



FCC RADIO TEST REPORT

FCC ID : IHDT56AY1
Equipment : Mobile Cellular Phone
Brand Name : Motorola
Model Name : XT2701-1, XT2701-2
Applicant : Motorola Mobility LLC
222 W,Merchandise Mart Plaza, Chicago IL 60654 USA
Manufacturer : Motorola Mobility LLC
222 W,Merchandise Mart Plaza, Chicago IL 60654 USA
Standard : FCC Part 15 Subpart C §15.247

The product was received on Aug. 13, 2026 and testing was performed from Aug. 18, 2026 to Sep. 17, 2026. We, Sporton International Inc. Wensan Laboratory, would like to declare that the tested sample has been evaluated in accordance with the test procedures and has been in compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval from Sporton International Inc. Wensan Laboratory, the test report shall not be reproduced except in full.

Louis Wu

Approved by: Louis Wu

Sporton International Inc. Wensan Laboratory

No.58, Aly. 75, Ln. 564, Wenhua 3rd, Rd., Guishan Dist., Taoyuan City 333010



Table of Contents

History of this test report.....	3
Summary of Test Result.....	4
1 General Description.....	5
1.1 Product Feature of Equipment Under Test.....	5
1.2 Modification of EUT	7
1.3 Testing Location	8
1.4 Applicable Standards.....	8
2 Test Configuration of Equipment Under Test.....	9
2.1 Carrier Frequency Channel	9
2.2 Test Mode.....	10
2.3 Connection Diagram of Test System.....	11
2.4 Support Unit used in test configuration and system	11
2.5 EUT Operation Test Setup	11
2.6 Measurement Results Explanation Example.....	12
3 Test Result.....	13
3.1 Number of Channel Measurement	13
3.2 Hopping Channel Separation Measurement	14
3.3 Dwell Time Measurement.....	15
3.4 20dB and 99% Bandwidth Measurement	16
3.5 Output Power Measurement.....	17
3.6 Conducted Band Edges Measurement.....	18
3.7 Conducted Spurious Emission Measurement	19
3.8 Radiated Band Edges and Spurious Emission Measurement	20
3.9 AC Conducted Emission Measurement.....	24
3.10 Antenna Requirements.....	26
4 List of Measuring Equipment	27
5 Measurement Uncertainty	29
Appendix A. Conducted Test Results	
Appendix B. AC Conducted Emission Test Result	
Appendix C. Radiated Spurious Emission Test Data	
Appendix D. Duty Cycle Plots	



History of this test report

Report No.	Version	Description	Issue Date
FR672113I	01	Initial issue of report	Sep. 23, 2026

Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
3.1	15.247(a)(1)	Number of Channels	Pass	-
3.2	15.247(a)(1)	Hopping Channel Separation	Pass	-
3.3	15.247(a)(1)	Dwell Time of Each Channel	Pass	-
3.4	15.247(a)(1)	20dB Bandwidth	Pass	-
3.4	2.1049	99% Occupied Bandwidth	Pass	-
3.5	15.247(b)(1) 15.247(b)(4)	Peak Output Power	Pass	-
3.6	15.247(d)	Conducted Band Edges	Pass	-
3.7	15.247(d)	Conducted Spurious Emission	Pass	-
3.8	15.247(d)	Radiated Band Edges and Radiated Spurious Emission	Pass	-
3.9	15.207	AC Conducted Emission	Pass	-
3.10	15.203	Antenna Requirement	Pass	-

Conformity Assessment Condition:

1. The test results (PASS/FAIL) with all measurement uncertainty excluded are presented against the regulation limits or in accordance with the requirements stipulated by the applicant/manufacture who shall bear all the risks of non-compliance that may potentially occur if measurement uncertainty is taken into account.
2. The measurement uncertainty please refer to each test result in the section "Measurement Uncertainty".

Disclaimer:

The product specifications of the EUT presented in the test report that may affect the test assessments are declared by the manufacturer who shall take full responsibility for the authenticity.

Reviewed by: Keven Cheng

Report Producer: Dara Chiu

1 General Description

1.1 Product Feature of Equipment Under Test

Product Feature		
General Specs	GSM/WCDMA/LTE/5G NR, Bluetooth, Wi-Fi 2.4GHz 802.11b/g/n/ax/be, Wi-Fi 5GHz 802.11a/n/ac/ax/be, Wi-Fi 6GHz 802.11a/ax/be, NFC, WPT, UWB and GNSS.	
Antenna Type	PIFA Antenna	
Sample 1	P+E-SIM	
Sample 2	P+P-SIM	

EUT Information List		
IMEI	Performed Test Item	
353070500009614	Conducted	
353070500007832	Conducted Emission	
353070500008095	Radiated Spurious Emission	

Antenna information		
2400 MHz ~ 2483.5 MHz	Peak Gain (dBi)	<Ant3>: -6.0 <Ant6>: -5.7

Remark:

1. MIMO Ant. 6+3 Directional Gain is a calculated result from MIMO Ant. 6 and MIMO Ant. 3. The formula used in calculation is documented in section 1.1.1.
2. Power of MIMO Ant. 6 + Ant. 3 is a calculated result from sum of the power MIMO Ant. 6 and MIMO Ant. 3.
3. All test items were performed with Sample 1.
4. The models XT2701-1, XT2701-2 are only for market differentiation, all the others are the same.
5. The EUT's information above is declared by manufacturer. Please refer to Disclaimer in report summary.

1.1.1 Antenna Directional Gain

Follows FCC KDB 662911 D01 Multiple Transmitter Output v02r01 F)2)f)ii)

Directional gain = G_{ANT} + Array Gain, where Array Gain is as follows:

For power measurements on IEEE 802.11 devices,

Array Gain = 0 dB (i.e., no array gain) for $N_{ANT} \leq 4$.

G_{ANT} is set equal to the gain of the antenna having the highest gain.

For PSD measurements, the directional gain calculation.

Array Gain = $10 \log(N_{ANT}/N_{SS})$ dB.

$$DirectionalGain = 10 \cdot \log \left[\frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right]$$

where

Each antenna is driven by no more than one spatial stream;

N_{SS} = the number of independent spatial streams of data;

N_{ANT} = the total number of antennas

$g_{j,k} = 10^{G_k/20}$ if the k th antenna is being fed by spatial stream j , or zero if it is not;
 G_k is the gain in dBi of the k th antenna.

As minimum $N_{SS}=1$ is supported by EUT, the formula can be simplified as:

Directional gain = $10 \cdot \log[(10^{G_1/20} + 10^{G_2/20} + \dots + 10^{G_N/20})^2 / N_{ANT}]$ dBi

Where $G_1, G_2, \dots, G_N$ denote single antenna gain.

The directional gain "DG" is calculated as following table.

			DG	DG	Power	PSD
			for	for	Limit	Limit
	Ant 6	Ant 3	Power	PSD	Reduction	Reduction
	(dBi)	(dBi)	(dBi)	(dBi)	(dB)	(dB)
2.4GHz	-5.70	-6.00	-5.70	-2.84	0.00	0.00

Calculation example:

If a device has two antenna, $G_{ANT6} = -5.7$ dBi; $G_{ANT3} = -6.0$ dBi

Directional gain of power measurement = $\max(-5.7, -6.0) + 0 = -5.7$ dBi

Directional gain of PSD derived from formula which is

$10 \times \log \{ [10^{(-5.7 \text{ dBi} / 20)} + 10^{(-6.0 \text{ dBi} / 20)}]^2 / 2 \} = -2.84$ dBi

Power and PSD limit reduction = Composite gain – 6dBi, (min = 0)

Specification of Accessory				
AC Adapter 1(US)	Brand Name	Motorola (Salcomp)	Model Name	MC-901
AC Adapter 1(EU)	Brand Name	Motorola (Salcomp)	Model Name	MC-902
AC Adapter 1(UK)	Brand Name	Motorola (Salcomp)	Model Name	MC-903
AC Adapter 1(AR)	Brand Name	Motorola (Salcomp)	Model Name	MC-906
AC Adapter 1(BR)	Brand Name	Motorola (Salcomp)	Model Name	MC-907
AC Adapter 1(CHILE)	Brand Name	Motorola (Salcomp)	Model Name	MC-909
AC Adapter 2(IN)	Brand Name	Motorola (Salcomp)	Model Name	MC-904
AC Adapter 2(IN Local)	Brand Name	Motorola (Salcomp)	Model Name	MC-904
AC Adapter 3(US)	Brand Name	Motorola (AOHAI)	Model Name	MC-901
AC Adapter 3(EU)	Brand Name	Motorola (AOHAI)	Model Name	MC-902
AC Adapter 3(UK)	Brand Name	Motorola (AOHAI)	Model Name	MC-903
AC Adapter 3(AR)	Brand Name	Motorola (AOHAI)	Model Name	MC-906
AC Adapter 3(BR)	Brand Name	Motorola (AOHAI)	Model Name	MC-907
AC Adapter 3(CHILE)	Brand Name	Motorola (AOHAI)	Model Name	MC-909
AC Adapter 4(IN)	Brand Name	Motorola (AOHAI)	Model Name	MC-904
AC Adapter 4(IN Local)	Brand Name	Motorola (XIHI)	Model Name	MC-904
Battery	Brand Name	Motorola (ATL)	Model Name	TZ70
USB Cable 1	Brand Name	Motorola (Saibao)	Model Name	SC18D86731
USB Cable 2	Brand Name	Motorola (Luxshare)	Model Name	SC18E08103
USB Cable 3	Brand Name	Motorola (Saibao)	Model Name	SC18D71644
USB Cable 4	Brand Name	Motorola (Luxshare)	Model Name	SC18E08104
Protective case	Brand Name	Motorola (Techson)	Model Name	SS68F43462

1.2 Modification of EUT

No modifications made to the EUT during the testing.

1.3 Testing Location

The test location is accredited based on TAF code 1190 and 3786 designated by NCC (National Communication Commission).

Test Site	Sporton International Inc. EMC & Wireless Communications Laboratory
Test Site Location	No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333
Test Site	Sporton International Inc. Wensan Laboratory
Test Site Location	No.58, Aly. 75, Ln. 564, Wenhua 3rd, Rd., Guishan Dist., Taoyuan City 333010

FCC designation No.: TW1190 and TW3786

Note:

1. The test site complies with ANSI C63.4 2014 requirement.
2. The Conducted Emission test item subcontracted to Sporton International Inc. EMC & Wireless Communications Laboratory.

1.4 Applicable Standards

According to the specifications declared by the manufacturer, the EUT must comply with the requirements of the following standards:

- ♦ FCC KDB Publication No. 558074 D01 15.247 Meas Guidance v05r02
- ♦ FCC KDB 414788 D01 Radiated Test Site v01r01
- ♦ FCC KDB 662911 D01 Multiple Transmitter Output v02r01.
- ♦ FCC Part 15 Subpart C §15.247
- ♦ ANSI C63.10-2020 + Cor.1-2023

Remark:

1. All the test items were validated and recorded in accordance with the standards without any modification during the testing.
2. The TAF code is not including all the FCC KDB listed without accreditation.
3. This EUT has also been tested and complied with the requirements of FCC Part 15, Subpart B, recorded in a separate test report.



2 Test Configuration of Equipment Under Test

2.1 Carrier Frequency Channel

Frequency Band	Channel	Freq. (MHz)	Channel	Freq. (MHz)	Channel	Freq. (MHz)
2404-2478 MHz	2	2404	32	2434	59	2461
	3	2405	33	2435	60	2462
	4	2406	34	2436	61	2463
	5	2407	35	2437	62	2464
	6	2408	36	2438	63	2465
	7	2409	37	2439	64	2466
	8	2410	38	2440	65	2467
	9	2411	39	2441	66	2468
	10	2412	40	2442	67	2469
	11	2413	41	2443	68	2470
	12	2414	42	2444	69	2471
	13	2415	43	2445	70	2472
	14	2416	44	2446	71	2473
	15	2417	45	2447	72	2474
	16	2418	46	2448	73	2475
	17	2419	47	2449	74	2476
	18	2420	48	2450	75	2477
	19	2421	49	2451	76	2478
	20	2422	50	2452	-	-
	21	2423	51	2453	-	-
	22	2424	52	2454	-	-
	26	2428	53	2455	-	-
	27	2429	54	2456	-	-
	28	2430	55	2457	-	-
	29	2431	56	2458	-	-
	30	2432	57	2459	-	-
	31	2433	58	2460	-	-



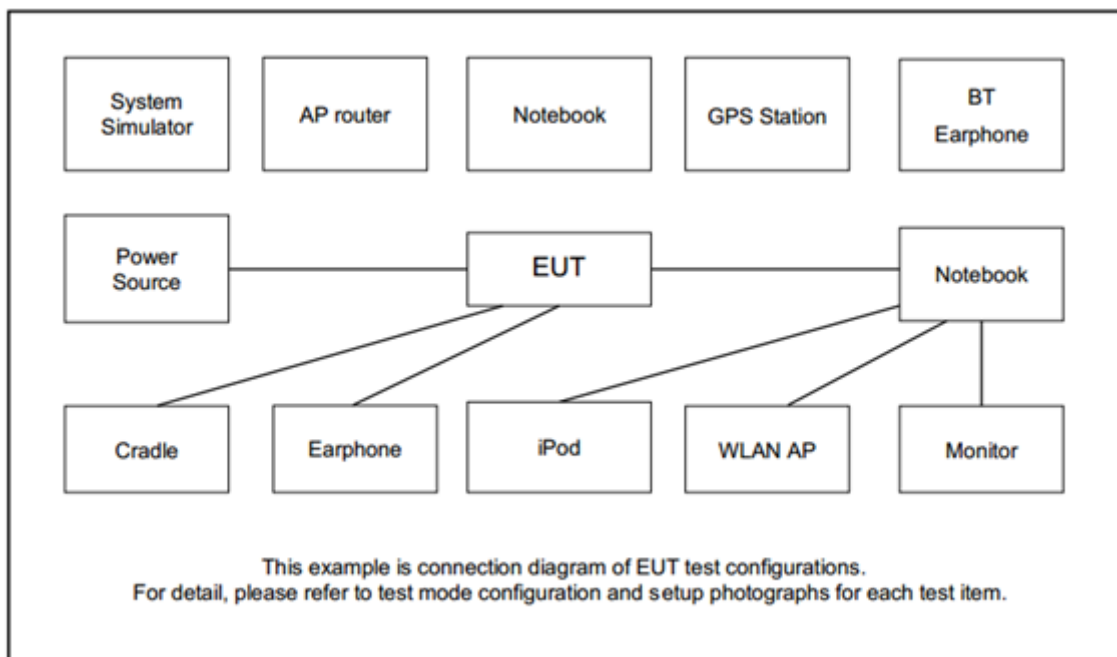
2.2 Test Mode

- a. The EUT has been associated with peripherals and configuration operated in a manner tended to maximize its emission characteristics in a typical application. Frequency range investigated: conduction emission (150 kHz to 30 MHz) radiation emission (9 kHz to the 10th harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower). For radiated measurement, the measured emission level of the EUT was maximized by rotating the EUT on a turntable, adjusting the orientation of the EUT and EUT antenna in three orthogonal axis (X: flat, Y: portrait, Z: landscape), and adjusting the measurement antenna orientation, following C63.10 exploratory test procedures and only the worst plane, and the worst mode of radiated spurious emissions is Bluetooth 3Mbps mode, and recorded in this report.
- b. AC power line Conducted Emission was tested under maximum output power.

The following summary table is showing all test modes to demonstrate in compliance with the standard.

Summary table of Test Cases	
Test Item	Data Rate / Modulation
Conducted Test Cases	Bluetooth LE 1Mbps ASK
	Mode 1: CH02_2404 MHz
	Mode 2: CH38_2440 MHz
	Mode 3: CH76_2478 MHz
AC Conducted Emission	Mode 1 :GSM850 Idle + Bluetooth link + WLAN link (2.4GHz) + USB Cable 3 (Charging from Adapter 3)
Remark:	
1. For Radiated Test Cases, the tests were performed with Adapter 3 and USB Cable 3.	
2. The detailed Radiated test modes are shown in Appendix C.	

2.3 Connection Diagram of Test System



2.4 Support Unit used in test configuration and system

Item	Equipment	Brand Name	Model Name	FCC ID	Data Cable	Power Cord
1.	Base Station	Anritsu	MT8820C	N/A	N/A	Unshielded,1.8m
2.	NOTE BOOK	Dell	Latitude 3420	FCC DoC	N/A	AC I/P:Unshielded, 1.2m DC O/P:Shielded, 1.8m
3.	WLAN AP	ASUS	GT-AXE11000	N/A	N/A	Unshielded,1.8m
4.	Bluetooth Earphone	Jlab Jbund Mini	2AHYV	N/A	N/A	N/A
5.	Bluetooth Tester	Rohde & Schwarz	CBT	NA	NA	NA

2.5 EUT Operation Test Setup

The RF test items, utility “QRCT 4.0.198.1 CTL” was installed in Notebook which was programmed in order to make the EUT get into the engineering modes to provide channel selection, power level, data rate and the application type and for continuous transmitting signals.



2.6 Measurement Results Explanation Example

For all conducted test items:

The offset level is set in the spectrum analyzer to compensate the RF cable loss and attenuator factor between EUT conducted output port and spectrum analyzer. With the offset compensation, the spectrum analyzer reading level is exactly the EUT RF output level.

Example:

The spectrum analyzer offset is derived from RF cable loss and attenuator factor.

Offset = RF cable loss + attenuator factor.

Following shows an offset computation example with cable loss 4.2 dB and 10 dB attenuator.

$$\begin{aligned}\text{Offset(dB)} &= \text{RF cable loss(dB)} + \text{attenuator factor(dB)} \\ &= 4.2 + 10 = 14.2 \text{ (dB)}\end{aligned}$$

3 Test Result

3.1 Number of Channel Measurement

3.1.1 Limits of Number of Hopping Frequency

Frequency hopping systems in the 2400-2483.5 MHz band shall use at least 15 channels.

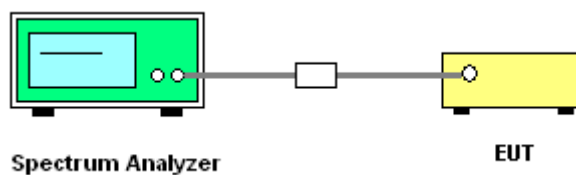
3.1.2 Measuring Instruments

Please refer to the measuring equipment list in this test report.

3.1.3 Test Procedure

1. The testing follows ANSI C63.10 clause 7.8.3.
2. The RF output of EUT is connected to the spectrum analyzer by RF cable and attenuator. The path loss is compensated to the results for each measurement.
3. Set the maximum power setting and enable the EUT to transmit continuously.
4. Enable the EUT hopping function.
5. Use the following spectrum analyzer settings: Span = the frequency band of operation; RBW = 300 kHz; VBW $\geq$ RBW; Sweep = No faster than coupled (auto) time; Detector function = peak; Trace = max hold.
6. The number of hopping frequency used is defined as the number of total channel.
7. Record the measurement data derived from spectrum analyzer.

3.1.4 Test Setup



3.1.5 Test Result of Number of Hopping Frequency

Please refer to Appendix A.

3.2 Hopping Channel Separation Measurement

3.2.1 Limit of Hopping Channel Separation

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.

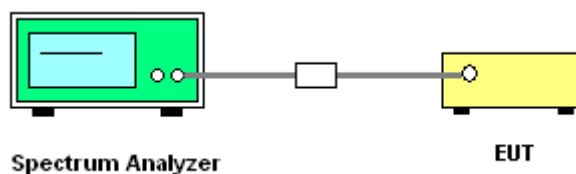
3.2.2 Measuring Instruments

Please refer to the measuring equipment list in this test report.

