

Radio Test Report

Manufacturer: Verizon Connect
Model: AT510
Model: AT510-B



In accordance with FCC and ISED (Module
Integration as per KDB 996369)
Technology: (4G - LTE)

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 75966423-03 Issue 02

SIGNATURE			
NAME	JOB TITLE	RESPONSIBLE FOR	ISSUE DATE
Steve Marshall	Senior Engineer	Authorised Signatory	11 August 2026

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

EXECUTIVE SUMMARY
A sample of this product was tested and found to be compliant with FCC 47 CFR Part 2 (2024), FCC 47 CFR Part 22 (2024), FCC 47 CFR Part 24 (2024), FCC 47 CFR Part 27 (2024), RSS-130 Issue 2 (2019-02), RSS-132 Issue 4 (2023-01), RSS-133 Issue 7 (2024-07), RSS-139 Issue 4 (2022-09) and Module Integration as per KDB 996369 D04 v02 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
01	First version	05-Aug-2026
02	Updated customer / applicant details	11-Aug-2026

Table 1

1.2 Introduction

Applicant	Verizon Connect
Manufacturer	Verizon Connect
Model Number(s)	AT510 and 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
Test Specification/Issue/Date	FCC 47 CFR Part 2: 2024 FCC 47 CFR Part 22: 2024 FCC 47 CFR Part 24: 2024 FCC 47 CFR Part 27: 2024 RSS-130: Issue 2 (2019-02) RSS-132: Issue 4 (2023-01) RSS-133: Issue 7 (2024-07) RSS-139: Issue 4 (2022-09)
Test Plan/Issue/Date	N/A
Order Number	8000000041
Date	28-November-2025
Date of Receipt of EUT	05-June-2026
Start of Test	10-July-2026
Finish of Test	13-July-2026
Name of Engineer(s)	Mohiuddin Mohammed
Related Document(s)	ANSI C63.26 (2015) ANSI C63.10-2020 +Cor.1-2023+C63.10a-2024 KDB 996369 D04 Module Integration Guide v02



1.3 Brief Summary of Results

A brief summary of the tests carried out in accordance with FCC and ISCED (Module Integration as per KDB 996369) is shown below.

Section	Specification Clause								Test Description	Result	Comments/Base Standard
	Part 2	Part 22	Part 24	Part 27	RSS-130	RSS-132	RSS-133	RSS-139			
Configuration and Mode: ADD-B: Battery Powered 4G (LTE) & FDD Band 25											
2.1	2.1053	-	24.238(a)	-	-	-	5.6	-	Radiated Spurious Emissions	Pass	ANSI C63.26 (2015) ANSI C63.10-2020 +Cor.1-2023+C63.10a-2024 KDB 996369 D04 Module Integration Guide v02
Configuration and Mode: ADD: DC Powered - 4G (LTE) & FDD Band 5											
2.1	2.1053	22.917(a)	-	-	-	5.5	-	-	Radiated Spurious Emissions	Pass	ANSI C63.26 (2015) ANSI C63.10-2020 +Cor.1-2023+C63.10a-2024 KDB 996369 D04 Module Integration Guide v02
Configuration and Mode: ADD: DC Powered 4G (LTE) & FDD Band 25											
2.1	2.1053	-	24.238(a)	-	-	-	5.6	-	Radiated Spurious Emissions	Pass	ANSI C63.26 (2015) ANSI C63.10-2020 +Cor.1-2023+C63.10a-2024 KDB 996369 D04 Module Integration Guide v02
Configuration and Mode: ADD: DC Powered - 4G (LTE) & FDD Band 13											
2.1	2.1053	-	-	27.53(c)	4.7	-	-	-	Radiated Spurious Emissions	Pass	ANSI C63.26 (2015) ANSI C63.10-2020 +Cor.1-2023+C63.10a-2024 KDB 996369 D04 Module Integration Guide v02
Configuration and Mode: ADD: DC Powered - 4G (LTE) & FDD Band 12											
2.1	2.1053	-	-	27.53((g)	4.7	-	-	-	Radiated Spurious Emissions	Pass	ANSI C63.26 (2015) ANSI C63.10-2020 +Cor.1-2023+C63.10a-2024 KDB 996369 D04 Module Integration Guide v02
Configuration and Mode: ADD: DC Powered - 4G (LTE) & FDD Band 66											



Section	Specification Clause								Test Description	Result	Comments/Base Standard
	Part 2	Part 22	Part 24	Part 27	RSS-130	RSS-132	RSS-133	RSS-139			
2.1	2.1053	-	-	27.53(h)	-	-	-	5.6	Radiated Spurious Emissions	Pass	ANSI C63.26 (2015) ANSI C63.10-2020 +Cor.1-2023+C63.10a-2024 KDB 996369 D04 Module Integration Guide v02

Table 2

Note: The test software supported more bands than the actual device application. The device application only uses bands 2,4,5,13,66 in the field. Testing of bands 5, 13, 25, and 66 satisfies the requirements for bands 2,4,5,13,66.
Band 12 was tested as part of the scope of the project, but not needed for FCC/ISED application as the final device application does not use it



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)	2402-2480 MHz	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	2 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 ☒		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



1.4 Product

1.4.1 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



1.5 Deviations from the Standard

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

1.6 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 - B, Model: AT510-B, Serial Number: 360000000000301			
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

1.7 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-Battery Powered - 4G (LTE)		
Radiated Spurious Emissions	Mohiuddin Mohammed	UKAS
Configuration and Mode: ADD-B Rechargeable - 4G (LTE)		
Radiated Spurious 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 Radiated Spurious Emissions

2.1.1 Specification Reference

FCC 47 CFR Part 2 Clause 2.1053
FCC 47 CFR Part 22 Clause 22.917 (a)
FCC 47 CFR Part 24 Clause 24.238 (a)
FCC 47 CFR Part 27 Clauses 27.53 (c), 27.53 (g), 27.53 (h)
RSS-130 Clause 4.7
RSS-132 Clause 5.5.
RSS-133 Clause 5.6.
RSS-139 Clause 5.6.

2.1.2 Equipment Under Test and Modification State

AT510, S/N: 350000000000302 - Modification State 0
AT510-B, S/N: 360000000000301 - Modification State 0

2.1.3 Date of Test

10-July-2026 to 13-July-2026

2.1.4 Test Method

ADD -DC Powered- 4G (LTE)

A preliminary profile of the Radiated Spurious Emissions was obtained up to the 5th harmonic or 3rd order intermod whichever was highest of the lowest intentional transmitter, as required by KDB 996369 D04, clause 3.2, by operating the EUT on a remotely controlled turntable within a semi-anechoic chamber. Emission measurements were performed on the worst-case modulation and channel per frequency range as shown in the original filing as per KDB 996369 D04 clause 3.4(b). Measurements of emissions from the EUT were obtained with the Measurement Antenna in both Horizontal and Vertical Polarisations. The profiling produced a list of the worst-case emissions together with the EUT azimuth and antenna polarisation.

Testing was performed in accordance with ANSI C63.26, Clause 5.5.

