

FCC and ISED Test Report

Apple Inc
Model: A3426



In accordance with FCC 47 CFR Part 15C,
ISED RSS-247 and ISED RSS-GEN
(Thread)

Prepared for: Apple Inc
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Document 75963990-16 Issue 02

SIGNATURE

NAME	JOB TITLE	RESPONSIBLE FOR	ISSUE DATE
Stephen Marshall	Senior Engineer	Authorised Signatory	01 February 2026

Signatures in this approval box have checked this document in line with the requirements of TUV SUD document control rules.

ENGINEERING STATEMENT

The measurements shown in this report were made in accordance with the procedures described on test pages. All reported testing was carried out on a sample equipment to demonstrate limited compliance with FCC 47 CFR Part 15C, ISED RSS-247 and ISED RSS-GEN. The sample tested was found to comply with the requirements defined in the applied rules.

RESPONSIBLE FOR	NAME	DATE	SIGNATURE
Report Generation	George Capps	01 February 2026	

FCC Accreditation

492497/UK2010 Octagon House, Fareham Test Laboratory

553713/UK2026 Concorde Park, Fareham Test Laboratory

ISED Accreditation

12669A/UK0003 Octagon House, Fareham Test Laboratory

28798/UK0003 Concorde Park, Fareham Test Laboratory

EXECUTIVE SUMMARY

A sample of this product was tested and found to be compliant with FCC 47 CFR Part 15C: 2024, ISED RSS-247: Issue 4 (2025-07), ISED RSS-GEN: Issue 5 (2018-04) + A2 (2021-02) for the tests detailed in section 1.3.



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1 Report Summary

1.1 Report Modification Record

Alterations and additions to this report will be issued to the holders of each copy in the form of a complete document.

Issue	Description of Change	Date of Issue
1	First Issue	21 January 2026
2	Corrected model number	01 February 2026

Table 1

1.2 Introduction

Applicant	Apple Inc
Manufacturer	Apple Inc
EUT/Sample Identification	Refer to section 1.6
Test Specification/Issue/Date	FCC 47 CFR Part 15C: 2024 ISED RSS-247: Issue 4 (2025-07) ISED RSS-GEN: Issue 5 (2018-04) + A2 (2021-02)
Start of Test	29-October-2025
Finish of Test	23-December-2025
Name of Engineer(s)	Akhil Rajendran Bhaskaran Nair, Ian Hart, George Williams, Gridi Bilali, Ian Broomhall, Ioan-Alexandru Bogatu, Colin Brain
Related Document(s)	ANSI C63.10 2020 + Cor.1-2023 + C63.10a-2024



1.3 Brief Summary of Results

A brief summary of the tests carried out in accordance with FCC 47 CFR Part 15C, ISED RSS-247 and ISED RSS-GEN is shown below.

Section	Specification Clause			Test Description	Result	Comments/Base Standard
	Part 15C	RSS-247	RSS-GEN			
Configuration and Mode: Thread						
-	15.203	-	-	Antenna Requirement	N/T	The device complies with the provisions of this section, as it uses permanently attached integral antennas.
2.1	15.205	2.4	8.10	Restricted Band Edges	Pass	ANSI C63.10 2020 + Cor.1-2023 + C63.10a-2024
2.2	15.247 (a)(2)	6.3.1	6.7	Emission Bandwidth	Pass	ANSI C63.10 2020 + Cor.1-2023 + C63.10a-2024
2.3	15.247 (b)	6.3.2	6.12	Maximum Conducted Output Power	Pass	ANSI C63.10 2020 + Cor.1-2023 + C63.10a-2024
2.4	15.247 (d)	6.6	-	Authorised Band Edges	Pass	ANSI C63.10 2020 + Cor.1-2023 + C63.10a-2024
2.5	15.209 and 15.247 (d)	2.4 and 6.6	6.13 and 8.9	Spurious Radiated Emissions	Pass	ANSI C63.10 2020 + Cor.1-2023 + C63.10a-2024
2.6	15.247 (e)	6.3.1	6.12	Power Spectral Density	Pass	ANSI C63.10 2020 + Cor.1-2023 + C63.10a-2024

Table 2



1.4 Product Information

1.4.1 Technical Description

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

1.4.2 Test Modes

The EUT's 2.4 GHz Thread radio supports SISO operation on three different cores. Core 0 and 1 also have two power settings: "iPA" & "ePA", but Core 2 only supports one power setting "iPA".

The EUT was tested in the following modes:

- Core 0 - iPA/ePA
- Core 1 - iPA/ePA
- Core 2 - iPA

1.4.3 Test Setup

For conducted tests the EUT antennas were disconnected and replaced with U. FL to SMA test cables to enable conducted testing on each core. The loss of these test cables were known and compensated for in any conducted measurements.

For all tests the EUT was put into a continuous transmit test mode with the chipset manufacturer's test commands to ensure the measured signals were representative.

1.4.4 Antenna Gain Table

Antenna Port	Frequency Range (MHz)	Peak Gain (dBi)	Conducted Cable Loss (dB)
Core 0 (WF1)	2412	3.7	0.71
	2442	4.6	0.71
	2472	4.5	0.71
Core 1 (WF2)	2412	3.8	0.71
	2442	3.6	0.71
	2472	3.7	0.71
Core 2 (WF3)	2412	2.2	0.71
	2442	4.0	0.71
	2472	4.5	0.71

Table 3

1.5 Deviations from the Standard

No deviations from the applicable test standard were made during testing.



1.6 Identification of the EUT

The table below details identification of the EUT(s) that have been used to carry out the testing within this report.

Model: A3426		
Serial Number	Hardware Version	Software Version
MM20HYW2Y6	REV1.0	25D36
MXDF7Q597J	REV1.0	25D36
FV3YG50JYP	REV1.0	25D36
FXXVQ1FY4C	REV1.0	25D43
GMW9QF460R	REV1.0	25D36

Table 4

1.7 EUT Modification Record

The table below details modifications made to the EUT during the test programme.

The modifications incorporated during each test are recorded on the appropriate test pages.

Modification State	Description of Modification still fitted to EUT	Modification Fitted By	Date Modification Fitted
Model: A3426, Serial Number: MM20HYW2Y6			
0	As supplied by the customer	Not Applicable	Not Applicable
Model: A3426, Serial Number: MXDF7Q597J			
0	As supplied by the customer	Not Applicable	Not Applicable
Model: A3426, Serial Number: FXXVQ1FY4C			
0	As supplied by the customer	Not Applicable	Not Applicable
Model: A3426, Serial Number: GMW9QF460R			
0	As supplied by the customer	Not Applicable	Not Applicable
Model: A3426, Serial Number: FV3YG50JYP			
0	As supplied by the customer	Not Applicable	Not Applicable

Table 5



1.8 Test Location

TÜV SÜD conducted the following tests at our Octagon House Test Laboratory.

Test Name	Name of Engineer(s)	Accreditation
Configuration and Mode: Thread		
Emission Bandwidth	George Williams	UKAS
Maximum Conducted Output Power	George Williams	UKAS
Power Spectral Density	George Williams	UKAS

Table 6

Office Address:

TÜV SÜD
Octagon House
Concorde Way
Fareham
Hampshire
PO15 5RL
United Kingdom

TÜV SÜD conducted the following tests at our Concorde Park Test Laboratory.

Test Name	Name of Engineer(s)	Accreditation
Configuration and Mode: Thread		
Restricted Band Edges	Akhil Rajendran Bhaskaran Nair, Ian Hart	UKAS
Authorised Band Edges	Akhil Rajendran Bhaskaran Nair, Ian Hart	UKAS
Spurious Radiated Emissions	Gridi Bilali, Ian Broomhall, Ioan- Alexandru Bogatu, Colin Brain	UKAS

Table 7

Office Address:

TÜV SÜD
Concorde Park
Concorde Way
Fareham
Hampshire
PO15 5FG
United Kingdom



2 Test Details

2.1 Restricted Band Edges

2.1.1 Specification Reference

FCC 47 CFR Part 15C, Clause 15.205
ISED RSS-247, Clause 2.4
ISED RSS-GEN, Clause 8.10

2.1.2 Equipment Under Test and Modification State

A3426, S/N: FXXVQ1FY4C - Modification State 0
A3426, S/N: GMW9QF460R - Modification State 0

2.1.3 Date of Test

29-October-2025 to 13-November-2025

2.1.4 Test Method

This test was performed in accordance with ANSI C63.10, clause 6.10.5 and 11.12.1.

Plots for average measurements were taken in accordance with ANSI C63.10, clause 11.12.2.5.2.

The following conversion can be applied to convert from dB μ V/m to μ V/m:

$10^{(\text{Field Strength in dB}\mu\text{V/m}/20)}$.

2.1.5 Environmental Conditions

Ambient Temperature	22.1 - 23.9 °C
Relative Humidity	39.3 - 52.2 %



2.1.6 Test Results

Thread

iPA - Core 0 (SISO)

Mode	TX Frequency (MHz)	Band Edge Frequency (MHz)	Peak Level (dBμV/m)	Average Level (dBuV/m)
Thread	2405	2390	54.94	42.65
Thread	2475	2483.5	54.58	43.78

Table 8 - iPA, Core 0, SISO Restricted Band Edge Results

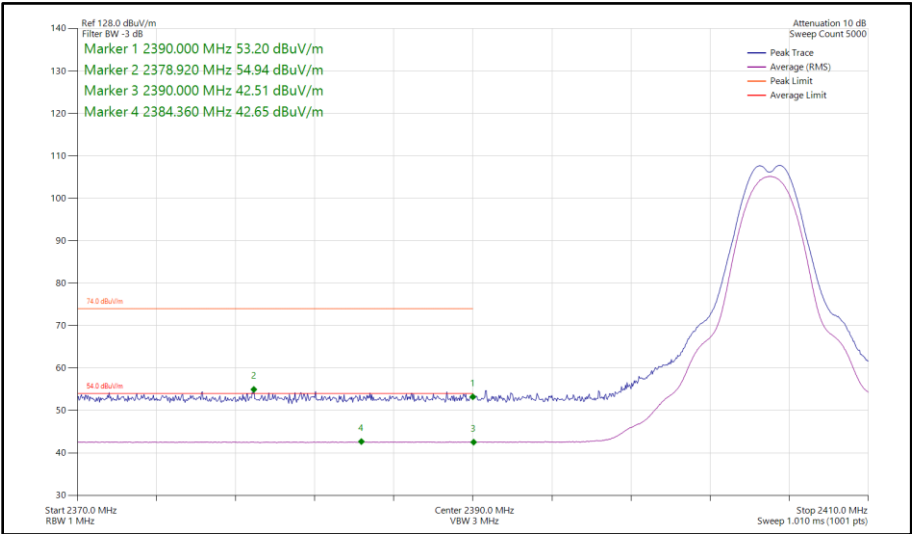
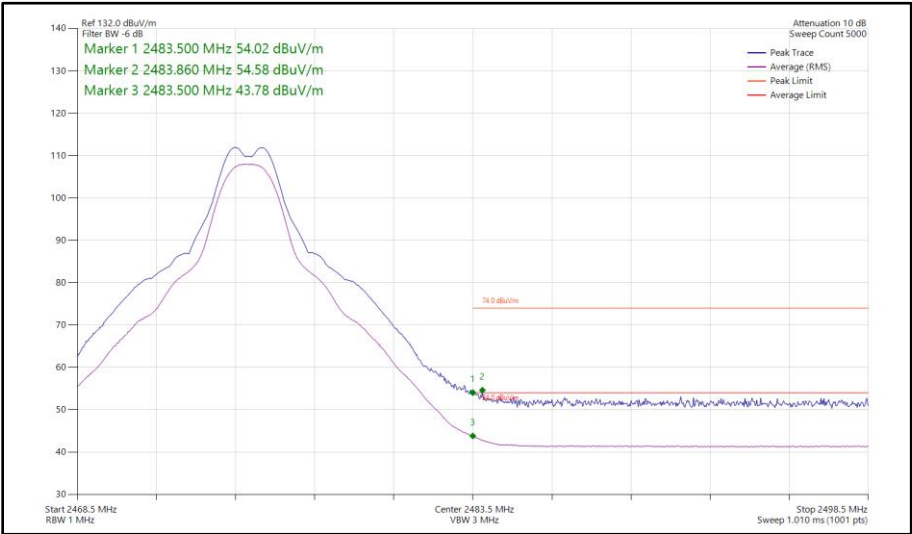


Figure 1 - Thread, iPA, SISO, Core 0 - 2405 MHz
Band Edge Frequency 2390 MHz

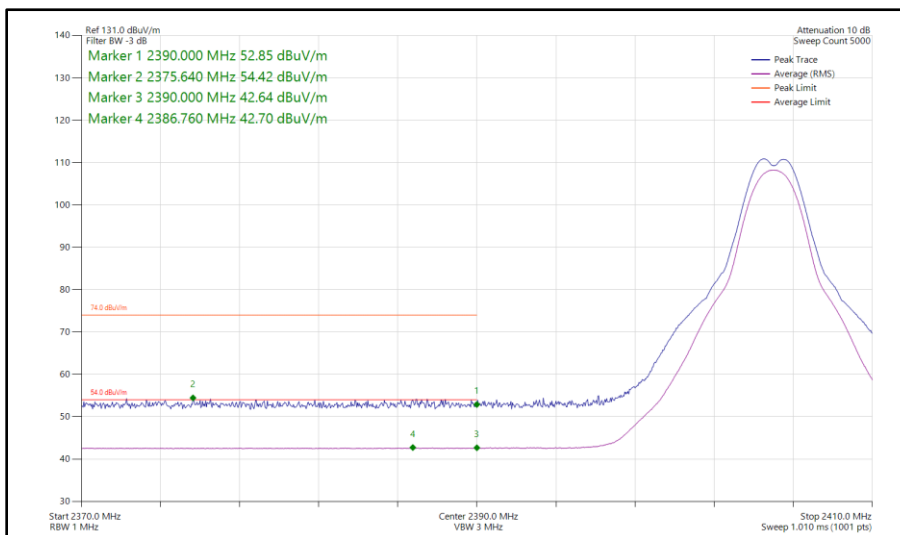


**Figure 2 - Thread, iPA, SISO, Core 0 - 2475 MHz
Band Edge Frequency 2483.5 MHz**

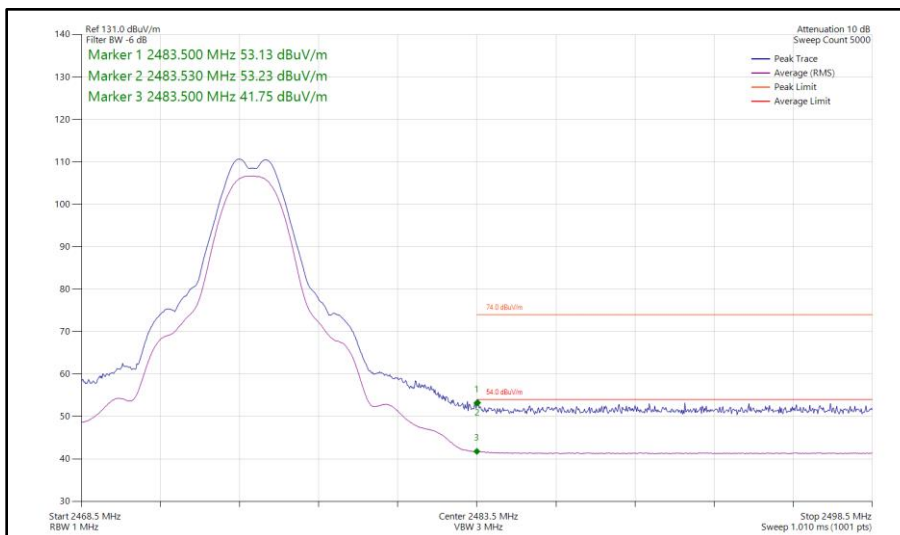
iPA - Core 1 (SISO)

Mode	TX Frequency (MHz)	Band Edge Frequency (MHz)	Peak Level (dBμV/m)	Average Level (dBμV/m)
Thread	2405	2390	54.42	42.70
Thread	2475	2483.5	53.23	41.75

Table 9 - iPA, Core 1, SISO Restricted Band Edge Results



**Figure 3 - Thread, iPA, SISO, Core 1 - 2405 MHz
Band Edge Frequency 2390 MHz**



**Figure 4 - Thread, iPA, SISO, Core 1 - 2475 MHz
Band Edge Frequency 2483.5 MHz**



iPA - Core 2 (SISO)

Mode	TX Frequency (MHz)	Band Edge Frequency (MHz)	Peak Level (dBµV/m)	Average Level (dBµV/m)
Thread	2405	2390	54.96	42.67
Thread	2475	2483.5	54.69	42.40

Table 10 - iPA, Core 2, SISO Restricted Band Edge Results

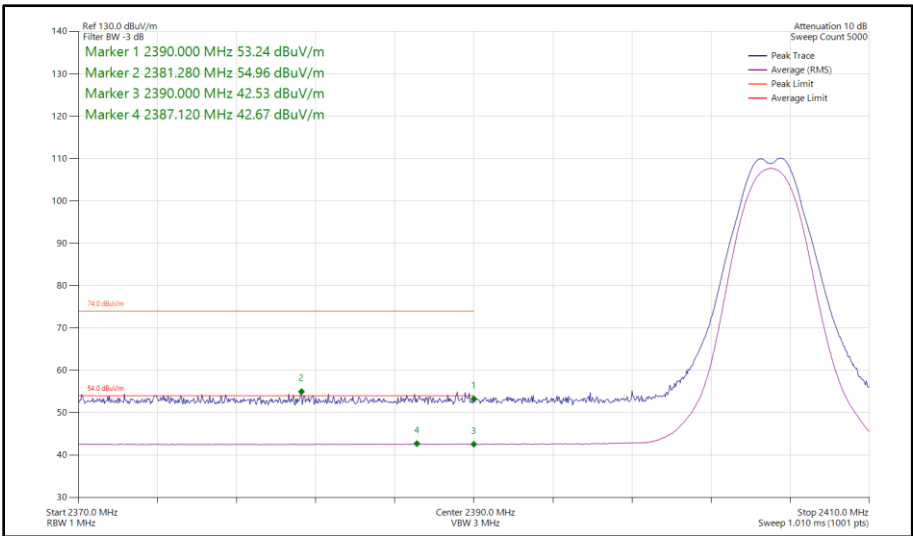


Figure 5 - Thread, iPA, SISO, Core 2 - 2405 MHz
Band Edge Frequency 2390 MHz

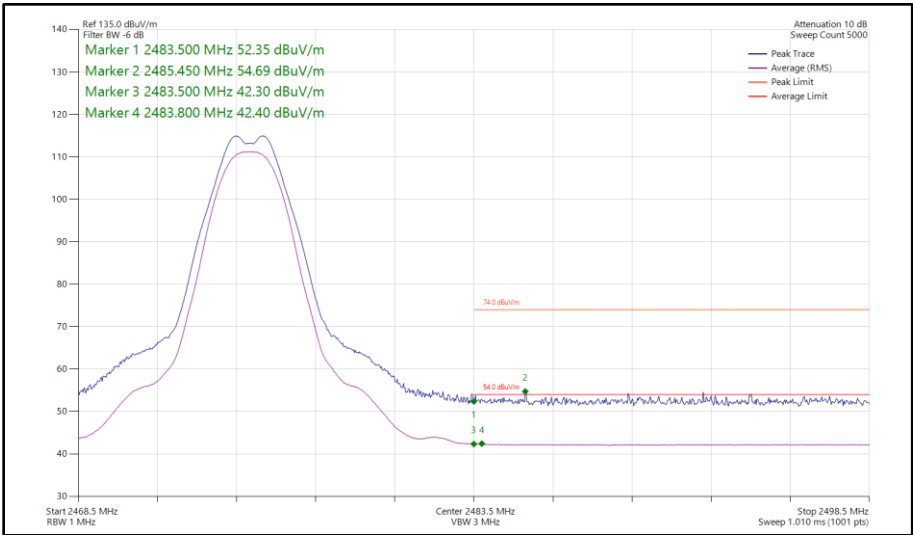
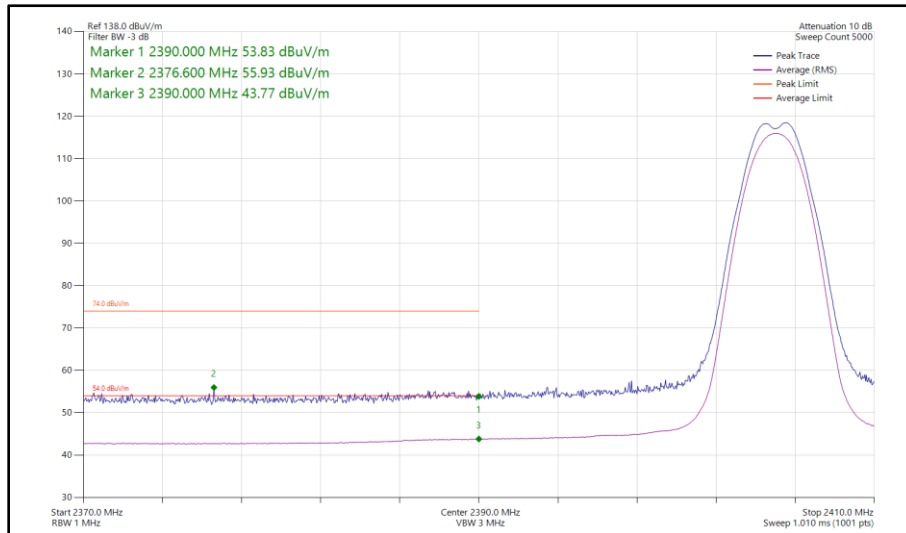


