Prüfbericht-Nr.: *Test report no.:*	**IN24QRE8 001**	**Auftrags-Nr.:** *Order no.:*	**146873078 090**	Seite 1 von 78 *Page 1 of 78*
Kunden-Referenz-Nr.: *Client reference no.:*	2026143	**Auftragsdatum:** *Order date:*	2024-01-19	
Auftraggeber: *Client:*	Schneider Electric 7262 Marconi Street Montreal, QC H2R 2Z5 Canada			
Prüfgegenstand: *Test item:*	Ecostruxure Flex-Server	**Serien-Nr.:** *serial no.:*	Engineering Sample	
Bezeichnung.: *Identification .:*	Main Model: ESXBFXSVRBCW008 Associated Model: ESXBFXSVRBCW016; ESXBFXSVRBCW032			
Auftrags-Inhalt: *Order content:*	Testing and issue of Test report with Grant Certificate			
Prüfgrundlage: *Test specification:*	FCC Part 15 Subpart E 15.247,15.407,15.207, 15.205 & 15.209 RSS 247 Issue 3 & RSS Gen Issue 5			
Wareneingangsdatum: *Date of sample receipt:*	2024-01-23			
Prüfmuster-Nr *Test sample no*	A003649514-001			
Prüfzeitraum: *Testing period:*	2024-01-24 - 2024-02-09			
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: 27711			
Prüfergebnis*: *Test result*:*	Pass			

geprüft von: *tested by:*		**genehmigt von:** *authorized by:*	
Datum: *Date:* **2024-07-08**	M.V. Naveen Kumar	**Ausstellatum:** *Issue date:* **2024-07-08**	M.K.N
Stellung / *Position:*	**M.V.Naveen Kumar** **Senior Engineer**	**Stellung** / *Position:*	**Madhu K.N** **Assistant Manager**
Sonstiges / *Other:*	FCC ID: 2BATG-ESXBFXSVRBCW IC : 30486-ESXBFXSVRBCW HVIN: ESXBFXSVRBCW008; ESXBFXSVRBCW016; ESXBFXSVRBCW032		
Zustand des Prüfgegenstandes bei Anlieferung: *Condition of the test item at delivery:*	Prüfmuster vollständig und unbeschädigt *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*

Dieser Prüfbericht bezieht sich nur auf das o.g. Prüfmuster und darf ohne Genehmigung der Prüfstelle nicht auszugsweise vervielfältigt werden. Dieser Bericht berechtigt nicht zur Verwendung eines Prüfzeichens.
This test report only relates to the a. m. test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any test mark.

V05

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TEST SUMMARY

Test Item	Applicable Standard		Result
	FCC 47 CFR 15	ISED	
Emission Bandwidth	15.247 (a) (2),15.407 (a) & (e)	RSS Gen Issue 5 Section 6.7 RSS 247 Issue 3 Section 6.2.1.1; 6.2.2.1; 6.2.3.1; 6.2.4.1	N/T
Frequency Stability	15.407 (g)	RSS Gen Issue 5 Section 8.11	N/T
Maximum conducted output power	15.247 (b) & 15.407 (a)	RSS 247 Issue 3 Section 6.2.1; 6.2.2; 6.2.3; & Section 6.2.4	Pass
Maximum Power spectral density	15.407 (a)	RSS 247 Issue 3 Section 6.2.1; 6.2.2; 6.2.3; & Section 6.2.4	N/T
Dynamic Frequency Selection	15.407 (h) FCC KDB Publication 905462 D02 & 905462 D03	RSS 247 Issue 3 Section 6.3	N/T
Spurious Radiated Emissions & Restricted Bands of Operation	15.407 (b) / (15.205 &15.209)	RSS 247 Issue 3 Section 6.2.1; 6.2.2; 6.2.3; & Section 6.2.4 RSS Gen Issue 5 Section 8.9 & 8.10	Pass
AC Power Line Conducted emission	15.207	RSS Gen Issue 5 Section 8.8	Pass
Antenna Requirement	15.203	-	Pass

Note:
NA: Not applicable

*N/T: Not tested Since the Product uses certified module " **802.11 ac/a/b/g/n + Bluetooth 4.2 module** " Model no: **ST60-SIPT** , from **Laird Technologies** and test results can be found in module test report No: " **FR740701AN** & **CR740701AC** " and respective **FCC ID: SQG-60 SIPT** & **IC**: **3147A- 602230C** issued by **International Certification Corp** with address: No. 14-1,Lane 19, Wen San 3rd St., Kwei Shan District, Tao Yuan City 333, Taiwan, R.O.C

Product Category: Electronics Testing
Test Discipline : EMC Test Facility

REVISION HISTORY OF THIS REPORT

Report Number	Version	Description	Issue date
IN24QRE8 001	01	Initial issue of report	2024-07-08

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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	101773	1.72 SP5	26.01.2025	Yearly	Radiated Spurious Emission
Horn Antenna	Schwarzbeck	BBHA 9120 D	9120D-1944	-	28.10.2024	Yearly	
Baloon and Biconical Antenna	Schwarzbeck mess-elektronik	VHBB-9124 / BBA-9106	01028	-	08.02.2025	Yearly	
Log-Periodic Antenna	Schwarzbeck mess-elektronik	VUSLP-9111B	9111B-111	-	03.02.2025	Yearly	
Active loop antenna	Frankonia	LAX-10	LAX-10-800	-	02.03.2024	Yearly	
Fully Anechoic Chamber	Albatross	-	-	-	-	-	
EMI Receiver	Rohde & Schwarz	ESW 44	103384	4.73 SP5	10.05.2025	Yearly	
Signal Analyser	Rohde & Schwarz	FSV7	101644	FW 3.30 SP1	09.02.2025	Yearly	Antenna – Port Conducted Test (TS8997) system
Open Switch & Control Unit	Rohde & Schwarz	OSP120 Incl. B157	OSP120-101323 & B157-100894	FW 1.27.0.0	05.01.2025	Yearly	
Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100811	-	12-07-2024	Yearly	AC Powerlines Test Case
Two Line V-Network (LISN)	Rohde & Schwarz	ENV216	100022	-	05.10.2024	Yearly	
EMI Receiver	Rohde & Schwarz	ESR7	101133		29.07.2024	Yearly	

Table 2: Instrument application Software versions

SL. No.	Test Type	Application software	Version
1	Radiated spurious emission measurement in 10mtr-SAC	BAT EMC	3.20.0.17
2	Radiated spurious emission measurement in FAC	EMC 32	10.60.20
3	Antenna Port conducted measurement: TS8997 system	WMS 32	10.60.20

3 GENERAL PRODUCT INFORMATION

3.1 Product Function and Intended Use

ESXB Flex-Server is a multiprotocol IoT gateway that has been designed specifically for industrial and commercial applications. It enables businesses to perform bi-directional data/control communication between a range of sensors and devices on-premise and cloud. Exposed physical interfaces include RS485, USB ports, power connector, LEDs, Switches and Ethernet.

3.2 Ratings and System Details of Equipment under Test

Table 3: Ratings and System Details as declared by the Supplier

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 5850MHz
No. of Channels		(Refer Table 5)
Channel Spacing		20 MHz, 40MHz, 80MHz
Modulation		OFDM-BPSK,QPSK,16QAM,64QAM,256QAM
Power level index setting used		Refer the power levels Clause: 9
Measured Average Power (dBm)		18.66dBm@Ch-5240MHz, ac-mode 20MHz Data Rate: MCS0
Number of antennas		1(SISO)
Antenna type & Gain(dBi)		Dipole Antenna & 2dBi
Supply Voltage to Product		12VDC through AC/DC Adapter
Environmental Conditions	Storage	-20°C to +65°C
	Operating	0°C to +50°C
EUT Dimension(L x Wx H)		33.6 x 17.6 x 4.1 cm

***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.

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 %

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 Name & Version : Gateway CB V3.3

Software Name & Version: Zenatix Gateway Image (v2.0)

Hardware Version Identification number(HVIN): Refer the Cover Page

4.3 Special Accessories and Auxiliary Equipment

Product	Manufacture	Model	Specifications
AC/DC Adapter	Meanwell SMPS	RS-25-12	I/P Voltage: 100-240VAC 0.35A 50/60Hz O/P Voltage: +12V ⎓ 1.3A

4.4 Test Modes_ data rates & Modulation

- None

4.5 Simultaneous Transmission

This product does n't supports Simultaneous transmission

4.6 Countermeasures to achieve EMC Compliance

- None

4.7 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 : A003649514-001 – Radiated test Sample & Conducted test Sample

4.8 Report Reference

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

Radio Protocol	Report Number
RF test report for FCC Part15 Subpart C & RSS 247 Issue 3, RSS Gen Issue 5	IN24TRDD 001
RF test report for FCC Part15 Subpart E & RSS 247 Issue 3, RSS Gen Issue 5	**IN24QRE8 001**
RF test report for FCC Part22 Subpart H & RSS Gen Issue 5, RSS 132 Issue 4	IN24778M 001
RF test report for FCC Part24 Subpart E & RSS Gen Issue 5, RSS-133 Issue 6	IN249G94 001
RF test report for FCC Part27 Subpart C & RSS Gen Issue 5, RSS 139 Issue 4, RSS 199 Issue 4, RSS 130 Issue 2	IN244I1B 001
RF test report for FCC Part90 Subpart S & RSS Gen Issue 5, RSS-132 Issue 4	IN2443F6 001

5 OPERATIONAL DESCRIPTION

ESXB Flex-Server has support for multiple protocols, these devices can be configured and connected to the gateway using an online portal. The gateway connects to the cloud downloads the configuration and enables the communication between cloud and sensing and control devices.

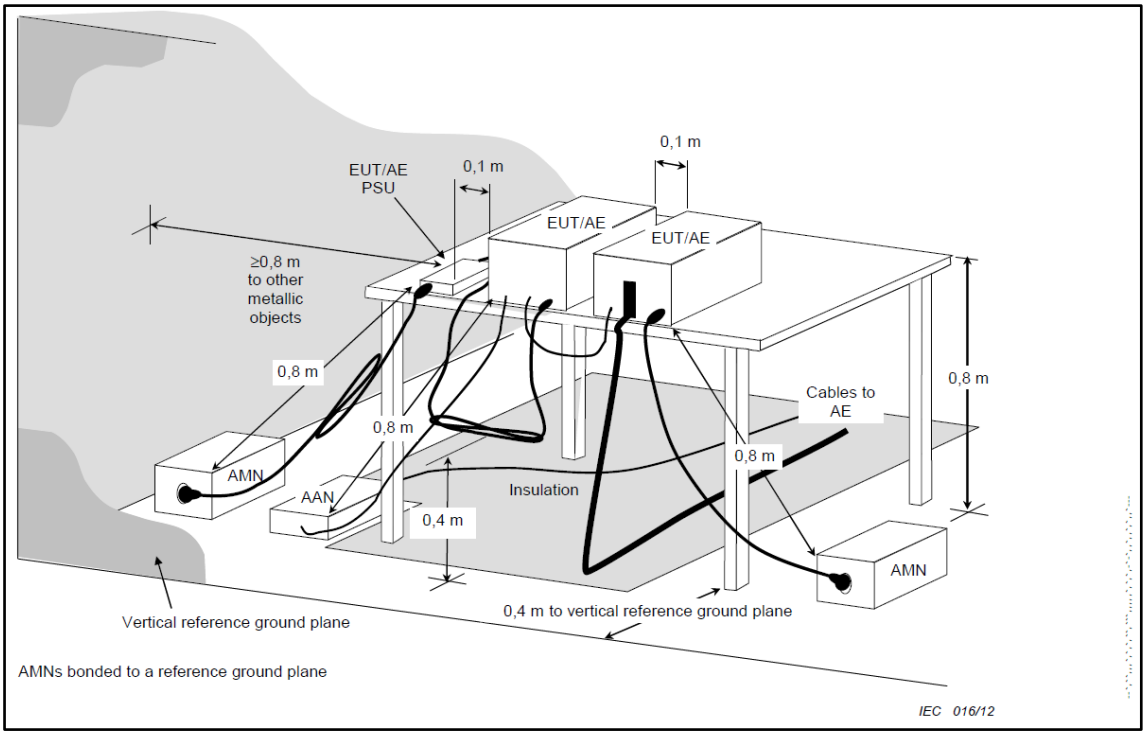
6 TEST METHODOLOGY

6.1 AC Powerline on Conducted emission

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 with an AC adaptor with 110V AC 60Hz supply.

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

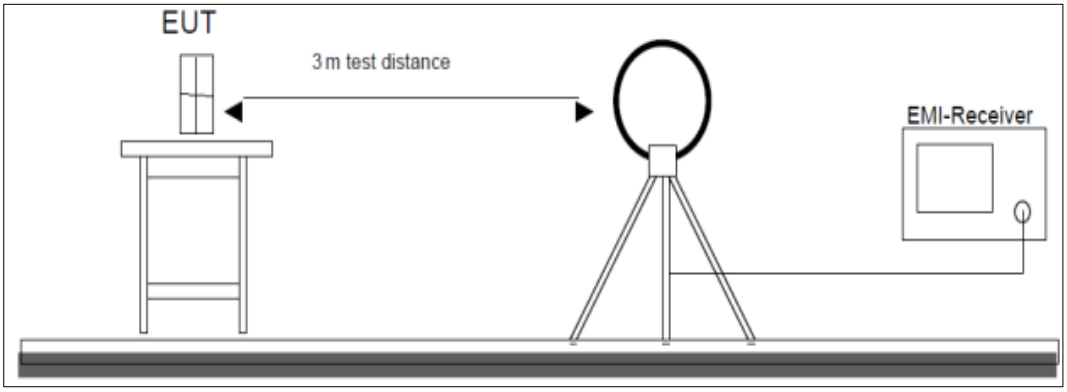


Figure 1: Frequency Range 9 kHz- 30 MHz

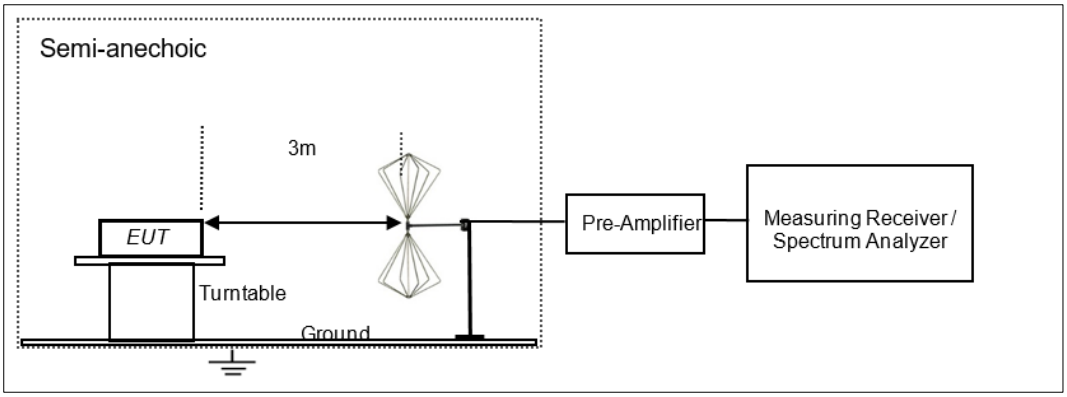


Figure 2: Frequency Range 30 MHz – 200 MHz

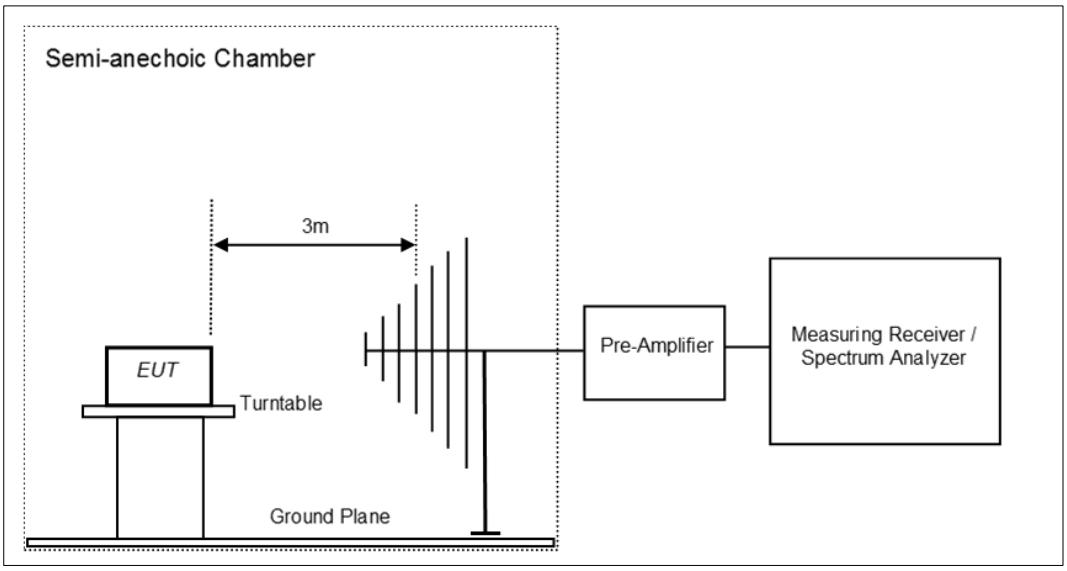


Figure 3: Frequency Range 200 MHz – 1 GHz

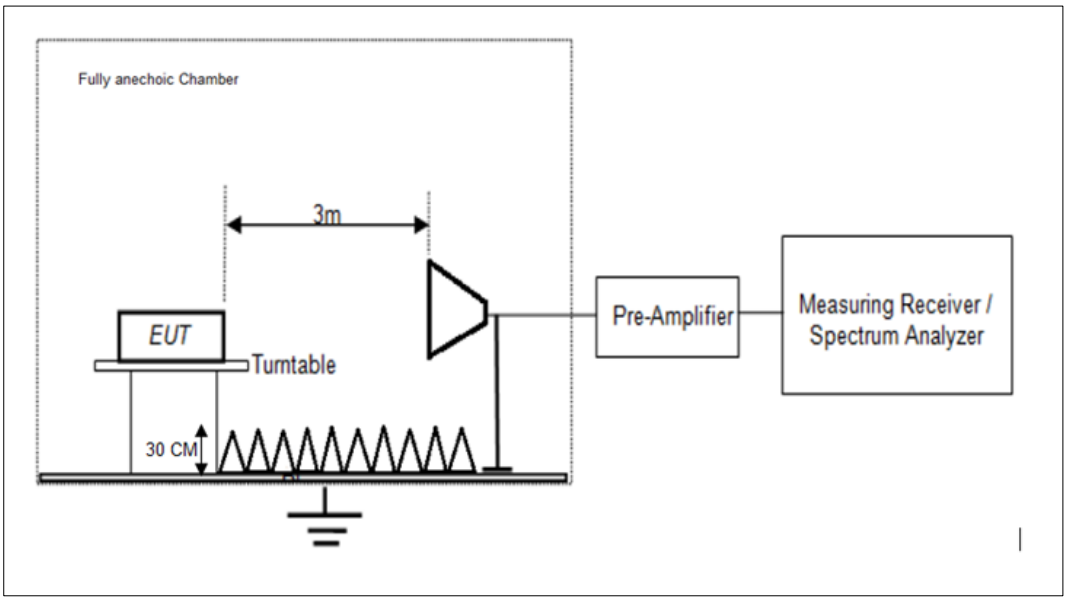


Figure 4: Frequency Range above 1 GHz

7 TEST RESULTS

7.1 Maximum Conducted Output Power

Result ***Pass***

Test Specification	FCC part 15 Subpart E 15.407 (a)(1)(ii),(a)(2),(a)(3)(i) RSS 247 Issue 3 Clause 6.2.1.1, 6.2.2.1 & 6.2.3.1, 6.2.4.2
Test Method	Subclause 12.3.3.2 of ANSI C63.10
Measurement Bandwidth	Refer the remarks below
Detector	Average sample detector mode
Port of testing	Antenna port
Requirement for FCC	Please Refer the below

Limits:

For FCC 15.407(a)

For an indoor access point operating in the band 5.15–5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

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

For the band 5.725–5.850 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500–kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point U–NII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U–NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

For ISED according to RSS-247 Clause 6.2

Frequency band 5150MHz-5250 MHz

LE-LAN devices are restricted to indoor operation only in the band 5150-5250 MHz. However, original equipment manufacturer (OEM) devices, which are installed in vehicles by vehicles manufacturers, are permitted.

Power limits

For OEM devices installed in vehicles, the maximum e.i.r.p. shall not exceed 30 mW or 1.76 + 10 log10B, dBm, whichever is less, where B is the 99% emission bandwidth in megahertz. Devices shall implement transmitter power control (TPC) in order to have the capability to operate at least 3 dB below the maximum permitted e.i.r.p. of 30 mW.

For other devices, the maximum e.i.r.p. shall not exceed 200 mW or 10 + 10 log10B, dBm, whichever power is less. B is the 99% emission bandwidth in megahertz. The e.i.r.p. spectral density shall not exceed 10 dBm in any 1.0 MHz band.

For Frequency range of 5250MHz to 5350MHz:

Power limits

For OEM devices installed in vehicles, the maximum e.i.r.p. shall not exceed 30 mW or 1.76 + 10 log10B, dBm, whichever is less. Devices shall implement TPC in order to have the capability to operate at least 3 dB below the maximum permitted e.i.r.p. of 30 mW.

Devices, other than devices installed in vehicles, shall comply with the following:

a) The maximum conducted output power shall not exceed 250 mW or 11 + 10 log10B, dBm, whichever is less. The power spectral density shall not exceed 11 dBm in any 1.0 MHz band;

b) 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. Note that devices with a maximum e.i.r.p. greater than 500 mW shall implement TPC in order to have the capability to operate at least 6 dB below the maximum permitted e.i.r.p. of 1 W.

Frequency bands 5470-5600 MHz and 5650-5725 MHz

Power limits:

The maximum conducted output power shall not exceed 250 mW or 11 + 10 log10B, dBm, whichever is less. The power spectral density shall not exceed 11 dBm in any 1.0 MHz band.

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. Note that devices with a maximum e.i.r.p. greater than 500 mW shall implement TPC in order to have the capability to operate at least 6 dB below the maximum permitted e.i.r.p. of 1 W.

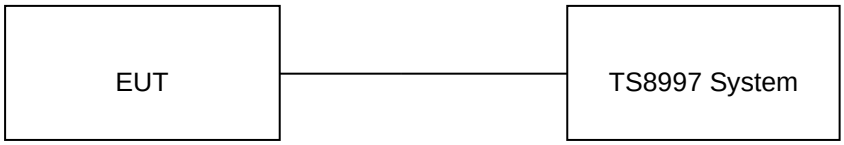
Frequency band 5725-5850 MHz

Power limits

For equipment operating in the band 5725-5850 MHz, the 6 dB bandwidth shall be at least 500 kHz.

The maximum conducted output power shall not exceed 1 W. The output power spectral density shall not exceed 30 dBm in any 500 kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the output power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications and multiple collocated transmitters transmitting the same information.

Test Method



Test Condition:

Normal Test Condition:

Temperature (Norm) = + 22.6 °C Voltage = 12VDC through AC/DC Adapter Relative humidity: 62 %

KDB Guidelines applied:

Measurements were made as per section E (3) (b) sub-section (b) in KDB 789033 D02 General UNII Test Procedures New Rules v02r01

Test results:

Note:
1. All the losses are included during measurement.

