



TEST REPORT

Test Report No. : UL-RPT-RP16171218JD09D

Applicant* : Apple Inc.

Model No. / HVIN* : A3534

FCC ID* : BCGA3534 **IC*** : 579C-A3534

Technologies : *Bluetooth* – BR
NB-FHSS
2.4 GHz WLAN
6 GHz WLAN

Test Standard(s) : FCC Parts 15.209(a), 15.247(d) & 15.407(b)
ISED Canada RSS-247 6.6, 7.3.1.3, 7.3.4.4, RSS-248 4.6 &
RSS-Gen 6.13 & 8.9

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. All information marked with (*) was provided by the Applicant or Authorised representative
6. Version 1.0.

Date of Issue: 09 July 2026

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UL International (UK) LTD

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Applicant Information

Company Name*:	Apple Inc.
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Contact Name*:	Stuart Thomas

Report Revision History

Version Number	Issue Date	Revision Details	Revised By
1.0	09/07/2026	Initial Version	Ben Mercer

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1 Attestation of Test Results

1.1 Description of EUT

The EUT was a desktop computer.*

1.2 General Information

Specification Reference:	47CFR15.247
Specification Title:	Code of Federal Regulations Volume 47 (Telecommunications): Part 15 Subpart C (Intentional Radiators) - Section 15.247
Specification Reference:	47CFR15.209
Specification Title:	Code of Federal Regulations Volume 47 (Telecommunications): Part 15 Subpart C (Intentional Radiators) - Section 15.209
Specification Reference:	47CFR15.407
Specification Title:	Code of Federal Regulations Volume 47 (Telecommunications): Part 15 Subpart E (Unlicensed National Information Infrastructure Devices) – Sections 15.407
Specification Reference:	RSS-Gen Issue 5 February 2021
Specification Title:	General Requirements for Compliance of Radio Apparatus
Specification Reference:	RSS-247 Issue 4 July 2025
Specification Title:	Digital Transmission Systems, Frequency Hopping Systems and Licence- Exempt Local Area Network Devices in 902-928 MHz, 2400-2483.5 MHz, 5150-5350 MHz, and 5470-5895 MHz bands
Specification Reference:	RSS-248 Issue 3 October 2024
Specification Title:	Radio Local Area Network (RLAN) Devices Operating in the 5925-7125 MHz Band
FCC Lab. Designation No.:	UK2011
ISED CABID:	UK0001
Location of Testing:	Units 3 & 4 Horizon, Wade Road, Kingsland Business Park, Basingstoke, Hampshire, RG24 8AH, United Kingdom
Test Dates:	05 May 2026 to 19 May 2026

1.3 Summary of Test Results

FCC Reference (47CFR)	ISED Canada Reference	Measurement	Result
Bluetooth Basic Rate & 6 GHz WLAN			
15.209(a) / 15.247(d) / 15.407(b)	RSS-Gen 6.13, 8.9 / RSS-247 6.6 / RSS-248 4.6	Transmitter Out of Band Radiated Emissions	Complied
Bluetooth Basic Rate, 2.4 GHz WLAN & 6 GHz WLAN			
15.209(a) / 15.247(d) / 15.407(b)	RSS-Gen 6.13, 8.9 / RSS-247 6.6 / RSS-248 4.6	Transmitter Out of Band Radiated Emissions	Complied
Bluetooth Basic Rate, 2.4 GHz WLAN & NB-FHSS			
15.209(a) / 15.247(d) / 15.407(b)	RSS-Gen 6.13, 8.9 / RSS-247 6.6, 7.3.4.4	Transmitter Out of Band Radiated Emissions	Complied
Bluetooth Basic Rate & NB-FHSS			
15.209(a) / 15.247(d) / 15.407(b)	RSS-Gen 6.13, 8.9 / RSS-247 6.6, 7.3.4.4	Transmitter Out of Band Radiated Emissions	Complied

Note(s):

1. The EUT supports Simultaneous-In-Band (SIB) and Simultaneous-Dual-Band (SDB) transmission. Testing was performed to verify compliance of radiated spurious emissions against applicable limits when the EUT was simultaneously transmitting in the 2.4 GHz and 5 / 6 GHz bands. Only radiated spurious emissions related to intermodulation products are recorded in this test report. The highest out-of-band noise floor levels were recorded if no intermodulation products were observed across the required measurement ranges.

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 specification identified above.

2 Summary of Testing

2.1 Facilities and Accreditation

The test site and measurement facilities used to collect data are located at Units 3 & 4 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	-
Site 17	X
Site 32	X
Site 33	X

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 C63.10-2020
Title:	American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices
Reference:	#ANSI C63.10-2020/Cor1-2023
Title:	American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices – Corrigendum 1
Reference:	#ANSI C63.10-2020+C63.10a-2024
Title:	American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices – Amendment 1

#The use of ANSI C63.10-2020/Cor1-2023 and C63.10a-2024 does not deviate from the testing procedures of ANSI C63.10-2020

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. 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
Radiated Spurious Emissions	30 MHz to 1 GHz	95%	±4.66 dB
Radiated Spurious Emissions	1 GHz to 40 GHz	95%	±5.06 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 Sample Calculation

Where relevant, the following calculations were used:

Radiated Emissions

- The recorded emission level was calculated from the level indicated by the measuring receiver, adjusted by a transducer factor (TDF in dB), using the formula:

$$\text{TDF (dB)} = C_{\text{Att}} (\text{dB}) + \text{AF (dB/m)} - P_{\text{Gain}} (\text{dB}) + D_{\text{Cor}} (\text{dB})$$

Where:

C_{Att} : conducted path attenuation (cables + attenuators)

AF: antenna factor

P_{Gain} : external preamplifier gain

D_{Cor} : distance correction factor (where applicable)

2.5 Test and Measurement Equipment

Test Equipment Used for Transmitter Radiated Emissions Tests

Asset No.	Instrument	Manufacturer	Type No.	Serial No.	Date Calibration Due	Cal. Interval (Months)
M226556	Thermohygrometer	Testo	608-H1	83800306	17 Dec 2026	12
K226203	3m RSE Chamber	Albatross Projects	N/A	N/A	07 Jul 2026	12
M274016	Test Receiver	Rohde & Schwarz	ESW44	103584	17 Dec 2026	12
A231567	Pre-Amplifier	RF Bay Inc.	LNA-1070	2	07 Jul 2026	12
A227145	Low Pass Filter	Micro-Tronics	LPM21015	001	07 Jul 2026	12
M2003	Thermohygrometer	Testo	608-H1	45046641	18 Dec 2026	12
K0017	3m RSE Chamber	MVG Industries UK Ltd	N/A	N/A	05 Jan 2027	12
M276829	Test Receiver	Rohde & Schwarz	ESW26	103335	13 Mar 2027	12
A264422	Signal Conditioning Unit	Link Microtek Ltd	AMUNIT-SCB-UL1	16816	14 Jul 2026	12
A2889	Horn Antenna	Schwarzbeck	BBHA 9120 B	00653	29 Dec 2026	12
G0607	Vector Signal Generator	Rohde & Schwarz	SMU200A	100943	03 Jul 2026	12
M236226	Test Receiver	Rohde & Schwarz	ESW26	103134	22 May 2026	12
A3182	Band Reject Filter	Wainright Instruments GMBH	WRCTF12+9-2398-2400-2483.5-2485.5-30EE	2	29 Aug 2026	24
A2890	Horn Antenna	Schwarzbeck	HWRD 750	014	29 Dec 2026	12
M2077	Test Receiver	Rohde & Schwarz	ESW44	102026	29 Apr 2027	12
M226553	Thermohygrometer	Testo	608-H1	83800731	17 Dec 2026	12
K226202	3m RSE Chamber	Albatross Projects	N/A	N/A	07 Jul 2026	12
A230567	Pre-Amplifier	Atlantic Microwave	A-HPAKX-380143-K5K5	VJ3601001	07 Jul 2026	12
A231050	Horn Antenna	Schwarzbeck	BBHA 9170	01280	07 Jul 2026	12
A2916	Attenuator	AtlanTecRF	AN18W5-10	832827#2	02 Feb 2027	12

3 Equipment Under Test (EUT)

3.1 Identification of Equipment Under Test (EUT)

Brand Name*:	Apple
Model Name or Number / HVIN*:	A3534
FCC ID*:	BCGA3534
ISED Canada Certification Number*:	579C-A3534

Test Sample Serial Number*:	Hardware Version*:	Software Version*:	Date of Receipt:
L5Q6J36Y22	REV 1.0	26A285	23 March 2026
TVF36KG42G	REV 1.0	26A285	23 March 2026
GMWPG7X7HL	REV 1.0	26A285	23 March 2026
MC46H6R62N	REV 1.0	26A285	23 March 2026

3.2 Modifications Incorporated in the EUT

No modifications were applied to the EUT during testing.

3.3 Additional Information Related to Testing

Tested Technology:	<i>Bluetooth</i> (FHSS)		
Mode:	Basic Rate		
Modulation:	GFSK		
Packet Type: (Maximum Payload)	DH5		
Data Rate (Mbps):	1		
Transmit Frequency Range:	2400 MHz to 2483.5 MHz		
Transmit Channels Tested:	Channel ID	Channel Number	Channel Frequency (MHz)
	Bottom	0	2402
	Top	78	2480

Technology Tested:	WLAN (IEEE 802.11b/g/n) / Digital Transmission System		
Channel Spacing:	20 MHz		
Modulation:	QPSK		
Data Rate:	802.11ax HE20 (MIMO)		MCS2 with CDD
Transmit Frequency Range:	2400 MHz to 2483.5 MHz		
Transmit Channels Tested:	Channel ID	Channel Number	Channel Frequency (MHz)
	Bottom	1	2412
	Top	11	2462

Technology Tested:	NarrowBand FHSS	
Channel Bandwidth:	1 MHz	
Modulation:	GFSK	
Packet Type: (Maximum Payload)	DH5	
Data Rate (Mbps):	1	
Transmit Frequency Range:	5150 MHz to 5250 MHz (U-NII-1)	
Transmit Channels Tested:	Channel ID	Channel Frequency (MHz)
	Bottom	5162
Transmit Frequency Range:	5725 MHz to 5850 MHz (U-NII-3)	
Transmit Channels Tested:	Channel ID	Channel Frequency (MHz)
	Top	5844
Transmit Frequency Range:	5925 MHz to 6425 MHz (U-NII-5)	
Transmit Channels Tested:	Channel ID	Channel Frequency (MHz)
	Top	6425

Additional Information Related to Testing (continued)

Technology Tested:	WLAN (IEEE 802.11a/ax/be) / U-NII / RLAN		
Channel Spacing:	20 MHz		
Modulation:	QPSK		
Data Rate:	802.11be EHT20 SU (MIMO)	MCS2 with CDD	
Transmit Frequency Range:	6425 MHz to 6525 MHz (U-NII-6)		
Transmit Channels Tested:	Channel ID	Channel Number	Channel Frequency (MHz)
	Middle	105	6475
Transmit Frequency Range:	6525 MHz to 6875 MHz (U-NII-7)		
Transmit Channels Tested:	Channel ID	Channel Number	Channel Frequency (MHz)
	Bottom	117	6535
Transmit Frequency Range:	6875 MHz to 7125 MHz (U-NII-8)		
Transmit Channels Tested:	Channel ID	Channel Number	Channel Frequency (MHz)
	Top	233	7115

3.4 Description of Available Antennas

The radio utilizes integrated antennas with the following maximum gains:

Technology	Frequency (MHz)	Antenna Port	Antenna Gain (dBi)*
Bluetooth BR	2402	Core 0	1.3
		Core 1	1.2
		Core 2	0.2
	2480	Core 0	1.4
		Core 1	1.3
		Core 2	0.7
2.4 GHz WLAN	2412	Core 0	1.3
		Core 1	1.2
	2462	Core 0	1.4
		Core 1	1.3
NB-FHSS	5162	Core 0	3.4
		Core 1	4.7
	5844	Core 0	4.2
		Core 1	4.5
	6425	Core 0	0.6
		Core 1	2.6
6 GHz WLAN	6475	Core 0	0.6
		Core 1	2.6
	6535	Core 0	-0.1
		Core 1	1.9
	7115	Core 0	1.5
		Core 1	1.0

