Prüfbericht-Nr.: *Test report no.:*	IN23ESPY 001	**Auftrags-Nr.:** *Order no.*:	146742971 0010	
Kunden-Referenz-Nr.: *Client reference no.:*	NA	**Auftragsdatum:** *Order date:*	2022-12-06	
Auftraggeber: *Client:*	1.HONEYWELL INTERNATIONAL INC,Honeywell Safety and Productivity Solutions 9680 OLD BAILES RD, FORT MILL, SC 29707, USA			
Prüfgegenstand: *Test item:*	HWBPM11AX-PRTM	**Product Type**	Wi-Fi BT Module	
Bezeichnung.: *Identification .:*	HWBPM11AX-PRT			
Auftrags-Inhalt: *Order content*:	Testing and issue of Test Report and Grant Certificate			
Prüfgrundlage: *Test specification:*	FCC Part 15 Subpart C & E, 15.247, 15.407,15.207, 15.209 & 15.205 RSS 247 Issue 2 and RSS GEN Issue 5			
Wareneingangsdatum: *Date of sample receipt:*	2022-12-07			
Prüfmuster-Nr & Serien-Nr.: *Test sample no & serial no.:*	A003385546-022 & A003385546-04 2022120701 & 2022120702			
Prüfzeitraum: *Testing period:*	2022-12-07 - 2023-01-06			
Ort der Prüfung: *Place of testing:*	Wireless laboratory, Bangalore			
Prüflaboratorium: *Testing laboratory:*	TÜV Rheinland (India) Pvt.Ltd., 27/B, 2nd Cross, Electronic City Phase1 Bangalore -560 100, India FCC Test site registration number: 496599 ISED Test site registration number: 3466E-1			
Prüfergebnis*: *Test result*:*	Pass			

geprüft von: *tested by:*

Datum: *Date:* 2023-01-07

genehmigt von: *authorized by:*

Ausstellatum: *Issue date:* 2023-02-14

Stellung / *Position:*	**Likhithesh M D** Senior Engineer	**Stellung** / *Position:*	**Madhu K N** Senior Engineer

Sonstiges / *Other:* FCC ID: HD5-PM11AX
IC: 1693B-PM11AX

Zustand des Prüfgegenstandes bei Anlieferung: Prüfmuster vollständig und unbeschädigt
Condition of the test item at delivery: *Test item complete and undamaged*

* Legende:	1 = sehr gut	2 = gut	3 = befriedigend	4 = ausreichend	5 = mangelhaft
	P(ass) = entspricht o.g. Prüfgrundlage(n)		F(ail) = entspricht nicht o.g. Prüfgrundlage(n)	N/A = nicht anwendbar	N/T = nicht getestet
** Legend:*	*1 = very good*	*2 = good*	*3 = satisfactory*	*4 = sufficient*	*5 = poor*
	P(ass) = passed a.m. test specification(s)		*F(ail) = failed a.m. test specification(s)*	*N/A = not applicable*	*N/T = not tested*

TEST SUMMARY

Test Item	Applicable Standard		Result
	FCC	ISED	
Emission Bandwidth	15.247 (a) (2),15.407 (a) & (e)	RSS Gen Issue 5 Section 6.7 RSS 247 Issue 2 Section 6.2.1.1; 6.2.2.1; 6.2.3.1; 6.2.4.1	Pass
Frequency Stability	15.407 (g)	RSS Gen Issue 5 Section 8.11	Pass
Maximum conducted output power	15.247 (b) & 15.407 (a)	RSS 247 Issue 2 Section 6.2.1; 6.2.2; 6.2.3; & Section 6.2.4	Pass
Maximum Power spectral density	15.247 (e) & 15.407 (a)	RSS 247 Issue 2 Section 6.2.1; 6.2.2; 6.2.3; & Section 6.2.4	Pass
Dynamic Frequency Selection	15.407 (h) FCC KDB Publication 905462 D02 & 905462 D03	RSS 247 Issue 2 Section 6.3	Pass
Spurious Radiated Emissions & Restricted Bands of Operation	15.407 (b) / (15.205 &15.209)	RSS 247 Issue 2 Section 6.2.1; 6.2.2; 6.2.3; & Section 6.2.4 RSS Gen Issue 5 Section 8.9 & 8.10	Pass
Conducted AC Power Lines	15.207	RSS Gen Issue 5 Section 8.8	Pass

Product Category: Electronics Testing
Test Discipline : EMC Test Facility

Compliance statement for Part 15.203:

"THE ANTENNA WITH A STANDARD CONNECTOR (RP-SMA) AND (U.FL) USED, WITH NO POSSIBILITY OF REPLACEMENT WITH A NON-APPROVED ANTENNA BY THE END-USER. THEREFORE, THE EUT IS CONSIDERED TO COMPLY WITH THIS PROVISION."

REVISION HISTORY OF THIS REPORT

Report Number	Version	Description	Issue date
IN23ESPY 001	01	Initial issue of report	06-02-2023
IN23ESPY 001	01	Reviewer Comments Updated	09-02-2023
IN23ESPY 001	01	Reviewer Comments Updated	14-02-2023

Table of Contents

1 GENERAL REMARKS

1.1 Attachments

All attachments are part of this test report and are issued in separate document

1. TEST SETUP PHOTOS

2: EUT EXTERNAL PHOTOS

3: EUT INTERNAL PHOTOS

4: FCC LABEL AND LABEL LOCATION

5: BLOCK DIAGRAM

6: SPECIFICATION OF EUT

7: SCHEMATIC DIAGRAM

8: BILL OF MATERIAL

9: USER MANUAL

10: MAXIMUM PERMISSIBLE EXPOSURE INFORMATION

2 TEST SITES

2.1 Testing Facilities

1. TÜV Rheinland (India) Pvt.Ltd.,
   27/B, 2nd Cross,
   ElectronicCityPhase1
   Bangalore – 560 100,
   India

   Radiated Measurement site type :
   Fully anechoic chamber (used for above 1 GHz measurements)

2. TUV Rheinland (India) Pvt.Ltd.,
   108 , Beside ISBR Business School,
   Electronic city Phase I
   Bangalore - 560 100.
   India

   Radiated Measurement site type :
   Semi anechoic chamber (used for below 1 GHz measurements)

2.2 List of Test and Measurement Instruments

Table 1: List of test and measurement instruments

Equipment	Manufacturer	Model Name	Serial Number	Firmware Versions	Calibration Due Date	Periodicity	Test Facility
EMI Receiver	Rohde & Schwarz	ESW 44	101732	4.73 SP5	04.08.2023	Yearly	Radiated Spurious Emission
Active loop antenna	Frankonia	LAX-10	LAX-10-800	-	31.01.2023	Yearly	
Baloon and Biconical Antenna	Schwarzbeck mess-elektronik	VHBB-9124 / BBA-9106	01028	-	03.02.2023	Yearly	
Log-Periodic Antenna	Schwarzbeck mess-elektronik	VUSLP-9111B	9111B-111	-	26.01.2023	Yearly	
Horn Antenna	Schwarzbeck	BBHA 9120 D	9120D-01944	-	11.10.2023	Yearly	
EMI Test Receiver	Rohde & Schwarz	ESW44	101773	1.72.SP1	12.02.2023	Yearly	
Semi Anechoic Chamber	Frankonia	-	-	-	-	-	
Fully Anechoic Chamber	Albatross	-	-	-	-	-	
Spectrum Analyzer	Agilent	E4407B	US41192772	A.14.07	21-12-2023	Yearly	Conducted Test Parameters
10dB Attenuator	H+S Electronics Pvt. Ltd	6810.17.A	770041	-	19-03-2023	Yearly	
Signal Analyser	Rohde & Schwarz	FSV7	101644	FW 3.40	25-01-2023	Yearly	
Signal Analyser	Anritsu Corporation	MS2830A	6261983953	-	18-10-2023	Yearly	
EMI Receiver	Rohde & Schwarz	ESR7	101133	3.48 SP3	22.07.2023	Yearly	Conducted AC Power line Test
Line Impedance Stabilization Network	Rohde & Schwarz	ENV 216	101434	-	11.04.2023	Yearly	
Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100811	-	12.07.2023	Yearly	

Table 2: Instrument application Software versions

SL. No.	Test Type	Application software	Version
1	Radiated spurious emission measurement in SAC	EMC 32	10.60.00
2	Radiated spurious emission measurement in FAC	EMC 32	10.60.00
3	Conducted Antenna Port Measurment	WMS32	11.10.00

3 GENERAL PRODUCT INFORMATION

3.1 Product Function and Intended Use

HWBPM11AX-PRTM is a carrier board with System on Module. The module to be used inside the Honeywell Products. The Module has Dual Band WIFI (2.4GHz & 5GHz) and BLUETOOTH radio interface. This module communicates with external host using SDIO interface for WIFI and UART for BLUETOOTH.

This Module supports 802.11a/b/g/n/ac/ax for WIFI and Supports BT (Basic , EDR & BLE) The module will act as Access Point / Master only in NON - DFS bands. In the DFS band, the Module acts as Slave /Station device which do not have Radar detection functionality.

Powered with BCM43752, **HWBPM11AX-PRTM** achieve the best possible connectivity and performance in RF Environment.This Module will be used to provide the WIFI & BLUETOOTH wireless connectivity for Honeywell Products.

3.2 Ratings and System Details of Equipment under Test

Table 3: Ratings and System Details as declared by the Client*

Radio Protocol		WI-FI 5GHz	
Operating Frequency Range		UNII-1 _ 5150MHz to 5250MHz UNII-2a _ 5250MHz to 5350MHz UNII-2c _ 5470MHz to 5725MHz***** UNII-3 _ 5725MHz to 5825MHz	
No. of Channels		(Refer Table 5)	
Channel Spacing		5 MHz	
Modulation		802.11b: DSSS ; 802.11g: OFDM; 802.11n: OFDM 802.11b: 1, 2, 5.5 , 11Mbps; 802.11g: 6 to 54Mbps 802.11n: MCS0 to MCS7; 802.11a: 6Mbps & 54Mbps 802.11ac : MCS0 to MCS9 802.11ax : MCS0 to MCS11	
Power level setting used		Refer Clause 11	
Maximum Measured Power (e.i.r.p)		21.59 dBm (5240MHz a_54Mbps) MAF94367 (Omni Directional Antenna) 30.63 dBm (5320MHz ac_VHT40) 1001932PT(Flex/PCB Antenna) 27.10 dBm (5240MHz a_54Mbps) FPA3020-10A(Flex/PCB Antenna) 26.55 dBm (5795MHz ac_VHT40) 1001932PT(Flex/PCB Antenna)	
Number of antennas		3	
Antenna Type & Gain		MAF94367 (Omni Directional Antenna)	3.37dBi
		1001932PT(Flex/PCB Antenna)	4.40dBi
		FPA3020-10A (Flex/PCB Antenna)	5.58dBi
Supply Voltage to Product		5.0VDC through AC/DC Adapter , < 1.0A	
Environmental Conditions	Storage	-20degC to +70degC Relative Humidity <95%	
	Operating	-20degC to +60degC Relative Humidity <95%	
EUT Dimension		8.0 x 3.7 x 0.5 CM (L x W x H)	

***Band 5600 MHz to 5650 MHz is not supported for Canada**

*__Disclaimer__: The information/data is supplied by the client and the same is considered to arrive at the final value. Any changes made apart from the specified specification, can directly impact on the tests results. Refer the products user manual for more details.

Note: Product **HWBPM11AX-PRTM** has multiple protocols. All the supported wireless protocols and their respective test results are issued in separate test reports, refer clause 4.7 Report references

3.3 Measurement Uncertainty:

Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of *k* = 2

Table 4: Measurement Uncertainty

Parameter	Uncertainty
Occupied Channel Bandwidth	±5 %
RF output power, conducted	±1.5 dB
Power Spectral Density, conducted	±3 dB
Unwanted Emissions, conducted	±3 dB
SAC, radiated measurement	±6 dB
FAC, radiated measurement	±6 dB
Temperature	±3 ℃
Supply Voltages	±3 %
Time	±5 %

Note: The listsed uncertainities are the worst case uncertainity for the entire range of mesurements and are for the reporting purpose only and are not used in determining the PASS/FAIL of the results.

4 TEST SET-UP AND OPERATION MODE

4.1 Principle of Configuration Selection

Transmission was enabled with highest possible duty cycle on low, mid and high channels.

4.2 UUT Operation and Software

Hardware Version Identification number (HVIN) : 3011-2325-001
Software version : 18.35.387.23.1301.62

4.3 Special Accessories and Auxiliary Equipment

Test laptop (TeraTerm VT Ver 4.105),
LAN cable &
Master device (Router) : FCC ID : MSQ-RTAXHP00

4.4 Simultaneous Transmission

This product supports Simultaneous transmission

4.5 Countermeasures to achieve EMC Compliance

None

4.6 List of frequencies

Frequency Band	Channel No.	Frequency (MHz)
5150–5250 MHz	**36**	**5180**
	38	5190
	46	5230
	48	**5240**
UNII 2A (5250-5350)	**52**	**5260**
	54	**5270**
	56	5280
	58	**5290**
	60	5300
	62	5310
	64	**5320**
UNII 2C (5470-5725)	**100**	**5500**
	102	5510
	106	**5530**
	108	5540
	112	5560
	116	5580
	120	5600
	124	5620
	128	5640
	132	5660
	134	**5670**
	136	5680
	138	**5690**
	140	**5700**
	142	**5710**
	144	**5720**
5725-5825 MHz	**149**	**5745**
	151	5755
	159	5795
	165	**5825**

Table 5: List of Wi-Fi center Frequencies

Channel used for Wi-Fi Testing

Channel Bandwidth (20MHz)	Channel Bandwidth (40MHz)	Channel Bandwidth (80MHz)
5180	5190	5210
5240	5230	5290
5260	5270	5530
5320	5310	5690
5500	5510	5755
5700	5590	-
5720	5670	-
5745	5710	-
5825	5755	-
-	5795	-

Note:

TUV Sample Identification number : A003385546-022– Radiated test Sample
A003385546-04– Conducted test Sample

4.7 Report Reference

Note: Product **HWBPM11AX-PRTM** has multiple protocols. All the supported wireless protocols and their respective test results are issued in saparate test reports, following table lists the report numbers.

Radio Protocol	Report Number
RF test report for Wi-Fi (2.4GHz) & BLE (2.4GHz)	IN23WDIF 001
RF test report for Bluetooth (2.4GHz)	IN23FG6K 001
RF test report for Wi-Fi (5GHz) – (This report)	**IN23ESPY 001**

5 Operational Description

This **HWBPM11AX-PRTM** module is a Wi-Fi, BT system on module which will be placed inside the Honeywell products like printers, barcode scanners, RFID readers etc. to enable wireless connectivity.

This module includes MAC & physical layer of 802.11a/b/g/n/ac/ax and the Bluetooth modem.

This module operates on 5.0V DC Power supply with internal on-board regulation to generate 3.3v for powering ON all the circuits.

The module uses internal power amplifier and LNA for 2.4GHz frequency band and an external front end chip for 5GHz frequency band.

All filters and diplexers are included in the module to ensure maximum power flatness and optimum VSWR. The module has one antenna chain for 2X2 output for Wi-Fi.

The module shall use WM-BAX-BM-57 USI SiP module with Broadcom BCM43752 chipset which includes LNA, switch, and internal power amplifier (iPA) for small form factor and optimum performance. All filters and diplexers will be included in the module to ensure maximum power flatness and optimum VSWR. The module will perform with all legacy hardware having data rates as low as 1Mbps. When running 802.11 ac in 2 x 2 MIMO mode, data rates are expected to reach 1200 Mbps or more.

This chipset also supports concurrent operation of Bluetooth (Version 5.1) for wireless connectivity during browsing or other device applications. Along with both standard and high speed (HS) Bluetooth data rates, Bluetooth low energy modes are also supported.

Hardware WAPI acceleration engine, AES, TKIP, WPA and WPA2 are supported to provide the latest security requirement on your network

The Device communicates with HOST using SDIO interface for WIFI and UART interface for BLUETOOTH..

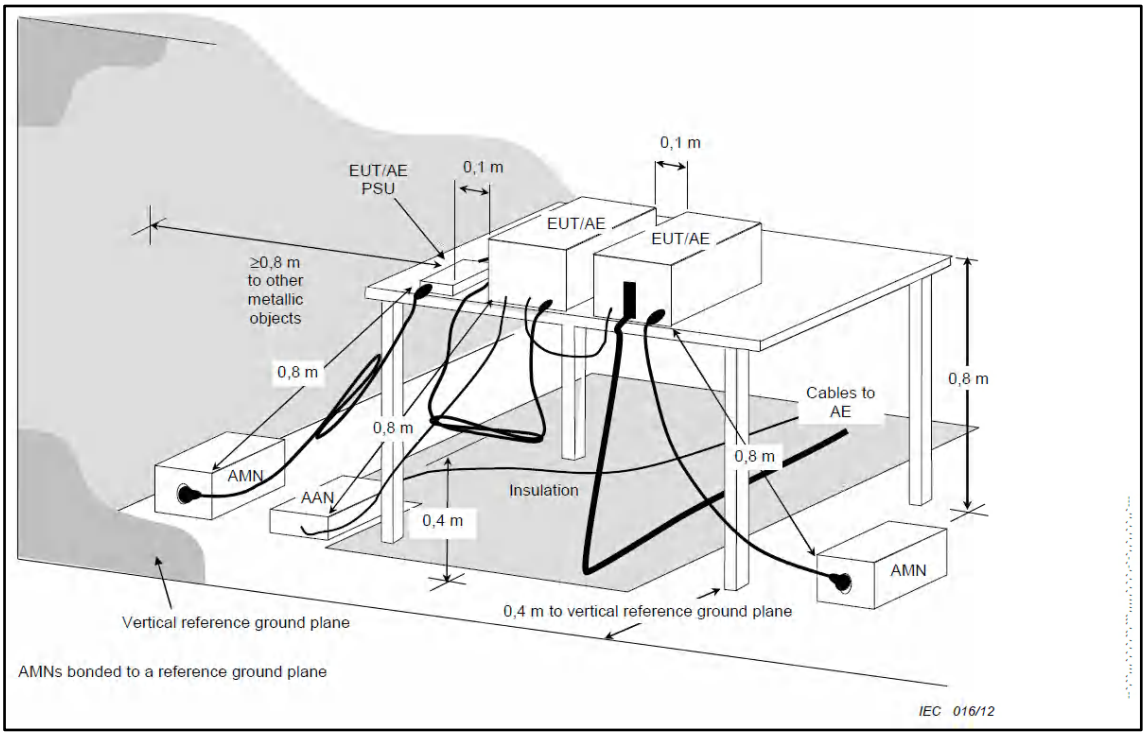
6 TEST METHODOLOGY

6.1 Conducted Spurious Emission AC Power line Test

Measured levels of ac power-line conducted emission across the 50Ω LISN port (to which the EUT is connected). All emission voltage and current measurements shall be made on each current-carrying conductor at the plug end of the EUT power cord by the use of mating plugs and receptacles on the LISN, if used. Equipment shall be tested with power cords that are normally supplied or recommended by the manufacturer and that have electrical and shielding characteristics that are the same as those cords normally supplied or recommended by the manufacturer.

The device is placed on the test table, raised 80cm above the referance ground plane. The vertical conducting plane is located 40cm to the rear of the device. AC Conducted emission measurement is made over frequency range from 150kHz to 30MHz, this measurement was performed with EUT powered by 2 methods and both method are tested individually, one with an AC adaptor with 110V AC 60Hz supply and second with Wireless charger with supply 110V AC 60Hz.

6.1.1 Test Setup Configuration



6.2 Radiated Emission Test

The radiated emission measurement was performed according to the procedures in ANSI C63.10-2013. The equipment under test (EUT) was placed at the middle of the 80 cm high turntable for below 1 GHz & 1.5 m height for above 1 GHz measurement, and the EUT is 3 meters far from the measuring antenna. The turntable was rotated 360˚ for obtaining the maximum emission. The height of the measuring antennas was scanned between 1 m and 4 m, and the antenna rotated to repeat the measurements for both the horizontal and vertical antenna polarizations. Repeat the measurement steps until the maximum emissions were obtained. The measurement above 1000 MHz was performed by horn antenna, The measurement below 30 MHz was performed by loop antenna, Measurement from 30 MHz to 200 MHz was performed by Baloon and Biconical Antenna, and mesurement from 200 MHz to 1 GHz was performed by Log-Periodic Antenna.

The EUT was rotated around the X-, Y-, and Z-Axis and the results from worst case axis are recorded

6.2.1 Test Setup Configuration

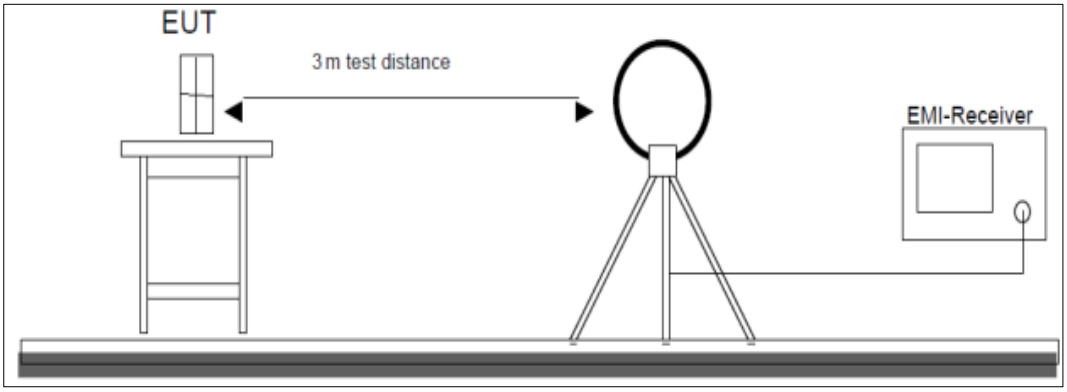


Figure 1: Frequency Range 9 kHz- 30 MHz

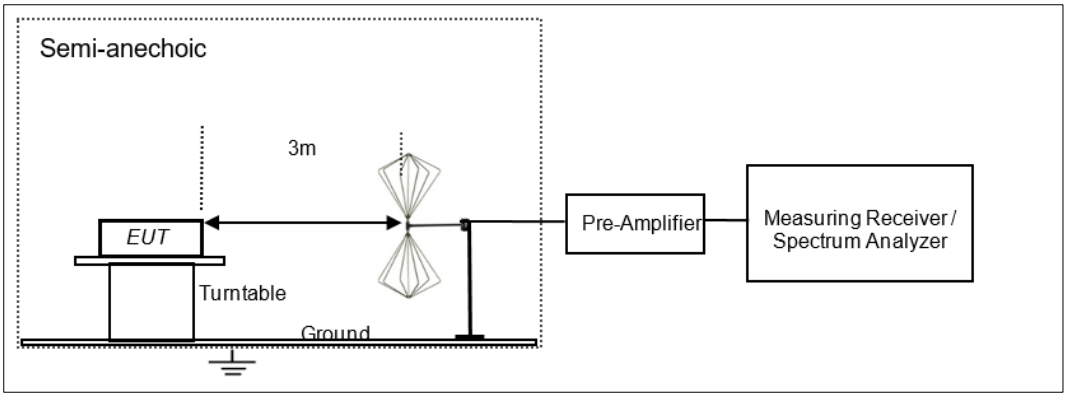


Figure 2: Frequency Range 30 MHz – 200 MHz

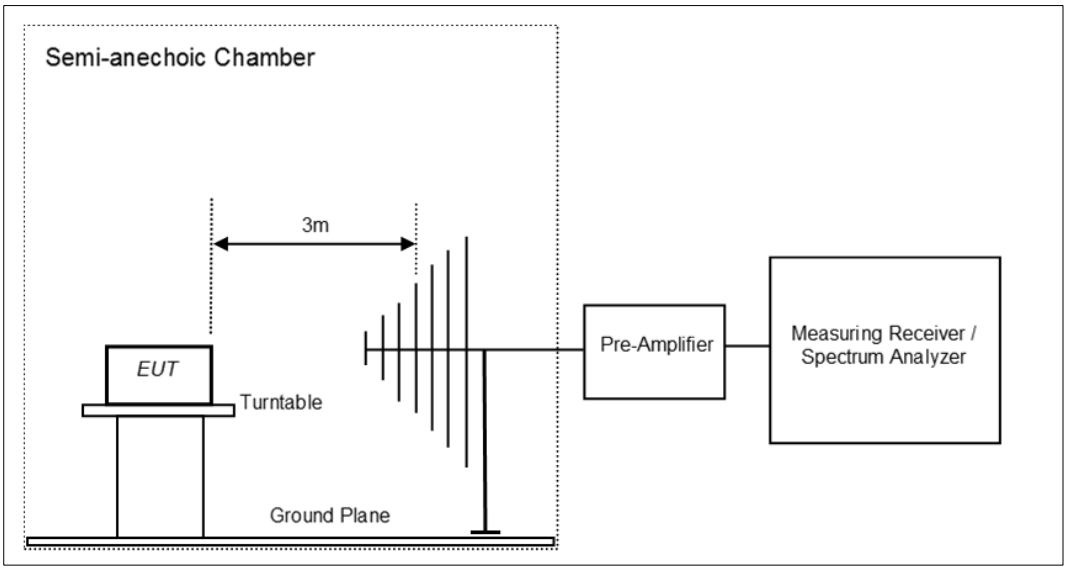


Figure 3: Frequency Range 200 MHz - 1GHz

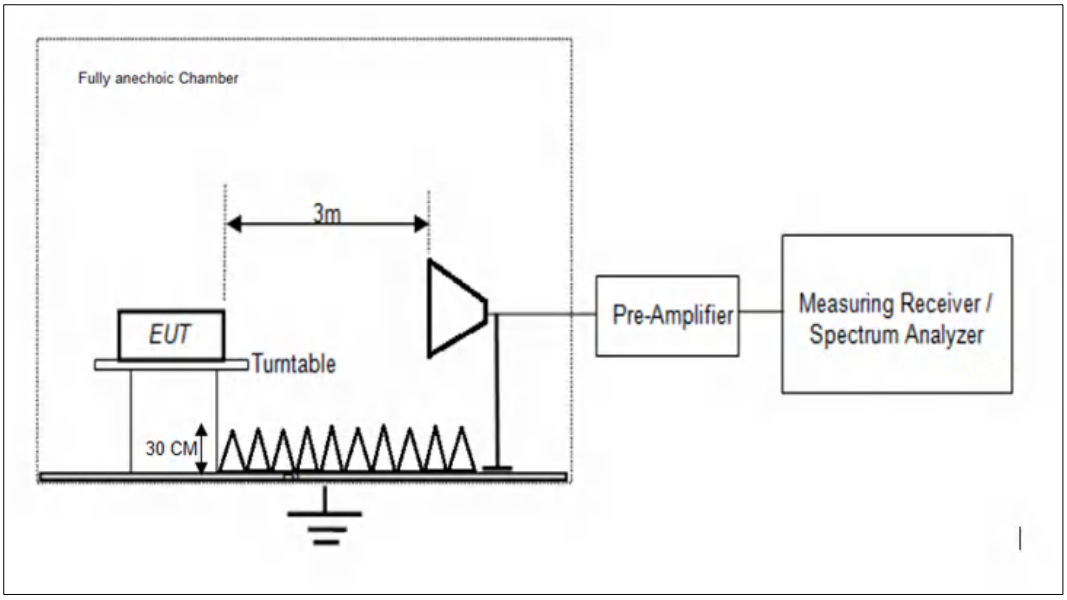


Figure 4: Frequency Range above 1 GHz

Frequency Range 30MHz to 10th harmonics of the highest fundamental frequency

Test performed as per ANSI C63.10-2013

Radiated spurious emission test are performed as below.

All the radiated emission measurements are performed in accordance with common requirement specified in 5.2 followed by substitution measurement as listed below

The equipment under test is placed on non-conductive table at 3m away from the receive antenna in accordance with above mentioned standard. Turn table is rotated through 360 degree, and receiver antenna height is varied in order to determine the level of maximum emission. The maximum emission level and position of the maximized emission is recorded with use of spectrum analyzer.

EUT power measured in a radiated test configuration using the signal (antenna) substitution techniques as per ANSI C63.10-2013 clause G.5.3

The ERP/EIRP may be determined from the power setting of a signal generator used in the signal (antenna) substitution test configuration as follows in Equation

$$\text{ERP EIRP} = PT + GT - LC$$

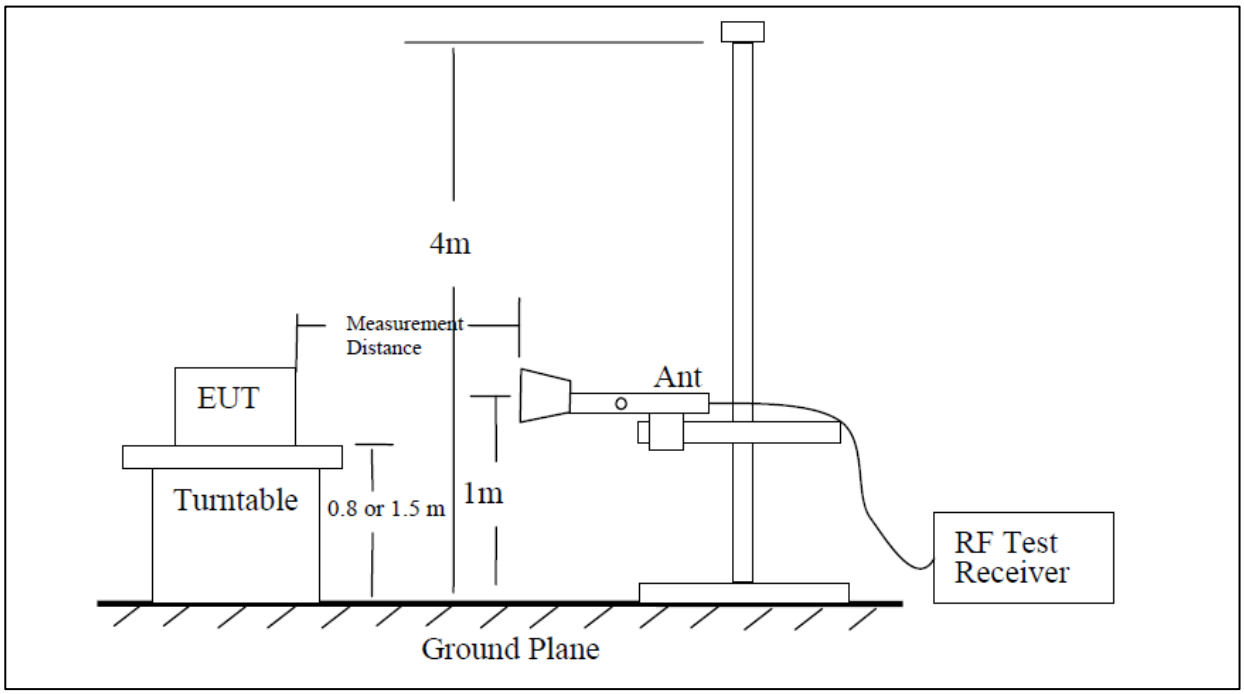
where

PSG is the power setting of the signal generator that produces the same received power reading as the DUT, in dBm, dBW, or psd

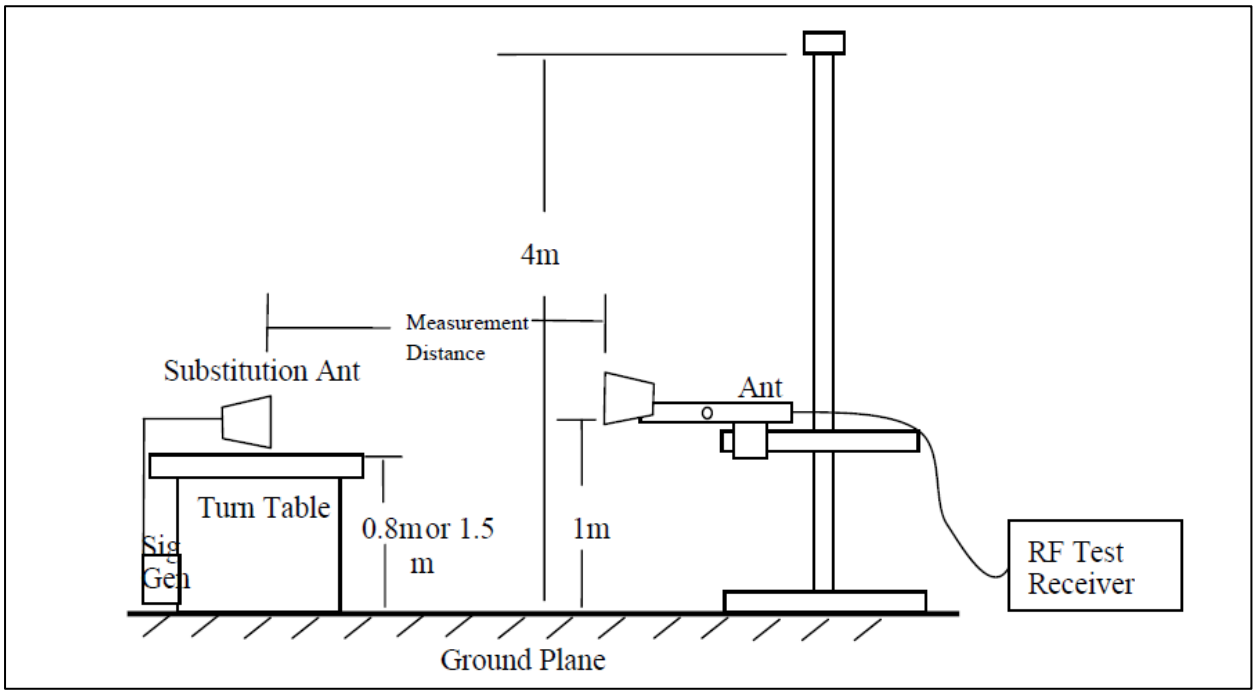
GT is the gain of the substitute antenna, in dBd (i.e., ERP) or dBi (i.e., EIRP)

LC is the signal loss in the cable connecting the signal generator to the substitute antenna, in dB

Test site-up for radiated measurements



Substitution method set-up for radiated emission



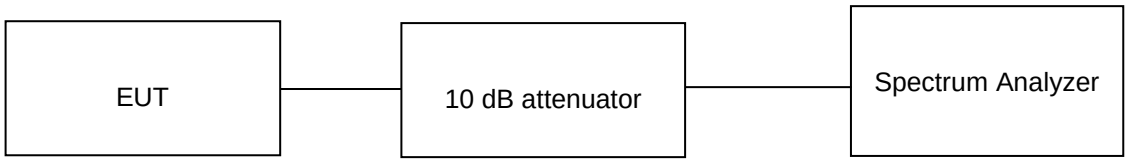
7 TEST RESULTS

7.1 Emission Bandwidth

Result ***Pass***

Test Specification	FCC part 15 Subpart C & E, 15.247 (a) (2), 15.407 (a) & (e) / RSS 247 Issue 2, Section 6.2.1.1; 6.2.2.1; 6.2.3.1; 6.2.4.1 & RSS Gen Issue 5, Section 6.7
Test Method	Subclause 6.9.2 of ANSI C63.10
Measurement Bandwidth	Refer Test Method below
Detector	Refer Test Method below
Port of testing	Antenna port
Requirement	1. 99% emission band width measurement for reporting purpose only in the band 5150-5250 MHz 2. 99% emission band width measurement for reporting purpose only in the band 5250-5350 MHz 3. 99% emission band width measurement for reporting purpose only in the band 5470-5725 MHz 2. For equipment operating in the band 5725-5850 MHz, the minimum 6 dB bandwidth shall be at least 500 kHz

Test Method:



The following procedure shall be used for measuring (99%) power bandwidth:

1. Set center frequency to the nominal EUT channel center frequency
2. Set span = 1.5 times to 5.0 times the OBW
3. Set RBW = 1% to 5% of the OBW
4. Set VBW ≥ 3 × RBW
5. Use the 99% power bandwidth function of the instrument
6. Use sample detector with single sweep mode, or use Peak detector and Max Hold mode (until the trace is stabilized)

The following procedure shall be used for measuring 6dB or 26dB emission bandwidth:

1. Set center frequency to the nominal EUT channel center frequency
2. Set span = 1.5 times to 5.0 times the OBW
3. Set RBW = 1% to 5% of the OBW (for 26 dB BW) & 100 kHz (for 6dB BW)
4. Set VBW ≥ 3 × RBW
5. Determine the "−xx dB down amplitude" using [(reference value) − xx]. Alternatively, this calculation may be made by using the marker-delta function of the instrument.

Note : All the steps in measurement method of KDB 789033 D02, ANSI C63.10 section 6.9.2 & 6.9.3, RSS GEN section 6.9 are followed

Test Condition:

Normal Test Condition:

Temperature (Norm) = + 25 °C Voltage = 5.0 V DC Relative humidity: 62 %

KDB Guidelines applied:

Measurements were made as per section C & D in KDB 789033 D02 General UNII Test Procedures New Rules v02r01

Test results:

Note:
1. All the losses are included during measurement and final values are mentioned in the test report.
10 dB attenuator + 0.8 dB Cable loss = 10.8 dB total offset

Note: Refer Attached Appendix for test Plots

Antenna Type: MAF94367(Omni Directional Antenna) RPSMA Results

Modulation: 802.11a :

Modulation	Data rate (Mbps)	Measured Frequency (MHz)	26 dB emission bandwidth (MHz)	99% Occupied Bandwidth (MHz)
802.11a : UNII 1	6	5180	22.00	16.70
		5240	27.00	17.00
	54	5180	21.50	16.70
		5240	**31.80**	**17.40**
802.11a : UNII 2a	6	**5260**	**34.30**	**18.10**
		5320	21.60	16.70
	54	5260	24.40	16.90
		5320	21.30	16.60
802.11a : UNII 2c	6	5500	21.30	16.80
		5700	21.40	16.70
		5720	**23.14** **15.33 -UNII 2C** **7.81 –UNII 3**	**17.15** **13.58 -UNII 2C** **3.57 –UNII 3**
	54	5500	21.00	16.60
		5700	21.00	16.60
		5720	21.88 15.27 -UNII 2C 6.61 –UNII 3	17.04 13.44 -UNII 2C 3.60 –UNII 3

Modulation: 802.11a : UNII 3

Data rate (Mbps)	Measured Frequency (MHz)	6 dB emission bandwidth (MHz)	Minimum Limit (MHz)
6	5745	16.40	0.5
	5825	16.35	0.5
54	5745	**16.55**	0.5
	5825	16.55	0.5

Data rate (Mbps)	Measured Frequency (MHz)	99% Occupied Bandwidth (MHz)
6	5745	**17.10**
	5825	16.90
54	5745	16.70
	5825	16.60

Modulation: 802.11n-HT20:

Modulation	Data rate	Measured Frequency (MHz)	26 dB emission bandwidth (MHz)	99% Occupied Bandwidth (MHz)
802.11n-HT20: UNII 1	MCS0	5180	23.70	18.10
		5240	**28.50**	**18.10**
	MCS7	5180	21.90	17.90
		5240	21.90	17.90
802.11n-HT20: UNII 2a	MCS0	**5260**	**33.00**	**18.70**
		5320	21.70	18.00
	MCS7	5260	21.70	17.90
		5320	21.50	17.90
802.11n-HT20: UNII 2c	MCS0	5500	21.70	17.90
		5700	21.80	18.00
		5720	**21.78** **15.05 -UNII 2C** **6.73 –UNII 3**	**18.07** **14.08 -UNII 2C** **3.99 –UNII 3**
	MCS7	5500	21.70	17.90
		5700	21.70	17.90
		5720	21.67 15.54 -UNII 2C 6.13 –UNII 3	18.10 13.99 -UNII 2C 4.11 –UNII 3

Modulation: 802.11n-HT20: UNII 3

Data rate	Measured Frequency (MHz)	6 dB emission bandwidth (MHz)	Minimum Limit (MHz)
MCS0	**5745**	**17.65**	**0.5**
	5825	17.65	0.5
MCS7	5745	17.85	0.5
	5825	17.85	0.5

Data rate	Measured Frequency (MHz)	99% Occupied Bandwidth (MHz)
MCS0	**5745**	**18.00**
	5825	18.00
MCS7	5745	17.90
	5825	17.90

Modulation: 802.11ac-VHT20:

Modulation	Data rate	Measured Frequency (MHz)	26 dB emission bandwidth (MHz)	99% Occupied Bandwidth (MHz)
802.11ac-VHT20: UNII 1	MCS0	5180	27.30	18.10
		5240	**37.50**	**19.40**
	MCS9	5180	21.70	17.90
		5240	21.50	17.90
802.11ac-VHT20: UNII 2a	MCS0	**5260**	**36.70**	**18.40**
		5320	21.80	17.90
	MCS9	5260	22.30	18.00
		5320	21.60	17.90
802.11ac-VHT20: UNII 2c	MCS0	5500	21.90	17.90
		5700	21.90	18.00
		5720	**22.71** **15.41 -UNII 2C** **7.30 –UNII 3**	**18.19** **14.08 -UNII 2C** **4.11 –UNII 3**
	MCS9	5500	21.60	17.90
		5700	21.70	17.80
		5720	21.51 14.78 -UNII 2C 6.73 –UNII 3	18.03 14.04 -UNII 2C 3.99 –UNII 3

Modulation: 802.11ac-VHT20: UNII 3

Data rate	Measured Frequency (MHz)	6 dB emission bandwidth (MHz)	Minimum Limit (MHz)
MCS0	5745	17.65	0.5
	5825	17.65	0.5
MCS9	**5745**	**17.85**	**0.5**
	5825	17.85	0.5

Data rate	Measured Frequency (MHz)	99% Occupied Bandwidth (MHz)
MCS0	**5745**	**18.20**
	5825	18.10
MCS9	5745	17.90
	5825	17.80

Modulation: 802.11ax-HE20:

Modulation	Data rate	Measured Frequency (MHz)	26 dB emission bandwidth (MHz)	99% Occupied Bandwidth (MHz)
802.11ax-HE20: UNII 1	MCS0	5180	21.60	18.90
		5240	**34.60**	**19.30**
	MCS11	5180	22.20	19.10
		5240	22.10	19.10
802.11ax-HE20: UNII 2a	MCS0	**5260**	**31.20**	**19.20**
		5320	21.50	18.90
	MCS11	5260	21.80	19.10
		5320	21.90	19.10
802.11ax-HE20: UNII 2c	MCS0	5500	21.50	19.00
		5700	21.50	18.90
		5720	21.51 15.02 -UNII 2C 6.49 –UNII 3	18.99 14.49 -UNII 2C 4.50 –UNII 3
	MCS11	5500	21.80	19.20
		5700	21.80	19.20
		5720	**21.96** **15.86 -UNII 2C** **6.10 –UNII 3**	**19.08** **14.52 -UNII 2C** **4.56 –UNII 3**

Modulation: 802.11ax-HE20: UNII 3

Data rate	Measured Frequency (MHz)	6 dB emission bandwidth (MHz)	Minimum Limit (MHz)
MCS0	5745	18.80	0.5
	5825	18.55	0.5
MCS11	**5745**	**19.20**	**0.5**
	5825	19.20	0.5

Data rate	Measured Frequency (MHz)	99% Occupied Bandwidth (MHz)
MCS0	5745	19.10
	5825	19.10
MCS11	**5745**	**19.10**
	5825	19.10

Modulation: 802.11n-HT40:

Modulation	Data rate	Measured Frequency (MHz)	26 dB emission bandwidth (MHz)	99% Occupied Bandwidth (MHz)
802.11n-HT40: UNII 1	MCS0	**5190**	**41.74**	**36.75**
		5230	41.49	36.75
	MCS7	5190	40.93	36.50
		5230	40.90	36.50
802.11n-HT40: UNII 2a	MCS0	**5270**	**41.54**	**37.25**
		5310	41.46	36.50
	MCS7	5270	41.39	36.50
		5310	41.46	36.50
802.11n-HT40: UNII 2c	MCS0	**5510**	**41.59**	**36.50**
		5590	41.37	37.50
		5670	41.42	36.75
		5710	41.55	37.25
	MCS7	5510	40.85	36.50
		5590	40.56	36.50
		5670	41.03	36.75
		5710	41.37	36.75

Modulation: 802.11n-HT40: UNII 3

Data rate	Measured Frequency (MHz)	6 dB emission bandwidth (MHz)	Minimum Limit (MHz)
MCS0	5755	36.40	0.5
	5795	36.20	0.5
MCS7	**5755**	**36.55**	**0.5**
	5795	36.55	0.5

Data rate	Measured Frequency (MHz)	99% Occupied Bandwidth (MHz)
MCS0	**5755**	**37.25**
	5795	37.25
MCS7	5755	36.75
	5795	36.50

Modulation: 802.11ac-VHT40:

Modulation	Data rate	Measured Frequency (MHz)	26 dB emission bandwidth (MHz)	99% Occupied Bandwidth (MHz)
802.11ac-VHT40: UNII 1	MCS0	**5190**	**41.74**	**36.75**
		5230	41.49	36.75
	MCS9	5190	40.93	36.50
		5230	40.90	36.50
802.11ac-VHT40: UNII 2a	MCS0	**5270**	**41.54**	**37.25**
		5310	41.46	36.50
	MCS9	5270	41.39	36.50
		5310	41.46	36.50
802.11ac-VHT40: UNII 2c	MCS0	**5510**	**41.59**	**36.50**
		5590	41.37	37.50
		5670	41.42	36.75
		5710	41.55	37.25
	MCS9	5510	40.85	36.50
		5590	40.56	36.50
		5670	41.03	36.75
		5710	41.37	36.75

Modulation: 802.11ac-VHT40: UNII 3

Data rate	Measured Frequency (MHz)	6 dB emission bandwidth (MHz)	Minimum Limit (MHz)
MCS0	5755	36.45	0.5
	5795	36.40	0.5
MCS9	**5755**	**36.55**	**0.5**
	5795	36.50	0.5

Data rate	Measured Frequency (MHz)	99% Occupied Bandwidth (MHz)
MCS0	5755	36.75
	5795	**37.00**
MCS9	5755	36.75
	5795	36.75

Modulation: 802.11ax-HE40MHz:

Modulation	Data rate	Measured Frequency (MHz)	26 dB emission bandwidth (MHz)	99% Occupied Bandwidth (MHz)
802.11ax-HE40: UNII 1	MCS0	**5190**	**41.69**	**37.75**
		5230	41.59	37.75
	MCS11	5190	41.59	37.75
		5230	41.49	37.75
802.11ax-HE40: UNII 2a	MCS0	**5270**	**41.67**	**37.75**
		5310	41.46	37.75
	MCS11	5270	41.67	37.75
		5310	41.46	37.75
802.11ax-HE40: UNII 2c	MCS0	5510	41.37	37.50
		5590	41.59	38.00
		5670	41.17	37.75
		5710	41.54	38.00
	MCS11	5510	41.53	37.75
		5590	41.46	37.75
		5670	41.64	37.75
		5710	**41.86**	**37.75**

Modulation: 802.11ax-HE40: UNII 3

Data rate	Measured Frequency (MHz)	6 dB emission bandwidth (MHz)	Minimum Limit (MHz)
MCS0	**5755**	**38.00**	**0.5**
	5795	37.65	0.5
MCS11	5755	38.00	0.5
	5795	38.00	0.5

