



Test report No:
24B0486R-RF-US-P06V01

FCC TEST REPORT

Product Name	Wi-Fi and Bluetooth Module
Trademark	N/A
Model and /or type reference	T5-E1-IPEX
FCC ID	2ANDL-T5-E1P
Applicant’s name / address	Hangzhou Tuya Information Technology Co., Ltd Room 301,Building 1,Huace Center,Xihu District, Hangzhou City,Zhejiang Province, China
Test method requested, standard	47 CFR FCC Part 15 (Section 15.247) ANSI C63.10: 2013
Verdict Summary	IN COMPLIANCE
Tested By (name / position & signature)	Tim Cao / Project Manager 
Approved by (name / position & signature)	Jack Zhang / Manager 
Date of issue	2024-12-23
Report Version	V1.0
Report template No	Template_FCC Part 15C-RF-V1.0

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Competences and Guarantees

DEKRA is a testing laboratory competent to carry out the tests described in this report.

In order to assure the traceability to other national and international laboratories, DEKRA has a calibration and maintenance program for its measurement equipment.

DEKRA guarantees the reliability of the data presented in this report, which is the result of the measurements and the tests performed to the item under test on the date and under the conditions stated in the report and it is based on the knowledge and technical facilities available at DEKRA at the time of performance of the test.

DEKRA is liable to the client for the maintenance of the confidentiality of all information related to the item under test and the results of the test.

The results presented in this Test Report apply only to the particular item under test established in this document.

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GENERAL CONDITIONS

Test Location	No. 99, Hongye Road, Suzhou Industrial Park Suzhou, 215006, P.R. China
Date(receive sample)	Nov. 13, 2024
Date (start test)	Nov. 20, 2024
Date (finish test)	Dec. 06, 2024

1. This report is only referred to the item that has undergone the test.
2. This report does not constitute or imply on its own an approval of the product by the Certification Bodies or Competent Authorities.
3. This document is only valid if complete; no partial reproduction can be made without previous written permission of DEKRA.
4. This test report cannot be used partially or in full for publicity and/or promotional purposes without previous written permission of DEKRA.
5. The 2.4G WLAN part of AirEngine6761-21T is exactly the same as AirEngine5761-11, so we only verified the power and AC Power Line Conducted Emission, and other data are quoted from AirEngine5761-11.

ENVIRONMENTAL CONDITIONS

The climatic conditions during the tests are within the limits specified by the manufacturer for the operation of the EUT and the test equipment. The climatic conditions during the tests were within the following limits:

Ambient temperature	15 °C – 35 °C
Relative Humidity air	30% - 60%

If explicitly required in the basic standard or applied product / product family standard the climatic values are recorded and documented separately in this test report.

POSSIBLE TEST CASE VERDICTS

Test case does not apply to test object	N/A
Test object does meet requirement	P (Pass) / PASS
Test object does not meet requirement	F (Fail) / FAIL
Not measured	N/M

ABBREVIATIONS

For the purposes of the present document, the following abbreviations apply:

EUT	: Equipment Under Test
QP	: Quasi-Peak
CAV	: CISPR Average
AV	: Average
CDN	: Coupling Decoupling Network
SAC	: Semi-Anechoic Chamber
OATS	: Open Area Test Site
BW	: Bandwidth
AM	: Amplitude Modulation
PM	: Pulse Modulation
HCP	: Horizontal Coupling Plane
VCP	: Vertical Coupling Plane
U_N	: Nominal voltage
T_x	: Transmitter
R_x	: Receiver
N/A	: Not Applicable
N/M	: Not Measured

DOCUMENT HISTORY

Report No.	Version	Description	Issued Date
24B0486R-RF-US-P06V01	V1.0	Initial issue of report.	2024-12-23

REMARKS AND COMMENTS

1. The equipment under test (EUT) does meet the essential requirements of the stated standard(s)/test(s).
2. These test results on a sample of the device are for the purpose of demonstrating Compliance with 47 CFR FCC Part 15 (Section 15.247).
3. The measurement result is considered in conformance with the requirement if it is within the prescribed limit, It is not necessary to account the uncertainty associated with the measurement result.
4. The test results presented in this report relate only to the object tested.
5. The test report shall not be reproduced without the written approval of DEKRA Testing and Certification (Suzhou) Co., Ltd.
6. This report will not be used for social proof function in China market.
7. DEKRA declines any responsibility with the following test data provided by customer that may affect the validity of result:
 - Chapter 1.1 General Description of the Item(s);
 - Chapter 1.2 Antenna Informaion;
 - Chapter 1.3 Data Rate;
 - Chapter 1.4 Channel List;

USED EQUIPMENT

Conducted Test/ TR8

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date	Firmware Version	Software version
Wireless Connectivity Tester	R&S	CMW 270	102593	2024.05.15	2025.05.14	V 4.0.60	N/A
Coaxial Cable	N/A	N/A	2477	2024.06.11	2025.06.10	N/A	N/A
Coaxial Cable	N/A	N/A	2478	2024.06.11	2025.06.10	N/A	N/A
High and low temperature and fast temperature change test box	ASTUOD	ASTD-FBT-225K	N/A	2024.04.21	2025.04.20	N/A	N/A
Temperature/Humidity Meter	RTS	RTS-1909	THM-032	2024.05.17	2025.05.16	N/A	N/A
Test system							
Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date	Firmware Version	Software version
MAX Signal Analyzer	Keysight	N9010A	MY48030494	2024.10.26	2025.10.25	A.14.03	N/A
RF Control Unit	Tonscend	JS0806-2	22G8060594	2024.01.31	2025.01.30	N/A	N/A
MXG-B RF Vector Signal Generator	Keysight	N5182B	MY61252529	2024.05.12	2025.05.11	B.01.96	N/A
Frequency extender for EXG or MXG	Keysight	N5182BX07	MY59362500	2024.05.12	2025.05.11	N/A	N/A
EXG-B MW Analog Signal Generator	Keysight	N5173B	MY61252566	2024.07.06	2025.07.05	B.01.95	N/A
Test Software	Tonscend	TS1120	JS1120-3	N/A	N/A	N/A	V3.0.22

AC Power Line Conducted Emission / TR1

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date	Firmware Version	Software version
EMI Test Receiver	R&S	ESCI	100726	2024.07.06	2025.07.05	4.42 SP1	N/A
Two-Line V-Network	R&S	ENV 216	101044	2024.10.26	2025.10.25	N/A	N/A
Two-Line V-Network	R&S	ENV 216	101189	2024.07.06	2025.07.05	N/A	N/A
50ohm Coaxial Switch	Anritsu	MP59B	6200464462	2024.07.06	2025.07.05	N/A	N/A
Coaxial Cable	Huber+Suhner	RG 223	TR1-C1	2024.07.06	2025.07.05	N/A	N/A
Impedance Stabilization Network	Teseq GmbH	ISN T800	57318	2024.01.20	2025.01.19	N/A	N/A
Temperature/Humidity Meter	RTS	RTS-1909	THM-011	2024.05.17	2025.05.16	N/A	N/A
Dekra test software	Dekra	N/A	N/A	N/A	N/A	N/A	N/A

Radiated Emission(9KHz-1GHz) / AC2

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date	Firmware Version	Software version
EMI Test Receiver	R&S	ESCI	100176	2024.05.12	2025.05.11	4.42 SP3	N/A
Loop Antenna	R&S	HFH2-Z2E	101149	2024.03.27	2025.03.26	N/A	N/A
Bilog Antenna	Teseq GmbH	CBL6112D	27611	2024.03.20	2025.03.19	N/A	N/A
Temperature/Humidity Meter	RTS	RTS-1909	THM-021	2024.05.17	2025.05.16	N/A	N/A
Coaxial Cable	Huber+Suhner	SUCOFLEX 106	AC2-C	2024.04.27	2025.04.26	N/A	N/A
Dekra test software	Dekra	N/A	N/A	N/A	N/A	N/A	3

Radiated Emission (1GHz-40GHz) / AC5

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date	Firmware Version	Software version
EXA Spectrum Analyzer	Keysight	N9020B	MY60112218	2024.11.02	2025.11.01	A.31.05	N/A
Pre-Amplifier	SKET	LNPA_0118 G-45	SK2021090101	2024.04.27	2025.04.26	N/A	N/A
Preamplifier	CHENGYI	EMC184045 SE	980263	2024.07.06	2025.07.05	N/A	N/A
DRG Horn	ETS-Lindgren	3117	00123988	2024.09.16	2025.09.15	N/A	N/A
Broad-Band Horn Antenna	Schwarzbeck	BBHA9170	294	2024.05.30	2025.05.29	N/A	N/A
Filter Switch Box	MVE	MSW-F196	C070001S	2024.04.20	2025.04.19	N/A	N/A
Coaxial Cable	ROSENBERGER	LA1-C011-2000/3000	AC5-40G	2024.01.25	2025.01.24	N/A	N/A
Coaxial Cable	ROSENBERGER	LA1-C011-2000/3000	AC5-40G-2	2024.05.26	2025.05.25	N/A	N/A
Cable	Rosenberger	LA1-C011-1000	0523	2024.05.26	2025.05.25	N/A	N/A
Temperature/Humidity Meter	RTS	RTS-1909	THM-001	2024.07.11	2025.07.10	N/A	N/A
Temperature/Humidity Meter	RTS	RTS-1909	THM-024	2024.05.17	2025.05.16	N/A	N/A
Dekra test software	Dekra	N/A	N/A	N/A	N/A	N/A	3

UNCERTAINTY

Uncertainties have been calculated according to the DEKRA internal document. The reported expanded uncertainties are based on a standard uncertainty multiplied by a coverage factor of $k=2$, providing a level of confidence of approximately 95%.

Test item	Uncertainty
AC Power Line Conducted Emission	± 2.92 dB
Peak Power Output	± 1.13 dB
Radiated Emission(30MHz~1GHz)	Horizontal: 30MHz~200MHz: 4.60 dB 200MHz~1GHz: 4.10 dB Vertical: 30MHz~200MHz: 4.80 dB 200MHz~1GHz: 4.10 dB
Radiated Emission(1GHz~40GHz)	Horizontal: 1GHz~18GHz: 5.00 dB Vertical: 1GHz~18GHz: 4.80 dB Horizontal: 18GHz~40GHz: 4.70 dB Vertical: 18GHz~40GHz: 4.60 dB
RF antenna conducted test	± 1.13 dB
Radiated Emission Band Edge	± 5.00 dB
DTS Bandwidth	± 279 Hz
Occupied Bandwidth	± 279 Hz
Power Density	± 1.13 dB

1 GENERAL INFORMATION

1.1 General Description of the Item(s)

Product Name..... :	Wi-Fi and Bluetooth Module
Model No. :	T5-E1-IPEX
Trademark. :	N/A
FCC ID..... :	2ANDL-T5-E1P
Hardware Version :	V1.0.0
Software Version..... :	V3.5.0
Manufacturer..... :	Hangzhou Tuya Information Technology Co., Ltd
Manufacturer Address..... :	Room 301,Building 1,Huace Center,Xihu District, Hangzhou City,Zhejiang Province, China
Factory..... :	1, Zhejiang Niuchuang Technology Co., Ltd 2, Hangzhou Xizhi Electronics Co., Ltd. 3, HuiZhou GSD Technology Co.,LTD 4, Shenzhen Sunwinon Electronics Co., Ltd. 5, Shenzhen Confidence Intelligence Electronic Co.,Ltd.
Factory address :	1, No. 1 Zhushan Road, Chang'an Town, Haining City , Jiaxing City, Zhejiang Province,China 2, 2nd Floor, Building 3, No. 8, Yuyang Road, Lushan Street, Fuyang District, Hangzhou City, Zhejiang Province,China 3, No. 2 Jinda Road, Science and technology industrial park Sandong Town,Huizhou,Guangdong Province,China 4, 1-6 Floor, No.101, Building 4, 6-6 Yanshan Avenue, Yanchuan Community, Yanluo Street, Baoan District, Shenzhen,China 5, Building 7, New Development Zone, Baishixia East District, Fuyong Street, Baoan District, Shenzhen, Guangdong Province, P.R.China

Wireless specifiction..... :	WIFI
Operating frequency range(s)..... :	2412~2462MHz
Number of channel..... :	802.11b/g/n/ax(20MHz) : 11 802.11n/ax(40MHz) : 07
Type of Modulation & Data Rate.... :	Refer to Clause 1.3
Device category	☐ Fixed point-to-point
	☐ Emit multiple directional beams, simultaneously or sequentially
	☒ Other cases

Rated power supply	Voltage and Frequency	
	☐	AC: 220 - 240 V, 50/60 Hz
	☒	DC: 3.3 Vdc / 500 mA / 1.65 W
	☐	Battery: 3.87 Vdc , 800 mAh
Mounting position..... :	☐	Tabletop equipment
	☐	Floor standing equipment
	☐	Hand-held/Portable equipment
	☒	Other: Module

1.2 Antenna Information

Antenna Manufacture	TUYA		
Antenna Serial Number	T5-E1-IPEX Antenna		
Antenna Delivery	☒	1TX + 1RX	
	☐	2TX + 2RX	
	☐	Others:	
Antenna Technology	☒	SISO	
	☐	MIMO	☐ CDD
			☐ Beam-forming
Antenna Type.....	☒	External	☒ FPC
			☐ Sectorized
	☐	Internal	☐ Ceramic Chip
			☐ PIFA
			☐ FPC
			☐ Others.....
Antenna Gain	2.98 dBi		

1.3 Data Rate

IEEE 802.11b

Modulation	Data Rate(Mb/s)
DSSS	1
DSSS	2
CCK	5.5
CCK	11

IEEE 802.11g

Modulation	R	Data Rate(Mb/s)
BPSK	1/2	6
BPSK	3/4	9
QPSK	1/2	12
QPSK	3/4	18
16-QAM	1/2	24
16-QAM	3/4	36
64-QAM	2/3	48
64-QAM	3/4	54

IEEE 802.11n

Spatial streames	MCS Index	Modulation	R	Data Rate(Mb/s)			
				800ns GI		400ns GI	
				20MHz	40MHz	20MHz	40MHz
1	0	BPSK	1/2	6.5	13.5	7.2	15.0
1	1	QPSK	1/2	13.0	27.0	14.4	30.0
1	2	QPSK	3/4	19.5	40.5	21.7	45.0
1	3	16-QAM	1/2	26.0	54.0	28.9	60.0
1	4	16-QAM	3/4	39.0	81.0	43.3	90.0
1	5	64-QAM	2/3	52.0	108.0	57.8	120.0
1	6	64-QAM	3/4	58.5	121.5	65.0	135.0
1	7	64-QAM	5/6	65.0	135.0	72.2	150.0
2	8	BPSK	1/2	13	27	14.4	30
2	9	QPSK	1/2	26	54	28.8	60
2	10	QPSK	3/4	39	81	43.4	90
2	11	16-QAM	1/2	52	108	57.8	120
2	12	16-QAM	3/4	78	162	86.6	180
2	13	64-QAM	2/3	104	216	115.6	240
2	14	64-QAM	3/4	117	243	130	270
2	15	64-QAM	5/6	130	270	144.4	300

IEEE 802.11ax

Spatial streams	MCS Index	Modulation	R	Data Rate(Mb/s)					
				800ns GI		1600ns GI		3200ns GI	
				20MHz	40MHz	20MHz	40MHz	20MHz	40MHz
1	0	BPSK	1/2	8.6	17.2	8.1	16.3	7.3	14.6
1	1	QPSK	1/2	17.2	34.4	16.3	32.5	14.6	29.3
1	2	QPSK	3/4	25.8	51.6	24.4	48.8	21.9	43.9
1	3	16-QAM	1/2	34.4	68.8	32.5	65	29.3	58.5
1	4	16-QAM	3/4	51.6	103.2	48.8	97.5	43.9	87.8
1	5	64-QAM	2/3	68.8	137.6	65	130	58.5	117
1	6	64-QAM	3/4	77.4	154.9	73.1	146.3	65.8	131.6
1	7	64-QAM	5/6	86	172.1	81.3	162.5	73.1	146.3
1	8	256QAM	3/4	103.2	206.5	97.5	195	87.8	175.5
1	9	256QAM	5/6	114.7	229.4	108.3	216.7	97.5	195
1	10	1024QAM	3/4	129	258.1	121.9	243.8	109.7	219.4
1	11	1024QAM	5/6	143.4	286.8	135.4	270.8	121.9	243.8
2	0	BPSK	1/2	17.2	34.4	16.2	32.6	14.6	29.2
2	1	QPSK	1/2	34.4	68.8	32.6	65	29.2	58.6
2	2	QPSK	3/4	51.6	103.2	48.8	97.6	43.8	87.8
2	3	16-QAM	1/2	68.8	137.6	65	130	58.6	117
2	4	16-QAM	3/4	103.2	206.4	97.6	195	87.8	175.6
2	5	64-QAM	2/3	137.6	275.2	130	260	117	234
2	6	64-QAM	3/4	154.8	309.8	146.2	292.6	131.6	263.2
2	7	64-QAM	5/6	172	344.2	162.6	325	146.2	292.6
2	8	256QAM	3/4	206.4	413	195	390	175.6	351
2	9	256QAM	5/6	229.4	458.8	216.6	433.4	195	390
2	10	1024QAM	3/4	258	516.2	243.8	487.6	219.4	438.8
2	11	1024QAM	5/6	286.8	573.6	270.8	541.6	243.8	487.6

Symbol	Explanation
R	Code rate
GI	guard interval

Note: We have evaluated low/mid/high data rate, the blue font is the highest power data rate.