Bandwidth (MHz)	Mode	Data Rate	Channel Frequency (MHz)	Measured Power (dBm)	Measured e.i.r.p (dBm)	FCC Limit (dBm)	ISED Limit (dBm)	ISED e.i.r.p Limit (dBm)
20	a	6	5180	12.20	14.20	30.00	-	22.23
			5240	16.30	18.30	30.00	-	22.23
			5260	13.91	15.91	23.99	23.23	29.23
			5320	11.71	13.71	23.99	23.34	29.24
			5500	10.52	12.52	24.00	23.24	29.24
			5600	14.45	16.45	24.00	23.24	29.27
			5700	8.85	10.85	23.99	23.23	29.23
			5720	14.84	16.84	23.96	23.96	29.96
			5745	15.54	17.54	30.00	30.00	-
			5825	15.46	17.46	30.00	30.00	-
	n	MCS0	5180	12.65	14.65	30.00	-	22.27
			5240	**16.65**	**18.65**	**30.00**	**-**	**22.47**
			5260	14.30	16.30	23.99	23.23	29.23
			5320	11.99	13.99	23.99	23.34	29.24
			5500	11.79	13.79	24.00	23.47	29.24
			5600	14.79	16.79	24.00	23.47	29.24
			5700	9.94	11.94	24.00	23.47	29.23
			5720	14.94	16.94	22.79	22.79	29.96
			5745	15.52	17.52	30.00	30.00	-
			5825	15.44	17.44	30.00	30.00	-
	ac	MCS0	5180	12.45	14.45	30.00	-	22.47
			5240	16.59	18.59	30.00	-	22.47
			5260	14.09	16.09	24.00	23.47	29.47
			5320	11.84	13.84	24.00	23.47	29.47
			5500	11.64	13.64	24.00	23.47	29.47
			5600	14.71	16.71	24.00	23.47	29.47
			5700	9.90	11.90	24.00	23.47	29.47
			5720	14.92	16.92	22.79	22.79	28.79
			5745	15.62	17.62	30.00	30.00	-
			5825	15.54	17.54	30.00	30.00	-

***Note:** Testing has been performed in SISO mode of Chain-0**.**

Bandwidth (MHz)	Mode	Data Rate	Channel Frequency (MHz)	Measured Power (dBm)	Measured e.i.r.p (dBm)	FCC Limit (dBm)	ISED Limit (dBm)	ISED e.i.r.p Limit (dBm)
40	n	MCS0	5190	11.11	13.11	30.00	-	23.01
			5230	14.23	16.23	30.00	-	23.01
			5270	12.76	14.76	23.97	23.97	30.00
			5310	9.58	11.58	23.97	23.97	30.00
			5510	10.32	12.32	23.97	23.97	30.00
			5670	11.01	13.01	23.97	23.97	30.00
			5710	12.83	14.83	23.97	23.97	30.00
			5755	13.61	15.61	30.00	30.00	-
			5795	13.36	15.36	30.00	30.00	-
	ac	MCS0	5190	11.14	13.14	30.00	-	23.01
			5230	**14.29**	**16.29**	**30.00**	**-**	**23.01**
			5270	12.76	14.76	23.97	23.97	30.00
			5310	9.56	11.56	23.97	23.97	30.00
			5510	10.33	12.33	23.97	23.97	30.00
			5670	10.99	12.99	23.97	23.97	30.00
			5710	12.82	14.82	23.97	23.97	30.00
			5755	13.59	15.59	30.00	30.00	-
			5795	13.36	15.36	30.00	30.00	-

Bandwidth (MHz)	Mode	Data Rate	Channel Frequency (MHz)	Measured Power (dBm)	Measured e.i.r.p (dBm)	FCC Limit (dBm)	ISED Limit (dBm)	ISED e.i.r.p Limit (dBm)
80	ac	MCS0	5210	8.76	10.76	30.00	-	23.01
			5290	9.40	11.40	23.97	23.97	30.00
			5530	8.91	10.91	23.97	23.97	30.00
			5690	11.38	13.38	23.97	23.97	30.00
			5775	**11.93**	**13.93**	**30.00**	**30.00**	**-**

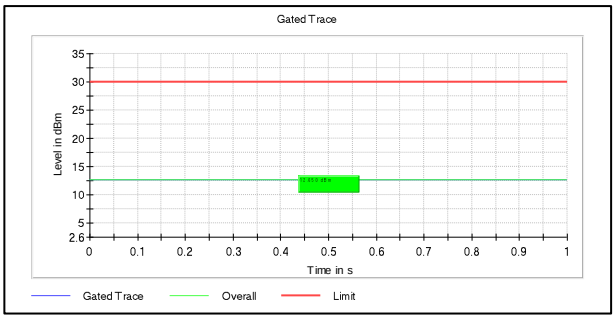
***Note:** Testing has been performed in SISO mode of Chain-0**.**

Test Plots:

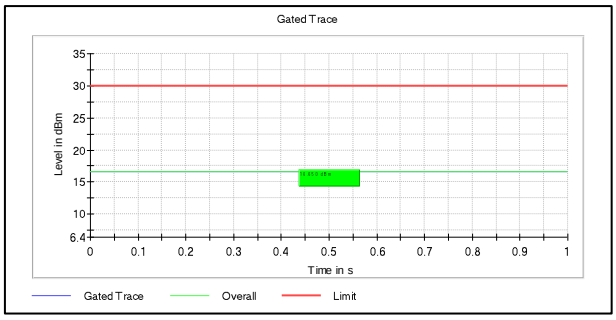
Modulation: 802.11n-20MHz

Data Rate: MCS0

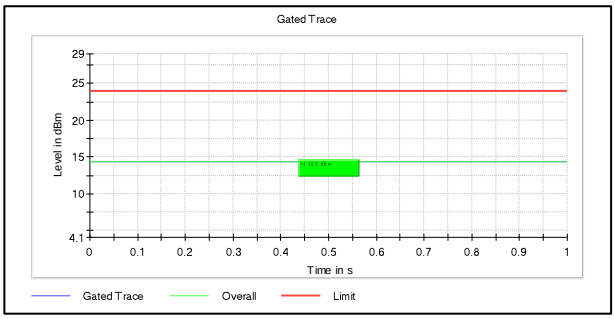
Channel Frequency: 5180MHz



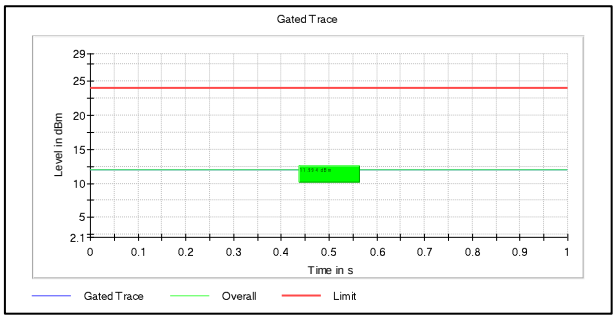
Channel Frequency: 5240MHz



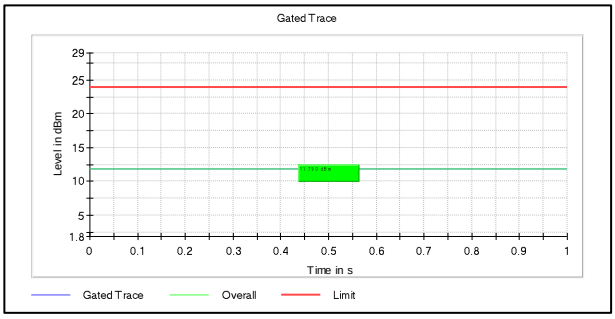
Channel Frequency: 5260MHz



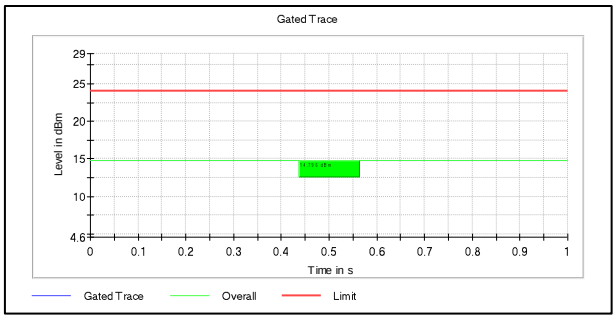
Channel Frequency: 5320MHz



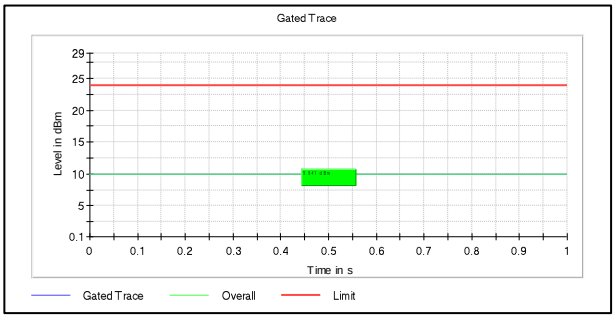
Channel Frequency: 5500MHz



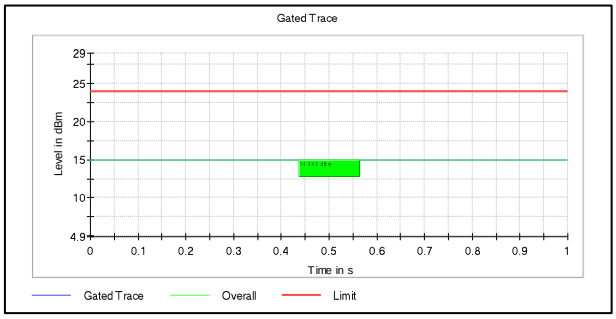
Channel Frequency: 5600MHz



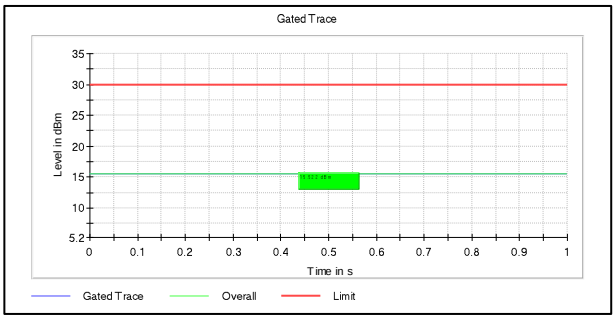
Channel Frequency: 5700MHz



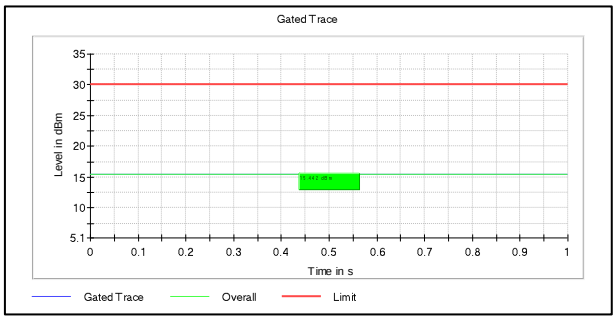
Channel Frequency: 5720MHz



Channel Frequency: 5745MHz

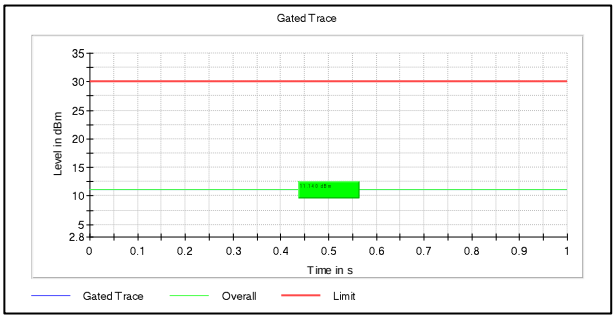


Channel Frequency: 5825MHz

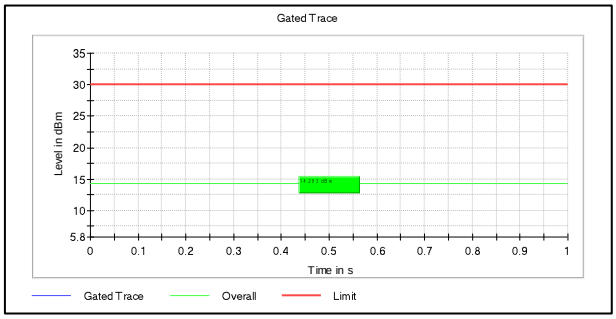


Modulation: 802.11ac-40MHz

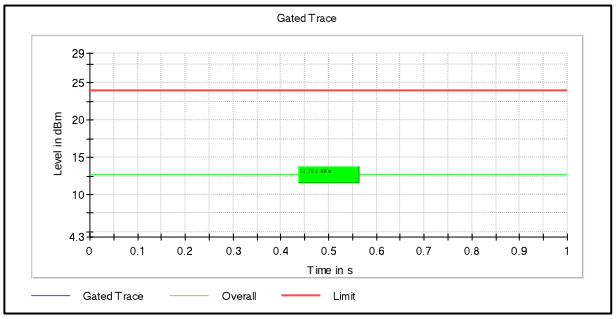
Channel Frequency: 5190MHz



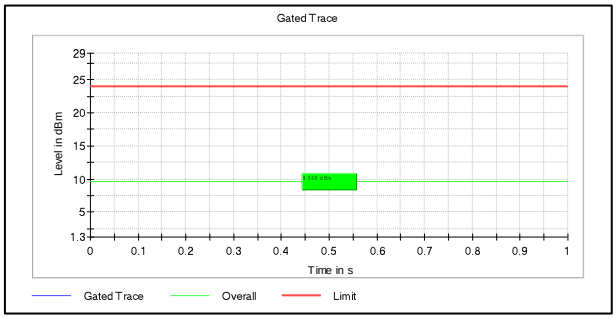
Channel Frequency: 5230MHz



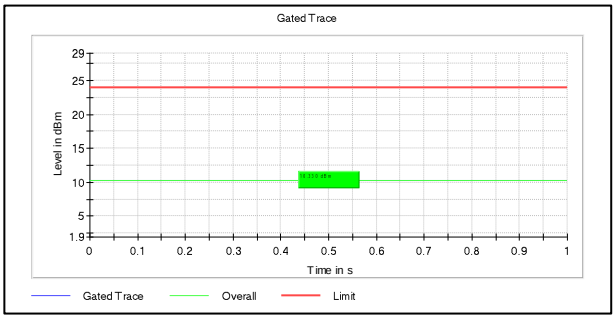
Channel Frequency: 5270MHz



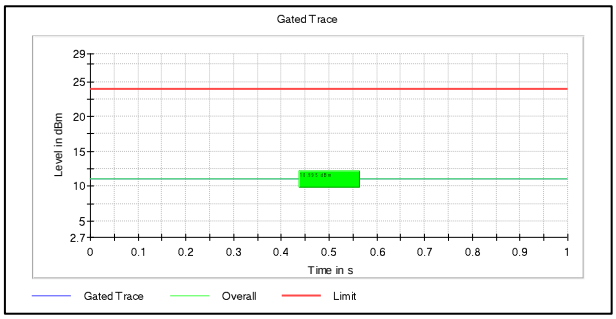
Channel Frequency: 5310MHz



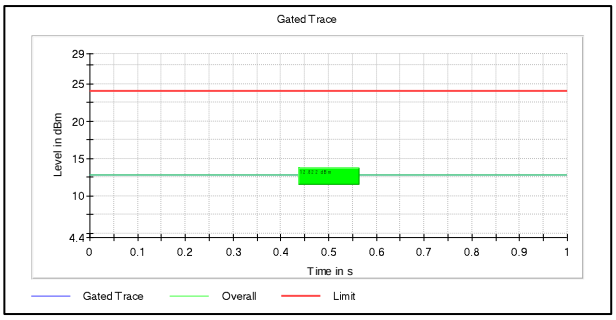
Channel Frequency: 5510MHz



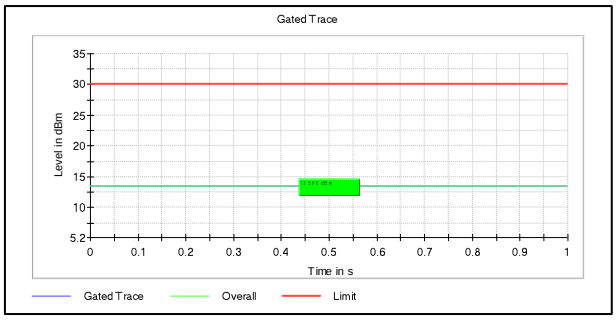
Channel Frequency: 5670MHz



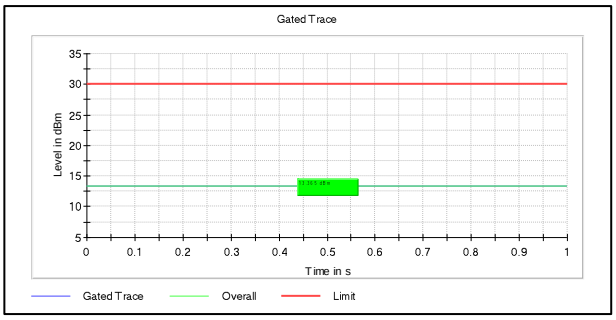
Channel Frequency: 5710MHz



Channel Frequency: 5755MHz



Channel Frequency: 5795MHz



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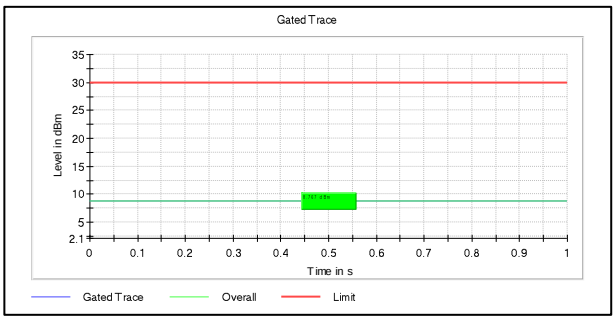
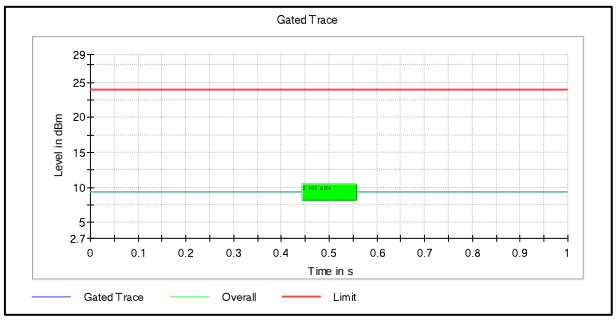
Modulation: 802.11ac-80MHz

Data Rate: MCS0

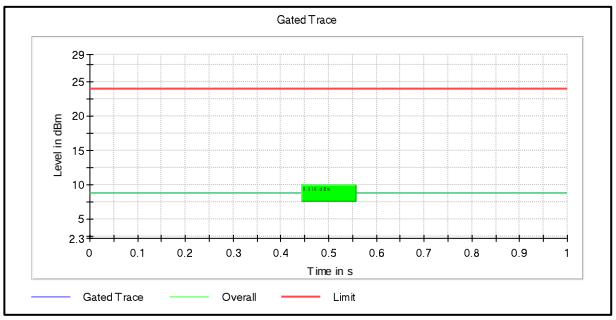
Channel Frequency: 5210MHz



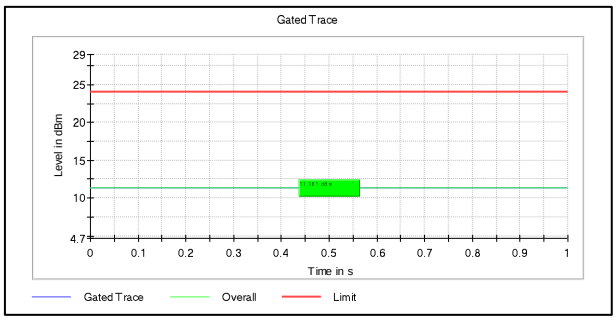
Channel Frequency: 5290MHz



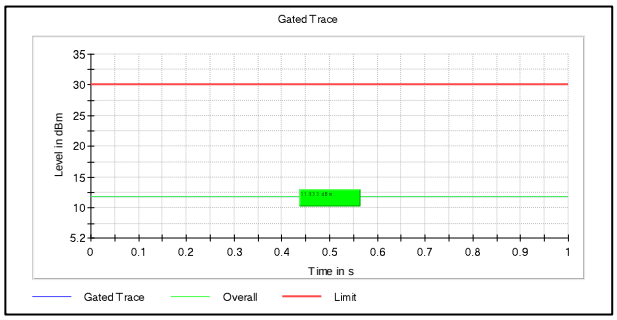
Channel Frequency: 5530MHz



Channel Frequency: 5690MHz



Channel Frequency: 5775MHz



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Output Power from the module report:

Bandwidth (MHz)	Mode	Data Rate	Channel Frequency (MHz)	Measured Power (dBm)	Measured e.i.r.p (dBm)	FCC Limit (dBm)	ISED Limit (dBm)	ISED e.i.r.p Limit (dBm)
20	a	6	5180	16.61	18.61	30.00	-	22.23
			5240	18.65	20.65	30.00	-	22.23
			5260	15.94	17.94	23.99	23.23	29.23
			5320	14.56	16.56	23.99	23.34	29.24
			5500	16.15	18.15	24.00	23.24	29.24
			5700	13.86	15.86	23.99	23.23	29.23
			5720	16.2	18.2	23.96	23.96	29.96
			5745	17.18	19.18	30.00	30.00	-
			5825	18.06	20.06	30.00	30.00	-
	n	MCS0	5180	16.52	18.52	30.00	-	22.27
			5240	18.53	20.53	30.00	-	22.47
			5260	15.89	17.89	23.99	23.23	29.23
			5320	15.95	17.95	23.99	23.34	29.24
			5500	16.12	18.12	24.00	23.47	29.24
			5700	14.85	16.85	24.00	23.47	29.23
			5720	15.86	17.86	22.79	22.79	29.96
			5745	17.12	19.12	30.00	30.00	-
			5825	18.06	20.06	30.00	30.00	-
	ac	MCS0	5180	16.65	18.65	30.00	-	22.47
			5240	**18.66**	**20.66**	**30.00**	**-**	**22.47**
			5260	16.06	18.06	24.00	23.47	29.47
			5320	16.10	18.10	24.00	23.47	29.47
			5500	16.24	18.24	24.00	23.47	29.47
			5700	14.98	16.98	24.00	23.47	29.47
			5720	16.36	18.36	22.79	22.79	28.79
			5745	17.24	19.24	30.00	30.00	-
			5825	18.19	20.19	30.00	30.00	-

Bandwidth (MHz)	Mode	Data Rate	Channel Frequency (MHz)	Measured Power (dBm)	Measured e.i.r.p (dBm)	FCC Limit (dBm)	ISED Limit (dBm)	ISED e.i.r.p Limit (dBm)
40	n	MCS0	5190	14.71	16.71	30.00	-	23.01
			5230	16.91	18.91	30.00	-	23.01
			5270	15.82	17.82	23.97	23.97	30.00
			5310	13.52	15.52	23.97	23.97	30.00
			5510	13.38	15.38	23.97	23.97	30.00
			5670	15.55	17.55	23.97	23.97	30.00
			5710	16.00	18.00	23.97	23.97	30.00
			5755	16.13	18.13	30.00	30.00	-
			5795	16.08	18.08	30.00	30.00	-
	ac	MCS0	5190	14.82	16.82	30.00	-	23.01
			5230	17.02	19.02	30.00	-	23.01
			5270	15.98	17.98	23.97	23.97	30.00
			5310	13.64	15.64	23.97	23.97	30.00
			5510	13.49	15.49	23.97	23.97	30.00
			5670	15.68	17.68	23.97	23.97	30.00
			5710	16.00	18.00	23.97	23.97	30.00
			5755	16.25	18.25	30.00	30.00	-
			5795	16.22	18.22	30.00	30.00	-

Bandwidth (MHz)	Mode	Data Rate	Channel Frequency (MHz)	Measured Power (dBm)	Measured e.i.r.p (dBm)	FCC Limit (dBm)	ISED Limit (dBm)	ISED e.i.r.p Limit (dBm)
80	ac	MCS0	5210	12.15	14.15	30.00	-	23.01
			5290	12.21	14.21	23.97	23.97	30.00
			5530	11.42	13.42	23.97	23.97	30.00
			5690	13.83	15.83	23.97	23.97	30.00
			5775	14.25	16.25	30.00	30.00	-

***Note:** Above output power extracted from the module report no: FR740701AN & CR740701AN in SISO mode of Chain-0

7.2 Spurious Radiated Emissions & Restricted Bands of Operation

Result ***Pass***

Test Specification	FCC part 15 Subpart E Section 15.407 (b) (2) (3)(15.205 & 15.209) RSS 247 Issue 3 Section 6.2.2.2 & 6.2.3.2 & 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
Test setup	Refer TEST METHODOLOGY

Limit:

According to FCC 15.407(b)

Undesirable emission limits. Except as shown in paragraph (b)(7) of this section, the maximum emissions outside of the frequency bands of operation shall be attenuated in accordance with the following limits:

1. For transmitters operating in the 5.15–5.25 GHz band: All emissions outside of the 5.15–5.35 GHz band shall not exceed an e.i.r.p. of −27 dBm/MHz
2. For transmitters operating in the 5.25–5.35 GHz band: All emissions outside of the 5.15–5.35 GHz band shall not exceed an e.i.r.p. of −27 dBm/MHz.
3. For transmitters operating in the 5.47–5.725 GHz band: All emissions outside of the 5.47–5.725 GHz band shall not exceed an e.i.r.p. of −27 dBm/MHz.
4. For transmitters operating solely in the 5.725–5.850 GHz band:
   (i) All emissions shall be limited to a level of −27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

According to RSS 247 ISSUE 3, Clause 6.2.1.2, 6.2.2.2, 6.2.3.2 & 6.2.4.3

Devices shall comply with the following:

a. For transmitters with operating frequencies in the band 5150-5250 MHz, all emissions outside the band 5150-5350MHz shall not exceed -27 dBm/MHz e.i.r.p. Any unwanted emissions that fall into the band 5250-5350 MHz shall be attenuated below the channel power by at least 26 dB, when measured using a resolution bandwidth between 1 and 5% of the occupied bandwidth (i.e. 99% bandwidth), above 5250 MHz. The 26 dB bandwidth may fall into the 5250-5350 MHz band; however, if the occupied bandwidth also falls within the 5250-5350 MHz band, the transmission is considered as intentional and the devices shall comply with all requirements in the band 5250-5350 MHz including implementing dynamic frequency selection (DFS)and TPC, on the portion of the emission that resides in the 5250-5350 MHz band.

