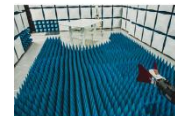




ELEMENT MATERIALS TECHNOLOGY

(formerly PCTEST)
18855 Adams Court, Morgan Hill, CA 95037 USA
Tel. 408.538.5600
<http://www.element.com>



MEASUREMENT REPORT FCC PART 15.407 Narrowband (NB) U-NII 5GHz

Applicant Name:

Apple Inc.
One Apple Park Way
Cupertino, CA 95014
United States

Date of Testing:

09/18/2025 - 12/23/2025

Test Report Issue Date:

1/15/2026

Test Site/Location:

Element Materials Technology, Morgan Hill, CA, USA

Test Report Serial No.:

1C2509100079-10-R6.BCG

FCC ID:

BCGA3459

APPLICANT:

Apple Inc.

Application Type:

Certification

Model:

A3459

EUT Type:

Tablet Device

Frequency Range:

5162 – 5245MHz, 5733 – 5844MHz

Modulation Type:

GFSK, $\pi/4$ DQPSK, OQPSK, 8PSK, 16QAM

FCC Classification:

Unlicensed National Information Infrastructure (UNII)

FCC Rule Part(s):

Part 15 Subpart E (15.407)

Test Procedure(s):

ANSI C63.10:2020 + Cor. 1:2023 + C63.10a:2024 + Errata to
C63.10a:2024, KDB 789033 D02 v02r01

This equipment has been shown to be capable of compliance with the applicable technical standards as indicated in the measurement report and was tested in accordance with the measurement procedures specified in ANSI C63.10:2020 + Cor. 1:2023 + C63.10a:2024 + Errata to C63.10a:2024 and KDB 789033 D02 v02r01. Test results reported herein relate only to the item(s) tested.

This revised Test Report (S/N: 1C2509100079-10-R6.BCG) supersedes and replaces the previously issued test report on the same subject device for the same type of testing as indicated. Please discard or destroy the previously issued test report(s) and dispose accordingly.

I attest to the accuracy of data. All measurements reported herein were performed by me or were made under my supervision and are correct to the best of my knowledge and belief. I assume full responsibility for the completeness of these measurements and vouch for the qualifications of all persons taking them.

RJ Ortanez
Executive Vice President



FCC ID: BCGA3459		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2509100079-10-R6.BCG	Test Dates: 09/18/2025 - 12/23/2025	EUT Type: Tablet Device	Page 1 of 272

V 11.0 06/2025

Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from Element Materials Technology. If you have any questions about this or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact ct.info@element.com.

Revision Summary

Revision	Date	Comments	Revised By
-	11/20/2025	Initial Release	WKR007077
R1	11/21/2025	Addressed TCB Comments in sections 2.2, 2.6, 6.0, and 7.4 to 7.7	WKR007077
R2	11/24/2025	Addressed TCB Comments in sections 2.2, 7.4, 7.5, 7.6, and 7.8	WKR007077
R3	11/25/2025	Addressed TCB Comments in Overview Table	WKR017014
R4	12/8/2025	Addressed TCB Comments in 2.2, 2.6, 7.5 and 7.8	WKR007077
R5	12/9/2025	Addressed Client's comments in 7.6	WKR007077
R6	12/24/2025	Addressed Client's comments in 6.0 & 7.3	WKR017014

FCC ID: BCGA3459		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2509100079-10-R6.BCG	Test Dates: 09/18/2025 - 12/23/2025	EUT Type: Tablet Device	Page 2 of 272

V 11.0 06/2025

Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from Element Materials Technology. If you have any questions about this or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact ct.info@element.com.

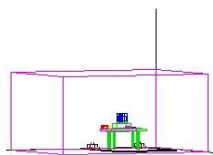
TABLE OF CONTENTS

1.0	INTRODUCTION	5
1.1	Scope.....	5
1.2	Element Materials Technology Test Location	5
1.3	Test Facility / Accreditations.....	5
2.0	PRODUCT INFORMATION	6
2.1	Equipment Description	6
2.2	Device Capabilities.....	6
2.3	Antenna Description	10
2.4	Test Support Equipment.....	10
2.5	Test Configuration	11
2.6	Software and Firmware	12
2.7	EMI Suppression Device(s)/Modifications.....	12
3.0	DESCRIPTION OF TESTS	13
3.1	Evaluation Procedure	13
3.2	AC Line Conducted Emissions	13
3.3	Radiated Emissions.....	14
3.4	Environmental Conditions.....	14
4.0	ANTENNA REQUIREMENTS	15
5.0	MEASUREMENT UNCERTAINTY	16
6.0	TEST EQUIPMENT CALIBRATION DATA.....	17
7.0	TEST RESULTS	18
7.1	Summary.....	18
7.2	26dB & 99% Bandwidth Measurement	19
7.3	6dB & 99% Bandwidth Measurement	52
7.4	Conducted Output Power Measurement.....	69
7.5	Maximum Power Spectral Density	77
7.6	Radiated Spurious Emission – Above 1GHz.....	189
7.7	Radiated Spurious Emissions – Below 1GHz	264
7.8	AC Line Conducted Emissions Measurement.....	268
8.0	CONCLUSION.....	272

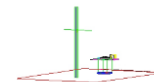
FCC ID: BCGA3459		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2509100079-10-R6.BCG	Test Dates: 09/18/2025 - 12/23/2025	EUT Type: Tablet Device	Page 3 of 272

V 11.0 06/2025

Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from Element Materials Technology. If you have any questions about this or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact ct.info@element.com.



MEASUREMENT REPORT



UNII Band	Tx Frequency [MHz]	Mode	Power Scheme	SISO				TxBF	
				Antenna WF8		Antenna WF7a		Summed	
				Max. Power (mW)	Max. Power (dBm)	Max. Power (mW)	Max. Power (dBm)	Max. Power (mW)	Max. Power (dBm)
1	5162 - 5245	NB UNII BDR	ePA	9.727	9.88	9.183	9.63	9.772	9.90
			iPA	5.572	7.46	6.081	7.84	9.528	9.79
		NB UNII LE	ePA	11.885	10.75	11.695	10.68	12.023	10.80
			iPA	5.572	7.46	5.970	7.76	11.376	10.56
		NB UNII HDR	ePA	29.923	14.76	27.925	14.46	59.020	17.71
			iPA	2.793	4.46	3.105	4.92	5.929	7.73
3	5733 - 5844	NB UNII BDR	ePA	17.378	12.40	17.742	12.49	17.338	12.39
			iPA	2.793	4.46	3.105	4.92	5.662	7.53
		NB UNII LE	ePA	105.682	20.24	97.275	19.88	200.909	23.03
			iPA	5.598	7.48	6.252	7.96	11.695	10.68
		NB UNII HDR	ePA	107.152	20.30	98.401	19.93	205.589	23.13
			iPA	5.572	7.46	6.237	7.95	11.641	10.66
3	5733 - 5844	NB UNII HDR	ePA	35.075	15.45	31.550	14.99	66.681	18.24
			iPA	2.793	4.46	3.162	5.00	5.916	7.72
		NB UNII HDT	ePA	34.914	15.43	31.405	14.97	65.917	18.19
			iPA	2.812	4.49	3.041	4.83	5.861	7.68

EUT Overview

FCC ID: BCGA3459	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1C2509100079-10-R6.BCG	Test Dates: 09/18/2025 - 12/23/2025	EUT Type: Tablet Device	Page 4 of 272

V 11.0 06/2025

Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from Element Materials Technology. If you have any questions about this or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact ct.info@element.com.

1.0 INTRODUCTION

1.1 Scope

Measurement and determination of electromagnetic emissions (EMC) of radio frequency devices including intentional and/or unintentional radiators for compliance with the technical rules and regulations of the Federal Communications Commission.

1.2 Element Materials Technology Test Location

These measurement tests were conducted at the Element Materials Technology facility located at 18855 Adams Court, Morgan Hill, CA 95037. The measurement facility is compliant with the test site requirements specified in ANSI C63.4-2014 and KDB 414788 D01 v01r01.

1.3 Test Facility / Accreditations

Measurements were performed at Element Materials Technology located in Morgan Hill, CA 95037, U.S.A.

- Element Materials Technology is an ISO 17025-2017 accredited test facility under the American Association for Laboratory Accreditation (A2LA) with Certificate number 2041.02 for Specific Absorption Rate (SAR), Hearing Aid Compatibility (HAC) testing, where applicable, and Electromagnetic Compatibility (EMC) testing for FCC and Innovation, Science, and Economic Development Canada rules.
- Element Washington DC LLC TCB is a Telecommunication Certification Body (TCB) accredited to ISO/IEC 17065-2012 by A2LA (Certificate number 2041.03) in all scopes of FCC Rules and ISSED Standards (RSS).
- Element Materials Technology facility is a registered (22831) test laboratory with the site description on file with ISSED.
- Element Washington DC LLC is a Recognized U.S. Certification Assessment Body (CAB# US0110) for ISSED Canada as designed by NIST under the U.S. and Canada Mutual Recognition Agreements (MRAs)

FCC ID: BCGA3459		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2509100079-10-R6.BCG	Test Dates: 09/18/2025 - 12/23/2025	EUT Type: Tablet Device	Page 5 of 272

V 11.0 06/2025

Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from Element Materials Technology. If you have any questions about this or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact ct.info@element.com.

2.0 PRODUCT INFORMATION

2.1 Equipment Description

The Equipment Under Test (EUT) is the **Apple Tablet Device FCC ID: BCGA3459**. The test data contained in this report pertains only to the emissions due to the EUT's Narrowband UNII transmitter.

- This Narrowband UNII module has been tested by manufacturer and the following were confirmed:
 - A) The hopping sequence is pseudorandom
 - B) The receiver input bandwidth equals the transmit bandwidth
 - C) The receiver hops in sequence with the transmit signal
 - D) Narrowband UNII can only hop within the same UNII band and cannot hop between bands

Test Device Serial No.: KX1QPW64K2, PT6Q9F2KYP, DLXHKP0001400013YL, DLXHKP0001500013YL

2.2 Device Capabilities

This device contains the following capabilities:

802.11b/g/n/ax/be WLAN, 802.11a/n/ac/ax/be UNII (5GHz and 6GHz), 802.15.4, Bluetooth (1x, EDR, LE, HDR, HDT), Narrowband (NB) UNII (5GHz and 6GHz), WPT.

This device supports BT Beamforming.

This device supports channel puncturing and channel bandwidth reduction.

Band 1	Band 3
Frequency (MHz)	Frequency (MHz)
5162	5733
:	:
5203	5788
:	:
5245	5844

Table 2-1. NB UNII Frequency / Channel Operations

FCC ID: BCGA3459	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1C2509100079-10-R6.BCG	Test Dates: 09/18/2025 - 12/23/2025	EUT Type: Tablet Device	Page 6 of 272

V 11.0 06/2025

Group	Mode	Data Rate (Mbps)	Modulation	Bandwidth (MHz)
1	BDR	1	GFSK	1
2	LE1M	1	GFSK	1
3	LE2M	2	GFSK	2
4	HDR4	4	Pi/4-DQPSK	2
5	HDR8	8	Pi/4-DQPSK	4
6	HDRPS2	2	OQPSK	2
	XHDRPS2	2		
7	HDRPM4	4	OQPSK	4
	HDRPM6	6		
	HDRPM8	8		
	XHDRPM4	4		
	XHDRPM6	6		
	XHDRPM8	8		
8	HDRPM12	12	16QAM	4
	HDRPM16	16		
	XHDRPM12	12		
	XHDRPM16	16		
9	HDRPL8	8	OQPSK	8
	HDRPL12	12		
	HDRPL16	16		
	XHDRPL8	8		
	XHDRPL12	12		
	XHDRPL16	16		
10	HDRPL24	24	16QAM	8
	HDRPL32	32		
	XHDRPL24	24		
	XHDRPL32	32		
11	HDT2	2	Pi/4-QPSK	2
	HDT3	3		
12	HDT4	4	8PSK	2
13	HDT6	6	16QAM	2
	HDT8	8		

Table 2-2. NB UNII Configuration

FCC ID: BCGA3459		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1C2509100079-10-R6.BCG	Test Dates: 09/18/2025 - 12/23/2025	EUT Type: Tablet Device		Page 7 of 272

V 11.0 06/2025

Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from Element Materials Technology. If you have any questions about this or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact ct.info@element.com.

Notes: This device is capable of operating in hopping and non-hopping mode. The EUT can hop between different channels in the U-NII Band 1 & U-NII Band 3. The maximum achievable duty cycles for all modes were determined based on measurements performed on a spectrum analyzer in zero-span mode with RBW = 8MHz, VBW = 50MHz, and detector = peak per the guidance of Section B)2)b) of KDB 789033 D02 v02r01 and ANSI C63.10:2020 + Cor. 1:2023 + C63.10a:2024 + Errata to C63.10a:2024. The RBW and VBW were both greater than 50/T, where T is the minimum transmission duration, and the number of sweep points across T was greater than 100. The duty cycles are as follows:

Mode		Antenna WF8		Antenna WF7a		TxBF	
		Duty Cycle [%]	DCCF [dB]	Duty Cycle [%]	DCCF [dB]	Duty Cycle [%]	DCCF [dB]
BDR	ePA	76.261	1177	76.296	1175	76.296	1175
	iPA	76.261	1177	76.296	1175	76.296	1175
LE1M	ePA	84.859	0.713	84.840	0.714	84.840	0.714
	iPA	84.859	0.713	84.840	0.714	84.840	0.714
LE2M	ePA	56.781	2.458	56.794	2.457	56.846	2.453
	iPA	56.781	2.458	56.794	2.457	56.846	2.453
HDR4	ePA	77.553	1104	77.804	1090	77.804	1090
	iPA	77.553	1104	77.804	1090	77.804	1090
HDR8	ePA	77.750	1093	77.750	1093	77.750	1093
	iPA	77.750	1093	77.750	1093	77.750	1093
HDRPS2	ePA	91981	0.363	92.449	0.341	91770	0.373
	iPA	91981	0.363	92.449	0.341	91770	0.373
XHDRPS2	ePA	98.084	0.084	98.878	0.049	98.401	0.070
	iPA	98.084	0.084	98.878	0.049	98.401	0.070
XHDRPM6	ePA	86.238	0.643	86.278	0.641	86.457	0.632
	iPA	86.238	0.643	86.278	0.641	86.457	0.632
XHDRPM8	ePA	92.321	0.347	92.172	0.354	92.172	0.354
	iPA	92.321	0.347	92.172	0.354	92.172	0.354
HDRPM16	ePA	89.784	0.468	89.166	0.498	89.598	0.477
	iPA	89.784	0.468	89.166	0.498	89.598	0.477
XHDRPM16	ePA	87.317	0.589	87.640	0.573	87.317	0.589
	iPA	87.317	0.589	87.640	0.573	87.317	0.589
HDRPL12	ePA	90.095	0.453	89.867	0.464	90.095	0.453
	iPA	90.095	0.453	89.867	0.464	90.095	0.453
XHDRPL16	ePA	95.017	0.222	95.017	0.222	95.082	0.219
	iPA	95.017	0.222	95.017	0.222	95.082	0.219
HDRPL32	ePA	88.145	0.548	88.410	0.535	88.288	0.541
	iPA	88.145	0.548	88.410	0.535	88.288	0.541
XHDRPL32	ePA	85.310	0.690	85.724	0.669	85.408	0.685
	iPA	85.310	0.690	85.724	0.669	85.408	0.685
HDT2	ePA	96.427	0.158	96.316	0.163	96.095	0.173
	iPA	96.427	0.158	96.316	0.163	96.095	0.173
HDT4	ePA	93.347	0.299	93.498	0.292	93.368	0.298
	iPA	93.347	0.299	93.498	0.292	93.368	0.298
HDT6	ePA	90.427	0.437	90.427	0.437	90.344	0.441
	iPA	90.427	0.437	90.427	0.437	90.344	0.441
HDT8	ePA	88.879	0.512	88.941	0.509	88.797	0.516
	iPA	88.879	0.512	88.941	0.509	88.797	0.516

Table 2-3. Measured Duty Cycles

FCC ID: BCGA3459	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1C2509100079-10-R6.BCG	Test Dates: 09/18/2025 - 12/23/2025	EUT Type: Tablet Device	Page 8 of 272

V 11.0 06/2025



This device supports simultaneous transmission operations, which allows multiple transmitters to transmit simultaneously on the same antenna. The table below shows all configurations possible.

Antenna	Simultaneous Tx Config	Bluetooth 2.4GHz	Thread	WLAN	NB UNII	WIFI 5GHz	WIFI 6GHz
		BDR, EDR, LE HDR, HDT	802.15.4	802.11 b/g/n/ax/be	BDR, EDR, LE HDR, HDT	802.11 a/n/ac/ax/be	802.11 a/ax/be
Ant WF8	Config 1	✓	✗	✗	✗	✓	✗
Ant WF8	Config 2	✓	✗	✗	✗	✗	✓
Ant WF8	Config 3	✗	✓	✗	✗	✓	✗
Ant WF8	Config 4	✗	✓	✗	✗	✗	✓
Ant WF8	Config 5	✗	✗	✓	✓	✗	✗
Ant WF8	Config 6	✗	✗	✓	✗	✓	✗
Ant WF8	Config 7	✗	✗	✓	✗	✗	✓

Table 2-4. Simultaneous Transmission Configurations

✓ = Support; ✗ = Not Support

TxBF = Antenna WF8 + Antenna WF7a

Note:

All the above simultaneous transmission configurations have been tested and the worst-case configuration was found to be Config 1 and reported in RF Bluetooth and RF UNII OFDM test reports.

FCC ID: BCGA3459	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1C2509100079-10-R6.BCG	Test Dates: 09/18/2025 - 12/23/2025	EUT Type: Tablet Device	Page 9 of 272

V 11.0 06/2025

Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from Element Materials Technology. If you have any questions about this or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact ct.info@element.com.

2.3 Antenna Description

The following antenna gains provided by the manufacturer were used for testing.

Frequency [MHz]	Antenna Gain (dBi)	
	Antenna WF8	Antenna WF7a
5162 - 5245	-0.2	2.9
5733 – 5844	5.3	2.5

Table 2-5. Highest Antenna Gain

2.4 Test Support Equipment

1	Apple MacBook Pro	Model:	A2141	S/N:	C02H604EQ05D
	w/AC/DC Adapter	Model:	A2166	S/N:	C4H042705ZNPM0WA6
2	Apple USB-C Cable	Model:	Spartan	S/N:	GXK1336018XKTR024
3	USB-C Cable	Model:	A2795	S/N:	DWH80115BK826GV19
	w/ AC Adapter	Model:	A2305	S/N:	C4H95160004PF4F4V
4	Apple Pencil	Model:	A2538	S/N:	KJ26TCFXJW
5	DC Power Supply	Model:	KPS3010D	S/N:	N/A

Table 2-6. Test Support Equipment List

FCC ID: BCGA3459		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2509100079-10-R6.BCG	Test Dates: 09/18/2025 - 12/23/2025	EUT Type: Tablet Device	Page 10 of 272

V 11.0 06/2025

Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from Element Materials Technology. If you have any questions about this or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact ct.info@element.com.

2.5 Test Configuration

The EUT was tested per the guidance of ANSI C63.10:2020 + Cor. 1:2023 + C63.10a:2024 + Errata to C63.10a:2024 and KDB 789033 D02 v02r01. ANSI C63.10:2020 + Cor. 1:2023 + C63.10a:2024 + Errata to C63.10a:2024 was used to reference the appropriate EUT setup for radiated spurious emissions testing and AC line conducted testing. See Sections 3.2 for AC line conducted emissions test setups, 3.3 for radiated emissions test setups, and 7.2, 7.3, 7.4, and 7.5 for antenna port conducted emissions test setups.

There are two vendors of the WiFi/Bluetooth radio modules, variant 1 and variant 2. Both radio modules have the same mechanical outline, same on-board antenna matching circuit, identical antenna structure, and are built and tested to conform to the same specifications and to operate within the same tolerances. The worst case configuration was found between the two variants. The EUT was also investigated with and without charger.

For emissions from 1GHz – 18GHz, low, mid, and high channels were tested with highest power and worst case configuration. The emissions below 1GHz and above 18GHz were tested with the highest transmitting power and the worst case channel were reported.

The EUT was manipulated through three orthogonal planes of X-orientation (flatbed), Y-orientation (landscape), and Z-orientation (portrait) during the testing. Only the worst case emissions were reported in this test report.

For AC line conducted and radiated test below 1GHz, following configurations were investigated and EUT powered by AC/DC adaptor was the worst case.

- EUT powered by AC/DC adaptor to USB-C cable with wire charger
- EUT powered by host PC via USB-C cable with wire charger

For conducted emissions, the following are the worst case NB UNII rates were used for testing:

1. BDR
2. LE1M
3. LE2M
4. HDR4
5. HDR8
6. HDRPS2
7. XHDRPM6
8. HDRPM16
9. HDT2
10. HDT4
11. HDT6

For radiated band edge, the following are the worst case NB UNII rates were used for testing:

1. BDR
2. LE1M
3. LE2M
4. HDR4
5. HDR8
6. XHDRPS2
7. XHDRPM8
8. XHDRPM16
9. XHDRPL16
10. XHDRPL32
11. HDT2
12. HDT8

FCC ID: BCGA3459		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2509100079-10-R6.BCG	Test Dates: 09/18/2025 - 12/23/2025	EUT Type: Tablet Device	Page 11 of 272

V 11.0 06/2025



2.6 Software and Firmware

The test was conducted with firmware version 23D40 installed on the EUT.

2.7 EMI Suppression Device(s)/Modifications

No EMI suppression device(s) were added and/or no modifications were made during testing.

FCC ID: BCGA3459		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2509100079-10-R6.BCG	Test Dates: 09/18/2025 - 12/23/2025	EUT Type: Tablet Device	Page 12 of 272

V 11.0 06/2025

Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from Element Materials Technology. If you have any questions about this or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact ct.info@element.com.

3.0 DESCRIPTION OF TESTS

3.1 Evaluation Procedure

The measurement procedures described in the American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices (ANSI C63.10:2020 + Cor. 1:2023 + C63.10a:2024 + Errata to C63.10a:2024) and the guidance provided in KDB 789033 D02 v02r01 were used in the measurement of the EUT.

Deviation from measurement procedure.....None

3.2 AC Line Conducted Emissions

The line-conducted facility is located inside a 7m x 3.66m x 2.7m shielded enclosure. The shielded enclosure is manufactured by AP Americas. The shielding effectiveness of the shielded room is in accordance with MIL-Std-285 or NSA 65-6. A 1m x 1.5m wooden table 80cm high is placed 40cm away from the vertical wall and 80cm away from the sidewall of the shielded room. Two 10kHz-30MHz, 50Ω/50μH Line-Impedance Stabilization Networks (LISNs) are bonded to the shielded room floor. Power to the LISNs is filtered by external high-current high-insertion loss power line filters. The external power line filter is EPCOS 2X60A Power Line Filter (100dB Attenuation, 14kHz-18GHz) and the two EPCOs 2X48A filters (100dB Minimum Insertion Loss, 14kHz - 10GHz). These filters attenuate ambient signal noise from entering the measurement lines. These filters are also bonded to the shielded enclosure.

The EUT is powered from one LISN and the support equipment is powered from the second LISN. If the EUT is a DC-powered device, power will be derived from the source power supply it normally will be powered from and this supply line(s) will be connected to the second LISN. All interconnecting cables more than 1 meter were shortened to a 1 meter length by non-inductive bundling (serpentine fashion) and draped over the back edge of the test table. All cables were at least 40cm above the horizontal reference ground plane. Power cables for support equipment were routed down to the second LISN while ensuring that that cables were not draped over the second LISN.

