

TEST REPORT

Application No.: SZEM2005003819CR
Applicant: TomTom International BV
Address of Applicant: De Ruijterkade 154 1011 AC Amsterdam, The Netherlands
Manufacturer: TomTom International BV
Address of Manufacturer: De Ruijterkade 154 1011 AC Amsterdam, The Netherlands
Factory: Dongguan Apical Electronics Co., Ltd
Address of Factory: 6#, Shunxing 5 Rd, No.2 Industrial zone, Dajingtou, Dalang Town, Dongguan City
Equipment Under Test (EUT):
EUT Name: GPS Navigation System
Model No.: 4YB50
Trade Mark: TOMTOM
FCC ID: S4LFF50
Standard(s) : 47 CFR Part 15, Subpart E 15.407
Date of Receipt: 2020-05-15
Date of Test: 2020-05-21 to 2020-05-28
Date of Issue: 2020-06-22

Test Result:	Pass*
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* In the configuration tested, the EUT complied with the standards specified above.


Keny Xu

Keny Xu
EMC Laboratory Manager



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Revision Record				
Version	Chapter	Date	Modifier	Remark
01		2020-06-22		Original

Authorized for issue by:			
			
		<hr/> Powell Bao /Project Engineer	
			
		<hr/> Eric Fu /Reviewer	



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2 Test Summary

Radio Spectrum Matter Part				
Item	Standard	Method	Requirement	Result
Maximum Conducted output power	47 CFR Part 15, Subpart E 15.407	KDB 789033 D02 II E	47 CFR Part 15, Subpart C 15.407 (a)	Pass
Radiated Emissions	47 CFR Part 15, Subpart E 15.407	KDB 789033 D02 II G	47 CFR Part 15, Subpart C 15.209 & 15.407(b)	Pass

Remark:

Model No.: 4YB50

This test report (Ref. No.: SZEM200500381905) is only valid with the original test report (Ref. No.: RF200116W006-3).

Review with the original report, this report just add the information of factory and changed the manufacturer, product name, model No. and trade mark.

According to the declaration from the applicant, the RF module used in this report and the one in original report were identical(RF module, model No.. K019-CW43-DW).

Considering to the difference, pre-scan were performed on the sample in this report to find the items which can be influential to the result in the original test report for fully retest.

Therefore in this report Conducted Peak Output Power, Conducted Spurious Emissions and Radiated Spurious Emissions were fully retested on model 4YB50 and shown the data in this report, other tests please refer to original report RF200116W006-3.



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4 General Information

4.1 Details of E.U.T.

Power Supply:	Powered by DC3.7V rechargeable battery and can be charged by car charger			
Cable:	Micro USB cable(Unshielded, 156cm)			
Operation Frequency:	Band	Mode	Frequency Range(MHz)	Number of channels
	UNII Band I	IEEE 802.11a	5180-5240	4
		IEEE 802.11n/ac 20MHz	5180-5240	4
		IEEE 802.11n/ac 40MHz	5190-5230	2
		IEEE 802.11ac 80MHz	5210	1
	UNII Band II-A	IEEE 802.11a	5260-5320	4
		IEEE 802.11n/ac 20MHz	5260-5320	4
		IEEE 802.11n/ac 40MHz	5270-5310	2
		IEEE 802.11ac 80MHz	5290	1
	UNII Band II-C	IEEE 802.11a	5500-5700	11
		IEEE 802.11n/ac 20MHz	5500-5700	11
		IEEE 802.11n/ac 40MHz	5510-5670	5
		IEEE 802.11ac 80MHz	5530-5610	2
	UNII Band III	IEEE 802.11a	5745-5825	5
		IEEE 802.11n/ac 20MHz	5745-5825	5
		IEEE 802.11n/ac 40MHz	5755-5795	2
		IEEE 802.11ac 80MHz	5775	1
Type of Modulation:	IEEE 802.11a: OFDM(BPSK/QPSK/16QAM/64QAM) IEEE 802.11n: OFDM(BPSK/QPSK/16QAM/64QAM) IEEE 802.11ac: OFDM (BPSK/QPSK/16QAM/64QAM/256QAM)			
Antenna Type	FPC			
Antenna Gain	0.64dBi			
DFS Function:	Slave without Radar detection			
TPC Function:	Not Support			

4.2 Description of Support Units

The EUT has been tested as an independent unit.



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4.3 Measurement Uncertainty

No.	Item	Measurement Uncertainty
1	Radio Frequency	$\pm 7.25 \times 10^{-8}$
2	Duty cycle	$\pm 0.37\%$
3	Occupied Bandwidth	$\pm 3\%$
4	Conduction emission	$\pm 3.0\text{dB}$ (150kHz to 30MHz)
5	RF conducted power	$\pm 0.75\text{dB}$
6	RF power density	$\pm 2.84\text{dB}$
7	Conducted Spurious emissions	$\pm 0.75\text{dB}$
8	RF Radiated power	$\pm 4.5\text{dB}$ (Below 1GHz)
		$\pm 4.8\text{dB}$ (Above 1GHz)
9	Radiated Spurious emission test	$\pm 4.5\text{dB}$ (Below 1GHz)
		$\pm 4.8\text{dB}$ (Above 1GHz)
10	Temperature test	$\pm 1^\circ\text{C}$
11	Humidity test	$\pm 3\%$
12	Supply voltages	$\pm 1\%$
13	Time	$\pm 3\%$



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4.4 Test Location

All tests were performed at:

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Tel: +86 755 2601 2053 Fax: +86 755 2671 0594

No tests were sub-contracted.

4.5 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

- **A2LA (Certificate No. 3816.01)**

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory is accredited by the American Association for Laboratory Accreditation(A2LA). Certificate No. 3816.01.

- **VCCI**

The 3m Fully-anechoic chamber for above 1GHz, 10m Semi-anechoic chamber for below 1GHz, Shielded Room for Mains Port Conducted Interference Measurement and Telecommunication Port Conducted Interference Measurement of SGS-CSTC Standards Technical Services Co., Ltd. have been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: G-20026, R-14188, C-12383 and T-11153 respectively.

- **FCC –Designation Number: CN1178**

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory has been recognized as an accredited testing laboratory.

Designation Number: CN1178. Test Firm Registration Number: 406779.

- **Innovation, Science and Economic Development Canada**

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory has been recognized by ISED as an accredited testing laboratory.

CAB identifier: CN0006.

IC#: 4620C.

4.6 Deviation from Standards

None

4.7 Abnormalities from Standard Conditions

None



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5 Equipment List

Maximum Conducted output power					
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
Shielding Room	SAEMC	MSR733	SEM001-09	2019-06-13	2022-06-12
DC Power Supply	Rohde & Schwarz	NGSM 32/10	SEM011-04	2020-03-24	2021-03-23
Spectrum Analyzer	Rohde & Schwarz	FSP	SEM004-06	2019-09-24	2020-09-23
Measurement Software	TST	TST PASS V1.0.5	N/A	N/A	N/A
Coaxial Cable	SGS	N/A	SEM031-02	2019-07-11	2020-07-10
Attenuator	Huber+Suhner	6620_SMA-50-1	SEM021-09	N/A	N/A
Signal Generator	KEYSIGHT	N5173B	SEM006-05	2019-09-24	2020-09-23
Power Meter	Rohde & Schwarz	NRVS	SEM014-02	2019-09-24	2020-09-23
Electric and Magnetic Field Analyzer	Narda	EHP-50F	SEM022-05	2019-11-28	2020-11-27

Radiated Emissions					
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
3m Semi-Anechoic Chamber	AUDIX	N/A	SEM001-02	2018-03-13	2021-03-12
Measurement Software	AUDIX	e3 V8.2014-6-27	N/A	N/A	N/A
Coaxial Cable	SGS	N/A	SEM026-01	2019-07-11	2020-07-10
EXA Spectrum Analyzer	AgilentTechnologies Inc	N9010A	SEM004-12	2020-04-09	2021-04-08
Horn Antenna	Rohde & Schwarz	HF907	SEM003-07	2018-04-13	2021-04-12
Horn Antenna	Schwarzbeck	BBHA 9170	SEM003-15	2017-10-17	2020-10-16
Pre-Amplifier	Compliance Directions Systems Inc.	PAP-0126	SEM004-11	2019-09-24	2020-09-23
Pre-amplifier	Rohde & Schwarz	CH14-H052	SEM005-17	2020-04-01	2021-03-31
Pre-amplifier	Compliance Directions Systems Inc.	PAP-2640-50	SEM005-08	2020-04-01	2021-03-31
DC Power Supply	Zhao Xin	KXN-6020D	SEM011-08	2019-09-24	2020-09-23
Active Loop Antenna	ETS-Lindgren	6502	SEM003-08	2017-08-22	2020-08-21

RE in Chamber					
Test Equipment	Manufacturer	Model No.	Inventory No.	Cal. Date	Cal. Due date
3m Semi-Anechoic Chamber	ETS-LINDGREN	N/A	SEM001-01	2017-08-05	2020-08-04
MXE EMI Receiver	Agilent	N9038A	SEM004-05	2018-09-25	2019-09-24



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(20Hz-8.4GHz)	Technologies				
BiConiLog Antenna (26-3000MHz)	ETS-LINDGREN	3142C	SEM003-01	2017-06-27	2020-06-26
Pre-amplifier (0.1-1300MHz)	Agilent Technologies	8447D	SEM005-01	2020-03-11	2021-03-30
Measurement Software	AUDIX	e3 V8.2014-6-27	N/A	N/A	N/A
Coaxial Cable	SGS	N/A	SEM025-01	2019-07-11	2020-07-10

General used equipment

Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
Humidity/ Temperature Indicator	Shanghai Meteorological Industry Factory	ZJ1-2B	SEM002-03	2019-09-26	2020-09-25
Humidity/ Temperature Indicator	Shanghai Meteorological Industry Factory	ZJ1-2B	SEM002-04	2019-09-26	2020-09-25
Humidity/ Temperature Indicator	Mingle	N/A	SEM002-08	2019-09-26	2020-09-25
Barometer	Changchun Meteorological Industry Factory	DYM3	SEM002-01	2020-04-07	2021-04-06



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6 Radio Spectrum Matter Test Results

6.1 Maximum Conducted output power

Test Requirement 47 CFR Part 15, Subpart C 15.407 (a)

Test Method: KDB 789033 D02 II E

Limit:

Frequency band(MHz)	Limit
5150-5250	≤1W(30dBm) for master device
	≤250mW(24dBm) for client device
5250-5350	≤250mW(24dBm) for client device or 11dBm+10logB*
5470-5725	≤250mW(24dBm) for client device or 11dBm+10logB*
5725-5850	≤1W(30dBm)
Remark:	<p>* Where B is the 26dB emission bandwidth in MHz.</p> <p>The maximum conducted output power must be measured over any interval of continuous transmission using instrumentation calibrated in terms of an rms-equivalent voltage.</p>

6.1.1 E.U.T. Operation

Operating Environment:

Temperature: 25.2 °C Humidity: 50.8 % RH Atmospheric Pressure: 1010 mbar

Pretest these
modes to find
the worst case:

a:TX mode (Band 1)_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n(HT20); data rate @ MCS0 is the worst case of IEEE 802.11n(HT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT20); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT80). Only the data of worst case is recorded in the report.

b:TX mode (Band 2A)_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n(HT20); data rate @ MCS0 is the worst case of IEEE 802.11n(HT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT20); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT80). Only the data of worst case is recorded in the report.

c:TX mode (Band 2C)_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n(HT20); data rate @ MCS0 is the worst case of IEEE 802.11n(HT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT20); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT80). Only the data of worst case is recorded in the report.



The worst case
for final test:

d:TX mode (Band 3)_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n(HT20); data rate @ MCS0 is the worst case of IEEE 802.11n(HT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT20); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT80). Only the data of worst case is recorded in the report.

a:TX mode (Band 1)_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n(HT20); data rate @ MCS0 is the worst case of IEEE 802.11n(HT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT20); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT80). Only the data of worst case is recorded in the report.

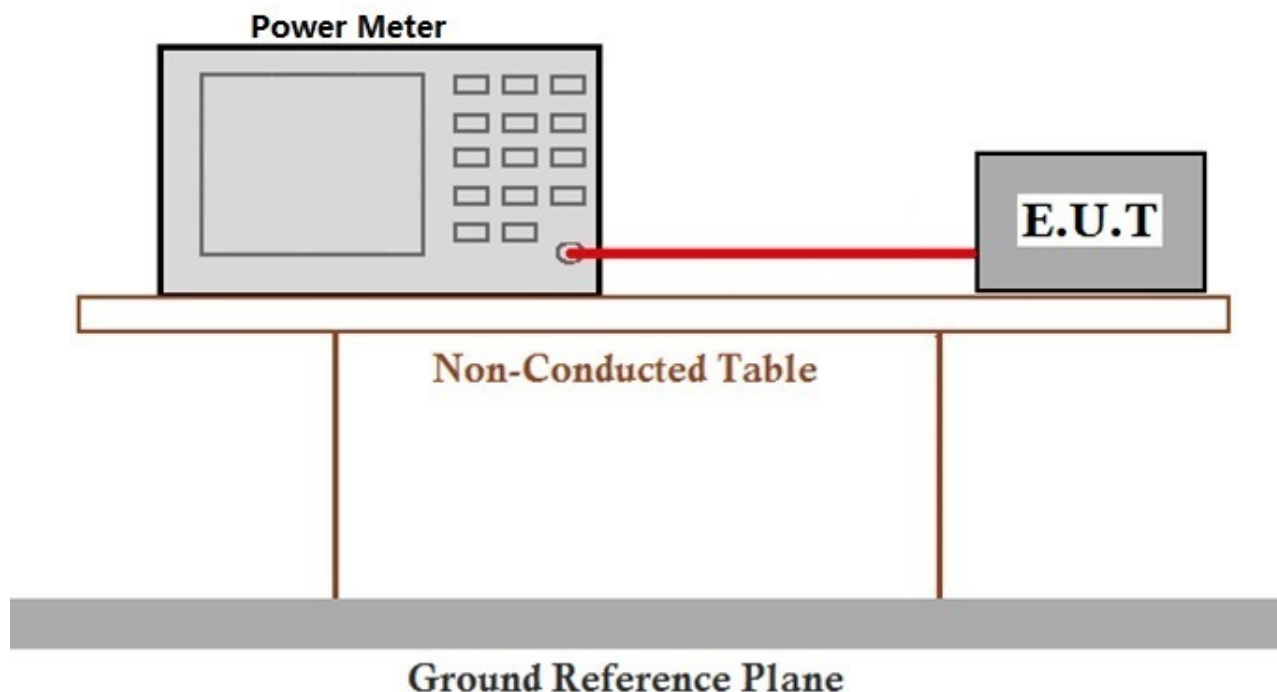
b:TX mode (Band 2A)_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n(HT20); data rate @ MCS0 is the worst case of IEEE 802.11n(HT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT20); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT80). Only the data of worst case is recorded in the report.

c:TX mode (Band 2C)_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n(HT20); data rate @ MCS0 is the worst case of IEEE 802.11n(HT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT20); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT80). Only the data of worst case is recorded in the report.

d:TX mode (Band 3)_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n(HT20); data rate @ MCS0 is the worst case of IEEE 802.11n(HT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT20); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT80). Only the data of worst case is recorded in the report.



6.1.2 Test Setup Diagram



6.1.3 Measurement Procedure and Data

The detailed test data see: Appendix 15.407



6.2 Radiated Emissions

Test Requirement 47 CFR Part 15, Subpart C 15.209 & 15.407(b)

Test Method: KDB 789033 D02 II G

Measurement Distance: 3m

Limit:

Limit:

For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz (68.2dBuV/m).

For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz (68.2dBuV/m).

For transmitters operating in the 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz (68.2dBuV/m).

For transmitters operating in the 5.725-5.85 GHz band: (i) All emissions shall be limited to a level of -27 dBm/MHz (68.2dBuV/m) at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz (105.2dBuV/m) 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 (110.8dBuV/m) 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 (122.2dBuV/m) at the band edge.

6.2.1 E.U.T. Operation

Operating Environment:

Temperature: 24.4 °C Humidity: 60 % RH Atmospheric Pressure: 1010 mbar

Pretest these modes to find the worst case: a:TX mode (Band 1)_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n(HT20); data rate @ MCS0 is the worst case of IEEE 802.11n(HT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT20); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT80). Only the data of worst case is recorded in the report.

b:TX mode (Band 2A)_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n(HT20); data rate @ MCS0 is the worst case of IEEE 802.11n(HT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT20); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT80). Only the data of worst case is recorded in the report.

c:TX mode (Band 2C)_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n(HT20); data rate @ MCS0 is the worst case of IEEE 802.11n(HT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT20); data rate @ MCS0 is the worst case of IEEE



The worst case
for final test:

802.11ac(VHT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT80). Only the data of worst case is recorded in the report.

d:TX mode (Band 3)_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n(HT20); data rate @ MCS0 is the worst case of IEEE 802.11n(HT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT20); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT80). Only the data of worst case is recorded in the report.

a:TX mode (Band 1)_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n(HT20); data rate @ MCS0 is the worst case of IEEE 802.11n(HT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT20); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT80). Only the data of worst case is recorded in the report.

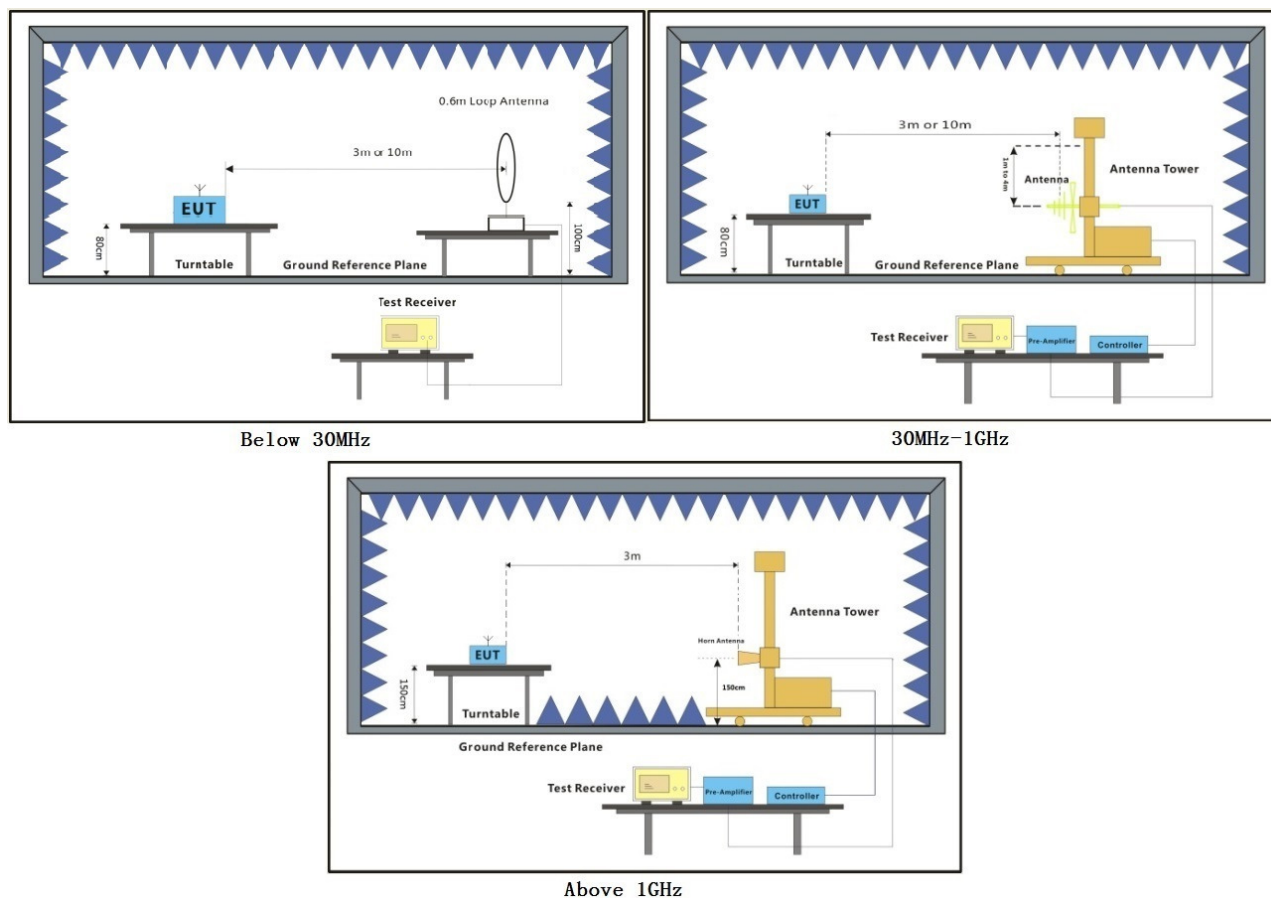
b:TX mode (Band 2A)_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n(HT20); data rate @ MCS0 is the worst case of IEEE 802.11n(HT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT20); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT80). Only the data of worst case is recorded in the report.

c:TX mode (Band 2C)_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n(HT20); data rate @ MCS0 is the worst case of IEEE 802.11n(HT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT20); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT80). Only the data of worst case is recorded in the report.

d:TX mode (Band 3)_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n(HT20); data rate @ MCS0 is the worst case of IEEE 802.11n(HT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT20); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT80). Only the data of worst case is recorded in the report.



6.2.2 Test Setup Diagram



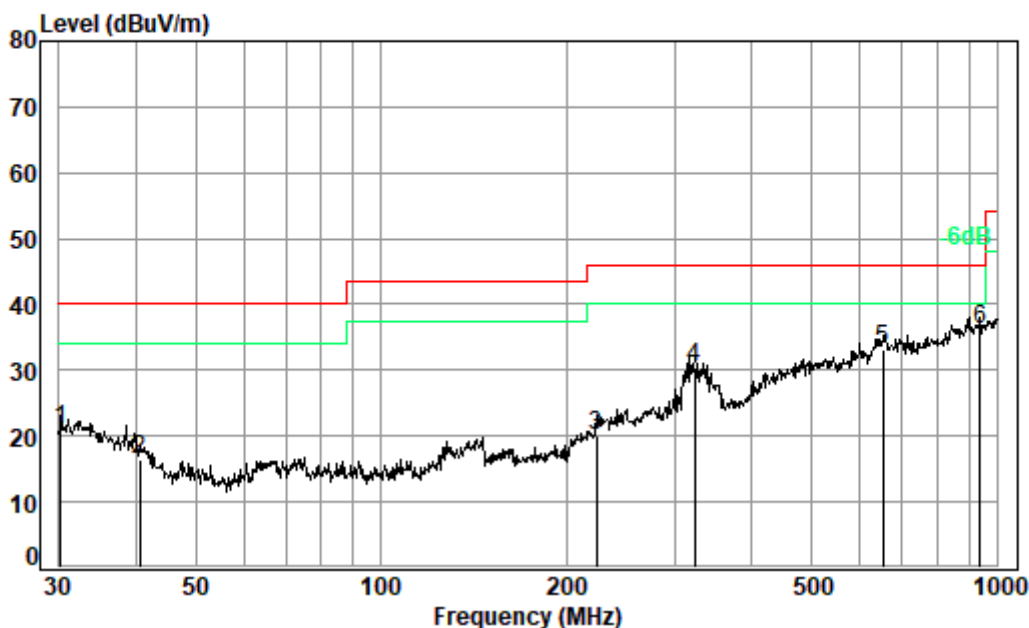
6.2.3 Measurement Procedure and Data

- a. For below 1GHz, the EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 or 10 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. For above 1GHz, the EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter fully-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- c. The EUT was set 3 or 10 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- d. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- e. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- f. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- g. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.
- h. Test the EUT in the lowest channel, the middle channel, the Highest channel.
- i. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is the worst case.
- j. Repeat above procedures until all frequencies measured was complete.

Remark:

1. Level= Read Level+ Cable Loss+ Antenna Factor- Preamp Factor
2. For emission below 1GHz, through the pre-scan found the worst case is the lowest channel of 802.11a. Only the worst case is recorded in the report.
3. Scan from 9kHz to 40GHz, the disturbance above 18GHz and below 30MHz was very low. The points marked on above plots are the highest emissions could be found when testing, so only above points had been displayed. The amplitude of spurious emissions from the radiator which are attenuated more than 20dB below the limit need not be reported.
4. As shown in this section, for frequencies above 1GHz, the field strength limits are based on average limits. However, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation. For the emissions whose peak level is lower than the average limit, only the peak measurement is shown in the report.

Mode:a; Polarization:Horizontal



Condition: 3m HORIZONTAL

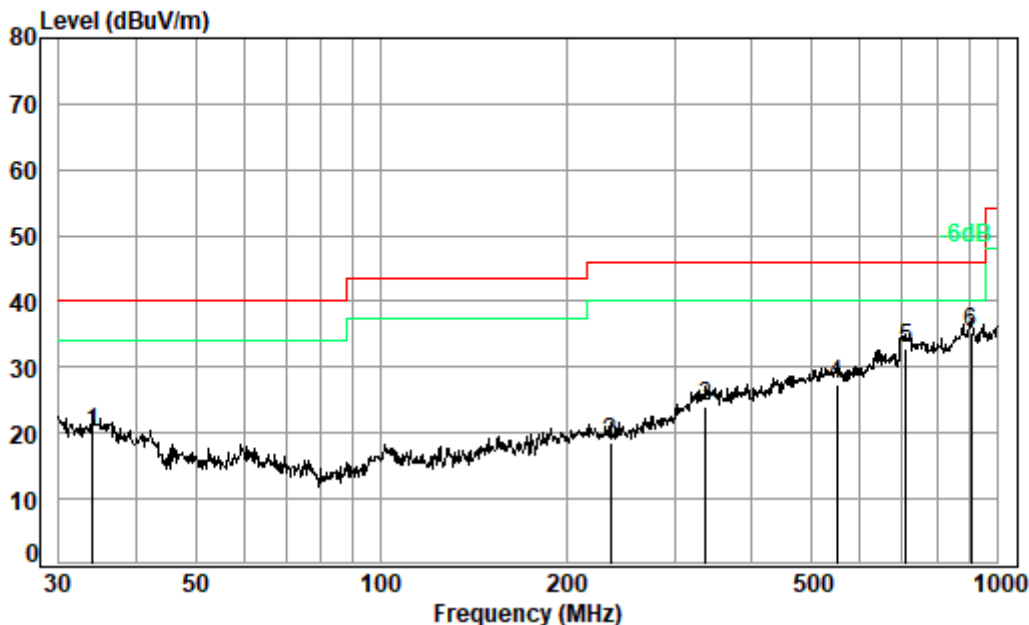
Job No. : 03819CR

Test Mode: a

	Freq	Cable	Ant	Preamp	Read	Limit	Over	
	MHz	Loss	Factor	Factor	Level	Level	Line	Limit Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1	30.21	0.60	22.38	27.73	25.73	20.98	40.00	-19.02 QP
2	40.56	0.61	17.29	27.70	26.24	16.44	40.00	-23.56 QP
3	223.73	1.54	17.51	27.07	28.19	20.17	46.00	-25.83 QP
4	323.32	1.98	20.33	27.01	34.99	30.29	46.00	-15.71 QP
5	651.94	2.81	27.30	28.01	31.18	33.28	46.00	-12.72 QP
6 pp	938.83	3.64	30.00	26.96	29.48	36.16	46.00	-9.84 QP



Mode:a; Polarization:Vertical



Condition: 3m VERTICAL

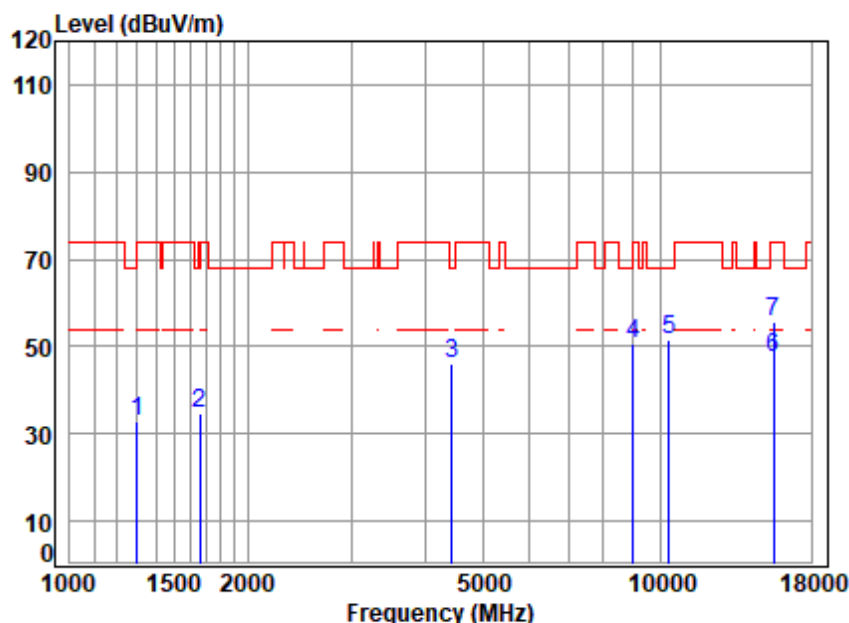
Job No. : 03819CR

Test Mode: a

	Cable	Ant	Preamp	Read	Limit	Over		
Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	34.04	0.60	20.31	27.72	27.03	20.22	40.00	-19.78 QP
2	235.82	1.60	18.48	27.03	25.60	18.65	46.00	-27.35 QP
3	336.04	2.02	20.70	27.08	28.37	24.01	46.00	-21.99 QP
4	549.02	2.65	25.63	27.97	27.07	27.38	46.00	-18.62 QP
5	711.67	2.94	27.97	27.89	29.92	32.94	46.00	-13.06 QP
6 pp	906.48	3.61	29.83	27.13	29.00	35.31	46.00	-10.69 QP



Mode:a; Polarization:Horizontal; Modulation:802.11a; bandwidth:20MHz; Channel:Low

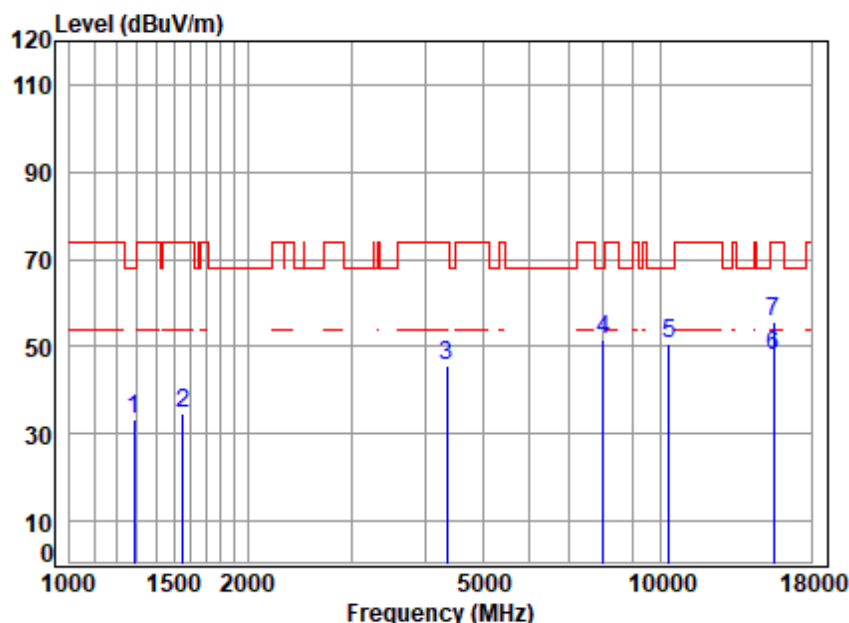


Site : chamber
Condition: 3m HORIZONTAL
Job No : 03819CR/03820CR
Mode : 5180 TX RSE
Note : 5G WIFI 11A

	Freq	Cable Loss	Ant Factor	Preamplifier Factor	Read Level	Level	Limit	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1300.858	2.90	25.03	40.36	45.33	32.90	74.00	-41.10	peak
2	1658.337	3.16	26.50	40.61	45.69	34.74	68.20	-33.46	peak
3	4430.628	6.59	33.48	42.50	48.55	46.12	68.20	-22.08	peak
4	8995.123	9.03	37.20	39.52	43.98	50.69	68.20	-17.51	peak
5	10360.000	9.62	37.76	38.17	42.24	51.45	68.20	-16.75	peak
6	15540.000	12.08	40.72	40.58	35.35	47.57	54.00	-6.43	Average
7	15540.000	12.08	40.72	40.58	43.41	55.63	74.00	-18.37	peak



Mode:a; Polarization:Vertical; Modulation:802.11a; bandwidth:20MHz; Channel:Low

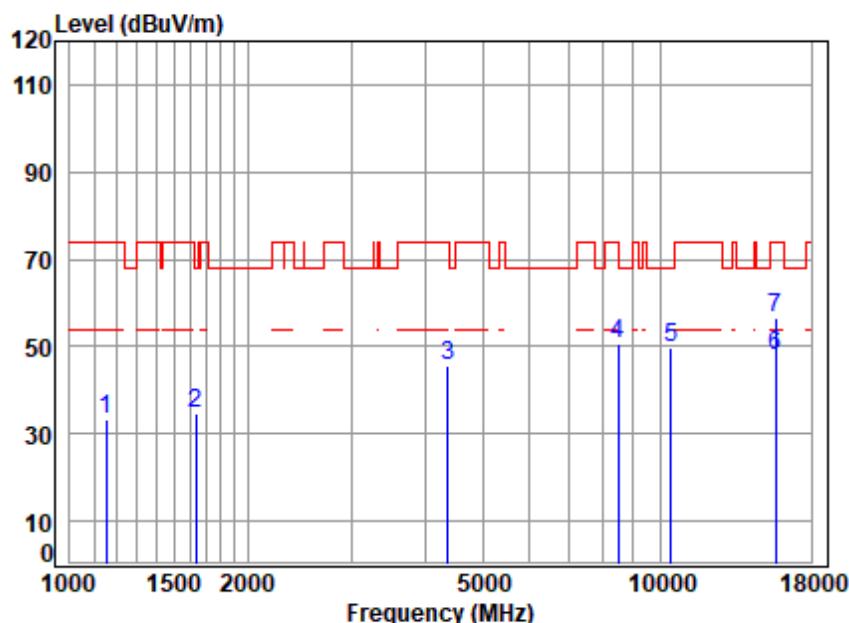


Site : chamber
Condition: 3m VERTICAL
Job No : 03819CR/03820CR
Mode : 5180 TX RSE
Note : 5G WIFI 11A

		Cable	Ant	Preamp	Read		Limit	Over	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1285.904	2.86	24.96	40.35	46.00	33.47	68.20	-34.73	peak
2	1551.677	2.97	26.04	40.54	46.28	34.75	74.00	-39.25	peak
3	4354.454	6.51	33.35	42.44	48.00	45.42	74.00	-28.58	peak
4	8013.020	8.28	36.71	41.18	47.92	51.73	68.20	-16.47	peak
5	10360.000	9.62	37.76	38.17	41.37	50.58	68.20	-17.62	peak
6	15540.000	12.08	40.72	40.58	35.54	47.76	54.00	-6.24	Average
7	15540.000	12.08	40.72	40.58	43.51	55.73	74.00	-18.27	peak



Mode:a; Polarization:Horizontal; Modulation:802.11a; bandwidth:20MHz; Channel:middle

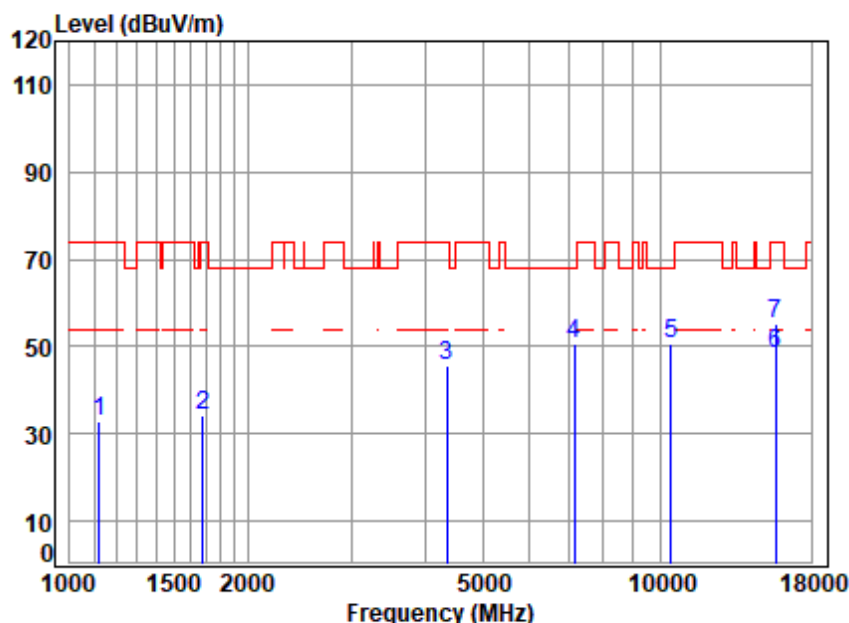


Site : chamber
Condition: 3m HORIZONTAL
Job No : 03819CR/03820CR
Mode : 5220 TX RSE
Note : 5G WIFI 11A

	Freq	Cable Loss	Ant Factor	Preamplifier Factor	Read Level	Level	Limit	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1152.148	2.42	24.37	40.24	46.84	33.39	74.00	-40.61	peak
2	1634.543	3.08	26.40	40.59	45.93	34.82	68.20	-33.38	peak
3	4367.058	6.56	33.37	42.45	48.01	45.49	74.00	-28.51	peak
4	8489.882	8.59	36.99	40.35	45.63	50.86	74.00	-23.14	peak
5	10440.000	9.49	37.72	38.21	40.67	49.67	68.20	-18.53	peak
6	15660.000	11.70	40.80	40.58	36.02	47.94	54.00	-6.06	Average
7	15660.000	11.70	40.80	40.58	44.69	56.61	74.00	-17.39	peak



Mode:a; Polarization:Vertical; Modulation:802.11a; bandwidth:20MHz; Channel:middle



Site : chamber
Condition: 3m VERTICAL
Job No : 03819CR/03820CR
Mode : 5220 TX RSE
Note : 5G WIFI 11A

		Cable	Ant	Preamp	Read		Limit	Over	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1122.563	2.29	24.23	40.22	46.57	32.87	74.00	-41.13	peak
2	1677.621	3.23	26.58	40.62	45.22	34.41	74.00	-39.59	peak
3	4354.454	6.51	33.35	42.44	48.05	45.47	74.00	-28.53	peak
4	7158.806	8.47	36.03	41.60	47.54	50.44	68.20	-17.76	peak
5	10440.000	9.49	37.72	38.21	41.45	50.45	68.20	-17.75	peak
6	15660.000	11.70	40.80	40.58	36.23	48.15	54.00	-5.85	Average
7	15660.000	11.70	40.80	40.58	43.41	55.33	74.00	-18.67	peak

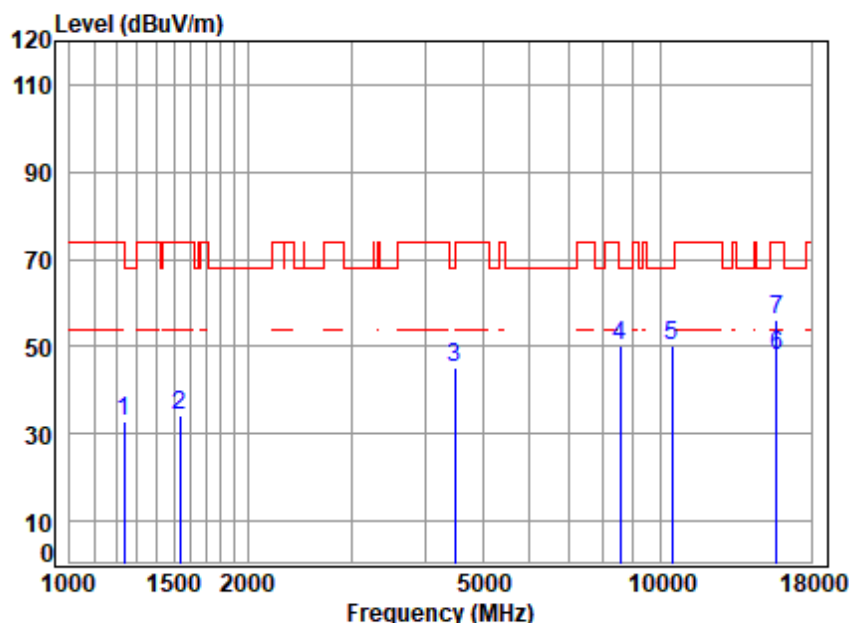


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Shenzhen Branch

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中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

Mode:a; Polarization:Horizontal; Modulation:802.11a; bandwidth:20MHz; Channel:High



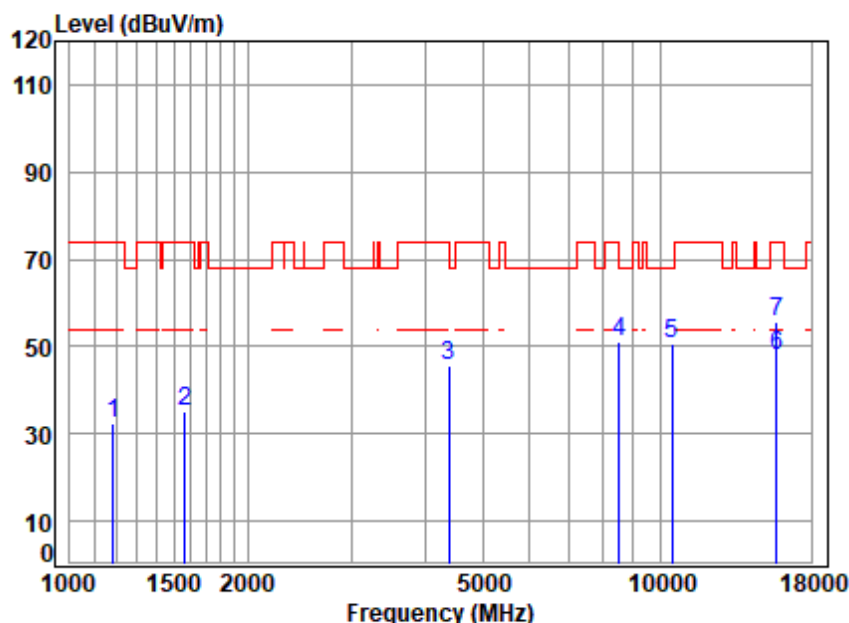
Site : chamber
Condition: 3m HORIZONTAL
Job No : 03819CR/03820CR
Mode : 5240 TX RSE
Note : 5G WIFI 11A

	Freq	Cable Loss	Ant Factor	Preamplifier Factor	Read Level	Level	Limit	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1234.909	2.73	24.74	40.31	45.57	32.73	74.00	-41.27	peak
2	1538.281	2.97	25.98	40.53	46.02	34.44	74.00	-39.56	peak
3	4482.150	6.43	33.57	42.54	47.61	45.07	68.20	-23.13	peak
4	8563.818	8.81	37.03	40.22	44.73	50.35	68.20	-17.85	peak
5	10480.000	9.38	37.71	38.23	41.45	50.31	68.20	-17.89	peak
6	15720.000	11.46	40.83	40.57	36.11	47.83	54.00	-6.17	Average
7	15720.000	11.46	40.83	40.57	44.25	55.97	74.00	-18.03	peak



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Mode:a; Polarization:Vertical; Modulation:802.11a; bandwidth:20MHz; Channel:High

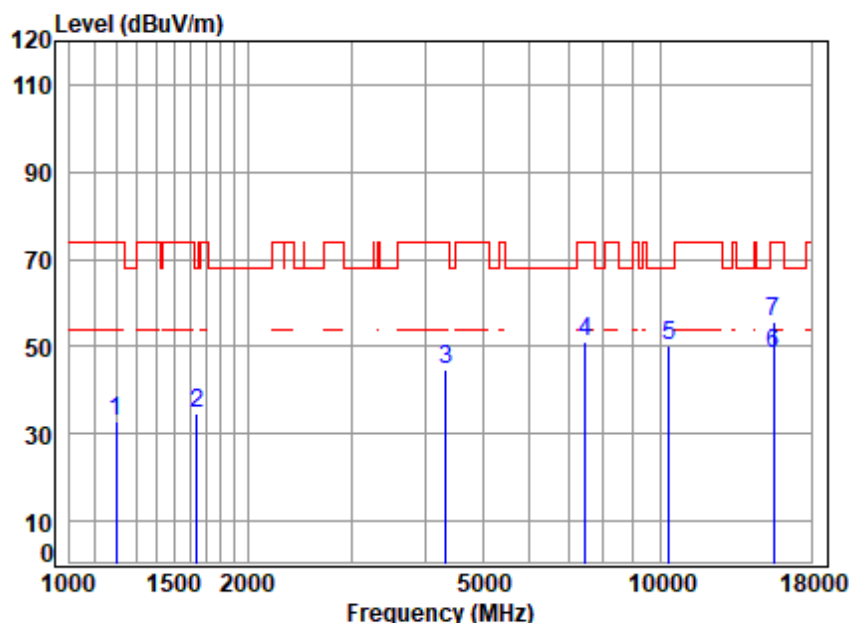


Site : chamber
Condition: 3m VERTICAL
Job No : 03819CR/03820CR
Mode : 5240 TX RSE
Note : 5G WIFI 11A

	Freq	Cable Loss	Ant Factor	Preamplifier Factor	Read Level	Level	Limit	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1185.936	2.57	24.53	40.27	45.76	32.59	74.00	-41.41	peak
2	1569.721	2.96	26.12	40.55	46.44	34.97	74.00	-39.03	peak
3	4392.376	6.66	33.42	42.47	48.02	45.63	74.00	-28.37	peak
4	8514.456	8.66	37.01	40.31	45.66	51.02	68.20	-17.18	peak
5	10480.000	9.38	37.71	38.23	41.89	50.75	68.20	-17.45	peak
6	15720.000	11.46	40.83	40.57	36.01	47.73	54.00	-6.27	Average
7	15720.000	11.46	40.83	40.57	44.01	55.73	74.00	-18.27	peak



Mode:a; Polarization:Horizontal; Modulation:802.11n; bandwidth:20MHz; Channel:Low

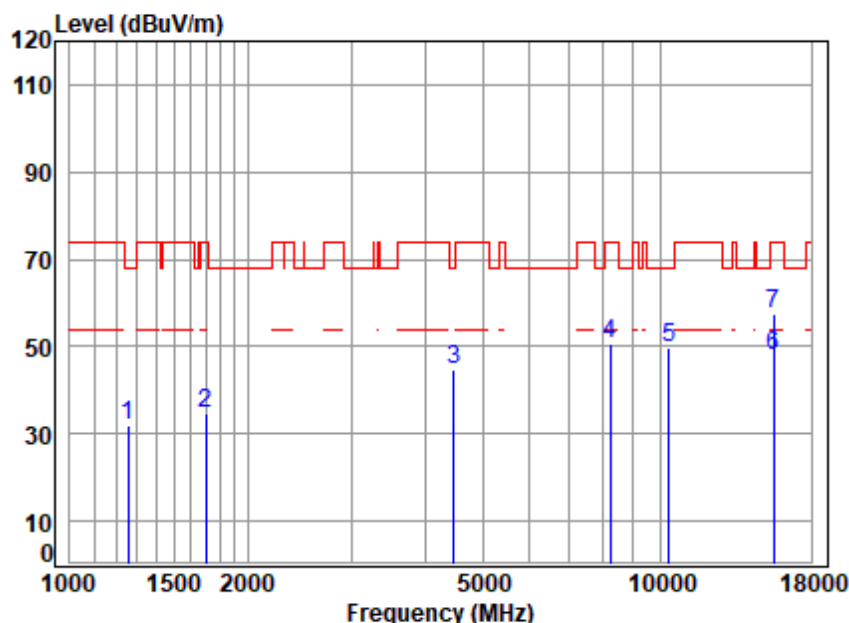


Site : chamber
Condition: 3m HORIZONTAL
Job No : 03819CR/03820CR
Mode : 5180 TX RSE
Note : 5G WIFI 11N20

	Freq	Cable Loss	Ant Factor	Preamplifier Factor	Read Level	Level	Limit	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1196.264	2.61	24.57	40.28	46.17	33.07	74.00	-40.93	peak
2	1639.274	3.09	26.42	40.59	45.96	34.88	68.20	-33.32	peak
3	4341.886	6.46	33.33	42.43	47.53	44.89	74.00	-29.11	peak
4	7454.429	8.07	36.26	41.46	48.37	51.24	74.00	-22.76	peak
5	10360.000	9.62	37.76	38.17	41.19	50.40	68.20	-17.80	peak
6	15540.000	12.08	40.72	40.58	36.16	48.38	54.00	-5.62	Average
7	15540.000	12.08	40.72	40.58	43.53	55.75	74.00	-18.25	peak



Mode:a; Polarization:Vertical; Modulation:802.11n; bandwidth:20MHz; Channel:Low

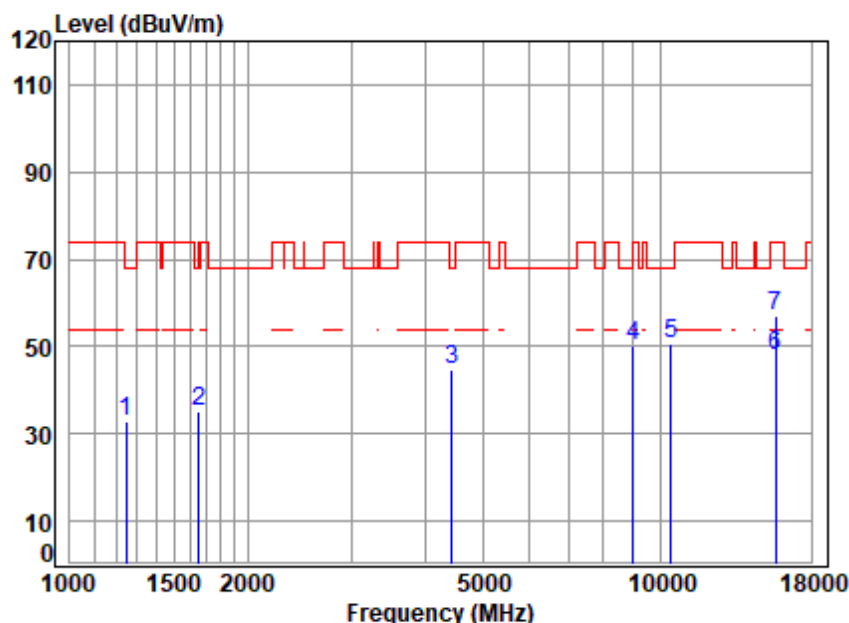


Site : chamber
Condition: 3m VERTICAL
Job No : 03819CR/03820CR
Mode : 5180 TX RSE
Note : 5G WIFI 11N20

