00	-2.099237	within the operation band	PASS
			NV	-20	-11000.00	-2.099237	within the operation band	PASS
			NV	-10	-11000.00	-2.099237	within the operation band	PASS
			NV	0	22000.00	4.198473	within the operation band	PASS
			NV	10	-11000.00	-2.099237	within the operation band	PASS
			NV	20	11000.00	2.091255	within the operation band	PASS
			NV	30	11000.00	2.099237	within the operation band	PASS
Ant1	5310		NV	40	-11000.00	-2.099237	within the operation band	PASS
			NV	50	-22000.00	-4.198473	within the operation band	PASS
			NV	-30	0.00	0.000000	within the operation band	PASS
			NV	-20	-22000.00	-4.182510	within the operation band	PASS
			NV	-10	22000.00	4.182510	within the operation band	PASS
			NV	0	-11000.00	-2.091255	within the operation band	PASS
			NV	10	11000.00	2.091255	within the operation band	PASS
			NV	20	-11000.00	-2.091255	within the operation band	PASS
			NV	30	-22000.00	-4.182510	within the operation band	PASS
			NV	40	11000.00	2.091255	within the operation band	PASS
Ant2	5310		NV	50	-11000.00	-2.091255	within the operation band	PASS
			NV	-30	11000.00	2.091255	within the operation band	PASS
			NV	-20	11000.00	2.091255	within the operation band	PASS
			NV	-10	11000.00	2.091255	within the operation band	PASS
			NV	0	-11000.00	-2.091255	within the operation band	PASS
			NV	10	22000.00	4.182510	within the operation band	PASS
			NV	20	11000.00	2.091255	within the operation band	PASS
			NV	30	0.00	0.000000	within the operation band	PASS
			NV	40	11000.00	2.091255	within the operation band	PASS
			NV	50	11000.00	2.091255	within the operation band	PASS
Ant1	5510	NV	-30	11000.00	2.083333	within the		PASS

Temperature								
TestMode	Antenna	Freq(MHz)	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
							operation band	
			NV	-20	-11000.00	-2.083333	within the operation band	PASS
			NV	-10	0.00	0.000000	within the operation band	PASS
			NV	0	0.00	0.000000	within the operation band	PASS
			NV	10	-44000.00	-8.333333	within the operation band	PASS
			NV	20	11000.00	2.083333	within the operation band	PASS
			NV	30	-11000.00	-2.083333	within the operation band	PASS
			NV	40	-22000.00	-4.166667	within the operation band	PASS
			NV	50	-11000.00	-2.083333	within the operation band	PASS
		5510	NV	-30	0.00	0.000000	within the operation band	PASS
			NV	-20	0.00	0.000000	within the operation band	PASS
			NV	-10	22000.00	4.166667	within the operation band	PASS
			NV	0	22000.00	4.166667	within the operation band	PASS
			NV	10	33000.00	6.250000	within the operation band	PASS
			NV	20	0.00	0.000000	within the operation band	PASS
			NV	30	-33000.00	-6.000000	within the operation band	PASS
			NV	40	-33000.00	-6.000000	within the operation band	PASS
			NV	50	11000.00	2.083333	within the operation band	PASS
		5550	NV	-30	-11000.00	-2.067669	within the operation band	PASS
			NV	-20	-11000.00	-2.067669	within the operation band	PASS
			NV	-10	11000.00	2.067669	within the operation band	PASS
			NV	0	0.00	0.000000	within the operation band	PASS
			NV	10	-33000.00	-6.203008	within the operation band	PASS
			NV	20	11000.00	2.067669	within the operation band	PASS
			NV	30	-33000.00	-6.000000	within the operation band	PASS
			NV	40	11000.00	2.067669	within the operation band	PASS
			NV	50	-33000.00	-6.203008	within the operation band	PASS
		5550	NV	-30	-11000.00	-2.067669	within the operation band	PASS
			NV	-20	-22000.00	-4.135338	within the operation band	PASS
			NV	-10	11000.00	2.067669	within the operation band	PASS
			NV	0	-22000.00	-4.135338	within the operation band	PASS
			NV	10	-11000.00	-2.067669	within the	PASS