Pre scans and final measurements were performed using the direct field strength method.

Field strength measurements were performed and then converted to Equivalent Power

Measurements in accordance with ANSI C63.26, Clause 5.2.7 equation c)

Example calculation:

$E \text{ (dBuV/m)} + 20\log(d) - 104.8 = \text{EIRP (dBm)}$ where (d) is the measurement distance.
 $82.2 \text{ (dBuV/m)} + 20\log(3) - 104.8 = \text{EIRP (dBm)}$
 $-13.0 = \text{EIRP (dBm)}$

The DUT was Battery Powered throughout the test and considered portable so it was tested in X/Y/Z planes.

During the test BLE LE1M at 2440 MHz was switched on and transmitting throughout the test.



ADD-B Battery Powered - 4G (LTE) - Simultaneous Transmission

Testing was conducted with the DUT transmitting at 2440 MHz, as this frequency demonstrated worst case during preliminary emissions testing, simultaneously with the worst case cellular operating band (Band 25) identified from the ADD - Rechargeable testing.

A preliminary profile of the Radiated Spurious Emissions was obtained up to the 5th harmonic or 3rd order intermod whichever was highest of the lowest intentional transmitter, as required by KDB 996369 D04, clause 3.2, by operating the EUT on a remotely controlled turntable within a semi-anechoic chamber. Emission measurements were performed on the worst-case modulation and channel per frequency range as shown in the original filing as per KDB 996369 D04 clause 3.4(b). Measurements of emissions from the EUT were obtained with the Measurement Antenna in both Horizontal and Vertical Polarisations. The profiling produced a list of the worst-case emissions together with the EUT azimuth and antenna polarisation.

Testing was performed in accordance with ANSI C63.26, Clause 5.5.

Prescans and final measurements were performed using the direct field strength method.

Field strength measurements were performed and then converted to Equivalent Power Measurements in accordance with ANSI C63.26, Clause 5.2.7 equation c)

Example calculation:

$E \text{ (dBuV/m)} + 20\log(d) - 104.8 = \text{EIRP (dBm)}$ where (d) is the measurement distance.

$82.2 \text{ (dBuV/m)} + 20\log(3) - 104.8 = \text{EIRP (dBm)}$

$-13.0 = \text{EIRP (dBm)}$

The DUT was Powered by 24V DC throughout the test and considered portable so it was tested in X/Y/Z planes.

2.1.5 Example Test Setup Diagram

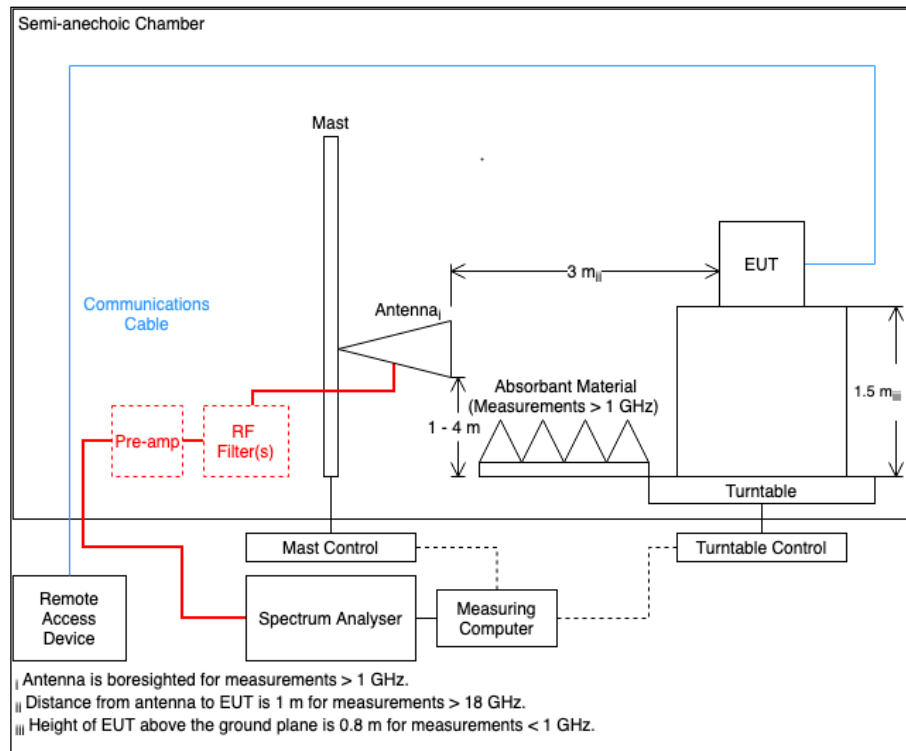


Figure 1

2.1.6 Environmental Conditions

Ambient Temperature	19.6 - 21.1 °C
Relative Humidity	21.1 - 72.0 %

2.1.7 Test Results

ADD-DC Powered - 4G (LTE)

UE Cat	Freq Band	DL-EARFCN	DL Freq (MHz)	UL-EARFCN	UL Freq (MHz)	CH BW (MHz)	Modulation	#RB	RB Offset	Power Class
3	FDD 5	2525	881.5	20525	836.5	10	QPSK	1	25	3 (23 dBm)
3	FDD 12	5095	737.5	23095	707.5	10	QPSK	1	25	3 (23 dBm)
3	FDD 13	5230	751	23230	782	10	QPSK	1	25	3 (23 dBm)
3	FDD 25	8365	1962.5	26365	1882.5	10	QPSK	1	25	3 (23 dBm)
3	FDD 66	66886	2155	132322	1745	10	QPSK	1	25	3 (23 dBm)

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

Table 16 - B5_X, 836.5+2440 MHz, 30 MHz to 6 GHz

*No emissions found within 6 dB of the limit.

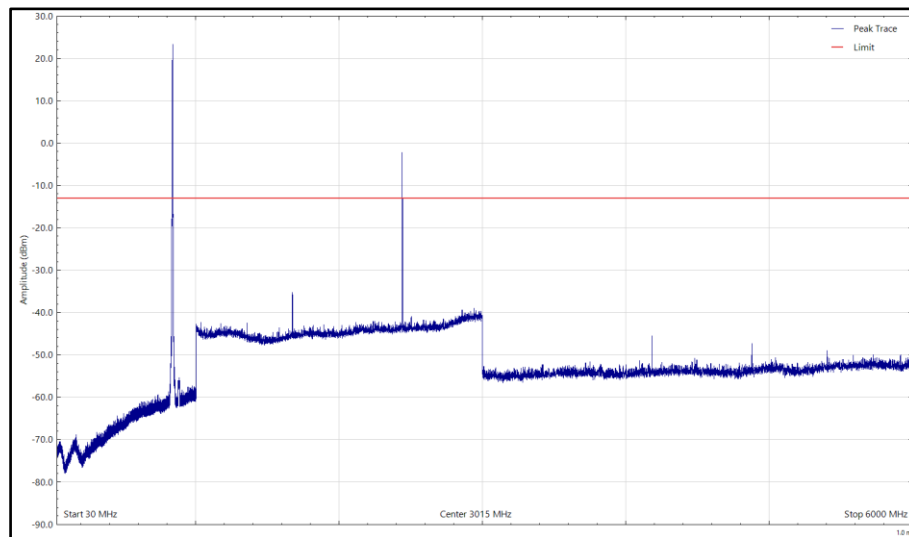


Figure 2 - B5_X, 836.5+2440 MHz, 30 MHz to 6 GHz, Horizontal (Peak)