	Freq	Cable Loss	Ant Factor	Preamplifier Factor	Read Level	Level	Limit	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1256.512	2.79	24.84	40.33	44.79	32.09	68.20	-36.11	peak
2	1697.129	3.30	26.66	40.63	45.21	34.54	74.00	-39.46	peak
3	4469.214	6.47	33.55	42.53	47.42	44.91	68.20	-23.29	peak
4	8224.200	8.31	36.84	40.80	46.40	50.75	74.00	-23.25	peak
5	10360.000	9.62	37.76	38.17	40.69	49.90	68.20	-18.30	peak
6	15540.000	12.08	40.72	40.58	35.88	48.10	54.00	-5.90	Average
7	15540.000	12.08	40.72	40.58	45.15	57.37	74.00	-16.63	peak



Mode:a; Polarization:Horizontal; Modulation:802.11n; bandwidth:20MHz; Channel:middle



Site : chamber
Condition: 3m HORIZONTAL
Job No : 03819CR/03820CR
Mode : 5220 TX RSE
Note : 5G WIFI 11N20

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1245.663	2.76	24.79	40.32	45.55	32.78	68.20	-35.42	peak
2	1653.550	3.15	26.48	40.60	45.94	34.97	68.20	-33.23	peak
3	4430.628	6.59	33.48	42.50	47.30	44.87	68.20	-23.33	peak
4	8995.123	9.03	37.20	39.52	43.41	50.12	68.20	-18.08	peak
5	10440.000	9.49	37.72	38.21	41.65	50.65	68.20	-17.55	peak
6	15660.000	11.70	40.80	40.58	35.78	47.70	54.00	-6.30	Average
7	15660.000	11.70	40.80	40.58	45.17	57.09	74.00	-16.91	peak

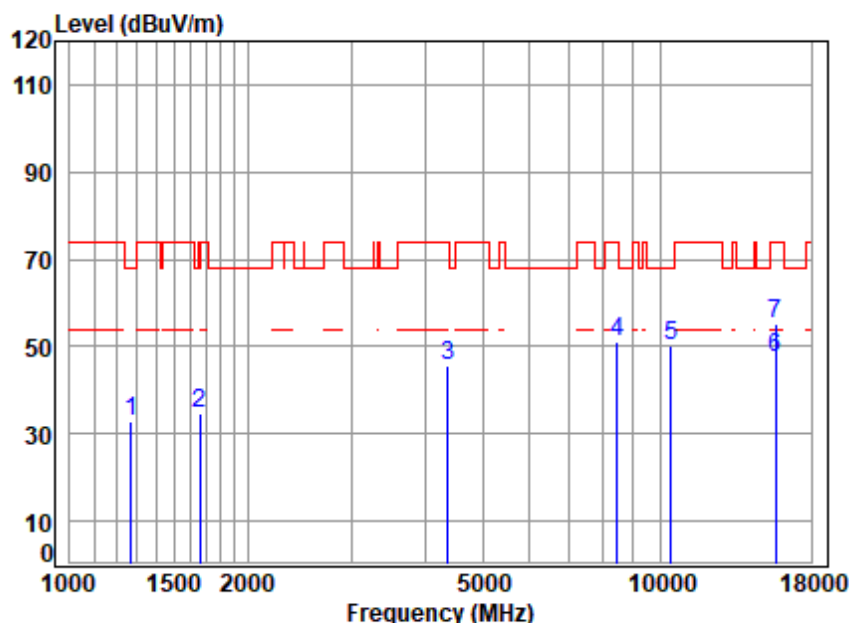


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中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

Mode:a; Polarization:Vertical; Modulation:802.11n; bandwidth:20MHz; Channel:middle

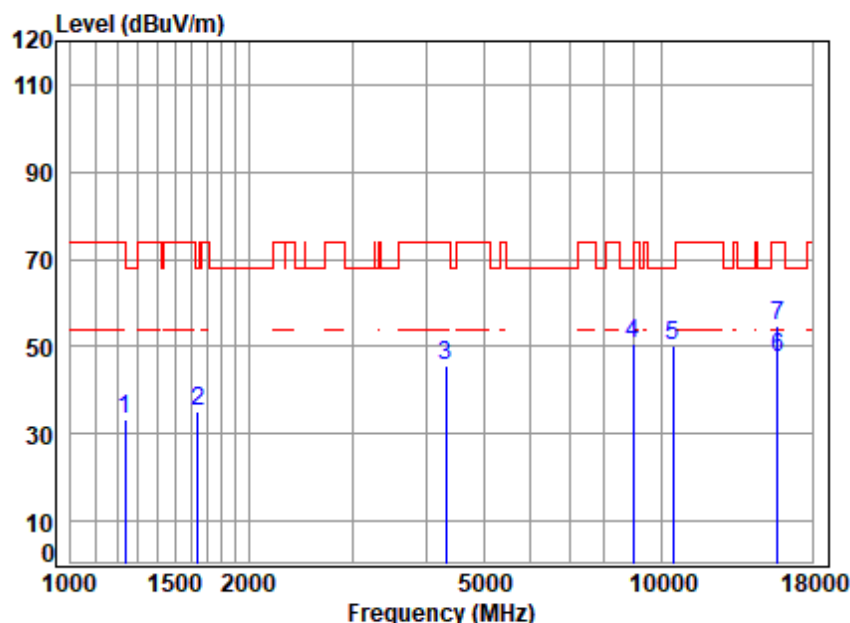


Site : chamber
Condition: 3m VERTICAL
Job No : 03819CR/03820CR
Mode : 5220 TX RSE
Note : 5G WIFI 11N20

	Freq	Cable Loss	Ant Factor	Preamplifier Factor	Read Level	Level	Limit	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1271.123	2.82	24.90	40.34	45.29	32.67	68.20	-35.53	peak
2	1658.337	3.16	26.50	40.61	45.77	34.82	68.20	-33.38	peak
3	4367.058	6.56	33.37	42.45	48.13	45.61	74.00	-28.39	peak
4	8440.945	8.46	36.97	40.43	46.32	51.32	74.00	-22.68	peak
5	10440.000	9.49	37.72	38.21	41.12	50.12	68.20	-18.08	peak
6	15660.000	11.70	40.80	40.58	35.65	47.57	54.00	-6.43	Average
7	15660.000	11.70	40.80	40.58	43.25	55.17	74.00	-18.83	peak



Mode:a; Polarization:Horizontal; Modulation:802.11n; bandwidth:20MHz; Channel:High

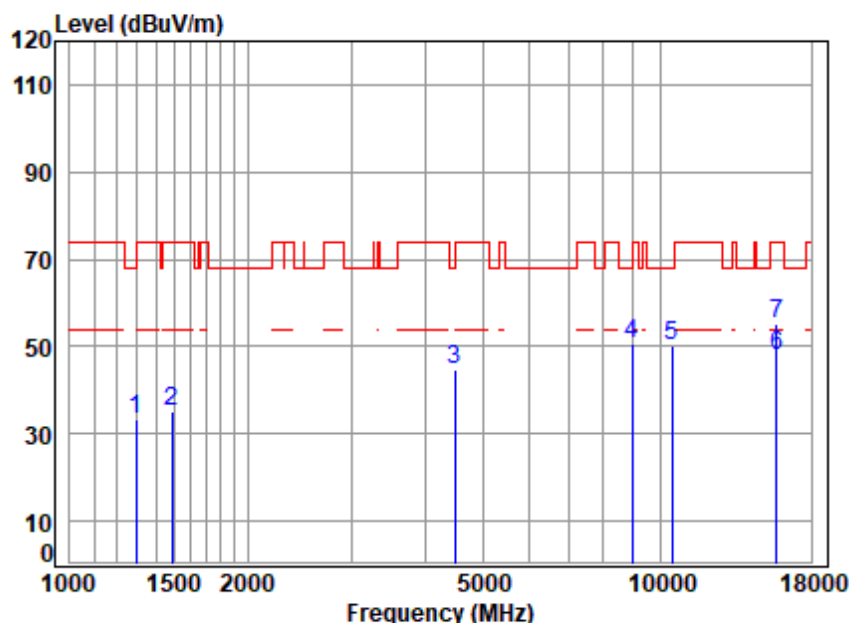


Site : chamber
Condition: 3m HORIZONTAL
Job No : 03819CR/03820CR
Mode : 5240 TX RSE
Note : 5G WIFI 11N20

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1234.909	2.73	24.74	40.31	46.34	33.50	74.00	-40.50	peak
2	1644.019	3.11	26.44	40.60	46.05	35.00	68.20	-33.20	peak
3	4316.859	6.37	33.28	42.41	48.38	45.62	74.00	-28.38	peak
4	8943.274	8.65	37.18	39.60	44.43	50.66	68.20	-17.54	peak
5	10480.000	9.38	37.71	38.23	41.42	50.28	68.20	-17.92	peak
6	15720.000	11.46	40.83	40.57	35.79	47.51	54.00	-6.49	Average
7	15720.000	11.46	40.83	40.57	43.20	54.92	74.00	-19.08	peak



Mode:a; Polarization:Vertical; Modulation:802.11n; bandwidth:20MHz; Channel:High

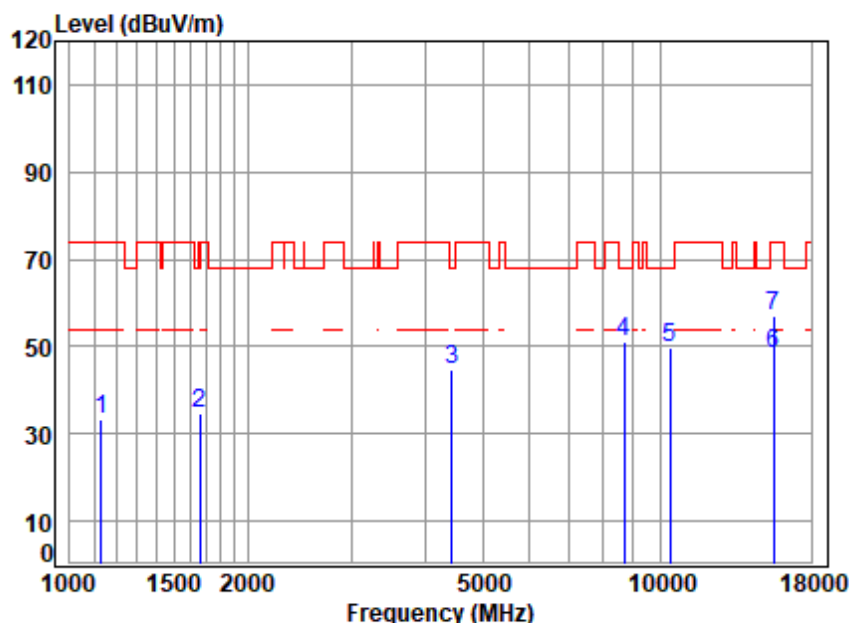


Site : chamber
Condition: 3m VERTICAL
Job No : 03819CR/03820CR
Mode : 5240 TX RSE
Note : 5G WIFI 11N20

	Freq	Cable Loss	Ant Factor	Preamplifier Factor	Read Level	Level	Limit	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1297.103	2.89	25.01	40.36	45.98	33.52	68.20	-34.68	peak
2	1490.142	2.93	25.76	40.50	46.75	34.94	74.00	-39.06	peak
3	4495.125	6.39	33.59	42.55	47.47	44.90	68.20	-23.30	peak
4	8943.274	8.65	37.18	39.60	44.56	50.79	68.20	-17.41	peak
5	10480.000	9.38	37.71	38.23	41.11	49.97	68.20	-18.23	peak
6	15720.000	11.46	40.83	40.57	36.05	47.77	54.00	-6.23	Average
7	15720.000	11.46	40.83	40.57	43.44	55.16	74.00	-18.84	peak



Mode:a; Polarization:Horizontal; Modulation:802.11n; bandwidth:40MHz; Channel:Low

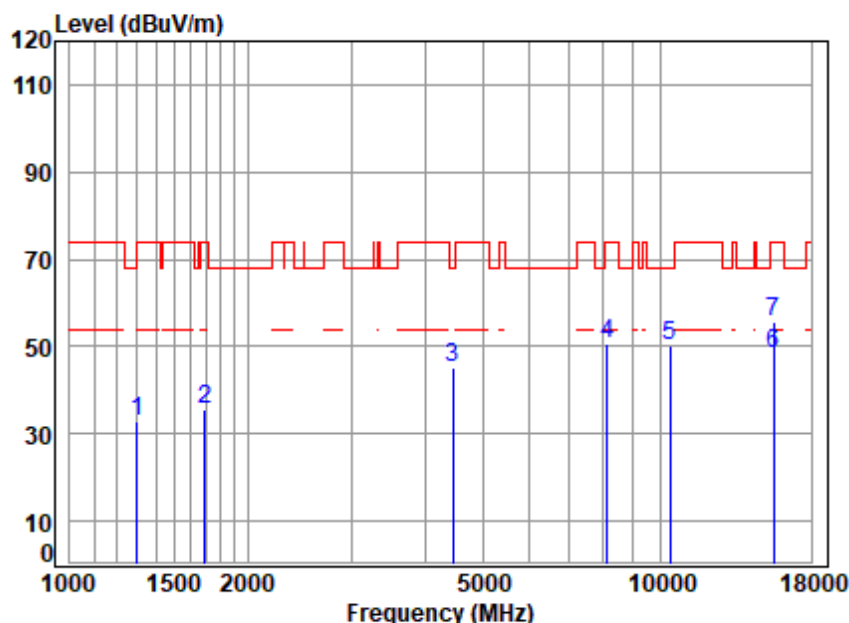


Site : chamber
Condition: 3m HORIZONTAL
Job No : 03819CR/03820CR
Mode : 5190 TX RSE
Note : 5G WIFI 11N40

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1132.340	2.34	24.27	40.22	46.89	33.28	74.00	-40.72	peak
2	1663.137	3.18	26.52	40.61	45.81	34.90	74.00	-39.10	peak
3	4443.453	6.55	33.50	42.51	47.35	44.89	68.20	-23.31	peak
4	8688.480	8.62	37.08	40.02	45.22	50.90	68.20	-17.30	peak
5	10380.000	9.61	37.75	38.18	40.72	49.90	68.20	-18.30	peak
6	15570.000	12.06	40.74	40.58	36.09	48.31	54.00	-5.69	Average
7	15570.000	12.06	40.74	40.58	44.60	56.82	74.00	-17.18	peak



Mode:a; Polarization:Vertical; Modulation:802.11n; bandwidth:40MHz; Channel:Low



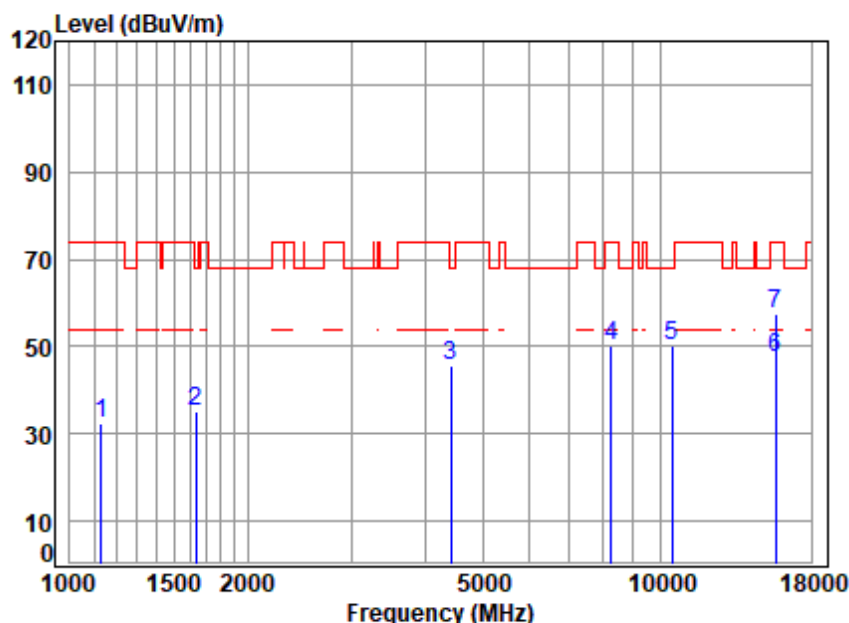
Site : chamber
Condition: 3m VERTICAL
Job No : 03819CR/03820CR
Mode : 5190 TX RSE
Note : 5G WIFI 11N40

	Freq	Cable Loss	Ant Factor	Preamplifier Factor	Read Level	Level	Limit	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1300.858	2.90	25.03	40.36	45.34	32.91	74.00	-41.09	peak
2	1692.231	3.28	26.64	40.63	46.29	35.58	74.00	-38.42	peak
3	4456.315	6.51	33.53	42.52	47.68	45.20	68.20	-23.00	peak
4	8129.664	8.41	36.78	40.97	46.53	50.75	74.00	-23.25	peak
5	10380.000	9.61	37.75	38.18	41.22	50.40	68.20	-17.80	peak
6	15570.000	12.06	40.74	40.58	35.92	48.14	54.00	-5.86	Average
7	15570.000	12.06	40.74	40.58	43.41	55.63	74.00	-18.37	peak



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Mode:a; Polarization:Horizontal; Modulation:802.11n; bandwidth:40MHz; Channel:High



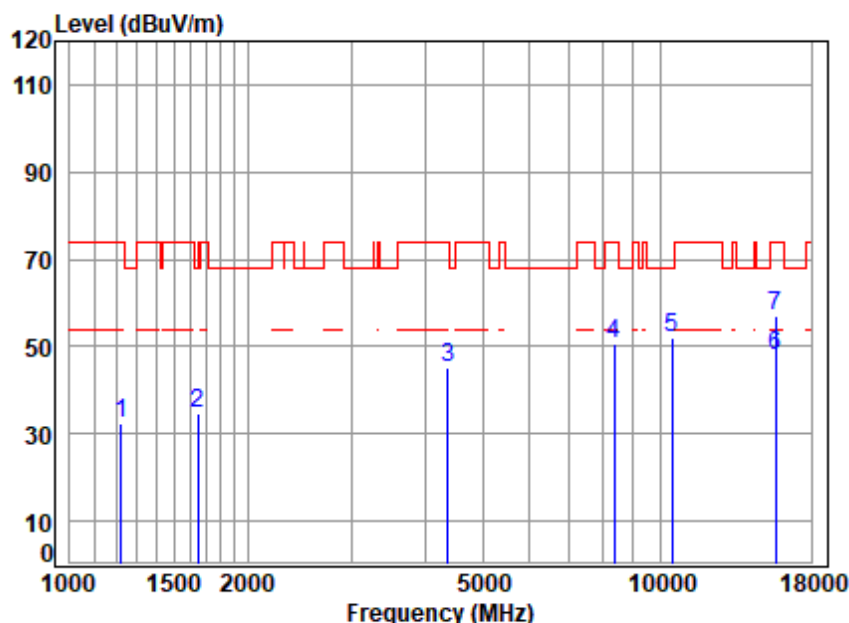
Site : chamber
Condition: 3m HORIZONTAL
Job No : 03819CR/03820CR
Mode : 5230 TX RSE
Note : 5G WIFI 11N40

	Freq	Cable Loss	Ant Factor	Preamplifier Factor	Read Level	Level	Limit	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1132.340	2.34	24.27	40.22	46.08	32.47	74.00	-41.53	peak
2	1634.543	3.08	26.40	40.59	46.04	34.93	68.20	-33.27	peak
3	4417.841	6.63	33.46	42.49	48.14	45.74	68.20	-22.46	peak
4	8248.005	8.27	36.85	40.76	46.02	50.38	74.00	-23.62	peak
5	10460.000	9.43	37.72	38.22	41.24	50.17	68.20	-18.03	peak
6	15690.000	11.52	40.82	40.58	35.76	47.52	54.00	-6.48	Average
7	15690.000	11.52	40.82	40.58	45.60	57.36	74.00	-16.64	peak



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Mode:a; Polarization:Vertical; Modulation:802.11n; bandwidth:40MHz; Channel:High

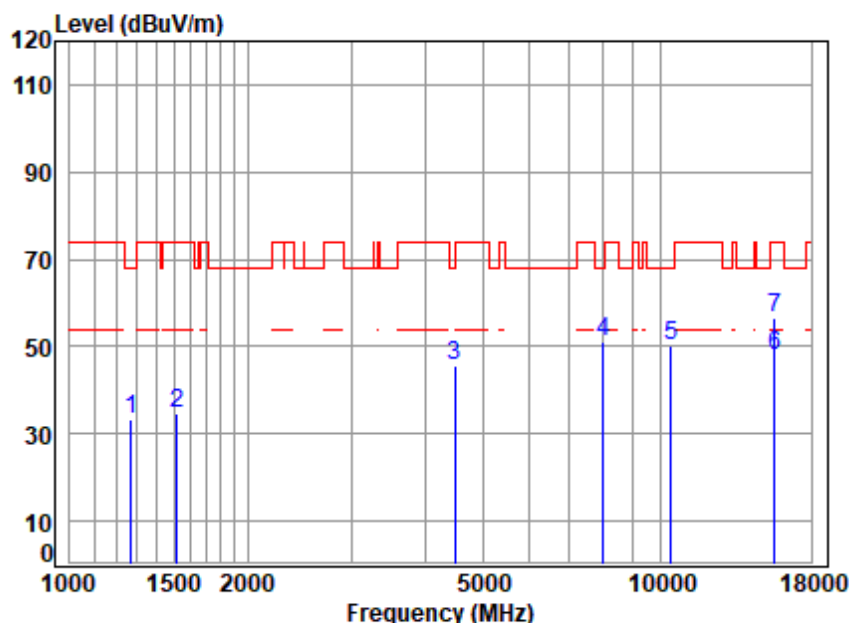


Site : chamber
Condition: 3m VERTICAL
Job No : 03819CR/03820CR
Mode : 5230 TX RSE
Note : 5G WIFI 11N40

	Freq	Cable Loss	Ant Factor	Preamplifier Factor	Read Level	Level	Limit	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1224.247	2.70	24.70	40.30	45.34	32.44	74.00	-41.56	peak
2	1648.778	3.13	26.46	40.60	45.66	34.65	68.20	-33.55	peak
3	4367.058	6.56	33.37	42.45	47.47	44.95	74.00	-29.05	peak
4	8343.918	8.26	36.91	40.60	46.24	50.81	74.00	-23.19	peak
5	10460.000	9.43	37.72	38.22	42.88	51.81	68.20	-16.39	peak
6	15690.000	11.52	40.82	40.58	36.03	47.79	54.00	-6.21	Average
7	15690.000	11.52	40.82	40.58	45.30	57.06	74.00	-16.94	peak



Mode:a; Polarization:Horizontal; Modulation:802.11ac; bandwidth:80MHz; Channel:middle



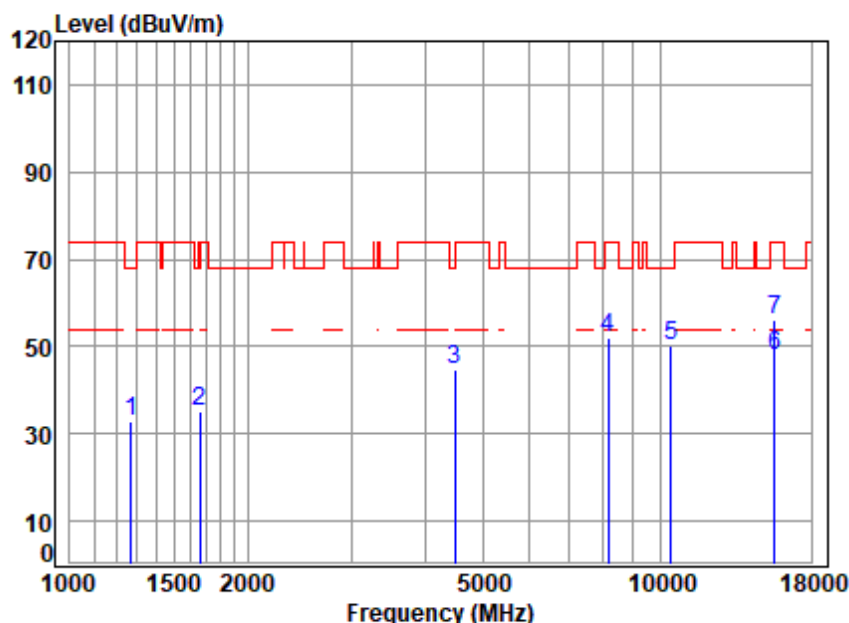
Site : chamber
Condition: 3m HORIZONTAL
Job No : 03819CR/03820CR
Mode : 5210 TX RSE
Note : 5G WIFI 11AC80

	Freq	Cable Loss	Ant Factor	Preamplifier Factor	Read Level	Level	Limit	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1271.123	2.82	24.90	40.34	45.98	33.36	68.20	-34.84	peak
2	1516.210	2.98	25.87	40.52	46.37	34.70	74.00	-39.30	peak
3	4482.150	6.43	33.57	42.54	48.03	45.49	68.20	-22.71	peak
4	8013.020	8.28	36.71	41.18	47.34	51.15	68.20	-17.05	peak
5	10420.000	9.54	37.73	38.20	41.12	50.19	68.20	-18.01	peak
6	15630.000	11.87	40.78	40.58	36.05	48.12	54.00	-5.88	Average
7	15630.000	11.87	40.78	40.58	44.49	56.56	74.00	-17.44	peak



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Mode:a; Polarization:Vertical; Modulation:802.11ac; bandwidth:80MHz; Channel:middle



Site : chamber
Condition: 3m VERTICAL
Job No : 03819CR/03820CR
Mode : 5210 TX RSE
Note : 5G WIFI 11AC80

		Cable	Ant	Preamp	Read	Limit	Over	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1	1271.123	2.82	24.90	40.34	45.63	33.01	68.20	-35.19 peak
2	1658.337	3.16	26.50	40.61	46.05	35.10	68.20	-33.10 peak
3	4482.150	6.43	33.57	42.54	47.29	44.75	68.20	-23.45 peak
4	8153.195	8.39	36.79	40.93	47.87	52.12	74.00	-21.88 peak
5	10420.000	9.54	37.73	38.20	41.27	50.34	68.20	-17.86 peak
6	15630.000	11.87	40.78	40.58	35.96	48.03	54.00	-5.97 Average
7	15630.000	11.87	40.78	40.58	43.96	56.03	74.00	-17.97 peak

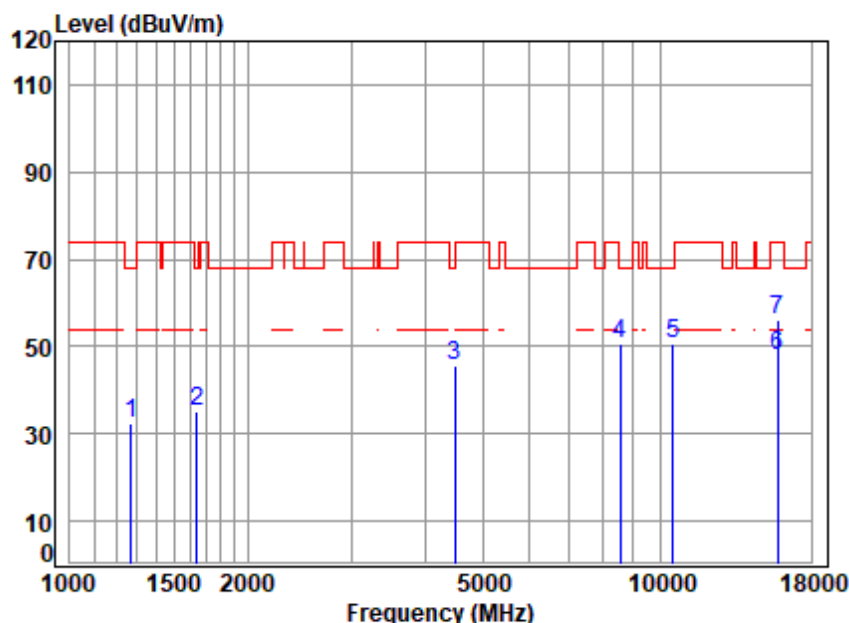


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Mode:b; Polarization:Horizontal; Modulation:802.11a; bandwidth:20MHz; Channel:Low



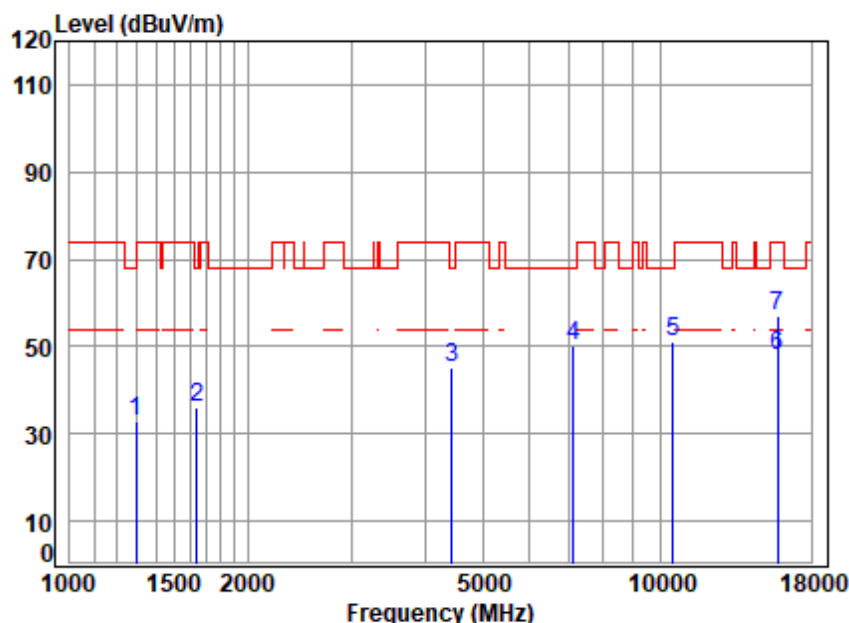
Site : chamber
Condition: 3m HORIZONTAL
Job No : 03819CR/03820CR
Mode : 5260 TX RSE
Note : 5G WIFI 11A

	Freq	Cable Loss	Ant Factor	Preamplifier Factor	Read Level	Level	Limit	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1271.123	2.82	24.90	40.34	44.86	32.24	68.20	-35.96	peak
2	1639.274	3.09	26.42	40.59	46.15	35.07	68.20	-33.13	peak
3	4495.125	6.39	33.59	42.55	47.97	45.40	68.20	-22.80	peak
4	8563.818	8.81	37.03	40.22	45.05	50.67	68.20	-17.53	peak
5	10520.000	9.45	37.70	38.25	41.52	50.42	68.20	-17.78	peak
6	15780.000	11.48	40.87	40.57	36.05	47.83	54.00	-6.17	Average
7	15780.000	11.48	40.87	40.57	44.33	56.11	74.00	-17.89	peak



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Mode:b; Polarization:Vertical; Modulation:802.11a; bandwidth:20MHz; Channel:Low

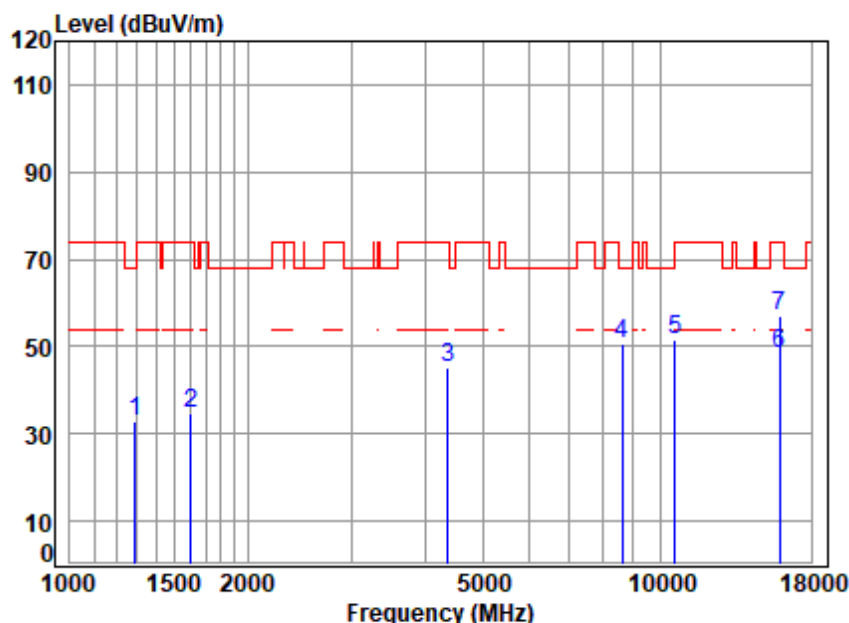


Site : chamber
Condition: 3m VERTICAL
Job No : 03819CR/03820CR
Mode : 5260 TX RSE
Note : 5G WIFI 11A

	Freq	Cable Loss	Ant Factor	Preamplifier Factor	Read Level	Level	Limit	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1297.103	2.89	25.01	40.36	45.41	32.95	68.20	-35.25	peak
2	1644.019	3.11	26.44	40.60	47.01	35.96	68.20	-32.24	peak
3	4430.628	6.59	33.48	42.50	47.43	45.00	68.20	-23.20	peak
4	7117.542	8.50	36.00	41.62	47.43	50.31	68.20	-17.89	peak
5	10520.000	9.45	37.70	38.25	42.20	51.10	68.20	-17.10	peak
6	15780.000	11.48	40.87	40.57	36.12	47.90	54.00	-6.10	Average
7	15780.000	11.48	40.87	40.57	45.28	57.06	74.00	-16.94	peak



Mode:b; Polarization:Horizontal; Modulation:802.11a; bandwidth:20MHz; Channel:middle

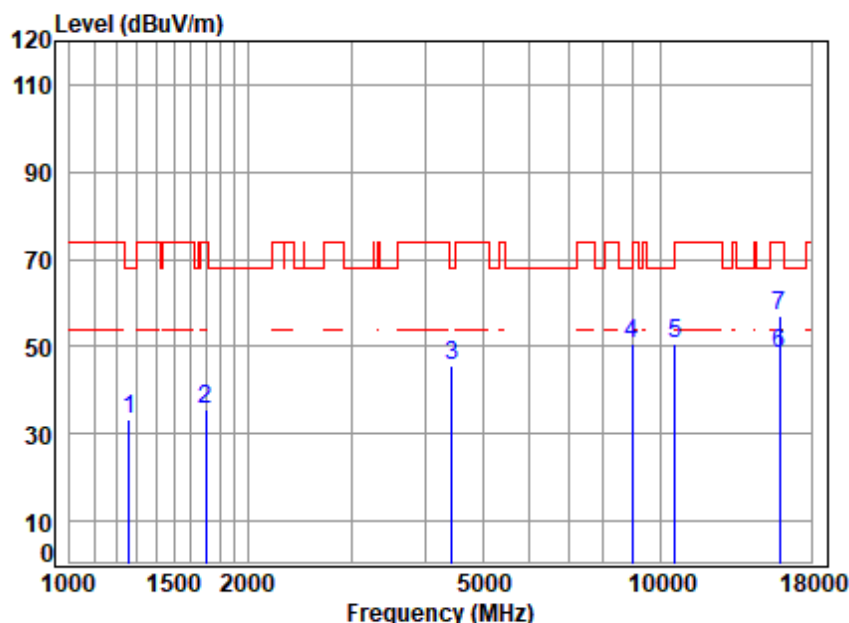


Site : chamber
Condition: 3m HORIZONTAL
Job No : 03819CR/03820CR
Mode : 5300 TX RSE
Note : 5G WIFI 11A

	Freq	Cable Loss	Ant Factor	Preamplifier Factor	Read Level	Level	Limit	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1289.627	2.87	24.98	40.35	45.25	32.75	68.20	-35.45	peak
2	1606.441	2.97	26.28	40.57	46.07	34.75	74.00	-39.25	peak
3	4367.058	6.56	33.37	42.45	47.64	45.12	74.00	-28.88	peak
4	8613.468	8.87	37.05	40.14	44.71	50.49	68.20	-17.71	peak
5	10600.000	9.95	37.72	38.29	42.15	51.53	68.20	-16.67	peak
6	15900.000	12.16	40.94	40.57	35.89	48.42	54.00	-5.58	Average
7	15900.000	12.16	40.94	40.57	44.71	57.24	74.00	-16.76	peak



Mode:b; Polarization:Vertical; Modulation:802.11a; bandwidth:20MHz; Channel:middle

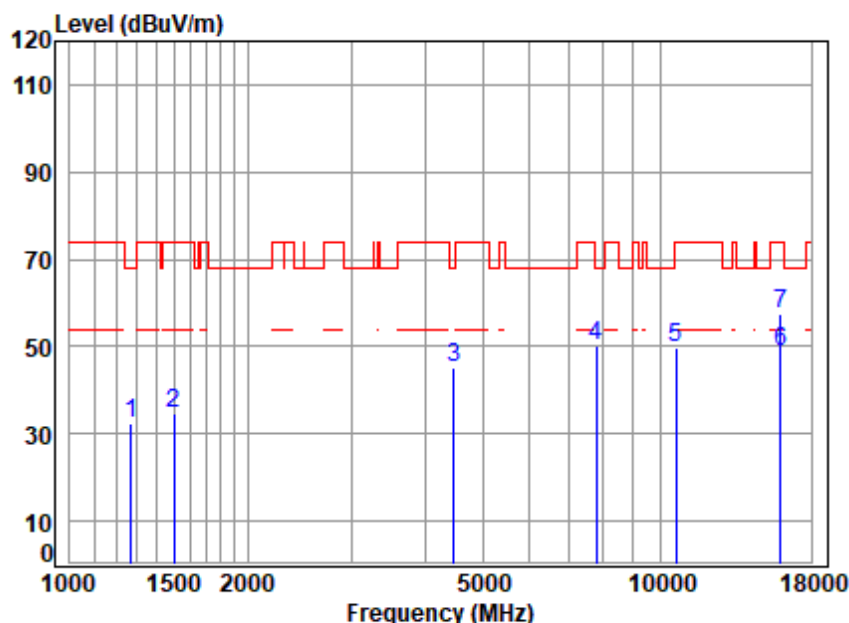


Site : chamber
Condition: 3m VERTICAL
Job No : 03819CR/03820CR
Mode : 5300 TX RSE
Note : 5G WIFI 11A

	Freq	Cable Loss	Ant Factor	Preamplifier Factor	Read Level	Level	Limit	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1260.149	2.79	24.85	40.33	46.17	33.48	68.20	-34.72	peak
2	1697.129	3.30	26.66	40.63	46.33	35.66	74.00	-38.34	peak
3	4443.453	6.55	33.50	42.51	47.93	45.47	68.20	-22.73	peak
4	8969.161	8.84	37.19	39.56	43.99	50.46	68.20	-17.74	peak
5	10600.000	9.95	37.72	38.29	41.13	50.51	68.20	-17.69	peak
6	15900.000	12.16	40.94	40.57	35.96	48.49	54.00	-5.51	Average
7	15900.000	12.16	40.94	40.57	44.55	57.08	74.00	-16.92	peak



Mode:b; Polarization:Horizontal; Modulation:802.11a; bandwidth:20MHz; Channel:High



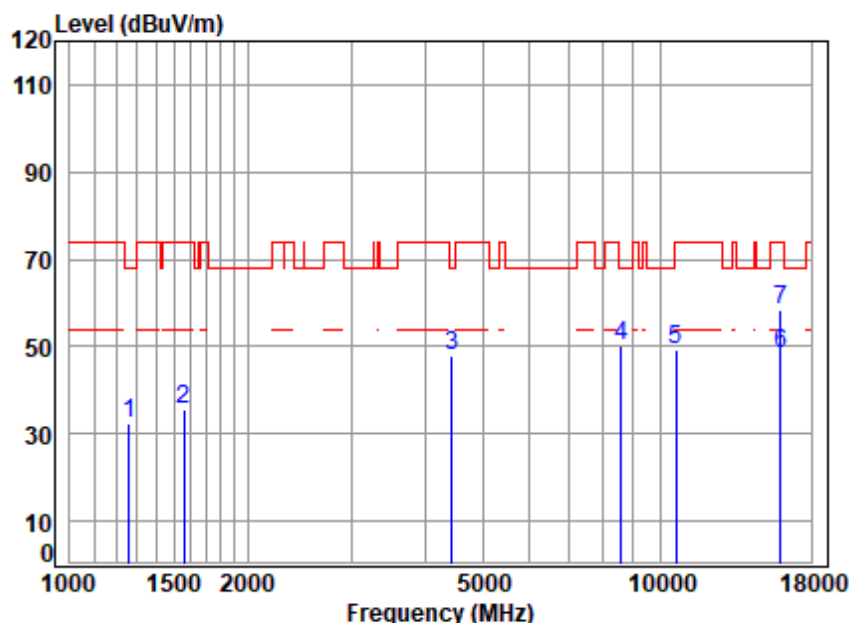
Site : chamber
Condition: 3m HORIZONTAL
Job No : 03819CR/03820CR
Mode : 5320 TX RSE
Note : 5G WIFI 11A

	Freq	Cable Loss	Ant Factor	Preamplifier Factor	Read Level	Level	Limit	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1271.123	2.82	24.90	40.34	44.93	32.31	68.20	-35.89	peak
2	1498.781	2.98	25.80	40.51	46.55	34.82	74.00	-39.18	peak
3	4469.214	6.47	33.55	42.53	47.84	45.33	68.20	-22.87	peak
4	7784.729	8.59	36.53	41.30	46.56	50.38	68.20	-17.82	peak
5	10640.000	9.95	37.73	38.31	40.53	49.90	74.00	-24.10	peak
6	15960.000	12.17	40.98	40.57	36.18	48.76	54.00	-5.24	Average
7	15960.000	12.17	40.98	40.57	45.10	57.68	74.00	-16.32	peak



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Mode:b; Polarization:Vertical; Modulation:802.11a; bandwidth:20MHz; Channel:High



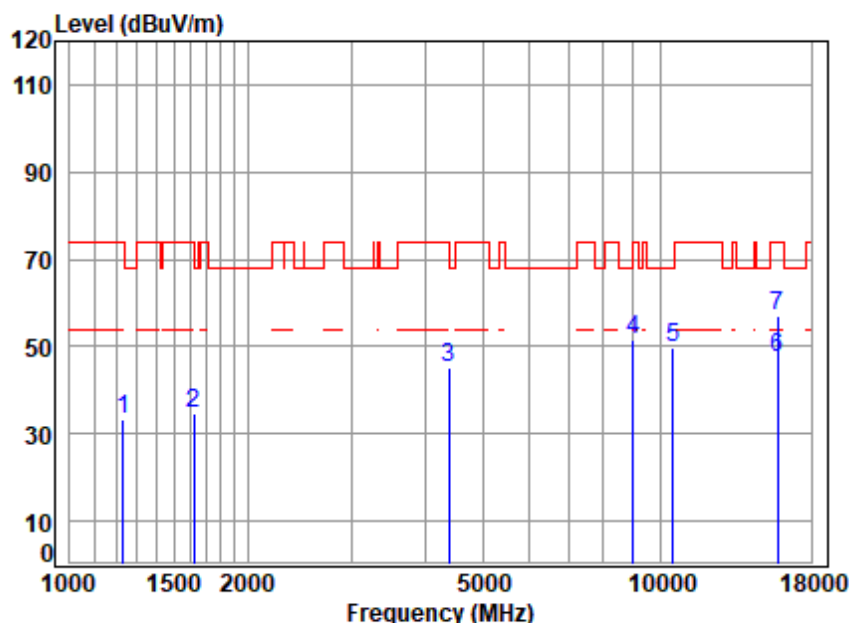
Site : chamber
Condition: 3m VERTICAL
Job No : 03819CR/03820CR
Mode : 5320 TX RSE
Note : 5G WIFI 11A

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1260.149	2.79	24.85	40.33	45.24	32.55	68.20	-35.65	peak
2	1560.673	2.97	26.08	40.55	47.16	35.66	74.00	-38.34	peak
3	4430.628	6.59	33.48	42.50	50.17	47.74	68.20	-20.46	peak
4	8588.607	8.88	37.04	40.18	44.49	50.23	68.20	-17.97	peak
5	10640.000	9.95	37.73	38.31	39.92	49.29	74.00	-24.71	peak
6	15960.000	12.17	40.98	40.57	35.69	48.27	54.00	-5.73	Average
7	15960.000	12.17	40.98	40.57	45.68	58.26	74.00	-15.74	peak



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Mode:b; Polarization:Horizontal; Modulation:802.11n; bandwidth:20MHz; Channel:Low

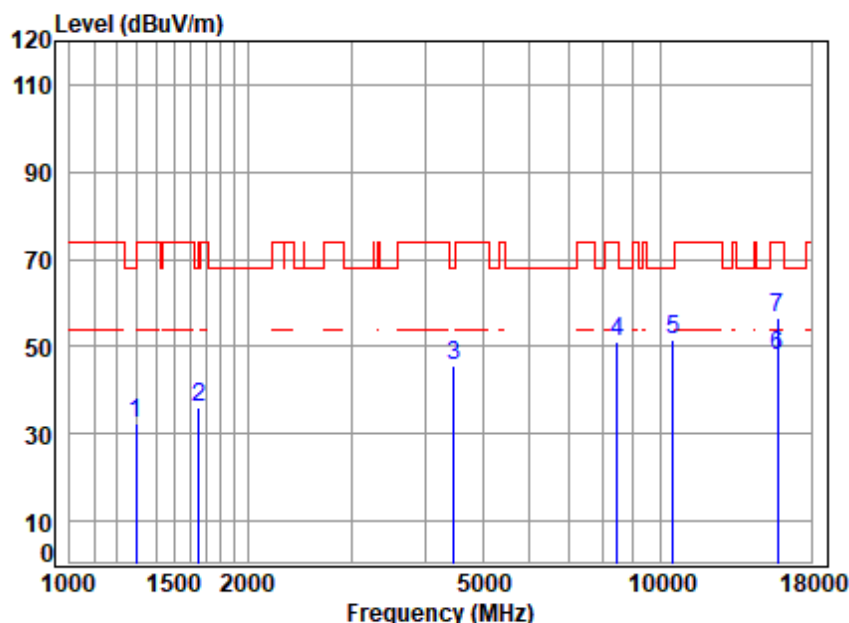


Site : chamber
Condition: 3m HORIZONTAL
Job No : 03819CR/03820CR
Mode : 5260 TX RSE
Note : 5G WIFI 11N20

	Freq	Cable Loss	Ant Factor	Preamplifier Factor	Read Level	Level	Limit	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1231.345	2.72	24.73	40.31	46.17	33.31	74.00	-40.69	peak
2	1625.121	3.04	26.36	40.59	45.79	34.60	74.00	-39.40	peak
3	4392.376	6.66	33.42	42.47	47.37	44.98	74.00	-29.02	peak
4	8995.123	9.03	37.20	39.52	44.67	51.38	68.20	-16.82	peak
5	10520.000	9.45	37.70	38.25	40.96	49.86	68.20	-18.34	peak
6	15780.000	11.48	40.87	40.57	35.56	47.34	54.00	-6.66	Average
7	15780.000	11.48	40.87	40.57	45.35	57.13	74.00	-16.87	peak



Mode:b; Polarization:Vertical; Modulation:802.11n; bandwidth:20MHz; Channel:Low



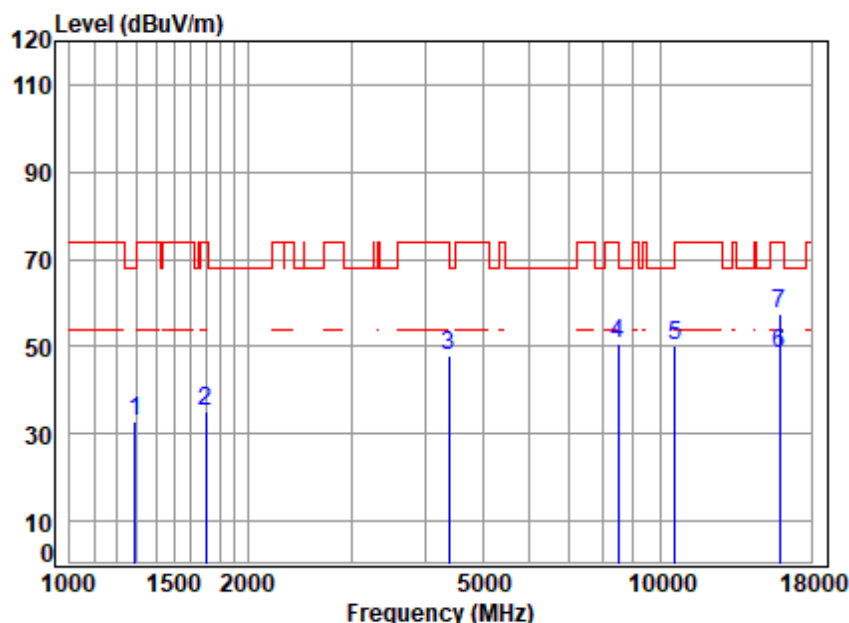
Site : chamber
Condition: 3m VERTICAL
Job No : 03819CR/03820CR
Mode : 5260 TX RSE
Note : 5G WIFI 11N20

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1293.359	2.88	25.00	40.36	44.74	32.26	68.20	-35.94	peak
2	1653.550	3.15	26.48	40.60	46.82	35.85	68.20	-32.35	peak
3	4469.214	6.47	33.55	42.53	47.91	45.40	68.20	-22.80	peak
4	8440.945	8.46	36.97	40.43	46.19	51.19	74.00	-22.81	peak
5	10520.000	9.45	37.70	38.25	42.47	51.37	68.20	-16.83	peak
6	15780.000	11.48	40.87	40.57	35.90	47.68	54.00	-6.32	Average
7	15780.000	11.48	40.87	40.57	44.64	56.42	74.00	-17.58	peak



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Mode:b; Polarization:Horizontal; Modulation:802.11n; bandwidth:20MHz; Channel:middle



