TEST REPORT

Product Name	**:**	**Mini PC**
Model Number	**:**	**NAB9 Plus, NABXX XXXXXXX(X = “0-9”, “A-Z”, “-”, “blank”)**
FCC ID	**:**	**2A49R-NABP**

Prepared for	:	MICRO COMPUTER (HK) TECH LIMITED
Address	:	RM 18, 28/F, Shui On Centre · 6-8 Harbour Road · WaterfRont · Wan Chai · HK
Prepared by	:	EMTEK (SHENZHEN) CO., LTD.
Address	:	Building 69, Majialong Industry Zone, Nanshan District, Shenzhen, Guangdong, China Tel: (0755) 26954280 Fax: (0755) 26954282
Report Number	:	ENS2411300003W00505R
Date(s) of Tests	:	December 13, 2024 to December 30, 2024
Date of Issue	:	January 6, 2025

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Modified Information

Version	Report No.	Revision Date	Summary
Ver.1.0	ENS2411300003W00505R	/	Original Report

1 TEST RESULT CERTIFICATION

Applicant	:	MICRO COMPUTER (HK) TECH LIMITED
Address	:	RM 18, 28/F, Shui On Centre · 6-8 Harbour Road · WaterfRont · Wan Chai · HK
Manufacturer	:	MICRO COMPUTER (HK) TECH LIMITED
Address	:	RM 18, 28/F, Shui On Centre · 6-8 Harbour Road · WaterfRont · Wan Chai · HK
EUT	:	Mini PC
Model Name	:	NAB9 Plus, NABXX XXXXXXX(X = “0-9”, “A-Z”, “-”, “blank”)
Trademark	:	N/A

Measurement Procedure Used:

APPLICABLE STANDARDS	
STANDARD	TEST RESULT
FCC 47 CFR Part 2, Subpart J FCC 47 CFR Part 15, Subpart E	**PASS**
IC RSS-248 Issue 2(12-2022) IC RSS-GEN, Issue 5(04-2018)+A1(03-2019)+A2(02-2021)	**PASS**

The above equipment was tested by EMTEK (SHENZHEN) CO., LTD. The test data, data evaluation, test procedures, and equipment configurations shown in this report were made in accordance with the procedures given in ANSI C63.10 (2013) and the energy emitted by the sample EUT tested as described in this report is in compliance with the above table standards requirement.
The test results of this report relate only to the tested sample identified in this report.

Date of Test	:	December 13, 2024 to December 30, 2024
Prepared by	:	Una Yu/Editor
Reviewer	:	Joe Xia/Supervisor
Approved & Authorized Signer	:	Lisa Wang/Manager

EMTEK (SHENZHEN) CO., LTD. TESTING

2 EUT TECHNICAL DESCRIPTION

FCC Classification:	6GHz Low Power Indoor Client (6XD)
Product:	Mini PC
Model Number:	NAB9 Plus, NABXX XXXXXXX(X = “0-9”, “A-Z”, “-”, “blank”)
WiFi Type:	UNII-5 Band: 5955 ~ 6415 MHz UNII-6 Band: 6435 ~ 6525 MHz UNII-7 Band: 6525 ~ 6875 MHz UNII-8 Band: 6875 ~ 7115 MHz
WLAN Supported:	802.11n(20)/n(40) 802.11ac(20)/ac(40)/ac(80)/ac(160) 802.11ax(20)/ax(40)/ax(80)/ax(160)
Modulation:	OFDM, OFDMA
Channel Number:	For 5955 ~ 6415MHz band: Channel 1 - 93 For 6435 ~ 6525MHz Band: Channel 97 - 119 For 6525 ~ 6875MHz Band: Channel 117 - 187 For 6875 ~ 7115MHz band: Channel 189 - 233
Antenna Type:	FPC Antenna
Antenna Gain:	Ant1: 4.95dBi (Note: The antenna information is provided by the customers, which will have a certain impact on the test results.)
Smart System	SISO
Power Supply :	DC 19V from adapter Adapter1: Model :DSA-120PFG-193190632 Input:100-240V~50/60Hz,2.0A Output:19.0V,6.32A,120.08W Adapter2: Model: hyleton-120W-1906320 Input:100-240V~50/60Hz,2A Max Output:19.0V,6.32A,120.0W
Temperature Range:	0°C ~35°C
TPC Function:	Not Applicable
Beamforming Function:	Not Applicable

Note: For more details, please refer to the User’s manual of the EUT.

3 SUMMARY OF TEST RESULTS

FCC Part Clause	IC Part Clause	Test Parameter	Verdict	Remark
15.403(i) 2.1049	RSS-248 4.4 RSS-Gen 6.7	26dB Emission Bandwidth	PASS	*
15.407 (a) 2.1049	RSS-248 4.4 RSS-Gen 6.7	99% Occupied Bandwidth	Reporting only	*
15.407 (a) 2.1046	RSS-248 4.6	Maximum Conducted Output Power	Reporting only	-
15.407 (a) 2.1046	RSS-248 4.6	Fundamental Maximum EIRP	PASS	
15.407 (a)	RSS-248 4.6	Maximum Power Spectral Density	PASS	*
15.407 (b)	RSS-248 4.7	In-Band Emissions(Emission Mask)	PASS	*
15.407 (d)	RSS-248 4.8	Contention Based Protocol	PASS	-
15.407 (b) 15.209 15.205	RSS-248 4.7 RSS-Gen 8.9 RSS-Gen 8.10 RSS-Gen 6.13	Radiated Spurious Emission	PASS	-
15.207	RSS-Gen 8.8	Power Line Conducted Emissions	PASS	-
15.203	RSS-Gen 6.8	Antenna Requirement	PASS	-
NOTE1:The results of this report do not take into account the uncertainty. NOTE2: The product supports OFDMA full RU tone and partial RU tone, both full RU and partial RU-left (for low CH) and partial RU-right (for high CH) test output power, the full RU power > partial RU, therefore the full RU perform full test to cover partial RU except for PSD and Duty cycle. NOTE3: The product does not support 802.11be, so the Channel Puncturing or Bandwidth Reduction has not been tested. NOTE4: * means that this item refers to module report RFBARR-WTW-P21100969-3 of FCC ID: RAS-MT7902				

RELATED SUBMITTAL(S) / GRANT(S):

This submittal(s) (test report) is filing to comply with the above table standards requirement.

4 TEST METHODOLOGY

4.1 GENERAL DESCRIPTION OF APPLIED STANDARDS

According to its specifications, the EUT must comply with the requirements of the following standards:
FCC 47 CFR Part 2, Subpart J
FCC 47 CFR Part 15, Subpart E
IC RSS-GEN, Issue 5(04-2018)+A1(03-2019)+A2(02-2021)
IC RSS-248 Issue 2(12-2022)
FCC KDB 662911 D01 Multiple Transmitter Output v02r01
FCC KDB 789033 D2 General UNII Test Procedures New Rules v02r01
FCC KDB 987594 D01 U-NII 6GHz General Requirements v01r03
FCC KDB 987594 D02 U-NII 6GHz EMC Measurement v01r01

4.2 MEASUREMENT EQUIPMENT USED

For Conducted Emission Test

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
EMI Test Receiver	Rohde & Schwarz	ESCI	101384	2024/5/11	1Year
AMN	Rohde & Schwarz	ENV216	101161	2024/5/10	1Year

For Spurious Emissions Test

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
Pre-Amplifier	Bonn	BLMA 011001N	2213967A	2024/10/18	1Year
EMI Test Receiver	Rohde & Schwarz	ESR7	102551	2024/10/18	1Year
Bilog Antenna	Schwarzbeck	VULB9163	9163142	2024/7/8	2Year
Horn antenna	Schwarzbeck	BBHA9120D	9120D-1198	2023/6/2	2Year
Pre-Amplifier	Bonn	BLMA 0118-5G	2213967B-01	2024/10/18	1Year
Spectrum Analyzer	Rohde & Schwarz	FSV3044	101290	2024/10/18	1Year
Horn antenna	Schwarzbeck	BBHA9170	9170-399	2023/5/12	2Year
Pre-Amplifier	Lunar EM	LNA18G26-40	J10121310100 01	2024/5/11	1Year
Pre-Amplifier	Lunar EM	LNA26G40-40	J10131310280 01	2024/5/11	1Year
Loop Antenna	Schwarzbeck	FMZB1519	1519-012	2023/5/12	2Year
Wideband Radio Communication Tester	R&S	CMW500	147366	2024/5/10	1Year

For Other Test

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
Wideband Radio Communication Tester	R&S	CMW500	171168	2024/9/18	1Year
Frequency Extender	R&S	CMW-Z800A	100430	2024/9/18	1Year
Spectrum Analyzer	R&S	FSV3044	101289	2024/12/17	1Year
Analog Signal Generator	R&S	SMB100A	183237	2024/9/18	1Year
Vector Signal Generator	R&S	SMM100A	101808	2024/9/18	1Year
RF Control Unit(Power Meter)	Tonscend	JS0806-2	22C8060567	2024/9/18	1Year

Temperature&Humidity Chamber	ESPEC	EL-02KA	12107166	2024/5/10	1 Year
DC Power Supply	KEYSIGHT	E3642A	MY53030016	2024/9/18	1 Year

4.3 DESCRIPTION OF TEST MODES

The EUT has been tested under its typical operating condition.
The EUT configuration for testing is installed on RF field strength measurement to meet the commissions requirement and operating in a manner which intends to maximize its emission characteristics in a continuous normal application.
The Transmitter was operated in the normal operating mode. The TX frequency was fixed which was for the purpose of the measurements.
Test of channel included the lowest and middle and highest frequency to perform the test, then record on this report.
Pre-defined engineering program for regulatory testing used to control the EUT for staying in continuous transmitting and receiving mode is programmed.

U-NII 5 Band (5925 ~ 6425MHz)

802.11n(20)/ ac(20)/ ax(20)							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
1	5955MHz	5	5975MHz	9	5995MHz	13	6015MHz
17	6035MHz	21	6055MHz	25	6075MHz	29	6095MHz
33	6115MHz	37	6135MHz	41	6155MHz	45	6175MHz
49	6195MHz	53	6215MHz	57	6235MHz	61	6255MHz
65	6275MHz	69	6295MHz	73	6315MHz	77	6335MHz
81	6355MHz	85	6375MHz	89	6395MHz	93	6415MHz

802.11n(40)/ ac(40)/ ax(40)							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
3	5965MHz	11	6005MHz	19	6045MHz	27	6085MHz
35	6125MHz	43	6165MHz	51	6205MHz	59	6245MHz
67	6285MHz	75	6325MHz	83	6365MHz	91	6405MHz

802.11ac(80)/ ax(80)							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
7	5985MHz	23	6065MHz	39	6145MHz	55	6225MHz
71	6305MHz	87	6385MHz	-	-	-	-

802.11ac(160)/ ax(160)							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
15	6025MHz	47	6185MHz	79	6345MHz	-	-

U-NII 6 Band (6425 ~ 6525MHz)

802.11n(20)/ ac(20)/ ax(20)							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
97	6435MHz	101	6455MHz	105	6475MHz	109	6495MHz
113	6515MHz	-	-	-	-	-	-

802.11n(40)/ ac(40)/ ax(40)							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
99	6445MHz	107	6485MHz	115	6525MHz	-	-

802.11ac(80)/ ax(80)							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
103	6465MHz	119	6545MHz	-	-	-	-

802.11ac(160)/ ax(160)							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
111	6505MHz	-	-	-	-	-	-

U-NII7 Band(6525~6875MHz)

802.11n(20)/ ac(20)/ ax(20)							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
117	6535MHz	121	6555MHz	125	6575MHz	129	6595MHz
133	6615MHz	137	6635MHz	141	6655MHz	145	6675MHz
149	6695MHz	153	6715MHz	157	6735MHz	161	6755MHz
165	6775MHz	169	6795MHz	173	6815MHz	177	6835MHz
181	6855MHz	185	6875MHz	-	-	-	-

802.11n(40)/ ac(40)/ ax(40)							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
123	6565MHz	131	6605MHz	139	6645MHz	147	6685MHz
155	6725MHz	163	6765MHz	171	6805MHz	179	6845MHz
187	6885MHz	-	-	-	-	-	-

802.11ac(80)/ ax(80)							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
135	6625MHz	151	6705MHz	167	6785MHz	183	6865MHz

802.11ac(160)/ ax(160)							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
143	6665MHz	175	6825MHz	-	-	-	-

U-NII8Band(6875~7125MHz)

802.11n(20)/ ac(20)/ ax(20)							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
189	6895MHz	193	6915MHz	197	6935MHz	201	6955MHz
205	6975MHz	209	6995MHz	213	7015MHz	217	7035MHz
221	7055MHz	225	7075MHz	229	7095MHz	233	7115MHz

802.11n(40)/ ac(40)/ ax(40)							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
195	6925MHz	203	6965MHz	211	7005MHz	219	7045MHz
227	7085MHz	-	-	-	-	-	-

802.11ac(80)/ ax(80)							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
199	6945MHz	215	7025MHz	-	-	-	-

802.11ac(160)/ ax(160)							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
207	6985MHz	-	-	-	-	-	-

Multi-antenna correlation:

☐	Transmit Signals are Correlated
	Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + \ldots + 10^{GN/20})^2 / N_{ANT}$] dBi
☐	All Transmit Signals are Completely Uncorrelated
	Directional gain = 10 log[$(10^{G1/10} + 10^{G2/10} + \ldots + 10^{GN/10}) / N_{ANT}$] dBi

5 FACILITIES AND ACCREDITATIONS

5.1 FACILITIES

Site Description

Name of Firm : EMTEK (SHENZHEN) CO., LTD.

Site Location : Building 69, Majialong Industry Zone,
Nanshan District, Shenzhen, Guangdong, China

5.2 EQUIPMENT

Radiated emissions are measured with one or more of the following types of linearly polarized antennas: tuned dipole, biconical, log periodic, bi-log, and/or ridged waveguide, horn. Spectrum analyzers with preselectors and quasi-peak detectors are used to perform radiated measurements.

Conducted emissions are measured with Line Impedance Stabilization Networks and EMI Test Receivers. Calibrated wideband preamplifiers, coaxial cables, and coaxial attenuators are also used for making measurements.

All receiving equipment conforms to CISPR Publication 16-1, “Radio Interference Measuring Apparatus and Measurement Methods.”

6 TEST SYSTEM UNCERTAINTY

The following measurement uncertainty levels have been estimated for tests performed on the apparatus:

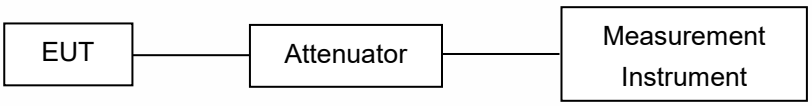
Test Parameter	Measurement Uncertainty
Radio Frequency	±1x10^-5
99%, 26dB Bandwidth	±1.0dB
Conducted Output Power	±1.0dB
Power Spectral Density	±1.0dB
In-Band Emissions (Mask)	±1.0dB
Contention Based Protocol	±1.0dB
Dual Client- Proper Power Adjustment	±1.0dB
Power Line Conducted Emission	±2.0dB
Radiated Spurious Emission	±3dB
Temperature	±0.5℃
Humidity	±3%

Measurement Uncertainty for a level of Confidence of 95%.

7 SETUP OF EQUIPMENT UNDER TEST

7.1 RADIO FREQUENCY TEST SETUP

The WLAN component's antenna ports(s) of the EUT are connected to the measurement instrument per an appropriate attenuator. The EUT is controlled by PC/software to emit the specified signals for the purpose of measurements.



7.2 RADIO FREQUENCY TEST SETUP

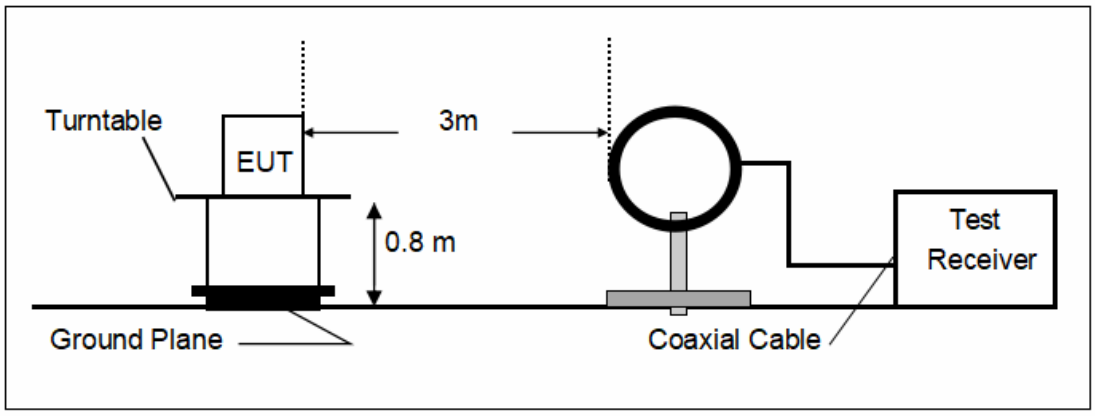
The test site semi-anechoic chamber has met the requirement of NSA tolerance 4 dB according to the standards: ANSI C63.10. The test distance is 3m.The setup is according to the requirements in Section 13.1.4.1 of ANSI C63.10-2013 and CAN/CSA-CEI/IEC CISPR 22.

Below 30MHz：
The EUT is placed on a turntable 0.8 meters above the ground in the chamber, 3 meter away from the antenna (loop antenna). The Antenna should be positioned with its plane vertical at the specified distance from the EUT and rotated about its vertical axis for maximum response at each azimuth about the EUT. The center of the loop shall be 1 m above the ground. For certain applications, the loop antenna plane may also need to be positioned horizontally at the specified distance from the EUT.

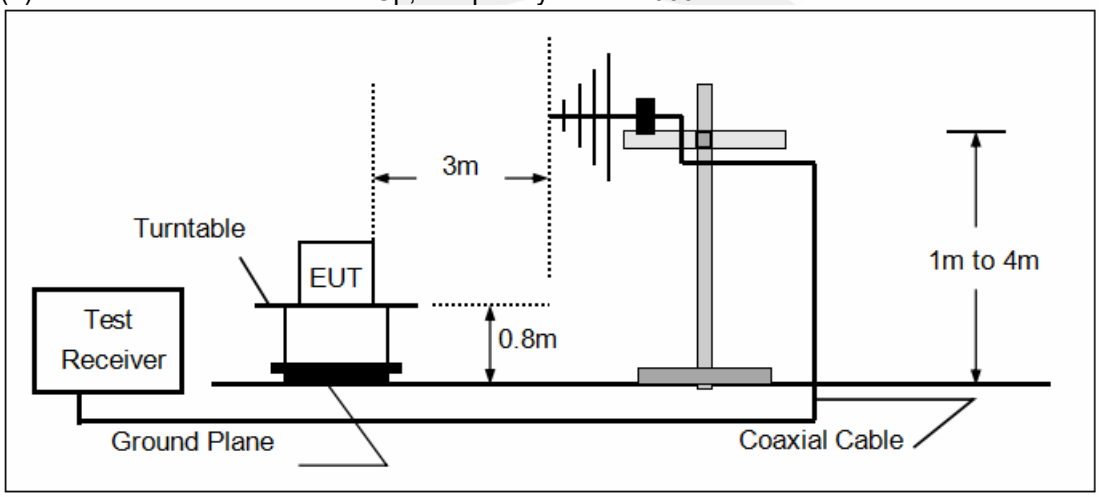
Above 30MHz：
The EUT is placed on a turntable 0.8 meters above the ground in the chamber, 3 meter away from the antenna. The maximal emission value is acquired by adjusting the antenna height, polarisation and turntable azimuth. Normally, the height range of antenna is 1 m to 4 m, the azimuth range of turntable is 0° to 360°, and the receive antenna has two polarizations Vertical (V) and Horizontal (H).

Above 1GHz：
(Note: the FCC's permission to use 1.5m as an alternative per TCBC Conf call of Dec. 2, 2014.)
The EUT is placed on a turntable 1.5 meters above the ground in the chamber, 3 meter away from the antenna. The maximal emission value is acquired by adjusting the antenna height, polarisation and turntable azimuth. Normally, the height range of antenna is 1 m to 4 m, the azimuth range of turntable is 0° to 360°, and the receive antenna has two polarizations Vertical (V) and Horizontal (H).

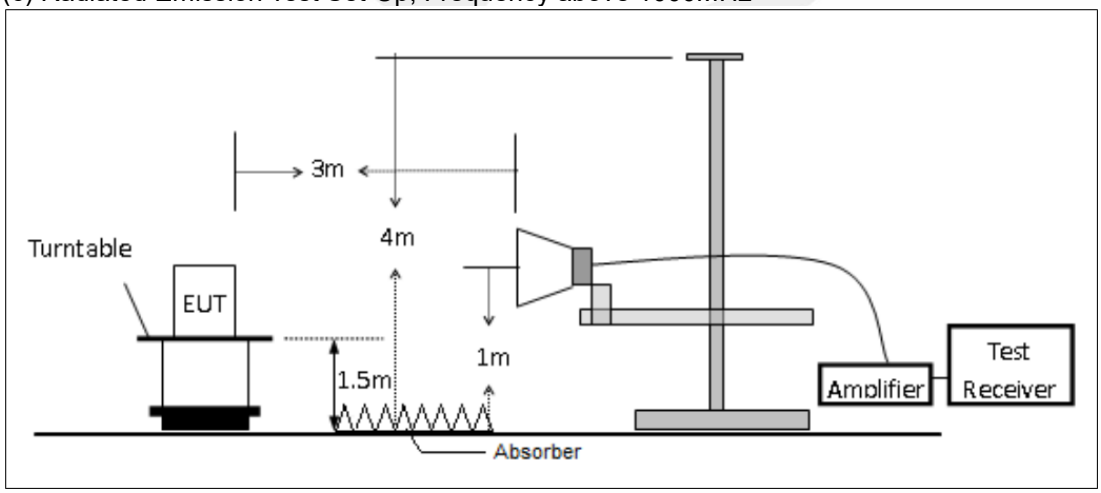
(a) Radiated Emission Test Set-Up, Frequency Below 30MHz



(b) Radiated Emission Test Set-Up, Frequency Below 1000MHz

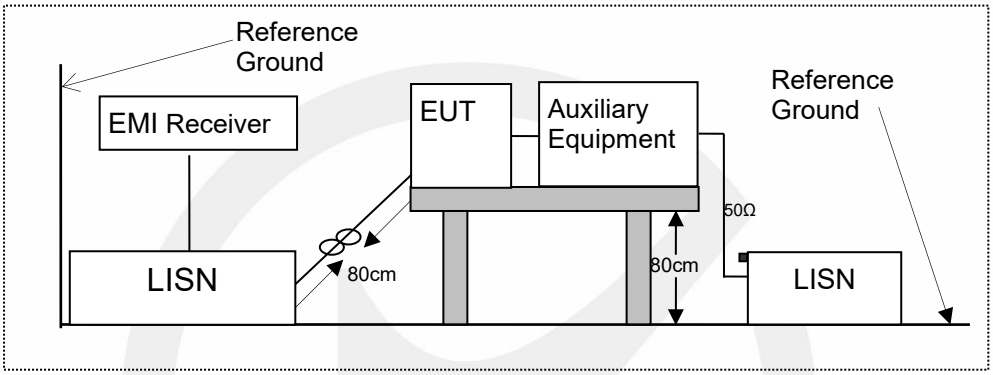


(c) Radiated Emission Test Set-Up, Frequency above 1000MHz

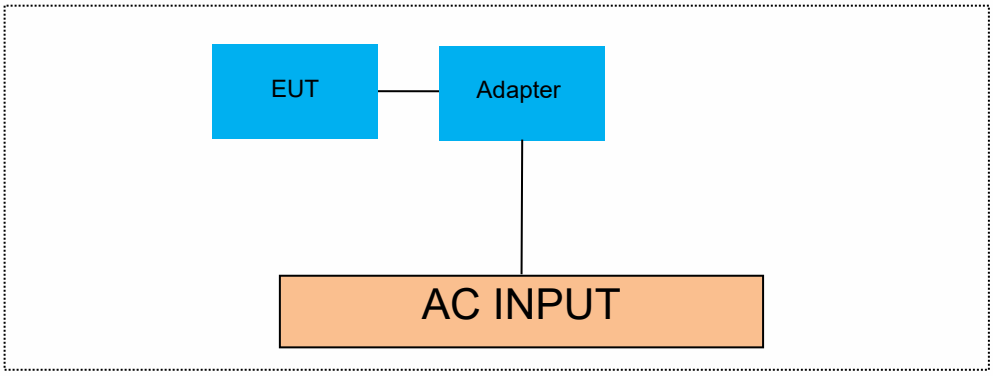


7.3 CONDUCTED EMISSION TEST SETUP

The mains cable of the EUT (maybe per AC/DC Adapter) must be connected to LISN. The LISN shall be placed 0.8 m from the boundary of EUT and bonded to a ground reference plane for LISN mounted on top of the ground reference plane. This distance is between the closest points of the LISN and the EUT. All other units of the EUT and associated equipment shall be at least 0.8m from the LISN.
Ground connections, where required for safety purposes, shall be connected to the reference ground point of the LISN and, where not otherwise provided or specified by the manufacturer, shall be of same length as the mains cable and run parallel to the mains connection at a separation distance of not more than 0.1 m.
According to the requirements in Section 13.1.4.1 of ANSI C63.10-2013 Conducted emissions from the EUT measured in the frequency range between 0.15 MHz and 30 MHz using CISPR Quasi-Peak and average detector mode.



7.4 BLOCK DIAGRAM CONFIGURATION OF TEST SYSTEM



7.5 SUPPORT EQUIPMENT

N/A

Notes:

1.All the equipment/cables were placed in the worst-case configuration to maximize the emission during the test.

2.Grounding was established in accordance with the manufacturer's requirements and conditions for the intended use.

8 TEST REQUIREMENTS

8.1 OCCUPIED BANDWIDTH

8.1.1 Applicable Standard

According to FCC Part 15.407(a)
According to 789033 D02 Section II.C.1 and Section II.D
According to 987594 D02 Section II.C and Section II.D
According to RSS-Gen 6.7, RSS-248 4.4

8.1.2 Conformance Limit

The maximum transmitter channel bandwidth for U-NII devices in the 5.925-7.125 GHz band is 320 megahertz.

8.1.3 Test Configuration

Test according to clause 7.1 radio frequency test setup.

8.1.4 Test Procedure

Emission Bandwidth (EBW)
a) Set RBW = approximately 1% of the emission bandwidth.
b) Set the VBW > RBW.
c) Detector = Peak.
d) Trace mode = max hold.
e) Measure the maximum width of the emission that is 26 dB down from the maximum of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.

99% Occupied Bandwidth
The following procedure shall be used for measuring (99 %) power bandwidth:
1. Set center frequency to the nominal EUT channel center frequency.
2. Set span = 1.5 times to 5.0 times the OBW.
3. Set RBW = 1 % to 5 % of the OBW
4. Set VBW ≥ 3 × RBW
5. Video averaging is not permitted. Where practical, a sample detection and single sweep mode shall be used. Otherwise, peak detection and max hold mode (until the trace stabilizes) shall be used.
6. Use the 99 % power bandwidth function of the instrument.