3.2.3 Test Procedures

1. The testing follows ANSI C63.10 clause 7.8.2.
2. The RF output of EUT is connected to the spectrum analyzer by RF cable and attenuator. The path loss is compensated to the results for each measurement.
3. Set the maximum power setting and enable the EUT to transmit continuously.
4. Enable the EUT hopping function.
5. Use the following spectrum analyzer settings:
Span = wide enough to capture the peaks of two adjacent channels;
RBW = 300 kHz; VBW $\geq$ RBW; Sweep = No faster than coupled (auto) time; Detector function = peak; Trace = max hold.
6. Measure and record the results in the test report.

3.2.4 Test Setup



3.2.5 Test Result of Hopping Channel Separation

Please refer to Appendix A.

3.3 Dwell Time Measurement

3.3.1 Limit of Dwell Time

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.

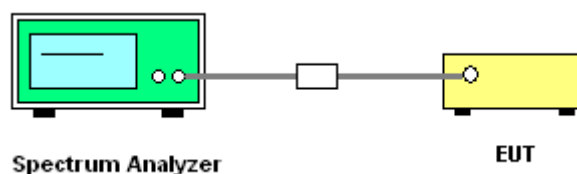
3.3.2 Measuring Instruments

Please refer to the measuring equipment list in this test report.

3.3.3 Test Procedures

1. The testing follows ANSI C63.10 clause 7.8.4.
2. The RF output of EUT is connected to the spectrum analyzer by RF cable and attenuator. The path loss is compensated to the results for each measurement.
3. Set the maximum power setting and enable the EUT to transmit continuously.
4. Enable the EUT hopping function.
5. Use the following spectrum analyzer settings: Span = zero span, centered on a hopping channel; RBW = 1 MHz; VBW $\geq$ RBW; Sweep = as necessary to capture the entire dwell time per hopping channel; Detector function = peak; Trace = max hold.
6. Measure and record the results in the test report.

3.3.4 Test Setup



3.3.5 Test Result of Dwell Time

Please refer to Appendix A.

3.4 20dB and 99% Bandwidth Measurement

3.4.1 Limit of 20dB and 99% Bandwidth

Reporting only

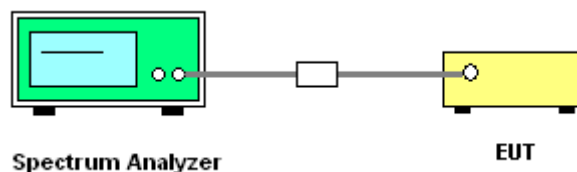
3.4.2 Measuring Instruments

Please refer to the measuring equipment list in this test report.

3.4.3 Test Procedures

1. The testing follows ANSI C63.10 clause 6.9.2 and 6.9.3.
2. The RF output of EUT is connected to the spectrum analyzer by RF cable and attenuator. The path loss is compensated to the results for each measurement.
3. Set the maximum power setting and enable the EUT to transmit continuously.
4. Use the following spectrum analyzer settings for 20 dB Bandwidth measurement.
Span = approximately 2 to 5 times the 20 dB bandwidth, centered on a hopping channel;
RBW $\geq 1\%$ of the 20 dB bandwidth, VBW $\geq 3 * \text{RBW}$; Sweep = auto; Detector function = peak;
Trace = max hold.
5. Use the following spectrum analyzer settings for 99 % Bandwidth measurement.
Span = approximately 1.5 to 5 times the 99% bandwidth, centered on a hopping channel;
RBW $\geq 1\text{-}5\%$ of the 99% bandwidth, VBW $\geq 3 * \text{RBW}$; Sweep = auto; Detector function = peak;
Trace = max hold.
6. Measure and record the results in the test report.

3.4.4 Test Setup



3.4.5 Test Result of 20dB Bandwidth

Please refer to Appendix A.

3.4.6 Test Result of 99% Occupied Bandwidth

Please refer to Appendix A.

3.5 Output Power Measurement

3.5.1 Limit of Output Power

The maximum peak conducted output power of the intentional radiator shall not exceed the following:
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. For all other frequency hopping systems in the 2400-2483.5 MHz band 0.125 watts.
If directional gain of transmitting antennas is greater than 6 dBi, the power shall be reduced by the same level in dB comparing to gain minus 6 dBi.

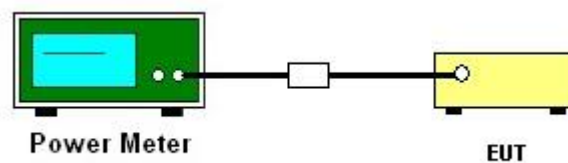
3.5.2 Measuring Instruments

Please refer to the measuring equipment list in this test report.

3.5.3 Test Procedures

1. The testing follows ANSI C63.10 clause 7.8.5.
2. The RF output of EUT is connected to the power meter by RF cable and attenuator. The path loss is compensated to the results for each measurement.
3. Set the maximum power setting and enable the EUT to transmit continuously.
4. Measure the conducted output power with cable loss and record the results in the test report.
5. The average power is compensated with duty factor.
6. Record the results in the test report.

3.5.4 Test Setup



3.5.5 Test Result of Peak Output Power

Please refer to Appendix A.

3.5.6 Test Result of Average Output Power (Reporting Only)

Please refer to Appendix A.

3.6 Conducted Band Edges Measurement

3.6.1 Limit of Band Edges

In any 100 kHz bandwidth outside the intentional radiation frequency band, the radio frequency power shall be at least 20 dB below the highest level of the radiated power. In addition, radiated emissions which fall in the restricted bands must also comply with the radiated emission limits.

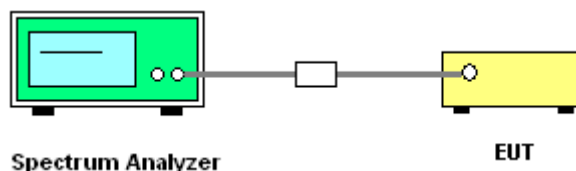
3.6.2 Measuring Instruments

Please refer to the measuring equipment list in this test report.

3.6.3 Test Procedures

1. The testing follows ANSI C63.10 clause 6.10.
2. Set the maximum power setting and enable the EUT to transmit continuously.
3. Set RBW = 100 kHz, VBW = 300 kHz. Band edge emissions must be at least 20 dB down from the highest emission level within the authorized band as measured with a 100 kHz RBW. The attenuation shall be 30 dB instead of 20 dB when RMS conducted output power procedure is used.
4. Enable hopping function of the EUT and then repeat step 2 and 3.
5. Measure and record the results in the test report.

3.6.4 Test Setup



3.6.5 Test Result of Conducted Band Edges

Please refer to Appendix A.

3.6.6 Test Result of Conducted Hopping Mode Band Edges

Please refer to Appendix A.

3.7 Conducted Spurious Emission Measurement

3.7.1 Limit of Spurious Emission Measurement

In any 100 kHz bandwidth outside the intentional radiation frequency band, the radio frequency power shall be at least 20 dB below the highest level of the radiated power. In addition, radiated emissions which fall in the restricted bands must also comply with the radiated emission limits.

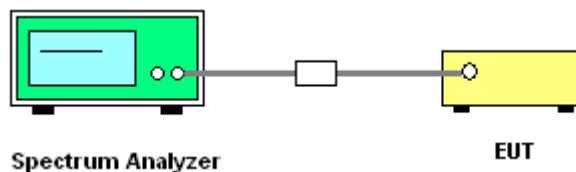
3.7.2 Measuring Instruments

Please refer to the measuring equipment list in this test report.

3.7.3 Test Procedure

1. The testing follows ANSI C63.10 clause 7.8.7.
2. The RF output of EUT is connected to the spectrum analyzer by RF cable and attenuator. The path loss is compensated to the results for each measurement.
3. Set the maximum power setting and enable the EUT to transmit continuously.
4. Set RBW = 100 kHz, VBW = 300 kHz, scan up through 10th harmonic. All harmonics / spurious must be at least 20 dB down from the highest emission level within the authorized band as measured with a 100 kHz RBW.
5. Measure and record the results in the test report.
6. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.

3.7.4 Test Setup



3.7.5 Test Result of Conducted Spurious Emission

Please refer to Appendix A.

3.8 Radiated Band Edges and Spurious Emission Measurement

3.8.1 Limit of Radiated Band Edges and Spurious Emission

In any 100 kHz bandwidth outside the intentional radiator frequency band, all harmonics / spurious must be at least 20 dB below the highest emission level within the authorized band. In addition, radiated emissions which fall in the restricted bands must also comply with the limits as below.

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

3.8.2 Measuring Instruments

Please refer to the measuring equipment list in this test report.

3.8.3 Test Procedures

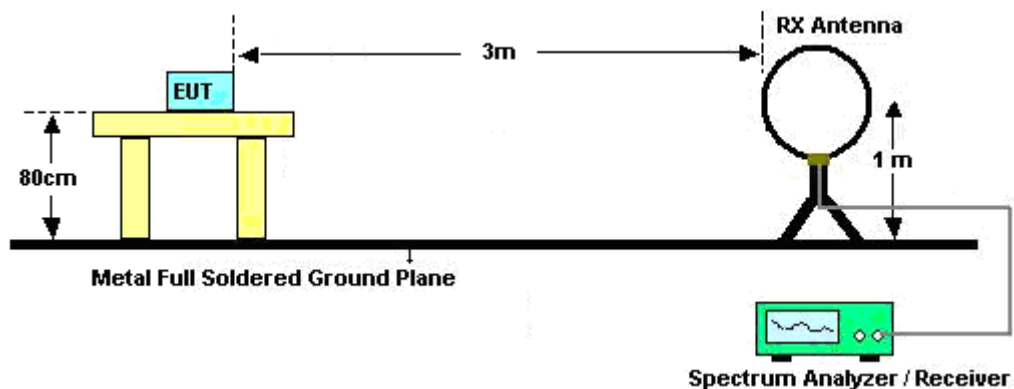
- The EUT is placed on a turntable with 0.8 meter for frequency below 1 GHz and 1.5 meter for frequency above 1 GHz respectively above ground.
- The EUT is set 3 meters away from the receiving antenna, which is mounted on the top of a variable height antenna tower.
- For each suspected emission, the EUT is arranged to its worst case and then tune the Antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level to comply with the guidelines.
- Set the maximum power setting and enable the EUT to transmit continuously.
- Use the following spectrum analyzer settings:
 - Span shall wide enough to fully capture the emission being measured;
 - Set RBW = 100 kHz for $f < 1$ GHz, RBW = 1 MHz for $f > 1$ GHz ; VBW $\geq$ RBW; Sweep = auto; Detector function = peak; Trace = max hold for peak
 - For average measurement: use duty cycle correction factor method per 15.35(c).
 Duty cycle = On time/100 milliseconds
 On time = $N_1 \cdot L_1 + N_2 \cdot L_2 + \dots + N_{n-1} \cdot L_{n-1} + N_n \cdot L_n$
 Where N_1 is number of type 1 pulses, L_1 is length of type 1 pulses, etc.
 Average Emission Level = Peak Emission Level + 20*log (Duty cycle)

6. Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level
7. Radiated testing below 1 GHz is performed by adjusting the antenna tower from 1 m to 4 m and by rotating the turn table from 0 degree to 360 degrees to find the peak maximum hold reading. When there is no suspected emission found and the emission level is with at least 6 dB margin against QP limit line, the position is marked as “-”.
8. Radiated testing above 1 GHz is performed by adjusting the antenna tower from 1 m to 4 m and by rotating the turn table from 0 degree to 360 degrees to find the peak maximum hold reading for scanning all frequencies. When there is no suspected emission found and the harmonic emission level is with at least 6 dB margin against average limit line, the position is marked as “-”.

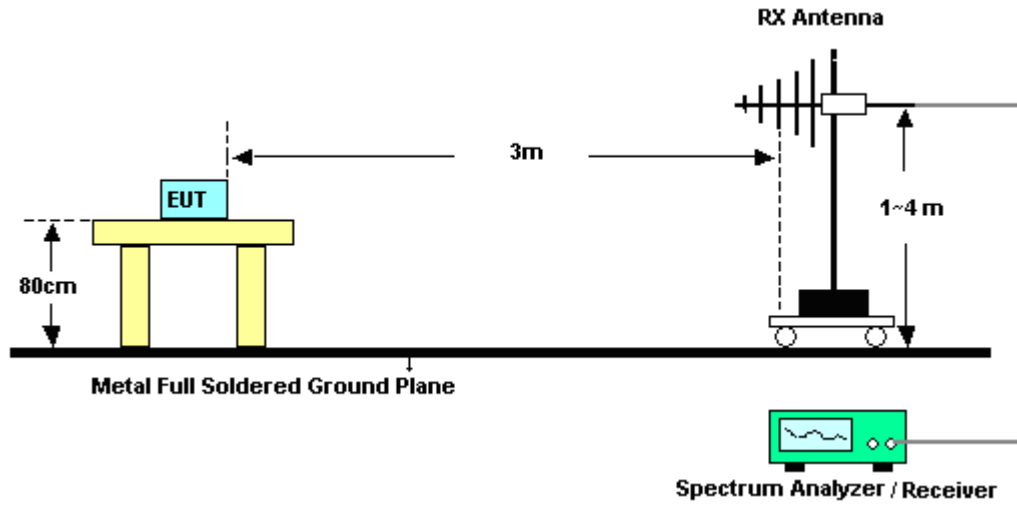
Note: The average levels are calculated from the peak level corrected with duty cycle correction factor (-61.11dB for ANT6/6+3 and -60.72 for ANT3) derived from $20\log(\text{dwell time}/100\text{ms})$. This correction is only for signals that hop with the fundamental signal, such as band-edge and harmonic. Other spurious signals that are independent of the hopping signal would not use this correction.

3.8.4 Test Setup

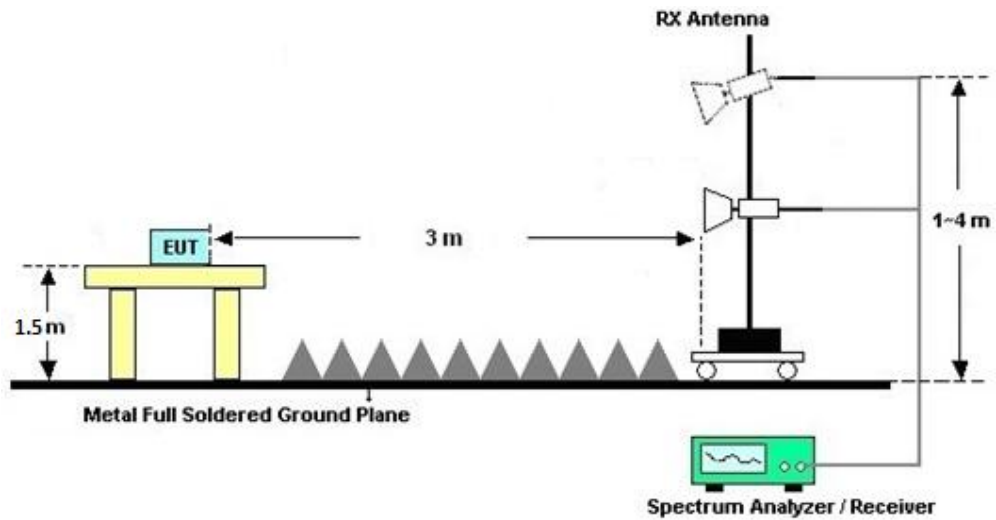
For radiated test below 30MHz



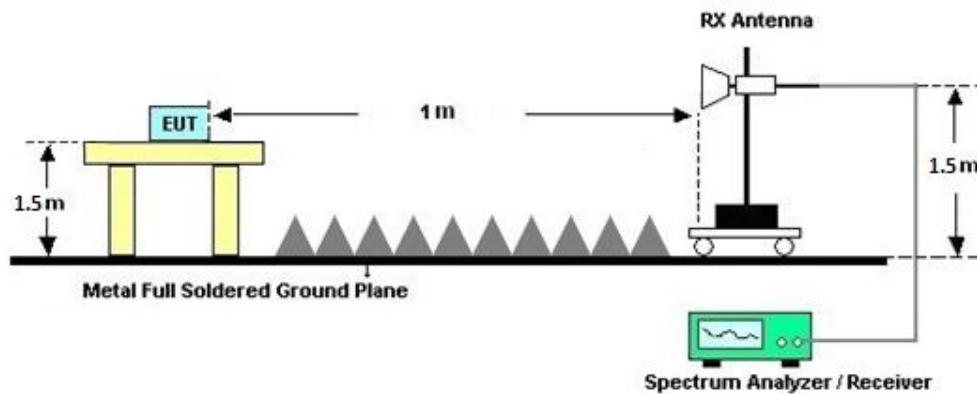
For radiated test from 30MHz to 1GHz



For radiated test from 1GHz to 18GHz



For radiated test above 18GHz



**3.8.5 Test Results of Radiated Spurious Emissions (9 kHz ~ 30 MHz)**

The low frequency, which starts from 9 kHz to 30 MHz, is pre-scanned and the result which is 20 dB lower than the limit line is not reported.

There is adequate comparison measurement of both open-field test site and alternative test site - semi-Anechoic chamber according to 414788 D01 Radiated Test Site v01r01, and the result comes out very similar.

3.8.6 Test Result of Radiated Spurious at Band Edges

Please refer to Appendix C.

3.8.7 Duty Cycle

Please refer to Appendix D.

3.8.8 Test Result of Radiated Spurious Emission (30MHz ~ 10th Harmonic)

Please refer to Appendix C.

3.9 AC Conducted Emission Measurement

3.9.1 Limit of AC Conducted Emission

For equipment that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits in the following table.

Frequency of emission (MHz)	Conducted limit (dB μ V)	
	Quasi-peak	Average
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50

*Decreases with the logarithm of the frequency.

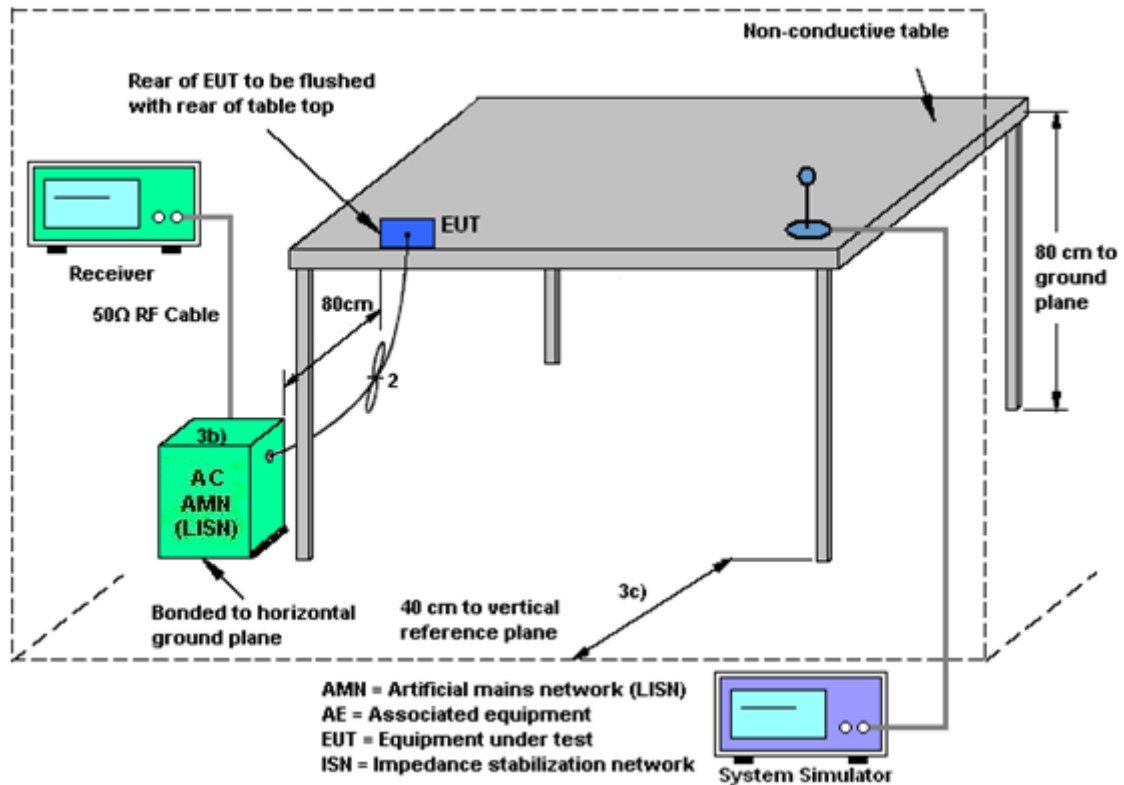
3.9.2 Measuring Instruments

Please refer to the measuring equipment list in this test report.

