

FCC Test Report

Manufacturer: Sulis Consultants
TENUTO 2, Model: 6920
In accordance with FCC 47 CFR Part 15C
(2.4 GHz Bluetooth Low Energy)



Prepared for: Sulis Consultants
Mead House
Eversley
RG27 0NW

FCC ID: 2AHVA-6920

COMMERCIAL-IN-CONFIDENCE

Document 75966330-01 Issue 01

SIGNATURE			
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Signatures in this approval box have checked this document in line with the requirements of TÜV SÜD document control rules.			
RESPONSIBLE FOR	NAME	DATE	SIGNATURE
Testing	Wenceslao Acosta Carrazco	19 December 2025	
FCC Accreditation: 492497/UK2010 Octagon House, Fareham Test Laboratory			
EXECUTIVE SUMMARY / ENGINEERING STATEMENT			
The measurements shown in this report were made in accordance with the procedures described on the test pages A sample of this product was tested to demonstrate limited compliance with FCC 47 CFR Part 15C: 2024 for the tests detailed in section 1.3. The sample tested was found to comply with the requirements defined in the applied rules.			

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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
01	First version	19-Dec-2025

Table 1

1.2 Introduction

Applicant	Sulis Consultants
Manufacturer	Sulis Consultants
Model Number(s)	6920
Serial Number(s)	001
Hardware Version(s)	Rev 1.5
Software Version(s)	N/A (test software for 100% duty cycle)
Number of Samples Tested	1
Test Specification/Issue/Date	FCC 47 CFR Part 15C: 2024
Order Number	SC_PO_677
Date	19-November-2025
Date of Receipt of EUT	05-December-2025
Start of Test	08-December-2025
Finish of Test	12-December-2025
Name of Engineer(s)	Wenceslao Acosta Carrazco
Related Document(s)	ANSI C63.10 (2020)



1.3 Brief Summary of Results

A brief summary of the tests carried out in accordance with FCC 47 CFR Part 15C is shown below.

Section	Specification Clause	Test Description	Result	Comments/Base Standard
	Part 15			
Configuration and Mode: 2.4 GHz Bluetooth Low Energy				
-	15.203	Antenna Requirement	N/T	The device complies with the provisions of this section, as it uses an integral antenna
2.1	15.249 (a)(e)	Field Strength of Fundamental	Pass	ANSI C63.10 (2020)
2.2	15.249 (a)(d)	Field Strength of Emissions	Pass	ANSI C63.10 (2020)
2.3	15.215 (c)	20 dB Bandwidth	Pass	ANSI C63.10 (2020)
2.4	15.249 (d)	Authorised Band Edges	Pass	ANSI C63.10 (2020)

Table 2



1.4 Customer Supplied Form

Equipment Description

Technical Description: <i>(Please provide a brief description of the intended use of the equipment including the technologies the product supports)</i>	Bluetooth LE personal health device		
Manufacturer:	MysteryVibe Limited Dairy South Shoelands Farm Seale Lane Puttenham Surrey GU10 1HL UK		
Model:	Tenuto Mini 2		
Part Number:	6920		
Hardware Version:	Rev 1.5		
Software Version:	N/A (test software for 100% duty cycle)		
FCC ID of the product under test – see guidance here	2AHVA-6920		
IC ID of the product under test – see guidance here	-		
Device Category	Mobile ☐	Portable ☐	Fixed ☐
Equipment is fitted with an Audio Low Pass Filter	Yes ☐	No ☐	

Intentional Radiators

Technology	BT LE					
Frequency Range (MHz to MHz)	2402 – 2480					
Conducted Declared Output Power (dBm)	N/A					
Antenna Gain (dBi)	-0.5					
Supported Bandwidth(s) (MHz) (e.g. 1 MHz, 20 MHz, 40 MHz)	1 MHz					
Modulation Scheme(s) (e.g. GFSK, QPSK etc)	GFSK					
ITU Emission Designator (see guidance here) (not mandatory for Part 15 devices)	N/A					
Bottom Frequency (MHz)	2402					
Middle Frequency (MHz)	2440					
Top Frequency (MHz)	2480					



Un-intentional Radiators

Highest frequency generated or used in the device or on which the device operates or tunes	N/A – test not required
Lowest frequency generated or used in the device or on which the device operates or tunes	
Class A Digital Device (Use in commercial, industrial or business environment) ☐	
Class B Digital Device (Use in residential environment only) ☐	

AC Power Source

AC supply frequency:		Hz
Voltage		V
Max current:		A
Single Phase ☐ Three Phase ☒		

DC Power Source

Nominal voltage:	5	V
Extreme upper voltage:	5	V
Extreme lower voltage:	5	V
Max current:	0.2	A

Battery Power Source

Voltage:	3.7	V
End-point voltage:		V (Point at which the battery will terminate)
Alkaline ☐ Leclanche ☒ Lithium ☐ Nickel Cadmium ☐ Lead Acid* ☐ *(Vehicle regulated)		
Other ☐ Please detail:		

Charging

Can the EUT transmit whilst being charged	Yes ☒ No ☐
---	---

Temperature

Minimum temperature:		°C
Maximum temperature:		°C



Cable Loss

Adapter Cable Loss (Conducted sample)		dB
--	--	----

Antenna Characteristics

Antenna connector ☐			State impedance		Ohm
Temporary antenna connector ☐			State impedance		Ohm
Integral antenna ☒	Type:	Chip	Gain	-0.5	dBi
External antenna ☐	Type:		Gain		dBi

For external antenna only:
Standard Antenna Jack ☐ If yes, describe how user is prohibited from changing antenna (if not professional installed):
Equipment is only ever professionally installed ☐
Non-standard Antenna Jack ☐
All part 15 applications will need to show how the antenna gain was derived either from a manufacturer data sheet or a measurement. Where the gain of the antenna is inherently accounted for as a result of the measurement, such as field strength measurements on a part 15.249 or 15.231 device, so the gain does not necessarily need to be verified. However, enough information regarding the construction of the antenna shall be provided. Such information maybe photographs, length of wire antenna etc.

Ancillaries (if applicable)

Manufacturer:		Part Number:	
Model:		Country of Origin:	

I hereby declare that the information supplied is correct and complete.

Name: Charlie Blackham
Position held: Director, Sulis Consultants Limited
Date: 04 Dec 2025



1.5 Product Information

1.5.1 Technical Description

Bluetooth LE personal health device

1.6 Deviations from the Standard

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

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
TENUTO 2, Model: 6920, Serial Number: 001			
0	As supplied by the customer	Not Applicable	Not Applicable

Table 3

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: 2.4 GHz Bluetooth Low Energy		
Field Strength of Fundamental	Wenceslao Acosta Carrazco	UKAS
Field Strength of Emissions	Wenceslao Acosta Carrazco	UKAS
20 dB Bandwidth	Wenceslao Acosta Carrazco	UKAS
Authorised Band Edges	Wenceslao Acosta Carrazco	UKAS

Table 4

Laboratory Address: TÜV SÜD, Octagon House,
Concorde Way, Fareham, Hampshire,
PO15 5RL, United Kingdom

2 Test Details

2.1 Field Strength of Fundamental

2.1.1 Specification Reference

FCC 47 CFR Part 15C, Clause 15.249 (a)

2.1.2 Equipment Under Test and Modification State

6920, S/N: 001 - Modification State 0

2.1.3 Date of Test

08-December-2025

2.1.4 Test Method

2.4 GHz Bluetooth Low Energy

The test was performed in accordance with ANSI C63.10, clause 6.3.
EUT was powered with 3.7 VDC internal battery.

2.1.5 Environmental Conditions

Ambient Temperature 19.9 °C
Relative Humidity 51.4 %

2.1.6 Test Results

2.4 GHz Bluetooth Low Energy

Frequency (MHz)	Field Strength (dBµV/m)	
	Peak	Average
2402	83.1	82.1
2440	83.1	82.1
2480	83.0	82.1