8.1.5 Test Results

Note: The modules of this prototype has been certified, and the data of the module refers to the original report: RFBARR-WTW-P21100969-3.

8.2 MAXIMUM CONDUCTED OUTPUT POWER

8.2.1 Applicable Standard

According to FCC Part 15.407(a)
According to 789033 D02 Section II.E.2.b)
According to 987594 D02 Section II.E
According to RSS-248 4.6

8.2.2 Conformance Limit

FCC Limit:

●	For an **indoor access point(6ID)** operating in the 5.925-7.125 GHz band, the maximum e.i.r.p. over the frequency band of operation must not exceed 30 dBm.
●	For **a subordinate device(6PP)** operating under the control of an indoor access point in the 5.925-7.125 GHz band, the maximum e.i.r.p. over the frequency band of operation must not exceed 30 dBm.
●	For **an indoor client device(6XD)** operating under the control of an indoor access point in the 5.925-7.125 GHz band, the maximum e.i.r.p. over the frequency band of operation must not exceed 24 dBm.
●	For **a Dual client device(6CD)** operating under the control of an indoor access point in the 5.925-7.125 GHz band, the maximum e.i.r.p. over the frequency band of operation must not exceed 24 dBm.
●	For **a Dual client device(6CD)** operating under the control of an standard access point in the 5.925-7.125 GHz band, the maximum e.i.r.p. over the frequency band of operation must not exceed 30 dBm.
The limits are based upon the maximum antenna gain does not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.	

IC Limit:

●	Other than client devices The maximum e.i.r.p. over the 5925-7125 MHz frequency band shall not exceed 30 dBm.
●	Client devices The maximum e.i.r.p. over the 5925-7125 MHz frequency band shall not exceed 24 dBm.
The limits are based upon the maximum antenna gain does not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.	

8.2.3 Test Configuration

Test according to clause 7.1 radio frequency test setup

8.2.4 Test Procedure

Method SA-2 (trace averaging across on and off times of the EUT transmissions, followed by duty cycle correction).
(i) Measure the duty cycle, x, of the transmitter output signal.
(ii) Set span to encompass the EBW (or the entire 99% occupied bandwidth) of the signal.
(iii) Set RBW = 1 MHz.
(iv) Set VBW ≥ 3 MHz.
(v) Number of points in sweep ≥ 2 × span / RBW. (This ensures that bin-to-bin spacing is ≤ RBW/2, so that narrowband signals are not lost between frequency bins.)
(vi) Sweep time = auto.
(vii) Detector = power averaging (rms).
(viii) Do not use sweep triggering. Allow the sweep to “free run.”
(ix) Trace average at least 100 traces in power averaging (rms) mode; however, the number of traces to be averaged shall be increased above 100 as needed to ensure that the average accurately represents the true average over the on and off periods of the transmitter.

(x) Compute power by integrating the spectrum across the EBW (or the entire 99% occupied bandwidth) of the signal using the instrument's band power measurement function with band limits set equal to the EBW (or occupied bandwidth) band edges. If the instrument does not have a band power function, sum the spectrum levels (in power units) at 1 MHz intervals extending across the EBW (or the entire 99% occupied bandwidth) of the signal.

(xi) Add 10 log (1/x), where x is the duty cycle, to the measured power in order to compute the average power during the actual transmission times (because the measurement represents an average over both the on and off times of the transmission). For example, add 10 log (1/0.25) = 6 dB if the duty cycle is 25%.

8.2.5 Test Results

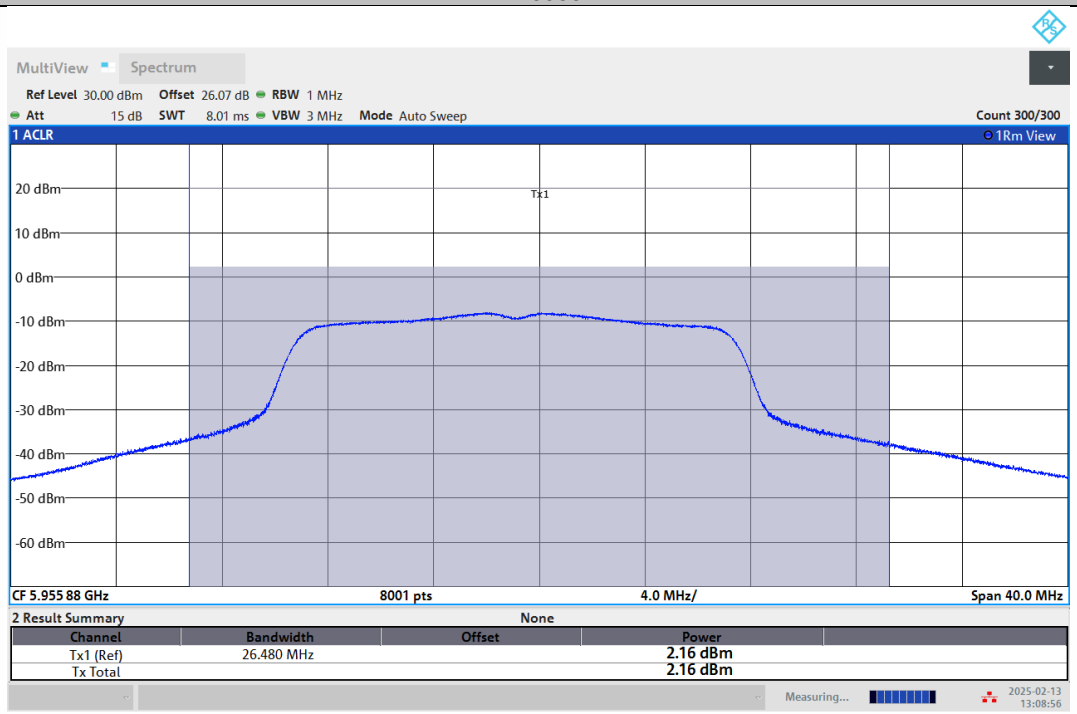
Test Mode	Antenna	Frequency [MHz]	Channel Powert [dBm]	Duty Cycle [%]	DC Factor [dBm]	Result [dBm]	Gain [dBi]	EIRP [dBm]	EIRP Limit [dBm]	Verdict
11A	Ant1	5955	1.04	77.22	1.12	2.16	4.95	7.11	≤24.00	PASS
11A	Ant1	6175	1.96	77.22	1.12	3.08	4.95	8.03	≤24.00	PASS
11A	Ant1	6415	1.45	77.22	1.12	2.57	4.95	7.52	≤24.00	PASS
11A	Ant1	6435	1.76	77.22	1.12	2.88	4.95	7.83	≤24.00	PASS
11A	Ant1	6475	1.88	77.22	1.12	3.00	4.95	7.95	≤24.00	PASS
11A	Ant1	6515	1.52	77.22	1.12	2.64	4.95	7.59	≤24.00	PASS
11A	Ant1	6535	1.57	77.78	1.09	2.66	4.95	7.61	≤24.00	PASS
11A	Ant1	6695	1.07	77.22	1.12	2.19	4.95	7.14	≤24.00	PASS
11A	Ant1	6855	2.08	77.22	1.12	3.20	4.95	8.15	≤24.00	PASS
11A	Ant1	6875	1.63	77.22	1.12	2.75	4.95	7.70	≤24.00	PASS
11A	Ant1	6895	1.49	77.22	1.12	2.61	4.95	7.56	≤24.00	PASS
11A	Ant1	6995	2.10	77.22	1.12	3.22	4.95	8.17	≤24.00	PASS
11A	Ant1	7115	1.86	77.22	1.12	2.98	4.95	7.93	≤24.00	PASS
11AX20SISO	Ant1	5955	-2.45	44.93	3.47	1.02	4.95	5.97	≤24.00	PASS
11AX20SISO	Ant1	6175	-1.25	43.66	3.60	2.35	4.95	7.30	≤24.00	PASS
11AX20SISO	Ant1	6415	-1.68	44.93	3.47	1.79	4.95	6.74	≤24.00	PASS
11AX20SISO	Ant1	6435	-1.63	44.93	3.47	1.84	4.95	6.79	≤24.00	PASS
11AX20SISO	Ant1	6475	-1.61	44.93	3.47	1.86	4.95	6.81	≤24.00	PASS
11AX20SISO	Ant1	6515	-2.09	44.93	3.47	1.38	4.95	6.33	≤24.00	PASS
11AX20SISO	Ant1	6535	-2.02	44.93	3.47	1.45	4.95	6.40	≤24.00	PASS
11AX20SISO	Ant1	6695	-2.48	44.93	3.47	0.99	4.95	5.94	≤24.00	PASS
11AX20SISO	Ant1	6855	-1.41	44.93	3.47	2.06	4.95	7.01	≤24.00	PASS
11AX20SISO	Ant1	6875	-1.91	44.93	3.47	1.56	4.95	6.51	≤24.00	PASS
11AX20SISO	Ant1	6895	-2.04	44.93	3.47	1.43	4.95	6.38	≤24.00	PASS
11AX20SISO	Ant1	6995	-0.94	44.93	3.47	2.53	4.95	7.48	≤24.00	PASS
11AX20SISO	Ant1	7115	-1.20	44.93	3.47	2.27	4.95	7.22	≤24.00	PASS
11AX40SISO	Ant1	5965	-2.01	44.93	3.47	1.46	4.95	6.41	≤24.00	PASS
11AX40SISO	Ant1	6165	-1.10	44.93	3.47	2.37	4.95	7.32	≤24.00	PASS
11AX40SISO	Ant1	6405	-1.59	44.93	3.47	1.88	4.95	6.83	≤24.00	PASS
11AX40SISO	Ant1	6445	-1.63	44.93	3.47	1.84	4.95	6.79	≤24.00	PASS

11AX40SISO	Ant1	6485	-1.31	44.93	3.47	2.16	4.95	7.11	≤24.00	PASS
11AX40SISO	Ant1	6525	-1.86	44.93	3.47	1.61	4.95	6.56	≤24.00	PASS
11AX40SISO	Ant1	6565	-1.88	44.93	3.47	1.59	4.95	6.54	≤24.00	PASS
11AX40SISO	Ant1	6685	-2.40	44.93	3.47	1.07	4.95	6.02	≤24.00	PASS
11AX40SISO	Ant1	6845	-1.20	44.93	3.47	2.27	4.95	7.22	≤24.00	PASS
11AX40SISO	Ant1	6885	-1.79	42.47	3.72	1.93	4.95	6.88	≤24.00	PASS
11AX40SISO	Ant1	6925	-0.40	44.93	3.47	3.07	4.95	8.02	≤24.00	PASS
11AX40SISO	Ant1	6965	-0.32	44.93	3.47	3.15	4.95	8.10	≤24.00	PASS
11AX40SISO	Ant1	7085	-1.36	44.93	3.47	2.11	4.95	7.06	≤24.00	PASS
11AX80SISO	Ant1	5985	-2.14	42.65	3.70	1.56	4.95	6.51	≤24.00	PASS
11AX80SISO	Ant1	6145	-0.80	42.65	3.70	2.90	4.95	7.85	≤24.00	PASS
11AX80SISO	Ant1	6385	-1.22	41.10	3.86	2.64	4.95	7.59	≤24.00	PASS
11AX80SISO	Ant1	6465	-1.93	42.65	3.70	1.77	4.95	6.72	≤24.00	PASS
11AX80SISO	Ant1	6545	-2.16	42.65	3.70	1.54	4.95	6.49	≤24.00	PASS
11AX80SISO	Ant1	6625	-2.97	42.65	3.70	0.73	4.95	5.68	≤24.00	PASS
11AX80SISO	Ant1	6705	-2.57	42.65	3.70	1.13	4.95	6.08	≤24.00	PASS
11AX80SISO	Ant1	6785	-1.85	42.65	3.70	1.85	4.95	6.80	≤24.00	PASS
11AX80SISO	Ant1	6865	-1.40	42.65	3.70	2.30	4.95	7.25	≤24.00	PASS
11AX80SISO	Ant1	6945	-0.42	42.65	3.70	3.28	4.95	8.23	≤24.00	PASS
11AX80SISO	Ant1	7025	-1.08	42.65	3.70	2.62	4.95	7.57	≤24.00	PASS
11AX160SISO	Ant1	6025	-4.20	40.00	3.98	-0.22	4.95	4.73	≤24.00	PASS
11AX160SISO	Ant1	6185	-4.00	37.66	4.24	0.24	4.95	5.19	≤24.00	PASS
11AX160SISO	Ant1	6345	-3.98	40.85	3.89	-0.09	4.95	4.86	≤24.00	PASS
11AX160SISO	Ant1	6505	-3.99	40.28	3.95	-0.04	4.95	4.91	≤24.00	PASS
11AX160SISO	Ant1	6665	-4.74	40.28	3.95	-0.79	4.95	4.16	≤24.00	PASS
11AX160SISO	Ant1	6825	-4.05	38.96	4.09	0.04	4.95	4.99	≤24.00	PASS
11AX160SISO	Ant1	6985	-3.10	38.46	4.15	1.05	4.95	6.00	≤24.00	PASS

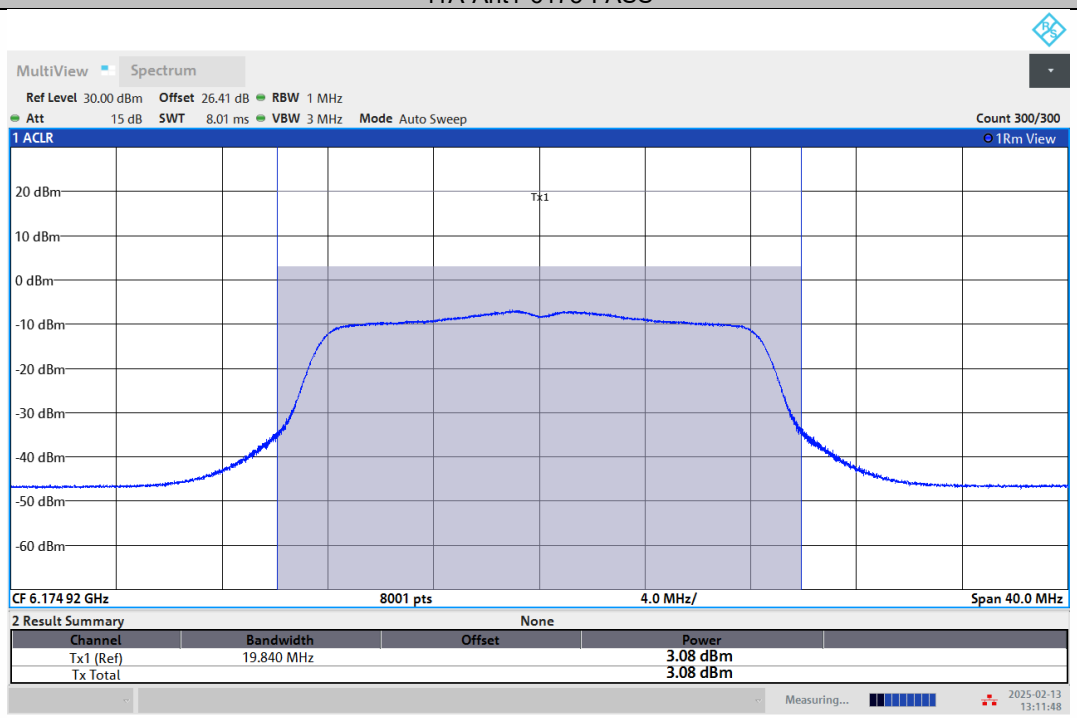
Note：The Duty Cycle Factor is compensated in the graph.

