TEST REPORT

Application No.:	SZCR2410004028AT
Applicant:	SZ DJI TECHNOLOGY CO., LTD.
Address of Applicant:	Lobby of T2, DJI Sky City, No. 53 Xianyuan Road, Xili Community, Xili Street, Nanshan District, 518055 Shenzhen, China
Manufacturer:	SZ DJI TECHNOLOGY CO., LTD.
Address of Manufacturer:	Lobby of T2, DJI Sky City, No. 53 Xianyuan Road, Xili Community, Xili Street, Nanshan District, 518055 Shenzhen, China
Equipment Under Test (EUT):	
EUT Name:	AGRAS T70/AGRAS T70P
Model No.:	3WWDZ-U50B, 3WWDZ-U70A ♣
♣	Please refer to section 2 of this report which indicates which model was actually tested and which were electrically identical.
Trade Mark:	DJI
FCC ID:	SS3-T702412
Standard(s) :	47 CFR Part 15, Subpart E 15.407
Date of Receipt:	2024-12-27
Date of Test:	2025-03-04 to 2025-03-13
Date of Issue:	2025-03-16
Test Result:	**Pass***

* In the configuration tested, the EUT complied with the standards specified above.

Keny Xu
EMC Laboratory Manager

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Revision Record				
Version	**Chapter**	**Date**	**Modifier**	**Remark**
01		2025-03-16		Original

Authorized for issue by:				
		Darren Yuan		
		Darren Yuan/Project Engineer		
		Eric Fu		
		Eric Fu/Reviewer		

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2 Test Summary

Radio Spectrum Technical Requirement				
Item	**Standard**	**Method**	**Requirement**	**Result**
Antenna Requirement	47 CFR Part 15, Subpart E 15.407	N/A	47 CFR Part 15, Subpart C 15.203	Pass
Transmission in the Absence of Data		N/A	47 CFR Part 15, Subpart E 15.407 (c)	Pass

Radio Spectrum Matter Part				
Item	**Standard**	**Method**	**Requirement**	**Result**
Maximum Conducted output power	47 CFR Part 15, Subpart E 15.407	ANSI C63.10 (2013) Section 12.3	47 CFR Part 15, Subpart E 15.407 (a)	Pass
Radiated Emissions (Below 1GHz)		ANSI C63.10 (2013) Section 6.4,6.5	47 CFR Part 15, Subpart C 15.209 & Subpart E 15.407(b)	Pass
Radiated Emissions (Above 1GHz)		ANSI C63.10 (2013) Section 6.6	47 CFR Part 15, Subpart C 15.209 & Subpart E 15.407(b)	Pass
Radiated Emissions which fall in the restricted bands		ANSI C63.10 (2013) Section 6.10.5	47 CFR Part 15, Subpart C 15.209 & Subpart E 15.407(b)	Pass
Duty Cycle		ANSI C63.10 (2013) Section 12.2	ANSI C63.10 (2013) Section 12.2	Pass
99% Bandwidth		ANSI C63.10 (2013) Section 12.4.2	ANSI C63.10 (2013) Section 12.4.2	Pass
Peak Power spectrum density		ANSI C63.10 (2013) Section 12.5	47 CFR Part 15, Subpart E 15.407 (a)	Pass
Frequency Stability		ANSI C63.10 (2013) Section 6.8	47 CFR Part 15, Subpart E 15.407 (g)	Pass

Remark: KDB 789033 D02 is not accredited by A2LA

Declaration of EUT Family Grouping:

Model No.: 3WWDZ-U50B, 3WWDZ-U70A

Only the model 3WWDZ-U50B was tested, since according to the declaration from the applicant, the electrical circuit design, PCB layout, components used and internal wiring and functions were identical for the above models, with only difference on the two models are equipped with water tanks of different capacities and are paired with batteries of different capacities ,3WWDZ-U50B equipped with 50L water tanks and BAX811- 30000mAh-52.5V battery, 3WWDZ-U70A equipped with 70L water tanks and BAX901- 41000mAh-52.78V battery.

Note: Both BAX811- 30000mAh-52.5V and BAX901- 41000mAh-52.78V battery are pre-scans, only the worst data recorded in this report.

3 Contents

4 General Information

4.1 Details of E.U.T.

Power supply:	Powered by Lithium-Ion Polymer Rechargeable Battery Battery information Battery 1 Model: BAX901-41000mAh-52.78V Nominal Voltage: 52.78V Rated Capacity: 41000mAh, 2164Wh Battery 2 Model: BAX811-30000mAh-52.5V Nominal Voltage: 52.5V Rated Capacity: 30000mAh, 1575Wh
Operation Frequency:	10MHz: 5730.5MHz-5844.5MHz 20MHz: 5735.5MHz-5839.5MHz 40MHz: 5745.5MHz-5829.5MHz 60MHz: 5755.5MHz-5819.5MHz 80MHz: 5765.5MHz-5809.5MHz
Modulation Type:	OFDM
Channel Spacing:	10MHz: 1MHz 20MHz: 1MHz 40MHz: 1MHz 60MHz: 1MHz 80MHz: 1MHz
Number of Channels:	10MHz: 115 20MHz: 105 40MHz: 85 60MHz: 65 80MHz: 45
Antenna Type:	Dipole Antenna
Antenna Gain:	ANT0: 3.0dBi, ANT1: 3.0dBi, ANT2: 3.0dBi, ANT3: 3.0dBi
Cable Loss (for RF conducted test):	1.7dB

Remark: The information in this section is provided by the applicant or manufacturer, SGS is not liable to the accuracy, suitability, reliability or/and integrity of the information.

4.2 Description of Support Units

Description	Manufacturer	Model No.	Serial No.
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The EUT has been tested as an independent unit.			

4.3 Measurement Uncertainty

Test Item	Measurement Uncertainty
Maximum Conducted output power	± 0.75dB
Radiated Emissions (Below 1GHz)	± 6.0dB for 3m; ± 5.0dB for 10m
Radiated Emissions (Above 1GHz)	± 4.6dB (1-18GHz);± 4.8dB (18-40GHz)
Radiated Emissions which fall in the restricted bands	± 6.0dB (below 1GHz); ± 4.6dB (above 1GHz);
Duty Cycle	± 0.37%
99% Bandwidth	± 3%
Peak Power spectrum density	± 2.84dB
Frequency Stability	± 7.25 x 10-8
Remark: The U_{lab} (lab Uncertainty) is less than $U_{cispr/ETSI}$ (CISPR/ETSI Uncertainty), so the test results – compliance is deemed to occur if no measured disturbance level exceeds the disturbance limit; – non-compliance is deemed to occur if any measured disturbance level exceeds the disturbance limit.	

4.4 Test Location

All tests were performed at:

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen Branch

No. 1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China. 518057.

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 (Member No. 1937)

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. Shenzhen EMC laboratory 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: CN1336

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

Designation Number: CN1336. Test Firm Registration Number: 787754.

• 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

5 Equipment List

Maximum Conducted output power					
Equipment	**Manufacturer**	**Model No.**	**Inventory No.**	**Cal Date**	**Cal Due Date**
Power Sensor	TST PASS	TSPS2023R	SEM009-26	2025-03-04	2026-03-03
Power Sensor	KEYSIGHT	U2021XA	SEM009-16	2025-03-04	2026-03-03
DC Power Supply	Chroma	62012P-80-60	SEM011-11	2024-08-14	2025-08-13
MXA Signal Analyzer	KEYSIGHT	N9020A	SEM004-19	2025-03-04	2026-03-03
Signal Generator	KEYSIGHT	N5173B	SEM006-05	2024-09-14	2025-09-13
Measurement Software	TST PASS	TST PASS V2.0	N/A	N/A	N/A
Coaxial Cable	SGS	N/A	SEM031-01	2024-07-06	2025-07-05
Attenuator	Huber+Suhner	6620_SMA-50-1	SEM021-09	2025-03-03	2026-03-02
Programmable Temperature & Humidity Chamber	Votsch Industrietechnik GmbH	VT 4002	SEM002-15	2025-02-26	2026-02-25

Radiated Emissions (Below 1GHz)					
Equipment	**Manufacturer**	**Model No.**	**Inventory No.**	**Cal Date**	**Cal Due Date**
10m Semi-Anechoic Chamber	SAEMC	FSAC1018	SEM001-03	2024-03-26	2025-03-25
MXE EMI receiver	KEYSIGHT	N9038A	SEM004-16	2024-08-14	2025-08-13
Trilog-Broadband Antenna	Schwarzbeck	VULB9168	SEM003-18	2023-09-23	2025-09-22
Pre-amplifier	Sonoma Instrument Co	310N	SEM005-04	2025-03-04	2026-03-03
Loop Antenna	ETS-Lindgren	6502	SEM003-08	2023-11-20	2025-11-19
Measurement Software	AUDIX	e3 V8.2014-6-27	N/A	N/A	N/A
Coaxial Cable	SGS	N/A	SEM029-01	2024-07-06	2025-07-05

Radiated Emissions (Above 1GHz)					
Equipment	**Manufacturer**	**Model No.**	**Inventory No.**	**Cal Date**	**Cal Due Date**
3m Fully-Anechoic Chamber	AUDIX	N/A	SEM001-02	2024-05-11	2027-05-10
Signal Analyzer	Rohde & Schwarz	FSV40	SEM008-04	2025-03-04	2026-03-03
Horn Antenna	Rohde&Schwarz	HF907	SEM003-07	2023-07-23	2025-07-22
Microwave system amplifier	Agilent	83017A	SEM005-25	2024-09-14	2025-09-13
Measurement Software	AUDIX	e3 V8.2014-6-27	N/A	N/A	N/A

Coaxial Cable	SGS	N/A	SEM026-01	2024-07-06	2025-07-05
Broad-Band Horn Antenna	Schwarzbeck	BBHA 9170	SEM003-15	2024-08-10	2025-08-09
Pre-Amplifier	Compliance Directions Systems Inc.	PAP-2640-50	SEM005-08	2024-03-15	2025-03-14

Radiated Emissions which fall in the restricted bands					
Equipment	**Manufacturer**	**Model No.**	**Inventory No.**	**Cal Date**	**Cal Due Date**
3m Fully-Anechoic Chamber	AUDIX	N/A	SEM001-02	2024-05-11	2027-05-10
Signal Analyzer	Rohde & Schwarz	FSV40	SEM008-04	2025-03-04	2026-03-03
Horn Antenna	Rohde&Schwarz	HF907	SEM003-07	2023-07-23	2025-07-22
Microwave system amplifier	Agilent	83017A	SEM005-25	2024-09-14	2025-09-13
Measurement Software	AUDIX	e3 V8.2014-6-27	N/A	N/A	N/A
Coaxial Cable	SGS	N/A	SEM026-01	2024-07-06	2025-07-05

RF Conducted Test					
Equipment	**Manufacturer**	**Model No.**	**Inventory No.**	**Cal Date**	**Cal Due Date**
DC Power Supply	Chroma	62012P-80-60	SEM011-11	2024-08-14	2025-08-13
MXA Signal Analyzer	KEYSIGHT	N9020A	SEM004-19	2025-03-04	2026-03-03
Signal Generator	KEYSIGHT	N5173B	SEM006-05	2024-09-14	2025-09-13
Measurement Software	TST PASS	TST PASS V2.0	N/A	N/A	N/A
Coaxial Cable	SGS	N/A	SEM031-01	2024-07-06	2025-07-05
Attenuator	Huber+Suhner	6620_SMA-50-1	SEM021-09	2025-03-03	2026-03-02
Programmable Temperature & Humidity Chamber	Votsch Industrietechnik GmbH	VT 4002	SEM002-15	2025-02-26	2026-02-25

General used equipment					
Equipment	**Manufacturer**	**Model No.**	**Inventory No.**	**Cal Date**	**Cal Due Date**
Humidity/ Temperature Indicator	deli	8838	SEM002-32	2024-07-24	2025-07-23
Humidity/ Temperature Indicator	deli	8838	SEM002-33	2024-07-24	2025-07-23
Barometer	Changchun Meteorological Industry Factory	DYM3	SEM002-01	2024-03-18	2025-03-17

6 Radio Spectrum Technical Requirement

6.1 Antenna Requirement

6.1.1 Test Requirement:

47 CFR Part 15, Subpart C 15.203

6.1.2 Conclusion

Standard Requirement:
An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.
15.247(b) (4) requirement:
The conducted output power limit specified in paragraph (b) of this section is based on the use of antennas with directional gains that do not exceed 6 dBi. Except as shown in paragraph (c) of this section, if transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(1), (b)(2), and (b)(3) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.
EUT Antenna:
The antenna is no consideration of replacement. The best case gain of the antennas are listed following:

Antenna Gain:	ANT0	ANT1	ANT2	ANT3
	3dBi	3dBi	3dBi	3dBi

Directional gain

ANT01	ANT03	ANT21	ANT23
6.01dBi	6.01dBi	6.01dBi	6.01dBi

Antenna location: Refer to internal photo.

6.2 Transmission in the Absence of Data

6.2.1 Test Requirement:

47 CFR Part 15, Subpart E 15.407 (c)

6.2.2 Conclusion

Standard Requirement:

The device shall automatically discontinue transmission in case of either absence of information to transmit or operational failure. These provisions are not intended to preclude the transmission of control or signalling information or the use of repetitive codes used by certain digital technologies to complete frame or burst intervals.

Applicants shall include in their application for equipment authorization a description of how this requirement is met.

EUT Details:

SDR chip support automatically discontinue transmission in case of either absence of information to transmit or operational failure, if the chip detect absence of information to transmit or operational failure, it will be automatically shut off.

7 Radio Spectrum Matter Test Results

7.1 Maximum Conducted output power

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

Test Method: ANSI C63.10 (2013) Section 12.3

Limit:

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

7.1.1 E.U.T. Operation

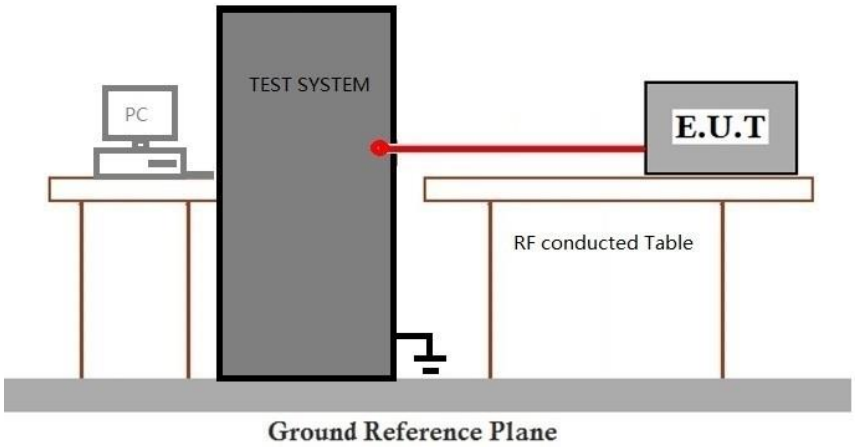
Operating Environment:

Temperature: 23.5 °C Humidity: 50.2 % RH Atmospheric Pressure: 1020 mbar

7.1.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	14	TX mode (5.8G SDR_10MHz)_Keep the EUT in transmitting mode
Final test	15	TX mode (5.8G SDR_20MHz)_Keep the EUT in transmitting mode
Final test	16	TX mode (5.8G SDR_40MHz)_Keep the EUT in transmitting mode
Final test	17	TX mode (5.8G SDR_60MHz)_Keep the EUT in transmitting mode
Final test	18	TX mode (5.8G SDR_80MHz)_Keep the EUT in transmitting mode

7.1.3 Test Setup Diagram



7.1.4 Measurement Procedure and Data

Note: Since the verify power the same operating range bandwidth and smaller power can be covered by the higher power.

Please Refer to Appendix for Details

7.2 Radiated Emissions (Below 1GHz)

Test Requirement 47 CFR Part 15, Subpart C 15.209 & Subpart E 15.407(b)
Test Method: ANSI C63.10 (2013) Section 6.4,6.5
Measurement Distance: 10m

Limit:

Frequency(MHz)	Field strength(microvolts/meter)	Measurement distance(meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100	3
88-216	150	3
216-960	200	3
960-1000	500	3

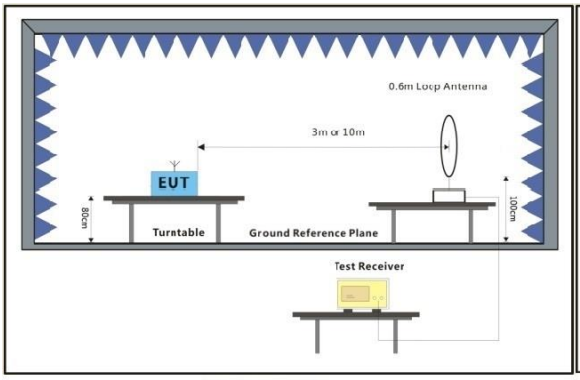
7.2.1 E.U.T. Operation

Operating Environment:
Temperature: 23.6 °C Humidity: 50.5 % RH Atmospheric Pressure: 1020 mbar

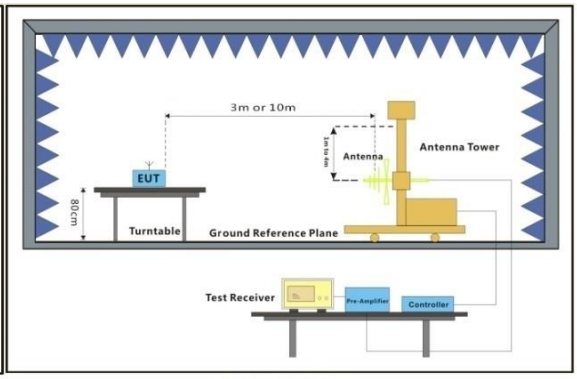
7.2.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Pre-scan	14	TX mode (5.8G SDR_10MHz)_Keep the EUT in transmitting mode
Final test	15	TX mode (5.8G SDR_20MHz)_Keep the EUT in transmitting mode
Pre-scan	16	TX mode (5.8G SDR_40MHz)_Keep the EUT in transmitting mode
Pre-scan	17	TX mode (5.8G SDR_60MHz)_Keep the EUT in transmitting mode
Pre-scan	18	TX mode (5.8G SDR_80MHz)_Keep the EUT in transmitting mode

7.2.3 Test Setup Diagram



Below 30MHz



30MHz-1GHz

7.2.4 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 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.

b. 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.

c. 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.

d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters (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.

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

f. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using quasi-peak method as specified and then reported in a data sheet.

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

h. 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.

i. Repeat above procedures until all frequencies measured was complete.

Remark:

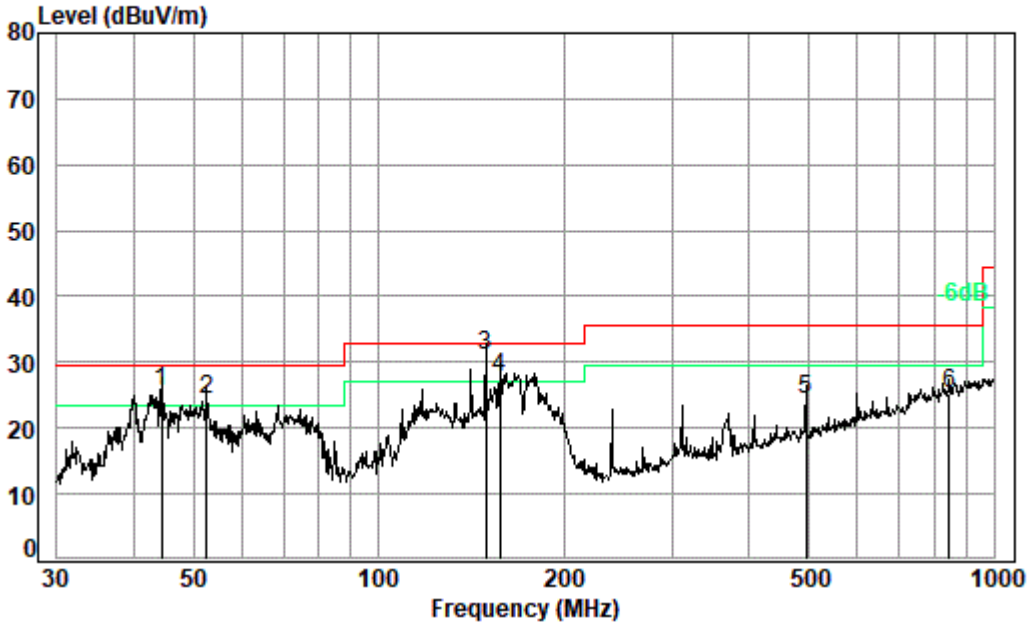
1. Level= Read Level+ Cable Loss+ Antenna Factor- Preamp Factor

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 30MHz, the disturbance 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. The disturbance below 1GHz was very low and the harmonics were the highest point could be found when testing, so only the above harmonics had been displayed.

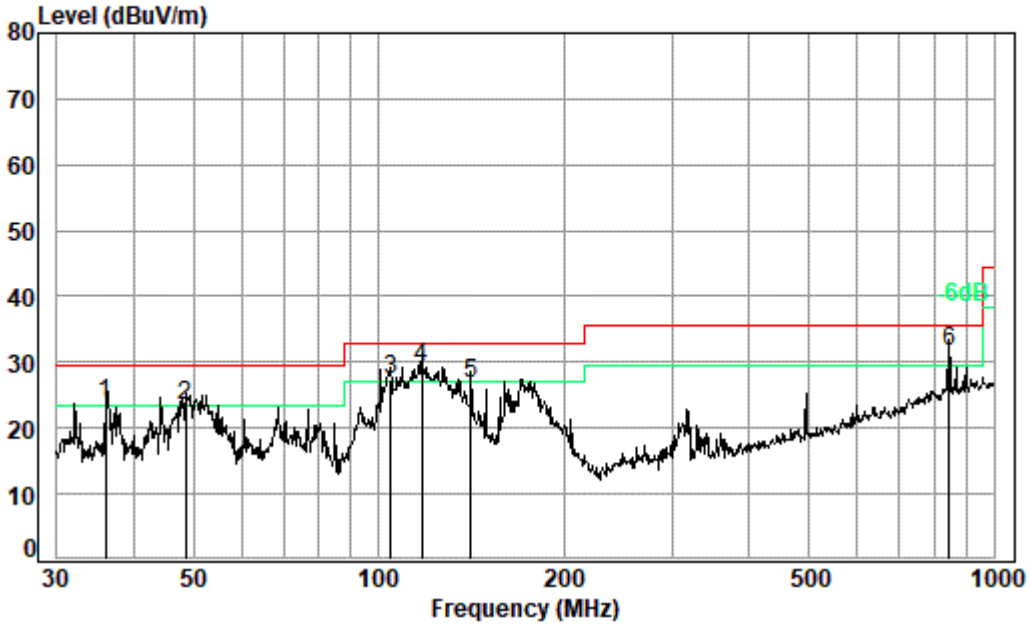
Test Mode: 15; Polarity: Horizontal; Modulation: OFDM; Channel: Middle



Condition: 10m HORIZONTAL
Job No. : 04028AT/04029AT
Test Mode: 15

	Freq	Read Level	Ant Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1	44.431	40.18	17.50	0.51	32.50	25.69	29.50	-3.81	QP
2	52.575	37.92	18.21	0.55	32.49	24.19	29.50	-5.31	QP
3 pp	149.486	44.71	17.72	0.95	32.50	30.88	33.00	-2.12	QP
4	157.559	41.35	17.84	0.98	32.50	27.67	33.00	-5.33	QP
5	494.199	33.47	21.83	1.84	32.68	24.46	35.60	-11.14	QP
6	845.088	28.00	26.80	2.56	32.02	25.34	35.60	-10.26	QP

Test Mode: 15; Polarity: Vertical; Modulation: OFDM; Channel: Middle



Condition: 10m VERTICAL
Job No. : 04028AT/04029AT
Test Mode: 15

	Freq	Read Level	Ant Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1	36.001	39.02	16.64	0.46	32.50	23.62	29.50	-5.88	QP
2	48.502	37.26	18.02	0.53	32.50	23.31	29.50	-6.19	QP
3	104.536	45.13	13.83	0.77	32.50	27.23	33.00	-5.77	QP
4 pp	117.360	45.81	15.21	0.82	32.50	29.34	33.00	-3.66	QP
5	141.330	40.96	17.31	0.92	32.50	26.69	33.00	-6.31	QP
6	845.088	34.19	26.80	2.56	32.02	31.53	35.60	-4.07	QP

The test was performed at a 10m test site. According to below formulate and the test data at 10m test distance,

$L_3 / L_{10} = D_{10} / D_3$

Note:

L_3: Level @ 3m distance. Unit: uV/m;

L_{10}: Level @ 10m distance. Unit: uV/m;

D_3: 3m distance. Unit: m

D_{10}: 10m distance. Unit: m

The level at 3m test distance is below:

Frequency (MHz)	Level @ 10m (dBuV/m)	Level @ 10m (uV/m)	Level @ 3m (uV/m)	Level @ 3m (dBuV/m)	Limit @ 3m (dBuV/m)	Margin (dB)	Ant. Polarization
44.431	25.69	19.25	64.18	36.15	40	-3.85	H
52.575	24.19	16.20	54.00	34.65	40	-5.35	H
149.486	30.88	34.99	116.65	41.34	43.5	-2.16	H
157.559	27.67	24.18	80.61	38.13	43.5	-5.37	H
494.199	24.46	16.71	55.70	34.92	46	-11.08	H
845.088	25.34	18.49	61.64	35.80	46	-10.20	H
36.001	23.62	15.17	50.57	34.08	40	-5.92	V
48.502	23.32	14.66	48.85	33.78	40	-6.22	V
104.536	27.23	22.99	76.63	37.69	43.5	-5.81	V
117.360	29.34	29.31	97.70	39.80	43.5	-3.70	V
141.330	26.69	21.60	72.01	37.15	43.5	-6.35	V
845.088	31.53	37.71	125.71	41.99	46	-4.01	V

7.3 Radiated Emissions (Above 1GHz)

Test Requirement 47 CFR Part 15, Subpart C 15.209 & Subpart E 15.407(b)
Test Method: ANSI C63.10 (2013) Section 6.6
Measurement Distance: 3m

Limit:

Frequency(MHz)	Field strength(microvolts/meter)	Measurement distance(meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

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

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

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

(4) For transmitters operating in the 5.725-5.85 GHz band:

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

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

7.3.1 E.U.T. Operation

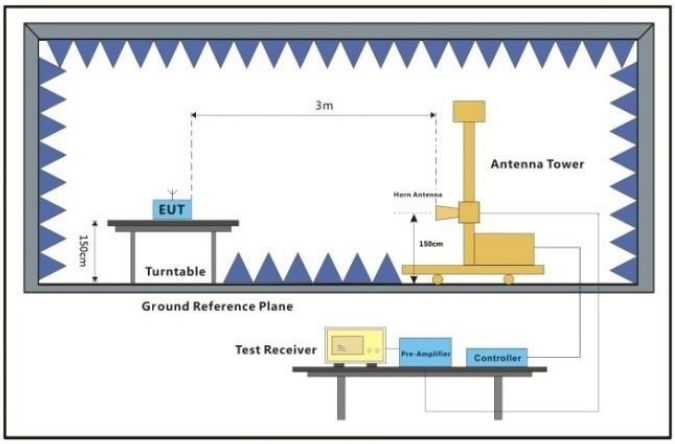
Operating Environment:

Temperature: 23.5 °C Humidity: 56.3 % RH Atmospheric Pressure: 1020 mbar

7.3.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Pre-scan	14	TX mode (5.8G SDR_10MHz)_Keep the EUT in transmitting mode
Final test	15	TX mode (5.8G SDR_20MHz)_Keep the EUT in transmitting mode
Pre-scan	16	TX mode (5.8G SDR_40MHz)_Keep the EUT in transmitting mode
Pre-scan	17	TX mode (5.8G SDR_60MHz)_Keep the EUT in transmitting mode
Pre-scan	18	TX mode (5.8G SDR_80MHz)_Keep the EUT in transmitting mode

7.3.3 Test Setup Diagram



Above 1GHz

7.3.4 Measurement Procedure and Data

a. 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.

