

TEST REPORT

Test Report No. : UL-RPT-RP14994595JD04A

Customer : Apple Inc.

Model No. : A3113

FCC ID : BCGA3113

Technology : NB-FHSS

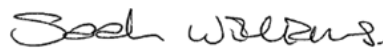
Test Standard(s) : FCC Parts 15.209(a) & 15.407

Test Laboratory : UL International (UK) Ltd, Basingstoke, Hampshire, RG24 8AH,
United Kingdom

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2. The results in this report apply only to the sample(s) tested.
3. The sample tested is in compliance with the above standard(s).
4. The test results in this report are traceable to the national or international standards.
5. Version 1.0

Date of Issue: 21 November 2023

Checked by:



Sarah Williams
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Customer Information

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Contact Name:	Stuart Thomas

Report Revision History

Version Number	Issue Date	Revision Details	Revised By
1.0	21/11/2023	Initial Version	Sarah Williams

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1 Attestation of Test Results

1.1 Description of EUT

The equipment under test (EUT) was a portable laptop computer.

1.2 General Information

Specification Reference:	47CFR15.407 and 47CFR15.403
Specification Title:	Code of Federal Regulations Volume 47 (Telecommunications): Part 15 Subpart E (Unlicensed National Information Infrastructure Devices) – Sections 15.403 and 15.407
Specification Reference:	47CFR15.209
Specification Title:	Code of Federal Regulations Volume 47 (Telecommunications): Part 15 Subpart C (Intentional Radiators) - Section 15.209
Site Registration:	685609
Lab. Designation No.:	UK2011
Location of Testing:	Units 3 & 4 Horizon, Wade Road, Kingsland Business Park, Basingstoke, Hampshire, RG24 8AH, United Kingdom
Test Dates:	06 September 2023 to 01 November 2023

1.3 Summary of Test Results

FCC Reference (47CFR)	Measurement	Result
Part 15.35(c)	Transmitter Duty Cycle	Note 1
Part 15.403	Transmitter 26 dB Emission Bandwidth	Complied
Part 15.407(e)	Transmitter Minimum 6 dB Bandwidth (5.725-5.85 GHz band)	Complied
Part 15.407(a)(1)(iv)	Transmitter Maximum Conducted Output Power (5.15-5.25 GHz band)	Complied
Part 15.407(a)(3)(i)	Transmitter Maximum Conducted Output Power (5.725-5.85 GHz band)	Complied
Part 15.407(a)(1)(iv)	Transmitter Maximum Power Spectral Density (5.15-5.25 GHz band)	Complied
Part 15.407(a)(3)(i)	Transmitter Maximum Power Spectral Density (5.725-5.85 GHz band)	Complied
Part 15.407(b) & 15.209(a)	Transmitter Out of Band Radiated Emissions	Complied
Part 15.407(b) & 15.209(a)	Transmitter Band Edge Radiated Emissions	Complied
Part 15.407(g)	Transmitter Frequency Stability (Temperature & Voltage Variation)	Note 2

Note(s):

1. The measurement was performed to assist in the calculation of the level of average output power, power spectral density and emissions as the EUT employs pulsed operation.
2. Frequency stability is better than 20 ppm which ensures that the signal remains in the allocated bands under all operational conditions stated in the user manual.

1.4 Deviations from the Test Specification

For the measurements contained within this test report, there were no deviations from, additions to, or exclusions from the test specifications identified above.

2 Summary of Testing

2.1 Facilities and Accreditation

The test site and measurement facilities used to collect data are located at Unit 3 Horizon, Wade Road, Kingsland Business Park, Basingstoke, Hampshire, RG24 8AH, United Kingdom. The following table identifies which facilities were utilised for radiated emission measurements documented in this report. Specific facilities are also identified in the test results sections.

Site 1	X
Site 2	-
Site 17	X
Site 32	-
Site 33	-

UL International (UK) Ltd is accredited by the United Kingdom Accreditation Service (UKAS). UKAS is one of the signatories to the International Laboratory Accreditation Co-operation (ILAC) Arrangement for the mutual recognition of test reports. The tests reported herein have been performed in accordance with its terms of accreditation.

2.2 Methods and Procedures

Reference:	ANSI C63.10-2013
Title:	American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices
Reference:	KDB 789033 D02 General U-NII Test Procedures New Rules v02r01 December 14, 2017
Title:	Guidelines for Compliance Testing of Unlicensed National Information Infrastructure (U-NII) Devices (Part 15, Subpart E)
Reference:	KDB 662911 D01 Multiple Transmitter Output v02r01 October 31, 2013
Title:	Emissions Testing of Transmitters with Multiple Outputs in the Same Band

2.3 Calibration and Uncertainty

Measuring Instrument Calibration

In accordance with UKAS requirements all the measurement equipment is on a calibration schedule. All equipment was within the calibration period on the date of testing.

Measurement Uncertainty & Decision Rule

Overview

No measurement or test can ever be perfect and the imperfections give rise to error of measurement in the results. Consequently the result of a measurement is only an approximation to the value of the measurand (the specific quantity subject to measurement) and is only complete when accompanied by a statement of the uncertainty of the approximation.

The expression of uncertainty of a measurement result allows realistic comparison of results with reference values and limits given in specifications and standards.

Decision Rule

Measurement system instrumentation shall be used with an accuracy specification meeting the accuracy specification limits according to IEC/IECEE OD-5014.

As applicable, unless specified otherwise in this quotation, the compliance "Decision Rule" is based on Simple Acceptance. If the measured value is on the limit, the result is defined as a pass. In this case the risk of a false positive is 50%. For further information regarding risk assessment refer to ILAC G8:09/2019.

Measurement Uncertainty

The reported expanded uncertainties below are based on a standard uncertainty multiplied by an appropriate coverage factor such that a confidence level of approximately 95% is maintained. For the purposes of this document "approximately" is interpreted as meaning "effectively" or "for most practical purposes".

Measurement Type	Range	Confidence Level (%)	Calculated Uncertainty
Duty Cycle	5.15 GHz to 5.850 GHz	95%	±1.39 %
26 dB Emission Bandwidth	5.15 GHz to 5.850 GHz	95%	±4.59 %
Minimum 6 dB Emission Bandwidth	5.15 GHz to 5.850 GHz	95%	±4.59 %
Maximum Conducted Output Power	5.15 GHz to 5.850 GHz	95%	±0.58 dB
Maximum Power Spectral Density	5.15 GHz to 5.850 GHz	95%	±1.13 dB
Radiated Spurious Emissions	9 kHz to 30 MHz	95%	±5.32 dB
Radiated Spurious Emissions	30 MHz to 1 GHz	95%	±3.30 dB
Radiated Spurious Emissions	1 GHz to 40 GHz	95%	±3.16 dB

The methods used to calculate the above uncertainties are in line with those recommended within the various measurement specifications. Where measurement specifications do not include guidelines for the evaluation of measurement uncertainty the published guidance of the appropriate accreditation body is followed.

2.4 Test and Measurement Equipment

Test Equipment Used for Transmitter Conducted Tests

Asset No.	Instrument	Manufacturer	Type No.	Serial No.	Date Calibration Due	Cal. Interval (Months)
M2071	Thermohygrometer	Testo	608-H1	45258132	08 Dec 2023	12
M231909	Signal Analyser	Keysight	N9020B	MY63430168	01 Dec 2023	12
A237326	Attenuator	Pasternack	PE7013-10	#17	Calibrated before use	-
A237327	Attenuator	Pasternack	PE7013-10	#18	Calibrated before use	-
M2019	Power Sensor	Boonton	RTP5006	10078	20 Mar 2024	12
M2020	Power Sensor	Boonton	RTP5006	9970	17 Mar 2024	12
A231993	Switching Unit	Mini-Circuits	ZT-400	12211020014	Calibrated before use	-
M1725	Network Analyser	Keysight	E5071C	MY46316169	09 Nov 2023	12

Test Measurement Software/Firmware Used

Name	Version	Release Date
Phoenix	1.5.1	16/10/2023

Test and Measurement Equipment (continued)**Test Equipment Used for Transmitter Radiated Emissions**

Asset No.	Instrument	Manufacturer	Type No.	Serial No.	Date Calibration Due	Cal. Interval (Months)
M2040	Thermohygrometer	Testo	608-H1	45124934	09 Dec 2023	12
K0001	3m RSE Chamber	Rainford EMC	N/A	N/A	06 Sep 2024	12
M236226	Test Receiver	Rohde & Schwarz	ESW26	103134	21 Apr 2024	12
A3165	Magnetic Loop Antenna	ETS-Lindgren	6502	00224383	13 Apr 2024	12
A3179	Pre-Amplifier	Hewlett Packard	8449B	3008A00934	21 Aug 2024	12
A2523	Attenuator	AtlanTecRF	AN18W5-10	832827#1	26 Jan 2024	12
A3138	Antenna	Schwarzbeck	BBHA 9120 B	00702	23 Aug 2024	12
M2003	Thermohygrometer	Testo	608-H1	45046641	09 Dec 2023	12
K0017	3m RSE Chamber	Rainford EMC	N/A	N/A	08 Nov 2023	12
M1995	Test Receiver	Rohde & Schwarz	ESU40	100428	02 Nov 2023	12
A3167	Pre-Amplifier	Com-Power	PAM-103	18020010	31 Oct 2024	12
A2863	Pre-Amplifier	Agilent	8449B	3008A02100	07 Nov 2023	12
A223628	Pre-Amplifier	Atlantic Microwave	A-LNAKX-380116-S5S5	210837001	03 Nov 2023	12
A3265	Pre-Amplifier	Schwarzbeck	BBV 9721	9721-069	31 Oct 2023	12
A3161	Antenna	Teseq	CBL6111D	50859	25 Sep 2024	12
A2889	Antenna	Schwarzbeck	BBHA 9120 B	00653	02 Nov 2023	12
A2890	Antenna	Schwarzbeck	HWRD 750	014	02 Nov 2023	12
A2892	Antenna	Schwarzbeck	BBHA 9170	9170-727	31 Oct 2023	12
A2916	Attenuator	AtlanTecRF	AN18W5-10	832827#2	25 Jan 2024	12
A3036	Low Pass Filter	AtlanTecRF	AFL-02000	15062902848	25 Jan 2024	12
A212038	High Pass Filter	Micro-Tronics	HPS20723	004	25 Jan 2024	12
A2947	High Pass Filter	AtlanTecRF	AFH-07000	1601900001	25 Jan 2024	12
A2474	Band Reject Filter	Wainwright	WRCJV8-5665-5725-5850-5910-50SS	1	10 Nov 2024	24
A2471	Band Pass Filter	Wainwright	WRCJV8-5100-5150-5250-5300-50SS	1	10 Nov 2024	24

Test and Measurement Equipment (continued)**Test Equipment Used for Transmitter Band Edge Radiated Emissions**

Asset No.	Instrument	Manufacturer	Type No.	Serial No.	Date Calibration Due	Cal. Interval (Months)
M2003	Thermohygrometer	Testo	608-H1	45124926	09 Dec 2023	12
K0017	3m RSE Chamber	Rainford EMC	N/A	N/A	08 Nov 2023	12
M1995	Test Receiver	Rohde & Schwarz	ESU40	100428	02 Nov 2023	12
A2863	Pre-Amplifier	Agilent	8449B	3008A02100	07 Nov 2023	12
A2889	Antenna	Schwarzbeck	BBHA 9120 B	00653	02 Nov 2023	12
A2916	Attenuator	AtlanTecRF	AN18W5-10	832827#2	25 Jan 2024	12

3 Equipment Under Test (EUT)

3.1 Identification of Equipment Under Test (EUT)

Brand Name:	Apple
Model Name or Number:	A3113
Test Sample Serial Number:	D6HCD7RY3W <i>(Conducted sample #1)</i>
Hardware Version:	REV 1.0
Software Version:	23A32770p
FCC ID:	BCGA3113
Date of Receipt:	12 October 2023

Brand Name:	Apple
Model Name or Number:	A3113
Test Sample Serial Number:	C6LTYQVMQ4 <i>(Radiated sample #1)</i>
Hardware Version:	REV 1.0
Software Version:	23A32770p
FCC ID:	BCGA3113
Date of Receipt:	17 August 2023

Brand Name:	Apple
Model Name or Number:	A3113
Test Sample Serial Number:	T2HJWP7F92 <i>(Radiated sample #2)</i>
Hardware Version:	REV 1.0
Software Version:	23A32771a
FCC ID:	BCGA3113
Date of Receipt:	19 September 2023

3.2 Modifications Incorporated in the EUT

No modifications were applied to the EUT during testing.

3.3 Additional Information Related to Testing

Technology Tested:	NarrowBand FHSS		
Type of Unit:	Transceiver		
Mode:	Basic Rate	High Data Rate	
Modulation:	GFSK	$\pi/4$ -DQPSK	
Packet Type (Maximum Payload):	DH5	4DH5	8DH5
Data Rate (Mbps):	1	4	8
Power Supply Requirement:	12 VDC via 120 VAC 60 Hz adaptor		
Maximum Conducted Output Power:	DH5	12.71 dBm	
	4DH5	16.78 dBm	
	8DH5	16.43 dBm	
Channel Bandwidth(s):	1, 2 & 4 MHz		
Transmit Frequency Range:	5150 MHz to 5250 MHz		
Transmit Channels Tested:	Channel ID	Channel Frequency (MHz)	
	Bottom	5162	
	Middle	5203	
	Top	5245	
Transmit Frequency Range:	5725 MHz to 5850 MHz		
Transmit Channels Tested:	Channel ID	Channel Frequency (MHz)	
	Bottom	5733	
	Middle	5788	
	Top	5844	

3.4 Description of Available Antennas

The radio utilizes two integrated antennas, with the following maximum gains:

Antenna Port	Frequency Range (MHz)	Antenna Gain (dBi)
Core 0	5150 to 5250	7.17
	5725 to 5850	7.48
Core 1	5150 to 5250	4.67
	5725 to 5850	6.01

The EUT also supports TxBF with unequal gains and equal transmit powers. Calculations for directional gain were in accordance with KDB 662911 D01 v02r01 Section F2)d)(i). Directional gain of Core 0 & Core 1 was calculated as:

Frequency Band 5150-5250 MHz

$N_{SS}=1$, $N_{ANT}=2$, $G_1 = G_{Core\ 0} = 7.17$ dBi, $G_2 = G_{Core\ 1} = 4.67$ dBi:

$$\begin{aligned}
 \text{Directional Gain} &= 10 \log \left[\frac{10^{\frac{G_1}{10}} + 10^{\frac{G_2}{10}} + \dots + 10^{\frac{G_N}{10}}}{N} \right] = 10 \log \left[\frac{10^{\frac{7.17}{10}} + 10^{\frac{4.67}{10}}}{2} \right] \\
 &= 10 \log \left[\frac{10^{0.717} + 10^{0.467}}{2} \right] = 9.02 \text{ dBi}
 \end{aligned}$$

Frequency Band 5725-5850 MHz

$N_{SS}=1$, $N_{ANT}=2$, $G_1 = G_{Core\ 0} = 7.48$ dBi, $G_2 = G_{Core\ 1} = 6.01$ dBi:

$$\begin{aligned}
 \text{Directional Gain} &= 10 \log \left[\frac{10^{\frac{G_1}{10}} + 10^{\frac{G_2}{10}} + \dots + 10^{\frac{G_N}{10}}}{N} \right] = 10 \log \left[\frac{10^{\frac{7.48}{10}} + 10^{\frac{6.01}{10}}}{2} \right] \\
 &= 10 \log \left[\frac{10^{0.748} + 10^{0.601}}{2} \right] = 9.79 \text{ dBi}
 \end{aligned}$$

3.5 Description of Test Setup

Support Equipment

The following support equipment was used to exercise the EUT during testing:

Description:	Test Laptop
Brand Name:	Apple
Model Name or Number:	MacBook Pro
Serial Number:	C02TN00GJ489

Description:	USB Diagnostic Cable
Brand Name:	Apple
Model Name or Number:	Chimp
Serial Number:	4391CD

Description:	Test Laptop
Brand Name:	Apple
Model Name or Number:	MacBook Pro
Serial Number:	FVFDH03JQ05G

Description:	Test Laptop
Brand Name:	Apple
Model Name or Number:	MacBook Pro
Serial Number:	C02C800FP0CW

Description:	USB Diagnostic Cable
Brand Name:	Apple
Model Name or Number:	Chimp
Serial Number:	30A99B

Description:	USB Diagnostic Cable
Brand Name:	Apple
Model Name or Number:	Chimp
Serial Number:	428CEB

Description:	AC to DC Power Adaptor
Brand Name:	Apple
Model Name or Number:	A2164
Serial Number:	Not marked or stated

Support Equipment (continued)

Description:	USB-C Dock Termination Hub
Brand Name:	Lenovo
Model Name or Number:	LDC-G2
Serial Number:	ZKW1XQRO

Description:	Personal Hands Free
Brand Name:	Not marked or stated
Model Name or Number:	Not marked or stated
Serial Number:	Not marked or stated

Description:	USB C-A Adaptor. Quantity 2.
Brand Name:	Not marked or stated
Model Name or Number:	Not marked or stated
Serial Number:	Not marked or stated

Description:	USB-A Cable. Quantity 2. Length 3 m
Brand Name:	Not marked or stated
Model Name or Number:	Not marked or stated
Serial Number:	Not marked or stated

Operating Modes

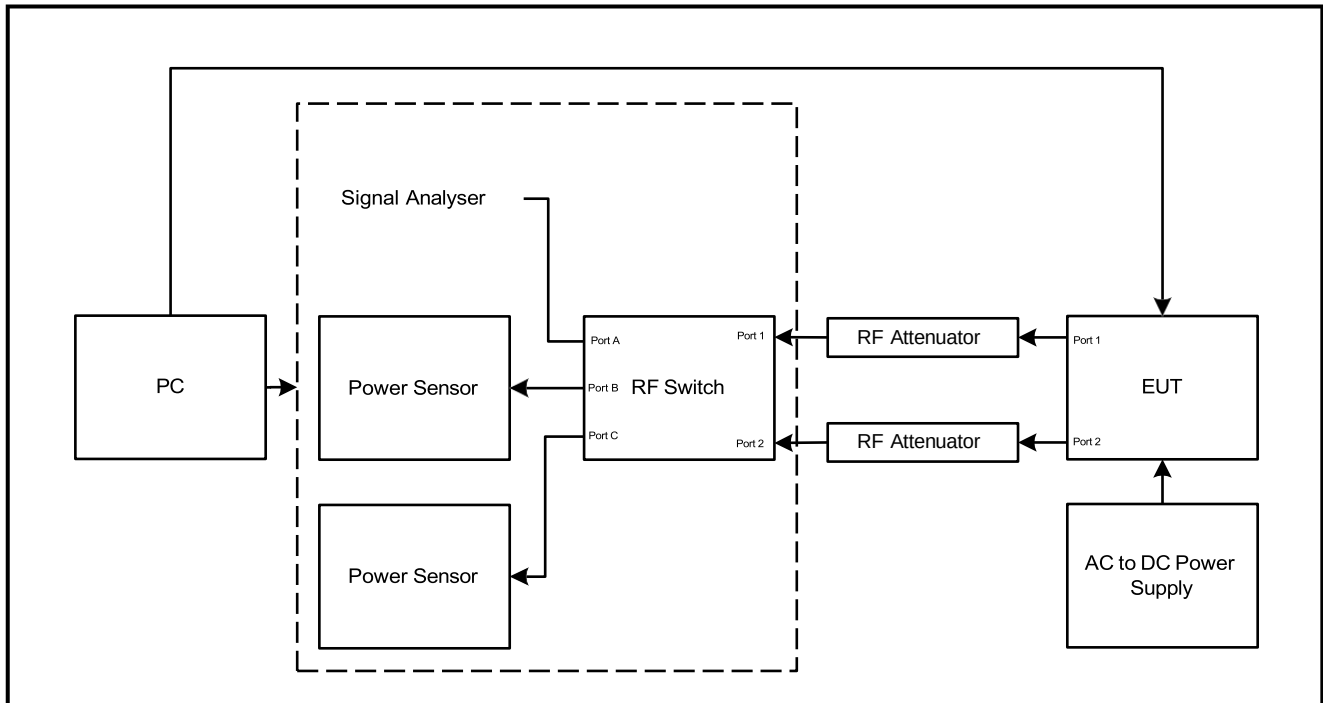
The EUT was tested in the following operating mode(s):

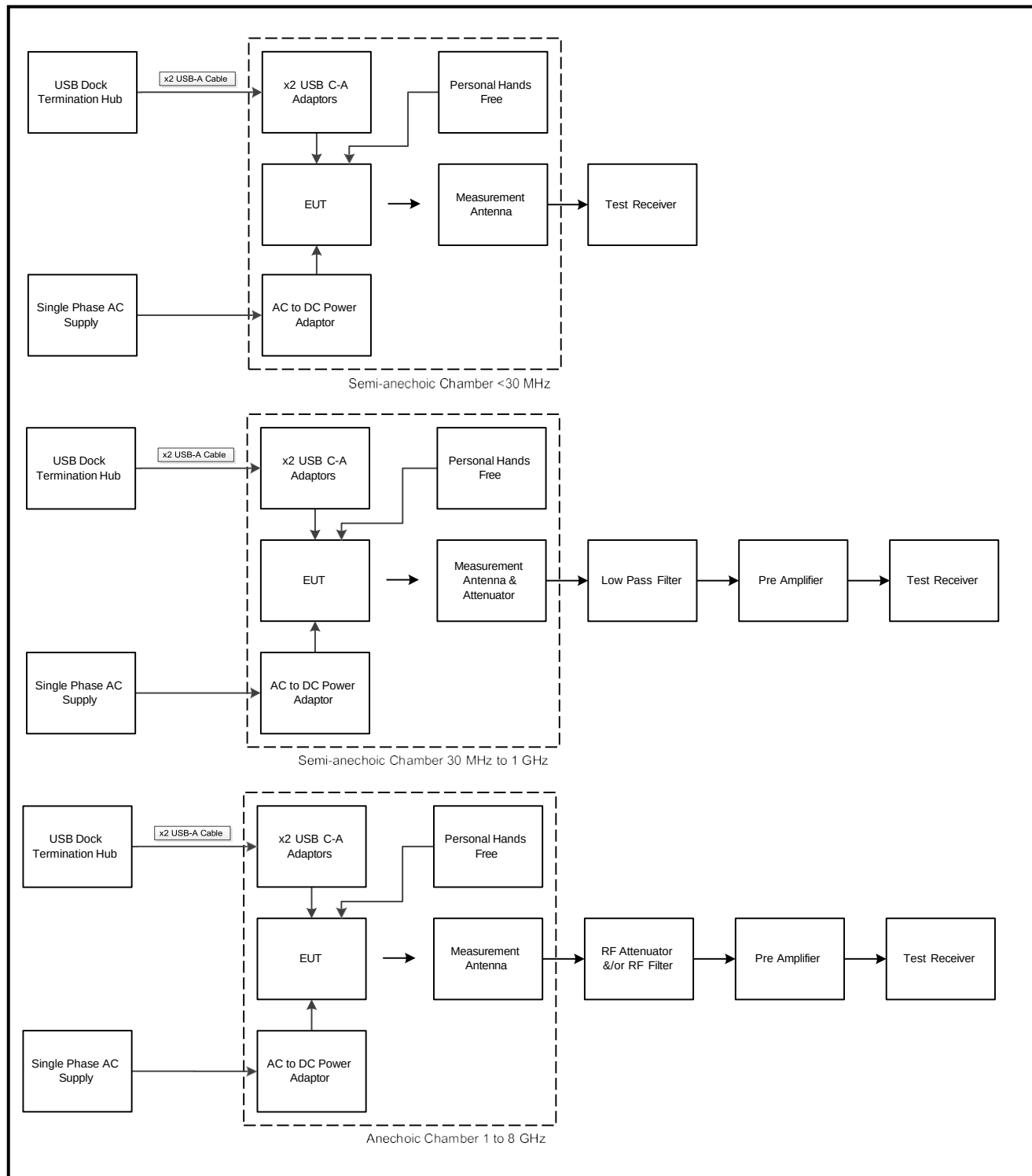
- Continuously transmitting with a modulated carrier at maximum power on the bottom, middle and top channels as required using the supported packet types.
- Transmitting on Core 0 or Core 1 in SISO configuration or Core 0 + Core 1 in Transmitter Beamforming configuration, on either the iPA or ePA path.

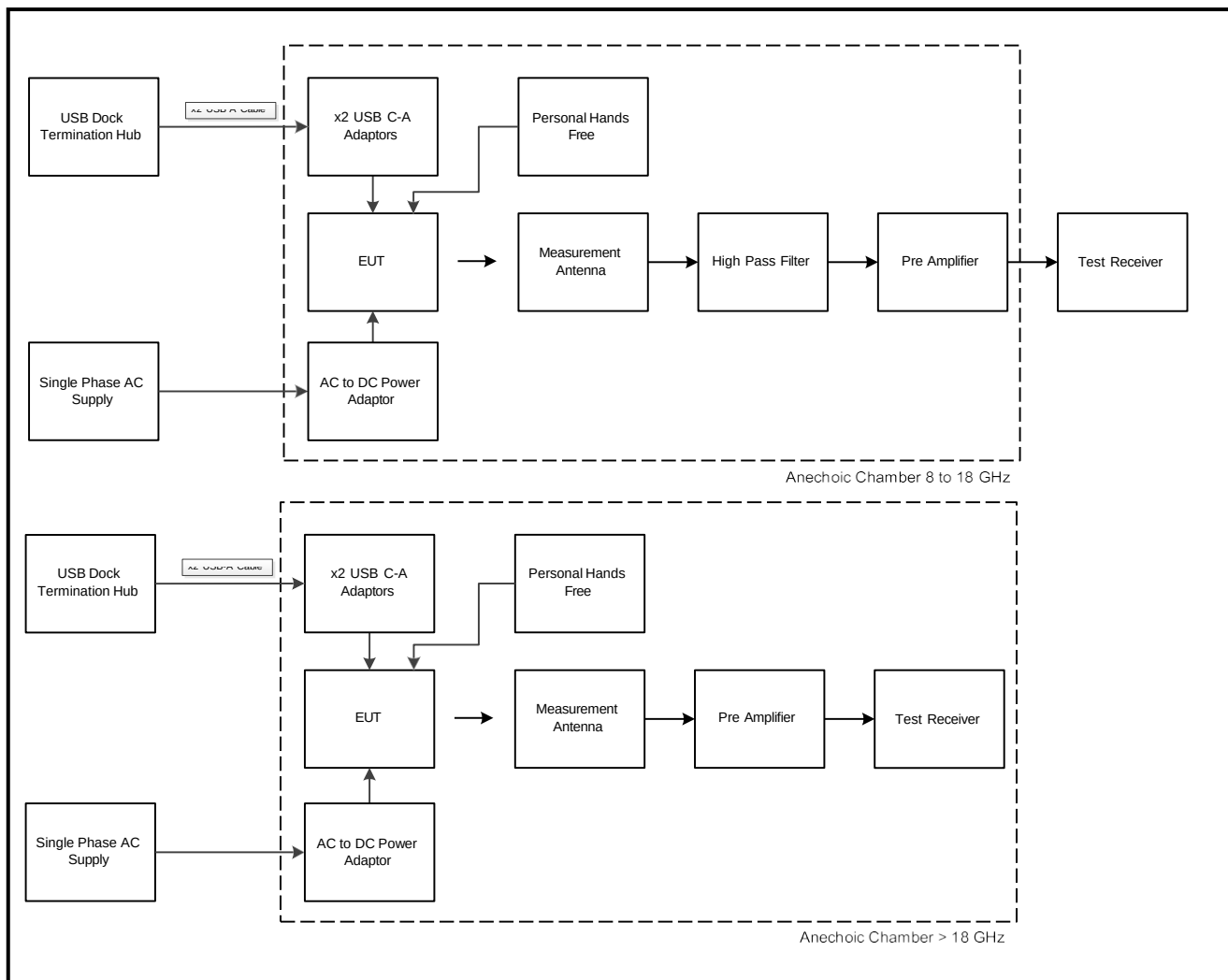
Configuration and Peripherals

The EUT was tested in the following configuration(s):

- A test laptop with the customer's test application was used to place the EUT into NarrowBand test mode. The application was used to enable continuous transmission and to select the test channels & packet types as required.
- The customer supplied U.FL RF cables with the EUT in order to perform conducted measurements. The measured additional path loss was included in any path loss calculations.
- The EUT was powered from a 120 VAC 60 Hz single phase mains supply.
- Transmitter radiated spurious emissions tests were performed with the EUT transmitting in 4DH5 Beamforming / Core 0 + Core 1 / ePA, as this mode was found to transmit the highest output power.
- Radiated band edge and spurious emissions were performed with the EUT in the normal position of operation. Tests were performed with the EUT connected to its AC to DC power adaptor, PHF and USB adaptors. All ports were terminated with suitable terminations.