3.5 Description of Test Setup

Support Equipment

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

Customer Supplied*:

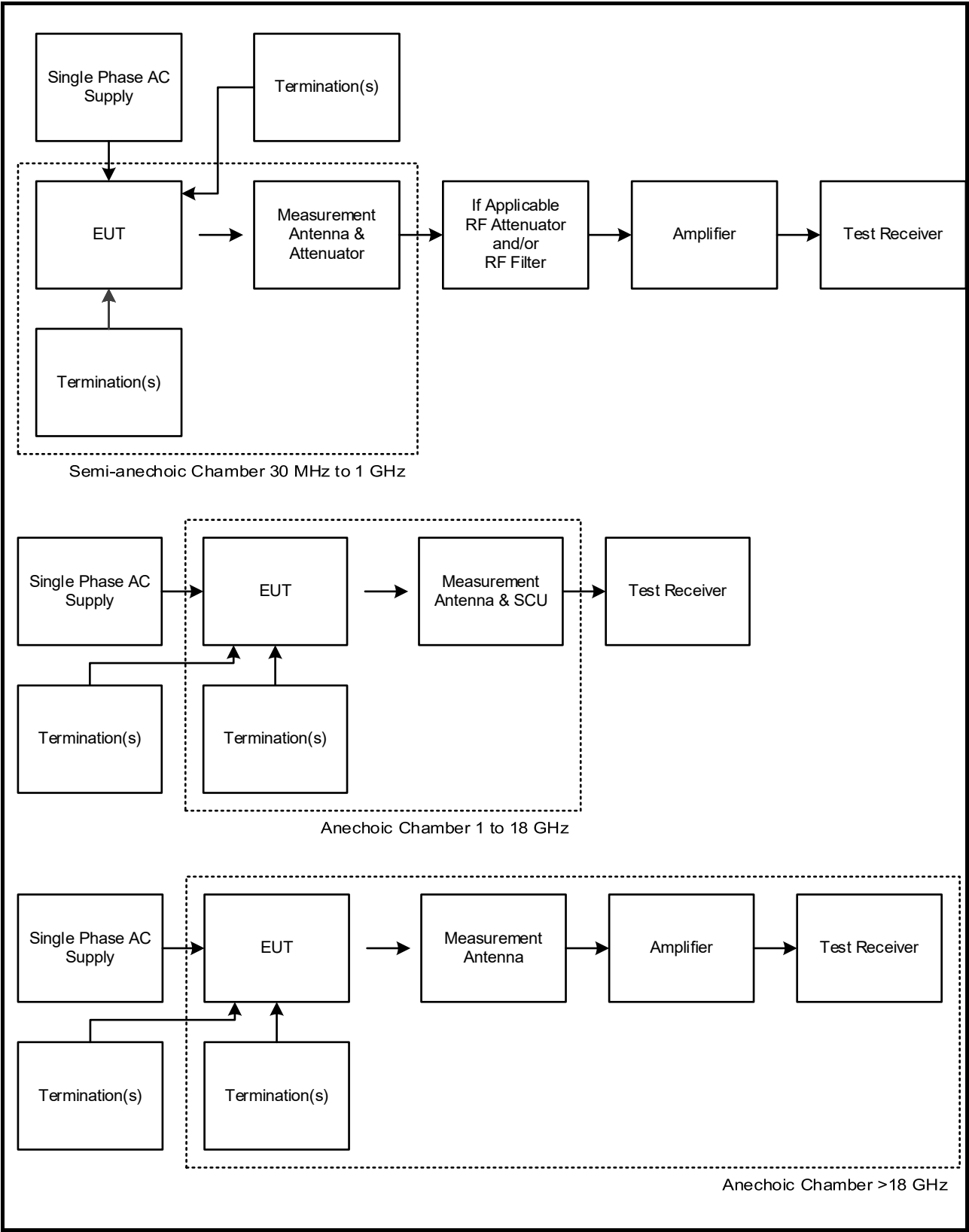
Description	Brand Name	Model Name or Number	Serial Number
Test Laptop	Apple	MacBook Pro	K5J73GH9RH
USB Diagnostic Cable	Apple	Chimp	439A10
Test Laptop	Apple	MacBook Pro	D097W7KM29
USB Diagnostic Cable	Apple	Chimp	43931F
Test Laptop	Apple	MacBook Pro	CFQL62C43K
USB Diagnostic Cable	Apple	Chimp	902BD2

Operating Modes, Configuration and Peripherals

- Transmitting at maximum power on the channels, modes and technologies detailed in section 3.3.
- Controlled in test mode using a set of commands entered into a terminal application on the test laptop supplied by the customer. The commands were used to enable a continuous transmission and to select the test channels, packet types, data rates and antenna configuration as required.
- The EUT was powered from an AC to DC Power Supply. The input was connected to a 120 VAC 60 Hz single phase mains supply.
- Tests were performed with the EUT in its worst-case orientation with respect to emissions.
- All active ports were terminated using the appropriate terminations during radiated emissions testing.

Test Setup Diagrams

Transmitter Radiated Emissions



4 Radiated Test Results

4.1 Transmitter Out of Band Radiated Emissions – Combination 1

Test Summary:

Test Engineers:	Andrew Harding, Faissal Merzaki, Dale Hills & Andrew Edwards	Test Dates:	05 May 2026 & 06 May 2026
Test Sample Serial Numbers:	L5Q6J36Y22, TVF36KG42G & GMWPG7X7HL		

FCC Reference:	Parts 15.209(a), 15.247(d) & 15.407(b)
ISED Canada Reference:	RSS-Gen 6.13, 8.9, RSS-247 6.6 & RSS-248 4.6
Test Method Used:	ANSI C63.10 Sections 6.3, 6.5, 6.6 & 12.7
Frequency Range:	30 MHz to 40 GHz
Configuration:	<i>Bluetooth</i> DH5 ePA TxBF channel 78 / 802.11be EHT20 CDD channel 105

Environmental Conditions:

Temperature (°C):	21 to 25
Relative Humidity (%):	35 to 43

Note(s):

1. All intermodulation products were below the noise floor level or greater than 20 dB from the specification limit.
2. Pre-scans were made against the FCC Part 15 general limits for radiated emissions.
3. Pre-scans below 1 GHz were performed in a semi-anechoic chamber 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.
4. Pre-scans above 1 GHz were performed in a fully anechoic chamber 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.

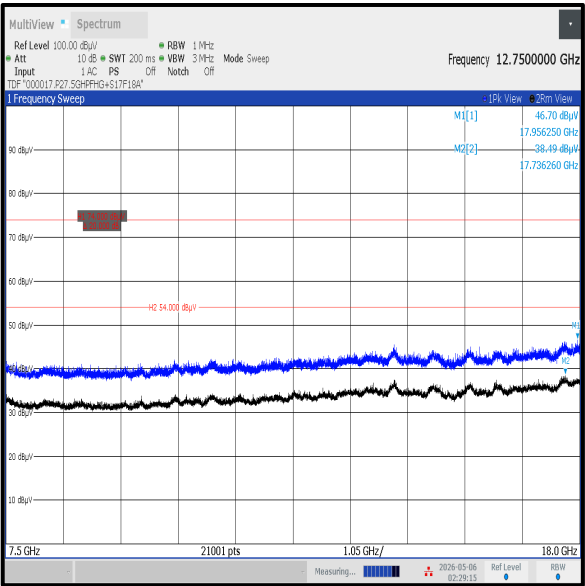
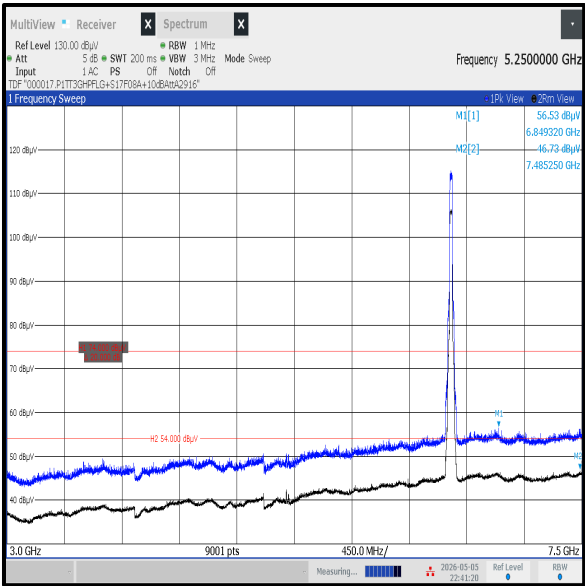
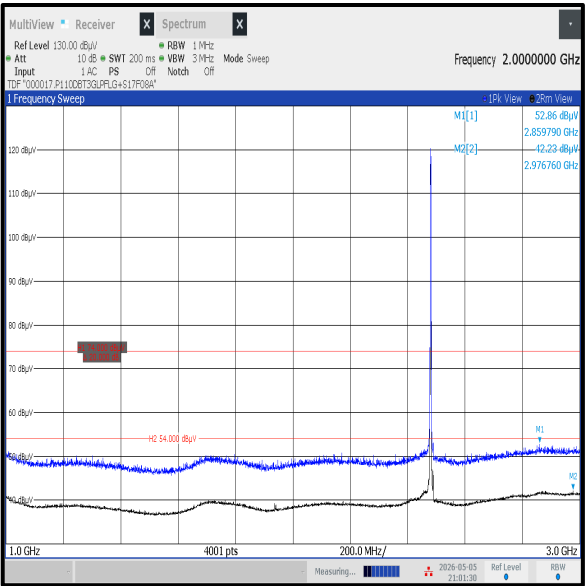
Transmitter Out of Band Radiated Emissions – Combination 1 (continued)

Results: Peak

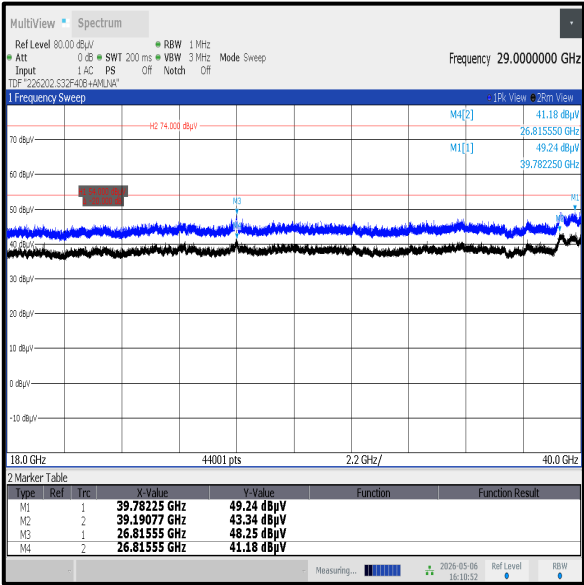
Frequency (MHz)	Antenna Polarity	Peak Level (dBμV/m)	Peak Limit (dBμV/m)	Margin (dB)	Result
See note 1					

Results: Average

Frequency (MHz)	Antenna Polarity	Average Level (dBμV/m)	Average Limit (dBμV/m)	Margin (dB)	Result
See note 1					



Transmitter Out of Band Radiated Emissions – Combination 1 (continued)



4.2 Transmitter Out of Band Radiated Emissions – Combination 2

Test Summary:

Test Engineers:	Andrew Harding, Faissal Merzaki, Dale Hills & Andrew Edwards	Test Dates:	05 May 2026 & 06 May 2026
Test Sample Serial Numbers:	L5Q6J36Y22, TVF36KG42G & GMWPG7X7HL		

FCC Reference:	Parts 15.209(a), 15.247(d) & 15.407(b)
ISED Canada Reference:	RSS-Gen 6.13, 8.9, RSS-247 6.6 & RSS-248 4.6
Test Method Used:	ANSI C63.10 Sections 6.3, 6.5, 6.6 & 12.7
Frequency Range:	30 MHz to 40 GHz
Configuration:	Bluetooth DH5 ePA TxBF channel 78 / 802.11be EHT20 CDD channel 117

Environmental Conditions:

Temperature (°C):	21 to 25
Relative Humidity (%):	35 to 43

Note(s):

1. All intermodulation products were below the noise floor level or greater than 20 dB from the specification limit.
2. Pre-scans were made against the FCC Part 15 general limits for radiated emissions.
3. Pre-scans below 1 GHz were performed in a semi-anechoic chamber 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.
4. Pre-scans above 1 GHz were performed in a fully anechoic chamber 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.