b. All emissions outside the band 5250-5350 MHz shall not exceed -27 dBm/MHz e.i.r.p.; or All emissions outside the band 5150-5350 MHz shall not exceed -27 dBm/MHz e.i.r.p. and its power shall comply with the spectral power density for operation within the band 5150-5250 MHz. The device, except devices installed in vehicles, shall be labelled or include in the user manual the following text “for indoor use only.”

c. Emissions outside the band 5470-5725 MHz shall not exceed -27 dBm/MHz e.i.r.p. However, devices with bandwidth overlapping the band edge of 5725 MHz can meet the emission limit of -27 dBm/MHz e.i.r.p. at 5850 MHz instead of 5725 MHz.

d. Devices operating in the band 5725-5850 MHz shall comply with the following e.i.r.p. spectral density limits:
   - 27 dBm/MHz at frequencies from the band edges decreasing linearly to 15.6 Bm/MHz at 5 MHz above or below the band edges;
   - 15.6 dBm/MHz at 5 MHz above or below the band edges decreasing linearly to 10 dBm/MHz at 25 MHz above or below the band edges;
   - 10 dBm/MHz at 25 MHz above or below the band edges decreasing linearly to -27 dBm/MHz at 75 MHz above or below the band edges; and
   - -27 dBm/MHz at frequencies more than 75 MHz above or below the band edges**.**

Table 6: 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) = + 23.2 °C Voltage = 12VDC through AC/DC Adapter Relative humidity: 62 %

Test results:

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

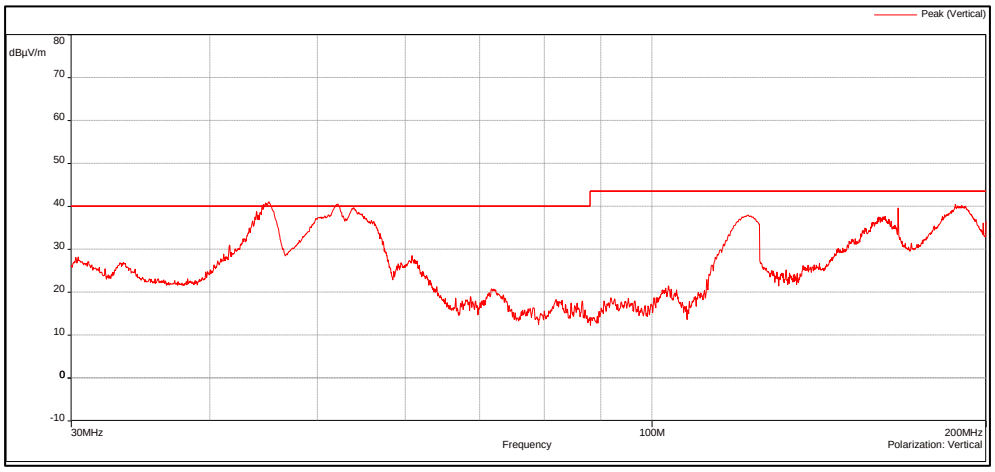
Test results for Frequency range : 9kHz – 30MHz

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

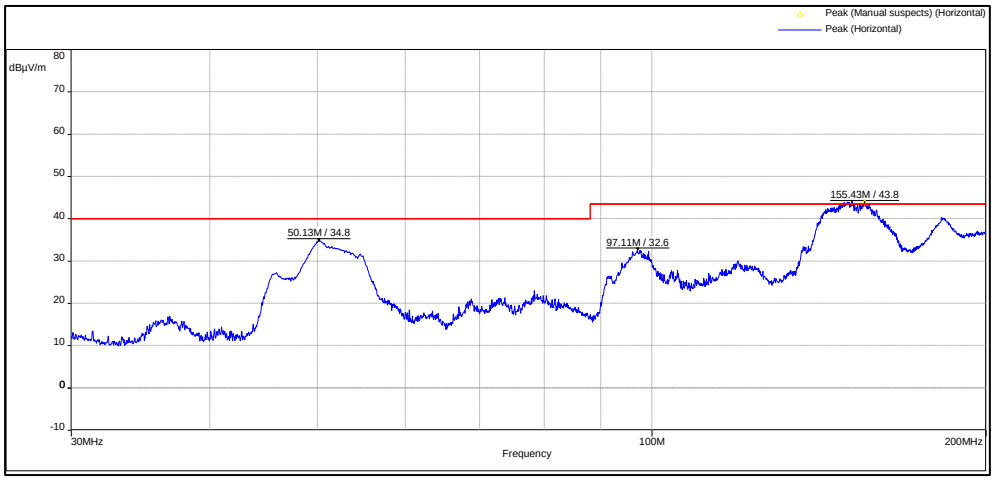
Test results for frequency range 30MHz – 200MHz

Antenna Polarization	Measured Frequency (MHz)	Measured emission (dBµV/m)	Limit (dBµV/m)	Margin (dB)
Vertical	44.82(QP)	32.04	40.00	-7.96
	51.93(QP)	34.29	40.00	-5.71
Horizontal	50.13(PK)	34.80	40.00	-5.20
	97.11(PK)	32.60	40.00	-7.40
	148.22(Av)	38.37	40.00	-1.63
	154.63(Av)	38.47	40.00	-1.53

Test Plots:



Frequency Range: 30MHz to 200MHz Polarization: Vertical

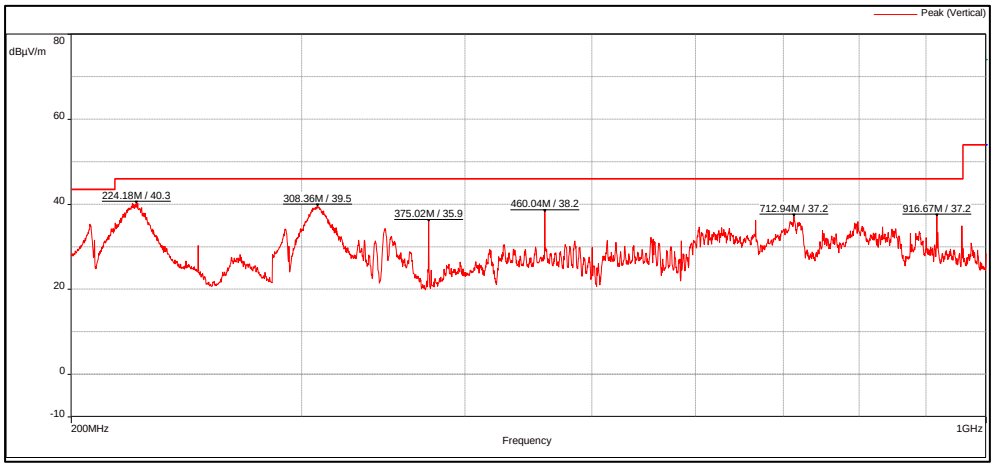


Frequency Range: 30MHz to 200MHz Polarization: Horizontal

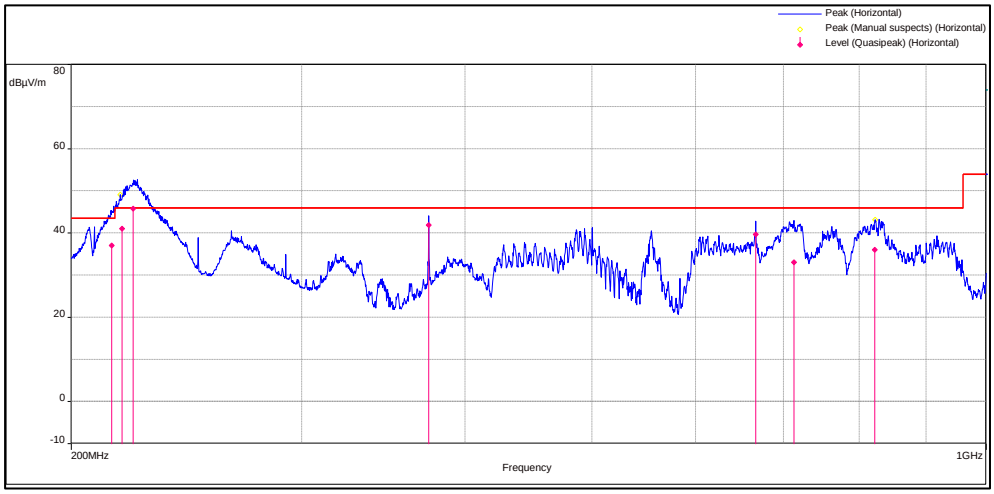
Test results for frequency range 200MHz – 1GHz

Antenna Polarization	Measured Frequency (MHz)	Measured emission (dBµV/m)	Limit (dBµV/m)	Margin (dB)
Vertical	224.18(PK)	40.30	43.50	-3.20
	308.36(PK)	39.50	43.50	-4.00
	375.02(PK)	35.90	43.50	-7.60
	460.04(PK)	38.20	43.50	-5.30
	712.94(PK)	37.20	43.50	-6.30
	916.67(PK)	37.20	43.50	-6.30
Horizontal	214.778(QP)	37.02	43.50	-6.48
	218.696(QP)	41.00	46.00	-5.00
	223.004(QP)	45.82	46.00	-0.18
	375.008(QP)	41.88	46.00	-4.12
	666.692(QP)	39.64	46.00	-6.36
	712.91(QP)	33.09	46.00	-12.91
	821.798(QP)	36.02	46.00	-9.98

Test Plots:



Frequency Range: 200MHz to 1GHz Polarization: Vertical



Frequency Range: 200MHz to 1GHz Polarization: Vertical

Test results for frequency range – 1GHz to 40 GHz

Modulation: 802.11a

Data Rate: 6Mbps

Channel Frequency (MHz)	Measured Frequency (MHz)	Antenna Polarization	Measured Emission (dBµV/m)	Limit (dBµV/m)	Margin (dB)
5180	5180 (Pk)	Vertical	105.91	-	-
	5180 (Av)		96.52	-	-
	5150 (Pk)		55.74	74.00*	-18.26
	5150 (Av)		42.60	54.00*	-11.40
	10360 (Pk)		52.45	68.23	-15.78
	10360 (Av)		39.97	54.00	-14.03
	15540 (Pk)		53.12	68.23	-15.11
	15540 (Av)		40.36	54.00	-13.64
	5180 (Pk)	Horizontal	87.48	-	-
	5180 (Av)		78.22	-	-
	5150 (Pk)		43.11	74.00*	-30.89
	5150 (Av)		30.30	54.00*	-23.70
	10360 (Pk)		52.77	68.23	-15.46
	10360 (Av)		39.78	54.00	-14.22
	15540 (Pk)		53.11	68.23	-15.12
	15540 (Av)		40.27	54.00	-13.73
5240	5240 (Pk)	Vertical	108.10	-	-
	5240 (Av)		98.77	-	-
	5350 (Pk)		52.51	74.00*	-21.49
	5350 (Av)		39.19	54.00*	-14.81
	10480 (Pk)		53.15	68.23	-15.08
	10480 (Av)		40.95	54.00	-13.05
	15720 (Pk)		52.02	68.23	-16.21
	15720 (Av)		39.66	54.00	-14.34
	5240 (Pk)	Horizontal	87.58	-	-
	5240 (Av)		78.32	-	-
	5350 (Pk)		42.55	74.00*	-31.45
	5350 (Av)		29.25	54.00*	-24.75
	10480 (Pk)		53.11	68.23	-15.12
	10480 (Av)		40.69	54.00	-13.31
	15720 (Pk)		51.77	68.23	-16.46
	15720 (Av)		39.59	54.00	-14.41
5260	5260 (Pk)	Vertical	106.23	-	-
	5260 (Av)		96.81	-	-
	5350 (Pk)		51.72	74.00*	-22.28
	5350 (Av)		37.23	54.00*	-16.77
	10520 (Pk)		52.70	68.23	-15.53
	10520 (Av)		40.74	54.00	-13.26
	15780 (Pk)		51.34	68.23	-16.89
	15780 (Av)		39.24	54.00	-14.76
	5260 (Pk)	Horizontal	87.03	-	-
	5260 (Av)		77.92	-	-
	5350 (Pk)		42.03	74.00*	-31.97
	5350 (Av)		29.09	54.00*	-24.91
	10520 (Pk)		53.05	68.23	-15.18
	10520 (Av)		40.50	54.00	-13.50
	15780 (Pk)		52.18	68.23	-16.05
	15780 (Av)		39.22	54.00	-14.78

Channel Frequency (MHz)	Measured Frequency (MHz)	Antenna Polarization	Measured Emission (dBµV/m)	Limit (dBµV/m)	Margin (dB)
5320	5320 (Pk)	Vertical	104.77	-	-
	5320 (Av)		95.46	-	-
	5350 (Pk)		56.74	74.00*	-17.26
	5350 (Av)		42.55	54.00*	-11.45
	10640 (Pk)		52.39	68.23	-15.84
	10640 (Av)		40.57	54.00	-13.43
	15960 (Pk)		51.04	68.23	-17.19
	15960 (Av)		39.51	54.00	-14.49
	5320 (Pk)	Horizontal	83.21	-	-
	5320 (Av)		73.98	-	-
	5350 (Pk)		42.38	74.00*	-31.62
	5350 (Av)		29.56	54.00*	-24.44
	10640 (Pk)		53.75	68.23	-14.48
	10640 (Av)		40.48	54.00	-13.52
	15960 (Pk)		51.44	68.23	-16.79
	15960 (Av)		39.60	54.00	-14.40
5500	5500 (Pk)	Vertical	104.98	-	-
	5500 (Av)		95.64	-	-
	5460 (Pk)		56.10	74.00*	-17.90
	5460 (Av)		40.62	54.00*	-13.38
	11000 (Pk)		53.48	68.23	-14.75
	11000 (Av)		41.35	54.00	-12.65
	16500 (Pk)		55.87	68.23	-12.36
	16500 (Av)		42.59	54.00	-11.41
	5500 (Pk)	Horizontal	84.88	-	-
	5500 (Av)		75.56	-	-
	5460 (Pk)		42.72	74.00*	-31.28
	5460 (Av)		29.59	54.00*	-24.41
	11000 (Pk)		53.81	68.23	-14.42
	11000 (Av)		41.35	54.00	-12.65
	16500 (Pk)		55.56	68.23	-12.67
	16500 (Av)		42.62	54.00	-11.38
5600	5600 (Pk)	Vertical	110.26	-	-
	5600 (Av)		101.20	-	-
	5460 (Pk)		51.05	74.00*	-22.95
	5460 (Av)		37.93	54.00*	-16.07
	11200 (Pk)		56.48	68.23	-11.75
	11200 (Av)		42.55	54.00	-11.45
	16800 (Pk)		56.44	68.23	-11.79
	16800 (Av)		43.72	54.00	-10.28
	5600 (Pk)	Horizontal	90.35	-	-
	5600 (Av)		81.46	-	-
	5460 (Pk)		42.67	74.00*	-31.33
	5460 (Av)		29.53	54.00*	-24.47
	11200 (Pk)		53.62	68.23	-14.61
	11200 (Av)		41.09	54.00	-12.91
	16800 (Pk)		55.38	68.23	-12.85
	16800 (Av)		43.73	54.00	-10.27

Channel Frequency (MHz)	Measured Frequency (MHz)	Antenna Polarization	Measured Emission (dBµV/m)	Limit (dBµV/m)	Margin (dB)
5700	5700 (Pk)	Vertical	104.06	-	-
	5700 (Av)		94.76	-	-
	5460 (Pk)		46.23	74.00*	-27.77
	5460 (Av)		33.33	54.00*	-20.67
	11400 (Pk)		55.45	68.23	-12.78
	11400 (Av)		43.08	54.00	-10.92
	17100 (Pk)		56.61	68.23	-11.62
	17100 (Av)		44.03	54.00	-9.97
	5700 (Pk)	Horizontal	83.70	-	-
	5700 (Av)		74.60	-	-
	5460 (Pk)		41.97	74.00*	-32.03
	5460 (Av)		29.35	54.00*	-24.65
	11400 (Pk)		54.22	68.23	-14.01
	11400 (Av)		41.81	54.00	-12.19
	17100 (Pk)		56.21	68.23	-12.02
	17100 (Av)		44.04	54.00	-9.96
5720	5720 (Pk)	Vertical	110.36	-	-
	5720 (Av)		101.32	-	-
	5460 (Pk)		50.69	74.00*	-23.31
	5460 (Av)		37.35	54.00*	-16.65
	11440 (Pk)		62.66	68.23	-5.57
	11440 (Av)		50.11	54.00	-3.89
	17160(Pk)		56.72	68.23	-11.51
	17160(Av)		44.80	54.00	-9.20
	5720 (Pk)	Horizontal	90.24	-	-
	5720 (Av)		81.12	-	-
	5460 (Pk)		42.19	74.00*	-31.81
	5460 (Av)		29.46	54.00*	-24.54
	11440 (Pk)		54.39	68.23	-13.84
	11440 (Av)		41.94	54.00	-12.06
	17160(Pk)		58.00	68.23	-10.23
	17160(Av)		44.78	54.00	-9.22

Channel Frequency (MHz)	Measured Frequency (MHz)	Antenna Polarization	Measured Emission (dBµV/m)	Limit (dBµV/m)	Margin (dB)
5745	5745 (Pk)	Vertical	110.24	-	-
	5745 (Av)		101.20	-	-
	5725(Pk)		83.94	122.20*	-38.26
	5720(Pk)		77.04	110.80*	-33.76
	5700(Pk)		68.36	105.20*	-36.84
	5650(Pk)		53.79	68.20*	-14.41
	11490 (Pk)		63.74	68.23	-4.49
	11490 (Av)		50.66	54.00	-3.34
	17235 (Pk)		57.49	68.23	-10.74
	17235 (Av)		45.33	54.00	-8.67
	5745 (Pk)	Horizontal	89.60	-	-
	5745 (Av)		80.59	-	-
	5725(Pk)		62.67	122.20*	-59.53
	5720(Pk)		55.89	110.80*	-54.91
	5700(Pk)		49.45	105.20*	-55.75
	5650(Pk)		41.76	68.20*	-26.44
	11490 (Pk)		54.62	68.23	-13.61
	11490 (Av)		42.67	54.00	-11.33
	17235 (Pk)		57.62	68.23	-10.61
	17235 (Av)		45.35	54.00	-8.65
5825	5825 (Pk)	Vertical	91.17	-	-
	5825 (Av)		82.28	-	-
	5850 (Pk)		58.13	122.20*	-64.07
	5855(Pk)		56.36	110.80*	-54.44
	5875(Pk)		48.35	105.20*	-56.85
	5925 (Pk)		43.06	68.20*	-25.14
	11650 (Pk)		53.98	68.23	-14.25
	11650 (Av)		42.16	54.00	-11.84
	17475 (Pk)		58.85	68.23	-9.38
	17475 (Av)		46.82	54.00	-7.18
	5825 (Pk)	Horizontal	109.90	-	-
	5825 (Av)		100.88	-	-
	5850 (Pk)		76.33	122.20*	-45.87
	5855(Pk)		74.85	110.80*	-35.95
	5875(Pk)		65.87	105.20*	-39.33
	5925 (Pk)		57.05	68.20*	-11.15
	11650 (Pk)		53.50	68.23	-14.73
	11650 (Av)		41.85	54.00	-12.15
	17475 (Pk)		58.89	68.23	-9.34
	17475 (Pk)		46.82	54.00	-7.18

Modulation: 802.11n-20MHz

Data Rate: MCS0

Channel Frequency (MHz)	Measured Frequency (MHz)	Antenna Polarization	Measured Emission (dBµV/m)	Limit (dBµV/m)	Margin (dB)
5180	5180 (Pk)	Vertical	104.41	-	-
	5180 (Av)		95.66	-	-
	5150 (Pk)		57.08	74.00*	-16.92
	5150 (Av)		43.86	54.00*	-10.14
	10360 (Pk)		52.16	68.23	-16.07
	10360 (Av)		39.64	54.00	-14.36
	15540 (Pk)		52.29	68.23	-15.94
	15540 (Av)		40.19	54.00	-13.81
	5180 (Pk)	Horizontal	86.53	-	-
	5180 (Av)		77.86	-	-
	5150 (Pk)		42.61	74.00*	-31.39
	5150 (Av)		30.55	54.00*	-23.45
	10360 (Pk)		52.00	68.23	-16.23
	10360 (Av)		39.54	54.00	-14.46
	15540 (Pk)		53.11	68.23	-15.12
	15540 (Av)		40.14	54.00	-13.86
5240	5240 (Pk)	Vertical	107.65	-	-
	5240 (Av)		98.75	-	-
	5350 (Pk)		52.61	74.00*	-21.39
	5350 (Av)		39.58	54.00*	-14.42
	10480 (Pk)		52.67	68.23	-15.56
	10480 (Av)		40.84	54.00	-13.16
	15720 (Pk)		52.88	68.23	-15.35
	15720 (Av)		39.48	54.00	-14.52
	5240 (Pk)	Horizontal	87.32	-	-
	5240 (Av)		78.56	-	-
	5350 (Pk)		42.05	74.00*	-31.95
	5350 (Av)		29.25	54.00*	-24.75
	10480 (Pk)		53.06	68.23	-15.17
	10480 (Av)		40.54	54.00	-13.46
	15720 (Pk)		51.98	68.23	-16.25
	15720 (Av)		39.51	54.00	-14.49
5260	5260 (Pk)	Vertical	105.53	-	-
	5260 (Av)		96.68	-	-
	5350 (Pk)		51.20	74.00*	-22.80
	5350 (Av)		37.53	54.00*	-16.47
	10520 (Pk)		53.00	68.23	-15.23
	10520 (Av)		40.55	54.00	-13.45
	15780 (Pk)		51.85	68.23	-16.38
	15780 (Av)		39.16	54.00	-14.84
	5260 (Pk)	Horizontal	86.46	-	-
	5260 (Av)		77.92	-	-
	5350 (Pk)		41.31	74.00*	-32.69
	5350 (Av)		29.07	54.00*	-24.93
	10520 (Pk)		52.20	68.23	-16.03
	10520 (Av)		40.33	54.00	-13.67
	15780 (Pk)		50.49	68.23	-17.74
	15780 (Av)		39.05	54.00	-14.95

Channel Frequency (MHz)	Measured Frequency (MHz)	Antenna Polarization	Measured Emission (dBµV/m)	Limit (dBµV/m)	Margin (dB)
5320	5320 (Pk)	Vertical	103.99	-	-
	5320 (Av)		95.38	-	-
	5350 (Pk)		57.93	74.00*	-16.07
	5350 (Av)		43.00	54.00*	-11.00
	10640 (Pk)		53.02	68.23	-15.21
	10640 (Av)		40.46	54.00	-13.54
	15960 (Pk)		51.03	68.23	-17.20
	15960 (Av)		39.33	54.00	-14.67
	5320 (Pk)	Horizontal	83.23	-	-
	5320 (Av)		74.40	-	-
	5350 (Pk)		41.96	74.00*	-32.04
	5350 (Av)		29.61	54.00*	-24.39
	10640 (Pk)		54.26	68.23	-13.97
	10640 (Av)		40.47	54.00	-13.53
	15960 (Pk)		51.86	68.23	-16.37
	15960 (Av)		39.35	54.00	-14.65
5500	5500 (Pk)	Vertical	105.16	-	-
	5500 (Av)		96.51	-	-
	5460 (Pk)		59.23	74.00*	-14.77
	5460 (Av)		41.84	54.00*	-12.16
	11000 (Pk)		53.39	68.23	-14.84
	11000 (Av)		41.34	54.00	-12.66
	16500 (Pk)		55.97	68.23	-12.26
	16500 (Av)		42.19	54.00	-11.81
	5500 (Pk)	Horizontal	85.10	-	-
	5500 (Av)		76.53	-	-
	5460 (Pk)		43.46	74.00*	-30.54
	5460 (Av)		29.80	54.00*	-24.20
	11000 (Pk)		53.65	68.23	-14.58
	11000 (Av)		41.25	54.00	-12.75
	16500 (Pk)		53.36	68.23	-14.87
	16500 (Av)		42.11	54.00	-11.89
5600	5600 (Pk)	Vertical	109.83	-	-
	5600 (Av)		101.15	-	-
	5460 (Pk)		51.50	74.00*	-22.50
	5460 (Av)		38.09	54.00*	-15.91
	11200 (Pk)		53.59	68.23	-14.64
	11200 (Av)		41.89	54.00	-12.11
	16800 (Pk)		54.59	68.23	-13.64
	16800 (Av)		43.30	54.00	-10.70
	5600 (Pk)	Horizontal	89.53	-	-
	5600 (Av)		81.38	-	-
	5460 (Pk)		42.06	74.00*	-31.94
	5460 (Av)		29.47	54.00*	-24.53
	11200 (Pk)		53.45	68.23	-14.78
	11200 (Av)		41.03	54.00	-12.97
	16800 (Pk)		55.83	68.23	-12.40
	16800 (Av)		43.27	54.00	-10.73