Data rate	Measured Frequency (MHz)	99% Occupied Bandwidth (MHz)
MCS0	5755	37.75
	5795	**38.00**
MCS11	5755	37.75
	5795	37.75

Modulation: 802.11ac-VHT80:

Modulation	Data rate	Measured Frequency (MHz)	26 dB emission bandwidth (MHz)	99% Occupied Bandwidth (MHz)
802.11ac-VHT80: UNII 1	MCS0	**5210**	**82.43**	**76.50**
	MCS9	5210	81.76	76.50
802.11ac-VHT80: UNII 2a	MCS0	**5290**	**82.32**	**76.50**
	MCS9	5290	81.82	76.50
802.11ac-VHT80: UNII 2c	MCS0	5530	82.74	75.50
	MCS9	**5690**	**82.81**	**77.00**
	MCS0	5530	81.69	76.00
	MCS9	**5690**	**82.23**	**76.50**

Modulation: 802.11ac-VHT80: UNII 3

Data rate	Measured Frequency (MHz)	6 dB emission bandwidth (MHz)	Minimum Limit (MHz)
MCS0	5775	76.45	0.5
MCS9	**5775**	**76.50**	**0.5**

Data rate	Measured Frequency (MHz)	99% Occupied Bandwidth (MHz)
MCS0	**5755**	**76.50**
MCS9	5755	76.50

Modulation: 802.11ax-HE80MHz:

Modulation	Data rate	Measured Frequency (MHz)	26 dB emission bandwidth (MHz)	99% Occupied Bandwidth (MHz)
802.11ax- HE80MHz: UNII 1	MCS0	**5210**	**82.07**	**77.50**
	MCS9	5210	81.73	77.50
802.11ax- HE80MHz: UNII 2a	MCS0	**5290**	**82.59**	**77.50**
	MCS9	5290	82.08	77.50
802.11ax- HE80MHz: UNII 2c	MCS0	5530	81.63	77.50
	MCS9	**5690**	**82.41**	**77.50**
	MCS0	5530	81.89	77.50
	MCS9	5690	82.00	77.50

Modulation: 802.11ax-HE80: UNII 3

Data rate	Measured Frequency (MHz)	6 dB emission bandwidth (MHz)	Minimum Limit (MHz)
MCS0	**5775**	**78.00**	**0.5**
MCS9	5775	77.80	0.5

Data rate	Measured Frequency (MHz)	99% Occupied Bandwidth (MHz)
MCS0	**5775**	**77.50**
MCS9	5775	77.50

Antenna Type: 1001932PT (Flex/PCB) Antenna MIMO Results

Modulation: 802.11a :

Modulation	Data rate (Mbps)	Measured Frequency (MHz)	26 dB emission bandwidth (MHz)	99% Occupied Bandwidth (MHz)
802.11a : UNII 1	6	5180	21.60	16.80
		5240	21.80	16.80
	54	5180	21.80	16.70
		5240	**23.30**	**17.00**
802.11a : UNII 2a	6	5260	21.80	16.80
		5320	21.80	16.90
	54	**5260**	**25.40**	**17.00**
		5320	21.60	16.70
802.11a : UNII 2c	6	5500	21.60	16.80
		5700	21.60	16.70
		5720	21.77 15.67 -UNII 2C 6.10 –UNII 3	17.20 13.69 -UNII 2C 3.51 –UNII 3
	54	5500	21.40	16.90
		5700	21.50	16.80
		5720	**21.96** **15.32 -UNII 2C** **6.64 –UNII 3**	**17.15** **13.49 -UNII 2C** **3.66 –UNII 3**

Modulation: 802.11a : UNII 3

Data rate (Mbps)	Measured Frequency (MHz)	6 dB emission bandwidth (MHz)	Minimum Limit (MHz)
6	5745	16.40	0.5
	5825	16.40	0.5
54	**5745**	**16.60**	**0.5**
	5825	16.60	0.5

Data rate (Mbps)	Measured Frequency (MHz)	99% Occupied Bandwidth (MHz)
6	5745	16.70
	5825	**18.00**
54	5745	16.70
	5825	16.80

Modulation: 802.11n-HT20:

Modulation	Data rate	Measured Frequency (MHz)	26 dB emission bandwidth (MHz)	99% Occupied Bandwidth (MHz)
802.11n-HT20: UNII 1	MCS0	5180	22.30	17.80
		5240	**22.60**	**18.00**
	MCS7	5180	22.00	17.90
		5240	22.20	17.90
802.11n-HT20: UNII 2a	MCS0	**5260**	**22.00**	**18.10**
		5320	21.90	18.00
	MCS7	5260	21.90	17.90
		5320	21.70	17.90
802.11n-HT20: UNII 2c	MCS0	5500	21.90	17.90
		5700	21.80	17.90
		5720	21.81 15.71 -UNII 2C 6.10 –UNII 3	18.14 14.03 -UNII 2C 4.11 –UNII 3
	MCS7	5500	21.70	17.90
		5700	21.80	17.90
		5720	**23.26** **16.41 -UNII 2C** **6.85 –UNII 3**	**18.12** **14.01 -UNII 2C** **4.11 –UNII 3**

Modulation: 802.11n-HT20: UNII 3

Data rate	Measured Frequency (MHz)	6 dB emission bandwidth (MHz)	Minimum Limit (MHz)
MCS0	5745	17.60	0.5
	5825	17.60	0.5
MCS7	5745	17.80	0.5
	5825	17.80	0.5

Data rate	Measured Frequency (MHz)	99% Occupied Bandwidth (MHz)
MCS0	5745	18.10
	5825	17.90
MCS7	5745	17.90
	5825	17.90

Modulation: 802.11ac-VHT20:

Modulation	Data rate	Measured Frequency (MHz)	26 dB emission bandwidth (MHz)	99% Occupied Bandwidth (MHz)
802.11ac-VHT20: UNII 1	MCS0	**5180**	**22.10**	**17.80**
		5240	22.00	17.90
	MCS9	5180	22.00	17.90
		5240	21.70	17.80
802.11ac-VHT20: UNII 2a	MCS0	**5260**	**22.10**	**17.90**
		5320	21.80	17.90
	MCS9	5260	21.60	17.80
		5320	21.50	17.80
802.11ac-VHT20: UNII 2c	MCS0	5500	21.60	17.90
		5700	**22.00**	**17.90**
		5720	**21.76** **15.36 -UNII 2C** **6.40 –UNII 3**	**18.07** **14.11 -UNII 2C** **3.96 –UNII 3**
	MCS9	5500	21.50	17.90
		5700	21.70	17.90
		5720	21.54 14.81 -UNII 2C 6.73 –UNII 3	18.11 14.12 -UNII 2C 3.99 –UNII 3

Modulation: 802.11ac-VHT20: UNII 3

Data rate	Measured Frequency (MHz)	6 dB emission bandwidth (MHz)	Minimum Limit (MHz)
MCS0	5745	18.65	0.5
	5825	18.65	0.5
MCS9	5745	19.20	0.5
	5825	19.20	0.5

Data rate	Measured Frequency (MHz)	99% Occupied Bandwidth (MHz)
MCS0	5745	19.00
	5825	19.00
MCS9	5745	19.20
	5825	19.10

Modulation: 802.11ax-HE20:

Modulation	Data rate	Measured Frequency (MHz)	26 dB emission bandwidth (MHz)	99% Occupied Bandwidth (MHz)
802.11ax-HE20: UNII 1	MCS0	5180	21.60	19.00
		5240	21.50	19.00
	MCS11	5180	22.00	19.20
		5240	22.00	19.20
802.11ax-HE20: UNII 2a	MCS0	5260	21.70	19.00
		5320	21.40	19.00
	MCS11	5260	21.90	19.20
		5320	21.80	19.10
802.11ax-HE20: UNII 2c	MCS0	5500	21.40	19.00
		5700	21.40	18.90
		5720	21.56 15.64 -UNII 2C 5.92 –UNII 3	18.96 14.46 -UNII 2C 4.50 –UNII 3
	MCS11	5500	21.80	19.10
		5700	21.90	19.20
		5720	**21.99** **14.66 -UNII 2C** **7.33 –UNII 3**	**19.13** **14.57 -UNII 2C** **4.56 –UNII 3**

Modulation: 802.11ax-HE20: UNII 3

Data rate	Measured Frequency (MHz)	6 dB emission bandwidth (MHz)	Minimum Limit (MHz)
MCS0	5745	18.65	0.5
	5825	18.65	0.5
MCS11	5745	19.20	0.5
	5825	19.20	0.5

Data rate	Measured Frequency (MHz)	99% Occupied Bandwidth (MHz)
MCS0	5745	19.00
	5825	19.00
MCS11	5745	19.20
	5825	19.10

Modulation: 802.11n-HT40:

Modulation	Data rate	Measured Frequency (MHz)	26 dB emission bandwidth (MHz)	99% Occupied Bandwidth (MHz)
802.11n-HT40: UNII 1	MCS0	5190	36.98	36.50
		5230	36.81	37.00
	MCS7	5190	36.74	36.50
		5230	36.78	36.75
802.11n-HT40: UNII 2a	MCS0	5270	36.65	38.25
		5310	36.78	36.50
	MCS7	5270	36.30	36.75
		5310	36.72	36.50
802.11n-HT40: UNII 2c	MCS0	5510	36.78	36.75
		5590	36.83	44.50
		5670	36.82	36.75
		5710	36.74	42.00
	MCS7	5510	36.84	36.75
		5590	36.81	36.75
		5670	36.79	36.75
		5710	36.79	36.50

Modulation: 802.11n-HT40: UNII 3

Data rate	Measured Frequency (MHz)	6 dB emission bandwidth (MHz)	Minimum Limit (MHz)
MCS0	5755	36.40	0.5
	5795	36.15	0.5
MCS7	5755	36.55	0.5
	5795	36.55	0.5

Data rate	Measured Frequency (MHz)	99% Occupied Bandwidth (MHz)
MCS0	5755	36.75
	5795	36.75
MCS7	5755	36.75
	5795	36.50

Modulation: 802.11ac-VHT40:

Modulation	Data rate	Measured Frequency (MHz)	26 dB emission bandwidth (MHz)	99% Occupied Bandwidth (MHz)
802.11ac-VHT40: UNII 1	MCS0	5190	36.99	36.75
		5230	**36.91**	**36.75**
	MCS9	5190	37.03	37.03
		5230	37.06	37.05
802.11ac-VHT40: UNII 2a	MCS0	5270	36.70	37.25
		5310	36.76	36.50
	MCS9	5270	36.99	36.75
		5310	**37.07**	**36.50**
802.11ac-VHT40: UNII 2c	MCS0	5510	36.97	36.75
		5590	36.78	37.50
		5670	36.78	36.75
		5710	36.74	37.25
	MCS9	5510	37.07	36.75
		5590	37.11	36.75
		5670	37.01	36.75
		5710	**37.12**	**36.50**

Modulation: 802.11ac-VHT40MHz: UNII 3

Data rate	Measured Frequency (MHz)	6 dB emission bandwidth (MHz)	Minimum Limit (MHz)
MCS0	5755	36.40	0.5
	5795	36.15	0.5
MCS9	**5755**	**36.55**	**0.5**
	5795	36.55	0.5

Data rate	Measured Frequency (MHz)	99% Occupied Bandwidth (MHz)
MCS0	**5755**	**36.75**
	5795	36.75
MCS9	5755	36.75
	5795	36.50

Modulation: 802.11ax-HE40:

Modulation	Data rate	Measured Frequency (MHz)	26 dB emission bandwidth (MHz)	99% Occupied Bandwidth (MHz)
802.11ax-HE40: UNII 1	MCS0	5190	37.86	37.75
		5230	**37.92**	**37.75**
	MCS11	5190	37.91	37.75
		5230	37.90	37.75
802.11ax-HE40: UNII 2a	MCS0	5270	37.84	38.00
		5310	**37.93**	**37.75**
	MCS11	5270	37.84	37.75
		5310	37.90	37.75
802.11ax-HE40: UNII 2c	MCS0	5510	37.88	37.75
		5590	**37.96**	**38.50**
		5670	37.84	37.75
		5710	37.84	38.25
	MCS11	5510	37.95	37.75
		5590	37.87	37.75
		5670	37.84	37.75
		5710	37.89	37.75

Modulation: 802.11ax-HE40: UNII 3

Data rate	Measured Frequency (MHz)	6 dB emission bandwidth (MHz)	Minimum Limit (MHz)
MCS0	5745	37.90	0.5
	5825	37.75	0.5
MCS11	**5745**	**37.95**	**0.5**
	5825	37.95	0.5

Data rate	Measured Frequency (MHz)	99% Occupied Bandwidth (MHz)
MCS0	**5745**	**37.75**
	5825	37.75
MCS11	5745	37.75
	5825	37.75

Modulation: 802.11ac-VHT80:

Modulation	Data rate	Measured Frequency (MHz)	26 dB emission bandwidth (MHz)	99% Occupied Bandwidth (MHz)
802.11ac-VHT80: UNII 1	MCS0	5210	76.21	76.50
	MCS9	5210	75.94	76.50
802.11ac-VHT80: UNII 2a	MCS0	5290	75.80	76.50
	MCS9	5290	75.76	76.50
802.11ac-VHT80: UNII 2c	MCS0	5530	75.74	76.00
	MCS9	5690	75.84	76.50
	MCS0	5530	75.79	76.00
	MCS9	5690	75.84	76.50

Modulation: 802.11ac-VHT80: UNII 3

Data rate	Measured Frequency (MHz)	6 dB emission bandwidth (MHz)	Minimum Limit (MHz)
MCS0	5775	75.45	0.5
MCS9	5775	75.50	0.5

Data rate	Measured Frequency (MHz)	99% Occupied Bandwidth (MHz)
MCS0	5755	76.50
MCS9	5755	76.50

Modulation: 802.11ax-HE80:

Modulation	Data rate	Measured Frequency (MHz)	26 dB emission bandwidth (MHz)	99% Occupied Bandwidth (MHz)
802.11ax- HE80: UNII 1	MCS0	5210	77.24	77.00
	MCS11	5210	77.21	77.50
802.11ax- HE80: UNII 2a	MCS0	5290	76.97	77.50
	MCS11	5290	77.16	77.50
802.11ax- HE80: UNII 2c	MCS0	5530	76.96	77.50
	MCS11	5690	76.99	77.50
	MCS0	5530	76.95	77.00
	MCS11	5690	77.11	77.50

Modulation: 802.11ax-HE80: UNII 3

Data rate	Measured Frequency (MHz)	6 dB emission bandwidth (MHz)	Minimum Limit (MHz)
MCS0	5775	77.55	0.5
MCS11	**5775**	**77.80**	**0.5**

Data rate	Measured Frequency (MHz)	99% Occupied Bandwidth (MHz)
MCS0	**5755**	**77.50**
MCS11	5755	77.50

Antenna Type: FPA3020-10A (Flex/PCB) Antenna MIMO Results

Modulation: 802.11a :

Modulation	Data rate (Mbps)	Measured Frequency (MHz)	26 dB emission bandwidth (MHz)	99% Occupied Bandwidth (MHz)
802.11a : UNII 1	6	5180	21.60	16.80
		5240	**21.80**	**16.80**
	54	5180	21.80	16.70
		5240	23.30	17.00
802.11a : UNII 2a	6	5260	21.80	16.80
		5320	21.80	16.90
	54	**5260**	**25.40**	**17.00**
		5320	21.60	16.70
802.11a : UNII 2c	6	5500	21.60	16.80
		5700	21.60	16.70
		5720	21.77 15.67 -UNII 2C 6.10 –UNII 3	17.20 13.69 -UNII 2C 3.51 –UNII 3
	54	5500	21.40	16.90
		5700	21.50	16.80
		5720	**21.96** **15.32 -UNII 2C** **6.64 –UNII 3**	**17.15** **13.49 -UNII 2C** **3.66 –UNII 3**

Modulation: 802.11a : UNII 3

Data rate (Mbps)	Measured Frequency (MHz)	6 dB emission bandwidth (MHz)	Minimum Limit (MHz)
6	5745	16.40	0.5
	5825	16.10	0.5
54	**5745**	**16.60**	**0.5**
	5825	16.60	0.5

Data rate (Mbps)	Measured Frequency (MHz)	99% Occupied Bandwidth (MHz)
6	**5745**	**17.10**
	5825	16.80
54	5745	16.90
	5825	16.80

Modulation: 802.11n-HT20:

Modulation	Data rate	Measured Frequency (MHz)	26 dB emission bandwidth (MHz)	99% Occupied Bandwidth (MHz)
802.11n-HT20: UNII 1	MCS0	5180	22.00	17.80
		5240	**22.60**	**18.00**
	MCS7	5180	22.00	17.90
		5240	22.20	17.90
802.11n-HT20: UNII 2a	MCS0	**5260**	**22.00**	**18.10**
		5320	21.90	18.00
	MCS7	5260	21.90	17.90
		5320	21.70	17.90
802.11n-HT20: UNII 2c	MCS0	5500	21.90	17.90
		5700	21.80	17.90
		5720	21.81 15.71 -UNII 2C 6.10 –UNII 3	18.14 14.03 -UNII 2C 4.11 –UNII 3
	MCS7	5500	21.70	17.90
		5700	21.80	17.90
		5720	**23.26** **16.41 -UNII 2C** **6.85 –UNII 3**	**18.12** **14.01 -UNII 2C** **4.11 –UNII 3**

Modulation: 802.11n-HT20: UNII 3

Data rate	Measured Frequency (MHz)	6 dB emission bandwidth (MHz)	Minimum Limit (MHz)
MCS0	5745	17.60	0.5
	5825	17.40	0.5
MCS7	5745	17.80	0.5
	5825	17.80	0.5

Data rate	Measured Frequency (MHz)	99% Occupied Bandwidth (MHz)
MCS0	5745	18.10
	5825	18.20
MCS7	5745	17.90
	5825	17.90

Modulation: 802.11ac-VHT20:

Modulation	Data rate	Measured Frequency (MHz)	26 dB emission bandwidth (MHz)	99% Occupied Bandwidth (MHz)
802.11ac-VHT20: UNII 1	MCS0	5180	21.90	17.90
		5240	22.00	17.90
	MCS9	5180	22.00	17.90
		5240	21.70	17.80
802.11ac-VHT20: UNII 2a	MCS0	5260	22.10	17.90
		5320	21.80	17.90
	MCS9	5260	21.60	17.80
		5320	21.50	17.80
802.11ac-VHT20: UNII 2c	MCS0	5500	21.60	17.90
		5700	22.00	17.90
		5720	**21.76** **15.36 -UNII 2C** **6.40 –UNII 3**	**18.07** **14.11 -UNII 2C** **3.96 –UNII 3**
	MCS9	5500	21.50	17.90
		5700	21.70	17.90
		5720	21.54 14.81 -UNII 2C 6.73 –UNII 3	18.11 14.12 -UNII 2C 3.99 –UNII 3

Modulation: 802.11ac-VHT20: UNII 3

Data rate	Measured Frequency (MHz)	6 dB emission bandwidth (MHz)	Minimum Limit (MHz)
MCS0	5745	17.60	0.5
	5825	17.15	0.5
MCS9	5745	17.80	0.5
	5825	17.80	0.5

Data rate	Measured Frequency (MHz)	99% Occupied Bandwidth (MHz)
MCS0	5745	17.90
	5825	18.90
MCS9	5745	17.80
	5825	18.90

Modulation: 802.11ax-HE20:

Modulation	Data rate	Measured Frequency (MHz)	26 dB emission bandwidth (MHz)	99% Occupied Bandwidth (MHz)
802.11ax-HE20: UNII 1	MCS0	5180	21.60	19.00
		5240	21.50	19.00
	MCS11	**5180**	**22.00**	**19.20**
		5240	22.00	19.20
802.11ax-HE20: UNII 2a	MCS0	5260	21.70	19.00
		5320	21.40	19.00
	MCS11	**5260**	**21.90**	**19.20**
		5320	21.80	19.10
802.11ax-HE20: UNII 2c	MCS0	5500	21.40	19.00
		5700	21.40	18.90
		5720	21.56 15.64 -UNII 2C 5.92 –UNII 3	18.96 14.46 -UNII 2C 4.50 –UNII 3
	MCS11	5500	21.80	19.10
		5700	21.90	19.20
		5720	**21.99** **14.66 -UNII 2C** **7.33 –UNII 3**	**19.13** **14.57 -UNII 2C** **4.56 –UNII 3**

Modulation: 802.11ax-HE20: UNII 3

Data rate	Measured Frequency (MHz)	6 dB emission bandwidth (MHz)	Minimum Limit (MHz)
MCS0	5745	18.85	0.5
	5825	18.55	0.5
MCS11	**5745**	**19.20**	**0.5**
	5825	19.20	0.5

Data rate	Measured Frequency (MHz)	99% Occupied Bandwidth (MHz)
MCS0	5745	19.00
	5825	19.10
MCS11	**5745**	**19.20**
	5825	19.10

Modulation: 802.11n-HT40:

Modulation	Data rate	Measured Frequency (MHz)	26 dB emission bandwidth (MHz)	99% Occupied Bandwidth (MHz)
802.11n-HT40: UNII 1	MCS0	5190	41.00	36.75
		5230	41.57	36.75
	MCS7	5190	40.96	36.50
		5230	40.97	36.50
802.11n-HT40: UNII 2a	MCS0	5270	41.27	38.00
		5310	41.47	36.50
	MCS7	5270	41.10	36.50
		5310	41.19	36.25
802.11n-HT40: UNII 2c	MCS0	5510	41.41	36.75
		5590	41.29	44.50
		5670	41.24	36.75
		5710	41.39	43.75
	MCS7	5510	41.42	36.75
		5590	41.00	36.75
		5670	40.84	36.75
		5710	41.11	36.50

Modulation: 802.11n-HT40: UNII 3

Data rate	Measured Frequency (MHz)	6 dB emission bandwidth (MHz)	Minimum Limit (MHz)
MCS0	5755	36.40	0.5
	5795	36.15	0.5
MCS7	5755	36.55	0.5
	5795	36.55	0.5

Data rate	Measured Frequency (MHz)	99% Occupied Bandwidth (MHz)
MCS0	5755	36.75
	5795	36.75
MCS7	5755	36.75
	5795	36.75

Modulation: 802.11ac-VHT40:

Modulation	Data rate	Measured Frequency (MHz)	26 dB emission bandwidth (MHz)	99% Occupied Bandwidth (MHz)
802.11ac-VHT40: UNII 1	MCS0	**5190**	**41.49**	**36.75**
		5230	41.49	36.75
	MCS9	5190	41.22	36.75
		5230	41.24	36.75
802.11ac-VHT40: UNII 2a	MCS0	**5270**	**41.81**	**37.00**
		5310	41.40	36.50
	MCS9	5270	41.13	36.75
		5310	41.15	36.75
802.11ac-VHT40: UNII 2c	MCS0	5510	41.53	36.75
		5590	41.33	38.00
		5670	41.45	36.75
		5710	**41.63**	**37.50**
	MCS9	5510	41.22	36.75
		5590	41.24	36.75
		5670	41.32	36.75
		5710	41.24	36.50

Modulation: 802.11ac-VHT40: UNII 3

Data rate	Measured Frequency (MHz)	6 dB emission bandwidth (MHz)	Minimum Limit (MHz)
MCS0	5755	36.40	0.5
	5795	36.15	0.5
MCS9	5755	36.55	0.5
	5795	**36.50**	**0.5**

Data rate	Measured Frequency (MHz)	99% Occupied Bandwidth (MHz)
MCS0	**5755**	**36.75**
	5795	36.50
MCS9	5755	36.75
	5795	36.50

Modulation: 802.11ax-HE40:

Modulation	Data rate	Measured Frequency (MHz)	26 dB emission bandwidth (MHz)	99% Occupied Bandwidth (MHz)
802.11ax-HE40: UNII 1	MCS0	**5190**	**41.41**	**37.75**
		5230	41.41	37.75
	MCS11	5190	41.36	37.75
		5230	41.18	37.75
802.11ax-HE40: UNII 2a	MCS0	5270	41.47	37.75
		5310	41.02	37.75
	MCS11	5270	41.20	37.75
		5310	**41.50**	**37.75**
802.11ax-HE40: UNII 2c	MCS0	5510	41.38	37.75
		5590	41.04	38.00
		5670	41.26	37.75
		5710	41.29	38.00
	MCS11	**5510**	**41.84**	**37.75**
		5590	41.43	37.75
		5670	41.29	37.75
		5710	41.31	37.75

Modulation: 802.11ax-HE40: UNII 3

Data rate	Measured Frequency (MHz)	6 dB emission bandwidth (MHz)	Minimum Limit (MHz)
MCS0	**5755**	**37.75**	**0.5**
	5795	37.05	0.5
MCS11	5755	37.75	0.5
	5795	37.30	0.5

Data rate	Measured Frequency (MHz)	99% Occupied Bandwidth (MHz)
MCS0	**5755**	**37.75**
	5795	37.75
MCS11	5755	37.75
	5795	37.75

Modulation: 802.11ac-VHT80:

Modulation	Data rate	Measured Frequency (MHz)	26 dB emission bandwidth (MHz)	99% Occupied Bandwidth (MHz)
802.11ac-VHT80: UNII 1	MCS0	**5210**	**82.76**	**76.50**
	MCS9	5210	82.00	76.50
802.11ac-VHT80: UNII 2a	MCS0	**5290**	**82.25**	**76.50**
	MCS9	5290	81.39	76.50
802.11ac-VHT80: UNII 2c	MCS0	5530	81.63	76.50
	MCS9	**5690**	**82.44**	**76.50**
	MCS0	5530	81.55	76.00
	MCS9	5690	82.20	76.50

Modulation: 802.11ac-VHT80: UNII 3

Data rate	Measured Frequency (MHz)	6 dB emission bandwidth (MHz)	Minimum Limit (MHz)
MCS0	5775	75.45	0.5
MCS9	**5775**	**75.50**	**0.5**

Data rate	Measured Frequency (MHz)	99% Occupied Bandwidth (MHz)
MCS0	5775	76.50
MCS9	**5775**	**76.50**

Modulation: 802.11ax-HE80:

Modulation	Data rate	Measured Frequency (MHz)	26 dB emission bandwidth (MHz)	99% Occupied Bandwidth (MHz)
802.11ax- HE80: UNII 1	MCS0	5210	82.04	77.50
	MCS11	5210	81.95	77.50
802.11ax- HE80: UNII 2a	MCS0	5290	81.98	77.50
	MCS11	5290	82.20	77.50
802.11ax- HE80: UNII 2c	MCS0	5530	81.78	77.00
	MCS11	5690	81.75	77.50
	MCS0	5530	81.48	77.50
	MCS11	5690	82.60	77.50

Modulation: 802.11ax-HE80: UNII 3

Data rate	Measured Frequency (MHz)	6 dB emission bandwidth (MHz)	Minimum Limit (MHz)
MCS0	5775	76.95	0.5
MCS11	**5775**	**77.80**	**0.5**

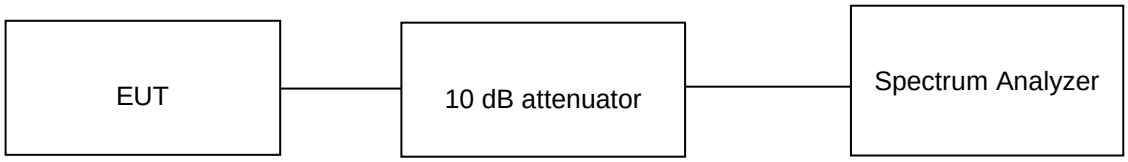
Data rate	Measured Frequency (MHz)	99% Occupied Bandwidth (MHz)
MCS0	**5775**	77.50
MCS11	5775	77.50

7.2 Maximum Conducted Output Power

Result ***Pass***

Test Specification	FCC part 15 Subpart C & E, 15.247 (b), 15.407 (a) / RSS 247 Issue 2 Section 6.2.1; 6.2.2; 6.2.3; & Section 6.2.4
Test Method	Subclause 12.3.2.4 of ANSI C63.10
Measurement Bandwidth	Refer the remarks below
Detector	Average sample detector mode
Port of testing	Antenna port
Requirement for FCC	1. 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 2. 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 dBm + 10 log B, where B is the 26 dB emission bandwidth in megahertz 3. For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W
Requirement for IC	1. For the band 5.15-5.25 GHz, the maximum e.i.r.p. shall not exceed 200 mW or 10 + 10 log10 (B), dBm, whichever power is less. B is the 99% emission bandwidth in megahertz 2a. For the band 5.250 -5.350 GHz, the maximum conducted output power shall not exceed 250 mW or 11 + 10 log10B, dBm, whichever is less 2b. For the band 5.250 -5.350 GHz, the maximum e.i.r.p. shall not exceed 1.0 W or 17 + 10 log10B, dBm, whichever is less. B is the 99% emission bandwidth in megahertz 3a. For the band 5.470-5.725GHz, The maximum conducted output power shall not exceed 250 mW or 11 + 10 log10B, dBm, whichever is less 3b. For the band 5.470-5.725GHz, The maximum e.i.r.p. shall not exceed 1.0 W or 17 + 10 log10B, dBm, whichever is less. B is the 99% emission bandwidth in megahertz 4. For the band 5.725-5.85 GHz, The maximum conducted output power shall not exceed 1 W

Test Method



The following procedure shall be used (trace averaging across on and off times of the EUT transmissions, followed by duty cycle correction):

1. Set center frequency to the nominal EUT channel center frequency
2. Set span to encompass the EBW (or, alternatively, the entire 99% occupied bandwidth) of the signal.
3. Set RBW = 1MHz
4. Set VBW ≥ 3 × RBW
5. Number of points in sweep ≥ 2 × span / RBW. (This ensures that bin-to-bin spacing is ≤ RBW/2, so that narrowband signals are not lost between frequency bins.)
6. Sweep time = auto
7. Detector = power averaging (rms), if available. Otherwise, use sample detector mode
8. Do not use sweep triggering. Allow the sweep to “free run.”
9. Trace average at least 100 traces and Compute power by integrating the spectrum across the EBW
10. Add 10 log (1/x), where x is the duty cycle, to the measured power in order to compute the average power during the actual transmission times (because the measurement represents an average over both the on and off times of the transmission)

Test Condition:

Normal Test Condition:

Temperature (Norm) = + 25 °C Voltage = 5.0 V DC Relative humidity: 62 %

KDB Guidelines applied:

Measurements were made as per section E (2) sub-section (d) in KDB 789033 D02 General UNII Test Procedures New Rules v02r01

Test results:

Note:

1. All the losses are included during measurement and final values are mentioned in the test report

   10 dB attenuator + 0.8 dB Cable loss = 10.8 dB total offset

2. Duty cycle correction factor is considered in Final Average power

   Duty cycle Correction factor = 10*LOG (1/X) Where X is Duty Cycle

3. This product do not support additional beamforming gain / directional gain, it uses signal antenna and hence directional gain of the single antenna is (3.37 dBi)

4. e.i.r.p = Maximum Average output power (dBm) + Antenna gain in dBi

Note: Refer Attached Appendix for test Plots

Antenna Type: MAF94367(Omni Directional Antenna) RPSMA Results
Modulation: 802.11a:

Data rate (Mbps)	Measured Frequency (MHz)	Measured Average Power (dBm)	Duty Cycle X %	Duty cycle correction factor (dB)	Maximum Average output power (dBm)	e.i.r.p (dBm)	FCC Power Limit (dBm)	IC power (dBm)	IC e.i.r.p Limit (dBm)
a_mode-6Mbps	5180	11.72	90.68	0.42	12.14	15.51	24.00	-	22.23
	5240	16.14	90.68	0.42	16.56	19.93	24.00	-	22.30
	5260	16.18	90.68	0.42	16.60	19.97	24.00	23.58	29.58
	5320	11.41	90.65	0.43	11.84	15.21	24.00	23.23	29.23
	5500	9.75	90.67	0.43	10.18	13.55	24.00	23.25	29.25
	5700	9.38	90.67	0.43	9.81	13.18	24.00	23.23	29.23
	5720	15.95	90.68	0.42	16.37	19.74	24.00	23.33	29.33
	5745	15.70	90.68	0.42	16.12	19.49	30.00	30.00	-
	5825	15.49	90.66	0.43	15.92	19.29	30.00	30.00	-
a_mode-54Mbps	5180	11.82	55.26	2.58	14.40	17.77	24.00	-	22.23
	5240	**15.64**	**55.25**	**2.58**	**18.22**	**21.59**	**24.00**	-	22.41
	5260	15.04	55.26	2.58	17.62	20.99	24.00	23.28	29.28
	5320	11.34	55.29	2.57	13.91	17.28	24.00	23.20	29.20
	5500	9.81	55.31	2.57	12.38	15.75	24.00	23.20	29.20
	5700	9.43	55.33	2.57	12.00	15.37	24.00	23.20	29.20
	5720	14.23	55.30	2.57	16.80	20.17	24.00	23.20	29.20
	5745	14.12	55.29	2.57	16.69	20.06	30.00	30.00	-
	5825	13.76	55.29	2.57	16.33	19.70	30.00	30.00	-

Modulation: 802.11n-HT20:

Data rate	Measured Frequency (MHz)	Measured Average Power (dBm)	Duty Cycle X %	Duty cycle correction factor (dB)	Maximum Average output power (dBm)	e.i.r.p (dBm)	FCC Power Limit (dBm)	IC power (dBm)	IC e.i.r.p Limit (dBm)
n_mode-HT20-MCS0	5180	9.61	90.08	0.45	10.06	13.43	24.00	-	22.58
	5240	15.91	90.06	0.45	16.36	19.73	24.00	-	22.58
	5260	15.92	90.08	0.45	16.37	19.74	24.00	23.72	29.72
	5320	11.38	90.08	0.45	11.83	15.20	24.00	23.55	29.55
	5500	9.72	90.07	0.45	10.17	13.54	24.00	23.53	29.53
	5700	8.18	90.10	0.45	8.63	12.00	24.00	23.55	29.55
	5720	14.89	90.07	0.45	15.34	18.71	24.00	23.62	29.62
	5745	14.79	90.09	0.45	15.24	18.61	30.00	30.00	-
	5825	14.42	90.09	0.45	14.87	18.24	30.00	30.00	-
n_mode-HT20-MCS7	5180	11.10	53.53	2.71	13.81	17.18	24.00	-	22.53
	5240	**14.40**	**53.52**	**2.71**	**17.11**	**20.48**	**24.00**	-	22.53
	5260	13.90	53.49	2.72	16.62	19.99	24.00	23.53	29.53
	5320	10.70	53.55	2.71	13.41	16.78	24.00	23.53	29.53
	5500	9.70	53.56	2.71	12.41	15.78	24.00	23.53	29.53
	5700	7.80	53.59	2.71	10.51	13.88	24.00	23.53	29.53
	5720	12.80	53.55	2.71	15.51	18.88	24.00	23.53	29.53
	5745	13.32	53.54	2.71	16.03	19.40	30.00	30.00	-
	5825	13.00	53.57	2.71	15.71	19.08	30.00	30.00	-

Modulation: 802.11ac-VHT20:

Data rate	Measured Frequency (MHz)	Measured Average Power (dBm)	Duty Cycle X %	Duty cycle correction factor (dB)	Maximum Average output power (dBm)	e.i.r.p (dBm)	FCC Power Limit (dBm)	IC power (dBm)	IC e.i.r.p Limit (dBm)
ac_mode-VHT20-MCS0	5180	10.78	90.13	0.45	11.23	14.60	24.00	-	22.58
	5240	**16.60**	**90.07**	**0.45**	**17.05**	**20.42**	**24.00**	-	22.88
	5260	16.02	90.11	0.45	16.47	19.84	24.00	23.65	29.65
	5320	11.35	90.11	0.45	11.80	15.17	24.00	23.53	29.53
	5500	9.79	90.07	0.45	10.24	13.61	24.00	23.53	29.53
	5700	8.24	90.15	0.45	8.69	12.06	24.00	23.55	29.55
	5720	15.77	90.14	0.45	16.22	19.59	24.00	23.60	29.60
	5745	15.38	90.14	0.45	15.83	19.20	30.00	30.00	-
	5825	15.25	90.12	0.45	15.70	19.07	30.00	30.00	-
ac_mode-VHT20-MCS9	5180	10.52	51.07	2.92	13.44	16.81	24.00	-	22.53
	5240	11.91	51.08	2.92	14.83	18.20	24.00	-	22.53
	5260	11.77	51.04	2.92	14.69	18.06	24.00	23.55	29.55
	5320	11.27	51.06	2.92	14.19	17.56	24.00	23.53	29.53
	5500	9.68	51.12	2.91	12.59	15.96	24.00	23.53	29.53
	5700	8.18	51.14	2.91	11.09	14.46	24.00	23.50	29.50
	5720	11.39	51.10	2.92	14.31	17.68	24.00	23.53	29.53
	5745	11.39	51.09	2.92	14.31	17.68	30.00	30.00	-
	5825	10.96	51.10	2.92	13.88	17.25	30.00	30.00	-

Modulation: 802.11ax-HE20:

Data rate	Measured Frequency (MHz)	Measured Average Power (dBm)	Duty Cycle X %	Duty cycle correction factor (dB)	Maximum Average output power (dBm)	e.i.r.p (dBm)	FCC Power Limit (dBm)	IC power (dBm)	IC e.i.r.p Limit (dBm)
ax_mode-HE20-MCS0	5180	10.76	87.62	0.57	11.33	14.70	24.00	-	22.76
	5240	**16.65**	**87.64**	**0.57**	**17.22**	**20.59**	**24.00**	**-**	**22.86**
	5260	16.03	87.64	0.57	16.60	19.97	24.00	23.83	29.83
	5320	11.47	87.64	0.57	12.04	15.41	24.00	23.76	29.76
	5500	9.98	87.62	0.57	10.55	13.92	24.00	23.79	29.79
	5700	8.21	87.58	0.58	8.79	12.16	24.00	23.76	29.76
	5720	14.99	87.63	0.57	15.56	18.93	24.00	23.79	29.79
	5745	14.86	87.63	0.57	15.43	18.80	30.00	30.00	-
	5825	14.51	87.65	0.57	15.08	18.45	30.00	30.00	-
ax_mode-HE20-MCS11	5180	9.75	45.04	3.46	13.21	16.58	24.00	-	22.81
	5240	9.41	45.04	3.46	12.87	16.24	24.00	-	22.81
	5260	9.02	45.03	3.46	12.48	15.85	24.00	23.81	29.81
	5320	9.56	45.03	3.46	13.02	16.39	24.00	23.81	29.81
	5500	8.89	45.05	3.46	12.35	15.72	24.00	23.83	29.83
	5700	8.46	45.09	3.46	11.92	15.29	24.00	23.83	29.83
	5720	8.60	45.09	3.46	12.06	15.43	24.00	23.81	29.81
	5745	8.69	45.09	3.46	12.15	15.52	30.00	30.00	-
	5825	8.30	45.14	3.45	11.75	15.12	30.00	30.00	-

Modulation: 802.11n-HT40:

Data rate	Measured Frequency (MHz)	Measured Average Power (dBm)	Duty Cycle X %	Duty cycle correction factor (dB)	Maximum Average output power (dBm)	e.i.r.p (dBm)	FCC Power Limit (dBm)	IC power (dBm)	IC e.i.r.p Limit (dBm)
n_mode-HT40_ MCS0	5190	12.30	81.85	0.87	13.17	16.54	24.00	-	25.65
	5230	14.90	81.84	0.87	15.77	19.14	24.00	-	25.65
	5270	15.50	81.85	0.87	16.37	19.74	24.00	23.97	25.71
	5310	12.80	81.87	0.87	13.67	17.04	24.00	23.97	25.62
	5510	8.70	81.89	0.87	9.57	12.94	24.00	23.97	25.62
	5590	15.50	81.86	0.87	16.37	19.74	24.00	23.97	25.74
	5670	10.60	81.89	0.87	11.47	14.84	24.00	23.97	25.65
	5710	15.60	81.89	0.87	16.47	19.84	24.00	23.97	25.71
	5755	15.40	81.89	0.87	16.27	19.64	30.00	30.00	-
	5795	14.90	81.89	0.87	15.77	19.14	30.00	30.00	-
n_mode-HT40_ MCS7	5190	12.00	40.83	3.89	15.89	19.26	24.00	-	25.62
	5230	**13.70**	**40.75**	**3.90**	**17.60**	**20.97**	**24.00**	**-**	25.62
	5270	13.30	40.84	3.89	17.19	20.56	24.00	23.97	25.62
	5310	12.60	40.81	3.89	16.49	19.86	24.00	23.97	25.62
	5510	8.60	40.89	3.88	12.48	15.85	24.00	23.97	25.62
	5590	12.60	40.89	3.88	16.48	19.85	24.00	23.97	25.62
	5670	10.70	40.90	3.88	14.58	17.95	24.00	23.97	25.65
	5710	12.60	40.87	3.89	16.49	19.86	24.00	23.97	25.65
	5755	12.50	40.88	3.89	16.39	19.76	30.00	30.00	-
	5795	12.10	40.90	3.88	15.98	19.35	30.00	30.00	-

Modulation: 802.11ac-VHT40:

Data rate	Measured Frequency (MHz)	Measured Average Power (dBm)	Duty Cycle X %	Duty cycle correction factor (dB)	Maximum Average output power (dBm)	e.i.r.p (dBm)	FCC Power Limit (dBm)	IC power (dBm)	IC e.i.r.p Limit (dBm)
ac_mode_ VHT40 _MCS0	5190	12.30	81.93	0.87	13.17	16.54	24.00	-	25.65
	5230	14.80	81.93	0.87	15.67	19.04	24.00	-	25.65
	5270	15.60	81.92	0.87	16.47	19.84	24.00	23.97	25.68
	5310	12.70	81.88	0.87	13.57	16.94	24.00	23.97	25.62
	5510	8.40	81.96	0.86	9.26	12.63	24.00	23.97	25.62
	5590	14.60	81.96	0.86	15.46	18.83	24.00	23.97	25.68
	5670	10.80	81.98	0.86	11.66	15.03	24.00	23.97	25.65
	5710	14.50	81.97	0.86	15.36	18.73	24.00	23.97	25.68
	5755	14.50	81.97	0.86	15.36	18.73	30.00	30.00	-
	5795	14.10	81.97	0.86	14.96	18.33	30.00	30.00	-
ac_mode_ VHT40_ MCS9	5190	12.00	37.81	4.22	16.22	19.59	24.00	-	25.65
	5230	**12.80**	**37.80**	**4.22**	**17.02**	**20.39**	**24.00**	**-**	**25.65**
	5270	12.20	37.80	4.22	16.42	19.79	24.00	23.97	25.65
	5310	12.60	37.78	4.23	16.83	20.20	24.00	23.97	25.62
	5510	8.40	37.89	4.21	12.61	15.98	24.00	23.97	25.65
	5590	11.70	37.87	4.22	15.92	19.29	24.00	23.97	25.65
	5670	10.60	37.86	4.22	14.82	18.19	24.00	23.97	25.65
	5710	11.60	37.86	4.22	15.82	19.19	24.00	23.97	25.62
	5755	11.60	37.88	4.22	15.82	19.19	30.00	30.00	-
	5795	11.20	37.88	4.22	15.42	18.79	30.00	30.00	-

Modulation: 802.11ax-HE40:

Data rate	Measured Frequency (MHz)	Measured Average Power (dBm)	Duty Cycle X %	Duty cycle correction factor (dB)	Maximum Average output power (dBm)	e.i.r.p (dBm)	FCC Power Limit (dBm)	IC power (dBm)	IC e.i.r.p Limit (dBm)
ax_mode_ HE40 _MCS0	5190	12.40	78.91	1.03	13.43	16.80	24.00	-	25.77
	5230	15.00	78.88	1.03	16.03	19.40	24.00	-	25.77
	5270	**15.80**	**78.88**	**1.03**	**16.83**	**20.20**	**24.00**	**23.97**	25.77
	5310	13.00	78.91	1.03	14.03	17.40	24.00	23.97	25.77
	5510	8.80	78.94	1.03	9.83	13.20	24.00	23.97	25.74
	5590	15.70	78.92	1.03	16.73	20.10	24.00	23.97	25.80
	5670	10.90	78.91	1.03	11.93	15.30	24.00	23.97	25.77
	5710	15.80	78.92	1.03	16.83	20.20	24.00	23.97	25.80
	5755	15.50	78.90	1.03	16.53	19.90	30.00	30.00	-
	5795	15.20	78.89	1.03	16.23	19.60	30.00	30.00	-
ac_mode_ HE40_ MCS11	5190	10.10	37.84	4.22	14.32	17.69	24.00	-	25.77
	5230	9.70	37.84	4.22	13.92	17.29	24.00	-	25.77
	5270	9.50	37.85	4.22	13.72	17.09	24.00	23.97	25.77
	5310	9.80	37.85	4.22	14.02	17.39	24.00	23.97	25.77
	5510	8.70	37.90	4.21	12.91	16.28	24.00	23.97	25.77
	5590	8.40	37.91	4.21	12.61	15.98	24.00	23.97	25.77
	5670	8.40	37.89	4.22	12.62	15.99	24.00	23.97	25.77
	5710	8.20	37.91	4.21	12.41	15.78	24.00	23.97	25.77
	5755	8.70	37.91	4.21	12.91	16.28	30.00	30.00	-
	5795	8.00	37.93	4.21	12.21	15.58	30.00	30.00	-

Modulation: 802.11ac-VHT80:

Data rate	Measured Frequency (MHz)	Measured Average Power (dBm)	Duty Cycle X %	Duty cycle correction factor (dB)	Maximum Average output power (dBm)	e.i.r.p (dBm)	FCC Power Limit (dBm)	IC power (dBm)	IC e.i.r.p Limit (dBm)
ac_mode-VHT80-MCS0	5210	13.70	69.28	1.59	15.29	18.66	24.00	23.97	35.84
	5290	13.90	69.32	1.59	15.49	18.86	24.00	23.97	35.84
	5530	11.10	69.37	1.59	12.69	16.06	24.00	23.97	35.78
	5690	15.40	69.33	1.59	16.99	20.36	24.00	23.97	35.86
	5755	15.00	69.33	1.59	16.59	19.96	30.00	30.00	35.84
ac_mode-VHT80-MCS9	**5210**	**12.60**	**30.79**	**5.12**	**17.72**	**21.09**	**24.00**	23.97	35.84
	5290	11.90	30.82	5.11	17.01	20.38	24.00	23.97	35.81
	5530	11.10	30.79	5.12	16.22	19.59	24.00	23.97	35.84
	5690	11.60	30.88	5.10	16.70	20.07	24.00	23.97	35.84
	5755	11.10	30.86	5.11	16.21	19.58	30.00	30.00	35.84

Modulation: 802.11ax-HE80:

Data rate	Measured Frequency (MHz)	Measured Average Power (dBm)	Duty Cycle X %	Duty cycle correction factor (dB)	Maximum Average output power (dBm)	e.i.r.p (dBm)	FCC Power Limit (dBm)	IC power (dBm)	IC e.i.r.p Limit (dBm)
ax_mode-HE80-MCS0	5210	13.90	66.75	1.76	15.66	19.03	24.00	23.97	35.89
	5290	14.20	66.79	1.75	15.95	19.32	24.00	23.97	35.89
	5530	10.40	66.80	1.75	12.15	15.52	24.00	23.97	35.89
	5690	**14.60**	**66.85**	**1.75**	**16.35**	**19.72**	**24.00**	**23.97**	**35.89**
	5755	14.10	66.80	1.75	15.85	19.22	30.00	23.97	35.89
ax_mode-HE80-MCS11	5210	8.90	35.17	4.54	13.44	16.81	24.00	23.97	35.89
	5290	8.10	35.19	4.54	12.64	16.01	24.00	23.97	35.89
	5530	7.60	35.25	4.53	12.13	15.50	24.00	23.97	35.89
	5690	7.00	35.29	4.52	11.52	14.89	24.00	23.97	35.89
	5755	6.60	35.30	4.52	11.12	14.49	30.00	23.97	35.89

Test results:

Note:

1. All the losses are included during measurement and final values are mentioned in the test report

    10 dB attenuator + 0.8 dB Cable loss = 10.8 dB total offset

2. Duty cycle correction factor is considered in Final Average power

    Duty cycle Correction factor = 10*LOG (1/X) Where X is Duty Cycle

3. This product do not support additional beamforming gain / directional gain, it uses signal antenna and hence directional gain of the single antenna is (4.40 dBi)

4. e.i.r.p = Maximum Average output power (dBm) + Antenna gain in dBi

Antenna Type: 1001932PT (Flex/PCB) Antenna MIMO Results

Modulation: 802.11a:

Data rate (Mbps)	Measured Frequency (MHz)	Measured Average Power (dBm)	Duty Cycle X %	Duty cycle correction factor (dB)	Maximum Average output power (dBm)	e.i.r.p (dBm)	FCC Power Limit (dBm)	IC power (dBm)	IC e.i.r.p Limit (dBm)
a_mode-6Mbps	5180	14.65	90.68	0.42	15.07	19.47	24.00	-	22.25
	5240	16.60	90.68	0.42	17.02	21.42	24.00	-	22.25
	5260	16.26	90.65	0.43	16.69	21.09	24.00	23.25	22.25
	5320	14.57	90.65	0.43	15.00	19.40	24.00	23.28	22.28
	5500	11.86	90.66	0.43	12.29	16.69	24.00	23.25	22.25
	5700	11.29	90.66	0.43	11.72	16.12	24.00	23.23	22.23
	5720	14.87	90.68	0.42	15.29	19.69	24.00	23.25	22.25
	5745	13.62	90.66	0.43	14.05	18.45	30.00	30.00	-
	5825	18.93	90.68	0.42	19.35	23.75	30.00	30.00	-
a_mode-54Mbps	5180	14.66	55.28	2.57	17.23	21.63	24.00	-	22.23
	5240	**18.94**	**55.26**	**2.58**	**21.52**	**25.92**	**24.00**	**-**	**22.30**
	5260	18.33	55.55	2.55	20.88	25.28	24.00	23.30	22.30
	5320	14.46	55.28	2.57	17.03	21.43	24.00	23.23	22.23
	5500	12.05	55.33	2.57	14.62	19.02	24.00	23.28	22.28
	5700	11.32	55.34	2.57	13.89	18.29	24.00	23.25	22.25
	5720	16.27	55.31	2.57	18.84	23.24	24.00	23.28	22.28
	5745	15.55	55.30	2.57	18.12	22.52	30.00	30.00	-
	5825	15.73	55.30	2.57	18.30	22.70	30.00	30.00	-

Modulation: 802.11n-HT20:

Data rate	Measured Frequency (MHz)	Measured Average Power (dBm)	Duty Cycle X %	Duty cycle correction factor (dB)	Maximum Average output power (dBm)	e.i.r.p (dBm)	FCC Power Limit (dBm)	IC power (dBm)	IC e.i.r.p Limit (dBm)
n_mode-HT20-MCS0	5180	13.68	90.07	0.45	14.13	18.53	24.00	-	22.50
	5240	16.48	90.07	0.45	16.93	21.33	24.00	-	22.55
	5260	16.16	90.09	0.45	16.61	21.01	24.00	23.58	22.58
	5320	14.57	90.05	0.46	15.03	19.43	24.00	23.55	22.55
	5500	12.00	90.10	0.45	12.45	16.85	24.00	23.53	22.53
	5700	10.08	90.08	0.45	10.53	14.93	24.00	23.53	22.53
	5720	14.74	90.07	0.45	15.19	19.59	24.00	23.53	22.53
	5745	14.49	90.07	0.45	14.94	19.34	30.00	30.00	-
	5825	14.57	90.10	0.45	15.02	19.42	30.00	30.00	-
n_mode-HT20-MCS7	5180	12.52	53.59	2.71	15.23	19.63	24.00	-	22.53
	5240	**17.91**	**53.56**	**2.71**	**20.62**	**25.02**	**24.00**	**-**	**22.53**
	5260	17.34	53.55	2.71	20.05	24.45	24.00	23.53	22.53
	5320	14.42	53.57	2.71	17.13	21.53	24.00	23.53	22.53
	5500	12.10	53.60	2.71	14.81	19.21	24.00	23.53	22.53
	5700	10.21	53.65	2.70	12.91	17.31	24.00	23.53	22.53
	5720	15.49	53.59	2.71	18.20	22.60	24.00	23.55	22.55
	5745	14.56	53.60	2.71	17.27	21.67	30.00	30.00	-
	5825	14.74	53.62	2.71	17.45	21.85	30.00	30.00	-

Modulation: 802.11ac-VHT20:

Data rate	Measured Frequency (MHz)	Measured Average Power (dBm)	Duty Cycle X %	Duty cycle correction factor (dB)	Maximum Average output power (dBm)	e.i.r.p (dBm)	FCC Power Limit (dBm)	IC power (dBm)	IC e.i.r.p Limit (dBm)
ac_mode-VHT20-MCS0	5180	12.68	90.15	0.45	13.13	17.53	24.00	-	22.50
	5240	16.55	90.11	0.45	17.00	21.40	24.00	-	22.53
	5260	16.21	90.07	0.45	16.66	21.06	24.00	23.53	22.53
	5320	13.69	90.12	0.45	14.14	18.54	24.00	23.53	22.53
	5500	12.02	90.15	0.45	12.47	16.87	24.00	23.53	22.53
	5700	10.11	90.16	0.45	10.56	14.96	24.00	23.53	22.53
	5720	14.76	90.12	0.45	15.21	19.61	24.00	23.53	22.53
	5745	13.54	90.15	0.45	13.99	18.39	30.00	30.00	-
	5825	13.65	90.15	0.45	14.10	18.50	30.00	30.00	-
ac_mode-VHT20-MCS9	5180	13.54	51.06	2.92	16.46	20.86	24.00	-	22.53
	5240	**16.12**	**51.09**	**2.92**	**19.04**	**23.44**	**24.00**	**-**	**22.50**
	5260	15.63	51.10	2.92	18.55	22.95	24.00	23.50	22.50
	5320	14.40	51.10	2.92	17.32	21.72	24.00	23.50	22.50
	5500	12.15	51.13	2.91	15.06	19.46	24.00	23.53	22.53
	5700	10.22	51.17	2.91	13.13	17.53	24.00	23.53	22.53
	5720	13.69	51.44	2.89	16.58	20.98	24.00	23.53	22.53
	5745	14.60	51.13	2.91	17.51	21.91	30.00	30.00	-
	5825	14.78	51.13	2.91	17.69	22.09	30.00	30.00	-

Modulation: 802.11ax-HE20:

Data rate	Measured Frequency (MHz)	Measured Average Power (dBm)	Duty Cycle X %	Duty cycle correction factor (dB)	Maximum Average output power (dBm)	e.i.r.p (dBm)	FCC Power Limit (dBm)	IC power (dBm)	IC e.i.r.p Limit (dBm)
ax_mode-HE20-MCS0	5180	13.84	87.65	0.57	14.41	18.81	24.00	-	22.79
	5240	16.68	87.65	0.57	17.25	21.65	24.00	-	22.79
	5260	16.33	87.62	0.57	16.90	21.30	24.00	23.79	22.79
	5320	14.74	87.65	0.57	15.31	19.71	24.00	23.79	22.79
	5500	12.12	87.66	0.57	12.69	17.09	24.00	23.79	22.79
	5700	10.21	87.67	0.57	10.78	15.18	24.00	23.76	22.76
	5720	14.89	87.63	0.57	15.46	19.86	24.00	23.79	22.79
	5745	13.67	87.66	0.57	14.24	18.64	30.00	30.00	22.79
	5825	14.83	87.63	0.57	15.40	19.80	30.00	30.00	-
ax_mode-HE20-MCS11	5180	12.66	45.10	3.46	16.12	20.52	24.00	-	22.83
	5240	**13.33**	**35.09**	**4.55**	**17.88**	**22.28**	**24.00**	-	22.83
	5260	12.67	45.09	3.46	16.13	20.53	24.00	23.83	22.83
	5320	12.53	45.08	3.46	15.99	20.39	24.00	23.81	22.81
	5500	11.24	45.11	3.46	14.70	19.10	24.00	23.81	22.81
	5700	10.40	45.15	3.45	13.85	18.25	24.00	23.83	22.83
	5720	10.66	45.16	3.45	14.11	18.51	24.00	23.83	22.83
	5745	11.60	45.13	3.46	15.06	19.46	30.00	30.00	-
	5825	11.69	45.15	3.45	15.14	19.54	30.00	30.00	-

Modulation: 802.11n-HT40:

Data rate	Measured Frequency (MHz)	Measured Average Power (dBm)	Duty Cycle X %	Duty cycle correction factor (dB)	Maximum Average output power (dBm)	e.i.r.p (dBm)	FCC Power Limit (dBm)	IC power (dBm)	IC e.i.r.p Limit (dBm)
n_mode-HT40_MCS0	5190	13.10	81.89	0.87	13.97	18.37	24.00	-	23.00
	5230	16.50	81.88	0.87	17.37	21.77	24.00	-	23.00
	5270	19.20	81.86	0.87	20.07	24.47	24.00	23.97	30.00
	5310	15.90	81.89	0.87	16.77	21.17	24.00	23.97	30.00
	5510	11.10	81.91	0.87	11.97	16.37	24.00	23.97	30.00
	5590	18.30	81.88	0.87	19.17	23.57	24.00	23.97	30.00
	5670	13.50	81.91	0.87	14.37	18.77	24.00	23.97	30.00
	5710	18.10	81.87	0.87	18.97	23.37	24.00	23.97	30.00
	5755	14.60	81.90	0.87	15.47	19.87	30.00	30.00	-
	5795	16.60	81.90	0.87	17.47	21.87	30.00	30.00	-
n_mode-HT40_MCS7	5190	12.90	40.90	3.88	16.78	21.18	24.00	-	23.00
	5230	**17.30**	**40.81**	**3.89**	**21.19**	**25.59**	**24.00**	**-**	**23.00**
	5270	17.00	40.87	3.89	20.89	25.29	24.00	23.97	30.00
	5310	15.70	40.89	3.88	19.58	23.98	24.00	23.97	30.00
	5510	11.20	40.96	3.88	15.08	19.48	24.00	23.97	30.00
	5590	15.50	40.93	3.88	19.38	23.78	24.00	23.97	30.00
	5670	13.60	40.96	3.88	17.48	21.88	24.00	23.97	30.00
	5710	15.20	40.93	3.88	19.08	23.48	24.00	23.97	30.00
	5755	15.80	40.92	3.88	19.68	24.08	30.00	30.00	-
	5795	15.40	40.94	3.88	19.28	23.68	30.00	30.00	-

Modulation: 802.11ac-VHT40:

Data rate	Measured Frequency (MHz)	Measured Average Power (dBm)	Duty Cycle X %	Duty cycle correction factor (dB)	Maximum Average output power (dBm)	e.i.r.p (dBm)	FCC Power Limit (dBm)	IC power (dBm)	IC e.i.r.p Limit (dBm)
ac_mode_ VHT40 _MCS0	5190	10.90	81.94	0.86	11.76	16.16	24.00	-	25.65
	5230	15.30	81.93	0.87	16.17	20.57	24.00	-	25.65
	5270	16.90	81.93	0.87	17.77	22.17	24.00	23.97	25.71
	5310	13.70	81.91	0.87	14.57	18.97	24.00	23.97	25.62
	5510	8.40	81.99	0.86	9.26	13.66	24.00	23.97	25.65
	5590	14.70	81.96	0.86	15.56	19.96	24.00	23.97	25.74
	5670	11.00	81.98	0.86	11.86	16.26	24.00	23.97	25.65
	5710	14.30	81.97	0.86	15.16	19.56	24.00	23.97	25.71
	5755	21.00	81.97	0.86	21.86	26.26	30.00	30.00	-
	5795	20.90	74.93	1.25	22.15	26.55	30.00	30.00	-
ac_mode_ VHT40_ MCS9	**5190**	**22.00**	**37.73**	**4.23**	**26.23**	**30.63**	**24.00**	**-**	**28.08**
	5230	22.00	37.77	4.23	26.23	30.63	24.00	-	28.33
	5270	14.50	37.82	4.22	18.72	23.12	24.00	23.97	25.65
	5310	14.20	37.79	4.23	18.43	22.83	24.00	23.97	25.62
	5510	9.50	37.89	4.21	13.71	18.11	24.00	23.97	25.65
	5590	12.70	37.83	4.22	16.92	21.32	24.00	23.97	25.65
	5670	12.00	37.87	4.22	16.22	20.62	24.00	23.97	25.65
	5710	12.50	37.88	4.22	16.72	21.12	24.00	23.97	25.62
	5755	13.10	37.87	4.22	17.32	21.72	30.00	30.00	-
	5795	12.70	37.88	4.22	16.92	21.32	30.00	30.00	-

Modulation: 802.11ax-HE40:

Data rate	Measured Frequency (MHz)	Measured Average Power (dBm)	Duty Cycle X %	Duty cycle correction factor (dB)	Maximum Average output power (dBm)	e.i.r.p (dBm)	FCC Power Limit (dBm)	IC power (dBm)	IC e.i.r.p Limit (dBm)
ax_mode_ HE40 _MCS0	5190	13.40	78.89	1.03	14.43	18.83	24.00	-	25.77
	5230	17.60	78.88	1.03	18.63	23.03	24.00	-	25.77
	5270	**19.40**	**78.90**	**1.03**	**20.43**	**24.83**	**24.00**	**23.97**	**25.80**
	5310	15.20	78.88	1.03	16.23	20.63	24.00	23.97	25.77
	5510	11.50	78.94	1.03	12.53	16.93	24.00	23.97	25.77
	5590	18.60	78.89	1.03	19.63	24.03	24.00	23.97	25.85
	5670	13.70	78.91	1.03	14.73	19.13	24.00	23.97	25.77
	5710	18.30	78.92	1.03	19.33	23.73	24.00	23.97	25.83
	5755	15.00	78.91	1.03	16.03	20.43	30.00	30.00	-
	5795	14.80	78.91	1.03	15.83	20.23	30.00	30.00	-
ax_mode_ HE40_ MCS11	5190	13.10	37.86	4.22	17.32	21.72	24.00	-	25.77
	5230	13.20	37.86	4.22	17.42	21.82	24.00	-	25.77
	5270	12.90	37.86	4.22	17.12	21.52	24.00	23.97	25.77
	5310	12.70	37.83	4.22	16.92	21.32	24.00	23.97	25.77
	5510	11.40	37.93	4.21	15.61	20.01	24.00	23.97	25.77
	5590	11.20	40.92	3.88	15.08	19.48	24.00	23.97	25.77
	5670	11.30	40.92	3.88	15.18	19.58	24.00	23.97	25.77
	5710	10.90	40.92	3.88	14.78	19.18	24.00	23.97	25.77
	5755	11.40	40.92	3.88	15.28	19.68	30.00	30.00	-
	5795	11.10	40.94	3.88	14.98	19.38	30.00	30.00	-

Modulation: 802.11ac-VHT80:

Data rate	Measured Frequency (MHz)	Measured Average Power (dBm)	Duty Cycle X %	Duty cycle correction factor (dB)	Maximum Average output power (dBm)	e.i.r.p (dBm)	FCC Power Limit (dBm)	IC power (dBm)	IC e.i.r.p Limit (dBm)
ac_mode-VHT80-MCS0	5210	10.80	69.26	1.60	12.40	16.80	24.00	23.97	35.84
	5290	11.20	69.31	1.59	12.79	17.19	24.00	23.97	35.84
	5530	11.10	69.35	1.59	12.69	17.09	24.00	23.97	35.81
	5690	15.70	69.33	1.59	17.29	21.69	24.00	23.97	35.84
	5755	15.40	69.32	1.59	16.99	21.39	30.00	30.00	35.84
ac_mode-VHT80-MCS9	**5210**	**13.80**	**30.77**	**5.12**	**18.92**	**23.32**	**24.00**	**23.97**	35.84
	5290	13.00	30.82	5.11	18.11	22.51	24.00	23.97	35.84
	5530	12.00	30.79	5.12	17.12	21.52	24.00	23.97	35.81
	5690	12.80	30.87	5.10	17.90	22.30	24.00	23.97	35.84
	5755	12.80	30.84	5.11	17.91	22.31	30.00	30.00	35.84

Modulation: 802.11ax-HE80:

Data rate	Measured Frequency (MHz)	Measured Average Power (dBm)	Duty Cycle X %	Duty cycle correction factor (dB)	Maximum Average output power (dBm)	e.i.r.p (dBm)	FCC Power Limit (dBm)	IC power (dBm)	IC e.i.r.p Limit (dBm)
ax_mode-VHT80-MCS0	5210	14.60	66.73	1.76	16.36	20.76	24.00	23.97	35.86
	5290	13.60	66.80	1.75	15.35	19.75	24.00	23.97	35.89
	5530	13.50	66.77	1.75	15.25	19.65	24.00	23.97	35.89
	5690	18.20	66.82	1.75	19.95	24.35	24.00	23.97	35.89
	5755	**18.40**	**66.77**	**1.75**	**20.15**	**24.55**	**30.00**	**30.00**	**35.89**
ax_mode-VHT80-MCS11	5210	12.00	35.23	4.53	16.53	20.93	24.00	23.97	35.89
	5290	10.90	35.24	4.53	15.43	19.83	24.00	23.97	35.89
	5530	10.60	35.28	4.52	15.12	19.52	24.00	23.97	35.86
	5690	10.30	35.33	4.52	14.82	19.22	24.00	23.97	35.89
	5755	10.40	35.12	4.54	14.94	19.34	30.00	30.00	35.89

Test results:

Note:

1. All the losses are included during measurement and final values are mentioned in the test report

    10 dB attenuator + 0.8 dB Cable loss = 10.8 dB total offset

2. Duty cycle correction factor is considered in Final Average power

    Duty cycle Correction factor = 10*LOG (1/X) Where X is Duty Cycle

3. This product do not support additional beamforming gain / directional gain, it uses signal antenna and hence directional gain of the single antenna is (5.58 dBi)

4. e.i.r.p = Maximum Average output power (dBm) + Antenna gain in dBi

Antenna Type: FPA3020-10 (Flex/PCB) Antenna MIMO Results

Modulation: 802.11a:

Data rate (Mbps)	Measured Frequency (MHz)	Measured Average Power (dBm)	Duty Cycle X %	Duty cycle correction factor (dB)	Maximum Average output power (dBm)	e.i.r.p (dBm)	FCC Power Limit (dBm)	IC power (dBm)	IC e.i.r.p Limit (dBm)
a_mode-6Mbps	5180	15.64	90.65	0.43	16.07	21.65	24.00	-	22.25
	5240	16.60	90.68	0.42	17.02	22.60	24.00	-	22.25
	5260	16.26	90.65	0.43	16.69	22.27	24.00	23.25	22.25
	5320	14.57	90.65	0.43	15.00	20.58	24.00	23.28	22.28
	5500	11.86	90.66	0.43	12.29	17.87	24.00	23.25	22.25
	5700	11.29	90.66	0.43	11.72	17.30	24.00	23.23	22.23
	5720	14.87	90.68	0.42	15.29	20.87	24.00	23.25	22.25
	5745	18.03	90.66	0.43	18.46	24.04	30.00	30.00	-
	5825	17.62	90.66	0.43	18.05	23.63	30.00	30.00	-
a_mode-54Mbps	5180	14.66	55.28	2.57	17.23	22.81	24.00	-	22.23
	5240	**18.94**	**55.26**	**2.58**	**21.52**	**27.10**	**24.00**	**-**	**22.30**
	5260	18.33	55.55	2.55	20.88	26.46	24.00	23.30	22.30
	5320	14.46	55.28	2.57	17.03	22.61	24.00	23.23	22.23
	5500	12.05	55.33	2.57	14.62	20.20	24.00	23.28	22.28
	5700	11.32	55.34	2.57	13.89	19.47	24.00	23.25	22.25
	5720	16.27	55.31	2.57	18.84	24.42	24.00	23.28	22.28
	5745	17.96	55.26	2.58	20.54	26.12	30.00	30.00	-
	5825	17.64	55.30	2.57	20.21	25.79	30.00	30.00	-

Modulation: 802.11n-HT20:

Data rate	Measured Frequency (MHz)	Measured Average Power (dBm)	Duty Cycle X %	Duty cycle correction factor (dB)	Maximum Average output power (dBm)	e.i.r.p (dBm)	FCC Power Limit (dBm)	IC power (dBm)	IC e.i.r.p Limit (dBm)
n_mode-HT20-MCS0	5180	13.55	90.10	0.45	14.00	19.58	24.00	-	22.50
	5240	16.48	90.07	0.45	16.93	22.51	24.00	-	22.55
	5260	16.16	90.09	0.45	16.61	22.19	24.00	23.58	22.58
	5320	14.57	90.05	0.46	15.03	20.61	24.00	23.55	22.55
	5500	12.00	90.10	0.45	12.45	18.03	24.00	23.53	22.53
	5700	10.08	90.08	0.45	10.53	16.11	24.00	23.53	22.53
	5720	14.74	90.07	0.45	15.19	20.77	24.00	23.53	22.53
	5745	17.10	90.10	0.45	17.55	23.13	30.00	30.00	-
	5825	18.28	90.10	0.45	18.73	24.31	30.00	30.00	-
n_mode-HT20-MCS7	5180	12.52	53.59	2.71	15.23	20.81	24.00	-	22.53
	5240	**17.91**	**53.56**	**2.71**	**20.62**	**26.20**	**24.00**	**-**	**22.53**
	5260	17.34	53.55	2.71	20.05	25.63	24.00	23.53	22.53
	5320	14.42	53.57	2.71	17.13	22.71	24.00	23.53	22.53
	5500	12.10	53.60	2.71	14.81	20.39	24.00	23.53	22.53
	5700	10.21	53.65	2.70	12.91	18.49	24.00	23.53	22.53
	5720	15.49	53.59	2.71	18.20	23.78	24.00	23.55	22.55
	5745	17.18	53.57	2.71	19.89	25.47	30.00	30.00	-
	5825	16.87	53.59	2.71	19.58	25.16	30.00	30.00	-

Modulation: 802.11ac-VHT20:

Data rate	Measured Frequency (MHz)	Measured Average Power (dBm)	Duty Cycle X %	Duty cycle correction factor (dB)	Maximum Average output power (dBm)	e.i.r.p (dBm)	FCC Power Limit (dBm)	IC power (dBm)	IC e.i.r.p Limit (dBm)
ac_mode-VHT20-MCS0	5180	14.63	90.14	0.45	15.08	20.66	24.00	-	22.53
	5240	16.55	90.11	0.45	17.00	22.58	24.00	-	22.53
	5260	16.21	90.07	0.45	16.66	22.24	24.00	23.53	22.53
	5320	15.12	90.14	0.45	15.57	21.15	24.00	23.53	22.53
	5500	12.02	90.15	0.45	12.47	18.05	24.00	23.53	22.53
	5700	10.11	90.16	0.45	10.56	16.14	24.00	23.53	22.53
	5720	14.76	90.12	0.45	15.21	20.79	24.00	23.53	22.53
	5745	16.26	90.15	0.45	16.71	22.29	30.00	30.00	-
	5825	**19.14**	**90.15**	**0.45**	**19.59**	**25.17**	**30.00**	**30.00**	**-**
ac_mode-VHT20-MCS9	5180	13.54	51.06	2.92	16.46	22.04	24.00	-	22.53
	5240	16.12	51.09	2.92	19.04	24.62	24.00	-	22.50
	5260	15.63	51.10	2.92	18.55	24.13	24.00	23.50	22.50
	5320	14.40	51.10	2.92	17.32	22.90	24.00	23.50	22.50
	5500	12.15	51.13	2.91	15.06	20.64	24.00	23.53	22.53
	5700	10.22	51.17	2.91	13.13	18.71	24.00	23.53	22.53
	5720	13.69	51.44	2.89	16.58	22.16	24.00	23.53	22.53
	5745	14.60	51.13	2.91	17.51	23.09	30.00	30.00	-
	5825	14.78	51.13	2.91	17.69	23.27	30.00	30.00	-

Modulation: 802.11ax-HE20:

Data rate	Measured Frequency (MHz)	Measured Average Power (dBm)	Duty Cycle X %	Duty cycle correction factor (dB)	Maximum Average output power (dBm)	e.i.r.p (dBm)	FCC Power Limit (dBm)	IC power (dBm)	IC e.i.r.p Limit (dBm)
ax_mode-HE20-MCS0	5180	13.84	87.65	0.57	14.41	19.99	24.00	-	22.79
	5240	16.68	87.65	0.57	17.25	22.83	24.00	-	22.79
	5260	16.33	87.62	0.57	16.90	22.48	24.00	23.79	22.79
	5320	14.74	87.65	0.57	15.31	20.89	24.00	23.79	22.79
	5500	12.12	87.66	0.57	12.69	18.27	24.00	23.79	22.79
	5700	10.21	87.67	0.57	10.78	16.36	24.00	23.76	22.76
	5720	14.89	87.63	0.57	15.46	21.04	24.00	23.79	22.79
	5745	17.30	87.63	0.57	17.87	23.45	30.00	30.00	-
	5825	**18.44**	**87.63**	**0.57**	**19.01**	**24.59**	**30.00**	**30.00**	**-**
ax_mode-HE20-MCS11	5180	12.66	45.10	3.46	16.12	21.70	24.00	-	22.83
	5240	13.33	35.09	4.55	17.88	23.46	24.00	-	22.83
	5260	12.67	45.09	3.46	16.13	21.71	24.00	23.83	22.83
	5320	12.53	45.08	3.46	15.99	21.57	24.00	23.81	22.81
	5500	11.24	45.11	3.46	14.70	20.28	24.00	23.81	22.81
	5700	10.40	45.15	3.45	13.85	19.43	24.00	23.83	22.83
	5720	10.66	45.16	3.45	14.11	19.69	24.00	23.83	22.83
	5745	11.60	45.13	3.46	15.06	20.64	30.00	30.00	-
	5825	11.69	45.15	3.45	15.14	20.72	**30.00**	30.00	-

Modulation: 802.11n-HT40:

Data rate	Measured Frequency (MHz)	Measured Average Power (dBm)	Duty Cycle X %	Duty cycle correction factor (dB)	Maximum Average output power (dBm)	e.i.r.p (dBm)	FCC Power Limit (dBm)	IC power (dBm)	IC e.i.r.p Limit (dBm)
n_mode-HT40_MCS0	5190	13.10	81.89	0.87	13.97	19.55	24.00	-	25.65
	5230	16.50	81.86	0.87	17.37	22.95	24.00	-	25.65
	5270	19.10	81.86	0.87	19.97	25.55	24.00	23.97	25.80
	5310	15.80	81.89	0.87	16.67	22.25	24.00	23.97	25.62
	5510	11.20	81.91	0.87	12.07	17.65	24.00	23.97	25.65
	5590	18.20	81.87	0.87	19.07	24.65	24.00	23.97	26.48
	5670	13.50	81.88	0.87	14.37	19.95	24.00	23.97	25.65
	5710	18.10	81.87	0.87	18.97	24.55	24.00	23.97	26.41
	5755	14.70	81.91	0.87	15.57	21.15	30.00	30.00	-
	5795	16.50	81.90	0.87	17.37	22.95	30.00	30.00	-
n_mode-HT40_MCS7	5190	13.00	40.88	3.88	16.88	22.46	24.00	-	25.62
	5230	**17.20**	**40.81**	**3.89**	**21.09**	**26.67**	**24.00**	**-**	**25.62**
	5270	17.10	40.85	3.89	20.99	26.57	24.00	23.97	25.62
	5310	15.70	40.87	3.89	19.59	25.17	24.00	23.97	25.59
	5510	11.20	40.97	3.88	15.08	20.66	24.00	23.97	25.65
	5590	15.50	40.93	3.88	19.38	24.96	24.00	23.97	25.65
	5670	13.50	40.95	3.88	17.38	22.96	24.00	23.97	25.65
	5710	15.20	40.92	3.88	19.08	24.66	24.00	23.97	25.62
	5755	15.70	40.93	3.88	19.58	25.16	30.00	30.00	-
	5795	15.40	40.92	3.88	19.28	24.86	30.00	30.00	-

Modulation: 802.11ac-VHT40:

Data rate	Measured Frequency (MHz)	Measured Average Power (dBm)	Duty Cycle X %	Duty cycle correction factor (dB)	Maximum Average output power (dBm)	e.i.r.p (dBm)	FCC Power Limit (dBm)	IC power (dBm)	IC e.i.r.p Limit (dBm)
ac_mode_ VHT40 _MCS0	5190	13.20	81.98	0.86	14.06	19.64	24.00	-	25.65
	5230	17.40	81.94	0.86	18.26	23.84	24.00	-	25.65
	5270	17.20	81.97	0.86	18.06	23.64	24.00	23.97	25.68
	5310	15.90	81.92	0.87	16.77	22.35	24.00	23.97	25.62
	5510	11.40	81.98	0.86	12.26	17.84	24.00	23.97	25.65
	5590	17.50	81.95	0.86	18.36	23.94	24.00	23.97	25.80
	5670	13.60	81.97	0.86	14.46	20.04	24.00	23.97	25.65
	5710	17.20	81.96	0.86	18.06	23.64	24.00	23.97	25.74
	5755	15.70	81.99	0.86	16.56	22.14	30.00	30.00	-
	5795	15.50	81.99	0.86	16.36	21.94	30.00	30.00	-
ac_mode_ VHT40_ MCS9	5190	12.90	37.89	4.21	17.11	22.69	24.00	-	25.65
	5230	**16.30**	**37.86**	**4.22**	**20.52**	**26.10**	**24.00**	**-**	**25.65**
	5270	15.90	37.85	4.22	20.12	25.70	24.00	23.97	25.65
	5310	15.80	37.82	4.22	20.02	25.60	24.00	23.97	25.65
	5510	11.20	37.96	4.21	15.41	20.99	24.00	23.97	25.65
	5590	14.60	37.88	4.22	18.82	24.40	24.00	23.97	25.65
	5670	13.60	37.90	4.21	17.81	23.39	24.00	23.97	25.65
	5710	14.30	37.94	4.21	18.51	24.09	24.00	23.97	25.62
	5755	14.90	37.92	4.21	19.11	24.69	30.00	30.00	-
	5795	14.50	37.93	4.21	18.71	24.29	30.00	30.00	-

Modulation: 802.11ax-HE40:

Data rate	Measured Frequency (MHz)	Measured Average Power (dBm)	Duty Cycle X %	Duty cycle correction factor (dB)	Maximum Average output power (dBm)	e.i.r.p (dBm)	FCC Power Limit (dBm)	IC power (dBm)	IC e.i.r.p Limit (dBm)
ax_mode_ HE40 _MCS0	5190	12.90	78.92	1.03	13.93	19.51	24.00	-	25.77
	5230	17.70	78.87	1.03	18.73	24.31	24.00	-	25.77
	5270	18.90	78.90	1.03	19.93	25.51	24.00	23.97	25.77
	5310	15.10	78.91	1.03	16.13	21.71	24.00	23.97	25.77
	5510	11.80	78.93	1.03	12.83	18.41	24.00	23.97	25.77
	5590	**19.20**	**78.89**	**1.03**	**20.23**	**25.81**	**24.00**	**23.97**	**25.80**
	5670	14.50	78.92	1.03	15.53	21.11	24.00	23.97	25.77
	5710	18.90	78.89	1.03	19.93	25.51	24.00	23.97	25.80
	5755	15.70	78.92	1.03	16.73	22.31	30.00	30.00	-
	5795	15.40	78.93	1.03	16.43	22.01	30.00	30.00	-
ax_mode_ HE40_ MCS11	5190	12.70	37.87	4.22	16.92	22.50	24.00	-	25.77
	5230	13.30	37.86	4.22	17.52	23.10	24.00	-	25.77
	5270	12.20	37.88	4.22	16.42	22.00	24.00	23.97	25.77
	5310	12.50	37.86	4.22	16.72	22.30	24.00	23.97	25.77
	5510	11.70	37.92	4.21	15.91	21.49	24.00	23.97	25.77
	5590	11.50	37.93	4.21	15.71	21.29	24.00	23.97	25.77
	5670	11.80	37.92	4.21	16.01	21.59	24.00	23.97	25.77
	5710	11.30	37.96	4.21	15.51	21.09	24.00	23.97	25.77
	5755	11.90	37.95	4.21	16.11	21.69	30.00	30.00	-
	5795	11.80	37.95	4.21	16.01	21.59	30.00	30.00	-

Modulation: 802.11ac-VHT80:

Data rate	Measured Frequency (MHz)	Measured Average Power (dBm)	Duty Cycle X %	Duty cycle correction factor (dB)	Maximum Average output power (dBm)	e.i.r.p (dBm)	FCC Power Limit (dBm)	IC power (dBm)	IC e.i.r.p Limit (dBm)
ac_mode-VHT80-MCS0	5210	14.10	69.24	1.60	15.70	21.28	24.00	23.97	35.84
	5290	14.30	69.32	1.59	15.89	21.47	24.00	23.97	35.84
	5530	11.30	69.33	1.59	12.89	18.47	24.00	23.97	35.84
	5690	15.80	69.33	1.59	17.39	22.97	24.00	23.97	35.84
	5755	15.40	69.30	1.59	16.99	22.57	30.00	30.00	35.84
ac_mode-VHT80-MCS9	**5210**	**13.80**	**30.77**	**5.12**	**18.92**	**24.50**	**24.00**	**23.97**	**35.84**
	5290	13.10	30.81	5.11	18.21	23.79	24.00	23.97	35.84
	5530	12.00	30.78	5.12	17.12	22.70	24.00	23.97	35.81
	5690	12.90	30.86	5.11	18.01	23.59	24.00	23.97	35.84
	5755	12.80	30.83	5.11	17.91	23.49	30.00	30.00	35.84

Modulation: 802.11ax-HE80:

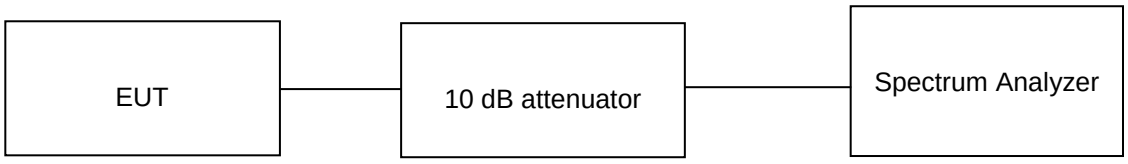
Data rate	Measured Frequency (MHz)	Measured Average Power (dBm)	Duty Cycle X %	Duty cycle correction factor (dB)	Maximum Average output power (dBm)	e.i.r.p (dBm)	FCC Power Limit (dBm)	IC power (dBm)	IC e.i.r.p Limit (dBm)
ax_mode-VHT80-MCS0	5210	16.60	66.75	1.76	18.36	23.94	24.00	23.97	35.89
	5290	16.80	66.77	1.75	18.55	24.13	24.00	23.97	35.89
	5530	13.60	66.79	1.75	15.35	20.93	24.00	23.97	35.86
	5690	18.20	66.82	1.75	19.95	25.53	24.00	23.97	35.89
	5755	**18.40**	**66.76**	**1.75**	**20.15**	**25.73**	**30.00**	**30.00**	**35.89**
ax_mode-VHT80-MCS9	5210	12.00	35.23	4.53	16.53	22.11	24.00	23.97	35.89
	5290	11.00	35.23	4.53	15.53	21.11	24.00	23.97	35.89
	5530	10.60	35.29	4.52	15.12	20.70	24.00	23.97	35.89
	5690	10.30	35.33	4.52	14.82	20.40	24.00	23.97	35.89
	5755	10.60	35.34	4.52	15.12	20.70	30.00	30.00	35.89

7.3 Maximum Power Spectral Density

Result ***Pass***

Test Specification	FCC part 15 Subpart C 15.407 (a) / RSS 247 Issue 2 Section 6.2.1; 6.2.2; 6.2.3; & Section 6.2.4
Test Method	Subclause 12.5 of ANSI C63.10
Measurement Bandwidth	100kHz/300kHz/1 MHz
Detector	Average sample detector
Port of testing	Antenna port
Requirement for FCC	1. For client devices in the 5.15-5.25 GHz band, the maximum power spectral density shall not exceed 11 dBm in any 1 MHz band 2. 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 3. For the band 5.725-5.85 GHz, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band
Requirement for IC	1. For the band 5.15-5.25 GHz, The e.i.r.p. spectral density shall not exceed 10 dBm in any 1 MHz band 2. For the 5.25-5.35 GHz, the power spectral density shall not exceed 11 dBm in any 1.0 MHz band 3. For the 5.47-5.725 GHz, the power spectral density shall not exceed 11 dBm in any 1.0 MHz band 4. For the band 5.725-5.85 GHz, The output power spectral density shall not exceed 30 dBm in any 500 kHz band

Test Method:



The following procedure shall be used:

1. Set center frequency to the nominal EUT channel center frequency
2. Set span to encompass the EBW (or, alternatively, the entire 99% occupied bandwidth) of the signal
3. Set RBW = 1MHz (5.15-5.25 GHz band) / 500kHz (5.725-5.85 GHz band)
4. Set VBW ≥ 3 × RBW
5. Number of points in sweep ≥ 2 × span / RBW. (This ensures that bin-to-bin spacing is ≤ RBW/2, so that narrowband signals are not lost between frequency bins.)
6. Sweep time = auto
7. Detector = power averaging (rms), if available. Otherwise, use sample detector mode
8. Do not use sweep triggering. Allow the sweep to “free run.”
9. Trace average at least 100 traces and Compute power by integrating the spectrum across the EBW
10. Add 10 log (1/x), where x is the duty cycle, to the measured power in order to compute the average power during the actual transmission times (because the measurement represents an average over both the on and off times of the transmission)
11. If measurements are performed using a reduced resolution bandwidth (< 1 MHz, or < 500 kHz) and integrated over 1 MHz, or 500 kHz bandwidth, the following adjustments to the procedures apply:

a. Set RBW = 300 kHz
b. Set VBW ≥ 3 RBW
c. If measurement bandwidth of Maximum PSD is specified in 500 kHz

PSD bandwidth correction Factor = 10 * log (500 kHz / RBW)

Test Condition:

Normal Test Condition:

Temperature (Norm) = + 25 °C Voltage = 5.0 V DC Relative humidity: 62 %

KDB Guidelines applied:

Measurements were made as per section F in KDB 789033 D02 General UNII Test Procedures New Rules v02r01

Test results:

Note:
1. All the losses are included during measurement and final values are mentioned in the test report

10 dB attenuator + 0.8dB Cable loss = 10.8 dB total offset

2. Duty cycle correction factor is considered in Final Average power

Duty cycle Correction factor = 10*LOG (1/X) Where X is Duty Cycle

3. This product do not support additional beamforming gain / directional gain, it uses signal antenna and hence directional gain of the single antenna is (3.37 dBi)

4. e.i.r.p = Maximum Average PSD (dBm) + Antenna gain in dBi

Note: Refer Attached Appendix for test Plots

Antenna Type: MAF94367(Omni Directional Antenna) RPSMA Results

Modulation: 802.11a – UNII 1, UNII2a, UNII2c

Data rate (Mbps)	Measured Frequency (MHz)	Measured Average PSD (dBm/ 1MHz)	Duty Cycle X %	Duty cycle correction factor (dB)	Maximum Average PSD (dBm/ 1MHz)	PSD (e.i.r.p) (dBm/ 1MHz)	FCC PSD Limit (dBm/1MHz)	IC e.i.r.p SD (dBm/ 1MHz)
a_mode-6Mbps	5180	0.54	90.68	0.42	0.96	4.33	11.00	10.00
	5240	4.99	90.68	0.42	5.41	8.78	11.00	10.00
	5260	**5.40**	**90.68**	**0.42**	**5.82**	**9.19**	**11.00**	**10.00**
	5320	0.52	90.65	0.43	0.95	4.32	11.00	10.00
	5500	-0.68	90.67	0.43	-0.25	3.12	11.00	10.00
	5700	-1.67	90.67	0.43	-1.24	2.13	11.00	10.00
	5720	5.26	90.68	0.42	5.68	9.05	11.00	10.00
a_mode-54Mbps	5180	-2.53	55.26	2.58	0.05	3.42	11.00	10.00
	5240	1.37	55.25	2.58	3.95	7.32	11.00	10.00
	5260	1.03	55.26	2.58	3.61	6.98	11.00	10.00
	5320	-2.72	55.29	2.57	-0.15	3.22	11.00	10.00
	5500	-3.83	55.31	2.57	-1.26	2.11	11.00	10.00
	5700	-4.19	55.33	2.57	-1.62	1.75	11.00	10.00
	5720	1.07	55.30	2.57	3.64	7.01	11.00	10.00

Modulation: 802.11a – UNII 3

Data rate (Mbps)	Measured Frequency (MHz)	Measured Average PSD (dBm/ 0.3MHz)	Duty Cycle X %	Duty cycle correction factor (dB)	Bandwidth Correction (dB)	Maximum Average PSD (dBm/ 500kHz)	PSD (e.i.r.p) (dBm/ 500kHz)	FCC PSD Limit (dBm/ 500kHz)	IC e.i.r.p PSD (dBm/ 500kHz)
a_mode-6Mbps	5745	-4.12	90.68	0.42	2.22	-1.48	1.89	30.00	10.00
	5825	-5.04	90.66	0.43	2.22	-2.40	0.97	30.00	10.00
a_mode-54Mbps	5180	-2.53	55.26	2.58	2.22	-3.01	0.36	30.00	10.00
	5745	-4.12	90.68	0.42	2.22	-3.88	-0.51	30.00	10.00

Modulation: 802.11n – UNII 1, UNII2a, UNII2c

Data rate	Measured Frequency (MHz)	Measured Average PSD (dBm/ 1MHz)	Duty Cycle X %	Duty cycle correction factor (dB)	Maximum Average PSD (dBm/ 1MHz)	PSD (e.i.r.p) (dBm/ 1MHz)	FCC PSD Limit (dBm/1MHz)	IC e.i.r.p SD (dBm/ 1MHz)
n_mode-HT20MHz-MCS0	5180	-2.64	90.08	0.45	-2.19	1.18	11.00	10.00
	5240	**5.60**	**90.06**	**0.45**	**6.05**	**9.42**	**11.00**	**10.00**
	5260	4.57	90.08	0.45	5.02	8.39	11.00	10.00
	5320	0.36	90.08	0.45	0.81	4.18	11.00	10.00
	5500	-1.50	90.07	0.45	-1.05	2.32	11.00	10.00
	5700	-2.63	90.10	0.45	-2.18	1.19	11.00	10.00
	5720	3.79	90.07	0.45	4.24	7.61	11.00	10.00
n_mode-HT20MHz-MCS7	5180	-3.54	53.53	2.71	-0.83	2.54	11.00	10.00
	5240	-0.09	53.52	2.71	2.62	5.99	11.00	10.00
	5260	-0.13	53.49	2.72	2.59	5.96	11.00	10.00
	5320	-2.93	53.55	2.71	-0.22	3.15	11.00	10.00
	5500	-3.84	53.56	2.71	-1.13	2.24	11.00	10.00
	5700	-5.86	53.59	2.71	-3.15	0.22	11.00	10.00
	5720	-1.13	53.55	2.71	1.58	4.95	11.00	10.00

Modulation: 802.11a – UNII 3

Data rate	Measured Frequency (MHz)	Measured Average PSD (dBm/ 0.3MHz)	Duty Cycle X %	Duty cycle correction factor (dB)	Bandwidth Correction (dB)	Maximum Average PSD (dBm/ 500kHz)	PSD (e.i.r.p) (dBm/ 500kHz)	FCC PSD Limit (dBm/ 500kHz)	IC e.i.r.p PSD (dBm/ 500kHz)
n_mode-HT20MHz-MCS0	5745	-4.69	90.09	0.45	2.22	-2.02	1.35	30.00	10.00
	5825	-6.58	90.09	0.45	2.22	-3.91	-0.54	30.00	10.00
n_mode-HT20MHz-MCS7	5745	-9.37	53.54	2.71	2.22	-4.44	-1.07	30.00	10.00
	5825	-9.97	53.57	2.71	2.22	-5.04	-1.67	30.00	10.00

Modulation: 802.11ac – 20MHz - UNII 1, UNII2a, UNII2c

Data rate	Measured Frequency (MHz)	Measured Average PSD (dBm/ 1MHz)	Duty Cycle X %	Duty cycle correction factor (dB)	Maximum Average PSD (dBm/ 1MHz)	PSD (e.i.r.p) (dBm/ 1MHz)	FCC PSD Limit (dBm/1MHz)	IC e.i.r.p SD (dBm/ 1MHz)
ac_mode-VHT20-MCS0	5180	-0.87	90.13	0.45	-0.42	2.95	11.00	10.00
	5240	**5.52**	**90.07**	**0.45**	**5.97**	**9.34**	**11.00**	**10.00**
	5260	4.98	90.11	0.45	5.43	8.80	11.00	10.00
	5320	0.69	90.11	0.45	1.14	4.51	11.00	10.00
	5500	-1.68	90.07	0.45	-1.23	2.14	11.00	10.00
	5700	-2.53	90.15	0.45	-2.08	1.29	11.00	10.00
	5720	4.25	90.14	0.45	4.70	8.07	11.00	10.00
ac_mode-VHT20-MCS9	5180	-4.85	51.07	2.92	-1.93	1.44	11.00	10.00
	5240	-2.37	51.08	2.92	0.55	3.92	11.00	10.00
	5260	-2.74	51.04	2.92	0.18	3.55	11.00	10.00
	5320	-2.34	51.06	2.92	0.58	3.95	11.00	10.00
	5500	-4.11	51.12	2.91	-1.20	2.17	11.00	10.00
	5700	-6.10	51.14	2.91	-3.19	0.18	11.00	10.00
	5720	-2.91	51.10	2.92	0.01	3.38	11.00	10.00

