

FCC and ISED Test Report

Manufacturer: Verizon Connect
Model: AT510
In accordance with FCC 47 CFR Part 15C and ISED RSS-247 and ISED RSS-GEN
Technology: (2.4 GHz Bluetooth Low Energy)



Prepared for: Verizon Connect Fleet USA LLC
5055 North Point Parkway
Alpharetta, Georgia
USA
30022

FCC ID: ZOQAT510 IC: 9734A-AT510

COMMERCIAL-IN-CONFIDENCE

Document 75966423-02 Issue 03

SIGNATURE

NAME	JOB TITLE	RESPONSIBLE FOR	ISSUE DATE
Steve Marshall	Senior Engineer	Authorised Signatory	14 September 2026

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	Mohiuddin Mohammed	11 August 2026	
	Hugo Petty	11 August 2026	

FCC Accreditation: 492497/UK2010 Octagon House, Fareham Test Laboratory
ISED Accreditation: 12669A/UK0003 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, ISED RSS-247 Issue 4 (2025-07) and ISED RSS-GEN: Issue 5 (2018-04) + A2 (2021-02) 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	05-Aug-2026
02	Updated customer / applicant details	11-Aug-2026
03	Correction of units for 99% OCB in table 20 Corrections to calibration expiry dates in table 21 Correction of mW units in Table 22	14-Sep-2026

Table 1

1.2 Introduction

Applicant	Verizon Connect
Manufacturer	Verizon Connect
Model Number(s)	AT510 & AT510-B
Hardware Version Identification Number (HVIN)	P3.1
Serial Number(s)	350000000000301 and 350000000000302
Hardware Version	VC-ADD-M-CGB-01D.06
Software Version	2.0.11
Number of Samples Tested	2
Test Specification/Issue/Date	FCC 47 CFR Part 15C (2024) ISED RSS-247: Issue 4 (2025-07) ISED RSS-GEN:2024 Issue 5 (2018-04) + A2 (2021-02).
Order Number	8000000041
Date	28-November-2025
Date of Receipt of EUT	05-June-2026
Start of Test	09-June-2026
Finish of Test	20-July-2026
Name of Engineer(s)	Mohiuddin Mohammed Hugo Petty
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 and ISSED RSS-247 and ISSED RSS-GEN is shown below.

Section	Specification Clause			Test Description	Result	Comments/Base Standard
	Part 15C	RSS-247	RSS-GEN			
Configuration and Mode: DC Powered - BLE						
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	15.247 (d) and 15.209	2.4 & 6.6	6.13 & 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
	15.203	-	-	Antenna	N/T	The device complies with the provisions of this section as it uses an integral antenna

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>		The asset tracker is for use on vehicles, shipping containers, heavy machinery with wide global distribution. The device provides real time location and vehicle status updates for customer assets. Device Features: GPS Location, Motion detection, Low power, Cellular Cat 1 Bis connectivity, status LEDS, External power cable, Internal battery	
Manufacturer:		Verizon Connect	
Model Number(s)		AT510; AT510-B	
Hardware Version Identification Number <i>The HVIN identifies hardware specifications of a product version</i>		P3.1	
Hardware Version <i>May be same as HVIN.</i>		VC-ADD-M-CGB-01D.06	
Software Version		2.0.11	
For definitions of the above terms refer to RSS-GEN Section 9.			
FCC ID of the product under test – see guidance here		ZOQAT510	
IC ID of the product under test – see guidance here		9734A-AT510	
Device Category	Mobile ☒	Portable ☐	Fixed ☐
Equipment is fitted with an Audio Low Pass Filter		Yes ☐	No ☒

Table 3

Intentional Radiators

Technology	Cellular	BLE	Wi-Fi	GNSS
Frequency Range (MHz to MHz)	1850-1910 MHz (B2 UL), 1930-1990 MHz (B2 DL), 1710-1755 MHz (B4 UL), 2110-2155 MHz (B4 DL), 824-849 MHz (B5 UL), 869-894 MHz (B5 DL), 777-787 MHz (B13 UL), 746-756 MHz (B13 DL), 1710-1780 MHz (B66 UL), 2110-2200 MHz (B66 DL)	2402-2480MHz	2401-2495 MHz, 5170-5330 MHz, 5490-5730 MHz, 5735-5895 MHz	1559-1610 MHz (L1)
Conducted Declared Output Power (dBm)	+25 dBm	+0 dBm	Rx Only	N/A
Antenna Gain (dBi)	1.0 dBi (698-960 MHz), 3.2 dBi (1710-2170 MHz), 3.5 dBi (2300-2400 MHz), 3.5 dBi (2490-2690 MHz)	1.0 dBi	1.25 dBi (2.4-2.5GHz), 2.17 dBi (5.15-5.85GHz)	4.5 dBi
Supported Bandwidth(s) (MHz) (e.g. 1 MHz, 20 MHz, 40 MHz)	1.4 MHz, 3 MHz, 5 MHz, 10 MHz, 15 MHz, 20 MHz	1 MHz	20 MHz, 40 MHz, 80 MHz, 160 MHz	2 MHz, 4 MHz
Modulation Scheme(s) (e.g. GFSK, QPSK etc)	QPSK, 16-QAM, 64-QAM	GFSK	DBPSK, DQPSK CCK, BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM 1024-QAM	BPSK CBOC QPSK
ITU Emission Designator (see guidance here) (not mandatory for Part 15 devices)				
Bottom Frequency (MHz)	746	2402	2401	1559
Middle Frequency (MHz)	1930	2440	5490	1585
Top Frequency (MHz)	2200	2480	589	1610

Table 4

Un-intentional Radiators

Highest frequency generated or used in the device or on which the device operates or tunes	160 MHz
Lowest frequency generated or used in the device or on which the device operates or tunes	32.768 KHz
Class A Digital Device (Use in commercial, industrial or business environment) ☒	
Class B Digital Device (Use in residential environment only) ☐	

Table 5

AC Power Source

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

Table 6

DC Power Source

Nominal voltage:	24	V
Extreme upper voltage:	60	V
Extreme lower voltage:	6.5	V
Max current:	0.6	A

Table 7

Battery Power Source

Voltage:	3.7	V
End-point voltage:	3.0	V (Point at which the battery will terminate)
Alkaline ☐ Leclanche ☐ Lithium ☒ Nickel Cadmium ☐ Lead Acid* ☐ *(Vehicle regulated)		
Other ☐	Please detail:	

Table 8

Charging

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

Table 9

Temperature

Minimum temperature:	-20	°C
Maximum temperature:	+60	°C

Table 10



Cable Loss

Adapter Cable Loss (Conducted sample)	0.9	dB
--	-----	----

Table 11

Antenna Characteristics

Antenna connector ☐			State impedance		Ohm
Temporary antenna connector ☐			State impedance		Ohm
Integral antenna ☒	Type:	BLE, SMD Ceramic, Taoglas WLA.10 SMT Antenna	Gain (Peak)	1.25	dBi
Integral antenna ☒	Type	LTE, SMD Ceramic, Taoglas PA.710.A SMT Antenna	Gain (Peak)	1.0 dBi (698-960 MHz), 3.2 dBi (1710-2170 MHz), 3.5 dBi (2300-2400 MHz), 3.5 dBi (2490-2690 MHz)	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.					

Table 12

Ancillaries (if applicable)

Manufacturer:		Part Number:	
Model:		Country of Origin:	

Table 13

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

Name: Stephen O'Hara
Position held: Validation Manager
Date: 30/07/2026



1.5 Product Information

1.5.1 Technical Description

The asset tracker is for use on vehicles, shipping containers, heavy machinery with wide global distribution. The device provides real time location and vehicle status updates for customer assets.

Device Features: GPS Location, Motion detection, Low power, Cellular Cat 1 Bis connectivity, status LEDS, External power cable, Internal battery



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
Asset Data Device, Model: AT510-B , Serial Number: 350000000000301			
0	As supplied by the customer	Not Applicable	Not Applicable
Asset Device, Model: AT510, Serial Number: 350000000000302			
0	As supplied by the customer	Not Applicable	Not Applicable

Table 14

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: ADD-B Rechargeable - BLE		
Authorised Band Edges	Mohiuddin Mohammed	UKAS
Emission Bandwidth	Hugo Petty	UKAS
Maximum Conducted Output Power	Hugo Petty	UKAS
Power Spectral Density	Hugo Petty	UKAS
Restricted Band Edges	Mohiuddin Mohammed	UKAS
Spurious Radiated Emissions	Mohiuddin Mohammed	UKAS

Table 15

Laboratory Address:

TÜV SÜD,
Octagon House,
Concorde Way,
Fareham,
Hampshire,
PO15 5RL,
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, 2.4
ISED RSS-GEN, 8.10

2.1.2 Equipment Under Test and Modification State

AT510, S/N: 350000000000302 - Modification State 0

2.1.3 Date of Test

18-June-2026

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

The DUT was powered by 24V DC throughout the test.

2.1.5 Environmental Conditions

Ambient Temperature	21.2 °C
Relative Humidity	67.0 %

2.1.6 Test Setup Diagram

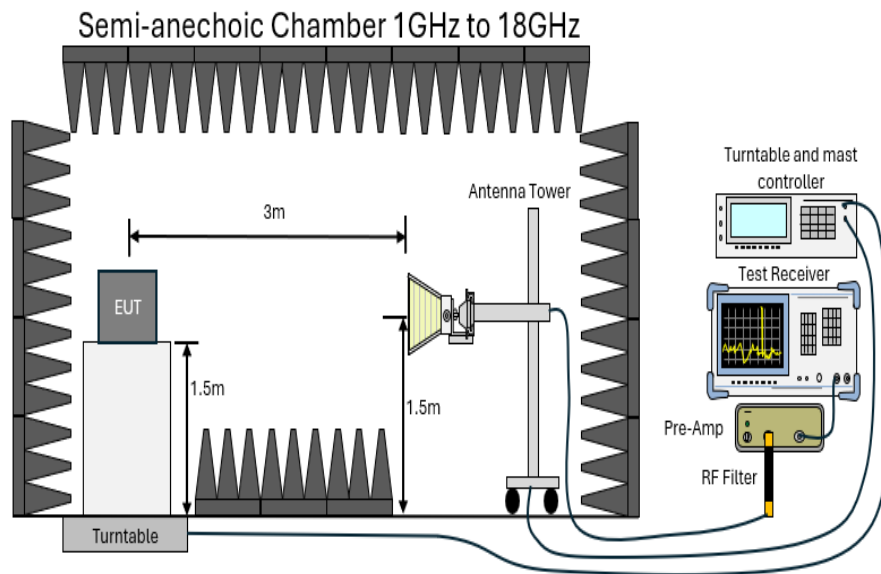


Figure 1

2.1.7 Test Results

Mode	Data Rate/MCS	Frequency (MHz)	Band Edge Frequency (MHz)	Peak Level (dBμV/m)	Average Level (dBμV/m)
BLE	LE1M	2402	2390	54.19	47.47
BLE	LE1M	2480	2483.5	63.03	48.73

Table 16- Restricted Band Edge Frequency Results

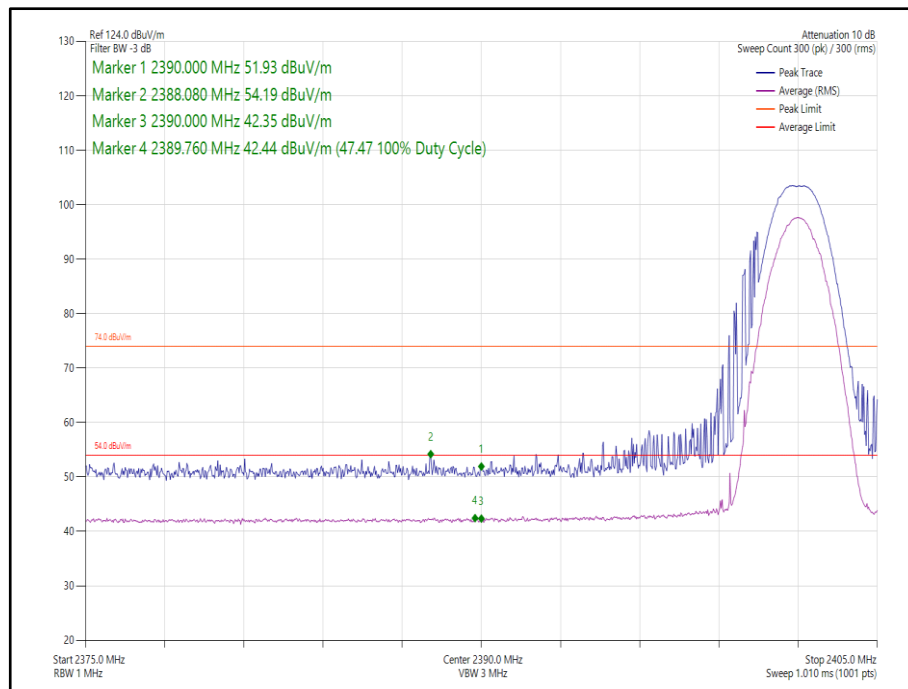


Figure 2 - BLE, 2402 MHz, Band Edge Frequency 2390 MHz

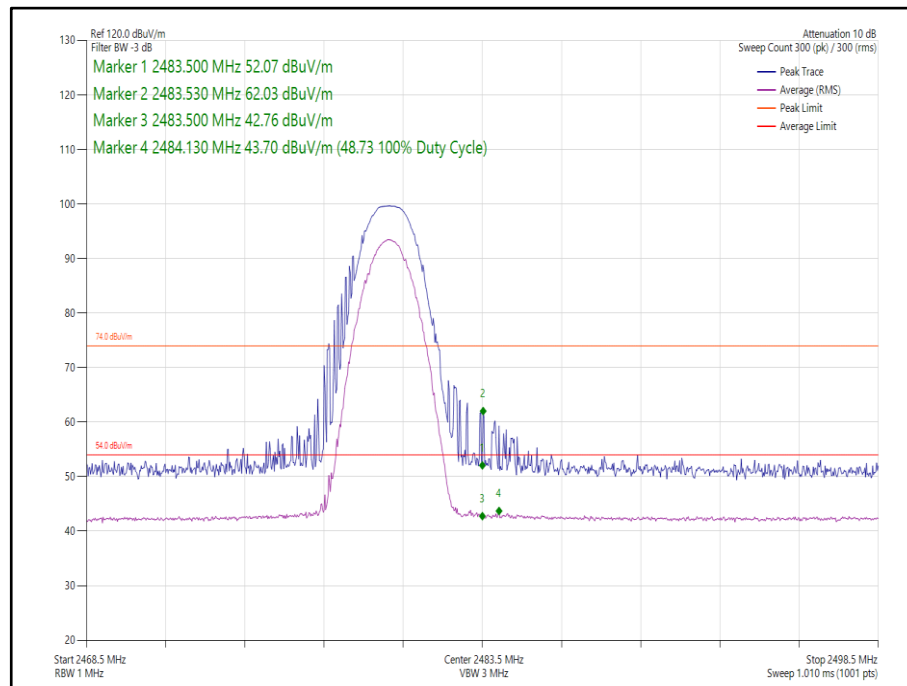


Figure 3 - BLE, 2480 MHz, Band Edge Frequency 2483.5 MHz

FCC 47 CFR Part 15, Limit Clause 15.209

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

Table 17

ISED RSS-GEN, Limit Clause 8.9

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

Table 18

*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.



2.1.8 Test Location and Test Equipment Used

This test was carried out in RF Chamber 5.

Instrument	Manufacturer	Type No	TE No	Calibration Period (months)	Calibration Expires
3m Semi-Anechoic Chamber	Rainford	RF Chamber 5	1545	36	23-Apr-2027
Turntable Controller	Inn-Co GmbH	CO 1000	1606	-	TU
Hygrometer	Rotronic	I-1000	2784	12	04-Nov-2026
Mast Controller	Maturo GmbH	NCD	4810	-	TU
Tilt Antenna Mast	Maturo GmbH	TAM 4.0-P	4811	-	TU
Antenna (DRG, 1 GHz to 10.5 GHz)	Schwarzbeck	BBHA9120B	4848	12	05-Jul-2026
Test Receiver	Rohde & Schwarz	ESW44	5084	12	08-Jan-2027
Emissions Software	TUV SUD	EmX V3.6.3	5125	-	Software
2m Coaxial Cable Assy	Junkosha	MWX221-02000AMSAMS/A	6363	12	06-Sep-2026
Cable Assy 8m (N to N) 18GHz	Junkosha	MWX221-08000NMSNMS/B	7050	12	03-Oct-2026

Table 19

TU - Traceability Unscheduled

2.2 Emission Bandwidth

2.2.1 Specification Reference

FCC 47 CFR Part 15C 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

AT510, S/N: 350000000000301 - Modification State 0

2.2.3 Date of Test

20-July-2026

2.2.4 Test Method

This test was performed in accordance with ANSI C63.10, clause 11.8.2 for 6 dB BW and 6.9.3 for 99% occupied bandwidth measurements.

