FCC RADIO TEST REPORT

FCC ID	:	**A4RGUL82**
Equipment	:	**Phone**
Model Name	:	**GUL82**
Applicant	:	**Google LLC** **1600 Amphitheatre Parkway,** **Mountain View, CA, 94043 USA**
Standard	:	**FCC Part 15 Subpart C §15.247**

The product was received on Dec. 12, 2024 and testing was performed from Dec. 17, 2024 to Mar. 21, 2025. 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, Taiwan (R.O.C.)

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History of this test report

Report No.	Version	Description	Issue Date
FR4N0918K	01	Initial issue of report	Mar. 26, 2025
FR4N0918K	02	Revise appendix A and List of Measuring Equipment This report is an updated version, replacing the report issued on Mar. 26, 2025.	May 02, 2025

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/manufacturer 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: William Chen
Report Producer: Lucy Wu

1 General Description

1.1 Product Feature of Equipment Under Test

Product Feature
General Specs GSM/WCDMA/LTE/5G NR/NTN , Bluetooth, BLE, BLE channel sounding, Thread, Wi-Fi 802.11be, NFC, WPC Rx, UWB and GNSS Rx. **Antenna Type** Bluetooth: **<Ant. 3>:** IFA Antenna **<Ant. 4>:** ILA Antenna

EUT Information List	
S/N	**Performed Test Item**
4B151FDCQ0000L	RF Conducted Measurement
4B191FDCQ000A9	Radiated Spurious Emission
51061FDCQ000B2	Conducted Emission

Antenna information		
2400 MHz ~ 2483.5 MHz	Peak Gain (dBi)	Ant.3: -0.1 Ant.4: -1.1

Remark: The EUT's information above is declared by manufacturer. Please refer to Disclaimer in report summary.

1.2 Modification of EUT

No modifications made to the EUT during the testing.

1.3 Testing Location

Test Site	Sporton International Inc. Wensan Laboratory
Test Site Location	No.58, Aly. 75, Ln. 564, Wenhua 3rd, Rd., Guishan Dist., Taoyuan City 333010, Taiwan (R.O.C.) TEL: +886-3-327-0868 FAX: +886-3-327-0855
Test Site No.	**Sporton Site No.**
	TH05-HY, CO07-HY, 03CH16-HY

Note: The test site complies with ANSI C63.4 2014 requirement.

FCC designation No.: TW3786

1.4 Applicable Standards

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

- FCC Part 15 Subpart C §15.247
- FCC KDB Publication No. 558074 D01 15.247 Meas Guidance v05r02
- FCC KDB 414788 D01 Radiated Test Site v01r01
- ANSI C63.10-2013

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.

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 accessory (Adapter or Earphone), and adjusting the measurement antenna orientation, following C63.10 exploratory test procedures and find X plane with Adapter for **<Ant. 3>** 2Mbps; Z plane with Adapter for **<Ant. 3>** 1Mbps, **<Ant. 4>** 1Mbps and 2Mbps as worst plane.

b. AC power line Conducted Emission was tested under maximum output power.

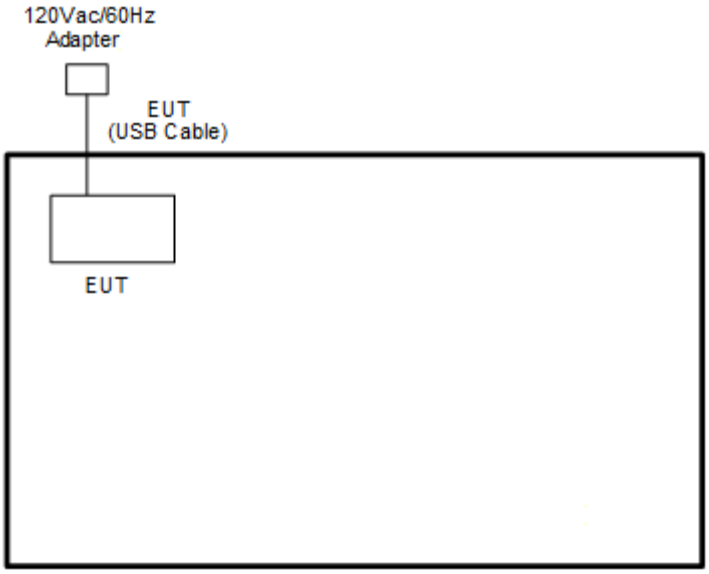
The following summary table is showing all test modes to demonstrate in compliance with the standard.

Summary table of Test Cases		
Test Item	**Data Rate / Modulation**	
Conducted Test Cases	**Bluetooth LE 1Mbps CS ASK**	**Bluetooth LE 2Mbps CS ASK**
	Mode 1: CH02_2404 MHz Mode 2: CH38_2440 MHz Mode 3: CH76_2478 MHz	Mode 4: CH02_2404 MHz Mode 5: CH38_2440 MHz Mode 6: CH76_2478 MHz
AC Conducted Emission	Mode 1 : Bluetooth-LE CS Channel 19 Tx + USB Cable 2 (Charging from AC Adapter)	

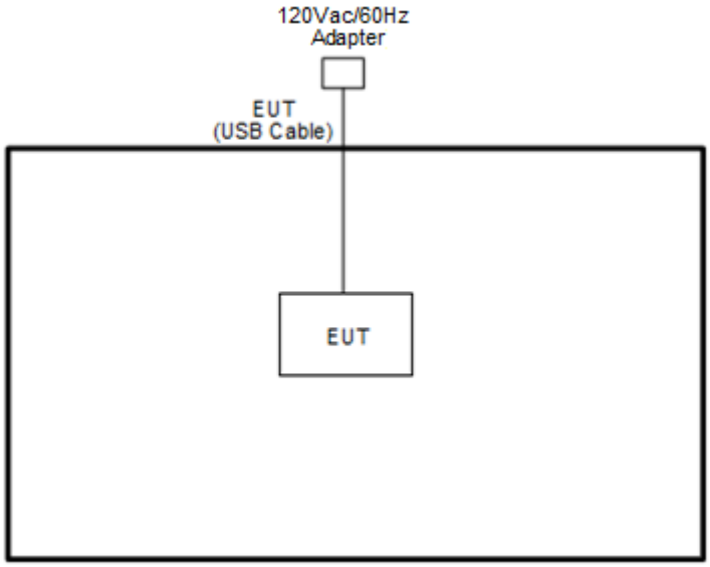
Remark:
1. For Radiated Test Cases, the worst mode data rate 1Mbps was reported only since the highest RF output power in the preliminary tests. The conducted spurious emissions and conducted band edge measurement for other data rates were not worse than 1Mbps, and no other significantly frequencies found in conducted spurious emission.
2. For Radiated Test Cases, the tests were performed with USB Cable 2.
3. During the preliminary test, both charging modes (Adapter mode and WPC Rx mode) were verified. It is determined that the adaptor mode is the worst case for official test.
4. The detailed Radiated test modes are shown in Appendix C.

2.3 Connection Diagram of Test System

<AC Conducted Emission Mode>



<Bluetooth-LE CS Tx Mode>



2.4 Support Unit used in test configuration and system

Item	Equipment	Brand Name	Model Name	FCC ID	Data Cable	Power Cord
1.	Adapter	N/A	G9BR1	N/A	N/A	N/A

2.5 EUT Operation Test Setup

The RF test items, utility “BT DUT Control GUI(Ver 03-11-24)” and “BT DUT Control GUI v.03-04-24” 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.

Offset(dB) = RF cable loss(dB) + attenuator factor(dB).
= 4.2 + 10 = 14.2 (dB)

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.

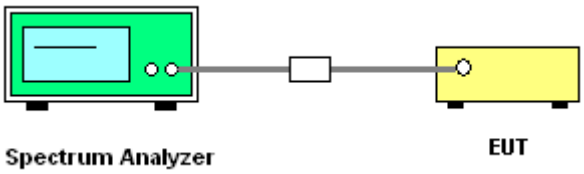
3.1.2 Measuring Instruments

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

3.1.3 Test Procedure

1. The testing follows ANSI C63.10-2013 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 ≥ RBW; Sweep = auto; 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.

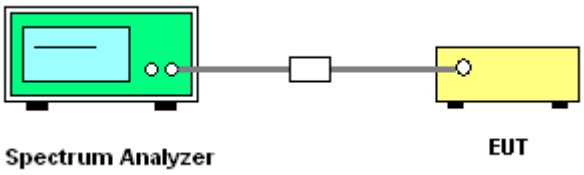
3.2.2 Measuring Instruments

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

3.2.3 Test Procedures

1. The testing follows ANSI C63.10-2013 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 ≥ RBW; Sweep = auto; 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.

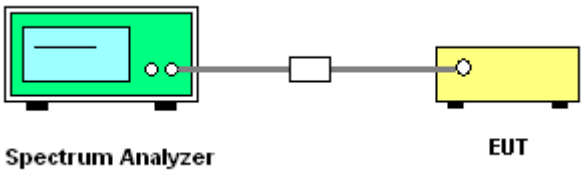
3.3.2 Measuring Instruments

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

3.3.3 Test Procedures

1. The testing follows ANSI C63.10-2013 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 ≥ 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

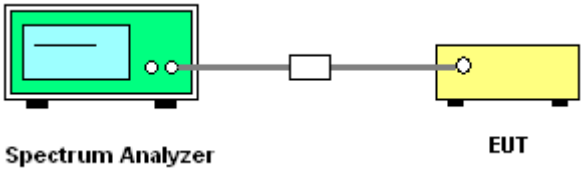
3.4.2 Measuring Instruments

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

3.4.3 Test Procedures

1. The testing follows ANSI C63.10-2013 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 ≥ 1% of the 20 dB bandwidth; VBW ≥ 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 within 1-5% of the 99% bandwidth; VBW ≥ 3 * 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.

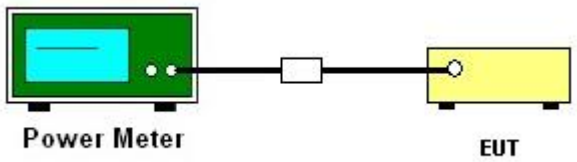
3.5.2 Measuring Instruments

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

3.5.3 Test Procedures

1. The testing follows ANSI C63.10-2013 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.

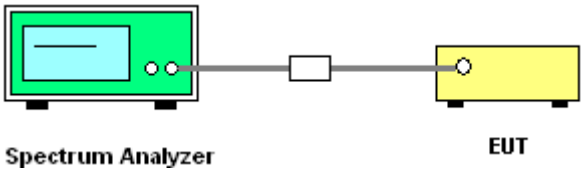
3.6.2 Measuring Instruments

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

3.6.3 Test Procedures

1. The testing follows ANSI C63.10-2013 clause 7.8.6.
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.

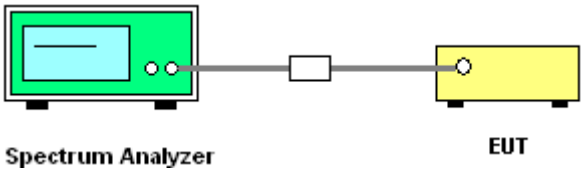
3.7.2 Measuring Instruments

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

3.7.3 Test Procedure

1. The testing follows ANSI C63.10-2013 clause 7.8.8.
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

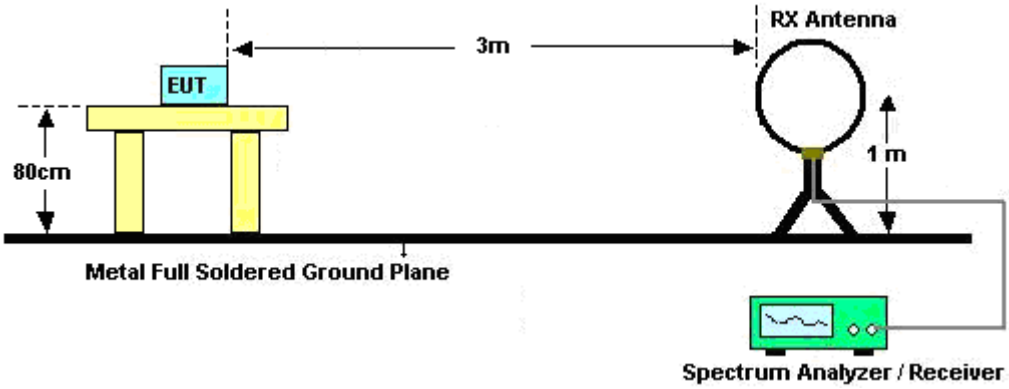
Please refer to the measuring equipment list in this test report.

3.8.3 Test Procedures

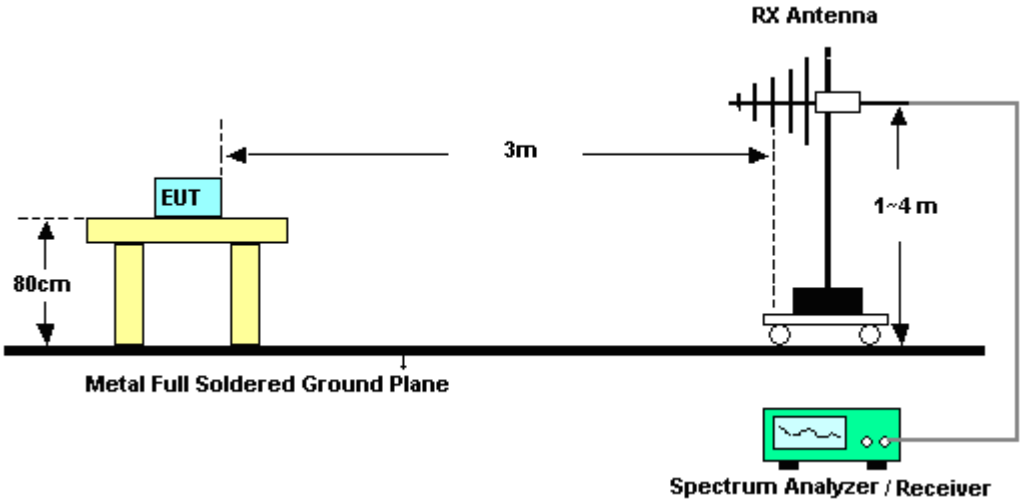
1. The EUT is placed on a turntable with 0.8 meter for frequency below 1 GHz and 1.5 meter for frequency above 1 GHz respectively above ground.
2. The EUT is set 3 meters away from the receiving antenna, which is mounted on the top of a variable height antenna tower.
3. For each suspected emission, the 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.
4. Set the maximum power setting and enable the EUT to transmit continuously.
5. Use the following spectrum analyzer settings:
   (1) Span shall wide enough to fully capture the emission being measured;
   (2) Set RBW = 100 kHz for f < 1 GHz, RBW = 1 MHz for f>1 GHz ; VBW ≥ RBW; Sweep = auto; Detector function = peak; Trace = max hold for peak
   (3) For average measurement: Set RBW = 100 kHz for f < 1 GHz, RBW = 1 MHz for f>1 GHz ; VBW ≥ 10Hz; Sweep = auto; Detector function = peak; Trace = max hold for average
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 “-“.

3.8.4 Test Setup

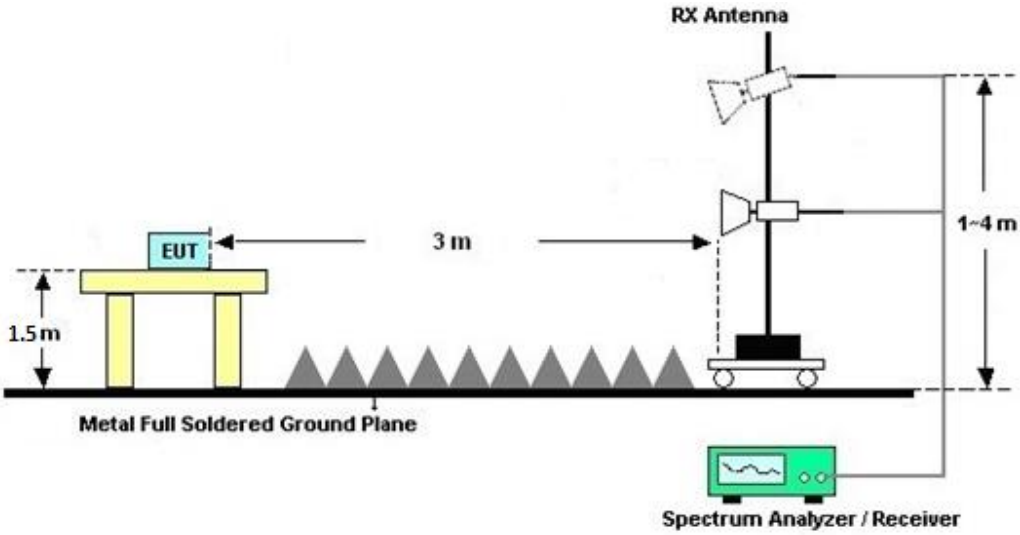
For radiated test below 30MHz



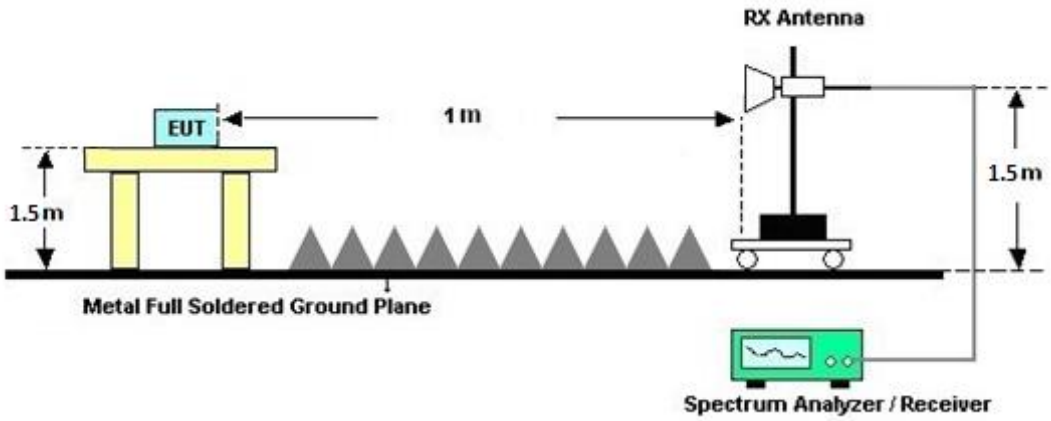
For radiated test from 30MHz to 1GHz



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 (dBμV)	
	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.

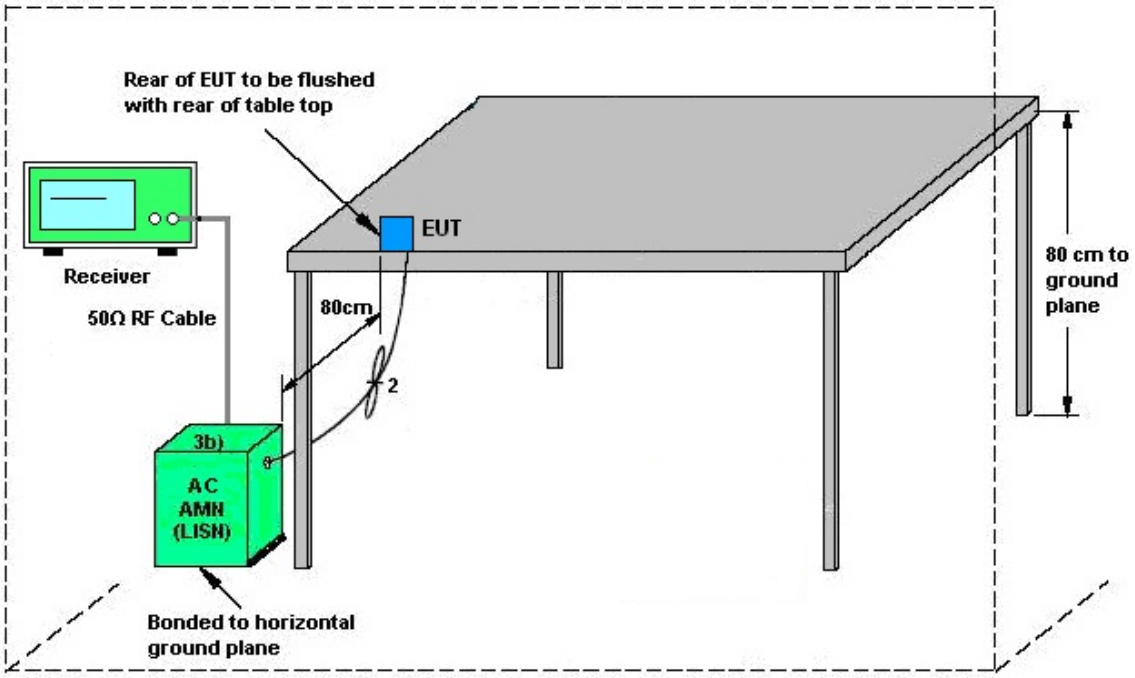
3.9.2 Measuring Instruments

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



AMN = Artificial mains network (LISN)
AE = Associated equipment
EUT = Equipment under test
ISN = Impedance stabilization network

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

b) Unique (non-standard) antenna connector.

Use of a standard connector is also allowed if the connector is within the transmitter enclosure and can only be accessed by disassembly of the transmitter, where such disassembly is not normally required. The user manual must not show that user has access to the connector.

4 List of Measuring Equipment

Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Loop Antenna	Rohde & Schwarz	HFH2-Z2	100488	9 kHz~30 MHz	Aug. 29, 2024	Dec. 29, 2024~ Mar. 10, 2025	Aug. 28, 2025	Radiation (03CH16-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA9170	1224	18GHz-40GHz	Oct. 25, 2024	Dec. 29, 2024~ Mar. 10, 2025	Oct. 24, 2025	Radiation (03CH16-HY)
EMI Test Receiver	Keysight	N9038A(MXE)	MY57290111	3Hz~26.5GHz	Nov. 22, 2024	Dec. 29, 2024~ Mar. 10, 2025	Nov. 21, 2025	Radiation (03CH16-HY)
Bilog Antenna	TESEQ	CBL 6111D & 00802N1D01N-06	47020 & 06	30MHz to 1GHz	Oct. 05, 2024	Dec. 29, 2024~ Mar. 10, 2025	Oct. 04, 2025	Radiation (03CH16-HY)
Horn Antenna	SCHWARZBECK	BBHA 9120 D	9120D-1522	1G~18GHz	Mar. 28, 2024	Dec. 29, 2024~ Mar. 10, 2025	Mar. 27, 2025	Radiation (03CH16-HY)
Amplifier	SONOMA	310N	371607	9kHz~1GHz	Jul. 02, 2024	Dec. 29, 2024~ Mar. 10, 2025	Jul. 01, 2025	Radiation (03CH16-HY)
Preamplifier	Keysight	83017A	MY53270264	1GHz~26.5GHz	Dec. 05, 2024	Dec. 29, 2024~ Mar. 10, 2025	Dec. 04, 2025	Radiation (03CH16-HY)
Preamplifier	EMEC	EM1G18G	060812	1GHz~18GHz	Dec. 24, 2024	Dec. 29, 2024~ Mar. 10, 2025	Dec. 23, 2025	Radiation (03CH16-HY)
Preamplifier	EMEC	EM18G40G	060801	18GHz~40GHz	May 27, 2024	Dec. 29, 2024~ Mar. 10, 2025	May 26, 2025	Radiation (03CH16-HY)
Filter	Wainwright	WLK4-1000-1530-8000-40SS	SN17	1.53GHz Low Pass Filter	Jan. 15, 2024	Dec. 29, 2024~ Jan. 13, 2025	Jan. 14, 2025	Radiation (03CH16-HY)
Filter	Wainwright	WLK4-1000-1530-8000-40SS	SN17	1.53GHz Low Pass Filter	Jan. 14, 2025	Jan. 14, 2024~ Mar. 10, 2025	Jan. 13, 2026	Radiation (03CH16-HY)
Filter	Wainwright	WHKX12-2700-3000-18000-60ST	SN3	3GHz High Pass Filter	Jun. 28, 2024	Dec. 29, 2024~ Mar. 10, 2025	Jun. 27, 2025	Radiation (03CH16-HY)
Notch Filter	ST1	STI15_9935_5150-5850	NA	N/A	Apr. 05, 2024	Dec. 29, 2024~ Mar. 10, 2025	Apr. 04, 2025	Radiation (03CH16-HY)
Notch Filter	Wainwright	WRCQV14-5425-5825-6525-6925-60SS	SN1	N/A	Jan. 05, 2024	Dec. 29, 2024~ Jan. 03, 2025	Jan. 04, 2025	Radiation (03CH16-HY)
Notch Filter	Wainwright	WRCQV14-5425-5825-6525-6925-60SS	SN1	N/A	Jan. 03, 2025	Jan. 04, 2024~ Mar. 10, 2025	Jan. 02, 2026	Radiation (03CH16-HY)
Filter	Wainwright	WHKX6-7268-9200-26500-40CD	SN2	9GHz High Pass Filter	May 22, 2024	Dec. 29, 2024~ Mar. 10, 2025	May 21, 2025	Radiation (03CH16-HY
RF Cable	HUBER + SUHNER	SUCOFLEX 102	801606/2	9KHz ~ 40GHz	Apr. 22, 2024	Dec. 29, 2024~ Mar. 10, 2025	Apr. 21, 2025	Radiation (03CH16-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102/SUCOFLEX 104	EC-A5-300-5757,805935/4,802434/4	30MHz~18GHz	Aug. 07, 2024	Dec. 29, 2024~ Mar. 10, 2025	Aug. 06, 2025	Radiation (03CH16-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	804011/2,804012/2	18-40GHz	Jan. 02, 2024	Dec. 29, 2024~ Dec. 30, 2024	Jan. 01, 2025	Radiation (03CH16-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	804011/2,804012/2	18-40GHz	Dec. 31, 2024	Dec. 31, 2024~ Mar. 10, 2025	Dec. 30, 2025	Radiation (03CH16-HY)

Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Software	Audix	E3 230621 V9	RK-002393	N/A	N/A	Dec. 29, 2024~ Mar. 10, 2025	N/A	Radiation (03CH16-HY)
Controller	ChainTek	3000-1	N/A	Control Turn table & Ant Mast	N/A	Dec. 29, 2024~ Mar. 10, 2025	N/A	Radiation (03CH16-HY)
Antenna Mast	ChainTek	MBS-520-1	N/A	1m~4m	N/A	Dec. 29, 2024~ Mar. 10, 2025	N/A	Radiation (03CH16-HY)
Turn Table	ChainTek	T-200-S-1	N/A	0~360 Degree	N/A	Dec. 29, 2024~ Mar. 10, 2025	N/A	Radiation (03CH16-HY)
Hygrometer	TECPEL	DTM-303A	TP201996	N/A	Nov. 01, 2024	Dec. 17, 2024~ Mar. 14, 2025	Oct. 31, 2025	Conducted (TH05-HY)
Power Meter	Anritsu	ML2495A	1036004	N/A	Jul. 04, 2024	Dec. 17, 2024~ Mar. 14, 2025	Jul. 03, 2025	Conducted (TH05-HY)
Power Sensor	Anritsu	MA2411B	1027253	300MHz~40GHz	Jul. 04, 2024	Dec. 17, 2024~ Mar. 14, 2025	Jul. 03, 2025	Conducted (TH05-HY)
Signal Analyzer	Rohde & Schwarz	FSV40	101566	10Hz~40GHz	Aug. 23, 2024	Dec. 17, 2024~ Mar. 14, 2025	Aug. 22, 2025	Conducted (TH05-HY)
Switch Control Mainframe	Burgeon	ETF-058	EC1300484 (BOX3)	N/A	May 20, 2024	Dec. 17, 2024~ Mar. 14, 2025	May 19, 2025	Conducted (TH05-HY)
Software	Sporton	BTWIFI_Final_ version_24121 1	N/A	Conducted Other Test Item	N/A	Dec. 17, 2024~ Mar. 14, 2025	N/A	Conducted (TH05-HY)
AC Power Source	ACPOWER	AFC-11003G	F317040033	N/A	N/A	Mar. 19, 2025~ Mar. 21, 2025	N/A	Conduction (CO07-HY)
Software	Rohde & Schwarz	EMC32 V10.30	N/A	N/A	N/A	Mar. 19, 2025~ Mar. 21, 2025	N/A	Conduction (CO07-HY)
Pulse Limiter	SCHWARZBE CK	VTSD 9561-F N	9561-F N00373	9kHz-200MHz	Oct. 23, 2024	Mar. 19, 2025~ Mar. 21, 2025	Oct. 22, 2025	Conduction (CO07-HY)
RF Cable	HUBER + SUHNER	RG 214/U	1358175	9kHz~30MHz	Mar. 03, 2025	Mar. 19, 2025~ Mar. 21, 2025	Mar. 02, 2026	Conduction (CO07-HY)
Lisn	Rohde & Schwarz	ENV216	100080	9kHz~30MHz	Dec. 12, 2024	Mar. 19, 2025~ Mar. 21, 2025	Dec. 11, 2025	Conduction (CO07-HY)
EMI Test Receiver	Rohde & Schwarz	ESR3	102317	9kHz~3.6GHz	Sep. 23, 2024	Mar. 19, 2025~ Mar. 21, 2025	Sep. 22, 2025	Conduction (CO07-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))	3.7 dB

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	6.5 dB

Uncertainty of Radiated Emission Measurement (1000 MHz ~ 6000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	4.9 dB

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	5.1 dB

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	5.3 dB

Appendix A. Test Result of Conducted Test Items

Test Engineer:	Mina Liu	Temperature:	21~25	°C
Test Date:	2024/12/17~2025/3/14	Relative Humidity:	51~54	%

<Ant. 3>

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	1Mbps	1	2	2404	0.507	0.507	0.986	0.3382	Pass
	1Mbps	1	38	2440	0.517	0.517	0.999	0.3448	Pass
	1Mbps	1	76	2478	0.522	0.522	0.999	0.3483	Pass
ASK	2Mbps	1	2	2404	0.996	0.983	0.994	0.6639	Pass
	2Mbps	1	38	2440	1.007	0.994	0.990	0.6716	Pass
	2Mbps	1	76	2478	1.021	1.016	1.007	0.6808	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	1792	0.045	0.081	0.4	Pass

TEST RESULTS DATA
Peak Power Table

DH	CH.	NTX	Peak Power (dBm)	Power Limit (dBm)	Test Result
ASK 1Mbps	2	1	20.13	20.97	Pass
	38	1	20.12	20.97	Pass
	76	1	20.36	20.97	Pass
ASK 2Mbps	2	1	19.76	20.97	Pass
	38	1	19.75	20.97	Pass
	76	1	20.03	20.97	Pass

TEST RESULTS DATA
Average Power Table
(Reporting Only)

DH	CH.	NTX	Average Power (dBm)	Duty Factor (dB)
ASK 1Mbps	2	1	18.79	7.81
	38	1	18.87	7.81
	76	1	18.99	7.81
ASK 2Mbps	2	1	18.94	7.91
	38	1	18.89	7.91
	76	1	19.00	7.91

TEST RESULTS DATA
Number of Hopping Frequency

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

<Ant. 4>

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	1Mbps	1	2	2404	0.506	0.507	1.003	0.3376	Pass
	1Mbps	1	38	2440	0.517	0.516	0.981	0.3447	Pass
	1Mbps	1	76	2478	0.523	0.521	0.999	0.3487	Pass
ASK	2Mbps	1	2	2404	0.995	0.986	1.020	0.6634	Pass
	2Mbps	1	38	2440	1.006	0.997	1.016	0.6708	Pass
	2Mbps	1	76	2478	1.027	1.018	1.012	0.6847	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	1869	0.044	0.083	0.4	Pass

TEST RESULTS DATA
Peak Power Table

DH	CH.	NTX	Peak Power (dBm)	Power Limit (dBm)	Test Result
ASK 1Mbps	2	1	19.42	20.97	Pass
	38	1	19.36	20.97	Pass
	76	1	20.13	20.97	Pass
ASK 2Mbps	2	1	19.47	20.97	Pass
	38	1	19.50	20.97	Pass
	76	1	20.12	20.97	Pass

TEST RESULTS DATA
Average Power Table
(Reporting Only)

DH	CH.	NTX	Average Power (dBm)	Duty Factor (dB)
ASK 1Mbps	2	1	18.84	8.11
	38	1	18.78	8.11
	76	1	18.99	8.11
ASK 2Mbps	2	1	18.70	7.98
	38	1	18.68	7.98
	76	1	18.85	7.98

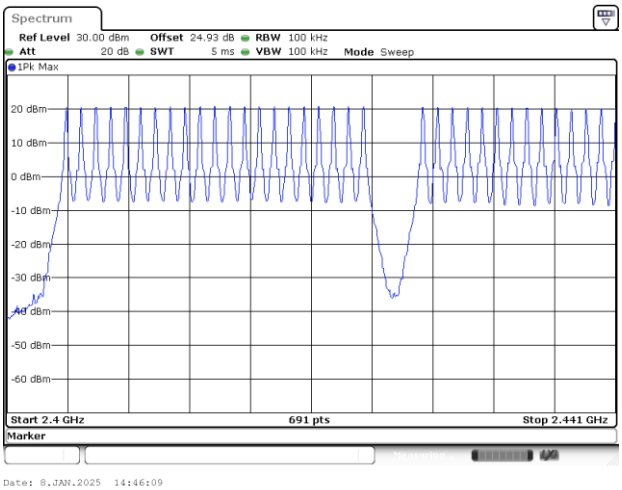
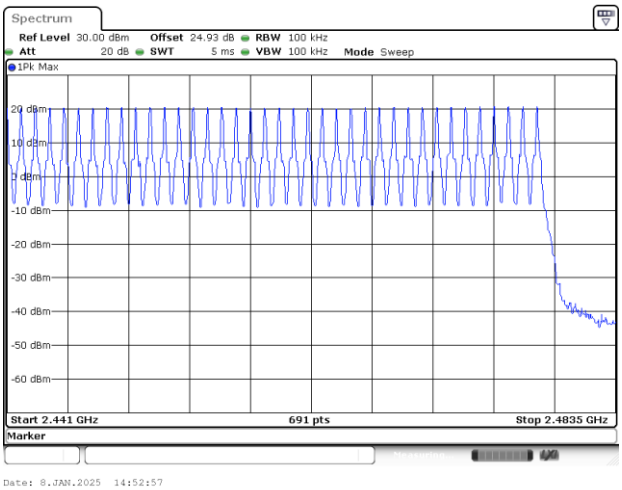
TEST RESULTS DATA
Number of Hopping Frequency

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

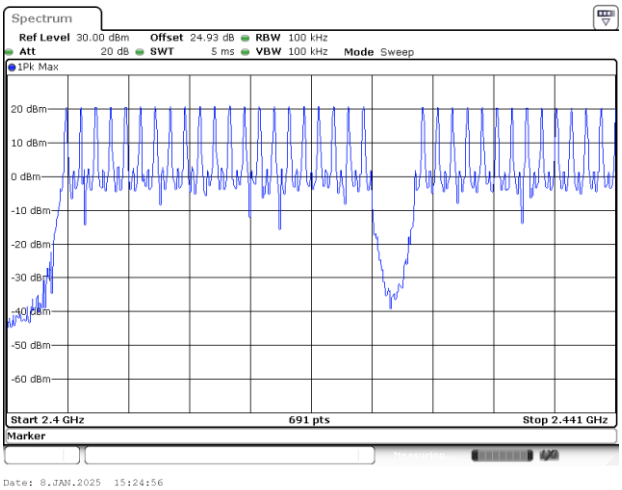
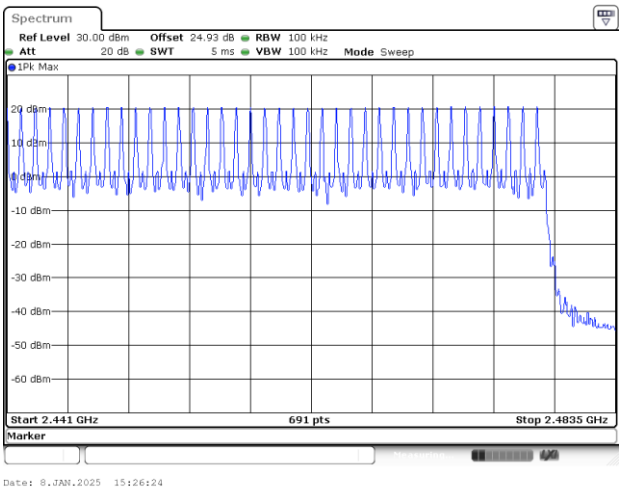
<Ant. 3>

Number of Hopping Frequency

<1Mbps>

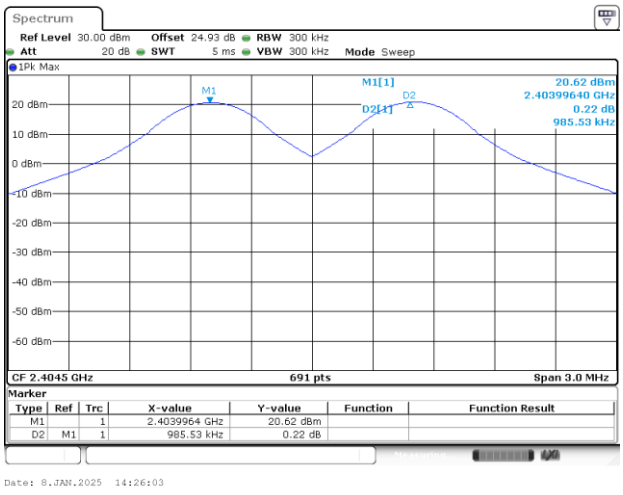
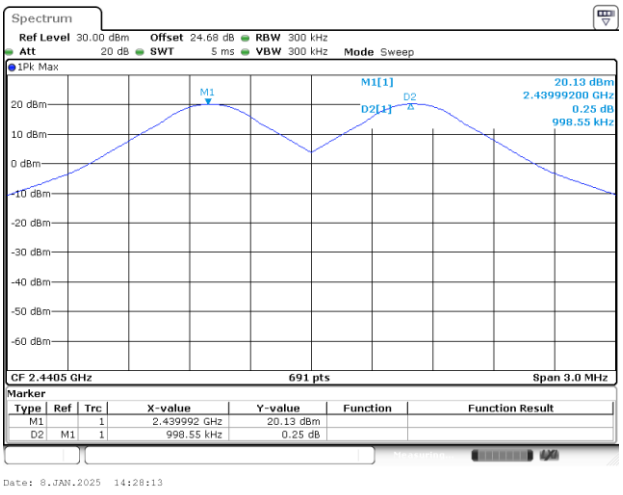
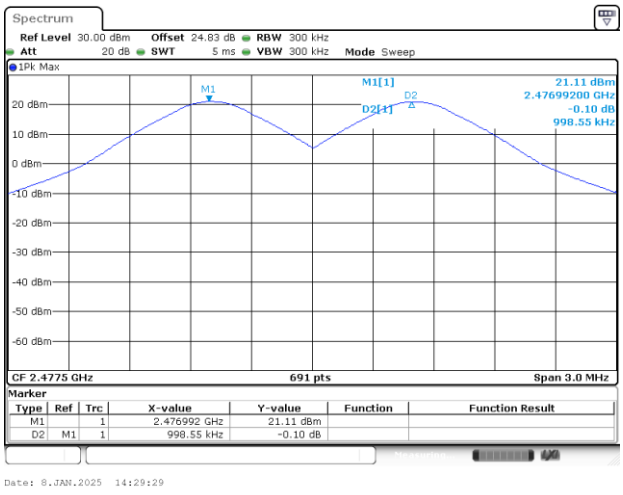
Number of Hopping Channel Plot	
Channel 02 - 38	**Channel 38 - 76**
	

<2Mbps>

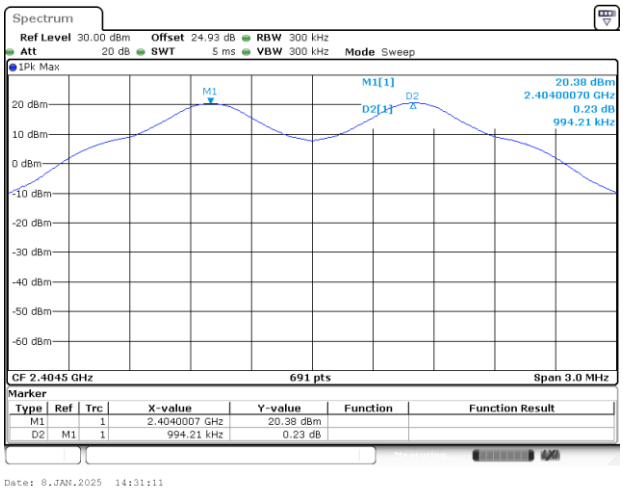
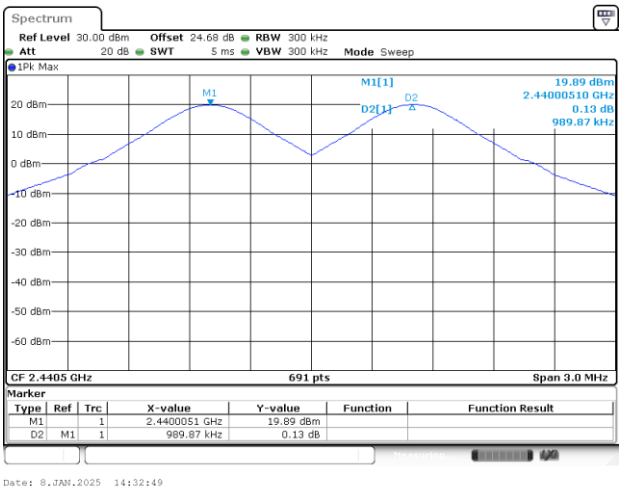
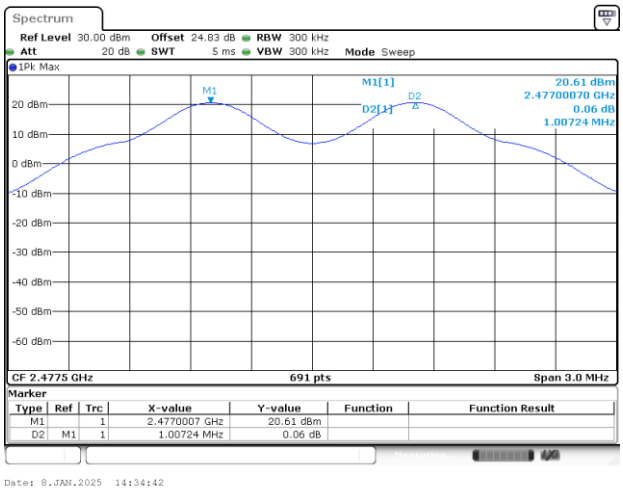
Number of Hopping Channel Plot	
Channel 02 - 38	**Channel 38 - 76**
	

Hopping Channel Separation

<1Mbps>

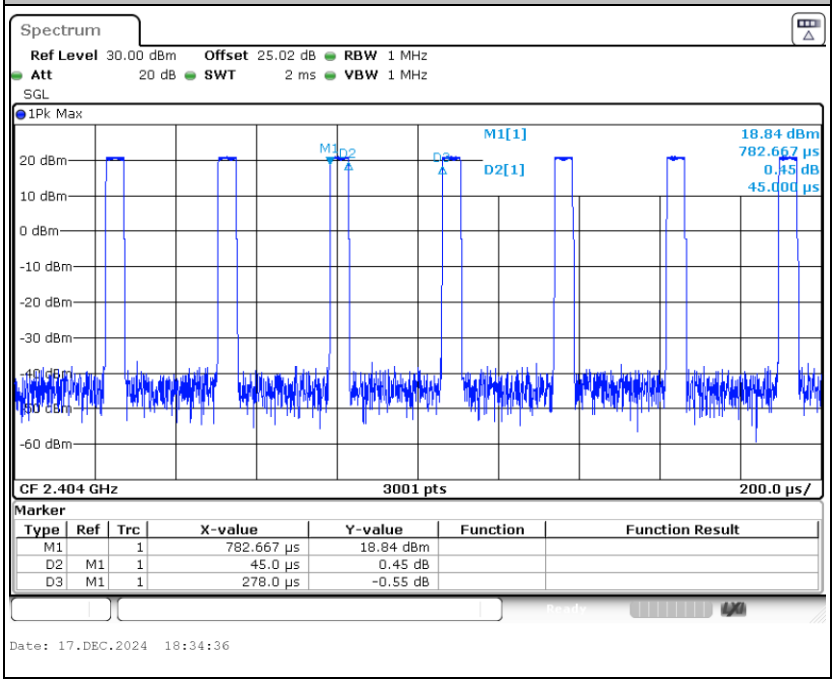
Channel Separation Plot on Channel 02 - 03	Channel Separation Plot on Channel 38 - 39
	
Channel Separation Plot on Channel 75 - 76	
	

<2Mbps>

Channel Separation Plot on Channel 02 - 03	Channel Separation Plot on Channel 38 - 39
	
Channel Separation Plot on Channel 75 - 76	
	

Dwell Time

Package Transfer Time Plot

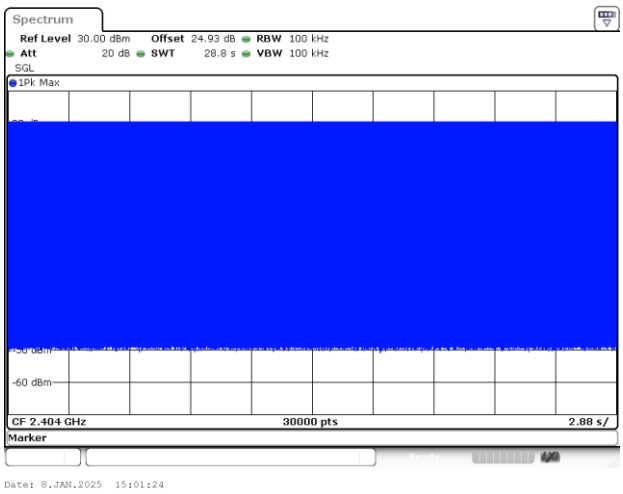
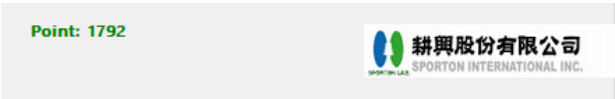


Remark:

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

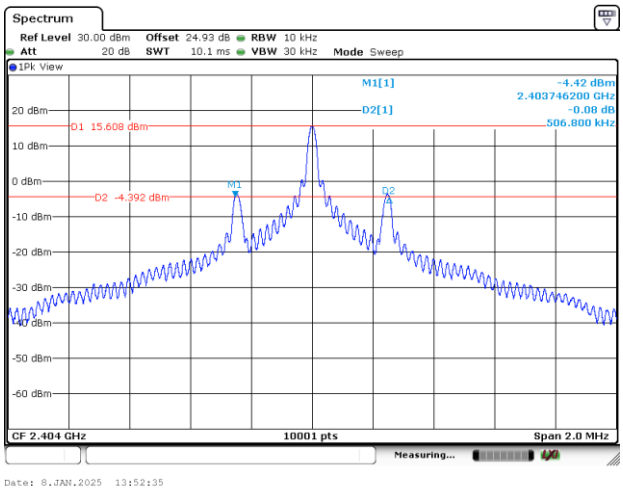
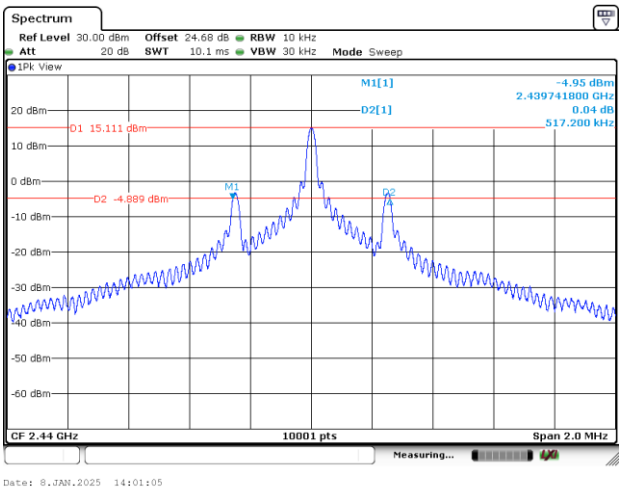
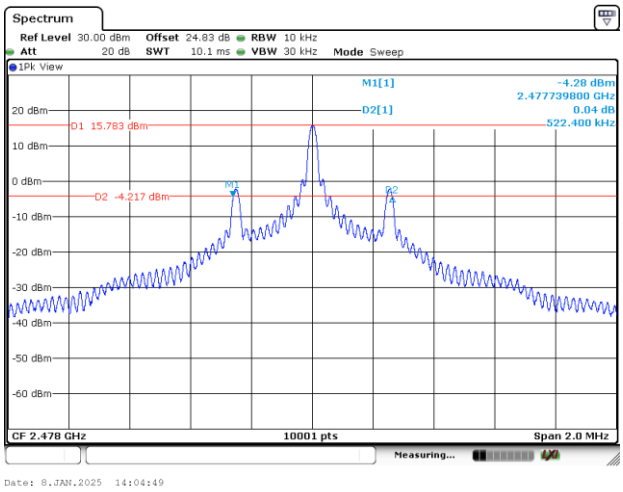
= 1792 x 0.045 ms = 0.081 sec

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.

