FCC Part 96.47 TEST REPORT

FCC ID	:	**2AQ68T99W373PC15**
Equipment	:	**5G WWAN Module**
Brand Name	:	**Foxconn**
Model Name	:	**T99W373**
Applicant	:	**Hon Lin Technology Co., Ltd** **11F, No.32, Jihu Rd., Neihu Dist., Taipei City 114, Taiwan R.O.C.**
Manufacturer	:	**Hon Lin Technology Co., Ltd** **11F, No.32, Jihu Rd., Neihu Dist., Taipei City 114, Taiwan R.O.C.**
Standard	:	**FCC Part 96.47**
RF Interface	:	**NR n48 / n77 / n78**

The product was received on Jun. 27, 2023 and testing was performed from Jul. 10, 2023 to Jul. 11, 2023. 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.

Approved by: Jones Tsai

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
FG262904-08K	01	Initial issue of report	Sep. 19, 2023

Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
3	96.47	End User Device additional requirement	Pass	-

Conformity Assessment Condition:
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.
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: Thomas Chen

Report Producer: Lucy Wu

1 General Description

1.1 Product Feature of Equipment Under Test

Product Feature
General Specs WCDMA/LTE/5G NR and GNSS

The following antennas were provided to the EUT

	Band	Brand	Model	Antenna Type	RF Exposure Max Antenna Gain(dBi)
5G NR	n48	WHA YU	C107-511725-A	PIFA	1
	n77 (3550~3700MHz)	WHA YU	C107-511725-A	PIFA	1
	n78 (3550~3700MHz)	WHA YU	C107-511725-A	PIFA	1

Remark: The above EUT's information was declared by manufacturer and used for Radiated Spurious Emission test.

1.2 Modification of EUT

No modifications are made to the EUT during all test items.

1.3 Testing Laboratory

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
Test Engineer	Thomas Chen
Temperature	24 ~ 25 ℃
Relative Humidity	52 ~ 55 %

FCC designation No.: TW3786

1.4 Applicable Standards

- FCC Part 96.47
- FCC KDB 940660 D01 Part 96 CBRS Eqpt v03
- WINNF-TS-0122-V1.0.2 CBRS CBSD Test Specification

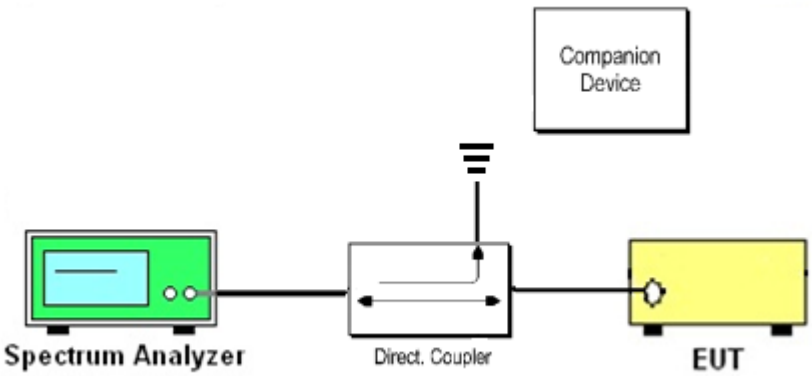
Remark:

1. All test items were verified and recorded according to the standards and without any deviation during the test.

2. The TAF code is not including all the FCC KDB listed without accreditation.

2 Test Configuration of Equipment Under Test

2.1 Connection Diagram of Test System



The companion device is certified NR CBSD (FCC ID: PIDAS2900)

3 End User Device additional requirement

3.1 Test Requirement

FCC Part 96.47

(a) End User Devices may operate only if they can positively receive and decode an authorization signal transmitted by a CBSD, including the frequencies and power limits for their operation.

(1) An End User Device must discontinue operations, change frequencies, or change its operational power level within 10 seconds of receiving instructions from its associated CBSD.