Figure 6 - Thread, iPA, SISO, Core 2 - 2475 MHz
Band Edge Frequency 2483.5 MHz

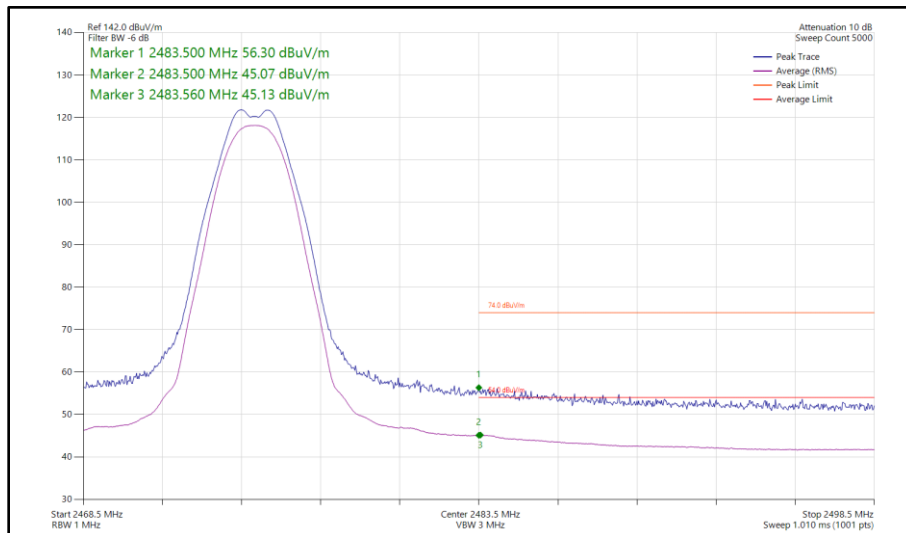
ePA - Core 0 (SISO)

Mode	TX Frequency (MHz)	Band Edge Frequency (MHz)	Peak Level (dBμV/m)	Average Level (dBμV/m)
Thread	2405	2390	55.93	43.77
Thread	2475	2483.5	56.30	45.13

Table 11 - ePA, Core 0, SISO Restricted Band Edge Results



**Figure 7 - Thread, ePA, SISO, Core 0 - 2405 MHz
Band Edge Frequency 2390 MHz**



**Figure 8 - Thread, ePA, SISO, Core 0 - 2475 MHz
Band Edge Frequency 2483.5 MHz**



ePA - Core 1 (SISO)

Mode	TX Frequency (MHz)	Band Edge Frequency (MHz)	Peak Level (dBµV/m)	Average Level (dBµV/m)
Thread	2405	2390	55.64	44.44
Thread	2475	2483.5	55.07	44.23

Table 12 - ePA, Core 1, SISO Restricted Band Edge Results

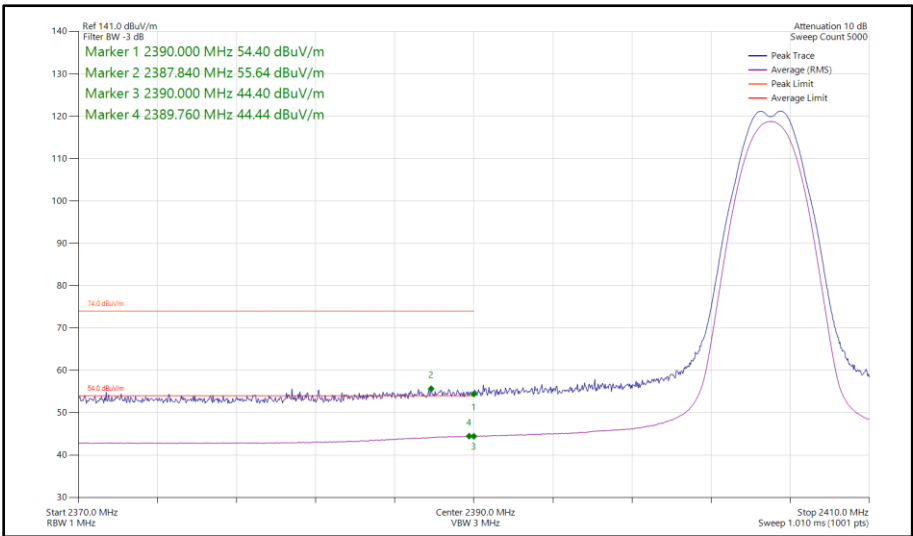


Figure 9 - Thread, ePA, SISO, Core 1 - 2405 MHz
Band Edge Frequency 2390 MHz

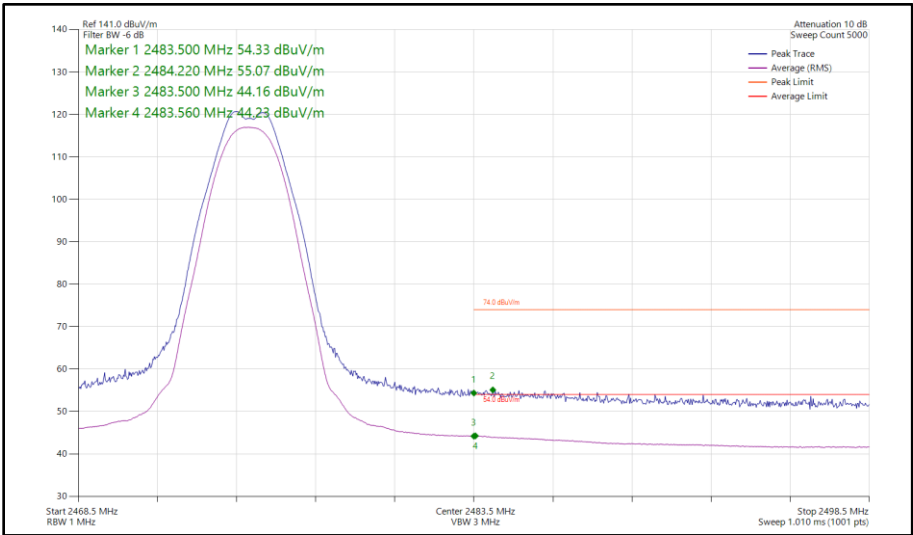


Figure 10 - Thread, ePA, SISO, Core 1 - 2475 MHz
Band Edge Frequency 2483.5 MHz

FCC 47 CFR Part 15, Limit Clause 15.209

Frequency (MHz)	Field Strength ($\mu\text{V/m}$ at 3 m)
30 to 88	100
88 to 216	150
216 to 960	200
Above 960	500

Table 13

ISED RSS-GEN, Limit Clause 8.9

Frequency (MHz)	Field Strength ($\mu\text{V/m}$ at 3 m)
30 to 88	100
88 to 216	150
216 to 960	200
Above 960*	500

Table 14

*Unless otherwise specified, for all frequencies greater than 1 GHz, the radiated emission limits for licence-exempt radio apparatus stated in applicable RSSs (including RSS-Gen) are based on measurements using a linear average detector function having a minimum resolution bandwidth of 1 MHz. If an average limit is specified for the EUT, then the peak emission shall also be measured with instrumentation properly adjusted for such factors as pulse desensitization to ensure the peak emission is less than 20 dB above the average limit.

2.1.7 Test Location and Test Equipment Used

This test was carried out in RF Chamber 15 and RF Chamber 18.

Instrument	Manufacturer	Type No.	TE No.	Calibration Period (months)	Calibration Expiry Date
Emissions Software	TUV SUD	EmX V3.6.1 V.	5125	-	O/P Mon
Test Receiver	Rohde & Schwarz	ESW44	5379	12	25-Nov-2026
Test Receiver	Rohde & Schwarz	ESW44	5914	12	17-Jun-2026
1500W (300V 12A) AC Power Supply	iTech	IT7324	5956	-	O/P Mon
Mast & Turntable Controller	Maturo Gmbh	FCU3.0	5960	-	TU
Tilt Antenna Mast	Maturo Gmbh	BAM4.5-P	5961	-	TU
5m Semi-Anechoic Chamber (Dual-Axis), Chamber 15	Albatross Projects	RF Chamber 15	5963	36	23-Apr-2028
Compact Antenna Mast	Maturo Gmbh	CAM4.0-P	5964	-	TU
Mast & Turntable Controller	Maturo Gmbh	FCU3.0	5966	-	TU
Tilt Antenna Mast	Maturo Gmbh	BAM4.5-P	5967	-	TU
Turntable	Maturo Gmbh	TT1.5SI	5968	-	TU



Instrument	Manufacturer	Type No.	TE No.	Calibration Period (months)	Calibration Expiry Date
Cable (SMA to SMA 1m)	Junkosha	MWX221-01000AMSAMS/A	5996	12	23-May-2026
Cable (SMA to SMA 1m)	Junkosha	MWX221-01000AMSAMS/A	6007	12	06-Jun-2026
Horn Antenna (1-10 GHz)	Schwarzbeck	BBHA9120B	6141	12	14-Sep-2026
SAC Switch Unit	TUV SUD	TUV_SSU_001	6144	12	05-Dec-2026
Digital Multimeter	Fluke	115	6145	12	06-Jun-2026
Digital Multimeter	Fluke	115	6146	12	05-Jun-2026
Humidity & Temperature meter	R.S Components	1364	6148	12	28-Aug-2026
USB Spectrum Analyser	Signal Hound	SA124B	6295	-	TU
USB Spectrum Analyser	Signal Hound	SA124B	6297	-	TU
1m Coaxial Cable Assy	Junkosha	MWX221-01000AMSAMS/A	6354	12	15-Apr-2026
Humidity and Temperature Meter	R.S Components	1364	6486	12	01-Jul-2026
3m Semi-Anechoic Chamber	Albatross Projects	Chamber 18	6597	36	08-May-2028
1m Cable	Junkosha	MWX241-01000AMSAMS/B	6740	12	27-Apr-2026
Turntable	Maturo GmbH	TT1.5SI	6797	-	TU
AC Programmable Power Supply	iTech	IT7324	6812	-	O/P Mon
Broad-Band Horn Antenna 1-10GHz N	Schwarzbeck	BBHA9120B	6825	12	14-Sep-2026
8M SMA Cable	Junkosha	MWX221-08000AMSAMS/B	6833	12	18-Aug-2026
8m SMA-Type Cable	Junkosha	MWX221-08000AMSAMS/B	6851	12	06-Nov-2026
Cable Assembly	Pasternack	PE300-60	6856	-	TU
Cable Assembly	Pasternack	PE300-60	6861	-	TU
Cable Assembly	Pasternack	PE300-60	6862	-	TU
Cable Assembly	Pasternack	PE300-60	6863	-	TU
Cable Assembly	Pasternack	PE300-60	6868	-	TU
SAC Switch Unit	TUV SUD	TUV_SSU_004 PLC	6886	12	02-Dec-2026
RF Amplifier BROADBAND AMPL/SMA/RoHS	Mini-Circuits	ZX60-83LN12+	6975	12	05-Apr-2026
RF Amplifier BROADBAND AMPL/SMA/RoHS	Mini-Circuits	ZX60-83LN12+	6976	12	05-Apr-2026

Table 15

TU - Traceability Unscheduled
O/P Mon - Output Monitored using calibrated equipment



2.2 Emission Bandwidth

2.2.1 Specification Reference

FCC 47 CFR Part 15C, Clause 15.247 (a)(2)
ISED RSS-247, Clause 6.3.1
ISED RSS-GEN, Clause 6.7

2.2.2 Equipment Under Test and Modification State

A3426, S/N: FV3YG50JYP - Modification State 0

2.2.3 Date of Test

04-December-2025

2.2.4 Test Method

This test was performed in accordance with ANSI C63.10, clause 6.9.2 for 6 dB BW and 6.9.3 for 99% occupied bandwidth measurements.

2.2.5 Environmental Conditions

Ambient Temperature	17.3 °C
Relative Humidity	50.5 %



2.2.6 Test Results

Thread

Test Configuration			
Frequency Range:	2400-2483.5 MHz	Band:	2.4 GHz
Limit Clause(s):	15.247 (a)(2) RSS-247 6.3.1 (a)	Test Method(s):	C63.10 6.9.3 C63.10 6.9.2
Additional Reference(s):	-		

DUT Configuration			
Mode:	Thread iPA 2.00 MHz	Duty Cycle (%):	-
CustomFieldTitle:	Thread iPA	DCCF (dB):	-
Antenna Configuration:	SISO	Peak Antenna Gain (dBi):	-
Active Port(s):	A (Core 0)	Active Chain(s):	0

Test Frequency (MHz)	6 dB Bandwidth (MHz)				Limit (kHz)
	A	B	C	D	
2405	1.640	-	-	-	≥500.0
2440	1.640	-	-	-	≥500.0
2475	1.640	-	-	-	≥500.0

Table 16 - 6 dB Bandwidth Results

Test Frequency (MHz)	99% Bandwidth (MHz)				Limit (kHz)
	A	B	C	D	
2405	2.224	-	-	-	-
2440	2.224	-	-	-	-
2475	2.224	-	-	-	-

Table 17 - 99% Bandwidth Results

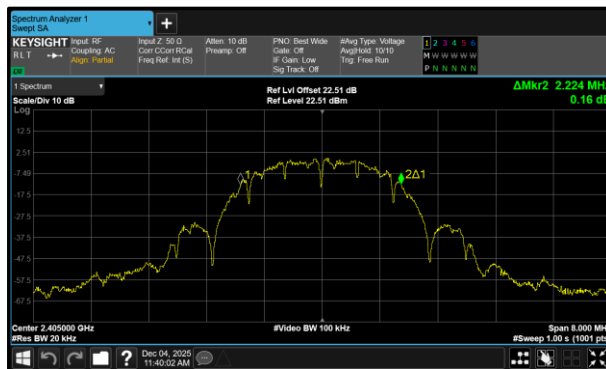


Figure 11 - Core 0 (A) 2405 MHz (CH11) 99% Bandwidth

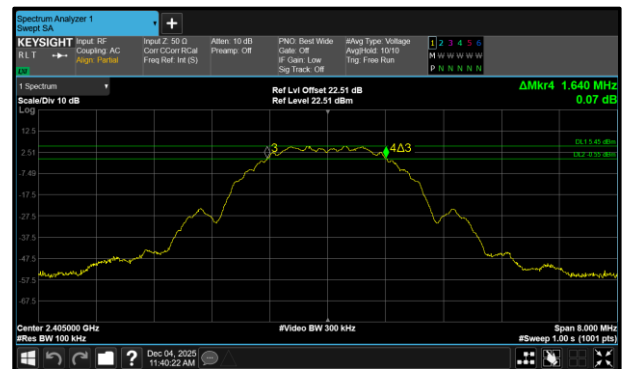


Figure 12 - Core 0 (A) 2405 MHz (CH11) 6 dB Bandwidth

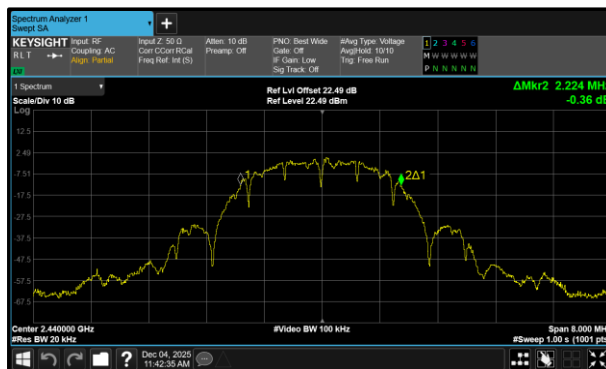


Figure 13 - Core 0 (A) 2440 MHz (CH18) 99% Bandwidth

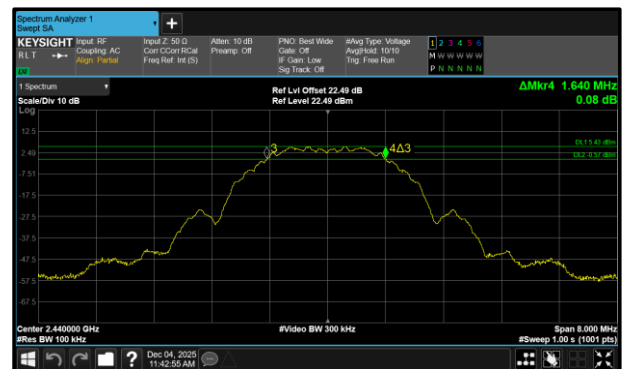


Figure 14 - Core 0 (A) 2440 MHz (CH18) 6 dB Bandwidth

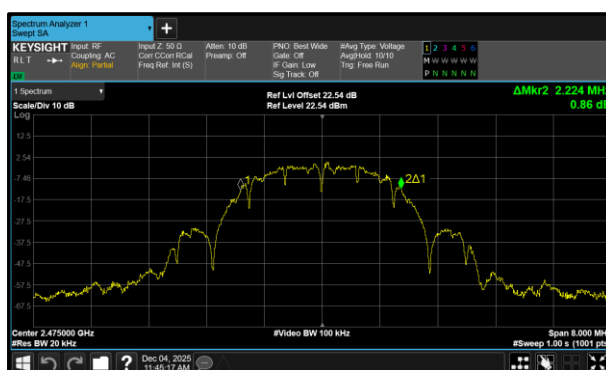


Figure 15 - Core 0 (A) 2475 MHz (CH25) 99% Bandwidth



Figure 16 - Core 0 (A) 2475 MHz (CH25) 6 dB Bandwidth



Test Configuration			
Frequency Range:	2400-2483.5 MHz	Band:	2.4 GHz
Limit Clause(s):	15.247 (a)(2) RSS-247 6.3.1 (a)	Test Method(s):	C63.10 6.9.3 C63.10 6.9.2
Additional Reference(s):	-		

DUT Configuration			
Mode:	Thread iPA 2.00 MHz	Duty Cycle (%):	-
CustomFieldTitle:	Thread iPA	DCCF (dB):	-
Antenna Configuration:	SISO	Peak Antenna Gain (dBi):	-
Active Port(s):	B (Core 1)	Active Chain(s):	1

Test Frequency (MHz)	6 dB Bandwidth (MHz)				Limit (kHz)
	A	B	C	D	
2405	-	1.640	-	-	≥500.0
2440	-	1.632	-	-	≥500.0
2475	-	1.640	-	-	≥500.0

Table 18 - 6 dB Bandwidth Results

Test Frequency (MHz)	99% Bandwidth (MHz)				Limit (kHz)
	A	B	C	D	
2405	-	2.232	-	-	-
2440	-	2.232	-	-	-
2475	-	2.224	-	-	-

Table 19 - 99% Bandwidth Results



Figure 17 - Core 1 (B) 2405 MHz (CH11) 99% Bandwidth

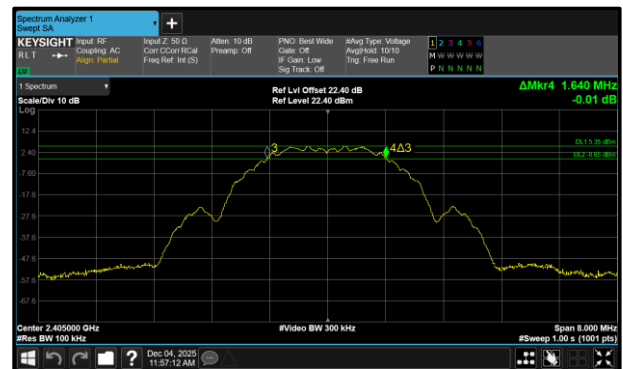


Figure 18 - Core 1 (B) 2405 MHz (CH11) 6 dB Bandwidth

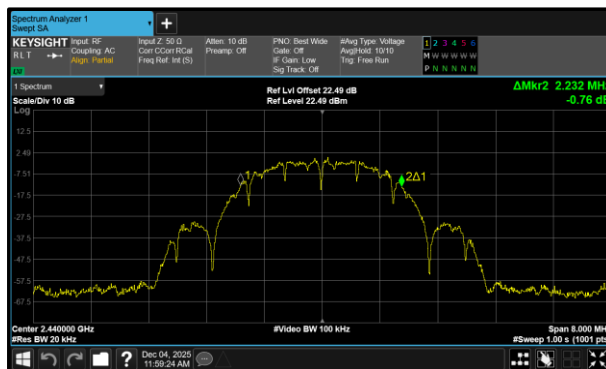


Figure 19 - Core 1 (B) 2440 MHz (CH18) 99% Bandwidth

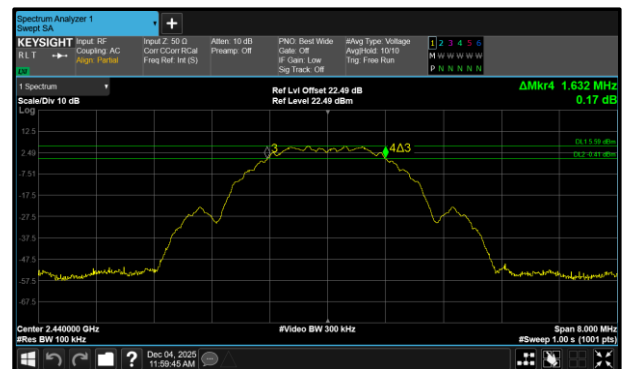


Figure 20 - Core 1 (B) 2440 MHz (CH18) 6 dB Bandwidth

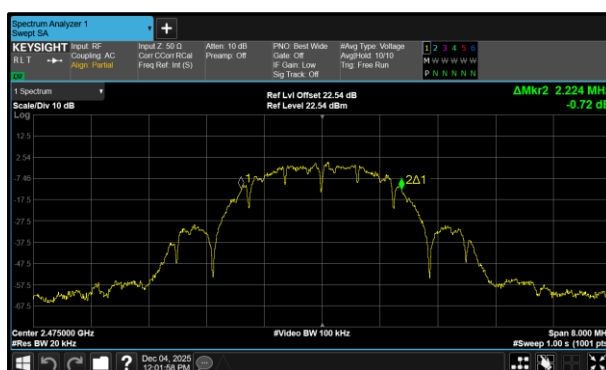


Figure 21 - Core 1 (B) 2475 MHz (CH25) 99% Bandwidth

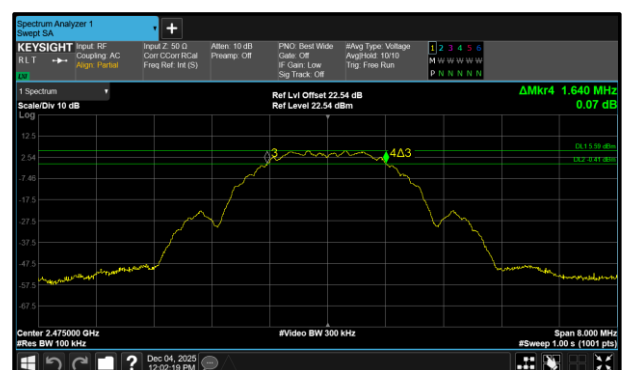


Figure 22 - Core 1 (B) 2475 MHz (CH25) 6 dB Bandwidth



Test Configuration			
Frequency Range:	2400-2483.5 MHz	Band:	2.4 GHz
Limit Clause(s):	15.247 (a)(2) RSS-247 6.3.1 (a)	Test Method(s):	C63.10 6.9.3 C63.10 6.9.2
Additional Reference(s):	-		

