

TEST REPORT

Applicant Name : Shenzhen Ulefone Technology Co., Ltd.
Address(FCC): 7A01, Building A, Block 1, Anhongji Tianyao Plaza, Longhua District, Shenzhen City, Guangdong Province China
Address(IC): 7A01, Building A, Block 1, Anhongji Tianyao Plaza, Longhua District Shenzhen City Guangdong 518110 China
Report Number: 2504Y12371E-RFA
FCC ID: 2AT9T-8002
IC: 28620-8002

Test Standard (s)

FCC PART 15.247; RSS-GEN ISSUE 5, FEBRUARY 2021 AMENDMENT 2
RSS-247 ISSUE 4, JULY 24, 2025

Sample Description

Product Name: Tablet
Model No.(FCC): RugKing Pad 2 Pro, GQ8002, RugKing Pad 2, RugKing Pad 2 Ultra, RugKing Pad 2E, RugKing Pad 2S, RugKing Pad 2 Lite, RugKing Pad 2 Pro+, RugKing Pad 2s, RugKing Pad 2s Pro
Model No.(IC): RugKing Pad 2 Pro
Trade Mark: ulefone
Date Received: 2025-10-30
Report Date: 2026-01-29

Test Result:	The EUT complied with the standards above.
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Prepared and Checked By:

Amanda Wei

Amanda Wei
EMC Engineer

Approved By:

Bob. Liao

Bob.Liao
EMC Engineer

Note: This report must not be used by the customer to claim product certification, approval, or endorsement by A2LA, or any agency of the Federal Government. The information marked “#” is provided by the applicant, the laboratory is not responsible for its authenticity and this information can affect the validity of the result in the test report. Customer model name, addresses, names, trademarks etc. are included but no need marked.

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DOCUMENT REVISION HISTORY

Revision Number	Report Number	Description of Revision	Date of Revision
Rev.00	2504Y12371E-RFA	Original Report	2026-01-29

GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

Product Name	Tablet
Tested Model (FCC&IC)	RugKing Pad 2 Pro
Multiple Model (FCC)	GQ8002, RugKing Pad 2, RugKing Pad 2 Ultra, RugKing Pad 2E, RugKing Pad 2S, RugKing Pad 2 Lite, RugKing Pad 2 Pro+, RugKing Pad 2s,RugKing Pad 2s Pro
Model Difference [#] (FCC)	The differences between the above models are in the model name and the sales channels. Please refer to DOS letter for details. The applicant provided model "RugKing Pad 2 Pro" for testing.
HVIN	GQ8002
Voltage Range [#]	DC 5V/9V from adapter DC 5V from desktop charger DC 3.87V from rechargeable battery
Adapter Information [#]	Model:HJ-PD18W-US Input:100-240 V~ 50/60Hz 0.8A Output:5.0V ===3.0A 15.0W OR 9.0V ===2.0A 18.0W OR 12.0V ===1.5A 18.0W (Note: The manufacturer claims that EUT only support 5/9V for charging.)
EUT Manufacture Information [#]	Company Name: Shenzhen Gotron Electronic CO.,Ltd. Address: 7B01, Building A, Block 1, Anhongji Tianyao Plaza, Longhua District, Shenzhen City, Guangdong Province China.

Frequency Range	Bluetooth: 2402-2480MHz
Maximum Conducted Output Power(Peak) (actual test result)	9.94 dBm
Modulation Technique	BDR: DH1/DH3/DH5(GFSK) EDR: 2DH1/2DH3/2DH5($\pi/4$ -DQPSK) EDR: 3DH1/3DH3/3DH5(8DPSK)
Antenna Specification [#]	FPC Antenna, Antenna gain: -2.02dBi (It is provided by the applicant.)
Sample Serial Number	For CE&RE Test: 3C1Q-4 For RF Conducted Test: 3C1Q-5 (Assigned by ATC, Shenzhen)
Sample/EUT Status	Good condition

Objective

This test report is in accordance with Part 2-Subpart J, Part 15-Subparts A and C of the Federal Communication Commission rules, RSS-GEN Issue 5, Feb. 2021 Amendment 2 and RSS-247 Issue 4, July 24, 2025 of the Innovation, Science and Economic Development Canada rules.

The tests were performed in order to determine compliance with FCC Part 15, Subpart C, and section 15.203, 15.205, 15.207, 15.209 and 15.247 rules. And RSS-GEN Issue 5, Feb. 2021 Amendment 2 and RSS-247 Issue 4, July 24, 2025.

Test Methodology

All measurements contained in this report were conducted with ANSI C63.10-2020+Cor. 1-2023+ C63.10a-2024+Errata to C63.10a-2024▲, American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices, KDB 558074 D01 15.247 Meas Guidance v05r02 and RSS-GEN Issue 5, Feb. 2021 Amendment 2 and RSS-247 Issue 4, July 24, 2025.

Unless otherwise stated there are no any additions to, deviations, or exclusions from the method.

Test Facility

The test site used by Shenzhen Accurate Technology Co., Ltd. to collect test data is located on the Floor 1, KuMaKe Building, Dongzhou Community, Guangming Street, Guangming District, Shenzhen, Guangdong, China.

Accredited by American Association for Laboratory Accreditation (A2LA).The Certificate Number is 4297.01.

The lab has been recognized by Innovation, Science and Economic Development Canada to test to Canadian radio equipment requirements. The Registration Number is 30241.

Measurement Uncertainty

Parameter		Uncertainty
Occupied Channel Bandwidth		5 %
RF Frequency		0.064×10^{-7}
RF output power, conducted		0.3 dB
Unwanted Emission, conducted		1.2 dB
AC Power Lines Conducted Emissions		2.7 dB
Radiated Emissions	9kHz - 30MHz	2.1 dB
	30MHz - 1GHz	4.3 dB
	1GHz - 18GHz	4.9 dB
	18GHz - 26.5GHz	5.2 dB
Temperature		1 °C
Humidity		7 %
Supply voltages		0.4 %

Note: The extended uncertainty given in this report is obtained by combining the standard uncertainty times the coverage factor K with the 95% confidence interval. Otherwise required by the applicant or Product Regulations, Decision Rule in this report did not consider the uncertainty.

SYSTEM TEST CONFIGURATION

Description of Test Configuration

The system was configured for testing in the engineering mode.

For Bluetooth BDR&EDR mode, 79 channels are provided to testing:

Channel	Freq. (MHz)	Channel	Freq. (MHz)	Channel	Freq. (MHz)	Channel	Freq. (MHz)
0	2402	20	2422	40	2442	60	2462
1	2403	21	2423	41	2443	61	2463
2	2404	22	2424	42	2444	62	2464
...	...	...	...	...	...	...	...
...	...	...	...	...	...	...	...
17	2419	37	2439	57	2459	77	2479
18	2420	38	2440	58	2460	78	2480
19	2421	39	2441	59	2461	/	/

EUT was tested with Channel 0, 39, 78 and additional channel 35, 36, 43.

Note: The device has two charging methods: adapter charging and dock charging. This report evaluates and tests both charging methods for AC Line Conducted Emissions and Radiated Spurious Emissions(Below 1GHz)

Test Mode 1: Charging by Adapter + BT Transmitting

Test Mode 2: Charging by Desktop Charger +BT Transmitting

EUT Exercise Software and Power Level[#]

Exercise Software:	Testing in the engineering mode.
Power Level:	9

Note: The information in the above table is provided by the applicant.

Special Accessories

No special accessory.

Equipment Modifications

No modification was made to the EUT tested.

Support Equipment List and Details

Manufacturer	Description	Model	Serial Number
Unknown	SIM card	Unknown	Unknown
Kingston	TF card	64G	Unknown
Unknown	Earphone	Unknown	Unknown
Unknown	Desktop Charger	UAS71	Unknown

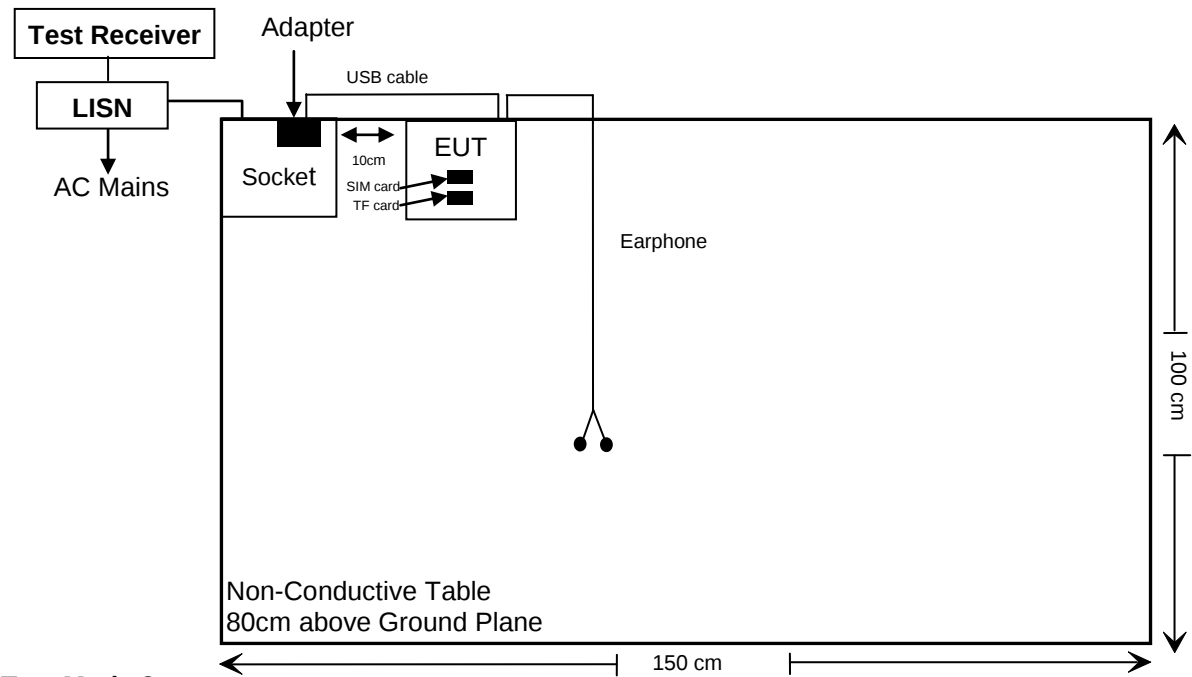
External I/O Cable

Cable Description	Shielding Type	Length (m)	From Port	To
USB Cable	NO	1.0	Adapter	EUT/Desktop Charger
Earphone cable	NO	1.2	EUT	Earphone

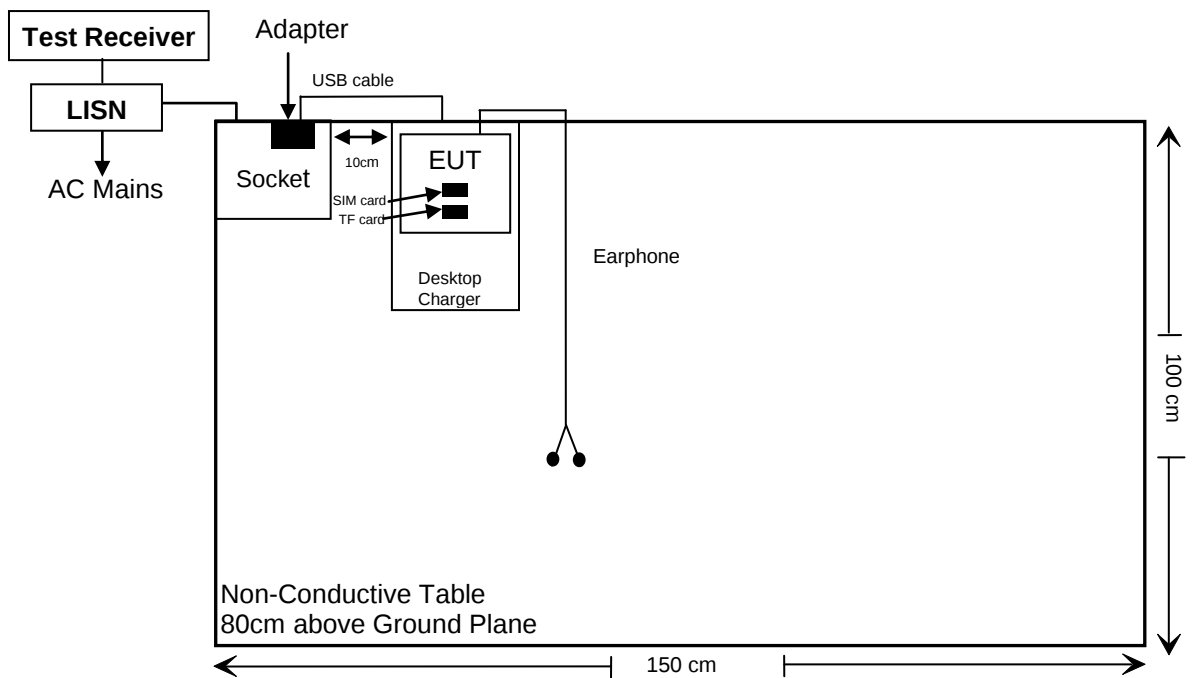
Block Diagram of Test Setup

For Conducted Emission:

Test Mode 1

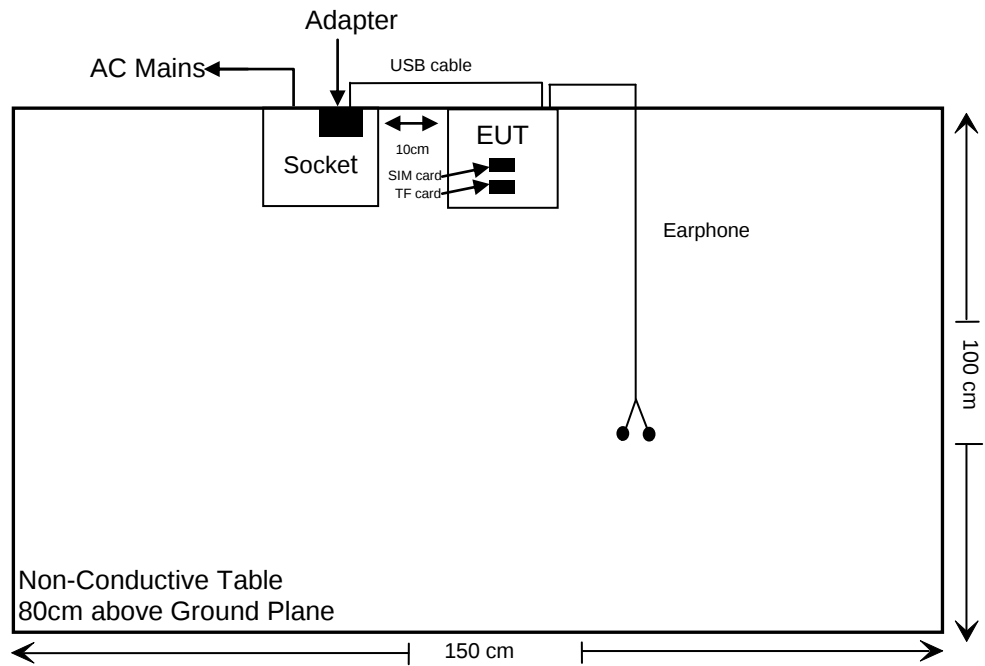


Test Mode 2

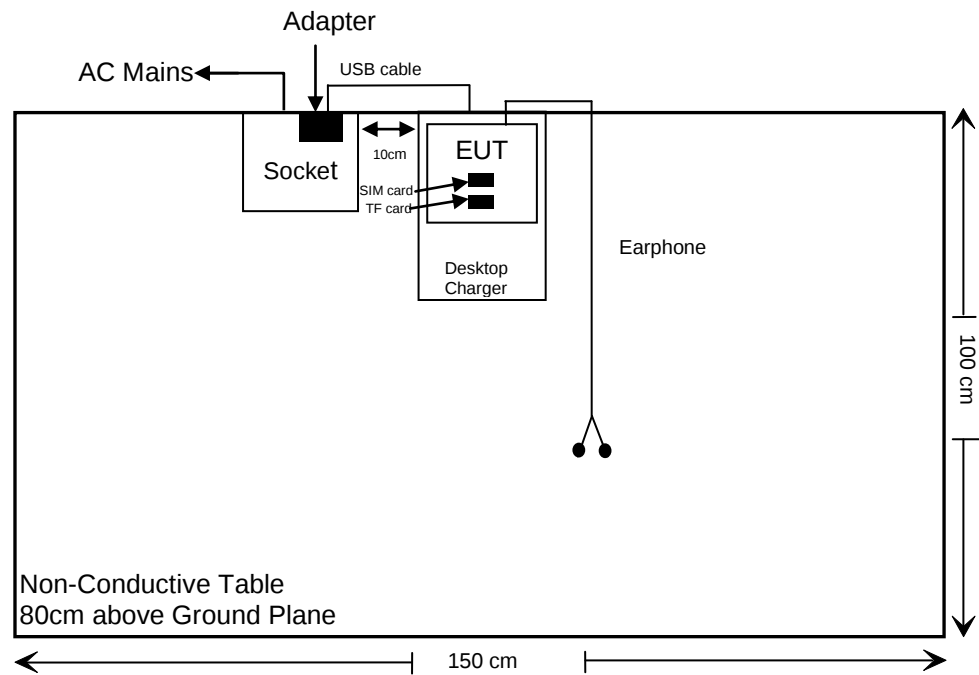


For Radiated Emission Below 1GHz:

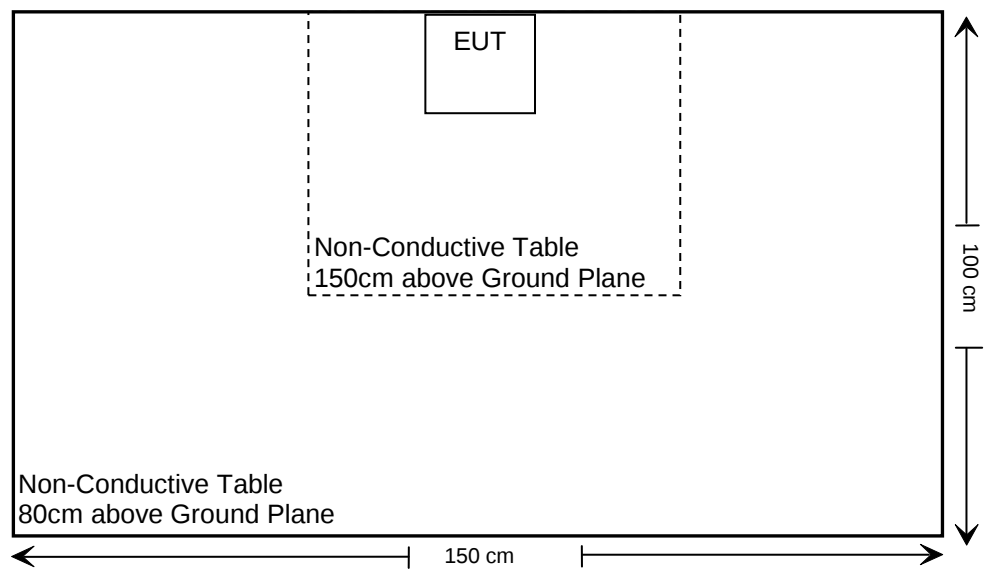
Test Mode 1



Test Mode 2



For Radiated Emission Above 1GHz:



SUMMARY OF TEST RESULTS

FCC Rules	ISED Rules	Description of Test	Result
§2.1093	RSS-102	RF Exposure(SAR)	Compliance
§15.203	RSS-Gen §6.8	Antenna Requirement	Compliance
§15.207(a)	RSS-Gen §8.8	AC Line Conducted Emissions	Compliance
§15.205, §15.209, §15.247(d)	RSS-Gen §8.10 RSS-247 §6.6	Radiated Spurious Emissions	Compliance
§15.247(a)(1)	RSS-Gen §6.7 RSS-247 §6.2.3.1(a)	20dB Emission Bandwidth & 99% Occupied Bandwidth	Compliance
§15.247(a)(1)	RSS-247 §6.2.1 RSS-247 §6.2.3.1	Channel Separation Test	Compliance
§15.247(a)(1)(iii)	RSS-247 §6.2.3.1(b)	Time of Occupancy (Dwell Time)	Compliance
§15.247(a)(1)(iii)	RSS-247 §6.2.3.1(b)	Quantity of hopping channel Test	Compliance
§15.247(b)(1)	RSS-247 §6.2.3.2	Peak Output Power Measurement	Compliance
§15.247(d)	RSS-247 §6.6	Conducted Spurious Emissions (Out of Band Emissions)	Compliance

TEST EQUIPMENT LIST

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Conducted Emissions Test					
Rohde & Schwarz	EMI Test Receiver	ESCI	100784	2025/09/17	2026/09/16
Rohde & Schwarz	L.I.S.N.	ENV216	101314	2025/09/17	2026/09/16
Anritsu Corp	50 Coaxial Switch	MP59B	6100237248	2025/09/18	2026/09/17
Rohde & Schwarz	Pulse Limiter	ESH3-Z2	100312	2025/05/30	2026/05/29
Unknown	RF Coaxial Cable	No.17	N0350	2025/05/30	2026/05/29
Test Software: e3 191218 (V9)					
Radiated Spurious Emission Test(Below 1GHz)					
Rohde & Schwarz	Test Receiver	ESR	102725	2025/09/18	2026/09/17
SONOMA INSTRUMENT	Amplifier	310N	186131	2025/03/26	2026/03/25
Schwarzbeck	Bilog Antenna	VULB9163	9163-323	2024/08/08	2027/08/07
Unknown	RF Coaxial Cable	No.12	N040	2025/05/30	2026/05/29
Unknown	RF Coaxial Cable	No.13	N300	2025/05/30	2026/05/29
Unknown	RF Coaxial Cable	No.14	N800	2025/05/30	2026/05/29
BACL	LOOP ANTENNA	1313-1A	3110711	2024/01/16	2027/01/15
Test Software: e3 191218 (V9)					
Radiated Spurious Emission Test(Above 1GHz)					
Rohde & Schwarz	Spectrum Analyzer	FSV40	101949	2025/09/17	2026/09/16
Decentest	Filter Switch Unit	DT7220FSU	DQ77927	2025/09/18	2026/09/17
Decentest	Multiplex Switch Test Control Set	DT7220CSU	DQ77924	2025/09/18	2026/09/17
A.H. Systems, inc.	Preamplifier	PAM-0118	226	2025/03/20	2026/03/19
Schwarzbeck	Horn Antenna	BBHA9120D	837	2023/02/22	2026/02/21
Unknown	RF Coaxial Cable	No.10	N050	2025/05/30	2026/05/29
Unknown	RF Coaxial Cable	No.11	N1000	2025/05/30	2026/05/29
Unknown	RF Coaxial Cable	No.19	N500	2025/05/30	2026/05/29
Schwarzbeck	HORN ANTENNA	BBHA9170	9170-359	2023/12/12	2026/12/11
BACL	Amplifier	BACL-1313-A1840	4012521	2025/05/30	2026/05/29
Unknown	RF Coaxial Cable	No.15	N600	2025/05/30	2026/05/29
Unknown	RF Coaxial Cable	No.16	N650	2025/05/30	2026/05/29
Test Software: e3 191218 (V9)					
RF Conducted Test					
Rohde & Schwarz	Spectrum Analyzer	FSV-40	101590	2025/09/17	2026/09/16
WEINSCHHEL	10dB Attenuator	5324	AU 3842	2025/03/26	2026/03/25
Test Software: JDAutoTestSystem V1.0.0					

*** Statement of Traceability:** Shenzhen Accurate Technology Co., Ltd. attests that all calibrations have been performed in accordance to requirements that traceable to National Primary Standards and International System of Units (SI).

RF EXPOSURE

Applicable Standard

FCC§1.1310 and §2.1093.

According to RSS-102 §5.2.2 table 3, SAR basic restrictions limits (100 kHz to 6 GHz).

Body region	Uncontrolled environment average SAR (W/kg)	Controlled environment average SAR (W/kg)	Averaging time (minutes)	Averaging mass (g)
Whole body	0.08	0.4	6	whole body
Localized head, neck and trunk	1.6	8	6	1
Localized limbs	4	20	6	10

Measurement Result: Compliance.

Please refer to FCC SAR Report: 2504Y12371E-SAA and IC SAR Report: 2504Y12371E-SAB.

ANTENNA REQUIREMENT

Applicable Standard

According to FCC § 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 user of a standard antenna jack or electrical connector is prohibited. The structure and application of the EUT were analyzed to determine compliance with section §15.203 of the rules. §15.203 state that the subject device must meet the following criteria:

- Antenna must be permanently attached to the unit.
- Antenna must use a unique type of connector to attach to the EUT.
- Unit must be professionally installed, and installer shall be responsible for verifying that the correct antenna is employed with the unit.

And according to FCC 47 CFR section 15.247 (b), if the transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

According to RSS-GEN §6.8,

The applicant for equipment certification shall provide a list of all antenna types that may be used with the transmitter, where applicable (i.e. for transmitters with detachable antenna), indicating the maximum permissible antenna gain (in dBi) and the required impedance for each antenna. The test report shall demonstrate the compliance of the transmitter with the limit for maximum equivalent isotropically radiated power (e.i.r.p.) specified in the applicable RSS, when the transmitter is equipped with any antenna type, selected from this list.

For expediting the testing, measurements may be performed using only the antenna with highest gain of each combination of transmitter and antenna type, with the transmitter output power set at the maximum level. However, the transmitter shall comply with the applicable requirements under all operational conditions and when in combination with any type of antenna from the list provided in the test report (and in the notice to be included in the user manual, provided below).

When measurements at the antenna port are used to determine the RF output power, the effective gain of the device's antenna shall be stated, based on a measurement or on data from the antenna's manufacturer.

The test report shall state the RF power, output power setting and spurious emission measurements with each antenna type that is used with the transmitter being tested.

For licence-exempt equipment with detachable antennas, the user manual shall also contain the following notice in a conspicuous location:

This radio transmitter [enter the device's ISED certification number] has been approved by Innovation, Science and Economic Development Canada to operate with the antenna types listed below, with the maximum permissible gain indicated. Antenna types not included in this list that have a gain greater than the maximum gain indicated for any type listed are strictly prohibited for use with this device.

Immediately following the above notice, the manufacturer shall provide a list of all antenna types which can be used with the transmitter, indicating the maximum permissible antenna gain (in dBi) and the required impedance for each antenna type.

Antenna Connector Construction

The EUT has one internal antenna arrangement, which was permanently attached, fulfill the requirement of this section. Please refer to the product photos.

Type	Antenna Gain [#]	Impedance
FPC	-2.02 dBi	50Ω

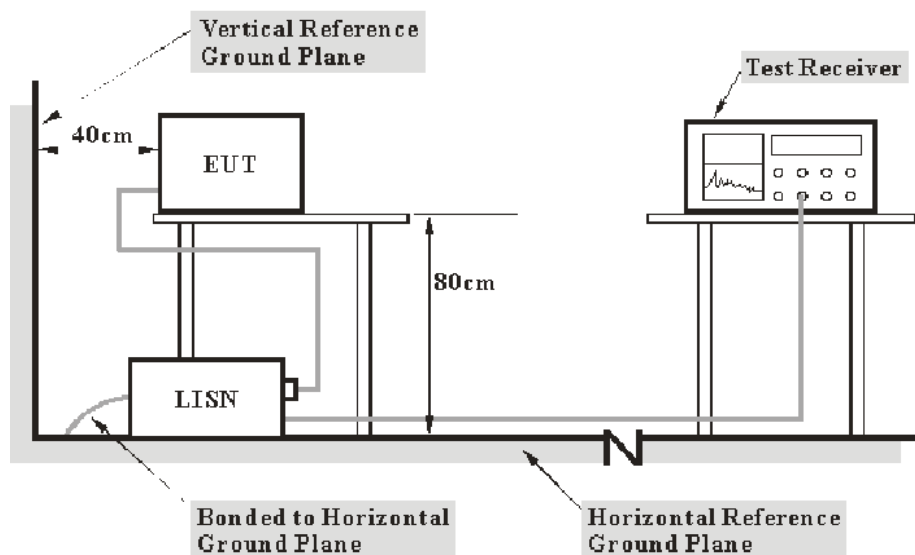
Result: Compliance.