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

c. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.

d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters (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.

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

f. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak or average method as specified and then reported in a data sheet.

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

h. 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.

i. Repeat above procedures until all frequencies measured was complete.

Remark:

1. Level= Read Level+ Cable Loss+ Antenna Factor- Preamp Factor

2. Scan from 18GHz to 40GHz, the disturbance above 18GHz 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.

3. 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.

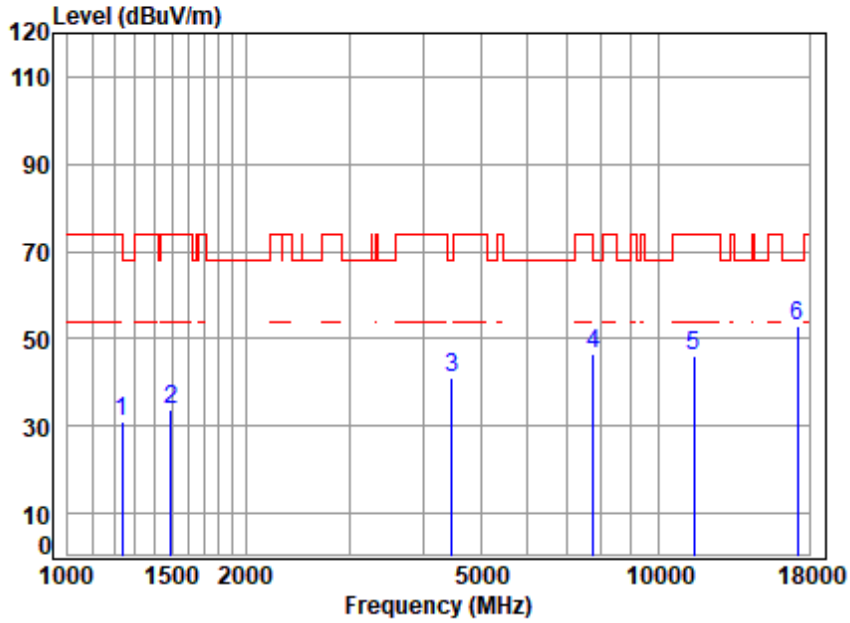
4. The disturbance above 18GHz were very low and the harmonics were the highest point could be found when testing, so only the above harmonics had been displayed.

5. For devices with multiple operating modes, measurements on the middle channel is used to determine the worst-case mode(s). Only the worst case mode with the highest output power and the mode with the highest output power spectral density for each modulation family (e.g., OFDM and direct sequence spread spectrum) is recorded in the test report.

6.The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is 3MHz for Peak detection (PK) and Average detection (AV) at frequency above 1GHz.

7. For fundamental and harmonic signal measurement, the resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is ≥1/T (Duty cycle＜98%) or 10Hz (Duty cycle≥98%) for Average detection (AV) at frequency above 1GHz.

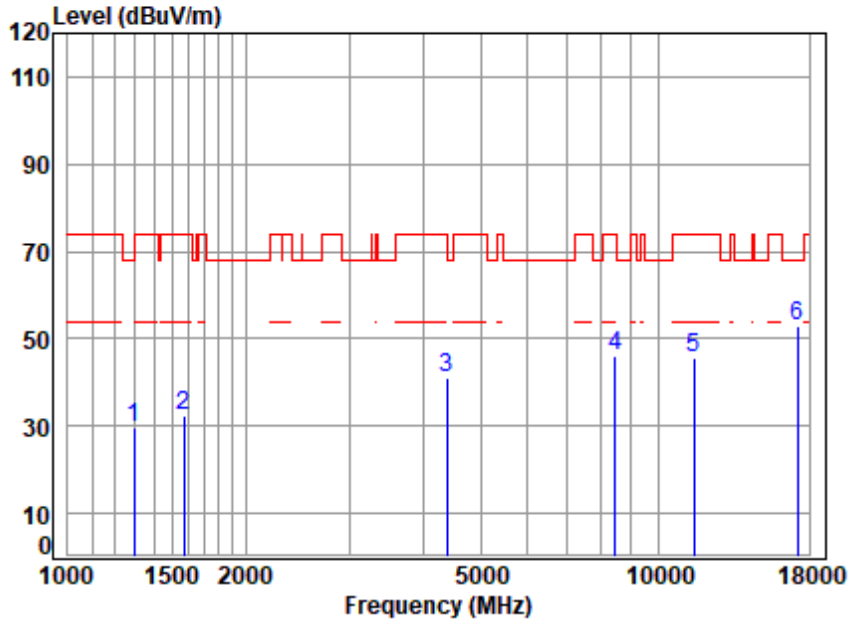
Test Mode: 15; Polarity: Horizontal; Modulation: OFDM; Channel: Low



Site : chamber
Condition: 3m HORIZONTAL
Job No : 04028AT\04029AT
Mode : 5735.5 RSE TX
Note : 5G SDR

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1238.483	3.73	24.94	54.69	57.19	31.17	74.00	-42.83	peak
2	1494.455	4.03	26.64	54.77	57.83	33.73	74.00	-40.27	peak
3	4469.214	7.22	33.97	54.25	54.25	41.19	68.20	-27.01	peak
4	7762.260	8.74	36.25	53.12	54.70	46.57	68.20	-21.63	peak
5	11471.000	11.93	37.77	53.10	49.64	46.24	74.00	-27.76	peak
6	p17206.500	14.56	43.01	52.79	48.33	53.11	68.20	-15.09	peak

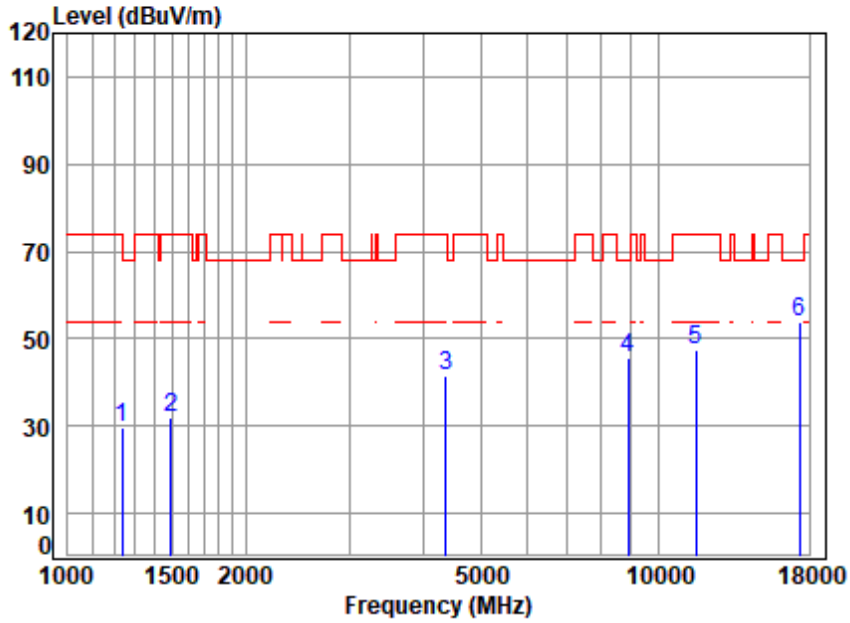
Test Mode: 15; Polarity: Vertical; Modulation: OFDM; Channel: Low



Site : chamber
Condition: 3m VERTICAL
Job No : 04028AT\04029AT
Mode : 5735.5 RSE TX
Note : 5G SDR

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1293.359	3.80	24.84	54.71	55.86	29.79	68.20	-38.41	peak
2	1574.265	4.15	26.90	54.80	55.97	32.22	74.00	-41.78	peak
3	4392.376	7.13	34.74	54.26	53.46	41.07	74.00	-32.93	peak
4	8440.945	9.47	36.62	53.33	53.51	46.27	74.00	-27.73	peak
5	11471.000	11.93	37.77	53.10	48.83	45.43	74.00	-28.57	peak
6	p17206.500	14.56	43.01	52.79	48.06	52.84	68.20	-15.36	peak

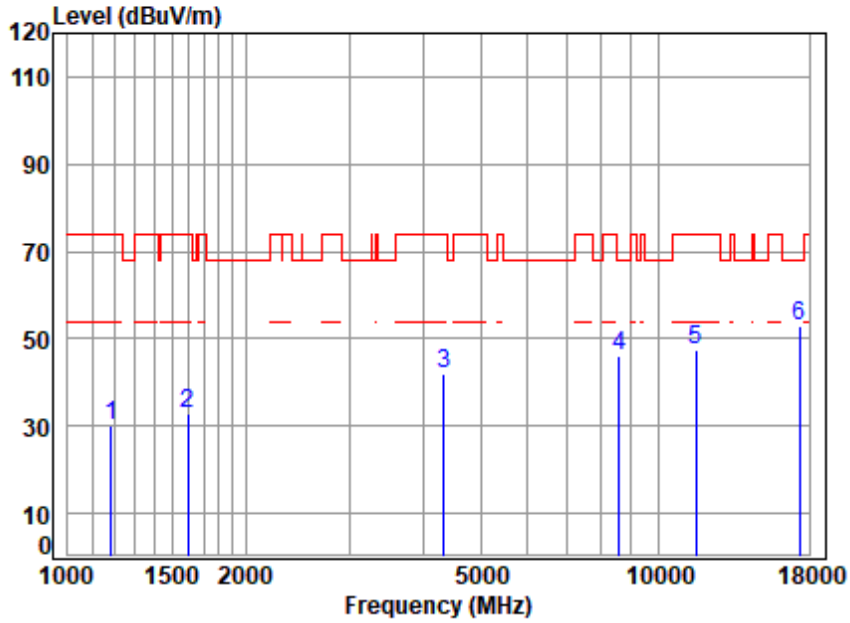
Test Mode: 15; Polarity: Horizontal; Modulation: OFDM; Channel: middle



Site : chamber
Condition: 3m HORIZONTAL
Job No : 04028AT\04029AT
Mode : 5787.5 RSE TX
Note : 5G SDR

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1238.483	3.73	24.94	54.69	55.50	29.48	74.00	-44.52	peak
2	1494.455	4.03	26.64	54.77	55.96	31.86	74.00	-42.14	peak
3	4367.058	7.10	34.54	54.26	54.08	41.46	74.00	-32.54	peak
4	8891.725	9.84	37.20	53.55	51.95	45.44	68.20	-22.76	peak
5	11575.000	11.95	37.72	53.12	50.75	47.30	74.00	-26.70	peak
6	p17362.500	14.73	43.29	52.72	48.41	53.71	68.20	-14.49	peak

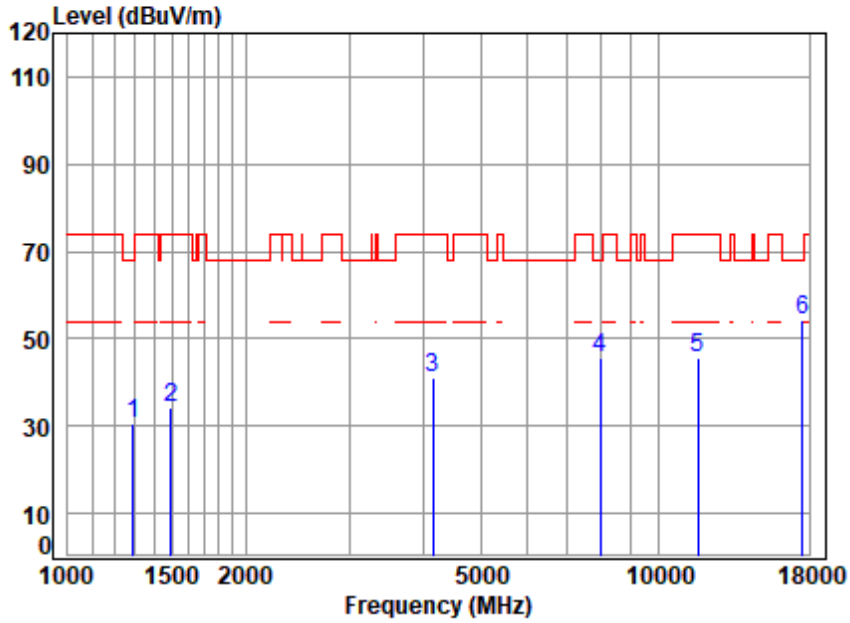
Test Mode: 15; Polarity: Vertical; Modulation: OFDM; Channel: middle



Site : chamber
Condition: 3m VERTICAL
Job No : 04028AT\04029AT
Mode : 5787.5 RSE TX
Note : 5G SDR

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1182.513	3.66	24.23	54.67	56.78	30.00	74.00	-44.00	peak
2	1597.181	4.18	26.81	54.80	56.51	32.70	74.00	-41.30	peak
3	4341.886	7.07	34.34	54.26	54.95	42.10	74.00	-31.90	peak
4	8588.607	9.60	36.88	53.40	53.18	46.26	68.20	-21.94	peak
5	11575.000	11.95	37.72	53.12	50.98	47.53	74.00	-26.47	peak
6	p17362.500	14.73	43.29	52.72	47.85	53.15	68.20	-15.05	peak

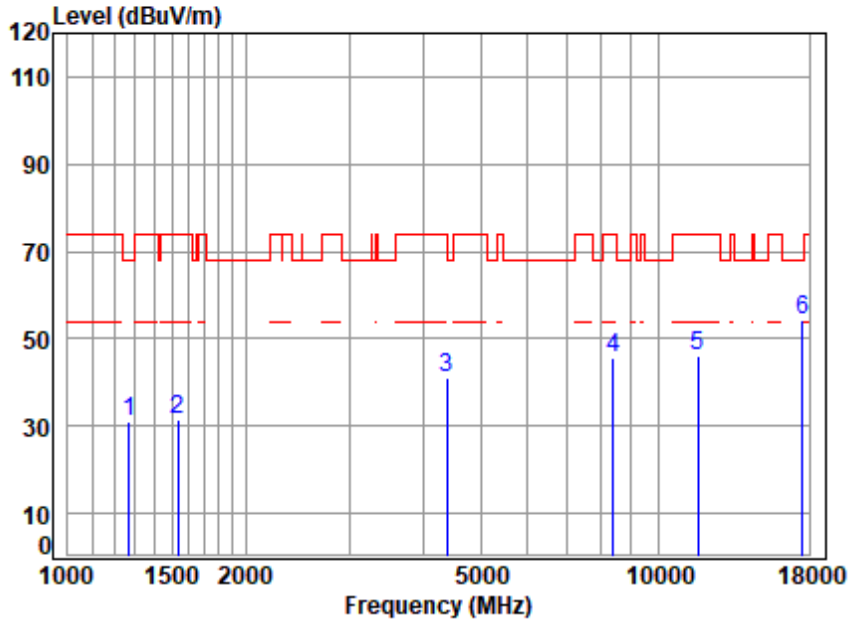
Test Mode: 15; Polarity: Horizontal; Modulation: OFDM; Channel: High



Site : chamber
Condition: 3m HORIZONTAL
Job No : 04028AT\04029AT
Mode : 5839.5 RSE TX
Note : 5G SDR

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1289.627	3.80	24.86	54.71	56.56	30.51	68.20	-37.69	peak
2	1494.455	4.03	26.64	54.77	58.39	34.29	74.00	-39.71	peak
3	4145.664	6.83	33.73	54.28	54.58	40.86	74.00	-33.14	peak
4	7989.893	9.02	36.40	53.10	53.43	45.75	68.20	-22.45	peak
5	11679.000	11.95	37.86	53.14	49.03	45.70	74.00	-28.30	peak
6	p17518.500	14.91	43.44	52.64	48.68	54.39	68.20	-13.81	peak

Test Mode: 15; Polarity: Vertical; Modulation: OFDM; Channel: High



Site : chamber
Condition: 3m VERTICAL
Job No : 04028AT\04029AT
Mode : 5839.5 RSE TX
Note : 5G SDR

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1271.123	3.77	24.97	54.70	56.97	31.01	68.20	-37.19	peak
2	1538.281	4.10	26.95	54.79	55.31	31.57	74.00	-42.43	peak
3	4392.376	7.13	34.74	54.26	53.67	41.28	74.00	-32.72	peak
4	8392.292	9.42	36.70	53.30	52.74	45.56	74.00	-28.44	peak
5	11679.000	11.95	37.86	53.14	49.60	46.27	74.00	-27.73	peak
6	p17518.500	14.91	43.44	52.64	48.65	54.36	68.20	-13.84	peak

7.4 Radiated Emissions which fall in the restricted bands

Test Requirement 47 CFR Part 15, Subpart C 15.209 & Subpart E 15.407(b)
Test Method: ANSI C63.10 (2013) Section 6.10.5
Measurement Distance: 3m

Limit:

Frequency(MHz)	Field strength(microvolts/meter)	Measurement distance(meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

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

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

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

(4) For transmitters operating in the 5.725-5.85 GHz band:

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

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

7.4.1 E.U.T. Operation

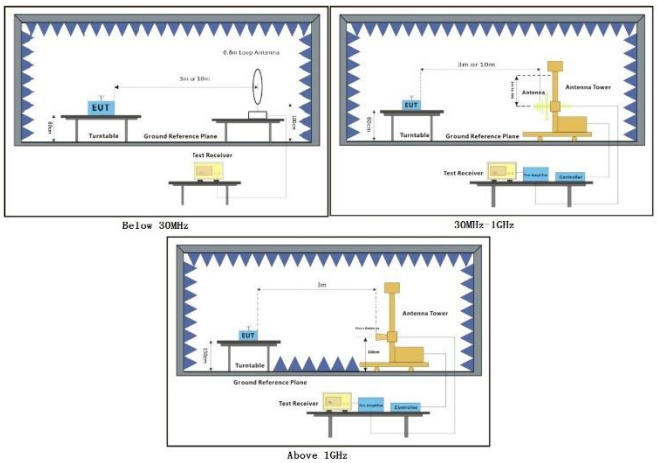
Operating Environment:

Temperature: 23.5 °C Humidity: 56.3 % RH Atmospheric Pressure: 1020 mbar

7.4.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	14	TX mode (5.8G SDR_10MHz)_Keep the EUT in transmitting mode
Final test	15	TX mode (5.8G SDR_20MHz)_Keep the EUT in transmitting mode
Final test	16	TX mode (5.8G SDR_40MHz)_Keep the EUT in transmitting mode
Final test	17	TX mode (5.8G SDR_60MHz)_Keep the EUT in transmitting mode
Final test	18	TX mode (5.8G SDR_80MHz)_Keep the EUT in transmitting mode

7.4.3 Test Setup Diagram



7.4.4 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.

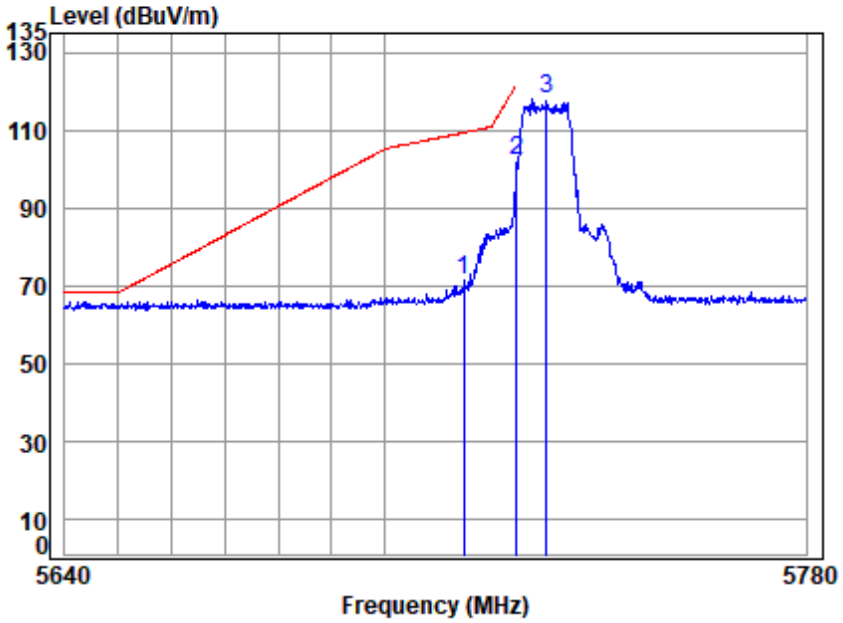
j. Repeat above procedures until all frequencies measured was complete.

Remark 1: Level= Read Level+ Cable Loss+ Antenna Factor- Preamp Factor

Remark 2.The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is 3MHz for Peak detection (PK) and Average detection (AV) at frequency above 1GHz.

Remark 3. For fundamental and harmonic signal measurement, the resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is $\geqslant$1/T (Duty cycle$<$98%) or 10Hz (Duty cycle$\geqslant$98%) for Average detection (AV) at frequency above 1GHz.

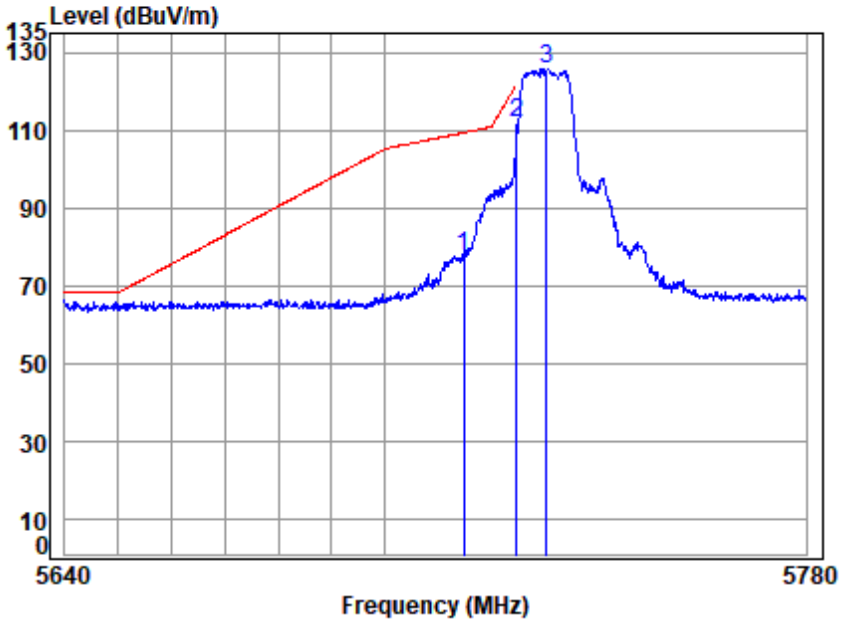
Test Mode: 14; Polarity: Horizontal; Modulation: OFDM; Channel: Low



Site : chamber
Condition: 3m HORIZONTAL
Job No : 04028AT\04029AT
Mode : 5730.5 Band edge
: 5G SDR 10M

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	5715.000	29.60	34.27	31.57	39.25	71.55	109.40	-37.85	peak
2 p	5725.000	29.61	34.25	31.57	70.05	102.34	122.20	-19.86	peak
3	5730.500	29.61	34.24	31.57	85.73	118.01	------	------	peak

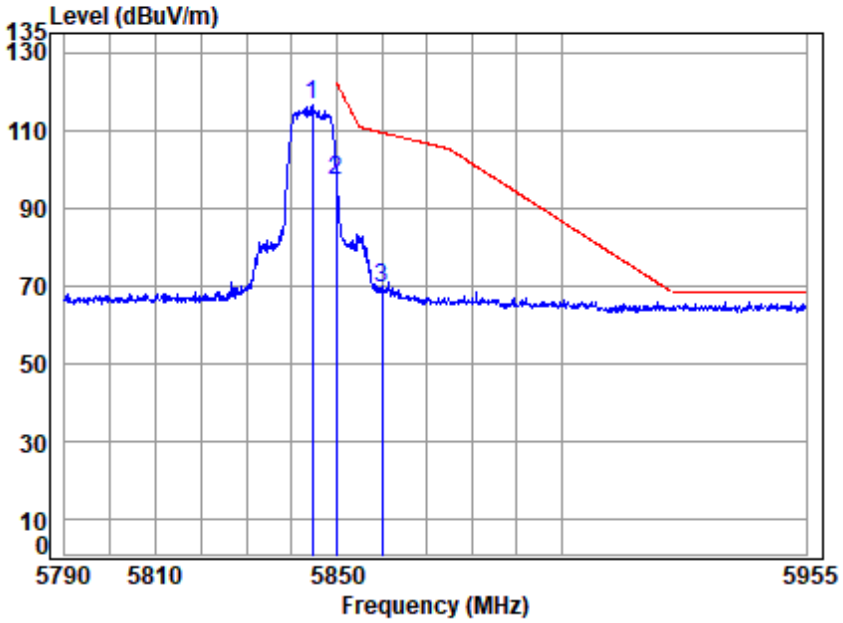
Test Mode: 14; Polarity: Vertical; Modulation: OFDM; Channel: Low