Sufficient time for the EUT, support equipment, and test equipment was allowed in order for them to warm up to their normal operating condition. The RF output of the LISN was connected to the spectrum analyzer and exploratory measurements were made to determine the frequencies producing the maximum emission from the EUT. The spectrum was scanned from 150kHz to 30MHz with a spectrum analyzer. The detector function was set to peak mode for exploratory measurements while the bandwidth of the analyzer was set to 10kHz. The EUT, support equipment, and interconnecting cables were arranged and manipulated to maximize each emission. Once the worst case emissions have been identified, the one EUT cable configuration/arrangement and mode of operation that produced these emissions is used for final measurements on the same test site. The analyzer is set to CISPR quasi-peak and average detectors with a 9kHz resolution bandwidth for final measurements.

Line conducted emissions test results are shown in Section 7.8. Automated test software was used to perform the AC line conducted emissions testing. Automated measurement software utilized is Rohde & Schwarz EMC32, Version 10.50.40.

FCC ID: BCGA3459		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2509100079-10-R6.BCG	Test Dates: 09/18/2025 - 12/23/2025	EUT Type: Tablet Device	Page 13 of 272

V 11.0 06/2025

Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from Element Materials Technology. If you have any questions about this or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact ct.info@element.com.

3.3 Radiated Emissions

The radiated test facilities consisted of an indoor 3 meter semi-anechoic chamber used for final measurements and exploratory measurements, when necessary. The measurement area is contained within the semi-anechoic chamber which is shielded from any ambient interference. The test site inside the chamber is a 6m x 5.2m elliptical, obstruction-free area in accordance with Figure 5.7 of Clause 5 in ANSI C63.4-2014. Absorbers are arranged on the floor between the turn table and the antenna mast in such a way so as to maximize the reduction of reflections for measurements above 1GHz. An 80cm tall test table made of Styrodur is placed on top of the turn table. For measurements above 1GHz, an additional Styrodur pedestal is placed on top of the test table to bring the total table height to 1.5m.

Per KDB 414788 D01 v01r01, radiated emission test sites other than open-field test sites (e.g., shielded anechoic chambers), may be employed for emission measurements below 30MHz if characterized so that the measurements correspond to those obtained at an open-field test site. To determine test site equivalency, a reference sample transmitting at 149kHz was measured on an open field test site (asphalt with no ground plane) and then measured in the 3m semi-anechoic chamber. A calibrated 60cm loop antenna was used while the reference device was rotated through the X, Y and Z axis in order to capture the worst case level. A maximum deviation of 2.77dB at 149kHz was measured when comparing the 3 meter semi-anechoic chamber to the open field site.

For all measurements, the spectrum was scanned through all EUT azimuths and from 1 to 4 meter receive antenna height using a broadband antenna from 30MHz up to the upper frequency shown in 15.33 depending on the highest frequency generated or used in the device or on which the device operates or tunes. For frequencies above 1GHz, linearly polarized double ridge horn antennas were used. For frequencies below 30MHz, a calibrated loop antenna was used. When exploratory measurements were necessary, they were performed at 1 meter test distance inside the semi-anechoic chamber using broadband antennas, broadband amplifiers, and spectrum analyzers to determine the frequencies and modes producing the maximum emissions. Sufficient time for the EUT, support equipment, and test equipment was allowed in order for them to warm up to their normal operating condition. The test set-up was placed on top of the 1 x 1.5 meter table. The EUT, support equipment, and interconnecting cables were arranged and manipulated to maximize each emission. Appropriate precaution was taken to ensure that all emissions from the EUT were maximized and investigated. The system configuration, mode of operation, turntable azimuth, and receive antenna height was noted for each frequency found.

Final measurements were made in the semi-anechoic chamber using calibrated, linearly polarized broadband and horn antennas. The test setup was configured to the setup that produced the worst case emissions. The spectrum analyzer was set to investigate all frequencies required for testing to compare the highest radiated disturbances with respect to the specified limits. The turntable containing the EUT was rotated through 360 degrees and the height of the receive antenna was varied 1 to 4 meters and stopped at the azimuth and height producing the maximum emission. Each emission was maximized by changing the orientation of the EUT through three orthogonal planes and changing the polarity of the receive antenna, whichever produced the worst-case emissions.

3.4 Environmental Conditions

The temperature is controlled within range of 15°C to 35°C. The relative humidity is controlled within range of 10% to 75%. The atmospheric pressure is monitored within the range 86-106kPa (860-1060mbar).

FCC ID: BCGA3459		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2509100079-10-R6.BCG	Test Dates: 09/18/2025 - 12/23/2025	EUT Type: Tablet Device	Page 14 of 272

V 11.0 06/2025

Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from Element Materials Technology. If you have any questions about this or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact ct.info@element.com.

4.0 ANTENNA REQUIREMENTS

Excerpt from §15.203 of the FCC Rules/Regulations:

“An intentional radiator antenna shall be designed to ensure that no antenna other than that furnished by the responsible party can 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 antennas of the EUT are **permanently attached**.
- There are no provisions for connection to an external antenna.

Conclusion:

The EUT complies with the requirement of §15.203.

FCC ID: BCGA3459		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2509100079-10-R6.BCG	Test Dates: 09/18/2025 - 12/23/2025	EUT Type: Tablet Device	Page 15 of 272

V 11.0 06/2025

5.0 MEASUREMENT UNCERTAINTY

The measurement uncertainties shown below were calculated in accordance with the requirements of ANSI C63.23-2012. All measurement uncertainty values are shown with a coverage factor of $k = 2$ to indicate a 95% level of confidence. The measurement uncertainty shown below meets or exceeds the U_{CISPR} measurement uncertainty values specified in CISPR 16-4-2 and, thus, can be compared directly to specified limits to determine compliance.

Contribution	Expanded Uncertainty ($\pm$ dB)
Conducted Bench Top Measurements	2.00
AC Line Conducted Disturbance	1.88
Radiated Disturbance (<30MHz)	4.24
Radiated Disturbance (30MHz - 1GHz)	4.96
Radiated Disturbance (1 - 18GHz)	5.18
Radiated Disturbance (>18GHz)	5.18

FCC ID: BCGA3459		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2509100079-10-R6.BCG	Test Dates: 09/18/2025 - 12/23/2025	EUT Type: Tablet Device	Page 16 of 272

V 11.0 06/2025

Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from Element Materials Technology. If you have any questions about this or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact ct.info@element.com.

6.0 TEST EQUIPMENT CALIBRATION DATA

Test Equipment Calibration is traceable to the National Institute of Standards and Technology (NIST). Measurements antennas used during testing were calibrated in accordance with the requirements of ANSI C63.5-2017.

Manufacturer	Model	Description	Cal Date	Cal Interval	Cal Due	Serial Number
Agilent	N9020A	MXA Signal Analyzer	7/7/2025	Biennial	7/7/2027	MY56470202
Anritsu	ML2496A	Power Meter	2/10/2025	Annual	2/10/2026	1306009
Anritsu	MA2411B	Pulse Power Sensor	2/10/2025	Annual	2/10/2026	1315051
Anritsu	MA2411B	Pulse Power Sensor	2/10/2025	Annual	2/10/2026	1339027
ATM	180-442-KF	20dB Nominal Gain Horn Antenna	3/24/2025	Annual	3/24/2026	T058601-02
ETS-Lindgren	3117	Double Ridged Guide Horn (1-18 GHz)	4/16/2025	Annual	4/16/2026	218555
Fairview Microwave/MCL	FMCA1975-36/BW-K10-2W44+	30MHz-40GHz RF Cable/Attenuator *	6/10/2025	Annual	6/10/2026	-
Keysight Technology	N9040B	UXA Signal Analyzer	6/9/2025	Annual	6/9/2026	MY57212015
Rohde & Schwarz	TS-PR18	Pre-Amplifier (1GHz - 18GHz)	8/6/2025	Annual	8/6/2026	101639
Rohde & Schwarz	FSW43	Spectrum Analyzer 2Hz to 43GHz	8/5/2025	Annual	8/5/2026	104093
Rohde & Schwarz	ESW44	EMI Test Receiver 2Hz to 44 GHz	5/13/2025	Annual	5/13/2026	101867
Rohde & Schwarz	TS-PR8	Pre-Amplifier (30MHz - 8GHz)	11/15/2024	Annual	11/15/2025	102326
Rohde & Schwarz	TS-PR8	Pre-Amplifier (30MHz - 8GHz)	10/14/2025	Annual	10/14/2026	102328
Rohde & Schwarz	TS-PR1840	Pre-Amplifier (18GHz - 40GHz)	6/3/2025	Annual	6/3/2026	100052
Rohde & Schwarz	HFH2-Z2	Loop Antenna	5/12/2025	Annual	5/12/2026	100546
Rohde & Schwarz	ENV216	Two-Line V-Network	4/24/2025	Annual	4/24/2026	101364
Schwarzbeck	VULB 9162	Bilog Antenna (30MHz - 6GHz)	7/17/2025	Annual	7/17/2026	00302

Table 6-1. Test Equipment List

Note:

- For equipment listed above that has a calibration date or calibration due date that falls within the test date range, care was taken to ensure that this equipment was used after the calibration date and before the calibration due date.
- * Denotes passive equipment that have been internally verified/calibrated.

FCC ID: BCGA3459		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2509100079-10-R6.BCG	Test Dates: 09/18/2025 - 12/23/2025	EUT Type: Tablet Device	Page 17 of 272

V 11.0 06/2025

Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from Element Materials Technology. If you have any questions about this or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact ct.info@element.com.

7.0 TEST RESULTS

7.1 Summary

Company Name: Apple Inc.

FCC ID: BCGA3459

FCC Classification: Unlicensed National Information Infrastructure (UNII)

FCC Part Section(s)	Test Description	Test Limit	Test Condition	Test Result	Reference
15.407	26dB Bandwidth	N/A	CONDUCTED	N/A	Section 7.2
15.407(e)	6dB Bandwidth	>500kHz(5725-5850MHz)		PASS	Section 7.3
2.1049	Occupied Bandwidth	N/A		N/A	Section 7.2
15.407 (a.1.iv), (a.3.i)	Maximum Conducted Output Power	Maximum conducted powers must meet the limits detailed in 15.407 (a)		PASS	Section 7.4
15.407 (a.1.iv), (a.3.i)	Maximum Power Spectral Density	Maximum power spectral density must meet the limits detailed in 15.407 (a)		PASS	Section 7.5
15.407(b.1), (b.4)	Undesirable Emissions	Undesirable emissions must meet the limits detailed in 15.407(b)	RADIATED	PASS	Section 7.6
15.205, 15.407(b.1), (b.4)	General Field Strength Limits (Restricted Bands and Radiated Emission Limits)	Emissions in restricted bands must meet the radiated limits detailed in 15.209		PASS	Section 7.6, 7.7
15.207	AC Conducted Emissions 150kHz – 30MHz	< FCC 15.207 limits	AC LINE CONDUCTED	PASS	Section 7.8

Table 7-1. Summary of Test Results

Notes:

- All channels, modes, and modulations/data rates were investigated among all UNII bands. The test results shown in the following sections represent the worst case emissions.
- The analyzer plots shown in this section were all taken with a correction table loaded into the analyzer. The correction table was used to account for the losses of the cables and attenuators used as part of the system to connect the EUT to the analyzer at all frequencies of interest.
- All antenna port conducted emissions testing was performed on a test bench with the antenna port of the EUT connected to the spectrum analyzer through calibrated cables and attenuators.
- For conducted spurious emissions, automated test software was used to measure emissions and capture the corresponding plots necessary to show compliance. The measurement software utilized is Element "Conducted Automation Software," Version 1.5.0.
- For radiated testing, automated test software was used to measure emissions and capture the corresponding plots necessary to show compliance. The measurement software utilized is Element "Chamber Automation," Version 3.6.

FCC ID: BCGA3459		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2509100079-10-R6.BCG	Test Dates: 09/18/2025 - 12/23/2025	EUT Type: Tablet Device	Page 18 of 272

V 11.0 06/2025

7.2 26dB & 99% Bandwidth Measurement

§2.1049; §15.407

Test Overview and Limit

The bandwidth at 26dB down from the highest in-band spectral density is measured with a spectrum analyzer connected to the antenna terminal while the EUT is operating at its maximum duty cycle, at its maximum power control level, as defined in ANSI C63.10:2020 + Cor. 1:2023 + C63.10a:2024 + Errata to C63.10a:2024 and KDB 789033 D02 v02r01, and at the appropriate frequencies. The spectrum analyzer's bandwidth measurement function is configured to measure the 26dB bandwidth.

Test Procedure Used

ANSI C63.10:2020 + Cor. 1:2023 + C63.10a:2024 + Errata to C63.10a:2024 – Subclause 12.5.2.
KDB 789033 D02 v02r01 – Section C

Test Settings

1. The signal analyzers' automatic bandwidth measurement capability was used to perform the 26dB bandwidth measurement. The "X" dB bandwidth parameter was set to $X = 26$. The automatic bandwidth measurement function also has the capability of simultaneously measuring the 99% occupied bandwidth. The bandwidth measurement was not influenced by any intermediate power nulls in the fundamental emission.
2. RBW = in the range of 1% to 5% of the emission bandwidth
3. $VBW \geq 3 \times RBW$
4. Detector = Peak
5. Trace mode = max hold

Test Setup

The EUT and measurement equipment were set up as shown in the diagram below.



Figure 7-1. Test Instrument & Measurement Setup

Test Notes

1. All antenna configs and power schemes were investigated and only the worst case is reported.
2. Low, mid and high channels were tested and tabular data has been reported. Only mid channel plots has been reported.

FCC ID: BCGA3459	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1C2509100079-10-R6.BCG	Test Dates: 09/18/2025 - 12/23/2025	EUT Type: Tablet Device	Page 19 of 272

V 11.0 06/2025

Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from Element Materials Technology. If you have any questions about this or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact ct.info@element.com.

7.2.1 Antenna WF8 26dB & 99% Bandwidth Measurements (U-NII-1)

Frequency [MHz]	Data Rate [Mbps]	Mode	Power Scheme	Measured 99% Occupied Bandwidth [MHz]	Measured 26dB Bandwidth [MHz]
5162	1.0	NB UNII BDR	ePA	0.930	1.248
5203	1.0	NB UNII BDR	ePA	0.930	1.248
5245	1.0	NB UNII BDR	ePA	0.930	1.248
5162	1.0	NB UNII LE1M	ePA	1.015	1.261
5203	1.0	NB UNII LE1M	ePA	1.015	1.261
5245	1.0	NB UNII LE1M	ePA	1.015	1.261
5162	2.0	NB UNII LE2M	ePA	2.031	2.512
5203	2.0	NB UNII LE2M	ePA	2.031	2.511
5245	2.0	NB UNII LE2M	ePA	2.031	2.510
5162	4.0	NB UNII HDR4	ePA	2.324	2.709
5203	4.0	NB UNII HDR4	ePA	2.325	2.711
5245	4.0	NB UNII HDR4	ePA	2.325	2.712
5162	8.0	NB UNII HDR8	ePA	4.624	5.300
5203	8.0	NB UNII HDR8	ePA	4.618	5.301
5245	8.0	NB UNII HDR8	ePA	4.619	5.308
5162	2.0	NB UNII HDRPS2	ePA	2.366	2.670
5203	2.0	NB UNII HDRPS2	ePA	2.373	2.676
5245	2.0	NB UNII HDRPS2	ePA	2.375	2.680
5162	6.0	NB UNII XHDRPM6	ePA	4.720	5.351
5203	6.0	NB UNII XHDRPM6	ePA	4.729	5.372
5245	6.0	NB UNII XHDRPM6	ePA	4.724	5.364
5162	16.0	NB UNII HDRPM16	ePA	4.673	5.337
5203	16.0	NB UNII HDRPM16	ePA	4.674	5.347
5245	16.0	NB UNII HDRPM16	ePA	4.668	5.269
5162	12.0	NB UNII HDRPL12	ePA	9.352	10.630
5203	12.0	NB UNII HDRPL12	ePA	9.364	10.622
5245	12.0	NB UNII HDRPL12	ePA	9.370	10.637
5162	32.0	NB UNII HDRPL32	ePA	9.280	10.548
5203	32.0	NB UNII HDRPL32	ePA	9.281	10.544
5245	32.0	NB UNII HDRPL32	ePA	9.282	10.551
5162	2.0	NB UNII HDT2	ePA	2.349	2.745
5203	2.0	NB UNII HDT2	ePA	2.349	2.745
5245	2.0	NB UNII HDT2	ePA	2.349	2.745
5162	4.0	NB UNII HDT4	ePA	2.359	2.809
5203	4.0	NB UNII HDT4	ePA	2.359	2.810
5245	4.0	NB UNII HDT4	ePA	2.359	2.810
5162	6.0	NB UNII HDT6	ePA	2.389	2.786
5203	6.0	NB UNII HDT6	ePA	2.389	2.787
5245	6.0	NB UNII HDT6	ePA	2.389	2.787

Table 7-2. Conducted BW Measurements Antenna WF8

FCC ID: BCGA3459	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1C2509100079-10-R6.BCG	Test Dates: 09/18/2025 - 12/23/2025	EUT Type: Tablet Device	Page 20 of 272

V 11.0 06/2025

Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from Element Materials Technology. If you have any questions about this or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact ct.info@element.com.



FCC ID: BCGA3459		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2509100079-10-R6.BCG	Test Dates: 09/18/2025 - 12/23/2025	EUT Type: Tablet Device	Page 21 of 272

V 11.0 06/2025

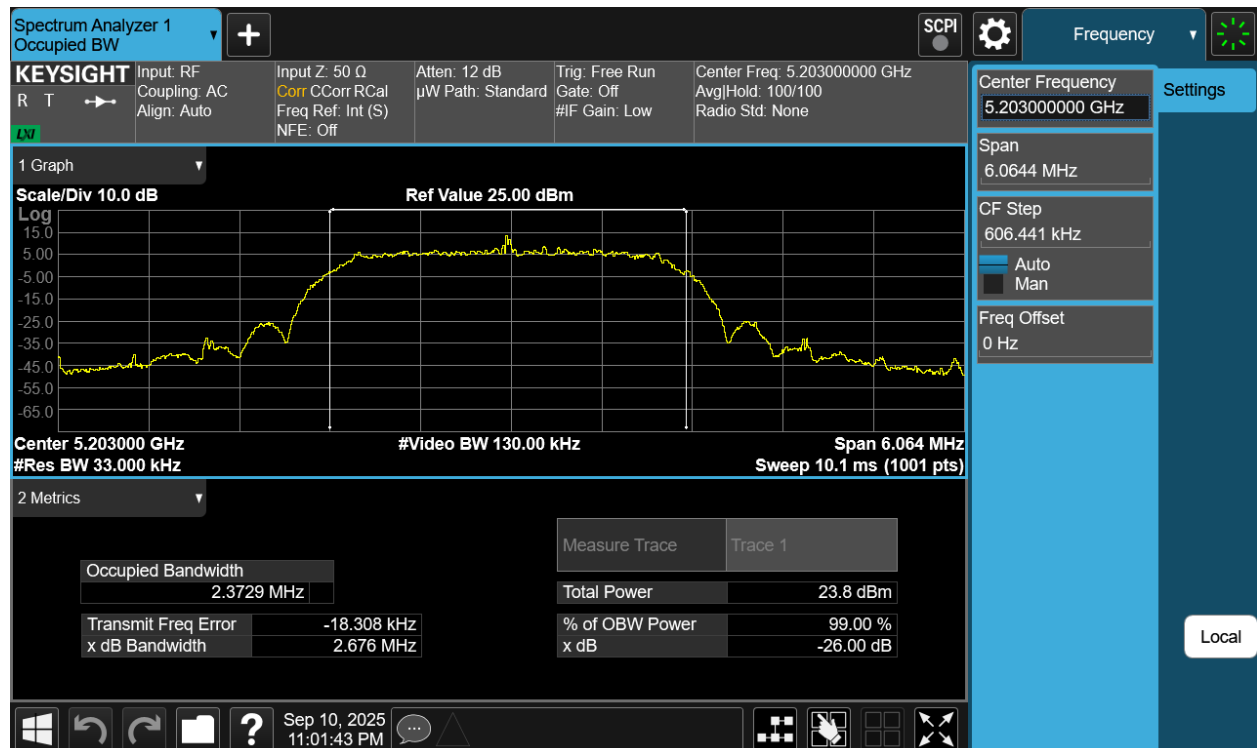
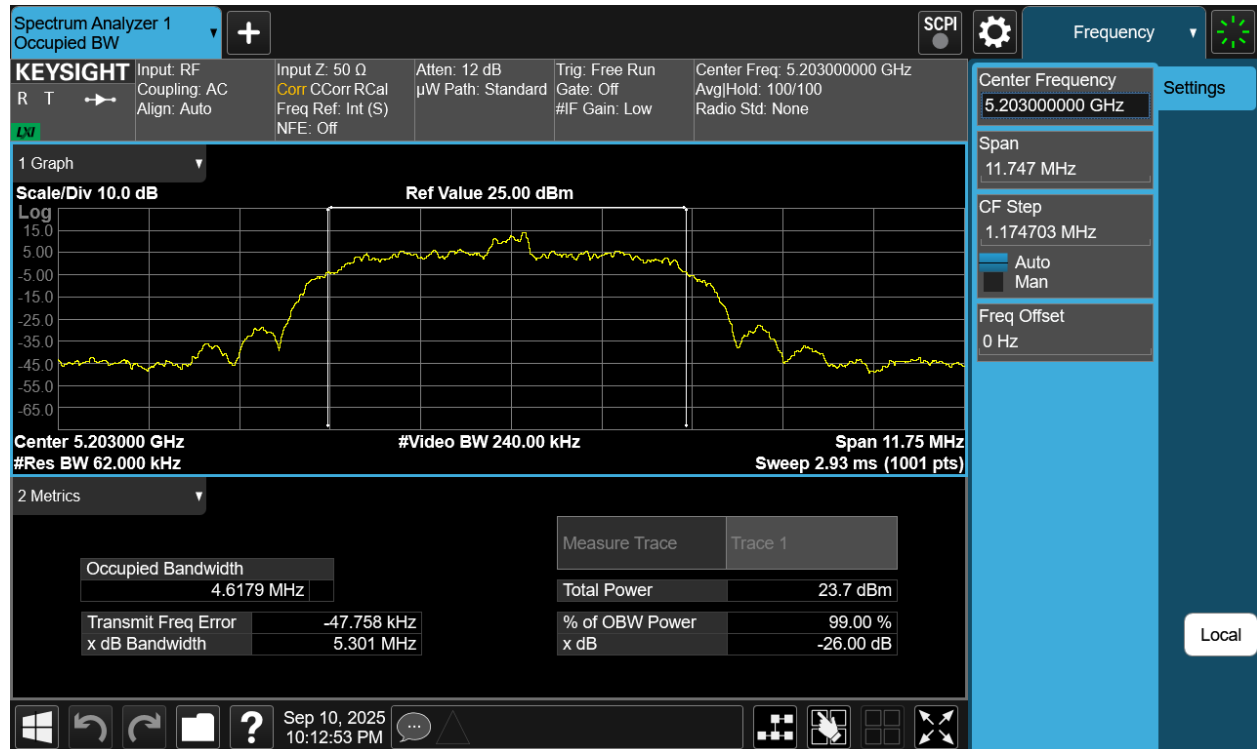
Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from Element Materials Technology. If you have any questions about this or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact ct.info@element.com.