8.2.6 Test Graphs

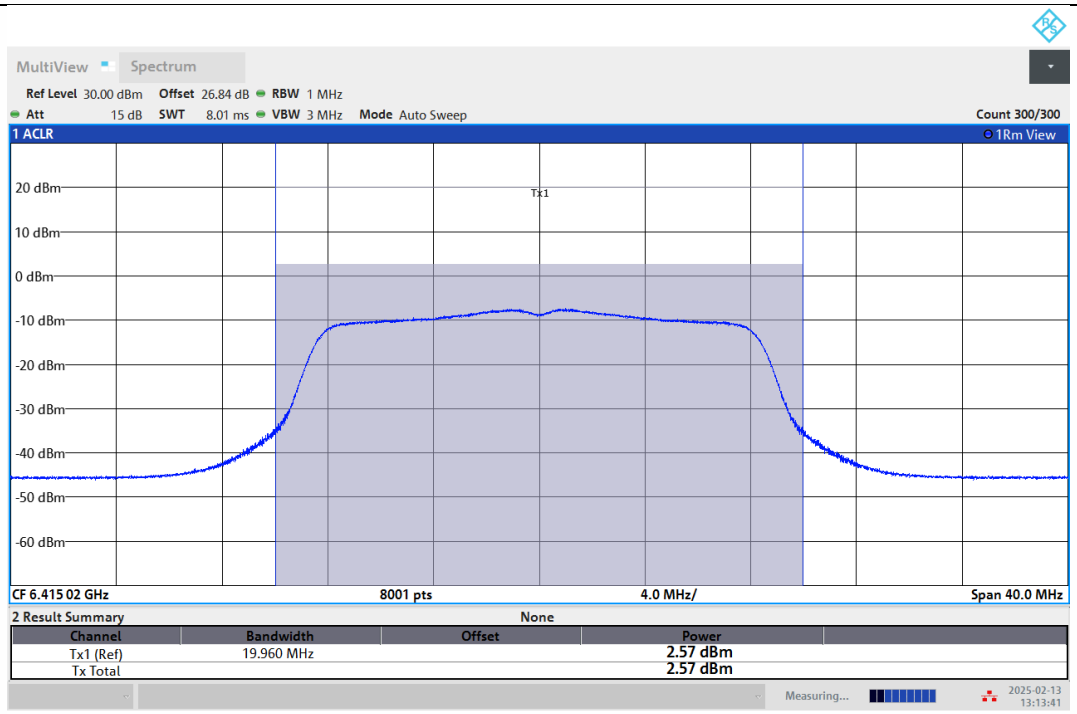
11A-Ant1-5955-PASS



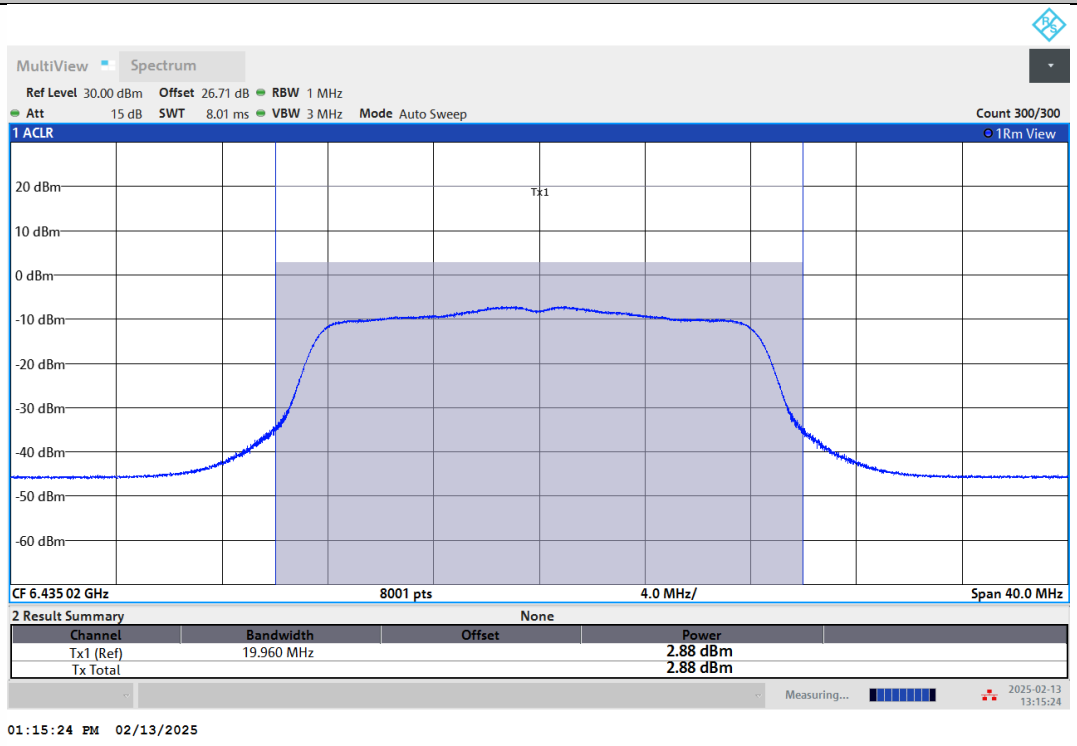
11A-Ant1-6175-PASS



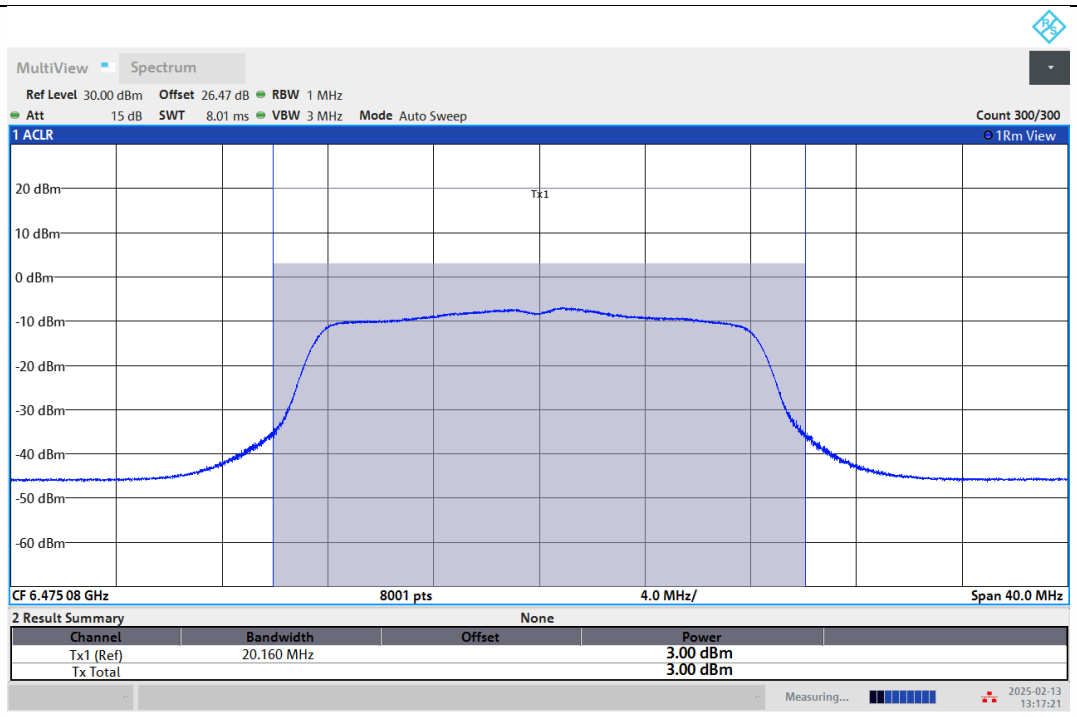
11A-Ant1-6415-PASS



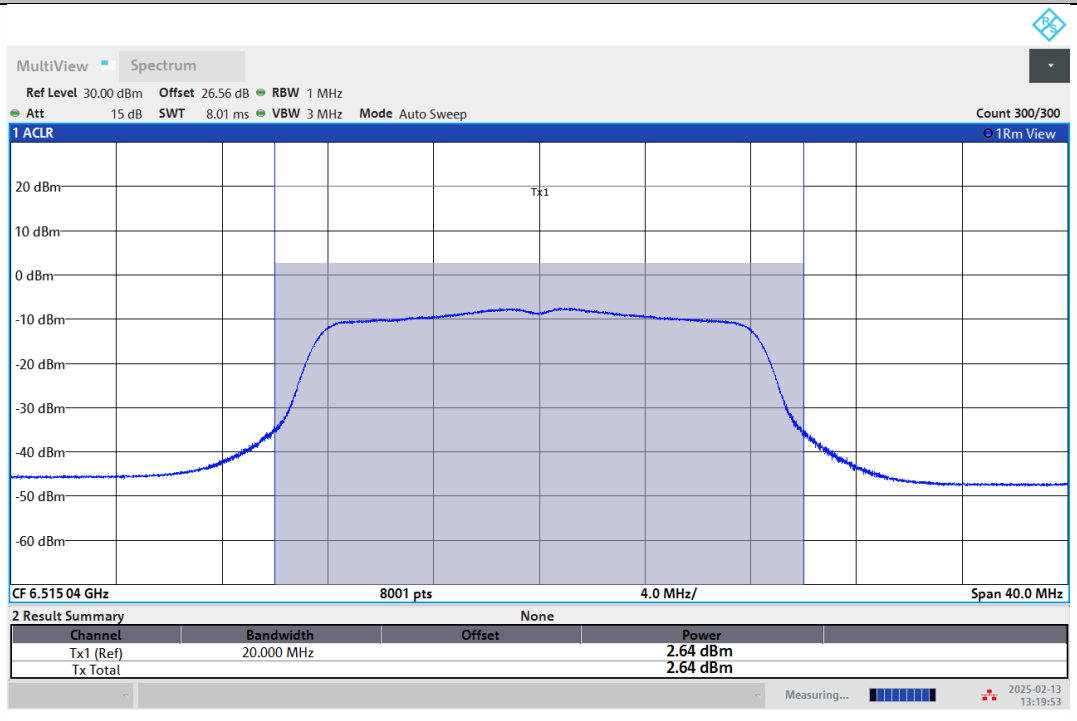
11A-Ant1-6435-PASS



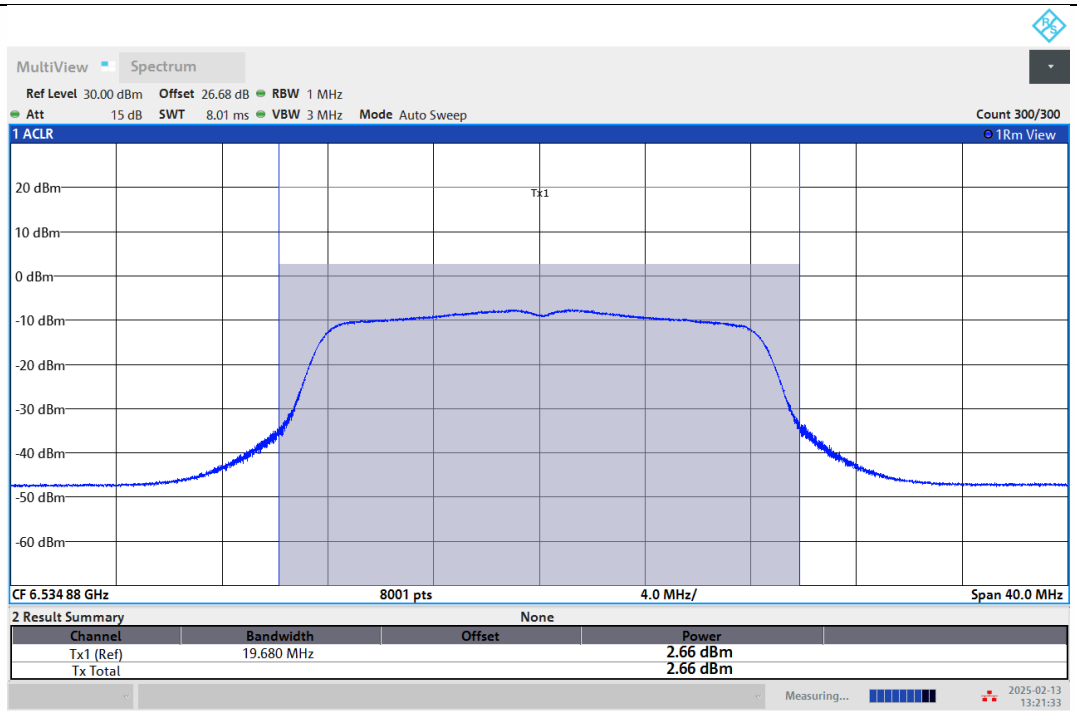
11A-Ant1-6475-PASS



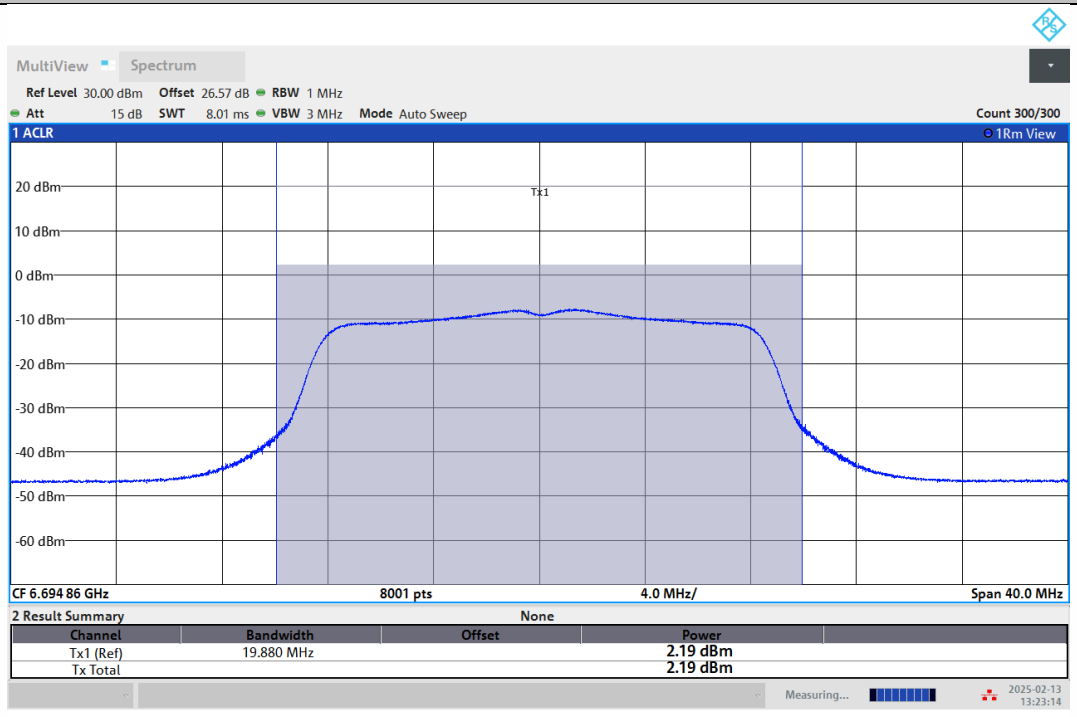
11A-Ant1-6515-PASS



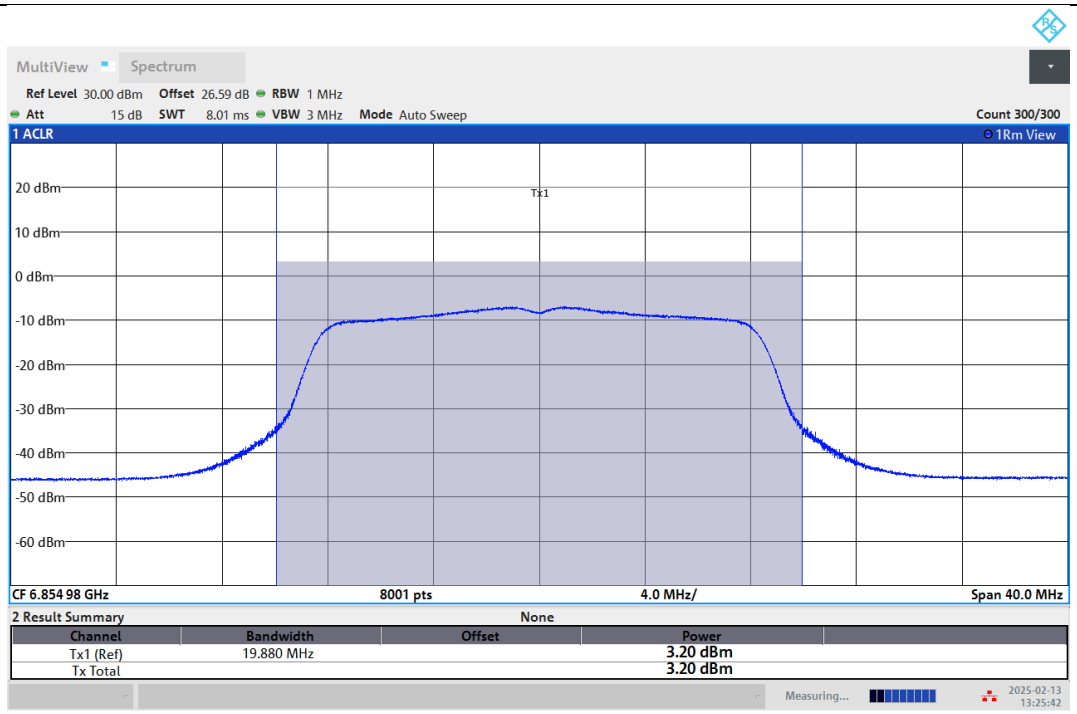
11A-Ant1-6535-PASS



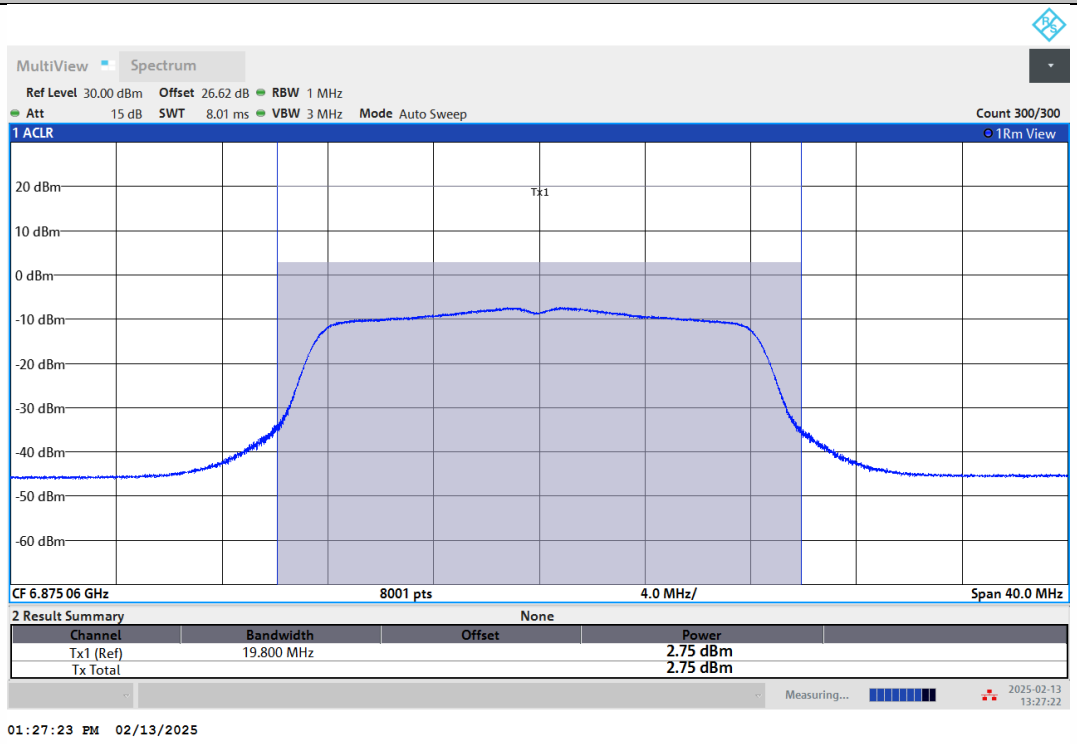
11A-Ant1-6695-PASS



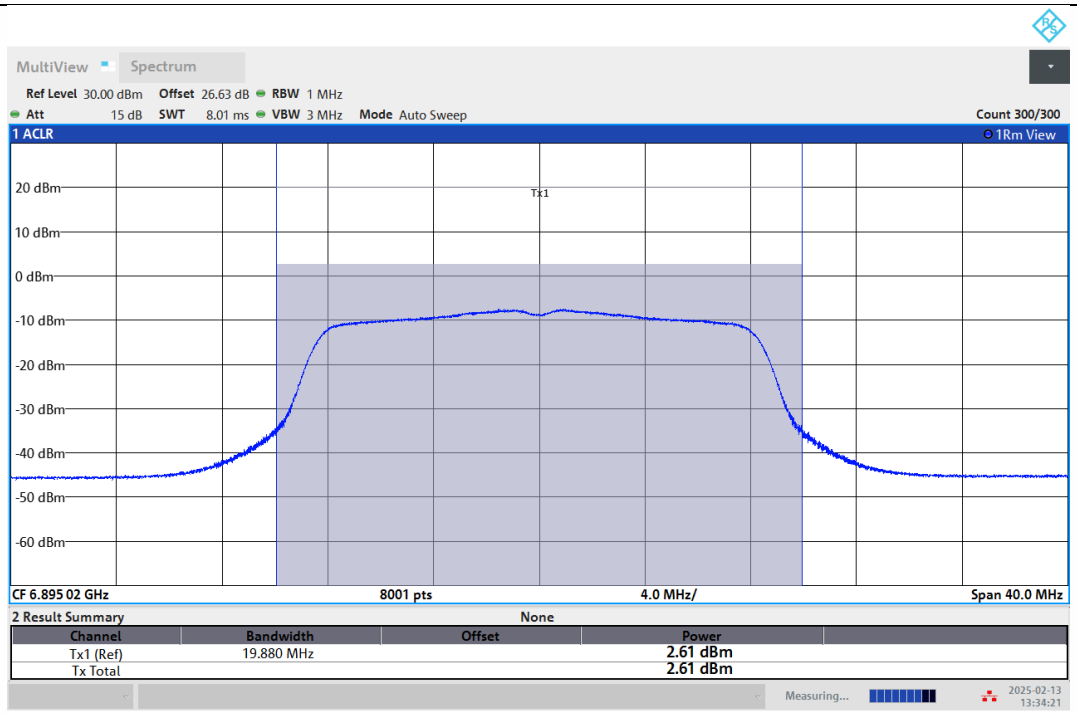
11A-Ant1-6855-PASS



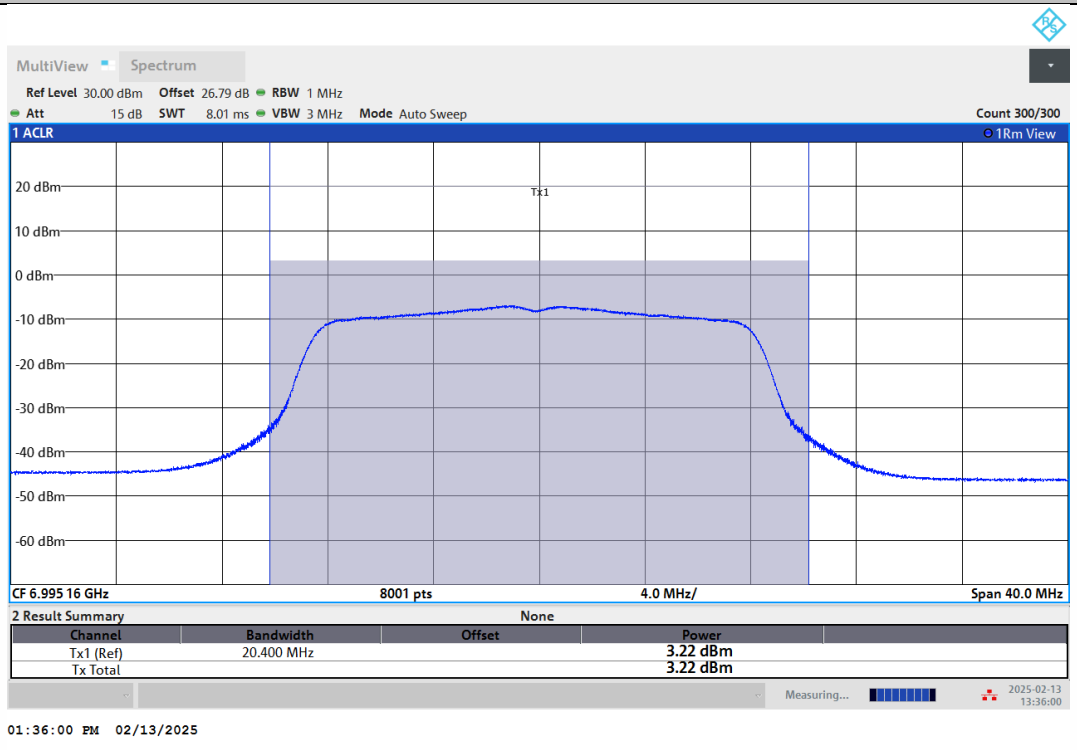
11A-Ant1-6875-PASS



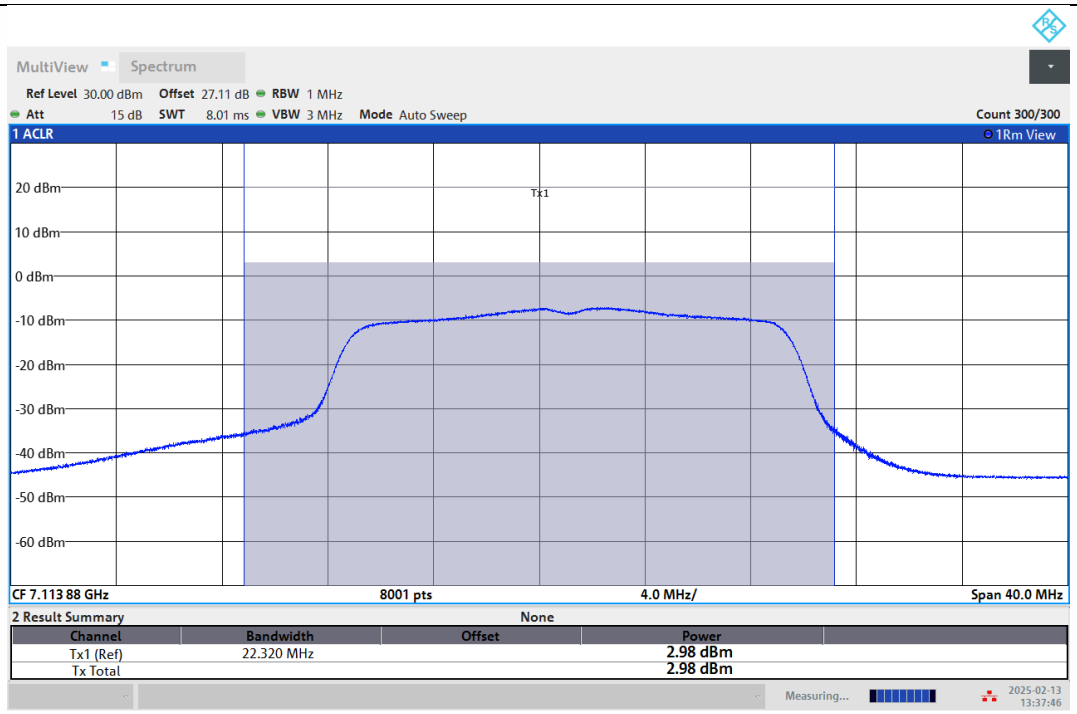
11A-Ant1-6895-PASS



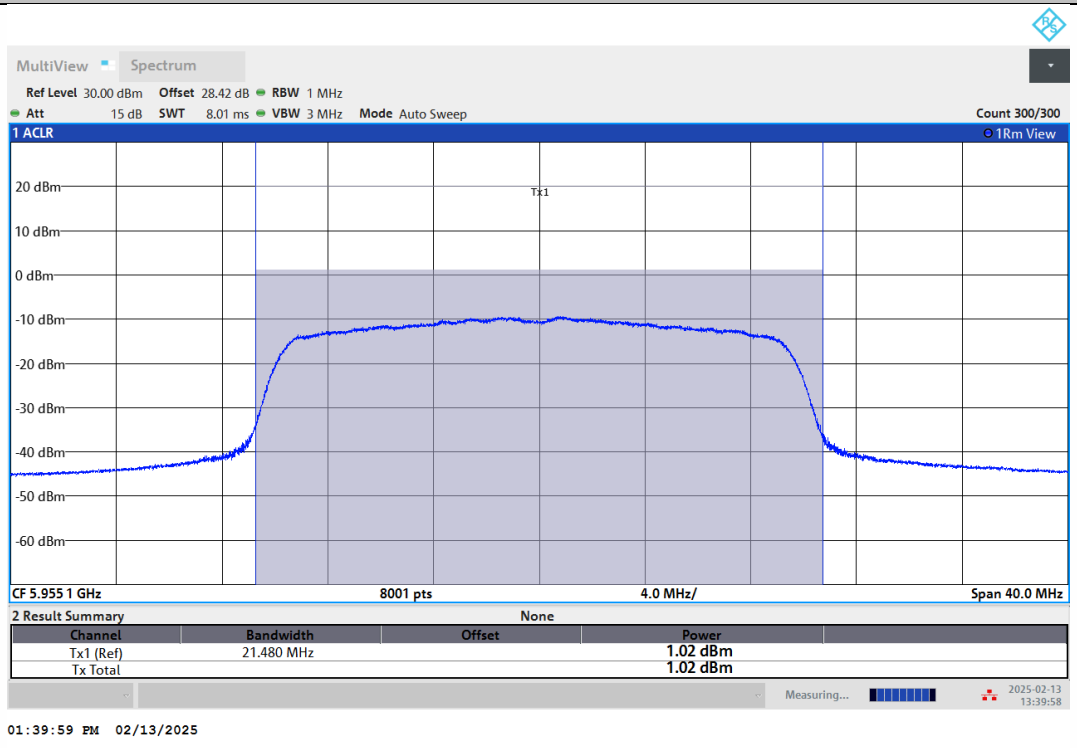
11A-Ant1-6995-PASS



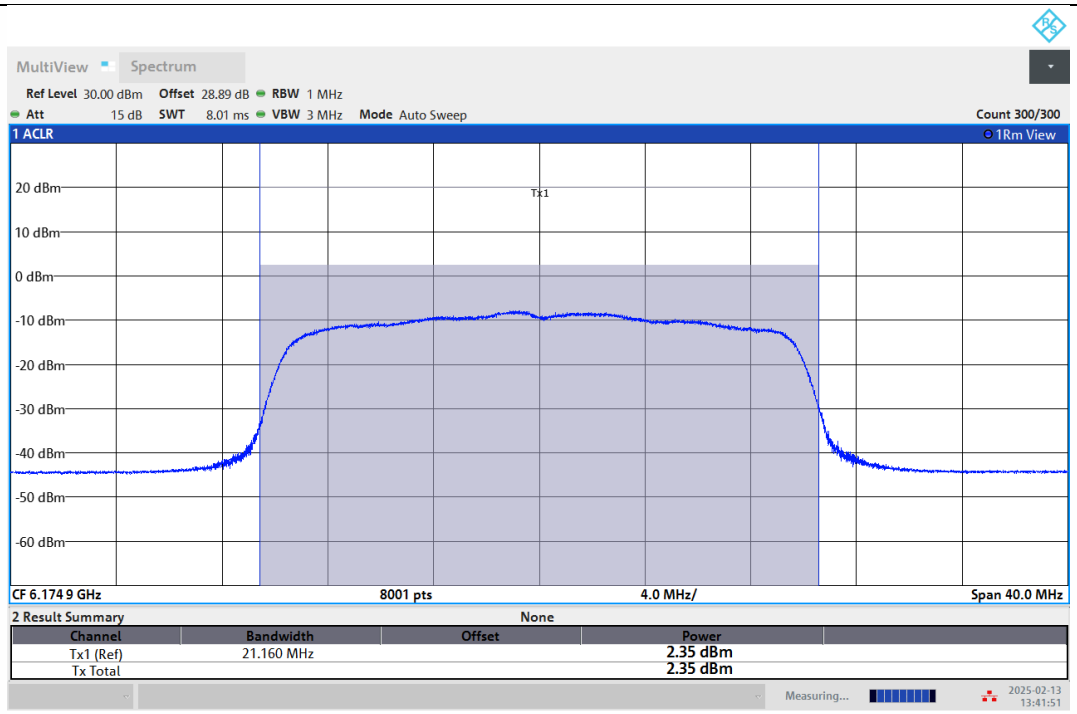
11A-Ant1-7115-PASS



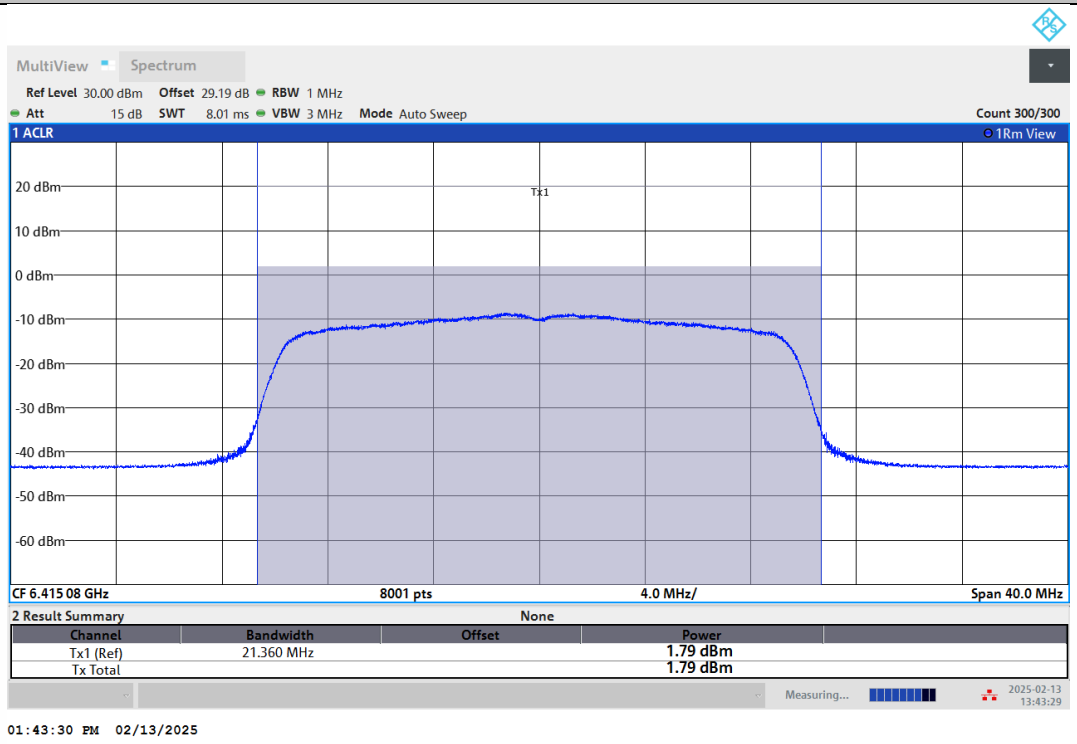