Test Setup Diagrams**Conducted Tests:****Test Setup for Conducted Tests**

Test Setup Diagrams (continued)**Radiated Tests:****Test Setup for Transmitter Radiated Emissions**

Test Setup Diagrams (continued)**Test Setup for Transmitter Radiated Emissions (continued)**

4 Antenna Port Test Results

4.1 Transmitter 26 dB Emission Bandwidth

Test Summary:

Test Engineer:	Luis Pazos Perez	Test Dates:	19 October 2023 & 01 November 2023
Test Sample Serial Number:	D6HCD7RY3W		

Environmental Conditions:

Temperature (°C):	19 to 22
Relative Humidity (%):	45 to 47

Note(s):

1. The signal analyser's resolution bandwidth was set to approximately 1% of the measured 26 dB emission bandwidth.
2. Example plots of each modulation on middle channel, for one antenna configuration, can be seen below to show setting parameters comply with testing method/procedure. All other plots are archived on the UL IT server and available for inspection if required.

Transmitter 26 dB Emission Bandwidth (5.15-5.25 GHz band) (continued)**4.1.1 5.15-5.25 GHz band****Results: iPA**

Frequency Range:	5.150-5.250 GHz	Band:	U-NII-1
Limit Clause:	15.403	Test Method:	KDB 789033 D02 Section II.C.1.

Antenna Configuration:	SISO	Mode:	iPA - BDR
Test Port:	1 (Core 0)	Modulation/Rate:	DH5 (GFSK)

Test Frequency (MHz)	26 dB Bandwidth (MHz)				Limit (kHz)
	1	2	3	4	
5162	1.248	-	-	-	-
5203	1.252	-	-	-	-
5245	1.248	-	-	-	-



Middle Channel

Transmitter 26 dB Emission Bandwidth (5.15-5.25 GHz band) (continued)

Frequency Range:	5.150-5.250 GHz	Band:	U-NII-1
Limit Clause:	15.403	Test Method:	KDB 789033 D02 Section II.C.1.

Antenna Configuration:	SISO	Mode:	iPA - HDR
Test Port:	1 (Core 0)	Rate/Modulation:	4-DH5 ($\pi/4$ DQPSK)

Test Frequency (MHz)	26 dB Bandwidth (MHz)				Limit (kHz)
	1	2	3	4	
5162	2.752	-	-	-	-
5203	2.760	-	-	-	-
5245	2.760	-	-	-	-



Middle Channel

Transmitter 26 dB Emission Bandwidth (5.15-5.25 GHz band) (continued)

Frequency Range:	5.150-5.250 GHz	Band:	U-NII-1
Limit Clause:	15.403	Test Method:	KDB 789033 D02 Section II.C.1.

Antenna Configuration:	SISO	Mode:	iPA - HDR
Test Port:	1 (Core 0)	Rate/Modulation:	8-DH5 ($\pi/4$ DQPSK)

Test Frequency (MHz)	26 dB Bandwidth (MHz)				Limit (kHz)
	1	2	3	4	
5162	5.730	-	-	-	-
5203	5.730	-	-	-	-
5245	5.730	-	-	-	-



Middle Channel

Transmitter 26 dB Emission Bandwidth (5.15-5.25 GHz band) (continued)

Frequency Range:	5.150-5.250 GHz	Band:	U-NII-1
Limit Clause:	15.403	Test Method:	KDB 789033 D02 Section II.C.1.

Antenna Configuration:	SISO	Mode:	iPA - BDR
Test Port:	2 (Core 1)	Rate/Modulation:	DH5 (GFSK)

Test Frequency (MHz)	26 dB Bandwidth (MHz)				Limit (kHz)
	1	2	3	4	
5162	-	1.252	-	-	-
5203	-	1.248	-	-	-
5245	-	1.248	-	-	-

Frequency Range:	5.150-5.250 GHz	Band:	U-NII-1
Limit Clause:	15.403	Test Method:	KDB 789033 D02 Section II.C.1.

Antenna Configuration:	SISO	Mode:	iPA - HDR
Test Port:	2 (Core 1)	Rate/Modulation:	4-DH5 ($\pi/4$ DQPSK)

Test Frequency (MHz)	26 dB Bandwidth (MHz)				Limit (kHz)
	1	2	3	4	
5162	-	2.760	-	-	-
5203	-	2.768	-	-	-
5245	-	2.752	-	-	-

Frequency Range:	5.150-5.250 GHz	Band:	U-NII-1
Limit Clause:	15.403	Test Method:	KDB 789033 D02 Section II.C.1.

Antenna Configuration:	SISO	Mode:	iPA - HDR
Test Port:	2 (Core 1)	Rate/Modulation:	8-DH5 ($\pi/4$ DQPSK)

Test Frequency (MHz)	26 dB Bandwidth (MHz)				Limit (kHz)
	1	2	3	4	
5162	-	5.715	-	-	-
5203	-	5.745	-	-	-
5245	-	5.745	-	-	-

Transmitter 26 dB Emission Bandwidth (5.15-5.25 GHz band) (continued)

Frequency Range:	5.150-5.250 GHz	Band:	U-NII-1
Limit Clause:	15.403	Test Method:	KDB 789033 D02 Section II.C.1.

Antenna Configuration:	Beamforming	Mode:	iPA - BDR
Test Port:	1+2 (Core 0 + Core 1)	Rate/Modulation:	DH5 (GFSK)

Test Frequency (MHz)	26 dB Bandwidth (MHz)				Limit (kHz)
	1	2	3	4	
5162	1.248	1.248	-	-	-
5203	1.252	1.248	-	-	-
5245	1.248	1.248	-	-	-

Frequency Range:	5.150-5.250 GHz	Band:	U-NII-1
Limit Clause:	15.403	Test Method:	KDB 789033 D02 Section II.C.1.

Antenna Configuration:	Beamforming	Mode:	iPA - HDR
Test Port:	1+2 (Core 0 + Core 1)	Rate/Modulation:	4-DH5 ($\pi/4$ DQPSK)

Test Frequency (MHz)	26 dB Bandwidth (MHz)				Limit (kHz)
	1	2	3	4	
5162	2.752	2.752	-	-	-
5203	2.752	2.760	-	-	-
5245	2.752	2.752	-	-	-

Frequency Range:	5.150-5.250 GHz	Band:	U-NII-1
Limit Clause:	15.403	Test Method:	KDB 789033 D02 Section II.C.1.

Antenna Configuration:	Beamforming	Mode:	iPA - HDR
Test Port:	1+2 (Core 0 + Core 1)	Rate/Modulation:	8-DH5 ($\pi/4$ DQPSK)

Test Frequency (MHz)	26 dB Bandwidth (MHz)				Limit (kHz)
	1	2	3	4	
5162	5.730	5.730	-	-	-
5203	5.730	5.730	-	-	-
5245	5.715	5.730	-	-	-

Transmitter 26 dB Emission Bandwidth (5.15-5.25 GHz band) (continued)**Results: ePA**

Frequency Range:	5.150-5.250 GHz	Band:	U-NII-1
Limit Clause:	15.403	Test Method:	KDB 789033 D02 Section II.C.1.

Antenna Configuration:	SISO	Mode:	ePA - HDR
Test Port:	1 (Core 0)	Rate/Modulation:	4-DH5 ($\pi/4$ DQPSK)

Test Frequency (MHz)	26 dB Bandwidth (MHz)				Limit (kHz)
	1	2	3	4	
5162	2.752	-	-	-	-
5203	2.752	-	-	-	-
5245	2.752	-	-	-	-

Frequency Range:	5.150-5.250 GHz	Band:	U-NII-1
Limit Clause:	15.403	Test Method:	KDB 789033 D02 Section II.C.1.

Antenna Configuration:	SISO	Mode:	ePA - HDR
Test Port:	1 (Core 0)	Rate/Modulation:	8-DH5 ($\pi/4$ DQPSK)

Test Frequency (MHz)	26 dB Bandwidth (MHz)				Limit (kHz)
	1	2	3	4	
5162	5.730	-	-	-	-
5203	5.715	-	-	-	-
5245	5.730	-	-	-	-

Frequency Range:	5.150-5.250 GHz	Band:	U-NII-1
Limit Clause:	15.403	Test Method:	KDB 789033 D02 Section II.C.1.

Antenna Configuration:	SISO	Mode:	ePA - HDR
Test Port:	2 (Core 1)	Rate/Modulation:	4-DH5 ($\pi/4$ DQPSK)

Test Frequency (MHz)	26 dB Bandwidth (MHz)				Limit (kHz)
	1	2	3	4	
5162	-	2.752	-	-	-
5203	-	2.752	-	-	-
5245	-	2.752	-	-	-

Transmitter 26 dB Emission Bandwidth (5.15-5.25 GHz band) (continued)

Frequency Range:	5.150-5.250 GHz	Band:	U-NII-1
Limit Clause:	15.403	Test Method:	KDB 789033 D02 Section II.C.1.

Antenna Configuration:	SISO	Mode:	ePA - HDR
Test Port:	2 (Core 1)	Rate/Modulation:	8-DH5 ($\pi/4$ DQPSK)

Test Frequency (MHz)	26 dB Bandwidth (MHz)				Limit (kHz)
	1	2	3	4	
5162	-	5.715	-	-	-
5203	-	5.715	-	-	-
5245	-	5.715	-	-	-

Frequency Range:	5.150-5.250 GHz	Band:	U-NII-1
Limit Clause:	15.403	Test Method:	KDB 789033 D02 Section II.C.1.

Antenna Configuration:	Beamforming	Mode:	ePA - HDR
Test Port:	1+2 (Core 0 + Core 1)	Rate/Modulation:	4-DH5 ($\pi/4$ DQPSK)

Test Frequency (MHz)	26 dB Bandwidth (MHz)				Limit (kHz)
	1	2	3	4	
5162	2.760	2.760	-	-	-
5203	2.784	2.760	-	-	-
5245	2.760	2.752	-	-	-

Frequency Range:	5.150-5.250 GHz	Band:	U-NII-1
Limit Clause:	15.403	Test Method:	KDB 789033 D02 Section II.C.1.

Antenna Configuration:	Beamforming	Mode:	ePA - HDR
Test Port:	1+2 (Core 0 + Core 1)	Rate/Modulation:	8-DH5 ($\pi/4$ DQPSK)

Test Frequency (MHz)	26 dB Bandwidth (MHz)				Limit (kHz)
	1	2	3	4	
5162	5.730	5.745	-	-	-
5203	5.730	5.700	-	-	-
5245	5.715	5.715	-	-	-

4.2 Transmitter Minimum 6 dB Bandwidth (5.725-5.85 GHz band)**Test Summary:**

Test Engineer:	Luis Pazos Perez	Test Dates:	19 October 2023 & 01 November 2023
Test Sample Serial Number:	D6HCD7RY3W		

Environmental Conditions:

Temperature (°C):	19 to 22
Relative Humidity (%):	45 to 47

Note(s):

1. The test receiver resolution bandwidth was set to 100 kHz and video bandwidth 300 kHz. A peak detector was used, sweep time was set to auto and the trace mode was Max Hold. The span was set to 4 MHz for DH5, 8 MHz for 4DH5 and 15 MHz for 8DH5. The bandwidth was measured at 6 dB down from the peak of the signal.
2. Example plots of each modulation on middle channel, for one antenna configuration, can be seen below to show setting parameters comply with testing method/procedure. All other plots are archived on the UL IT server and available for inspection if required.

Transmitter Minimum 6 dB Bandwidth (5.725-5.85 GHz band) (continued)**Results: iPA**

Frequency Range:	5.725-5.850 GHz	Band:	U-NII-3
Limit Clause:	15.407(e)	Test Method:	KDB 789033 D02 Section II.C.2.

Antenna Configuration:	SISO	Mode:	iPA - BDR
Test Port:	1 (Core 0)	Rate/Modulation:	DH5 (GFSK)

Test Frequency (MHz)	6 dB Bandwidth (MHz)				Limit (kHz)
	1	2	3	4	
5733	0.572	-	-	-	≥500.0
5788	0.572	-	-	-	≥500.0
5844	0.564	-	-	-	≥500.0



Middle Channel

Transmitter Minimum 6 dB Bandwidth (5.725-5.85 GHz band) (continued)

Frequency Range:	5.725-5.850 GHz	Band:	U-NII-3
Limit Clause:	15.407(e)	Test Method:	KDB 789033 D02 Section II.C.2.

Antenna Configuration:	SISO	Mode:	iPA - HDR
Test Port:	1 (Core 0)	Rate/Modulation:	4-DH5 ($\pi/4$ DQPSK)

Test Frequency (MHz)	6 dB Bandwidth (MHz)				Limit (kHz)
	1	2	3	4	
5733	2.112	-	-	-	≥ 500.0
5788	2.112	-	-	-	≥ 500.0
5844	2.112	-	-	-	≥ 500.0



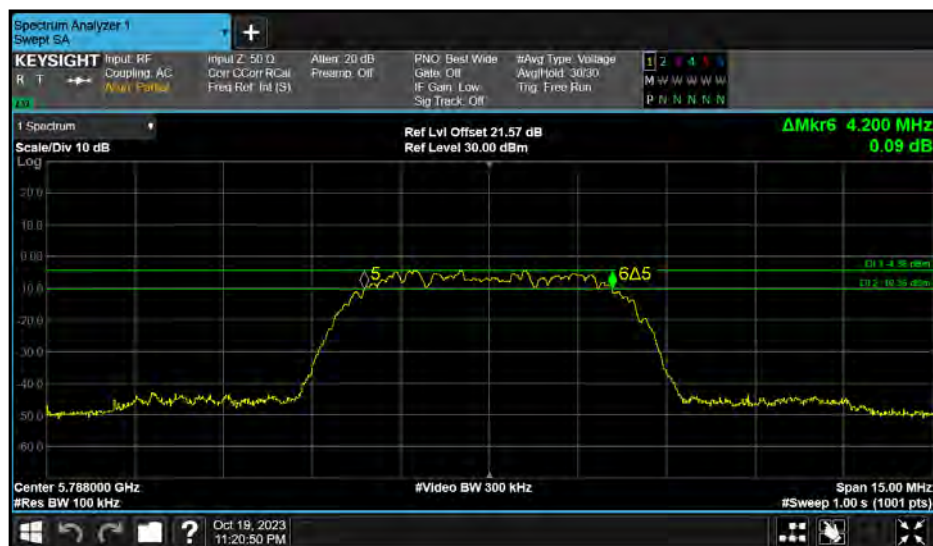
Middle Channel

Transmitter Minimum 6 dB Bandwidth (5.725-5.85 GHz band) (continued)

Frequency Range:	5.725-5.850 GHz	Band:	U-NII-3
Limit Clause:	15.407(e)	Test Method:	KDB 789033 D02 Section II.C.2.

Antenna Configuration:	SISO	Mode:	iPA - HDR
Test Port:	1 (Core 0)	Rate/Modulation:	8-DH5 ($\pi/4$ DQPSK)

Test Frequency (MHz)	6 dB Bandwidth (MHz)				Limit (kHz)
	1	2	3	4	
5733	4.200	-	-	-	≥ 500.0
5788	4.200	-	-	-	≥ 500.0
5844	4.200	-	-	-	≥ 500.0



Middle Channel

Transmitter Minimum 6 dB Bandwidth (5.725-5.85 GHz band) (continued)

Frequency Range:	5.725-5.850 GHz	Band:	U-NII-3
Limit Clause:	15.407(e)	Test Method:	KDB 789033 D02 Section II.C.2.

Antenna Configuration:	SISO	Mode:	iPA - BDR
Test Port:	2 (Core 1)	Rate/Modulation:	DH5 (GFSK)

Test Frequency (MHz)	6 dB Bandwidth (MHz)				Limit (kHz)
	1	2	3	4	
5733	-	0.560	-	-	≥500.0
5788	-	0.552	-	-	≥500.0
5844	-	0.556	-	-	≥500.0

Frequency Range:	5.725-5.850 GHz	Band:	U-NII-3
Limit Clause:	15.407(e)	Test Method:	KDB 789033 D02 Section II.C.2.

Antenna Configuration:	SISO	Mode:	iPA - HDR
Test Port:	2 (Core 1)	Rate/Modulation:	4-DH5 ($\pi/4$ DQPSK)

Test Frequency (MHz)	6 dB Bandwidth (MHz)				Limit (kHz)
	1	2	3	4	
5733	-	2.112	-	-	≥500.0
5788	-	2.112	-	-	≥500.0
5844	-	2.112	-	-	≥500.0

Frequency Range:	5.725-5.850 GHz	Band:	U-NII-3
Limit Clause:	15.407(e)	Test Method:	KDB 789033 D02 Section II.C.2.

Antenna Configuration:	SISO	Mode:	iPA - HDR
Test Port:	2 (Core 1)	Rate/Modulation:	8-DH5 ($\pi/4$ DQPSK)

Test Frequency (MHz)	6 dB Bandwidth (MHz)				Limit (kHz)
	1	2	3	4	
5733	-	4.200	-	-	≥500.0
5788	-	4.200	-	-	≥500.0
5844	-	4.200	-	-	≥500.0

Transmitter Minimum 6 dB Bandwidth (5.725-5.85 GHz band) (continued)

Frequency Range:	5.725-5.850 GHz	Band:	U-NII-3
Limit Clause:	15.407(e)	Test Method:	KDB 789033 D02 Section II.C.2.

Antenna Configuration:	Beamforming	Mode:	iPA - BDR
Test Port:	1+2 (Core 0 + Core 1)	Rate/Modulation:	DH5 (GFSK)

Test Frequency (MHz)	6 dB Bandwidth (MHz)				Limit (kHz)
	1	2	3	4	
5733	0.572	0.552	-	-	≥500.0
5788	0.572	0.544	-	-	≥500.0
5844	0.564	0.548	-	-	≥500.0

Frequency Range:	5.725-5.850 GHz	Band:	U-NII-3
Limit Clause:	15.407(e)	Test Method:	KDB 789033 D02 Section II.C.2.

Antenna Configuration:	Beamforming	Mode:	iPA - HDR
Test Port:	1+2 (Core 0 + Core 1)	Rate/Modulation:	4-DH5 ($\pi/4$ DQPSK)

Test Frequency (MHz)	6 dB Bandwidth (MHz)				Limit (kHz)
	1	2	3	4	
5733	2.112	2.112	-	-	≥500.0
5788	2.112	2.112	-	-	≥500.0
5844	2.112	2.112	-	-	≥500.0

Frequency Range:	5.725-5.850 GHz	Band:	U-NII-3
Limit Clause:	15.407(e)	Test Method:	KDB 789033 D02 Section II.C.2.

Antenna Configuration:	Beamforming	Mode:	iPA - HDR
Test Port:	1+2 (Core 0 + Core 1)	Rate/Modulation:	8-DH5 ($\pi/4$ DQPSK)

Test Frequency (MHz)	6 dB Bandwidth (MHz)				Limit (kHz)
	1	2	3	4	
5733	4.200	4.200	-	-	≥500.0
5788	4.200	4.200	-	-	≥500.0
5844	4.200	4.200	-	-	≥500.0

Transmitter Minimum 6 dB Bandwidth (5.725-5.85 GHz band) (continued)**Results: ePA**

Frequency Range:	5.725-5.850 GHz	Band:	U-NII-3
Limit Clause:	15.407(e)	Test Method:	KDB 789033 D02 Section II.C.2.

Antenna Configuration:	SISO	Mode:	ePA - HDR
Test Port:	1 (Core 0)	Rate/Modulation:	4-DH5 ($\pi/4$ DQPSK)

Test Frequency (MHz)	6 dB Bandwidth (MHz)				Limit (kHz)
	1	2	3	4	
5733	2.120	-	-	-	≥ 500.0
5788	2.112	-	-	-	≥ 500.0
5844	2.112	-	-	-	≥ 500.0

Frequency Range:	5.725-5.850 GHz	Band:	U-NII-3
Limit Clause:	15.407(e)	Test Method:	KDB 789033 D02 Section II.C.2.

Antenna Configuration:	SISO	Mode:	ePA - HDR
Test Port:	1 (Core 0)	Rate/Modulation:	8-DH5 ($\pi/4$ DQPSK)

Test Frequency (MHz)	6 dB Bandwidth (MHz)				Limit (kHz)
	1	2	3	4	
5733	4.200	-	-	-	≥ 500.0
5788	4.200	-	-	-	≥ 500.0
5844	4.200	-	-	-	≥ 500.0

Frequency Range:	5.725-5.850 GHz	Band:	U-NII-3
Limit Clause:	15.407(e)	Test Method:	KDB 789033 D02 Section II.C.2.

Antenna Configuration:	SISO	Mode:	ePA - HDR
Test Port:	2 (Core 1)	Rate/Modulation:	4-DH5 ($\pi/4$ DQPSK)

Test Frequency (MHz)	6 dB Bandwidth (MHz)				Limit (kHz)
	1	2	3	4	
5733	-	2.112	-	-	≥ 500.0
5788	-	2.112	-	-	≥ 500.0
5844	-	2.112	-	-	≥ 500.0

Transmitter Minimum 6 dB Bandwidth (5.725-5.85 GHz band) (continued)

Frequency Range:	5.725-5.850 GHz	Band:	U-NII-3
Limit Clause:	15.407(e)	Test Method:	KDB 789033 D02 Section II.C.2.

Antenna Configuration:	SISO	Mode:	ePA - HDR
Test Port:	2 (Core 1)	Rate/Modulation:	8-DH5 ($\pi/4$ DQPSK)

Test Frequency (MHz)	6 dB Bandwidth (MHz)				Limit (kHz)
	1	2	3	4	
5733	-	4.200	-	-	≥ 500.0
5788	-	4.185	-	-	≥ 500.0
5844	-	4.200	-	-	≥ 500.0

Frequency Range:	5.725-5.850 GHz	Band:	U-NII-3
Limit Clause:	15.407(e)	Test Method:	KDB 789033 D02 Section II.C.2.

Antenna Configuration:	Beamforming	Mode:	ePA - HDR
Test Port:	1+2 (Core 0 + Core 1)	Rate/Modulation:	4-DH5 ($\pi/4$ DQPSK)

Test Frequency (MHz)	6 dB Bandwidth (MHz)				Limit (kHz)
	1	2	3	4	
5733	2.120	2.112	-	-	≥ 500.0
5788	2.120	2.112	-	-	≥ 500.0
5844	2.112	2.112	-	-	≥ 500.0

Frequency Range:	5.725-5.850 GHz	Band:	U-NII-3
Limit Clause:	15.407(e)	Test Method:	KDB 789033 D02 Section II.C.2.

Antenna Configuration:	Beamforming	Mode:	ePA - HDR
Test Port:	1+2 (Core 0 + Core 1)	Rate/Modulation:	8-DH5 ($\pi/4$ DQPSK)

Test Frequency (MHz)	6 dB Bandwidth (MHz)				Limit (kHz)
	1	2	3	4	
5733	4.200	4.185	-	-	≥ 500.0
5788	4.200	4.200	-	-	≥ 500.0
5844	4.200	4.200	-	-	≥ 500.0

4.3 Transmitter Maximum Conducted Output Power

4.3.1 5.15-5.25 GHz band

Test Summary:

Test Engineer:	Luis Pazos Perez	Test Dates:	19 October 2023 & 01 November 2023
Test Sample Serial Number:	D6HCD7RY3W		

Environmental Conditions:

Temperature (°C):	19 to 22
Relative Humidity (%):	45 to 56

Note(s):

1. Measurements were performed in accordance with FCC KDB 789033 II.E.3.b) Method PM-G using a wideband gated RF average power meter only during the ON time of the transmitter, therefore no duty cycle corrections calculations were required.
2. The Part 15.407(a)(1)(iv) limit shall not exceed 250 mW (24.0 dBm).
3. For Beamforming modes, conducted power was measured on both ports and then combined using the measure-and-sum method stated in FCC KDB 662911 D01 Section E)1).
4. For details on antenna gains refer to Section 3.4 of this test report.
5. For SISO Core 0 and Beamforming modes of operation, the antenna gain is > 6 dBi. In accordance with Part 15.407(a)(1)(iv), the limit was reduced by the amount in dB the antenna gain exceeds 6 dBi. Therefore the limit of 24.0 dBm has been reduced by using the following calculation:

$$\begin{aligned} \text{SISO / Core 0: } 24 \text{ dBm} - 1.17 \text{ dB} &= 22.83 \text{ dBm} \\ \text{Beamforming / Core 0 + Core 1: } 24 \text{ dBm} - 3.02 \text{ dB} &= 20.98 \text{ dBm} \end{aligned}$$

Transmitter Maximum Conducted Output Power (5.15-5.25 GHz band) (continued)**Results: iPA**

Frequency Range:	5.150-5.250 GHz	Band:	U-NII-1
Limit Clause:	15.407 (a) (1)(iv)	Test Method:	KDB 789033 D02 Section II.E.3.b)

Antenna Configuration:	SISO	Mode:	iPA - BDR
Test Port:	1 (Core 0)	Rate/Modulation:	DH5 (GFSK)

Burst Tx	Stability: < ±2%	Duty Cycle (%): 77.00	Period (ms): 3.750	Width (ms): 2.887
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Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Antenna Gain (dBi)	Limit (dBm)	Margin (dB)
	1	2	3	4	Σ			
5162	8.26	-	-	-	-	7.17	22.83	14.57
5203	8.48	-	-	-	-	7.17	22.83	14.35
5245	8.23	-	-	-	-	7.17	22.83	14.60

Frequency Range:	5.150-5.250 GHz	Band:	U-NII-1
Limit Clause:	15.407 (a) (1)(iv)	Test Method:	KDB 789033 D02 Section II.E.3.b)

Antenna Configuration:	SISO	Mode:	iPA - HDR
Test Port:	1 (Core 0)	Rate/Modulation:	4-DH5 (π/4 DQPSK)

Constant Tx	Stability: < ±2%	Duty Cycle (%): 100.00	Period (ms): -	Width (ms): -
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Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Antenna Gain (dBi)	Limit (dBm)	Margin (dB)
	1	2	3	4	Σ			
5162	3.13	-	-	-	-	7.17	22.83	19.70
5203	3.17	-	-	-	-	7.17	22.83	19.66
5245	3.12	-	-	-	-	7.17	22.83	19.71

Transmitter Maximum Conducted Output Power (5.15-5.25 GHz band) (continued)

Frequency Range:	5.150-5.250 GHz	Band:	U-NII-1
Limit Clause:	15.407 (a) (1)(iv)	Test Method:	KDB 789033 D02 Section II.E.3.b)

Antenna Configuration:	SISO	Mode:	iPA - HDR
Test Port:	1 (Core 0)	Rate/Modulation:	8-DH5 ($\pi/4$ DQPSK)

Constant Tx	Stability: < $\pm 2\%$	Duty Cycle (%): 100.00	Period (ms): -	Width (ms): -
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Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Antenna Gain (dBi)	Limit (dBm)	Margin (dB)
	1	2	3	4	Σ			
5162	3.21	-	-	-	-	7.17	22.83	19.62
5203	3.24	-	-	-	-	7.17	22.83	19.59
5245	3.19	-	-	-	-	7.17	22.83	19.64

Frequency Range:	5.150-5.250 GHz	Band:	U-NII-1
Limit Clause:	15.407 (a) (1)(iv)	Test Method:	KDB 789033 D02 Section II.E.3.b)

Antenna Configuration:	SISO	Mode:	iPA - BDR
Test Port:	2 (Core 1)	Rate/Modulation:	DH5 (GFSK)

Burst Tx	Stability: < $\pm 2\%$	Duty Cycle (%): 77.00	Period (ms): 3.750	Width (ms): 2.887
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Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Antenna Gain (dBi)	Limit (dBm)	Margin (dB)
	1	2	3	4	Σ			
5162	-	9.66	-	-	-	4.67	24.00	14.34
5203	-	9.95	-	-	-	4.67	24.00	14.05
5245	-	9.85	-	-	-	4.67	24.00	14.15

Transmitter Maximum Conducted Output Power (5.15-5.25 GHz band) (continued)

Frequency Range:	5.150-5.250 GHz	Band:	U-NII-1
Limit Clause:	15.407 (a) (1)(iv)	Test Method:	KDB 789033 D02 Section II.E.3.b)