Channel Frequency (MHz)	Measured Frequency (MHz)	Antenna Polarization	Measured Emission (dBµV/m)	Limit (dBµV/m)	Margin (dB)
5700	5700 (Pk)	Vertical	104.40	-	-
	5700 (Av)		95.83	-	-
	5460 (Pk)		47.71	74.00*	-26.29
	5460 (Av)		33.85	54.00*	-20.15
	11400 (Pk)		57.32	68.23	-10.91
	11400 (Av)		43.77	54.00	-10.23
	17100 (Pk)		55.97	68.23	-12.26
	17100 (Av)		43.67	54.00	-10.33
	5700 (Pk)	Horizontal	83.83	-	-
	5700 (Av)		75.50	-	-
	5460 (Pk)		41.89	74.00*	-32.11
	5460 (Av)		29.38	54.00*	-24.62
	11400 (Pk)		53.72	68.23	-14.51
	11400 (Av)		41.81	54.00	-12.19
	17100 (Pk)		55.86	68.23	-12.37
	17100 (Av)		43.70	54.00	-10.30
5720	5720 (Pk)	Vertical	109.75	-	-
	5720 (Av)		101.26	-	-
	5460 (Pk)		50.89	74.00*	-23.11
	5460 (Av)		37.59	54.00*	-16.41
	11440 (Pk)		65.19	68.23	-3.04
	11440 (Av)		51.19	54.00	-2.81
	17160(Pk)		56.89	68.23	-11.34
	17160(Av)		44.40	54.00	-9.60
	5720 (Pk)	Horizontal	89.61	-	-
	5720 (Av)		81.08	-	-
	5460 (Pk)		42.61	74.00*	-31.39
	5460 (Av)		29.46	54.00*	-24.54
	11440 (Pk)		54.09	68.23	-14.14
	11440 (Av)		41.92	54.00	-12.08
	17160(Pk)		57.23	68.23	-11.00
	17160(Av)		44.38	54.00	-9.62

Channel Frequency (MHz)	Measured Frequency (MHz)	Antenna Polarization	Measured Emission (dBµV/m)	Limit (dBµV/m)	Margin (dB)
5745	5745 (Pk)	Vertical	109.72	-	-
	5745 (Av)		100.99	-	-
	5725(Pk)		84.24	122.20*	-37.96
	5720(Pk)		77.33	110.80*	-33.47
	5700(Pk)		70.25	105.20*	-34.95
	5650(Pk)		54.08	68.20*	-14.12
	11490 (Pk)		66.32	68.23	-1.91
	11490 (Av)		51.84	54.00	-2.16
	17235 (Pk)		57.36	68.23	-10.87
	17235 (Av)		45.31	54.00	-8.69
	5745 (Pk)	Horizontal	87.23	-	-
	5745 (Av)		78.41	-	-
	5725(Pk)		61.61	122.20*	-60.59
	5720(Pk)		55.37	110.80*	-55.43
	5700(Pk)		50.39	105.20*	-54.81
	5650(Pk)		41.85	68.20*	-26.35
	11490 (Pk)		55.18	68.23	-13.05
	11490 (Av)		42.78	54.00	-11.22
	17235 (Pk)		58.01	68.23	-10.22
	17235 (Av)		45.31	54.00	-8.69
5825	5825 (Pk)	Vertical	109.14	-	-
	5825 (Av)		100.13	-	-
	5850 (Pk)		74.92	122.20*	-47.28
	5855(Pk)		72.99	110.80*	-37.81
	5875(Pk)		63.53	105.20*	-41.67
	5925 (Pk)		55.16	68.20*	-13.04
	11650 (Pk)		54.27	68.23	-13.96
	11650 (Av)		42.19	54.00	-11.81
	17475 (Pk)		58.64	68.23	-9.59
	17475 (Av)		46.71	54.00	-7.29
	5825 (Pk)	Horizontal	90.34	-	-
	5825 (Av)		82.16	-	-
	5850 (Pk)		60.19	122.20*	-62.01
	5855(Pk)		57.88	110.80*	-52.92
	5875(Pk)		49.46	105.20*	-55.74
	5925 (Pk)		43.19	68.20*	-25.01
	11650 (Pk)		54.28	68.23	-13.95
	11650 (Av)		41.87	54.00	-12.13
	17475 (Pk)		58.50	68.23	-9.73
	17475 (Pk)		46.69	54.00	-7.31

Modulation: 802.11ac-20MHz
Data Rate: MCS0

Channel Frequency (MHz)	Measured Frequency (MHz)	Antenna Polarization	Measured Emission (dBµV/m)	Limit (dBµV/m)	Margin (dB)
5180	5180 (Pk)	Vertical	105.21	-	-
	5180 (Av)		96.43	-	-
	5150 (Pk)		55.13	74.00*	-18.87
	5150 (Av)		43.09	54.00*	-10.91
	10360 (Pk)		52.89	68.23	-15.34
	10360 (Av)		39.70	54.00	-14.30
	15540 (Pk)		52.54	68.23	-15.69
	15540 (Av)		40.12	54.00	-13.88
	5180 (Pk)	Horizontal	86.63	-	-
	5180 (Av)		77.91	-	-
	5150 (Pk)		43.20	74.00*	-30.80
	5150 (Av)		30.92	54.00*	-23.08
	10360 (Pk)		51.27	68.23	-16.96
	10360 (Av)		39.47	54.00	-14.53
	15540 (Pk)		51.53	68.23	-16.70
	15540 (Av)		40.07	54.00	-13.93
5240	5240 (Pk)	Vertical	108.22	-	-
	5240 (Av)		99.62	-	-
	5350 (Pk)		52.25	74.00*	-21.75
	5350 (Av)		40.29	54.00*	-13.71
	10480 (Pk)		53.83	68.23	-14.40
	10480 (Av)		40.67	54.00	-13.33
	15720 (Pk)		51.01	68.23	-17.22
	15720 (Av)		39.60	54.00	-14.40
	5240 (Pk)	Horizontal	89.26	-	-
	5240 (Av)		80.73	-	-
	5350 (Pk)		41.73	74.00*	-32.27
	5350 (Av)		29.74	54.00*	-24.26
	10480 (Pk)		52.55	68.23	-15.68
	10480 (Av)		40.52	54.00	-13.48
	15720 (Pk)		52.10	68.23	-16.13
	15720 (Av)		39.44	54.00	-14.56
5260	5260 (Pk)	Vertical	106.62	-	-
	5260 (Av)		98.07	-	-
	5350 (Pk)		51.85	74.00*	-22.15
	5350 (Av)		38.85	54.00*	-15.15
	10520 (Pk)		52.46	68.23	-15.77
	10520 (Av)		40.50	54.00	-13.50
	15780 (Pk)		50.18	68.23	-18.05
	15780 (Av)		39.05	54.00	-14.95
	5260 (Pk)	Horizontal	87.24	-	-
	5260 (Av)		78.67	-	-
	5350 (Pk)		42.03	74.00*	-31.97
	5350 (Av)		29.79	54.00*	-24.21
	10520 (Pk)		52.35	68.23	-15.88
	10520 (Av)		40.45	54.00	-13.55
	15780 (Pk)		51.15	68.23	-17.08
	15780 (Av)		39.06	54.00	-14.94

Channel Frequency (MHz)	Measured Frequency (MHz)	Antenna Polarization	Measured Emission (dBµV/m)	Limit (dBµV/m)	Margin (dB)
5320	5320 (Pk)	Vertical	104.21	-	-
	5320 (Av)		95.73	-	-
	5350 (Pk)		55.13	74.00*	-18.87
	5350 (Av)		42.96	54.00*	-11.04
	10640 (Pk)		52.71	68.23	-15.52
	10640 (Av)		40.55	54.00	-13.45
	15960 (Pk)		52.25	68.23	-15.98
	15960 (Av)		39.36	54.00	-14.64
	5320 (Pk)	Horizontal	76.86	-	-
	5320 (Av)		68.08	-	-
	5350 (Pk)		42.22	74.00*	-31.78
	5350 (Av)		29.68	54.00*	-24.32
	10640 (Pk)		52.58	68.23	-15.65
	10640 (Av)		40.45	54.00	-13.55
	15960 (Pk)		51.57	68.23	-16.66
	15960 (Av)		39.36	54.00	-14.64
5500	5500 (Pk)	Vertical	104.75	-	-
	5500 (Av)		96.08	-	-
	5460 (Pk)		56.07	74.00*	-17.93
	5460 (Av)		40.91	54.00*	-13.09
	11000 (Pk)		53.37	68.23	-14.86
	11000 (Av)		41.34	54.00	-12.66
	16500 (Pk)		53.98	68.23	-14.25
	16500 (Av)		42.17	54.00	-11.83
	5500 (Pk)	Horizontal	85.91	-	-
	5500 (Av)		77.32	-	-
	5460 (Pk)		42.19	74.00*	-31.81
	5460 (Av)		29.67	54.00*	-24.33
	11000 (Pk)		53.12	68.23	-15.11
	11000 (Av)		41.25	54.00	-12.75
	16500 (Pk)		53.80	68.23	-14.43
	16500 (Av)		41.75	54.00	-12.25
5600	5600 (Pk)	Vertical	108.55	-	-
	5600 (Av)		99.91	-	-
	5460 (Pk)		50.98	74.00*	-23.02
	5460 (Av)		37.86	54.00*	-16.14
	11200 (Pk)		54.38	68.23	-13.85
	11200 (Av)		42.66	54.00	-11.34
	16800 (Pk)		56.05	68.23	-12.18
	16800 (Av)		43.38	54.00	-10.62
	5600 (Pk)	Horizontal	90.24	-	-
	5600 (Av)		81.59	-	-
	5460 (Pk)		41.88	74.00*	-32.12
	5460 (Av)		29.39	54.00*	-24.61
	11200 (Pk)		52.45	68.23	-15.78
	11200 (Av)		41.03	54.00	-12.97
	16800 (Pk)		54.81	68.23	-13.42
	16800 (Av)		43.34	54.00	-10.66

Channel Frequency (MHz)	Measured Frequency (MHz)	Antenna Polarization	Measured Emission (dBµV/m)	Limit (dBµV/m)	Margin (dB)
5700	5700 (Pk)	Vertical	103.33	-	-
	5700 (Av)		94.66	-	-
	5460 (Pk)		44.73	74.00*	-29.27
	5460 (Av)		33.21	54.00*	-20.79
	11400 (Pk)		57.35	68.23	-10.88
	11400 (Av)		43.61	54.00	-10.39
	17100 (Pk)		55.70	68.23	-12.53
	17100 (Av)		43.61	54.00	-10.39
	5700 (Pk)	Horizontal	83.98	-	-
	5700 (Av)		75.23	-	-
	5460 (Pk)		42.66	74.00*	-31.34
	5460 (Av)		29.11	54.00*	-24.89
	11400 (Pk)		54.06	68.23	-14.17
	11400 (Av)		41.83	54.00	-12.17
	17100 (Pk)		56.09	68.23	-12.14
	17100 (Av)		43.68	54.00	-10.32
5720	5720 (Pk)	Vertical	108.21	-	-
	5720 (Av)		99.55	-	-
	5460 (Pk)		50.99	74.00*	-23.01
	5460 (Av)		36.80	54.00*	-17.20
	11440 (Pk)		63.81	68.23	-4.42
	11440 (Av)		49.40	54.00	-4.60
	17160(Pk)		55.91	68.23	-12.32
	17160(Av)		44.39	54.00	-9.61
	5720 (Pk)	Horizontal	86.62	-	-
	5720 (Av)		78.24	-	-
	5460 (Pk)		41.38	74.00*	-32.62
	5460 (Av)		29.28	54.00*	-24.72
	11440 (Pk)		53.38	68.23	-14.85
	11440 (Av)		41.85	54.00	-12.15
	17160(Pk)		55.60	68.23	-12.63
	17160(Av)		44.41	54.00	-9.59

Channel Frequency (MHz)	Measured Frequency (MHz)	Antenna Polarization	Measured Emission (dBµV/m)	Limit (dBµV/m)	Margin (dB)
5745	5745 (Pk)	Vertical	108.27	-	-
	5745 (Av)		99.47	-	-
	5725(Pk)		82.37	122.20*	-39.83
	5720(Pk)		75.12	110.80*	-35.68
	5700(Pk)		67.61	105.20*	-37.59
	5650(Pk)		50.94	68.20*	-17.26
	11490 (Pk)		66.87	68.23	-1.36
	11490 (Av)		52.03	54.00	-1.97
	17235 (Pk)		57.10	68.23	-11.13
	17235 (Av)		45.01	54.00	-8.99
	5745 (Pk)	Horizontal	88.55	-	-
	5745 (Av)		79.74	-	-
	5725(Pk)		62.90	122.20*	-59.30
	5720(Pk)		55.74	110.80*	-55.06
	5700(Pk)		48.99	105.20*	-56.21
	5650(Pk)		41.92	68.20*	-26.28
	11490 (Pk)		54.87	68.23	-13.36
	11490 (Av)		42.62	54.00	-11.38
	17235 (Pk)		57.83	68.23	-10.40
	17235 (Av)		45.01	54.00	-8.99
5825	5825 (Pk)	Vertical	107.81	-	-
	5825 (Av)		99.08	-	-
	5850 (Pk)		77.03	122.20*	-45.17
	5855(Pk)		74.70	110.80*	-36.10
	5875(Pk)		64.76	105.20*	-40.44
	5925 (Pk)		54.53	68.20*	-13.67
	11650 (Pk)		54.23	68.23	-14.00
	11650 (Av)		42.07	54.00	-11.93
	17475 (Pk)		58.35	68.23	-9.88
	17475 (Av)		46.62	54.00	-7.38
	5825 (Pk)	Horizontal	88.52	-	-
	5825 (Av)		79.86	-	-
	5850 (Pk)		58.62	122.20*	-63.58
	5855(Pk)		56.88	110.80*	-53.92
	5875(Pk)		46.88	105.20*	-58.32
	5925 (Pk)		42.88	68.20*	-25.32
	11650 (Pk)		54.09	68.23	-14.14
	11650 (Av)		42.01	54.00	-11.99
	17475 (Pk)		58.85	68.23	-9.38
	17475 (Pk)		46.81	54.00	-7.19

Modulation: 802.11n-40MHz

Data Rate: MCS0

Channel Frequency (MHz)	Measured Frequency (MHz)	Antenna Polarization	Measured Emission (dBµV/m)	Limit (dBµV/m)	Margin (dB)
5190	5190 (Pk)	Vertical	101.97	-	-
	5190 (Av)		93.14	-	-
	5150 (Pk)		58.12	74.00*	-15.88
	5150 (Av)		45.07	54.00*	-8.93
	10380 (Pk)		52.02	68.23	-16.21
	10380 (Av)		40.37	54.00	-13.63
	15570 (Pk)		53.31	68.23	-14.92
	15570 (Av)		41.62	54.00	-12.38
	5190 (Pk)	Horizontal	83.60	-	-
	5190 (Av)		74.75	-	-
	5150 (Pk)		43.95	74.00*	-30.05
	5150 (Av)		31.53	54.00*	-22.47
	10380 (Pk)		53.18	68.23	-15.05
	10380 (Av)		40.31	54.00	-13.69
	15570 (Pk)		53.78	68.23	-14.45
	15570 (Av)		41.71	54.00	-12.29
5230	5230 (Pk)	Vertical	104.04	-	-
	5230 (Av)		95.15	-	-
	5350 (Pk)		51.40	74.00*	-22.60
	5350 (Av)		38.39	54.00*	-15.61
	10460 (Pk)		53.00	68.23	-15.23
	10460 (Av)		41.17	54.00	-12.83
	15690 (Pk)		53.80	68.23	-14.43
	15690 (Av)		41.04	54.00	-12.96
	5230 (Pk)	Horizontal	85.97	-	-
	5230 (Av)		77.11	-	-
	5350 (Pk)		42.32	74.00*	-31.68
	5350 (Av)		29.68	54.00*	-24.32
	10460 (Pk)		53.50	68.23	-14.73
	10460 (Av)		41.06	54.00	-12.94
	15690 (Pk)		53.44	68.23	-14.79
	15690 (Av)		41.04	54.00	-12.96
5270	5270 (Pk)	Vertical	103.92	-	-
	5270 (Av)		95.11	-	-
	5350 (Pk)		50.63	74.00*	-23.37
	5350 (Av)		38.32	54.00*	-15.68
	10540 (Pk)		53.24	68.23	-14.99
	10540 (Av)		41.10	54.00	-12.90
	15810 (Pk)		55.18	68.23	-13.05
	15810 (Av)		43.51	54.00	-10.49
	5270 (Pk)	Horizontal	85.42	-	-
	5270 (Av)		76.76	-	-
	5350 (Pk)		42.69	74.00*	-31.31
	5350 (Av)		29.66	54.00*	-24.34
	10540 (Pk)		52.36	68.23	-15.87
	10540 (Av)		41.11	54.00	-12.89
	15810 (Pk)		52.10	68.23	-16.13
	15810 (Av)		41.03	54.00	-12.97

Channel Frequency (MHz)	Measured Frequency (MHz)	Antenna Polarization	Measured Emission (dBµV/m)	Limit (dBµV/m)	Margin (dB)
5310	5310 (Pk)	Vertical	100.15	-	-
	5310 (Pk)		91.58	-	-
	5350 (Pk)		57.59	74.00*	-16.41
	5350 (Pk)		43.84	54.00*	-10.16
	10620 (Pk)		52.94	68.23	-15.29
	10620 (Pk)		41.20	54.00	-12.80
	15930 (Pk)		52.66	68.23	-15.57
	15930 (Av)		40.78	54.00	-13.22
	5310 (Pk)	Horizontal	81.08	-	-
	5310 (Pk)		72.50	-	-
	5350 (Pk)		43.13	74.00*	-30.87
	5350 (Pk)		30.98	54.00*	-23.02
	10620 (Pk)		53.13	68.23	-15.10
	10620 (Pk)		41.17	54.00	-12.83
	15930 (Pk)		52.96	68.23	-15.27
	15930 (Av)		40.85	54.00	-13.15
5510	5510 (Pk)	Vertical	101.66	-	-
	5510 (Av)		92.83	-	-
	5460 (Pk)		54.86	74.00*	-19.14
	5460 (Av)		41.88	54.00*	-12.12
	11020 (Pk)		53.49	68.23	-14.74
	11020 (Av)		41.79	54.00	-12.21
	16530 (Pk)		55.65	68.23	-12.58
	16530 (Av)		43.23	54.00	-10.77
	5510 (Pk)	Horizontal	81.22	-	-
	5510 (Av)		72.45	-	-
	5460 (Pk)		42.65	74.00*	-31.35
	5460 (Av)		30.22	54.00*	-23.78
	11020 (Pk)		54.96	68.23	-13.27
	11020 (Av)		41.82	54.00	-12.18
	16530 (Pk)		56.15	68.23	-12.08
	16530 (Av)		43.36	54.00	-10.64
5670	5670 (Pk)	Vertical	101.58	-	-
	5670 (Av)		92.97	-	-
	5460 (Pk)		47.37	74.00*	-26.63
	5460 (Av)		35.56	54.00*	-18.44
	11340 (Pk)		54.02	68.23	-14.21
	11340 (Av)		42.30	54.00	-11.70
	17010 (Pk)		56.18	68.23	-12.05
	17010 (Av)		44.13	54.00	-9.87
	5670 (Pk)	Horizontal	81.08	-	-
	5670 (Av)		72.26	-	-
	5460 (Pk)		42.44	74.00*	-31.56
	5460 (Av)		29.91	54.00*	-24.09
	11340 (Pk)		53.55	68.23	-14.68
	11340 (Av)		41.67	54.00	-12.33
	17010 (Pk)		55.68	68.23	-12.55
	17010 (Av)		44.17	54.00	-9.83

Channel Frequency (MHz)	Measured Frequency (MHz)	Antenna Polarization	Measured Emission (dBµV/m)	Limit (dBµV/m)	Margin (dB)
5710	5710 (Pk)	Vertical	104.24	-	-
	5710 (Av)		95.48	-	-
	5460 (Pk)		48.79	74.00*	-25.21
	5460 (Av)		36.38	54.00*	-17.62
	11420 (Pk)		58.77	68.23	-9.46
	11420 (Av)		46.42	54.00	-7.58
	17130(Pk)		56.16	68.23	-12.07
	17130(Av)		44.36	54.00	-9.64
	5710 (Pk)	Horizontal	83.44	-	-
	5710 (Av)		74.87	-	-
	5460 (Pk)		42.75	74.00*	-31.25
	5460 (Av)		30.00	54.00*	-24.00
	11420 (Pk)		54.19	68.23	-14.04
	11420 (Av)		42.22	54.00	-11.78
	17130(Pk)		56.93	68.23	-11.30
	17130(Av)		44.53	54.00	-9.47

Channel Frequency (MHz)	Measured Frequency (MHz)	Antenna Polarization	Measured Emission (dBµV/m)	Limit (dBµV/m)	Margin (dB)
5755	5755 (Pk)	Vertical	103.43	-	-
	5755 (Av)		94.86	-	-
	5725(Pk)		73.53	122.20*	-48.67
	5720(Pk)		71.84	110.80*	-38.96
	5700(Pk)		66.59	105.20*	-38.61
	5650(Pk)		51.78	68.20*	-16.42
	11510 (Pk)		60.95	68.23	-7.28
	11510 (Av)		48.98	54.00	-5.02
	17265 (Pk)		56.53	68.23	-11.70
	17265 (Av)		44.41	54.00	-9.59
	5755 (Pk)	Horizontal	83.72	-	-
	5755 (Av)		75.11	-	-
	5725(Pk)		53.71	122.20*	-68.49
	5720(Pk)		51.92	110.80*	-58.88
	5700(Pk)		47.85	105.20*	-57.35
	5650(Pk)		42.94	68.20*	-25.26
	11510 (Pk)		55.90	68.23	-12.33
	11510 (Av)		42.77	54.00	-11.23
	17265 (Pk)		58.22	68.23	-10.01
	17265 (Av)		44.40	54.00	-9.60
5795	5795 (Pk)	Vertical	103.50	-	-
	5795 (Av)		94.69	-	-
	5850 (Pk)		68.41	122.20*	-53.79
	5855(Pk)		65.58	110.80*	-45.22
	5875(Pk)		58.73	105.20*	-46.47
	5925 (Pk)		53.11	68.20*	-15.09
	11590 (Pk)		61.91	68.23	-6.32
	11590 (Av)		49.96	54.00	-4.04
	17385 (Pk)		56.63	68.23	-11.60
	17385 (Pk)		44.89	54.00	-9.11
	5795 (Pk)	Horizontal	83.57	-	-
	5795 (Av)		74.86	-	-
	5850 (Pk)		50.94	122.20*	-71.26
	5855(Pk)		48.81	110.80*	-61.99
	5875(Pk)		43.26	105.20*	-61.94
	5925 (Pk)		41.95	68.20*	-26.25
	11590 (Pk)		54.25	68.23	-13.98
	11590 (Av)		42.15	54.00	-11.85
	17385 (Pk)		57.58	68.23	-10.65
	17385 (Pk)		44.88	54.00	-9.12

Modulation: 802.11ac-40MHz

Data Rate: MCS0

Channel Frequency (MHz)	Measured Frequency (MHz)	Antenna Polarization	Measured Emission (dBµV/m)	Limit (dBµV/m)	Margin (dB)
5190	5190 (Pk)	Vertical	101.20	-	-
	5190 (Av)		92.58	-	-
	5150 (Pk)		58.02	74.00*	-15.98
	5150 (Av)		44.93	54.00*	-9.07
	10380 (Pk)		52.51	68.23	-15.72
	10380 (Av)		40.45	54.00	-13.55
	15570 (Pk)		53.89	68.23	-14.34
	15570 (Av)		41.48	54.00	-12.52
	5190 (Pk)	Horizontal	82.52	-	-
	5190 (Av)		73.75	-	-
	5150 (Pk)		44.74	74.00*	-29.26
	5150 (Av)		31.37	54.00*	-22.63
	10380 (Pk)		52.26	68.23	-15.97
	10380 (Av)		40.35	54.00	-13.65
	15570 (Pk)		53.67	68.23	-14.56
	15570 (Av)		41.44	54.00	-12.56
5230	5230 (Pk)	Vertical	103.95	-	-
	5230 (Av)		95.27	-	-
	5350 (Pk)		51.62	74.00*	-22.38
	5350 (Av)		38.51	54.00*	-15.49
	10460 (Pk)		52.18	68.23	-16.05
	10460 (Av)		41.06	54.00	-12.94
	15690 (Pk)		53.26	68.23	-14.97
	15690 (Av)		40.90	54.00	-13.10
	5230 (Pk)	Horizontal	84.80	-	-
	5230 (Av)		76.16	-	-
	5150 (Pk)		42.74	74.00*	-31.26
	5150 (Av)		29.62	54.00*	-24.38
	10460 (Pk)		53.67	68.23	-14.56
	10460 (Av)		41.03	54.00	-12.97
	15690 (Pk)		52.78	68.23	-15.45
	15690 (Av)		40.79	54.00	-13.21
5270	5270 (Pk)	Vertical	103.96	-	-
	5270 (Av)		95.32	-	-
	5350 (Pk)		52.06	74.00*	-21.94
	5350 (Av)		38.68	54.00*	-15.32
	10540 (Pk)		53.57	68.23	-14.66
	10540 (Av)		41.16	54.00	-12.84
	15810 (Pk)		52.88	68.23	-15.35
	15810 (Av)		41.10	54.00	-12.90
	5270 (Pk)	Horizontal	85.07	-	-
	5270 (Av)		76.54	-	-
	5350 (Pk)		42.27	74.00*	-31.73
	5350 (Av)		29.67	54.00*	-24.33
	10540 (Pk)		53.72	68.23	-14.51
	10540 (Av)		41.12	54.00	-12.88
	15810 (Pk)		53.70	68.23	-14.53
	15810 (Av)		41.05	54.00	-12.95

