

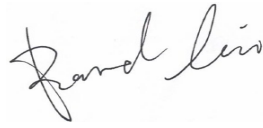
**FCC PART 15.247
TEST REPORT**

For

Tersus GNSS Inc.

Rm 601, Bldg E2, No. 88, Jinjihu Ave, Suzhou, China

FCC ID: 2AMDJ-TC120

Report Type: Original Report	Product Name: Tablet
Report Number:	RSA250211001-00B
Report Date:	2025-10-21
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Note: This test report is prepared for the customer shown above and for the device described herein. It may not be duplicated or used in part without prior written consent from Bay Area Compliance Laboratories Corp. (Kunshan). This report must not be used by the customer to claim product certification, approval, or endorsement by NVLAP, or any agency of the U.S. Government.

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REPORT REVISION HISTORY

Number of Revisions	Report No.	Version	Issue Date	Description
0	RSHA250211001-00B	R1V1	2025-10-21	Initial Release

GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

Applicant:	Tersus GNSS Inc.
Product Name:	Tablet
Tested Model:	TC120
Power Supply:	DC 9-36 V
RF Function:	Classic BT
Operating Band/Frequency:	2402-2480 MHz
Maximum Output Power:	GFSK: 7.48 dBm $\pi/4$ -DQPSK: 7.17 dBm 8DPSK: 6.74 dBm
Channel Number:	79
Channel Separation:	1 MHz
Modulation Type:	GFSK, $\pi/4$ -DQPSK, 8DPSK
Antenna Type:	FPC Antenna
★Maximum Antenna Gain:	1.5 dBi

Note: The maximum antenna gain was declared by the manufacturer.

All measurement and test data in this report was gathered from production sample serial number: RSHA250211001-1 (Assigned by the BACL (Kunshan). The EUT supplied by the applicant was received on 2025-02-11.)

Objective

This test report is prepared for *Tersus GNSS Inc.* in accordance with Part 2-Subpart J, Part 15-Subparts A and C of the Federal Communication Commissions rules.

The tests were performed in order to determine Compliance with FCC Part 15, Subpart C, section 15.203, 15.205, 15.209 and 15.247 rules.

Test Methodology

All measurements contained in this report were conducted with ANSI C63.10-2020, American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices and 558074 D01 15.247 Meas Guidance v05r02.

Measurement Uncertainty

Item		Uncertainty
AC Power Lines Conducted Emissions		3.19dB
RF conducted test with spectrum		0.9dB
RF Output Power with Power meter		0.5dB
Radiated emission	9 kHz~150 kHz	3.8dB
	150 kHz~30 MHz	3.4dB
	30MHz~1GHz	6.11dB
	1GHz~6GHz	4.45dB
	6GHz~18GHz	5.23dB
	18GHz~40GHz	5.65dB
Occupied Bandwidth		0.5kHz
Temperature		1.0°C
Humidity		6%

Test Facility

The Test site used by Bay Area Compliance Laboratories Corp. (Kunshan) to collect test data is located on the No.248 Chenghu Road, Kunshan, Jiangsu Province, China.

Bay Area Compliance Laboratories Corp. (Kunshan) is accredited in accordance with ISO/IEC 17025:2017 by NVLAP (Lab code: 600338-0), and the lab has been recognized as the FCC accredited lab under the KDB 974614 D01, the FCC Designation No.: CN5055.

SYSTEM TEST CONFIGURATION

Description of Test Configuration

Channel list:

Channel	Frequency (MHz)	Channel	Frequency (MHz)
0	2402	40	2442
1	2403	...	...
...	...	...	...
...	...	78	2480
39	2441	/	/

EUT was tested with Channel 0, 39 and 78.

EUT Exercise Software

RF Test Tool: Engineering Mode

★Power level: Default

Note: The power level was declared by the applicant.

Special Accessories

No special accessory.

Equipment Modifications

No modification was made to the EUT tested.

Support Equipment List and Details

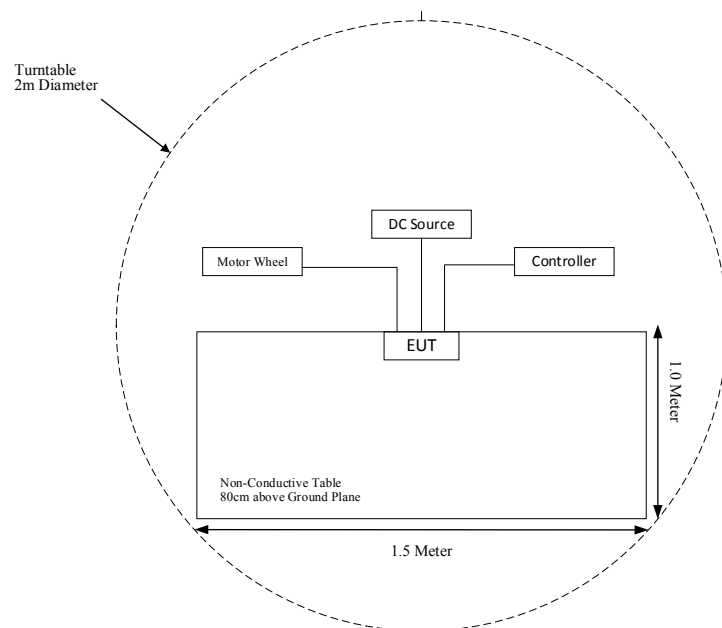
Manufacturer	Description	Model	Serial Number
ZHAOXIN	DC Source	RXN-605D	21R605D08132677
Tersus GNSS Inc.	Motor Wheel	AG993	/
Tersus GNSS Inc.	Controller	GC30	/

External I/O Cable

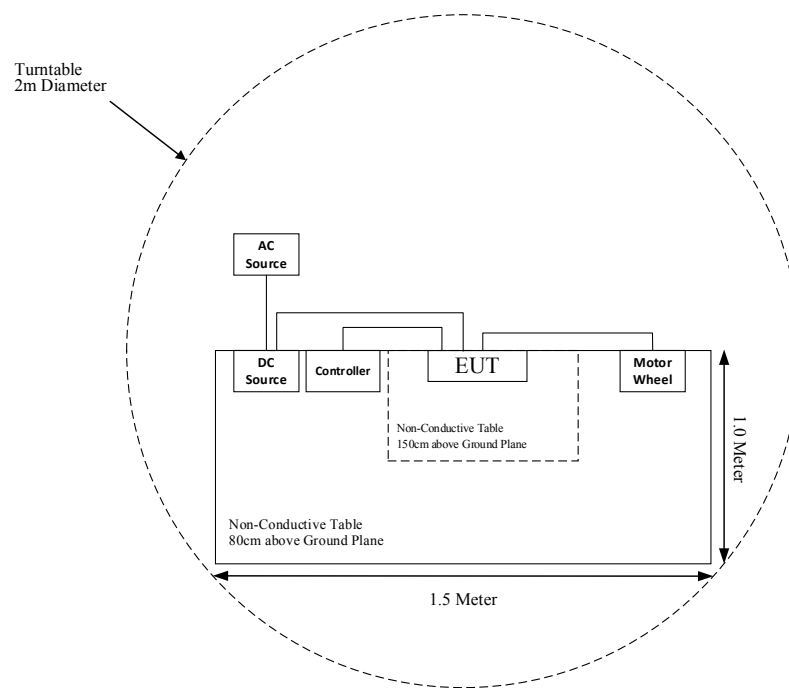
Cable Description	Length (m)	From Port	To Port
Power Cable 1	1.5	EUT	DC Source
Power Cable 2	1.0	DC Source	AC Source
Power Cable 3	2.5	EUT	Motor Wheel
Power Cable 4	3.0	EUT	Controller

Block Diagram of Test Setup

For Radiated Emissions (Below 1GHz):



For Radiated Emissions (1GHz - 25GHz):



SUMMARY OF TEST RESULTS

FCC Rules	Description of Test	Result
§15.203	Antenna Requirement	Compliant
§15.207(a)	AC Line Conducted Emissions	Not Applicable (See Note)
§15.205, §15.209 & §15.247(d)	Radiated Emissions & Restricted Bands Emissions	Compliant
§15.247(a)(1)	20 dB Emission Bandwidth	Compliant
§15.247(a)(1)	Channel Separation Test	Compliant
§15.247(a)(1)(iii)	Time of Occupancy (Dwell Time)	Compliant
§15.247(a)(1)(iii)	Quantity of hopping channel Test	Compliant
§15.247(b)(1)	Peak Output Power Measurement	Compliant
§15.247(d)	Band edges	Compliant
§1.1310 & §2.1091	Maximum Permissible Exposure (MPE)	Compliant

Note: The EUT is a vehicular equipment.

TEST EQUIPMENT LIST

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Radiated Emission Test (Chamber #1)					
Rohde & Schwarz	EMI Test Receiver	ESCI	100195	2024-04-23	2025-04-22
Sunol Sciences	Broadband Antenna	JB3	A090314-1	2024-11-08	2027-11-07
Narda	6dB Attenuator	773-6	10690812-2-1	2024-10-29	2027-10-28
ETS-LINDGREN	Loop Antenna	6512	108100	2024-11-03	2027-11-02
Sonoma Instrument	Pre-amplifier	310N	171205	2024-04-23	2025-04-22
Rohde & Schwarz	Auto Test Software	EMC32	100361	N/A	N/A
MICRO-COAX	Coaxial Cable	Cable-8	008	2024-05-23	2025-05-22
MICRO-COAX	Coaxial Cable	Cable-9	009	2024-05-23	2025-05-22
MICRO-COAX	Coaxial Cable	Cable-10	010	2024-05-23	2025-05-22
Radiated Emission Test (Chamber #2)					
Rohde & Schwarz	EMI Test Receiver	ESU40	100207/040	2024-04-25	2025-04-24
ETS-LINDGREN	Horn Antenna	3115	9311-4159	2024-12-02	2025-12-01
ETS-LINDGREN	Horn Antenna	3116	2516	2024-12-12	2027-12-11
A.H.Systems, inc	Amplifier	PAM-0118P	512	2024-04-25	2025-04-24
SELECTOR	Amplifier	EM18G40G	060726	2024-04-25	2025-04-24
MICRO-TRONICS	Band Reject Filter	BRM50702	G024	2024-08-05	2025-08-04
Narda	Attenuator	10dB	010	2024-08-15	2025-08-14
Rohde & Schwarz	Auto test Software	EMC32	100361	N/A	N/A
MICRO-COAX	Coaxial Cable	Cable-6	006	2024-04-25	2025-04-24
MICRO-COAX	Coaxial Cable	Cable-11	011	2024-04-25	2025-04-24
MICRO-COAX	Coaxial Cable	Cable-12	012	2024-04-25	2025-04-24
MICRO-COAX	Coaxial Cable	Cable-13	013	2024-04-25	2025-04-24
RF Conducted Test					
Rohde & Schwarz	Signal Analyzer	FSU26	200103	2025-04-09	2026-04-08
Rohde & Schwarz	Signal Analyzer	FSV40	101116	2024-04-08	2025-04-07
Narda	Attenuator	10dB	010	2024-08-15	2025-08-14
				2025-04-08	2026-04-07

Statement of Traceability: Bay Area Compliance Laboratories Corp. (Kunshan) attests that all calibrations have been performed in accordance to requirements that traceable to National Primary Standards and International System of Units (SI).

FCC §1.1310 & §2.1091 - MAXIMUM PERMISSIBLE EXPOSURE (MPE)

Applicable Standard

According to subpart §2.1091 and subpart §1.1310, systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission's guidelines.

Limits for Maximum Permissible Exposure (MPE) (§1.1310, §2.1091)

(B) Limits for General Population/Uncontrolled Exposure				
Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm²)	Averaging Time (minutes)
0.3-1.34	614	1.63	*(100)	30
1.34-30	824/f	2.19/f	*(180/f ²)	30
30-300	27.5	0.073	0.2	30
300-1500	/	/	f/1500	30
1500-100,000	/	/	1.0	30

f = frequency in MHz; * = Plane-wave equivalent power density;

According to §1.1310 and §2.1091 RF exposure is calculated.

Calculated Formulary:

Predication of MPE limit at a given distance

$S = PG/4\pi R^2$ = power density (in appropriate units, e.g. mW/cm²);

P = power input to the antenna (in appropriate units, e.g., mW);

G = power gain of the antenna in the direction of interest relative to an isotropic radiator, the power gain factor, is normally numeric gain;

R = distance to the center of radiation of the antenna (appropriate units, e.g., cm);

For simultaneously transmit system, the calculated power density should comply with:

$$\sum_i \frac{S_i}{S_{Limit,i}} \leq 1$$

Calculation Data:

Mode	Frequency Range (MHz)	Antenna Gain		Tune-up Output Power*		Evaluation Distance (cm)	Power Density (mW/cm ²)	MPE Limit (mW/cm ²)
		(dBi)	(numeric)	(dBm)	(mW)			
2.4G Wi-Fi	2412-2462	1.5	1.41	20.00	100.00	20	0.0280	1.00
BLE	2402-2480	1.5	1.41	-3.50	0.45	20	0.0001	1.00
BT	2402-2480	1.5	1.41	7.50	5.62	20	0.0016	1.00
5G Wi-Fi	5150-5250	1.2	1.32	11.50	14.13	20	0.0037	1.00
	5725-5850	1.2	1.32	10.50	11.22	20	0.0029	1.00
LTE band 5	824-849	-0.8	0.83	24.50	281.84	20	0.0466	0.5493
LTE band 7	2500-2570	1.62	1.45	22.50	177.83	20	0.0514	1.00
LTE band 38	2570-2620	1.60	1.45	23.50	223.87	20	0.0644	1.00
LTE band 41	2496-2690	1.62	1.45	24.00	251.19	20	0.0726	1.00

(1) The target output powers are all declared by the Manufacturer.

(2) Wi-Fi/BT/BLE and LTE can transmit simultaneously, the worst condition is 802.11b of Wi-Fi, LTE Band 5 as below:

$$\sum_i \frac{S_i}{S_{Limit,i}} = 0.0280/1.00 + 0.0466/0.5493 = 0.0280 + 0.0848 = 0.1128 < 1.0$$

Result: The device meet FCC MPE at 20 cm distance.

FCC §15.203 – 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 use of a standard antenna jack or electrical connector is prohibited.

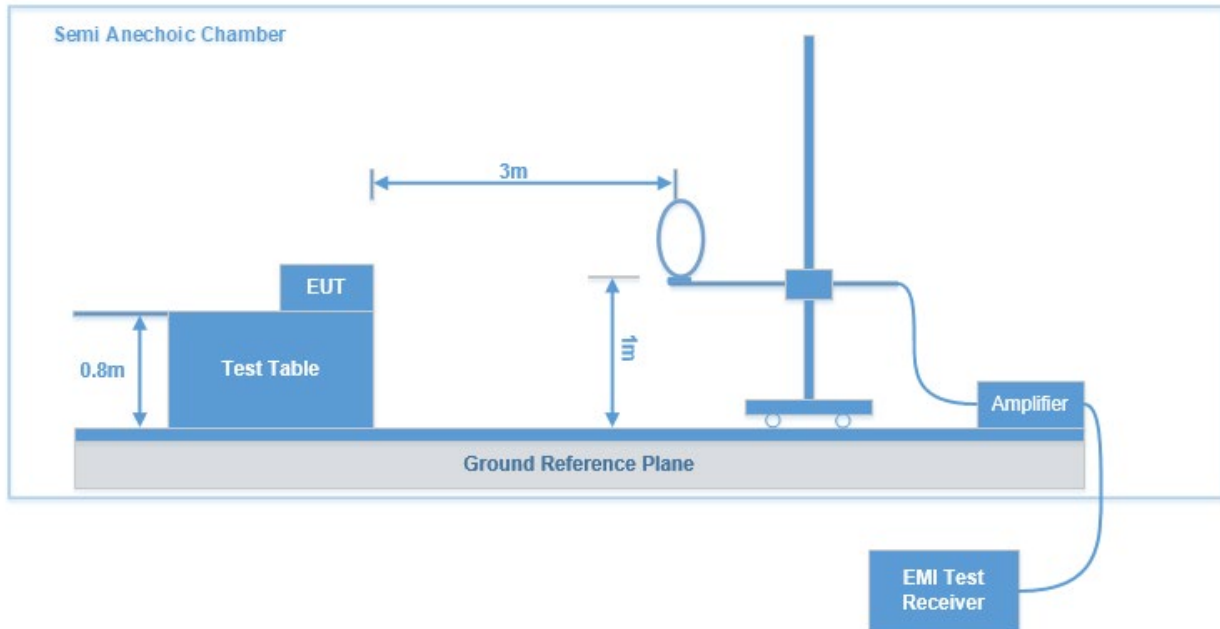
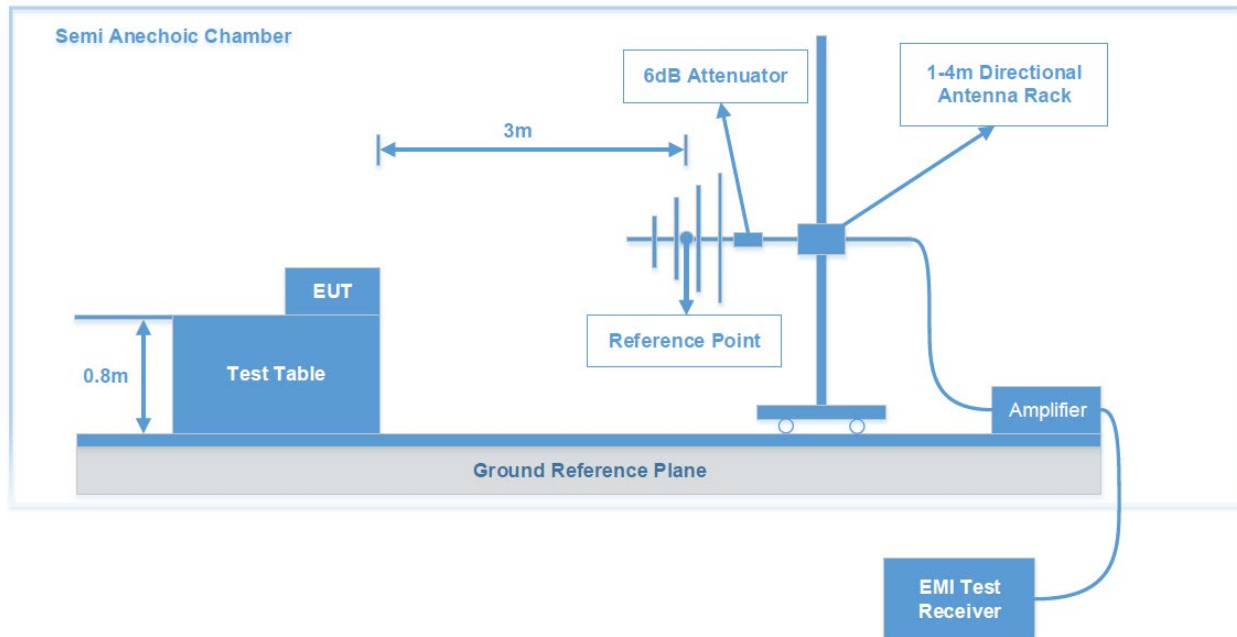
Antenna Connector Construction