3.2 Test Procedure

Following procedure can be done by applying WINNF-TS-0122-V1.0.2 CBRS CBSD Test Specification, use the certified Airspan NR CBSD (FCC ID: PIDAS2900) as companion device to show compliance with Part 96.47 requirement for End User Device (EUD):

1. Setup with frequency 3560-3600MHz and power level 10dBm/MHz
2. Enable CBSD service from Airspan ACP management
3. Check EUD Tx Frequency and power
4. Disable CBSD service from Airspan ACP management
    a. Check EUD stops transmission within 10seconds.

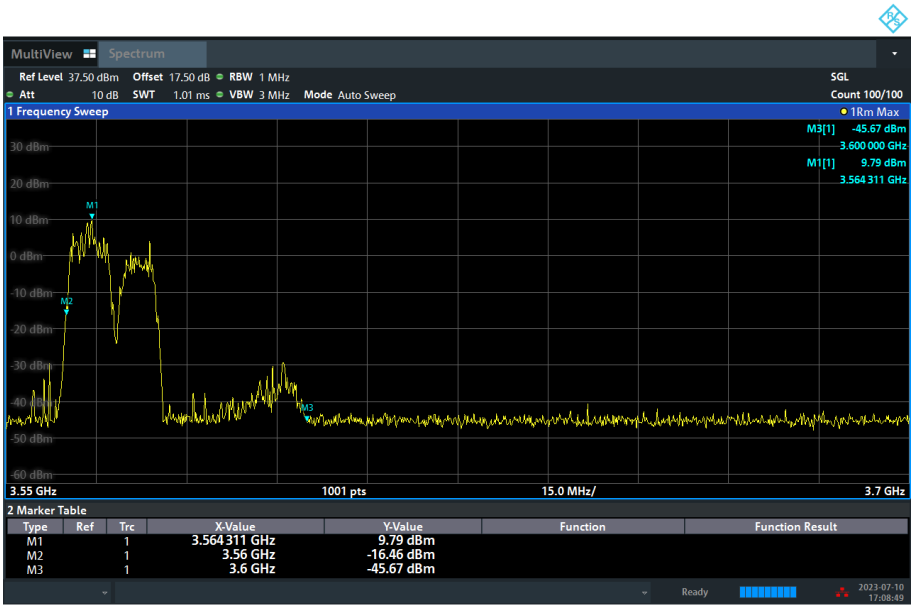
5. Setup with frequency 3650-3690MHz and power level 20dBm/MHz
6. Enable CBSD service from Airspan ACP management
7. Check EUD Tx Frequency and power
8. Disable CBSD service from Airspan ACP management
    a. Check EUD stops transmission within 10seconds.

3.3 Test Result

3.3.1 NR n48

[Step 1] Setup with frequency 3560-3600MHz and power level 10dBm/MHz

[Step 3] Check EUD Tx Frequency and power



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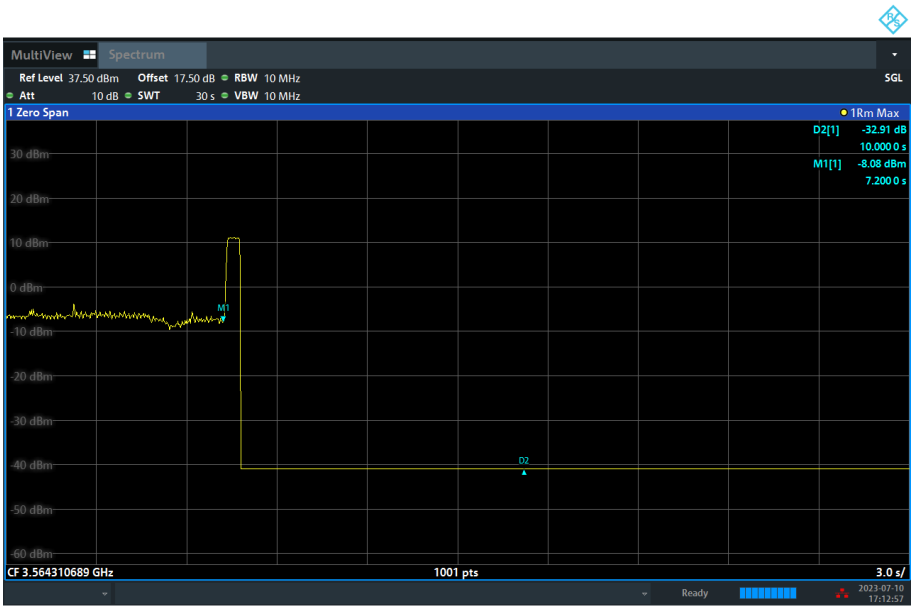
[Step 4.a.] EUD stops transmission within 10 seconds of receiving instructions from its associated CBSD.