3.9.3 Test Procedures

1. The EUT is placed 0.4 meter away from the conducting wall of the shielding room, and is kept at least 80 centimeters from any other grounded conducting surface.
2. Connect EUT to the power mains through a line impedance stabilization network (LISN).
3. All the support units are connecting to the other LISN.
4. The LISN provides 50 ohm coupling impedance for the measuring instrument.
5. The FCC states that a 50 ohm, 50 microhenry LISN shall be used.
6. Both Line and Neutral shall be tested in order to find out the maximum conducted emission.
7. The frequency range from 150 kHz to 30 MHz is scanned.
8. Set the test-receiver system to Peak Detect Function and specified bandwidth (IF Bandwidth = 9 kHz) with Maximum Hold Mode. Then measurement is also conducted by Average Detector and Quasi-Peak Detector Function respectively.

3.9.4 Test Setup



3.9.5 Test Result of AC Conducted Emission

Please refer to Appendix B.



3.10 Antenna Requirements

3.10.1 Standard Applicable

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited. This requirement does not apply to carrier current devices or to devices operated under the provisions of § 15.211, 15.213, 15.217, 15.219, 15.221, or § 15.236. Further, this requirement does not apply to intentional radiators that must be professionally installed, such as perimeter protection systems and some field disturbance sensors, or to other intentional radiators which, in accordance with § 15.31(d), must be measured at the installation site. However, the installer shall be responsible for ensuring that the proper antenna is employed so that the limits in this part are not exceeded.

3.10.2 Antenna Anti-Replacement Construction

Antenna permanently attached.



4 List of Measuring Equipment

Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Hygrometer	TECEPEL	DTM-303A	TP201996	N/A	Nov. 04, 2025	Aug. 25, 2026~ Sep. 14, 2026	Nov. 03, 2026	Conducted (TH05-HY)
USB RF Power Sensor	DARE	RPR3006W	17I00015SNO3 7 (NO:167)	10MHz~6GHz	Nov. 14, 2025	Aug. 25, 2026~ Sep. 14, 2026	Nov. 13, 2026	Conducted (TH05-HY)
Signal & Spectrum Analyzer	Rohde & Schwarz	FSV3044	101466	10HZ~44GHZ	Nov. 12, 2025	Aug. 25, 2026~ Sep. 14, 2026	Nov. 11, 2026	Conducted (TH05-HY)
Switch Control Mainframe	EM Electronics	EMSW18SE	SW191204 (BOX8)	N/A	Dec. 29, 2025	Aug. 25, 2026~ Sep. 14, 2026	Dec. 28, 2026	Conducted (TH05-HY)
Software	Sporton	BTWIFI_Final version_24051 3	N/A	Conducted Other Test Item	N/A	Aug. 25, 2026~ Sep. 14, 2026	N/A	Conducted (TH05-HY)
Loop Antenna	Rohde & Schwarz	HFH2-Z2E	101108	9kHz~30MHz	Dec. 11, 2025	Aug. 18, 2026~ Sep. 17, 2026	Dec.10, 2026	Radiation (03CH16-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA9170	1230	18GHz~40GHz	Nov. 05, 2026	Aug. 18, 2026~ Sep. 17, 2026	Nov.04, 2026	Radiation (03CH16-HY)
Spectrum Analyzer	Keysight	N9010B	MY60241055	10Hz~44GHz	Nov. 18, 2025	Aug. 18, 2026~ Sep. 17, 2026	Nov.17, 2026	Radiation (03CH16-HY)
EMI Test Receiver	Keysight	N9038A(MXE)	MY57290111	3Hz~26.5GHz	Nov. 26, 2025	Aug. 18, 2026~ Sep. 17, 2026	Nov.25, 2026	Radiation (03CH16-HY)
Bilog Antenna	TESEQ	CBL 6111D & 00802N1D01N- 06	47020 & 06	30MHz to 1GHz	Oct. 04, 2025	Aug. 18, 2026~ Sep. 17, 2026	Oct. 03, 2026	Radiation (03CH16-HY)
Horn Antenna	SCHWARZBECK	BBHA 9120 D	9120D-1522	1GHz~18GHz	Mar. 26, 2026	Aug. 18, 2026~ Sep. 17, 2026	Mar. 25, 2027	Radiation (03CH16-HY)
Amplifier	SONOMA	310N	371607	9kHz~1GHz	Jun. 29, 2026	Aug. 18, 2026~ Sep. 17, 2026	Jun. 28, 2027	Radiation (03CH16-HY)
Preamplifier	Keysight	83017A	MY53270264	1GHz~26.5GHz	Sep. 12, 2025	Aug. 18, 2026~ Sep. 17, 2026	Sep.11, 2026	Radiation (03CH16-HY)
Preamplifier	Keysight	83017A	MY53270264	1GHz~26.5GHz	Sep. 11, 2026	Aug. 18, 2026~ Sep. 17, 2026	Sep.10, 2027	Radiation (03CH16-HY)
Preamplifier	EMEC	EM1G18G	060812	1GHz~18GHz	Dec. 22, 2025	Aug. 18, 2026~ Sep. 17, 2026	Dec. 21,2026	Radiation (03CH16-HY)
Preamplifier	EMEC	EM18G40G	060801	18GHz~40GHz	Jun 08, 2026	Aug. 18, 2026~ Sep. 17, 2026	Jun 07, 2027	Radiation (03CH16-HY)
Filter	Wainwright	WLK4-1000-15 30-8000-40SS	SN17	1.53GHz Low Pass Filter	Jan. 13, 2026	Aug. 18, 2026~ Sep. 17, 2026	Jan. 12, 2027	Radiation (03CH16-HY)
Filter	Wainwright	WHKX12-2700- 3000-18000-60 ST	SN3	3GHz High Pass Filter	Jun. 25, 2026	Aug. 18, 2026~ Sep. 17, 2026	Jun. 24, 2027	Radiation (03CH16-HY)
Filter	Wainwright	WHKX8-5872.5 -6750-18000-4 OST	SN27	6.75GHz High Pass Filter	Dec. 22, 2025	Aug. 18, 2026~ Sep. 17, 2026	Dec. 21,2026	Radiation (03CH16-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	801606/2	9KHz ~ 40GHz	May 13, 2026	Aug. 18, 2026~ Sep. 17, 2026	May 12, 2027	Radiation (03CH16-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102/SUCOFLE X 104	EC-A5-300-575 7,805935/4,802 434/4	30MHz~18GHz	Aug. 05, 2026	Aug. 18, 2026~ Sep. 17, 2026	Aug.04 ,2027	Radiation (03CH16-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	804011/2,8040 12/2	18-40GHz	Dec. 18, 2025	Aug. 18, 2026~ Sep. 17, 2026	Dec.17 ,2026	Radiation (03CH16-HY)
Software	Audix	E3 230621 V9	RK-002393	N/A	N/A	Aug. 18, 2026~ Sep. 17, 2026	N/A	Radiation (03CH16-HY)
Controller	ChainTek	3000-1	N/A	Control Turn table & Ant Mast	N/A	Aug. 18, 2026~ Sep. 17, 2026	N/A	Radiation (03CH16-HY)
Antenna Mast	ChainTek	MBS-520-1	N/A	1m~4m	N/A	Aug. 18, 2026~ Sep. 17, 2026	N/A	Radiation (03CH16-HY)
Turn Table	ChainTek	T-200-S-1	N/A	0~360 Degree	N/A	Aug. 18, 2026~ Sep. 17, 2026	N/A	Radiation (03CH16-HY)



Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
AC Power Source	ALL	APC-130	N/A	N/A	N/A	Aug. 21, 2026	N/A	Conduction (CO05-HY)
EMI Test Receiver	Rohde & Schwarz	ESR3	102388	N/A	Dec. 16, 2025	Aug. 21, 2026	Dec. 15, 2026	Conduction (CO05-HY)
Hygrometer	TECPEL	DTM-303A	TP210031	N/A	Jun. 15, 2026	Aug. 21, 2026	Jun. 14, 2027	Conduction (CO05-HY)
Two-Line V-Network	Rohde & Schwarz	ENV 216 +EMCI-EXP-U S-US S	100080+N-021	N/A	Apr. 22, 2026	Aug. 21, 2026	Apr. 21, 2027	Conduction (CO05-HY)
Software	Rohde & Schwarz	EMC32	N/A	N/A	N/A	Aug. 21, 2026	N/A	Conduction (CO05-HY)
Pulse Limiter	SCHWARZBECK	VTSD 9561-F N	00691	N/A	Aug. 07, 2026	Aug. 21, 2026	Aug. 06, 2027	Conduction (CO05-HY)
LISN Cable	MVE	RG-400	MQT24082501	N/A	Oct. 14, 2025	Aug. 21, 2026	Oct. 13, 2026	Conduction (CO05-HY)



5 Measurement Uncertainty

Uncertainty of Conducted Emission Measurement (150 kHz ~ 30 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	3.70 dB
--	---------

Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	6.50 dB
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Uncertainty of Radiated Emission Measurement (1000 MHz ~ 6000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	4.60 dB
--	---------

Uncertainty of Radiated Emission Measurement (6000 MHz ~ 18000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	5.60 dB
--	---------

Uncertainty of Radiated Emission Measurement (18000 MHz ~ 40000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	5.20 dB
--	---------

Appendix A1-1. Test Result of Conducted Test Items (for ANT6)

Test Engineer:	Hank Hsu	Temperature:	21~25	°C
Test Date:	2026/8/25~9/14	Relative Humidity:	51~54	%

TEST RESULTS DATA**20dB and 99% Occupied Bandwidth and Hopping Channel Separation**

Mod.	Data Rate	N _{TX}	CH.	Freq. (MHz)	20dB BW (MHz)	99% Bandwidth (MHz)	Hopping Channel Separation Measurement (MHz)	Hopping Channel Separation Measurement Limit (MHz)	Pass/Fail
ASK	1Mbps	1	2	2404	0.101	0.221	1.003	0.0672	Pass
	1Mbps	1	38	2440	0.100	0.227	0.999	0.0668	Pass
	1Mbps	1	76	2478	0.101	0.220	1.007	0.0671	Pass

TEST RESULTS DATA**Dwell Time**

Mod.	Hopping Channel Number Rate	Hops Over Occupancy Time (hops)	Package Transfer Time (msec)	Dwell Time (sec)	Limits (sec)	Pass/Fail
ASK	72	673	0.046	0.031	0.4	Pass

TEST RESULTS DATA**Peak Power Table**

DH	CH.	N _{TX}	Peak Power (dBm)	Power Limit (dBm)	Test Result	Setting
ASK 1Mbps	2	1	15.38	20.97	Pass	10
	38	1	16.11	20.97	Pass	
	76	1	14.95	20.97	Pass	

TEST RESULTS DATA**Average Power Table
(Reporting Only)**

DH	CH.	N _{TX}	Average Power (dBm)	Duty Factor (dB)	Setting
ASK 1Mbps	2	1	14.70	11.33	10
	38	1	15.48	11.33	
	76	1	14.30	11.33	

TEST RESULTS DATA**Number of Hopping Frequency**

Number of Hopping (Channel)	Adaptive Frequency Hopping (Channel)	Limits (Channel)	Pass/Fail
72	15	> 15	Pass

Appendix A1-2. Test Result of Conducted Test Items (for ANT3)

Test Engineer:	Hank Hsu	Temperature:	21~25	°C
Test Date:	2026/8/25~9/14	Relative Humidity:	51~54	%

TEST RESULTS DATA**20dB and 99% Occupied Bandwidth and Hopping Channel Separation**

Mod.	Data Rate	N _{TX}	CH.	Freq. (MHz)	20dB BW (MHz)	99% Bandwidth (MHz)	Hopping Channel Separation Measurement (MHz)	Hopping Channel Separation Measurement Limit (MHz)	Pass/Fail
ASK	1Mbps	1	2	2404	0.114	0.220	1.003	0.0760	Pass
	1Mbps	1	38	2440	0.114	0.226	1.003	0.0763	Pass
	1Mbps	1	76	2478	0.114	0.215	1.003	0.0760	Pass

TEST RESULTS DATA**Dwell Time**

Mod.	Hopping Channel Number Rate	Hops Over Occupancy Time (hops)	Package Transfer Time (msec)	Dwell Time (sec)	Limits (sec)	Pass/Fail
ASK	72	694	0.046	0.032	0.4	Pass

TEST RESULTS DATA**Peak Power Table**

DH	CH.	N _{TX}	Peak Power (dBm)	Power Limit (dBm)	Test Result	Setting
ASK 1Mbps	2	1	14.65	20.97	Pass	10
	38	1	14.75	20.97	Pass	
	76	1	14.57	20.97	Pass	

TEST RESULTS DATA**Average Power Table
(Reporting Only)**

DH	CH.	N _{TX}	Average Power (dBm)	Duty Factor (dB)	Setting
ASK 1Mbps	2	1	14.04	11.33	10
	38	1	14.17	11.33	
	76	1	13.91	11.33	

TEST RESULTS DATA**Number of Hopping Frequency**

Number of Hopping (Channel)	Adaptive Frequency Hopping (Channel)	Limits (Channel)	Pass/Fail
72	15	> 15	Pass

Appendix A1-3. Test Result of Conducted Test Items (for ANT6+3)

Test Engineer:	Hank Hsu	Temperature:	21~25	°C
Test Date:	2026/8/25~9/14	Relative Humidity:	51~54	%

TEST RESULTS DATA**20dB and 99% Occupied Bandwidth and Hopping Channel Separation**

Mod.	Data Rate	NTX	CH.	Freq. (MHz)	20db BW (MHz)	99% Bandwidth (MHz)	Hopping Channel Separation Measurement (MHz)	Hopping Channel Separation Measurement Limit (MHz)	Pass/Fail
ASK ANT6+3(6)	1Mbps	1	02	2404	0.101	0.210	0.999	0.0671	Pass
ASK ANT6+3(6)	1Mbps	1	38	2440	0.101	0.212	1.007	0.0675	Pass
ASK ANT6+3(6)	1Mbps	1	76	2478	0.100	0.213	0.999	0.0667	Pass
ASK ANT6+3(3)	1Mbps	1	02	2404	0.101	0.216	0.999	0.0671	Pass
ASK ANT6+3(3)	1Mbps	1	38	2440	0.114	0.225	1.007	0.0763	Pass
ASK ANT6+3(3)	1Mbps	1	76	2478	0.114	0.211	1.003	0.0761	Pass

TEST RESULTS DATA**Dwell Time**

Mod.	Hopping Channel Number Rate	Hops Over Occupancy Time (hops)	Package Transfer Time (msec)	Dwell Time (sec)	Limits (sec)	Pass/Fail
ASK	72	720.000	0.05	0.04	0.4	Pass

TEST RESULTS DATA**Peak Power Table**

DH	CH.	NTX	Peak Power (dBm)	Power Limit (dBm)	Test Result	Setting
ASK 1M_ANT6+3(6)	02	1	11.70	20.97	Pass	10.0
	38	1	12.79	20.97	Pass	
	76	1	11.56	20.97	Pass	
ASK 1M_ANT6+3(3)	02	1	10.47	20.97	Pass	10.0
	38	1	11.30	20.97	Pass	
	76	1	10.52	20.97	Pass	
ASK 1M_ANT6+3	02	1	14.14	20.97	Pass	10.0
	38	1	15.12	20.97	Pass	
	76	1	14.08	20.97	Pass	

TEST RESULTS DATA**Average Power Table
(Reporting Only)**

DH	CH.	NTX	Average Power (dBm)	Duty Factor (dB)	Setting
ASK 1M_ANT6+3(6)	02	1	11.12	11.06	10.00
	38	1	12.01	11.06	
	76	1	10.86	11.06	
ASK 1M_ANT6+3(3)	02	1	9.83	11.33	10.00
	38	1	10.63	11.33	
	76	1	9.85	11.33	
ASK 1M_ANT6+3	02	1	13.53	-	10.00
	38	1	14.38	-	
	76	1	13.39	-	

TEST RESULTS DATA**Number of Hopping Frequency**

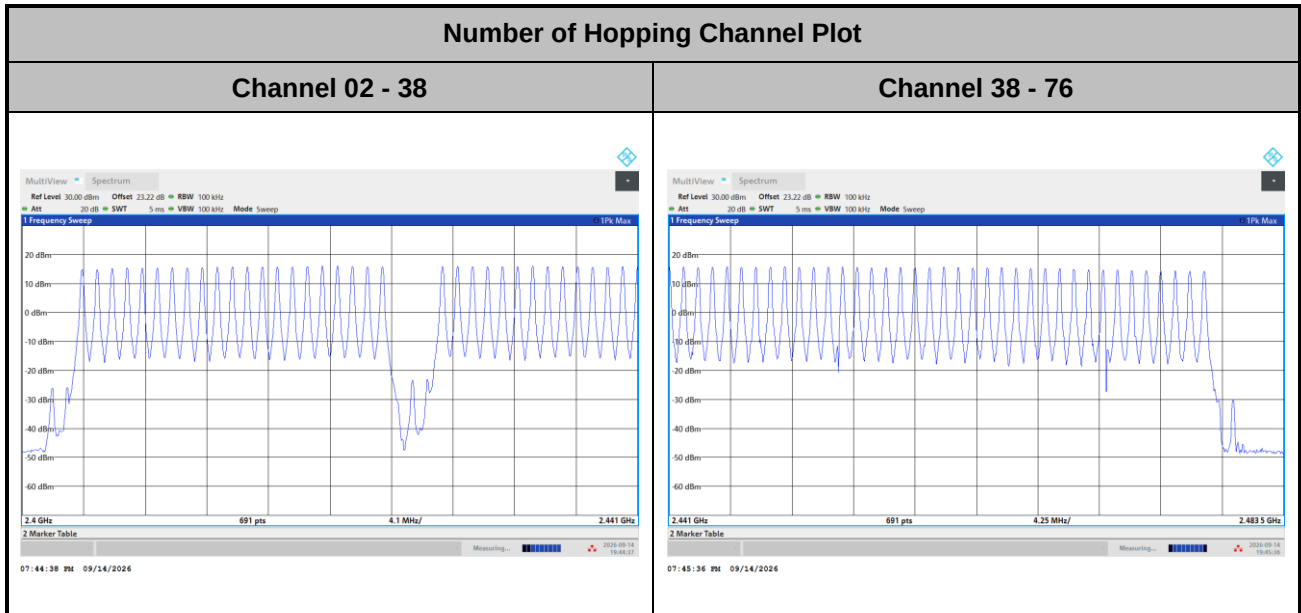
Number of Hopping (Channel)	Adaptive Frequency Hopping (Channel)	Limits (Channel)	Pass/Fail
72	20	> 15	Pass



Number of TX = 1, Ant. 6 (Measured)