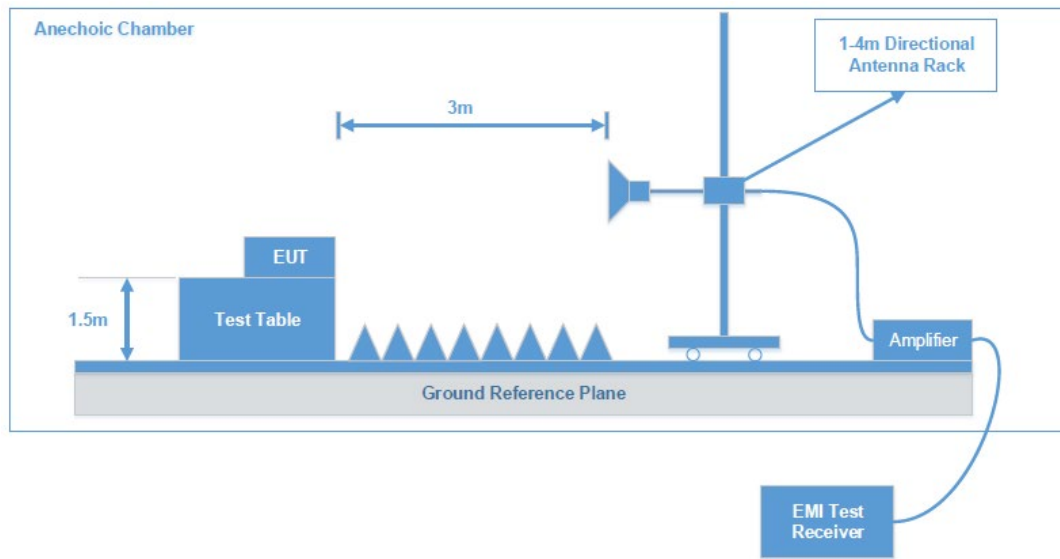
The EUT has an FPC Antenna for Bluetooth, and the antenna gain is 1.5 dBi, fulfill the requirement of this section. Please refer to the EUT photos.

Result: Compliant.

FCC §15.205, §15.209 & §15.247(d) – RADIATED EMISSIONS**Applicable Standard**

FCC §15.205; §15.209; §15.247(d)

Test System Setup**9 kHz-30MHz:****30MHz-1GHz:**

Above 1GHz:

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

EMI Test Receiver Setup

The system was investigated from 9 kHz to 25 GHz.

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

Frequency Range	RBW	VBW	IF B/W	Detector
9 kHz – 150 kHz	200 Hz	1 kHz	200 Hz	QP/Average
150 kHz – 30 MHz	9 kHz	30 kHz	9 kHz	QP/ Average
30 MHz – 1000 MHz	100 kHz	300 kHz	/	Peak
	/	/	120 kHz	QP
Above 1GHz	1MHz	3 MHz	/	Peak
	1MHz	3 MHz	/	Average

Test Procedure

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

If the measured peak level of the emissions that the measuring receiver reading level plus corrected factor is at least 6 dB below the QP emission limit, there's no need to record the measured QP level of the emissions in the report.

For 9 kHz-30MHz test, the lowest height of the magnetic antenna shall be 1 m above the ground and three antenna orientations (parallel, perpendicular, and ground-parallel) shall be measured.

Corrected Amplitude & Margin Calculation

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

Corrected Amplitude (dB μ V/m) = Meter Reading (dB μ V) + Antenna Factor (dB/m) + Cable Loss (dB) - Amplifier Gain (dB)

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

Margin (dB) = Limit (dB μ V/m) – Corrected Amplitude (dB μ V/m)

Note: The QuasiPeak (dB μ V/m), MaxPeak (dB μ V/m), Average (dB μ V/m) which shown in the data table are all Corrected Amplitude.

Test Results Summary

According to the recorded data in following table, the EUT complied with the FCC Title 47, Part 15, Subpart C, section 15.205, 15.209 and 15.247.

Test Data: See Appendix

FCC §15.247(a) (1)-CHANNEL SEPARATION TEST

Applicable Standard

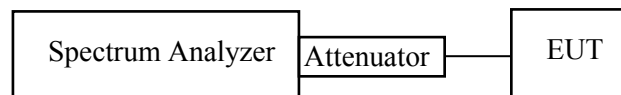
Frequency hopping systems shall have hopping channel carrier frequencies separated by a minimum of 25 kHz or the 20 dB bandwidth of the hopping channel, whichever is greater. Alternatively, frequency hopping systems operating in the 2400-2483.5 MHz band may have hopping channel carrier frequencies that 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.

Test Procedure

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

- Span: Wide enough to capture the peaks of two adjacent channels.
- 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.
- Video (or average) bandwidth (VBW) $\geq$ RBW.
- Sweep: Auto.
- Detector function: Peak.
- Trace: Max hold.
- Allow the trace to stabilize.

Use the marker-delta function to determine the separation between the peaks of the adjacent channels.



Note: Offset (10.5dB) = Attenuator (10dB) + Cable Loss (0.5dB)

Test Data: See Appendix

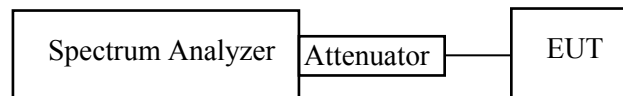
FCC §15.247(a) (1) – 20 dB EMISSION BANDWIDTH

Applicable Standard

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.

Test Procedure

1. Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
2. Position the EUT without connection to measurement instrument. Turn on the EUT and connect it to measurement instrument. Then set it to any one convenient frequency within its operating range. Set a reference level on the measuring instrument equal to the highest peak value.
3. Measure the frequency difference of two frequencies that were attenuated 20 dB from the reference level. Record the frequency difference as the emission bandwidth.
4. Repeat above procedures until all frequencies measured were complete.



Note: Offset (10.5dB) = Attenuator (10dB) + Cable Loss (0.5dB)

Test Data: See Appendix

FCC §15.247(a) (1) (iii)-QUANTITY OF HOPPING CHANNEL TEST

Applicable Standard

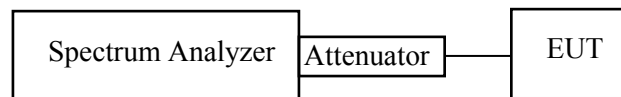
Frequency hopping systems in the 2400–2483.5 MHz band shall use at least 15 channels. The average time of occupancy on any channel shall not be greater than 0.4 seconds within a period of 0.4 seconds multiplied by the number of hopping channels employed. Frequency hopping systems may avoid or suppress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

Test Procedure

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

- a. Span: The frequency band of operation. Depending on the number of channels the device supports, it may be necessary to divide the frequency range of operation across multiple spans, to allow the individual channels to be clearly seen.
- b. 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.
- c. VBW $\geq$ RBW.
- d. Sweep: Auto.
- e. Detector function: Peak.
- f. Trace: Max hold.
- g. Allow the trace to stabilize.

It might prove necessary to break the span up into subranges to show clearly all of the hopping frequencies.



Note: Offset (10.5dB) = Attenuator (10dB) + Cable Loss (0.5dB)

Test Data: See Appendix

FCC §15.247(a) (1) (iii) - TIME OF OCCUPANCY (DWELL TIME)

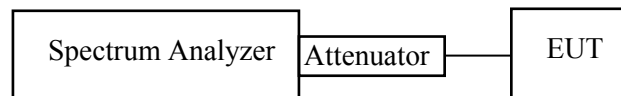
Applicable Standard

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.

Test Procedure

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

- a Span: Zero span, centered on a hopping channel.
- b RBW shall be $\leq$ channel spacing and where possible RBW should be set $\geq 1 / T$, where T is the expected dwell time per channel.
- c Sweep: As necessary to capture the entire dwell time per hopping channel; where possible use a video trigger and trigger delay so that the transmitted signal starts a little to the right of the start of the plot. The trigger level might need slight adjustment to prevent triggering when the system hops on an adjacent channel; a second plot might be needed with a longer sweep time to show two successive hops on a channel.
- d Detector function: Peak.
- e Trace: Max hold.



Note: Offset (10.5dB) = Attenuator (10dB) + Cable Loss (0.5dB)

Test Data: See Appendix

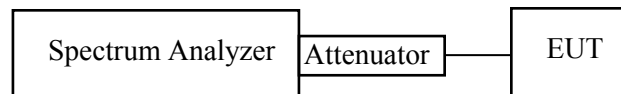
FCC §15.247(b) (1) - PEAK OUTPUT POWER MEASUREMENT

Applicable Standard

According to §15.247(b) (1), for frequency hopping systems operating in the 2400–2483.5 MHz band employing at least 75 non-overlapping hopping channels, and all frequency hopping systems in the 5725–5850 MHz band: 1 watt. And for all other frequency hopping systems in the 2400–2483.5 MHz band: 0.125 watts.

Test Procedure

- a. Use the following spectrum analyzer settings:
 - 1) Span: Approximately five times the 20 dB bandwidth, centered on a hopping channel.
 - 2) RBW > 20 dB bandwidth of the emission being measured.
 - 3) VBW $\geq$ RBW.
 - 4) Sweep: Auto.
 - 5) Detector function: Peak.
 - 6) Trace: Max hold.
- b. Allow trace to stabilize.
- c. Use the marker-to-peak function to set the marker to the peak of the emission.
- d. The indicated level is the peak output power, after any corrections for external attenuators and cables.
- e. A plot of the test results and setup description shall be included in the test report.



Note: Offset (10.5dB) = Attenuator (10dB) + Cable Loss (0.5dB)

Test Data: See Appendix

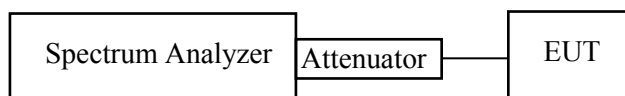
FCC §15.247(d) - BAND EDGES TESTING

Applicable Standard

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)).

Test Procedure

1. Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
2. Remove the antenna from the EUT and then connect to a low loss RF cable from the antenna port to a EMI test receiver, then turn on the EUT and make it operate in transmitting mode. Then set it to Low Channel and High Channel within its operating range, and make sure the instrument is operated in its linear range.
3. Set RBW of spectrum analyzer to 100 kHz with a convenient frequency span including 100 kHz bandwidth from band edge.
4. Measure the highest amplitude appearing on spectral display and set it as a reference level. Plot the graph with marking the highest point and edge frequency.
5. Repeat above procedures until all measured frequencies were complete.



Note: Offset (10.5dB) = Attenuator (10dB) + Cable Loss (0.5dB)

Test Data: See Appendix

Appendix - TEST DATA

RADIATED EMISSIONS & RESTRICTED BANDS EMISSIONS

Environmental Conditions & Test Information

Test Item:	SPURIOUS EMISSIONS			
	9kHz - 1GHz		1 GHz - 18 GHz	18 GHz – 25 GHz
Test Date:	2025-04-07	2025-04-01	2025-04-11	2025-04-23
Temperature:	16.3 °C	18.3 °C	24.1 °C	17.3 °C
Relative Humidity:	53 %	39 %	46 %	38 %
ATM Pressure:	102.5 kPa	102.1 kPa	100.9 kPa	102.6 kPa
Test Result:	Pass	Pass	Pass	Pass
Test Engineer:	Jerry Yan	Jerry Yan	Destine Hu	Hugh Wu

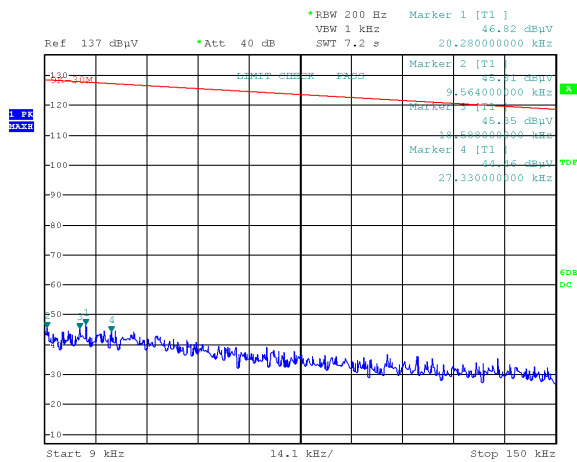
EUT operation mode: Transmitting

After pre-scan in the X, Y and Z axes of orientation, the worst case is below:

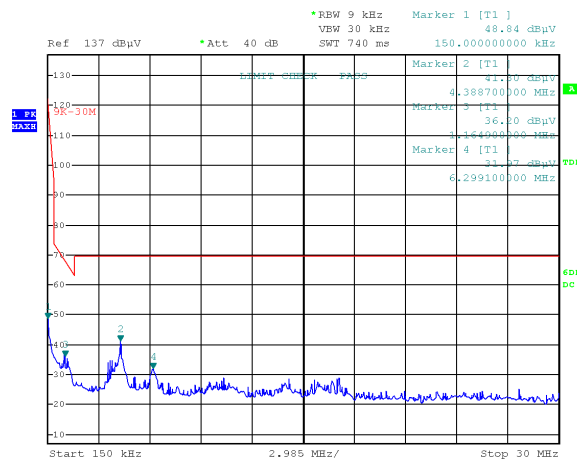
9 kHz-30MHz: Transmitting in GFSK Mode high channel (maximum output power mode)

Parallel(worst case)

9kHz-150kHz



150kHz-30MHz



Project No.RSHA250211001
Date: 7.APR.2025 17:17:22

Tester:Jerry Yan

Project No.RSHA250211001
Date: 7.APR.2025 17:20:50

Tester:Jerry Yan

9 kHz-150 kHz

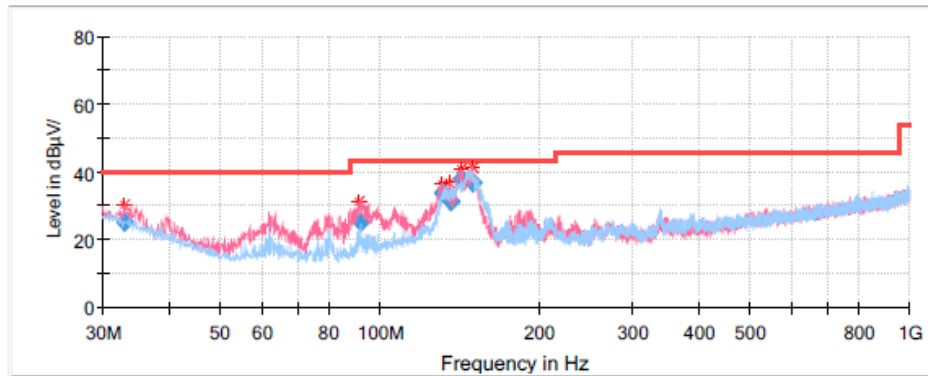
Frequency (kHz)	Corrected Amplitude (dBμV/m) @3m	Detector PK/QP/Ave.	Corrected Factor (dB/m)	Limit (dBμV/m) @3m	Margin (dB)
9.56	45.81	PK	-0.42	128.00	82.19
18.59	45.35	PK	-0.55	122.22	76.87
20.28	46.82	PK	-0.56	121.46	74.64
27.33	44.46	PK	-0.60	118.87	74.41