Modulation: 802.11ac – 20MHz - UNII 3

Data rate	Measured Frequency (MHz)	Measured Average PSD (dBm/ 0.3MHz)	Duty Cycle X %	Duty cycle correction factor (dB)	Bandwidth Correction (dB)	Maximum Average PSD (dBm/ 500kHz)	PSD (e.i.r.p) (dBm/ 500kHz)	FCC PSD Limit (dBm/ 500kHz)	IC e.i.r.p PSD (dBm/ 500kHz)
ac_mode-VHT20-MCS0	5745	-3.19	90.14	0.45	2.22	-0.52	2.85	30.00	10.00
	5825	-4.88	90.12	0.45	2.22	-2.21	1.16	30.00	10.00
ac_mode-VHT20-MCS9	5745	-9.86	51.09	2.92	2.22	-4.72	-1.35	30.00	10.00
	5825	-9.26	51.10	2.92	2.22	-4.13	-0.76	30.00	10.00

Modulation: 802.11ax – 20MHz - UNII 1, UNII2a, UNII2c

Data rate	Measured Frequency (MHz)	Measured Average PSD (dBm/ 1MHz)	Duty Cycle X %	Duty cycle correction factor (dB)	Maximum Average PSD (dBm/ 1MHz)	PSD (e.i.r.p) (dBm/ 1MHz)	FCC PSD Limit (dBm/1MHz)	IC e.i.r.p SD (dBm/ 1MHz)
ax_mode-HE20-MCS0	5180	-0.14	87.62	0.57	0.43	3.80	11.00	10.00
	5240	**5.35**	**87.64**	**0.57**	**5.92**	**9.29**	**11.00**	**10.00**
	5260	5.15	87.64	0.57	5.72	9.09	11.00	10.00
	5320	0.94	87.64	0.57	1.51	4.88	11.00	10.00
	5500	-0.96	87.62	0.57	-0.39	2.98	11.00	10.00
	5700	-2.70	87.58	0.58	-2.12	1.25	11.00	10.00
	5720	4.12	87.63	0.57	4.69	8.06	11.00	10.00
ax_mode-HE20-MCS11	5180	-5.32	45.04	3.46	-1.86	1.51	11.00	10.00
	5240	-5.79	45.04	3.46	-2.33	1.04	11.00	10.00
	5260	-6.06	45.03	3.46	-2.60	0.77	11.00	10.00
	5320	-5.76	45.03	3.46	-2.30	1.07	11.00	10.00
	5500	-6.74	45.05	3.46	-3.28	0.09	11.00	10.00
	5700	-6.39	45.09	3.46	-2.93	0.44	11.00	10.00
	5720	-6.37	45.09	3.46	-2.91	0.46	11.00	10.00

Modulation: 802.11ax – 20MHz - UNII 3

Data rate	Measured Frequency (MHz)	Measured Average PSD (dBm/ 0.3MHz)	Duty Cycle X %	Duty cycle correction factor (dB)	Bandwidth Correction (dB)	Maximum Average PSD (dBm/ 500kHz)	PSD (e.i.r.p) (dBm/ 500kHz)	FCC PSD Limit (dBm/ 500kHz)	IC e.i.r.p PSD (dBm/ 500kHz)
ax_mode-HE20-MCS0	5745	-3.08	87.63	0.57	2.22	-0.29	3.08	30.00	10.00
	5825	-3.75	87.65	0.57	2.22	-0.96	2.41	30.00	10.00
ax_mode-HE20-MCS11	5745	-12.48	45.09	3.46	2.22	-6.80	-3.43	30.00	10.00
	5825	-12.79	45.14	3.45	2.22	-7.12	-3.75	30.00	10.00

Modulation: 802.11n – 40MHz - UNII 1, UNII2a, UNII2c

Data rate	Measured Frequency (MHz)	Measured Average PSD (dBm/ 1MHz)	Duty Cycle X %	Duty cycle correction factor (dB)	Maximum Average PSD (dBm/ 1MHz)	PSD (e.i.r.p) (dBm/ 1MHz)	FCC PSD Limit (dBm/1MHz)	IC e.i.r.p SD (dBm/ 1MHz)
n_mode-HT40_ MCS0	5190	-5.15	81.85	0.87	-4.28	-0.91	11.00	10.00
	5230	-2.17	81.84	0.87	-1.30	2.07	11.00	10.00
	5270	-1.87	81.85	0.87	-1.00	2.37	11.00	10.00
	5310	-4.82	81.87	0.87	-3.95	-0.58	11.00	10.00
	5510	-8.27	81.89	0.87	-7.40	-4.03	11.00	10.00
	5590	**-1.12**	**81.86**	**0.87**	**-0.25**	**3.12**	**11.00**	**10.00**
	5670	-6.00	81.89	0.87	-5.13	-1.76	11.00	10.00
	5710	-1.38	81.89	0.87	-0.51	2.86	11.00	10.00
n_mode-HT40_ MCS7	5190	-7.90	40.83	3.89	-4.01	-0.64	11.00	10.00
	5230	-5.76	40.75	3.90	-1.86	1.51	11.00	10.00
	5270	-6.88	40.84	3.89	-2.99	0.38	11.00	10.00
	5310	-7.74	40.81	3.89	-3.85	-0.48	11.00	10.00
	5510	-10.86	40.89	3.88	-6.98	-3.61	11.00	10.00
	5590	-6.47	40.89	3.88	-2.59	0.78	11.00	10.00
	5670	-8.77	40.90	3.88	-4.89	-1.52	11.00	10.00
	5710	-6.10	40.87	3.89	-2.21	1.16	11.00	10.00

Modulation: 802.11n – 40MHz - UNII 3

Data rate	Measured Frequency (MHz)	Measured Average PSD (dBm/ 0.3MHz)	Duty Cycle X %	Duty cycle correction factor (dB)	Bandwidth Correction (dB)	Maximum Average PSD (dBm/ 500kHz)	PSD (e.i.r.p) (dBm/ 500kHz)	FCC PSD Limit (dBm/ 500kHz)	IC e.i.r.p PSD (dBm/ 500kHz)
n_mode-HT40_MCS 0	5755	-9.77	81.89	0.87	6.99	-6.68	-3.31	30.00	10.00
	5795	-10.28	81.89	0.87	6.99	-7.19	-3.82	30.00	10.00
n_mode-HT40_MCS 7	5755	-13.69	40.88	3.89	6.99	-7.58	-4.21	30.00	10.00
	5795	-14.69	40.90	3.88	6.99	-8.59	-5.22	30.00	10.00

Modulation: 802.11ac – VHT40MHz - UNII 1, UNII2a, UNII2c

Data rate	Measured Frequency (MHz)	Measured Average PSD (dBm/ 1MHz)	Duty Cycle X %	Duty cycle correction factor (dB)	Maximum Average PSD (dBm/ 1MHz)	PSD (e.i.r.p) (dBm/ 1MHz)	FCC PSD Limit (dBm/1MHz)	IC e.i.r.p SD (dBm/ 1MHz)
ac_mode_ VHT40_ MCS0	5190	-5.69	81.93	0.87	-4.82	-1.45	11.00	10.00
	5230	-2.24	81.93	0.87	-1.37	2.00	11.00	10.00
	5270	**-1.45**	**81.92**	**0.87**	**-0.58**	**2.79**	**11.00**	**10.00**
	5310	-4.50	81.88	0.87	-3.63	-0.26	11.00	10.00
	5510	-4.62	81.96	0.86	-3.76	-0.39	11.00	10.00
	5590	-2.33	81.96	0.86	-1.47	1.90	11.00	10.00
	5670	-5.99	81.98	0.86	-5.13	-1.76	11.00	10.00
	5710	-2.30	81.97	0.86	-1.44	1.93	11.00	10.00
ac_mode_ VHT40_ MCS9	5190	-8.84	37.81	4.22	-4.62	-1.25	11.00	10.00
	5230	-7.05	37.80	4.22	-2.83	0.54	11.00	10.00
	5270	-8.05	37.80	4.22	-3.83	-0.46	11.00	10.00
	5310	-7.80	37.78	4.23	-3.57	-0.20	11.00	10.00
	5510	-11.87	37.89	4.21	-7.66	-4.29	11.00	10.00
	5590	-7.99	37.87	4.22	-3.77	-0.40	11.00	10.00
	5670	-8.37	37.86	4.22	-4.15	-0.78	11.00	10.00
	5710	-8.25	37.86	4.22	-4.03	-0.66	11.00	10.00

Modulation: 802.11ac – VHT40MHz - UNII 3

Data rate (Mbps)	Measured Frequency (MHz)	Measured Average PSD (dBm/ 0.3MHz)	Duty Cycle X %	Duty cycle correction factor (dB)	Bandwidth Correction (dB)	Maximum Average PSD (dBm/ 500kHz)	PSD (e.i.r.p) (dBm/ 500kHz)	FCC PSD Limit (dBm/ 500kHz)	IC e.i.r.p PSD (dBm/ 500kHz)
n_mode _ VHT40_ MCS0	5755	-10.79	81.97	0.86	2.22	-7.71	-4.34	30.00	10.00
	5795	-10.80	81.97	0.86	2.22	-7.72	-4.35	30.00	10.00
n_mode _ VHT40_ MCS9	5755	-15.26	37.88	4.22	2.22	-8.82	-5.45	30.00	10.00
	5795	-15.17	37.88	4.22	2.22	-8.73	-5.36	30.00	10.00

Modulation: 802.11ax – HE20MHz - UNII 1, UNII2a, UNII2c

Data rate (Mbps)	Measured Frequency (MHz)	Measured Average PSD (dBm/ 1MHz)	Duty Cycle X %	Duty cycle correction factor (dB)	Maximum Average PSD (dBm/ 1MHz)	PSD (e.i.r.p) (dBm/ 1MHz)	FCC PSD Limit (dBm/1MHz)	IC e.i.r.p SD (dBm/ 1MHz)
ax_mode-HE40-MCS0	5190	-5.27	78.91	1.03	-4.24	-0.87	11.00	10.00
	5230	-2.13	78.88	1.03	-1.10	2.27	11.00	10.00
	5270	-1.51	78.88	1.03	-0.48	2.89	11.00	10.00
	5310	-4.69	78.91	1.03	-3.66	-0.29	11.00	10.00
	5510	-8.47	78.94	1.03	-7.44	-4.07	11.00	10.00
	5590	**-1.12**	**78.92**	**1.03**	**-0.09**	**3.28**	**11.00**	**10.00**
	5670	-6.08	78.91	1.03	-5.05	-1.68	11.00	10.00
	5710	-1.40	78.92	1.03	-0.37	3.00	11.00	10.00
ax_mode-HE40-MCS11	5190	-11.04	37.84	4.22	-6.82	-3.45	11.00	10.00
	5230	-10.07	37.84	4.22	-5.85	-2.48	11.00	10.00
	5270	-10.05	37.85	4.22	-5.83	-2.46	11.00	10.00
	5310	-9.98	37.85	4.22	-5.76	-2.39	11.00	10.00
	5510	-10.61	37.90	4.21	-6.40	-3.03	11.00	10.00
	5590	-10.90	37.91	4.21	-6.69	-3.32	11.00	10.00
	5670	-11.04	37.89	4.22	-6.82	-3.45	11.00	10.00
	5710	-11.33	37.91	4.21	-7.12	-3.75	11.00	10.00

Modulation: 802.11ac – VHT20MHz - UNII 3

Data rate (Mbps)	Measured Frequency (MHz)	Measured Average PSD (dBm/ 0.3MHz)	Duty Cycle X %	Duty cycle correction factor (dB)	Bandwidth Correction (dB)	Maximum Average PSD (dBm/ 500kHz)	PSD (e.i.r.p) (dBm/ 500kHz)	FCC PSD Limit (dBm/ 500kHz)	IC e.i.r.p PSD (dBm/ 500kHz)
ax_mode-HE40-MCS0	5755	-10.26	78.90	1.03	6.99	-7.01	-3.64	30.00	10.00
	5795	-10.32	78.89	1.03	6.99	-7.07	-3.70	30.00	10.00
ax_mode-HE40-MCS11	5755	-18.43	37.91	4.21	6.99	-12.00	-8.63	30.00	10.00
	5795	-17.07	37.93	4.21	6.99	-10.64	-7.27	30.00	10.00

Modulation: 802.11ac – VHT80MHz - UNII 1, UNII2a, UNII2c

Data rate	Measured Frequency (MHz)	Measured Average PSD (dBm/ 1MHz)	Duty Cycle X %	Duty cycle correction factor (dB)	Maximum Average PSD (dBm/ 1MHz)	PSD (e.i.r.p) (dBm/ 1MHz)	FCC PSD Limit (dBm/1MHz)	IC e.i.r.p SD (dBm/ 1MHz)
ac_mode-VHT 80_MCS0	5210	-8.36	69.28	1.59	-6.77	-3.40	11.00	10.00
	5290	-8.01	69.32	1.59	-6.42	-3.05	11.00	10.00
	5530	-10.05	69.37	1.59	-8.46	-5.09	11.00	10.00
	5690	**-6.03**	**69.33**	**1.59**	**-4.44**	**-1.07**	**11.00**	**10.00**
ac_mode-VHT 80_MCS9	5210	-11.51	30.79	5.12	-6.39	-3.02	11.00	10.00
	5290	-13.35	30.82	5.11	-8.24	-4.87	11.00	10.00
	5530	-12.78	30.79	5.12	-7.66	-4.29	11.00	10.00
	5690	-12.51	30.88	5.10	-7.41	-4.04	11.00	10.00

Modulation: 802.11ac – VHT80MHz - UNII 3

Data rate	Measured Frequency (MHz)	Measured Average PSD (dBm/ 0.3MHz)	Duty Cycle X %	Duty cycle correction factor (dB)	Bandwidth Correction (dB)	Maximum Average PSD (dBm/ 500kHz)	PSD (e.i.r.p) (dBm/ 500kHz)	FCC PSD Limit (dBm/ 500kHz)	IC e.i.r.p PSD (dBm/ 500kHz)
ac_mode-VHT 80_MCS0	5775	-14.11	69.33	1.59	2.22	-10.30	-6.93	30.00	10.00
ac_mode-VHT 80MHz_MCS9	5775	-19.56	30.86	5.11	2.22	-12.23	-8.86	30.00	10.00

Modulation: 802.11ax – VHT80MHz - UNII 1, UNII2a, UNII2c

Data rate	Measured Frequency (MHz)	Measured Average PSD (dBm/ 1MHz)	Duty Cycle X %	Duty cycle correction factor (dB)	Maximum Average PSD (dBm/ 1MHz)	PSD (e.i.r.p) (dBm/ 1MHz)	FCC PSD Limit (dBm/1MHz)	IC e.i.r.p SD (dBm/ 1MHz)
ax_mode-HE 80_MCS0	5210	-7.96	66.75	1.76	-6.20	-2.83	11.00	10.00
	5290	-7.66	66.79	1.75	-5.91	-2.54	11.00	10.00
	5530	-9.73	66.80	1.75	-7.98	-4.61	11.00	10.00
	5690	**-5.95**	**66.85**	**1.75**	**-4.20**	**-0.83**	**11.00**	**10.00**
ax_mode-HE 80_MCS11	5210	-12.84	35.17	4.54	-8.30	-4.93	11.00	10.00
	5290	-15.28	35.19	4.54	-10.74	-7.37	11.00	10.00
	5530	-14.26	35.25	4.53	-9.73	-6.36	11.00	10.00
	5690	-15.34	35.29	4.52	-10.82	-7.45	11.00	10.00

Modulation: 802.11ac – VHT80MHz - UNII 3

Data rate	Measured Frequency (MHz)	Measured Average PSD (dBm/ 0.3MHz)	Duty Cycle X %	Duty cycle correction factor (dB)	Bandwidth Correction (dB)	Maximum Average PSD (dBm/ 500kHz)	PSD (e.i.r.p) (dBm/ 500kHz)	FCC PSD Limit (dBm/ 500kHz)	IC e.i.r.p PSD (dBm/ 500kHz)
ax_mode-HE 80_MCS0	5775	-14.47	66.80	1.75	2.22	-10.50	-7.13	30.00	10.00
ax_mode-HE 80_MCS11	5775	-22.24	35.30	4.52	2.22	-15.50	-12.13	30.00	10.00

Antenna Type: 1001932PT (Flex/PCB) Antenna MIMO Results

Note:

1. All the losses are included during measurement and final values are mentioned in the test report

   10 dB attenuator + 0.8 dB Cable loss = 10.8 dB total offset

2. Duty cycle correction factor is considered in Final Average power

   Duty cycle Correction factor = 10*LOG (1/X) Where X is Duty Cycle

3. This product do not support additional beamforming gain / directional gain, it uses signal antenna and hence directional gain of the single antenna is (4.40 dBi)

4. e.i.r.p = Maximum Average output power (dBm) + Antenna gain in dBi

Modulation: 802.11a – UNII 1, UNII2a, UNII2c

Data rate (Mbps)	Measured Frequency (MHz)	Measured Average PSD 1 (dBm/ 1MHz)	Measured Average PSD 2 (dBm/ 1MHz)	Total Chain1 + Chain2 PSD	Duty Cycle X %	Duty cycle correction factor (dB)	PSD (e.i.r.p) (dBm/ 1MHz)	FCC PSD Limit (dBm/1MHz)	IC e.i.r.p SD (dBm/ 1MHz)
a_mode-6Mbps	5180	-0.92	-1.46	1.83	90.68	0.42	3.36	11.00	10.00
	5240	2.15	1.79	4.98	90.68	0.42	6.61	11.00	10.00
	5260	1.94	1.55	4.76	90.65	0.43	6.38	11.00	10.00
	5320	1.74	-0.04	3.95	90.65	0.43	4.79	11.00	10.00
	5500	-0.34	-0.16	2.76	90.66	0.43	4.67	11.00	10.00
	5700	-0.17	-1.18	2.36	90.66	0.43	3.65	11.00	10.00
	5720	0.89	0.63	3.77	90.68	0.42	5.45	11.00	10.00
a_mode-54Mbps	5180	-1.75	-2.13	1.07	55.28	2.57	4.84	11.00	10.00
	5240	**2.45**	**1.73**	**5.12**	**55.26**	**2.58**	**8.71**	**11.00**	**10.00**
	5260	2.68	1.47	5.13	55.55	2.55	8.42	11.00	10.00
	5320	-1.31	-2.66	1.08	55.28	2.57	4.31	11.00	10.00
	5500	-3.02	-3.38	-0.19	55.33	2.57	3.59	11.00	10.00
	5700	-2.12	-4.39	-0.10	55.34	2.57	2.58	11.00	10.00
	5720	1.38	0.33	3.90	55.31	2.57	7.30	11.00	10.00

Modulation: 802.11a – UNII 3

Data rate (Mbps)	Measured Frequency (MHz)	Measured Average PSD 1 (dBm/ 0.1MHz)	Measured Average PSD 2 (dBm/ 0.1MHz)	Total Chain1 + Chain2 PSD (dBm/ 0.1MHz)	Duty Cycle X %	Duty cycle correction factor (dB)	Bandwidth Correction factor (dB)	PSD (e.i.r.p) (dBm/ 0.5MHz)	FCC PSD Limit (dBm/ 0.5MHz)	IC e.i.r.p SD (dBm/ 0.5MHz)
a_mode-6Mbps	5745	-7.16	-7.23	-4.18	90.66	0.43	6.99	7.63	30.00	10.00
	5825	-6.16	-6.76	-3.44	90.68	0.42	6.99	8.38	30.00	10.00
a_mode-54Mbps	**5745**	**-6.47**	**-7.92**	**-4.12**	**55.30**	**2.57**	**6.99**	**9.84**	**30.00**	**10.00**
	5825	-8.39	-8.23	-5.30	55.30	2.57	6.99	8.66	30.00	10.00

Modulation: 802.11n – UNII 1, UNII2a, UNII2c

Data rate	Measured Frequency (MHz)	Measured Average PSD 1 (dBm/ 1MHz)	Measured Average PSD 2 (dBm/ 1MHz)	Total Chain1 + Chain2 PSD	Duty Cycle X %	Duty cycle correction factor (dB)	PSD (e.i.r.p) (dBm/ 1MHz)	FCC PSD Limit (dBm/1MHz)	IC e.i.r.p SD (dBm/ 1MHz)
n_mode-HT20-MCS0	5180	0.32	-0.34	3.01	90.07	0.45	4.51	11.00	10.00
	5240	1.98	1.31	4.67	90.07	0.45	6.16	11.00	10.00
	5260	2.34	0.97	4.72	90.09	0.45	5.82	11.00	10.00
	5320	1.21	-0.18	3.58	90.05	0.46	4.68	11.00	10.00
	5500	-0.62	-0.80	2.30	90.10	0.45	4.05	11.00	10.00
	5700	-1.32	-3.04	0.91	90.08	0.45	1.81	11.00	10.00
	5720	1.47	0.75	4.14	90.07	0.45	5.60	11.00	10.00
n_mode-HT20-MCS7	5180	-3.19	-3.25	-0.21	53.59	2.71	3.86	11.00	10.00
	5240	1.28	-0.68	3.42	53.56	2.71	6.43	11.00	10.00
	5260	**0.79**	**-0.04**	**3.41**	**53.55**	**2.71**	**7.07**	**11.00**	**10.00**
	5320	-1.58	-3.09	0.74	53.57	2.71	4.02	11.00	10.00
	5500	-3.59	-3.99	-0.78	53.60	2.71	3.12	11.00	10.00
	5700	-4.51	-5.91	-2.14	53.65	2.70	1.19	11.00	10.00
	5720	0.22	-0.76	2.77	53.59	2.71	6.35	11.00	10.00

Modulation: 802.11n – UNII 3

Data rate	Measured Frequency (MHz)	Measured Average PSD 1 (dBm/ 0.1MHz)	Measured Average PSD 2 (dBm/ 0.1MHz)	Total Chain1 + Chain2 PSD (dBm/ 0.1MHz)	Duty Cycle X %	Duty cycle correction factor (dB)	Bandwidth Correction factor (dB)	PSD (e.i.r.p) (dBm/ 0.5MHz)	FCC PSD Limit (dBm/ 0.5MHz)	IC e.i.r.p SD (dBm/ 0.5MHz)
n_mode-HT20-MCS0	5745	-6.43	-7.02	-3.70	90.07	0.45	6.99	8.14	30.00	10.00
	5825	-6.91	-7.34	-4.11	90.10	0.45	6.99	7.73	30.00	10.00
n_mode-HT20-MCS7	5745	-8.10	-9.03	-5.53	53.60	2.71	6.99	8.57	30.00	10.00
	5825	-9.17	-9.34	-6.24	53.62	2.71	6.99	7.85	30.00	10.00

Modulation: 802.11ac – UNII 1, UNII2a, UNII2c

Data rate	Measured Frequency (MHz)	Measured Average PSD 1 (dBm/ 1MHz)	Measured Average PSD 2 (dBm/ 1MHz)	Total Chain1 + Chain2 PSD	Duty Cycle X %	Duty cycle correction factor (dB)	PSD (e.i.r.p) (dBm/ 1MHz)	FCC PSD Limit (dBm/1MHz)	IC e.i.r.p SD (dBm/ 1MHz)
ac_mode-VHT20-MCS0	5180	-0.47	-1.64	1.99	90.15	0.45	3.21	11.00	10.00
	5240	**2.39**	**1.06**	**4.79**	**90.11**	**0.45**	**5.91**	**11.00**	**10.00**
	5260	2.27	0.81	4.61	90.07	0.45	5.66	11.00	10.00
	5320	0.89	-1.26	2.96	90.12	0.45	3.59	11.00	10.00
	5500	-0.07	-0.82	2.58	90.15	0.45	4.03	11.00	10.00
	5700	-1.68	-3.00	0.72	90.16	0.45	1.85	11.00	10.00
	5720	1.10	0.43	3.79	90.12	0.45	5.28	11.00	10.00
ac_mode-VHT20-MCS9	5180	-2.55	-3.87	-0.15	51.06	2.92	3.45	11.00	10.00
	5240	-1.27	-1.49	1.63	51.09	2.92	5.83	11.00	10.00
	5260	-1.02	-1.92	1.56	51.10	2.92	5.40	11.00	10.00
	5320	-1.34	-3.27	0.81	51.10	2.92	4.05	11.00	10.00
	5500	-2.79	-3.77	-0.24	51.13	2.91	3.54	11.00	10.00
	5700	-4.82	-6.44	-2.54	51.17	2.91	0.87	11.00	10.00
	5720	-2.30	-2.61	0.56	51.44	2.89	4.68	11.00	10.00

Modulation: 802.11ac – UNII 3

Data rate	Measured Frequency (MHz)	Measured Average PSD 1 (dBm/ 0.1MHz)	Measured Average PSD 2 (dBm/ 0.1MHz)	Total Chain1 + Chain2 PSD (dBm/ 0.1MHz)	Duty Cycle X %	Duty cycle correction factor (dB)	Bandwidth Correction factor (dB)	PSD (e.i.r.p) (dBm/ 0.5MHz)	FCC PSD Limit (dBm/ 0.5MHz)	IC e.i.r.p SD (dBm/ 0.5MHz)
ac_mode-VHT20-MCS0	5745	-6.91	-8.39	-4.58	90.15	0.45	6.99	7.26	30.00	10.00
	5825	-8.00	-8.55	-5.26	90.15	0.45	6.99	6.58	30.00	10.00
ac_mode-VHT20-MCS9	5745	-8.89	-8.66	-5.76	51.13	2.91	6.99	8.54	30.00	10.00
	5825	-8.57	-8.55	-5.55	51.13	2.91	6.99	8.75	30.00	10.00

Modulation: 802.11ax – UNII 1, UNII2a, UNII2c

Data rate	Measured Frequency (MHz)	Measured Average PSD 1 (dBm/ 1MHz)	Measured Average PSD 2 (dBm/ 1MHz)	Total Chain1 + Chain2 PSD	Duty Cycle X %	Duty cycle correction factor (dB)	PSD (e.i.r.p) (dBm/ 1MHz)	FCC PSD Limit (dBm/1MHz)	IC e.i.r.p SD (dBm/ 1MHz)
ax_mode-HE20-MCS0	5180	0.35	0.19	3.28	87.65	0.57	5.16	11.00	10.00
	5240	**2.39**	**1.53**	**4.99**	**87.65**	**0.57**	**6.50**	**11.00**	**10.00**
	5260	2.81	1.17	5.08	87.62	0.57	6.14	11.00	10.00
	5320	1.82	-0.20	3.94	87.65	0.57	4.77	11.00	10.00
	5500	0.40	0.84	3.64	87.66	0.57	5.81	11.00	10.00
	5700	-1.99	-2.44	0.80	87.67	0.57	2.53	11.00	10.00
	5720	1.47	0.81	4.16	87.63	0.57	5.78	11.00	10.00
ax_mode-HE20-MCS11	5180	-4.01	-5.08	-1.50	45.10	3.46	2.78	11.00	10.00
	5240	-5.58	-5.86	-2.71	35.09	4.55	3.09	11.00	10.00
	5260	-3.80	-5.20	-1.43	45.09	3.46	2.66	11.00	10.00
	5320	-4.06	-6.30	-2.03	45.08	3.46	1.56	11.00	10.00
	5500	-4.74	-5.40	-2.05	45.11	3.46	2.46	11.00	10.00
	5700	-5.07	-6.02	-2.51	45.15	3.45	1.83	11.00	10.00
	5720	-4.50	-6.87	-2.51	45.16	3.45	0.98	11.00	10.00

Modulation: 802.11ax – UNII 3

Data rate	Measured Frequency (MHz)	Measured Average PSD 1 (dBm/ 0.1MHz)	Measured Average PSD 2 (dBm/ 0.1MHz)	Total Chain1 + Chain2 PSD (dBm/ 0.1MHz)	Duty Cycle X %	Duty cycle correction factor (dB)	Bandwidth Correction factor (dB)	PSD (e.i.r.p) (dBm/ 0.5MHz)	FCC PSD Limit (dBm/ 0.5MHz)	IC e.i.r.p SD (dBm/ 0.5MHz)
ax_mode-HE20-MCS0	5745	-8.44	-8.98	-5.69	87.66	0.57	6.99	6.27	30.00	10.00
	5825	-7.76	-7.76	-4.75	87.63	0.57	6.99	7.21	30.00	10.00
ax_mode-HE20-MCS11	5745	-11.92	-12.96	-9.40	45.13	3.46	6.99	5.45	30.00	10.00
	5825	-12.16	-14.25	-10.07	45.15	3.45	6.99	4.77	30.00	10.00

Modulation: 802.11n – UNII 1, UNII2a, UNII2c

Data rate	Measured Frequency (MHz)	Measured Average PSD 1 (dBm/ 1MHz)	Measured Average PSD 2 (dBm/ 1MHz)	Total Chain1 + Chain2 PSD	Duty Cycle X %	Duty cycle correction factor (dB)	PSD (e.i.r.p) (dBm/ 1MHz)	FCC PSD Limit (dBm/1MHz)	IC e.i.r.p SD (dBm/ 1MHz)
n_mode-HT40-MCS0	5190	-6.49	-7.96	-4.15	81.89	0.87	-2.69	11.00	10.00
	5230	-2.58	-3.60	-0.05	81.88	0.87	1.67	11.00	10.00
	5270	-0.44	-1.23	2.19	81.86	0.87	4.04	11.00	10.00
	5310	-3.29	-4.46	-0.83	81.89	0.87	0.81	11.00	10.00
	5510	-8.24	-7.65	-4.92	81.91	0.87	-2.38	11.00	10.00
	5590	-1.44	-1.16	1.71	81.88	0.87	4.11	11.00	10.00
	5670	-6.00	-5.96	-2.97	81.91	0.87	-0.69	11.00	10.00
	5710	**-0.92**	**-0.91**	**2.10**	**81.87**	**0.87**	**4.36**	**11.00**	**10.00**
n_mode-HT40-MCS7	5190	-7.76	-10.03	-5.74	40.90	3.88	-1.75	11.00	10.00
	5230	-4.28	-5.39	-1.79	40.81	3.89	2.90	11.00	10.00
	5270	-4.66	-5.82	-2.19	40.87	3.89	2.47	11.00	10.00
	5310	-6.00	-7.41	-3.64	40.89	3.88	0.87	11.00	10.00
	5510	-9.57	-10.32	-6.92	40.96	3.88	-2.04	11.00	10.00
	5590	-6.36	-6.04	-3.19	40.93	3.88	2.24	11.00	10.00
	5670	-8.08	-8.86	-5.44	40.96	3.88	-0.58	11.00	10.00
	5710	-5.98	-6.74	-3.33	40.93	3.88	1.54	11.00	10.00

Modulation: 802.11n – UNII 3

Data rate	Measured Frequency (MHz)	Measured Average PSD 1 (dBm/ 0.1MHz)	Measured Average PSD 2 (dBm/ 0.1MHz)	Total Chain1 + Chain2 PSD (dBm/ 0.1MHz)	Duty Cycle X %	Duty cycle correction factor (dB)	Bandwidth Correction factor (dB)	PSD (e.i.r.p) (dBm/ 0.5MHz)	FCC PSD Limit (dBm/ 0.5MHz)	IC e.i.r.p SD (dBm/ 0.5MHz)
n_mode-HT40-MCS0	5755	-13.98	-12.63	-10.24	81.90	0.87	6.99	2.01	30.00	10.00
	5795	-11.59	-10.43	-7.96	81.90	0.87	6.99	4.30	30.00	10.00
n_mode-HT40-MCS7	5755	-12.05	-11.77	-8.90	40.92	3.88	6.99	6.37	30.00	10.00
	5795	-12.01	-12.30	-9.14	40.94	3.88	6.99	6.13	30.00	10.00

Modulation: 802.11ac – UNII 1, UNII2a, UNII2c

Data rate	Measured Frequency (MHz)	Measured Average PSD 1 (dBm/ 1MHz)	Measured Average PSD 2 (dBm/ 1MHz)	Total Chain1 + Chain2 PSD	Duty Cycle X %	Duty cycle correction factor (dB)	PSD (e.i.r.p) (dBm/ 1MHz)	FCC PSD Limit (dBm/1MHz)	IC e.i.r.p SD (dBm/ 1MHz)
ac_mode-VHT40-MCS0	5190	-5.78	-7.91	-3.71	81.94	0.86	-2.65	11.00	10.00
	5230	-1.65	-3.13	0.68	81.93	0.87	2.14	11.00	10.00
	5270	**-0.37**	**-0.90**	**2.38**	**81.93**	**0.87**	**4.37**	**11.00**	**10.00**
	5310	-3.79	-4.60	-1.17	81.91	0.87	0.67	11.00	10.00
	5510	-7.81	-7.73	-4.76	81.99	0.86	-2.47	11.00	10.00
	5590	-1.78	-1.78	1.23	81.96	0.86	3.48	11.00	10.00
	5670	-5.16	-6.02	-2.56	81.98	0.86	-0.76	11.00	10.00
	5710	-1.66	-1.78	1.29	81.97	0.86	3.48	11.00	10.00
ac_mode-VHT40-MCS9	5190	-8.53	-10.32	-6.32	37.73	4.23	-1.69	11.00	10.00
	5230	-5.98	-6.20	-3.08	37.77	4.23	2.43	11.00	10.00
	5270	-5.73	-7.40	-3.47	37.82	4.22	1.22	11.00	10.00
	5310	-6.93	-7.29	-4.10	37.79	4.23	1.34	11.00	10.00
	5510	-10.17	-10.84	-7.48	37.89	4.21	-2.23	11.00	10.00
	5590	-7.27	-7.47	-4.36	37.83	4.22	1.15	11.00	10.00
	5670	-8.42	-8.19	-5.29	37.87	4.22	0.43	11.00	10.00
	5710	-7.50	-7.33	-4.40	37.88	4.22	1.29	11.00	10.00

Modulation: 802.11ac – UNII 3

Data rate	Measured Frequency (MHz)	Measured Average PSD 1 (dBm/ 0.1MHz)	Measured Average PSD 2 (dBm/ 0.1MHz)	Total Chain1 + Chain2 PSD (dBm/ 0.1MHz)	Duty Cycle X %	Duty cycle correction factor (dB)	Bandwidth Correction factor (dB)	PSD (e.i.r.p) (dBm/ 0.5MHz)	FCC PSD Limit (dBm/ 0.5MHz)	IC e.i.r.p SD (dBm/ 0.5MHz)
ac_mode-VHT40-MCS0	5755	-11.14	-11.36	-8.24	81.97	0.86	6.99	4.02	30.00	10.00
	5795	-11.18	-11.38	-8.27	74.93	1.25	6.99	4.37	30.00	10.00
ac_mode-VHT40-MCS9	5755	-13.14	-13.58	-10.34	37.87	4.22	6.99	5.26	30.00	10.00
	5795	-12.70	-13.81	-10.21	37.88	4.22	6.99	5.40	30.00	10.00

Modulation: 802.11ax – UNII 1, UNII2a, UNII2c

Data rate	Measured Frequency (MHz)	Measured Average PSD 1 (dBm/ 1MHz)	Measured Average PSD 2 (dBm/ 1MHz)	Total Chain1 + Chain2 PSD	Duty Cycle X %	Duty cycle correction factor (dB)	PSD (e.i.r.p) (dBm/ 1MHz)	FCC PSD Limit (dBm/1MHz)	IC e.i.r.p SD (dBm/ 1MHz)
ax_mode-HE40-MCS0	5190	-5.82	-7.73	-3.66	78.89	1.03	-2.30	11.00	10.00
	5230	-1.36	-2.79	0.99	78.88	1.03	2.64	11.00	10.00
	5270	-0.32	-1.26	2.25	78.90	1.03	4.17	11.00	10.00
	5310	-4.68	-5.61	-2.11	78.88	1.03	-0.18	11.00	10.00
	5510	-7.28	-7.87	-4.55	78.94	1.03	-2.44	11.00	10.00
	5590	**-0.80**	**-0.68**	**2.27**	**78.89**	**1.03**	**4.75**	**11.00**	**10.00**
	5670	-4.94	-6.19	-2.51	78.91	1.03	-0.76	11.00	10.00
	5710	-0.34	-1.05	2.33	78.92	1.03	4.38	11.00	10.00
ax_mode-HE40-MCS11	5190	-9.05	-10.98	-6.90	37.86	4.22	-2.36	11.00	10.00
	5230	-9.16	-9.85	-6.48	37.86	4.22	-1.23	11.00	10.00
	5270	-9.25	-11.12	-7.07	37.86	4.22	-2.50	11.00	10.00
	5310	-9.08	-10.86	-6.87	37.83	4.22	-2.24	11.00	10.00
	5510	-10.02	-11.29	-7.60	37.93	4.21	-2.68	11.00	10.00
	5590	-10.28	-10.55	-7.40	40.92	3.88	-2.27	11.00	10.00
	5670	-9.87	-10.91	-7.35	40.92	3.88	-2.63	11.00	10.00
	5710	-10.66	-10.86	-7.75	40.92	3.88	-2.58	11.00	10.00

Modulation: 802.11ax – UNII 3

Data rate	Measured Frequency (MHz)	Measured Average PSD 1 (dBm/ 0.1MHz)	Measured Average PSD 2 (dBm/ 0.1MHz)	Total Chain1 + Chain2 PSD (dBm/ 0.1MHz)	Duty Cycle X %	Duty cycle correction factor (dB)	Bandwidth Correction factor (dB)	PSD (e.i.r.p) (dBm/ 0.5MHz)	FCC PSD Limit (dBm/ 0.5MHz)	IC e.i.r.p SD (dBm/ 0.5MHz)
ax_mode-HE40-MCS0	5755	-13.38	-13.39	-10.37	78.91	1.03	6.99	2.04	30.00	10.00
	5795	-13.06	-13.27	-10.15	78.91	1.03	6.99	2.27	30.00	10.00
ax_mode-HE40-MCS11	5755	-17.27	-17.40	-14.32	40.92	3.88	6.99	0.95	30.00	10.00
	5795	-17.74	-18.40	-15.05	40.94	3.88	6.99	0.22	30.00	10.00

Modulation: 802.11ac – UNII 1, UNII2a, UNII2c

Data rate	Measured Frequency (MHz)	Measured Average PSD 1 (dBm/ 1MHz)	Measured Average PSD 2 (dBm/ 1MHz)	Total Chain1 + Chain2 PSD	Duty Cycle X %	Duty cycle correction factor (dB)	PSD (e.i.r.p) (dBm/ 1MHz)	FCC PSD Limit (dBm/1MHz)	IC e.i.r.p SD (dBm/ 1MHz)
ac_mode-VHT80-MCS0	5210	-9.20	-11.08	-7.03	69.26	1.60	-5.08	11.00	10.00
	5290	-9.38	-10.21	-6.76	69.31	1.59	-4.22	11.00	10.00
	5530	-9.33	-10.34	-6.80	69.35	1.59	-4.35	11.00	10.00
	5690	-4.77	-5.28	-2.01	69.33	1.59	0.71	11.00	10.00
ac_mode-VHT80-MCS9	5210	-10.28	-11.11	-7.66	30.77	5.12	-1.59	11.00	10.00
	5290	-12.09	-11.98	-9.02	30.82	5.11	-2.47	11.00	10.00
	5530	-12.10	-12.85	-9.45	30.79	5.12	-3.33	11.00	10.00
	5690	-11.44	-11.86	-8.63	30.87	5.10	-2.36	11.00	10.00

Modulation: 802.11ac – UNII 3

Data rate	Measured Frequency (MHz)	Measured Average PSD 1 (dBm/ 0.1MHz)	Measured Average PSD 2 (dBm/ 0.1MHz)	Total Chain1 + Chain2 PSD (dBm/ 0.1MHz)	Duty Cycle X %	Duty cycle correction factor (dB)	Bandwidth Correction factor (dB)	PSD (e.i.r.p) (dBm/ 0.5MHz)	FCC PSD Limit (dBm/ 0.5MHz)	IC e.i.r.p SD (dBm/ 0.5MHz)
ac_mode-VHT80-MCS0	5755	-12.66	-13.34	-9.98	69.32	1.59	6.99	3.00	30.00	10.00
ac_mode-VHT80-MCS9	5755	-16.99	-18.53	-14.68	30.84	5.11	6.99	1.82	30.00	10.00

Modulation: 802.11ax – UNII 1, UNII2a, UNII2c

Data rate	Measured Frequency (MHz)	Measured Average PSD 1 (dBm/ 1MHz)	Measured Average PSD 2 (dBm/ 1MHz)	Total Chain1 + Chain2 PSD	Duty Cycle X %	Duty cycle correction factor (dB)	PSD (e.i.r.p) (dBm/ 1MHz)	FCC PSD Limit (dBm/1MHz)	IC e.i.r.p SD (dBm/ 1MHz)
ax_mode-HE80-MCS0	5210	-8.36	-9.78	-6.00	66.73	1.76	-3.62	11.00	10.00
	5290	-8.90	-9.93	-6.37	66.80	1.75	-3.78	11.00	10.00
	5530	-9.14	-10.28	-6.66	66.77	1.75	-4.13	11.00	10.00
	5690	-3.85	-5.04	-1.39	66.82	1.75	1.11	11.00	10.00
ax_mode-HE80-MCS11	5210	11.99	-15.08	12.00	35.23	4.53	-6.15	11.00	10.00
	5290	-14.45	-16.05	-12.17	35.24	4.53	-7.12	11.00	10.00
	5530	-13.27	-15.18	-11.11	35.28	4.52	-6.26	11.00	10.00
	5690	-15.47	-15.43	-12.44	35.33	4.52	-6.51	11.00	10.00

Modulation: 802.11ax – UNII 3

Data rate	Measured Frequency (MHz)	Measured Average PSD 1 (dBm/ 0.1MHz)	Measured Average PSD 2 (dBm/ 0.1MHz)	Total Chain1 + Chain2 PSD (dBm/ 0.1MHz)	Duty Cycle X %	Duty cycle correction factor (dB)	Bandwidth Correction factor (dB)	PSD (e.i.r.p) (dBm/ 0.5MHz)	FCC PSD Limit (dBm/ 0.5MHz)	IC e.i.r.p SD (dBm/ 0.5MHz)
ax_mode-HE80-MCS0	5775	-12.66	-13.34	-9.98	69.32	1.59	6.99	3.00	30.00	10.00
ax_mode-HE80-MCS11	5775	-16.99	-18.53	-14.68	30.84	5.11	6.99	1.82	30.00	10.00

Antenna Type: FPA3020-10 (Flex/PCB) Antenna MIMO Results

Note:

1. All the losses are included during measurement and final values are mentioned in the test report

   10 dB attenuator + 0.8 dB Cable loss = 10.8 dB total offset

2. Duty cycle correction factor is considered in Final Average power

   Duty cycle Correction factor = 10*LOG (1/X) Where X is Duty Cycle

3. This product do not support additional beamforming gain / directional gain, it uses signal antenna and hence directional gain of the single antenna is (5.58 dBi)

4. e.i.r.p = Maximum Average output power (dBm) + Antenna gain in dBi

Modulation: 802.11a – UNII 1, UNII2a, UNII2c

Data rate (Mbps)	Measured Frequency (MHz)	Measured Average PSD 1 (dBm/ 1MHz)	Measured Average PSD 2 (dBm/ 1MHz)	Total Chain1 + Chain2 PSD	Duty Cycle X %	Duty cycle correction factor (dB)	PSD (e.i.r.p) (dBm/ 1MHz)	FCC PSD Limit (dBm/1MHz)	IC e.i.r.p SD (dBm/ 1MHz)
a_mode-6Mbps	5180	1.83	0.83	4.37	90.65	0.43	6.84	11.00	10.00
	5240	2.83	1.22	5.11	90.68	0.42	7.22	11.00	10.00
	5260	2.50	0.99	4.82	90.65	0.43	7.00	11.00	10.00
	5320	1.74	-0.04	3.95	90.65	0.43	5.97	11.00	10.00
	5500	-0.34	-0.16	2.76	90.66	0.43	5.85	11.00	10.00
	5700	-0.17	-1.18	2.36	90.66	0.43	4.83	11.00	10.00
	5720	1.62	0.67	4.18	90.68	0.42	6.67	11.00	10.00
a_mode-54Mbps	5180	-1.75	-2.13	1.07	55.28	2.57	6.02	11.00	10.00
	5240	2.45	1.73	5.12	55.26	2.58	9.89	11.00	10.00
	5260	2.68	1.47	5.13	55.55	2.55	9.60	11.00	10.00
	5320	-1.31	-2.66	1.08	55.28	2.57	5.49	11.00	10.00
	5500	-3.02	-3.38	-0.19	55.33	2.57	4.77	11.00	10.00
	5700	-2.12	-4.39	-0.10	55.34	2.57	3.76	11.00	10.00
	5720	1.38	0.33	3.90	55.31	2.57	8.48	11.00	10.00

Modulation: 802.11a – UNII 3

Data rate (Mbps)	Measured Frequency (MHz)	Measured Average PSD 1 (dBm/ 0.1MHz)	Measured Average PSD 2 (dBm/ 0.1MHz)	Total Chain1 + Chain2 PSD (dBm/ 0.1MHz)	Duty Cycle X %	Duty cycle correction factor (dB)	Bandwidth Correction factor (dB)	PSD (e.i.r.p) (dBm/ 0.5MHz)	FCC PSD Limit (dBm/ 0.5MHz)	IC e.i.r.p SD (dBm/ 0.5MHz)
a_mode-6Mbps	5745	-3.13	-3.47	-0.29	90.66	0.43	6.99	12.71	30.00	10.00
	5825	-3.62	-4.03	-0.81	90.66	0.43	6.99	12.19	30.00	10.00
a_mode-54Mbps	5745	-5.26	-5.87	-2.54	55.26	2.58	6.99	12.60	**30.00**	**10.00**
	5825	-6.08	-6.75	-3.39	55.30	2.57	6.99	11.75	30.00	10.00

Modulation: 802.11n – UNII 1, UNII2a, UNII2c

Data rate	Measured Frequency (MHz)	Measured Average PSD 1 (dBm/ 1MHz)	Measured Average PSD 2 (dBm/ 1MHz)	Total Chain1 + Chain2 PSD	Duty Cycle X %	Duty cycle correction factor (dB)	PSD (e.i.r.p) (dBm/ 1MHz)	FCC PSD Limit (dBm/1MHz)	IC e.i.r.p SD (dBm/ 1MHz)
n_mode-HT20-MCS0	5180	-0.85	-1.80	1.71	90.10	0.45	4.23	11.00	10.00
	5240	2.55	1.34	5.00	90.07	0.45	7.37	11.00	10.00
	5260	2.63	0.36	4.65	90.09	0.45	6.39	11.00	10.00
	5320	1.21	-0.18	3.58	90.05	0.46	5.86	11.00	10.00
	5500	-0.62	-0.80	2.30	90.10	0.45	5.23	11.00	10.00
	5700	-1.32	-3.04	0.91	90.08	0.45	2.99	11.00	10.00
	5720	1.40	0.04	3.78	90.07	0.45	6.07	11.00	10.00
n_mode-HT20-MCS7	5180	-3.19	-3.25	-0.21	53.59	2.71	5.04	11.00	10.00
	5240	1.28	-0.68	3.42	53.56	2.71	7.61	11.00	10.00
	5260	0.79	-0.04	3.41	53.55	2.71	8.25	11.00	10.00
	5320	-1.58	-3.09	0.74	53.57	2.71	5.20	11.00	10.00
	5500	-3.59	-3.99	-0.78	53.60	2.71	4.30	11.00	10.00
	5700	-4.51	-5.91	-2.14	53.65	2.70	2.37	11.00	10.00
	5720	0.22	-0.76	2.77	53.59	2.71	7.53	11.00	10.00