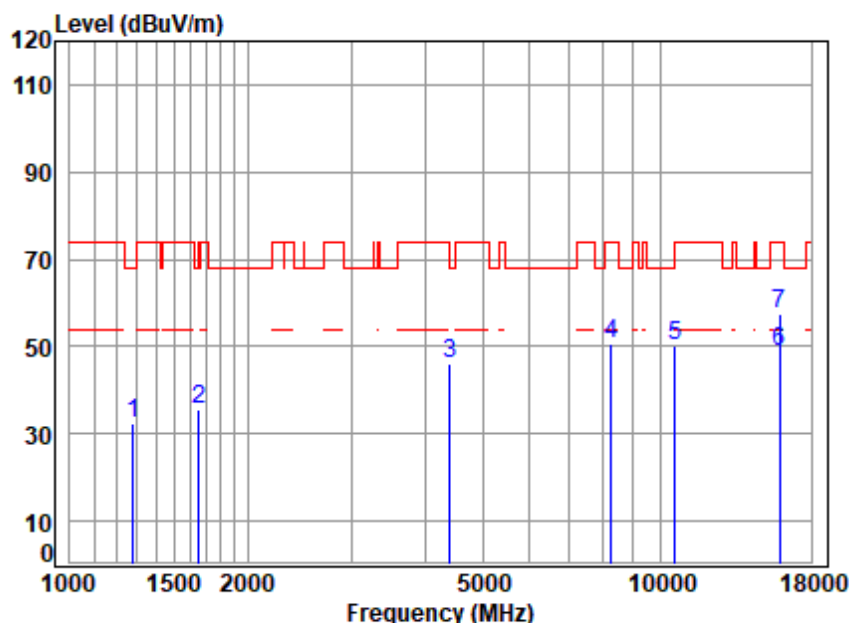
Site : chamber
Condition: 3m HORIZONTAL
Job No : 03819CR/03820CR
Mode : 5300 TX RSE
Note : 5G WIFI 11N20

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1289.627	2.87	24.98	40.35	45.53	33.03	68.20	-35.17	peak
2	1697.129	3.30	26.66	40.63	45.63	34.96	74.00	-39.04	peak
3	4379.699	6.61	33.39	42.46	50.15	47.69	74.00	-26.31	peak
4	8489.882	8.59	36.99	40.35	45.27	50.50	74.00	-23.50	peak
5	10600.000	9.95	37.72	38.29	40.98	50.36	68.20	-17.84	peak
6	15900.000	12.16	40.94	40.57	36.05	48.58	54.00	-5.42	Average
7	15900.000	12.16	40.94	40.57	44.94	57.47	74.00	-16.53	peak



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Mode:b; Polarization:Vertical; Modulation:802.11n; bandwidth:20MHz; Channel:middle

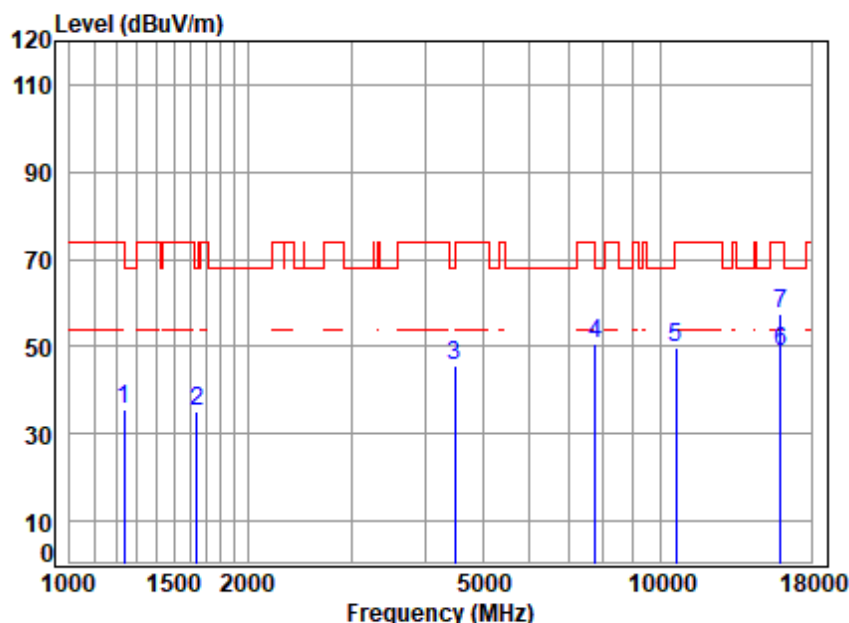


Site : chamber
Condition: 3m VERTICAL
Job No : 03819CR/03820CR
Mode : 5300 TX RSE
Note : 5G WIFI 11N20

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1278.492	2.84	24.93	40.35	44.99	32.41	68.20	-35.79	peak
2	1653.550	3.15	26.48	40.60	46.74	35.77	68.20	-32.43	peak
3	4405.090	6.67	33.44	42.48	48.27	45.90	68.20	-22.30	peak
4	8248.005	8.27	36.85	40.76	46.22	50.58	74.00	-23.42	peak
5	10600.000	9.95	37.72	38.29	40.84	50.22	68.20	-17.98	peak
6	15900.000	12.16	40.94	40.57	36.17	48.70	54.00	-5.30	Average
7	15900.000	12.16	40.94	40.57	44.85	57.38	74.00	-16.62	peak



Mode:b; Polarization:Horizontal; Modulation:802.11n; bandwidth:20MHz; Channel:High

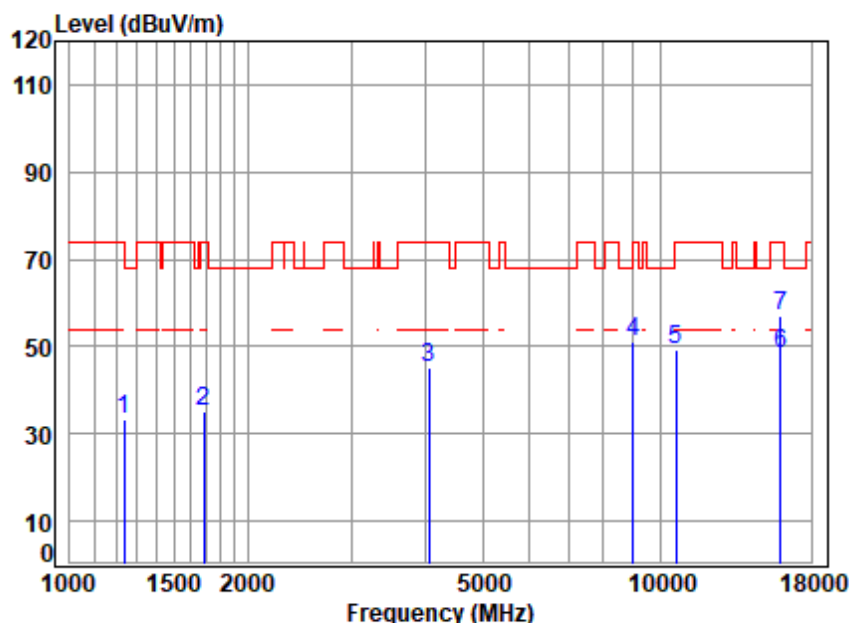


Site : chamber
Condition: 3m HORIZONTAL
Job No : 03819CR/03820CR
Mode : 5320 TX RSE
Note : 5G WIFI 11N20

	Freq	Cable Loss	Ant Factor	Preamplifier Factor	Read Level	Level	Limit	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1234.909	2.73	24.74	40.31	48.65	35.81	74.00	-38.19	peak
2	1644.019	3.11	26.44	40.60	46.39	35.34	68.20	-32.86	peak
3	4495.125	6.39	33.59	42.55	48.13	45.56	68.20	-22.64	peak
4	7762.260	8.60	36.51	41.31	46.88	50.68	68.20	-17.52	peak
5	10640.000	9.95	37.73	38.31	40.43	49.80	74.00	-24.20	peak
6	15960.000	12.17	40.98	40.57	36.03	48.61	54.00	-5.39	Average
7	15960.000	12.17	40.98	40.57	44.94	57.52	74.00	-16.48	peak



Mode:b; Polarization:Vertical; Modulation:802.11n; bandwidth:20MHz; Channel:High

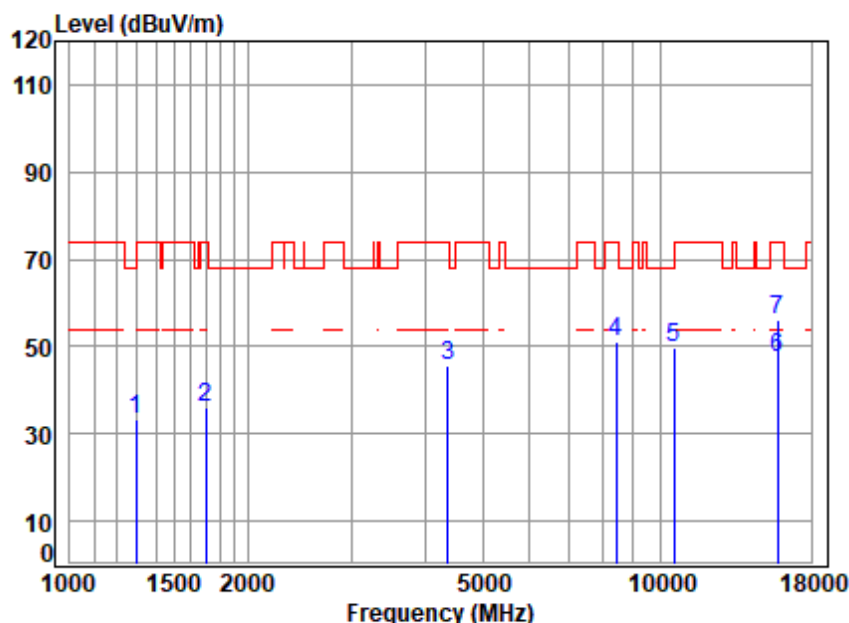


Site : chamber
Condition: 3m VERTICAL
Job No : 03819CR/03820CR
Mode : 5320 TX RSE
Note : 5G WIFI 11N20

	Freq	Cable Loss	Ant Factor	Preamplifier Factor	Read Level	Level	Limit	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1234.909	2.73	24.74	40.31	46.04	33.20	74.00	-40.80	peak
2	1687.347	3.27	26.62	40.62	45.81	35.08	74.00	-38.92	peak
3	4062.629	5.98	32.82	42.21	48.73	45.32	74.00	-28.68	peak
4	8995.123	9.03	37.20	39.52	44.20	50.91	68.20	-17.29	peak
5	10640.000	9.95	37.73	38.31	39.93	49.30	74.00	-24.70	peak
6	15960.000	12.17	40.98	40.57	35.71	48.29	54.00	-5.71	Average
7	15960.000	12.17	40.98	40.57	44.63	57.21	74.00	-16.79	peak



Mode:b; Polarization:Horizontal; Modulation:802.11n; bandwidth:40MHz; Channel:Low

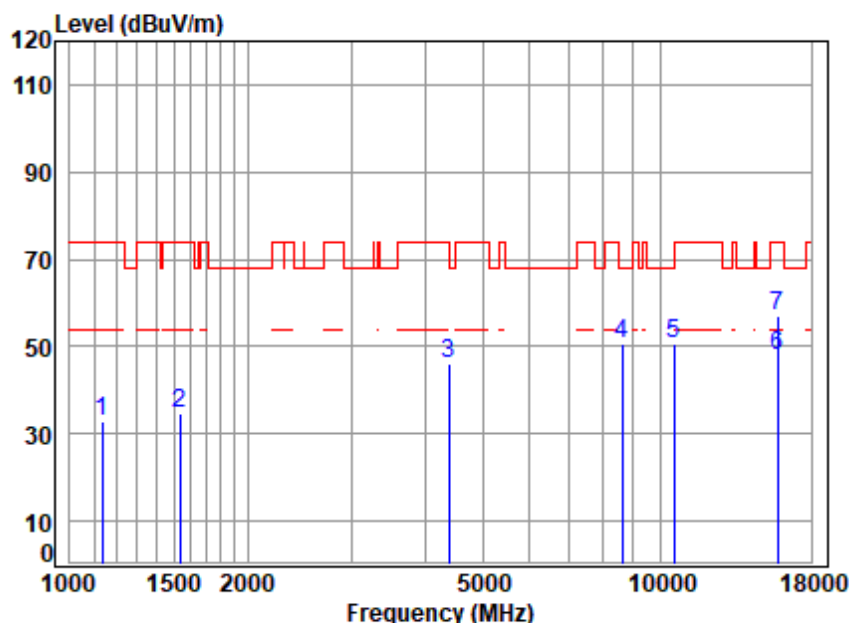


Site : chamber
Condition: 3m HORIZONTAL
Job No : 03819CR/03820CR
Mode : 5270 TX RSE
Note : 5G WIFI 11N40

	Freq	Cable Loss	Ant Factor	Preamplifier Factor	Read Level	Level	Limit	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1297.103	2.89	25.01	40.36	45.62	33.16	68.20	-35.04	peak
2	1702.042	3.30	26.68	40.63	46.59	35.94	74.00	-38.06	peak
3	4367.058	6.56	33.37	42.45	48.08	45.56	74.00	-28.44	peak
4	8416.584	8.39	36.95	40.47	46.06	50.93	74.00	-23.07	peak
5	10540.000	9.57	37.71	38.26	40.86	49.88	68.20	-18.32	peak
6	15810.000	11.55	40.89	40.57	35.62	47.49	54.00	-6.51	Average
7	15810.000	11.55	40.89	40.57	44.33	56.20	74.00	-17.80	peak



Mode:b; Polarization:Vertical; Modulation:802.11n; bandwidth:40MHz; Channel:Low

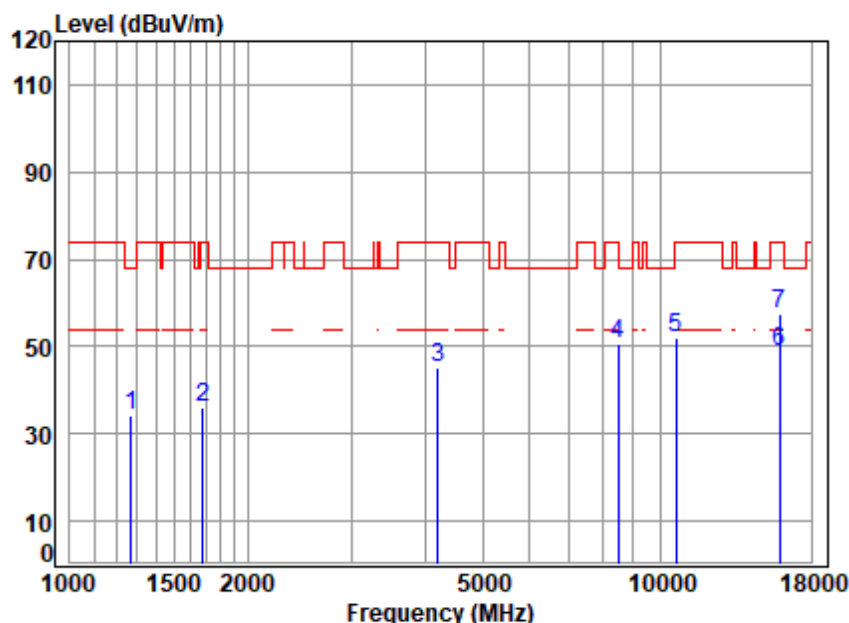


Site : chamber
Condition: 3m VERTICAL
Job No : 03819CR/03820CR
Mode : 5270 TX RSE
Note : 5G WIFI 11N40

	Freq	Cable Loss	Ant Factor	Preamplifier Factor	Read Level	Level	Limit	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1135.617	2.35	24.29	40.23	46.54	32.95	74.00	-41.05	peak
2	1538.281	2.97	25.98	40.53	46.47	34.89	74.00	-39.11	peak
3	4379.699	6.61	33.39	42.46	48.32	45.86	74.00	-28.14	peak
4	8613.468	8.87	37.05	40.14	44.83	50.61	68.20	-17.59	peak
5	10540.000	9.57	37.71	38.26	41.44	50.46	68.20	-17.74	peak
6	15810.000	11.55	40.89	40.57	35.95	47.82	54.00	-6.18	Average
7	15810.000	11.55	40.89	40.57	45.31	57.18	74.00	-16.82	peak



Mode:b; Polarization:Horizontal; Modulation:802.11n; bandwidth:40MHz; Channel:High

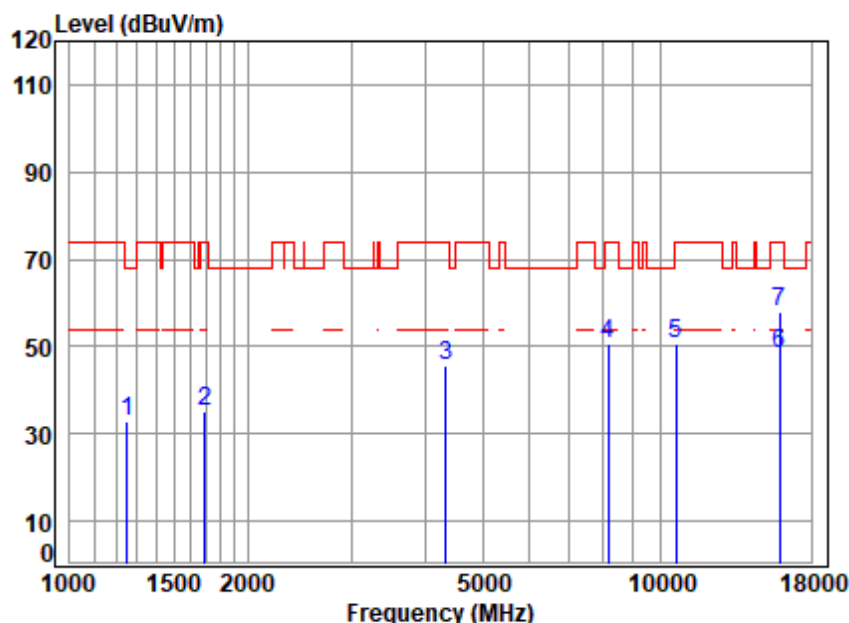


Site : chamber
Condition: 3m HORIZONTAL
Job No : 03819CR/03820CR
Mode : 5310 TX RSE
Note : 5G WIFI 11N40

	Freq	Cable Loss	Ant Factor	Preamplifier Factor	Read Level	Level	Limit	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1271.123	2.82	24.90	40.34	46.77	34.15	68.20	-34.05	peak
2	1682.477	3.25	26.60	40.62	46.79	36.02	74.00	-37.98	peak
3	4206.011	6.14	33.08	42.32	48.12	45.02	74.00	-28.98	peak
4	8489.882	8.59	36.99	40.35	45.39	50.62	74.00	-23.38	peak
5	10620.000	9.95	37.72	38.30	42.81	52.18	74.00	-21.82	peak
6	15930.000	12.17	40.96	40.57	36.08	48.64	54.00	-5.36	Average
7	15930.000	12.17	40.96	40.57	45.11	57.67	74.00	-16.33	peak



Mode:b; Polarization:Vertical; Modulation:802.11n; bandwidth:40MHz; Channel:High



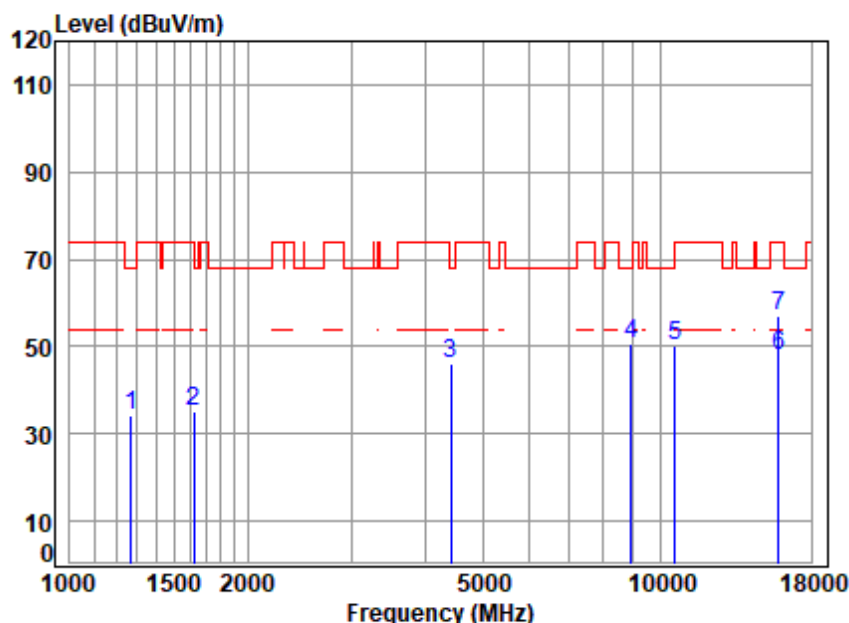
Site : chamber
Condition: 3m VERTICAL
Job No : 03819CR/03820CR
Mode : 5310 TX RSE
Note : 5G WIFI 11N40

	Freq	Cable Loss	Ant Factor	Preamplifier Factor	Read Level	Level	Limit	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1249.269	2.77	24.81	40.32	45.45	32.71	68.20	-35.49	peak
2	1692.231	3.28	26.64	40.63	45.98	35.27	74.00	-38.73	peak
3	4341.886	6.46	33.33	42.43	48.48	45.84	74.00	-28.16	peak
4	8176.795	8.37	36.81	40.89	46.50	50.79	74.00	-23.21	peak
5	10620.000	9.95	37.72	38.30	41.46	50.83	74.00	-23.17	peak
6	15930.000	12.17	40.96	40.57	35.95	48.51	54.00	-5.49	Average
7	15930.000	12.17	40.96	40.57	45.43	57.99	74.00	-16.01	peak



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Mode:b; Polarization:Horizontal; Modulation:802.11ac; bandwidth:80MHz; Channel:middle

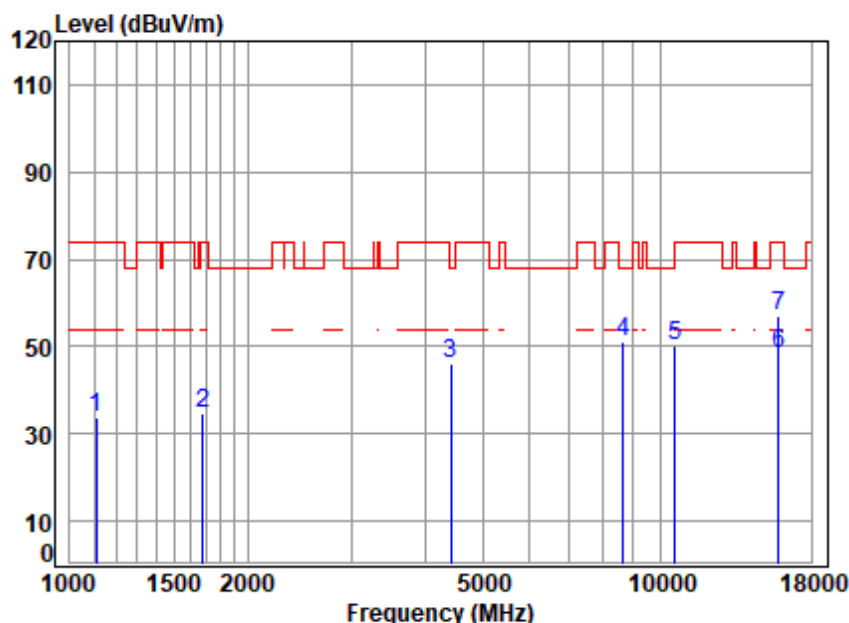


Site : chamber
Condition: 3m HORIZONTAL
Job No : 03819CR/03820CR
Mode : 5290 TX RSE
Note : 5G WIFI 11AC80

	Freq	Cable Loss	Ant Factor	Preamplifier Factor	Read Level	Level	Limit	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1271.123	2.82	24.90	40.34	47.02	34.40	68.20	-33.80	peak
2	1620.431	3.03	26.34	40.58	46.45	35.24	74.00	-38.76	peak
3	4417.841	6.63	33.46	42.49	48.56	46.16	68.20	-22.04	peak
4	8917.462	8.45	37.17	39.64	44.52	50.50	68.20	-17.70	peak
5	10580.000	9.82	37.72	38.28	40.94	50.20	68.20	-18.00	peak
6	15870.000	11.96	40.92	40.57	35.72	48.03	54.00	-5.97	Average
7	15870.000	11.96	40.92	40.57	44.84	57.15	74.00	-16.85	peak



Mode:b; Polarization:Vertical; Modulation:802.11ac; bandwidth:80MHz; Channel:middle



Site : chamber
Condition: 3m VERTICAL
Job No : 03819CR/03820CR
Mode : 5290 TX RSE
Note : 5G WIFI 11AC80

	Freq	Cable Loss	Ant Factor	Preamplifier Factor	Read Level	Level	Limit	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1109.660	2.23	24.16	40.20	47.37	33.56	74.00	-40.44	peak
2	1677.621	3.23	26.58	40.62	45.71	34.90	74.00	-39.10	peak
3	4417.841	6.63	33.46	42.49	48.31	45.91	68.20	-22.29	peak
4	8638.399	8.78	37.06	40.10	45.53	51.27	68.20	-16.93	peak
5	10580.000	9.82	37.72	38.28	40.83	50.09	68.20	-18.11	peak
6	15870.000	11.96	40.92	40.57	36.04	48.35	54.00	-5.65	Average
7	15870.000	11.96	40.92	40.57	44.66	56.97	74.00	-17.03	peak

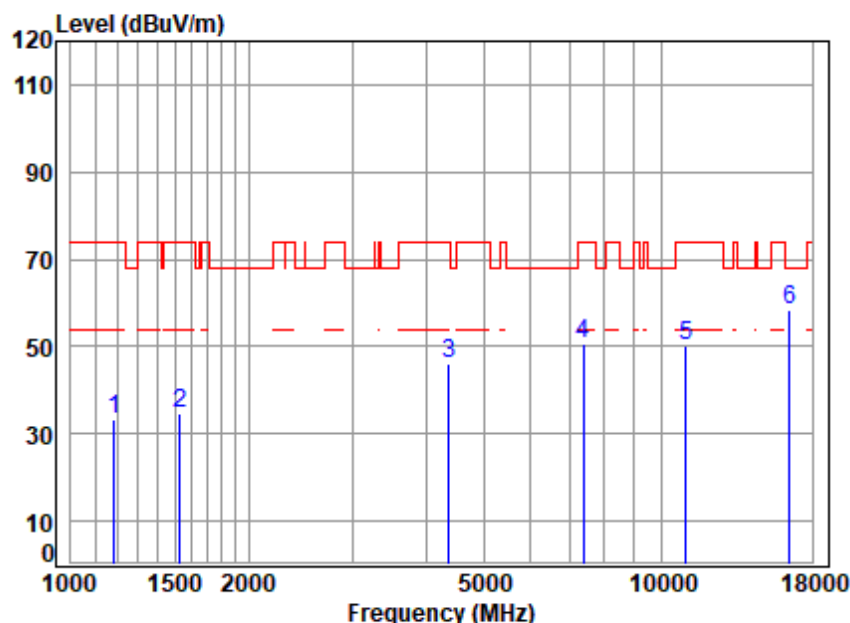


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Shenzhen Branch

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Mode:c; Polarization:Horizontal; Modulation:802.11a; bandwidth:20MHz; Channel:Low

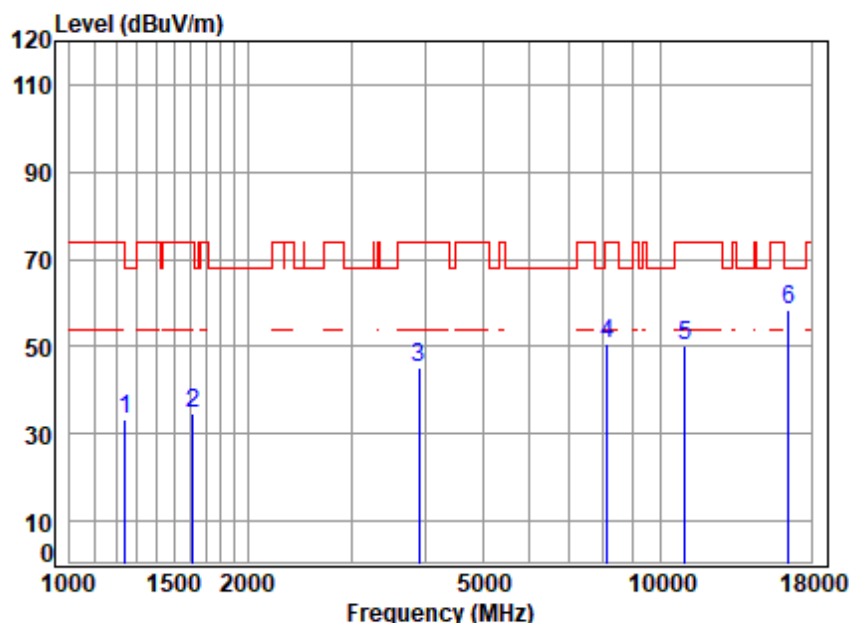


Site : chamber
Condition: 3m HORIZONTAL
Job No : 03819CR/03820CR
Mode : 5500 TX RSE
Note : 5G WIFI 11A

	Freq	Cable Loss	Ant Factor	Preamplifier Factor	Read Level	Level	Limit	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1185.936	2.57	24.53	40.27	46.36	33.19	74.00	-40.81	peak
2	1529.414	2.98	25.94	40.53	46.17	34.56	74.00	-39.44	peak
3	4367.058	6.56	33.37	42.45	48.48	45.96	74.00	-28.04	peak
4	7390.070	8.20	36.21	41.49	47.55	50.47	74.00	-23.53	peak
5	11000.000	9.98	37.80	38.47	40.67	49.98	74.00	-24.02	peak
6	16500.000	12.91	42.20	40.55	43.64	58.20	68.20	-10.00	peak



Mode:c; Polarization:Vertical; Modulation:802.11a; bandwidth:20MHz; Channel:Low

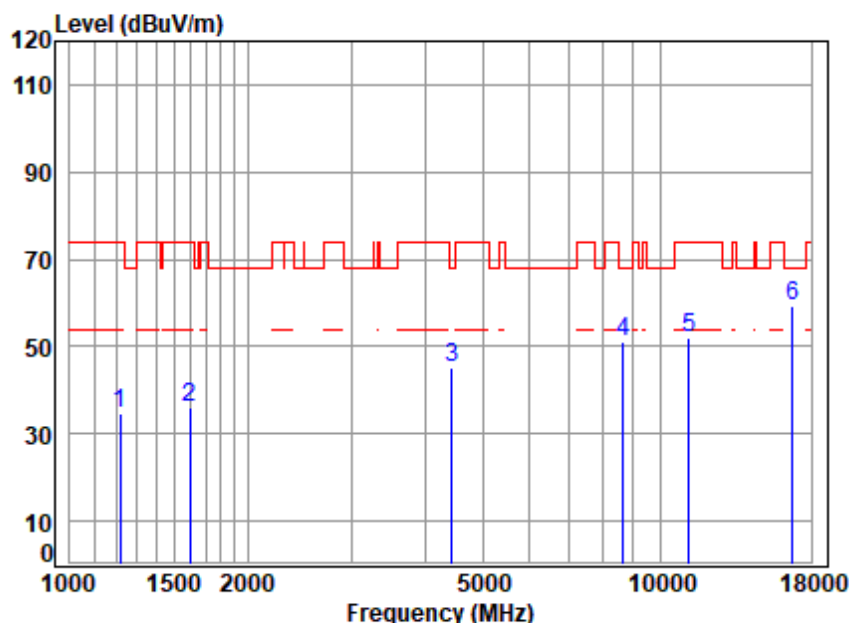


Site : chamber
Condition: 3m VERTICAL
Job No : 03819CR/03820CR
Mode : 5500 TX RSE
Note : 5G WIFI 11A

	Freq	Cable Loss	Ant Factor	Preamplifier Factor	Read Level	Level	Limit	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1242.068	2.75	24.78	40.32	45.90	33.11	68.20	-35.09	peak
2	1615.754	3.01	26.32	40.58	46.09	34.84	74.00	-39.16	peak
3	3901.516	6.01	32.51	42.07	48.65	45.10	74.00	-28.90	peak
4	8129.664	8.41	36.78	40.97	46.55	50.77	74.00	-23.23	peak
5	11000.000	9.98	37.80	38.47	41.03	50.34	74.00	-23.66	peak
6	16500.000	12.91	42.20	40.55	43.99	58.55	68.20	-9.65	peak



Mode:c; Polarization:Horizontal; Modulation:802.11a; bandwidth:20MHz; Channel:middle

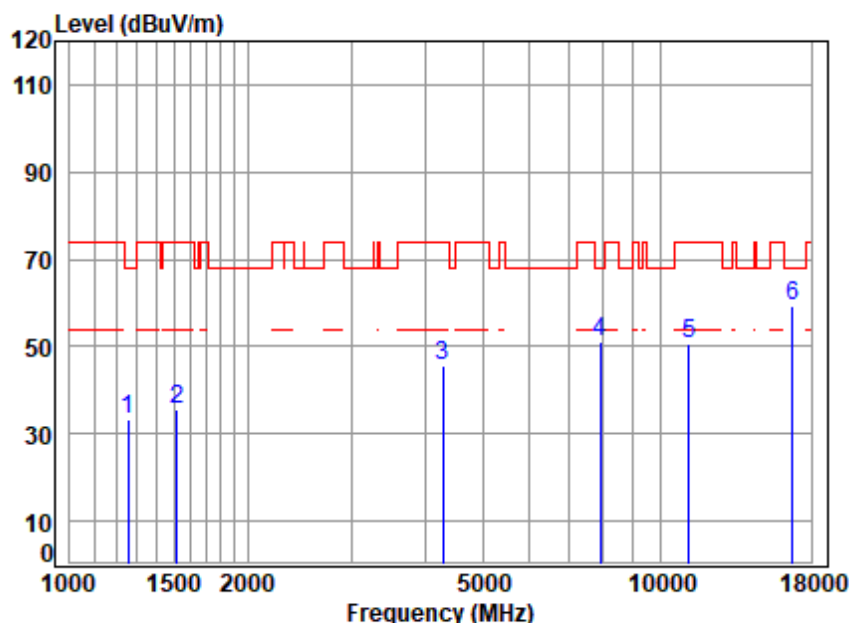


Site : chamber
Condition: 3m HORIZONTAL
Job No : 03819CR/03820CR
Mode : 5580 TX RSE
Note : 5G WIFI 11A

	Freq	Cable Loss	Ant Factor	Preamplifier Factor	Read Level	Level	Limit	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1217.190	2.68	24.67	40.30	47.64	34.69	74.00	-39.31	peak
2	1597.181	2.95	26.24	40.57	47.37	35.99	74.00	-38.01	peak
3	4443.453	6.55	33.50	42.51	47.64	45.18	68.20	-23.02	peak
4	8663.404	8.70	37.07	40.06	45.42	51.13	68.20	-17.07	peak
5	11160.000	10.25	37.83	38.54	42.26	51.80	74.00	-22.20	peak
6	16740.000	13.55	42.39	40.54	43.90	59.30	68.20	-8.90	peak



Mode:c; Polarization:Vertical; Modulation:802.11a; bandwidth:20MHz; Channel:middle

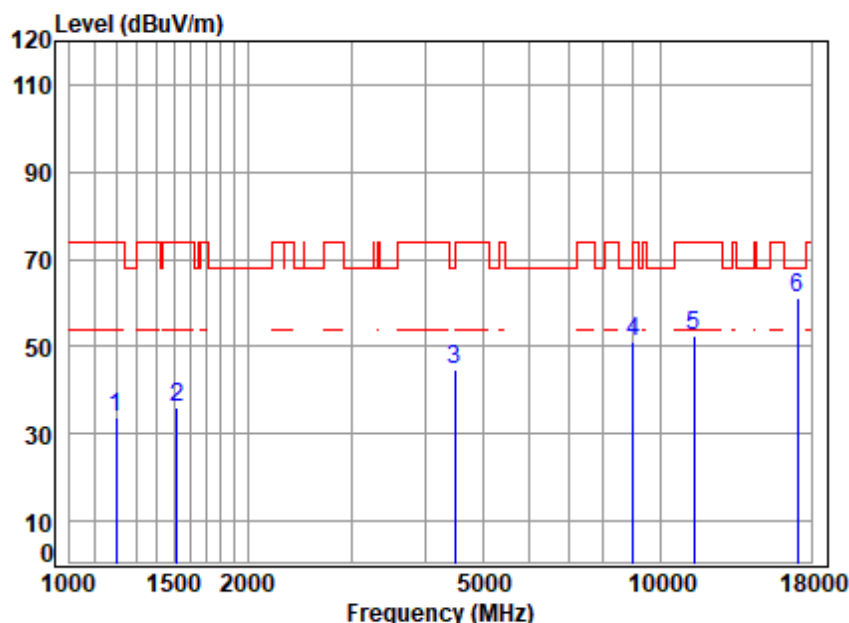


Site : chamber
Condition: 3m VERTICAL
Job No : 03819CR/03820CR
Mode : 5580 TX RSE
Note : 5G WIFI 11A

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1256.512	2.79	24.84	40.33	46.04	33.34	68.20	-34.86	peak
2	1520.598	2.98	25.89	40.52	47.32	35.67	74.00	-38.33	peak
3	4279.589	6.27	33.22	42.38	48.63	45.74	74.00	-28.26	peak
4	7920.911	8.28	36.64	41.24	47.20	50.88	68.20	-17.32	peak
5	11160.000	10.25	37.83	38.54	41.27	50.81	74.00	-23.19	peak
6	16740.000	13.55	42.39	40.54	43.96	59.36	68.20	-8.84	peak



Mode:c; Polarization:Horizontal; Modulation:802.11a; bandwidth:20MHz; Channel:High

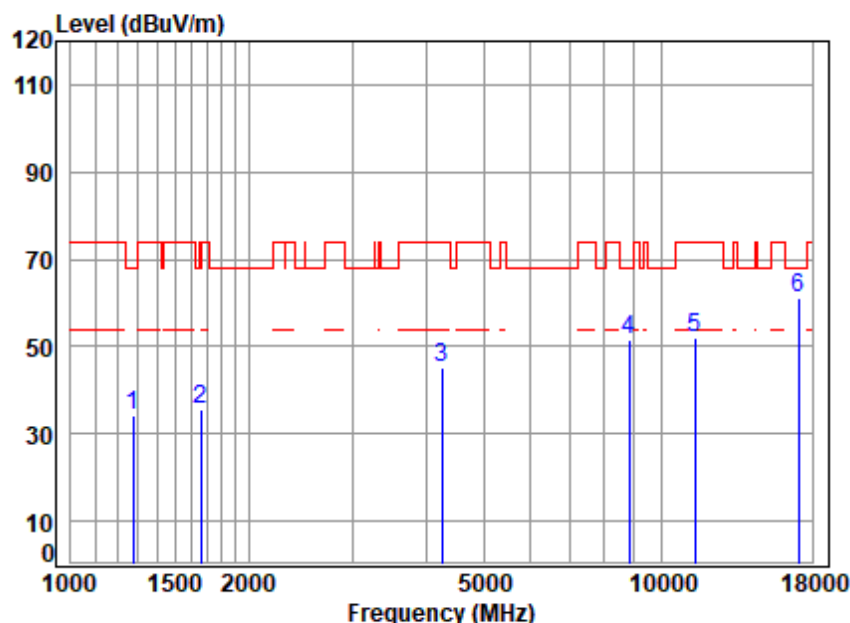


Site : chamber
Condition: 3m HORIZONTAL
Job No : 03819CR/03820CR
Mode : 5700 TX RSE
Note : 5G WIFI 11A

	Freq	Cable Loss	Ant Factor	Preamplifier Factor	Read Level	Level	Limit	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1199.726	2.63	24.59	40.28	46.88	33.82	74.00	-40.18	peak
2	1520.598	2.98	25.89	40.52	47.65	36.00	74.00	-38.00	peak
3	4482.150	6.43	33.57	42.54	47.42	44.88	68.20	-23.32	peak
4	8995.123	9.03	37.20	39.52	44.21	50.92	68.20	-17.28	peak
5	11400.000	11.52	37.88	38.65	41.82	52.57	74.00	-21.43	peak
6	17100.000	13.23	42.66	40.53	45.93	61.29	68.20	-6.91	peak



Mode:c; Polarization:Vertical; Modulation:802.11a; bandwidth:20MHz; Channel:High

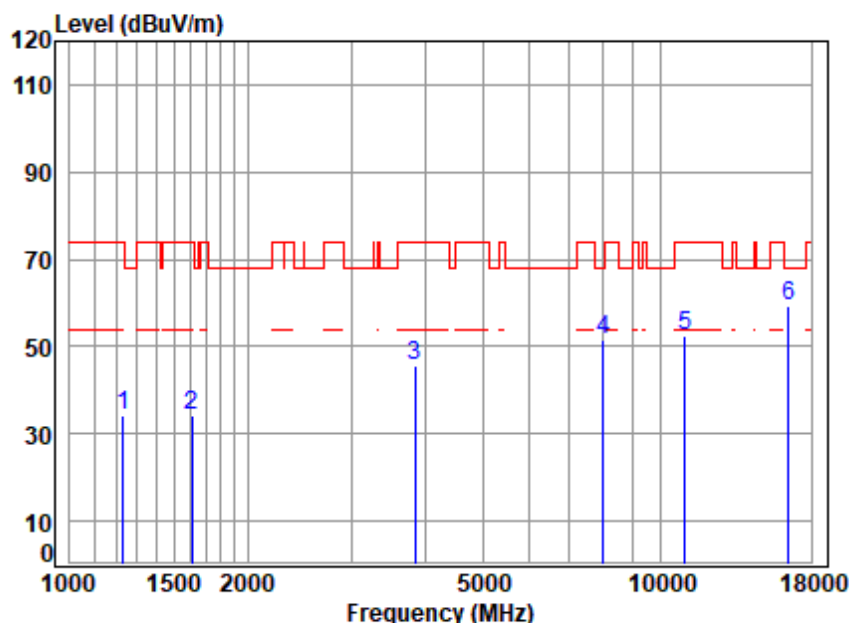


Site : chamber
Condition: 3m VERTICAL
Job No : 03819CR/03820CR
Mode : 5700 TX RSE
Note : 5G WIFI 11A

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1274.802	2.83	24.92	40.34	46.94	34.35	68.20	-33.85	peak
2	1658.337	3.16	26.50	40.61	46.67	35.72	68.20	-32.48	peak
3	4242.641	6.20	33.15	42.35	48.01	45.01	74.00	-28.99	peak
4	8814.957	8.44	37.13	39.81	45.90	51.66	68.20	-16.54	peak
5	11400.000	11.52	37.88	38.65	41.14	51.89	74.00	-22.11	peak
6	17100.000	13.23	42.66	40.53	45.73	61.09	68.20	-7.11	peak



Mode:c; Polarization:Horizontal; Modulation:802.11n; bandwidth:20MHz; Channel:Low

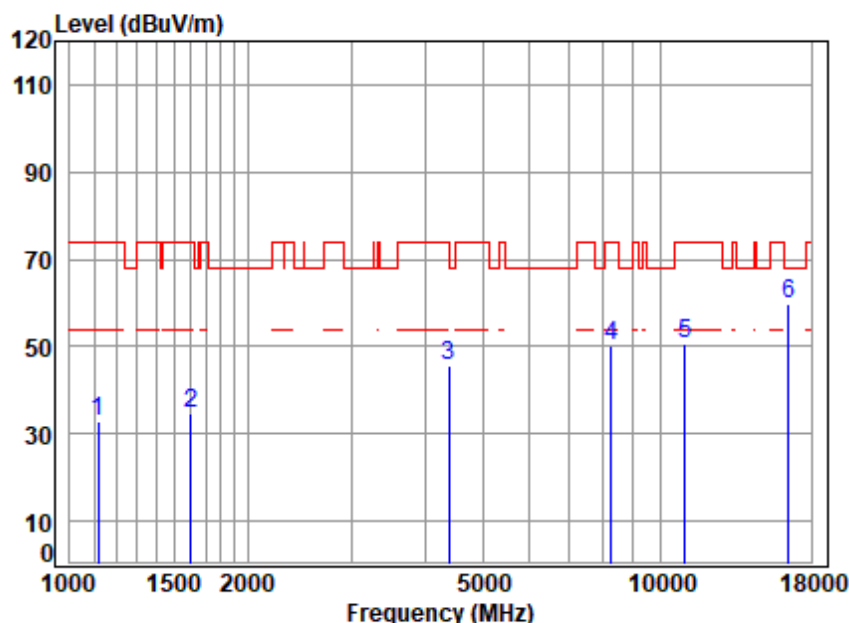


Site : chamber
Condition: 3m HORIZONTAL
Job No : 03819CR/03820CR
Mode : 5500 TX RSE
Note : 5G WIFI 11N20

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1231.345	2.72	24.73	40.31	47.08	34.22	74.00	-39.78	peak
2	1611.091	2.99	26.30	40.58	45.50	34.21	74.00	-39.79	peak
3	3845.537	6.56	32.41	42.03	48.52	45.46	74.00	-28.54	peak
4	8013.020	8.28	36.71	41.18	47.96	51.77	68.20	-16.43	peak
5	11000.000	9.98	37.80	38.47	42.99	52.30	74.00	-21.70	peak
6	16500.000	12.91	42.20	40.55	44.64	59.20	68.20	-9.00	peak



Mode:c; Polarization:Vertical; Modulation:802.11n; bandwidth:20MHz; Channel:Low

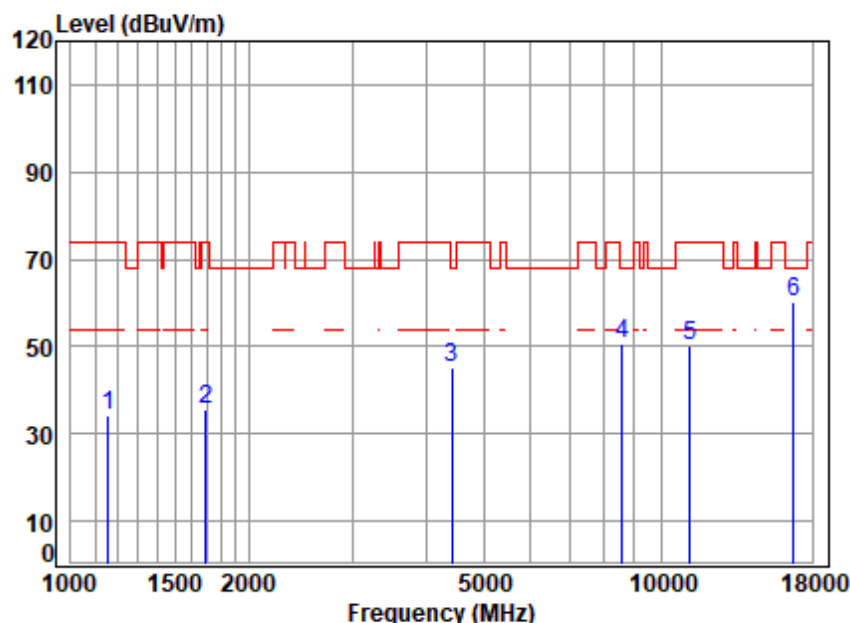


Site : chamber
Condition: 3m VERTICAL
Job No : 03819CR/03820CR
Mode : 5500 TX RSE
Note : 5G WIFI 11N20

	Freq	Cable Loss	Ant Factor	Preamplifier Factor	Read Level	Level	Limit	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1119.323	2.28	24.21	40.21	46.46	32.74	74.00	-41.26	peak
2	1601.804	2.96	26.26	40.57	46.13	34.78	74.00	-39.22	peak
3	4379.699	6.61	33.39	42.46	48.29	45.83	74.00	-28.17	peak
4	8248.005	8.27	36.85	40.76	45.89	50.25	74.00	-23.75	peak
5	11000.000	9.98	37.80	38.47	41.16	50.47	74.00	-23.53	peak
6	16500.000	12.91	42.20	40.55	45.20	59.76	68.20	-8.44	peak



Mode:c; Polarization:Horizontal; Modulation:802.11n; bandwidth:20MHz; Channel:middle

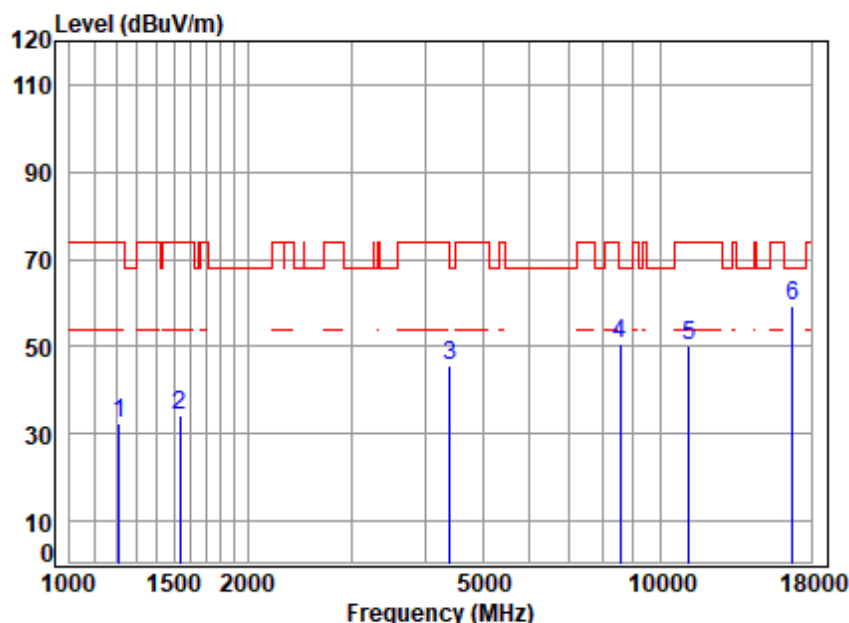


Site : chamber
Condition: 3m HORIZONTAL
Job No : 03819CR/03820CR
Mode : 5580 TX RSE
Note : 5G WIFI 11N20

	Freq	Cable Loss	Ant Factor	Preamplifier Factor	Read Level	Level	Limit	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1158.828	2.45	24.40	40.25	47.81	34.41	74.00	-39.59	peak
2	1692.231	3.28	26.64	40.63	46.42	35.71	74.00	-38.29	peak
3	4417.841	6.63	33.46	42.49	47.47	45.07	68.20	-23.13	peak
4	8588.607	8.88	37.04	40.18	44.98	50.72	68.20	-17.48	peak
5	11160.000	10.25	37.83	38.54	40.79	50.33	74.00	-23.67	peak
6	16740.000	13.55	42.39	40.54	44.92	60.32	68.20	-7.88	peak



Mode:c; Polarization:Vertical; Modulation:802.11n; bandwidth:20MHz; Channel:middle