DUT Configuration			
Mode:	Thread iPA 2.00 MHz	Duty Cycle (%):	-
CustomFieldTitle:	Thread iPA	DCCF (dB):	-
Antenna Configuration:	SISO	Peak Antenna Gain (dBi):	-
Active Port(s):	C (Core 2)	Active Chain(s):	2

Test Frequency (MHz)	6 dB Bandwidth (MHz)				Limit (kHz)
	A	B	C	D	
2405	-	-	1.640	-	≥500.0
2440	-	-	1.632	-	≥500.0
2475	-	-	1.640	-	≥500.0

Table 20 - 6 dB Bandwidth Results

Test Frequency (MHz)	99% Bandwidth (MHz)				Limit (kHz)
	A	B	C	D	
2405	-	-	2.232	-	-
2440	-	-	2.224	-	-
2475	-	-	2.224	-	-

Table 21 - 99% Bandwidth Results



Figure 23 - Core 2 (C) 2405 MHz (CH11) 99% Bandwidth



Figure 24 - Core 2 (C) 2405 MHz (CH11) 6 dB Bandwidth

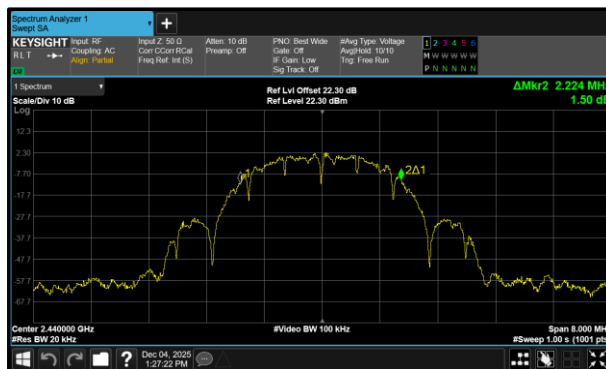


Figure 25 - Core 2 (C) 2440 MHz (CH18) 99% Bandwidth

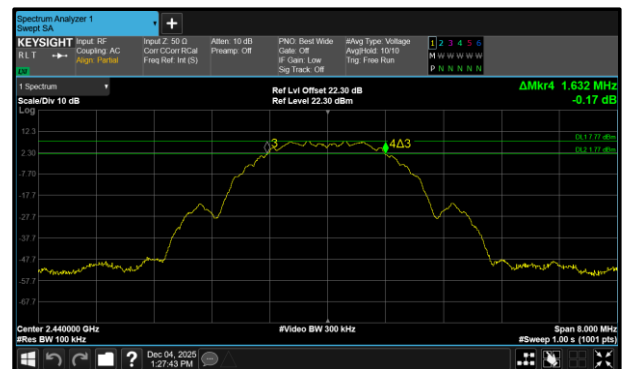


Figure 26 - Core 2 (C) 2440 MHz (CH18) 6 dB Bandwidth

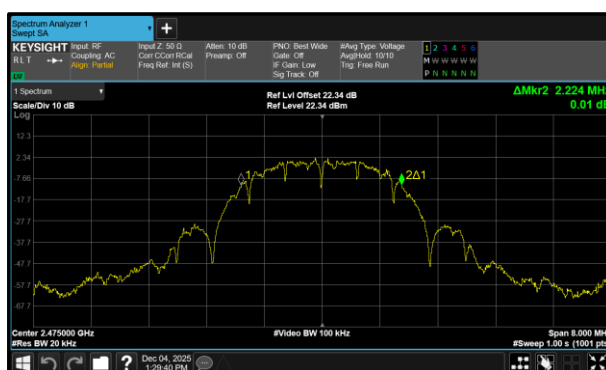


Figure 27 - Core 2 (C) 2475 MHz (CH25) 99% Bandwidth



Figure 28 - Core 2 (C) 2475 MHz (CH25) 6 dB Bandwidth



Test Configuration			
Frequency Range:	2400-2483.5 MHz	Band:	2.4 GHz
Limit Clause(s):	15.247 (a)(2) RSS-247 6.3.1 (a)	Test Method(s):	C63.10 6.9.3 C63.10 6.9.2
Additional Reference(s):	-		

DUT Configuration			
Mode:	Thread ePA 2.00 MHz	Duty Cycle (%):	-
CustomFieldTitle:	Thread ePA	DCCF (dB):	-
Antenna Configuration:	SISO	Peak Antenna Gain (dBi):	-
Active Port(s):	A (Core 0)	Active Chain(s):	0

Test Frequency (MHz)	6 dB Bandwidth (MHz)				Limit (kHz)
	A	B	C	D	
2405	1.608	-	-	-	≥500.0
2440	1.616	-	-	-	≥500.0
2475	1.608	-	-	-	≥500.0

Table 22 - 6 dB Bandwidth Results

Test Frequency (MHz)	99% Bandwidth (MHz)				Limit (kHz)
	A	B	C	D	
2405	2.184	-	-	-	-
2440	2.192	-	-	-	-
2475	2.192	-	-	-	-

Table 23 - 99% Bandwidth Results

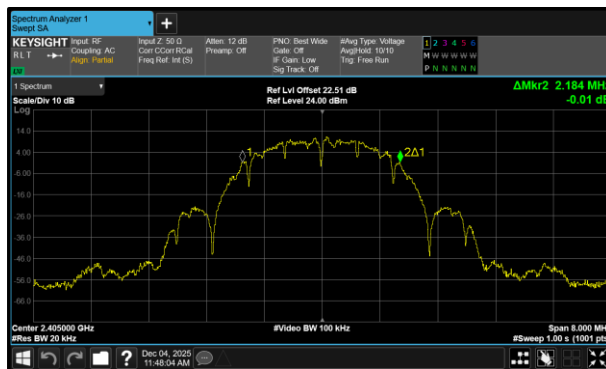


Figure 29 - Core 0 (A) 2405 MHz (CH11) 99% Bandwidth



Figure 30 - Core 0 (A) 2405 MHz (CH11) 6 dB Bandwidth

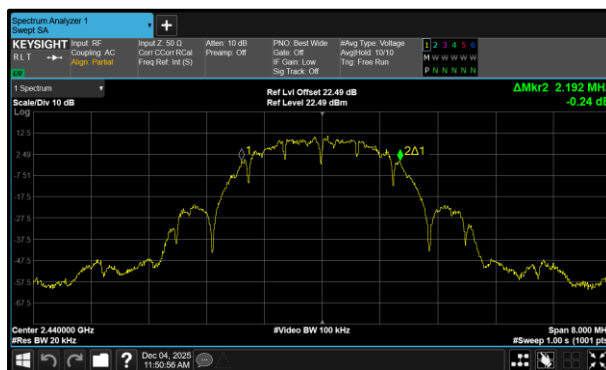


Figure 31 - Core 0 (A) 2440 MHz (CH18) 99% Bandwidth

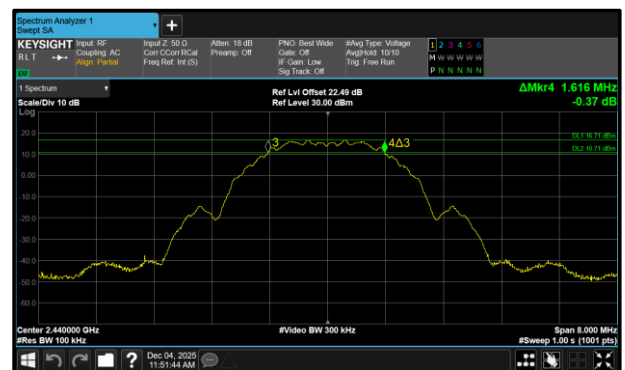


Figure 32 - Core 0 (A) 2440 MHz (CH18) 6 dB Bandwidth

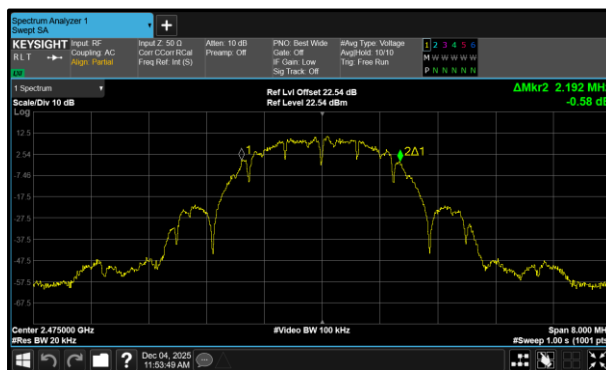


Figure 33 - Core 0 (A) 2475 MHz (CH25) 99% Bandwidth

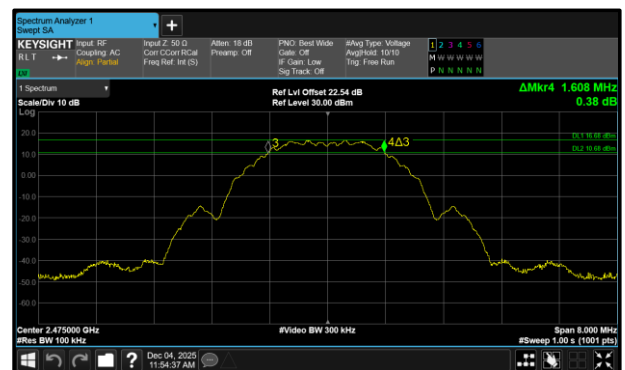


Figure 34 - Core 0 (A) 2475 MHz (CH25) 6 dB Bandwidth



Test Configuration			
Frequency Range:	2400-2483.5 MHz	Band:	2.4 GHz
Limit Clause(s):	15.247 (a)(2) RSS-247 6.3.1 (a)	Test Method(s):	C63.10 6.9.3 C63.10 6.9.2
Additional Reference(s):	-		

DUT Configuration			
Mode:	Thread ePA 2.00 MHz	Duty Cycle (%):	-
CustomFieldTitle:	Thread ePA	DCCF (dB):	-
Antenna Configuration:	SISO	Peak Antenna Gain (dBi):	-
Active Port(s):	B (Core 1)	Active Chain(s):	1

Test Frequency (MHz)	6 dB Bandwidth (MHz)				Limit (kHz)
	A	B	C	D	
2405	-	1.608	-	-	≥500.0
2440	-	1.608	-	-	≥500.0
2475	-	1.608	-	-	≥500.0

Table 24 - 6 dB Bandwidth Results

Test Frequency (MHz)	99% Bandwidth (MHz)				Limit (kHz)
	A	B	C	D	
2405	-	2.192	-	-	-
2440	-	2.192	-	-	-
2475	-	2.200	-	-	-

Table 25 - 99% Bandwidth Results

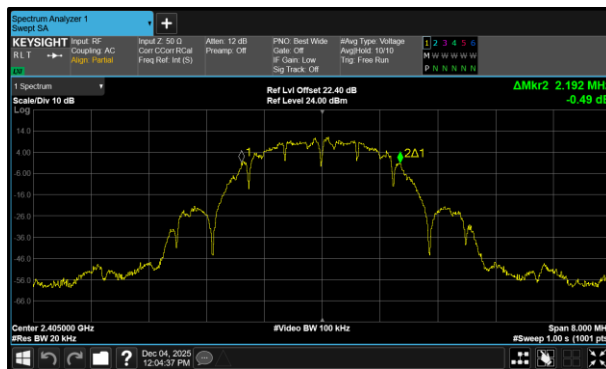


Figure 35 - Core 1 (B) 2405 MHz (CH11) 99% Bandwidth

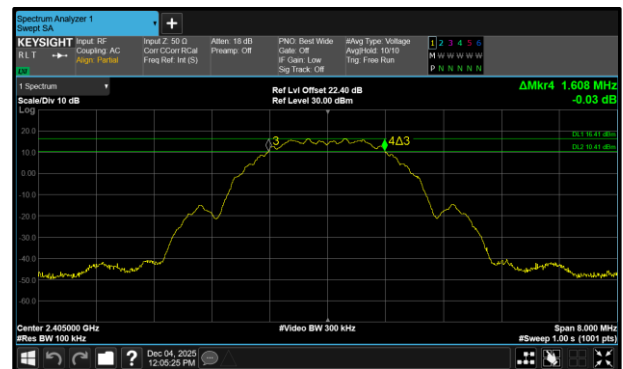


Figure 36 - Core 1 (B) 2405 MHz (CH11) 6 dB Bandwidth

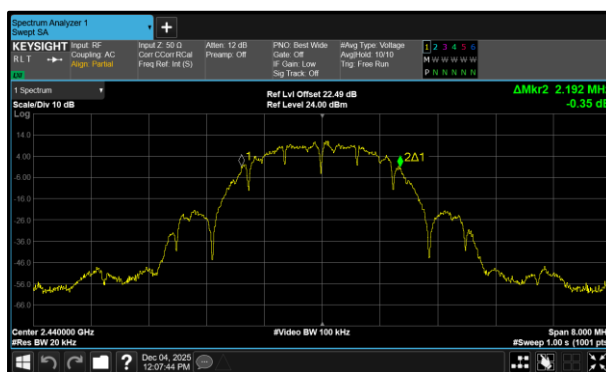


Figure 37 - Core 1 (B) 2440 MHz (CH18) 99% Bandwidth

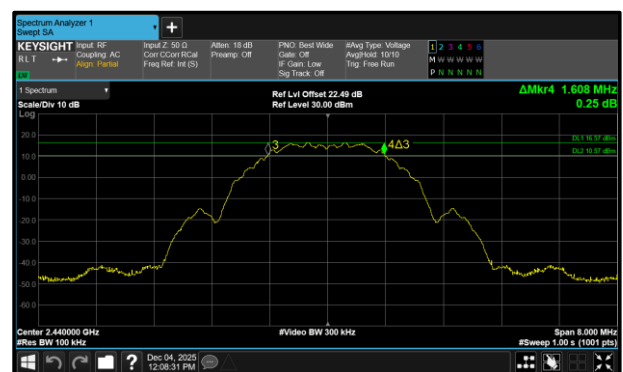


Figure 38 - Core 1 (B) 2440 MHz (CH18) 6 dB Bandwidth

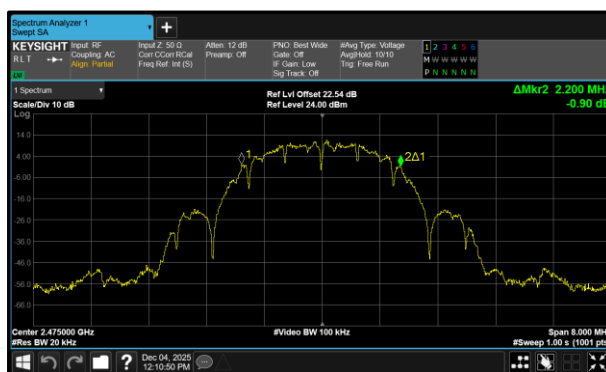


Figure 39 - Core 1 (B) 2475 MHz (CH25) 99% Bandwidth

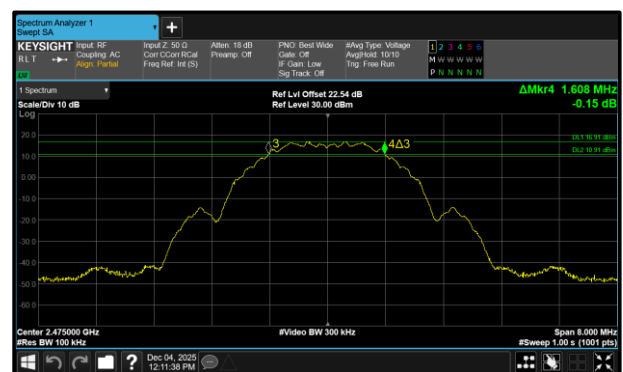


Figure 40 - Core 1 (B) 2475 MHz (CH25) 6 dB Bandwidth



FCC 47 CFR Part 15, Limit Clause 15.247(a)(2) and ISED RSS-247, Clause 6.3.1

The minimum 6 dB Bandwidth shall be at least 500 kHz.

2.2.7 Test Location and Test Equipment Used

This test was carried out in EMC Laboratory 2.

Instrument	Manufacturer	Type No.	TE No.	Calibration Period (months)	Calibration Expiry Date
Multimeter	Iso-tech	IDM101	2421	12	11-Nov-2026
Hygrometer	Rotronic	HP21	4741	12	29-May-2026
AC Programmable Power Supply	iTech	IT7324	5227	-	O/P Mon
Signal Conditioning Unit	TUV SUD	SPECTRUM_SCU001	5759	12	01-Feb-2026
MXA Signal Analyser	Keysight Technologies	N9020B	5919	24	31-Mar-2028
SCU Cable Assembly	TUV SUD	SPECTRUM_SCU_CA	6903	12	01-Feb-2026
SCU Cable Assembly	TUV SUD	SPECTRUM_SCU_CA	6904	12	01-Feb-2026
6dB Attenuator cable assembly for SCU.	TUV SUD	SPECTRUM_SCU_CA	7214	12	28-Nov-2026

Table 26

O/P Mon - Output Monitored using calibrated equipment



2.3 Maximum Conducted Output Power

2.3.1 Specification Reference

FCC 47 CFR Part 15C, Clause 15.247 (b)
ISED RSS-247, Clause 6.3.2
ISED RSS-GEN, Clause 6.12

2.3.2 Equipment Under Test and Modification State

A3426, S/N: FV3YG50JYP - Modification State 0

2.3.3 Date of Test

04-December-2025

2.3.4 Test Method

The test was performed in accordance with ANSI C63.10 clause 11.9.2.3.2 Method AVGPM-G.

2.3.5 Environmental Conditions

Ambient Temperature	17.3 °C
Relative Humidity	50.5 %



2.3.6 Test Results

Thread

Test Configuration			
Frequency Range:	2400-2483.5 MHz	Band:	2.4 GHz
Limit Clause(s):	15.247 (b)(3) RSS-247 6.3.2	Test Method(s):	C63.10 11.9.2.3.2
Additional Reference(s):	-		

DUT Configuration			
Mode:	Thread iPA 2.00 MHz	Duty Cycle (%):	100.0
CustomFieldTitle:	Thread iPA	DCCF (dB):	-
Antenna Configuration:	SISO	Peak Antenna Gain (dBi):	4.60
Active Port(s):	A (Core 0)	Active Chain(s):	0

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	Σ		
2405	8.59	-	-	-	8.59	30.00	-21.41
2440	8.59	-	-	-	8.59	30.00	-21.41
2475	8.65	-	-	-	8.65	30.00	-21.35

Table 27 - FCC Maximum Conducted (average) Output Power Results

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)	EIRP (dBm)	EIRP Limit (dBm)	EIRP Margin (dB)
	A	B	C	D	Σ					
2405	8.59	-	-	-	8.59	30.00	-21.41	12.29	36.00	-23.71
2440	8.59	-	-	-	8.59	30.00	-21.41	13.19	36.00	-22.81
2475	8.65	-	-	-	8.65	30.00	-21.35	13.15	36.00	-22.85

Table 28 - ISSED Maximum Conducted (average) Output Power Results



Test Configuration			
Frequency Range:	2400-2483.5 MHz	Band:	2.4 GHz
Limit Clause(s):	15.247 (b)(3) RSS-247 6.3.2	Test Method(s):	C63.10 11.9.2.3.2
Additional Reference(s):	-		

DUT Configuration			
Mode:	Thread iPA 2.00 MHz	Duty Cycle (%):	100.0
CustomFieldTitle:	Thread iPA	DCCF (dB):	-
Antenna Configuration:	SISO	Peak Antenna Gain (dBi):	3.80
Active Port(s):	B (Core 1)	Active Chain(s):	1

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	Σ		
2405	-	8.65	-	-	8.65	30.00	-21.35
2440	-	8.86	-	-	8.86	30.00	-21.14
2475	-	8.86	-	-	8.86	30.00	-21.14

Table 29 - FCC Maximum Conducted (average) Output Power Results

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)	EIRP (dBm)	EIRP Limit (dBm)	EIRP Margin (dB)
	A	B	C	D	Σ					
2405	-	8.65	-	-	8.65	30.00	-21.35	12.45	36.00	-23.55
2440	-	8.86	-	-	8.86	30.00	-21.14	12.46	36.00	-23.54
2475	-	8.86	-	-	8.86	30.00	-21.14	12.56	36.00	-23.44

Table 30 - ISD Maximum Conducted (average) Output Power Results



Test Configuration			
Frequency Range:	2400-2483.5 MHz	Band:	2.4 GHz
Limit Clause(s):	15.247 (b)(3) RSS-247 6.3.2	Test Method(s):	C63.10 11.9.2.3.2
Additional Reference(s):	-		

DUT Configuration			
Mode:	Thread iPA 2.00 MHz	Duty Cycle (%):	100.0
CustomFieldTitle:	Thread iPA	DCCF (dB):	-
Antenna Configuration:	SISO	Peak Antenna Gain (dBi):	4.50
Active Port(s):	C (Core 2)	Active Chain(s):	2

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	Σ		
2405	-	-	10.75	-	10.75	30.00	-19.25
2440	-	-	11.00	-	11.00	30.00	-19.00
2475	-	-	10.75	-	10.75	30.00	-19.25

Table 31 - FCC Maximum Conducted (average) Output Power Results

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)	EIRP (dBm)	EIRP Limit (dBm)	EIRP Margin (dB)
	A	B	C	D	Σ					
2405	-	-	10.75	-	10.75	30.00	-19.25	12.95	36.00	-23.05
2440	-	-	11.00	-	11.00	30.00	-19.00	15.00	36.00	-21.00
2475	-	-	10.75	-	10.75	30.00	-19.25	15.25	36.00	-20.75

Table 32 - ISSED Maximum Conducted (average) Output Power Results



Test Configuration			
Frequency Range:	2400-2483.5 MHz	Band:	2.4 GHz
Limit Clause(s):	15.247 (b)(3) RSS-247 6.3.2	Test Method(s):	C63.10 11.9.2.3.2
Additional Reference(s):	-		

DUT Configuration			
Mode:	Thread ePA 2.00 MHz	Duty Cycle (%):	100.0
CustomFieldTitle:	Thread ePA	DCCF (dB):	-
Antenna Configuration:	SISO	Peak Antenna Gain (dBi):	4.60
Active Port(s):	A (Core 0)	Active Chain(s):	0

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	Σ		
2405	19.64	-	-	-	19.64	30.00	-10.36
2440	19.66	-	-	-	19.66	30.00	-10.34
2475	19.64	-	-	-	19.64	30.00	-10.36

Table 33 - FCC Maximum Conducted (average) Output Power Results

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)	EIRP (dBm)	EIRP Limit (dBm)	EIRP Margin (dB)
	A	B	C	D	Σ					
2405	19.64	-	-	-	19.64	30.00	-10.36	23.34	36.00	-12.66
2440	19.66	-	-	-	19.66	30.00	-10.34	24.26	36.00	-11.74
2475	19.64	-	-	-	19.64	30.00	-10.36	24.14	36.00	-11.86

Table 34 - ISD Maximum Conducted (average) Output Power Results



Test Configuration			
Frequency Range:	2400-2483.5 MHz	Band:	2.4 GHz
Limit Clause(s):	15.247 (b)(3) RSS-247 6.3.2	Test Method(s):	C63.10 11.9.2.3.2
Additional Reference(s):	-		

DUT Configuration			
Mode:	Thread ePA 2.00 MHz	Duty Cycle (%):	100.0
CustomFieldTitle:	Thread ePA	DCCF (dB):	-
Antenna Configuration:	SISO	Peak Antenna Gain (dBi):	3.80
Active Port(s):	B (Core 1)	Active Chain(s):	1

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	Σ		
2405	-	19.50	-	-	19.50	30.00	-10.50
2440	-	19.61	-	-	19.61	30.00	-10.39
2475	-	19.99	-	-	19.99	30.00	-10.01

Table 35 - FCC Maximum Conducted (average) Output Power Results

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)	EIRP (dBm)	EIRP Limit (dBm)	EIRP Margin (dB)
	A	B	C	D	Σ					
2405	-	19.50	-	-	19.50	30.00	-10.50	23.30	36.00	-12.70
2440	-	19.61	-	-	19.61	30.00	-10.39	23.21	36.00	-12.79
2475	-	19.99	-	-	19.99	30.00	-10.01	23.69	36.00	-12.31

Table 36 - ISD Maximum Conducted (average) Output Power Results



FCC 47 CFR Part 15, Limit Clause 15.247 (b)(3)

For systems using digital modulation in the 902–928 MHz, 2400–2483.5 MHz, and 5725–5850 MHz bands: 1 Watt.