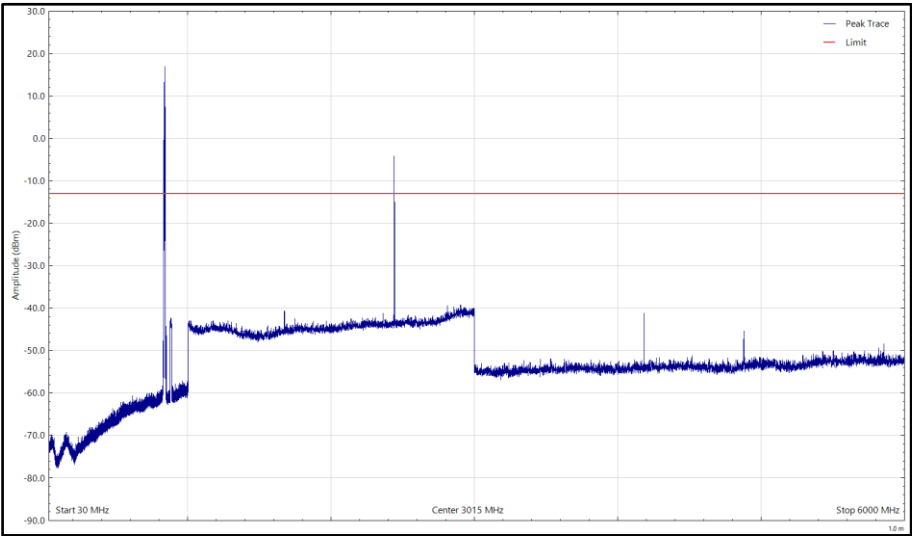


Figure 3 - B5_X, 836.5+2440 MHz, 30 MHz to 6 GHz, Vertical (Peak)



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

Table 17 - B5_Y, 836.5+2440 MHz, 30 MHz to 6 GHz

*No emissions found within 6 dB of the limit.

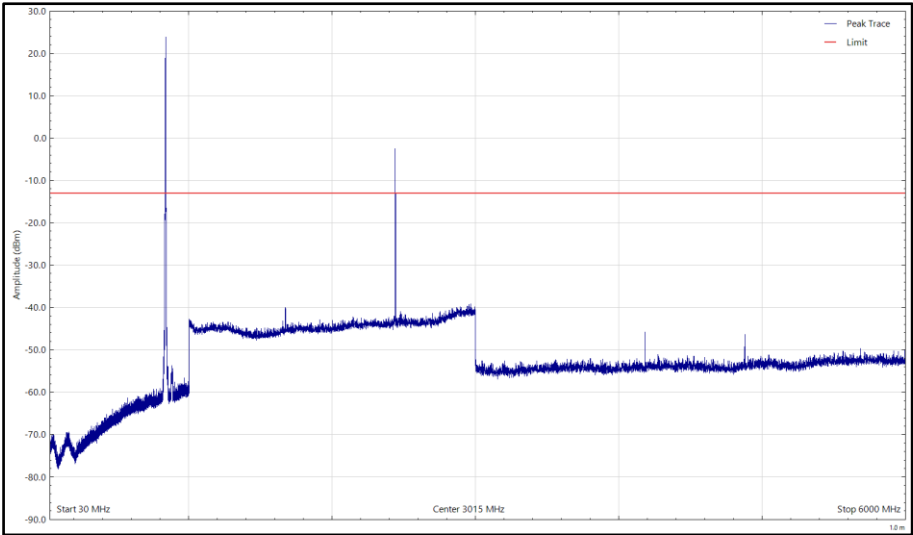


Figure 4 - B5_Y, 836.5+2440 MHz, 30 MHz to 6 GHz, Horizontal (Peak)

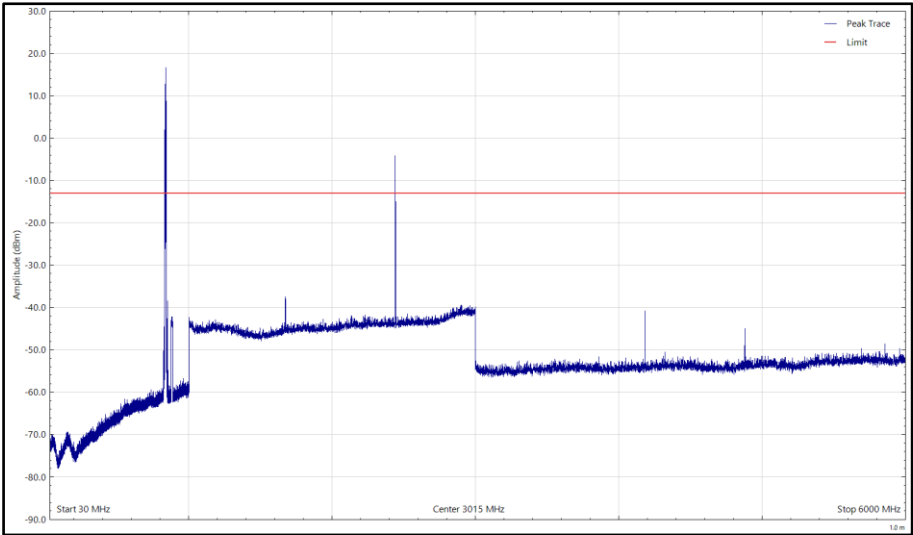


Figure 5 - B5_Y, 836.5+2440 MHz, 30 MHz to 6 GHz, Vertical (Peak)



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

Table 18 - B5_Z, 836.5+2440 MHz, 30 MHz to 6 GHz

*No emissions found within 6 dB of the limit.