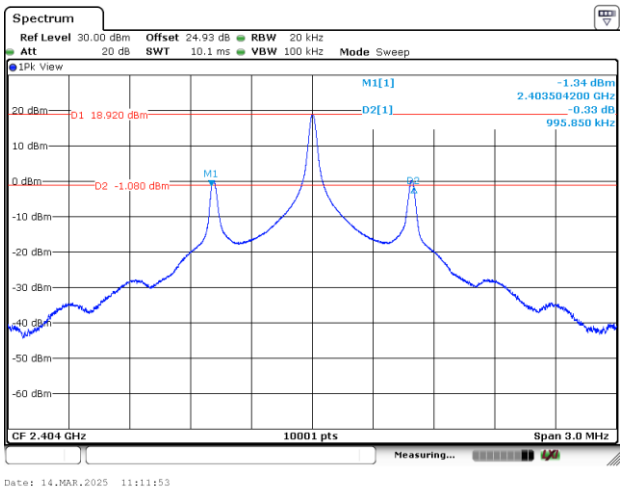
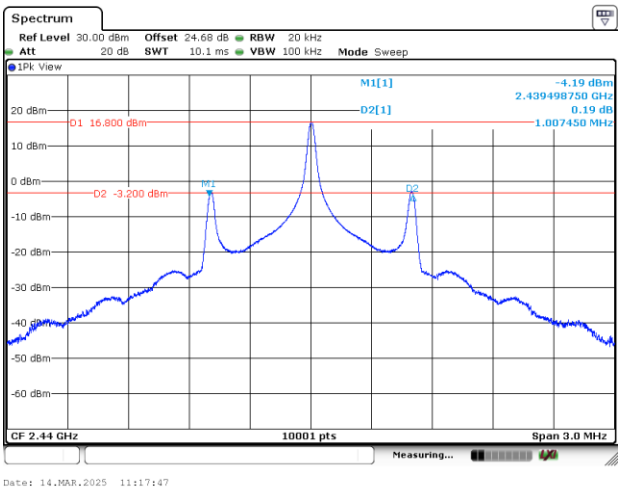
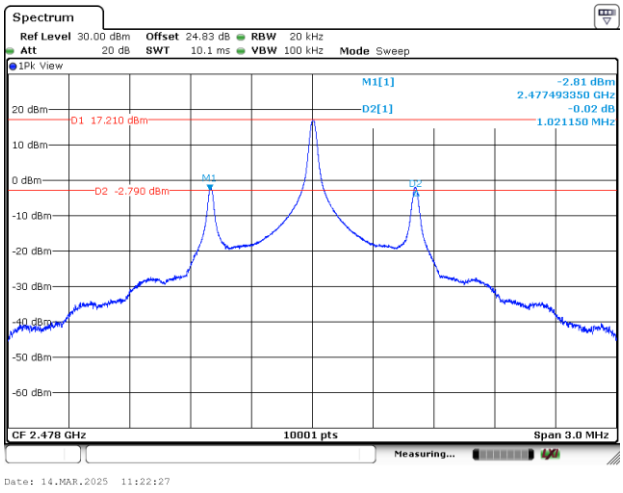
Dwell time Plot in Channel 02	On-time hop count 1792
	

20dB Bandwidth

<1Mbps>

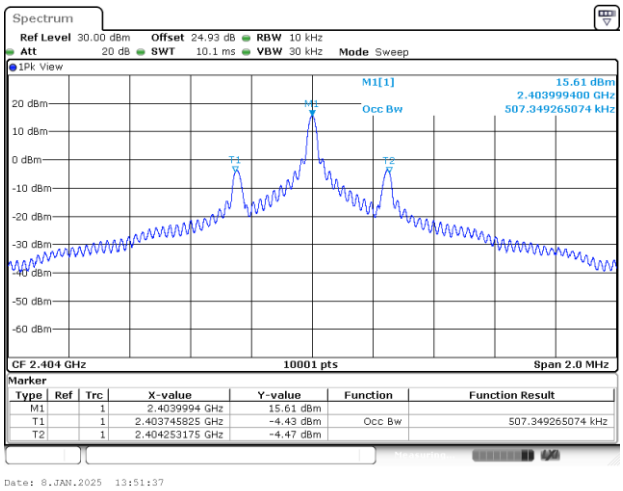
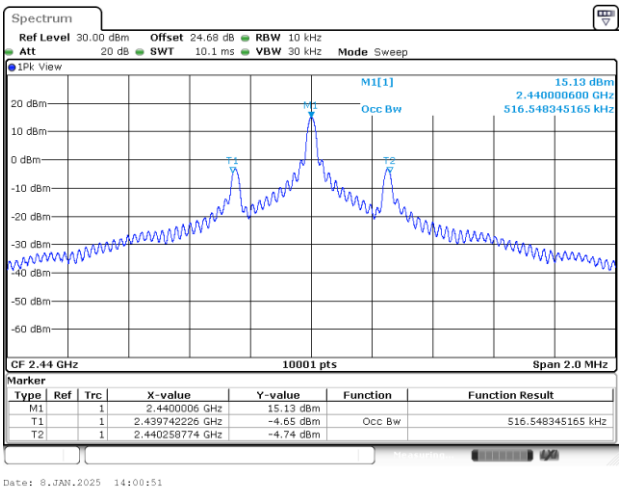
20 dB Bandwidth Plot in Channel 02	20 dB Bandwidth Plot in Channel 38
	
20 dB Bandwidth Plot in Channel 76	
	

<2Mbps>

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
	
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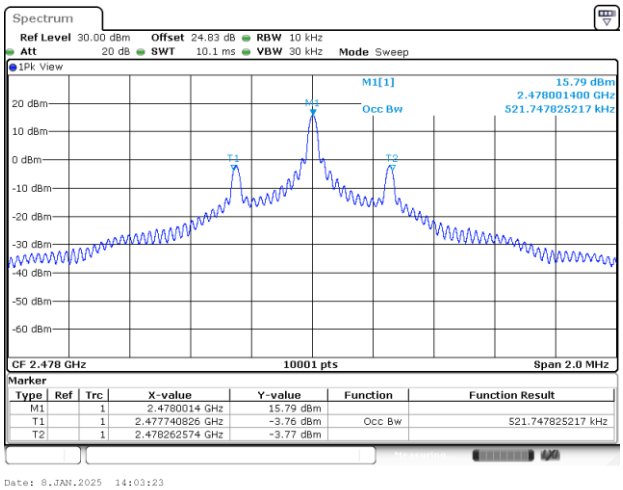	

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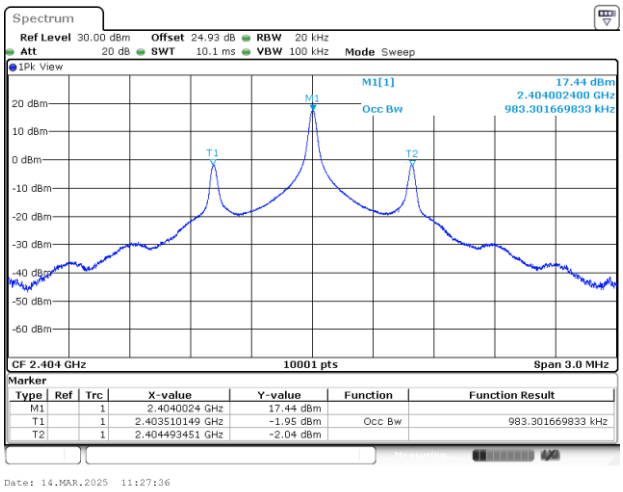
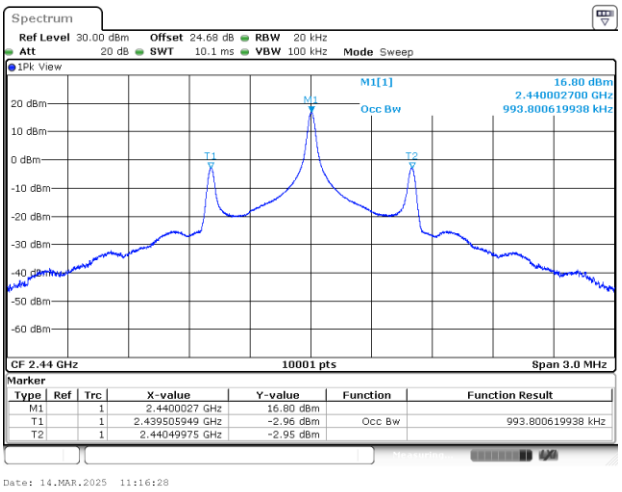
99% Occupied Bandwidth on Channel 02	99% Occupied Bandwidth on Channel 38
	
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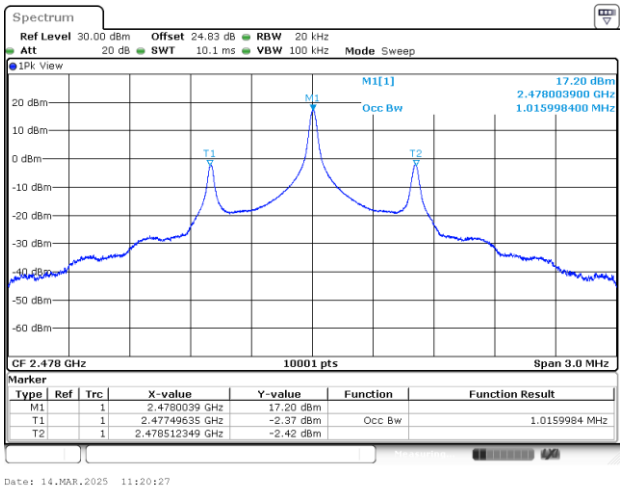	

Band Edges

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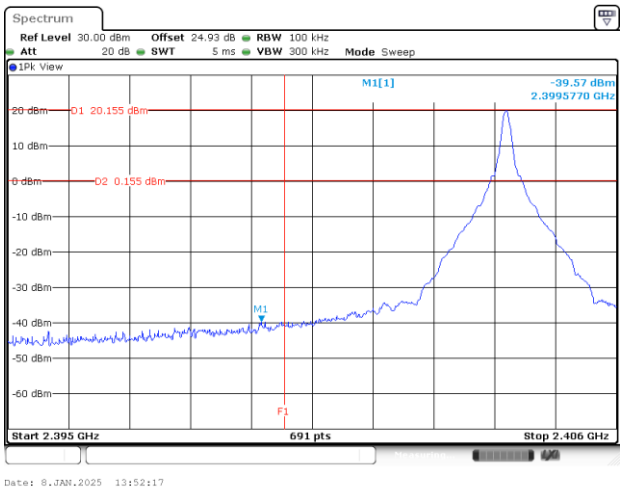
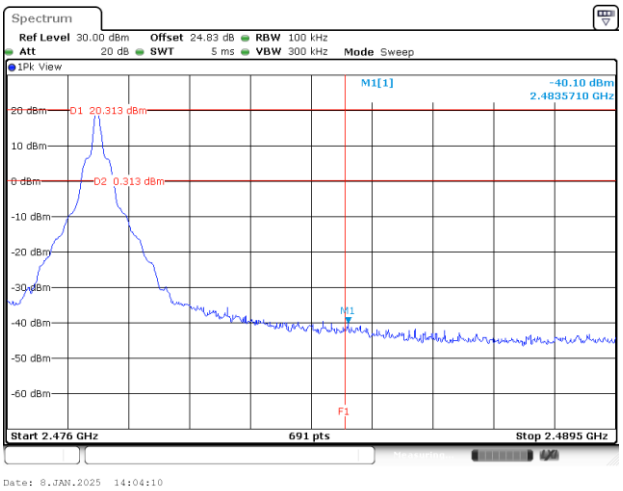
Low Band Edge Plot on Channel 02	High Band Edge Plot on Channel 76
	

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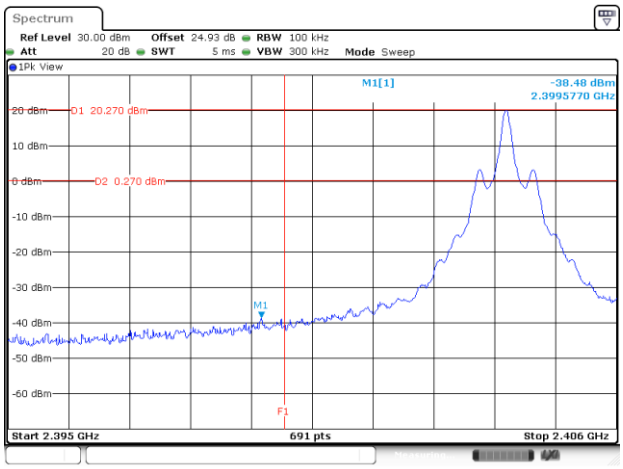
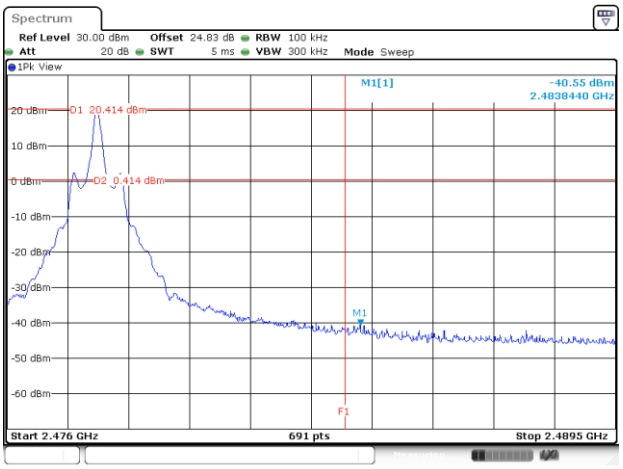
Low Band Edge Plot on Channel 02	High Band Edge Plot on Channel 76
	

Hopping Mode Band Edges

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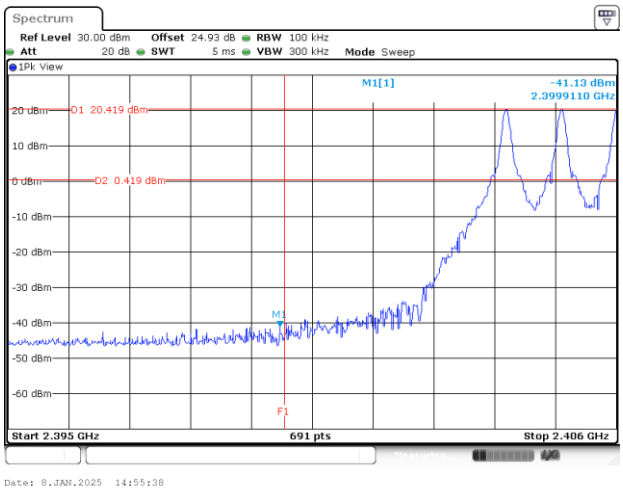
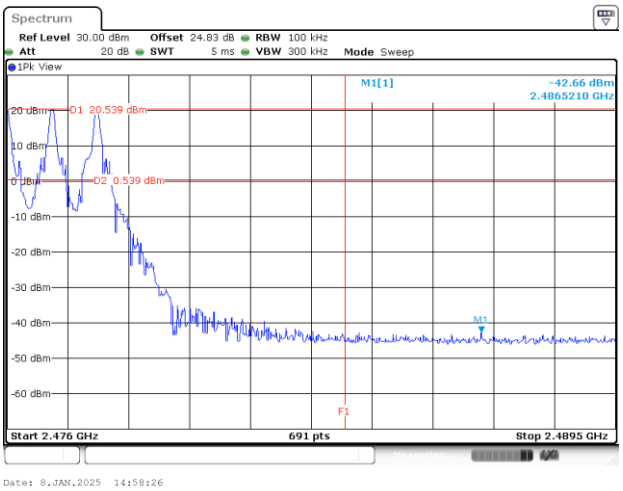
Hopping Mode Low Band Edge Plot	Hopping Mode High Band Edge Plot
	

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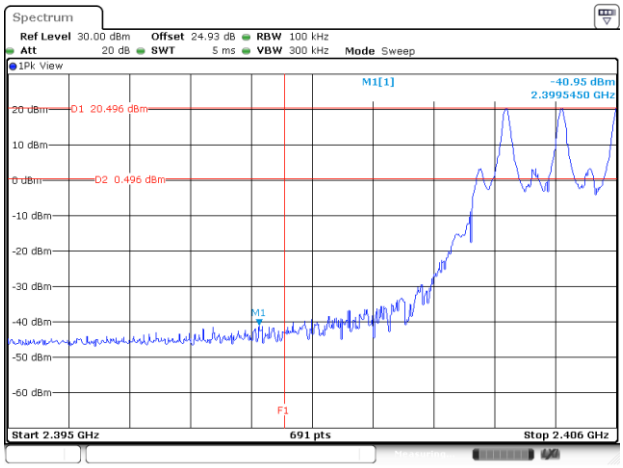
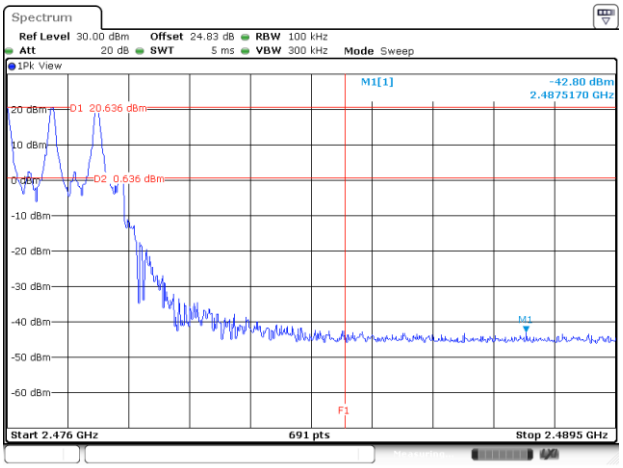
Hopping Mode Low Band Edge Plot	Hopping Mode High Band Edge Plot
	

Conducted Spurious Emission

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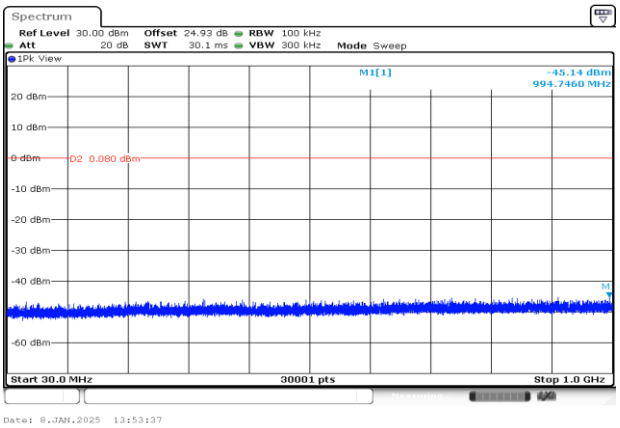
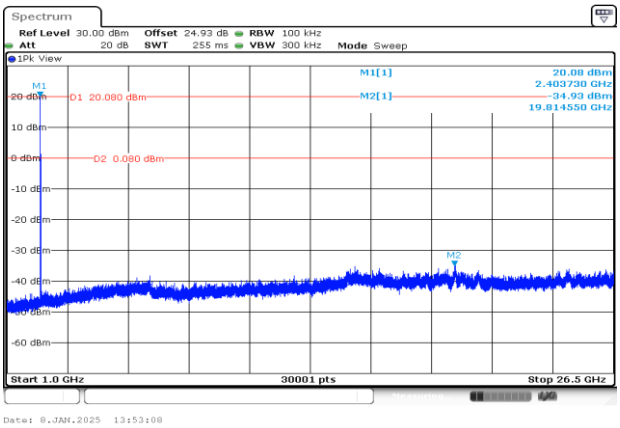
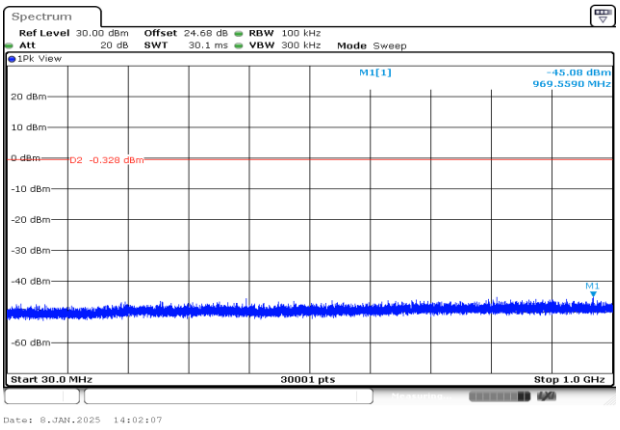
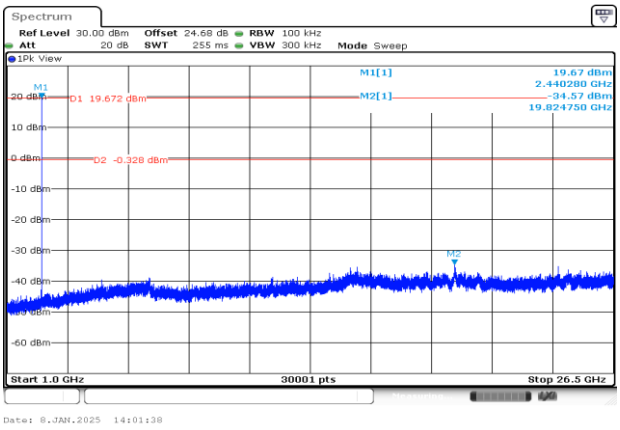
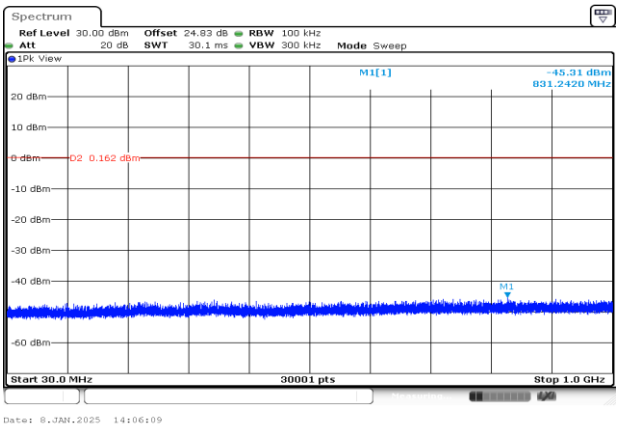
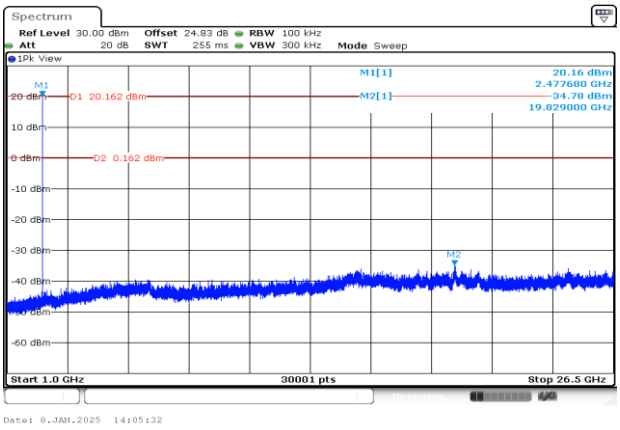
CSE Plot on Low Ch between 30MHz ~ 1 GHz	CSE Plot on Low Ch between 1GHz ~ 26.5GHz
	
CSE Plot on Mid. Ch between 30MHz ~ 1 GHz	**CSE Plot on Mid. Ch between 1GHz ~ 26.5GHz**
	
CSE Plot on High Ch between 30MHz ~ 1 GHz	**CSE Plot on High Ch between 1GHz ~ 26.5GHz**
	

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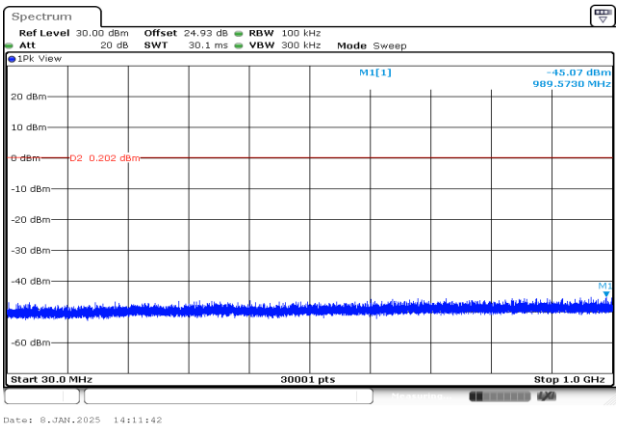
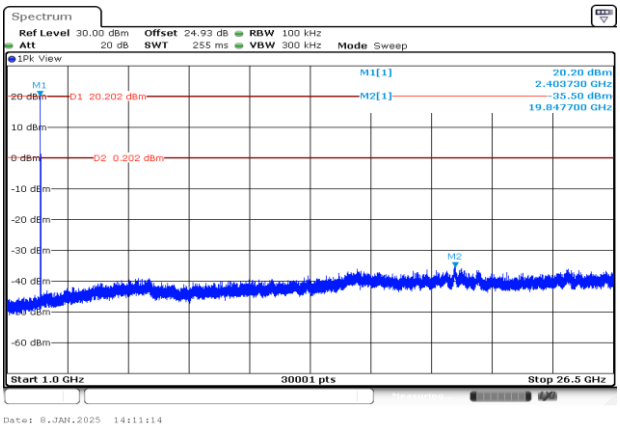
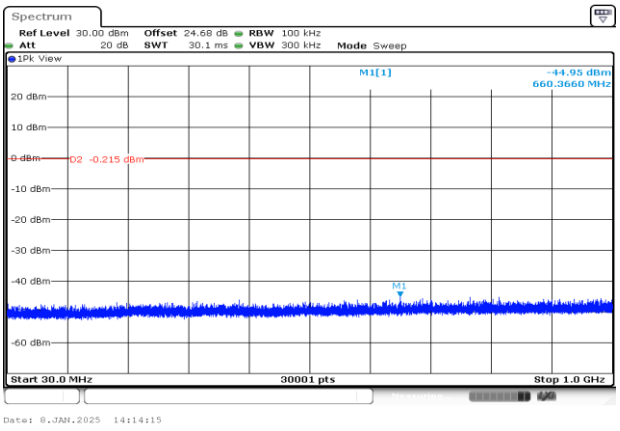
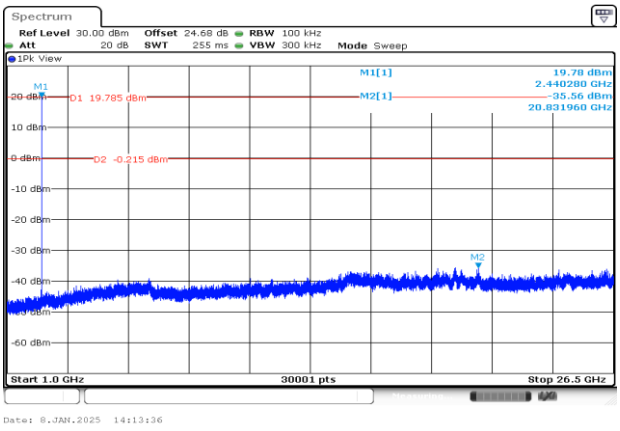
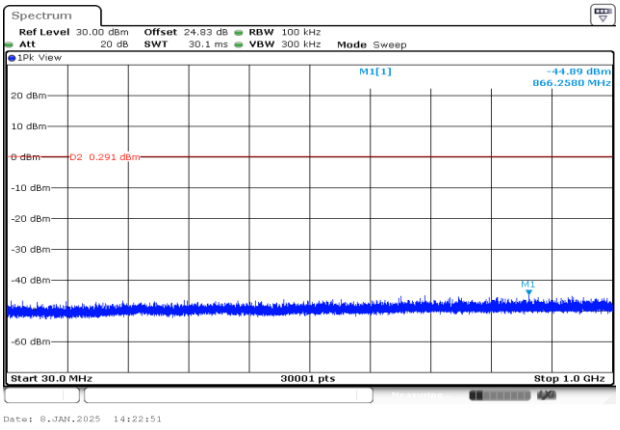
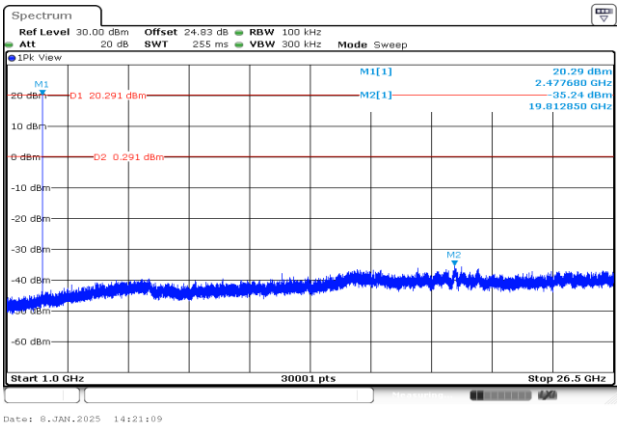
CSE Plot on Low Ch between 30MHz ~ 1 GHz	CSE Plot on Low Ch between 1GHz ~ 26.5GHz
	