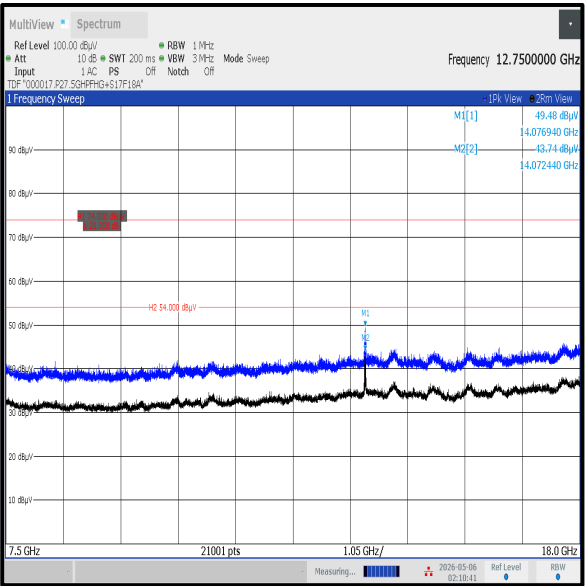
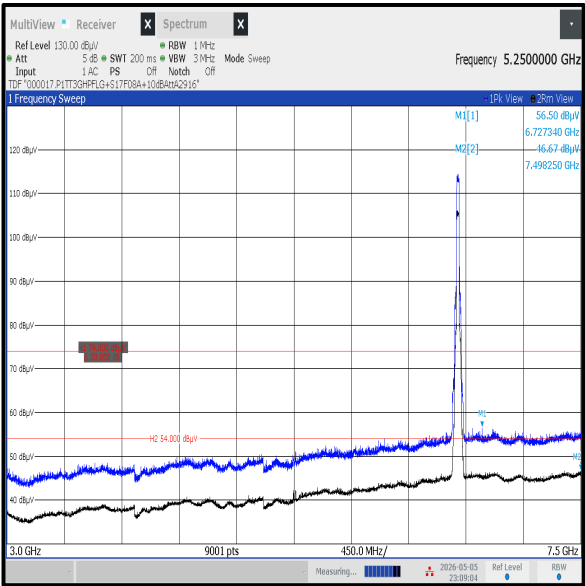
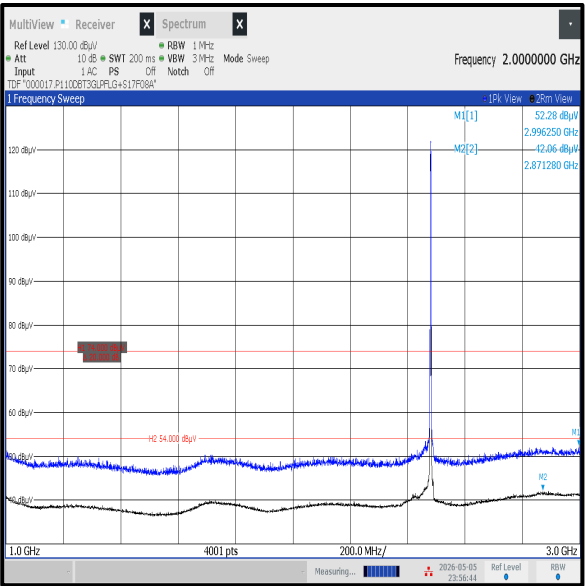
Transmitter Out of Band Radiated Emissions – Combination 2 (continued)

Results: Peak

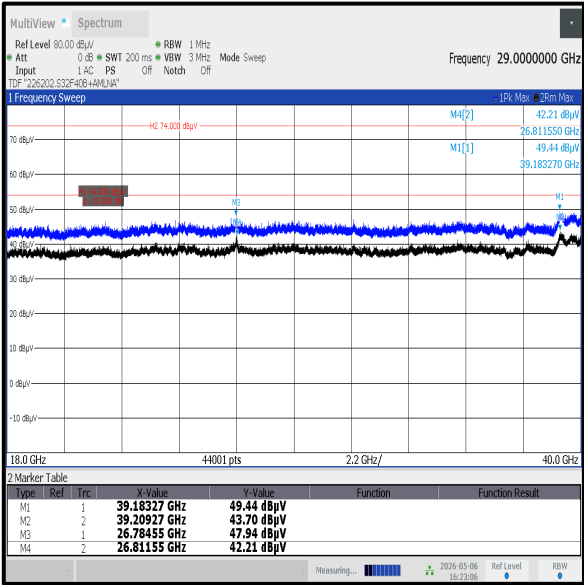
Frequency (MHz)	Antenna Polarity	Peak Level (dBμV/m)	Peak Limit (dBμV/m)	Margin (dB)	Result
See note 1					

Results: Average

Frequency (MHz)	Antenna Polarity	Average Level (dBμV/m)	Average Limit (dBμV/m)	Margin (dB)	Result
See note 1					



Transmitter Out of Band Radiated Emissions – Combination 2 (continued)



4.3 Transmitter Out of Band Radiated Emissions – Combination 3

Test Summary:

Test Engineers:	Andrew Harding, Faissal Merzaki, Dale Hills & Andrew Edwards	Test Dates:	05 May 2026 & 06 May 2026
Test Sample Serial Numbers:	L5Q6J36Y22, TVF36KG42G & GMWPG7X7HL		

FCC Reference:	Parts 15.209(a), 15.247(d) & 15.407(b)
ISED Canada Reference:	RSS-Gen 6.13, 8.9, RSS-247 6.6 & RSS-248 4.6
Test Method Used:	ANSI C63.10 Sections 6.3, 6.5, 6.6 & 12.7
Frequency Range:	30 MHz to 40 GHz
Configuration:	Bluetooth DH5 ePA TxBF channel 0 / 802.11be EHT20 CDD channel 233

Environmental Conditions:

Temperature (°C):	21 to 25
Relative Humidity (%):	35 to 43

Note(s):

1. All intermodulation products were below the noise floor level or greater than 20 dB from the specification limit.
2. Pre-scans were made against the FCC Part 15 general limits for radiated emissions.
3. Pre-scans below 1 GHz were performed in a semi-anechoic chamber 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.
4. Pre-scans above 1 GHz were performed in a fully anechoic chamber 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.

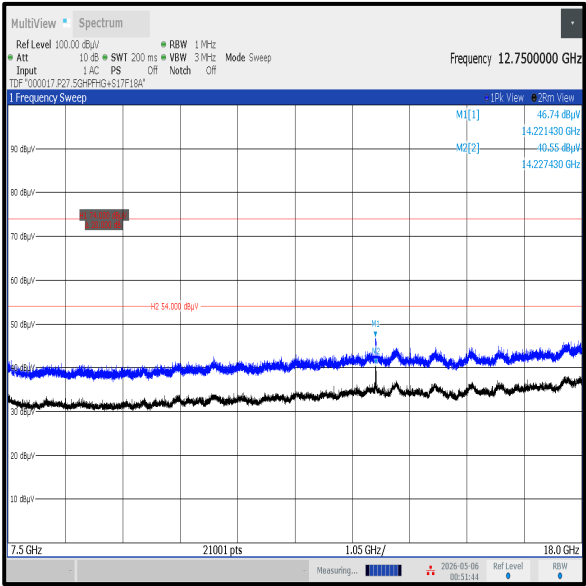
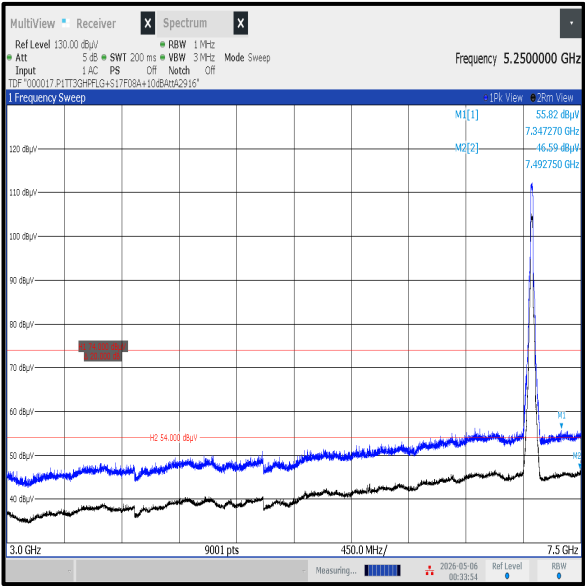
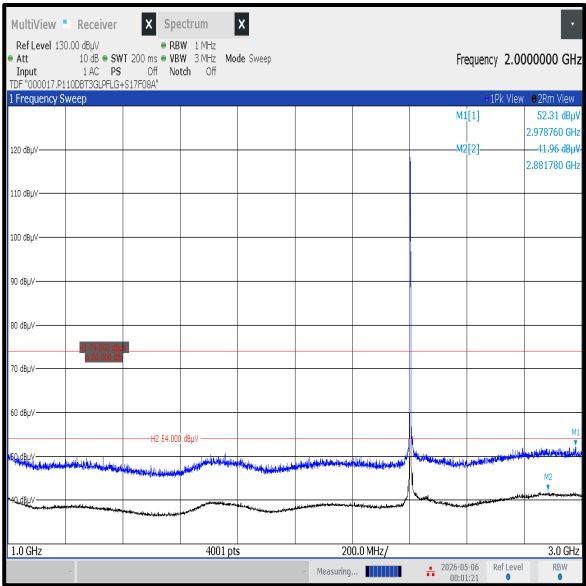
Transmitter Out of Band Radiated Emissions – Combination 3 (continued)

Results: Peak

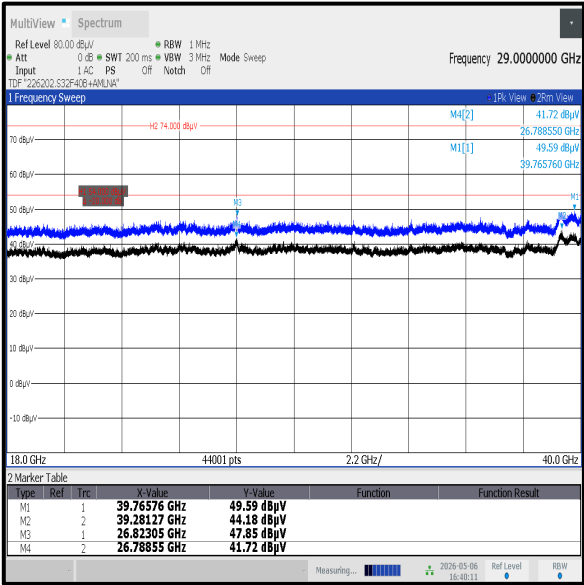
Frequency (MHz)	Antenna Polarity	Peak Level (dBμV/m)	Peak Limit (dBμV/m)	Margin (dB)	Result
See note 1					

Results: Average

Frequency (MHz)	Antenna Polarity	Average Level (dBμV/m)	Average Limit (dBμV/m)	Margin (dB)	Result
See note 1					



Transmitter Out of Band Radiated Emissions – Combination 3 (continued)



4.4 Transmitter Out of Band Radiated Emissions – Combination 4

Test Summary:

Test Engineers:	Atiquel Tanvir, Shamraiz Ashiq, Prasanna Reddy & Andrew Edwards	Test Dates:	12 May 2026 to 19 May 2026
Test Sample Serial Number:	MC46H6R62N		

FCC Reference:	Parts 15.209(a), 15.247(d) & 15.407(b)
ISED Canada Reference:	RSS-Gen 6.13, 8.9, RSS-247 6.6 & RSS-248 4.6
Test Method Used:	ANSI C63.10 Sections 6.3, 6.5, 6.6 & 12.7
Frequency Range:	30 MHz to 40 GHz
Configuration:	Bluetooth DH5 iPA Core 2 channel 78 / 802.11ax HE20 RU 26.0 CDD channel 1 / 802.11be EHT20 CDD channel 105