AC LINE CONDUCTED EMISSIONS

Applicable Standard

FCC §15.207(a). RSS-GEN §8.8

EUT Setup



Note: 1. Support units were connected to second LISN.
2. Both of LISNs (AMN) 80 cm from EUT and at the least 80 cm from other units and other metal planes support units.

The setup of EUT is according with per ANSI C63.10-2020 measurement procedure. The specification used was with the FCC Part 15.207 and RSS-Gen limits.

The spacing between the peripherals was 10 cm.

EMI Test Receiver Setup

The EMI test receiver was set to investigate the spectrum from 150 kHz to 30 MHz.

During the conducted emission test, the EMI test receiver was set with the following configurations:

Frequency Range	IF B/W
150 kHz – 30 MHz	9 kHz

Test Procedure

During the conducted emission test, the adapter was connected to the outlet of the LISN.

Maximizing procedure was performed on the six (6) highest emissions of the EUT.

All final data was recorded in the Quasi-peak and average detection mode.

Calculation

The factor is calculated by adding LISN VDF (Voltage Division Factor) and Cable Loss. The basic equation is as follows:

$$\text{Factor} = \text{LISN VDF} + \text{Cable Loss} + 10\text{dB Attenuation(Limiter)}$$

The “**Over limit**” column of the following data tables indicates the degree of compliance with the applicable limit. For example, an over limit of -7 dB means the emission is 7 dB below the limit. The equation for calculation is as follows:

$$\text{Over Limit} = \text{Level} - \text{Limit}$$

$$\text{Level} = \text{Read Level} + \text{Factor}$$

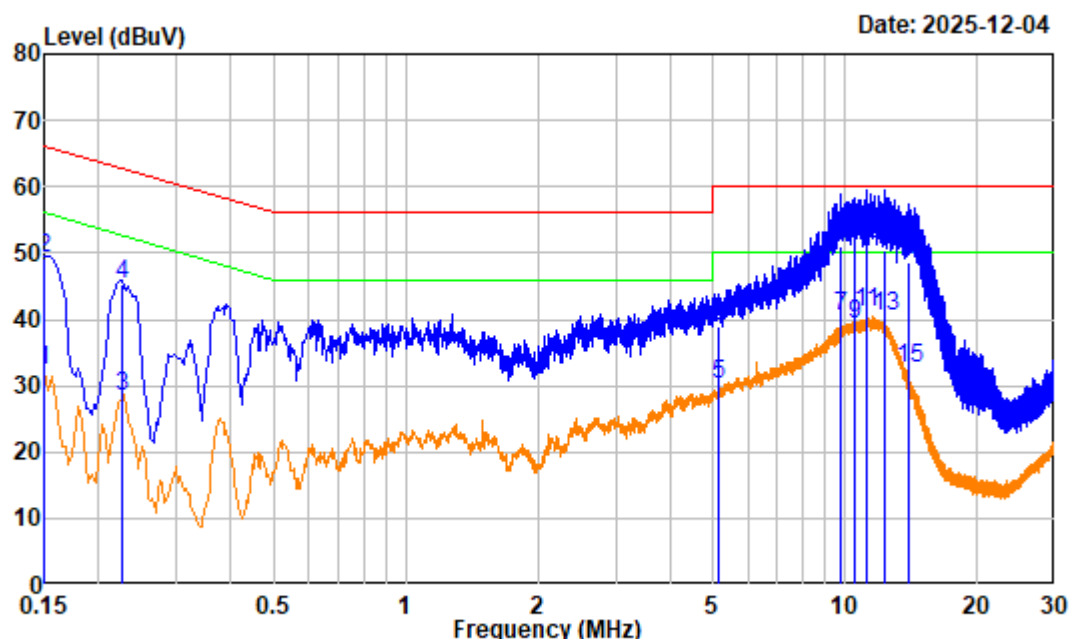
Test Data

Environmental Conditions

Temperature:	23.6 °C
Relative Humidity:	35 %
ATM Pressure:	100.9 kPa
Test Engineer:	Jason Fan
Test Date:	2025-12-04
EUT Operation Mode:	BT Transmitting

Test Result: Compliance, please refer to the below data.

Note: The mode and channel: BT 3DH5 Middle Channel was tested.

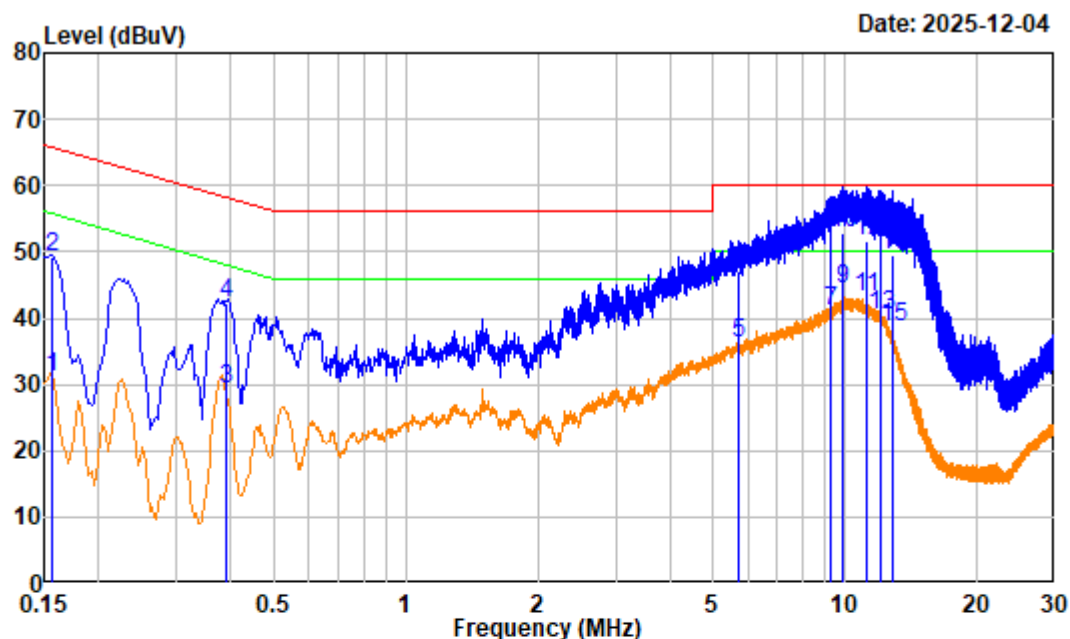
Test Mode 1:**AC 120V/60Hz, Line:**

Site : Shielding Room
 Condition : Line
 Job No. : 2504Y12371E-RF
 Test Mode : Test mode 1
 Tester : Jason Fan
 Receiver Setting: IF B/W 9kHz PK/AV

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dBuV	dBuV	dBuV	dB	
1	0.150	19.99	12.39	32.38	56.00	-23.62	Average
2	0.150	19.99	29.33	49.32	66.00	-16.68	QP
3	0.225	19.97	8.38	28.35	52.63	-24.28	Average
4	0.225	19.97	25.33	45.30	62.63	-17.33	QP
5	5.133	21.73	8.39	30.12	50.00	-19.88	Average
6	5.133	21.73	17.33	39.06	60.00	-20.94	QP
7	9.735	22.73	17.65	40.38	50.00	-9.62	Average
8	9.735	22.73	28.34	51.07	60.00	-8.93	QP
9	10.467	22.85	16.39	39.24	50.00	-10.76	Average
10	10.467	22.85	30.34	53.19	60.00	-6.81	QP
11	11.193	22.97	18.04	41.01	50.00	-8.99	Average
12	11.193	22.97	28.34	51.31	60.00	-8.69	QP
13	12.312	23.13	17.46	40.59	50.00	-9.41	Average
14	12.312	23.13	27.34	50.47	60.00	-9.53	QP
15	14.007	23.35	9.16	32.51	50.00	-17.49	Average

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dBuV	dBuV	dBuV	dB	
16	14.007	23.35	25.33	48.68	60.00	-11.32	QP

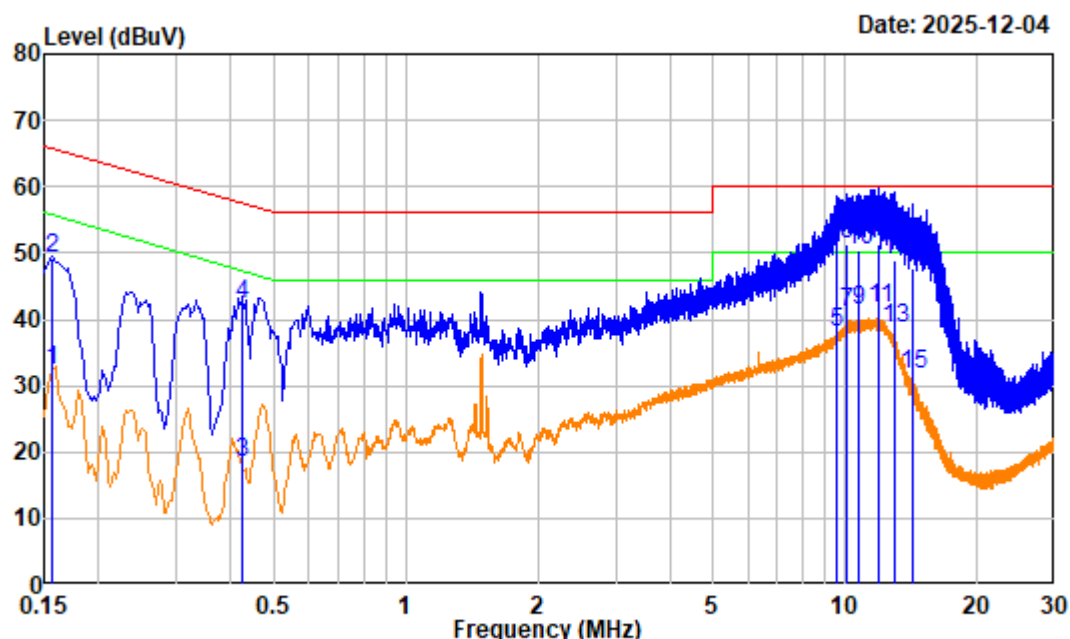
AC 120V/60Hz, Neutral:



Site : Shielding Room
 Condition : neutral
 Job No. : 2504Y12371E-RF
 Test Mode : Test mode 1
 Tester : Jason Fan
 Receiver Setting: IF B/W 9kHz PK/AV

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dBuV	dBuV	dBuV	dB	
1	0.156	19.85	11.39	31.24	55.67	-24.43	Average
2	0.156	19.85	29.33	49.18	65.67	-16.49	QP
3	0.390	19.96	9.39	29.35	48.06	-18.71	Average
4	0.390	19.96	22.34	42.30	58.06	-15.76	QP
5	5.733	21.91	14.38	36.29	50.00	-13.71	Average
6	5.733	21.91	25.33	47.24	60.00	-12.76	QP
7	9.237	22.74	18.39	41.13	50.00	-8.87	Average
8	9.237	22.74	31.34	54.08	60.00	-5.92	QP
9	9.831	22.87	21.42	44.29	50.00	-5.71	Average
10	9.831	22.87	30.07	52.94	60.00	-7.06	QP
11	11.190	23.09	20.04	43.13	50.00	-6.87	Average
12	11.190	23.09	28.39	51.48	60.00	-8.52	QP
13	12.039	23.20	17.39	40.59	50.00	-9.41	Average
14	12.039	23.20	30.33	53.53	60.00	-6.47	QP
15	12.873	23.31	15.20	38.51	50.00	-11.49	Average

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dBuV	dBuV	dBuV	dB	
16	12.873	23.31	26.24	49.55	60.00	-10.45	QP

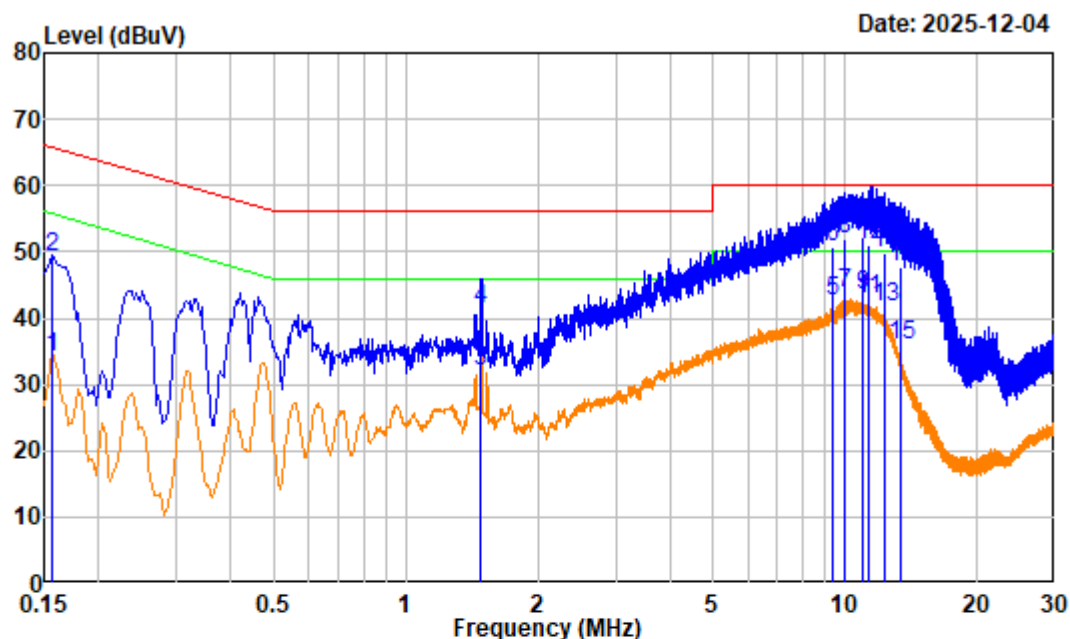
Test Mode 2:**AC 120V/60Hz, Line:**

Site : Shielding Room
 Condition : Line
 Job No. : 2504Y12371E-RF
 Test Mode : Test mode 2
 Tester : Jason Fan
 Receiver Setting: IF B/W 9kHz PK/AV

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dBuV	dBuV	dBuV	dB	
1	0.156	19.94	12.39	32.33	55.67	-23.34	Average
2	0.156	19.94	29.33	49.27	65.67	-16.40	QP
3	0.426	20.02	-1.62	18.40	47.33	-28.93	Average
4	0.426	20.02	22.33	42.35	57.33	-14.98	QP
5	9.594	22.70	15.38	38.08	50.00	-11.92	Average
6	9.594	22.70	29.32	52.02	60.00	-7.98	QP
7	10.122	22.80	18.24	41.04	50.00	-8.96	Average
8	10.122	22.80	28.40	51.20	60.00	-8.80	QP
9	10.773	22.90	18.57	41.47	50.00	-8.53	Average
10	10.773	22.90	27.64	50.54	60.00	-9.46	QP
11	11.952	23.08	18.45	41.53	50.00	-8.47	Average
12	11.952	23.08	28.26	51.34	60.00	-8.66	QP
13	12.987	23.23	15.49	38.72	50.00	-11.28	Average
14	12.987	23.23	25.64	48.87	60.00	-11.13	QP
15	14.301	23.39	8.38	31.77	50.00	-18.23	Average

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dBuV	dBuV	dBuV	dB	
16	14.301	23.39	24.33	47.72	60.00	-12.28	QP

AC 120V/60Hz, Neutral:



Site : Shielding Room
 Condition : neutral
 Job No. : 2504Y12371E-RF
 Test Mode : Test mode 2
 Tester : Jason Fan
 Receiver Setting: IF B/W 9kHz PK/AV

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dBuV	dBuV	dBuV	dB	
1	0.156	19.85	14.39	34.24	55.67	-21.43	Average
2	0.156	19.85	29.33	49.18	65.67	-16.49	QP
3	1.482	20.71	11.34	32.05	46.00	-13.95	Average
4	1.482	20.71	20.50	41.21	56.00	-14.79	QP
5	9.372	22.77	19.95	42.72	50.00	-7.28	Average
6	9.372	22.77	27.85	50.62	60.00	-9.38	QP
7	9.936	22.89	20.86	43.75	50.00	-6.25	Average
8	9.936	22.89	29.16	52.05	60.00	-7.95	QP
9	10.950	23.05	20.38	43.43	50.00	-6.57	Average
10	10.950	23.05	29.33	52.38	60.00	-7.62	QP
11	11.295	23.10	19.89	42.99	50.00	-7.01	Average
12	11.295	23.10	28.07	51.17	60.00	-8.83	QP
13	12.312	23.23	18.31	41.54	50.00	-8.46	Average
14	12.312	23.23	26.47	49.70	60.00	-10.30	QP
15	13.338	23.37	12.69	36.06	50.00	-13.94	Average

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dBuV	dBuV	dBuV	dB	
16	13.338	23.37	24.27	47.64	60.00	-12.36	QP

RADIATED SPURIOUS EMISSIONS

Applicable Standard

FCC §15.205; §15.209; §15.247(d)

RSS-GEN §8.10 & RSS-247 §6.6

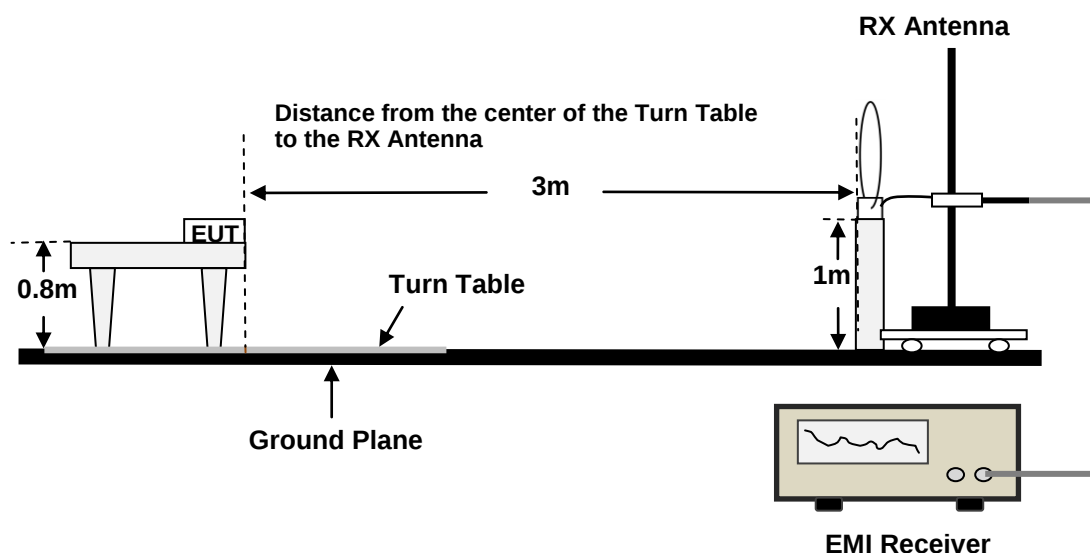
Restricted frequency bands, identified in table 7, are designated primarily for safety-of-life services (distress calling and certain aeronautical activities), certain satellite downlinks, radio astronomy and some government uses. Except where otherwise indicated, the following conditions related to the restricted frequency bands apply: (a) The transmit frequency, including fundamental components of modulation, of licence-exempt radio apparatus shall not fall within the restricted frequency bands listed in table 7 except for apparatus compliant with RSS-287, Emergency Position Indicating Radio Beacons (EPIRB), Emergency Locator Transmitters (ELT), Personal Locator Beacons (PLB), and Maritime Survivor Locator Devices (MSLD). (b) Unwanted emissions that fall into restricted frequency bands listed in table 7 shall comply with the limits specified in table 5 and table 6. (c) Unwanted emissions that do not fall within the restricted frequency bands listed in table 7 shall comply either with the limits specified in the applicable RSS or with those specified in table 5 and table 6.

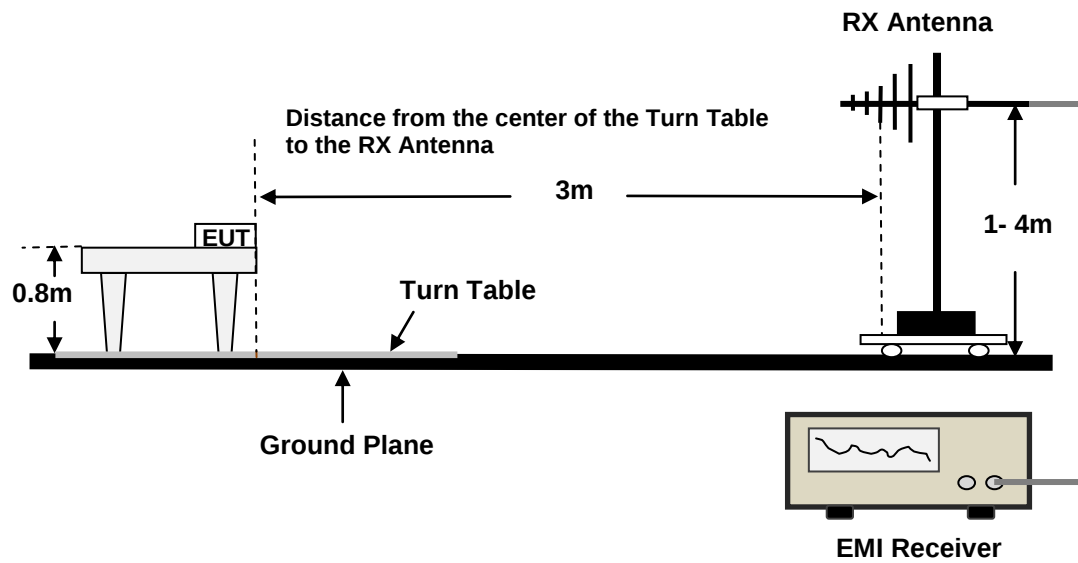
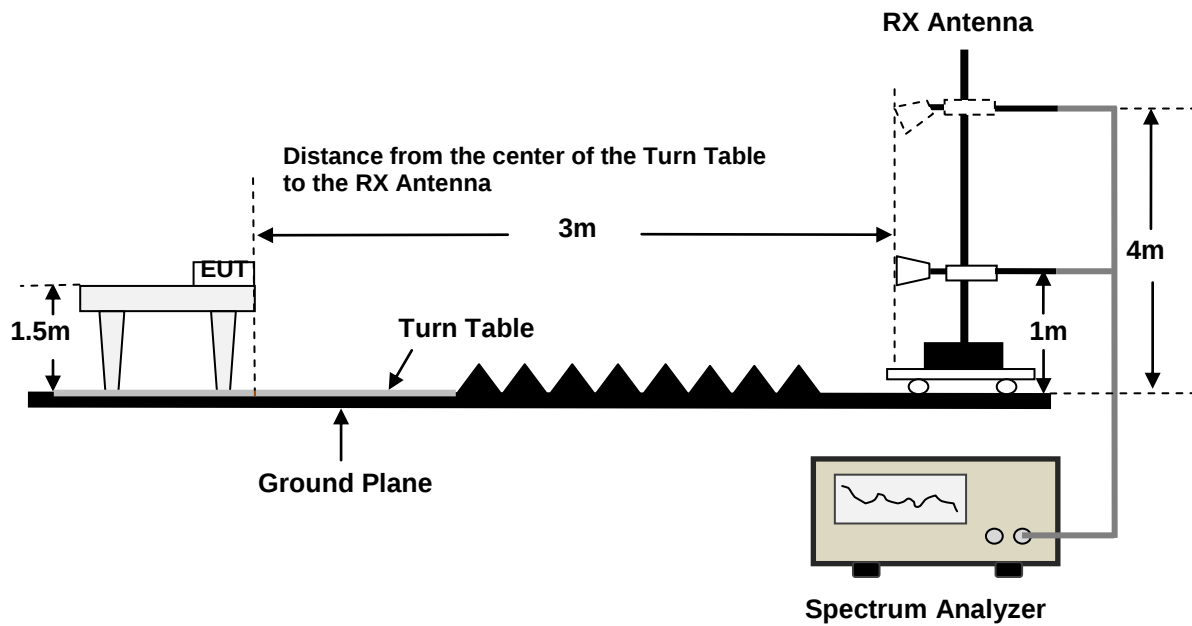
In any 100 kHz bandwidth outside the frequency band in which the spread spectrum device, digitally modulated device, or hybrid system is operating, the RF power that is produced shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power – based on either an RF conducted or a radiated measurement – provided that the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of root-mean-square averaging over a time interval, as permitted under section 6.3.2, the attenuation required shall be 30 dB instead of 20 dB. Attenuation below the general field strength limits specified in RSS-Gen is not required.

For the spurious emission below 30MHz, the unit of final result on the test plots are dB μ V/m, so the limit should be added by 51,5 dB from dB μ A/m to dB μ V/m.

EUT Setup

9kHz - 30MHz:



30MHz - 1GHz:**Above 1GHz:**

The radiated emission performed in the 3 meters, using the setup accordance with the ANSI C63.10-2020. The specification used was the FCC 15.209, FCC 15.247, RSS-GEN and RSS-247 limits.

EMI Test Receiver & Spectrum Analyzer Setup

The system was investigated from 9kHz to 25GHz.

During the radiated emission test, the EMI test receiver & Spectrum Analyzer Setup were set with the following configurations:

9kHz - 1000MHz:

Frequency Range	Measurement	RBW	Video B/W	IF B/W	Detector
9kHz - 150kHz	PK	0.3kHz	1kHz	/	PK
	QP/AV	/	/	200Hz	QP/AV
150kHz - 30MHz	PK	10kHz	30kHz	/	PK
	QP/AV	/	/	9kHz	QP/AV
30MHz - 1000MHz	PK	100kHz	300kHz	/	PK
	QP	/	/	120kHz	QP

1GHz - 25GHz:

Pre-scan:

Measurement	Detector	RBW	Video B/W
PK	Peak	1MHz	3MHz
Ave.	Peak	1MHz	5kHz

Final measurement for emission identified during the pre-scan:

Measurement	Detector	RBW	Video B/W
PK	Peak	1MHz	3MHz
Ave.	Peak	1MHz	10Hz

Note 1: The 1GHz-18GHz testing use the notch filter.

Note 2: The band edge testing use 10dB attenuator.

Note 3: The filters and attenuators are all integrated within the filter switch unit.

Test Procedure

Maximizing procedure was performed on the highest emissions to ensure that the EUT complied with all installation combinations.

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

Note 1: If the maximized peak measured value is under the QP/Average limit by more than 6dB, then it is unnecessary to perform an QP/Average measurement.

Note 2: For above 1GHz, the test result of peak was 20dB below to the limit of peak, which can be compliant to the average limit, so just peak value was recorded.

Calculation

The Factor is calculated by adding the Antenna Factor and Cable Loss, and subtracting the Amplifier Gain. The basic equation is as follows:

$$\text{Factor} = \text{Antenna Factor} + \text{Cable Loss} - \text{Amplifier Gain}$$

The “**Over Limit/Margin**” column of the following data tables indicates the degree of compliance with the applicable limit. For example, an over limit/margin of -7dB means the emission is 7dB below the limit. The equation for calculation is as follows:

$$\begin{aligned}\text{Over Limit/Margin} &= \text{Level} / \text{Corrected Amplitude} - \text{Limit} \\ \text{Level} / \text{Corrected Amplitude} &= \text{Read Level} + \text{Factor}\end{aligned}$$

Test Data

For Radiated Spurious Emissions, after pre-scan testing in the X, Y and Z axes of orientation, the worst case as setup photos was recorded.