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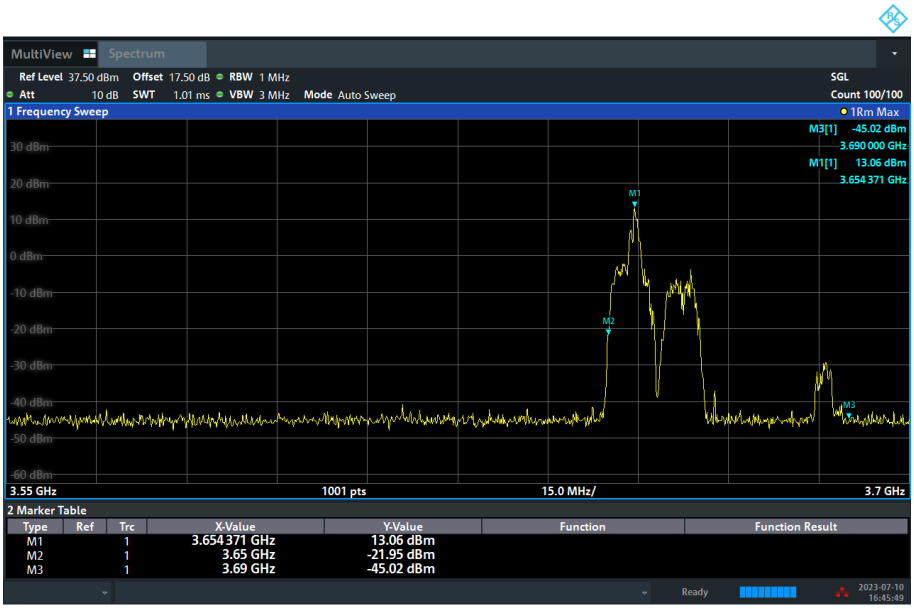
[Step 5] Setup with 3650-3690MHz & power level 20dBm/MHz

[Step 7] Check EUD Tx Frequency and power



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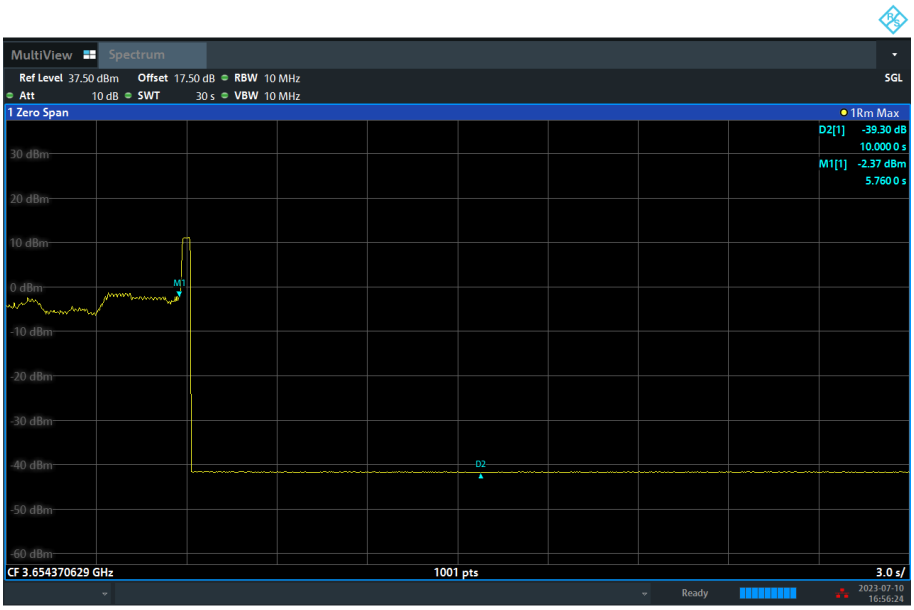
[Step 8.a.] After changing the frequency and power level,

The module (EUT) discontinues operations, change frequencies, or change its operational power level within 10 seconds of receiving instructions from its associated CBSD. Test result is PASS.