Antenna Configuration:	SISO	Mode:	iPA - HDR
Test Port:	2 (Core 1)	Rate/Modulation:	4-DH5 ($\pi/4$ DQPSK)

Constant Tx	Stability: < $\pm 2\%$	Duty Cycle (%): 100.00	Period (ms): -	Width (ms): -
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Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Antenna Gain (dBi)	Limit (dBm)	Margin (dB)
	1	2	3	4	Σ			
5162	-	3.15	-	-	-	4.67	24.00	20.85
5203	-	3.22	-	-	-	4.67	24.00	20.78
5245	-	3.09	-	-	-	4.67	24.00	20.91

Frequency Range:	5.150-5.250 GHz	Band:	U-NII-1
Limit Clause:	15.407 (a) (1)(iv)	Test Method:	KDB 789033 D02 Section II.E.3.b)

Antenna Configuration:	SISO	Mode:	iPA - HDR
Test Port:	2 (Core 1)	Rate/Modulation:	8-DH5 ($\pi/4$ DQPSK)

Constant Tx	Stability: < $\pm 2\%$	Duty Cycle (%): 100.00	Period (ms): -	Width (ms): -
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Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Antenna Gain (dBi)	Limit (dBm)	Margin (dB)
	1	2	3	4	Σ			
5162	-	3.06	-	-	-	4.67	24.00	20.94
5203	-	3.29	-	-	-	4.67	24.00	20.71
5245	-	3.08	-	-	-	4.67	24.00	20.92

Transmitter Maximum Conducted Output Power (5.15-5.25 GHz band) (continued)

Frequency Range:	5.150-5.250 GHz	Band:	U-NII-1
Limit Clause:	15.407 (a) (1)(iv)	Test Method:	KDB 789033 D02 Section II.E.3.b)

Antenna Configuration:	Beamforming	Mode:	iPA - BDR
Test Port:	1+2 (Core 0 + Core 1)	Rate/Modulation:	DH5 (GFSK)

Burst Tx	Stability: < ±2%	Duty Cycle (%): 76.99	Period (ms): 3.750	Width (ms): 2.887
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Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Antenna Gain (dBi)	Limit (dBm)	Margin (dB)
	1	2	3	4	Σ			
5162	2.75	3.22	-	-	6.00	9.02	20.98	14.98
5203	2.57	3.05	-	-	5.81	9.02	20.98	15.17
5245	2.57	3.35	-	-	5.98	9.02	20.98	15.00

Frequency Range:	5.150-5.250 GHz	Band:	U-NII-1
Limit Clause:	15.407 (a) (1)(iv)	Test Method:	KDB 789033 D02 Section II.E.3.b)

Antenna Configuration:	Beamforming	Mode:	iPA - HDR
Test Port:	1+2 (Core 0 + Core 1)	Rate/Modulation:	4-DH5 (π/4 DQPSK)

Constant Tx	Stability: < ±2%	Duty Cycle (%): 100.00	Period (ms): -	Width (ms): -
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Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Antenna Gain (dBi)	Limit (dBm)	Margin (dB)
	1	2	3	4	Σ			
5162	3.13	3.34	-	-	6.25	9.02	20.98	14.73
5203	3.16	3.00	-	-	6.09	9.02	20.98	14.89
5245	2.87	3.28	-	-	6.09	9.02	20.98	14.89

Transmitter Maximum Conducted Output Power (5.15-5.25 GHz band) (continued)

Frequency Range:	5.150-5.250 GHz	Band:	U-NII-1
Limit Clause:	15.407 (a) (1)(iv)	Test Method:	KDB 789033 D02 Section II.E.3.b)

Antenna Configuration:	Beamforming	Mode:	iPA - HDR
Test Port:	1+2 (Core 0 + Core 1)	Rate/Modulation:	8-DH5 ($\pi/4$ DQPSK)

Constant Tx	Stability: < $\pm 2\%$	Duty Cycle (%): 100.00	Period (ms): -	Width (ms): -
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Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Antenna Gain (dBi)	Limit (dBm)	Margin (dB)
	1	2	3	4	Σ			
5162	2.49	3.08	-	-	5.81	9.02	20.98	15.17
5203	3.22	3.04	-	-	6.14	9.02	20.98	14.84
5245	2.92	3.32	-	-	6.14	9.02	20.98	14.84

Transmitter Maximum Conducted Output Power (5.15-5.25 GHz band) (continued)**Results: ePA**

Frequency Range:	5.150-5.250 GHz	Band:	U-NII-1
Limit Clause:	15.407 (a) (1)(iv)	Test Method:	KDB 789033 D02 Section II.E.3.b)

Antenna Configuration:	SISO	Mode:	ePA - HDR
Test Port:	1 (Core 0)	Rate/Modulation:	4-DH5 ($\pi/4$ DQPSK)

Constant Tx	Stability: < $\pm 2\%$	Duty Cycle (%): 100.00	Period (ms): -	Width (ms): -
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Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Antenna Gain (dBi)	Limit (dBm)	Margin (dB)
	1	2	3	4	Σ			
5162	10.06	-	-	-	-	7.17	22.83	12.77
5203	10.49	-	-	-	-	7.17	22.83	12.34
5245	10.23	-	-	-	-	7.17	22.83	12.60

Frequency Range:	5.150-5.250 GHz	Band:	U-NII-1
Limit Clause:	15.407 (a) (1)(iv)	Test Method:	KDB 789033 D02 Section II.E.3.b)

Antenna Configuration:	SISO	Mode:	ePA - HDR
Test Port:	1 (Core 0)	Rate/Modulation:	8-DH5 ($\pi/4$ DQPSK)

Constant Tx	Stability: < $\pm 2\%$	Duty Cycle (%): 100.00	Period (ms): -	Width (ms): -
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Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Antenna Gain (dBi)	Limit (dBm)	Margin (dB)
	1	2	3	4	Σ			
5162	12.12	-	-	-	-	7.17	22.83	10.71
5203	12.40	-	-	-	-	7.17	22.83	10.43
5245	12.14	-	-	-	-	7.17	22.83	10.69

Transmitter Maximum Conducted Output Power (5.15-5.25 GHz band) (continued)

Frequency Range:	5.150-5.250 GHz	Band:	U-NII-1
Limit Clause:	15.407 (a) (1)(iv)	Test Method:	KDB 789033 D02 Section II.E.3.b)

Antenna Configuration:	SISO	Mode:	ePA - HDR
Test Port:	2 (Core 1)	Rate/Modulation:	4-DH5 ($\pi/4$ DQPSK)

Constant Tx	Stability: < $\pm 2\%$	Duty Cycle (%): 100.00	Period (ms): -	Width (ms): -
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Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Antenna Gain (dBi)	Limit (dBm)	Margin (dB)
	1	2	3	4	Σ			
5162	-	11.64	-	-	-	4.67	24.00	12.36
5203	-	11.66	-	-	-	4.67	24.00	12.34
5245	-	11.72	-	-	-	4.67	24.00	12.28

Frequency Range:	5.150-5.250 GHz	Band:	U-NII-1
Limit Clause:	15.407 (a) (1)(iv)	Test Method:	KDB 789033 D02 Section II.E.3.b)

Antenna Configuration:	SISO	Mode:	ePA - HDR
Test Port:	2 (Core 1)	Rate/Modulation:	8-DH5 ($\pi/4$ DQPSK)

Constant Tx	Stability: < $\pm 2\%$	Duty Cycle (%): 100.00	Period (ms): -	Width (ms): -
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Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Antenna Gain (dBi)	Limit (dBm)	Margin (dB)
	1	2	3	4	Σ			
5162	-	13.95	-	-	-	4.67	24.00	10.05
5203	-	13.85	-	-	-	4.67	24.00	10.15
5245	-	13.87	-	-	-	4.67	24.00	10.13

Transmitter Maximum Conducted Output Power (5.15-5.25 GHz band) (continued)

Frequency Range:	5.150-5.250 GHz	Band:	U-NII-1
Limit Clause:	15.407 (a) (1)(iv)	Test Method:	KDB 789033 D02 Section II.E.3.b)

Antenna Configuration:	Beamforming	Mode:	ePA - HDR
Test Port:	1+2 (Core 0 + Core 1)	Rate/Modulation:	4-DH5 ($\pi/4$ DQPSK)

Constant Tx	Stability: < $\pm 2\%$	Duty Cycle (%): 100.00	Period (ms): -	Width (ms): -
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Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Antenna Gain (dBi)	Limit (dBm)	Margin (dB)
	1	2	3	4	Σ			
5162	4.71	5.09	-	-	7.92	9.02	20.98	13.06
5203	5.41	5.50	-	-	8.47	9.02	20.98	12.51
5245	5.11	5.49	-	-	8.31	9.02	20.98	12.67

Frequency Range:	5.150-5.250 GHz	Band:	U-NII-1
Limit Clause:	15.407 (a) (1)(iv)	Test Method:	KDB 789033 D02 Section II.E.3.b)

Antenna Configuration:	Beamforming	Mode:	ePA - HDR
Test Port:	1+2 (Core 0 + Core 1)	Rate/Modulation:	8-DH5 ($\pi/4$ DQPSK)

Constant Tx	Stability: < $\pm 2\%$	Duty Cycle (%): 100.00	Period (ms): -	Width (ms): -
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Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Antenna Gain (dBi)	Limit (dBm)	Margin (dB)
	1	2	3	4	Σ			
5162	7.10	6.49	-	-	9.81	9.02	20.98	11.17
5203	7.40	7.01	-	-	10.22	9.02	20.98	10.76
5245	7.28	7.44	-	-	10.37	9.02	20.98	10.61

Transmitter Maximum Conducted Output Power (5.725-5.85 GHz band)**4.3.2 5.725-5.85 GHz band****Test Summary:**

Test Engineer:	Luis Pazos Perez	Test Dates:	19 October 2023 & 01 November 2023
Test Sample Serial Number:	D6HCD7RY3W		

Environmental Conditions:

Temperature (°C):	19 to 22
Relative Humidity (%):	45 to 56

Note(s):

- Measurements were performed in accordance with FCC KDB 789033 II.E.3.b) Method PM-G using a wideband gated RF average power meter only during the ON time of the transmitter, therefore no duty cycle corrections calculations were required.
- The FCC Part 15.407(a)(3)(i) limit shall not exceed 1 W (30.0 dBm).
- For Beamforming modes, conducted power was measured on both ports and then combined using the measure-and-sum method stated in FCC KDB 662911 D01 Section E)1).
- For details on antenna gains refer to Section 3.4 of this test report.
- For all modes of operation, the antenna gain is > 6 dBi. In accordance with Part 15.407(a)(3)(i), the limit was reduced by the amount in dB the antenna gain exceeds 6 dBi. Therefore the limit of 30 dBm has been reduced by using the following calculation:

$$SISO / Core 0: 30 \text{ dBm} - 1.48 \text{ dB} = 28.52 \text{ dBm}$$

$$SISO / Core 1: 30 \text{ dBm} - 0.01 \text{ dB} = 29.99 \text{ dBm}$$

$$Beamforming / Core 0 + Core 1: 30 \text{ dBm} - 3.79 \text{ dB} = 26.21 \text{ dBm}$$

Transmitter Maximum Conducted Output Power (5.725-5.85 GHz band) (continued)**Results: iPA**

Frequency Range:	5.725-5.850 GHz	Band:	U-NII-3
Limit Clause:	15.407 (a)(3)(i)	Test Method:	KDB 789033 D02 Section II.E.3.b)

Antenna Configuration:	SISO	Mode:	iPA - BDR
Test Port:	1 (Core 0)	Rate/Modulation:	DH5 (GFSK)

Burst Tx	Stability: < $\pm 2\%$	Duty Cycle (%): 77.00	Period (ms): 3.750	Width (ms): 2.887
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Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Antenna Gain (dBi)	Limit (dBm)	Margin (dB)
	1	2	3	4	Σ			
5733	9.51	-	-	-	-	7.48	28.52	19.01
5788	9.85	-	-	-	-	7.48	28.52	18.67
5844	9.96	-	-	-	-	7.48	28.52	18.56

Frequency Range:	5.725-5.850 GHz	Band:	U-NII-3
Limit Clause:	15.407 (a)(3)(i)	Test Method:	KDB 789033 D02 Section II.E.3.b)

Antenna Configuration:	SISO	Mode:	iPA - HDR
Test Port:	1 (Core 0)	Rate/Modulation:	4-DH5 ($\pi/4$ DQPSK)

Constant Tx	Stability: < $\pm 2\%$	Duty Cycle (%): 100.00	Period (ms): -	Width (ms): -
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Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Antenna Gain (dBi)	Limit (dBm)	Margin (dB)
	1	2	3	4	Σ			
5733	3.22	-	-	-	-	7.48	28.52	25.30
5788	3.19	-	-	-	-	7.48	28.52	25.33
5844	3.30	-	-	-	-	7.48	28.52	25.22

Transmitter Maximum Conducted Output Power (5.725-5.85 GHz band) (continued)

Frequency Range:	5.725-5.850 GHz	Band:	U-NII-3
Limit Clause:	15.407 (a)(3)(i)	Test Method:	KDB 789033 D02 Section II.E.3.b)

Antenna Configuration:	SISO	Mode:	iPA - HDR
Test Port:	1 (Core 0)	Rate/Modulation:	8-DH5 ($\pi/4$ DQPSK)

Constant Tx	Stability: < $\pm 2\%$	Duty Cycle (%): 100.00	Period (ms): -	Width (ms): -
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Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Antenna Gain (dBi)	Limit (dBm)	Margin (dB)
	1	2	3	4	Σ			
5733	3.06	-	-	-	-	7.48	28.52	25.46
5788	3.28	-	-	-	-	7.48	28.52	25.24
5844	3.14	-	-	-	-	7.48	28.52	25.38

Frequency Range:	5.725-5.850 GHz	Band:	U-NII-3
Limit Clause:	15.407 (a)(3)(i)	Test Method:	KDB 789033 D02 Section II.E.3.b)

Antenna Configuration:	SISO	Mode:	iPA - BDR
Test Port:	2 (Core 1)	Rate/Modulation:	DH5 (GFSK)

Burst Tx	Stability: < $\pm 2\%$	Duty Cycle (%): 77.00	Period (ms): 3.750	Width (ms): 2.887
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Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Antenna Gain (dBi)	Limit (dBm)	Margin (dB)
	1	2	3	4	Σ			
5733	-	9.78	-	-	-	6.01	29.99	20.21
5788	-	9.98	-	-	-	6.01	29.99	20.01
5844	-	9.82	-	-	-	6.01	29.99	20.17

Transmitter Maximum Conducted Output Power (5.725-5.85 GHz band) (continued)

Frequency Range:	5.725-5.850 GHz	Band:	U-NII-3
Limit Clause:	15.407 (a)(3)(i)	Test Method:	KDB 789033 D02 Section II.E.3.b)

Antenna Configuration:	SISO	Mode:	iPA - HDR
Test Port:	2 (Core 1)	Rate/Modulation:	4-DH5 ($\pi/4$ DQPSK)

Constant Tx	Stability: < $\pm 2\%$	Duty Cycle (%): 100.00	Period (ms): -	Width (ms): -
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Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Antenna Gain (dBi)	Limit (dBm)	Margin (dB)
	1	2	3	4	Σ			
5733	-	3.30	-	-	-	6.01	29.99	26.69
5788	-	3.01	-	-	-	6.01	29.99	26.98
5844	-	3.32	-	-	-	6.01	29.99	26.67

Frequency Range:	5.725-5.850 GHz	Band:	U-NII-3
Limit Clause:	15.407 (a)(3)(i)	Test Method:	KDB 789033 D02 Section II.E.3.b)

Antenna Configuration:	SISO	Mode:	iPA - HDR
Test Port:	2 (Core 1)	Rate/Modulation:	8-DH5 ($\pi/4$ DQPSK)

Constant Tx	Stability: < $\pm 2\%$	Duty Cycle (%): 100.00	Period (ms): -	Width (ms): -
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Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Antenna Gain (dBi)	Limit (dBm)	Margin (dB)
	1	2	3	4	Σ			
5733	-	3.37	-	-	-	6.01	29.99	26.62
5788	-	3.01	-	-	-	6.01	29.99	26.98
5844	-	3.40	-	-	-	6.01	29.99	26.59

Transmitter Maximum Conducted Output Power (5.725-5.85 GHz band) (continued)

Frequency Range:	5.725-5.850 GHz	Band:	U-NII-3
Limit Clause:	15.407 (a)(3)(i)	Test Method:	KDB 789033 D02 Section II.E.3.b)

Antenna Configuration:	Beamforming	Mode:	iPA - BDR
Test Port:	1+2 (Core 0 + Core 1)	Rate/Modulation:	DH5 (GFSK)

Burst Tx	Stability: < ±2%	Duty Cycle (%): 77.00	Period (ms): 3.750	Width (ms): 2.887
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Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Antenna Gain (dBi)	Limit (dBm)	Margin (dB)
	1	2	3	4	Σ			
5733	9.53	8.40	-	-	12.01	9.79	26.21	14.20
5788	9.87	8.81	-	-	12.38	9.79	26.21	13.83
5844	9.97	9.42	-	-	12.71	9.79	26.21	13.50

Frequency Range:	5.725-5.850 GHz	Band:	U-NII-3
Limit Clause:	15.407 (a)(3)(i)	Test Method:	KDB 789033 D02 Section II.E.3.b)

Antenna Configuration:	Beamforming	Mode:	iPA - HDR
Test Port:	1+2 (Core 0 + Core 1)	Rate/Modulation:	4-DH5 (π/4 DQPSK)

Constant Tx	Stability: < ±2%	Duty Cycle (%): 100.00	Period (ms): -	Width (ms): -
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Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Antenna Gain (dBi)	Limit (dBm)	Margin (dB)
	1	2	3	4	Σ			
5733	3.18	2.21	-	-	5.73	9.79	26.21	20.48
5788	3.25	1.94	-	-	5.66	9.79	26.21	20.55
5844	3.14	2.66	-	-	5.92	9.79	26.21	20.29

Transmitter Maximum Conducted Output Power (5.725-5.85 GHz band) (continued)

Frequency Range:	5.725-5.850 GHz	Band:	U-NII-3
Limit Clause:	15.407 (a)(3)(i)	Test Method:	KDB 789033 D02 Section II.E.3.b)

Antenna Configuration:	Beamforming	Mode:	iPA - HDR
Test Port:	1+2 (Core 0 + Core 1)	Rate/Modulation:	8-DH5 ($\pi/4$ DQPSK)

Constant Tx	Stability: < $\pm 2\%$	Duty Cycle (%): 100.00	Period (ms): -	Width (ms): -
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Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Antenna Gain (dBi)	Limit (dBm)	Margin (dB)
	1	2	3	4	Σ			
5733	3.48	2.06	-	-	5.84	9.79	26.21	20.37
5788	3.23	2.17	-	-	5.74	9.79	26.21	20.47
5844	3.24	2.76	-	-	6.01	9.79	26.21	20.20

Transmitter Maximum Conducted Output Power (5.725-5.85 GHz band) (continued)**Results: ePA**

Frequency Range:	5.725-5.850 GHz	Band:	U-NII-3
Limit Clause:	15.407 (a)(3)(i)	Test Method:	KDB 789033 D02 Section II.E.3.b)

Antenna Configuration:	SISO	Mode:	ePA - HDR
Test Port:	1 (Core 0)	Rate/Modulation:	4-DH5 ($\pi/4$ DQPSK)

Constant Tx	Stability: $< \pm 2\%$	Duty Cycle (%): 100.00	Period (ms): -	Width (ms): -
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Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Antenna Gain (dBi)	Limit (dBm)	Margin (dB)
	1	2	3	4	Σ			
5733	13.93	-	-	-	-	7.48	28.52	14.59
5788	13.94	-	-	-	-	7.48	28.52	14.58
5844	13.71	-	-	-	-	7.48	28.52	14.81

Frequency Range:	5.725-5.850 GHz	Band:	U-NII-3
Limit Clause:	15.407 (a)(3)(i)	Test Method:	KDB 789033 D02 Section II.E.3.b)

Antenna Configuration:	SISO	Mode:	ePA - HDR
Test Port:	1 (Core 0)	Rate/Modulation:	8-DH5 ($\pi/4$ DQPSK)

Constant Tx	Stability: $< \pm 2\%$	Duty Cycle (%): 100.00	Period (ms): -	Width (ms): -
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Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Antenna Gain (dBi)	Limit (dBm)	Margin (dB)
	1	2	3	4	Σ			
5733	13.64	-	-	-	-	7.48	28.52	14.88
5788	13.50	-	-	-	-	7.48	28.52	15.02
5844	13.74	-	-	-	-	7.48	28.52	14.78

Transmitter Maximum Conducted Output Power (5.725-5.85 GHz band) (continued)

Frequency Range:	5.725-5.850 GHz	Band:	U-NII-3
Limit Clause:	15.407 (a)(3)(i)	Test Method:	KDB 789033 D02 Section II.E.3.b)

Antenna Configuration:	SISO	Mode:	ePA - HDR
Test Port:	2 (Core 1)	Rate/Modulation:	4-DH5 ($\pi/4$ DQPSK)

Constant Tx	Stability: < $\pm 2\%$	Duty Cycle (%): 100.00	Period (ms): -	Width (ms): -
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Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Antenna Gain (dBi)	Limit (dBm)	Margin (dB)
	1	2	3	4	Σ			
5733	-	13.88	-	-	-	6.01	29.99	16.11
5788	-	13.67	-	-	-	6.01	29.99	16.32
5844	-	13.90	-	-	-	6.01	29.99	16.09

Frequency Range:	5.725-5.850 GHz	Band:	U-NII-3
Limit Clause:	15.407 (a)(3)(i)	Test Method:	KDB 789033 D02 Section II.E.3.b)

Antenna Configuration:	SISO	Mode:	ePA - HDR
Test Port:	2 (Core 1)	Rate/Modulation:	8-DH5 ($\pi/4$ DQPSK)

Constant Tx	Stability: < $\pm 2\%$	Duty Cycle (%): 100.00	Period (ms): -	Width (ms): -
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Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Antenna Gain (dBi)	Limit (dBm)	Margin (dB)
	1	2	3	4	Σ			
5733	-	13.85	-	-	-	6.01	29.99	16.14
5788	-	13.57	-	-	-	6.01	29.99	16.42
5844	-	13.86	-	-	-	6.01	29.99	16.13

Transmitter Maximum Conducted Output Power (5.725-5.85 GHz band) (continued)

Frequency Range:	5.725-5.850 GHz	Band:	U-NII-3
Limit Clause:	15.407 (a)(3)(i)	Test Method:	KDB 789033 D02 Section II.E.3.b)

Antenna Configuration:	Beamforming	Mode:	ePA - HDR
Test Port:	1+2 (Core 0 + Core 1)	Rate/Modulation:	4-DH5 ($\pi/4$ DQPSK)

Constant Tx	Stability: < $\pm 2\%$	Duty Cycle (%): 100.00	Period (ms): -	Width (ms): -
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Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Antenna Gain (dBi)	Limit (dBm)	Margin (dB)
	1	2	3	4	Σ			
5733	13.79	13.28	-	-	16.55	9.79	26.21	9.66
5788	13.64	13.45	-	-	16.56	9.79	26.21	9.65
5844	13.93	13.60	-	-	16.78	9.79	26.21	9.43

Frequency Range:	5.725-5.850 GHz	Band:	U-NII-3
Limit Clause:	15.407 (a)(3)(i)	Test Method:	KDB 789033 D02 Section II.E.3.b)

Antenna Configuration:	Beamforming	Mode:	ePA - HDR
Test Port:	1+2 (Core 0 + Core 1)	Rate/Modulation:	8-DH5 ($\pi/4$ DQPSK)

Constant Tx	Stability: < $\pm 2\%$	Duty Cycle (%): 100.00	Period (ms): -	Width (ms): -
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Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Antenna Gain (dBi)	Limit (dBm)	Margin (dB)
	1	2	3	4	Σ			
5733	13.72	13.08	-	-	16.43	9.79	26.21	9.78
5788	13.81	12.87	-	-	16.37	9.79	26.21	9.84
5844	13.53	13.04	-	-	16.30	9.79	26.21	9.91

4.4 Transmitter Maximum Power Spectral Density

4.4.1 5.15-5.25 GHz band

Test Summary:

Test Engineer:	Luis Pazos Perez	Test Dates:	19 October 2023 & 01 November 2023
Test Sample Serial Number:	D6HCD7RY3W		

Environmental Conditions:

Temperature (°C):	19 to 22
Relative Humidity (%):	45 to 56

Note(s):

1. Transmitter Maximum Power Spectral Density tests were performed using a signal analyser in accordance with KDB 789033 II. F referencing II.E.2.d) Method SA-2.
2. FCC Part 15.407(a)(1)(iv) limit for PSD is <11 dBm/MHz.
3. For Beamforming modes, PSD was measured on both ports and then combined using the *measure and sum spectral maxima across the outputs* technique, stated in FCC KDB 662911 D01 Section E)2)b).
4. For details on antenna gains refer to Section 3.4 of this test report.
5. For SISO mode Core 1 of operation, the antenna gain is ≤ 6 dBi.
6. For SISO Core 0 and Beamforming modes of operation, the antenna gain is > 6 dBi. In accordance with Part 15.407(a)(1)(iv), the limit was reduced by the amount in dB the antenna gain exceeds 6 dBi. Therefore the limit of 11.0 dBm / MHz has been reduced by using the following calculation:
$$\text{SISO / Core 0: } 11 \text{ dBm / MHz} - 1.17 \text{ dB} = 9.83 \text{ dBm / MHz}$$
$$\text{Beamforming / Core 0 + Core 1: } 11 \text{ dBm / MHz} - 3.02 \text{ dB} = 7.98 \text{ dBm / MHz}$$
7. Example plots of each modulation on middle channel, for one antenna configuration, can be seen below to show setting parameters comply with testing method/procedure. All other plots are archived on the UL IT server and available for inspection if required.

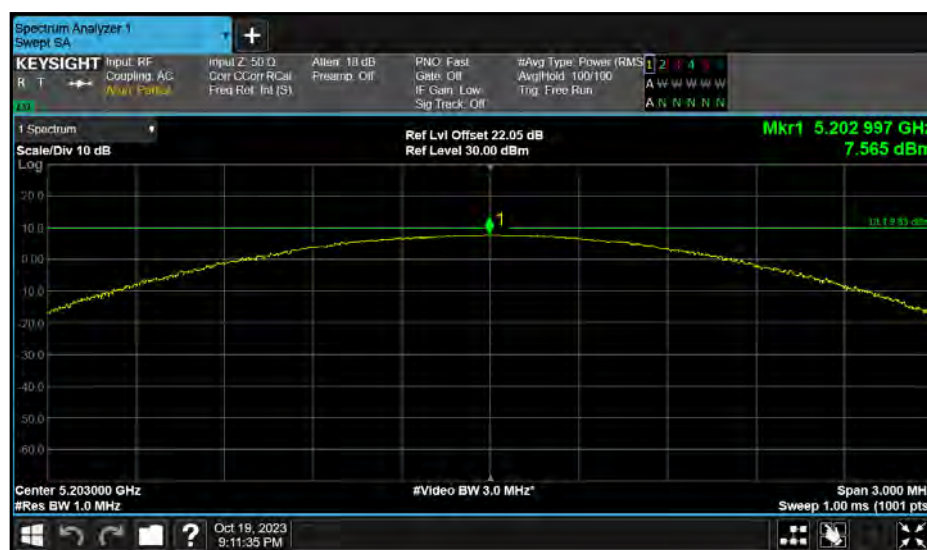
Transmitter Maximum Power Spectral Density (5.15-5.25 GHz band) (continued)**Results: iPA**

Frequency Range:	5.150-5.250 GHz	Band:	U-NII-1
Limit Clause:	15.407 (a) (1)(iv)	Test Method:	KDB 789033 D02 Section II.F referencing II.E.2.d)
Note:	DCCF was added to the spectrum analyser reference level offset.		