9kHz-1GHz

Environmental Conditions

Temperature:	24.8 °C
Relative Humidity:	55 %
ATM Pressure:	101.1 kPa
Test Engineer:	Colin Lin
Test Date:	2025-11-16
EUT Operation Mode:	BT Transmitting

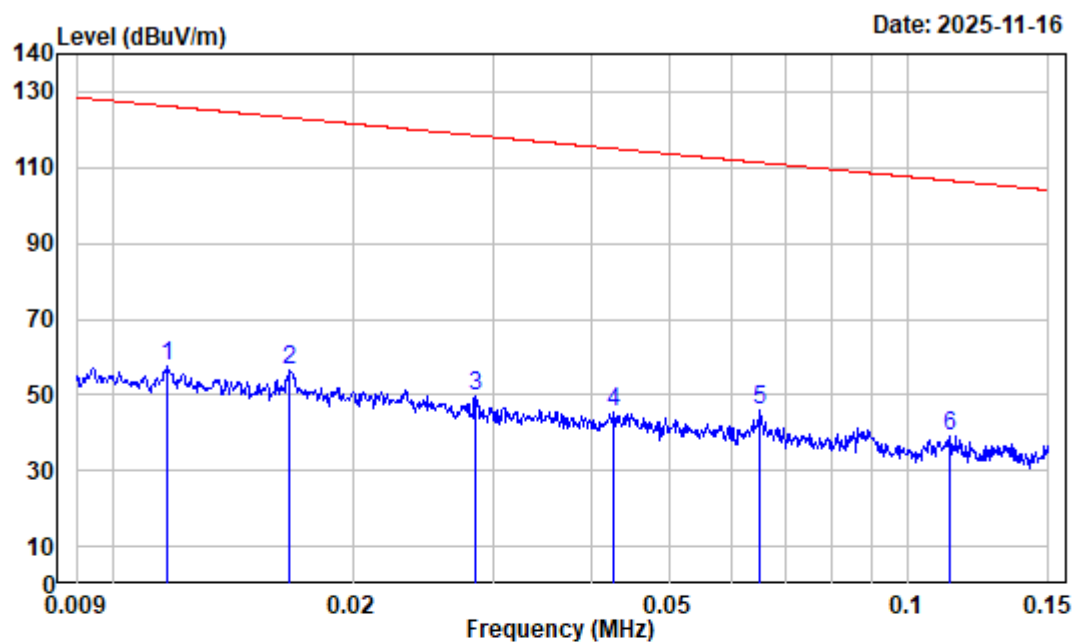
Test Result: Compliance, please refer to the below data.

Note 1: The Loop Antenna were tested in parallel, perpendicular, and ground-parallel. The worst orientation was parallel and the data was recorded in report.

Note: The mode and channel: BT 3DH5 Middle Channel was tested.

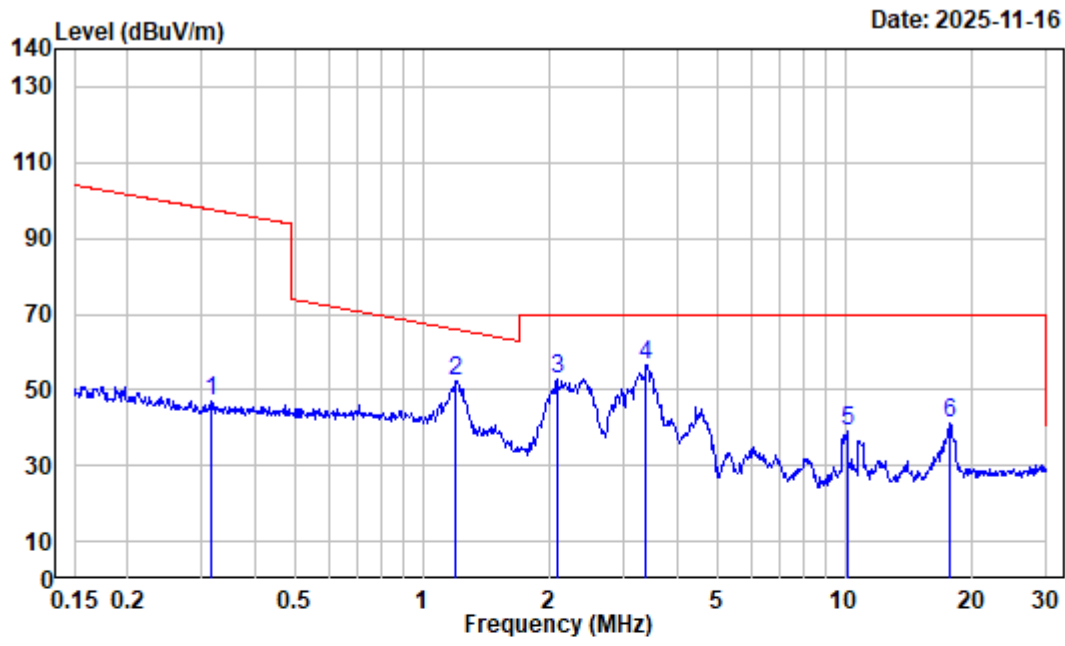
Test Mode 1

9kHz~30MHz:



Site : Chamber
 Condition : 3m
 Job No. : 2504Y12371E-RF
 Polarization : Parallel Tester: Colin Lin
 Test Mode : Test Mode 1
 Receiver Setting: RBW:300Hz VBW:1kHz

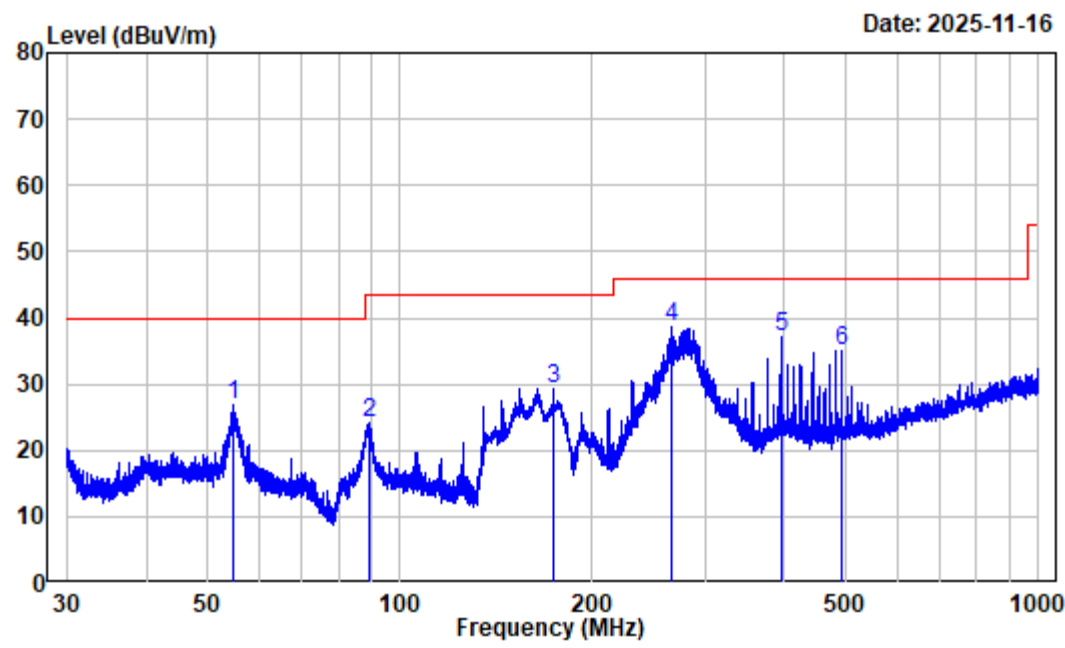
	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	0.012	35.06	22.59	57.65	126.22	-68.57	Peak
2	0.017	32.87	23.72	56.59	123.17	-66.58	Peak
3	0.029	27.57	22.24	49.81	118.48	-68.67	Peak
4	0.043	24.35	21.20	45.55	115.03	-69.48	Peak
5	0.065	20.66	25.33	45.99	111.34	-65.35	Peak
6	0.113	15.86	23.14	39.00	106.55	-67.55	Peak



Site : Chamber
Condition : 3m
Job No. : 2504Y12371E-RF
Polarization : Parallel Tester: Colin Lin
Test Mode : Test Mode 1
Receiver Setting: RBW:10kHz VBW:30kHz

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	0.315	6.96	40.03	46.99	97.64	-50.65	Peak
2	1.197	-2.53	55.03	52.50	65.88	-13.38	Peak
3	2.077	-5.42	58.38	52.96	69.54	-16.58	Peak
4	3.381	-6.01	62.64	56.63	69.54	-12.91	Peak
5	10.125	-5.31	44.61	39.30	69.54	-30.24	Peak
6	17.661	-3.82	44.87	41.05	69.54	-28.49	Peak

30MHz~1GHz:



Site : Chamber

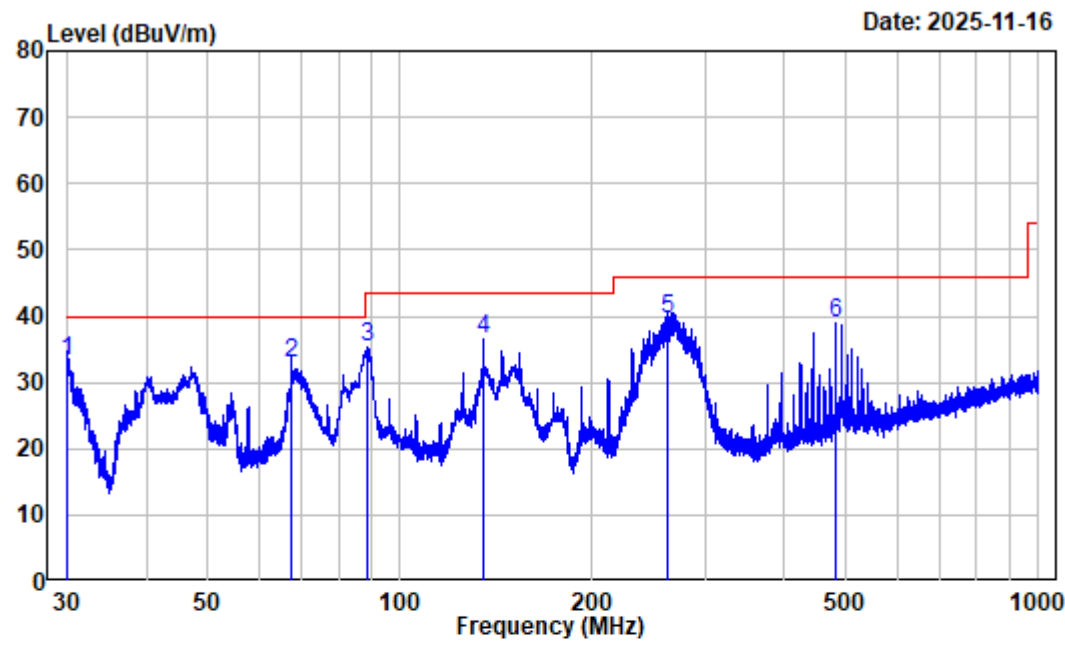
Condition : 3m HORIZONTAL

Job No. : 2504Y12371E-RF Tester: Colin Lin

Test Mode : Test Mode 1

Receiver Setting: RBW:100kHz VBW:300kHz

	Freq	Factor	Read Level	Limit Level	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB
1	54.595	-10.59	37.35	26.76	40.00	-13.24 Peak
2	89.590	-13.80	37.94	24.14	43.50	-19.36 Peak
3	173.433	-13.41	42.76	29.35	43.50	-14.15 Peak
4	267.077	-9.86	48.62	38.76	46.00	-7.24 Peak
5	395.028	-6.16	43.23	37.07	46.00	-8.93 Peak
6	491.606	-3.96	39.09	35.13	46.00	-10.87 Peak

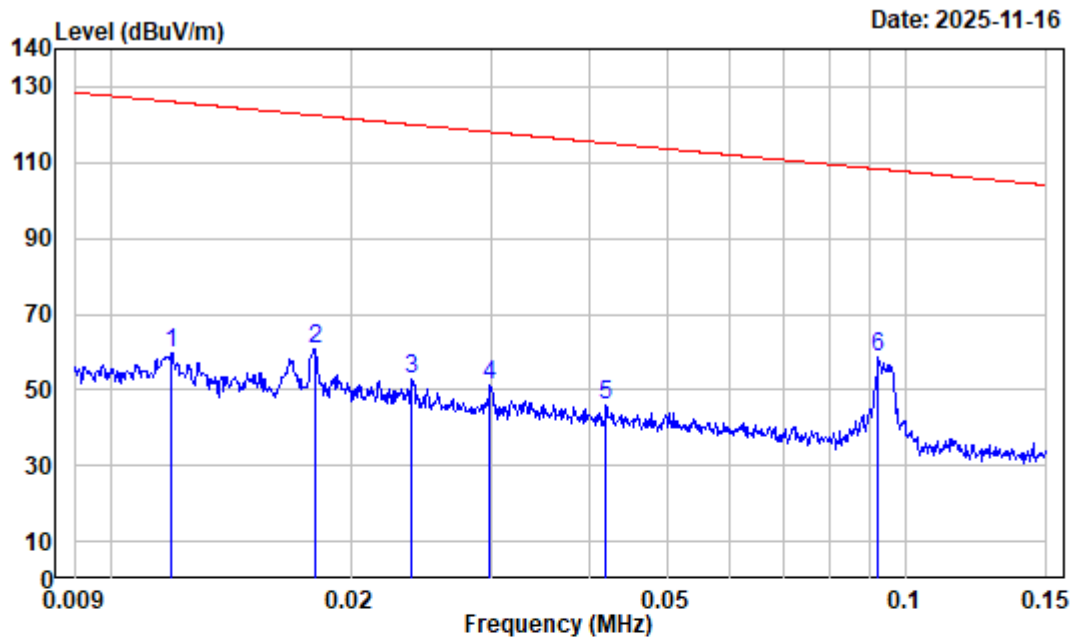


Site : Chamber
Condition : 3m VERTICAL
Job No. : 2504Y12371E-RF Tester: Colin Lin
Test Mode : Test Mode 1
Receiver Setting: RBW:100kHz VBW:300kHz

	Freq	Factor	Read Level	Limit Level	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB
1	30.026	-11.78	45.12	33.34	40.00	-6.66 QP
2	67.409	-13.45	46.35	32.90	40.00	-7.10 QP
3	89.120	-13.95	49.18	35.23	43.50	-8.27 Peak
4	134.854	-14.45	50.90	36.45	43.50	-7.05 Peak
5	261.631	-10.05	49.56	39.51	46.00	-6.49 QP
6	481.793	-4.32	43.37	39.05	46.00	-6.95 Peak

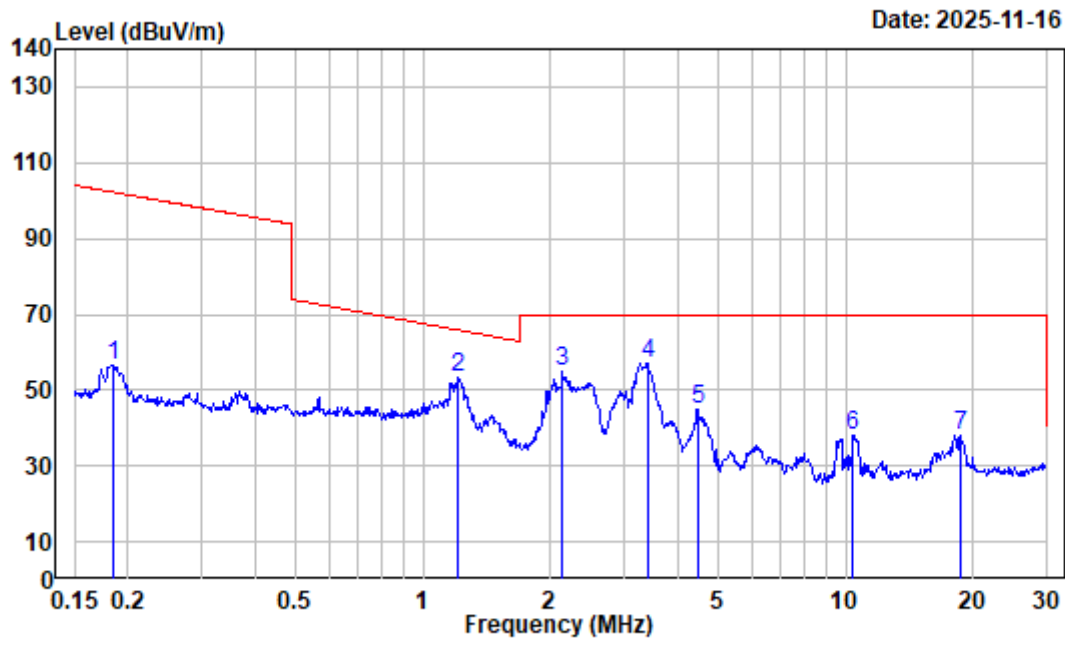
Test Mode 2:

9kHz~30MHz:



Site : chamber
Condition : 3m
Job No. : 2504Y12371E-RF
Polarization : Parallel Tester: Colin Lin
Test Mode : Test Mode 2
Receiver Setting: RBW:300Hz VBW:1kHz

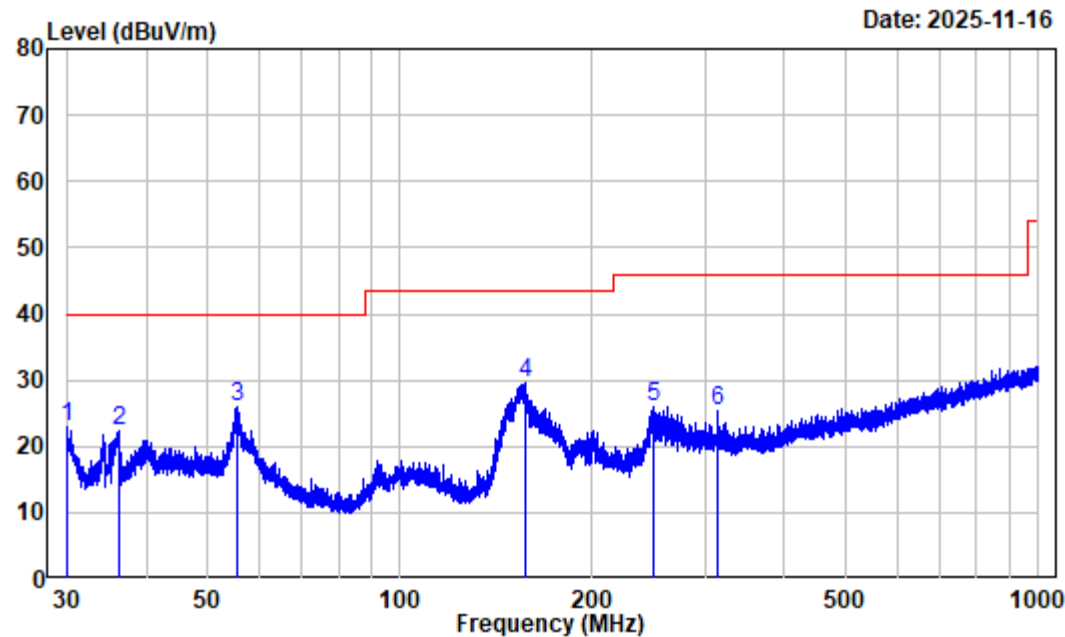
	Freq	Factor	Read Level	Level	Limit	Over	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	0.012	34.97	24.57	59.54	126.08	-66.54	Peak
2	0.018	32.27	28.60	60.87	122.48	-61.61	Peak
3	0.024	29.66	23.18	52.84	120.04	-67.20	Peak
4	0.030	26.99	24.15	51.14	118.09	-66.95	Peak
5	0.042	24.48	21.33	45.81	115.15	-69.34	Peak
6	0.092	17.26	41.45	58.71	108.31	-49.60	Peak



Site : chamber
Condition : 3m
Job No. : 2504Y12371E-RF
Polarization : Parallel Tester: Colin Lin
Test Mode : Test Mode 2
Receiver Setting: RBW:10kHz VBW:30kHz

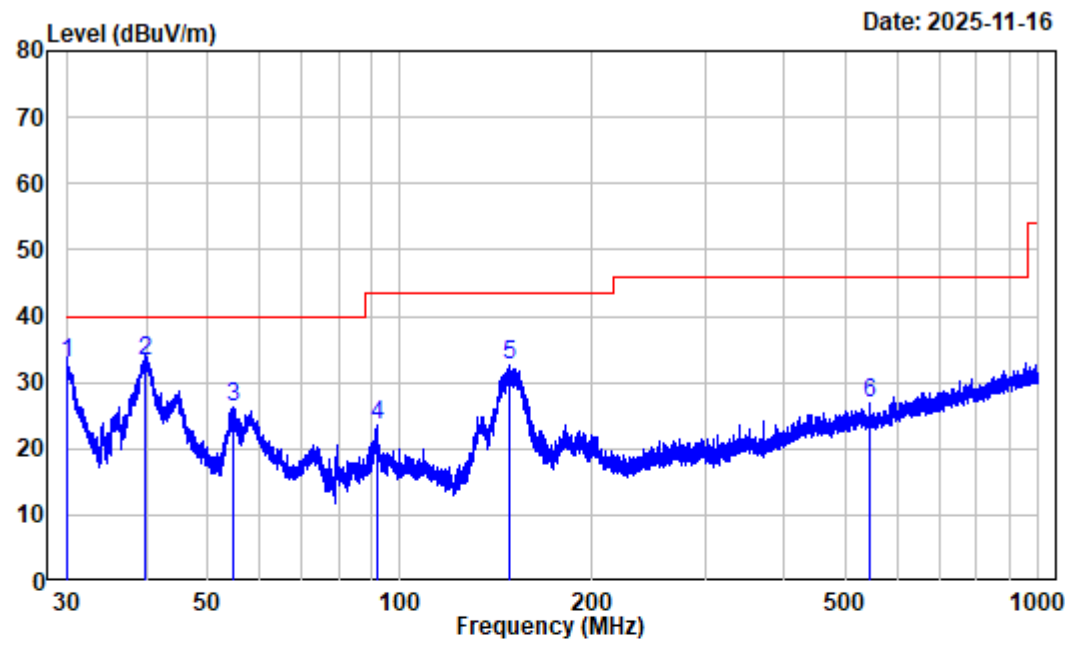
	Freq		Read		Limit	Over	Remark
	Factor		Level	Level	Line	Limit	
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	0.184	12.59	44.14	56.73	102.29	-45.56	Peak
2	1.210	-2.58	55.93	53.35	65.78	-12.43	Peak
3	2.144	-5.44	60.36	54.92	69.54	-14.62	Peak
4	3.399	-6.02	63.22	57.20	69.54	-12.34	Peak
5	4.478	-6.30	51.29	44.99	69.54	-24.55	Peak
6	10.397	-5.25	43.53	38.28	69.54	-31.26	Peak
7	18.622	-3.68	41.75	38.07	69.54	-31.47	Peak

30MHz~1GHz:



Site : chamber
Condition : 3m HORIZONTAL
Job No. : 2504Y12371E-RF Tester: Colin Lin
Test Mode : Test Mode 2
Receiver Setting: RBW:100kHz VBW:300kHz

	Freq	Factor	Read Level	Limit Level	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB
1	30.026	-11.78	34.58	22.80	40.00	-17.20 Peak
2	36.350	-11.39	33.70	22.31	40.00	-17.69 Peak
3	55.390	-10.71	36.79	26.08	40.00	-13.92 Peak
4	156.801	-14.36	43.83	29.47	43.50	-14.03 Peak
5	249.425	-10.07	36.01	25.94	46.00	-20.06 Peak
6	314.928	-8.62	33.88	25.26	46.00	-20.74 Peak



Site : chamber
Condition : 3m VERTICAL
Job No. : 2504Y12371E-RF Tester: Colin Lin
Test Mode : Test Mode 2
Receiver Setting: RBW:100kHz VBW:300kHz

	Freq	Factor	Read Level	Limit Level	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB
1	30.026	-11.78	44.67	32.89	40.00	-7.11 Peak
2	39.889	-10.55	43.69	33.14	40.00	-6.86 QP
3	54.763	-10.64	36.86	26.22	40.00	-13.78 Peak
4	91.776	-13.13	36.80	23.67	43.50	-19.83 Peak
5	148.767	-14.82	47.28	32.46	43.50	-11.04 Peak
6	544.466	-3.44	30.24	26.80	46.00	-19.20 Peak

1GHz-25GHz

Environmental Conditions

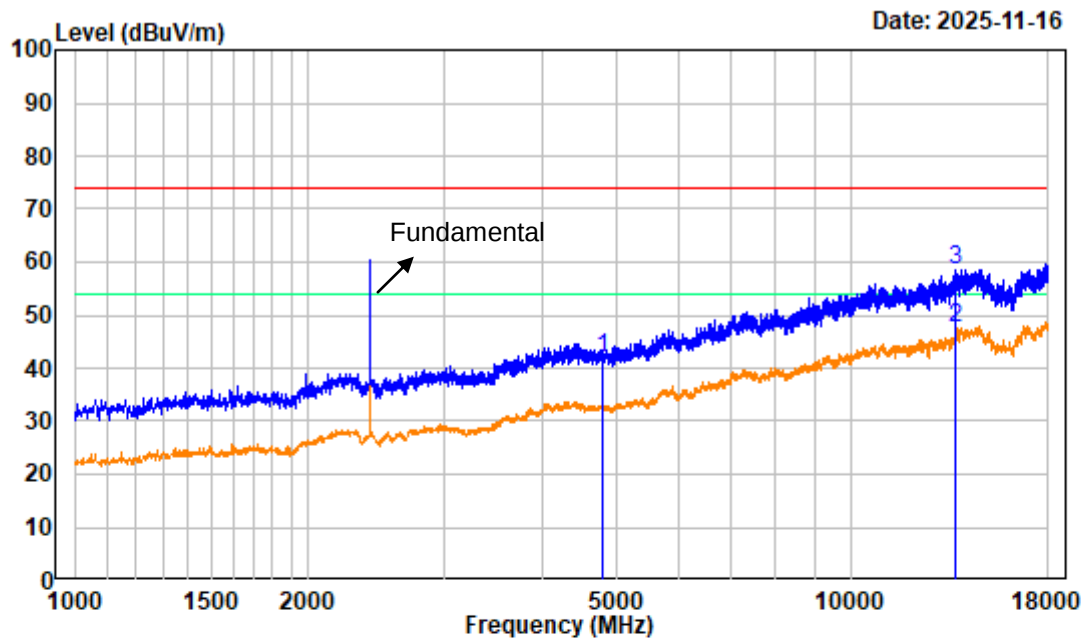
Temperature:	24.4 to 25.2 °C
Relative Humidity:	48 to 57 %
ATM Pressure:	100.1 to 101.1 kPa
Test Engineer:	Kevin Lv
Test Date:	2025-11-14 to 2025-12-05
EUT Operation Mode:	Transmitting

Test Result: Compliance, please refer to the below data.

Note 1: For 1GHz-18GHz, the fundamental with band reject filter.

Note 2: For 18GHz-25GHz, the mode and channel: BT 3DH5 Middle Channel 2441MHz was tested.