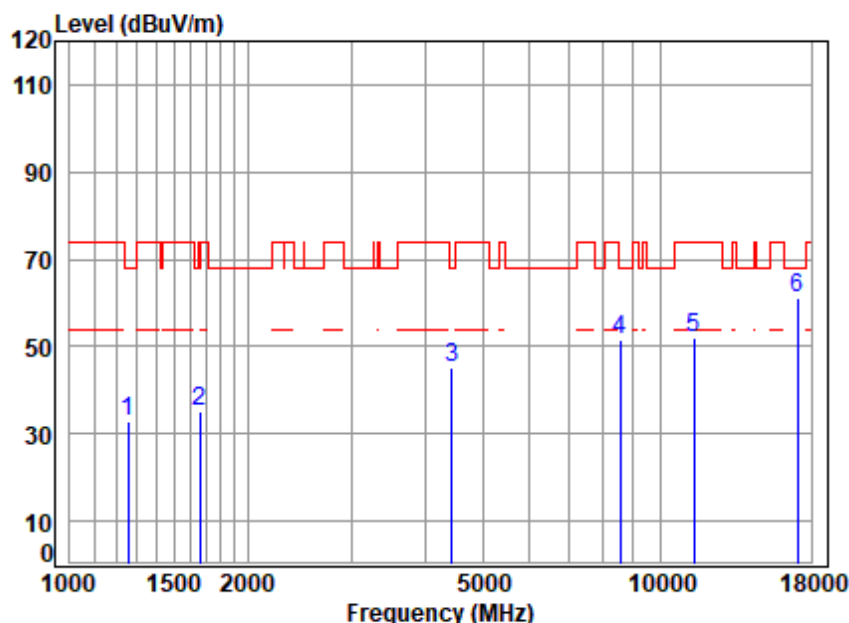


Site : chamber
Condition: 3m VERTICAL
Job No : 03819CR/03820CR
Mode : 5580 TX RSE
Note : 5G WIFI 11N20

	Freq	Cable Loss	Ant Factor	Preamplifier Factor	Read Level	Level	Limit	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1213.677	2.67	24.65	40.29	45.57	32.60	74.00	-41.40	peak
2	1538.281	2.97	25.98	40.53	45.86	34.28	74.00	-39.72	peak
3	4405.090	6.67	33.44	42.48	47.85	45.48	68.20	-22.72	peak
4	8539.102	8.73	37.02	40.26	45.13	50.62	68.20	-17.58	peak
5	11160.000	10.25	37.83	38.54	40.83	50.37	74.00	-23.63	peak
6	16740.000	13.55	42.39	40.54	43.89	59.29	68.20	-8.91	peak



Mode:c; Polarization:Horizontal; Modulation:802.11n; bandwidth:20MHz; Channel:High

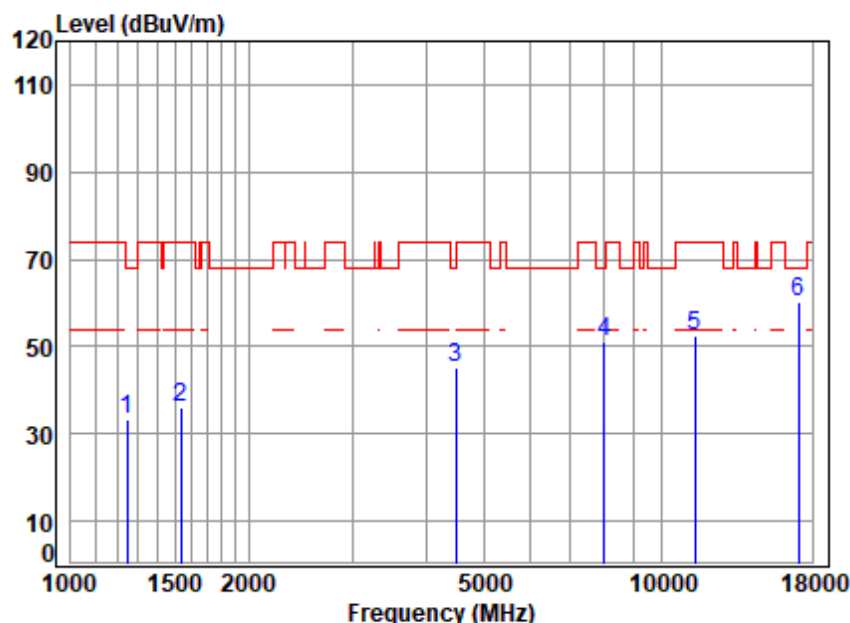


Site : chamber
Condition: 3m HORIZONTAL
Job No : 03819CR/03820CR
Mode : 5700 TX RSE
Note : 5G WIFI 11N20

	Freq	Cable Loss	Ant Factor	Preamplifier Factor	Read Level	Level	Limit	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1256.512	2.79	24.84	40.33	45.43	32.73	68.20	-35.47	peak
2	1663.137	3.18	26.52	40.61	45.87	34.96	74.00	-39.04	peak
3	4430.628	6.59	33.48	42.50	47.81	45.38	68.20	-22.82	peak
4	8539.102	8.73	37.02	40.26	46.01	51.50	68.20	-16.70	peak
5	11400.000	11.52	37.88	38.65	41.26	52.01	74.00	-21.99	peak
6	17100.000	13.23	42.66	40.53	45.60	60.96	68.20	-7.24	peak



Mode:c; Polarization:Vertical; Modulation:802.11n; bandwidth:20MHz; Channel:High



Site : chamber
Condition: 3m VERTICAL
Job No : 03819CR/03820CR
Mode : 5700 TX RSE
Note : 5G WIFI 11N20

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1245.663	2.76	24.79	40.32	45.89	33.12	68.20	-35.08	peak
2	1538.281	2.97	25.98	40.53	47.56	35.98	74.00	-38.02	peak
3	4495.125	6.39	33.59	42.55	47.86	45.29	68.20	-22.91	peak
4	8013.020	8.28	36.71	41.18	47.40	51.21	68.20	-16.99	peak
5	11400.000	11.52	37.88	38.65	41.55	52.30	74.00	-21.70	peak
6	17100.000	13.23	42.66	40.53	44.79	60.15	68.20	-8.05	peak

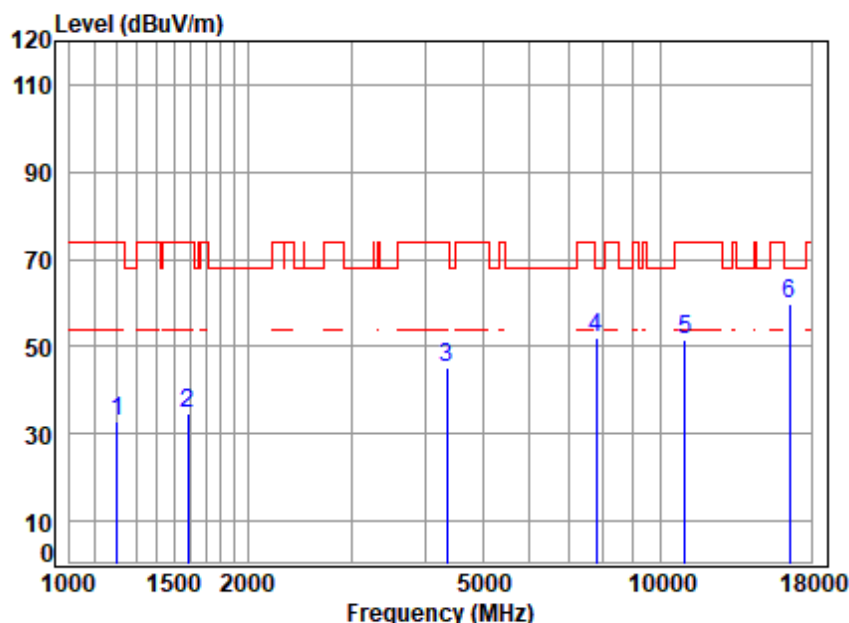


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Mode:c; Polarization:Horizontal; Modulation:802.11n; bandwidth:40MHz; Channel:Low

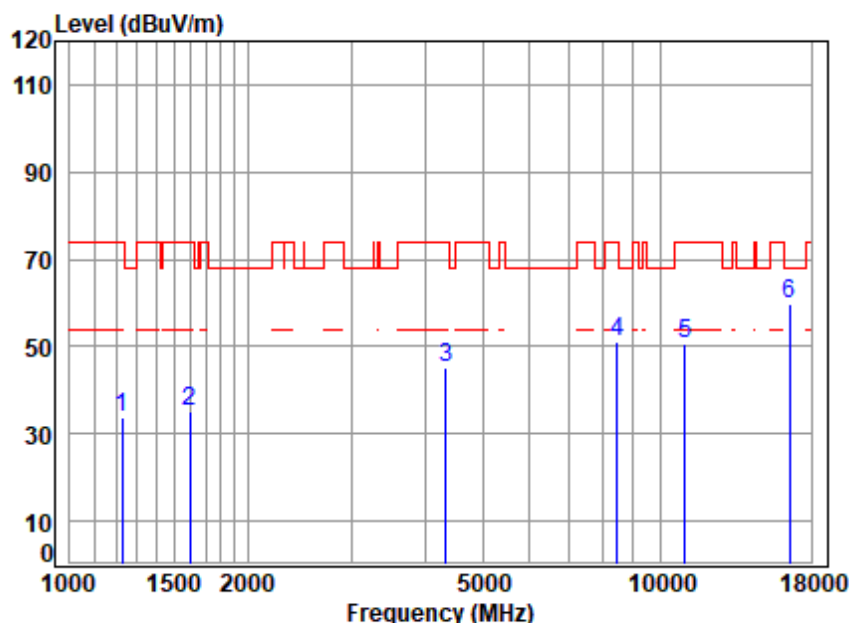


Site : chamber
Condition: 3m HORIZONTAL
Job No : 03819CR/03820CR
Mode : 5510 TX RSE
Note : 5G WIFI 11N40

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1203.199	2.64	24.60	40.29	46.06	33.01	74.00	-40.99	peak
2	1583.392	2.96	26.18	40.56	46.08	34.66	74.00	-39.34	peak
3	4354.454	6.51	33.35	42.44	47.74	45.16	74.00	-28.84	peak
4	7784.729	8.59	36.53	41.30	48.27	52.09	68.20	-16.11	peak
5	11020.000	9.97	37.80	38.48	42.17	51.46	74.00	-22.54	peak
6	16530.000	13.00	42.22	40.55	45.05	59.72	68.20	-8.48	peak



Mode:c; Polarization:Vertical; Modulation:802.11n; bandwidth:40MHz; Channel:Low

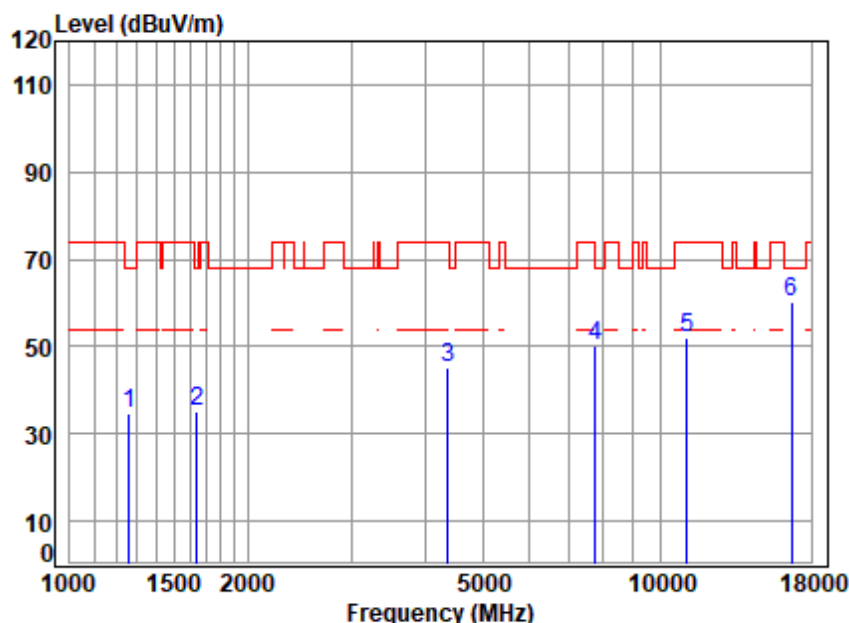


Site : chamber
Condition: 3m VERTICAL
Job No : 03819CR/03820CR
Mode : 5510 TX RSE
Note : 5G WIFI 11N40

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1227.791	2.71	24.71	40.31	46.77	33.88	74.00	-40.12	peak
2	1597.181	2.95	26.24	40.57	46.63	35.25	74.00	-38.75	peak
3	4341.886	6.46	33.33	42.43	47.95	45.31	74.00	-28.69	peak
4	8465.379	8.52	36.98	40.39	45.89	51.00	74.00	-23.00	peak
5	11020.000	9.97	37.80	38.48	41.25	50.54	74.00	-23.46	peak
6	16530.000	13.00	42.22	40.55	45.17	59.84	68.20	-8.36	peak



Mode:c; Polarization:Horizontal; Modulation:802.11n; bandwidth:40MHz; Channel:middle

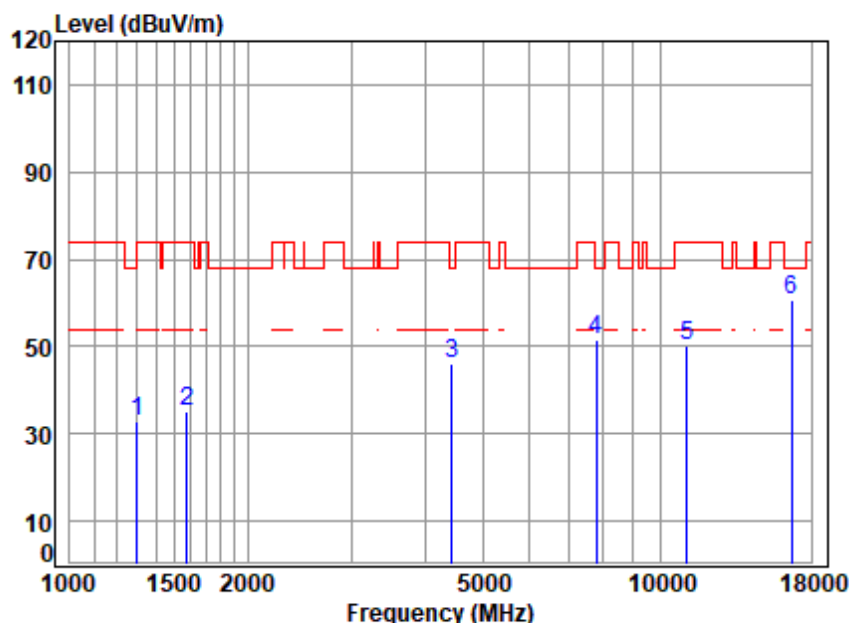


Site : chamber
Condition: 3m HORIZONTAL
Job No : 03819CR/03820CR
Mode : 5550 TX RSE
Note : 5G WIFI 11N40

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1260.149	2.79	24.85	40.33	47.15	34.46	68.20	-33.74	peak
2	1644.019	3.11	26.44	40.60	46.25	35.20	68.20	-33.00	peak
3	4367.058	6.56	33.37	42.45	47.87	45.35	74.00	-28.65	peak
4	7762.260	8.60	36.51	41.31	46.35	50.15	68.20	-18.05	peak
5	11100.000	9.92	37.82	38.52	42.85	52.07	74.00	-21.93	peak
6	16650.000	13.46	42.32	40.54	44.91	60.15	68.20	-8.05	peak



Mode:c; Polarization:Vertical; Modulation:802.11n; bandwidth:40MHz; Channel:middle

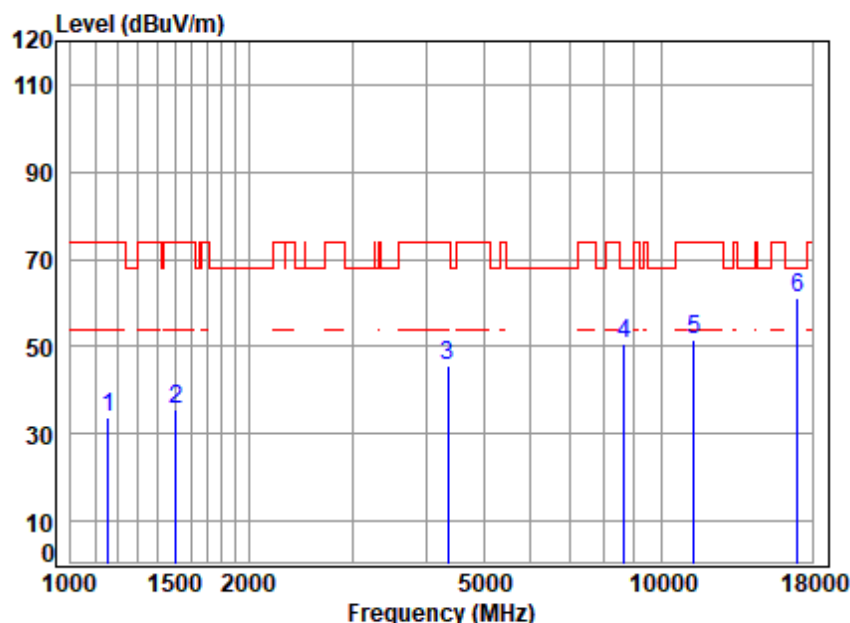


Site : chamber
Condition: 3m VERTICAL
Job No : 03819CR/03820CR
Mode : 5550 TX RSE
Note : 5G WIFI 11N40

	Freq	Cable Loss	Ant Factor	Preamplifier Factor	Read Level	Level	Limit	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1300.858	2.90	25.03	40.36	45.12	32.69	74.00	-41.31	peak
2	1578.822	2.96	26.16	40.56	46.71	35.27	74.00	-38.73	peak
3	4430.628	6.59	33.48	42.50	48.54	46.11	68.20	-22.09	peak
4	7784.729	8.59	36.53	41.30	47.86	51.68	68.20	-16.52	peak
5	11100.000	9.92	37.82	38.52	41.15	50.37	74.00	-23.63	peak
6	16650.000	13.46	42.32	40.54	45.31	60.55	68.20	-7.65	peak



Mode:c; Polarization:Horizontal; Modulation:802.11n; bandwidth:40MHz; Channel:High

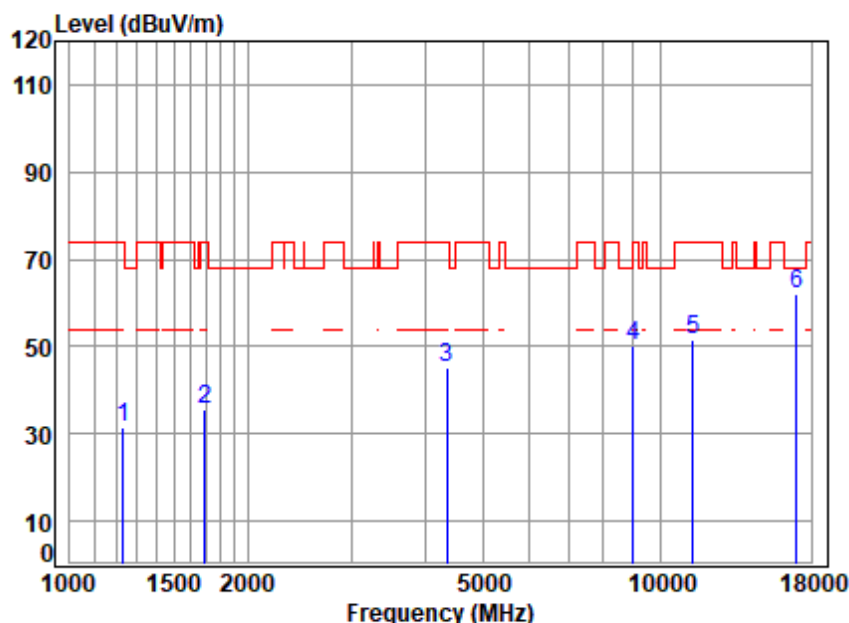


Site : chamber
Condition: 3m HORIZONTAL
Job No : 03819CR/03820CR
Mode : 5670 TX RSE
Note : 5G WIFI 11N40

	Freq	Cable Loss	Ant Factor	Preamplifier Factor	Read Level	Level	Limit	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1158.828	2.45	24.40	40.25	47.36	33.96	74.00	-40.04	peak
2	1507.470	2.99	25.83	40.51	47.09	35.40	74.00	-38.60	peak
3	4354.454	6.51	33.35	42.44	48.09	45.51	74.00	-28.49	peak
4	8663.404	8.70	37.07	40.06	45.07	50.78	68.20	-17.42	peak
5	11340.000	11.03	37.87	38.62	41.33	51.61	74.00	-22.39	peak
6	17010.000	15.43	42.61	40.53	43.83	61.34	68.20	-6.86	peak



Mode:c; Polarization:Vertical; Modulation:802.11n; bandwidth:40MHz; Channel:High

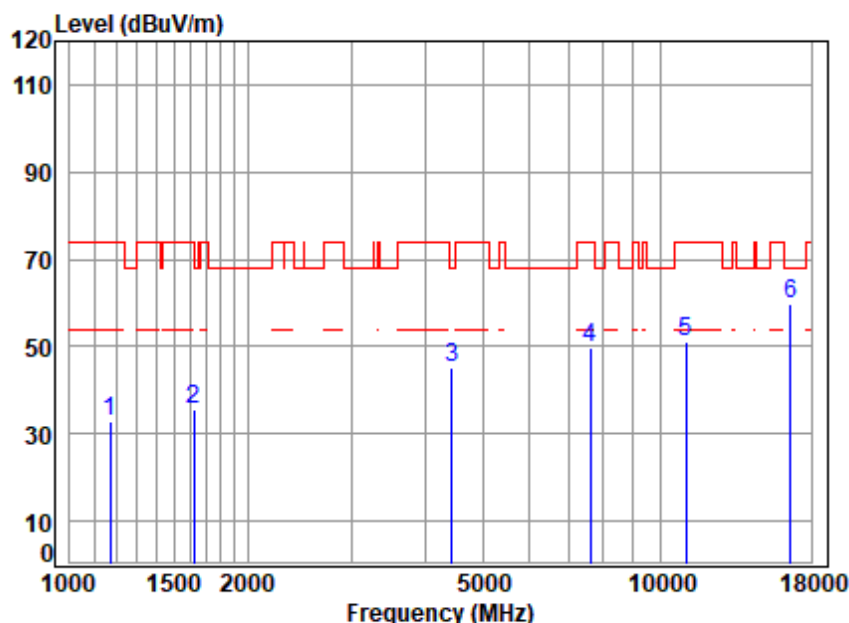


Site : chamber
Condition: 3m VERTICAL
Job No : 03819CR/03820CR
Mode : 5670 TX RSE
Note : 5G WIFI 11N40

	Freq	Cable Loss	Ant Factor	Preamplifier Factor	Read Level	Level	Limit	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1231.345	2.72	24.73	40.31	44.48	31.62	74.00	-42.38	peak
2	1692.231	3.28	26.64	40.63	46.45	35.74	74.00	-38.26	peak
3	4354.454	6.51	33.35	42.44	47.54	44.96	74.00	-29.04	peak
4	8995.123	9.03	37.20	39.52	43.47	50.18	68.20	-18.02	peak
5	11340.000	11.03	37.87	38.62	41.38	51.66	74.00	-22.34	peak
6	17010.000	15.43	42.61	40.53	44.38	61.89	68.20	-6.31	peak



Mode:c; Polarization:Horizontal; Modulation:802.11ac; bandwidth:80MHz; Channel:Low

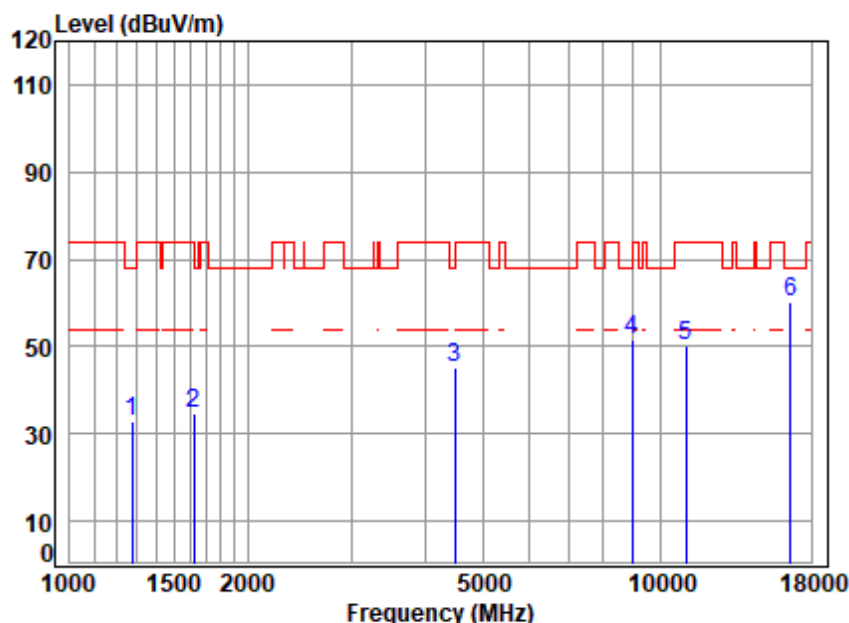


Site : chamber
Condition: 3m HORIZONTAL
Job No : 03819CR/03820CR
Mode : 5530 TX RSE
Note : 5G WIFI 11AC80

		Cable	Ant	Preamp	Read		Limit	Over	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1168.920	2.50	24.45	40.26	46.07	32.76	74.00	-41.24	peak
2	1625.121	3.04	26.36	40.59	46.55	35.36	74.00	-38.64	peak
3	4430.628	6.59	33.48	42.50	47.47	45.04	68.20	-23.16	peak
4	7606.788	7.94	36.39	41.38	46.92	49.87	74.00	-24.13	peak
5	11060.000	9.94	37.81	38.50	41.91	51.16	74.00	-22.84	peak
6	16590.000	13.18	42.27	40.54	45.03	59.94	68.20	-8.26	peak



Mode:c; Polarization:Vertical; Modulation:802.11ac; bandwidth:80MHz; Channel:Low

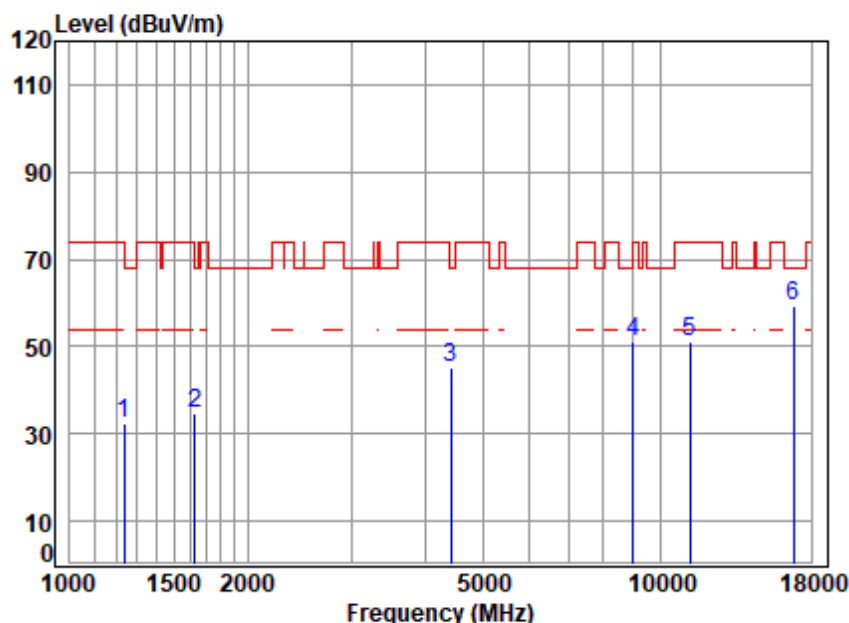


Site : chamber
Condition: 3m VERTICAL
Job No : 03819CR/03820CR
Mode : 5530 TX RSE
Note : 5G WIFI 11AC80

	Freq	Cable Loss	Ant Factor	Preamplifier Factor	Read Level	Level	Limit	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1274.802	2.83	24.92	40.34	45.46	32.87	68.20	-35.33	peak
2	1620.431	3.03	26.34	40.58	45.74	34.53	74.00	-39.47	peak
3	4482.150	6.43	33.57	42.54	47.72	45.18	68.20	-23.02	peak
4	8969.161	8.84	37.19	39.56	44.97	51.44	68.20	-16.76	peak
5	11060.000	9.94	37.81	38.50	40.99	50.24	74.00	-23.76	peak
6	16590.000	13.18	42.27	40.54	45.53	60.44	68.20	-7.76	peak



Mode:c; Polarization:Horizontal; Modulation:802.11ac; bandwidth:80MHz; Channel:High

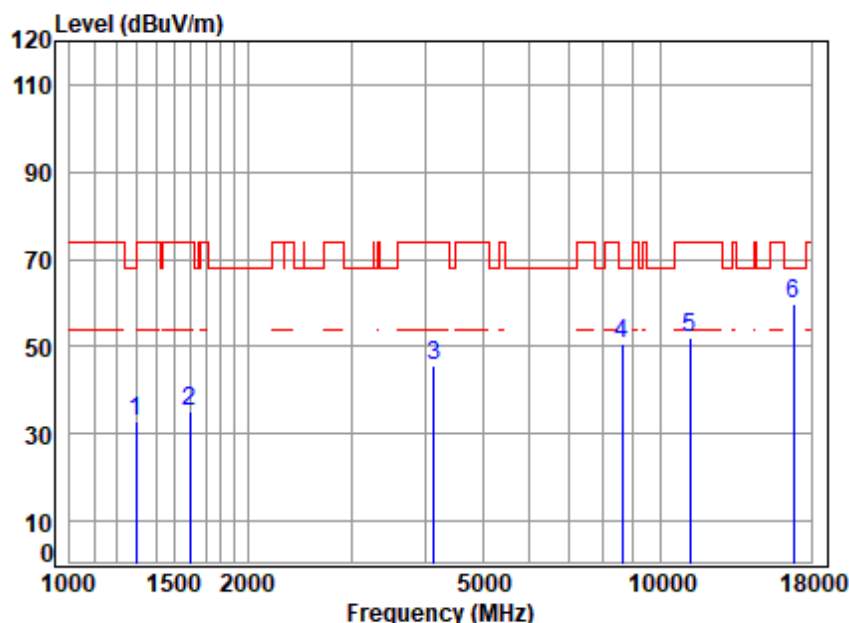


Site : chamber
Condition: 3m HORIZONTAL
Job No : 03819CR/03820CR
Mode : 5610 TX RSE
Note : 5G WIFI 11AC80

	Freq	Cable Loss	Ant Factor	Preamplifier Factor	Read Level	Level	Limit	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1238.483	2.74	24.76	40.31	44.99	32.18	74.00	-41.82	peak
2	1629.825	3.06	26.38	40.59	46.02	34.87	68.20	-33.33	peak
3	4417.841	6.63	33.46	42.49	47.53	45.13	68.20	-23.07	peak
4	8995.123	9.03	37.20	39.52	44.29	51.00	68.20	-17.20	peak
5	11220.000	10.52	37.84	38.57	41.43	51.22	74.00	-22.78	peak
6	16830.000	13.25	42.47	40.54	44.07	59.25	68.20	-8.95	peak



Mode:c; Polarization:Vertical; Modulation:802.11ac; bandwidth:80MHz; Channel:High

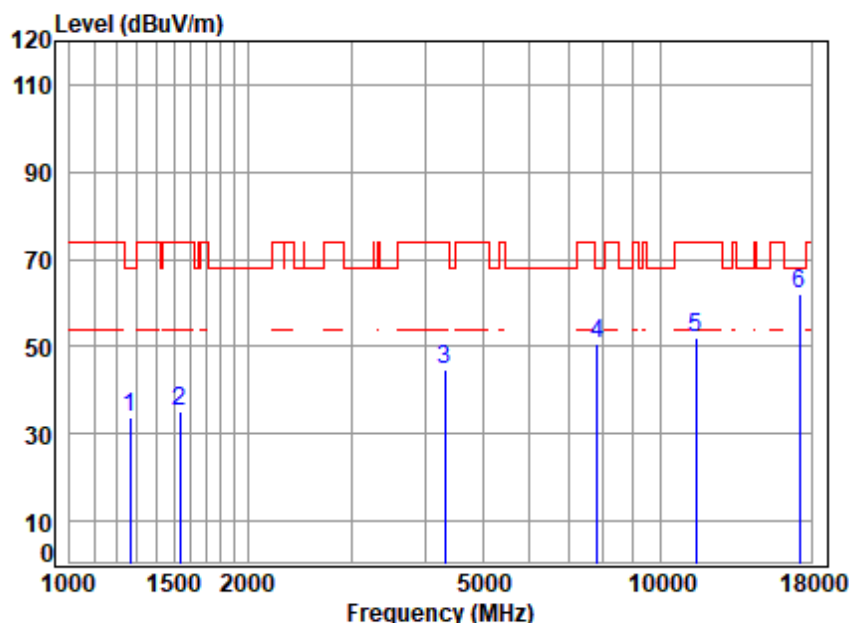


Site : chamber
Condition: 3m VERTICAL
Job No : 03819CR/03820CR
Mode : 5610 TX RSE
Note : 5G WIFI 11AC80

	Freq	Cable Loss	Ant Factor	Preamplifier Factor	Read Level	Level	Limit	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1297.103	2.89	25.01	40.36	45.21	32.75	68.20	-35.45	peak
2	1597.181	2.95	26.24	40.57	46.42	35.04	74.00	-38.96	peak
3	4133.699	6.04	32.95	42.27	48.95	45.67	74.00	-28.33	peak
4	8613.468	8.87	37.05	40.14	44.90	50.68	68.20	-17.52	peak
5	11220.000	10.52	37.84	38.57	42.01	51.80	74.00	-22.20	peak
6	16830.000	13.25	42.47	40.54	44.64	59.82	68.20	-8.38	peak



Mode:d; Polarization:Horizontal; Modulation:802.11a; bandwidth:20MHz; Channel:Low

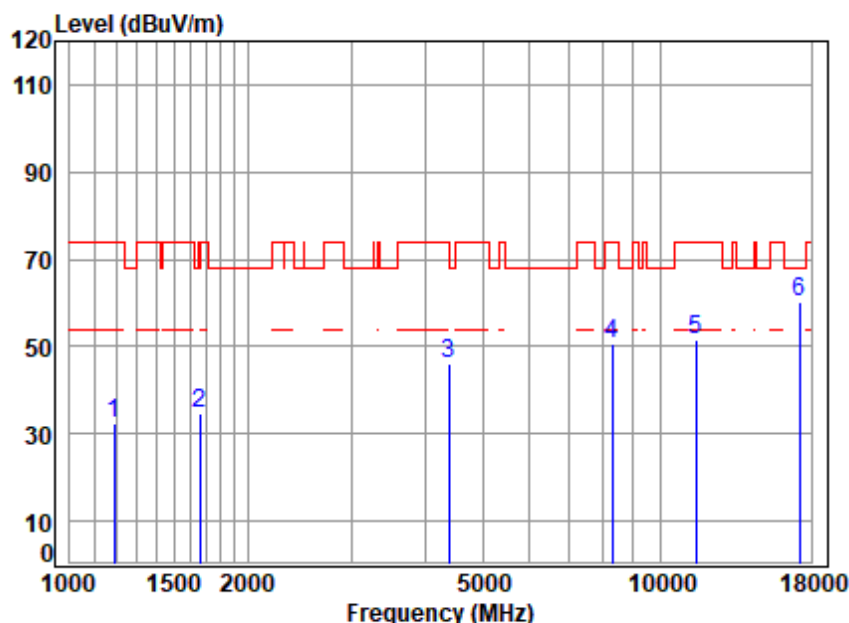


Site : chamber
Condition: 3m HORIZONTAL
Job No : 03819CR/03820CR
Mode : 5745 TX RSE
Note : 5G WIFI 11A

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1263.796	2.80	24.87	40.33	46.61	33.95	68.20	-34.25	peak
2	1538.281	2.97	25.98	40.53	46.79	35.21	74.00	-38.79	peak
3	4316.859	6.37	33.28	42.41	47.34	44.58	74.00	-29.42	peak
4	7807.262	8.57	36.55	41.29	46.79	50.62	68.20	-17.58	peak
5	11490.000	10.99	37.90	38.69	41.63	51.83	74.00	-22.17	peak
6	17235.000	14.32	42.74	40.52	45.37	61.91	68.20	-6.29	peak



Mode:d; Polarization:Vertical; Modulation:802.11a; bandwidth:20MHz; Channel:Low

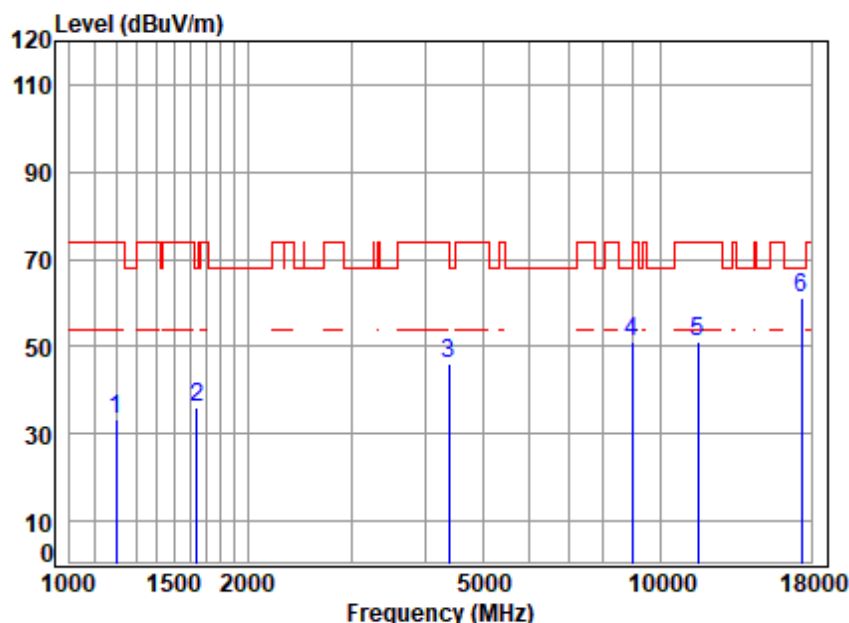


Site : chamber
Condition: 3m VERTICAL
Job No : 03819CR/03820CR
Mode : 5745 TX RSE
Note : 5G WIFI 11A

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1189.368	2.58	24.54	40.27	45.67	32.52	74.00	-41.48	peak
2	1658.337	3.16	26.50	40.61	45.50	34.55	68.20	-33.65	peak
3	4379.699	6.61	33.39	42.46	48.41	45.95	74.00	-28.05	peak
4	8295.823	8.20	36.88	40.68	46.26	50.66	74.00	-23.34	peak
5	11490.000	10.99	37.90	38.69	41.15	51.35	74.00	-22.65	peak
6	17235.000	14.32	42.74	40.52	43.60	60.14	68.20	-8.06	peak



Mode:d; Polarization:Horizontal; Modulation:802.11a; bandwidth:20MHz; Channel:middle

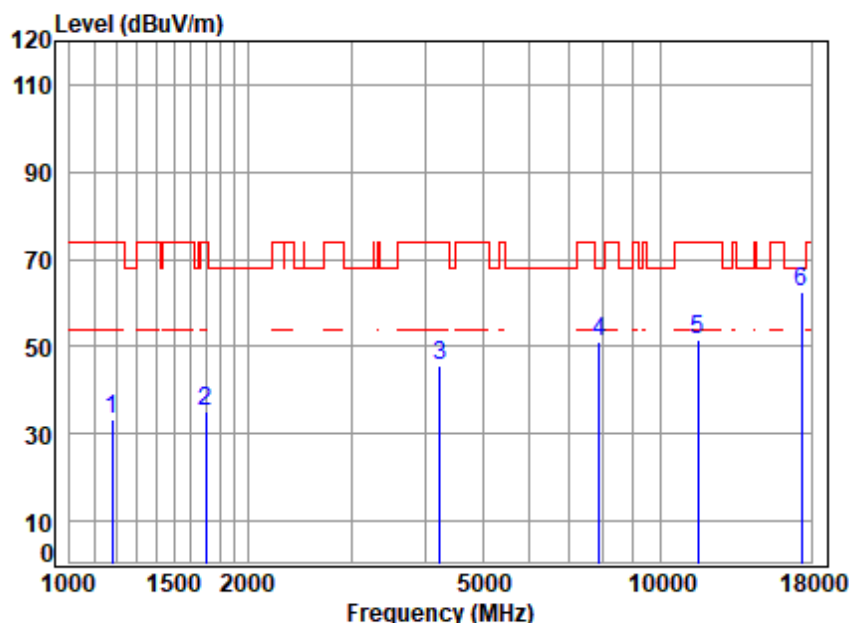


Site : chamber
Condition: 3m HORIZONTAL
Job No : 03819CR/03820CR
Mode : 5785 TX RSE
Note : 5G WIFI 11A

	Freq	Cable Loss	Ant Factor	Preamplifier Factor	Read Level	Level	Limit	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1199.726	2.63	24.59	40.28	46.56	33.50	74.00	-40.50	peak
2	1644.019	3.11	26.44	40.60	46.87	35.82	68.20	-32.38	peak
3	4392.376	6.66	33.42	42.47	48.64	46.25	74.00	-27.75	peak
4	8969.161	8.84	37.19	39.56	44.68	51.15	68.20	-17.05	peak
5	11570.000	10.66	37.87	38.72	41.20	51.01	74.00	-22.99	peak
6	17355.000	13.87	42.81	40.52	45.16	61.32	68.20	-6.88	peak



Mode:d; Polarization:Vertical; Modulation:802.11a; bandwidth:20MHz; Channel:middle

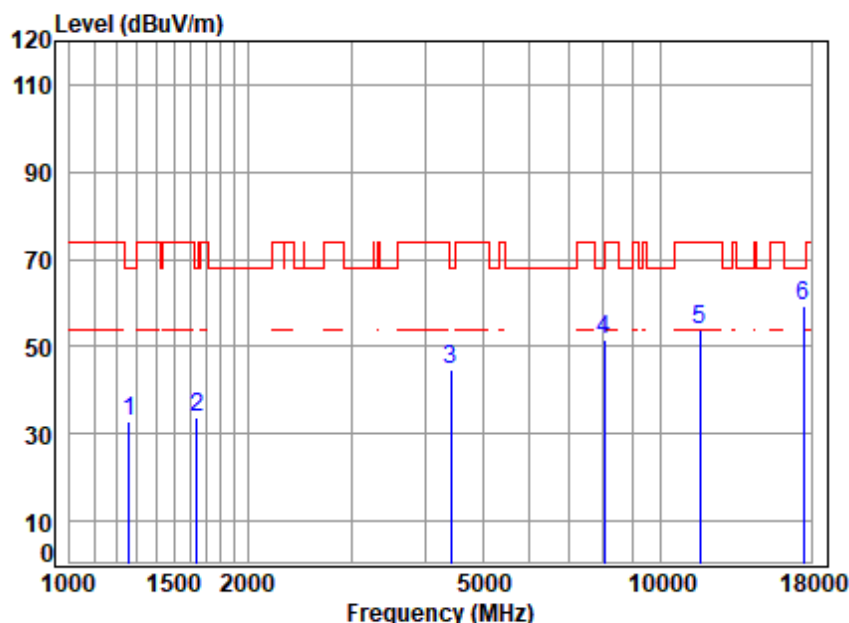


Site : chamber
Condition: 3m VERTICAL
Job No : 03819CR/03820CR
Mode : 5785 TX RSE
Note : 5G WIFI 11A

	Freq	Cable Loss	Ant Factor	Preamplifier Factor	Read Level	Level	Limit	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1179.100	2.54	24.49	40.26	46.69	33.46	74.00	-40.54	peak
2	1702.042	3.30	26.68	40.63	45.58	34.93	74.00	-39.07	peak
3	4230.396	6.18	33.13	42.34	48.65	45.62	74.00	-28.38	peak
4	7875.254	8.36	36.60	41.26	47.33	51.03	68.20	-17.17	peak
5	11570.000	10.66	37.87	38.72	41.79	51.60	74.00	-22.40	peak
6	17355.000	13.87	42.81	40.52	46.24	62.40	68.20	-5.80	peak



Mode:d; Polarization:Horizontal; Modulation:802.11a; bandwidth:20MHz; Channel:High

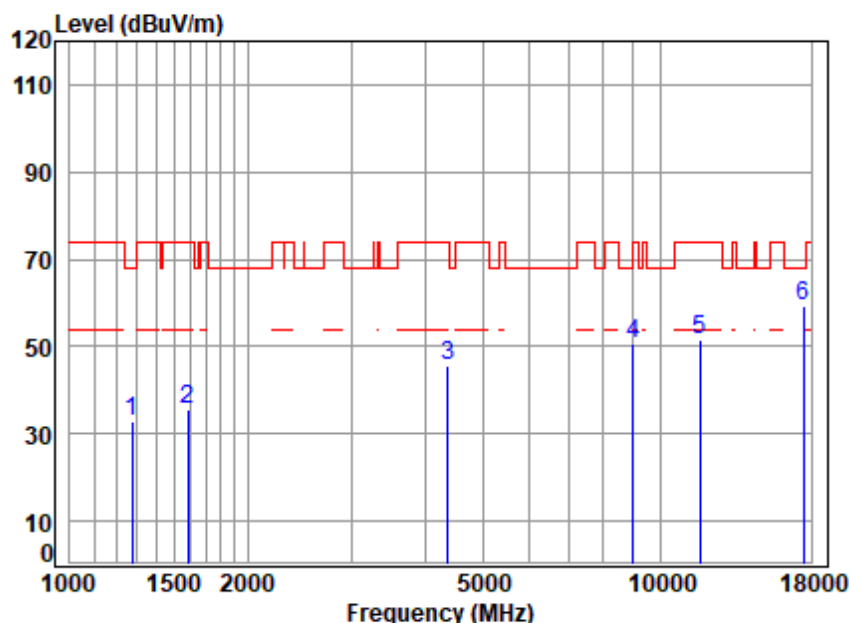


Site : chamber
Condition: 3m HORIZONTAL
Job No : 03819CR/03820CR
Mode : 5825 TX RSE
Note : 5G WIFI 11A

	Freq	Cable Loss	Ant Factor	Preamplifier Factor	Read Level	Level	Limit	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1260.149	2.79	24.85	40.33	45.70	33.01	68.20	-35.19	peak
2	1644.019	3.11	26.44	40.60	44.99	33.94	68.20	-34.26	peak
3	4417.841	6.63	33.46	42.49	47.19	44.79	68.20	-23.41	peak
4	8036.214	8.32	36.72	41.14	47.75	51.65	74.00	-22.35	peak
5	11650.000	10.52	37.84	38.75	44.10	53.71	74.00	-20.29	peak
6	17475.000	13.18	42.89	40.52	43.64	59.19	68.20	-9.01	peak



Mode:d; Polarization:Vertical; Modulation:802.11a; bandwidth:20MHz; Channel:High

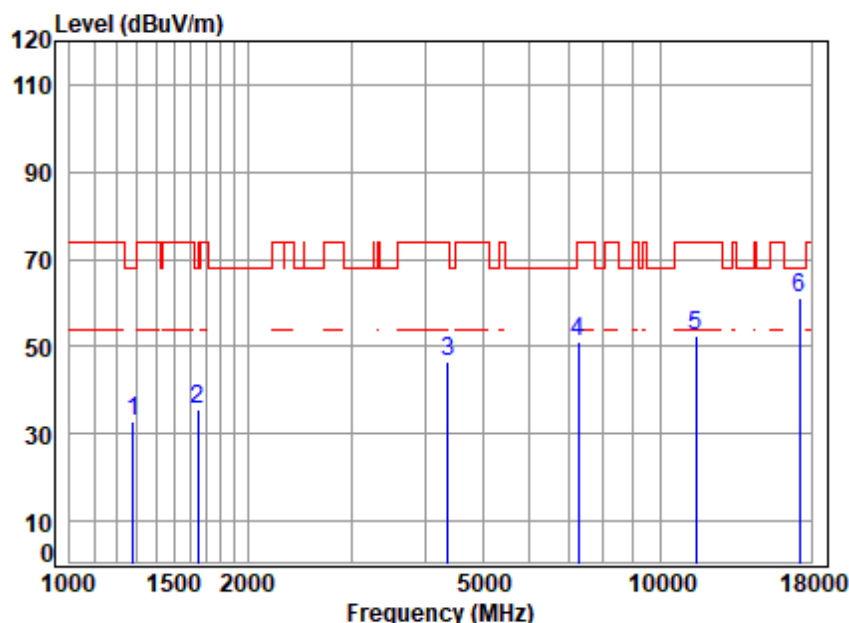


Site : chamber
Condition: 3m VERTICAL
Job No : 03819CR/03820CR
Mode : 5825 TX RSE
Note : 5G WIFI 11A

	Freq	Cable Loss	Ant Factor	Preamplifier Factor	Read Level	Level	Limit	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1274.802	2.83	24.92	40.34	45.34	32.75	68.20	-35.45	peak
2	1583.392	2.96	26.18	40.56	47.07	35.65	74.00	-38.35	peak
3	4367.058	6.56	33.37	42.45	47.99	45.47	74.00	-28.53	peak
4	8995.123	9.03	37.20	39.52	43.98	50.69	68.20	-17.51	peak
5	11650.000	10.52	37.84	38.75	42.17	51.78	74.00	-22.22	peak
6	17475.000	13.18	42.89	40.52	43.68	59.23	68.20	-8.97	peak



Mode:d; Polarization:Horizontal; Modulation:802.11n; bandwidth:20MHz; Channel:Low

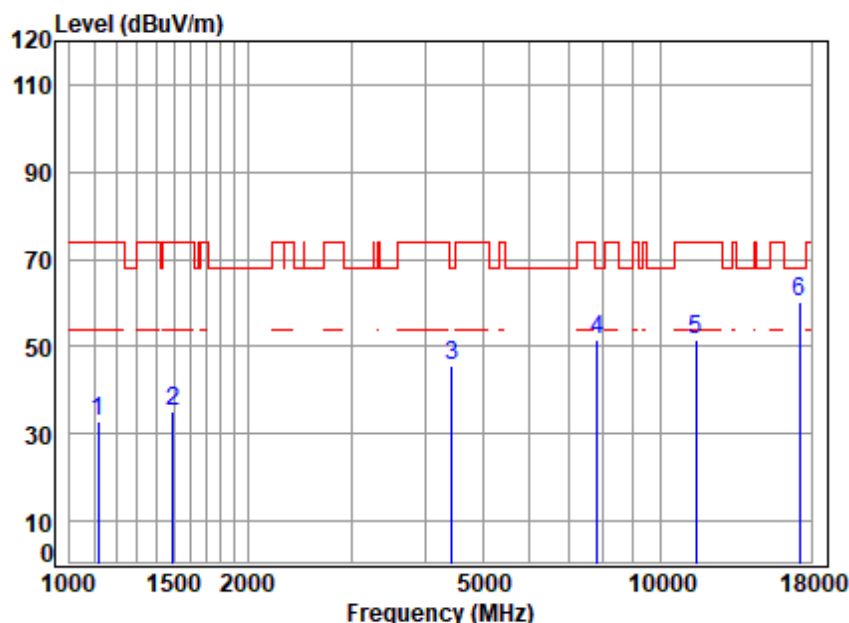


Site : chamber
Condition: 3m HORIZONTAL
Job No : 03819CR/03820CR
Mode : 5745 TX RSE
Note : 5G WIFI 11N20