11AX20SISO-Ant1-5955-PASS



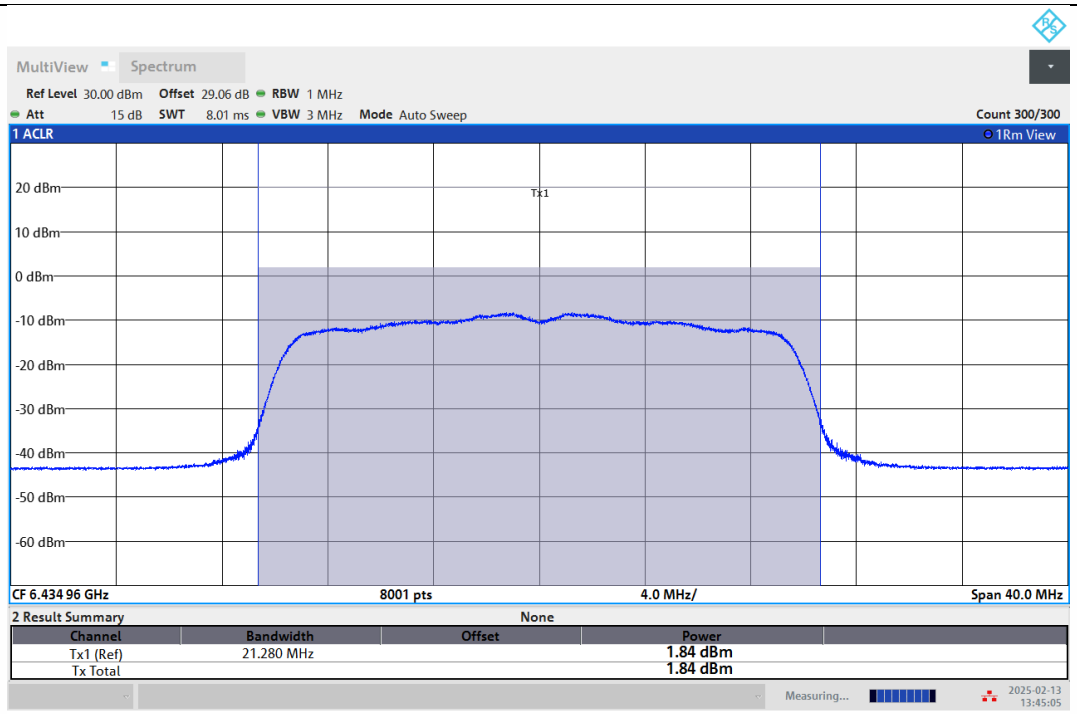
11AX20SISO-Ant1-6175-PASS



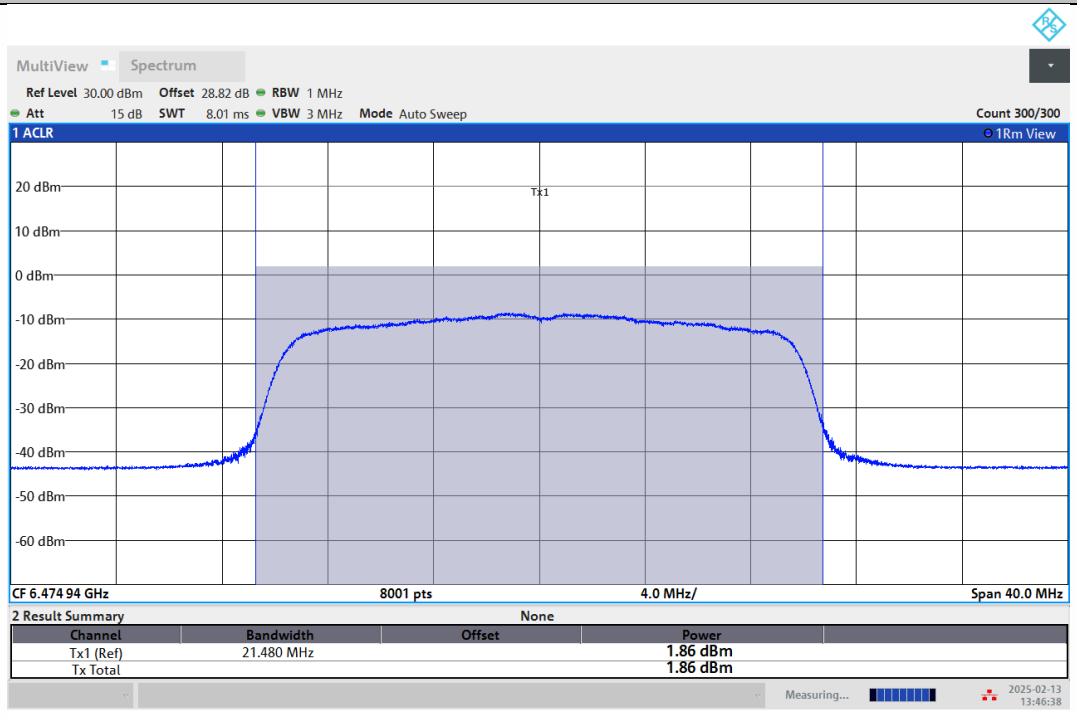
11AX20SISO-Ant1-6415-PASS



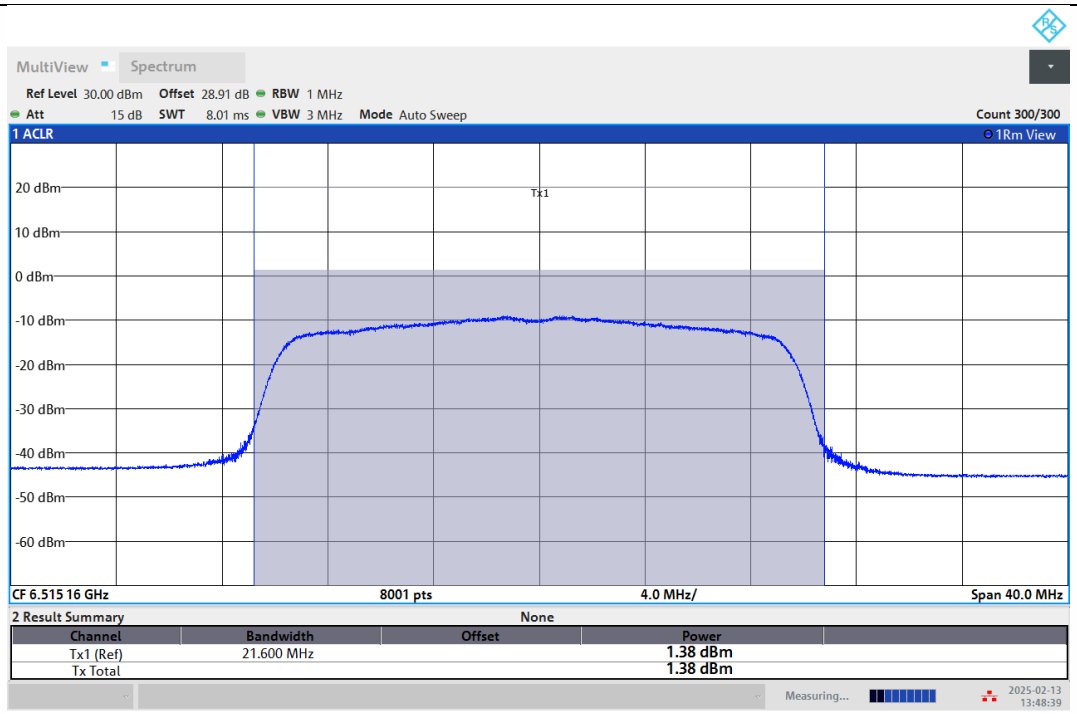
11AX20SISO-Ant1-6435-PASS



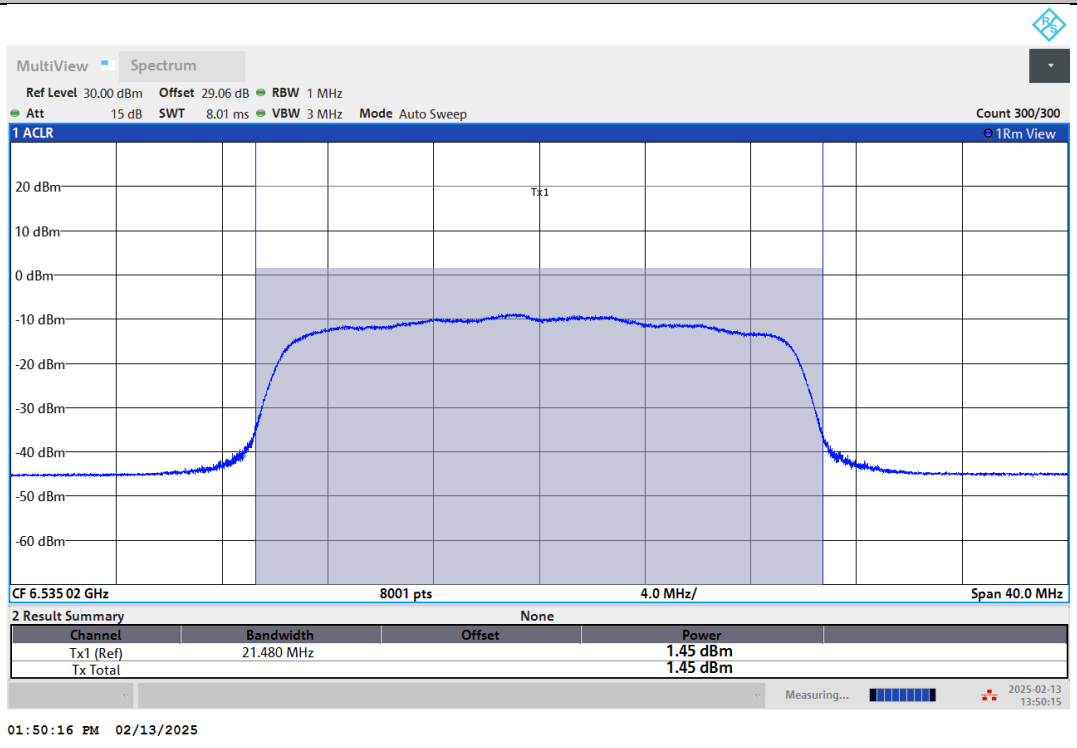
11AX20SISO-Ant1-6475-PASS



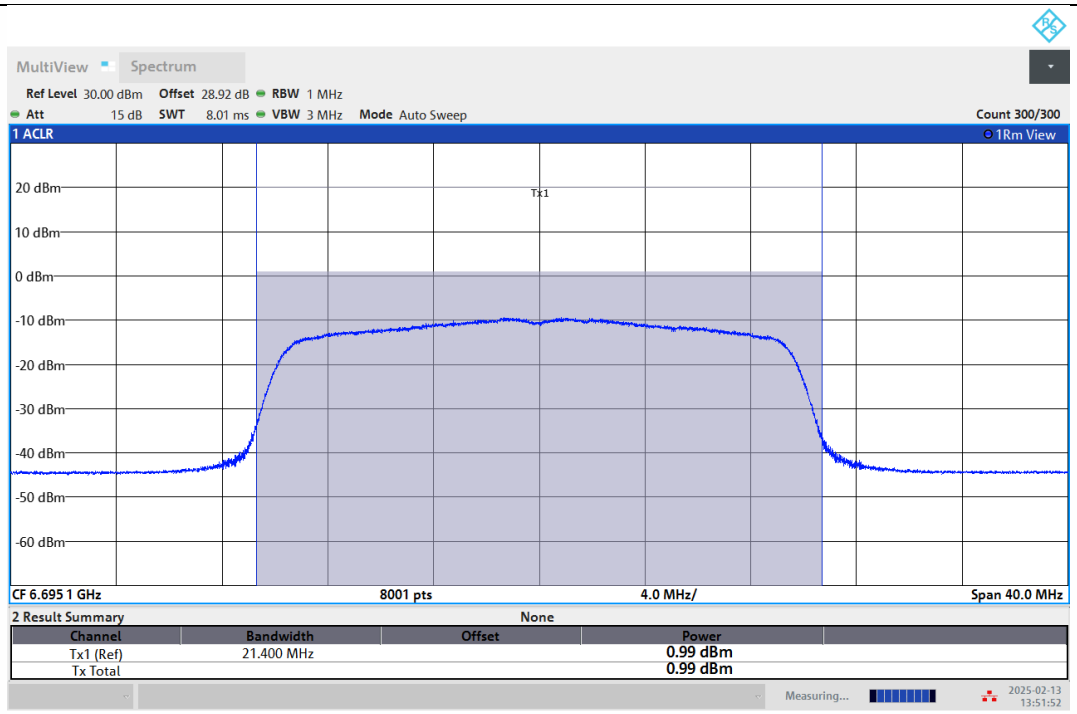
11AX20SISO-Ant1-6515-PASS



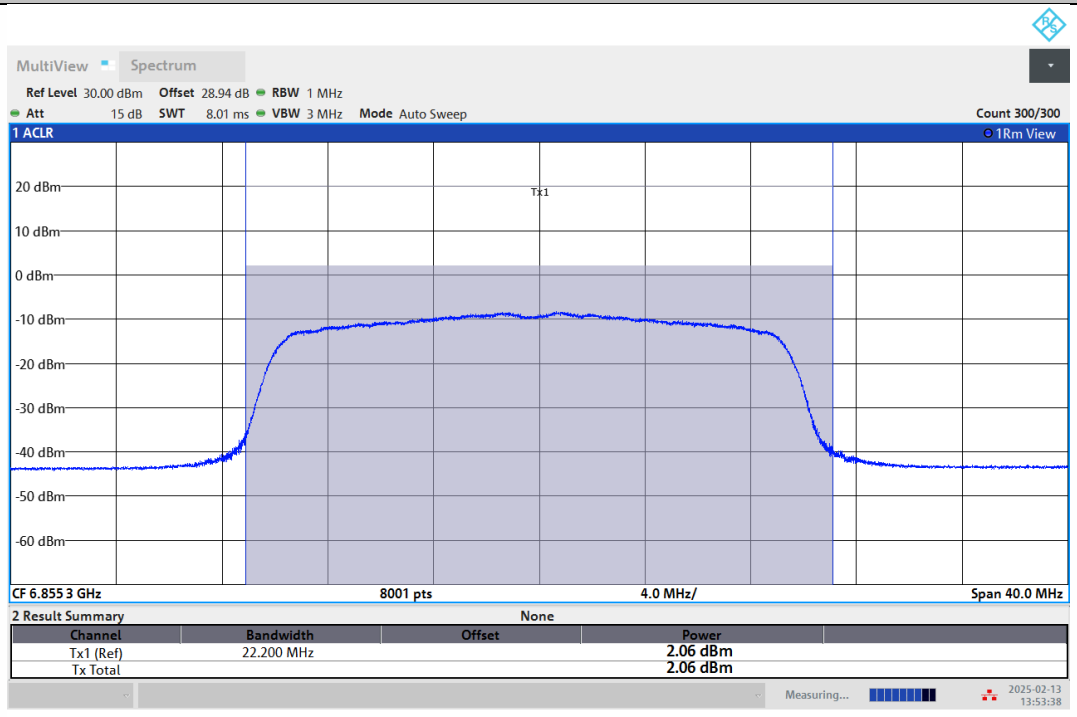
11AX20SISO-Ant1-6535-PASS



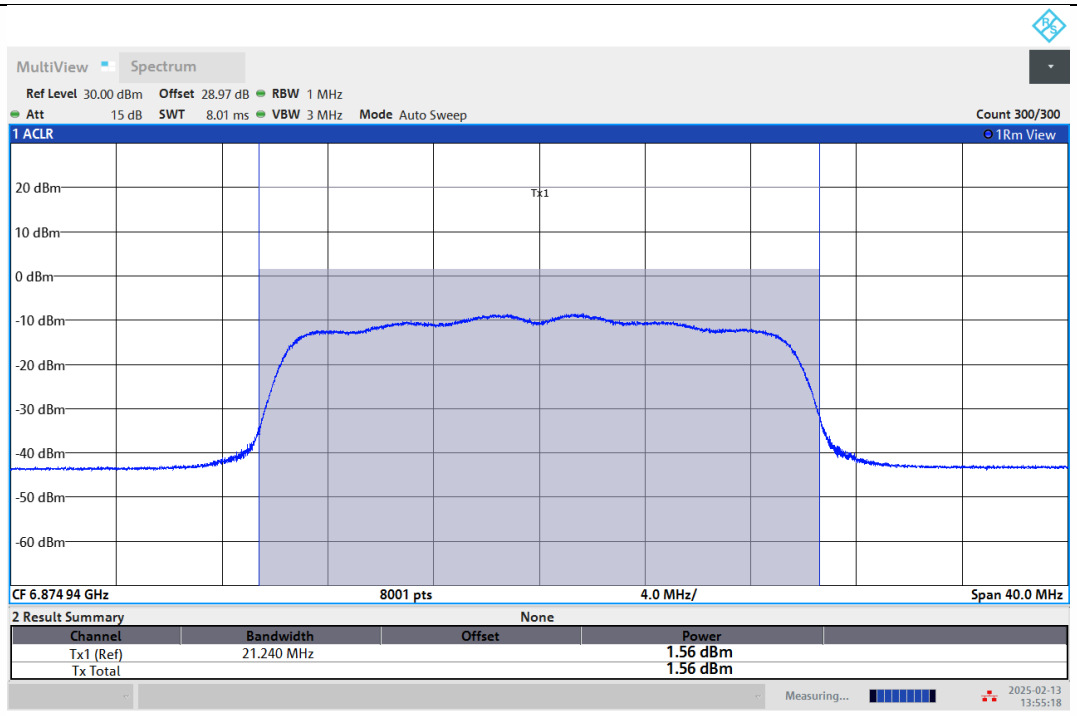
11AX20SISO-Ant1-6695-PASS



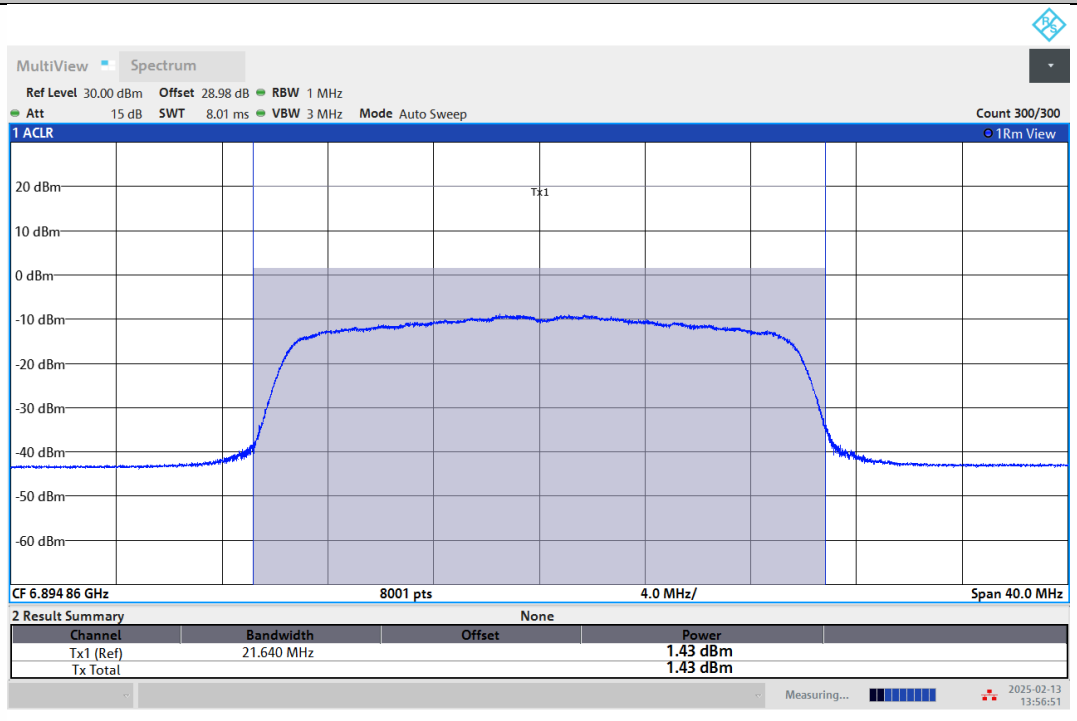
11AX20SISO-Ant1-6855-PASS



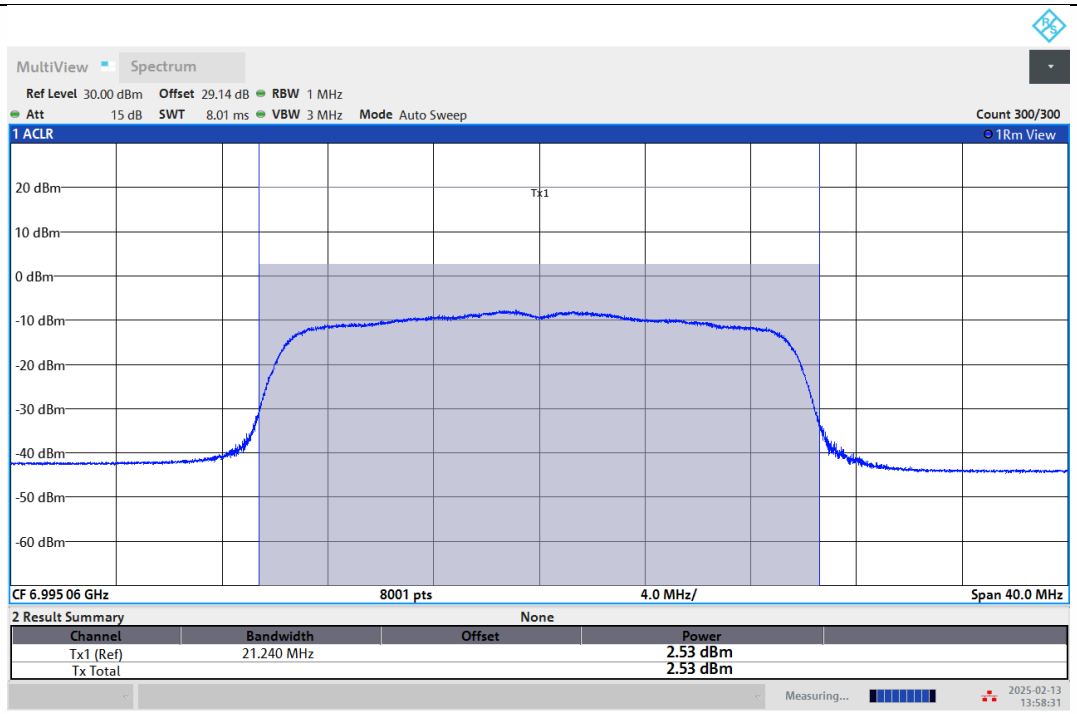
11AX20SISO-Ant1-6875-PASS



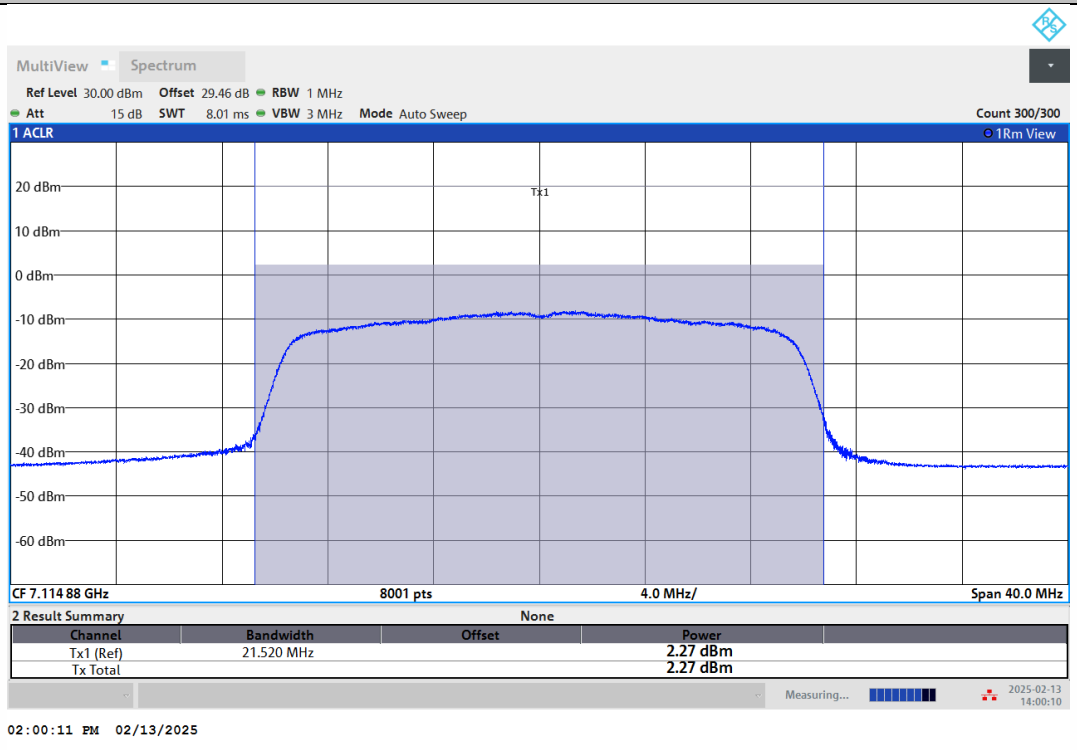
11AX20SISO-Ant1-6895-PASS



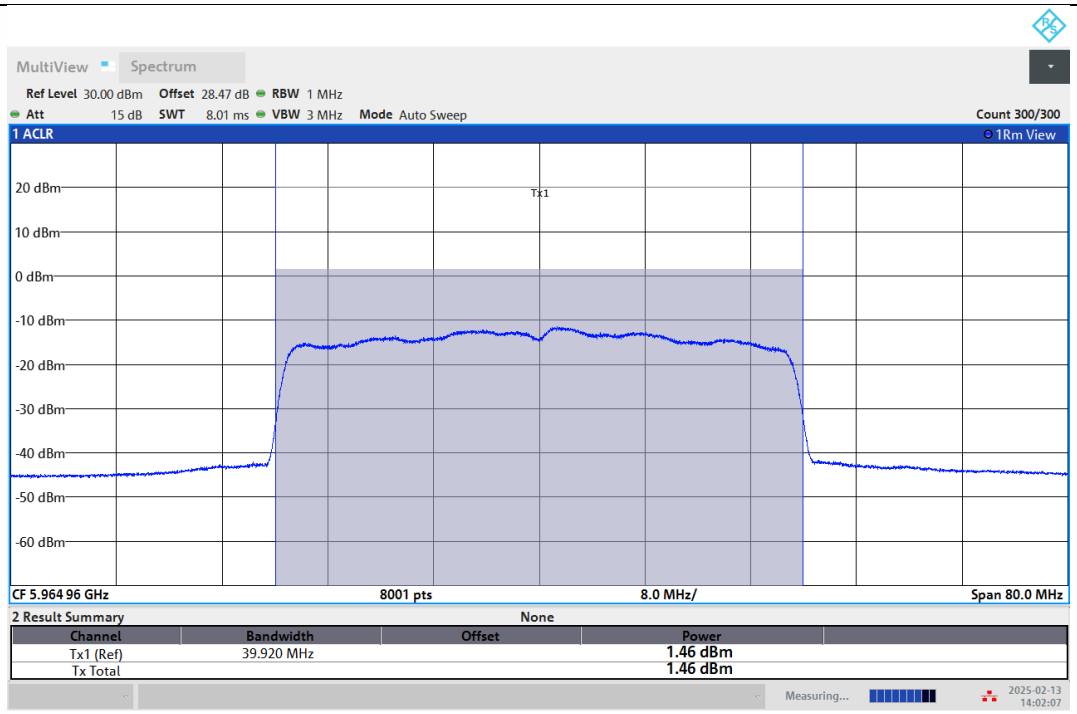
11AX20SISO-Ant1-6995-PASS



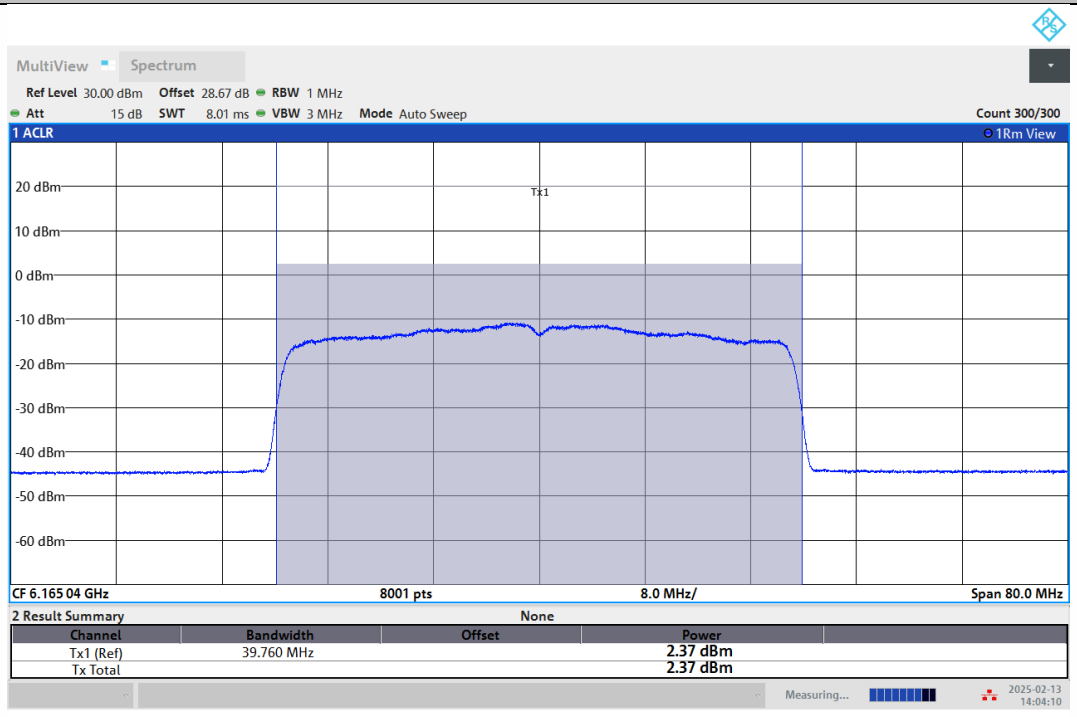