150 kHz-30 MHz

Frequency (MHz)	Corrected Amplitude (dBμV/m) @3m	Detector PK/QP/Ave.	Corrected Factor (dB/m)	Limit (dBμV/m) @3m	Margin (dB)
0.15	48.84	PK	-11.34	104.08	55.24
1.16	36.20	PK	-28.14	66.32	30.12
4.39	41.30	PK	-31.97	69.54	28.24
6.30	31.97	PK	-32.26	69.54	37.57

30MHz-1GHz:*EUT operation mode: Transmitting in maximum output power GFSK mode***Low Channel: 2402 MHz****Common Information**

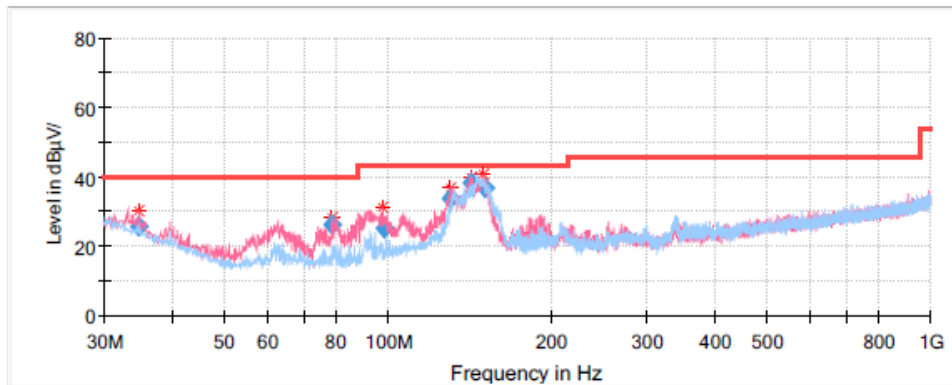
Project No:	RSHA250211001
EUT Model:	TC120
Test Mode:	Transmitting in BT mode low channel
Standard:	FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.247
Test Equipment:	ESCI, JB3, 310N
Receiver Setting:	RBW: 100 kHz, VBW: 300 kHz, Sweep Time: Auto
Temperature:	18.3°C
Humidity:	39%
Barometric Pressure:	102.1kPa
Test Engineer:	Jerry Yan
Test Date:	2025/4/1

**Final Result**

Frequency (MHz)	QuasiPeak (dB μV/m)	Limit (dB μV/m)	Margin (dB)	Pol	Corr. (dB/m)
33.098700	25.02	40.00	14.98	V	-6.8
92.157750	25.01	43.50	18.49	V	-16.3
130.914800	33.59	43.50	9.91	V	-11.1
135.877400	31.09	43.50	12.41	V	-11.1
142.008650	37.75	43.50	5.75	V	-11.3
150.396150	36.71	43.50	6.79	V	-11.7

Middle Channel: 2441 MHz**Common Information**

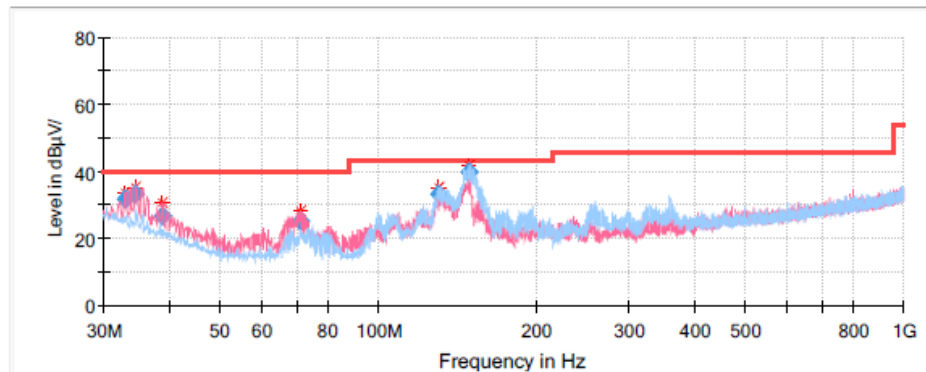
Project No: RSHA250211001
EUT Model: TC120
Test Mode: Transmitting in BT mode middle channel
Standard: FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.247
Test Equipment: ESCI, JB3, 310N
Receiver Setting: RBW: 100 kHz, VBW: 300 kHz, Sweep Time: Auto
Temperature: 18.3°C
Humidity: 39%
Barometric Pressure: 102.1 kPa
Test Engineer: Jerry Yan
Test Date: 2025/4/1

**Final Result**

Frequency (MHz)	QuasiPeak (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
34.850000	25.51	40.00	14.49	V	-7.3
79.078300	26.18	40.00	13.82	V	-17.1
98.257850	25.16	43.50	18.34	V	-14.8
130.156000	33.59	43.50	9.91	V	-11.1
142.884100	37.99	43.50	5.51	V	-11.3
151.280000	36.52	43.50	6.98	V	-11.7

High Channel: 2480 MHz**Common Information**

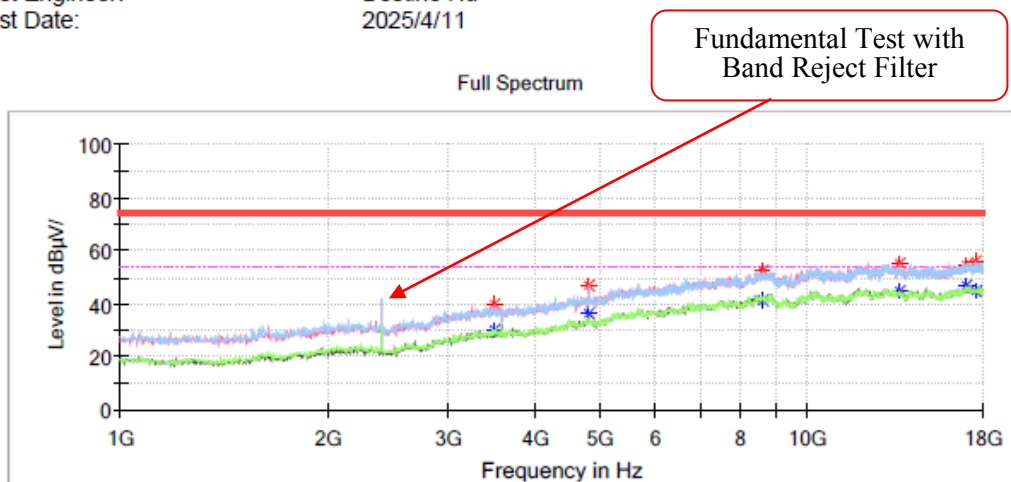
Project No: RSHA250211001
EUT Model: TC120
Test Mode: Transmitting in BT mode high channel
Standard: FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.247
Test Equipment: ESCI, JB3, 310N
Receiver Setting: RBW: 100 kHz, VBW: 300 kHz, Sweep Time: Auto
Temperature: 18.3°C
Humidity: 39%
Barometric Pressure: 102.1kPa
Test Engineer: Jerry Yan
Test Date: 2025/4/1

**Final Result**

Frequency (MHz)	QuasiPeak (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
32.915200	31.90	40.00	8.10	V	-7.4
34.601500	33.37	40.00	6.63	V	-7.9
38.856650	26.71	40.00	13.29	V	-10.7
71.349550	24.92	40.00	15.08	V	-16.6
129.916000	33.16	43.50	10.34	H	-11.1
148.702500	39.73	43.50	3.77	H	-11.6

1 GHz - 18 GHz:**GFSK:****Low Channel: 2402 MHz****Common Information**

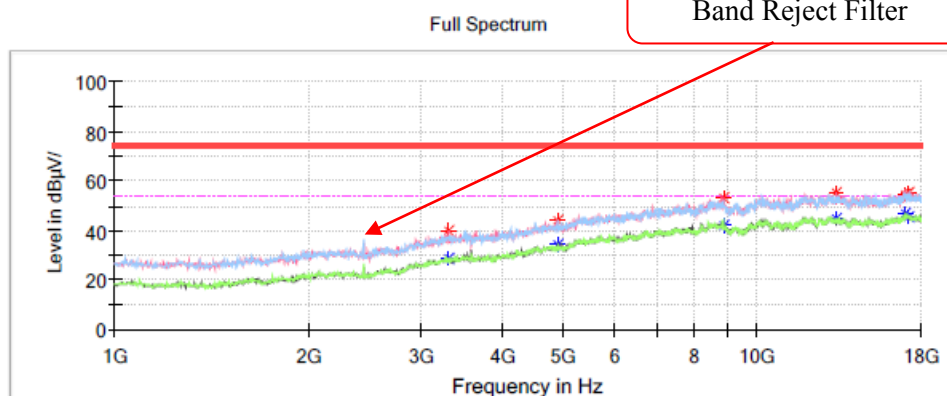
Project No:	RSHA250211001
EUT Model:	TC120
Test Mode:	BT
Standard:	FCC Part 15.247& FCC Part 15.205& FCC Part 15.209
Test Equipment:	ESU40,3115,PAM-0118P
Receiver Setting:	RBW: 1MHz, VBW: 3MHz, Sweep Time: Auto
Temperature:	24.1℃
Humidity:	46%
Atmospheric Pressure:	100.9kPa
Test Engineer:	Destine Hu
Test Date:	2025/4/11

**Critical Freqs**

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
3495.600000	---	29.98	54.00	24.02	V	-6.4
3495.600000	39.75	---	74.00	34.25	V	-6.4
4804.600000	---	36.46	54.00	17.54	H	-3.2
4804.600000	47.18	---	74.00	26.82	H	-3.2
8609.200000	---	41.61	54.00	12.39	V	5.4
8609.200000	52.14	---	74.00	21.86	V	5.4
13648.000000	---	44.71	54.00	9.29	V	9.7
13648.000000	55.11	---	74.00	18.89	V	9.7
16997.000000	---	46.81	54.00	7.19	V	12.3
16997.000000	54.25	---	74.00	19.75	V	12.3
17510.400000	---	44.65	54.00	9.35	H	11.5
17510.400000	55.61	---	74.00	18.39	H	11.5

Middle Channel: 2441 MHz**Common Information**

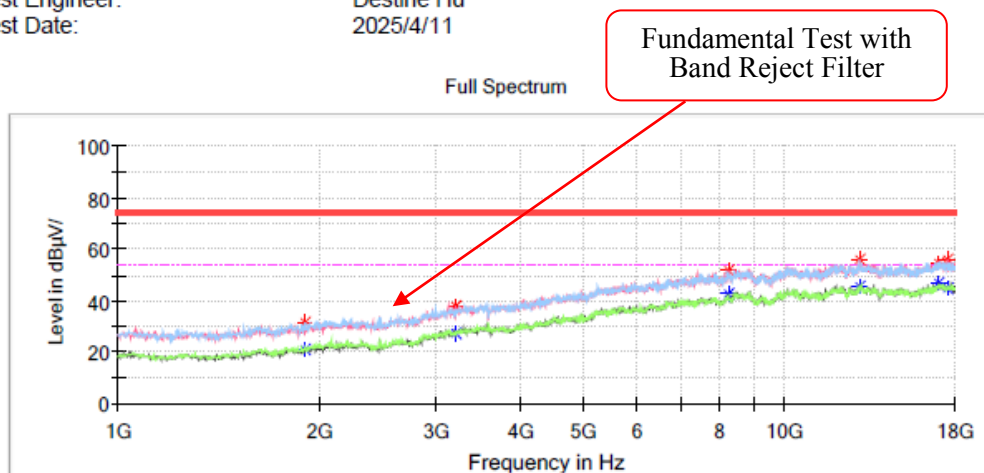
Project No: RSHA250211001
EUT Model: TC120
Test Mode: BT
Standard: FCC Part 15.247& FCC Part 15.205& FCC Part 15.209
Test Equipment: ESU40,3115,PAM-0118P
Receiver Setting: RBW: 1MHz, VBW: 3MHz, Sweep Time: Auto
Temperature: 24.1°C
Humidity: 46%
Atmospheric Pressure: 100.9kPa
Test Engineer: Destine Hu
Test Date: 2025/4/11

**Critical Freqs**

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
3315.400000	---	28.68	54.00	25.32	H	-7.1
3315.400000	39.64	---	74.00	34.36	H	-7.1
4879.400000	---	33.96	54.00	20.04	V	-2.9
4879.400000	44.21	---	74.00	29.79	V	-2.9
8864.200000	---	42.23	54.00	11.77	H	5.4
8864.200000	53.17	---	74.00	20.83	H	5.4
13301.200000	---	44.61	54.00	9.39	V	9.6
13301.200000	55.20	---	74.00	18.80	V	9.6
16980.000000	---	46.58	54.00	7.42	H	12.2
16980.000000	54.51	---	74.00	19.49	H	12.2
17228.200000	---	45.27	54.00	8.73	V	11.9
17228.200000	55.58	---	74.00	18.42	V	11.9

High Channel: 2480 MHz**Common Information**

Project No: RSHA250211001
EUT Model: TC120
Test Mode: BT
Standard: FCC Part 15.247& FCC Part 15.205& FCC Part 15.209
Test Equipment: ESU40,3115,PAM-0118P
Receiver Setting: RBW: 1MHz, VBW: 3MHz, Sweep Time: Auto
Temperature: 24.1℃
Humidity: 46%
Atmospheric Pressure: 100.9kPa
Test Engineer: Destine Hu
Test Date: 2025/4/11

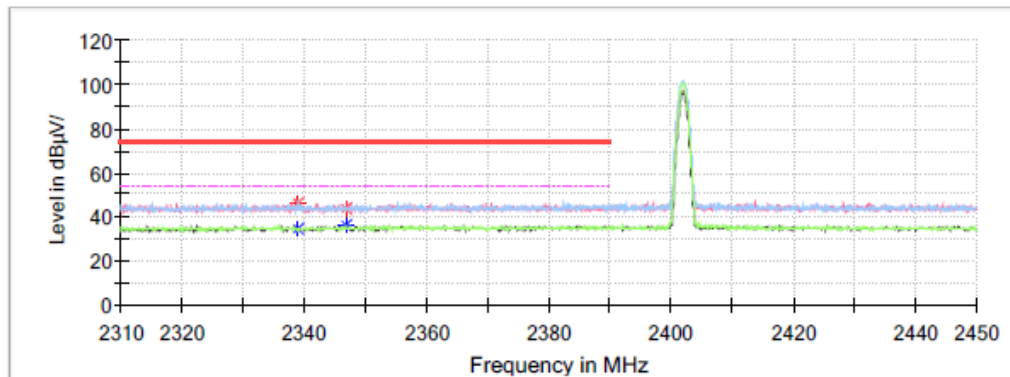
**Critical Freqs**

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1907.800000	---	21.22	54.00	32.78	H	-12.3
1907.800000	31.56	---	74.00	42.44	H	-12.3
3213.400000	---	27.33	54.00	26.67	H	-7.5
3213.400000	37.92	---	74.00	36.08	H	-7.5
8218.200000	---	42.71	54.00	11.29	V	4.6
8218.200000	51.86	---	74.00	22.14	V	4.6
12964.600000	---	45.58	54.00	8.42	H	9.7
12964.600000	55.67	---	74.00	18.33	H	9.7
17007.200000	---	47.11	54.00	6.89	H	12.3
17007.200000	54.51	---	74.00	19.49	H	12.3
17537.600000	---	44.56	54.00	9.44	V	11.6
17537.600000	56.15	---	74.00	17.85	V	11.6

Band Edge:**Left Side****Common Information**

Project No: RSHA250211001
EUT Model: TC120
Test Mode: BT
Standard: FCC Part 15.247& FCC Part 15.205& FCC Part 15.209
Test Equipment: ESU40,3115,PAM-0118P
Receiver Setting: RBW: 1MHz, VBW: 3MHz, Sweep Time: Auto
Temperature: 24.1°C
Humidity: 46%
Atmospheric Pressure: 100.9kPa
Test Engineer: Destine Hu
Test Date: 2025/4/11