Table 5 - Peak Level

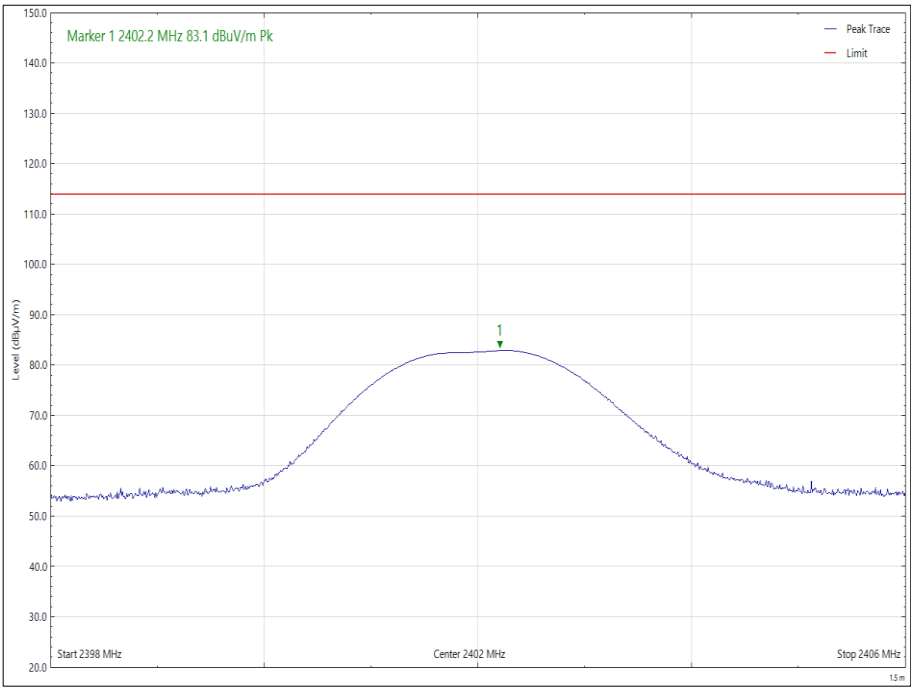


Figure 1 - 2402 MHz, Peak Level

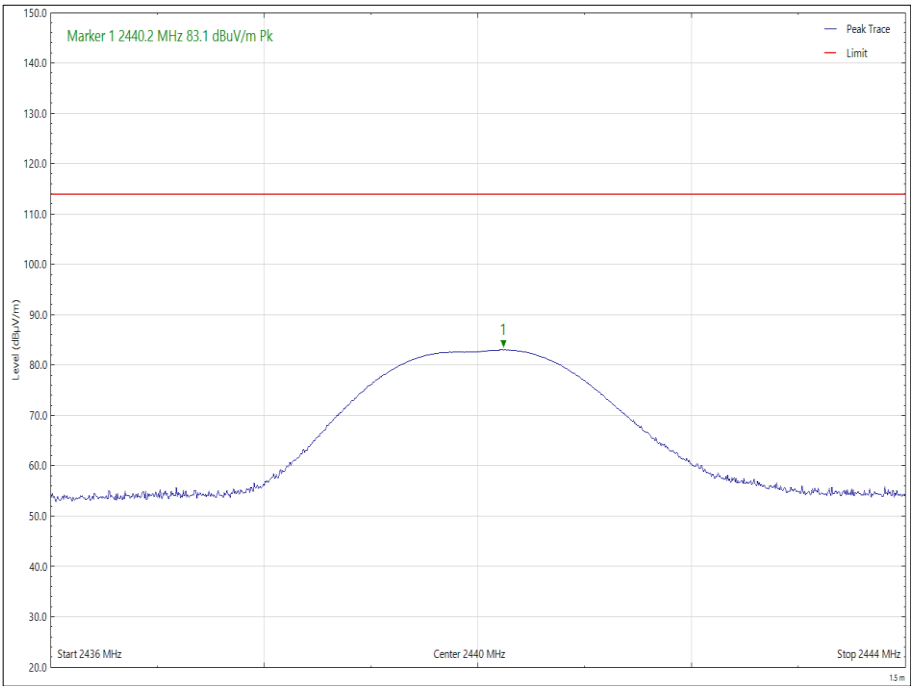


Figure 2 - 2440 MHz, Peak Level

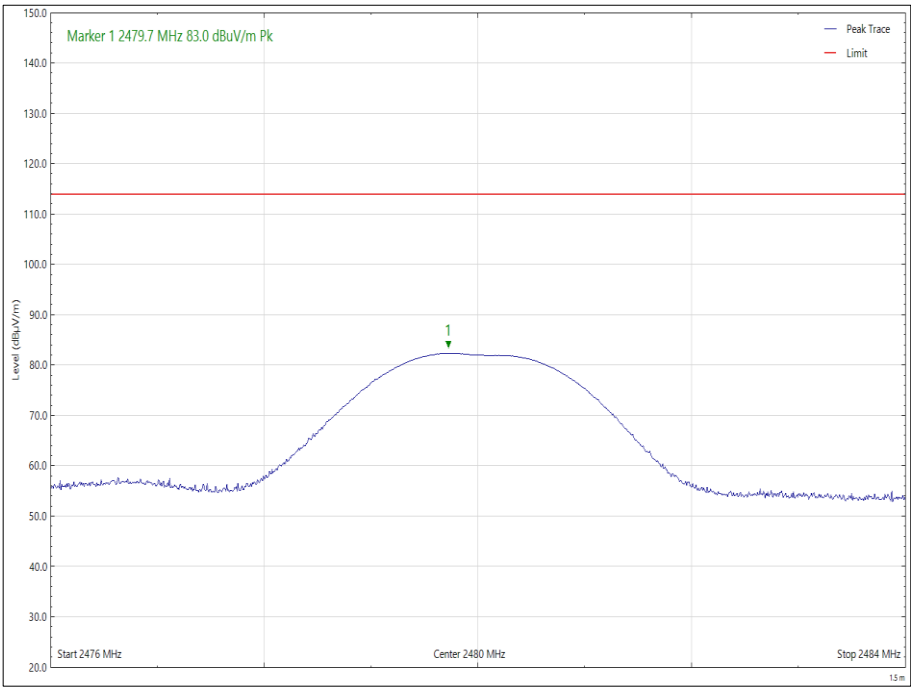


Figure 3 - 2480 MHz, Peak Level

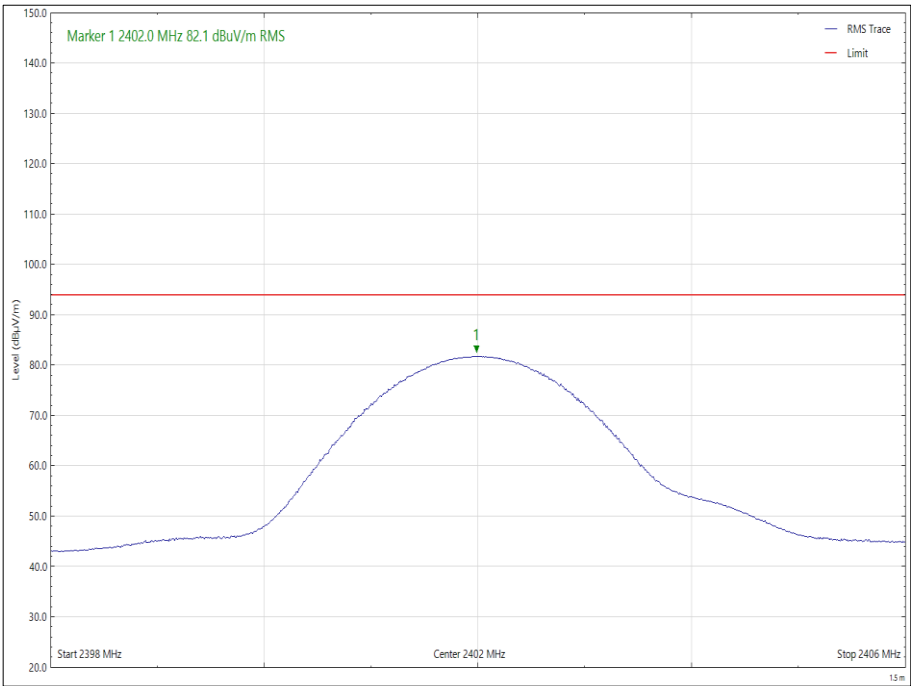


Figure 4 - 2402 MHz, Average Level

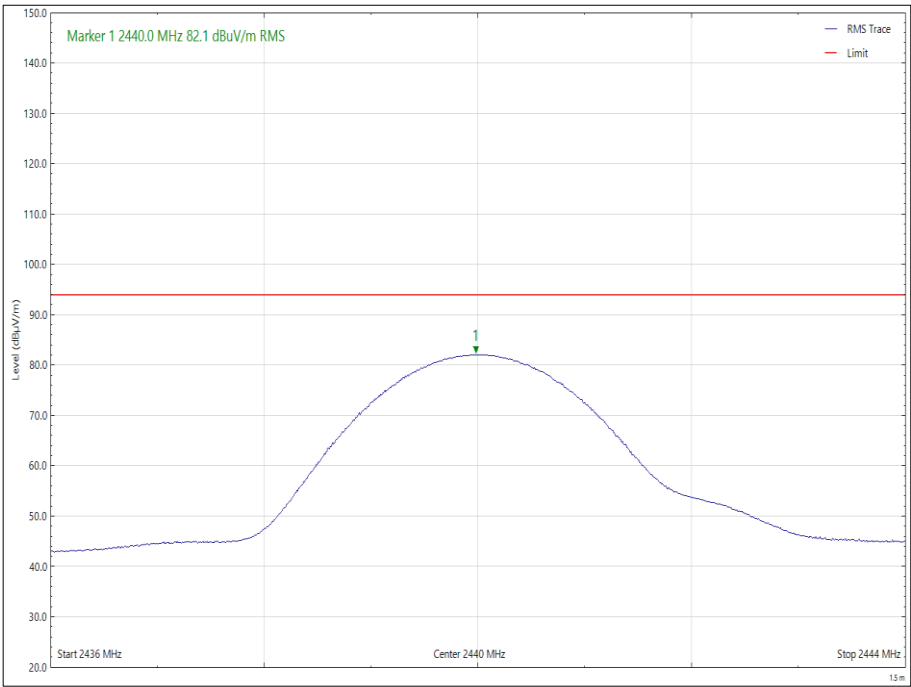


Figure 5 - 2440 MHz, Average Level

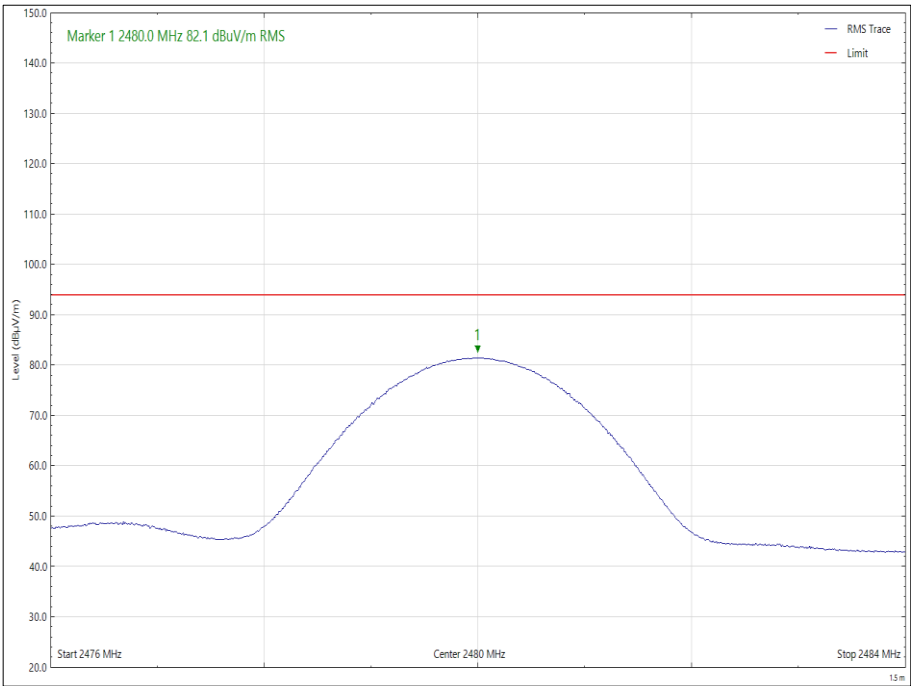


Figure 6 - 2480 MHz, Average Level

FCC 47 CFR Part 15, Limit Clause 15.249 (a)

Fundamental Frequency (MHz)	Average Field Strength of Fundamental (millivolts/meter)	Average Field Strength of Fundamental (dBμV/m)
902 to 928	50	93.98
2400 to 2483.5	50	93.98
5725 to 5875	50	93.98
24000 to 24250	250	107.96

Table 6

FCC 47 CFR Part 15, Limit Clause 15.35 (b)

The limit on peak radio frequency emissions is 20 dB above the maximum permitted average emission limit applicable to the equipment under test. This peak limit applies to the total peak emission level radiated by the device.

2.1.7 Test Location and Test Equipment Used

This test was carried out in RF Chamber 11.

Instrument	Manufacturer	Type No	TE No	Calibration Period (months)	Calibration Expires
Hygrometer	Rotronic	HP21	4741	12	29-May-2026
Emissions Software	TUV SUD	EmX V3.5.5	5125	-	Software
3m Semi-Anechoic Chamber	Rainford	RF Chamber 11	5136	36	14-Nov-2027
Mast	Maturo	TAM 4.0-P	5158	-	TU
Mast and Turntable Controller	Maturo	Maturo NCD	5159	-	TU
Turntable	Maturo	TT 15WF	5160	-	TU
Antenna (DRG, 1 GHz to 10.5 GHz)	Schwarzbeck	BBHA9120B	5215	12	05-Jul-2026
EMI Test Receiver	Rohde & Schwarz	ESW44	5527	12	14-Aug-2026
2m Coaxial Cable Assy	Junkosha	MWX221-02000AMSAMS/A	6360	12	13-May-2026
Cable Assy 8m (N to N) 18GHz	Junkosha	MWX221-08000NMSNMS/B	7049	12	01-Jun-2026

Table 7

TU - Traceability Unscheduled



2.2 Field Strength of Emissions

2.2.1 Specification Reference

FCC 47 CFR Part 15C, Clause 15.249 (a)(d)

2.2.2 Equipment Under Test and Modification State

6920, S/N: 001 - Modification State 0

2.2.3 Date of Test

09-December-2025 to 12-December-2025

2.2.4 Test Method

2.4 GHz Bluetooth Low Energy

The test was performed in accordance with ANSI C63.10, clause 6.3, 6.4 and 6.6.

EUT was powered with 3.7 VDC internal battery.

For frequencies above 18 GHz, the measurement distance was reduced from 3m to 1m and therefore the limit was reduced accordingly using the following formula:

$$20 \cdot \log(1/3) = -9.54 \text{ dB.}$$

2.2.5 Environmental Conditions

Ambient Temperature 19.8 - 22.0 °C

Relative Humidity 43.9 - 51.8 %



2.2.6 Test Results

2.4 GHz Bluetooth Low Energy

Frequency (MHz)	Level	Limit	Margin (dB)	Detector	Unit	Angle (°)	Height (cm)	Polarisation
953.653	26.18	46.00	-19.82	Q-Peak	dBuV/m	8	100	Vertical

Table 8 - CH37_LE1M_X, 2402 MHz, 30 MHz to 26 GHz

No other emissions found within 10 dB of the limit.

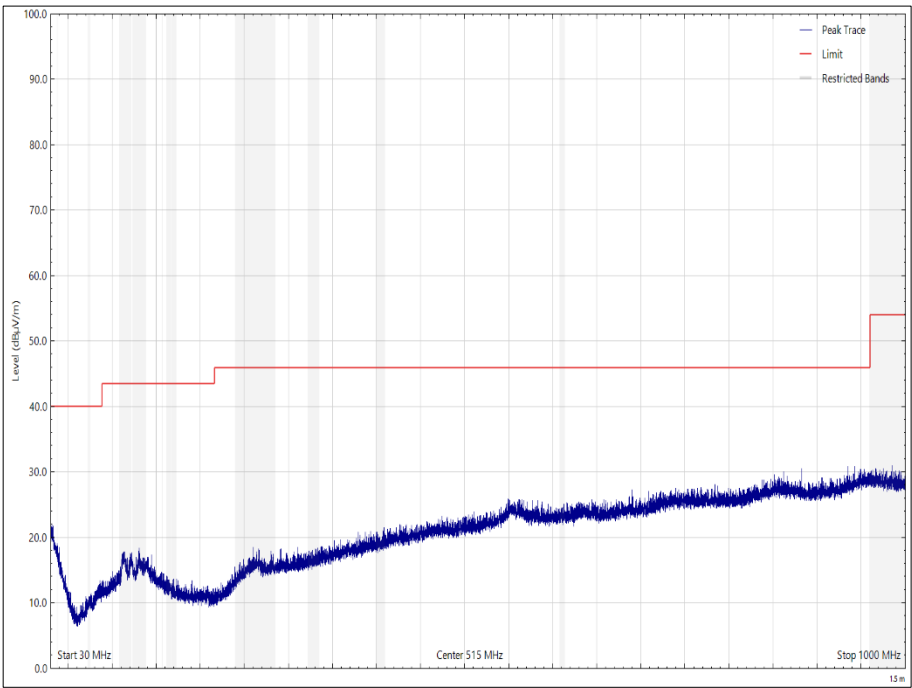


Figure 7 - CH37_LE1M_X, 2402 MHz, 30 MHz to 1 GHz, Horizontal (Peak)

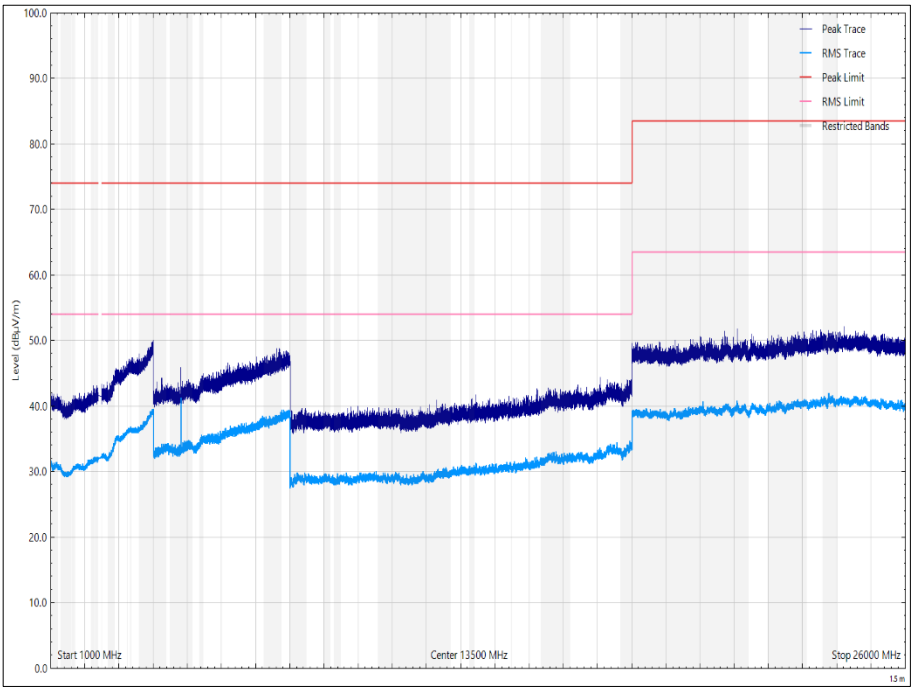


Figure 8 - CH37_LE1M_X, 2402 MHz, 1 GHz to 26 GHz, Horizontal

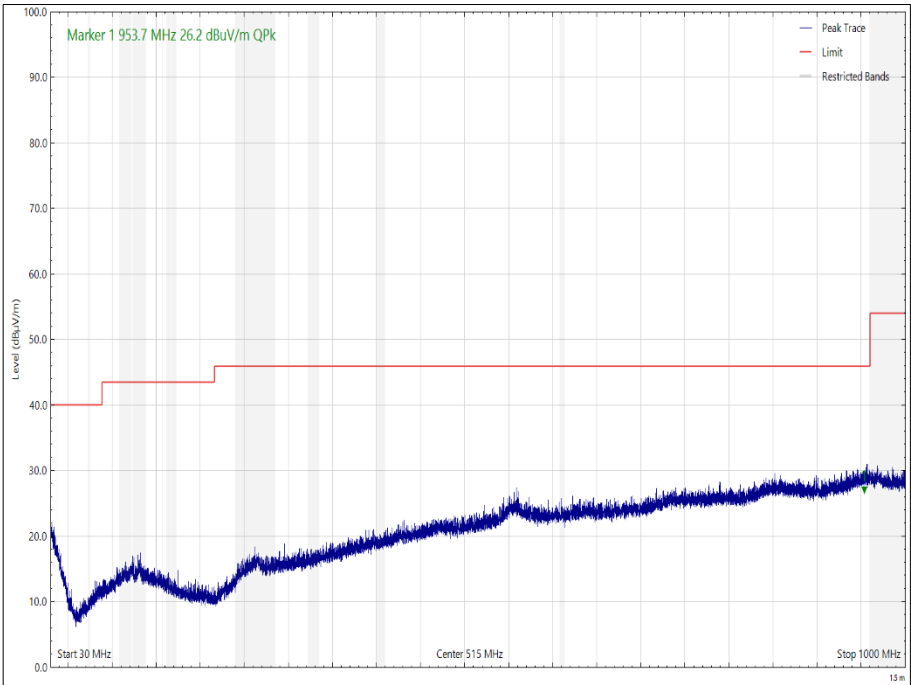


Figure 9 -CH37_LE1M_X, 2402 MHz, 30 MHz to 1 GHz, Vertical (Peak)

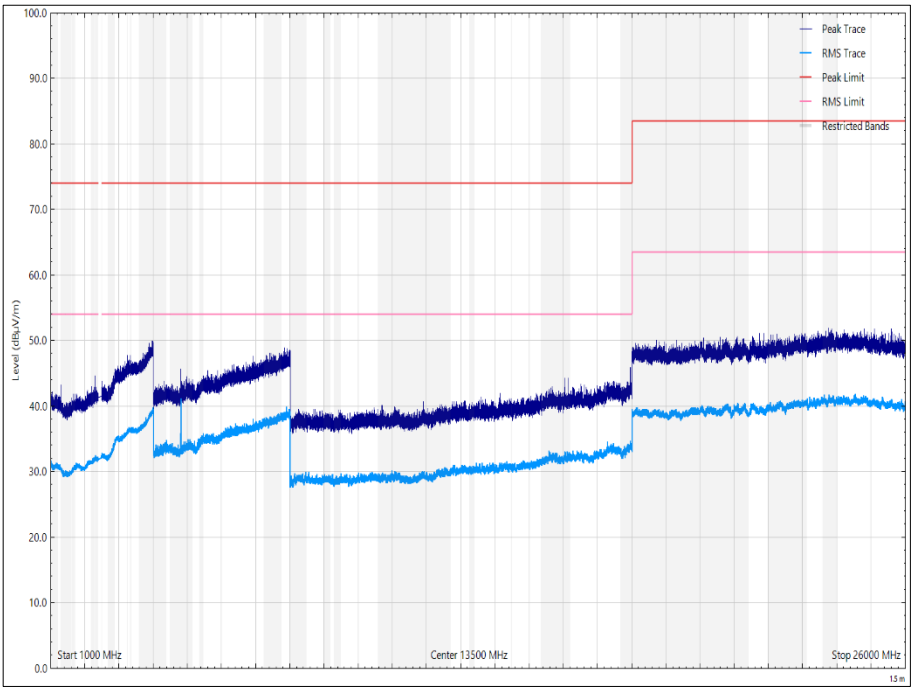


Figure 10 - CH37_LE1M_X, 2402 MHz, 1 GHz to 26 GHz, Vertical



Frequency (MHz)	Level	Limit	Margin (dB)	Detector	Unit	Angle (°)	Height (cm)	Polarisation
*								

Table 9 - CH37_LE1M_Y, 2402 MHz, 30 MHz to 26 GHz

* No emissions found within 10 dB of the limit.