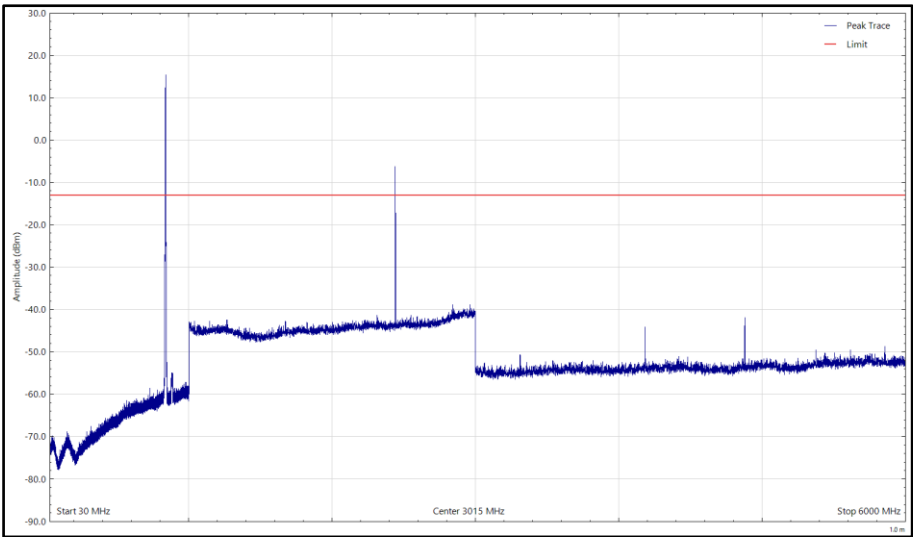


Figure 6 - B5_Z, 836.5+2440 MHz, 30 MHz to 6 GHz, Horizontal (Peak)

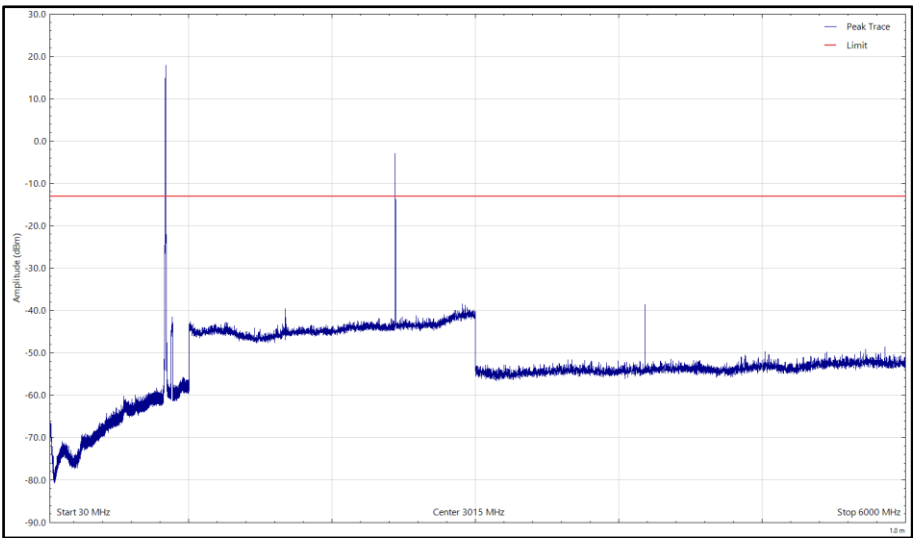


Figure 7 - B5_Z, 836.5+2440 MHz, 30 MHz to 6 GHz, Vertical (Peak)



Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
1415.160	-41.26	-13.00	-28.26	Peak	38	316	Vertical

Table 19 - B12_X, 707.5+2440 MHz, 30 MHz to 6 GHz

No other emissions found within 6 dB of the limit.

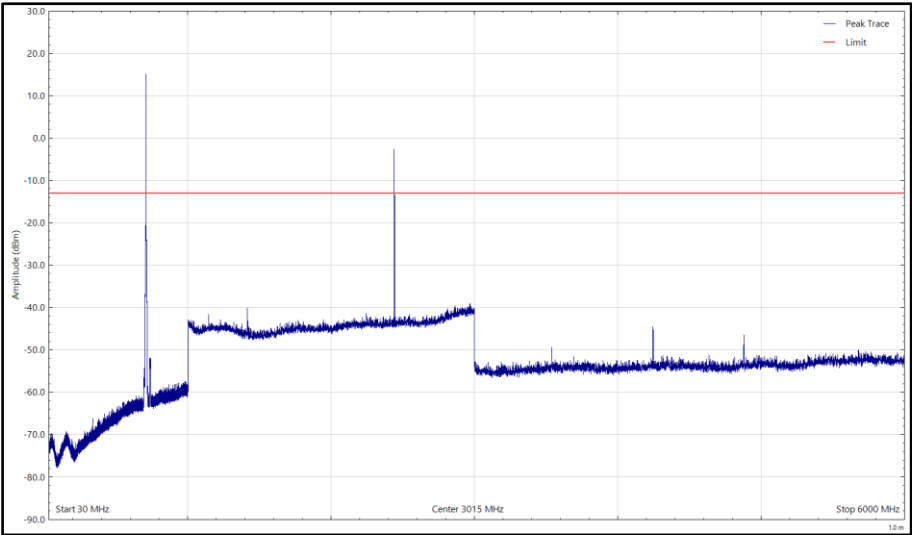


Figure 8 - B12_X, 707.5+2440 MHz, 30 MHz to 6 GHz, Horizontal (Peak)

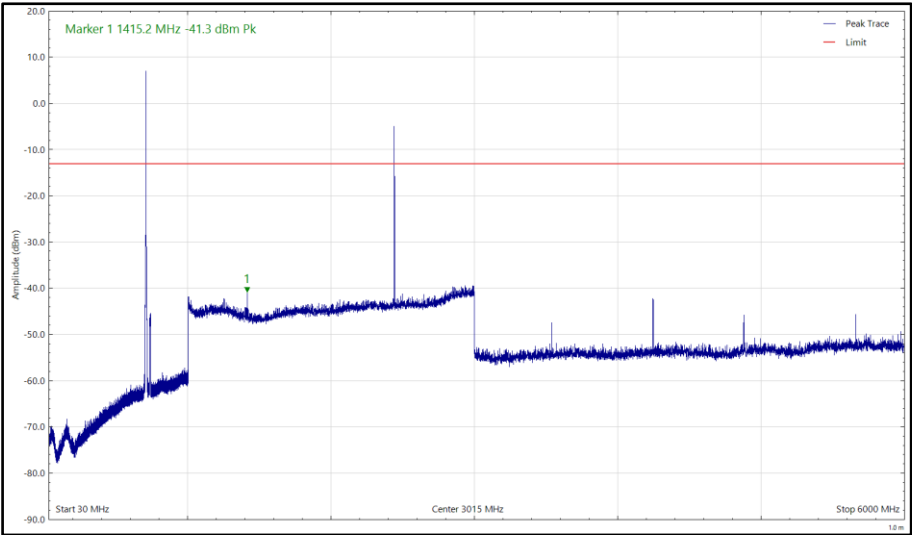


Figure 9 - B12_X, 707.5+2440 MHz, 30 MHz to 6 GHz, Vertical (Peak)



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

Table 20 - B12_Y, 707.5+2440 MHz, 30 MHz to 6 GHz

*No emissions found within 6 dB of the limit.