Number of Hopping Frequency

<1Mbps>

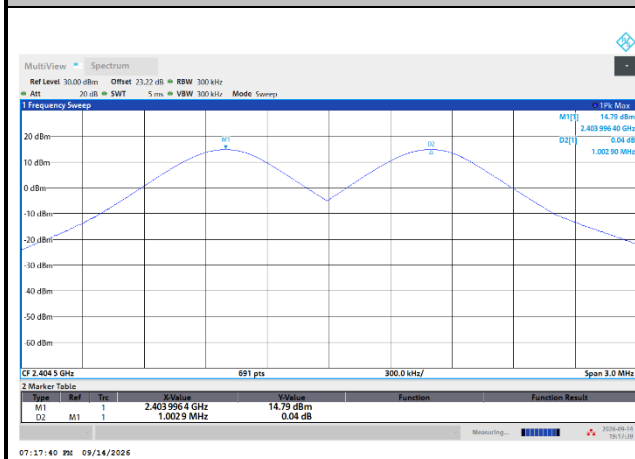




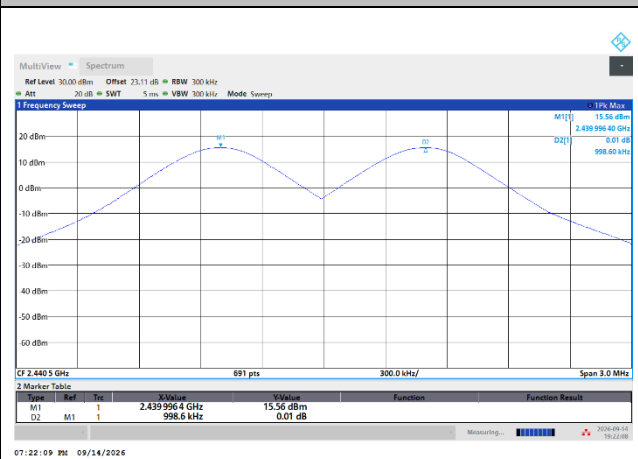
Hopping Channel Separation

<1Mbps>

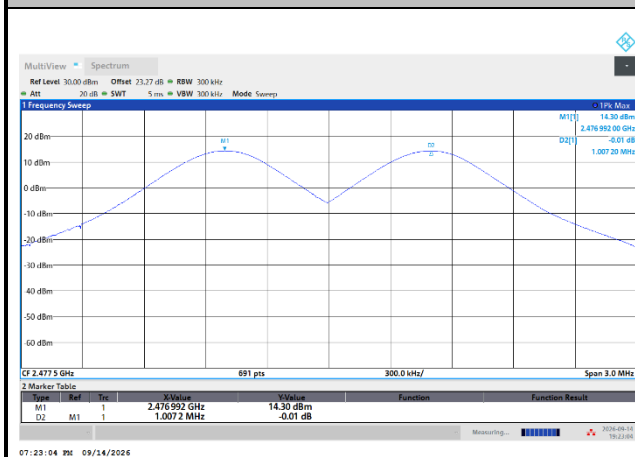
Channel Separation Plot on Channel 02 - 03



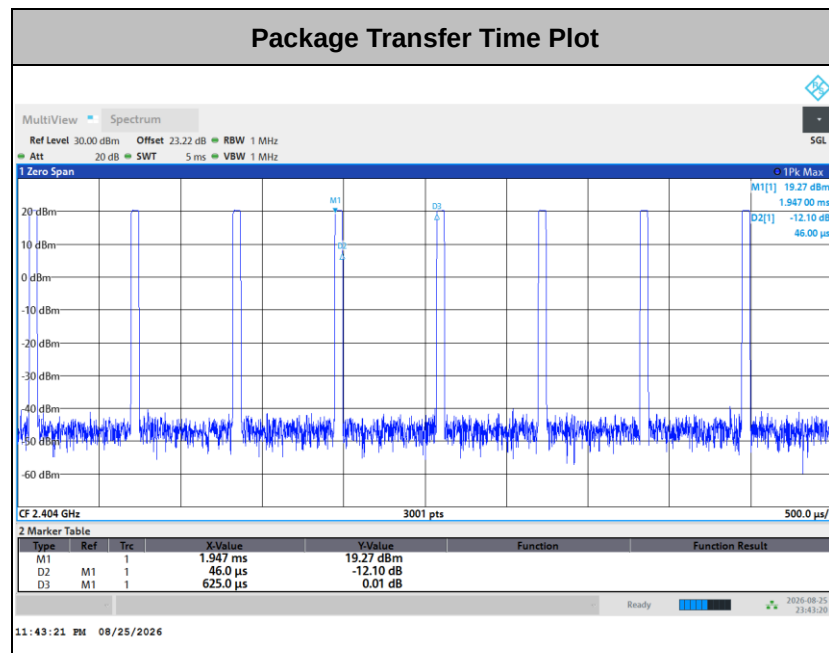
Channel Separation Plot on Channel 38 - 39



Channel Separation Plot on Channel 75 - 76



Dwell Time



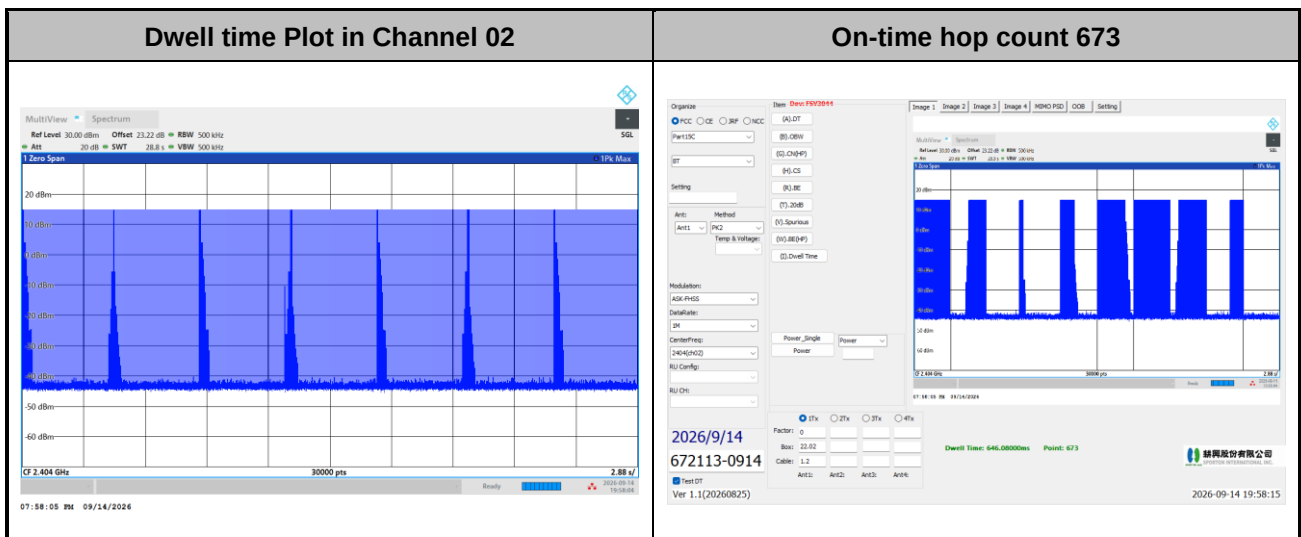
Remark:

1. Dwell Time(s) = Hops Over Occupancy Time (hops) x Package Transfer Time

$$= 673 \times 0.046 \text{ ms} = 0.031 \text{ sec}$$

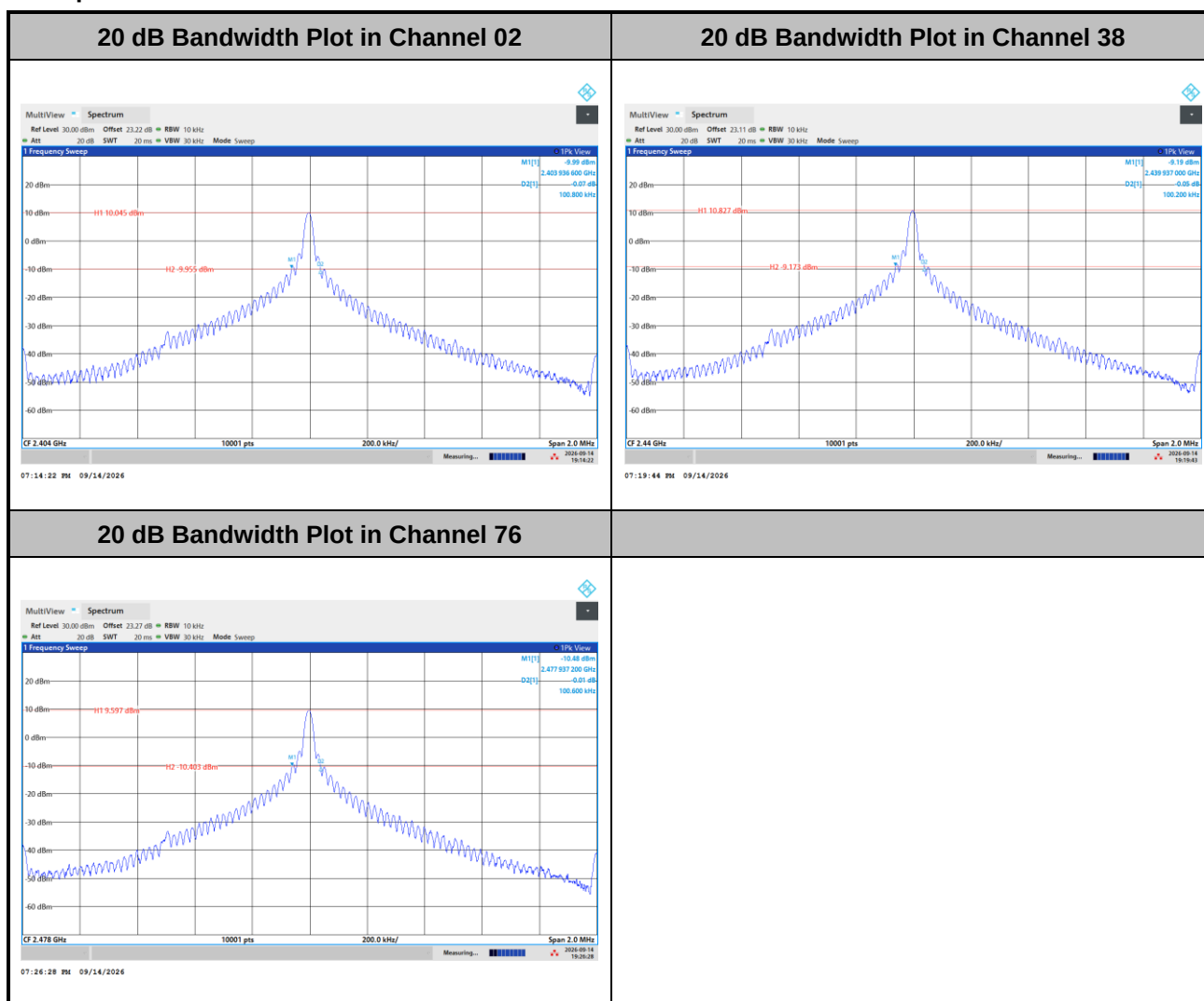
2. The observation Occupancy time is hopping channel 72 channels x 400ms = 28.8sec using sweep point 30,000. This shows that 1ms per on-time contains 1 hop.

The total hops is finally counted via computer analysis.





<1Mbps>

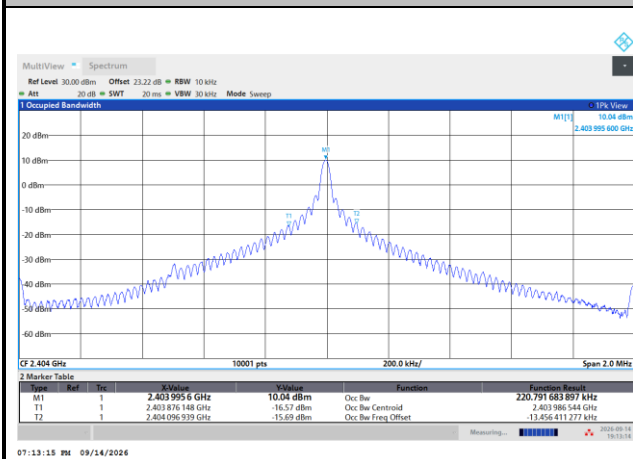




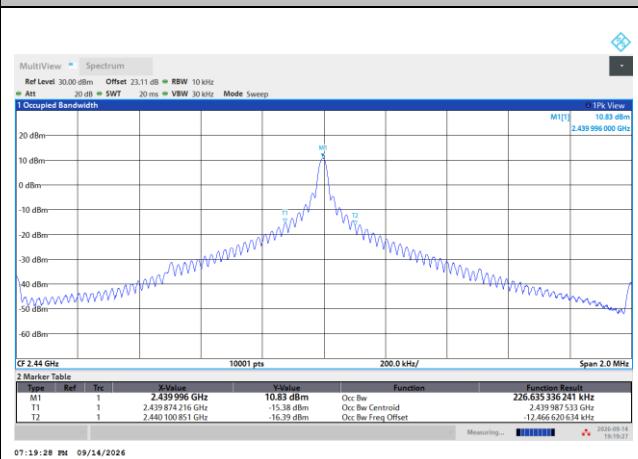
99% Occupied Bandwidth

<1Mbps>

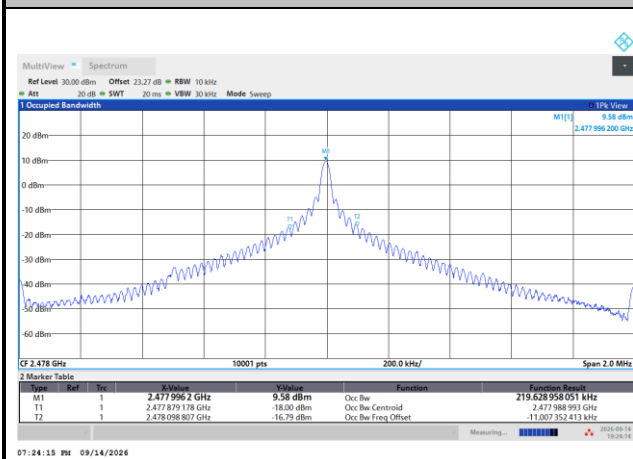
99% Occupied Bandwidth on Channel 02



99% Occupied Bandwidth on Channel 38



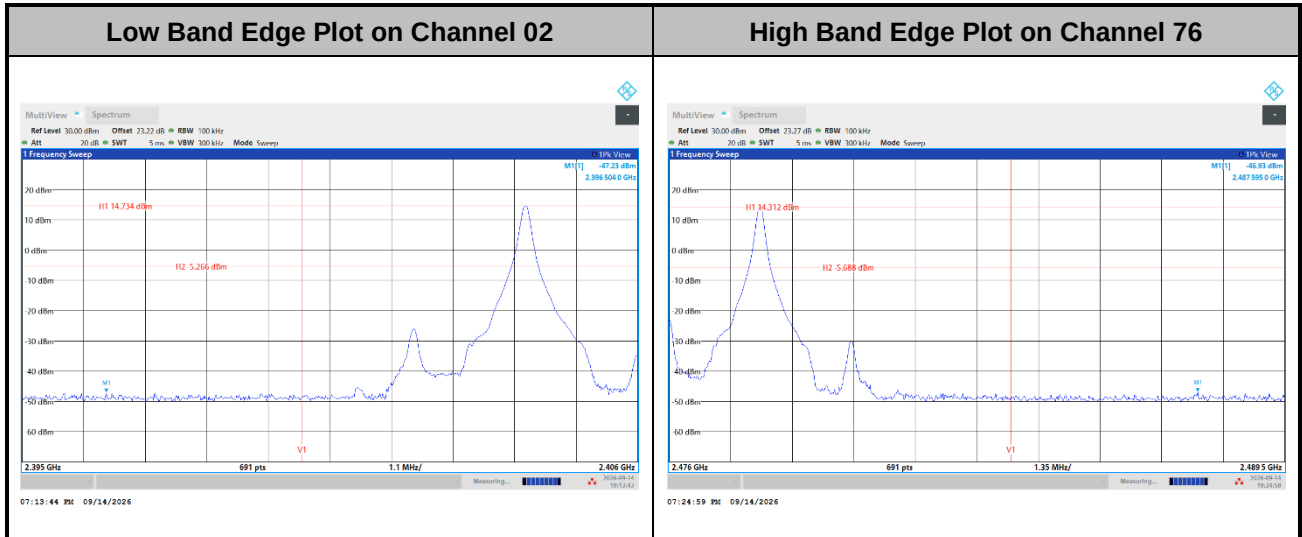
99% Occupied Bandwidth on Channel 76





Band Edges

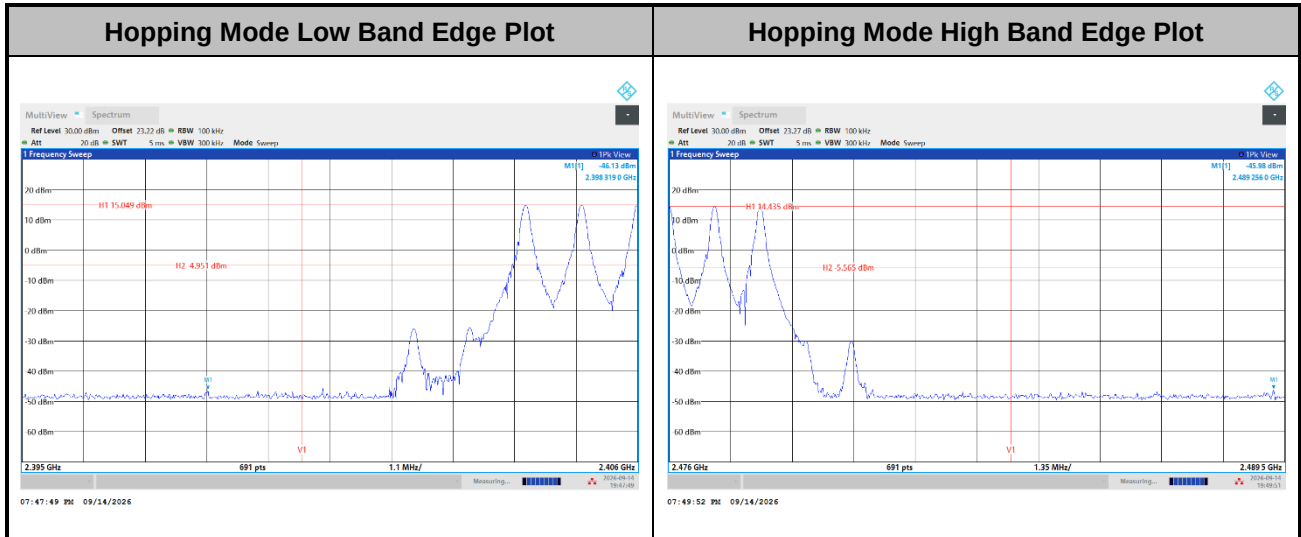
<1Mbps>





Hopping Mode Band Edges

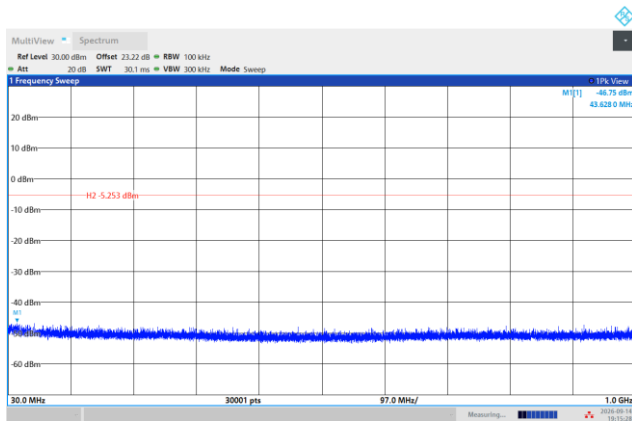
<1Mbps>



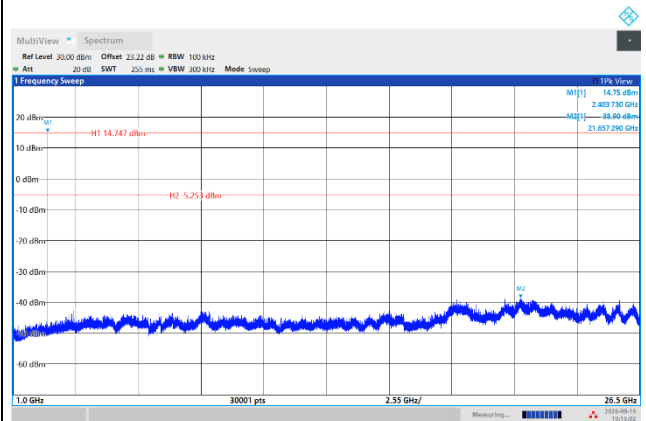
Conducted Spurious Emission

<1Mbps>

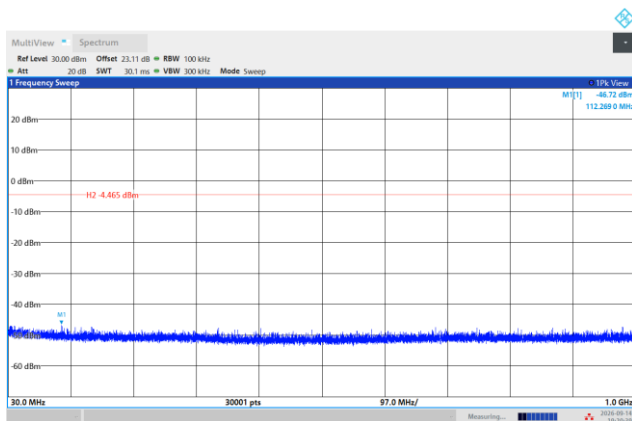
CSE Plot on Low Ch between 30MHz ~ 1 GHz