Antenna Configuration:	SISO	Mode:	iPA - BDR
Test Port:	1 (Core 0)	Rate/Modulation:	DH5 (GFSK)

Burst Tx	Stability: < ±2%	Duty Cycle (%): 77.00	Period (ms): 3.750	Width (ms): 2.887
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Test Frequency (MHz)	PSD (dBm / MHz)					Limit (dBm / MHz)	Margin (dB)
	1	2	3	4	Σ		
5162	7.57	-	-	-	-	9.83	2.26
5203	7.57	-	-	-	-	9.83	2.26
5245	7.13	-	-	-	-	9.83	2.70

**Middle Channel**

Transmitter Maximum Power Spectral Density (5.15-5.25 GHz band) (continued)

Frequency Range:	5.150-5.250 GHz	Band:	U-NII-1
Limit Clause:	15.407 (a) (1)(iv)	Test Method:	KDB 789033 D02 Section II.F referencing II.E.2.d)

Antenna Configuration:	SISO	Mode:	iPA - HDR
Test Port:	1 (Core 0)	Rate/Modulation:	4-DH5 ($\pi/4$ DQPSK)

Constant Tx	Stability: $< \pm 2\%$	Duty Cycle (%): 100.00	Period (ms): -	Width (ms): -
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Test Frequency (MHz)	PSD (dBm / MHz)					Limit (dBm / MHz)	Margin (dB)
	1	2	3	4	Σ		
5162	0.14	-	-	-	-	9.83	9.69
5203	0.09	-	-	-	-	9.83	9.74
5245	0.35	-	-	-	-	9.83	9.48



Middle Channel

Transmitter Maximum Power Spectral Density (5.15-5.25 GHz band) (continued)

Frequency Range:	5.150-5.250 GHz	Band:	U-NII-1
Limit Clause:	15.407 (a) (1)(iv)	Test Method:	KDB 789033 D02 Section II.F referencing II.E.2.d)

Antenna Configuration:	SISO	Mode:	iPA - HDR
Test Port:	1 (Core 0)	Rate/Modulation:	8-DH5 ($\pi/4$ DQPSK)

Constant Tx	Stability: < $\pm 2\%$	Duty Cycle (%): 100.00	Period (ms): -	Width (ms): -
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Test Frequency (MHz)	PSD (dBm / MHz)					Limit (dBm / MHz)	Margin (dB)
	1	2	3	4	Σ		
5162	-2.65	-	-	-	-	9.83	12.48
5203	-2.91	-	-	-	-	9.83	12.74
5245	-2.60	-	-	-	-	9.83	12.43



Middle Channel

Transmitter Maximum Power Spectral Density (5.15-5.25 GHz band) (continued)

Frequency Range:	5.150-5.250 GHz	Band:	U-NII-1
Limit Clause:	15.407 (a) (1)(iv)	Test Method:	KDB 789033 D02 Section II.F referencing II.E.2.d)
Note:	DCCF was added to the spectrum analyser reference level offset.		

Antenna Configuration:	SISO	Mode:	iPA - BDR
Test Port:	2 (Core 1)	Rate/Modulation:	DH5 (GFSK)

Burst Tx	Stability: < $\pm 2\%$	Duty Cycle (%): 77.00	Period (ms): 3.750	Width (ms): 2.887
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Test Frequency (MHz)	PSD (dBm / MHz)					Limit (dBm / MHz)	Margin (dB)
	1	2	3	4	Σ		
5162	-	9.03	-	-	-	11.00	1.97
5203	-	9.00	-	-	-	11.00	2.00
5245	-	9.00	-	-	-	11.00	2.00

Frequency Range:	5.150-5.250 GHz	Band:	U-NII-1
Limit Clause:	15.407 (a) (1)(iv)	Test Method:	KDB 789033 D02 Section II.F referencing II.E.2.d)

Antenna Configuration:	SISO	Mode:	iPA - HDR
Test Port:	2 (Core 1)	Rate/Modulation:	4-DH5 ($\pi/4$ DQPSK)

Constant Tx	Stability: < $\pm 2\%$	Duty Cycle (%): 100.00	Period (ms): -	Width (ms): -
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Test Frequency (MHz)	PSD (dBm / MHz)					Limit (dBm / MHz)	Margin (dB)
	1	2	3	4	Σ		
5162	-	0.34	-	-	-	11.00	10.66
5203	-	0.06	-	-	-	11.00	10.94
5245	-	0.44	-	-	-	11.00	10.56

Transmitter Maximum Power Spectral Density (5.15-5.25 GHz band) (continued)

Frequency Range:	5.150-5.250 GHz	Band:	U-NII-1
Limit Clause:	15.407 (a) (1)(iv)	Test Method:	KDB 789033 D02 Section II.F referencing II.E.2.d)

Antenna Configuration:	SISO	Mode:	iPA - HDR
Test Port:	2 (Core 1)	Rate/Modulation:	8-DH5 ($\pi/4$ DQPSK)

Constant Tx	Stability: < $\pm 2\%$	Duty Cycle (%): 100.00	Period (ms): -	Width (ms): -
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Test Frequency (MHz)	PSD (dBm / MHz)					Limit (dBm / MHz)	Margin (dB)
	1	2	3	4	Σ		
5162	-	-2.59	-	-	-	11.00	13.59
5203	-	-2.65	-	-	-	11.00	13.65
5245	-	-2.51	-	-	-	11.00	13.51

Frequency Range:	5.150-5.250 GHz	Band:	U-NII-1
Limit Clause:	15.407 (a) (1)(iv)	Test Method:	KDB 789033 D02 Section II.F referencing II.E.2.d)
Note:	DCCF was added to the spectrum analyser reference level offset.		

Antenna Configuration:	Beamforming	Mode:	iPA - BDR
Test Port:	1+2 (Core 0 + Core 1)	Rate/Modulation:	DH5 (GFSK)

Burst Tx	Stability: < $\pm 2\%$	Duty Cycle (%): 76.99	Period (ms): 3.750	Width (ms): 2.887
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Test Frequency (MHz)	PSD (dBm / MHz)					Limit (dBm / MHz)	Margin (dB)
	1	2	3	4	Σ		
5162	2.04	2.50	-	-	5.29	7.98	2.69
5203	1.66	1.85	-	-	4.76	7.98	3.22
5245	1.94	2.53	-	-	5.25	7.98	2.73

Transmitter Maximum Power Spectral Density (5.15-5.25 GHz band) (continued)

Frequency Range:	5.150-5.250 GHz	Band:	U-NII-1
Limit Clause:	15.407 (a) (1)(iv)	Test Method:	KDB 789033 D02 Section II.F referencing II.E.2.d)

Antenna Configuration:	Beamforming	Mode:	iPA - HDR
Test Port:	1+2 (Core 0 + Core 1)	Rate/Modulation:	4-DH5 ($\pi/4$ DQPSK)

Constant Tx	Stability: < $\pm 2\%$	Duty Cycle (%): 100.00	Period (ms): -	Width (ms): -
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Test Frequency (MHz)	PSD (dBm / MHz)					Limit (dBm / MHz)	Margin (dB)
	1	2	3	4	Σ		
5162	0.19	0.36	-	-	3.28	7.98	4.70
5203	-0.09	-0.11	-	-	2.91	7.98	5.07
5245	-0.02	0.41	-	-	3.21	7.98	4.77

Frequency Range:	5.150-5.250 GHz	Band:	U-NII-1
Limit Clause:	15.407 (a) (1)(iv)	Test Method:	KDB 789033 D02 Section II.F referencing II.E.2.d)

Antenna Configuration:	Beamforming	Mode:	iPA - HDR
Test Port:	1+2 (Core 0 + Core 1)	Rate/Modulation:	8-DH5 ($\pi/4$ DQPSK)

Constant Tx	Stability: < $\pm 2\%$	Duty Cycle (%): 100.00	Period (ms): -	Width (ms): -
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Test Frequency (MHz)	PSD (dBm / MHz)					Limit (dBm / MHz)	Margin (dB)
	1	2	3	4	Σ		
5162	-3.16	-2.69	-	-	0.09	7.98	7.89
5203	-2.82	-2.86	-	-	0.17	7.98	7.81
5245	-2.63	-2.37	-	-	0.51	7.98	7.47

Transmitter Maximum Power Spectral Density (5.15-5.25 GHz band) (continued)**Results: ePA**

Frequency Range:	5.150-5.250 GHz	Band:	U-NII-1
Limit Clause:	15.407 (a) (1)(iv)	Test Method:	KDB 789033 D02 Section II.F referencing II.E.2.d)

Antenna Configuration:	SISO	Mode:	ePA - HDR
Test Port:	1 (Core 0)	Rate/Modulation:	4-DH5 ($\pi/4$ DQPSK)

Constant Tx	Stability: < $\pm 2\%$	Duty Cycle (%): 100.00	Period (ms): -	Width (ms): -
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Test Frequency (MHz)	PSD (dBm / MHz)					Limit (dBm / MHz)	Margin (dB)
	1	2	3	4	Σ		
5162	6.93	-	-	-	-	9.83	2.90
5203	7.20	-	-	-	-	9.83	2.63
5245	7.23	-	-	-	-	9.83	2.60

Frequency Range:	5.150-5.250 GHz	Band:	U-NII-1
Limit Clause:	15.407 (a) (1)(iv)	Test Method:	KDB 789033 D02 Section II.F referencing II.E.2.d)

Antenna Configuration:	SISO	Mode:	ePA - HDR
Test Port:	1 (Core 0)	Rate/Modulation:	8-DH5 ($\pi/4$ DQPSK)

Constant Tx	Stability: < $\pm 2\%$	Duty Cycle (%): 100.00	Period (ms): -	Width (ms): -
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Test Frequency (MHz)	PSD (dBm / MHz)					Limit (dBm / MHz)	Margin (dB)
	1	2	3	4	Σ		
5162	6.13	-	-	-	-	9.83	3.70
5203	6.22	-	-	-	-	9.83	3.61
5245	6.32	-	-	-	-	9.83	3.51

Transmitter Maximum Power Spectral Density (5.15-5.25 GHz band) (continued)

Frequency Range:	5.150-5.250 GHz	Band:	U-NII-1
Limit Clause:	15.407 (a) (1)(iv)	Test Method:	KDB 789033 D02 Section II.F referencing II.E.2.d)

Antenna Configuration:	SISO	Mode:	ePA - HDR
Test Port:	2 (Core 1)	Rate/Modulation:	4-DH5 ($\pi/4$ DQPSK)

Constant Tx	Stability: $< \pm 2\%$	Duty Cycle (%): 100.00	Period (ms): -	Width (ms): -
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Test Frequency (MHz)	PSD (dBm / MHz)					Limit (dBm / MHz)	Margin (dB)
	1	2	3	4	Σ		
5162	-	8.77	-	-	-	11.00	2.23
5203	-	8.44	-	-	-	11.00	2.56
5245	-	8.73	-	-	-	11.00	2.27

Frequency Range:	5.150-5.250 GHz	Band:	U-NII-1
Limit Clause:	15.407 (a) (1)(iv)	Test Method:	KDB 789033 D02 Section II.F referencing II.E.2.d)

Antenna Configuration:	SISO	Mode:	ePA - HDR
Test Port:	2 (Core 1)	Rate/Modulation:	8-DH5 ($\pi/4$ DQPSK)

Constant Tx	Stability: $< \pm 2\%$	Duty Cycle (%): 100.00	Period (ms): -	Width (ms): -
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Test Frequency (MHz)	PSD (dBm / MHz)					Limit (dBm / MHz)	Margin (dB)
	1	2	3	4	Σ		
5162	-	8.21	-	-	-	11.00	2.79
5203	-	7.77	-	-	-	11.00	3.23
5245	-	8.06	-	-	-	11.00	2.94

Transmitter Maximum Power Spectral Density (5.15-5.25 GHz band) (continued)

Frequency Range:	5.150-5.250 GHz	Band:	U-NII-1
Limit Clause:	15.407 (a) (1)(iv)	Test Method:	KDB 789033 D02 Section II.F referencing II.E.2.d)

Antenna Configuration:	Beamforming	Mode:	ePA - HDR
Test Port:	1+2 (Core 0 + Core 1)	Rate/Modulation:	4-DH5 ($\pi/4$ DQPSK)

Constant Tx	Stability: $< \pm 2\%$	Duty Cycle (%): 100.00	Period (ms): -	Width (ms): -
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Test Frequency (MHz)	PSD (dBm / MHz)					Limit (dBm / MHz)	Margin (dB)
	1	2	3	4	Σ		
5162	1.55	1.98	-	-	4.78	7.98	3.20
5203	2.09	2.39	-	-	5.25	7.98	2.73
5245	2.17	2.63	-	-	5.42	7.98	2.56

Frequency Range:	5.150-5.250 GHz	Band:	U-NII-1
Limit Clause:	15.407 (a) (1)(iv)	Test Method:	KDB 789033 D02 Section II.F referencing II.E.2.d)

Antenna Configuration:	Beamforming	Mode:	ePA - HDR
Test Port:	1+2 (Core 0 + Core 1)	Rate/Modulation:	8-DH5 ($\pi/4$ DQPSK)

Constant Tx	Stability: $< \pm 2\%$	Duty Cycle (%): 100.00	Period (ms): -	Width (ms): -
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Test Frequency (MHz)	PSD (dBm / MHz)					Limit (dBm / MHz)	Margin (dB)
	1	2	3	4	Σ		
5162	1.20	0.57	-	-	3.90	7.98	4.08
5203	1.24	0.81	-	-	4.04	7.98	3.94
5245	1.58	1.74	-	-	4.67	7.98	3.31

Transmitter Maximum Power Spectral Density (5.725-5.85 GHz band)**4.4.2 5.725-5.85 GHz band****Test Summary:**

Test Engineer:	Luis Pazos Perez	Test Dates:	19 October 2023 & 01 November 2023
Test Sample Serial Number:	D6HCD7RY3W		

Environmental Conditions:

Temperature (°C):	19 to 22
Relative Humidity (%):	45 to 56

Note(s):

1. Transmitter Maximum Power Spectral Density tests were performed using a signal analyser in accordance with KDB 789033 II. F referencing II.E.2.d) Method SA-2.
2. FCC Part 15.407(a)(3)(i) limit for PSD is <30 dBm/500 kHz.
3. For Beamforming modes, PSD was measured on both ports and then combined using the *measure and sum spectral maxima across the outputs* technique, stated in FCC KDB 662911 D01 Section E)2)b).
4. For details on antenna gains refer to Section 3.4 of this test report.
5. For all modes of operation, the antenna gain is > 6 dBi. In accordance with Part 15.407(a)(3)(i), the limit was reduced by the amount in dB the antenna gain exceeds 6 dBi. Therefore the limit of 30 dBm/MHz has been reduced by using the following calculations:
$$\begin{aligned} \text{SISO / Core 0: } 30 \text{ dBm / MHz} - 1.48 \text{ dB} &= 28.52 \text{ dBm / MHz} \\ \text{SISO / Core 1: } 30 \text{ dBm / MHz} - 0.01 \text{ dB} &= 29.99 \text{ dBm / MHz} \\ \text{Beamforming / Core 0 + Core 1: } 30 \text{ dBm / MHz} - 3.79 \text{ dB} &= 26.21 \text{ dBm / MHz} \end{aligned}$$
6. Example plots of each modulation on middle channel, for one antenna configuration, can be seen below to show setting parameters comply with testing method/procedure. All other plots are archived on the UL IT server and available for inspection if required.

Transmitter Maximum Power Spectral Density (5.725-5.85 GHz band) (continued)**Results: iPA**

Frequency Range:	5.725-5.850 GHz	Band:	U-NII-3
Limit Clause:	15.407 (a)(3)(i)	Test Method:	KDB 789033 D02 Section II.F referencing II.E.2.d)
Note:	DCCF was added to the spectrum analyser reference level offset.		

Antenna Configuration:	SISO	Mode:	iPA - BDR
Test Port:	1 (Core 0)	Rate/Modulation:	DH5 (GFSK)

Burst Tx	Stability: < ±2%	Duty Cycle (%): 77.00	Period (ms): 3.750	Width (ms): 2.887
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Test Frequency (MHz)	PSD (dBm / 500 kHz)					Limit (dBm / 500 kHz)	Margin (dB)
	1	2	3	4	Σ		
5733	7.53	-	-	-	-	28.52	20.99
5788	8.33	-	-	-	-	28.52	20.19
5844	8.90	-	-	-	-	28.52	19.62

**Middle Channel**

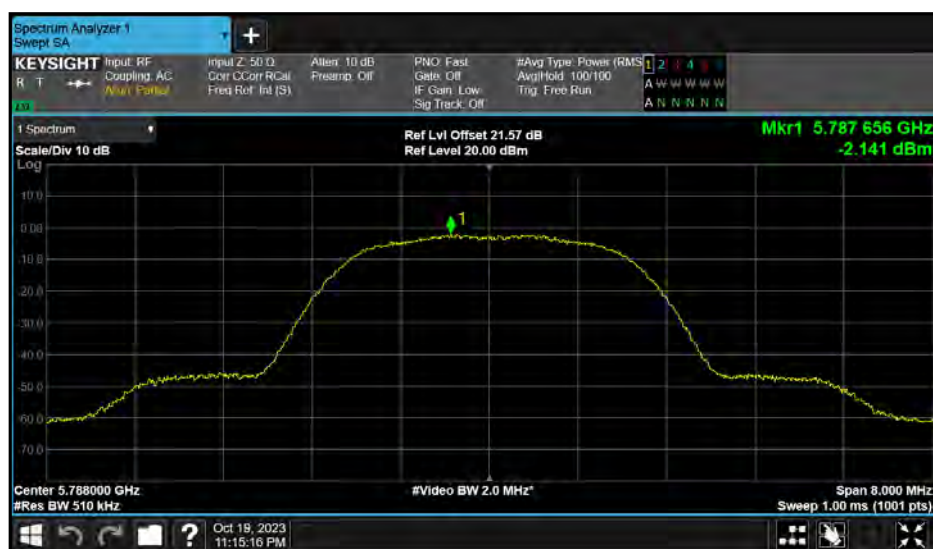
Transmitter Maximum Power Spectral Density (5.725-5.85 GHz band) (continued)

Frequency Range:	5.725-5.850 GHz	Band:	U-NII-3
Limit Clause:	15.407 (a)(3)(i)	Test Method:	KDB 789033 D02 Section II.F referencing II.E.2.d)

Antenna Configuration:	SISO	Mode:	iPA - HDR
Test Port:	1 (Core 0)	Rate/Modulation:	4-DH5 ($\pi/4$ DQPSK)

Constant Tx	Stability: $< \pm 2\%$	Duty Cycle (%): 100.00	Period (ms): -	Width (ms): -
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Test Frequency (MHz)	PSD (dBm / 500 kHz)					Limit (dBm / 500 kHz)	Margin (dB)
	1	2	3	4	Σ		
5733	-2.14	-	-	-	-	28.52	30.66
5788	-2.14	-	-	-	-	28.52	30.66
5844	-1.81	-	-	-	-	28.52	30.33



Middle Channel

Transmitter Maximum Power Spectral Density (5.725-5.85 GHz band) (continued)

Frequency Range:	5.725-5.850 GHz	Band:	U-NII-3
Limit Clause:	15.407 (a)(3)(i)	Test Method:	KDB 789033 D02 Section II.F referencing II.E.2.d)

Antenna Configuration:	SISO	Mode:	iPA - HDR
Test Port:	1 (Core 0)	Rate/Modulation:	8-DH5 ($\pi/4$ DQPSK)

Constant Tx	Stability: $< \pm 2\%$	Duty Cycle (%): 100.00	Period (ms): -	Width (ms): -
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Test Frequency (MHz)	PSD (dBm / 500 kHz)					Limit (dBm / 500 kHz)	Margin (dB)
	1	2	3	4	Σ		
5733	-5.50	-	-	-	-	28.52	34.02
5788	-5.45	-	-	-	-	28.52	33.97
5844	-5.08	-	-	-	-	28.52	33.60



Middle Channel

Transmitter Maximum Power Spectral Density (5.725-5.85 GHz band) (continued)

Frequency Range:	5.725-5.850 GHz	Band:	U-NII-3
Limit Clause:	15.407 (a)(3)(i)	Test Method:	KDB 789033 D02 Section II.F referencing II.E.2.d)
Note:	DCCF was added to the spectrum analyser reference level offset.		

Antenna Configuration:	SISO	Mode:	iPA - BDR
Test Port:	2 (Core 1)	Rate/Modulation:	DH5 (GFSK)

Burst Tx	Stability: < ±2%	Duty Cycle (%): 77.00	Period (ms): 3.750	Width (ms): 2.887
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Test Frequency (MHz)	PSD (dBm / 500 kHz)					Limit (dBm / 500 kHz)	Margin (dB)
	1	2	3	4	Σ		
5733	-	7.71	-	-	-	29.99	22.28
5788	-	8.31	-	-	-	29.99	21.68
5844	-	8.90	-	-	-	29.99	21.09

Frequency Range:	5.725-5.850 GHz	Band:	U-NII-3
Limit Clause:	15.407 (a)(3)(i)	Test Method:	KDB 789033 D02 Section II.F referencing II.E.2.d)

Antenna Configuration:	SISO	Mode:	iPA - HDR
Test Port:	2 (Core 1)	Rate/Modulation:	4-DH5 (π/4 DQPSK)

Constant Tx	Stability: < ±2%	Duty Cycle (%): 100.00	Period (ms): -	Width (ms): -
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Test Frequency (MHz)	PSD (dBm / 500 kHz)					Limit (dBm / 500 kHz)	Margin (dB)
	1	2	3	4	Σ		
5733	-	-2.06	-	-	-	29.99	32.05
5788	-	-2.24	-	-	-	29.99	32.23
5844	-	-1.65	-	-	-	29.99	31.64

Transmitter Maximum Power Spectral Density (5.725-5.85 GHz band) (continued)

Frequency Range:	5.725-5.850 GHz	Band:	U-NII-3
Limit Clause:	15.407 (a)(3)(i)	Test Method:	KDB 789033 D02 Section II.F referencing II.E.2.d)

Antenna Configuration:	SISO	Mode:	iPA - HDR
Test Port:	2 (Core 1)	Rate/Modulation:	8-DH5 ($\pi/4$ DQPSK)

Constant Tx	Stability: < $\pm 2\%$	Duty Cycle (%): 100.00	Period (ms): -	Width (ms): -
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Test Frequency (MHz)	PSD (dBm / 500 kHz)					Limit (dBm / 500 kHz)	Margin (dB)
	1	2	3	4	Σ		
5733	-	-5.30	-	-	-	29.99	35.29
5788	-	-5.50	-	-	-	29.99	35.49
5844	-	-4.77	-	-	-	29.99	34.76

Frequency Range:	5.725-5.850 GHz	Band:	U-NII-3
Limit Clause:	15.407 (a)(3)(i)	Test Method:	KDB 789033 D02 Section II.F referencing II.E.2.d)
Note:	DCCF was added to the spectrum analyser reference level offset.		

Antenna Configuration:	Beamforming	Mode:	iPA - BDR
Test Port:	1+2 (Core 0 + Core 1)	Rate/Modulation:	DH5 (GFSK)

Burst Tx	Stability: < $\pm 2\%$	Duty Cycle (%): 77.00	Period (ms): 3.750	Width (ms): 2.887
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Test Frequency (MHz)	PSD (dBm / 500 kHz)					Limit (dBm / 500 kHz)	Margin (dB)
	1	2	3	4	Σ		
5733	7.94	6.79	-	-	10.41	26.21	15.80
5788	8.18	7.32	-	-	10.78	26.21	15.43
5844	8.60	8.13	-	-	11.38	26.21	14.83

Transmitter Maximum Power Spectral Density (5.725-5.85 GHz band) (continued)

Frequency Range:	5.725-5.850 GHz	Band:	U-NII-3
Limit Clause:	15.407 (a)(3)(i)	Test Method:	KDB 789033 D02 Section II.F referencing II.E.2.d)

Antenna Configuration:	Beamforming	Mode:	iPA - HDR
Test Port:	1+2 (Core 0 + Core 1)	Rate/Modulation:	4-DH5 ($\pi/4$ DQPSK)

Constant Tx	Stability: < $\pm 2\%$	Duty Cycle (%): 100.00	Period (ms): -	Width (ms): -
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Test Frequency (MHz)	PSD (dBm / 500 kHz)					Limit (dBm / 500 kHz)	Margin (dB)
	1	2	3	4	Σ		
5733	-2.14	-3.08	-	-	0.43	26.21	25.78
5788	-1.87	-2.95	-	-	0.63	26.21	25.58
5844	-1.66	-2.08	-	-	1.15	26.21	25.06

Frequency Range:	5.725-5.850 GHz	Band:	U-NII-3
Limit Clause:	15.407 (a)(3)(i)	Test Method:	KDB 789033 D02 Section II.F referencing II.E.2.d)

Antenna Configuration:	Beamforming	Mode:	iPA - HDR
Test Port:	1+2 (Core 0 + Core 1)	Rate/Modulation:	8-DH5 ($\pi/4$ DQPSK)

Constant Tx	Stability: < $\pm 2\%$	Duty Cycle (%): 100.00	Period (ms): -	Width (ms): -
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Test Frequency (MHz)	PSD (dBm / 500 kHz)					Limit (dBm / 500 kHz)	Margin (dB)
	1	2	3	4	Σ		
5733	-5.14	-6.48	-	-	-2.75	26.21	28.96
5788	-5.24	-6.25	-	-	-2.71	26.21	28.92
5844	-4.84	-5.46	-	-	-2.13	26.21	28.34

Transmitter Maximum Power Spectral Density (5.725-5.85 GHz band) (continued)**Results: ePA**

Frequency Range:	5.725-5.850 GHz	Band:	U-NII-3
Limit Clause:	15.407 (a)(3)(i)	Test Method:	KDB 789033 D02 Section II.F referencing II.E.2.d)

Antenna Configuration:	SISO	Mode:	ePA - HDR
Test Port:	1 (Core 0)	Rate/Modulation:	4-DH5 ($\pi/4$ DQPSK)

Constant Tx	Stability: $< \pm 2\%$	Duty Cycle (%): 100.00	Period (ms): -	Width (ms): -
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Test Frequency (MHz)	PSD (dBm / 500 kHz)					Limit (dBm / 500 kHz)	Margin (dB)
	1	2	3	4	Σ		
5733	8.39	-	-	-	-	28.52	20.13
5788	8.66	-	-	-	-	28.52	19.86
5844	8.63	-	-	-	-	28.52	19.89

Frequency Range:	5.725-5.850 GHz	Band:	U-NII-3
Limit Clause:	15.407 (a)(3)(i)	Test Method:	KDB 789033 D02 Section II.F referencing II.E.2.d)

Antenna Configuration:	SISO	Mode:	ePA - HDR
Test Port:	1 (Core 0)	Rate/Modulation:	8-DH5 ($\pi/4$ DQPSK)

Constant Tx	Stability: $< \pm 2\%$	Duty Cycle (%): 100.00	Period (ms): -	Width (ms): -
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Test Frequency (MHz)	PSD (dBm / 500 kHz)					Limit (dBm / 500 kHz)	Margin (dB)
	1	2	3	4	Σ		
5733	4.84	-	-	-	-	28.52	23.68
5788	4.76	-	-	-	-	28.52	23.76
5844	5.72	-	-	-	-	28.52	22.80

Transmitter Maximum Power Spectral Density (5.725-5.85 GHz band) (continued)

Frequency Range:	5.725-5.850 GHz	Band:	U-NII-3
Limit Clause:	15.407 (a)(3)(i)	Test Method:	KDB 789033 D02 Section II.F referencing II.E.2.d)

Antenna Configuration:	SISO	Mode:	ePA - HDR
Test Port:	2 (Core 1)	Rate/Modulation:	4-DH5 ($\pi/4$ DQPSK)

Constant Tx	Stability: $< \pm 2\%$	Duty Cycle (%): 100.00	Period (ms): -	Width (ms): -
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Test Frequency (MHz)	PSD (dBm / 500 kHz)					Limit (dBm / 500 kHz)	Margin (dB)
	1	2	3	4	Σ		
5733	-	8.46	-	-	-	29.99	21.53
5788	-	8.25	-	-	-	29.99	21.74
5844	-	8.86	-	-	-	29.99	21.13

Frequency Range:	5.725-5.850 GHz	Band:	U-NII-3
Limit Clause:	15.407 (a)(3)(i)	Test Method:	KDB 789033 D02 Section II.F referencing II.E.2.d)

Antenna Configuration:	SISO	Mode:	ePA - HDR
Test Port:	2 (Core 1)	Rate/Modulation:	8-DH5 ($\pi/4$ DQPSK)

Constant Tx	Stability: $< \pm 2\%$	Duty Cycle (%): 100.00	Period (ms): -	Width (ms): -
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Test Frequency (MHz)	PSD (dBm / 500 kHz)					Limit (dBm / 500 kHz)	Margin (dB)
	1	2	3	4	Σ		
5733	-	4.94	-	-	-	29.99	25.05
5788	-	5.14	-	-	-	29.99	24.85
5844	-	5.83	-	-	-	29.99	24.16

Transmitter Maximum Power Spectral Density (5.725-5.85 GHz band) (continued)