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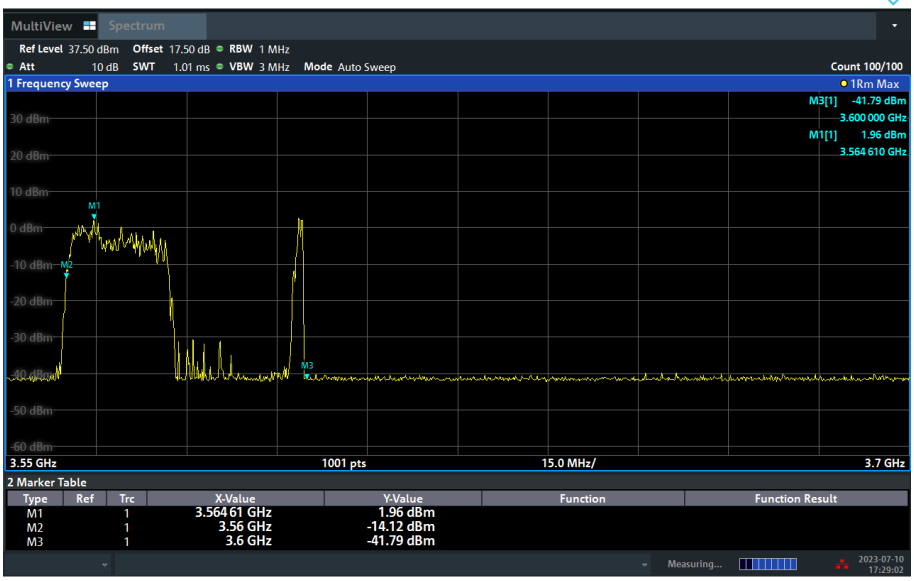
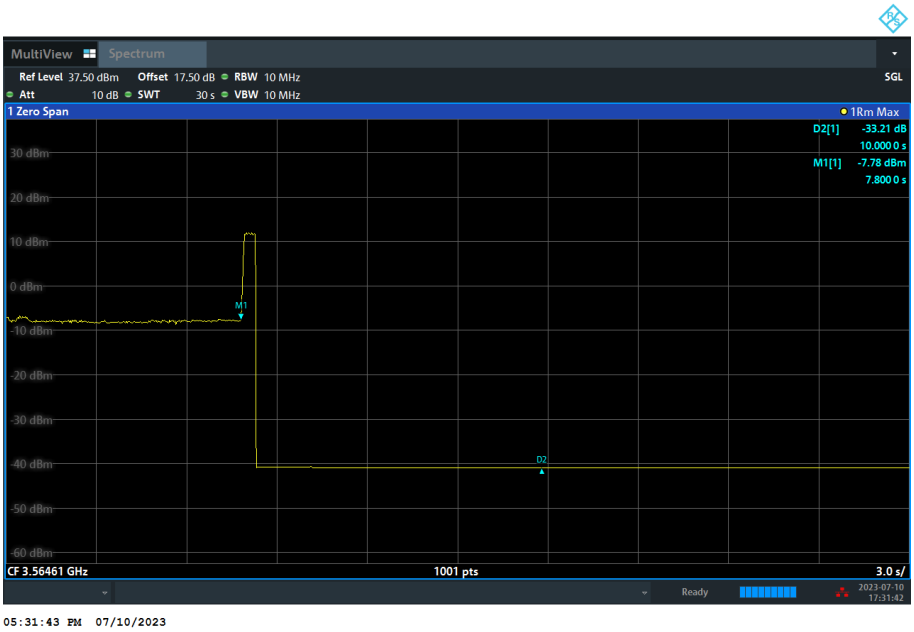
3.3.2 NR n77