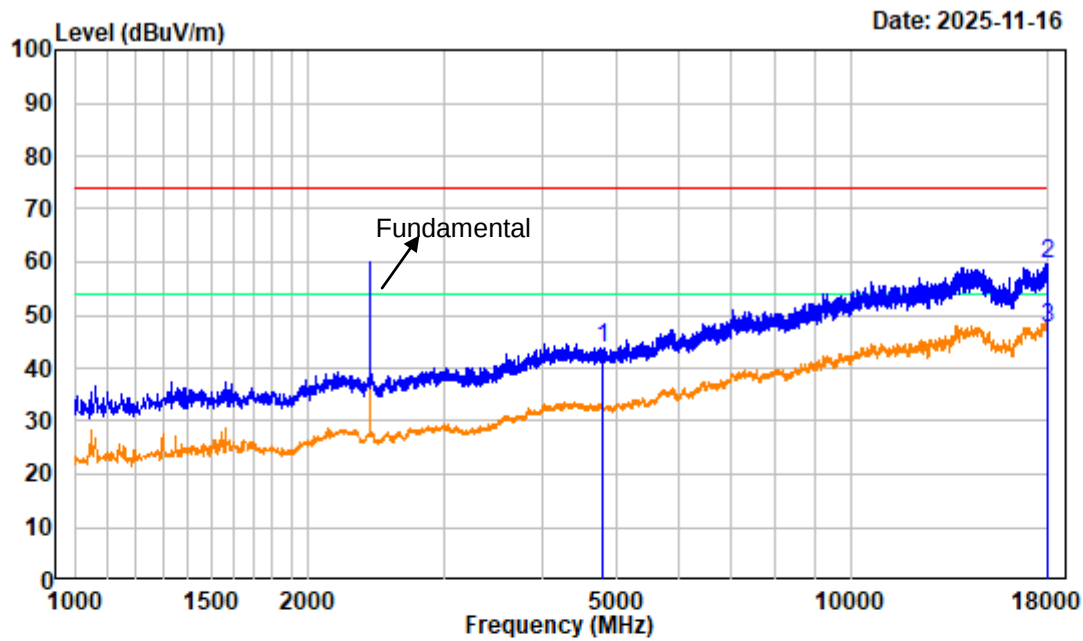
BT 3DH5 Low Channel 1GHz-18GHz_HORIZONTAL



Site : chamber
Condition : 3m HORIZONTAL
Project No.: 2504Y12371E-RF
Test Mode : Transmitting Tester:Kevin Lv
Note : BT 3DH5 Low Channel 2402MHz 1GHz-18GHz
SA setting : Peak:RBW:1MHz,VBW:3MHz Ave:RBW:1MHz,VBW:5kHz

	Freq	Factor	Read		Limit	Over	Remark
			Level	Level	Line	Limit	
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	4804.000	-6.64	48.68	42.04	74.00	-31.96	Peak
2	13690.500	7.96	39.71	47.67	54.00	-6.33	Average
3	13690.500	7.96	50.69	58.65	74.00	-15.35	Peak

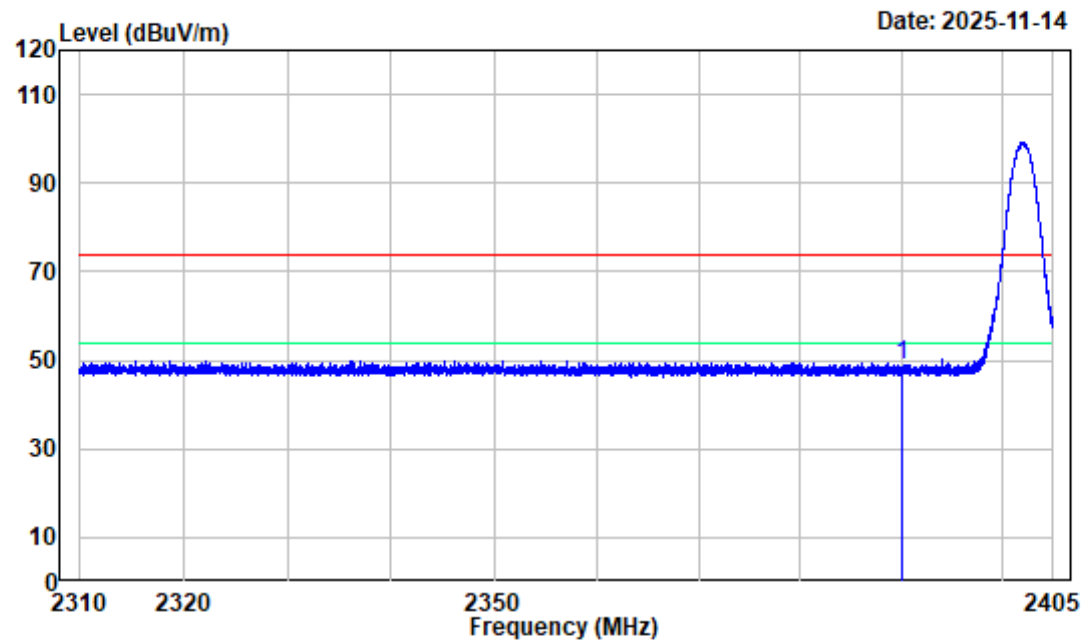
BT 3DH5 Low Channel 1GHz-18GHz_VERTICAL



Site : chamber
Condition : 3m VERTICAL
Project No.: 2504Y12371E-RF
Test Mode : Transmitting Tester:Kevin Lv
Note : BT 3DH5 Low Channel 2402MHz 1GHz-18GHz
SA setting : Peak:RBW:1MHz,VBW:3MHz Ave:RBW:1MHz,VBW:5kHz

Freq		Factor	Read Level	Level	Limit Line	Over Limit	Remark
MHz		dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	4804.000	-6.64	50.23	43.59	74.00	-30.41	Peak
2	17946.880	8.16	51.46	59.62	74.00	-14.38	Peak
3	17946.880	8.16	39.45	47.61	54.00	-6.39	Average

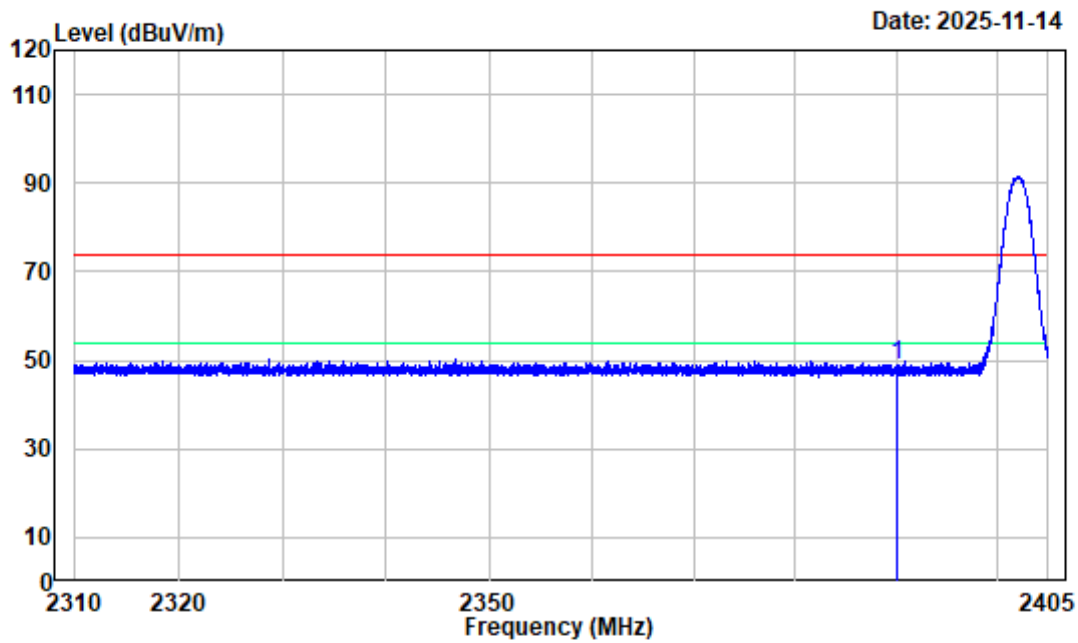
BT 3DH5 Low Channel Bandedge_HORIZONTAL



Site : chamber
Condition : 3m HORIZONTAL
Project No.: 2504Y12371E-RF
Test Mode : Transmitting Tester:Kevin Lv
Note : BT 3DH5 Low Channel 2402MHz Bandedge
SA setting : Peak:RBW:1MHz,VBW:3MHz

Freq Factor		Read Level	Level	Limit Line	Over Limit	Remark
MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1 2390.000	-10.25	58.99	48.74	74.00	-25.26	peak

BT 3DH5 Low Channel Bandedge_VERTICAL



Site : chamber

Condition : 3m VERTICAL

Project No.: 2504Y12371E-RF

Test Mode : Transmitting

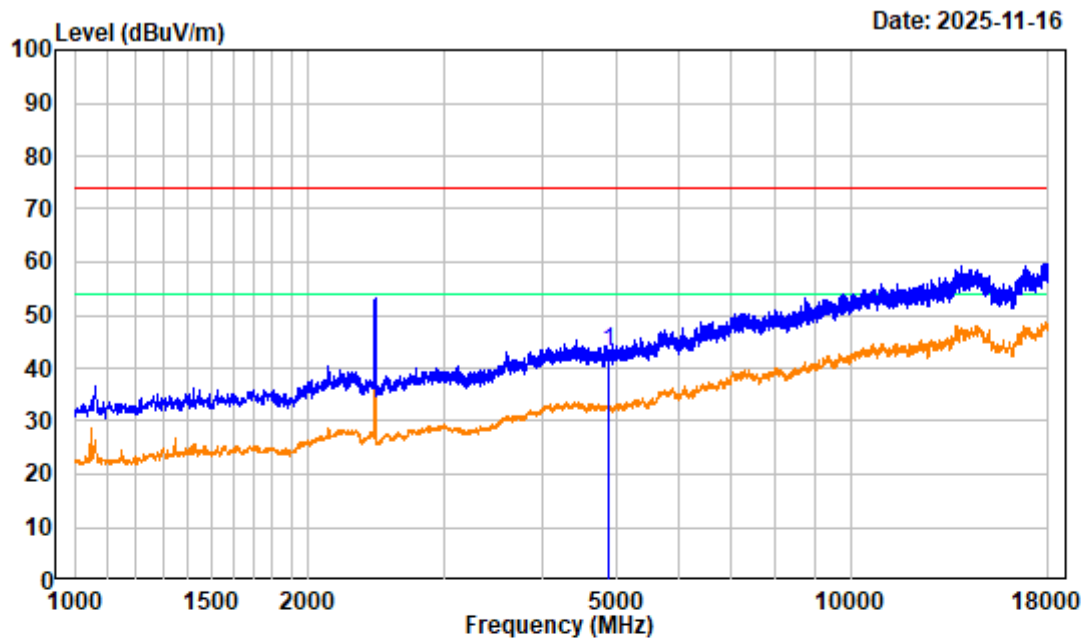
Tester:Kevin Lv

Note : BT 3DH5 Low Channel 2402MHz Bandedge

SA setting : Peak:RBW:1MHz,VBW:3MHz

Freq Factor		Read Level	Level	Limit Line	Over Limit	Remark
MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1 2390.000	-10.25	59.28	49.03	74.00	-24.97	peak

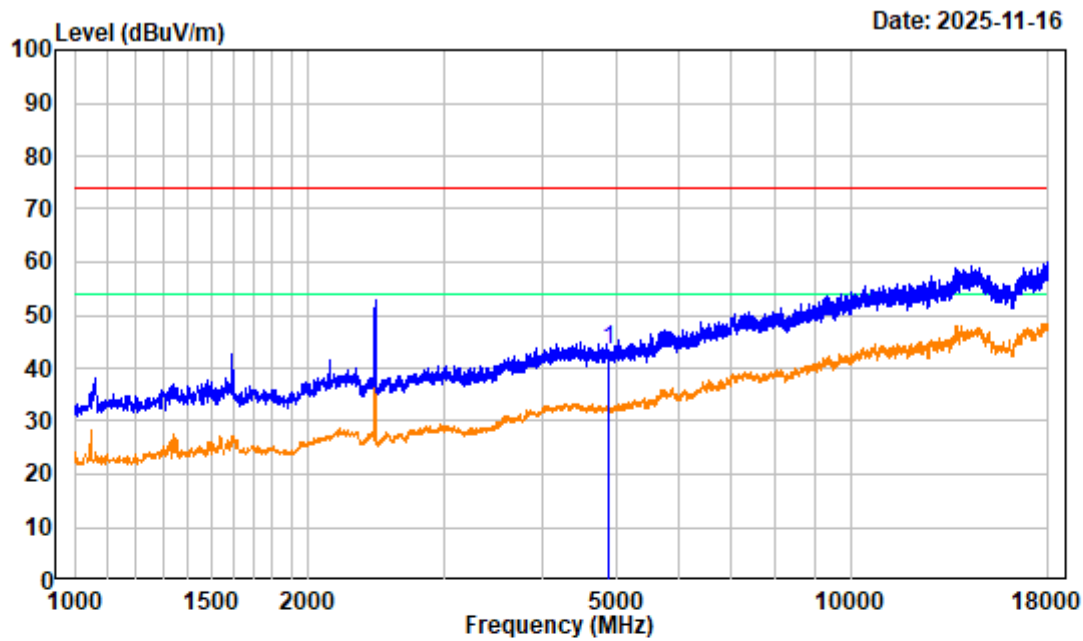
BT 3DH5 Middle Channel 1GHz-18GHz_HORIZONTAL



Site : chamber
Condition : 3m HORIZONTAL
Project No.: 2504Y12371E-RF
Test Mode : Transmitting Tester:Kevin Lv
Note : BT 3DH5 Middle Channel 2441MHz 1GHz-18GHz
SA setting : Peak:RBW:1MHz,VBW:3MHz Ave:RBW:1MHz,VBW:5kHz

Freq Factor		Read Level	Level	Limit Line	Over Limit	Remark
MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1 4882.000	-6.57	49.52	42.95	74.00	-31.05	peak

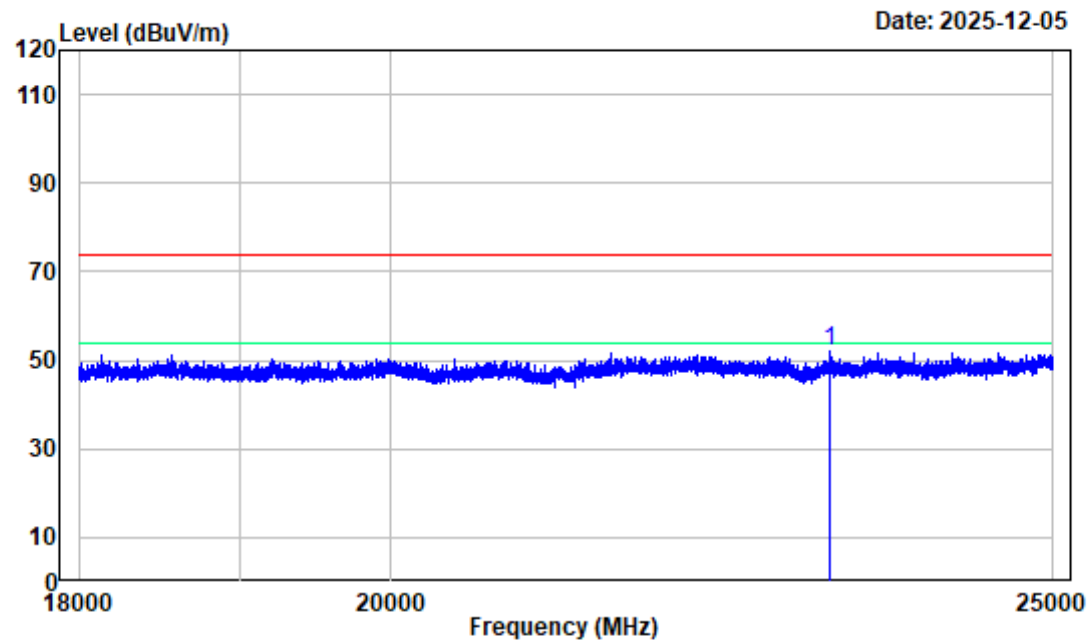
BT 3DH5 Middle Channel 1GHz-18GHz_VERTICAL



Site : chamber
Condition : 3m VERTICAL
Project No.: 2504Y12371E-RF
Test Mode : Transmitting Tester:Kevin Lv
Note : BT 3DH5 Middle Channel 2441MHz 1GHz-18GHz
SA setting : Peak:RBW:1MHz,VBW:3MHz Ave:RBW:1MHz,VBW:5kHz

Freq Factor		Read Level		Limit	Over	Remark
MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	4882.000	-6.57	50.08	43.51	74.00	-30.49 peak

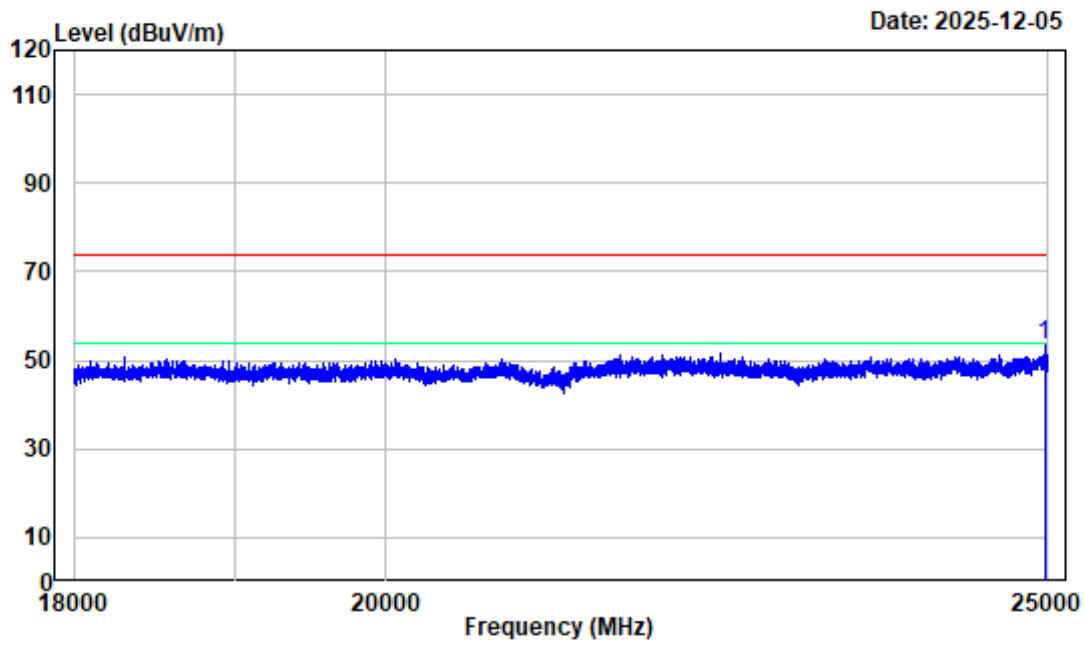
BT 3DH5 Middle Channel 18GHz-25GHz_HORIZONTAL



Site : chamber
Condition : 3m HORIZONTAL
Project No.: 2504Y12371E-RF
Test Mode : Transmitting Tester:Kevin Lv
Note : BT 3DH5 Middle Channel 2441MHz 18GHz-25GHz
SA setting : Peak:RBW:1MHz,VBW:3MHz

Freq Factor		Read Level	Level	Limit Line	Over Limit	Remark
MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1 23189.630	1.15	50.82	51.97	74.00	-22.03	Peak

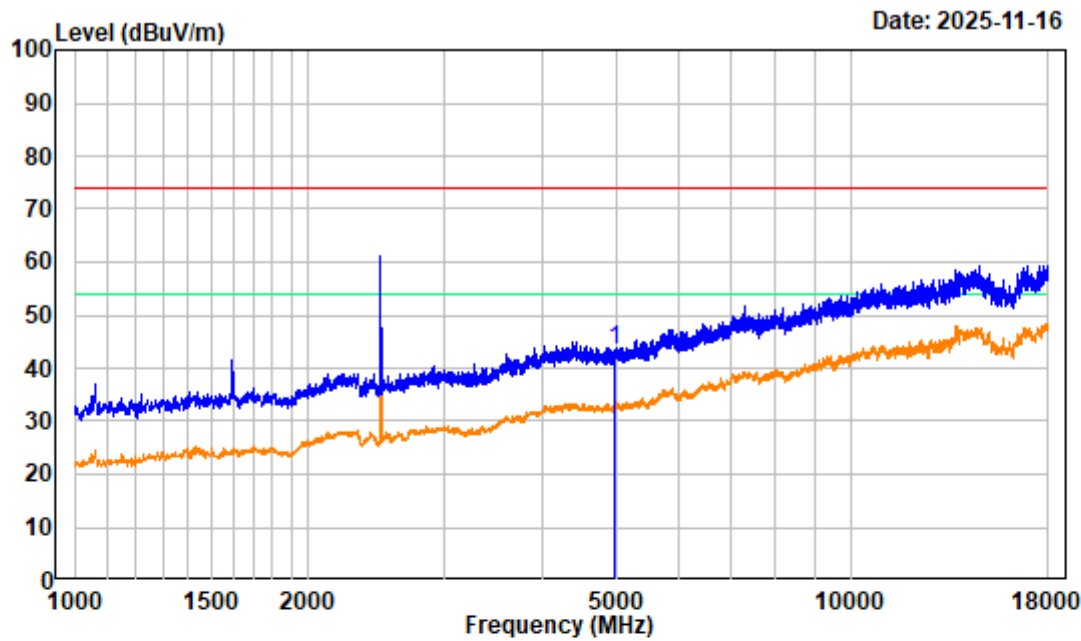
BT 3DH5 Middle Channel 18GHz-25GHz_VERTICAL



Site : chamber
Condition : 3m VERTICAL
Project No.: 2504Y12371E-RF
Test Mode : Transmitting Tester:Kevin Lv
Note : BT 3DH5 Middle Channel 2441MHz 18GHz-25GHz
SA setting : Peak:RBW:1MHz,VBW:3MHz

Freq Factor		Read Level	Level	Limit Line	Over Limit	Remark
MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1 24970.250	4.26	49.00	53.26	74.00	-20.74	Peak

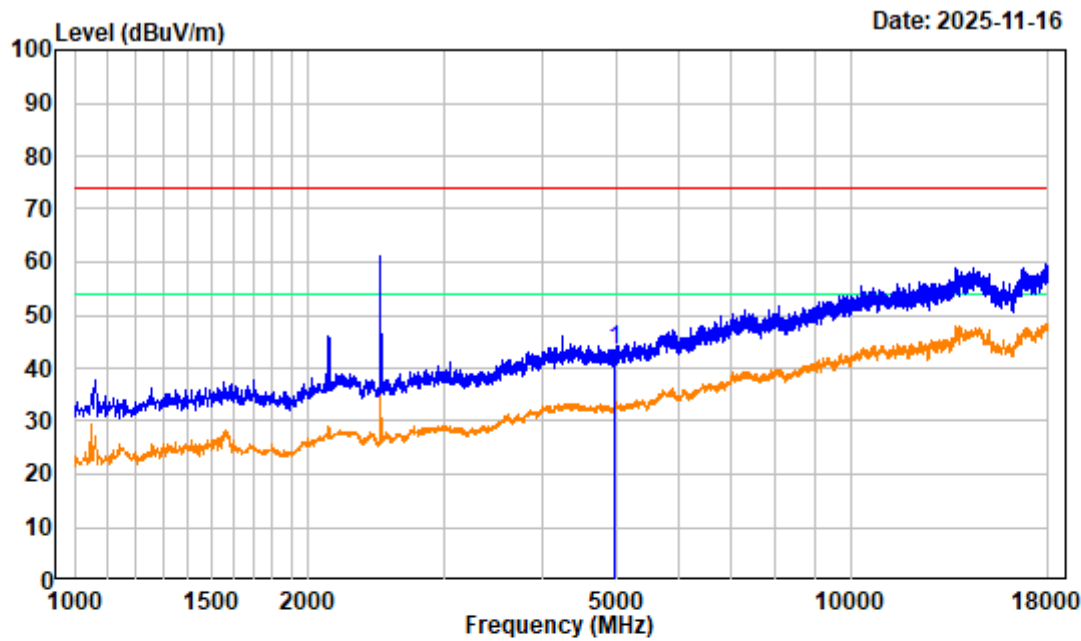
BT 3DH5 High Channel 1GHz-18GHz_HORIZONTAL



Site : chamber
Condition : 3m HORIZONTAL
Project No.: 2504Y12371E-RF
Test Mode : Transmitting Tester:Kevin Lv
Note : BT 3DH5 High Channel 2480MHz 1GHz-18GHz
SA setting : Peak:RBW:1MHz,VBW:3MHz Ave:RBW:1MHz,VBW:5kHz

Freq Factor		Read Level	Level	Limit Line	Over Limit	Remark
MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	4960.000	-6.32	49.64	43.32	74.00	-30.68 Peak

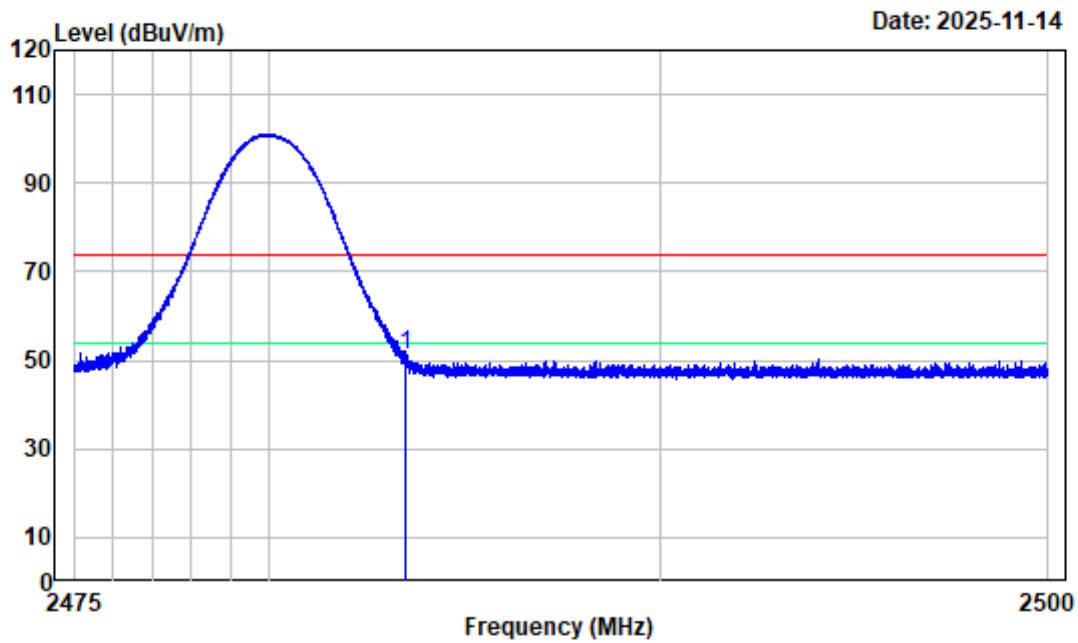
BT 3DH5 High Channel 1GHz-18GHz_VERTICAL



Site : chamber
Condition : 3m VERTICAL
Project No.: 2504Y12371E-RF
Test Mode : Transmitting Tester:Kevin Lv
Note : BT 3DH5 High Channel 2480MHz 1GHz-18GHz
SA setting : Peak:RBW:1MHz,VBW:3MHz Ave:RBW:1MHz,VBW:5kHz

Freq Factor		Read Level	Level	Limit Line	Over Limit	Remark
MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1 4960.000	-6.32	49.65	43.33	74.00	-30.67	Peak

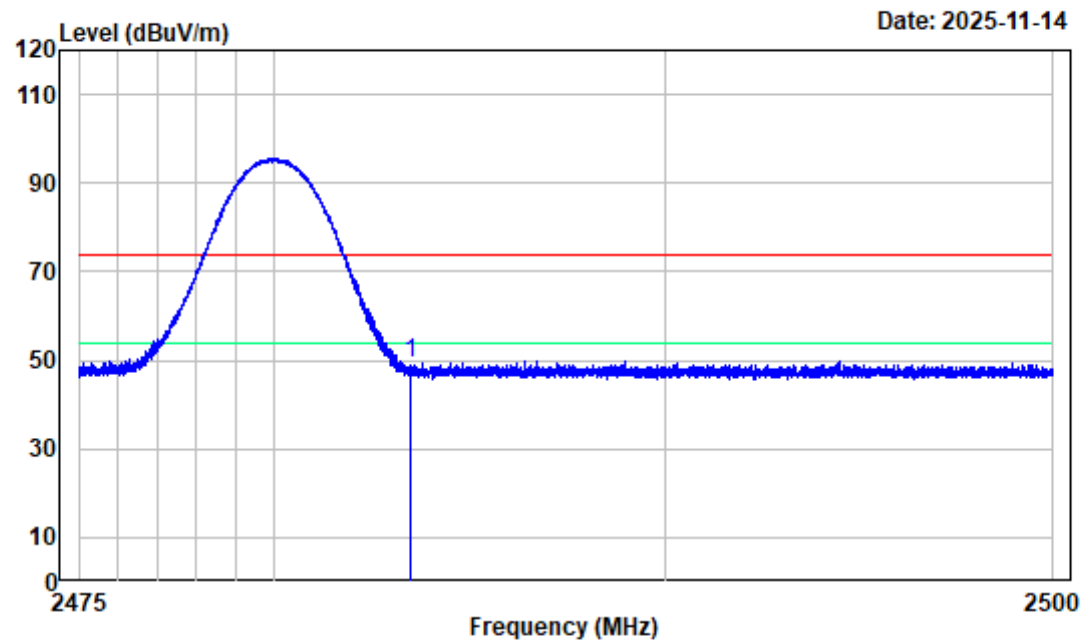
BT 3DH5 High Channel Bandedge_HORIZONTAL



Site : chamber
Condition : 3m HORIZONTAL
Project No.: 2504Y12371E-RF
Test Mode : Transmitting Tester:Kevin Lv
Note : BT 3DH5 High Channel 2480MHz Bandedge
SA setting : Peak:RBW:1MHz,VBW:3MHz

Freq Factor		Read Level	Level	Limit Line	Over Limit	Remark
MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1 2483.500	-10.23	61.51	51.28	74.00	-22.72	peak

BT 3DH5 High Channel Bandedge_VERTICAL



Site : chamber
Condition : 3m VERTICAL
Project No.: 2504Y12371E-RF
Test Mode : Transmitting Tester:Kevin Lv
Note : BT 3DH5 High Channel 2480MHz Bandedge
SA setting : Peak:RBW:1MHz,VBW:3MHz

Freq Factor		Read Level	Level	Limit Line	Over Limit	Remark
MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1 2483.500	-10.23	59.37	49.14	74.00	-24.86	peak

CHANNEL SEPARATION TEST

Applicable Standard

According to FCC §15.247(a)(1):

Frequency hopping systems shall have hopping channel carrier frequencies separated by a minimum of 25 kHz or the 20 dB bandwidth of the hopping channel, whichever is greater. Alternatively, frequency hopping systems operating in the 2400-2483.5 MHz band may have hopping channel carrier frequencies that are separated by 25 kHz or two-thirds of the 20 dB bandwidth of the hopping channel, whichever is greater provided the systems operate with an output power no greater than 125 mW. The system shall hop to channel frequencies that are selected at the system hopping rate from a pseudo randomly ordered list of hopping frequencies. Each frequency must be used equally on the average by each transmitter. The system receivers shall have input bandwidths that match the hopping channel bandwidths of their corresponding transmitters and shall shift frequencies in synchronization with the transmitted signals.

