

TEST REPORT

Applicant: Eagle Wireless Holdings, Inc.
EUT Description: 5G RedCap Sub-6 GHz LGA Module
Model No: I5255C-NA
Brand: Eagle Wireless
FCC ID: 2BNX7I5255CNAA
Standards: CFR 47, FCC Part 2
CFR 47, FCC Part 96.47
Date of Receipt: 2026/07/02
Date of Test: 2026/07/02 to 2026/09/03
Date of Issue: 2026/09/03

TOWE tested the above equipment in accordance with the requirements set forth in the above standards. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. It is the manufacturer's responsibility to assure that additional production units of the model are manufactured with identical electrical and mechanical components. All samples tested were in good operating condition throughout the entire test program. Measurement Uncertainties are published for informational purposes only and were not taken into account unless noted otherwise. Without written approval of TOWE, the test report shall not be reproduced except in full.



Jim Huang
Approved By:



Carey Chen
Reviewed By:

Revision History

Rev.	Issue Date	Description	Revised by
01	2026/09/03	Original	Carey Chen

Summary of Test Results

FCC Part	Test Item	Verdict
§96.47	End user device additional requirements	Pass

Contents

1	General Description	5
1.1	Lab Information.....	5
1.1.1	Testing Location	5
1.1.2	Test Facility / Accreditations	5
1.2	Client Information	5
1.2.1	Applicant.....	5
1.2.2	Manufacturer.....	5
1.3	Product Information.....	6
2	Test Configuration	7
2.1	Description of test setup.....	7
2.2	Test Environment.....	7
2.3	Test RF Cable	7
2.4	Modifications.....	7
3	Equipment and Measurement Uncertainty.....	8
3.1	Test Equipment List.....	8
3.2	Measurement Uncertainty	8
4	Test Results.....	9
4.1	End user Device Additional Requirements.....	9
5	Test Setup Photos.....	10
	Appendix.....	11

1 General Description

1.1 Lab Information

1.1.1 Testing Location

These measurement tests were conducted at the Sushi TOWE Wireless Testing (Shenzhen) Co., Ltd. facility located at F 401 and F 101, Building E, Hongwei Industrial Zone, No. 6, Liuxian 3rd Road, Zone 70, Xingdong Community, Xin'an Street, Bao'an District, Shenzhen, People's Republic of China. The measurement facility is compliant with the test site requirements specified in ANSI C63.4-2014

Tel.: +86-755-27212361

Contact Email: info@towewireless.com

1.1.2 Test Facility / Accreditations

A2LA (Certificate Number: 7088.01)

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017 General requirements for the competence of testing and calibration laboratories. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communiqué dated April 2017).

FCC Designation No.: CN1353

Sushi TOWE Wireless Testing(Shenzhen) Co., Ltd. has been recognized as an accredited testing laboratory.

Test Firm Registration Number: 684095

Designation Number: CN1353.

ISED CAB identifier: CN0152

Sushi TOWE Wireless Testing(Shenzhen) Co., Ltd. has been recognized by ISED as an accredited testing laboratory.

CAB identifier: CN0152

Company Number: 31000

1.2 Client Information

1.2.1 Applicant

Applicant:	Eagle Wireless Holdings, Inc.
Address:	1974 E. 66th St., Suite 200-B, Cleveland, OH 44103, United States Of America

1.2.2 Manufacturer

Manufacturer:	Eagle Wireless Holdings, Inc.
Address:	1974 E. 66th St., Suite 200-B, Cleveland, OH 44103, United States Of America

1.3 Product Information

EUT Description:	5G RedCap Sub-6 GHz LGA Module		
Model No:	I5255C-NA		
Brand:	Eagle Wireless		
Hardware Version:	R1.0		
Software Version:	I5255CNAABR01A01M2G		
IMEI:	016842000001476		
Technical specification:			
Modulation Type:	LTE: ☒ QPSK, ☒ 16QAM, ☒ 64QAM, ☒ 256QAM		
	NR: ☒ DFT-s-OFDM: PI/2-BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM ☒ CP-OFDM: QPSK, 16-QAM, 64-QAM, 256-QAM		
Operation Frequency Range:	Band	TX Frequency	RX Frequency
	LTE Band 42	3550 ~ 3600 MHz	3550 ~ 3600 MHz
	LTE Band 43	3600 ~ 3700 MHz	3600 ~ 3700 MHz
	LTE Band 48	3550 ~ 3700 MHz	3550 ~ 3700 MHz
	NR Band n48	3550 ~ 3700 MHz	3550 ~ 3700 MHz
	Note: The frequency range of LTE Band 48 covers the frequency range of LTE Band 43 and LTE Band 42, so LTE Band 43 and LTE Band 42 is exempt from testing.		
Antenna Type:	☒ External, ☐ Integrated		
Antenna Gain:	Band	Ant (dBi)	
	LTE Band 42	1	
	LTE Band 43	1	
	LTE Band 48	1	
	NR Band n48	1	
Remark: The above EUT's information was declared by applicant, please refer to the specifications or user manual for more detailed description.			