FCC ID: BCGA3459		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2509100079-10-R6.BCG	Test Dates: 09/18/2025 - 12/23/2025	EUT Type: Tablet Device	Page 22 of 272

V 11.0 06/2025

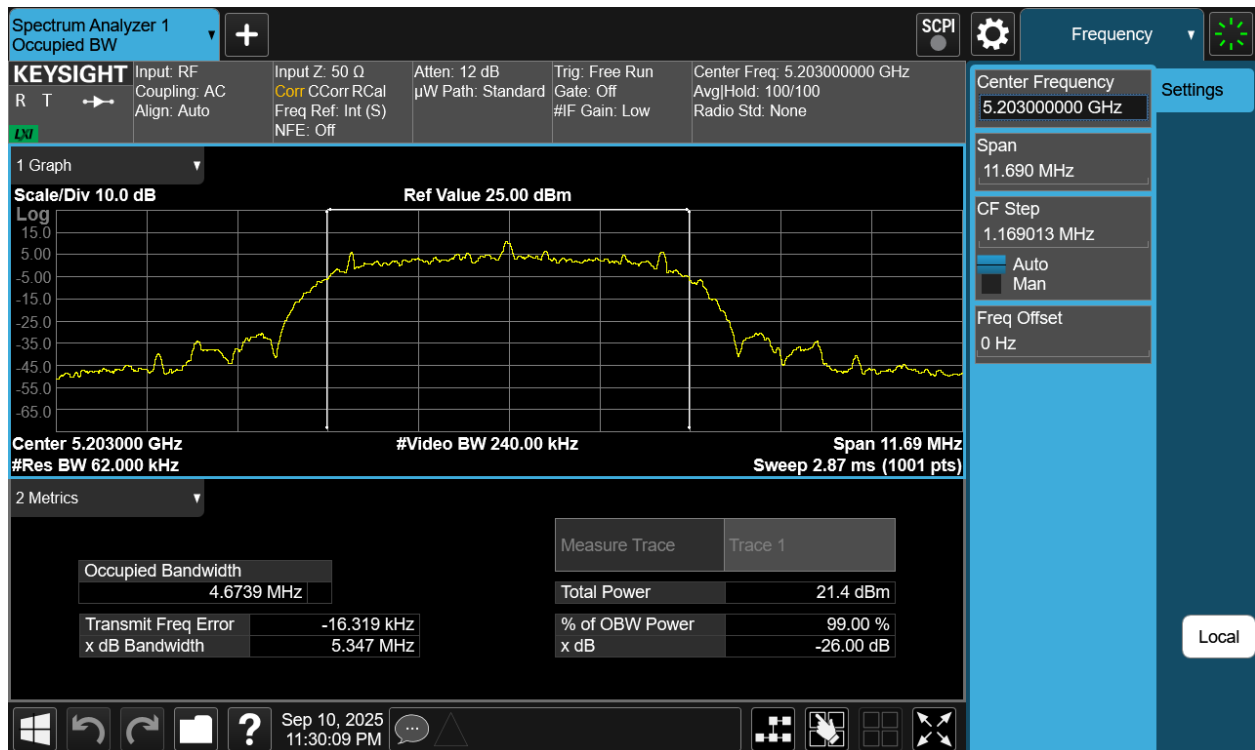
Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from Element Materials Technology. If you have any questions about this or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact ct.info@element.com.

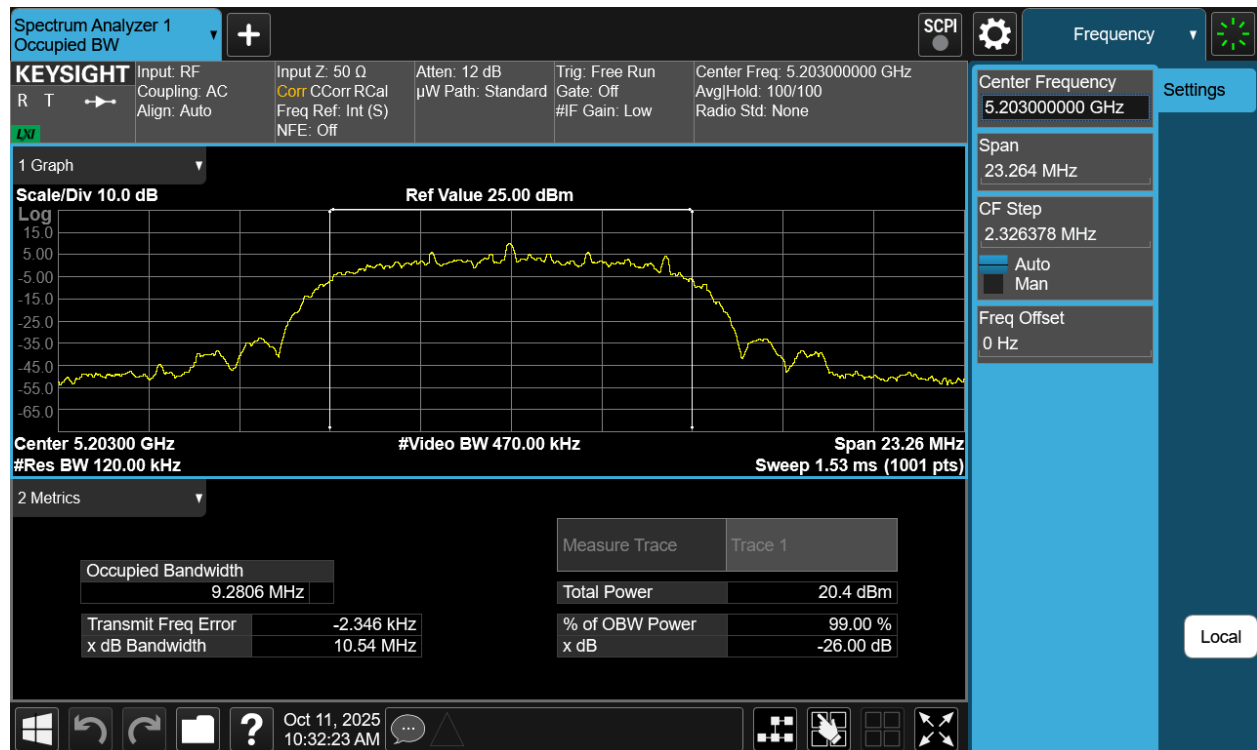
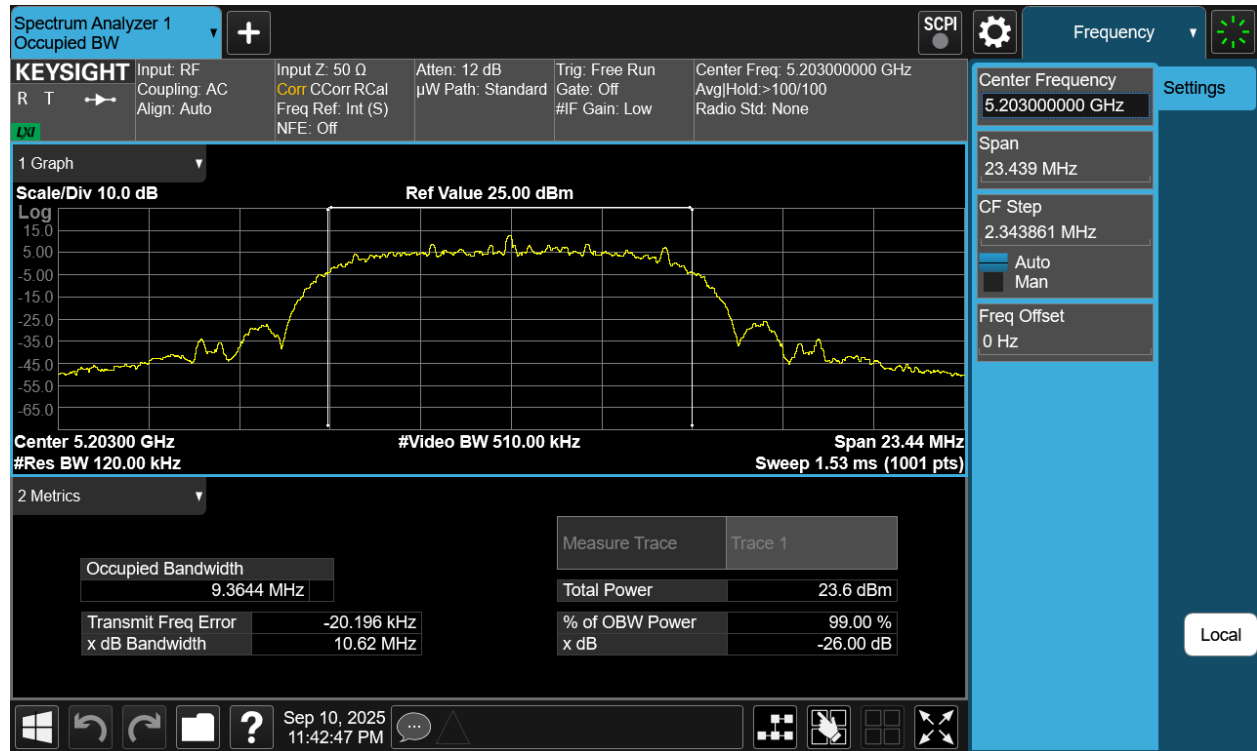


FCC ID: BCGA3459		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2509100079-10-R6.BCG	Test Dates: 09/18/2025 - 12/23/2025	EUT Type: Tablet Device	Page 23 of 272

V 11.0 06/2025

Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from Element Materials Technology. If you have any questions about this or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact ct.info@element.com.

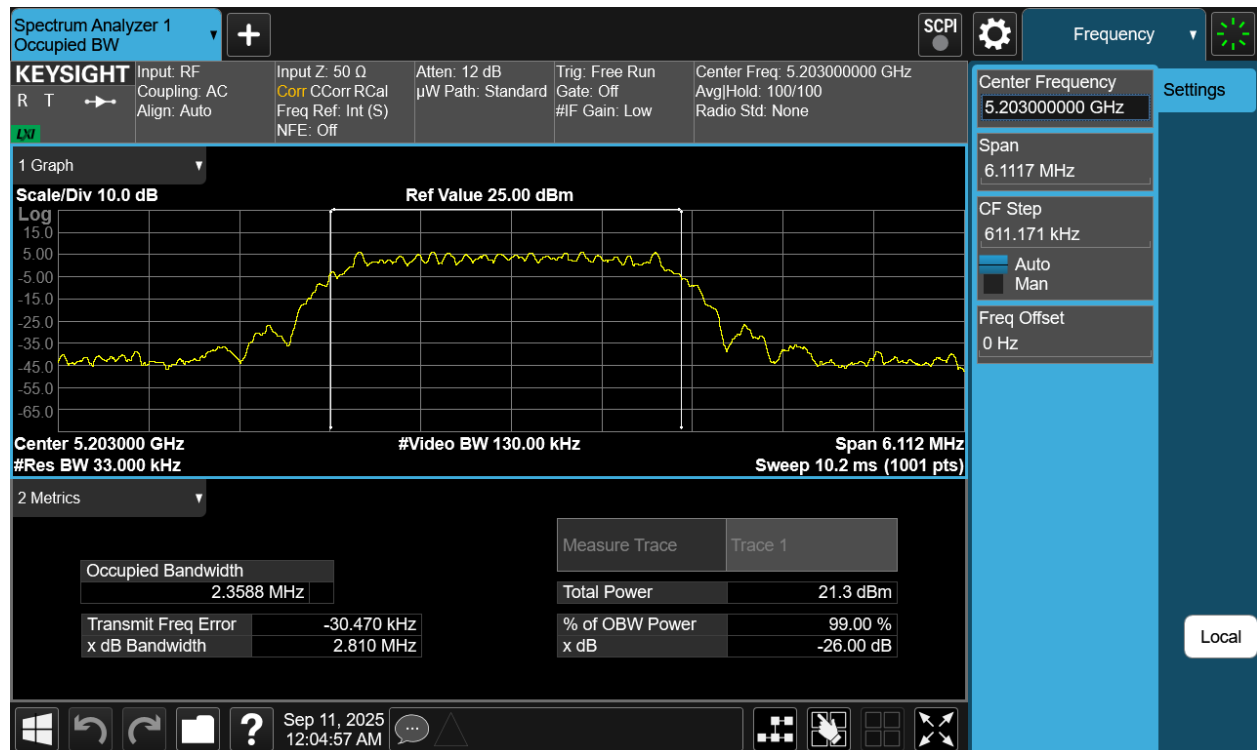
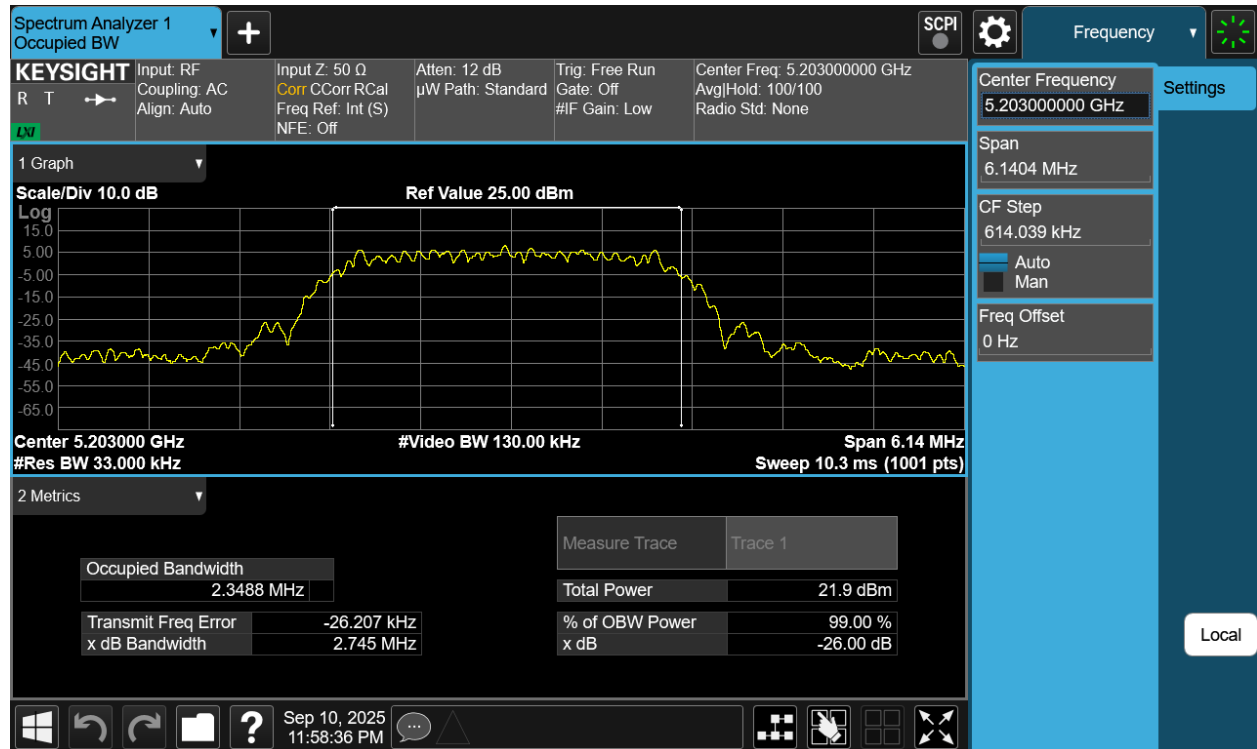




FCC ID: BCGA3459		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2509100079-10-R6.BCG	Test Dates: 09/18/2025 - 12/23/2025	EUT Type: Tablet Device	Page 25 of 272

V 11.0 06/2025

Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from Element Materials Technology. If you have any questions about this or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact ct.info@element.com.



FCC ID: BCGA3459		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2509100079-10-R6.BCG	Test Dates: 09/18/2025 - 12/23/2025	EUT Type: Tablet Device	Page 26 of 272



Plot 7-13. 26dB BW Antenna WF8 (NB UNII HDT6, ePA– 5203MHz)

FCC ID: BCGA3459	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1C2509100079-10-R6.BCG	Test Dates: 09/18/2025 - 12/23/2025	EUT Type: Tablet Device	Page 27 of 272

V 11.0 06/2025

Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from Element Materials Technology. If you have any questions about this or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact ct.info@element.com.

7.2.2 Antenna WF8 99% Bandwidth Measurements (U-NII-3)

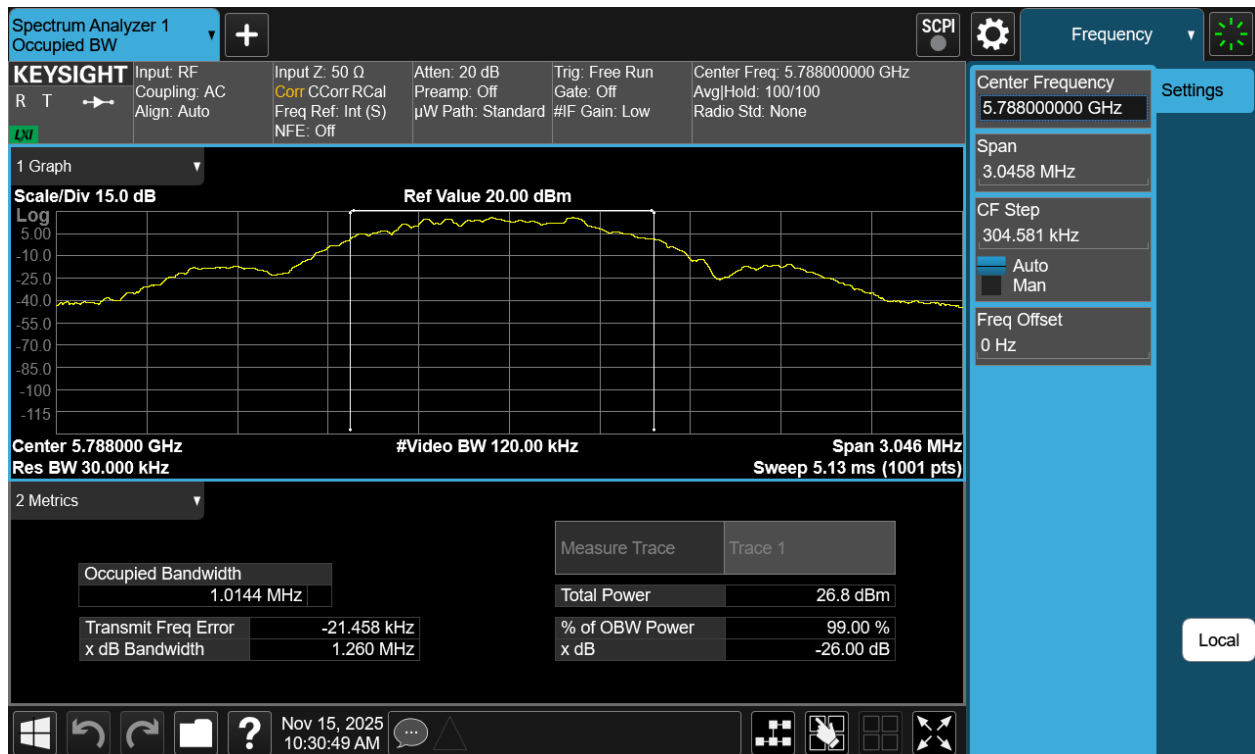
Frequency [MHz]	Data Rate [Mbps]	Mode	Power Scheme	Measured 99% Occupied Bandwidth [MHz]
5733	1.0	NB UNII BDR	ePA	0.934
5788	1.0	NB UNII BDR	ePA	0.934
5844	1.0	NB UNII BDR	ePA	0.934
5733	1.0	NB UNII LE1M	ePA	1.014
5788	1.0	NB UNII LE1M	ePA	1.014
5844	1.0	NB UNII LE1M	ePA	1.014
5733	2.0	NB UNII LE2M	ePA	2.037
5788	2.0	NB UNII LE2M	ePA	2.037
5844	2.0	NB UNII LE2M	ePA	2.036
5733	4.0	NB UNII HDR4	ePA	2.334
5788	4.0	NB UNII HDR4	ePA	2.333
5844	4.0	NB UNII HDR4	ePA	2.335
5733	8.0	NB UNII HDR8	ePA	4.674
5788	8.0	NB UNII HDR8	ePA	4.665
5844	8.0	NB UNII HDR8	ePA	4.673
5733	2.0	NB UNII HDRPS2	ePA	2.375
5788	2.0	NB UNII HDRPS2	ePA	2.373
5844	2.0	NB UNII HDRPS2	ePA	2.375
5733	6.0	NB UNII XHDRPM6	ePA	4.716
5788	6.0	NB UNII XHDRPM6	ePA	4.742
5844	6.0	NB UNII XHDRPM6	ePA	4.756
5733	16.0	NB UNII HDRPM16	ePA	4.702
5788	16.0	NB UNII HDRPM16	ePA	4.699
5844	16.0	NB UNII HDRPM16	ePA	4.704
5733	12.0	NB UNII HDRPL12	ePA	9.456
5788	12.0	NB UNII HDRPL12	ePA	9.392
5844	12.0	NB UNII HDRPL12	ePA	9.443
5733	32.0	NB UNII HDRPL32	ePA	9.312
5788	32.0	NB UNII HDRPL32	ePA	9.295
5844	32.0	NB UNII HDRPL32	ePA	9.314
5733	2.0	NB UNII HDT2	ePA	2.373
5788	2.0	NB UNII HDT2	ePA	2.374
5844	2.0	NB UNII HDT2	ePA	2.374
5733	4.0	NB UNII HDT4	ePA	2.384
5788	4.0	NB UNII HDT4	ePA	2.384
5844	4.0	NB UNII HDT4	ePA	2.384
5733	6.0	NB UNII HDT6	ePA	2.390
5788	6.0	NB UNII HDT6	ePA	2.390
5844	6.0	NB UNII HDT6	ePA	2.390

Table 7-3. Conducted BW Measurements Antenna WF8

FCC ID: BCGA3459	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1C2509100079-10-R6.BCG	Test Dates: 09/18/2025 - 12/23/2025	EUT Type: Tablet Device	Page 28 of 272

V 11.0 06/2025

Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from Element Materials Technology. If you have any questions about this or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact ct.info@element.com.