Site : chamber
Condition: 3m VERTICAL
Job No : 04028AT\04029AT
Mode : 5730.5 Band edge
: 5G SDR 10M

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	5715.000	29.60	34.27	31.57	45.04	77.34	109.40	-32.06	peak
2 p	5725.000	29.61	34.25	31.57	79.81	112.10	122.20	-10.10	peak
3	5730.500	29.61	34.24	31.57	93.67	125.95	------	------	peak

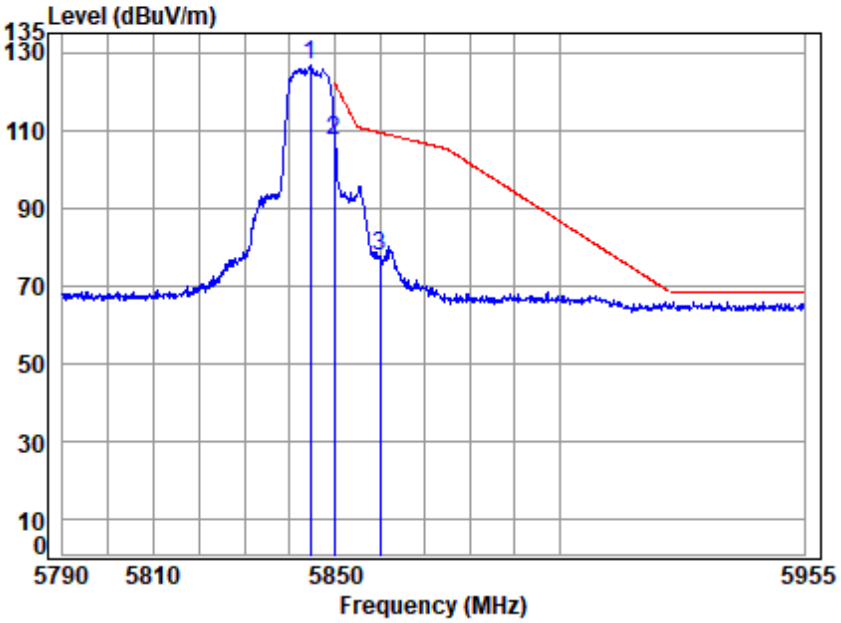
Test Mode: 14; Polarity: Horizontal; Modulation: OFDM; Channel: High



Site : chamber
Condition: 3m HORIZONTAL
Job No : 04028AT\04029AT
Mode : 5844.5 Band edge
: 5G SDR 10M

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	5844.500	29.68	34.39	31.63	84.26	116.70	------	------	peak
2 p	5850.000	29.68	34.40	31.63	64.56	97.01	122.20	-25.19	peak
3	5860.000	29.69	34.44	31.64	36.59	69.08	109.40	-40.32	peak

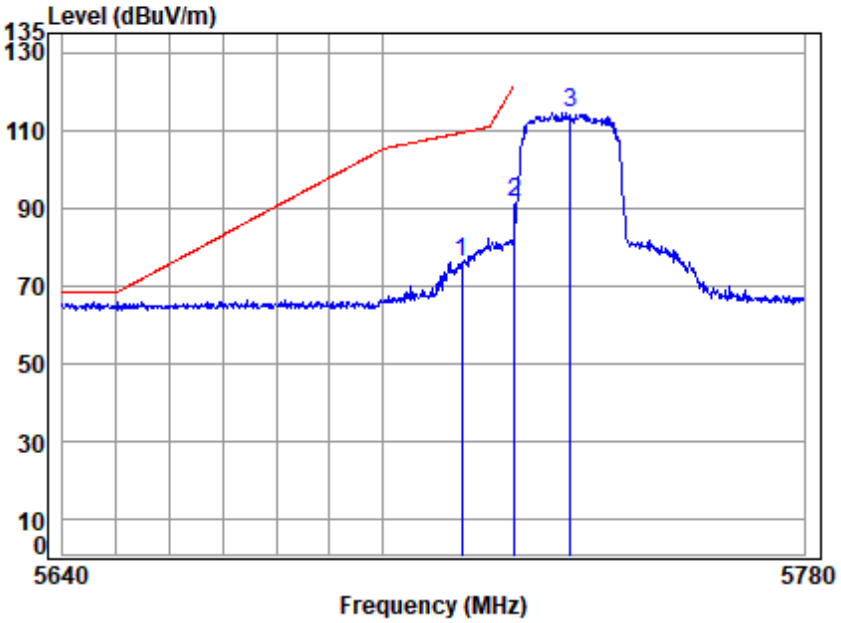
Test Mode: 14; Polarity: Vertical; Modulation: OFDM; Channel: High



Site : chamber
Condition: 3m VERTICAL
Job No : 04028AT\04029AT
Mode : 5844.5 Band edge
: 5G SDR 10M

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	5844.500	29.68	34.39	31.63	94.12	126.56	------	------	peak
2 p	5850.000	29.68	34.40	31.63	74.78	107.23	122.20	-14.97	peak
3	5860.000	29.69	34.44	31.64	45.01	77.50	109.40	-31.90	peak

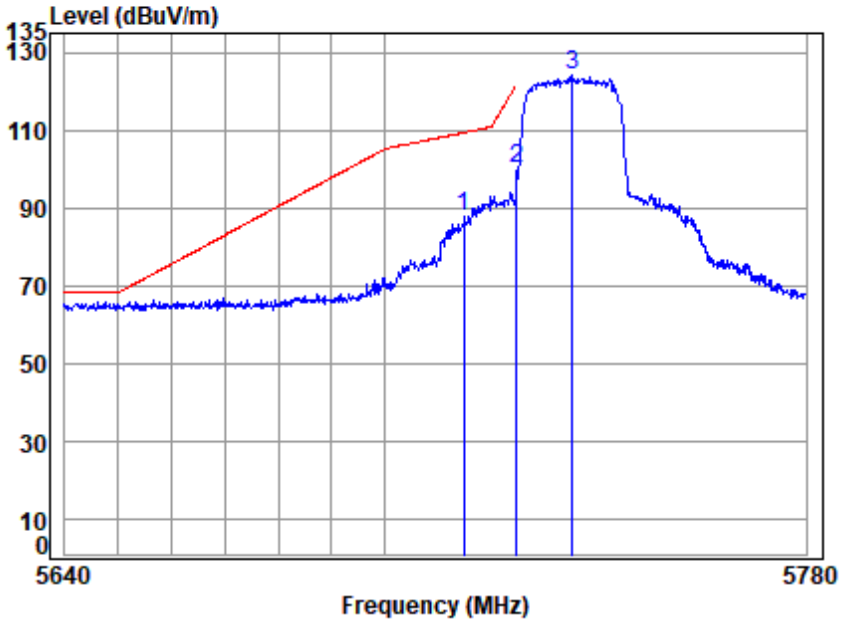
Test Mode: 15; Polarity: Horizontal; Modulation: OFDM; Channel: Low



Site : chamber
Condition: 3m HORIZONTAL
Job No : 04028AT\04029AT
Mode : 5735.5 Band edge
: 5G SDR 20M

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	5715.000	29.60	34.27	31.57	43.48	75.78	109.40	-33.62	peak
2 p	5725.000	29.61	34.25	31.57	58.90	91.19	122.20	-31.01	peak
3	5735.500	29.61	34.23	31.58	82.37	114.63	------	------	peak

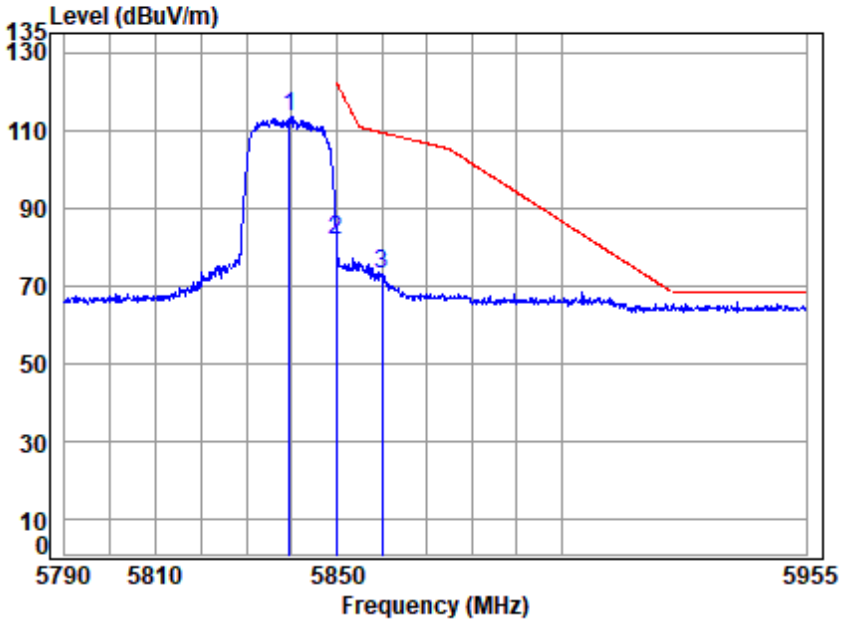
Test Mode: 15; Polarity: Vertical; Modulation: OFDM; Channel: Low



Site : chamber
Condition: 3m VERTICAL
Job No : 04028AT\04029AT
Mode : 5735.5 Band edge
: 5G SDR 20M

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1 p	5715.000	29.60	34.27	31.57	55.33	87.63	109.40	-21.77	peak
2	5725.000	29.61	34.25	31.57	67.60	99.89	122.20	-22.31	peak
3	5735.500	29.61	34.23	31.58	91.77	124.03	------	------	peak

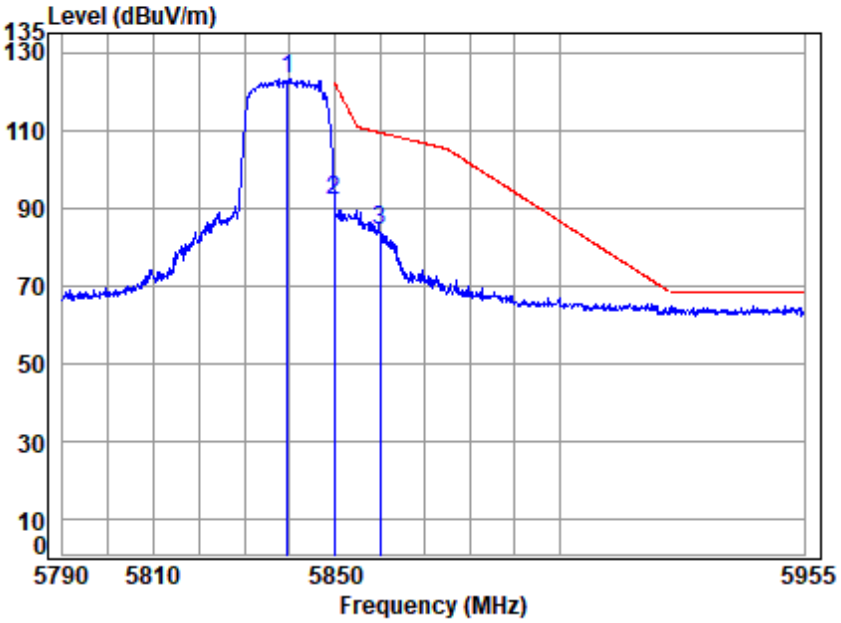
Test Mode: 15; Polarity: Horizontal; Modulation: OFDM; Channel: High



Site : chamber
Condition: 3m HORIZONTAL
Job No : 04028AT\04029AT
Mode : 5839.5 Band edge
: 5G SDR 20M

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	5839.500	29.68	34.38	31.63	80.99	113.42	------	------	peak
2	5850.000	29.68	34.40	31.63	49.02	81.47	122.20	-40.73	peak
3 p	5860.000	29.69	34.44	31.64	40.62	73.11	109.40	-36.29	peak

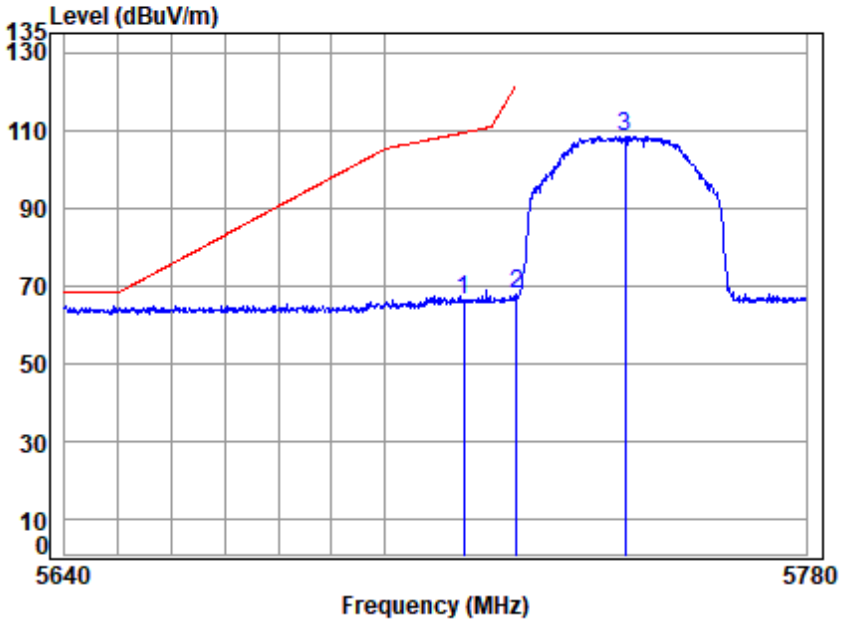
Test Mode: 15; Polarity: Vertical; Modulation: OFDM; Channel: High



Site : chamber
Condition: 3m VERTICAL
Job No : 04028AT\04029AT
Mode : 5839.5 Band edge
: 5G SDR 20M

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	5839.500	29.68	34.38	31.63	90.63	123.06	------	------	peak
2	5850.000	29.68	34.40	31.63	59.57	92.02	122.20	-30.18	peak
3 p	5860.000	29.69	34.44	31.64	51.82	84.31	109.40	-25.09	peak

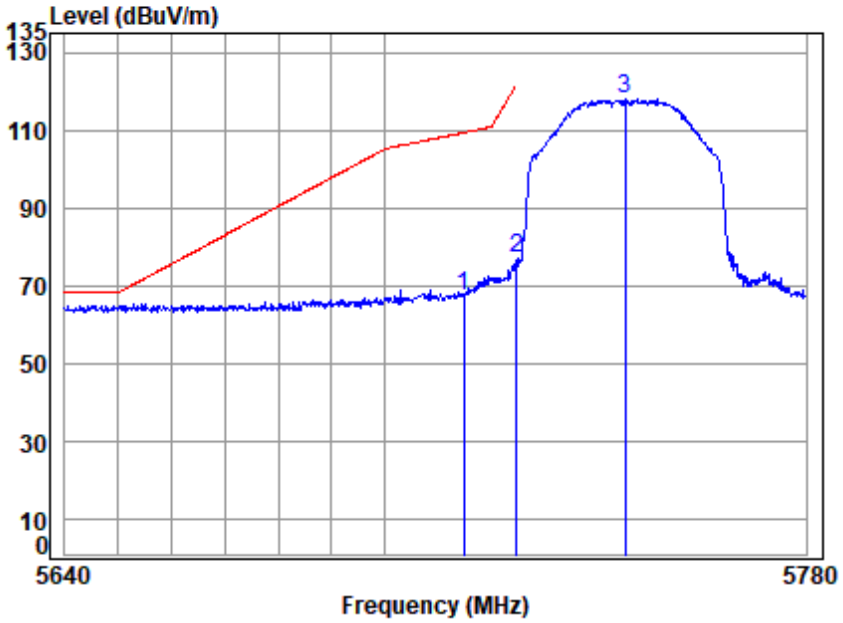
Test Mode: 16; Polarity: Horizontal; Modulation: OFDM; Channel: Low



Site : chamber
Condition: 3m HORIZONTAL
Job No : 04028AT\04029AT
Mode : 5745.5 Band edge
: 5G SDR 40M

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1 p	5715.000	29.60	34.27	31.57	34.13	66.43	109.40	-42.97	peak
2	5725.000	29.61	34.25	31.57	35.37	67.66	122.20	-54.54	peak
3	5745.500	29.62	34.21	31.58	76.17	108.42	------	------	peak

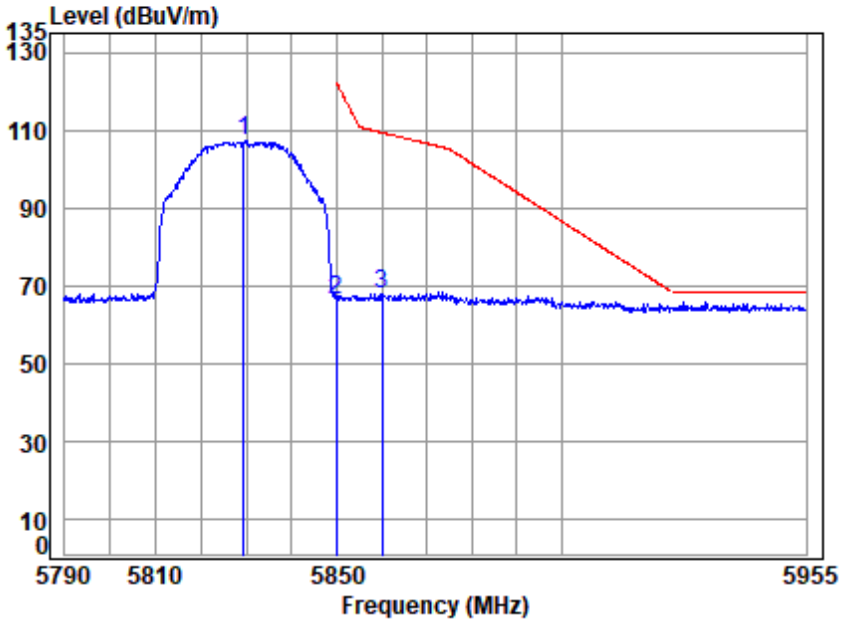
Test Mode: 16; Polarity: Vertical; Modulation: OFDM; Channel: Low



Site : chamber
Condition: 3m VERTICAL
Job No : 04028AT\04029AT
Mode : 5745.5 Band edge
: 5G SDR 40M

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1 p	5715.000	29.60	34.27	31.57	34.97	67.27	109.40	-42.13	peak
2	5725.000	29.61	34.25	31.57	44.48	76.77	122.20	-45.43	peak
3	5745.500	29.62	34.21	31.58	85.87	118.12	------	------	peak

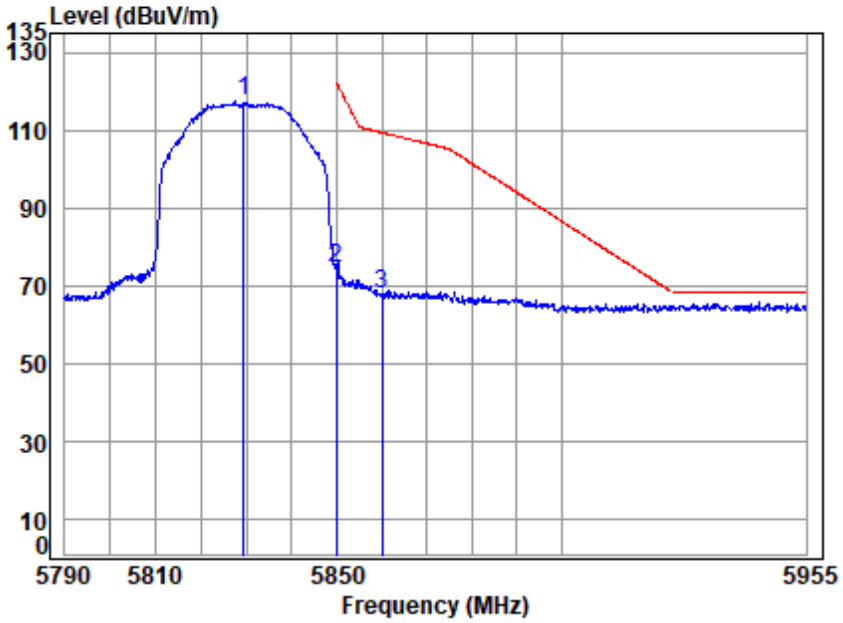
Test Mode: 16; Polarity: Horizontal; Modulation: OFDM; Channel: High



Site : chamber
Condition: 3m HORIZONTAL
Job No : 04028AT\04029AT
Mode : 5829.5 Band edge
: 5G SDR 40M

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	5829.500	29.67	34.36	31.62	74.85	107.26	------	------	peak
2	5850.000	29.68	34.40	31.63	33.68	66.13	122.20	-56.07	peak
3 p	5860.000	29.69	34.44	31.64	35.47	67.96	109.40	-41.44	peak

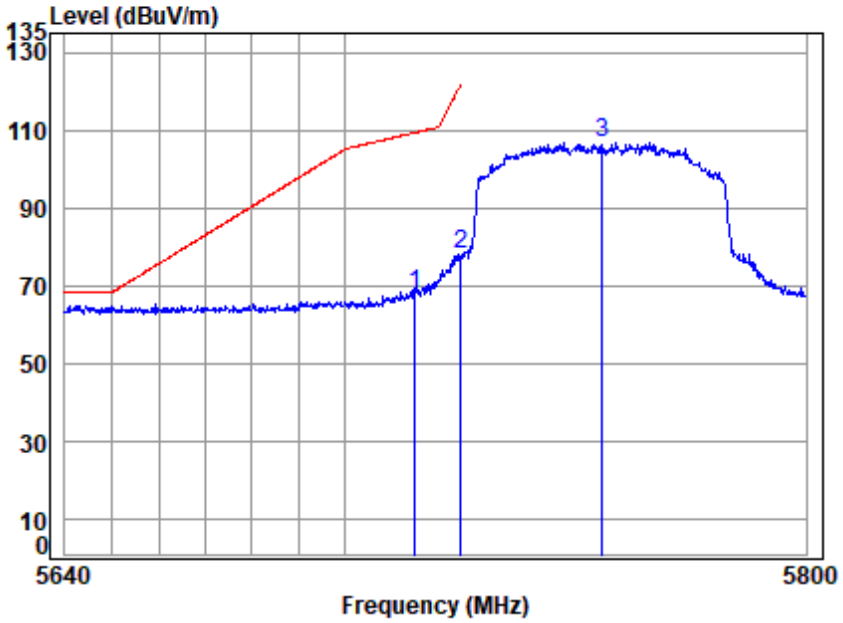
Test Mode: 16; Polarity: Vertical; Modulation: OFDM; Channel: High



Site : chamber
Condition: 3m VERTICAL
Job No : 04028AT\04029AT
Mode : 5829.5 Band edge
: 5G SDR 40M

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	5829.500	29.67	34.36	31.62	85.04	117.45	------	------	peak
2	5850.000	29.68	34.40	31.63	42.19	74.64	122.20	-47.56	peak
3 p	5860.000	29.69	34.44	31.64	35.22	67.71	109.40	-41.69	peak

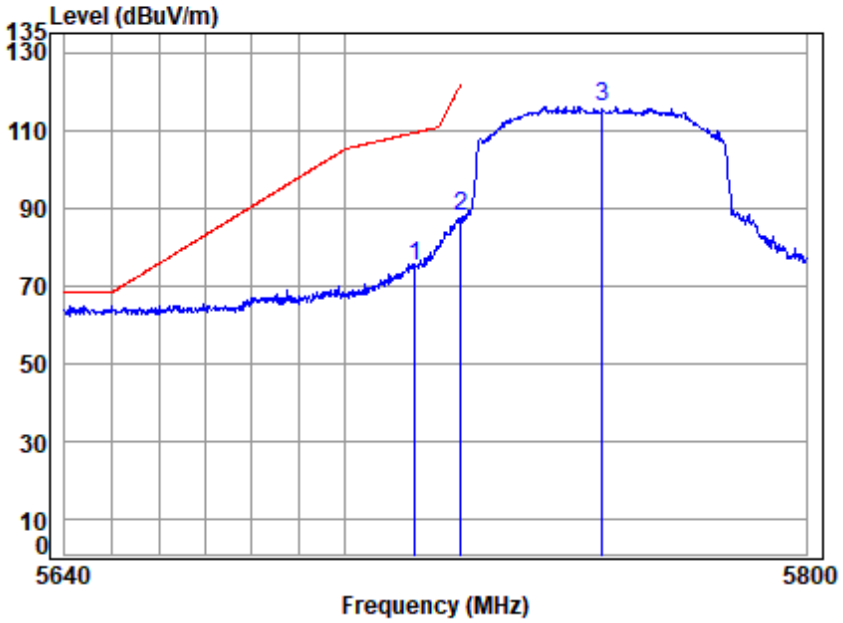
Test Mode: 17; Polarity: Horizontal; Modulation: OFDM; Channel: Low



Site : chamber
Condition: 3m HORIZONTAL
Job No : 04028AT\04029AT
Mode : 5755.5 Band edge
: 5G SDR 60M

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1 p	5715.000	29.60	34.27	31.57	35.67	67.97	109.40	-41.43	peak
2	5725.000	29.61	34.25	31.57	45.54	77.83	122.20	-44.37	peak
3	5755.500	29.63	34.21	31.59	74.53	106.78	------	------	peak

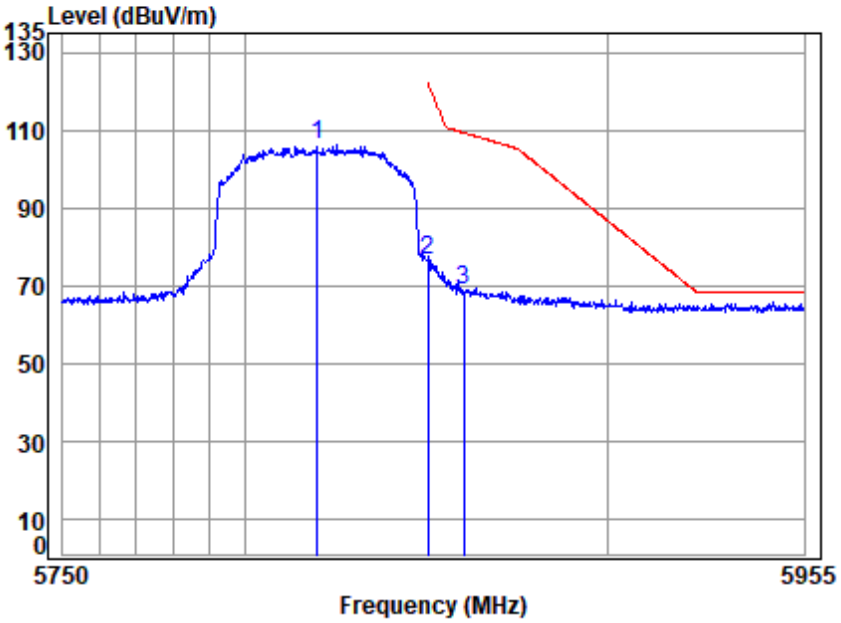
Test Mode: 17; Polarity: Vertical; Modulation: OFDM; Channel: Low