2 Test Configuration

2.1 Description of test setup

Description	Manufacturer	Model	ID
LTE Base Station	Baicells	mBS31001	2AG32MBS3100196N
NR Base Station	Baicells	BSC7048A243	2AG32BSC7048A243
Router	TP Link	TL-WDR6300	/
Laptop	DELL	Latitude 3510	/
Development Board*	Eagle Wireless	I5255C-NA-TE-A	E1Y26FB1P000008
Development Board*	Eagle Wireless	5G-REDCAP-EVB	D1Y25KL4Z000182
Remark: *the information are provided by applicant.			

2.2 Test Environment

Temperature:	24°C ~ 26°C
Relative Humidity:	45 ~ 56 % RH Ambient
Voltage:	Nominal: 3.8 Vdc

2.3 Test RF Cable

For all conducted test items: The offset level is set spectrum analyzer to compensate the RF cable loss and attenuator factor between RF conducted output port and spectrum analyzer. With the offset compensation, the spectrum analyzer reading level will be exactly the RF output level.

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

Offset = RF cable loss + attenuator factor.

2.4 Modifications

No modifications were made during testing.

3 Equipment and Measurement Uncertainty

All test and measuring equipment utilized to perform the tests documented in this report are calibrated on a regular basis, whichever is less, and where applicable is traceable recognized national standards.

3.1 Test Equipment List

Radiated Emission					
Description	Manufacturer	Model	SN	Last Due	Cal Due
EXA Signal Analyzer, Multi-touch	Keysight	N9010B	MY63440541	2026/05/29	2027/05/28
Signal Analyzer	Keysight	N9020A	US46470468	2026/03/05	2027/03/04
Power Divider	Qotana	DBPD0200001800C	22122900036	2025/03/11	2027/03/10

3.2 Measurement Uncertainty

Parameter	U _{lab}
Frequency error	371.88Hz

Uncertainty figures are valid to a confidence level of 95%

4 Test Results

4.1 End user Device Additional Requirements.

Limits

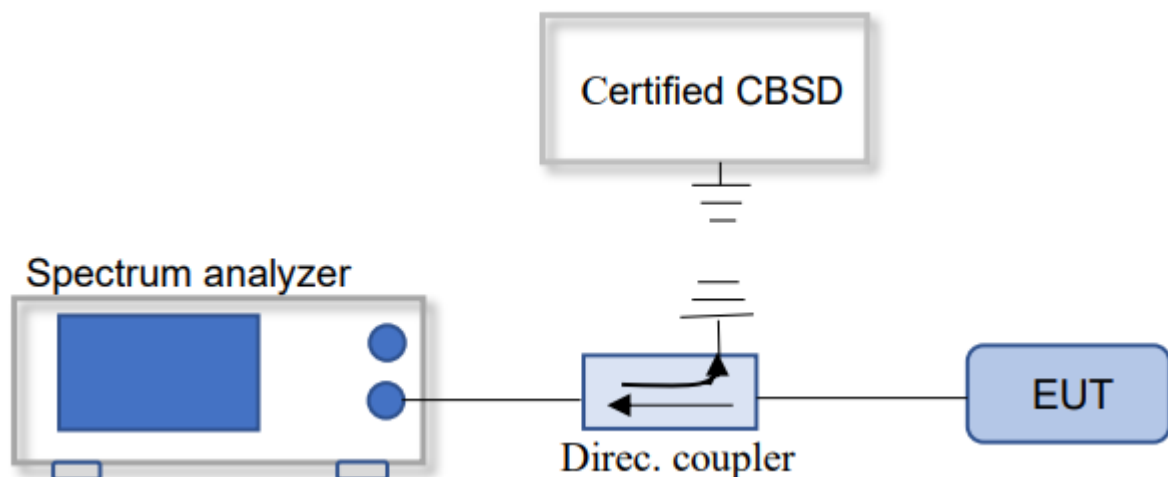
End User Devices will operate only after it receives authorization from an associated CBSD, including the frequencies and power limits for their operation.