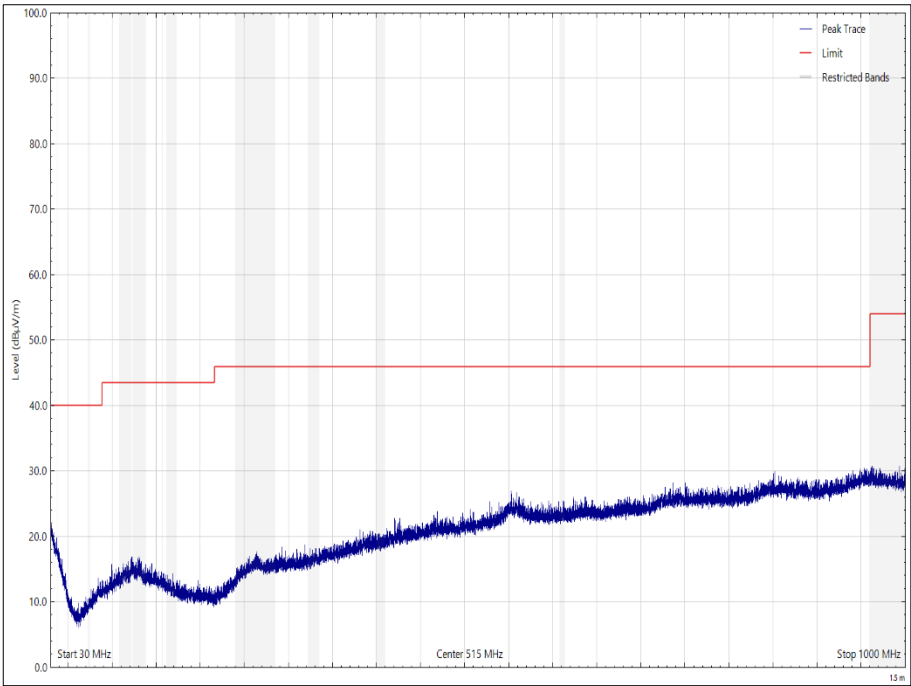


Figure 11 - CH37_LE1M_Y, 2402 MHz, 30 MHz to 1 GHz, Horizontal (Peak)

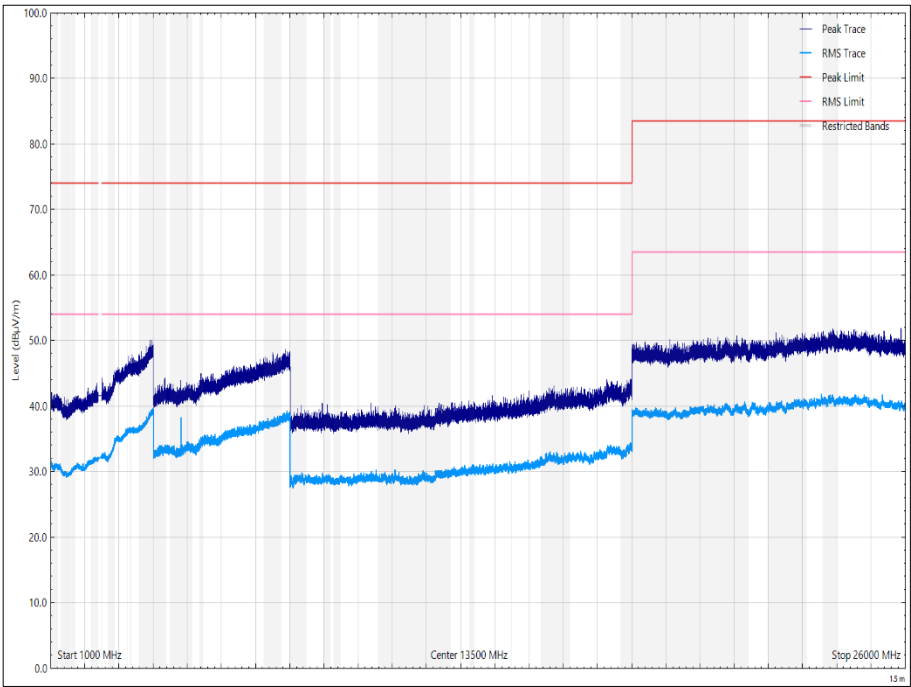


Figure 12 - CH37_LE1M_Y, 2402 MHz, 1 GHz to 26 GHz, Horizontal

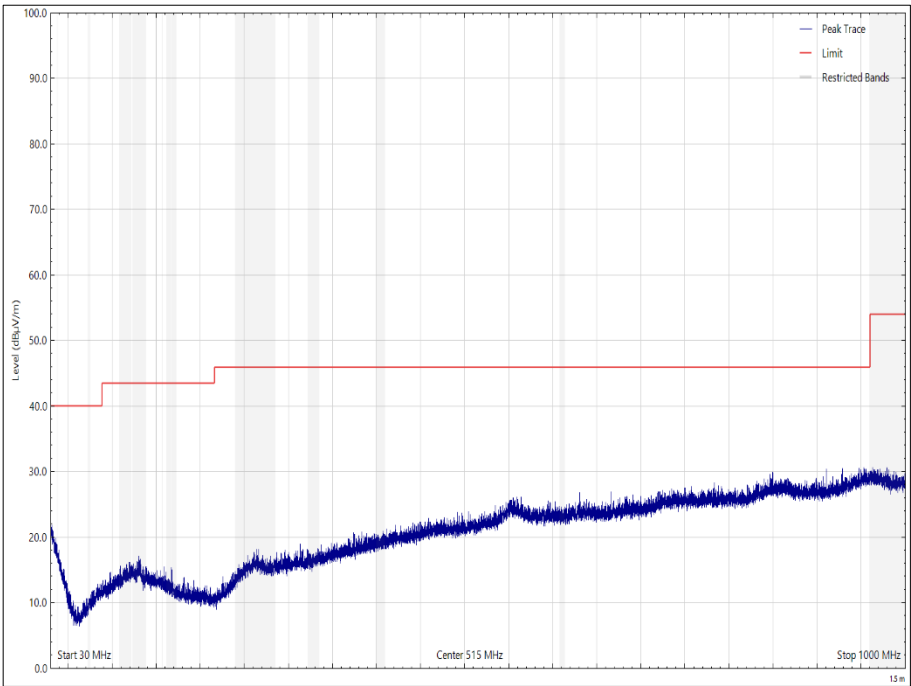


Figure 13 - CH37_LE1M_Y, 2402 MHz, 30 MHz to 1 GHz, Vertical (Peak)

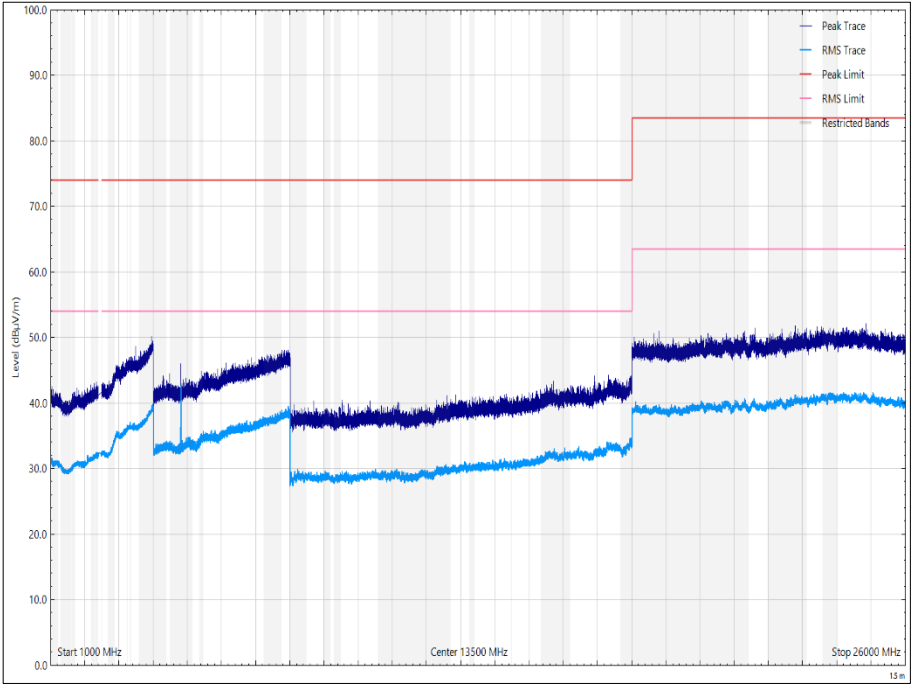


Figure 14 - CH37_LE1M_Y, 2402 MHz, 30 MHz to 1 GHz, Vertical (Peak)



Frequency (MHz)	Level	Limit	Margin (dB)	Detector	Unit	Angle (°)	Height (cm)	Polarisation
*								

Table 10 - CH37_LE1M_Z, 2402 MHz, 30 MHz to 26 GHz

* No emissions found within 10 dB of the limit.

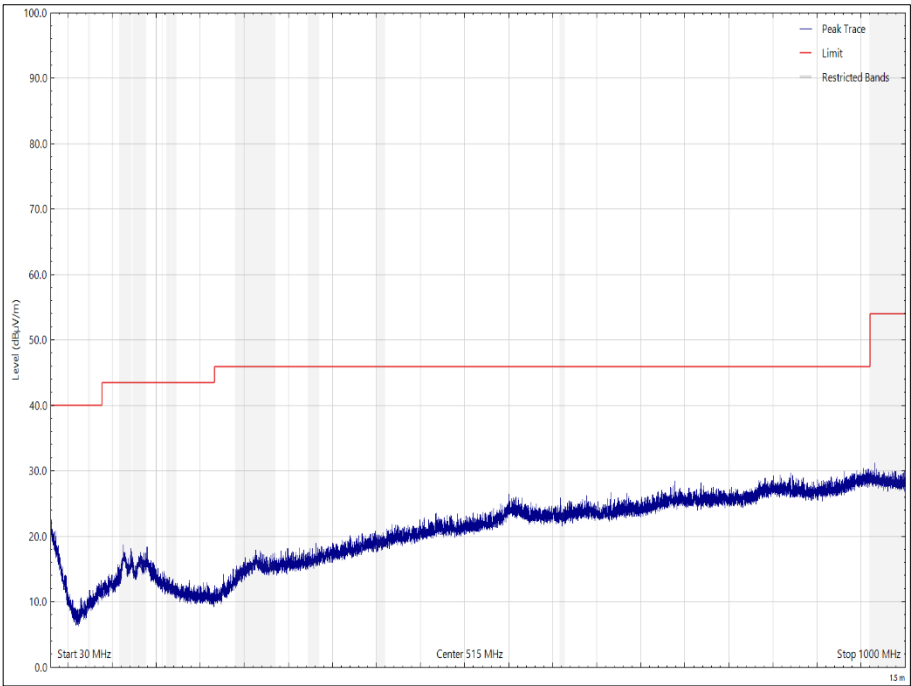


Figure 15 - CH37_LE1M_Z, 2402 MHz, 30 MHz to 1 GHz, Horizontal (Peak)

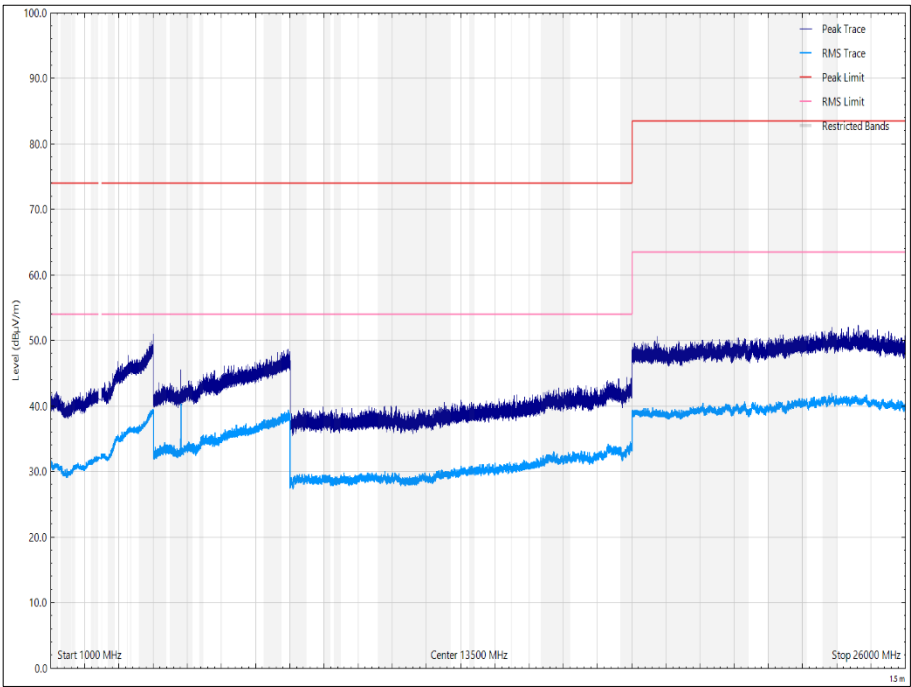


Figure 16 - CH37_LE1M_Z, 2402 MHz, 1 GHz to 26 GHz, Horizontal

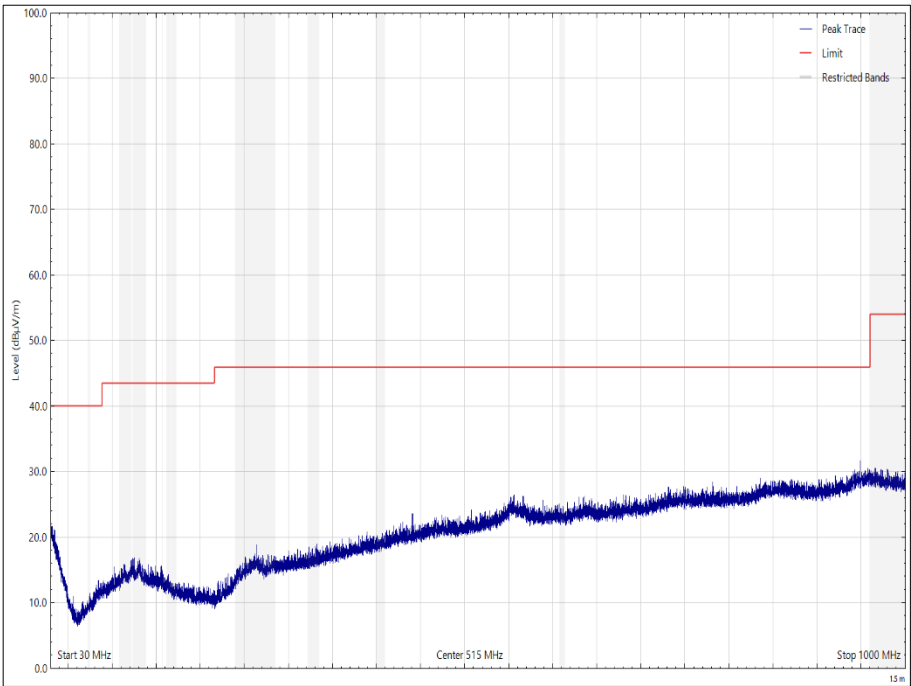


Figure 17 - CH37_LE1M_Z, 2402 MHz, 30 MHz to 1 GHz, Vertical (Peak)

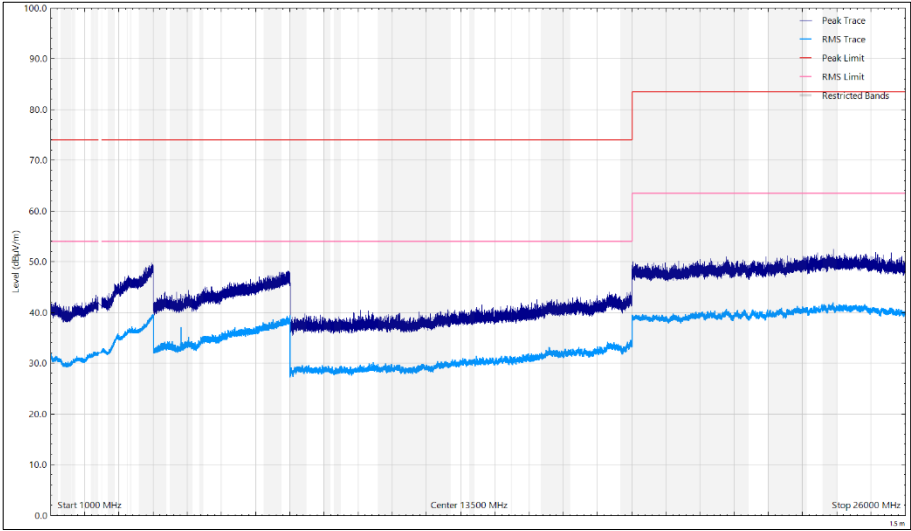


Figure 18 - CH37_LE1M_Z, 2402 MHz, 1 GHz to 26 GHz, Vertical



Frequency (MHz)	Level	Limit	Margin (dB)	Detector	Unit	Angle (°)	Height (cm)	Polarisation
*								

Table 11 - CH19_LE1M_X, 2440 MHz, 30 MHz to 26 GHz

* No emissions found within 10 dB of the limit.