Temperature								
TestMode	Antenna	Freq(MHz)	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Ant1	5670		NV	20	-33000.00	-6.000000	within the operation band	PASS
			NV	30	-33000.00	-6.000000	within the operation band	PASS
			NV	40	-33000.00	-6.000000	within the operation band	PASS
			NV	50	-22000.00	-4.135338	within the operation band	PASS
			NV	-30	-11000.00	-2.000000	within the operation band	PASS
	5670		NV	-20	11000.00	2.000000	within the operation band	PASS
			NV	-10	22000.00	4.000000	within the operation band	PASS
			NV	0	-33000.00	-6.000000	within the operation band	PASS
			NV	10	-11000.00	-2.000000	within the operation band	PASS
			NV	20	-33000.00	-6.000000	within the operation band	PASS
Ant2	5670		NV	30	0.00	0.000000	within the operation band	PASS
			NV	40	-22000.00	-4.000000	within the operation band	PASS
			NV	50	-11000.00	-2.000000	within the operation band	PASS
			NV	-30	11000.00	1.929825	within the operation band	PASS
			NV	-20	11000.00	1.929825	within the operation band	PASS
	5670		NV	-10	11000.00	1.929825	within the operation band	PASS
			NV	0	-11000.00	-2.000000	within the operation band	PASS
			NV	10	-11000.00	-2.000000	within the operation band	PASS
			NV	20	0.00	0.000000	within the operation band	PASS
			NV	30	33000.00	6.000000	within the operation band	PASS
Ant1	5755		NV	40	-22000.00	-4.000000	within the operation band	PASS
			NV	50	0.00	0.000000	within the operation band	PASS
			NV	-30	22000.00	3.942652	within the operation band	PASS
			NV	-20	11000.00	1.971326	within the operation band	PASS
			NV	-10	11000.00	1.929825	within the operation band	PASS
	5755		NV	0	11000.00	1.929825	within the operation band	PASS
			NV	10	0.00	0.000000	within the operation band	PASS
			NV	20	11000.00	1.971326	within the operation band	PASS
			NV	30	-11000.00	-1.971326	within the operation band	PASS
			NV	40	0.00	0.000000	within the operation band	PASS
			NV	50	11000.00	1.971326	within the	PASS

Temperature								
TestMode	Antenna	Freq(MHz)	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Ant2	5755	5755	NV	-30	11000.00	1.971326	within the operation band	PASS
			NV	-20	11000.00	1.971326	within the operation band	PASS
			NV	-10	-11000.00	-1.971326	within the operation band	PASS
			NV	0	11000.00	1.971326	within the operation band	PASS
			NV	10	11000.00	1.929825	within the operation band	PASS
			NV	20	11000.00	1.929825	within the operation band	PASS
			NV	30	-33000.00	-5.913978	within the operation band	PASS
			NV	40	11000.00	1.971326	within the operation band	PASS
			NV	50	-33000.00	-5.913978	within the operation band	PASS
			NV	-30	0.00	0.000000	within the operation band	PASS
Ant1	5795	5795	NV	-20	11000.00	1.929825	within the operation band	PASS
			NV	-10	11000.00	1.929825	within the operation band	PASS
			NV	0	-22000.00	-3.859649	within the operation band	PASS
			NV	10	-11000.00	-1.929825	within the operation band	PASS
			NV	20	0.00	0.000000	within the operation band	PASS
			NV	30	11000.00	1.929825	within the operation band	PASS
			NV	40	11000.00	1.929825	within the operation band	PASS
			NV	50	22000.00	3.859649	within the operation band	PASS
			NV	-30	0.00	0.000000	within the operation band	PASS
			NV	-20	-22000.00	-3.859649	within the operation band	PASS
Ant2	5795	5795	NV	-10	0.00	0.000000	within the operation band	PASS
			NV	0	0.00	0.000000	within the operation band	PASS
			NV	10	0.00	0.000000	within the operation band	PASS
			NV	20	-33000.00	-5.789474	within the operation band	PASS
			NV	30	-11000.00	-1.929825	within the operation band	PASS
			NV	40	-22000.00	-3.859649	within the operation band	PASS
			NV	50	0.00	0.000000	within the operation band	PASS
			NV	-30	-11000.00	-2.123552	within the operation band	PASS
			NV	-20	-22000.00	-4.247104	within the operation band	PASS
			NV	-10	11000.00	2.123552	within the operation band	PASS
11AC80MI MO	Ant1	5210	NV	0	0.00	0.000000	within the	PASS

Temperature								
TestMode	Antenna	Freq(MHz)	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
							operation band	
			NV	10	22000.00	4.247104	within the operation band	PASS
			NV	20	0.00	0.000000	within the operation band	PASS
			NV	30	11000.00	2.123552	within the operation band	PASS
			NV	40	-22000.00	-4.247104	within the operation band	PASS
			NV	50	0.00	0.000000	within the operation band	PASS
		5210	NV	-30	0.00	0.000000	within the operation band	PASS
			NV	-20	0.00	0.000000	within the operation band	PASS
			NV	-10	22000.00	4.247104	within the operation band	PASS
			NV	0	22000.00	4.247104	within the operation band	PASS
			NV	10	0.00	0.000000	within the operation band	PASS
			NV	20	11000.00	2.115385	within the operation band	PASS
			NV	30	11000.00	2.123552	within the operation band	PASS
			NV	40	22000.00	4.247104	within the operation band	PASS
			NV	50	11000.00	2.123552	within the operation band	PASS
		5290	NV	-30	11000.00	2.115385	within the operation band	PASS
			NV	-20	-22000.00	-4.230769	within the operation band	PASS
			NV	-10	0.00	0.000000	within the operation band	PASS
			NV	0	11000.00	2.115385	within the operation band	PASS
			NV	10	0.00	0.000000	within the operation band	PASS
			NV	20	-22000.00	-4.230769	within the operation band	PASS
			NV	30	-22000.00	-4.230769	within the operation band	PASS
			NV	40	-11000.00	-2.115385	within the operation band	PASS
			NV	50	-22000.00	-4.230769	within the operation band	PASS
		5290	NV	-30	11000.00	2.115385	within the operation band	PASS
			NV	-20	22000.00	4.230769	within the operation band	PASS
			NV	-10	0.00	0.000000	within the operation band	PASS
			NV	0	0.00	0.000000	within the operation band	PASS
			NV	10	11000.00	2.115385	within the operation band	PASS
			NV	20	-11000.00	-2.115385	within the operation band	PASS
			NV	30	0.00	0.000000	within the operation band	PASS
			NV	40	0.00	0.000000	within the	PASS