According to RSS-247 §6.2.1:

The following bandwidth and hopping channel requirements shall apply to FHS operating in the bands 902-928 MHz, 2400-2483.5 MHz and 5725-5850 MHz:

- a. the bandwidth of a frequency hopping channel is the 20 dB emission bandwidth, measured with the hopping stopped. The system's RF bandwidth is equal to the channel bandwidth multiplied by the number of channels in the hopset. The system shall hop to channel frequencies that are selected at the system hopping rate from a pseudo randomly ordered list of hopping frequencies. The system receivers shall have input bandwidths that match the hopping channel bandwidths of their corresponding transmitters and shall shift frequencies in synchronization with the transmitted signals.
- b. the hopping channel carrier frequencies shall be separated by a minimum of 25 kHz or the 20 dB bandwidth of the hopping channel, whichever is greater.

According to RSS-247 §6.2.3.1:

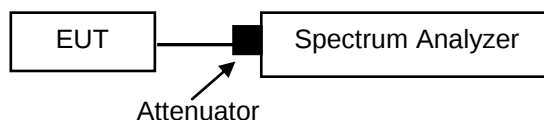
- a. FHS operating in the band 2400-2483.5 MHz may have hopping channel carrier frequencies that are separated by 25 kHz or two-thirds of the 20 dB bandwidth of the hopping channel, whichever is greater, provided that the systems operate with an output power no greater than 0.125 W.

Test Procedure

According to ANSI C63.10a-2024, section 7.8.2

The EUT shall have its hopping function enabled. Use the following spectrum analyzer settings:

- a) Span: Wide enough to capture the peaks of two adjacent channels.
- b) RBW: Start with the RBW set to approximately 30% of the channel spacing; adjust as necessary to best identify the center of each individual channel.
- c) Video (or average) bandwidth (VBW) $\geq 1/10^{\text{th}}$ the RBW.
- d) Sweep: No faster than coupled (auto) time.
- e) Detector function: Peak.
- f) Trace: Max-hold.
- g) Allow the trace to stabilize.



Note: Offset=RF cable loss(0.5dB[#])+ Attenuator(10dB)

Test Data

Test Result: Compliance. Please refer to the Appendix.

20 DB EMISSION BANDWIDTH & 99% OCCUPIED BANDWIDTH

Applicable Standard

According to FCC §15.247(a)(1):

Alternatively, frequency hopping systems operating in the 2400–2483.5 MHz band may have hopping channel carrier frequencies that are separated by 25 kHz or two-thirds of the 20 dB bandwidth of the hopping channel, whichever is greater, provided the systems operate with an output power no greater than 125 mW.

According to RSS-247 §6.2.3.1(a):

FHS operating in the band 2400-2483.5 MHz may have hopping channel carrier frequencies that are separated by 25 kHz or two-thirds of the 20 dB bandwidth of the hopping channel, whichever is greater, provided that the systems operate with an output power no greater than 0.125 W.

According to RSS-GEN §6.7:

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.

In some cases, the “20 dB bandwidth” is required, which is defined as the frequency range between two points, one at the lowest frequency below and one at the highest frequency above the carrier frequency, at which the maximum power level of the transmitted emission is attenuated 20 dB below the maximum in-band power level of the modulated signal, where the two points are on the outskirts of the in-band emission.

Test Procedure

According to ANSI C63.10-2020, section 6.9.2

- a) The spectrum analyzer center frequency is set to the nominal EUT channel center frequency. The span range for the EMI receiver or spectrum analyzer shall be between two times and five times the OBW.
- b) The nominal IF filter bandwidth (3 dB RBW) shall be in the range of 1% to 5% of the OBW and video bandwidth (VBW) shall be at least three times RBW, unless otherwise specified by the applicable requirement.
- c) Set the reference level of the instrument as required, keeping the signal from exceeding the maximum input mixer level for linear operation. In general, the peak of the spectral envelope shall be more than $[10 \log (OBW/RBW)]$ below the reference level. Specific guidance is given in 4.1.6.2.
- d) Steps a) through c) might require iteration to adjust within the specified tolerances.
- e) The dynamic range of the instrument at the selected RBW shall be more than 10 dB below the target “-xx dB down” requirement; that is, if the requirement calls for measuring the -20 dB OBW, the instrument noise floor at the selected RBW shall be at least 30 dB below the reference value.
- f) Set detection mode to peak and trace mode to max-hold.
- g) Determine the reference value: Set the EUT to transmit an unmodulated carrier or modulated signal, as applicable. Allow the trace to stabilize. Set the spectrum analyzer marker to the highest level of the displayed trace (this is the reference value).
- h) Determine the “-xx dB down amplitude” using $[(\text{reference value}) - xx]$. Alternatively, this calculation may be made by using the marker-delta function of the instrument.
- i) If the reference value is determined by an unmodulated carrier, then turn the EUT modulation ON, and either clear the existing trace or start a new trace on the spectrum analyzer and allow the new trace to stabilize. Otherwise, the trace from step g) shall be used for step j).

- j) Place two markers, one at the lowest frequency and the other at the highest frequency of the envelope of the spectral display, such that each marker is at or slightly below the “-xx dB down amplitude” determined in step h). If a marker is below this “-xx dB down amplitude” value, then it shall be as close as possible to this value. The dBc bandwidth is the frequency difference between the two markers. Alternatively, set a marker at the lowest frequency of the envelope of the spectral display, such that the marker is at or slightly below the “-xx dB down amplitude” determined in step h). Reset the marker-delta function and move the marker to the other side of the emission until the delta marker amplitude is at the same level as the reference marker amplitude. The marker-delta frequency reading at this point is the specified emission bandwidth.
- k) The dBc bandwidth shall be reported by providing spectral plot(s) of the measuring instrument display; the plot axes and the scale units per division shall be clearly labeled. Tabular data may be reported in addition to the plot(s).

According to ANSI C63.10-2020, section 7.8.6 and section 6.9.3

The occupied bandwidth is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers are each equal to 0.5% of the total mean power of the given emission. The following procedure shall be used for measuring 99% power bandwidth:

- a) The instrument center frequency is set to the nominal EUT channel center frequency. The frequency span for the spectrum analyzer shall be between 1.5 times and 5.0 times the OBW.
- b) The nominal IF filter bandwidth (3 dB RBW) shall be in the range of 1% to 5% of the OBW, and VBW shall be at least three times the RBW, unless otherwise specified by the applicable requirement.
- c) Set the reference level of the instrument as required, keeping the signal from exceeding the maximum input mixer level for linear operation. In general, the peak of the spectral envelope shall be more than $[10 \log (OBW/RBW)]$ below the reference level. Specific guidance is given in 4.1.6.2.
- d) Step a) through step c) might require iteration to adjust within the specified range.
- e) 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.
- f) Use the 99% power bandwidth function of the instrument (if available) and report the measured bandwidth.
- g) If the instrument does not have a 99% power bandwidth function, then the trace data points are recovered and directly summed in linear power terms. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5% of the total is reached; that frequency is recorded as the lower frequency. The process is repeated until 99.5% of the total is reached; that frequency is recorded as the upper frequency. The 99% power bandwidth is the difference between these two frequencies.
- h) The occupied bandwidth shall be reported by providing spectral plot(s) of the measuring instrument display; the plot axes and the scale units per division shall be clearly labeled. Tabular data may be reported in addition to the plot(s).

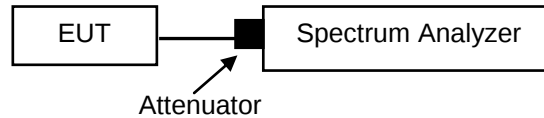
According to RSS-GEN § 6.7

The following conditions shall be observed for measuring the occupied bandwidth and x dB bandwidth:

- The transmitter shall be operated at its maximum carrier power measured under normal test conditions.
- The span of the spectrum analyzer shall be set large enough to capture all products of the modulation process, including the emission skirts, around the carrier frequency, but small enough to avoid having other emissions (e.g. on adjacent channels) within the span.
- The detector of the spectrum analyzer shall be set to “Sample”. However, a peak, or peak hold, may be used in place of the sampling detector since this usually produces a wider bandwidth than the actual bandwidth (worst-case measurement). Use of a peak hold (or “Max Hold”) may be necessary to determine the occupied / x dB bandwidth if the device is not transmitting continuously.
- The resolution bandwidth (RBW) shall be in the range of 1% to 5% of the actual occupied / x dB bandwidth and the video bandwidth (VBW) shall not be smaller than three times the RBW value. Video averaging is not permitted.

Note: It may be necessary to repeat the measurement a few times until the RBW and VBW are in compliance with the above requirement.

For the 99% emission bandwidth, the trace data points are recovered and directly summed in linear power level terms. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5% of the total is reached, and that frequency recorded. The process is repeated for the highest frequency data points (starting at the highest frequency, at the right side of the span, and going down in frequency). This frequency is then recorded. The difference between the two recorded frequencies is the occupied bandwidth (or the 99% emission bandwidth).



Note: Offset=RF cable loss(0.5dB[#])+ Attenuator(10dB)

Test Data

Test Result: Compliance. Please refer to the Appendix.

QUANTITY OF HOPPING CHANNEL TEST

Applicable Standard

According to FCC §15.247(a) (1) (iii):

Frequency hopping systems in the 2400–2483.5 MHz band shall use at least 15 channels. The average time of occupancy on any channel shall not be greater than 0.4 seconds within a period of 0.4 seconds multiplied by the number of hopping channels employed. Frequency hopping systems may avoid or suppress transmissions on a particular hopping frequency provided that a minimum of 15 channels are used.

According to RSS-247 §6.2.3.1 (b):

FHS operating in the band 2400-2483.5 MHz shall use at least 15 hopping channels. The average time of occupancy on any channel shall not be greater than 0.4 s within a period of 0.4 s, multiplied by the number of hopping channels employed. Transmissions on particular hopping frequencies may be avoided or suppressed provided that at least 15 hopping channels are used.

Test Procedure

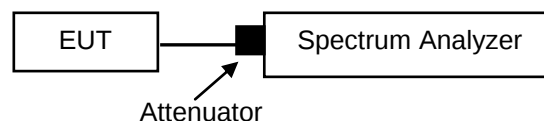
According to ANSI C63.10a-2024, section 7.8.3

The EUT shall have its hopping function enabled. Use the following spectrum analyzer settings:

- Span: The frequency band of operation. Depending on the number of channels the device supports, it could be necessary to divide the frequency range of operation across multiple spans, to allow the individual channels to be clearly seen.
- RBW: To identify clearly the individual channels, set the RBW to less than 30% of the channel spacing or the 20 dB bandwidth, whichever is smaller.
- VBW $\geq 1/10^{\text{th}}$ the RBW.
- Sweep: No faster than coupled (auto) time.
- Detector function: Peak.
- Trace: Max-hold.
- Allow the trace to stabilize.

It might prove necessary to break the span up into subranges to show clearly all of the hopping frequencies. Compliance of an EUT with the appropriate regulatory limit shall be determined for the number of hopping channels. A spectral plot of the data shall be included in the test report.

Where the device shares the same channel plan (carrier frequencies and number of channels) across multiple data rates or modulation schemes then the number of channels need only be measured for one of those modulation schemes or data rates.



Note: Offset=RF cable loss(0.5dB[#])+ Attenuator(10dB)

Test Data

Test Result: Compliance. Please refer to the Appendix.

TIME OF OCCUPANCY (DWELL TIME)

Applicable Standard

According to FCC §15.247(a) (1) (iii):

Frequency hopping systems in the 2400-2483.5 MHz shall use at least 15 channels. The average time of occupancy on any channel shall not be greater than 0.4 seconds within a period of 0.4 seconds multiplied by the number of hopping channels employed. Frequency hopping systems may avoid or suppress transmissions on a particular hopping frequency provided that a minimum of 15 channels are used.

According to RSS-247 § 6.2.31(b):

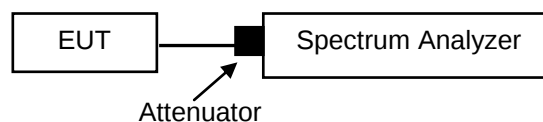
FHS operating in the band 2400-2483.5 MHz shall use at least 15 hopping channels. The average time of occupancy on any channel shall not be greater than 0.4 s within a period of 0.4 s, multiplied by the number of hopping channels employed. Transmissions on particular hopping frequencies may be avoided or suppressed provided that at least 15 hopping channels are used.

Test Procedure

According to ANSI C63.10-2020, section 7.8.4

Use the following spectrum analyzer settings to determine the dwell time per hop:

- Span: Zero span, centered on a hopping channel.
- RBW shall be $\leq$ channel spacing and where possible RBW should be set $\gg 1 / T$, where T is the expected transmission time per hop.
- Sweep time: Set so that the start of the first transmission and end of the last transmission for the hop are clearly captured. Setting the sweep time to be slightly longer than the hopping period per channel (hopping period = $1/\text{hopping rate}$) should achieve this.
- Use a video trigger, where possible with a trigger delay, so that the start of the transmission is clearly observed. The trigger level might need adjustment to reduce the chance of triggering when the system hops on an adjacent channel.
- Detector function: Peak.
- Trace: Clear-write, single sweep.
- Place markers at the start of the first transmission on the channel and at the end of the last transmission. The dwell time per hop is the time between these two markers.



Note: Offset=RF cable loss(0.5dB[#])+ Attenuator(10dB)

Test Data

Test Result: Compliance. Please refer to the Appendix.

PEAK OUTPUT POWER MEASUREMENT

Applicable Standard

According to §15.247(b) (1):

For frequency hopping systems operating in the 2400–2483.5 MHz band employing at least 75 on-overlapping hopping channels, and all frequency hopping systems in the 5725-5850MHz band: 1 watt. And for all other frequency hopping systems in the 2400–2483.5 MHz band: 0.125 watts.

According to RSS-247 §6.2.3.2:

The following transmitter output power and e.i.r.p. requirements shall apply:

- a. if the hopset uses 75 or more hopping channels, the maximum peak conducted output power shall not exceed 1.0 W.
- b. if the hopset uses less than 75 hopping channels the maximum peak conducted output power shall not exceed 0.125 W.
- c. the e.i.r.p. shall not exceed 4 W, except as provided in sections 6.5 a) and b).

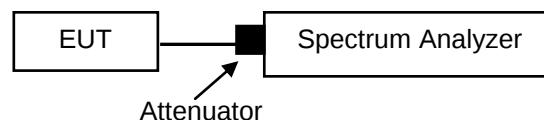
Test Procedure

According to ANSI C63.10-2020, section 7.8.5

Use the following spectrum analyzer settings:

- a) Span: Approximately five times the 20 dB bandwidth, centered on a hopping channel.
- b) RBW > 20 dB bandwidth of the emission being measured.
- c) VBW ≥ RBW.
- d) Sweep: No faster than coupled (auto) time.
- e) Detector function: Peak.
- f) Trace: Max-hold.
- g) Allow trace to stabilize.
- h) Use the marker-to-peak function to set the marker to the peak of the emission.
- i) The indicated level is the peak output power, after any corrections for external attenuators and cables.

NOTE—A peak responding power meter may be used, where the power meter and sensor system video bandwidth is greater than the occupied bandwidth of the unlicensed wireless device, rather than a spectrum analyzer.



Note: Offset=RF cable loss(0.5dB[#])+ Attenuator(10dB)

Test Data

Test Result: Compliance. Please refer to the Appendix.

CONDUCTED SPURIOUS EMISSIONS

Applicable Standard

According to FCC §15.247(d):

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in §15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c)).

According to RSS-247 § 6.6:

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum device, digitally modulated device, or hybrid system is operating, the RF power that is produced shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power – based on either an RF conducted or a radiated measurement – provided that the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of root-mean-square averaging over a time interval, as permitted under section 6.3.2, the attenuation required shall be 30 dB instead of 20 dB. Attenuation below the general field strength limits specified in RSS-Gen is not required.

Test Procedure

According to ANSI C63.10-2020, section 7.8.7

7.8.7.1 General considerations

To demonstrate compliance with the relative out-of-band emissions requirements conducted spurious emissions shall be measured for the transmit frequencies, per 5.5 and 5.6, and at the maximum transmit powers. Frequency hopping shall be disabled for this test with the exception of measurements at the allocated band-edges which shall be repeated with hopping enabled.

Connect the primary antenna port through an attenuator to the spectrum analyzer input; in the results, account for all losses between the unlicensed wireless device output and the spectrum analyzer. The frequency range of testing shall span 30 MHz to 10 times the operating frequency and this may be done in a single sweep or, to aid resolution, across a number of sweeps. The resolution bandwidth shall be 100 kHz, video bandwidth 300 kHz, and a coupled sweep time with a peak detector.

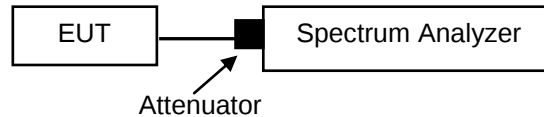
The limit is based on the highest in-band level across all channels measured using the same instrument settings (resolution bandwidth of 100 kHz, video bandwidth of 300 kHz, and a coupled sweep time with a peak detector). To help clearly demonstrate compliance a display line may be set at the required offset (typically 20 dB) below the highest in-band level. Where the highest in-band level is not clearly identified in the out-of-band measurements a separate spectral plot showing the in-band level shall be provided.

When conducted measurements cannot be made (for example a device with integrated, non-removable antenna) radiated measurements shall be used. The reference level for determining the limit shall be established by maximizing the field strength from the highest power channel and measuring using the resolution and video bandwidth settings and peak detector as described above. The field strength limit for spurious emissions outside of restricted-bands shall then be set at the required offset (typically 20 dB) below the highest in-band level. Radiated measurements will follow the standards measurement procedures described in Clause 6 with the exception that the resolution bandwidth shall be 100 kHz, video bandwidth 300 kHz, and a coupled sweep time with a peak detector. Note that use of wider measurement bandwidths are acceptable for measuring the spurious emissions provided that the peak detector is used and that the measured value of spurious emissions are compared to the highest in-band level measured with the 100 kHz / 300 kHz bandwidth settings to determine compliance.

7.8.7.2 & section 6.10 Band-edges

- a) Set the center frequency and span to encompass frequency range to be measured.
- b) Set the RBW = 100 kHz.
- c) Set the VBW $\geq [3 \times \text{RBW}]$. d) Detector = peak.
- e) Sweep time = auto couple. f) Trace mode = max hold.
- g) Allow trace to fully stabilize.
- h) Use the peak marker function to determine the maximum amplitude level.

Ensure that the amplitude of all unwanted emissions outside of the authorized frequency band (excluding restricted frequency bands) is attenuated by at least the minimum requirements. Report the three highest emissions relative to the limit.



Note: Offset=RF cable loss(0.5dB[#]/3.0dB[#])+ Attenuator(10dB)

The cable loss of 0.5dB[#] has been added into test result, except for test result of frequencies from 30 MHz to 25 GHz, where a maximum cable loss of 3.0dB[#] has been added.

Test Data

Test Result: Compliance. Please refer to the Appendix.

APPENDIX

Test Information:

Sample No.:	3C1Q-5	Test Date:	2025/11/28~2026/01/29
Test Site:	RF	Test Mode:	Transmitting
Tester:	Cayde Hou	Test Result:	Pass

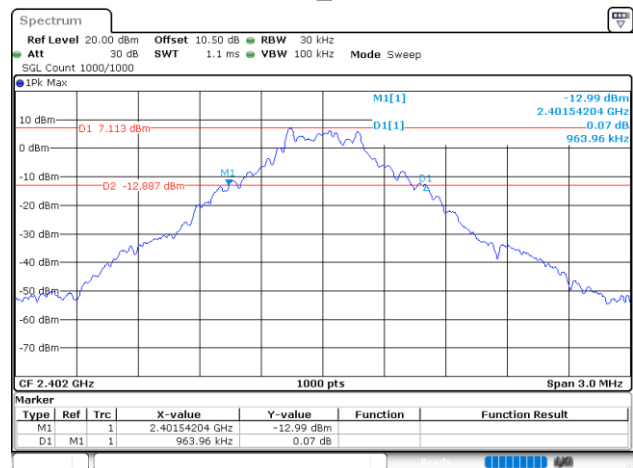
Environmental Conditions:

Temperature: (°C)	18.6~22.0	Relative Humidity: (%)	37~39	ATM Pressure: (kPa)	101.1~101.8
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20 dB Emission Bandwidth

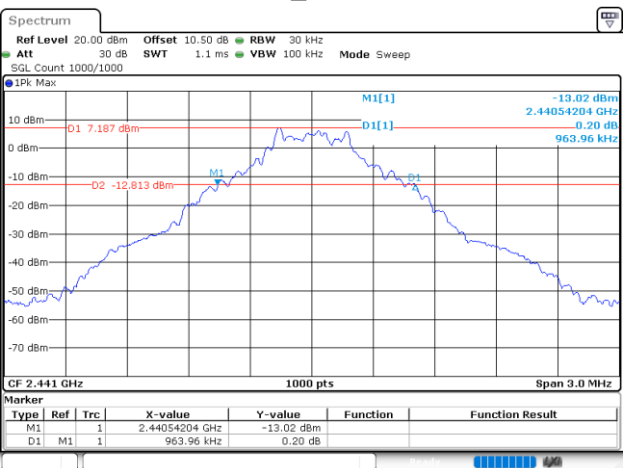
Mode	Channel	Result (MHz)
DH5	Low	0.964
	Middle	0.964
	High	0.961
2DH5	Low	1.297
	Middle	1.291
	High	1.291
3DH5	Low	1.303
	Middle	1.297
	High	1.297

DH5_Low



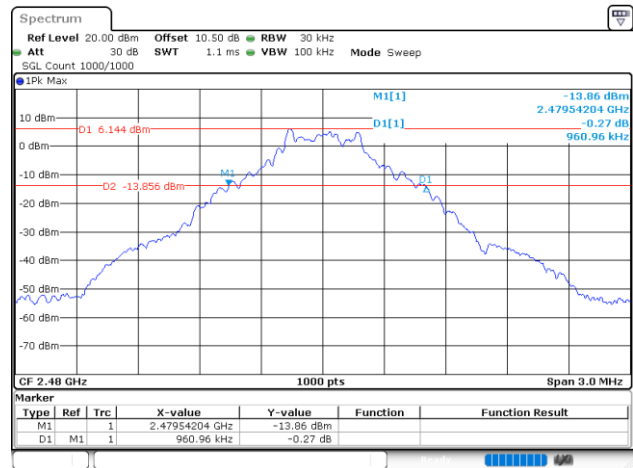
ProjectNo.:2504Y12371E-RF Tester:Cayde Hou
Date: 28.NOV.2025 13:10:16

DH5_Middle



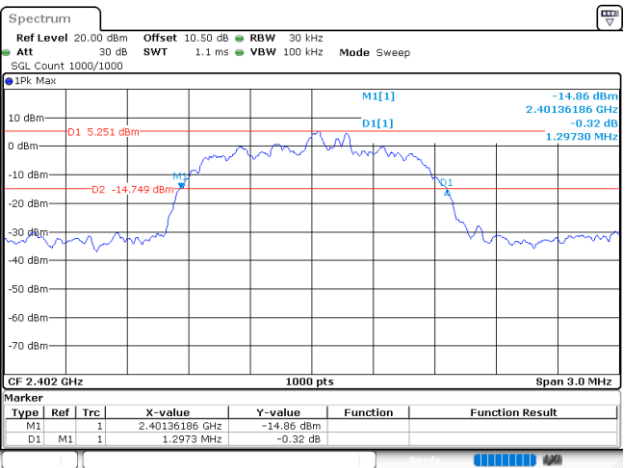
ProjectNo.:2504Y12371E-RF Tester:Cayde Hou
Date: 28.NOV.2025 13:13:33

DH5_High



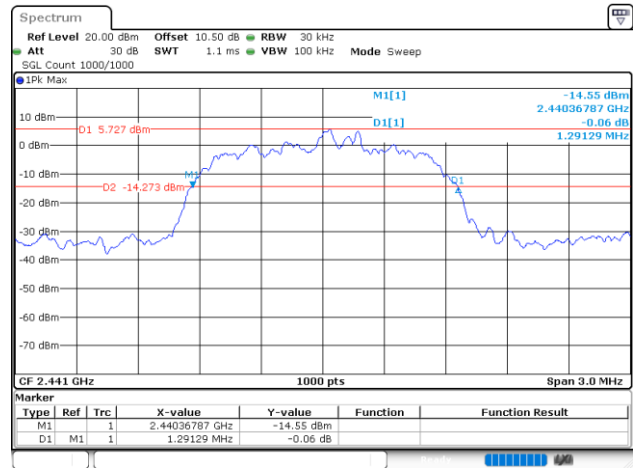
ProjectNo.:2504Y12371E-RF Tester:Cayde Hou
Date: 28.NOV.2025 13:18:05

2DH5_Low



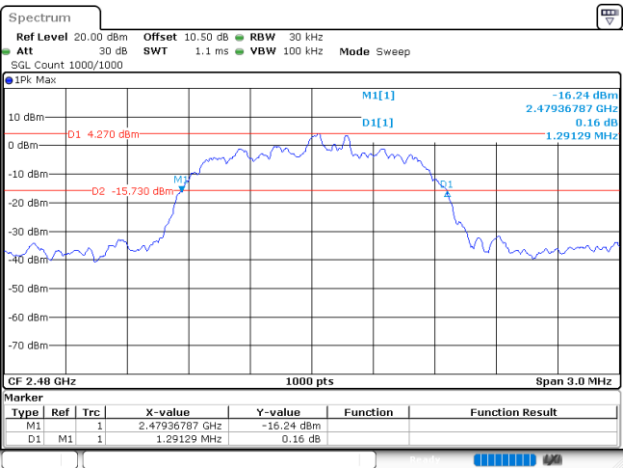
ProjectNo.:2504Y12371E-RF Tester:Cayde Hou
Date: 28.NOV.2025 13:21:18

2DH5_Middle



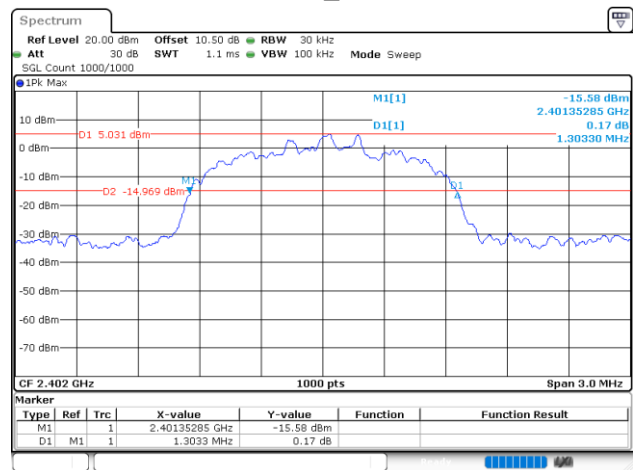
ProjectNo.:2504Y12371E-RF Tester:Cayde Hou
Date: 28.NOV.2025 13:25:37