Site : chamber
Condition: 3m VERTICAL
Job No : 04028AT\04029AT
Mode : 5755.5 Band edge
: 5G SDR 60M

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1 p	5715.000	29.60	34.27	31.57	42.73	75.03	109.40	-34.37	peak
2	5725.000	29.61	34.25	31.57	55.27	87.56	122.20	-34.64	peak
3	5755.500	29.63	34.21	31.59	83.98	116.23	------	------	peak

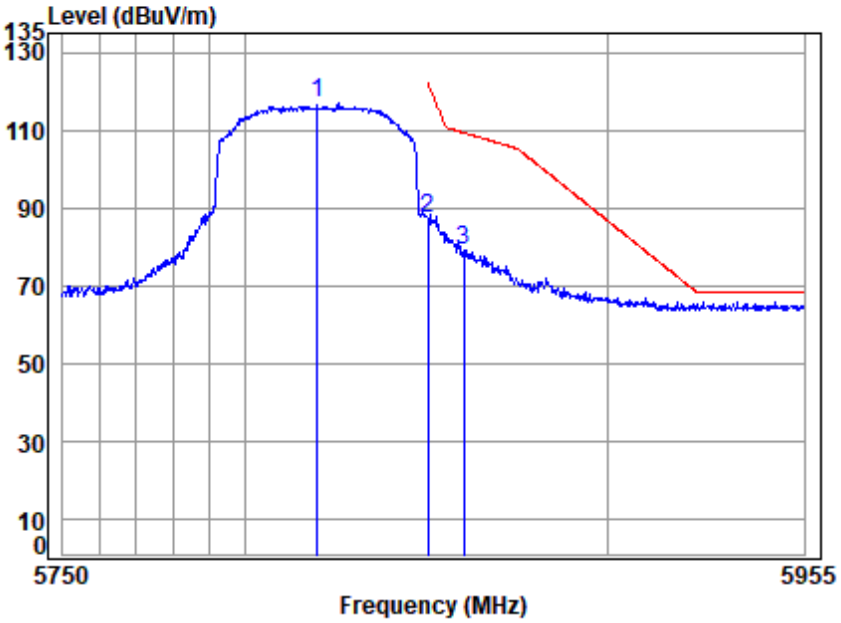
Test Mode: 17; Polarity: Horizontal; Modulation: OFDM; Channel: High



Site : chamber
Condition: 3m HORIZONTAL
Job No : 04028AT\04029AT
Mode : 5819.5 Band edge
: 5G SDR 60M

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	5819.500	29.66	34.34	31.62	74.08	106.46	------	------	peak
2	5850.000	29.68	34.40	31.63	44.16	76.61	122.20	-45.59	peak
3 p	5860.000	29.69	34.44	31.64	36.29	68.78	109.40	-40.62	peak

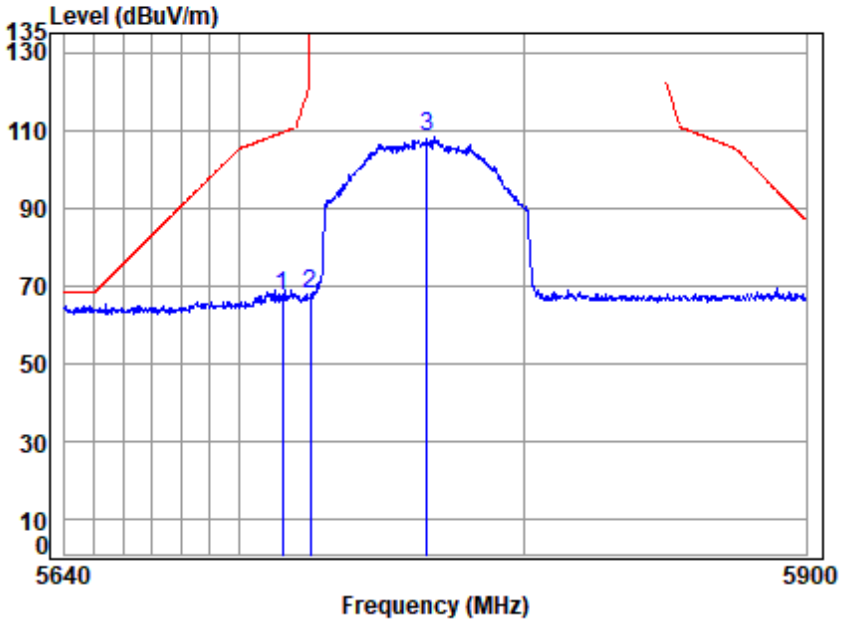
Test Mode: 17; Polarity: Vertical; Modulation: OFDM; Channel: High



Site : chamber
Condition: 3m VERTICAL
Job No : 04028AT\04029AT
Mode : 5819.5 Band edge
: 5G SDR 60M

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	5819.500	29.66	34.34	31.62	84.56	116.94	------	------	peak
2	5850.000	29.68	34.40	31.63	54.93	87.38	122.20	-34.82	peak
3 p	5860.000	29.69	34.44	31.64	46.39	78.88	109.40	-30.52	peak

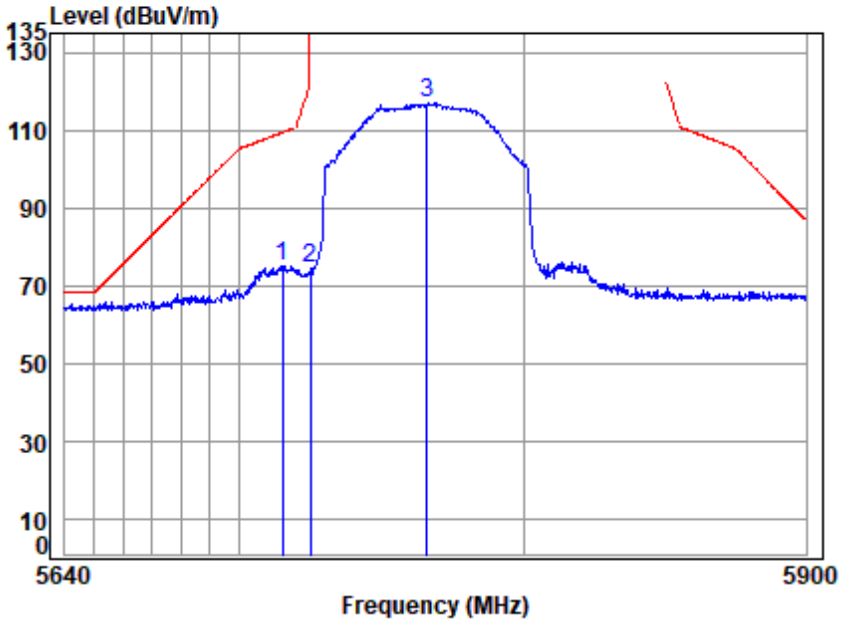
Test Mode: 18; Polarity: Horizontal; Modulation: OFDM; Channel: Low



Site : chamber
Condition: 3m HORIZONTAL
Job No : 04028AT\04029AT
Mode : 5765.5 Band edge
: 5G SDR 80M

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1 p	5715.000	29.60	34.27	31.57	35.13	67.43	109.40	-41.97	peak
2	5725.000	29.61	34.25	31.57	35.62	67.91	122.20	-54.29	peak
3	5765.500	29.63	34.23	31.59	75.84	108.11	------	------	peak

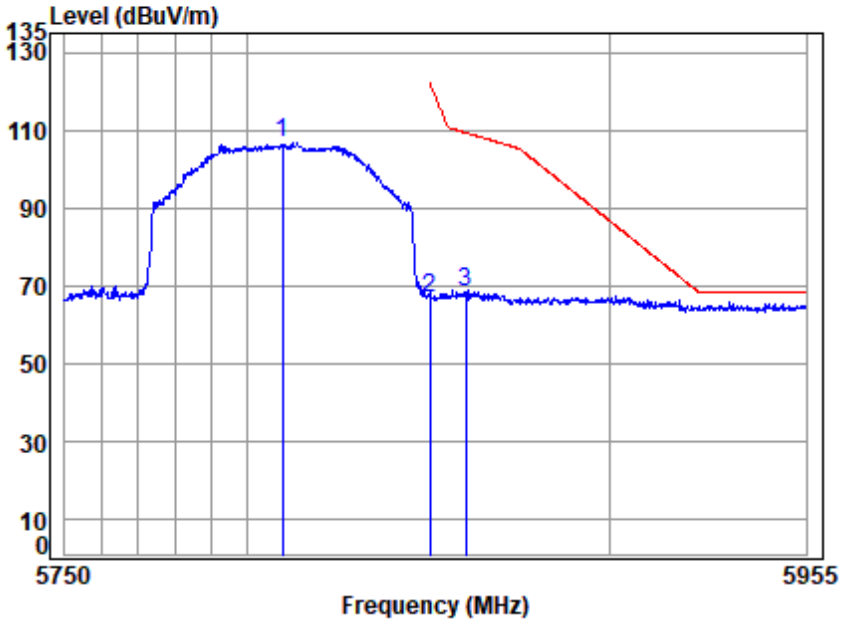
Test Mode: 18; Polarity: Vertical; Modulation: OFDM; Channel: Low



Site : chamber
Condition: 3m VERTICAL
Job No : 04028AT\04029AT
Mode : 5765.5 Band edge
: 5G SDR 80M

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1 p	5715.000	29.60	34.27	31.57	42.69	74.99	109.40	-34.41	peak
2	5725.000	29.61	34.25	31.57	42.02	74.31	122.20	-47.89	peak
3	5765.500	29.63	34.23	31.59	84.82	117.09	------	------	peak

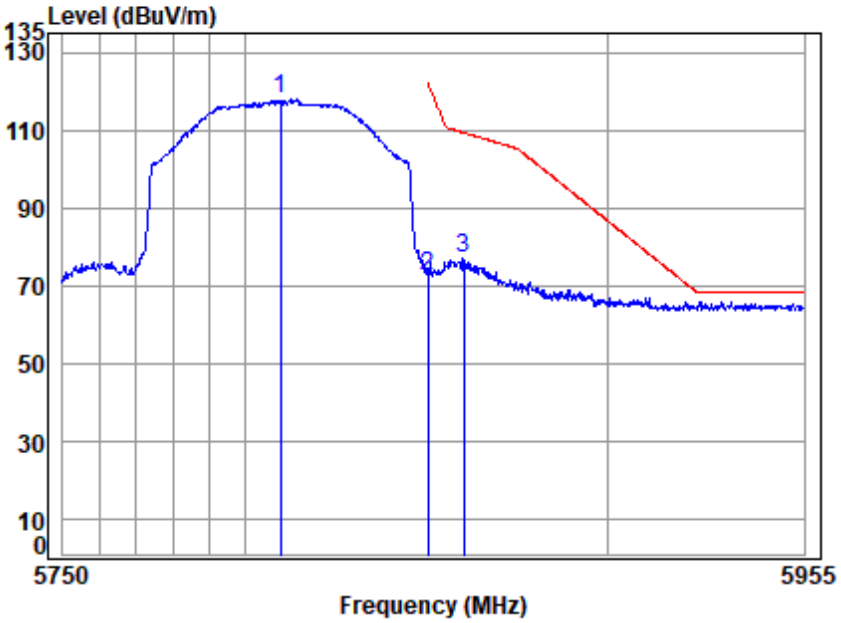
Test Mode: 18; Polarity: Horizontal; Modulation: OFDM; Channel: High



Site : chamber
Condition: 3m HORIZONTAL
Job No : 04028AT\04029AT
Mode : 5809.5 Band edge
: 5G SDR 80M

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	5809.500	29.66	34.32	31.61	74.56	106.93	------	------	peak
2	5850.000	29.68	34.40	31.63	34.07	66.52	122.20	-55.68	peak
3 p	5860.000	29.69	34.44	31.64	35.74	68.23	109.40	-41.17	peak

Test Mode: 18; Polarity: Vertical; Modulation: OFDM; Channel: High



Site : chamber
Condition: 3m VERTICAL
Job No : 04028AT\04029AT
Mode : 5809.5 Band edge
: 5G SDR 80M

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	5809.500	29.66	34.32	31.61	85.60	117.97	------	------	peak
2	5850.000	29.68	34.40	31.63	39.83	72.28	122.20	-49.92	peak
3 p	5860.000	29.69	34.44	31.64	44.51	77.00	109.40	-32.40	peak

7.5 Duty Cycle

Test Requirement ANSI C63.10 (2013) Section 12.2
Test Method: ANSI C63.10 (2013) Section 12.2

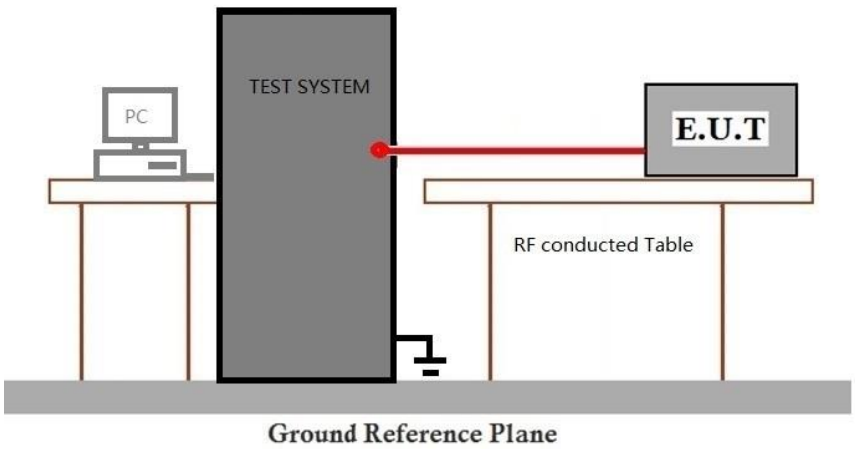
7.5.1 E.U.T. Operation

Operating Environment:
Temperature: 23.5 °C Humidity: 50.2 % RH Atmospheric Pressure: 1020 mbar

7.5.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	14	TX mode (5.8G SDR_10MHz)_Keep the EUT in transmitting mode
Final test	15	TX mode (5.8G SDR_20MHz)_Keep the EUT in transmitting mode
Final test	16	TX mode (5.8G SDR_40MHz)_Keep the EUT in transmitting mode
Final test	17	TX mode (5.8G SDR_60MHz)_Keep the EUT in transmitting mode
Final test	18	TX mode (5.8G SDR_80MHz)_Keep the EUT in transmitting mode

7.5.3 Test Setup Diagram



7.5.4 Measurement Procedure and Data

Please Refer to Appendix for Details

7.6 99% Bandwidth

Test Requirement ANSI C63.10 (2013) Section 12.4.2
Test Method: ANSI C63.10 (2013) Section 12.4.2

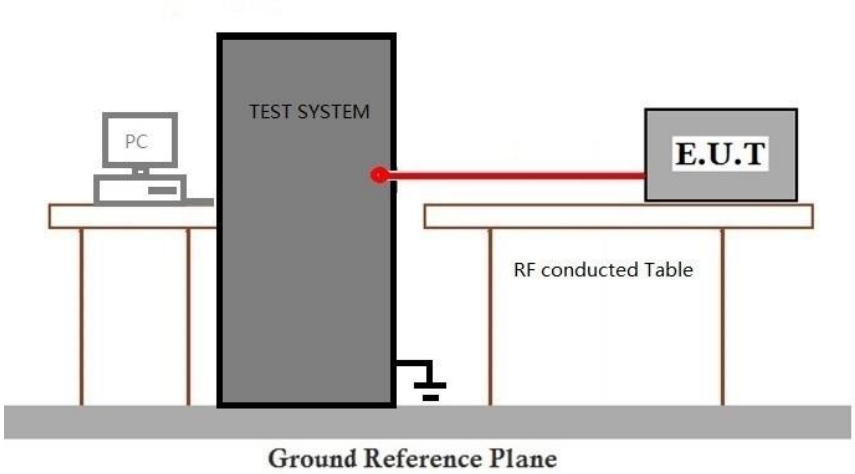
7.6.1 E.U.T. Operation

Operating Environment:
Temperature: 23.5 °C Humidity: 50.2 % RH Atmospheric Pressure: 1020 mbar

7.6.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	14	TX mode (5.8G SDR_10MHz)_Keep the EUT in transmitting mode
Final test	15	TX mode (5.8G SDR_20MHz)_Keep the EUT in transmitting mode
Final test	16	TX mode (5.8G SDR_40MHz)_Keep the EUT in transmitting mode
Final test	17	TX mode (5.8G SDR_60MHz)_Keep the EUT in transmitting mode
Final test	18	TX mode (5.8G SDR_80MHz)_Keep the EUT in transmitting mode

7.6.3 Test Setup Diagram



7.6.4 Measurement Procedure and Data

Please Refer to Appendix for Details

7.7 Peak Power spectrum density

Test Requirement 47 CFR Part 15, Subpart E 15.407 (a)
Test Method: ANSI C63.10 (2013) Section 12.5

Limit:

Frequency band(MHz)	Limit
5150-5250	≤17dBm in 1MHz for master device
	≤11dBm in 1MHz for client device
5250-5350	≤11dBm in 1MHz for client device
5470-5725	≤11dBm in 1MHz for client device
5725-5850	≤30dBm in 500 kHz
Remark:	The maximum power spectral density is measured as a conducted emission by direct connection of a calibrated test instrument to the equipment under test.

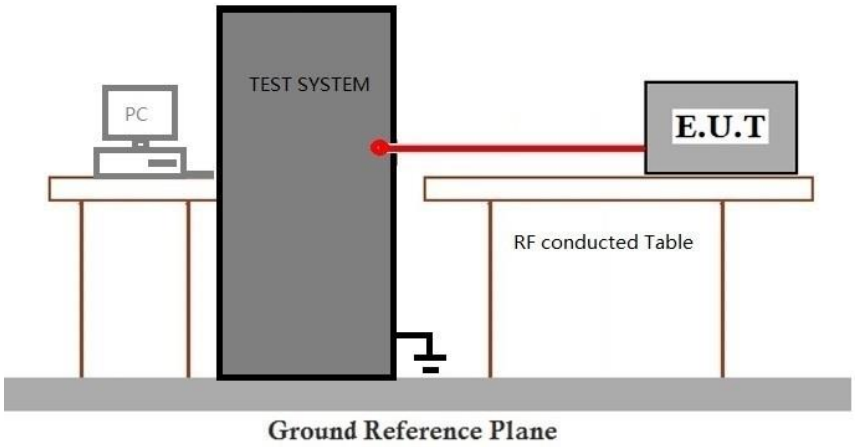
7.7.1 E.U.T. Operation

Operating Environment:
Temperature: 23.5 °C Humidity: 50.2 % RH Atmospheric Pressure: 1020 mbar

7.7.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	14	TX mode (5.8G SDR_10MHz)_Keep the EUT in transmitting mode
Final test	15	TX mode (5.8G SDR_20MHz)_Keep the EUT in transmitting mode
Final test	16	TX mode (5.8G SDR_40MHz)_Keep the EUT in transmitting mode
Final test	17	TX mode (5.8G SDR_60MHz)_Keep the EUT in transmitting mode
Final test	18	TX mode (5.8G SDR_80MHz)_Keep the EUT in transmitting mode

7.7.3 Test Setup Diagram



7.7.4 Measurement Procedure and Data

Please Refer to Appendix for Details

7.8 Frequency Stability

Test Requirement 47 CFR Part 15, Subpart E 15.407 (g)
Test Method: ANSI C63.10 (2013) Section 6.8

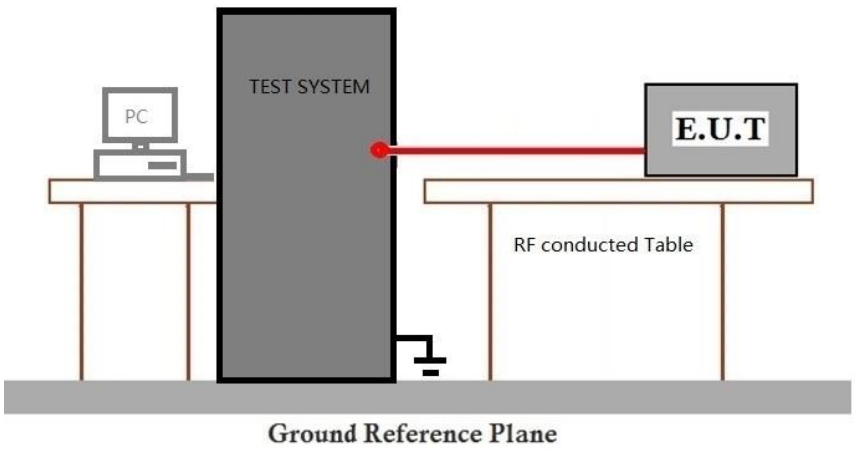
7.8.1 E.U.T. Operation

Operating Environment:
Temperature: 23.5 °C Humidity: 50.3 % RH Atmospheric Pressure: 1020 mbar

7.8.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	14	TX mode (5.8G SDR_10MHz)_Keep the EUT in transmitting mode
Final test	15	TX mode (5.8G SDR_20MHz)_Keep the EUT in transmitting mode
Final test	16	TX mode (5.8G SDR_40MHz)_Keep the EUT in transmitting mode
Final test	17	TX mode (5.8G SDR_60MHz)_Keep the EUT in transmitting mode
Final test	18	TX mode (5.8G SDR_80MHz)_Keep the EUT in transmitting mode

7.8.3 Test Setup Diagram



7.8.4 Measurement Procedure and Data

Please Refer to Appendix for Details

8 Test Setup Photo

Refer to Setup Photo for SZCR2410004028AT

9 EUT Constructional Details (EUT Photos)

Refer to External and Internal Photos for SZCR2410004028AT

10 Appendix

For ANT0 & 1:

1. Duty Cycle

1.1 Test Result

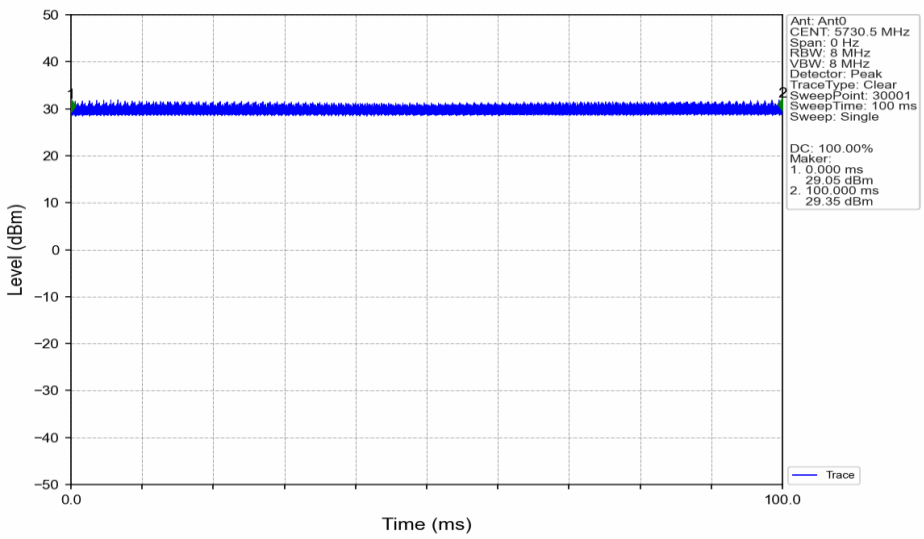
1.1.1 Ant0

Ant0							
Mode	TX Type	Frequency (MHz)	T_on (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	Max. DC Variation (%)
10M	MIMO	5730.5	100.000	100.000	100.00	0.00	0.00
		5787.5	100.000	100.000	100.00	0.00	0.00
		5844.5	100.000	100.000	100.00	0.00	0.00
20M	MIMO	5735.5	100.000	100.000	100.00	0.00	0.00
		5787.5	100.000	100.000	100.00	0.00	0.00
		5839.5	100.000	100.000	100.00	0.00	0.00
40M	MIMO	5745.5	100.000	100.000	100.00	0.00	0.00
		5787.5	100.000	100.000	100.00	0.00	0.00
		5829.5	100.000	100.000	100.00	0.00	0.00
60M	MIMO	5755.5	100.000	100.000	100.00	0.00	0.00
		5787.5	100.000	100.000	100.00	0.00	0.00
		5819.5	100.000	100.000	100.00	0.00	0.00
80M	MIMO	5765.5	100.000	100.000	100.00	0.00	0.00
		5787.5	100.000	100.000	100.00	0.00	0.00
		5809.5	100.000	100.000	100.00	0.00	0.00