Frequency Range:	5.725-5.850 GHz	Band:	U-NII-3
Limit Clause:	15.407 (a)(3)(i)	Test Method:	KDB 789033 D02 Section II.F referencing II.E.2.d)

Antenna Configuration:	Beamforming	Mode:	ePA - HDR
Test Port:	1+2 (Core 0 + Core 1)	Rate/Modulation:	4-DH5 ($\pi/4$ DQPSK)

Constant Tx	Stability: < $\pm 2\%$	Duty Cycle (%): 100.00	Period (ms): -	Width (ms): -
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Test Frequency (MHz)	PSD (dBm / 500 kHz)					Limit (dBm / 500 kHz)	Margin (dB)
	1	2	3	4	Σ		
5733	7.95	7.61	-	-	10.79	26.21	15.42
5788	8.10	8.23	-	-	11.18	26.21	15.03
5844	8.71	8.65	-	-	11.69	26.21	14.52

Frequency Range:	5.725-5.850 GHz	Band:	U-NII-3
Limit Clause:	15.407 (a)(3)(i)	Test Method:	KDB 789033 D02 Section II.F referencing II.E.2.d)

Antenna Configuration:	Beamforming	Mode:	ePA - HDR
Test Port:	1+2 (Core 0 + Core 1)	Rate/Modulation:	8-DH5 ($\pi/4$ DQPSK)

Constant Tx	Stability: < $\pm 2\%$	Duty Cycle (%): 100.00	Period (ms): -	Width (ms): -
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Test Frequency (MHz)	PSD (dBm / 500 kHz)					Limit (dBm / 500 kHz)	Margin (dB)
	1	2	3	4	Σ		
5733	5.05	4.41	-	-	7.75	26.21	18.46
5788	4.94	4.26	-	-	7.62	26.21	18.59
5844	5.34	4.76	-	-	8.07	26.21	18.14

5 Radiated Test Results

5.1 Transmitter Out of Band Radiated Emissions <1 GHz

Test Summary:

Test Engineers:	Andrew Harding & Jose Bayona	Test Dates:	18 October 2023 & 19 October 2023
Test Sample Serial Number:	T2HJWP7F92		

FCC Reference:	Parts 15.407(b)(4)(i),(9),(10) & 15.209(a)
Test Method Used:	KDB 789033 II.G. & ANSI C63.10 Sections 6.3, 6.4 and 6.5
Frequency Range:	9 kHz to 1000 MHz

Environmental Conditions:

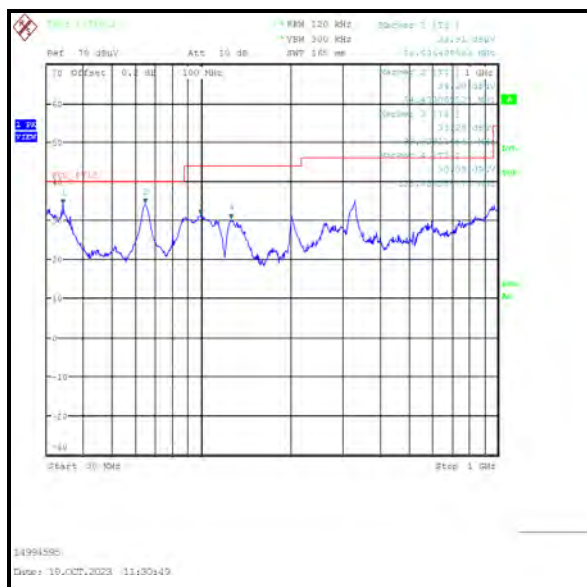
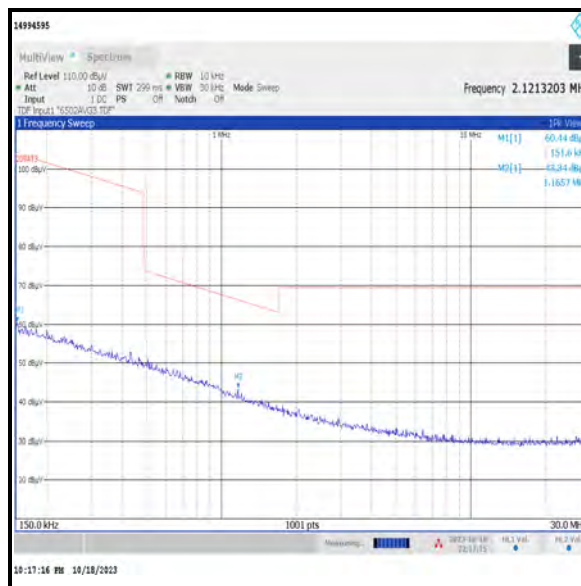
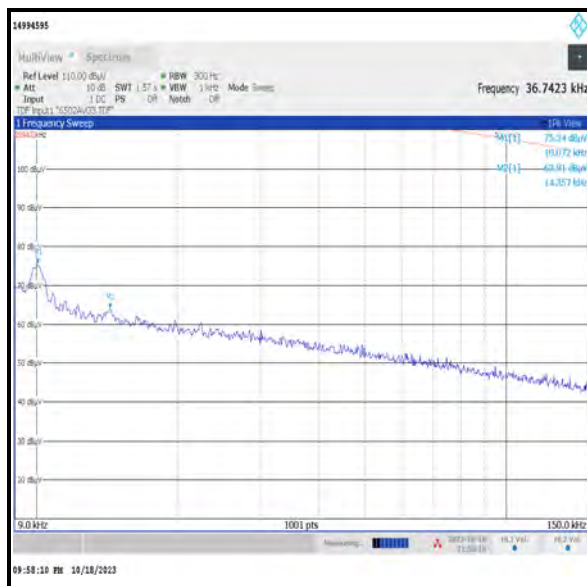
Temperature (°C):	23 to 24
Relative Humidity (%):	47 to 50

Note(s):

1. The final measured value, for the given emission in the field strength result tables, incorporates the calibrated antenna factor and cable loss.
2. The preliminary scans showed similar emission levels below 1 GHz, for each channel of operation. Therefore final radiated emissions measurements were performed with the EUT set to the middle channel only.
3. All other emissions shown on the pre-scan plots were investigated and found to be ambient, or >20 dB below the applicable limit or below the measurement system noise floor.
4. Measurements below 30 MHz were performed in a semi-anechoic chamber (Asset Number K0001) at 3 metres. The EUT was placed at a height of 80 cm above the reference ground plane in the centre of the chamber turntable. The limit was extrapolated to 3 metres in accordance with ANSI C63.10 clause 6.4.3 using the method described in clause 6.4.4.2. ANSI C63.10 clause 5.2 states an alternative test site that can demonstrate equivalence to an open area test site may be used for measurements below 30 MHz. Therefore, measurements were performed in a semi-anechoic chamber. The correlation data between semi-anechoic chamber and an open field test site is available upon request.
5. Measurements from 30 MHz to 1 GHz were performed in a semi-anechoic chamber (Asset Number K0017) at a distance of 3 metres. The EUT was placed at a height of 80 cm above the reference ground plane in the centre of the chamber turntable. Maximum emission levels were determined by height searching the measurement antenna over the range 1 metre to 4 metres.
6. Pre-scans were performed and markers placed on the highest measured levels. The test receiver was configured as follows: For 9 kHz to 150 kHz, the resolution bandwidth was set to 300 Hz and video bandwidth 1 kHz. A peak detector was used and trace mode was Max Hold. For 150 kHz to 30 MHz, the resolution bandwidth was set to 10 kHz and video bandwidth 30 kHz, trace mode was Max Hold. For 30 MHz to 1 GHz, the resolution bandwidth was set to 120 kHz and video bandwidth 500 kHz. A peak detector was used, sweep time was set to auto and trace mode was Max Hold.
7. Final measurements were performed on the marker frequencies and the results entered into the table below. The test receiver resolution bandwidth was set to 120 kHz, using a CISPR quasi-peak detector and span wide enough to see the whole emission.

Transmitter Out of Band Radiated Emissions (continued)**Results: Quasi-Peak / Middle Channel / 4DH5 / Beamforming / Core 0 + Core 1 / ePA**

Frequency (MHz)	Antenna Polarity	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
30.615	Vertical	29.0	40.0	11.0	Complied
34.625	Vertical	27.4	40.0	12.6	Complied
64.880	Vertical	30.8	40.0	9.2	Complied
86.680	Vertical	27.0	40.0	13.0	Complied
98.120	Vertical	27.4	43.5	16.1	Complied
126.040	Vertical	26.3	43.5	17.2	Complied
202.160	Vertical	26.8	43.5	16.7	Complied
326.460	Vertical	30.7	46.0	15.3	Complied

Transmitter Out of Band Radiated Emissions (continued)**Results: Quasi-Peak / Middle Channel / 4DH5 / Beamforming / Core 0 + Core 1 / ePA**

Note: These plots are pre-scans and for indication purposes only. For final measurements, see accompanying table.

5.2 Transmitter Out of Band Radiated Emissions >1 GHz

5.2.1 5.15-5.25 GHz band

Test Summary:

Test Engineers:	Andrew Harding & Jose Bayona	Test Dates:	05 October 2023 to 31 October 2023
Test Sample Serial Number:	T2HJWP7F92		

FCC Reference:	Part 15.407(b)(1),(10) & 15.209(a)
Test Method Used:	KDB 789033 II.G. & ANSI C63.10 Sections 6.3 and 6.6
Frequency Range:	1 GHz to 40 GHz

Environmental Conditions:

Temperature (°C):	21 to 25
Relative Humidity (%):	46 to 50

Note(s):

1. FCC Part 15.407(b)(1) states for transmitters operating in the band 5.15 to 5.25 GHz: all emissions outside of the 5.15 to 5.35 GHz band will not exceed -27 dBm/MHz. Part(b)(10) states the provisions of 15.205 apply e.g. restricted bands of operation.
2. The final measured value, for the given emission in the result tables, incorporates the calibrated antenna factor and cable loss. Field strength measurements were converted to EIRP using a conversion factor of 95.2, in accordance with KDB 789033 G.2.d)(iii).
3. All other emissions shown on the pre-scans were investigated and found to be ambient, or > 20 dB below the appropriate limit or below the noise floor of the measurement system.
4. Appropriate RF filters and attenuators were used during pre-scans and final measurements. Insertion losses were entered on the spectrum analyser as RF levels offsets.
5. The emission shown on the 1 GHz to 6 GHz plot at approximately 5203 MHz is the EUT fundamental.
6. Measurements were performed across the two restricted bands (4.5 to 5.15 GHz & 5.35 to 5.46 GHz) closest to the band of operation with the EUT transmitting on the bottom channel in the 5.15 to 5.25 GHz band. The 4.5 to 5.15 GHz plot is included in this section of the test report. For the EUT transmitting on the top channel in the 5.15 to 5.25 GHz band, these plots were included as part of upper band edge measurements and can be found in section 5.3.1 of this test report.
7. Pre-scans above 1 GHz were performed in a fully anechoic chamber (Asset Number K0017) at a distance of 3 metres. The EUT was placed at a height of 1.5 metres above the test chamber floor in the centre of the chamber turntable. All measurement antennas were placed at a fixed height of 1.5 metres above the test chamber floor, in line with the EUT.
8. Pre-scans were performed and a marker placed on the highest measured level of the appropriate plot. The test receiver resolution bandwidth was set to 1 MHz and video bandwidth 3 MHz. The sweep time was set to auto. Peak and average measurements were performed with their own appropriate detectors during the pre-scan measurements.

Transmitter Out of Band Radiated Emissions (5.15-5.25 GHz band operation) (continued)**Results: 4DH5 / Beamforming / Core 0 + Core 1 / ePA****Results: Bottom Channel / EIRP**

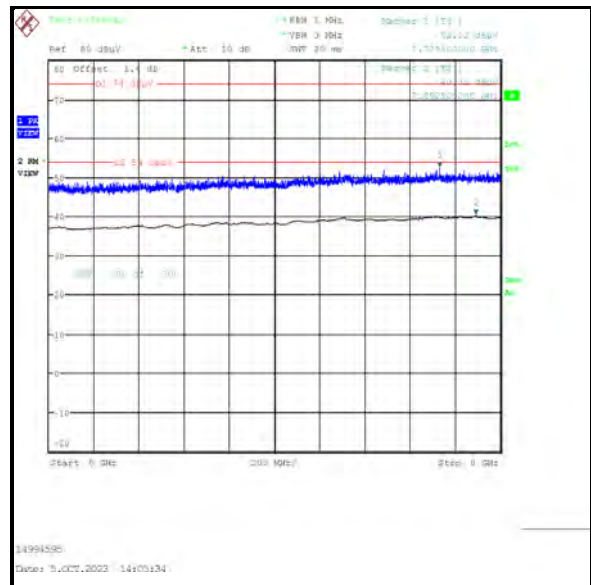
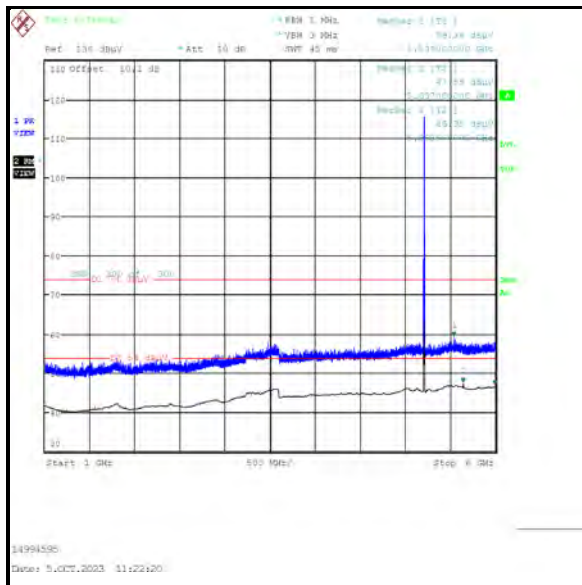
Frequency (MHz)	Antenna Polarity	Level (dBm)	Limit (dBm)	Margin (dB)	Result
5592.208	Vertical	-40.2	-27.0	13.2	Complied

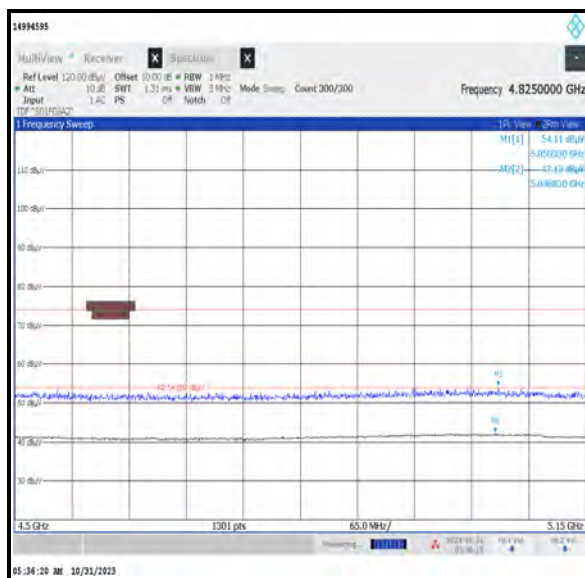
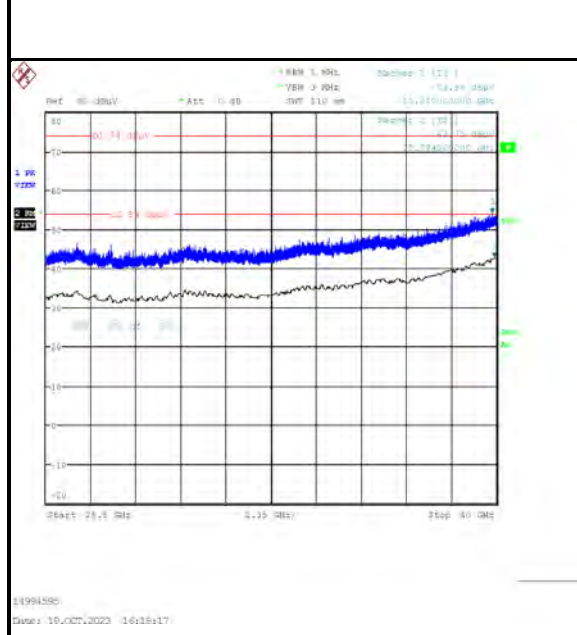
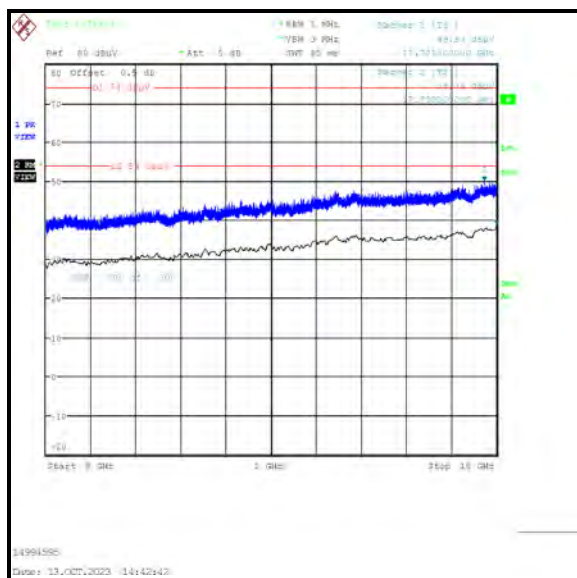
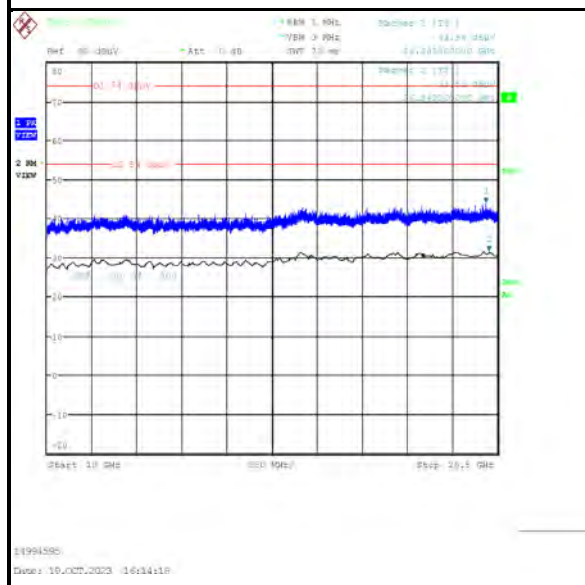
Results: Middle Channel / EIRP

Frequency (MHz)	Antenna Polarity	Level (dBm)	Limit (dBm)	Margin (dB)	Result
5636.433	Vertical	-40.2	-27.0	13.2	Complied

Results: Top Channel / EIRP

Frequency (MHz)	Antenna Polarity	Level (dBm)	Limit (dBm)	Margin (dB)	Result
5682.369	Vertical	-40.6	-27.0	13.6	Complied



Transmitter Out of Band Radiated Emissions (5.15-5.25 GHz band operation) (continued)**Restricted Band 4.5 GHz to 5.15 GHz**

Note: These plots are pre-scans and for indication purposes only. For final measurements, see accompanying table.

Transmitter Out of Band Radiated Emissions >1 GHz (continued)**5.2.2 5.725-5.85 GHz band****Test Summary:**

Test Engineers:	Andrew Harding & Jose Bayona	Test Dates:	05 October 2023 to 19 October 2023
Test Sample Serial Number:	T2HJWP7F92		

FCC Reference:	Part 15.407(b)(4)(i),(10) & 15.209(a)
Test Method Used:	KDB 789033 II.G. & ANSI C63.10 Sections 6.3 and 6.6
Frequency Range:	1 GHz to 40 GHz

Environmental Conditions:

Temperature (°C):	23 to 25
Relative Humidity (%):	46 to 50

Note(s):

1. FCC Part 15.407(b)(4)(i) states for transmitters operating in the band 5.725 to 5.85 GHz: all emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge. Part(b)(10) states the provisions of 15.205 apply e.g. restricted bands of operation.
2. The final measured value, for the given emission in the result tables, incorporates the calibrated antenna factor and cable loss. Where applicable, field strength measurements were converted to EIRP using a conversion factor of 95.2, in accordance with KDB 789033 G.2.d)(iii).
3. All other emissions shown on the pre-scans were investigated and found to be ambient, or > 20 dB below the appropriate limit or below the noise floor of the measurement system.
4. Appropriate RF filters and attenuators were used during pre-scans and final measurements. Insertion losses were entered on the spectrum analyser as RF levels offsets.
5. The emission shown on the 1 GHz to 6 GHz plot at approximately 5788 MHz is the EUT fundamental.
6. Pre-scans above 1 GHz were performed in a fully anechoic chamber (Asset Number K0017) at a distance of 3 metres. The EUT was placed at a height of 1.5 metres above the test chamber floor in the centre of the chamber turntable. All measurement antennas were placed at a fixed height of 1.5 metres above the test chamber floor, in line with the EUT. Final measurements above 1 GHz were performed in a semi-anechoic chamber (Asset Number K0017) at a distance of 3 metres. The EUT was placed at a height of 1.5 m above the reference ground plane in the centre of the chamber turntable. Maximum emission levels were determined by height searching the measurement antenna over the range 1 metre to 4 metres.
7. Pre-scans were performed and a marker placed on the highest measured level of the appropriate plot. The test receiver resolution bandwidth was set to 1 MHz and video bandwidth 3 MHz. The sweep time was set to auto. Peak and average measurements were performed with their own appropriate detectors during the pre-scan measurements.
8. Final measurements were performed on the marker frequencies and the results entered into the table below. The test receiver resolution bandwidth was set to 1 MHz and video bandwidth 3 MHz. The sweep time was set to auto, with and span wide enough to see the whole emission. Peak measurements were performed with a peak detector and max hold enable. Average measurements were performed with an RMS detector and trace average over 300 sweeps.

Transmitter Out of Band Radiated Emissions (5.725-5.85 GHz band operation) (continued)**Results: 4DH5 / Beamforming / Core 0 + Core 1 / ePA****Results: Bottom Channel / EIRP**

Frequency (MHz)	Antenna Polarity	Level (dBm)	Limit (dBm)	Margin (dB)	Result
5323.560	Vertical	-42.1	-27.0	15.1	Complied
6142.870	Vertical	-40.5	-27.0	13.5	Complied

Results: Middle Channel / EIRP

Frequency (MHz)	Antenna Polarity	Level (dBm)	Limit (dBm)	Margin (dB)	Result
6201.040	Vertical	-41.0	-27.0	14.0	Complied

Results: Middle Channel / Field Strength / Peak

Frequency (MHz)	Antenna Polarity	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5374.850	Vertical	53.3	74.0	20.7	Complied

Results: Middle Channel / Field Strength / Average

Frequency (MHz)	Antenna Polarity	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5374.680	Vertical	43.1	54.0	10.9	Complied

Results: Top Channel / EIRP

Frequency (MHz)	Antenna Polarity	Level (dBm)	Limit (dBm)	Margin (dB)	Result
6261.270	Vertical	-40.0	-27.0	13.0	Complied

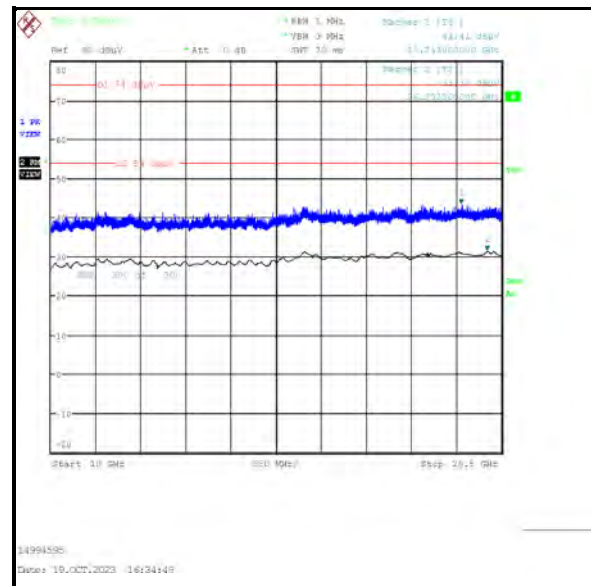
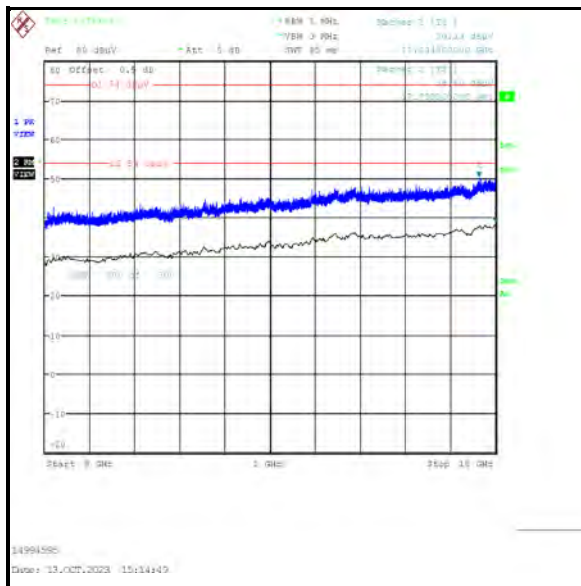
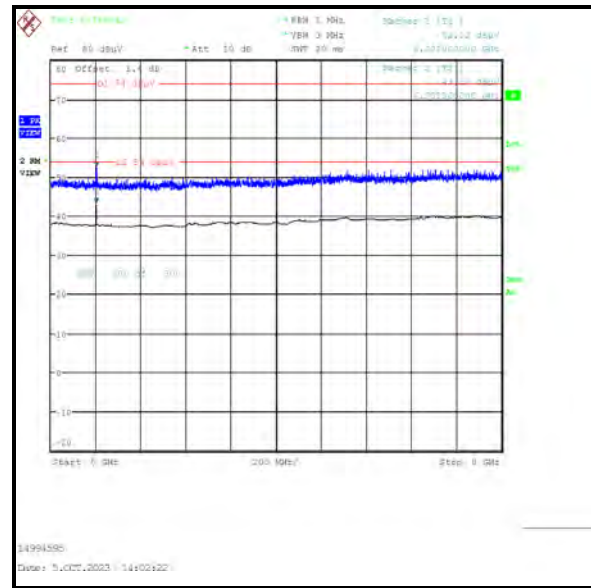
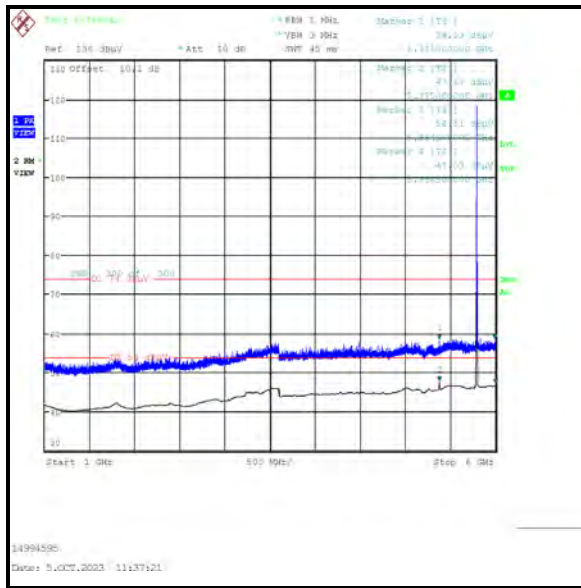
Results: Top Channel / Field Strength / Peak

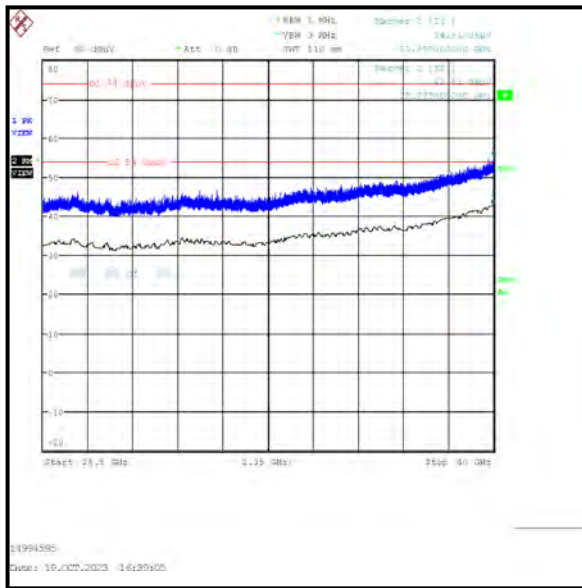
Frequency (MHz)	Antenna Polarity	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5426.759	Vertical	56.8	74.0	17.2	Complied

Results: Top Channel / Field Strength / Average

Frequency (MHz)	Antenna Polarity	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5426.559	Vertical	49.3	54.0	4.7	Complied

Transmitter Out of Band Radiated Emissions (5.725-5.85 GHz band operation) (continued)



Transmitter Out of Band Radiated Emissions (5.725-5.85 GHz band operation) (continued)

Note: These plots are pre-scans and for indication purposes only. For final measurements, see accompanying table.