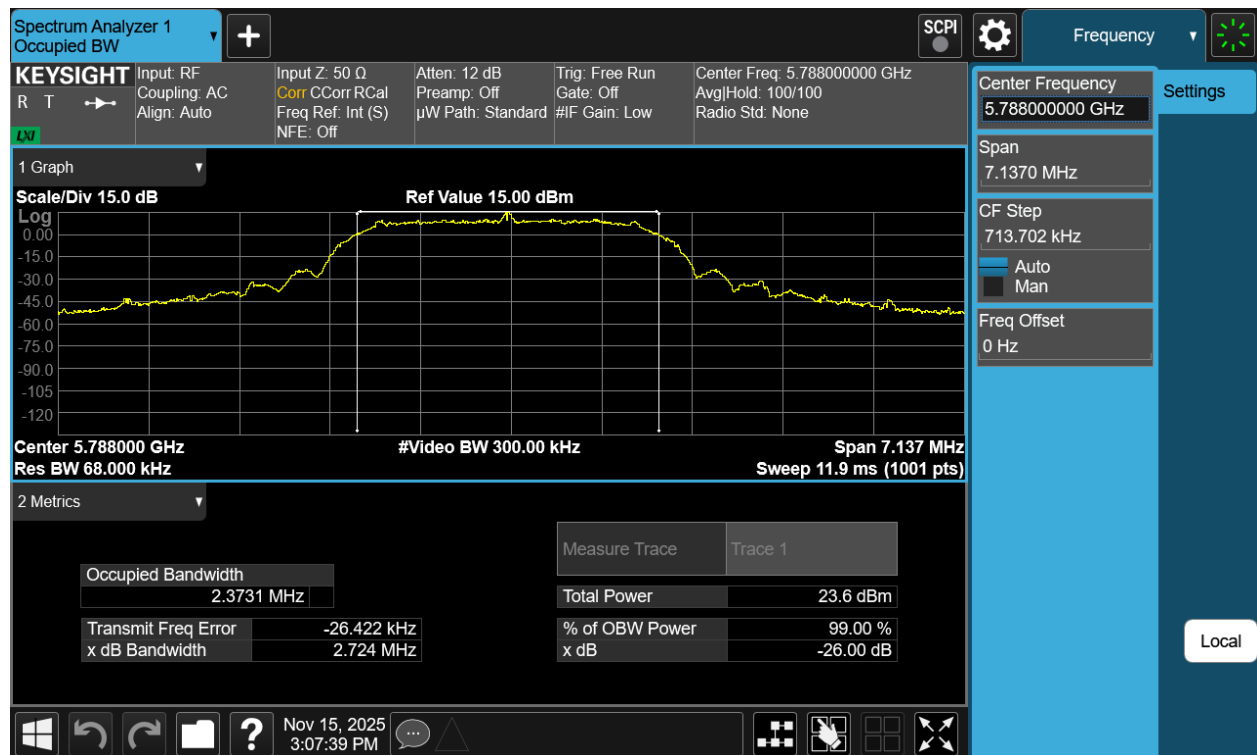
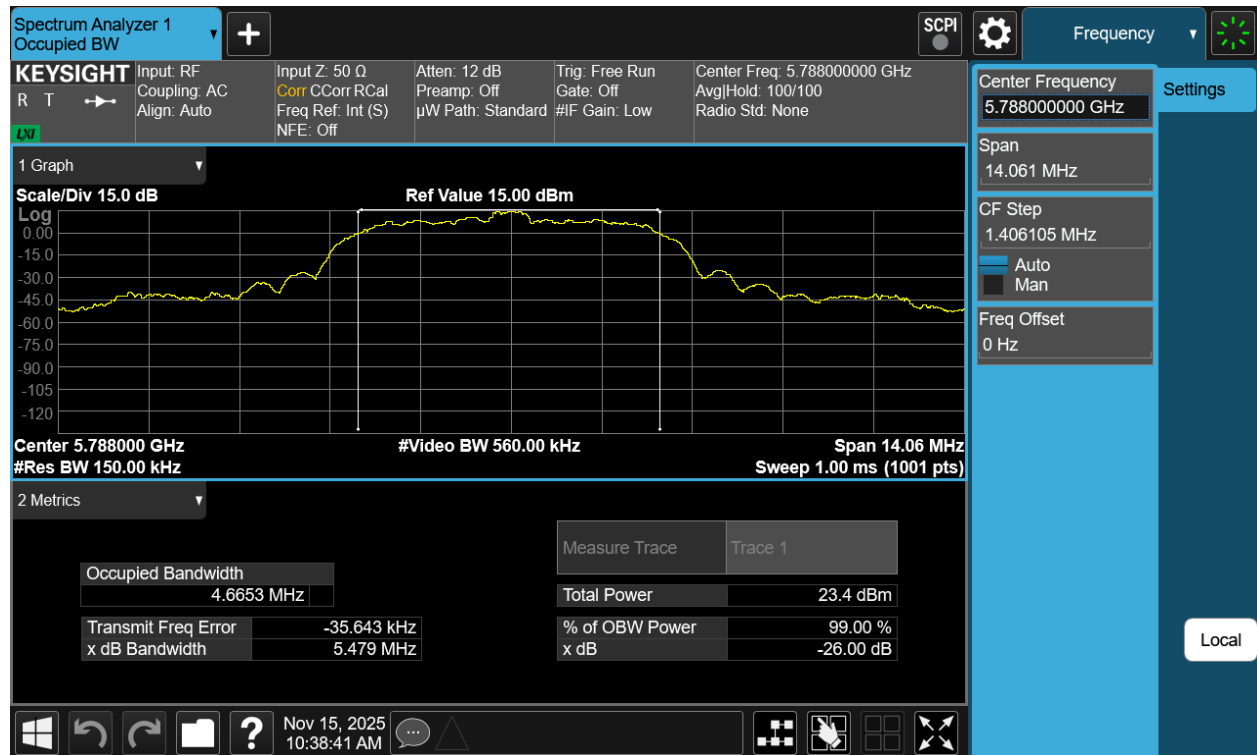
FCC ID: BCGA3459		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2509100079-10-R6.BCG	Test Dates: 09/18/2025 - 12/23/2025	EUT Type: Tablet Device	Page 29 of 272

V 11.0 06/2025

Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from Element Materials Technology. If you have any questions about this or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact ct.info@element.com.



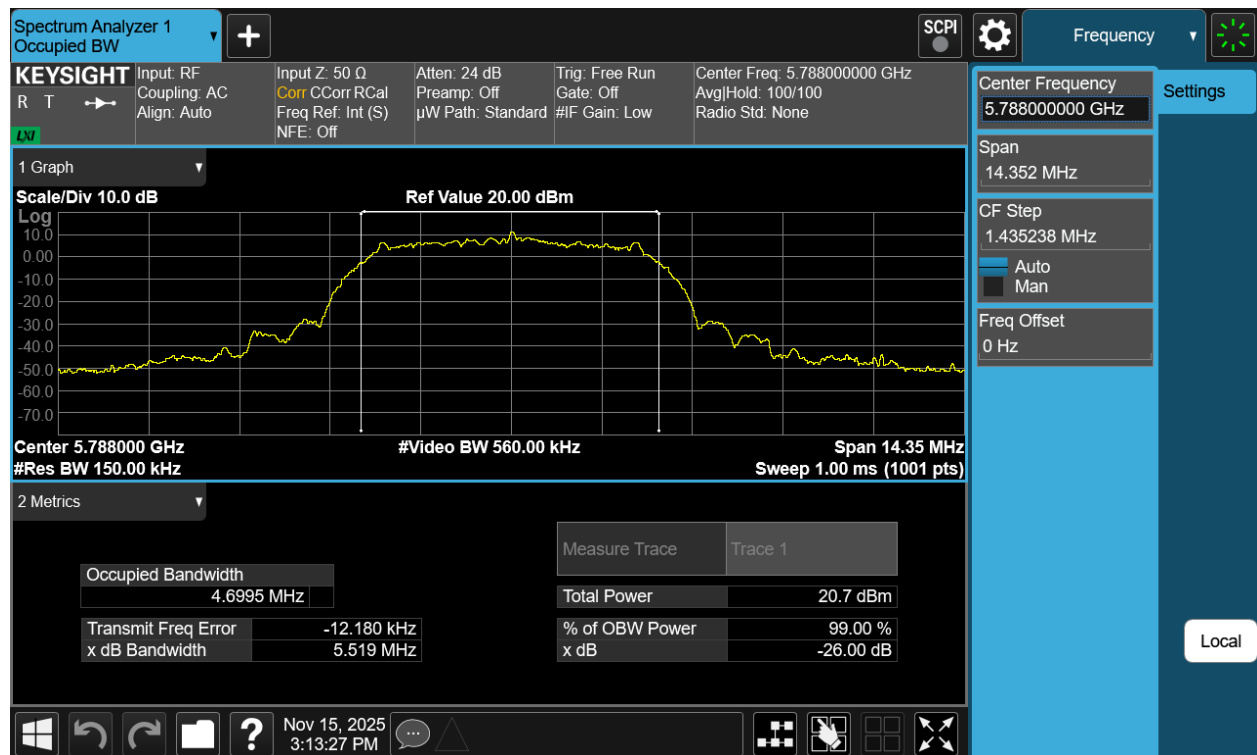
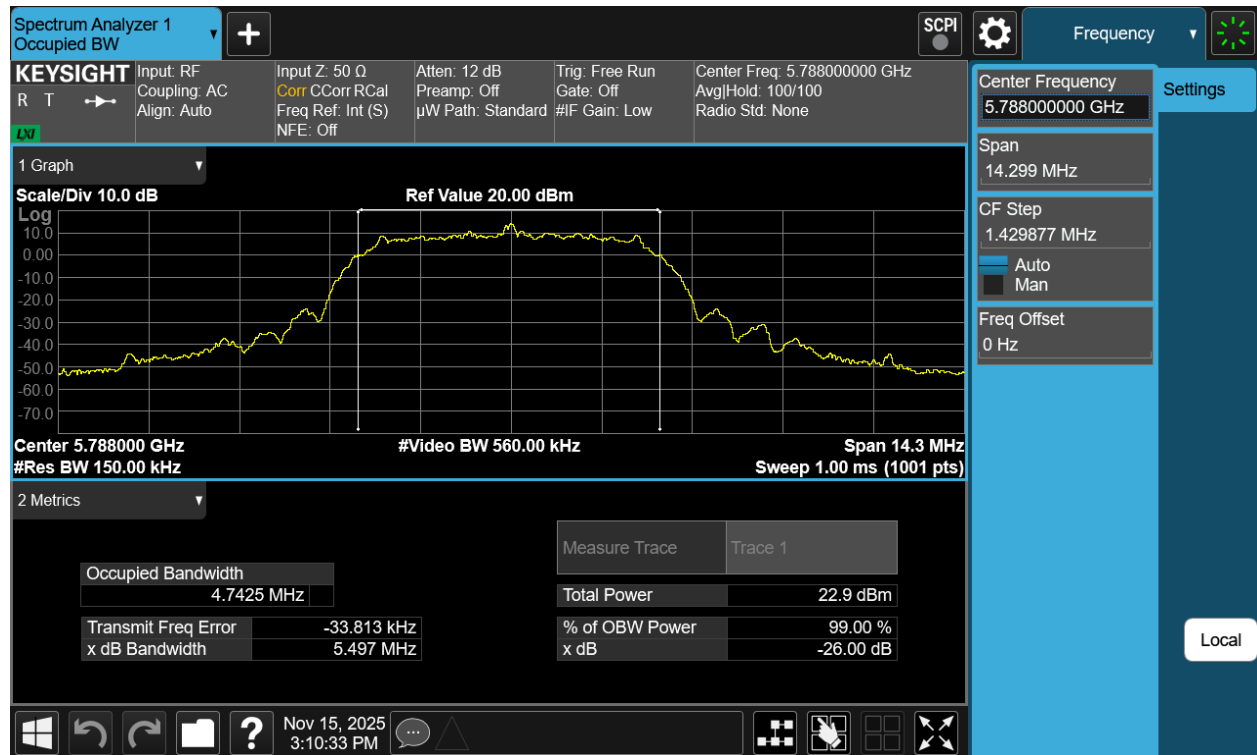
FCC ID: BCGA3459		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2509100079-10-R6.BCG	Test Dates: 09/18/2025 - 12/23/2025	EUT Type: Tablet Device	Page 30 of 272



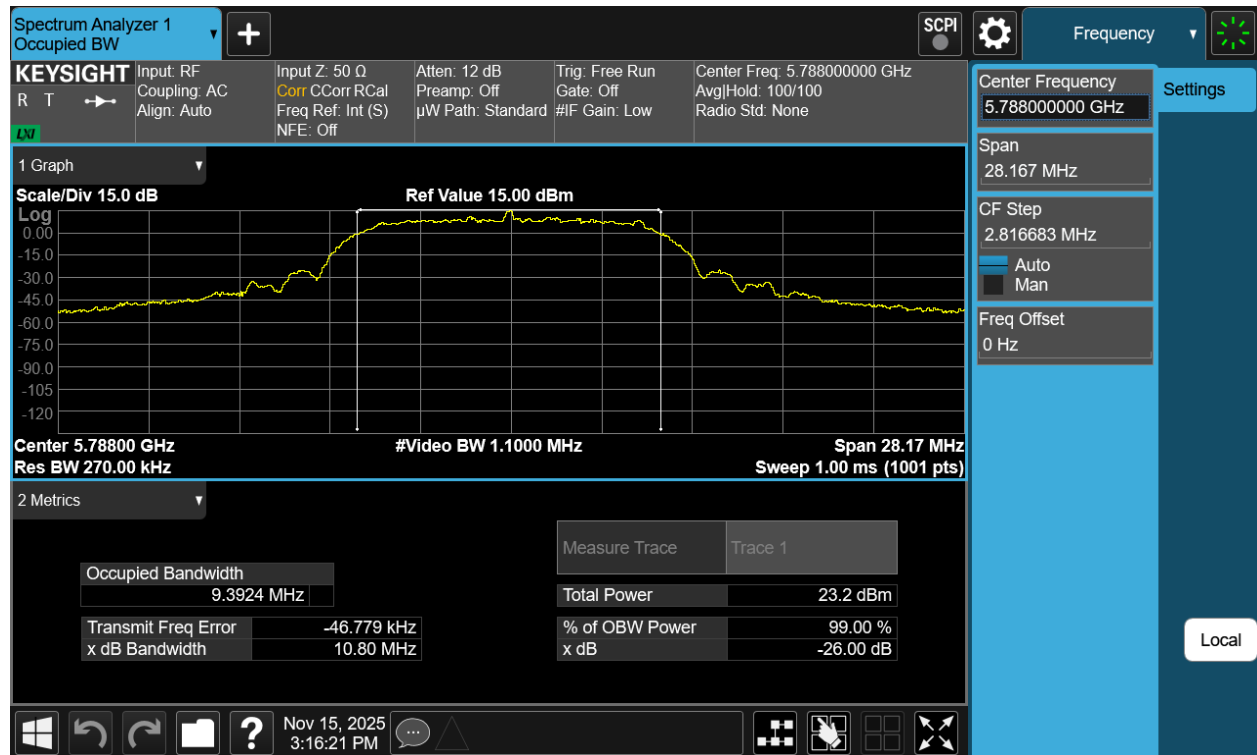
FCC ID: BCGA3459		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2509100079-10-R6.BCG	Test Dates: 09/18/2025 - 12/23/2025	EUT Type: Tablet Device	Page 31 of 272

V 11.0 06/2025

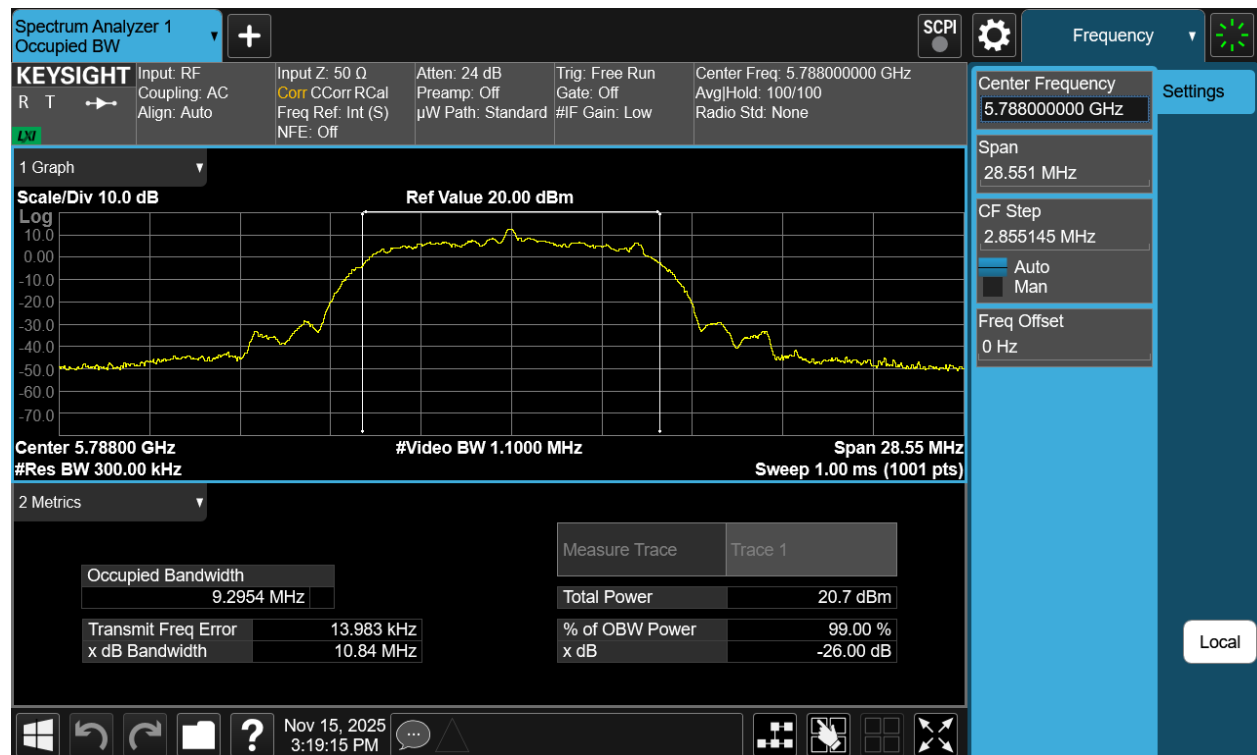
Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from Element Materials Technology. If you have any questions about this or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact ct.info@element.com.



FCC ID: BCGA3459		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2509100079-10-R6.BCG	Test Dates: 09/18/2025 - 12/23/2025	EUT Type: Tablet Device	Page 32 of 272

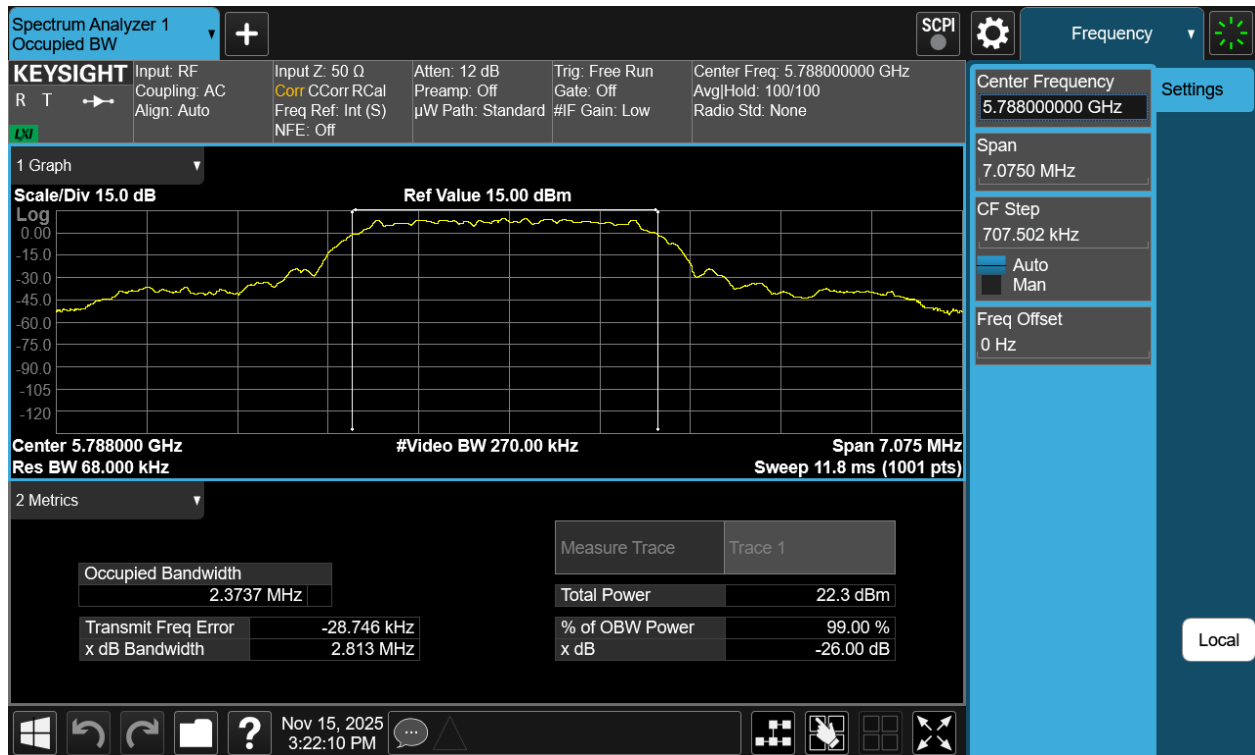


Plot 7-22. 99% OBW Antenna WF8 (NB UNII HDRPL12, ePA – 5788MHz)

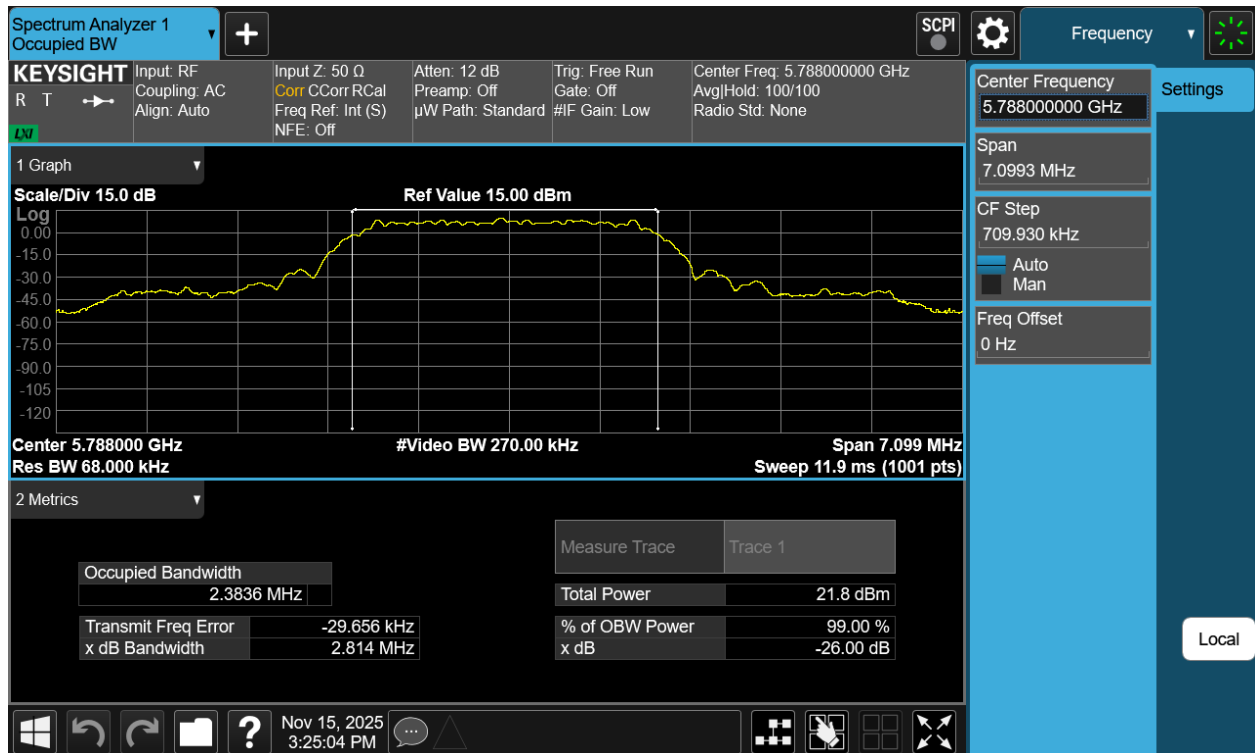


Plot 7-23. 99% OBW Antenna WF8 (NB UNII HDRPL32, ePA – 5788MHz)

FCC ID: BCGA3459	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1C2509100079-10-R6.BCG	Test Dates: 09/18/2025 - 12/23/2025	EUT Type: Tablet Device	Page 33 of 272



Plot 7-24. 99% OBW Antenna WF8 (NB UNII HDT2, ePA- 5788MHz)

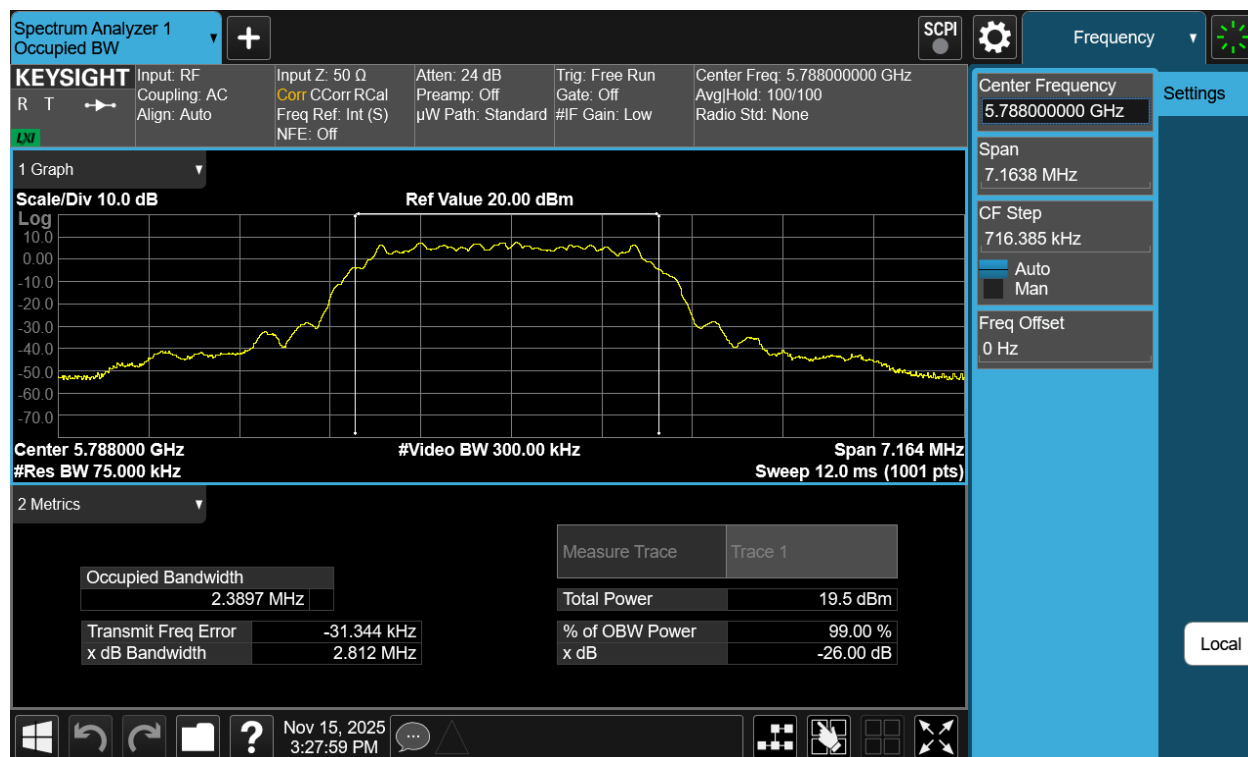


Plot 7-25. 99% OBW Antenna WF8 (NB UNII HDT4, ePA- 5788MHz)

FCC ID: BCGA3459		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2509100079-10-R6.BCG	Test Dates: 09/18/2025 - 12/23/2025	EUT Type: Tablet Device	Page 34 of 272

V 11.0 06/2025

Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from Element Materials Technology. If you have any questions about this or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact ct.info@element.com.