The DUT was powered by 24V DC throughout the test.

2.2.5 Environmental Conditions

Ambient Temperature	21.2 °C
Relative Humidity	45.1 %

2.2.6 Test Setup Diagram

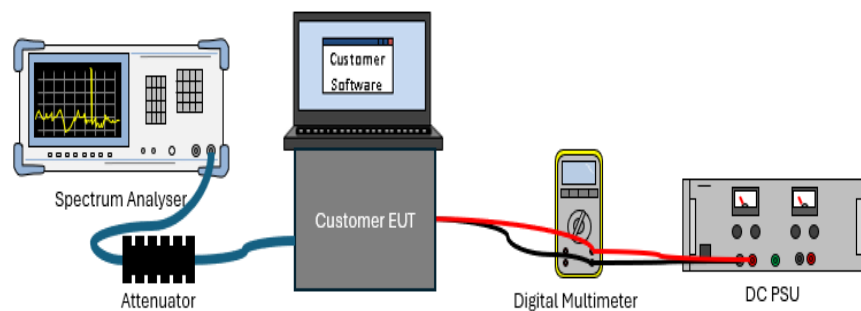


Figure 4



2.2.7 Test Results

Frequency (MHz)	99 % Occupied Bandwidth (kHz)	6 dB Bandwidth (kHz)
2402	1020.1	653.5
2440	1019.9	667.4
2480	1018.0	659.3

Table 20



Figure 5 – 6 dB OBW: 2402 MHz



Figure 6 - 6 dB OBW: 2440 MHz

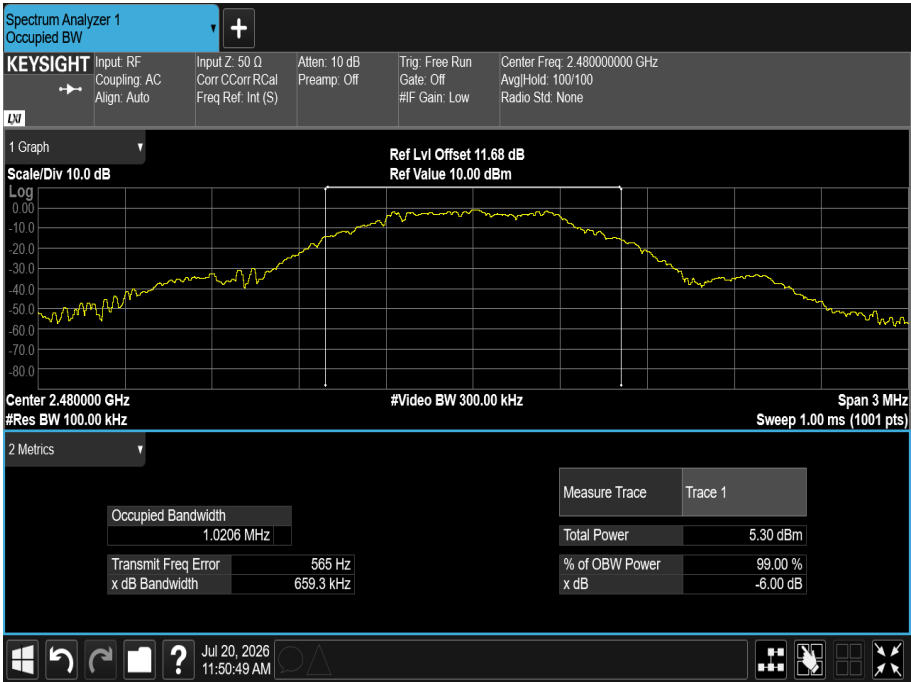


Figure 7 - 6 dB OBW: 2480 MHz



Figure 8 – 99% OBW: 2402 MHz



Figure 9 - 99% OBW: 2440 MHz

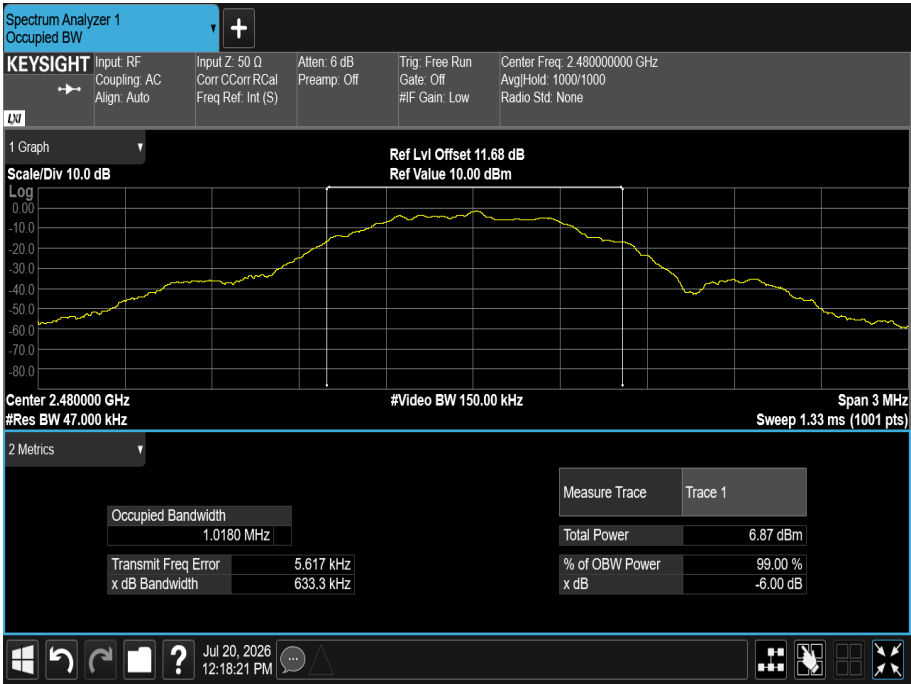


Figure 10 - 99% OBW: 2480 MHz

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

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



2.2.8 Test Location and Test Equipment Used

This test was carried out in RF Laboratory 2.

Instrument	Manufacturer	Type No	TE No	Calibration Period (months)	Calibration Expires
DC Power Supply	Hewlett Packard	6269B	1909	-	TU
Multimeter	Iso-Tech	IDM101	2421	12	11-Nov-2026
GPSDR Frequency Standard	Spectracom	SecureSync 1200-0408-0601	4393	6	17-Sep-2026
Thermo-Hygro-Barometer	PCE Instruments	PCE-THB 40	5604	12	05-Feb-2027
Coaxial Fixed Attenuator DC-18GHz 5W 10dB	RF-Lambda	RFS5G18B10SMP	6179	12	10-Oct-2026
Cable (SMA to SMA 1m)	Junkosha	MWX221/B	6304	12	23-Sep-2026
MXA Signal Analyser	Keysight Technologies	N9020B	6418	12	15-Oct-2027
1m N-type Cable	Junkosha	MWX221-01000NMSNMS/B	6930	12	11-Dec-2026
1m N-type Cable	Junkosha	MWX221-01000NMSNMS/B	6933	12	11-Dec-2026
Electronic Calibration Module 300kHz to 9GHz	Agilent Technologies	85092-60010	7254	12	08-May-2027
Network Analyser 300kHz - 8.5 GHz	Agilent Technologies	E5071B	7259	12	29-Apr-2027

Table 21

TU - Traceability Unscheduled

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 6.12.

2.3.2 Equipment Under Test and Modification State

AT510, S/N: 350000000000301 - Modification State 0

2.3.3 Date of Test

13-July-2026

2.3.4 Test Method

The test was performed in accordance with ANSI C63.10 clause 11.9.1.1 Method RBW $\geq$ DTS Bandwidth.

The DUT was Powered by 24V DC throughout the test.

2.3.5 Environmental Conditions

Ambient Temperature	22.0 °C
Relative Humidity	39.3 %

2.3.6 Test Setup Diagram

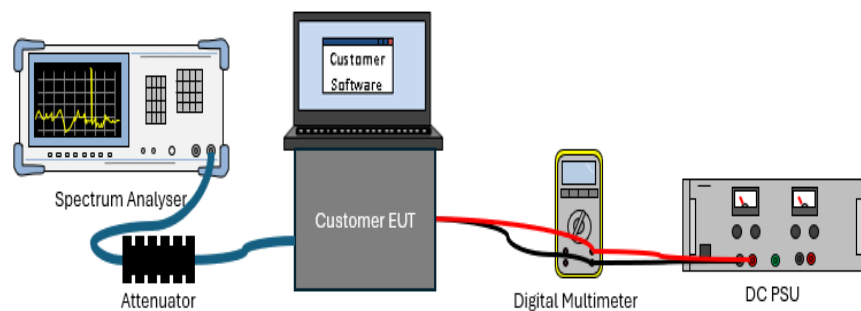


Figure 11



2.3.7 Test Results

Frequency (MHz)	Modulation Scheme	Maximum Output Power	
		dBm	mW
2402	GFSK	-0.481 (Max Hold, Peak RMS Detector)	0.895
2440	GFSK	-0.510 (Max Hold, Peak RMS Detector)	0.889
2480	GFSK	-0.615 (Max Hold, Peak RMS Detector)	0.868

Table 22

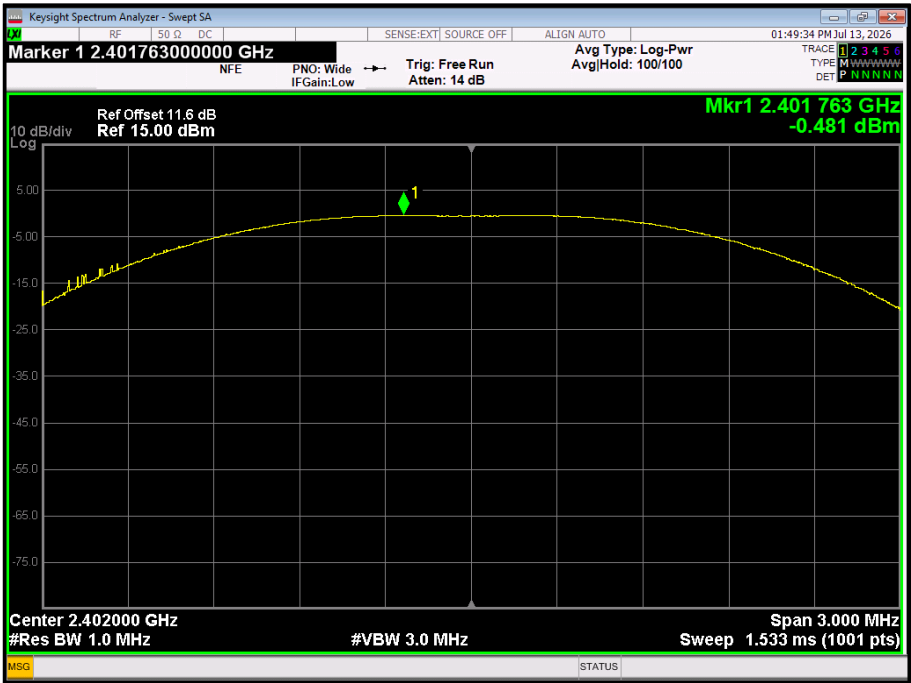


Figure 12- Maximum Conducted Output Power: 2402 MHz

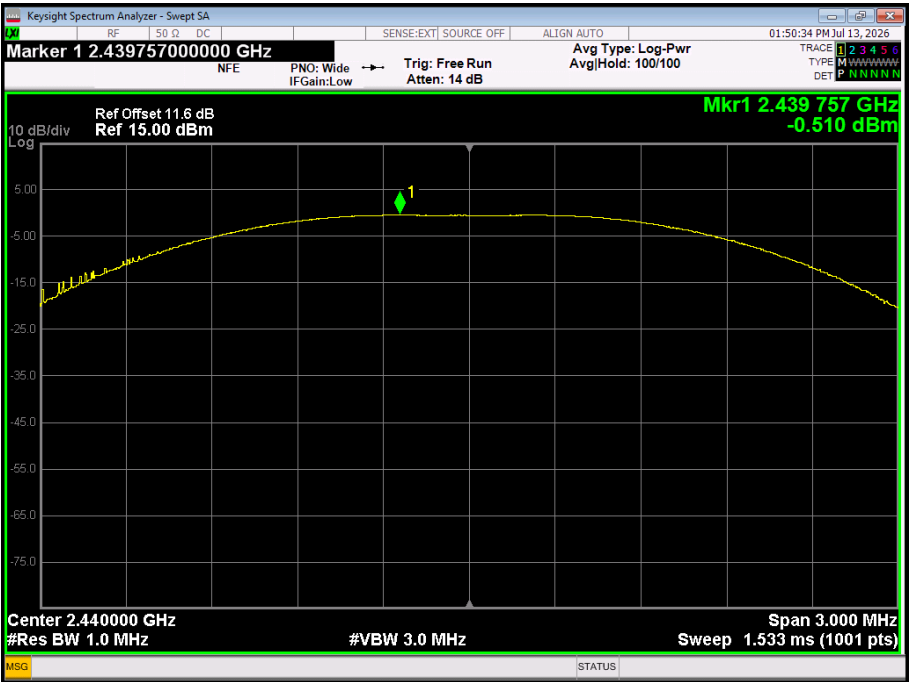


Figure 13- Maximum Conducted Output Power: 2440 MHz

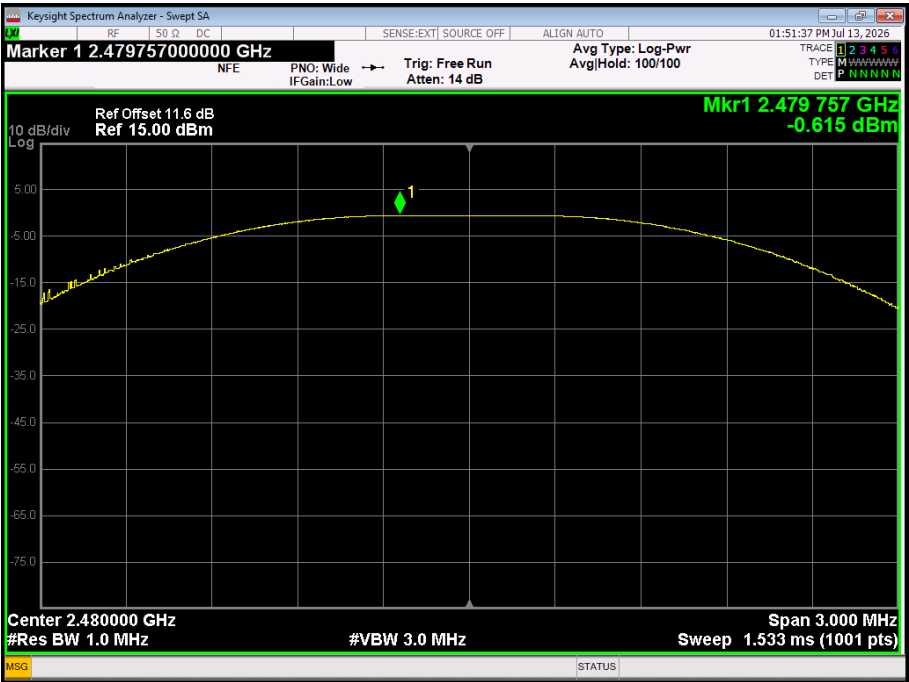


Figure 14- Maximum Conducted Output Power: 2480 MHz

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 902-928 MHz, the maximum peak conducted output power shall not exceed 1W, and the e.i.r.p. shall not exceed 4 W.

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 RSS-247 section 6.5 a) and b).

As an alternative to a peak power measurement, compliance can be based on a measurement of the maximum conducted output power.

2.3.8 Test Location and Test Equipment Used

This test was carried out in RF Laboratory 2.