CSE Plot on Mid. Ch between 30MHz ~ 1 GHz	**CSE Plot on Mid. Ch between 1GHz ~ 26.5GHz**
	
CSE Plot on High Ch between 30MHz ~ 1 GHz	**CSE Plot on High Ch between 1GHz ~ 26.5GHz**
	

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Number of Hopping Frequency

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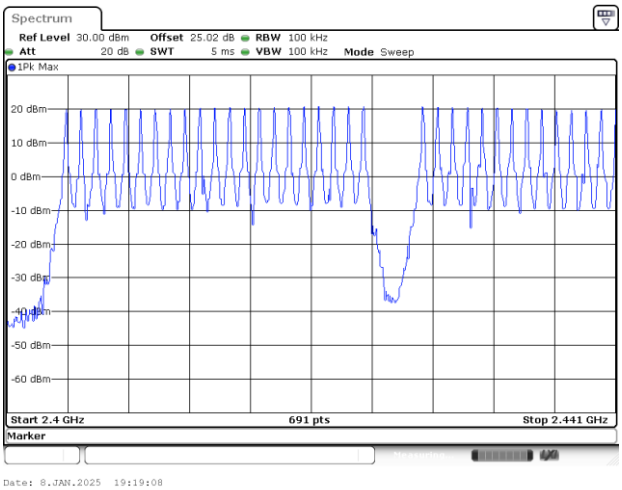
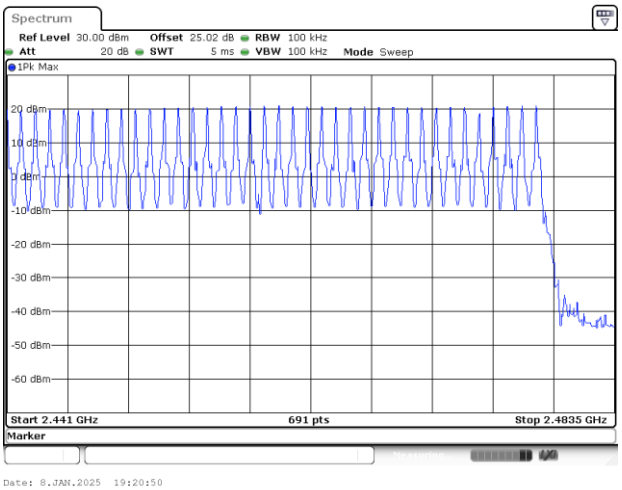
Number of Hopping Channel Plot	
Channel 02 - 38	**Channel 38 - 76**
	

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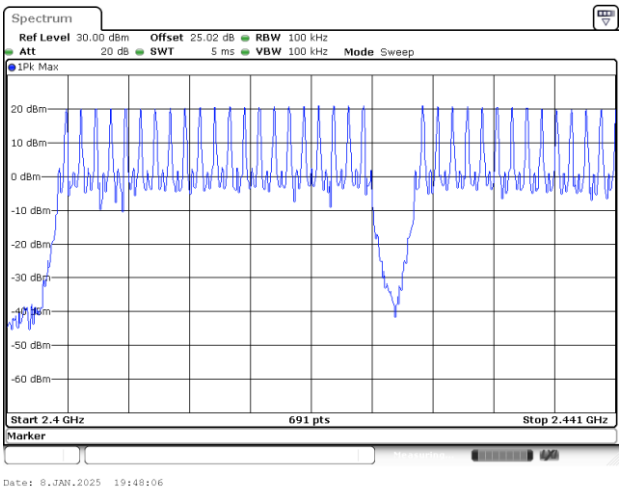
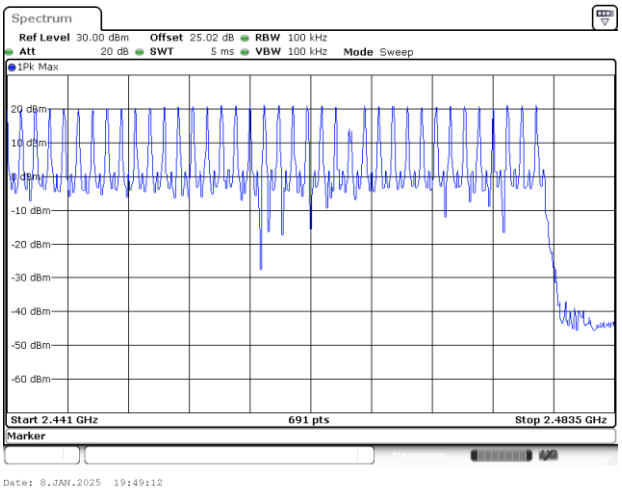
Number of Hopping Channel Plot	
Channel 02 - 38	**Channel 38 - 76**
	

Hopping Channel Separation

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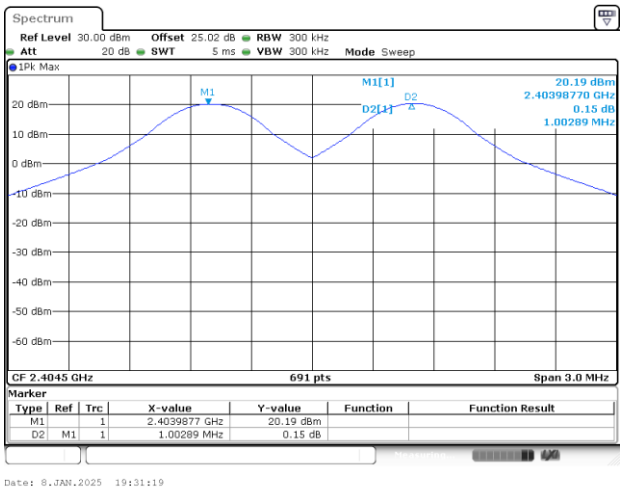
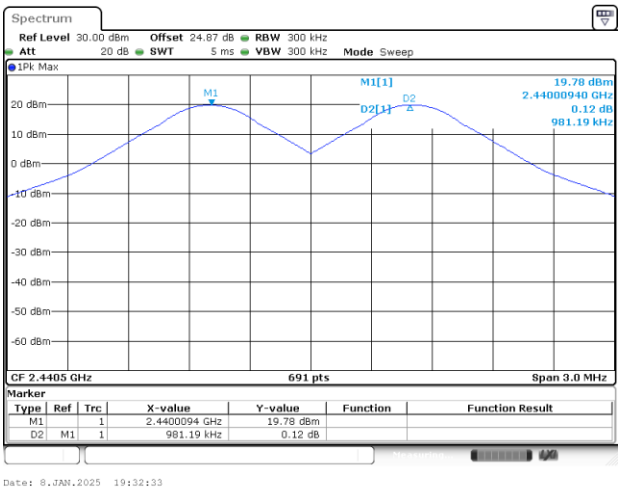
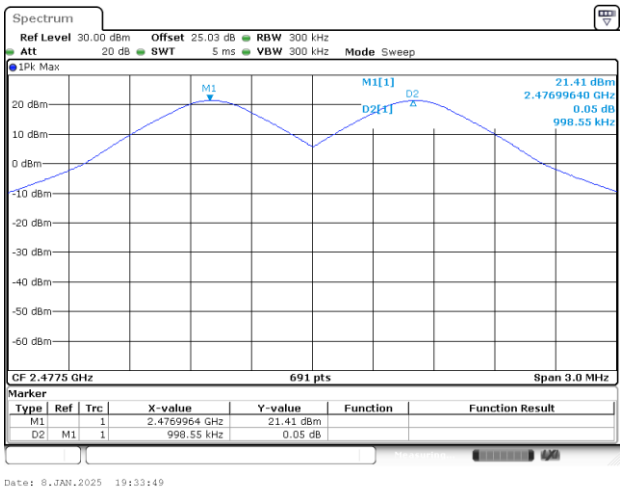
Channel Separation Plot on Channel 02 - 03	Channel Separation Plot on Channel 38 - 39
	
Channel Separation Plot on Channel 75 - 76	
	

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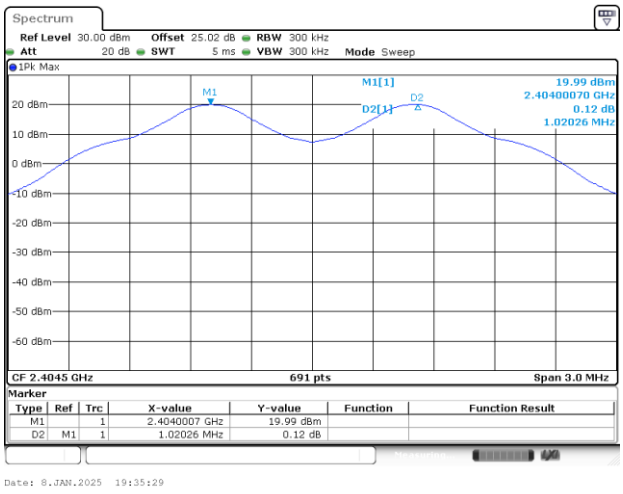
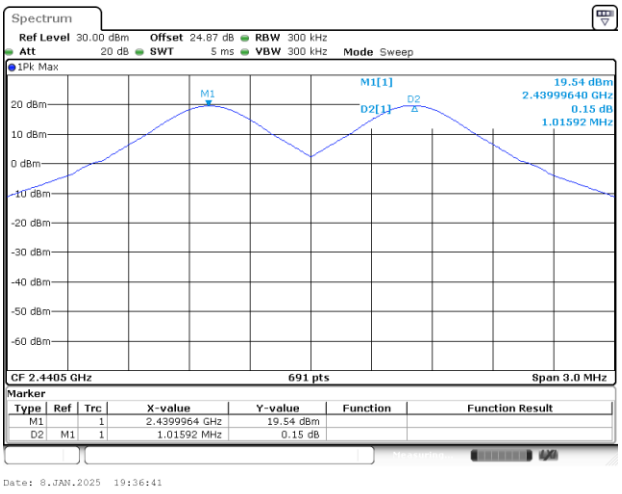
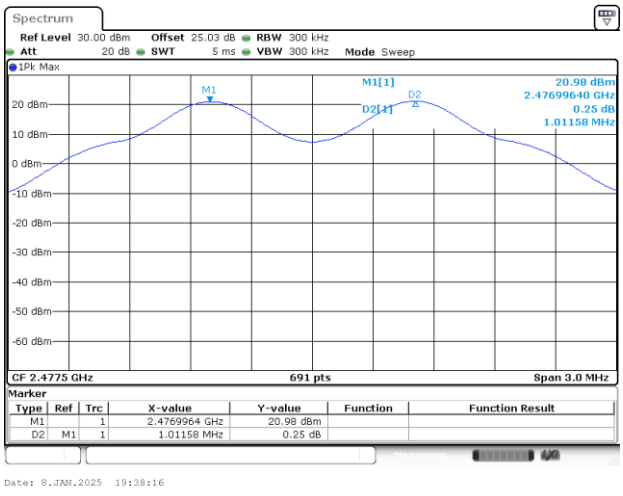
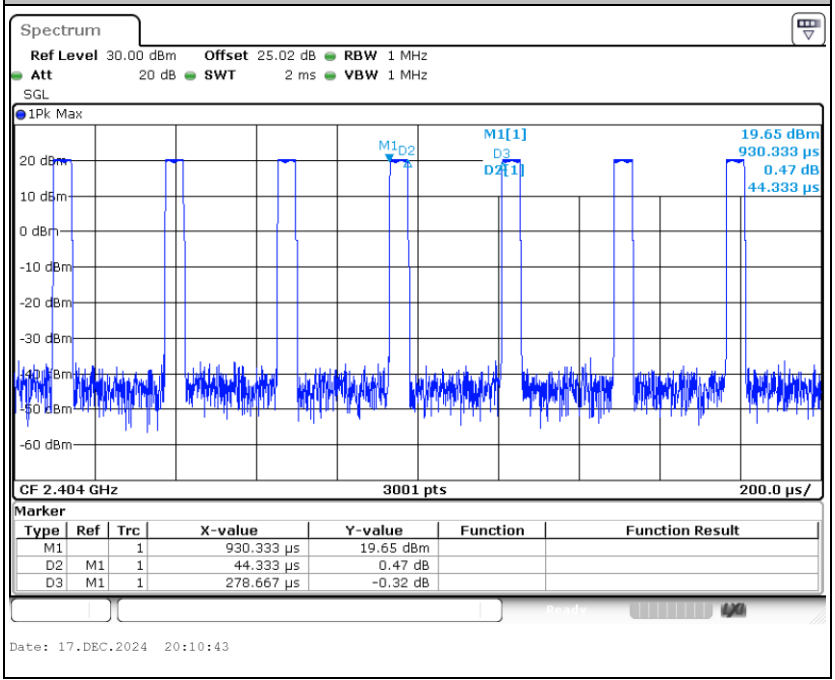
Channel Separation Plot on Channel 02 - 03	Channel Separation Plot on Channel 38 - 39
	
Channel Separation Plot on Channel 75 - 76	
	

Dwell Time

Package Transfer Time Plot

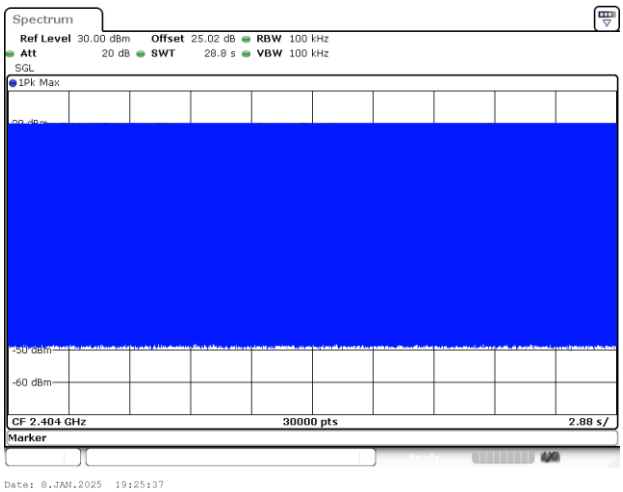
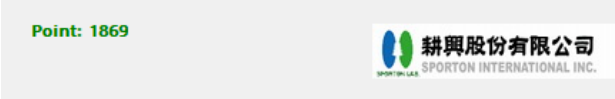


Remark:

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

= 1869 x 0.044333 ms = 0.083 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.

Dwell time Plot in Channel 02	On-time hop count 1869
	

20dB Bandwidth

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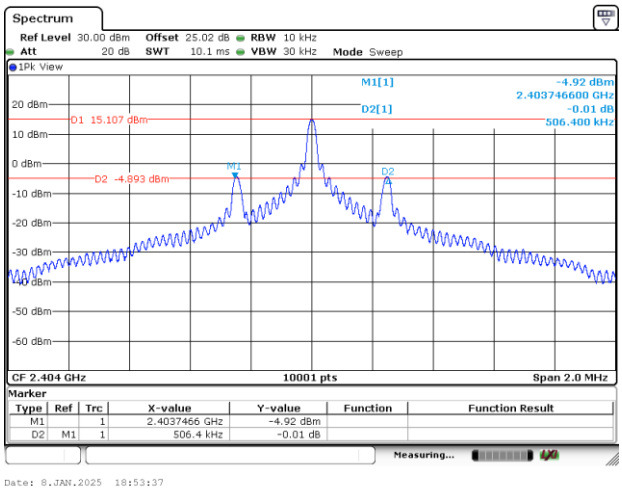
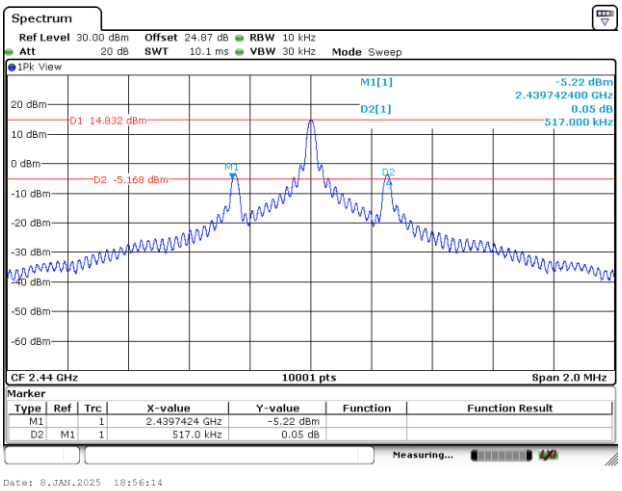
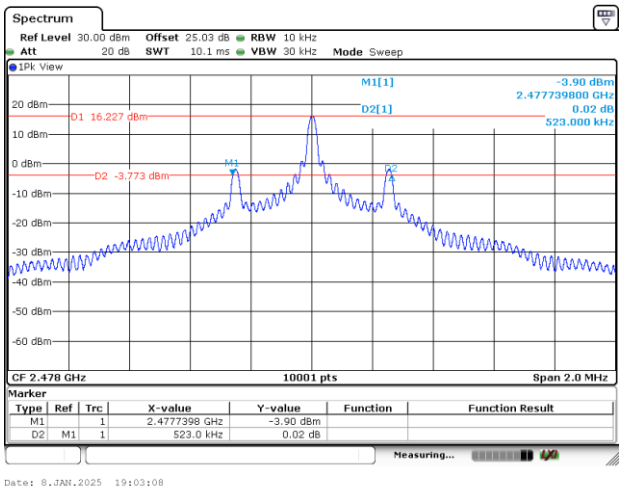
20 dB Bandwidth Plot in Channel 02	20 dB Bandwidth Plot in Channel 38
	
20 dB Bandwidth Plot in Channel 76	
	

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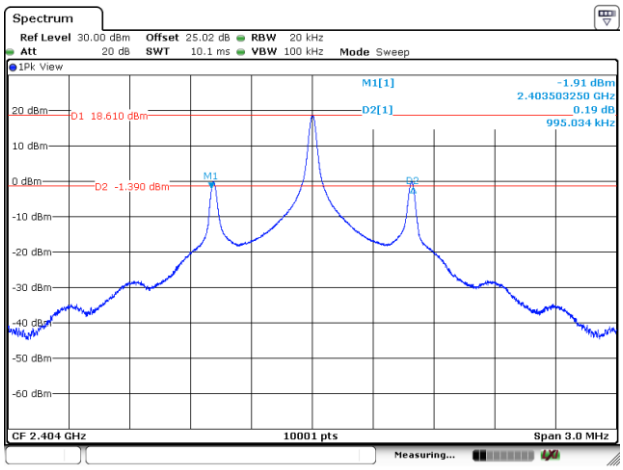
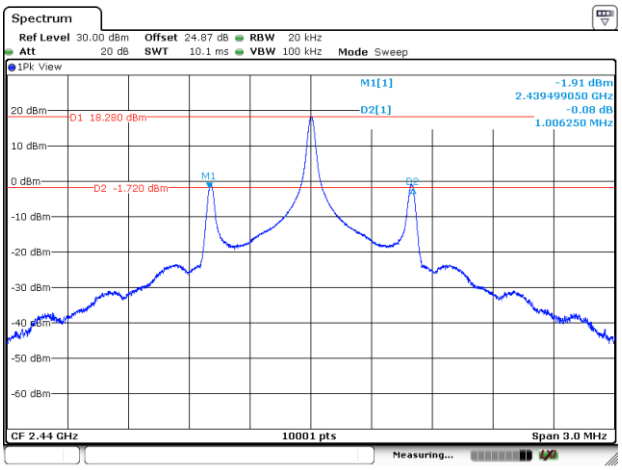
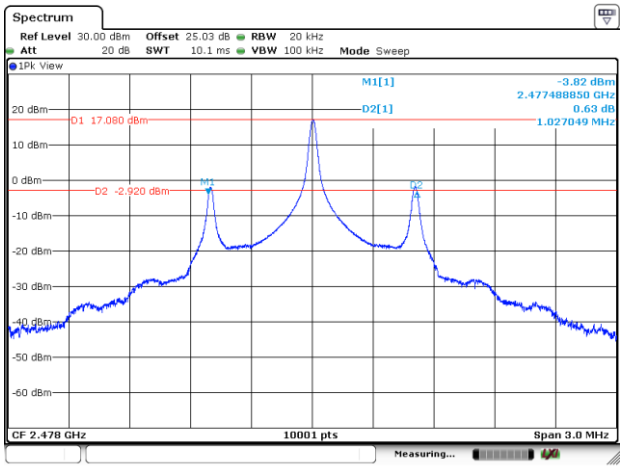
20 dB Bandwidth Plot in Channel 02	20 dB Bandwidth Plot in Channel 38
	
Date: 14.MAR.2025 11:36:02	Date: 14.MAR.2025 11:47:19
20 dB Bandwidth Plot in Channel 76	
	
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99% Occupied Bandwidth

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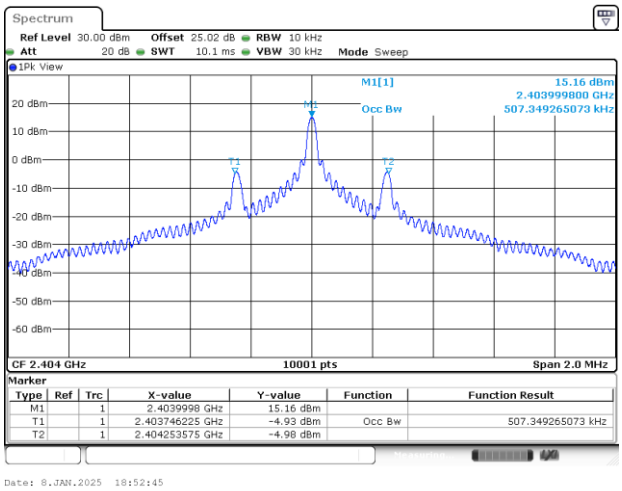
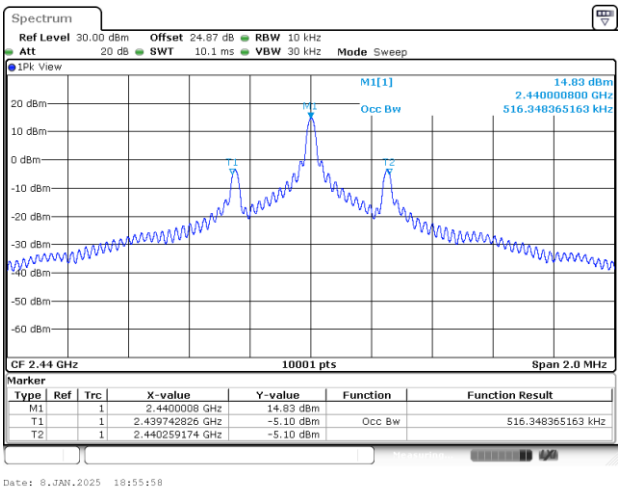
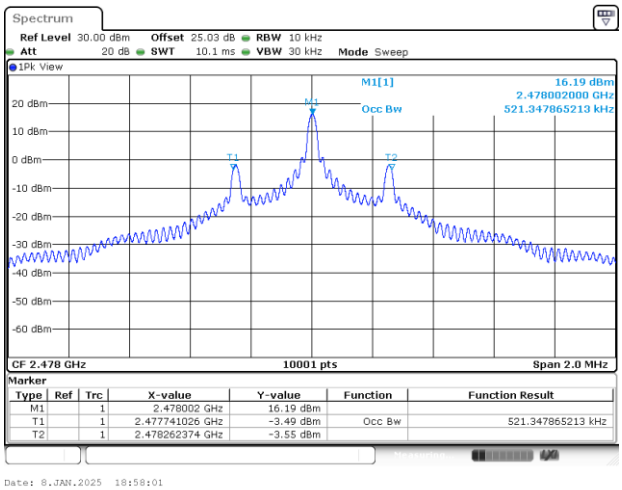
99% Occupied Bandwidth on Channel 02