	Freq	Cable Loss	Ant Factor	Preamplifier Factor	Read Level	Level	Limit	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1278.492	2.84	24.93	40.35	45.55	32.97	68.20	-35.23	peak
2	1648.778	3.13	26.46	40.60	46.80	35.79	68.20	-32.41	peak
3	4367.058	6.56	33.37	42.45	49.14	46.62	74.00	-27.38	peak
4	7263.015	8.42	36.11	41.55	48.33	51.31	74.00	-22.69	peak
5	11490.000	10.99	37.90	38.69	42.42	52.62	74.00	-21.38	peak
6	17235.000	14.32	42.74	40.52	44.49	61.03	68.20	-7.17	peak



Mode:d; Polarization:Vertical; Modulation:802.11n; bandwidth:20MHz; Channel:Low

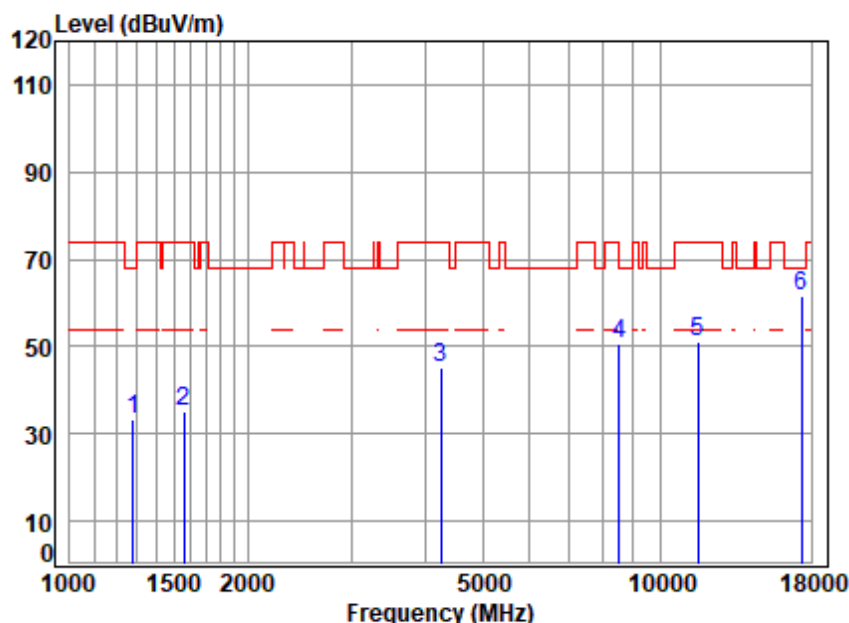


Site : chamber
Condition: 3m VERTICAL
Job No : 03819CR/03820CR
Mode : 5745 TX RSE
Note : 5G WIFI 11N20

	Freq	Cable Loss	Ant Factor	Preamplifier Factor	Read Level	Level	Limit	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1116.093	2.26	24.20	40.21	46.74	32.99	74.00	-41.01	peak
2	1494.455	2.96	25.78	40.50	46.90	35.14	74.00	-38.86	peak
3	4430.628	6.59	33.48	42.50	48.21	45.78	68.20	-22.42	peak
4	7829.860	8.50	36.57	41.28	47.56	51.35	68.20	-16.85	peak
5	11490.000	10.99	37.90	38.69	41.23	51.43	74.00	-22.57	peak
6	17235.000	14.32	42.74	40.52	43.83	60.37	68.20	-7.83	peak



Mode:d; Polarization:Horizontal; Modulation:802.11n; bandwidth:20MHz; Channel:middle

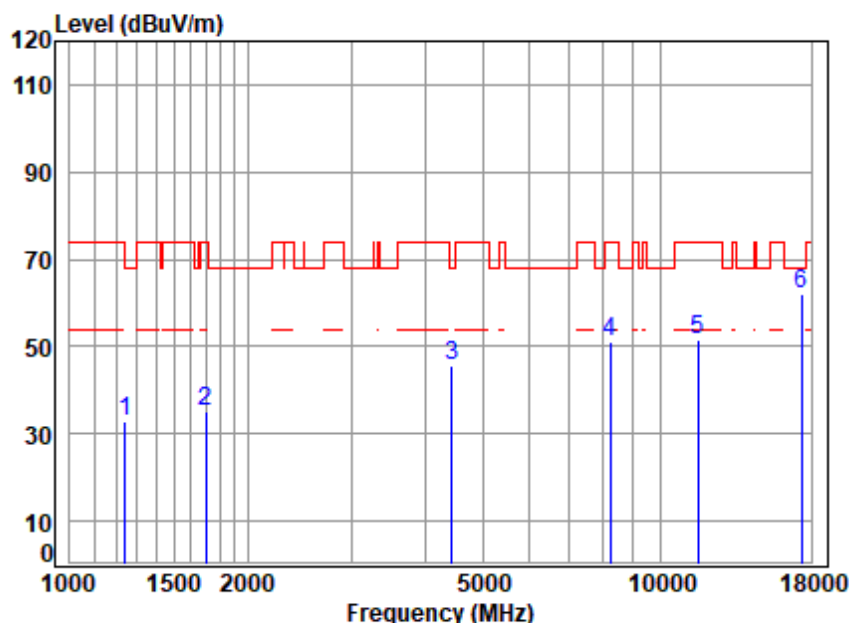


Site : chamber
Condition: 3m HORIZONTAL
Job No : 03819CR/03820CR
Mode : 5785 TX RSE
Note : 5G WIFI 11N20

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1278.492	2.84	24.93	40.35	45.67	33.09	68.20	-35.11	peak
2	1560.673	2.97	26.08	40.55	46.84	35.34	74.00	-38.66	peak
3	4242.641	6.20	33.15	42.35	48.34	45.34	74.00	-28.66	peak
4	8514.456	8.66	37.01	40.31	45.50	50.86	68.20	-17.34	peak
5	11570.000	10.66	37.87	38.72	41.10	50.91	74.00	-23.09	peak
6	17355.000	13.87	42.81	40.52	45.51	61.67	68.20	-6.53	peak



Mode:d; Polarization:Vertical; Modulation:802.11n; bandwidth:20MHz; Channel:middle

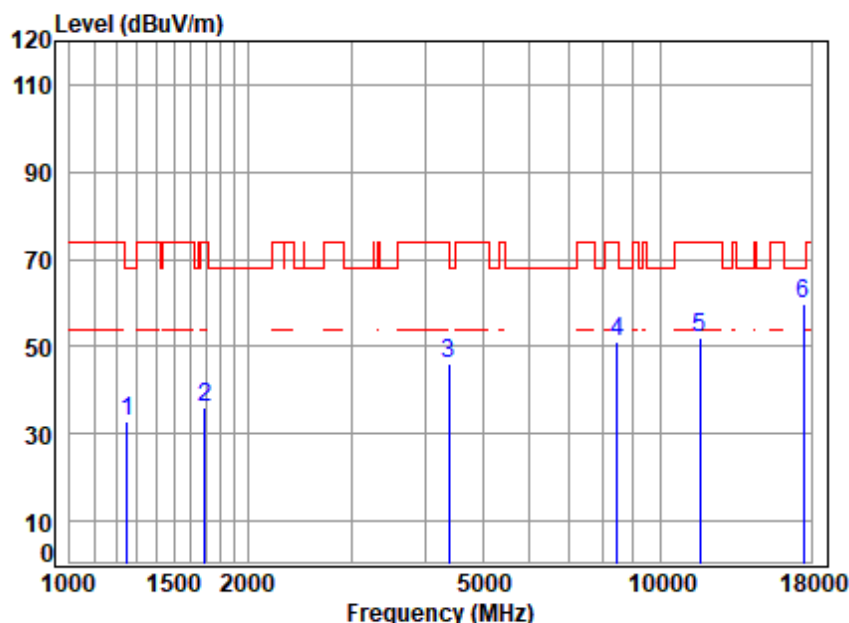


Site : chamber
Condition: 3m VERTICAL
Job No : 03819CR/03820CR
Mode : 5785 TX RSE
Note : 5G WIFI 11N20

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1242.068	2.75	24.78	40.32	45.69	32.90	68.20	-35.30	peak
2	1697.129	3.30	26.66	40.63	45.85	35.18	74.00	-38.82	peak
3	4443.453	6.55	33.50	42.51	47.86	45.40	68.20	-22.80	peak
4	8224.200	8.31	36.84	40.80	46.58	50.93	74.00	-23.07	peak
5	11570.000	10.66	37.87	38.72	41.96	51.77	74.00	-22.23	peak
6	17355.000	13.87	42.81	40.52	46.05	62.21	68.20	-5.99	peak



Mode:d; Polarization:Horizontal; Modulation:802.11n; bandwidth:20MHz; Channel:High

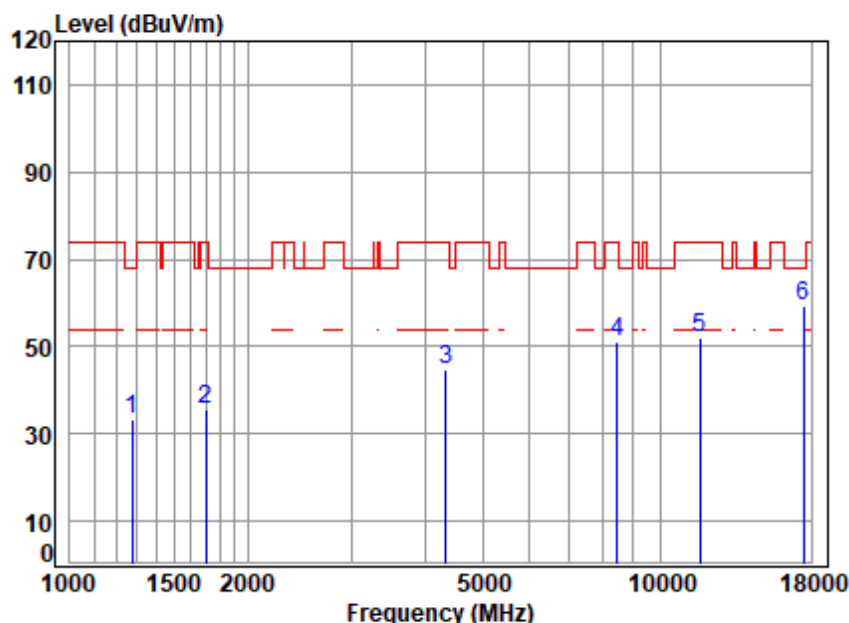


Site : chamber
Condition: 3m HORIZONTAL
Job No : 03819CR/03820CR
Mode : 5825 TX RSE
Note : 5G WIFI 11N20

	Freq	Cable Loss	Ant Factor	Preamplifier Factor	Read Level	Level	Limit	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1249.269	2.77	24.81	40.32	45.64	32.90	68.20	-35.30	peak
2	1692.231	3.28	26.64	40.63	46.56	35.85	74.00	-38.15	peak
3	4379.699	6.61	33.39	42.46	48.74	46.28	74.00	-27.72	peak
4	8465.379	8.52	36.98	40.39	46.16	51.27	74.00	-22.73	peak
5	11650.000	10.52	37.84	38.75	42.49	52.10	74.00	-21.90	peak
6	17475.000	13.18	42.89	40.52	44.41	59.96	68.20	-8.24	peak



Mode:d; Polarization:Vertical; Modulation:802.11n; bandwidth:20MHz; Channel:High

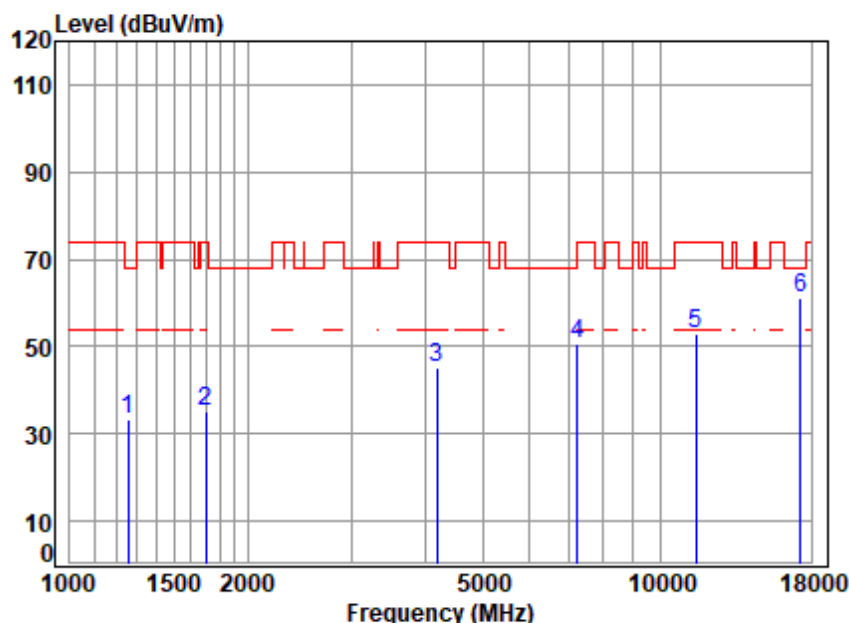


Site : chamber
Condition: 3m VERTICAL
Job No : 03819CR/03820CR
Mode : 5825 TX RSE
Note : 5G WIFI 11N20

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1274.802	2.83	24.92	40.34	46.09	33.50	68.20	-34.70	peak
2	1697.129	3.30	26.66	40.63	46.33	35.66	74.00	-38.34	peak
3	4341.886	6.46	33.33	42.43	47.35	44.71	74.00	-29.29	peak
4	8440.945	8.46	36.97	40.43	46.32	51.32	74.00	-22.68	peak
5	11650.000	10.52	37.84	38.75	42.61	52.22	74.00	-21.78	peak
6	17475.000	13.18	42.89	40.52	43.57	59.12	68.20	-9.08	peak



Mode:d; Polarization:Horizontal; Modulation:802.11n; bandwidth:40MHz; Channel:Low

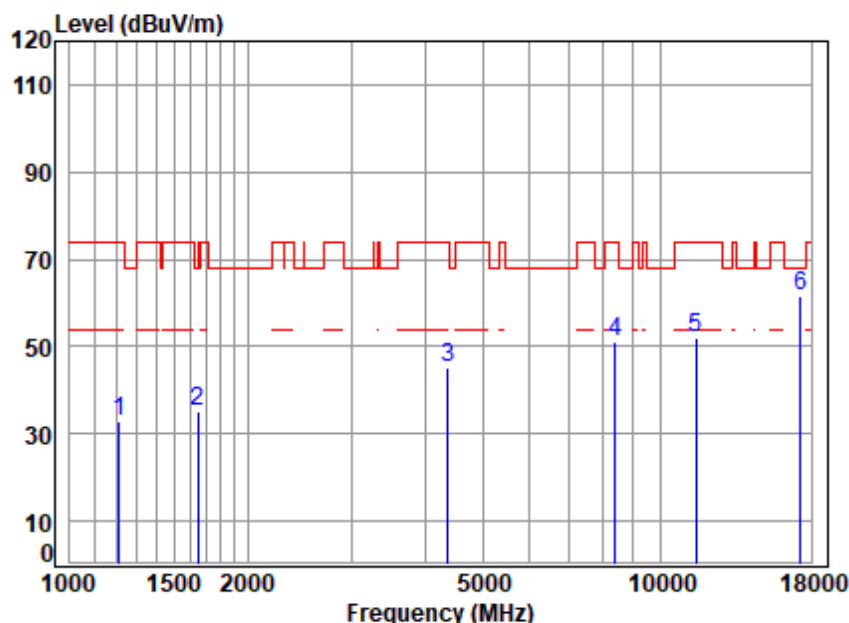


Site : chamber
Condition: 3m HORIZONTAL
Job No : 03819CR/03820CR
Mode : 5755 TX RSE
Note : 5G WIFI 11N40

	Freq	Cable Loss	Ant Factor	Preamplifier Factor	Read Level	Level	Limit	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1256.512	2.79	24.84	40.33	46.16	33.46	68.20	-34.74	peak
2	1697.129	3.30	26.66	40.63	45.97	35.30	74.00	-38.70	peak
3	4181.768	6.10	33.04	42.31	48.16	44.99	74.00	-29.01	peak
4	7242.052	8.43	36.10	41.56	47.45	50.42	68.20	-17.78	peak
5	11510.000	10.89	37.90	38.69	42.60	52.70	74.00	-21.30	peak
6	17265.000	14.47	42.76	40.52	44.62	61.33	68.20	-6.87	peak



Mode:d; Polarization:Vertical; Modulation:802.11n; bandwidth:40MHz; Channel:Low

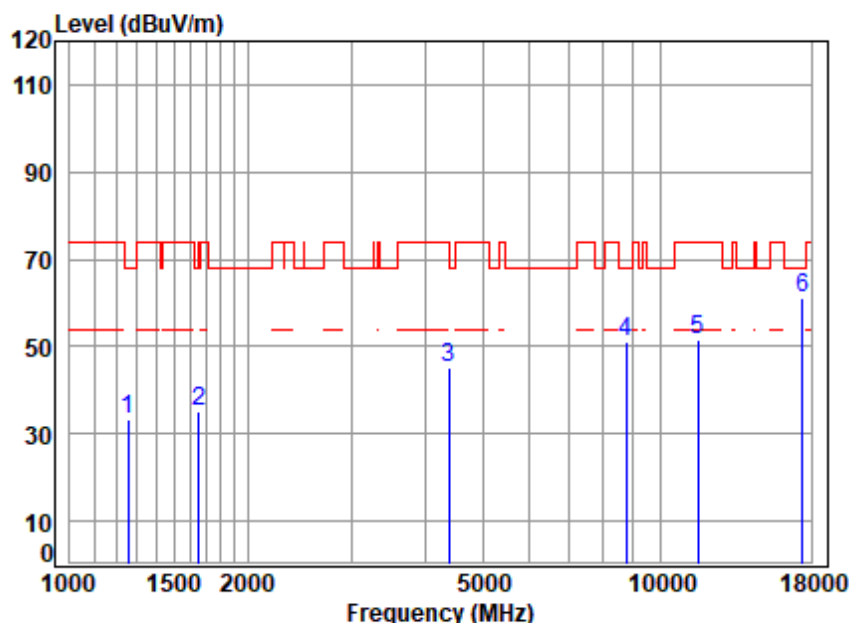


Site : chamber
Condition: 3m VERTICAL
Job No : 03819CR/03820CR
Mode : 5755 TX RSE
Note : 5G WIFI 11N40

	Freq	Cable Loss	Ant Factor	Preamplifier Factor	Read Level	Level	Limit	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1210.174	2.66	24.64	40.29	45.68	32.69	74.00	-41.31	peak
2	1648.778	3.13	26.46	40.60	46.21	35.20	68.20	-33.00	peak
3	4367.058	6.56	33.37	42.45	47.79	45.27	74.00	-28.73	peak
4	8392.292	8.33	36.94	40.51	46.31	51.07	74.00	-22.93	peak
5	11510.000	10.89	37.90	38.69	41.73	51.83	74.00	-22.17	peak
6	17265.000	14.47	42.76	40.52	44.97	61.68	68.20	-6.52	peak



Mode:d; Polarization:Horizontal; Modulation:802.11n; bandwidth:40MHz; Channel:High

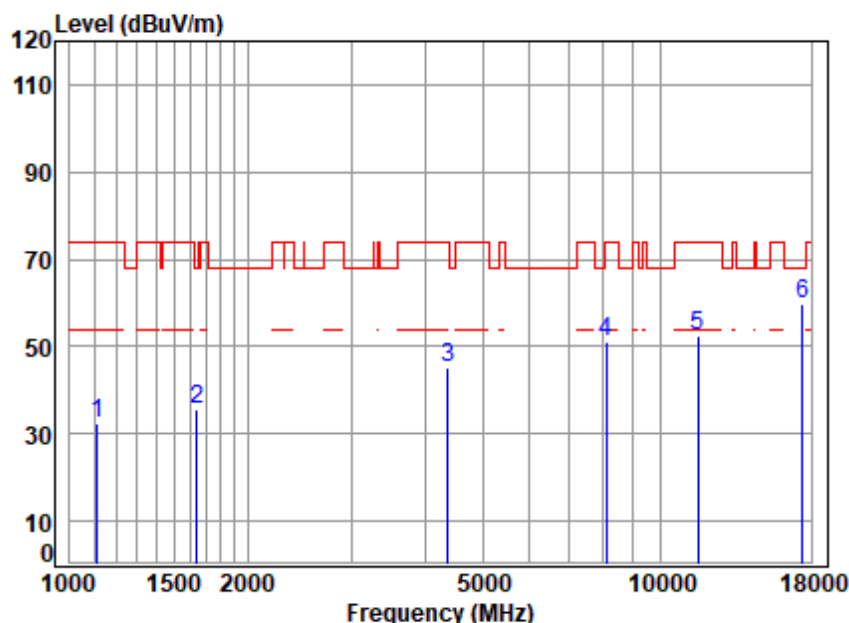


Site : chamber
Condition: 3m HORIZONTAL
Job No : 03819CR/03820CR
Mode : 5795 TX RSE
Note : 5G WIFI 11N40

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1256.512	2.79	24.84	40.33	46.03	33.33	68.20	-34.87	peak
2	1653.550	3.15	26.48	40.60	46.18	35.21	68.20	-32.99	peak
3	4379.699	6.61	33.39	42.46	47.74	45.28	74.00	-28.72	peak
4	8738.852	8.53	37.10	39.93	45.27	50.97	68.20	-17.23	peak
5	11590.000	10.59	37.86	38.73	41.78	51.50	74.00	-22.50	peak
6	17385.000	13.46	42.83	40.52	45.17	60.94	68.20	-7.26	peak



Mode:d; Polarization:Vertical; Modulation:802.11n; bandwidth:40MHz; Channel:High



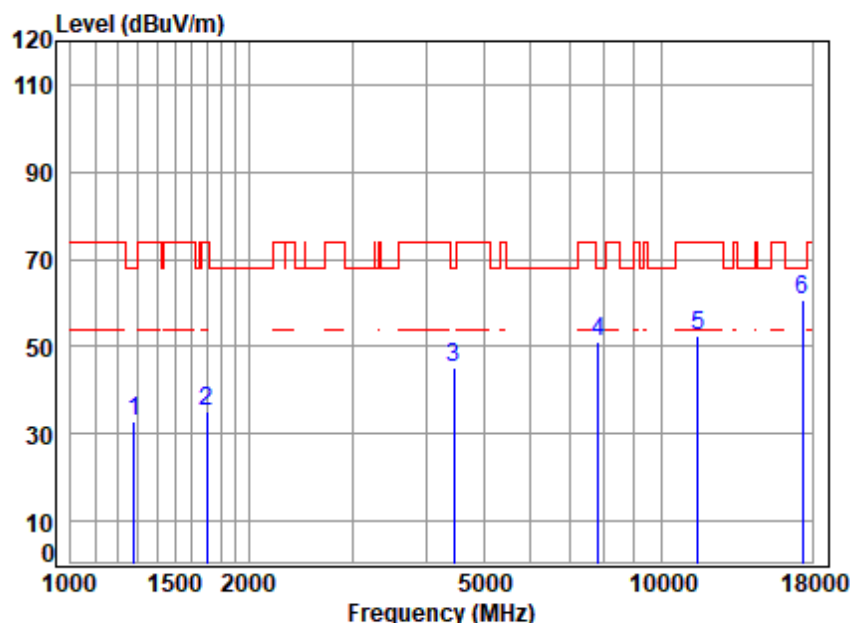
Site : chamber
Condition: 3m VERTICAL
Job No : 03819CR/03820CR
Mode : 5795 TX RSE
Note : 5G WIFI 11N40

	Freq	Cable Loss	Ant Factor	Preamplifier Factor	Read Level	Level	Limit	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1112.872	2.25	24.18	40.21	46.08	32.30	74.00	-41.70	peak
2	1639.274	3.09	26.42	40.59	46.64	35.56	68.20	-32.64	peak
3	4367.058	6.56	33.37	42.45	47.63	45.11	74.00	-28.89	peak
4	8106.200	8.43	36.77	41.01	46.71	50.90	74.00	-23.10	peak
5	11590.000	10.59	37.86	38.73	42.53	52.25	74.00	-21.75	peak
6	17385.000	13.46	42.83	40.52	43.82	59.59	68.20	-8.61	peak



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Mode:d; Polarization:Horizontal; Modulation:802.11ac; bandwidth:80MHz; Channel:middle

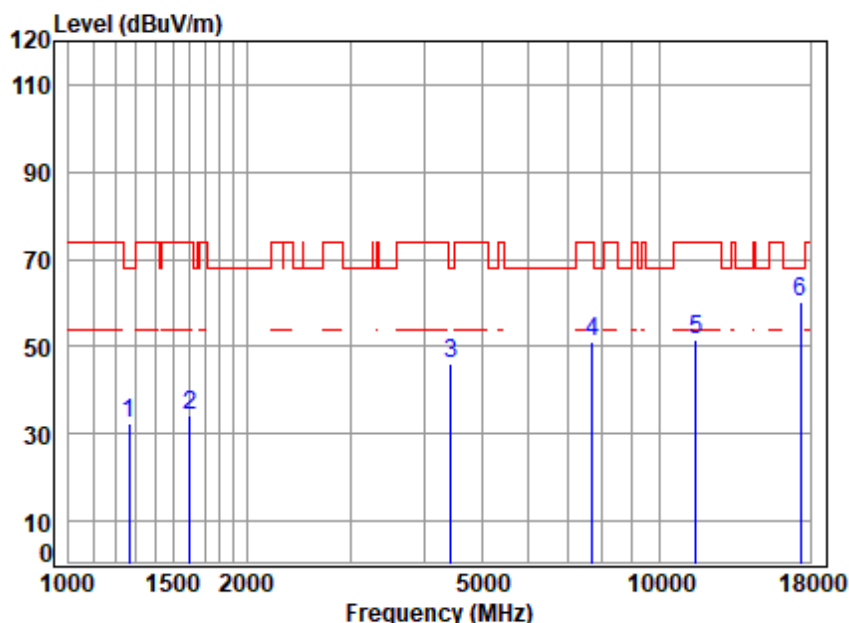


Site : chamber
Condition: 3m HORIZONTAL
Job No : 03819CR/03820CR
Mode : 5775 TX RSE
Note : 5G WIFI 11AC80

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1278.492	2.84	24.93	40.35	45.48	32.90	68.20	-35.30	peak
2	1702.042	3.30	26.68	40.63	45.59	34.94	74.00	-39.06	peak
3	4456.315	6.51	33.53	42.52	47.49	45.01	68.20	-23.19	peak
4	7829.860	8.50	36.57	41.28	47.23	51.02	68.20	-17.18	peak
5	11550.000	10.74	37.88	38.71	42.71	52.62	74.00	-21.38	peak
6	17325.000	14.28	42.80	40.52	44.17	60.73	68.20	-7.47	peak



Mode:d; Polarization:Vertical; Modulation:802.11ac; bandwidth:80MHz; Channel:middle



Site : chamber
Condition: 3m VERTICAL
Job No : 03819CR/03820CR
Mode : 5775 TX RSE
Note : 5G WIFI 11AC80

		Cable	Ant	Preamp	Read		Limit	Over	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1267.454	2.81	24.89	40.34	45.09	32.45	68.20	-35.75	peak
2	1606.441	2.97	26.28	40.57	45.73	34.41	74.00	-39.59	peak
3	4443.453	6.55	33.50	42.51	48.36	45.90	68.20	-22.30	peak
4	7695.244	8.58	36.46	41.34	47.50	51.20	74.00	-22.80	peak
5	11550.000	10.74	37.88	38.71	41.80	51.71	74.00	-22.29	peak
6	17325.000	14.28	42.80	40.52	43.82	60.38	68.20	-7.82	peak



7 Photographs

7.1 Test Setup

Please refer to setup photos.

7.2 EUT Constructional Details (EUT Photos)

Please Refer to external and internal photos for details.

8 Appendix

8.1 Appendix 15.407

1. Maximum Conducted Output Power

1.1 Test Result

Test Mode	Frequency (MHz)	Tx Type	Measured Output Power (dBm)	Limits (dBm)	Verdict
			Ant 1		
802.11a	5180	SISO	12.84	≤24	PASS
	5200	SISO	12.75	≤24	PASS
	5240	SISO	12.84	≤24	PASS
	5260	SISO	12.66	≤30	PASS
	5300	SISO	12.79	≤30	PASS
	5320	SISO	12.61	≤30	PASS
	5500	SISO	12.85	≤24	PASS
	5580	SISO	12.97	≤24	PASS
	5600	SISO	12.19	≤24	PASS
	5700	SISO	12.85	≤24	PASS
	5745	SISO	12.58	≤30	PASS
	5785	SISO	12.76	≤30	PASS
	5825	SISO	13.18	≤30	PASS
802.11n(HT20)	5180	SISO	12.10	≤24	PASS
	5200	SISO	12.23	≤24	PASS
	5240	SISO	12.34	≤24	PASS
	5260	SISO	12.03	≤30	PASS
	5300	SISO	11.62	≤30	PASS
	5320	SISO	12.01	≤30	PASS
	5500	SISO	11.71	≤24	PASS
	5580	SISO	11.79	≤24	PASS
	5600	SISO	11.19	≤24	PASS
	5700	SISO	11.61	≤24	PASS
	5745	SISO	11.90	≤30	PASS
	5785	SISO	11.53	≤30	PASS
	5825	SISO	11.93	≤30	PASS
802.11n(HT40)	5190	SISO	10.99	≤24	PASS
	5230	SISO	11.31	≤24	PASS
	5270	SISO	11.63	≤30	PASS
	5310	SISO	11.49	≤30	PASS
	5510	SISO	11.28	≤24	PASS



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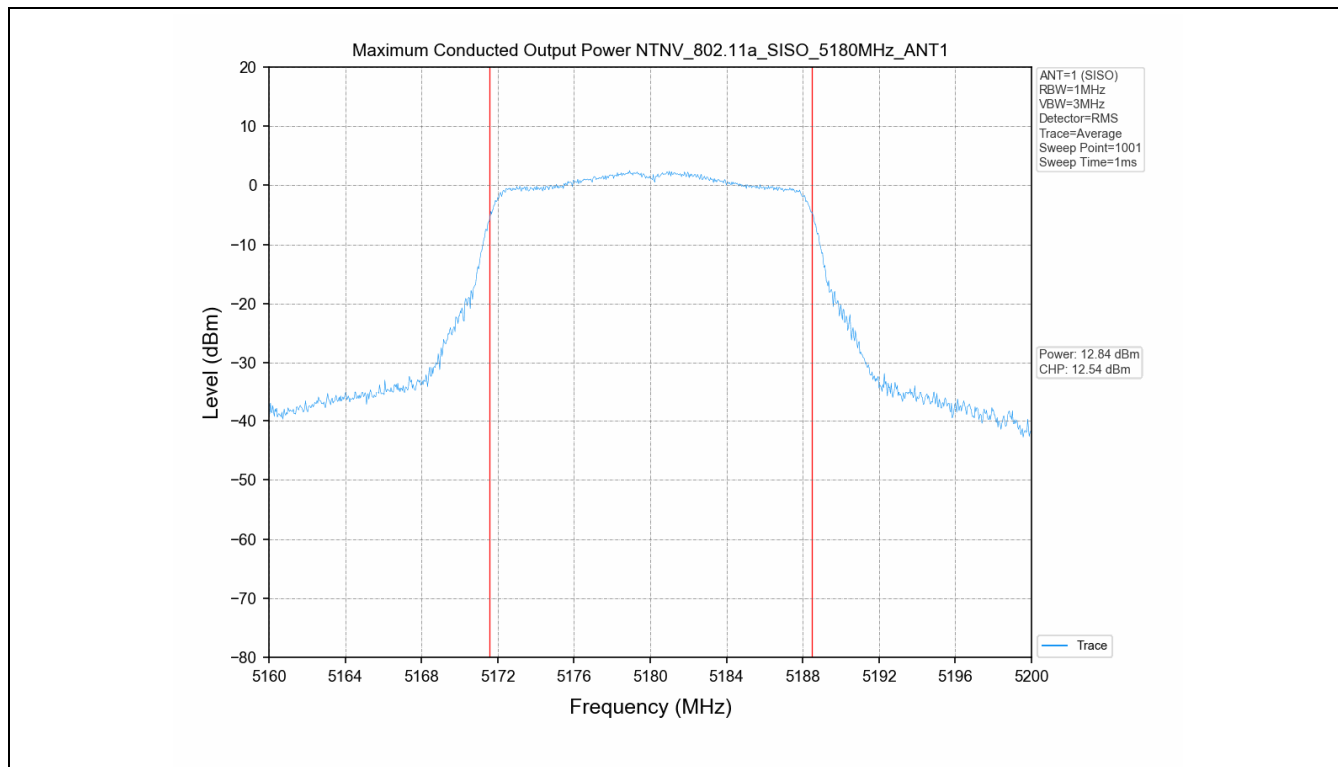
	5550	SISO	11.12	≤24	PASS
	5590	SISO	10.96	≤24	PASS
	5670	SISO	12.61	≤24	PASS
	5755	SISO	11.83	≤30	PASS
	5795	SISO	11.82	≤30	PASS
802.11ac(VHT20)	5180	SISO	12.24	≤24	PASS
	5200	SISO	12.38	≤24	PASS
	5240	SISO	12.87	≤24	PASS
	5260	SISO	12.74	≤30	PASS
	5300	SISO	12.53	≤30	PASS
	5320	SISO	12.39	≤30	PASS
	5500	SISO	12.34	≤24	PASS
	5580	SISO	12.60	≤24	PASS
	5600	SISO	12.66	≤24	PASS
	5700	SISO	12.66	≤24	PASS
	5745	SISO	12.41	≤30	PASS
	5785	SISO	12.53	≤30	PASS
	5825	SISO	12.52	≤30	PASS
802.11ac(VHT40)	5190	SISO	12.23	≤24	PASS
	5230	SISO	12.69	≤24	PASS
	5270	SISO	12.71	≤30	PASS
	5310	SISO	12.27	≤30	PASS
	5510	SISO	12.77	≤24	PASS
	5550	SISO	12.82	≤24	PASS
	5590	SISO	13.07	≤24	PASS
	5670	SISO	12.57	≤24	PASS
	5755	SISO	12.66	≤30	PASS
	5795	SISO	12.90	≤30	PASS
802.11ac(VHT80)	5210	SISO	10.17	≤24	PASS
	5290	SISO	10.05	≤30	PASS
	5530	SISO	10.35	≤24	PASS
	5610	SISO	10.05	≤24	PASS
	5775	SISO	10.10	≤30	PASS

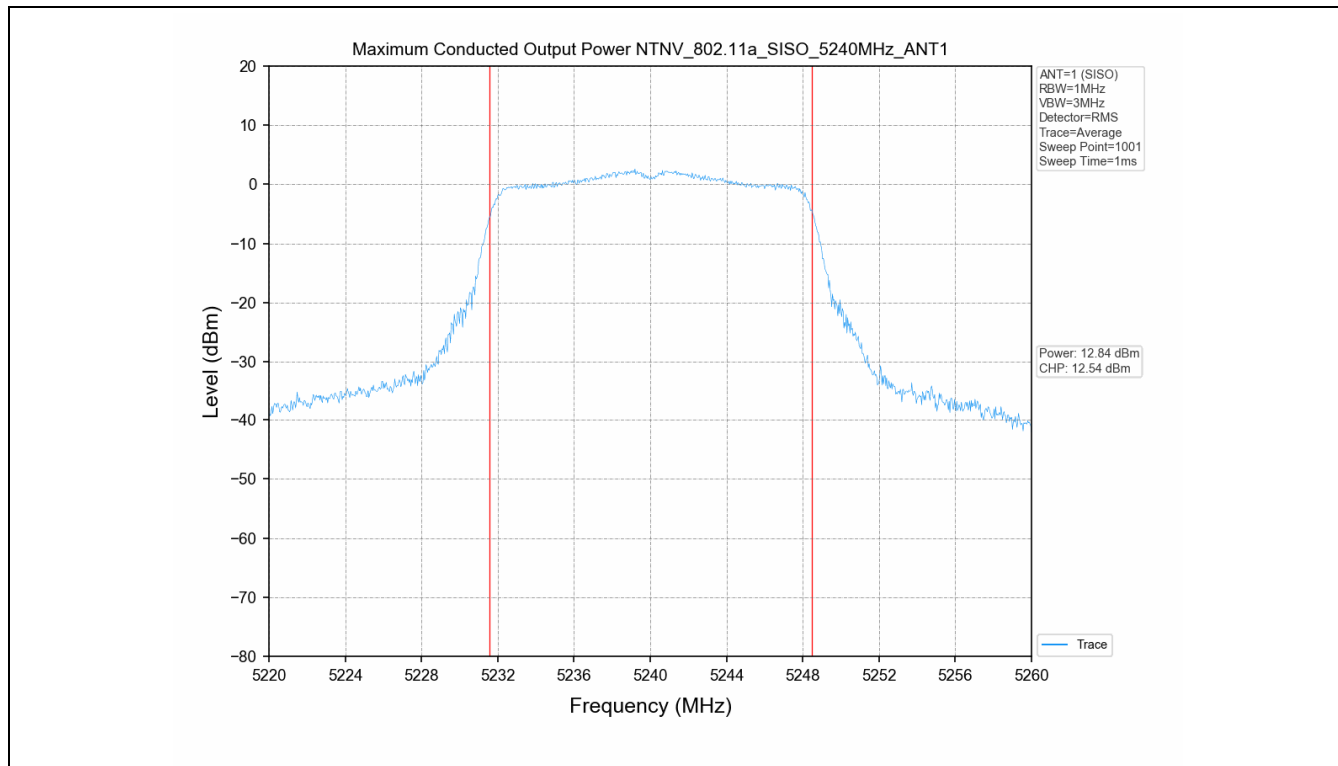
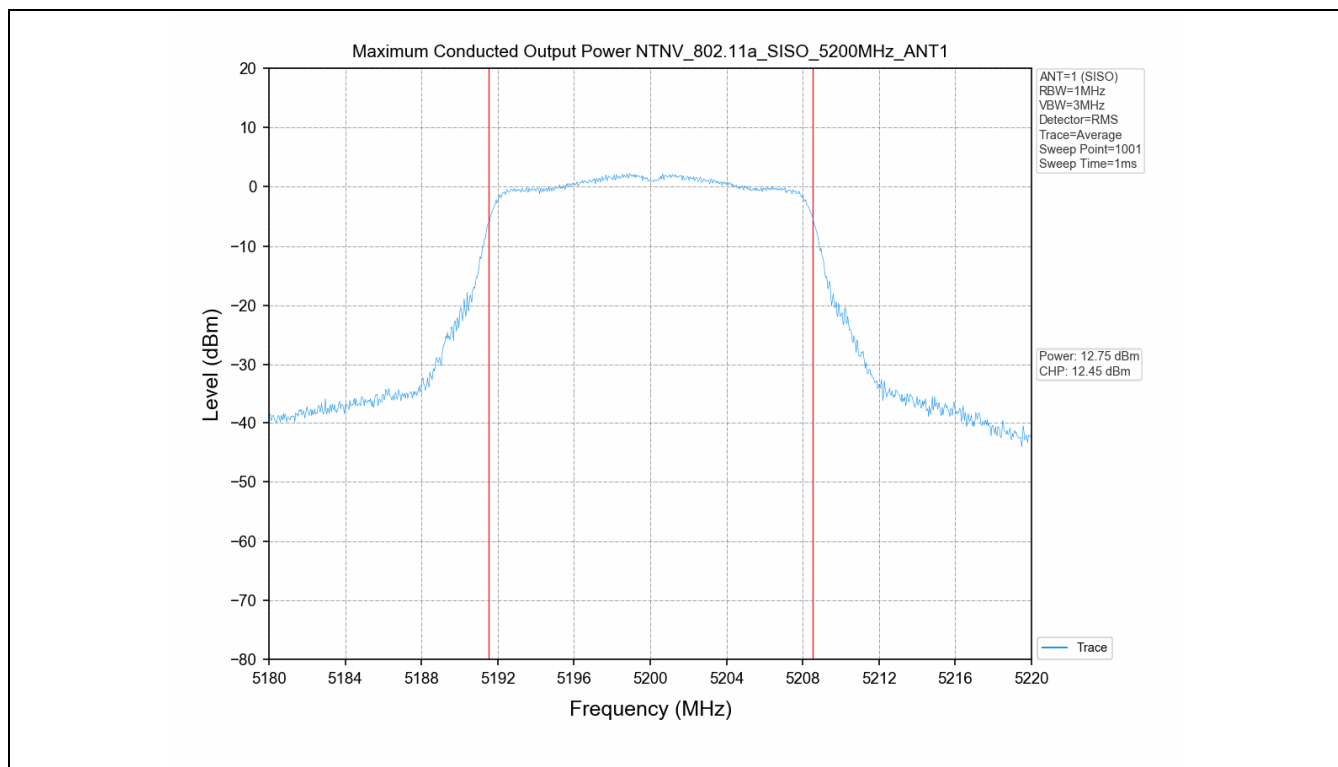


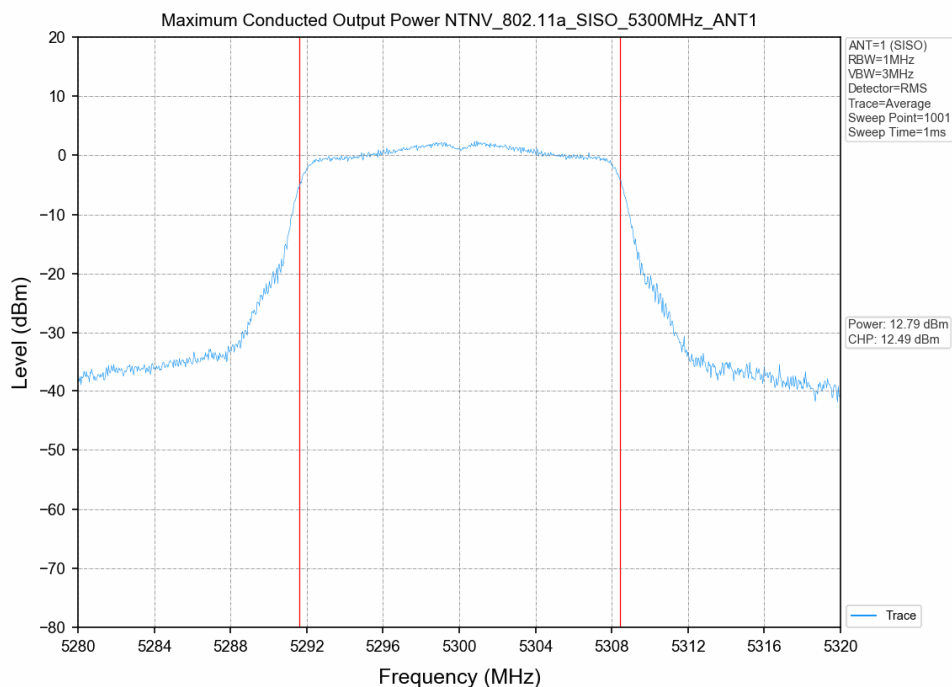
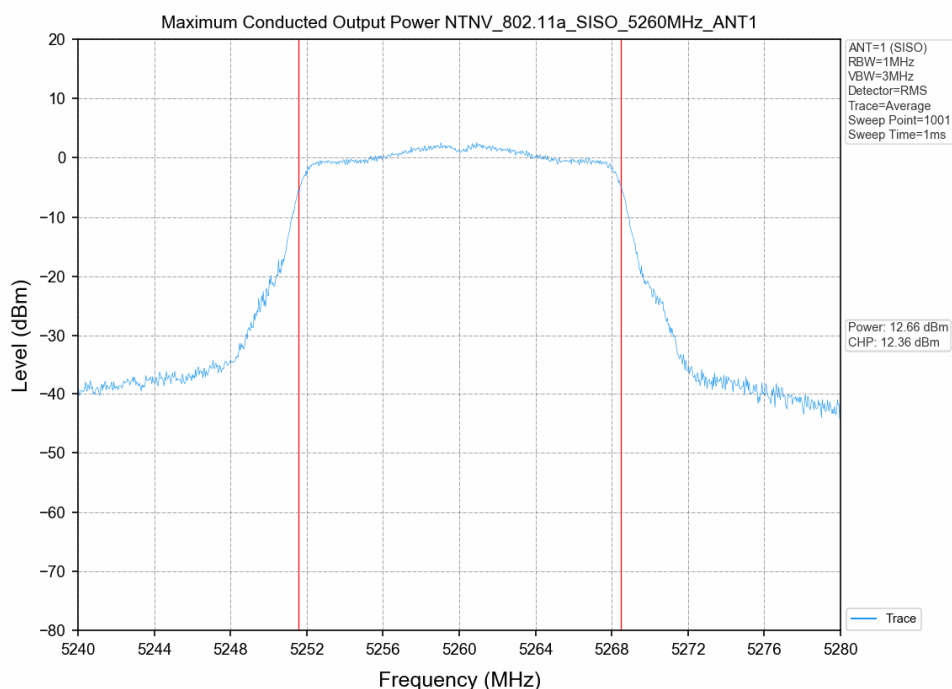
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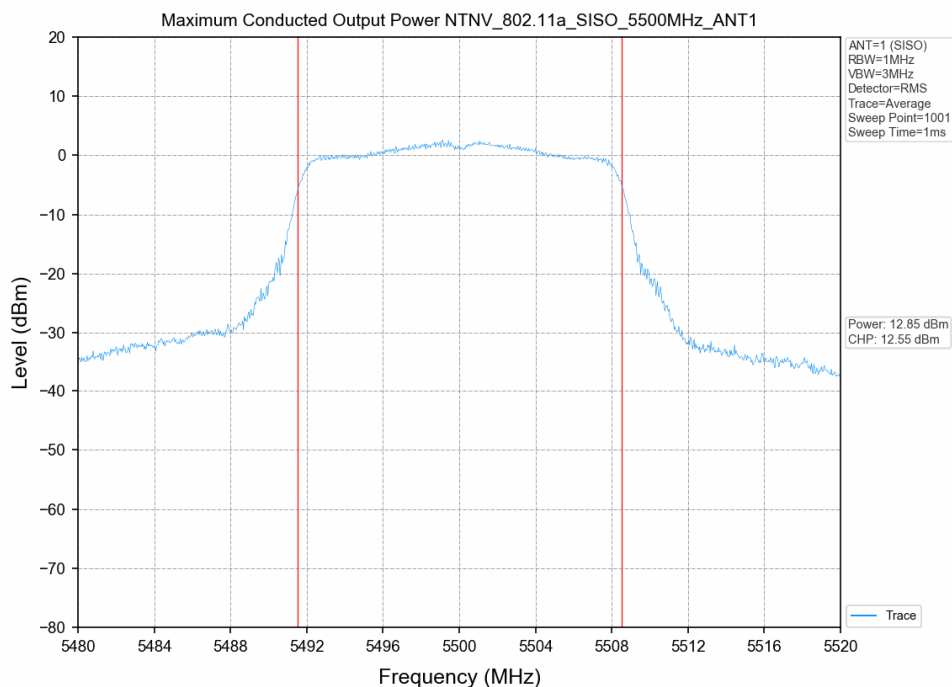
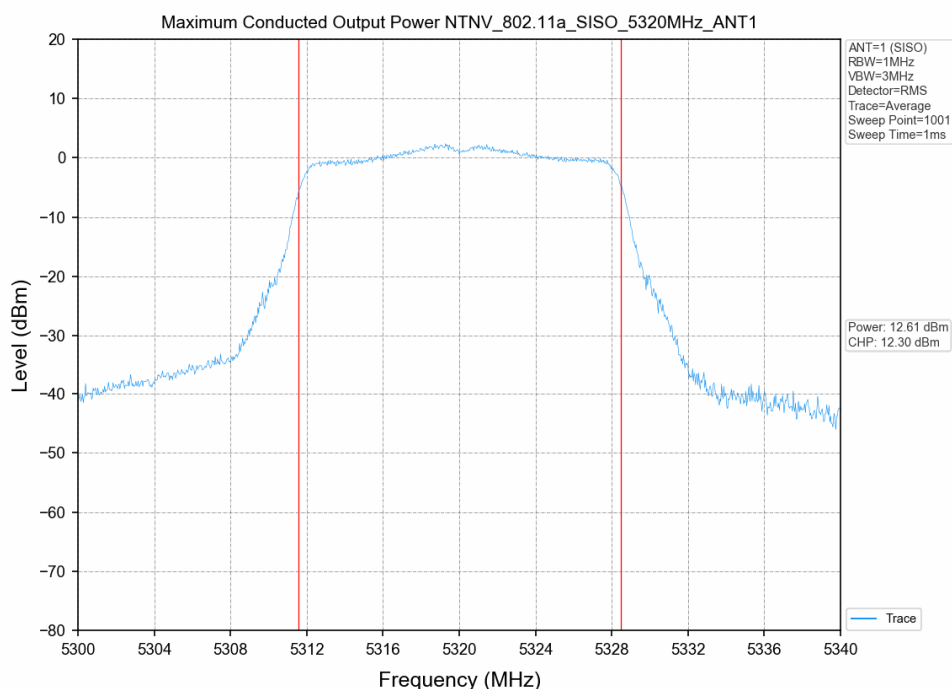
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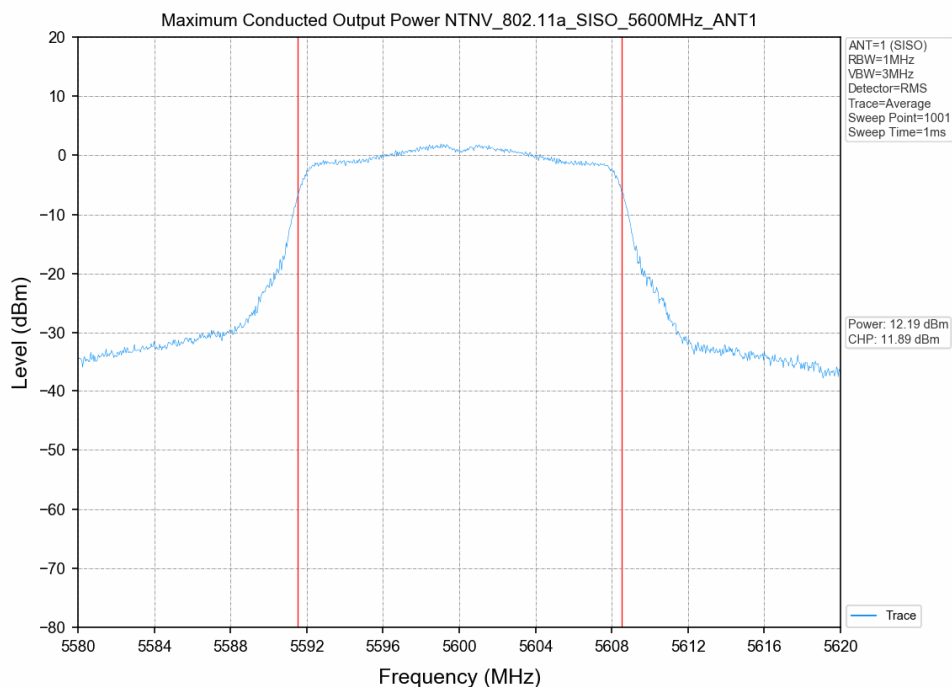
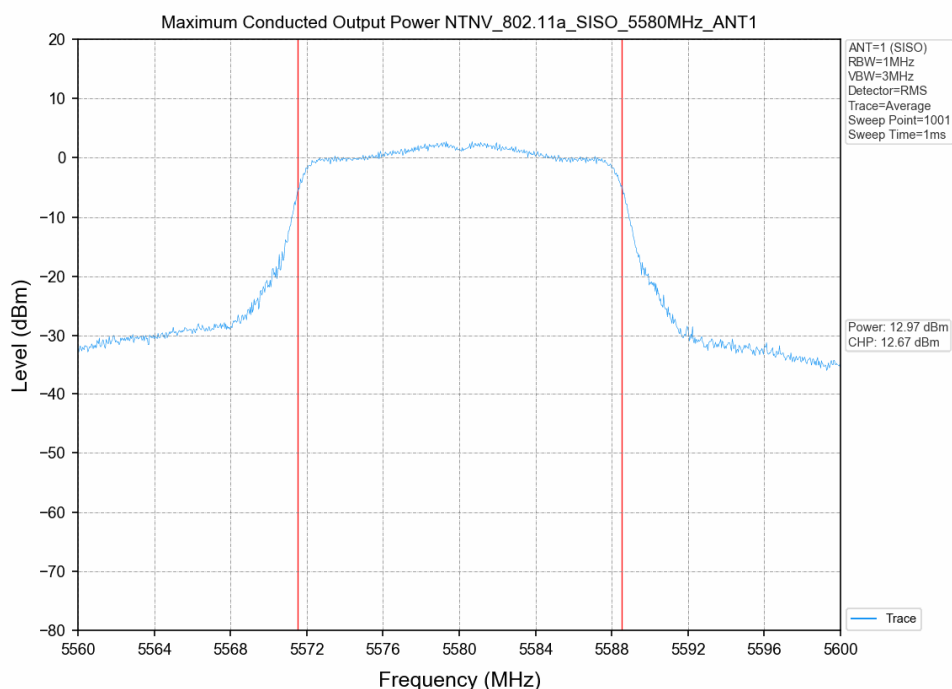
1.2 Test Graph