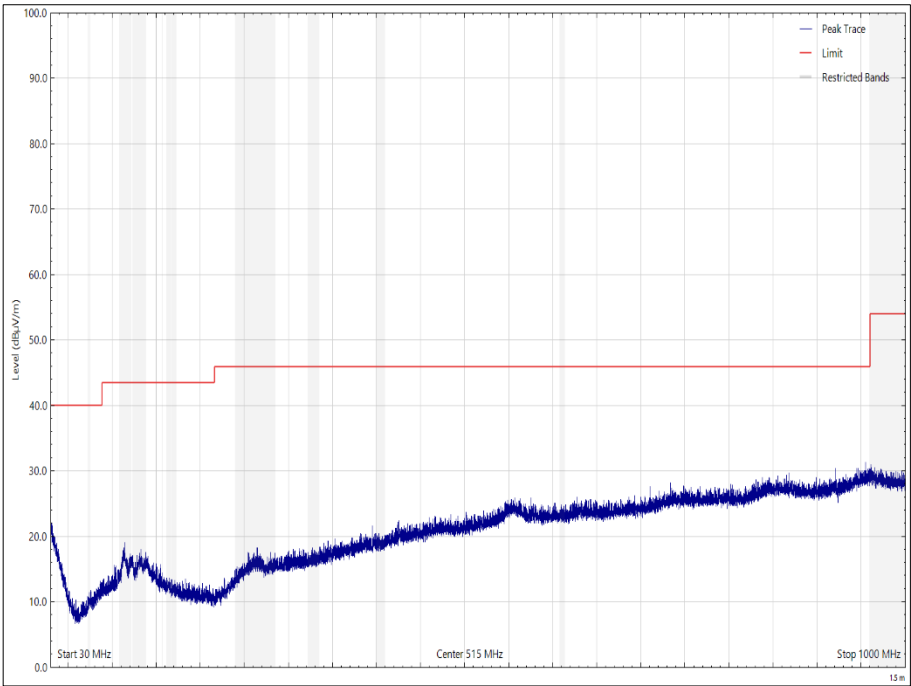


Figure 19 – CH19_LE1M_X, 2440 MHz, 30 MHz to 1 GHz, Horizontal (Peak)

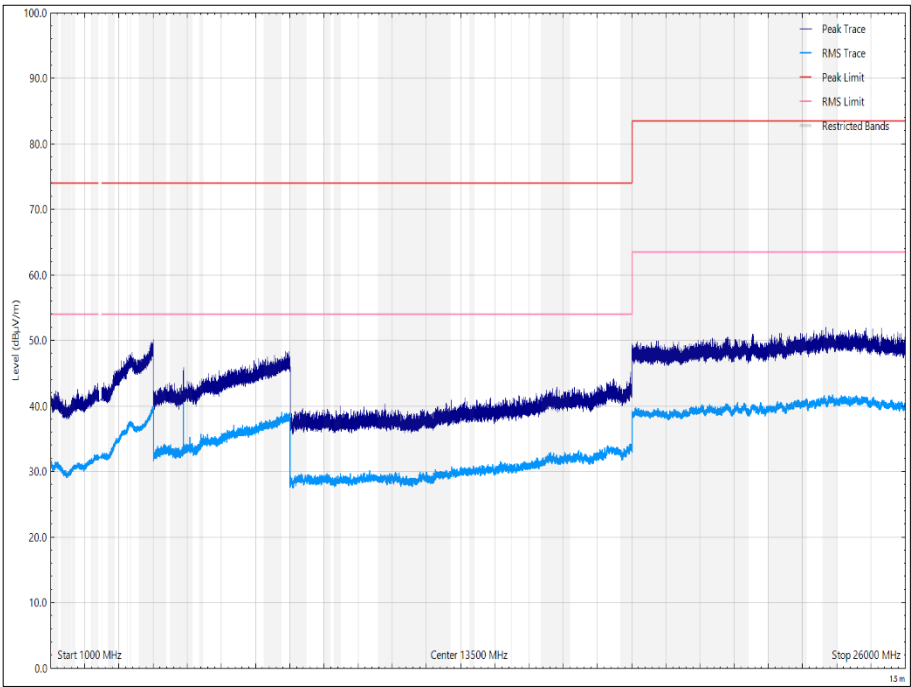


Figure 20 - CH19_LE1M_X, 2440 MHz, 1 GHz to 26 GHz, Horizontal (Peak)

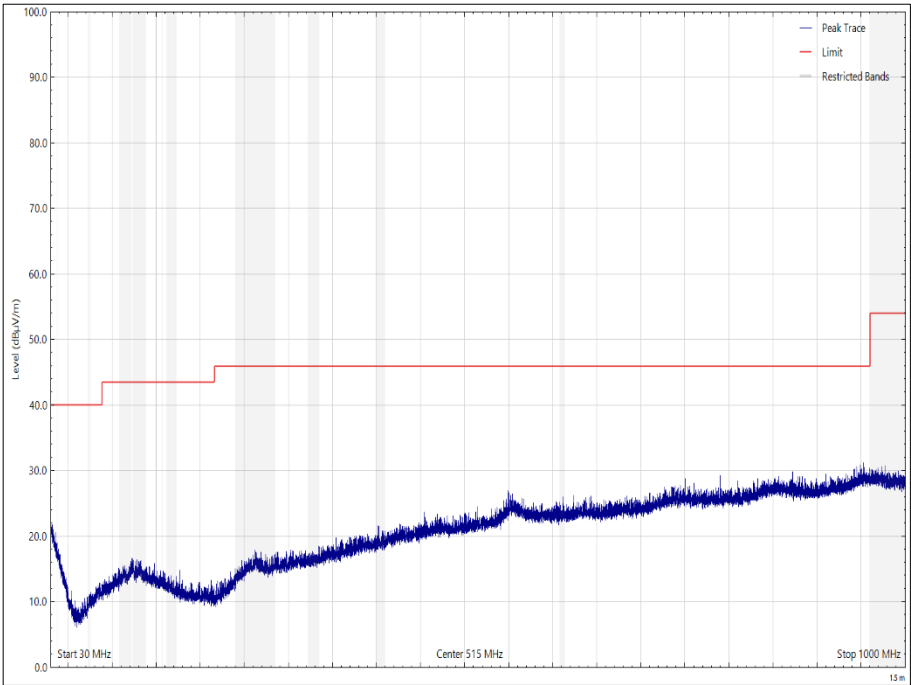


Figure 21 - CH19_LE1M_X, 2440 MHz, 30 MHz to 1 GHz, Vertical (Peak)

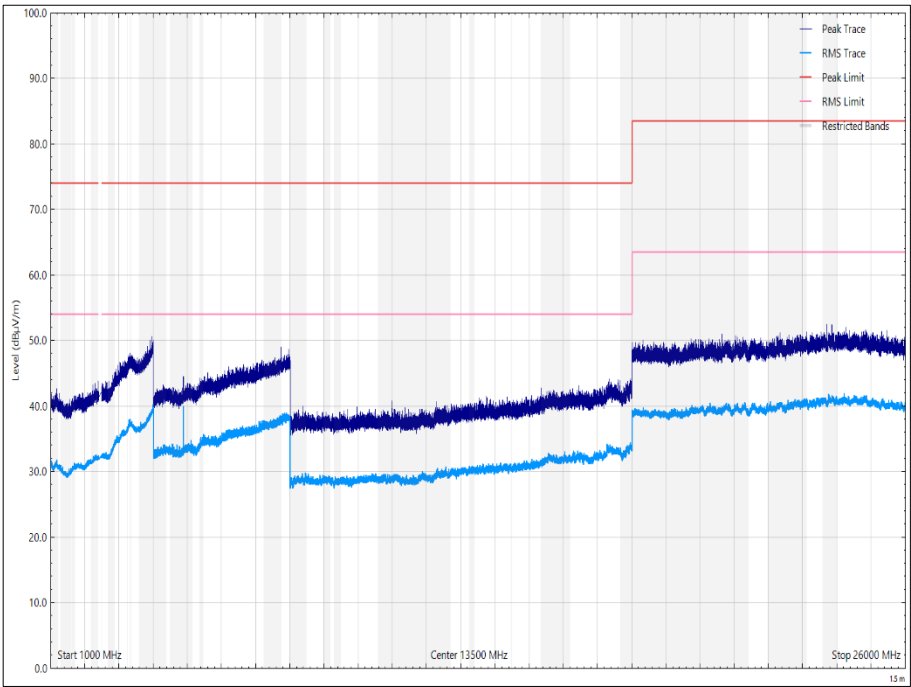


Figure 22 - CH19_LE1M_X, 2440 MHz, 1 GHz to 26 GHz, Vertical (Peak)



Frequency (MHz)	Level	Limit	Margin (dB)	Detector	Unit	Angle (°)	Height (cm)	Polarisation
*								

Table 12 - CH19_LE1M_Y, 2440 MHz, 30 MHz to 26 GHz

* No emissions found within 10 dB of the limit.

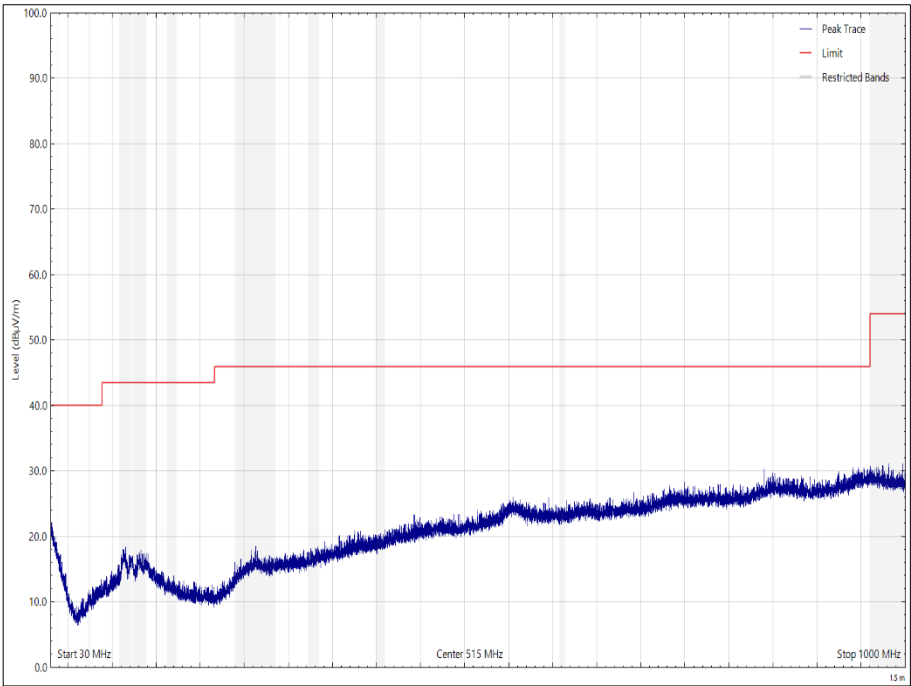


Figure 23 - CH19_LE1M_Y, 2440 MHz, 30 MHz to 1 GHz, Horizontal (Peak)

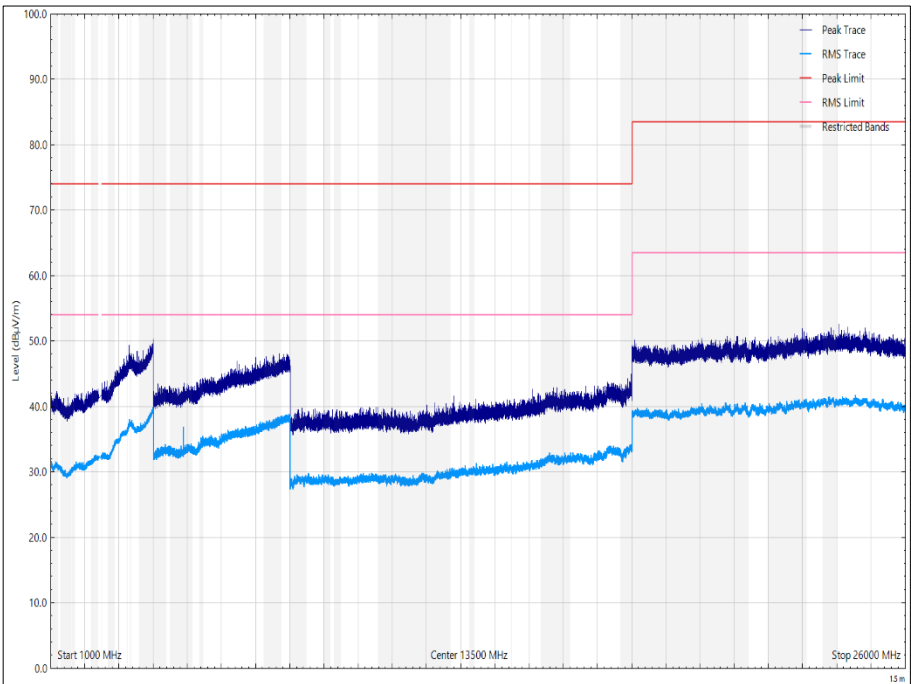


Figure 24 - CH19_LE1M_Y, 2440 MHz, 1 GHz to 26 GHz, Horizontal (Peak)