[Step 1] Setup with frequency 3560-3600MHz and power level 10dBm/MHz

[Step 3] Check EUD Tx Frequency and power

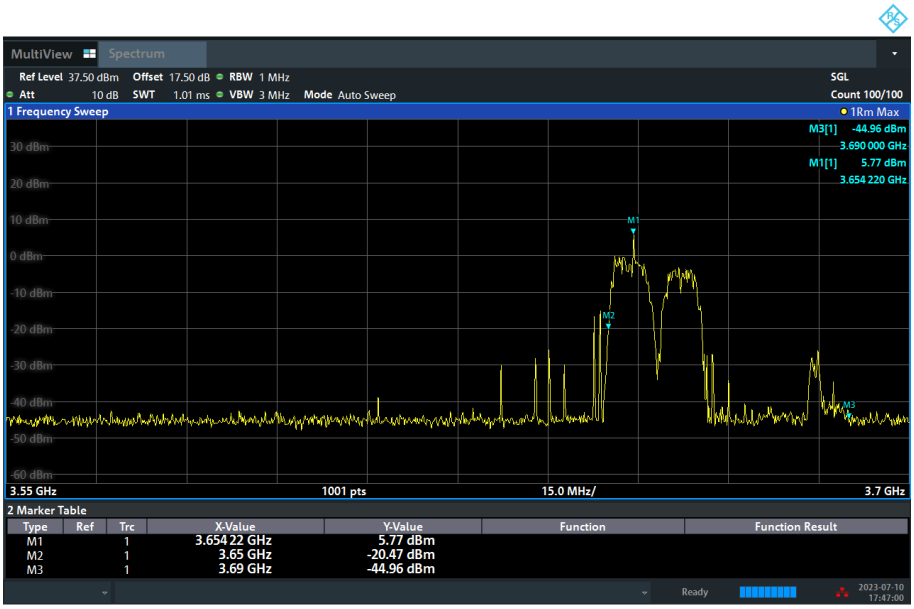


[Step 4.a.] EUD stops transmission within 10 seconds of receiving instructions from its associated CBSD.



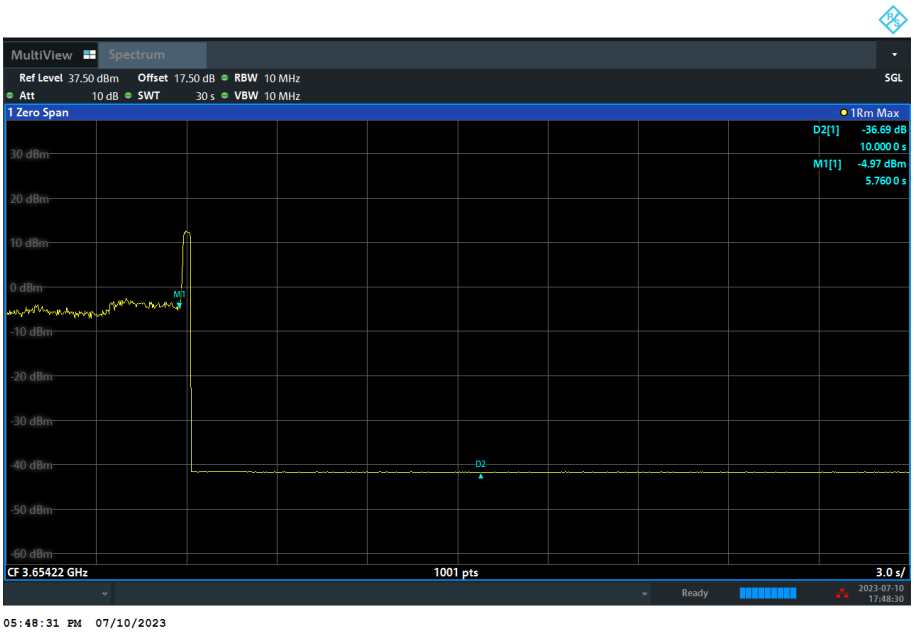
[Step 5] Setup with 3650-3690MHz & power level 20dBm/MHz