Channel Frequency (MHz)	Measured Frequency (MHz)	Antenna Polarization	Measured Emission (dBµV/m)	Limit (dBµV/m)	Margin (dB)
5310	5310 (Pk)	Vertical	99.43	-	-
	5310 (Pk)		90.87	-	-
	5350 (Pk)		56.47	74.00*	-17.53
	5350 (Pk)		42.77	54.00*	-11.23
	10620 (Pk)		52.68	68.23	-15.55
	10620 (Pk)		41.17	54.00	-12.83
	15930 (Pk)		53.10	68.23	-15.13
	15930 (Av)		40.75	54.00	-13.25
	5310 (Pk)	Horizontal	80.65	-	-
	5310 (Pk)		72.02	-	-
	5350 (Pk)		48.74	74.00*	-25.26
	5350 (Pk)		30.37	54.00*	-23.63
	10620 (Pk)		53.74	68.23	-14.49
	10620 (Pk)		41.17	54.00	-12.83
	15930 (Pk)		53.39	68.23	-14.84
	15930 (Av)		40.81	54.00	-13.19
5510	5510 (Pk)	Vertical	101.28	-	-
	5510 (Av)		92.68	-	-
	5460 (Pk)		54.48	74.00*	-19.52
	5460 (Av)		41.96	54.00*	-12.04
	11020 (Pk)		53.25	68.23	-14.98
	11020 (Av)		41.80	54.00	-12.20
	16530 (Pk)		55.03	68.23	-13.20
	16530 (Av)		43.19	54.00	-10.81
	5510 (Pk)	Horizontal	81.33	-	-
	5510 (Av)		72.73	-	-
	5460 (Pk)		43.20	74.00*	-30.80
	5460 (Av)		30.37	54.00*	-23.63
	11020 (Pk)		54.41	68.23	-13.82
	11020 (Av)		41.78	54.00	-12.22
	16530 (Pk)		55.45	68.23	-12.78
	16530 (Av)		43.19	54.00	-10.81
5670	5670 (Pk)	Vertical	102.44	-	-
	5670 (Av)		93.85	-	-
	5460 (Pk)		47.83	74.00*	-26.17
	5460 (Av)		35.52	54.00*	-18.48
	11340 (Pk)		54.43	68.23	-13.80
	11340 (Av)		42.69	54.00	-11.31
	17010 (Pk)		56.57	68.23	-11.66
	17010 (Av)		44.14	54.00	-9.86
	5670 (Pk)	Horizontal	81.52	-	-
	5670 (Av)		72.98	-	-
	5460 (Pk)		43.10	74.00*	-30.90
	5460 (Av)		29.95	54.00*	-24.05
	11340 (Pk)		53.92	68.23	-14.31
	11340 (Av)		41.70	54.00	-12.30
	17010 (Pk)		56.09	68.23	-12.14
	17010 (Av)		44.12	54.00	-9.88

Channel Frequency (MHz)	Measured Frequency (MHz)	Antenna Polarization	Measured Emission (dBµV/m)	Limit (dBµV/m)	Margin (dB)
5710	5710 (Pk)	Vertical	104.23	-	-
	5710 (Av)		95.62	-	-
	5460 (Pk)		48.83	74.00*	-25.17
	5460 (Av)		36.64	54.00*	-17.36
	11420 (Pk)		59.44	68.23	-8.79
	11420 (Av)		46.95	54.00	-7.05
	17130(Pk)		57.61	68.23	-10.62
	17130(Av)		44.55	54.00	-9.45
	5710 (Pk)	Horizontal	80.86	-	-
	5710 (Av)		72.32	-	-
	5460 (Pk)		42.84	74.00*	-31.16
	5460 (Av)		29.89	54.00*	-24.11
	11420 (Pk)		54.14	68.23	-14.09
	11420 (Av)		42.08	54.00	-11.92
	17130(Pk)		56.50	68.23	-11.73
	17130(Av)		44.48	54.00	-9.52

Channel Frequency (MHz)	Measured Frequency (MHz)	Antenna Polarization	Measured Emission (dBµV/m)	Limit (dBµV/m)	Margin (dB)
5755	5755 (Pk)	Vertical	103.46	-	-
	5755 (Av)		94.93	-	-
	5725(Pk)		73.35	122.20*	-48.85
	5720(Pk)		69.74	110.80*	-41.06
	5700(Pk)		66.91	105.20*	-38.29
	5650(Pk)		51.57	68.20*	-16.63
	11510 (Pk)		61.36	68.23	-6.87
	11510 (Av)		48.79	54.00	-5.21
	17265 (Pk)		57.08	68.23	-11.15
	17265 (Av)		44.39	54.00	-9.61
	5755 (Pk)	Horizontal	83.61	-	-
	5755 (Av)		75.04	-	-
	5725(Pk)		54.01	122.20*	-68.19
	5720(Pk)		50.79	110.80*	-60.01
	5700(Pk)		48.86	105.20*	-56.34
	5650(Pk)		42.24	68.20*	-25.96
	11510 (Pk)		55.74	68.23	-12.49
	11510 (Av)		42.81	54.00	-11.19
	17265 (Pk)		56.59	68.23	-11.64
	17265 (Av)		44.45	54.00	-9.55
5795	5795 (Pk)	Vertical	103.25	-	-
	5795 (Av)		94.72	-	-
	5850 (Pk)		67.98	122.20*	-54.22
	5855(Pk)		64.94	110.80*	-45.86
	5875(Pk)		58.17	105.20*	-47.03
	5925 (Pk)		53.12	68.20*	-15.08
	11590 (Pk)		62.20	68.23	-6.03
	11590 (Av)		50.45	54.00	-3.55
	17385 (Pk)		56.93	68.23	-11.30
	17385 (Pk)		44.88	54.00	-9.12
	5795 (Pk)	Horizontal	83.99	-	-
	5795 (Av)		75.45	-	-
	5850 (Pk)		50.57	122.20*	-71.63
	5855(Pk)		48.33	110.80*	-62.47
	5875(Pk)		43.38	105.20*	-61.82
	5925 (Pk)		42.60	68.20*	-25.60
	11590 (Pk)		54.11	68.23	-14.12
	11590 (Av)		42.12	54.00	-11.88
	17385 (Pk)		57.63	68.23	-10.60
	17385 (Pk)		44.92	54.00	-9.08

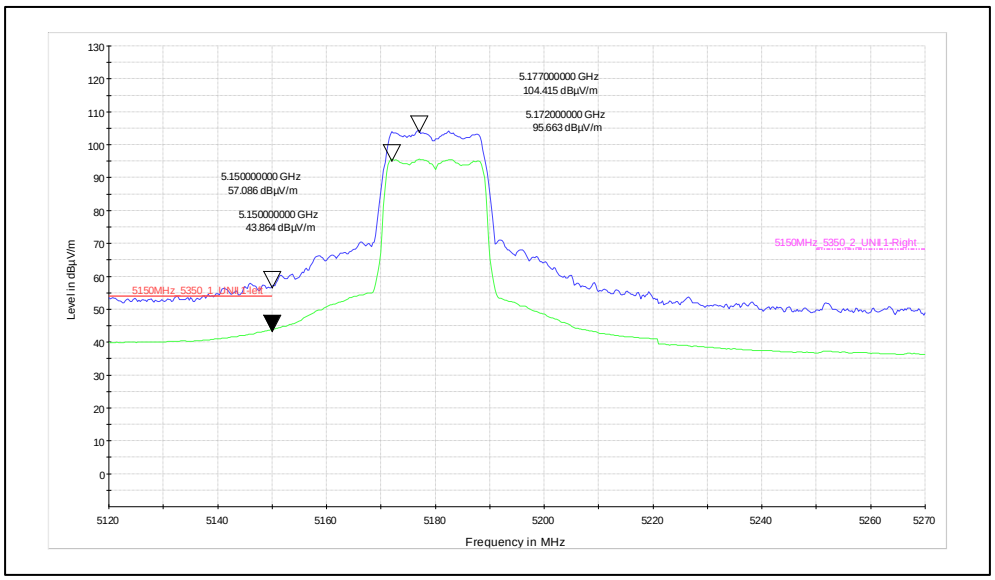
Modulation: 802.11ac-80MHz
Data Rate: MCS0

Channel Frequency (MHz)	Measured Frequency (MHz)	Antenna Polarization	Measured Emission (dBµV/m)	Limit (dBµV/m)	Margin (dB)
5210	5210 (Pk)	Vertical	96.36	-	-
	5210 (Av)		86.83	-	-
	5150 (Pk)		57.57	74.00*	-16.43
	5150 (Av)		45.23	54.00*	-8.77
	10420 (Pk)		52.40	68.23	-15.83
	10420 (Av)		40.63	54.00	-13.37
	15630 (Pk)		54.65	68.23	-13.58
	15630 (Av)		41.47	54.00	-12.53
	5210 (Pk)	Horizontal	78.10	-	-
	5210 (Av)		68.36	-	-
	5150 (Pk)		44.15	74.00*	-29.85
	5150 (Av)		31.63	54.00*	-22.37
	10420 (Pk)		53.04	68.23	-15.19
	10420 (Av)		40.65	54.00	-13.35
	15630 (Pk)		54.70	68.23	-13.53
	15630 (Av)		41.53	54.00	-12.47
5290	5290 (Pk)	Vertical	97.01	-	-
	5290 (Av)		87.35	-	-
	5350 (Pk)		59.86	74.00*	-14.14
	5350 (Av)		49.06	54.00*	-4.94
	10580 (Pk)		54.83	68.23	-13.40
	10580 (Av)		41.06	54.00	-12.94
	15870 (Pk)		53.67	68.23	-14.56
	15870 (Av)		41.31	54.00	-12.69
	5290 (Pk)	Horizontal	78.50	-	-
	5290 (Av)		68.54	-	-
	5350 (Pk)		44.64	74.00*	-29.36
	5350 (Av)		32.53	54.00*	-21.47
	10580 (Pk)		52.44	68.23	-15.79
	10580 (Av)		41.00	54.00	-13.00
	15870 (Pk)		53.01	68.23	-15.22
	15870 (Av)		41.24	54.00	-12.76
5530	5530 (Pk)	Vertical	97.35	-	-
	5530 (Av)		87.42	-	-
	5460 (Pk)		55.11	74.00*	-18.89
	5460 (Av)		43.92	54.00*	-10.08
	11060 (Pk)		53.42	68.23	-14.81
	11060 (Av)		41.51	54.00	-12.49
	16590 (Pk)		55.09	68.23	-13.14
	16590 (Av)		42.73	54.00	-11.27
	5530 (Pk)	Horizontal	77.05	-	-
	5530 (Av)		67.34	-	-
	5460 (Pk)		43.48	74.00*	-30.52
	5460 (Av)		30.86	54.00*	-23.14
	11060 (Pk)		53.74	68.23	-14.49
	11060 (Av)		41.56	54.00	-12.44
	16590 (Pk)		54.30	68.23	-13.93
	16590 (Av)		42.73	54.00	-11.27

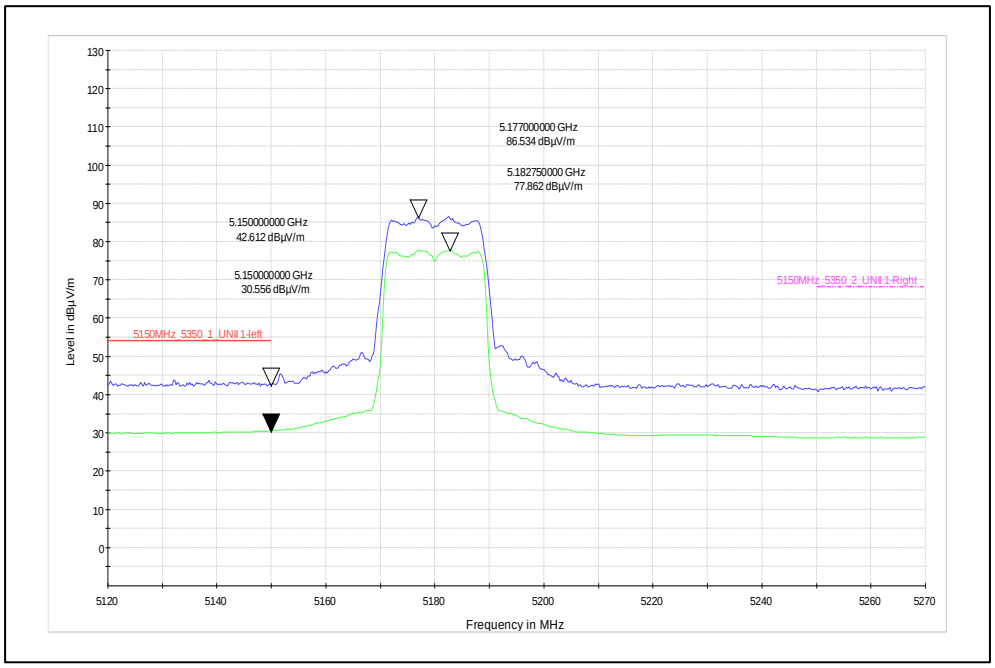
Channel Frequency (MHz)	Measured Frequency (MHz)	Antenna Polarization	Measured Emission (dBµV/m)	Limit (dBµV/m)	Margin (dB)
5690	5690 (Pk)	Vertical	99.10	-	-
	5690 (Av)		89.48	-	-
	5460 (Pk)		48.65	74.00*	-25.35
	5460 (Av)		35.99	54.00*	-18.01
	11380 (Pk)		55.54	68.23	-12.69
	11380 (Av)		43.45	54.00	-10.55
	17070 (Pk)		55.99	68.23	-12.24
	17070 (Av)		44.04	54.00	-9.96
	5690 (Pk)	Horizontal	79.80	-	-
	5690 (Av)		70.13	-	-
	5460 (Pk)		43.63	74.00*	-30.37
	5460 (Av)		30.21	54.00*	-23.79
	11380 (Pk)		54.22	68.23	-14.01
	11380 (Av)		42.08	54.00	-11.92
	17070 (Pk)		56.33	68.23	-11.90
	17070 (Av)		44.05	54.00	-9.95

Channel Frequency (MHz)	Measured Frequency (MHz)	Antenna Polarization	Measured Emission (dBµV/m)	Limit (dBµV/m)	Margin (dB)
5775	5775 (Pk)	Vertical	99.07	-	-
	5775 (Pk)		89.25	-	-
	5850 (Pk)		63.92	122.20*	-58.28
	5855 (Pk)		64.08	110.80*	-46.72
	5875 (Pk)		62.38	105.20*	-42.82
	5925 (Pk)		54.30	68.20*	-13.90
	11550 (Pk)		59.66	68.23	-8.57
	11550 (Av)		45.88	54.00	-8.12
	17325 (Pk)		56.75	68.23	-11.48
	17325 (Av)		44.63	54.00	-9.37
	5775 (Pk)	Horizontal	79.92	-	-
	5775 (Pk)		70.22	-	-
	5850 (Pk)		47.52	122.20*	-74.68
	5855 (Pk)		47.59	110.80*	-63.21
	5875 (Pk)		46.07	105.20*	-59.13
	5925 (Pk)		43.11	68.20*	-25.09
	11550 (Av)		55.34	68.23	-12.89
	11550 (Pk)		42.42	54.00	-11.58
	17325 (Pk)		57.10	68.23	-11.13
	17325 (Av)		44.68	54.00	-9.32

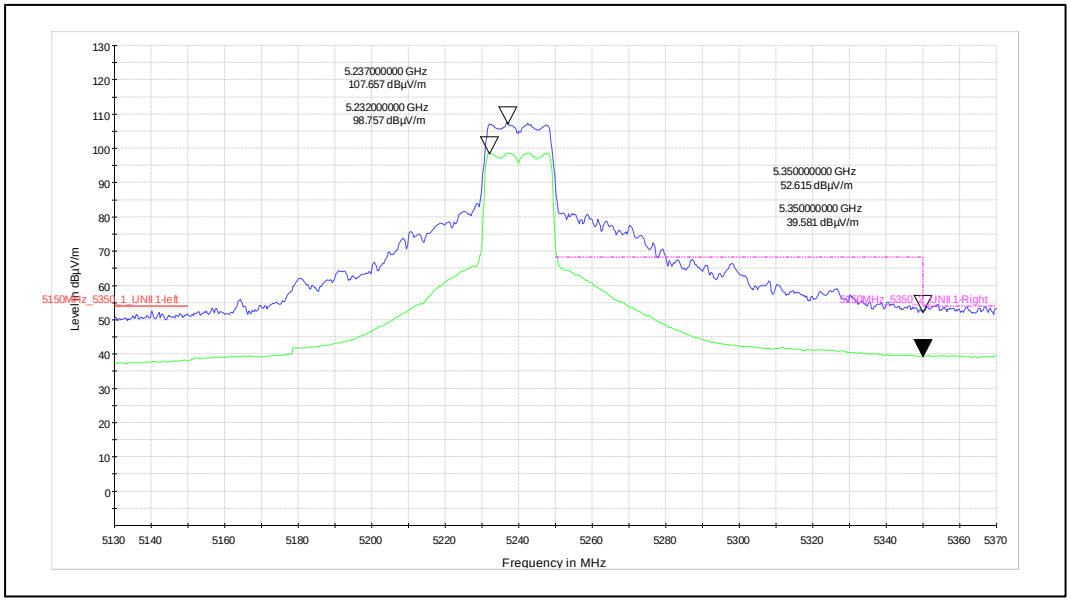
Test Plots:
Modulation: 802.11n-20MHz
Data Rate: MCS0
Channel Frequency: 5180MHz_Vertical Polarization



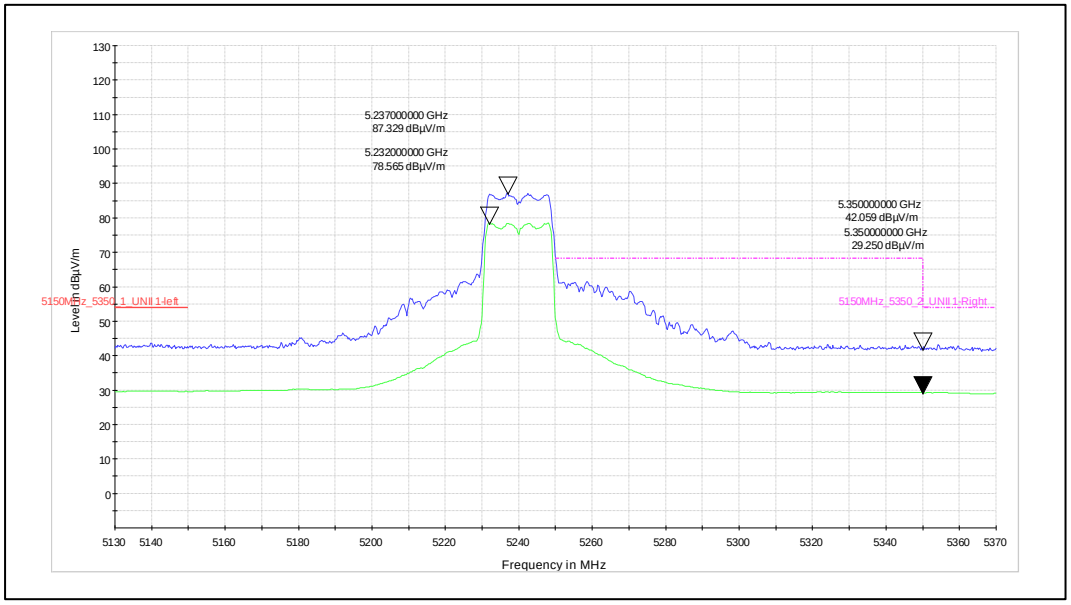
Channel Frequency: 5180MHz_Horizontal Polarization



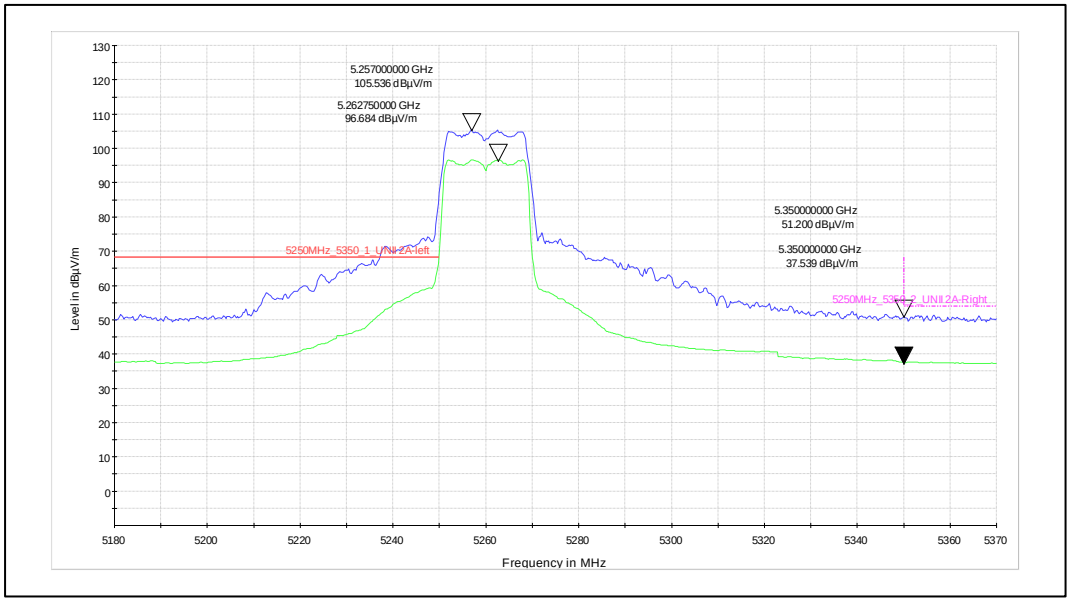
Channel Frequency: 5240MHz_Vertical Polarization



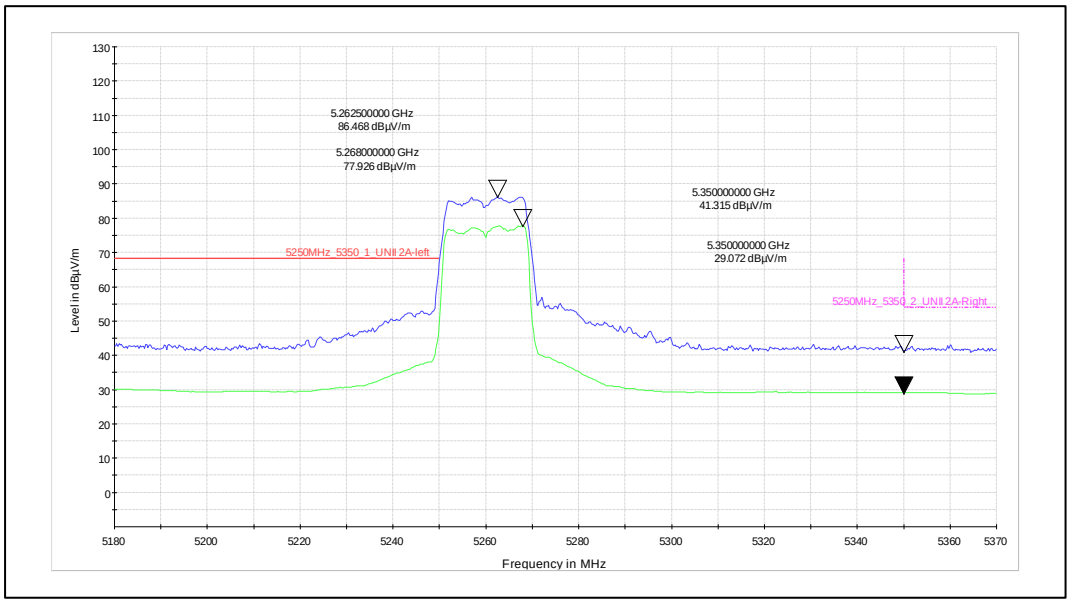
Channel Frequency: 5240MHz_Horizontal Polarization