99% Occupied Bandwidth on Channel 38



99% Occupied Bandwidth on Channel 76



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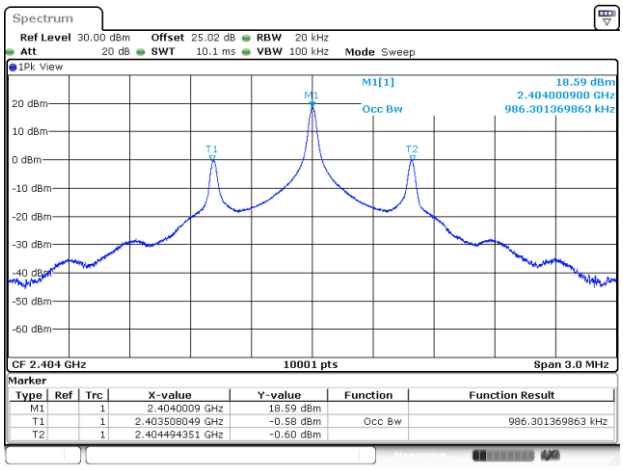
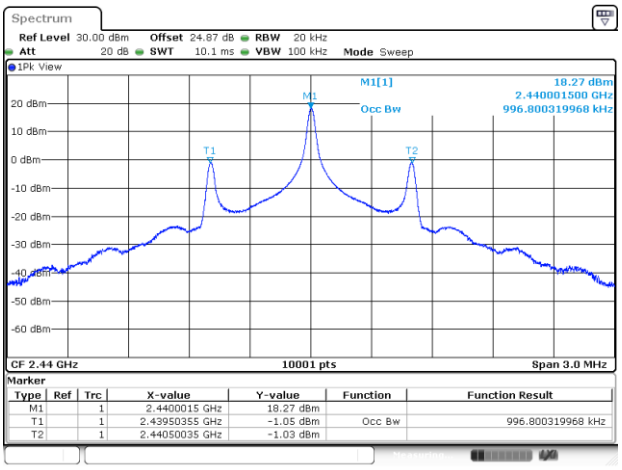
99% Occupied Bandwidth on Channel 02	99% Occupied Bandwidth on Channel 38
	
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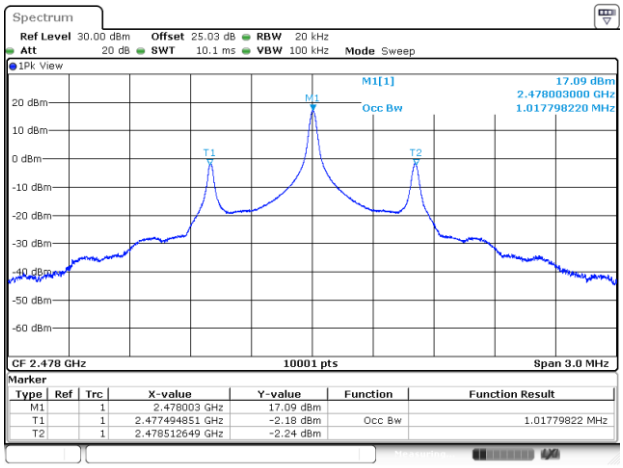
99% Occupied Bandwidth on Channel 76	
	
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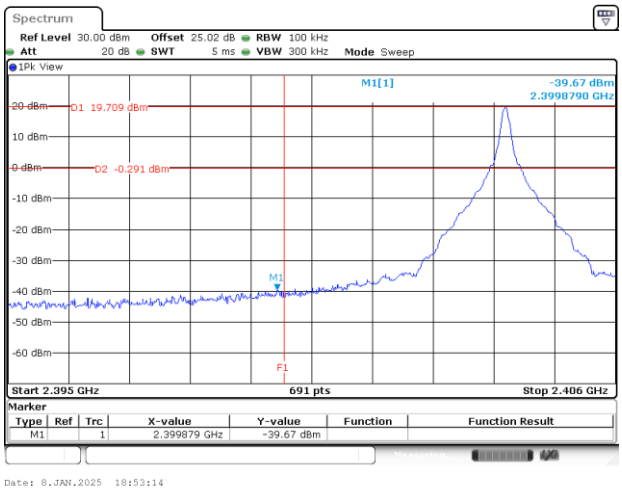
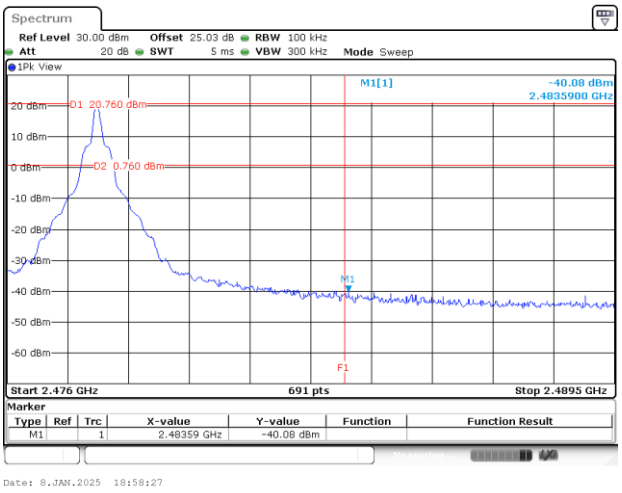
Band Edges

<1Mbps>

Low Band Edge Plot on Channel 02	High Band Edge Plot on Channel 76
	

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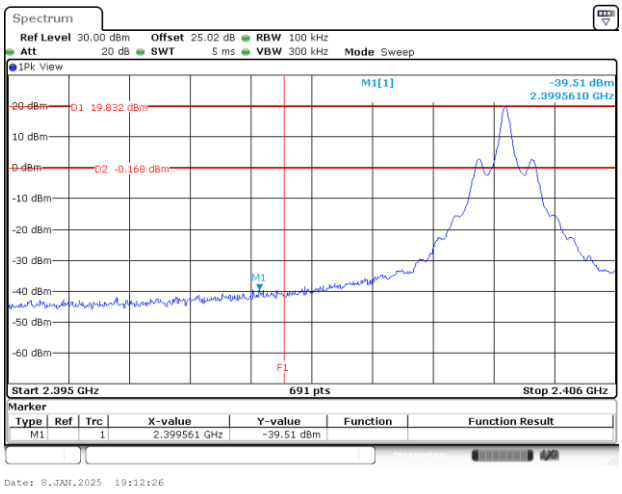
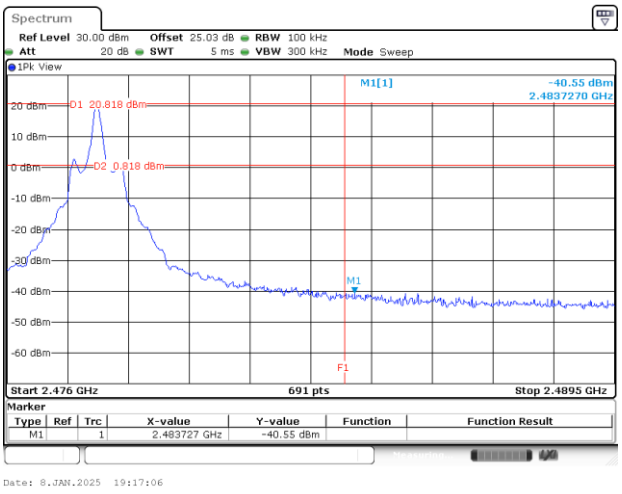
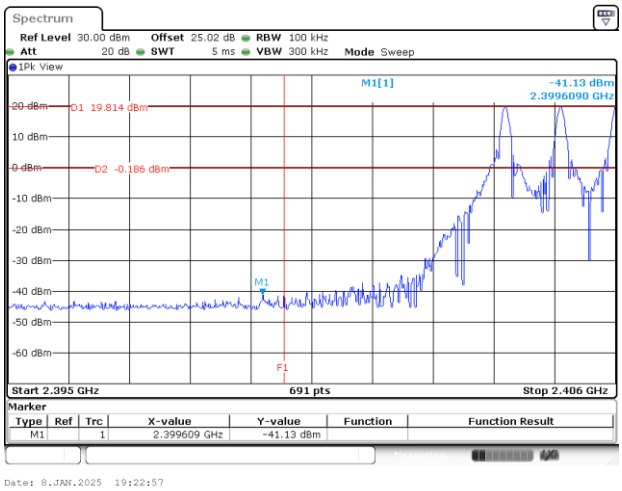
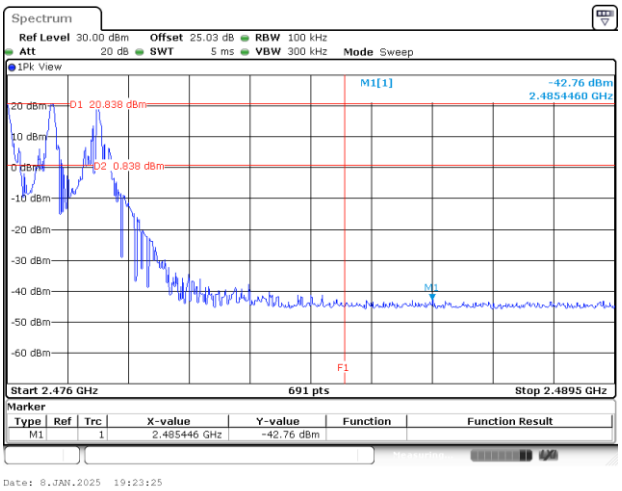
Low Band Edge Plot on Channel 02	High Band Edge Plot on Channel 76
	

Hopping Mode Band Edges

<1Mbps>

Hopping Mode Low Band Edge Plot	Hopping Mode High Band Edge Plot
	

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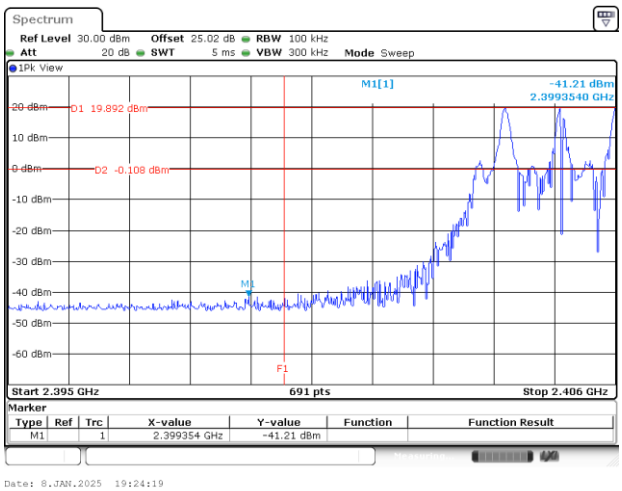
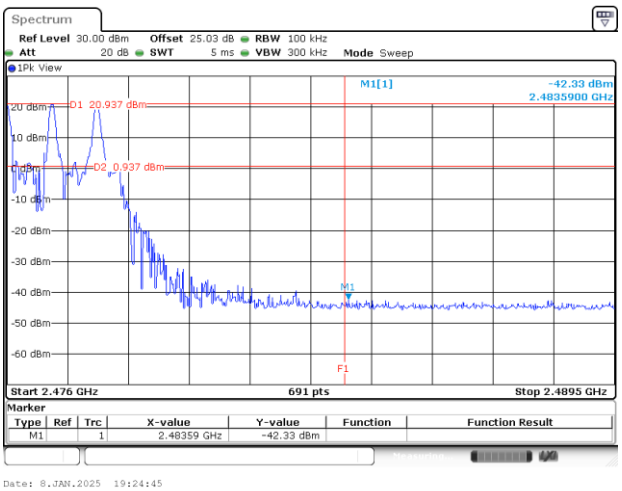
Hopping Mode Low Band Edge Plot	Hopping Mode High Band Edge Plot
	

Conducted Spurious Emission

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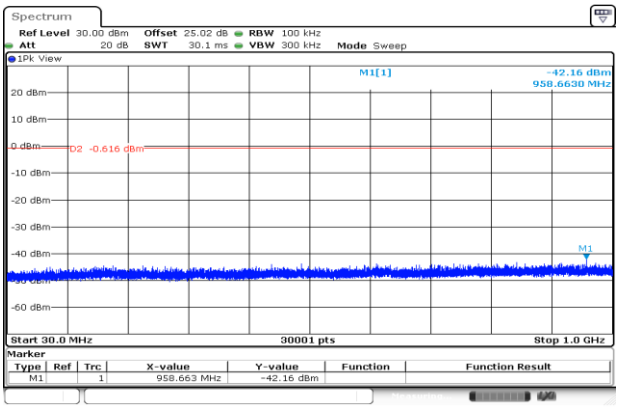
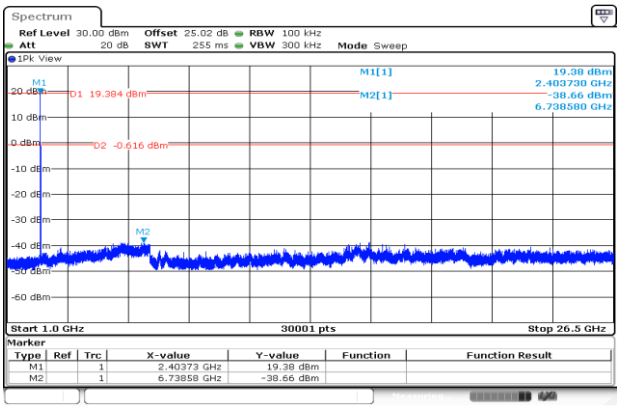
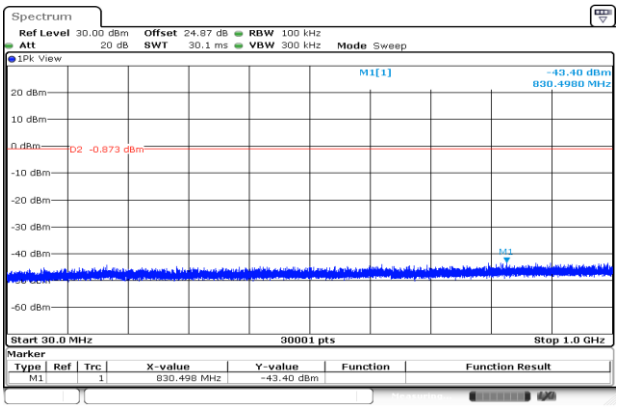
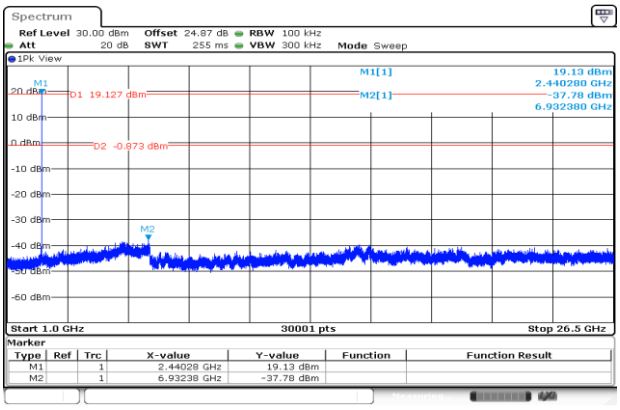
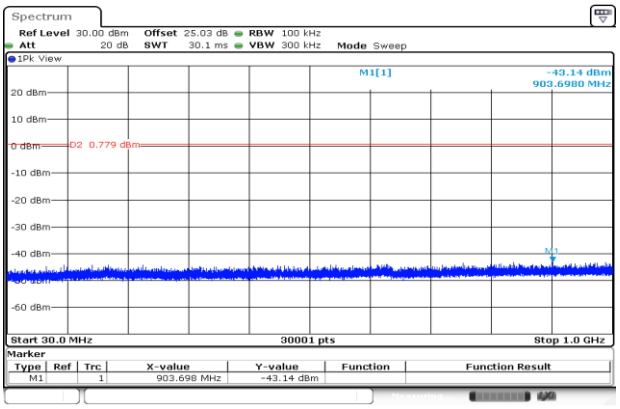
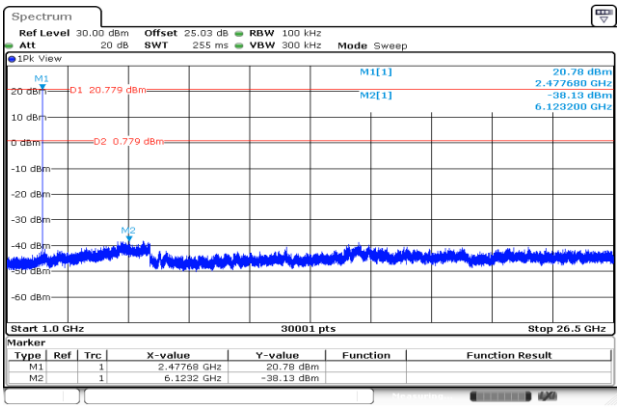
CSE Plot on Low Ch between 30MHz ~ 1 GHz	CSE Plot on Low Ch between 1GHz ~ 26.5GHz
	
CSE Plot on Mid. Ch between 30MHz ~ 1 GHz	**CSE Plot on Mid. Ch between 1GHz ~ 26.5GHz**
	
CSE Plot on High Ch between 30MHz ~ 1 GHz	**CSE Plot on High Ch between 1GHz ~ 26.5GHz**
	

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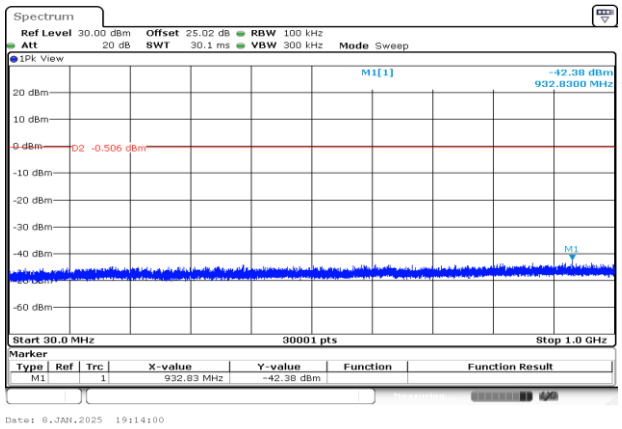
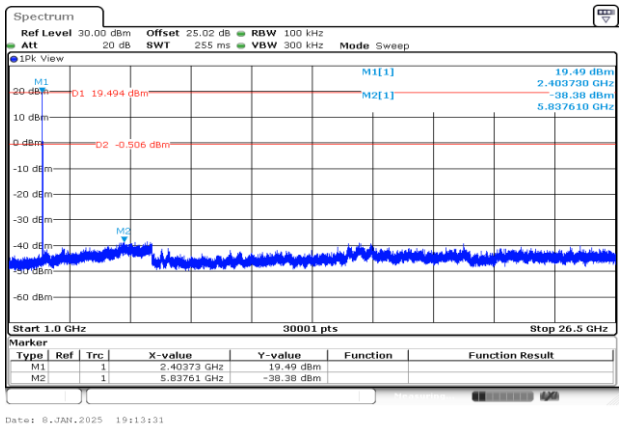
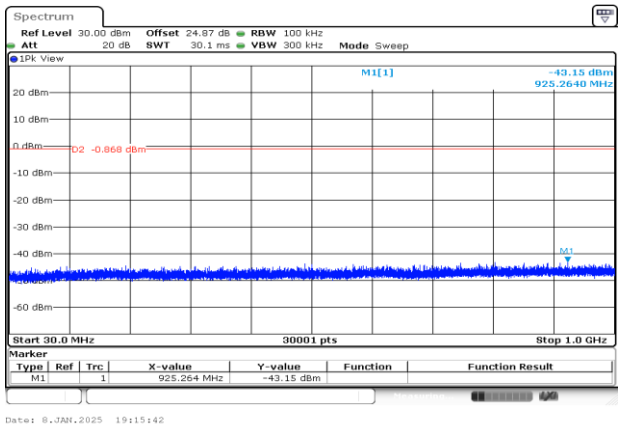
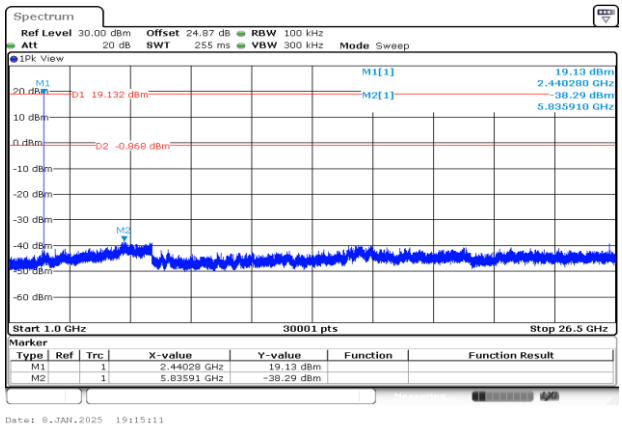
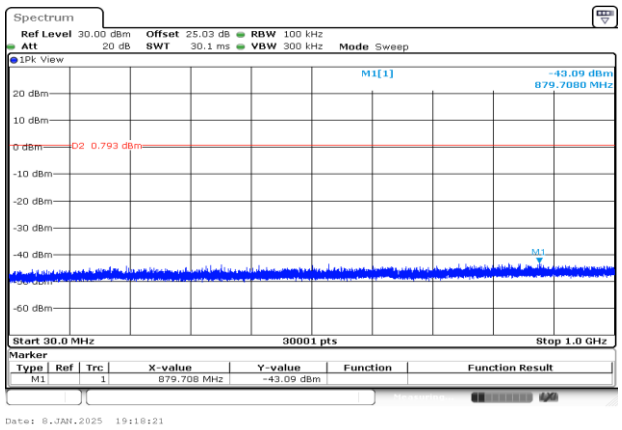
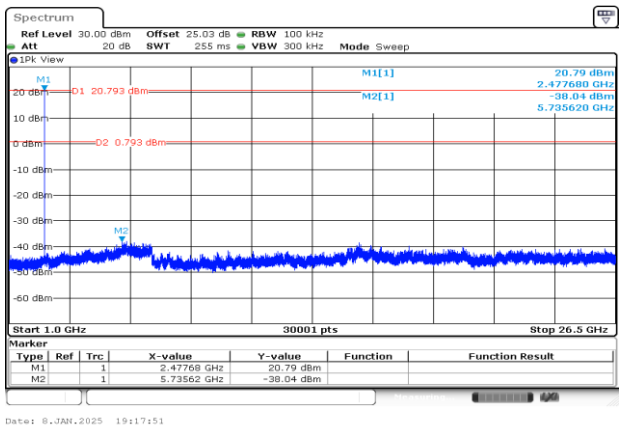
CSE Plot on Low Ch between 30MHz ~ 1 GHz	CSE Plot on Low Ch between 1GHz ~ 26.5GHz
	

CSE Plot on Mid. Ch between 30MHz ~ 1 GHz	CSE Plot on Mid. Ch between 1GHz ~ 26.5GHz
	