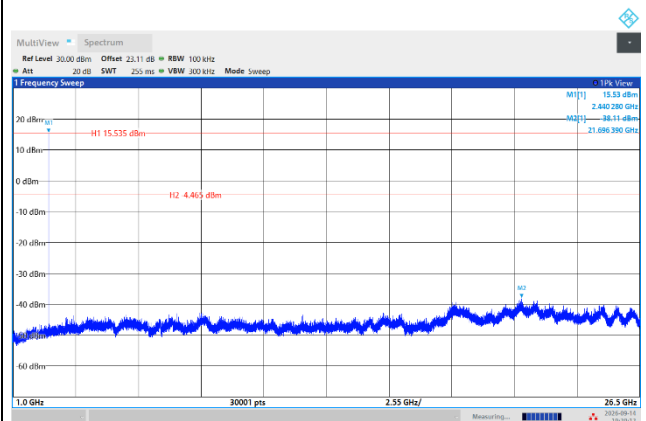
CSE Plot on Low Ch between 1GHz ~ 26.5GHz



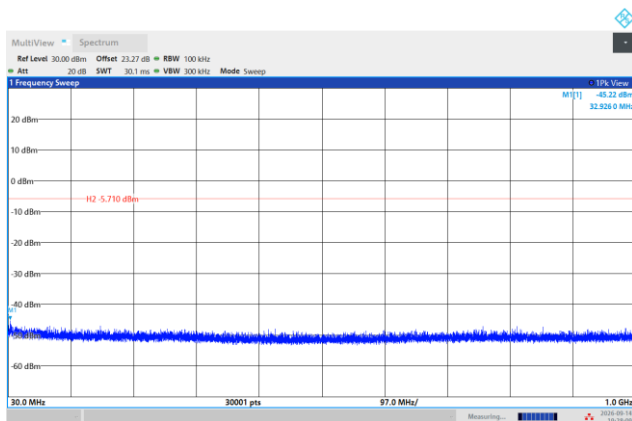
CSE Plot on Mid. Ch between 30MHz ~ 1 GHz



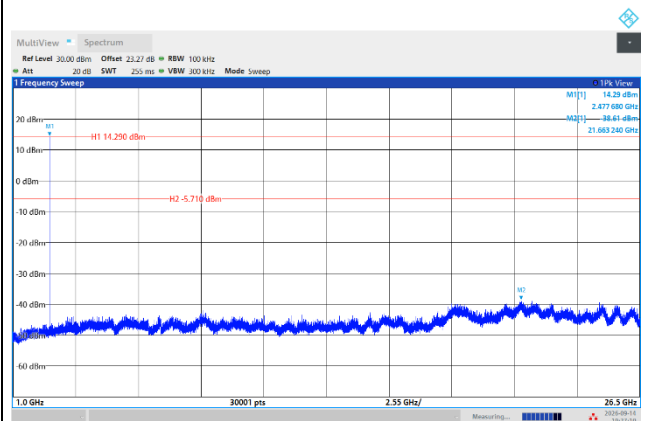
CSE Plot on Mid. Ch between 1GHz ~ 26.5GHz



CSE Plot on High Ch between 30MHz ~ 1 GHz



CSE Plot on High Ch between 1GHz ~ 26.5GHz

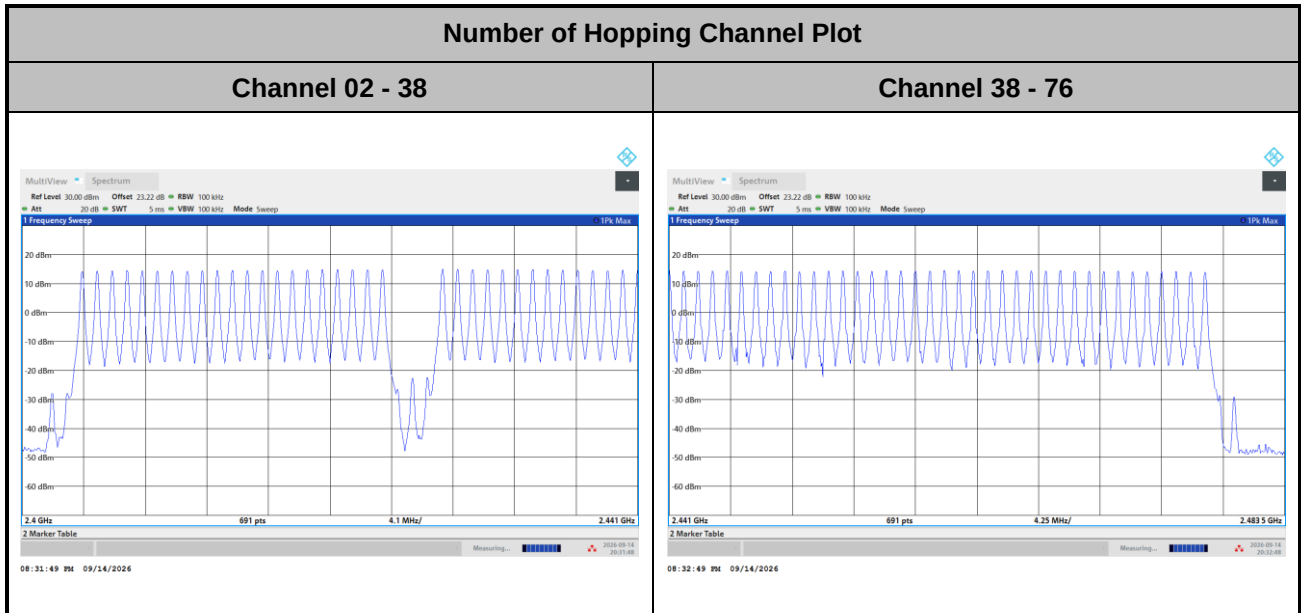




Number of TX = 1, Ant. 3 (Measured)

Number of Hopping Frequency

<1Mbps>

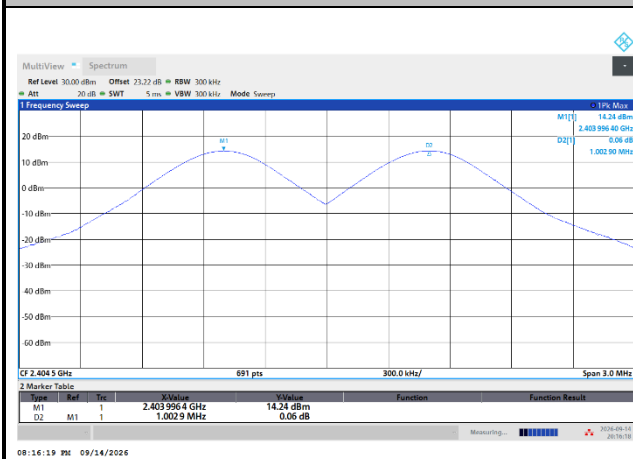




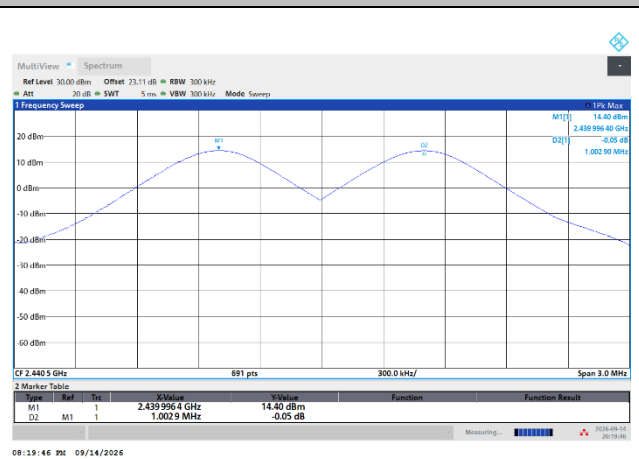
Hopping Channel Separation

<1Mbps>

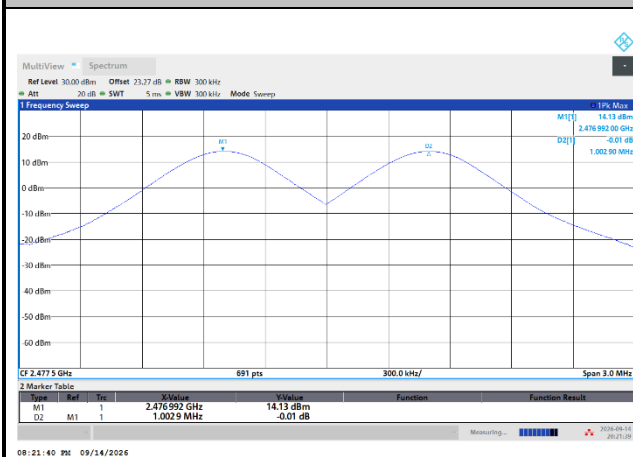
Channel Separation Plot on Channel 02 - 03



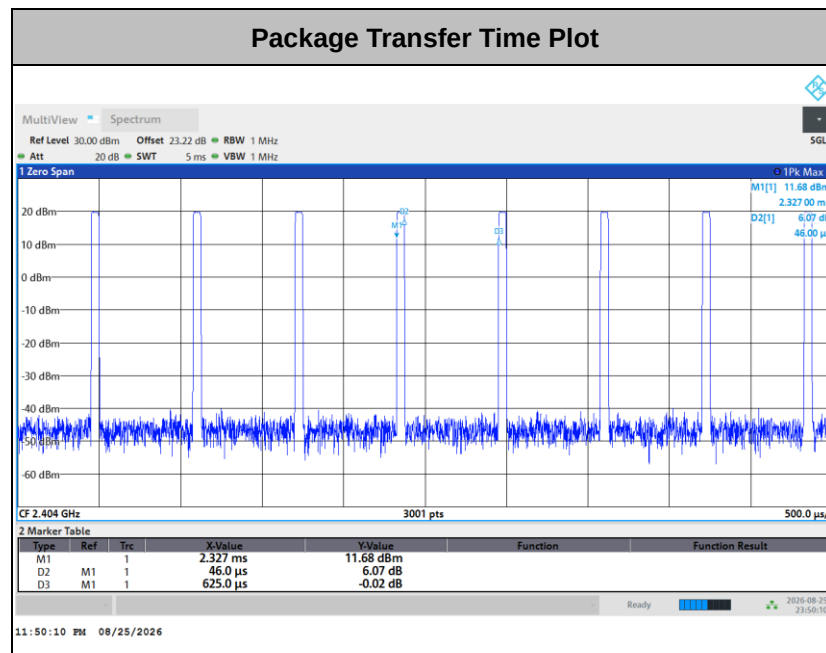
Channel Separation Plot on Channel 38 - 39



Channel Separation Plot on Channel 75 - 76



Dwell Time



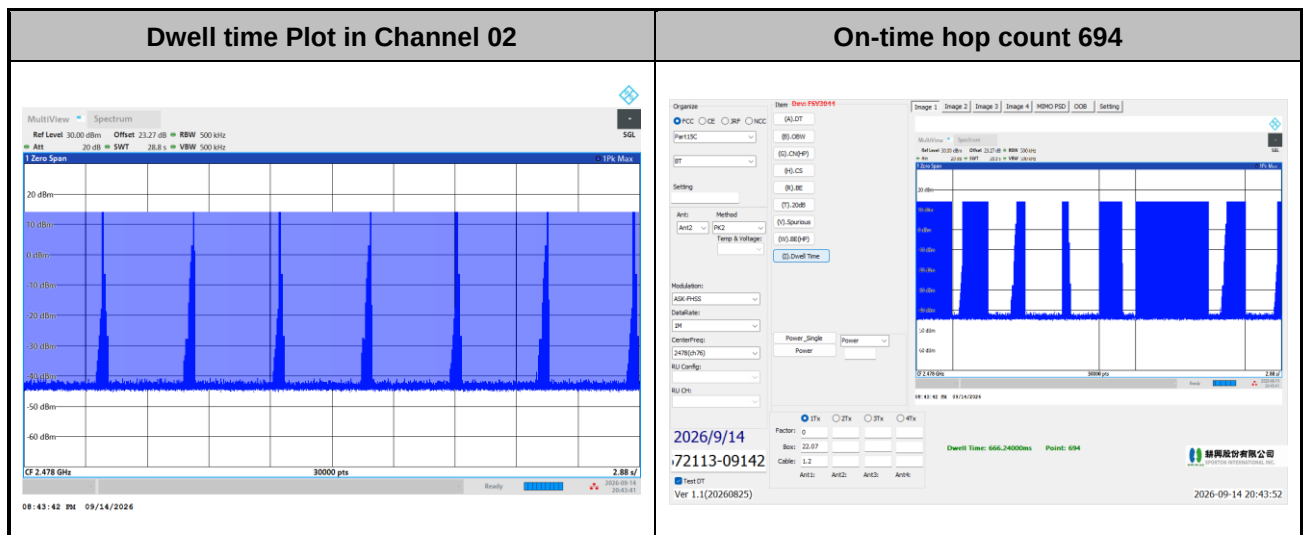
Remark:

1. Dwell Time(s) = Hops Over Occupancy Time (hops) x Package Transfer Time

$$= 694 \times 0.046 \text{ ms} = 0.031 \text{ sec}$$

2. The observation Occupancy time is hopping channel 72 channels x 400ms = 28.8sec using sweep point 30,000. This shows that 1ms per on-time contains 1 hop.

The total hops is finally counted via computer analysis.