Instrument	Manufacturer	Type No	TE No	Calibration Period (months)	Calibration Expires
DC Power Supply	Hewlett Packard	6269B	1909	-	TU
GPSDR Frequency Standard	Spectracom	SecureSync 1200-0408-0601	4393	6	17-Sep-2026
Digital Multi-meter	Iso-tech	IDM93N	4435	12	06-Mar-2027
PXA Signal Analyser	Keysight Technologies	N9030A	4653	12	27-May-2027
3.5 mm 1m Cable	Junkosha	MWX221-01000DMS	5416	12	O/P Mon
Thermo-Hygro-Barometer	PCE Instruments	PCE-THB 40	5604	12	05-Feb-2027
Coaxial Fixed Attenuator DC-18GHz 5W 10dB	RF-Lambda	RFS5G18B10SMP	6181	12	19-Aug-2026
1m N-type Cable	Junkosha	MWX221-01000NMSNMS/B	6930	12	11-Dec-2026
1m N-type Cable	Junkosha	MWX221-01000NMSNMS/B	6933	12	11-Dec-2026
Electronic Calibration Module 300kHz to 9GHz	Agilent Technologies	85092-60010	7254	12	08-May-2027
Network Analyser 300kHz - 8.5 GHz	Agilent Technologies	E5071B	7259	12	29-Apr-2027

Table 23

TU - Traceability Unscheduled

O/P Mon – Output Monitored using calibrated equipment

2.4 Power Spectral Density

2.4.1 Specification Reference

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

2.4.2 Equipment Under Test and Modification State

AT510, S/N: 350000000000301 - Modification State 0

2.4.3 Date of Test

13-July-2026

2.4.4 Test Method

This test was performed in accordance with ANSI C63.10, clause 11.10.2.

The DUT was externally powered by a linear power supply at 24VDC.

2.4.5 Environmental Conditions

Ambient Temperature	22.0 °C
Relative Humidity	39.3 %

2.4.6 Test Setup Diagram

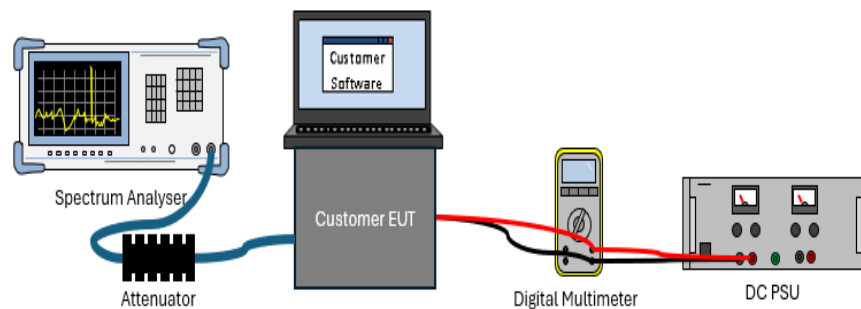


Figure 15



2.4.7 Test Results

Frequency (MHz)	Power Spectral Density (dBm)	Measurement Bandwidth (kHz)
2402	-4.235	30
2440	-4.448	30
2480	-4.067	30

Table 24



Figure 16- Power Spectral Density: 2402 MHz



Figure 17- Power Spectral Density: 2440 MHz



Figure 18- Power Spectral Density: 2480 MHz



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(b)

The transmitter power spectral density conducted from the transmitter to the antenna(s) shall not be greater than 8 dBm/3 kHz band during any time interval of continuous transmission. This power spectral density shall be determined in accordance with the provisions of RSS-247 clause 6.3.2. The power spectral density shall be determined using the same method as is used to determine the maximum conducted output power.

2.4.8 Test Location and Test Equipment Used

This test was carried out in RF Laboratory 2.

Instrument	Manufacturer	Type No	TE No	Calibration Period (months)	Calibration Expires
DC Power Supply	Hewlett Packard	6269B	1909	-	TU
GPSDR Frequency Standard	Spectracom	SecureSync 1200-0408-0601	4393	6	17-Sep-2026
Digital Multi-meter	Iso-tech	IDM93N	4435	12	06-Mar-2027
PXA Signal Analyser	Keysight Technologies	N9030A	4653	12	27-May-2027
3.5 mm 1m Cable	Junkosha	MWX221-01000DMS	5416	12	O/P Mon
Thermo-Hygro-Barometer	PCE Instruments	PCE-THB 40	5604	12	05-Feb-2027
Coaxial Fixed Attenuator DC-18GHz 5W 10dB	RF-Lambda	RFS5G18B10SMP	6181	12	19-Aug-2026
1m N-type Cable	Junkosha	MWX221-01000NMSNMS/B	6930	12	11-Dec-2026
1m N-type Cable	Junkosha	MWX221-01000NMSNMS/B	6933	12	11-Dec-2026
Electronic Calibration Module 300kHz to 9GHz	Agilent Technologies	85092-60010	7254	12	08-May-2027
Network Analyser 300kHz - 8.5 GHz	Agilent Technologies	E5071B	7259	12	29-Apr-2027

Table 25

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 6.13 and 8.9

2.5.2 Equipment Under Test and Modification State

AT510, S/N: 350000000000302 - Modification State 0

2.5.3 Date of Test

08-July-2026 to 11-July-2026

2.5.4 Test Method

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

For frequencies > 1 GHz, plots for average measurements were taken in accordance with ANSI C63.10, clause 11.12.2.5.2.

The EUT was placed on the non-conducting platform in a manner typical of a normal installation. As the EUT was considered portable and therefore reasonable to be used in multiple planes, pre-scans were performed with the EUT orientated in X, Y and Z planes with reference to the ground plane.

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 10 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:
 $10^{(\text{Field Strength in dBuV/m}/20)}$

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

At a measurement distance of 1 meter the limit line was increased by $20 \cdot \text{LOG}(3/1) = 9.54$ dB.

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

The DUT was powered by 24V DC throughout the test.

2.5.5 Example Test Setup Diagram

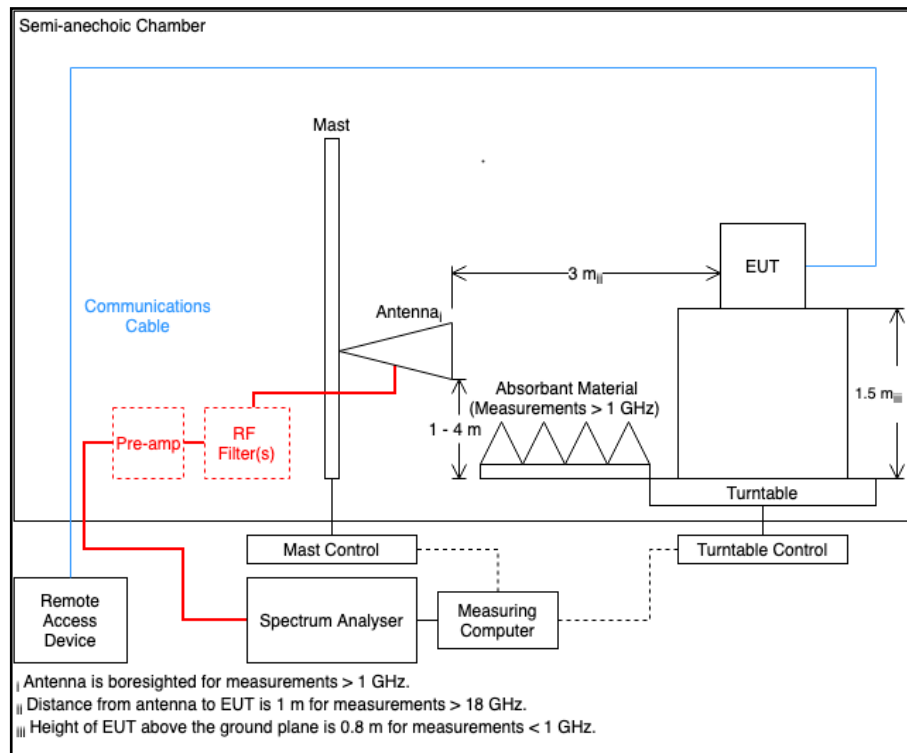


Figure 19

2.5.6 Environmental Conditions

Ambient Temperature	21.2 °C
Relative Humidity	67.0 %

2.5.7 Test Results

Frequency (MHz)	Level	Limit	Margin (dB)	Detector	Unit	Angle (°)	Height (cm)	Polarisation
4803.850	42.78	54.00	-11.22	RMS	dBuv/m	151	380	Vertical
4804.000	39.90	54.00	-14.10	RMS	dBuv/m	110	323	Horizontal
4804.100	48.52	74.00	-25.48	Peak	dBuv/m	110	323	Horizontal
4804.299	50.90	74.00	-23.10	Peak	dBuv/m	151	380	Vertical
7205.200	52.38	74.00	-21.62	Peak	dBuv/m	100	287	Horizontal
7205.452	54.10	74.00	-19.90	Peak	dBuv/m	304	257	Vertical
7205.551	44.96	54.00	-9.04	RMS	dBuv/m	304	257	Vertical
7205.700	42.97	54.00	-11.03	RMS	dBuv/m	100	287	Horizontal

Table 26 - Bottom Channel_LE1M_X, 2402 MHz, 30 MHz to 25 GHz

No other emissions found within 6 dB of the limit.

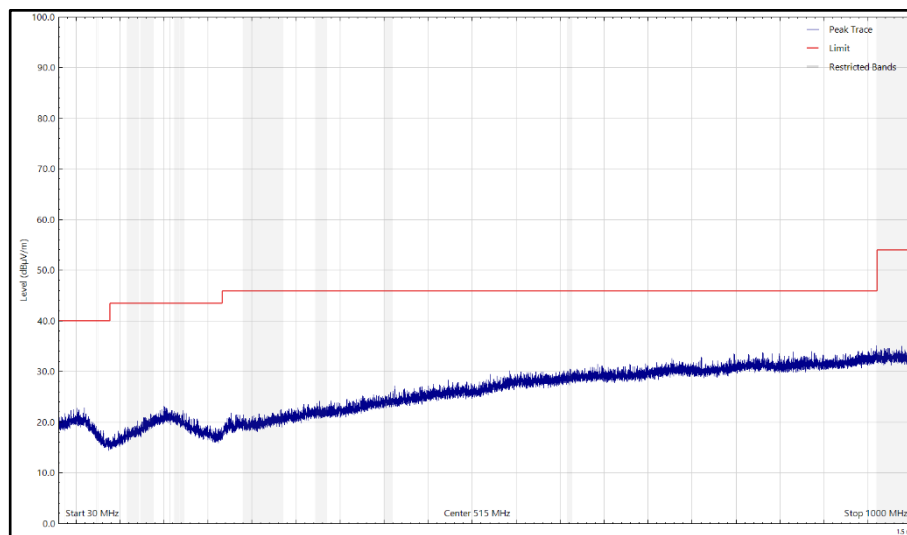


Figure 20 - Bottom Channel_LE1M_X, 2402 MHz, 30 MHz to 1 GHz, Horizontal

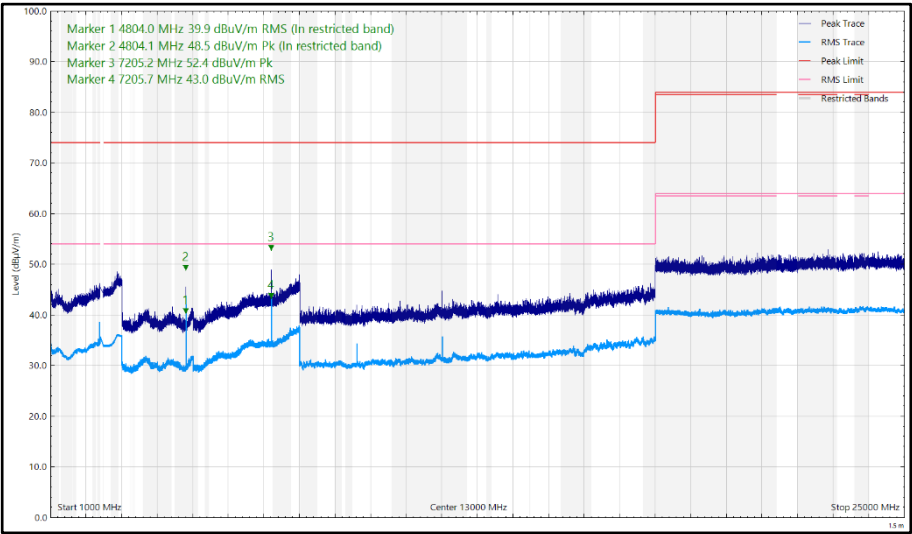


Figure 21 - Bottom Channel_LE1M_X, 2402 MHz, 1 GHz to 25 GHz, Horizontal

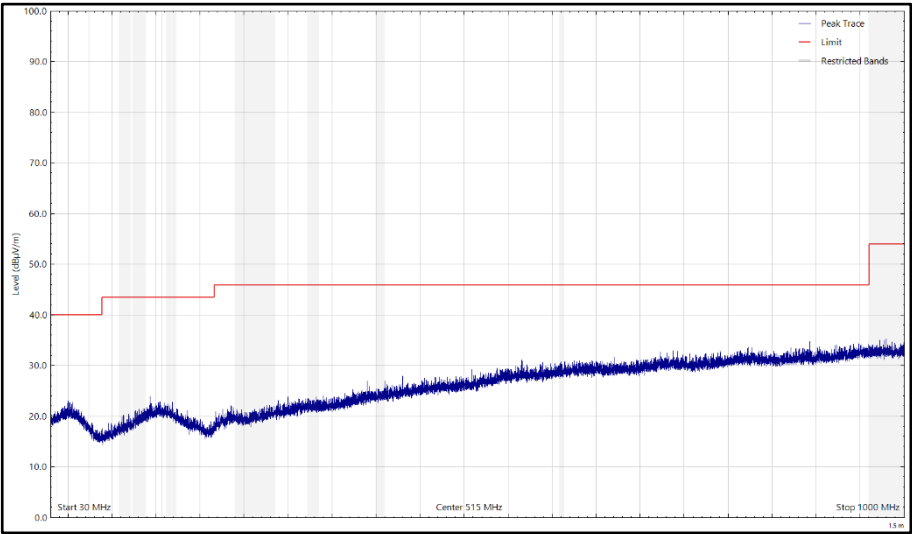


Figure 22 - Bottom Channel_LE1M_X, 2402 MHz, 30 MHz to 1 GHz, Vertical

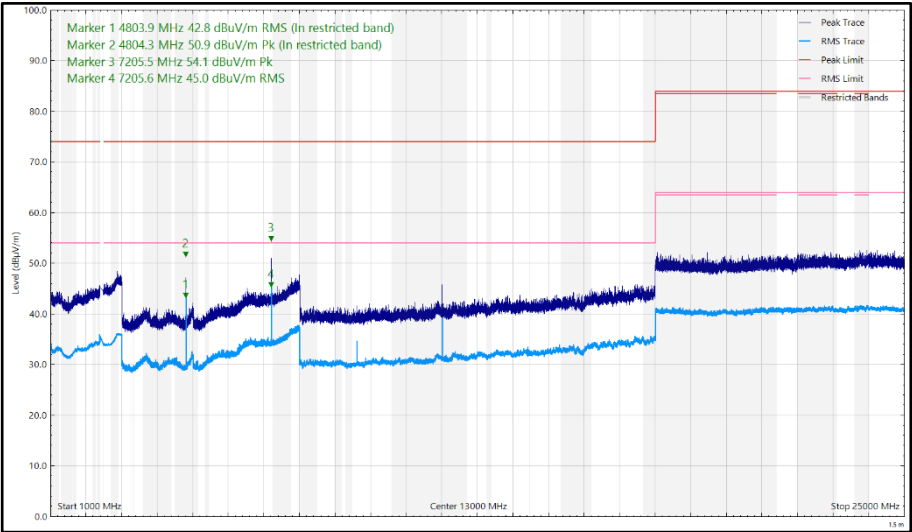


Figure 23 - Bottom Channel_LE1M_X, 2402 MHz, 1 GHz to 25 GHz, Vertical

Frequency (MHz)	Level	Limit	Margin (dB)	Detector	Unit	Angle (°)	Height (cm)	Polarisation
4803.551	54.35	74.00	-19.65	Peak	dBuv/m	20	276	Vertical
4803.800	39.06	54.00	-14.94	RMS	dBuv/m	126	129	Horizontal
4803.801	46.59	54.00	-7.41	RMS	dBuv/m	20	276	Vertical
7205.450	42.95	54.00	-11.05	RMS	dBuv/m	115	100	Horizontal
7205.550	48.33	54.00	-5.67	RMS	dBuv/m	314	245	Vertical
7206.599	57.26	74.00	-16.74	Peak	dBuv/m	314	245	Vertical
12008.800	36.03	54.00	-17.97	RMS	dBuv/m	142	146	Vertical

Table 27 - Bottom Channel_LE1M_Y, 2402 MHz, 30 MHz to 25 GHz

No other emissions found within 6 dB of the limit.