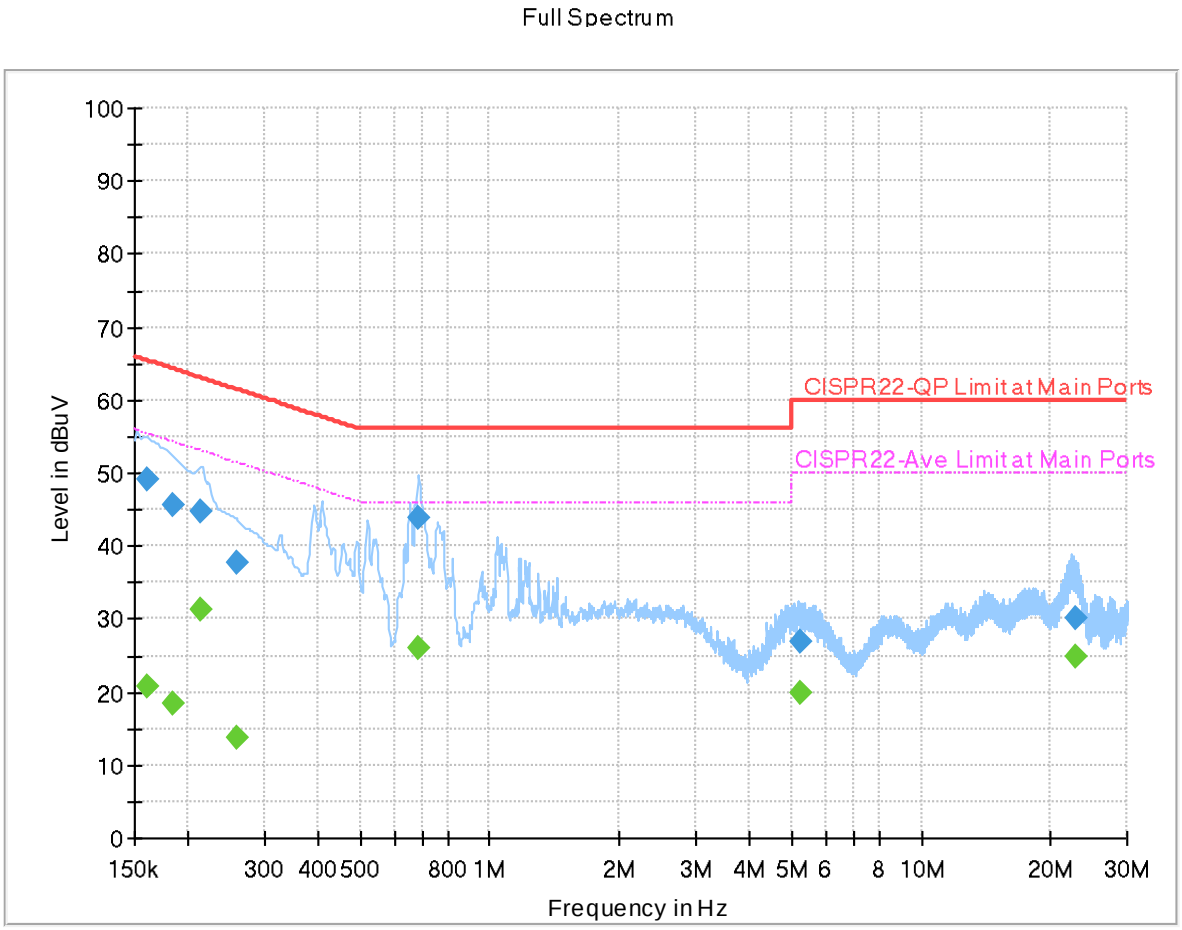
CSE Plot on High Ch between 30MHz ~ 1 GHz	CSE Plot on High Ch between 1GHz ~ 26.5GHz
	

Appendix B. AC Conducted Emission Test Results

Test Engineer :	Louis Chung	**Temperature :**	16.1~22.7℃
		Relative Humidity :	45.9~48.9%

EUT Information

Report NO :	4N0918
Test Mode :	Mode 1
Test Voltage :	120Vac/60Hz
Phase :	Line

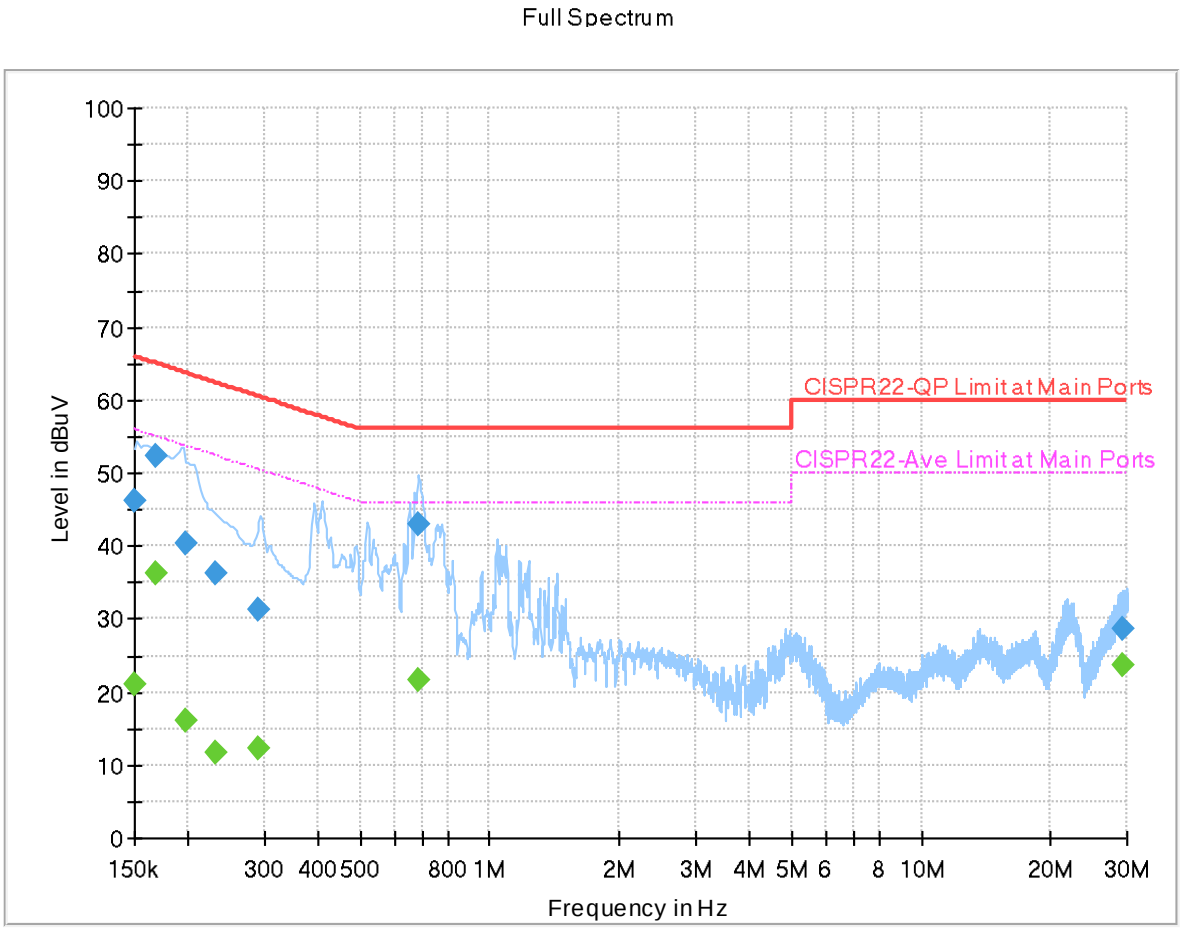


Final_Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.161250	---	20.80	55.40	34.60	L1	OFF	19.8
0.161250	49.02	---	65.40	16.38	L1	OFF	19.8
0.183750	---	18.35	54.31	35.96	L1	OFF	19.8
0.183750	45.73	---	64.31	18.58	L1	OFF	19.8
0.213000	---	31.20	53.09	21.89	L1	OFF	19.8
0.213000	44.74	---	63.09	18.35	L1	OFF	19.8
0.258000	---	13.83	51.50	37.67	L1	OFF	19.8
0.258000	37.77	---	61.50	23.73	L1	OFF	19.8
0.683250	---	25.89	46.00	20.11	L1	OFF	19.8
0.683250	43.86	---	56.00	12.14	L1	OFF	19.8
5.228250	---	20.01	50.00	29.99	L1	OFF	20.0
5.228250	26.96	---	60.00	33.04	L1	OFF	20.0
22.697250	---	24.73	50.00	25.27	L1	OFF	20.7
22.697250	30.13	---	60.00	29.87	L1	OFF	20.7

EUT Information

Report NO :	4N0918
Test Mode :	Mode 1
Test Voltage :	120Vac/60Hz
Phase :	Neutral



Final_Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.150000	---	20.96	56.00	35.04	N	OFF	19.8
0.150000	46.08	---	66.00	19.92	N	OFF	19.8
0.168000	---	36.23	55.06	18.83	N	OFF	19.8
0.168000	52.29	---	65.06	12.77	N	OFF	19.8
0.198015	---	16.04	53.69	37.65	N	OFF	19.8
0.198015	40.22	---	63.69	23.47	N	OFF	19.8
0.231000	---	11.60	52.41	40.81	N	OFF	19.8
0.231000	36.36	---	62.41	26.05	N	OFF	19.8
0.289500	---	12.17	50.54	38.37	N	OFF	19.8
0.289500	31.21	---	60.54	29.33	N	OFF	19.8
0.683655	---	21.70	46.00	24.30	N	OFF	19.8
0.683655	43.12	---	56.00	12.88	N	OFF	19.8
29.359545	---	23.62	50.00	26.38	N	OFF	21.0
29.359545	28.70	---	60.00	31.30	N	OFF	21.0

Appendix C. Radiated Spurious Emission Test Data

Test Engineer :	Jerry Lan, Gary Guo and Steven Wu	**Temperature :**	20~26°C
		Relative Humidity :	40~65%

Note symbol

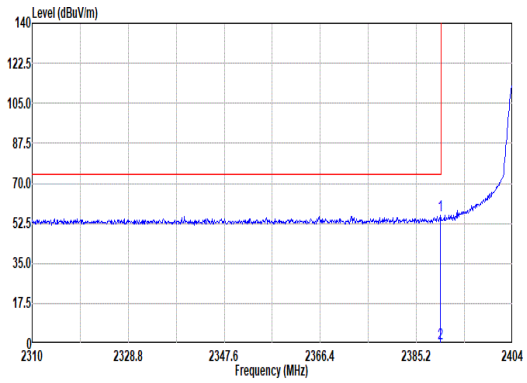
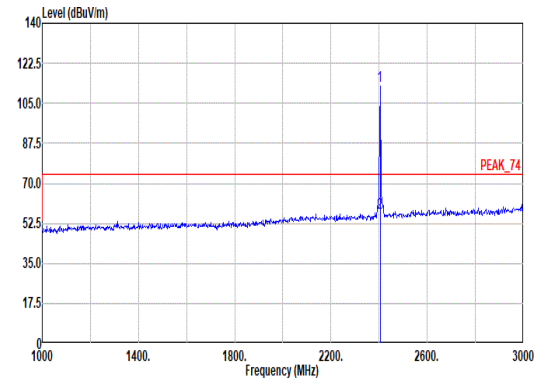
-L	**Low channel location**
-R	**High channel location**

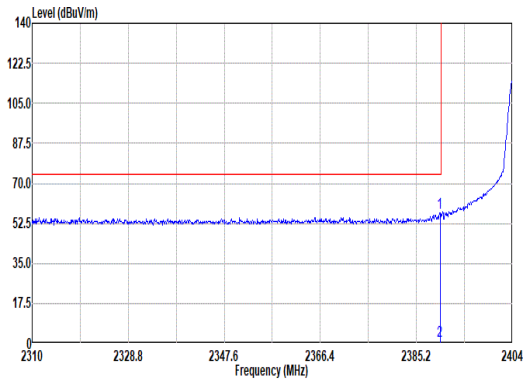
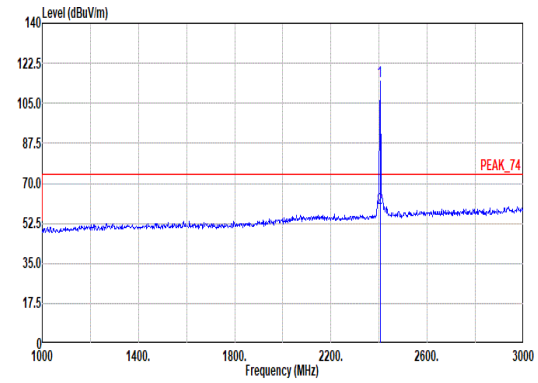
C1. Radiated Spurious Emission Test Modes

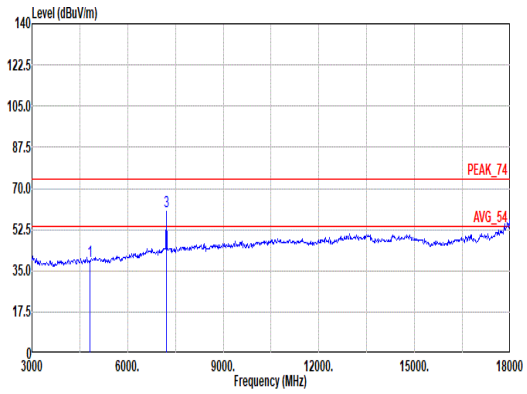
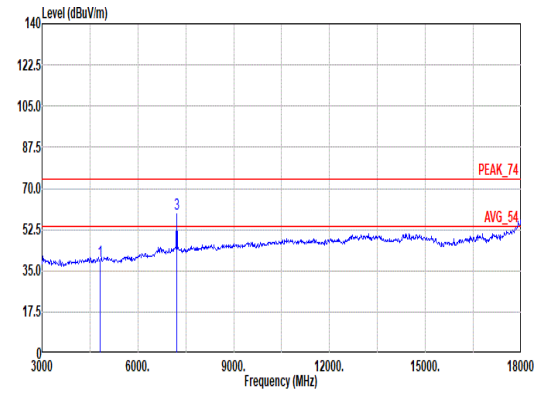
Mode	Band (MHz)	Antenna	Modulation	Channel	Frequency	Data Rate	RU	Remark
Mode 1	2400-2483.5	3	Bluetooth-LE_GFSK	02	2404	1Mbps	-	-
Mode 2	2400-2483.5	3	Bluetooth-LE_GFSK	38	2440	1Mbps	-	-
Mode 3	2400-2483.5	3	Bluetooth-LE_GFSK	76	2478	1Mbps	-	-
Mode 4	2400-2483.5	3	Bluetooth-LE_GFSK	02	2404	2Mbps	-	-
Mode 5	2400-2483.5	3	Bluetooth-LE_GFSK	38	2440	2Mbps	-	-
Mode 6	2400-2483.5	3	Bluetooth-LE_GFSK	76	2478	2Mbps	-	-
Mode 7	2400-2483.5	4	Bluetooth-LE_GFSK	02	2404	1Mbps	-	-
Mode 8	2400-2483.5	4	Bluetooth-LE_GFSK	38	2440	1Mbps	-	-
Mode 9	2400-2483.5	4	Bluetooth-LE_GFSK	76	2478	1Mbps	-	-
Mode 10	2400-2483.5	4	Bluetooth-LE_GFSK	02	2404	2Mbps	-	-
Mode 11	2400-2483.5	4	Bluetooth-LE_GFSK	38	2440	2Mbps	-	-
Mode 12	2400-2483.5	4	Bluetooth-LE_GFSK	76	2478	2Mbps	-	-
Mode 13	2400-2483.5	3	Bluetooth-LE_GFSK	76	2478	2Mbps	-	LF
Mode 14	2400-2483.5	3	Bluetooth-LE_GFSK	76	2478	2Mbps	-	SHF
Mode 15	2400-2483.5	4	Bluetooth-LE_GFSK	76	2478	2Mbps	-	LF
Mode 16	2400-2483.5	4	Bluetooth-LE_GFSK	76	2478	2Mbps	-	SHF

C2. Summary of each worse mode

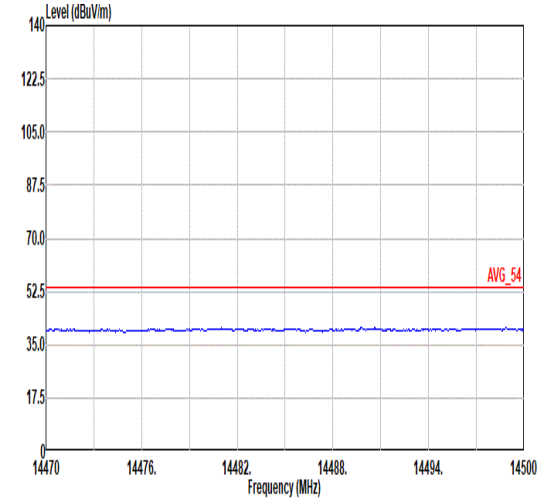
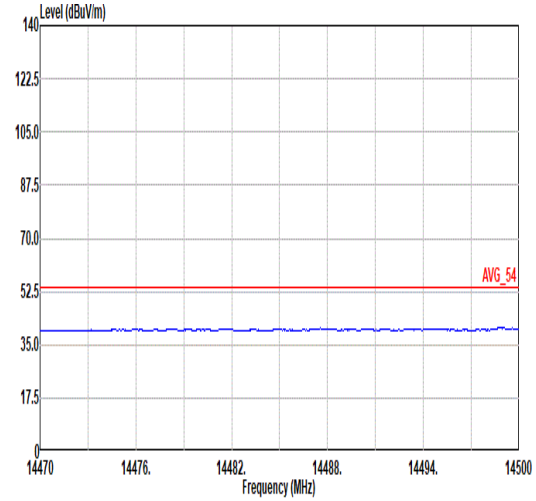
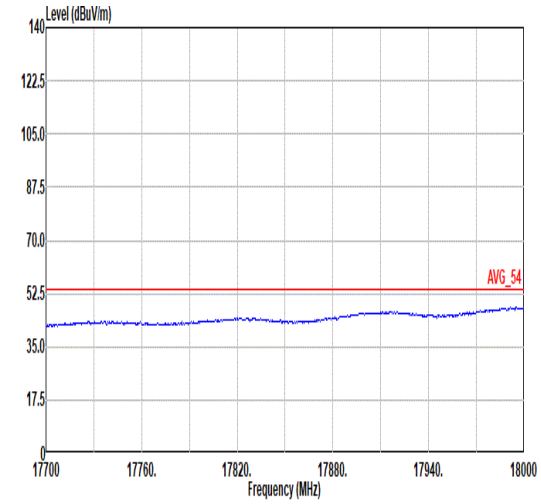
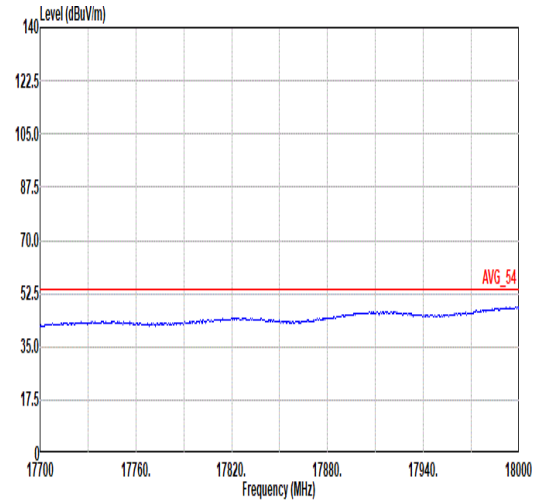
Mode	Modulation	Ch.	Freq. (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Pol.	Peak Avg.	Result	RU	Remark
1	Bluetooth-LE_GFSK	02	2389.81	56.87	74.00	-17.13	V	Peak	Pass	-	Band Edge
	Bluetooth-LE_GFSK	02	4808.00	39.18	74.00	-34.82	H	Peak	Pass	-	Harmonic
2	Bluetooth-LE_GFSK	38	2494.48	56.31	74.00	-17.69	H	Peak	Pass	-	Band Edge
	Bluetooth-LE_GFSK	38	7320.00	63.70	74.00	-10.30	V	Peak	Pass	-	Harmonic
3	Bluetooth-LE_GFSK	76	2483.85	66.61	74.00	-7.39	V	Peak	Pass	-	Band Edge
	Bluetooth-LE_GFSK	76	7434.00	66.11	74.00	-7.89	V	Peak	Pass	-	Harmonic
4	Bluetooth-LE_GFSK	02	2388.96	56.78	74.00	-17.22	V	Peak	Pass	-	Band Edge
	Bluetooth-LE_GFSK	02	4808.00	39.87	74.00	-34.13	H	Peak	Pass	-	Harmonic
5	Bluetooth-LE_GFSK	38	2499.04	56.12	74.00	-17.88	H	Peak	Pass	-	Band Edge
	Bluetooth-LE_GFSK	38	7320.00	66.20	74.00	-7.80	V	Peak	Pass	-	Harmonic
6	Bluetooth-LE_GFSK	76	2483.52	67.00	74.00	-7.00	H	Peak	Pass	-	Band Edge
	Bluetooth-LE_GFSK	76	7434.00	66.95	74.00	-7.05	V	Peak	Pass	-	Harmonic
7	Bluetooth-LE_GFSK	02	2389.81	56.44	74.00	-17.56	V	Peak	Pass	-	Band Edge
	Bluetooth-LE_GFSK	02	4808.00	39.81	74.00	-34.19	H	Peak	Pass	-	Harmonic
8	Bluetooth-LE_GFSK	38	2486.98	56.02	74.00	-17.98	H	Peak	Pass	-	Band Edge
	Bluetooth-LE_GFSK	38	7320.00	49.62	74.00	-24.38	H	Peak	Pass	-	Harmonic
9	Bluetooth-LE_GFSK	76	2483.68	61.54	74.00	-12.46	V	Peak	Pass	-	Band Edge
	Bluetooth-LE_GFSK	76	7434.00	49.13	74.00	-24.87	H	Peak	Pass	-	Harmonic
10	Bluetooth-LE_GFSK	02	2388.87	57.48	74.00	-16.52	V	Peak	Pass	-	Band Edge
	Bluetooth-LE_GFSK	02	4808.00	39.63	74.00	-34.37	H	Peak	Pass	-	Harmonic
11	Bluetooth-LE_GFSK	38	2485.60	56.12	74.00	-17.88	H	Peak	Pass	-	Band Edge
	Bluetooth-LE_GFSK	38	7320.00	45.08	74.00	-28.92	H	Peak	Pass	-	Harmonic
12	Bluetooth-LE_GFSK	76	2484.27	62.08	74.00	-11.92	V	Peak	Pass	-	Band Edge
	Bluetooth-LE_GFSK	76	7434.00	45.28	74.00	-28.72	H	Peak	Pass	-	Harmonic
13	LF	76	42.02	34.85	40.00	-5.15	V	QP	Pass	-	LF
14	SHF	76	23288.00	39.47	74.00	-34.53	V	Peak	Pass	-	SHF
15	LF	76	41.59	34.71	40.00	-5.29	V	QP	Pass	-	LF
16	SHF	76	25704.00	39.31	74.00	-34.69	H	Peak	Pass	-	SHF

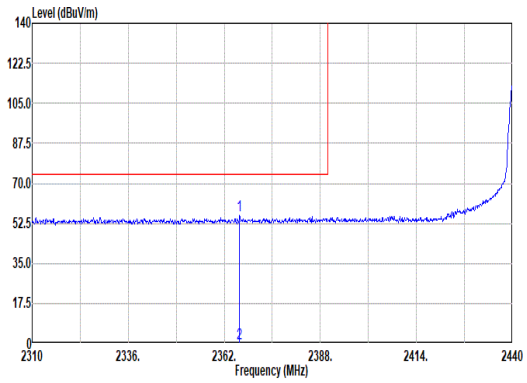
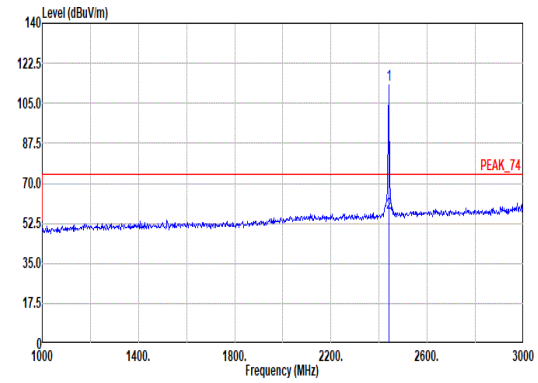
Mode	1	
	Band Edge	
	2400-2483.5_Bluetooth-LE_GFSK _CH02_2404MHz	
ANT	3	
Pol.	Horizontal	Fundamental
Peak	 Site : 03CH16-HY Condition: PEAK_BE_74 3m 9120D-1522_240328 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 2389.90 55.86 74.00 -18.14 41.26 27.30 7.71 30.33 9.92 107 54 PEAK 2 2389.90 -0.06 54.00 -54.06 -- -- -- -- -- -- -- AVERAGE	 Site : 03CH16-HY Condition: PEAK_74 3m 9120D-1522_240328 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 2404.00 112.79 ------ ------ 98.06 27.40 7.74 30.33 9.92 107 54 PEAK 2 2404.00 56.87 ------ ------ -- -- -- -- -- -- -- AVERAGE

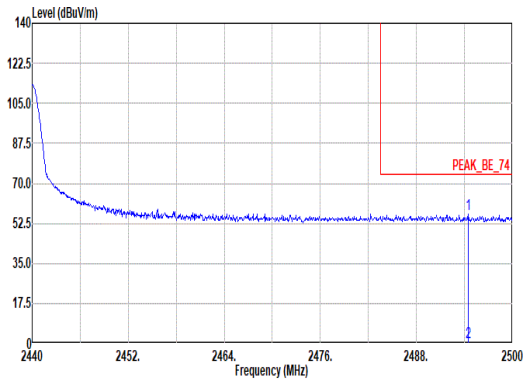
Mode	1	
	Band Edge	
	2400-2483.5_Bluetooth-LE_GFSK _CH02_2404MHz	
ANT	3	
Pol.	Vertical	Fundamental
Peak	 Site : 03CH16-HY Condition: PEAK_BE_74 3m 9120D-1522_240328 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Limit Read Ant Cable Preamp Aux APos TPos Freq Level Line Margin Level Factor Loss Factor Factor Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 2389.81 56.87 74.00 -17.13 42.27 27.30 7.71 30.33 9.92 194 71 PEAK 2 2389.81 0.95 54.00 -53.05 -- -- -- -- -- -- -- AVERAGE	 Site : 03CH16-HY Condition: PEAK_74 3m 9120D-1522_240328 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Limit Read Ant Cable Preamp Aux APos TPos Freq Level Line Margin Level Factor Loss Factor Factor Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 2404.00 114.87 ------ ------ 100.14 27.40 7.74 30.33 9.92 194 71 PEAK 2 2404.00 58.95 ------ ------ -- -- -- -- -- -- -- AVERAGE

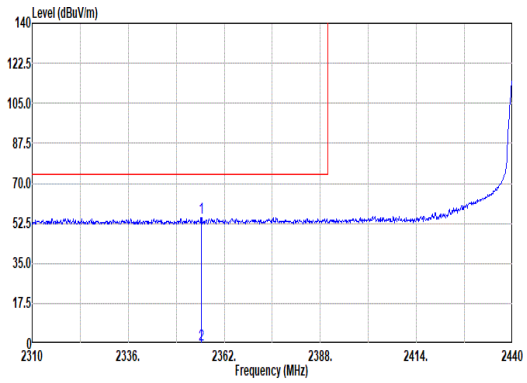
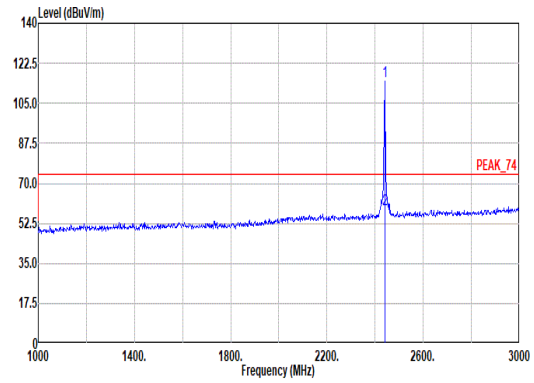
Mode	1	
	Harmonic	
	2400-2483.5_Bluetooth-LE_GFSK _CH02_2404MHz	
ANT	3	
Pol.	Horizontal	Vertical
Peak Avg	 Site : 03CH16-HY Condition: PEAK_74 3m 9120D-1522_240328 HORIZONTAL Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 4808.00 39.18 74.00 -34.82 61.73 32.33 11.04 66.40 0.48 -- -- PEAK 2 4808.00 -16.74 54.00 -70.74 -- -- -- -- -- -- -- AVERAGE 3 7212.00 60.39 ------ ------ 75.72 36.85 13.22 65.75 0.35 201 24 PEAK	 Site : 03CH16-HY Condition: PEAK_74 3m 9120D-1522_240328 VERTICAL Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 4808.00 38.98 74.00 -35.02 61.53 32.33 11.04 66.40 0.48 -- -- PEAK 2 4808.00 -16.94 54.00 -70.94 -- -- -- -- -- -- -- AVERAGE 3 7212.00 59.36 ------ ------ 74.69 36.85 13.22 65.75 0.35 313 335 PEAK

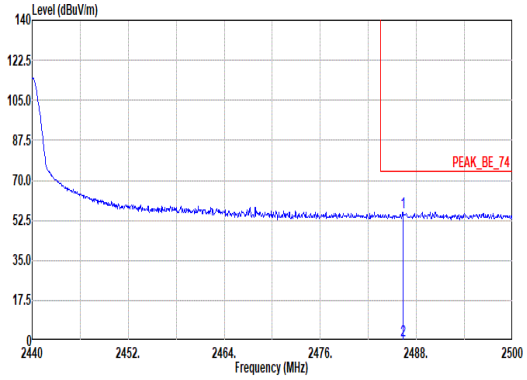
Remark: The unwanted signal 7212.000MHz、7212.000MHz can be ignored since it falls within the non-restricted band and meet the requirements of 15.247 (d).