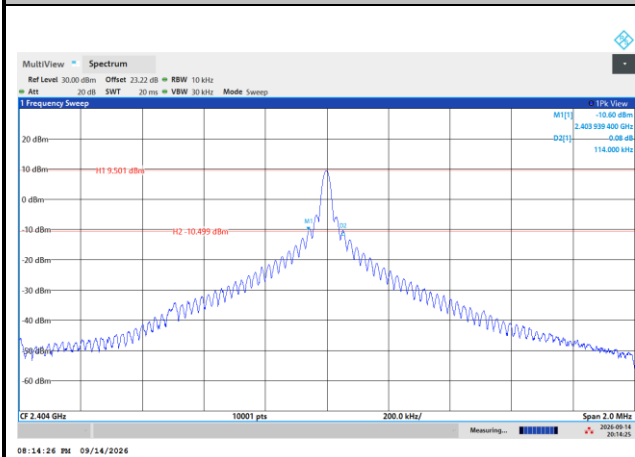




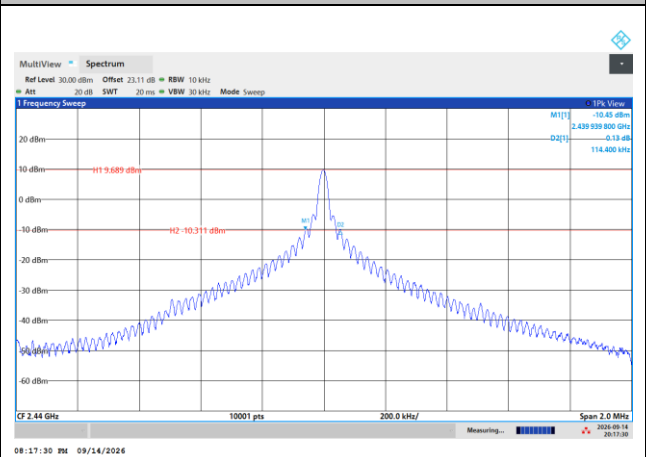
20dB Bandwidth

<1Mbps>

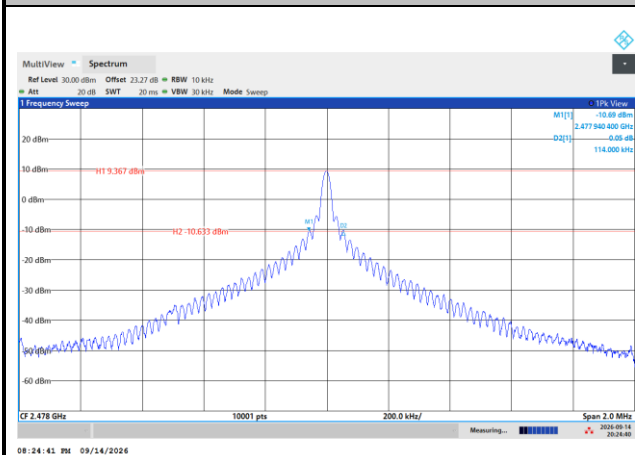
20 dB Bandwidth Plot in Channel 02



20 dB Bandwidth Plot in Channel 38



20 dB Bandwidth Plot in Channel 76

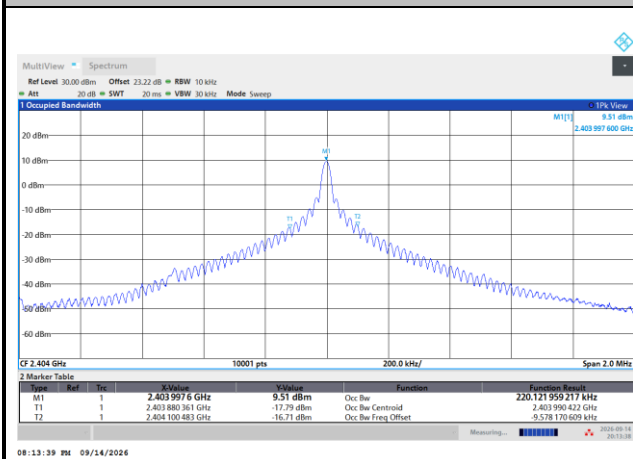




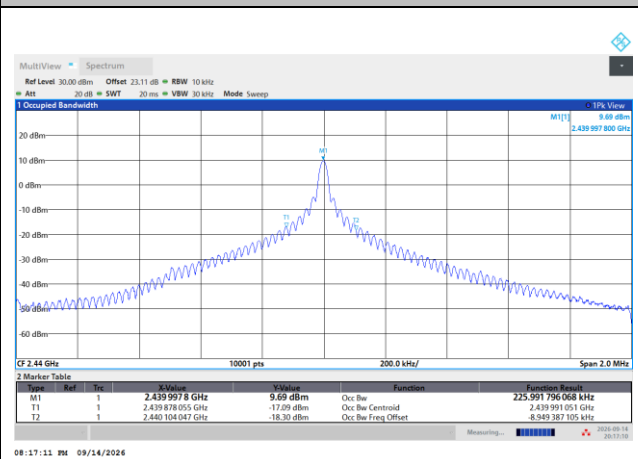
99% Occupied Bandwidth

<1Mbps>

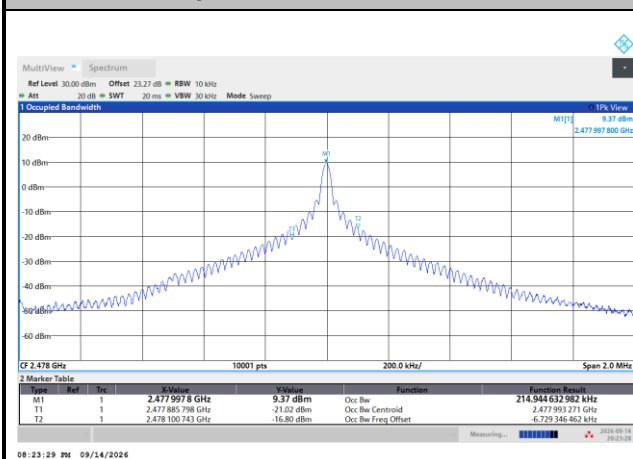
99% Occupied Bandwidth on Channel 02



99% Occupied Bandwidth on Channel 38



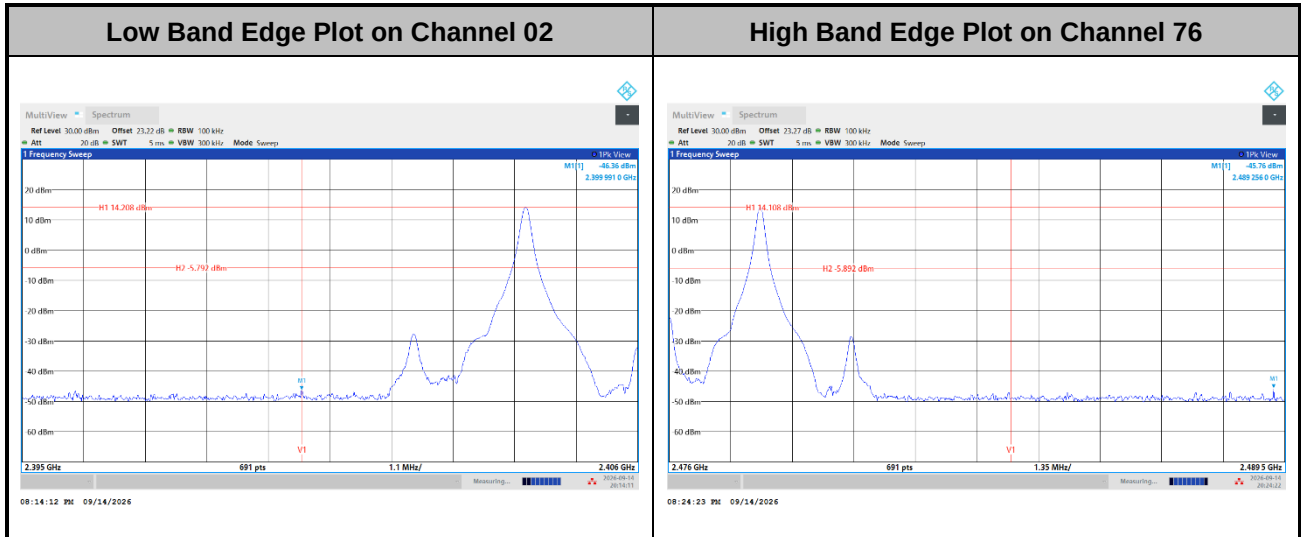
99% Occupied Bandwidth on Channel 76





Band Edges

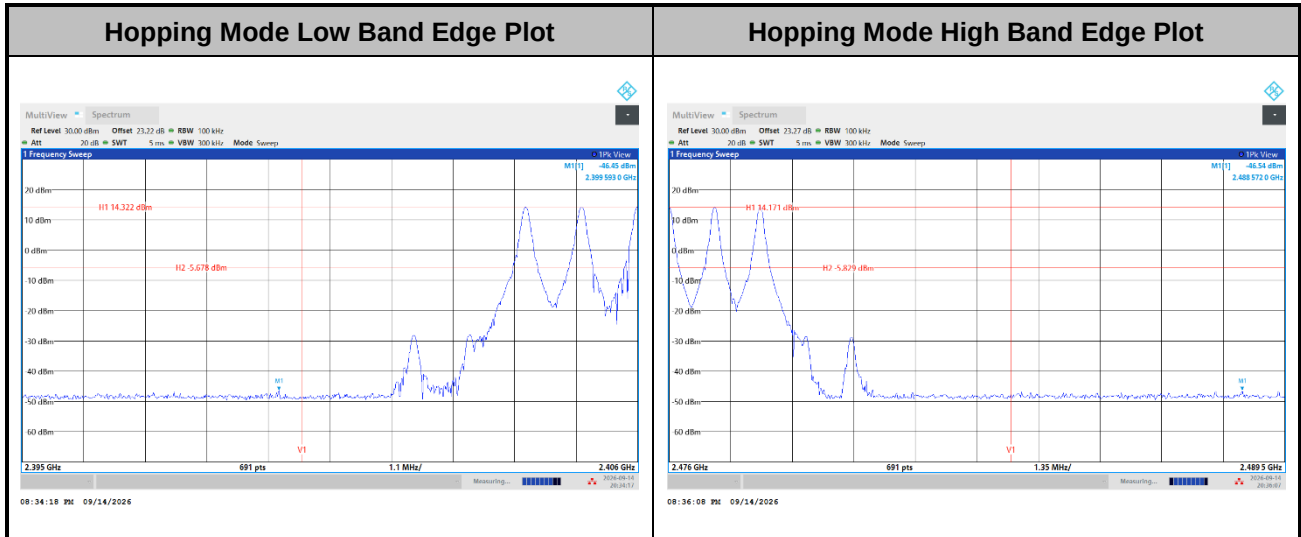
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Hopping Mode Band Edges

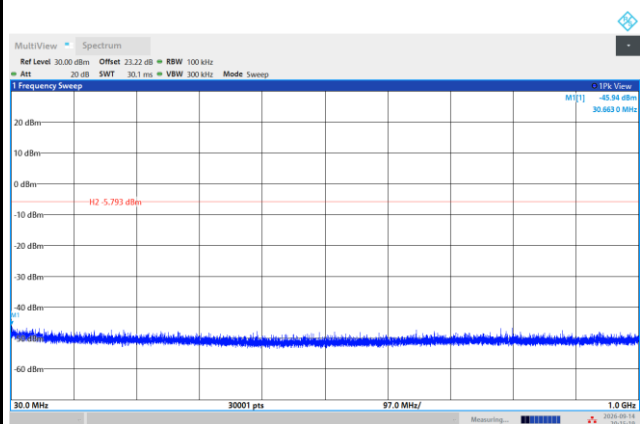
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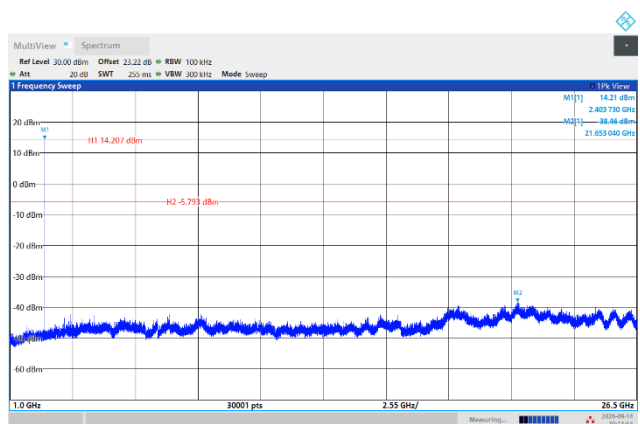
Conducted Spurious Emission

<1Mbps>

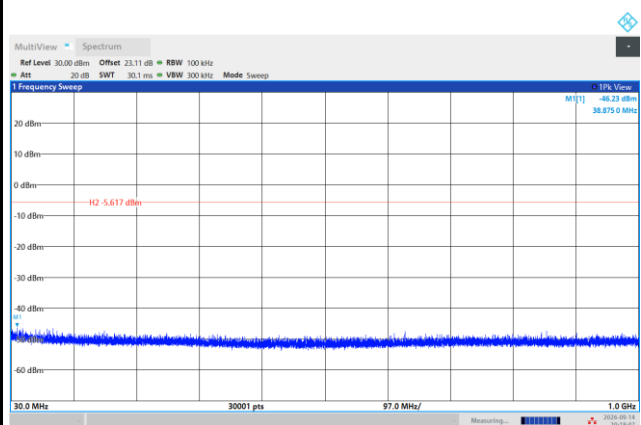
CSE Plot on Low Ch between 30MHz ~ 1 GHz



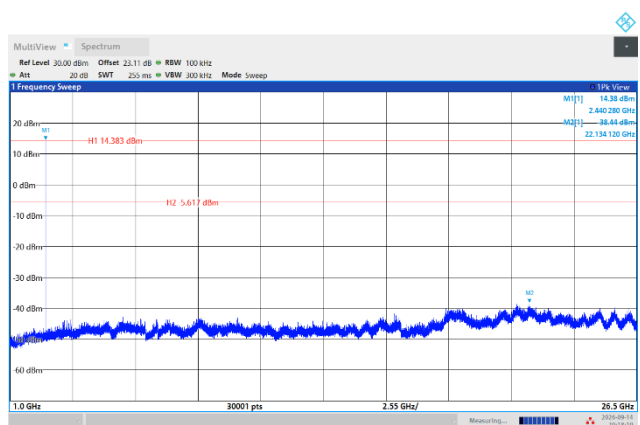
CSE Plot on Low Ch between 1GHz ~ 26.5GHz



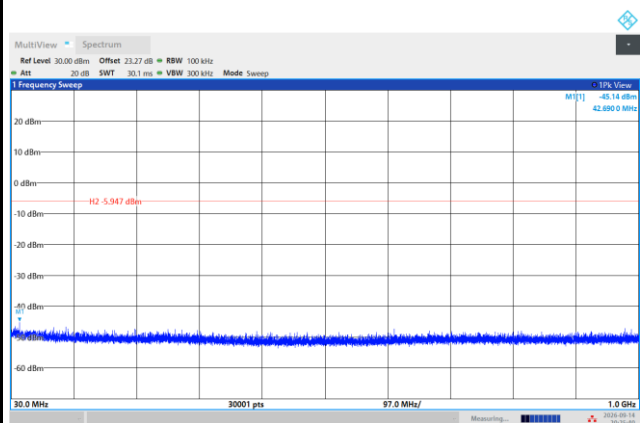
CSE Plot on Mid. Ch between 30MHz ~ 1 GHz



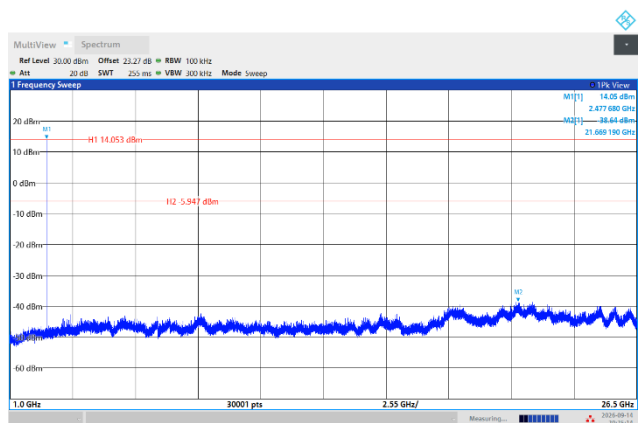
CSE Plot on Mid. Ch between 1GHz ~ 26.5GHz



CSE Plot on High Ch between 30MHz ~ 1 GHz



CSE Plot on High Ch between 1GHz ~ 26.5GHz

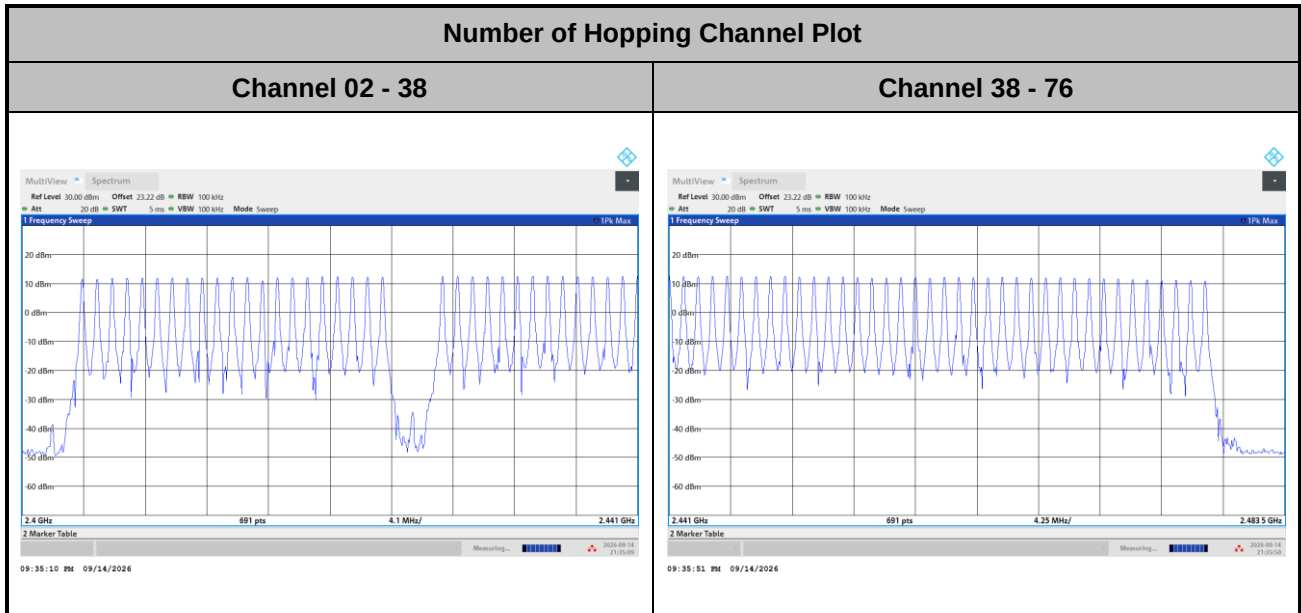




Number of TX = 2, Ant. 6 (Measured)

Number of Hopping Frequency

<1Mbps>

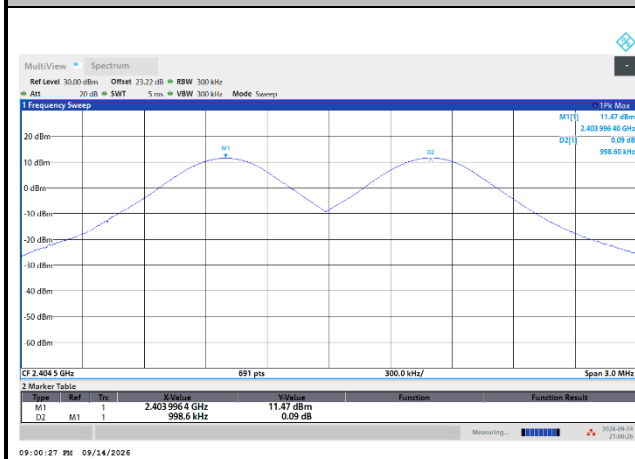




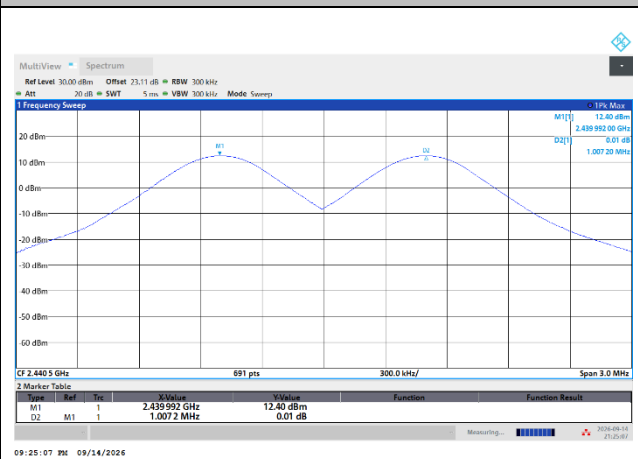
Hopping Channel Separation

<1Mbps>

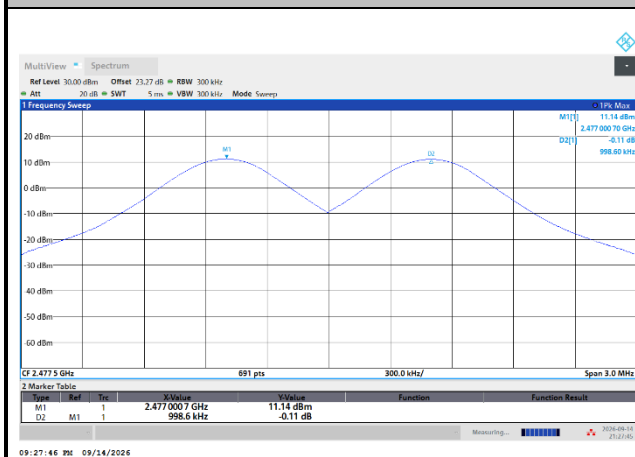
Channel Separation Plot on Channel 02 - 03



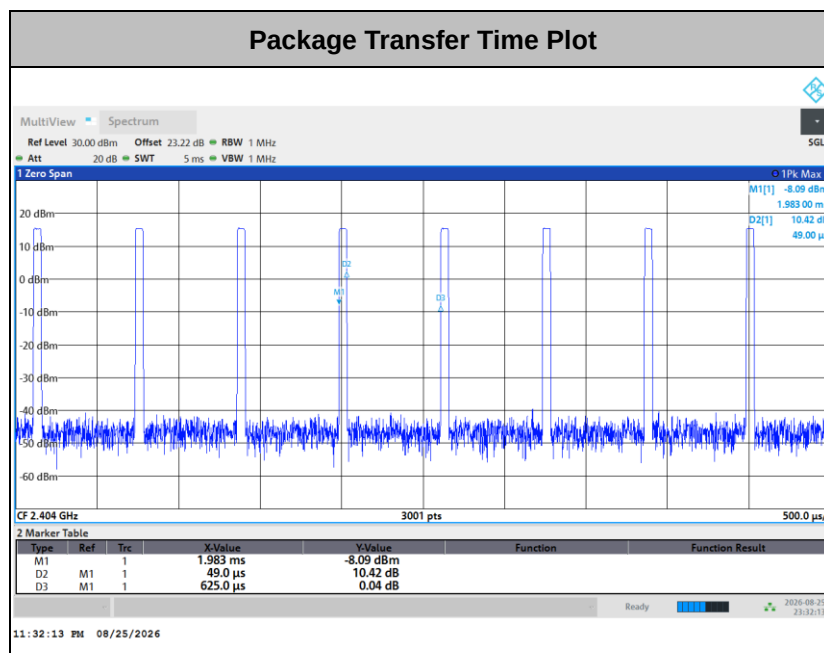
Channel Separation Plot on Channel 38 - 39



Channel Separation Plot on Channel 75 - 76

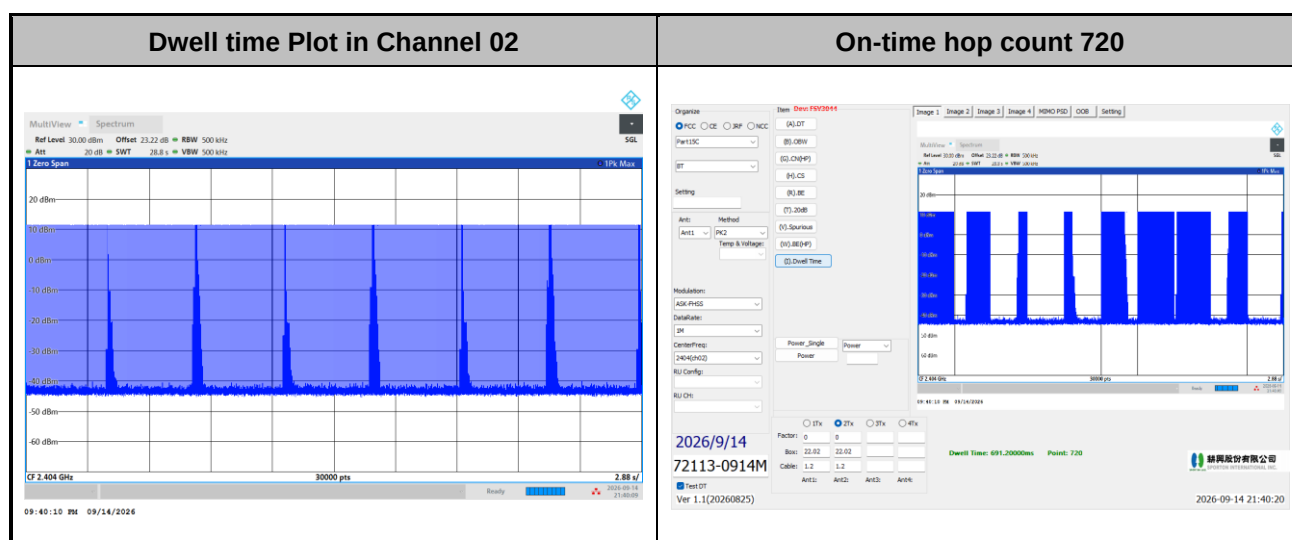


Dwell Time



Remark:

1. Dwell Time(s) = Hops Over Occupancy Time (hops) x Package Transfer Time
= 720 x 0.049 ms = 0.035 sec
2. The observation Occupancy time is hopping channel 72 channels x 400ms = 28.8sec using sweep point 30,000. This shows that 1ms per on-time contains 1 hop. The total hops is finally counted via computer analysis.