[Step 7] Check EUD Tx Frequency and power



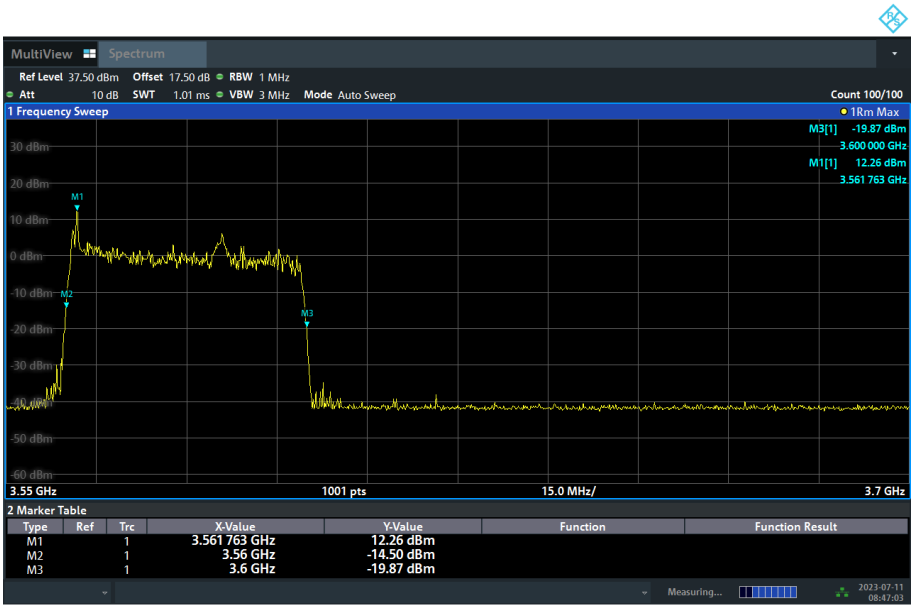
[Step 8.a.] After changing the frequency and power level,

The module (EUT) discontinues operations, change frequencies, or change its operational power level within 10 seconds of receiving instructions from its associated CBSD. Test result is PASS.



3.3.3 NR n78

[Step 1] Setup with frequency 3560-3600MHz and power level 10dBm/MHz
[Step 3] Check EUD Tx Frequency and power



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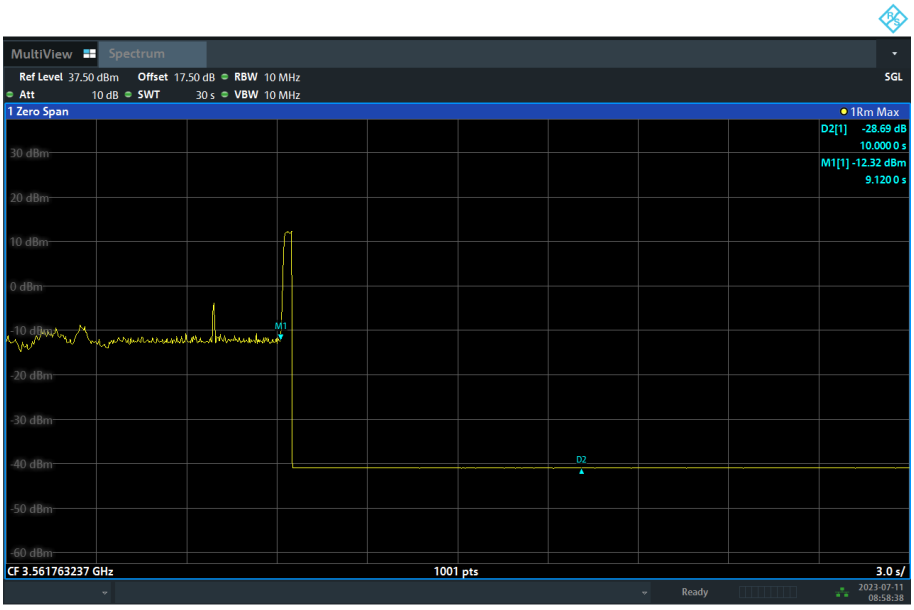
[Step 4.a.] EUD stops transmission within 10 seconds of receiving instructions from its associated CBSD.