Environmental Conditions:

Temperature (°C):	21 to 24
Relative Humidity (%):	30 to 39

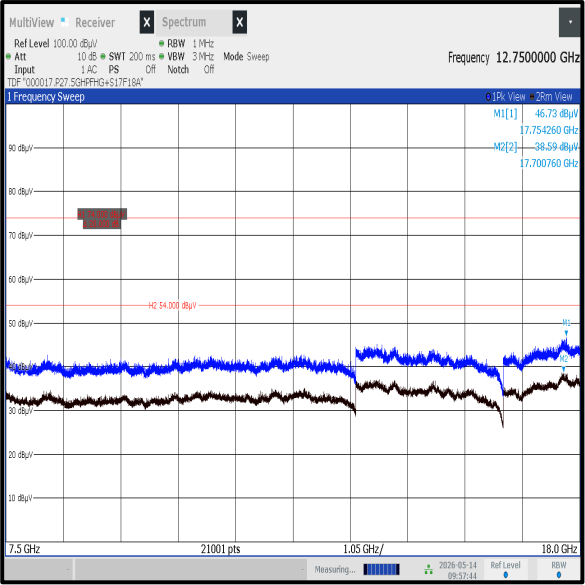
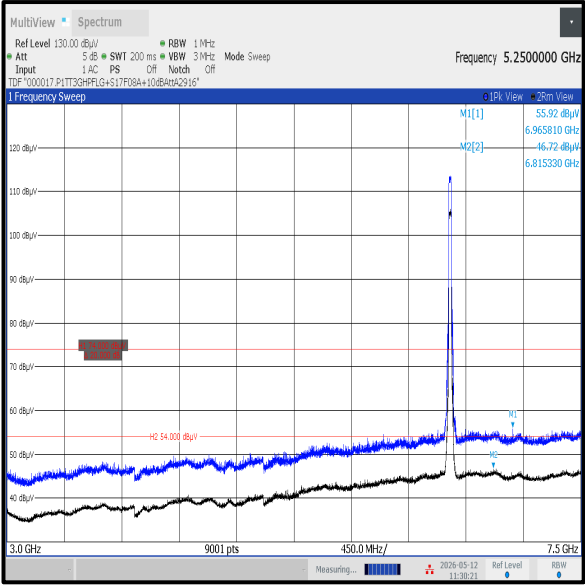
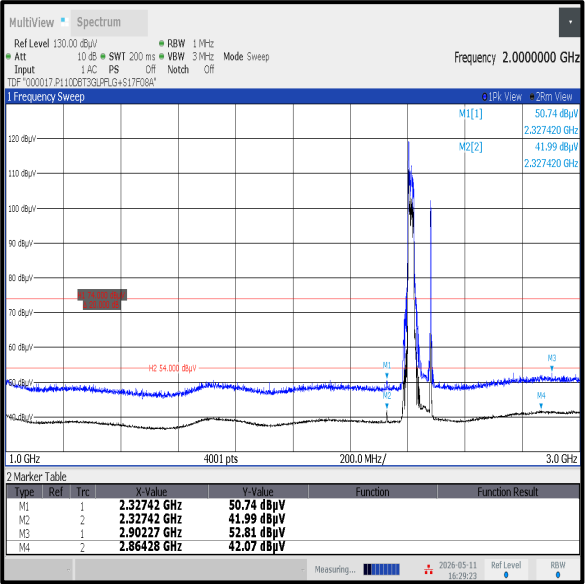
Note(s):

1. All other intermodulation products were below the noise floor level or greater than 20 dB from the specification limit.
2. Pre-scans were made against the FCC Part 15 general limits for radiated emissions.
3. Measurements below 1 GHz were performed in a semi-anechoic chamber 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.
4. Measurements above 1 GHz were performed in a fully anechoic chamber 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. Maximum emission levels were determined by height searching the measurement antenna over the range 1 metre to 4 metres.
5. # In accordance with ANSI C63.10 clause 6.6.4.3 note 1, if the maximized peak measured value complies with the average limit, then it is unnecessary to perform an average measurement

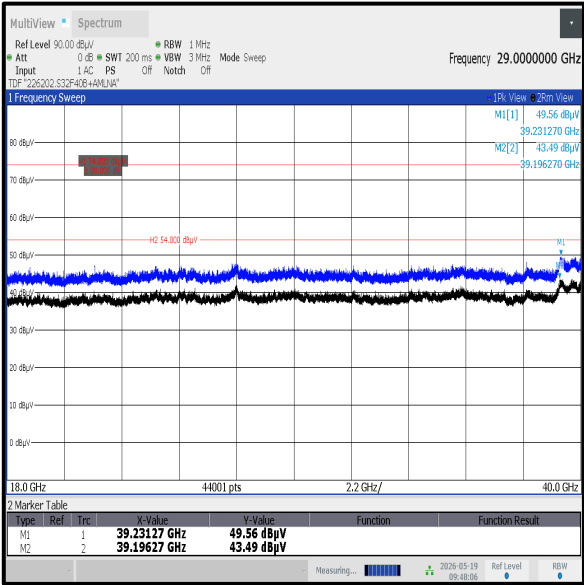
Transmitter Out of Band Radiated Emissions – Combination 4 (continued)

Results: Peak

Frequency (MHz)	Antenna Polarity	Peak Level (dBμV/m)	Average Limit (dBμV/m)	Margin (dB)	Result
2327.735	Horizontal	49.80	54.0 [#]	4.20	Complied



Transmitter Out of Band Radiated Emissions – Combination 4 (continued)



4.5 Transmitter Out of Band Radiated Emissions – Combination 5

Test Summary:

Test Engineers:	Atiqul Tanvir, Shamraiz Ashiq, Prasanna Reddy & Andrew Edwards	Test Dates:	12 May 2026 to 19 May 2026
Test Sample Serial Number:	MC46H6R62N		

FCC Reference:	Parts 15.209(a), 15.247(d) & 15.407(b)
ISED Canada Reference:	RSS-Gen 6.13, 8.9, RSS-247 6.6 & RSS-248 4.6
Test Method Used:	ANSI C63.10 Sections 6.3, 6.5, 6.6 & 12.7
Frequency Range:	30 MHz to 40 GHz
Configuration:	Bluetooth DH5 iPA Core 2 channel 78 / 802.11ax HE20 RU 26.0 CDD channel 1 / 802.11be EHT20 CDD channel 117

Environmental Conditions:

Temperature (°C):	21 to 24
Relative Humidity (%):	30 to 39

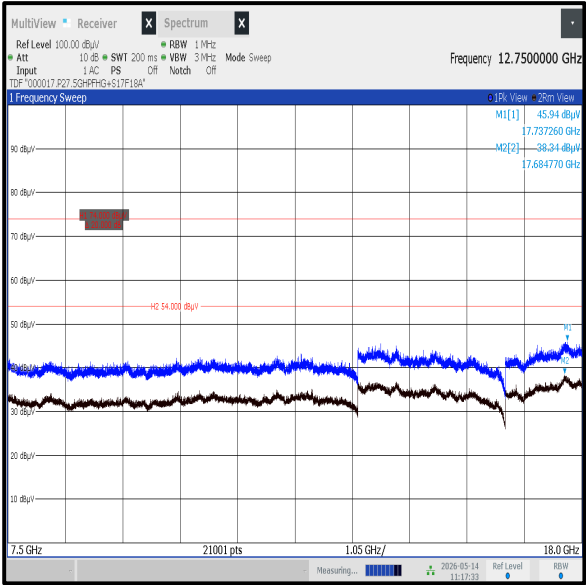
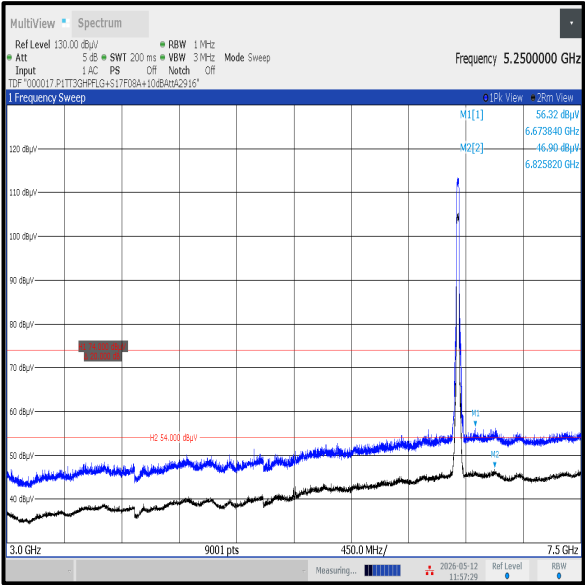
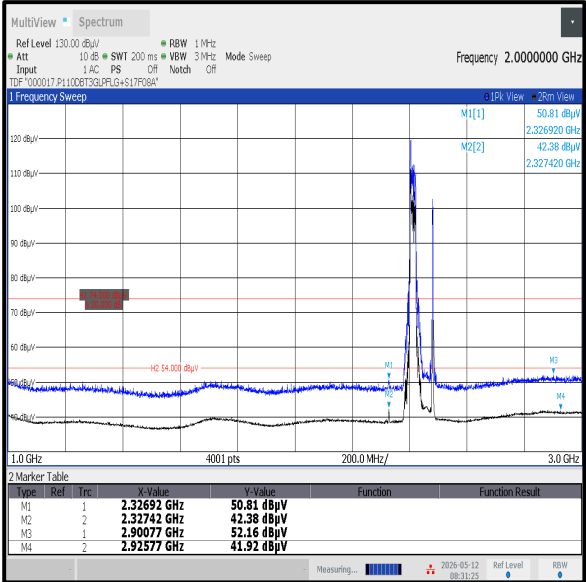
Note(s):

1. All other intermodulation products were below the noise floor level or greater than 20 dB from the specification limit.
2. Pre-scans were made against the FCC Part 15 general limits for radiated emissions.
3. Measurements below 1 GHz were performed in a semi-anechoic chamber 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.
4. Measurements above 1 GHz were performed in a fully anechoic chamber 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. Maximum emission levels were determined by height searching the measurement antenna over the range 1 metre to 4 metres.
5. # In accordance with ANSI C63.10 clause 6.6.4.3 note 1, if the maximized peak measured value complies with the average limit, then it is unnecessary to perform an average measurement.

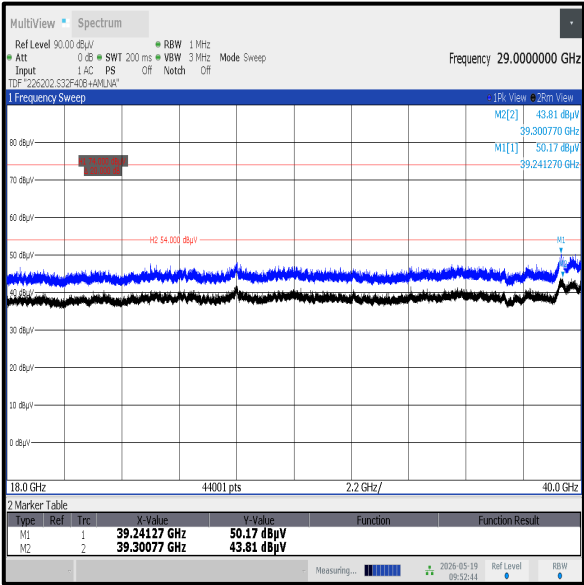
Transmitter Out of Band Radiated Emissions – Combination 5 (continued)

Results: Peak

Frequency (MHz)	Antenna Polarity	Peak Level (dBμV/m)	Average Limit (dBμV/m)	Margin (dB)	Result
2327.735	Horizontal	49.80	54.0 [#]	4.20	Complied



Transmitter Out of Band Radiated Emissions – Combination 5 (continued)



4.6 Transmitter Out of Band Radiated Emissions – Combination 6

Test Summary:

Test Engineers:	Atiqul Tanvir, Shamraiz Ashiq, Prasanna Reddy & Andrew Edwards	Test Dates:	12 May 2026 to 19 May 2026
Test Sample Serial Number:	MC46H6R62N		

FCC Reference:	Parts 15.209(a), 15.247(d) & 15.407(b)
ISED Canada Reference:	RSS-Gen 6.13, 8.9, RSS-247 6.6 & RSS-248 4.6
Test Method Used:	ANSI C63.10 Sections 6.3, 6.5, 6.6 & 12.7
Frequency Range:	30 MHz to 40 GHz
Configuration:	<i>Bluetooth</i> DH5 iPA Core 2 channel 0 / 802.11ax HE20 RU 26.0 CDD channel 11 / 802.11be EHT20 CDD channel 233

Environmental Conditions:

Temperature (°C):	21 to 24
Relative Humidity (%):	30 to 39

Note(s):

1. All intermodulation products were below the noise floor level or greater than 20 dB from the specification limit.
2. Pre-scans were made against the FCC Part 15 general limits for radiated emissions.
3. Pre-scans below 1 GHz were performed in a semi-anechoic chamber 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.
4. Pre-scans above 1 GHz were performed in a fully anechoic chamber 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.