ISED RSS-247, Limit Clause 6.3.2

For DTS operating in the band 2400-2483.5 MHz, the maximum peak conducted output power shall not exceed 1W, and the e.i.r.p. shall not exceed 4 W, except as provided in section 6.5 a) and b).

2.3.7 Test Location and Test Equipment Used

This test was carried out in EMC Laboratory 2.

Instrument	Manufacturer	Type No.	TE No.	Calibration Period (months)	Calibration Expiry Date
Digital Multi-meter	Iso-tech	IDM93N	4435	12	06-Mar-2026
Hygrometer	Rotronic	HP21	4741	12	29-May-2026
AC Programmable Power Supply	iTech	IT7324	5227	-	O/P Mon
Signal Conditioning Unit	TUV SUD	SPECTRUM_SCU001	5759	12	01-Feb-2026
USB Power Sensor	Boonton	RTP5008	5830	12	01-Feb-2026
USB Power Sensor	Boonton	RTP5008	5832	12	01-Feb-2026
USB Wideband Power Sensor	Boonton	RTP5008	6592	12	01-Feb-2026
SCU Cable Assembly	TUV SUD	SPECTRUM_SCU_CA	6903	12	01-Feb-2026
SCU Cable Assembly	TUV SUD	SPECTRUM_SCU_CA	6904	12	01-Feb-2026
6dB Attenuator cable assembly for SCU.	TUV SUD	SPECTRUM_SCU_CA	7214	12	28-Nov-2026

Table 37

O/P Mon - Output Monitored using calibrated equipment



2.4 Authorised Band Edges

2.4.1 Specification Reference

FCC 47 CFR Part 15C, Clause 15.247 (d)
ISED RSS-247, Clause 6.6

2.4.2 Equipment Under Test and Modification State

A3426, S/N: FXXVQ1FY4C - Modification State 0
A3426, S/N: GMW9QF460R - Modification State 0

2.4.3 Date of Test

29-October-2025 to 13-November-2025

2.4.4 Test Method

The test was performed in accordance with ANSI C63.10, clause 6.10.4.

2.4.5 Environmental Conditions

Ambient Temperature	22.1 - 23.9 °C
Relative Humidity	39.3 - 52.2 %



2.4.6 Test Results

Thread

iPA - Core 0 (SISO)

Mode	TX Frequency (MHz)	Band Edge Frequency (MHz)	Level (dBc)
Thread	2405	2400	-51.55

Table 38 - iPA, Core 0, SISO Authorised Band Edge Results

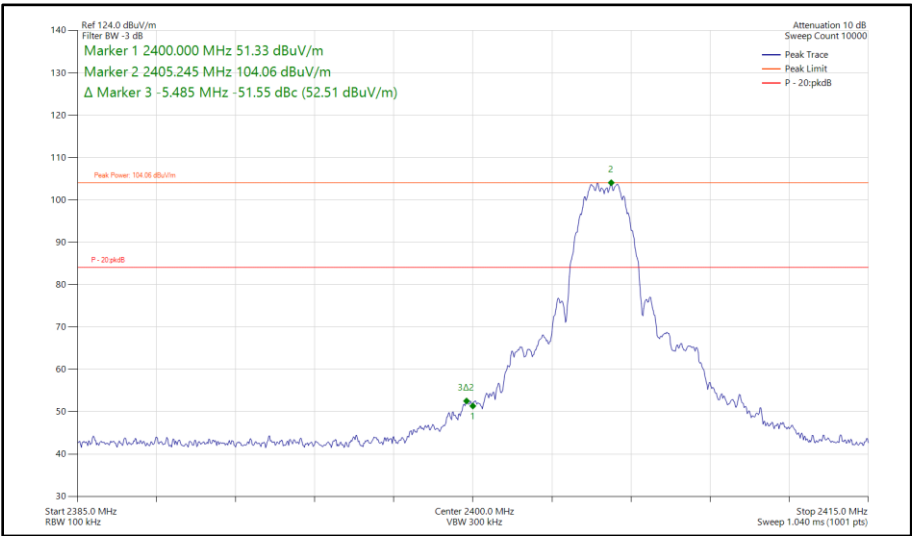


Figure 41 - Thread, iPA, SISO, Core 0 - 2405 MHz
Band Edge Frequency 2400 MHz



iPA - Core 1 (SISO)

Mode	TX Frequency (MHz)	Band Edge Frequency (MHz)	Level (dBc)
Thread	2405	2400	-47.14

Table 39 - iPA, Core 1, SISO Authorised Band Edge Results

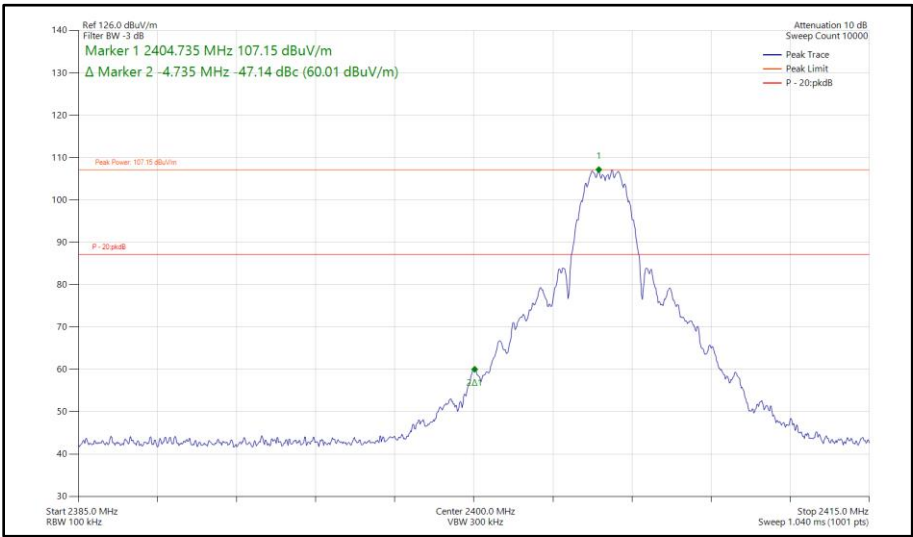


Figure 42 - Thread, iPA, SISO, Core 1 - 2405 MHz
Band Edge Frequency 2400 MHz



iPA - Core 2 (SISO)

Mode	TX Frequency (MHz)	Band Edge Frequency (MHz)	Level (dBc)
Thread	2405	2400	-61.21

Table 40 - iPA, Core 2, SISO Authorised Band Edge Results

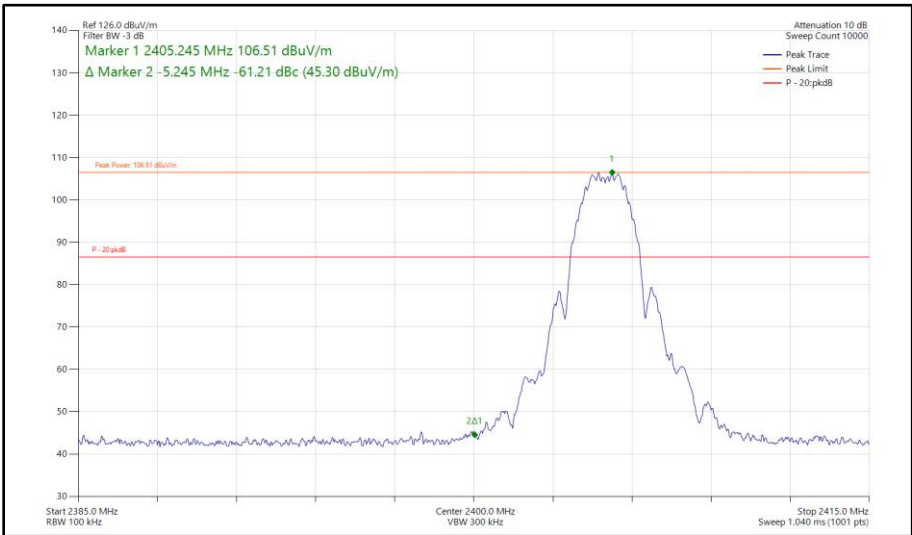


Figure 43 - Thread, iPA, SISO, Core 2 - 2405 MHz
Band Edge Frequency 2400 MHz



ePA - Core 0 (SISO)

Mode	TX Frequency (MHz)	Band Edge Frequency (MHz)	Level (dBc)
Thread	2405	2400	-67.00

Table 41 - ePA, Core 0, SISO Authorised Band Edge Results

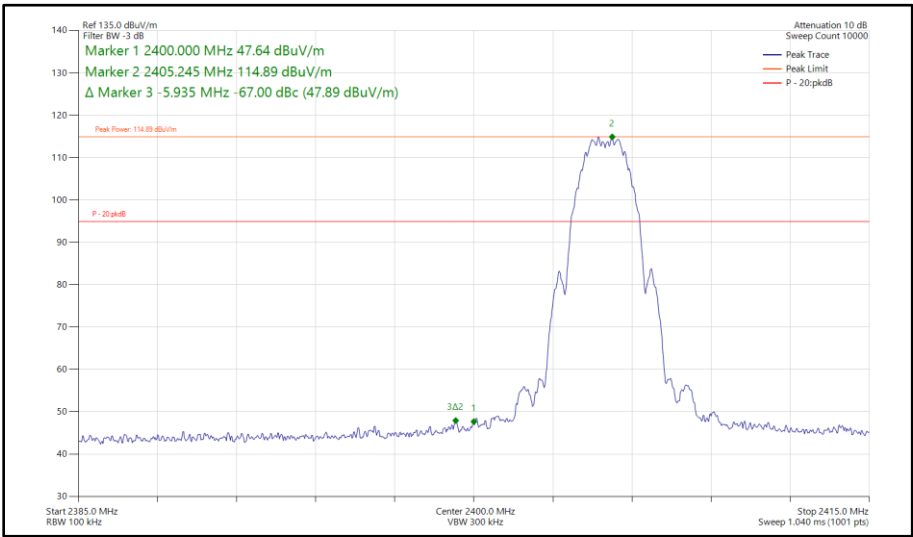
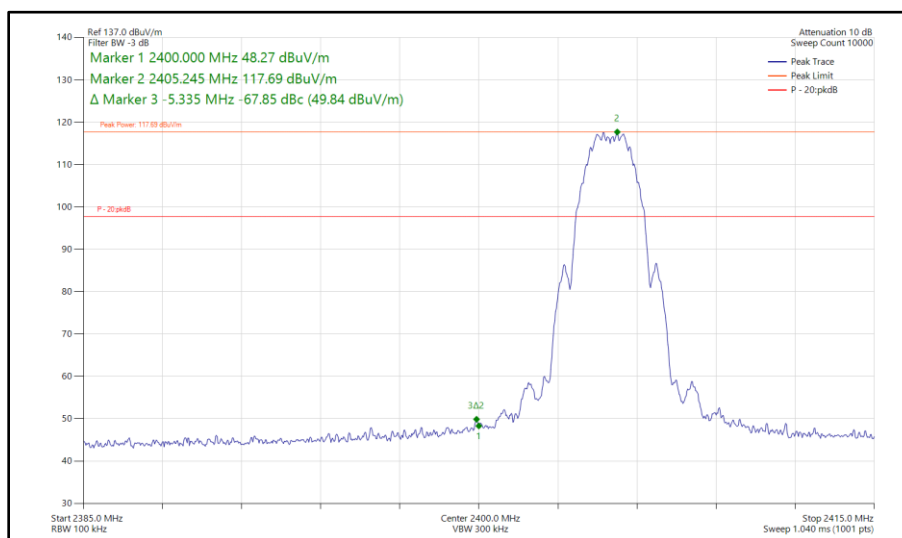


Figure 44 - Thread, ePA, SISO, Core 0 - 2405 MHz
Band Edge Frequency 2400 MHz

ePA - Core 1 (SISO)

Mode	TX Frequency (MHz)	Band Edge Frequency (MHz)	Level (dBc)
Thread	2405	2400	-67.85

Table 42 - ePA, Core 1, SISO Authorised Band Edge Results



**Figure 45 - Thread, ePA, SISO, Core 1 - 2405 MHz
Band Edge Frequency 2400 MHz**

FCC 47 CFR Part 15, Limit Clause 15.247 (d)

20 dB below the fundamental measured in a 100 kHz bandwidth using a peak detector. If the transmitter complies with the conducted power limits, based on the use of RMS averaging over a time interval, the attenuation required shall be 30 dB below the fundamental instead of 20 dB.

ISED RSS-247, Limit Clause 6.6

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum device, digitally modulated device, or hybrid system is operating, the RF power that is produced shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power – based on either an RF conducted or a radiated measurement – provided that the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of root-mean-square averaging over a time interval, as permitted under section 6.3.2, the attenuation required shall be 30 dB instead of 20 dB. Attenuation below the general field strength limits specified in RSS-Gen is not required.



2.4.7 Test Location and Test Equipment Used

This test was carried out in RF Chamber 15 and RF Chamber 18.

Instrument	Manufacturer	Type No.	TE No.	Calibration Period (months)	Calibration Expiry Date
Emissions Software	TUV SUD	EmX V3.6.1 V.	5125	-	O/P Mon
Test Receiver	Rohde & Schwarz	ESW44	5379	12	25-Nov-2026
Test Receiver	Rohde & Schwarz	ESW44	5914	12	17-Jun-2026
1500W (300V 12A) AC Power Supply	iTech	IT7324	5956	-	O/P Mon
Mast & Turntable Controller	Maturo Gmbh	FCU3.0	5960	-	TU
Tilt Antenna Mast	Maturo Gmbh	BAM4.5-P	5961	-	TU
5m Semi-Anechoic Chamber (Dual-Axis), Chamber 15	Albatross Projects	RF Chamber 15	5963	36	23-Apr-2028
Compact Antenna Mast	Maturo Gmbh	CAM4.0-P	5964	-	TU
Mast & Turntable Controller	Maturo Gmbh	FCU3.0	5966	-	TU
Tilt Antenna Mast	Maturo Gmbh	BAM4.5-P	5967	-	TU
Turntable	Maturo Gmbh	TT1.5SI	5968	-	TU
Cable (SMA to SMA 1m)	Junkosha	MWX221-01000AMSAMS/A	5996	12	23-May-2026
Cable (SMA to SMA 1m)	Junkosha	MWX221-01000AMSAMS/A	6007	12	06-Jun-2026
Horn Antenna (1-10 GHz)	Schwarzbeck	BBHA9120B	6141	12	14-Sep-2026
SAC Switch Unit	TUV SUD	TUV_SSU_001	6144	12	05-Dec-2026
Digital Multimeter	Fluke	115	6145	12	06-Jun-2026
Digital Multimeter	Fluke	115	6146	12	05-Jun-2026
Humidity & Temperature meter	R.S Components	1364	6148	12	28-Aug-2026
USB Spectrum Analyser	Signal Hound	SA124B	6295	-	TU
USB Spectrum Analyser	Signal Hound	SA124B	6297	-	TU
1m Coaxial Cable Assy	Junkosha	MWX221-01000AMSAMS/A	6354	12	15-Apr-2026
Directional Coupler	Mini-Circuits	ZUDC20-06183-S+	6484	-	TU
3m Semi-Anechoic Chamber	Albatross Projects	Chamber 18	6597	36	08-May-2028
1m Cable	Junkosha	MWX241-01000AMSAMS/B	6740	12	27-Apr-2026
Turntable	Maturo Gmbh	TT1.5SI	6797	-	TU
AC Programmable Power Supply	iTech	IT7324	6812	-	O/P Mon
Broad-Band Horn Antenna 1-10GHz N	Schwarzbeck	BBHA9120B	6825	12	14-Sep-2026



Instrument	Manufacturer	Type No.	TE No.	Calibration Period (months)	Calibration Expiry Date
8M SMA Cable	Junkosha	MWX221-08000AMSAMS/B	6833	12	18-Aug-2026
8m SMA-Type Cable	Junkosha	MWX221-08000AMSAMS/B	6851	12	06-Nov-2026
Cable Assembly	Pasternack	PE300-60	6856	-	TU
Cable Assembly	Pasternack	PE300-60	6861	-	TU
Cable Assembly	Pasternack	PE300-60	6862	-	TU
Cable Assembly	Pasternack	PE300-60	6863	-	TU
Cable Assembly	Pasternack	PE300-60	6868	-	TU
SAC Switch Unit	TUV SUD	TUV_SSU_004 PLC	6886	12	02-Dec-2026
RF Amplifier BROADBAND AMPL/SMA/RoHS	Mini-Circuits	ZX60-83LN12+	6975	12	05-Apr-2026
RF Amplifier BROADBAND AMPL/SMA/RoHS	Mini-Circuits	ZX60-83LN12+	6976	12	05-Apr-2026

Table 43

TU - Traceability Unscheduled
O/P Mon - Output Monitored using calibrated equipment



2.5 Spurious Radiated Emissions

2.5.1 Specification Reference

FCC 47 CFR Part 15C, Clause 15.209 and 15.247 (d)
ISED RSS-247, Clause 2.4 and 6.6
ISED RSS-GEN, Clause 6.13 and 8.9

2.5.2 Equipment Under Test and Modification State

A3426, S/N: MM20HYW2Y6 - Modification State 0
A3426, S/N: MXDF7Q597J - Modification State 0

2.5.3 Date of Test

17-December-2025 to 23-December-2025

2.5.4 Test Method

This test was performed in accordance with ANSI C63.10, clause 6.3, 6.5 and 6.6.

Ports on the EUT were terminated with loads as described in ANSI C63.10 clause 6.2.3.

In the 30 MHz to 1 GHz range pre-scans were only performed on the mid channel (2440 MHz).

The plots shown are the characterisation of the EUT. The limits on the plots represent the most stringent case for restricted bands, (74/54 dBuV/m) when compared to 20 dBc outside restricted bands. The limits shown have been used as a threshold to determine where further measurements are necessary. Where results are within 20 dB of the limits shown on the plots, further investigation was carried out and reported in results tables.

The following conversion can be applied to convert from dBuV/m to uV/m:
 $10^{(\text{Field Strength in dBuV/m}/20)}$

To determine the emission characteristic of the EUT above 18 GHz, the test antenna was swept over all faces of the EUT whilst observing a spectral display. The frequency of any emissions of interest was noted for formal measurement at the correct measurement distance of 1m. This procedure was repeated for all relevant transmit operating channels.

Above 18 GHz, the measurement distance was reduced to 1 m. The limit line was increased by $20 \cdot \log(3/1) = 9.54$ dB.

Where formal measurements have been necessary, the results have been presented in the emissions table.

2.5.5 Environmental Conditions

Ambient Temperature	21.6 - 23.8 °C
Relative Humidity	42.1 - 46.9 %

2.5.6 Test Results

Thread

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
2483.569	37.18	54.00	-16.82	RMS	46	399	Vertical
4214.917	33.69	54.00	-20.31	RMS	4	110	Vertical

Table 44 - 2405 MHz (CH11), Thread, ePA, Core 0, 1 GHz to 18 GHz

No other emissions found within 20 dB of the limit.