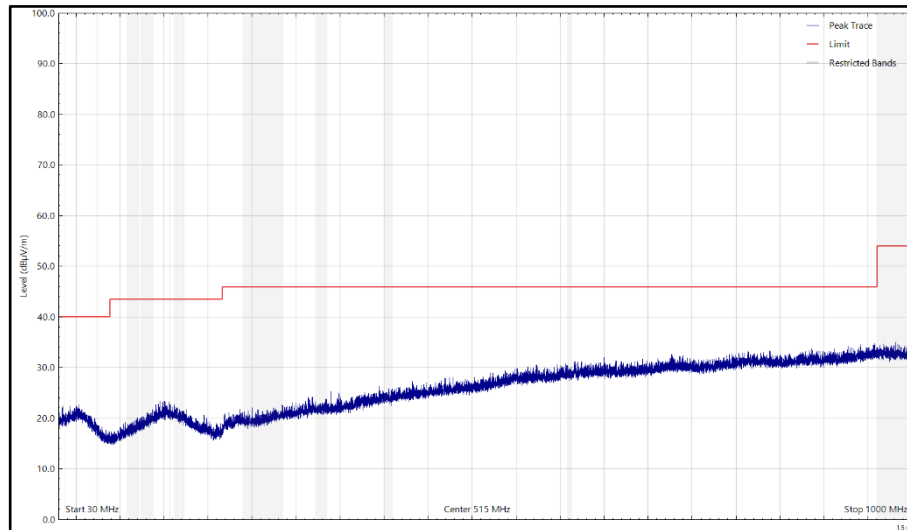


Figure 24 - Bottom Channel_LE1M_Y, 2402 MHz, 30 MHz to 1 GHz, Horizontal

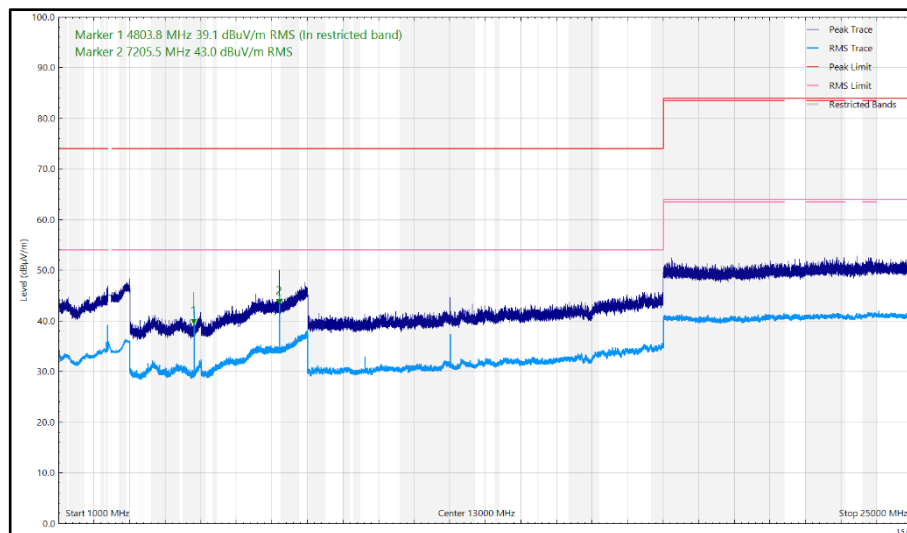


Figure 25 - Bottom Channel_LE1M_Y, 2402 MHz, 1 GHz to 25 GHz, Horizontal

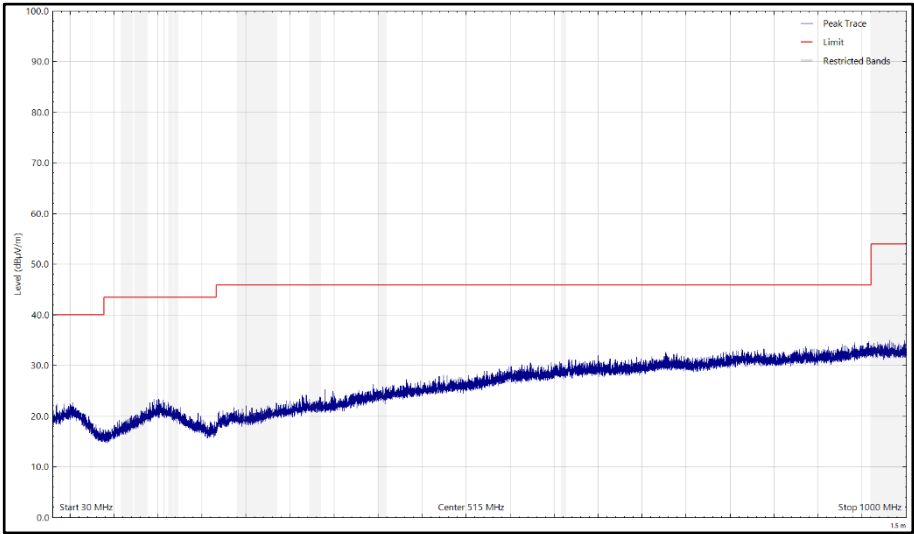


Figure 26 - Bottom Channel_LE1M_Y, 2402 MHz, 30 MHz to 1 GHz, Vertical

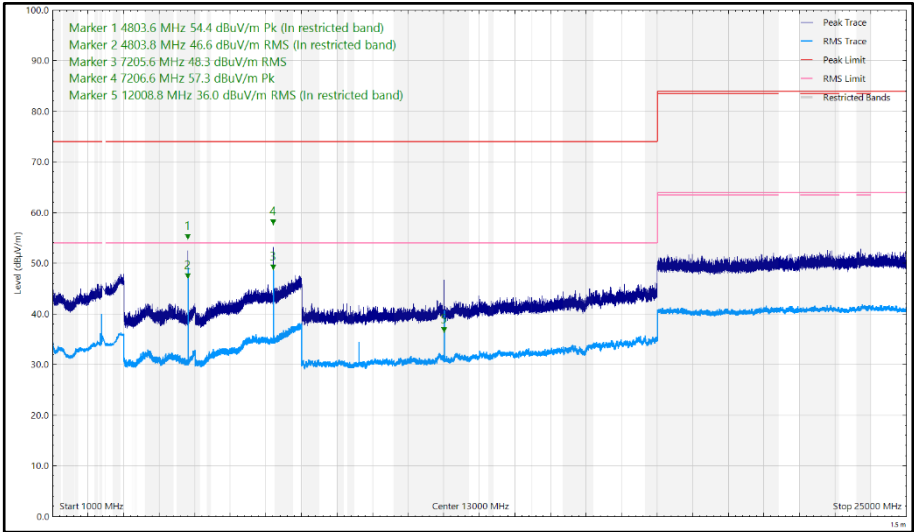


Figure 27 - Bottom Channel_LE1M_Y, 2402 MHz, 1 GHz to 25 GHz, Vertical

Frequency (MHz)	Level	Limit	Margin (dB)	Detector	Unit	Angle (°)	Height (cm)	Polarisation
4803.899	46.21	54.00	-7.79	RMS	dBuV/m	27	249	Horizontal
7205.550	47.25	54.00	-6.75	RMS	dBuV/m	340	215	Horizontal

Table 28 - Bottom Channel_LE1M_Z, 2402 MHz, 30 MHz to 25 GHz

No other emissions found within 6 dB of the limit.

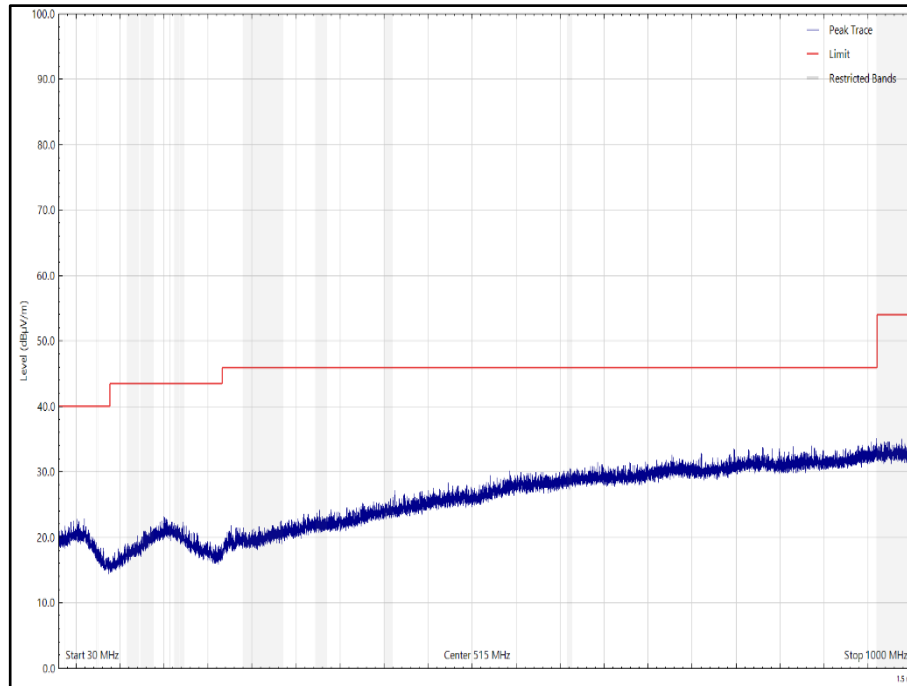


Figure 28 - Bottom Channel_LE1M_Z, 2402 MHz, 30 MHz to 1 GHz, Horizontal

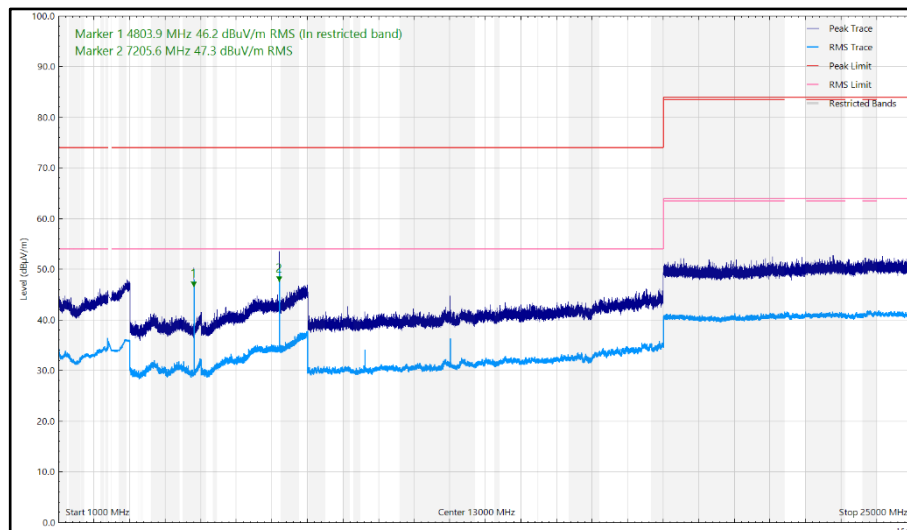


Figure 29 - Bottom Channel_LE1M_Z, 2402 MHz, 1 GHz to 25 GHz, Horizontal

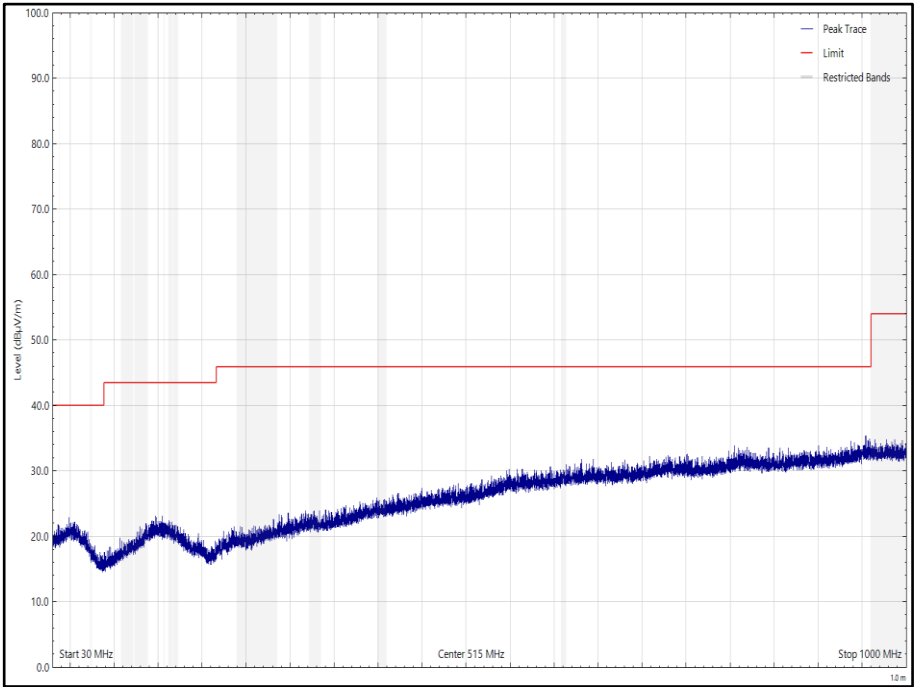


Figure 30 - Bottom Channel_LE1M_Z, 2402 MHz, 30 MHz to 1 GHz, Vertical

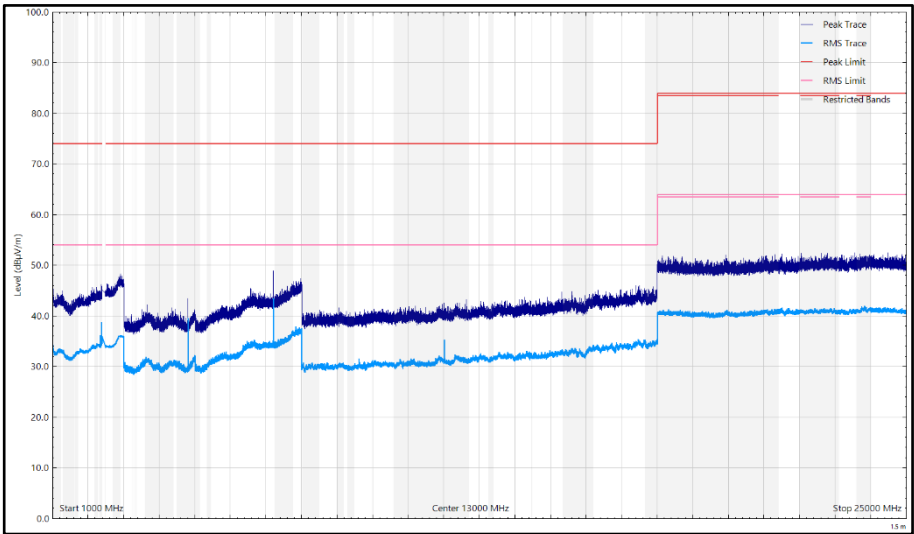


Figure 31 - Bottom Channel_LE1M_Z, 2402 MHz, 1 GHz to 25 GHz, Vertical

Frequency (MHz)	Level	Limit	Margin (dB)	Detector	Unit	Angle (°)	Height (cm)	Polarisation
4879.550	51.98	74.00	-22.02	Peak	dBuv/m	106	385	Horizontal
4879.900	43.67	54.00	-10.33	RMS	dBuv/m	106	385	Horizontal
4880.000	45.17	54.00	-8.83	RMS	dBuv/m	150	393	Vertical
4880.400	53.07	74.00	-20.93	Peak	dBuv/m	150	393	Vertical
7319.500	54.41	74.00	-19.59	Peak	dBuv/m	62	272	Vertical
7319.500	44.75	54.00	-9.25	RMS	dBuv/m	62	272	Vertical
7319.500	43.55	54.00	-10.45	RMS	dBuv/m	96	274	Horizontal
7320.698	53.84	74.00	-20.16	Peak	dBuv/m	96	274	Horizontal
12198.800	38.13	54.00	-15.87	RMS	dBuv/m	124	140	Vertical

Table 29 - Mid Channel_LE1M_X, 2440 MHz, 30 MHz to 25 GHz

No other emissions found within 6 dB of the limit.