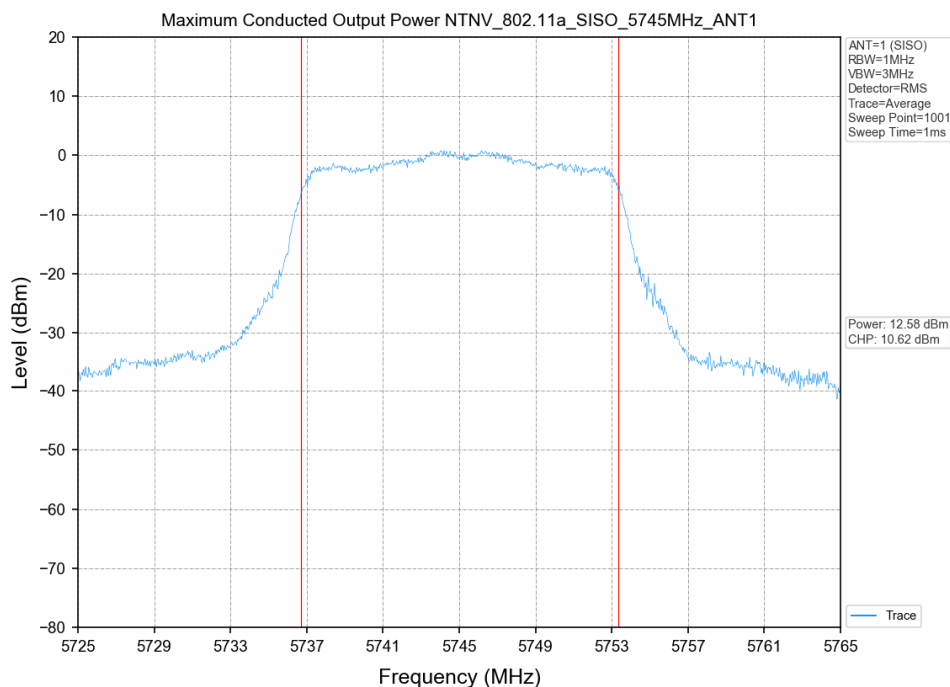
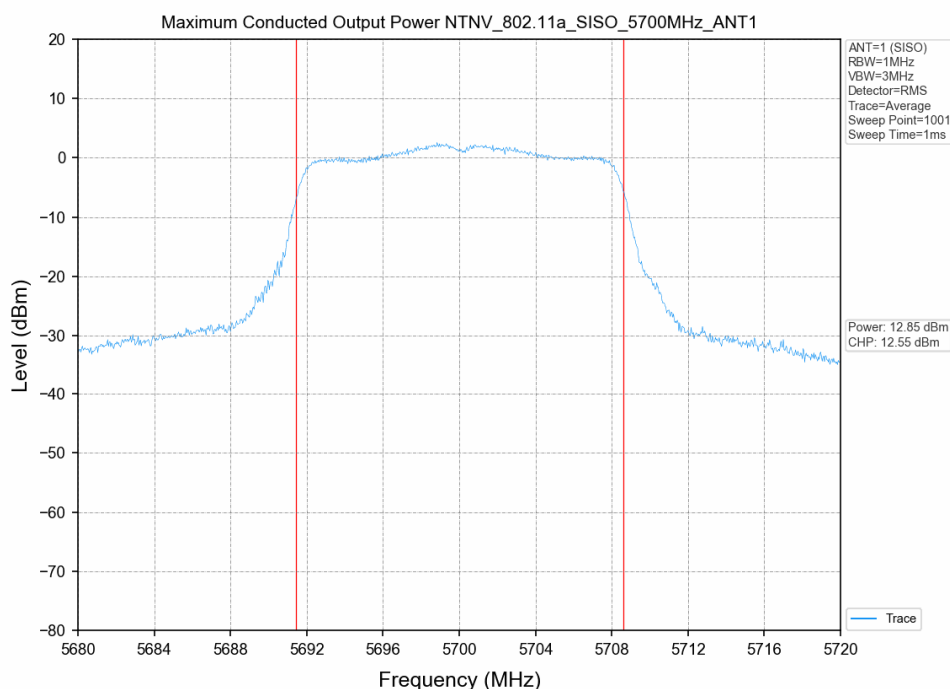


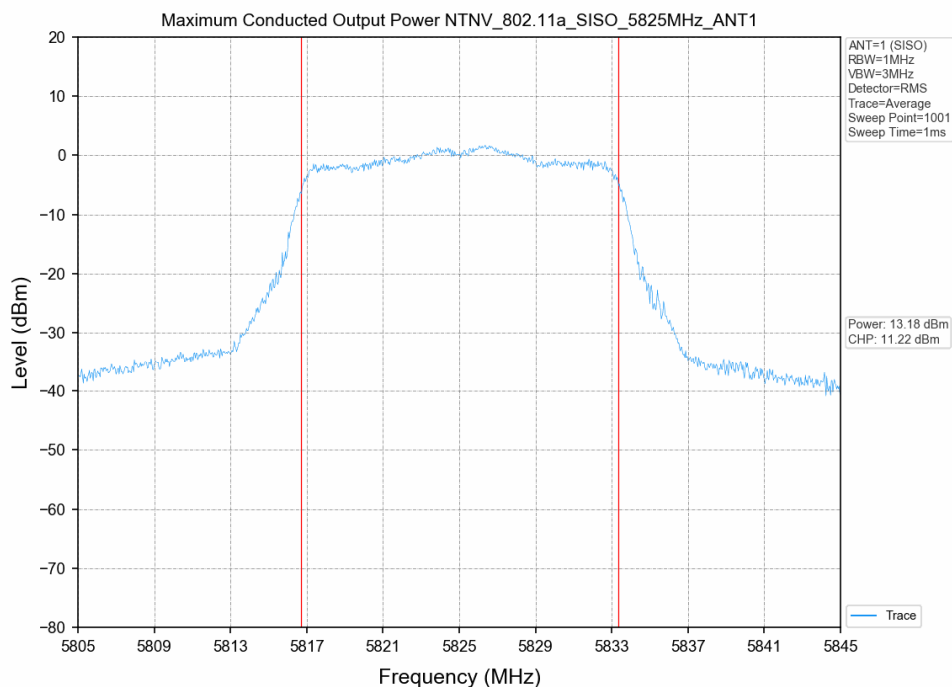
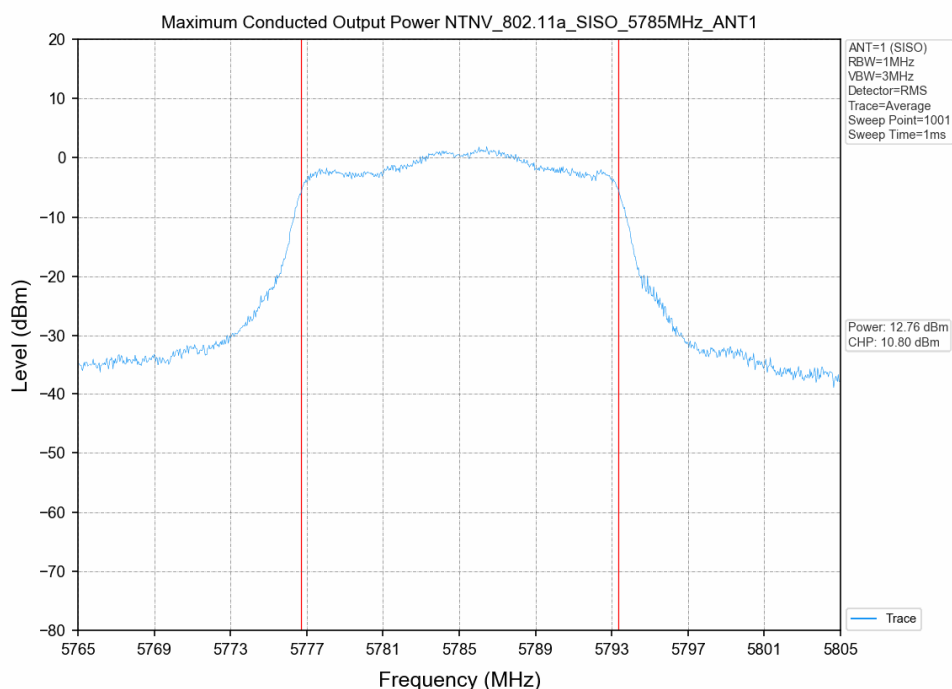


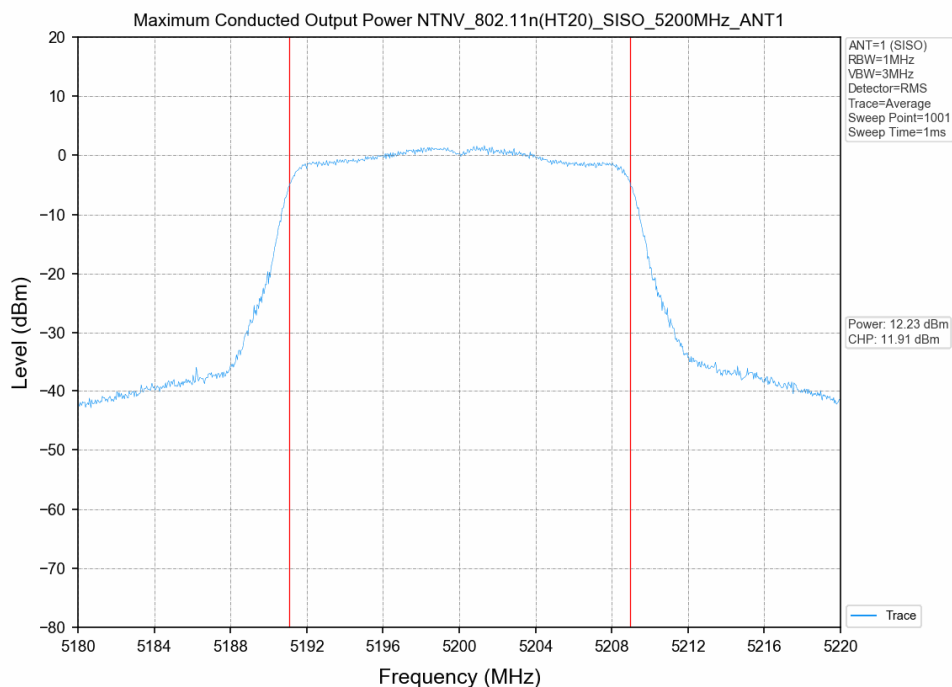
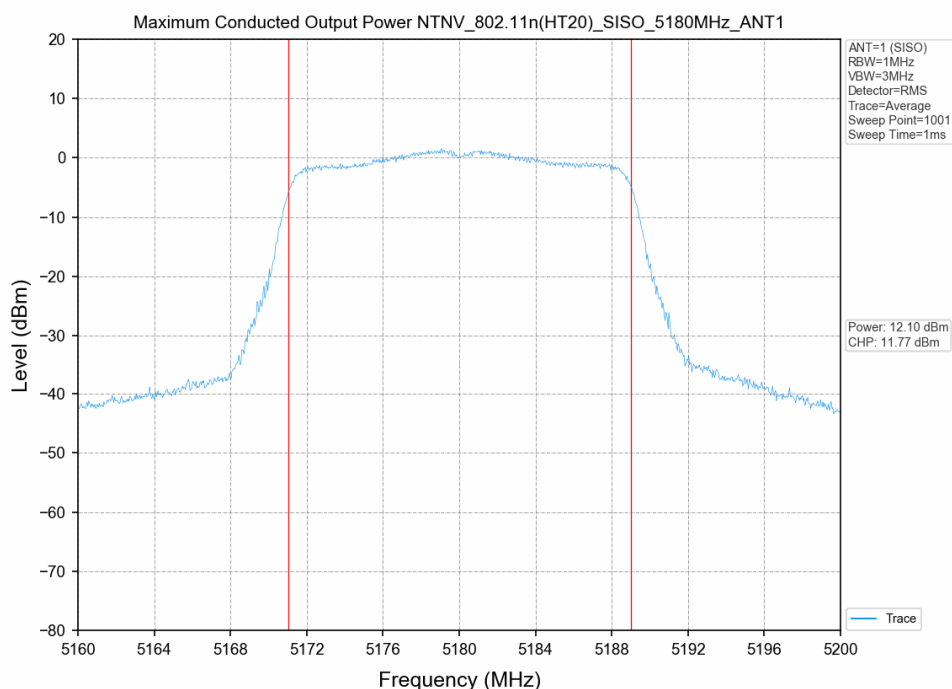


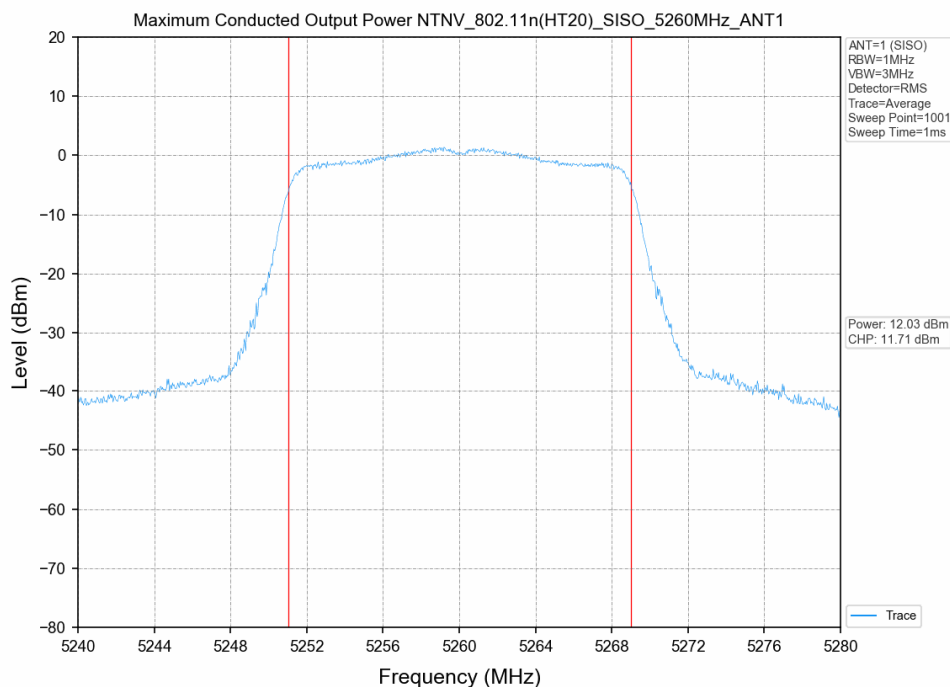
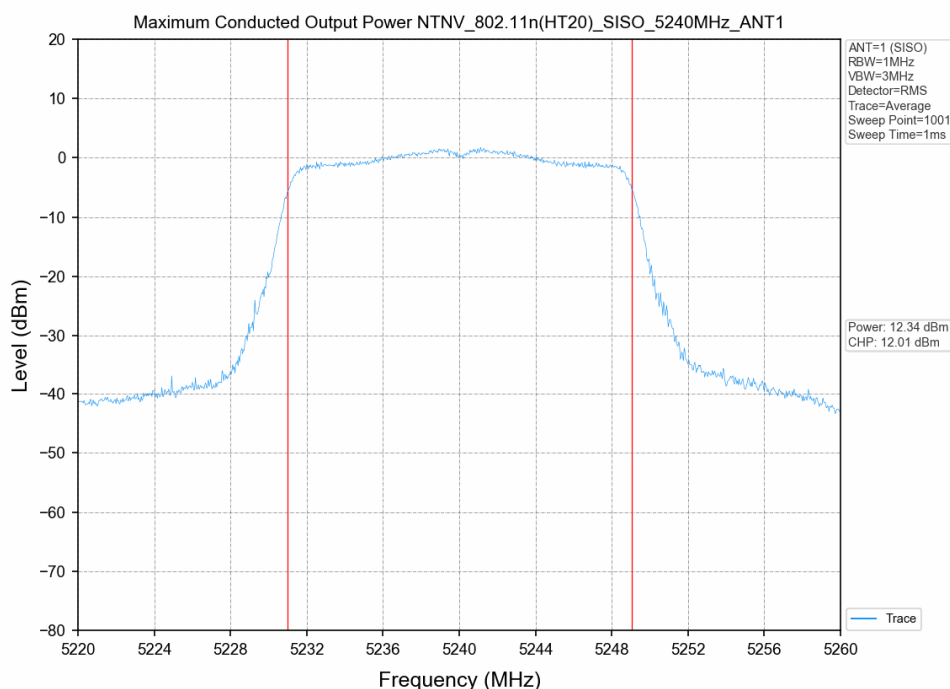


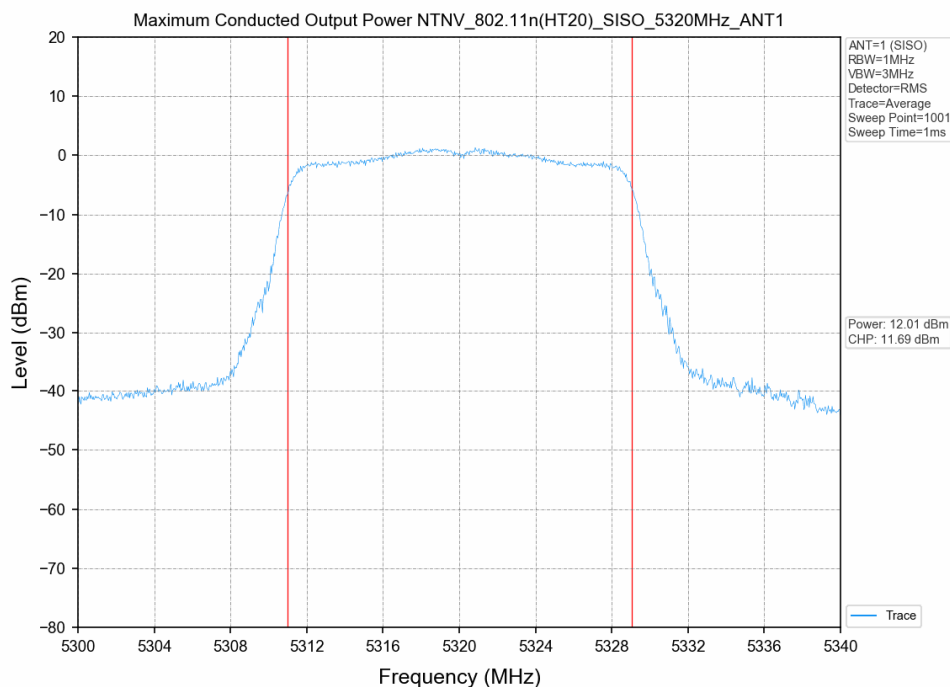
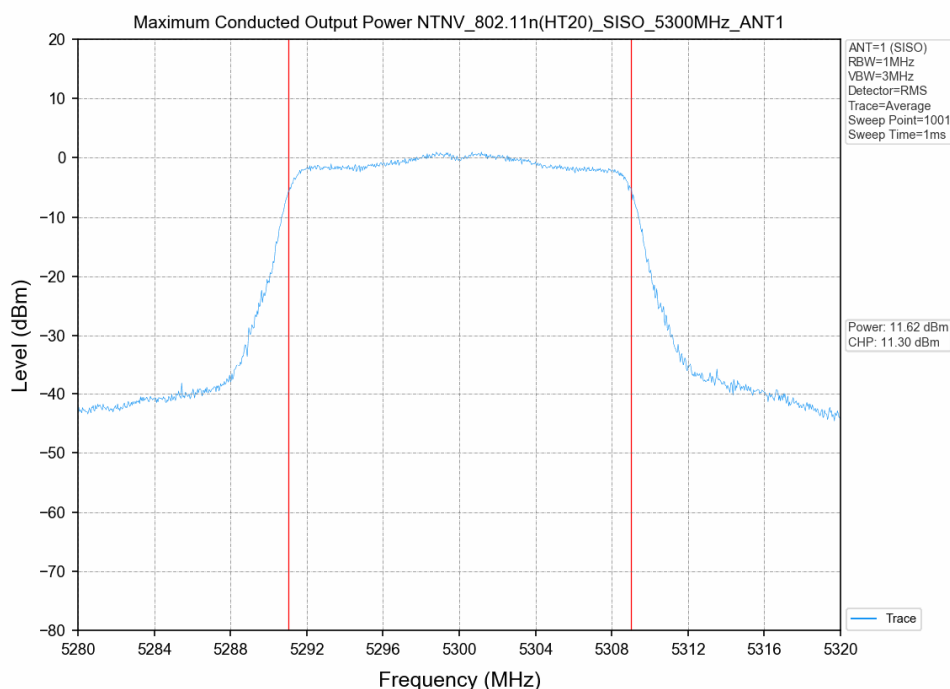


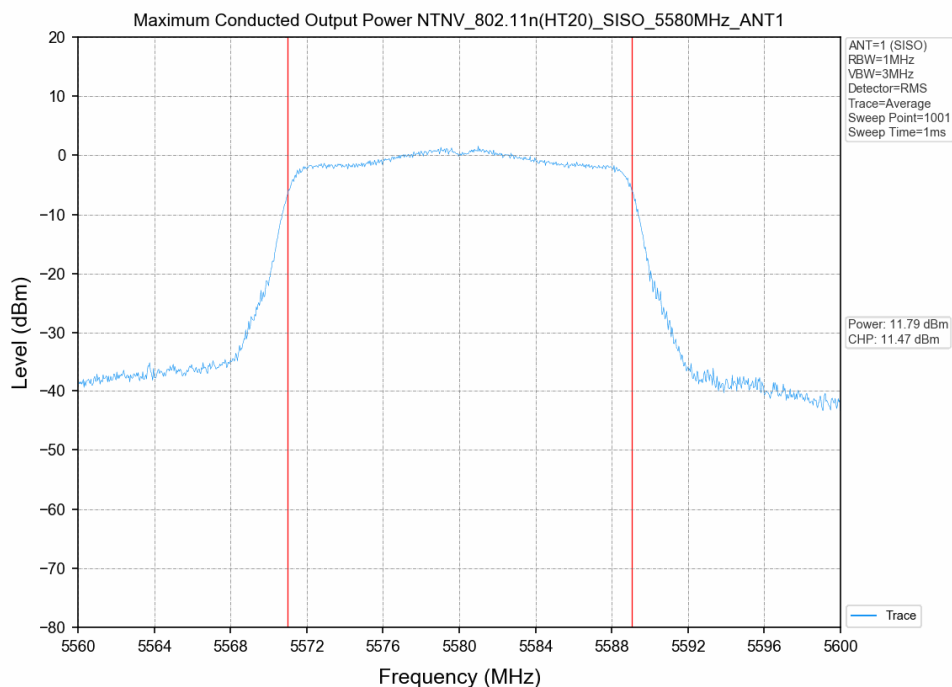
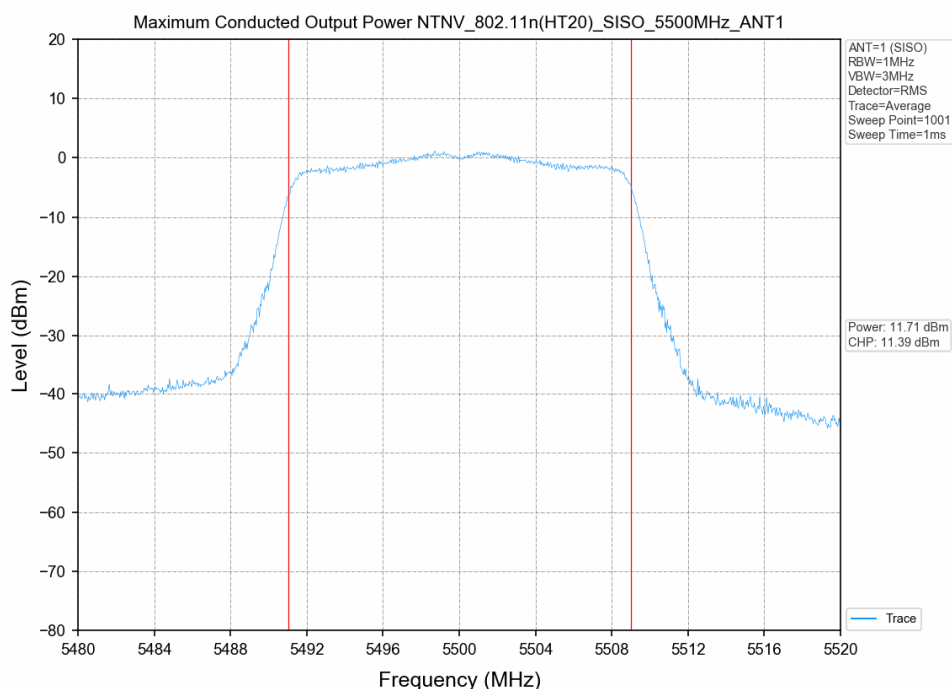


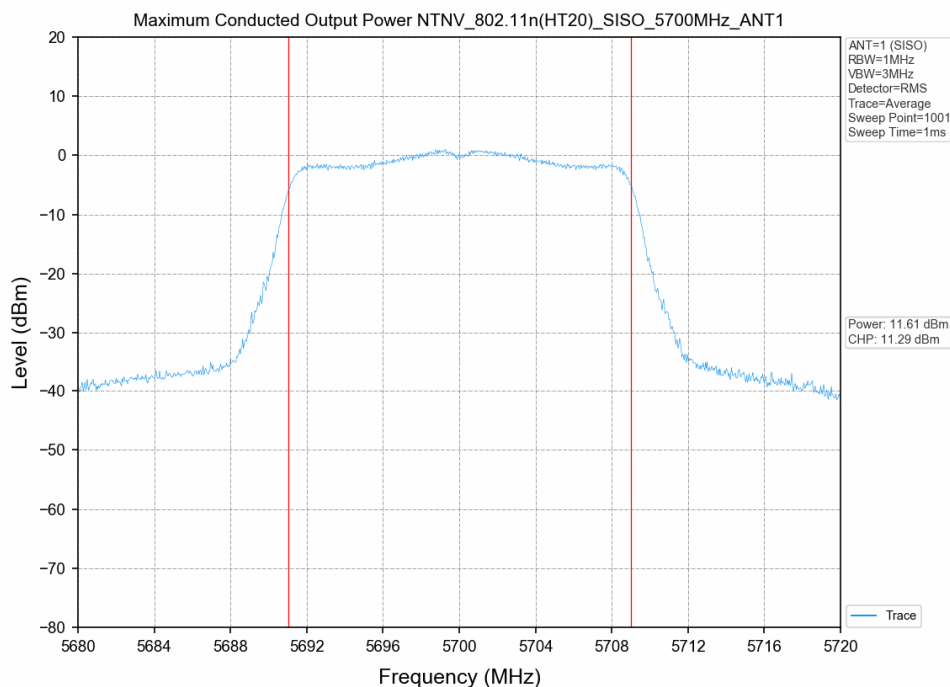
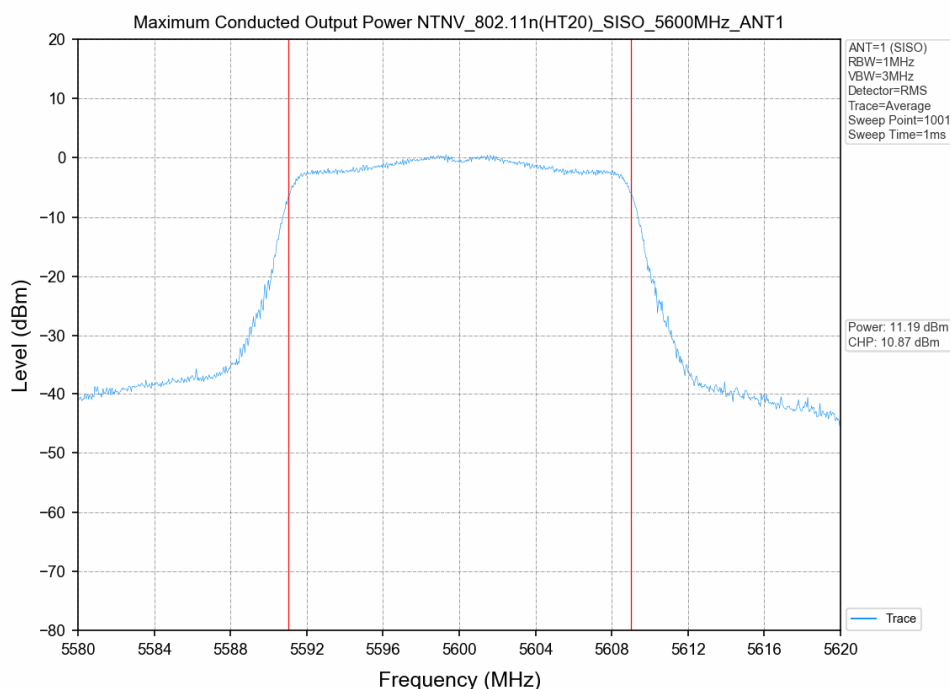


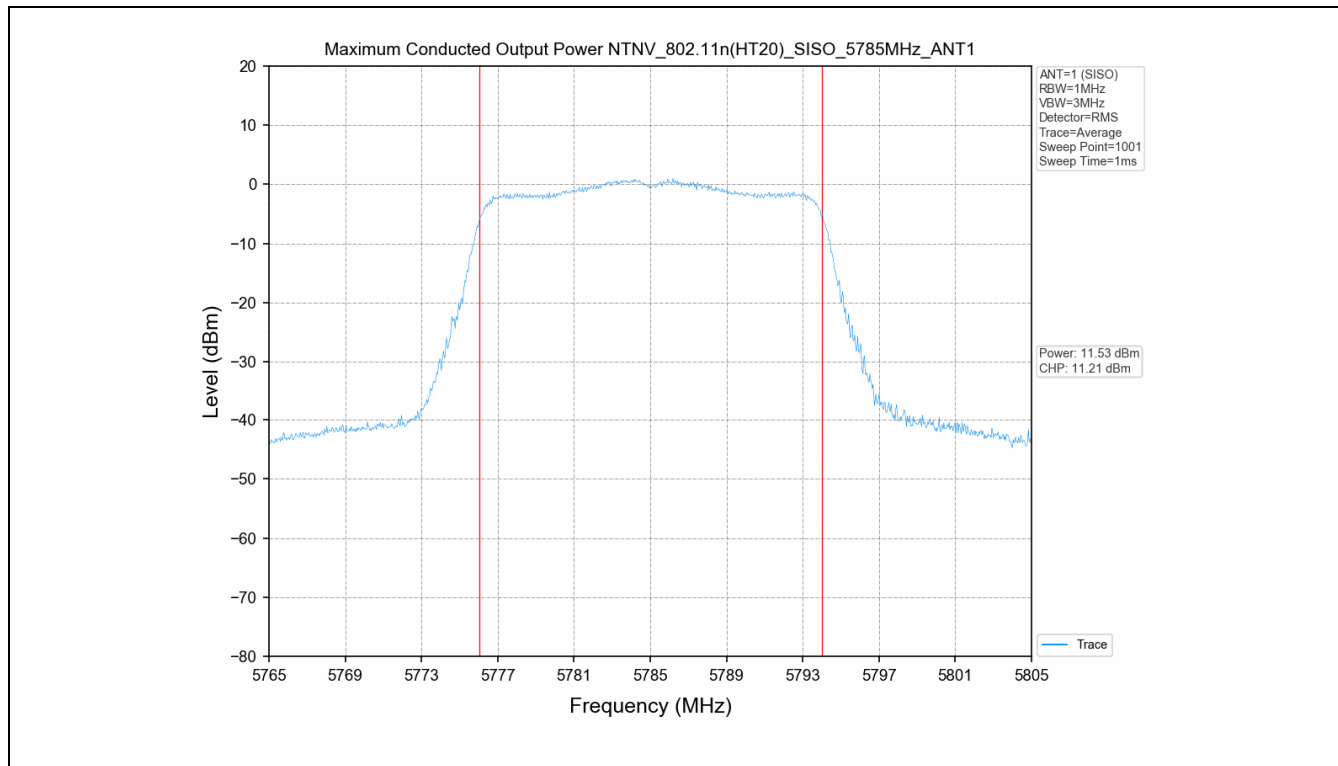
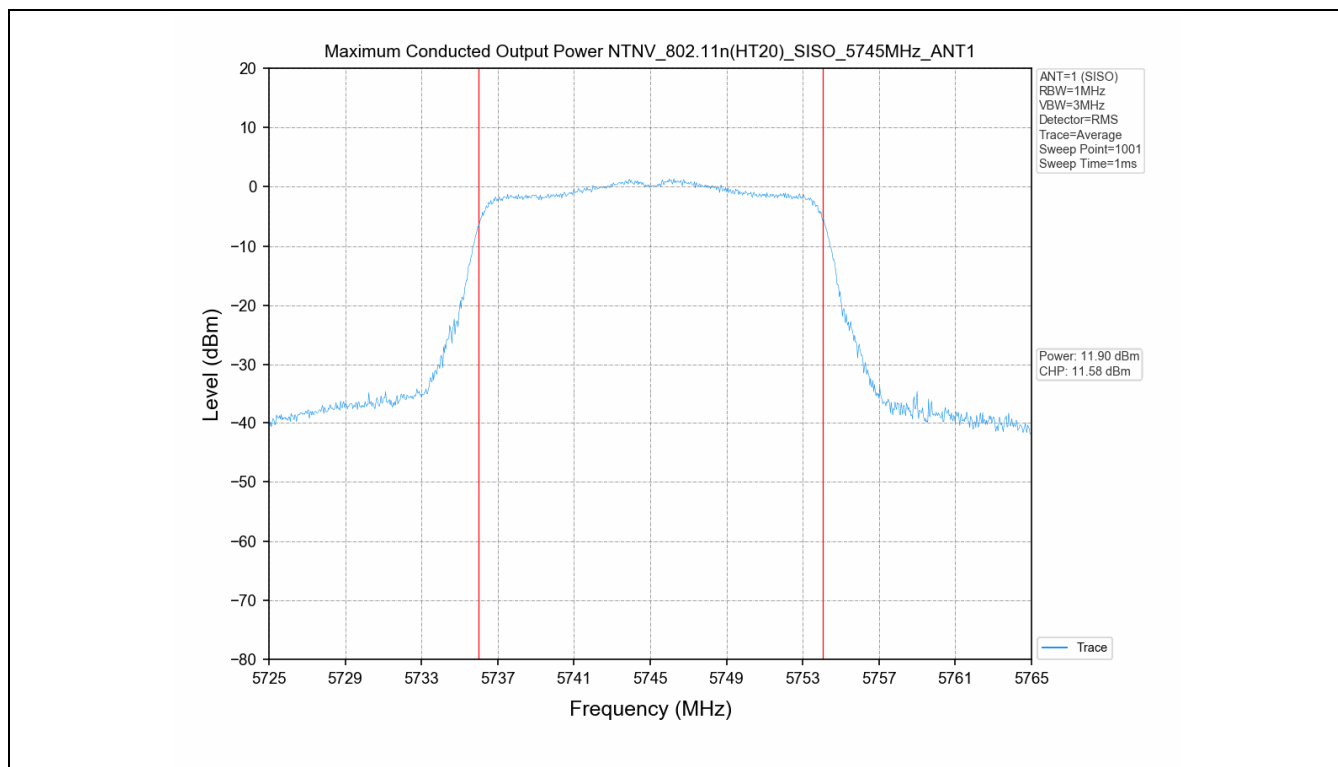


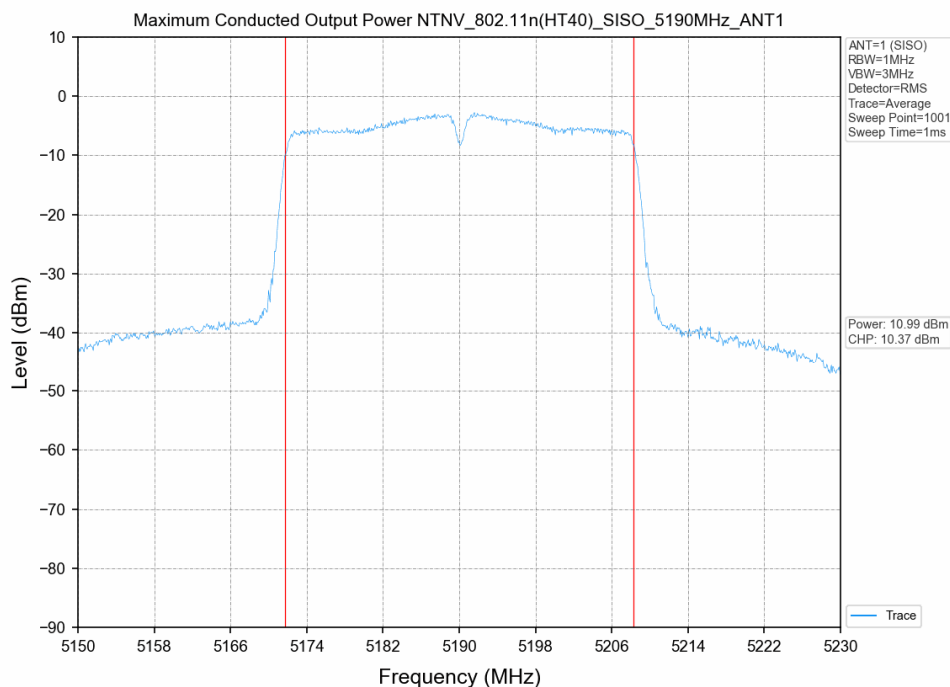
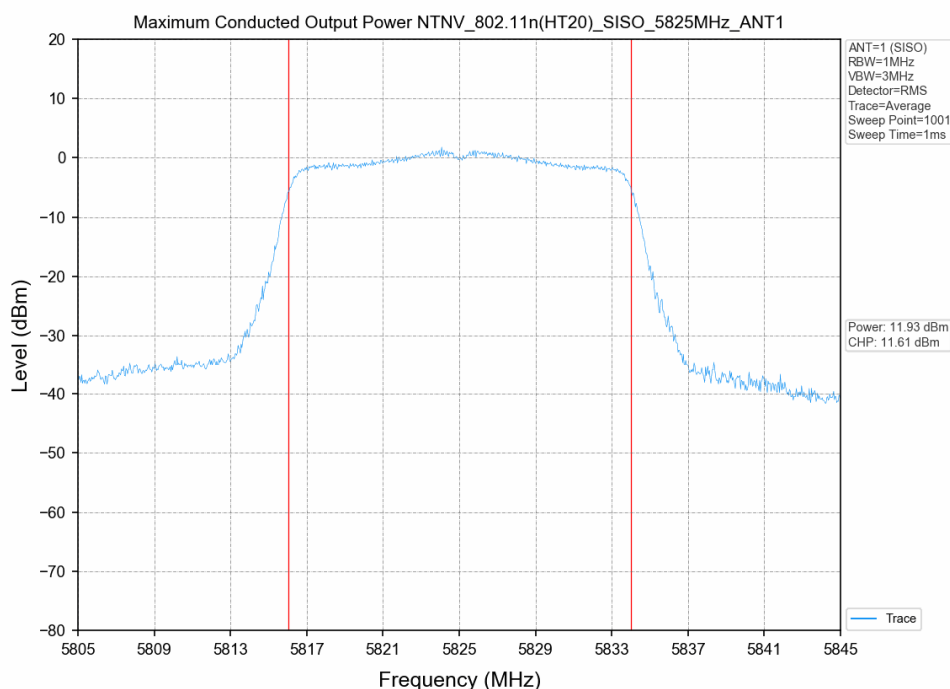


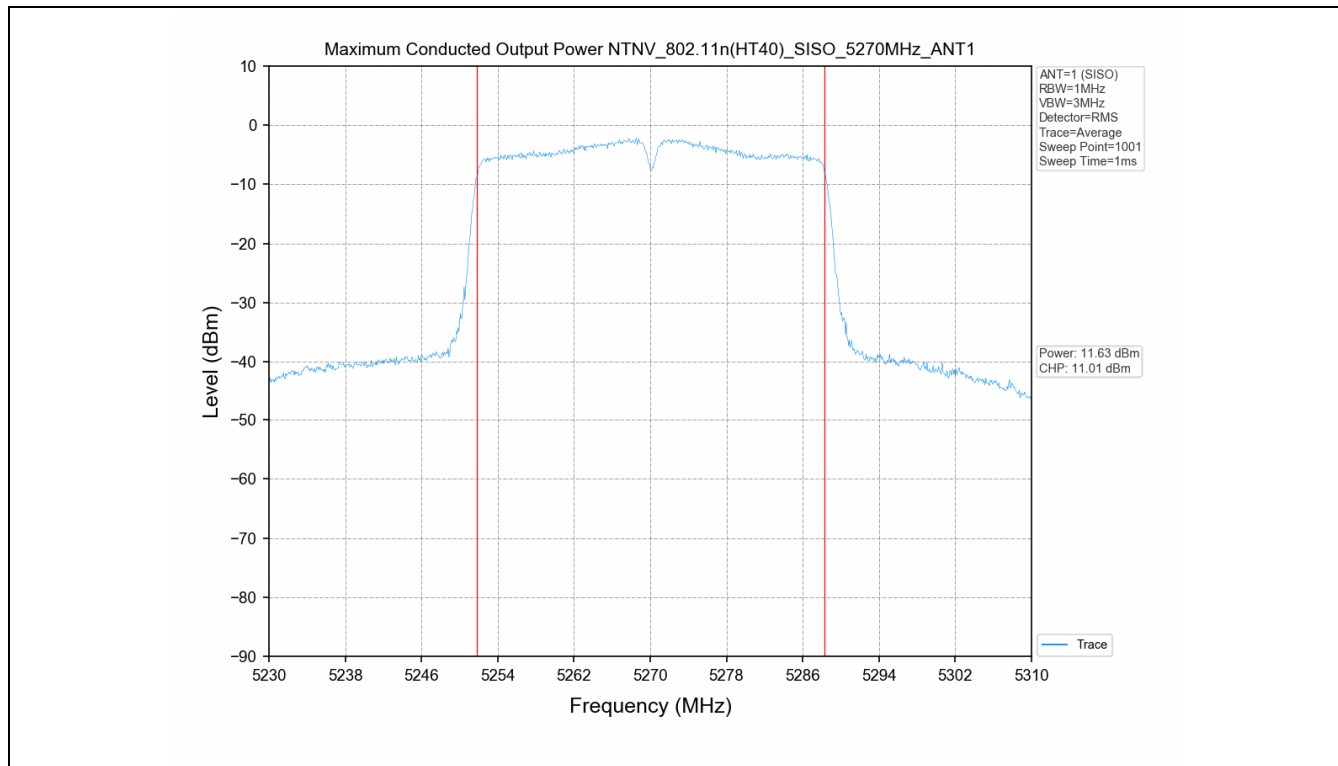
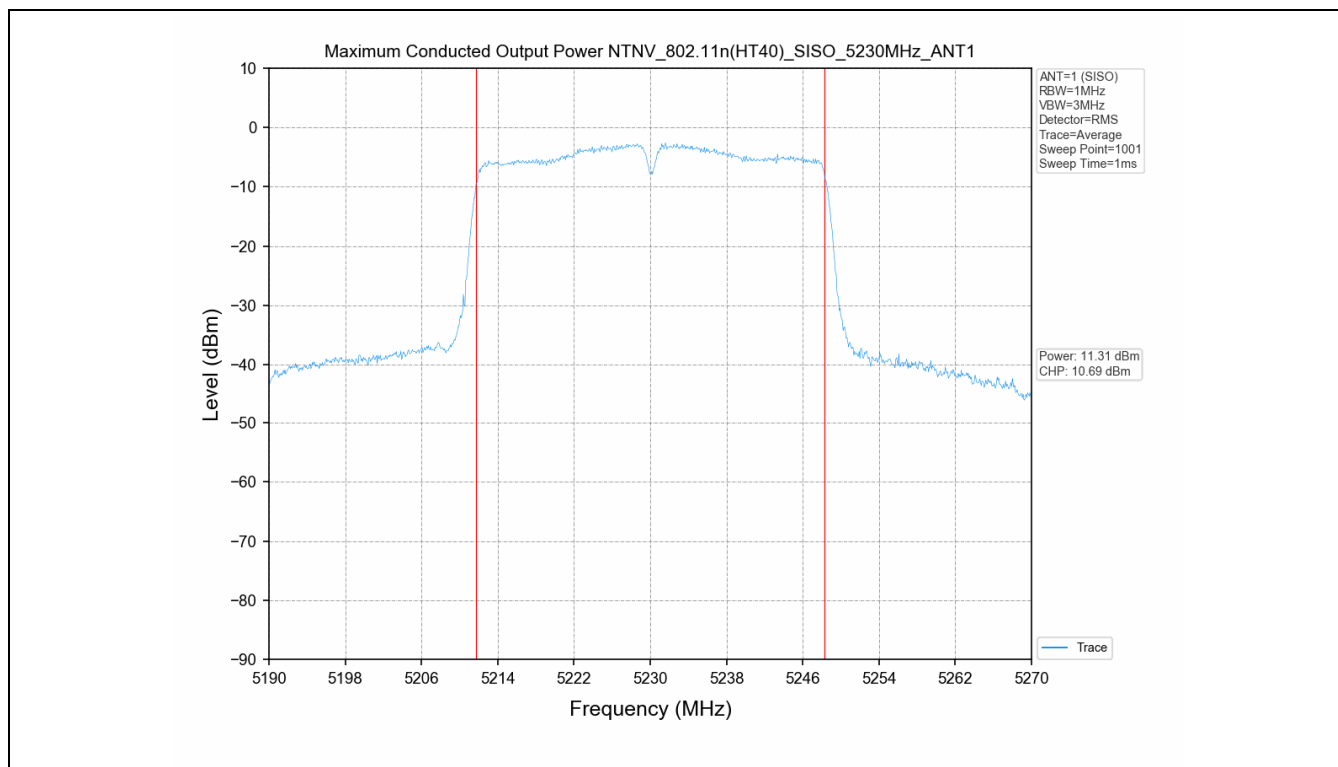