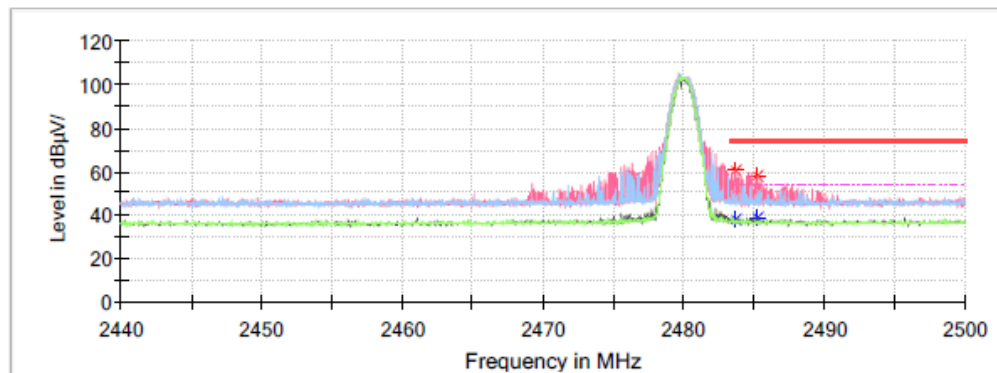
Full Spectrum

**Critical Freqs**

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
2338.840000	46.27	---	74.00	27.73	H	-0.7
2338.840000	---	34.32	54.00	19.68	H	-0.7
2346.792000	43.34	---	74.00	30.66	V	-0.7
2346.792000	---	35.94	54.00	18.06	V	-0.7

Right Side**Common Information**

Project No: RSHA250211001
EUT Model: TC120
Test Mode: BT
Standard: FCC Part 15.247& FCC Part 15.205& FCC Part 15.209
Test Equipment: ESU40,3115,PAM-0118P
Receiver Setting: RBW: 1MHz, VBW: 3MHz, Sweep Time: Auto
Temperature: 24.1℃
Humidity: 46%
Atmospheric Pressure: 100.9kPa
Test Engineer: Destine Hu
Test Date: 2025/4/11

Full Spectrum**Critical Freqs**

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
2483.656000	60.02	---	74.00	13.98	V	-0.3
2483.656000	---	38.18	54.00	15.82	V	-0.3
2485.264000	57.97	---	74.00	16.03	V	-0.2
2485.264000	---	38.63	54.00	15.37	V	-0.2

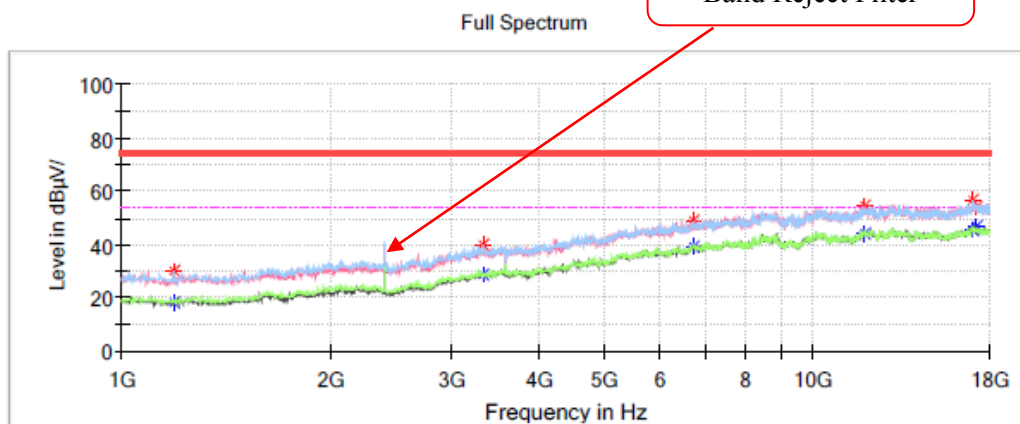
$\pi/4$ -DQPSK:

Low Channel: 2402 MHz

Common Information

Project No:	RSHA250211001
EUT Model:	TC120
Test Mode:	BT
Standard:	FCC Part 15.247& FCC Part 15.205& FCC Part 15.209
Test Equipment:	ESU40,3115,PAM-0118P
Receiver Setting:	RBW: 1MHz, VBW: 3MHz, Sweep Time: Auto
Temperature:	24.1°C
Humidity:	46%
Atmospheric Pressure:	100.9kPa
Test Engineer:	Destine Hu
Test Date:	2025/4/11

Fundamental Test with
Band Reject Filter

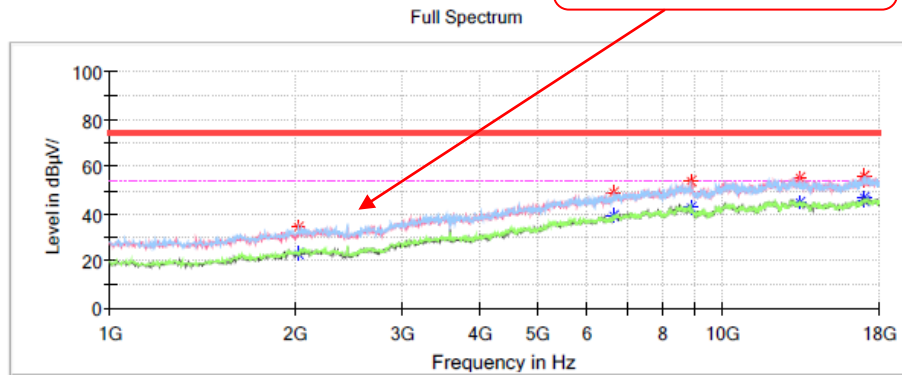
**Critical Freqs**

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1187.000000	---	18.48	54.00	35.52	H	-15.2
1187.000000	29.72	---	74.00	44.28	H	-15.2
3325.600000	---	28.94	54.00	25.06	V	-7.1
3325.600000	39.64	---	74.00	34.36	V	-7.1
6725.600000	---	38.99	54.00	15.01	H	1.5
6725.600000	49.16	---	74.00	24.84	H	1.5
11866.400000	---	44.25	54.00	9.75	V	8.9
11866.400000	54.43	---	74.00	19.57	V	8.9
16973.200000	56.40	---	74.00	17.60	H	12.2
16973.200000	---	45.61	54.00	8.39	H	12.2
17221.400000	53.69	---	74.00	20.31	V	11.9
17221.400000	---	46.94	54.00	7.06	V	11.9

Middle Channel: 2441 MHz**Common Information**

Project No: RSHA250211001
 EUT Model: TC120
 Test Mode: BT
 Standard: FCC Part 15.247& FCC Part 15.205& FCC Part 15.209
 Test Equipment: ESU40,3115,PAM-0118P
 Receiver Setting: RBW: 1MHz, VBW: 3MHz, Sweep Time: Auto
 Temperature: 24.1℃
 Humidity: 46%
 Atmospheric Pressure: 100.9kPa
 Test Engineer: Destine Hu
 Test Date: 2025/4/11

Fundamental Test with
Band Reject Filter

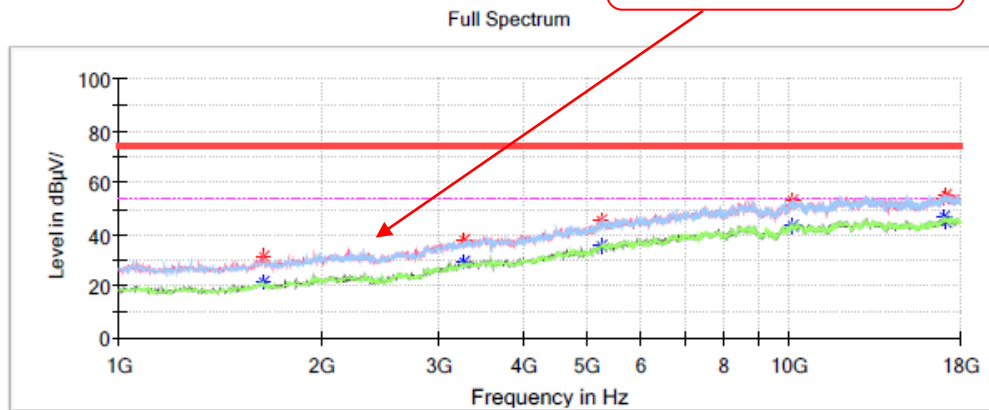
**Critical Freqs**

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
2033.600000	---	23.18	54.00	30.82	H	-11.6
2033.600000	34.21	---	74.00	39.79	H	-11.6
6640.600000	---	39.02	54.00	14.98	V	1.1
6640.600000	49.00	---	74.00	25.00	V	1.1
8877.800000	---	42.67	54.00	11.33	H	5.4
8877.800000	53.67	---	74.00	20.33	H	5.4
13325.000000	---	45.02	54.00	8.98	V	9.6
13325.000000	54.99	---	74.00	19.01	V	9.6
17003.800000	---	46.65	54.00	7.35	V	12.3
17003.800000	54.01	---	74.00	19.99	V	12.3
17010.600000	55.95	---	74.00	18.05	H	12.3
17010.600000	---	45.58	54.00	8.42	H	12.3

High Channel: 2480 MHz**Common Information**

Project No: RSHA250211001
EUT Model: TC120
Test Mode: BT
Standard: FCC Part 15.247& FCC Part 15.205& FCC Part 15.209
Test Equipment: ESU40,3115,PAM-0118P
Receiver Setting: RBW: 1MHz, VBW: 3MHz, Sweep Time: Auto
Temperature: 24.1℃
Humidity: 46%
Atmospheric Pressure: 100.9kPa
Test Engineer: Destine Hu
Test Date: 2025/4/11

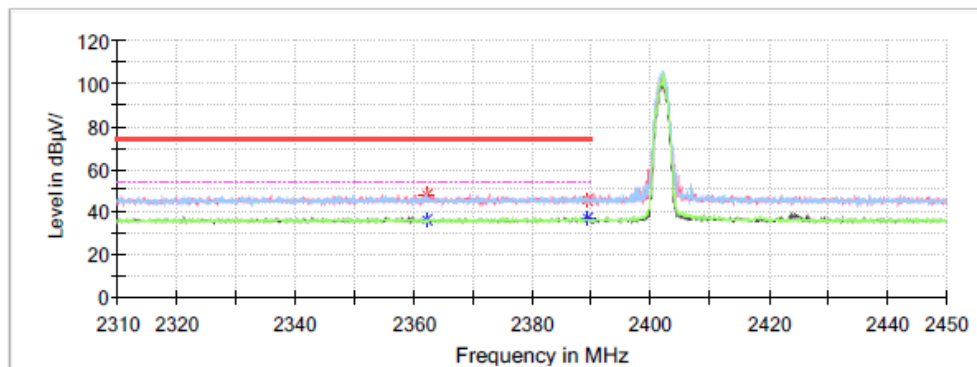
Fundamental Test with
Band Reject Filter

**Critical Freqs**

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1639.200000	---	21.53	54.00	32.47	V	-13.9
1639.200000	31.31	---	74.00	42.69	V	-13.9
3271.200000	---	29.62	54.00	24.38	V	-7.3
3271.200000	37.88	---	74.00	36.12	V	-7.3
5229.600000	---	35.48	54.00	18.52	H	-1.5
5229.600000	45.18	---	74.00	28.82	H	-1.5
10112.000000	---	43.30	54.00	10.70	V	7.2
10112.000000	53.32	---	74.00	20.68	V	7.2
16997.000000	---	46.53	54.00	7.47	H	12.3
16997.000000	54.13	---	74.00	19.87	H	12.3
17146.600000	55.39	---	74.00	18.61	H	12.1
17146.600000	---	44.97	54.00	9.03	H	12.1

Band Edge:**Left Side****Common Information**

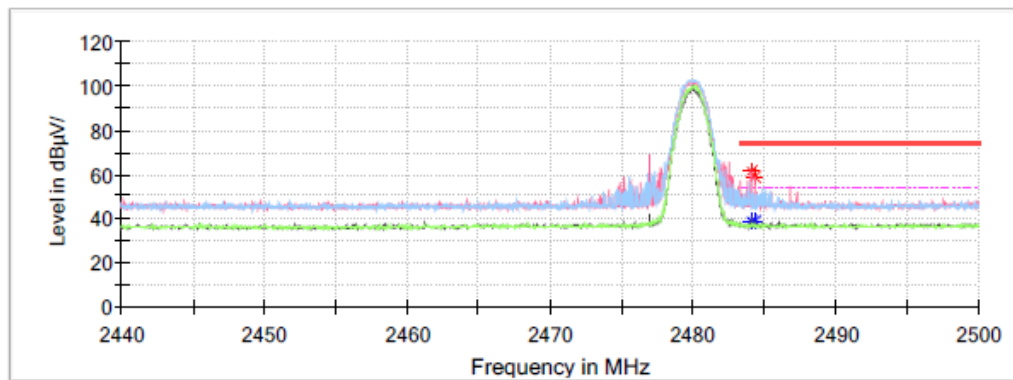
Project No: RSHA250211001
EUT Model: TC120
Test Mode: BT
Standard: FCC Part 15.247& FCC Part 15.205& FCC Part 15.209
Test Equipment: ESU40,3115,PAM-0118P
Receiver Setting: RBW: 1MHz, VBW: 3MHz, Sweep Time: Auto
Temperature: 24.1℃
Humidity: 46%
Atmospheric Pressure: 100.9kPa
Test Engineer: Destine Hu
Test Date: 2025/4/11

Full Spectrum**Critical Freqs**

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
2362.080000	47.73	---	74.00	26.27	H	-0.7
2362.080000	---	36.30	54.00	17.70	H	-0.7
2389.240000	45.01	---	74.00	28.99	V	-0.6
2389.240000	---	37.01	54.00	16.99	V	-0.6

Right Side**Common Information**

Project No: RSHA250211001
EUT Model: TC120
Test Mode: BT
Standard: FCC Part 15.247& FCC Part 15.205& FCC Part 15.209
Test Equipment: ESU40,3115,PAM-0118P
Receiver Setting: RBW: 1MHz, VBW: 3MHz, Sweep Time: Auto
Temperature: 24.1℃
Humidity: 46%
Atmospheric Pressure: 100.9kPa
Test Engineer: Destine Hu
Test Date: 2025/4/11

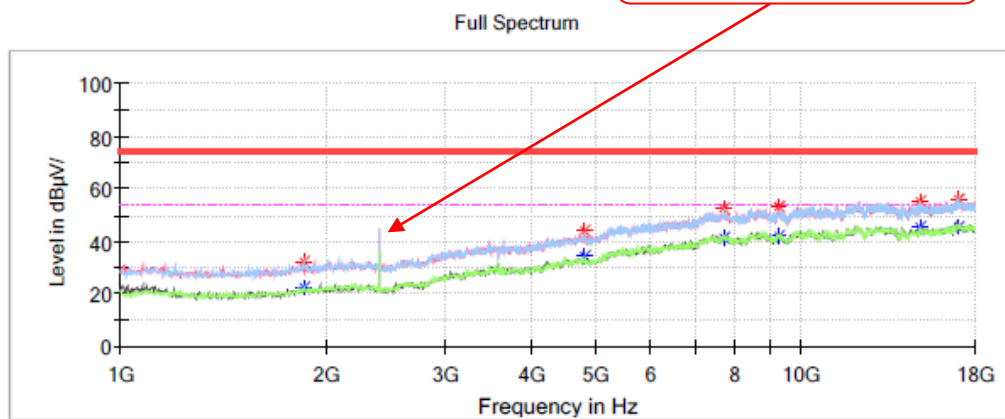
Full Spectrum**Critical Freqs**

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
2484.040000	61.05	---	74.00	12.95	V	-0.3
2484.040000	---	38.21	54.00	15.79	V	-0.3
2484.328000	58.78	---	74.00	15.22	V	-0.3
2484.328000	---	38.34	54.00	15.66	V	-0.3

8DPSK:**Low Channel: 2402 MHz****Common Information**

Project No:	RSHA250211001
EUT Model:	TC120
Test Mode:	BT
Standard:	FCC Part 15.247& FCC Part 15.205& FCC Part 15.209
Test Equipment:	ESU40,3115,PAM-0118P
Receiver Setting:	RBW: 1MHz, VBW: 3MHz, Sweep Time: Auto
Temperature:	24.1°C
Humidity:	46%
Atmospheric Pressure:	100.9kPa
Test Engineer:	Destine Hu
Test Date:	2025/4/11

Fundamental Test with
Band Reject Filter

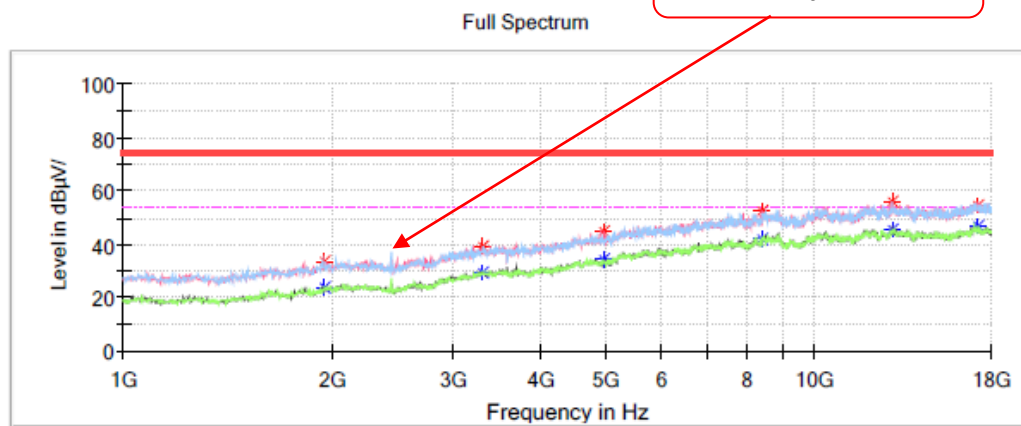
**Critical Freqs**

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1856.800000	---	22.44	54.00	31.56	H	-12.6
1856.800000	32.07	---	74.00	41.93	H	-12.6
4804.600000	---	34.26	54.00	19.74	V	-3.2
4804.600000	44.30	---	74.00	29.70	V	-3.2
7687.800000	---	41.33	54.00	12.67	H	3.9
7687.800000	52.64	---	74.00	21.36	H	3.9
9248.400000	---	42.04	54.00	11.96	V	5.4
9248.400000	53.21	---	74.00	20.79	V	5.4
14953.600000	---	45.13	54.00	8.87	H	9.3
14953.600000	55.17	---	74.00	18.83	H	9.3
17007.200000	---	45.75	54.00	8.25	V	12.3
17007.200000	56.08	---	74.00	17.92	V	12.3