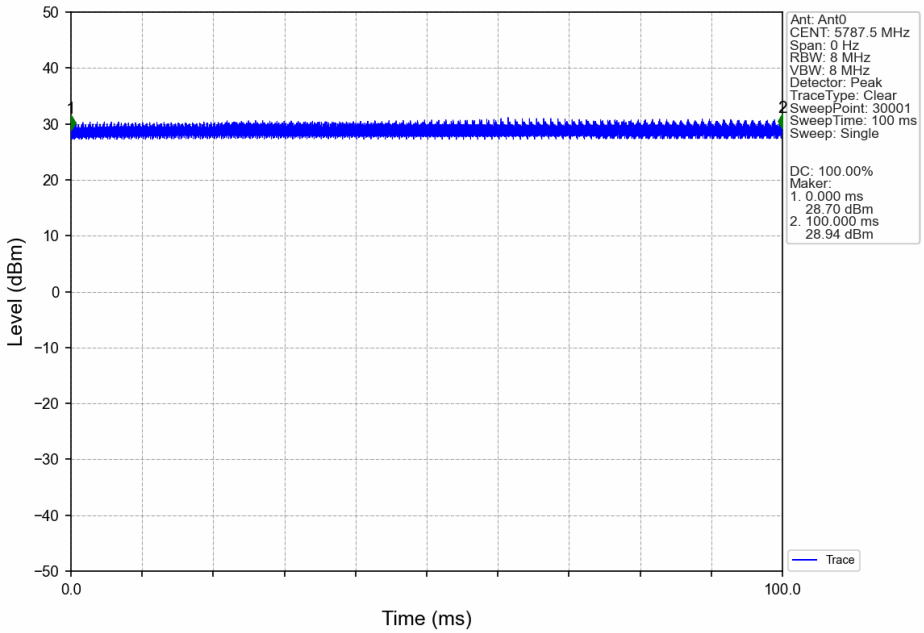
1.2 Test Graph

1.2.1 Ant0

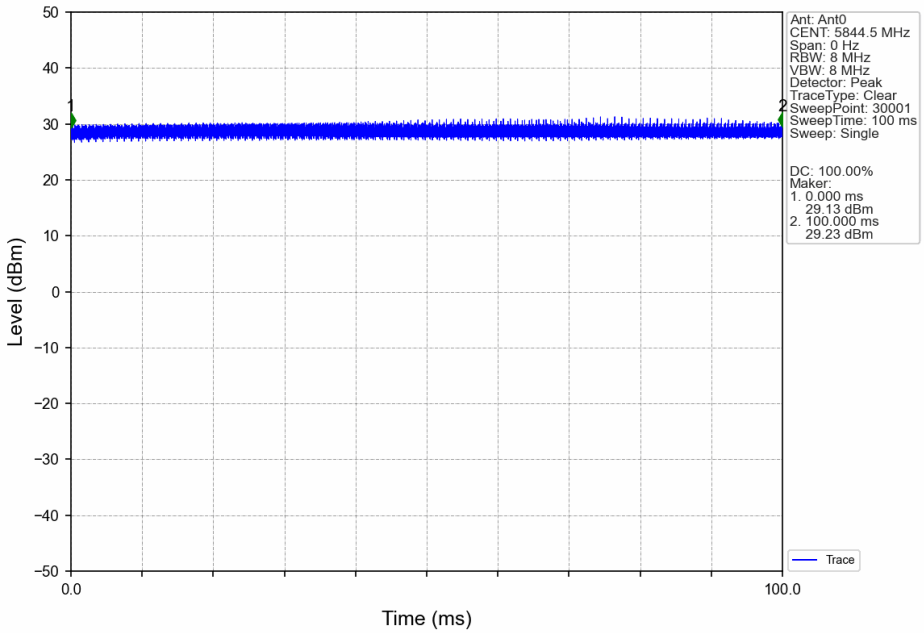
10M_LCH_5730.5MHz_Ant0_NTNV



10M_MCH_5787.5MHz_Ant0_NTNV



10M_HCH_5844.5MHz_Ant0_NTNV



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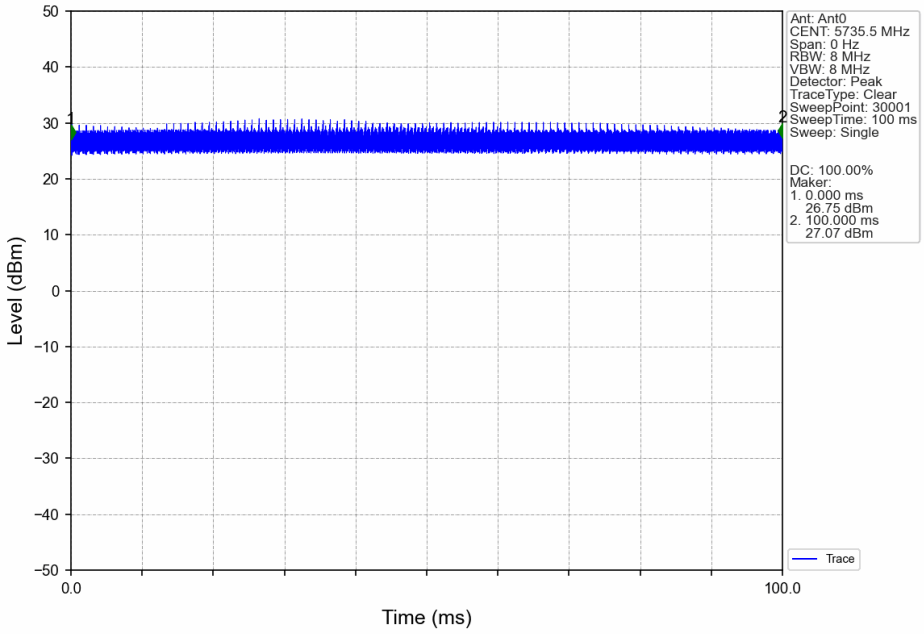
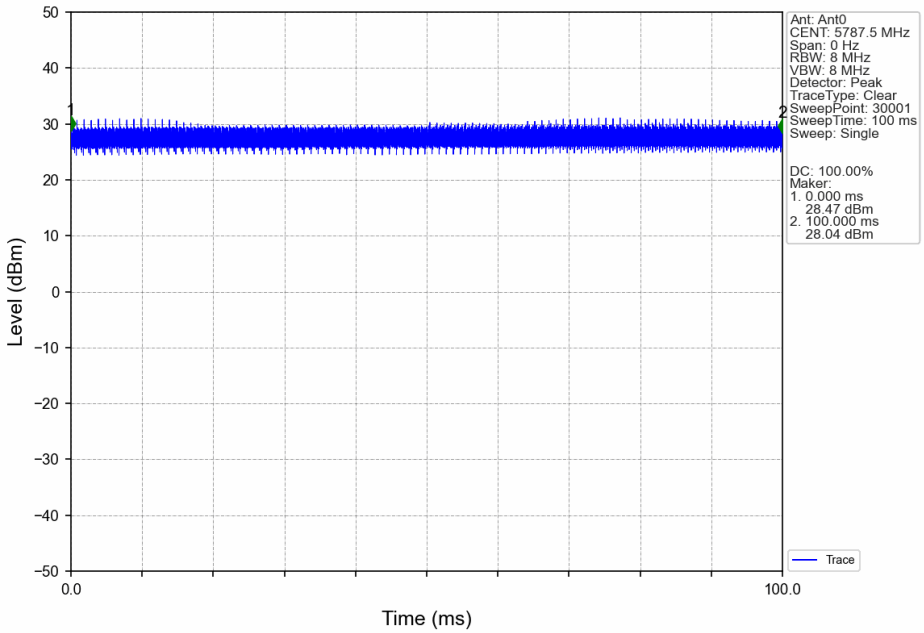


20M_MCH_5787.5MHz_Ant0_NTNV



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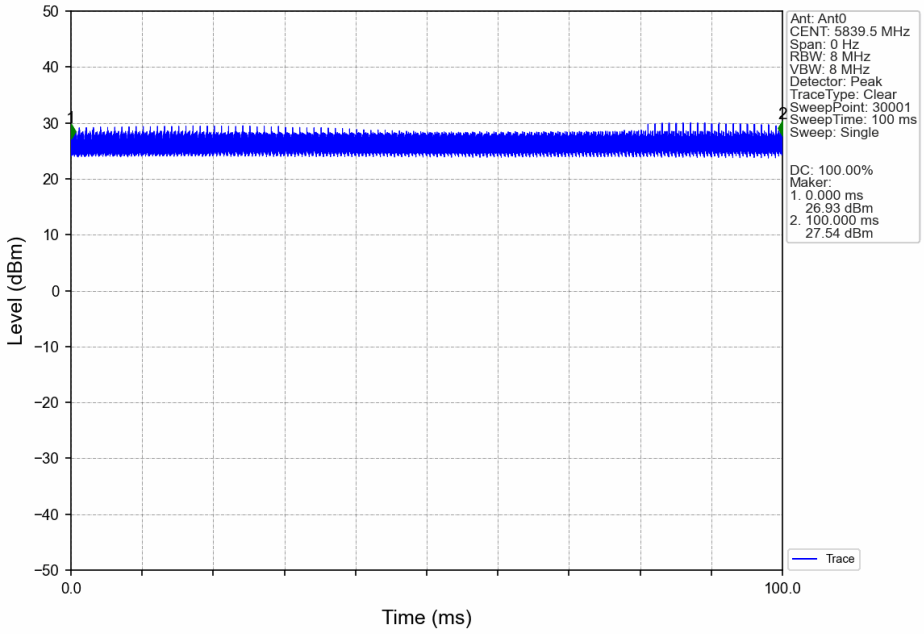
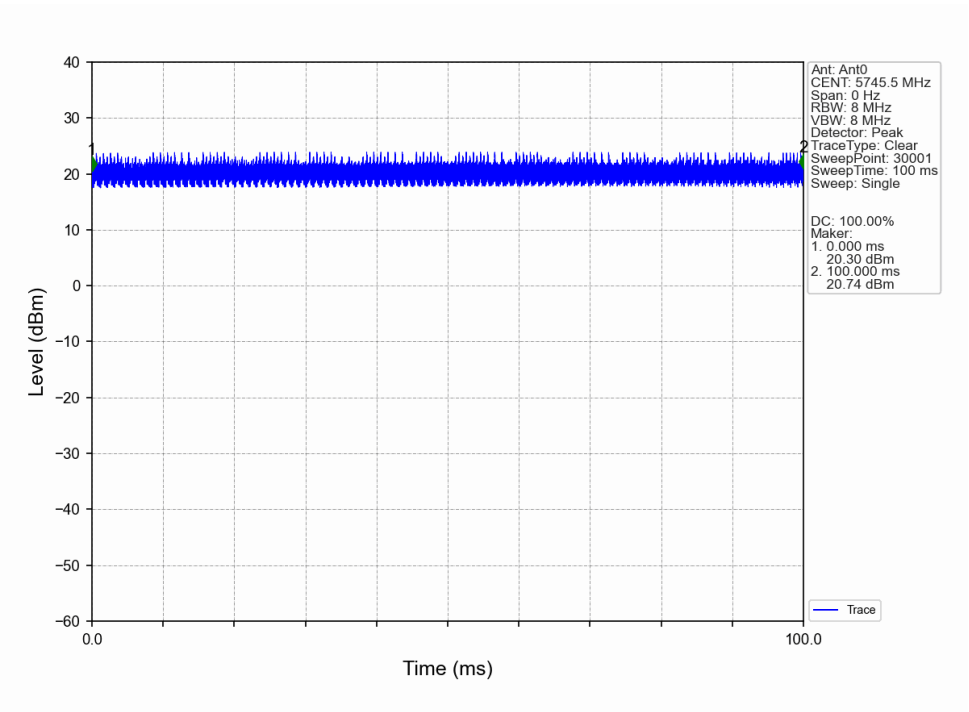
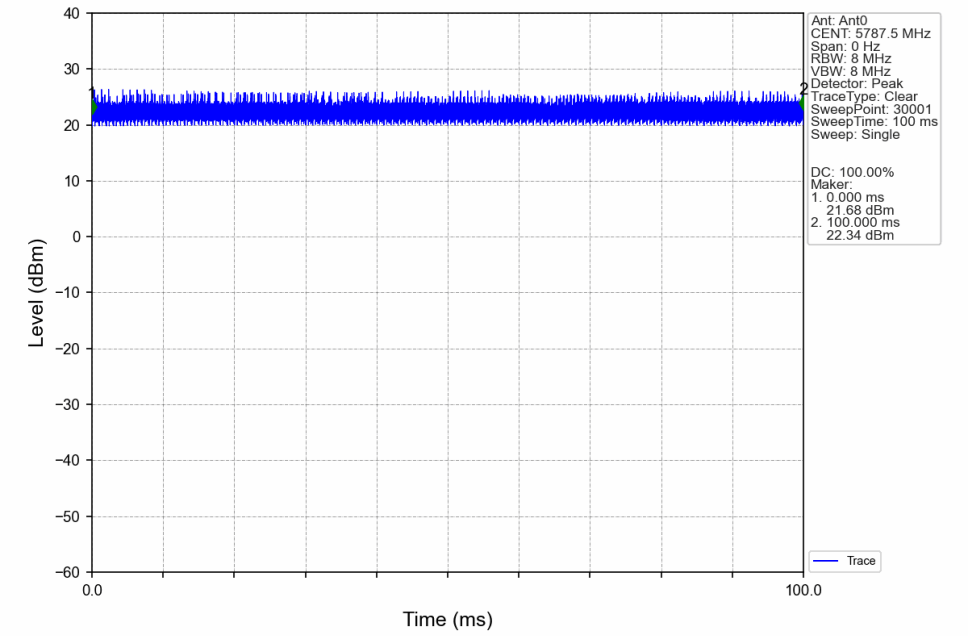


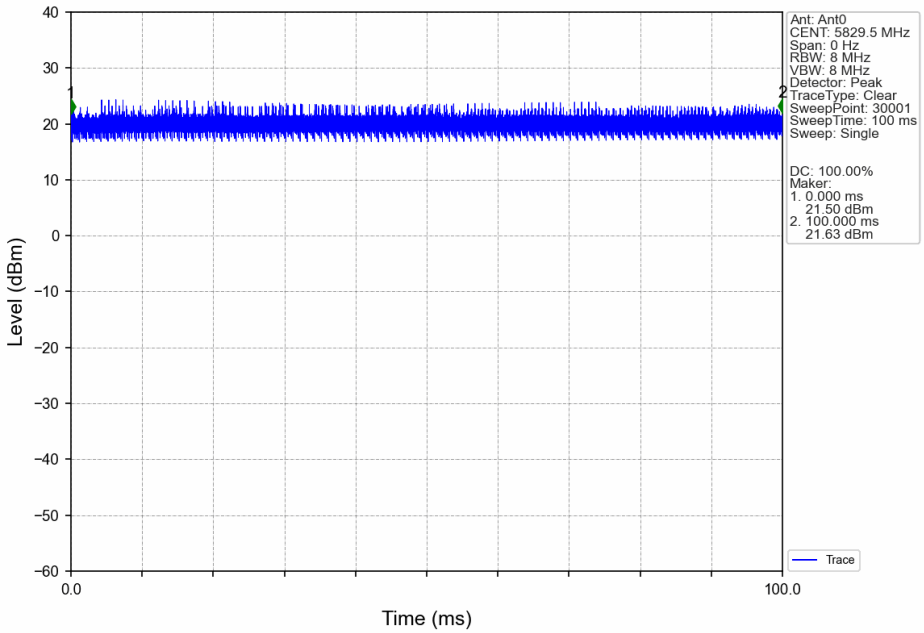
40M_LCH_5745.5MHz_Ant0_NTNV



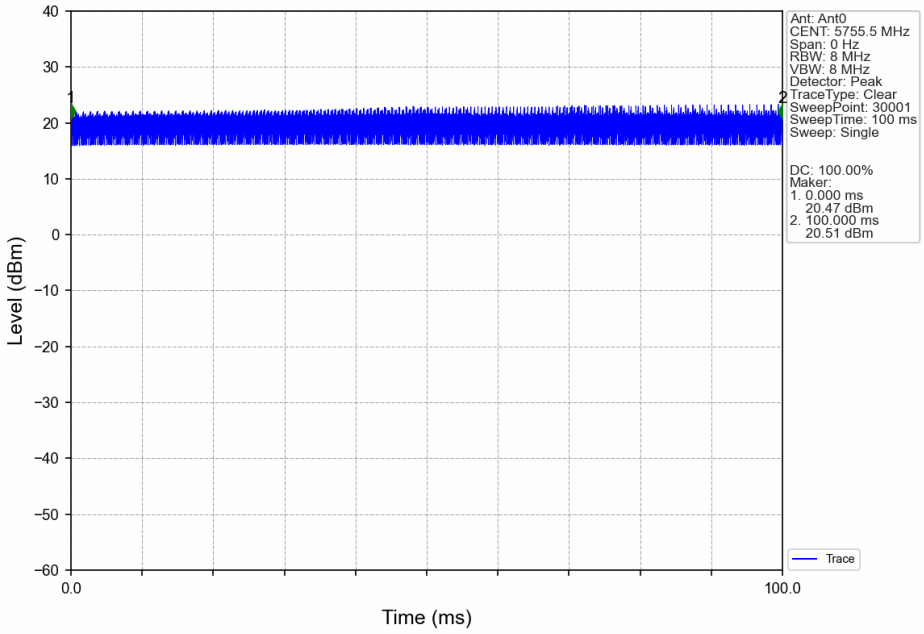
40M_MCH_5787.5MHz_Ant0_NTNV



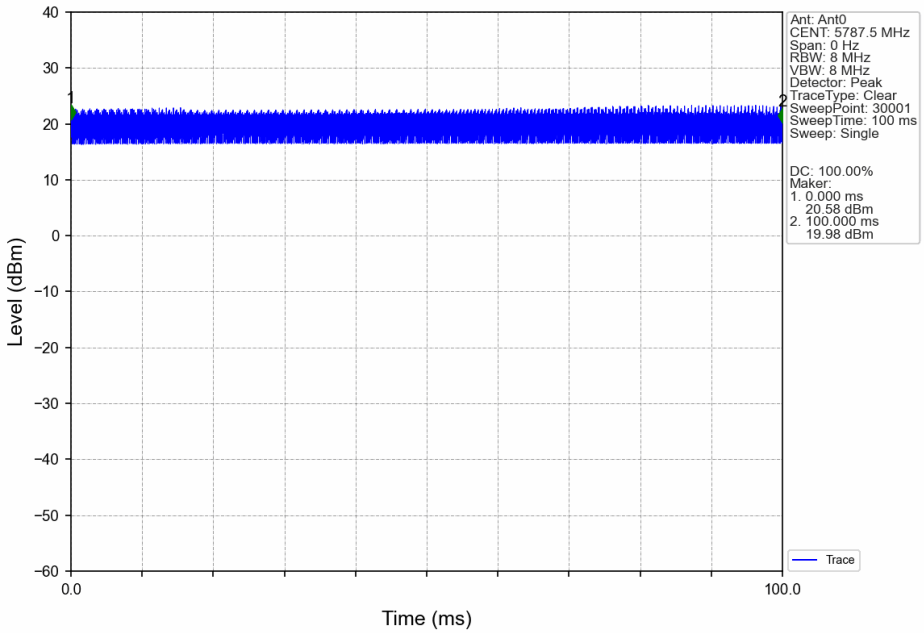
40M_HCH_5829.5MHz_Ant0_NTNV



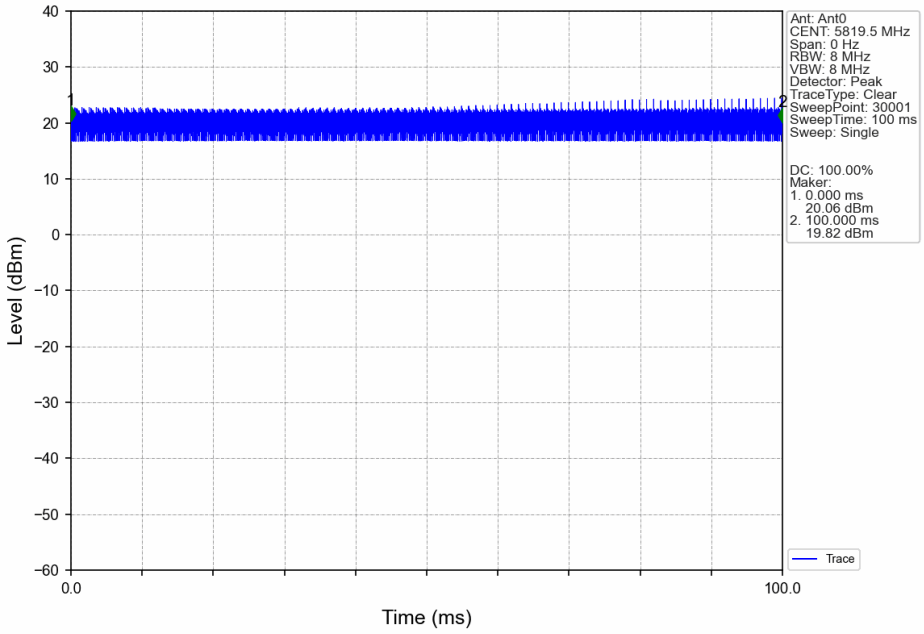
60M_LCH_5755.5MHz_Ant0_NTNV



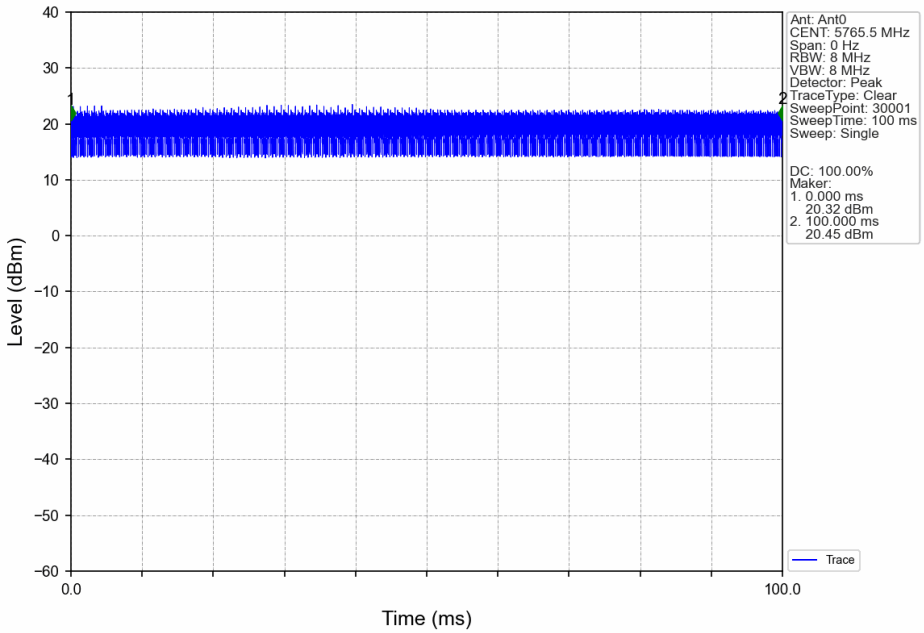
60M_MCH_5787.5MHz_Ant0_NTNV



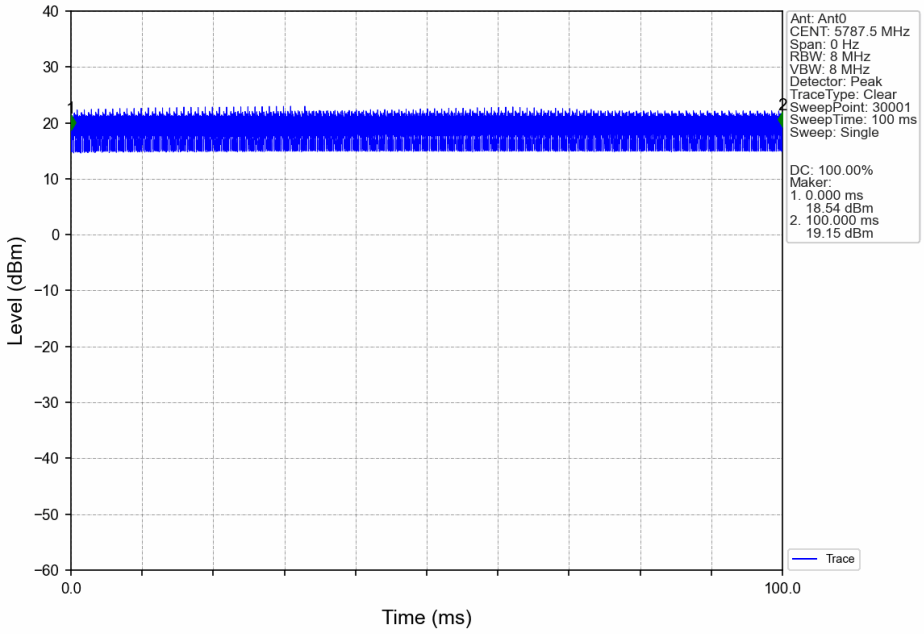
60M_HCH_5819.5MHz_Ant0_NTNV



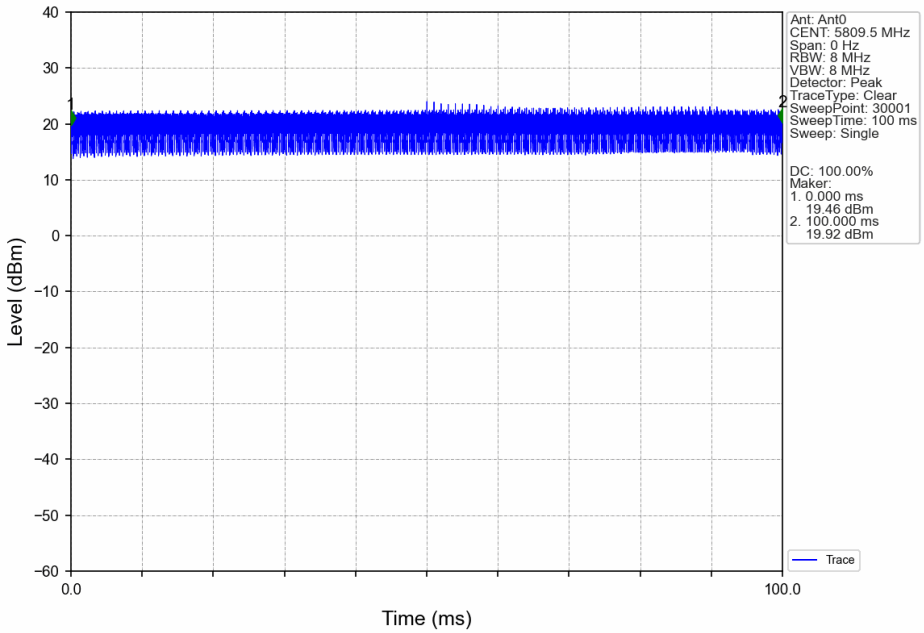
80M_LCH_5765.5MHz_Ant0_NTNV



80M_MCH_5787.5MHz_Ant0_NTNV



80M_HCH_5809.5MHz_Ant0_NTNV



2. Bandwidth

2.1 Test Result

2.1.1 OBW

Mode	TX Type	Frequency (MHz)	ANT	99% Occupied Bandwidth (MHz)		Verdict
				Result	Limit	
10M	MIMO	5730.5	0	9.185	/	Pass
		5787.5	0	9.120	/	Pass
		5844.5	0	9.130	/	Pass
20M	MIMO	5735.5	0	17.929	/	Pass
		5787.5	0	17.933	/	Pass
		5839.5	0	17.927	/	Pass
40M	MIMO	5745.5	0	31.996	/	Pass
		5787.5	0	31.906	/	Pass
		5829.5	0	31.835	/	Pass
60M	MIMO	5755.5	0	52.318	/	Pass
		5787.5	0	52.175	/	Pass
		5819.5	0	52.212	/	Pass
80M	MIMO	5765.5	0	62.160	/	Pass
		5787.5	0	61.510	/	Pass
		5809.5	0	62.231	/	Pass