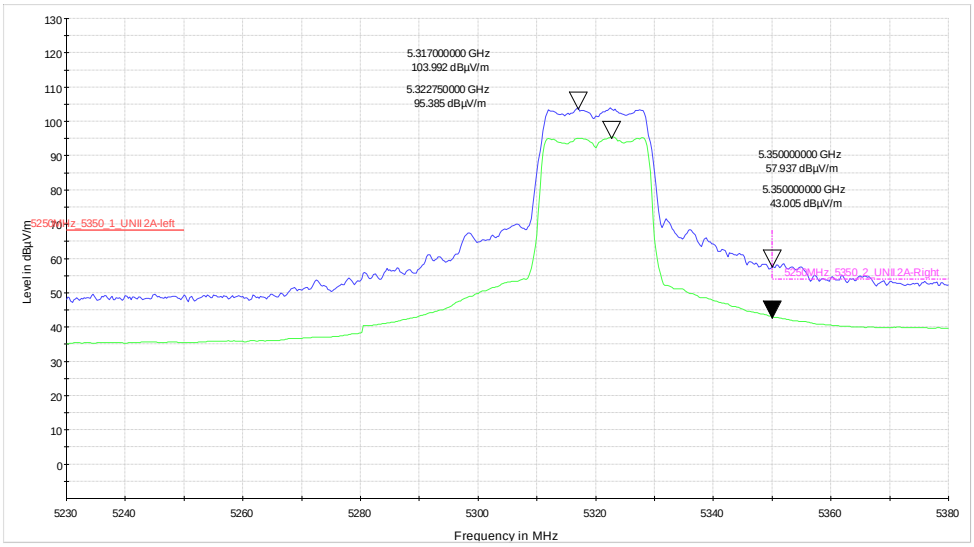
Channel Frequency: 5260MHz_Vertical Polarization



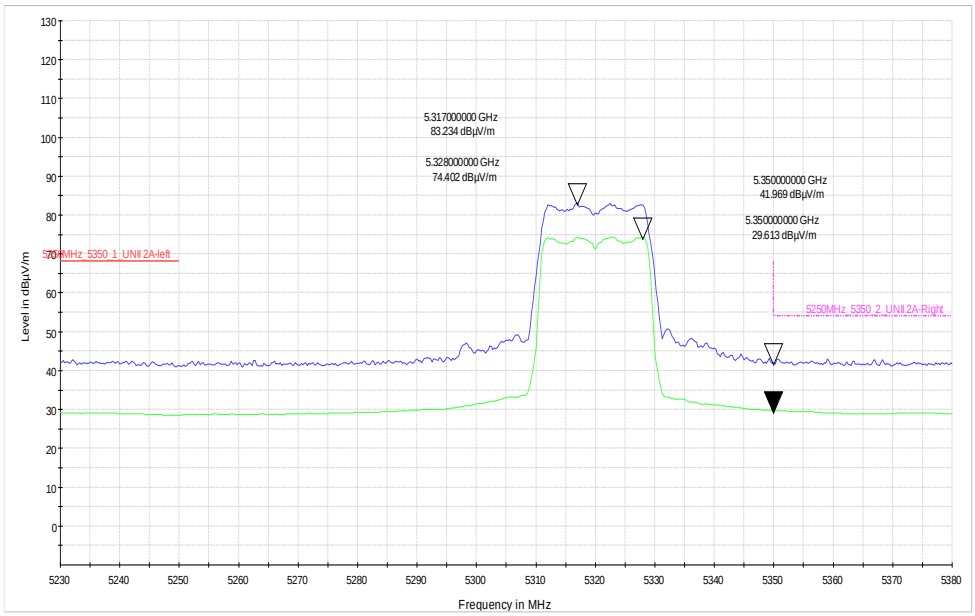
Channel Frequency: 5260MHz_Horizontal Polarization



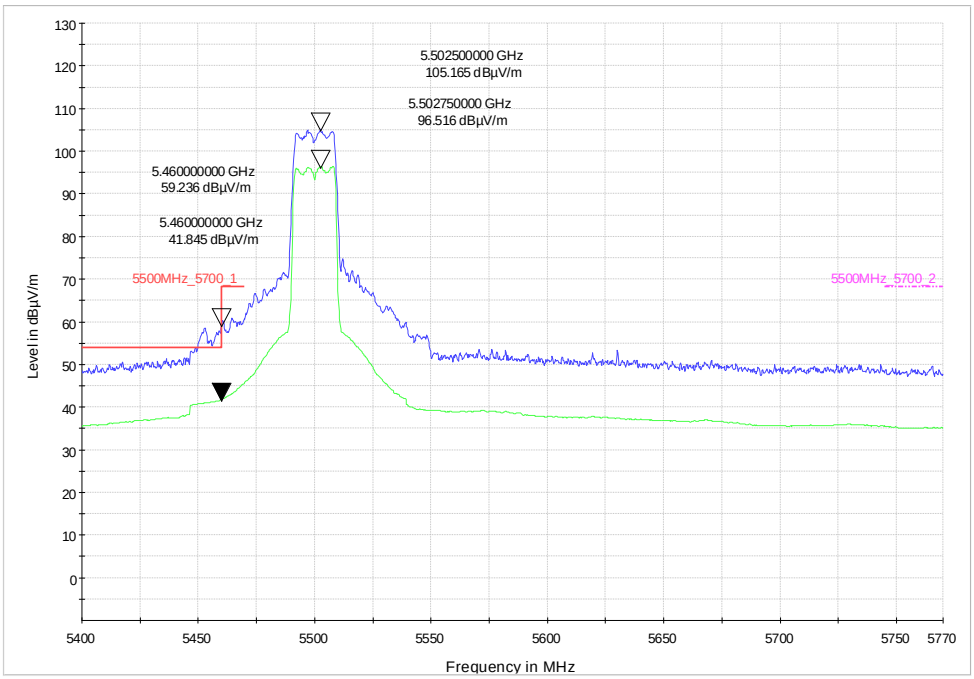
Channel Frequency: 5320MHz_Vertical Polarization



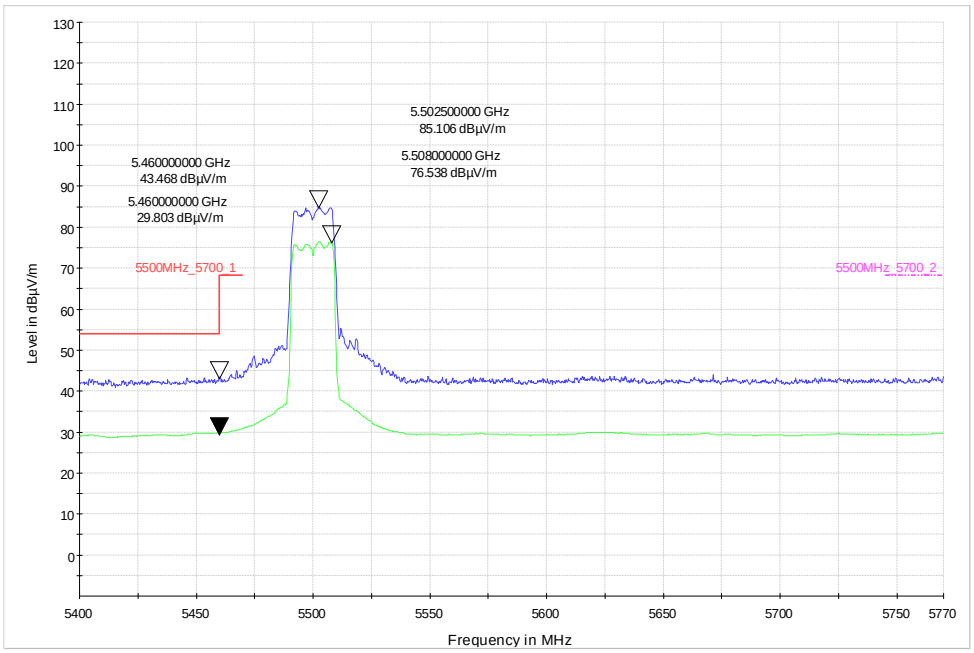
Channel Frequency: 5320MHz_Horizontal Polarization



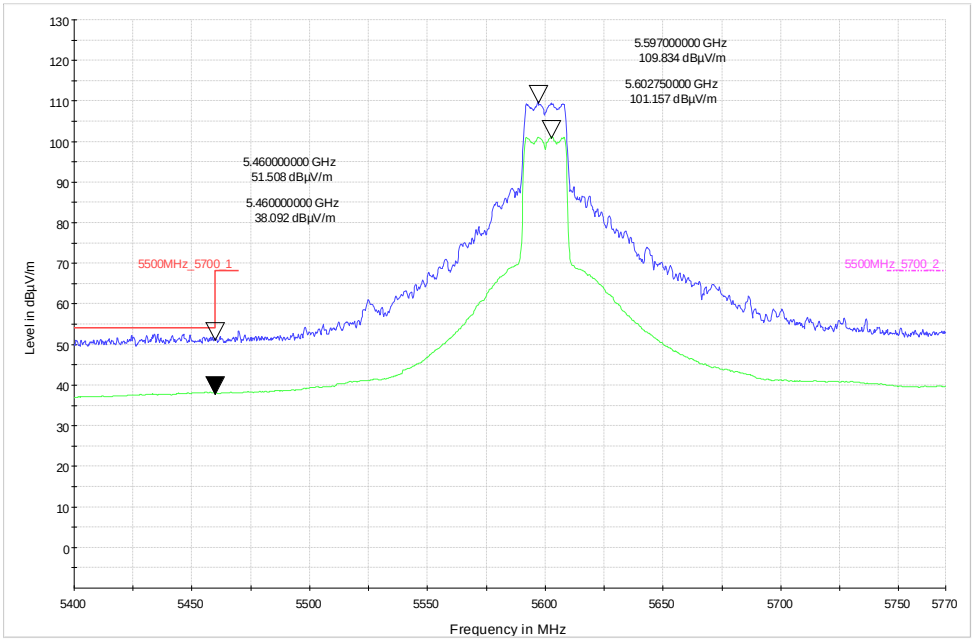
Channel Frequency: 5500MHz_Vertical Polarization



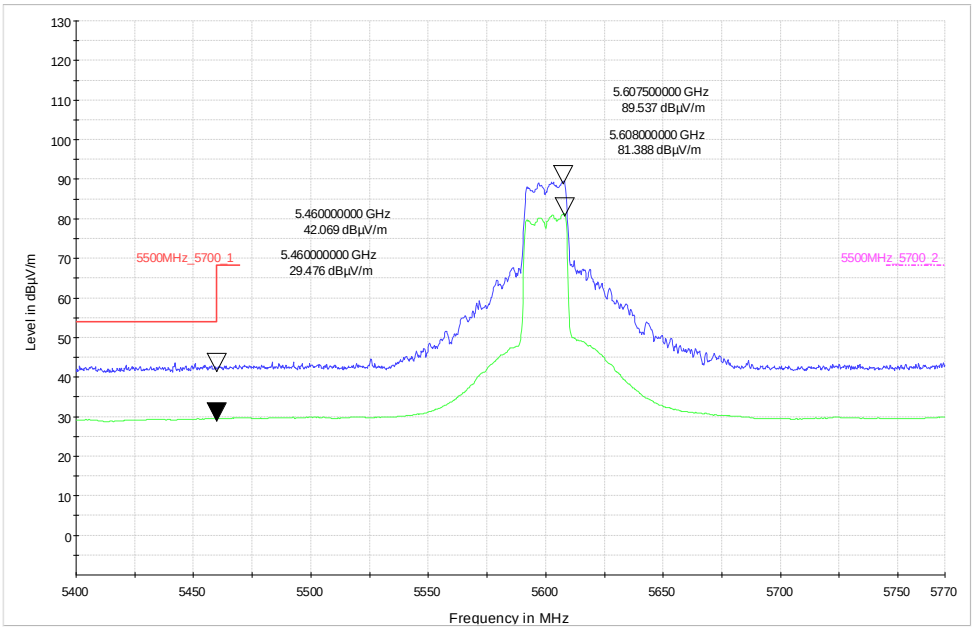
Channel Frequency: 5500MHz_Horizontal Polarization



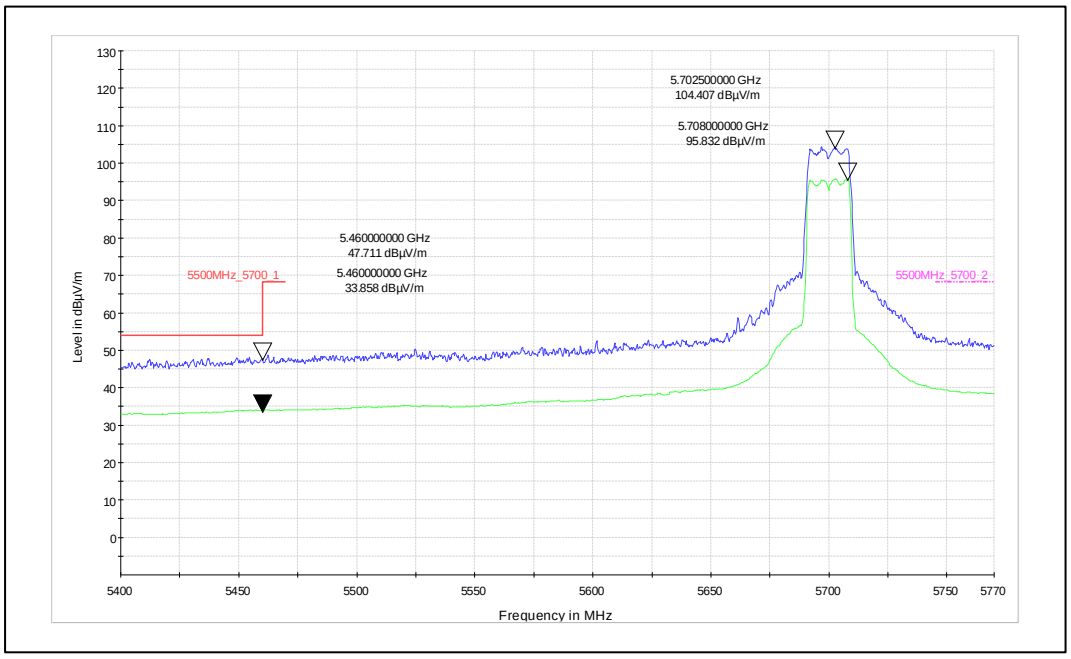
Channel Frequency: 5600MHz_Vertical Polarization



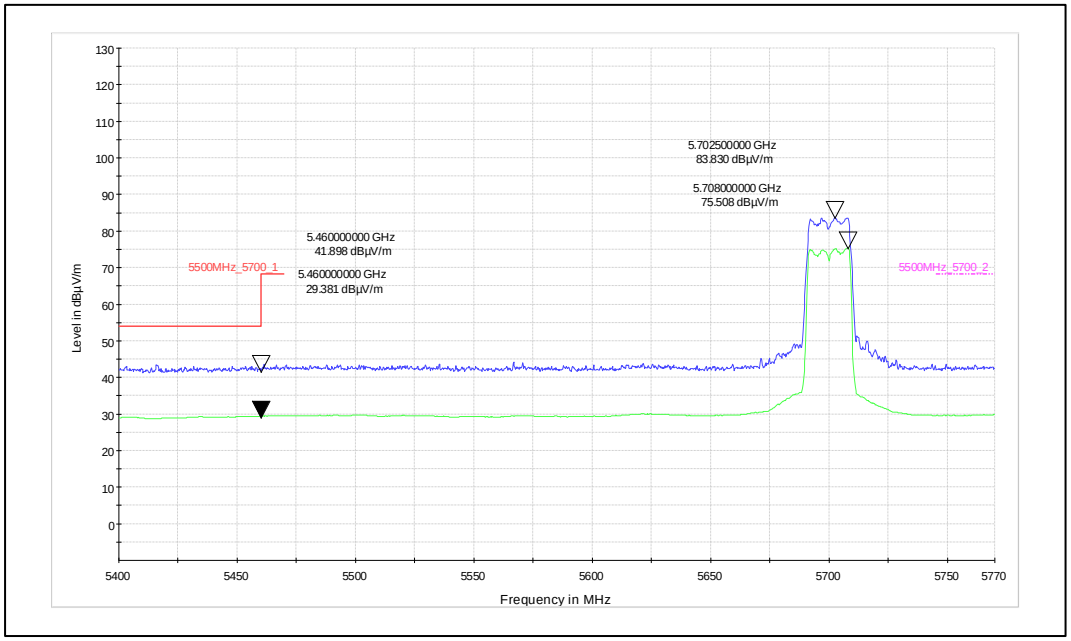
Channel Frequency: 5600MHz_Horizontal Polarization



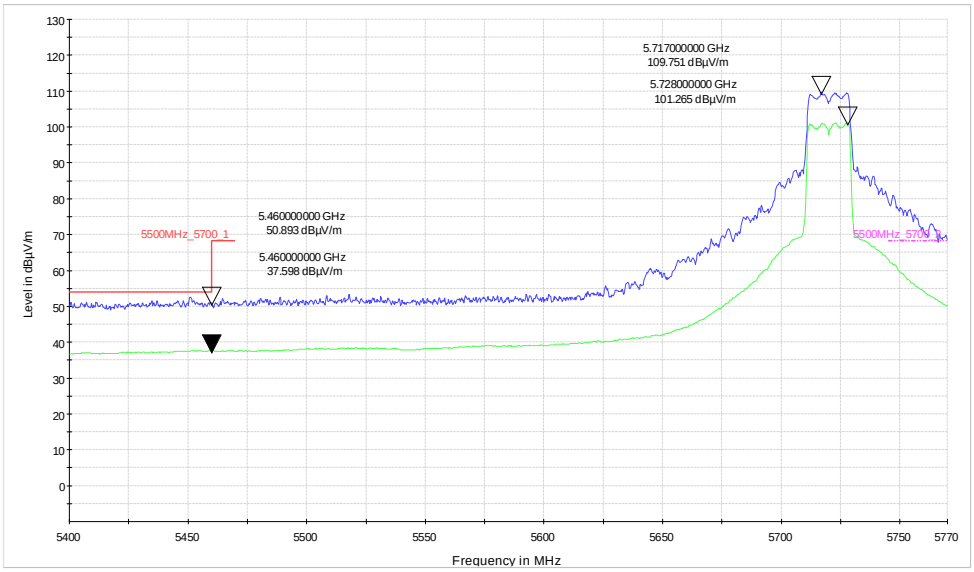
Channel Frequency: 5700MHz_Vertical Polarization



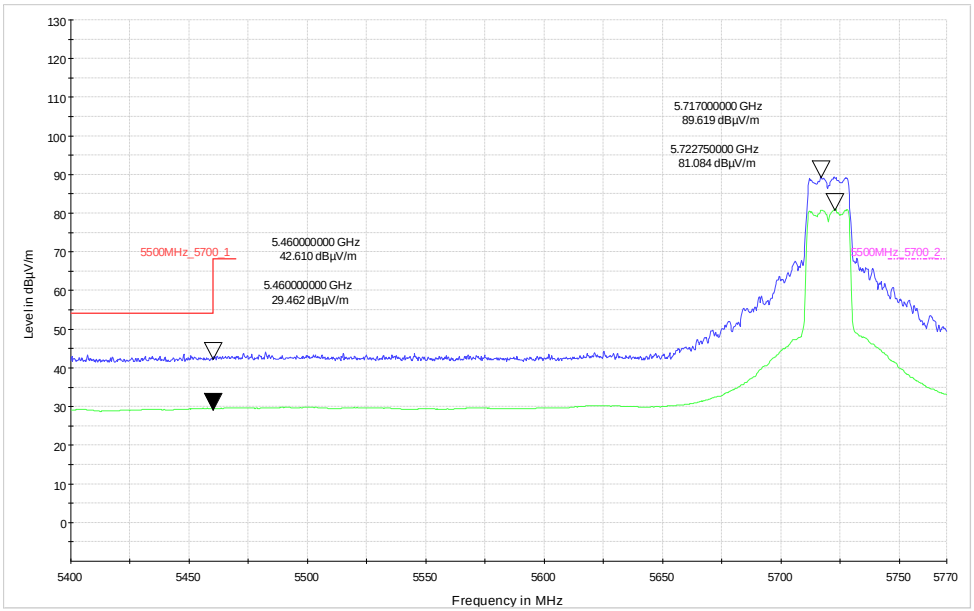
Channel Frequency: 5700MHz_Horizontal Polarization



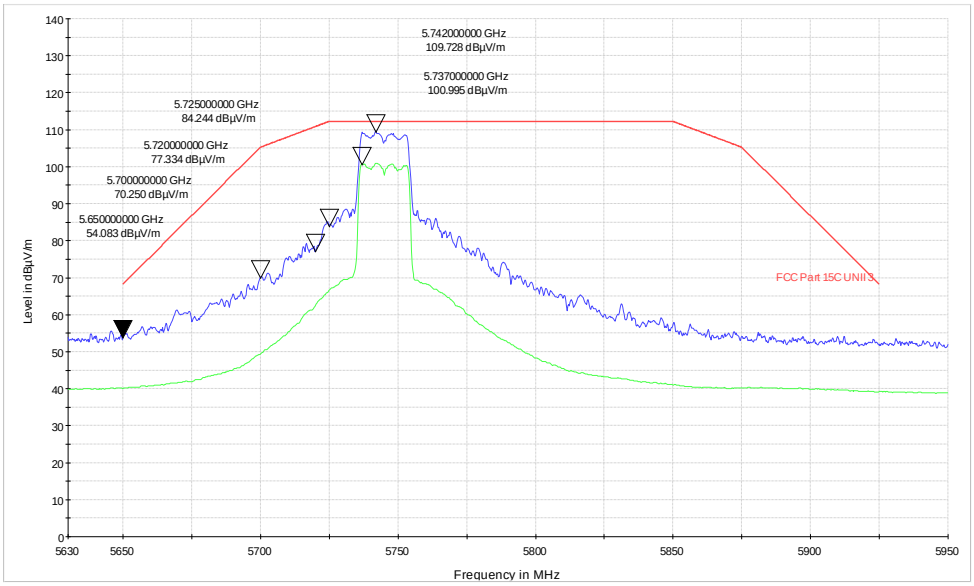
Channel Frequency: 5720MHz_Vertical Polarization



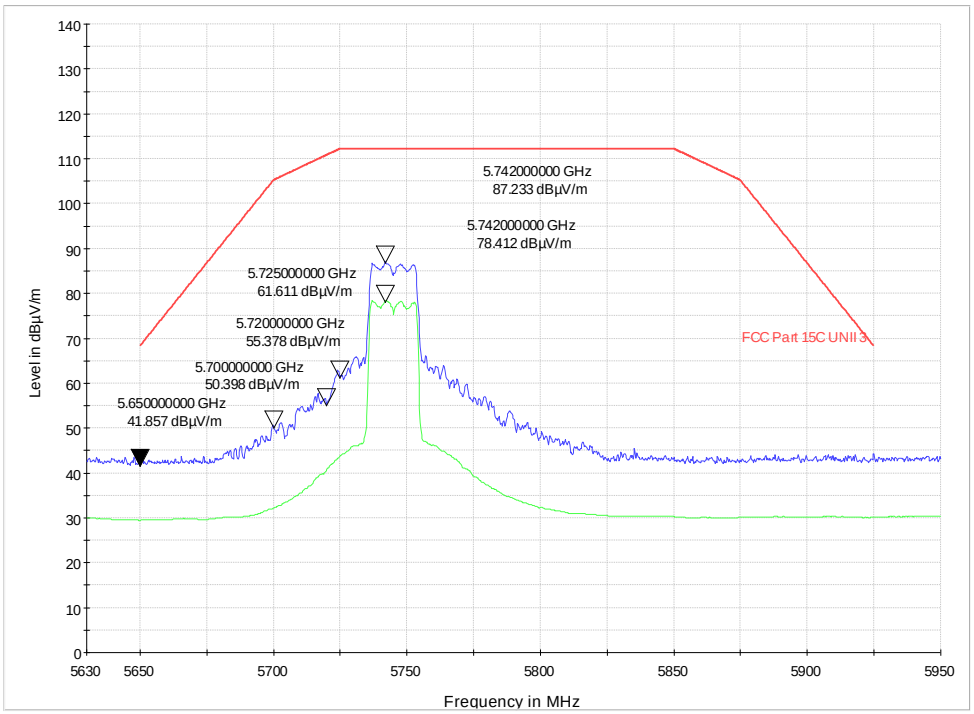
Channel Frequency: 5720MHz_Horizontal Polarization