Modulation: 802.11n – UNII 3

Data rate	Measured Frequency (MHz)	Measured Average PSD 1 (dBm/ 0.1MHz)	Measured Average PSD 2 (dBm/ 0.1MHz)	Total Chain1 + Chain2 PSD (dBm/ 0.1MHz)	Duty Cycle X %	Duty cycle correction factor (dB)	Bandwidth Correction factor (dB)	PSD (e.i.r.p) (dBm/ 0.5MHz)	FCC PSD Limit (dBm/ 0.5MHz)	IC e.i.r.p SD (dBm/ 0.5MHz)
n_mode-HT20-MCS0	5745	-4.90	-5.13	-2.00	90.10	0.45	6.99	11.02	30.00	10.00
	5825	-3.78	-3.69	-0.72	90.10	0.45	6.99	12.30	30.00	10.00
n_mode-HT20-MCS7	5745	-6.46	-7.06	-3.74	53.57	2.71	6.99	11.54	30.00	10.00
	5825	-7.19	-7.54	-4.35	53.59	2.71	6.99	10.93	30.00	10.00

Modulation: 802.11ac – UNII 1, UNII2a, UNII2c

Data rate	Measured Frequency (MHz)	Measured Average PSD 1 (dBm/ 1MHz)	Measured Average PSD 2 (dBm/ 1MHz)	Total Chain1 + Chain2 PSD	Duty Cycle X %	Duty cycle correction factor (dB)	PSD (e.i.r.p) (dBm/ 1MHz)	FCC PSD Limit (dBm/1MHz)	IC e.i.r.p SD (dBm/ 1MHz)
ac_mode-VHT20-MCS0	5180	0.28	-0.09	3.11	90.14	0.45	5.94	11.00	10.00
	5240	1.99	1.24	4.64	90.11	0.45	7.27	11.00	10.00
	5260	2.18	1.05	4.66	90.07	0.45	7.08	11.00	10.00
	5320	1.50	-0.16	3.76	90.14	0.45	5.87	11.00	10.00
	5500	-0.07	-0.82	2.58	90.15	0.45	5.21	11.00	10.00
	5700	-1.68	-3.00	0.72	90.16	0.45	3.03	11.00	10.00
	5720	1.41	0.39	3.94	90.12	0.45	6.42	11.00	10.00
ac_mode-VHT20-MCS9	5180	-2.55	-3.87	-0.15	51.06	2.92	4.63	11.00	10.00
	5240	-1.27	-1.49	1.63	51.09	2.92	7.01	11.00	10.00
	5260	-1.02	-1.92	1.56	51.10	2.92	6.58	11.00	10.00
	5320	-1.34	-3.27	0.81	51.10	2.92	5.23	11.00	10.00
	5500	-2.79	-3.77	-0.24	51.13	2.91	4.72	11.00	10.00
	5700	-4.82	-6.44	-2.54	51.17	2.91	2.05	11.00	10.00
	5720	-2.30	-2.61	0.56	51.44	2.89	5.86	11.00	10.00

Modulation: 802.11ac – UNII 3

Data rate	Measured Frequency (MHz)	Measured Average PSD 1 (dBm/ 0.1MHz)	Measured Average PSD 2 (dBm/ 0.1MHz)	Total Chain1 + Chain2 PSD (dBm/ 0.1MHz)	Duty Cycle X %	Duty cycle correction factor (dB)	Bandwidth Correction factor (dB)	PSD (e.i.r.p) (dBm/ 0.5MHz)	FCC PSD Limit (dBm/ 0.5MHz)	IC e.i.r.p SD (dBm/ 0.5MHz)
ac_mode-VHT20-MCS0	5745	-5.68	-6.03	-2.84	90.15	0.45	6.99	10.18	30.00	10.00
	5825	-2.81	-2.62	0.30	90.15	0.45	6.99	13.32	30.00	10.00
ac_mode-VHT20-MCS9	5745	-8.89	-8.66	-5.76	51.13	2.91	6.99	9.72	30.00	10.00
	5825	-8.57	-8.55	-5.55	51.13	2.91	6.99	9.93	30.00	10.00

Modulation: 802.11ax – UNII 1, UNII2a, UNII2c

Data rate	Measured Frequency (MHz)	Measured Average PSD 1 (dBm/ 1MHz)	Measured Average PSD 2 (dBm/ 1MHz)	Total Chain1 + Chain2 PSD	Duty Cycle X %	Duty cycle correction factor (dB)	PSD (e.i.r.p) (dBm/ 1MHz)	FCC PSD Limit (dBm/1MHz)	IC e.i.r.p SD (dBm/ 1MHz)
ax_mode-HE20-MCS0	5180	0.35	0.19	3.28	87.65	0.57	6.34	11.00	10.00
	5240	2.32	1.30	4.85	87.65	0.57	7.45	11.00	10.00
	5260	2.23	1.15	4.73	87.62	0.57	7.30	11.00	10.00
	5320	1.82	-0.20	3.94	87.65	0.57	5.95	11.00	10.00
	5500	0.40	0.84	3.64	87.66	0.57	6.99	11.00	10.00
	5700	-1.99	-2.44	0.80	87.67	0.57	3.71	11.00	10.00
	5720	2.18	1.05	4.66	87.63	0.57	7.20	11.00	10.00
ax_mode-HE20-MCS11	5180	-4.01	-5.08	-1.50	45.10	3.46	3.96	11.00	10.00
	5240	-5.58	-5.86	-2.71	35.09	4.55	4.27	11.00	10.00
	5260	-3.80	-5.20	-1.43	45.09	3.46	3.84	11.00	10.00
	5320	-4.06	-6.30	-2.03	45.08	3.46	2.74	11.00	10.00
	5500	-4.74	-5.40	-2.05	45.11	3.46	3.64	11.00	10.00
	5700	-5.07	-6.02	-2.51	45.15	3.45	3.01	11.00	10.00
	5720	-4.50	-6.87	-2.51	45.16	3.45	2.16	11.00	10.00

Modulation: 802.11ax – UNII 3

Data rate	Measured Frequency (MHz)	Measured Average PSD 1 (dBm/ 0.1MHz)	Measured Average PSD 2 (dBm/ 0.1MHz)	Total Chain1 + Chain2 PSD (dBm/ 0.1MHz)	Duty Cycle X %	Duty cycle correction factor (dB)	Bandwidth Correction factor (dB)	PSD (e.i.r.p) (dBm/ 0.5MHz)	FCC PSD Limit (dBm/ 0.5MHz)	IC e.i.r.p SD (dBm/ 0.5MHz)
ax_mode-HE20-MCS0	5745	-5.34	-5.96	-2.63	87.63	0.57	6.99	10.51	30.00	10.00
	5825	-4.34	-26.22	-4.31	87.63	0.57	6.99	8.83	30.00	10.00
ax_mode-HE20-MCS11	5745	-11.92	-12.96	-9.40	45.13	3.46	6.99	6.63	30.00	10.00
	5825	-12.16	-14.25	-10.07	45.15	3.45	6.99	5.95	30.00	10.00

Modulation: 802.11n – UNII 1, UNII2a, UNII2c

Data rate	Measured Frequency (MHz)	Measured Average PSD 1 (dBm/ 1MHz)	Measured Average PSD 2 (dBm/ 1MHz)	Total Chain1 + Chain2 PSD	Duty Cycle X %	Duty cycle correction factor (dB)	PSD (e.i.r.p) (dBm/ 1MHz)	FCC PSD Limit (dBm/1MHz)	IC e.i.r.p SD (dBm/ 1MHz)
n_mode-HT40-MCS0	5190	-5.63	-7.88	-3.60	81.89	0.87	-2.61	11.00	10.00
	5230	-2.39	-3.64	0.04	81.86	0.87	1.63	11.00	10.00
	5270	-0.27	-1.16	2.32	81.86	0.87	4.11	11.00	10.00
	5310	-5.30	-4.60	-1.93	81.89	0.87	0.67	11.00	10.00
	5510	-6.85	-8.23	-4.48	81.91	0.87	-2.96	11.00	10.00
	5590	-0.52	-0.91	2.30	81.87	0.87	4.36	11.00	10.00
	5670	-4.65	-6.01	-2.27	81.88	0.87	-0.74	11.00	10.00
	5710	-0.03	-1.19	2.44	81.87	0.87	4.08	11.00	10.00
n_mode-HT40-MCS7	5190	-8.58	-10.59	-6.46	40.88	3.88	-2.31	11.00	10.00
	5230	-4.37	-5.56	-1.91	40.81	3.89	2.73	11.00	10.00
	5270	-4.81	-6.03	-2.37	40.85	3.89	2.26	11.00	10.00
	5310	-6.81	-7.54	-4.15	40.87	3.89	0.75	11.00	10.00
	5510	-10.13	-10.26	-7.18	40.97	3.88	-1.98	11.00	10.00
	5590	-6.57	-5.85	-3.18	40.93	3.88	2.43	11.00	10.00
	5670	-7.33	-8.48	-4.86	40.95	3.88	-0.20	11.00	10.00
	5710	-5.76	-6.12	-2.93	40.92	3.88	2.16	11.00	10.00

Modulation: 802.11n – UNII 3

Data rate	Measured Frequency (MHz)	Measured Average PSD 1 (dBm/ 0.1MHz)	Measured Average PSD 2 (dBm/ 0.1MHz)	Total Chain1 + Chain2 PSD (dBm/ 0.1MHz)	Duty Cycle X %	Duty cycle correction factor (dB)	Bandwidth Correction factor (dB)	PSD (e.i.r.p) (dBm/ 0.5MHz)	FCC PSD Limit (dBm/ 0.5MHz)	IC e.i.r.p SD (dBm/ 0.5MHz)
n_mode-HT40-MCS0	5755	-12.53	-12.33	-9.42	81.90	0.87	6.99	2.84	30.00	10.00
	5795	-10.23	-10.76	-7.48	81.90	0.87	6.99	4.78	30.00	10.00
n_mode-HT40-MCS7	5755	-12.22	-12.17	-9.18	40.92	3.88	6.99	6.09	30.00	10.00
	5795	-12.60	-12.02	-9.29	40.94	3.88	6.99	5.98	30.00	10.00

Modulation: 802.11ac – UNII 1, UNII2a, UNII2c

Data rate	Measured Frequency (MHz)	Measured Average PSD 1 (dBm/ 1MHz)	Measured Average PSD 2 (dBm/ 1MHz)	Total Chain1 + Chain2 PSD	Duty Cycle X %	Duty cycle correction factor (dB)	PSD (e.i.r.p) (dBm/ 1MHz)	FCC PSD Limit (dBm/1MHz)	IC e.i.r.p SD (dBm/ 1MHz)
ac_mode-VHT40-MCS0	5190	-5.92	-7.49	-3.62	81.98	0.86	-2.23	11.00	10.00
	5230	-1.77	-3.05	0.65	81.94	0.86	2.21	11.00	10.00
	5270	-2.33	-3.08	0.32	81.97	0.86	2.18	11.00	10.00
	5310	-3.69	-4.63	-1.12	81.92	0.87	0.64	11.00	10.00
	5510	-6.88	-7.97	-4.38	81.98	0.86	-2.71	11.00	10.00
	5590	-1.38	-1.38	1.63	81.95	0.86	3.88	11.00	10.00
	5670	-5.66	-5.99	-2.81	81.97	0.86	-0.73	11.00	10.00
	5710	-1.08	-2.04	1.48	81.96	0.86	3.22	11.00	10.00
ac_mode-VHT40-MCS9	5190	-8.88	-10.61	-6.65	37.89	4.21	-2.00	11.00	10.00
	5230	-5.32	-6.00	-2.64	37.86	4.22	2.62	11.00	10.00
	5270	-6.43	-6.73	-3.57	37.85	4.22	1.89	11.00	10.00
	5310	-6.35	-7.16	-3.73	37.82	4.22	1.46	11.00	10.00
	5510	-10.17	-10.59	-7.36	37.96	4.21	-1.98	11.00	10.00
	5590	-7.20	-7.59	-4.38	37.88	4.22	1.03	11.00	10.00
	5670	-7.41	-8.83	-5.05	37.90	4.21	-0.22	11.00	10.00
	5710	-6.84	-7.44	-4.12	37.94	4.21	1.17	11.00	10.00

Modulation: 802.11ac – UNII 3

Data rate	Measured Frequency (MHz)	Measured Average PSD 1 (dBm/ 0.1MHz)	Measured Average PSD 2 (dBm/ 0.1MHz)	Total Chain1 + Chain2 PSD (dBm/ 0.1MHz)	Duty Cycle X %	Duty cycle correction factor (dB)	Bandwidth Correction factor (dB)	PSD (e.i.r.p) (dBm/ 0.5MHz)	FCC PSD Limit (dBm/ 0.5MHz)	IC e.i.r.p SD (dBm/ 0.5MHz)
ac_mode-VHT40-MCS0	5755	-10.85	-11.40	-8.11	81.97	0.86	6.99	4.15	30.00	10.00
	5795	-11.04	-11.40	-8.21	74.93	1.25	6.99	4.44	30.00	10.00
ac_mode-VHT40-MCS9	5755	-13.10	-13.19	-10.13	37.87	4.22	6.99	5.47	30.00	10.00
	5795	-14.16	-12.58	-10.29	37.88	4.22	6.99	5.32	30.00	10.00

Modulation: 802.11ax – UNII 1, UNII2a, UNII2c

Data rate	Measured Frequency (MHz)	Measured Average PSD 1 (dBm/ 1MHz)	Measured Average PSD 2 (dBm/ 1MHz)	Total Chain1 + Chain2 PSD	Duty Cycle X %	Duty cycle correction factor (dB)	PSD (e.i.r.p) (dBm/ 1MHz)	FCC PSD Limit (dBm/1MHz)	IC e.i.r.p SD (dBm/ 1MHz)
ax_mode-HE40-MCS0	5190	-5.98	-7.78	-3.78	78.92	1.03	-2.35	11.00	10.00
	5230	-2.00	-2.60	0.72	78.87	1.03	2.83	11.00	10.00
	5270	-0.48	-1.12	2.22	78.90	1.03	4.31	11.00	10.00
	5310	-5.14	-5.51	-2.31	78.91	1.03	-0.08	11.00	10.00
	5510	-7.38	-7.93	-4.64	78.93	1.03	-2.50	11.00	10.00
	5590	-0.63	-1.04	2.18	78.89	1.03	4.39	11.00	10.00
	5670	-4.62	-5.88	-2.19	78.92	1.03	-0.45	11.00	10.00
	5710	-0.27	-1.20	2.30	78.89	1.03	4.23	11.00	10.00
ax_mode-HE40-MCS11	5190	-8.74	-10.35	-6.46	37.87	4.22	-1.73	11.00	10.00
	5230	-8.94	-9.89	-6.38	37.86	4.22	-1.27	11.00	10.00
	5270	-8.54	-10.79	-6.51	37.88	4.22	-2.17	11.00	10.00
	5310	-9.66	-10.83	-7.20	37.86	4.22	-2.21	11.00	10.00
	5510	-10.41	-10.83	-7.60	37.92	4.21	-2.22	11.00	10.00
	5590	-10.62	-10.80	-7.70	37.93	4.21	-2.19	11.00	10.00
	5670	-10.80	-11.70	-8.22	37.92	4.21	-3.09	11.00	10.00
	5710	-11.19	-11.29	-8.23	37.96	4.21	-2.68	11.00	10.00

Modulation: 802.11ax – UNII 3

Data rate	**Measured Frequency (MHz)**	**Measured Average PSD 1 (dBm/ 0.1MHz)**	**Measured Average PSD 2 (dBm/ 0.1MHz)**	**Total Chain1 + Chain2 PSD (dBm/ 0.1MHz)**	**Duty Cycle X %**	**Duty cycle correction factor (dB)**	**Bandwidth Correction factor (dB)**	**PSD (e.i.r.p) (dBm/ 0.5MHz)**	**FCC PSD Limit (dBm/ 0.5MHz)**	**IC e.i.r.p SD (dBm/ 0.5MHz)**
ax_mode-HE40-MCS0	5755	-13.27	-13.11	-10.18	78.91	1.03	6.99	2.24	30.00	10.00
	5795	-13.16	-13.75	-10.43	78.91	1.03	6.99	1.98	30.00	10.00
ax_mode-HE40-MCS11	5755	-16.76	-17.62	-14.16	40.92	3.88	6.99	1.11	30.00	10.00
	5795	-17.07	-16.65	-13.84	40.94	3.88	6.99	1.42	30.00	10.00

Modulation: 802.11ac – UNII 1, UNII2a, UNII2c

Data rate	Measured Frequency (MHz)	Measured Average PSD 1 (dBm/ 1MHz)	Measured Average PSD 2 (dBm/ 1MHz)	Total Chain1 + Chain2 PSD	Duty Cycle X %	Duty cycle correction factor (dB)	PSD (e.i.r.p) (dBm/ 1MHz)	FCC PSD Limit (dBm/1MHz)	IC e.i.r.p SD (dBm/ 1MHz)
ac_mode-VHT80-MCS0	5210	-6.46	-7.73	-4.04	69.24	1.60	-1.73	11.00	10.00
	5290	-6.86	-7.26	-4.05	69.32	1.59	-1.27	11.00	10.00
	5530	-9.5	-10.72	-7.06	69.33	1.59	-4.73	11.00	10.00
	5690	-4.64	-5.65	-2.11	69.33	1.59	0.34	11.00	10.00
ac_mode-VHT80-MCS9	5210	-10.01	-11.15	-7.53	30.77	5.12	-1.63	11.00	10.00
	5290	-11.29	-12.07	-8.65	30.81	5.11	-2.56	11.00	10.00
	5530	-11.64	-12.96	-9.24	30.78	5.12	-3.44	11.00	10.00
	5690	-10.76	-12.43	-8.50	30.86	5.11	-2.92	11.00	10.00

Modulation: 802.11ac – UNII 3

Data rate	Measured Frequency (MHz)	Measured Average PSD 1 (dBm/ 0.1MHz)	Measured Average PSD 2 (dBm/ 0.1MHz)	Total Chain1 + Chain2 PSD (dBm/ 0.1MHz)	Duty Cycle X %	Duty cycle correction factor (dB)	Bandwidth Correction factor (dB)	PSD (e.i.r.p) (dBm/ 0.5MHz)	FCC PSD Limit (dBm/ 0.5MHz)	IC e.i.r.p SD (dBm/ 0.5MHz)
ac_mode-VHT40-MCS0	5775	-12.66	-13.34	-9.98	69.30	1.59	6.99	3.01	30.00	10.00
ac_mode-VHT40-MCS9	5775	-16.99	-18.53	-14.68	30.83	5.11	6.99	1.82	30.00	10.00

Modulation: 802.11ax – UNII 1, UNII2a, UNII2c

Data rate	Measured Frequency (MHz)	Measured Average PSD 1 (dBm/ 1MHz)	Measured Average PSD 2 (dBm/ 1MHz)	Total Chain1 + Chain2 PSD	Duty Cycle X %	Duty cycle correction factor (dB)	PSD (e.i.r.p) (dBm/ 1MHz)	FCC PSD Limit (dBm/1MHz)	IC e.i.r.p SD (dBm/ 1MHz)
ax_mode-HE40-MCS0	5210	-8.36	-9.78	-6.00	66.73	1.76	-3.62	11.00	10.00
	5290	-8.9	-9.93	-6.37	66.80	1.75	-3.78	11.00	10.00
	5530	-9.14	-10.28	-6.66	66.77	1.75	-4.13	11.00	10.00
	5690	-3.85	-5.04	-1.39	66.82	1.75	1.11	11.00	10.00
ax_mode-HE40-MCS11	5210	-6.5	-8.08	-4.21	66.75	1.76	-1.92	11.00	10.00
	5290	-6.2	-6.98	-3.56	66.77	1.75	-0.83	11.00	10.00
	5530	-8.3	-9.94	-6.03	66.79	1.75	-3.79	11.00	10.00
	5690	-4.64	-5.35	-1.97	66.82	1.75	0.80	11.00	10.00

Modulation: 802.11ax – UNII 3

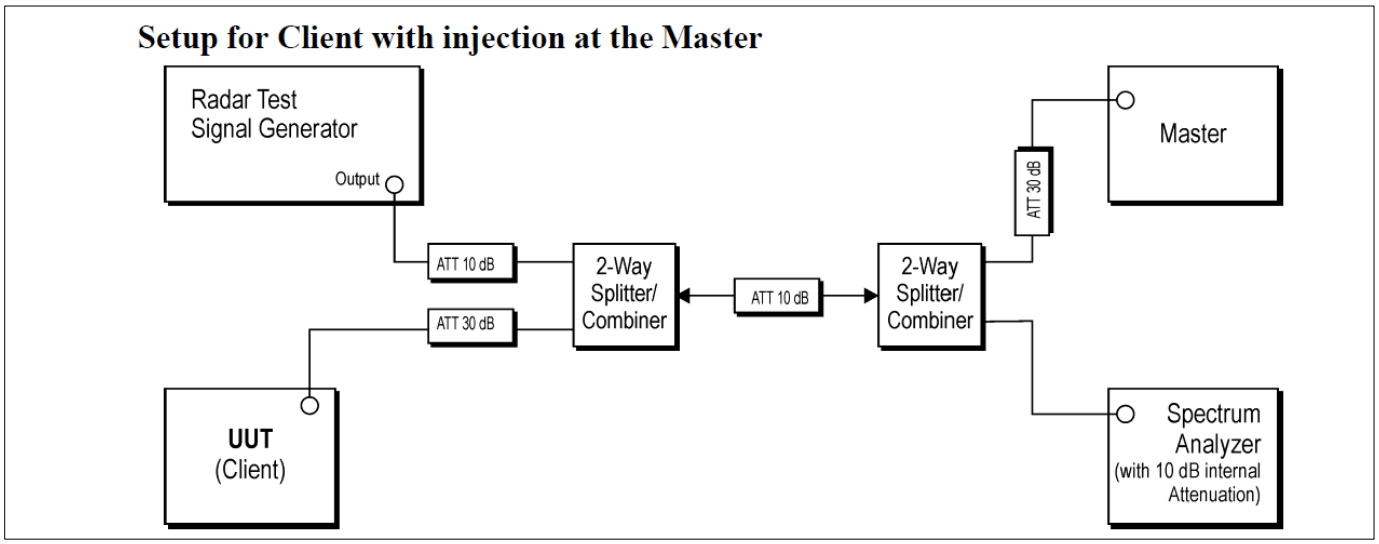
Data rate	Measured Frequency (MHz)	Measured Average PSD 1 (dBm/ 0.1MHz)	Measured Average PSD 2 (dBm/ 0.1MHz)	Total Chain1 + Chain2 PSD (dBm/ 0.1MHz)	Duty Cycle X %	Duty cycle correction factor (dB)	Bandwidth Correction factor (dB)	PSD (e.i.r.p) (dBm/ 0.5MHz)	FCC PSD Limit (dBm/ 0.5MHz)	IC e.i.r.p SD (dBm/ 0.5MHz)
ax_mode-HE40-MCS0	5775	-13.17	-13.41	-10.28	66.76	1.75	6.99	2.87	30.00	10.00
ax_mode-HE40-MCS11	5775	-21.37	-21.96	-18.64	35.34	4.52	6.99	-2.74	30.00	10.00

7.4 Dynamic Frequency Selection (DFS)

Result ***Pass***

Test Specification	15.407 (h) / RSS 247 Issue 2 Section 6.3
Test Method	FCC KDB Publication 905462 D02 & 905462 D03
Port of testing	Conducted method
UUT Type	Client without radar detection capabilities
Requirement	1. Transmit power control (TPC). U-NII devices operating in the 5.25-5.35 GHz band and the 5.47-5.725 GHz band shall employ a TPC mechanism. The U-NII device is required to have the capability to operate at least 6 dB below the mean EIRP value of 30 dBm. A TPC mechanism is not required for systems with an e.i.r.p. of less than 500 mW 2. Radar Detection Function of Dynamic Frequency Selection (DFS). U-NII devices operating with any part of its 26 dB emission bandwidth in the 5.25-5.35 GHz and 5.47-5.725 GHz bands shall employ a DFS radar detection mechanism to detect the presence of radar systems and to avoid co-channel operation with radar systems. Operators shall only use equipment with a DFS mechanism that is turned on when operating in these bands

Test Setup :



Note: FCC Certified Access Point is used for testing with FCC ID: **MSQ-RTAXHP00**

Limits :

Applicability of DFS Requirements Prior to Use of a Channel

Requirement	**Operational Mode**		
	Master	**Client Without Radar Detection**	**Client With Radar Detection**
Non-Occupancy Period	Yes	Not required	Yes
DFS Detection Threshold	Yes	Not required	Yes
Channel Availability Check Time	Yes	Not required	Not required
U-NII Detection Bandwidth	Yes	Not required	Yes

Applicability of DFS requirements during normal operation

Requirement	**Operational Mode**	
	Master Device or Client with Radar Detection	**Client Without Radar Detection**
DFS Detection Threshold	Yes	Not required
Channel Closing Transmission Time	Yes	Yes
Channel Move Time	Yes	Yes
U-NII Detection Bandwidth	Yes	Not required

The operational behavior and individual DFS requirements that are associated with these modes are as follows: as per KDB 905462 D02 UNII DFS Compliance Procedures New Rules v02

Client Devices

a) A *Client Device* will not transmit before having received appropriate control signals from a *Master Device*.

b) A *Client Device* will stop all its transmissions whenever instructed by a *Master Device* to which it is associated and will meet the *Channel Move Time* and *Channel Closing Transmission Time* requirements. The *Client Device* will not resume any transmissions until it has again received control signals from a *Master Device*.

c) If a *Client Device* is performing *In-Service Monitoring* and detects a *Radar Waveform* above the *DFS Detection Threshold*, it will inform the *Master Device*. This is equivalent to the *Master Device* detecting the *Radar Waveform* and d) through f) of section 5.1.1 apply.

d) Irrespective of *Client Device* or *Master Device* detection the *Channel Move Time* and *Channel Closing Transmission Time* requirements remain the same.

e) The client test frequency must be monitored to ensure no transmission of any type has occurred for 30 minutes. Note: If the client moves with the master, the device is considered compliant if nothing appears in the client non-occupancy period test. For devices that shut down (rather than moving channels), no beacons should appear.

DFS Detection Thresholds

below provides the *DFS Detection Thresholds* for *Master Devices* as well as *Client Devices* incorporating *In-Service Monitoring*.

DFS Detection Thresholds for Master Devices and Client Devices with Radar Detection

Maximum Transmit Power	**Value (See Notes 1, 2, and 3)**
EIRP ≥ 200 milliwatt	-64 dBm
EIRP < 200 milliwatt and power spectral density < 10 dBm/MHz	-62 dBm
EIRP < 200 milliwatt that do not meet the power spectral density requirement	-64 dBm
Note 1: This is the level at the input of the receiver assuming a 0 dBi receive antenna. **Note 2:** Throughout these test procedures an additional 1 dB has been added to the amplitude of the test transmission waveforms to account for variations in measurement equipment. This will ensure that the test signal is at or above the detection threshold level to trigger a DFS response. **Note3:** EIRP is based on the highest antenna gain. For MIMO devices refer to KDB Publication 662911 D01.	

Response Requirements

provides the response requirements for *Master* and *Client Devices* incorporating DFS.

DFS Response Requirement Values

Parameter	**Value**
Non-occupancy period	Minimum 30 minutes
Channel Availability Check Time	60 seconds
Channel Move Time	10 seconds See Note 1.
Channel Closing Transmission Time	200 milliseconds + an aggregate of 60 milliseconds over remaining 10 second period. See Notes 1 and 2.
U-NII Detection Bandwidth	Minimum 100% of the U-NII 99% transmission power bandwidth. See Note 3.
Note 1: *Channel Move Time* and the *Channel Closing Transmission Time* should be performed with Radar Type 0. The measurement timing begins at the end of the Radar Type 0 burst. **Note 2:** The *Channel Closing Transmission Time* is comprised of 200 milliseconds starting at the beginning of the *Channel Move Time* plus any additional intermittent control signals required to facilitate a *Channel* move (an aggregate of 60 milliseconds) during the remainder of the 10 second period. The aggregate duration of control signals will not count quiet periods in between transmissions. **Note 3:** During the *U-NII Detection Bandwidth* detection test, radar type 0 should be used. For each frequency step the minimum percentage of detection is 90 percent. Measurements are performed with no data traffic.	

Note :

1. This UUT is classified as Client device without radar detection capabilites, hence only *Channel Move Time* and *Channel Closing Transmission Time* are applicable
2. *Channel Move Time* and *Channel Closing Transmission Time* is performed with Radar Type 0
3. *U-NII Detection Bandwidth* is not applicable for this device

Test Condition:

Normal Test Condition:

Temperature (Norm) = + 25 °C Voltage = 5.0 V DC Relative humidity: 62 %

KDB Guidelines applied:

Measurements were made following the guidelines of *905462 D02 UNII DFS Compliance Procedures New Rules v02 & 905462 D03 Client Without DFS New Rules v01r02*

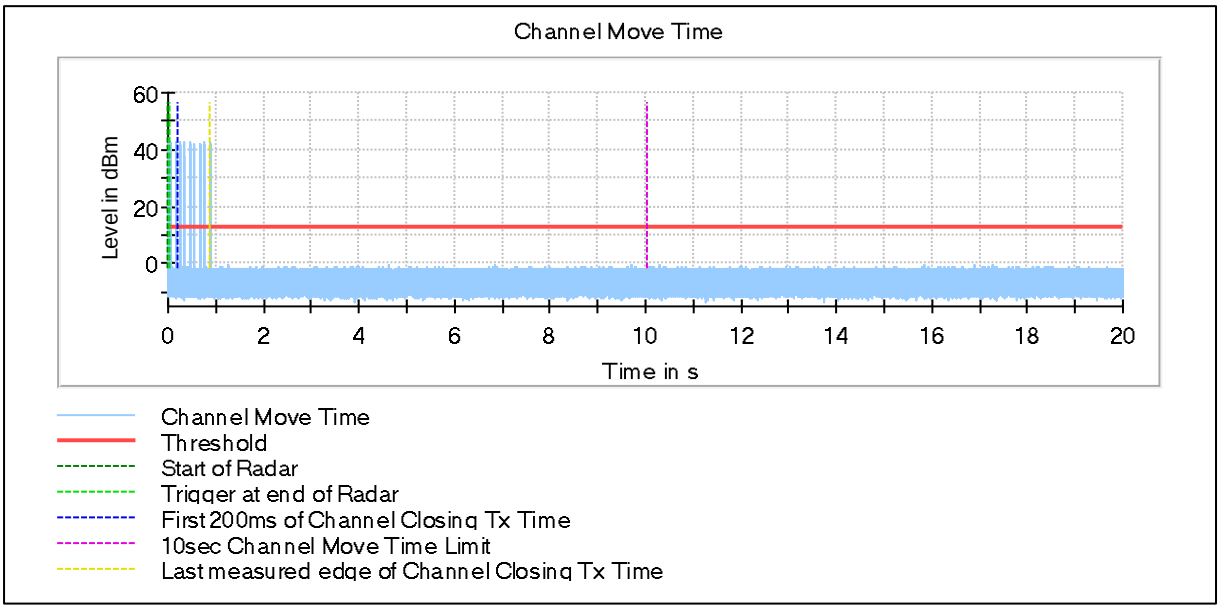
Note: The DFS testing is performed in ax mode configuration.

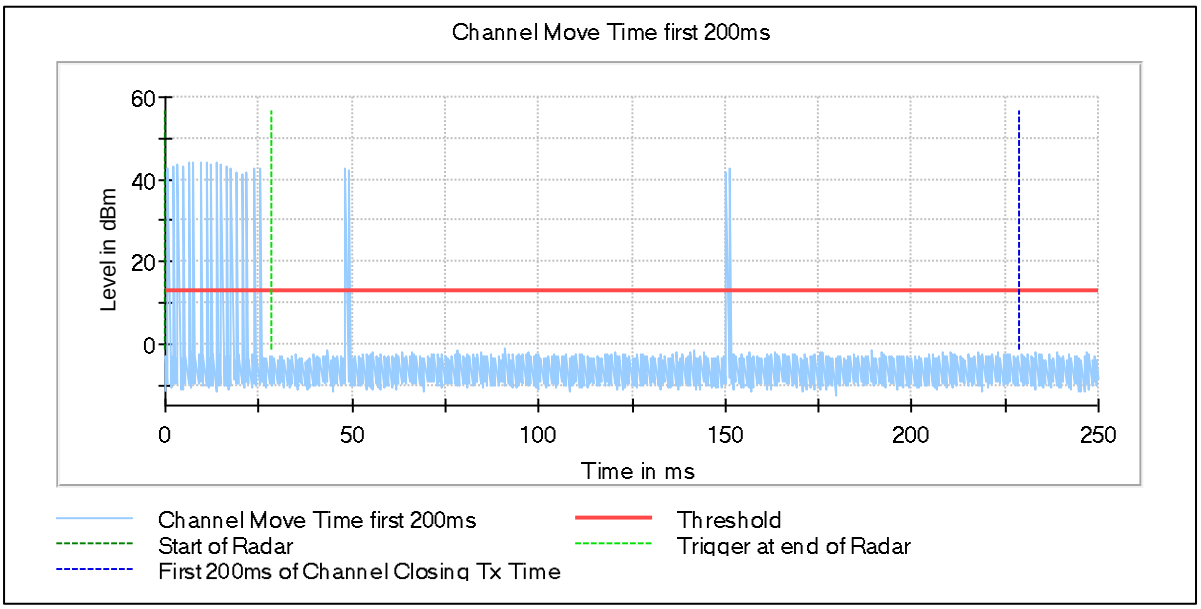
Test results:

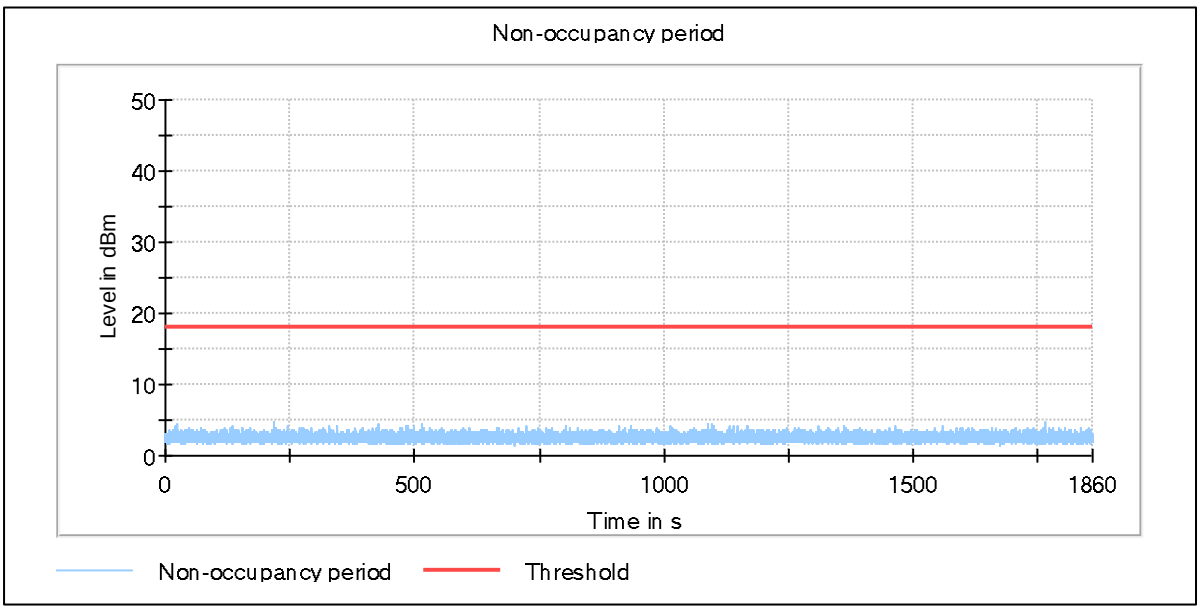
DFS In-Service Monitoring

UNII band : UNII 2a
Channel Bandwidth : 20MHz

Operating Frequency (MHz)	Test	Measured Value	Limit
5320	Channel move Time	0.839 sec	10 sec
	Channel Closing Transmission Time	1.640 ms + 4.148 ms	200 milliseconds + an aggregate of 60 milliseconds over remaining 10 second period
	Non Occupancy Time	0	Min 30 minutes

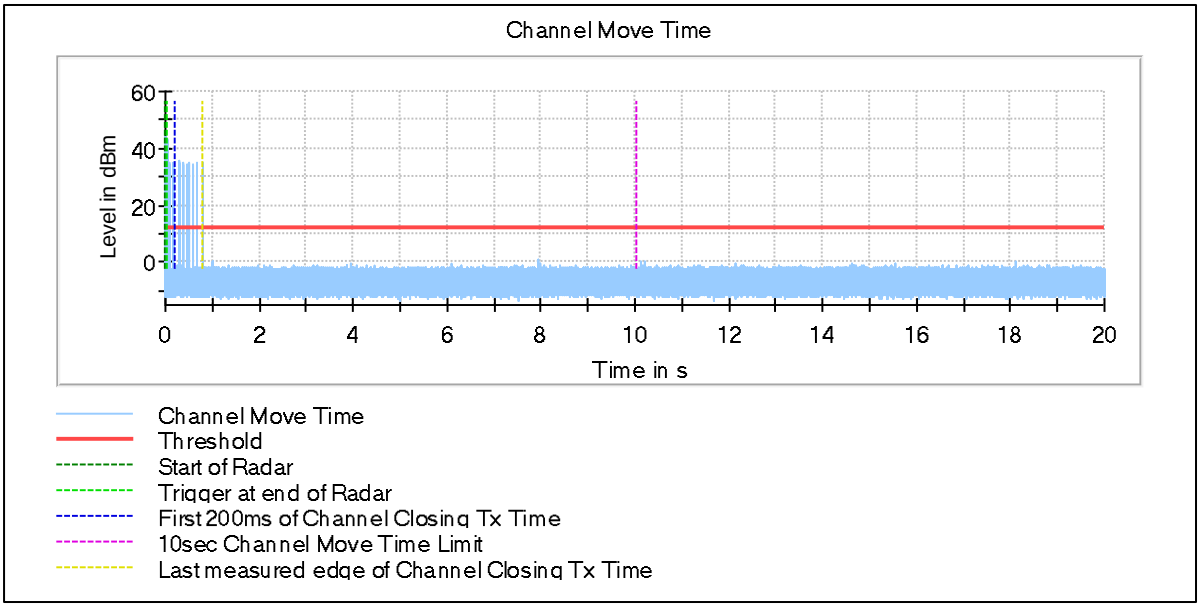


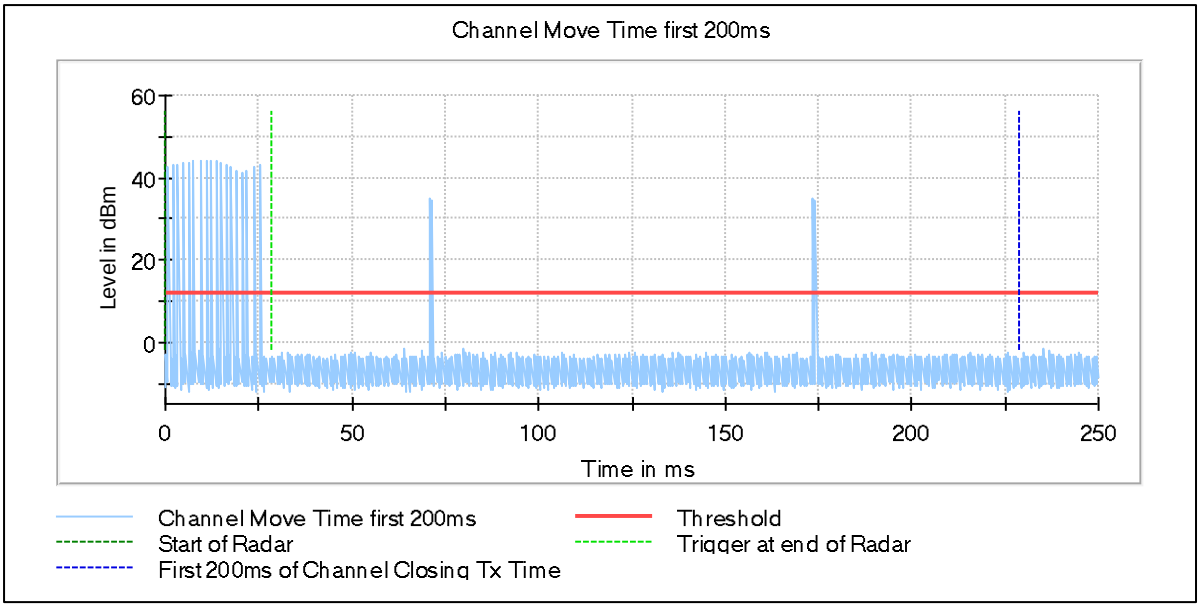

Channel Move Time first 200ms
Level in dBm
60
40
20
0
0
50
100
150
200
250
Time in ms
Channel Move Time first 200ms
Start of Radar
First 200ms of Channel Closing Tx Time
Threshold
Trigger at end of Radar

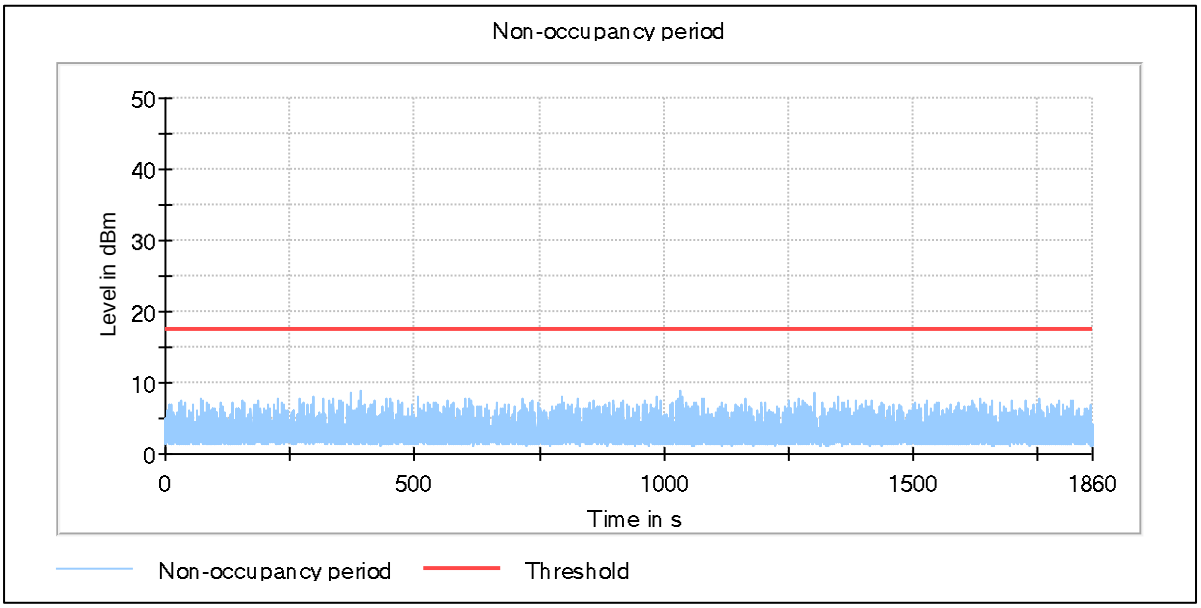

Non-occupancy period
Level in dBm
50
40
30
20
10
0
0
500
1000
1500
1860
Time in s
Non-occupancy period
Threshold

UNII band : UNII 2a
Channel Bandwidth : 40MHz

Operating Frequency (MHz)	Test	Measured Value	Limit
5310	Channel move Time	0.760 sec	10 sec
	Channel Closing Transmission Time	1.168 ms + 3.808 ms	200 milliseconds + an aggregate of 60 milliseconds over remaining 10 second period
	Non Occupancy Time	0	Min 30 minutes