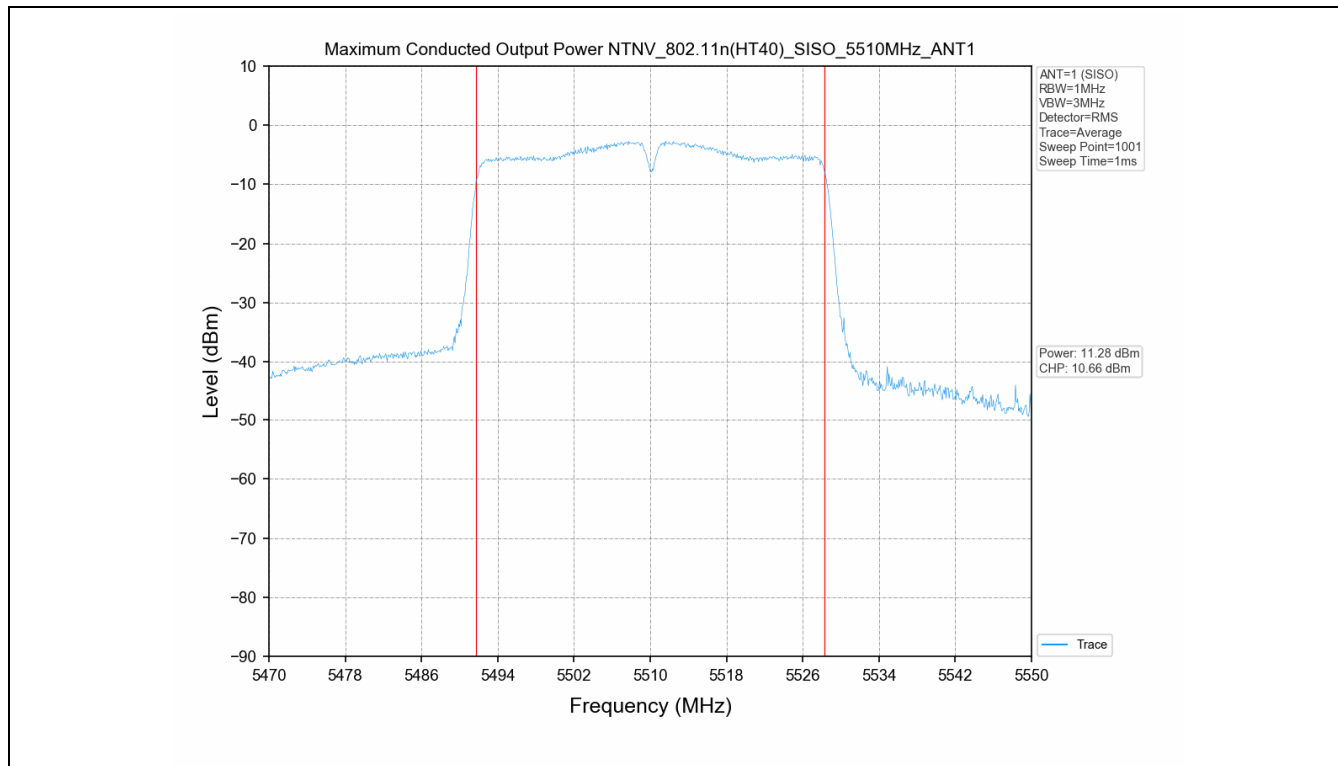
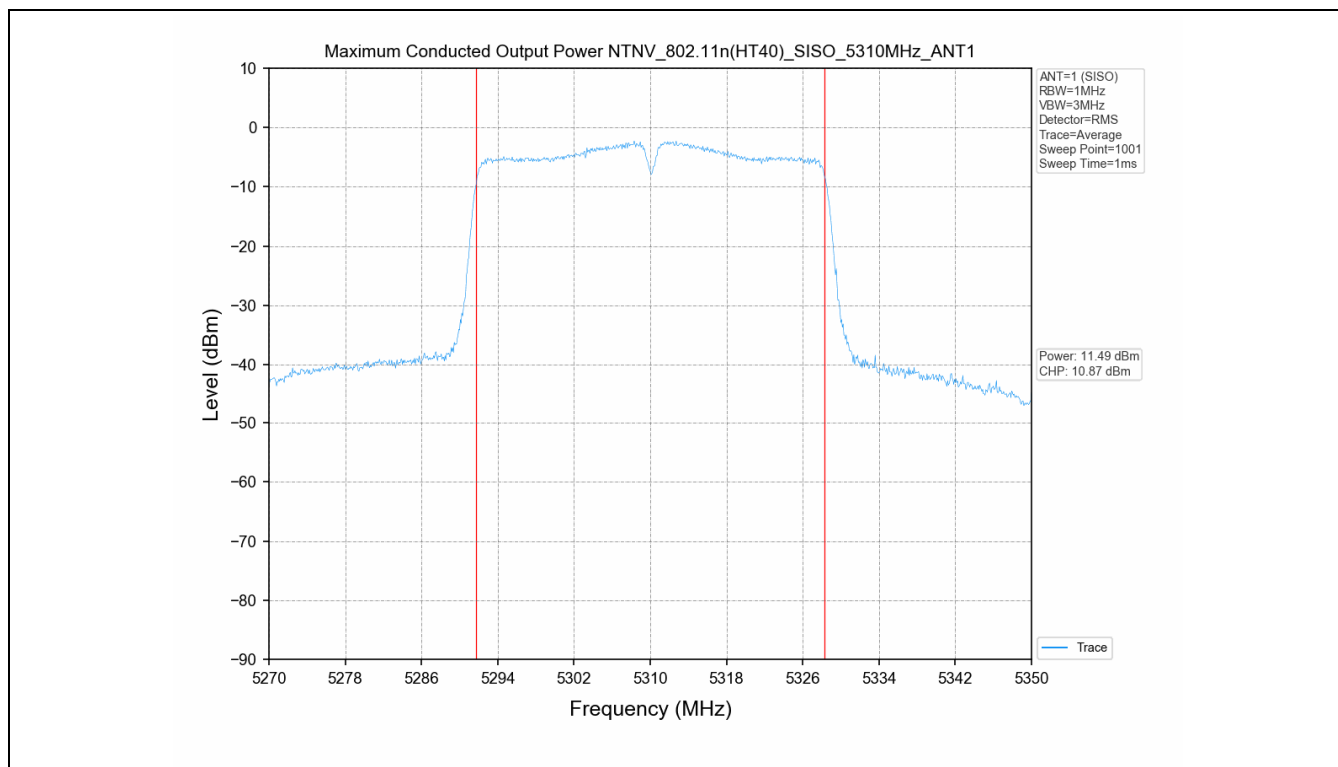


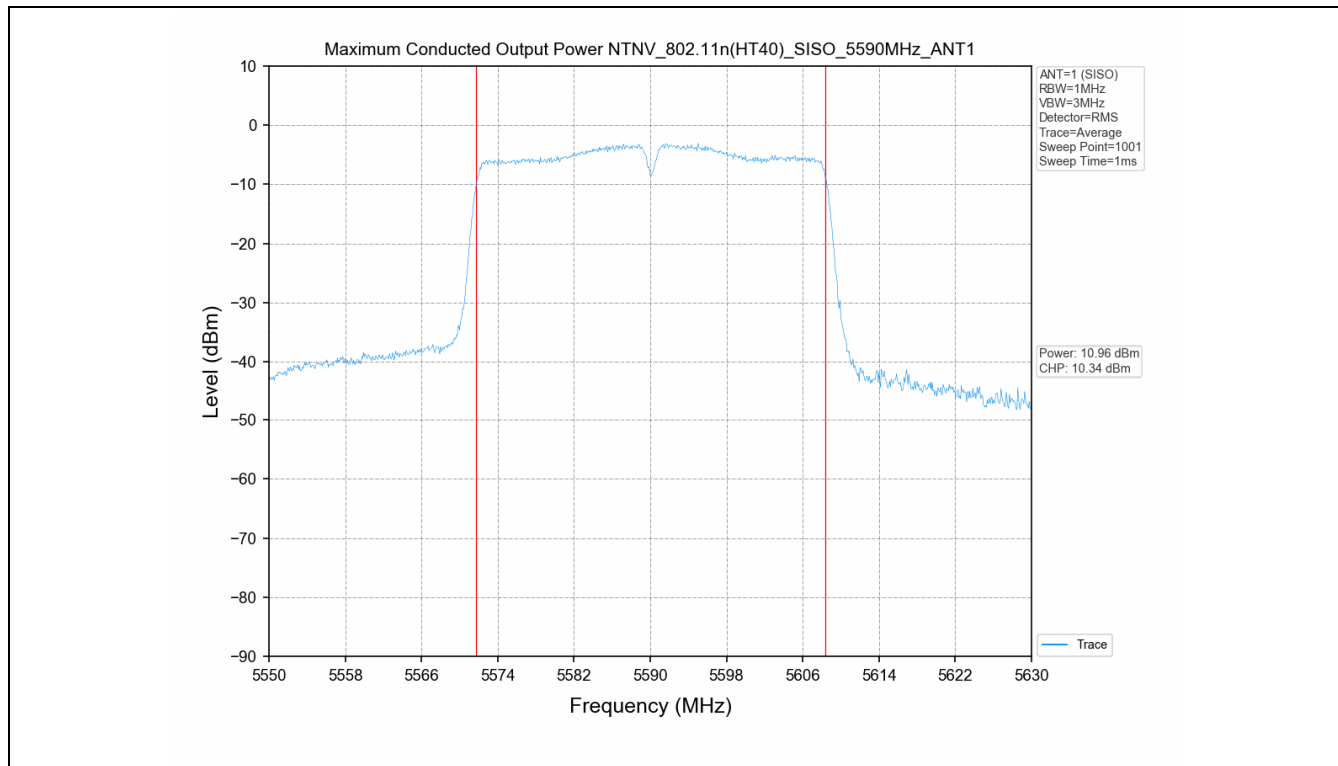
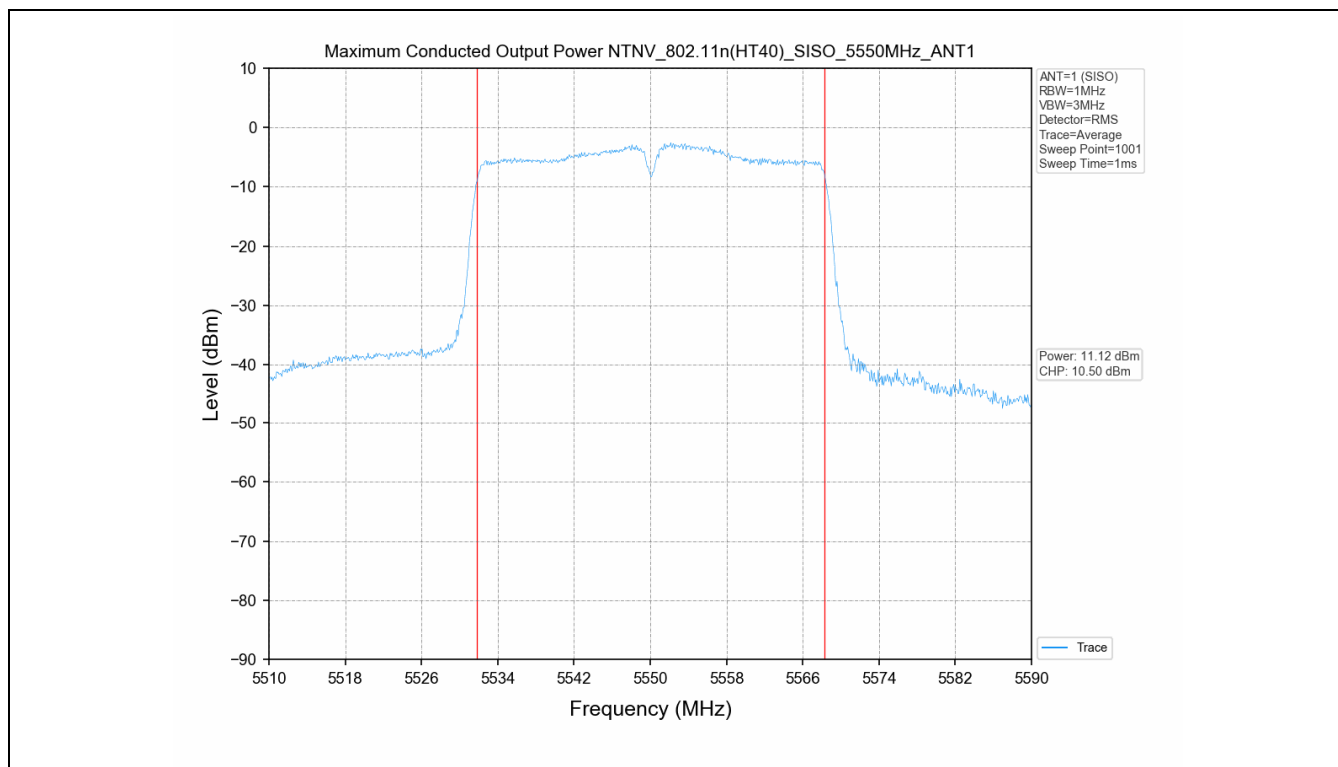


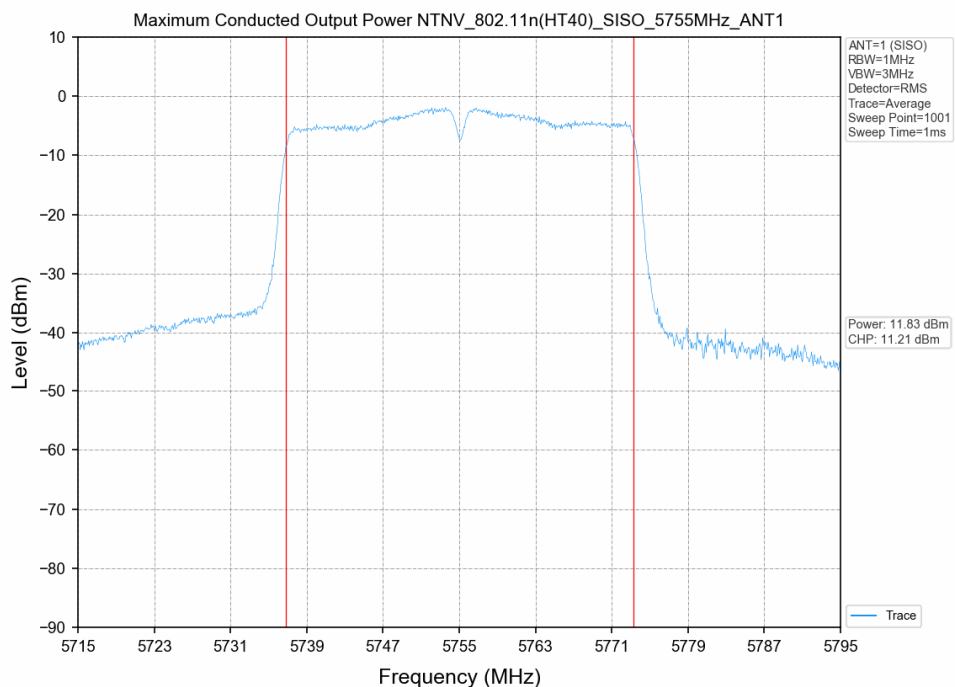
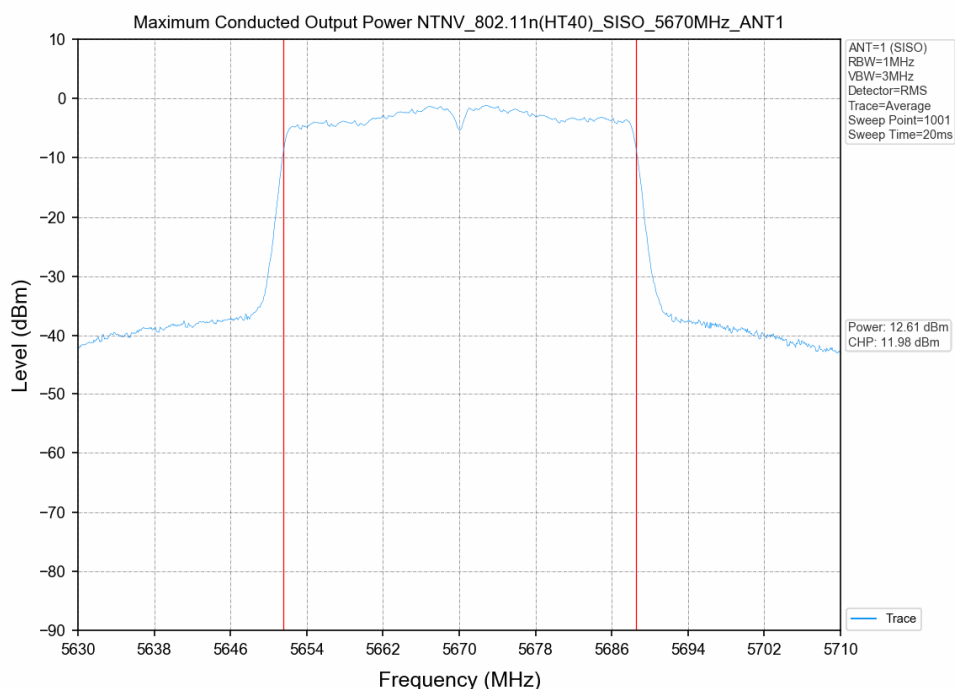


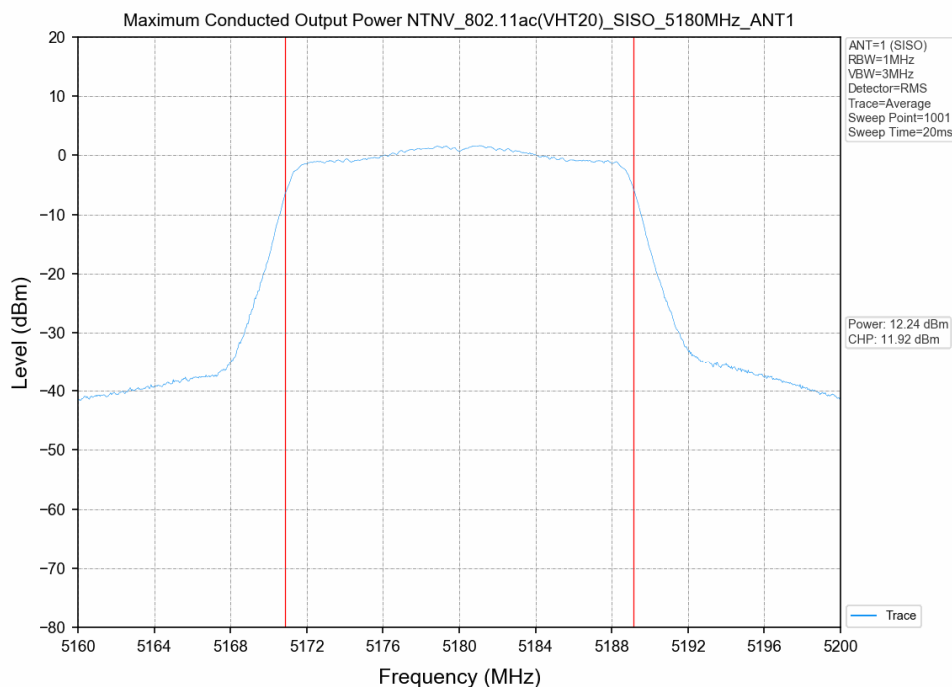
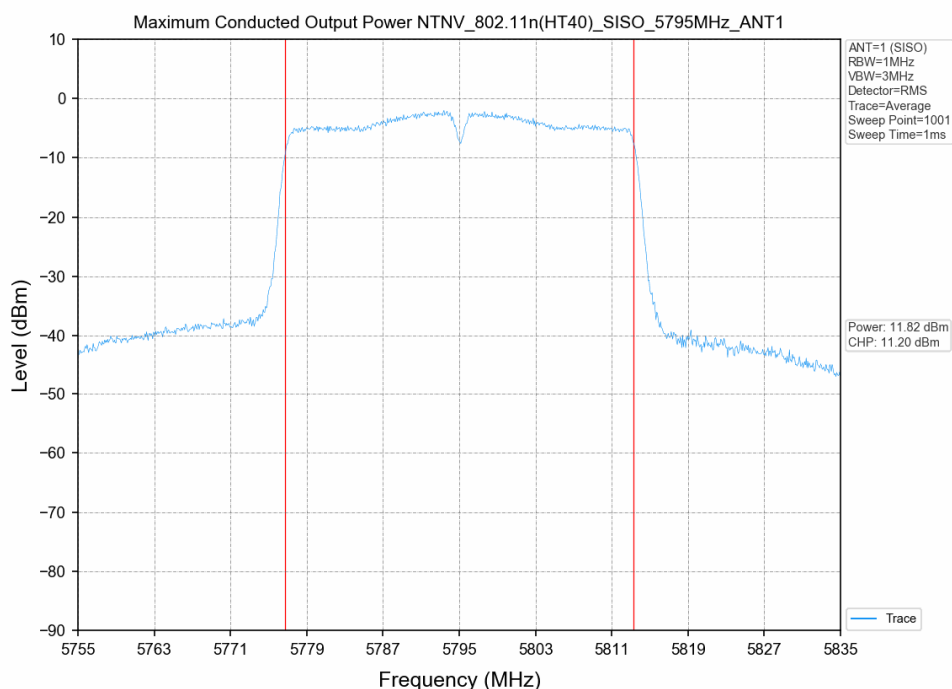


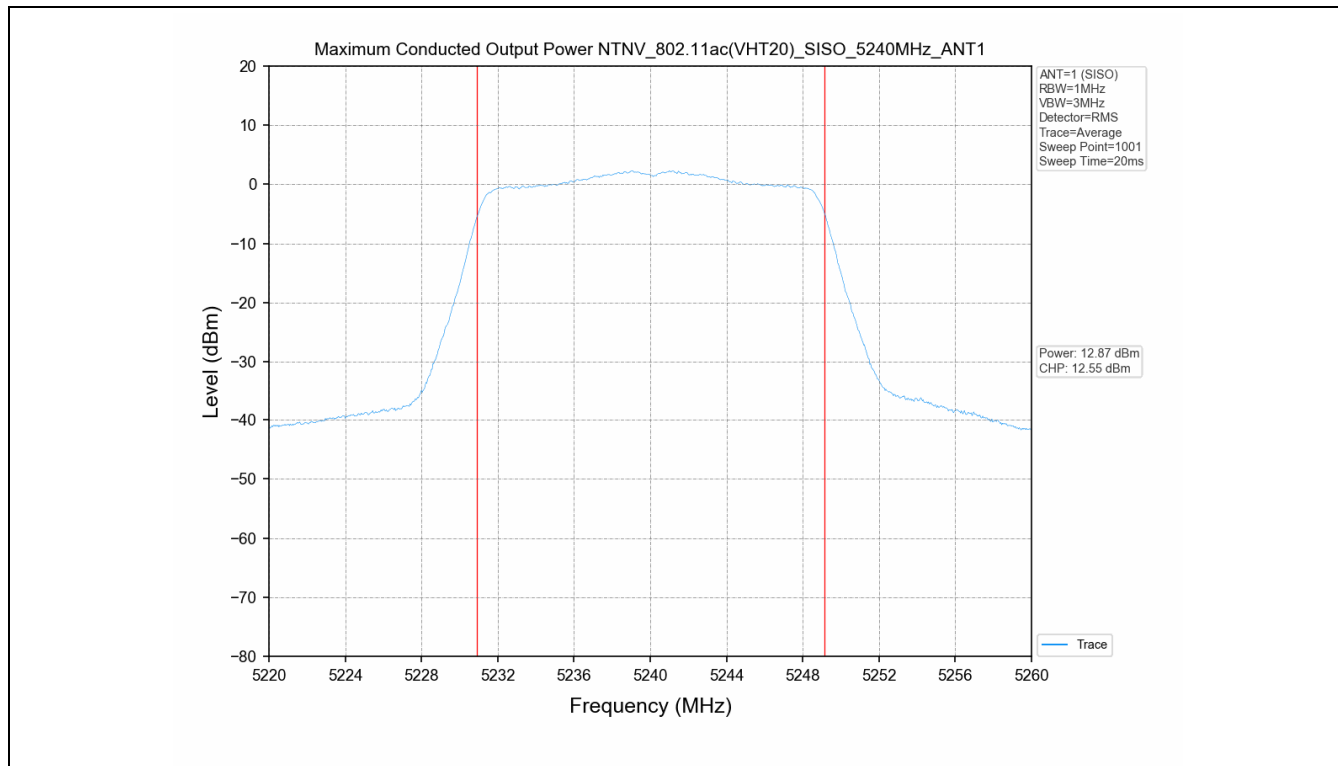
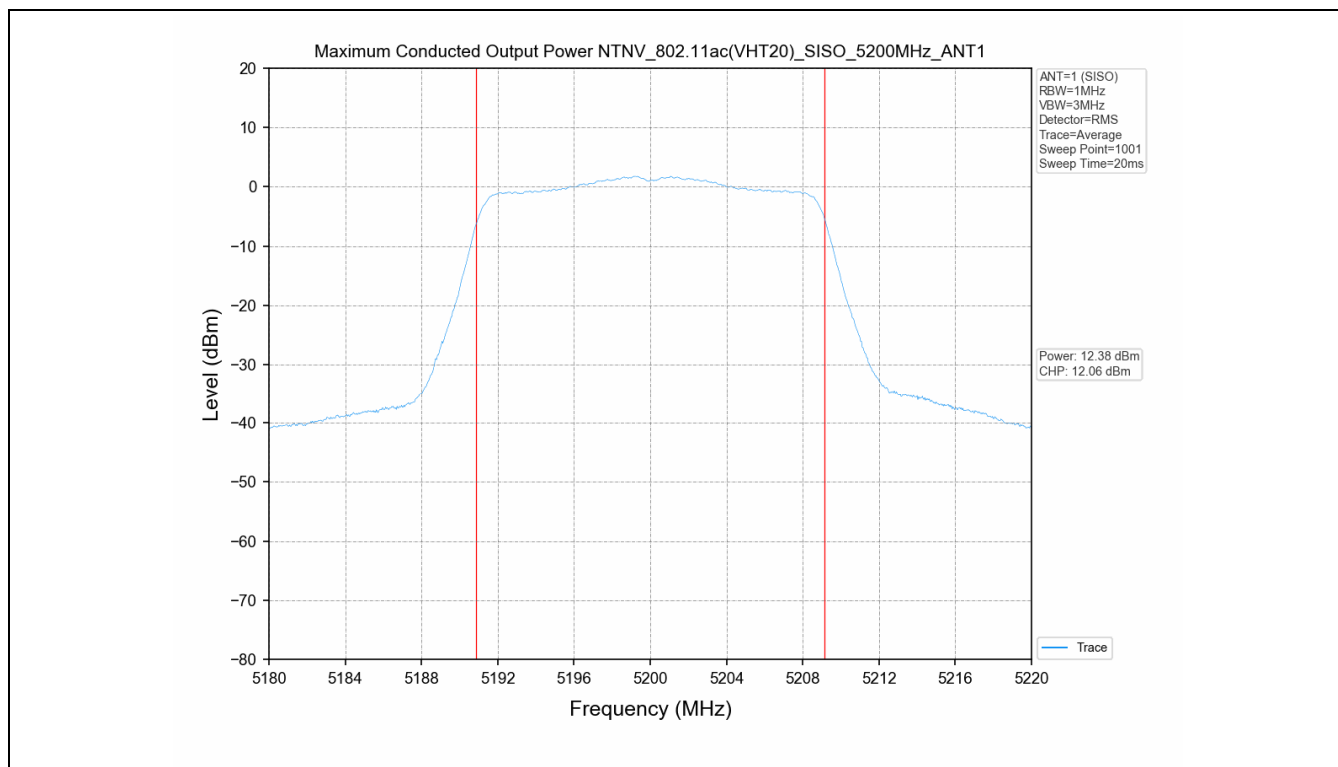


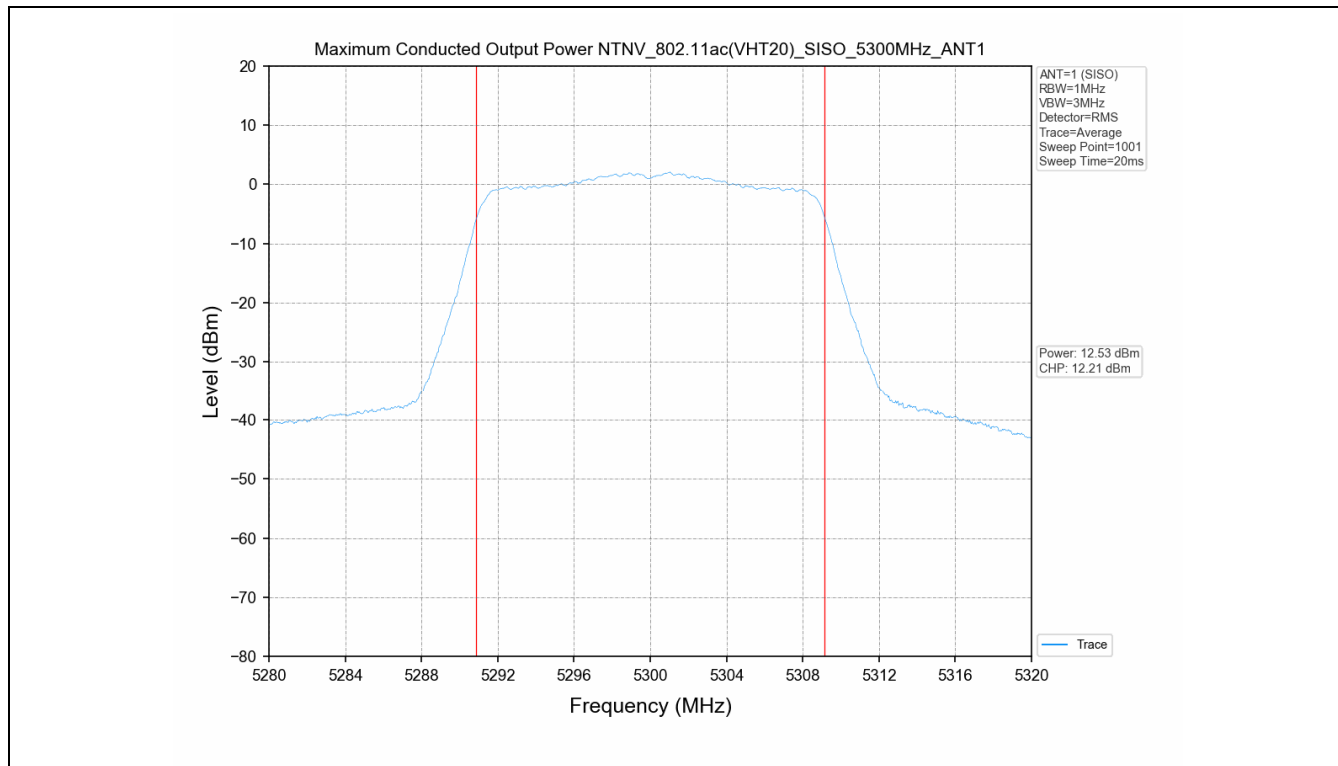
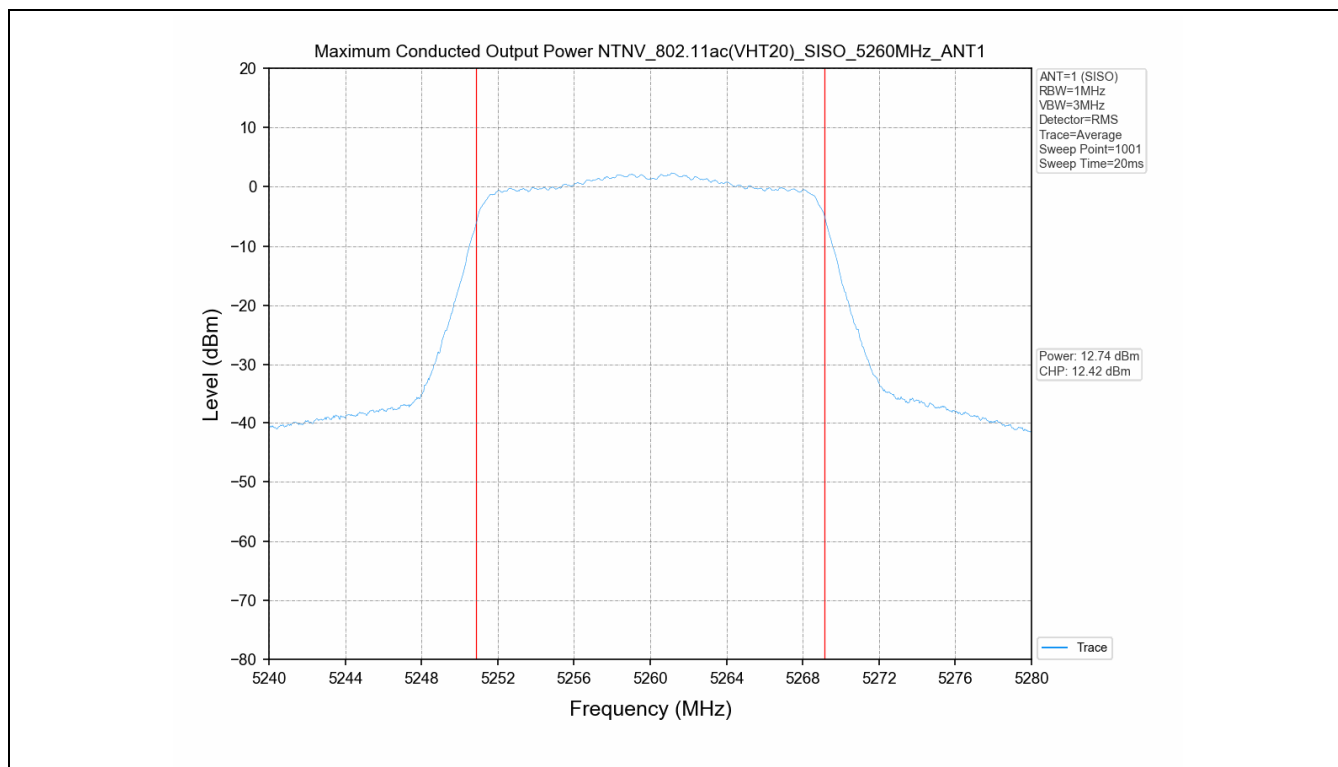


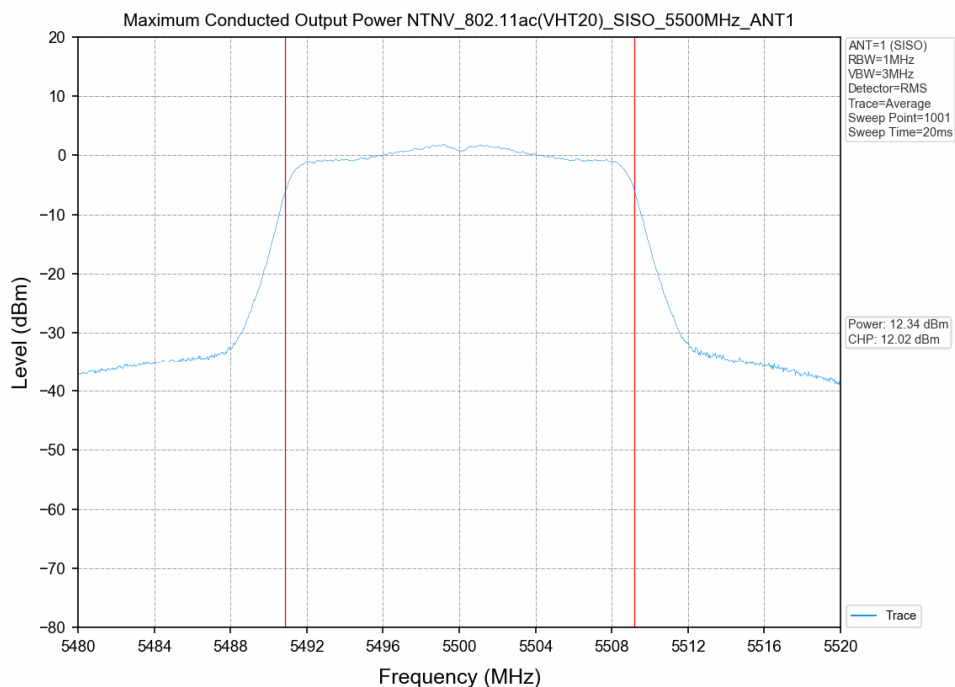
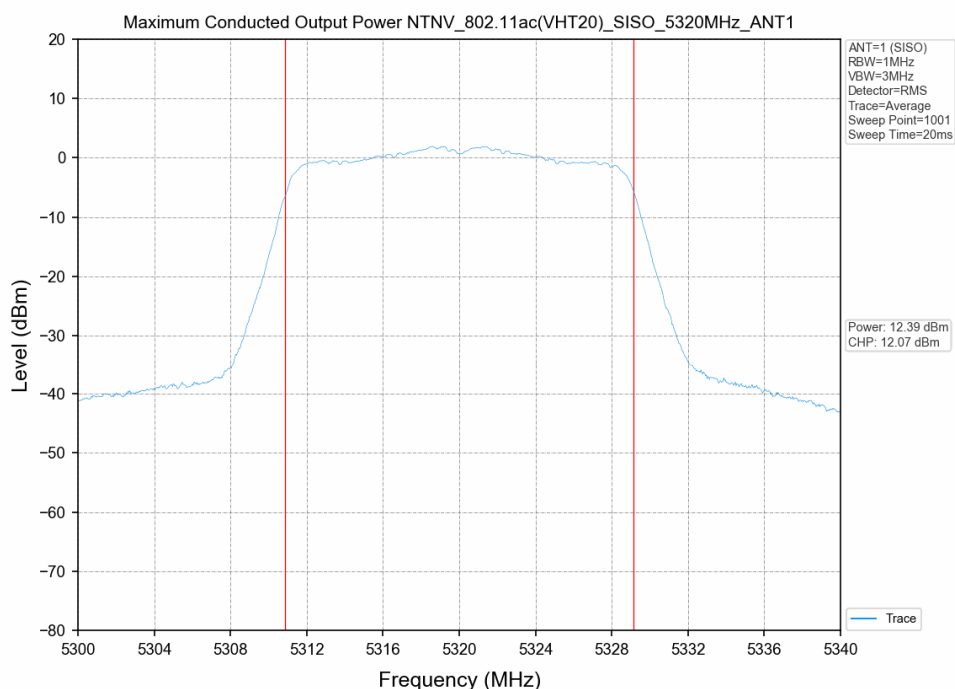


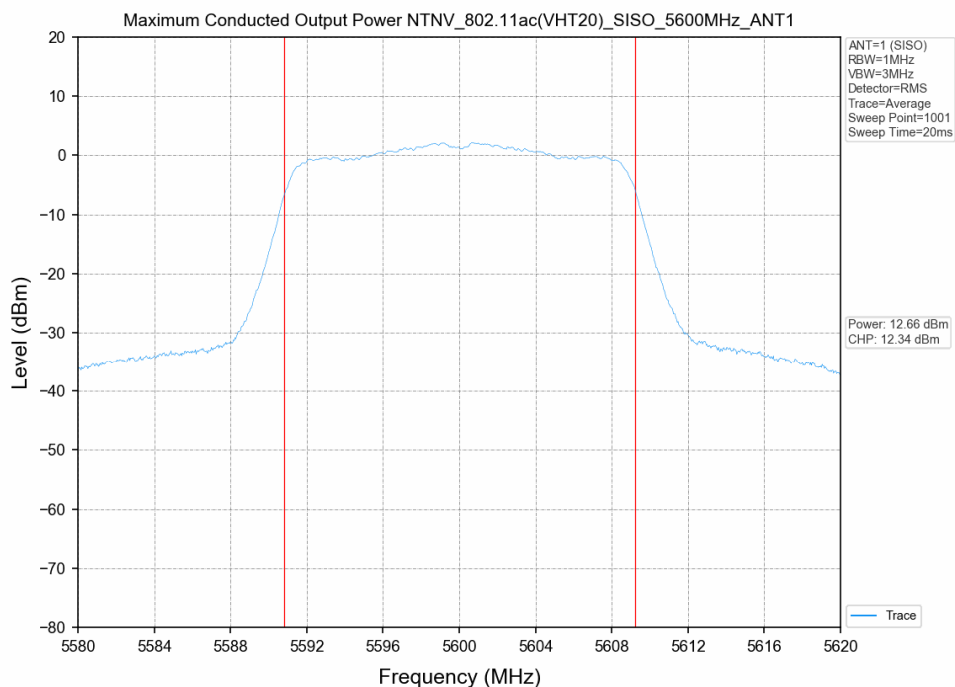
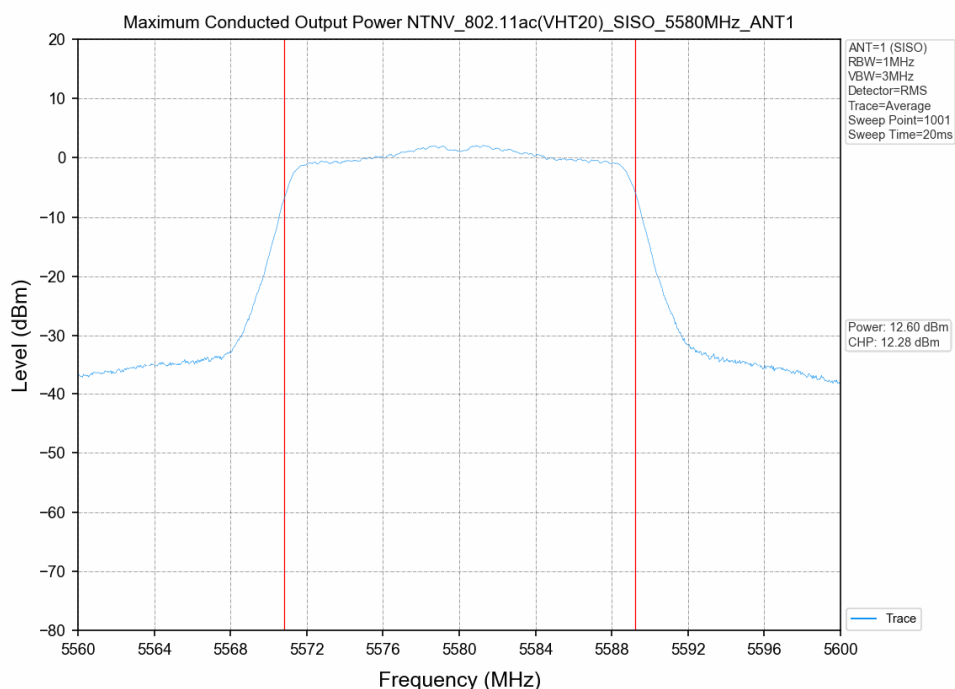


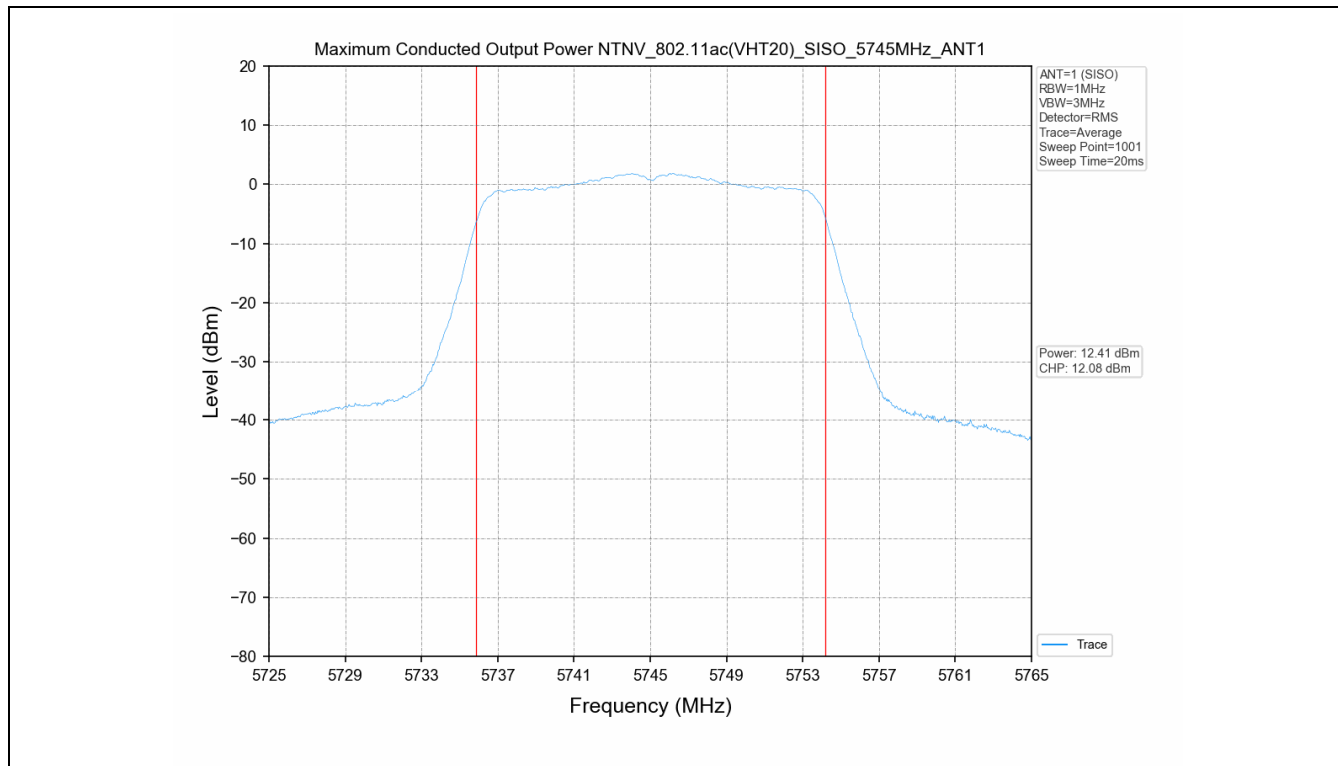
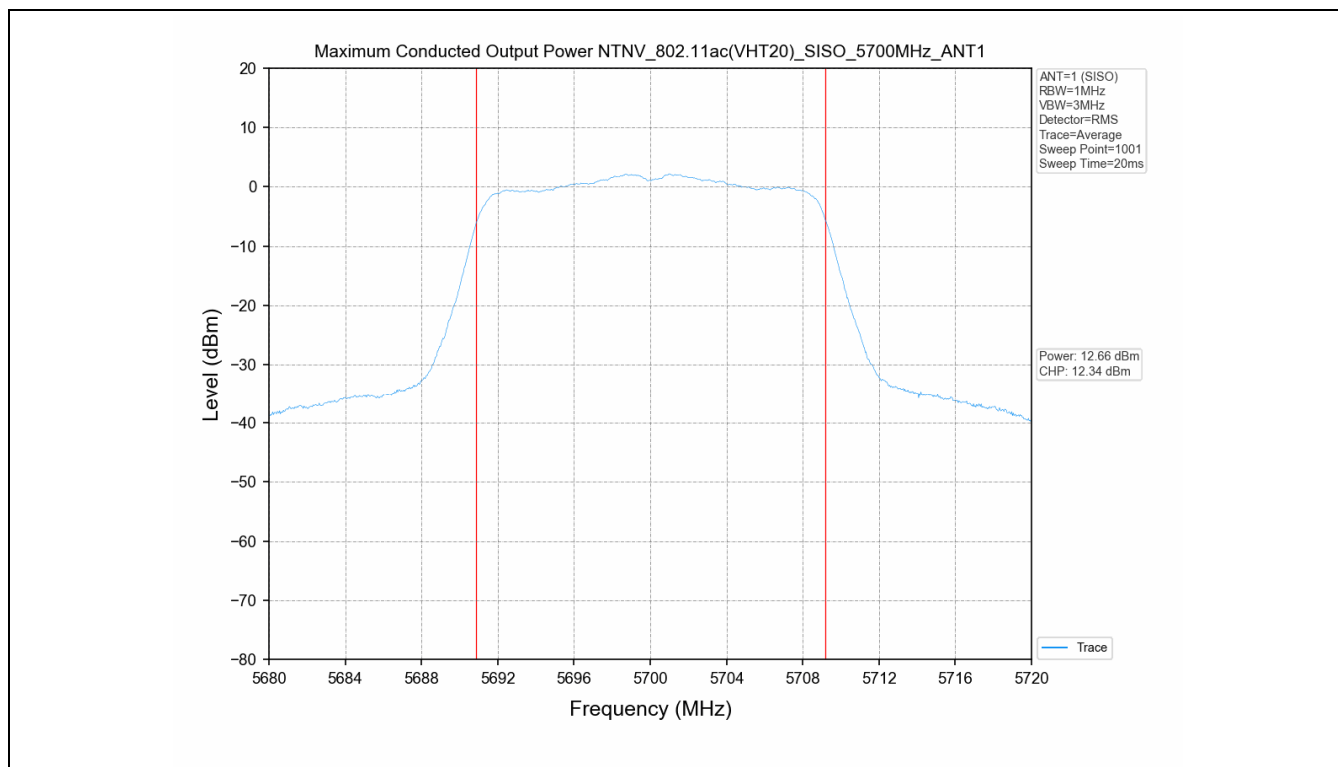