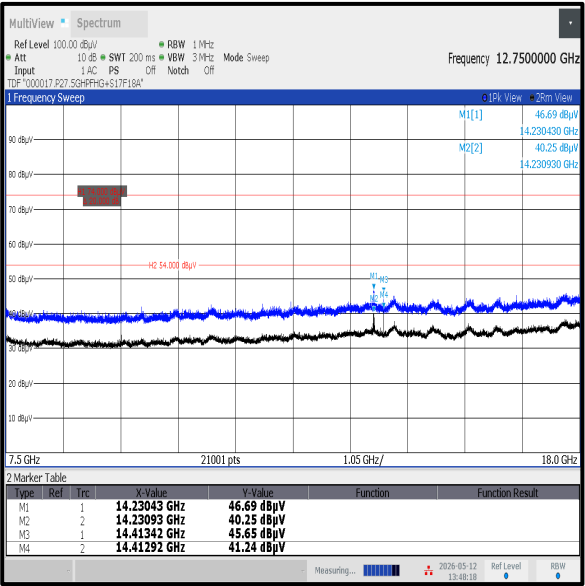
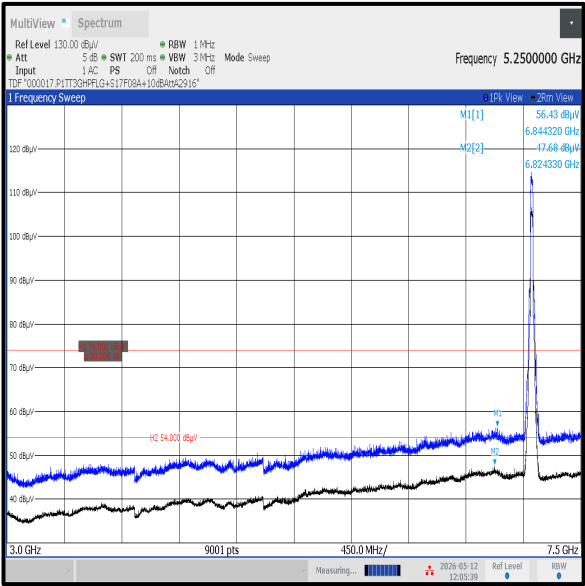
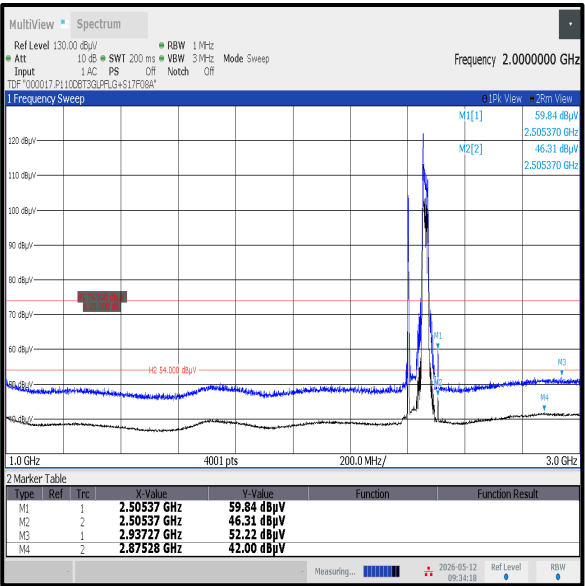
Transmitter Out of Band Radiated Emissions – Combination 6 (continued)

Results: Peak

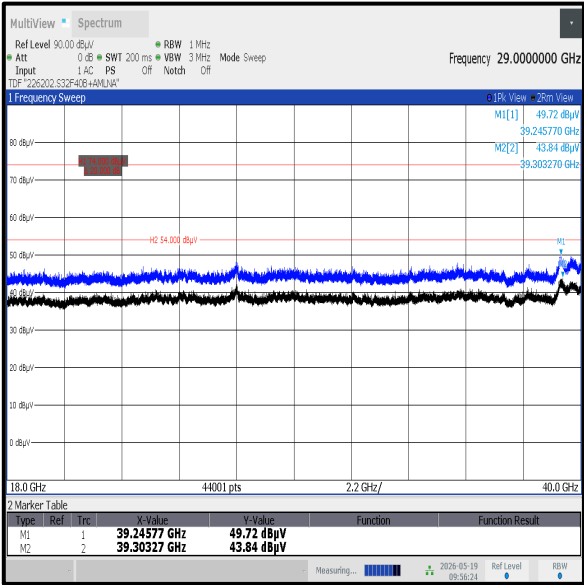
Frequency (MHz)	Antenna Polarity	Peak Level (dBμV/m)	Peak Limit (dBμV/m)	Margin (dB)	Result
See note 1					

Results: Average

Frequency (MHz)	Antenna Polarity	Average Level (dBμV/m)	Average Limit (dBμV/m)	Margin (dB)	Result
See note 1					



Transmitter Out of Band Radiated Emissions – Combination 6 (continued)



4.7 Transmitter Out of Band Radiated Emissions – Combination 7

Test Summary:

Test Engineers:	Atiqul Tanvir, Andrew Harding, Robert English & Andrew Edwards	Test Dates:	06 May 2026 & 07 May 2026
Test Sample Serial Numbers:	L5Q6J36Y22, TVF36KG42G & GMWPG7X7HL		

FCC Reference:	Parts 15.209(a), 15.247(d) & 15.407(b)
ISED Canada Reference:	RSS-Gen 6.13, 8.9, RSS-247 6.6, 7.3.1.3
Test Method Used:	ANSI C63.10 Sections 6.3, 6.5, 6.6, 11.11, 11.12 & 12.7
Frequency Range:	30 MHz to 40 GHz
Configuration:	Bluetooth DH5 iPA Core 2 channel 78 / 802.11ax HE20 RU 26.0 CDD channel 1 / NB-FHSS DH5 ePA TxBF 5162 MHz

Environmental Conditions:

Temperature (°C):	21 to 25
Relative Humidity (%):	34 to 44

Note(s):

1. All other intermodulation products were below the noise floor level or greater than 20 dB from the specification limit.
2. Pre-scans were made against the FCC Part 15 general limits for radiated emissions.
3. Measurements below 1 GHz were performed in a semi-anechoic chamber 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.
4. Measurements above 1 GHz were performed in a fully anechoic chamber 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. Maximum emission levels were determined by height searching the measurement antenna over the range 1 metre to 4 metres.
5. # The corrected average level has been obtained by subtracting the calculated duty cycle correction factor from the measured peak level for any restricted band emissions related to the fundamental. See Appendix 1 for further information.

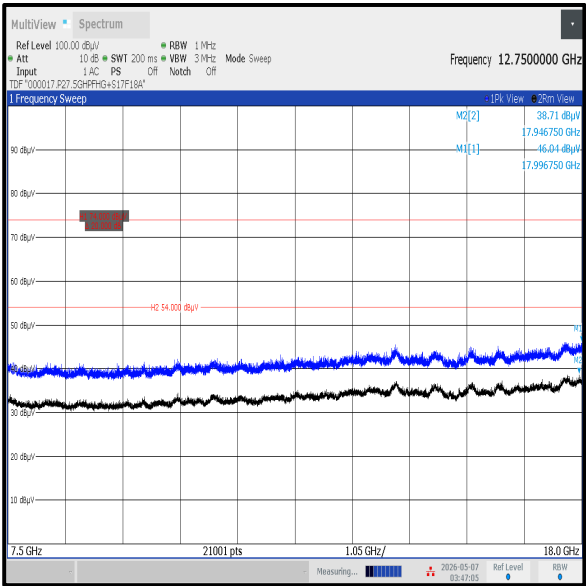
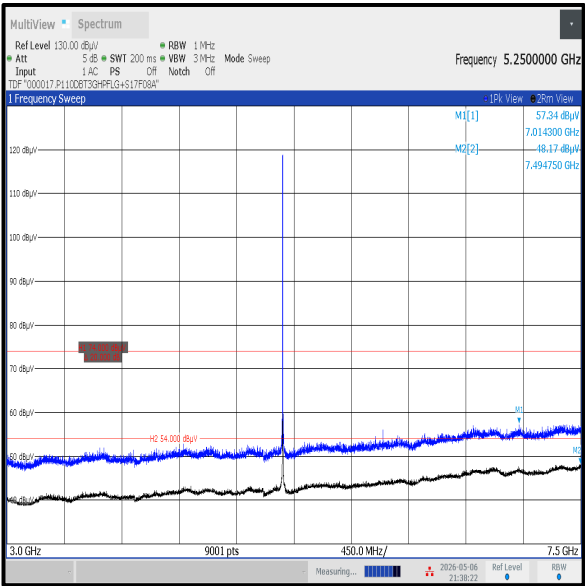
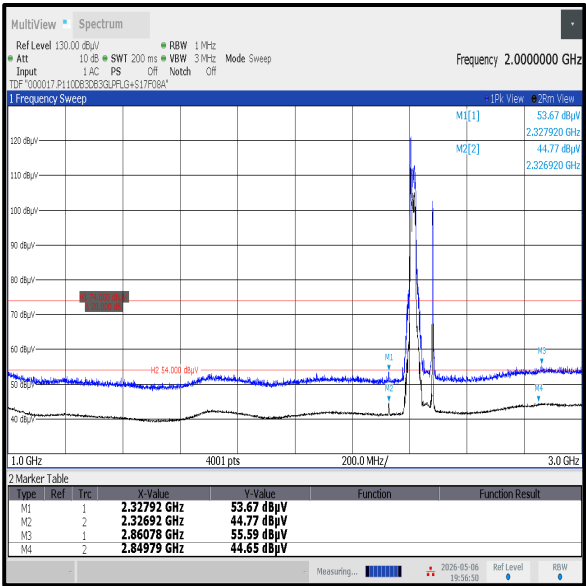
Transmitter Out of Band Radiated Emissions – Combination 7 (continued)

Results: Peak

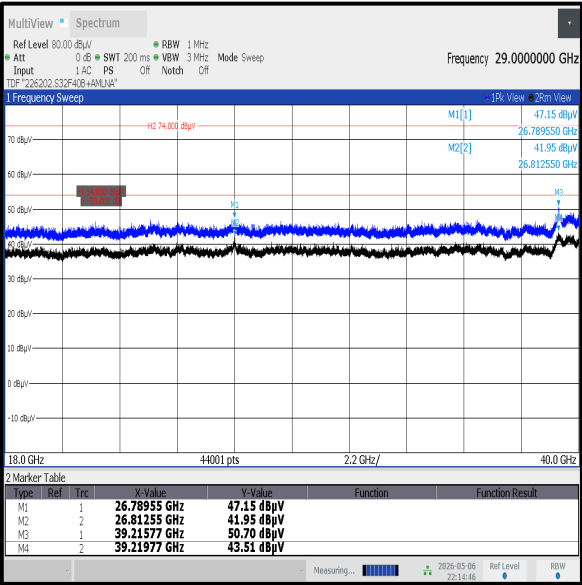
Frequency (MHz)	Antenna Polarity	Peak Level (dBμV/m)	Peak Limit (dBμV/m)	Margin (dB)	Result
2327.540	Horizontal	55.09	74.0	18.91	Complied

Results: Average

Frequency (MHz)	Antenna Polarity	Average Level (dBμV/m)	Average Limit (dBμV/m)	Margin (dB)	Result
2327.540	Horizontal	36.09#	54.0	17.91	Complied



Transmitter Out of Band Radiated Emissions – Combination 7 (continued)



4.8 Transmitter Out of Band Radiated Emissions – Combination 8

Test Summary:

Test Engineers:	Atiqul Tanvir, Dale Hills, Andrew Harding & Andrew Edwards	Test Dates:	06 May 2026 & 07 May 2026
Test Sample Serial Numbers:	L5Q6J36Y22, TVF36KG42G & GMWPG7X7HL		

FCC Reference:	Parts 15.209(a), 15.247(d) & 15.407(b)
ISED Canada Reference:	RSS-Gen 6.13, 8.9, RSS-247 6.6, 7.3.4.4
Test Method Used:	ANSI C63.10 Sections 6.3, 6.5, 6.6, 11.11, 11.12 & 12.7
Frequency Range:	30 MHz to 40 GHz
Configuration:	Bluetooth DH5 iPA Core 2 channel 0 / 802.11ax HE20 RU 26.0 CDD channel 11 / NB-FHSS DH5 ePA TxBF 5844 MHz

Environmental Conditions:

Temperature (°C):	21 to 25
Relative Humidity (%):	34 to 44

Note(s):

1. All intermodulation products were below the noise floor level or greater than 20 dB from the specification limit.
2. Pre-scans were made against the FCC Part 15 general limits for radiated emissions.
3. Pre-scans below 1 GHz were performed in a semi-anechoic chamber 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.
4. Pre-scans above 1 GHz were performed in a fully anechoic chamber 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.