1.4 Channel List

IEEE 802.11b/g & IEEE 802.11n/ax (20MHz)

Working Frequency of Each Channel							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
1	2412 MHz	2	2417 MHz	3	2422 MHz	4	2427 MHz
5	2432 MHz	6	2437 MHz	7	2442 MHz	8	2447 MHz
9	2452 MHz	10	2457 MHz	11	2462 MHz	-	-

IEEE 802.11n/ax (40MHz)

Working Frequency of Each Channel							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
3	2422 MHz	4	2427 MHz	5	2432 MHz	6	2437 MHz
7	2442 MHz	8	2447 MHz	9	2452 MHz	-	-

Note: The General Description of the Item, antenna information, Test Data Rate and Channel List in clause 1 are provided and confirmed by the client.

2 DESCRIPTION OF TEST SETUP

2.1 Operating mode(s) used for tests

During the tests the following operating mode(s) has(have) been used.

Test Mode	Mode 1: Transmit by 802.11b
	Mode 2: Transmit by 802.11g
	Mode 3: Transmit by 802.11n(20MHz)
	Mode 4: Transmit by 802.11n(40MHz)
	Mode 3: Transmit by 802.11ac(20MHz)
	Mode 4: Transmit by 802.11ac(40MHz)
	Mode 3: Transmit by 802.11ax(20MHz)
	Mode 4: Transmit by 802.11ax(40MHz)

Note 1: Regards to the frequency band operation: the lowest, middle and highest frequency channel were selected to perform the test, then shown on this report.

Note 2: For portable device, radiated tests was verified over X, Y, Z axis, and shown the worst case on this report.

Note 3: We evaluated all configurations for Full and Partial RU for 802.11ax, and the worst data is shown in the report.

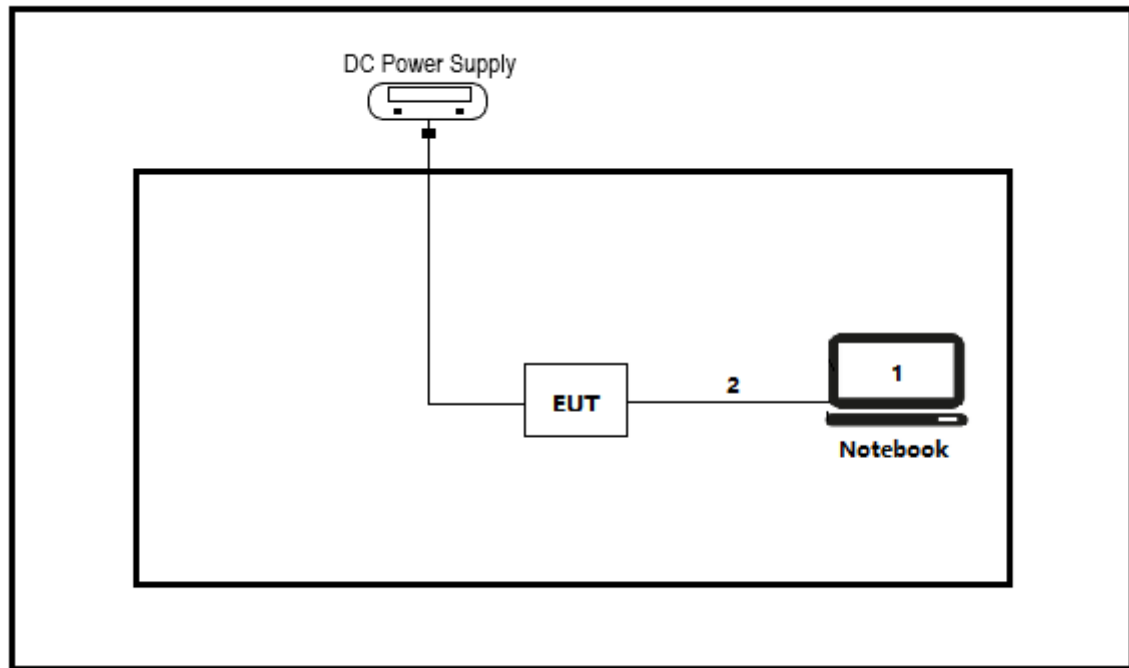
2.2 Auxiliary equipment / Test software for the EUT

Auxiliary equipment	Type / Version	Manufacturer	Supplied by
(1) Notebook	Think pad x220	Lenovo	Adapter
(2) USB Control Cable	N/A	N/A	N/A
(3) USB Control Cable	N/A	N/A	N/
software	Type / Version	Manufacturer	Supplied by
Wi-Fi test tool	V4.0	N/A	N/A

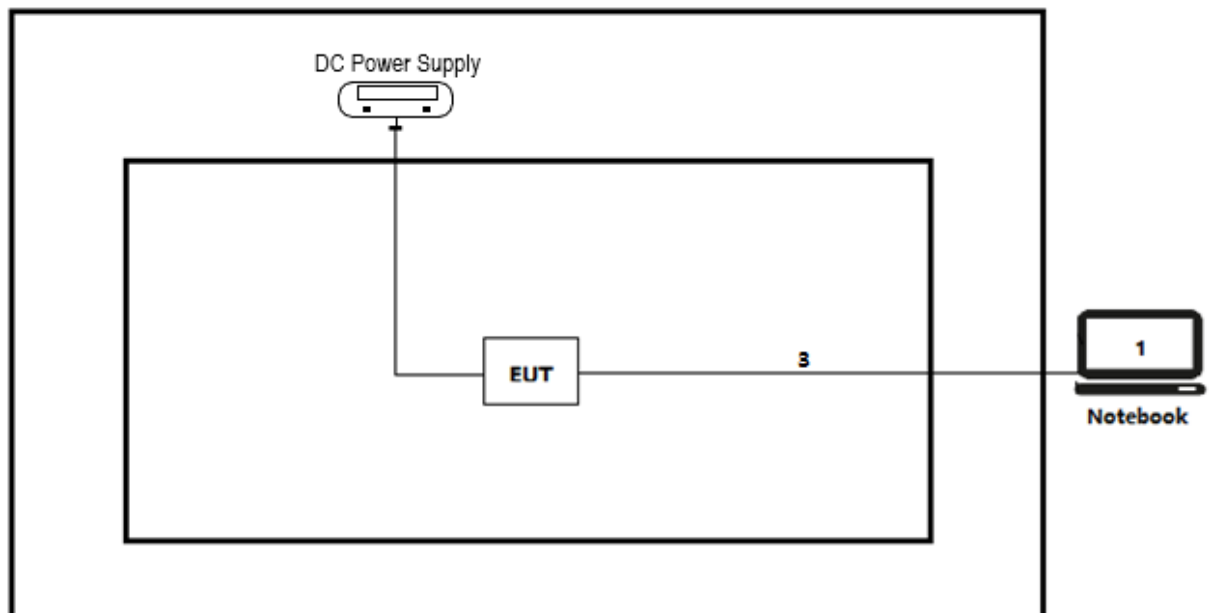
Accessories Information	Cable		
	Length used during test [m]	Attached during test	Shielded
(2)USB Control Cable	1	☒	☒
(3)USB Control Cable	8	☒	☒

2.3 Test Configuration / Block diagram used for tests

Test setup Diagram- Conducted test



Test setup Diagram- Radiated Emission



2.4 Testing process

1	Setup the EUT as shown in Section 2.3.
2	Run the software “Wi-Fi test tool” on the notebook computer.
3	Configure the test mode, the test channel, and the data rate.
4	Verify that the EUT works properly.

3 VERDICT SUMMARY SECTION

This chapter presents an overview of standards and results. Refer to the next chapters for details of measured test results and applied test levels.

3.1 Standards

Standard	Year	Description
FCC CFR Title 47 Part 15 Subpart C Section 15.247	2024	Operation within the bands 902–928 MHz, 2400–2483.5 MHz, and 5725–5850 MHz.
ANSI C63.10	2013	American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices
KDB 558074 D01V05r02	2019	Guidance for performing compliance measurements on Digital Transmission System (DTS) operating under section 15.247
KDB 662911	2020	Provision to Allow Measurement of Directional Gain of Multi-Antenna Systems for Compliance Verification

3.2 Deviation(s) from the Standard(s) / Test Specification(s)

The following deviation(s) was / were made from the published requirements of the listed standards: N/A.

(Please define the deviations from the standard(s) if applicable)

3.3 Overview of results

Requirement – Test Item	Standard(s)	Verdict	Remark
20dB Emission Bandwidth	FCC 15.247(a)(2)	PASS	Test data please refer to Appendix A
Maximum conducted output power	15.247 (b)(3)	PASS	Test data please refer to Appendix B
Maximum power spectral density	FCC 15.247(e)	PASS	Test data please refer to Appendix C
Band edge measurements	FCC 15.247(d) FCC 15.205 FCC 15.209	PASS	Test data please refer to Appendix D
Conducted Spurious Emission	FCC 15.247(d), FCC 15.209	PASS	Test data please refer to Appendix E
Duty cycle	ANSI C63.10:2013	PASS	Test data please refer to Appendix F
Emissions in Restricted Bands	FCC 15.205 FCC 15.209	PASS	Test data please refer to Appendix G
AC Power Line Conducted Emission	FCC 15.207	N/A	---
Antenna Requirement	FCC 15.203	PASS	---

3.4 Power setting in test

Mode	Channel	Frequency (MHz)	Power setting
Mode1	01	2412	16
	06	2437	15
	11	2462	14
Mode2	01	2412	38
	06	2437	37
	11	2462	36
Mode3	01	2412	34
	06	2437	33
	11	2462	32
Mode4	03	2422	28
	06	2437	27
	09	2452	26
Mode5	01	2412	34
	06	2437	33
	11	2462	32
Mode6	03	2422	28
	06	2437	27
	09	2452	26

3.5 Test Matrix

Test item	Model : T5-E1-IPEX	
	#1	#2
DTS Bandwidth	☒	☐
Maximum conducted output power	☒	☐
Maximum power spectral density	☒	☐
Band edge measurements	☐	☒
Conducted Spurious Emission	☒	☐
Duty cycle	☒	☐
Emissions in Restricted Bands	☐	☒
Note1: The only difference between sample #1 and sample #2 is whether to keep the original antenna, sample #1 is a conduction test product that removes the original antenna and is equipped with SMA wires, and sample #2 is a complete product that retains the original antenna.		

3.6 Test Facility

USA : FCC Designation Number: CN1199

4 TEST RESULTS

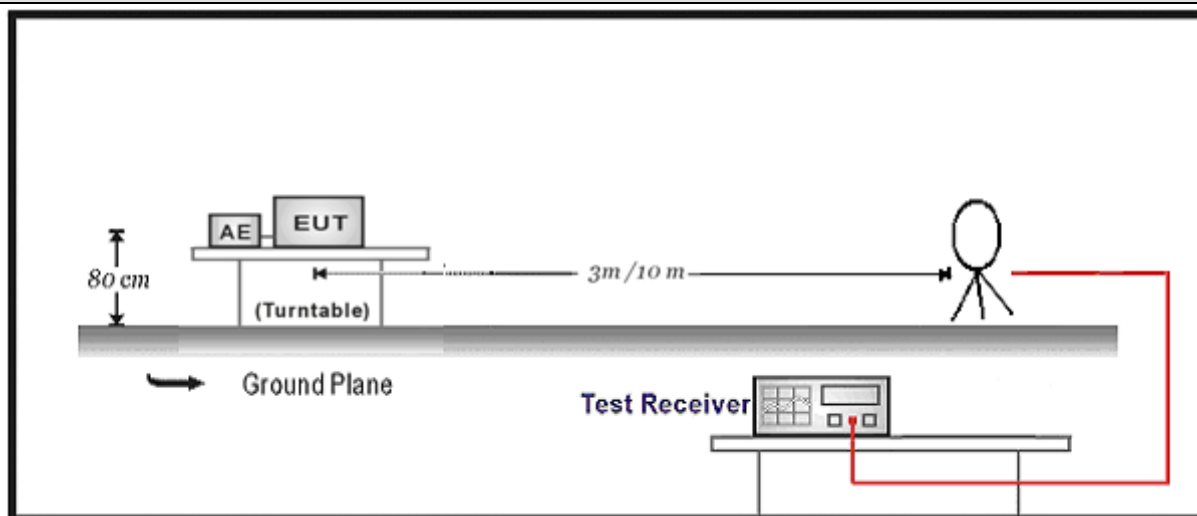
4.1 Emissions in restricted frequency bands	VERDICT: PASS
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4.1.1 Limit			
Standard		FCC Part 15 Subpart C Paragraph 15.205; 15.209	
Restricted Bands of operation for FCC			
Frequency (MHz)	Frequency (MHz)	Frequency (MHz)	Frequency (GHz)
0.090 – 0.110	16.42 – 16.423	399.9 – 410	4.5 – 5.15
0.495 – 0.505	16.69475 –16.69525	608 – 614	5.35 – 5.46
2.1735 – 2.1905	16.80425 – 16.80475	960 – 1240	7.25 – 7.75
4.125 – 4.128	25.5 – 25.67	1300 – 1427	8.025 – 8.5
4.17725 – 4.17775	37.5 – 38.25	1435 – 1626.5	9.0 – 9.2
4.20725 – 4.20775	73 – 74.6	1645.5 – 1646.5	9.3 – 9.5
6.215 – 6.218	74.8 – 75.2	1660 – 1710	10.6 – 12.7
6.26775 – 6.26825	108 – 121.94	1718.8 – 1722.2	13.25 – 13.4
6.31175 – 6.31225	123 – 138	2200 – 2300	14.47 – 14.5
8.291 – 8.294	149.9 – 150.05	2310 – 2390	15.35 – 16.2
8.362 – 8.366	156.52475 – 156.52525	2483.5 – 2500	17.7 – 21.4
8.37625 – 8.38675	156.7 – 156.9	2690 – 2900	22.01 – 23.12
8.81425 – 8.81475	162.0125 – 167.17	3260 – 3267	23.6 – 24.0
12.29 – 12.293	167.72 – 173.2	3332 – 3339	31.2 – 31.8
12.51975–12.52025	240 – 285	3345.8 – 3358	36.43 – 36.5
12.57675–12.57725	322 – 335.4	3600 – 4400	Above 38.6
13.36 – 13.41	--	--	--
Restricted Band Emissions Limit			
Frequency (MHz)	Field strength (µV/m)	Field strength (dBµV/m)	Measurement distance (m)
0.009 - 0.49	2400/F(kHz)	48.5 – 13.8	300 ^(Note 1)
0.49 - 1.705	24000/F(kHz)	33.8 - 23	30 ^(Note 1)
1.705 - 30	30	29.5	30 ^(Note 1)
30 - 88	100	40	3 ^(Note 2)
88 - 216	150	43.5	3 ^(Note 2)
216 - 960	200	46	3 ^(Note 2)
Above 960	500	54	3 ^(Note 2)
Note 1: At frequencies below 30 MHz, measurements may be performed at a distance closer than that specified in the regulations; however, an attempt should be made to avoid making measurements in the near field. Pending the development of an appropriate measurement procedure for measurements performed below 30 MHz, when performing measurements at a closer distance than specified, the results shall be extrapolated to the specified distance by either making measurements at a minimum of two distances on at least one radial to determine the proper extrapolation factor or by using the square of an inverse linear distance extrapolation factor (40 dB/decade).			
Note 2: At frequencies at or above 30 MHz, measurements may be performed at a distance other than what is specified provided: measurements are not made in the near field except where it can be shown that near field			

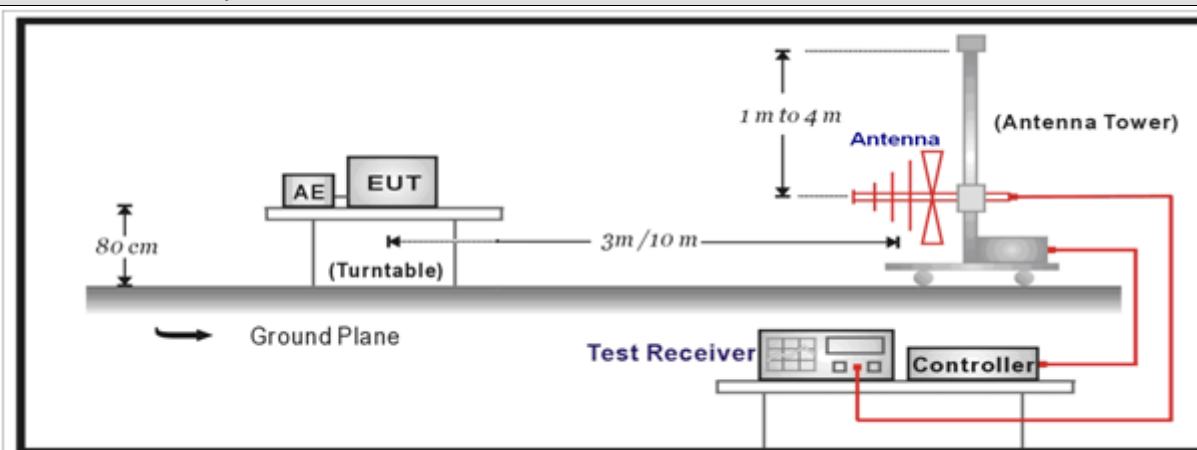
measurements are appropriate due to the characteristics of the device; and it can be demonstrated that the signal levels needed to be measured at the distance employed can be detected by the measurement equipment. Measurements shall not be performed at a distance greater than 30 meters unless it can be further demonstrated that measurements at a distance of 30 meters or less are impractical. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse linear-distance for field strength measurements; inverse-linear-distance-squared for power density measurements).