Middle Channel: 2441 MHz**Common Information**

Project No:	RSHA250211001
EUT Model:	TC120
Test Mode:	BT
Standard:	FCC Part 15.247& FCC Part 15.205& FCC Part 15.209
Test Equipment:	ESU40,3115,PAM-0118P
Receiver Setting:	RBW: 1MHz, VBW: 3MHz, Sweep Time: Auto
Temperature:	24.1°C
Humidity:	46%
Atmospheric Pressure:	100.9kPa
Test Engineer:	Destine Hu
Test Date:	2025/4/11

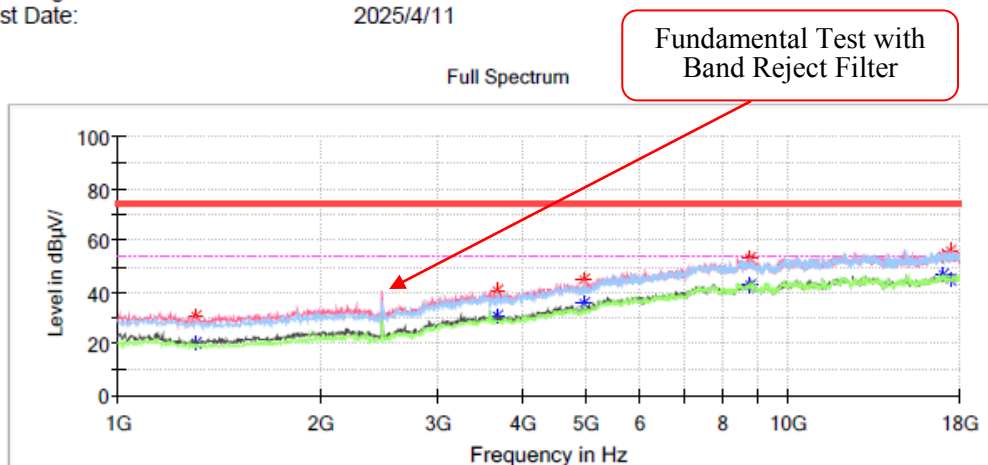
Fundamental Test with
Band Reject Filter

**Critical_Freqs**

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1952.000000	---	23.92	54.00	30.08	V	-12.0
1952.000000	33.60	---	74.00	40.40	V	-12.0
3312.000000	---	29.49	54.00	24.51	H	-7.1
3312.000000	39.13	---	74.00	34.87	H	-7.1
4950.800000	---	34.06	54.00	19.94	V	-2.6
4950.800000	44.75	---	74.00	29.25	V	-2.6
8381.400000	---	41.75	54.00	12.25	V	5.1
8381.400000	52.57	---	74.00	21.43	V	5.1
12964.600000	55.65	---	74.00	18.35	H	9.7
12964.600000	---	45.39	54.00	8.61	H	9.7
17241.800000	54.56	---	74.00	19.44	V	11.9
17241.800000	---	46.89	54.00	7.11	V	11.9

High Channel: 2480 MHz**Common Information**

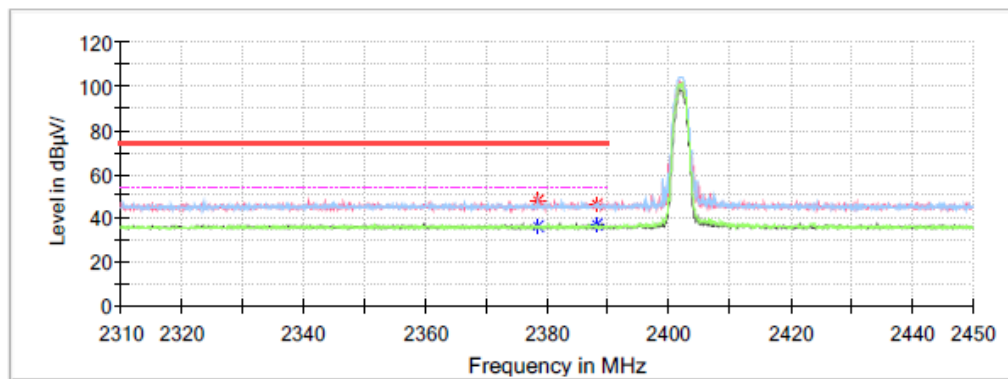
Project No: RSHA250211001
EUT Model: TC120
Test Mode: BT
Standard: FCC Part 15.247& FCC Part 15.205& FCC Part 15.209
Test Equipment: ESU40,3115,PAM-0118P
Receiver Setting: RBW: 1MHz, VBW: 3MHz, Sweep Time: Auto
Temperature: 24.1℃
Humidity: 46%
Atmospheric Pressure: 100.9kPa
Test Engineer: Destine Hu
Test Date: 2025/4/11

**Critical Freqs**

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1306.000000	---	20.57	54.00	33.43	V	-15.0
1306.000000	31.06	---	74.00	42.94	V	-15.0
3672.400000	---	30.66	54.00	23.34	V	-6.2
3672.400000	40.36	---	74.00	33.64	V	-6.2
4957.600000	---	35.58	54.00	18.42	V	-2.6
4957.600000	45.03	---	74.00	28.97	V	-2.6
8748.600000	---	42.79	54.00	11.21	H	5.4
8748.600000	53.15	---	74.00	20.85	H	5.4
17000.400000	53.86	---	74.00	20.14	V	12.3
17000.400000	---	46.70	54.00	7.30	V	12.3
17469.600000	---	44.73	54.00	9.27	H	11.6
17469.600000	55.78	---	74.00	18.22	H	11.6

Band Edge:**Left Side****Common Information**

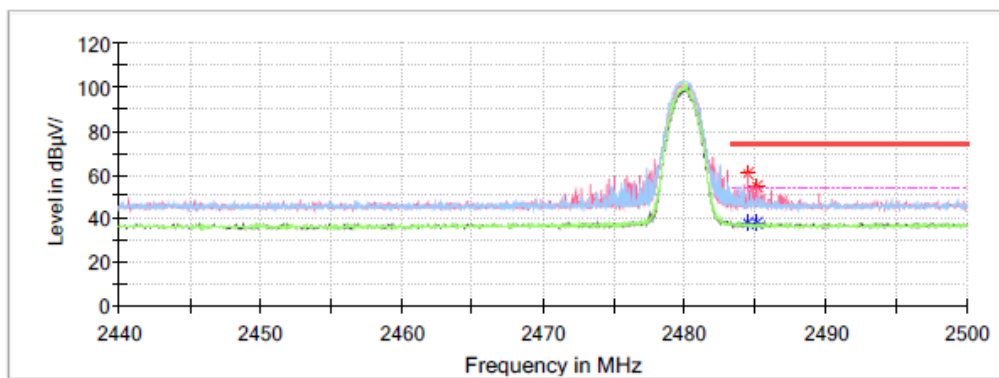
Project No: RSHA250211001
EUT Model: TC120
Test Mode: BT
Standard: FCC Part 15.247& FCC Part 15.205& FCC Part 15.209
Test Equipment: ESU40,3115,PAM-0118P
Receiver Setting: RBW: 1MHz, VBW: 3MHz, Sweep Time: Auto
Temperature: 24.1°C
Humidity: 46%
Atmospheric Pressure: 100.9kPa
Test Engineer: Destine Hu
Test Date: 2025/4/11

Full Spectrum**Critical Freqs**

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
2378.376000	47.73	---	74.00	26.27	H	-0.6
2378.376000	---	36.18	54.00	17.82	H	-0.6
2388.064000	45.74	---	74.00	28.26	H	-0.6
2388.064000	---	37.33	54.00	16.67	H	-0.6

Right Side**Common Information**

Project No: RSHA250211001
EUT Model: TC120
Test Mode: BT
Standard: FCC Part 15.247& FCC Part 15.205& FCC Part 15.209
Test Equipment: ESU40,3115,PAM-0118P
Receiver Setting: RBW: 1MHz, VBW: 3MHz, Sweep Time: Auto
Temperature: 24.1°C
Humidity: 46%
Atmospheric Pressure: 100.9kPa
Test Engineer: Destine Hu
Test Date: 2025/4/11

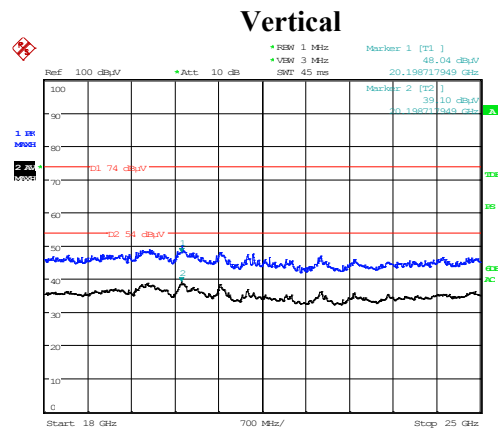
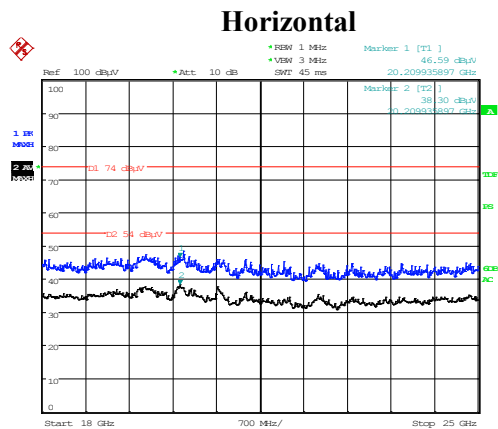
Full Spectrum**Critical Freqs**

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
2484.448000	---	38.17	54.00	15.83	V	-0.3
2484.448000	60.44	---	74.00	13.56	V	-0.3
2485.192000	---	37.77	54.00	16.23	V	-0.3
2485.192000	54.48	---	74.00	19.52	V	-0.3

18GHz-25GHz:

GFSK:

EUT operation mode: Transmitting in maximum output power GFSK mode high channel



Project No :RSHA250211001
Date: 23.APR.2025 00:10:35

Tester :Hugh Wu

Project No :RSHA250211001
Date: 23.APR.2025 00:45:36

Tester :Hugh Wu

Frequency (GHz)	Max Peak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Pol	Corr. (dB/m)
20.20	---	39.1	54	14.9	V	12.46
20.20	48.04	---	74	25.96	V	12.46
20.21	---	38.3	54	15.7	H	12.47
20.21	46.59	---	74	27.41	H	12.47

Note: The test distance is 3m. The limit is 74dBμV/m(Peak) and 54dBμV/m(Average).

CHANNEL SEPARATION TEST

Environmental Conditions & Test Information

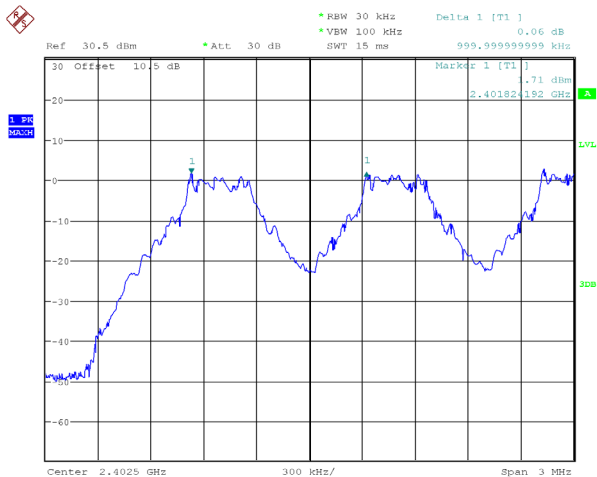
Test Date:	2025-04-15
Temperature:	23.7 °C
Relative Humidity:	51 %
ATM Pressure:	101.8 kPa
Test Result:	Pass
Test Engineer:	Neil Zhou

EUT operation mode: Transmitting

Mode	Channel	Channel frequency (MHz)	Result (MHz)	Limit (MHz)
GFSK	Low	2402-2403	1.000	0.823
	Middle	2441-2442	1.005	0.823
	High	2480-2479	1.000	0.823

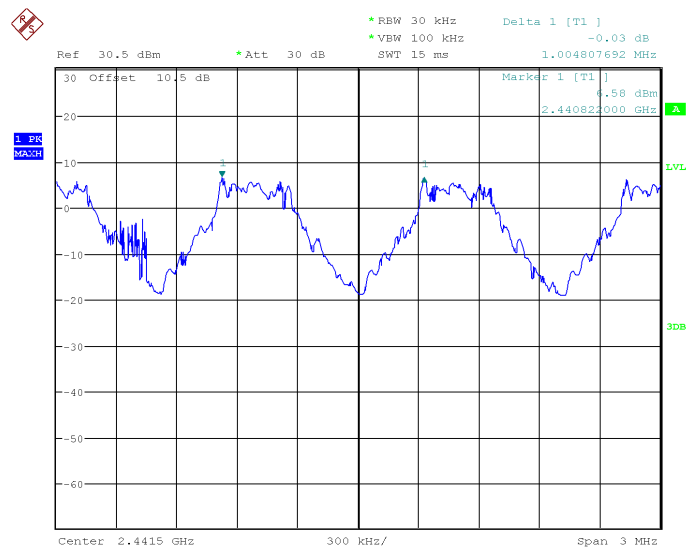
Note: Only GFSK mode result is reported since EDR ($\pi/4$ -DQPSK, 8DPSK) has the exact same channel plan.
Limit = 20 dB bandwidth*2/3

BDR (GFSK): Low Channel



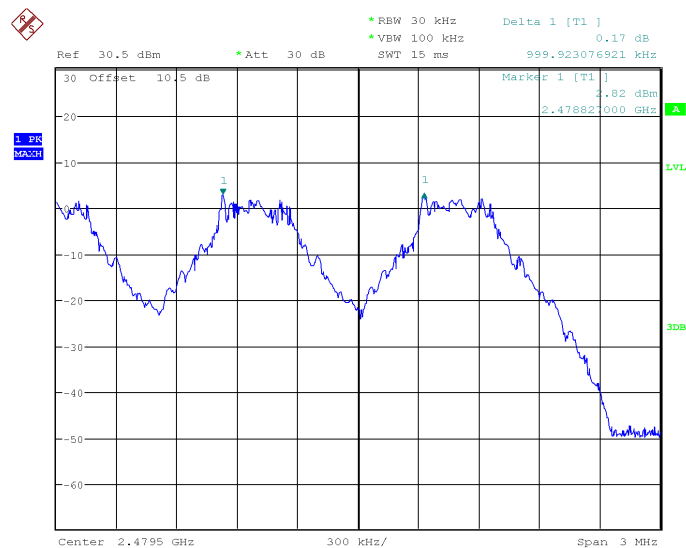
ProjectNo.:RSHA250211001 Tester:Neil Zhou
Date: 15.APR.2025 10:25:45

BDR (GFSK): Middle Channel



ProjectNo.:RSHA250211001 Tester:Neil Zhou
Date: 15.APR.2025 10:34:08

BDR (GFSK): High Channel



ProjectNo.:RSHA250211001 Tester:Neil Zhou
Date: 15.APR.2025 10:42:41

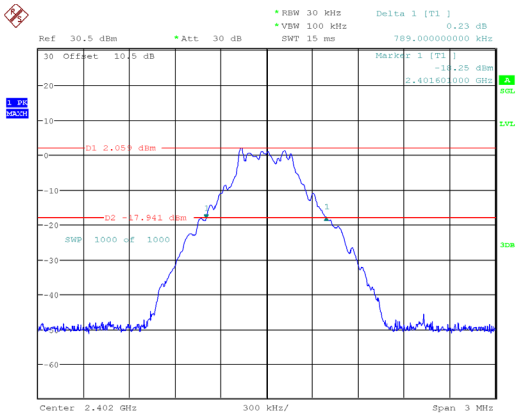
20 dB BANDWIDTH TEST**Environmental Conditions & Test Information**

Test Date:	2025-04-15	2025-03-05
Temperature:	23.7 °C	24 °C
Relative Humidity:	51 %	52 %
ATM Pressure:	101.8 kPa	101.0 kPa
Test Result:	Pass	Pass
Test Engineer:	Neil Zhou	Neil Zhou