5.3 Transmitter Band Edge Radiated Emissions

5.3.1 5.15-5.25 GHz band

Test Summary:

Test Engineer:	John Ferdinand & Andrew Harding	Test Dates:	06 September 2023 to 11 September 2023
Test Sample Serial Number:	C6LTYQVMQ4		

FCC Reference:	Parts 15.407(b)(1),(10), 15.205 & 15.209(a)
Test Method Used:	ANSI C63.10 Section 6.10 & KDB 789033 II.G.

Environmental Conditions:

Temperature (°C):	26 to 28
Relative Humidity (%):	46 to 51

Note(s):

1. Lower band edge measurements were performed with the EUT transmitting on the bottom channel. Upper band edge measurements were performed with the EUT transmitting on the top channel.
2. In addition, the lower and upper band edges were performed with the EUT configured in hopping mode. It was set to hop across the 79 channels closest to the applicable band edge. These plots are archived on the UL IT server and available for inspection if required.
3. For transmitters operating in the 5.15-5.25 GHz band: all emissions outside of the 5.15-5.35 GHz band shall not exceed an EIRP of -27 dBm/MHz. However, there are restricted bands of operation below the lower band edge at 4.5-5.15 GHz and also above the upper band edge at 5.35-5.46 GHz therefore the provisions of FCC Part 15.205 apply. Tests for at 4.5-5.15 GHz restricted band were performed and are included in section 5.2.1 of this test report.
4. Field strength measurements using peak and average detectors were performed in the restricted bands below 5.15 GHz and above 5.35 GHz. Field strength and EIRP results were found to be compliant with the restricted band limits and Part 15.407 out-of-band limits.

Transmitter Band Edge Radiated Emissions (5.15-5.25 GHz band operation) (continued)**Results: Static / DH5 / SISO / Core 0 / iPA****Results: Lower Band Edge / Peak**

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5125.561	58.7	74.0	15.3	Complied
5150	57.6	74.0	16.4	Complied

Results: Upper Band Edge / Peak

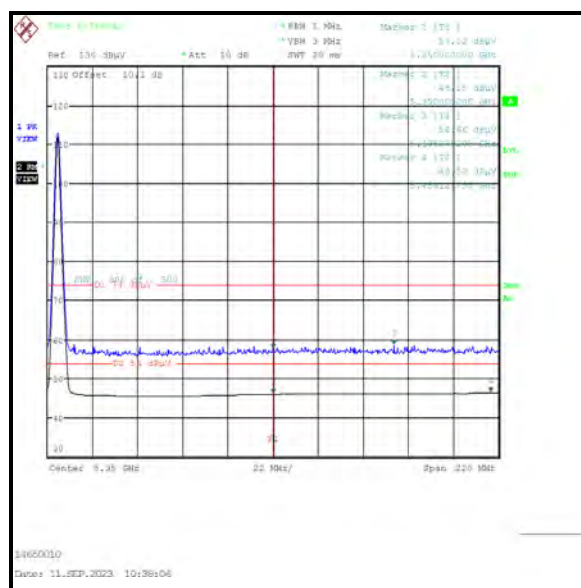
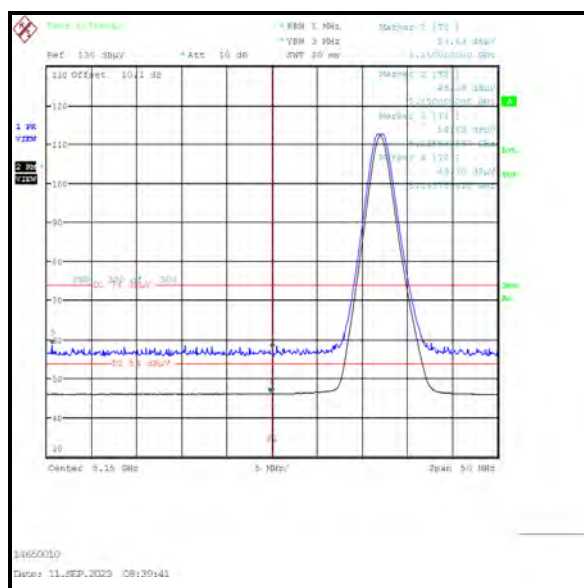
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	57.5	74.0	16.5	Complied
5408.878	58.7	74.0	15.3	Complied

Results: Lower Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5150	46.3	54.0	7.7	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	46.2	54.0	7.8	Complied
5456.122	46.5	54.0	7.5	Complied



Transmitter Band Edge Radiated Emissions (5.15-5.25 GHz band operation) (continued)**Results: Static / 4DH5 / SISO / Core 0 / iPA****Results: Lower Band Edge / Peak**

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5129.647	58.5	74.0	15.5	Complied
5150	57.1	74.0	16.9	Complied

Results: Upper Band Edge / Peak

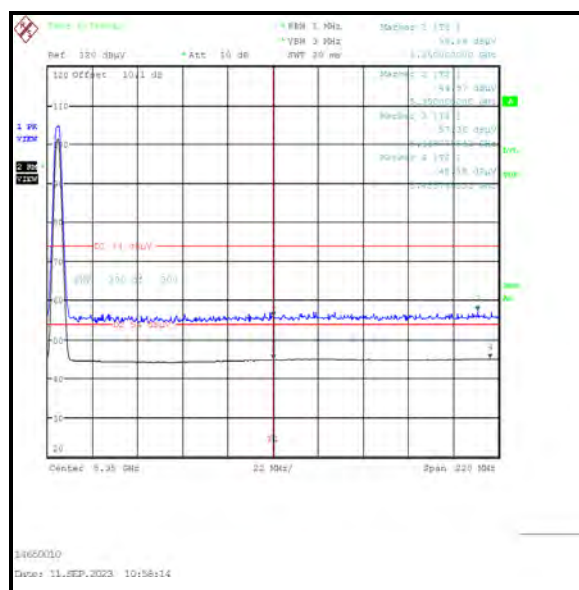
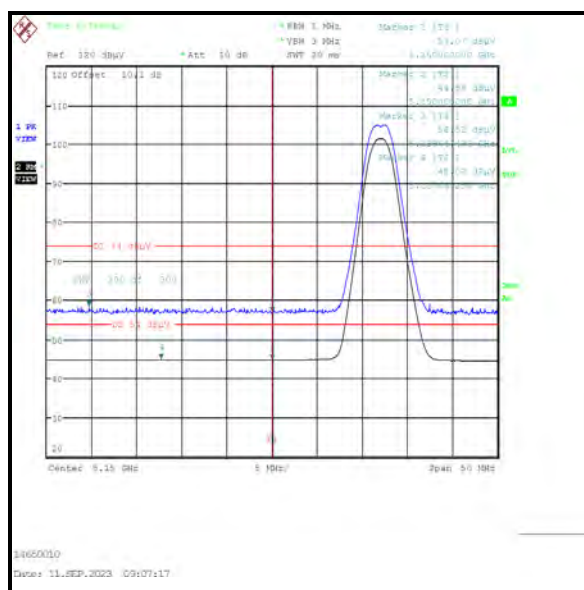
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	55.9	74.0	18.1	Complied
5449.776	57.4	74.0	16.6	Complied

Results: Lower Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5137.660	45.0	54.0	9.0	Complied
5150	44.9	54.0	9.1	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	45.0	54.0	9.0	Complied
5455.769	45.2	54.0	8.8	Complied



Transmitter Band Edge Radiated Emissions (5.15-5.25 GHz band operation) (continued)**Results: Static / 4DH5 / SISO / Core 0 / ePA****Results: Lower Band Edge / Peak**

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5139.183	59.8	74.0	14.2	Complied
5150	59.4	74.0	14.6	Complied

Results: Upper Band Edge / Peak

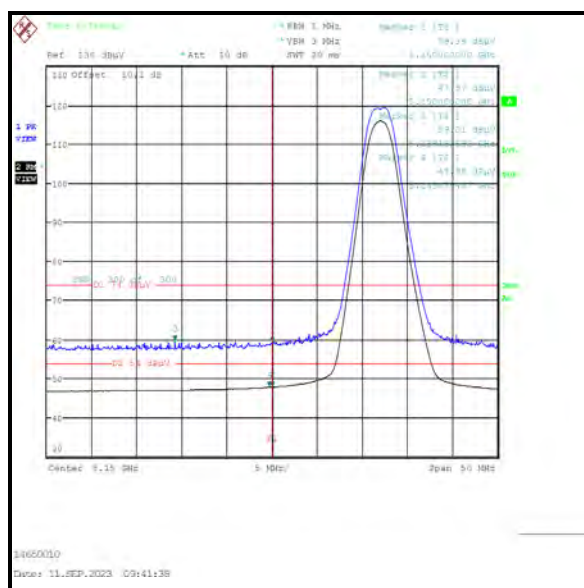
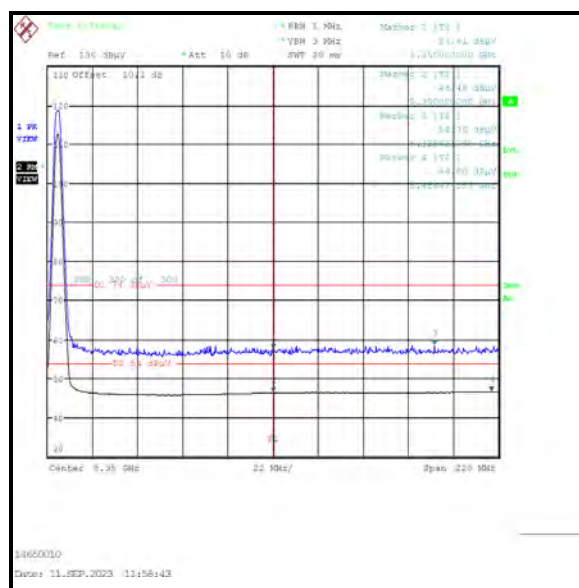
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	57.6	74.0	16.4	Complied
5428.622	58.8	74.0	15.2	Complied

Results: Lower Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5150	48.0	54.0	6.0	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	46.5	54.0	7.5	Complied
5456.474	46.8	54.0	7.2	Complied

**Lower Band Edge****Upper Band Edge**

Transmitter Band Edge Radiated Emissions (5.15-5.25 GHz band operation) (continued)**Results: Static / 8DH5 / SISO / Core 0 / iPA****Results: Lower Band Edge / Peak**

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5133.814	58.4	74.0	15.6	Complied
5150	57.0	74.0	17.0	Complied

Results: Upper Band Edge / Peak

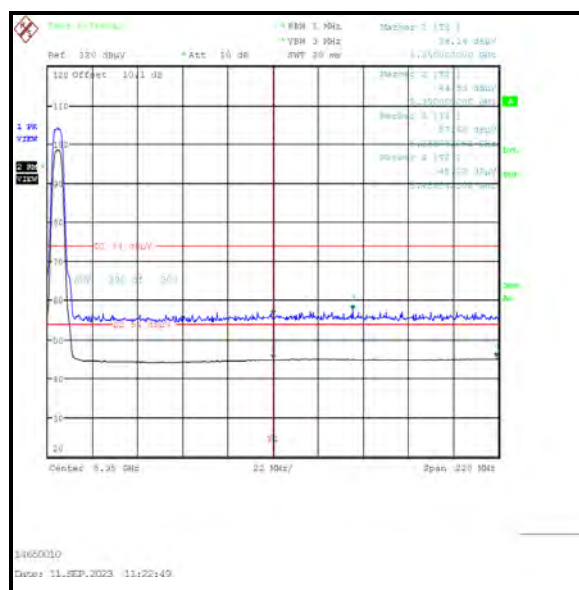
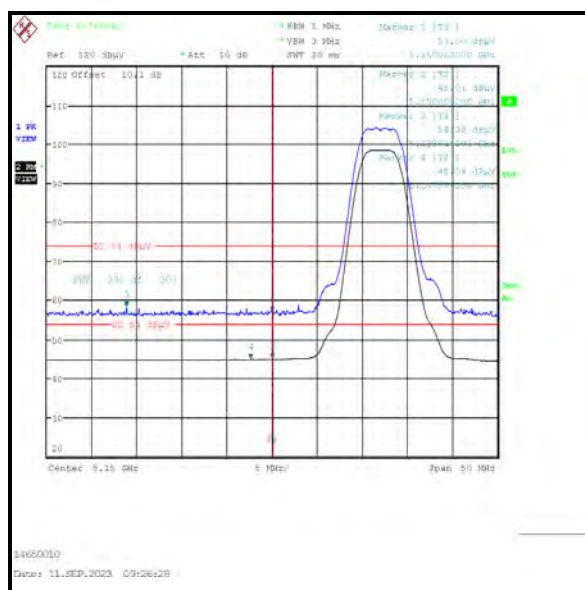
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	56.1	74.0	17.9	Complied
5388.782	57.6	74.0	16.4	Complied

Results: Lower Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5150	45.0	54.0	9.0	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	44.9	54.0	9.1	Complied
5458.942	45.2	54.0	8.8	Complied



Transmitter Band Edge Radiated Emissions (5.15-5.25 GHz band operation) (continued)**Results: Static / 8DH5 / SISO / Core 0 / ePA****Results: Lower Band Edge / Peak**

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5150	61.4	74.0	12.6	Complied

Results: Upper Band Edge / Peak

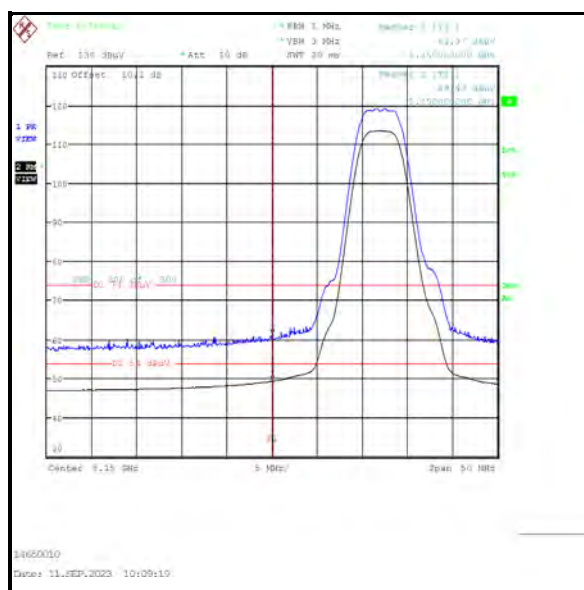
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	57.2	74.0	16.8	Complied
5449.776	58.9	74.0	15.1	Complied

Results: Lower Band Edge / Average

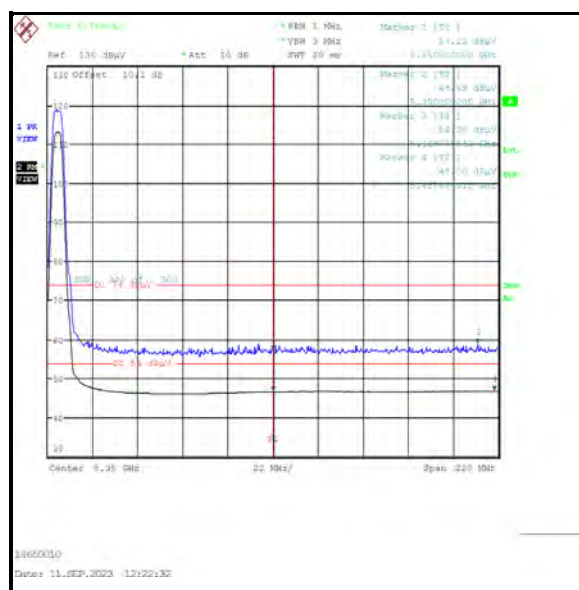
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5150	49.4	54.0	4.6	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	46.7	54.0	7.3	Complied
5457.885	47.0	54.0	7.0	Complied



Lower Band Edge



Upper Band Edge

Transmitter Band Edge Radiated Emissions (5.15-5.25 GHz band operation) (continued)**Results: Static / DH5 / SISO / Core 1 / iPA****Results: Lower Band Edge / Peak**

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5138.221	58.9	74.0	15.1	Complied
5150	58.2	74.0	15.8	Complied

Results: Upper Band Edge / Peak

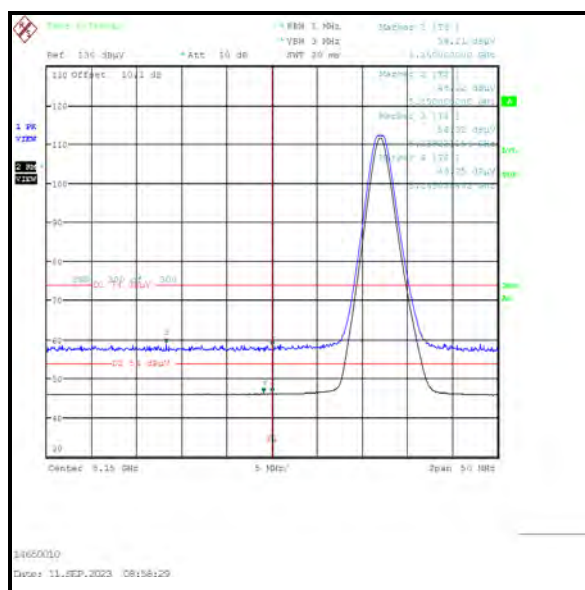
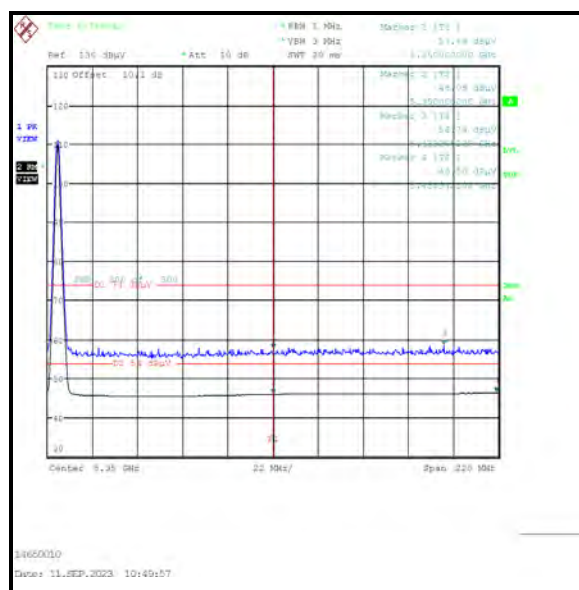
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	57.7	74.0	16.3	Complied
5433.205	58.7	74.0	15.3	Complied

Results: Lower Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5149.038	46.3	54.0	7.7	Complied
5150	46.2	54.0	7.8	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	46.1	54.0	7.9	Complied
5458.942	46.5	54.0	7.5	Complied

**Lower Band Edge****Upper Band Edge**

Transmitter Band Edge Radiated Emissions (5.15-5.25 GHz band operation) (continued)**Results: Static / 4DH5 / SISO / Core 1 / iPA****Results: Lower Band Edge / Peak**

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5144.231	57.9	74.0	16.1	Complied
5150	56.5	74.0	17.5	Complied

Results: Upper Band Edge / Peak

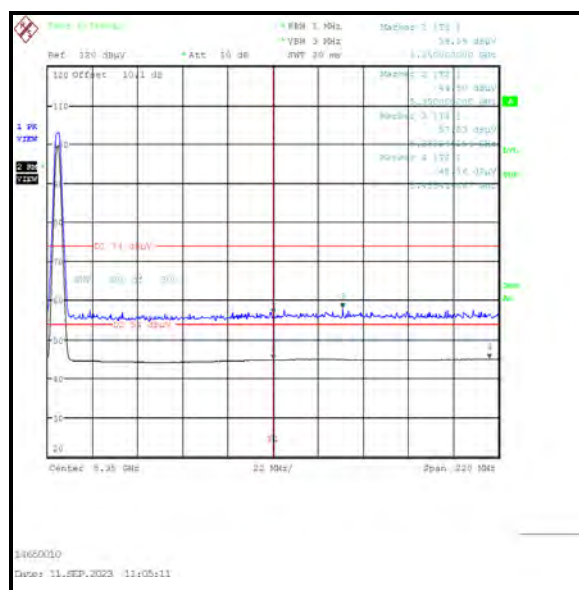
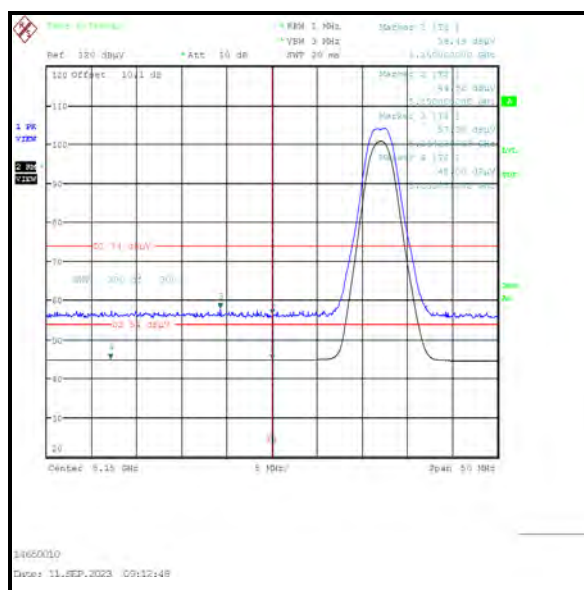
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	56.6	74.0	17.4	Complied
5383.846	57.8	74.0	16.2	Complied

Results: Lower Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5132.051	45.0	54.0	9.0	Complied
5150	44.9	54.0	9.1	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	44.9	54.0	9.1	Complied
5455.417	45.2	54.0	8.8	Complied



Transmitter Band Edge Radiated Emissions (5.15-5.25 GHz band operation) (continued)**Results: Static / 4DH5 / SISO / Core 1 / ePA****Results: Lower Band Edge / Peak**

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5146.394	59.7	74.0	14.3	Complied
5150	58.3	74.0	15.7	Complied

Results: Upper Band Edge / Peak

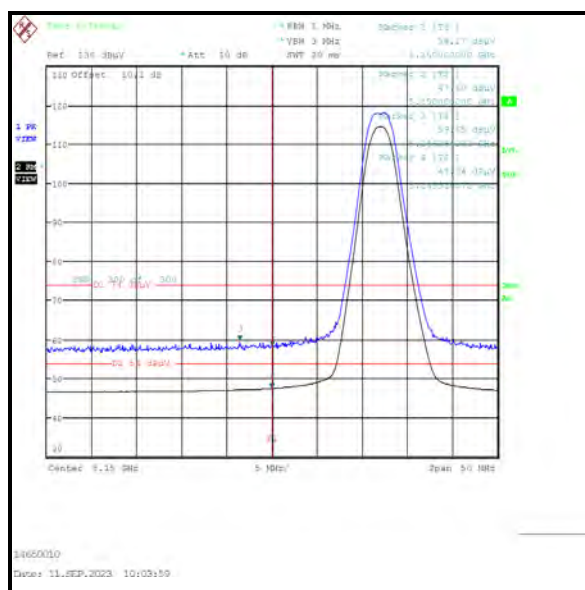
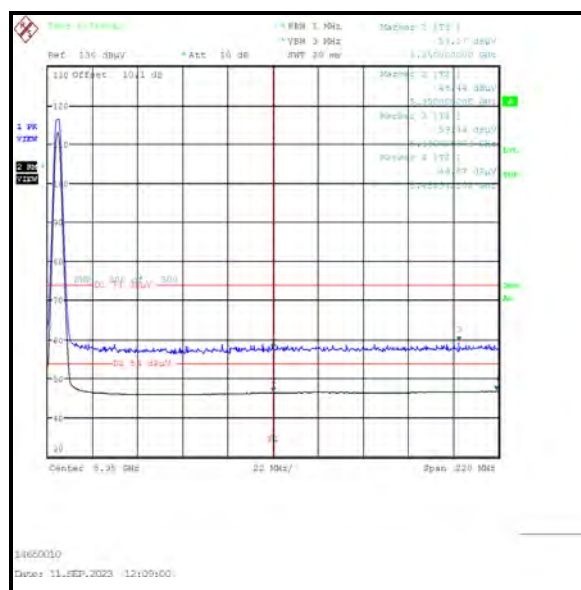
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	57.6	74.0	16.4	Complied
5440.609	59.4	74.0	14.6	Complied

Results: Lower Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5150	47.6	54.0	6.4	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	46.4	54.0	7.6	Complied
5458.942	46.9	54.0	7.1	Complied

**Lower Band Edge****Upper Band Edge**

Transmitter Band Edge Radiated Emissions (5.15-5.25 GHz band operation) (continued)**Results: Static / 8DH5 / SISO / Core 1 / iPA****Results: Lower Band Edge / Peak**

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5131.731	57.9	74.0	16.1	Complied
5150	56.5	74.0	17.5	Complied

Results: Upper Band Edge / Peak

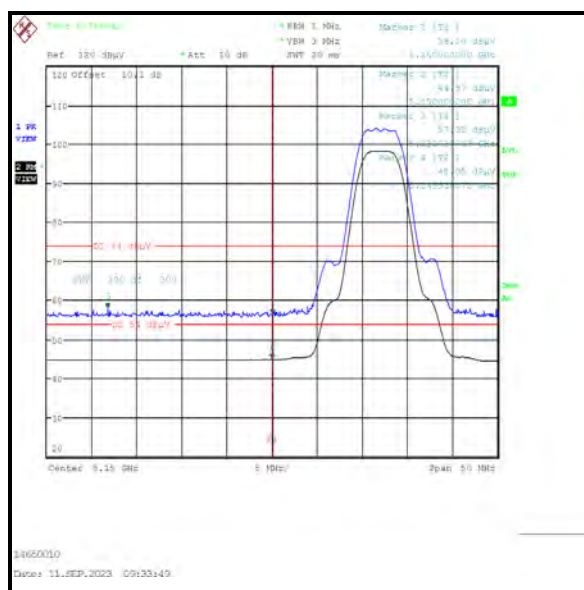
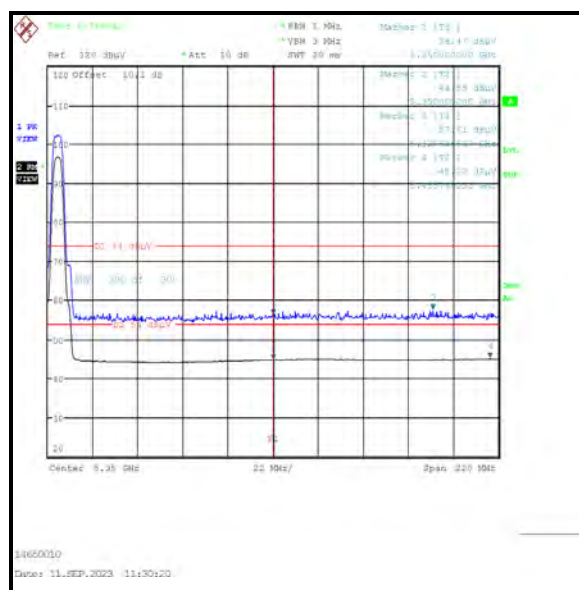
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	56.5	74.0	17.5	Complied
5427.917	57.6	74.0	16.4	Complied

Results: Lower Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5149.920	45.1	54.0	8.9	Complied
5150	45.0	54.0	9.0	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	44.9	54.0	9.1	Complied
5455.769	45.2	54.0	8.8	Complied

**Lower Band Edge****Upper Band Edge**

Transmitter Band Edge Radiated Emissions (5.15-5.25 GHz band operation) (continued)**Results: Static / 8DH5 / SISO / Core 1 / ePA****Results: Lower Band Edge / Peak**

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5148.958	60.8	74.0	13.2	Complied
5150	59.7	74.0	14.3	Complied