4.1.2 Test Setup

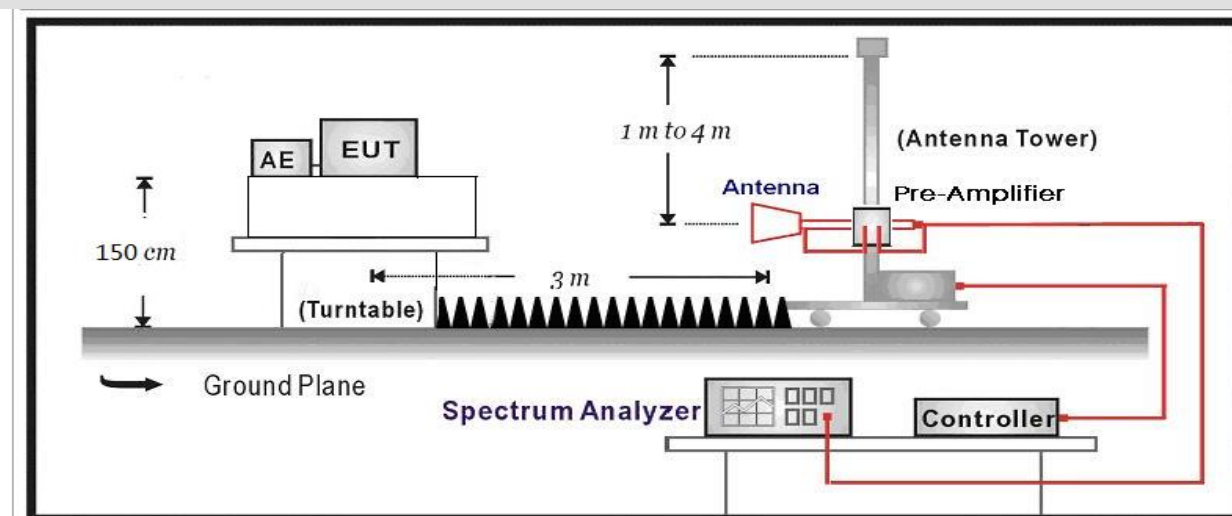
Below 30MHz Test Setup:



30MHz-1GHz Test Setup:



Above 1GHz Test Setup:



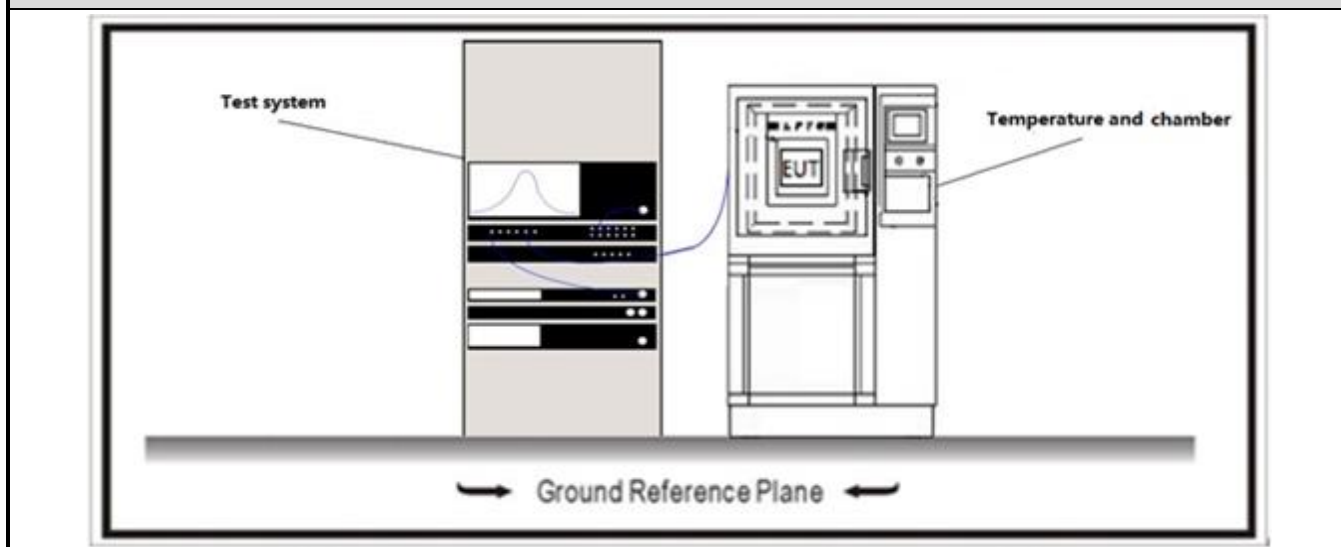
4.1.3 Test Procedure				
	References Rule		Chapter	Description
☒	ANSI C63.10		11.12	Emissions in restricted frequency bands
	☒	ANSI C63.10	11.12.1	Radiated emission measurements
	☒	ANSI C63.10	6.3	Radiated spurious emission test
	☒	ANSI C63.10	6.4	Radiated emissions from unlicensed wireless devices below 30 MHz
	☒	ANSI C63.10	6.5	Radiated emissions from unlicensed wireless devices in the frequency range of 30 MHz to 1000 MHz
	☒	ANSI C63.10	6.6	Radiated emissions from unlicensed wireless devices above 1 GHz
	☐	ANSI C63.10	11.12.2	Antenna-port conducted measurements
	☐	ANSI C63.10	11.12.2.3	Quasi-peak measurement procedure
	☐	ANSI C63.10	11.12.2.4	Peak power measurement procedure
	☐	ANSI C63.10	11.12.2.5	Average power measurement procedures
	☐	ANSI C63.10	11.12.2.5.1	Trace averaging with continuous EUT transmission at full power
	☐	ANSI C63.10	11.12.2.5.2	Trace averaging across ON and OFF times of the EUT transmissions followed by duty cycle correction
	☐	ANSI C63.10	11.12.2.5.3	Reduced VBW averaging across ON and OFF times of the EUT transmissions with max hold

4.2 Emissions in non-restricted frequency band**VERDICT: PASS****4.2.1 Limit**

Standard	FCC Part 15 Subpart C Paragraph 15.247(d)
RF Output power (Detection methods)	Limit(dB)
RF Output power(Average detector)	30dBc(Note1)
RF Output power(PK detector)	20dBc(Note2)

Note 1: If maximum conducted (average) output power was used to demonstrate compliance as described in 9.2, then the peak power in any 100 kHz bandwidth outside of the authorized frequency band shall be attenuated by at least 30 dB relative to the maximum in-band peak PSD level in 100 kHz (i.e., 30 dBc).

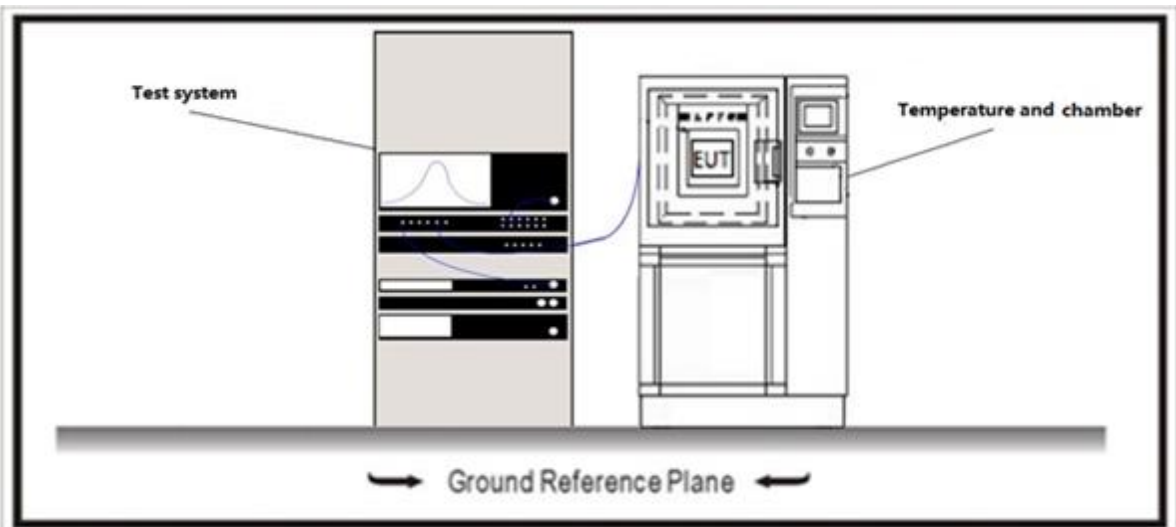
Note 2: If the maximum peak conducted output power procedure was used, then the peak output power measured in any 100 kHz bandwidth outside of the authorized frequency band shall be attenuated by at least 20 dB relative to the maximum in-band peak PSD level in 100 kHz (i.e., 20 dBc).

4.2.2 Test Setup**4.2.3 Test Procedure**

References Rule	Chapter	Description
☒ ANSI C63.10	11.11	Emissions in non-restricted frequency bands
☒ ANSI C63.10	11.11.1	General
☒ ANSI C63.10	11.11.2	Reference level measurement
☒ ANSI C63.10	11.11.3	Emission level measurement

4.3 Duty cycle	VERDICT: PASS
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4.3.1 Limit
N/A

4.3.2 Test Setup
 The diagram illustrates the test setup. On the left is the 'Test system', which includes a display showing a waveform. On the right is the 'Temperature and chamber', which is a large environmental test chamber. A cable connects the test system to the chamber. Below the equipment is a 'Ground Reference Plane' indicated by a double-headed arrow.

4.3.3 Test Procedure			
References Rule		Chapter	Description
☒	ANSI C63.10	11.6	Duty cycle (D), transmission duration (T), and maximum power control level

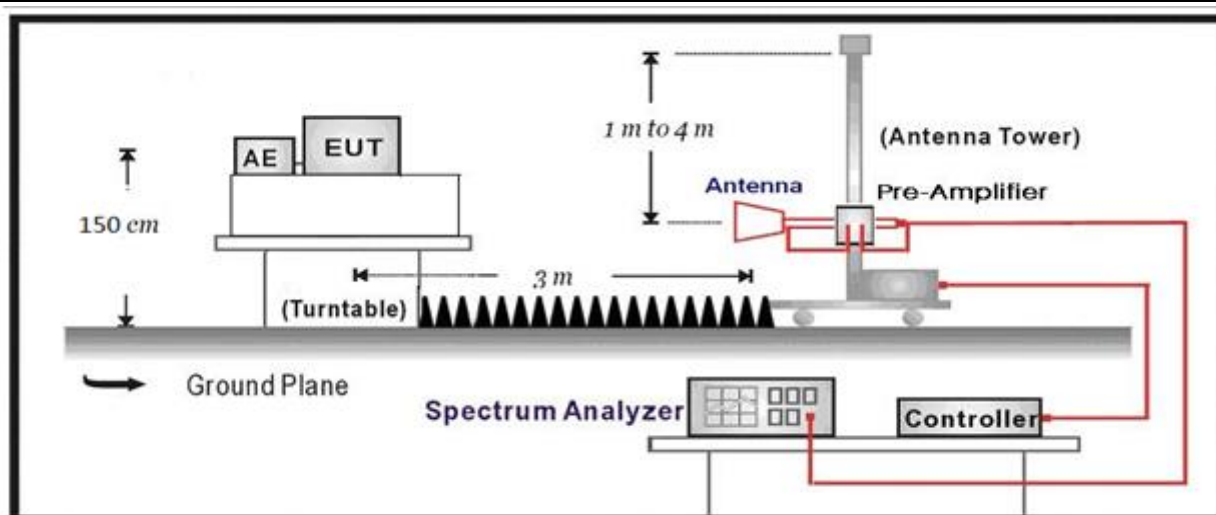
4.4 Radiated Emission Band Edge**VERDICT: PASS****4.4.1 Limit**

Standard		FCC Part 15 Subpart C Paragraph 15.247(d) , 15.205, 15.209		
Frequency bands (MHz)	Detector	Limit (dB μ V/m)	RBW (MHz)	Distance (m)
2310-2390 2483.5-2500	PK	74	1	3
	AV	54	1	3

Note: The field strength of emissions appearing within these frequency bands shall not exceed the limits.

4.4.2 Test Setup

Above 1GHz Test Setup:



4.4.3 Test Procedure			
	References Rule	Chapter	Description
☒	ANSI C63.10	6.10	Band-edge testing
	☒ ANSI C63.10	6.10.5	Restricted-band band-edge measurements
	☐ ANSI C63.10	6.10.6	Marker-delta method
☒	ANSI C63.10	11.12	Emissions in restricted frequency bands
	☒ ANSI C63.10	11.12.1	Radiated emission measurements
	☒ ANSI C63.10	6.3	Radiated spurious emission test
☐	ANSI C63.10	6.4	Radiated emissions from unlicensed wireless devices below 30 MHz
☐	ANSI C63.10	6.5	Radiated emissions from unlicensed wireless devices in the frequency range of 30 MHz to 1000 MHz
☒	ANSI C63.10	6.6	Radiated emissions from unlicensed wireless devices above 1 GHz

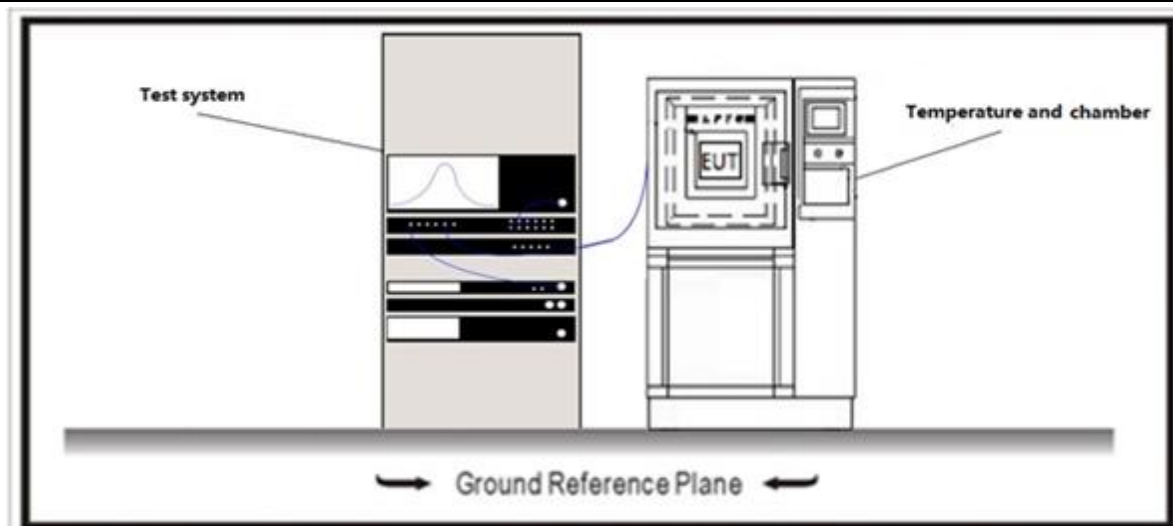
4.5 DTS Bandwidth**VERDICT: PASS****4.5.1 Limit**

Standard	FCC Part 15 Subpart C Paragraph 15.247 (a)(2)
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Systems using digital modulation techniques operate in the 2400-2483.5 MHz. The minimum 6 dB bandwidth shall be at least 500 kHz

Standard	ANSI C63.10 Paragraph 6.7
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The occupied bandwidth or the "99% emission bandwidth" is defined as the frequency range between two points, one above and the other below the carrier frequency, within which 99% of the total transmitted power of the fundamental transmitted emission is contained. The occupied bandwidth shall be reported for all equipment in addition to the specified bandwidth required in the applicable RSSs. The occupied bandwidth should be within the required frequency range.

4.5.2 Test Setup**4.5.3 Test Procedure**

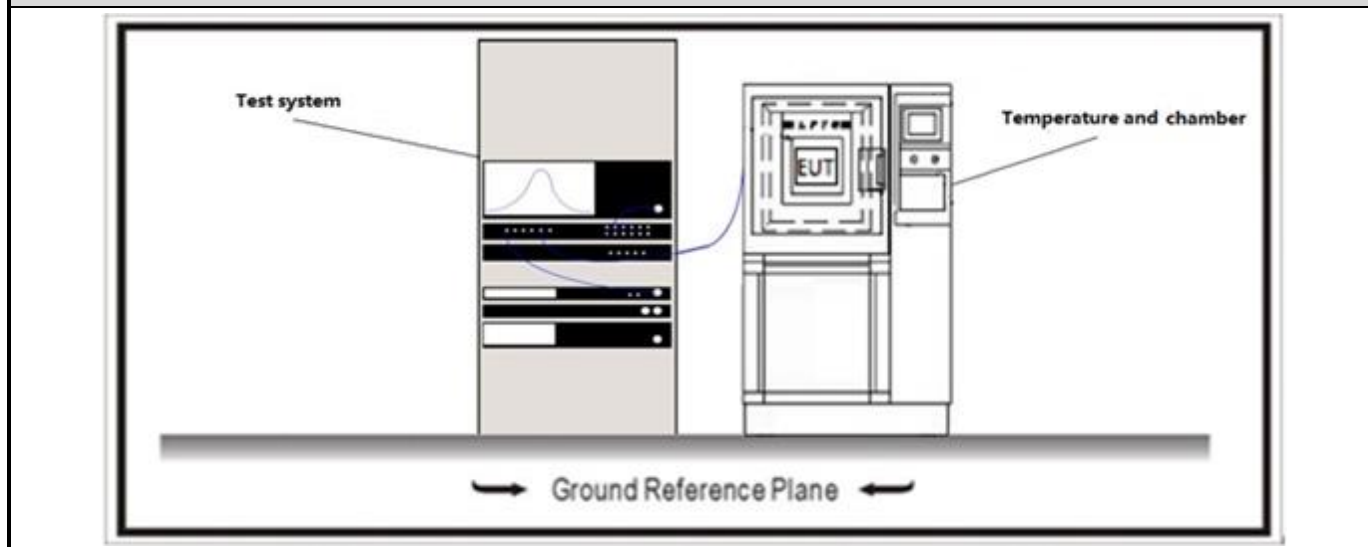
	Reference Rule	Chapter	Description
☒	ANSI C63.10	11.8	DTS bandwidth
☒	ANSI C63.10	11.8.1	Option 1
☐	ANSI C63.10	11.8.2	Option 2
☒	ANSI C63.10	6.9	Occupied bandwidth
☐	ANSI C63.10	6.9.2	relative measurement procedure
☒	ANSI C63.10	6.9.3	power bandwidth (99%) measurement procedure

4.6 Fundamental emission output power**VERDICT: PASS****4.6.1 Limit**

Standard		FCC Part 15 Subpart C Paragraph 15.247 (b)(3)
☒	GTX <6dBi	Pout≤30dBm
☐	GTX >6dBi	
☐	Non-Fix point-point	Pout≤30-(GTX -6)
☐	Fix point-point	Pout≤30-[(GTX-6)]/3
☐	Point-to-multipoint	Pout≤30-(GTX-6)
☐	Overlap Beams	Pout≤30-[(GTX-6)]/3
☐	Avgregate power transmitted simultaneously on all beams	Pout≤30-[(GTX-6)]/3
☐	single directional beam	Pout≤30-[(GTX-6)]/3+8dB

Note 1 : GTX directional gain of transmitting antennas.