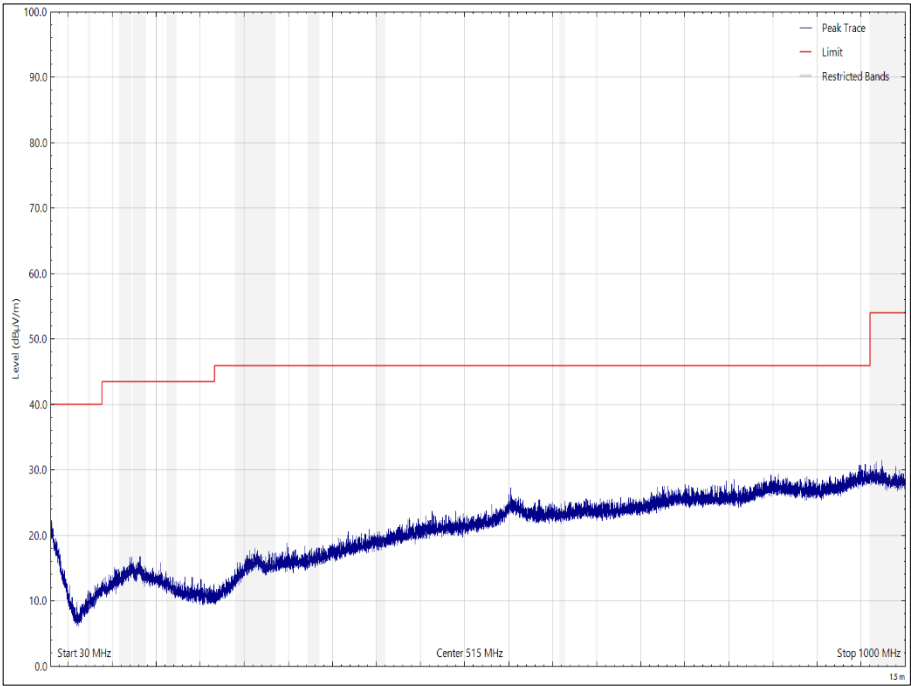


Figure 25 - CH19_LE1M_Y, 2440 MHz, 30 MHz to 1 GHz, Vertical (Peak)

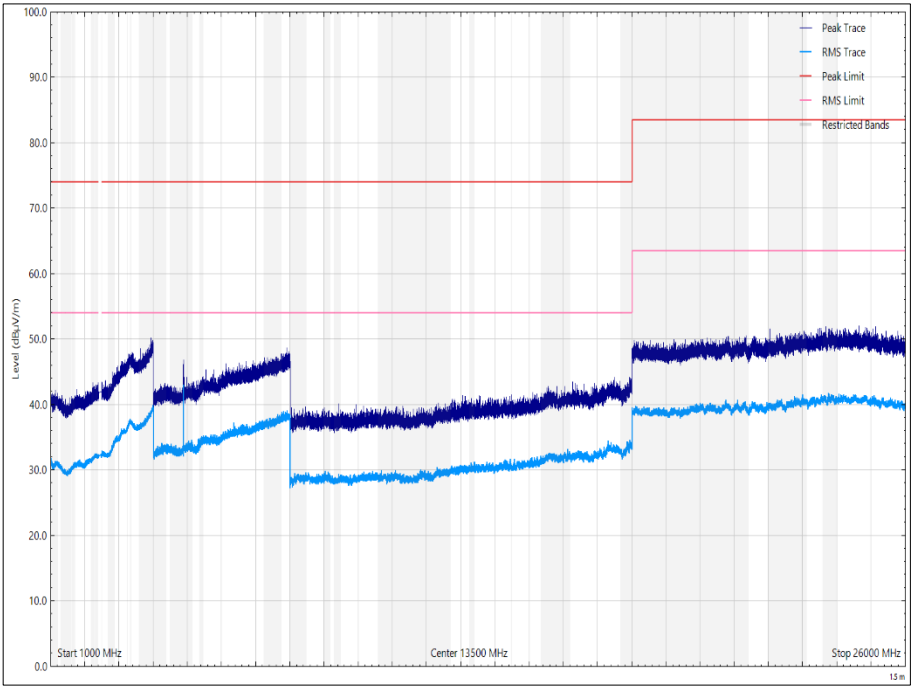


Figure 26 - CH19_LE1M_Y, 2440 MHz, 1 GHz to 26 GHz, Vertical (Peak)



Frequency (MHz)	Level	Limit	Margin (dB)	Detector	Unit	Angle (°)	Height (cm)	Polarisation
*								

Table 13 - CH19_LE1M_Z, 2440 MHz, 30 MHz to 26 GHz

* No emissions found within 10 dB of the limit.

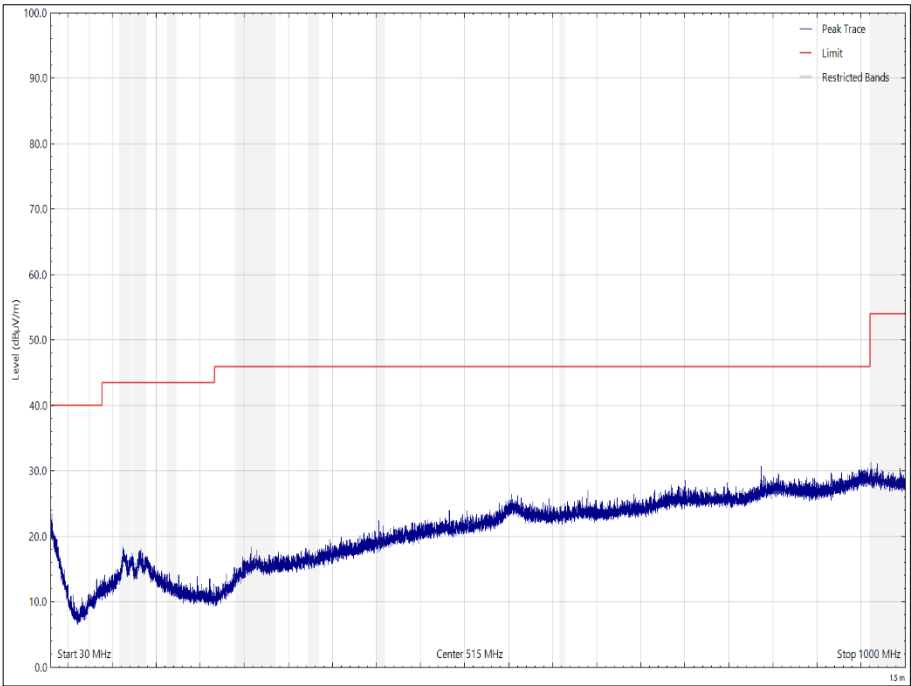


Figure 27 - CH19_LE1M_Z, 2440 MHz, 30 MHz to 1 GHz, Horizontal (Peak)

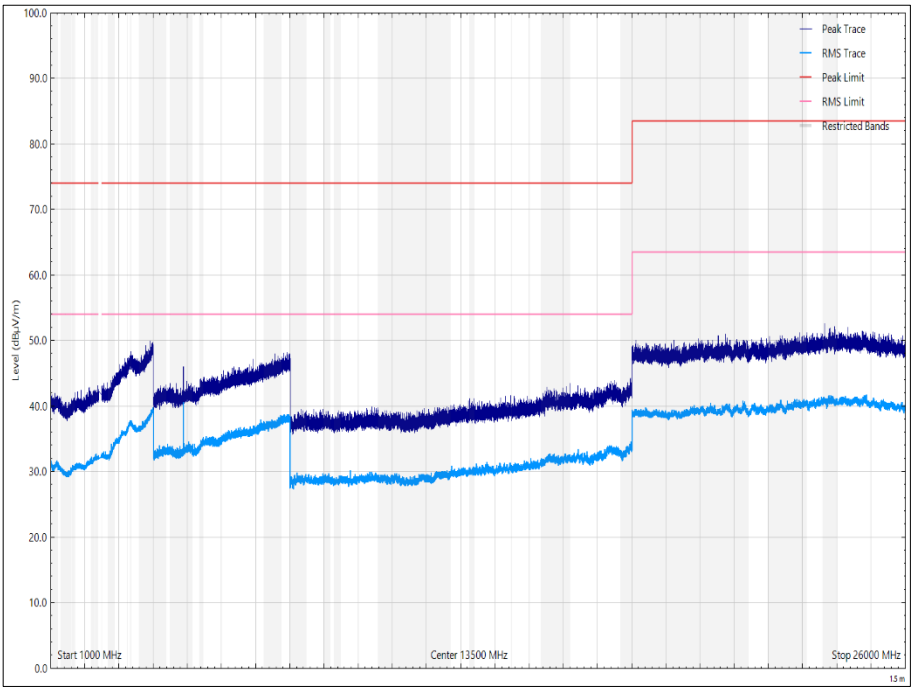


Figure 28 - CH19_LE1M_Z, 2440 MHz, 1 GHz to 26 GHz, Horizontal (Peak)

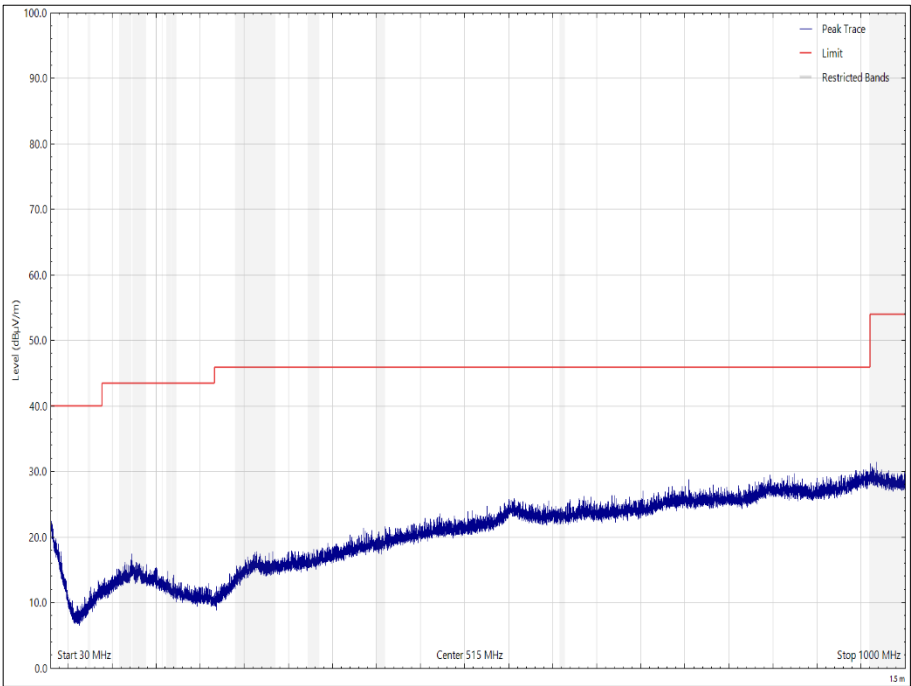


Figure 29 - CH19_LE1M_Z, 2440 MHz, 30 MHz to 1 GHz, Vertical (Peak)

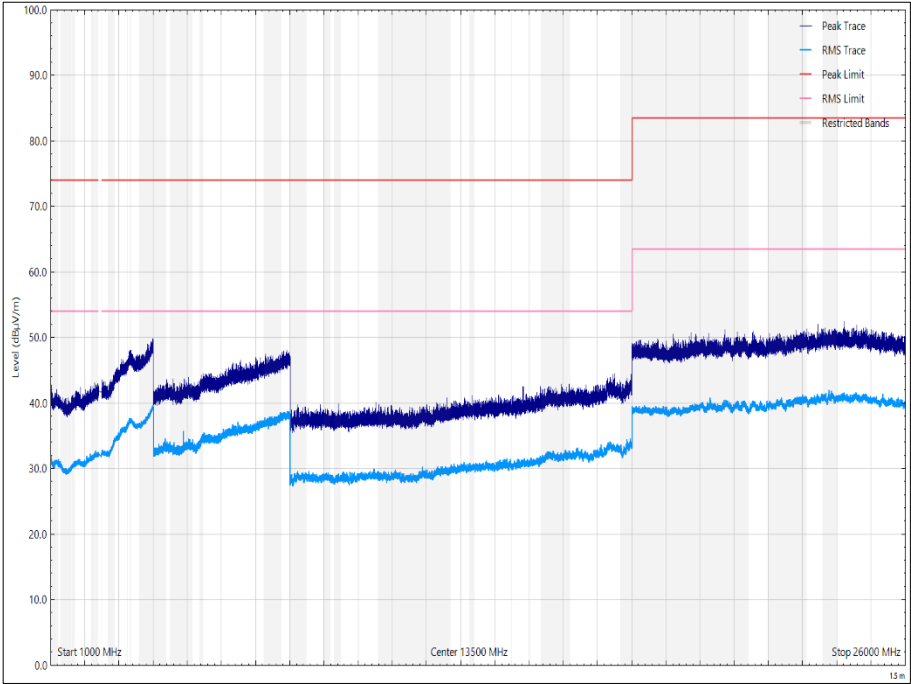


Figure 30 - CH19_LE1M_Z, 2440 MHz, 1 GHz to 26 GHz, Vertical (Peak)



Frequency (MHz)	Level	Limit	Margin (dB)	Detector	Unit	Angle (°)	Height (cm)	Polarisation
*								

Table 14 – CH39_LE1M_X, 2480 MHz, 30 MHz to 26 GHz

* No emissions found within 10 dB of the limit.

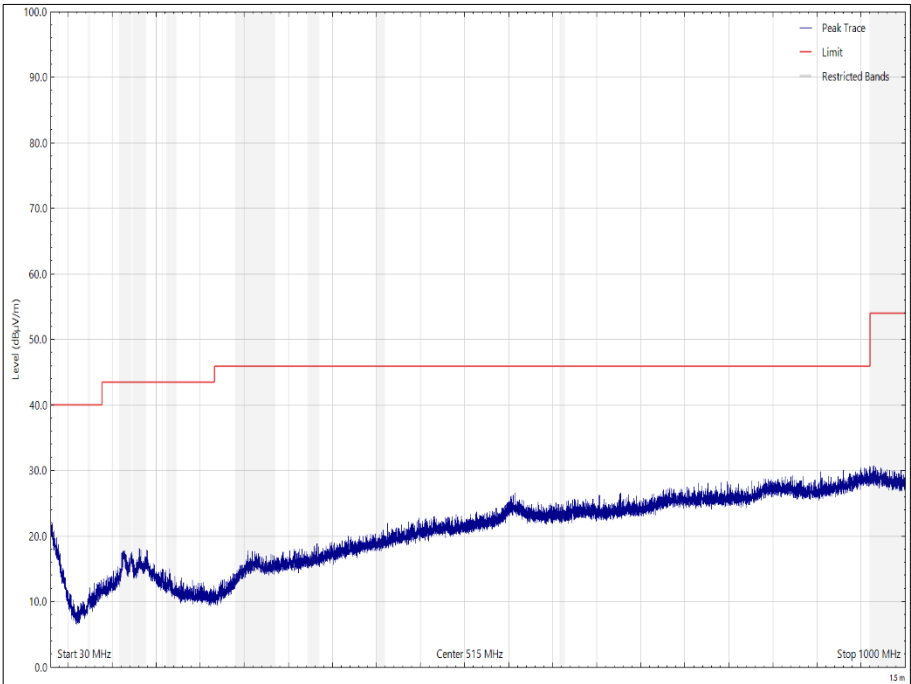


Figure 31 – CH39_LE1M_X, 2480 MHz, 30 MHz to 1 GHz, Horizontal (Peak)

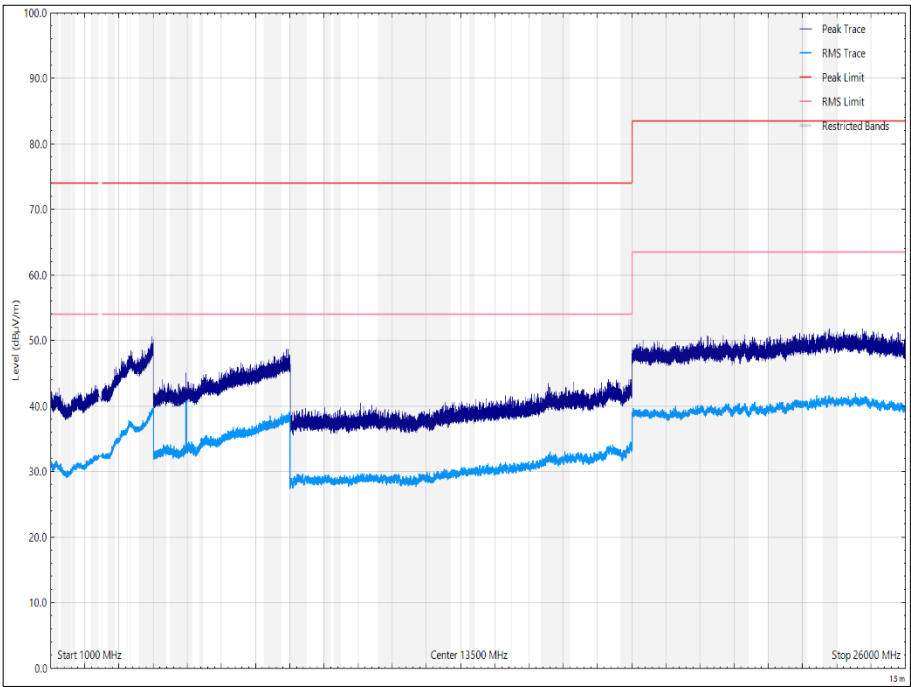


Figure 32 - CH39_LE1M_X, 2480 MHz, 1 GHz to 26 GHz, Horizontal (Peak)