2DH5_High



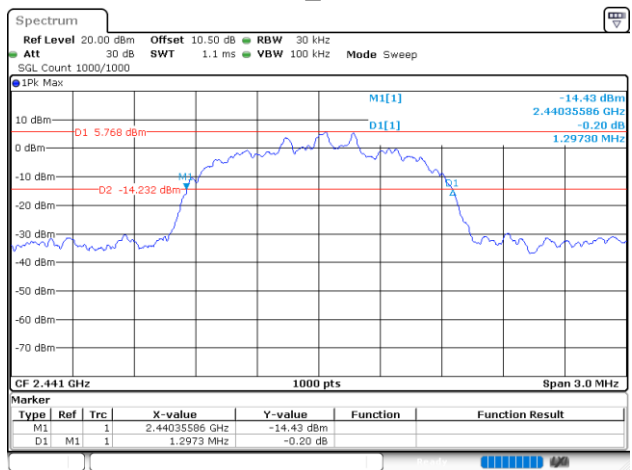
ProjectNo.:2504Y12371E-RF Tester:Cayde Hou
Date: 28.NOV.2025 13:28:41

3DH5_Low



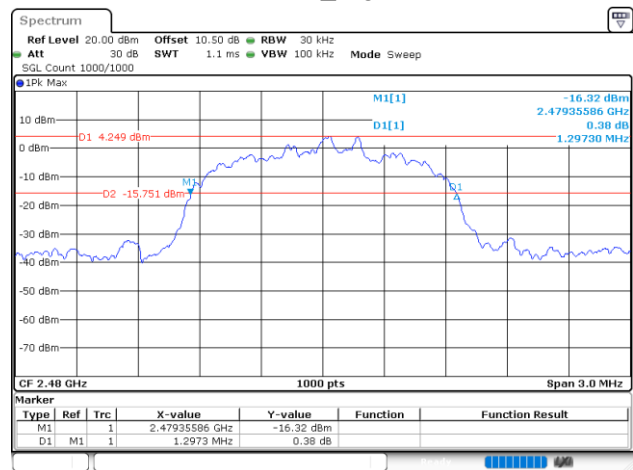
ProjectNo.:2504Y12371E-RF Tester:Cayde Hou
Date: 28.NOV.2025 13:30:51

3DH5_Middle



ProjectNo.:2504Y12371E-RF Tester:Cayde Hou
Date: 28.NOV.2025 13:32:28

3DH5_High

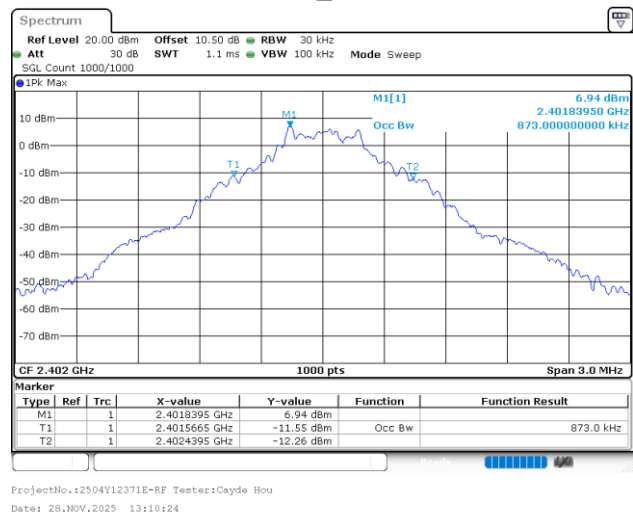


ProjectNo.:2504Y12371E-RF Tester:Cayde Hou
Date: 28.NOV.2025 13:35:27

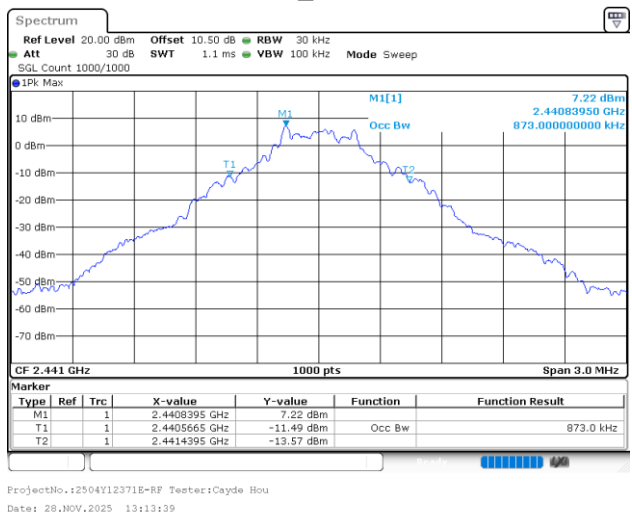
99% Occupied Bandwidth

Mode	Channel	99% OBW (MHz)
DH5	Low	0.873
	Middle	0.873
	High	0.879
2DH5	Low	1.188
	Middle	1.182
	High	1.179
3DH5	Low	1.188
	Middle	1.185
	High	1.179

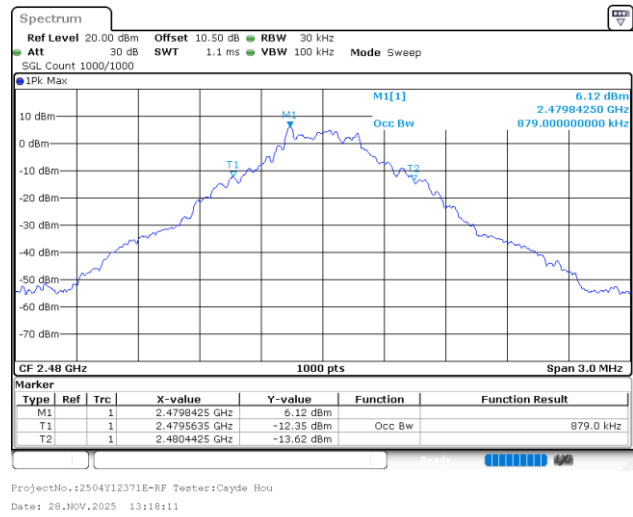
DH5_Low



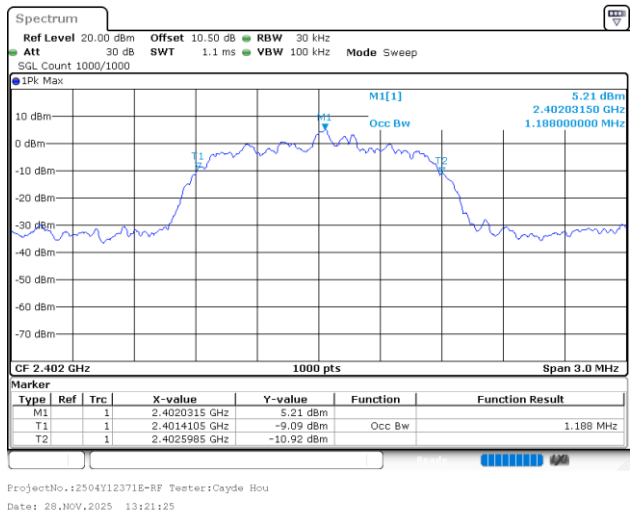
DH5_Middle



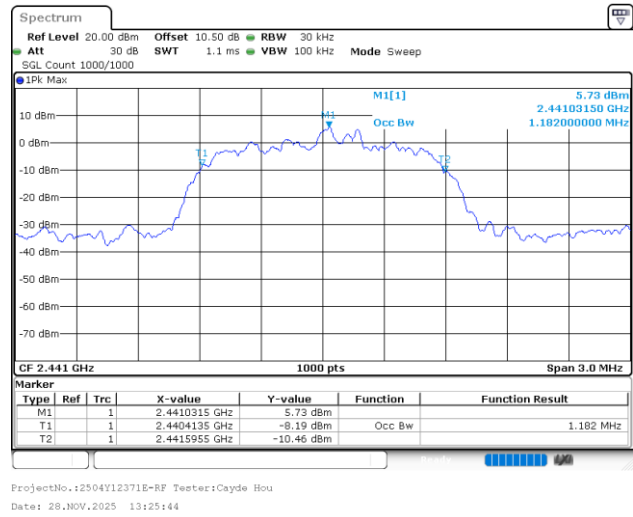
DH5_High



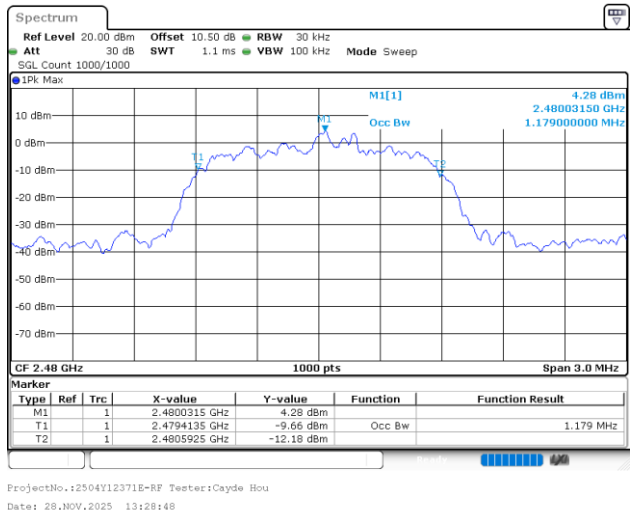
2DH5_Low



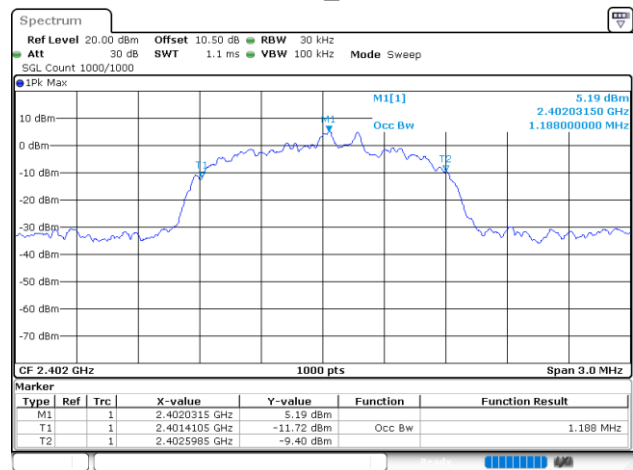
2DH5_Middle



2DH5_High

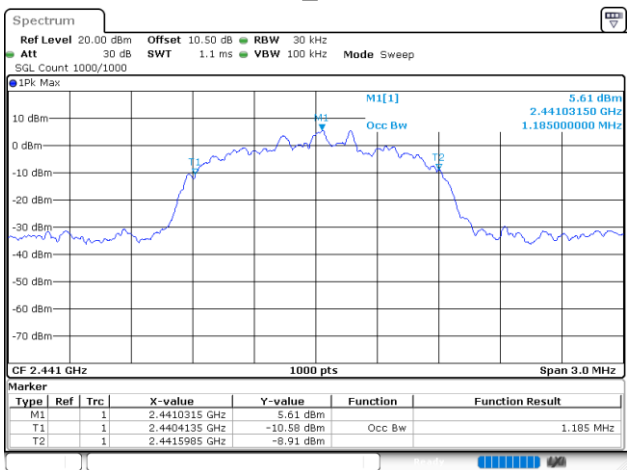


3DH5_Low



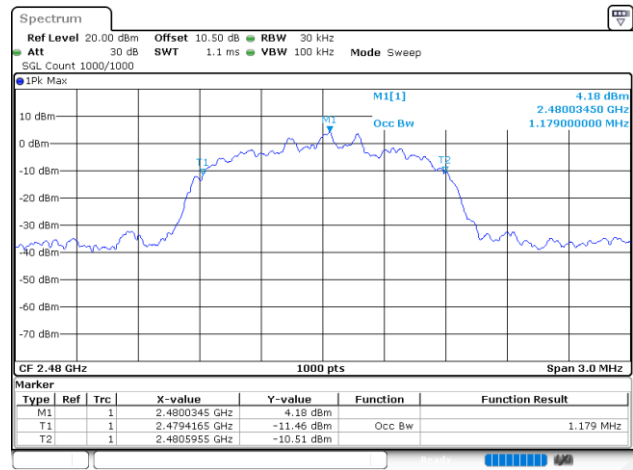
ProjectNo.:2504Y12371E-RF Tester:Cayde Hou
Date: 28.NOV.2025 13:30:58

3DH5_Middle



ProjectNo.:2504Y12371E-RF Tester:Cayde Hou
Date: 28.NOV.2025 13:32:35

3DH5_High



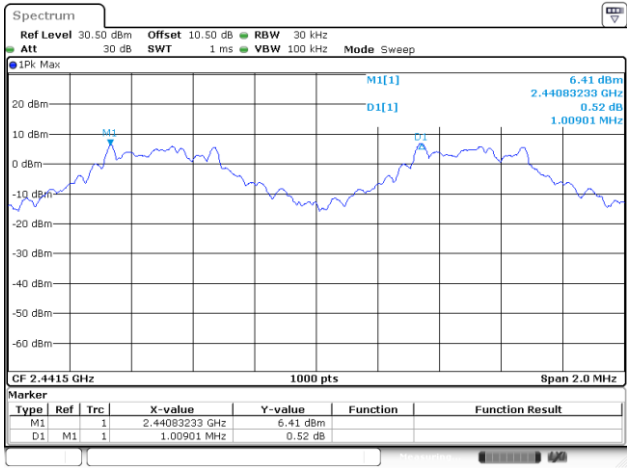
ProjectNo.:2504Y12371E-RF Tester:Cayde Hou
Date: 28.NOV.2025 13:35:34

Channel Separation

Mode	Channel	Result (MHz)	Limit (MHz)	Verdict
DH5	Middle	1.009	0.869	Pass

Note: Only the BDR (GFSK) mode result is reported since EDR ($\pi/4$ -DQPSK) and EDR (8DPSK) modes have the exact same channel plan, and the limit is the maximum 20dB bandwidth *2/3.

DH5_Middle

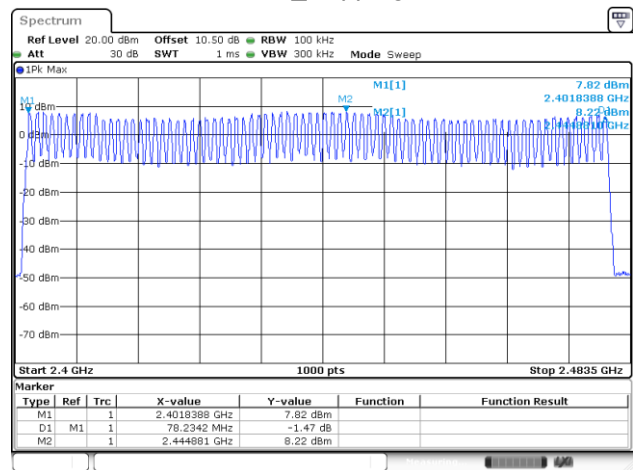


ProjectNo.:2504Y12371E-RF Tester:Cayde Hou
Date: 28.NOV.2025 17:22:59

Number of Hopping Frequency

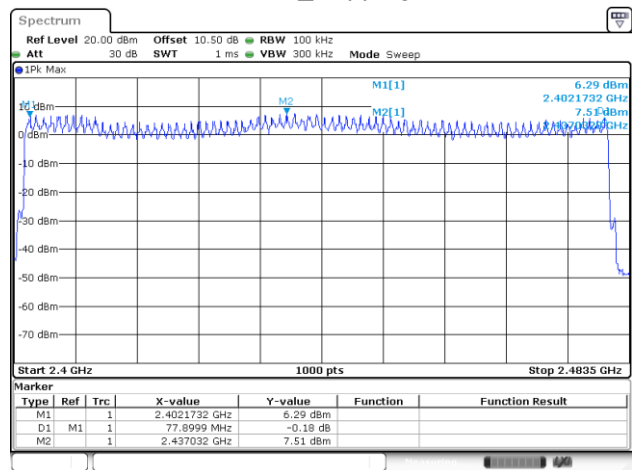
Mode	Channel	Result	Limit	Verdict
DH5	Hopping	79	15	Pass
2DH5	Hopping	79	15	Pass
3DH5	Hopping	79	15	Pass

DH5_Hopping



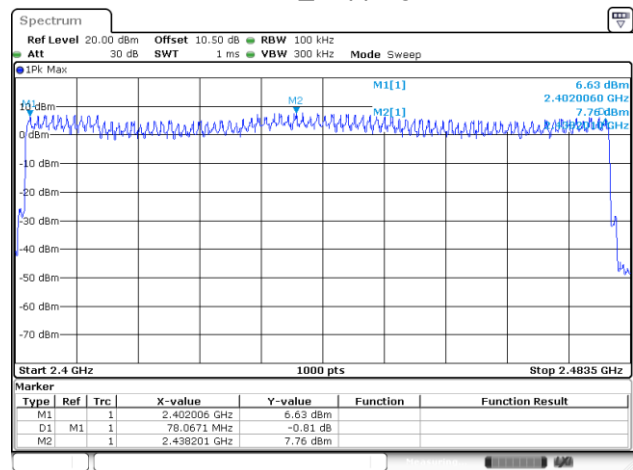
ProjectNo.:2504Y12371E-RF Tester:Cayde Hou
Date: 28.NOV.2025 13:52:29

2DH5_Hopping



ProjectNo.:2504Y12371E-RF Tester:Cayde Hou
Date: 28.NOV.2025 13:56:55

3DH5_Hopping



ProjectNo.:2504Y12371E-RF Tester:Cayde Hou
Date: 28.NOV.2025 13:56:07

Maximum Conducted Output Power

Mode	Test Frequency (MHz)	Peak Output Power (dBm)	Limit (dBm)	Verdict
DH5	2402	8.46	21.00	Pass
	2441	8.57	21.00	Pass
	2480	7.56	21.00	Pass
2DH5	2402	8.90	21.00	Pass
	2441	9.56	21.00	Pass
	2480	8.27	21.00	Pass
3DH5	2402	9.07	21.00	Pass
	2441	9.69	21.00	Pass
	2480	8.41	21.00	Pass

Additional Channel Power

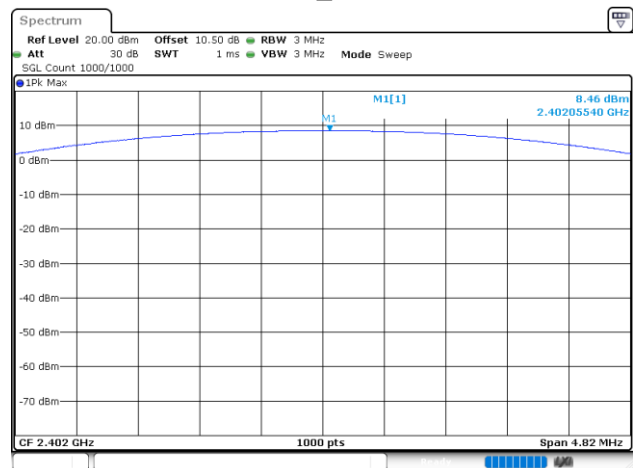
Mode	Test Frequency (MHz)	Result (dB)	Limit (dB)	Verdict
DH5	2445	8.81	21.00	Pass
2DH5	2437	9.94	21.00	Pass
3DH5	2438	9.87	21.00	Pass

Note 1: The antenna gain is -2.02dBi[#].

Note 2: EIRP = Conducted Output Power + Antenna Gain

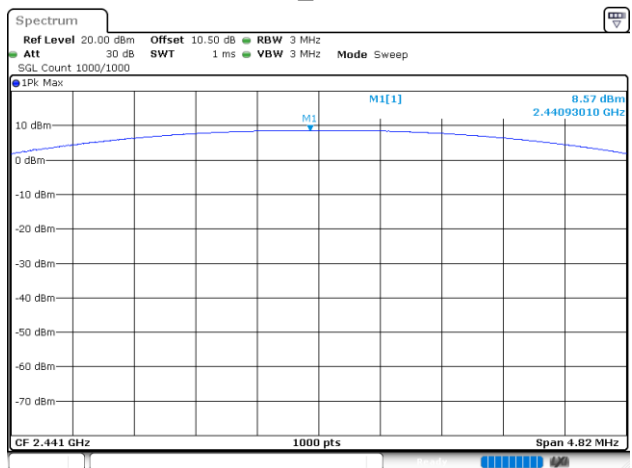
Note 3: The maximum EIRP is 9.94dBm-2.02dBi=7.92dBm<36dBm, so it's compliance with ISED C EIRP limit.

DH5_Low



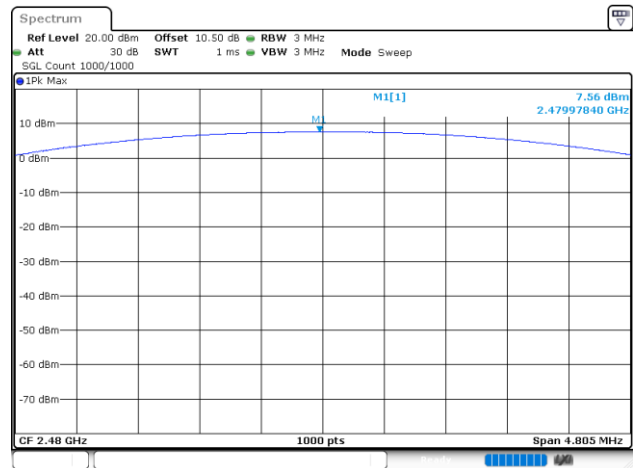
ProjectNo.:2504Y12371E-RF Tester:Cayde Hou
Date: 28.NOV.2025 13:11:07

DH5_Middle



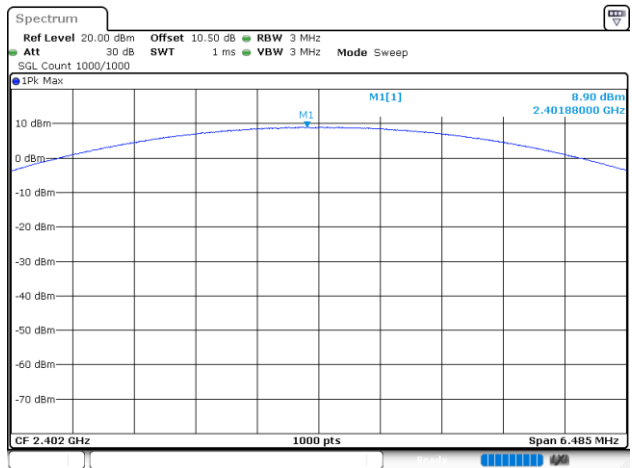
ProjectNo.:2504Y12371E-RF Tester:Cayde Hou
Date: 28.NOV.2025 13:15:33

DH5_High



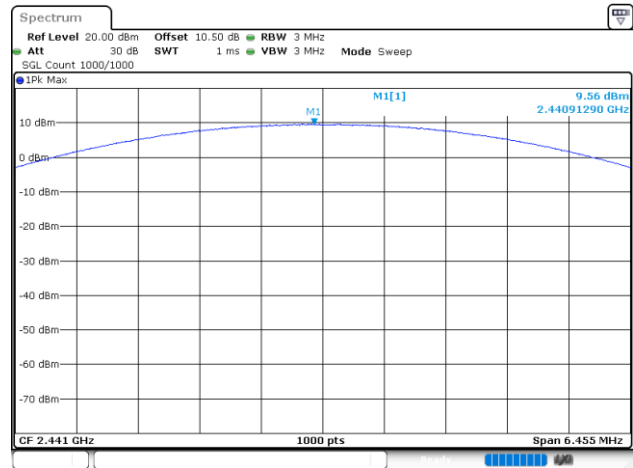
ProjectNo.:2504Y12371E-RF Tester:Cayde Hou
Date: 28.NOV.2025 13:19:48

2DH5_Low



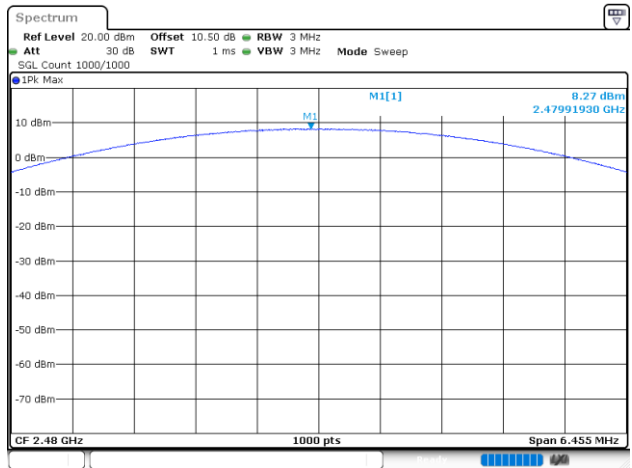
ProjectNo.:2504Y12371E-RF Tester:Cayde Hou
Date: 28.NOV.2025 13:23:46

2DH5_Middle



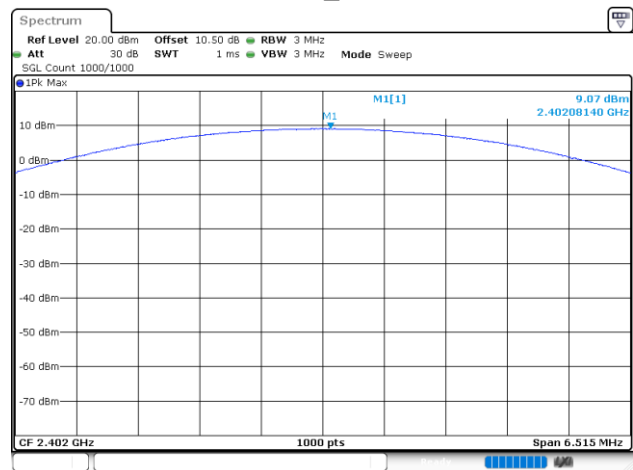
ProjectNo.:2504Y12371E-RF Tester:Cayde Hou
Date: 28.NOV.2025 13:27:31

2DH5_High



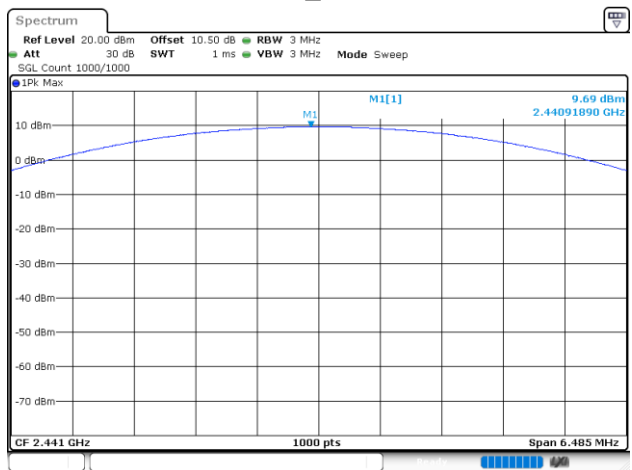
ProjectNo.:2504Y12371E-RF Tester:Cayde Hou
Date: 28.NOV.2025 13:28:57

3DH5_Low



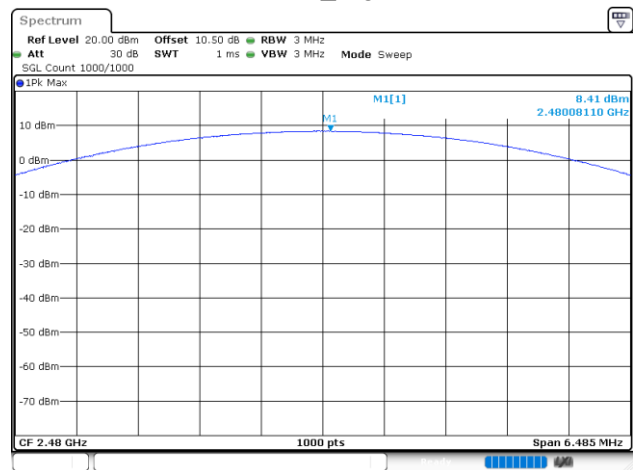
ProjectNo.:2504Y12371E-RF Tester:Cayde Hou
Date: 28.NOV.2025 13:31:10