Temperature								
TestMode	Antenna	Freq(MHz)	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Ant1	5530	NV	50	-11000.00	-2.115385	within the operation band	operation band	PASS
Ant2	5530	NV	10	0.00	0.000000	within the operation band	operation band	PASS
Ant1	5610	NV	-30	22000.00	4.182510	within the operation band	operation band	PASS
Ant2	5610	NV	-20	22000.00	4.182510	within the operation band	operation band	PASS

Temperature								
TestMode	Antenna	Freq(MHz)	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
							operation band	
			NV	0	-11000.00	-2.091255	within the operation band	PASS
			NV	10	22000.00	4.182510	within the operation band	PASS
			NV	20	11000.00	2.091255	within the operation band	PASS
			NV	30	0.00	0.000000	within the operation band	PASS
			NV	40	0.00	0.000000	within the operation band	PASS
			NV	50	0.00	0.000000	within the operation band	PASS
	Ant1	5775	NV	-30	45000.00	7.792208	within the operation band	PASS
			NV	-20	0.00	0.000000	within the operation band	PASS
			NV	-10	0.00	0.000000	within the operation band	PASS
			NV	0	0.00	0.000000	within the operation band	PASS
			NV	10	0.00	0.000000	within the operation band	PASS
			NV	20	0.00	0.000000	within the operation band	PASS
			NV	30	45000.00	7.792208	within the operation band	PASS
			NV	40	0.00	0.000000	within the operation band	PASS
			NV	50	0.00	0.000000	within the operation band	PASS
	Ant2	5775	NV	-30	45000.00	7.792208	within the operation band	PASS
			NV	-20	0.00	0.000000	within the operation band	PASS
			NV	-10	0.00	0.000000	within the operation band	PASS
			NV	0	45000.00	7.792208	within the operation band	PASS
			NV	10	45000.00	7.792208	within the operation band	PASS
			NV	20	0.00	0.000000	within the operation band	PASS
			NV	30	0.00	0.000000	within the operation band	PASS
			NV	40	0.00	0.000000	within the operation band	PASS
			NV	50	0.00	0.000000	within the operation band	PASS

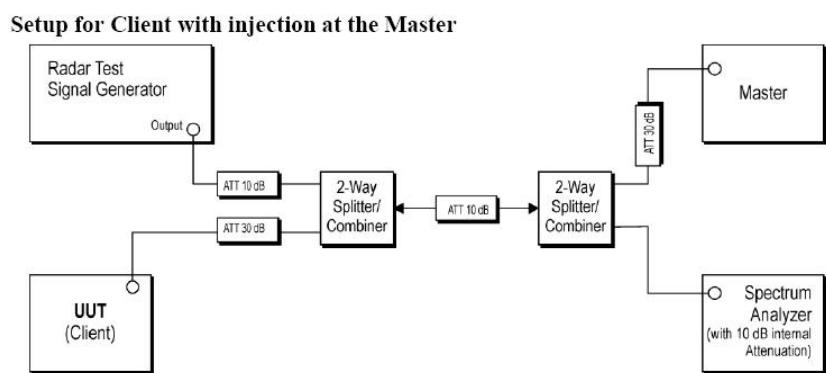
## 5.7 Dynamic Frequency Selection (DFS)

Ambient condition:

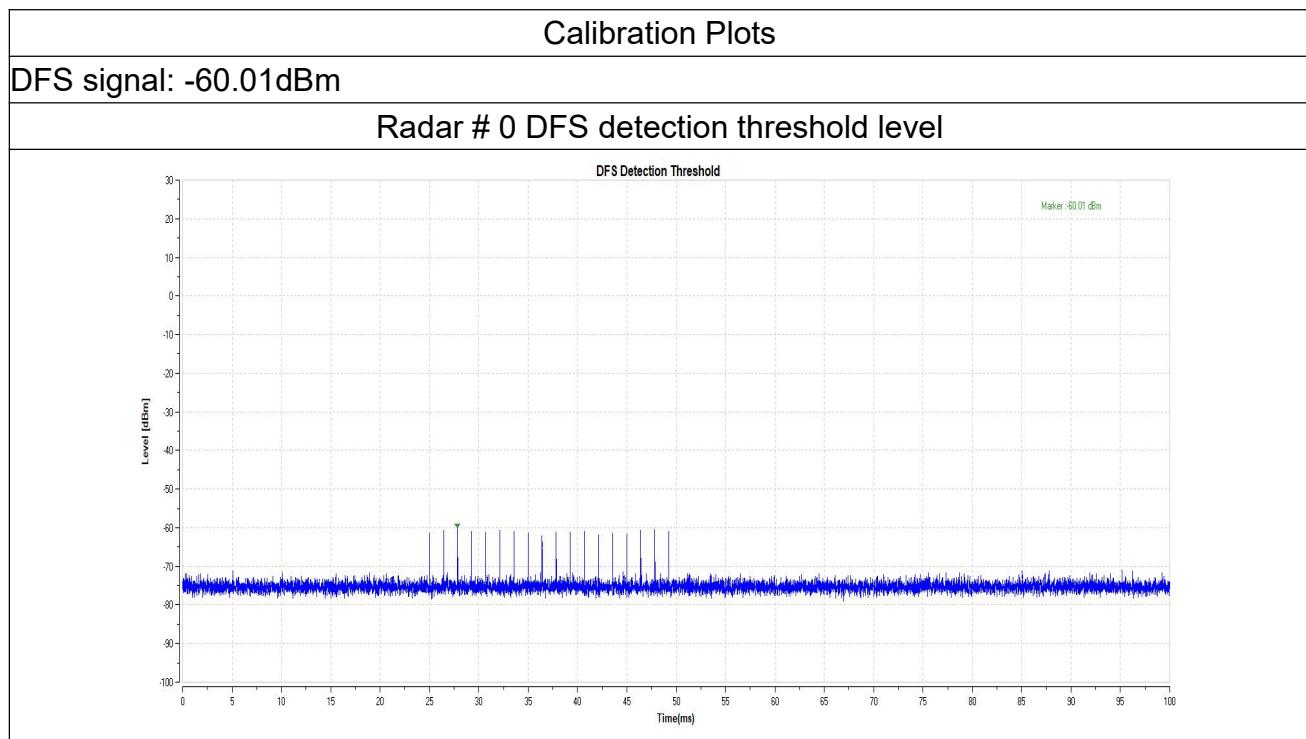
Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.2kPa

### 5.7.1 DFS detection threshold level

Test Setup:



Test Results:



## 5.7.2 UNII Detection Bandwidth

### Method of Measurement:

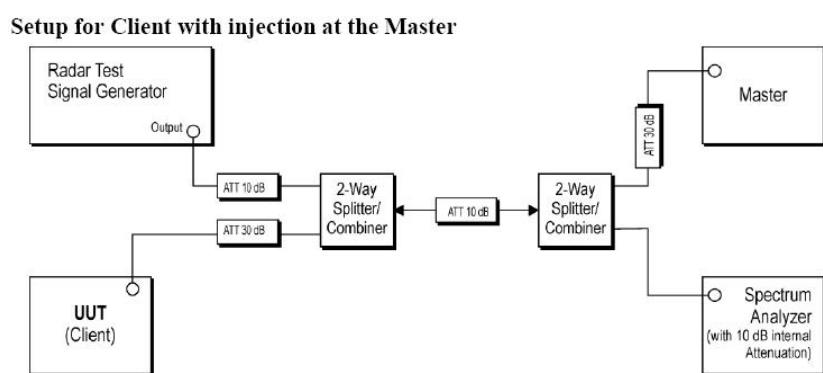
Refer as KDB905462 D02 UNII DFS Compliance Procedures New Rules v02, clause 7.8.1 for UNII Detection Bandwidth test. During the U-NII Detection Bandwidth detection test, radar type 1 is used and for each frequency step the minimum percentage of detection is 90 percent. Measurements are performed with no data traffic. The EUT is set up as a standalone device (no associated Client and no traffic). The radar frequency is increased in 1 MHz steps, repeating the above test sequence, until the detection rate falls below 90%. The highest frequency at which detection is greater than or equal to 90% is denoted as FH. The radar frequency is decreased in 1 MHz steps, repeating the above test sequence, until the detection rate falls below 90%. The lowest frequency at which detection is greater than or equal to 90% is denoted as FL. UNII Detection Bandwidth = FH - FL

### Limits:

Channel Bandwidth (MHz)	99% Power Bandwidth (MHz)	UNII Detection Bandwidth (MHz)
20	N/A	N/A
40	N/A	N/A
80	N/A	N/A

UNII Detection Bandwidth is minimum 100% of the 99% power bandwidth. A single radar Burst is generated for a minimum of 10 trials, and the response of the UUT is noted. The UUT must detect the Radar Waveform 90% or more of the time.

### Test Setup:



### Test Results:

Not required

### 5.7.3 Channel Availability Check (CAC)

#### Method of Measurement:

Refer as KDB905462 D02 UNII DFS Compliance Procedures New Rules v02, clause 7.8.2.1 for Initial Channel Availability Check Time. The EUT does not emit beacon, control, or data signals on the test Channel until the power-up sequence has been completed and the UNII device checks for Radar Waveforms for one minute on the test Channel. This test does not use any Radar Waveforms.