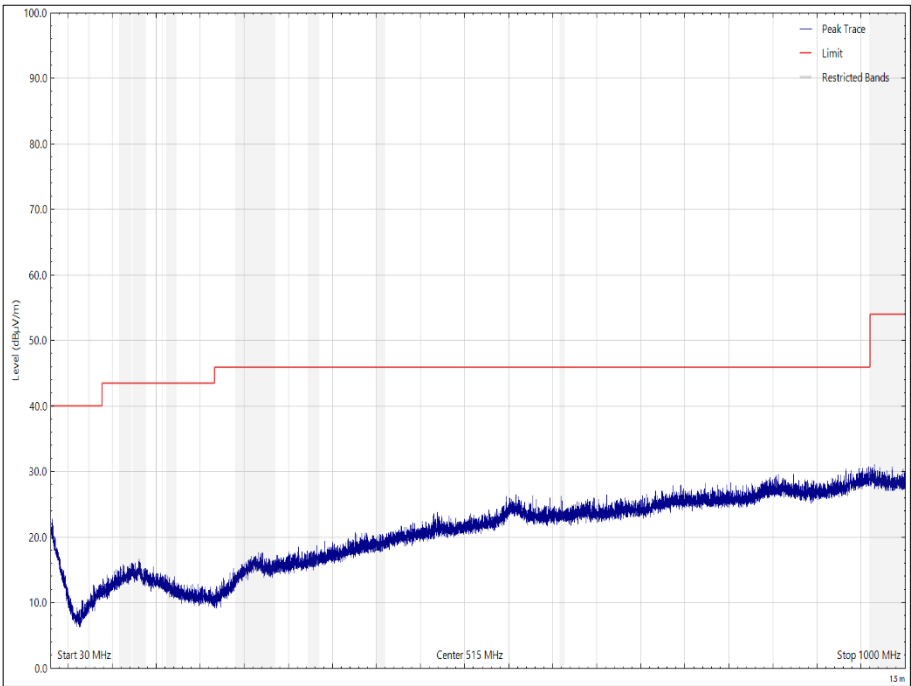


Figure 33 - CH39_LE1M_X, 2480 MHz, 30 MHz to 1 GHz, Vertical (Peak)

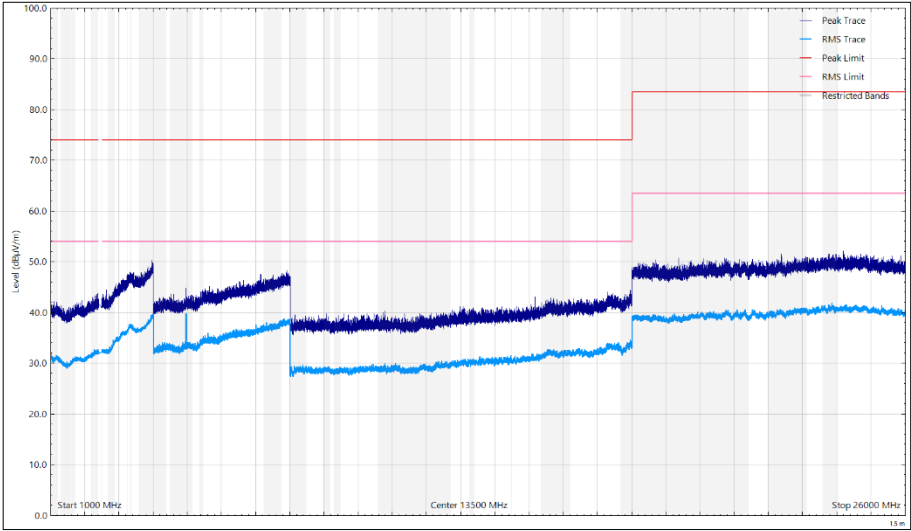


Figure 34 - CH39_LE1M_X, 2480 MHz, 1 GHz to 26 GHz, Vertical (Peak)



Frequency (MHz)	Level	Limit	Margin (dB)	Detector	Unit	Angle (°)	Height (cm)	Polarisation
*								

Table 15 – CH39_LE1M_Y, 2480 MHz, 30 MHz to 26 GHz

* No emissions found within 10 dB of the limit.

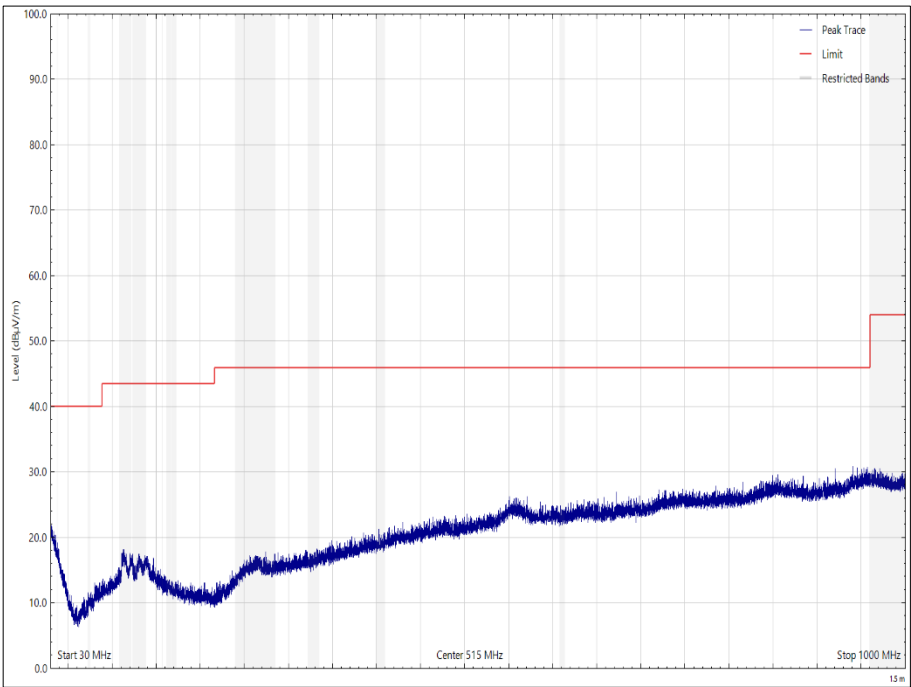


Figure 35 - CH39_LE1M_Y, 2480 MHz, 30 MHz to 1 GHz, Horizontal (Peak)

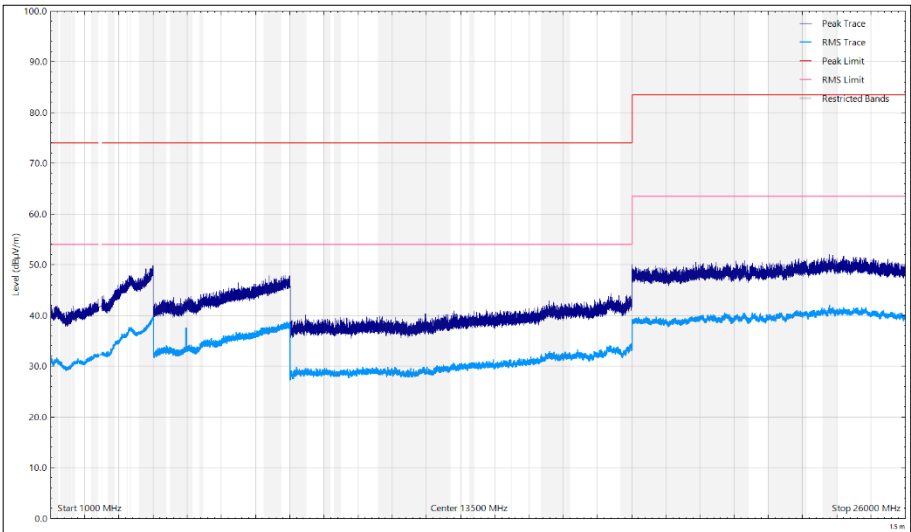


Figure 36 - CH39_LE1M_Y, 2480 MHz, 1 GHz to 26 GHz, Horizontal (Peak)

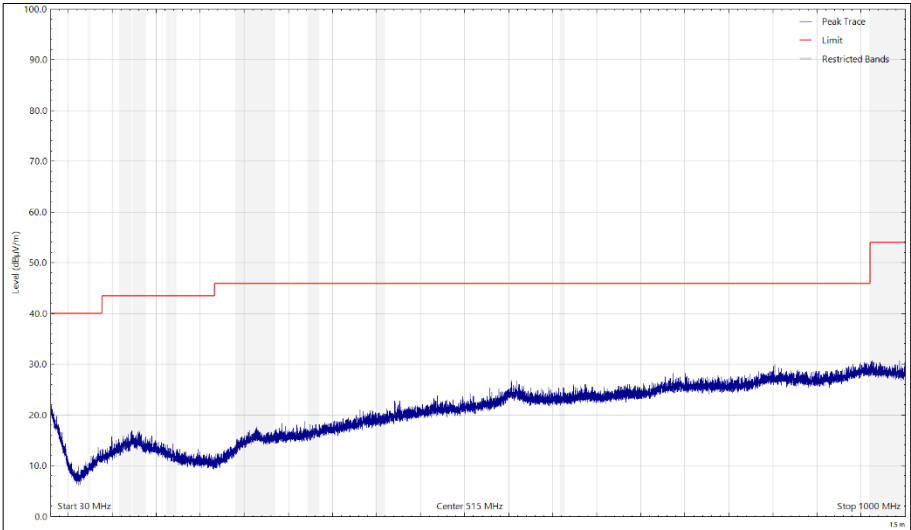


Figure 37 - CH39_LE1M_Y, 2480 MHz, 30 MHz to 1 GHz, Vertical (Peak)

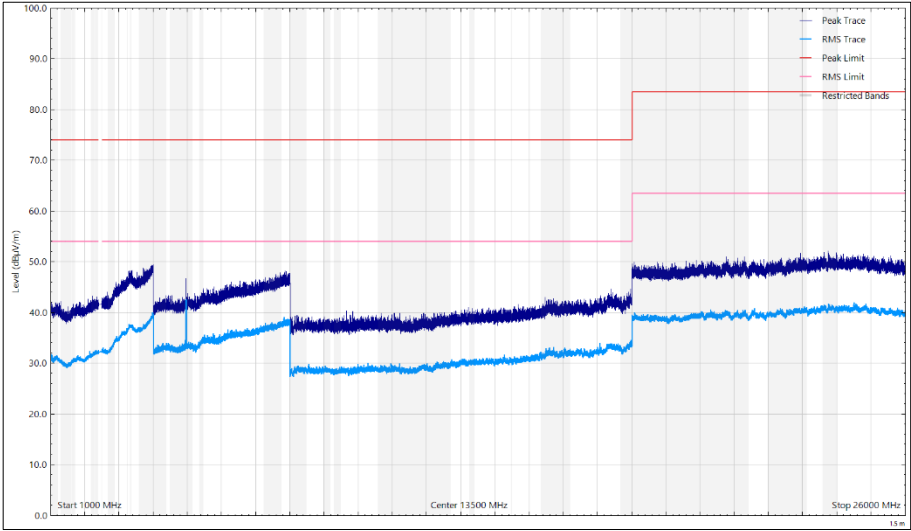


Figure 38 - CH39_LE1M_Y, 2480 MHz, 1 GHz to 26 GHz, Vertical (Peak)



Frequency (MHz)	Level	Limit	Margin (dB)	Detector	Unit	Angle (°)	Height (cm)	Polarisation
*								

Table 16 – CH39_LE1M_Z, 2480 MHz, 30 MHz to 26 GHz

* No emissions found within 10 dB of the limit.

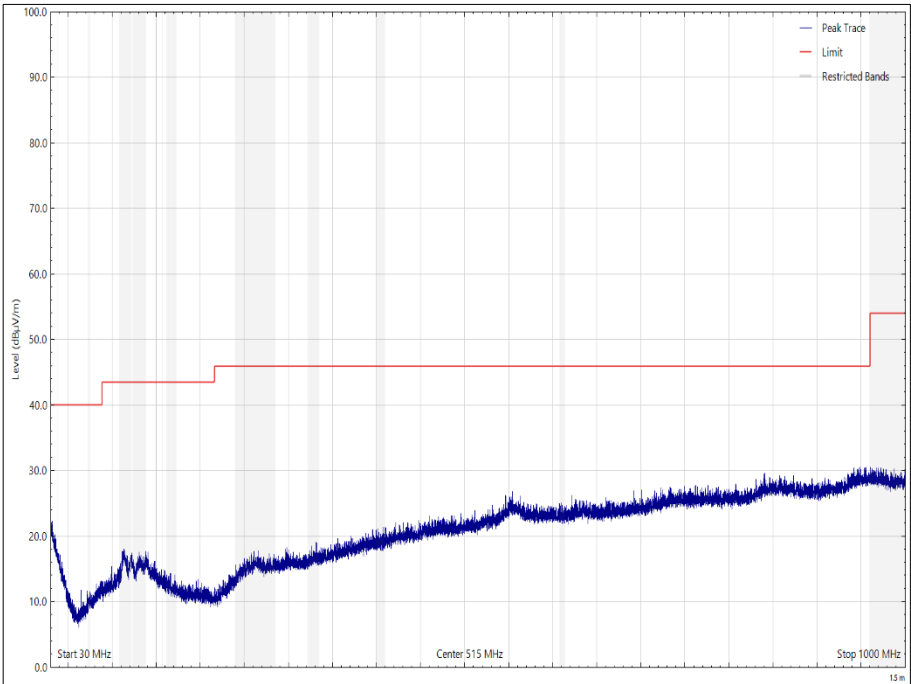


Figure 39 - CH39_LE1M_Z, 2480 MHz, 30 MHz to 1 GHz, Horizontal (Peak)

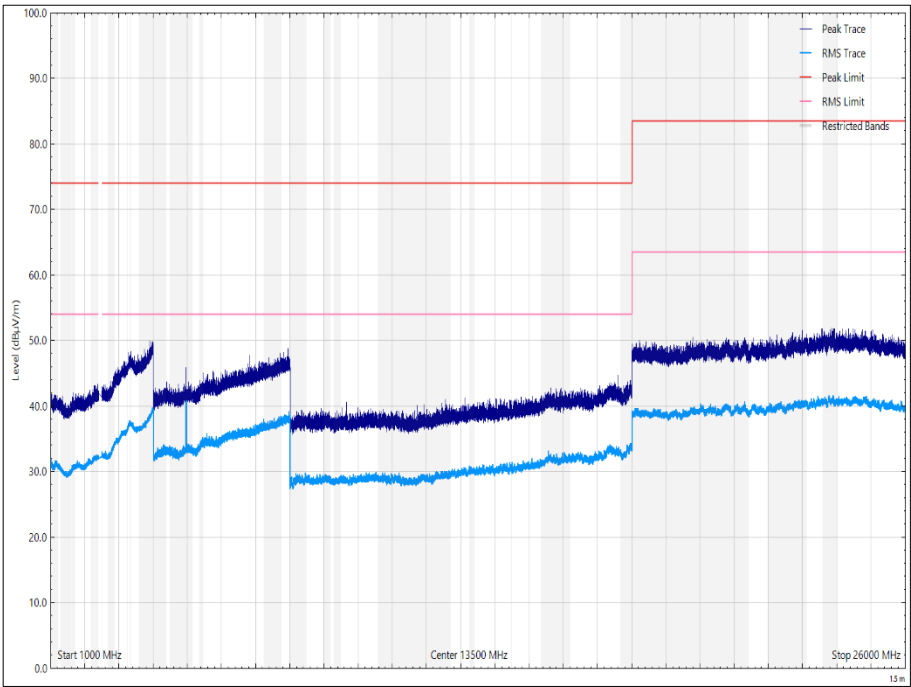


Figure 40 - CH39_LE1M_Z, 2480 MHz, 1 GHz to 26 GHz, Horizontal (Peak)