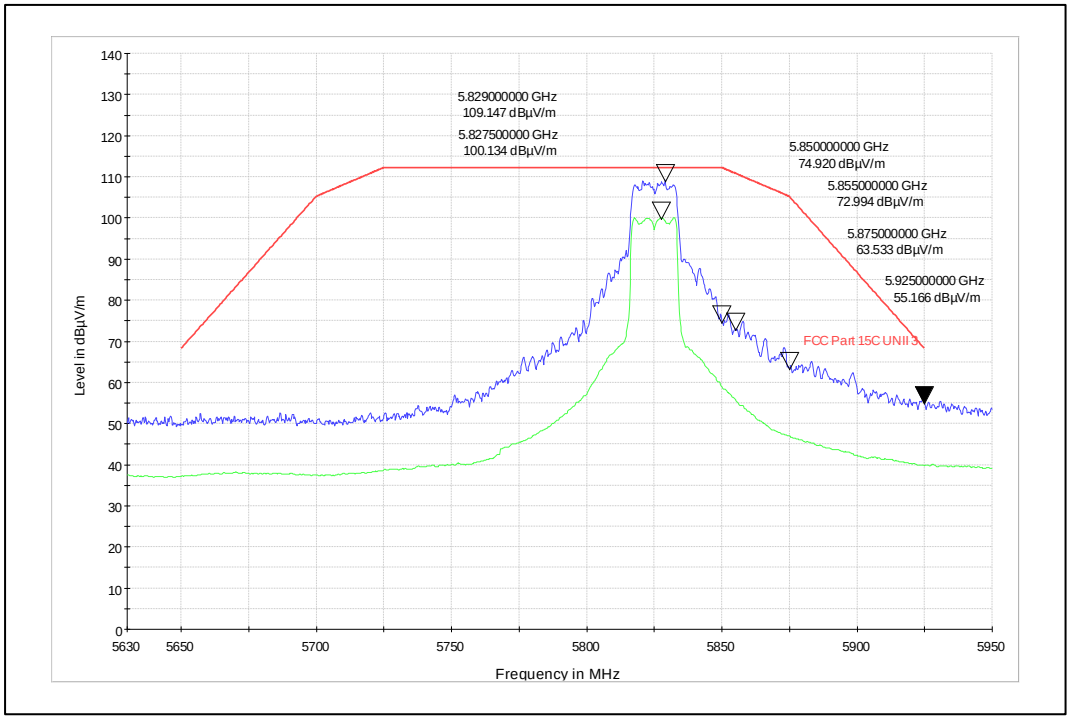
Channel Frequency: 5745MHz_Vertical Polarization



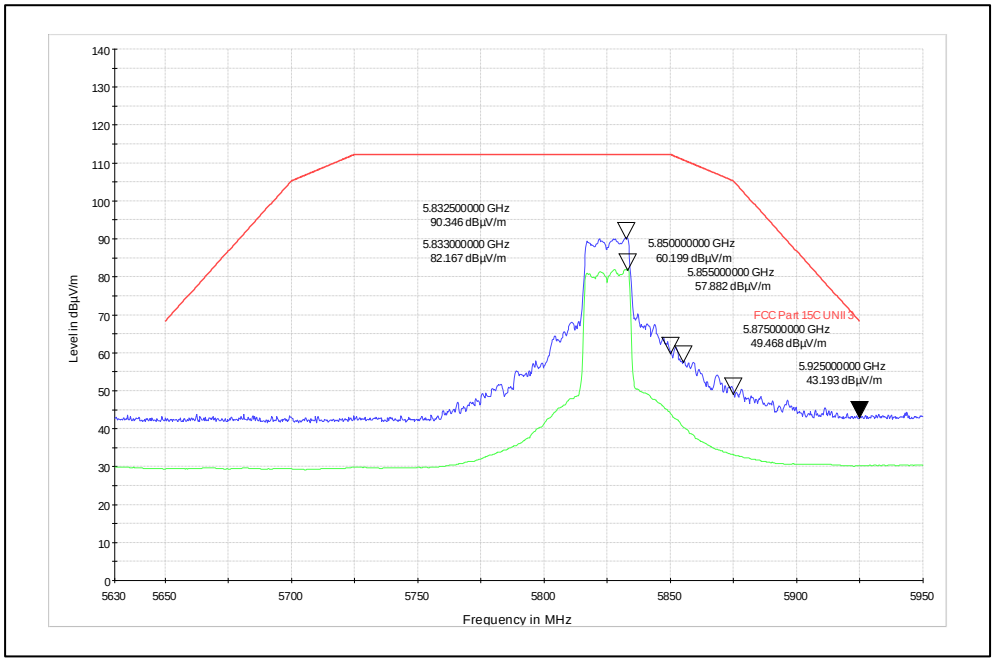
Channel Frequency: 5745MHz_Horizontal Polarization



Channel Frequency: 5825MHz_Vertical Polarization



Channel Frequency: 5825MHz_Horizontal Polarization

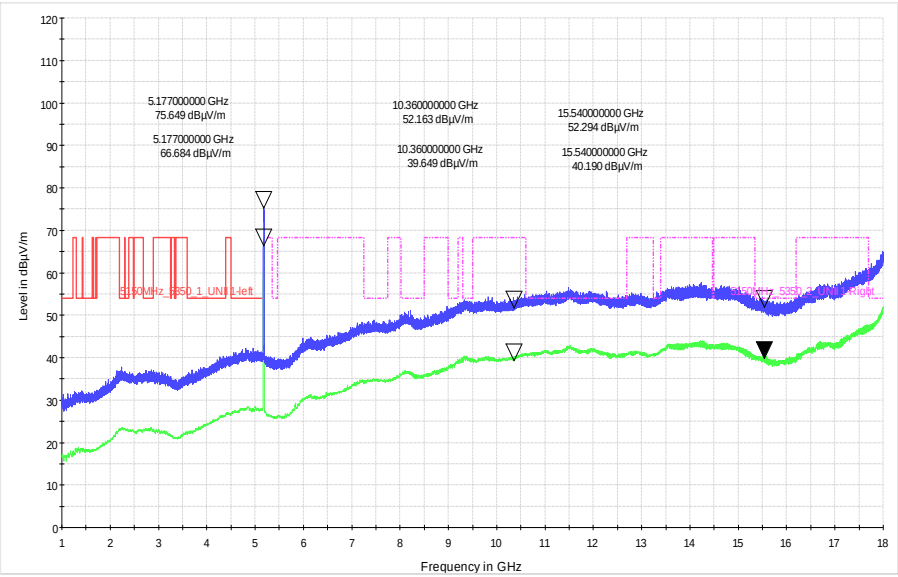


Test Plots for Spurious Radiated emission:

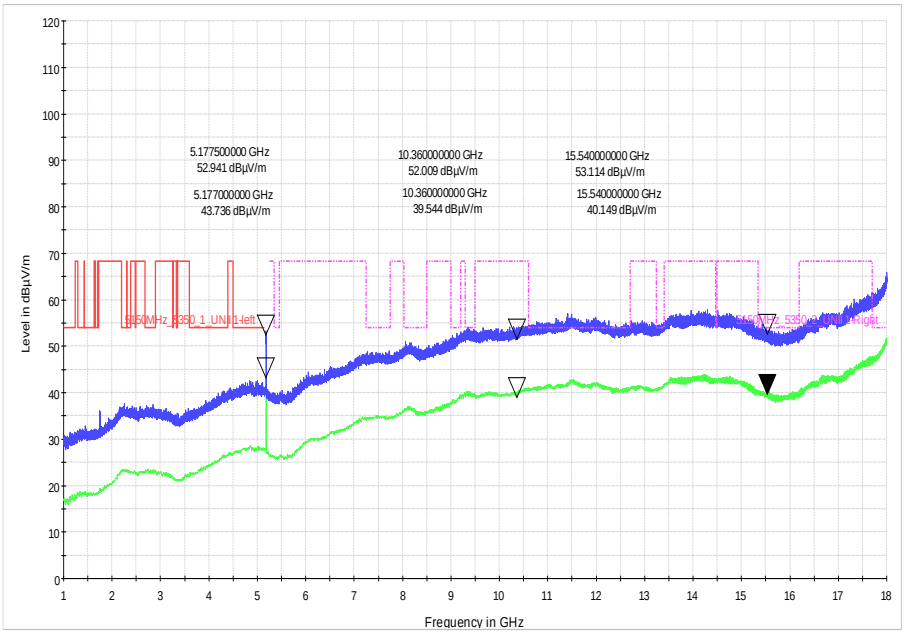
Modulation: 802.11n-20MHz

Data Rate: MCS0

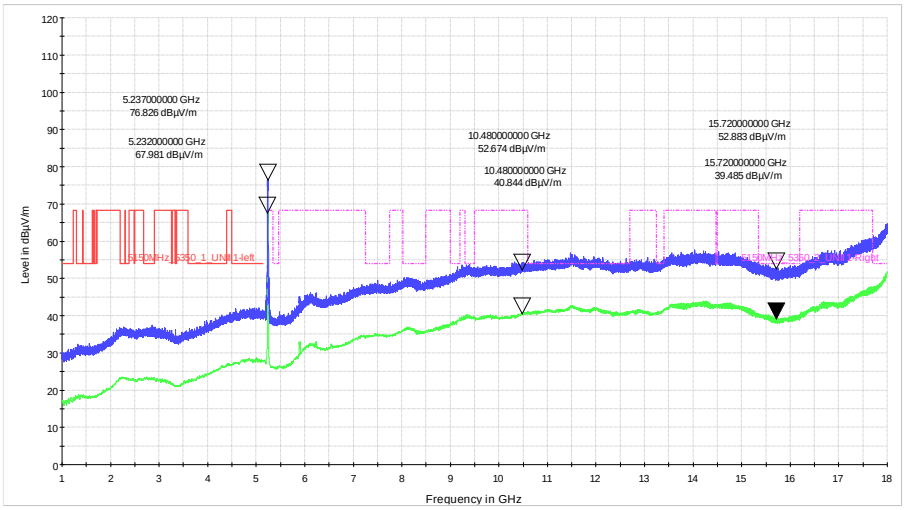
Channel Frequency: 5180MHz_1GHz to 18GHz_Vertical Polarization



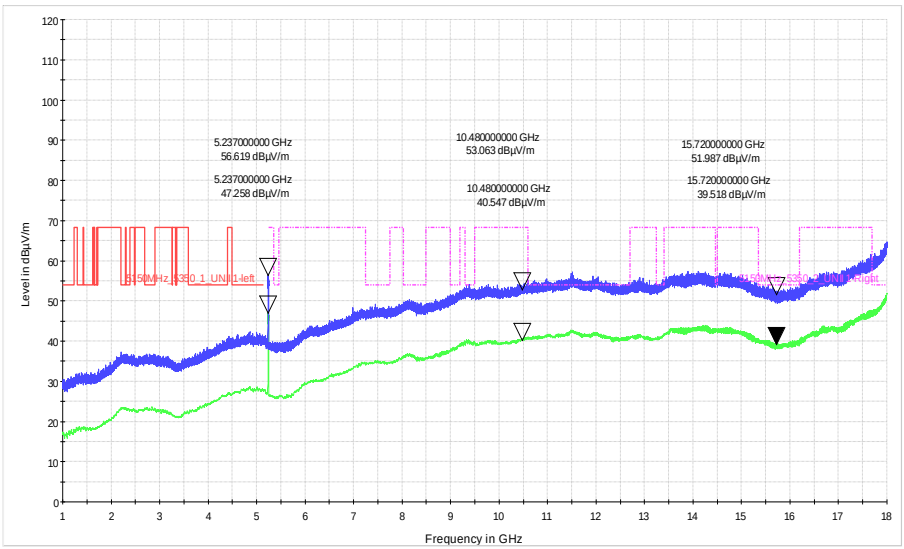
Channel Frequency: 5180MHz_1GHz to 18GHz_Horizontal Polarization



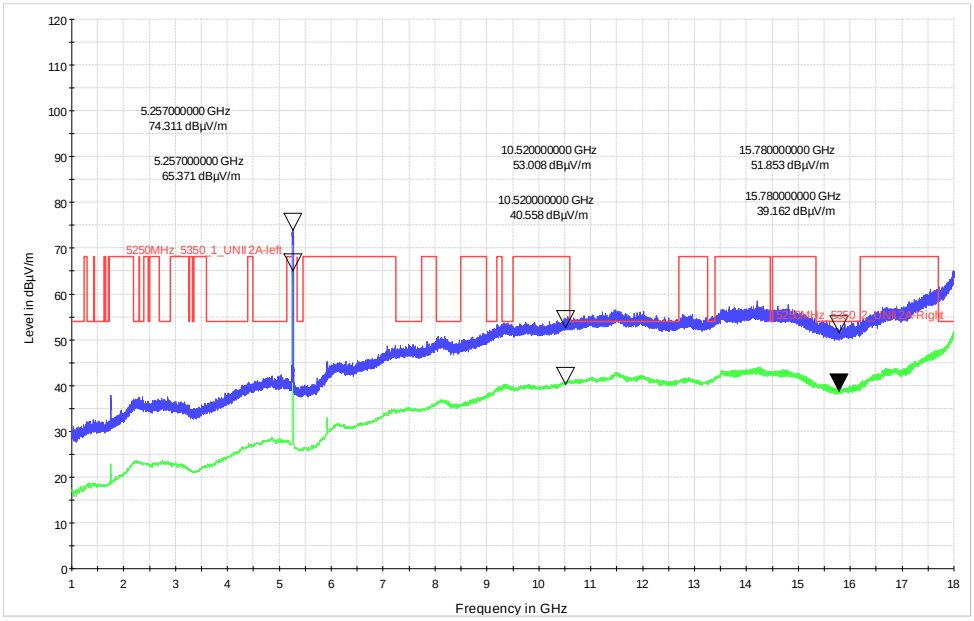
Channel Frequency: 5240MHz_1GHz to 18GHz_Vertical Polarization



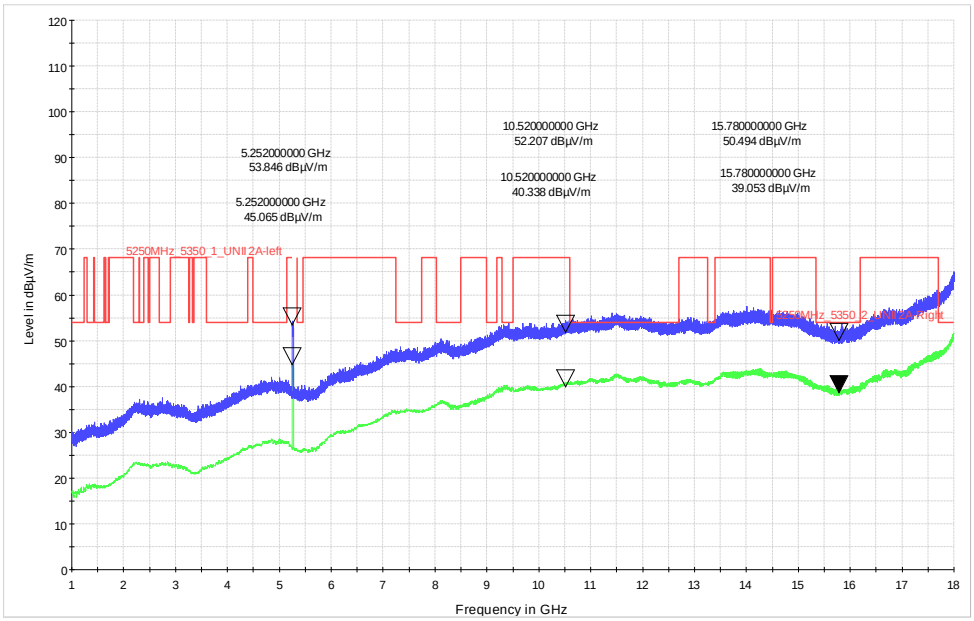
Channel Frequency: 5240MHz_1GHz to 18GHz_Horizontal Polarization



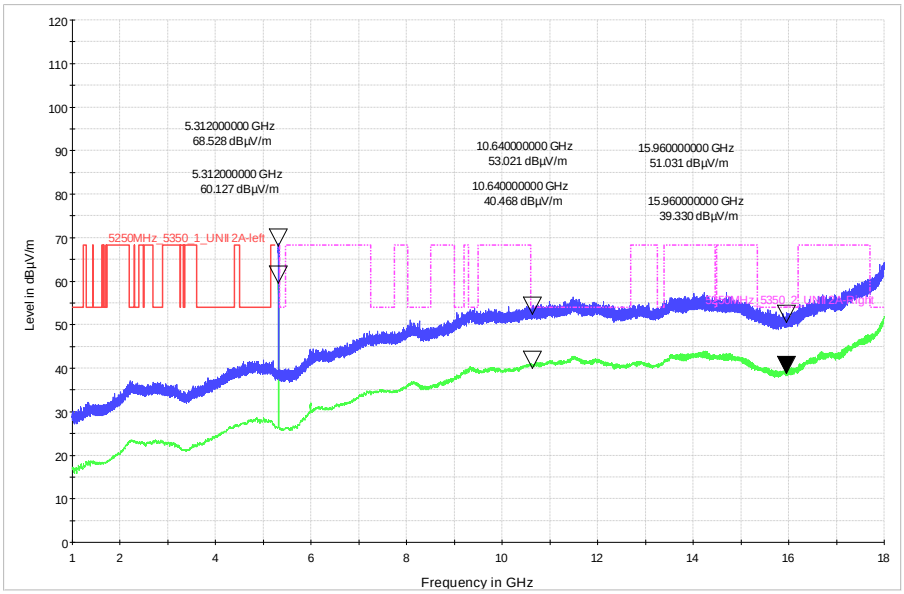
Channel Frequency: 5260MHz_1GHz to 18GHz_Vertical Polarization



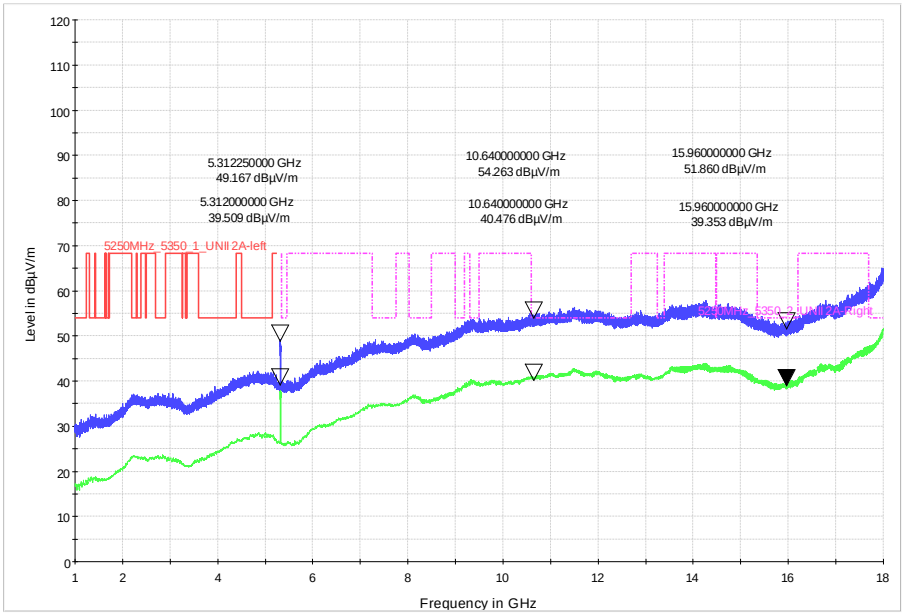
Channel Frequency: 5260MHz_1GHz to 18GHz_Horizontal Polarization



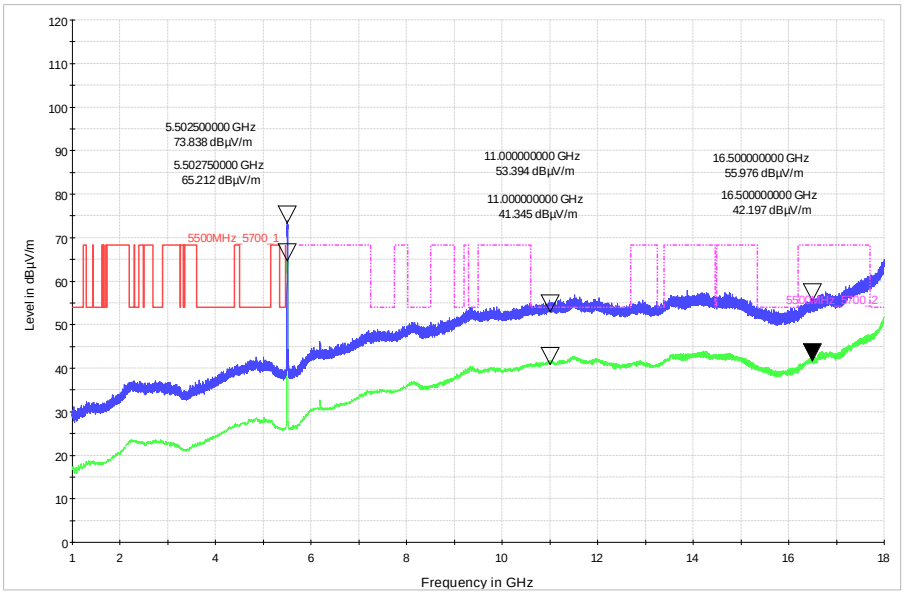
Channel Frequency: 5320MHz_1GHz to 18GHz_Vertical Polarization



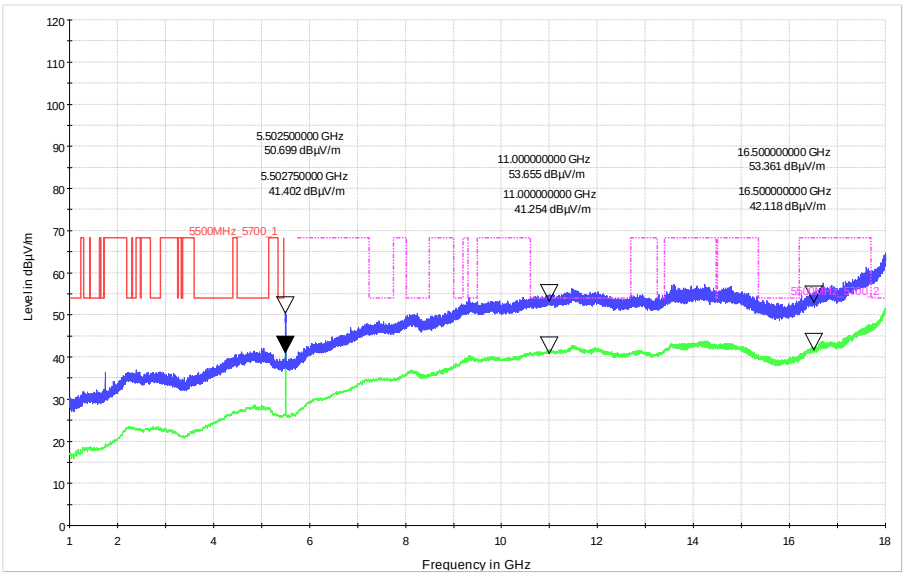
Channel Frequency: 5320MHz_1GHz to 18GHz_Horizontal Polarization



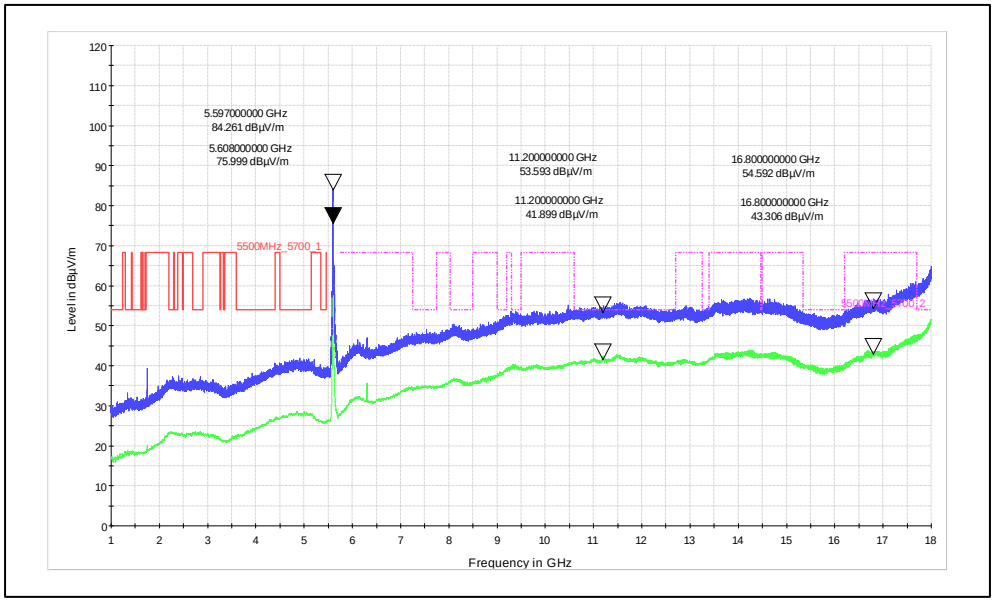
Channel Frequency: 5500MHz_1GHz to 18GHz_Vertical Polarization