EUT operation mode: Transmitting

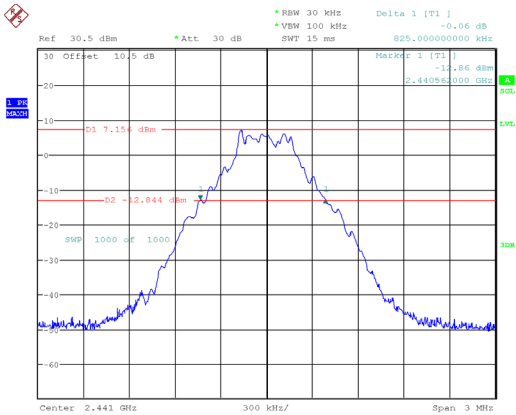
Mode	Channel	Frequency (MHz)	20 dB Emission Bandwidth (MHz)
BDR (GFSK)	Low	2402	0.789
	Middle	2441	0.825
	High	2480	0.786
EDR ($\pi/4$ -DQPSK)	Low	2402	1.234
	Middle	2441	1.213
	High	2480	1.213
EDR (8DPSK)	Low	2402	1.222
	Middle	2441	1.219
	High	2480	1.222

DH1_Low 0.789MHz



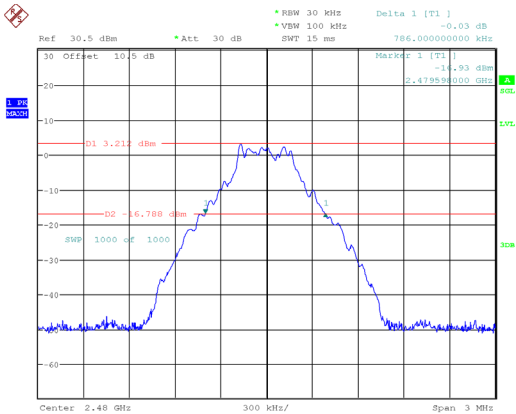
ProjectNo.:RSHA250211001 Tester:Neil Zhou
Date: 15.APR.2025 09:24:09

DH1_Middle 0.825MHz



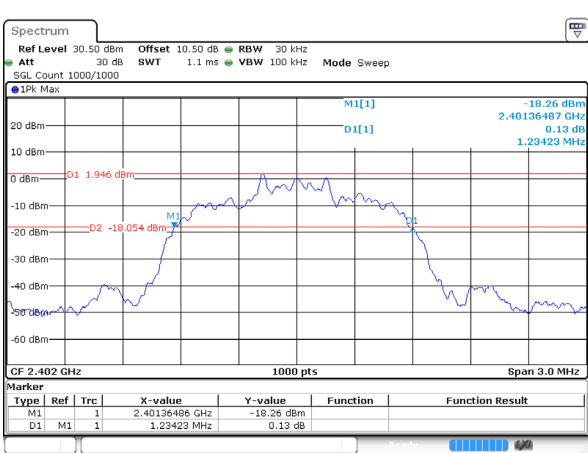
ProjectNo.:RSHA250211001 Tester:Neil Zhou
Date: 15.APR.2025 09:31:33

DH1_High 0.786MHz



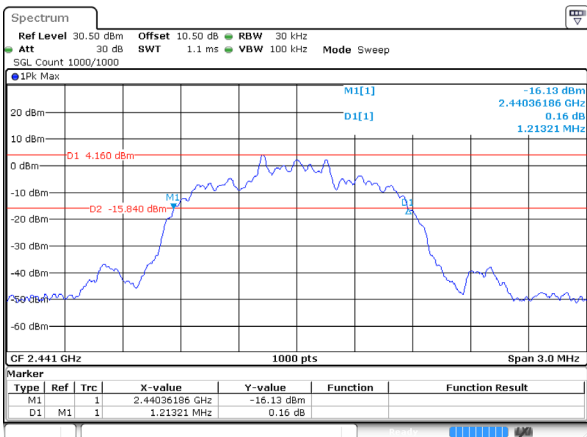
ProjectNo.:RSHA250211001 Tester:Neil Zhou
Date: 15.APR.2025 09:39:03

2DH1_Low 1.234MHz



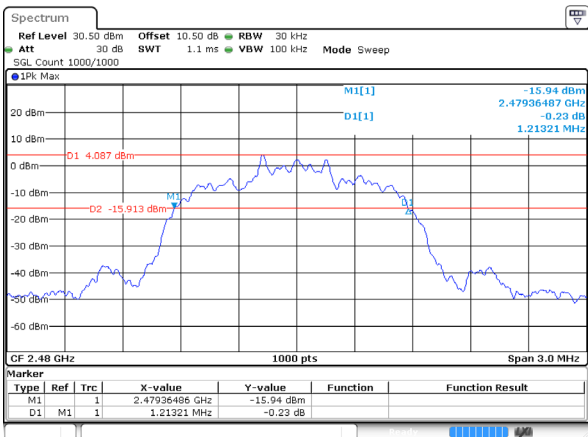
ProjectNo.: RSHA250211001 Tester:Neil Zhou
Date: 5.MAR.2025 00:59:44

2DH1_Middle 1.213MHz



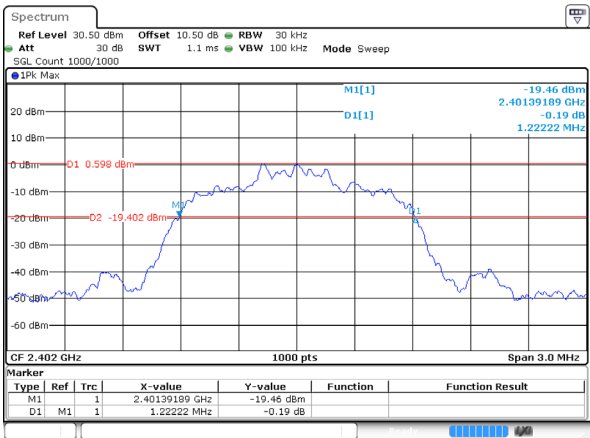
ProjectNo.: RSHA250211001 Tester:Neil Zhou
Date: 5.MAR.2025 01:02:52

2DH1_High 1.213MHz



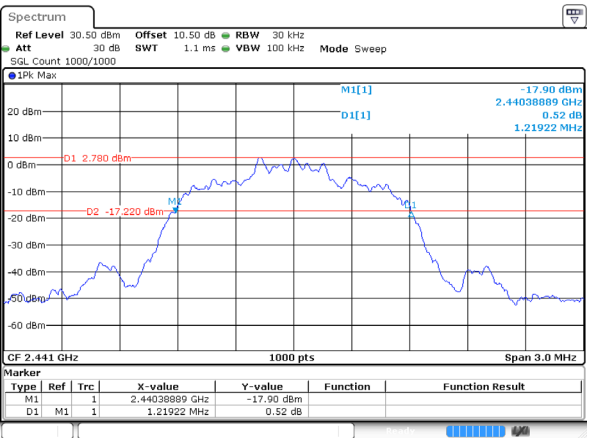
ProjectNo.: RSHA250211001 Tester:Neil Zhou
Date: 5.MAR.2025 01:05:19

3DH1_Low 1.222MHz



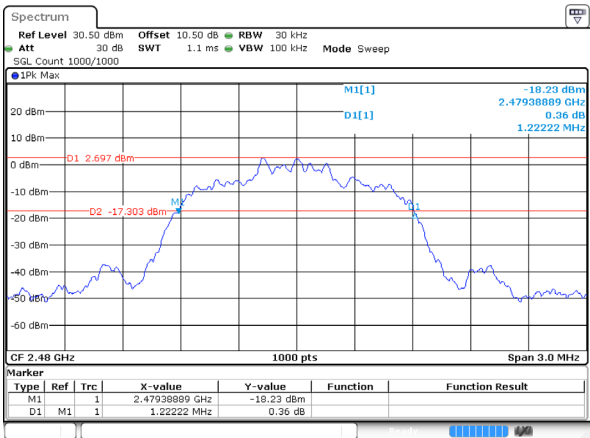
ProjectNo: RSHA250211001 Tester:Neil Zhou
Date: 5.MAR.2025 01:08:59

3DH1_Middle 1.219MHz



ProjectNo: RSHA250211001 Tester:Neil Zhou
Date: 5.MAR.2025 01:12:12

3DH1_High 1.222MHz



ProjectNo: RSHA250211001 Tester:Neil Zhou
Date: 5.MAR.2025 01:14:42

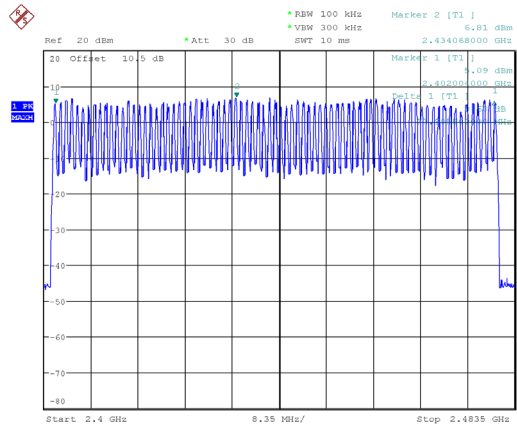
QUANTITY OF HOPPING CHANNEL TEST**Environmental Conditions & Test Information**

Test Date:	2025-10-13
Temperature:	24.5 °C
Relative Humidity:	50 %
ATM Pressure:	101.5 kPa
Test Result:	Pass
Test Engineer:	Neil Zhou

EUT operation mode: Hopping

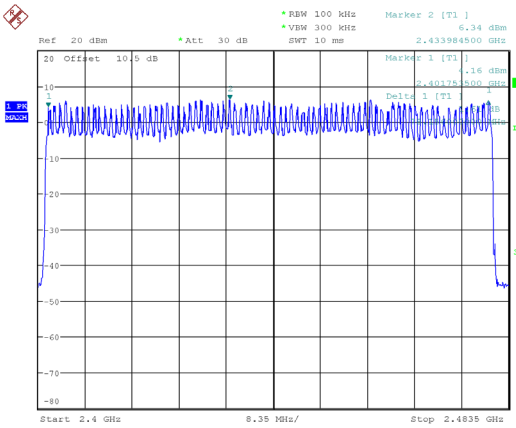
Mode	Frequency Range (MHz)	Number of Hopping Channel (CH)	Limit (CH)
BDR (GFSK)	2400-2483.5	79	≥15
EDR ($\pi/4$ -DQPSK)	2400-2483.5	79	≥15
EDR (8DPSK)	2400-2483.5	79	≥15

DH1_Hopping 79



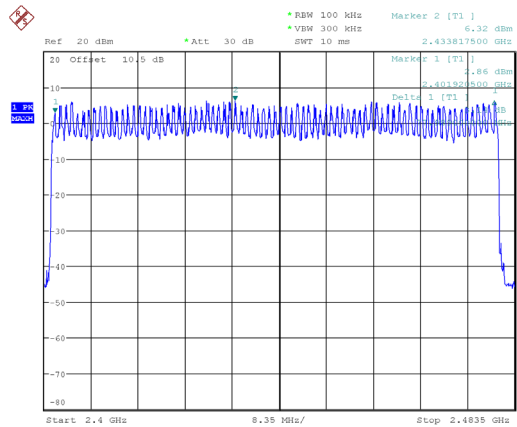
ProjectNo.:RSHA250211001 Tester:Neil Zhou
Date: 13.OCT.2025 16:14:06

2DH1_Hopping 79



ProjectNo.:RSHA250211001 Tester:Neil Zhou
Date: 13.OCT.2025 16:25:44

3DH1_Hopping 79



ProjectNo.:RSHA250211001 Tester:Neil Zhou
Date: 13.OCT.2025 16:31:07

TIME OF OCCUPANCY (DWELL TIME)**Environmental Conditions & Test Information**

Test Date:	2025-10-21
Temperature:	24.2 °C
Relative Humidity:	55 %
ATM Pressure:	103.1 kPa
Test Result:	Pass
Test Engineer:	Neil Zhou

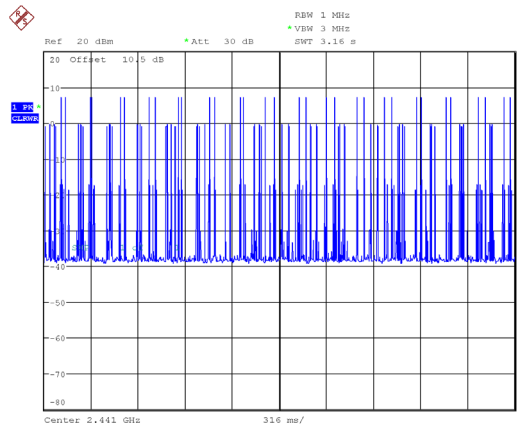
EUT operation mode: Hopping

Mode		Channel	BurstWidth (ms)	TotalHops (Num)	Dwell time (s)	Limit (s)	Result
BDR (GFSK)	DH1	Middle	0.391	320	0.125	0.4	Pass
	DH3		1.653	130	0.215	0.4	Pass
	DH5		2.925	80	0.234	0.4	Pass
EDR ($\pi/4$ -DQPSK)	2DH1		0.397	320	0.127	0.4	Pass
	2DH3		1.656	180	0.298	0.4	Pass
	2DH5		2.930	70	0.205	0.4	Pass
EDR (8DPSK)	3DH1		0.398	320	0.127	0.4	Pass
	3DH3		1.656	130	0.215	0.4	Pass
	3DH5		2.925	90	0.263	0.4	Pass

Note: Dwell time = BurstWidth (Pulse time) * TotalHops

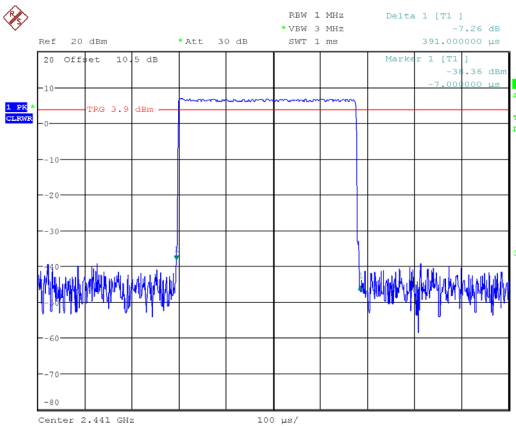
TotalHops (31.6s) = hopping numbers (3.16s)*10

BDR (GFSK): Hopping Numbers-DH1



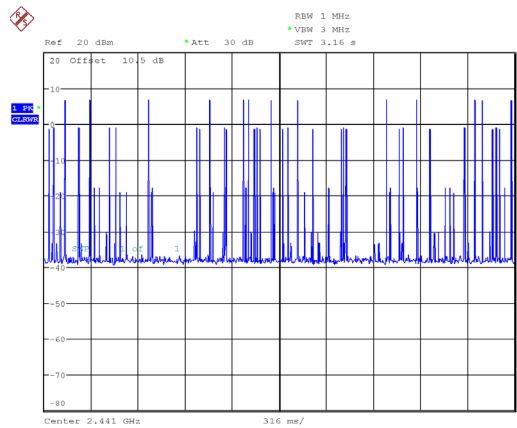
ProjectNo.:RSHA250211001 Tester:Neil Zhou
Date: 21.OCT.2025 13:57:00

BDR (GFSK): Pulse time, Middle Channel, DH1



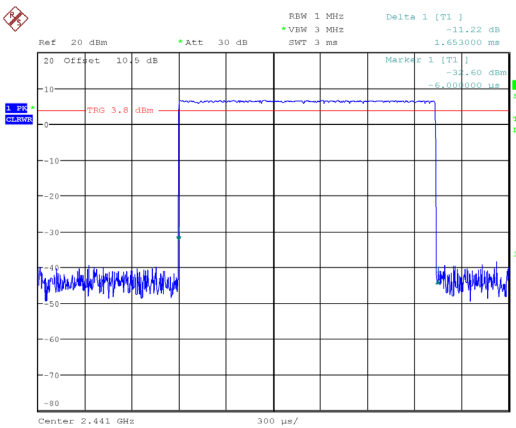
ProjectNo.:RSHA250211001 Tester:Neil Zhou
Date: 21.OCT.2025 13:57:53

BDR (GFSK): Hopping Numbers-DH3



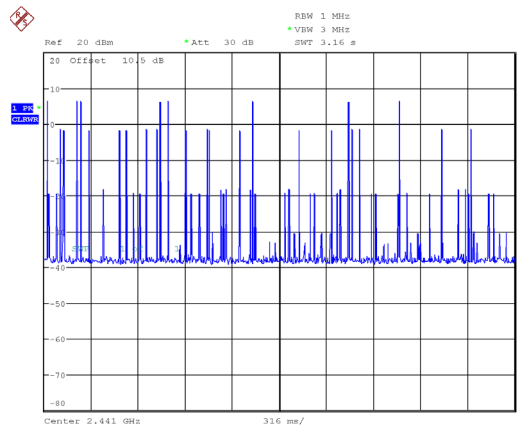
ProjectNo.:RSHA250211001 Tester:Neil Zhou
Date: 21.OCT.2025 13:58:44