Results: Upper Band Edge / Peak

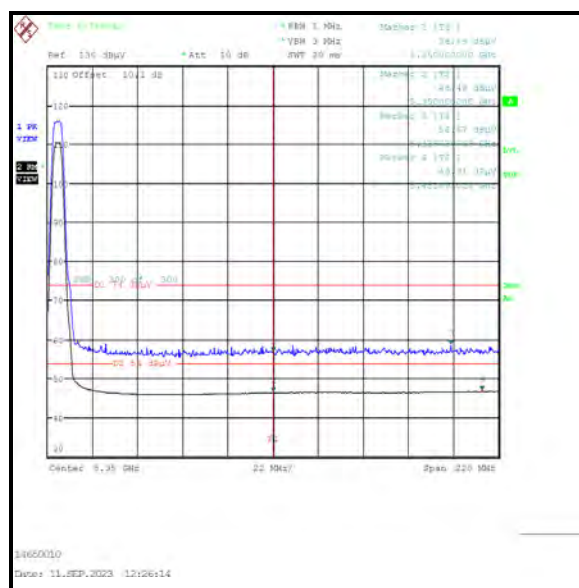
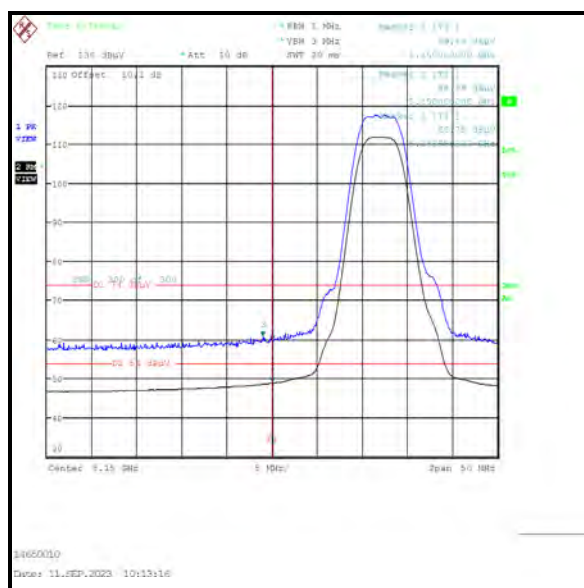
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	56.7	74.0	17.3	Complied
5436.731	58.7	74.0	15.3	Complied

Results: Lower Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5150	49.0	54.0	5.0	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	46.5	54.0	7.5	Complied
5451.892	46.9	54.0	7.1	Complied



Transmitter Band Edge Radiated Emissions (5.15-5.25 GHz band operation) (continued)**Results: Static / DH5 / Beamforming / Core 0 + Core 1 / iPA****Results: Lower Band Edge / Peak**

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5141.587	59.0	74.0	15.0	Complied
5150	56.9	74.0	17.1	Complied

Results: Upper Band Edge / Peak

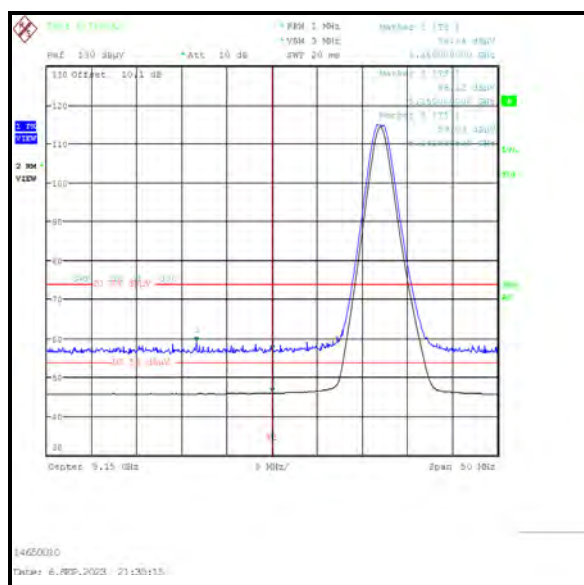
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	56.0	74.0	18.0	Complied
5376.442	58.4	74.0	15.6	Complied

Results: Lower Band Edge / Average

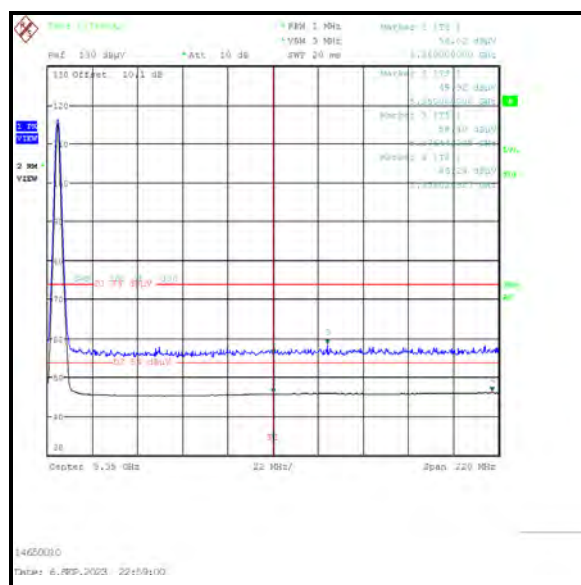
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5150	46.1	54.0	7.9	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	45.9	54.0	8.1	Complied
5456.827	46.2	54.0	7.8	Complied



Lower Band Edge



Upper Band Edge

Transmitter Band Edge Radiated Emissions (5.15-5.25 GHz band operation) (continued)**Results: Static / 4DH5 / Beamforming / Core 0 + Core 1 / iPA****Results: Lower Band Edge / Peak**

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5145.513	58.6	74.0	15.4	Complied
5150	57.2	74.0	16.8	Complied

Results: Upper Band Edge / Peak

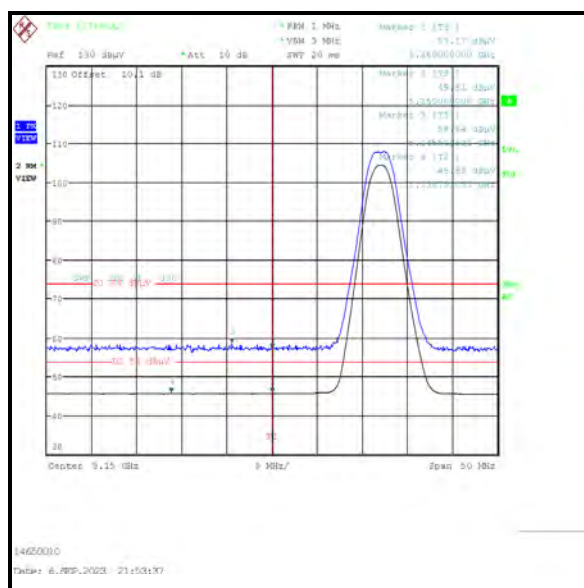
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	57.1	74.0	16.9	Complied
5455.064	58.4	74.0	15.6	Complied

Results: Lower Band Edge / Average

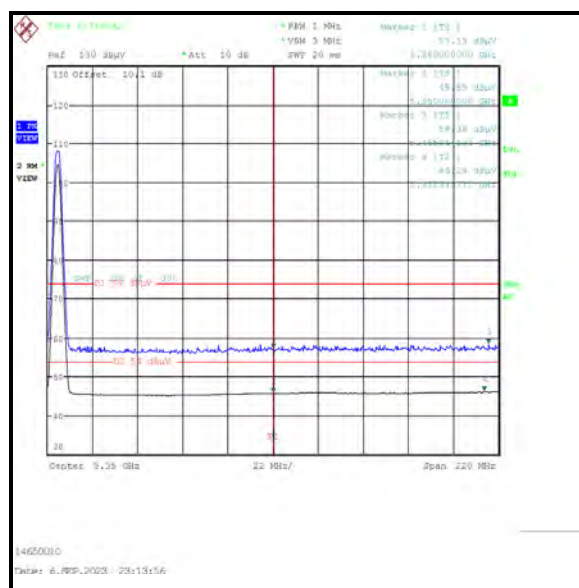
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5138.782	45.9	54.0	8.1	Complied
5150	45.8	54.0	8.2	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	45.9	54.0	8.1	Complied
5452.949	46.2	54.0	7.8	Complied



Lower Band Edge



Upper Band Edge

Transmitter Band Edge Radiated Emissions (5.15-5.25 GHz band operation) (continued)**Results: Static / 4DH5 / Beamforming / Core 0 + Core 1 / ePA****Results: Lower Band Edge / Peak**

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5148.317	60.9	74.0	13.1	Complied
5150	59.9	74.0	14.1	Complied

Results: Upper Band Edge / Peak

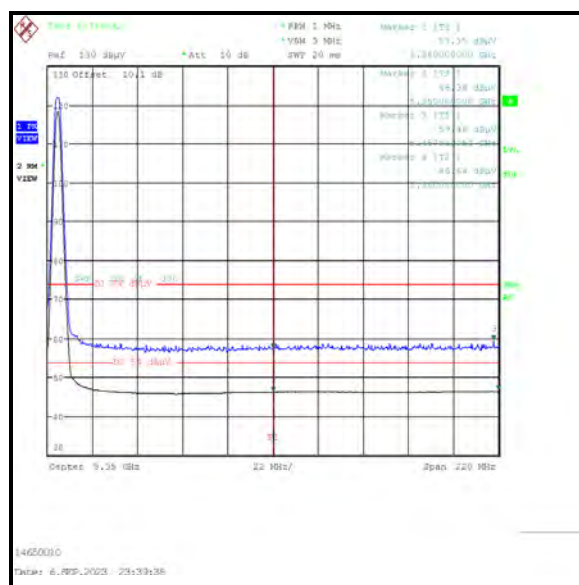
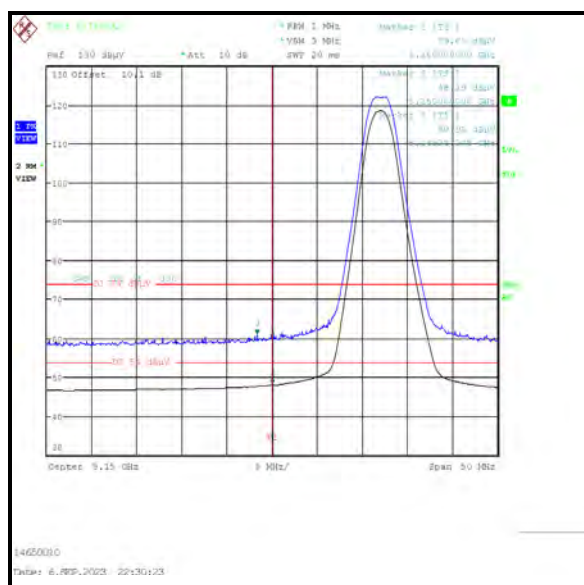
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	57.4	74.0	16.6	Complied
5457.532	59.5	74.0	14.5	Complied

Results: Lower Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5150	48.2	54.0	5.8	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	46.4	54.0	7.6	Complied
5460.000	46.6	54.0	7.4	Complied



Transmitter Band Edge Radiated Emissions (5.15-5.25 GHz band operation) (continued)**Results: Static / 8DH5 / Beamforming / Core 0 + Core 1 / iPA****Results: Lower Band Edge / Peak**

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5137.821	58.7	74.0	15.3	Complied
5150	57.2	74.0	16.8	Complied

Results: Upper Band Edge / Peak

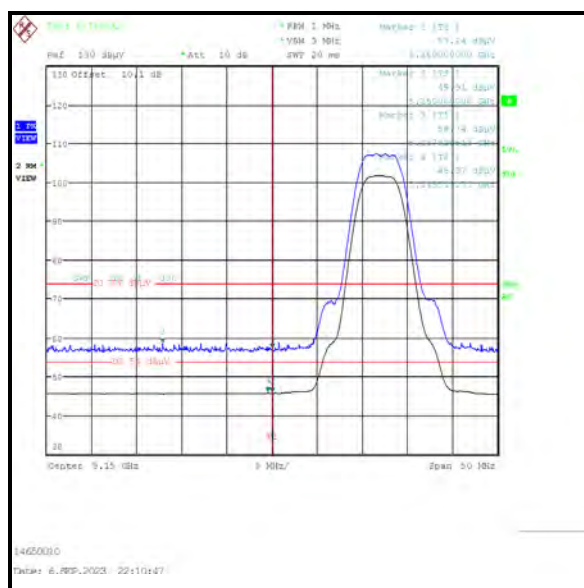
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	56.9	74.0	17.1	Complied
5414.519	58.6	74.0	15.4	Complied

Results: Lower Band Edge / Average

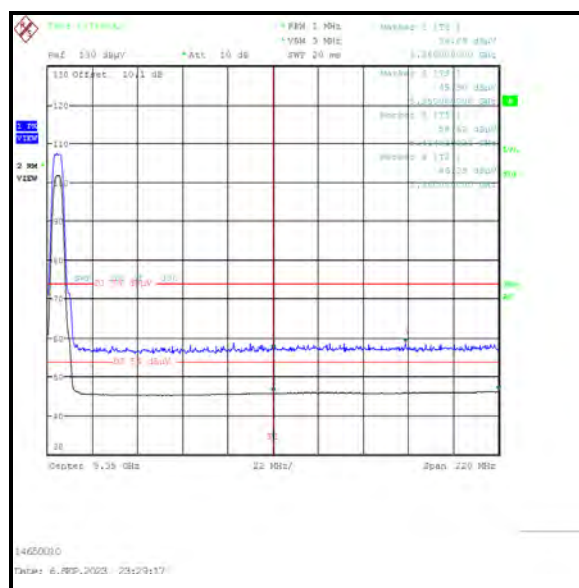
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5149.519	46.0	54.0	8.0	Complied
5150	45.9	54.0	8.1	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	45.9	54.0	8.1	Complied
5460.000	46.3	54.0	7.7	Complied



Lower Band Edge



Upper Band Edge

Transmitter Band Edge Radiated Emissions (5.15-5.25 GHz band operation) (continued)**Results: Static / 8DH5 / Beamforming / Core 0 + Core 1 / ePA****Results: Lower Band Edge / Peak**

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5149.519	62.1	74.0	11.9	Complied
5150	61.3	74.0	12.7	Complied

Results: Upper Band Edge / Peak

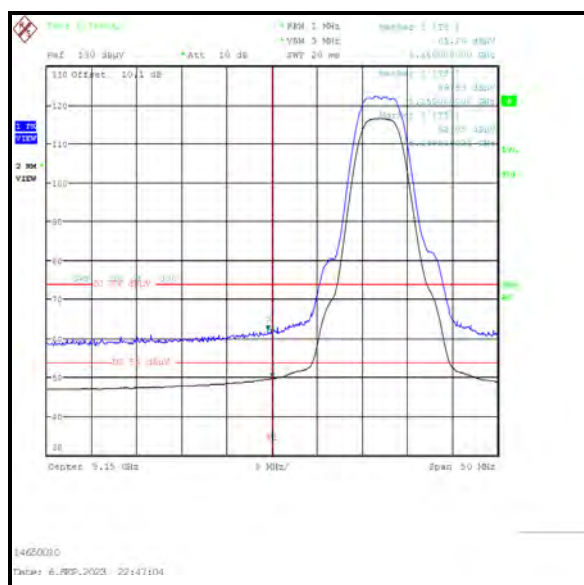
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	57.8	74.0	16.2	Complied
5363.045	59.2	74.0	14.8	Complied

Results: Lower Band Edge / Average

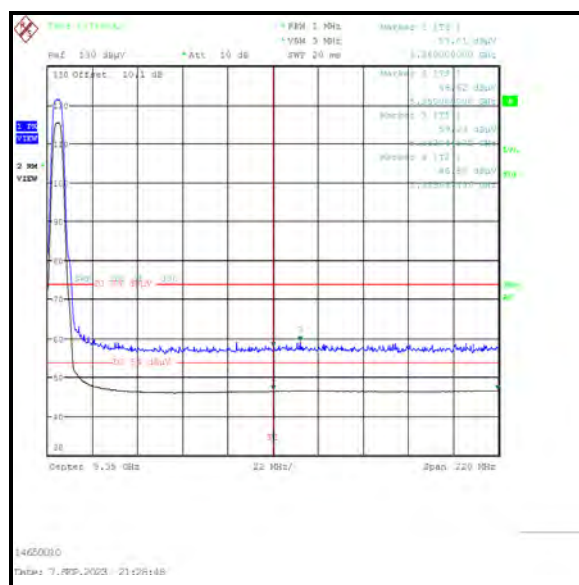
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5150	49.8	54.0	4.2	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	46.6	54.0	7.4	Complied
5459.647	46.8	54.0	7.2	Complied



Lower Band Edge



Upper Band Edge

Transmitter Band Edge Radiated Emissions (5.725-5.85 GHz band)**5.3.2 5.725-5.85 GHz band****Test Summary:**

Test Engineers:	John Ferdinand & Andrew Harding	Test Dates:	07 September 2023 to 11 September 2023
Test Sample Serial Number:	C6LTYQVMQ4		

FCC Reference:	Parts 15.407(b)(4)(i),(10), 15.205 & 15.209(a)
Test Method Used:	ANSI C63.10 Section 6.10 & KDB 789033 II.G.

Environmental Conditions:

Temperature (°C):	26 to 28
Relative Humidity (%):	50 to 51

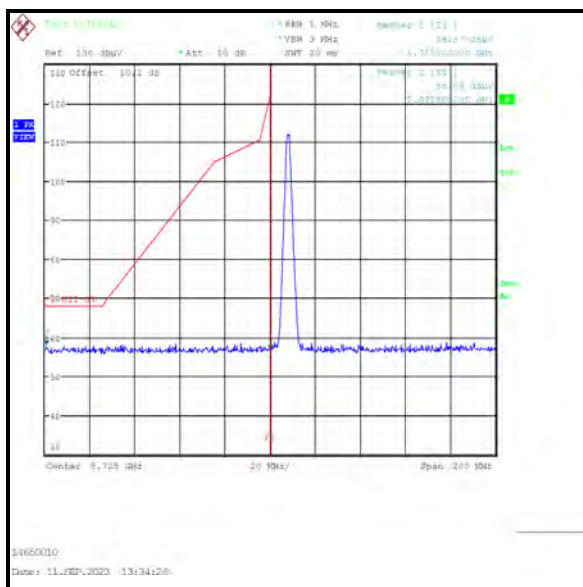
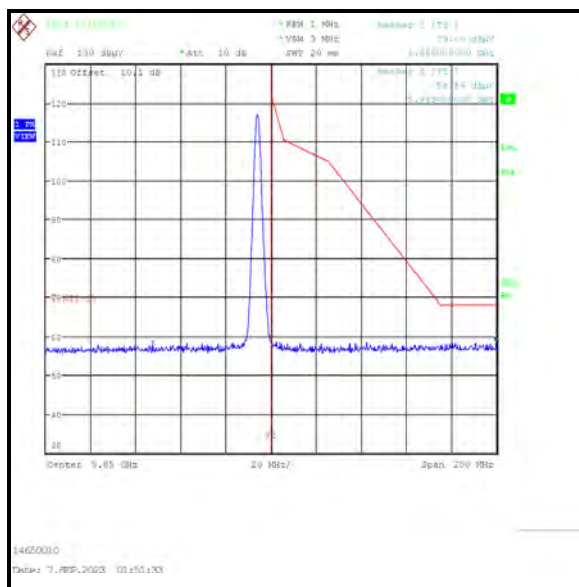
Note(s):

1. Lower band edge measurements were performed with the EUT transmitting on the bottom channel. Upper band edge measurements were performed with the EUT transmitting on the top channel.
2. In addition, the lower and upper band edges were performed with the EUT configured in hopping mode. It was set to hop across the 79 channels closest to the applicable band edge. These plots are archived on the UL IT server and available for inspection if required.
3. For completeness, results are also shown as EIRP in dBm and also as field strength in dBμV/m. Measured field strength was converted to EIRP in accordance with KDB 789033 G.2.d)(iii) using a conversion factor of 95.2.

Transmitter Band Edge Radiated Emissions (5.725-5.85 GHz band operation) (continued)**Results: Static / DH5 / SISO / Core 0 / iPA**

Frequency (MHz)	Level (dBm)	Limit (dBm/MHz)	Margin (dB)	Result
5625.800	-37.1	-27.0	10.1	Complied
5725	-38.2	27.0	65.2	Complied
5850	-36.2	27.0	63.2	Complied
5949.600	-36.6	-27.0	9.6	Complied

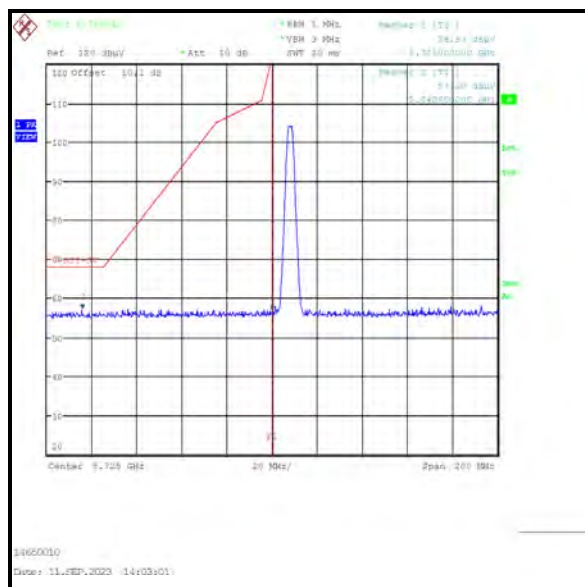
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5625.800	58.1	68.2	10.1	Complied
5725	57.0	122.2	65.2	Complied
5850	59.0	122.2	63.2	Complied
5949.600	58.6	68.2	9.6	Complied

**Lower Band Edge****Upper Band Edge**

Transmitter Band Edge Radiated Emissions (5.725-5.85 GHz band operation) (continued)**Results: Static / 4DH5 / SISO / Core 0 / iPA**

Frequency (MHz)	Level (dBm)	Limit (dBm/MHz)	Margin (dB)	Result
5640.600	-38.0	-27.0	11.0	Complied
5725	-38.3	27.0	65.3	Complied
5850	-36.9	27.0	63.9	Complied
5935.600	-35.7	-27.0	8.7	Complied

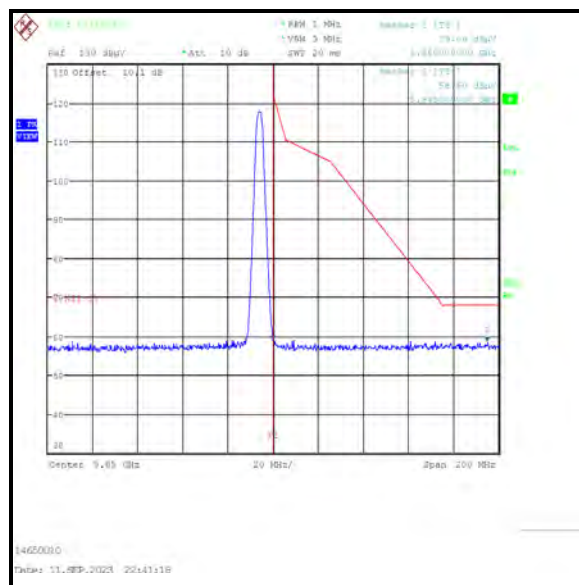
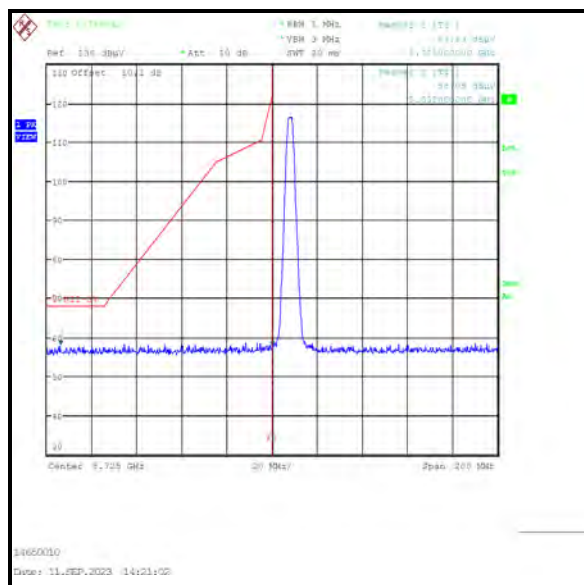
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5640.600	57.2	68.2	11.0	Complied
5725	56.9	122.2	65.3	Complied
5850	58.3	122.2	63.9	Complied
5935.600	59.5	68.2	8.7	Complied



Transmitter Band Edge Radiated Emissions (5.725-5.85 GHz band operation) (continued)**Results: Static / 4DH5 / SISO / Core 0 / ePA**

Frequency (MHz)	Level (dBm)	Limit (dBm/MHz)	Margin (dB)	Result
5631.000	-37.1	-27.0	10.1	Complied
5725	-37.4	27.0	64.4	Complied
5850	-36.1	27.0	63.1	Complied
5945.000	-36.6	-27.0	9.6	Complied

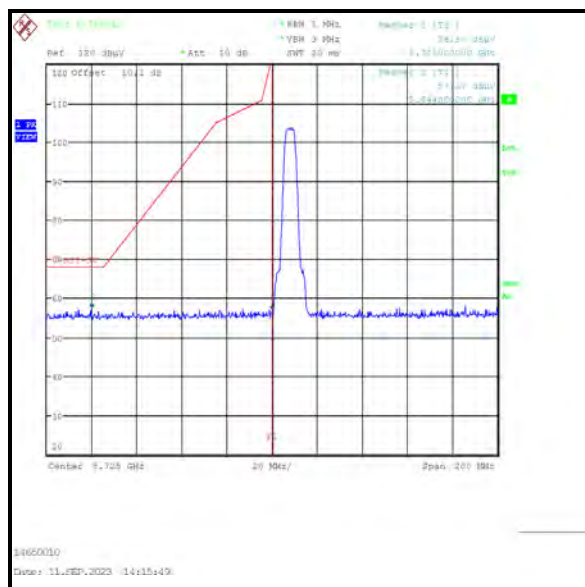
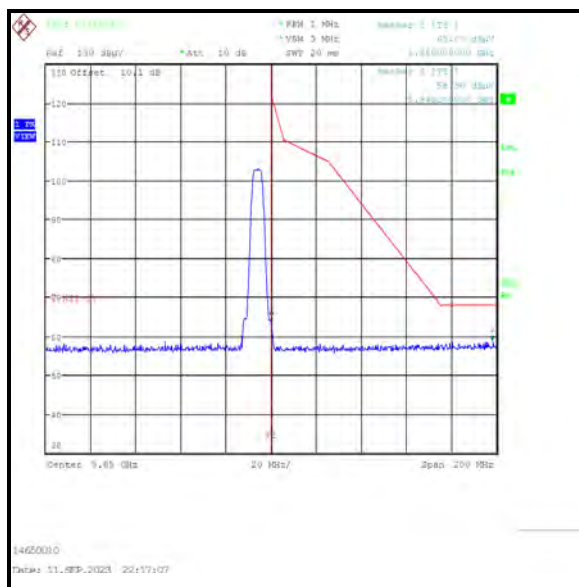
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5631.000	58.1	68.2	10.1	Complied
5725	57.8	122.2	64.4	Complied
5850	59.1	122.2	63.1	Complied
5945.000	58.6	68.2	9.6	Complied



Transmitter Band Edge Radiated Emissions (5.725-5.85 GHz band operation) (continued)**Results: Static / 8DH5 / SISO / Core 0 / iPA**

Frequency (MHz)	Level (dBm)	Limit (dBm/MHz)	Margin (dB)	Result
5644.800	-37.9	-27.0	10.9	Complied
5725	-38.3	27.0	65.3	Complied
5850	-30.1	27.0	57.1	Complied
5948.200	-36.3	-27.0	9.3	Complied

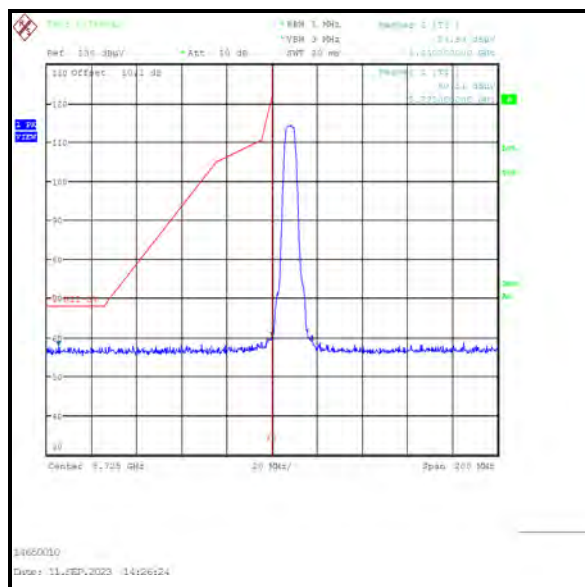
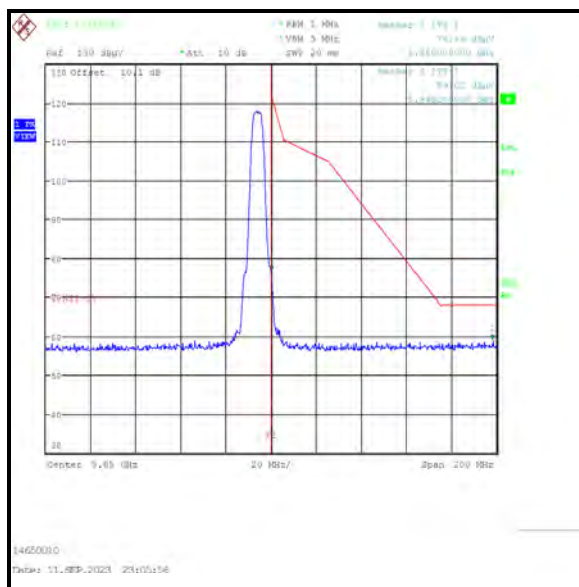
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5644.800	57.3	68.2	10.9	Complied
5725	56.9	122.2	65.3	Complied
5850	65.1	122.2	57.1	Complied
5948.200	58.9	68.2	9.3	Complied