Note 2 : Pout is maximum conducted output power .

4.6.2 Test Setup

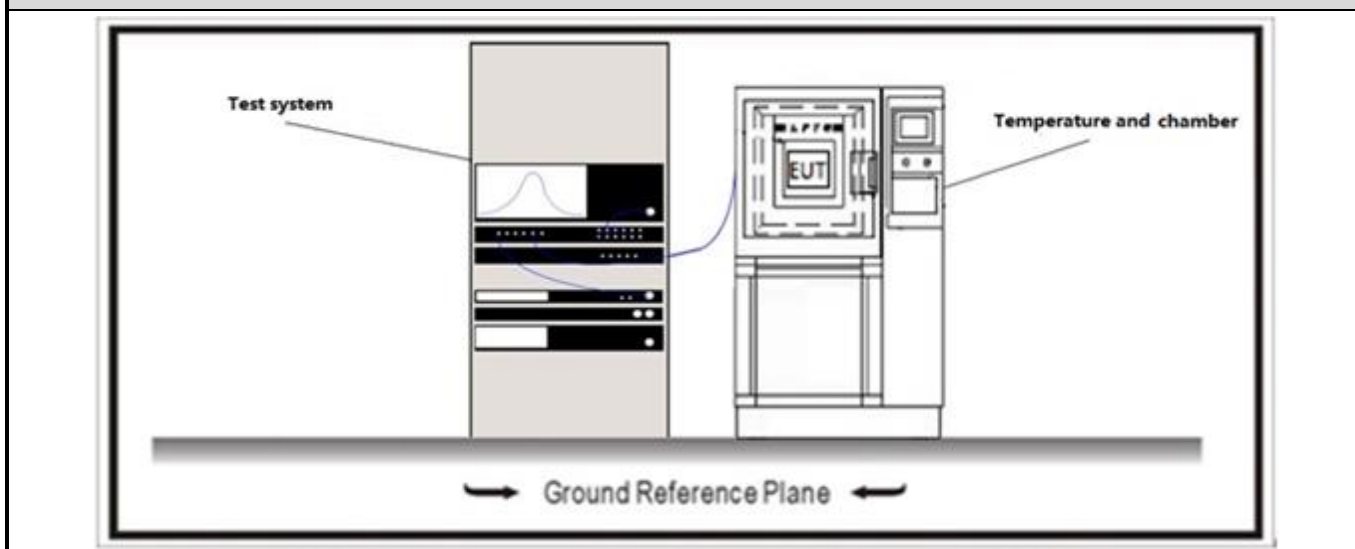
4.6.3 Test Procedure							
	References Rule			Chapter	Description		
☒	ANSI C63.10			11.9	Fundamental emission output power		
	☐	ANSI C63.10			11.9.1	Maximum peak conducted output power	
		☐	ANSI C63.10	11.9.1.1	RBW ≥ DTS bandwidth		
		☐	ANSI C63.10	11.9.1.2	Integrated band power method		
		☐	ANSI C63.10	11.9.1.3	PKPM1 Peak power meter method		
	☒	ANSI C63.10			11.9.2	Maximum conducted (average) output power	
		☐	ANSI C63.10			11.9.2.2	Measurement using a spectrum analyzer (SA)
			☐	ANSI C63.10	11.9.2.2.2	Method AVGSA-1(Duty cycle≥98%)	
			☐	ANSI C63.10	11.9.2.2.3	Method AVGSA-1A(Duty cycle≥98%)	
			☐	ANSI C63.10	11.9.2.2.4	Method AVGSA-2(Duty cycle≤98%)	
			☐	ANSI C63.10	11.9.2.2.5	Method AVGSA-2A(Duty cycle≤98%)	
			☐	ANSI C63.10	11.9.2.2.4	Method AVGSA-3	
			☐	ANSI C63.10	11.9.2.2.5	Method AVGSA-3A	
		☒	ANSI C63.10			11.9.2.3	Measurement using a power meter (PM)
			☒	ANSI C63.10	11.9.2.3.1	Method AVGPM	
			☐	ANSI C63.10	11.9.2.3.2	Method AVGPM-G	

Directional Gain Calculations for In-Band test method

	References Rule		Chapter	Description
☐	KDB 662911		F2)a)	Basic methodology
	☐	KDB 662911	F2)a) (i)	transmit signals are correlated
	☐	KDB 662911	F2)a) (ii)	transmit signals are uncorrelated
☐	KDB 662911		F2)b)	Sectorized antenna systems.
☐	KDB 662911		F2)c)	Cross-polarized antennas
	☐	ANSI C63.10	F2)c) (i)	Cross-polarized antennas
	☐	ANSI C63.10	F2)c) (ii)	Multiple antennas
☐	KDB 662911		F2)e)	Spatial stream
	☐	KDB 662911	F2)e) (i)	Antennas have the same gain
	☐	KDB 662911	F2)e) (ii)	Antenna have the different gain with one spatial stream
	☐	KDB 662911	F2)e) (iii)	Antenna have the different gain with more than one spatial stream
☒	KDB 662911		F2)f)	Cyclic Delay Diversity (CDD)
	☒	KDB 662911	F2)f) (i)	Antennas have the same gain
	☐	KDB 662911	F2)f) (ii)	Antenna have the different gain with one spatial stream
	☐	KDB 662911	F2)f) (iii)	Antenna have the different gain with more than one spatial stream

4.7 Power Density**VERDICT: PASS****4.7.1 Limit:****Standard**

FCC Part 15 Subpart C Paragraph 15.247 (e)

Power Spectral Density $\leq 8\text{dBm}/3\text{kHz}$ **4.7.2 Test Setup****4.7.3 Test Procedure**

	References Rule	Chapter	Description
☒	ANSI C63.10	11.10	Maximum power spectral density level in the fundamental emission
☒	ANSI C63.10	11.10.2	Method PKPSD (peak PSD)
☐	ANSI C63.10	11.10.3	Method AVGPSD-1(Duty cycle $\geq 98\%$)
☐	ANSI C63.10	11.10.4	Method AVGPSD-1A(Duty cycle $\geq 98\%$)
☐	ANSI C63.10	11.10.5	Method AVGPSD-2(Duty cycle $< 98\%$)
☐	ANSI C63.10	11.10.6	Method AVGPSD-2A(Duty cycle $< 98\%$)
☐	ANSI C63.10	11.10.7	Method AVGPSD-3
☐	ANSI C63.10	11.10.8	Method AVGPSD-3A

Directional Gain Calculations for In-Band test method				
	References Rule		Chapter	Description
☐	KDB 662911		F2)a)	Basic methodology
	☐	KDB 662911	F2)a) (i)	transmit signals are correlated
	☐	KDB 662911	F2)a) (ii)	transmit signals are uncorrelated
☐	KDB 662911		F2)b)	Sectorized antenna systems.
☐	KDB 662911		F2)c)	Cross-polarized antennas
	☐	ANSI C63.10	F2)c) (i)	Cross-polarized antennas
	☐	ANSI C63.10	F2)c) (ii)	Multiple antennas
☐	KDB 662911		F2)e)	Spatial stream
	☐	KDB 662911	F2)e) (i)	Antennas have the same gain
	☐	KDB 662911	F2)e) (ii)	Antenna have the different gain with one spatial stream
	☐	KDB 662911	F2)e) (iii)	Antenna have the different gain with more than one spatial stream
☒	KDB 662911		F2)f)	Cyclic Delay Diversity (CDD)
	☒	KDB 662911	F2)f) (i)	Antennas have the same gain
	☐	KDB 662911	F2)f) (ii)	Antenna have the different gain with one spatial stream
	☐	KDB 662911	F2)f) (iii)	Antenna have the different gain with more than one spatial stream

4.8 AC Power Line Conducted Emission

VERDICT: N/A

4.8.1 Limit

Standard	FCC Part 15 Subpart C Paragraph 15.207.	
Frequency range [MHz]	Limit: QP [dB(μV) ¹⁾]	Limit: AV [dB(μV) ¹⁾]
0,15 - 0,50	66 - 56 ²⁾	56 - 46 ²⁾
0,50 - 5,0	56	46
5,0 - 30	60	50

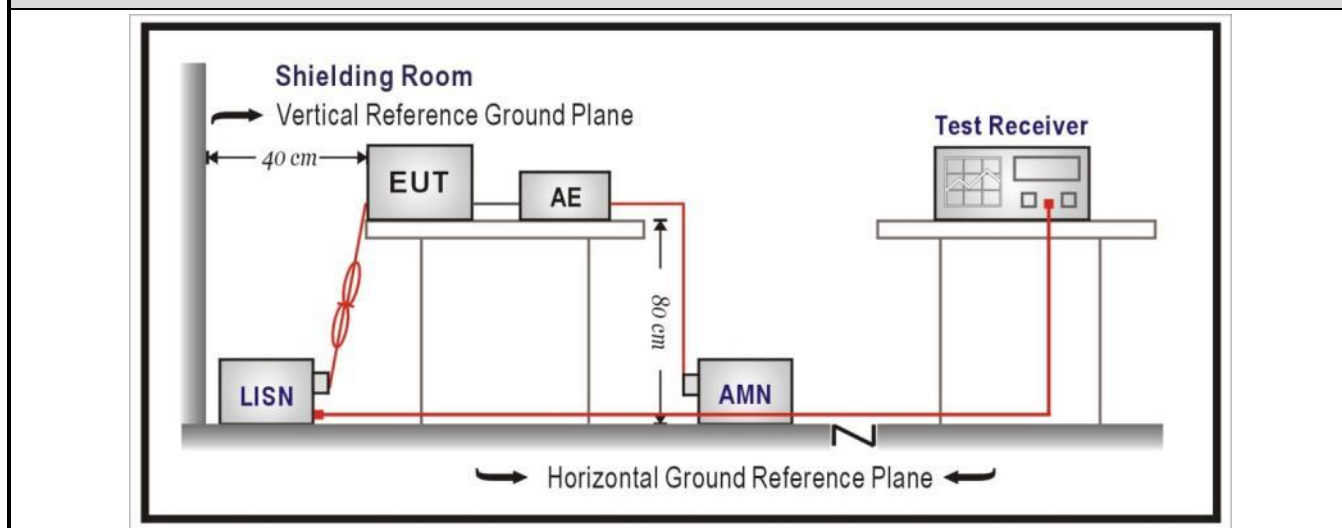
¹⁾ At the transition frequency, the lower limit applies.

²⁾ The limit decreases linearly with the logarithm of the frequency.

NOTE 1: The exclusion band for transmitters shall be considered for transmitters operating at frequencies below 30 MHz.

NOTE 2: Where the AC output port is directly connected (or via a circuit breaker) to the AC power input port of the EUT the AC power output port need not to be tested.

4.8.2 Test Setup



4.8.3 Test Procedure

	References Rule	Chapter	Item
☒	ANSI C63.10-2013	6.2	Standard test method for ac power-line conducted emissions from unlicensed wireless devices

Note: The EUT uses DC power supply.

4.9 Antenna Requirement	VERDICT: PASS
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4.9.1 Limit:	
Standard	FCC Part 15 Subpart C Paragraph 15.203
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 shall be considered sufficient to comply with the provisions of this section. 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. This requirement does not apply to carrier current devices or to devices operated under the provisions of §15.211, §15.213, §15.217, §15.219, or §15.221. Further, this requirement does not apply to intentional radiators that must be professionally installed, such as perimeter protection systems and some field disturbance sensors, or to other intentional radiators which, in accordance with §15.31(d), must be measured at the installation site. However, the installer shall be responsible for ensuring that the proper antenna is employed so that the limits in this part are not exceeded.	

4.9.2 Antenna Connector Construction:	
☒	The use of a permanently attached antenna
☐	The antenna use of a unique coupling to the intentional radiator
☐	The use of a nonstandard antenna jack or electrical connector
Please refer to the attached document "Internal Photograph" to show the antenna connector.	

5 TEST SETUP PHOTO AND EUT PHOTO

Remark: The test setup photo and EUT Photo please see appendix.

6 TEST RESULT

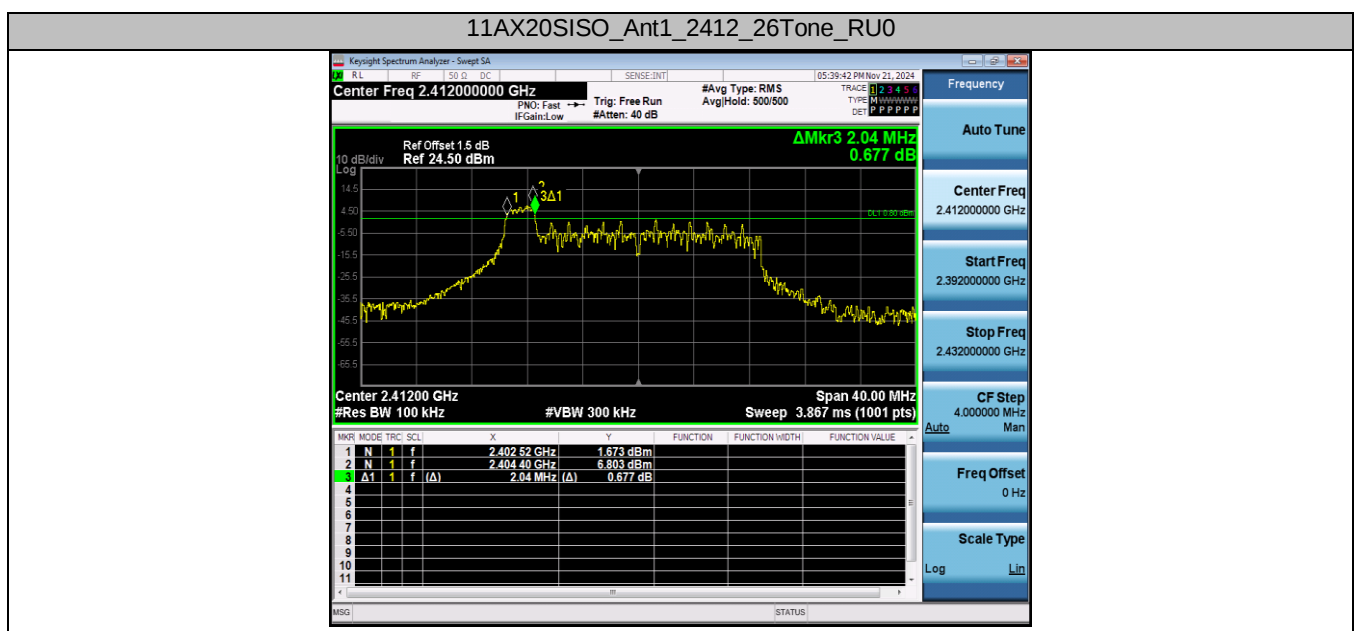
Appendix A: DTS Bandwidth

TestMode	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	2412	9.040	2407.440	2416.480	0.5	PASS
	2437	8.520	2432.480	2441.000	0.5	PASS
	2462	8.040	2457.960	2466.000	0.5	PASS
11G	2412	16.400	2403.800	2420.200	0.5	PASS
	2437	16.320	2428.840	2445.160	0.5	PASS
	2462	16.440	2453.800	2470.240	0.5	PASS
11N20SISO	2412	17.600	2403.200	2420.800	0.5	PASS
	2437	17.880	2428.240	2446.120	0.5	PASS
	2462	17.600	2453.200	2470.800	0.5	PASS
11N40SISO	2422	35.040	2404.480	2439.520	0.5	PASS
	2437	35.280	2419.240	2454.520	0.5	PASS
	2452	34.480	2435.040	2469.520	0.5	PASS
11AX20SISO	2412	17.840	2403.320	2421.160	0.5	PASS
	2437	18.360	2427.720	2446.080	0.5	PASS
	2462	17.520	2452.880	2470.400	0.5	PASS
11AX40SISO	2422	35.920	2404.080	2440.000	0.5	PASS
	2437	36.000	2419.080	2455.080	0.5	PASS
	2452	34.000	2435.520	2469.520	0.5	PASS