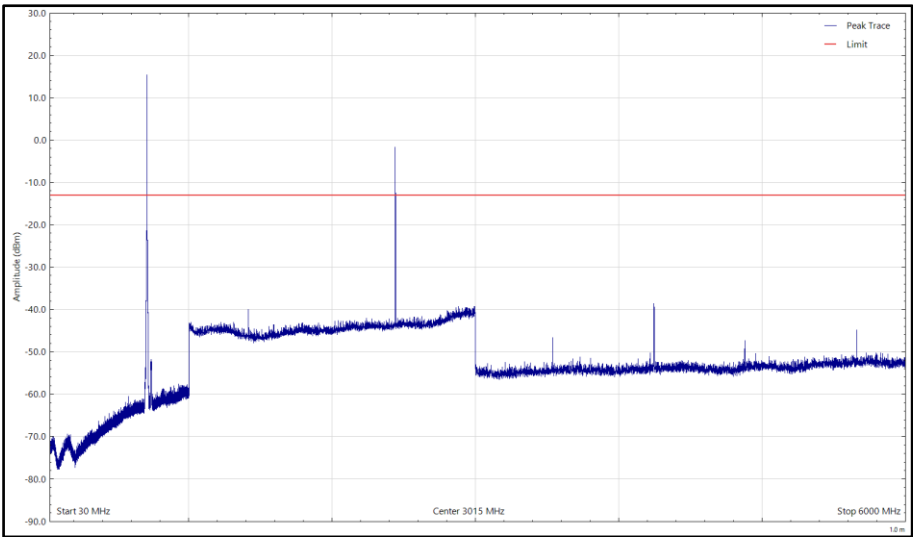


Figure 10 - B12_Y, 707.5+2440 MHz, 30 MHz to 6 GHz, Horizontal (Peak)

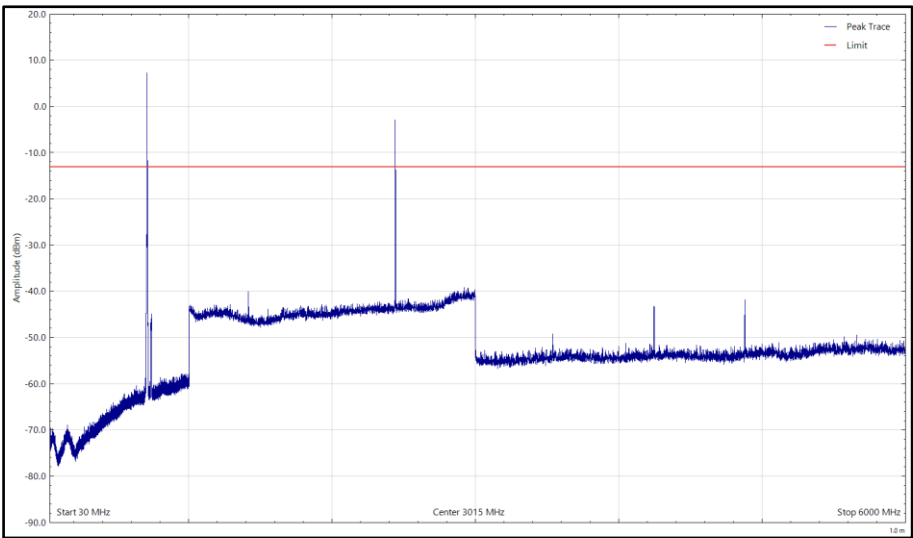


Figure 11 - B12_Y, 707.5+2440 MHz, 30 MHz to 6 GHz, Vertical (Peak)



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

Table 21 - B12_Z, 707.5+2440 MHz, 30 MHz to 6 GHz

*No emissions found within 6 dB of the limit.

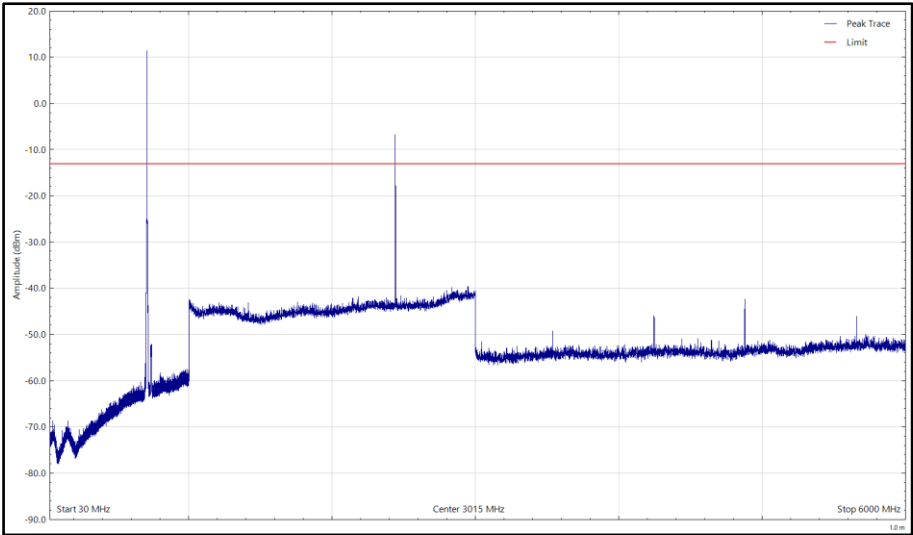


Figure 12 - B12_Z, 707.5+2440 MHz, 30 MHz to 6 GHz, Horizontal (Peak)

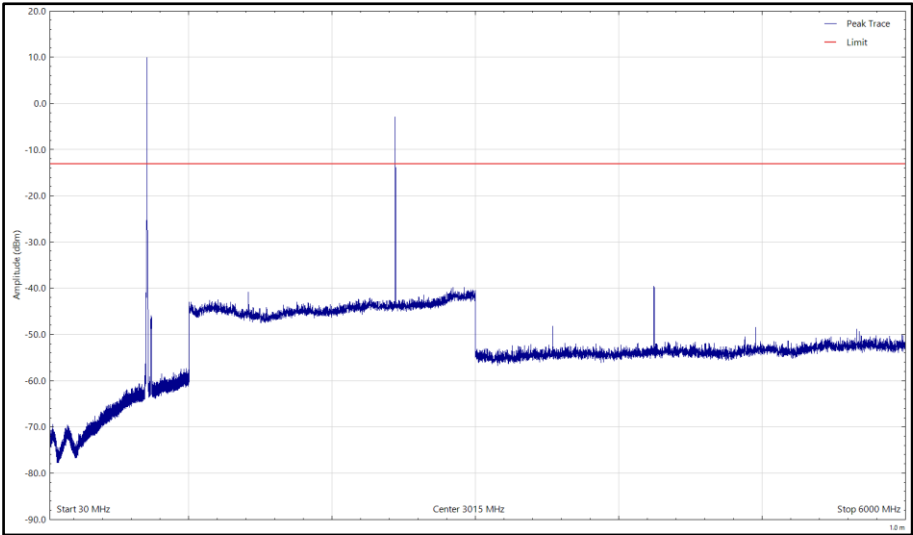


Figure 13 - B12_Z, 707.5+2440 MHz, 30 MHz to 6 GHz, Vertical (Peak)

Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
775.776	-25.75	-46.00	20.25	Peak	177	100	Horizontal
775.996	-33.41	-46.00	12.59	Peak	108	121	Vertical

Table 22 - B13_X, 782+2440 MHz, 30 MHz to 6 GHz

Near the uplink frequency, the RBW of the spectrum analyser was reduced so that the level in the spurious domain could be accurately measured. The limit was reduced by $10 \cdot \text{LOG}(\text{RBW}/1 \text{ MHz})$.