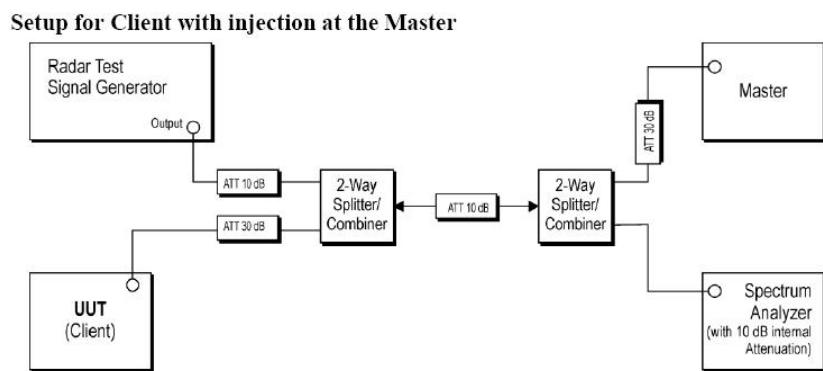
Refer as FCC 06-96 Appendix, clause 7.8.2.2 for Radar Burst at the Beginning of the Channel Availability Check Time. To verify successful radar detection on the selected Channel during a period equal to the Beginning of the Channel Availability Check Time.

Refer as FCC 06-96 Appendix, clause 7.8.2.3 for Radar Burst at the End of the Channel Availability Check Time. To verify successful radar detection on the selected Channel during a period equal to the End of the Channel Availability Check Time.

#### Limits:

Channel Availability Check Limit
<input checked="" type="checkbox"/> The EUT shall perform a Channel Availability Check to ensure that there is no radar operating on the channel. After power-up sequence, receive at least 1 minute (60 sec) on the intended operating frequency.

#### Test Setup:



#### Test Results:

Not required

## 5.7.4 In-service Monitoring

### Method of Measurement:

Refer as KDB905462 D02 UNII DFS Compliance Procedures New Rules v02, clause 7.8.3 verified during In-Service Monitoring; Channel Closing Transmission Time, Channel Move Time. Client Device will associate with the EUT. Observe the transmissions of the EUT at the end of the radar Burst on the Operating Channel for duration greater than 10 seconds. Measure and record the transmissions from the EUT during the observation time (Channel Move Time). Compare the Channel Move Time and Channel Closing Transmission Time limits.

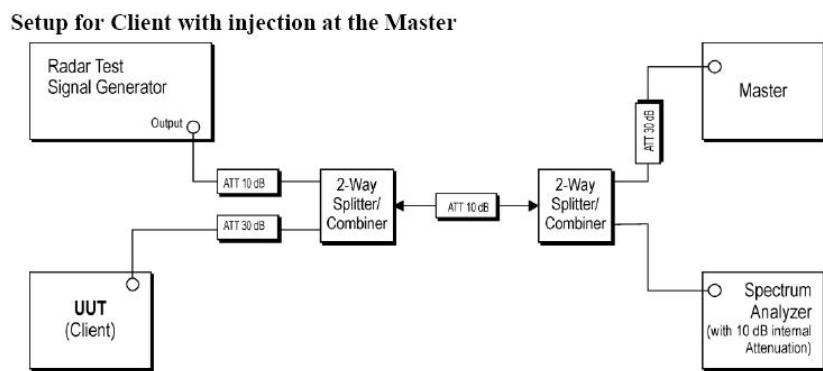
Refer as KDB905462 D02 UNII DFS Compliance Procedures New Rules v02, clause 8.3 verified during In-Service Monitoring; Channel Closing Transmission Time, Channel Move Time. One 10 sec plot needs to be reported for the Short Pulse Radar Types 1-4 and one for the Long Pulse Radar Type in a 22 sec plot. And zoom-in a 600 ms plot verified channel closing time for the aggregate transmission time starting from 200ms after the end of the radar signal to the completion of the channel move.

Refer as KDB905462 D02 UNII DFS Compliance Procedures New Rules v02, clause 7.8.3 verified during In-Service Monitoring; Non-Occupancy Period. Client Device will associate with the EUT. Observe the transmissions of the EUT at the end of the radar Burst on the Operating Channel for duration greater than 10 seconds. Measure and record the transmissions from the EUT during the observation time (Non-Occupancy Period). Compare the Non-Occupancy Period limits.

### Limits:

In-service Monitoring Limit	
Channel Move Time	10 sec
Channel Closing Transmission Time	200 ms + an aggregate of 60 ms over remaining 10 sec periods.
Non-occupancy period	Minimum 30 minutes