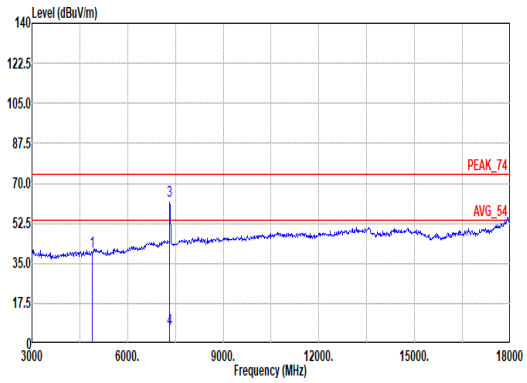
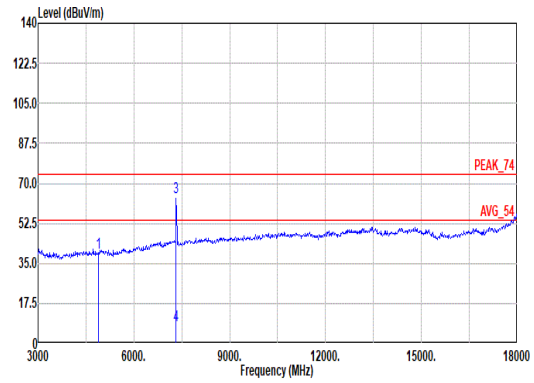
Mode	1	
	Harmonic	
	2400-2483.5_Bluetooth-LE_GFSK _CH02_2404MHz	
ANT	3	
Pol.	Horizontal	Vertical
14.47G ~14.5G Avg	 Site : 03CH16-HY Condition: AVG_54 3m 9120D-1522_240328 HORIZONTAL	 Site : 03CH16-HY Condition: AVG_54 3m 9120D-1522_240328 VERTICAL
17.7G ~18G Avg	 Site : 03CH16-HY Condition: AVG_54 3m 9120D-1522_240328 HORIZONTAL	 Site : 03CH16-HY Condition: AVG_54 3m 9120D-1522_240328 VERTICAL

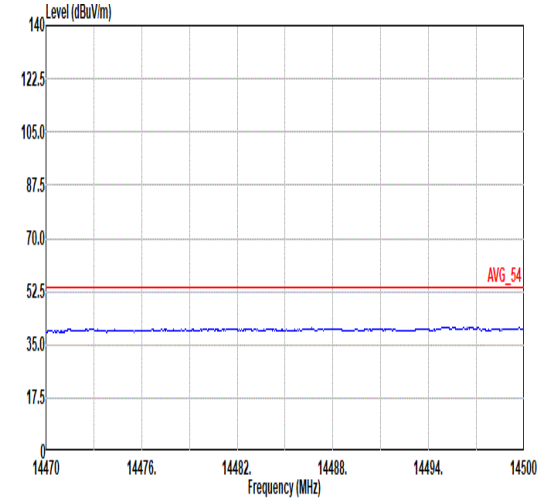
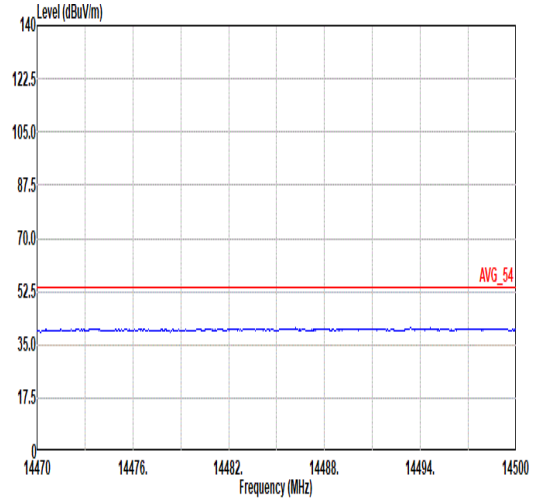
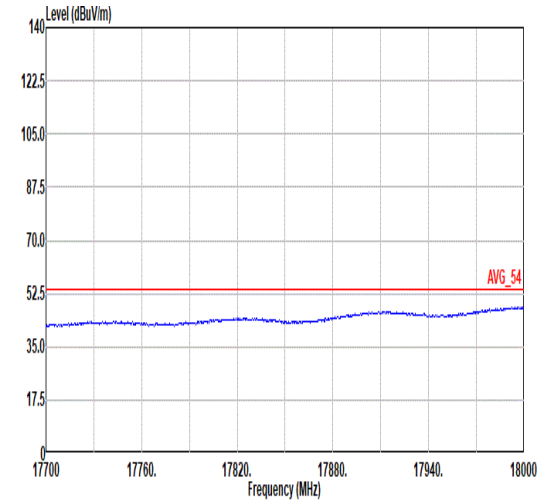
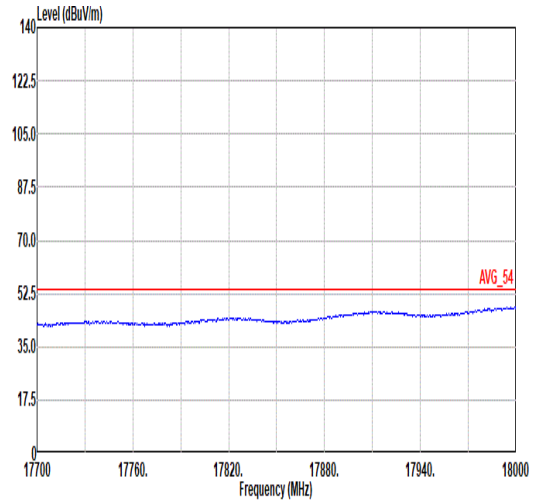
Mode	2	
	Band Edge - L	
	2400-2483.5_Bluetooth-LE_GFSK _CH38_2440MHz	
ANT	3	
Pol.	Horizontal	Fundamental
Peak	 Site : 03CH16-HY Condition: PEAK_BE_74 3m 9120D-1522_240328 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Limit Read Ant Cable Preamp Aux APos TPos Freq Level Line Margin Level Factor Loss Factor Factor Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 2366.16 55.74 74.00 -18.26 41.29 27.20 7.67 30.34 9.92 104 53 PEAK 2 2366.16 -0.18 54.00 -54.18 -- -- -- -- -- -- -- AVERAGE	 Site : 03CH16-HY Condition: PEAK_74 3m 9120D-1522_240328 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Limit Read Ant Cable Preamp Aux APos TPos Freq Level Line Margin Level Factor Loss Factor Factor Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 2440.00 112.91 ------ ------ 97.91 27.60 7.79 30.31 9.92 104 53 PEAK 2 2440.00 56.99 ------ ------ -- -- -- -- -- -- -- AVERAGE

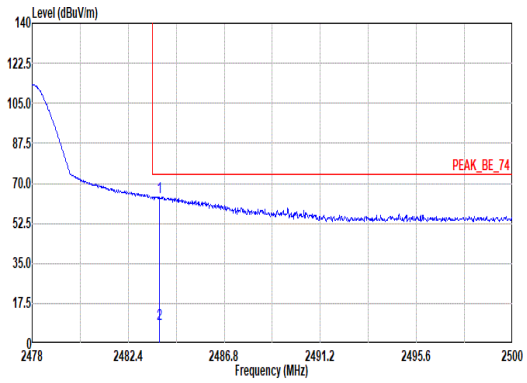
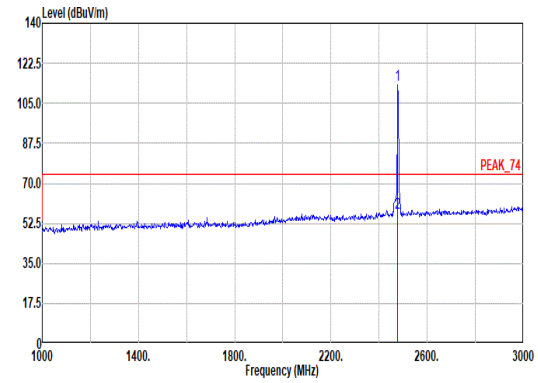
Mode	2	
	Band Edge - R	
	2400-2483.5_Bluetooth-LE_GFSK _CH38_2440MHz	
ANT	3	
Pol.	Horizontal	Fundamental
Peak	 Site : 03CH16-HY Condition: PEAK_BE_74 3m 9120D-1522_240328 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Limit Read Ant Cable Preamp Aux APos TPos Freq Level Line Margin Level Factor Loss Factor Factor Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 2494.48 56.31 74.00 -17.69 41.10 27.70 7.88 30.29 9.92 104 53 PEAK 2 2494.48 0.39 54.00 -53.61 -- -- -- -- -- -- -- AVERAGE	Blank

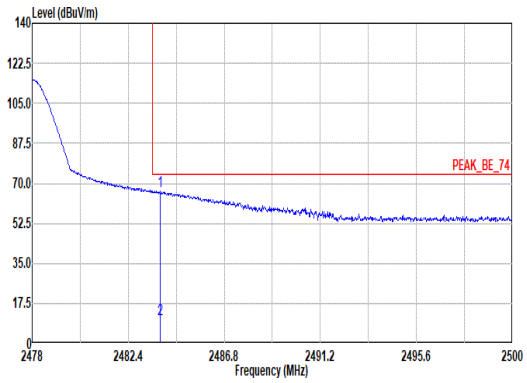
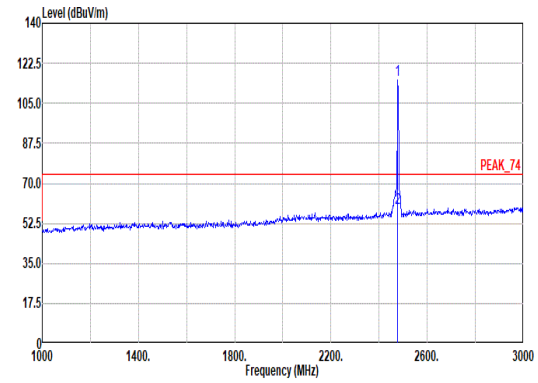
Mode	2	
	Band Edge - L	
	2400-2483.5_Bluetooth-LE_GFSK _CH38_2440MHz	
ANT	3	
Pol.	Vertical	Fundamental
Peak	 Site : 03CH16-HY Condition: PEAK_BE_74 3m 9120D-1522_240328 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Limit Read Ant Cable Preamp Aux APos TPos Freq Level Line Margin Level Factor Loss Factor Factor Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 2355.76 55.14 74.00 -18.86 40.75 27.16 7.65 30.34 9.92 210 69 PEAK 2 2355.76 -0.78 54.00 -54.78 -- -- -- -- -- -- -- AVERAGE	 Site : 03CH16-HY Condition: PEAK_74 3m 9120D-1522_240328 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Limit Read Ant Cable Preamp Aux APos TPos Freq Level Line Margin Level Factor Loss Factor Factor Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 2440.00 114.80 ------ ------ 99.80 27.60 7.79 30.31 9.92 210 69 PEAK 2 2440.00 58.88 ------ ------ -- -- -- -- -- -- -- AVERAGE

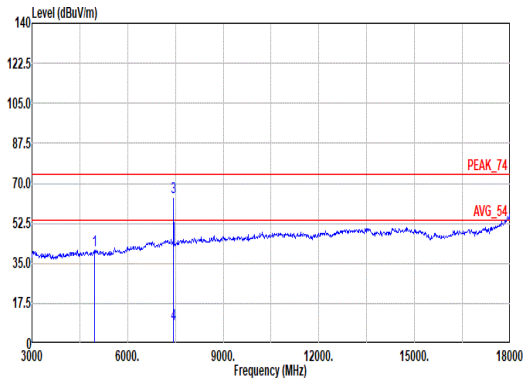
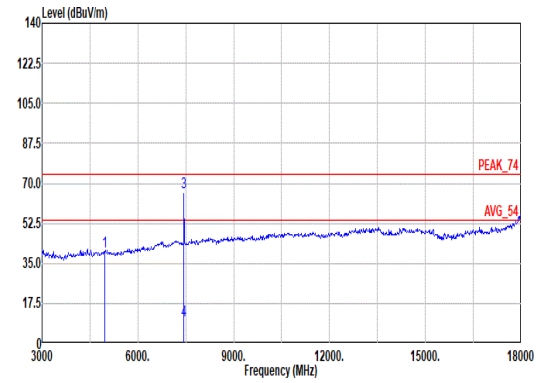
Mode	2	
	Band Edge - R	
	2400-2483.5_Bluetooth-LE_GFSK _CH38_2440MHz	
ANT	3	
Pol.	Vertical	Fundamental
Peak	 Site : 03CH16-HY Condition: PEAK_BE_74 3m 9120D-1522_240328 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Limit Read Ant Cable Preamp Aux APos TPos Freq Level Line Margin Level Factor Loss Factor Factor Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 2486.32 56.01 74.00 -17.99 40.83 27.70 7.86 30.30 9.92 210 69 PEAK 2 2486.32 0.09 54.00 -53.91 -- -- -- -- -- -- -- AVERAGE	Blank

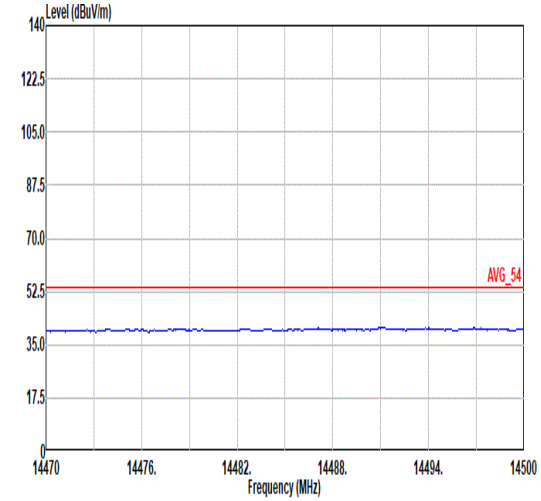
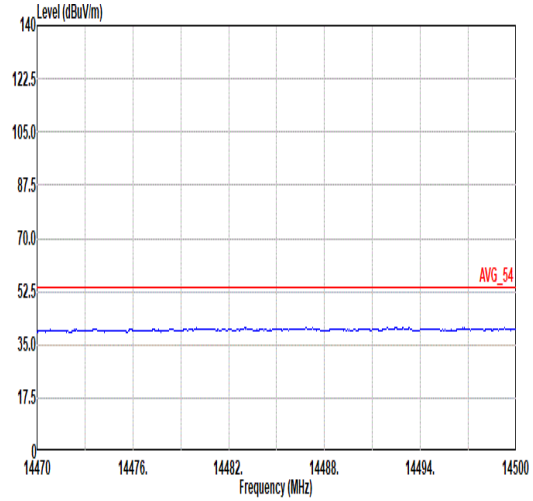
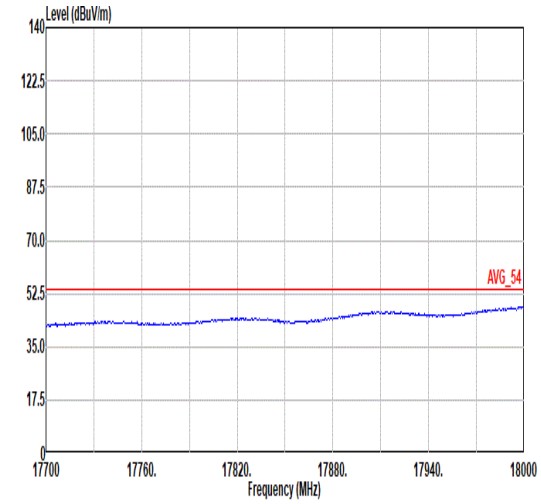
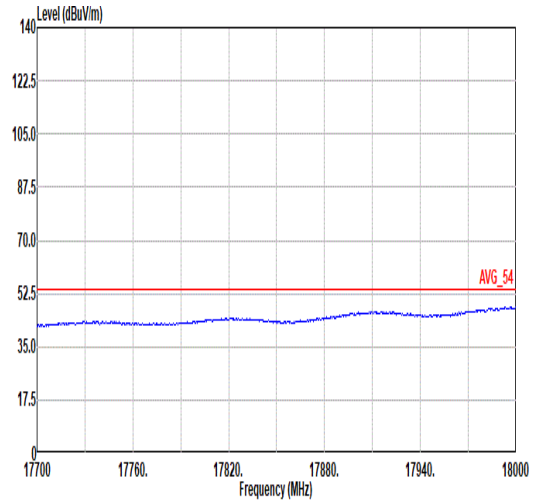
Mode	2	
	Harmonic	
	2400-2483.5_Bluetooth-LE_GFSK _CH38_2440MHz	
ANT	3	
Pol.	Horizontal	Vertical
Peak Avg	 Site : 03CH16-HY Condition: PEAK_74 3m 9120D-1522_240328 HORIZONTAL Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 4880.00 39.99 74.00 -34.01 62.16 32.62 11.05 66.34 0.50 -- -- PEAK 2 4880.00 -15.93 54.00 -69.93 -- -- -- -- -- -- -- AVERAGE 3 7320.00 62.42 74.00 -11.58 77.67 36.78 13.29 65.76 0.44 206 26 PEAK 4 7320.00 6.50 54.00 -47.50 -- -- -- -- -- -- -- AVERAGE	 Site : 03CH16-HY Condition: PEAK_74 3m 9120D-1522_240328 VERTICAL Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 4880.00 39.49 74.00 -34.51 61.66 32.62 11.05 66.34 0.50 -- -- PEAK 2 4880.00 -16.43 54.00 -70.43 -- -- -- -- -- -- -- AVERAGE 3 7320.00 63.70 74.00 -10.30 78.95 36.78 13.29 65.76 0.44 312 336 PEAK 4 7320.00 7.78 54.00 -46.22 -- -- -- -- -- -- -- AVERAGE

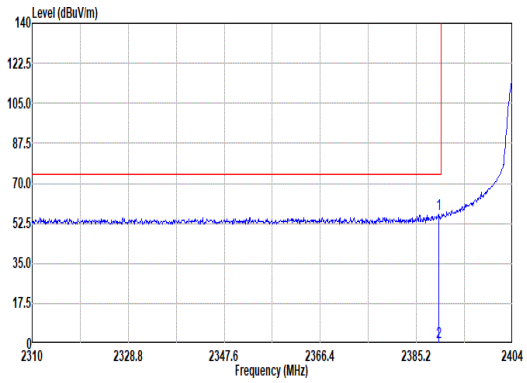
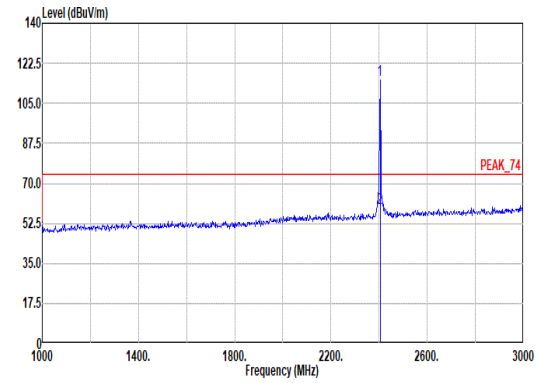
Mode	2	
	Harmonic	
	2400-2483.5_Bluetooth-LE_GFSK _CH38_2440MHz	
ANT	3	
Pol.	Horizontal	Vertical
14.47G ~14.5G Avg	 Site : 03CH16-HY Condition: AVG_54 3m 9120D-1522_240328 HORIZONTAL	 Site : 03CH16-HY Condition: AVG_54 3m 9120D-1522_240328 VERTICAL
17.7G ~18G Avg	 Site : 03CH16-HY Condition: AVG_54 3m 9120D-1522_240328 HORIZONTAL	 Site : 03CH16-HY Condition: AVG_54 3m 9120D-1522_240328 VERTICAL

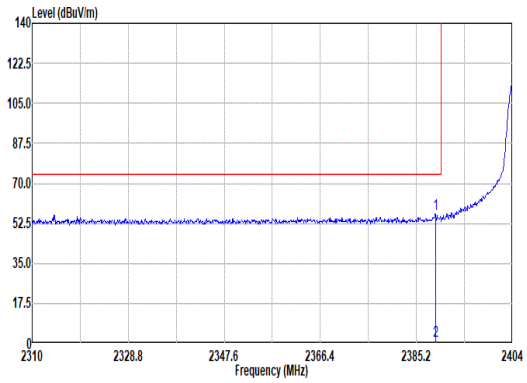
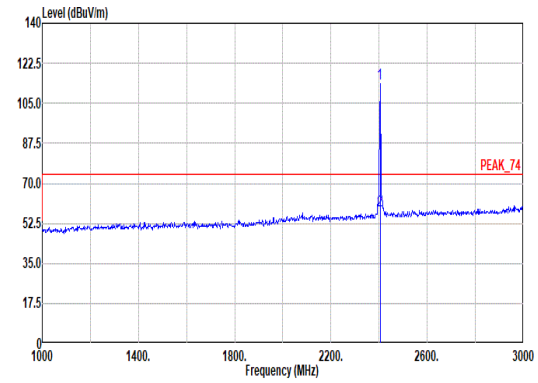
Mode	3	
	Band Edge	
	2400-2483.5_Bluetooth-LE_GFSK _CH76_2478MHz	
ANT	3	
Pol.	Horizontal	Fundamental
Peak	 Site : 03CH16-HY Condition: PEAK_BE_74 3m 9120D-1522_240328 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 2483.83 64.19 74.00 -9.81 49.01 27.70 7.86 30.30 9.92 100 54 PEAK 2 2483.83 8.27 54.00 -45.73 -- -- -- -- -- -- -- AVERAGE	 Site : 03CH16-HY Condition: PEAK_74 3m 9120D-1522_240328 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 2478.00 113.03 ------ ------ 97.88 27.68 7.85 30.30 9.92 100 54 PEAK 2 2478.00 57.11 ------ ------ -- -- -- -- -- -- -- AVERAGE