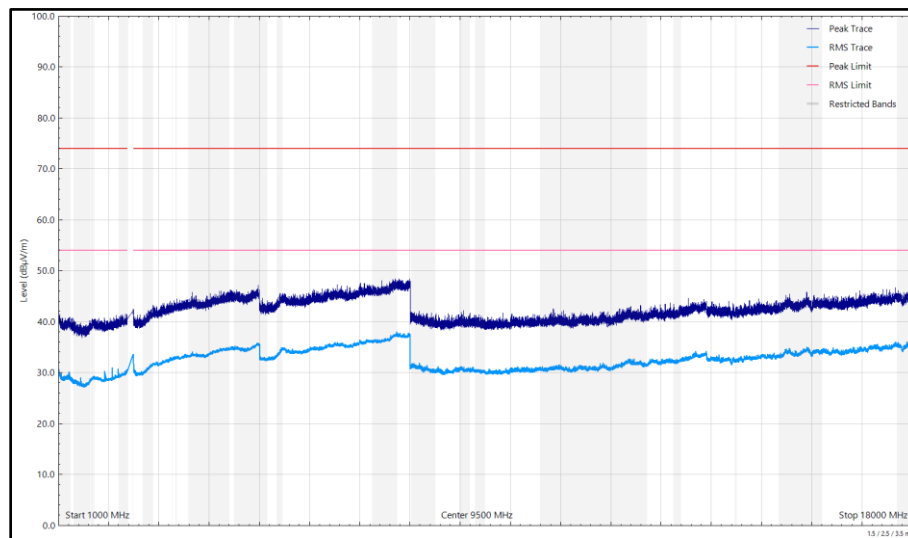


Figure 46 - 2405 MHz (CH11), Thread, ePA, Core 0, 1 GHz to 18 GHz, Horizontal

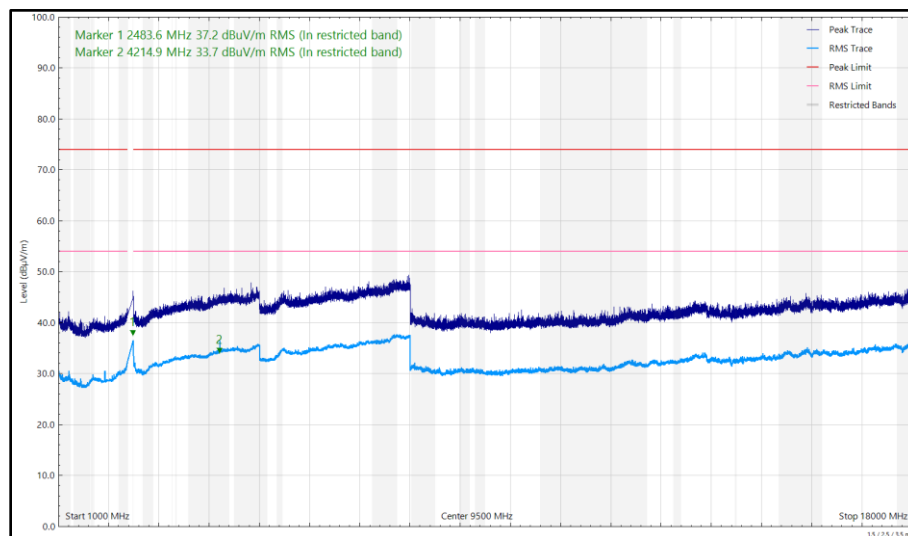


Figure 47 - 2405 MHz (CH11), Thread, ePA, Core 0, 1 GHz to 18 GHz, Vertical

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
37.550	20.56	40.00	-19.44	Q-Peak	21	114	Vertical
38.055	20.40	40.00	-19.60	Q-Peak	60	351	Horizontal
74.337	19.07	40.00	-20.93	Q-Peak	18	120	Vertical
113.035	19.13	43.50	-24.37	Q-Peak	217	102	Vertical
119.686	18.87	43.50	-24.63	Q-Peak	86	242	Horizontal
2389.843	35.05	54.00	-18.95	RMS	360	391	Vertical
2483.507	37.55	54.00	-16.45	RMS	33	398	Vertical
2483.559	34.58	54.00	-19.42	RMS	52	390	Horizontal
4211.925	36.02	54.00	-17.98	RMS	333	304	Vertical

Table 45 - 2440 MHz (CH18), Thread, ePA, Core 0, 30 MHz to 26 GHz

No other emissions found within 20 dB of the limit.

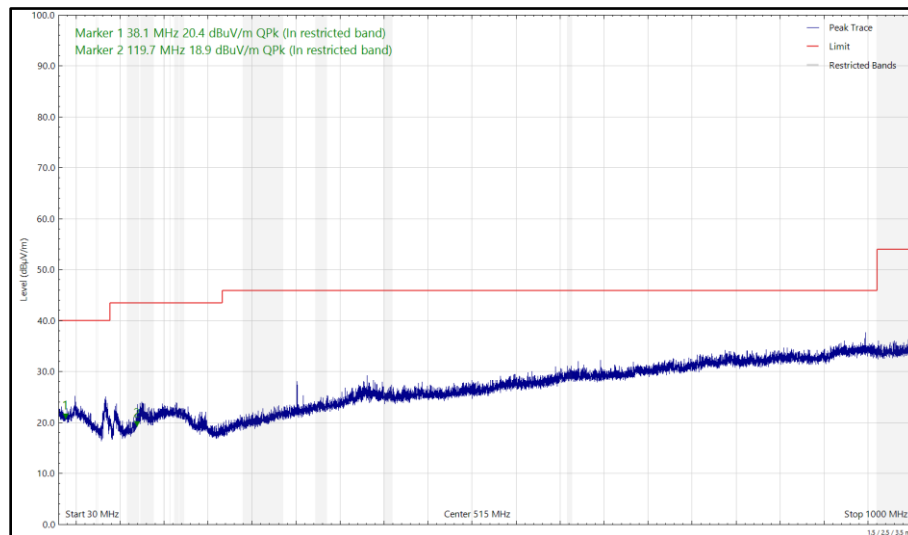


Figure 48 - 2440 MHz (CH18), Thread, ePA, Core 0, 30 MHz to 1 GHz, Horizontal (Peak)

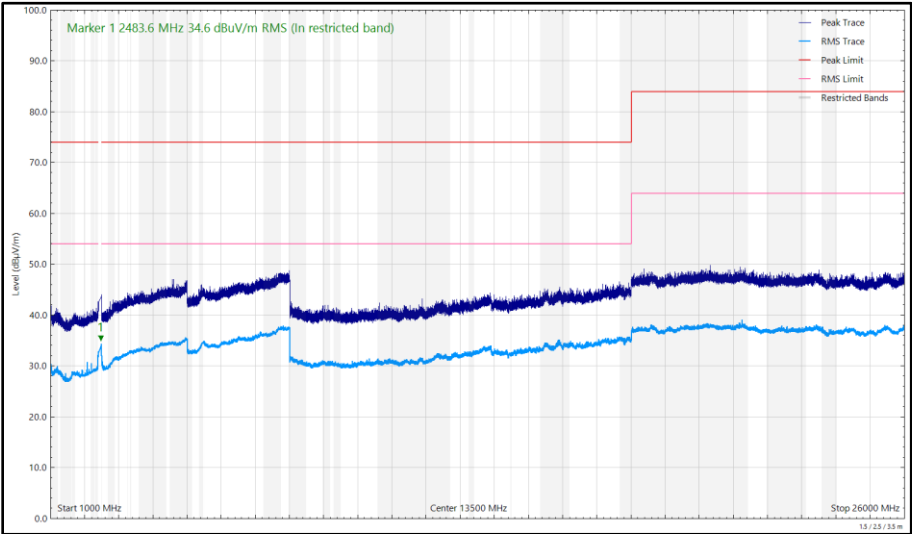


Figure 49 - 2440 MHz (CH18), Thread, ePA, Core 0, 1 GHz to 26 GHz, Horizontal

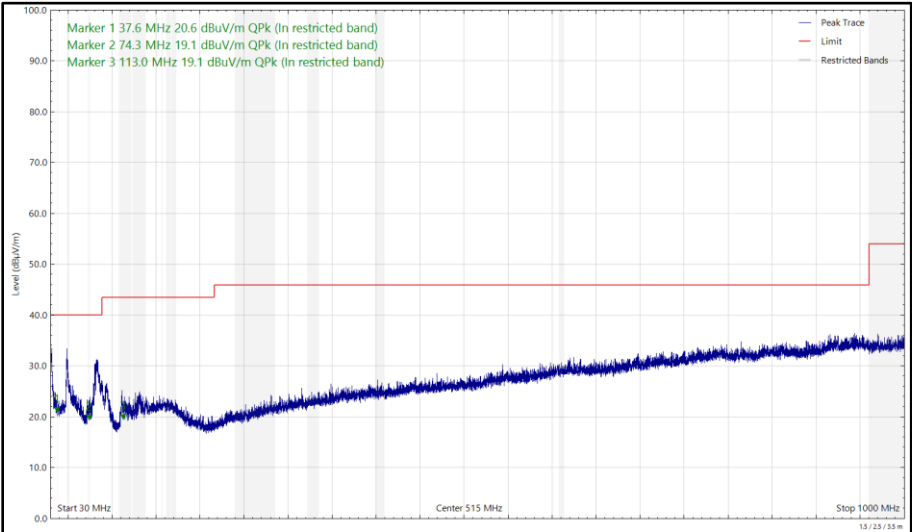


Figure 50 - 2440 MHz (CH18), Thread, ePA, Core 0, 30 MHz to 1 GHz, Vertical (Peak)

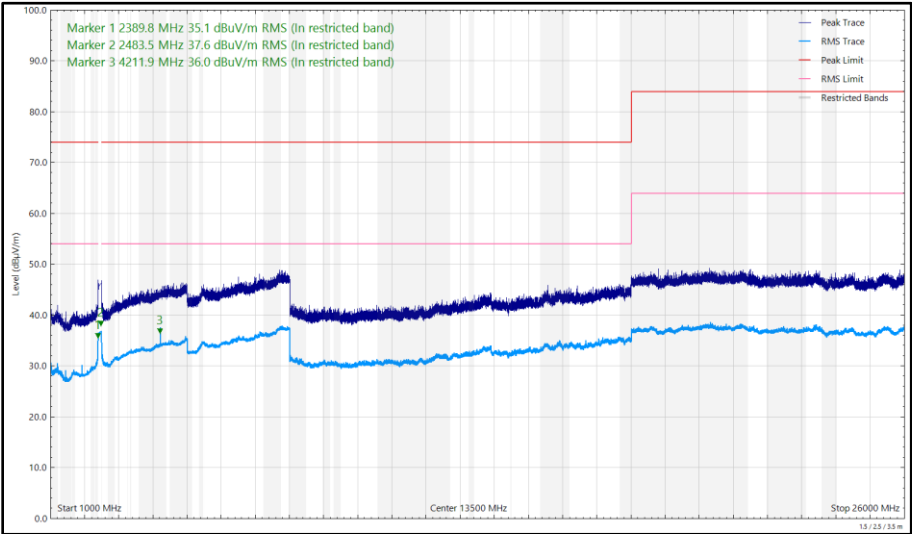


Figure 51 - 2440 MHz (CH18), Thread, ePA, Core 0, 1 GHz to 26 GHz, Vertical

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
2389.772	35.26	54.00	-18.74	RMS	16	289	Vertical
4211.801	33.44	54.00	-20.56	RMS	58	175	Vertical

Table 46 - 2475 MHz (CH25), Thread, ePA, Core 0, 1 GHz to 18 GHz

No other emissions found within 20 dB of the limit.

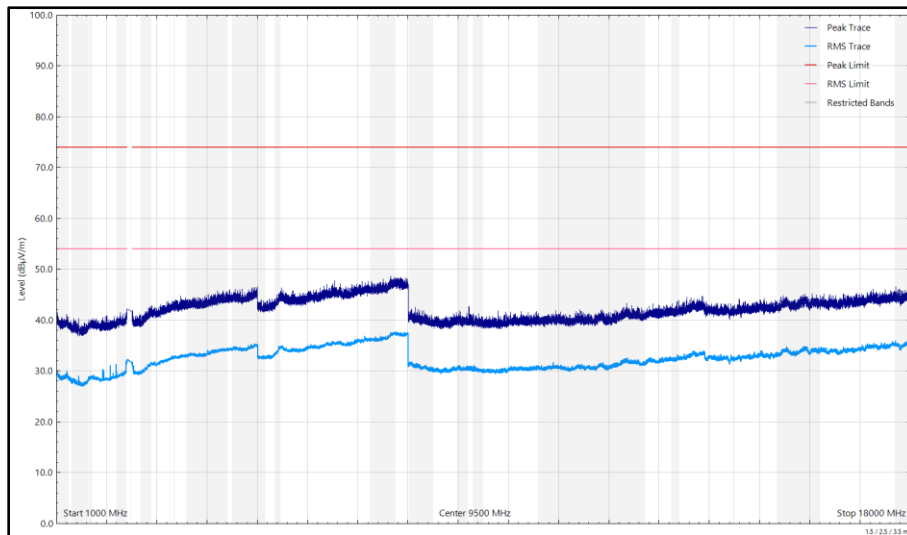


Figure 52 - 2475 MHz (CH25), Thread, ePA, Core 0, 1 GHz to 18 GHz, Horizontal

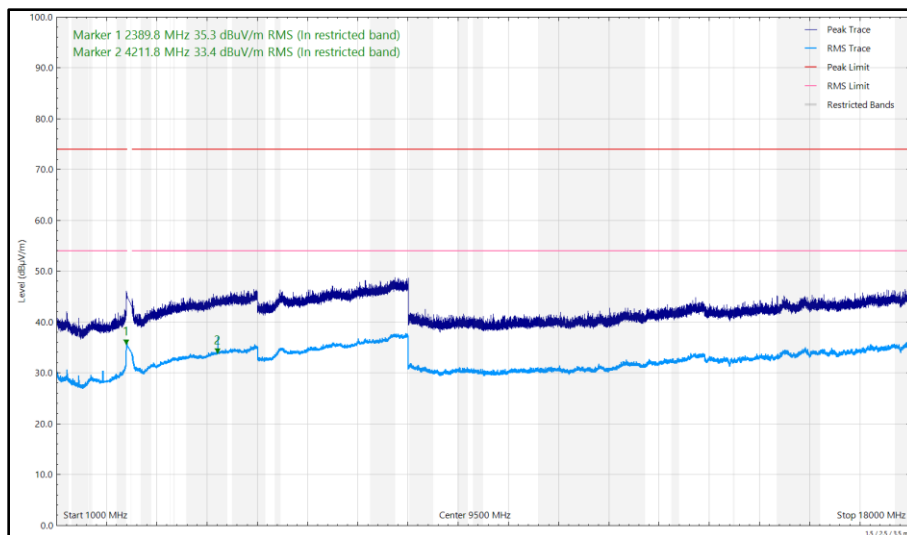


Figure 53 - 2475 MHz (CH25), Thread, ePA, Core 0, 1 GHz to 18 GHz, Vertical

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
2483.650	35.79	54.00	-18.21	RMS	333	394	Vertical
4215.721	33.51	54.00	-20.49	RMS	58	100	Vertical

Table 47 - 2405 MHz (CH11), Thread, ePA, Core 1, 1 GHz to 18 GHz

No other emissions found within 20 dB of the limit.

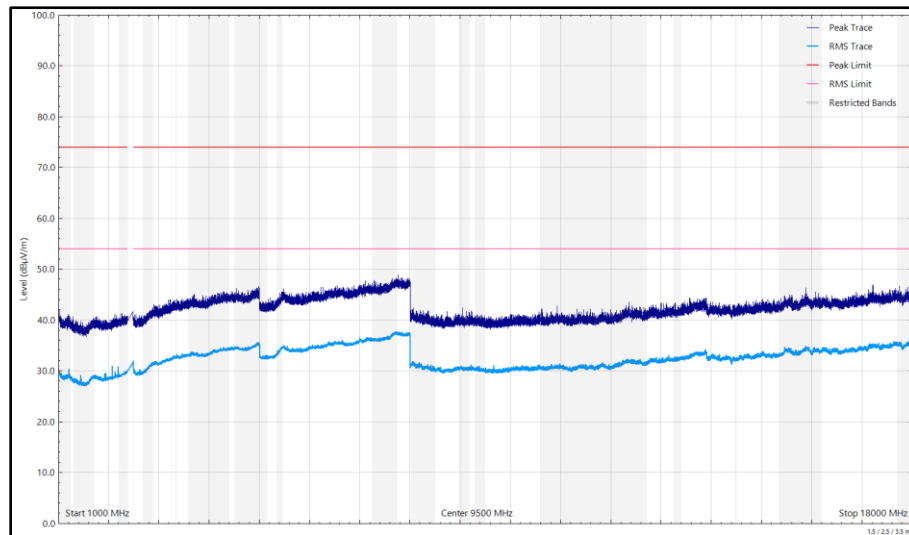


Figure 54 - 2405 MHz (CH11), Thread, ePA, Core 1, 1 GHz to 18 GHz, Horizontal

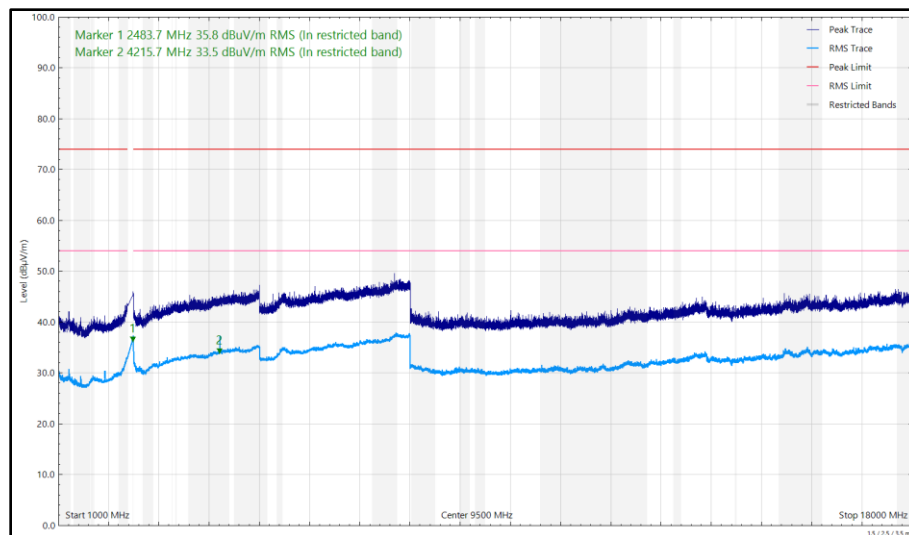


Figure 55 - 2405 MHz (CH11), Thread, ePA, Core 1, 1 GHz to 18 GHz, Vertical

Frequency (MHz)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
38.016	20.31	40.00	-19.69	Q-Peak	181	274	Horizontal
38.063	20.36	40.00	-19.64	Q-Peak	317	283	Vertical
74.004	18.07	40.00	-21.93	Q-Peak	7	387	Horizontal
74.036	18.16	40.00	-21.84	Q-Peak	341	203	Vertical
111.790	19.11	43.50	-24.39	Q-Peak	355	100	Vertical
123.101	19.30	43.50	-24.20	Q-Peak	0	279	Horizontal
2389.962	37.17	54.00	-16.83	RMS	0	319	Vertical
2483.724	37.37	54.00	-16.63	RMS	356	361	Vertical

Table 48 - 2440 MHz (CH18), Thread, ePA, Core 1, 30 MHz to 26 GHz

No other emissions found within 20 dB of the limit.