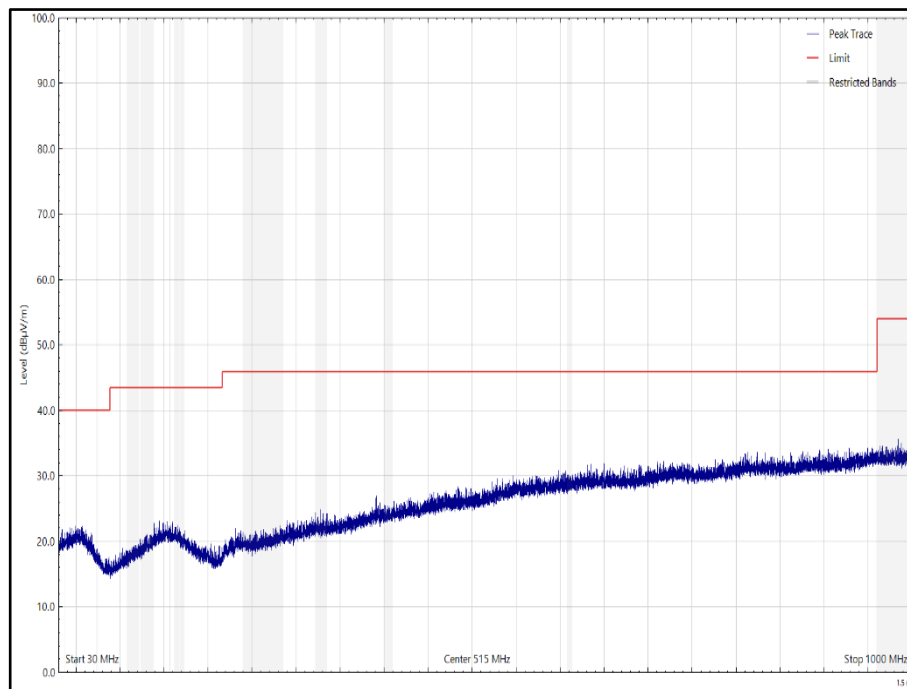


Figure 32 - Mid Channel_LE1M_X, 2440 MHz, 30 MHz to 1 GHz, Horizontal

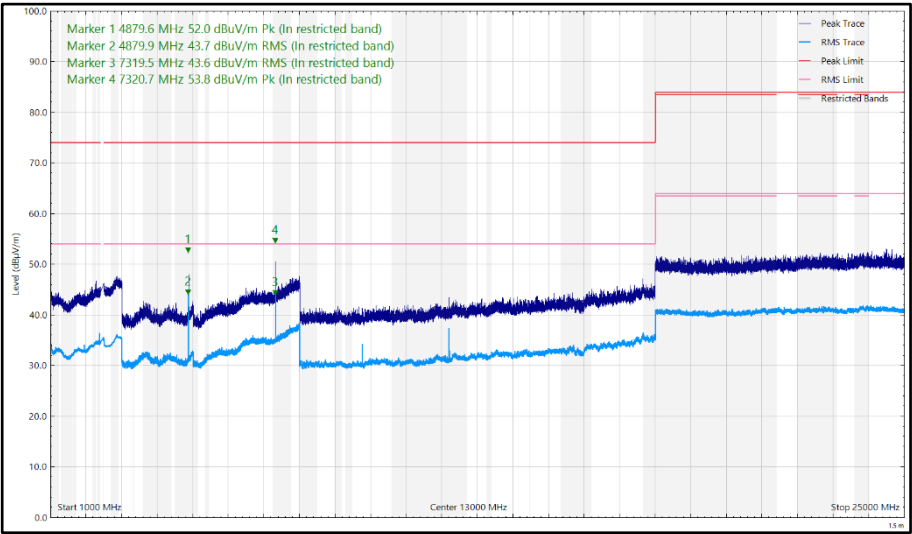


Figure 18 - Mid Channel_LE1M_X, 2440 MHz, 1 GHz to 25 GHz, Horizontal

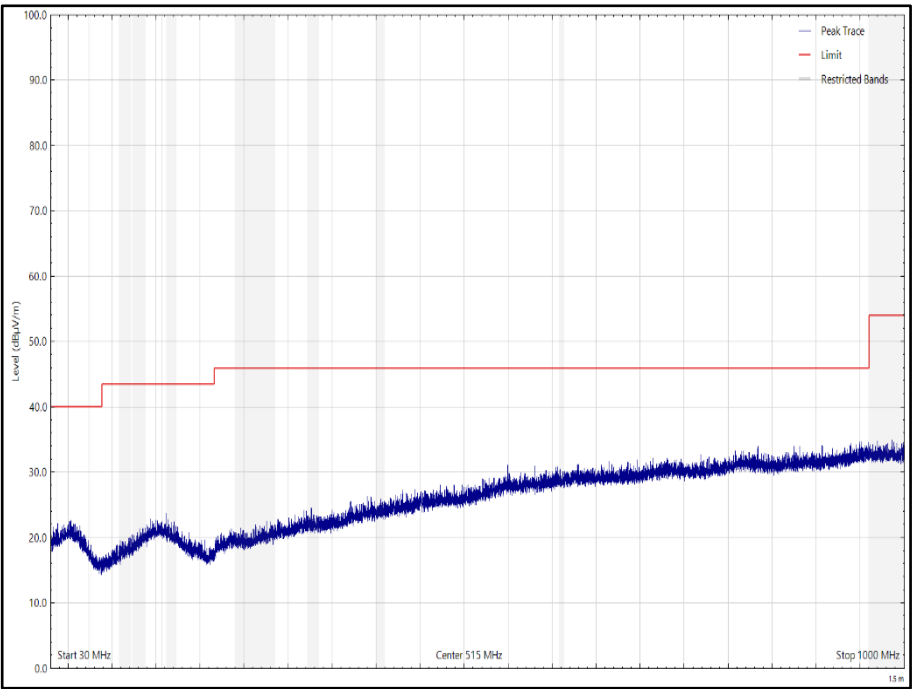


Figure 33 - Mid Channel_LE1M_X, 2440 MHz, 30 MHz to 1 GHz, Vertical

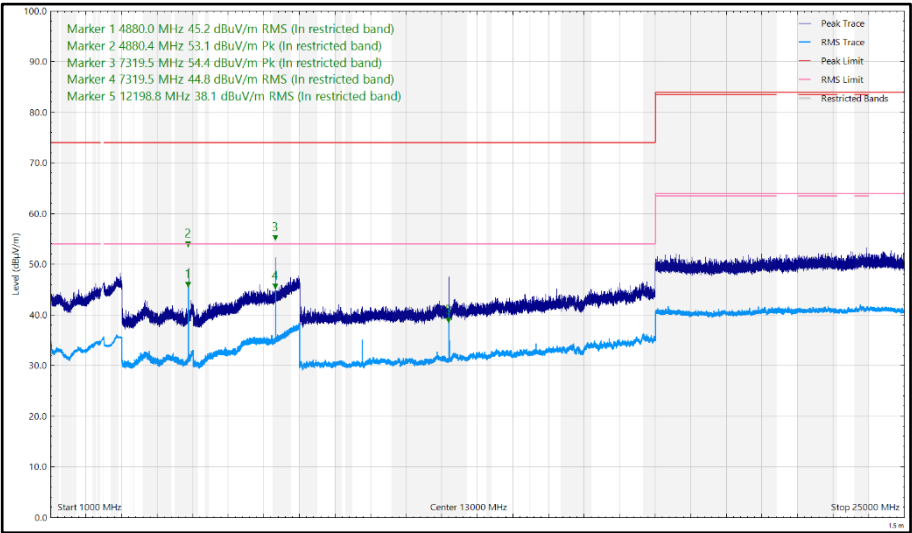


Figure 34 - Mid Channel_LE1M_X, 2440 MHz, 1 GHz to 25 GHz, Vertical

Frequency (MHz)	Level	Limit	Margin (dB)	Detector	Unit	Angle (°)	Height (cm)	Polarisation
4879.450	54.86	74.00	-19.14	Peak	dBuv/m	350	288	Vertical
4879.850	40.01	54.00	-13.99	RMS	dBuv/m	132	145	Horizontal
4879.950	46.93	54.00	-7.07	RMS	dBuv/m	350	288	Vertical
4880.150	49.05	74.00	-24.95	Peak	dBuv/m	132	145	Horizontal
7319.100	56.06	74.00	-17.94	Peak	dBuv/m	307	272	Vertical
7319.500	46.95	54.00	-7.05	RMS	dBuv/m	307	272	Vertical
7319.651	42.86	54.00	-11.14	RMS	dBuv/m	119	106	Horizontal
7320.800	52.58	74.00	-21.42	Peak	dBuv/m	119	106	Horizontal
12198.850	37.98	54.00	-16.02	RMS	dBuv/m	147	164	Vertical

Table 30 - Mid Channel_LE1M_Y, 2440 MHz, 30 MHz to 25 GHz

No other emissions found within 6 dB of the limit.

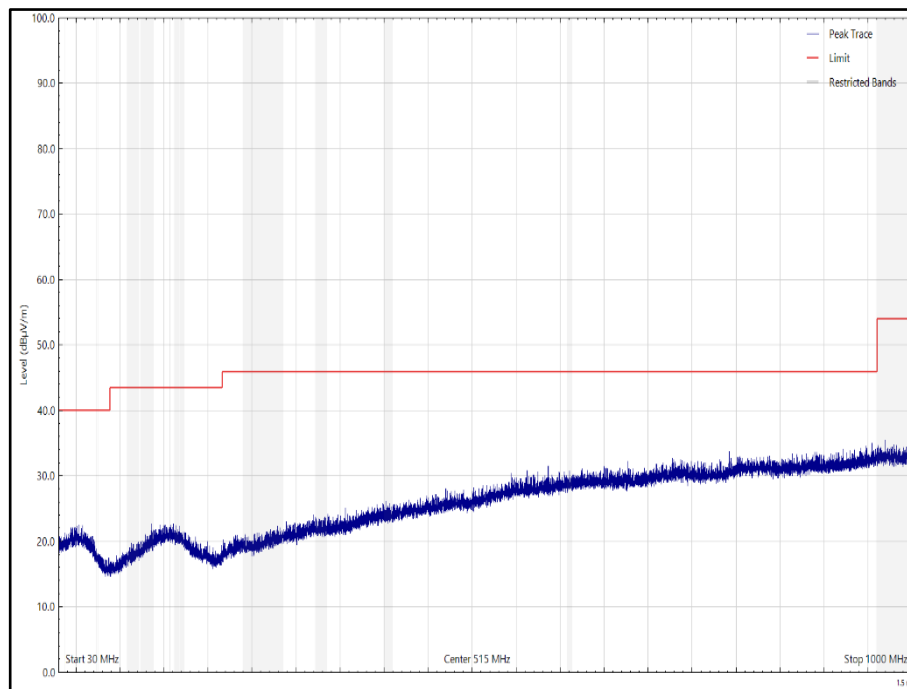


Figure 35 - Mid Channel_LE1M_Y, 2440 MHz, 30 MHz to 1 GHz, Horizontal

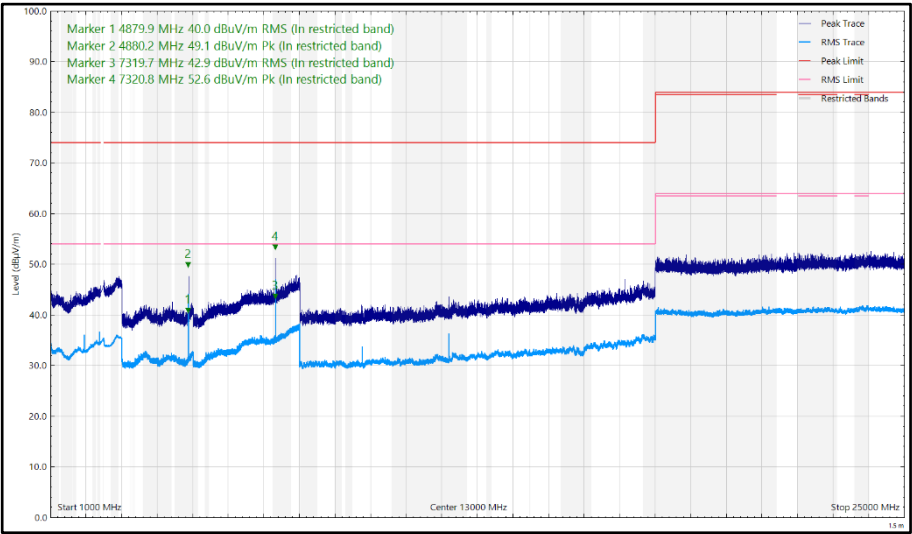


Figure 36 - Mid Channel_LE1M_Y, 2440 MHz, 1 GHz to 25 GHz, Horizontal

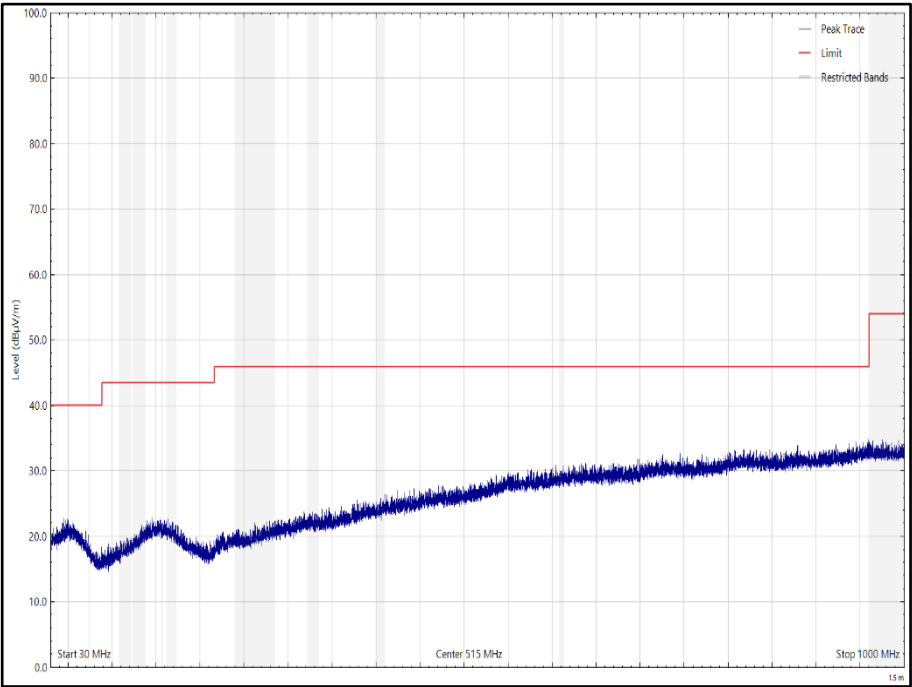


Figure 37 - Mid Channel_LE1M_Y, 2440 MHz, 30 MHz to GHz, Vertical

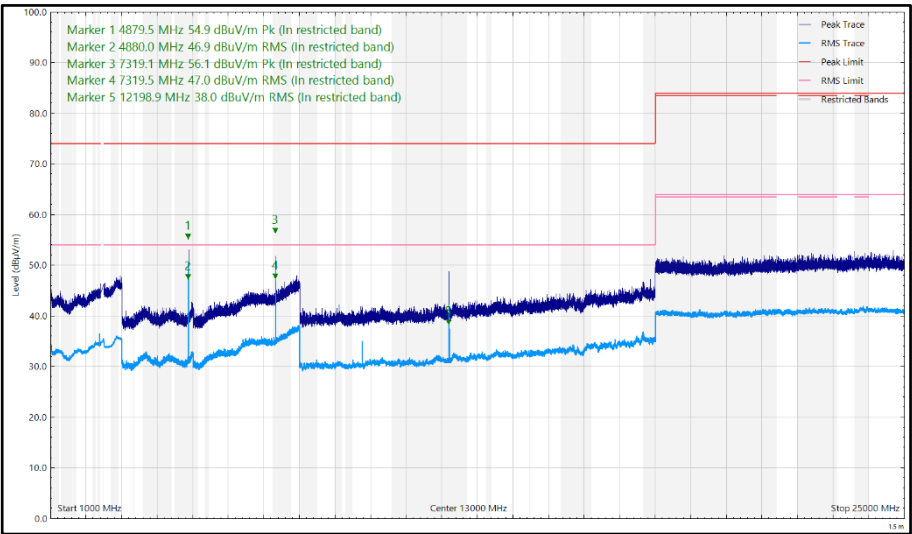


Figure 38 - Mid Channel_LE1M_Y, 2440 MHz, 1 GHz to 25 GHz, Vertical

Frequency (MHz)	Level	Limit	Margin (dB)	Detector	Unit	Angle (°)	Height (cm)	Polarisation
4879.800	48.12	54.00	-5.88	RMS	dBuv/m	35	245	Horizontal
4879.951	36.74	54.00	-17.26	RMS	dBuv/m	48	100	Vertical
4880.449	55.84	74.00	-18.16	Peak	dBuv/m	35	245	Horizontal
7319.200	57.78	74.00	-16.22	Peak	dBuv/m	335	214	Horizontal
7319.300	48.86	54.00	-5.14	RMS	dBuv/m	335	214	Horizontal
7319.550	37.91	54.00	-16.09	RMS	dBuv/m	210	205	Vertical
7320.799	48.53	74.00	-25.47	Peak	dBuv/m	210	205	Vertical
12198.750	36.30	54.00	-17.70	RMS	dBuv/m	37	178	Horizontal

Table 31 - Mid Channel_LE1M_Z, 2440 MHz, 30 MHz to 25 GHz

No other emissions found within 6 dB of the limit.