BDR (GFSK): Pulse time, Middle Channel, DH3



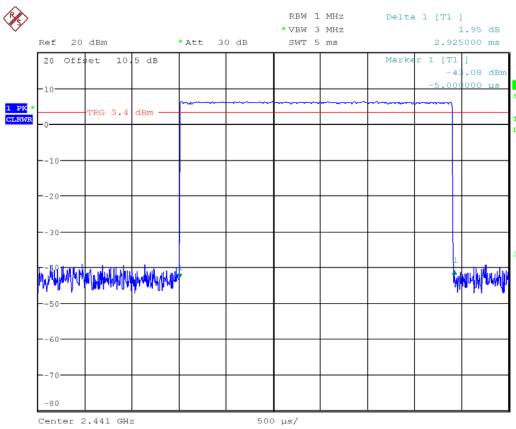
ProjectNo.:RSHA250211001 Tester:Neil Zhou
Date: 21.OCT.2025 13:59:38

BDR (GFSK): Hopping Numbers-DH5



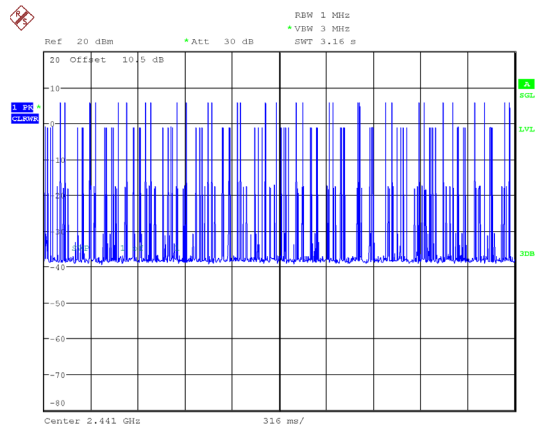
ProjectNo.:RSHA250211001 Tester:Neil Zhou
Date: 21.OCT.2025 14:31:50

BDR (GFSK): Pulse time, Middle Channel, DH5



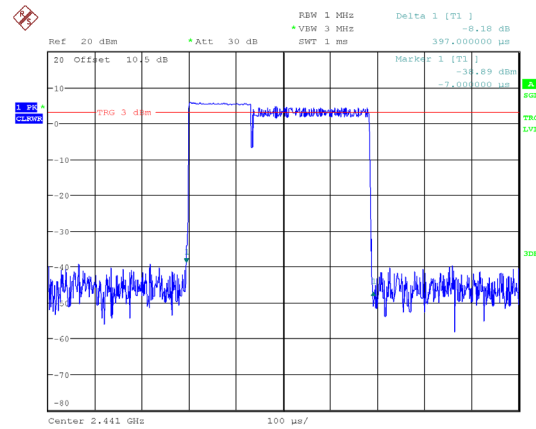
ProjectNo.:RSHA250211001 Tester:Neil Zhou
Date: 21.OCT.2025 14:33:16

EDR ($\pi/4$ -DQPSK): Hopping Numbers-2DH1



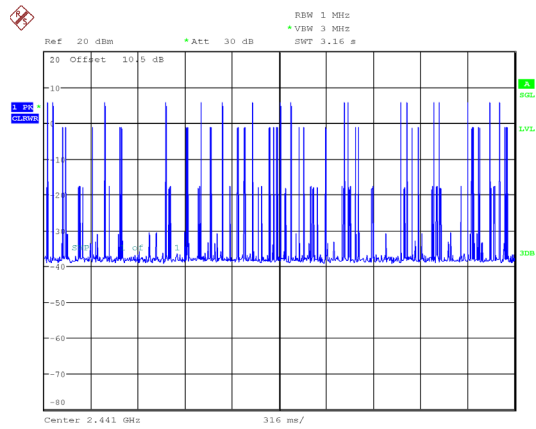
ProjectNo.:RSHA250211001 Tester:Neil Zhou
Date: 21.OCT.2025 14:03:37

EDR ($\pi/4$ -DQPSK): Pulse time, Middle Channel, 2DH1



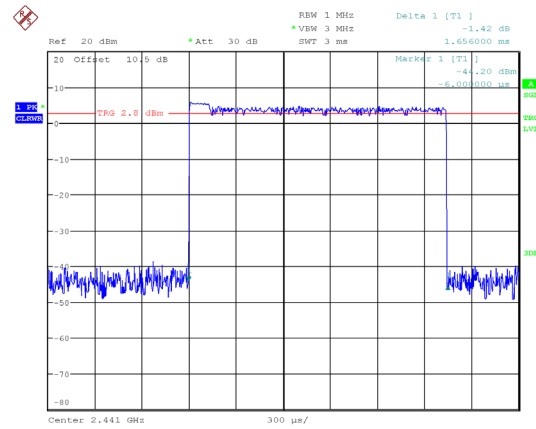
ProjectNo.:RSHA250211001 Tester:Neil Zhou
Date: 21.OCT.2025 14:04:29

EDR ($\pi/4$ -DQPSK): Hopping Numbers-2DH3



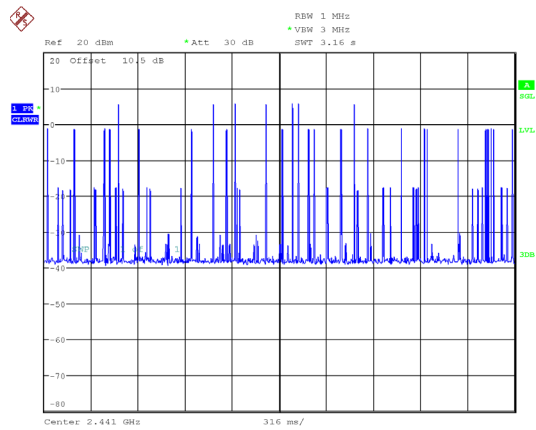
ProjectNo.:RSHA250211001 Tester:Neil Zhou
Date: 21.OCT.2025 14:05:13

EDR ($\pi/4$ -DQPSK): Pulse time, Middle Channel, 2DH3



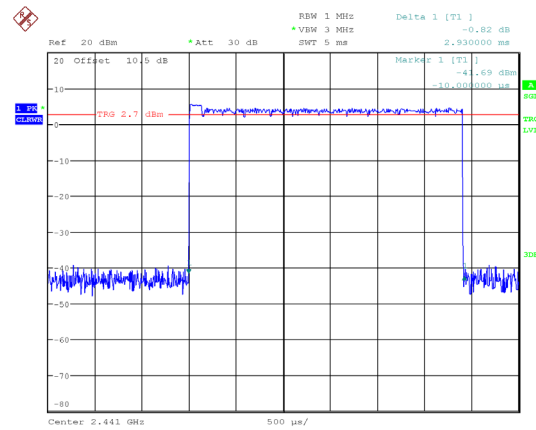
ProjectNo.:RSHA250211001 Tester:Neil Zhou
Date: 21.OCT.2025 14:06:11

EDR ($\pi/4$ -DQPSK): Hopping Numbers-2DH5



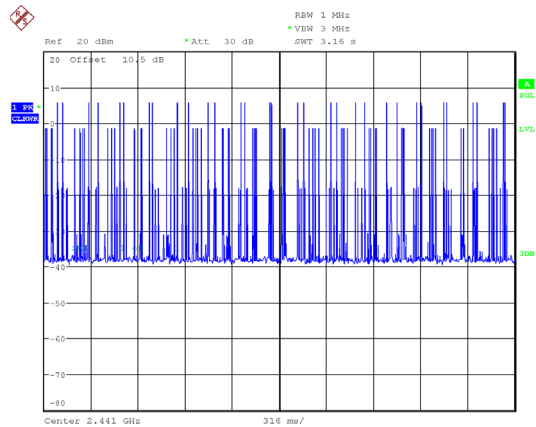
ProjectNo.:RSHA250211001 Tester:Neil Zhou
Date: 21.OCT.2025 14:08:30

EDR ($\pi/4$ -DQPSK): Pulse time, Middle Channel, 2DH5



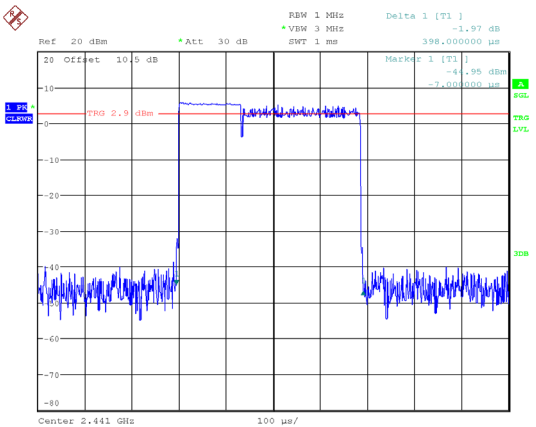
ProjectNo.:RSHA250211001 Tester:Neil Zhou
Date: 21.OCT.2025 14:09:16

EDR (8DPSK): Hopping Numbers-3DH1



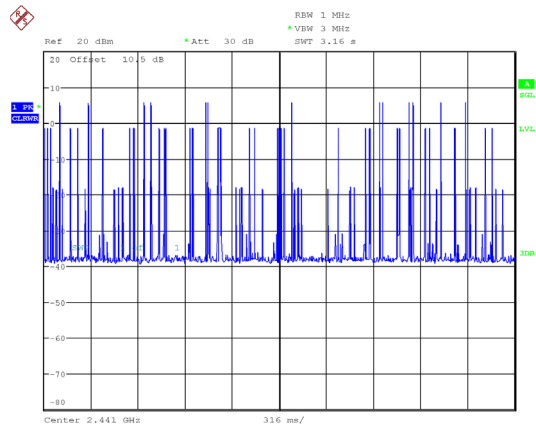
ProjectNo.:RSHA250211001 Tester:Neil Zhou
Date: 21.OCT.2025 14:13:10

EDR (8DPSK): Pulse time, Middle Channel, 3DH1



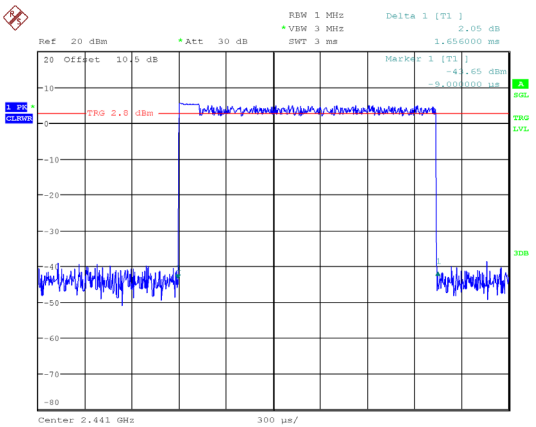
ProjectNo.:RSHA250211001 Tester:Neil Zhou
Date: 21.OCT.2025 14:14:01

EDR (8DPSK): Hopping Numbers-3DH3



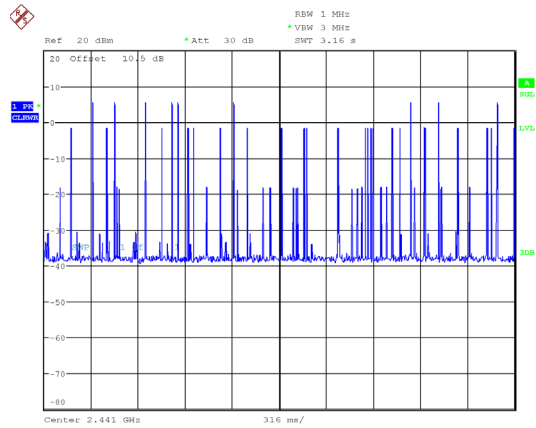
ProjectNo.:RSHA250211001 Tester:Neil Zhou
Date: 21.OCT.2025 14:15:31

EDR (8DPSK): Pulse time, Middle Channel, 3DH3



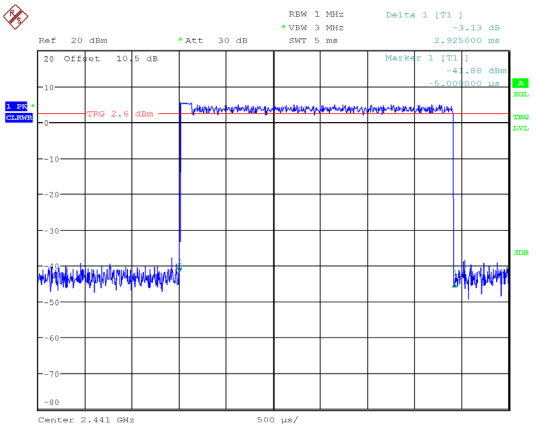
ProjectNo.:RSHA250211001 Tester:Neil Zhou
Date: 21.OCT.2025 14:16:20

EDR (8DPSK): Hopping Numbers-3DH5



ProjectNo.:RSHA250211001 Tester:Neil Zhou
Date: 21.OCT.2025 14:19:33

EDR (8DPSK): Pulse time, Middle Channel, 3DH5



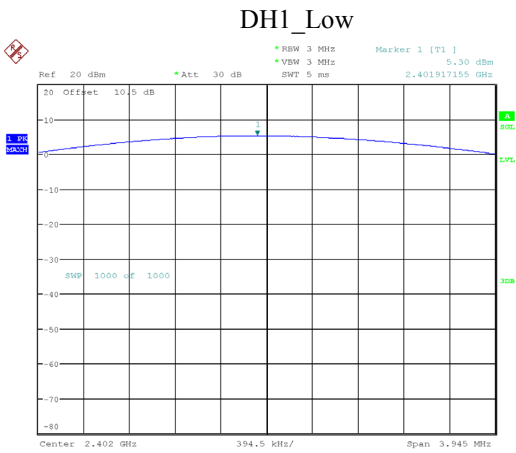
ProjectNo.:RSHA250211001 Tester:Neil Zhou
Date: 21.OCT.2025 14:20:20

PEAK OUTPUT POWER MEASUREMENT**Environmental Conditions & Test Information**

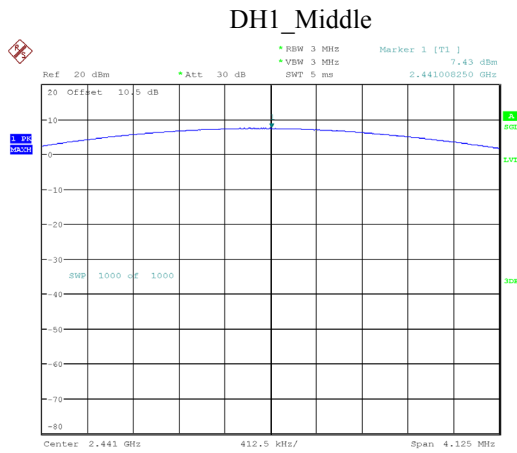
Test Date:	2025-04-29
Temperature:	22.7 °C
Relative Humidity:	54 %
ATM Pressure:	101.9 kPa
Test Result:	Pass
Test Engineer:	Neil Zhou

EUT operation mode: Transmitting

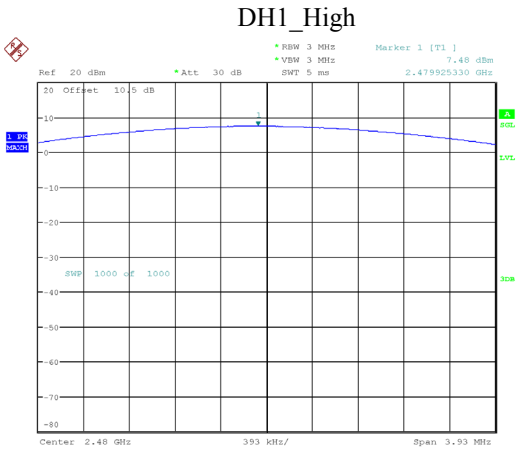
Mode	Channel	Frequency (MHz)	Result (dBm)	Limit (dBm)
GFSK	Low	2402	5.30	21
	Middle	2441	7.43	
	High	2480	7.48	
$\pi/4$ DQPSK	Low	2402	4.51	21
	Middle	2441	6.54	
	High	2480	7.17	
8DPSK	Low	2402	4.51	21
	Middle	2441	6.27	
	High	2480	6.74	



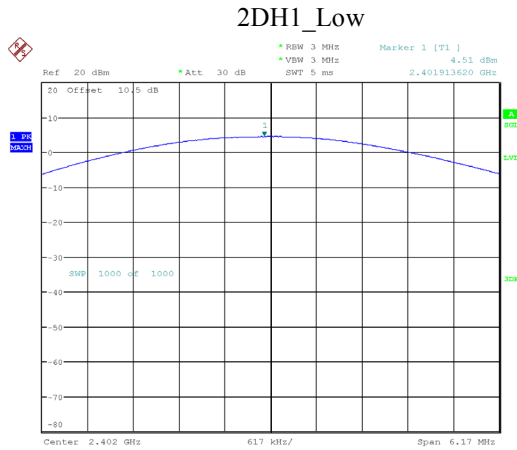
ProjectNo.:RSHA250211001 Tester:Neil Zhou
Date: 29.APR.2025 17:55:43