End User Devices discontinues operation, changes Frequency, and changes its operational power level within 10 s of receiving instructions from its associated CBSD.

Test Procedure

KDB 940660 D01 Part 96 CBRS Eqpt v02, WINNF-TS-0122 V1.0.2

Test Setup



Test Settings

Based on the End user device additional requirements. During the test, use a certified Ruckus CBSD device (LTE Base Station FCC ID: 2AG32MBS3100196N, NR Base Station FCC ID: 2AG32BSC7048A243) as a companion device.

1. Configure CBSD to operate at 3600MHz~3630MHz, and Power level 10dBm/MHz
2. Enable AP service from Ruckus Cloud management
3. Check End User Devices Frequency and Power
4. Disable AP service from Ruckus Cloud management, check whether the EUT stops transmitting within 10s
5. Repeat step 2 to step 4 with the CBSD operating at 3670MHz~3690MHz, and Power level 20dBm/MHz.

Measuring Instruments

The measuring equipment is listed in the section 3.1 of this test report.

Test Result

The detailed test data see: **Appendix**.

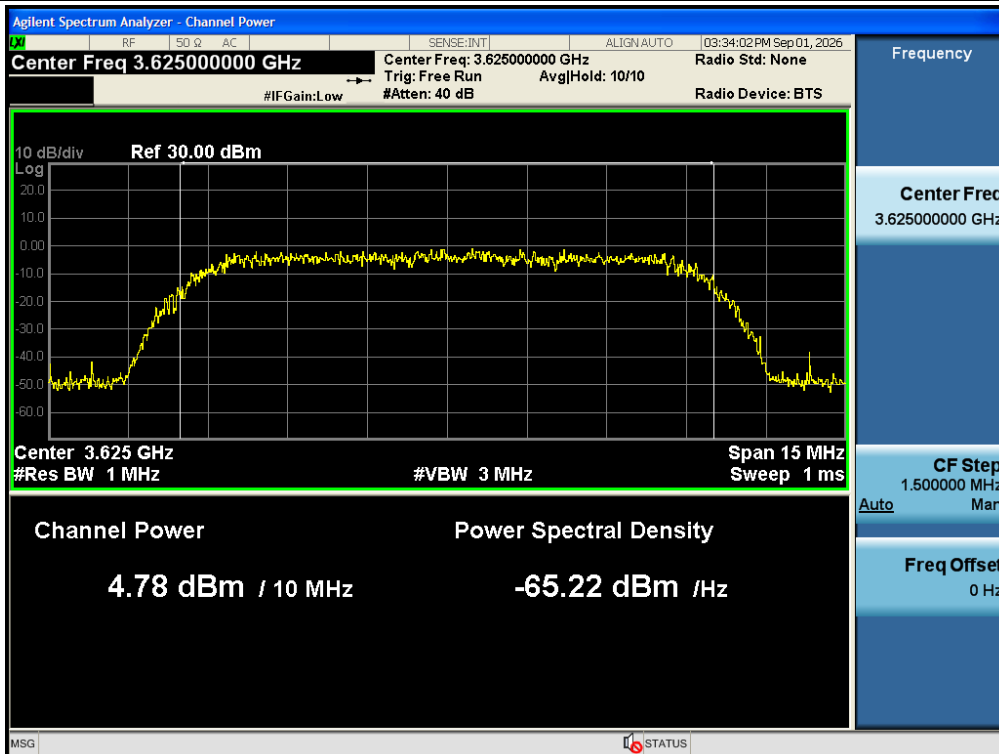
5 Test Setup Photos

The detailed test data see: **Appendix-D PART96.47 Setup Photos**

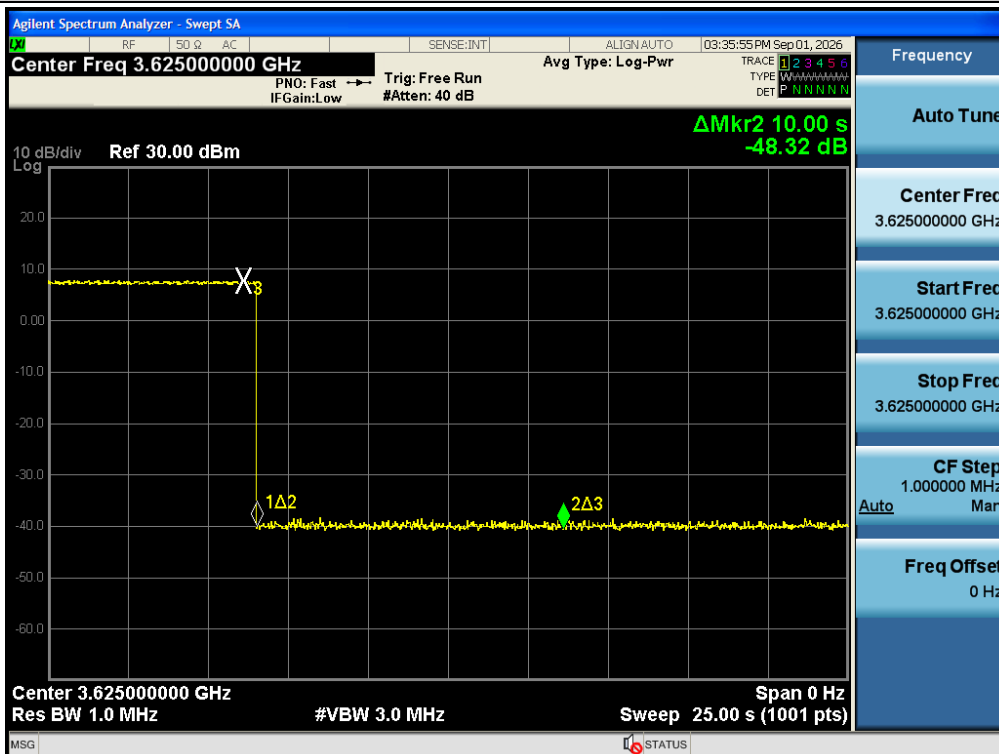
Appendix

LTE

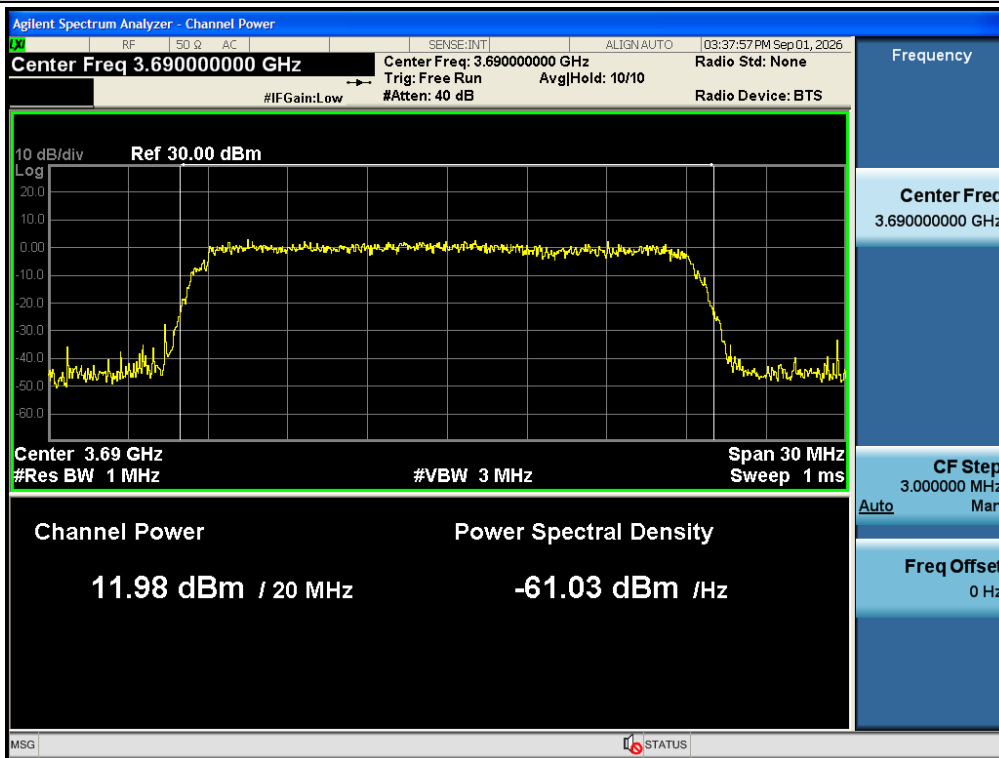
Bandwidth: 10MHz Setup with frequency 3625MHz and power level 10dBm/MHz