Plot 7-26. 99% OBW Antenna WF8 (NB UNII HDT6, ePA– 5788MHz)

FCC ID: BCGA3459	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1C2509100079-10-R6.BCG	Test Dates: 09/18/2025 - 12/23/2025	EUT Type: Tablet Device	Page 35 of 272

V 11.0 06/2025

Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from Element Materials Technology. If you have any questions about this or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact ct.info@element.com.

7.2.3 Antenna WF7a 26dB & 99% Bandwidth Measurements (U-NII-1)

Frequency [MHz]	Data Rate [Mbps]	Mode	Power Scheme	Measured 99% Occupied Bandwidth [MHz]	Measured 26dB Bandwidth [MHz]
5162	1.0	NB UNII BDR	ePA	0.930	1.248
5203	1.0	NB UNII BDR	ePA	0.930	1.248
5245	1.0	NB UNII BDR	ePA	0.930	1.247
5162	1.0	NB UNII LE1M	ePA	1.016	1.262
5203	1.0	NB UNII LE1M	ePA	1.016	1.263
5245	1.0	NB UNII LE1M	ePA	1.015	1.262
5162	2.0	NB UNII LE2M	ePA	2.032	2.511
5203	2.0	NB UNII LE2M	ePA	2.032	2.512
5245	2.0	NB UNII LE2M	ePA	2.031	2.513
5162	4.0	NB UNII HDR4	ePA	2.324	2.712
5203	4.0	NB UNII HDR4	ePA	2.324	2.711
5245	4.0	NB UNII HDR4	ePA	2.325	2.711
5162	8.0	NB UNII HDR8	ePA	4.621	5.320
5203	8.0	NB UNII HDR8	ePA	4.606	5.319
5245	8.0	NB UNII HDR8	ePA	4.618	5.311
5162	2.0	NB UNII HDRPS2	ePA	2.370	2.672
5203	2.0	NB UNII HDRPS2	ePA	2.384	2.682
5245	2.0	NB UNII HDRPS2	ePA	2.376	2.685
5162	6.0	NB UNII XHDRPM6	ePA	4.711	5.360
5203	6.0	NB UNII XHDRPM6	ePA	4.706	5.357
5245	6.0	NB UNII XHDRPM6	ePA	4.721	5.367
5162	16.0	NB UNII HDRPM16	ePA	4.669	5.283
5203	16.0	NB UNII HDRPM16	ePA	4.659	5.338
5245	16.0	NB UNII HDRPM16	ePA	4.674	5.340
5162	12.0	NB UNII HDRPL12	ePA	9.331	10.638
5203	12.0	NB UNII HDRPL12	ePA	9.346	10.654
5245	12.0	NB UNII HDRPL12	ePA	9.356	10.632
5162	32.0	NB UNII HDRPL32	ePA	9.284	10.647
5203	32.0	NB UNII HDRPL32	ePA	9.274	10.547
5245	32.0	NB UNII HDRPL32	ePA	9.273	10.548
5162	2.0	NB UNII HDT2	ePA	2.349	2.745
5203	2.0	NB UNII HDT2	ePA	2.348	2.745
5245	2.0	NB UNII HDT2	ePA	2.349	2.745
5162	4.0	NB UNII HDT4	ePA	2.359	2.810
5203	4.0	NB UNII HDT4	ePA	2.359	2.810
5245	4.0	NB UNII HDT4	ePA	2.359	2.811
5162	6.0	NB UNII HDT6	ePA	2.389	2.786
5203	6.0	NB UNII HDT6	ePA	2.389	2.786
5245	6.0	NB UNII HDT6	ePA	2.389	2.786

Table 7-4. Conducted BW Measurements Antenna WF7a

FCC ID: BCGA3459	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1C2509100079-10-R6.BCG	Test Dates: 09/18/2025 - 12/23/2025	EUT Type: Tablet Device	Page 36 of 272

V 11.0 06/2025

Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from Element Materials Technology. If you have any questions about this or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact ct.info@element.com.



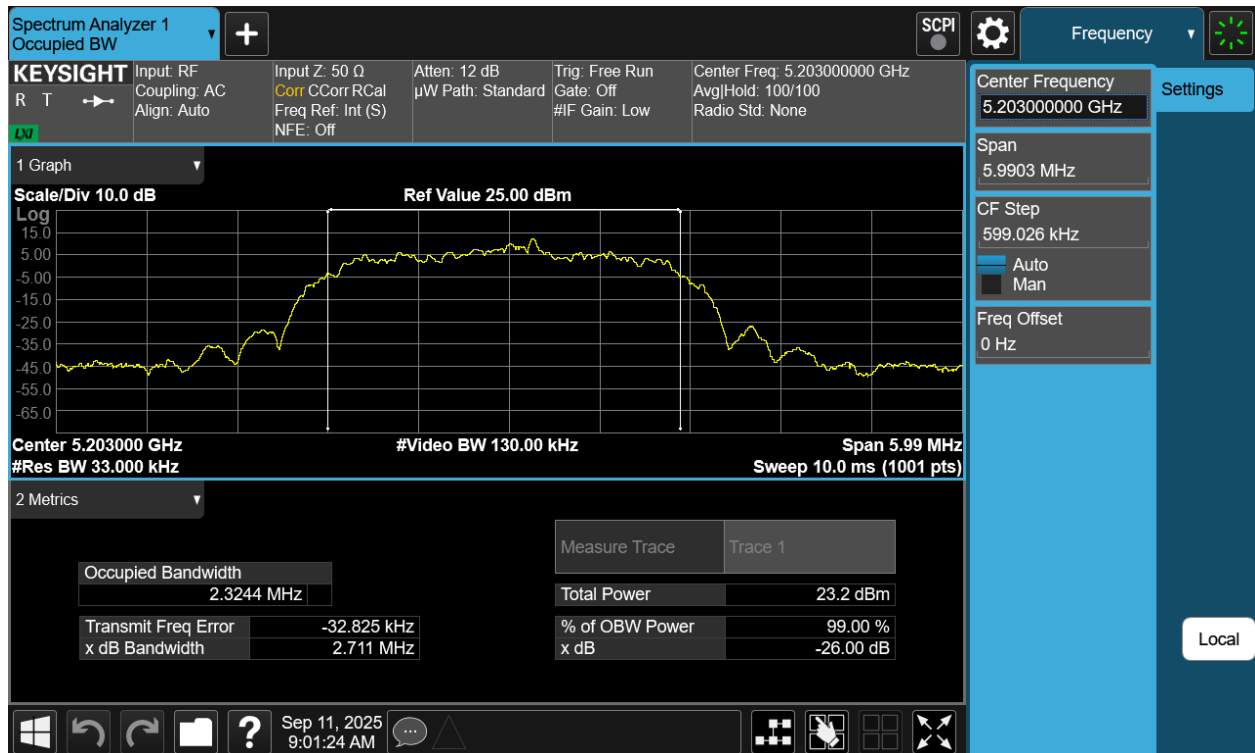
FCC ID: BCGA3459	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1C2509100079-10-R6.BCG	Test Dates: 09/18/2025 - 12/23/2025	EUT Type: Tablet Device	Page 37 of 272

V 11.0 06/2025

Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from Element Materials Technology. If you have any questions about this or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact ct.info@element.com.



Plot 7-29. 26dB BW Antenna WF7a (NB UNII LE2M, ePA- 5203MHz)



Plot 7-30. 26dB BW Antenna WF7a (NB UNII HDR4, ePA- 5203MHz)

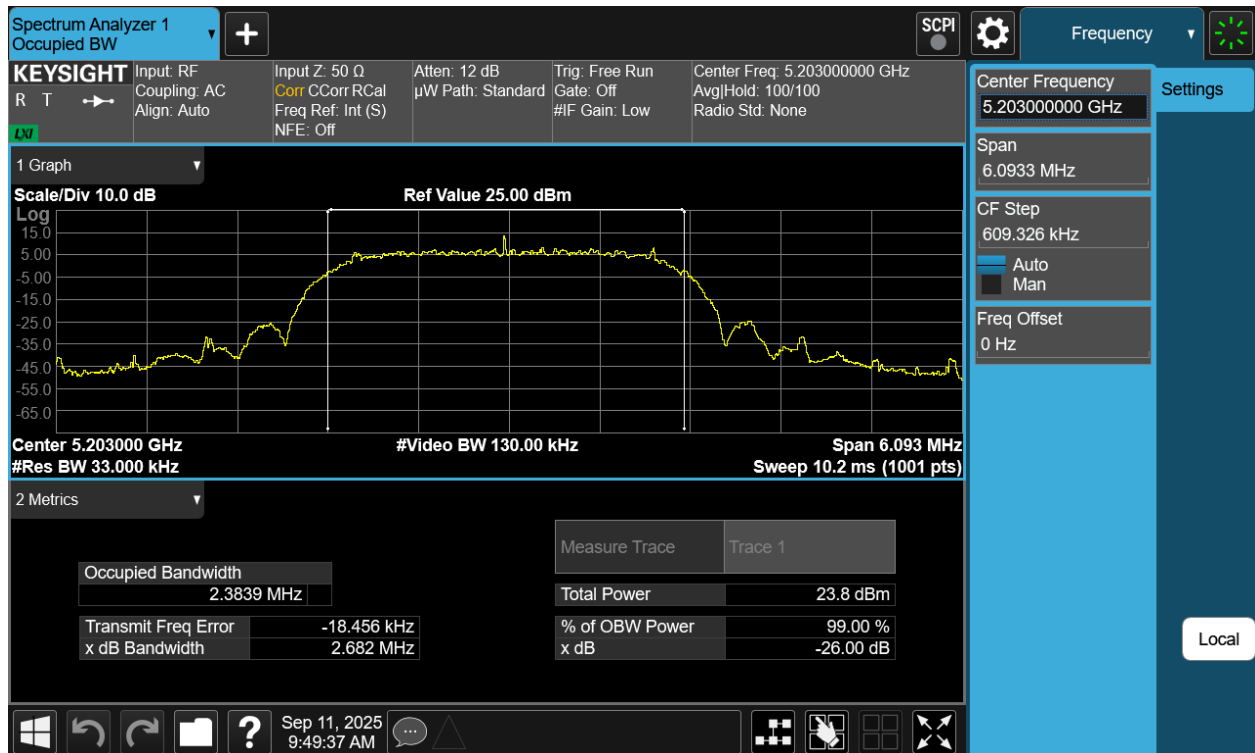
FCC ID: BCGA3459	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1C2509100079-10-R6.BCG	Test Dates: 09/18/2025 - 12/23/2025	EUT Type: Tablet Device	Page 38 of 272

V 11.0 06/2025

Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from Element Materials Technology. If you have any questions about this or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact ct.info@element.com.



Plot 7-31. 26dB BW Antenna WF7a (NB UNII HDR8, ePA- 5203MHz)

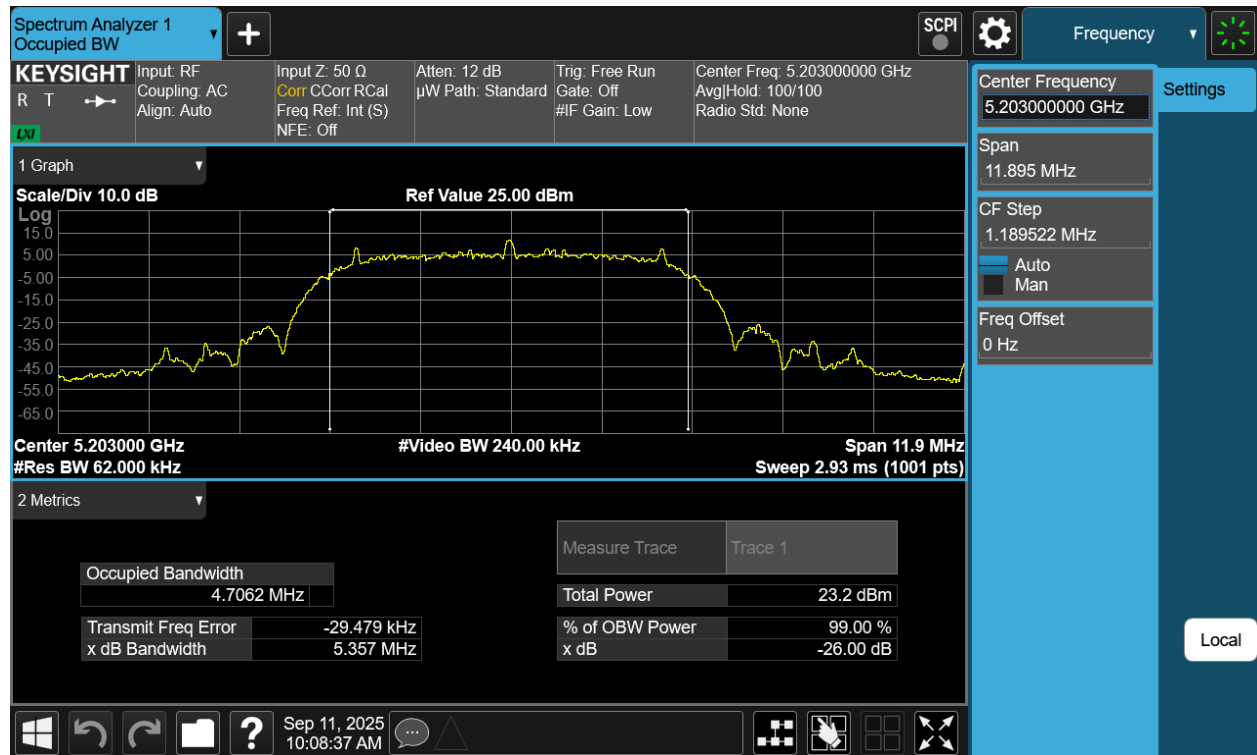


Plot 7-32. 26dB BW Antenna WF7a (NB UNII HDRPS2, ePA- 5203MHz)

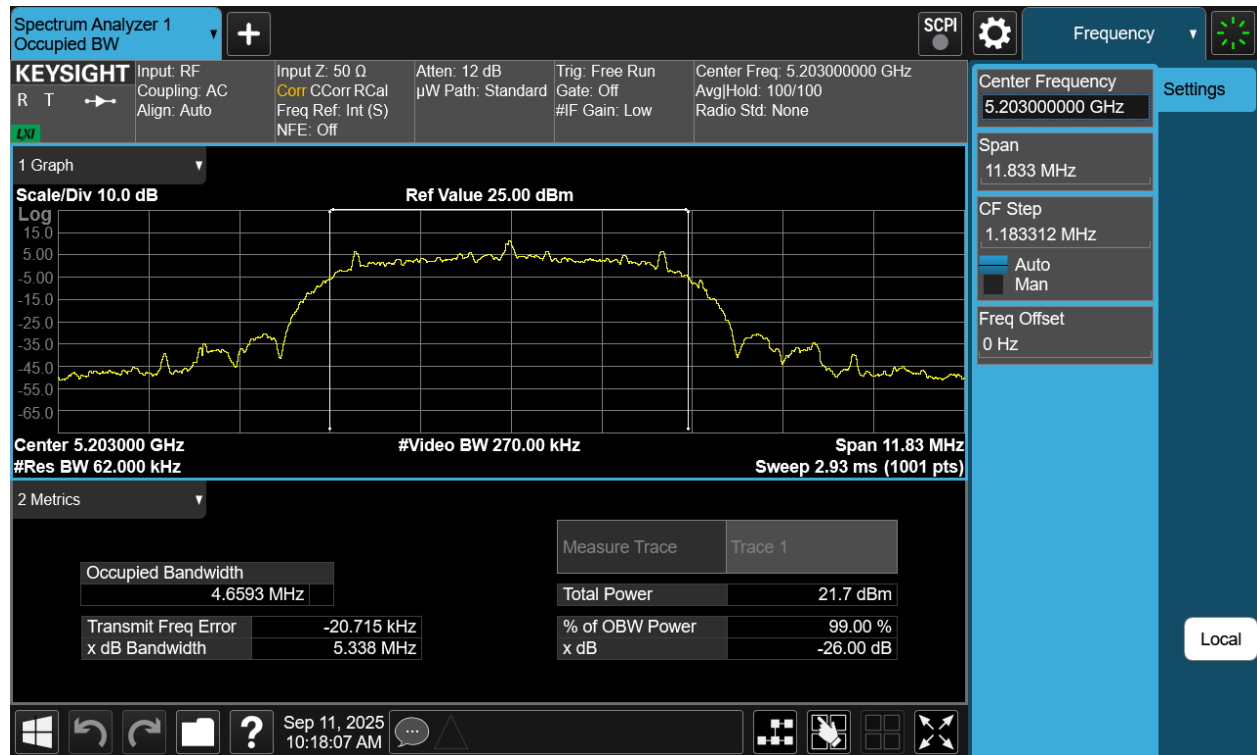
FCC ID: BCGA3459	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1C2509100079-10-R6.BCG	Test Dates: 09/18/2025 - 12/23/2025	EUT Type: Tablet Device	Page 39 of 272

V 11.0 06/2025

Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from Element Materials Technology. If you have any questions about this or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact ct.info@element.com.



Plot 7-33. 26dB BW Antenna WF7a (NB UNII XHDRPM6, ePA- 5203MHz)

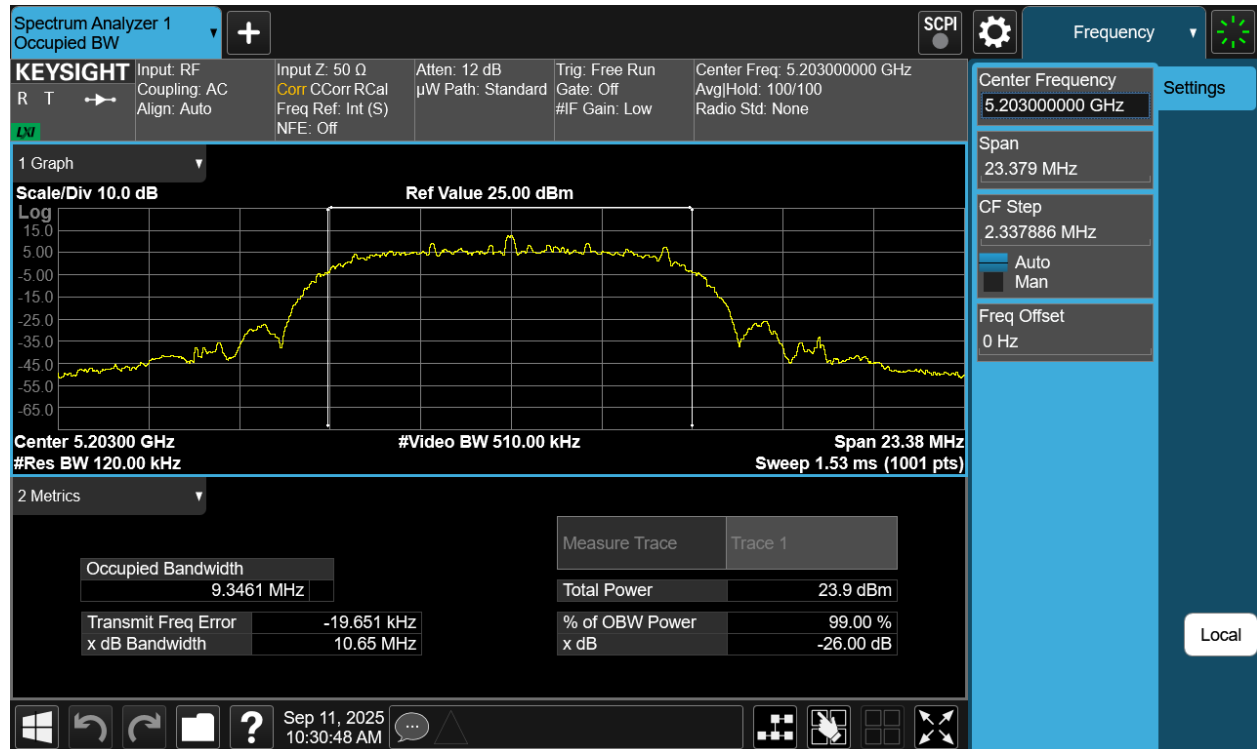


Plot 7-34. 26dB BW Antenna WF7a (NB UNII HDRPM16, ePA- 5203MHz)

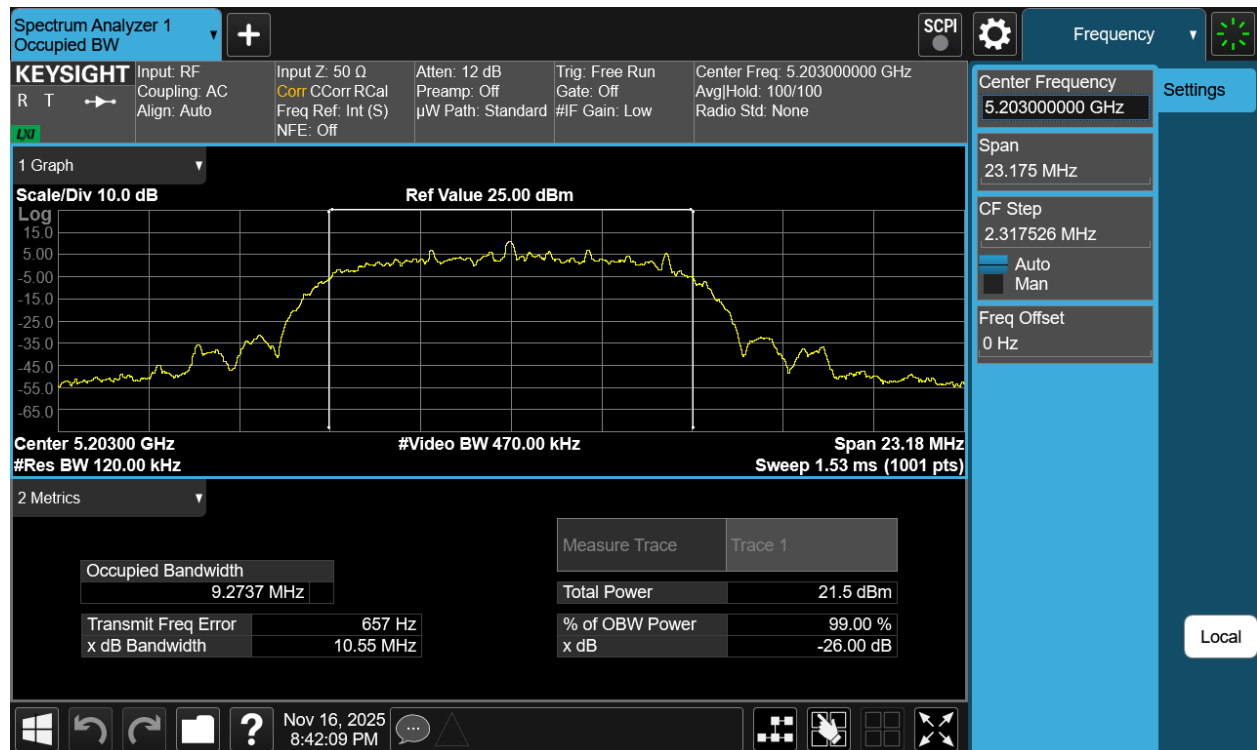
FCC ID: BCGA3459	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1C2509100079-10-R6.BCG	Test Dates: 09/18/2025 - 12/23/2025	EUT Type: Tablet Device	Page 40 of 272

V 11.0 06/2025

Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from Element Materials Technology. If you have any questions about this or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact ct.info@element.com.