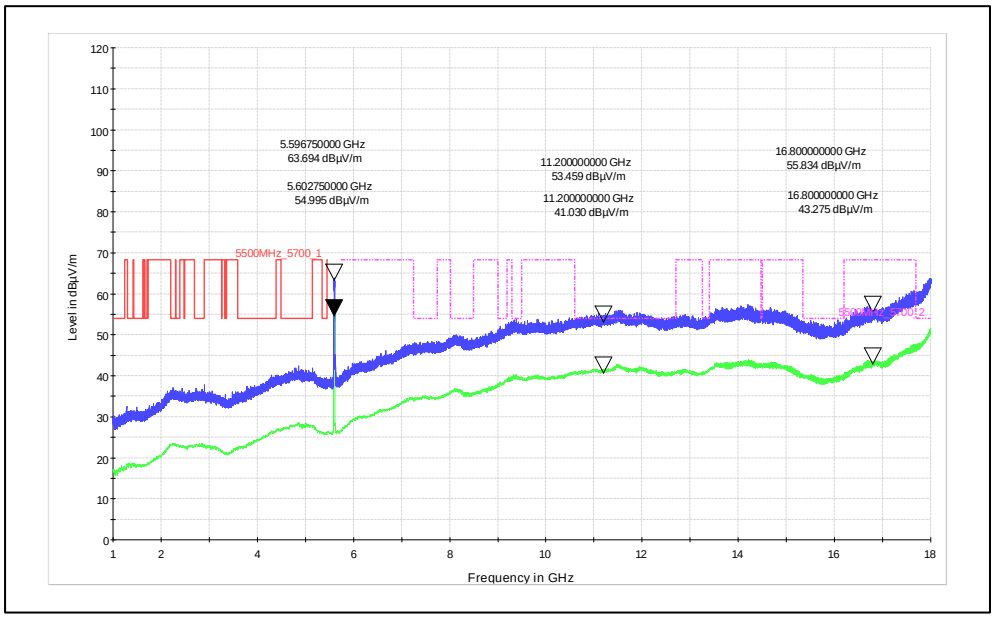
Channel Frequency: 5500MHz_1GHz to 18GHz_Horizontal Polarization



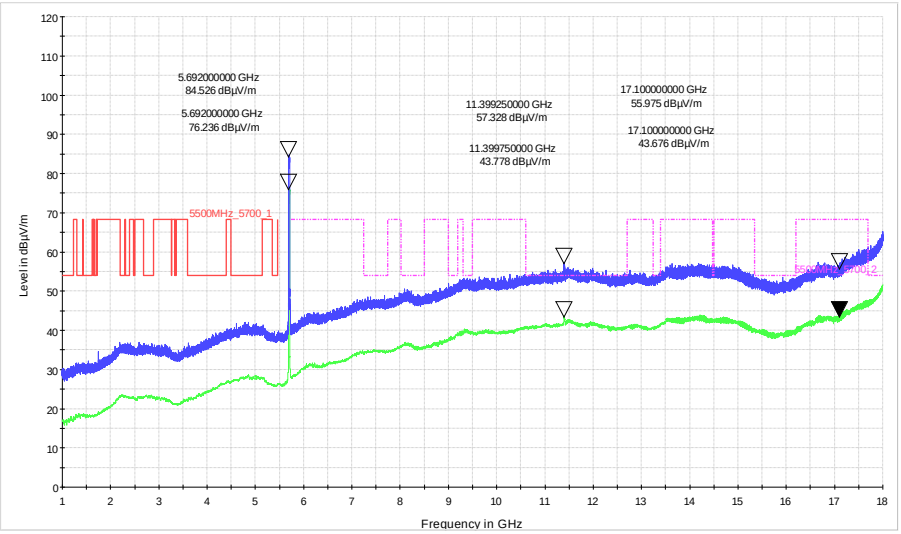
Channel Frequency: 5600MHz_1GHz to 18GHz_Vertical Polarization



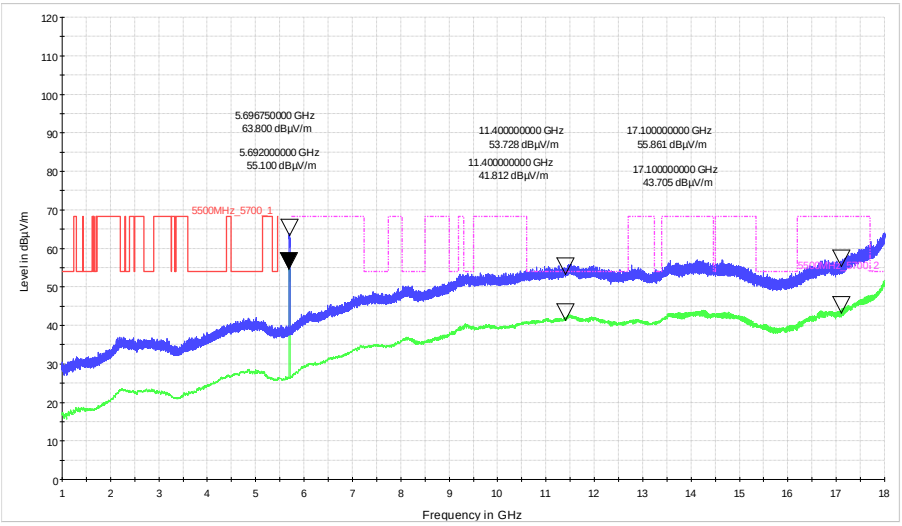
Channel Frequency: 5600MHz_1GHz to 18GHz_Horizontal Polarization



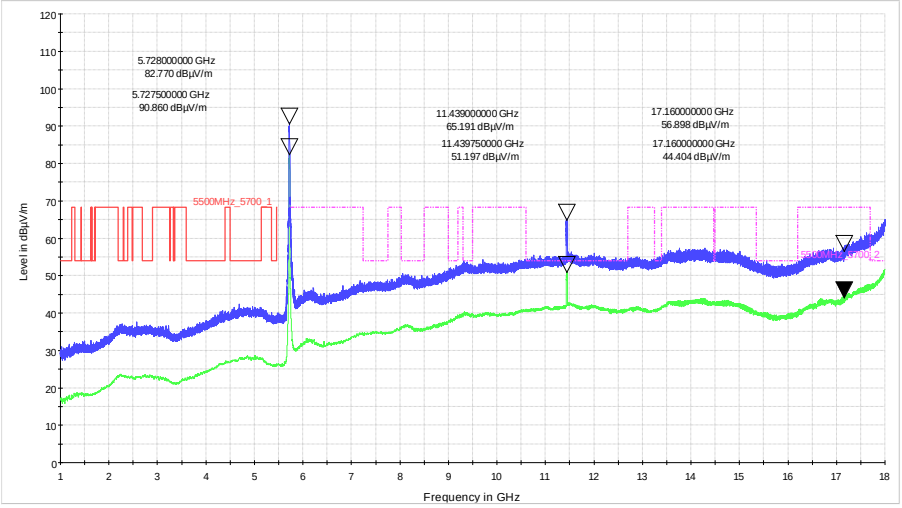
Channel Frequency: 5700MHz_1GHz to 18GHz_Vertical Polarization



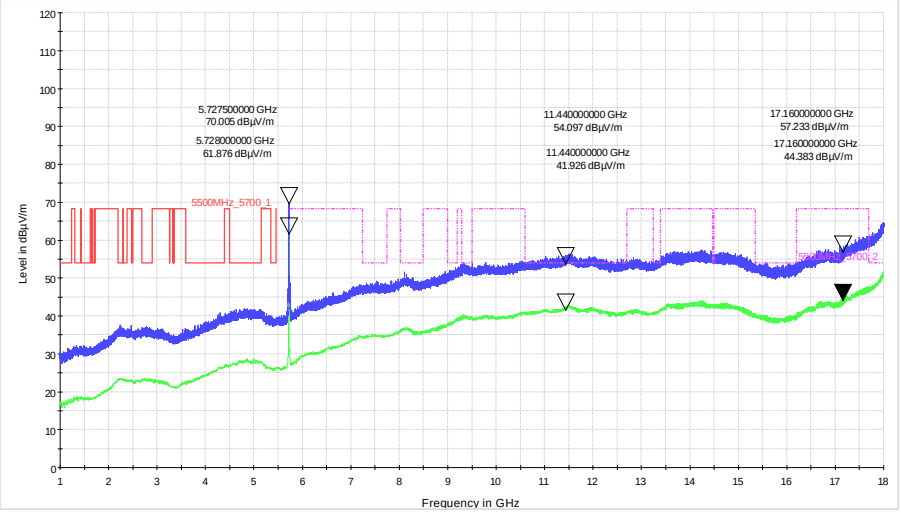
Channel Frequency: 5700MHz_1GHz to 18GHz_Horizontal Polarization



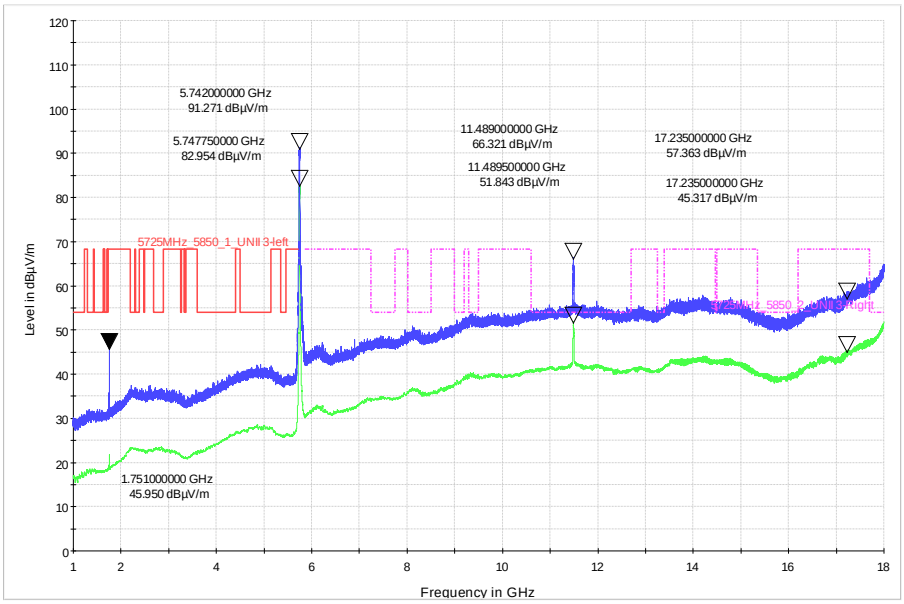
Channel Frequency: 5720MHz_1GHz to 18GHz_Vertical Polarization



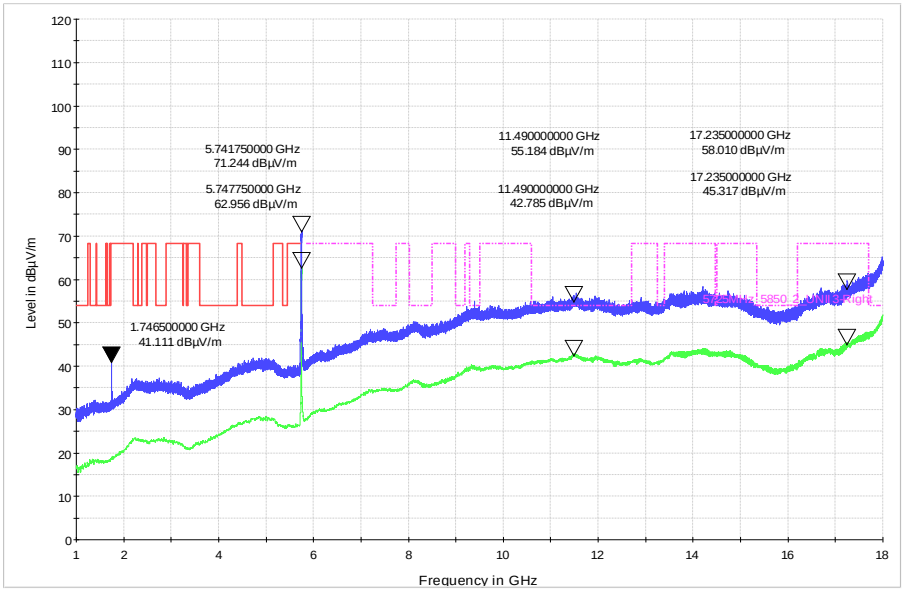
Channel Frequency: 5720MHz_1GHz to 18GHz_Horizontal Polarization



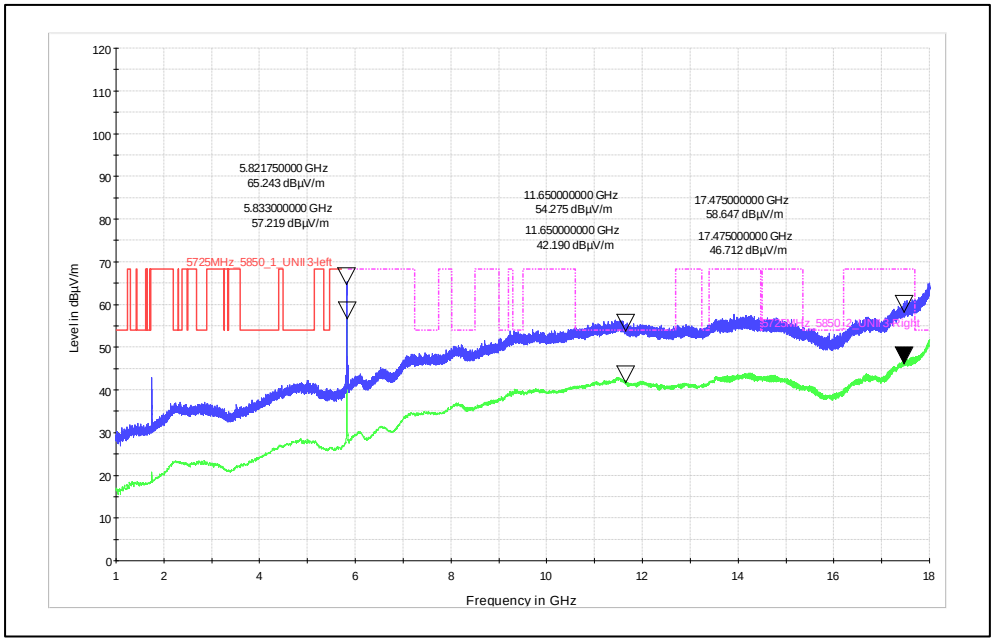
Channel Frequency: 5745MHz_1GHz to 18GHz_Vertical Polarization



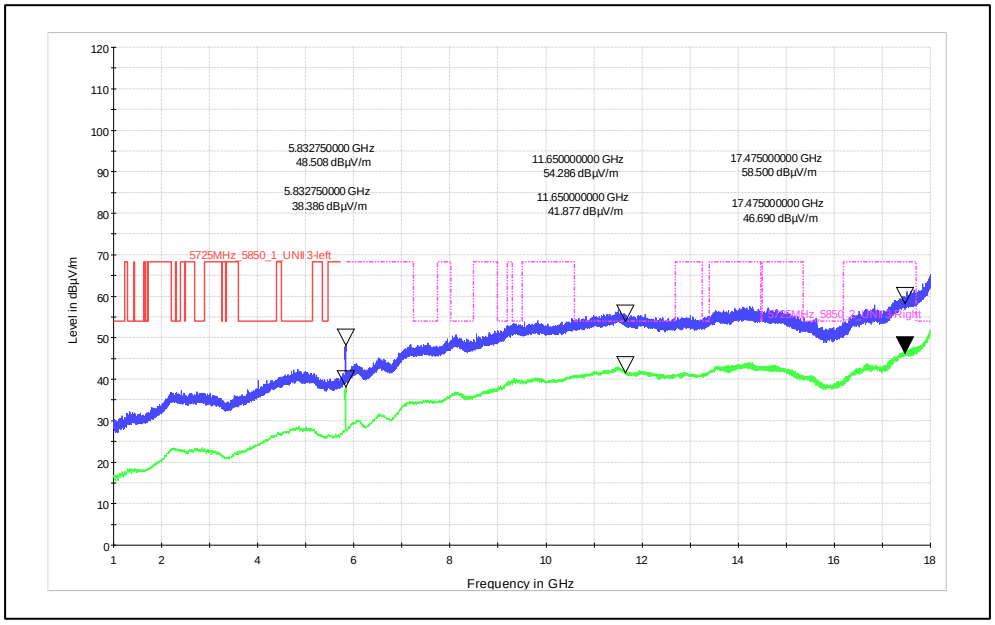
Channel Frequency: 5745MHz_1GHz to 18GHz_Horizontal Polarization



Channel Frequency: 5825MHz_1GHz to 18GHz_Vertical Polarization



Channel Frequency: 5825MHz_1GHz to 18GHz_Horizontal Polarization



7.3 AC POWER LINE CONDUCTED EMISSION

Result ***Pass***

Test Specification:	FCC Part 15 Section 15.207/RSS Gen Issue 5 Section 8.8
Test Method:	ANSI C 63.10-2013
Testing Location:	Screened room
Measurement Bandwidth:	9kHz
Frequency Range:	150kHz – 30MHz
Supply Voltage:	110VAC,60Hz
Test Method:	Refer TEST METHODOLOGY

Limits of section 15.207

Frequency of emission (MHz)	Conducted limit (dBµV)	
	Quasi-peak (dBµV)	Average (dBµV)
0.15-0.5	66-56*	56-46*
0.5-5	56	46
5-30	60	50

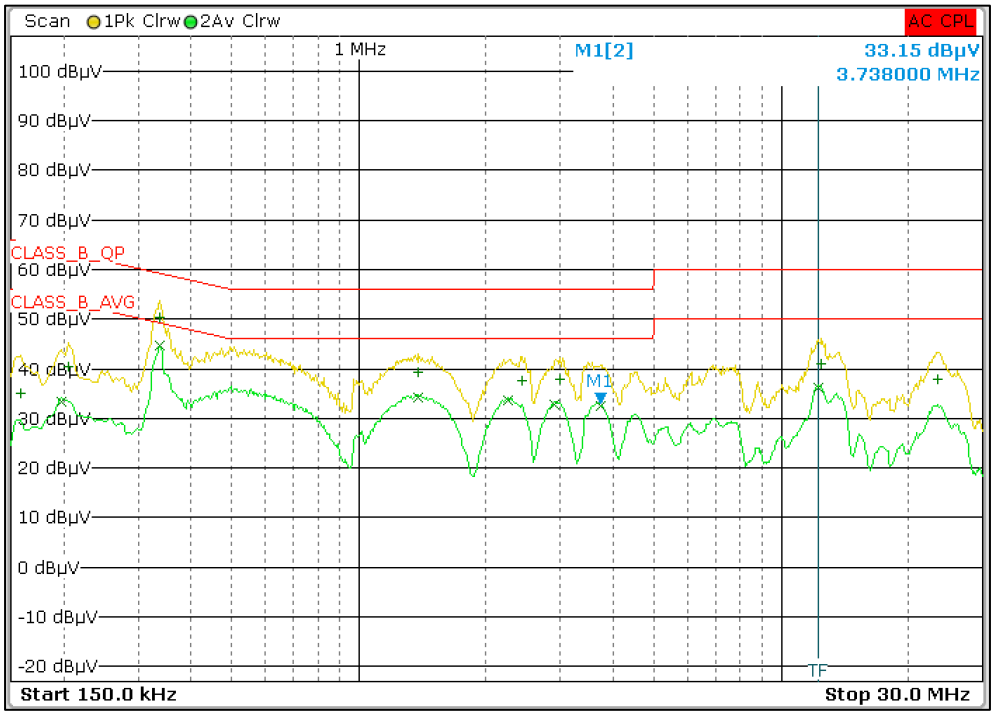
* Decreases with the logarithm of the frequency

Test Conditions:

Normal Temperature = +24°C Voltage (V norm) = 110V AC through AC/DC Adapter RH = 64 %

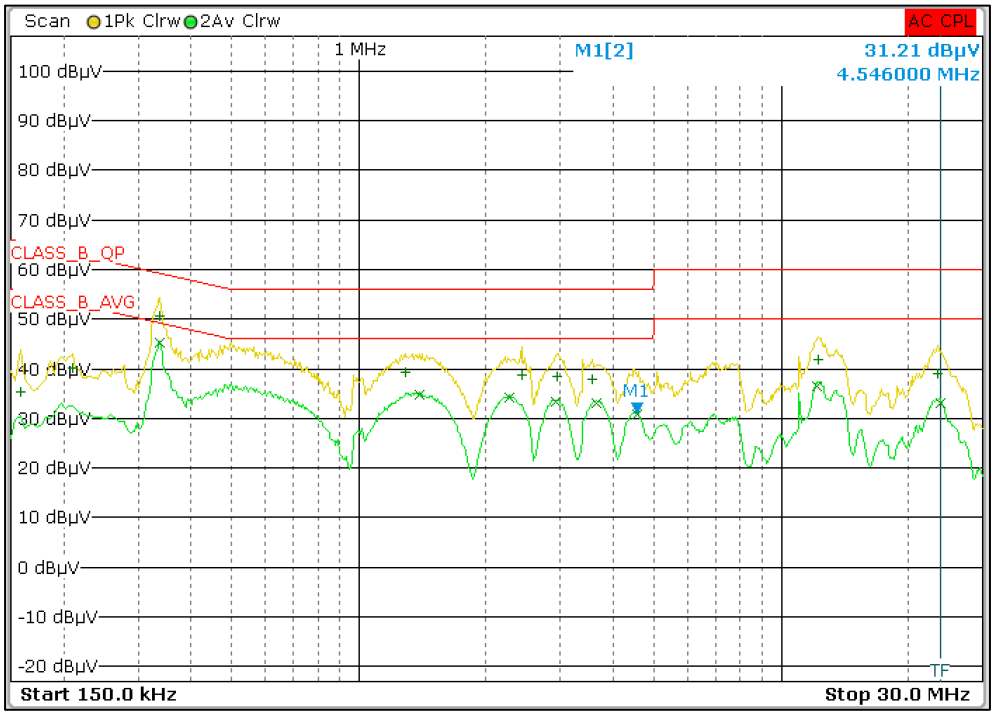
Test results:

110VAC-60Hz-Line



Trace	Frequency	Level (dBµV)	Phase	Detector	Delta Limit/dB
2	338.000000000 kHz	44.61		Average	-4.64
1	338.000000000 kHz	50.30		Quasi Peak	-8.95
2	1.382000000 MHz	34.20		Average	-11.80
2	2.250000000 MHz	33.58		Average	-12.42
2	2.906000000 MHz	32.77		Average	-13.23
2	3.738000000 MHz	32.40		Average	-13.60
2	12.206000000 MHz	36.16		Average	-13.84
1	1.386000000 MHz	39.21		Quasi Peak	-16.79
1	2.998000000 MHz	37.84		Quasi Peak	-18.16
1	2.430000000 MHz	37.63		Quasi Peak	-18.37
1	12.454000000 MHz	40.90		Quasi Peak	-19.10
2	198.000000000 kHz	33.41		Average	-20.28
1	23.422000000 MHz	37.97		Quasi Peak	-22.03
1	206.000000000 kHz	40.54		Quasi Peak	-22.83
1	158.000000000 kHz	35.17		Quasi Peak	-30.40

110VAC-60Hz-Neutral:



Trace	Frequency	Level (dBµV)	Phase	Detector	Delta Limit/dB
2	338.000000000 kHz	45.13		Average	-4.12
2	338.000000000 kHz	45.12		Average	-4.13
1	338.000000000 kHz	50.61		Quasi Peak	-8.64
1	338.000000000 kHz	50.60		Quasi Peak	-8.65
2	1.394000000 MHz	34.71		Average	-11.29
2	2.270000000 MHz	34.14		Average	-11.86
2	2.922000000 MHz	33.30		Average	-12.70
2	3.650000000 MHz	32.99		Average	-13.01
2	12.154000000 MHz	36.51		Average	-13.49
2	4.546000000 MHz	30.69		Average	-15.31
1	1.290000000 MHz	39.32		Quasi Peak	-16.68
2	23.798000000 MHz	33.15		Average	-16.85
1	2.426000000 MHz	38.62		Quasi Peak	-17.38
1	2.954000000 MHz	38.36		Quasi Peak	-17.64
1	3.558000000 MHz	37.96		Quasi Peak	-18.04
1	12.226000000 MHz	41.92		Quasi Peak	-18.08
1	23.426000000 MHz	39.09		Quasi Peak	-20.91
1	210.000000000 kHz	40.21		Quasi Peak	-23.00
1	158.000000000 kHz	35.40		Quasi Peak	-30.17

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Table 6: Transmitter limits for Radiated emission 29

9 POWER TABLE

Antenna Type & Antenna Gain: Dipole Antenna & 2dBi

Modulation: 802.11a Data Rate: 6Mbps		Modulation: 802.11n-20M Data Rate: MCS0		Modulation: 802.11ac-20M Data Rate: MCS0	
Channel Frequency (MHz)	**Power level**	**Channel Frequency (MHz)**	**Power level**	**Channel Frequency (MHz)**	**Power level**
5180	14	5180	14	5180	14
5240	18	5240	18	5240	18
5260	16	5260	16	5260	16
5320	14	5320	14	5320	14
5500	13	5500	14	5500	14
5600	18	5600	18	5600	18
5700	12	5700	13	5700	13
5725	18	5725	18	5725	18
5745	18	5745	18	5745	18
5825	18	5825	18	5825	18

Modulation: 802.11n-40M Data Rate: MCS0		Modulation: 802.11ac-40M Data Rate: MCS0	
Channel Frequency (MHz)	**Power level**	**Channel Frequency (MHz)**	**Power level**
5190	13	5190	13
5230	16	5230	16
5270	16	5270	16
5310	12	5310	12
5510	13	5510	13
5670	14	5670	14
5710	16	5710	16
5755	16	5755	16
5795	16	5795	16

Modulation: 802.11ac-80M Data Rate: MCS0	
Channel Frequency (MHz)	**Power level**
5210	10
5290	11
5530	11
5690	14
5775	14

*****END OF TEST REPORT*****