Test Mode	Frequency[MHz]	Ru Size	Ru Index	DTS BW [MHz]	FL [MHz]	FH [MHz]	Limit [MHz]	Verdict
11AX20SISO	2412	26Tone	RU0	2.040	2402.520	2404.560	0.5	PASS
			RU4	2.600	2410.680	2413.280	0.5	PASS
			RU8	2.080	2419.440	2421.520	0.5	PASS
		52Tone	RU37	3.950	2402.560	2406.510	0.5	PASS
			RU39	4.040	2413.280	2417.320	0.5	PASS
			RU40	4.210	2417.230	2421.440	0.5	PASS
		106Tone	RU53	7.610	2402.600	2410.210	0.5	PASS
			RU54	7.970	2413.510	2421.480	0.5	PASS
	2437	26Tone	RU0	2.080	2427.480	2429.560	0.5	PASS
			RU4	2.680	2435.640	2438.320	0.5	PASS
			RU8	2.210	2444.230	2446.440	0.5	PASS
		52Tone	RU37	3.950	2427.560	2431.510	0.5	PASS
			RU39	4.040	2438.280	2442.320	0.5	PASS
			RU40	3.720	2442.720	2446.440	0.5	PASS
		106Tone	RU53	7.720	2427.560	2435.280	0.5	PASS
			RU54	7.960	2438.480	2446.440	0.5	PASS
	2462	26Tone	RU0	2.080	2452.480	2454.560	0.5	PASS
			RU4	2.640	2460.680	2463.320	0.5	PASS
			RU8	2.060	2469.400	2471.460	0.5	PASS
		52Tone	RU37	4.200	2452.560	2456.760	0.5	PASS
			RU39	4.080	2463.240	2467.320	0.5	PASS
			RU40	4.480	2466.960	2471.440	0.5	PASS
		106Tone	RU53	8.760	2452.560	2461.320	0.5	PASS
			RU54	7.690	2463.710	2471.400	0.5	PASS

11AX40SISO	2422	26Tone	RU0	2.780	2402.960	2405.740	0.5	PASS
			RU17	3.480	2437.480	2440.960	0.5	PASS
		52Tone	RU37	4.480	2403.040	2407.520	0.5	PASS
			RU44	4.480	2436.400	2440.880	0.5	PASS
		106Tone	RU53	8.320	2403.280	2411.600	0.5	PASS
			RU56	8.680	2432.200	2440.880	0.5	PASS
		242Tone	RU61	17.280	2404.480	2421.760	0.5	PASS
			RU62	17.680	2422.240	2439.920	0.5	PASS
	2437	26Tone	RU0	2.560	2417.960	2420.520	0.5	PASS
			RU17	2.560	2453.480	2456.040	0.5	PASS
		52Tone	RU37	4.480	2418.040	2422.520	0.5	PASS
			RU44	4.480	2451.480	2455.960	0.5	PASS
		106Tone	RU53	9.120	2418.200	2427.320	0.5	PASS
			RU56	8.640	2447.240	2455.880	0.5	PASS
		242Tone	RU61	17.360	2419.400	2436.760	0.5	PASS
			RU62	15.120	2437.160	2452.280	0.5	PASS
	2452	26Tone	RU0	3.480	2433.040	2436.520	0.5	PASS
			RU17	2.560	2468.480	2471.040	0.5	PASS
		52Tone	RU37	4.480	2433.040	2437.520	0.5	PASS
			RU44	7.480	2463.480	2470.960	0.5	PASS
		106Tone	RU53	8.240	2433.280	2441.520	0.5	PASS
			RU56	9.560	2461.240	2470.800	0.5	PASS
		242Tone	RU61	17.360	2434.400	2451.760	0.5	PASS
			RU62	17.280	2452.240	2469.520	0.5	PASS

The worse case Test Graphs:



Appendix B: Maximum conducted output power

Test Mode	Frequency [MHz]	Conducted Power[dBm]	Conducted Limit[dBm]	EIRP [dBm]	EIRP Limit[dBm]	Verdict
11B	2412	17.82	≤30.00	20.80	≤36.00	PASS
	2437	17.87	≤30.00	20.85	≤36.00	PASS
	2462	17.69	≤30.00	20.67	≤36.00	PASS
11G	2412	15.75	≤30.00	18.73	≤36.00	PASS
	2437	16.10	≤30.00	19.08	≤36.00	PASS
	2462	16.15	≤30.00	19.13	≤36.00	PASS
11N20SISO	2412	14.76	≤30.00	17.74	≤36.00	PASS
	2437	14.84	≤30.00	17.82	≤36.00	PASS
	2462	14.86	≤30.00	17.84	≤36.00	PASS
11N40SISO	2422	12.69	≤30.00	15.67	≤36.00	PASS
	2437	12.74	≤30.00	15.72	≤36.00	PASS
	2452	12.69	≤30.00	15.67	≤36.00	PASS
11AX20SISO	2412	14.58	≤30.00	17.56	≤36.00	PASS
	2437	14.68	≤30.00	17.66	≤36.00	PASS
	2462	14.79	≤30.00	17.77	≤36.00	PASS
11AX40SISO	2422	12.65	≤30.00	15.63	≤36.00	PASS
	2437	12.67	≤30.00	15.65	≤36.00	PASS
	2452	12.70	≤30.00	15.68	≤36.00	PASS

Test Mode	Frequency [MHz]	Ru Size	Ru Index	Conducted Power [dBm]	Conducted Limit[dBm]	EIRP [dBm]	EIRP Limit [dBm]	Verdict
11AX20SISO	2412	26Tone	RU0	11.55	≤30.00	14.53	≤36.00	PASS
			RU4	14.34	≤30.00	17.32	≤36.00	PASS
			RU8	12.22	≤30.00	15.20	≤36.00	PASS
		52Tone	RU37	12.74	≤30.00	15.72	≤36.00	PASS
			RU39	15.45	≤30.00	18.43	≤36.00	PASS
			RU40	12.77	≤30.00	15.75	≤36.00	PASS
		106Tone	RU53	13.99	≤30.00	16.97	≤36.00	PASS
			RU54	14.21	≤30.00	17.19	≤36.00	PASS
	2437	26Tone	RU0	11.96	≤30.00	14.94	≤36.00	PASS
			RU4	14.73	≤30.00	17.71	≤36.00	PASS
			RU8	11.58	≤30.00	14.56	≤36.00	PASS

		52Tone	RU37	12.79	≤30.00	15.77	≤36.00	PASS
			RU39	14.81	≤30.00	17.79	≤36.00	PASS
			RU40	12.80	≤30.00	15.78	≤36.00	PASS
		106Tone	RU53	13.97	≤30.00	16.95	≤36.00	PASS
			RU54	13.85	≤30.00	16.83	≤36.00	PASS
	2462	26Tone	RU0	12.47	≤30.00	15.45	≤36.00	PASS
			RU4	15.11	≤30.00	18.09	≤36.00	PASS
			RU8	12.19	≤30.00	15.17	≤36.00	PASS
		52Tone	RU37	13.33	≤30.00	16.31	≤36.00	PASS
			RU39	15.14	≤30.00	18.12	≤36.00	PASS
			RU40	13.13	≤30.00	16.11	≤36.00	PASS
		106Tone	RU53	14.49	≤30.00	17.47	≤36.00	PASS
			RU54	14.54	≤30.00	17.52	≤36.00	PASS
11AX40SISO	2422	26Tone	RU0	8.59	≤30.00	11.57	≤36.00	PASS
			RU17	8.67	≤30.00	11.65	≤36.00	PASS
		52Tone	RU37	9.24	≤30.00	12.22	≤36.00	PASS
			RU44	9.64	≤30.00	12.62	≤36.00	PASS
		106Tone	RU53	10.90	≤30.00	13.88	≤36.00	PASS
			RU56	11.15	≤30.00	14.13	≤36.00	PASS
		242Tone	RU61	12.46	≤30.00	15.44	≤36.00	PASS
			RU62	12.67	≤30.00	15.65	≤36.00	PASS
	2437	26Tone	RU0	8.80	≤30.00	11.78	≤36.00	PASS
			RU17	8.82	≤30.00	11.80	≤36.00	PASS
		52Tone	RU37	9.40	≤30.00	12.38	≤36.00	PASS
			RU44	9.33	≤30.00	12.31	≤36.00	PASS
		106Tone	RU53	11.09	≤30.00	14.07	≤36.00	PASS
			RU56	11.11	≤30.00	14.09	≤36.00	PASS
		242Tone	RU61	12.71	≤30.00	15.69	≤36.00	PASS
			RU62	12.77	≤30.00	15.75	≤36.00	PASS
	2452	26Tone	RU0	8.72	≤30.00	11.70	≤36.00	PASS
			RU17	8.63	≤30.00	11.61	≤36.00	PASS
		52Tone	RU37	9.66	≤30.00	12.64	≤36.00	PASS
			RU44	9.58	≤30.00	12.56	≤36.00	PASS
		106Tone	RU53	10.89	≤30.00	13.87	≤36.00	PASS
			RU56	11.26	≤30.00	14.24	≤36.00	PASS

		242Tone	RU61	12.92	≤30.00	15.90	≤36.00	PASS
			RU62	13.51	≤30.00	16.49	≤36.00	PASS

Note 1: EIRP Power = Conducted Power + Antenna gain

Note 2: The Antenna gain please refer to clause 1.2

Appendix C: Maximum power spectral density

TestMode	Antenna	Frequency[MHz]	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-12.41	≤8.00	PASS
		2437	-12.48	≤8.00	PASS
		2462	-12.95	≤8.00	PASS
11G	Ant1	2412	-13.16	≤8.00	PASS
		2437	-14.50	≤8.00	PASS
		2462	-12.61	≤8.00	PASS
11N20SISO	Ant1	2412	-15.82	≤8.00	PASS
		2437	-14.89	≤8.00	PASS
		2462	-14.68	≤8.00	PASS
11N40SISO	Ant1	2422	-16.38	≤8.00	PASS
		2437	-18.09	≤8.00	PASS
		2452	-17.86	≤8.00	PASS
11AX20SISO	Ant1	2412	-16.08	≤8.00	PASS
		2437	-14.88	≤8.00	PASS
		2462	-14.71	≤8.00	PASS
11AX40SISO	Ant1	2422	-19.02	≤8.00	PASS
		2437	-18.92	≤8.00	PASS
		2452	-19.05	≤8.00	PASS

TestMode	Frequency[MHz]	RuSize	RuIndex	Result [dBm/3kHz]	Limit [dBm/3kHz]	Verdict
11AX20SISO	2412	26Tone	RU0	-10.85	≤8.00	PASS
			RU4	-8.45	≤8.00	PASS
			RU8	-11.07	≤8.00	PASS
		52Tone	RU37	-12.01	≤8.00	PASS
			RU39	-11.28	≤8.00	PASS
			RU40	-11.69	≤8.00	PASS
		106Tone	RU53	-13.08	≤8.00	PASS
			RU54	-12.50	≤8.00	PASS
	2437	26Tone	RU0	-11.53	≤8.00	PASS
			RU4	-8.15	≤8.00	PASS
			RU8	-11.37	≤8.00	PASS
		52Tone	RU37	-11.21	≤8.00	PASS
			RU39	-10.61	≤8.00	PASS
			RU40	-12.34	≤8.00	PASS
		106Tone	RU53	-12.30	≤8.00	PASS
			RU54	-13.09	≤8.00	PASS
	2462	26Tone	RU0	-11.06	≤8.00	PASS
			RU4	-8.01	≤8.00	PASS
			RU8	-10.47	≤8.00	PASS
		52Tone	RU37	-11.17	≤8.00	PASS

11AX40SISO		106Tone	RU39	-10.93	≤8.00	PASS
			RU40	-11.82	≤8.00	PASS
			RU53	-11.36	≤8.00	PASS
			RU54	-12.32	≤8.00	PASS
	2422	26Tone	RU0	-15.57	≤8.00	PASS
			RU17	-13.51	≤8.00	PASS
		52Tone	RU37	-15.80	≤8.00	PASS
			RU44	-16.14	≤8.00	PASS
		106Tone	RU53	-13.94	≤8.00	PASS
			RU56	-14.60	≤8.00	PASS
		242Tone	RU61	-17.79	≤8.00	PASS
			RU62	-15.57	≤8.00	PASS
	2437	26Tone	RU0	-14.69	≤8.00	PASS
			RU17	-14.02	≤8.00	PASS
		52Tone	RU37	-14.39	≤8.00	PASS
			RU44	-14.79	≤8.00	PASS
		106Tone	RU53	-15.52	≤8.00	PASS
			RU56	-14.59	≤8.00	PASS
		242Tone	RU61	-13.61	≤8.00	PASS
			RU62	-16.52	≤8.00	PASS
	2452	26Tone	RU0	-14.55	≤8.00	PASS
			RU17	-14.18	≤8.00	PASS
		52Tone	RU37	-16.22	≤8.00	PASS
			RU44	-15.77	≤8.00	PASS
		106Tone	RU53	-16.21	≤8.00	PASS
			RU56	-15.19	≤8.00	PASS
		242Tone	RU61	-16.34	≤8.00	PASS
			RU62	-15.28	≤8.00	PASS