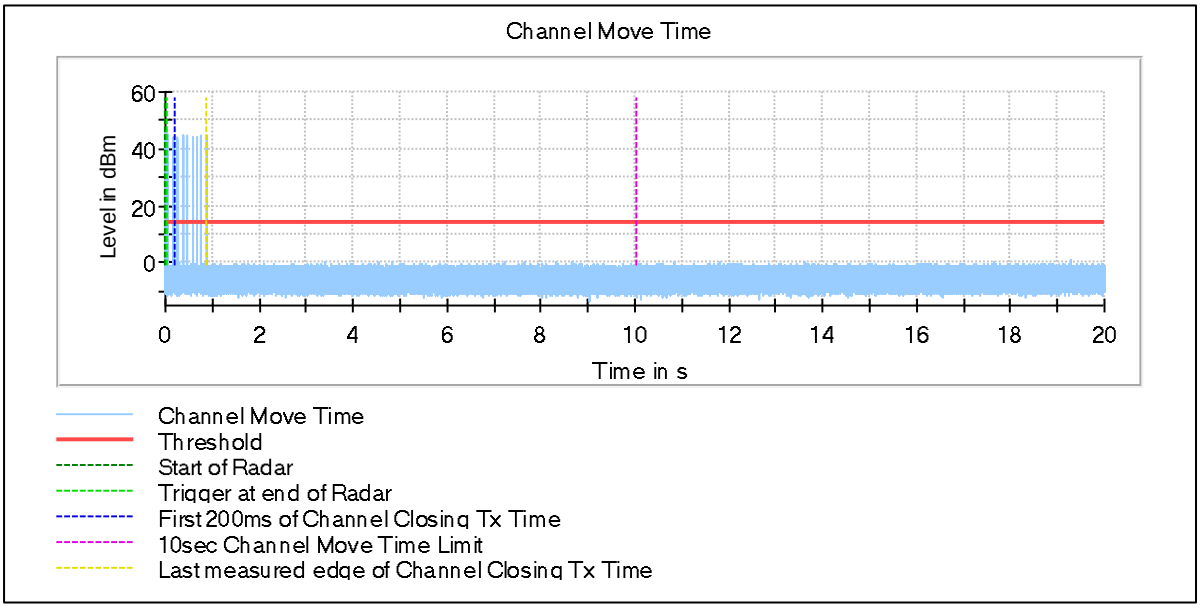


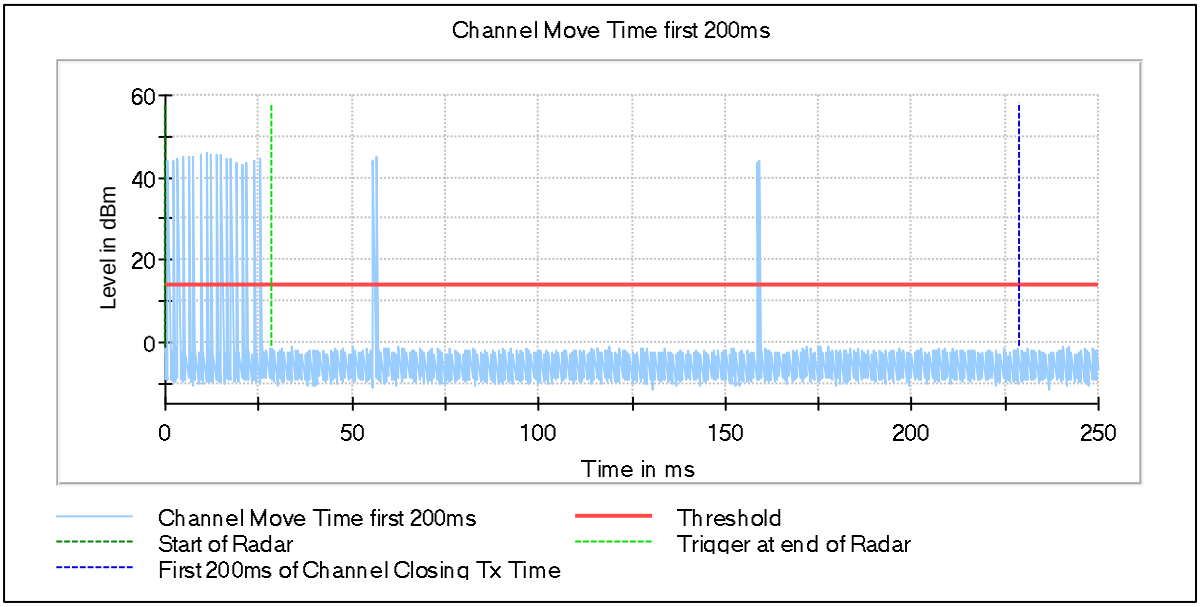


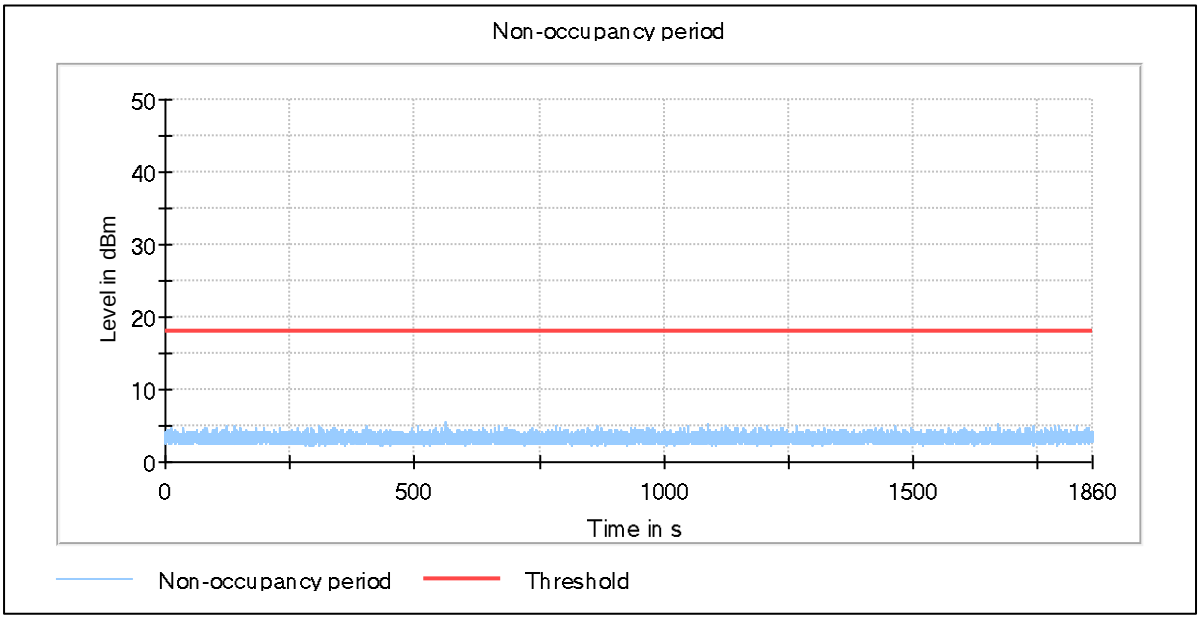


UNII band : UNII 2c
Channel Bandwidth : 20MHz

Operating Frequency (MHz)	Test	Measured Value	Limit
5500	Channel move Time	0.847 sec	10 sec
	Channel Closing Transmission Time	1.128 ms + 4.036 ms	200 milliseconds + an aggregate of 60 milliseconds over remaining 10 second period
	Non Occupancy Time	0	Min 30 minutes

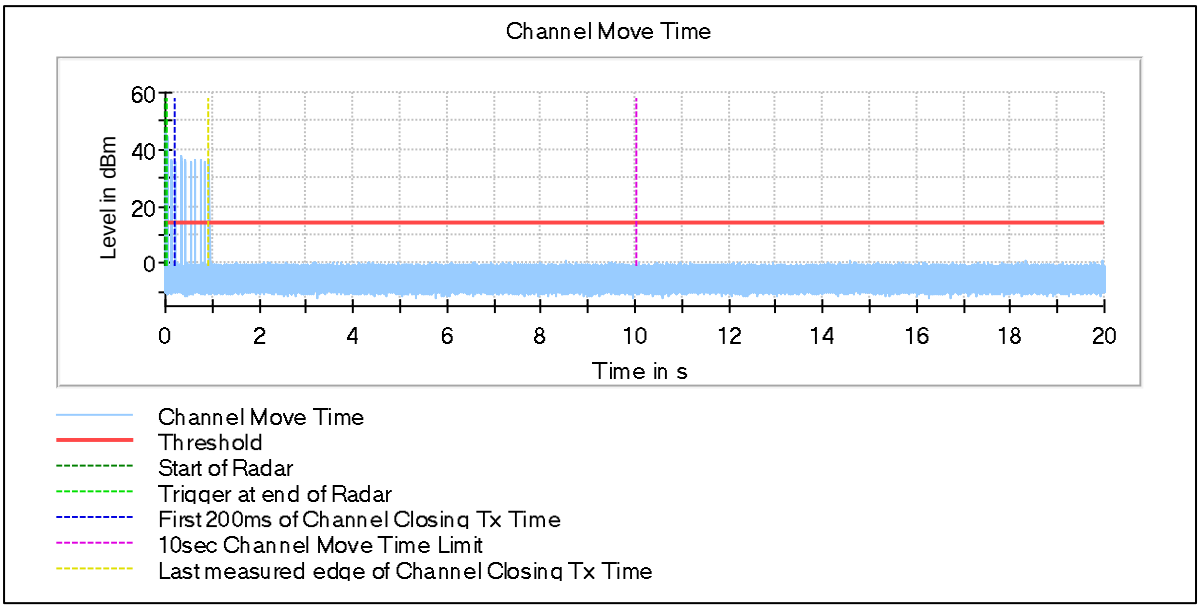


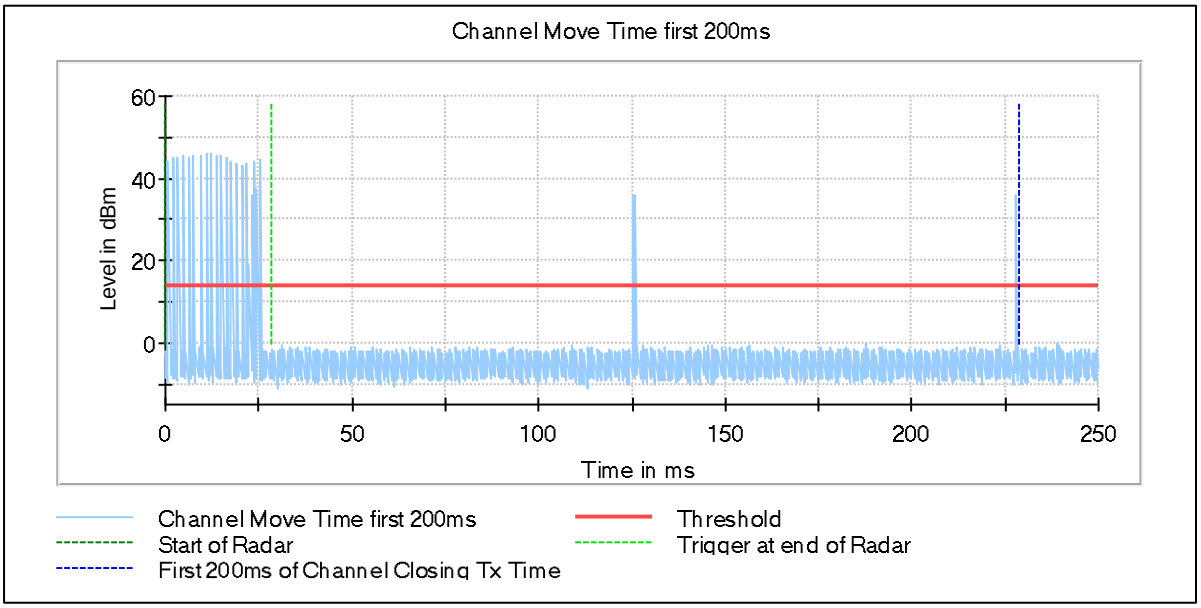

Channel Move Time first 200ms
Level in dBm
60
40
20
0
0
50
100
150
200
250
Time in ms
Channel Move Time first 200ms
Start of Radar
First 200ms of Channel Closing Tx Time
Threshold
Trigger at end of Radar

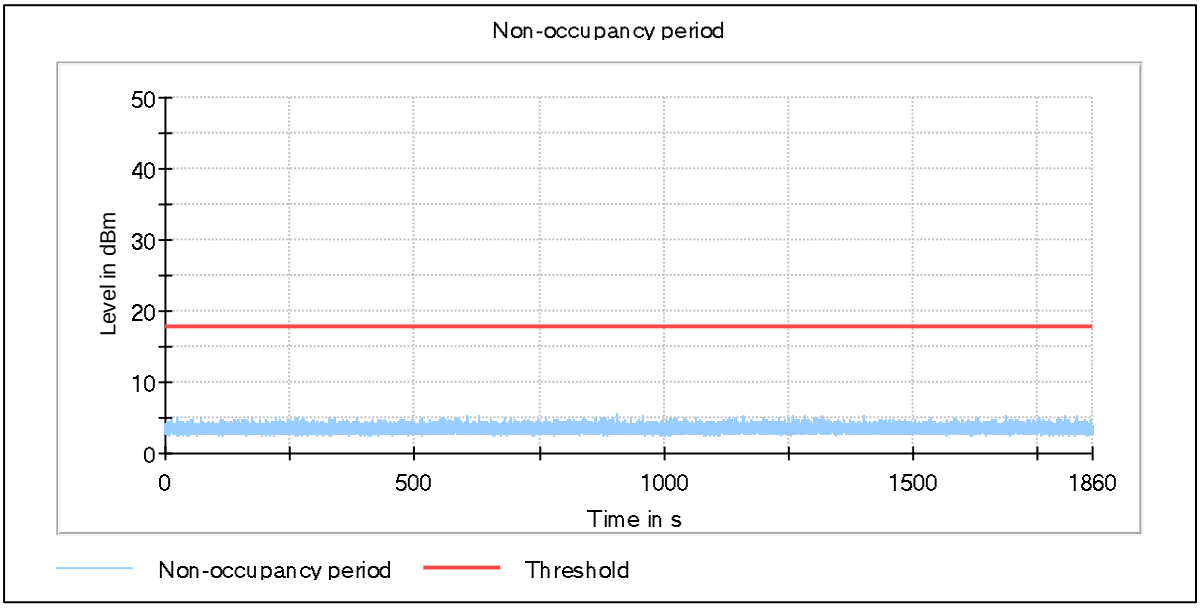

Non-occupancy period
Level in dBm
50
40
30
20
10
0
0
500
1000
1500
1860
Time in s
Non-occupancy period
Threshold

UNII band : UNII 2c
Channel Bandwidth : 40MHz

Operating Frequency (MHz)	Test	Measured Value	Limit
5510	Channel move Time	0.917 s	10 sec
	Channel Closing Transmission Time	1.136 ms + 4.140 ms	200 milliseconds + an aggregate of 60 milliseconds over remaining 10 second period
	Non Occupancy Time	0	Min 30 minutes






Non-occupancy period
Level in dBm
50
40
30
20
10
0
0
500
1000
1500
1860
Time in s
Non-occupancy period
Threshold

7.5 Spurious Radiated Emissions & Restricted Bands of Operation

Result ***Pass***

Test Specification	FCC part 15 Subpart C & E Section 15.407 (b) (15.205 & 15.209) / RSS 247 Issue 2 Section 6.2.1; 6.2.2; 6.2.3; 6.2.4 / RSS Gen Issue 5 Section 8.9 & 8.10
Test Method	ANSI C 63.10 – 2013
Measurement Bandwidth	100kHz for below 1GHz 1MHz for above 1GHz
Measurement Location	Semi Anechoic Chamber 30MHz - 1 GHz Fully Anechoic Chamber 1 GHz - 40GHz
Measuring Distance	3 m
Detector	Refer Remark
Requirement	As per the limits mentioned in the below table
Test setup	Refer TEST METHODOLOGY

Limit:

Table 6: Undesirable emission limits

Frequency Band	Limit
5.15-5.25 GHz	e.i.r.p. -27dBm [68.2 dBuV/3m]
5.25-5.35 GHz	e.i.r.p. -27dBm [68.2 dBuV/3m]
5.47-5.725 GHz	e.i.r.p. -27dBm [68.2 dBuV/3m]
5.725-5.85 GHz	5.715 GHz to 5.725 GHz - e.i.r.p. -17dBm [78.2 dBuV/3m] 5.85 GHz to 5.86 GHz - e.i.r.p. -17dBm [78.2 dBuV/3m] other frequency range - e.i.r.p. -27dBm [68.2 dBuV/3m]

Table 7: Transmitter limits for Radiated emission

Frequency (MHz)	Field strength (µV/m)	Field strength (dBµV/m)	Distance of Measurement (m)
0.009 – 0.490	2400/F(kHz)	48.50 – 13.80	300*
0.490 – 1.705	24000/F(kHz)	33.80 – 23.00	30*
1.705 -30	30	29.54	30*
30-88	100	40.0	3
88-216	150	43.5	3
216-960	200	46.0	3
Above 960	500	54.0	3

Remark: * The limit shows in the table above of frequency range 0.009 – 0.490, 0.490 – 1.705 MHz and 1.705-30MHz is at 300 meter, 30 meter and 30 meter range respectively, which corresponds to 128.51 – 93.80, 73.80 – 62.96 and 69.54 dBµV/m at 3m range by extrapolation calculation and the measurement of loop antenna.

The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9–90 kHz, 110–490 kHz and above 1000 MHz Radiated emission limits in these three bands are based on measurements employing an average detector.

Test Condition:

Normal Test Condition:

Temperature (Norm) = + 25 °C Voltage = 5.0 V DC Relative humidity: 62 %

Note: Refer Attached Appendix for test Plots

Test results:

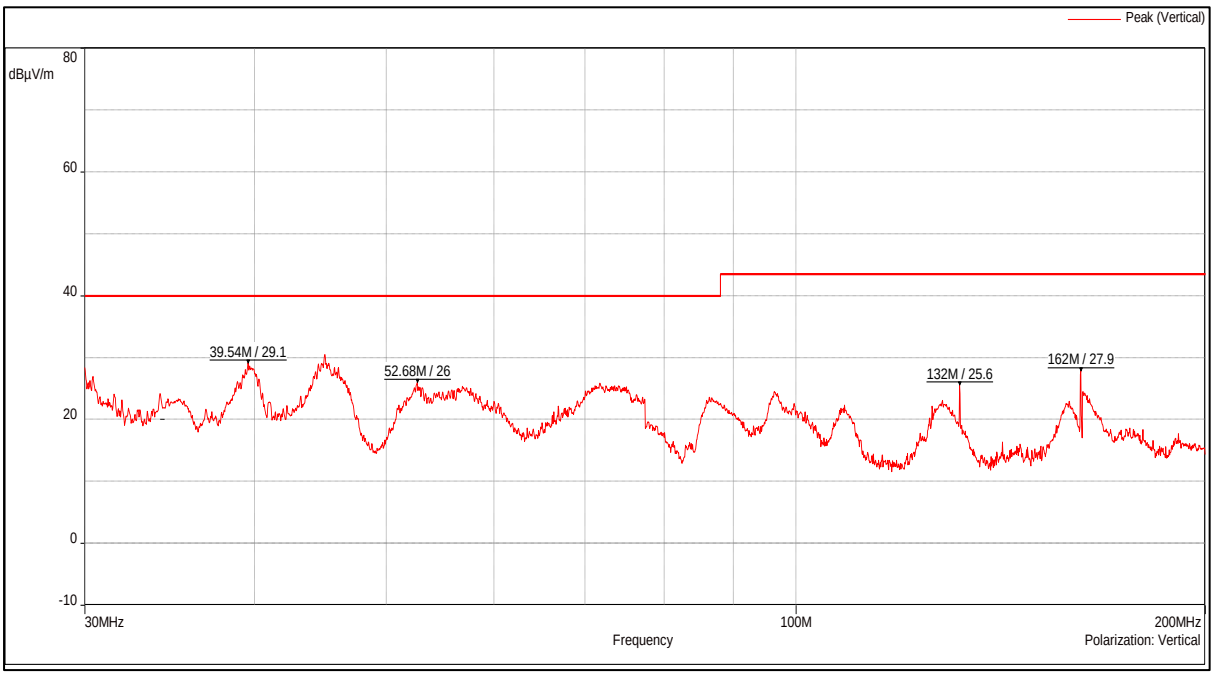
Note: All the losses are included during measurement and final values are mentioned in the test report. Refer TEST METHODOLOGYfor more details

Test results for Frequency range : 9kHz – 30MHz

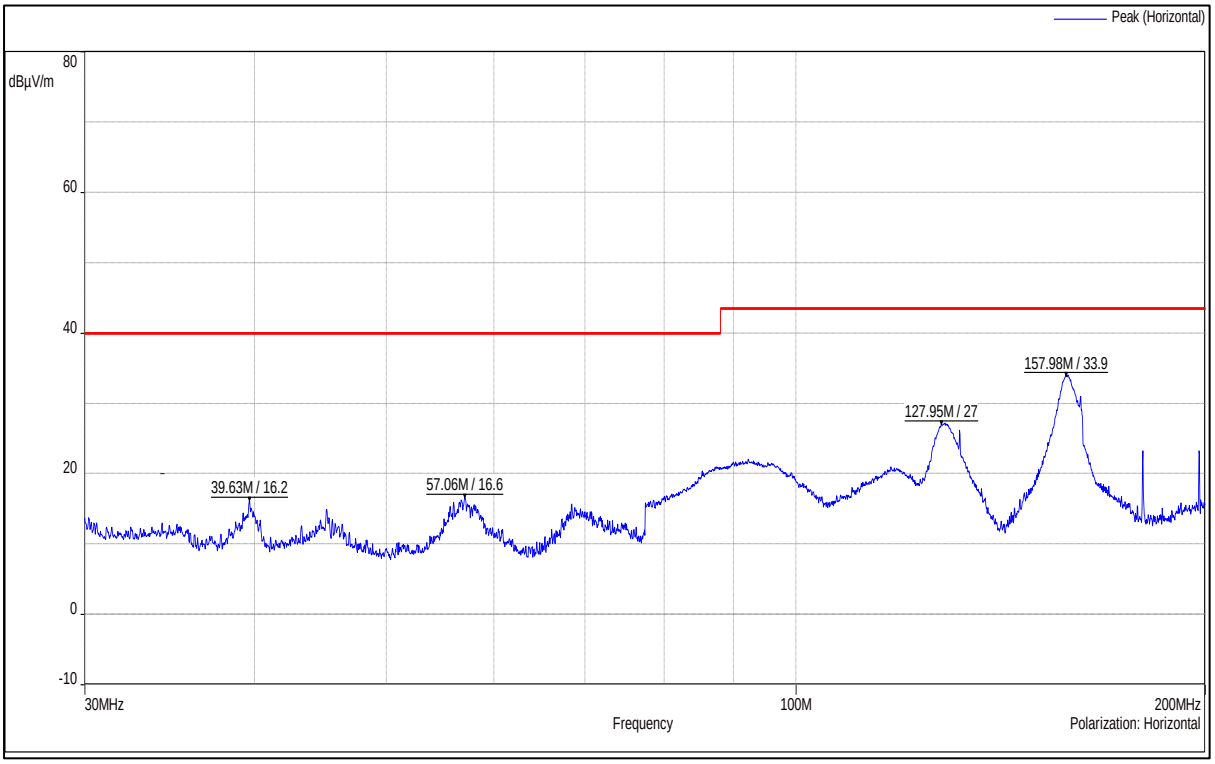
No Emissions found in the frequency range 9kHz – 30MHz

Test results for frequency range 30MHz – 1GHz

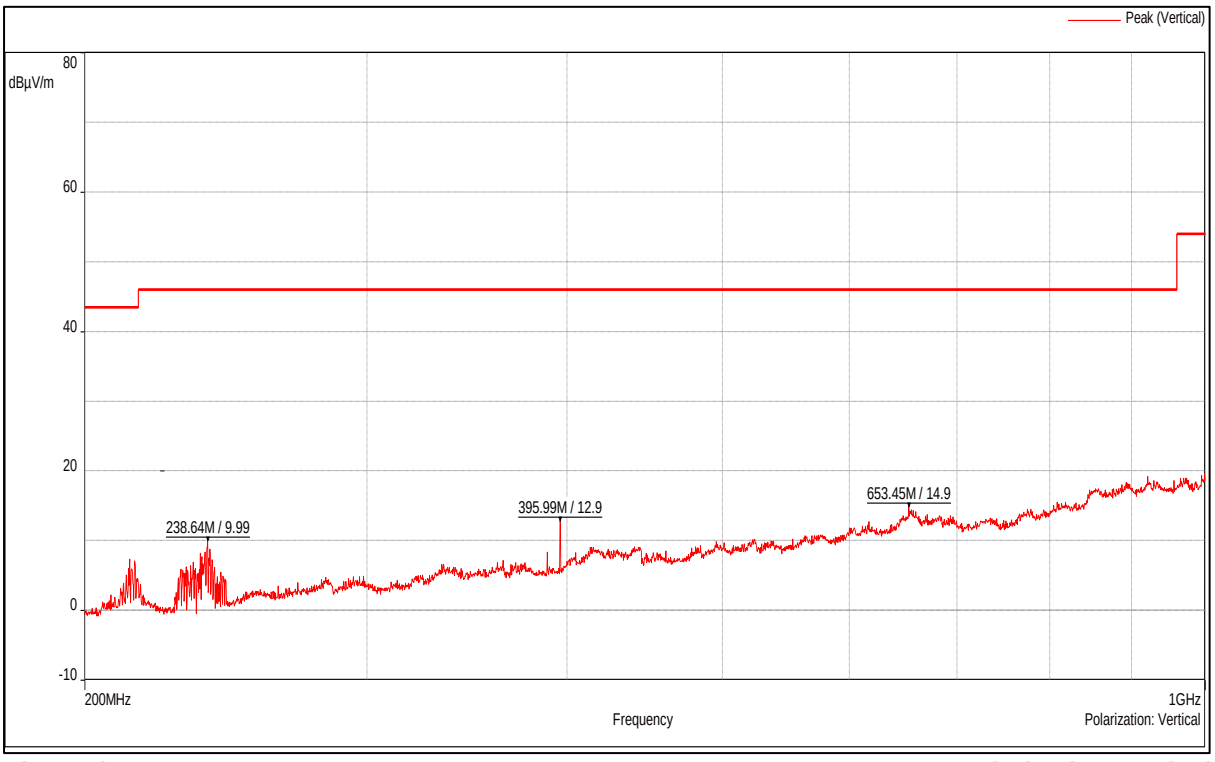
Antenna Polarization	Measured Frequency (MHz)	Measured Value (dBµV/m)	Limit (dBµV/m)	Margin (dB)
Vertical	39.54	29.10	40.00	-10.90
	52.68	26.00	40.00	-14.00
	132.00	25.60	43.50	-17.90
	162.00	27.90	43.50	-15.60
	238.64	9.99	46.00	-36.01
	395.99	12.90	46.00	-33.10
	653.45	14.90	46.00	-31.10
Horizontal	39.63	16.20	40.00	-23.80
	57.06	16.60	43.50	-26.90
	127.95	27.00	43.50	-16.50
	157.98	33.93	43.50	-9.57
	263.99	3.93	46.00	-42.07
	395.99	18.70	46.00	-27.30
	659.84	14.20	46.00	-31.80



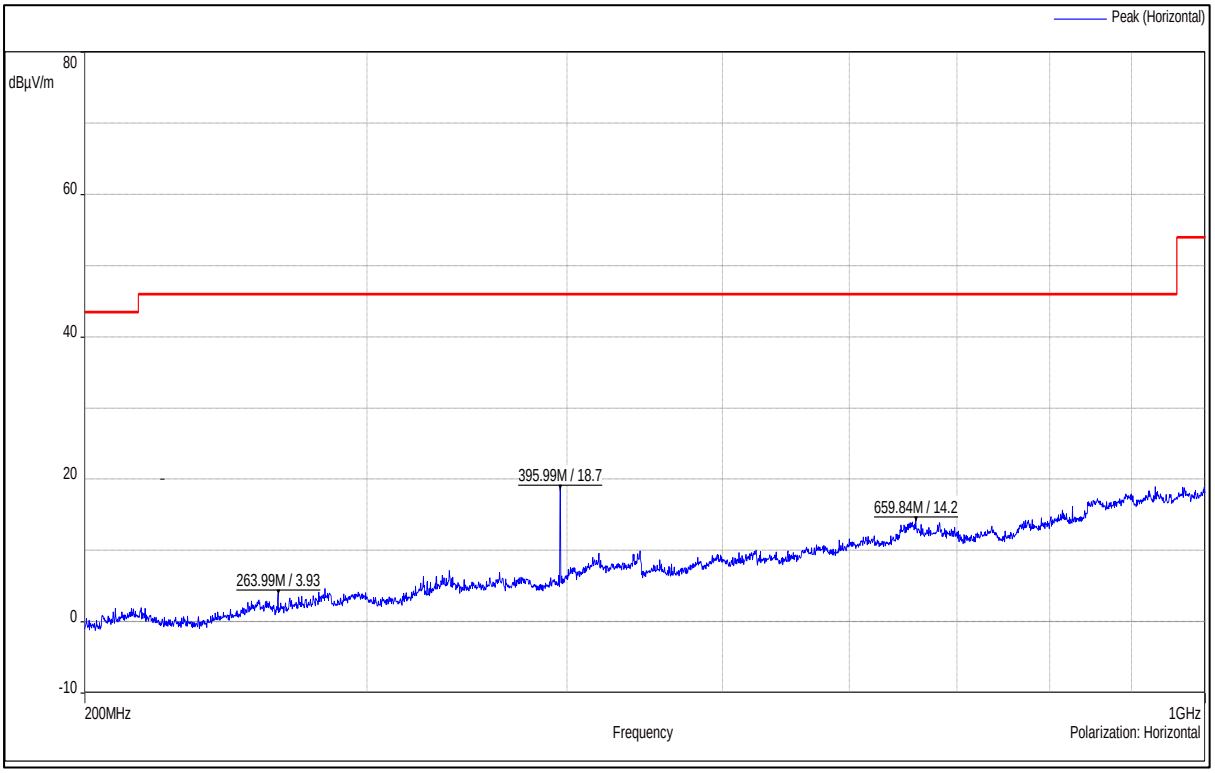
Channel Frequency 30MHz – 200MHz **Polarization Vertical**



Channel Frequency 30MHz – 200MHz **Polarization Horizontal**



Channel Frequency 200MHz – 1GHz **Polarization Vertical**



Channel Frequency 200MHz – 1GHz **Polarization Horizontal**

Test results for frequency range – 1GHz to 40 GHz

Antenna Type: MAF94367(Omni Directional Antenna) Port 1 RPSMA Results

Modulation: 802.11a
Data rate: 6Mbps

Channel Frequency (MHz)	Measured Frequency (MHz)	Antenna Polarization	Emission (dBµV/m)	Limit (dBµV/m)	Margin (dB)
5180	5180 (Pk)	Vertical	104.28	-	-
	5180 (Av)		94.00	-	-
	5150 (Pk)		61.87	74*	-12.13
	5150 (Av)		40.18	54*	-13.82
	10360 (Pk)		51.8	68.23	-16.43
	10360 (Av)		39.42	54	-14.58
	15540 (Pk)		52.93	68.23	-15.30
	15540 (Av)		41.42	54	-12.58
	5180 (Pk)	Horizontal	98.33	-	-
	5180 (Av)		87.95	-	-
	5150 (Pk)		54.01	74*	-19.99
	5150 (Av)		35.49	54	-18.51
	10360 (Pk)		51.93	68.23	-16.30
	10360 (Av)		39.53	54	-14.47
	15540 (Pk)		53.29	68.23	-14.94
	15540 (Av)		41.48	54	-12.52
5240	5240 (Pk)	Vertical	109.01	-	-
	5240 (Av)		98.22	-	-
	5350 (Pk)		56.34	74*	-17.66
	5350 (Av)		41.25	54*	-12.75
	10480 (Pk)		52.56	68.23	-15.67
	10480 (Av)		40.00	54	-14.00
	15720 (Pk)		53.82	68.23	-14.41
	15720 (Av)		41.24	54	-12.76
	5240 (Pk)	Horizontal	105.05	-	-
	5240 (Av)		94.25	-	-
	5350 (Pk)		51.17	74*	-22.83
	5350 (Av)		37.04	54*	-16.96
	10480 (Pk)		52.27	68.23	-15.96
	10480 (Av)		39.38	54	-14.62
	15720 (Pk)		52.77	68.23	-15.46
	15720 (Av)		41.21	54	-12.79
5260	5260 (Pk)	Vertical	108.51	-	-
	5260 (Av)		98.17	-	-
	5350 (Pk)		46.21	74*	-27.79
	5350 (Av)		33.86	54*	-20.14
	10520 (Pk)		51.70	68.23	-16.53
	10520 (Av)		39.83	54	-14.17
	15780 (Pk)		53.04	68.23	-15.19
	15780 (Av)		40.92	54	-13.08
	5260 (Pk)	Horizontal	103.87	-	-
	5260 (Av)		93.41	-	-
	5350 (Pk)		49.93	74*	-24.07
	5350 (Av)		35.89	54*	-18.11
	10520 (Pk)		51.30	68.23	-16.93
	10520 (Av)		39.91	54	-14.09
	15780 (Pk)		52.70	68.23	-15.53
	15780 (Av)		40.96	54	-13.04

Note:
*** :- Indicate restricted band frequency in 15.205**
Pk: Peak Detector; Av: Average Detector

Channel Frequency (MHz)	Measured Frequency (MHz)	Antenna Polarization	Emission (dBµV/m)	Limit (dBµV/m)	Margin (dB)
5320	5320 (Pk)	Vertical	103.23	-	-
	5320 (Av)		92.84	-	-
	5350 (Pk)		69.73	74*	-4.27
	5350 (Av)		42.23	54*	-11.77
	10640 (Pk)		51.80	68.23	-16.43
	10640 (Av)		39.90	54	-14.10
	15960 (Pk)		53.28	68.23	-14.95
	15960 (Av)		41.44	54	-12.56
	5320 (Pk)	Horizontal	99.02	-	-
	5320 (Av)		88.50	-	-
	5350 (Pk)		64.20	74*	-9.80
	5350 (Av)		38.61	54*	-15.39
	10640 (Pk)		52.65	68.23	-15.58
	10640 (Av)		39.93	54	-14.07
	15960 (Pk)		53.99	68.23	-14.24
	15960 (Av)		41.43	54	-12.57
5500	5500 (Pk)	Vertical	103.04	-	-
	5500 (Av)		92.61	-	-
	5460 (Pk)		52.21	74*	-21.79
	5460 (Av)		36.44	54*	-17.56
	11000 (Pk)		52.55	68.23	-15.68
	11000 (Av)		40.29	54	-13.71
	16500 (Pk)		55.78	68.23	-12.45
	16500 (Av)		43.25	54	-10.75
	5500 (Pk)	Horizontal	97.46	-	-
	5500 (Av)		87.00	-	-
	5460 (Pk)		46.55	74*	-27.45
	5460 (Av)		33.15	54*	-20.85
	11000 (Pk)		52.59	68.23	-15.64
	11000 (Av)		40.30	54	-13.70
	16500 (Pk)		55.27	68.23	-12.96
	16500 (Av)		43.25	54	-10.75
5700	5700 (Pk)	Vertical	102.34	-	-
	5700 (Av)		92.03	-	-
	5460 (Pk)		43.42	74*	-30.58
	5460 (Av)		30.52	54*	-23.48
	11400 (Pk)		53.63	68.23	-14.60
	11400 (Av)		41.11	54	-12.89
	17100 (Pk)		56.16	68.23	-12.07
	17100 (Av)		44.24	54	-9.76
	5700 (Pk)	Horizontal	94.95	-	-
	5700 (Av)		84.54	-	-
	5460 (Pk)		43.27	74*	-30.73
	5460 (Av)		30.23	54*	-23.77
	11400 (Pk)		53.66	68.23	-14.57
	11400 (Av)		40.93	54	-13.07
	17100 (Pk)		56.17	68.23	-12.06
	17100 (Av)		44.16	54	-9.84

Note:
*** :- Indicate restricted band frequency in 15.205**
Pk: Peak Detector; Av: Average Detector

Channel Frequency (MHz)	Measured Frequency (MHz)	Antenna Polarization	Emission (dBµV/m)	Limit (dBµV/m)	Margin (dB)
5720	5720 (Pk)	Vertical	107.69	-	-
	5720 (Av)		96.98	-	-
	5460 (Pk)		43.31	74*	-30.69
	5460 (Av)		30.78	54*	-23.22
	11440 (Pk)		56.42	68.23	-11.81
	11440 (Av)		42.94	54	-11.06
	17160 (Pk)		56.65	68.23	-11.58
	17160 (Av)		44.42	54	-9.58
	5720 (Pk)	Horizontal	99.70	-	-
	5720 (Av)		89.30	-	-
	5460 (Pk)		43.30	74*	-30.70
	5460 (Av)		30.22	54*	-23.78
	11440 (Pk)		53.41	68.23	-14.82
	11440 (Av)		40.90	54	-13.10
	17160 (Pk)		56.53	68.23	-11.70
	17160 (Av)		44.41	54	-9.59
5745	5715(Pk)	Vertical	71.90	78.20*	-6.30
	5725(Pk)		81.00	78.20*	2.80
	5745 (Pk)		106.54	-	-
	5745 (Av)		96.02	-	-
	11490 (Pk)		53.55	68.23	-14.68
	11490 (Av)		42.26	54	-11.74
	17235 (Pk)		56.47	68.23	-11.76
	17235 (Av)		45.02	54	-8.98
	5715(Pk)	Horizontal	64.87	78.20*	-13.33
	5725(Pk)		74.40	78.20*	-3.80
	5745 (Pk)		99.53	-	-
	5745 (Av)		88.98	-	-
	11490 (Pk)		53.47	68.23	-14.76
	11490 (Av)		41.74	54	-12.26
	17235 (Pk)		57.33	68.23	-10.90
	17235 (Av)		45.07	54	-8.93
5825	5825 (Pk)	Vertical	106.87	-	-
	5825 (Av)		96.30	-	-
	5850 (Pk)		72.25	78.20*	-5.95
	5860 (Pk)		58.61	78.20*	-19.59
	11650 (Pk)		59.72	68.23	-8.51
	11650 (Av)		45.31	54	-8.69
	17475 (Pk)		59.26	68.23	-8.97
	17475 (Av)		46.82	54	-7.18
	5825 (Pk)	Horizontal	97.78	-	-
	5825 (Av)		87.23	-	-
	5850 (Pk)		60.86	78.20*	-17.34
	5860 (Pk)		50.41	78.20*	-27.79
	11650 (Pk)		53.38	68.23	-14.85
	11650 (Av)		40.71	54	-13.29
	17475 (Pk)		58.54	68.23	-9.69
	17475 (Av)		46.84	54	-7.16

Note:
*** :- Indicate restricted band frequency in 15.205**
Pk: Peak Detector; Av: Average Detector

Modulation: 802.11a
Data rate: 54Mbps

Channel Frequency (MHz)	Measured Frequency (MHz)	Antenna Polarization	Emission (dBµV/m)	Limit (dBµV/m)	Margin (dB)
5180	5180 (Pk)	Vertical	104.06	-	-
	5180 (Av)		88.46	-	-
	5150 (Pk)		67.44	74*	-6.56
	5150 (Av)		41.11	54*	-12.89
	10360 (Pk)		51.11	68.23	-17.12
	10360 (Av)		39.07	54	-14.93
	15540 (Pk)		52.98	68.23	-15.25
	15540 (Av)		40.94	54	-13.06
	5180 (Pk)	Horizontal	99.32	-	-
	5180 (Av)		83.51	-	-
	5150 (Pk)		63.43	74*	-10.57
	5150 (Av)		36.71	54*	-17.29
	10360 (Pk)		51.77	68.23	-16.46
	10360 (Av)		39.03	54	-14.97
	15540 (Pk)		53.28	68.23	-14.95
	15540 (Av)		40.91	54	-13.09
5240	5240 (Pk)	Vertical	107.66	-	-
	5240 (Av)		92.05	-	-
	5350 (Pk)		47.88	74*	-26.12
	5350 (Av)		33.59	54*	-20.41
	10480 (Pk)		51.49	68.23	-16.74
	10480 (Av)		39.53	54	-14.47
	15720 (Pk)		53.24	68.23	-14.99
	15720 (Av)		40.97	54	-13.03
	5240 (Pk)	Horizontal	103.11	-	-
	5240 (Av)		87.45	-	-
	5350 (Pk)		43.84	74*	-30.16
	5350 (Av)		31.33	54*	-22.67
	10480 (Pk)		51.38	68.23	-16.85
	10480 (Av)		39.52	54	-14.48
	15720 (Pk)		53.94	68.23	-14.29
	15720 (Av)		40.96	54	-13.04
5260	5260 (Pk)	Vertical	107.86	-	-
	5260 (Av)		91.89	-	-
	5350 (Pk)		54.69	74*	-19.31
	5350 (Av)		36.88	54*	-17.12
	10520 (Pk)		51.64	68.23	-16.59
	10520 (Av)		39.64	54	-14.36
	15780 (Pk)		53.21	68.23	-15.02
	15780 (Av)		40.70	54	-13.30
	5260 (Pk)	Horizontal	103.63	-	-
	5260 (Av)		87.65	-	-
	5350 (Pk)		50.00	74*	-24.00
	5350 (Av)		33.52	54*	-20.48
	10520 (Pk)		51.52	68.23	-16.71
	10520 (Av)		39.68	54	-14.32
	15780 (Pk)		52.72	68.23	-15.51
	15780 (Av)		40.68	54	-13.32

Note:
*** :- Indicate restricted band frequency in 15.205**
Pk: Peak Detector; Av: Average Detector

Channel Frequency (MHz)	Measured Frequency (MHz)	Antenna Polarization	Emission (dBµV/m)	Limit (dBµV/m)	Margin (dB)
5320	5320 (Pk)	Vertical	103.68	-	-
	5320 (Av)		87.87	-	-
	5350 (Pk)		50.34	74*	-23.66
	5350 (Av)		35.55	54*	-18.45
	10640 (Pk)		51.48	68.23	-16.75
	10640 (Av)		39.71	54	-14.29
	15960 (Pk)		54.38	68.23	-13.85
	15960 (Av)		41.19	54	-12.81
	5320 (Pk)	Horizontal	98.56	-	-
	5320 (Av)		82.92	-	-
	5350 (Pk)		46.60	74*	-27.40
	5350 (Av)		32.81	54*	-21.19
	10640 (Pk)		51.22	68.23	-17.01
	10640 (Av)		39.70	54	-14.30
	15960 (Pk)		53.37	68.23	-14.86
	15960 (Av)		41.19	54	-12.81
5500	5500 (Pk)	Vertical	102.53	-	-
	5500 (Av)		87.00	-	-
	5460 (Pk)		54.49	74*	-19.51
	5460 (Av)		35.74	54*	-18.26
	11000 (Pk)		53.00	68.23	-15.23
	11000 (Av)		10.20	54	-43.80
	16500 (Pk)		55.11	68.23	-13.12
	16500 (Av)		43.20	54	-10.80
	5500 (Pk)	Horizontal	95.19	-	-
	5500 (Av)		79.77	-	-
	5460 (Pk)		49.42	74*	-24.58
	5460 (Av)		32.33	54*	-21.67
	11000 (Pk)		51.16	68.23	-17.07
	11000 (Av)		40.24	54	-13.76
	16500 (Pk)		54.94	68.23	-13.29
	16500 (Av)		43.15	54	-10.85
5700	5700 (Pk)	Vertical	101.66	-	-
	5700 (Av)		85.83	-	-
	5460 (Pk)		42.71	74*	-31.29
	5460 (Av)		30.20	54*	-23.80
	11400 (Pk)		53.14	68.23	-15.09
	11400 (Av)		40.97	54	-13.03
	17100 (Pk)		56.30	68.23	-11.93
	17100 (Av)		44.12	54	-9.88
	5700 (Pk)	Horizontal	95.14	-	-
	5700 (Av)		79.23	-	-
	5460 (Pk)		42.93	74*	-31.07
	5460 (Av)		29.99	54*	-24.01
	11400 (Pk)		53.71	68.23	-14.52
	11400 (Av)		40.92	54	-13.08
	17100 (Pk)		55.88	68.23	-12.35
	17100 (Av)		44.17	54	-9.83

Note:
*** :- Indicate restricted band frequency in 15.205**
Pk: Peak Detector; Av: Average Detector

Channel Frequency (MHz)	Measured Frequency (MHz)	Antenna Polarization	Emission (dBµV/m)	Limit (dBµV/m)	Margin (dB)
5720	5720 (Pk)	Vertical	105.51	-	-
	5720 (Av)		89.94	-	-
	5460 (Pk)		42.94	74*	-31.06
	5460 (Av)		30.33	54*	-23.67
	11440 (Pk)		52.96	68.23	-15.27
	11440 (Av)		41.04	54	-12.96
	17160 (Pk)		56.03	68.23	-12.20
	17160 (Av)		44.28	54	-9.72
	5720 (Pk)	Horizontal	98.52	-	-
	5720 (Av)		82.96	-	-
	5460 (Pk)		42.23	74*	-31.77
	5460 (Av)		30.05	54*	-23.95
	11440 (Pk)		52.60	68.23	-15.63
	11440 (Av)		40.83	54	-13.17
	17160 (Pk)		57.48	68.23	-10.75
	17160 (Av)		44.32	54	-9.68
5745	5715(Pk)	Vertical	65.39	78.20*	-12.81
	5725(Pk)		71.36	78.20*	-6.84
	5745 (Pk)		104.85	-	-
	5745 (Av)		89.02	-	-
	11490 (Pk)		54.26	68.23	-13.97
	11490 (Av)		41.85	54	-12.15
	17235 (Pk)		57.62	68.23	-10.61
	17235 (Av)		45.04	54	-8.96
	5715(Pk)	Horizontal	58.77	78.20*	-19.43
	5725(Pk)		64.74	78.20*	-13.46
	5745 (Pk)		97.78	-	-
	5745 (Av)		81.95	-	-
	11490 (Pk)		53.85	68.23	-14.38
	11490 (Av)		41.64	54	-12.36
	17235 (Pk)		56.66	68.23	-11.57
	17235 (Av)		44.99	54	-9.01
5825	5825 (Pk)	Vertical	104.58	-	-
	5825 (Av)		88.79	-	-
	5850 (Pk)		62.26	78.20*	-15.94
	5860 (Pk)		57.50	78.20*	-20.70
	11650 (Pk)		54.08	68.23	-14.15
	11650 (Av)		41.49	54	-12.51
	17475 (Pk)		59.53	68.23	-8.70
	17475 (Av)		46.84	54	-7.16
	5825 (Pk)	Horizontal	95.39	-	-
	5825 (Av)		79.53	-	-
	5850 (Pk)		53.40	78.20*	-24.80
	5860 (Pk)		48.48	78.20*	-29.72
	11650 (Pk)		56.54	68.23	-11.69
	11650 (Av)		42.82	54	-11.18
	17475 (Pk)		59.07	68.23	-9.16
	17475 (Av)		46.81	54	-7.19

Note:
*** :- Indicate restricted band frequency in 15.205**
Pk: Peak Detector; Av: Average Detector

Modulation: 802.11n _ HT 20MHz
Data rate: MCS0

Channel Frequency (MHz)	Measured Frequency (MHz)	Antenna Polarization	Emission (dBµV/m)	Limit (dBµV/m)	Margin (dB)
5180	5180 (Pk)	Vertical	103.57	-	-
	5180 (Av)		92.10	-	-
	5150 (Pk)		55.28	74*	-18.72
	5150 (Av)		37.91	54*	-16.09
	10360 (Pk)		51.31	68.23	-16.92
	10360 (Av)		39.06	54	-14.94
	15540 (Pk)		52.65	68.23	-15.58
	15540 (Av)		40.94	54	-13.06
	5180 (Pk)	Horizontal	98.11	-	-
	5180 (Av)		86.64	-	-
	5150 (Pk)		50.21	74*	-23.79
	5150 (Av)		34.02	54*	-19.98
	10360 (Pk)		51.27	68.23	-16.96
	10360 (Av)		39.06	54	-14.94
	15540 (Pk)		53.10	68.23	-15.13
	15540 (Av)		40.94	54	-13.06
5240	5240 (Pk)	Vertical	109.95	-	-
	5240 (Av)		98.82	-	-
	5350 (Pk)		54.09	74*	-19.91
	5350 (Av)		39.54	54*	-14.46
	10480 (Pk)		51.31	68.23	-16.92
	10480 (Av)		39.54	54	-14.46
	15720 (Pk)		53.85	68.23	-14.38
	15720 (Av)		40.93	54	-13.07
	5240 (Pk)	Horizontal	105.05	-	-
	5240 (Av)		94.59	-	-
	5350 (Pk)		47.98	74*	-26.02
	5350 (Av)		35.44	54*	-18.56
	10480 (Pk)		51.53	68.23	-16.70
	10480 (Av)		39.50	54	-14.50
	15720 (Pk)		53.35	68.23	-14.88
	15720 (Av)		40.93	54	-13.07
5260	5260 (Pk)	Vertical	108.25	-	-
	5260 (Av)		97.74	-	-
	5350 (Pk)		55.40	74*	-18.60
	5350 (Av)		40.77	54*	-13.23
	10520 (Pk)		52.03	68.23	-16.20
	10520 (Av)		36.69	54	-17.31
	15780 (Pk)		52.71	68.23	-15.52
	15780 (Av)		40.70	54	-13.30
	5260 (Pk)	Horizontal	103.47	-	-
	5260 (Av)		93.18	-	-
	5350 (Pk)		48.45	74*	-25.55
	5350 (Av)		36.39	54*	-17.61
	10520 (Pk)		51.48	68.23	-16.75
	10520 (Av)		39.58	54	-14.42
	15780 (Pk)		52.75	68.23	-15.48
	15780 (Av)		40.62	54	-13.38

Note:
*** :- Indicate restricted band frequency in 15.205**
Pk: Peak Detector; Av: Average Detector