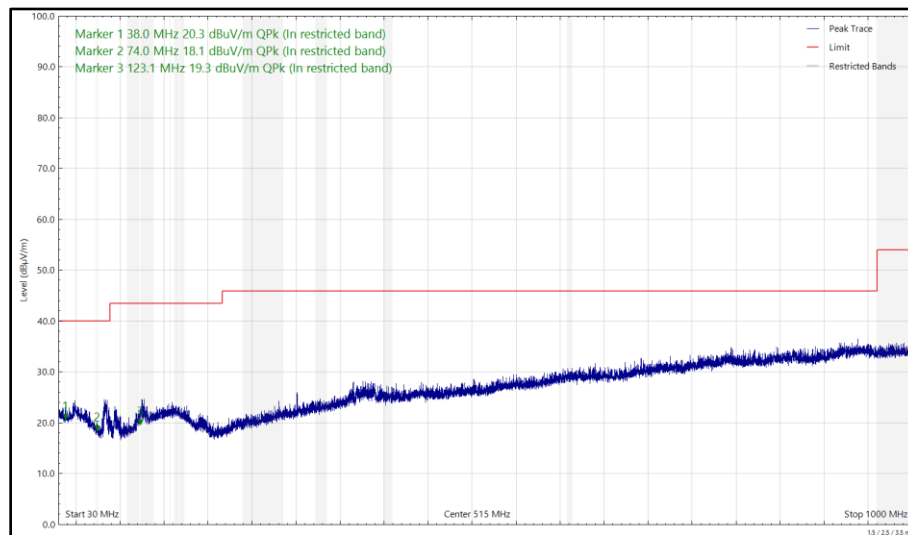


Figure 56 - 2440 MHz (CH18), Thread, ePA, Core 1, 30 MHz to 1 GHz, Horizontal (Peak)

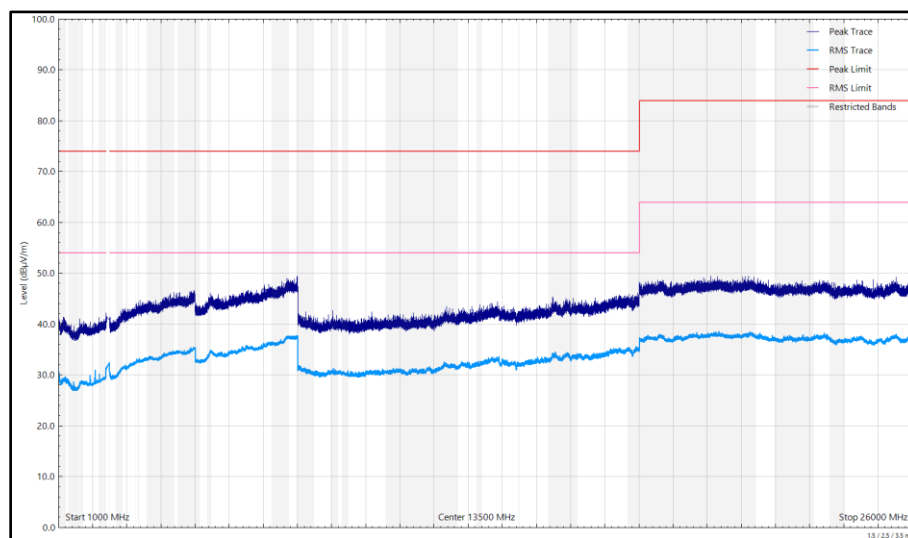


Figure 57 - 2440 MHz (CH18), Thread, ePA, Core 1, 1 GHz to 26 GHz, Horizontal

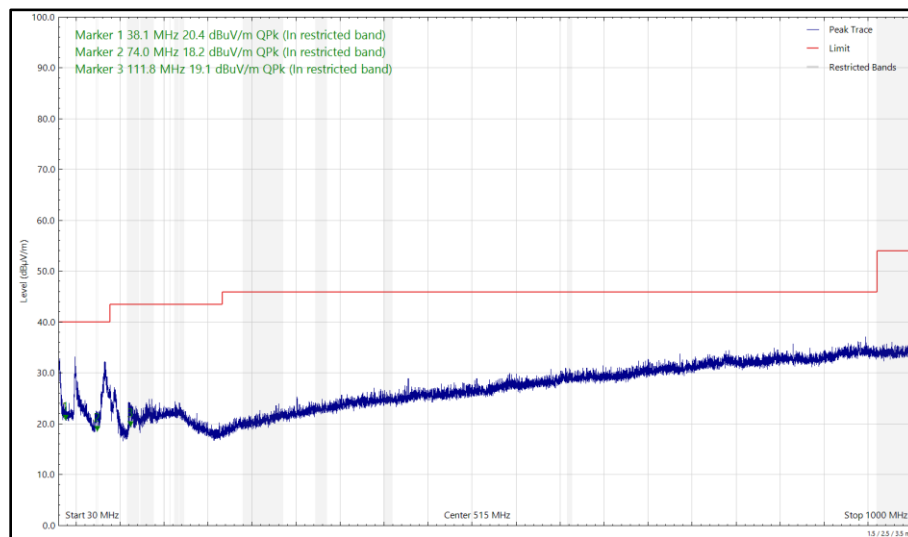


Figure 58 - 2440 MHz (CH18), Thread, ePA, Core 1, 30 MHz to 1 GHz, Vertical (Peak)

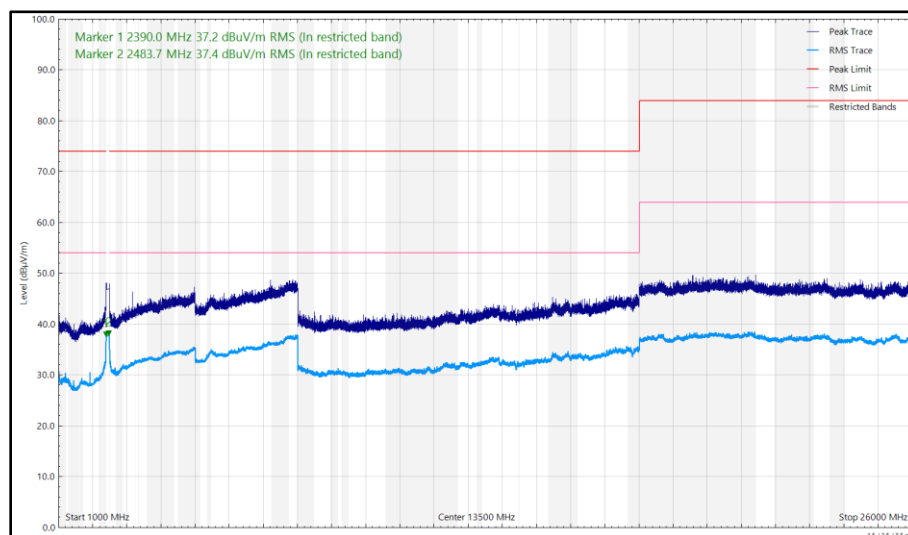


Figure 59 - 2440 MHz (CH18), Thread, ePA, Core 1, 1 GHz to 26 GHz, Vertical



Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
2389.547	36.40	54.00	-17.60	RMS	1	299	Vertical
4216.899	33.36	54.00	-20.64	RMS	230	268	Vertical

Table 49 - 2475 MHz (CH25), Thread, ePA, Core 1, 1 GHz to 18 GHz

No other emissions found within 20 dB of the limit.

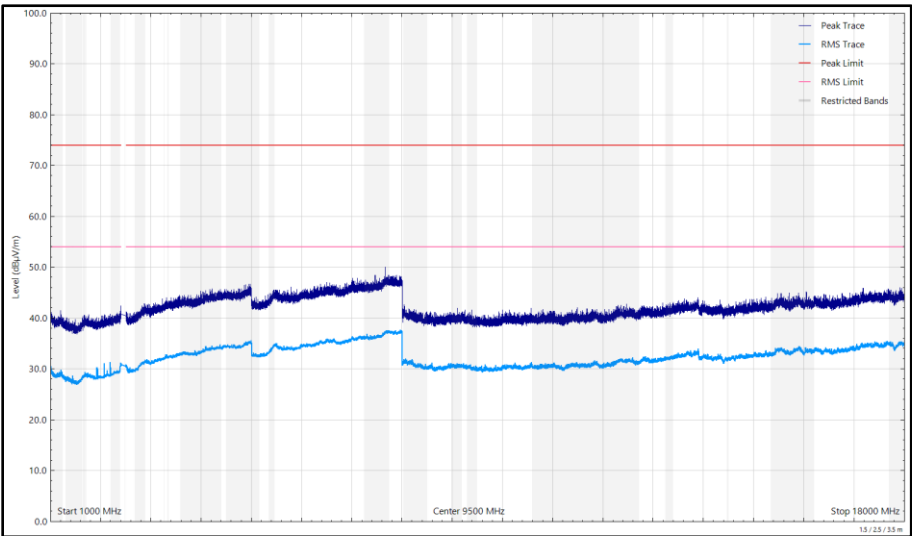


Figure 60 - 2475 MHz (CH25), Thread, ePA, Core 1, 1 GHz to 18 GHz, Horizontal

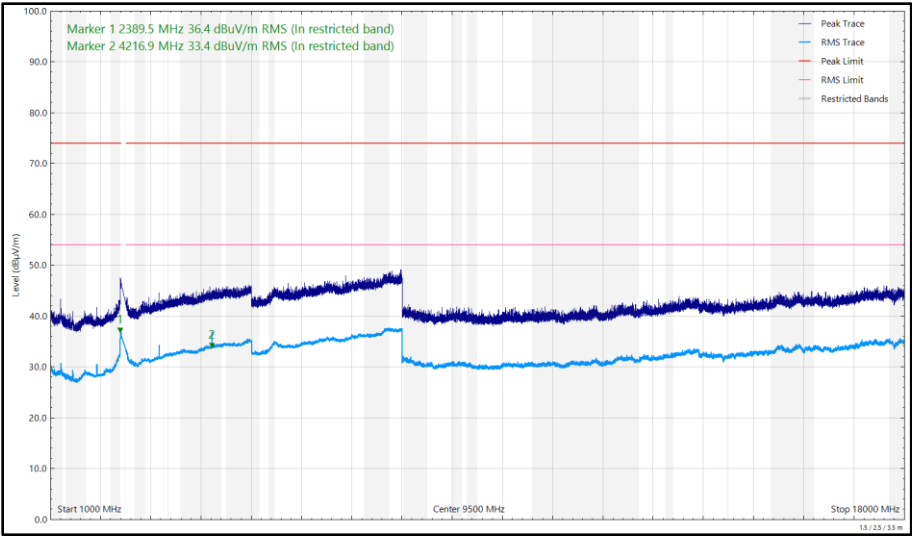


Figure 61 - 2475 MHz (CH25), Thread, ePA, Core 1, 1 GHz to 18 GHz, Vertical

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
4211.900	35.97	54.00	-18.03	RMS	332	299	Vertical

Table 50 - 2405 MHz (CH11), Thread, iPA, Core 0, 1 GHz to 18 GHz

No other emissions found within 20 dB of the limit.

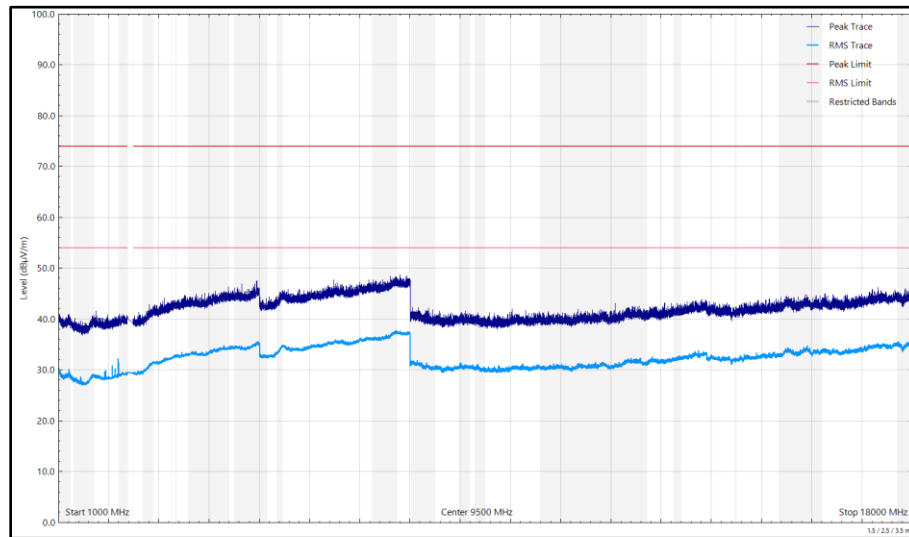


Figure 62 - 2405 MHz (CH11), Thread, iPA, Core 0, 1 GHz to 18 GHz, Horizontal

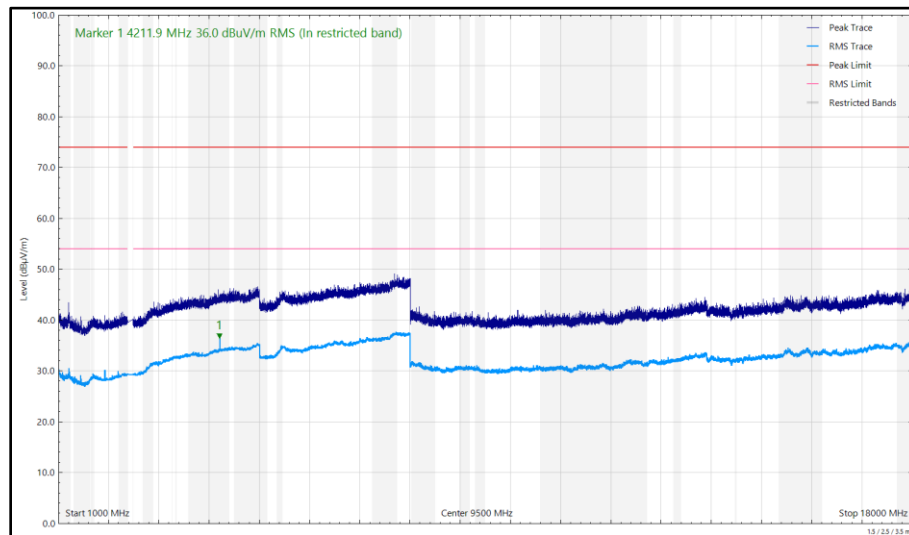


Figure 63 - 2405 MHz (CH11), Thread, iPA, Core 0, 1 GHz to 18 GHz, Vertical

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
37.914	20.36	40.00	-19.64	Q-Peak	338	214	Horizontal
38.196	20.41	40.00	-19.59	Q-Peak	100	280	Vertical
73.096	18.22	40.00	-21.78	Q-Peak	348	262	Vertical
74.320	17.81	40.00	-22.19	Q-Peak	350	240	Horizontal
112.738	19.15	43.50	-24.35	Q-Peak	247	107	Vertical
127.265	19.26	43.50	-24.24	Q-Peak	104	388	Horizontal
135.307	20.15	43.50	-23.35	Q-Peak	350	332	Vertical
4211.950	35.94	54.00	-18.06	RMS	332	321	Vertical

Table 51 - 2440 MHz (CH18), Thread, iPA, Core 0, 30 MHz to 26 GHz

No other emissions found within 20 dB of the limit.

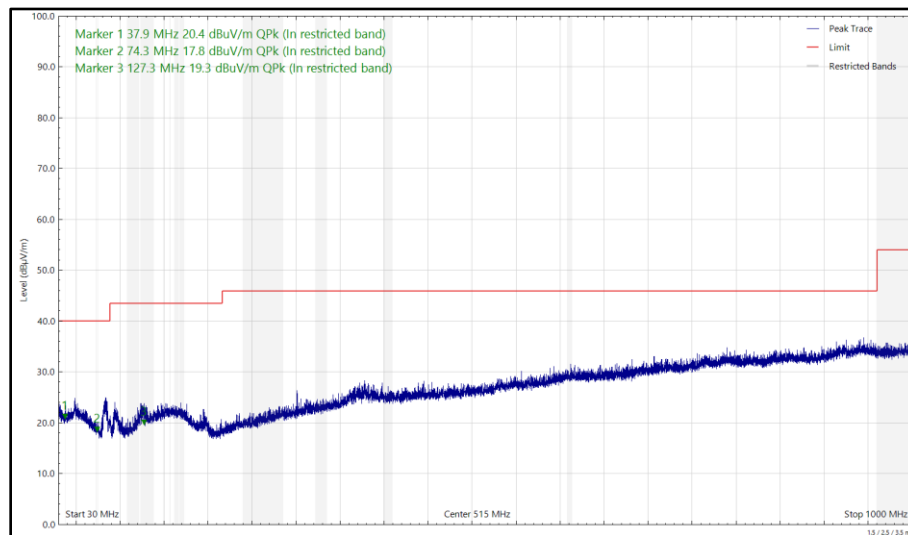


Figure 64 - 2440 MHz (CH18), Thread, iPA, Core 0, 30 MHz to 1 GHz, Horizontal (Peak)

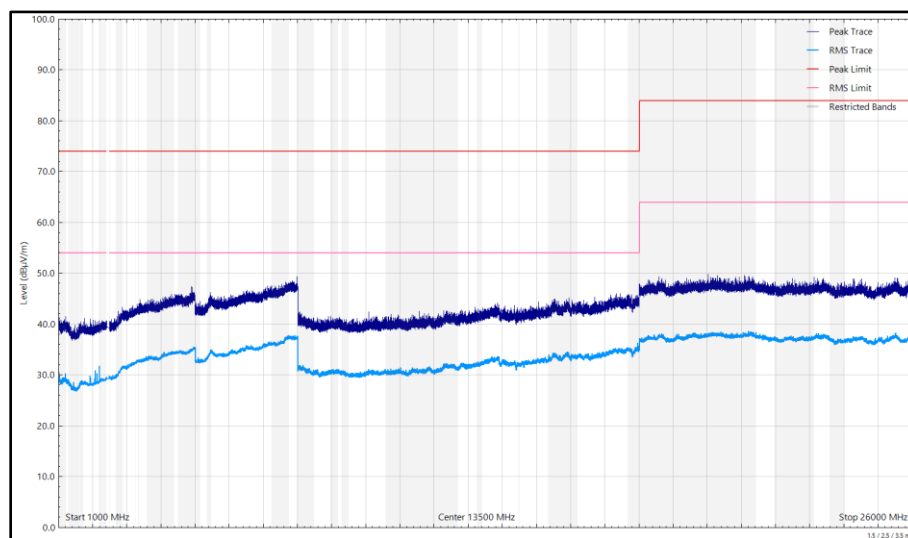


Figure 65 - 2440 MHz (CH18), Thread, iPA, Core 0, 1 GHz to 26 GHz, Horizontal

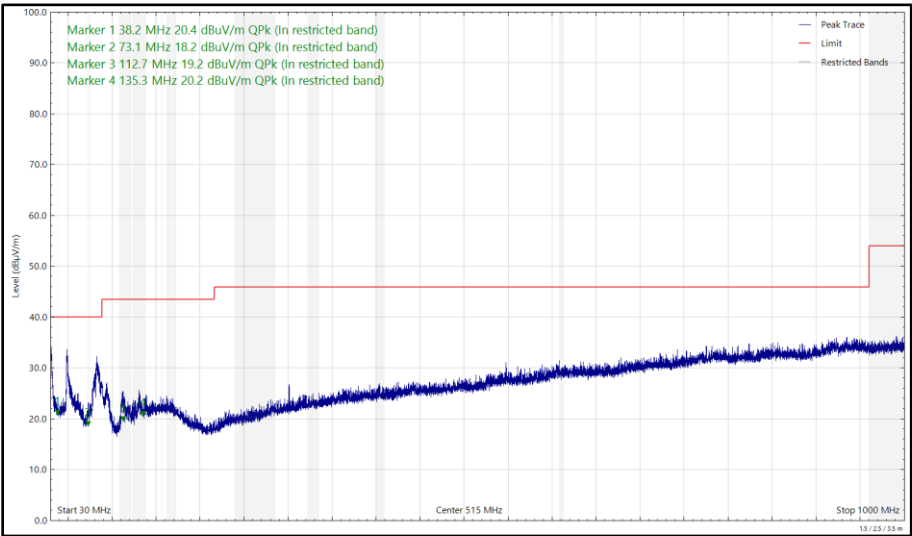


Figure 66 - 2440 MHz (CH18), Thread, iPA, Core 0, 30 MHz to 1 GHz, Vertical (Peak)

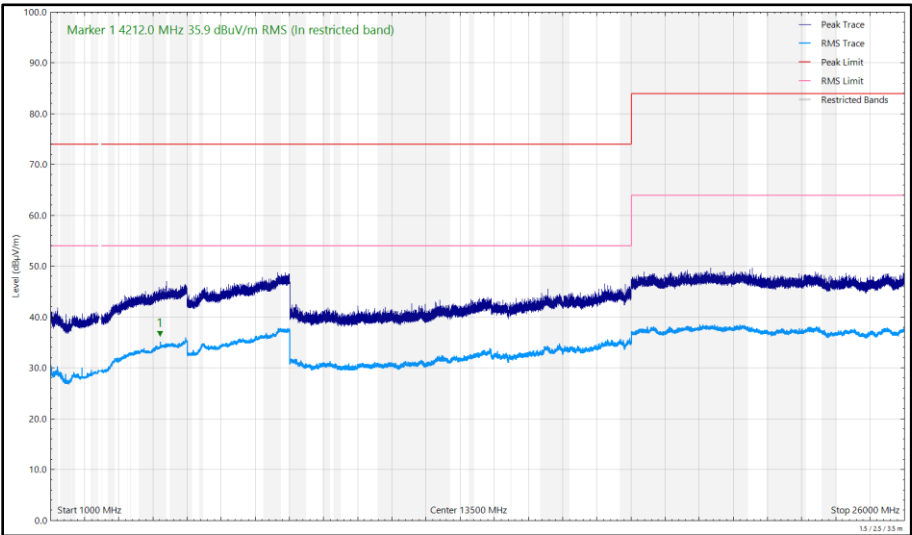


Figure 67 - 2440 MHz (CH18), Thread, iPA, Core 0, 1 GHz to 26 GHz, Vertical



Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
4212.025	33.43	54.00	-20.57	RMS	0	390	Vertical

Table 52 - 2475 MHz (CH25), Thread, iPA, Core 0, 1 GHz to 18 GHz

No other emissions found within 20 dB of the limit.

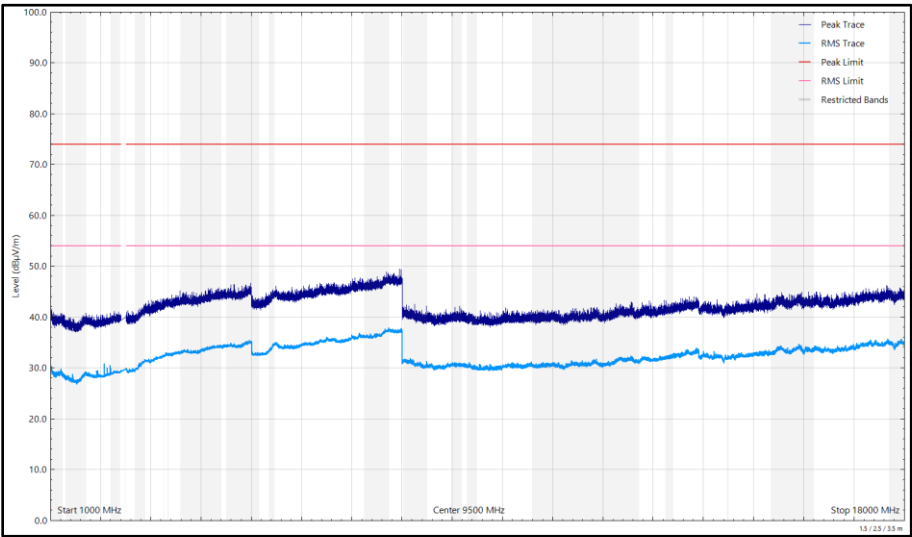


Figure 68 - 2475 MHz (CH25), Thread, iPA, Core 0, 1 GHz to 18 GHz, Horizontal

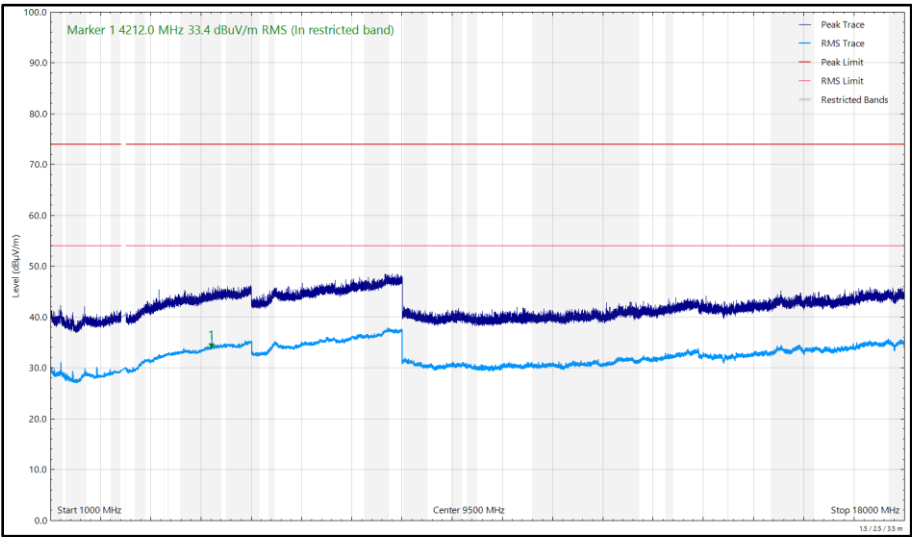


Figure 69 - 2475 MHz (CH25), Thread, iPA, Core 0, 1 GHz to 18 GHz, Vertical



Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
4211.950	35.07	54.00	-18.93	RMS	325	363	Vertical

Table 53 - 2405 MHz (CH11), Thread, iPA, Core 1, 1 GHz to 18 GHz

No other emissions found within 20 dB of the limit.