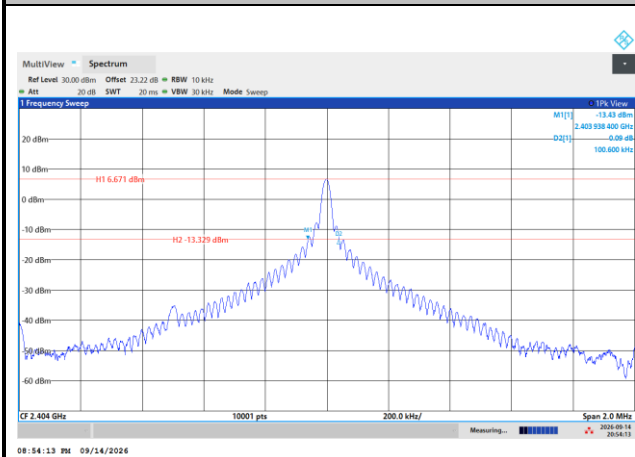




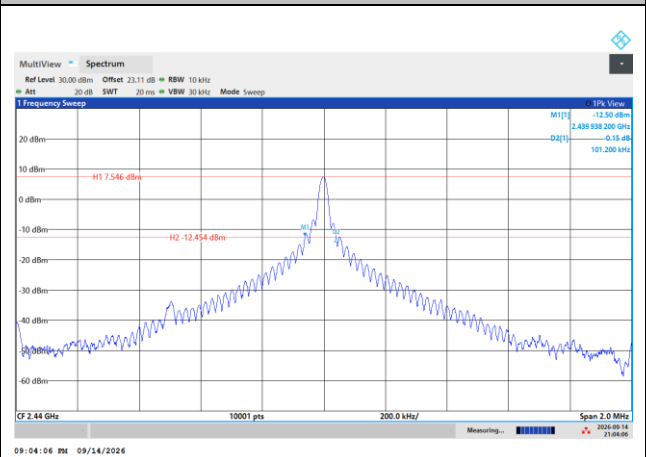
20dB Bandwidth

<1Mbps>

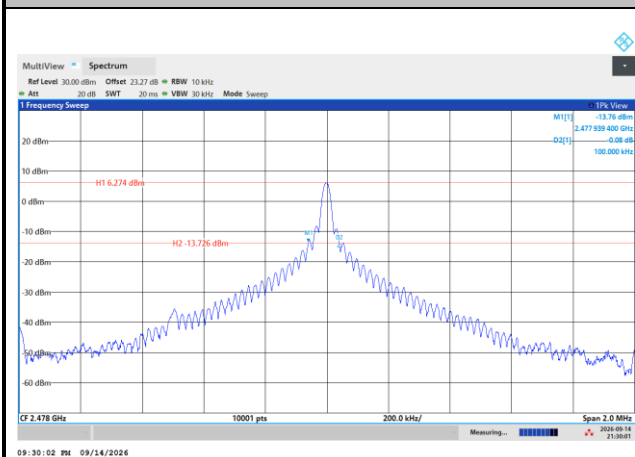
20 dB Bandwidth Plot in Channel 02



20 dB Bandwidth Plot in Channel 38



20 dB Bandwidth Plot in Channel 76

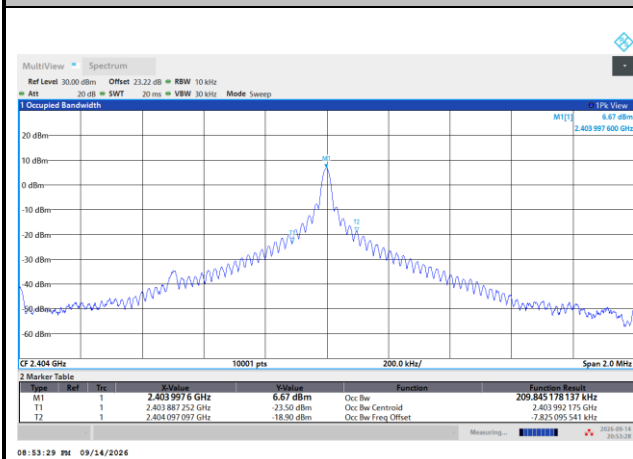




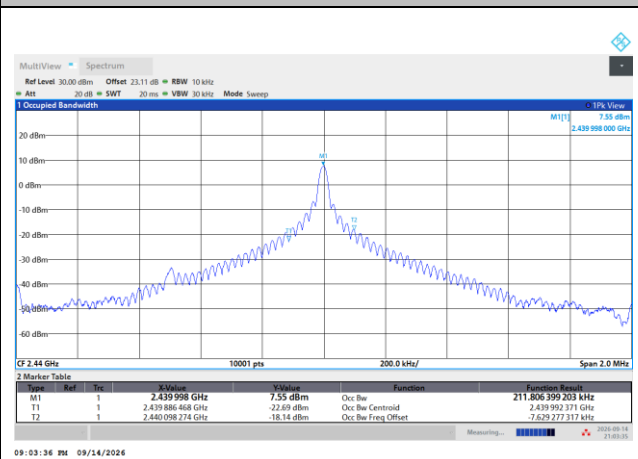
99% Occupied Bandwidth

<1Mbps>

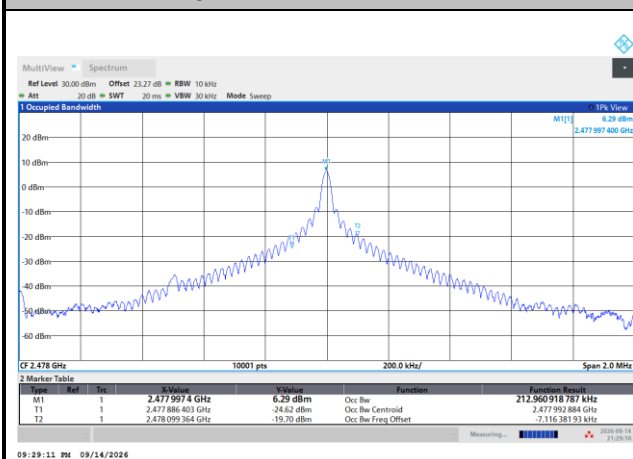
99% Occupied Bandwidth on Channel 02



99% Occupied Bandwidth on Channel 38

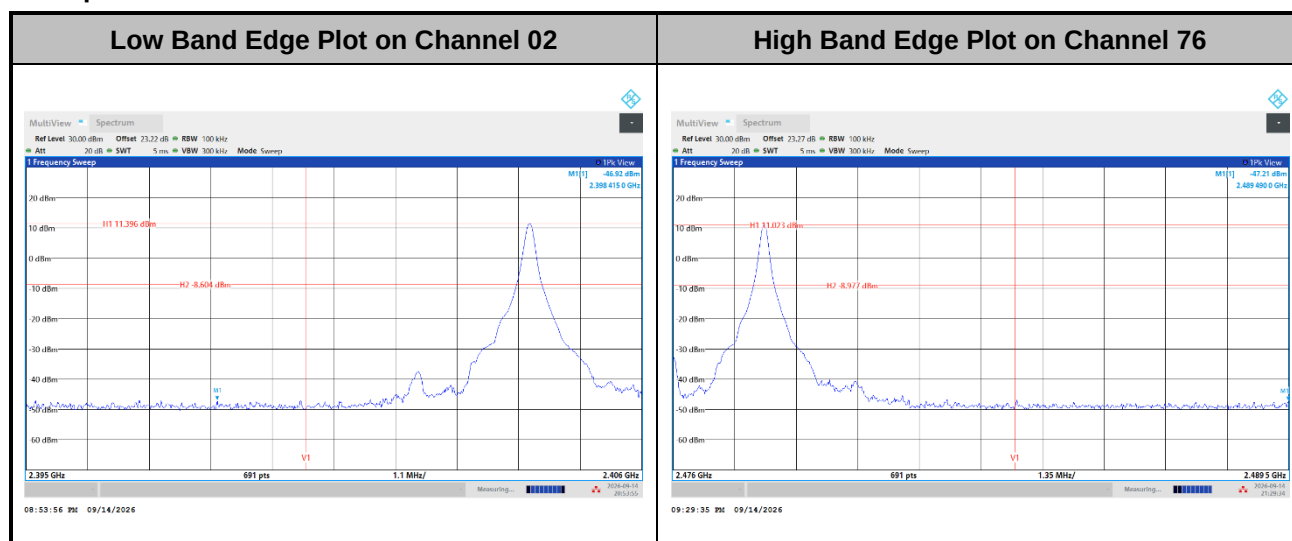


99% Occupied Bandwidth on Channel 76





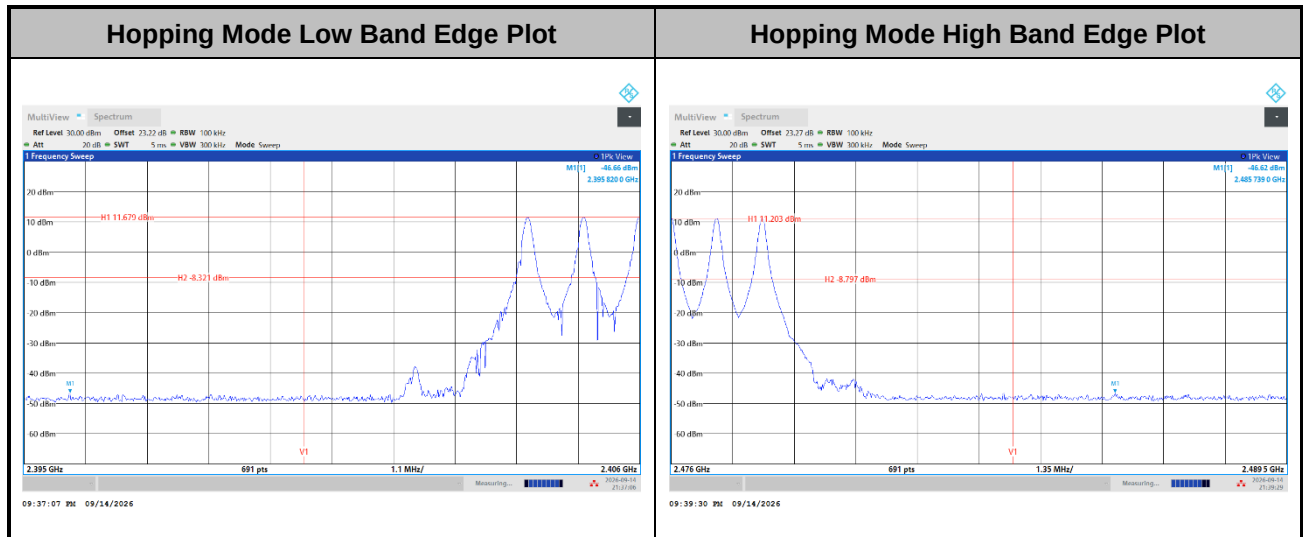
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Hopping Mode Band Edges

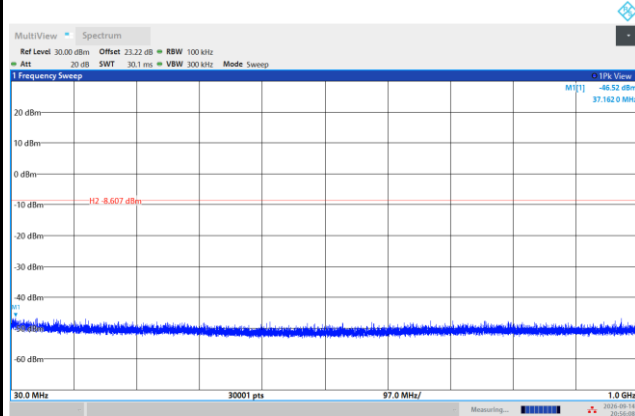
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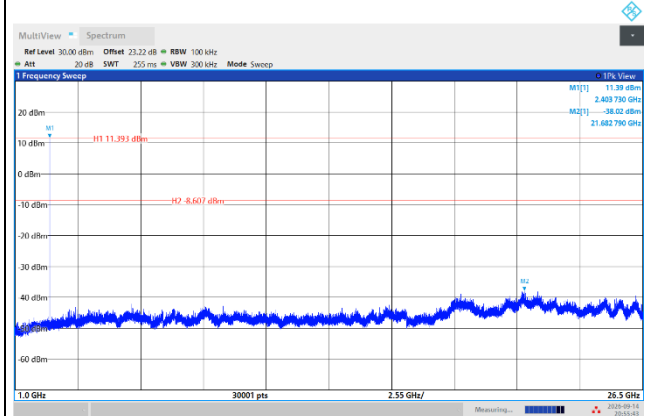
Conducted Spurious Emission

<1Mbps>

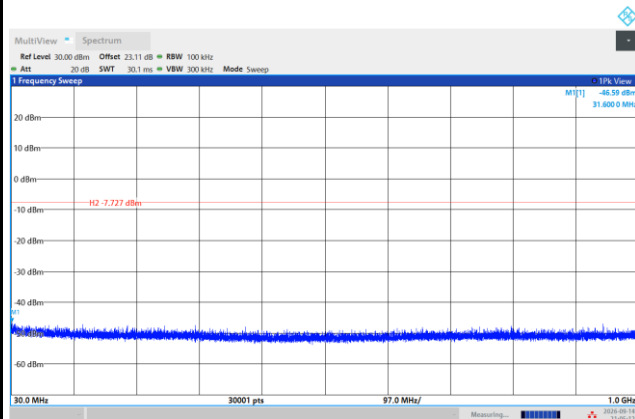
CSE Plot on Low Ch between 30MHz ~ 1 GHz



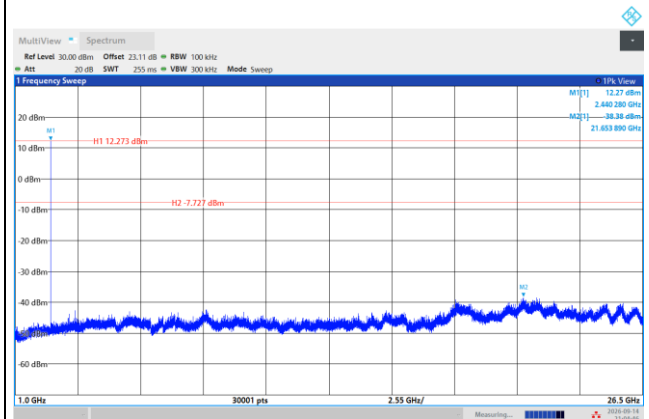
CSE Plot on Low Ch between 1GHz ~ 26.5GHz



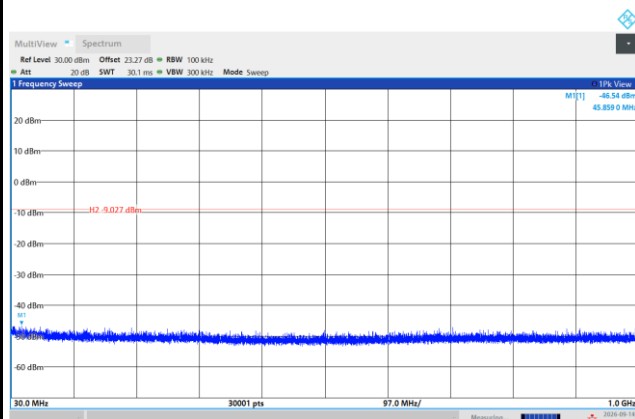
CSE Plot on Mid. Ch between 30MHz ~ 1 GHz



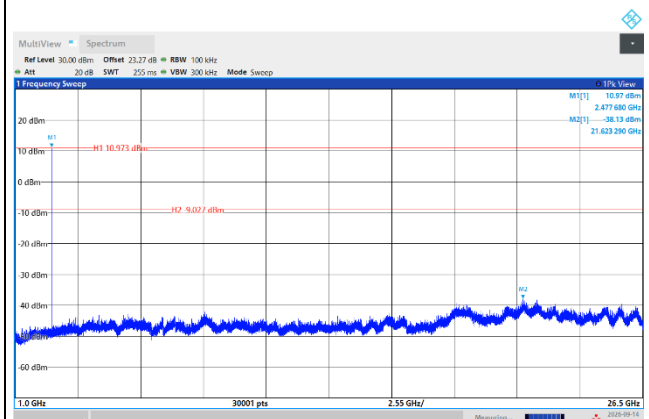
CSE Plot on Mid. Ch between 1GHz ~ 26.5GHz