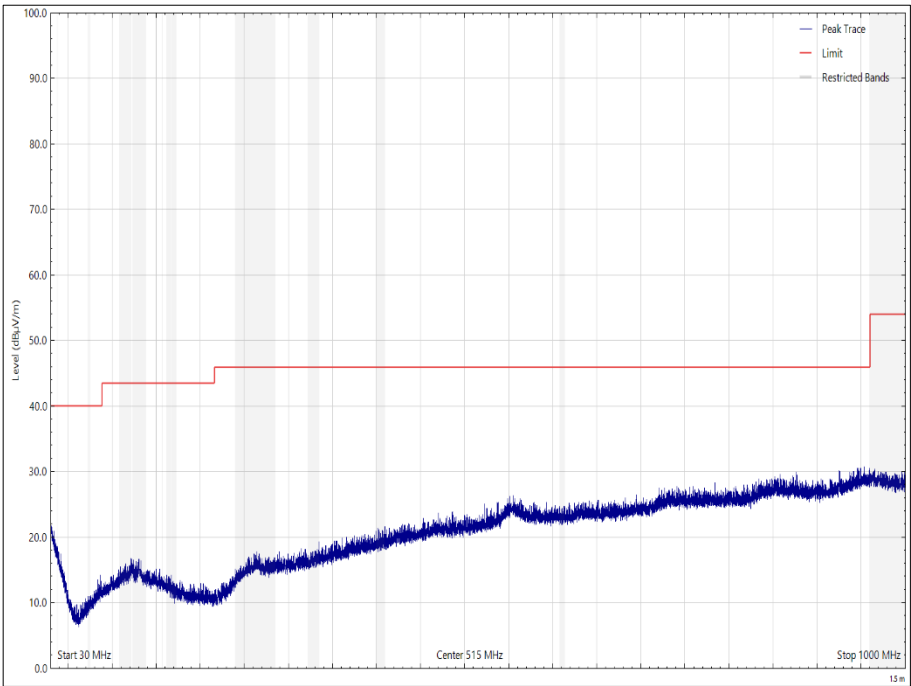


Figure 41 - CH39_LE1M_Z, 2480 MHz, 30 MHz to 1 GHz, Vertical (Peak)

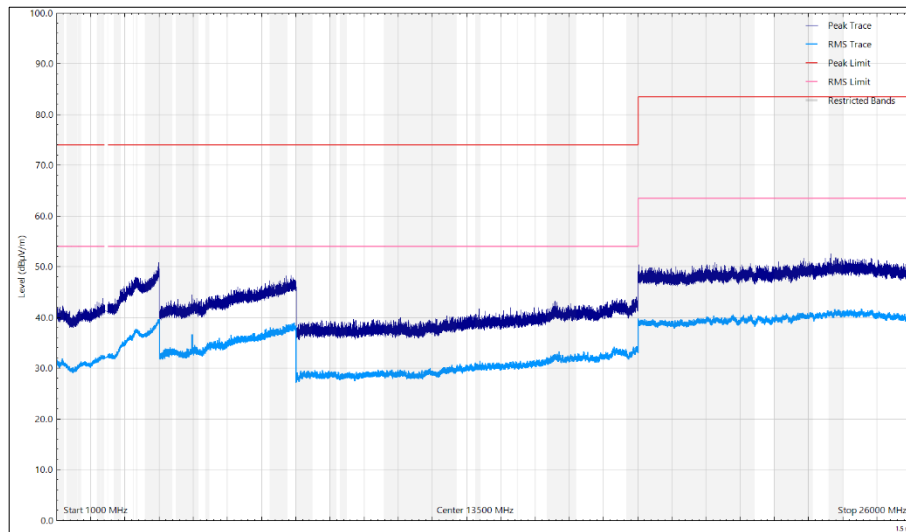


Figure 42 - CH39_LE1M_Z, 2480 MHz, 1 GHz to 26 GHz, Vertical (Peak)

FCC 47 CFR Part 15. Limit Clause 15.249 (a)

Fundamental Frequency (MHz)	Field Strength of Harmonics (microvolts/meter)
902 to 928	500
2400 to 2483.5	500
5725 to 5875	500
24000 to 24250	2500

Table 17 - FCC Limit Table - 15.249

FCC 47 CFR Part 15. Limit Clause 15.249 (d) and 15.209

Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in 15.209, whichever is the lesser attenuation.

Frequency (MHz)	Field Strength (microvolts/meter)
0.009 to 0.490	2400/F (kHz)
0.490 to 1.705	24000/F (kHz)
1.705 to 30.0	30
30 to 88	100
88 to 216	150
216 to 960	200
Above 960	500

Table 18 - FCC Limit Table - 15.209

2.2.7 Test Location and Test Equipment Used

This test was carried out in RF Chamber 11.

Instrument	Manufacturer	Type No	TE No	Calibration Period (months)	Calibration Expires
Antenna (DRG, 18 GHz to 40 GHz)	Link Microtek Ltd	AM180HA-K-TU2	230	24	08-Oct-2026
True RMS Multimeter	Fluke	79 Series III	411	12	09-Jan-2026
Pre-Amplifier (18 GHz to 40 GHz)	Phase One	PSO4-0087	1534	12	20-Oct-2026
Programmable Power Supply	Iso-tech	IPS 2010	2437	-	O/P Mon
Hygrometer	Rotronic	HP21	4741	12	29-May-2026
Emissions Software	TUV SUD	EmX V3.5.5	5125	-	Software
3m Semi-Anechoic Chamber	Rainford	RF Chamber 11	5136	36	14-Nov-2027
Mast	Maturo	TAM 4.0-P	5158	-	TU
Mast and Turntable Controller	Maturo	Maturo NCD	5159	-	TU
Turntable	Maturo	TT 15WF	5160	-	TU
Antenna (DRG, 1 GHz to 10.5 GHz)	Schwarzbeck	BBHA9120B	5215	12	05-Jul-2026
Antenna (DRG, 7.5 GHz to 18 GHz)	Schwarzbeck	HWRD750	5216	12	12-Jul-2026
3 GHz High pass filter	Wainwright	WHKX12-2580-3000-18000-80SS	5220	12	04-Apr-2026
Signal Analyzer	Keysight Technologies	PXA N9030B	5432	12	19-Aug-2026
Pre-Amplifier (1 GHz to 26.5 GHz)	Agilent Technologies	8449B	5445	12	10-Jul-2026
Cable (K-Type to K-Type, 1 m)	Junkosha	MWX241-01000KMSKMS/A	5511	12	06-Jun-2026
Cable (K-Type to K-Type, 1 m)	Junkosha	MWX241-01000KMSKMS/A	5512	12	06-Jun-2026
EMI Test Receiver	Rohde & Schwarz	ESW44	5527	12	14-Aug-2026
7 GHz High pass Filter	Wainwright	WHKX12-5850-6800-18000-80SS	5550	12	30-May-2026
Pre-Amplifier (8 GHz to 18 GHz)	Wright Technologies	APS06-0061	5595	12	28-Oct-2026
Antenna (Bi-Log, 30 MHz to 1 GHz)	Teseq	CBL6111D	5615	24	24-Apr-2027
Multimeter	Fluke	115	6343	12	27-Feb-2026
2m Coaxial Cable Assy	Junkosha	MWX221-02000AMSAMS/A	6360	12	13-May-2026



Instrument	Manufacturer	Type No	TE No	Calibration Period (months)	Calibration Expires
1m Coaxial Cable Assy	Junkosha	MWX221-01000AMSAMS/A	6373	12	06-Sep-2026
Cable Assy 8m (N to N) 18GHz	Junkosha	MWX221-08000NMSNMS/B	7049	12	01-Jun-2026

Table 19

TU - Traceability Unscheduled

O/P Mon – Output Monitored using calibrated equipment

2.3 20 dB Bandwidth

2.3.1 Specification Reference

FCC 47 CFR Part 15C, Clause 15.215 (c)

2.3.2 Equipment Under Test and Modification State

6920, S/N: 001 - Modification State 0

2.3.3 Date of Test

10-December-2025

2.3.4 Test Method

2.4 GHz Bluetooth Low Energy

The test was performed in accordance with ANSI C63.10, clause 6.9.2.

EUT was powered with 3.7 VDC internal battery.

Preliminary searches were carried out to find worse case orientation on every channel.

2.3.5 Environmental Conditions

Ambient Temperature	21.1 °C
Relative Humidity	51.0 %

2.3.6 Test Results

2.4 GHz Bluetooth Low Energy

Frequency (MHz)	20 dB Bandwidth (kHz)
2402.0036	1190
2439.9317	1170
2479.9281	1180

Table 20 - 20 dB Bandwidth Results



Figure 43 – CH37, 2402 MHz, 20 dB Bandwidth



Figure 44 – CH19, 2440 MHz, 20 dB Bandwidth



Figure 45 – CH39, 2480 MHz, 20 dB Bandwidth

FCC 47 CFR Part 15, Limit Clause 15.215 (c)

The 20 dB bandwidth of the emission, or whatever bandwidth may otherwise be specified in the specific rule section under which the equipment operates, is contained within the frequency band designated in the rule section under which the equipment is operated.



2.3.7 Test Location and Test Equipment Used

This test was carried out in RF Chamber 11.

Instrument	Manufacturer	Type No	TE No	Calibration Period (months)	Calibration Expires
Hygrometer	Rotronic	HP21	4741	12	29-May-2026
3m Semi-Anechoic Chamber	Rainford	RF Chamber 11	5136	36	14-Nov-2027
Mast	Maturo	TAM 4.0-P	5158	-	TU
Mast and Turntable Controller	Maturo	Maturo NCD	5159	-	TU
Turntable	Maturo	TT 15WF	5160	-	TU
Antenna (DRG, 1 GHz to 10.5 GHz)	Schwarzbeck	BBHA9120B	5215	12	05-Jul-2026
EMI Test Receiver	Rohde & Schwarz	ESW44	5527	12	14-Aug-2026
2m Coaxial Cable Assy	Junkosha	MWX221-02000AMSAMS/A	6360	12	13-May-2026
Cable Assy 8m (N to N) 18GHz	Junkosha	MWX221-08000NMSNMS/B	7049	12	01-Jun-2026

Table 21

TU - Traceability Unscheduled



2.4 Authorised Band Edges

2.4.1 Specification Reference

FCC 47 CFR Part 15C, Clause 15.249 (d)

2.4.2 Equipment Under Test and Modification State

6920, S/N: 001 - Modification State 0

2.4.3 Date of Test

09-December-2025 to 10-December-2025

2.4.4 Test Method

2.4 GHz Bluetooth Low Energy

The test was performed in accordance with ANSI C63.10, clause 6.10.6 (Marker-delta method) for bottom channel and 6.10.5 for the top channel.

EUT was powered with a 3.7 VDC internal battery.

Preliminary measurements according to ANSI C63.10.4.1.5.2.5 were carried out to find out the duty cycle. This value was 100%.

Using the marker-delta method for bottom channel, peak values are calculated by subtracting the delta value from the signal with a low-resolution bandwidth with respective high-resolution bandwidth plots. The marker is positioned at 2400 MHz, so this shows the band edge value for the lower edge.

For the upper channel the standard method was used.

Warning on the analyzer mentioning center frequency outside transducer factor was a constant message regarding the frequency, thus it did not affect the measurements.

2.4.5 Environmental Conditions

Ambient Temperature 19.8 - 21.1 °C
Relative Humidity 51.0 - 51.8 %

2.4.6 Test Results

2.4 GHz Bluetooth Low Energy

Frequency (MHz)	Measured Frequency (MHz)	Peak Level (dBμV/m)	Average Level (dBμV/m)
2402	2400.0	45.98	*
2480	2483.5	53.42	40.39

Table 22 - Authorised Band Edge Results

* Since peak value passed both average and peak limit, average test was not performed