11AX20SISO-Ant1-7115-PASS



11AX40SISO-Ant1-5965-PASS



11AX40SISO-Ant1-6165-PASS



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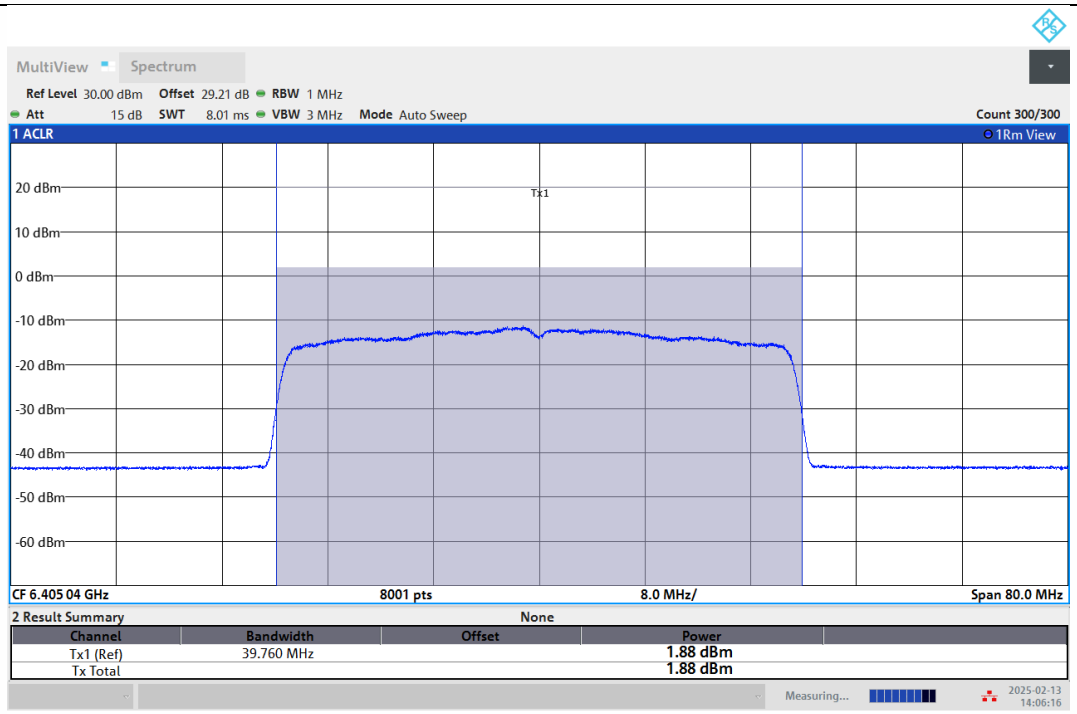
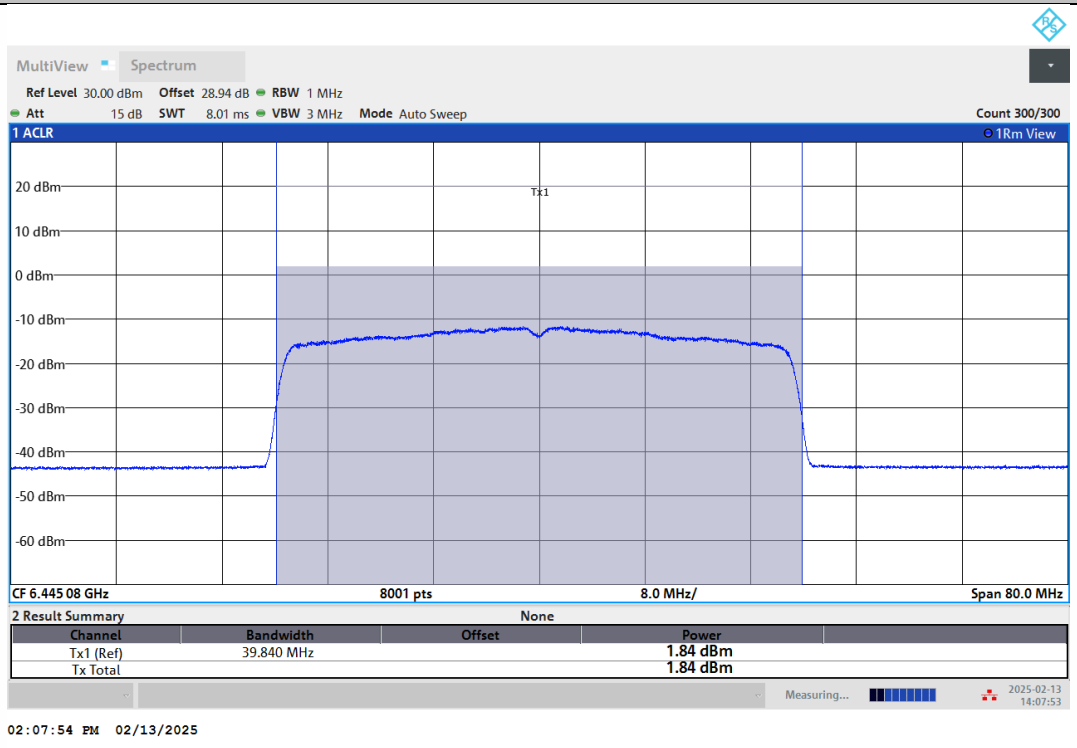
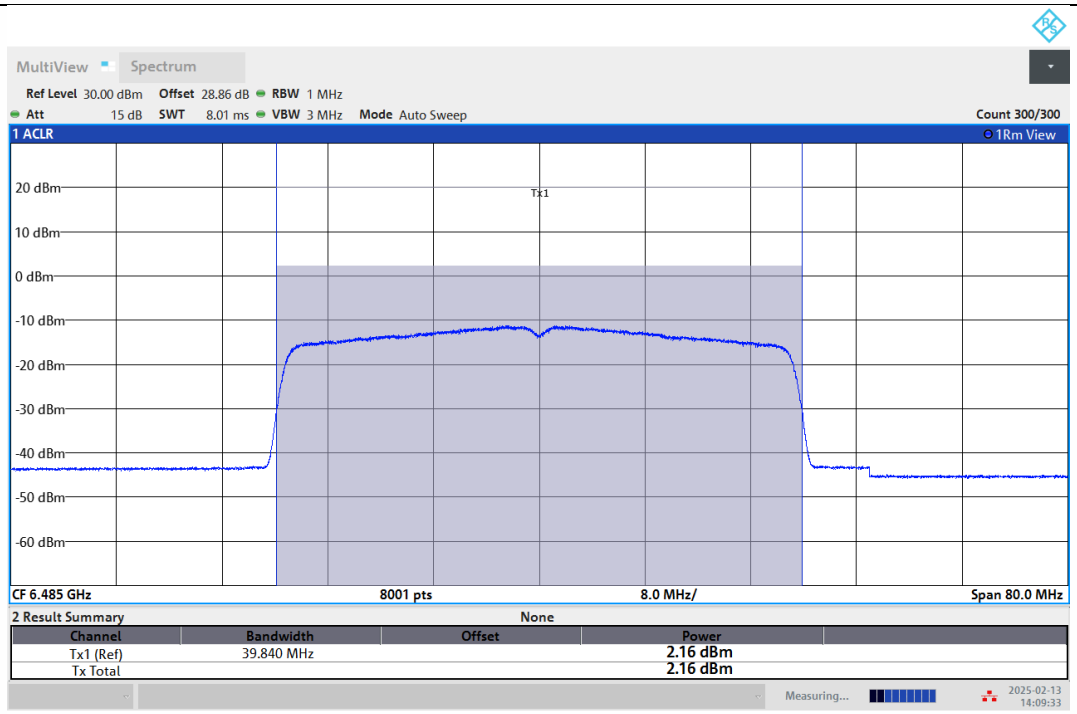


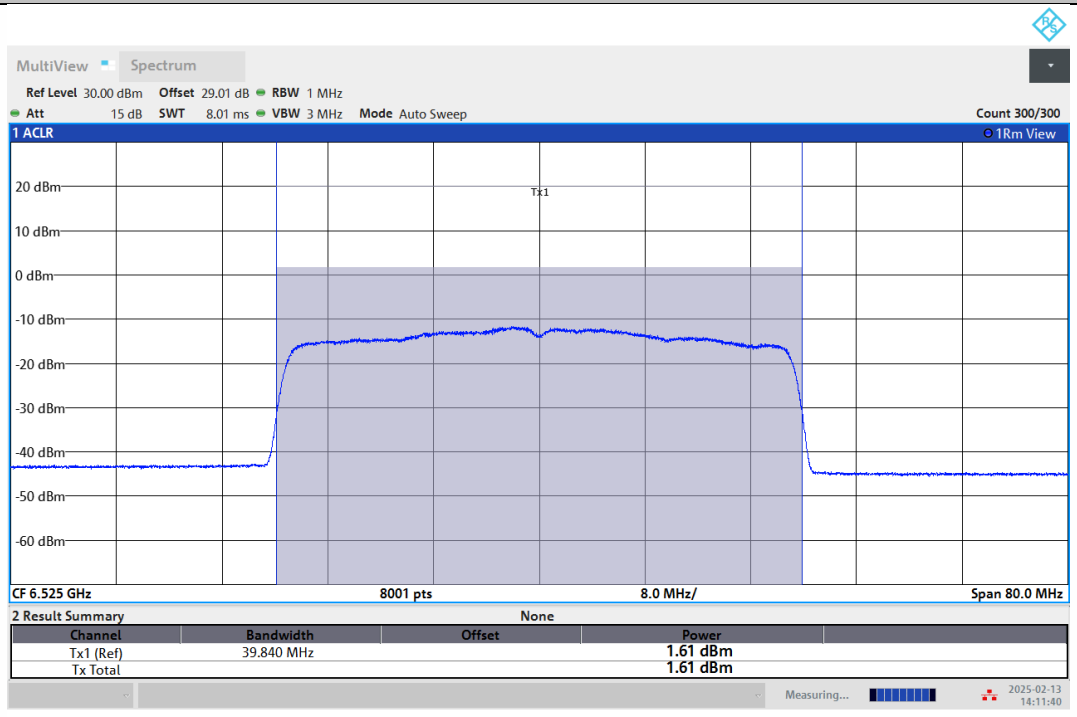
11AX40SISO-Ant1-6445-PASS



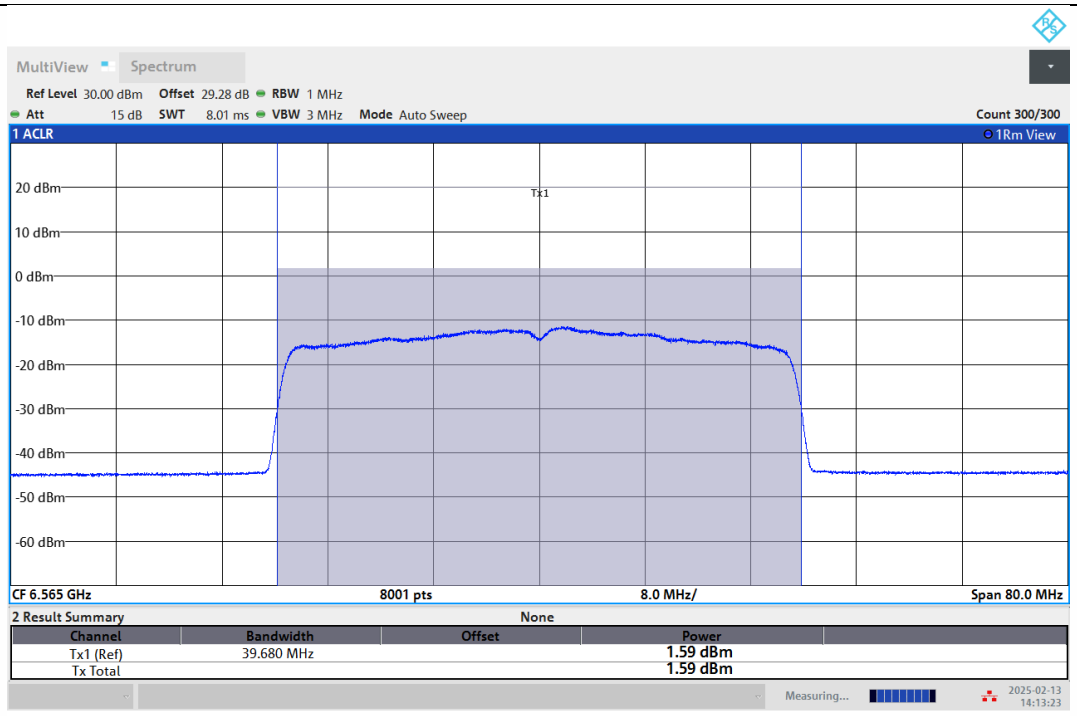
11AX40SISO-Ant1-6485-PASS



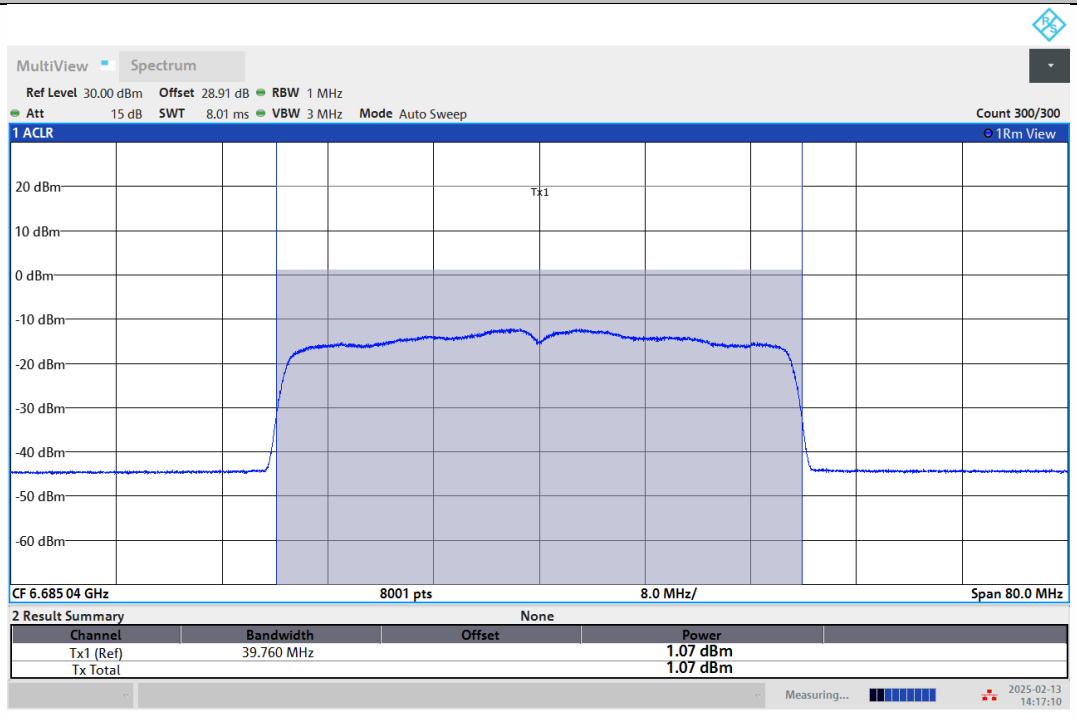
11AX40SISO-Ant1-6525-PASS



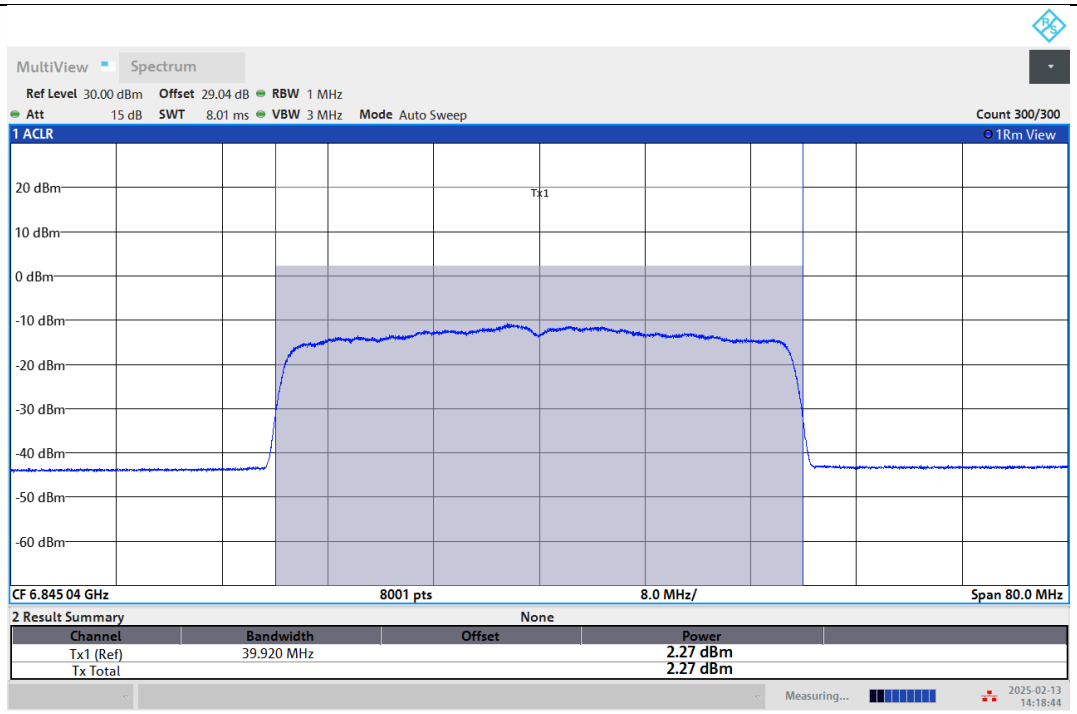
11AX40SISO-Ant1-6565-PASS



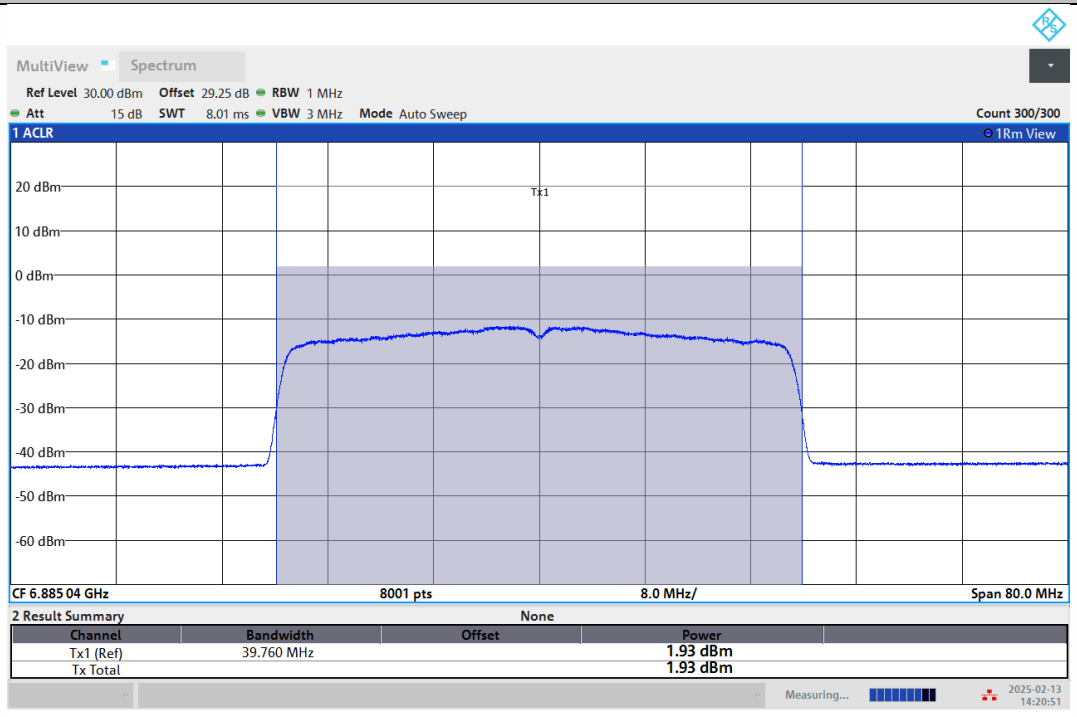
11AX40SISO-Ant1-6685-PASS



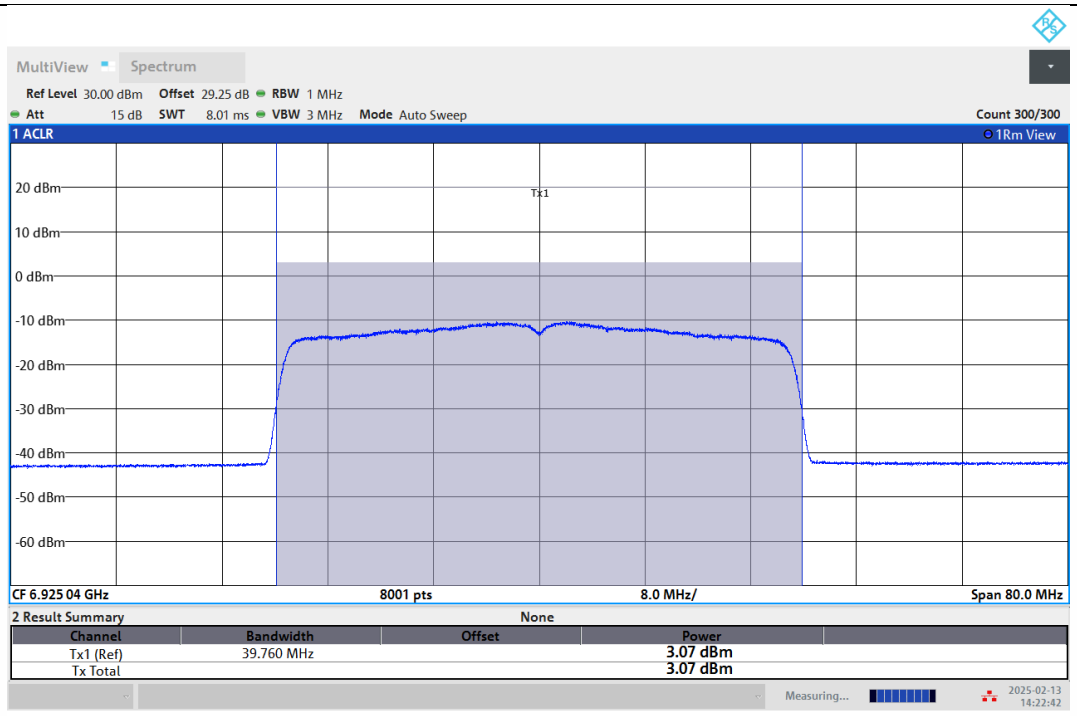
11AX40SISO-Ant1-6845-PASS



11AX40SISO-Ant1-6885-PASS



11AX40SISO-Ant1-6925-PASS



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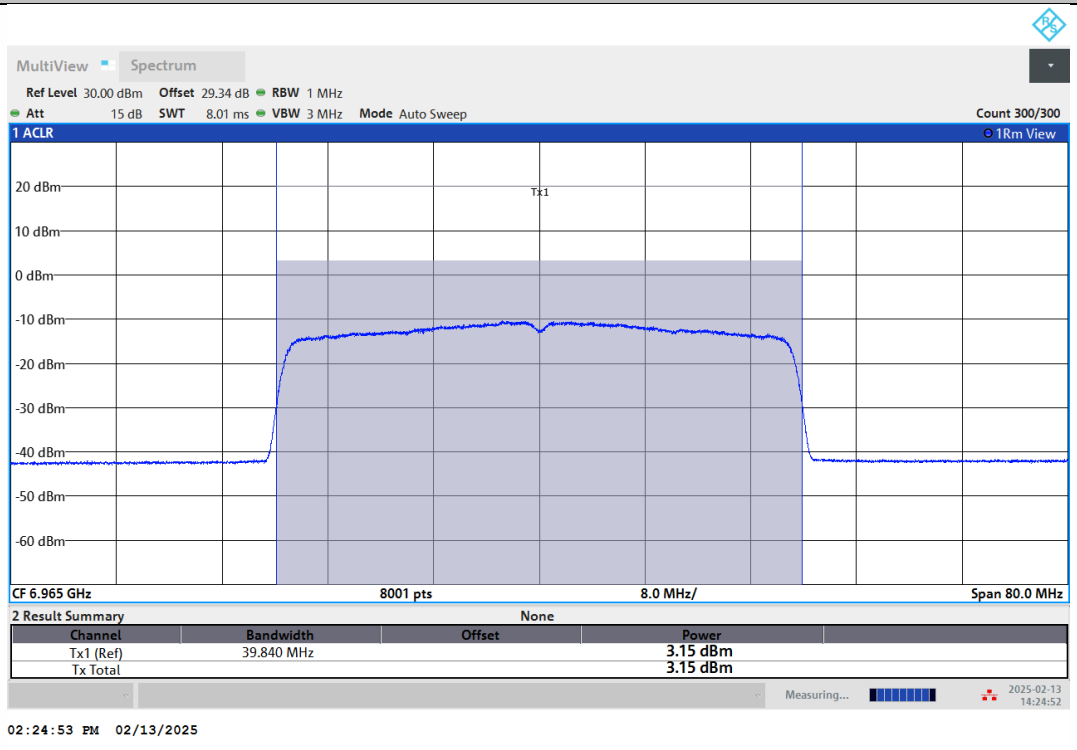
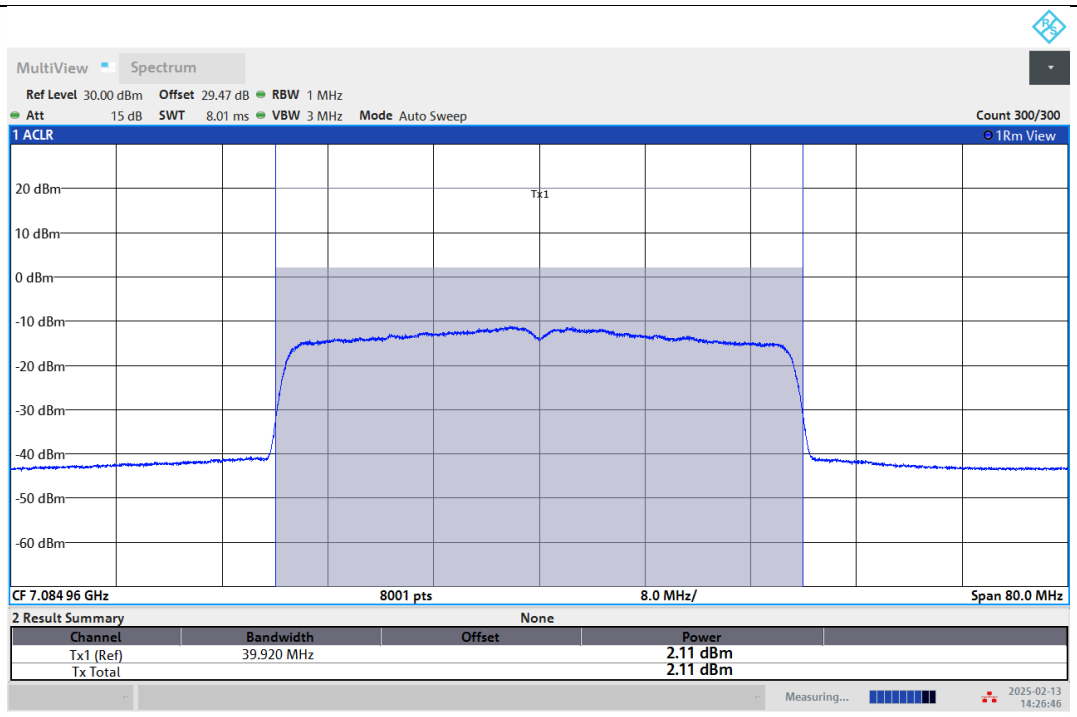