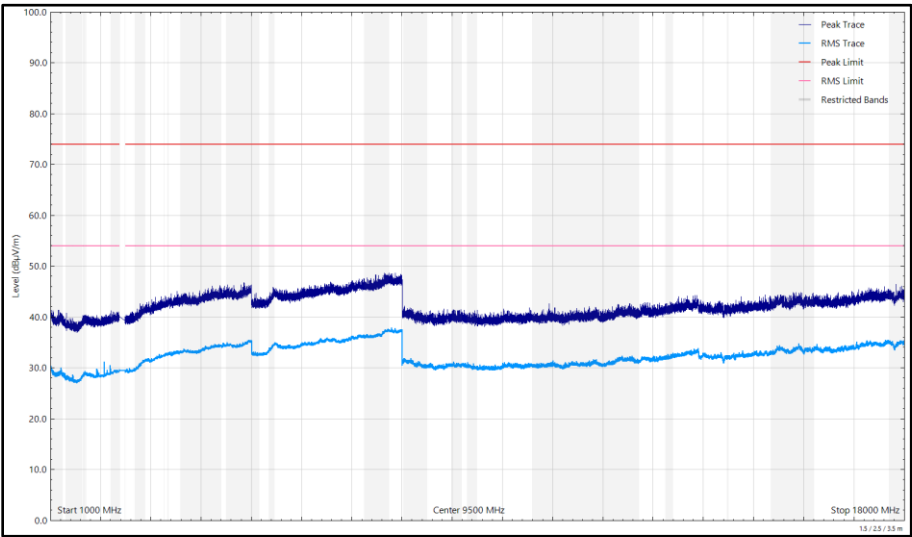


Figure 70 - 2405 MHz (CH11), Thread, iPA, Core 1, 1 GHz to 18 GHz, Horizontal

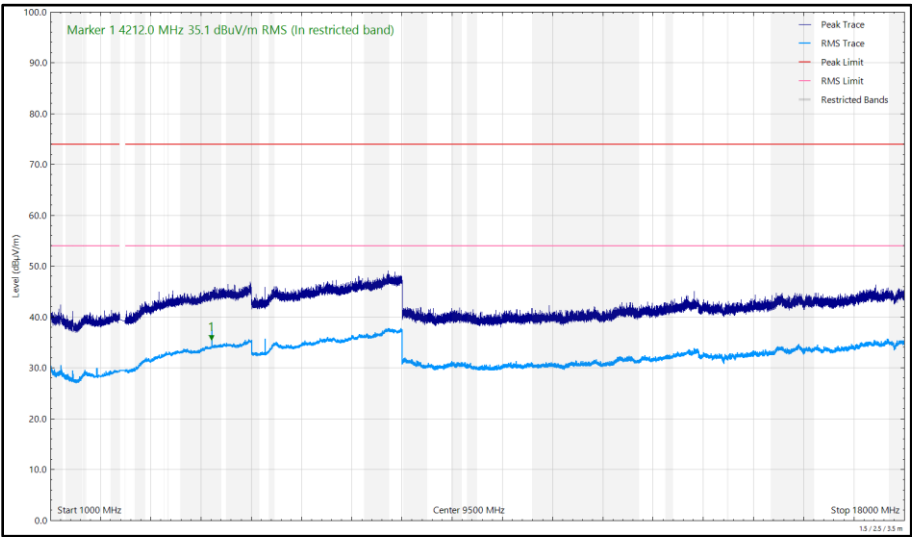


Figure 71 - 2405 MHz (CH11), Thread, iPA, Core 1, 1 GHz to 18 GHz, Vertical

Frequency (MHz)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
37.803	20.31	40.00	-19.69	Q-Peak	350	353	Vertical
37.921	20.36	40.00	-19.64	Q-Peak	132	391	Horizontal
74.220	18.18	40.00	-21.82	Q-Peak	344	107	Vertical
115.573	18.65	43.50	-24.85	Q-Peak	223	327	Vertical
124.660	19.81	43.50	-23.69	Q-Peak	189	320	Horizontal
130.469	19.83	43.50	-23.67	Q-Peak	139	272	Vertical
4211.975	35.70	54.00	-18.30	RMS	331	294	Vertical

Table 54 - 2440 MHz (CH18), Thread, iPA, Core 1, 30 MHz to 26 GHz

No other emissions found within 20 dB of the limit.

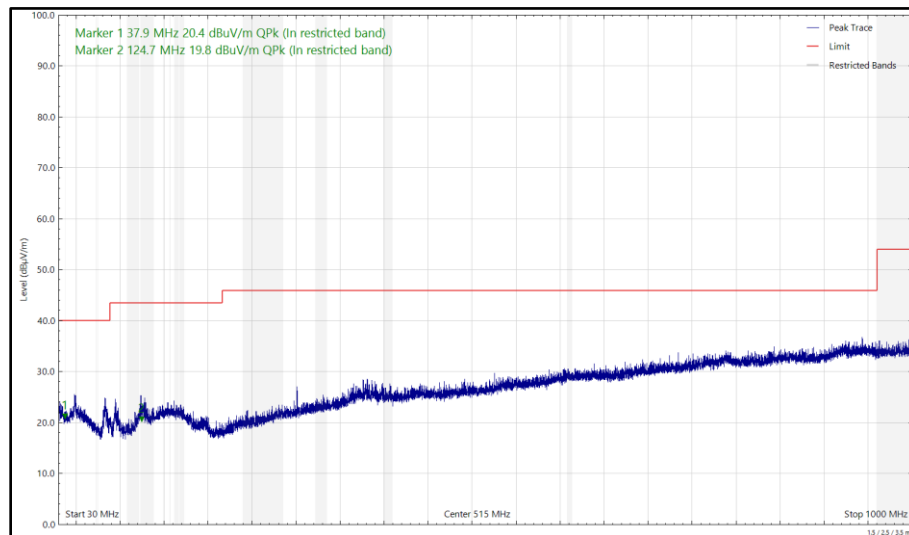


Figure 72 - 2440 MHz (CH18), Thread, iPA, Core 1, 30 MHz to 1 GHz, Horizontal (Peak)

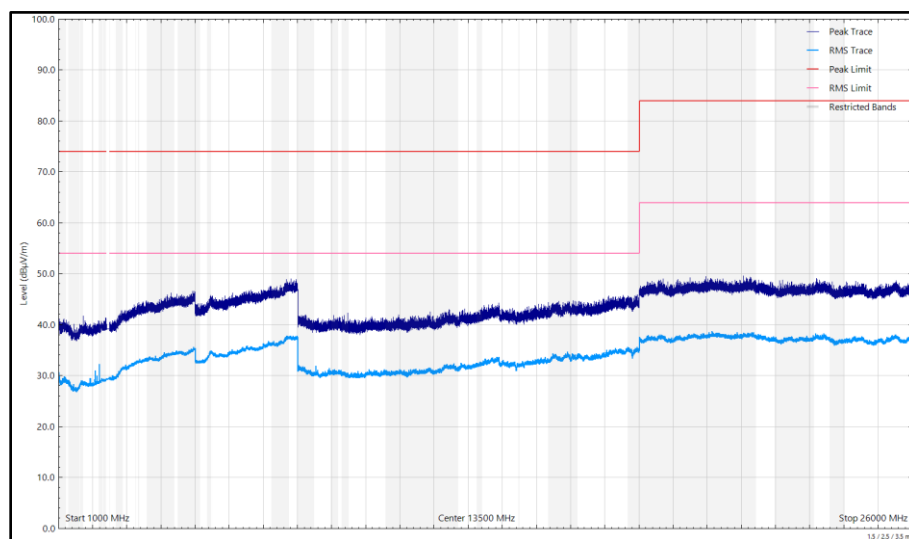


Figure 73 - 2440 MHz (CH18), Thread, iPA, Core 1, 1 GHz to 26 GHz, Horizontal

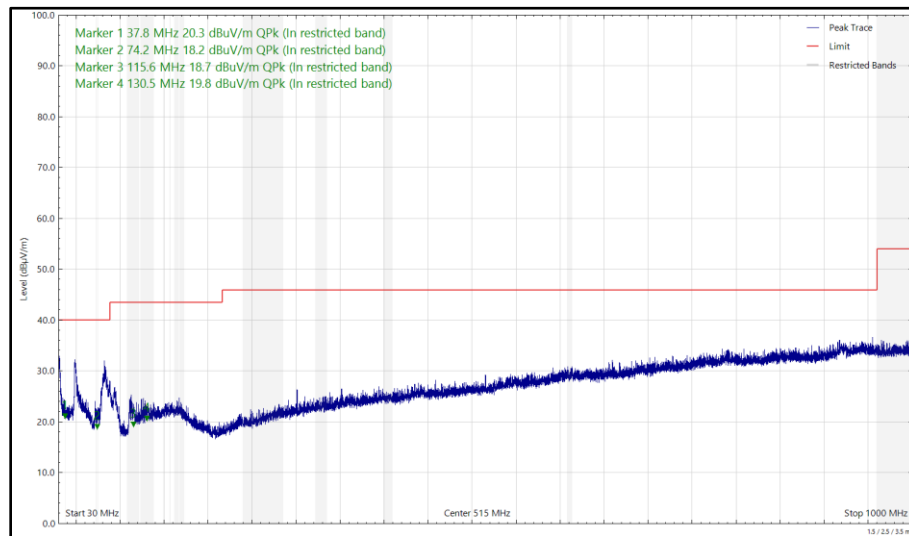


Figure 74 - 2440 MHz (CH18), Thread, iPA, Core 1, 30 MHz to 1 GHz, Vertical (Peak)

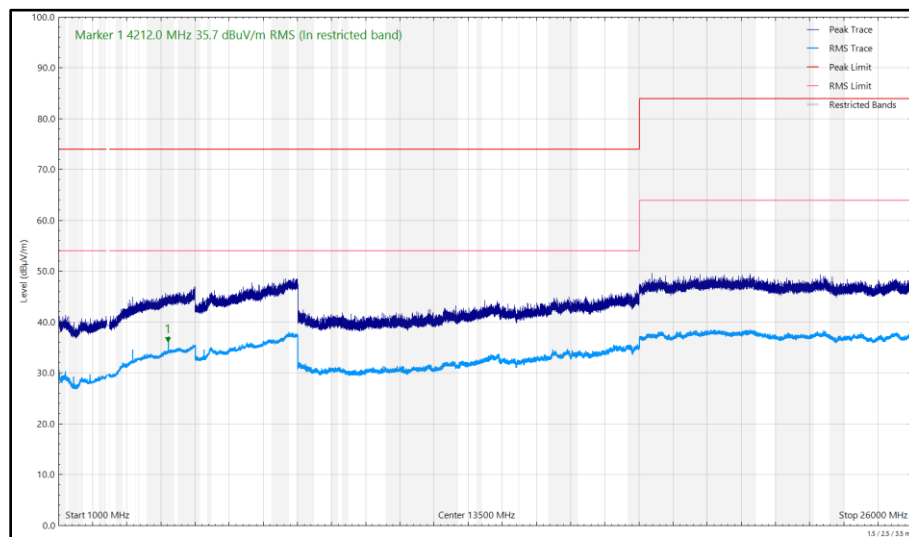


Figure 75 - 2440 MHz (CH18), Thread, iPA, Core 1, 1 GHz to 26 GHz, Vertical

Frequency (MHz)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
4212.600	33.38	54.00	-20.62	RMS	289	144	Vertical

Table 55 - 2475 MHz (CH25), Thread, iPA, Core 1, 1 GHz to 18 GHz

No other emissions found within 20 dB of the limit.

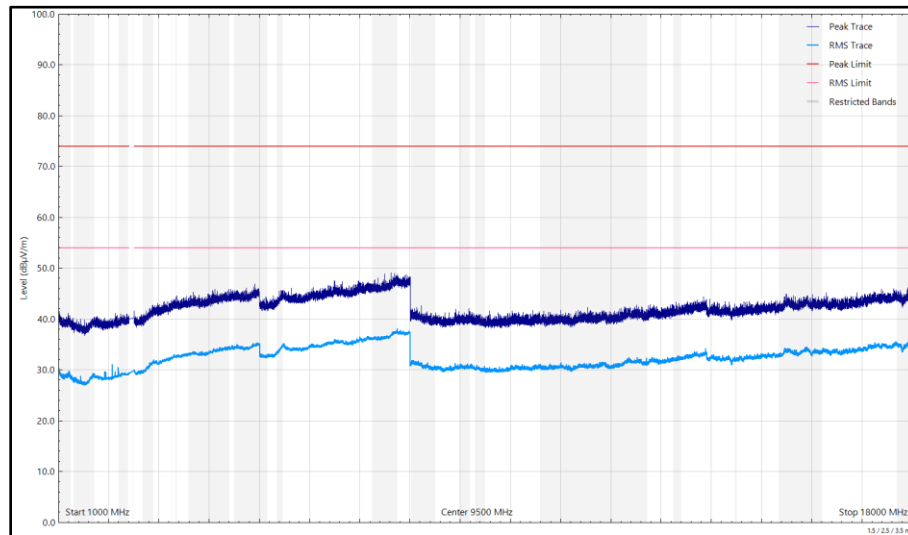


Figure 76 - 2475 MHz (CH25), Thread, iPA, Core 1, 1 GHz to 18 GHz, Horizontal

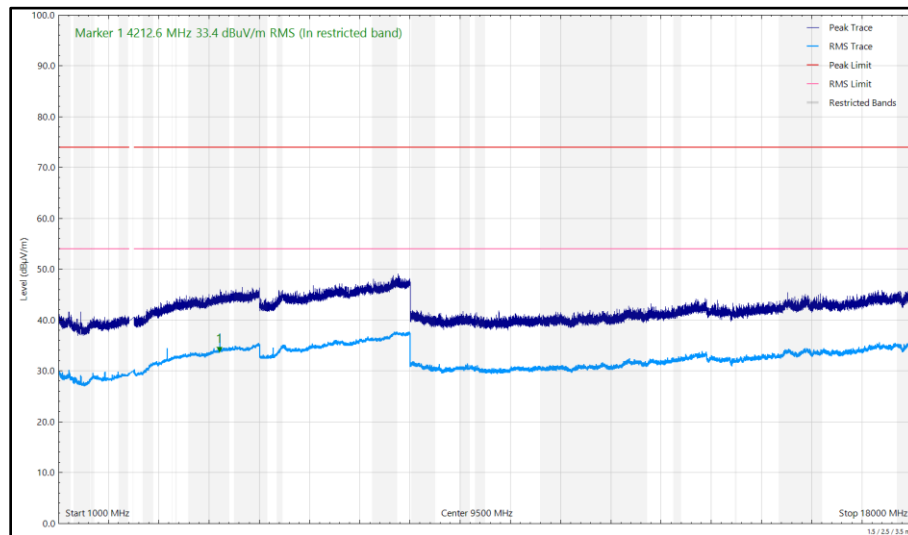


Figure 77 - 2475 MHz (CH25), Thread, iPA, Core 1, 1 GHz to 18 GHz, Vertical

Frequency (MHz)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
4211.925	35.31	54.00	-18.69	RMS	327	307	Vertical

Table 56 - 2405 MHz (CH11), Thread, iPA, Core 2, 1 GHz to 18 GHz

No other emissions found within 20 dB of the limit.

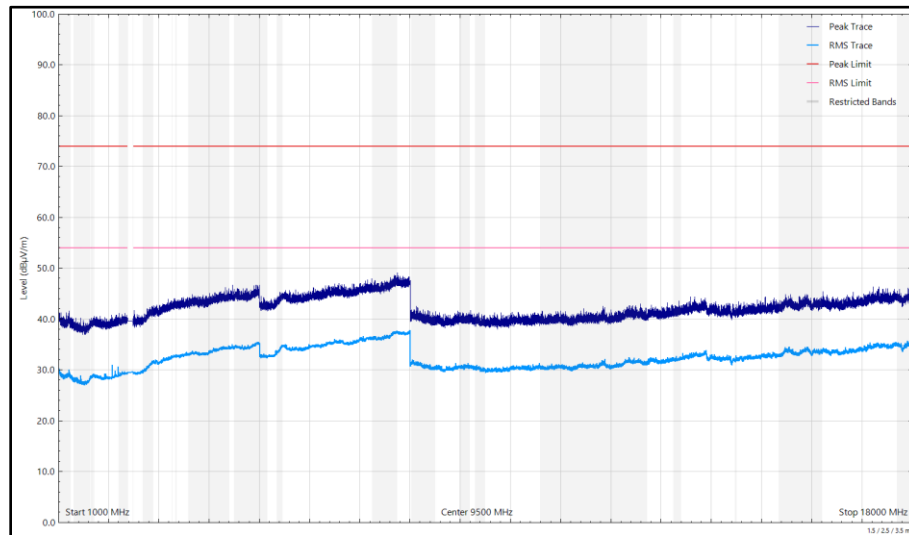


Figure 78 - 2405 MHz (CH11), Thread, iPA, Core 2, 1 GHz to 18 GHz, Horizontal

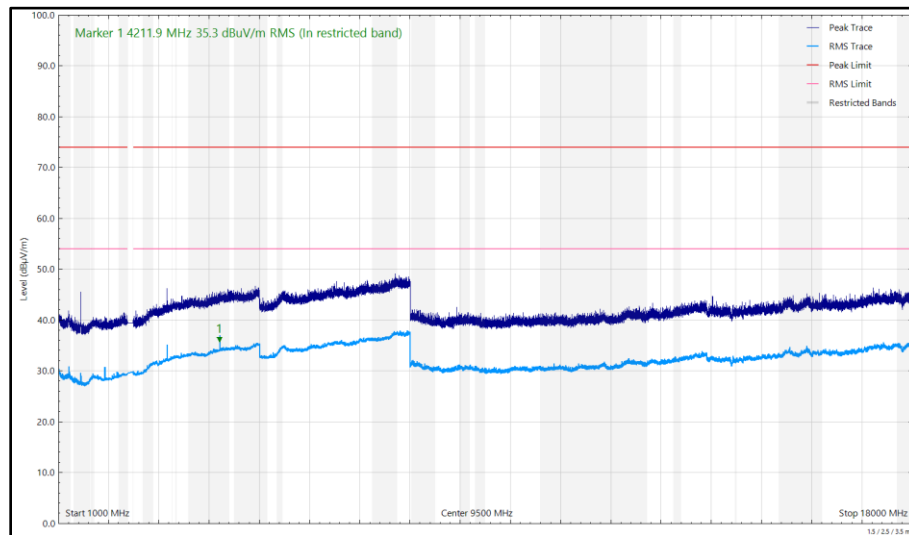


Figure 79 - 2405 MHz (CH11), Thread, iPA, Core 2, 1 GHz to 18 GHz, Vertical

Frequency (MHz)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
37.647	20.32	40.00	-19.68	Q-Peak	356	379	Horizontal
73.092	18.62	40.00	-21.38	Q-Peak	50	137	Vertical
114.520	18.54	43.50	-24.96	Q-Peak	309	365	Vertical
123.312	19.51	43.50	-23.99	Q-Peak	228	260	Horizontal
136.629	20.31	43.50	-23.19	Q-Peak	160	247	Vertical
4213.911	33.56	54.00	-20.44	RMS	234	376	Vertical

Table 57 - 2440 MHz (CH18), Thread, iPA, Core 2, 30 MHz to 26 GHz

No other emissions found within 20 dB of the limit.