**Lower Band Edge****Upper Band Edge**

Transmitter Band Edge Radiated Emissions (5.725-5.85 GHz band operation) (continued)**Results: Static / 8DH5 / SISO / Core 0 / ePA**

Frequency (MHz)	Level (dBm)	Limit (dBm/MHz)	Margin (dB)	Result
5630.200	-37.3	-27.0	10.3	Complied
5725	-35.1	27.0	62.1	Complied
5850	-18.5	27.0	45.5	Complied
5948.200	-36.2	-27.0	9.2	Complied

Frequency (MHz)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
5630.200	57.9	68.2	10.3	Complied
5725	60.1	122.2	62.1	Complied
5850	76.7	122.2	45.5	Complied
5948.200	59.0	68.2	9.2	Complied

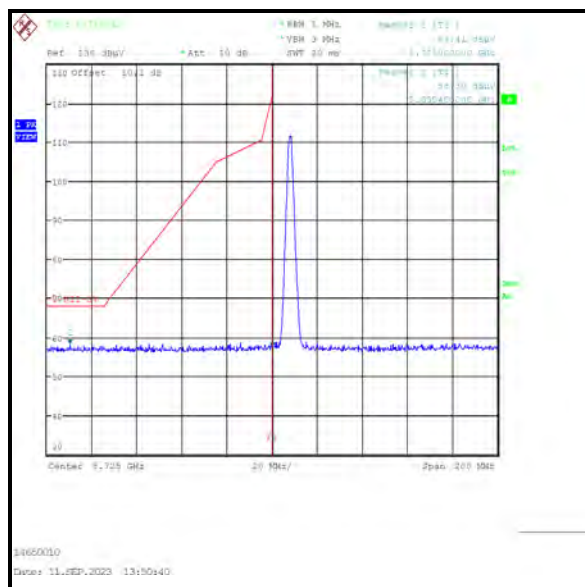
**Lower Band Edge****Upper Band Edge**

Transmitter Band Edge Radiated Emissions (5.725-5.85 GHz band operation) (continued)

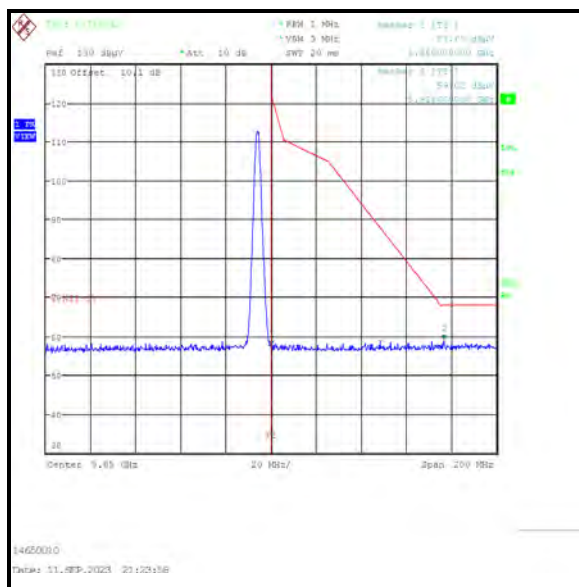
Results: Static / DH5 / SISO / Core 1 / iPA

Frequency (MHz)	Level (dBm)	Limit (dBm/MHz)	Margin (dB)	Result
5635.400	-36.9	-27.0	9.9	Complied
5725	-37.8	27.0	64.8	Complied
5850	-37.5	27.0	64.5	Complied
5926.600	-36.2	-27.0	9.2	Complied

Frequency (MHz)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
5635.400	58.3	68.2	9.9	Complied
5725	57.4	122.2	64.8	Complied
5850	57.7	122.2	64.5	Complied
5926.600	59.0	68.2	9.2	Complied



Lower Band Edge

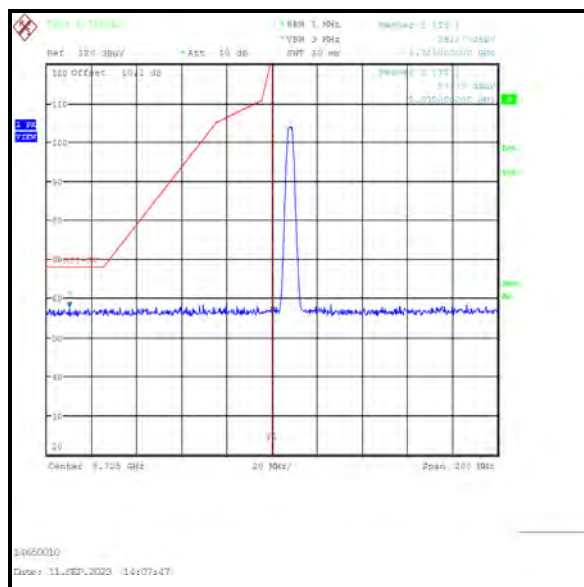
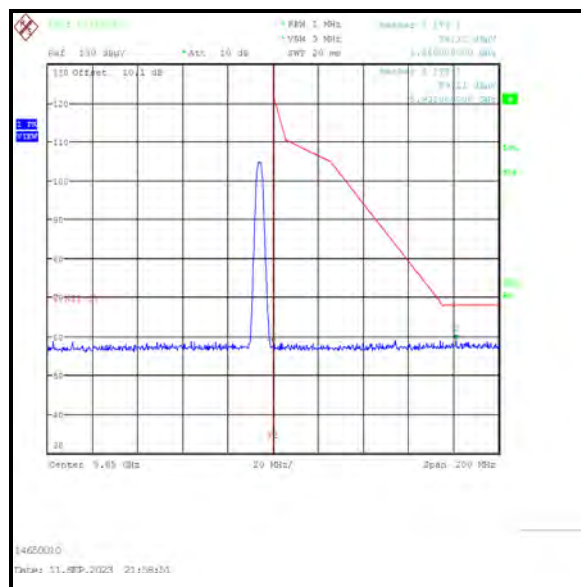


Upper Band Edge

Transmitter Band Edge Radiated Emissions (5.725-5.85 GHz band operation) (continued)**Results: Static / 4DH5 / SISO / Core 1 / iPA**

Frequency (MHz)	Level (dBm)	Limit (dBm/MHz)	Margin (dB)	Result
5635.000	-37.4	-27.0	10.4	Complied
5725	-38.6	27.0	65.6	Complied
5850	-36.9	27.0	63.9	Complied
5931.000	-36.1	-27.0	9.1	Complied

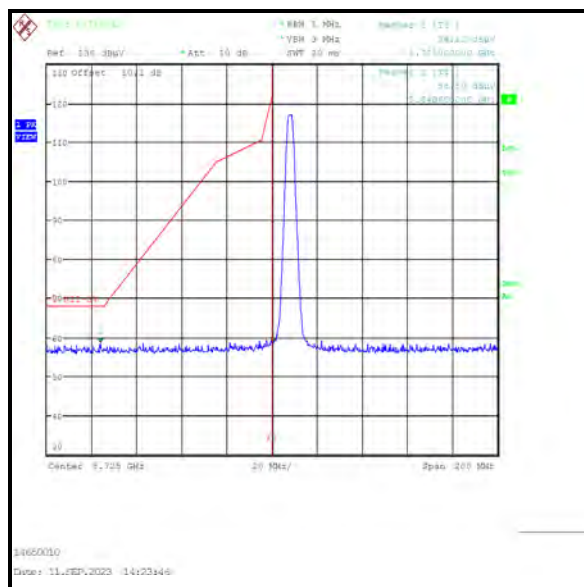
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5635.000	57.8	68.2	10.4	Complied
5725	56.6	122.2	65.6	Complied
5850	58.3	122.2	63.9	Complied
5931.000	59.1	68.2	9.1	Complied

**Lower Band Edge****Upper Band Edge**

Transmitter Band Edge Radiated Emissions (5.725-5.85 GHz band operation) (continued)**Results: Static / 4DH5 / SISO / Core 1 / ePA**

Frequency (MHz)	Level (dBm)	Limit (dBm/MHz)	Margin (dB)	Result
5648.600	-36.7	-27.0	9.7	Complied
5725	-36.4	27.0	63.4	Complied
5850	-35.2	27.0	62.2	Complied
5937.600	-35.8	-27.0	8.8	Complied

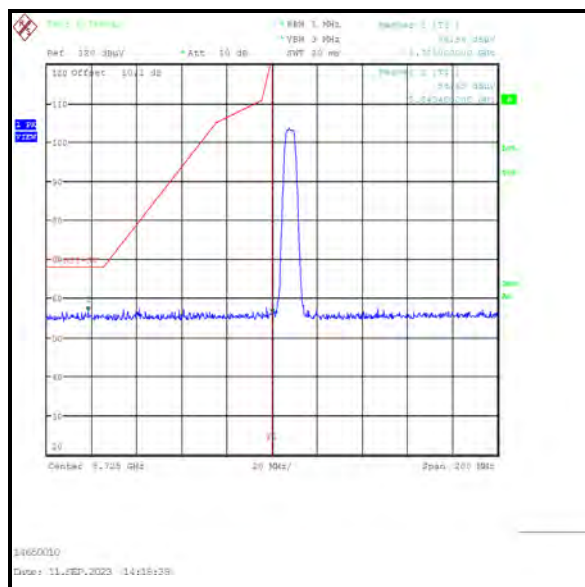
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5648.600	58.5	68.2	9.7	Complied
5725	58.8	122.2	63.4	Complied
5850	60.0	122.2	62.2	Complied
5937.600	59.4	68.2	8.8	Complied

**Lower Band Edge****Upper Band Edge**

Transmitter Edge Radiated Emissions (5.725-5.85 GHz band operation) (continued)**Results: Static / 8DH5 / SISO / Core 1 / iPA**

Frequency (MHz)	Level (dBm)	Limit (dBm/MHz)	Margin (dB)	Result
5643.400	-38.5	-27.0	11.5	Complied
5725	-39.3	27.0	66.3	Complied
5850	-37.4	27.0	64.4	Complied
5929.000	-36.0	-27.0	9.0	Complied

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5643.400	56.7	68.2	11.5	Complied
5725	55.9	122.2	66.3	Complied
5850	57.8	122.2	64.4	Complied
5929.000	59.2	68.2	9.0	Complied



Lower Band Edge

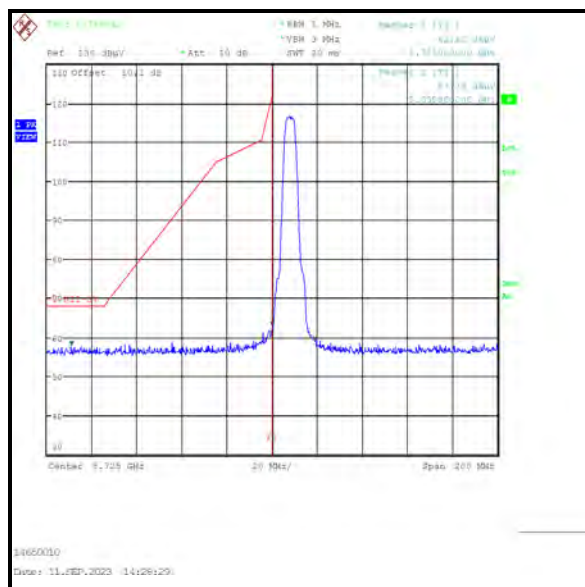
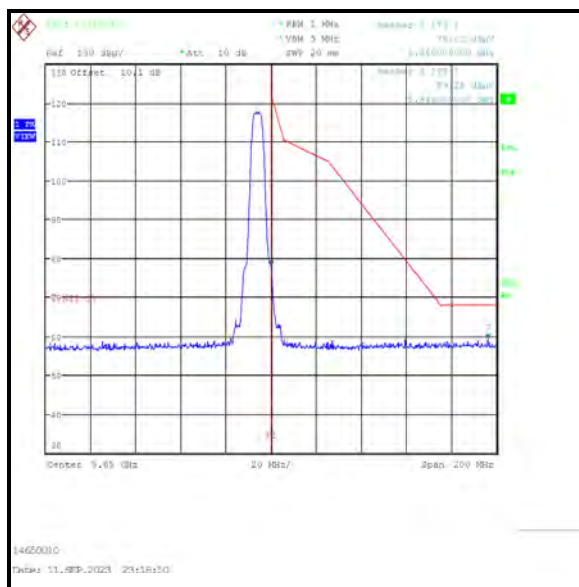


Upper Band Edge

Transmitter Band Edge Radiated Emissions (5.725-5.85 GHz band operation) (continued)**Results: Static / 8DH5 / SISO / Core 1 / ePA**

Frequency (MHz)	Level (dBm)	Limit (dBm/MHz)	Margin (dB)	Result
5635.800	-37.4	-27.0	10.4	Complied
5725	-32.4	27.0	59.4	Complied
5850	-17.2	27.0	44.2	Complied
5946.000	-35.9	-27.0	8.9	Complied

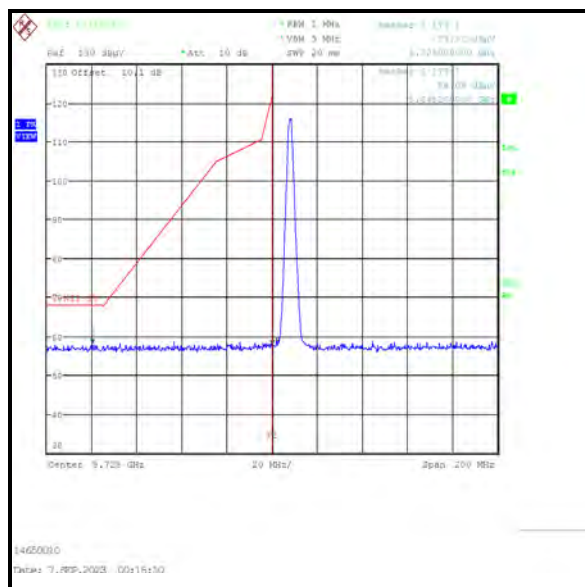
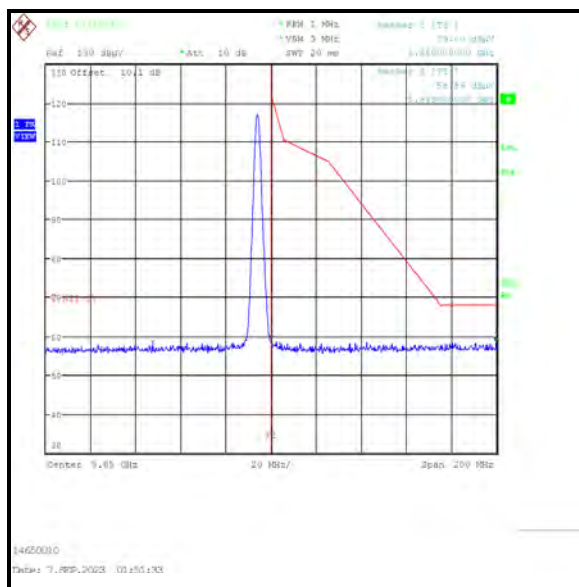
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5635.800	57.8	68.2	10.4	Complied
5725	62.8	122.2	59.4	Complied
5850	78.0	122.2	44.2	Complied
5946.000	59.3	68.2	8.9	Complied

**Lower Band Edge****Upper Band Edge**

Transmitter Band Edge Radiated Emissions (5.725-5.85 GHz band operation) (continued)**Results: Static / DH5 / Beamforming / Core 0 + Core 1 / iPA**

Frequency (MHz)	Level (dBm)	Limit (dBm/MHz)	Margin (dB)	Result
5645.200	-37.1	-27.0	10.1	Complied
5725	-37.3	27.0	64.3	Complied
5850	-36.2	27.0	63.2	Complied
5949.600	-36.6	-27.0	9.6	Complied

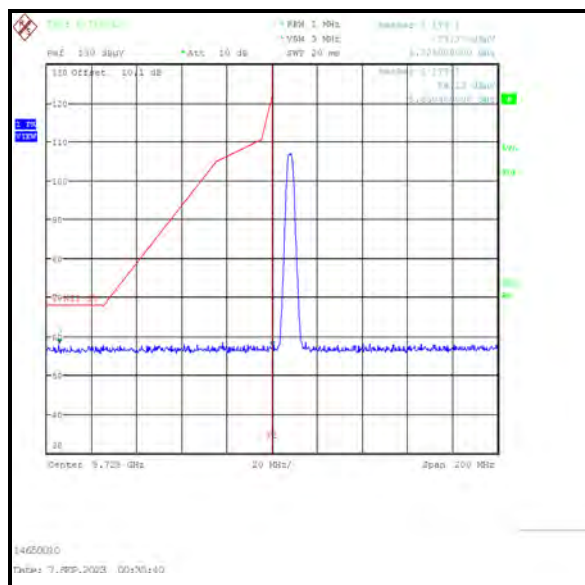
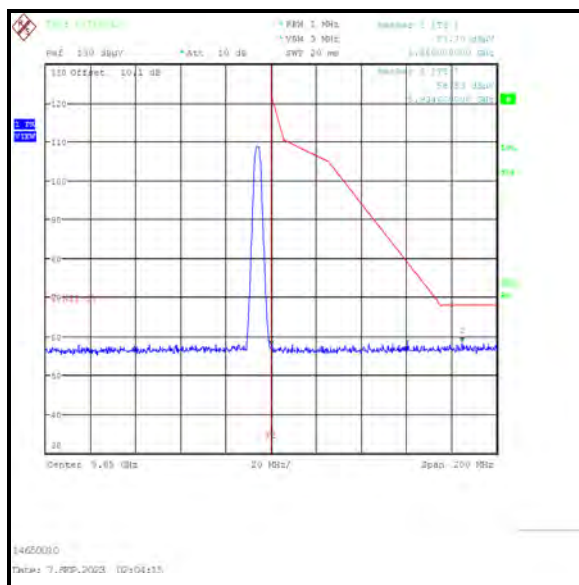
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5645.200	58.1	68.2	10.1	Complied
5725	57.9	122.2	64.3	Complied
5850	59.0	122.2	63.2	Complied
5949.600	58.6	68.2	9.6	Complied

**Lower Band Edge****Upper Band Edge**

Transmitter Band Edge Radiated Emissions (5.725-5.85 GHz band operation) (continued)**Results: Static / 4DH5 / Beamforming / Core 0 + Core 1 / iPA**

Frequency (MHz)	Level (dBm)	Limit (dBm/MHz)	Margin (dB)	Result
5630.400	-37.1	-27.0	10.1	Complied
5725	-37.8	27.0	64.8	Complied
5850	-37.5	27.0	64.5	Complied
5934.600	-36.7	-27.0	9.7	Complied

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5630.400	58.1	68.2	10.1	Complied
5725	57.4	122.2	64.8	Complied
5850	57.7	122.2	64.5	Complied
5934.600	58.5	68.2	9.7	Complied

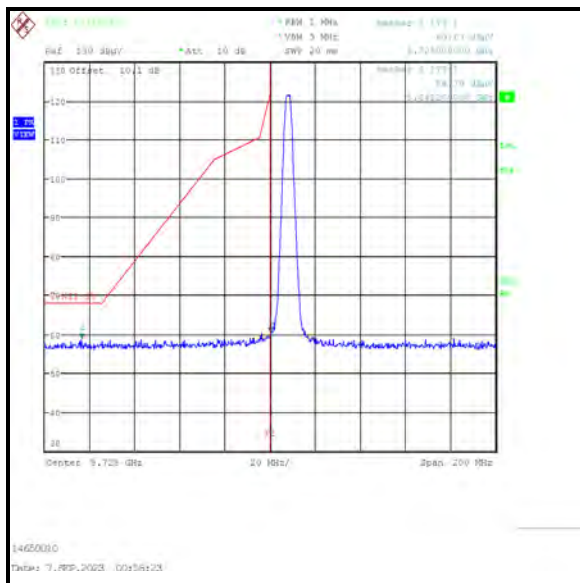
**Lower Band Edge****Upper Band Edge**

Transmitter Band Edge Radiated Emissions (5.725-5.85 GHz band operation) (continued)

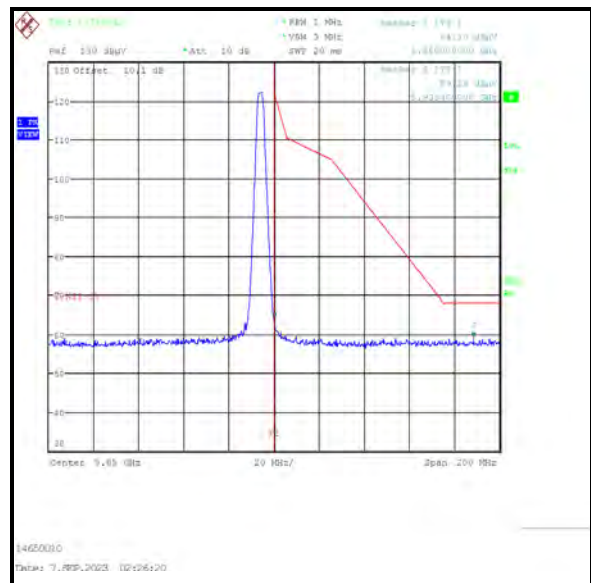
Results: Static / 4DH5 / Beamforming / Core 0 + Core 1 / ePA

Frequency (MHz)	Level (dBm)	Limit (dBm/MHz)	Margin (dB)	Result
5641.200	-36.4	-27.0	9.4	Complied
5725	-34.6	27.0	61.6	Complied
5850	-31.1	27.0	58.1	Complied
5938.400	-35.9	-27.0	8.9	Complied

Frequency (MHz)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
5641.200	58.8	68.2	9.4	Complied
5725	60.6	122.2	61.6	Complied
5850	64.1	122.2	58.1	Complied
5938.400	59.3	68.2	8.9	Complied



Lower Band Edge

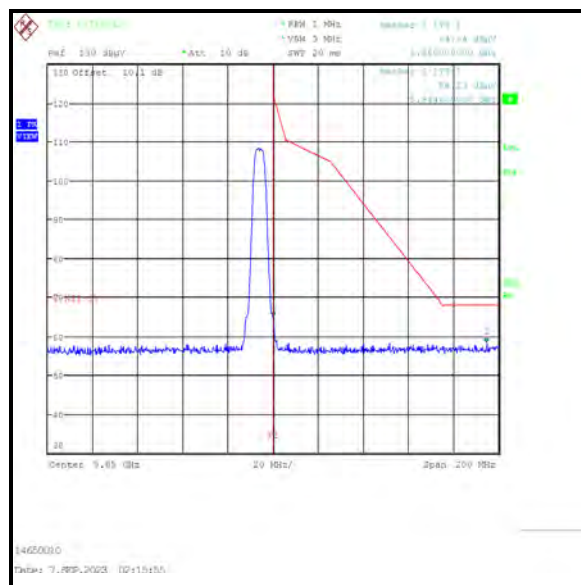
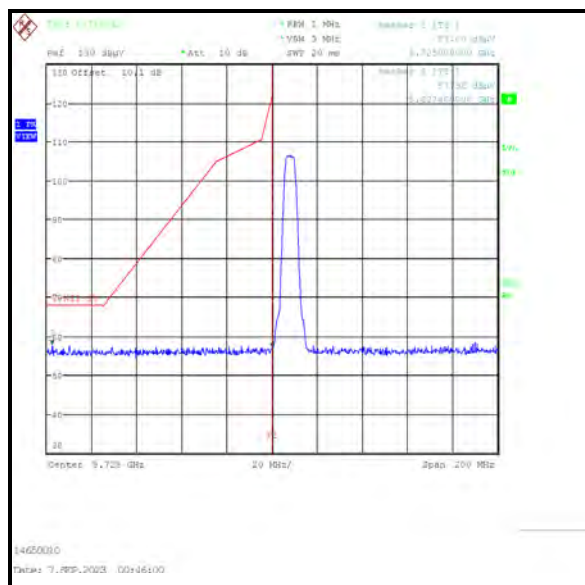


Upper Band Edge

Transmitter Band Edge Radiated Emissions (5.725-5.85 GHz band operation) (continued)**Results: Static / 8DH5 / Beamforming / Core 0 + Core 1 / iPA**

Frequency (MHz)	Level (dBm)	Limit (dBm/MHz)	Margin (dB)	Result
5627.400	-37.3	-27.0	10.3	Complied
5725	-38.2	27.0	65.2	Complied
5850	-30.3	27.0	57.3	Complied
5944.600	-37.0	-27.0	10.0	Complied

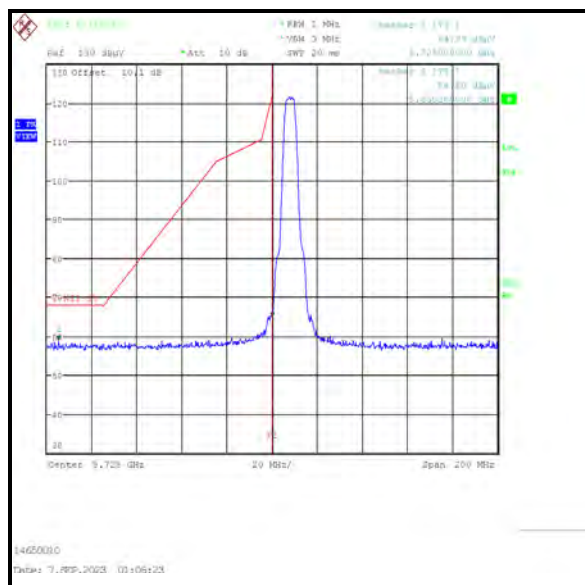
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5627.400	57.9	68.2	10.3	Complied
5725	57.0	122.2	65.2	Complied
5850	64.9	122.2	57.3	Complied
5944.600	58.2	68.2	10.0	Complied



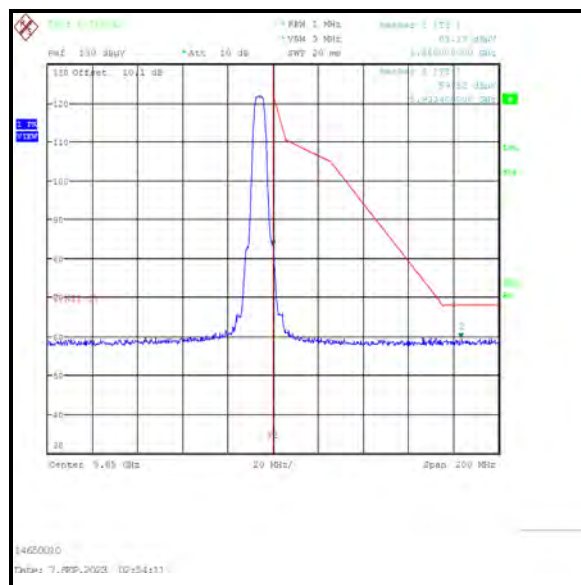
Transmitter Band Edge Radiated Emissions (5.725-5.85 GHz band operation) (continued)**Results: Static / 8DH5 / Beamforming / Core 0 + Core 1 / ePA**

Frequency (MHz)	Level (dBm)	Limit (dBm/MHz)	Margin (dB)	Result
5630.200	-36.4	-27.0	9.4	Complied
5725	-30.2	27.0	57.2	Complied
5850	-12.0	27.0	39.0	Complied
5933.400	-35.7	-27.0	8.7	Complied

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5630.200	58.8	68.2	9.4	Complied
5725	65.0	122.2	57.2	Complied
5850	83.2	122.2	39.0	Complied
5933.400	59.5	68.2	8.7	Complied



Lower Band Edge



Upper Band Edge

--- END OF REPORT ---