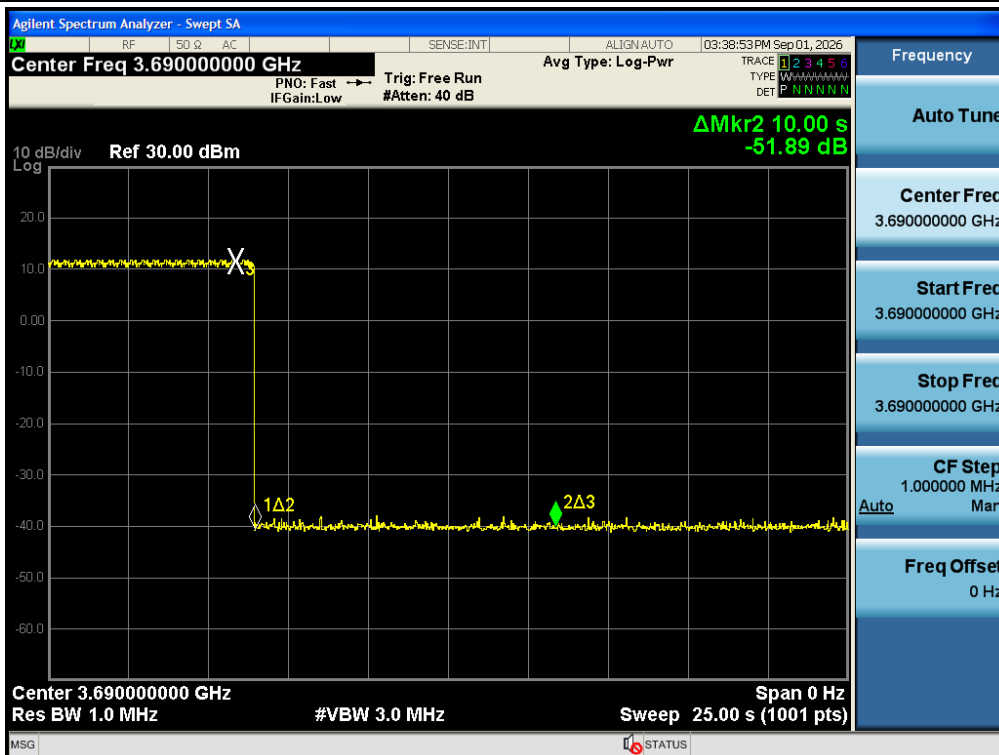
EUT stops transmission within 10 seconds of receiving instructions from its associated CBSD.