No other emissions found within 6 dB of the limit.

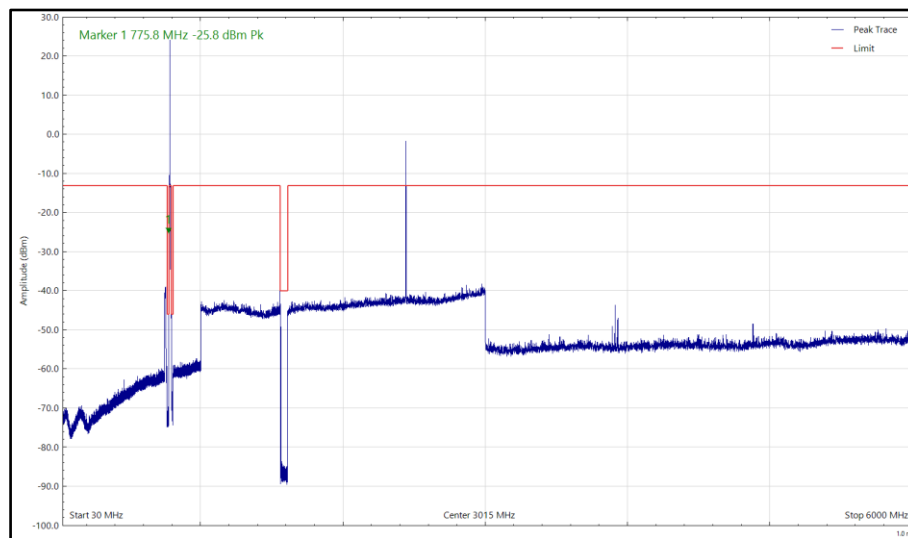


Figure 14 - B13_X, 782+2440 MHz, 30 MHz to 6 GHz, Horizontal (Peak)

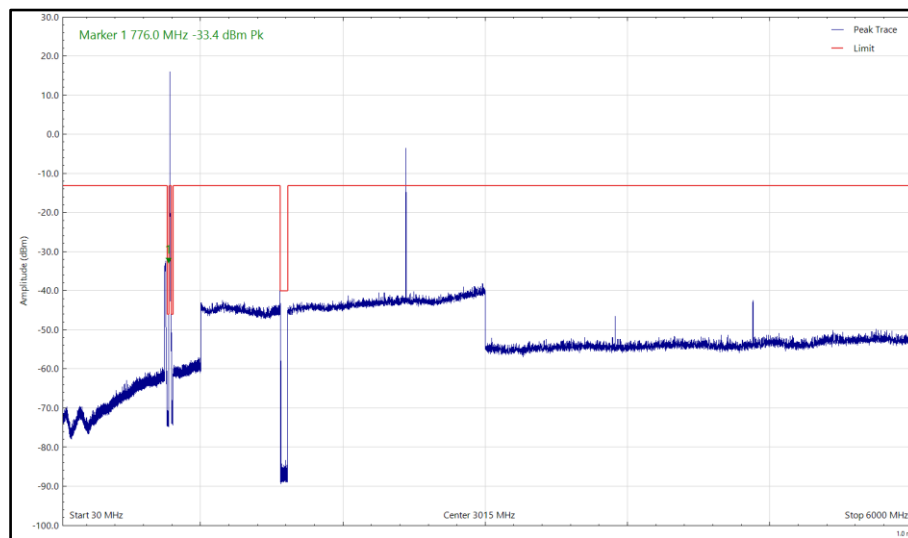


Figure 15 - B13_X, 782+2440 MHz, 30 MHz to 6 GHz, Vertical (Peak)



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

Table 23 - B13_Y, 782+2440 MHz, 30MHz to 6 GHz

*No emissions found within 6 dB of the limit.

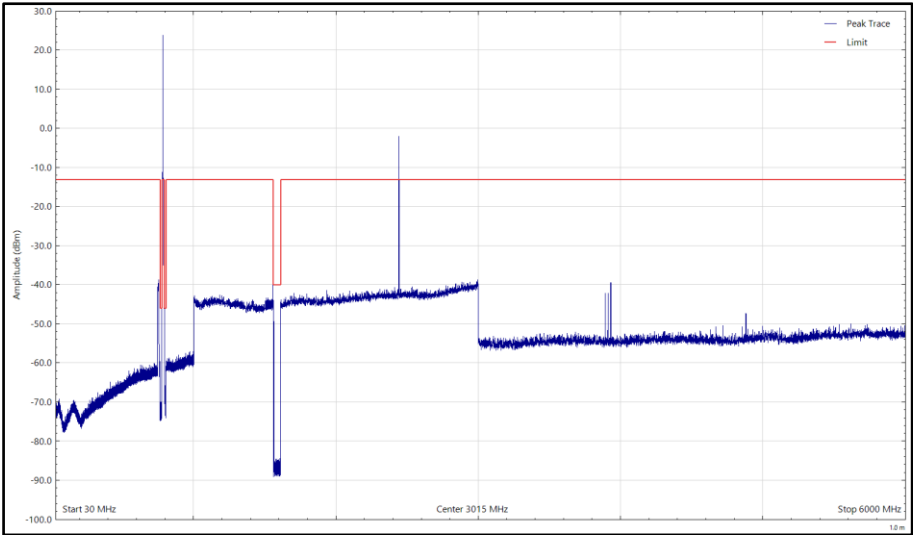


Figure 16 - B13_Y, 782+2440 MHz, 30MHz to 6 GHz, Horizontal (Peak)

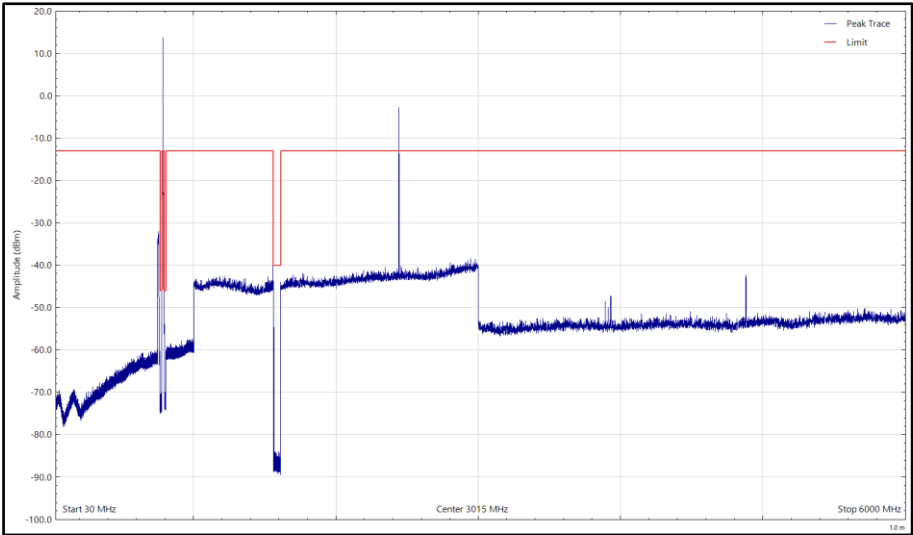


Figure 17 - B13_Y, 782+2440 MHz, 30MHz to 6 GHz, Vertical (Peak)



Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
1564.196	-47.49	-40.00	-7.49	RMS	148	202	Vertical
1564.196	-49.30	-40.00	-9.30	RMS	185	190	Horizontal

Table 24 - B13_Z, 782+2440 MHz, 30 MHz to 6 GHz

No other emissions found within 6 dB of the limit.