11AX40SISO-Ant1-7085-PASS



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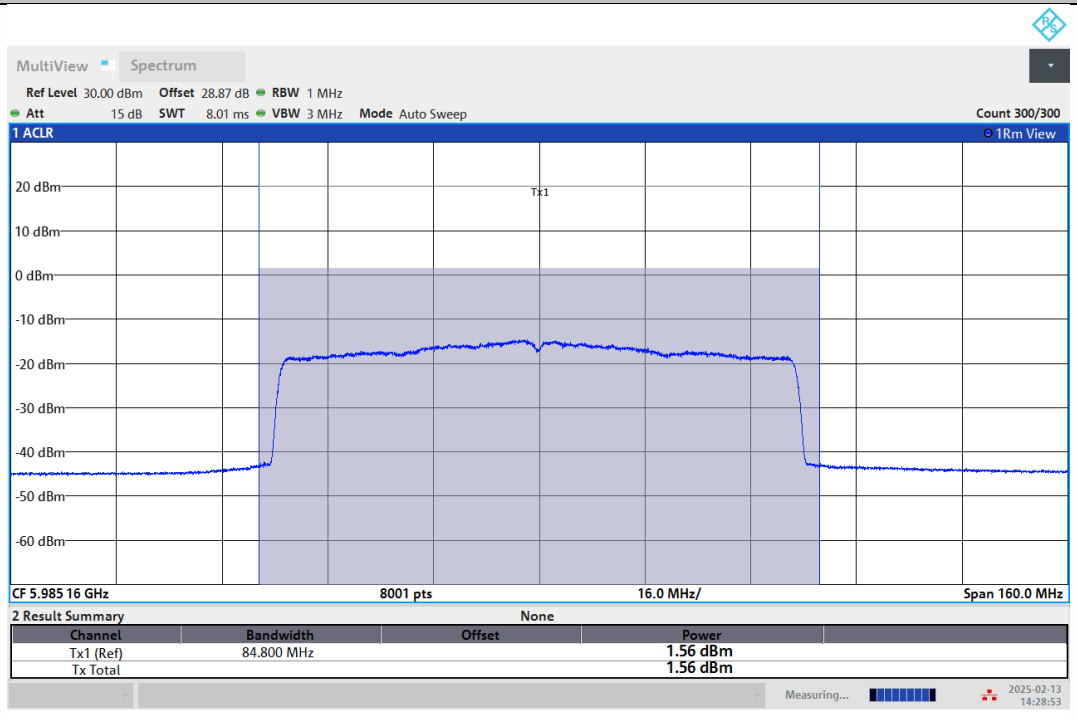

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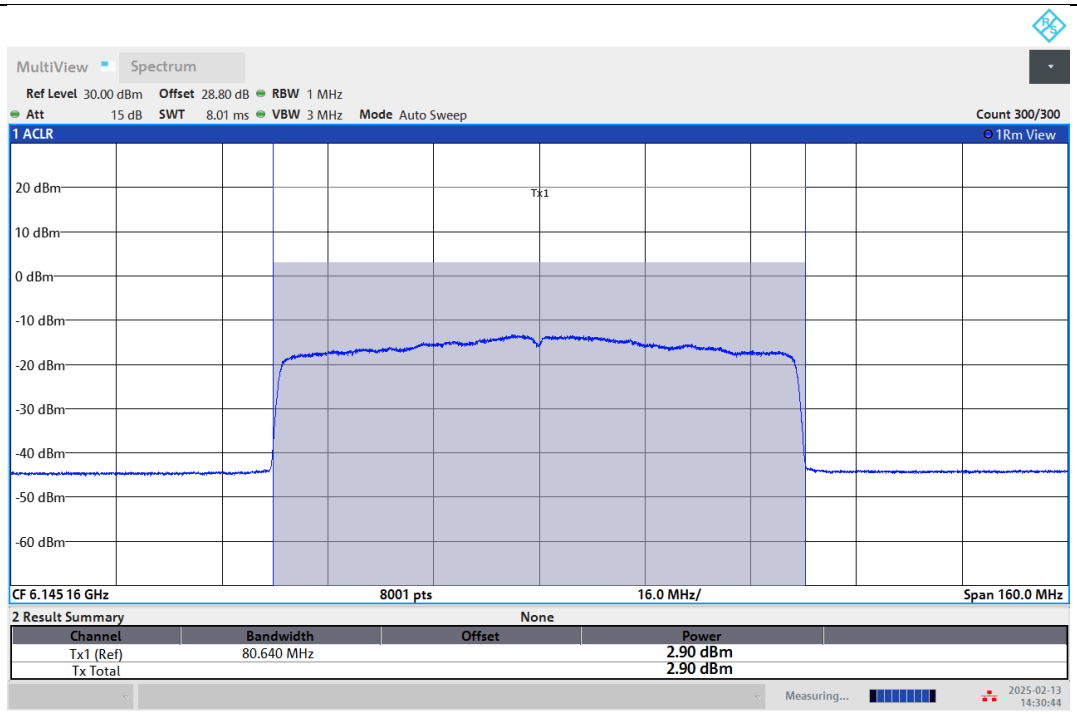

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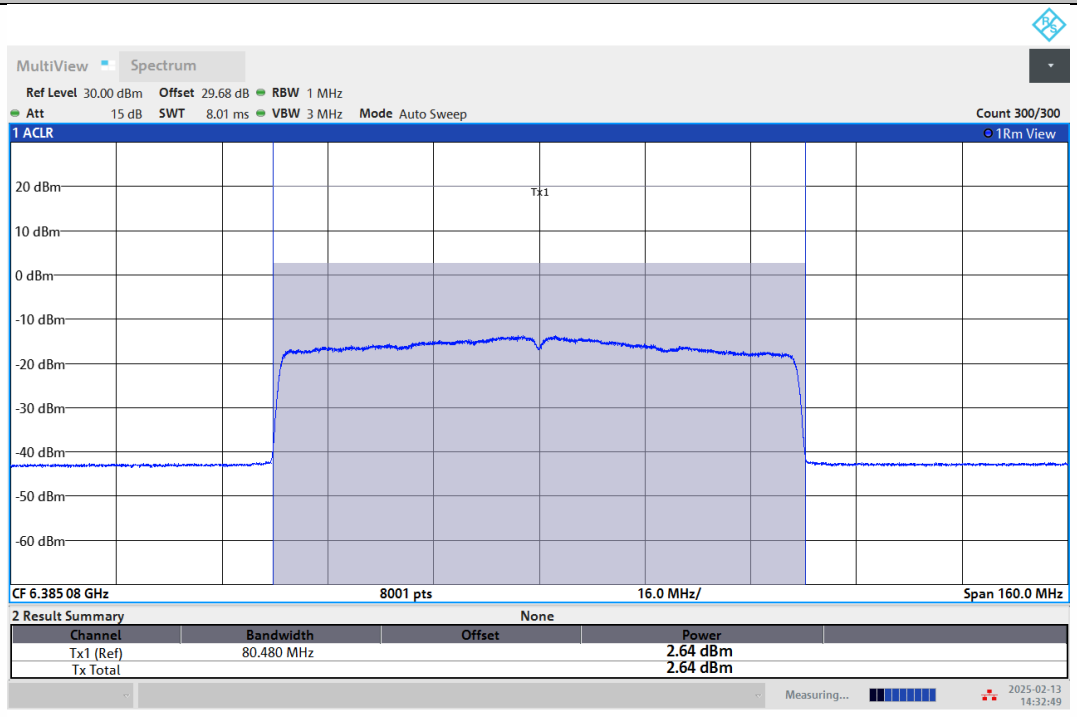

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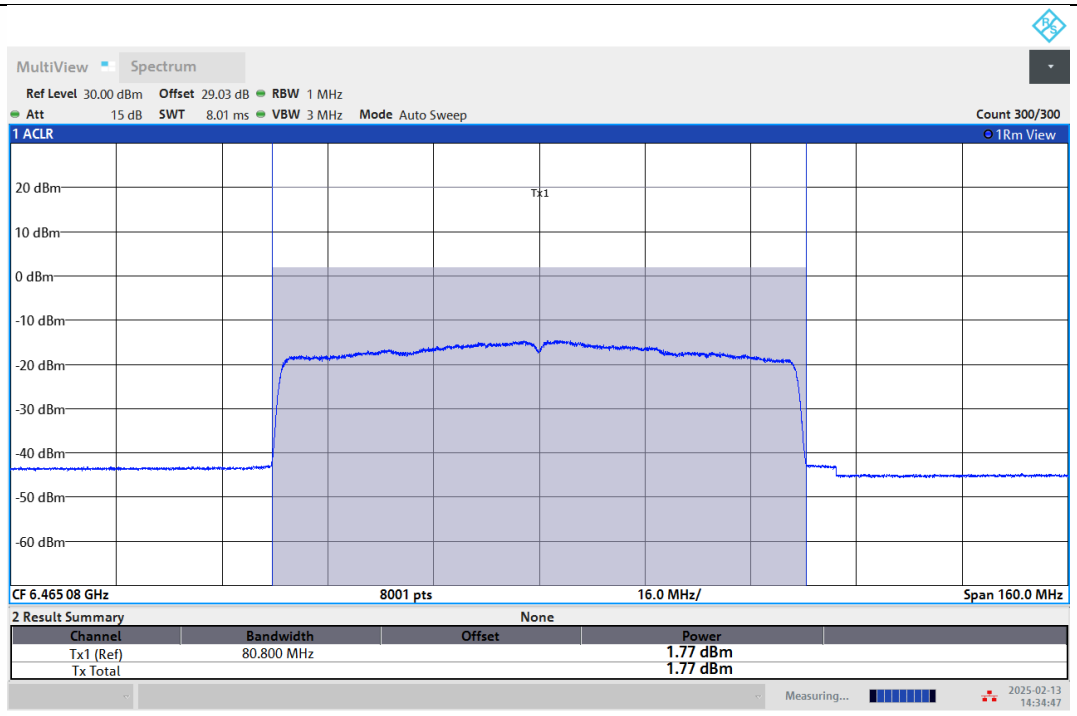

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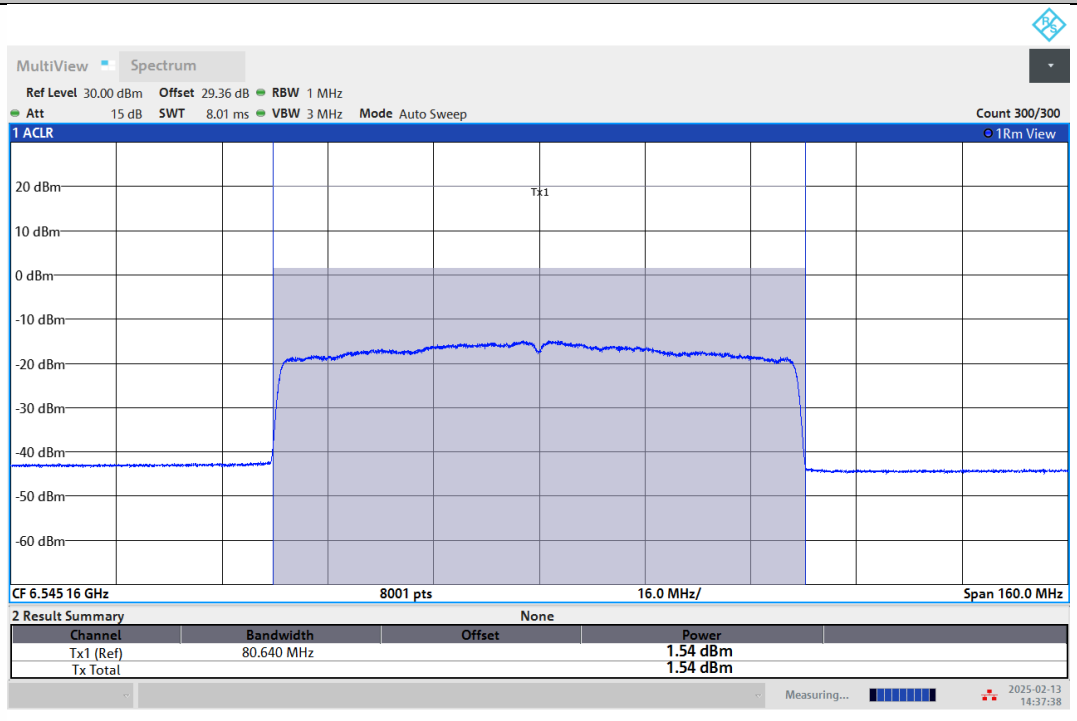

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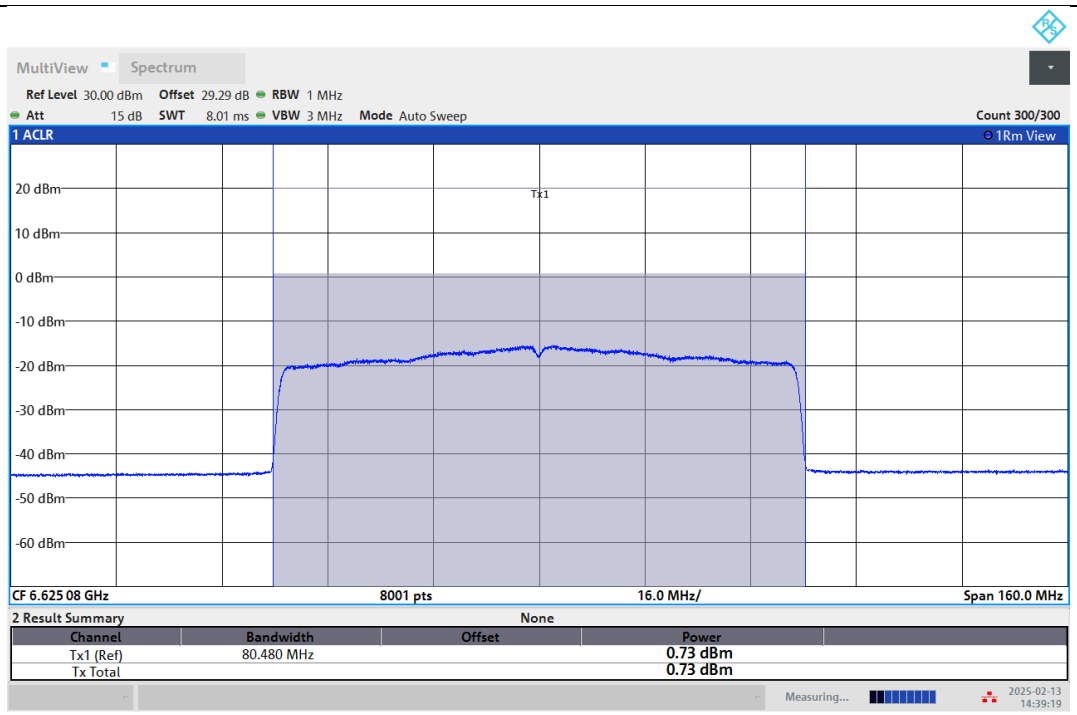

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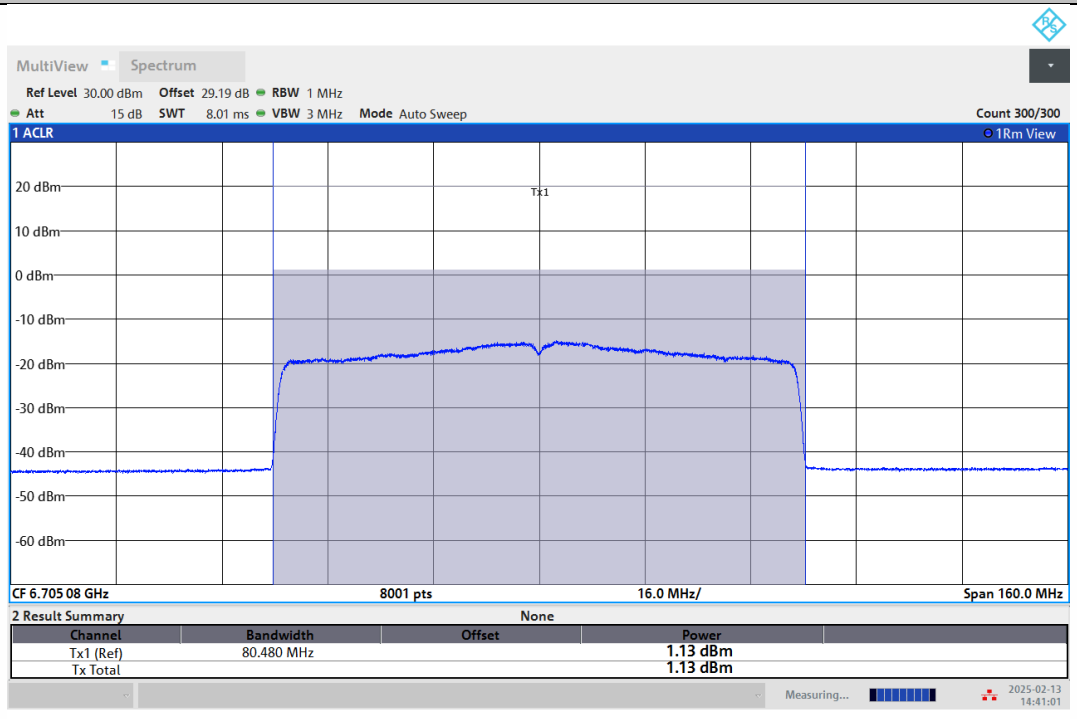

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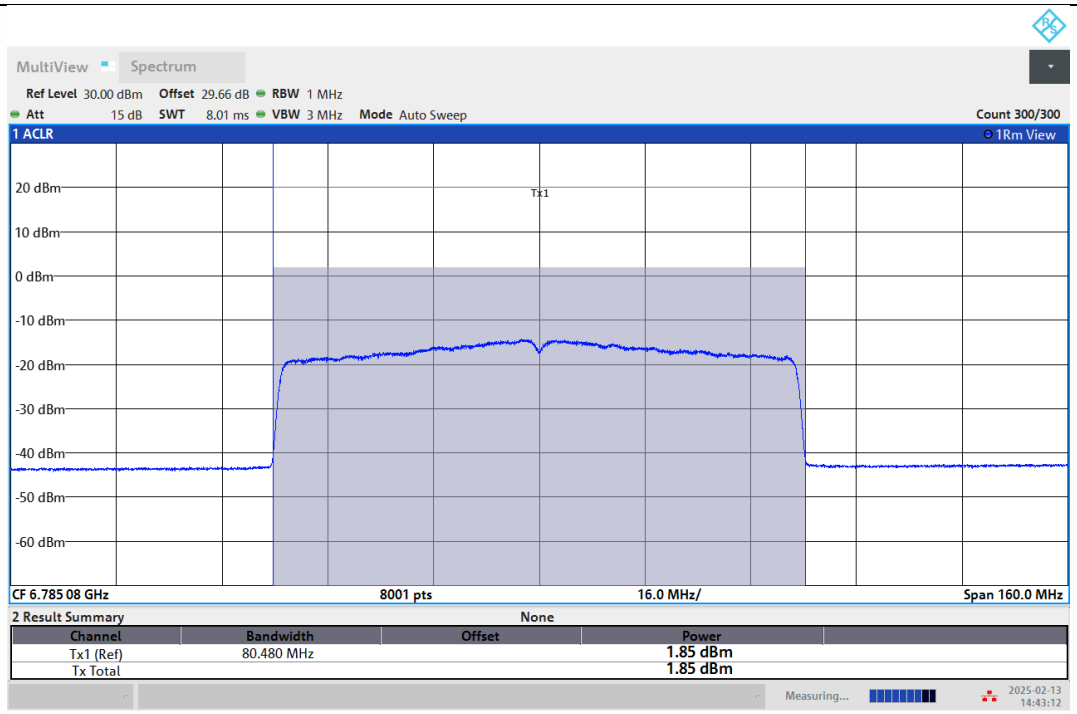

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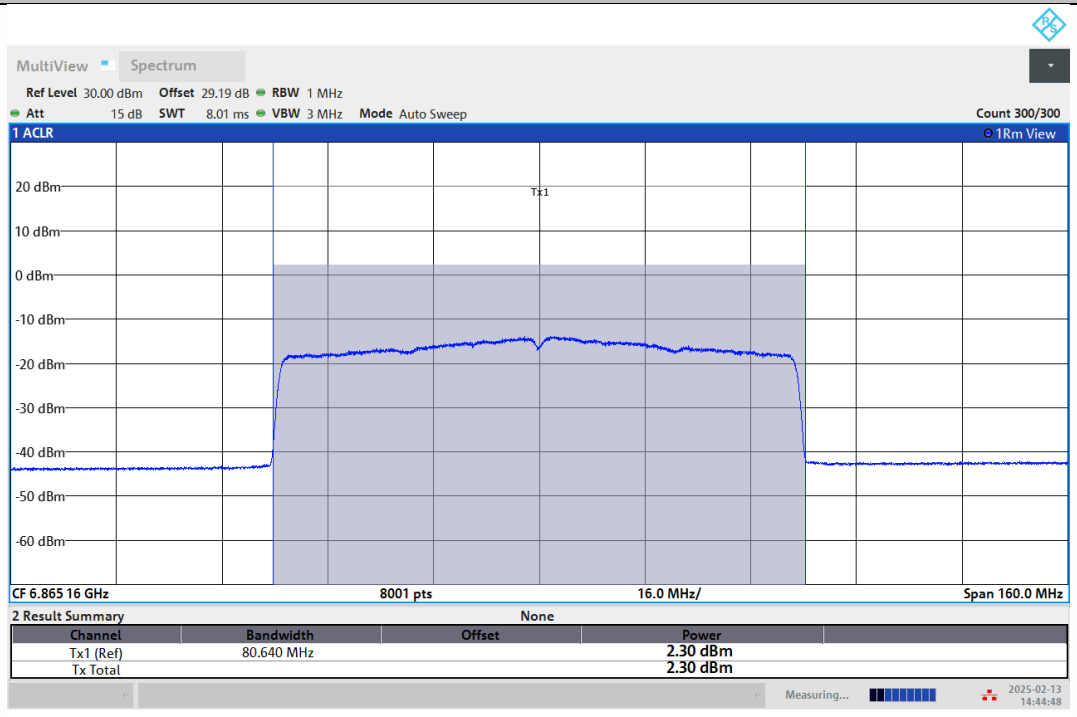

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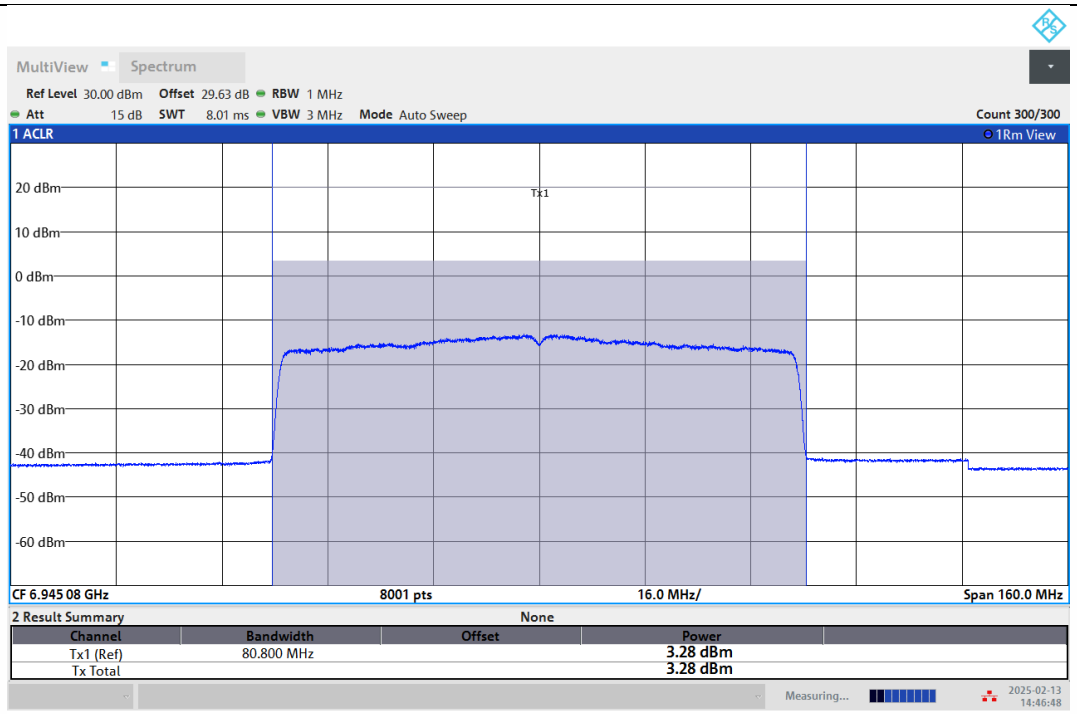