Test Graphs

11B_Ant1_2412



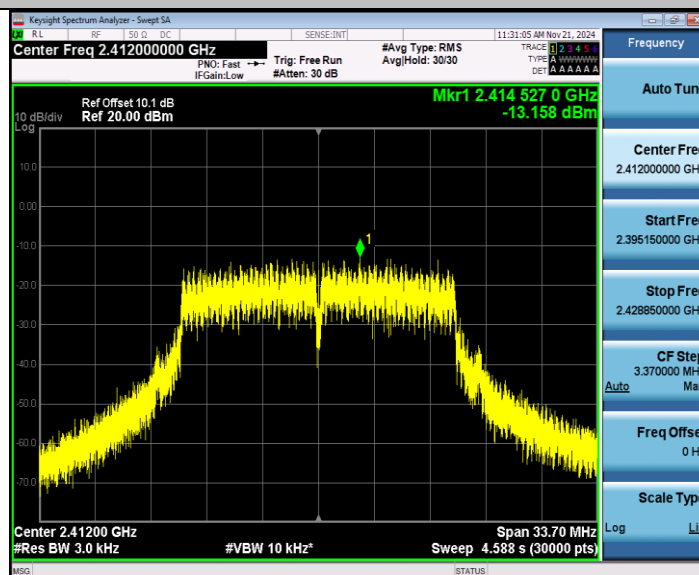
11B_Ant1_2437



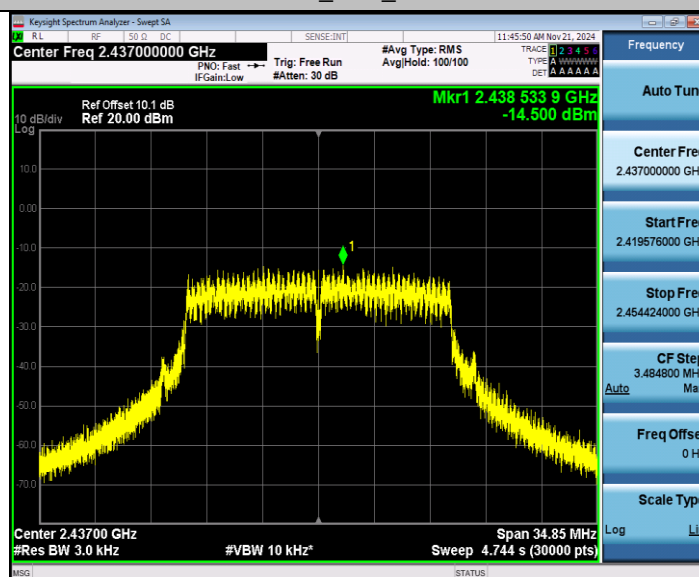
11B_Ant1_2462



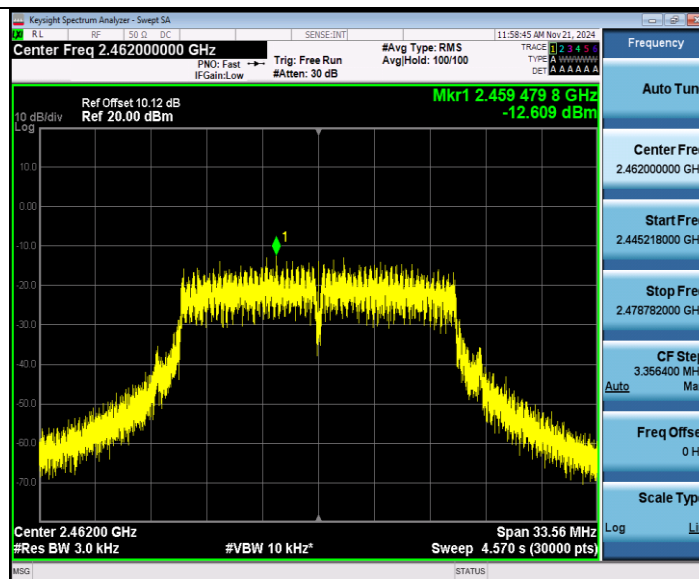
11G_Ant1_2412



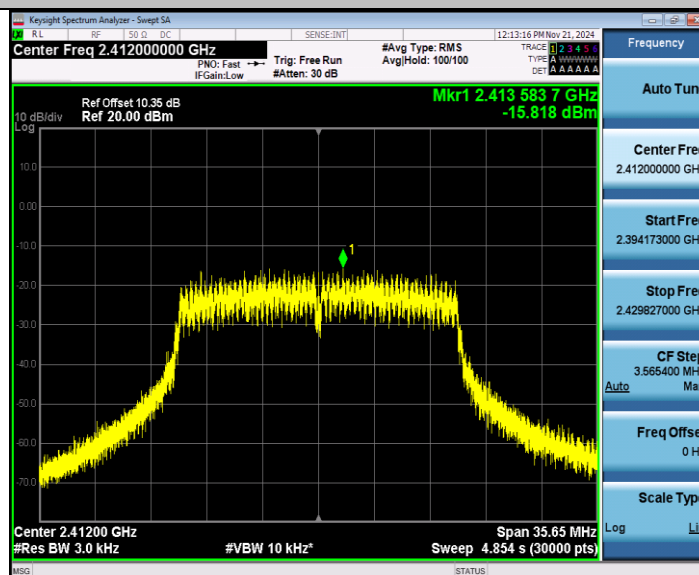
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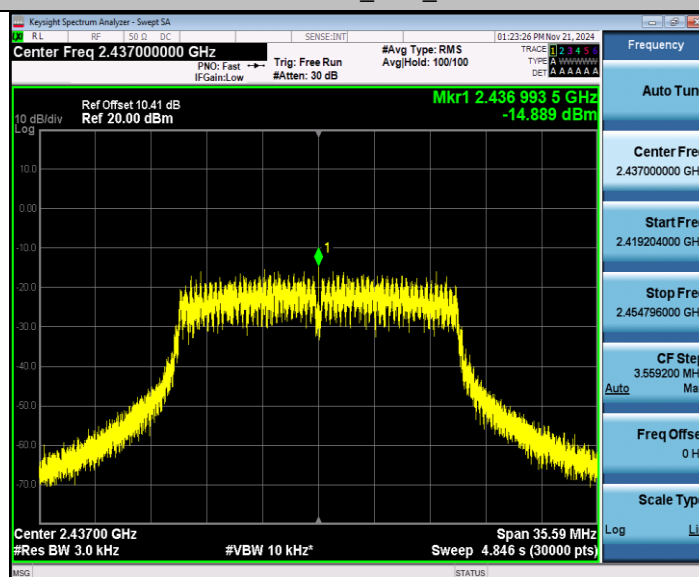
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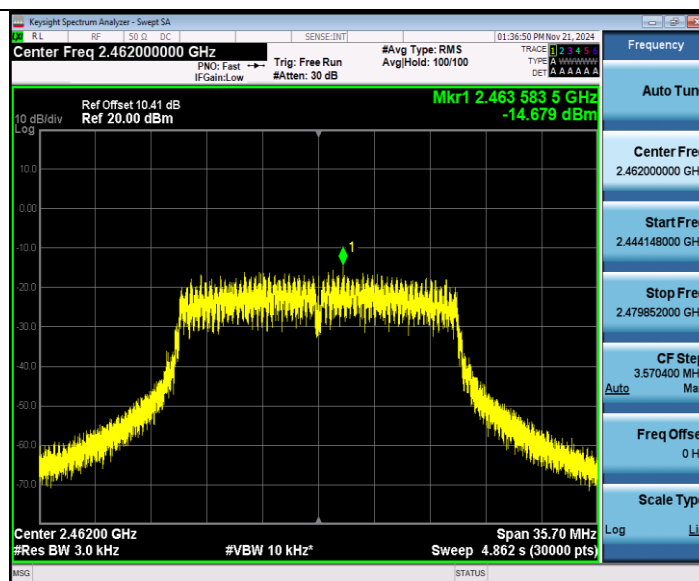
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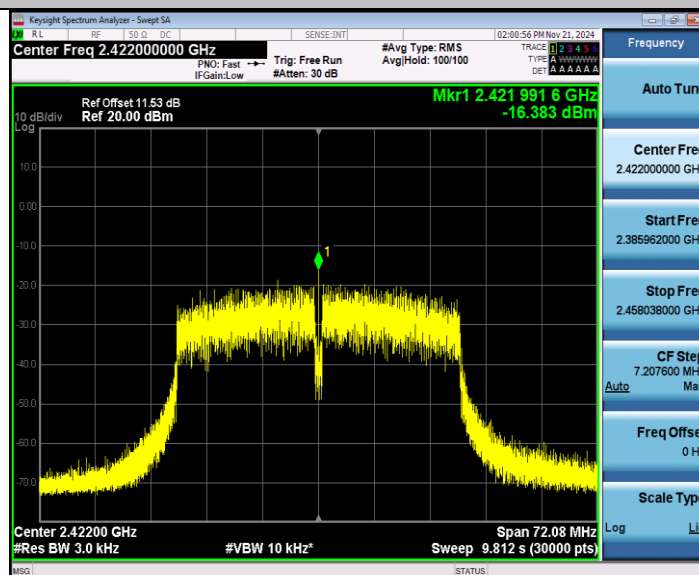
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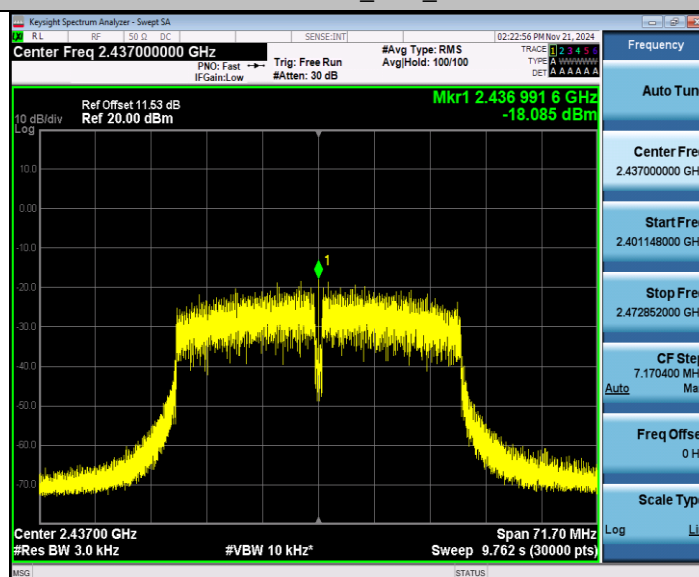
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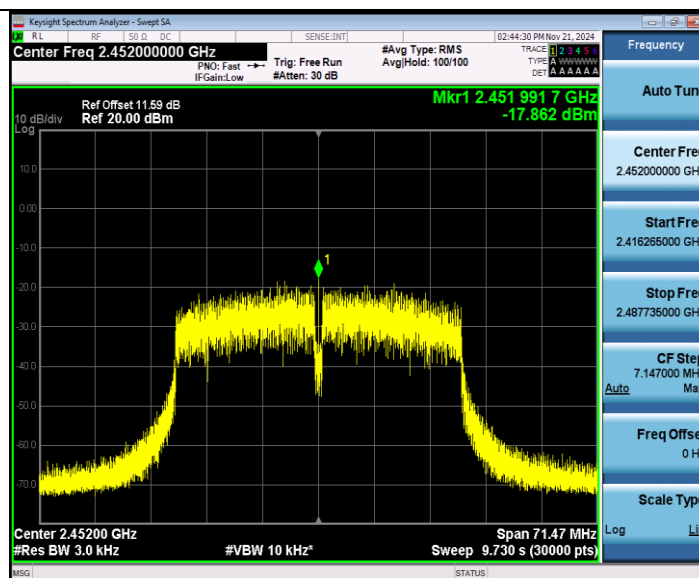
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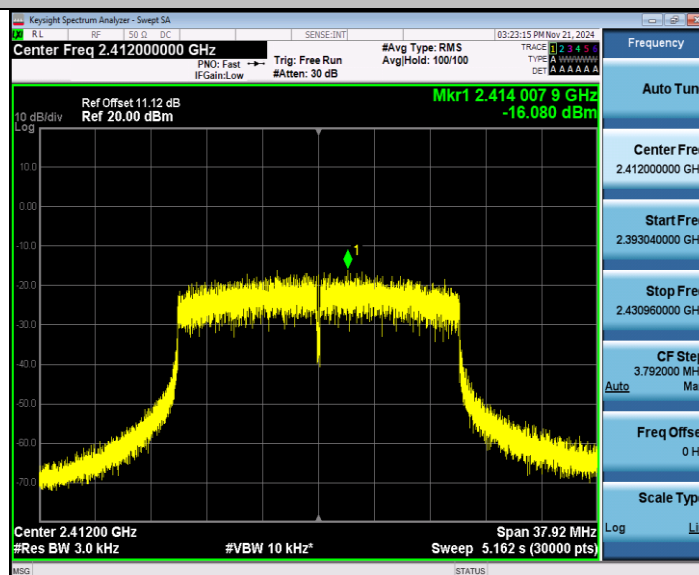
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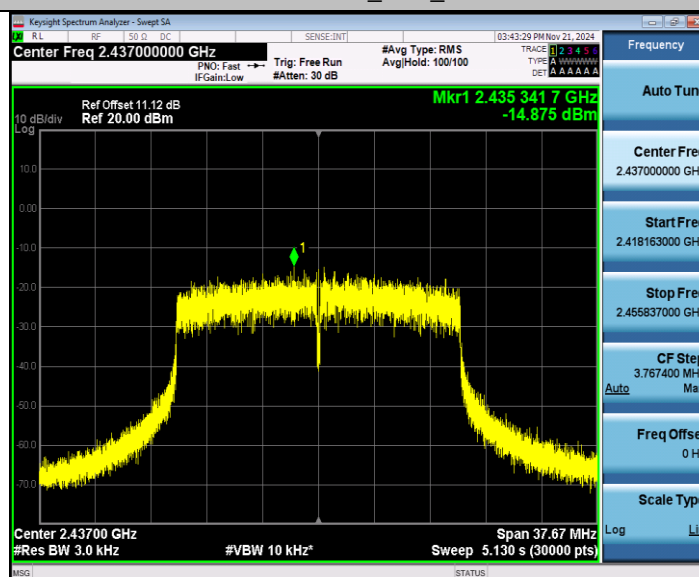
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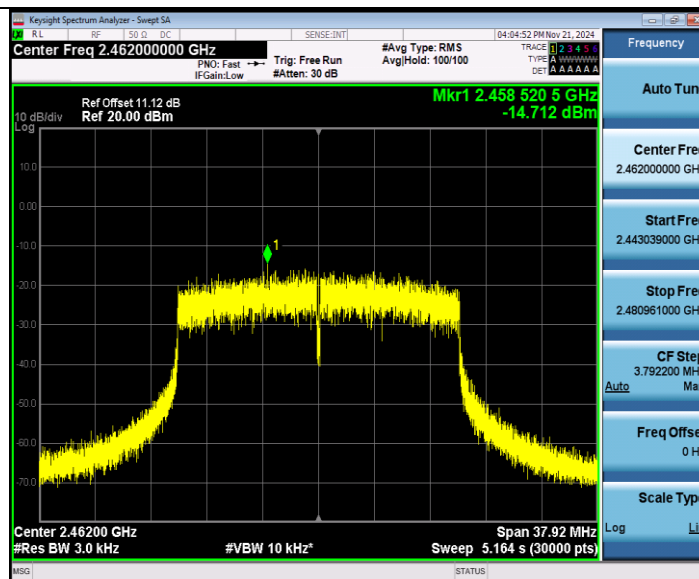
11AX20SISO_Ant1_2412



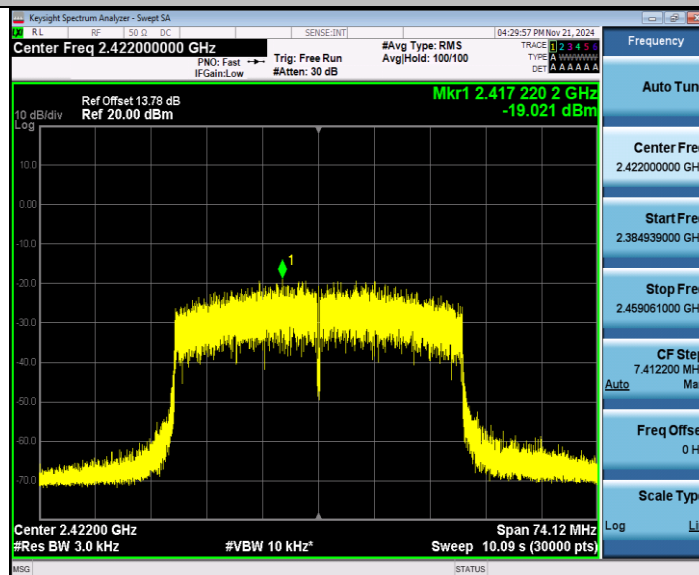
11AX20SISO_Ant1_2437



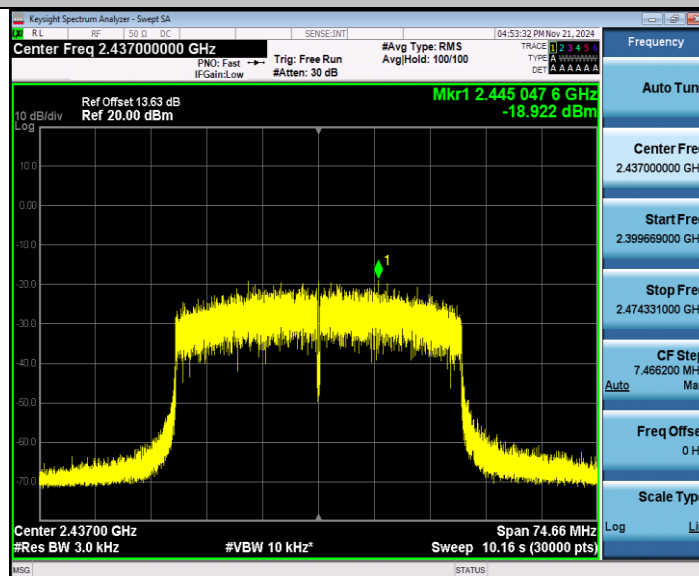
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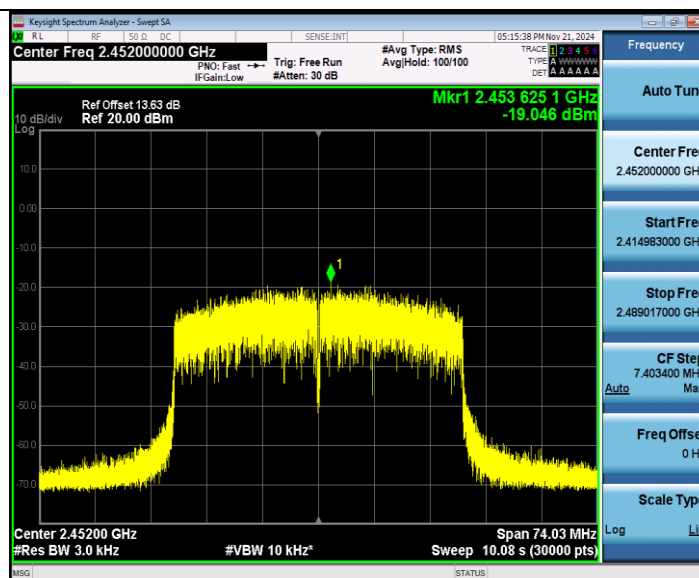
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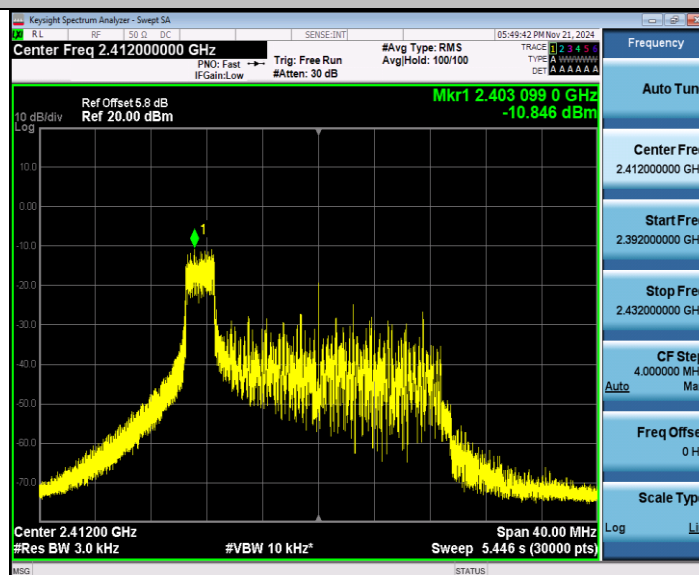
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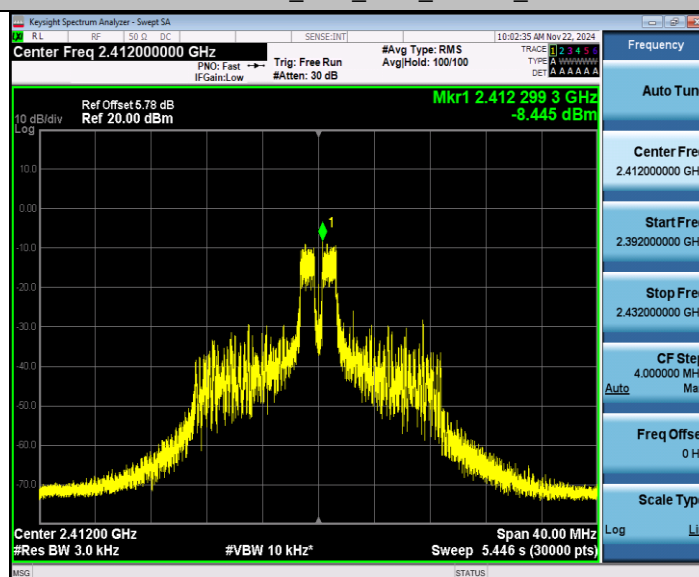
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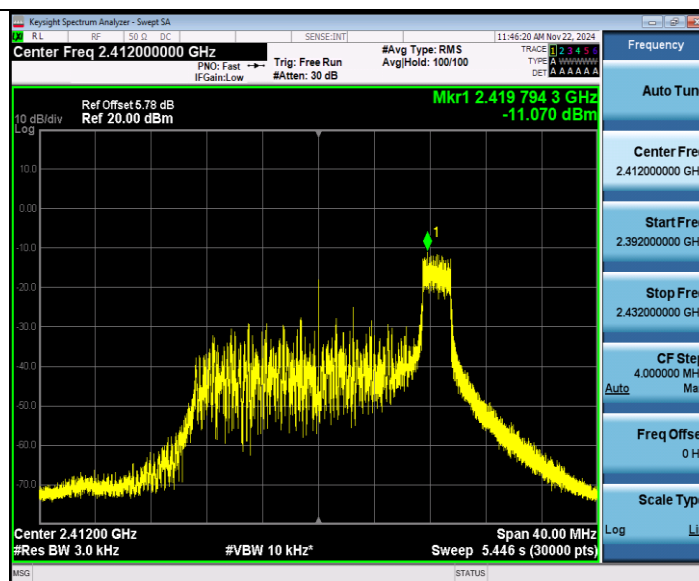
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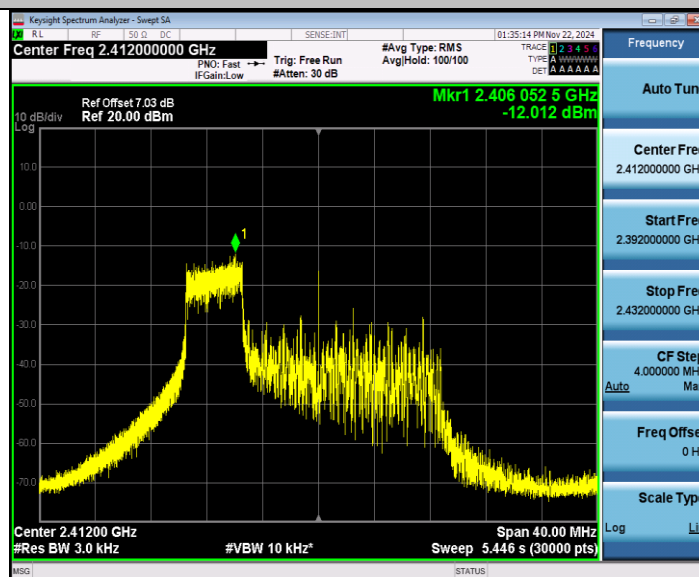
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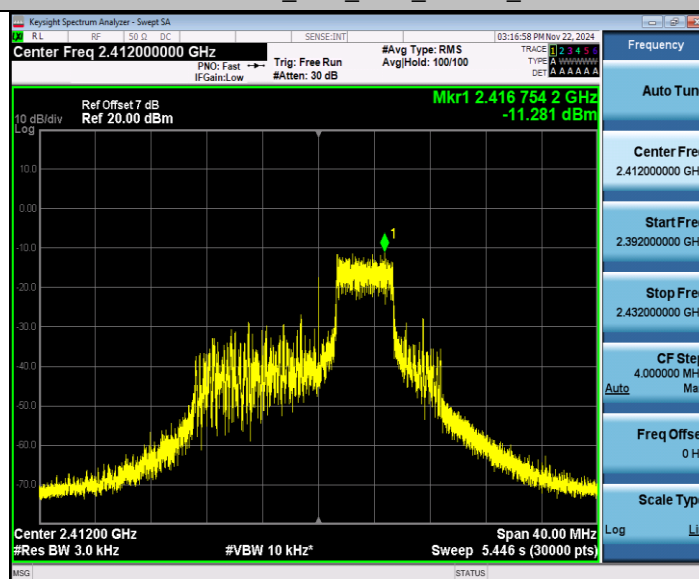
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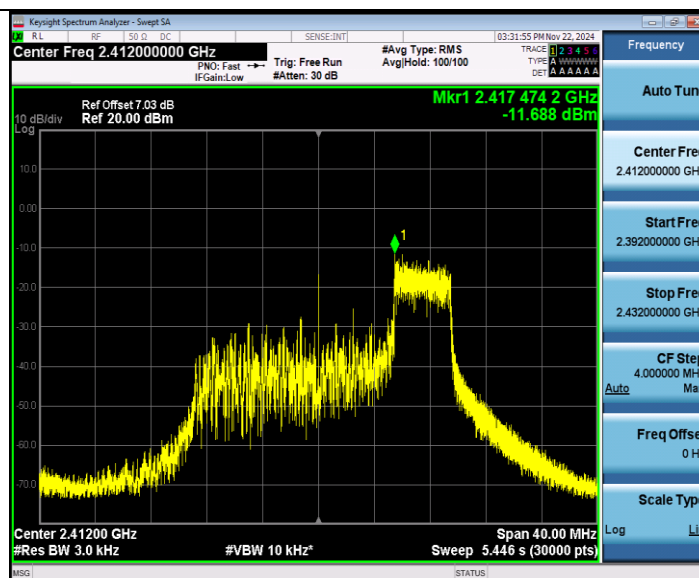
11AX20SISO_Ant1_2412_52Tone_RU37