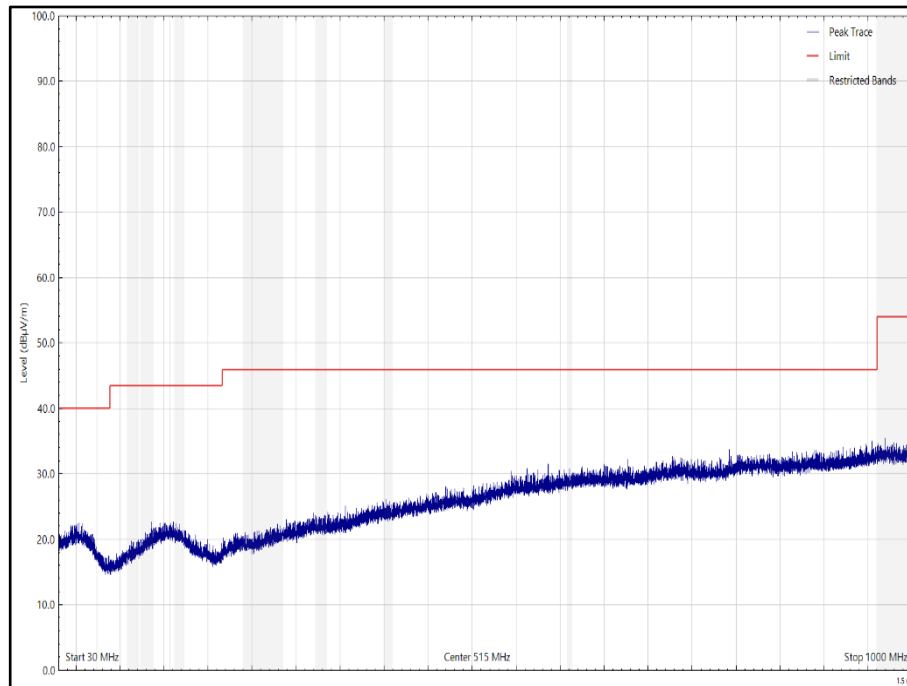


Figure 39 - Mid Channel_LE1M_Z, 2440 MHz, 30 MHz to 1 GHz, Horizontal

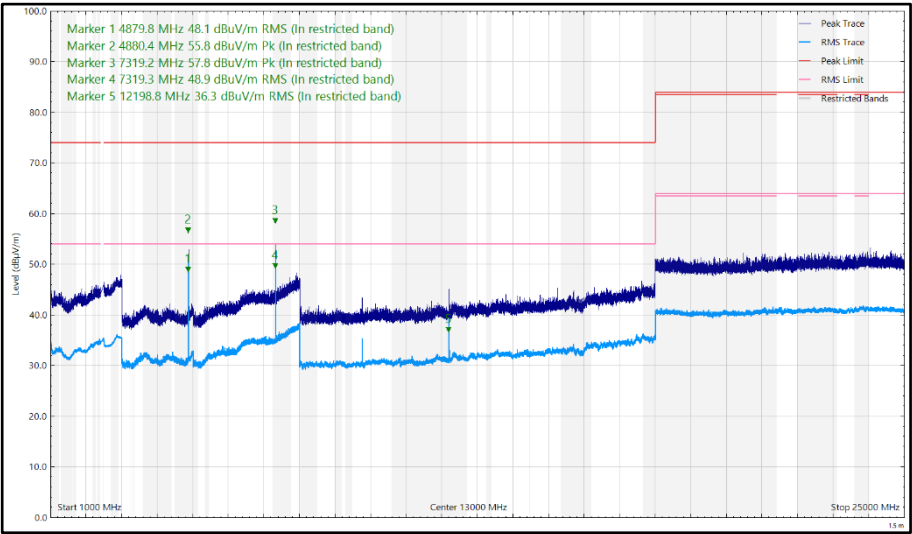


Figure 40 - Mid Channel_LE1M_Z, 2440 MHz, 1 GHz to 25 GHz, Horizontal

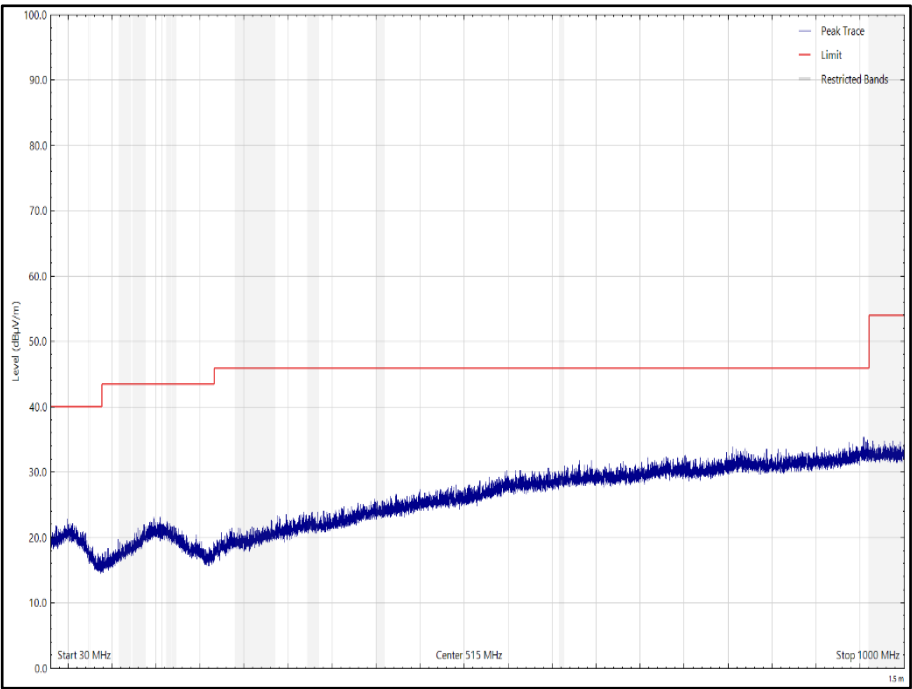


Figure 41 - Mid Channel_LE1M_Z, 2440 MHz, 30 MHz to 1 GHz, Vertical

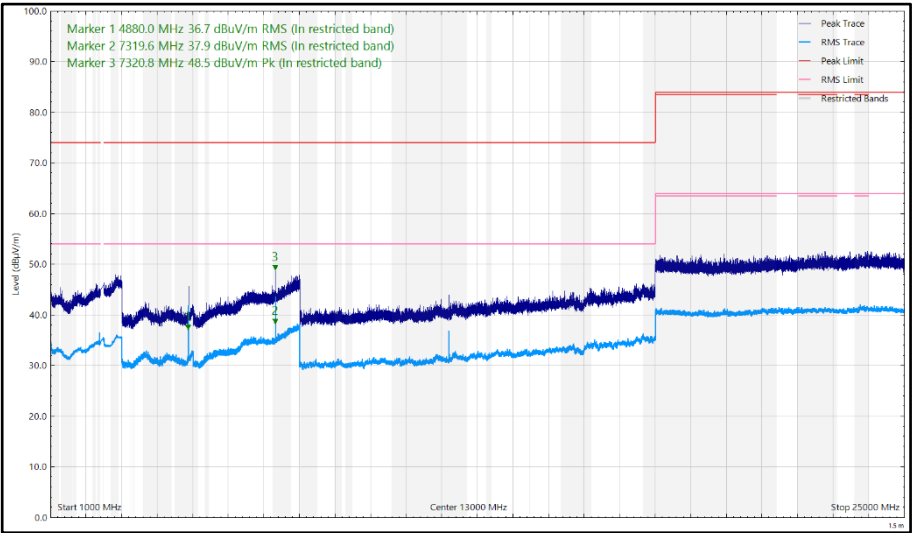


Figure 42 - Mid Channel_LE1M_Z, 2440 MHz,1 GHz to 25 GHz, Vertical



Frequency (MHz)	Level	Limit	Margin (dB)	Detector	Unit	Angle (°)	Height (cm)	Polarisation
4959.900	44.96	54.00	-9.04	RMS	dBuv/m	152	358	Vertical
4959.951	42.83	54.00	-11.17	RMS	dBuv/m	112	400	Horizontal
7439.402	42.54	54.00	-11.46	RMS	dBuv/m	284	215	Vertical
7439.501	44.41	54.00	-9.59	RMS	dBuv/m	102	280	Horizontal
12398.700	36.34	54.00	-17.66	RMS	dBuv/m	224	198	Horizontal
12398.901	38.38	54.00	-15.62	RMS	dBuv/m	124	108	Vertical

Table 32 - Top Channel_LE1M_X, 2480 MHz, 30 MHz to 25 GHz

No other emissions found within 6 dB of the limit.

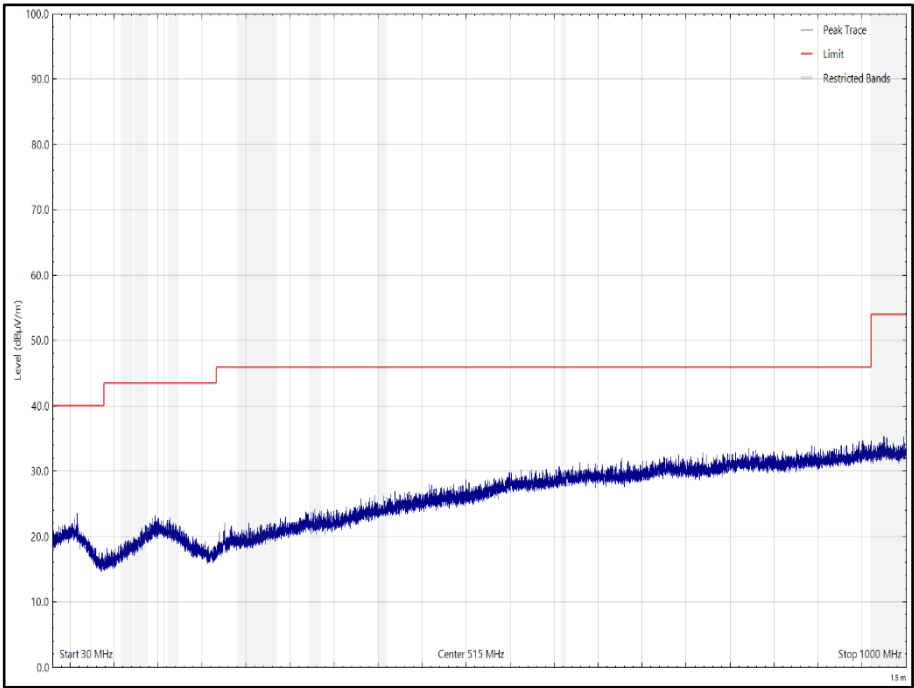


Figure 43 - Top Channel_LE1M_X, 2480 MHz, 30 MHz to 1 GHz, Horizontal

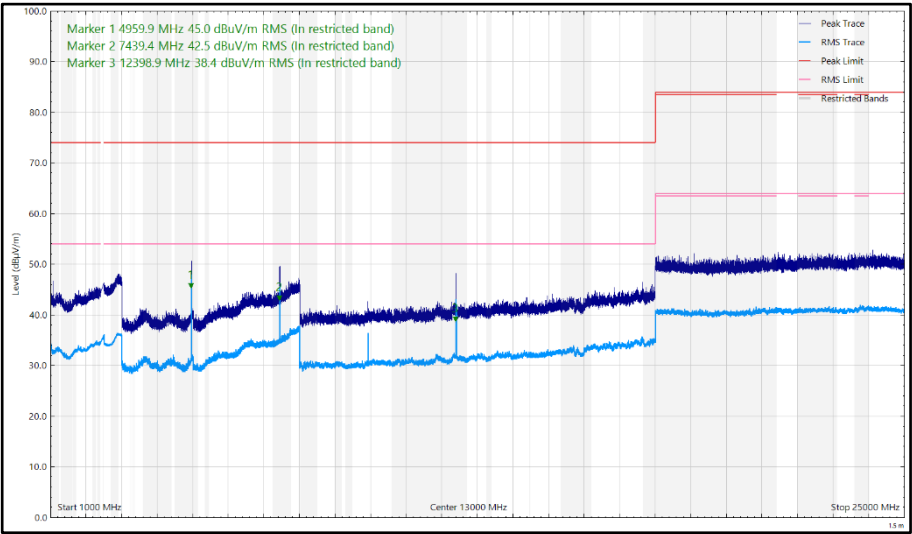


Figure 44 - Top Channel_LE1M_X, 2480 MHz,1 GHz to 25 GHz, Horizontal

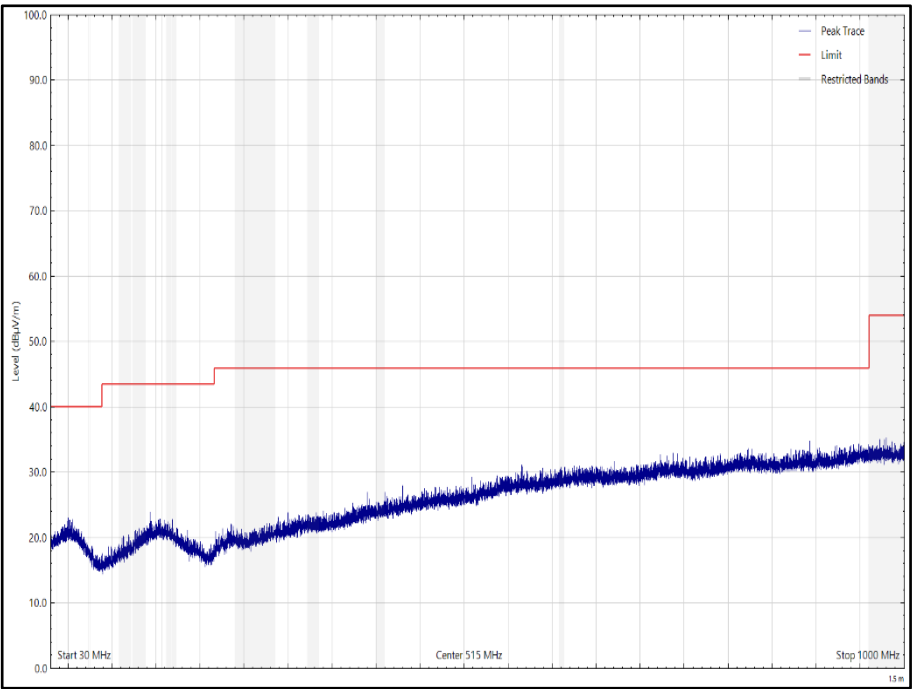


Figure 45 - Top Channel_LE1M_X, 2480 MHz, 30 MHz to 1 GHz, Vertical

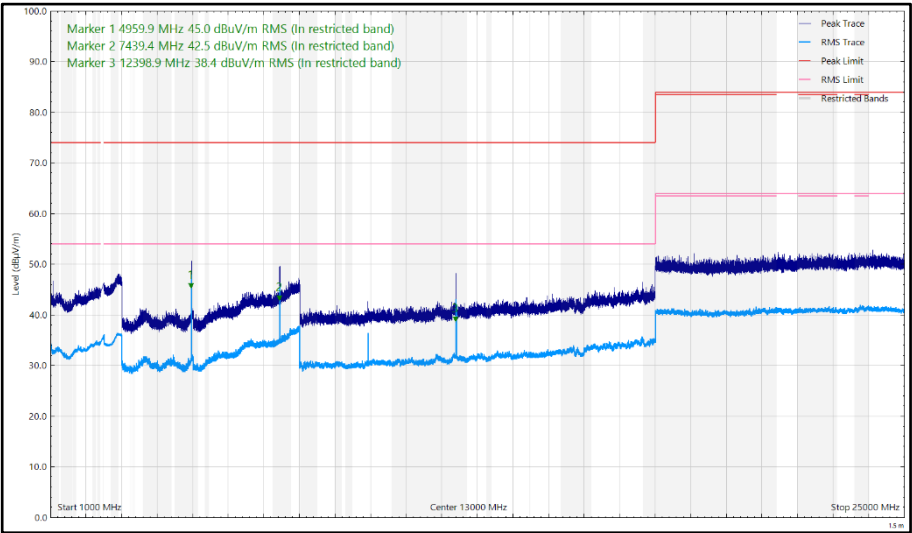


Figure 46 - Top Channel_LE1M_X, 2480 MHz, 1 GHz to 25 GHz, Vertical

Frequency (MHz)	Level	Limit	Margin (dB)	Detector	Unit	Angle (°)	Height (cm)	Polarisation
4959.850	41.51	54.00	-12.49	RMS	dBuv/m	128	100	Horizontal
4959.900	47.69	54.00	-6.31	RMS	dBuv/m	341	303	Vertical
7439.450	41.51	54.00	-12.49	RMS	dBuv/m	242	116	Horizontal
7439.450	43.21	54.00	-10.79	RMS	dBuv/m	75	225	Vertical
12398.850	36.29	54.00	-17.71	RMS	dBuv/m	137	142	Horizontal
12398.851	39.48	54.00	-14.52	RMS	dBuv/m	144	174	Vertical

Table 33 - Top Channel_LE1M_Y, 2480 MHz, 30 MHz to 25 GHz

No other emissions found within 6 dB of the limit.