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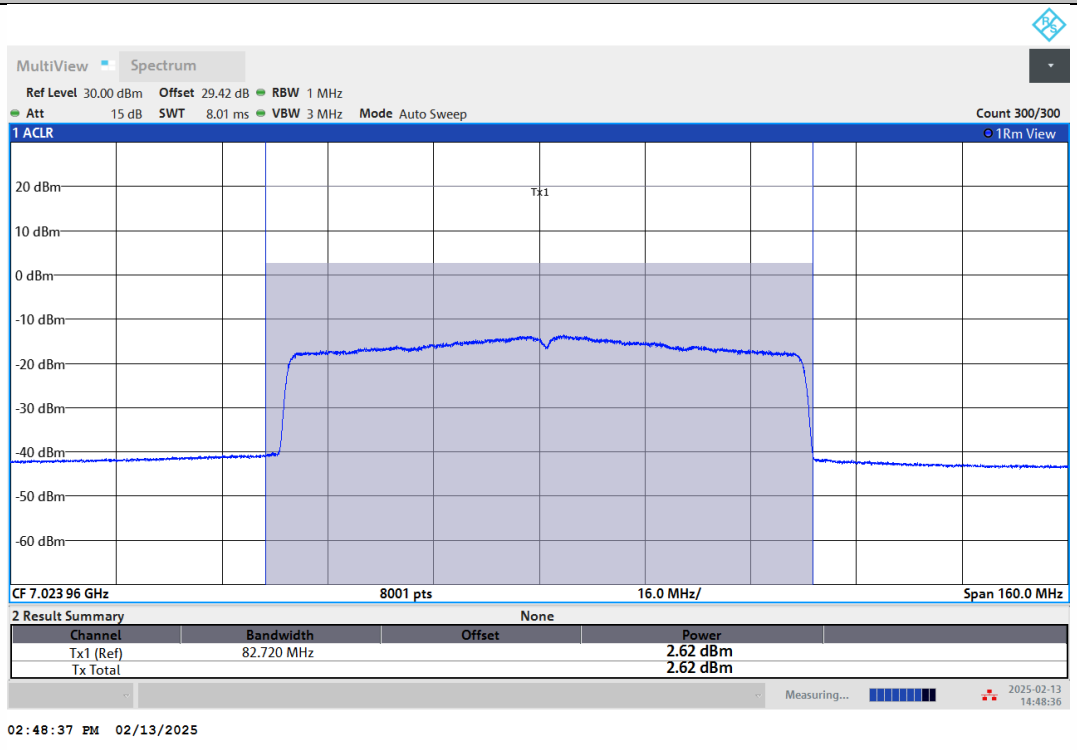

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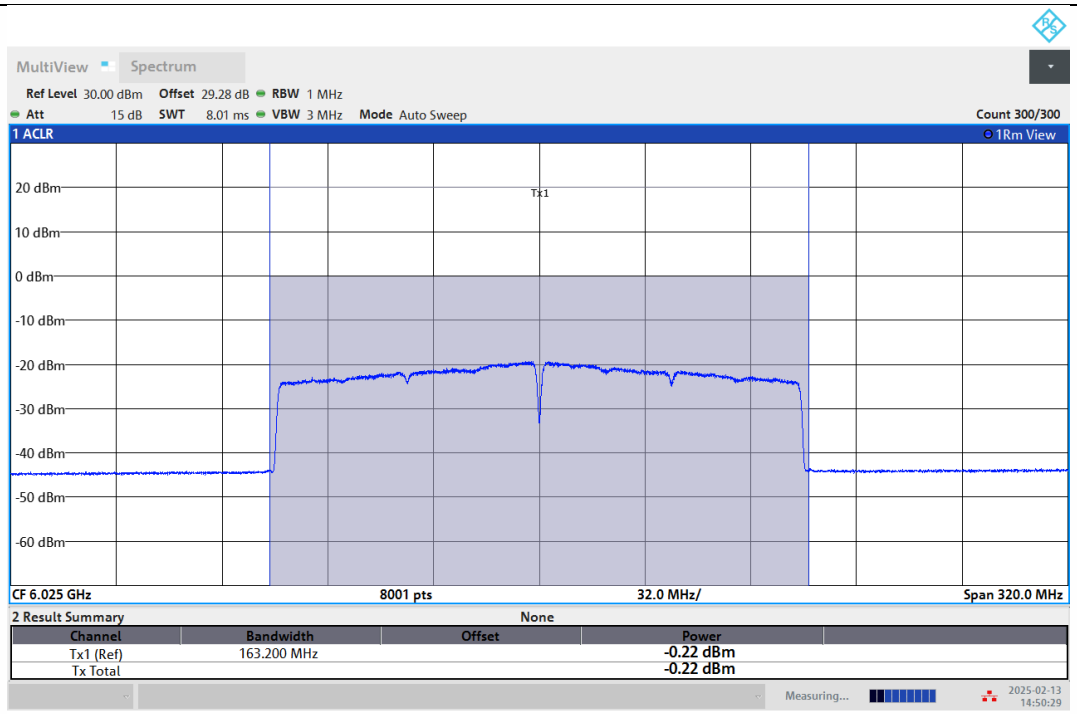

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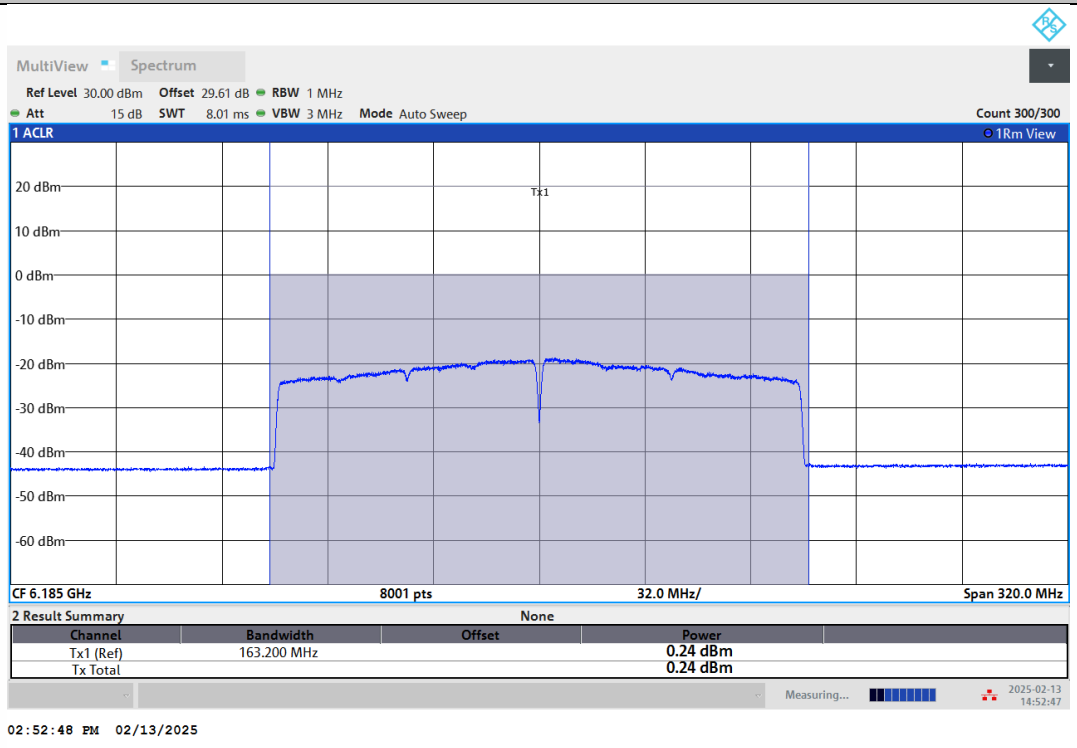

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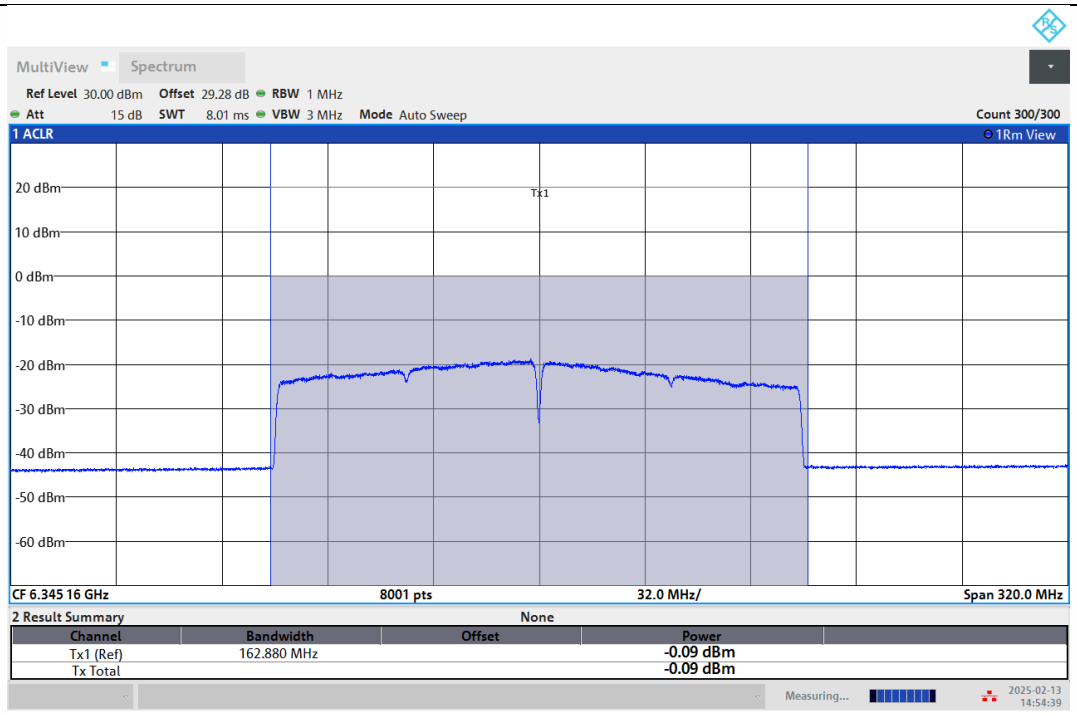

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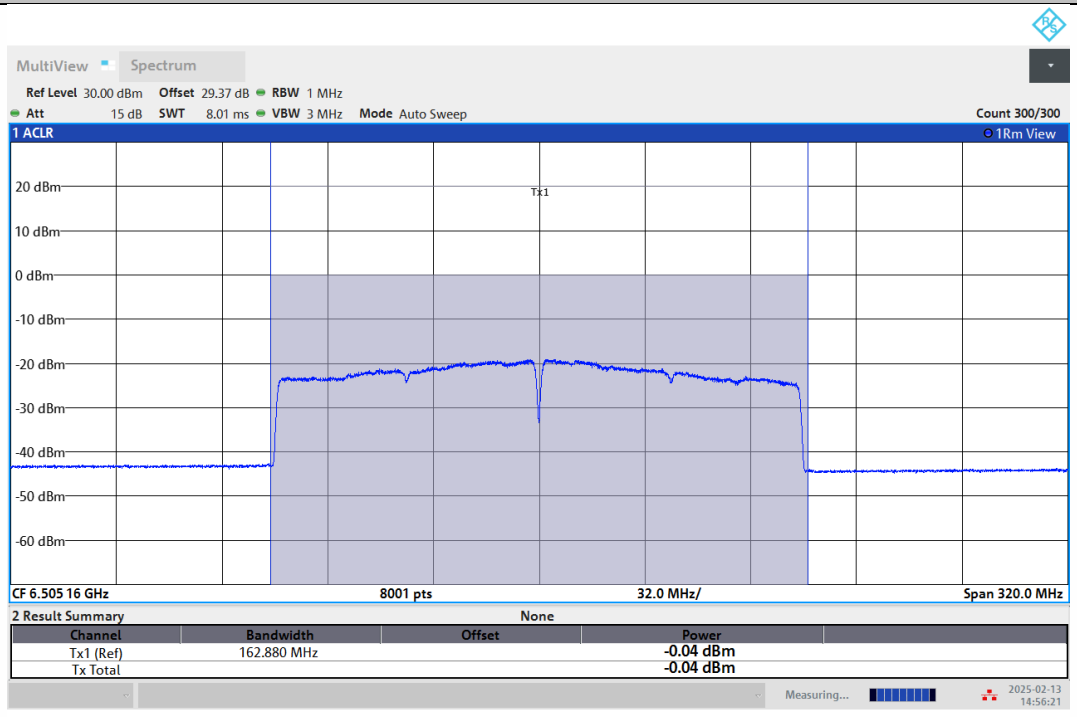
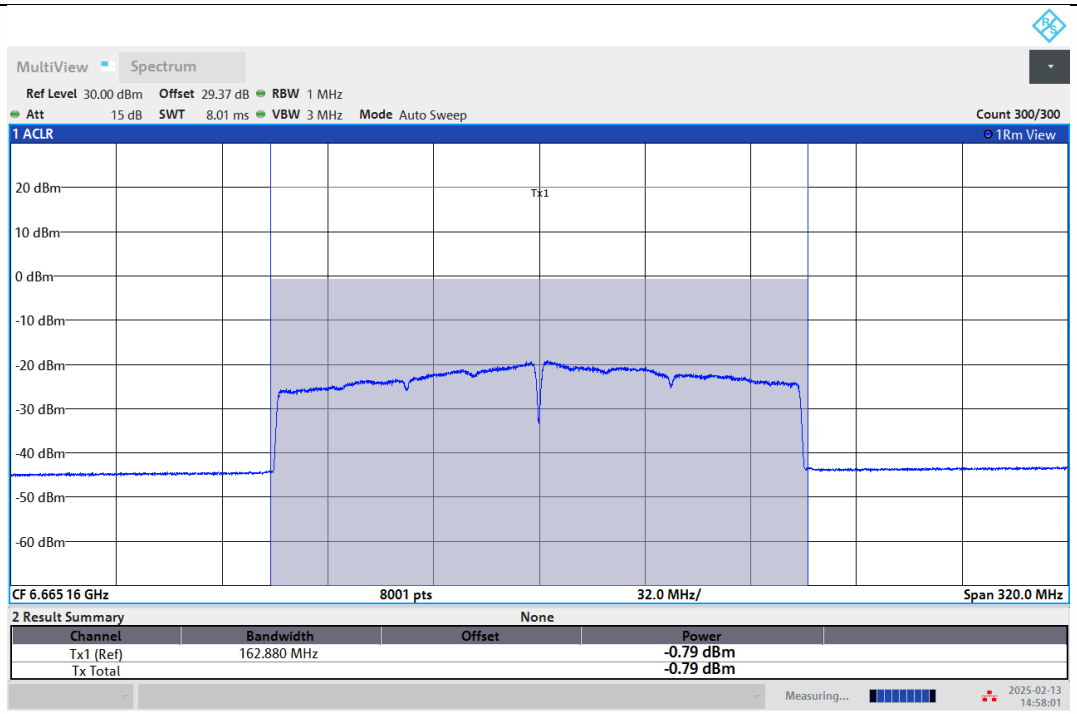


11AX160SISO-Ant1-6665-PASS



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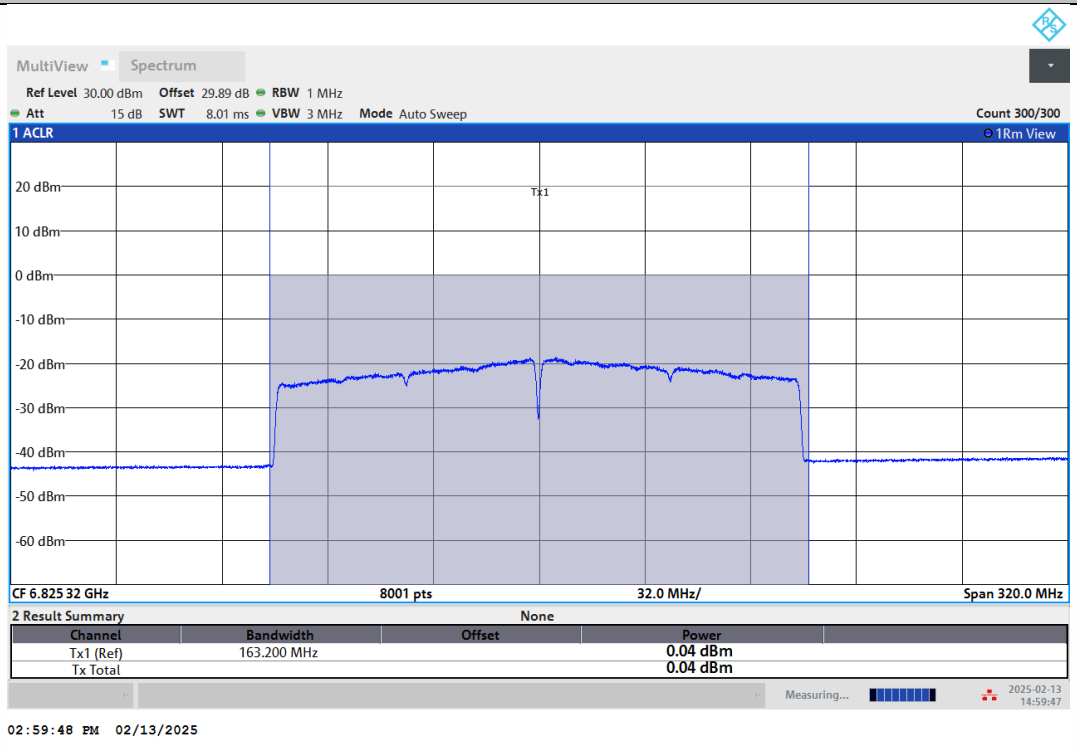

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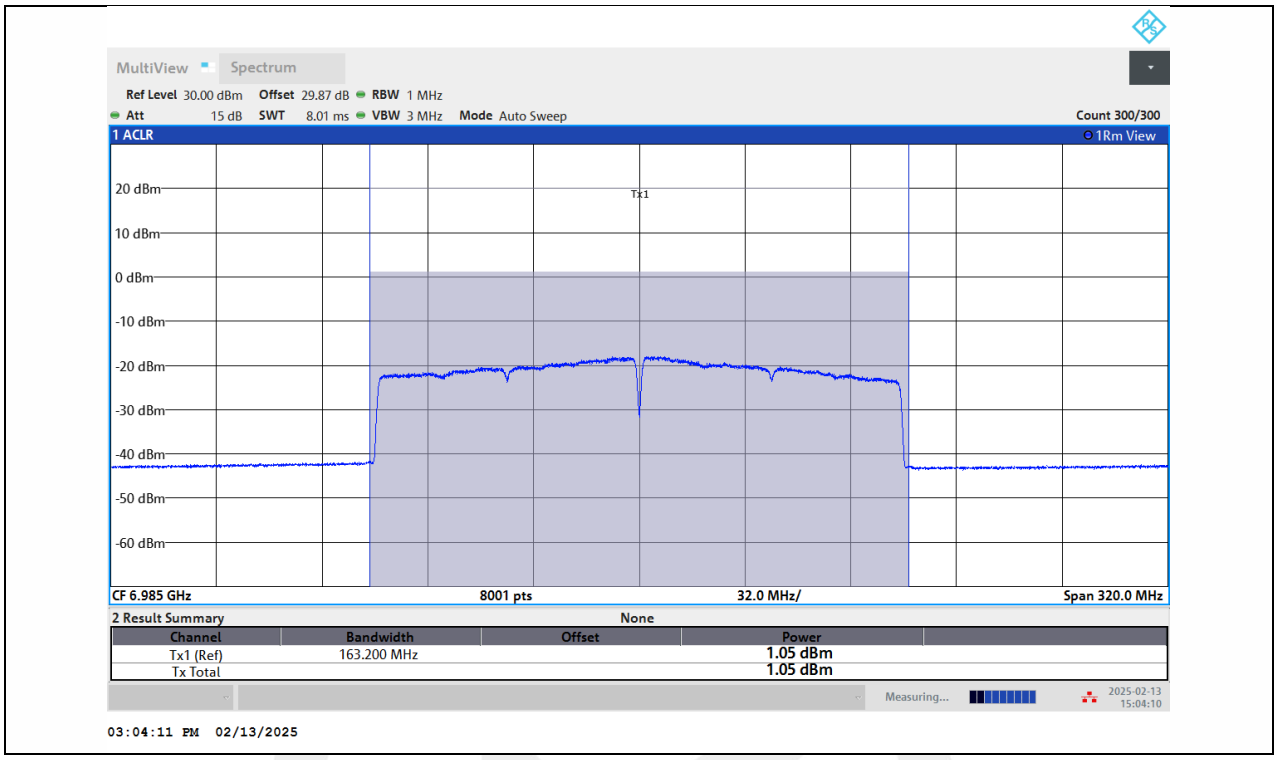

MultiView
Spectrum
Ref Level 30.00 dBm Offset 29.87 dB RBW 1 MHz
Att 15 dB SWT 8.01 ms VBW 3 MHz Mode Auto Sweep
Count 300/300
1 ACLR
1Rm View
20 dBm
10 dBm
0 dBm
-10 dBm
-20 dBm
-30 dBm
-40 dBm
-50 dBm
-60 dBm
Tx1
CF 6.985 GHz
8001 pts
32.0 MHz/
Span 320.0 MHz
2 Result Summary
None
Channel
Bandwidth
Offset
Power
Tx1 (Ref)
163.200 MHz
1.05 dBm
Tx Total
1.05 dBm
Measuring...
2025-02-13
15:04:10
03:04:11 PM 02/13/2025

8.3 MAXIMUM POWER SPECTRAL DENSITY

8.3.1 Applicable Standard

According to FCC Part 15.407(a)
According to 789033 D02 Section II.F
According to 987594 D02 Section II.F
According to RSS-248 4.6

8.3.2 Conformance Limit

FCC Limit:

☐	For an **indoor access point(6ID)** operating in the 5.925-7.125 GHz band, the maximum power spectral density must not exceed 5 dBm e.i.r.p. in any 1-megahertz band.
☐	For **a subordinate device(6PP)** operating under the control of an indoor access point in the 5.925-7.125 GHz band, the maximum power spectral density must not exceed 5 dBm e.i.r.p in any 1-megahertz band.
☐	For **an indoor client device(6XD)** operating under the control of an indoor access point in the 5.925-7.125 GHz band, the maximum power spectral density must not exceed -1 dBm e.i.r.p in any 1-megahertz band.
☐	For **a Dual client device(6CD)** operating under the control of an indoor access point in the 5.925-7.125 GHz band, the maximum power spectral density must not exceed -1 dBm e.i.r.p in any 1-megahertz band.
☐	For **a Dual client device(6CD)** operating under the control of an standard access point in the 5.925-7.125 GHz band, the maximum power spectral density must not exceed 17 dBm & 6dB below AP e.i.r.p in any 1-megahertz band.
The limits are based upon the maximum antenna gain does not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.	

IC Limit:

☐	Other than client devices The maximum e.i.r.p. spectral density shall not exceed 5 dBm/MHz.
☐	Client devices The maximum e.i.r.p. spectral density shall not exceed -1 dBm/MHz.
The limits are based upon the maximum antenna gain does not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.	

8.3.3 Test Configuration

Test according to clause 7.1 radio frequency test setup

8.3.4 Test Procedure

Method SA-2 (trace averaging across on and off times of the EUT transmissions, followed by duty cycle correction).
(i) Measure the duty cycle, x, of the transmitter output signal.
(ii) Set span to encompass the EBW (or the entire 99% occupied bandwidth) of the signal.
(iii) Set RBW = 1 MHz.
(iv) Set VBW ≥ 3 MHz.
(v) Number of points in sweep ≥ 2 × span / RBW. (This ensures that bin-to-bin spacing is ≤ RBW/2, so that narrowband signals are not lost between frequency bins.)
(vi) Sweep time = auto.
(vii) Detector = power averaging (rms).
(viii) Do not use sweep triggering. Allow the sweep to “free run.”
(ix) Trace average at least 100 traces in power averaging (rms) mode; however, the number of traces to be averaged shall be increased above 100 as needed to ensure that the average accurately represents the true average over the on and off periods of the transmitter.

(x) Use the peak search function on the instrument to find the peak of the spectrum and record its value.
(xi) Add 10 log (1/x), where x is the duty cycle, to the measured power in order to compute the average power during the actual transmission times (because the measurement represents an average over both the on and off times of the transmission). For example, add 10 log (1/0.25) = 6 dB if the duty cycle is 25%.

8.3.5 Test Results

Note: The modules of this prototype has been certified, and the data of the module refers to the original report: RFBARR-WTW-P21100969-3.

8.4 IN-BAND EMISSIONS (EMISSION MASK)

8.4.1 Applicable Standard

According to FCC Part 15.407(b)
According to 987594 D02 Section II.J
According to RSS-248 4.7

8.4.2 Conformance Limit

For transmitters operating within the 5.925-7.125 GHz bands: Power spectral density must be suppressed by 20 dB at 1 MHz outside of channel edge, by 28 dB at one channel bandwidth from the channel center, and by 40 dB at one- and one-half times the channel bandwidth away from channel center. At frequencies between one megahertz outside an unlicensed device's channel edge and one channel bandwidth from the center of the channel, the limits must be linearly interpolated between 20 dB and 28 dB suppression, and at frequencies between one and one- and one-half times an unlicensed device's channel bandwidth, the limits must be linearly interpolated between 28 dB and 40 dB suppression. Emissions removed from the channel center by more than one- and one-half times the channel bandwidth must be suppressed by at least 40 dB.

8.4.3 Test Configuration

Test according to clause 7.1 radio frequency test setup

8.4.4 Test Procedure

1. Connect output of the antenna port to a spectrum analyzer or EMI receiver, with appropriate attenuation, as to not damage the instrumentation.
2. Set the reference level of the measuring equipment in accordance with procedure 4.1.5.2 of ANSI C63.10-2013.
3. Measure the 26 dB EBW using the test procedure 12.4.1 of ANSI C63.10-2013. (This will be used to determine the channel edge.)
4. Measure the power spectral density (which will be used for emissions mask reference) using the following procedure:
a) Set the span to encompass the entire 26 dB EBW of the signal.
b) Set RBW = same RBW used for 26 dB EBW measurement.
c) Set VBW ≥ 3 x RBW
d) Number of points in sweep ≥ [2 x span / RBW].
e) Sweep time = auto.
f) Detector = RMS
g) Trace average at least 100 traces in power averaging (rms) mode.
h) Use the peak search function on the instrument to find the peak of the spectrum.
5. For the purposes of developing the emission mask, the channel bandwidth is defined as the 26 dB EBW.
6. Using the measuring equipment limit line function, develop the emissions mask based on the following requirements. The emissions power spectral density must be reduced below the peak power spectral density (in dB) as follows: a. Suppressed by 20 dB at 1 MHz outside of the channel edge. (The channel edge is defined as the 26-dB point on either side of the carrier center frequency.)
b. Suppressed by 28 dB at one channel bandwidth from the channel center.
c. Suppressed by 40 dB at one- and one-half times the channel bandwidth from the channel center.
7. Adjust the span to encompass the entire mask as necessary.
8. Clear trace.
9. Trace average at least 100 traces in power averaging (rms) mode.
10. Adjust the reference level as necessary so that the crest of the channel touches the top of the emission mask.

8.4.5 Test Results

Note: The modules of this prototype has been certified, and the data of the module refers to the original report: RFBARR-WTW-P21100969-3.