3DH5_Middle



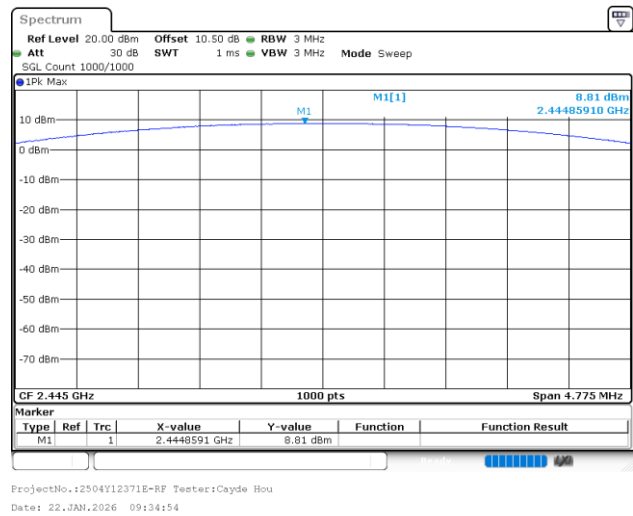
ProjectNo.:2504Y12371E-RF Tester:Cayde Hou
Date: 28.NOV.2025 13:33:35

3DH5_High

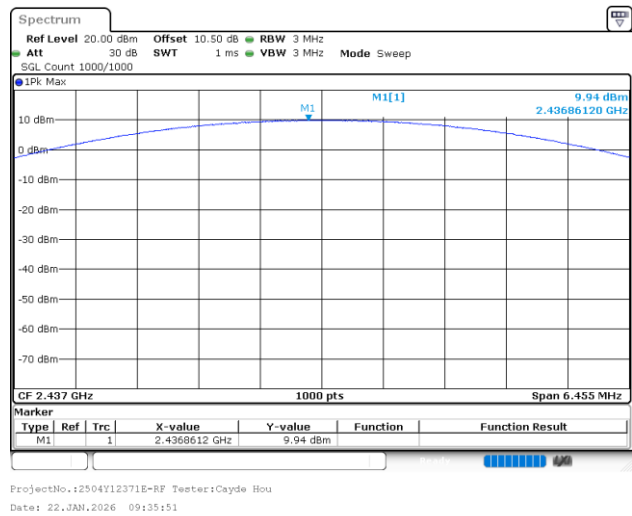


ProjectNo.:2504Y12371E-RF Tester:Cayde Hou
Date: 28.NOV.2025 13:37:59

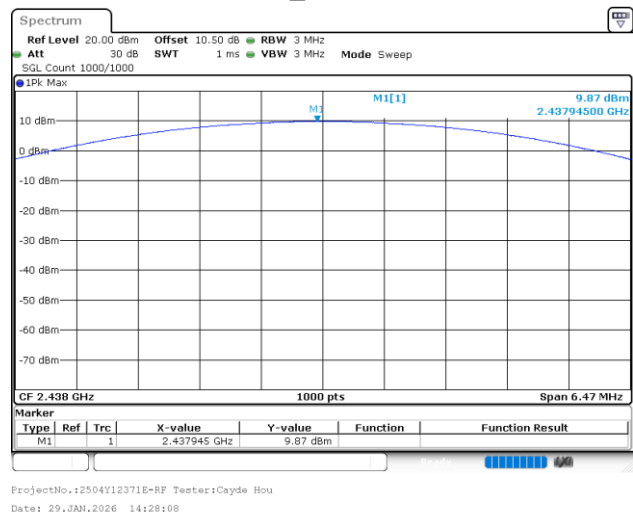
DH5_Additional



2DH5_Additional



3DH5_Additional



Time of Occupancy (dwell time)

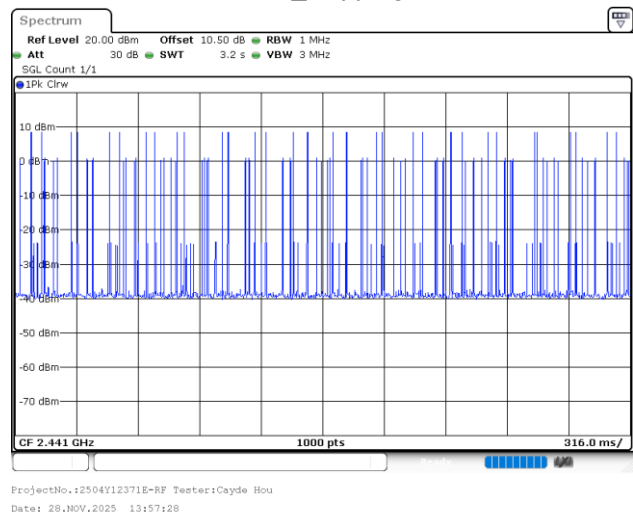
Test Mode	Channel	BurstWidth (ms)	TotalHops (Num)	Result (s)	Limit (s)	Verdict
DH1	Hopping	0.440	320	0.141	≤ 0.4	Pass
DH3	Hopping	1.697	170	0.288	≤ 0.4	Pass
DH5	Hopping	2.948	120	0.354	≤ 0.4	Pass
2DH1	Hopping	0.433	320	0.139	≤ 0.4	Pass
2DH3	Hopping	1.685	120	0.202	≤ 0.4	Pass
2DH5	Hopping	2.943	110	0.324	≤ 0.4	Pass
3DH1	Hopping	0.428	320	0.137	≤ 0.4	Pass
3DH3	Hopping	1.682	170	0.286	≤ 0.4	Pass
3DH5	Hopping	2.938	110	0.323	≤ 0.4	Pass

Note 1: A period time = $0.4 \times 79 = 31.6(S)$, Result = BurstWidth * Totalhops

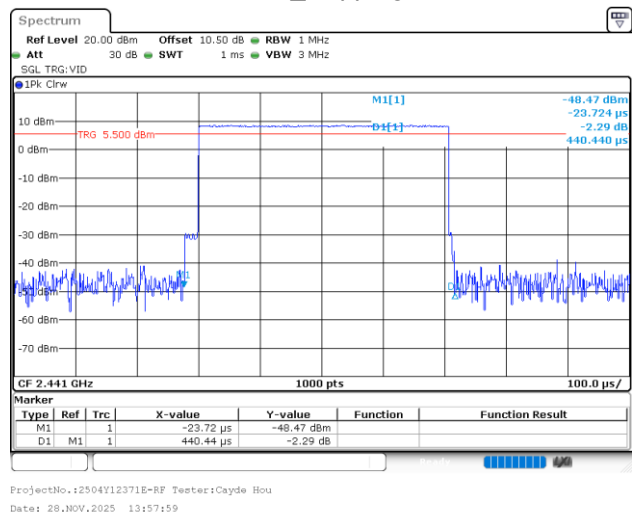
Note 2: Totalhops = Hopping Number in $3.16s \times 10$

Note 3: Hopping Number in 3.16s = Total of highest signals in 3.16s(Second high signals were other channel)

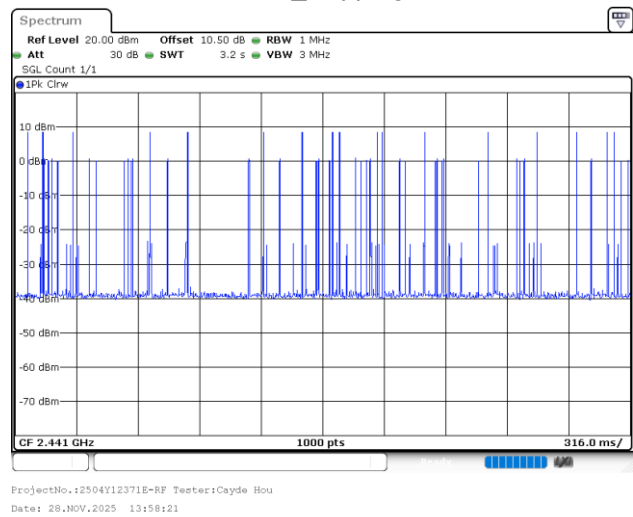
DH1_Hopping



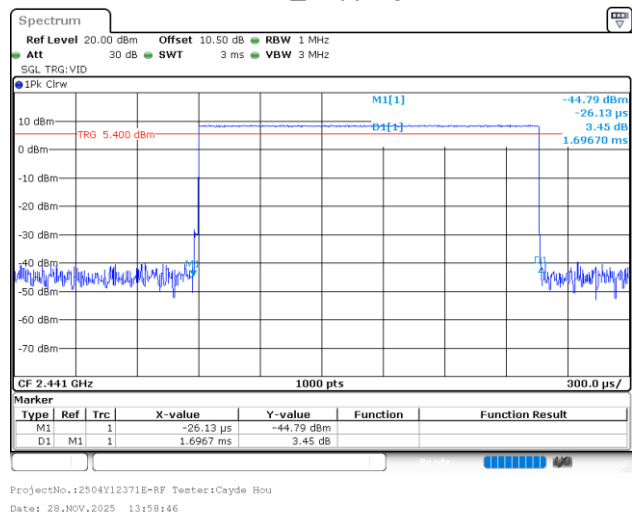
DH1_Hopping



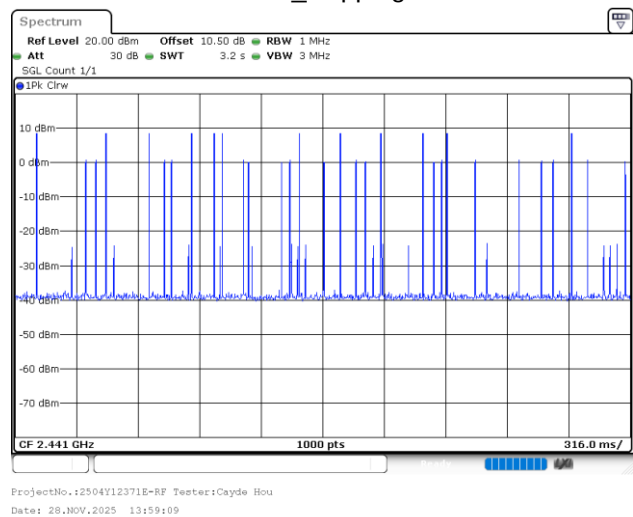
DH3_Hopping



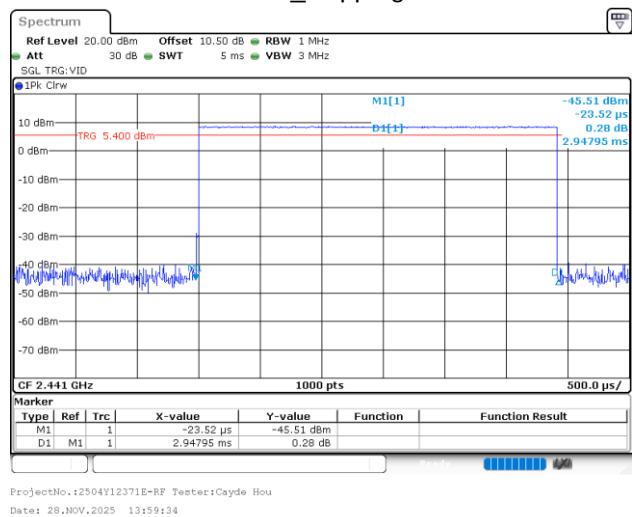
DH3_Hopping



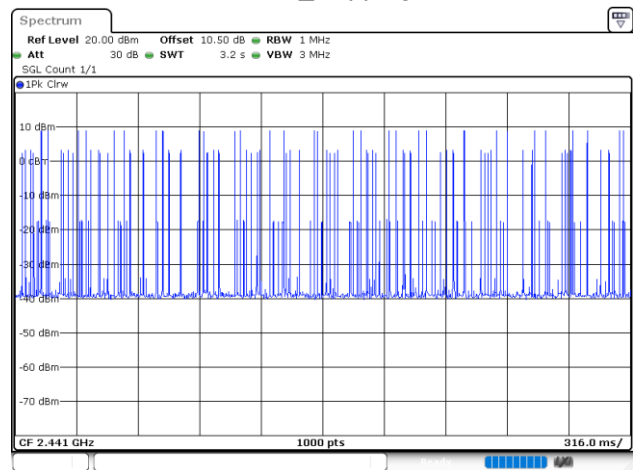
DH5_Hopping



DH5_Hopping

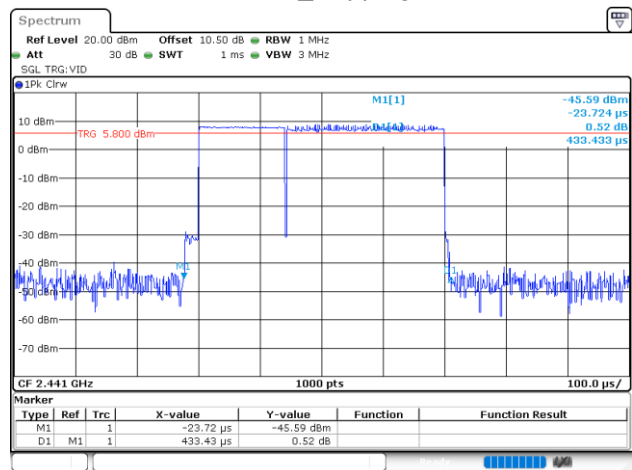


2DH1_Hopping



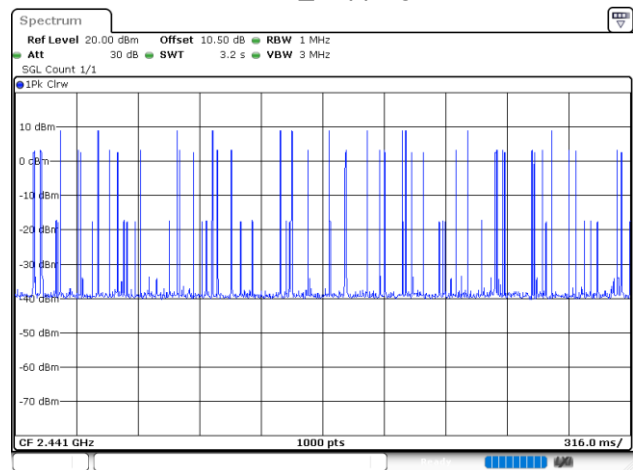
ProjectNo.:2504Y12371E-RF Tester:Cayde Hou
Date: 28.NOV.2025 14:00:05

2DH1_Hopping



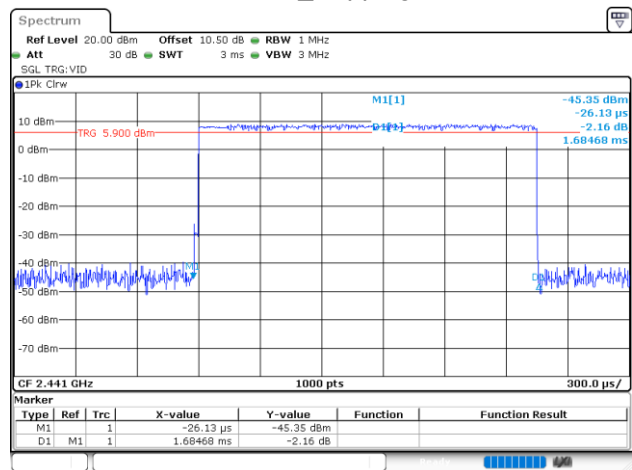
ProjectNo.:2504Y12371E-RF Tester:Cayde Hou
Date: 28.NOV.2025 14:02:09

2DH3_Hopping



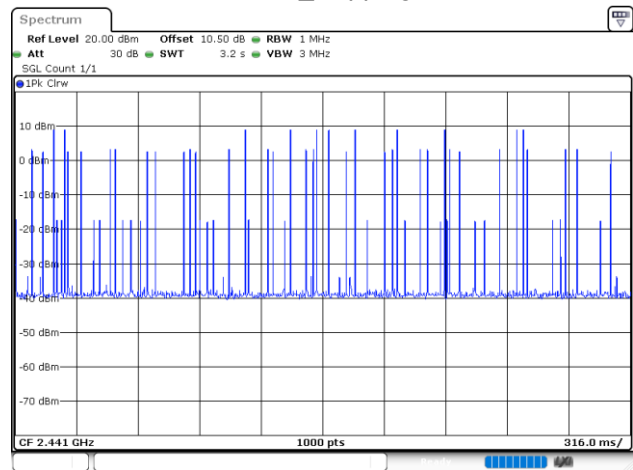
ProjectNo.:2504Y12371E-RF Tester:Cayde Hou
Date: 28.NOV.2025 14:04:17

2DH3_Hopping



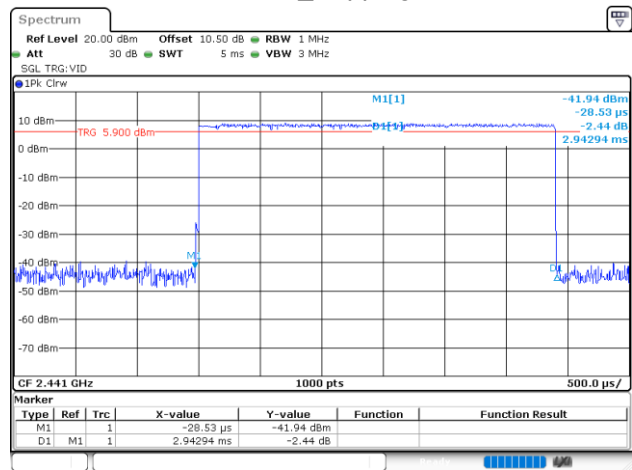
ProjectNo.:2504Y12371E-RF Tester:Cayde Hou
Date: 28.NOV.2025 14:04:32

2DH5_Hopping



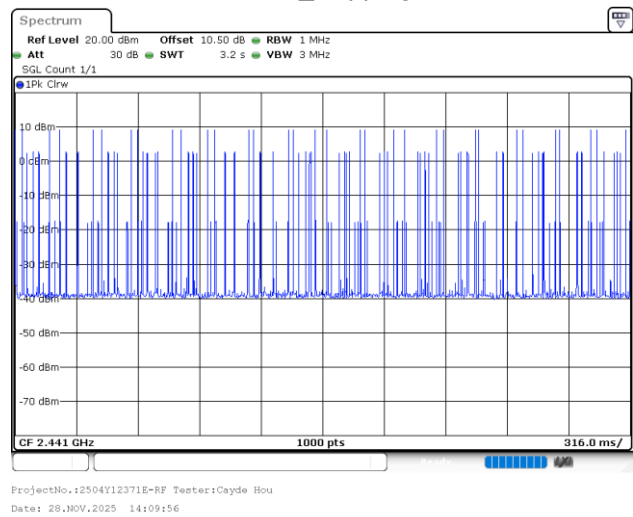
ProjectNo.:2504Y12371E-RF Tester:Cayde Hou
Date: 28.NOV.2025 14:07:54

2DH5_Hopping

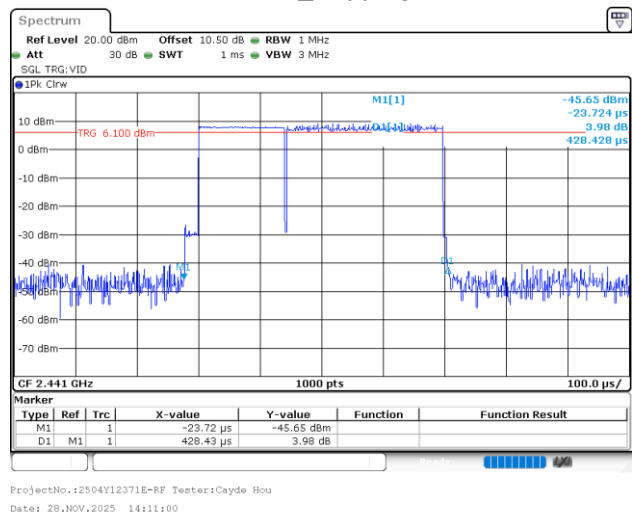


ProjectNo.:2504Y12371E-RF Tester:Cayde Hou
Date: 28.NOV.2025 14:09:29

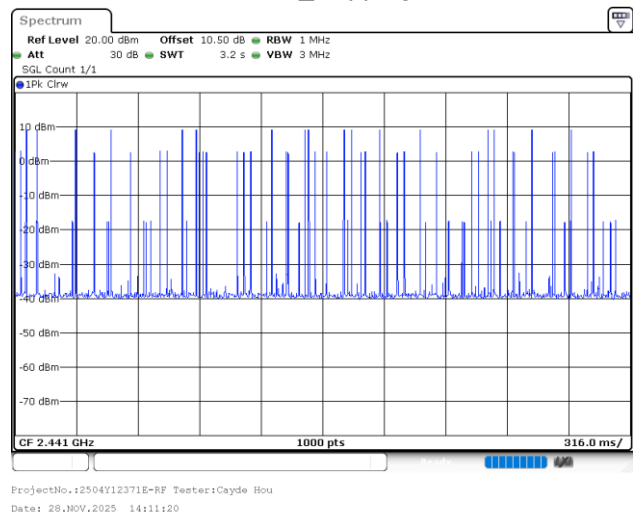
3DH1_Hopping



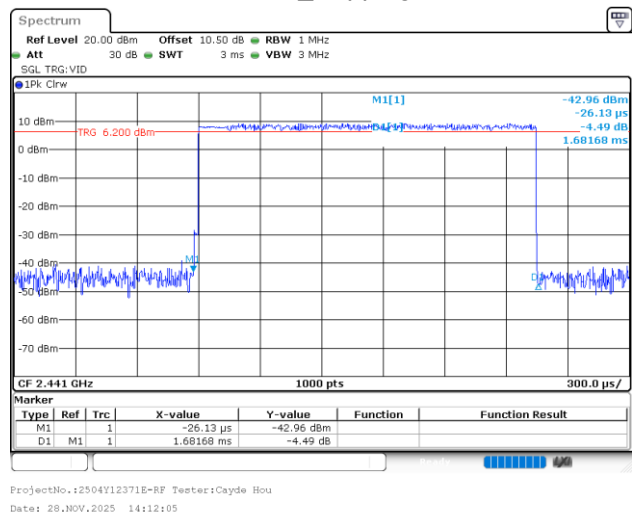
3DH1_Hopping



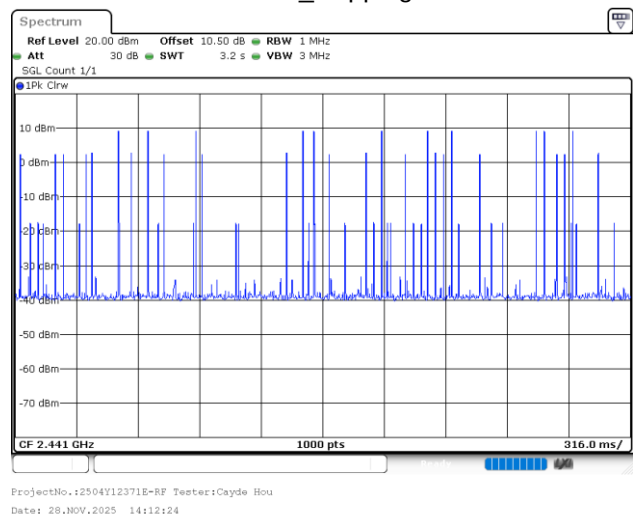
3DH3_Hopping



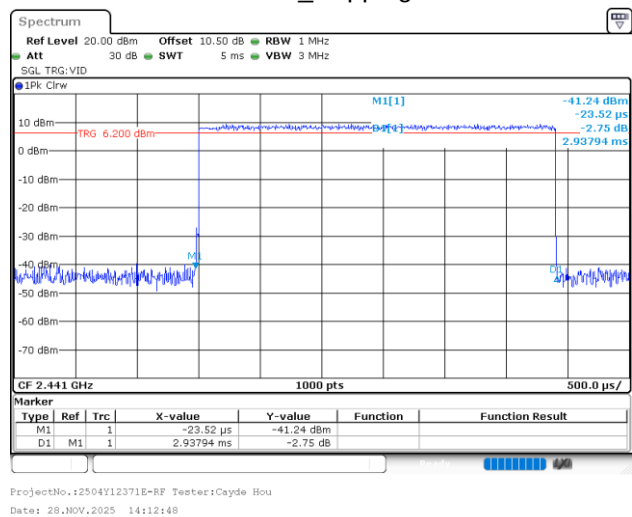
3DH3_Hopping



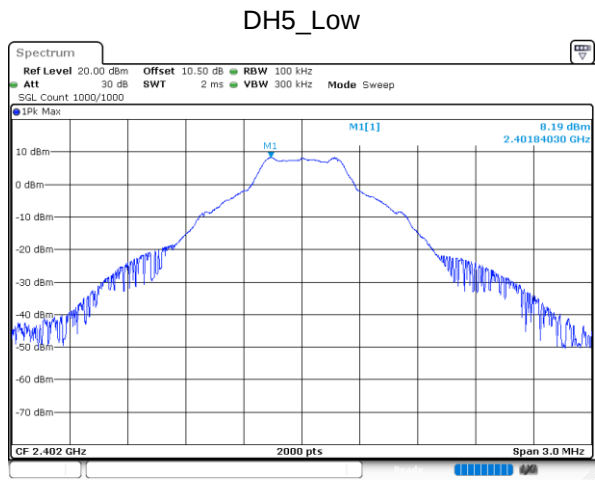
3DH5_Hopping



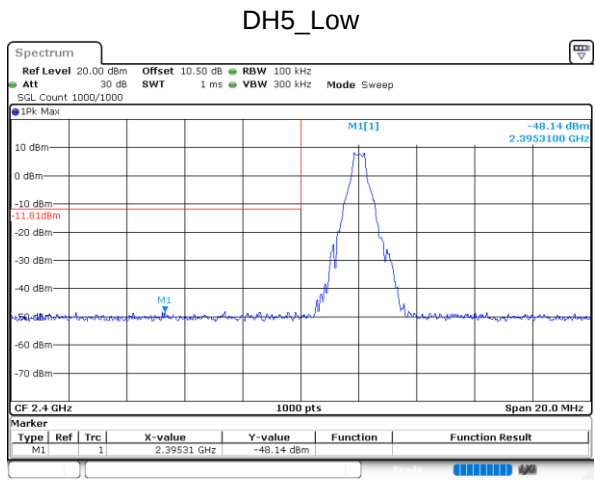
3DH5_Hopping



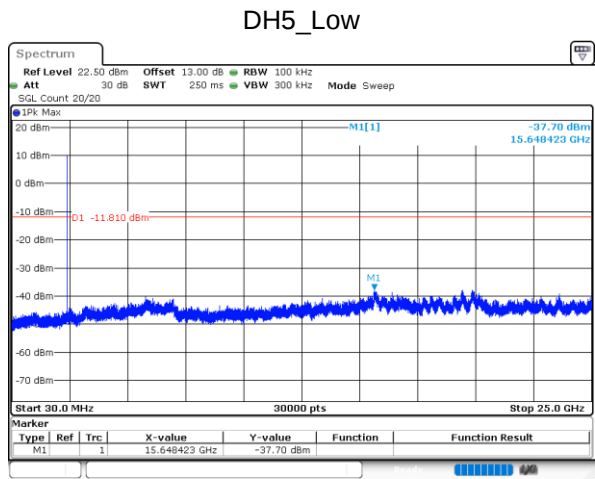
Conducted Spurious Emission



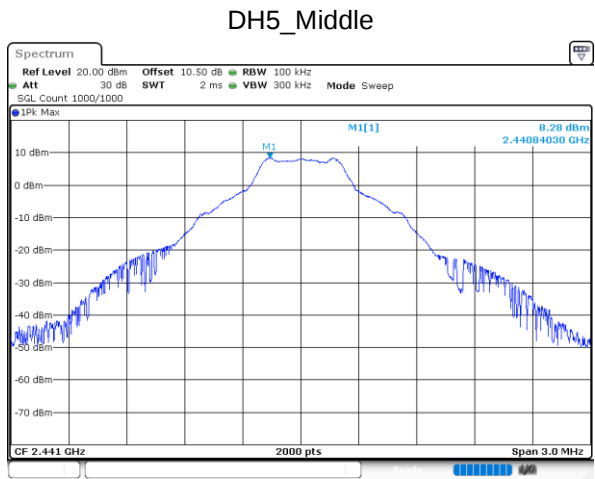
ProjectNo.:2504Y12371E-RF Tester:Cayde Hou
Date: 28.NOV.2025 13:11:15