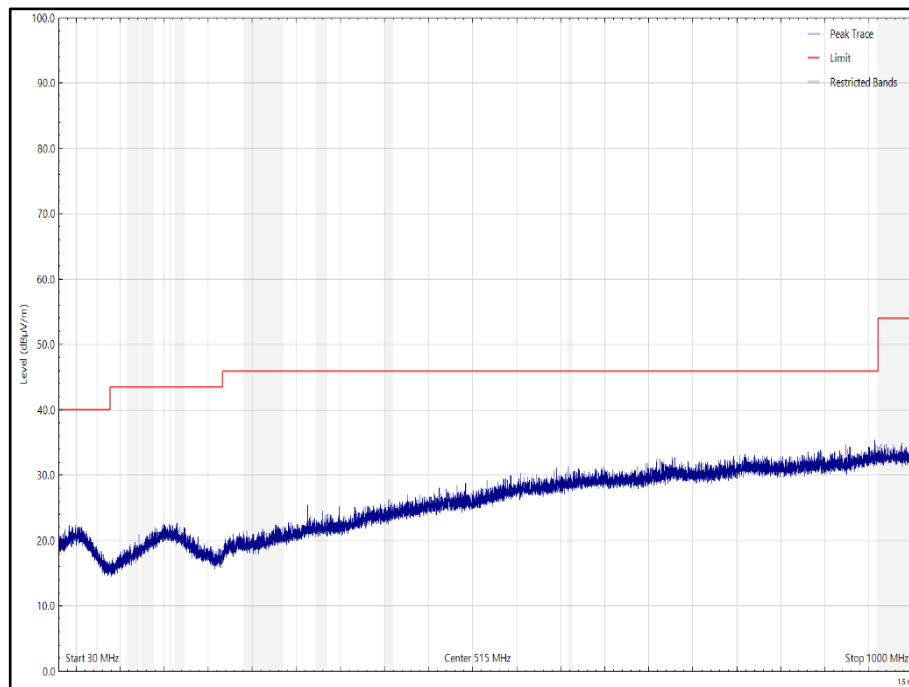


Figure 47 - Top Channel_LE1M_Y, 2480 MHz, 30 MHz to 1 GHz, Horizontal

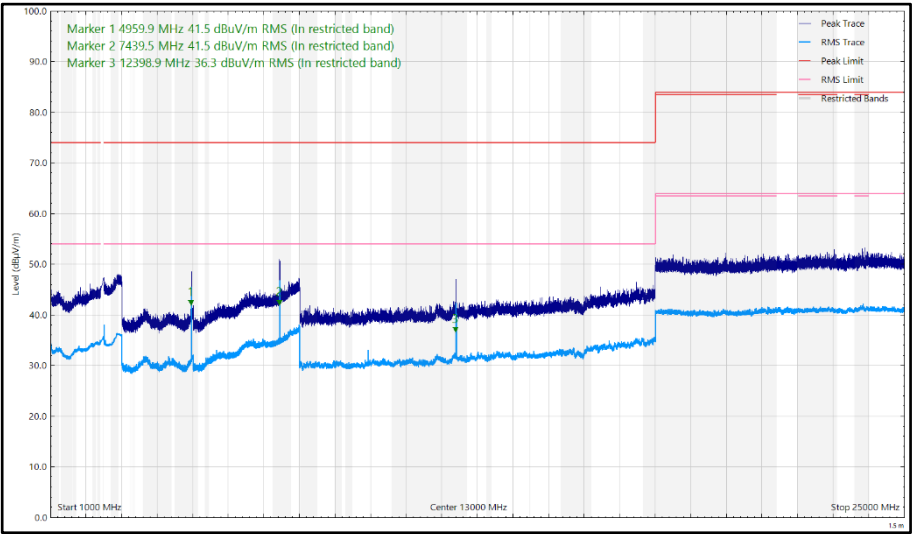


Figure 48 - Top Channel_LE1M_Y, 2480 MHz, 1 GHz to 25 GHz, Horizontal

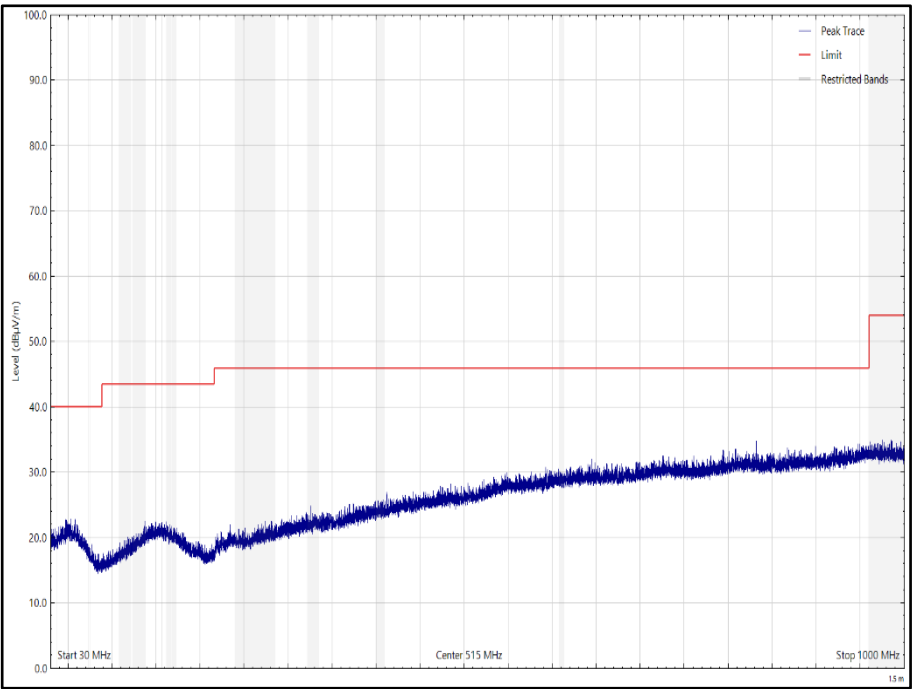


Figure 49 - Top Channel_LE1M_Y, 2480 MHz, 30 MHz to 1 GHz, Vertical

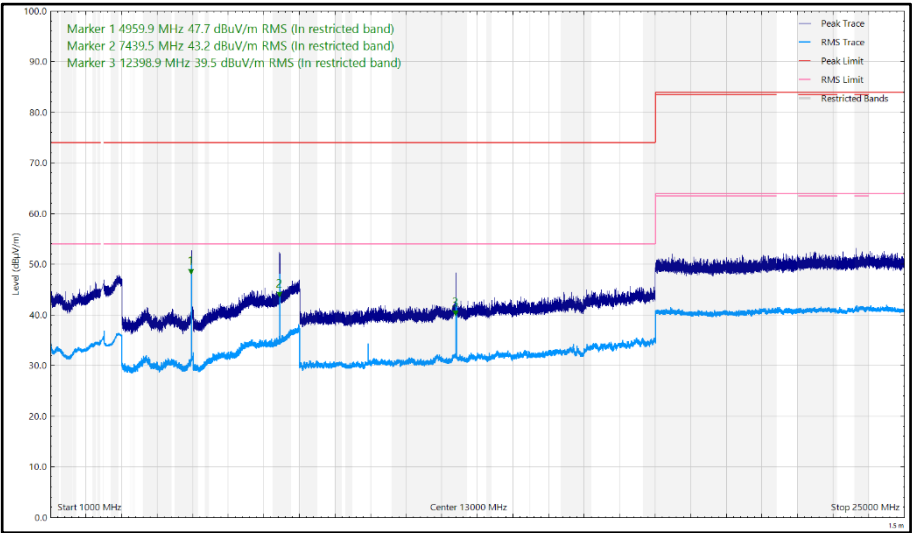


Figure 50 - Top Channel_LE1M_Y, 2480 MHz,1 GHz to 25 GHz, Vertical

Frequency (MHz)	Level	Limit	Margin (dB)	Detector	Unit	Angle (°)	Height (cm)	Polarisation
4959.850	37.93	54.00	-16.07	RMS	dBuv/m	119	114	Vertical
4959.850	48.19	54.00	-5.81	RMS	dBuv/m	14	247	Horizontal
4960.050	47.09	74.00	-26.91	Peak	dBuv/m	119	114	Vertical
4960.449	55.97	74.00	-18.03	Peak	dBuv/m	14	247	Horizontal
7439.350	39.17	54.00	-14.83	RMS	dBuv/m	150	138	Vertical
7439.400	54.10	74.00	-19.90	Peak	dBuv/m	43	172	Horizontal
7439.500	44.54	54.00	-9.46	RMS	dBuv/m	43	172	Horizontal
7440.249	49.90	74.00	-24.10	Peak	dBuv/m	150	138	Vertical
12398.750	37.72	54.00	-16.28	RMS	dBuv/m	359	334	Vertical
12398.850	36.36	54.00	-17.64	RMS	dBuv/m	52	155	Horizontal

Table 34 - Top Channel_LE1M_Z, 2480 MHz, 30 MHz to 25 GHz

No other emissions found within 6 dB of the limit.

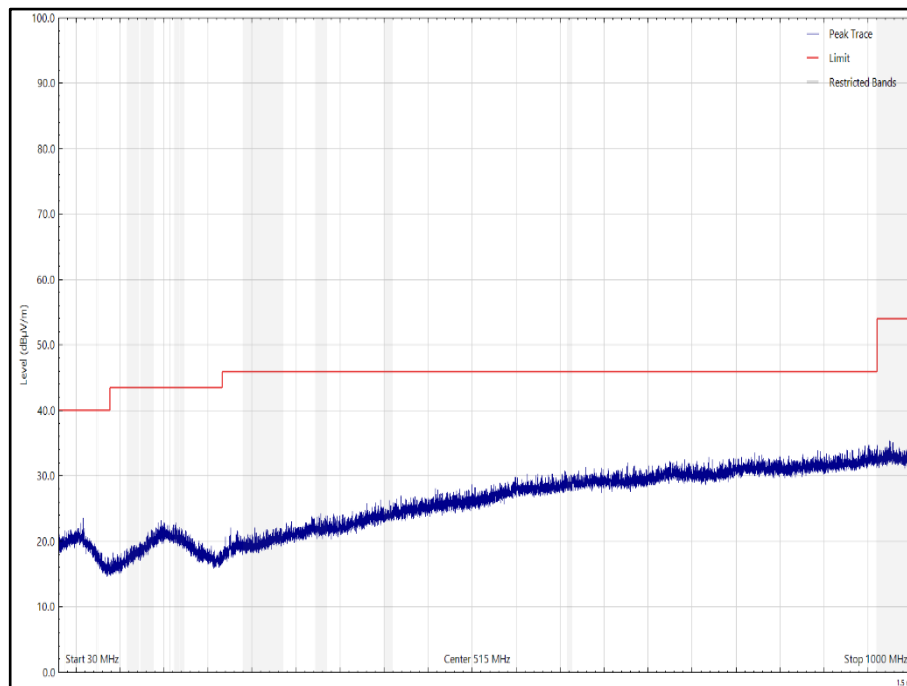


Figure 51 - Top Channel_LE1M_Z, 2480 MHz, 30 MHz to 1 GHz, Horizontal

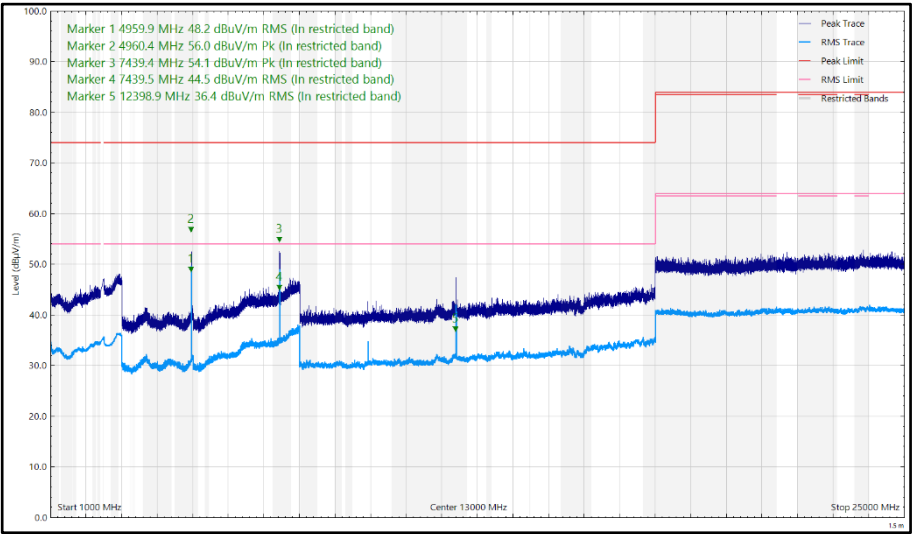


Figure 52 - Top Channel_LE1M_Z, 2480 MHz,1 GHz to 25 GHz, Horizontal

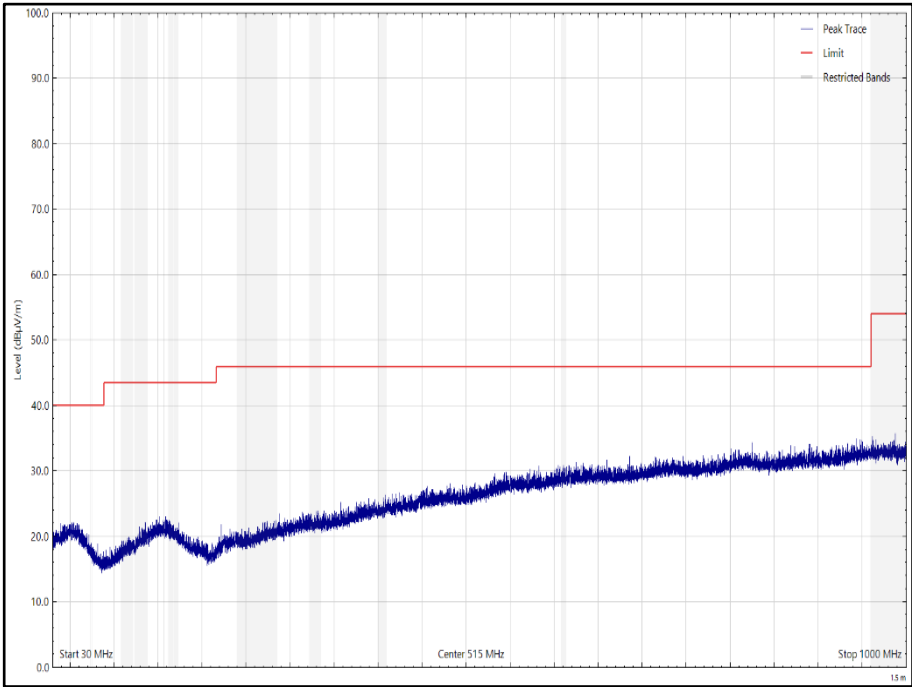


Figure 53 - Top Channel_LE1M_Z, 2480 MHz, 30 MHz to 1 GHz, Vertical

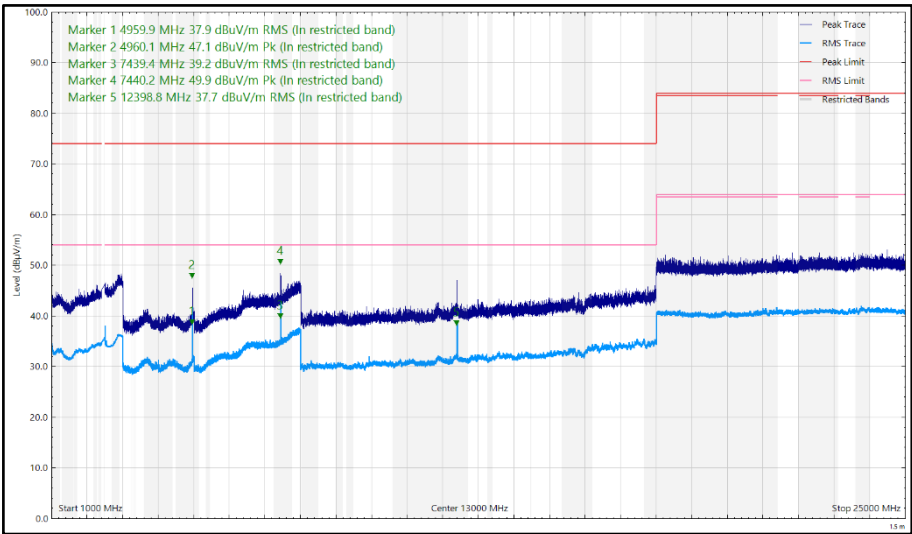


Figure 54 - Top Channel_LE1M_Z, 2480 MHz, 1 GHz to 25 GHz, Vertical



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 or digitally modulated device 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 5.4(4), 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.