## Test Setup:

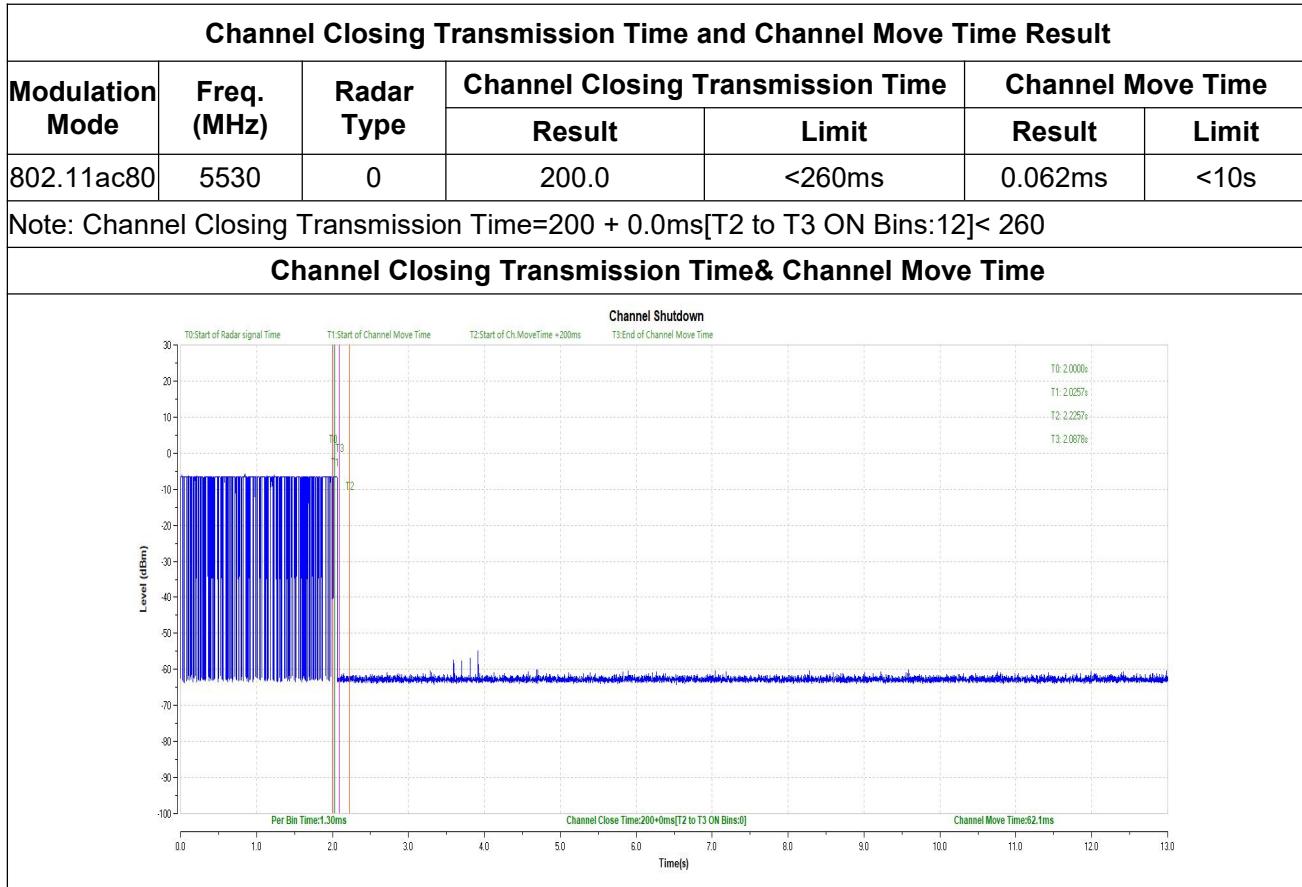
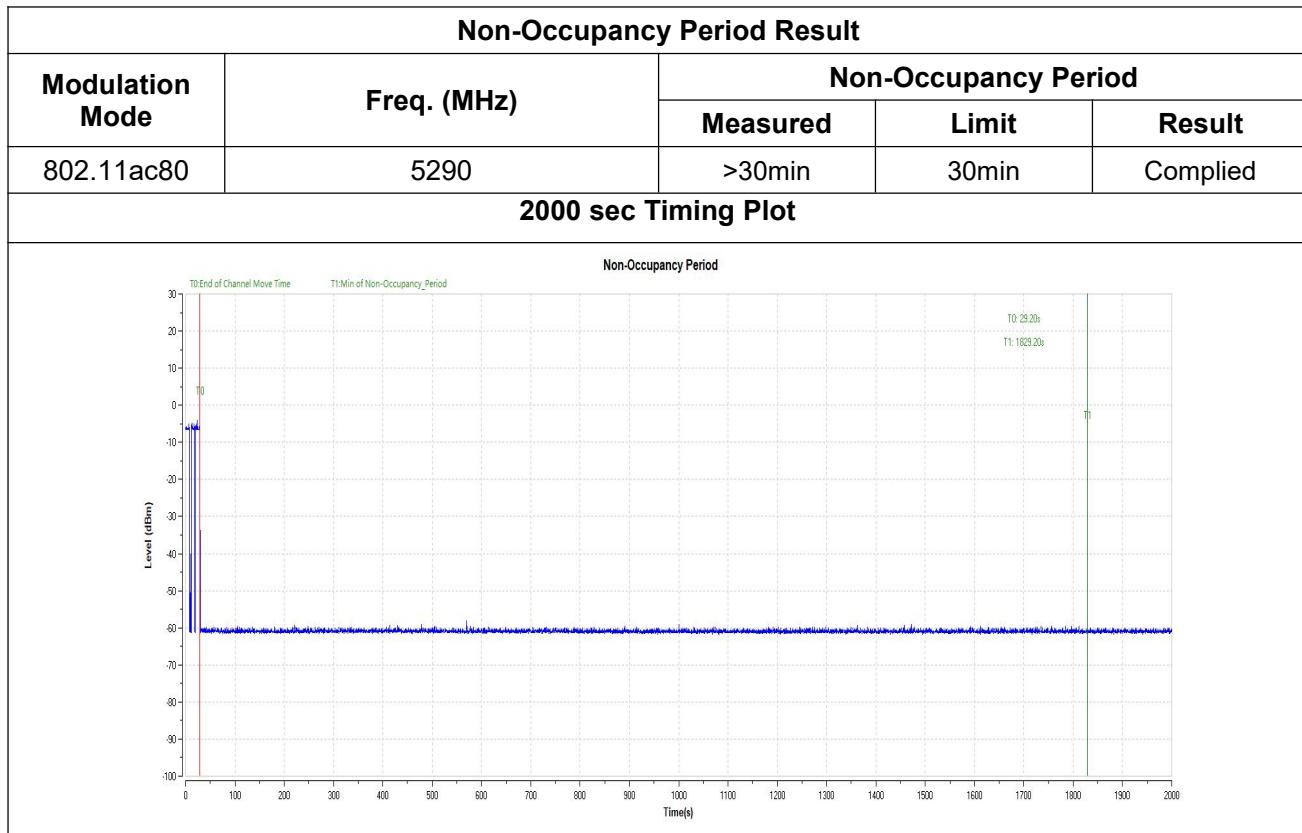