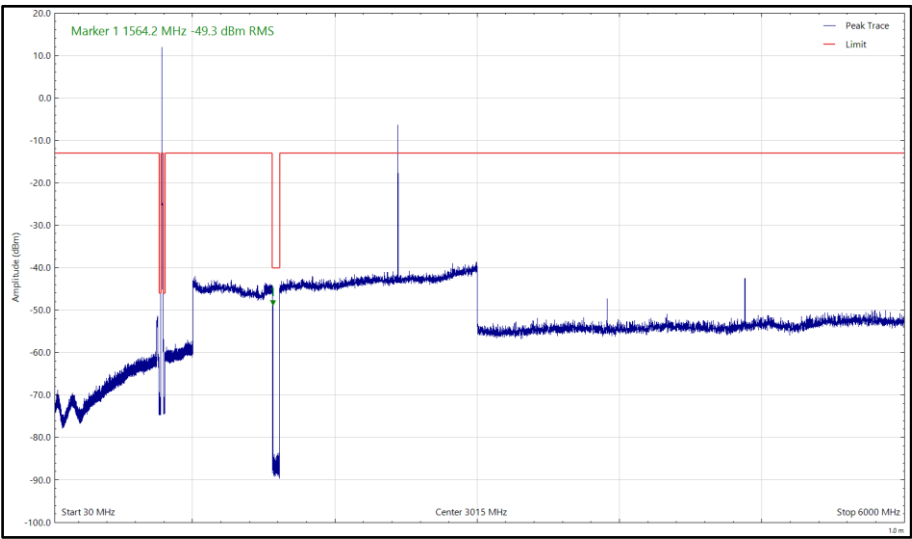


Figure 18 - B13_Z, 782+2440 MHz, 30 MHz to 6 GHz, Horizontal (Peak)

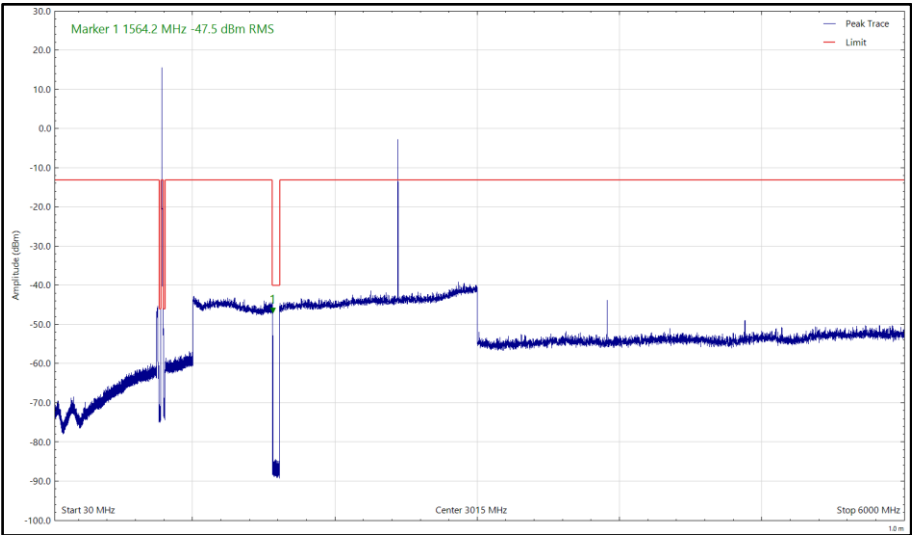


Figure 19 - B13_Z, 782+2440 MHz, 30 MHz to 6 GHz, Vertical (Peak)



Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
3765.000	-19.11	-13.00	-6.11	Peak	80	135	Vertical
3765.350	-23.06	-13.00	-10.06	Peak	118	110	Horizontal

Table 25 - B25_X, 1882.5 + 2440 MHz, 30 MHz to 9.5 GHz

No other emissions found within 6 dB of the limit.

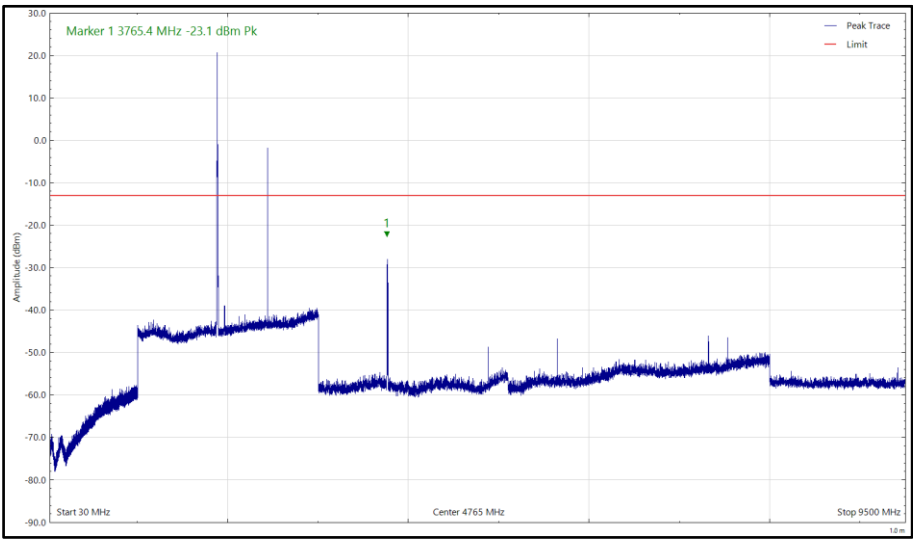


Figure 20 - B25_X, 1882.5 + 2440 MHz, 30 MHz to 9.5 GHz, Horizontal (Peak)