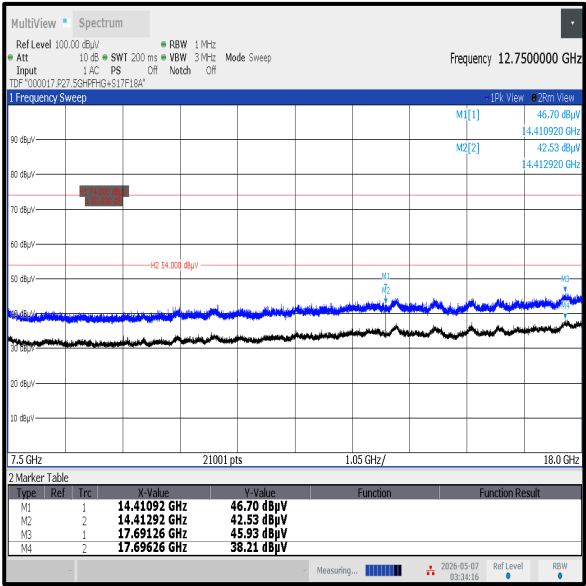
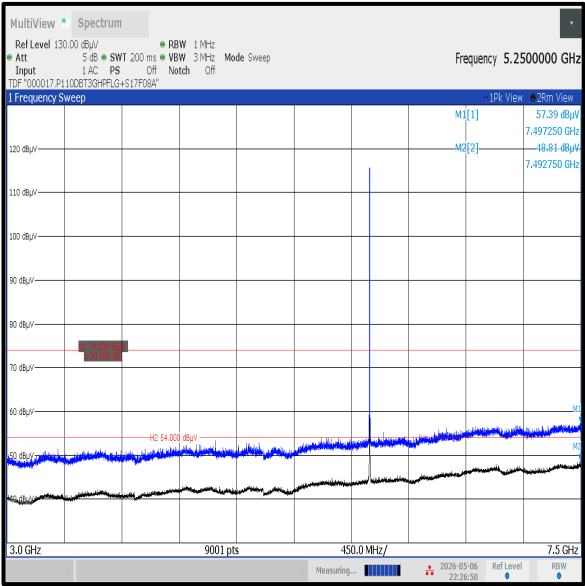
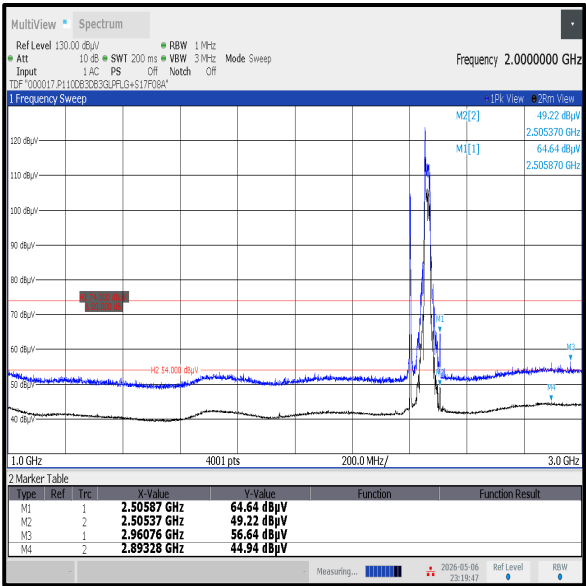
Transmitter Out of Band Radiated Emissions – Combination 8 (continued)

Results: Peak

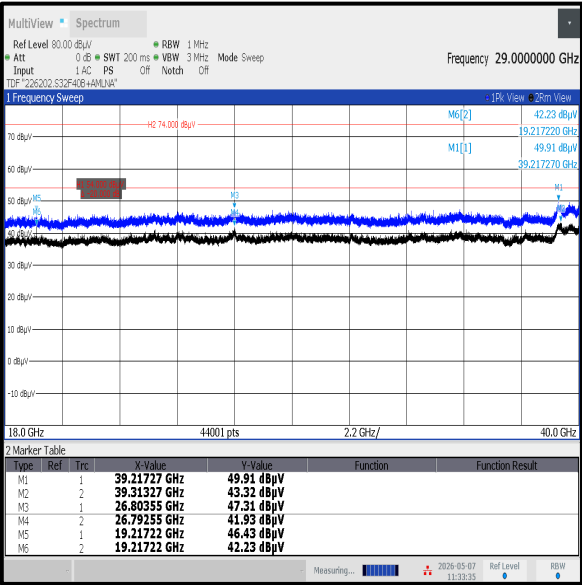
Frequency (MHz)	Antenna Polarity	Peak Level (dBμV/m)	Peak Limit (dBμV/m)	Margin (dB)	Result
See Note 1					

Results: Average

Frequency (MHz)	Antenna Polarity	Average Level (dBμV/m)	Average Limit (dBμV/m)	Margin (dB)	Result
See Note 1					



Transmitter Out of Band Radiated Emissions – Combination 8 (continued)



4.9 Transmitter Out of Band Radiated Emissions – Combination 9

Test Summary:

Test Engineers:	Atiquel Tanvir, Andrew Harding, Robert English & Andrew Edwards	Test Dates:	06 May 2026 & 07 May 2026
Test Sample Serial Numbers:	L5Q6J36Y22, TVF36KG42G & GMWPG7X7HL		

FCC Reference:	Parts 15.209(a), 15.247(d) & 15.407(b)
ISED Canada Reference:	RSS-Gen 6.13, 8.9, RSS-247 6.6 & RSS-248 4.6
Test Method Used:	ANSI C63.10 Sections 6.3, 6.5, 6.6, 11.11, 11.12 & 12.7
Frequency Range:	30 MHz to 40 GHz
Configuration:	Bluetooth DH5 iPA Core 2 channel 78 / 802.11ax HE20 RU 26.0 CDD channel 1 / NB-FHSS DH5 ePA TxBF 6425 MHz

Environmental Conditions:

Temperature (°C):	21 to 25
Relative Humidity (%):	34 to 44

Note(s):

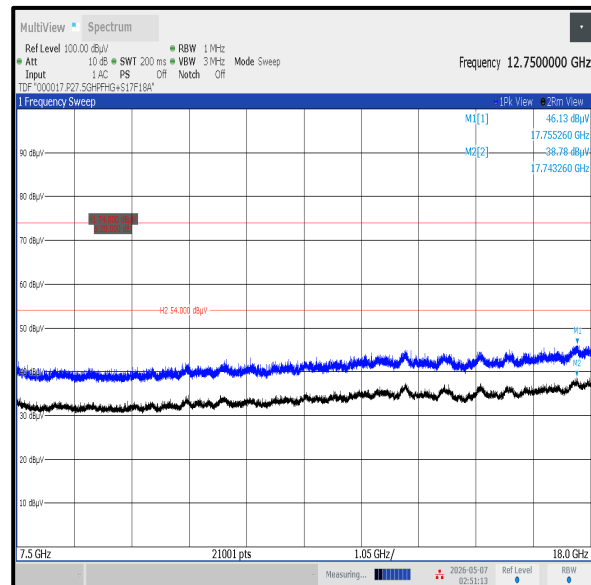
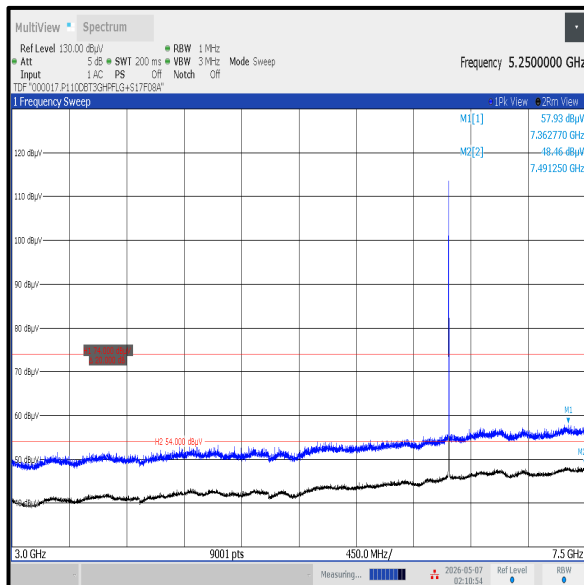
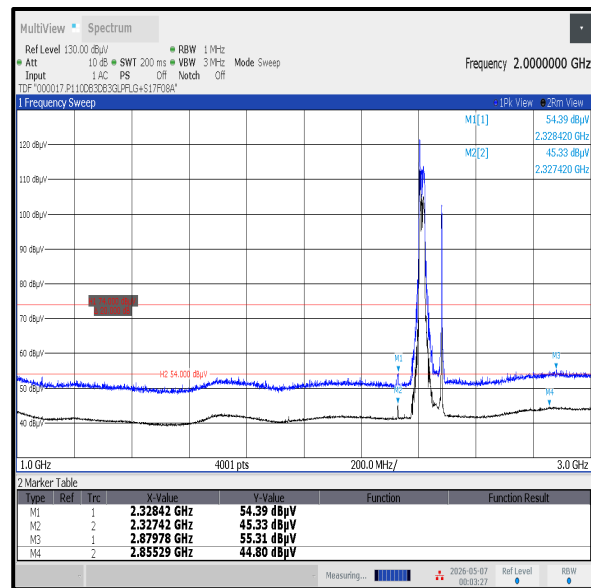
1. All other intermodulation products were below the noise floor level or greater than 20 dB from the specification limit.
2. Pre-scans were made against the FCC Part 15 general limits for radiated emissions.
3. Measurements below 1 GHz were performed in a semi-anechoic chamber at a distance of 3 metres. 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.
4. Measurements above 1 GHz were performed in a fully anechoic chamber 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. Maximum emission levels were determined by height searching the measurement antenna over the range 1 metre to 4 metres.
5. # The corrected average level has been obtained by subtracting the calculated duty cycle correction factor from the measured peak level for any restricted band emissions related to the fundamental. See Appendix 1 for further information.