Channel Frequency (MHz)	Measured Frequency (MHz)	Antenna Polarization	Emission (dBµV/m)	Limit (dBµV/m)	Margin (dB)
5320	5320 (Pk)	Vertical	103.38	-	-
	5320 (Av)		92.47	-	-
	5350 (Pk)		67.39	74*	-6.61
	5350 (Av)		40.47	54*	-13.53
	10640 (Pk)		51.98	68.23	-16.25
	10640 (Av)		39.70	54	-14.30
	15960 (Pk)		52.53	68.23	-15.70
	15960 (Av)		41.28	54	-12.72
	5320 (Pk)	Horizontal	98.24	-	-
	5320 (Av)		88.05	-	-
	5350 (Pk)		61.24	74*	-12.76
	5350 (Av)		36.03	54*	-17.97
	10640 (Pk)		52.31	68.23	-15.92
	10640 (Av)		39.74	54	-14.26
	15960 (Pk)		53.78	68.23	-14.45
	15960 (Av)		41.28	54	-12.72
5500	5500 (Pk)	Vertical	102.63	-	-
	5500 (Av)		91.96	-	-
	5460 (Pk)		55.87	74*	-18.13
	5460 (Av)		36.28	54*	-17.72
	11000 (Pk)		52.52	68.23	-15.71
	11000 (Av)		40.43	54	-13.57
	16500 (Pk)		55.05	68.23	-13.18
	16500 (Av)		43.37	54	-10.63
	5500 (Pk)	Horizontal	94.30	-	-
	5500 (Av)		83.66	-	-
	5460 (Pk)		48.34	74*	-25.66
	5460 (Av)		32.47	54*	-21.53
	11000 (Pk)		53.38	68.23	-14.85
	11000 (Av)		40.42	54	-13.58
	16500 (Pk)		55.99	68.23	-12.24
	16500 (Av)		43.35	54	-10.65
5700	5700 (Pk)	Vertical	99.84	-	-
	5700 (Av)		89.65	-	-
	5460 (Pk)		42.66	74*	-31.34
	5460 (Av)		30.32	54*	-23.68
	11400 (Pk)		52.72	68.23	-15.51
	11400 (Av)		41.08	54	-12.92
	17100 (Pk)		56.96	68.23	-11.27
	17100 (Av)		44.35	54	-9.65
	5700 (Pk)	Horizontal	93.63	-	-
	5700 (Av)		82.19	-	-
	5460 (Pk)		42.18	74*	-31.82
	5460 (Av)		30.02	54*	-23.98
	11400 (Pk)		52.84	68.23	-15.39
	11400 (Av)		41.09	54	-12.91
	17100 (Pk)		56.05	68.23	-12.18
	17100 (Av)		44.37	54	-9.63

Note:
*** :- Indicate restricted band frequency in 15.205**
Pk: Peak Detector; Av: Average Detector

Channel Frequency (MHz)	Measured Frequency (MHz)	Antenna Polarization	Emission (dBµV/m)	Limit (dBµV/m)	Margin (dB)
5720	5720 (Pk)	Vertical	105.80	-	-
	5720 (Av)		95.59	-	-
	5460 (Pk)		43.81	74*	-30.19
	5460 (Av)		30.56	54*	-23.44
	11440 (Pk)		53.56	68.23	-14.67
	11440 (Av)		41.42	54	-12.58
	17160 (Pk)		56.92	68.23	-11.31
	17160 (Av)		44.47	54	-9.53
	5720 (Pk)	Horizontal	98.78	-	-
	5720 (Av)		87.83	-	-
	5460 (Pk)		42.63	74*	-31.37
	5460 (Av)		30.16	54*	-23.84
	11440 (Pk)		53.49	68.23	-14.74
	11440 (Av)		41.00	54	-13.00
	17160 (Pk)		56.39	68.23	-11.84
	17160 (Av)		44.49	54	-9.51
5745	5715(Pk)	Vertical	69.37	78.2*	-8.83
	5725(Pk)		77.94	78.2*	-0.26
	5745 (Pk)		104.30	-	-
	5745 (Av)		92.15	-	-
	11490 (Pk)		53.53	68.23	-14.70
	11490 (Av)		42.17	54	-11.83
	17235 (Pk)		57.98	68.23	-10.25
	17235 (Av)		45.11	54	-8.89
	5715(Pk)	Horizontal	62.25	78.2*	-15.95
	5725(Pk)		70.87	78.2*	-7.33
	5745 (Pk)		97.76	-	-
	5745 (Av)		86.02	-	-
	11490 (Pk)		54.23	68.23	-14.00
	11490 (Av)		41.77	54	-12.23
	17235 (Pk)		57.53	68.23	-10.70
	17235 (Av)		45.10	54	-8.90
5825	5825 (Pk)	Vertical	106.64	-	-
	5825 (Av)		95.29	-	-
	5850 (Pk)		70.71	74*	-7.49
	5860 (Pk)		64.05	54*	-14.15
	11650 (Pk)		59.12	68.23	-9.11
	11650 (Av)		44.72	54	-9.28
	17475 (Pk)		59.43	68.23	-8.80
	17475 (Av)		46.87	54	-7.13
	5825 (Pk)	Horizontal	97.51	-	-
	5825 (Av)		85.82	-	-
	5850 (Pk)		60.98	74*	-17.22
	5860 (Pk)		54.07	54*	-24.13
	11650 (Pk)		52.46	68.23	-15.77
	11650 (Av)		40.73	54	-13.27
	17475 (Pk)		58.94	68.23	-9.29
	17475 (Av)		46.83	54	-7.17

Note:
*** :- Indicate restricted band frequency in 15.205**
k: Peak Detector; Av: Average Detector

Modulation: 802.11n _ HT 20MHz
Data rate: MCS7

Channel Frequency (MHz)	Measured Frequency (MHz)	Antenna Polarization	Emission (dBµV/m)	Limit (dBµV/m)	Margin (dB)
5180	5180 (Pk)	Vertical	102.60	-	-
	5180 (Av)		86.61	-	-
	5150 (Pk)		54.33	74*	-19.67
	5150 (Av)		36.66	54*	-17.34
	10360 (Pk)		51.87	68.23	-16.36
	10360 (Av)		39.03	54	-14.97
	15540 (Pk)		52.97	68.23	-15.26
	15540 (Av)		40.92	54	-13.08
	5180 (Pk)	Horizontal	97.70	-	-
	5180 (Av)		81.26	-	-
	5150 (Pk)		49.90	74*	-24.10
	5150 (Av)		33.47	54*	-20.53
	10360 (Pk)		50.65	68.23	-17.58
	10360 (Av)		39.07	54	-14.93
	15540 (Pk)		53.04	68.23	-15.19
	15540 (Av)		40.93	54	-13.07
5240	5240 (Pk)	Vertical	106.83	-	-
	5240 (Av)		90.48	-	-
	5350 (Pk)		47.34	74*	-26.66
	5350 (Av)		33.11	54*	-20.89
	10480 (Pk)		51.35	68.23	-16.88
	10480 (Av)		39.52	54	-14.48
	15720 (Pk)		52.75	68.23	-15.48
	15720 (Av)		49.91	54	-4.09
	5240 (Pk)	Horizontal	102.41	-	-
	5240 (Av)		86.32	-	-
	5350 (Pk)		43.11	74*	-30.89
	5350 (Av)		31.02	54*	-22.98
	10480 (Pk)		51.70	68.23	-16.53
	10480 (Av)		39.44	54	-14.56
	15720 (Pk)		52.64	68.23	-15.59
	15720 (Av)		40.91	54	-13.09
5260	5260 (Pk)	Vertical	105.63	-	-
	5260 (Av)		89.63	-	-
	5350 (Pk)		50.09	74*	-23.91
	5350 (Av)		33.63	54*	-20.37
	10520 (Pk)		52.72	68.23	-15.51
	10520 (Av)		39.55	54	-14.45
	15780 (Pk)		51.69	68.23	-16.54
	15780 (Av)		40.66	54	-13.34
	5260 (Pk)	Horizontal	100.73	-	-
	5260 (Av)		84.38	-	-
	5350 (Pk)		44.82	74*	-29.18
	5350 (Av)		31.07	54*	-22.93
	10520 (Pk)		51.73	68.23	-16.50
	10520 (Av)		39.60	54	-14.40
	15780 (Pk)		52.81	68.23	-15.42
	15780 (Av)		40.74	54	-13.26

Note:
*** :- Indicate restricted band frequency in 15.205**
Pk: Peak Detector; Av: Average Detector

Channel Frequency (MHz)	Measured Frequency (MHz)	Antenna Polarization	Emission (dBµV/m)	Limit (dBµV/m)	Margin (dB)
5320	5320 (Pk)	Vertical	103.98	-	-
	5320 (Av)		87.55	-	-
	5350 (Pk)		67.16	74*	-6.84
	5350 (Av)		40.09	54*	-13.91
	10640 (Pk)		51.55	68.23	-16.68
	10640 (Av)		39.66	54	-14.34
	15960 (Pk)		53.63	68.23	-14.60
	15960 (Av)		41.17	54	-12.83
	5320 (Pk)	Horizontal	98.45	-	-
	5320 (Av)		82.71	-	-
	5350 (Pk)		61.55	74*	-12.45
	5350 (Av)		36.09	54*	-17.91
	10640 (Pk)		50.90	68.23	-17.33
	10640 (Av)		39.65	54	-14.35
	15960 (Pk)		53.30	68.23	-14.93
	15960 (Av)		41.18	54	-12.82
5500	5500 (Pk)	Vertical	102.57	-	-
	5500 (Av)		86.19	-	-
	5460 (Pk)		53.69	74*	-20.31
	5460 (Av)		35.59	54*	-18.41
	11000 (Pk)		50.99	68.23	-17.24
	11000 (Av)		40.16	54	-13.84
	16500 (Pk)		55.02	68.23	-13.21
	16500 (Av)		43.12	54	-10.88
	5500 (Pk)	Horizontal	95.39	-	-
	5500 (Av)		78.93	-	-
	5460 (Pk)		45.44	74*	-28.56
	5460 (Av)		32.30	54*	-21.70
	11000 (Pk)		53.98	68.23	-14.25
	11000 (Av)		40.69	54	-13.31
	16500 (Pk)		54.35	68.23	-13.88
	16500 (Av)		43.15	54	-10.85
5700	5700 (Pk)	Vertical	100.41	-	-
	5700 (Av)		84.78	-	-
	5460 (Pk)		42.30	74*	-31.70
	5460 (Av)		30.10	54*	-23.90
	11400 (Pk)		52.66	68.23	-15.57
	11400 (Av)		40.90	54	-13.10
	17100 (Pk)		55.96	68.23	-12.27
	17100 (Av)		44.17	54	-9.83
	5700 (Pk)	Horizontal	93.17	-	-
	5700 (Av)		77.53	-	-
	5460 (Pk)		42.52	74*	-31.48
	5460 (Av)		29.95	54*	-24.05
	11400 (Pk)		53.35	68.23	-14.88
	11400 (Av)		40.86	54	-13.14
	17100 (Pk)		56.05	68.23	-12.18
	17100 (Av)		44.09	54	-9.91

Note:
*** :- Indicate restricted band frequency in 15.205**
Pk: Peak Detector; Av: Average Detector

Channel Frequency (MHz)	Measured Frequency (MHz)	Antenna Polarization	Emission (dBµV/m)	Limit (dBµV/m)	Margin (dB)
5720	5720 (Pk)	Vertical	104.75	-	-
	5720 (Av)		88.23	-	-
	5460 (Pk)		42.77	74*	-31.23
	5460 (Av)		30.26	54*	-23.74
	11440 (Pk)		51.77	68.23	-16.46
	11440 (Av)		40.94	54	-13.06
	17160 (Pk)		55.23	68.23	-13.00
	17160 (Av)		44.31	54	-9.69
	5720 (Pk)	Horizontal	96.64	-	-
	5720 (Av)		81.03	-	-
	5460 (Pk)		42.09	74*	-31.91
	5460 (Av)		29.96	54*	-24.04
	11440 (Pk)		52.62	68.23	-15.61
	11440 (Av)		40.82	54	-13.18
	17160 (Pk)		55.90	68.23	-12.33
	17160 (Av)		44.36	54	-9.64
5745	5715(Pk)	Vertical	67.30	78.20*	-10.90
	5725(Pk)		72.83	78.20*	-5.37
	5745 (Pk)		104.58	-	-
	5745 (Av)		88.28	-	-
	11490 (Pk)		53.98	68.23	-14.25
	11490 (Av)		42.11	54	-11.89
	17235 (Pk)		57.33	68.23	-10.90
	17235 (Av)		44.99	54	-9.01
	5715(Pk)	Horizontal	65.17	78.20*	-13.03
	5725(Pk)		60.38	78.20*	-17.82
	5745 (Pk)		97.09	-	-
	5745 (Av)		80.06	-	-
	11490 (Pk)		54.56	68.23	-13.67
	11490 (Av)		41.56	54	-12.44
	17235 (Pk)		56.62	68.23	-11.61
	17235 (Av)		45.00	54	-9.00
5825	5825 (Pk)	Vertical	103.67	-	-
	5825 (Av)		87.29	-	-
	5850 (Pk)		67.09	78.20*	-11.11
	5860 (Pk)		57.74	78.20*	-20.46
	11650 (Pk)		53.03	68.23	-15.20
	11650 (Av)		40.98	54	-13.02
	17475 (Pk)		58.15	68.23	-10.08
	17475 (Av)		46.73	54	-7.27
	5825 (Pk)	Horizontal	95.31	-	-
	5825 (Av)		78.67	-	-
	5850 (Pk)		56.97	78.20*	-21.23
	5860 (Pk)		49.56	78.20*	-28.64
	11650 (Pk)		52.45	68.23	-15.78
	11650 (Av)		40.67	54	-13.33
	17475 (Pk)		58.65	68.23	-9.58
	17475 (Av)		46.75	54	-7.25

Note:
*** :- Indicate restricted band frequency in 15.205**
Pk: Peak Detector; Av: Average Detector

Modulation: **802.11ac _ VHT 20MHz**
Data rate: **MCS0**

Channel Frequency (MHz)	Measured Frequency (MHz)	Antenna Polarization	Emission (dBµV/m)	Limit (dBµV/m)	Margin (dB)
5180	5180 (Pk)	Vertical	102.13	-	-
	5180 (Av)		92.29	-	-
	5150 (Pk)		61.77	74*	-12.23
	5150 (Av)		37.60	54*	-16.40
	10360 (Pk)		51.08	68.23	-17.15
	10360 (Av)		39.06	54	-14.94
	15540 (Pk)		53.53	68.23	-14.70
	15540 (Av)		40.80	54	-13.20
	5180 (Pk)	Horizontal	97.45	-	-
	5180 (Av)		86.91	-	-
	5150 (Pk)		57.86	74*	-16.14
	5150 (Av)		86.91	54*	32.91
	10360 (Pk)		51.46	68.23	-16.77
	10360 (Av)		38.99	54	-15.01
	15540 (Pk)		53.12	68.23	-15.11
	15540 (Av)		40.89	54	-13.11
5240	5240 (Pk)	Vertical	109.43	-	-
	5240 (Av)		98.76	-	-
	5350 (Pk)		54.54	74*	-19.46
	5350 (Av)		39.09	54*	-14.91
	10480 (Pk)		51.82	68.23	-16.41
	10480 (Av)		39.47	54	-14.53
	15720 (Pk)		52.40	68.23	-15.83
	15720 (Av)		40.90	54	-13.10
	5240 (Pk)	Horizontal	105.03	-	-
	5240 (Av)		93.94	-	-
	5350 (Pk)		47.79	74*	-26.21
	5350 (Av)		34.86	54*	-19.14
	10480 (Pk)		51.11	68.23	-17.12
	10480 (Av)		39.46	54	-14.54
	15720 (Pk)		52.66	68.23	-15.57
	15720 (Av)		40.85	54	-13.15
5260	5260 (Pk)	Vertical	108.84	-	-
	5260 (Av)		97.74	-	-
	5350 (Pk)		54.30	74*	-19.70
	5350 (Av)		40.07	54*	-13.93
	10520 (Pk)		51.55	68.23	-16.68
	10520 (Av)		39.57	54	-14.43
	15780 (Pk)		52.65	68.23	-15.58
	15780 (Av)		40.65	54	-13.35
	5260 (Pk)	Horizontal	103.59	-	-
	5260 (Av)		92.39	-	-
	5350 (Pk)		49.95	74*	-24.05
	5350 (Av)		35.23	54*	-18.77
	10520 (Pk)		52.23	68.23	-16.00
	10520 (Av)		39.56	54	-14.44
	15780 (Pk)		52.77	68.23	-15.46
	15780 (Av)		40.63	54	-13.37

Note:
*** :- Indicate restricted band frequency in 15.205**
Pk: Peak Detector; Av: Average Detector

Channel Frequency (MHz)	Measured Frequency (MHz)	Antenna Polarization	Emission (dBµV/m)	Limit (dBµV/m)	Margin (dB)
5320	5320 (Pk)	Vertical	103.32	-	-
	5320 (Av)		93.01	-	-
	5350 (Pk)		67.34	74*	-6.66
	5350 (Av)		38.92	54*	-15.08
	10640 (Pk)		52.14	68.23	-16.09
	10640 (Av)		39.66	54	-14.34
	15960 (Pk)		53.36	68.23	-14.87
	15960 (Av)		41.16	54	-12.84
	5320 (Pk)	Horizontal	96.35	-	-
	5320 (Av)		86.35	-	-
	5350 (Pk)		58.88	74*	-15.12
	5350 (Av)		33.73	54*	-20.27
	10640 (Pk)		51.98	68.23	-16.25
	10640 (Av)		39.63	54	-14.37
	15960 (Pk)		53.26	68.23	-14.97
	15960 (Av)		41.14	54	-12.86
5500	5500 (Pk)	Vertical	102.05	-	-
	5500 (Av)		91.85	-	-
	5460 (Pk)		52.39	74*	-21.61
	5460 (Av)		36.19	54*	-17.81
	11000 (Pk)		51.55	68.23	-16.68
	11000 (Av)		40.18	54	-13.82
	16500 (Pk)		55.39	68.23	-12.84
	16500 (Av)		43.13	54	-10.87
	5500 (Pk)	Horizontal	97.02	-	-
	5500 (Av)		86.72	-	-
	5460 (Pk)		52.84	74*	-21.16
	5460 (Av)		33.05	54*	-20.95
	11000 (Pk)		51.96	68.23	-16.27
	11000 (Av)		40.18	54	-13.82
	16500 (Pk)		54.96	68.23	-13.27
	16500 (Av)		43.19	54	-10.81
5700	5700 (Pk)	Vertical	100.37	-	-
	5700 (Av)		90.30	-	-
	5460 (Pk)		43.11	74*	-30.89
	5460 (Av)		30.26	54*	-23.74
	11400 (Pk)		53.33	68.23	-14.90
	11400 (Av)		40.95	54	-13.05
	17100 (Pk)		56.23	68.23	-12.00
	17100 (Av)		44.12	54	-9.88
	5700 (Pk)	Horizontal	93.35	-	-
	5700 (Av)		83.08	-	-
	5460 (Pk)		42.15	74*	-31.85
	5460 (Av)		30.11	54*	-23.89
	11400 (Pk)		52.69	68.23	-15.54
	11400 (Av)		40.86	54	-13.14
	17100 (Pk)		56.43	68.23	-11.80
	17100 (Av)		44.12	54	-9.88

Note:
*** :- Indicate restricted band frequency in 15.205**
Pk: Peak Detector; Av: Average Detector

Channel Frequency (MHz)	Measured Frequency (MHz)	Antenna Polarization	Emission (dBµV/m)	Limit (dBµV/m)	Margin (dB)
5720	5720 (Pk)	Vertical	106.61	-	-
	5720 (Av)		96.47	-	-
	5460 (Pk)		42.69	74*	-31.31
	5460 (Av)		30.65	54*	-23.35
	11440 (Pk)		55.13	68.23	-13.10
	11440 (Av)		42.94	54	-11.06
	17160 (Pk)		56.24	68.23	-11.99
	17160 (Av)		44.37	54	-9.63
	5720 (Pk)	Horizontal	99.29	-	-
	5720 (Av)		89.03	-	-
	5460 (Pk)		42.40	74*	-31.60
	5460 (Av)		30.11	54*	-23.89
	11440 (Pk)		53.00	68.23	-15.23
	11440 (Av)		40.80	54	-13.20
	17160 (Pk)		56.85	68.23	-11.38
	17160 (Av)		44.34	54	-9.66
5745	5715(Pk)	Vertical	102.59	78.20*	24.39
	5725(Pk)		92.01	78.20*	13.81
	5745 (Pk)		76.60	-	-
	5745 (Av)		67.49	-	-
	11490 (Pk)		54.19	68.23	-14.04
	11490 (Av)		42.02	54	-11.98
	17235 (Pk)		56.78	68.23	-11.45
	17235 (Av)		44.97	54	-9.03
	5715(Pk)	Horizontal	97.12	78.20*	18.92
	5725(Pk)		86.22	78.20*	8.02
	5745 (Pk)		69.65	-	-
	5745 (Av)		61.35	-	-
	11490 (Pk)		53.66	68.23	-14.57
	11490 (Av)		41.60	54	-12.40
	17235 (Pk)		57.03	68.23	-11.20
	17235 (Av)		45.01	54	-8.99
5825	5825 (Pk)	Vertical	108.03	-	-
	5825 (Av)		95.81	-	-
	5850 (Pk)		76.76	78.20*	-1.44
	5860 (Pk)		71.11	78.20*	-7.09
	11650 (Pk)		60.98	68.23	-7.25
	11650 (Av)		45.31	54	-8.69
	17475 (Pk)		58.43	68.23	-9.80
	17475 (Av)		46.74	54	-7.26
	5825 (Pk)	Horizontal	97.71	-	-
	5825 (Av)		85.85	-	-
	5850 (Pk)		67.34	78.20*	-10.86
	5860 (Pk)		60.13	78.20*	-18.07
	11650 (Pk)		52.66	68.23	-15.57
	11650 (Av)		40.64	54	-13.36
	17475 (Pk)		58.75	68.23	-9.48
	17475 (Av)		46.71	54	-7.29

Note:
*** :- Indicate restricted band frequency in 15.205**
Pk: Peak Detector; Av: Average Detector

Modulation: **802.11ac _ VHT 20MHz**
Data rate: **MCS9**

Channel Frequency (MHz)	Measured Frequency (MHz)	Antenna Polarization	Emission (dBµV/m)	Limit (dBµV/m)	Margin (dB)
5180	5180 (Pk)	Vertical	101.63	-	-
	5180 (Av)		85.26	-	-
	5150 (Pk)		65.62	74*	-8.38
	5150 (Av)		37.62	54*	-16.38
	10360 (Pk)		51.55	68.23	-16.68
	10360 (Av)		39.32	54	-14.68
	15540 (Pk)		50.23	68.23	-18.00
	15540 (Av)		38.69	54	-15.31
	5180 (Pk)	Horizontal	97.85	-	-
	5180 (Av)		81.56	-	-
	5150 (Pk)		60.22	74*	-13.78
	5150 (Av)		34.91	54*	-19.09
	10360 (Pk)		51.61	68.23	-16.62
	10360 (Av)		39.29	54	-14.71
	15540 (Pk)		52.60	68.23	-15.63
	15540 (Av)		38.70	54	-15.30
5240	5240 (Pk)	Vertical	104.94	-	-
	5240 (Av)		88.38	-	-
	5350 (Pk)		46.42	74*	-27.58
	5350 (Av)		32.73	54*	-21.27
	10480 (Pk)		53.07	68.23	-15.16
	10480 (Av)		39.92	54	-14.08
	15720 (Pk)		50.37	68.23	-17.86
	15720 (Av)		38.57	54	-15.43
	5240 (Pk)	Horizontal	101.06	-	-
	5240 (Av)		84.09	-	-
	5350 (Pk)		43.69	74*	-30.31
	5350 (Av)		30.95	54*	-23.05
	10480 (Pk)		52.25	68.23	-15.98
	10480 (Av)		40.00	54	-14.00
	15720 (Pk)		50.71	68.23	-17.52
	15720 (Av)		38.61	54	-15.39
5260	5260 (Pk)	Vertical	104.08	-	-
	5260 (Av)		87.54	-	-
	5350 (Pk)		46.87	74*	-27.13
	5350 (Av)		32.92	54*	-21.08
	10520 (Pk)		52.61	68.23	-15.62
	10520 (Av)		39.77	54	-14.23
	15780 (Pk)		50.64	68.23	-17.59
	15780 (Av)		38.40	54	-15.60
	5260 (Pk)	Horizontal	99.62	-	-
	5260 (Av)		83.40	-	-
	5350 (Pk)		44.18	74*	-29.82
	5350 (Av)		30.88	54*	-23.12
	10520 (Pk)		52.26	68.23	-15.97
	10520 (Av)		40.01	54	-28.22
	15780 (Pk)		52.04	68.23	-16.19
	15780 (Av)		39.93	54	-14.07

Note:
*** :- Indicate restricted band frequency in 15.205**
Pk: Peak Detector; Av: Average Detector

Channel Frequency (MHz)	Measured Frequency (MHz)	Antenna Polarization	Emission (dBµV/m)	Limit (dBµV/m)	Margin (dB)
5320	5320 (Pk)	Vertical	103.30	-	-
	5320 (Av)		86.96	-	-
	5350 (Pk)		53.02	74*	-20.98
	5350 (Av)		35.18	54*	-18.82
	10640 (Pk)		52.44	68.23	-15.79
	10640 (Av)		39.99	54	-14.01
	15960 (Pk)		52.34	68.23	-15.89
	15960 (Av)		39.94	54	-14.06
	5320 (Pk)	Horizontal	98.19	-	-
	5320 (Av)		81.97	-	-
	5350 (Pk)		49.91	74*	-24.09
	5350 (Av)		32.51	54*	-21.49
	10640 (Pk)		52.26	68.23	-15.97
	10640 (Av)		39.97	54	-14.03
	15960 (Pk)		52.45	68.23	-15.78
	15960 (Av)		39.93	54	-14.07
5500	5500 (Pk)	Vertical	102.36	-	-
	5500 (Av)		85.99	-	-
	5460 (Pk)		52.11	74*	-21.89
	5460 (Av)		35.51	54*	-18.49
	11000 (Pk)		52.31	68.23	-15.92
	11000 (Av)		40.63	54	-13.37
	16500 (Pk)		53.59	68.23	-14.64
	16500 (Av)		41.99	54	-12.01
	5500 (Pk)	Horizontal	96.30	-	-
	5500 (Av)		79.84	-	-
	5460 (Pk)		43.96	74*	-30.04
	5460 (Av)		32.43	54*	-21.57
	11000 (Pk)		52.96	68.23	-15.27
	11000 (Av)		40.66	54	-13.34
	16500 (Pk)		54.39	68.23	-13.84
	16500 (Av)		41.98	54	-12.02
5700	5700 (Pk)	Vertical	99.56	-	-
	5700 (Av)		83.07	-	-
	5460 (Pk)		42.77	74*	-31.23
	5460 (Av)		30.09	54*	-23.91
	11400 (Pk)		53.30	68.23	-14.93
	11400 (Av)		41.40	54	-12.60
	17100 (Pk)		56.62	68.23	-11.61
	17100 (Av)		43.71	54	-10.29
	5700 (Pk)	Horizontal	93.16	-	-
	5700 (Av)		77.01	-	-
	5460 (Pk)		42.92	74*	-31.08
	5460 (Av)		29.98	54*	-24.02
	11400 (Pk)		53.90	68.23	-14.33
	11400 (Av)		41.40	54	-12.60
	17100 (Pk)		55.49	68.23	-12.74
	17100 (Av)		43.71	54	-10.29

Note:
*** :- Indicate restricted band frequency in 15.205**
Pk: Peak Detector; Av: Average Detector

Channel Frequency (MHz)	Measured Frequency (MHz)	Antenna Polarization	Emission (dBµV/m)	Limit (dBµV/m)	Margin (dB)
5720	5720 (Pk)	Vertical	102.49	-	-
	5720 (Av)		86.31	-	-
	5460 (Pk)		42.77	74*	-31.23
	5460 (Av)		30.22	54*	-23.78
	11440 (Pk)		54.65	68.23	-13.58
	11440 (Av)		41.40	54	-12.60
	17160 (Pk)		56.70	68.23	-11.53
	17160 (Av)		43.88	54	-10.12
	5720 (Pk)	Horizontal	95.15	-	-
	5720 (Av)		78.76	-	-
	5460 (Pk)		42.49	74*	-31.51
	5460 (Av)		29.98	54*	-24.02
	11440 (Pk)		54.04	68.23	-14.19
	11440 (Av)		41.36	54	-12.64
	17160 (Pk)		55.53	68.23	-12.70
	17160 (Av)		43.83	54	-10.17
5745	5715(Pk)	Vertical	102.15	78.20*	23.95
	5725(Pk)		85.78	78.20*	7.58
	5745 (Pk)		66.55	-	-
	5745 (Av)		59.12	-	-
	11490 (Pk)		55.34	68.23	-12.89
	11490 (Av)		42.43	54	-11.57
	17235 (Pk)		56.63	68.23	-11.60
	17235 (Av)		44.57	54	-9.43
	5715(Pk)	Horizontal	94.54	78.20*	16.34
	5725(Pk)		78.08	78.20*	-0.12
	5745 (Pk)		58.71	-	-
	5745 (Av)		51.43	-	-
	11490 (Pk)		54.54	68.23	-13.69
	11490 (Av)		42.34	54	-11.66
	17235 (Pk)		56.89	68.23	-11.34
	17235 (Av)		44.47	54	-9.53
5825	5825 (Pk)	Vertical	101.47	-	-
	5825 (Av)		84.70	-	-
	5850 (Pk)		61.76	78.20*	-16.44
	5860 (Pk)		55.18	78.20*	-23.02
	11650 (Pk)		54.05	68.23	-14.18
	11650 (Av)		42.08	54	-11.92
	17475 (Pk)		59.97	68.23	-8.26
	17475 (Av)		46.52	54	-7.48
	5825 (Pk)	Horizontal	93.49	-	-
	5825 (Av)		76.77	-	-
	5850 (Pk)		52.01	78.20*	-26.19
	5860 (Pk)		47.00	78.20*	-31.20
	11650 (Pk)		54.95	68.23	-13.28
	11650 (Av)		41.72	54	-12.28
	17475 (Pk)		58.95	68.23	-9.28
	17475 (Av)		46.57	54	-7.43

Note:
*** :- Indicate restricted band frequency in 15.205**
Pk: Peak Detector; Av: Average Detector

Modulation: **802.11ax_ HE 20MHz**
Data rate: **MCS0**

Channel Frequency (MHz)	Measured Frequency (MHz)	Antenna Polarization	Emission (dBµV/m)	Limit (dBµV/m)	Margin (dB)
5180	5180 (Pk)	Vertical	105.89	-	-
	5180 (Av)		92.36	-	-
	5150 (Pk)		70.17	74*	-3.83
	5150 (Av)		36.56	54*	-17.44
	10360 (Pk)		51.26	68.23	-16.97
	10360 (Av)		39.26	54	-14.74
	15540 (Pk)		51.48	68.23	-16.75
	15540 (Av)		38.62	54	-15.38
	5180 (Pk)	Horizontal	101.19	-	-
	5180 (Av)		87.60	-	-
	5150 (Pk)		68.09	74*	-5.91
	5150 (Av)		40.27	54*	-13.73
	10360 (Pk)		51.77	68.23	-16.46
	10360 (Av)		39.23	54	-14.77
	15540 (Pk)		50.00	68.23	-18.23
	15540 (Av)		38.63	54	-15.37
5240	5240 (Pk)	Vertical	110.91	-	-
	5240 (Av)		97.72	-	-
	5350 (Pk)		54.78	74*	-19.22
	5350 (Av)		39.22	54*	-14.78
	10480 (Pk)		52.39	68.23	-15.84
	10480 (Av)		40.08	54	-13.92
	15720 (Pk)		51.17	68.23	-17.06
	15720 (Av)		38.71	54	-15.29
	5240 (Pk)	Horizontal	105.73	-	-
	5240 (Av)		92.47	-	-
	5350 (Pk)		47.66	74*	-26.34
	5350 (Av)		33.97	54*	-20.03
	10480 (Pk)		52.40	68.23	-15.83
	10480 (Av)		40.03	54	-13.97
	15720 (Pk)		50.78	68.23	-17.45
	15720 (Av)		38.65	54	-15.35
5260	5260 (Pk)	Vertical	110.13	-	-
	5260 (Av)		97.52	-	-
	5350 (Pk)		56.84	74*	-17.16
	5350 (Av)		43.02	54*	-10.98
	10520 (Pk)		52.16	68.23	-16.07
	10520 (Av)		39.99	54	-14.01
	15780 (Pk)		51.99	68.23	-16.24
	15780 (Av)		39.24	54	-14.76
	5260 (Pk)	Horizontal	106.83	-	-
	5260 (Av)		93.03	-	-
	5350 (Pk)		53.80	74*	-20.20
	5350 (Av)		38.73	54*	-15.27
	10520 (Pk)		51.41	68.23	-16.82
	10520 (Av)		39.95	54	-14.05
	15780 (Pk)		52.42	68.23	-15.81
	15780 (Av)		39.21	54	-14.79

Note:
*** :- Indicate restricted band frequency in 15.205**
Pk: Peak Detector; Av: Average Detector

Channel Frequency (MHz)	Measured Frequency (MHz)	Antenna Polarization	Emission (dBµV/m)	Limit (dBµV/m)	Margin (dB)
5320	5320 (Pk)	Vertical	106.35	-	-
	5320 (Av)		92.20	-	-
	5350 (Pk)		67.13	74*	-6.87
	5350 (Av)		39.59	54*	-14.41
	10640 (Pk)		52.80	68.23	-15.43
	10640 (Av)		40.19	54	-13.81
	15960 (Pk)		52.60	68.23	-15.63
	15960 (Av)		40.68	54	-13.32
	5320 (Pk)	Horizontal	101.47	-	-
	5320 (Av)		87.33	-	-
	5350 (Pk)		59.62	74*	-14.38
	5350 (Av)		35.18	54*	-18.82
	10640 (Pk)		52.09	68.23	-16.14
	10640 (Av)		40.18	54	-13.82
	15960 (Pk)		52.79	68.23	-15.44
	15960 (Av)		40.74	54	-13.26
5500	5500 (Pk)	Vertical	105.63	-	-
	5500 (Av)		91.72	-	-
	5460 (Pk)		55.13	74*	-18.87
	5460 (Av)		36.52	54*	-17.48
	11000 (Pk)		53.30	68.23	-14.93
	11000 (Av)		40.86	54	-13.14
	16500 (Pk)		54.83	68.23	-13.40
	16500 (Av)		42.61	54	-11.39
	5500 (Pk)	Horizontal	97.17	-	-
	5500 (Av)		84.08	-	-
	5460 (Pk)		48.28	74*	-25.72
	5460 (Av)		32.59	54*	-21.41
	11000 (Pk)		53.15	68.23	-15.08
	11000 (Av)		40.86	54	-13.14
	16500 (Pk)		54.37	68.23	-13.86
	16500 (Av)		42.59	54	-11.41
5700	5700 (Pk)	Vertical	102.90	-	-
	5700 (Av)		90.36	-	-
	5460 (Pk)		43.03	74*	-30.97
	5460 (Av)		30.35	54*	-23.65
	11400 (Pk)		53.52	68.23	-14.71
	11400 (Av)		41.66	54	-12.34
	17100 (Pk)		56.72	68.23	-11.51
	17100 (Av)		44.24	54	-9.76
	5700 (Pk)	Horizontal	96.68	-	-
	5700 (Av)		82.89	-	-
	5460 (Pk)		42.88	74*	-31.12
	5460 (Av)		30.02	54*	-23.98
	11400 (Pk)		54.10	68.23	-14.13
	11400 (Av)		41.73	54	-12.27
	17100 (Pk)		56.48	68.23	-11.75
	17100 (Av)		44.28	54	-9.72

Note:
*** :- Indicate restricted band frequency in 15.205**
Pk: Peak Detector; Av: Average Detector

Channel Frequency (MHz)	Measured Frequency (MHz)	Antenna Polarization	Emission (dBµV/m)	Limit (dBµV/m)	Margin (dB)
5720	5720 (Pk)	Vertical	109.40	-	-
	5720 (Av)		95.31	-	-
	5460 (Pk)		42.93	74*	-31.07
	5460 (Av)		30.58	54*	-23.42
	11440 (Pk)		53.30	68.23	-14.93
	11440 (Av)		41.84	54	-12.16
	17160 (Pk)		56.33	68.23	-11.90
	17160 (Av)		44.36	54	-9.64
	5720 (Pk)	Horizontal	101.76	-	-
	5720 (Av)		88.30	-	-
	5460 (Pk)		42.71	74*	-31.29
	5460 (Av)		30.14	54*	-23.86
	11440 (Pk)		54.00	68.23	-14.23
	11440 (Av)		41.67	54	-12.33
	17160 (Pk)		57.01	68.23	-11.22
	17160 (Av)		44.33	54	-9.67
5745	5715(Pk)	Vertical	67.63	78.20*	-10.57
	5725(Pk)		77.09	78.20*	-1.11
	5745 (Pk)		108.54	-	-
	5745 (Av)		94.68	-	-
	11490 (Pk)		54.88	68.23	-13.35
	11490 (Av)		42.32	54	-11.68
	17235 (Pk)		58.55	68.23	-9.68
	17235 (Av)		46.90	54	-7.10
	5715(Pk)	Horizontal	60.68	78.20*	-17.52
	5725(Pk)		70.42	78.20*	-7.78
	5745 (Pk)		101.16	-	-
	5745 (Av)		87.31	-	-
	11490 (Pk)		54.33	68.23	-13.90
	11490 (Av)		42.56	54	-11.44
	17235 (Pk)		56.64	68.23	-11.59
	17235 (Av)		44.92	54	-9.08
5825	5825 (Pk)	Vertical	108.04	-	-
	5825 (Av)		94.46	-	-
	5850 (Pk)		73.86	78.20*	-4.34
	5860 (Pk)		59.73	78.20*	-18.47
	11650 (Pk)		54.88	68.23	-13.35
	11650 (Av)		42.32	54	-11.68
	17475 (Pk)		58.55	68.23	-9.68
	17475 (Av)		46.09	54	-7.91
	5825 (Pk)	Horizontal	99.32	-	-
	5825 (Av)		85.51	-	-
	5850 (Pk)		63.51	78.20*	-14.69
	5860 (Pk)		51.26	78.20*	-26.94
	11650 (Pk)		54.65	68.23	-13.58
	11650 (Av)		41.83	54	-12.17
	17475 (Pk)		59.20	68.23	-9.03
	17475 (Av)		46.91	54	-7.09

Note:
*** :- Indicate restricted band frequency in 15.205**
Pk: Peak Detector; Av: Average Detector

Modulation: **802.11ax _ HE 20MHz**
Data rate: **MCS11**

Channel Frequency (MHz)	Measured Frequency (MHz)	Antenna Polarization	Emission (dBµV/m)	Limit (dBµV/m)	Margin (dB)
5180	5180 (Pk)	Vertical	102.99	-	-
	5180 (Av)		84.25	-	-
	5150 (Pk)		52.25	74*	-21.75
	5150 (Av)		36.24	54*	-17.76
	10360 (Pk)		51.26	68.23	-16.97
	10360 (Av)		39.23	54	-14.77
	15540 (Pk)		51.50	68.23	-16.73
	15540 (Av)		38.67	54	-15.33
	5180 (Pk)	Horizontal	98.66	-	-
	5180 (Av)		79.87	-	-
	5150 (Pk)		47.54	74*	-26.46
	5150 (Av)		33.31	54*	-20.69
	10360 (Pk)		51.38	68.23	-16.85
	10360 (Av)		39.23	54	-14.77
	15540 (Pk)		51.34	68.23	-16.89
	15540 (Av)		38.70	54	-15.30
5240	5240 (Pk)	Vertical	103.40	-	-
	5240 (Av)		84.41	-	-
	5350 (Pk)		46.09	74*	-27.91
	5350 (Av)		31.51	54*	-22.49
	10480 (Pk)		52.52	68.23	-15.71
	10480 (Av)		40.08	54	-13.92
	15720 (Pk)		50.66	68.23	-17.57
	15720 (Av)		38.72	54	-15.28
	5240 (Pk)	Horizontal	99.40	-	-
	5240 (Av)		80.38	-	-
	5350 (Pk)		42.92	74*	-31.08
	5350 (Av)		30.72	54*	-23.28
	10480 (Pk)		51.86	68.23	-16.37
	10480 (Av)		40.06	54	-13.94
	15720 (Pk)		51.01	68.23	-17.22
	15720 (Av)		38.69	54	-15.31
5260	5260 (Pk)	Vertical	102.12	-	-
	5260 (Av)		83.47	-	-
	5350 (Pk)		44.99	74*	-29.01
	5350 (Av)		31.89	54*	-22.11
	10520 (Pk)		52.35	68.23	-15.88
	10520 (Av)		39.91	54	-14.09
	15780 (Pk)		50.66	68.23	-17.57
	15780 (Av)		38.56	54	-15.44
	5260 (Pk)	Horizontal	97.90	-	-
	5260 (Av)		79.12	-	-
	5350 (Pk)		42.37	74*	-31.63
	5350 (Av)		30.39	54*	-23.61
	10520 (Pk)		52.48	68.23	-15.75
	10520 (Av)		39.94	54	-14.06
	15780 (Pk)		50.84	68.23	-17.39
	15780 (Av)		38.58	54	-15.42

Note:
*** :- Indicate restricted band frequency in 15.205**
Pk: Peak Detector; Av: Average Detector

Channel Frequency (MHz)	Measured Frequency (MHz)	Antenna Polarization	Emission (dBµV/m)	Limit (dBµV/m)	Margin (dB)
5320	5320 (Pk)	Vertical	101.84	-	-
	5320 (Av)		83.69	-	-
	5350 (Pk)		59.95	74*	-14.05
	5350 (Av)		33.84	54*	-20.16
	10640 (Pk)		52.78	68.23	-15.45
	10640 (Av)		40.17	54	-13.83
	15960 (Pk)		53.12	68.23	-15.11
	15960 (Av)		40.14	54	-13.86
	5320 (Pk)	Horizontal	96.16	-	-
	5320 (Av)		78.80	-	-
	5350 (Pk)		54.52	74*	-19.48
	5350 (Av)		31.46	54*	-22.54
	10640 (Pk)		52.30	68.23	-15.93
	10640 (Av)		40.21	54	-13.79
	15960 (Pk)		52.31	68.23	-15.92
	15960 (Av)		40.17	54	-13.83
5500	5500 (Pk)	Vertical	102.58	-	-
	5500 (Av)		83.89	-	-
	5460 (Pk)		50.64	74*	-23.36
	5460 (Av)		35.12	54*	-18.88
	11000 (Pk)		53.03	68.23	-15.20
	11000 (Av)		40.72	54	-13.28
	16500 (Pk)		54.55	68.23	-13.68
	16500 (Av)		42.43	54	-11.57
	5500 (Pk)	Horizontal	97.10	-	-
	5500 (Av)		78.41	-	-
	5460 (Pk)		45.58	74*	-28.42
	5460 (Av)		32.33	54*	-21.67
	11000 (Pk)		53.56	68.23	-14.67
	11000 (Av)		40.75	54	-13.25
	16500 (Pk)		55.40	68.23	-12.83
	16500 (Av)		42.48	54	-11.52
5700	5700 (Pk)	Vertical	101.41	-	-
	5700 (Av)		83.42	-	-
	5460 (Pk)		42.89	74*	-31.11
	5460 (Av)		30.16	54*	-23.84
	11400 (Pk)		53.88	68.23	-14.35
	11400 (Av)		41.51	54	-12.49
	17100 (Pk)		56.05	68.23	-12.18
	17100 (Av)		44.04	54	-9.96
	5700 (Pk)	Horizontal	92.01	-	-
	5700 (Av)		74.09	-	-
	5460 (Pk)		42.53	74*	-31.47
	5460 (Av)		30.00	54*	-24.00
	11400 (Pk)		53.79	68.23	-14.44
	11400 (Av)		41.45	54	-12.55
	17100 (Pk)		55.98	68.23	-12.25
	17100 (Av)		44.03	54	-9.97

Note:
*** :- Indicate restricted band frequency in 15.205**
Pk: Peak Detector; Av: Average Detector

Channel Frequency (MHz)	Measured Frequency (MHz)	Antenna Polarization	Emission (dBµV/m)	Limit (dBµV/m)	Margin (dB)
5720	5720 (Pk)	Vertical	100.68	-	-
	5720 (Av)		82.27	-	-
	5460 (Pk)		42.35	74*	-31.65
	5460 (Av)		30.15	54*	-23.85
	11440 (Pk)		53.44	68.23	-14.79
	11440 (Av)		41.48	54	-12.52
	17160 (Pk)		56.24	68.23	-11.99
	17160 (Av)		44.23	54	-9.77
	5720 (Pk)	Horizontal	94.45	-	-
	5720 (Av)		75.67	-	-
	5460 (Pk)		42.06	74*	-31.94
	5460 (Av)		30.00	54*	-24.00
	11440 (Pk)		53.40	68.23	-14.83
	11440 (Av)		41.43	54	-12.57
	17160 (Pk)		56.21	68.23	-12.02
	17160 (Av)		44.14	54	-9.86
5745	5715(Pk)	Vertical	100.86	78.20*	22.66
	5725(Pk)		82.19	78.20*	3.99
	5745 (Pk)		64.21	-	-
	5745 (Av)		53.29	-	-
	11490 (Pk)		54.95	68.23	-13.28
	11490 (Av)		42.55	54	-11.45
	17235 (Pk)		57.10	68.23	-11.13
	17235 (Av)		44.85	54	-9.15
	5715(Pk)	Horizontal	93.10	78.20*	14.90
	5725(Pk)		74.37	78.20*	-3.83
	5745 (Pk)		54.37	-	-
	5745 (Av)		47.36	-	-
	11490 (Pk)		54.04	68.23	-14.19
	11490 (Av)		42.56	54	-11.44
	17235 (Pk)		57.27	68.23	-10.96
	17235 (Av)		44.87	54	-9.13
5825	5825 (Pk)	Vertical	99.78	-	-
	5825 (Av)		80.89	-	-
	5850 (Pk)		57.67	78.20*	-20.53
	5860 (Pk)		51.47	78.20*	-26.73
	11650 (Pk)		53.64	68.23	-14.59
	11650 (Av)		41.75	54	-12.25
	17475 (Pk)		59.23	68.23	-9.00
	17475 (Av)		46.76	54	-7.24
	5825 (Pk)	Horizontal	91.73	-	-
	5825 (Av)		72.91	-	-
	5850 (Pk)		51.28	78.20*	-26.92
	5860 (Pk)		45.83	78.20*	-32.37
	11650 (Pk)		53.56	68.23	-14.67
	11650 (Av)		41.68	54	-12.32
	17475 (Pk)		58.57	68.23	-9.66
	17475 (Av)		46.70	54	-7.30

Note:
*** :- Indicate restricted band frequency in 15.205**
Pk: Peak Detector; Av: Average Detector