8.5 CONTENTION BASED PROTOCOL

8.5.1 Applicable Standard

According to FCC Part 15.407(d)
According to 987594 D02 Section II.I
According to RSS-248 4.8

8.5.2 Conformance Limit

Indoor access points, subordinate devices and client devices operating in the 5.925-7.125 GHz band (herein referred to as unlicensed devices) are required to use technologies that include a contention-based protocol to avoid co-channel interference with incumbent devices sharing the band. To ensure incumbent co-channel operations are detected in a technology-agnostic manner, unlicensed devices are required to detect co-channel radio frequency energy (energy detect) and avoid simultaneous transmission.
Unlicensed low-power indoor devices must detect co-channel radio frequency power that is at least -62 dBm or lower. Upon detection of energy in the band, unlicensed low power indoor devices must vacate the channel (in which incumbent signal is transmitted) and stay off the incumbent channel as long as detected radio frequency power is equal to or greater than the threshold (-62 dBm). The -62 dBm (or lower) threshold is referenced to a 0 dBi antenna gain.
To ensure incumbent operations are reliably detected in the band, low power indoor devices must detect RF energy throughout their intended operating channel. For example, an 802.11 device that plans to transmit a 40 MHz- wide signal (on a primary 20 MHz channel and a secondary 20 MHz channel) must detect energy throughout the entire 40 MHz channel. Additionally, low-power indoor devices must detect co-channel energy with 90% or greater certainty.

8.5.3 Test Configuration

a) Simulating Incumbent Signal
The incumbent signal is assumed to be noise-like. One example of such transmission could be Digital Video Broadcasting (DVB) systems that use Orthogonal Frequency Division Multiplexing (OFDM). Incumbent systems may also use different bandwidths for their transmissions. A 10 MHz-wide additive white Gaussian noise (AWGN) signal is selected to simulate and represent incumbent transmission.
b) Required number of tests
Incumbent and EUT (access point, subordinate or client) signals may occupy different portions of the channel. Depending on the EUT transmission bandwidth and incumbent signal center frequency (simulated by a 10 MHz-wide AWGN signal), the center frequency of the EUT signal f_{c1} may fall within the incumbent's occupied bandwidth, or outside of it.

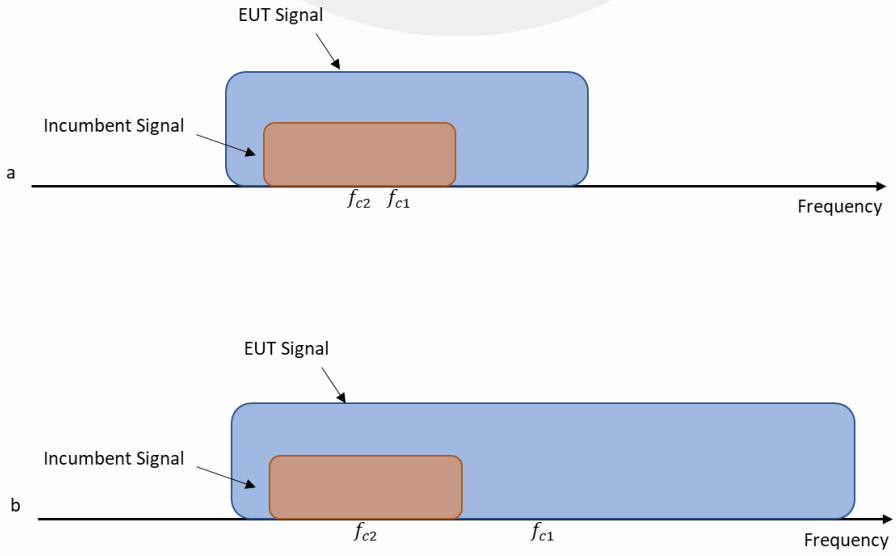


Figure. Two possible scenarios where a) center frequency of EUT transmission falls within incumbent's bandwidth, or b) outside of it

To ensure EUT reliably detects an incumbent signal in both scenarios shown in Figure, the detection threshold test may be repeated more than once with the incumbent signal (having center frequency f_{c2}) tuned to different center frequencies within the UT transmission bandwidth. The criteria specified in Table determines how many times the detection threshold test must be performed;

Table. Criteria to determine number of times detection threshold test may be performed

If	Number of Tests	Placement of Incumbent Transmission
$BW_{EUT} \leq BW_{Inc}$	Once	Tune incumbent and EUT transmissions ($f_{c1} = f_{c2}$)
$BW_{Inc} \leq BW_{EUT} \leq 2BW_{Inc}$	Once	Incumbent transmission is contained within BW_{EUT}
$2BW_{Inc} \leq BW_{EUT} \leq 4BW_{Inc}$	Twice. Incumbent transmission is contained within BW_{EUT}	Incumbent transmission is located as closely as possible to the lower edge and upper edge, respectively, of the EUT channel
$BW_{EUT} > 4BW_{Inc}$	Three times	Incumbent transmission is located as closely as possible to the lower edge of the EUT channel, in the middle of EUT channel, and as closely as possible to the upper edge of the EUT channel

where:
BW_{EUT}: Transmission bandwidth of EUT signal
BW_{Inc}: Transmission bandwidth of the simulated incumbent signal (10 MHz wide AWGN signal)
f_{c1}: Center frequency of EUT transmission
f_{c2}: Center frequency of simulated incumbent signal

8.5.4 Test Procedure

To ensure the EUT is capable of detecting co-channel energy, the first step is to configure the EUT to transmit with a constant duty cycle. To simulate an incumbent signal, a signal generator (or similar source) that is capable of generating band-limited additive white Gaussian noise (AWGN) is required. Depending on the EUT antenna configuration, the AWGN signal can be provided to the EUT receiver via a conducted method (Figure). Figure shows the conducted test setup where a band-limited AWGN signal is generated at a very low power level and injected into the EUT's antenna port. The AWGN signal power level is then incrementally increased while the EUT transmission is monitored on a signal analyzer 2 to verify if the EUT can sense the AWGN signal and can subsequently cease its transmission. A triggered measurement, as shown in Figure, is optional, and assists with determining the time it takes the EUT to cease transmission (or vacate the channel) upon detecting RF energy. If the EUT has only one antenna port, then an AWGN signal source can be connected to the same antenna port.

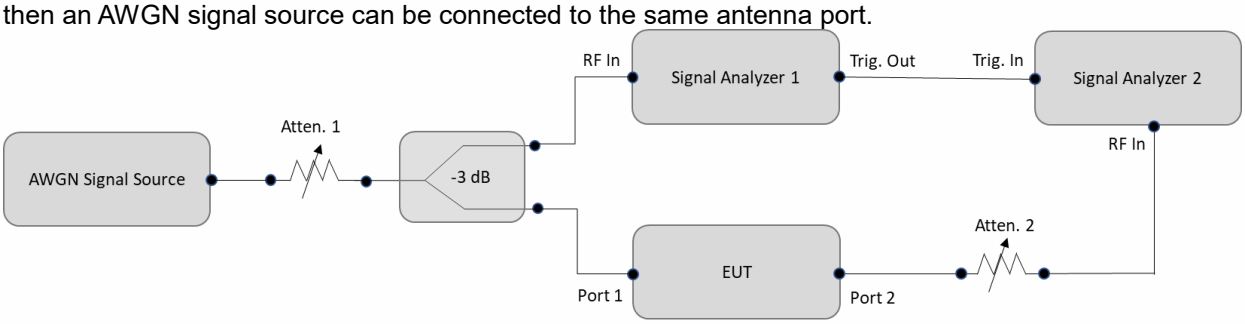


Figure. Contention-based protocol test setup, conducted method Step-by-Step Procedure, Conducted Setup

1. Configure the EUT to transmit with a constant duty cycle.
2. Set the operating parameters of the EUT including power level, operating frequency, modulation and bandwidth.
3. Set the signal analyzer center frequency to the nominal EUT channel center frequency. The span range of the signal analyzer shall be between two times and five times the OBW of the EUT.

Connect the output port of the EUT to the signal analyzer 2, as shown in Figure. Ensure that the attenuator 2 provides enough attenuation to not overload the signal analyzer 2 receiver.
4. Monitoring the signal analyzer 2, verify the EUT is operating and transmitting with the parameters set at step two.
5. Using an AWGN signal source, generate (but do not transmit, i.e., RF OFF) a 10 MHz-wide AWGN signal. Use Table 1 to determine the center frequency of the 10 MHz AWGN signal relative to the EUT's channel bandwidth and center frequency.
6. Set the AWGN signal power to an extremely low level (more than 20 dB below the -62 dBm threshold). Connect the AWGN signal source, via a 3-dB splitter, to the signal analyzer 1 and the EUT as shown in Figure.
7. Transmit the AWGN signal (RF ON) and verify its characteristics on the signal analyzer 1.
8. Monitor the signal analyzer 2 to verify if the AWGN signal has been detected and the EUT has ceased transmission. If the EUT continues to transmit, then incrementally increase the AWGN signal power level until the EUT stops transmitting.
9. (Including all losses in the RF paths) Determine and record the AWGN signal power level (at the EUT's antenna port) at which the EUT ceased transmission. Repeat the procedure at least 10 times to verify the EUT can detect an AWGN signal with 90% (or better) level of certainty.
10. Refer to Table to determine number of times the detection threshold testing needs to be repeated. If testing is required more than once, then go back to step 5, choose a different center frequency for the AWGN signal and repeat the process.

8.5.5 Test Results

PASS

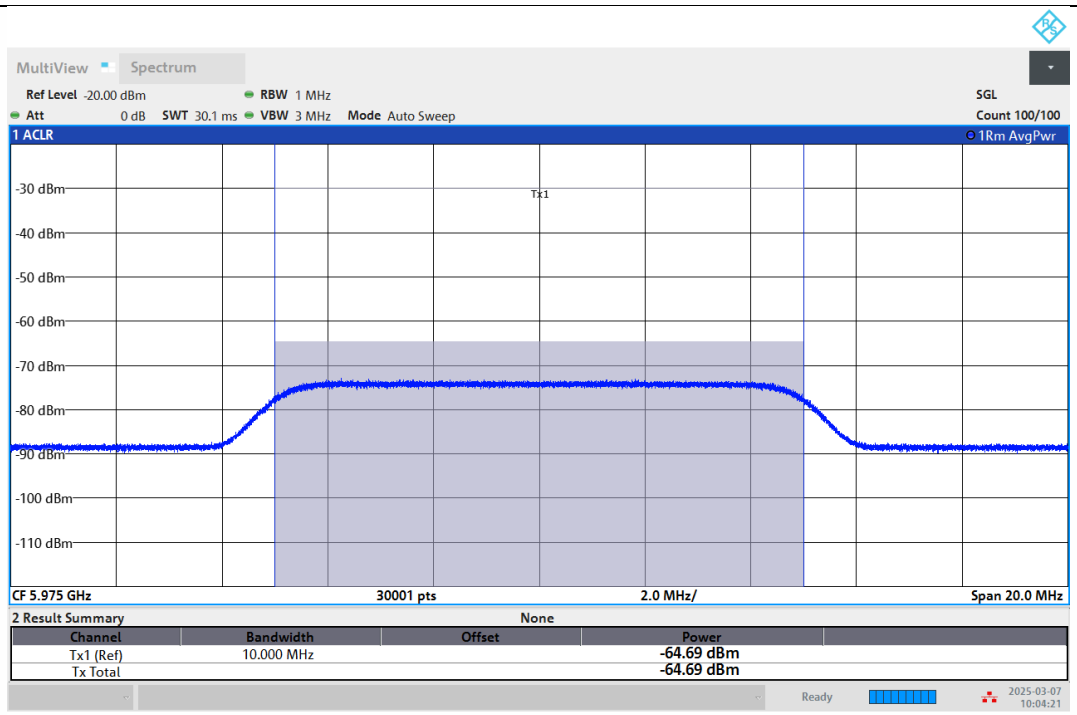
Test Mode	Antenna Gain [dBi]	Channel	Interference Frequency [MHz]		EUT Tx Status	Injected (AWGN) Power [dBm]	Path Loss [dB]	Adjusted Power [dBm]	Detection Limit [dBm]	Margin[dBm]	Detection Rate		Verdict
											Result [%]	Limit [%]	
11AX20SISO	4.95	5975	Center	5975	OFF	-64.69	0	-69.64	-62	7.64	100	90	PASS
11AX20SISO	4.95	5975	Center	5975	Minimal	-65.67	0	-70.62	-62	---	0	---	---
11AX20SISO	4.95	5975	Center	5975	ON	-66	0	-70.95	-62	---	---	---	---
11AX20SISO	4.95	6455	Center	6455	OFF	-61.72	0	-66.67	-62	4.67	100	90	PASS
11AX20SISO	4.95	6455	Center	6455	Minimal	-62.68	0	-67.63	-62	---	0	---	---
11AX20SISO	4.95	6455	Center	6455	ON	-63	0	-67.95	-62	---	---	---	---
11AX20SISO	4.95	6535	Center	6535	OFF	-64.73	0	-69.68	-62	7.68	100	90	PASS
11AX20SISO	4.95	6535	Center	6535	Minimal	-65.69	0	-70.64	-62	---	0	---	---
11AX20SISO	4.95	6535	Center	6535	ON	-63	0	-67.95	-62	---	---	---	---
11AX20SISO	4.95	6935	Center	6935	OFF	-61.69	0	-66.64	-62	4.64	100	90	PASS
11AX20SISO	4.95	6935	Center	6935	Minimal	-62.67	0	-67.62	-62	---	0	---	---
11AX20SISO	4.95	6935	Center	6935	ON	-63	0	-67.95	-62	---	---	---	---
11AX160MIMO	4.95	6025	Center	6100	OFF	-59.73	0	-64.68	-62	2.68	100	90	PASS
11AX160MIMO	4.95	6025	Center	6025	OFF	-58.73	0	-63.68	-62	1.68	100	90	PASS
11AX160MIMO	4.95	6025	Center	5950	OFF	-57.74	0	-62.69	-62	0.69	100	90	PASS
11AX160MIMO	4.95	6025	Center	6100	Minimal	-60.63	0	-65.58	-62	---	0	---	---
11AX160MIMO	4.95	6025	Center	6025	Minimal	-59.71	0	-64.66	-62	---	0	---	---
11AX160MIMO	4.95	6025	Center	5950	Minimal	-58.75	0	-63.7	-62	---	0	---	---
11AX160MIMO	4.95	6025	Center	6100	ON	-59	0	-63.95	-62	---	---	---	---
11AX160MIMO	4.95	6025	Center	6025	ON	-59	0	-63.95	-62	---	---	---	---
11AX160MIMO	4.95	6025	Center	5950	ON	-59	0	-63.95	-62	---	---	---	---
11AX160MIMO	4.95	6505	Center	6580	OFF	-58.66	0	-63.61	-62	1.61	100	90	PASS
11AX160MIMO	4.95	6505	Center	6505	OFF	-57.67	0	-62.62	-62	0.62	100	90	PASS
11AX160MIMO	4.95	6505	Center	6430	OFF	-58.73	0	-63.68	-62	1.68	100	90	PASS
11AX160MIMO	4.95	6505	Center	6580	Minimal	-59.64	0	-64.59	-62	---	0	---	---
11AX160MIMO	4.95	6505	Center	6505	Minimal	-58.68	0	-63.63	-62	---	0	---	---
11AX160MIMO	4.95	6505	Center	6430	Minimal	-59.71	0	-64.66	-62	---	0	---	---
11AX160	4.95	6505	Cent	65	ON	-59	0	-63.9	-62	---	---	---	---

MIMO			er	80				5					
11AX160 MIMO	4.95	6505	Center	6505	ON	-59	0	-63.95	-62	---	---	---	---
11AX160 MIMO	4.95	6505	Center	6430	ON	-59	0	-63.95	-62	---	---	---	---
11AX160 MIMO	4.95	6665	Center	6740	OFF	-58.83	0	-63.78	-62	1.78	100	90	PASS
11AX160 MIMO	4.95	6665	Center	6665	OFF	-58.5	0	-63.45	-62	1.45	100	90	PASS
11AX160 MIMO	4.95	6665	Center	6590	OFF	-58.61	0	-63.56	-62	1.56	100	90	PASS
11AX160 MIMO	4.95	6665	Center	6740	Minimal	-59.81	0	-64.76	-62	---	0	---	---
11AX160 MIMO	4.95	6665	Center	6665	Minimal	-59.49	0	-64.44	-62	---	0	---	---
11AX160 MIMO	4.95	6665	Center	6590	Minimal	-59.59	0	-64.54	-62	---	0	---	---
11AX160 MIMO	4.95	6665	Center	6740	ON	-59	0	-63.95	-62	---	---	---	---
11AX160 MIMO	4.95	6665	Center	6665	ON	-59	0	-63.95	-62	---	---	---	---
11AX160 MIMO	4.95	6665	Center	6590	ON	-59	0	-63.95	-62	---	---	---	---
11AX160 MIMO	4.95	6985	Center	7060	OFF	-62.64	0	-67.59	-62	5.59	100	90	PASS
11AX160 MIMO	4.95	6985	Center	6985	OFF	-59.8	0	-64.75	-62	2.75	100	90	PASS
11AX160 MIMO	4.95	6985	Center	6910	OFF	-58.81	0	-63.76	-62	1.76	100	90	PASS
11AX160 MIMO	4.95	6985	Center	7060	Minimal	-63.65	0	-68.6	-62	---	0	---	---
11AX160 MIMO	4.95	6985	Center	6985	Minimal	-60.71	0	-65.66	-62	---	0	---	---
11AX160 MIMO	4.95	6985	Center	6910	Minimal	-59.79	0	-64.74	-62	---	0	---	---
11AX160 MIMO	4.95	6985	Center	7060	ON	-60	0	-64.95	-62	---	---	---	---
11AX160 MIMO	4.95	6985	Center	6985	ON	-59	0	-63.95	-62	---	---	---	---
11AX160 MIMO	4.95	6985	Center	6910	ON	-59	0	-63.95	-62	---	---	---	---

Test Mode	Antenna Gain [dBi]	Channel	Interference Frequency [MHz]		Injected (AWGN) Power [dBm]	EUT Tx Status	T1	T2	T3	T4	T5	T6	T7	T8	T9	T10	Rate [%]	Limit [%]	Verdict
11AX20S ISO	4.95	5975	Center	5975	-69.64	OFF	1	1	1	1	1	1	1	1	1	1	100	90	PASS
11AX20S ISO	4.95	5975	Center	5975	-70.62	Minimal	---	---	---	---	---	---	---	---	---	---	0	---	---
11AX20S ISO	4.95	5975	Center	5975	-70.95	ON	---	---	---	---	---	---	---	---	---	---	---	---	---
11AX20S ISO	4.95	6455	Center	6455	-66.67	OFF	1	1	1	1	1	1	1	1	1	1	100	90	PASS
11AX20S ISO	4.95	6455	Center	6455	-67.63	Minimal	---	---	---	---	---	---	---	---	---	---	0	---	---
11AX20S ISO	4.95	6455	Center	6455	-67.95	ON	---	---	---	---	---	---	---	---	---	---	---	---	---
11AX20S ISO	4.95	6535	Center	6535	-69.68	OFF	1	1	1	1	1	1	1	1	1	1	100	90	PASS
11AX20S ISO	4.95	6535	Center	6535	-70.64	Minimal	---	---	---	---	---	---	---	---	---	---	0	---	---
11AX20S ISO	4.95	6535	Center	6535	-67.95	ON	---	---	---	---	---	---	---	---	---	---	---	---	---
11AX20S ISO	4.95	6935	Center	6935	-66.64	OFF	1	1	1	1	1	1	1	1	1	1	100	90	PASS
11AX20S ISO	4.95	6935	Center	6935	-67.62	Minimal	---	---	---	---	---	---	---	---	---	---	0	---	---
11AX20S ISO	4.95	6935	Center	6935	-67.95	ON	---	---	---	---	---	---	---	---	---	---	---	---	---
11AX160 MIMO	4.95	6025	Center	6100	-64.68	OFF	1	1	1	1	1	1	1	1	1	1	100	90	PASS
11AX160 MIMO	4.95	6025	Center	6025	-63.68	OFF	1	1	1	1	1	1	1	1	1	1	100	90	PASS
11AX160 MIMO	4.95	6025	Center	5950	-62.69	OFF	1	1	1	1	1	1	1	1	1	1	100	90	PASS
11AX160 MIMO	4.95	6025	Center	6100	-65.58	Minimal	---	---	---	---	---	---	---	---	---	---	0	---	---
11AX160 MIMO	4.95	6025	Center	6025	-64.66	Minimal	---	---	---	---	---	---	---	---	---	---	0	---	---
11AX160 MIMO	4.95	6025	Center	5950	-63.7	Minimal	---	---	---	---	---	---	---	---	---	---	0	---	---
11AX160 MIMO	4.95	6025	Center	6100	-63.95	ON	---	---	---	---	---	---	---	---	---	---	---	---	---
11AX160 MIMO	4.95	6025	Center	6025	-63.95	ON	---	---	---	---	---	---	---	---	---	---	---	---	---
11AX160 MIMO	4.95	6025	Center	5950	-63.95	ON	---	---	---	---	---	---	---	---	---	---	---	---	---
11AX160 MIMO	4.95	6505	Center	6580	-63.61	OFF	1	1	1	1	1	1	1	1	1	1	100	90	PASS
11AX160 MIMO	4.95	6505	Center	6505	-62.62	OFF	1	1	1	1	1	1	1	1	1	1	100	90	PASS
11AX160 MIMO	4.95	6505	Center	6430	-63.68	OFF	1	1	1	1	1	1	1	1	1	1	100	90	PASS
11AX160 MIMO	4.95	6505	Center	6580	-64.59	Minimal	---	---	---	---	---	---	---	---	---	---	0	---	---
11AX160 MIMO	4.95	6505	Center	6505	-63.63	Minimal	---	---	---	---	---	---	---	---	---	---	0	---	---
11AX160 MIMO	4.95	6505	Center	6430	-64.66	Minimal	---	---	---	---	---	---	---	---	---	---	0	---	---

11AX160 MIMO	4.95	6505	Center	6580	-63.95	ON	---	---	---	---	---	---	---	---	---	---	---	---
11AX160 MIMO	4.95	6505	Center	6505	-63.95	ON	---	---	---	---	---	---	---	---	---	---	---	---
11AX160 MIMO	4.95	6505	Center	6430	-63.95	ON	---	---	---	---	---	---	---	---	---	---	---	---
11AX160 MIMO	4.95	6665	Center	6740	-63.78	OFF	1	1	1	1	1	1	1	1	1	100	90	PASS
11AX160 MIMO	4.95	6665	Center	6665	-63.45	OFF	1	1	1	1	1	1	1	1	1	100	90	PASS
11AX160 MIMO	4.95	6665	Center	6590	-63.56	OFF	1	1	1	1	1	1	1	1	1	100	90	PASS
11AX160 MIMO	4.95	6665	Center	6740	-64.76	Minimal	---	---	---	---	---	---	---	---	---	0	---	---
11AX160 MIMO	4.95	6665	Center	6665	-64.44	Minimal	---	---	---	---	---	---	---	---	---	0	---	---
11AX160 MIMO	4.95	6665	Center	6590	-64.54	Minimal	---	---	---	---	---	---	---	---	---	0	---	---
11AX160 MIMO	4.95	6665	Center	6740	-63.95	ON	---	---	---	---	---	---	---	---	---	---	---	---
11AX160 MIMO	4.95	6665	Center	6665	-63.95	ON	---	---	---	---	---	---	---	---	---	---	---	---
11AX160 MIMO	4.95	6665	Center	6590	-63.95	ON	---	---	---	---	---	---	---	---	---	---	---	---
11AX160 MIMO	4.95	6985	Center	7060	-67.59	OFF	1	1	1	1	1	1	1	1	1	100	90	PASS
11AX160 MIMO	4.95	6985	Center	6985	-64.75	OFF	1	1	1	1	1	1	1	1	1	100	90	PASS
11AX160 MIMO	4.95	6985	Center	6910	-63.76	OFF	1	1	1	1	1	1	1	1	1	100	90	PASS
11AX160 MIMO	4.95	6985	Center	7060	-68.6	Minimal	---	---	---	---	---	---	---	---	---	0	---	---
11AX160 MIMO	4.95	6985	Center	6985	-65.66	Minimal	---	---	---	---	---	---	---	---	---	0	---	---
11AX160 MIMO	4.95	6985	Center	6910	-64.74	Minimal	---	---	---	---	---	---	---	---	---	0	---	---
11AX160 MIMO	4.95	6985	Center	7060	-64.95	ON	---	---	---	---	---	---	---	---	---	---	---	---
11AX160 MIMO	4.95	6985	Center	6985	-63.95	ON	---	---	---	---	---	---	---	---	---	---	---	---
11AX160 MIMO	4.95	6985	Center	6910	-63.95	ON	---	---	---	---	---	---	---	---	---	---	---	---

11AX20SISO-Ant1-5975-Center-5975-OFF-PASS



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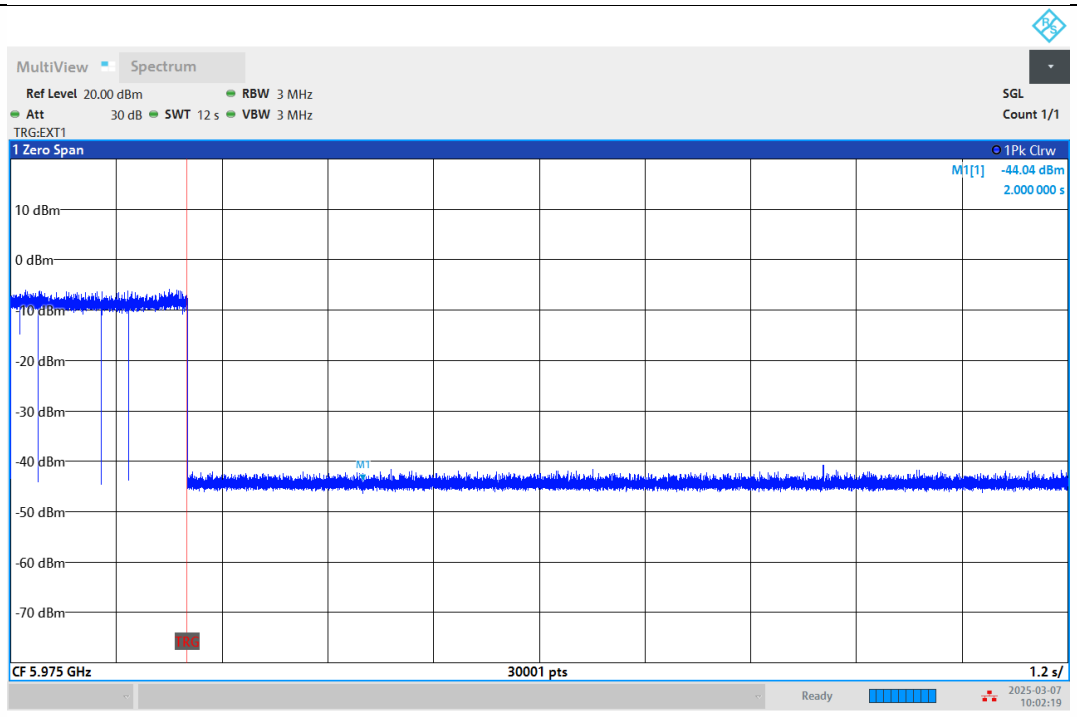

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11AX20SISO-Ant1-5975-Center-5975-Minimal