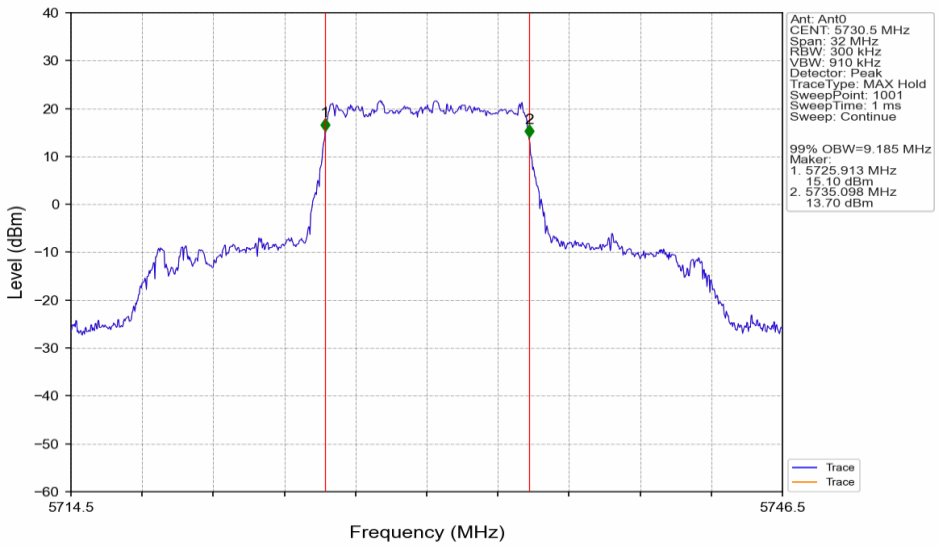
2.1.2 6dB BW

Mode	TX Type	Frequency (MHz)	ANT	6dB Bandwidth (MHz)		Verdict
				Result	Limit	
10M	MIMO	5730.5	0	9.041	>=0.5	Pass
		5787.5	0	9.035	>=0.5	Pass
		5844.5	0	9.044	>=0.5	Pass
20M	MIMO	5735.5	0	17.893	>=0.5	Pass
		5787.5	0	17.847	>=0.5	Pass
		5839.5	0	17.914	>=0.5	Pass
40M	MIMO	5745.5	0	23.654	>=0.5	Pass
		5787.5	0	23.665	>=0.5	Pass
		5829.5	0	23.646	>=0.5	Pass
60M	MIMO	5755.5	0	43.050	>=0.5	Pass
		5787.5	0	42.980	>=0.5	Pass
		5819.5	0	42.999	>=0.5	Pass
80M	MIMO	5765.5	0	41.727	>=0.5	Pass
		5787.5	0	40.835	>=0.5	Pass
		5809.5	0	40.916	>=0.5	Pass