Bandwidth: 20MHz Setup with frequency 3690MHz and power level 20dBm/MHz

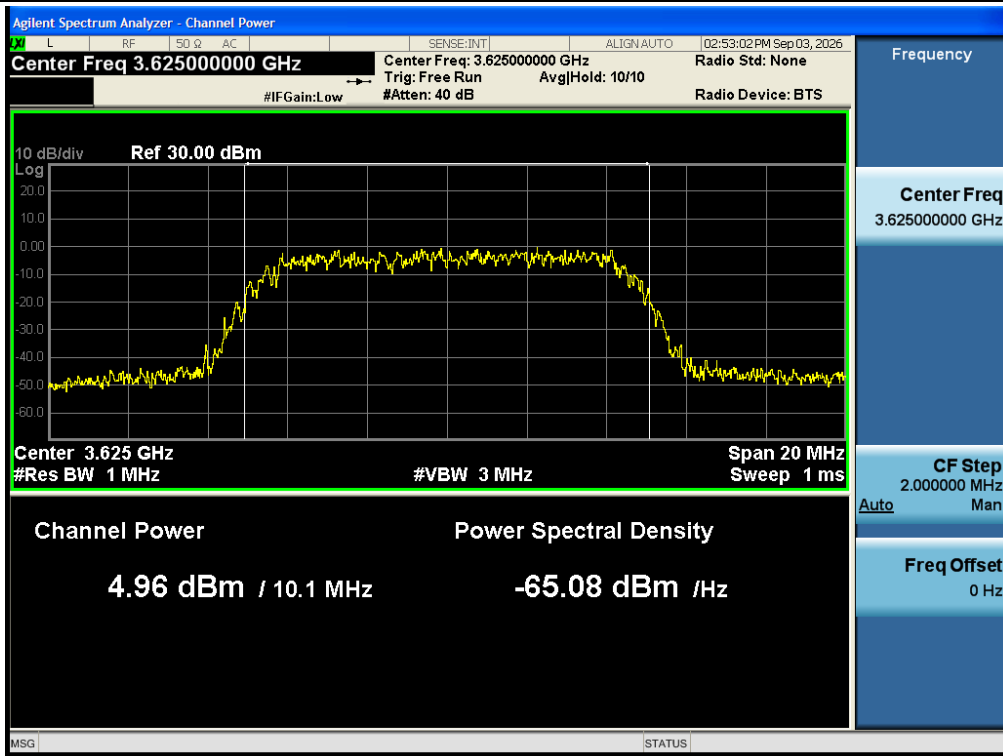


EUT stops transmission within 10 seconds of receiving instructions from its associated CBSD.