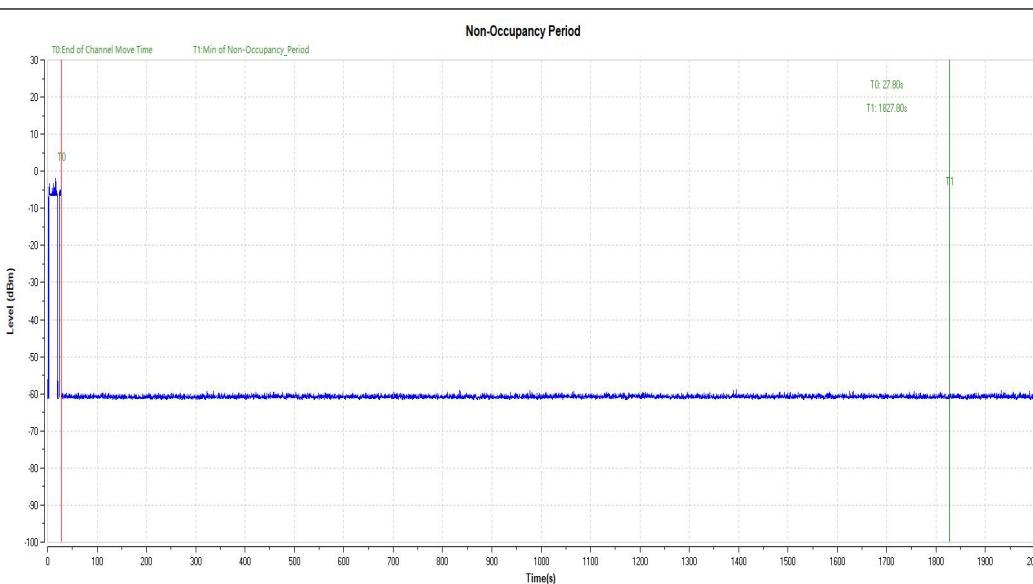
## Test Results:

Channel Closing Transmission Time and Channel Move Time Result						
Modulation Mode	Freq. (MHz)	Radar Type	Channel Closing Transmission Time		Channel Move Time	
			Result(ms)	Limit (ms)	Result(S)	Limit (S)
802.11ac80	5290	0	201.3	<260	0.547	<10

Note: Channel Closing Transmission Time=200 + 1.3ms[T2 to T3 ON Bins:12]< 260

Channel Closing Transmission Time& Channel Move Time						
<p>Channel Shutdown</p> <p>Level (dBm)</p> <p>Time(s)</p> <p>T0: Start of Radar signal Time</p> <p>T1: Start of Channel Move Time</p> <p>T2: Start of Ch.MoveTime + 200ms</p> <p>T3: End of Channel Move Time</p> <p>T0: 2.000s</p> <p>T1: 2.025s</p> <p>T2: 2.225s</p> <p>T3: 2.572s</p> <p>Per Bin Time:1.30ms</p> <p>Channel Close Time:200+1.3ms[T2 to T3 ON Bins:1]</p> <p>Channel Move Time:547ms</p>						



Non-Occupancy Period Result				
Modulation Mode	Freq. (MHz)	Non-Occupancy Period		
		Measured	Limit	Result
802.11ac80	5530	>30min	30min	Complied
2000 sec Timing Plot				
				

### 5.7.5 Statistical Performance Check

#### Method of Measurement:

Refer as KDB905462 D02 UNII DFS Compliance Procedures New Rules v02, clause 7.8.4 for Statistical Performance Check test. Stream the MPEG test file from the Master Device to the Client Device on the test Channel for the entire period of the test. Observe the transmissions of the UUT at the end of the Burst on the Operating Channel for duration greater than 10 seconds for Short Pulse Radar Types 1-4 and 6 to ensure detection occurs. Then Observe the transmissions of the UUT at the end of the Burst on the Operating Channel for duration greater than 22 seconds for Long Pulse Radar Type 5 to ensure detection occurs. The device can utilize a test mode to demonstrate when detection occurs to prevent the need to reset the device between trial runs.