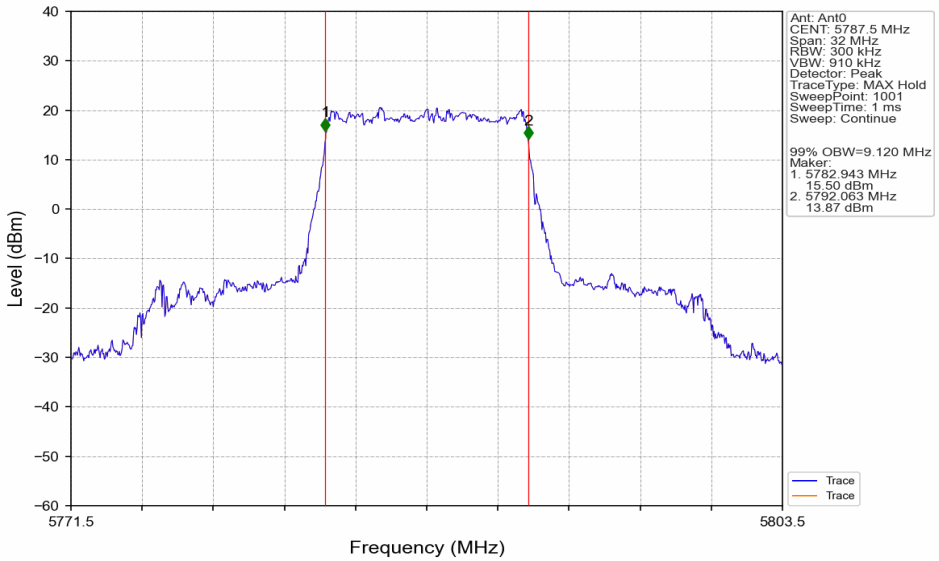
2.2 Test Graph

2.2.1 OBW

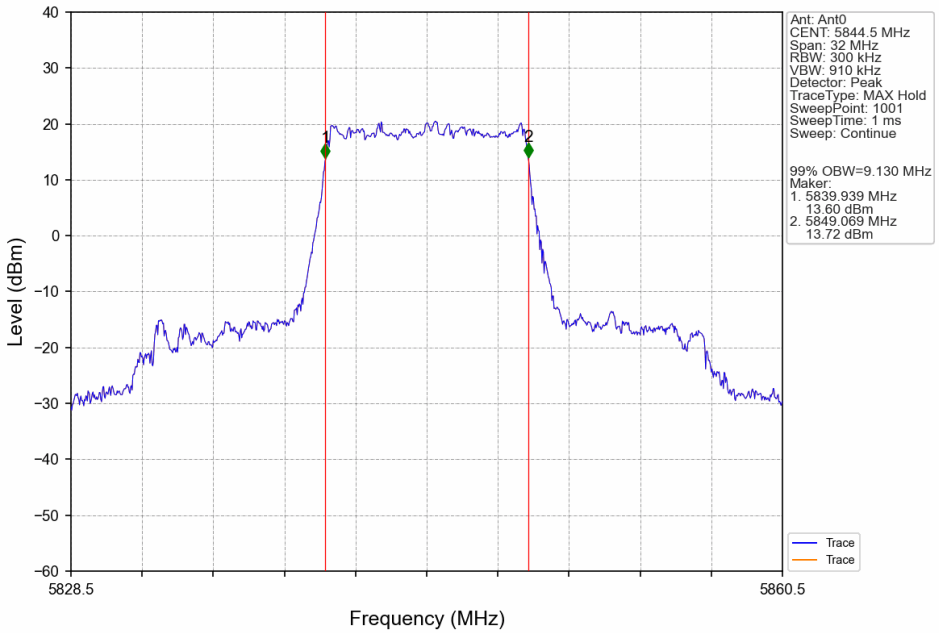
10M_LCH_5730.5MHz_Ant0_NTNV



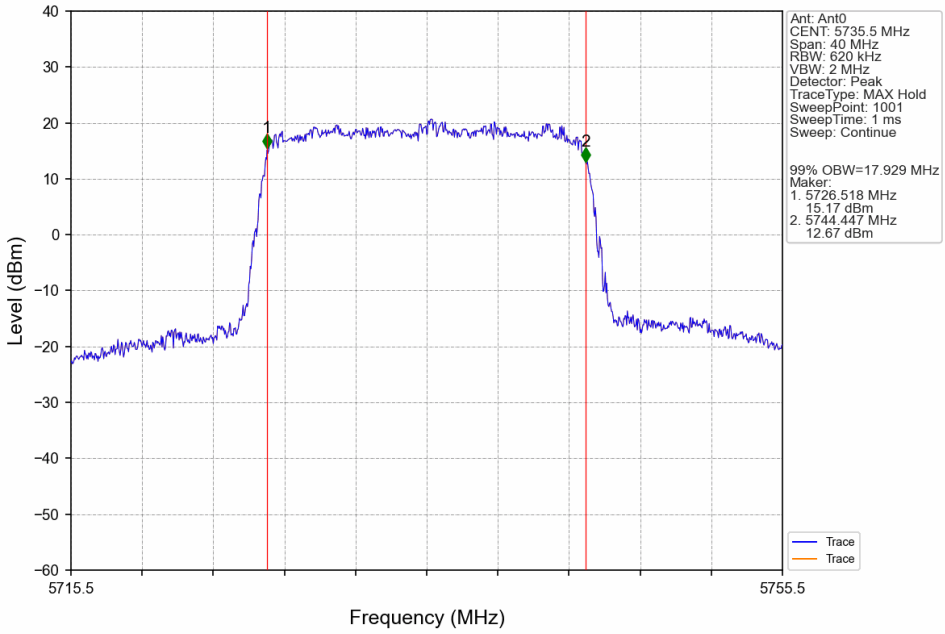
10M_MCH_5787.5MHz_Ant0_NTNV



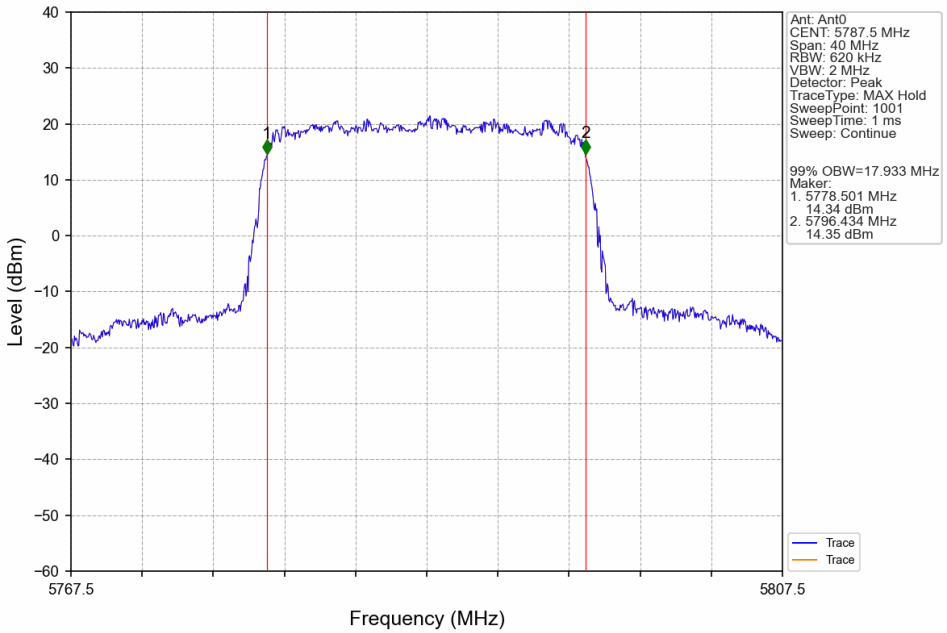
10M_HCH_5844.5MHz_Ant0_NTNV



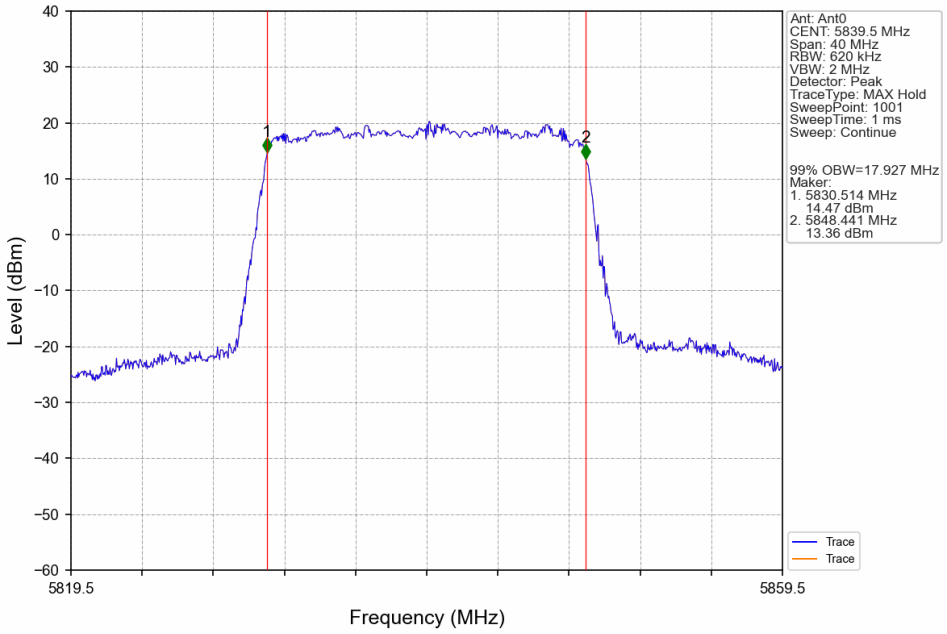
20M_LCH_5735.5MHz_Ant0_NTNV



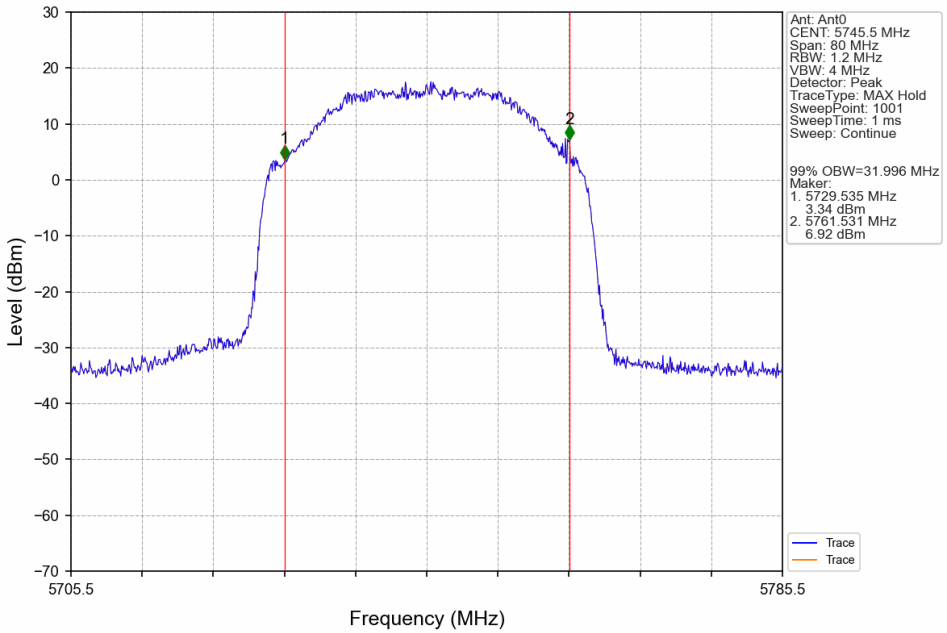
20M_MCH_5787.5MHz_Ant0_NTNV



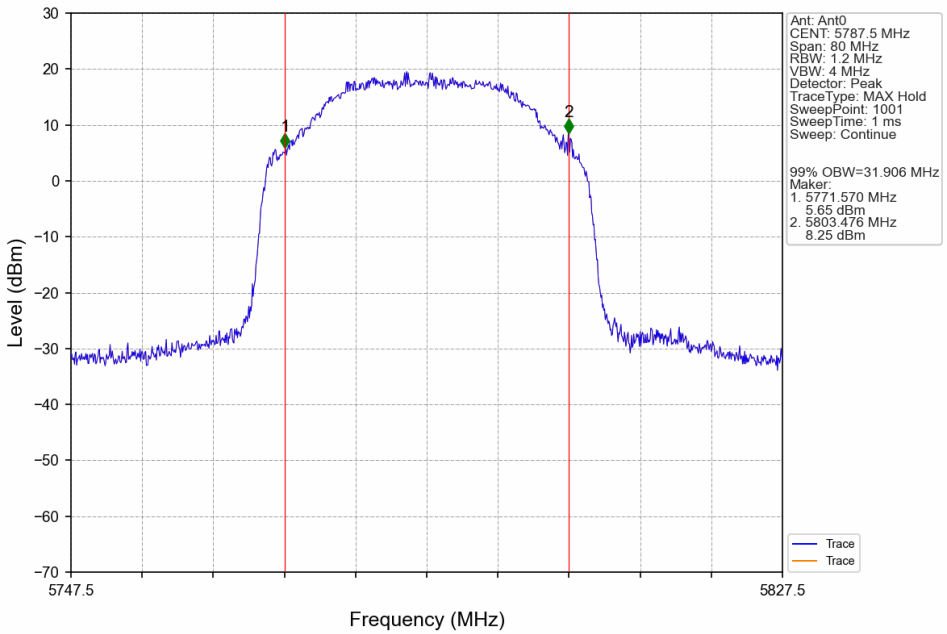
20M_HCH_5839.5MHz_Ant0_NTNV



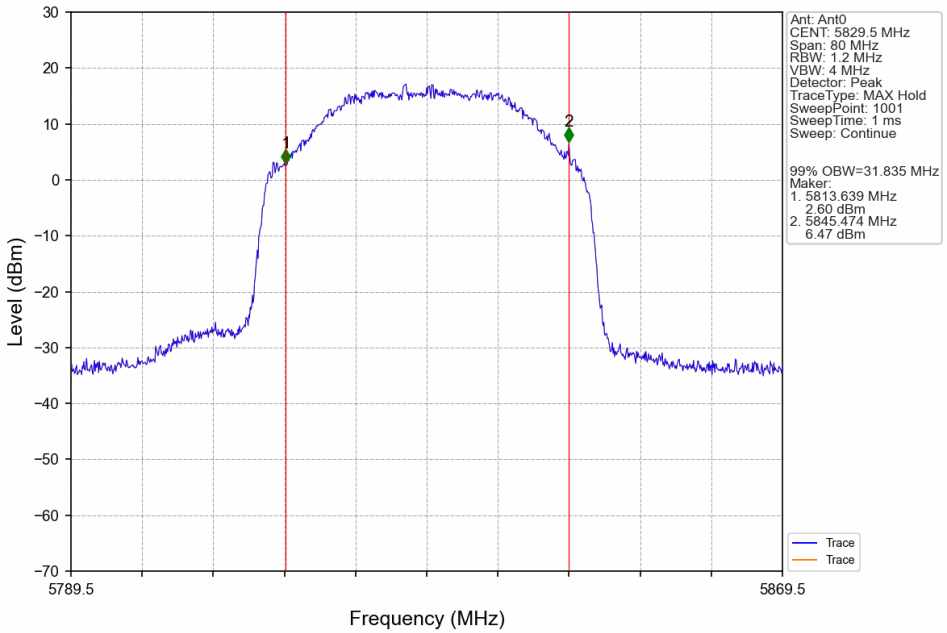
40M_LCH_5745.5MHz_Ant0_NTNV



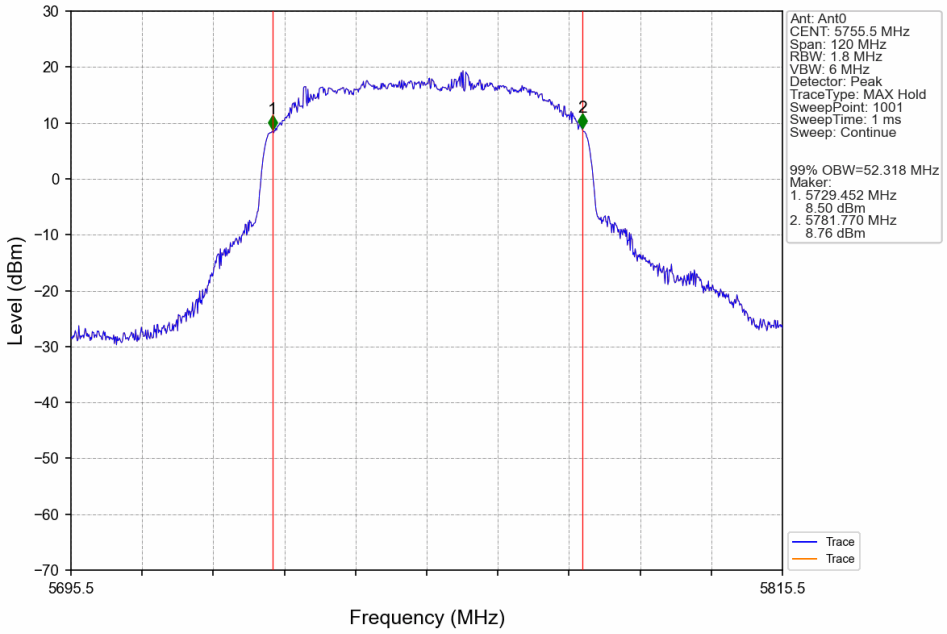
40M_MCH_5787.5MHz_Ant0_NTNV



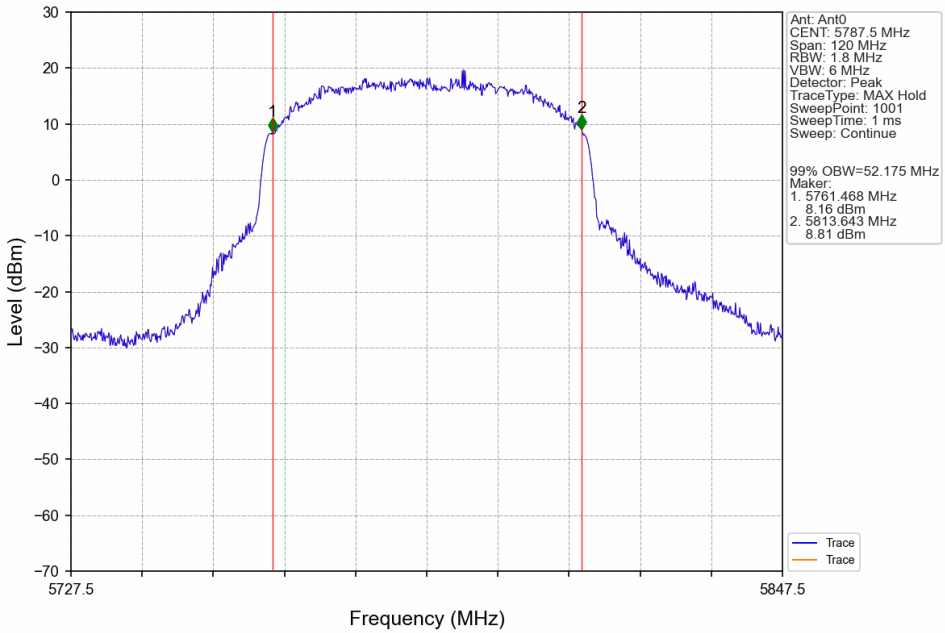
40M_HCH_5829.5MHz_Ant0_NTNV



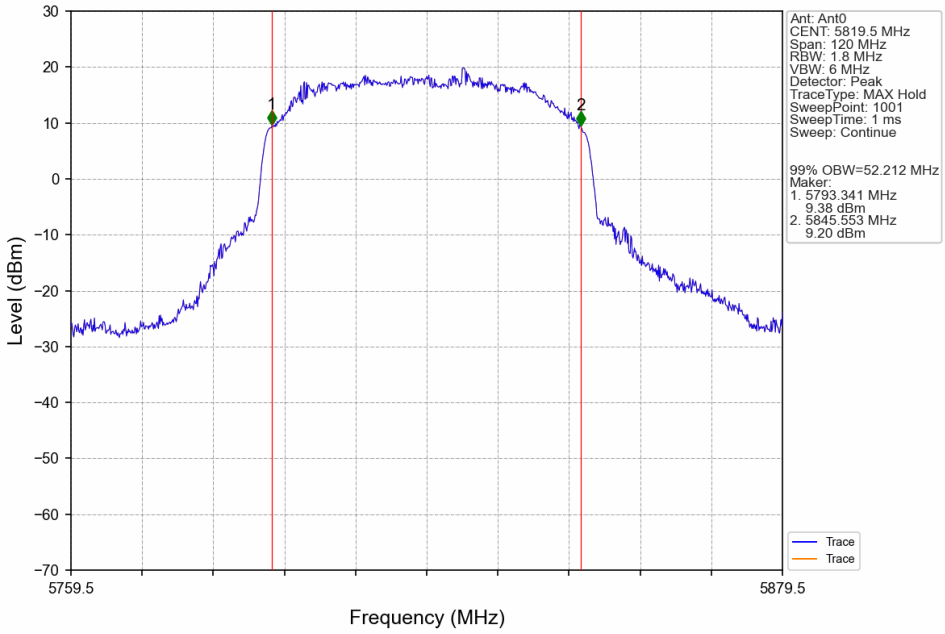
60M_LCH_5755.5MHz_Ant0_NTNV



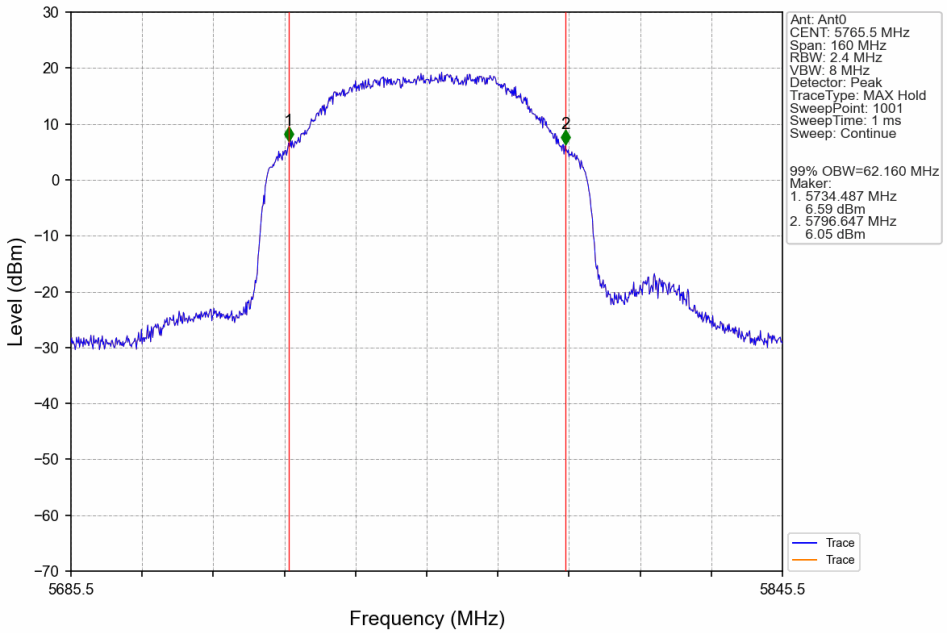
60M_MCH_5787.5MHz_Ant0_NTNV



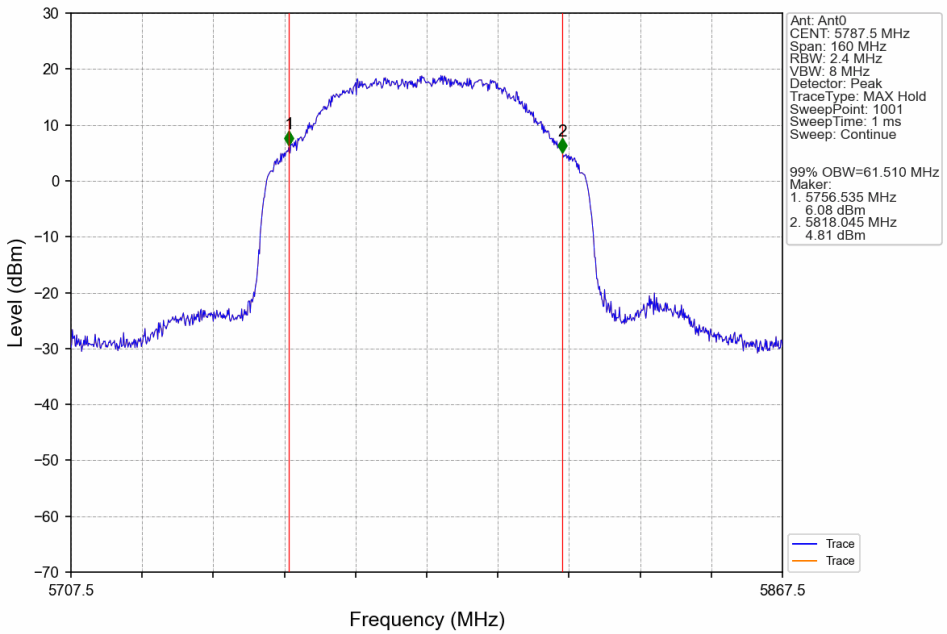
60M_HCH_5819.5MHz_Ant0_NTNV



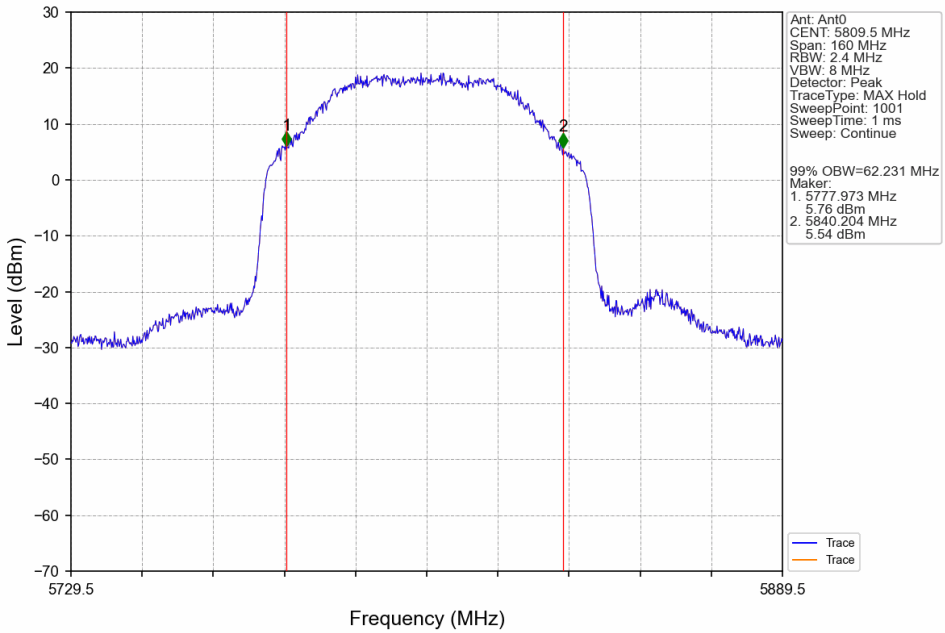
80M_LCH_5765.5MHz_Ant0_NTNV



80M_MCH_5787.5MHz_Ant0_NTNV

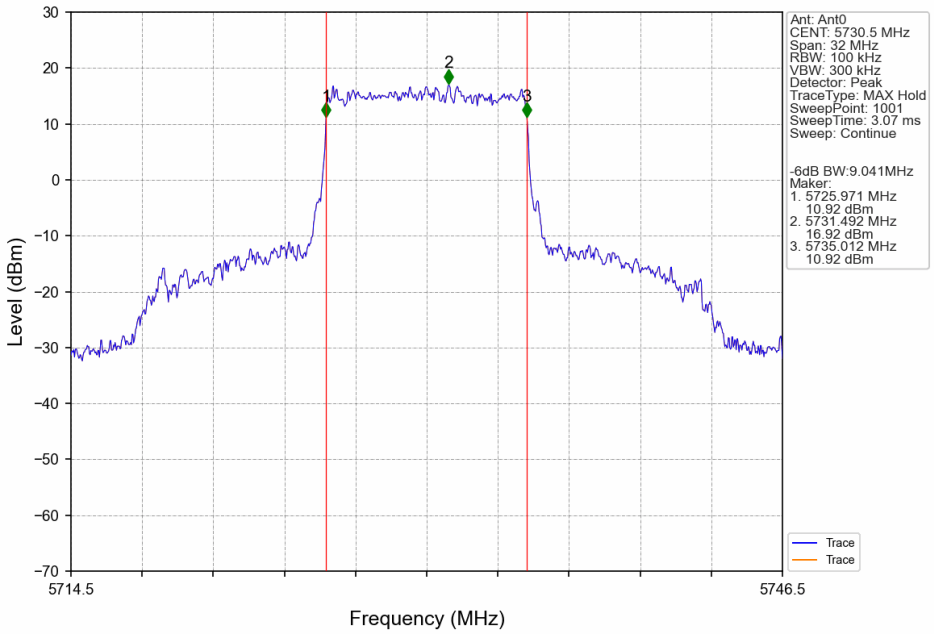


80M_HCH_5809.5MHz_Ant0_NTNV

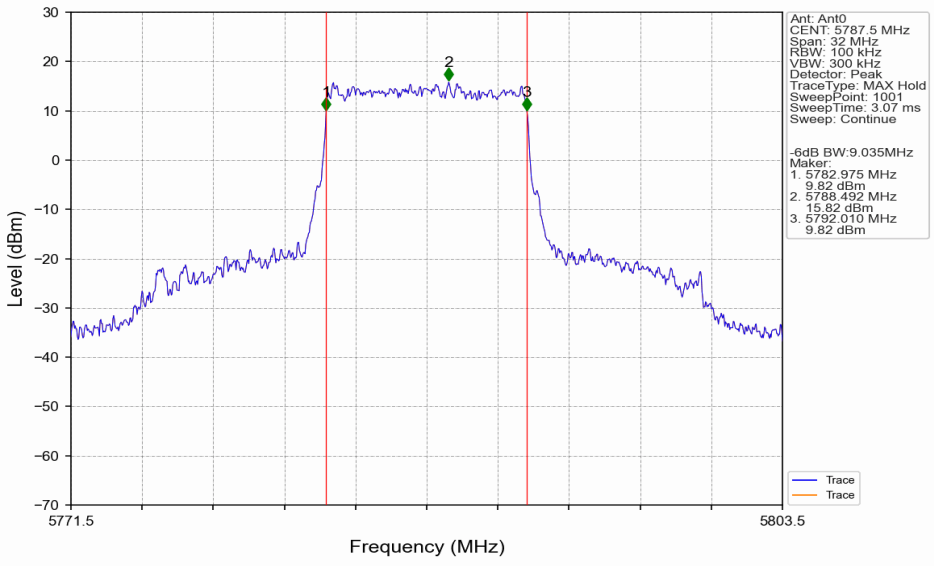


2.2.2 6dB BW

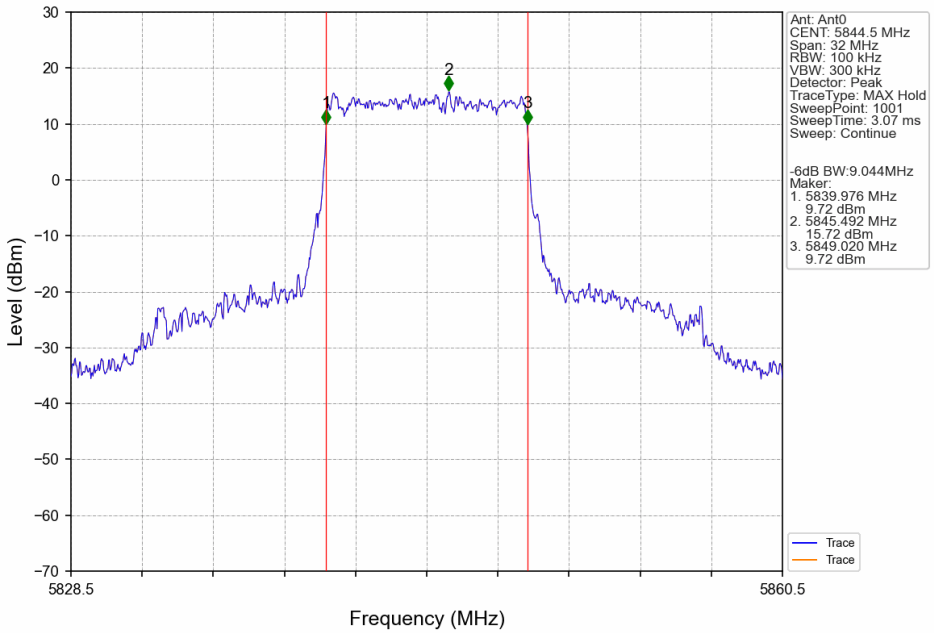
10M_LCH_5730.5MHz_Ant0_NTNV



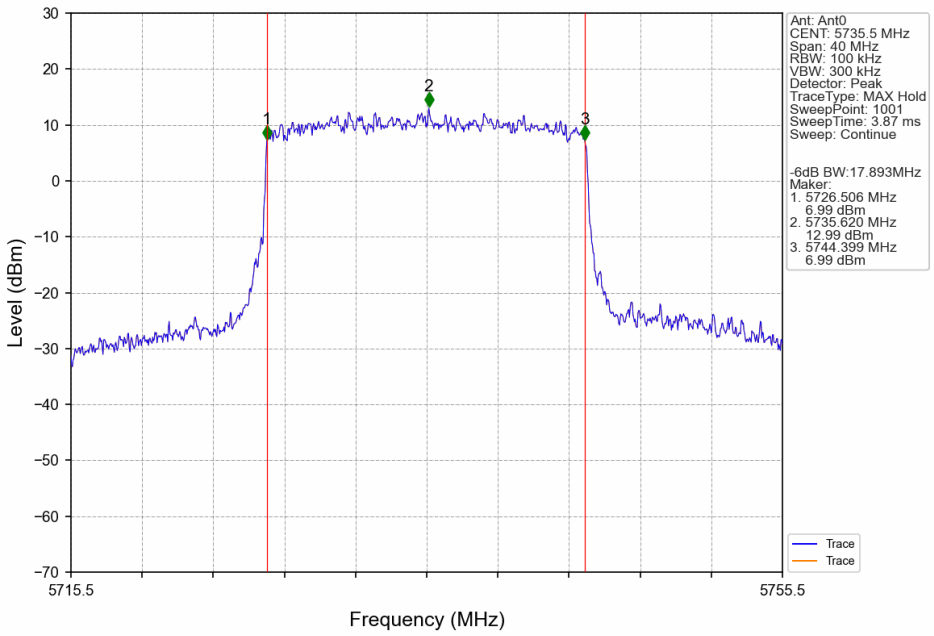
10M_MCH_5787.5MHz_Ant0_NTNV



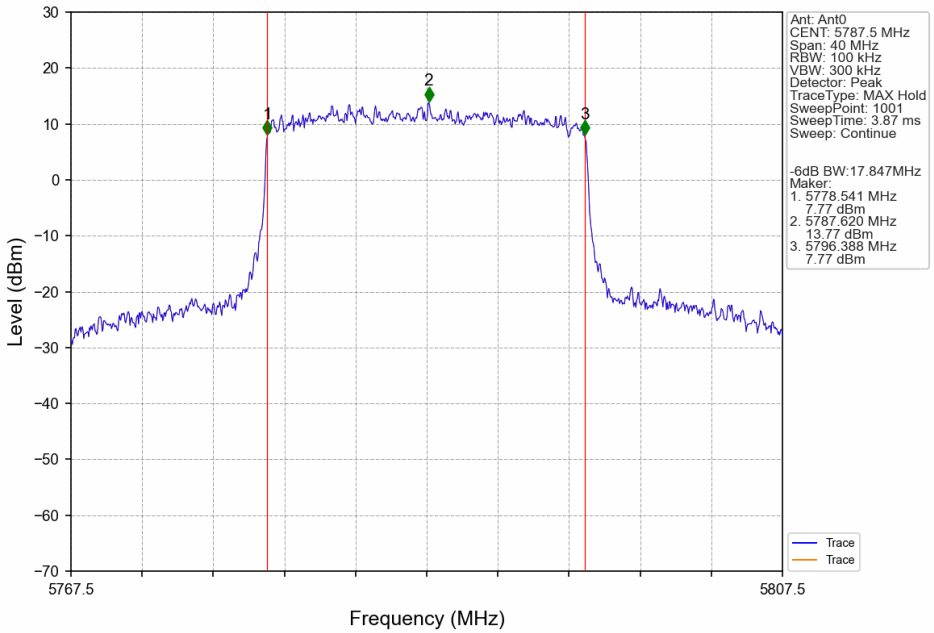
10M_HCH_5844.5MHz_Ant0_NTNV



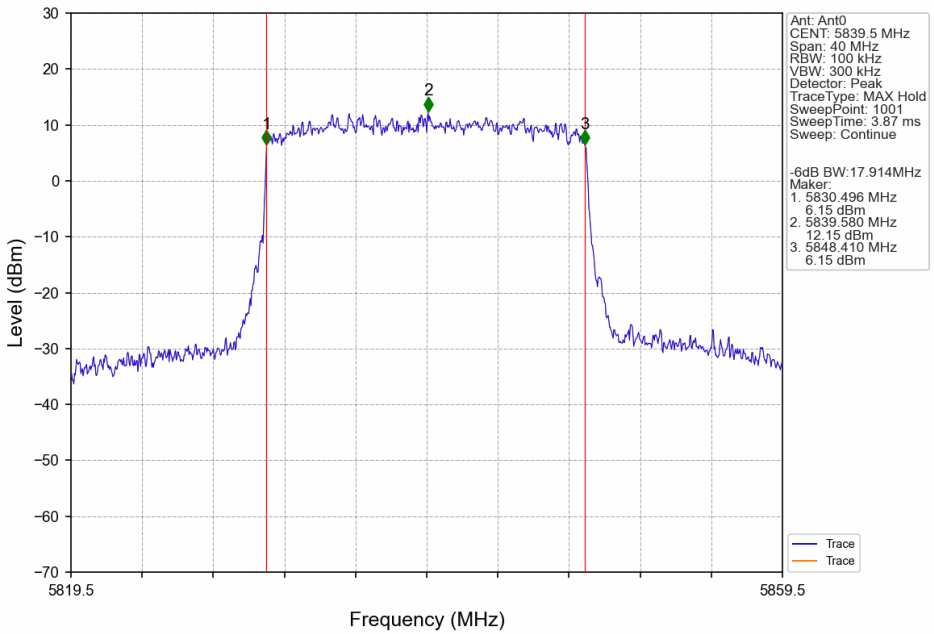
20M_LCH_5735.5MHz_Ant0_NTNV



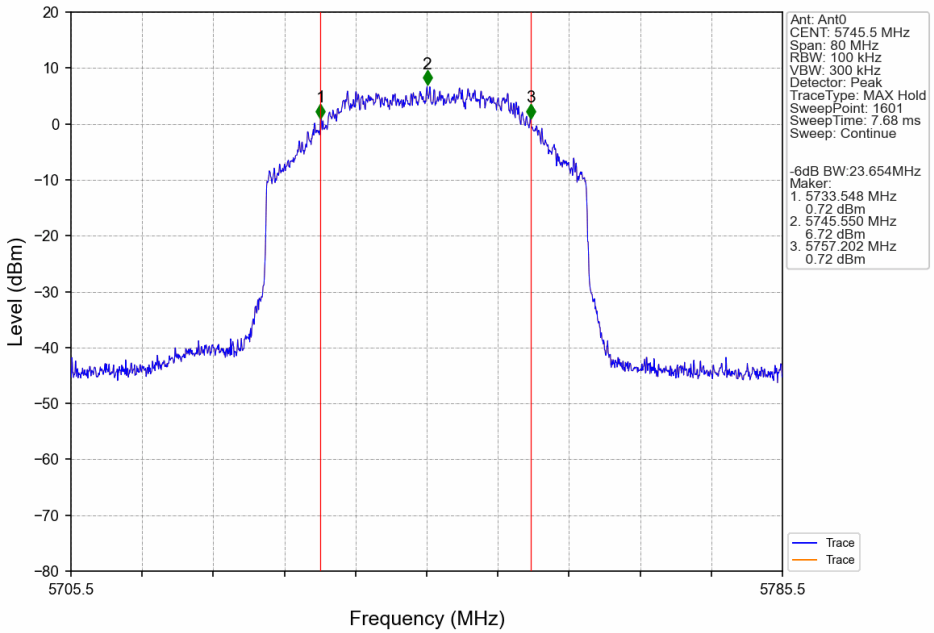
20M_MCH_5787.5MHz_Ant0_NTNV



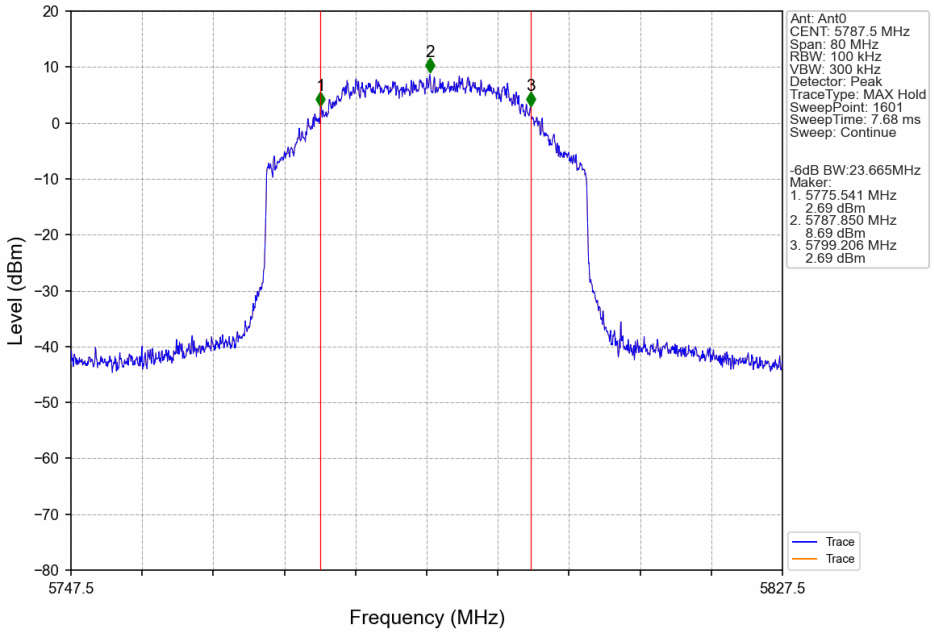
20M_HCH_5839.5MHz_Ant0_NTNV



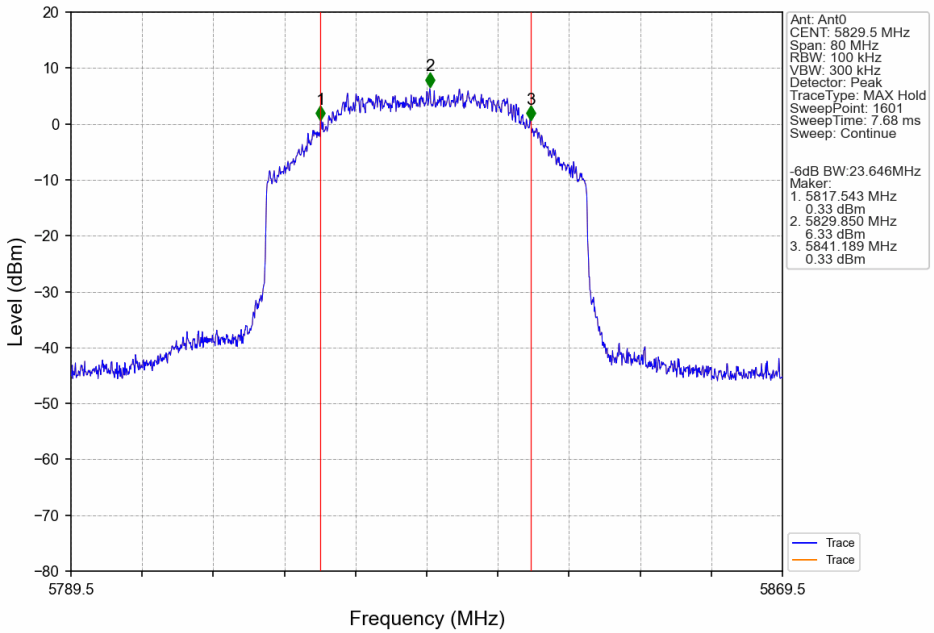
40M_LCH_5745.5MHz_Ant0_NTNV



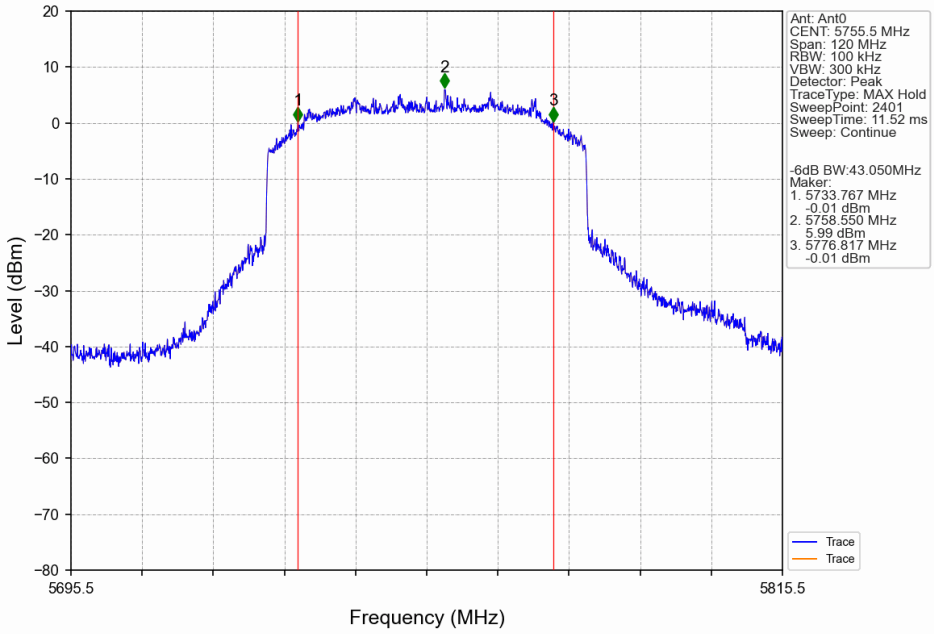
40M_MCH_5787.5MHz_Ant0_NTNV



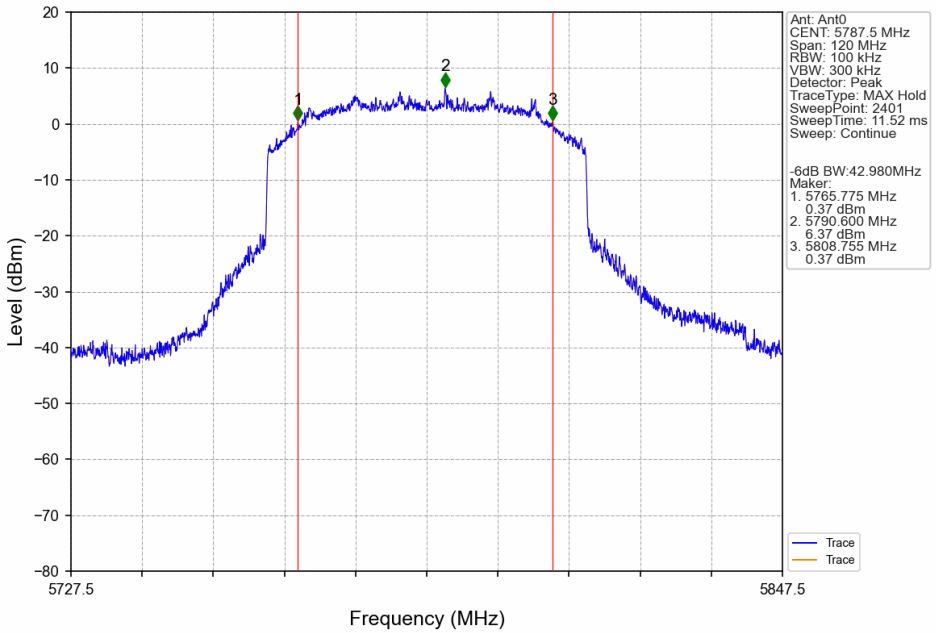
40M_HCH_5829.5MHz_Ant0_NTNV



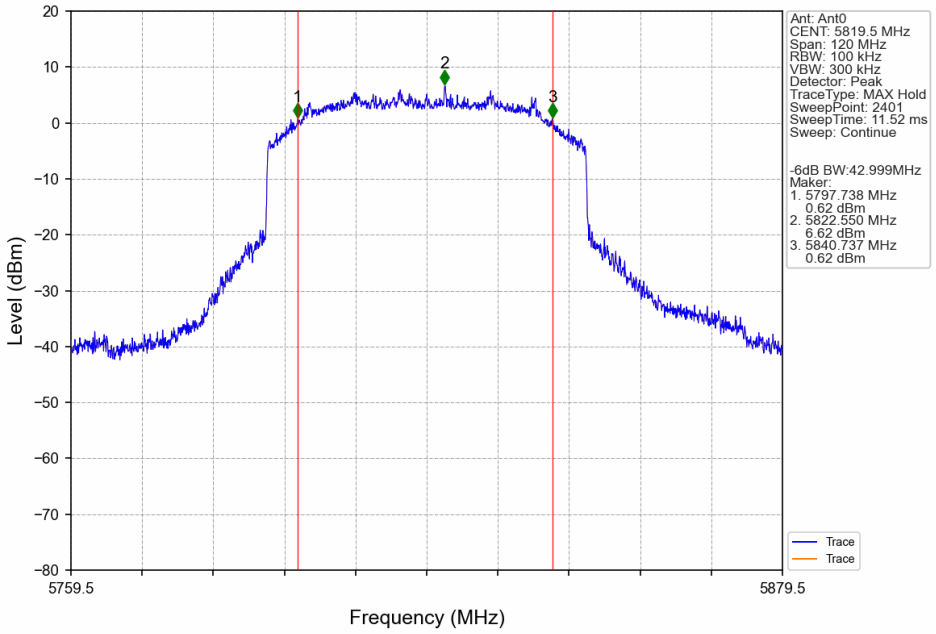
60M_LCH_5755.5MHz_Ant0_NTNV



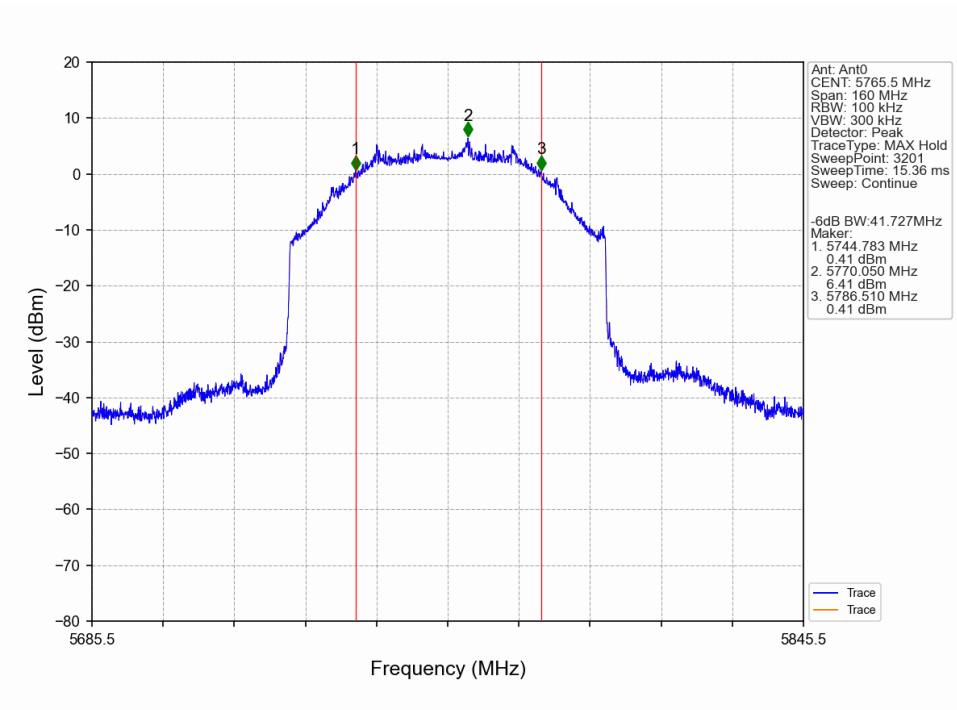
60M_MCH_5787.5MHz_Ant0_NTNV



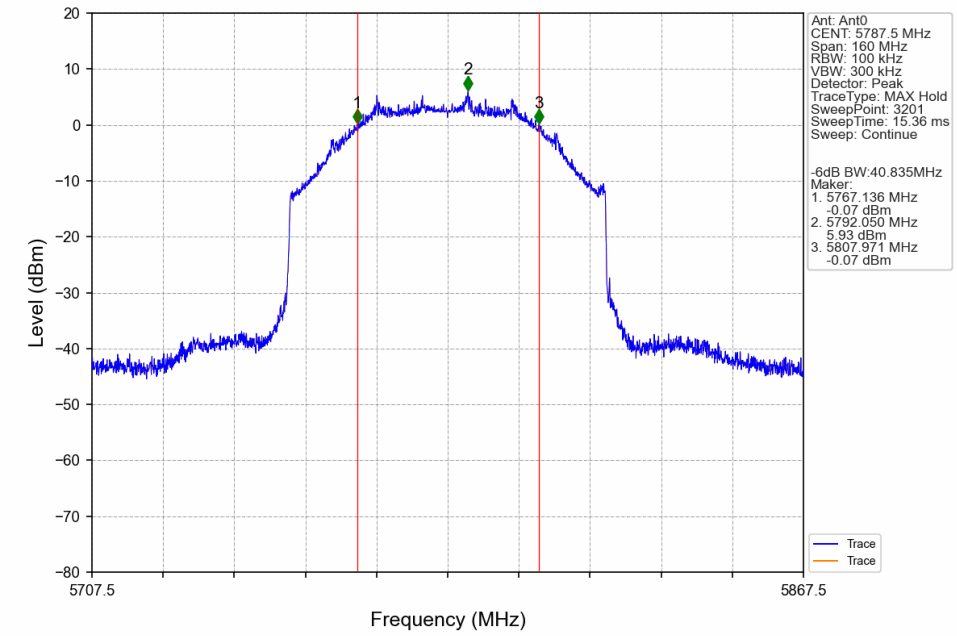
60M_HCH_5819.5MHz_Ant0_NTNV



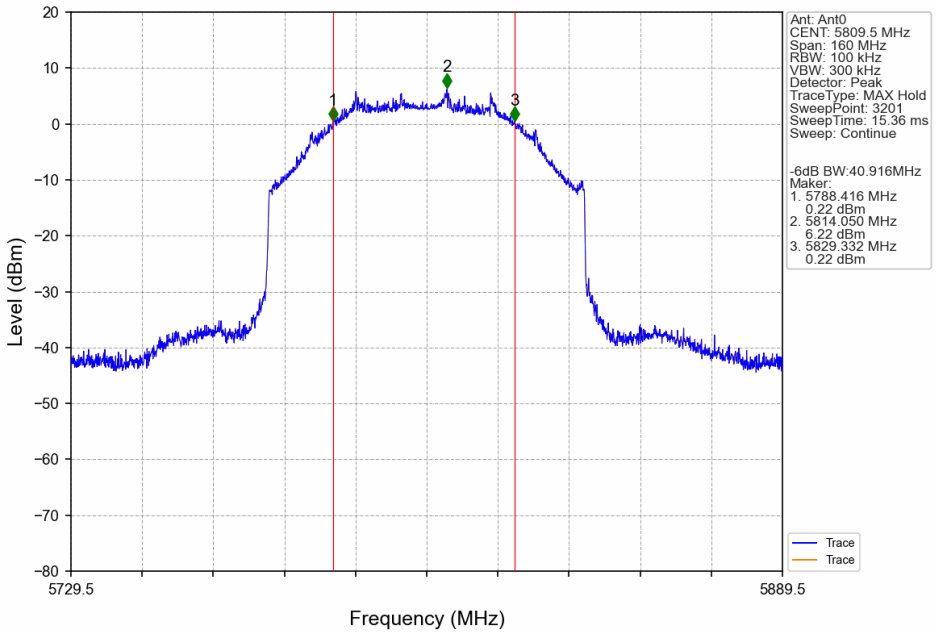
80M_LCH_5765.5MHz_Ant0_NTNV



80M_MCH_5787.5MHz_Ant0_NTNV



80M_HCH_5809.5MHz_Ant0_NTNV



3. Maximum Conducted Output Power

3.1 Test Result

3.1.1 Power