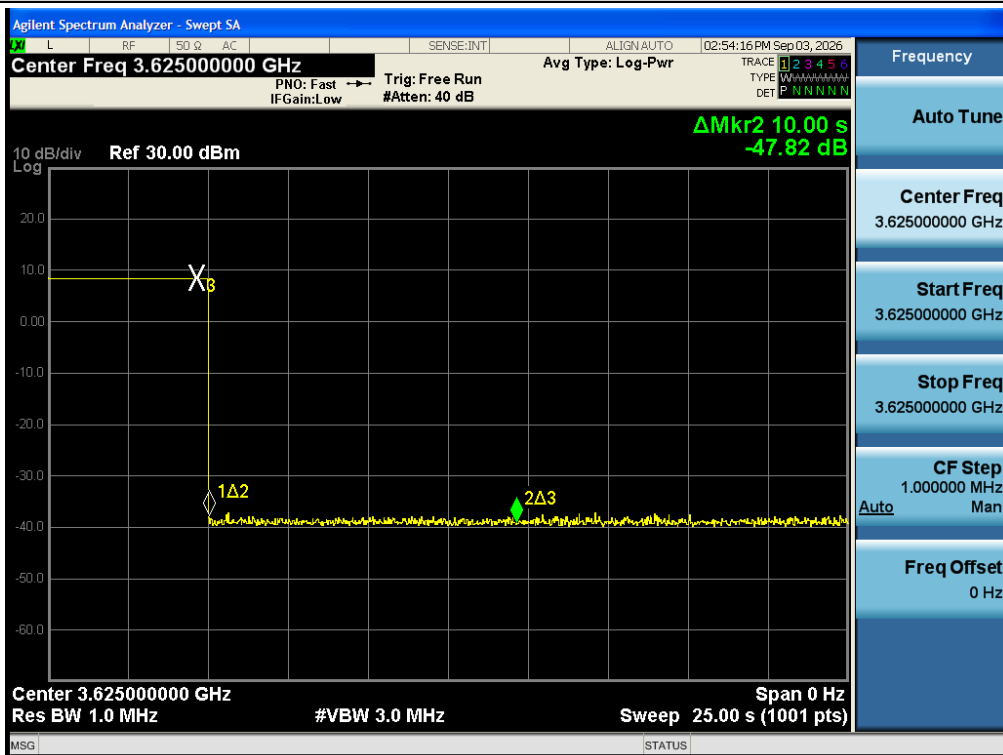


NR

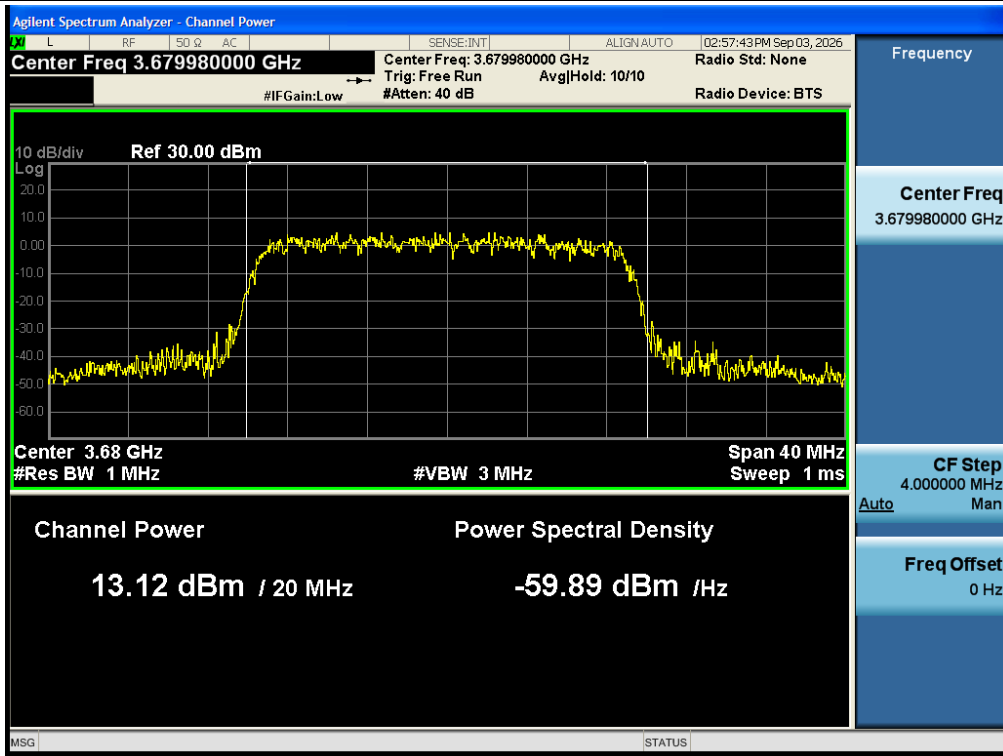
Bandwidth: 10MHz Setup with frequency 3625MHz and power level 10dBm/MHz



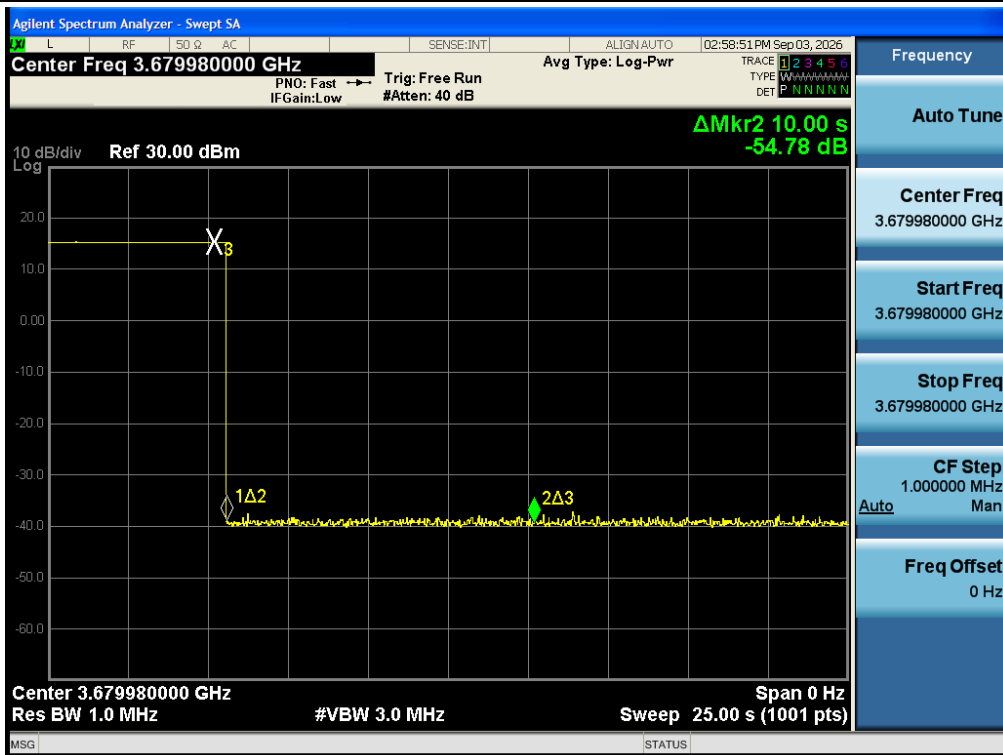
EUT stops transmission within 10 seconds of receiving instructions from its associated CBSD.



Bandwidth: 20MHz Setup with frequency 3679.98MHz and power level 20dBm/MHz



EUT stops transmission within 10 seconds of receiving instructions from its associated CBSD.



~The End~