Transmitter Out of Band Radiated Emissions – Combination 9 (continued)**Results: Peak**

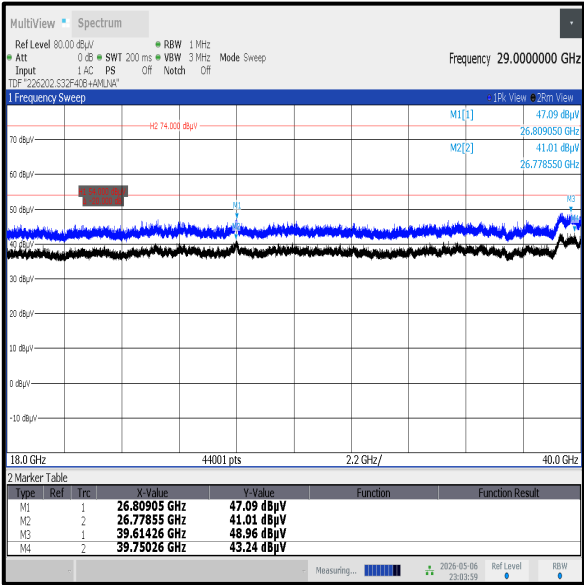
Frequency (MHz)	Antenna Polarity	Peak Level (dB μ V/m)	Peak Limit (dB μ V/m)	Margin (dB)	Result
2327.290	Horizontal	55.31	74.0	18.69	Complied

Results: Average

Frequency (MHz)	Antenna Polarity	Average Level (dB μ V/m)	Average Limit (dB μ V/m)	Margin (dB)	Result
2327.290	Horizontal	36.31#	54.0	17.69	Complied



Transmitter Out of Band Radiated Emissions – Combination 9 (continued)



4.10 Transmitter Out of Band Radiated Emissions – Combination 10

Test Summary:

Test Engineers:	Rob English, Atiqul Tanvir, Shamraiz Ashiq & Andrew Edwards	Test Dates:	06 May 2026 & 07 May 2026
Test Sample Serial Numbers:	L5Q6J36Y22, TVF36KG42G & GMWPG7X7HL		

FCC Reference:	Parts 15.209(a), 15.247(d) & 15.407(b)
ISED Canada Reference:	RSS-Gen 6.13, 8.9, RSS-247 6.6, 7.3.1.3
Test Method Used:	ANSI C63.10 Sections 6.3, 6.5, 6.6 & 12.7
Frequency Range:	30 MHz to 40 GHz
Configuration:	Bluetooth DH5 ePA TxBF channel 78 / NB-FHSS DH5 ePA TxBF 5162 MHz

Environmental Conditions:

Temperature (°C):	21 to 24
Relative Humidity (%):	32 to 44

Note(s):

1. All intermodulation products were below the noise floor level or greater than 20 dB from the specification limit.
2. Pre-scans were made against the FCC Part 15 general limits for radiated emissions.
3. Pre-scans below 1 GHz were performed in a semi-anechoic chamber 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.
4. Pre-scans above 1 GHz were performed in a fully anechoic chamber 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.

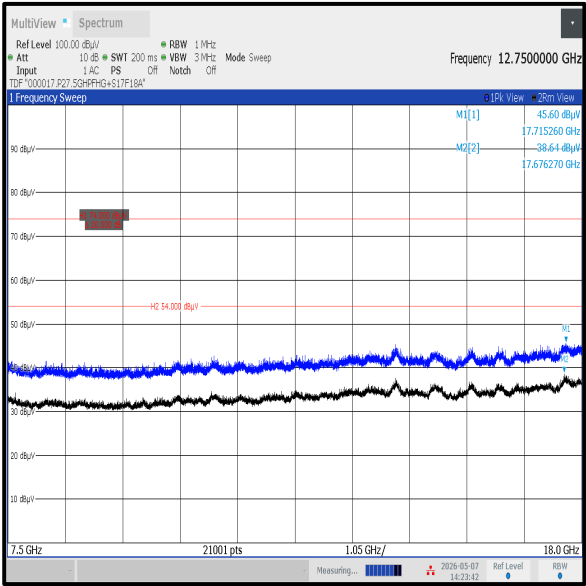
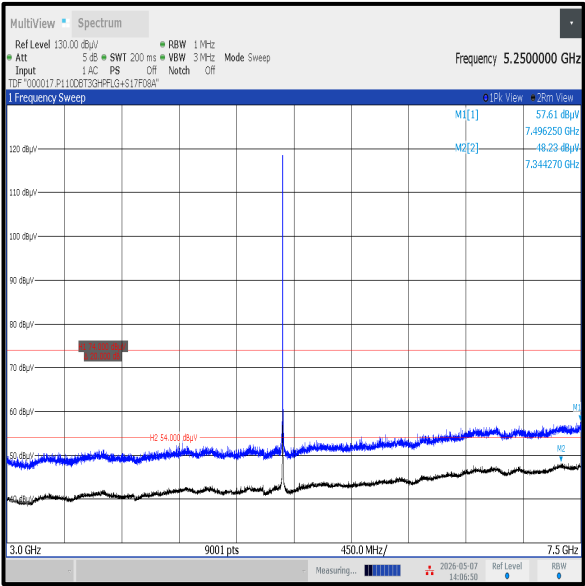
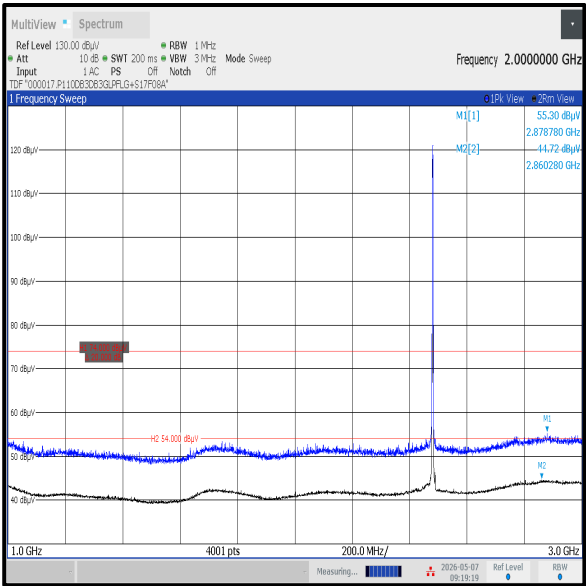
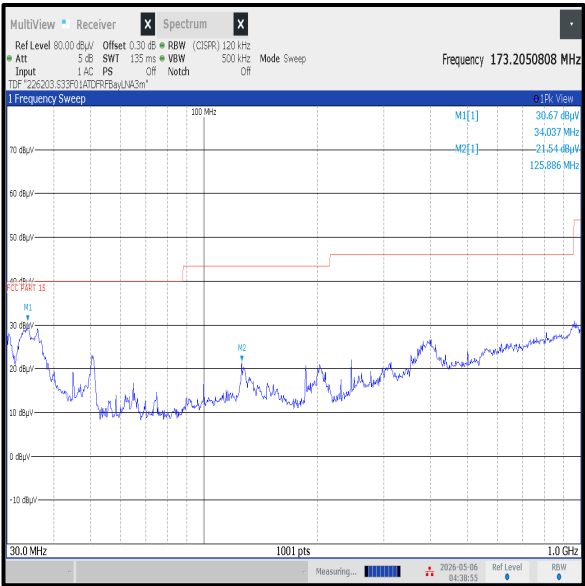
Transmitter Out of Band Radiated Emissions – Combination 10 (continued)

Results: Peak

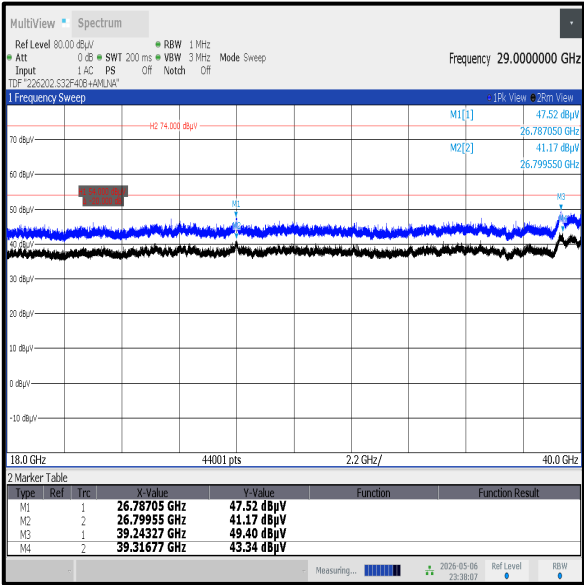
Frequency (MHz)	Antenna Polarity	Peak Level (dBμV/m)	Peak Limit (dBμV/m)	Margin (dB)	Result
See Note 1					

Results: Average

Frequency (MHz)	Antenna Polarity	Average Level (dBμV/m)	Average Limit (dBμV/m)	Margin (dB)	Result
See Note 1					



Transmitter Out of Band Radiated Emissions – Combination 10 (continued)



4.11 Transmitter Out of Band Radiated Emissions – Combination 11

Test Summary:

Test Engineers:	Rob English, Atiqul Tanvir, Shamraiz Ashiq & Andrew Edwards	Test Dates:	06 May 2026 & 07 May 2026
Test Sample Serial Numbers:	L5Q6J36Y22, TVF36KG42G & GMWPG7X7HL		

FCC Reference:	Parts 15.209(a), 15.247(d) & 15.407(b)
ISED Canada Reference:	RSS-Gen 6.13, 8.9, RSS-247 6.6, 7.3.4.4
Test Method Used:	ANSI C63.10 Sections 6.3, 6.5, 6.6 & 12.7
Frequency Range:	30 MHz to 40 GHz
Configuration:	Bluetooth DH5 ePA TxBF channel 0 / NB-FHSS DH5 ePA TxBF 5844 MHz

Environmental Conditions:

Temperature (°C):	21 to 24
Relative Humidity (%):	32 to 44

Note(s):

1. All intermodulation products were below the noise floor level or greater than 20 dB from the specification limit.
2. Pre-scans were made against the FCC Part 15 general limits for radiated emissions.
3. Pre-scans below 1 GHz were performed in a semi-anechoic chamber 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.
4. Pre-scans above 1 GHz were performed in a fully anechoic chamber 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.

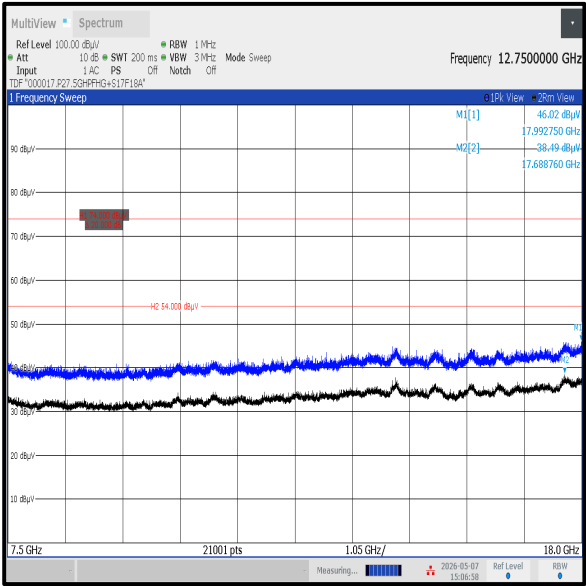
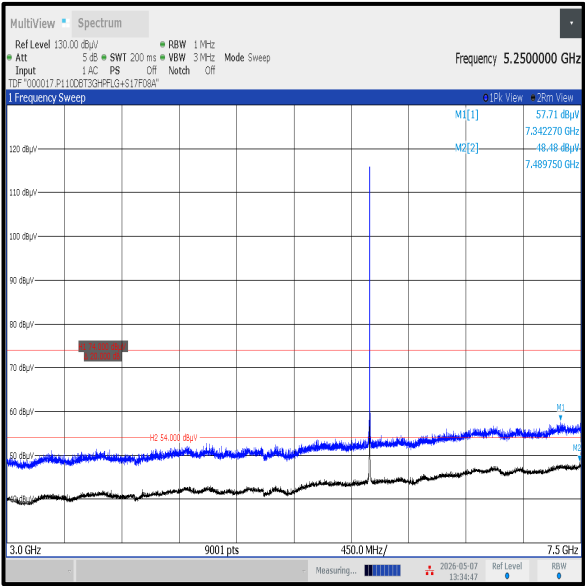
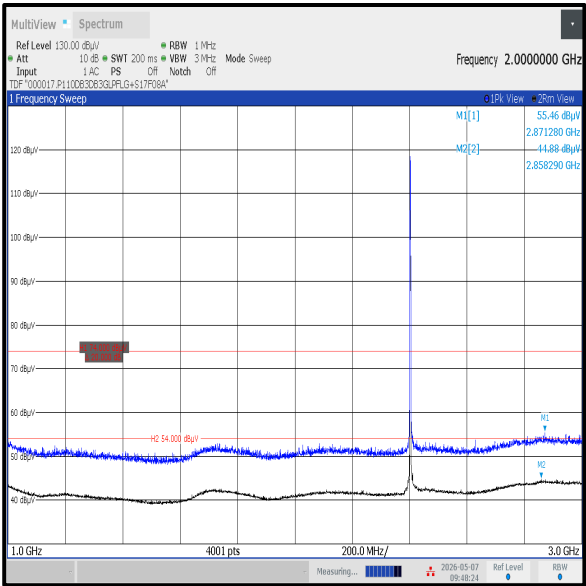
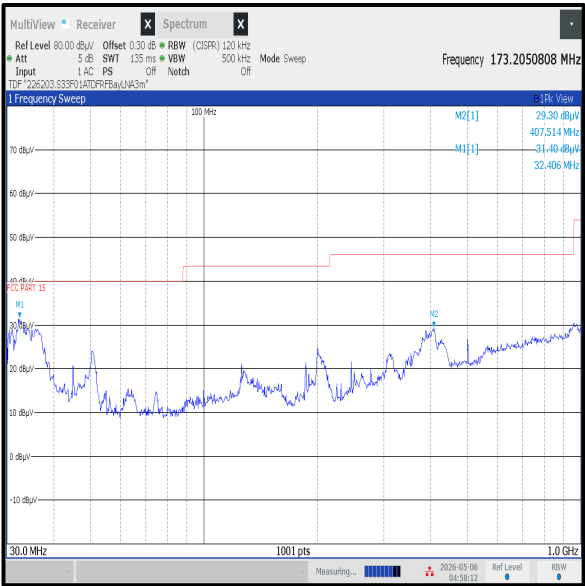
Transmitter Out of Band Radiated Emissions – Combination 11 (continued)