Mode	TX Type	Frequency (MHz)	Maximum Average Conducted Output Power (dBm)				Verdict
			ANT0	ANT1	MIMO	Limit	
10M	MIMO	5730.5	24.70	25.66	28.22	<=29.99	Pass
		5787.5	25.28	25.96	28.64	<=29.99	Pass
		5844.5	25.35	25.62	28.50	<=29.99	Pass
20M	MIMO	5735.5	24.87	25.90	28.43	<=29.99	Pass
		5787.5	25.59	26.27	28.95	<=29.99	Pass
		5839.5	24.51	24.52	27.53	<=29.99	Pass
40M	MIMO	5745.5	20.16	20.97	23.59	<=29.99	Pass
		5787.5	22.20	22.96	25.61	<=29.99	Pass
		5829.5	19.18	19.38	22.29	<=29.99	Pass
60M	MIMO	5755.5	20.06	21.61	23.91	<=29.99	Pass
		5787.5	20.46	21.39	23.96	<=29.99	Pass
		5819.5	21.15	21.66	24.42	<=29.99	Pass
80M	MIMO	5765.5	21.40	22.37	24.92	<=29.99	Pass
		5787.5	21.03	22.21	24.67	<=29.99	Pass
		5809.5	21.42	21.63	24.54	<=29.99	Pass

4. Maximum Power Spectral Density

4.1 Test Result

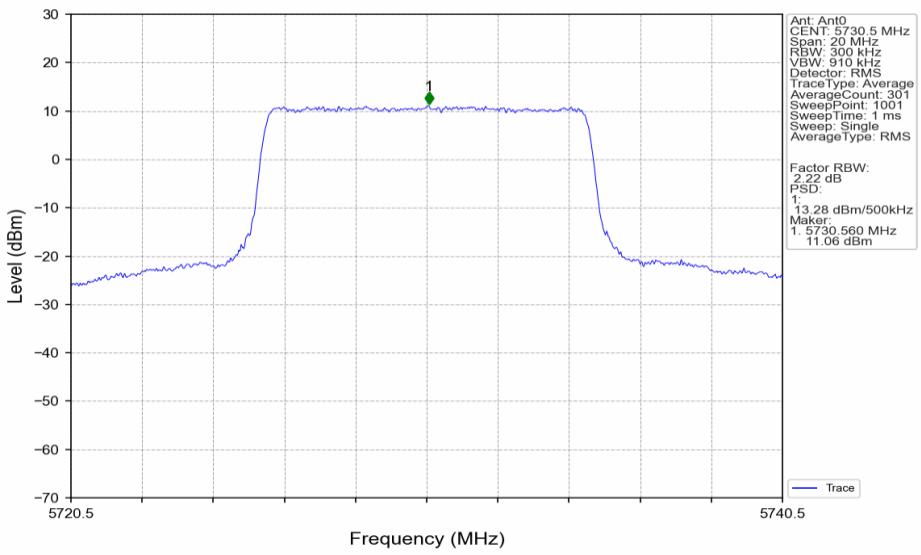
4.1.1 PSD-Band3

Mode	TX Type	Frequency (MHz)	Maximum PSD (dBm/500kHz)				Verdict
			ANT0	ANT1	MIMO	Limit	
10M	MIMO	5730.5	13.28	14.67	17.03	<=29.99	Pass
		5787.5	14.02	14.64	17.21	<=29.99	Pass
		5844.5	13.87	14.48	17.14	<=29.99	Pass
20M	MIMO	5735.5	10.71	11.81	14.15	<=29.99	Pass
		5787.5	11.39	12.32	14.56	<=29.99	Pass
		5839.5	10.54	10.78	13.30	<=29.99	Pass
40M	MIMO	5745.5	4.93	6.59	8.82	<=29.99	Pass
		5787.5	7.16	8.13	10.68	<=29.99	Pass
		5829.5	4.09	4.65	7.39	<=29.99	Pass
60M	MIMO	5755.5	2.10	3.82	5.74	<=29.99	Pass
		5787.5	2.43	4.36	6.45	<=29.99	Pass
		5819.5	3.55	4.09	6.53	<=29.99	Pass
80M	MIMO	5765.5	3.40	4.52	6.94	<=29.99	Pass
		5787.5	3.37	4.54	6.76	<=29.99	Pass
		5809.5	3.41	3.46	6.41	<=29.99	Pass

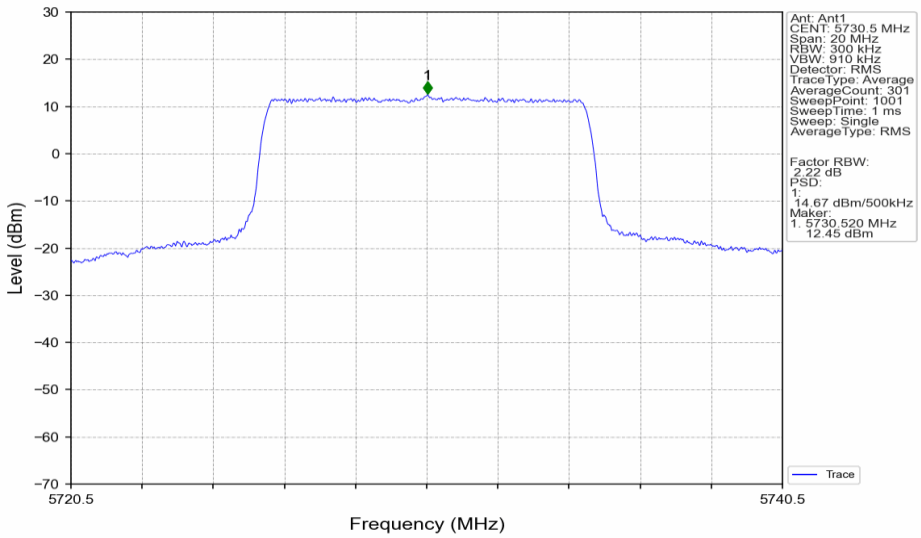
4.2 Test Graph

4.2.1 PSD-Band3

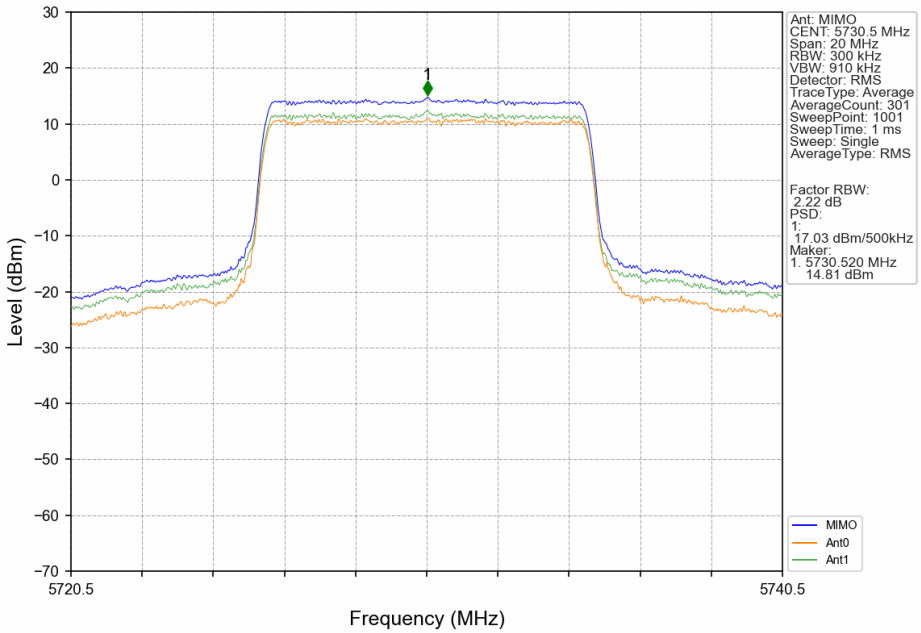
10M_LCH_5730.5MHz_Ant0_NTNV



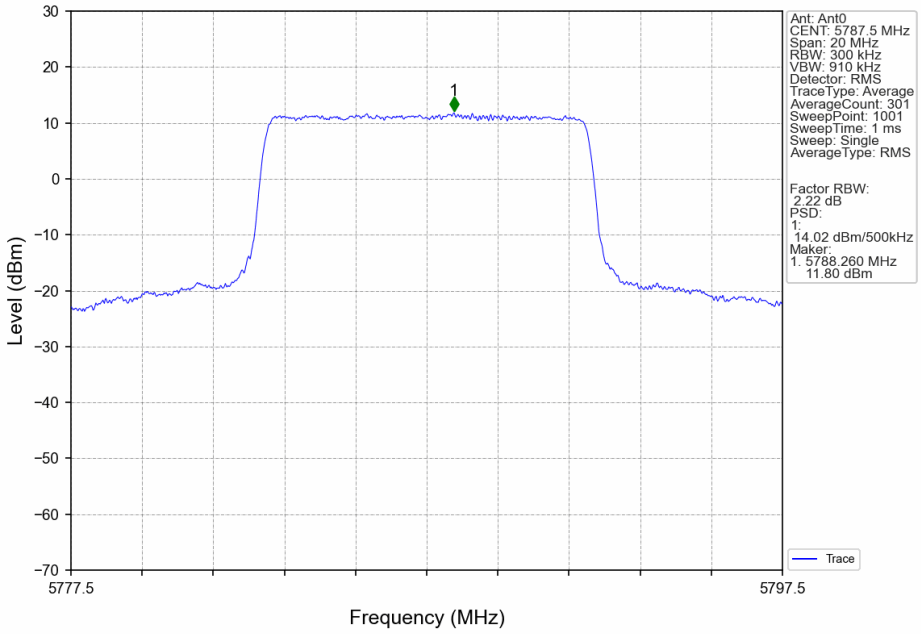
10M_LCH_5730.5MHz_Ant1_NTNV



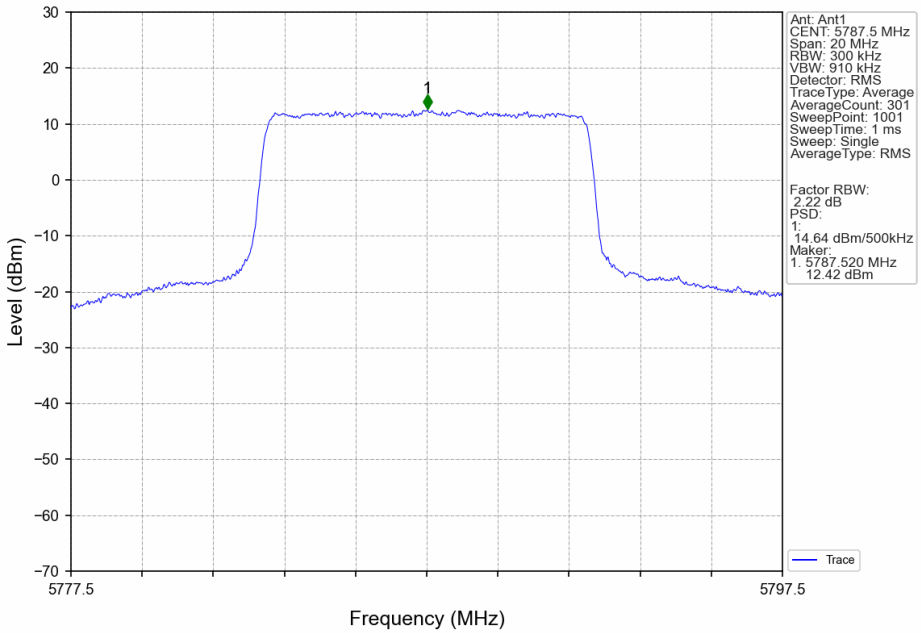
10M_LCH_5730.5MHz_MIMO_NTNV



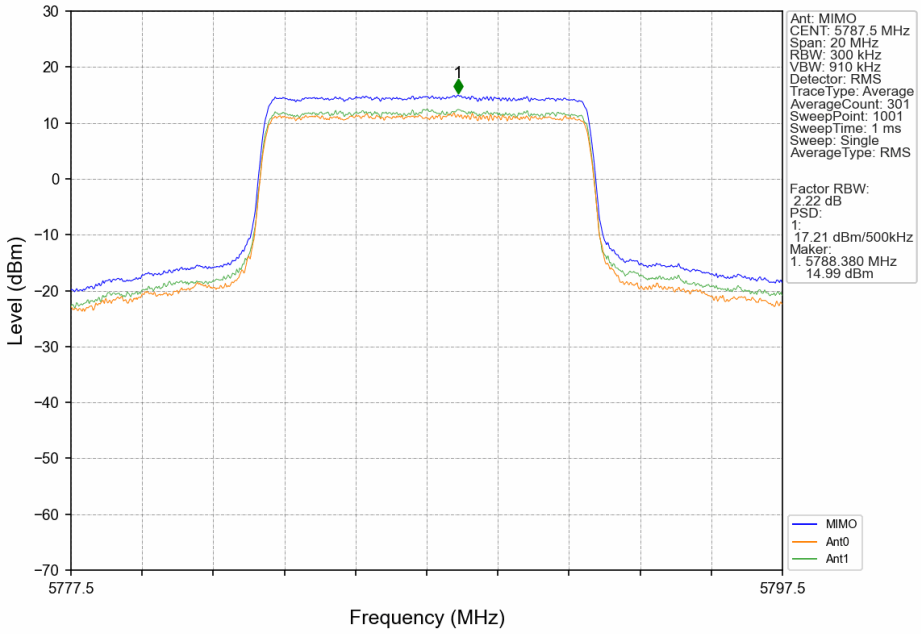
10M_MCH_5787.5MHz_Ant0_NTNV



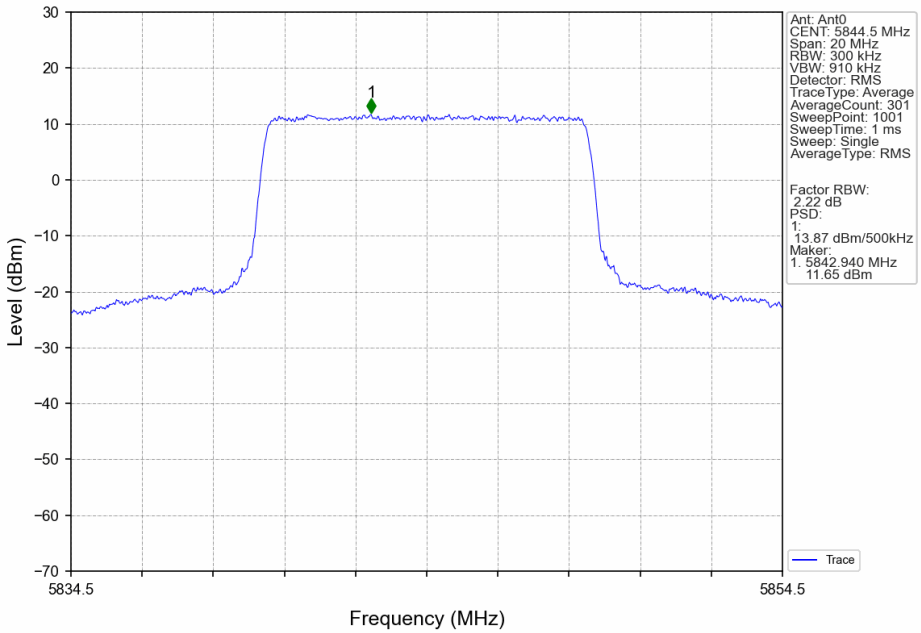
10M_MCH_5787.5MHz_Ant1_NTNV



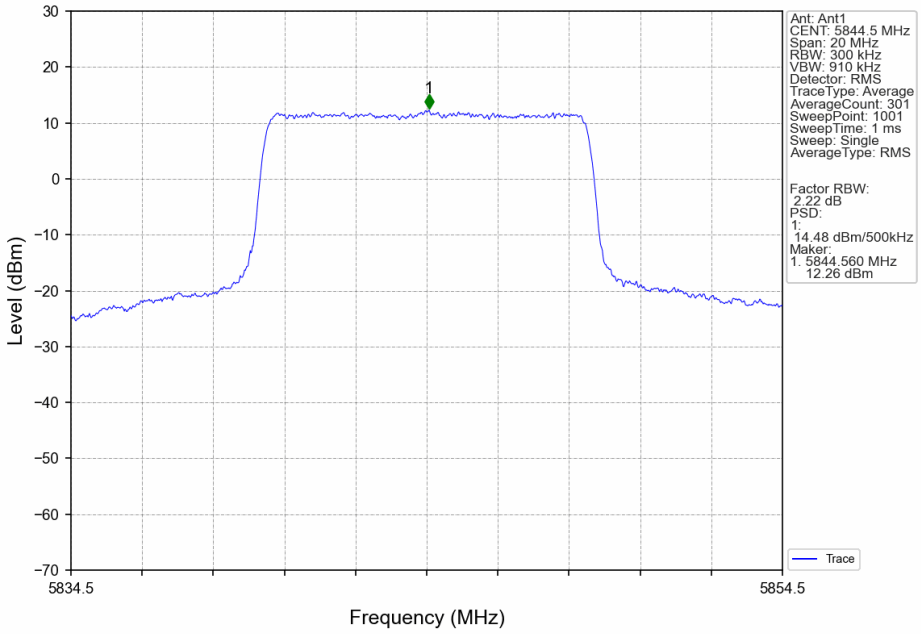
10M_MCH_5787.5MHz_MIMO_NTNV



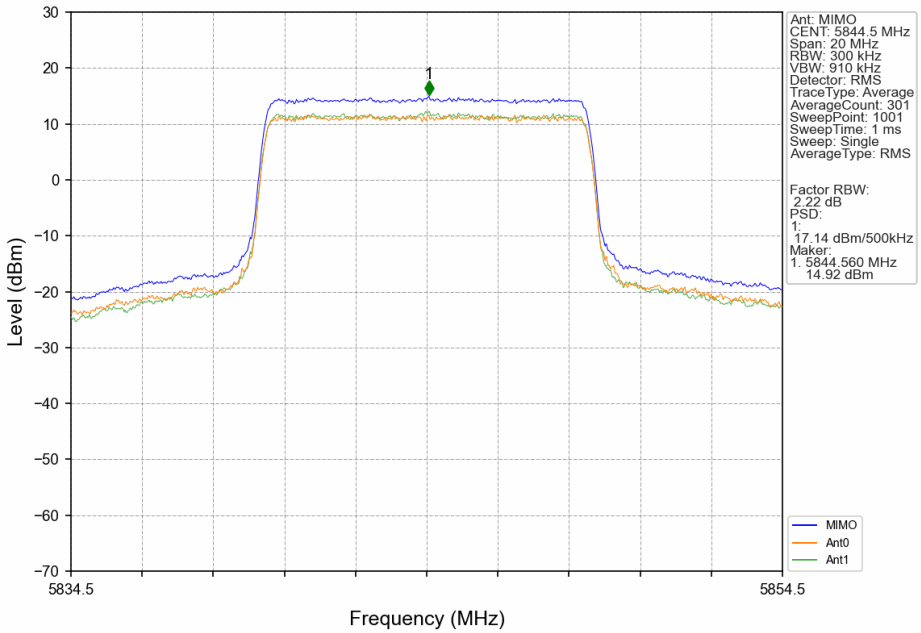
10M_HCH_5844.5MHz_Ant0_NTNV



10M_HCH_5844.5MHz_Ant1_NTNV



10M_HCH_5844.5MHz_MIMO_NTNV



20M_LCH_5735.5MHz_Ant0_NTNV