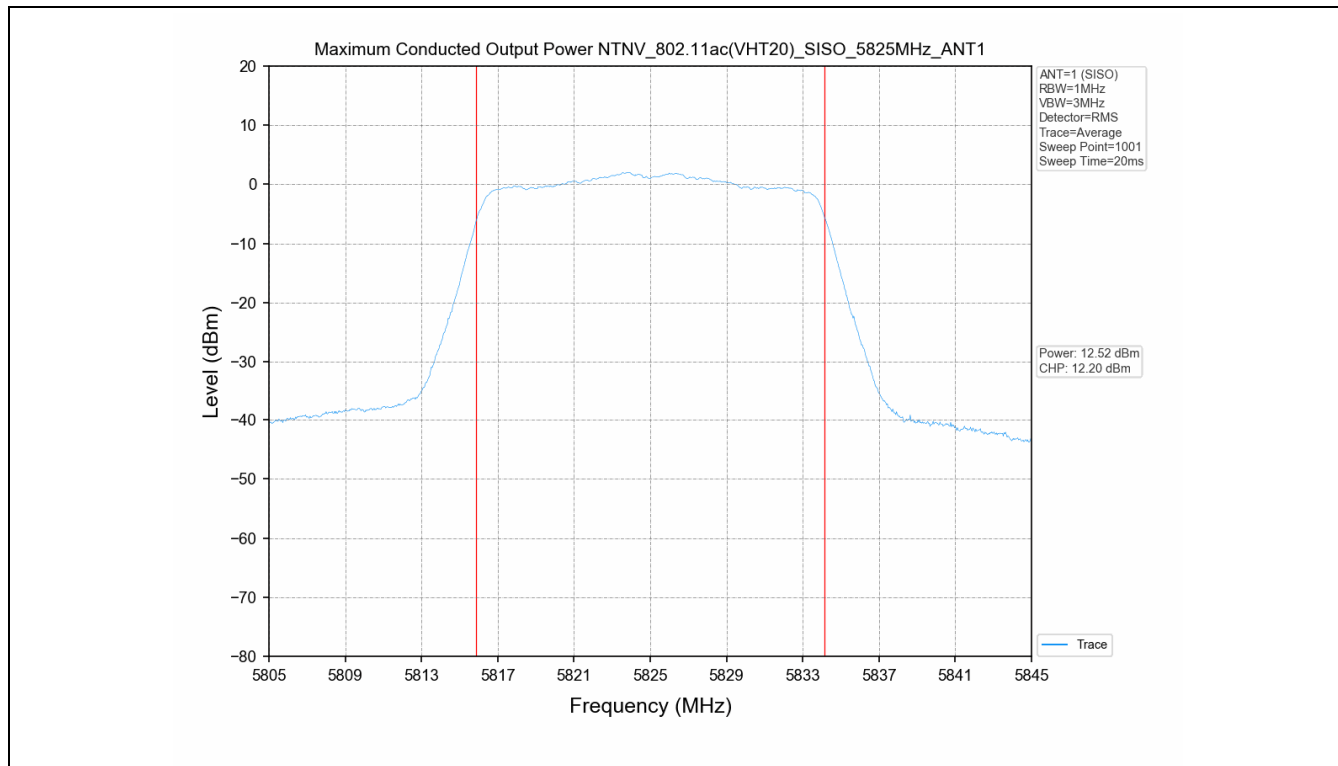
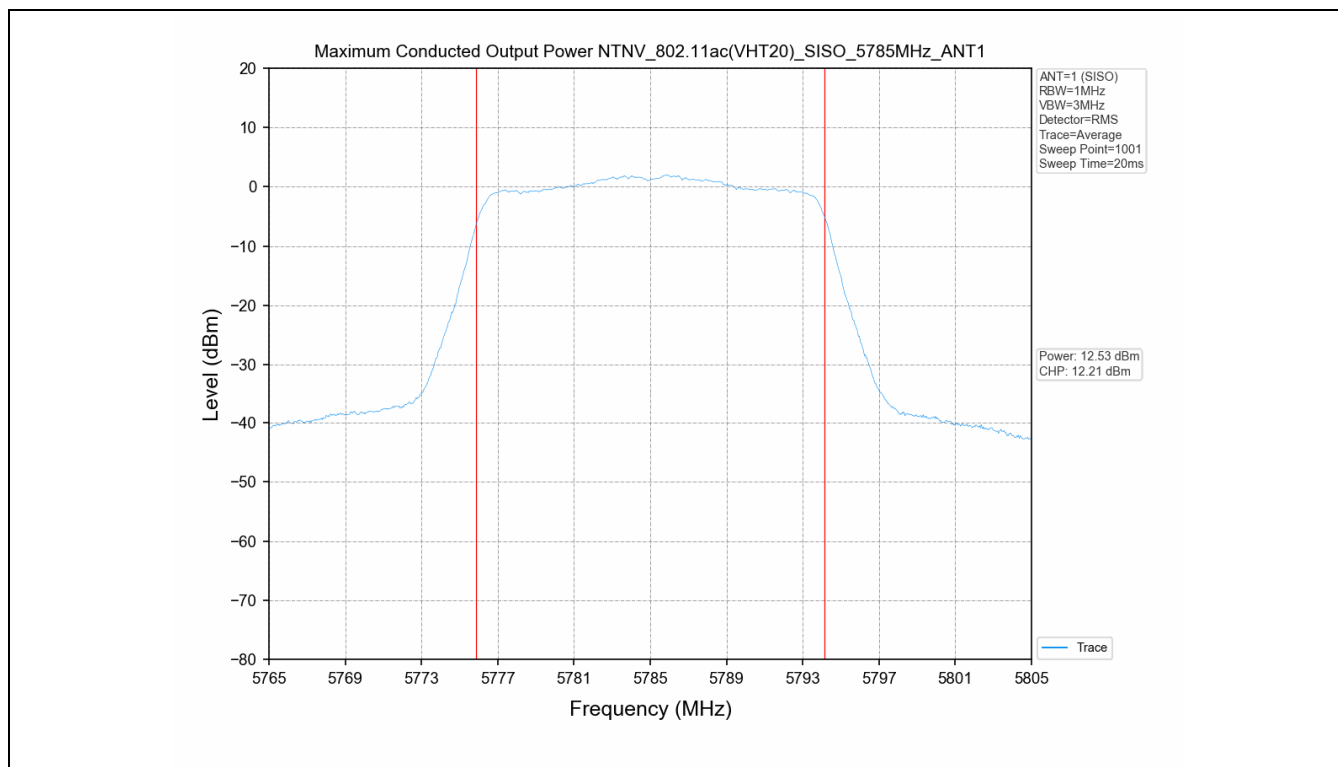


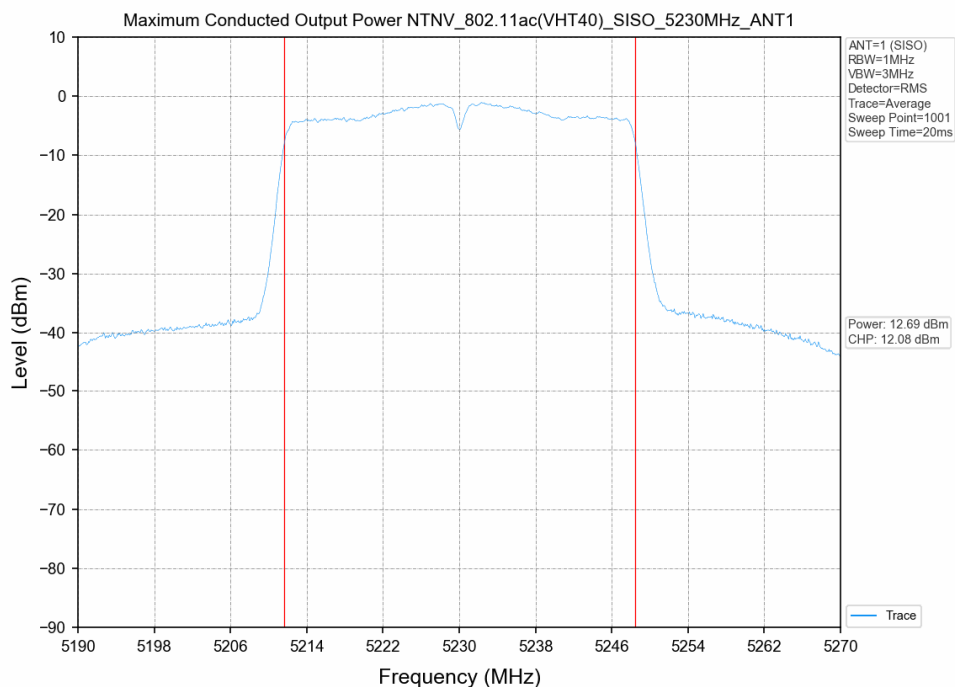
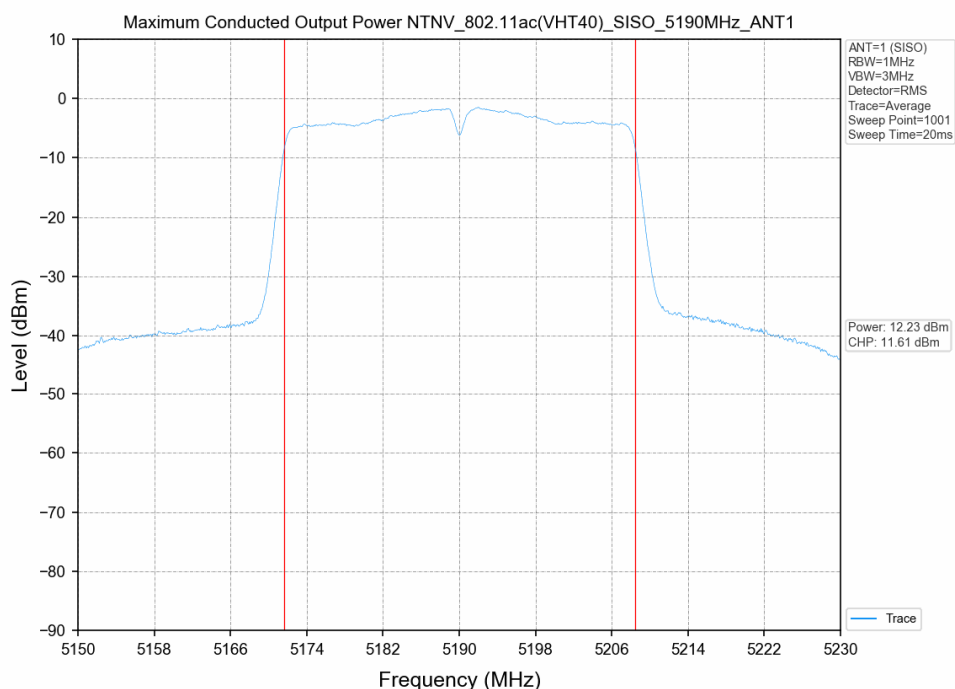


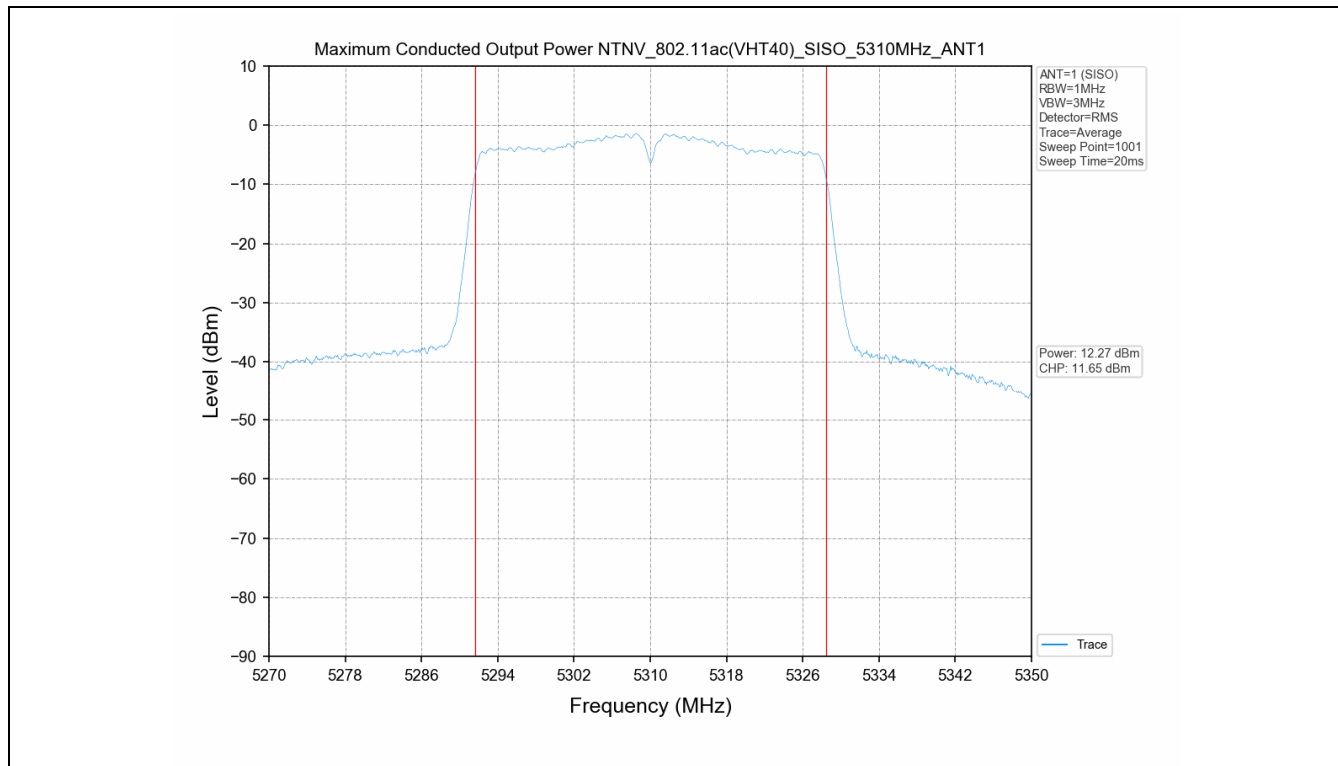
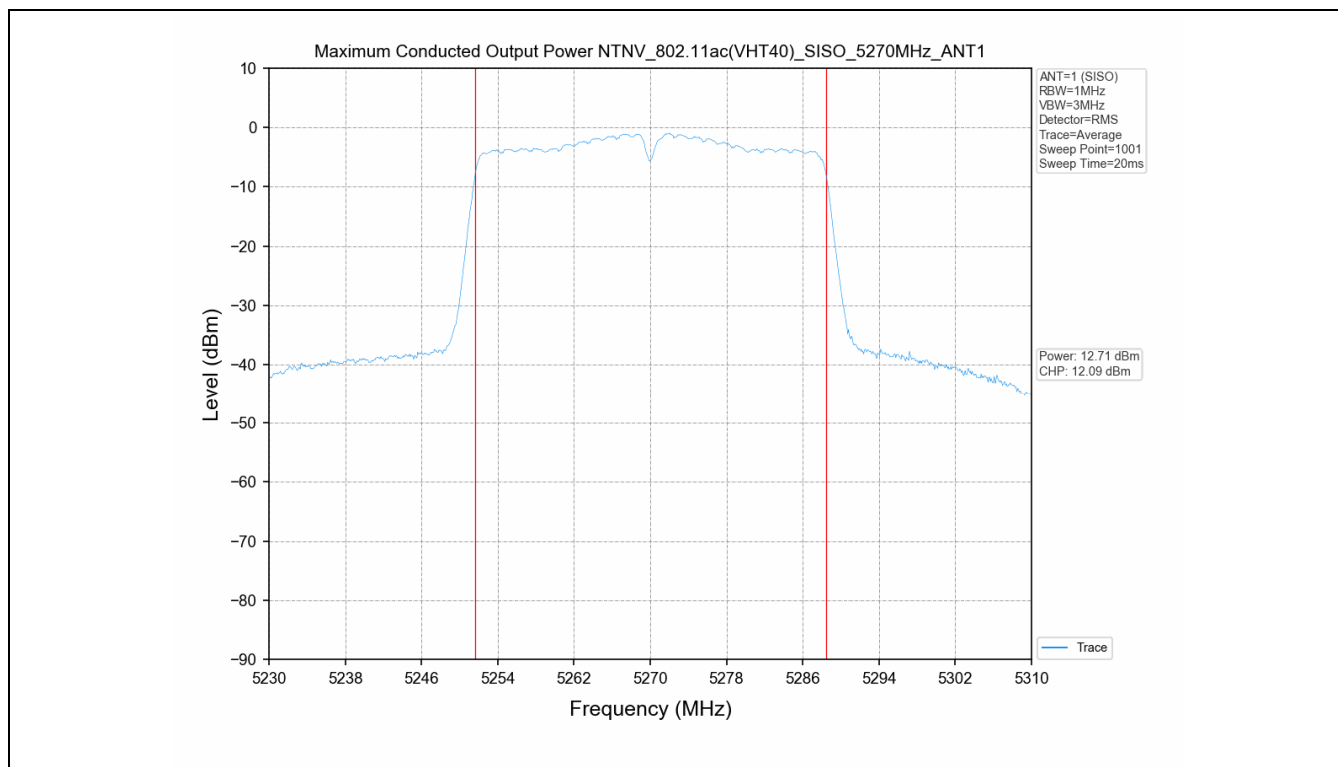


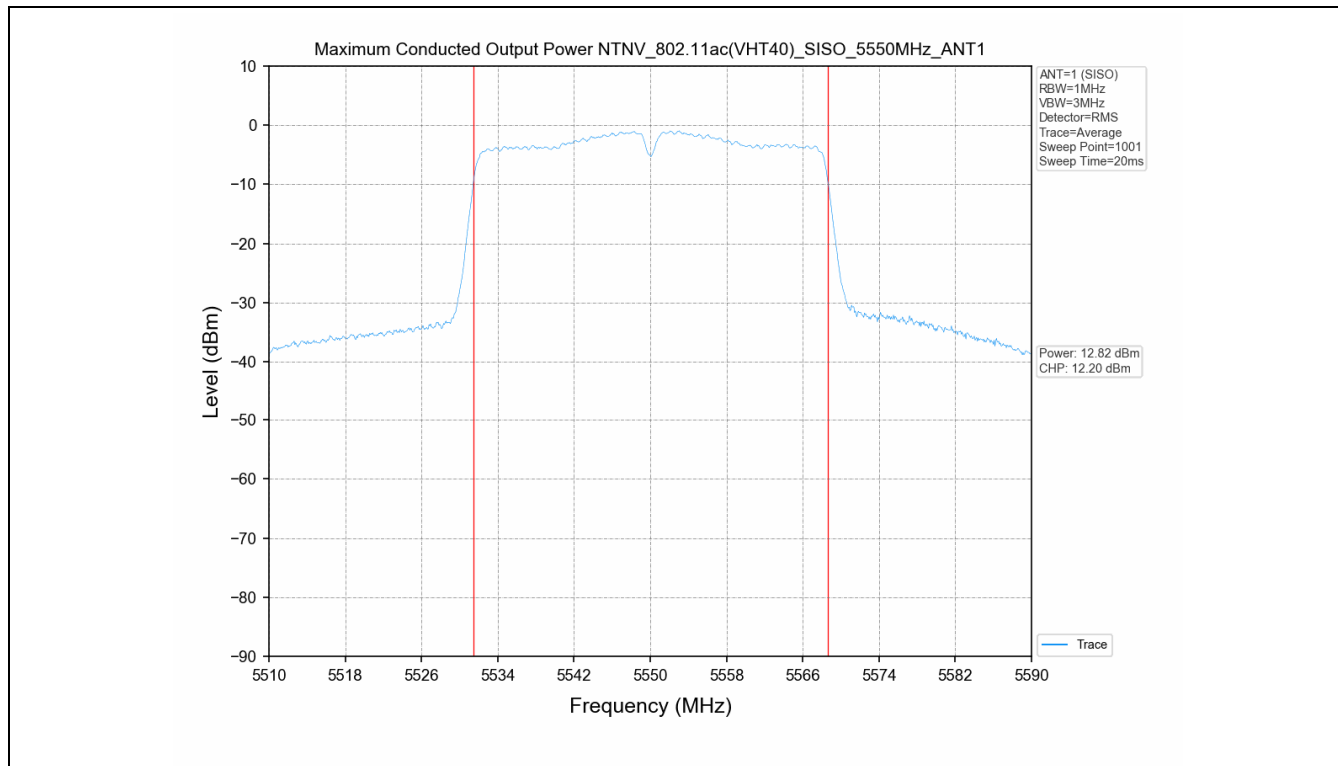
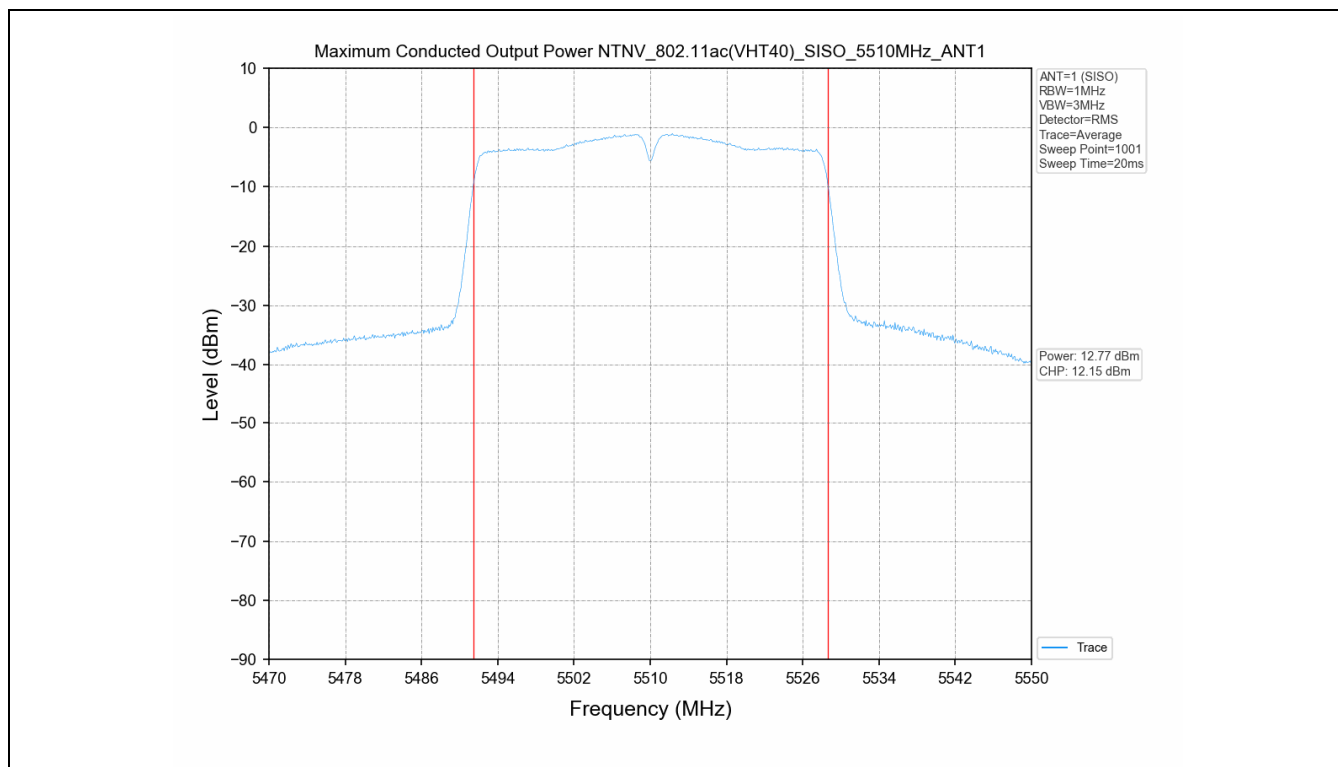


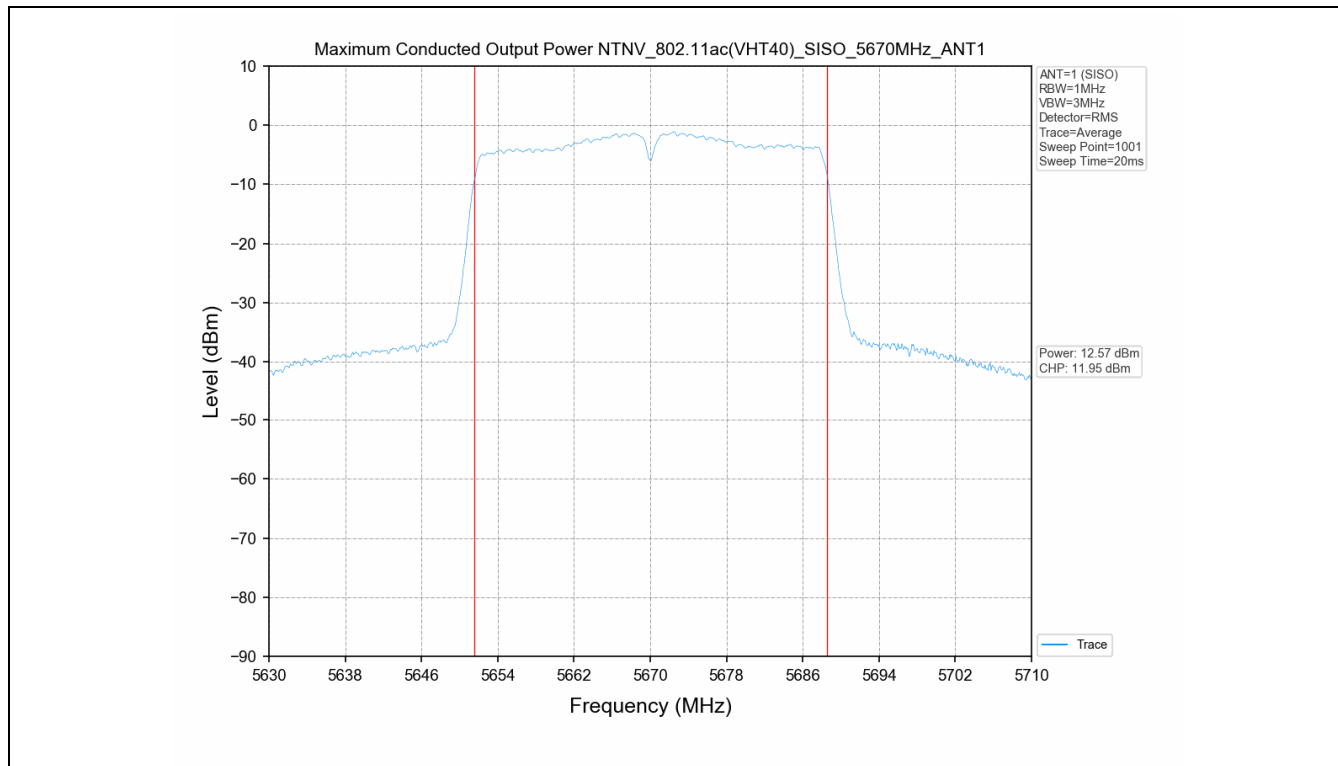
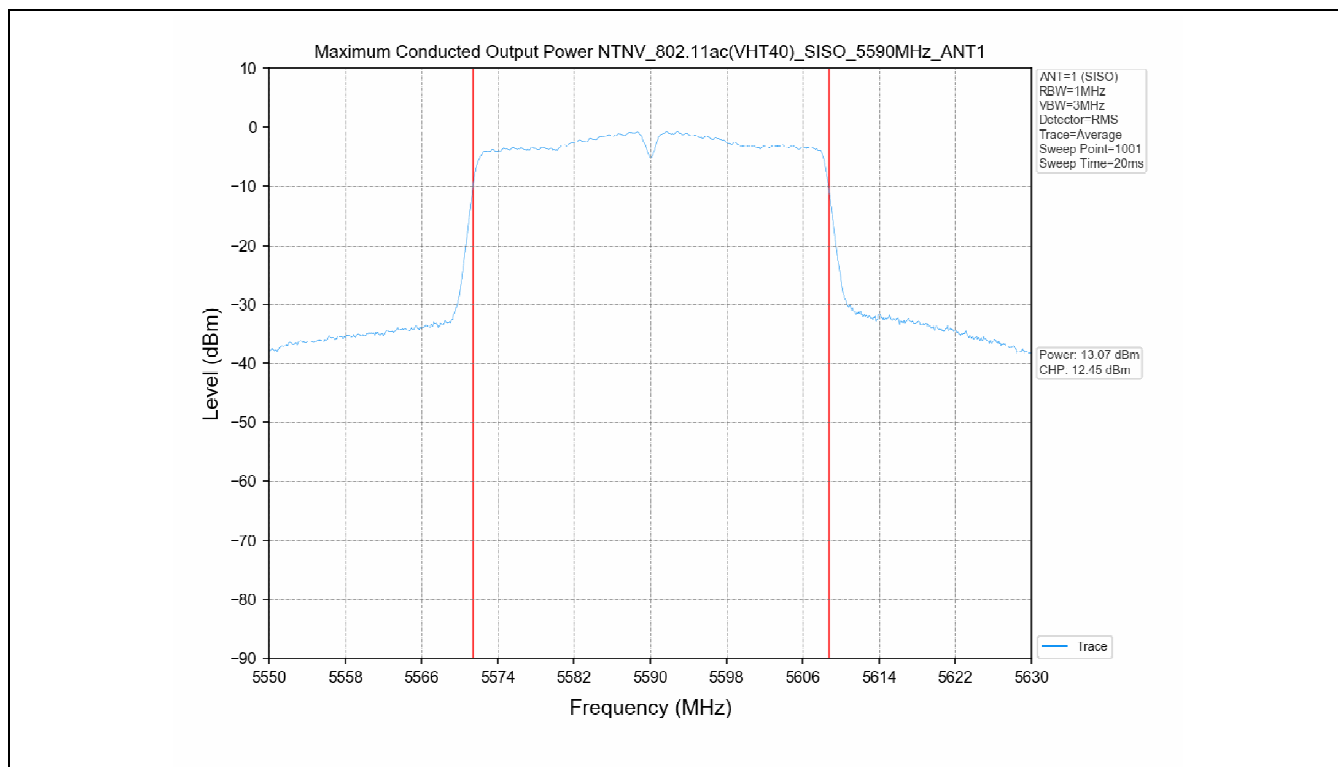


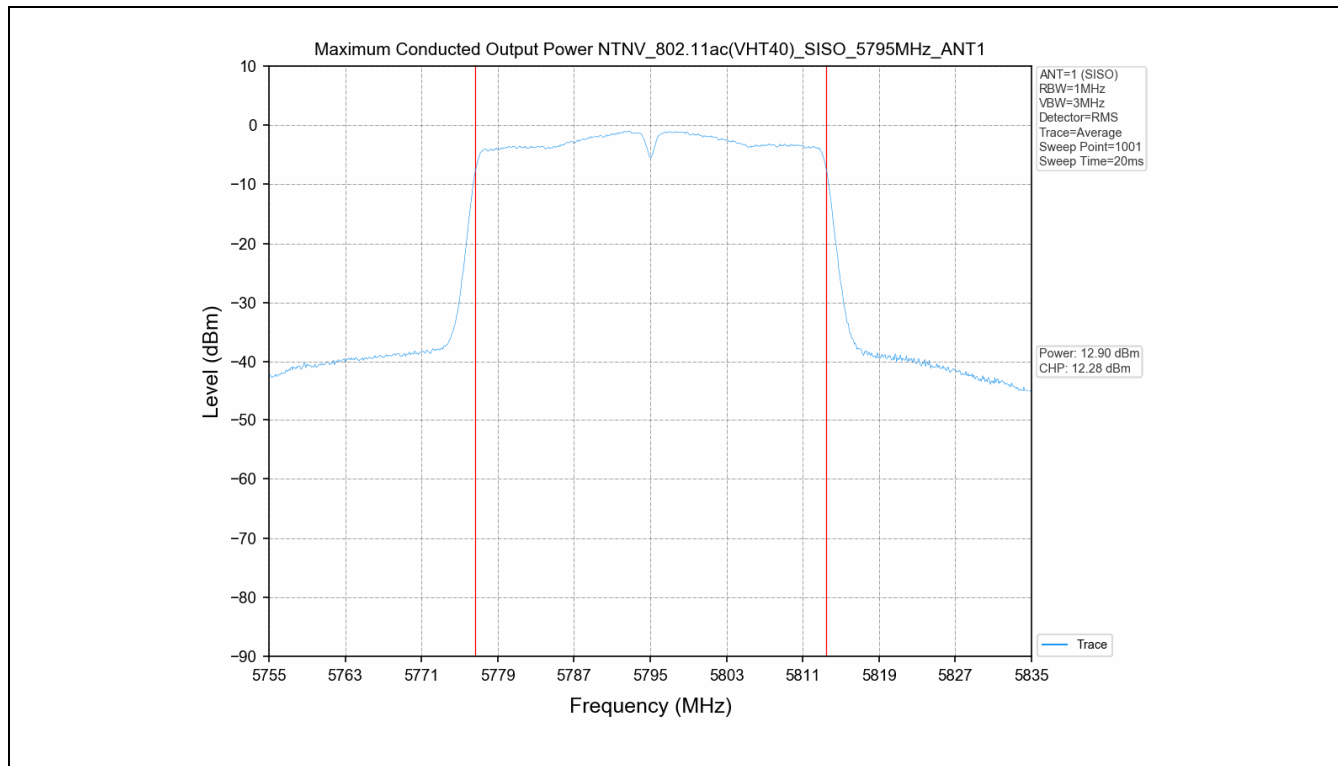
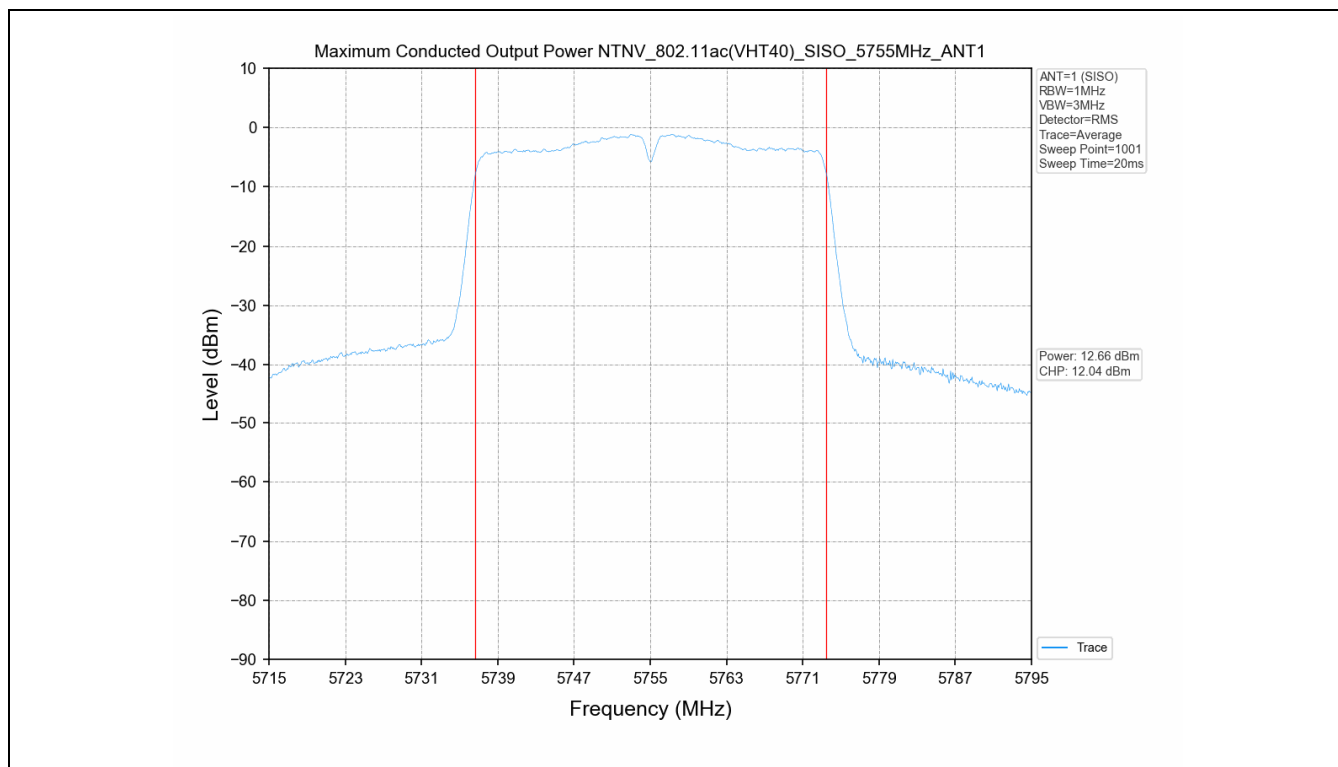


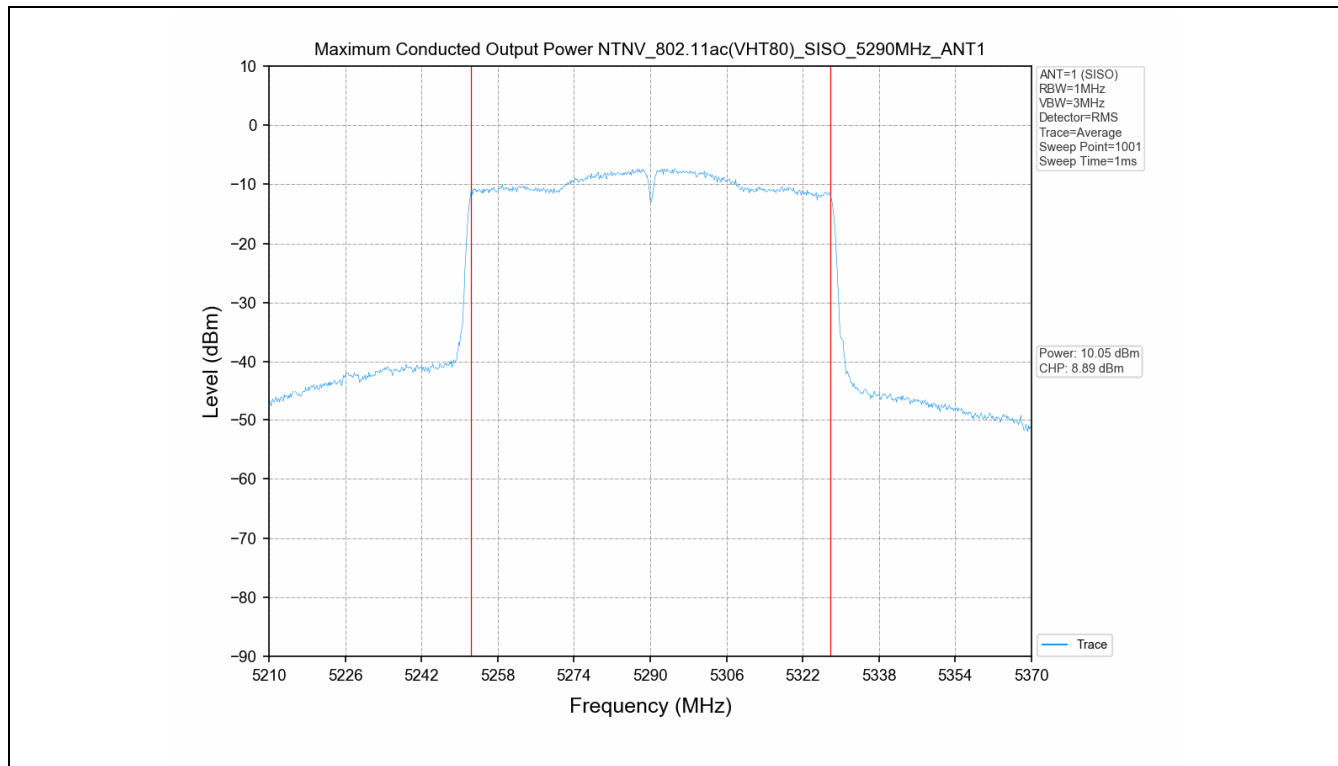
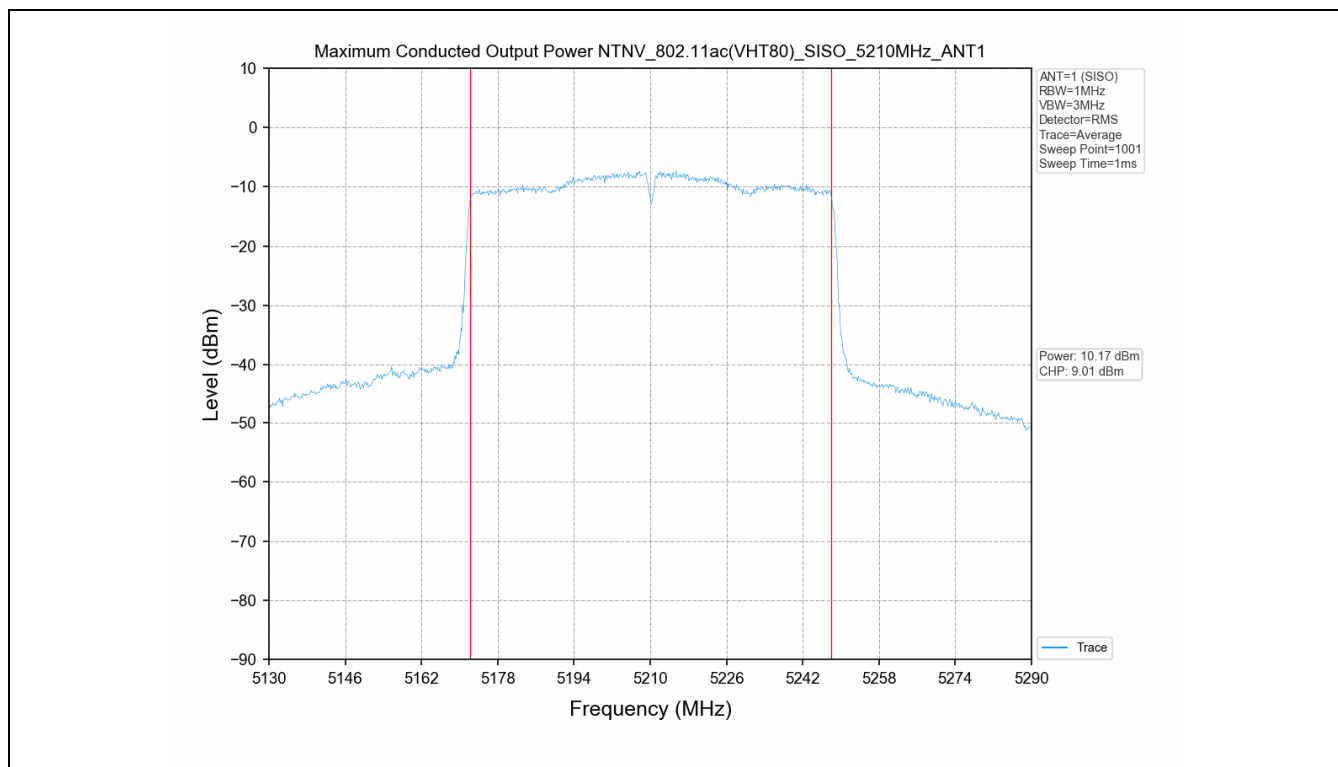


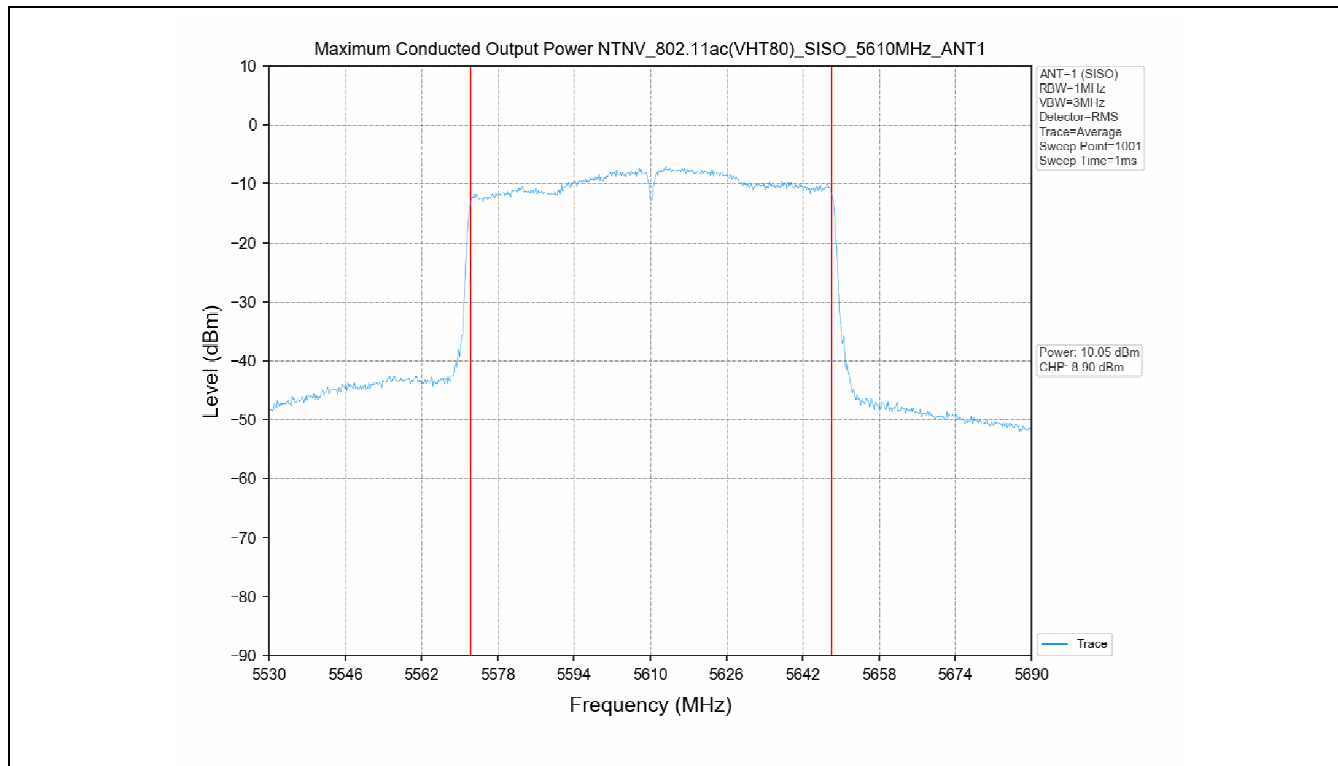
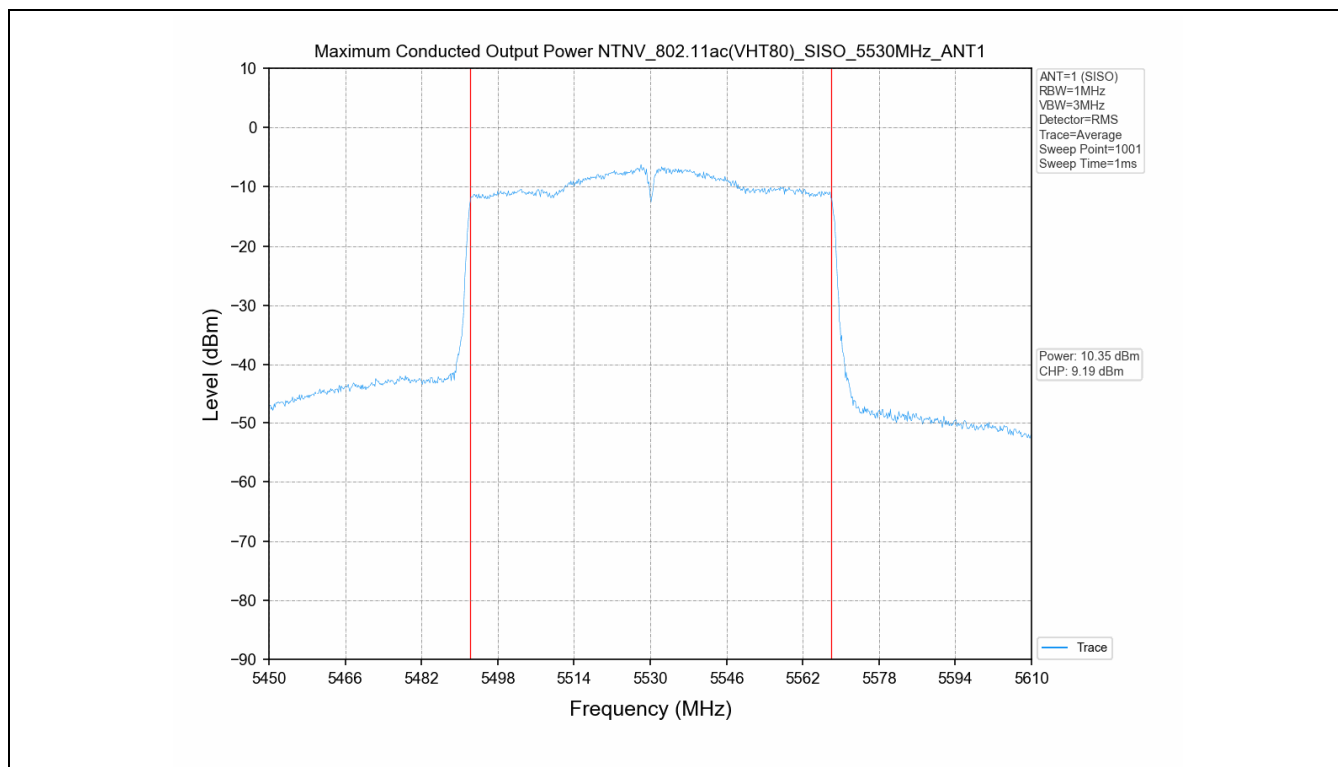


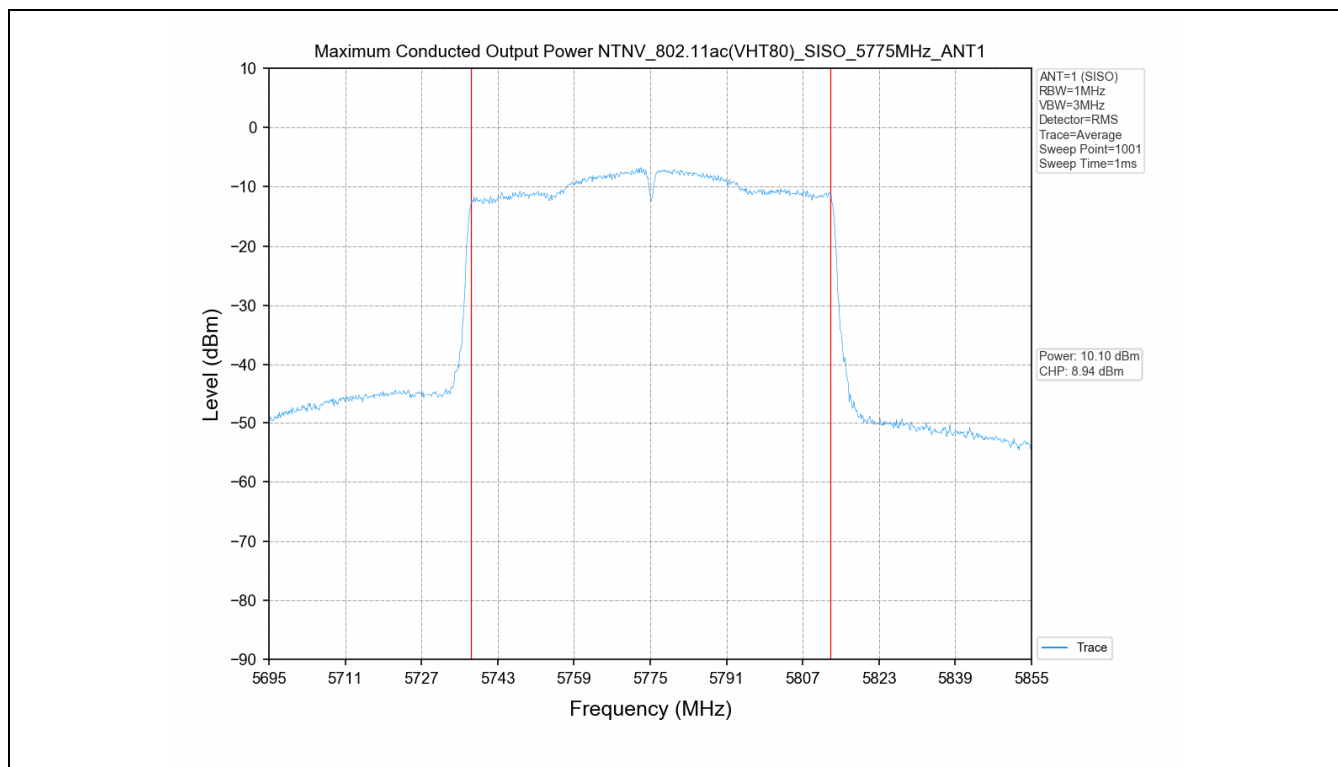












- End of the Report -