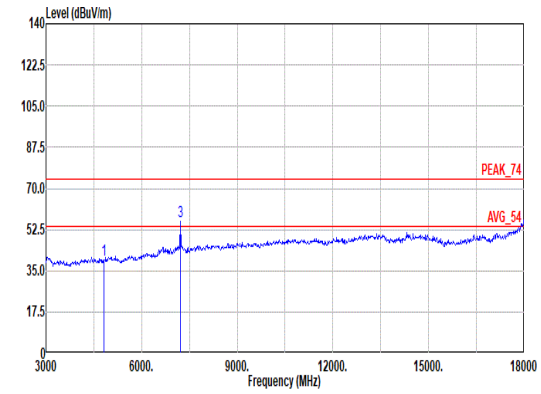
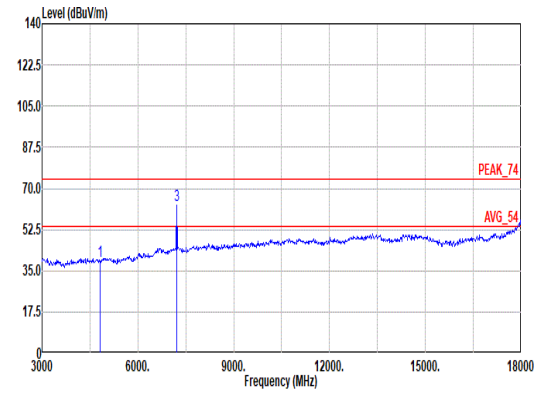
Mode	3	
	Band Edge	
	2400-2483.5_Bluetooth-LE_GFSK _CH76_2478MHz	
ANT	3	
Pol.	Vertical	Fundamental
Peak	 Site : 03CH16-HY Condition: PEAK_BE_74 3m 9120D-1522_240328 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Limit Read Ant Cable Preamp Aux APos TPos Freq Level Line Margin Level Factor Loss Factor Factor Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 2483.85 66.61 74.00 -7.39 51.43 27.70 7.86 30.30 9.92 209 67 PEAK 2 2483.85 10.69 54.00 -43.31 -- -- -- -- -- -- -- AVERAGE	 Site : 03CH16-HY Condition: PEAK_74 3m 9120D-1522_240328 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Limit Read Ant Cable Preamp Aux APos TPos Freq Level Line Margin Level Factor Loss Factor Factor Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 2478.00 115.12 ------ ------ 99.97 27.68 7.85 30.30 9.92 209 67 PEAK 2 2478.00 59.20 ------ ------ -- -- -- -- -- -- -- AVERAGE

Mode	3	
	Harmonic	
	2400-2483.5_Bluetooth-LE_GFSK _CH76_2478MHz	
ANT	3	
Pol.	Horizontal	Vertical
Peak Avg	 Site : 03CH16-HY Condition: PEAK_74 3m 9120D-1522_240328 HORIZONTAL Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 4956.00 40.49 74.00 -33.51 62.17 33.01 11.06 66.28 0.53 -- -- PEAK 2 4956.00 -15.43 54.00 -69.43 -- -- -- -- -- -- -- AVERAGE 3 7434.00 64.14 74.00 -9.86 79.68 36.33 13.38 65.76 0.51 201 27 PEAK 4 7434.00 8.22 54.00 -45.78 -- -- -- -- -- -- -- AVERAGE	 Site : 03CH16-HY Condition: PEAK_74 3m 9120D-1522_240328 VERTICAL Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 4956.00 40.03 74.00 -33.97 61.71 33.01 11.06 66.28 0.53 -- -- PEAK 2 4956.00 -15.89 54.00 -69.89 -- -- -- -- -- -- -- AVERAGE 3 7434.00 66.11 74.00 -7.89 81.65 36.33 13.38 65.76 0.51 313 337 PEAK 4 7434.00 10.19 54.00 -43.81 -- -- -- -- -- -- -- AVERAGE

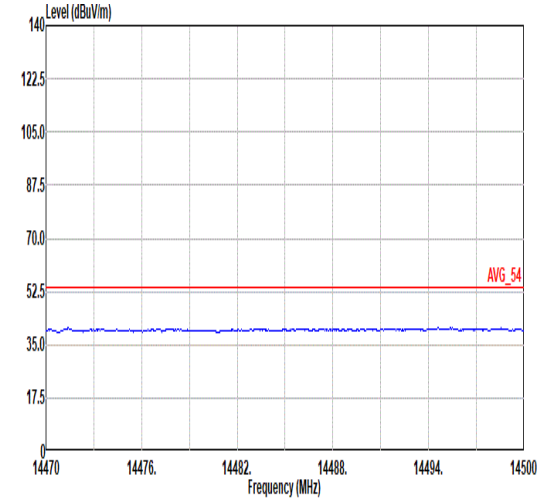
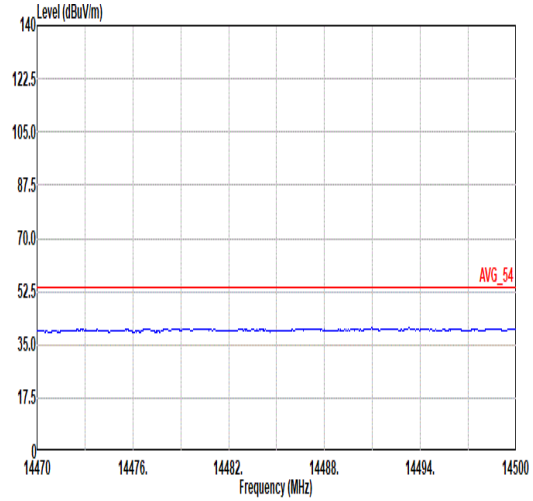
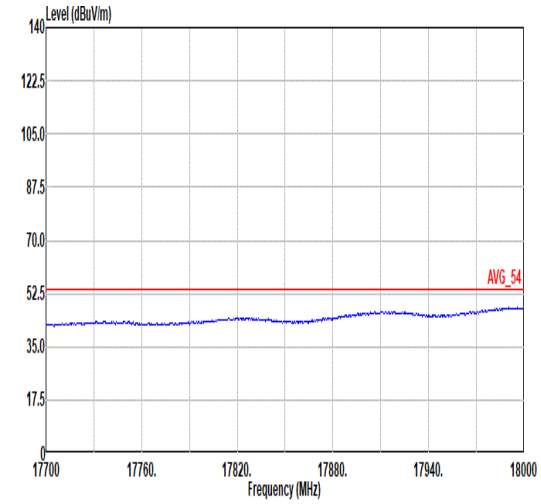
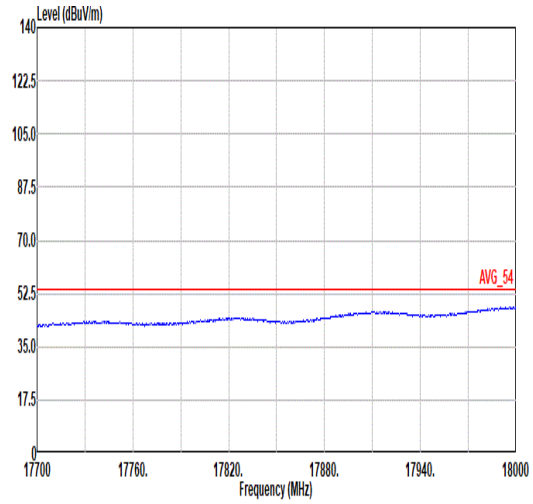
Mode	3	
	Harmonic	
	2400-2483.5_Bluetooth-LE_GFSK _CH76_2478MHz	
ANT	3	
Pol.	Horizontal	Vertical
14.47G ~14.5G Avg	 Site : 03CH16-HY Condition: AVG_54 3m 9120D-1522_240328 HORIZONTAL	 Site : 03CH16-HY Condition: AVG_54 3m 9120D-1522_240328 VERTICAL
17.7G ~18G Avg	 Site : 03CH16-HY Condition: AVG_54 3m 9120D-1522_240328 HORIZONTAL	 Site : 03CH16-HY Condition: AVG_54 3m 9120D-1522_240328 VERTICAL

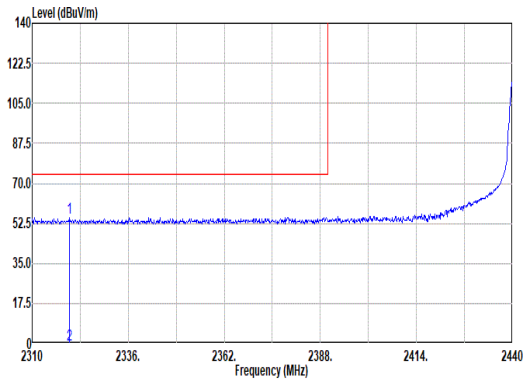
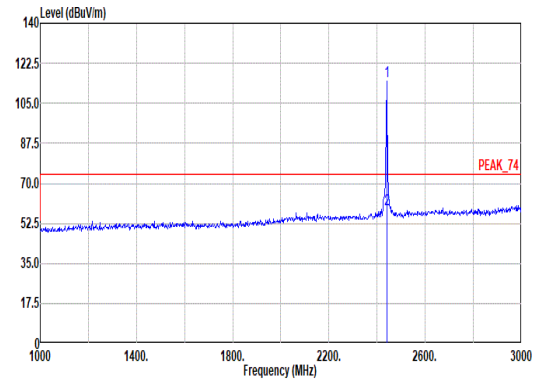
Mode	4	
	Band Edge	
	2400-2483.5_Bluetooth-LE_GFSK _CH02_2404MHz	
ANT	3	
Pol.	Horizontal	Fundamental
Peak	 Site : 03CH16-HY Condition: PEAK_BE_74 3m 9120D-1522_240328 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 2389.52 56.65 74.00 -17.35 42.05 27.30 7.71 30.33 9.92 386 34 PEAK 2 2389.52 0.73 54.00 -53.27 -- -- -- -- -- -- -- AVERAGE	 Site : 03CH16-HY Condition: PEAK_74 3m 9120D-1522_240328 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 2404.00 114.98 ------ ------ 100.25 27.40 7.74 30.33 9.92 386 34 PEAK 2 2404.00 59.06 ------ ------ -- -- -- -- -- -- -- AVERAGE

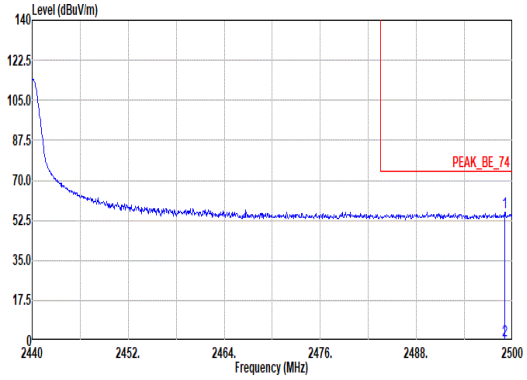
Mode	4	
	Band Edge	
	2400-2483.5_Bluetooth-LE_GFSK _CH02_2404MHz	
ANT	3	
Pol.	Vertical	Fundamental
Peak	 Site : 03CH16-HY Condition: PEAK_BE_74 3m 9120D-1522_240328 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 2388.96 56.78 74.00 -17.22 42.19 27.29 7.71 30.33 9.92 383 112 PEAK 2 2388.96 0.86 54.00 -53.14 -- -- -- -- -- -- -- AVERAGE	 Site : 03CH16-HY Condition: PEAK_74 3m 9120D-1522_240328 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 2404.00 113.82 ------ ------ 99.09 27.40 7.74 30.33 9.92 383 112 PEAK 2 2404.00 57.90 ------ ------ -- -- -- -- -- -- -- AVERAGE

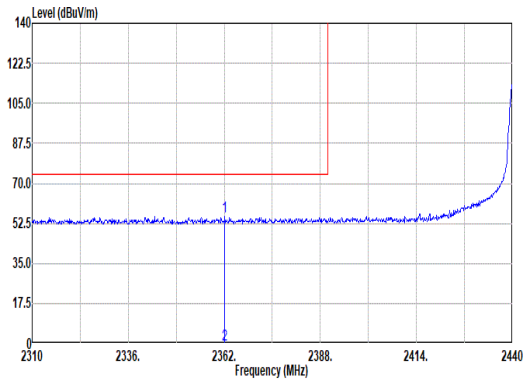
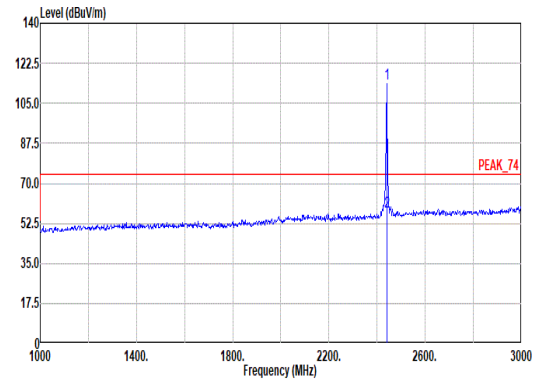
Mode	4	
	Harmonic	
	2400-2483.5_Bluetooth-LE_GFSK _CH02_2404MHz	
ANT	3	
Pol.	Horizontal	Vertical
Peak Avg	 Site : 03CH16-HY Condition: PEAK_74 3m 9120D-1522_240328 HORIZONTAL Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 4808.00 39.87 74.00 -34.13 62.42 32.33 11.04 66.40 0.48 -- -- PEAK 2 4808.00 -16.05 54.00 -70.05 6.50 32.33 11.04 66.40 0.48 -- -- AVERAGE 3 7212.00 56.03 ------ ------ 71.36 36.85 13.22 65.75 0.35 398 299 PEAK	 Site : 03CH16-HY Condition: PEAK_74 3m 9120D-1522_240328 VERTICAL Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 4808.00 39.25 74.00 -34.75 61.80 32.33 11.04 66.40 0.48 -- -- PEAK 2 4808.00 -16.67 54.00 -70.67 5.88 32.33 11.04 66.40 0.48 -- -- AVERAGE 3 7212.00 63.02 ------ ------ 78.35 36.85 13.22 65.75 0.35 100 226 PEAK

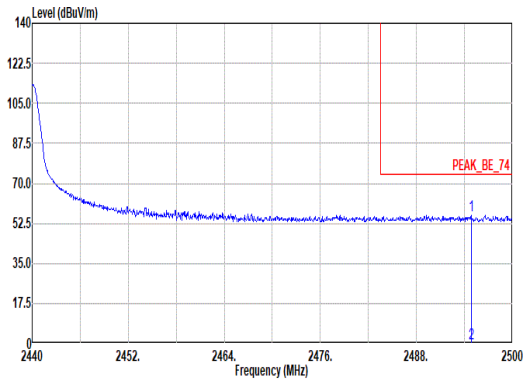
Remark: The unwanted signal 7212.000MHz、7212.000MHz can be ignored since it falls within the non-restricted band and meet the requirements of 15.247 (d).

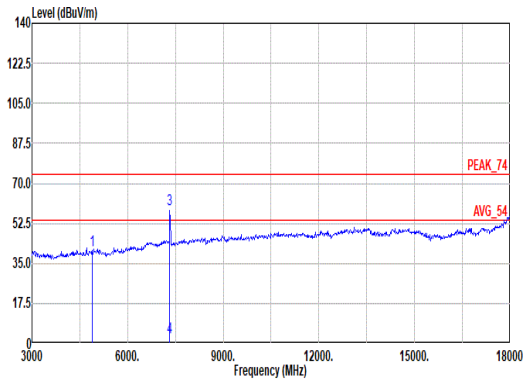
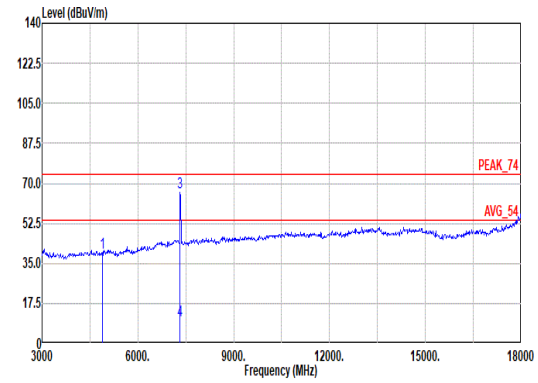
Mode	4	
	Harmonic	
	2400-2483.5_Bluetooth-LE_GFSK _CH02_2404MHz	
ANT	3	
Pol.	Horizontal	Vertical
14.47G ~14.5G Avg	 Site : 03CH16-HY Condition: AVG_54 3m 9120D-1522_240328 HORIZONTAL	 Site : 03CH16-HY Condition: AVG_54 3m 9120D-1522_240328 VERTICAL
17.7G ~18G Avg	 Site : 03CH16-HY Condition: AVG_54 3m 9120D-1522_240328 HORIZONTAL	 Site : 03CH16-HY Condition: AVG_54 3m 9120D-1522_240328 VERTICAL

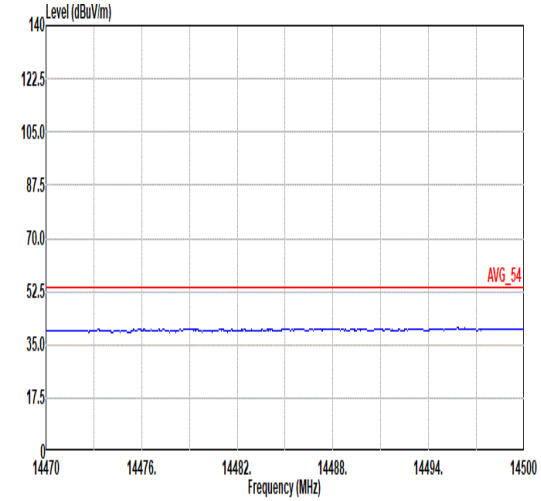
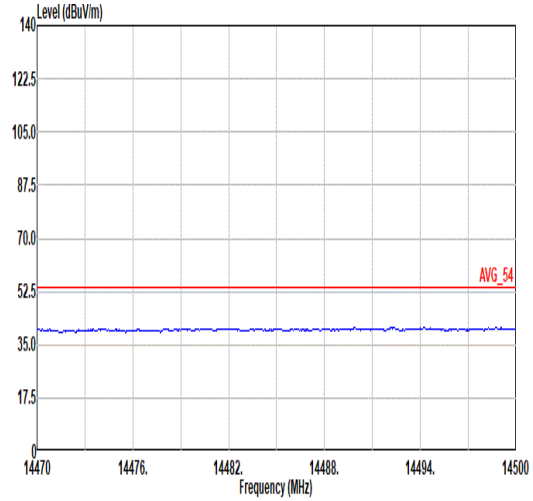
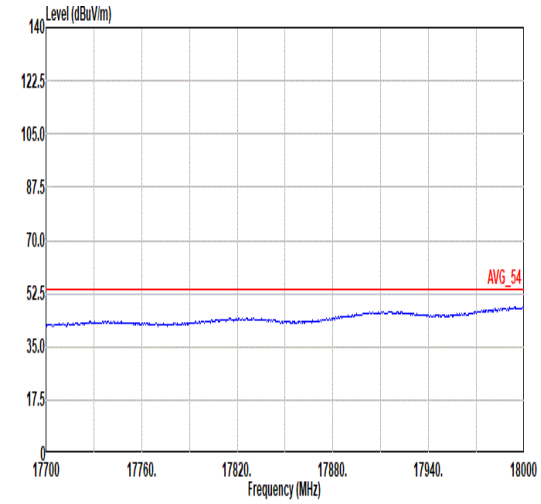
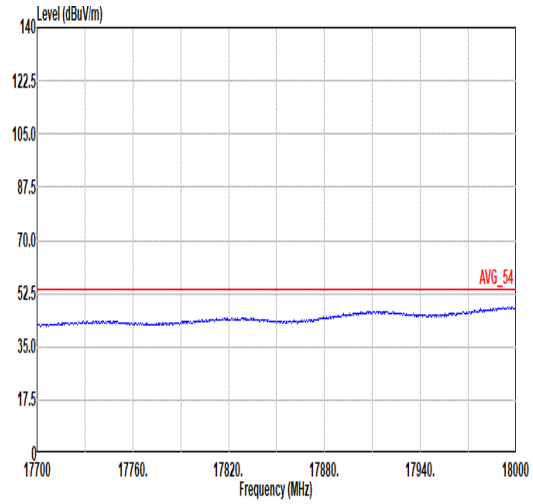
Mode	5	
	Band Edge - L	
	2400-2483.5_Bluetooth-LE_GFSK _CH38_2440MHz	
ANT	3	
Pol.	Horizontal	Fundamental
Peak	 Site : 03CH16-HY Condition: PEAK_BE_74 3m 9120D-1522_240328 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Limit Read Ant Cable Preamp Aux APos TPos Freq Level Line Margin Level Factor Loss Factor Factor Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 2320.14 55.18 74.00 -18.82 40.93 27.10 7.59 30.36 9.92 379 29 PEAK 2 2320.14 -0.74 54.00 -54.74 -- -- -- -- -- -- -- AVERAGE	 Site : 03CH16-HY Condition: PEAK_74 3m 9120D-1522_240328 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Limit Read Ant Cable Preamp Aux APos TPos Freq Level Line Margin Level Factor Loss Factor Factor Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 2440.00 114.39 ------ ------ 99.39 27.60 7.79 30.31 9.92 379 29 PEAK 2 2440.00 58.47 ------ ------ -- -- -- -- -- -- -- AVERAGE

Mode	5	
	Band Edge - R	
	2400-2483.5_Bluetooth-LE_GFSK _CH38_2440MHz	
ANT	3	
Pol.	Horizontal	Fundamental
Peak	 Site : 03CH16-HY Condition: PEAK_BE_74 3m 9120D-1522_240328 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Limit Read Ant Cable Preamp Aux APos TPos Freq Level Line Margin Level Factor Loss Factor Factor Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 2499.04 56.12 74.00 -17.88 40.91 27.70 7.88 30.29 9.92 379 29 PEAK 2 2499.04 0.20 54.00 -53.80 -- -- -- -- -- -- -- AVERAGE	Blank

Mode	5	
	Band Edge - L	
	2400-2483.5_Bluetooth-LE_GFSK _CH38_2440MHz	
ANT	3	
Pol.	Vertical	Fundamental
Peak	 Site : 03CH16-HY Condition: PEAK_BE_74 3m 9120D-1522_240328 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 2362.13 55.52 74.00 -18.48 41.07 27.20 7.67 30.34 9.92 375 109 PEAK 2 2362.13 -0.40 54.00 -54.40 -- -- -- -- -- -- -- AVERAGE	 Site : 03CH16-HY Condition: PEAK_74 3m 9120D-1522_240328 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 2440.00 113.51 ------ ------ 98.51 27.60 7.79 30.31 9.92 375 109 PEAK 2 2440.00 57.59 ------ ------ -- -- -- -- -- -- -- AVERAGE

Mode	5	
	Band Edge - R	
	2400-2483.5_Bluetooth-LE_GFSK _CH38_2440MHz	
ANT	3	
Pol.	Vertical	Fundamental
Peak	 Site : 03CH16-HY Condition: PEAK_BE_74 3m 9120D-1522_240328 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Limit Read Ant Cable Preamp Aux APos TPos Freq Level Line Margin Level Factor Loss Factor Factor Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 2494.84 56.06 74.00 -17.94 40.85 27.70 7.88 30.29 9.92 375 109 PEAK 2 2494.84 0.14 54.00 -53.86 -- -- -- -- -- -- -- AVERAGE	Blank

Mode	5	
	Harmonic	
	2400-2483.5_Bluetooth-LE_GFSK _CH38_2440MHz	
ANT	3	
Pol.	Horizontal	Vertical
Peak Avg	 Site : 03CH16-HY Condition: PEAK_74 3m 9120D-1522_240328 HORIZONTAL Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 4880.00 40.69 74.00 -33.31 62.86 32.62 11.05 66.34 0.50 -- -- PEAK 2 4880.00 -15.23 54.00 -69.23 -- -- -- -- -- -- -- AVERAGE 3 7320.00 58.70 74.00 -15.30 73.95 36.78 13.29 65.76 0.44 400 298 PEAK 4 7320.00 2.78 54.00 -51.22 -- -- -- -- -- -- -- AVERAGE	 Site : 03CH16-HY Condition: PEAK_74 3m 9120D-1522_240328 VERTICAL Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 4880.00 39.46 74.00 -34.54 61.63 32.62 11.05 66.34 0.50 -- -- PEAK 2 4880.00 -16.46 54.00 -70.46 -- -- -- -- -- -- -- AVERAGE 3 7320.00 66.20 74.00 -7.80 81.45 36.78 13.29 65.76 0.44 100 228 PEAK 4 7320.00 10.28 54.00 -43.72 -- -- -- -- -- -- -- AVERAGE

Mode	5	
	Harmonic	
	2400-2483.5_Bluetooth-LE_GFSK _CH38_2440MHz	
ANT	3	
Pol.	Horizontal	Vertical
14.47G ~14.5G Avg	 Site : 03CH16-HY Condition: AVG_54 3m 9120D-1522_240328 HORIZONTAL	 Site : 03CH16-HY Condition: AVG_54 3m 9120D-1522_240328 VERTICAL
17.7G ~18G Avg	 Site : 03CH16-HY Condition: AVG_54 3m 9120D-1522_240328 HORIZONTAL	 Site : 03CH16-HY Condition: AVG_54 3m 9120D-1522_240328 VERTICAL