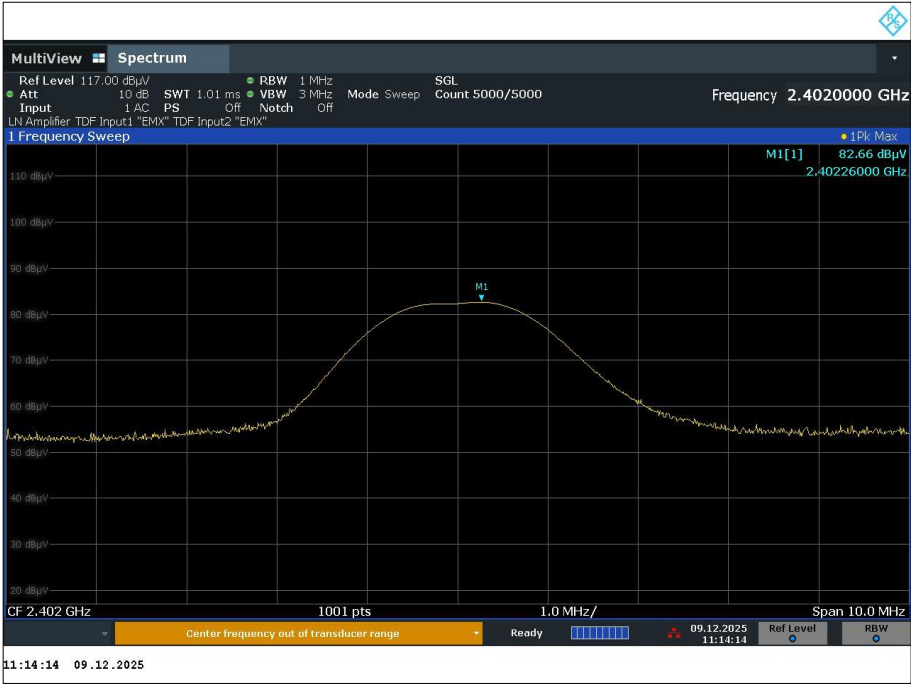


Figure 46 – Bottom Channel 2402 MHz, HIGH RBW, Peak

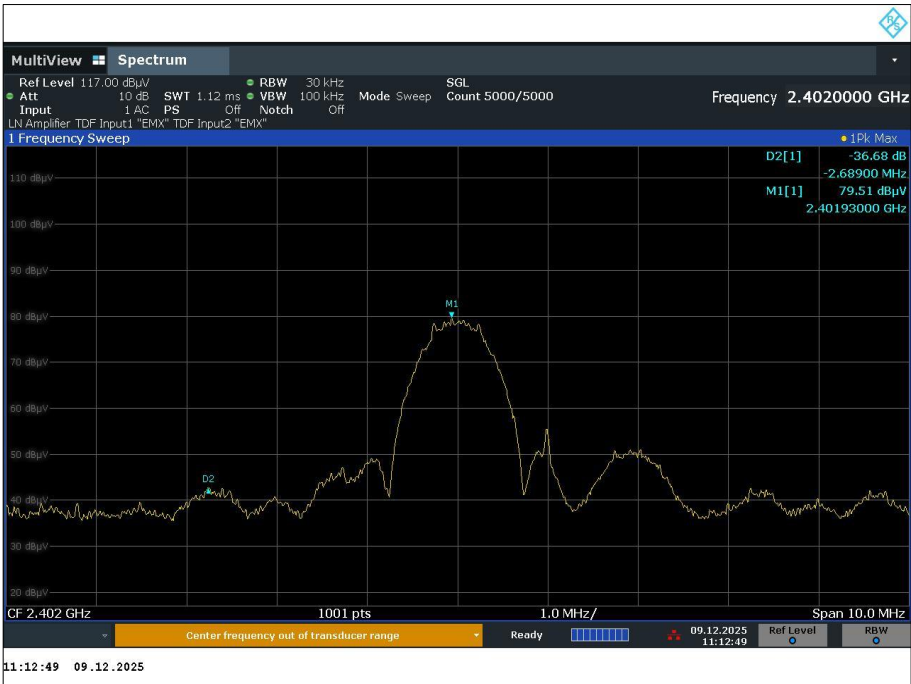


Figure 47- Bottom Channel 2402 MHz, LOW RBW, Peak

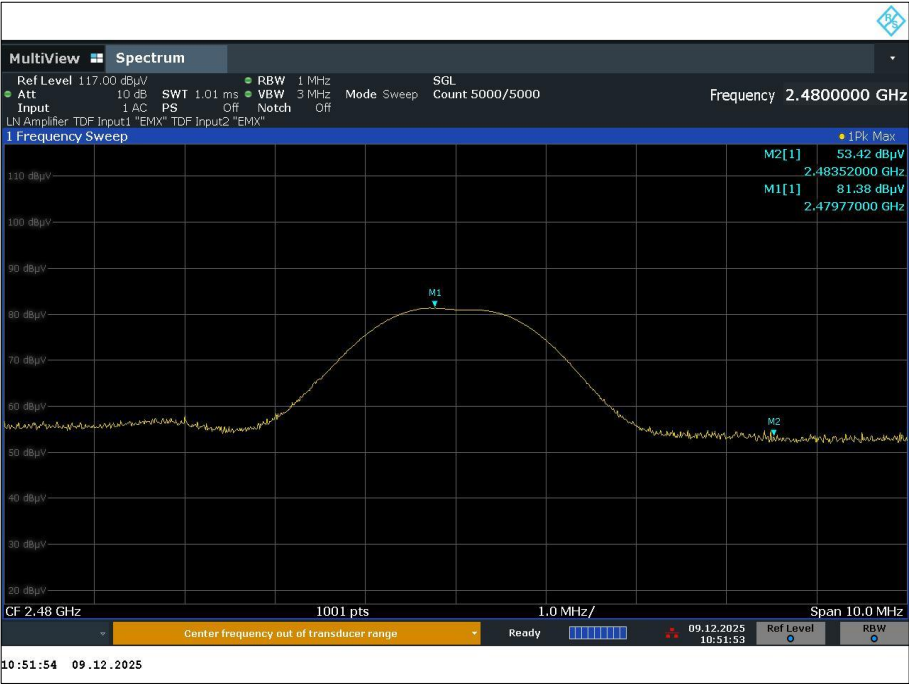


Figure 48 – Top Channel, 2480 MHz, Peak

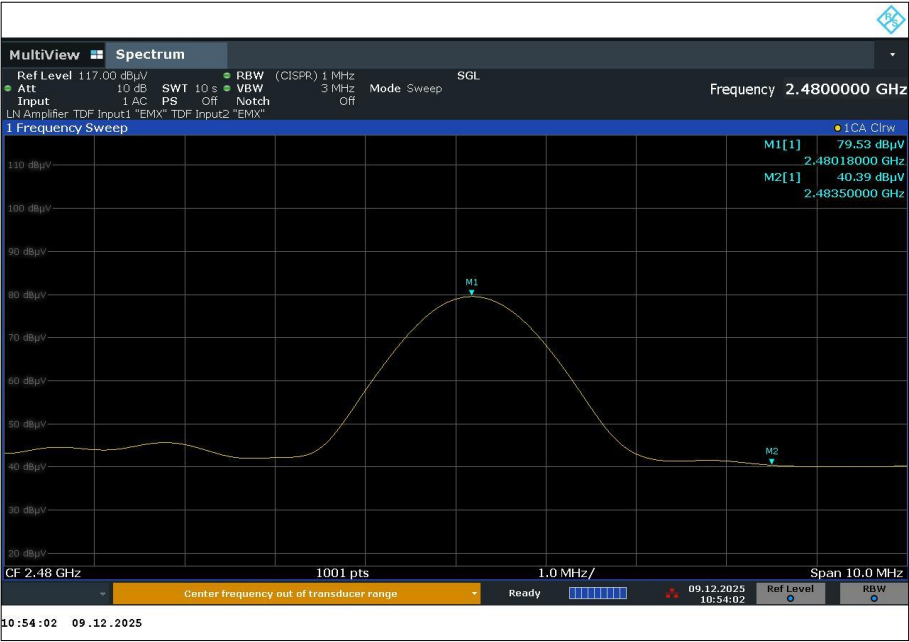


Figure 49 - Top Channel, 2480 MHz, Average

FCC 47 CFR Part 15C, Limit Clause 15.249 (d)

Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in § 15.209, whichever is the lesser attenuation.

FCC 47 CFR Part 15C, 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 23

2.4.7 Test Location and Test Equipment Used

This test was carried out in RF Chamber 11.

Instrument	Manufacturer	Type No	TE No	Calibration Period (months)	Calibration Expires
Hygrometer	Rotronic	HP21	4741	12	29-May-2026
3m Semi-Anechoic Chamber	Rainford	RF Chamber 11	5136	36	14-Nov-2027
Mast	Maturo	TAM 4.0-P	5158	-	TU
Mast and Turntable Controller	Maturo	Maturo NCD	5159	-	TU
Turntable	Maturo	TT 15WF	5160	-	TU
Antenna (DRG, 1 GHz to 10.5 GHz)	Schwarzbeck	BBHA9120B	5215	12	05-Jul-2026
EMI Test Receiver	Rohde & Schwarz	ESW44	5527	12	14-Aug-2026
2m Coaxial Cable Assy	Junkosha	MWX221-02000AMSAMS/A	6360	12	13-May-2026
Cable Assy 8m (N to N) 18GHz	Junkosha	MWX221-08000NMSNMS/B	7049	12	01-Jun-2026

Table 24

TU - Traceability Unscheduled

3 Photographs

3.1 Equipment Under Test (EUT) set up and orientation

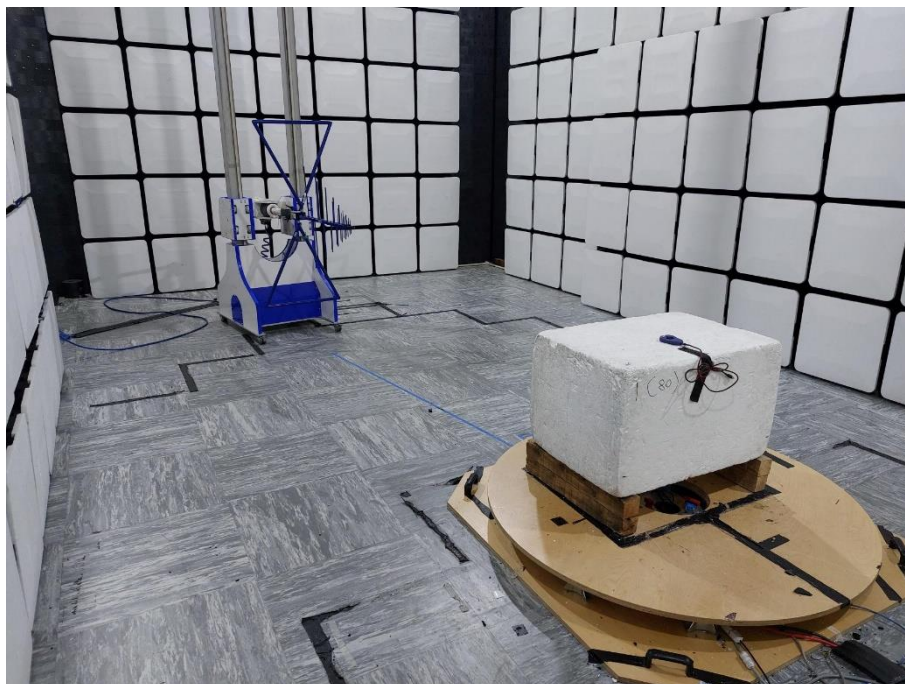


Figure 50 – Test Setup 30MHz to 1GHz

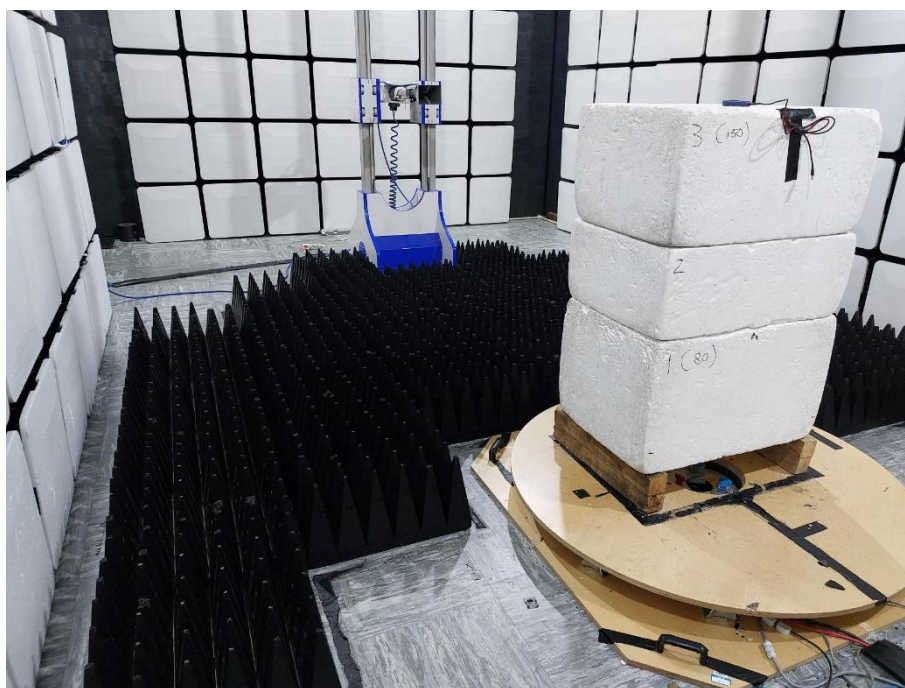


Figure 51 – Test Setup 1GHz to 8 GHz

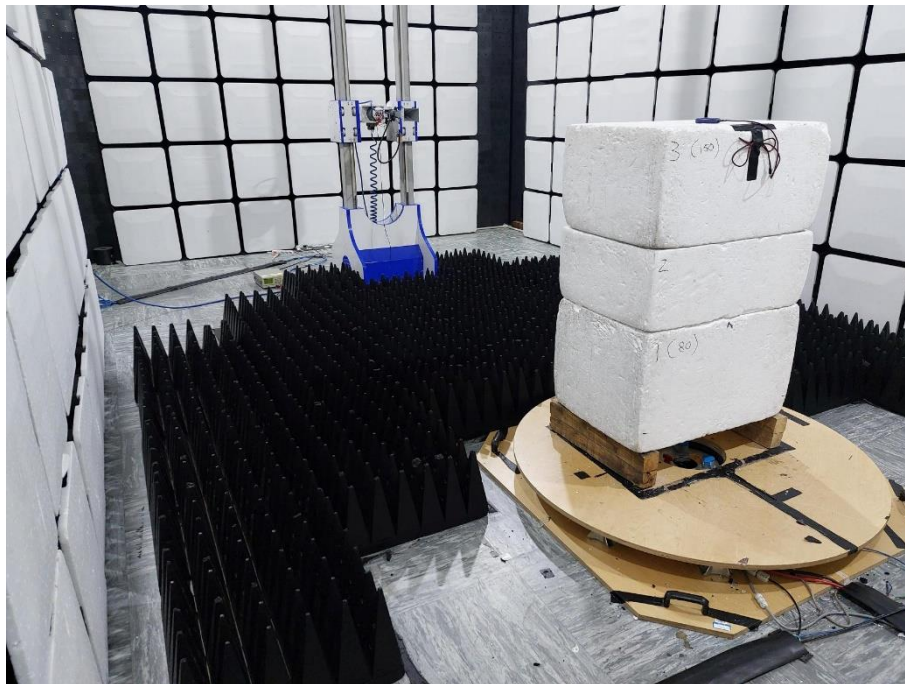


Figure 52 – Test Setup 8 GHz to 18 GHz



Figure 53 – Test Setup 18 GHz to 26 GHz



Figure 54 – X Orientation

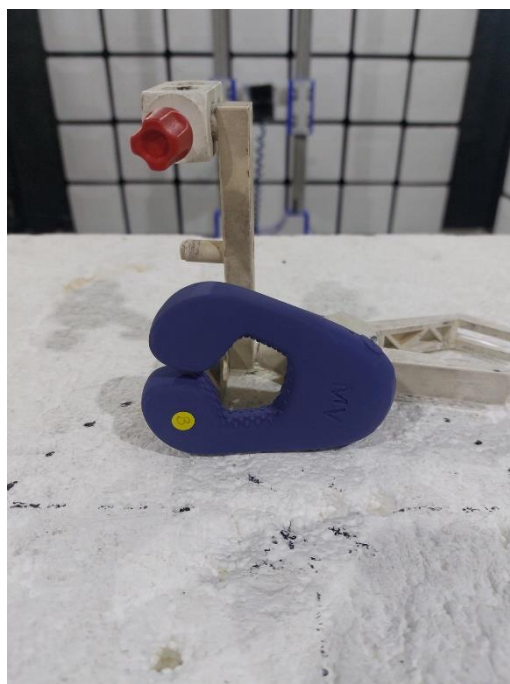


Figure 55 – Y Orientation

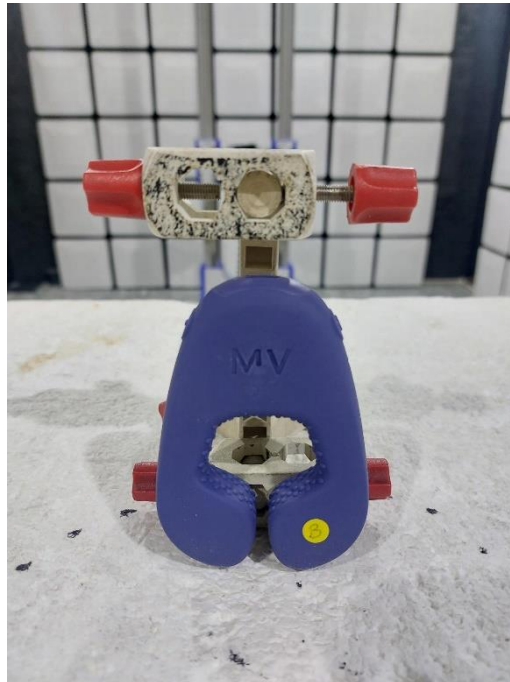


Figure 56 – Z Orientation

4 Measurement Uncertainty

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

Test Name	Measurement Uncertainty
Field Strength of Fundamental	30 MHz to 1 GHz: ± 5.2 dB 1 GHz to 40 GHz: ± 6.3 dB
Field Strength of Emissions	30 MHz to 1 GHz: ± 5.2 dB 1 GHz to 40 GHz: ± 6.3 dB
20 dB Bandwidth	± 8.88 kHz
Authorised Band Edges	30 MHz to 1 GHz: ± 5.2 dB 1 GHz to 40 GHz: ± 6.3 dB

Table 25

Measurement Uncertainty Decision Rule

Determination of conformity with the specification limits is based on the decision rule according to IEC Guide 115:2023, Clause 4.3.4 (Simple Acceptance). 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.