Modulation: **802.11n _ HT 40MHz**
Data rate: **MCS0**

Channel Frequency (MHz)	Measured Frequency (MHz)	Antenna Polarization	Emission (dBµV/m)	Limit (dBµV/m)	Margin (dB)
5190	5190 (Pk)	Vertical	98.29	-	-
	5190 (Av)		86.77	-	-
	5150 (Pk)		64.20	74*	-9.80
	5150 (Av)		44.75	54*	-9.25
	10380 (Pk)		52.21	68.23	-16.02
	10380 (Av)		39.66	54	-14.34
	15570 (Pk)		53.38	68.23	-14.85
	15570 (Av)		41.36	54	-12.64
	5190 (Pk)	Horizontal	92.63	-	-
	5190 (Av)		81.37	-	-
	5150 (Pk)		55.13	74*	-18.87
	5150 (Av)		39.01	54*	-14.99
	10380 (Pk)		51.42	68.23	-16.81
	10380 (Av)		39.68	54	-14.32
	15570 (Pk)		53.89	68.23	-14.34
	15570 (Av)		41.32	54	-12.68
5230	5230 (Pk)	Vertical	102.12	-	-
	5230 (Av)		90.74	-	-
	5350 (Pk)		53.14	74*	-20.86
	5350 (Av)		36.49	54*	-17.51
	10460 (Pk)		52.37	68.23	-15.86
	10460 (Av)		39.93	54	-14.07
	15690 (Pk)		53.02	68.23	-15.21
	15690 (Av)		40.85	54	-13.15
	5230 (Pk)	Horizontal	93.82	-	-
	5230 (Av)		82.43	-	-
	5350 (Pk)		45.84	74*	-28.16
	5350 (Av)		32.10	54*	-21.90
	10460 (Pk)		51.61	68.23	-16.62
	10460 (Av)		40.01	54	-13.99
	15690 (Pk)		53.20	68.23	-15.03
	15690 (Av)		40.88	54	-13.12
5270	5270 (Pk)	Vertical	102.03	-	-
	5270 (Av)		90.55	-	-
	5350 (Pk)		57.34	74*	-16.66
	5350 (Av)		38.88	54*	-15.12
	10540 (Pk)		52.51	68.23	-15.72
	10540 (Av)		40.08	54	-13.92
	15810 (Pk)		52.98	68.23	-15.25
	15810 (Av)		40.72	54	-13.28
	5270 (Pk)	Horizontal	96.01	-	-
	5270 (Av)		84.87	-	-
	5350 (Pk)		50.71	74*	-23.29
	5350 (Av)		34.57	54*	-19.43
	10540 (Pk)		52.71	68.23	-15.52
	10540 (Av)		40.06	54	-13.94
	15810 (Pk)		52.68	68.23	-15.55
	15810 (Av)		40.68	54	-13.32

Note:
*** :- Indicate restricted band frequency in 15.205**
Pk: Peak Detector; Av: Average Detector

Channel Frequency (MHz)	Measured Frequency (MHz)	Antenna Polarization	Emission (dBµV/m)	Limit (dBµV/m)	Margin (dB)
5310	5310 (Pk)	Vertical	98.37	-	-
	5310 (Av)		86.42	-	-
	5350 (Pk)		63.33	74*	-10.67
	5350 (Av)		42.55	54*	-11.45
	10620 (Pk)		52.27	68.23	-15.96
	10620 (Av)		40.12	54	-13.88
	15930 (Pk)		53.87	68.23	-14.36
	15930 (Av)		41.17	54	-12.83
	5310 (Pk)	Horizontal	91.77	-	-
	5310 (Av)		80.31	-	-
	5350 (Pk)		56.67	74*	-17.33
	5350 (Av)		37.55	54*	-16.45
	10620 (Pk)		52.09	68.23	-16.14
	10620 (Av)		40.13	54	-13.87
	15930 (Pk)		53.46	68.23	-14.77
	15930 (Av)		41.22	54	-12.78
5510	5510 (Pk)	Vertical	95.75	-	-
	5510 (Av)		83.92	-	-
	5460 (Pk)		49.22	74*	-24.78
	5460 (Av)		35.60	54*	-18.40
	11020 (Pk)		52.51	68.23	-15.72
	11020 (Av)		40.87	54	-13.13
	16530 (Pk)		54.95	68.23	-13.28
	16530 (Av)		42.87	54	-11.13
	5510 (Pk)	Horizontal	88.75	-	-
	5510 (Av)		77.28	-	-
	5460 (Pk)		44.17	74*	-29.83
	5460 (Av)		31.96	54*	-22.04
	11020 (Pk)		53.16	68.23	-15.07
	11020 (Av)		40.85	54	-13.15
	16530 (Pk)		54.73	68.23	-13.50
	16530 (Av)		42.83	54	-11.17
5590	5590 (Pk)	Vertical	102.92	-	-
	5590 (Av)		91.72	-	-
	5460 (Pk)		53.68	74*	-20.32
	5460 (Av)		39.06	54*	-14.94
	11180 (Pk)		53.56	68.23	-14.67
	11180 (Av)		40.71	54	-13.29
	16770 (Pk)		55.34	68.23	-12.89
	16770 (Av)		43.50	54	-10.50
	5590 (Pk)	Horizontal	95.44	-	-
	5590 (Av)		83.87	-	-
	5460 (Pk)		49.90	74*	-24.10
	5460 (Av)		34.11	54*	-19.89
	11180 (Pk)		52.58	68.23	-15.65
	11180 (Av)		40.68	54	-13.32
	16770 (Pk)		55.62	68.23	-12.61
	16770 (Av)		43.50	54	-10.50

Note:
*** :- Indicate restricted band frequency in 15.205**
Pk: Peak Detector; Av: Average Detector

Channel Frequency (MHz)	Measured Frequency (MHz)	Antenna Polarization	Emission (dBµV/m)	Limit (dBµV/m)	Margin (dB)
5670	5670 (Pk)	Vertical	98.38	-	-
	5670 (Av)		86.48	-	-
	5460 (Pk)		43.14	74*	-30.86
	5460 (Av)		30.75	54*	-23.25
	11340 (Pk)		53.35	68.23	-14.88
	11340 (Av)		41.22	54	-12.78
	17010 (Pk)		54.28	68.23	-13.95
	17010 (Av)		42.53	54	-11.47
	5670 (Pk)	Horizontal	90.07	-	-
	5670 (Av)		78.78	-	-
	5460 (Pk)		43.00	74*	-31.00
	5460 (Av)		30.16	54*	-23.84
	11340 (Pk)		52.93	68.23	-15.30
	11340 (Av)		41.08	54	-12.92
	17010 (Pk)		54.16	68.23	-14.07
	17010 (Av)		42.43	54	-11.57
5710	5710 (Pk)	Vertical	102.01	-	-
	5710 (Av)		90.69	-	-
	5460 (Pk)		42.95	74*	-31.05
	5460 (Av)		30.75	54*	-23.25
	11420 (Pk)		53.60	68.23	-14.63
	11420 (Av)		41.97	54	-12.03
	17130 (Pk)		53.72	68.23	-14.51
	17130 (Av)		42.35	54	-11.65
	5710 (Pk)	Horizontal	93.52	-	-
	5710 (Av)		82.05	-	-
	5460 (Pk)		43.79	74*	-30.21
	5460 (Av)		30.19	54*	-23.81
	11420 (Pk)		53.52	68.23	-14.71
	11420 (Av)		41.73	54	-12.27
	17130 (Pk)		54.92	68.23	-13.31
	17130 (Av)		42.33	54	-11.67
5755	5755 (Pk)	Vertical	101.99	-	-
	5755 (Av)		89.84	-	-
	5715(Pk)		71.83	78.20*	-6.37
	5725(Pk)		76.40	78.20*	-1.80
	11510 (Pk)		57.50	68.23	-10.73
	11510 (Av)		43.94	54	-10.06
	17265(Pk)		53.63	68.23	-14.60
	17265(Av)		41.99	54	-12.01
	5755 (Pk)	Horizontal	94.21	-	-
	5755 (Av)		82.43	-	-
	5715(Pk)		66.17	78.20*	-12.03
	5725(Pk)		69.84	78.20*	-8.36
	11510 (Pk)		53.84	68.23	-14.39
	11510 (Av)		42.62	54	-11.38
	17265(Pk)		54.25	68.23	-13.98
	17265(Av)		41.96	54	-12.04

Note:
*** :- Indicate restricted band frequency in 15.205**
Pk: Peak Detector; Av: Average Detector

Channel Frequency (MHz)	Measured Frequency (MHz)	Antenna Polarization	Emission (dBµV/m)	Limit (dBµV/m)	Margin (dB)
5795	5795 (Pk)	Vertical	101.47	-	-
	5795 (Av)		89.42	-	-
	5850 (Pk)		68.25	78.20*	-9.95
	5860 (Pk)		64.92	78.20*	-13.28
	11590 (Pk)		59.36	68.23	-8.87
	11590 (Av)		44.69	54	-9.31
	17385 (Pk)		54.77	68.23	-13.46
	17385 (Av)		41.71	54	-12.29
	5795 (Pk)	Horizontal	94.51	-	-
	5795 (Av)		82.38	-	-
	5850 (Pk)		60.83	78.20*	-17.37
	5860 (Pk)		56.36	78.20*	-21.84
	11590 (Pk)		53.27	68.23	-14.96
	11590 (Av)		41.97	54	-12.03
	17385 (Pk)		53.07	68.23	-15.16
	17385 (Pk)		41.71	54	-12.29

Note:
*** :- Indicate restricted band frequency in 15.205**
Pk: Peak Detector; Av: Average Detector

Modulation: **802.11n _ HT 40MHz**
Data rate: **MCS7**

Channel Frequency (MHz)	Measured Frequency (MHz)	Antenna Polarization	Emission (dBµV/m)	Limit (dBµV/m)	Margin (dB)
5190	5190 (Pk)	Vertical	98.69	-	-
	5190 (Av)		80.44	-	-
	5150 (Pk)		63.50	74*	-10.50
	5150 (Av)		41.64	54*	-12.36
	10380 (Pk)		51.76	68.23	-16.47
	10380 (Av)		39.62	54	-14.38
	15570 (Pk)		53.89	68.23	-14.34
	15570 (Av)		41.29	54	-12.71
	5190 (Pk)	Horizontal	87.25	-	-
	5190 (Av)		68.46	-	-
	5150 (Pk)		53.39	74*	-20.61
	5150 (Av)		32.78	54*	-21.22
	10380 (Pk)		51.84	68.23	-16.39
	10380 (Av)		39.57	54	-14.43
	15570 (Pk)		53.86	68.23	-14.37
	15570 (Av)		41.28	54	-12.72
5230	5230 (Pk)	Vertical	100.62	-	-
	5230 (Av)		82.96	-	-
	5350 (Pk)		50.20	74*	-23.80
	5350 (Av)		33.03	54*	-20.97
	10460 (Pk)		52.16	68.23	-16.07
	10460 (Av)		39.95	54	-14.05
	15690 (Pk)		53.27	68.23	-14.96
	15690 (Av)		40.78	54	-13.22
	5230 (Pk)	Horizontal	95.02	-	-
	5230 (Av)		76.77	-	-
	5350 (Pk)		45.33	74*	-28.67
	5350 (Av)		31.08	54*	-22.92
	10460 (Pk)		51.59	68.23	-16.64
	10460 (Av)		39.94	54	-14.06
	15690 (Pk)		53.38	68.23	-14.85
	15690 (Av)		40.79	54	-13.21
5270	5270 (Pk)	Vertical	100.08	-	-
	5270 (Av)		81.45	-	-
	5350 (Pk)		53.04	74*	-20.96
	5350 (Av)		33.12	54*	-20.88
	10540 (Pk)		52.26	68.23	-15.97
	10540 (Av)		40.04	54	-13.96
	15810 (Pk)		52.59	68.23	-15.64
	15810 (Av)		40.61	54	-13.39
	5270 (Pk)	Horizontal	93.65	-	-
	5270 (Av)		75.50	-	-
	5350 (Pk)		46.93	74*	-27.07
	5350 (Av)		30.85	54*	-23.15
	10540 (Pk)		52.10	68.23	-16.13
	10540 (Av)		40.03	54	-13.97
	15810 (Pk)		52.15	68.23	-16.08
	15810 (Av)		40.67	54	-13.33

Note:
*** :- Indicate restricted band frequency in 15.205**
Pk: Peak Detector; Av: Average Detector

Channel Frequency (MHz)	Measured Frequency (MHz)	Antenna Polarization	Emission (dBµV/m)	Limit (dBµV/m)	Margin (dB)
5310	5310 (Pk)	Vertical	98.56	-	-
	5310 (Av)		80.35	-	-
	5350 (Pk)		62.63	74*	-11.37
	5350 (Av)		39.46	54*	-14.54
	10620 (Pk)		52.51	68.23	-15.72
	10620 (Av)		40.14	54	-13.86
	15930 (Pk)		53.31	68.23	-14.92
	15930 (Av)		41.19	54	-12.81
	5310 (Pk)	Horizontal	93.24	-	-
	5310 (Av)		74.47	-	-
	5350 (Pk)		56.80	74*	-17.20
	5350 (Av)		35.45	54*	-18.55
	10620 (Pk)		52.24	68.23	-15.99
	10620 (Av)		40.14	54	-13.86
	15930 (Pk)		53.31	68.23	-14.92
	15930 (Av)		41.20	54	-12.80
5510	5510 (Pk)	Vertical	95.70	-	-
	5510 (Av)		76.89	-	-
	5460 (Pk)		51.32	74*	-22.68
	5460 (Av)		33.75	54*	-20.25
	11020 (Pk)		52.90	68.23	-15.33
	11020 (Av)		40.91	54	-13.09
	16530 (Pk)		52.46	68.23	-15.77
	16530 (Av)		41.08	54	-12.92
	5510 (Pk)	Horizontal	89.07	-	-
	5510 (Av)		70.36	-	-
	5460 (Pk)		44.74	74*	-29.26
	5460 (Av)		30.91	54*	-23.09
	11020 (Pk)		52.83	68.23	-15.40
	11020 (Av)		40.88	54	-13.12
	16530 (Pk)		54.90	68.23	-13.33
	16530 (Av)		42.79	54	-11.21
5590	5590 (Pk)	Vertical	99.58	-	-
	5590 (Av)		80.81	-	-
	5460 (Pk)		47.15	74*	-26.85
	5460 (Av)		31.34	54*	-22.66
	11180 (Pk)		52.39	68.23	-15.84
	11180 (Av)		40.45	54	-13.55
	16770 (Pk)		55.40	68.23	-12.83
	16770 (Av)		43.36	54	-10.64
	5590 (Pk)	Horizontal	92.77	-	-
	5590 (Av)		74.58	-	-
	5460 (Pk)		42.65	74*	-31.35
	5460 (Av)		30.28	54*	-23.72
	11180 (Pk)		51.95	68.23	-16.28
	11180 (Av)		40.40	54	-13.60
	16770 (Pk)		54.56	68.23	-13.67
	16770 (Av)		43.33	54	-10.67

Note:
*** :- Indicate restricted band frequency in 15.205**
Pk: Peak Detector; Av: Average Detector

Channel Frequency (MHz)	Measured Frequency (MHz)	Antenna Polarization	Emission (dBµV/m)	Limit (dBµV/m)	Margin (dB)
5670	5670 (Pk)	Vertical	99.17	-	-
	5670 (Av)		80.11	-	-
	5460 (Pk)		43.19	74*	-30.81
	5460 (Av)		30.19	54*	-23.81
	11340 (Pk)		52.26	68.23	-15.97
	11340 (Av)		41.04	54	-12.96
	17010 (Pk)		54.25	68.23	-13.98
	17010 (Av)		42.43	54	-11.57
	5670 (Pk)	Horizontal	90.80	-	-
	5670 (Av)		72.63	-	-
	5460 (Pk)		44.09	74*	-29.91
	5460 (Av)		29.95	54*	-24.05
	11340 (Pk)		53.22	68.23	-15.01
	11340 (Av)		41.06	54	-12.94
	17010 (Pk)		54.12	68.23	-14.11
	17010 (Av)		42.42	54	-11.58
5710	5710 (Pk)	Vertical	99.46	-	-
	5710 (Av)		81.47	-	-
	5460 (Pk)		42.82	74*	-31.18
	5460 (Av)		30.20	54*	-23.80
	11420 (Pk)		52.99	68.23	-15.24
	11420 (Av)		41.64	54	-12.36
	17130 (Pk)		53.70	68.23	-14.53
	17130 (Av)		42.38	54	-11.62
	5710 (Pk)	Horizontal	92.16	-	-
	5710 (Av)		73.32	-	-
	5460 (Pk)		43.13	74*	-30.87
	5460 (Av)		29.95	54*	-24.05
	11420 (Pk)		53.48	68.23	-14.75
	11420 (Av)		41.63	54	-12.37
	17130 (Pk)		54.33	68.23	-13.90
	17130 (Av)		42.44	54	-11.56
5755	5755 (Pk)	Vertical	98.34	-	-
	5755 (Av)		79.52	-	-
	5715(Pk)		62.29	78.20*	-15.91
	5725(Pk)		66.79	78.20*	-11.41
	11510 (Pk)		54.62	68.23	-13.61
	11510 (Av)		42.75	54	-11.25
	17265(Pk)		53.04	68.23	-15.19
	17265(Av)		41.99	54	-12.01
	5755 (Pk)	Horizontal	92.11	-	-
	5755 (Av)		73.23	-	-
	5715(Pk)		56.05	78.20*	-22.15
	5725(Pk)		59.60	78.20*	-18.60
	11510 (Pk)		53.43	68.23	-14.80
	11510 (Av)		42.52	54	-11.48
	17265(Pk)		54.11	68.23	-14.12
	17265(Av)		41.97	54	-12.03

Note:
*** :- Indicate restricted band frequency in 15.205**
Pk: Peak Detector; Av: Average Detector

Channel Frequency (MHz)	Measured Frequency (MHz)	Antenna Polarization	Emission (dBµV/m)	Limit (dBµV/m)	Margin (dB)
5795	5795 (Pk)	Vertical	99.11	-	-
	5795 (Av)		80.71	-	-
	5850 (Pk)		54.43	78.20*	-23.77
	5860 (Pk)		52.11	78.20*	-26.09
	11590 (Pk)		55.38	68.23	-12.85
	11590 (Av)		42.38	54	-11.62
	17385 (Pk)		53.44	68.23	-14.79
	17385 (Av)		41.70	54	-12.30
	5795 (Pk)	Horizontal	91.51	-	-
	5795 (Av)		72.63	-	-
	5850 (Pk)		47.79	78.20*	-30.41
	5860 (Pk)		46.79	78.20*	-31.41
	11590 (Pk)		54.25	68.23	-13.98
	11590 (Av)		41.88	54	-12.12
	17385 (Pk)		53.22	68.23	-15.01
	17385 (Pk)		41.68	54	-12.32

Note:
*** :- Indicate restricted band frequency in 15.205**
Pk: Peak Detector; Av: Average Detector

Modulation: **802.11ac _ VHT 40MHz**
Data rate: **MCS0**

Channel Frequency (MHz)	Measured Frequency (MHz)	Antenna Polarization	Emission (dBµV/m)	Limit (dBµV/m)	Margin (dB)
5190	5190 (Pk)	Vertical	97.26	-	-
	5190 (Av)		85.93	-	-
	5150 (Pk)		62.84	74*	-11.16
	5150 (Av)		43.63	54*	-10.37
	10380 (Pk)		51.66	68.23	-16.57
	10380 (Av)		39.55	54	-14.45
	15570 (Pk)		53.51	68.23	-14.72
	15570 (Av)		41.31	54	-12.69
	5190 (Pk)	Horizontal	93.21	-	-
	5190 (Av)		81.38	-	-
	5150 (Pk)		57.07	74*	-16.93
	5150 (Av)		39.84	54*	-14.16
	10380 (Pk)		51.91	68.23	-16.32
	10380 (Av)		39.56	54	-14.44
	15570 (Pk)		53.69	68.23	-14.54
	15570 (Av)		41.36	54	-12.64
5230	5230 (Pk)	Vertical	101.81	-	-
	5230 (Av)		90.49	-	-
	5350 (Pk)		52.74	74*	-21.26
	5350 (Av)		36.49	54*	-17.51
	10460 (Pk)		51.67	68.23	-16.56
	10460 (Av)		39.89	54	-14.11
	15690 (Pk)		51.80	68.23	-16.43
	15690 (Av)		40.77	54	-13.23
	5230 (Pk)	Horizontal	94.97	-	-
	5230 (Av)		84.05	-	-
	5350 (Pk)		46.91	74*	-27.09
	5350 (Av)		32.47	54*	-21.53
	10460 (Pk)		51.56	68.23	-16.67
	10460 (Av)		39.92	54	-14.08
	15690 (Pk)		53.48	68.23	-14.75
	15690 (Av)		40.78	54	-13.22
5270	5270 (Pk)	Vertical	101.69	-	-
	5270 (Av)		90.57	-	-
	5350 (Pk)		61.58	74*	-12.42
	5350 (Av)		45.81	54*	-8.19
	10540 (Pk)		51.72	68.23	-16.51
	10540 (Av)		39.98	54	-14.02
	15810 (Pk)		52.34	68.23	-15.89
	15810 (Av)		40.60	54	-13.40
	5270 (Pk)	Horizontal	95.91	-	-
	5270 (Av)		84.55	-	-
	5350 (Pk)		55.90	74*	-18.10
	5350 (Av)		40.84	54*	-13.16
	10540 (Pk)		52.20	68.23	-16.03
	10540 (Av)		40.04	54	-13.96
	15810 (Pk)		52.89	68.23	-15.34
	15810 (Av)		40.58	54	-13.42

Note:
*** :- Indicate restricted band frequency in 15.205**
Pk: Peak Detector; Av: Average Detector

Channel Frequency (MHz)	Measured Frequency (MHz)	Antenna Polarization	Emission (dBµV/m)	Limit (dBµV/m)	Margin (dB)
5310	5310 (Pk)	Vertical	99.37	-	-
	5310 (Av)		87.78	-	-
	5350 (Pk)		61.29	74*	-12.71
	5350 (Av)		42.92	54*	-11.08
	10620 (Pk)		52.52	68.23	-15.71
	10620 (Av)		40.14	54	-13.86
	15930 (Pk)		53.05	68.23	-15.18
	15930 (Av)		41.17	54	-12.83
	5310 (Pk)	Horizontal	92.37	-	-
	5310 (Av)		80.99	-	-
	5350 (Pk)		54.73	74*	-19.27
	5350 (Av)		37.62	54*	-16.38
	10620 (Pk)		51.90	68.23	-16.33
	10620 (Av)		40.13	54	-13.87
	15930 (Pk)		53.13	68.23	-15.10
	15930 (Av)		41.22	54	-12.78
5510	5510 (Pk)	Vertical	95.57	-	-
	5510 (Av)		83.77	-	-
	5460 (Pk)		52.05	74*	-21.95
	5460 (Av)		35.37	54*	-18.63
	11020 (Pk)		52.57	68.23	-15.66
	11020 (Av)		40.88	54	-13.12
	16530 (Pk)		54.96	68.23	-13.27
	16530 (Av)		42.77	54	-11.23
	5510 (Pk)	Horizontal	88.68	-	-
	5510 (Av)		76.91	-	-
	5460 (Pk)		45.40	74*	-28.60
	5460 (Av)		31.65	54*	-22.35
	11020 (Pk)		52.57	68.23	-15.66
	11020 (Av)		40.79	54	-13.21
	16530 (Pk)		54.74	68.23	-13.49
	16530 (Av)		42.78	54	-11.22
5590	5590 (Pk)	Vertical	101.98	-	-
	5590 (Av)		90.34	-	-
	5460 (Pk)		50.37	74*	-23.63
	5460 (Av)		36.28	54*	-17.72
	11180 (Pk)		52.97	68.23	-15.26
	11180 (Av)		40.42	54	-13.58
	16770 (Pk)		54.85	68.23	-13.38
	16770 (Av)		43.32	54	-10.68
	5590 (Pk)	Horizontal	93.00	-	-
	5590 (Av)		81.69	-	-
	5460 (Pk)		46.07	74*	-27.93
	5460 (Av)		31.99	54*	-22.01
	11180 (Pk)		52.55	68.23	-15.68
	11180 (Av)		40.44	54	-13.56
	16770 (Pk)		55.38	68.23	-12.85
	16770 (Av)		42.32	54	-11.68

Note:
*** :- Indicate restricted band frequency in 15.205**
Pk: Peak Detector; Av: Average Detector

Channel Frequency (MHz)	Measured Frequency (MHz)	Antenna Polarization	Emission (dBµV/m)	Limit (dBµV/m)	Margin (dB)
5670	5670 (Pk)	Vertical	97.50	-	-
	5670 (Av)		85.96	-	-
	5460 (Pk)		43.94	74*	-30.06
	5460 (Av)		30.58	54*	-23.42
	11340 (Pk)		53.30	68.23	-14.93
	11340 (Av)		41.10	54	-12.90
	17010 (Pk)		53.65	68.23	-14.58
	17010 (Av)		42.42	54	-11.58
	5670 (Pk)	Horizontal	90.45	-	-
	5670 (Av)		79.14	-	-
	5460 (Pk)		42.50	74*	-31.50
	5460 (Av)		30.08	54*	-23.92
	11340 (Pk)		52.86	68.23	-15.37
	11340 (Av)		41.11	54	-12.89
	17010 (Pk)		53.86	68.23	-14.37
	17010 (Av)		42.41	54	-11.59
5710	5710 (Pk)	Vertical	101.40	-	-
	5710 (Av)		90.21	-	-
	5460 (Pk)		42.75	74*	-31.25
	5460 (Av)		30.61	54*	-23.39
	11420 (Pk)		53.68	68.23	-14.55
	11420 (Av)		41.83	54	-12.17
	17130 (Pk)		54.56	68.23	-13.67
	17130 (Av)		42.45	54	-11.55
	5710 (Pk)	Horizontal	91.99	-	-
	5710 (Av)		80.54	-	-
	5460 (Pk)		42.98	74*	-31.02
	5460 (Av)		30.04	54*	-23.96
	11420 (Pk)		54.02	68.23	-14.21
	11420 (Av)		41.69	54	-12.31
	17130 (Pk)		54.28	68.23	-13.95
	17130 (Av)		42.47	54	-11.53
5755	5755 (Pk)	Vertical	101.88	-	-
	5755 (Av)		90.32	-	-
	5715(Pk)		71.02	78.20*	-7.18
	5725(Pk)		74.49	78.20*	-3.71
	11510 (Pk)		58.34	68.23	-9.89
	11510 (Av)		43.65	54	-10.35
	17265(Pk)		54.15	68.23	-14.08
	17265(Av)		42.03	54	-11.97
	5755 (Pk)	Horizontal	93.79	-	-
	5755 (Av)		82.04	-	-
	5715(Pk)		64.53	78.20*	-13.67
	5725(Pk)		67.58	78.20*	-10.62
	11510 (Pk)		54.6	68.23	-13.63
	11510 (Av)		42.49	54	-11.51
	17265(Pk)		53.44	68.23	-14.79
	17265(Av)		42.04	54	-11.96

Note:
*** :- Indicate restricted band frequency in 15.205**
Pk: Peak Detector; Av: Average Detector

Channel Frequency (MHz)	Measured Frequency (MHz)	Antenna Polarization	Emission (dBµV/m)	Limit (dBµV/m)	Margin (dB)
5795	5795 (Pk)	Vertical	101.41	-	-
	5795 (Av)		89.83	-	-
	5850 (Pk)		62.64	78.20*	-15.56
	5860 (Pk)		60.29	78.20*	-17.91
	11590 (Pk)		54.23	68.23	-14.00
	11590 (Av)		42.34	54	-11.66
	17385 (Pk)		53.58	68.23	-14.65
	17385 (Av)		41.69	54	-12.31
	5795 (Pk)	Horizontal	92.57	-	-
	5795 (Av)		81.03	-	-
	5850 (Pk)		53.37	78.20*	-24.83
	5860 (Pk)		53.47	78.20*	-24.73
	11590 (Pk)		53.73	68.23	-14.50
	11590 (Av)		41.93	54	-12.07
	17385 (Pk)		54.15	68.23	-14.08
	17385 (Pk)		41.71	54	-12.29

Note:
*** :- Indicate restricted band frequency in 15.205**
Pk: Peak Detector; Av: Average Detector

Modulation: **802.11ac _ VHT 40MHz**
Data rate: **MCS9**

Channel Frequency (MHz)	Measured Frequency (MHz)	Antenna Polarization	Emission (dBµV/m)	Limit (dBµV/m)	Margin (dB)
5190	5190 (Pk)	Vertical	100.37	-	-
	5190 (Av)		81.48	-	-
	5150 (Pk)		63.12	74*	-10.88
	5150 (Av)		42.62	54*	-11.38
	10380 (Pk)		52.14	68.23	-16.09
	10380 (Av)		39.57	54	-14.43
	15570 (Pk)		53.13	68.23	-15.10
	15570 (Av)		41.33	54	-12.67
	5190 (Pk)	Horizontal	95.05	-	-
	5190 (Av)		76.39	-	-
	5150 (Pk)		57.27	74*	-16.73
	5150 (Av)		38.37	54*	-15.63
	10380 (Pk)		51.80	68.23	-16.43
	10380 (Av)		39.55	54	-14.45
	15570 (Pk)		54.03	68.23	-14.20
	15570 (Av)		41.29	54	-12.71
5230	5230 (Pk)	Vertical	102.21	-	-
	5230 (Av)		83.06	-	-
	5350 (Pk)		49.37	74*	-24.63
	5350 (Av)		33.36	54*	-20.64
	10460 (Pk)		52.40	68.23	-15.83
	10460 (Av)		39.49	54	-14.51
	15690 (Pk)		52.56	68.23	-15.67
	15690 (Av)		40.83	54	-13.17
	5230 (Pk)	Horizontal	97.56	-	-
	5230 (Av)		77.99	-	-
	5350 (Pk)		45.36	74*	-28.64
	5350 (Av)		30.88	54*	-23.12
	10460 (Pk)		51.75	68.23	-16.48
	10460 (Av)		39.93	54	-14.07
	15690 (Pk)		53.43	68.23	-14.80
	15690 (Av)		40.73	54	-13.27
5270	5270 (Pk)	Vertical	101.18	-	-
	5270 (Av)		81.94	-	-
	5350 (Pk)		51.56	74*	-22.44
	5350 (Av)		33.78	54*	-20.22
	10540 (Pk)		52.17	68.23	-16.06
	10540 (Av)		40.05	54	-13.95
	15810 (Pk)		52.77	68.23	-15.46
	15810 (Av)		40.64	54	-13.36
	5270 (Pk)	Horizontal	96.25	-	-
	5270 (Av)		77.23	-	-
	5350 (Pk)		48.74	74*	-25.26
	5350 (Av)		31.18	54*	-22.82
	10540 (Pk)		52.54	68.23	-15.69
	10540 (Av)		40.04	54	-13.96
	15810 (Pk)		53.00	68.23	-15.23
	15810 (Av)		40.64	54	-13.36

Note:
*** :- Indicate restricted band frequency in 15.205**
Pk: Peak Detector; Av: Average Detector

Channel Frequency (MHz)	Measured Frequency (MHz)	Antenna Polarization	Emission (dBµV/m)	Limit (dBµV/m)	Margin (dB)
5310	5310 (Pk)	Vertical	101.39	-	-
	5310 (Av)		82.15	-	-
	5350 (Pk)		63.84	74*	-10.16
	5350 (Av)		41.63	54*	-12.37
	10620 (Pk)		51.41	68.23	-16.82
	10620 (Av)		40.09	54	-13.91
	15930 (Pk)		53.01	68.23	-15.22
	15930 (Av)		41.17	54	-12.83
	5310 (Pk)	Horizontal	96.58	-	-
	5310 (Av)		77.13	-	-
	5350 (Pk)		58.44	74*	-15.56
	5350 (Av)		37.48	54*	-16.52
	10620 (Pk)		52.24	68.23	-15.99
	10620 (Av)		40.11	54	-13.89
	15930 (Pk)		54.07	68.23	-14.16
	15930 (Av)		41.18	54	-12.82
5510	5510 (Pk)	Vertical	97.61	-	-
	5510 (Av)		78.44	-	-
	5460 (Pk)		52.33	74*	-21.67
	5460 (Av)		34.72	54*	-19.28
	11020 (Pk)		52.64	68.23	-15.59
	11020 (Av)		40.79	54	-13.21
	16530 (Pk)		54.67	68.23	-13.56
	16530 (Av)		42.80	54	-11.20
	5510 (Pk)	Horizontal	92.29	-	-
	5510 (Av)		73.19	-	-
	5460 (Pk)		46.93	74*	-27.07
	5460 (Av)		32.30	54*	-21.70
	11020 (Pk)		52.38	68.23	-15.85
	11020 (Av)		40.83	54	-13.17
	16530 (Pk)		54.25	68.23	-13.98
	16530 (Av)		42.78	54	-11.22
5590	5590 (Pk)	Vertical	101.71	-	-
	5590 (Av)		81.65	-	-
	5460 (Pk)		46.92	74*	-27.08
	5460 (Av)		31.95	54*	-22.05
	11180 (Pk)		51.97	68.23	-16.26
	11180 (Av)		40.47	54	-13.53
	16770 (Pk)		55.40	68.23	-12.83
	16770 (Av)		43.33	54	-10.67
	5590 (Pk)	Horizontal	86.61	-	-
	5590 (Av)		66.95	-	-
	5460 (Pk)		43.50	74*	-30.50
	5460 (Av)		30.34	54*	-23.66
	11180 (Pk)		51.91	68.23	-16.32
	11180 (Av)		40.48	54	-13.52
	16770 (Pk)		55.46	68.23	-12.77
	16770 (Av)		43.36	54	-10.64

Note:
*** :- Indicate restricted band frequency in 15.205**
Pk: Peak Detector; Av: Average Detector

Channel Frequency (MHz)	Measured Frequency (MHz)	Antenna Polarization	Emission (dBµV/m)	Limit (dBµV/m)	Margin (dB)
5670	5670 (Pk)	Vertical	100.15	-	-
	5670 (Av)		81.08	-	-
	5460 (Pk)		43.72	74*	-30.28
	5460 (Av)		30.62	54*	-23.38
	11340 (Pk)		52.88	68.23	-15.35
	11340 (Av)		41.12	54	-12.88
	17010 (Pk)		54.39	68.23	-13.84
	17010 (Av)		42.39	54	-11.61
	5670 (Pk)	Horizontal	92.94	-	-
	5670 (Av)		73.67	-	-
	5460 (Pk)		43.76	74*	-30.24
	5460 (Av)		30.27	54*	-23.73
	11340 (Pk)		52.89	68.23	-15.34
	11340 (Av)		41.11	54	-12.89
	17010 (Pk)		54.76	68.23	-13.47
	17010 (Av)		42.39	54	-11.61
5710	5710 (Pk)	Vertical	99.82	-	-
	5710 (Av)		81.15	-	-
	5460 (Pk)		43.37	74*	-30.63
	5460 (Av)		30.49	54*	-23.51
	11420 (Pk)		53.29	68.23	-14.94
	11420 (Av)		41.68	54	-12.32
	17130 (Pk)		54.23	68.23	-14.00
	17130 (Av)		42.43	54	-11.57
	5710 (Pk)	Horizontal	93.00	-	-
	5710 (Av)		73.71	-	-
	5460 (Pk)		42.70	74*	-31.30
	5460 (Av)		30.20	54*	-23.80
	11420 (Pk)		53.76	68.23	-14.47
	11420 (Av)		41.60	54	-12.40
	17130 (Pk)		54.31	68.23	-13.92
	17130 (Av)		42.47	54	-11.53
5755	5755 (Pk)	Vertical	100.06	-	-
	5755 (Av)		80.47	-	-
	5715(Pk)		62.53	78.20*	-15.67
	5725(Pk)		65.51	78.20*	-12.69
	11510 (Pk)		54.53	68.23	-13.70
	11510 (Av)		42.92	54	-11.08
	17265(Pk)		53.17	68.23	-15.06
	17265(Av)		42.03	54	-11.97
	5755 (Pk)	Horizontal	91.49	-	-
	5755 (Av)		72.34	-	-
	5715(Pk)		55.65	78.20*	-22.55
	5725(Pk)		58.23	78.20*	-19.97
	11510 (Pk)		54.43	68.23	-13.80
	11510 (Av)		42.49	54	-11.51
	17265(Pk)		54.92	68.23	-13.31
	17265(Av)		42.02	54	-11.98

Note:
*** :- Indicate restricted band frequency in 15.205**
Pk: Peak Detector; Av: Average Detector

Channel Frequency (MHz)	Measured Frequency (MHz)	Antenna Polarization	Emission (dBµV/m)	Limit (dBµV/m)	Margin (dB)
5795	5795 (Pk)	Vertical	98.53	-	-
	5795 (Av)		79.19	-	-
	5850 (Pk)		53.92	78.20*	-24.28
	5860 (Pk)		51.41	78.20*	-26.79
	11590 (Pk)		56.16	68.23	-12.07
	11590 (Av)		42.02	54	-11.98
	17385 (Pk)		53.38	68.23	-14.85
	17385 (Av)		41.67	54	-12.33
	5795 (Pk)	Horizontal	91.31	-	-
	5795 (Av)		72.31	-	-
	5850 (Pk)		47.79	78.20*	-30.41
	5860 (Pk)		46.57	78.20*	-31.63
	11590 (Pk)		54.06	68.23	-14.17
	11590 (Av)		41.93	54	-12.07
	17385 (Pk)		53.63	68.23	-14.60
	17385 (Pk)		41.69	54	-12.31

Note:
*** :- Indicate restricted band frequency in 15.205**
Pk: Peak Detector; Av: Average Detector

Modulation: **802.11ax _ HE 40MHz**
Data rate: **MCS0**

Channel Frequency (MHz)	Measured Frequency (MHz)	Antenna Polarization	Emission (dBµV/m)	Limit (dBµV/m)	Margin (dB)
5190	5190 (Pk)	Vertical	102.73	-	-
	5190 (Av)		88.23	-	-
	5150 (Pk)		66.03	74*	-7.97
	5150 (Av)		49.27	54*	-4.73
	10380 (Pk)		51.72	68.23	-16.51
	10380 (Av)		39.77	54	-14.23
	15570 (Pk)		54.37	68.23	-13.86
	15570 (Av)		41.11	54	-12.89
	5190 (Pk)	Horizontal	96.55	-	-
	5190 (Av)		81.42	-	-
	5150 (Pk)		60.27	74*	-13.73
	5150 (Av)		42.74	54*	-11.26
	10380 (Pk)		52.14	68.23	-16.09
	10380 (Av)		39.90	54	-14.10
	15570 (Pk)		53.66	68.23	-14.57
	15570 (Av)		41.15	54	-12.85
5230	5230 (Pk)	Vertical	104.83	-	-
	5230 (Av)		89.50	-	-
	5350 (Pk)		54.56	74*	-19.44
	5350 (Av)		38.51	54*	-15.49
	10460 (Pk)		52.60	68.23	-15.63
	10460 (Av)		39.83	54	-14.17
	15690 (Pk)		53.23	68.23	-15.00
	15690 (Av)		41.02	54	-12.98
	5230 (Pk)	Horizontal	99.43	-	-
	5230 (Av)		84.88	-	-
	5350 (Pk)		48.96	74*	-25.04
	5350 (Av)		34.32	54*	-19.68
	10460 (Pk)		52.24	68.23	-15.99
	10460 (Av)		39.88	54	-14.12
	15690 (Pk)		53.05	68.23	-15.18
	15690 (Av)		40.97	54	-13.03
5270	5270 (Pk)	Vertical	105.27	-	-
	5270 (Av)		90.90	-	-
	5350 (Pk)		60.14	74*	-13.86
	5350 (Av)		41.70	54*	-12.30
	10540 (Pk)		52.08	68.23	-16.15
	10540 (Av)		40.13	54	-13.87
	15810 (Pk)		52.69	68.23	-15.54
	15810 (Av)		40.85	54	-13.15
	5270 (Pk)	Horizontal	100.43	-	-
	5270 (Av)		85.55	-	-
	5350 (Pk)		55.03	74*	-18.97
	5350 (Av)		37.57	54*	-16.43
	10540 (Pk)		52.02	68.23	-16.21
	10540 (Av)		40.11	54	-13.89
	15810 (Pk)		52.58	68.23	-15.65
	15810 (Av)		40.86	54	-13.14

Note:
*** :- Indicate restricted band frequency in 15.205**
Pk: Peak Detector; Av: Average Detector

Channel Frequency (MHz)	Measured Frequency (MHz)	Antenna Polarization	Emission (dBµV/m)	Limit (dBµV/m)	Margin (dB)
5310	5310 (Pk)	Vertical	101.93	-	-
	5310 (Av)		87.27	-	-
	5350 (Pk)		64.66	74*	-9.34
	5350 (Av)		47.84	54*	-6.16
	10620 (Pk)		51.84	68.23	-16.39
	10620 (Av)		39.91	54	-14.09
	15930 (Pk)		52.86	68.23	-15.37
	15930 (Av)		41.27	54	-12.73
	5310 (Pk)	Horizontal	97.44	-	-
	5310 (Av)		82.94	-	-
	5350 (Pk)		59.39	74*	-14.61
	5350 (Av)		43.03	54*	-10.97
	10620 (Pk)		51.67	68.23	-16.56
	10620 (Av)		39.97	54	-14.03
	15930 (Pk)		53.52	68.23	-14.71
	15930 (Av)		41.37	54	-12.63
5510	5510 (Pk)	Vertical	99.31	-	-
	5510 (Av)		84.65	-	-
	5460 (Pk)		57.58	74*	-16.42
	5460 (Av)		38.97	54*	-15.03
	11020 (Pk)		51.91	68.23	-16.32
	11020 (Av)		40.61	54	-13.39
	16530 (Pk)		55.40	68.23	-12.83
	16530 (Av)		43.39	54	-10.61
	5510 (Pk)	Horizontal	93.61	-	-
	5510 (Av)		78.68	-	-
	5460 (Pk)		48.95	74*	-25.05
	5460 (Av)		34.60	54*	-19.40
	11020 (Pk)		51.89	68.23	-16.34
	11020 (Av)		40.62	54	-13.38
	16530 (Pk)		54.88	68.23	-13.35
	16530 (Av)		43.40	54	-10.60
5590	5590 (Pk)	Vertical	106.64	-	-
	5590 (Av)		91.80	-	-
	5460 (Pk)		59.31	74*	-14.69
	5460 (Av)		42.90	54*	-11.10
	11180 (Pk)		51.97	68.23	-16.26
	11180 (Av)		40.30	54	-13.70
	16770 (Pk)		56.34	68.23	-11.89
	16770 (Av)		44.24	54	-9.76
	5590 (Pk)	Horizontal	99.96	-	-
	5590 (Av)		85.32	-	-
	5460 (Pk)		54.63	74*	-19.37
	5460 (Av)		38.36	54*	-15.64
	11180 (Pk)		52.31	68.23	-15.92
	11180 (Av)		40.27	54	-13.73
	16770 (Pk)		56.33	68.23	-11.90
	16770 (Av)		44.23	54	-9.77

Note:
*** :- Indicate restricted band frequency in 15.205**
Pk: Peak Detector; Av: Average Detector

Channel Frequency (MHz)	Measured Frequency (MHz)	Antenna Polarization	Emission (dBµV/m)	Limit (dBµV/m)	Margin (dB)
5670	5670 (Pk)	Vertical	101.22	-	-
	5670 (Av)		86.48	-	-
	5460 (Pk)		44.98	74*	-29.02
	5460 (Av)		32.12	54*	-21.88
	11340 (Pk)		52.82	68.23	-15.41
	11340 (Av)		40.75	54	-13.25
	17010 (Pk)		56.27	68.23	-11.96
	17010 (Av)		44.20	54	-9.80
	5670 (Pk)	Horizontal	94.49	-	-
	5670 (Av)		79.81	-	-
	5460 (Pk)		43.21	74*	-30.79
	5460 (Av)		30.97	54*	-23.03
	11340 (Pk)		52.56	68.23	-15.67
	11340 (Av)		40.69	54	-13.31
	17010 (Pk)		56.45	68.23	-11.78
	17010 (Av)		44.15	54	-9.85
5710	5710 (Pk)	Vertical	103.18	-	-
	5710 (Av)		88.73	-	-
	5460 (Pk)		47.75	74*	-26.25
	5460 (Av)		33.67	54*	-20.33
	11420 (Pk)		53.91	68.23	-14.32
	11420 (Av)		41.93	54	-12.07
	17130 (Pk)		56.67	68.23	-11.56
	17130 (Av)		44.45	54	-9.55
	5710 (Pk)	Horizontal	98.18	-	-
	5710 (Av)		83.47	-	-
	5460 (Pk)		44.21	74*	-29.79
	5460 (Av)		31.65	54*	-22.35
	11420 (Pk)		52.40	68.23	-15.83
	11420 (Av)		41.28	54	-12.72
	17130 (Pk)		56.43	68.23	-11.80
	17130 (Av)		44.48	54	-9.52
5755	5755 (Pk)	Vertical	103.67	-	-
	5755 (Av)		88.55	-	-
	5715(Pk)		77.49	78.20*	-0.71
	5725(Pk)		79.21	78.20*	1.01
	11510 (Pk)		55.71	68.23	-12.52
	11510 (Av)		43.21	54	-10.79
	17265(Pk)		57.71	68.23	-10.52
	17265(Av)		44.88	54	-9.12
	5755 (Pk)	Horizontal	97.22	-	-
	5755 (Av)		81.98	-	-
	5715(Pk)		71.16	78.20*	-7.04
	5725(Pk)		72.00	78.20*	-6.20
	11510 (Pk)		53.60	68.23	-14.63
	11510 (Av)		42.14	54	-11.86
	17265(Pk)		56.93	68.23	-11.30
	17265(Av)		44.89	54	-9.11

Note:
*** :- Indicate restricted band frequency in 15.205**
Pk: Peak Detector; Av: Average Detector

Channel Frequency (MHz)	Measured Frequency (MHz)	Antenna Polarization	Emission (dBµV/m)	Limit (dBµV/m)	Margin (dB)
5795	5795 (Pk)	Vertical	104.23	-	-
	5795 (Av)		89.17	-	-
	5850 (Pk)		69.16	78.20*	-9.04
	5860 (Pk)		66.86	78.20*	-11.34
	11590 (Pk)		57.13	68.23	-11.10
	11590 (Av)		43.67	54	-10.33
	17385 (Pk)		57.10	68.23	-11.13
	17385 (Av)		45.61	54	-8.39
	5795 (Pk)	Horizontal	97.37	-	-
	5795 (Av)		81.33	-	-
	5850 (Pk)		60.22	78.20*	-17.98
	5860 (Pk)		60.05	78.20*	-18.15
	11590 (Pk)		54.15	68.23	-14.08
	11590 (Av)		41.37	54	-12.63
	17385 (Pk)		58.37	68.23	-9.86
	17385 (Pk)		45.62	54	-8.38

Note:
*** :- Indicate restricted band frequency in 15.205**
Pk: Peak Detector; Av: Average Detector