Plot 7-35. 26dB BW Antenna WF7a (NB UNII HDRPL12, ePA- 5203MHz)

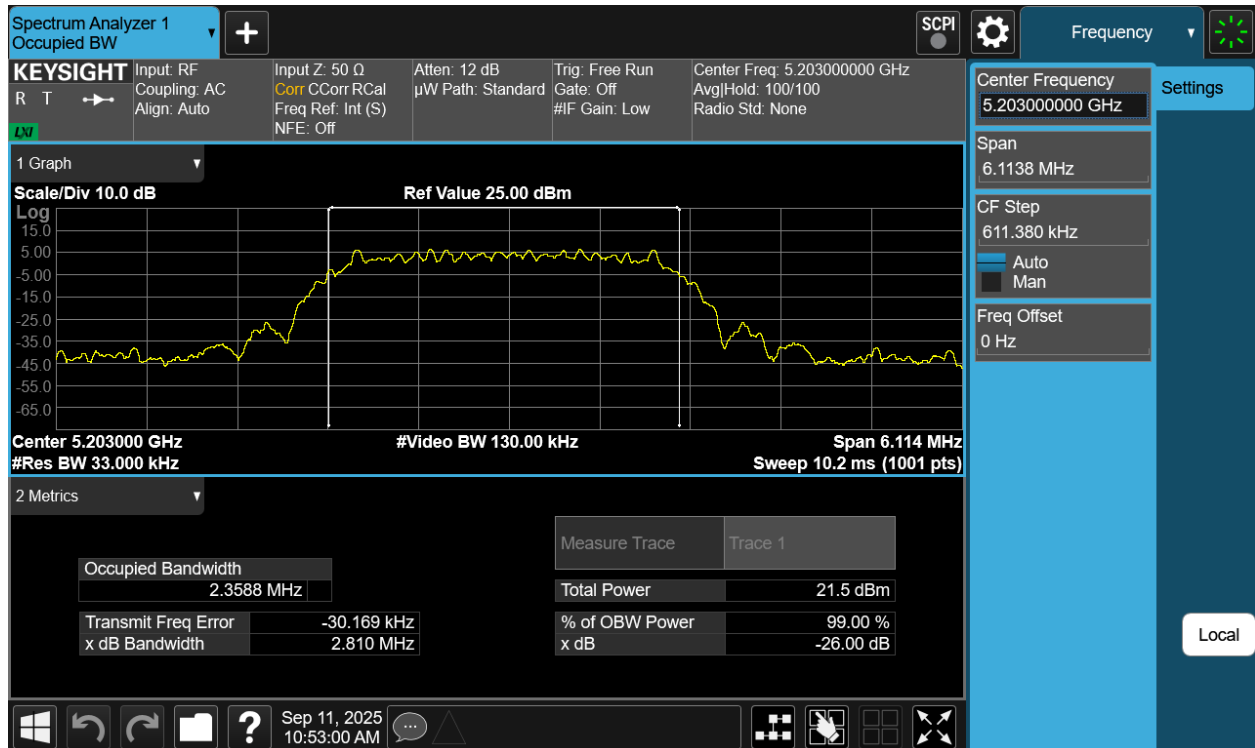


Plot 7-36. 26dB BW Antenna WF7a (NB UNII HDRPL32, ePA- 5203MHz)

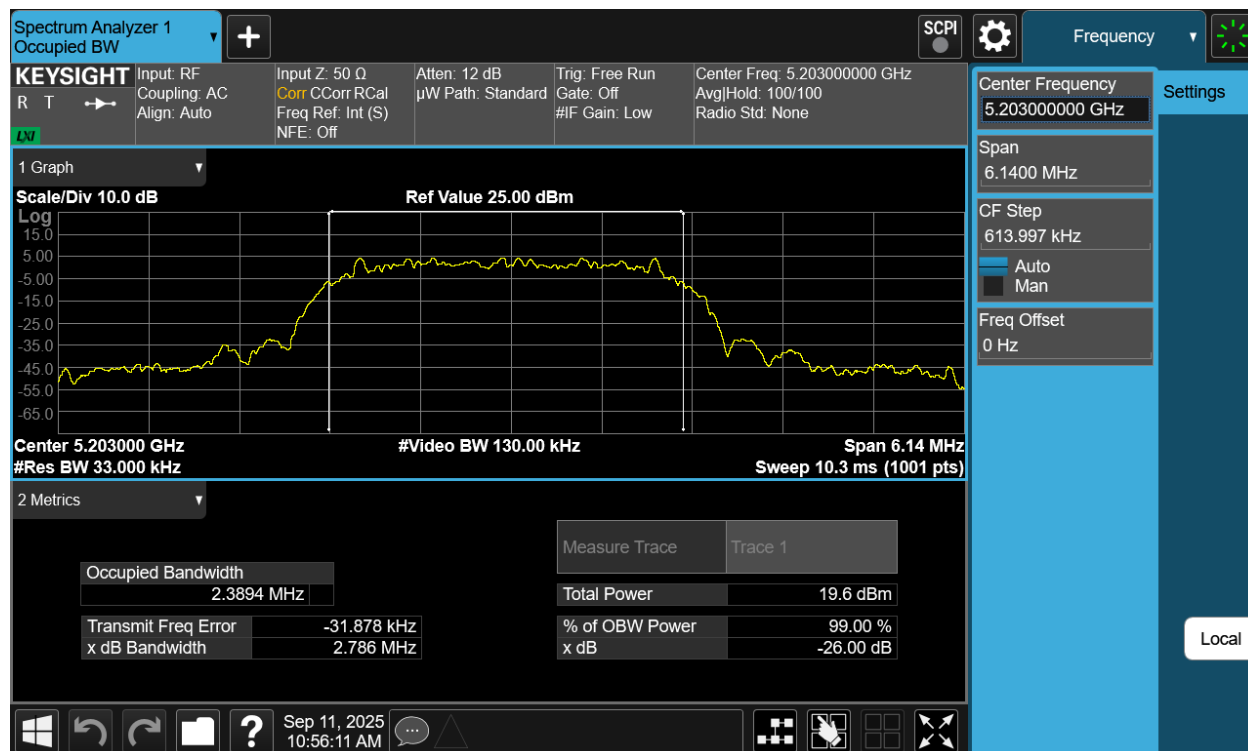
FCC ID: BCGA3459	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1C2509100079-10-R6.BCG	Test Dates: 09/18/2025 - 12/23/2025	EUT Type: Tablet Device	Page 41 of 272

V 11.0 06/2025

Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from Element Materials Technology. If you have any questions about this or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact ct.info@element.com.



FCC ID: BCGA3459		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2509100079-10-R6.BCG	Test Dates: 09/18/2025 - 12/23/2025	EUT Type: Tablet Device	Page 42 of 272



FCC ID: BCGA3459		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2509100079-10-R6.BCG	Test Dates: 09/18/2025 - 12/23/2025	EUT Type: Tablet Device	Page 43 of 272

V 11.0 06/2025

Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from Element Materials Technology. If you have any questions about this or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact ct.info@element.com.

7.2.4 Antenna WF7a 99% Bandwidth Measurements (U-NII-3)

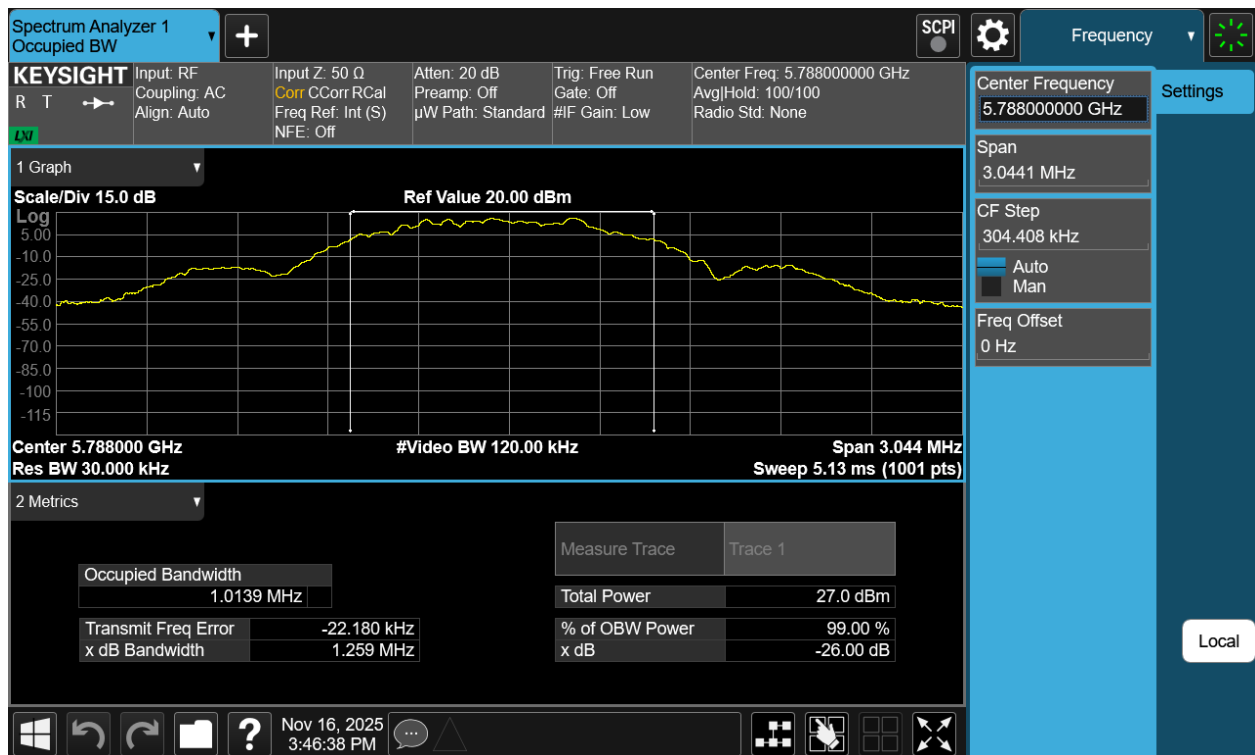
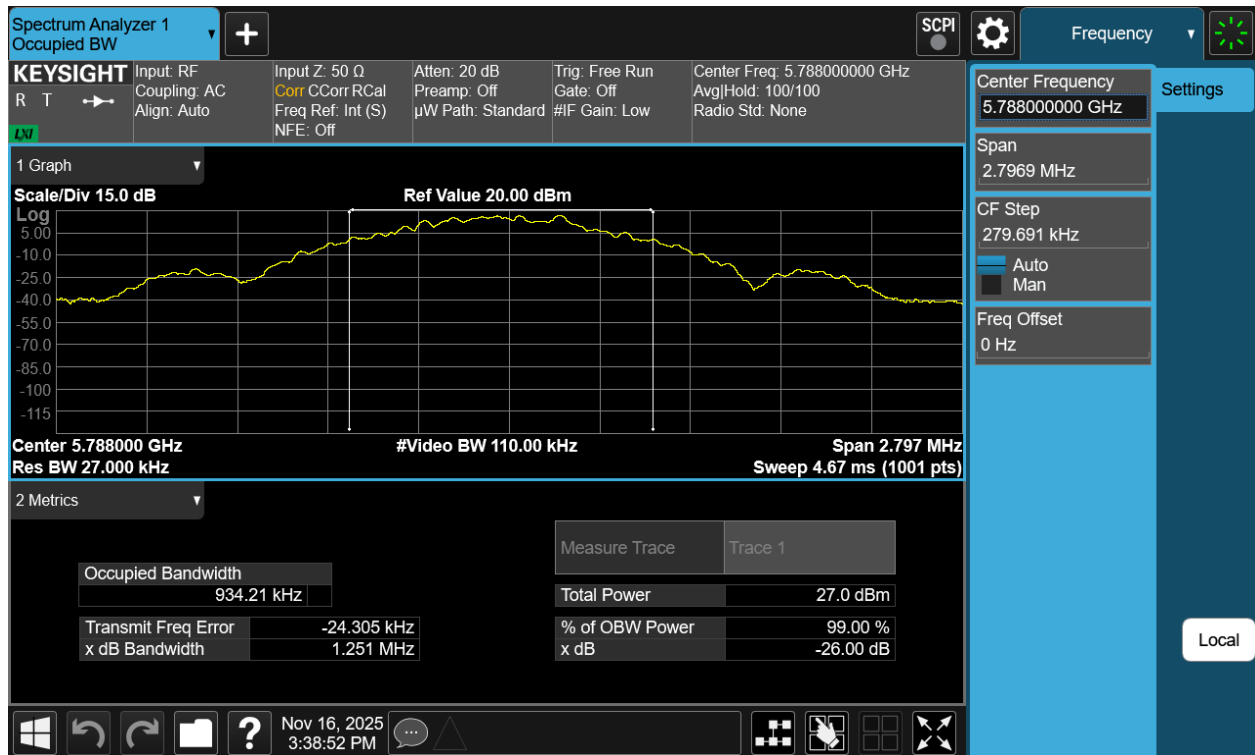
Frequency [MHz]	Data Rate [Mbps]	Mode	Power Scheme	Measured 99% Occupied Bandwidth [MHz]
5733	1.0	NB UNII BDR	ePA	0.934
5788	1.0	NB UNII BDR	ePA	0.934
5844	1.0	NB UNII BDR	ePA	0.934
5733	1.0	NB UNII LE1M	ePA	1.014
5788	1.0	NB UNII LE1M	ePA	1.014
5844	1.0	NB UNII LE1M	ePA	1.014
5733	2.0	NB UNII LE2M	ePA	2.037
5788	2.0	NB UNII LE2M	ePA	2.036
5844	2.0	NB UNII LE2M	ePA	2.036
5733	4.0	NB UNII HDR4	ePA	2.336
5788	4.0	NB UNII HDR4	ePA	2.333
5844	4.0	NB UNII HDR4	ePA	2.333
5733	8.0	NB UNII HDR8	ePA	4.693
5788	8.0	NB UNII HDR8	ePA	4.665
5844	8.0	NB UNII HDR8	ePA	4.682
5733	2.0	NB UNII HDRPS2	ePA	2.374
5788	2.0	NB UNII HDRPS2	ePA	2.376
5844	2.0	NB UNII HDRPS2	ePA	2.382
5733	6.0	NB UNII XHDRPM6	ePA	4.744
5788	6.0	NB UNII XHDRPM6	ePA	4.738
5844	6.0	NB UNII XHDRPM6	ePA	4.767
5733	16.0	NB UNII HDRPM16	ePA	4.685
5788	16.0	NB UNII HDRPM16	ePA	4.679
5844	16.0	NB UNII HDRPM16	ePA	4.705
5733	12.0	NB UNII HDRPL12	ePA	9.410
5788	12.0	NB UNII HDRPL12	ePA	9.375
5844	12.0	NB UNII HDRPL12	ePA	9.421
5733	32.0	NB UNII HDRPL32	ePA	9.309
5788	32.0	NB UNII HDRPL32	ePA	9.289
5844	32.0	NB UNII HDRPL32	ePA	9.311
5733	2.0	NB UNII HDT2	ePA	2.374
5788	2.0	NB UNII HDT2	ePA	2.374
5844	2.0	NB UNII HDT2	ePA	2.374
5733	4.0	NB UNII HDT4	ePA	2.384
5788	4.0	NB UNII HDT4	ePA	2.384
5844	4.0	NB UNII HDT4	ePA	2.384
5733	6.0	NB UNII HDT6	ePA	2.389
5788	6.0	NB UNII HDT6	ePA	2.390
5844	6.0	NB UNII HDT6	ePA	2.390

Table 7-5. Conducted BW Measurements Antenna WF7a

FCC ID: BCGA3459	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1C2509100079-10-R6.BCG	Test Dates: 09/18/2025 - 12/23/2025	EUT Type: Tablet Device	Page 44 of 272

V 11.0 06/2025

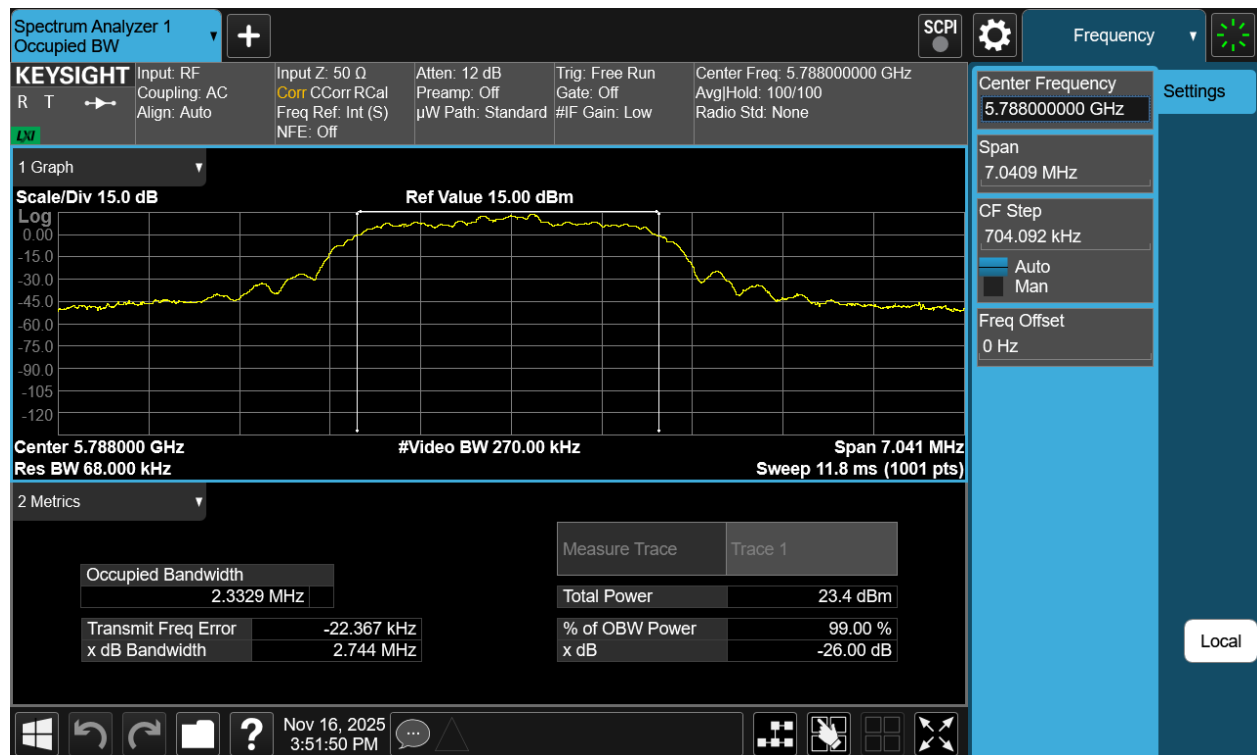
Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from Element Materials Technology. If you have any questions about this or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact ct.info@element.com.