Results: Peak

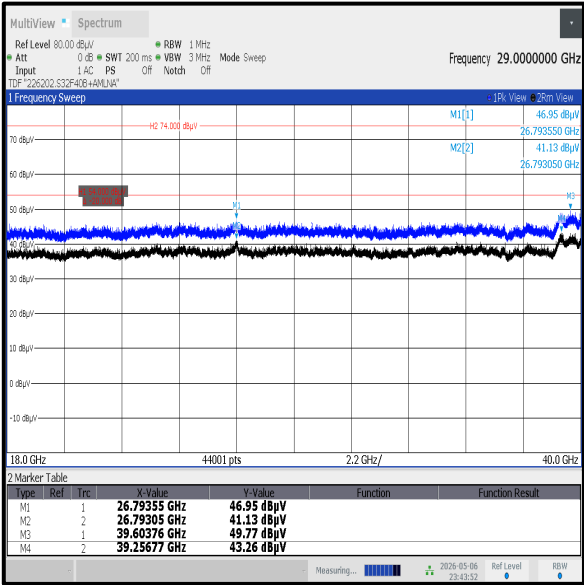
Frequency (MHz)	Antenna Polarity	Peak Level (dBμV/m)	Peak Limit (dBμV/m)	Margin (dB)	Result
See note 1					

Results: Average

Frequency (MHz)	Antenna Polarity	Average Level (dBμV/m)	Average Limit (dBμV/m)	Margin (dB)	Result
See note 1					



Transmitter Out of Band Radiated Emissions – Combination 11 (continued)



4.12 Transmitter Out of Band Radiated Emissions – Combination 12

Test Summary:

Test Engineers:	Rob English, Atiqul Tanvir, Shamraiz Ashiq & Andrew Edwards	Test Dates:	06 May 2026 & 07 May 2026
Test Sample Serial Numbers:	L5Q6J36Y22, TVF36KG42G & GMWPG7X7HL		

FCC Reference:	Parts 15.209(a), 15.247(d) & 15.407(b)
ISED Canada Reference:	RSS-Gen 6.13, 8.9, RSS-247 6.6 & RSS-248 4.6
Test Method Used:	ANSI C63.10 Sections 6.3, 6.5, 6.6 & 12.7
Frequency Range:	30 MHz to 40 GHz
Configuration:	<i>Bluetooth</i> DH5 ePA TxBF channel 78 / NB-FHSS DH5 ePA TxBF 6425 MHz

Environmental Conditions:

Temperature (°C):	21 to 24
Relative Humidity (%):	32 to 44

Note(s):

1. All intermodulation products were below the noise floor level or greater than 20 dB from the specification limit.
2. Pre-scans were made against the FCC Part 15 general limits for radiated emissions.
3. Pre-scans below 1 GHz were performed in a semi-anechoic chamber 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.
4. Pre-scans above 1 GHz were performed in a fully anechoic chamber 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.

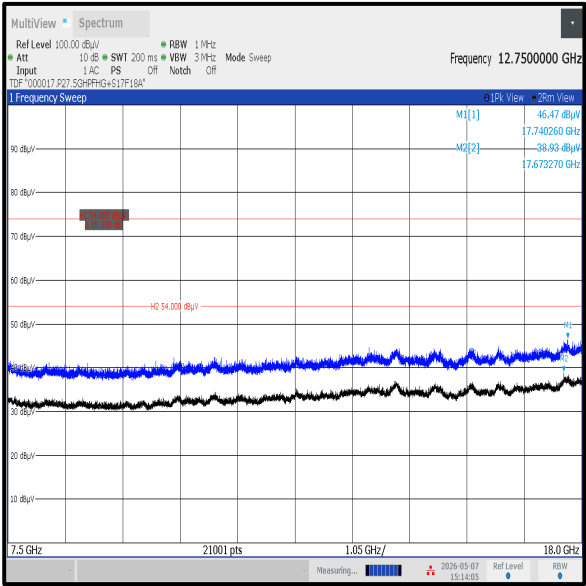
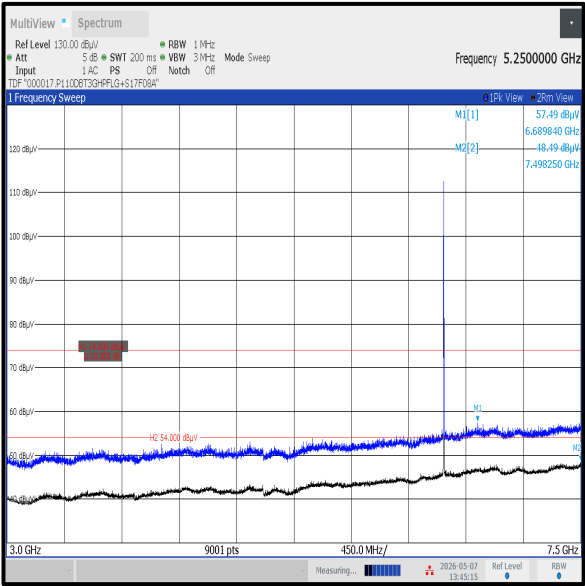
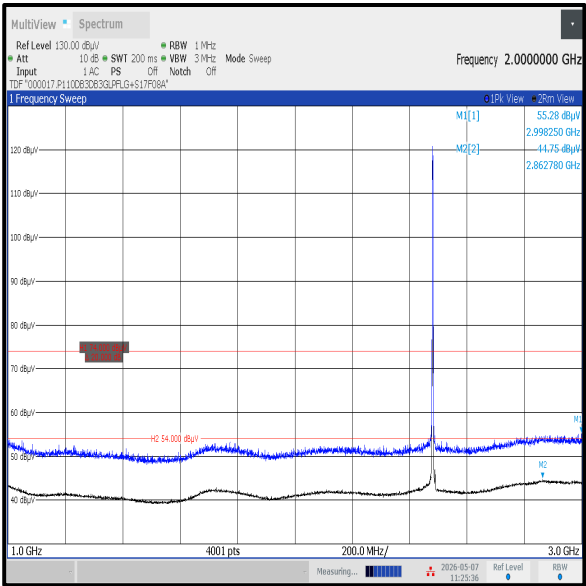
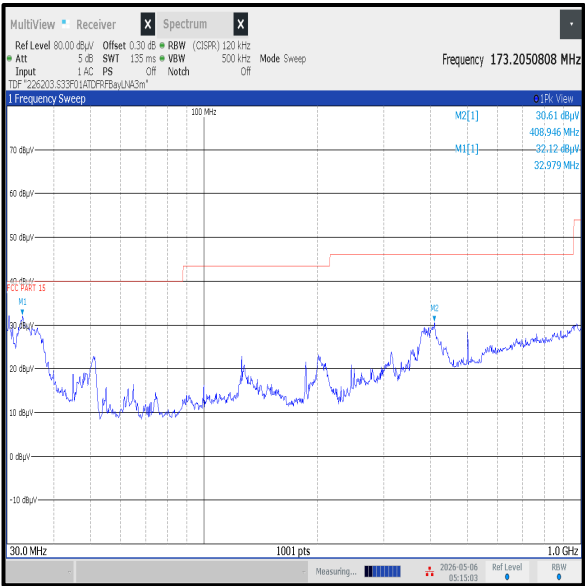
Transmitter Out of Band Radiated Emissions – Combination 12 (continued)

Results: Peak

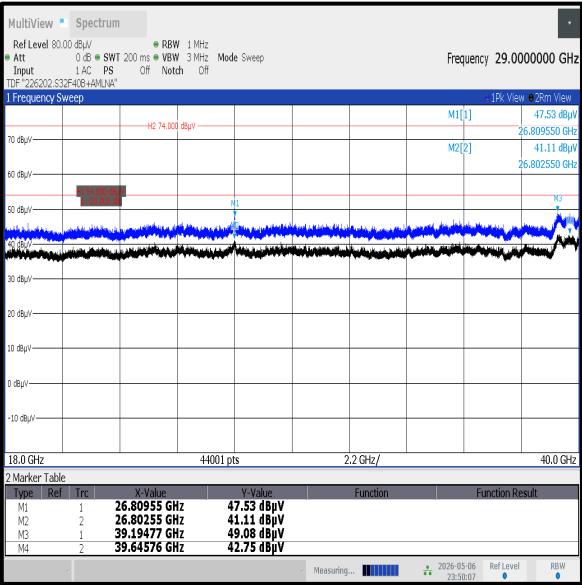
Frequency (MHz)	Antenna Polarity	Peak Level (dBμV/m)	Peak Limit (dBμV/m)	Margin (dB)	Result
See note 1					

Results: Average

Frequency (MHz)	Antenna Polarity	Peak Level (dBμV/m)	Peak Limit (dBμV/m)	Margin (dB)	Result
See note 1					



Transmitter Out of Band Radiated Emissions – Combination 12 (continued)



Appendix 1

FHSS Duty Cycle Correction Factor Calculation

In accordance with ANSI C63.10 section 7.5, a duty cycle correction factor may be applied to calculate the average radiated field strength emission levels for an FHSS device.

The following values were taken from the *Bluetooth* Core Specification V6.0 to give the worst case correction:

Modulation	DH5, 2DH5 and 3DH5
Channel Hopping Rate (Hops/s)	1600
Tx Timeslots	5
Rx Timeslots	1
Adjusted Hopping Rate for Adaptive Frequency Hopping (Hops/s)	266.667
Time per Hop (ms)	3.75
Minimum Number of Channels	20
Time per Hop Sequence (ms)	75
Maximum Number of Hops on One Channel in any 100 ms Observation Period	3
Maximum Dwell Time on One Channel in any 100 ms Observation Period (ms)	11.25
Calculated Duty cycle correction factor applied (dB)	19.0
Maximum Duty cycle correction factor applied (dB)	19.0

The duty cycle correction factor was calculated based on the above values:

$$DH5, 2DH5 \text{ and } 3DH5: 20 * \text{Log}(11.25 \text{ ms} / 100 \text{ ms}) = 19.0 \text{ dB}$$

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