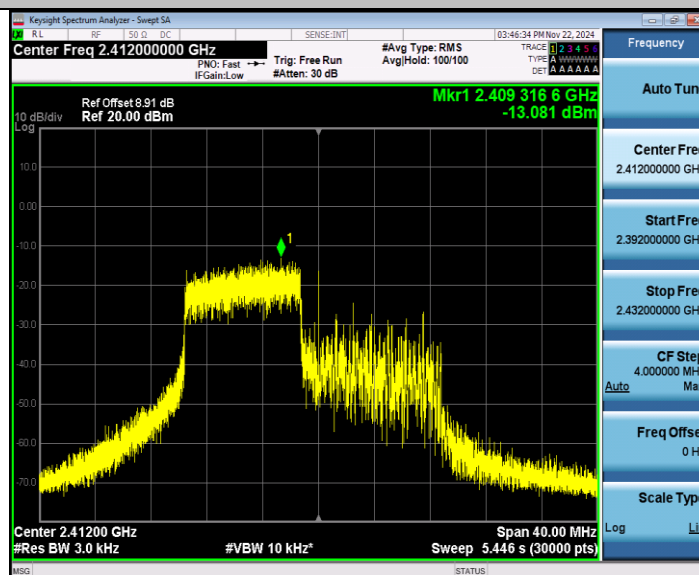
11AX20SISO_Ant1_2412_52Tone_RU39



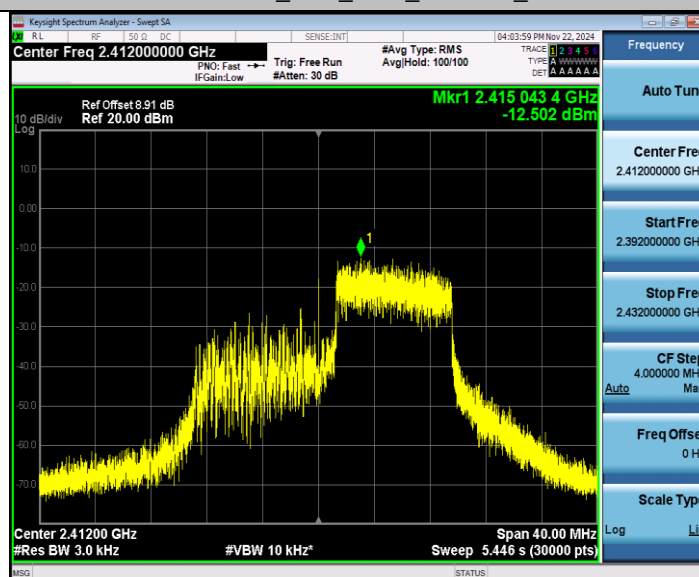
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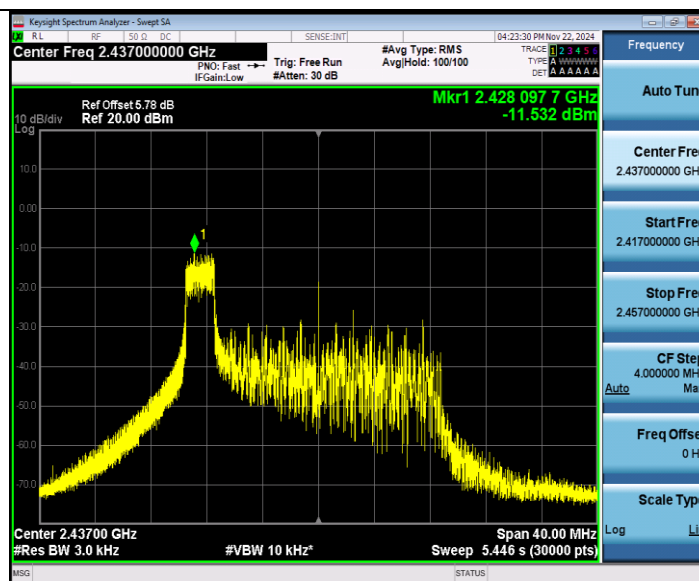
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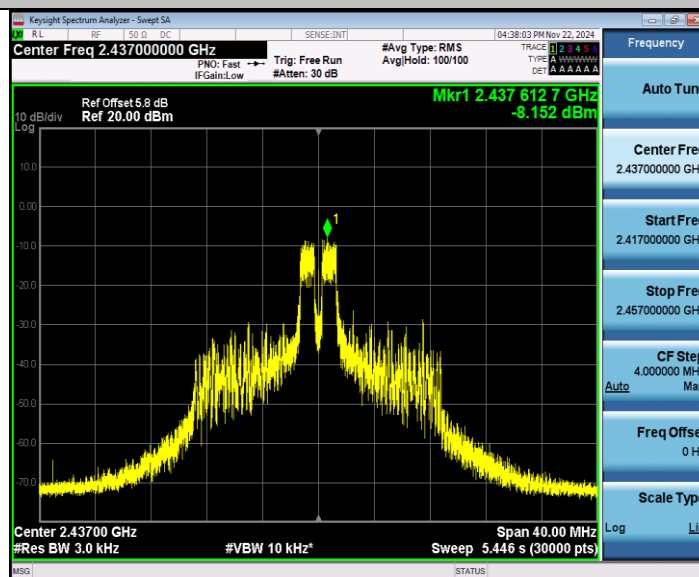
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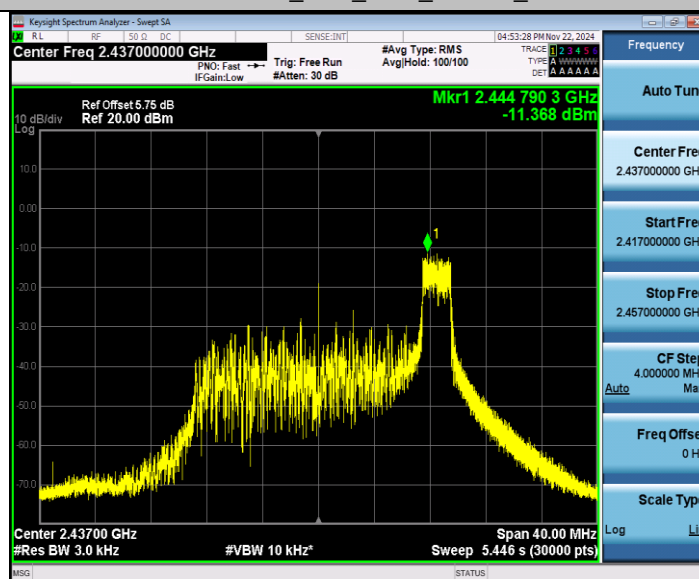
11AX20SISO_Ant1_2437_26Tone_RU0



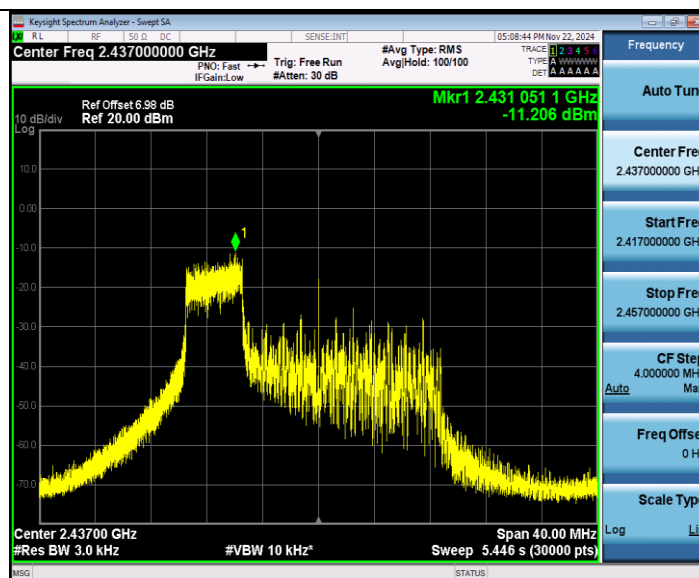
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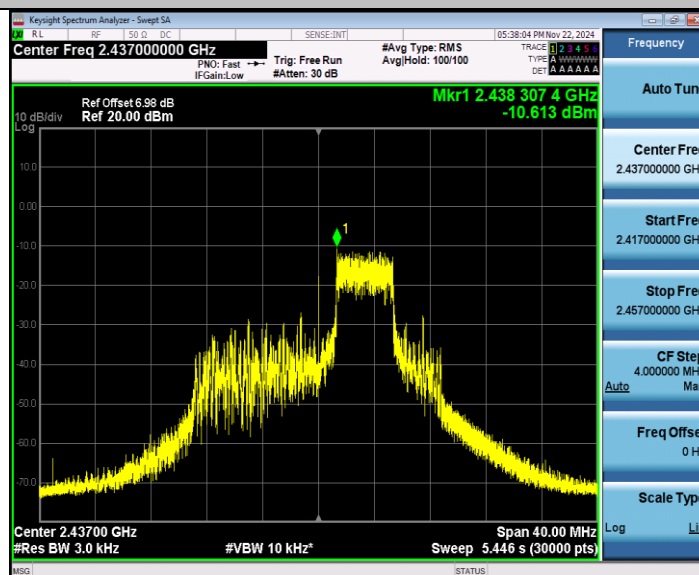
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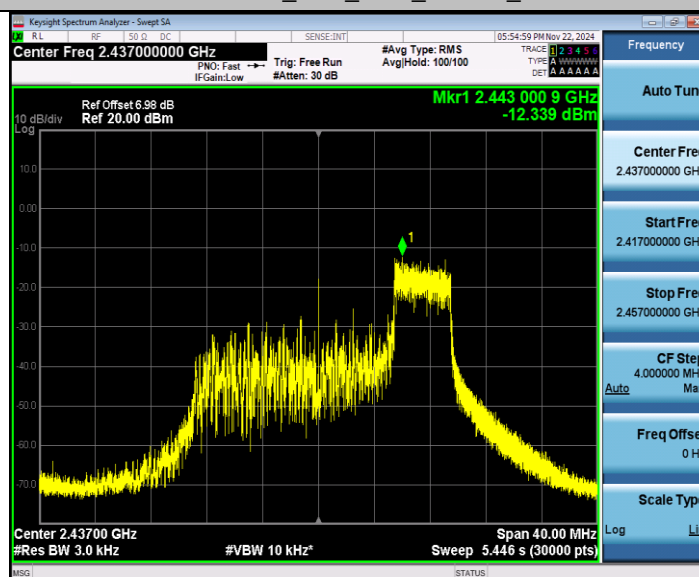
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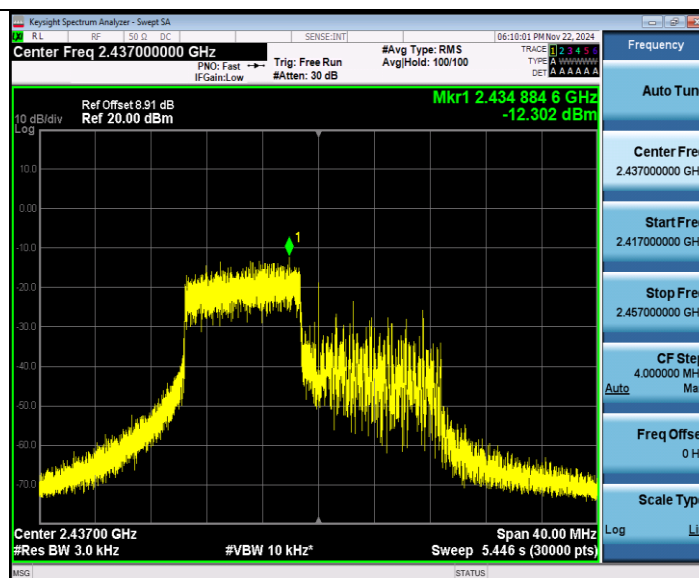
11AX20SISO_Ant1_2437_52Tone_RU39