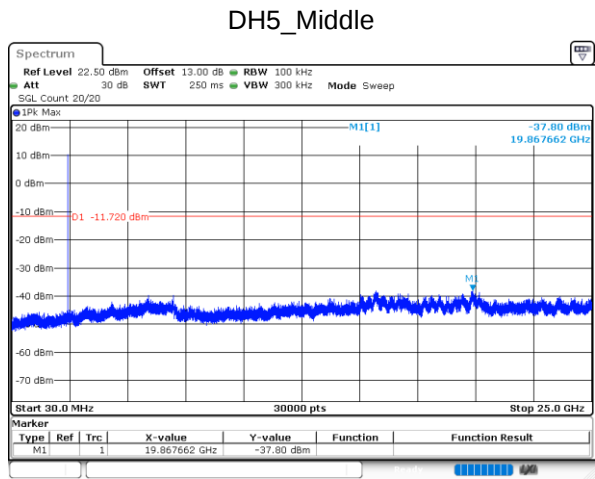
ProjectNo.:2504Y12371E-RF Tester:Cayde Hou
Date: 28.NOV.2025 13:11:33



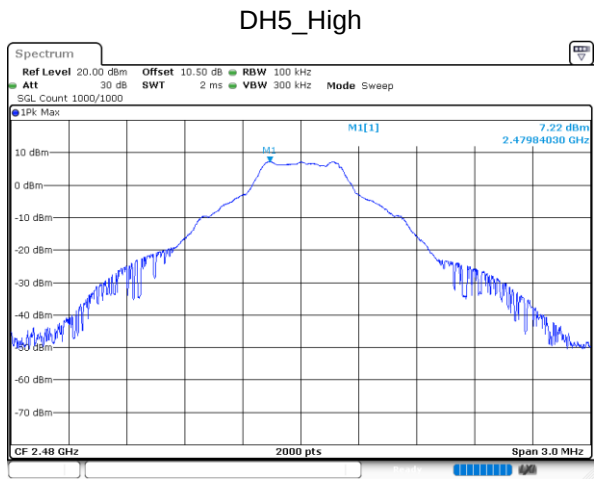
ProjectNo.:2504Y12371E-RF Tester:Cayde Hou
Date: 28.NOV.2025 13:11:58



ProjectNo.:2504Y12371E-RF Tester:Cayde Hou
Date: 28.NOV.2025 13:15:40

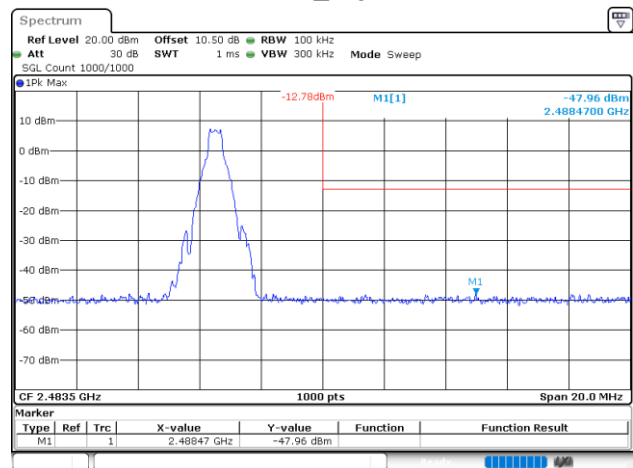


ProjectNo.:2504Y12371E-RF Tester:Cayde Hou
Date: 28.NOV.2025 13:16:08



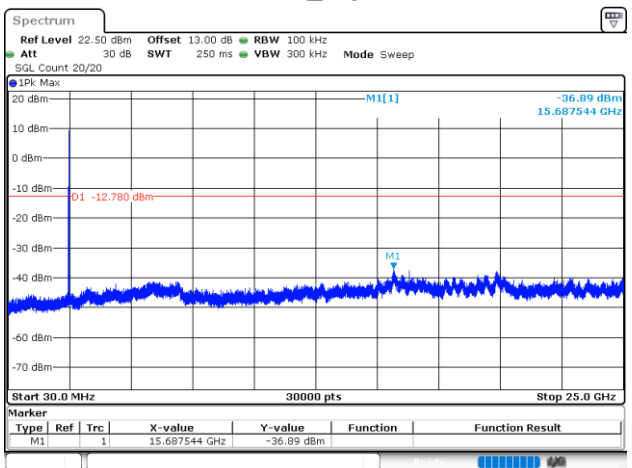
ProjectNo.:2504Y12371E-RF Tester:Cayde Hou
Date: 28.NOV.2025 13:19:56

DH5_High



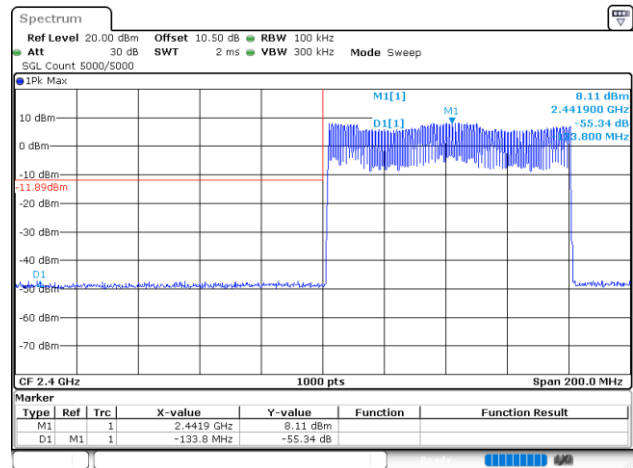
ProjectNo.:2504Y12371E-RF Tester:Cayde Hou
Date: 28.NOV.2025 13:20:09

DH5_High



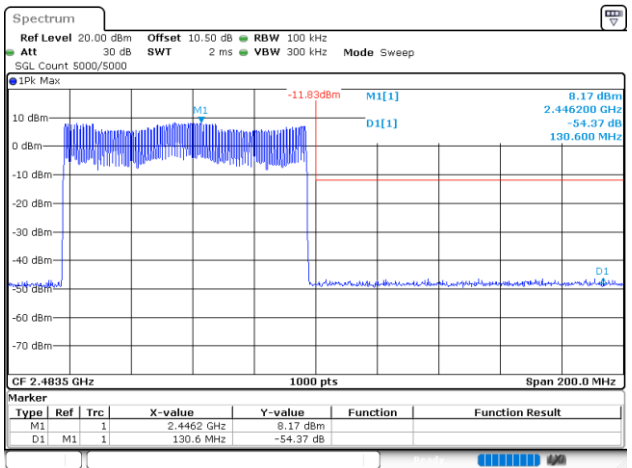
ProjectNo.:2504Y12371E-RF Tester:Cayde Hou
Date: 28.NOV.2025 13:20:35

DH5_Hopping_Lower



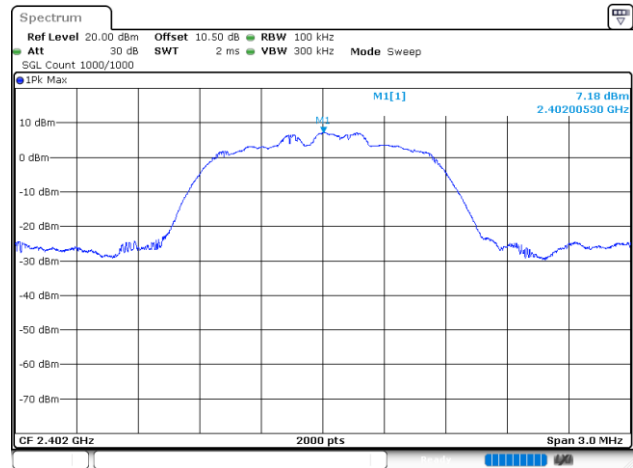
ProjectNo.:2504Y12371E-RF Tester:Cayde Hou
Date: 28.NOV.2025 14:15:37

DH5_Hopping_Upper



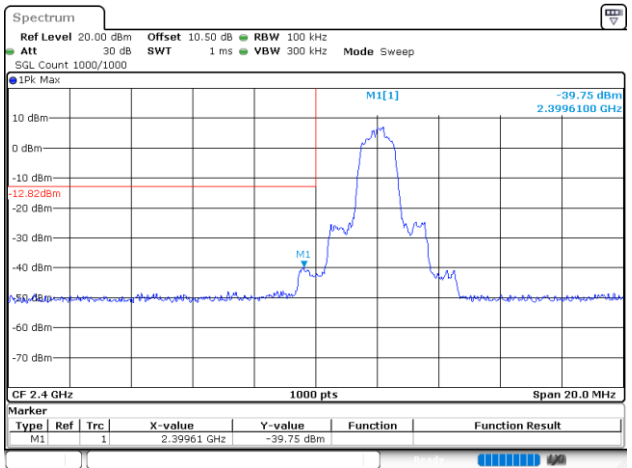
ProjectNo.:2504Y12371E-RF Tester:Cayde Hou
Date: 28.NOV.2025 14:16:32

2DH5_Low



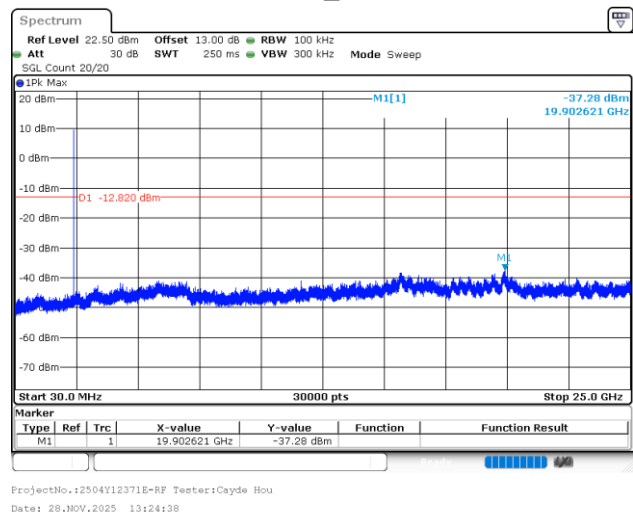
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Date: 28.NOV.2025 13:23:54

2DH5_Low

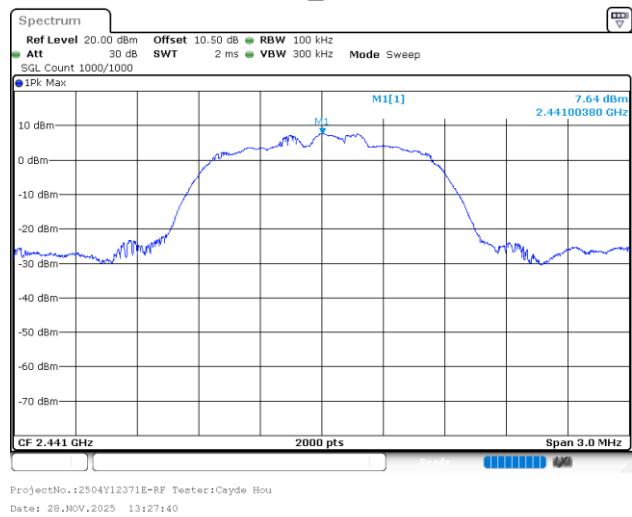


ProjectNo.:2504Y12371E-RF Tester:Cayde Hou
Date: 28.NOV.2025 13:24:12

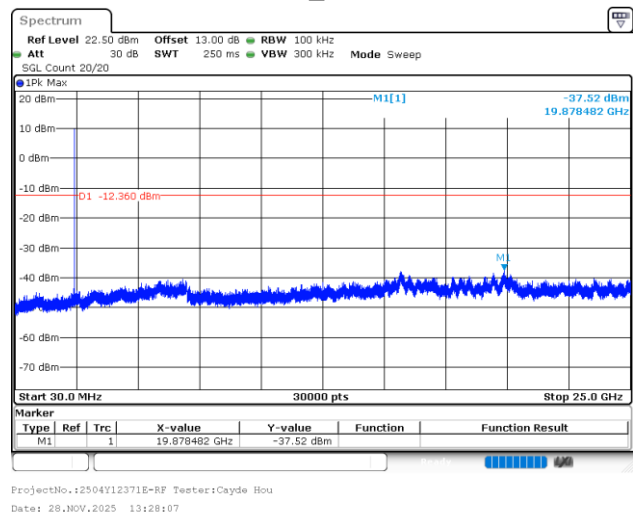
2DH5_Low



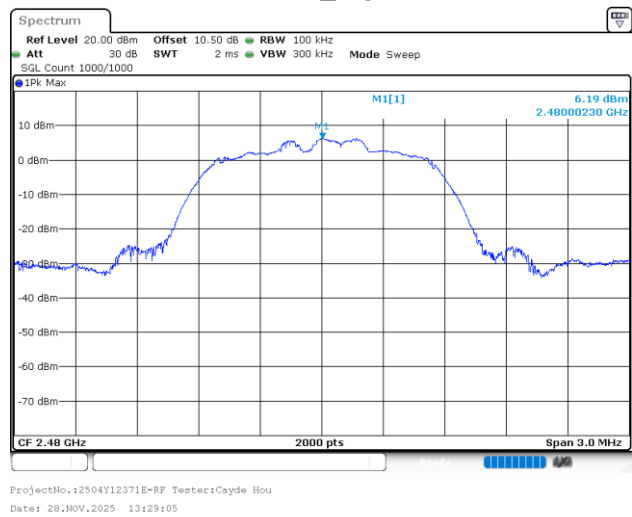
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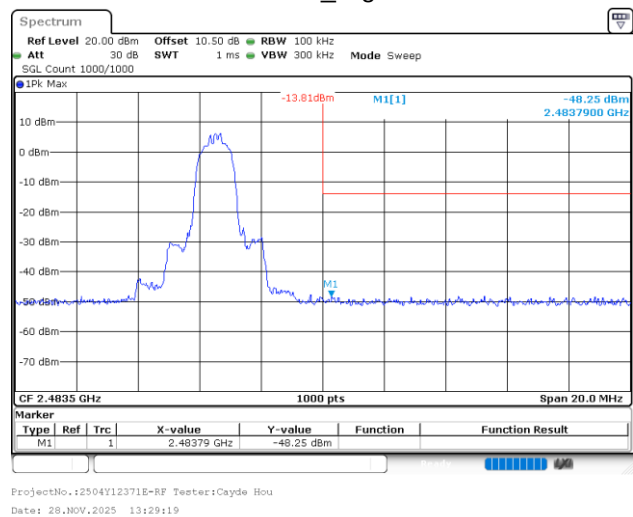
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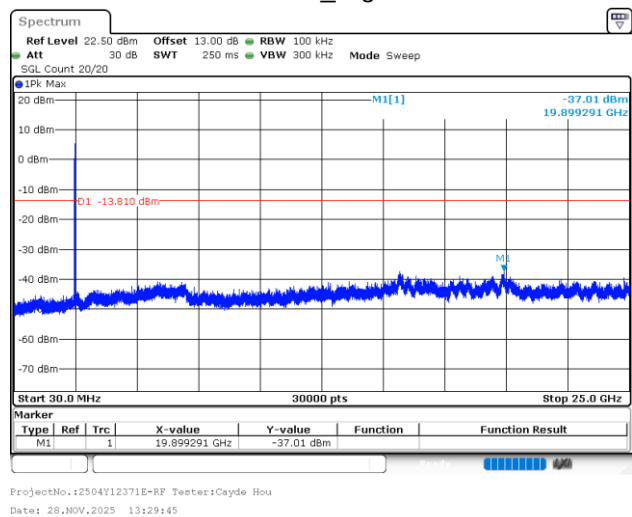
2DH5_High



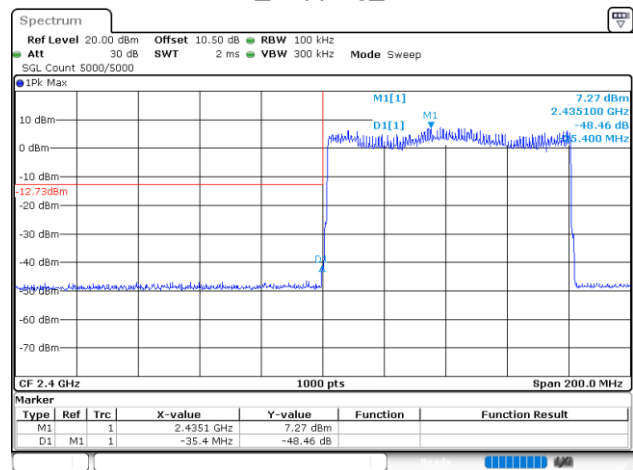
2DH5_High



2DH5_High

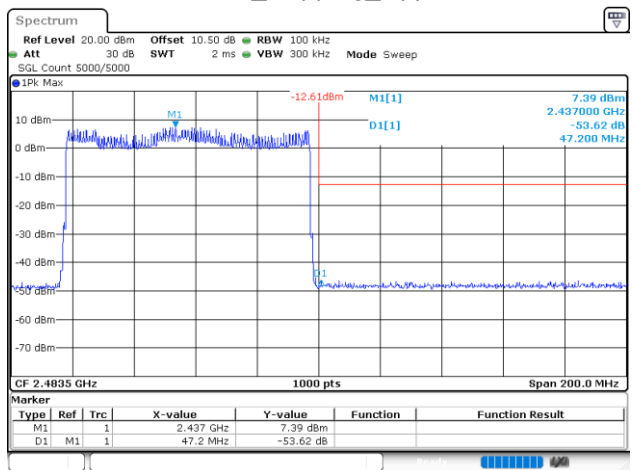


2DH5_Hopping_Lower



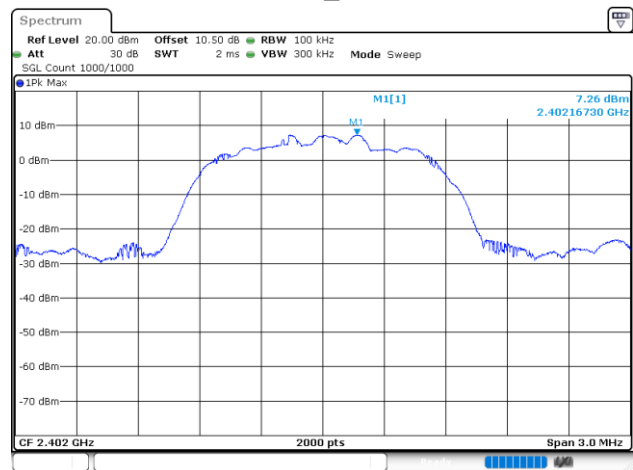
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Date: 28.NOV.2025 14:17:28

2DH5_Hopping_Upper



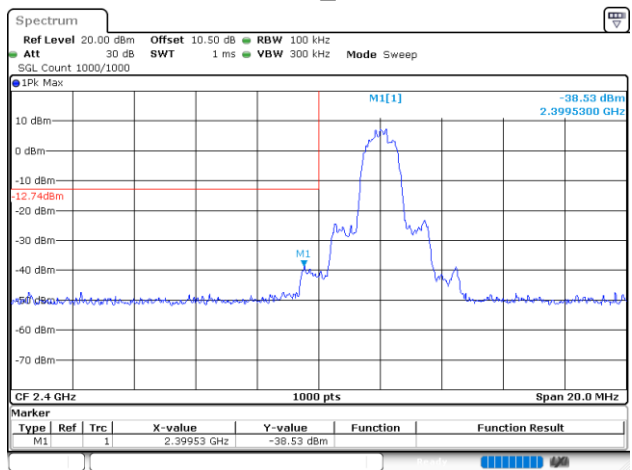
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Date: 28.NOV.2025 14:18:50

3DH5_Low



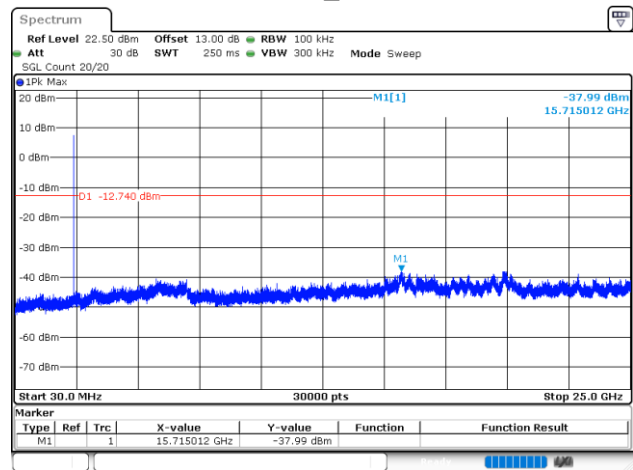
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Date: 28.NOV.2025 13:31:18

3DH5_Low



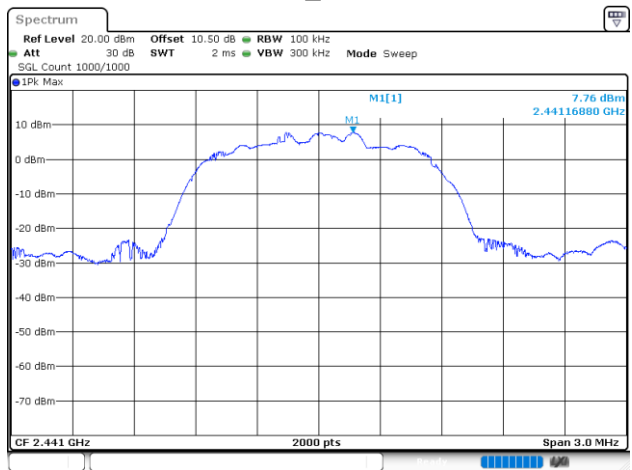
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Date: 28.NOV.2025 13:31:37

3DH5_Low



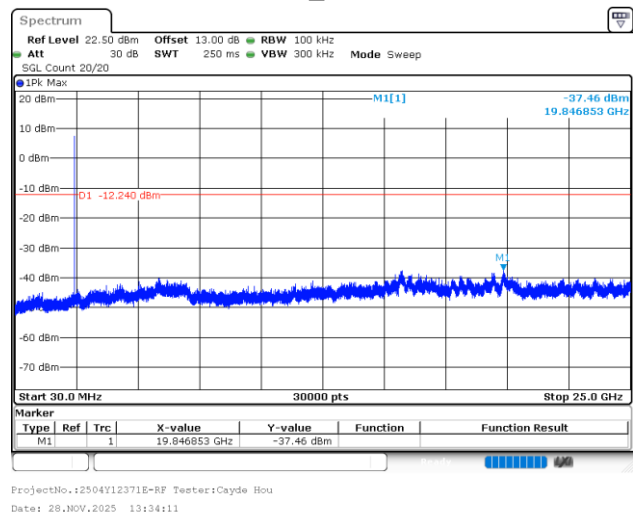
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3DH5_Middle

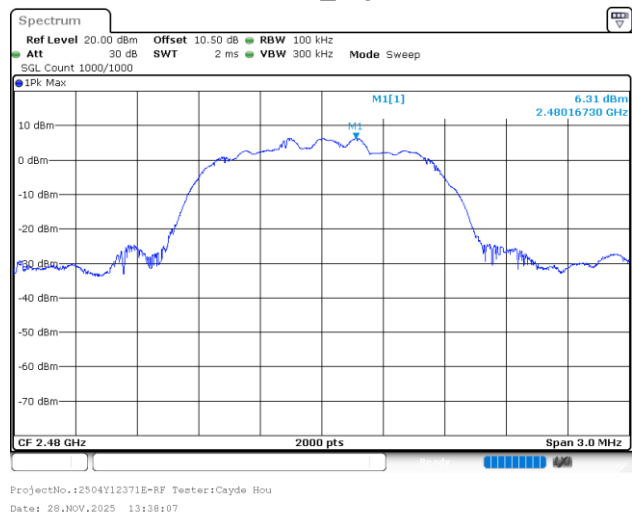


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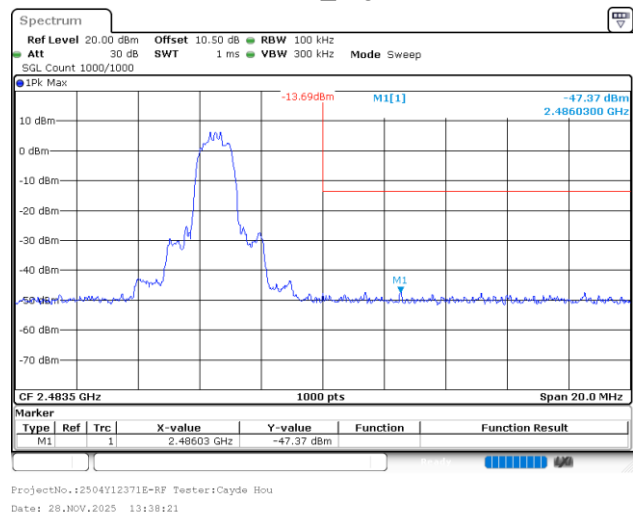
3DH5_Middle



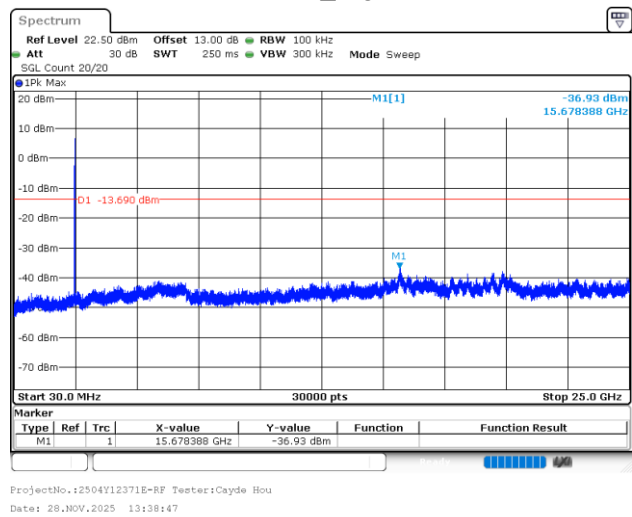
3DH5_High



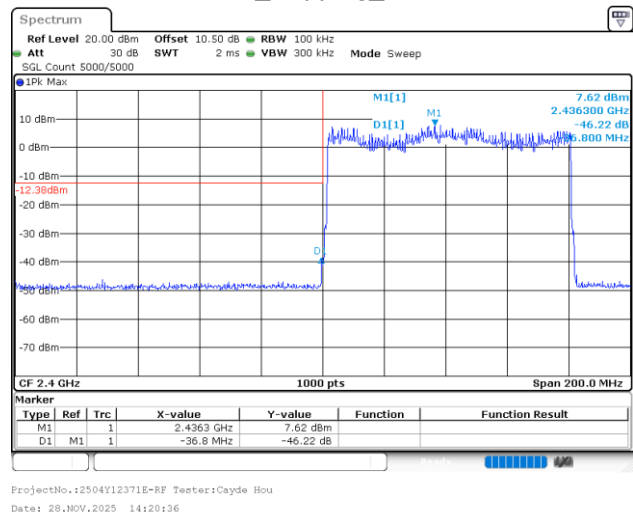
3DH5_High



3DH5_High



3DH5_Hopping_Lower



3DH5_Hopping_Upper

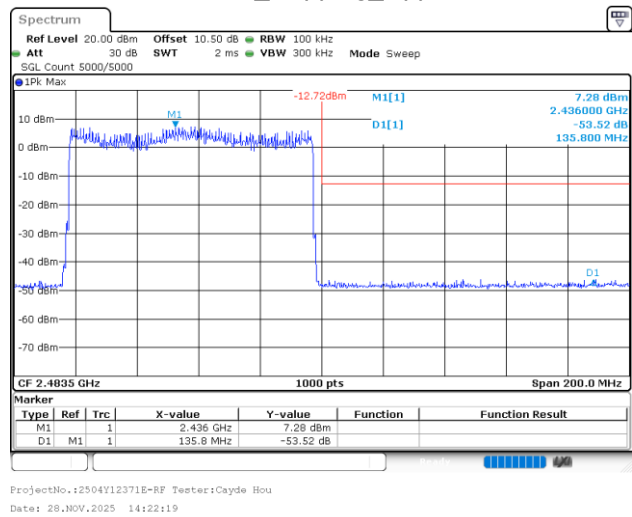


EXHIBIT A-EUT PHOTOGRAPHS

For FCC, please refer to the Attachment No.1 2504Y12371E-RF-00 EUT External Photos and Attachment No.2 2504Y12371E-RF EUT Internal Photos.

For IC, please refer to the Attachment No.8 2504Y12371E-RF-08 EUT External Photos and Attachment No.2 2504Y12371E-RF EUT Internal Photos.

EXHIBIT B-TEST SETUP PHOTOGRAPHS

Please refer to the Attachment No.3 2504Y12371E-RFA Test Photos.

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