FCC ID: BCGA3459		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2509100079-10-R6.BCG	Test Dates: 09/18/2025 - 12/23/2025	EUT Type: Tablet Device	Page 45 of 272

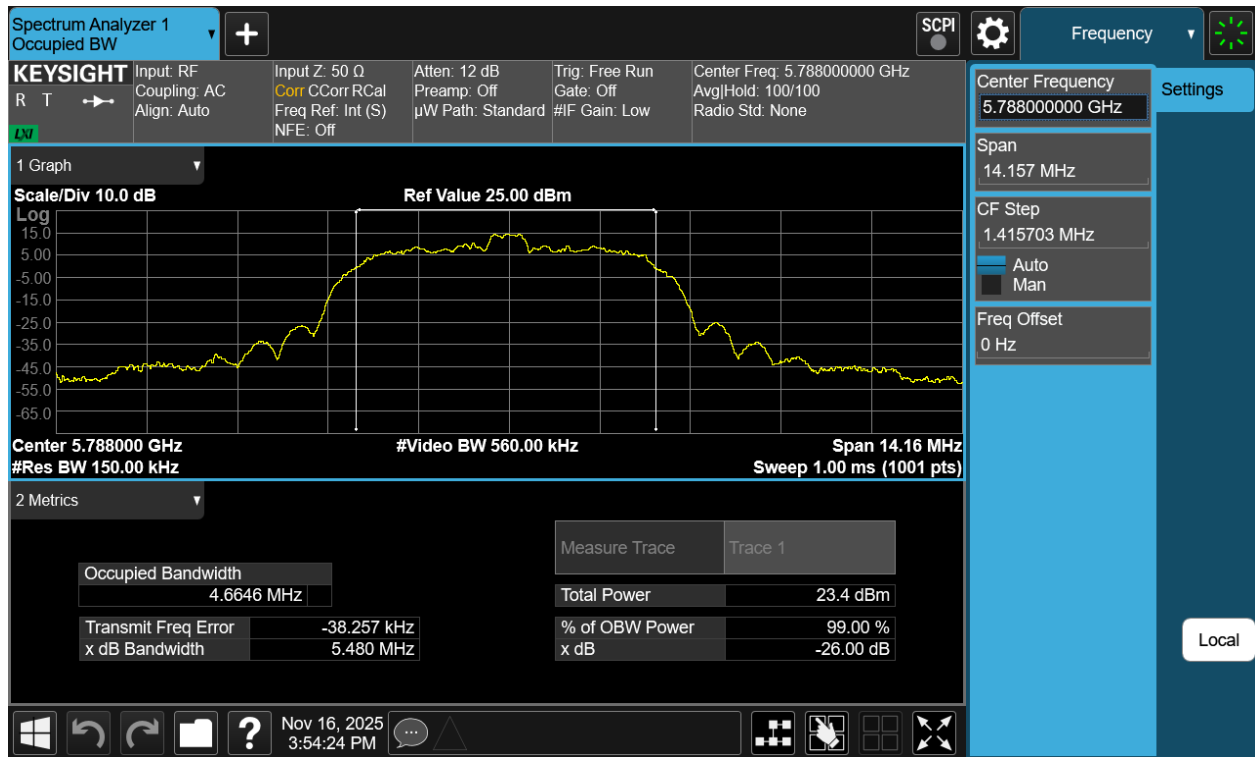


Plot 7-42. 99% OBW Antenna WF7a (NB UNII LE2M, ePA- 5788MHz)

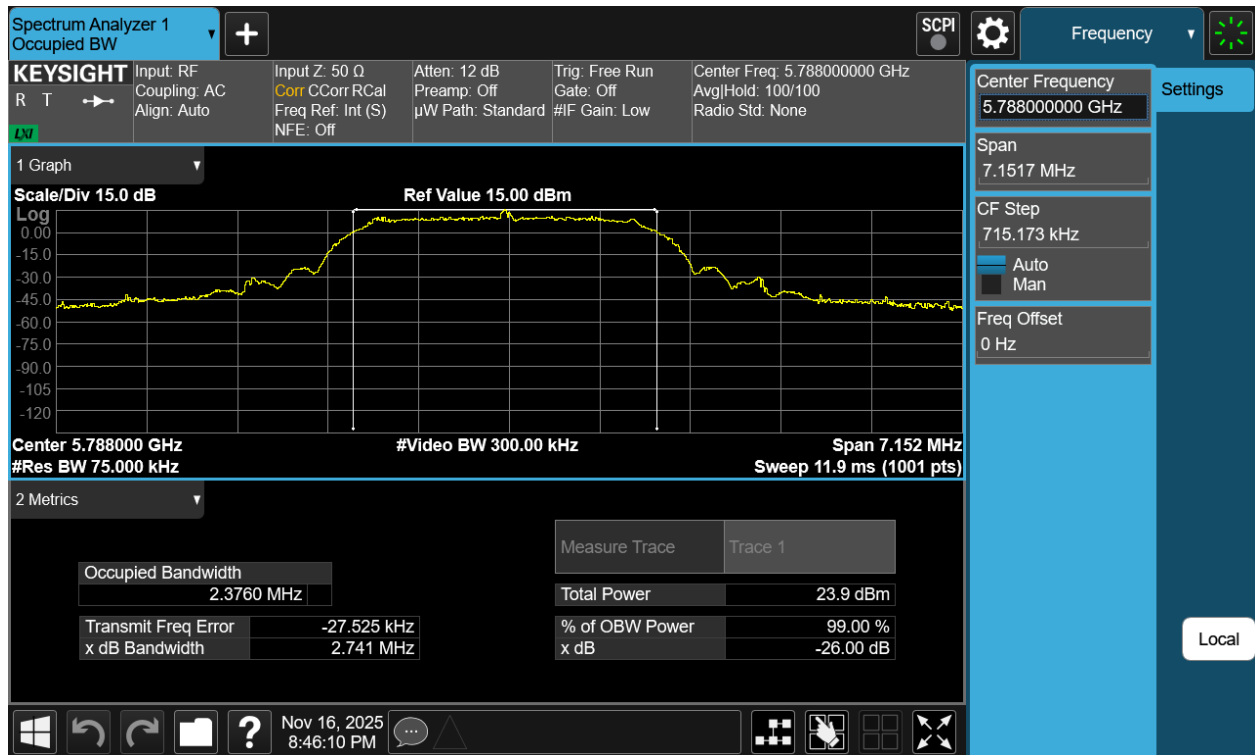


Plot 7-43. 99% OBW Antenna WF7a (NB UNII HDR4, ePA – 5788MHz)

FCC ID: BCGA3459	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1C2509100079-10-R6.BCG	Test Dates: 09/18/2025 - 12/23/2025	EUT Type: Tablet Device	Page 46 of 272



Plot 7-44. 99% OBW Antenna WF7a (NB UNII HDR8, ePA - 5788MHz)

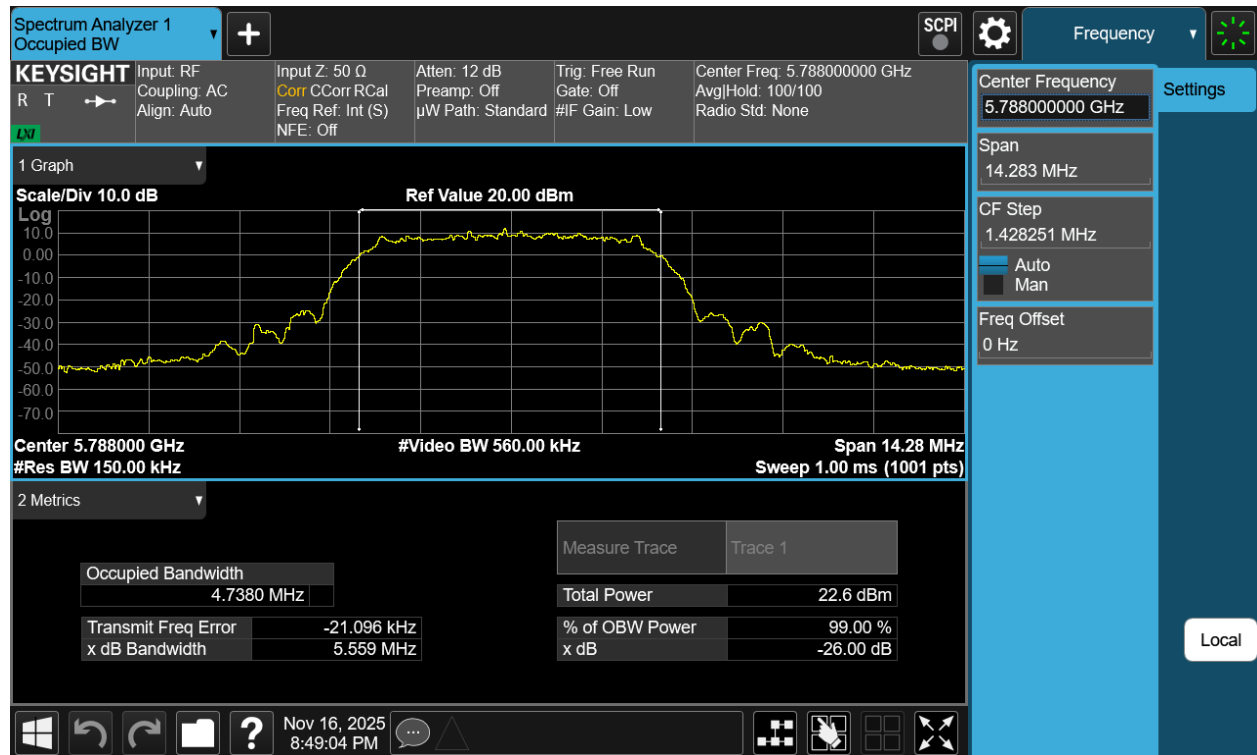


Plot 7-45. 99% OBW Antenna WF7a (NB UNII HDRPS2, ePA - 5788MHz)

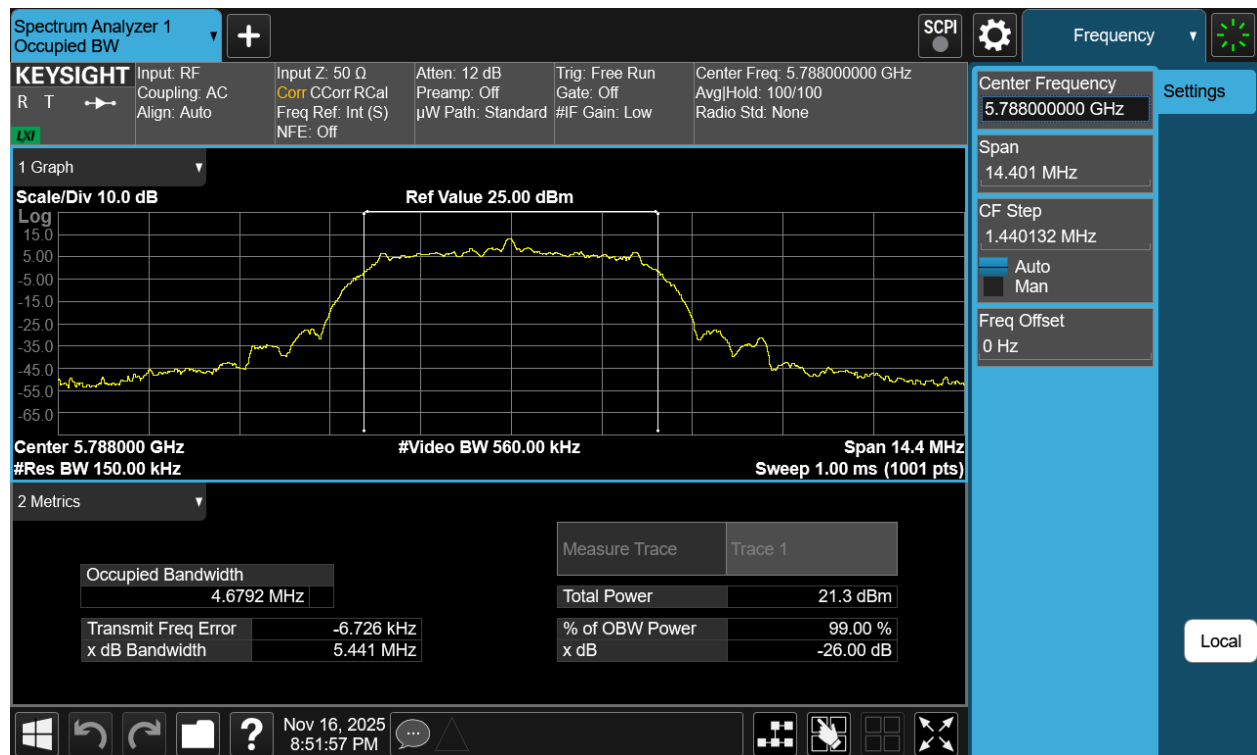
FCC ID: BCGA3459	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1C2509100079-10-R6.BCG	Test Dates: 09/18/2025 - 12/23/2025	EUT Type: Tablet Device	Page 47 of 272

V 11.0 06/2025

Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from Element Materials Technology. If you have any questions about this or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact ct.info@element.com.

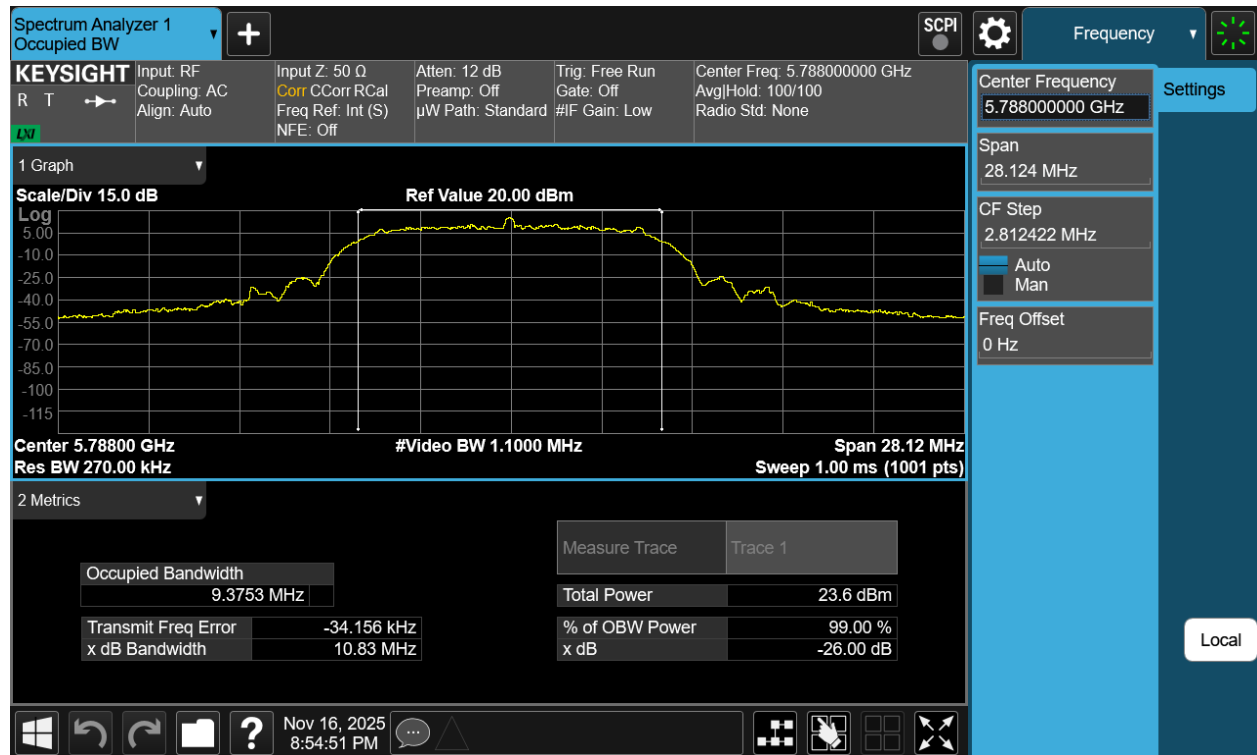


Plot 7-46. 99% OBW Antenna WF7a (NB UNII XHDRPM6, ePA – 5788MHz)



Plot 7-47. 99% OBW Antenna WF7a (NB UNII HDRPM16, ePA – 5788MHz)

FCC ID: BCGA3459	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1C2509100079-10-R6.BCG	Test Dates: 09/18/2025 - 12/23/2025	EUT Type: Tablet Device	Page 48 of 272



Plot 7-48. 99% OBW Antenna WF7a (NB UNII HDRPL12, ePA – 5788MHz)

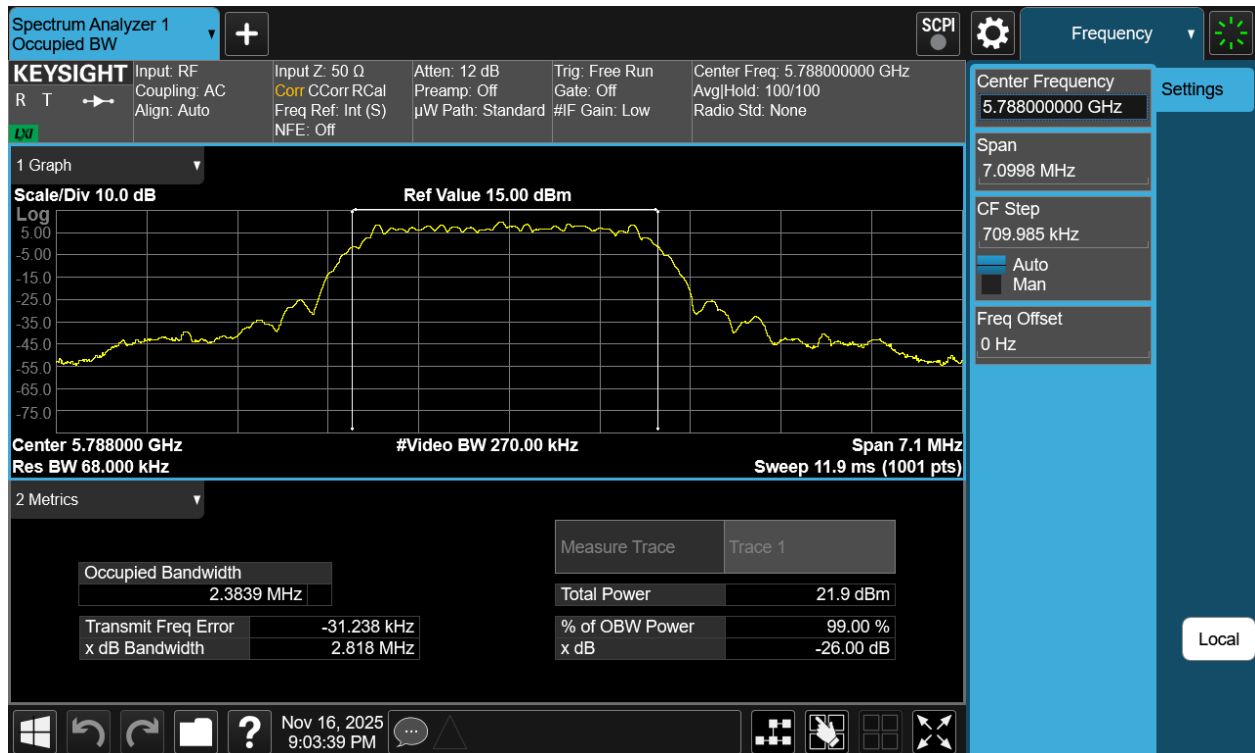


Plot 7-49. 99% OBW Antenna WF7a (NB UNII HDRPL32, ePA – 5788MHz)

FCC ID: BCGA3459	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1C2509100079-10-R6.BCG	Test Dates: 09/18/2025 - 12/23/2025	EUT Type: Tablet Device	Page 49 of 272



Plot 7-50. 99% OBW Antenna WF7a (NB UNII HDT2, ePA- 5788MHz)



Plot 7-51. 99% OBW Antenna WF7a (NB UNII HDT4, ePA- 5788MHz)

FCC ID: BCGA3459	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1C2509100079-10-R6.BCG	Test Dates: 09/18/2025 - 12/23/2025	EUT Type: Tablet Device	Page 50 of 272



Plot 7-52. 99% OBW Antenna WF7a (NB UNII HDT6, ePA- 5788MHz)

FCC ID: BCGA3459	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1C2509100079-10-R6.BCG	Test Dates: 09/18/2025 - 12/23/2025	EUT Type: Tablet Device	Page 51 of 272

V 11.0 06/2025

Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from Element Materials Technology. If you have any questions about this or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact ct.info@element.com.

7.3 6dB Bandwidth Measurement

§2.1049; §15.407 (e)

Test Overview and Limit

The bandwidth at 6dB down from the highest in-band spectral density is measured with a spectrum analyzer connected to the antenna terminal while the EUT is operating at its maximum duty cycle, at its maximum power control level, as defined in ANSI C63.10:2020 + Cor. 1:2023 + C63.10a:2024 + Errata to C63.10a:2024 and KDB 789033 D02 v02r01, and at the appropriate frequencies. The spectrum analyzer's bandwidth measurement function is configured to measure the 6dB bandwidth.

In the 5.725 – 5.850GHz band, the 6dB bandwidth must be ≥ 500 kHz.

Test Procedure Used

ANSI C63.10:2020 + Cor. 1:2023 + C63.10a:2024 + Errata to C63.10a:2024 – Subclause 12.5.1.
KDB 789033 D02 v02r01 – Section C

Test Settings

1. The signal analyzers' automatic bandwidth measurement capability was used to perform the 6dB bandwidth measurement. The "X" dB bandwidth parameter was set to $X = 6$. The bandwidth measurement was not influenced by any intermediate power nulls in the fundamental emission.
2. RBW = 100 kHz
3. VBW $\geq 3 \times$ RBW
4. Detector = Peak
5. Trace mode = max hold
6. Sweep = auto couple

Test Setup

The EUT and measurement equipment were set up as shown in the diagram below.



Figure 7-2. Test Instrument & Measurement Setup

Test Notes

1. All antenna configurations and power schemes were investigated and only the worst case is reported.
2. Low, mid and high channels were tested and tabular data has been reported. Only mid channel plots has been reported.

FCC ID: BCGA3459	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1C2509100079-10-R6.BCG	Test Dates: 09/18/2025 - 12/23/2025	EUT Type: Tablet Device	Page 52 of 272

V 11.0 06/2025

7.3.1 Antenna WF8 6dB Bandwidth Measurements (U-NII-3)

Frequency [MHz]	Data Rate [Mbps]	Mode	Power Scheme	Measured 6dB Bandwidth [MHz]	Minimum 6dB Bandwidth [MHz]	Pass / Fail
5733	1.0	NB UNII BDR	ePA	0.551	0.500	Pass
5788	1.0	NB UNII BDR	ePA	0.552	0.500	Pass
5844	1.0	NB UNII BDR	ePA	0.551	0.500	Pass
5733	1.0	NB UNII LE1M	ePA	0.664	0.500	Pass
5788	1.0	NB UNII LE1M	ePA	0.663	0.500	Pass
5844	1.0	NB UNII LE1M	ePA	0.663	0.500	Pass
5733	2.0	NB UNII LE2M	ePA	1.182	0.500	Pass
5788	2.0	NB UNII LE2M	ePA	1.182	0.500	Pass
5844	2.0	NB UNII LE2M	ePA	1.180	0.500	Pass
5733	4.0	NB UNII HDR4	ePA	1.581	0.500	Pass
5788	4.0	NB UNII HDR4	ePA	1.846	0.500	Pass
5844	4.0	NB UNII HDR4	ePA	1.667	0.500	Pass
5733	8.0	NB UNII HDR8	ePA	0.759	0.500	Pass
5788	8.0	NB UNII HDR8	ePA	0.547	0.500	Pass
5844	8.0	NB UNII HDR8	ePA	0.553	0.500	Pass
5733	2.0	NB UNII HDRPS2	ePA	2.089	0.500	Pass
5788	2.0	NB UNII HDRPS2	ePA	2.104	0.500	Pass
5844	2.0	NB UNII HDRPS2	ePA	2.084	0.500	Pass
5733	6.0	NB UNII XHDRPM6	ePA	2.684	0.500	Pass
5788	6.0	NB UNII XHDRPM6	ePA	4.052	0.500	Pass
5844	6.0	NB UNII XHDRPM6	ePA	4.068	0.500	Pass
5733	16.0	NB UNII HDRPM16	ePA	1.194	0.500	Pass
5788	16.0	NB UNII HDRPM16	ePA	0.963	0.500	Pass
5844	16.0	NB UNII HDRPM16	ePA	4.037	0.500	Pass
5733	12.0	NB UNII HDRPL12	ePA	6.119	0.500	Pass
5788	12.0	NB UNII HDRPL12	ePA	6.111	0.500	Pass
5844	12.0	NB UNII HDRPL12	ePA	6.096	0.500	Pass
5733	32.0	NB UNII HDRPL32	ePA	6.111	0.500	Pass
5788	32.0	NB UNII HDRPL32	ePA	6.116	0.500	Pass
5844	32.0	NB UNII HDRPL32	ePA	6.111	0.500	Pass
5733	2.0	NB UNII HDT2	ePA	2.118	0.500	Pass
5788	2.0	NB UNII HDT2	ePA	2.116	0.500	Pass
5844	2.0	NB UNII HDT2	ePA	2.119	0.500	Pass
5733	4.0	NB UNII HDT4	ePA	2.124	0.500	Pass
5788	4.0	NB UNII HDT4	ePA	2.125	0.500	Pass
5844	4.0	NB UNII HDT4	ePA	2.124	0.500	Pass
5733	6.0	NB UNII HDT6	ePA	2.128	0.500	Pass
5788	6.0	NB UNII HDT6	ePA	2.127	0.500	Pass
5844	6.0	NB UNII HDT6	ePA	2.126	0.500	Pass

Table 7-6. Conducted BW Measurements Antenna WF8

FCC ID: BCGA3459		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2509100079-10-R6.BCG	Test Dates: 09/18/2025 - 12/23/2025	EUT Type: Tablet Device	Page 53 of 272

V 11.0 06/2025

Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from Element Materials Technology. If you have any questions about this or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact ct.info@element.com.