In addition, radiated emissions which fall in the restricted bands, as defined in RSS-GEN, clause 8.10, must also comply with the radiated emission limits specified in RSS-GEN clause 8.9.

2.5.8 Test Location and Test Equipment Used

This test was carried out in EMC Chamber 5.

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
Multimeter	Fluke	79 Series III	611	12	04-Feb-2027
Pre-Amplifier (18 GHz to 40 GHz)	Phase One	PSO4-0087	1534	12	20-Oct-2026
3m Semi-Anechoic Chamber	Rainford	RF Chamber 5	1545	36	23-Apr-2027
Programmable Power Supply	Iso-tech	IPS 2010	2437	-	O/P Mon
Hygrometer	Rotronic	I-1000	2784	12	04-Nov-2026
Mast Controller	Maturo Gmbh	NCD	4810	-	TU
Tilt Antenna Mast	Maturo Gmbh	TAM 4.0-P	4811	-	TU
Band Reject Filter - 2.425 GHz	Wainwright	WRCGV14-2390-2400-2450-2460-50SS	5067	12	02-May-2027
Band Reject Filter - 2.4585 GHz	Wainwright	WRCGV14-2423.5-2433.5-2483.5-2493.5-50SS	5069	12	07-Nov-2026
Test Receiver	Rohde & Schwarz	ESW44	5084	12	08-Jan-2027
Emissions Software	TUV SUD	EmX V3.6.3	5125	-	Software
Antenna (DRG, 7.5 GHz to 18 GHz)	Schwarzbeck	HWRD750	5216	12	12-Jul-2026
Antenna (DRG 1-10.5GHz)	Schwarzbeck	BBHA9120B	5232	12	18-Jul-2026
Pre-amplifier (30 dB, 1GHz to 18GHz)	Schwarzbeck	BBV 9718 C	5261	12	07-May-2027
Cable (SMA to SMA, 1 m)	Junkosha	MWX221-01000AMSAMS/A	5515	12	21-Oct-2026
3 GHz High pass Filter	Wainwright	WHKX12-2580-3000-18000-80SS	5548	12	31-Aug-2026
7 GHz High pass Filter	Wainwright	WHKX12-5850-6800-18000-80SS	5549	12	31-Aug-2026
Pre-Amplifier (8 GHz to 18 GHz)	Wright Technologies	APS06-0061	5596	12	28-Oct-2026
1m K-Type Cable	Junkosha	MWX221/B	5908	12	04-Nov-2026
Cable (K-Type to K-Type, 2 m)	Junkosha	MWX241/B	5909	12	23-Sep-2026
2m Coaxial Cable Assy	Junkosha	MWX221-02000AMSAMS/A	6363	12	06-Sep-2026



Instrument	Manufacturer	Type No	TE No	Calibration Period (months)	Calibration Expires
Trilog Super Broadband Test Antenna	Schwarzbeck	VULB 9168	6635	24	25-Jul-2027
Cable Assy 8m (N to N) 18GHz	Junkosha	MWX221-08000NMSNMS/B	7050	12	03-Oct-2026

Table 35

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

2.6 Authorised Band Edges

2.6.1 Specification Reference

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

2.6.2 Equipment Under Test and Modification State

S/N: 350000000000302 - Modification State 0

2.6.3 Date of Test

18-June-2026

2.6.4 Test Method

The test was performed in accordance with ANSI C63.10, clause 6.10.4.
The DUT was powered by 24V DC throughout the test.

2.6.5 Environmental Conditions

Ambient Temperature	21.2 °C
Relative Humidity	67.0 %

2.6.6 Set Up Diagram

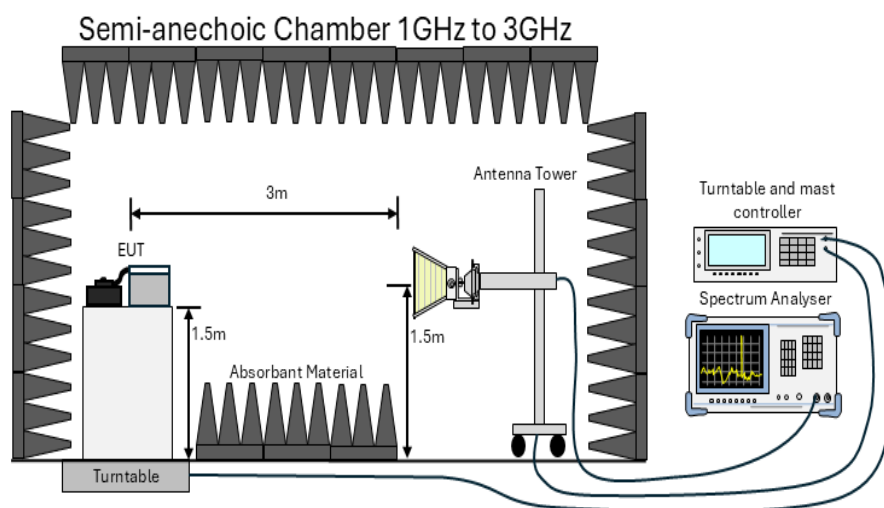


Figure 55

2.6.7 Test Results

Mode	Data Rate/MCS	Frequency (MHz)	Band Edge Frequency (MHz)	Level (dBc)
BLE	LE1M	2402	2400.0	-45.11
BLE	LE1M	2480	2483.5	-55.22

Table 36 - Authorized Band Edge Results

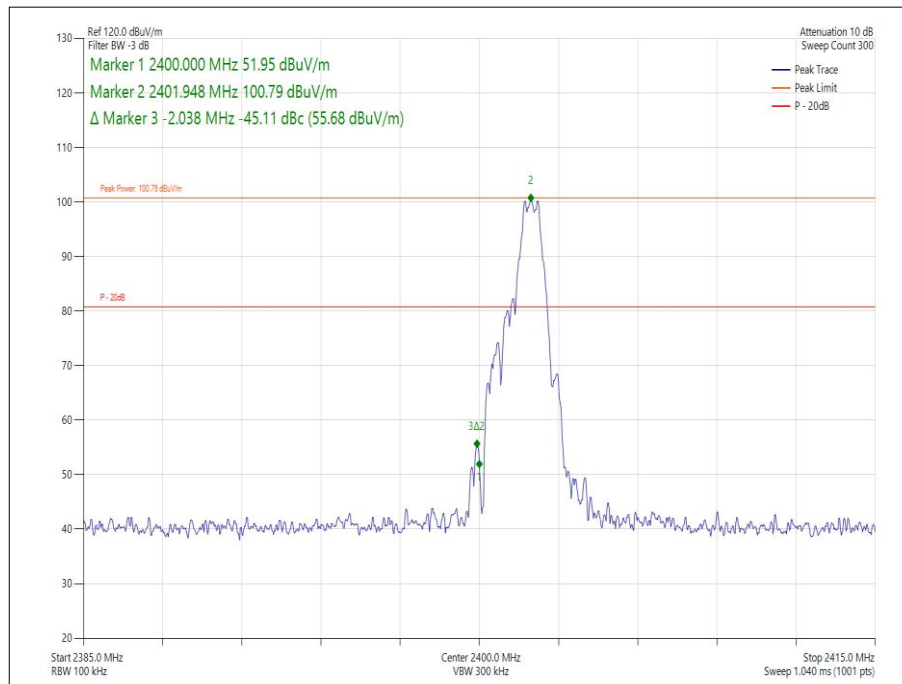


Figure 56 - BLE, 2402 MHz, Band Edge Frequency 2400 MHz

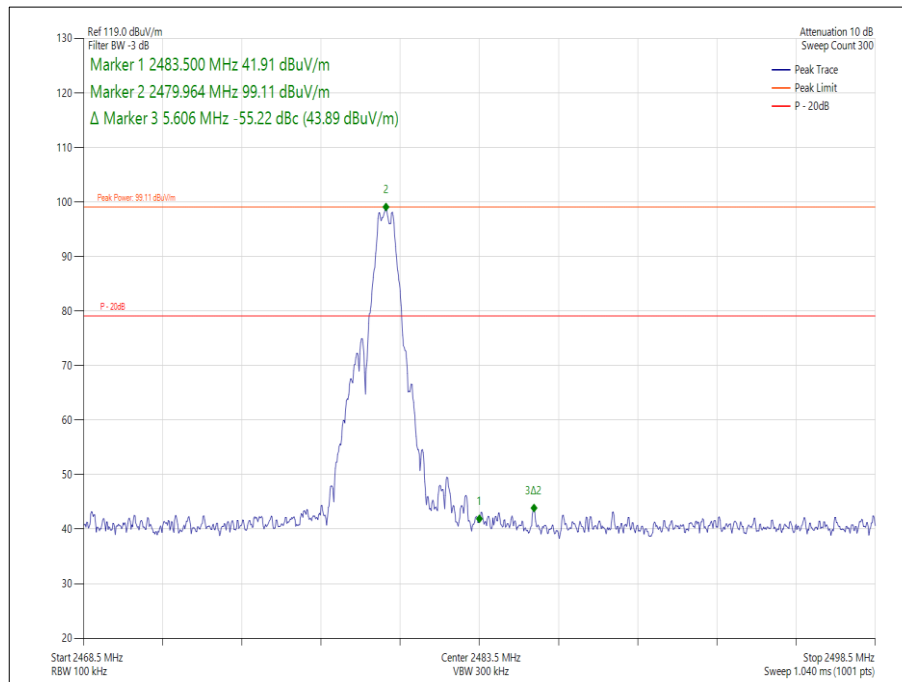


Figure 57 - BLE, 2480 MHz, Band Edge Frequency 2483.5 MHz

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 or digitally modulated device 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 5.4(4), 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.

2.6.8 Test Location and Test Equipment Used

This test was carried out in EMC Chamber 5.

Instrument	Manufacturer	Type No	TE No	Calibration Period (months)	Calibration Expires
3m Semi-Anechoic Chamber	Rainford	RF Chamber 5	1545	36	23-Apr-2027
Turntable Controller	Inn-Co GmbH	CO 1000	1606	-	TU
Hygrometer	Rotronic	I-1000	2784	12	04-Nov-2026
Mast Controller	Maturo GmbH	NCD	4810	-	TU
Tilt Antenna Mast	Maturo GmbH	TAM 4.0-P	4811	-	TU
Antenna (DRG, 1 GHz to 10.5 GHz)	Schwarzbeck	BBHA9120B	4848	12	05-Jul-2026
Test Receiver	Rohde & Schwarz	ESW44	5084	12	08-Jan-2027
Emissions Software	TUV SUD	EmX V3.6.3	5125	-	Software
2m Coaxial Cable Assy	Junkosha	MWX221-02000AMSAMS/A	6363	12	06-Sep-2026
Cable Assy 8m (N to N) 18GHz	Junkosha	MWX221-08000NMSNMS/B	7050	12	03-Oct-2026

Table 37

TU - Traceability Unscheduled

3 Photographs



Figure 58 – X Orientation



Figure 59 – Y Orientation



Figure 60 –Z Orientation



Figure 61 - Test Setup - 30 MHz to 1 GHz

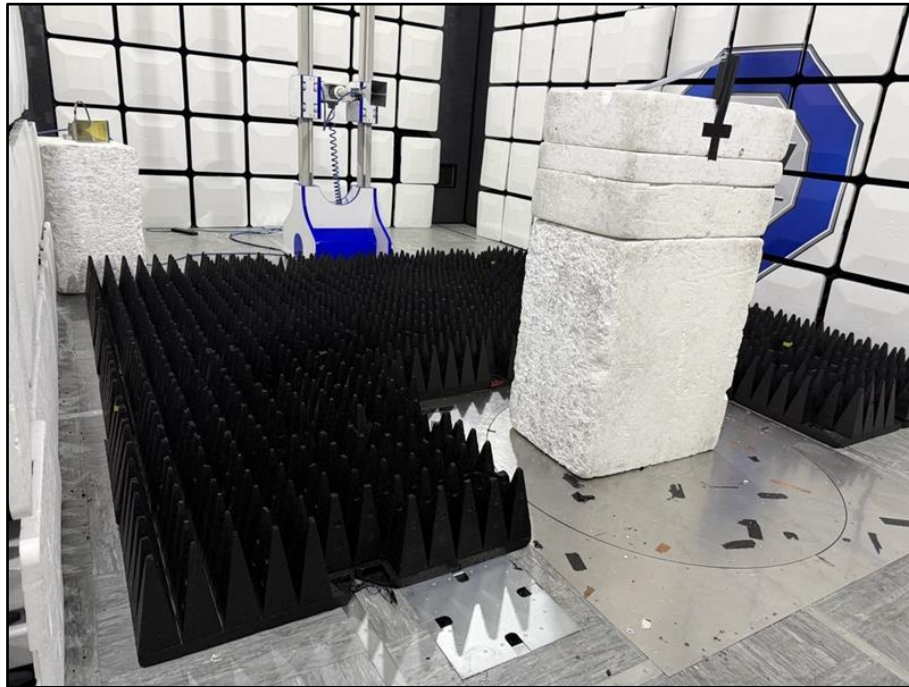


Figure 62 - Test Setup - 1 GHz to 8 GHz

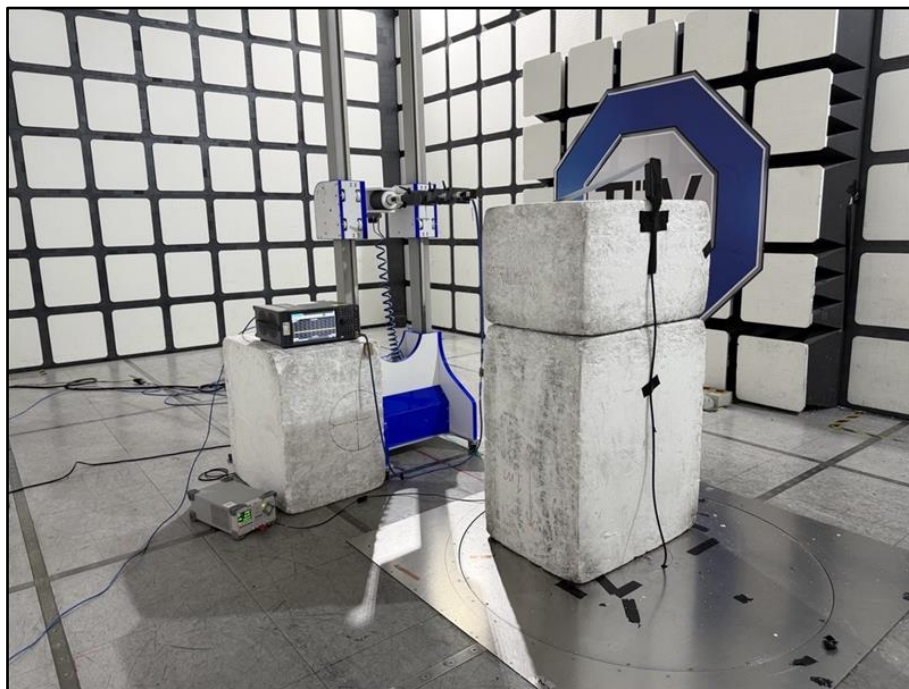


Figure 63 - Test Setup - 18 GHz to 25 GHz



Figure 64 - Test Setup - Conducted

4 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
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
Emission Bandwidth	± 58.63 kHz
Maximum Conducted Output Power	± 1.03 dB
Power Spectral Density	± 1.00 dB

Table 38

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.