#### Limits:

Radar Type	Minimum Percentage of Successful Detection (Pd)	Minimum Trials
1	60%	30
2	60%	30
3	60%	30
4	60%	30
Aggregate (Radar Types 1-4)	80%	120
5	80%	30
6	70%	30

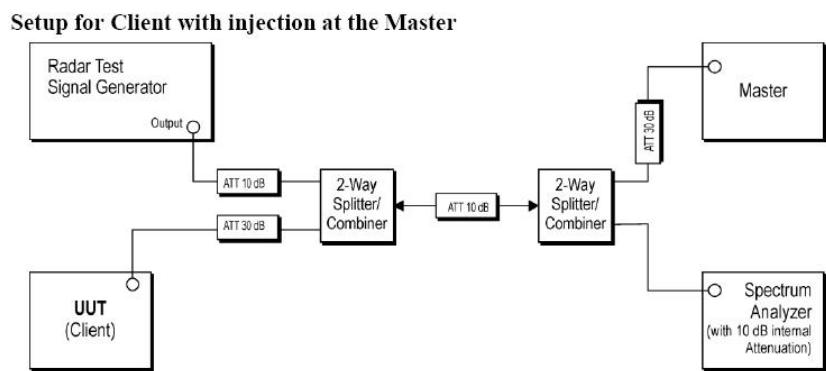
The percentage of successful detection is calculated by:

$$\frac{\text{Total Waveform Detections}}{\text{Total Waveform Trails}} \times 100 = \text{Probability of Detection Radar Waveform}$$

In addition an aggregate minimum percentage of successful detection across all Short Pulse Radar Types 1-4 is required and is calculated as follows:

$$\frac{Pd1+Pd2+Pd3+Pd4}{4}$$

## Test Setup:



## Test Results:

Not required

## 6. Appendix X

Test Equipment	Type/Mode	SERIAL NO.	Equipment No.	Manufacturer	Cal. Due
Communication Shielded Room 2	4m*3m*3m	CRTDSWKS44301	/	CRT	2027/04/22
Spectrum Analyzer	FSV40	101580	DZ-000238-3	R&S	2026/03/27
UXA signal analyzer	N9040B	US57212256	DZ-000466	KEYSIGHT	2025/12/17
RF Radio Frequency Switch	JS0806-2	19H9080187	DZ-000241	Tonscend	2026/03/27
Programmable DC Power Supply	E3644A	MY58036222	DZ-000178	KEYSIGHT	2026/04/10
5m Semi-Anechoic Chamber	SAC-5	SAC-5-2.0	EM-000557	COMTEST	2027/02/01
Spectrum Analyzer	N9010B	MY57470323	DZ-000174	KEYSIGHT	2026/01/01
EMI Test Receiver	N9038A-508	MY532290079	EM-000397	Agilent	2025/12/26
EMI Test Receiver	ESR7	102235	EM-000574	R&S	2026/01/05
loop antenna	HLA 6121	540046	EM-000546	TESEQ	2026/06/03
Broadband Antenna	VULB 9163	9163-530	EM-000342	SCHWARZBECK	2025/06/09
Waveguide Horn Antenna	BBHA9170	00949	DZ-000209-2	SCHWARZBECK	2025/08/03
5G Bandstop Filters	WRCJV12-4900-5100-5900-6100-50EE	1	DZ-000186	WI	2025/12/02
Preamplifier	BBV 9721	9721-050	DZ-000209-1	SCHWARZBECK	2026/06/02
Temperature and humidity meter	MHO-C201	/	DZ-000249-2	Seconds test	2025/07/28
Temperature and humidity meter	MHO-C201	/	DZ-000249-5	Seconds test	2025/07/28

Dynacomm	Software Release	Software Developer
TS1120-3 Test System(Conduction test)	3.3.38	Tonscend
TS+ (5m,Radiation test)	JS32-RE 5.0.0	Tonscend

Description Of Support Units					
<b>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.</b>					
Description	Brand	Model No.	FCC ID	Serial Number	Supplied by
AX3000 Gigabit Wi-Fi 6 Router	TP-Link	Archer AX50	TE7AX50	22170V0001968	/

— No Body Text Below —

## Important

1. The test report is invalid without the official stamp of CVC;
2. Any part photocopies of the test report are forbidden without the written permission from CVC;
3. The test report is invalid without the signatures of Author and Reviewer;
4. The test report is invalid if altered;
5. Objections to the test report must be submitted to CVC within 15 days;
6. Generally, commission test is responsible for the tested samples only;
7. As for the test result, “—” or “N/A” means “not applicable”, “/” means “not testing”, “P” means “pass” and “F” means “fail”.

Address: No.3,Tiantaiyi Road, Kaitai Avenue, Science City, Guangzhou, China (Test location)

Post Code: 510663 Tel: 020-32293888

FAX: 020 32293889 E-mail: [office@cvc.org.cn](mailto:office@cvc.org.cn)