Plot 7-53. 6dB BW Antenna WF8 (NB UNII BDR, ePA – 5788MHz)



Plot 7-54. 6dB BW Antenna WF8 (NB UNII LE1M, ePA– 5788MHz)

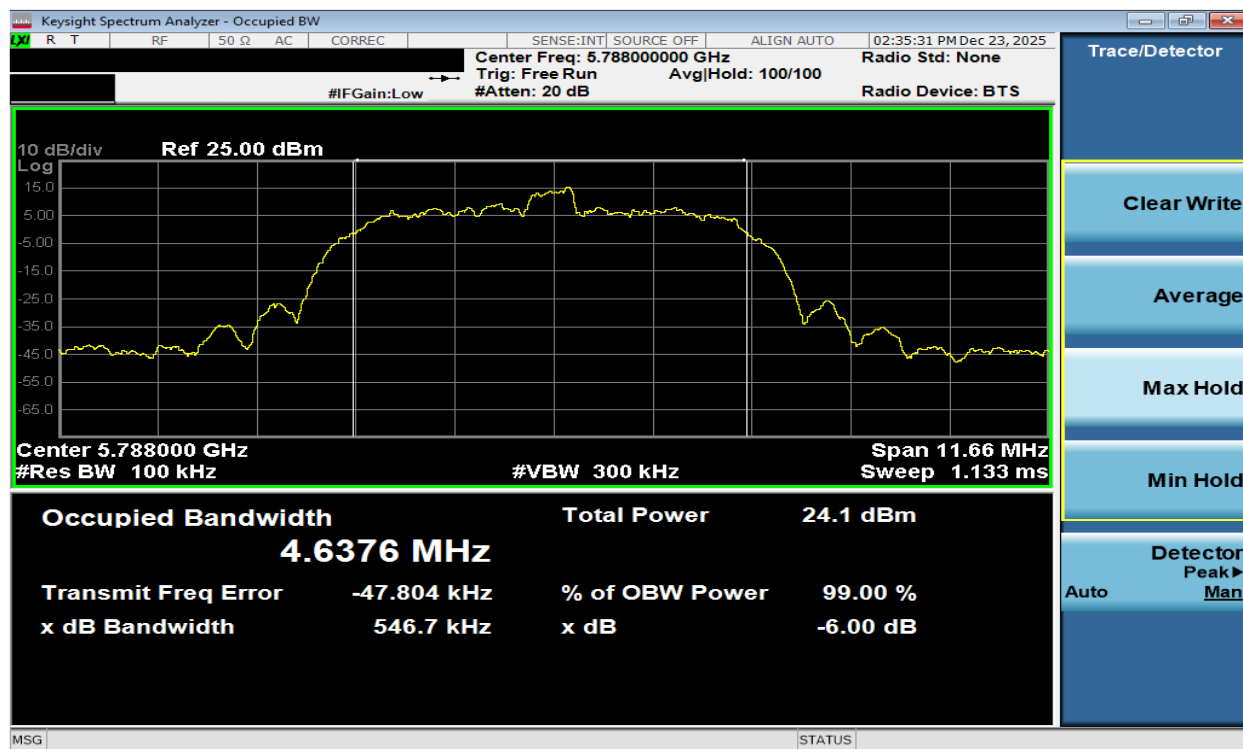
FCC ID: BCGA3459	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1C2509100079-10-R6.BCG	Test Dates: 09/18/2025 - 12/23/2025	EUT Type: Tablet Device	Page 54 of 272

V 11.0 06/2025

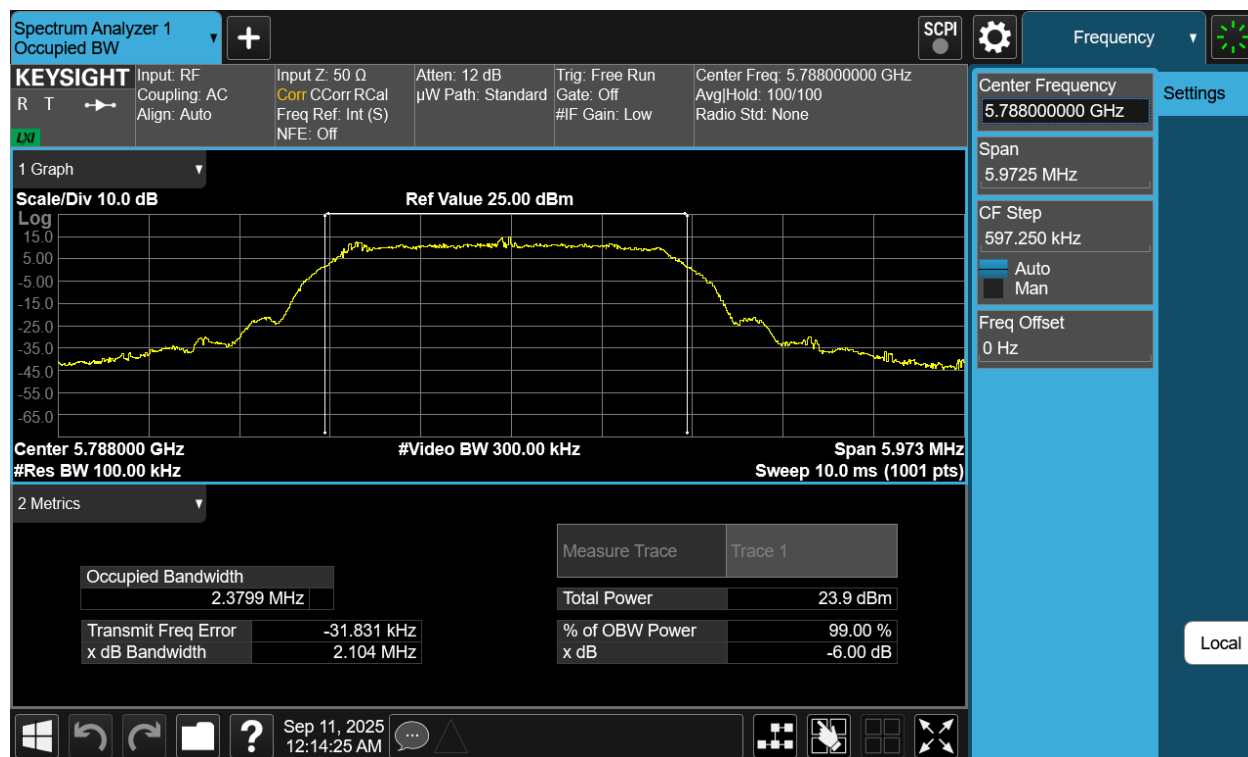
Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from Element Materials Technology. If you have any questions about this or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact ct.info@element.com.



FCC ID: BCGA3459	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1C2509100079-10-R6.BCG	Test Dates: 09/18/2025 - 12/23/2025	EUT Type: Tablet Device	Page 55 of 272



Plot 7-57. 6dB BW Antenna WF8 (NB UNII HDR8, ePA – 5788MHz)

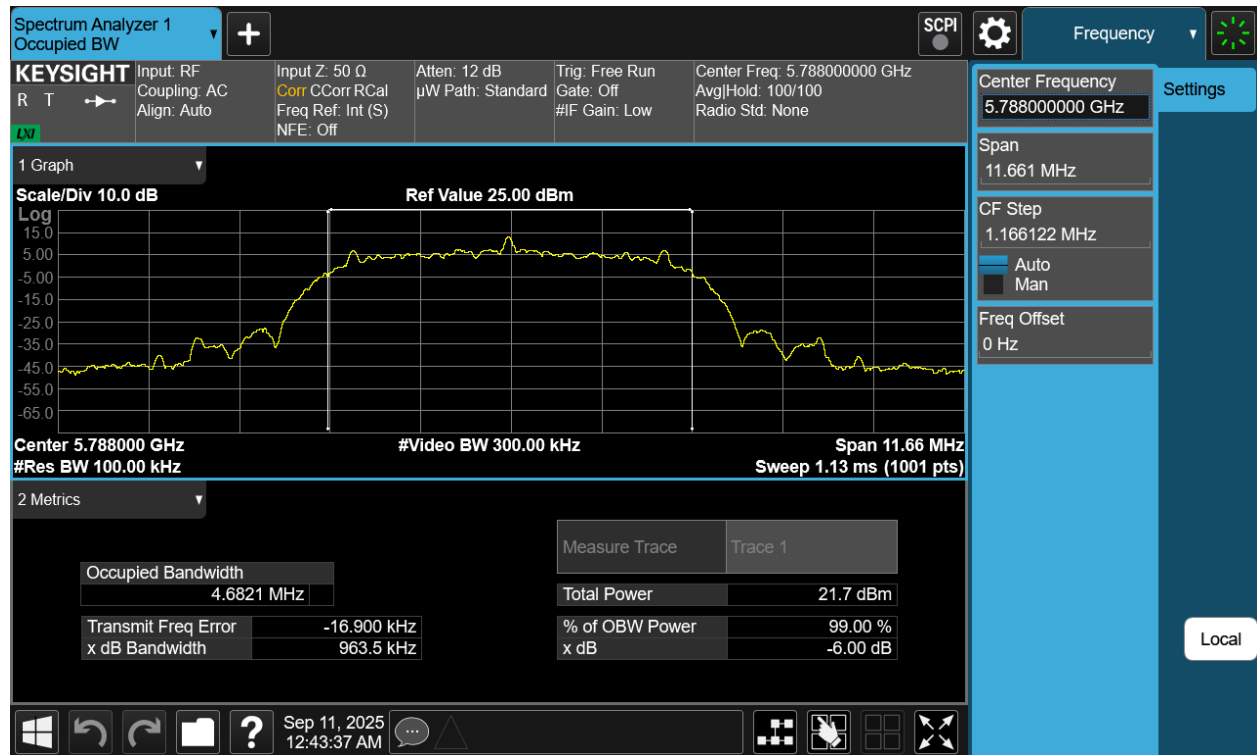


Plot 7-58. 6dB BW Antenna WF8 (NB UNII HDRPS2, ePA – 5788MHz)

FCC ID: BCGA3459		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2509100079-10-R6.BCG	Test Dates: 09/18/2025 - 12/23/2025	EUT Type: Tablet Device	Page 56 of 272

V 11.0 06/2025

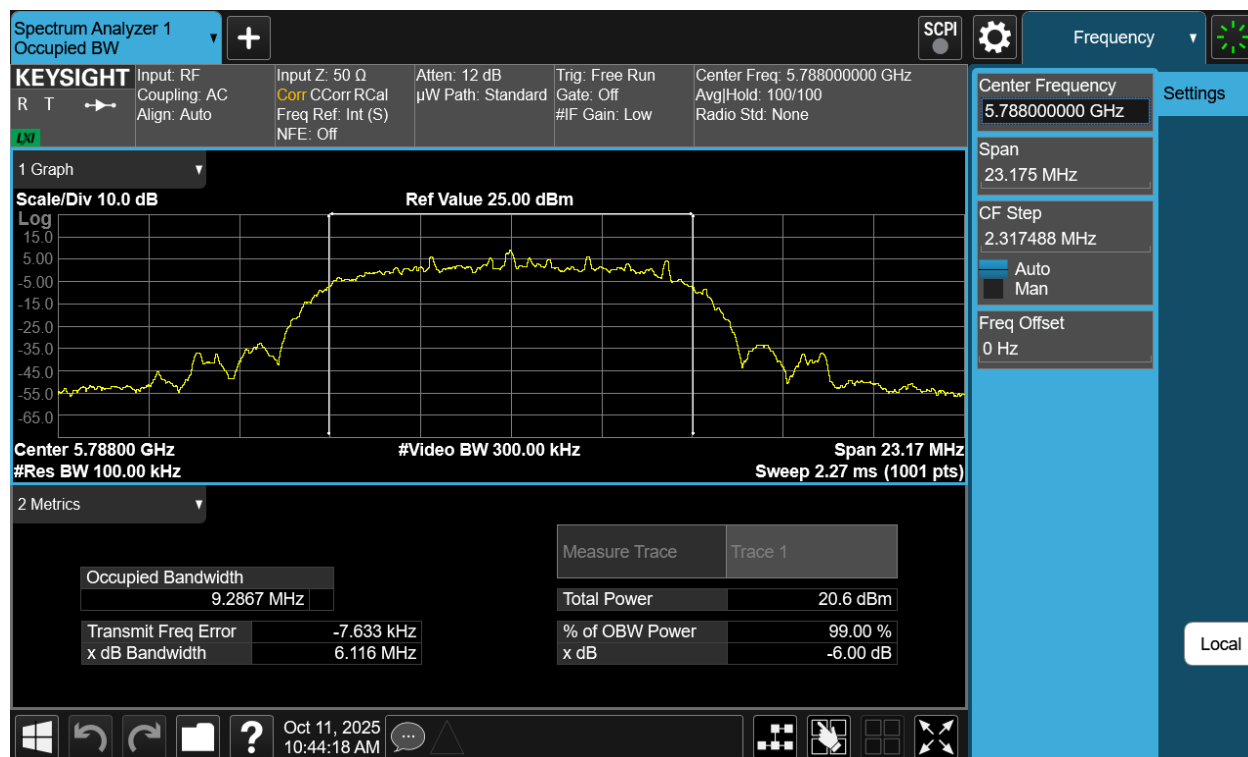
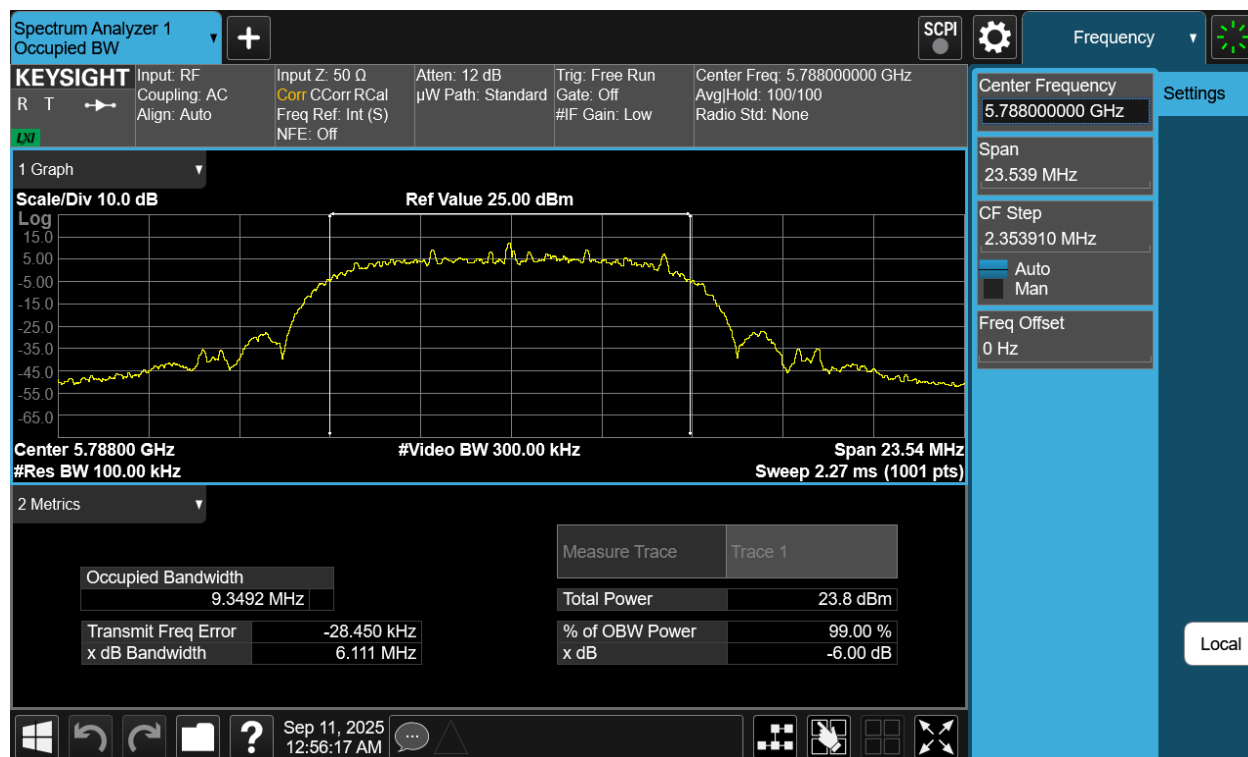
Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from Element Materials Technology. If you have any questions about this or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact ct.info@element.com.



FCC ID: BCGA3459		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2509100079-10-R6.BCG	Test Dates: 09/18/2025 - 12/23/2025	EUT Type: Tablet Device	Page 57 of 272

V 11.0 06/2025

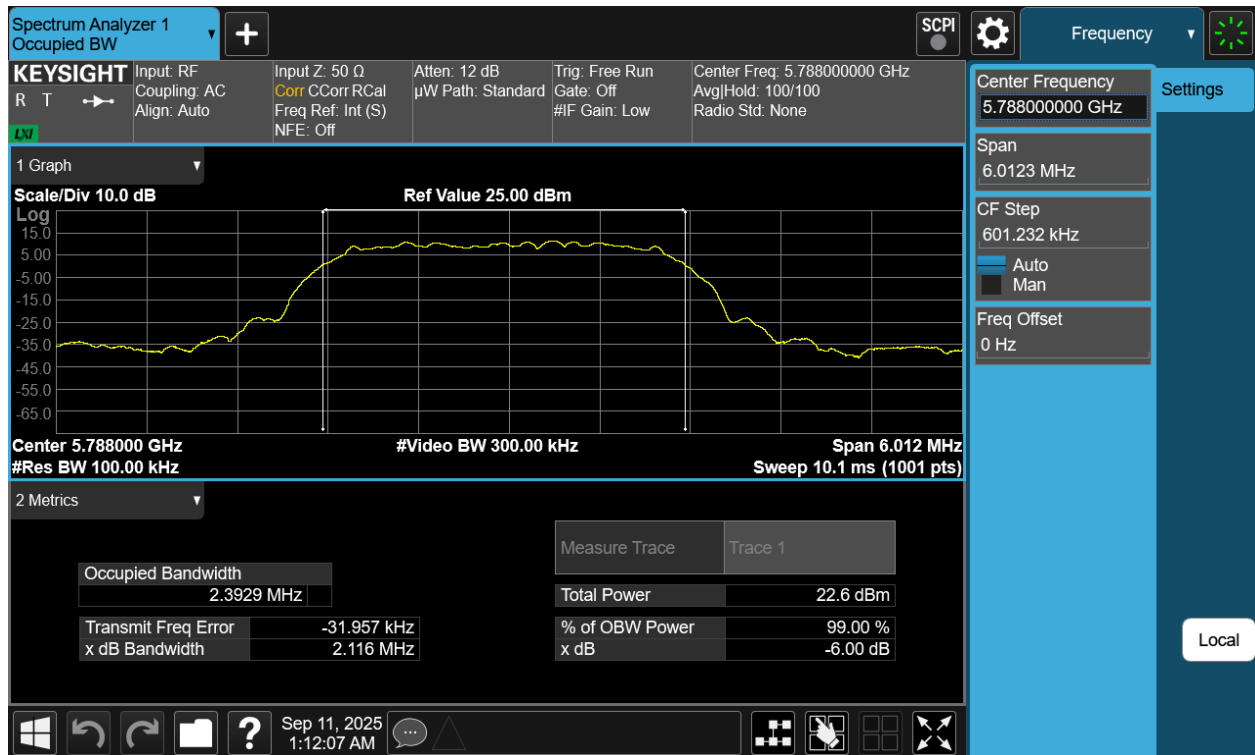
Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from Element Materials Technology. If you have any questions about this or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact ct.info@element.com.



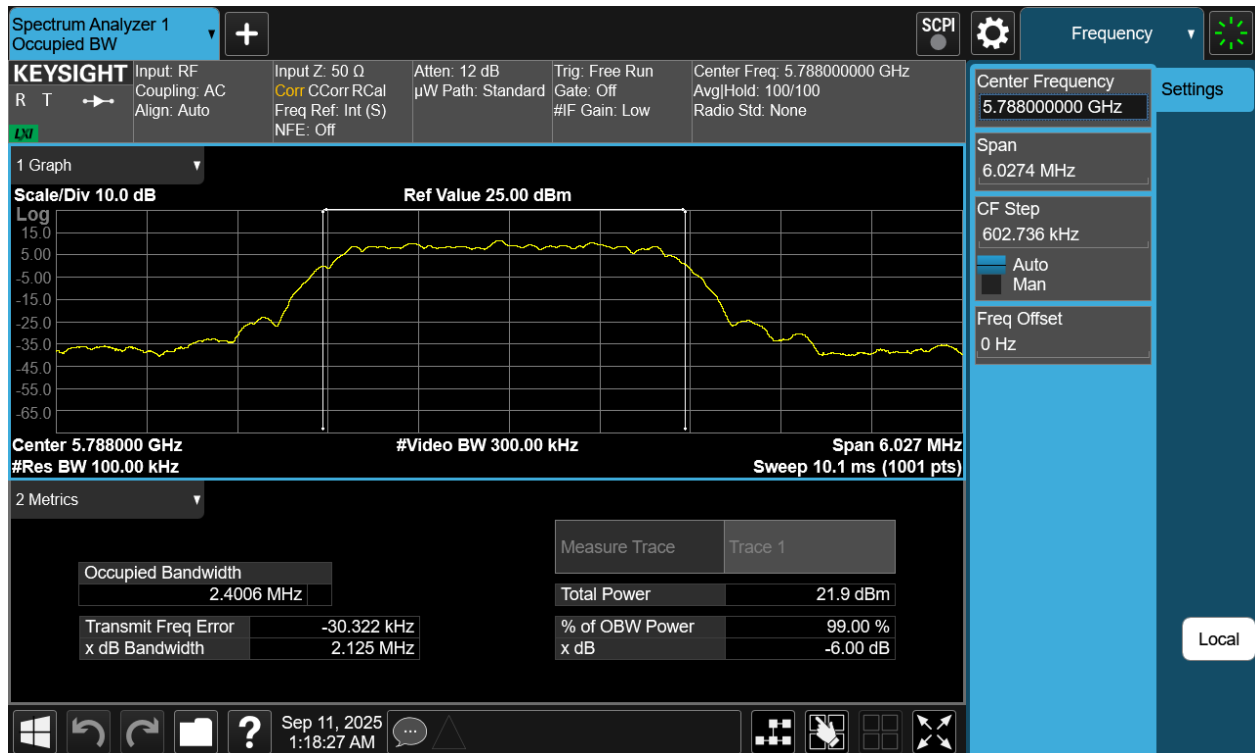
FCC ID: BCGA3459		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2509100079-10-R6.BCG	Test Dates: 09/18/2025 - 12/23/2025	EUT Type: Tablet Device	Page 58 of 272

V 11.0 06/2025

Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from Element Materials Technology. If you have any questions about this or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact ct.info@element.com.



Plot 7-63. 6dB BW Antenna WF8 (NB UNII HDT2, ePA- 5788MHz)



Plot 7-64. 6dB BW Antenna WF8 (NB UNII HDT4, ePA- 5788MHz)

FCC ID: BCGA3459	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1C2509100079-10-R6.BCG	Test Dates: 09/18/2025 - 12/23/2025	EUT Type: Tablet Device	Page 59 of 272

V 11.0 06/2025

Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from Element Materials Technology. If you have any questions about this or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact ct.info@element.com.