CSE Plot on High Ch between 30MHz ~ 1 GHz



CSE Plot on High Ch between 1GHz ~ 26.5GHz

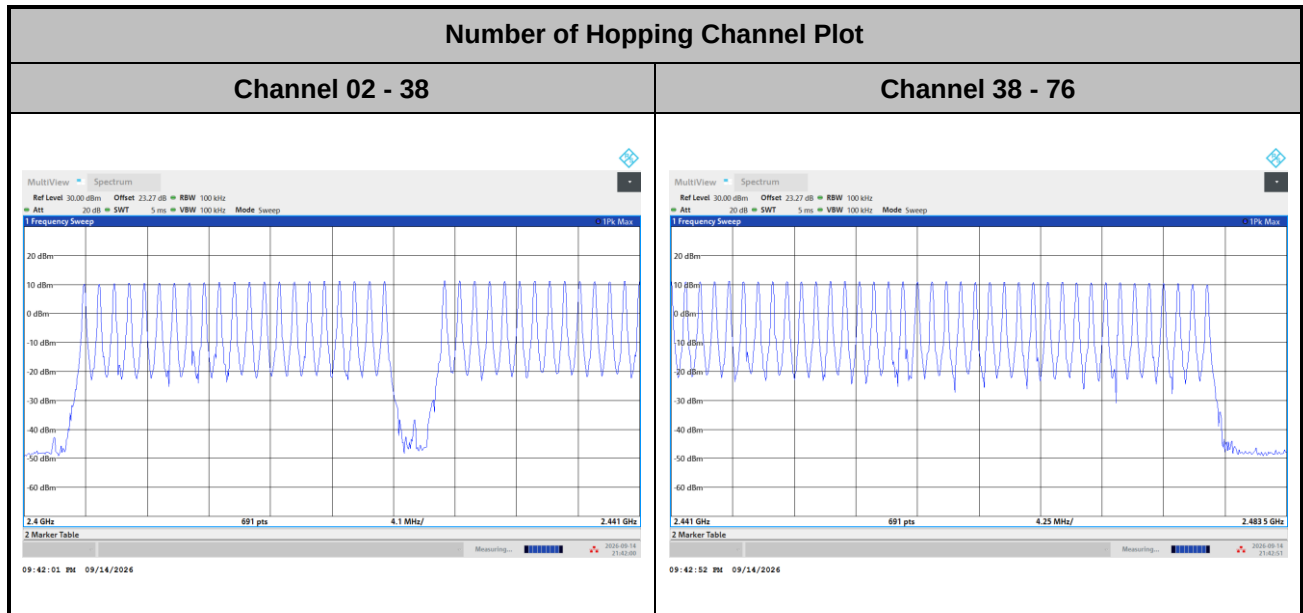




Number of TX = 2, Ant. 3 (Measured)

Number of Hopping Frequency

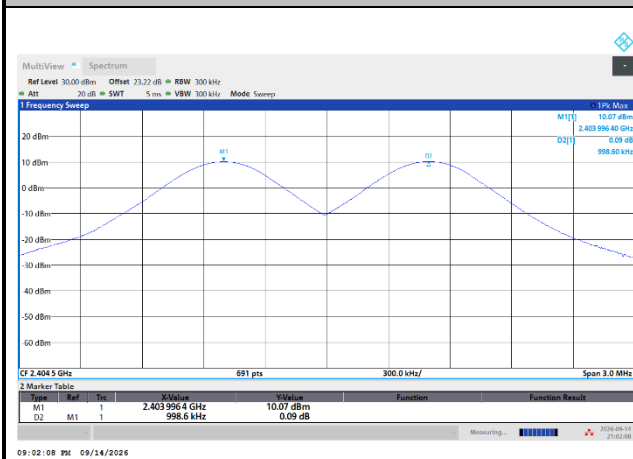
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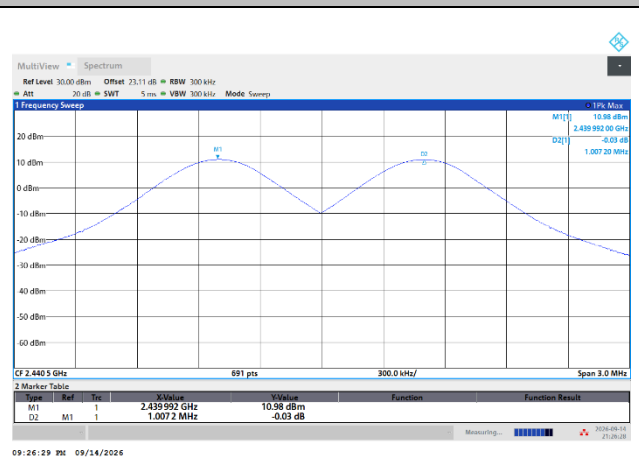
Hopping Channel Separation

<1Mbps>

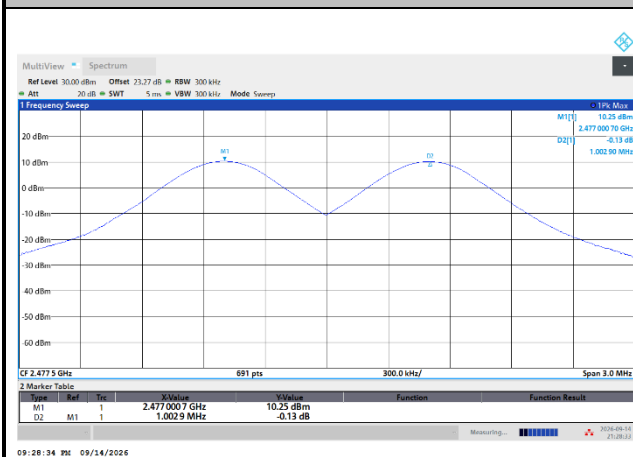
Channel Separation Plot on Channel 02 - 03



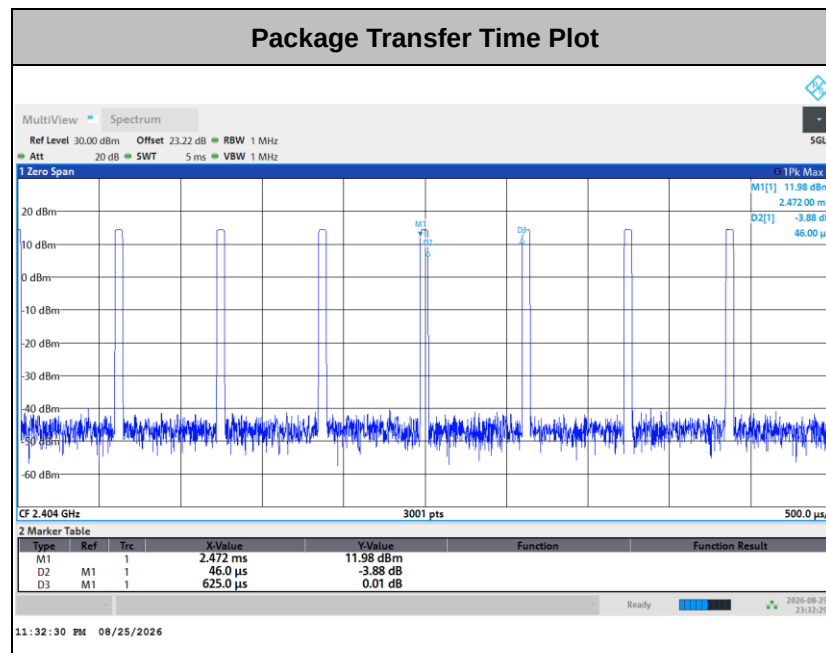
Channel Separation Plot on Channel 38 - 39



Channel Separation Plot on Channel 75 - 76



Dwell Time



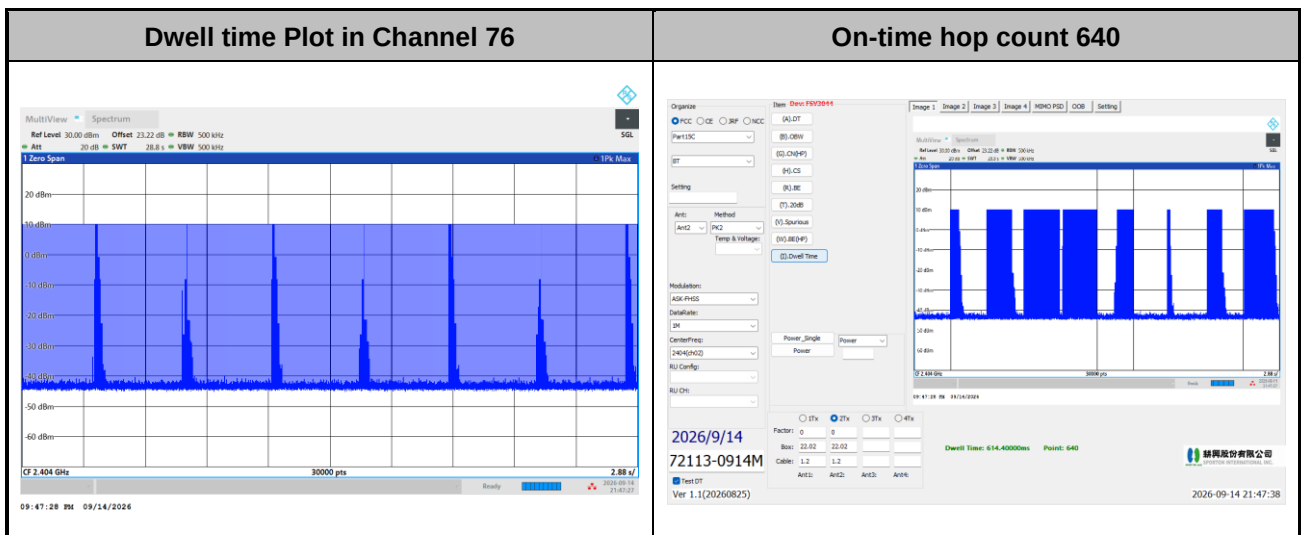
Remark:

3. Dwell Time(s) = Hops Over Occupancy Time (hops) x Package Transfer Time

$$= 640 \times 0.046 \text{ ms} = 0.029 \text{ sec}$$

4. The observation Occupancy time is hopping channel 72 channels x 400ms = 28.8sec using sweep point 30,000. This shows that 1ms per on-time contains 1 hop.

The total hops is finally counted via computer analysis.

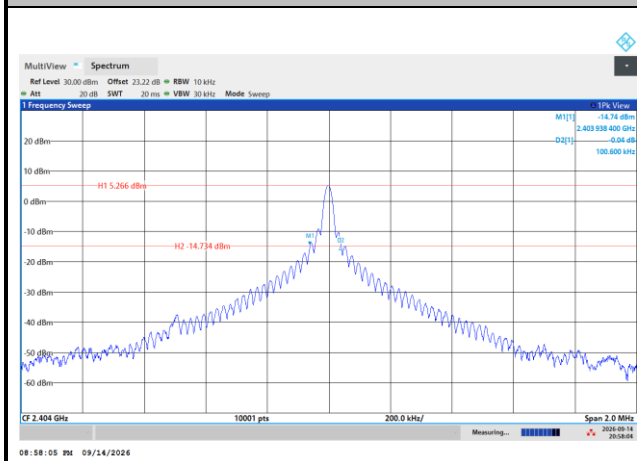




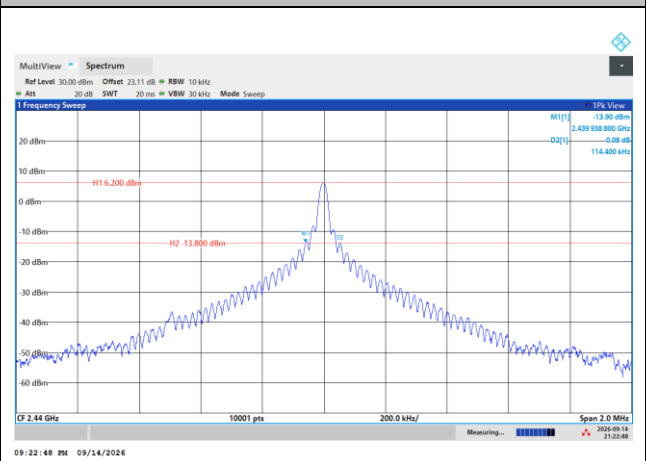
20dB Bandwidth

<1Mbps>

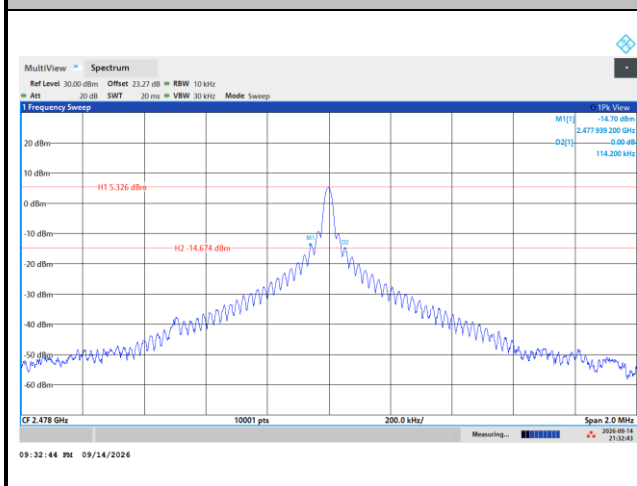
20 dB Bandwidth Plot in Channel 02



20 dB Bandwidth Plot in Channel 38



20 dB Bandwidth Plot in Channel 76

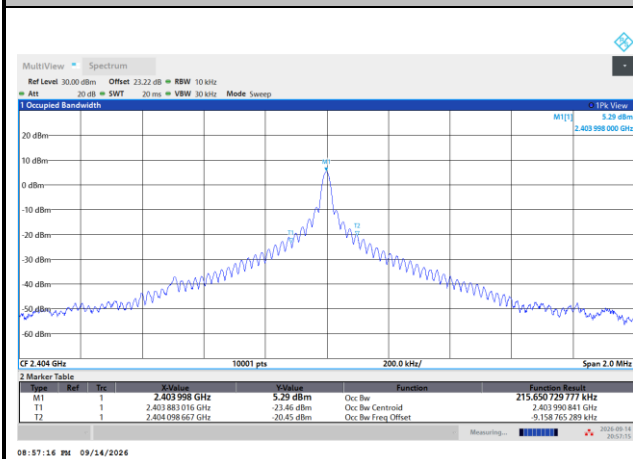




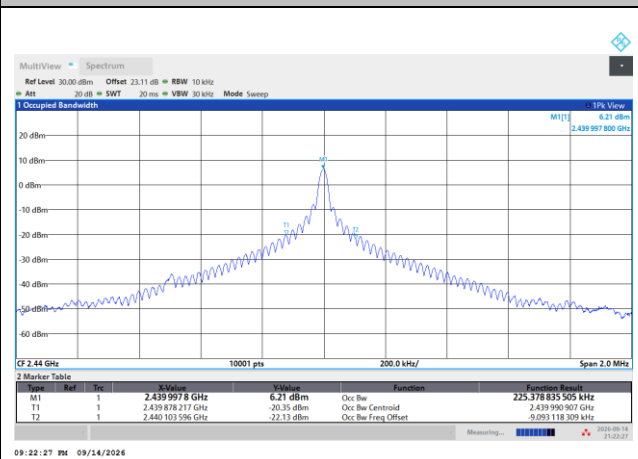
99% Occupied Bandwidth

<1Mbps>

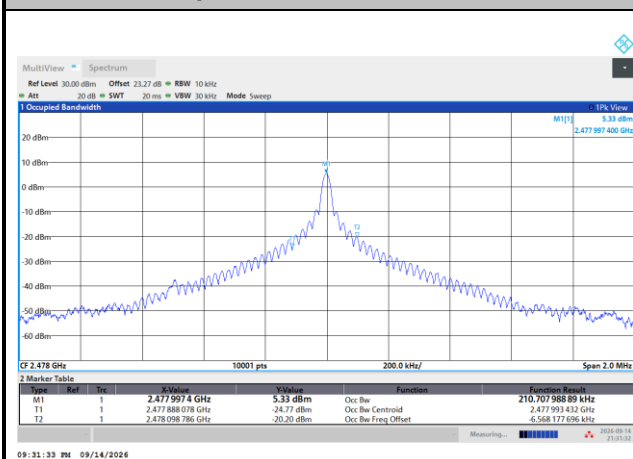
99% Occupied Bandwidth on Channel 02



99% Occupied Bandwidth on Channel 38



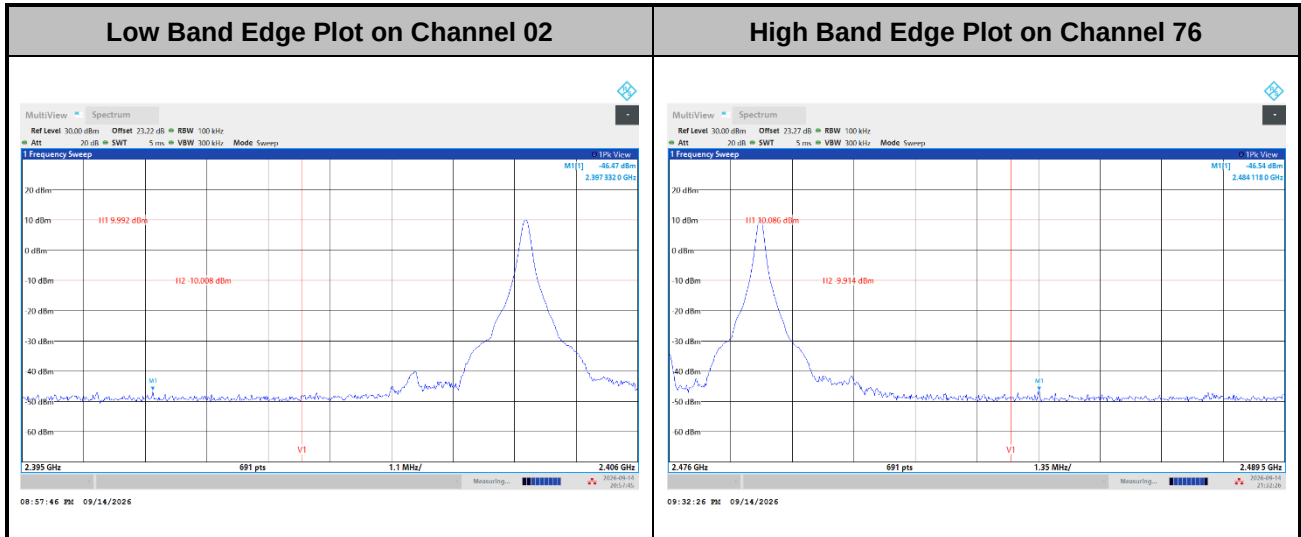
99% Occupied Bandwidth on Channel 76





Band Edges

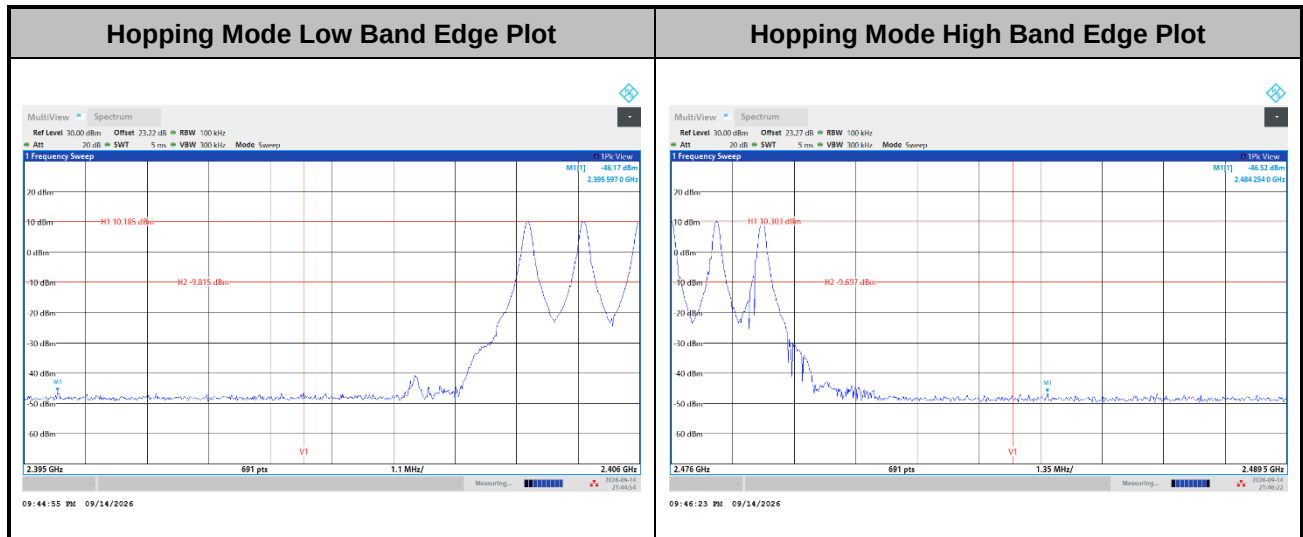
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Hopping Mode Band Edges

<1Mbps>



Conducted Spurious Emission