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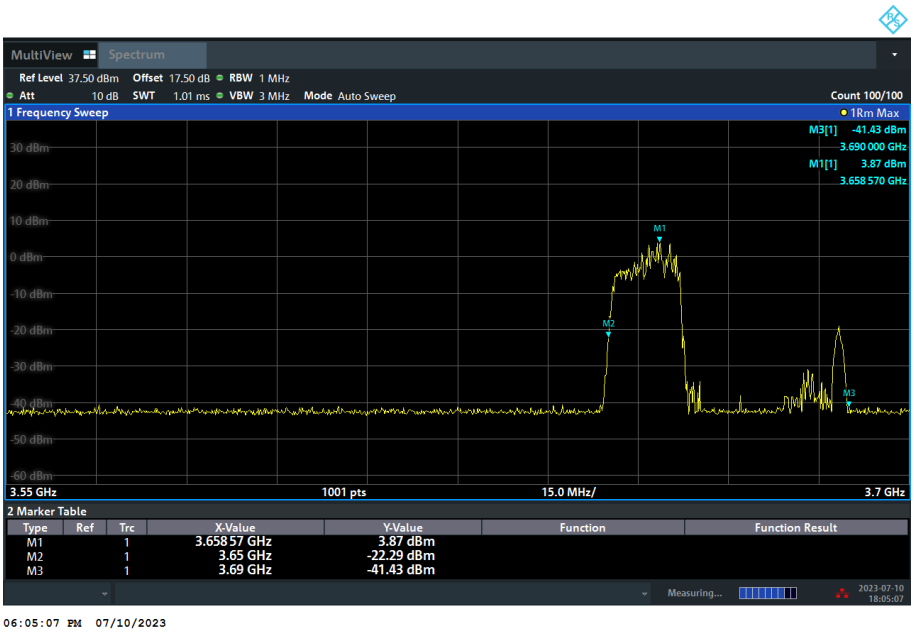
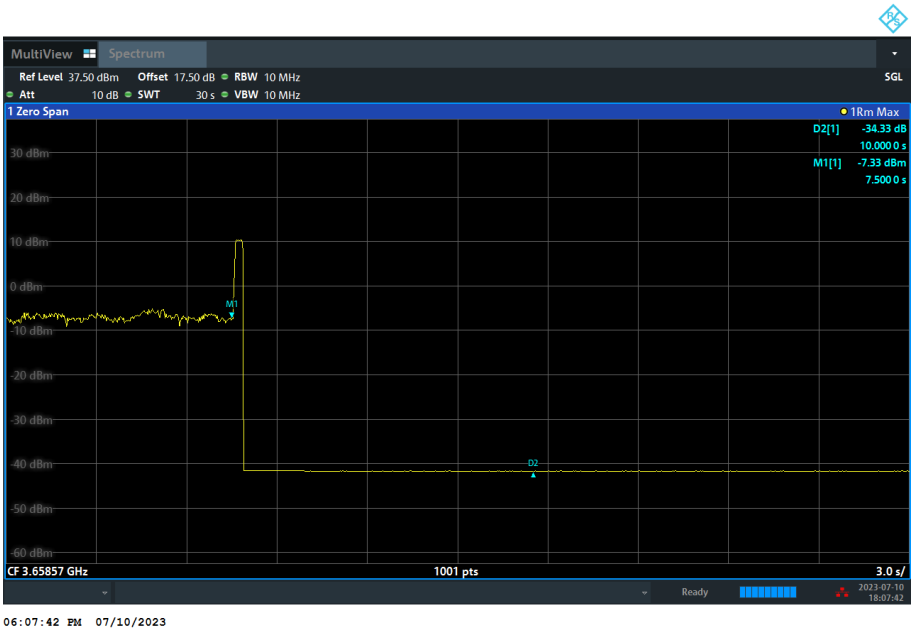
[Step 5] Setup with 3650-3690MHz & power level 20dBm/MHz
[Step 7] Check EUD Tx Frequency and power



[Step 8.a.] After changing the frequency and power level, The module (EUT) discontinues operations, change frequencies, or change its operational power level within 10 seconds of receiving instructions from its associated CBSD. Test result is PASS.



4 List of Measuring Equipment

Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Spectrum Analyzer	R&S	FSV3044	101468	10Hz~44GHz	Mar. 13, 2023	Jul. 10, 2023~ Jul. 11, 2023	Mar. 12, 2024	Conducted (TH05-HY)