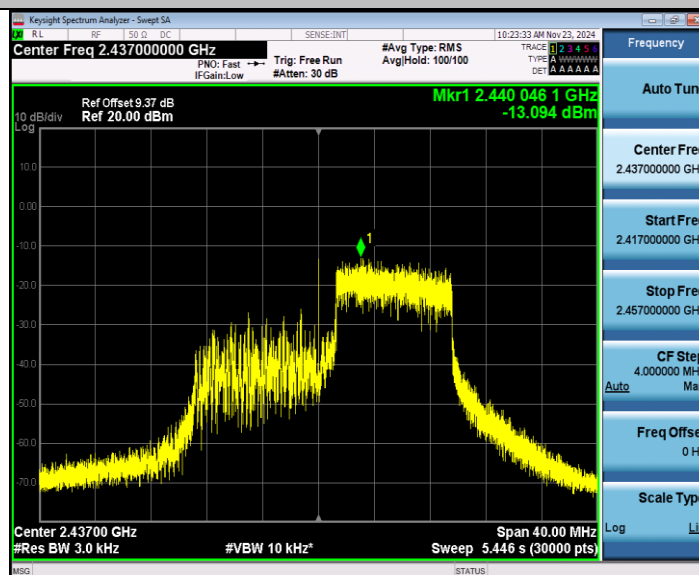
11AX20SISO_Ant1_2437_52Tone_RU40



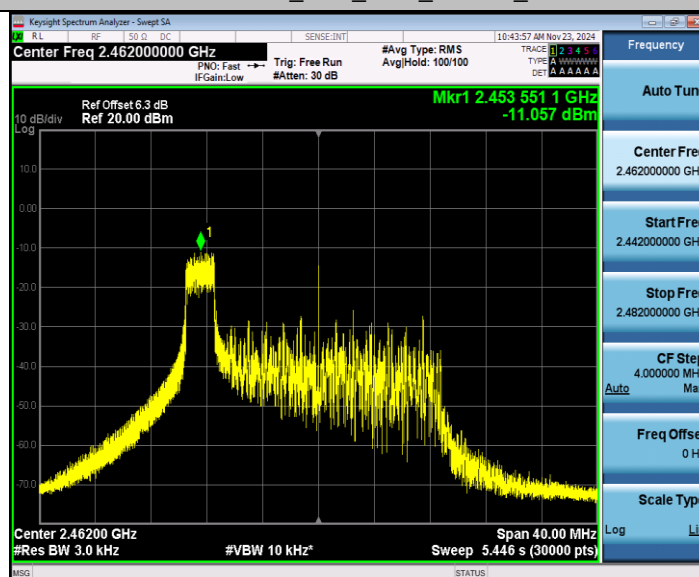
11AX20SISO_Ant1_2437_106Tone_RU53



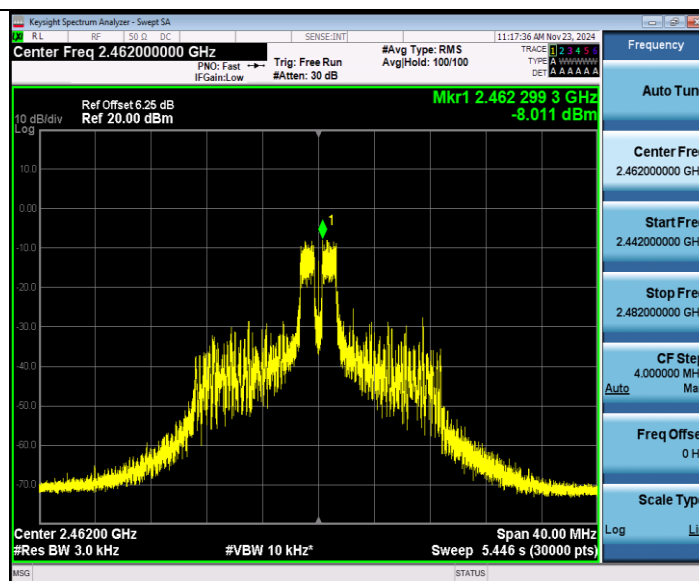
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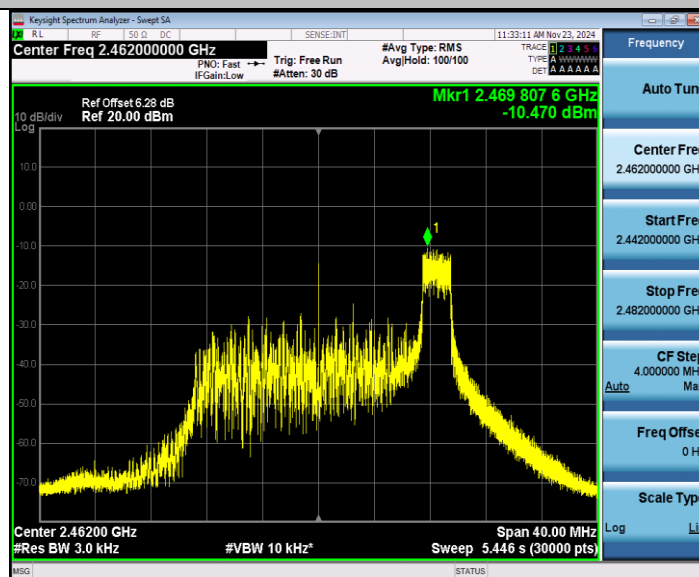
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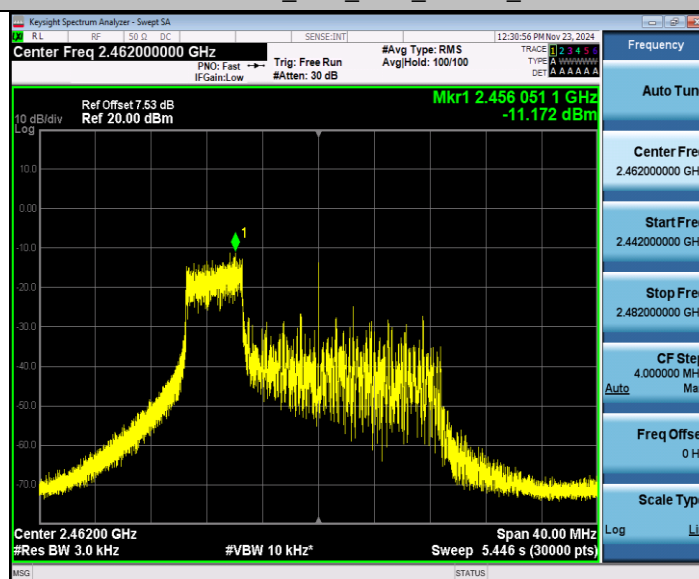
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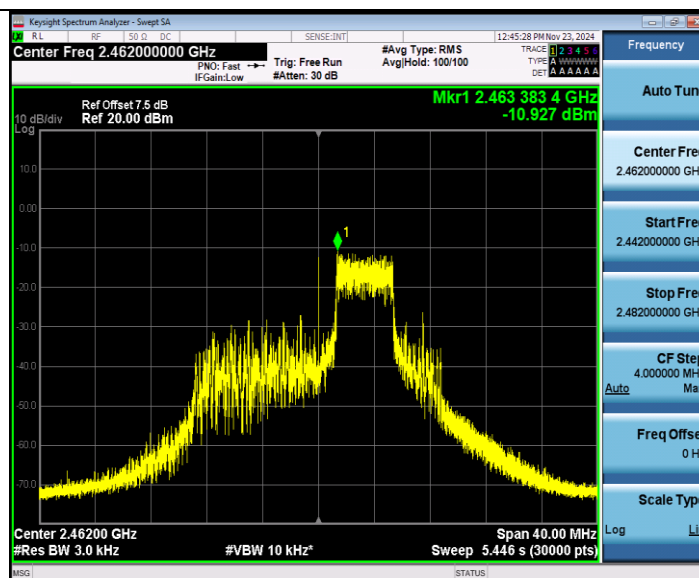
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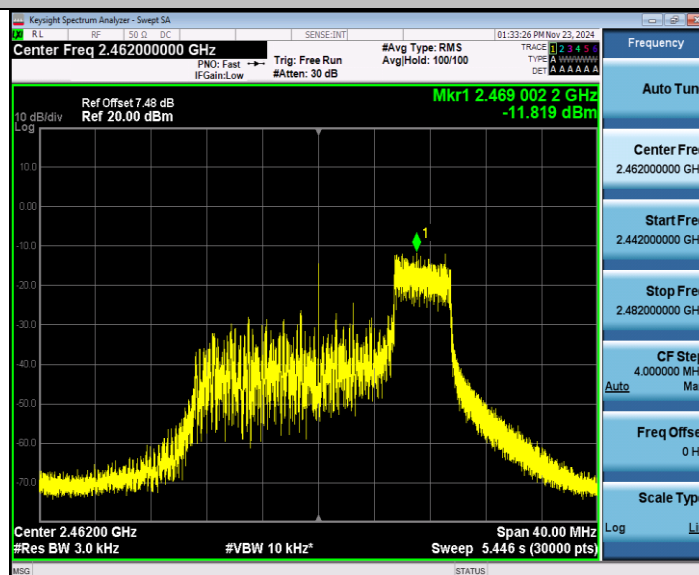
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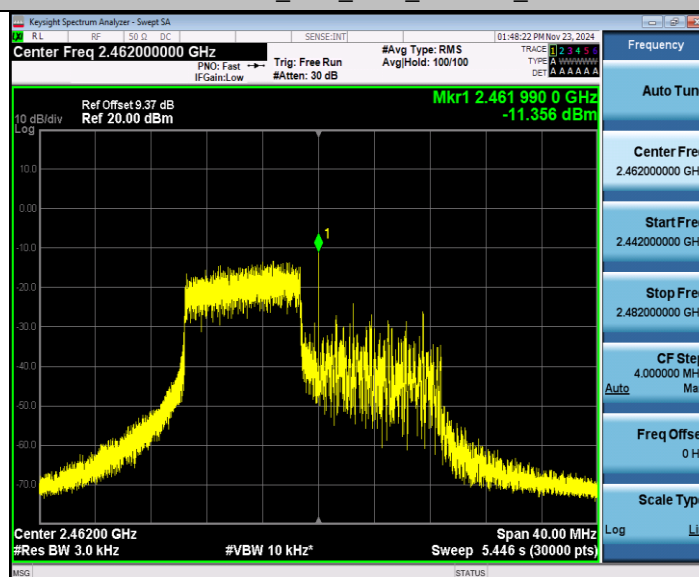
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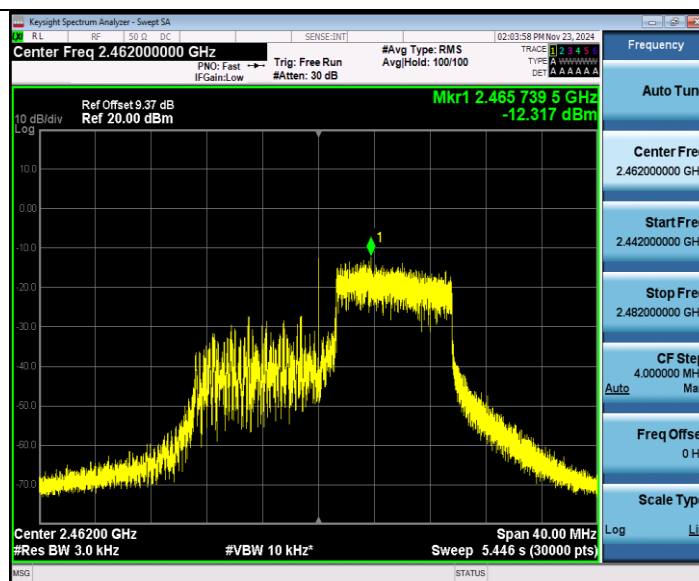
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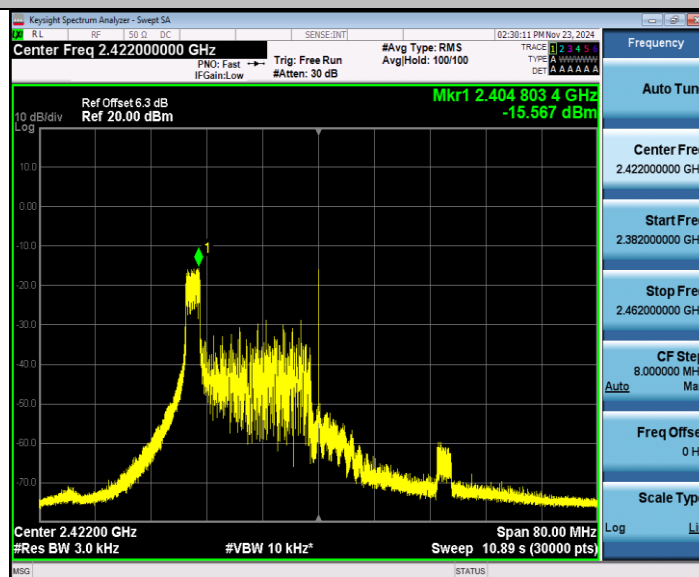
11AX20SISO_Ant1_2462_106Tone_RU53



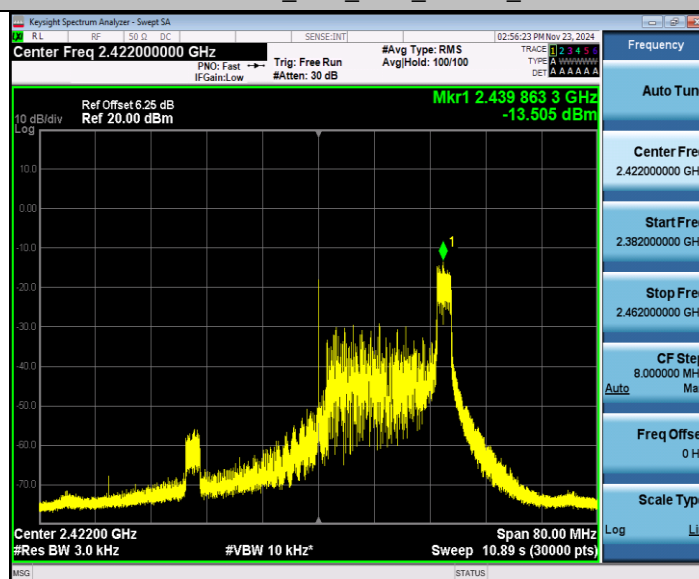
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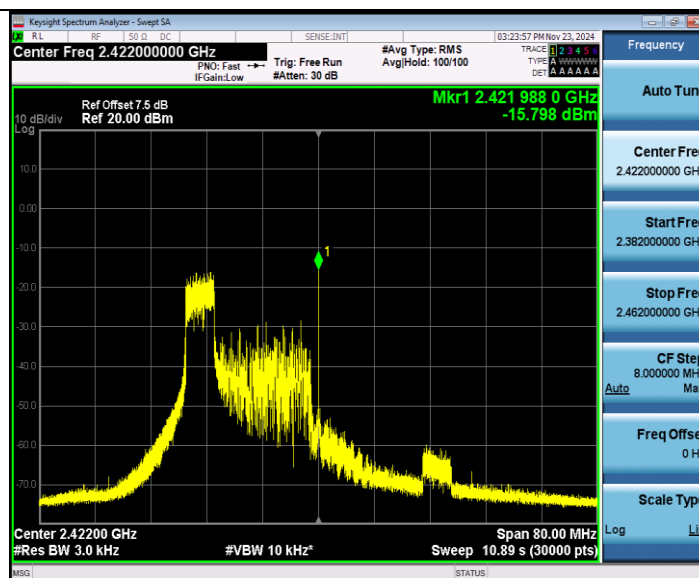
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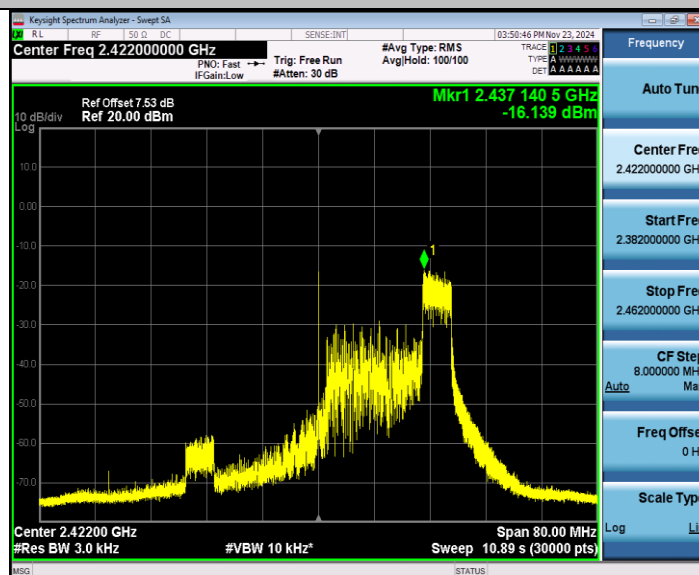
11AX40SISO_Ant1_2422_26Tone_RU17



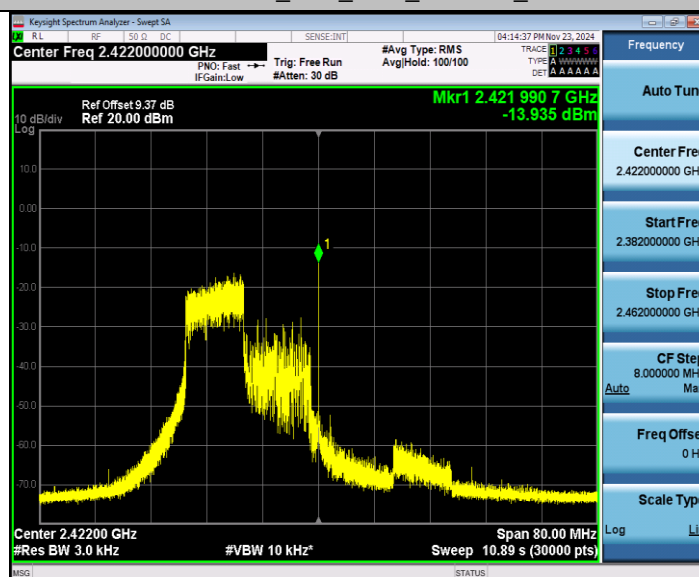
11AX40SISO_Ant1_2422_52Tone_RU37



11AX40SISO_Ant1_2422_52Tone_RU44



11AX40SISO_Ant1_2422_106Tone_RU53



11AX40SISO_Ant1_2422_106Tone_RU56