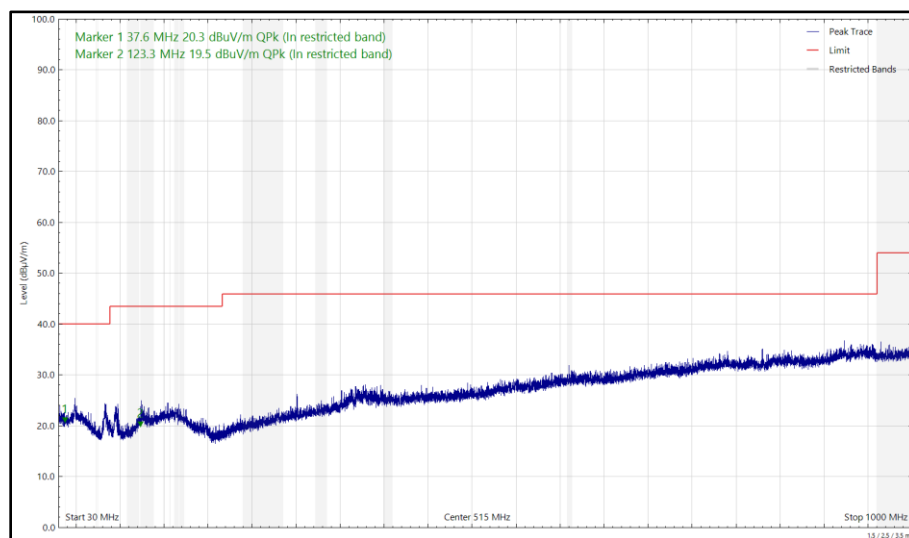


Figure 80 - 2440 MHz (CH18), Thread, iPA, Core 2, 30 MHz to 1 GHz, Horizontal (Peak)

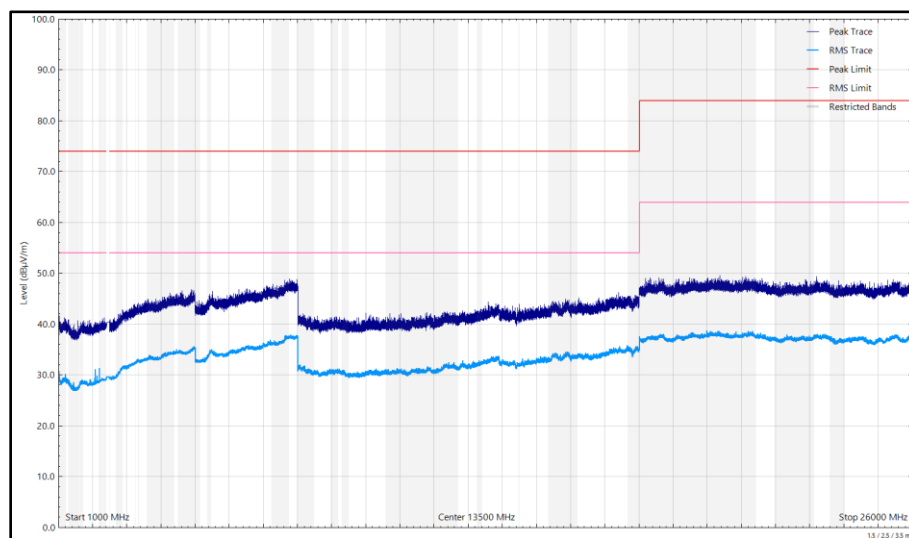


Figure 81 - 2440 MHz (CH18), Thread, iPA, Core 2, 1 GHz to 26 GHz, Horizontal

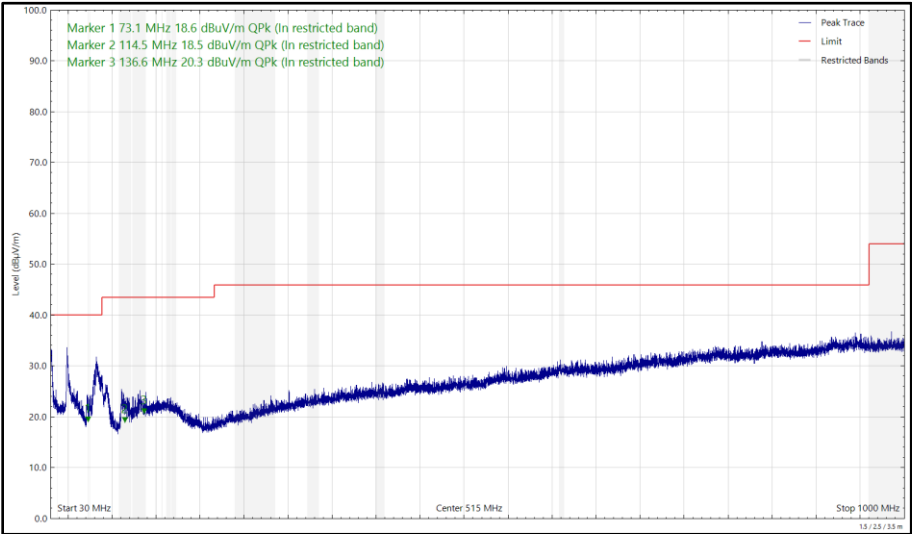


Figure 82 - 2440 MHz (CH18), Thread, iPA, Core 2, 30 MHz to 1 GHz, Vertical (Peak)

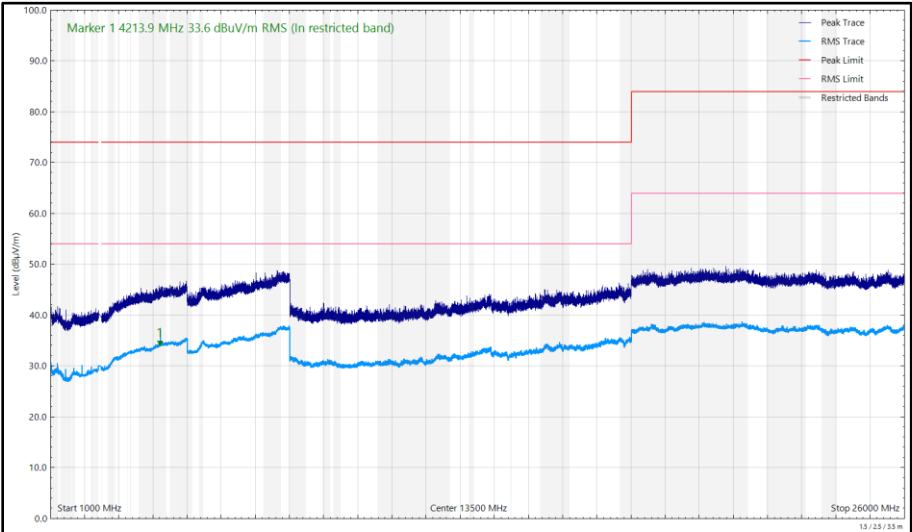


Figure 83 - 2440 MHz (CH18), Thread, iPA, Core 2, 1 GHz to 26 GHz, Vertical

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
4211.501	33.41	54.00	-20.59	RMS	195	384	Vertical
4949.001	37.55	54.00	-16.45	RMS	351	311	Vertical

Table 58 - 2475 MHz (CH25), Thread, iPA, Core 2, 1 GHz to 18 GHz

No other emissions found within 20 dB of the limit.

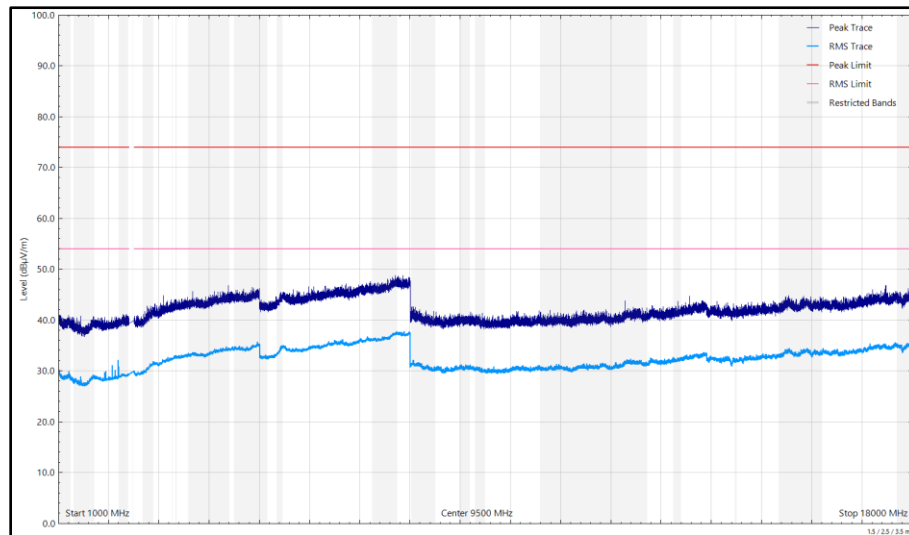


Figure 84 - 2475 MHz (CH25), Thread, iPA, Core 2, 1 GHz to 18 GHz, Horizontal

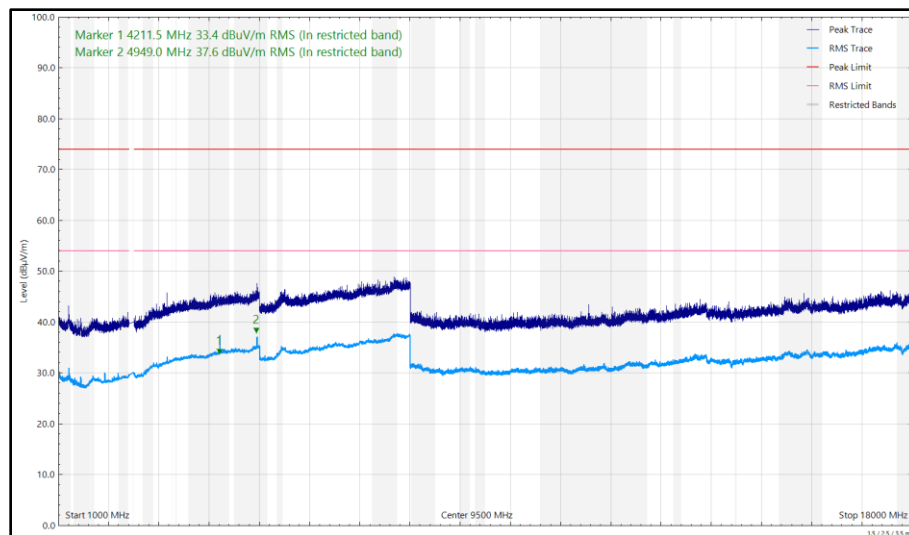


Figure 85 - 2475 MHz (CH25), Thread, iPA, Core 2, 1 GHz to 18 GHz, Vertical



FCC 47 CFR Part 15, Limit Clause 15.247 (d)

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB.

Attenuation below the general limits specified in § 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in § 15.205(a), must also comply with the radiated emission limits specified in 15.209(a)

ISED RSS-247, Limit Clause 6.6

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum device, digitally modulated device, or hybrid system is operating, the RF power that is produced shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power – based on either an RF conducted or a radiated measurement – provided that the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of root-mean-square averaging over a time interval, as permitted under section 6.3.2, the attenuation required shall be 30 dB instead of 20 dB. Attenuation below the general field strength limits specified in RSS-Gen is not required.



2.5.7 Test Location and Test Equipment Used

This test was carried out in RF Chamber 15 and RF Chamber 16.

Instrument	Manufacturer	Type No.	TE No.	Calibration Period (months)	Calibration Expiry Date
Power Supply Unit	Farnell	D302T	609	12	TU
Emissions Software	TUV SUD	EmX V3.6	5125	-	TU
Test Receiver	Rohde & Schwarz	ESW44	5914	12	17-Jun-2026
Cable (K Type 2m)	Junkosha	MWX241-02000KMSKS/B	5937	12	12-Jun-2026
1500W (300V 12A) AC Power Supply	iTech	IT7324	5956	-	TU
1500W (300V 12A) AC Power Supply	iTech	IT7324	5957	-	TU
5m Semi-Anechoic Chamber (Dual-Axis), Chamber 15	Albatross Projects	RF Chamber 15	5963	36	23-Apr-2028
Compact Antenna Mast	Maturo Gmbh	CAM4.0-P	5964	-	TU
Mast & Turntable Controller	Maturo Gmbh	FCU3.0	5966	-	TU
Tilt Antenna Mast	Maturo Gmbh	BAM4.5-P	5967	-	TU
Turntable	Maturo Gmbh	TT1.5SI	5968	-	TU
3m Semi-Anechoic Chamber, Chamber 16	Albatross Projects	RF Chamber 16	5972	36	07-May-2028
Mast & Turntable Controller	Maturo Gmbh	FCU3.0	5973	-	TU
Tilt Antenna Mast	Maturo Gmbh	BAM4.5-P	5974	-	TU
Turntable	Maturo Gmbh	TT1.5SI	5975	-	TU
Horn Antenna (1-10 GHz)	Schwarzbeck	BBHA9120B	6142	12	14-Sep-2026
Digital Multimeter	Fluke	115	6145	12	06-Jun-2026
Digital Multimeter	Fluke	115	6146	12	05-Jun-2026
Double Ridge Active Horn Antenna (18-40 GHz)	Com-Power	AHA-840	6189	24	26-Sep-2026
SAC Switch Unit	TUV SUD	TUV_SSU_001	6191	12	18-Dec-2026
8GHz Highpass Filter	Wainwright	WHKX 7150 8000 18000 50SS	6194	12	23-Apr-2026
Pre Amp 8 - 18 GHz	Wright Technologies	APS06 0061	6200	12	24-Apr-2026
Attenuator 4dB	Pasternack	PE7074-4	6204	24	13-Mar-2027
Cable (SMA to SMA 20cm)	TUV SUD	MH-FH 8-18	6215	12	23-Apr-2026
USB Spectrum Analyser	Signal Hound	SA124B	6297	-	TU
USB Spectrum Analyser	Signal Hound	SA124B	6383	-	TU
Trilog Super Broadband Test Antenna	Schwarzbeck	VULB 9168	6456	24	13-Mar-2027
DRG Horn Antenna (8-18 GHz)	Schwarzbeck	HWRD750	6458	12	18-May-2026
Humidity and Temperature Meter	R.S Components	1364	6486	12	01-Jul-2026



Instrument	Manufacturer	Type No.	TE No.	Calibration Period (months)	Calibration Expiry Date
10dB attenuator	Pasternack	PE-7013-10	6727	12	14-Jan-2026
1m Cable	Junkosha	MWX241-01000AMSAMS/B	6741	12	27-Apr-2026
Low Noise Amplifier	B&Z Technologies	BZR01001800	6800	12	03-Dec-2026
EMI Test Receiver	Rohde & Schwarz	ESW44	6805	12	24-Jul-2026
1M SMA Cable	Junkosha	MWX221-01000AMSAMS/B	6831	12	18-Aug-2026
8M SMA Cable	Junkosha	MWX221-08000AMSAMS/B	6833	12	18-Aug-2026
8M SMA Cable	Junkosha	MWX221-08000AMSAMS/B	6834	12	18-Aug-2026
Handheld Hygrometer	Fluke	971	6837	12	16-Sep-2026
8m SMA-Type Cable	Junkosha	MWX221-08000AMSAMS/B	6849	12	06-Nov-2026
Cable Assembly	SpecTech	PE300-60	6856	-	TU
Cable Assembly	SpecTech	PE300-60	6858	-	TU
Cable Assembly	SpecTech	PE300-60	6862	-	TU
Cable Assembly	SpecTech	PE300-60	6864	-	TU
Cable Assembly	SpecTech	PE300-60	6868	-	TU
RF Amplifier BROADBAND AMPL/SMA/RoHS	Mini-Circuits	ZX60-83LN12+	6976	12	05-Apr-2026
RF Amplifier BROADBAND AMPL/SMA/RoHS	Mini-Circuits	ZX60-83LN12+	6978	12	05-Apr-2026

Table 59

TU - Traceability Unscheduled



2.6 Power Spectral Density

2.6.1 Specification Reference

FCC 47 CFR Part 15C, Clause 15.247 (e)
ISED RSS-247, Clause 6.3.1
ISED RSS-GEN, Clause 6.12

2.6.2 Equipment Under Test and Modification State

A3426, S/N: FV3YG50JYP - Modification State 0

2.6.3 Date of Test

04-December-2025

2.6.4 Test Method

This test was performed in accordance with ANSI C63.10, clause 11.10.5.

2.6.5 Environmental Conditions

Ambient Temperature	17.3 °C
Relative Humidity	50.5 %



2.6.6 Test Results

Thread

Test Configuration			
Frequency Range:	2400-2483.5 MHz	Band:	2.4 GHz
Limit Clause(s):	15.247 (e) RSS-247 6.3.1	Test Method(s):	C63.10 11.10.5
Additional Reference(s):	-		

DUT Configuration			
Mode:	Thread iPA 2.00 MHz	Duty Cycle (%):	100.0
CustomFieldTitle:	Thread iPA	DCCF (dB):	0.00
Antenna Configuration:	SISO	Peak Antenna Gain (dBi):	4.60
Active Port(s):	A (Core 0)	Active Chain(s):	0

Test Frequency (MHz)	RBW (kHz)	PSD (dBm/RBW)					Limit (dBm/3 kHz)	Margin (dB)
		A	B	C	D	Σ		
2405	3.0	-14.52	-	-	-	-14.52	8.00	-22.52
2440	3.0	-14.36	-	-	-	-14.36	8.00	-22.36
2475	3.0	-14.71	-	-	-	-14.71	8.00	-22.71

Table 60 - Maximum Power Spectral Density Results



Test Configuration			
Frequency Range:	2400-2483.5 MHz	Band:	2.4 GHz
Limit Clause(s):	15.247 (e) RSS-247 6.3.1	Test Method(s):	C63.10 11.10.5
Additional Reference(s):	-		

DUT Configuration			
Mode:	Thread iPA 2.00 MHz	Duty Cycle (%):	100.0
CustomFieldTitle:	Thread iPA	DCCF (dB):	0.00
Antenna Configuration:	SISO	Peak Antenna Gain (dBi):	3.80
Active Port(s):	B (Core 1)	Active Chain(s):	1

Test Frequency (MHz)	RBW (kHz)	PSD (dBm/RBW)					Limit (dBm/3 kHz)	Margin (dB)
		A	B	C	D	Σ		
2405	3.0	-	-14.58	-	-	-14.58	8.00	-22.58
2440	3.0	-	-14.75	-	-	-14.75	8.00	-22.75
2475	3.0	-	-14.72	-	-	-14.72	8.00	-22.72

Table 61 - Maximum Power Spectral Density Results



Test Configuration			
Frequency Range:	2400-2483.5 MHz	Band:	2.4 GHz
Limit Clause(s):	15.247 (e) RSS-247 6.3.1	Test Method(s):	C63.10 11.10.5
Additional Reference(s):	-		

DUT Configuration			
Mode:	Thread iPA 2.00 MHz	Duty Cycle (%):	100.0
CustomFieldTitle:	Thread iPA	DCCF (dB):	0.00
Antenna Configuration:	SISO	Peak Antenna Gain (dBi):	4.50
Active Port(s):	C (Core 2)	Active Chain(s):	2

Test Frequency (MHz)	RBW (kHz)	PSD (dBm/RBW)					Limit (dBm/3 kHz)	Margin (dB)
		A	B	C	D	Σ		
2405	3.0	-	-	-12.76	-	-12.76	8.00	-20.76
2440	3.0	-	-	-12.16	-	-12.16	8.00	-20.16
2475	3.0	-	-	-12.62	-	-12.62	8.00	-20.62

Table 62 - Maximum Power Spectral Density Results



Test Configuration			
Frequency Range:	2400-2483.5 MHz	Band:	2.4 GHz
Limit Clause(s):	15.247 (e) RSS-247 6.3.1	Test Method(s):	C63.10 11.10.5
Additional Reference(s):	-		

DUT Configuration			
Mode:	Thread ePA 2.00 MHz	Duty Cycle (%):	100.0
CustomFieldTitle:	Thread ePA	DCCF (dB):	0.00
Antenna Configuration:	SISO	Peak Antenna Gain (dBi):	4.60
Active Port(s):	A (Core 0)	Active Chain(s):	0

Test Frequency (MHz)	RBW (kHz)	PSD (dBm/RBW)					Limit (dBm/3 kHz)	Margin (dB)
		A	B	C	D	Σ		
2405	3.0	-3.62	-	-	-	-3.62	8.00	-11.62
2440	3.0	-3.30	-	-	-	-3.30	8.00	-11.30
2475	3.0	-3.60	-	-	-	-3.60	8.00	-11.60

Table 63 - Maximum Power Spectral Density Results



Test Configuration			
Frequency Range:	2400-2483.5 MHz	Band:	2.4 GHz
Limit Clause(s):	15.247 (e) RSS-247 6.3.1	Test Method(s):	C63.10 11.10.5
Additional Reference(s):	-		

DUT Configuration			
Mode:	Thread ePA 2.00 MHz	Duty Cycle (%):	100.0
CustomFieldTitle:	Thread ePA	DCCF (dB):	0.00
Antenna Configuration:	SISO	Peak Antenna Gain (dBi):	3.80
Active Port(s):	B (Core 1)	Active Chain(s):	1

Test Frequency (MHz)	RBW (kHz)	PSD (dBm/RBW)					Limit (dBm/3 kHz)	Margin (dB)
		A	B	C	D	Σ		
2405	3.0	-	-3.88	-	-	-3.88	8.00	-11.88
2440	3.0	-	-3.66	-	-	-3.66	8.00	-11.66
2475	3.0	-	-3.92	-	-	-3.92	8.00	-11.92

Table 64 - Maximum Power Spectral Density Results

FCC 47 CFR Part 15, Limit Clause 15.247 (e)

The power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.

ISED RSS-247, Limit Clause 6.3.1

The transmitter power spectral density conducted from the transmitter to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission

2.6.7 Test Location and Test Equipment Used

This test was carried out in EMC Laboratory 2.

Instrument	Manufacturer	Type No.	TE No.	Calibration Period (months)	Calibration Expiry Date
Multimeter	Iso-tech	IDM101	2421	12	11-Nov-2026
Hygrometer	Rotronic	HP21	4741	12	29-May-2026
AC Programmable Power Supply	iTech	IT7324	5227	-	O/P Mon
Signal Conditioning Unit	TUV SUD	SPECTRUM_SCU001	5759	12	01-Feb-2026
MXA Signal Analyser	Keysight Technologies	N9020B	5919	24	31-Mar-2028
SCU Cable Assembly	TUV SUD	SPECTRUM_SCU_CA	6903	12	01-Feb-2026
SCU Cable Assembly	TUV SUD	SPECTRUM_SCU_CA	6904	12	01-Feb-2026
6dB Attenuator cable assembly for SCU.	TUV SUD	SPECTRUM_SCU_CA	7214	12	28-Nov-2026



Table 65

O/P Mon - Output Monitored using calibrated equipment

3 Measurement Uncertainty

For a 95% confidence level, the measurement uncertainties for defined systems are:

Test Name	Measurement Uncertainty
Restricted Band Edges	30 MHz to 1 GHz: ± 5.2 dB 1 GHz to 40 GHz: ± 6.3 dB
Emission Bandwidth	± 36.70 kHz
Maximum Conducted Output Power	Method PM: ± 0.65 dB Method SA: ± 1.05 dB
Authorised Band Edges	30 MHz to 1 GHz: ± 5.2 dB 1 GHz to 40 GHz: ± 6.3 dB
Spurious Radiated Emissions	30 MHz to 1 GHz: ± 5.2 dB 1 GHz to 40 GHz: ± 6.3 dB
Power Spectral Density	± 1.00 dB

Table 66

Measurement Uncertainty Decision Rule – Accuracy Method

Determination of conformity with the specification limits is based on the decision rule according to IEC Guide 115:2021, Clause 4.4.3 (Procedure 2). The measurement results are directly compared with the test limit to determine conformance with the requirements of the standard.

Risk: The uncertainty of measurement about the measured result is negligible with regard to the final pass/fail decision. The measurement result can be directly compared with the test limit to determine conformance with the requirement (compare IEC Guide 115). The level of risk to falsely accept and falsely reject items is further described in ILAC-G8.