ProjectNo.:RSHA250211001 Tester:Neil Zhou
Date: 29.APR.2025 17:57:08



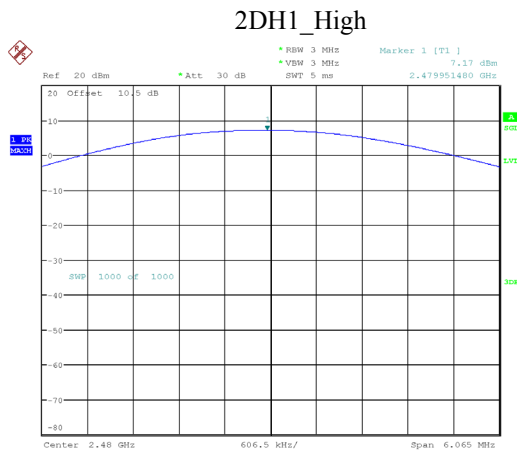
ProjectNo.:RSHA250211001 Tester:Neil Zhou
Date: 29.APR.2025 17:58:00



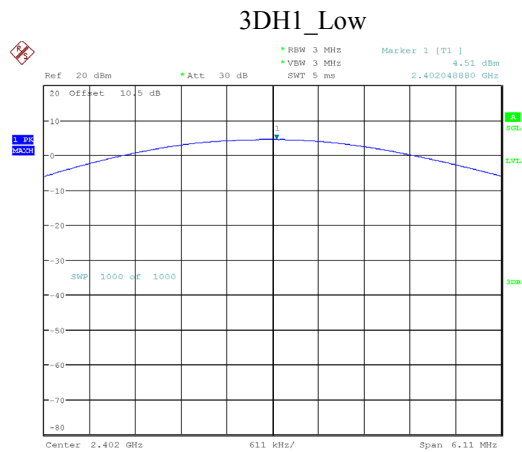
ProjectNo.:RSHA250211001 Tester:Neil Zhou
Date: 29.APR.2025 17:59:02



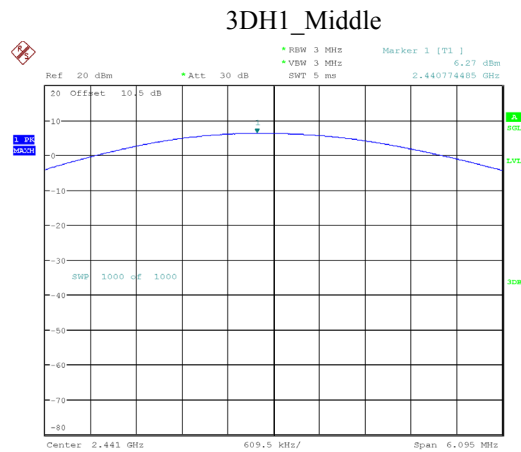
ProjectNo.:RSHA250211001 Tester:Neil Zhou
Date: 29.APR.2025 17:59:55



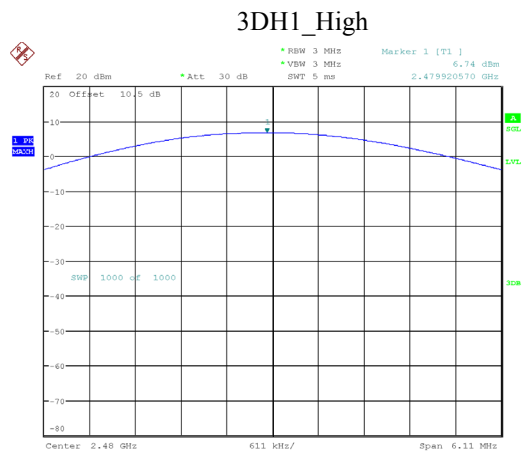
ProjectNo.:RSHA250211001 Tester:Neil Zhou
Date: 29.APR.2025 18:01:34



ProjectNo.:RSHA250211001 Tester:Neil Zhou
Date: 29.APR.2025 18:04:26



ProjectNo.:RSHA250211001 Tester:Neil Zhou
Date: 29.APR.2025 18:06:00



ProjectNo.:RSHA250211001 Tester:Neil Zhou
Date: 29.APR.2025 18:07:47

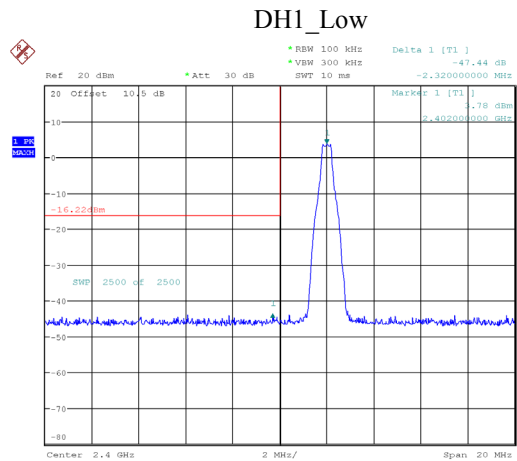
BAND EDGES**Environmental Conditions & Test Information**

Test Date:	2025-05-14
Temperature:	23.6 °C
Relative Humidity:	47 %
ATM Pressure:	101.5 kPa
Test Result:	Pass
Test Engineer:	Neil Zhou

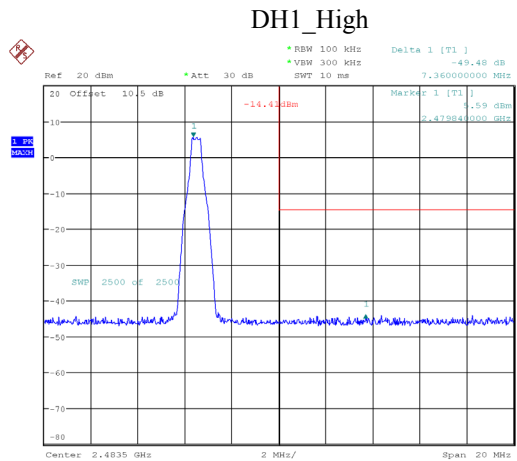
EUT operation mode: Transmitting & Hopping

Test Result: Compliant.

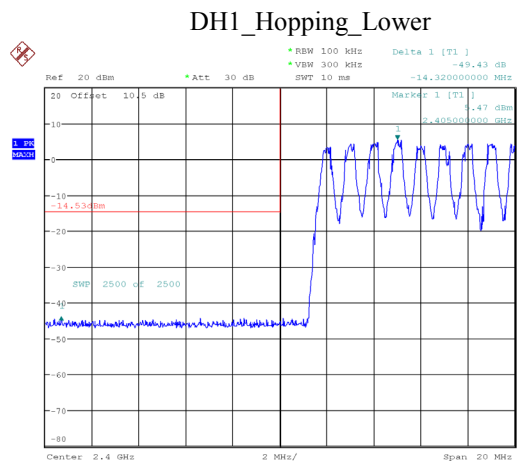
Mode	Channel	Frequency (MHz)	Result (dBc)	Limit (dBc)
GFSK	Low	2402	47.44	20
	High	2480	49.48	
$\pi/4$ DQPSK	Low	2402	47.31	
	High	2480	48.99	
8DPSK	Low	2402	47.24	
	High	2480	48.75	
GFSK (Hopping)	Low	2402	49.43	
	High	2480	48.37	
$\pi/4$ DQPSK (Hopping)	Low	2402	48.75	
	High	2480	48.45	
8DPSK (Hopping)	Low	2402	48.50	
	High	2480	48.51	



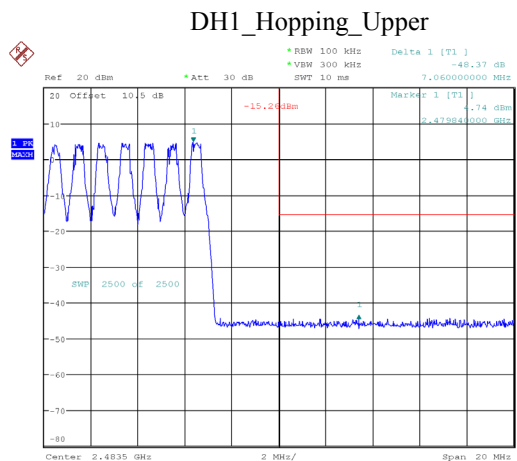
ProjectNo.:RSHA250211001 Tester:Neil Zhou
Date: 14.MAY.2025 14:10:53



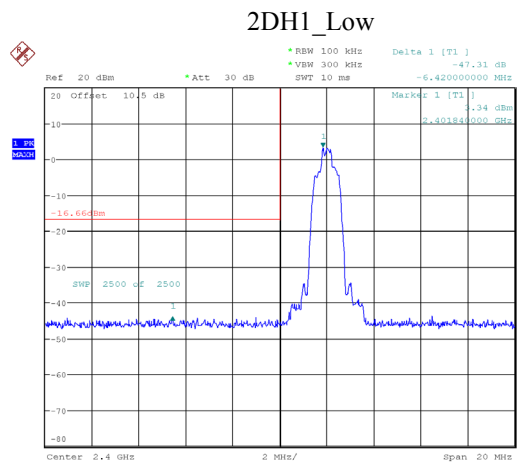
ProjectNo.:RSHA250211001 Tester:Neil Zhou
Date: 14.MAY.2025 14:13:23



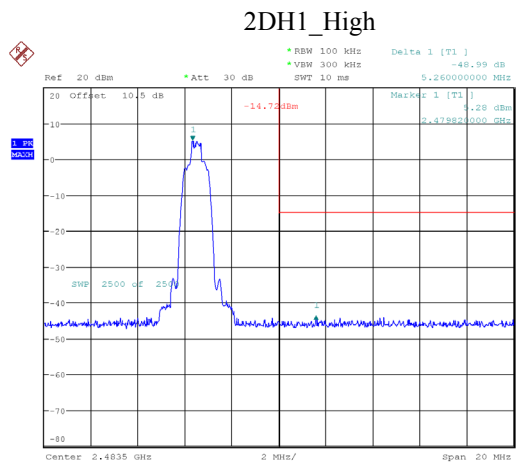
ProjectNo.:RSHA250211001 Tester:Neil Zhou
Date: 14.MAY.2025 14:06:06



ProjectNo.:RSHA250211001 Tester:Neil Zhou
Date: 14.MAY.2025 14:08:26

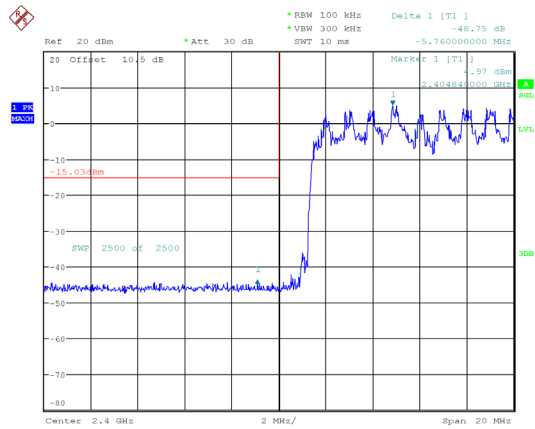


ProjectNo.:RSHA250211001 Tester:Neil Zhou
Date: 14.MAY.2025 14:21:04



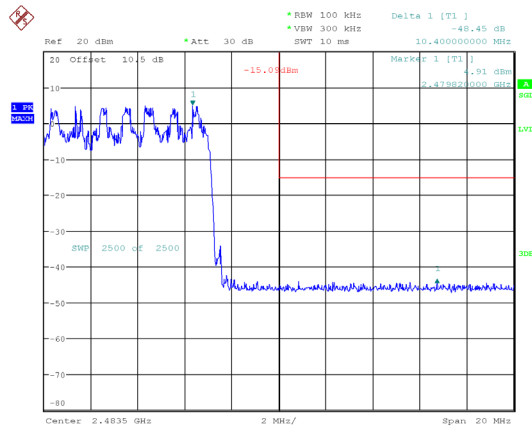
ProjectNo.:RSHA250211001 Tester:Neil Zhou
Date: 14.MAY.2025 14:26:31

2DH1_Hopping_Lower



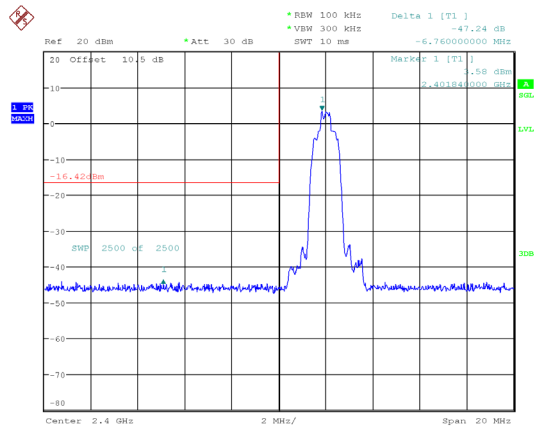
ProjectNo.:RSHA250211001 Tester:Neil Zhou
Date: 14.MAY.2025 14:16:07

2DH1_Hopping_Upper



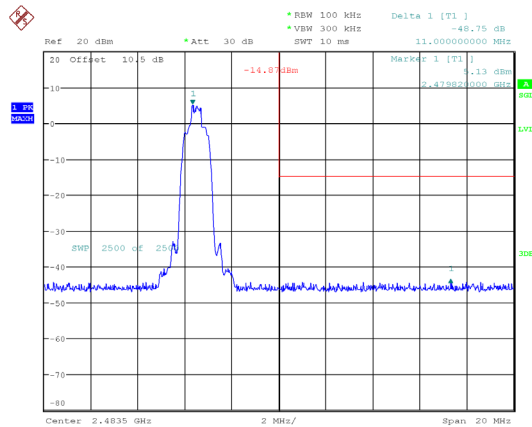
ProjectNo.:RSHA250211001 Tester:Neil Zhou
Date: 14.MAY.2025 14:18:24

3DH1_Low



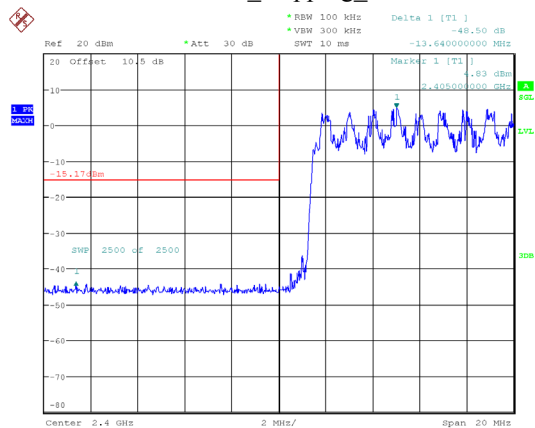
ProjectNo.:RSHA250211001 Tester:Neil Zhou
Date: 14.MAY.2025 14:13:39

3DH1_High



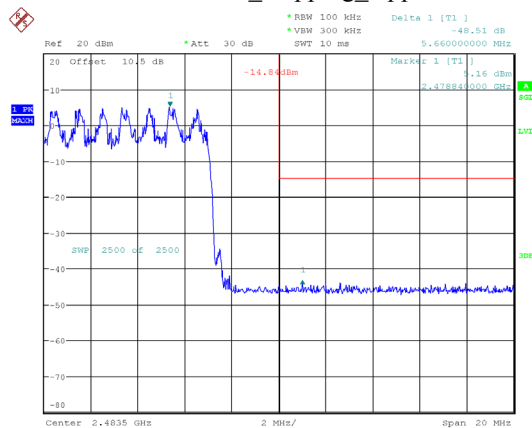
ProjectNo.:RSHA250211001 Tester:Neil Zhou
Date: 14.MAY.2025 14:13:02

3DH1_Hopping_Lower



ProjectNo.:RSHA250211001 Tester:Neil Zhou
Date: 14.MAY.2025 14:30:07

3DH1_Hopping_Upper



ProjectNo.:RSHA250211001 Tester:Neil Zhou
Date: 14.MAY.2025 14:32:23

EUT PHOTOGRAPHS

Please refer to the attachment EXHIBIT A-EUT EXTERNAL PHOTOGRAPHS and EXHIBIT B-EUT INTERNAL PHOTOGRAPHS.

TEST SETUP PHOTOGRAPHS

Please refer to the attachment EXHIBIT C-TEST SETUP PHOTOGRAPHS.

Declarations

1. The laboratory is not responsible for the authenticity of any information provided by the applicant. Information from the applicant that may affect test results is marked with “★”.
2. The test data was only valid for the test sample(s).
3. This report is valid only with a valid digital signature. The digital signature may be available only under the Adobe software above version 7.0.
4. Otherwise required by the applicant or Product Regulations, Decision Rule in this report did not consider the uncertainty.
5. The extended uncertainty given in this report is obtained by combining the standard uncertainty times the coverage factor $k=2$ with the 95.45% confidence interval.

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