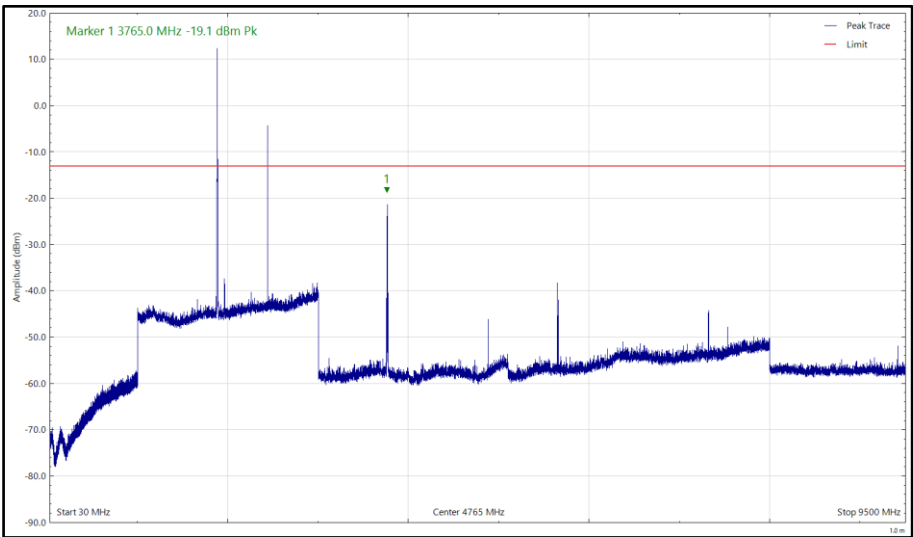


Figure 21 - B25_X, 1882.5 + 2440 MHz, 30 MHz to 9.5 GHz, Vertical (Peak)



Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
3765.050	-20.05	-13.00	-7.05	Peak	217	110	Horizontal
3765.350	-25.51	-13.00	-12.51	Peak	70	239	Vertical

Table 26 - B25_Y, 1882.5 + 2440 MHz, 30 MHz to 9.5 GHz

No other emissions found within 6 dB of the limit.

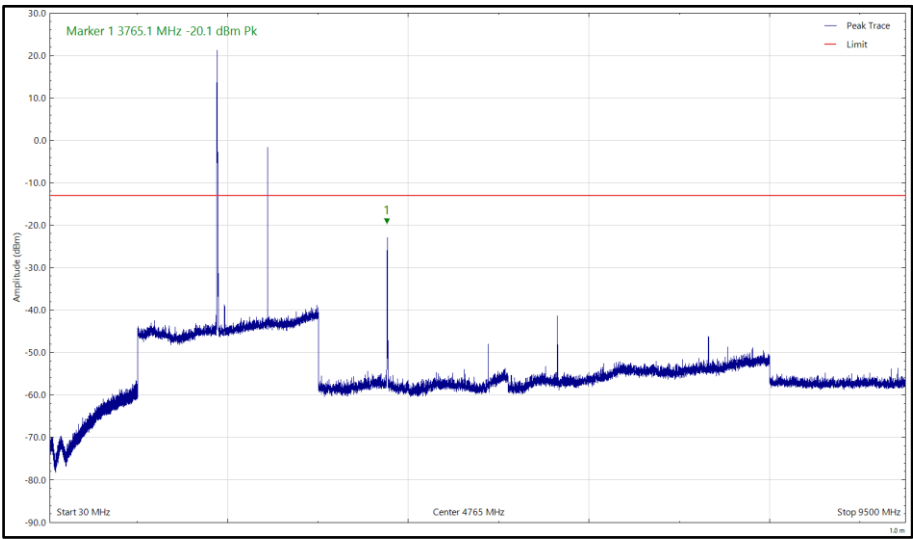


Figure 22 - B25_Y, 1882.5 + 2440 MHz, 30 MHz to 9.5 GHz, Horizontal (Peak)

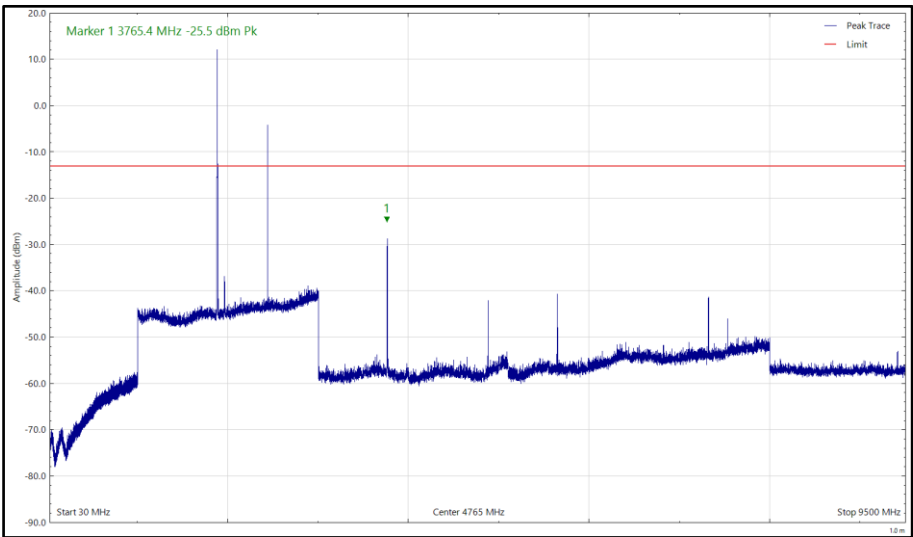


Figure 23 - B25_Y, 1882.5 + 2440 MHz, 30 MHz to 9.5 GHz, Vertical (Peak)



Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
3765.350	-21.15	-13.00	-8.15	Peak	145	178	Vertical

Table 27 - B25_Z, 1882.5 + 2440 MHz, 30 MHz to 9.5 GHz

No other emissions found within 6 dB of the limit.

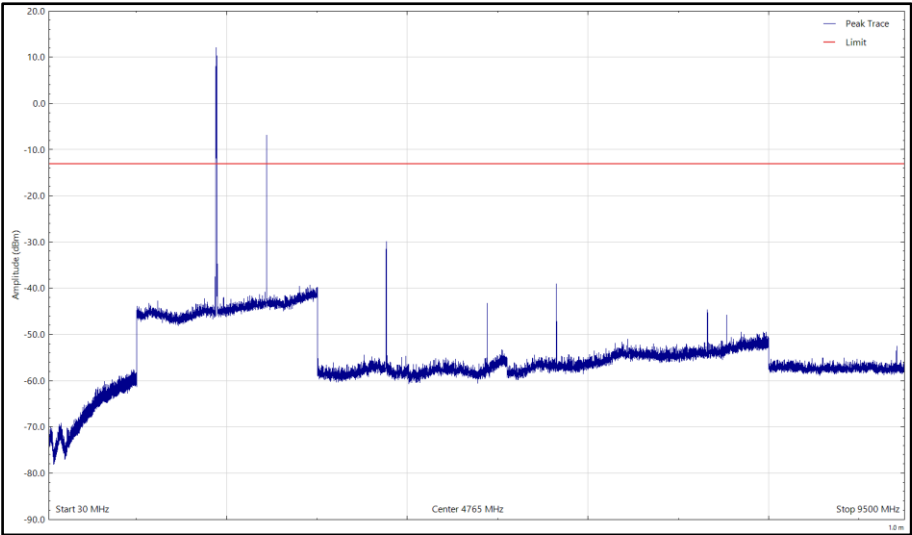


Figure 24 - B25_Z, 1882.5 + 2440 MHz, 30 MHz to 9.5 GHz, Horizontal (Peak)

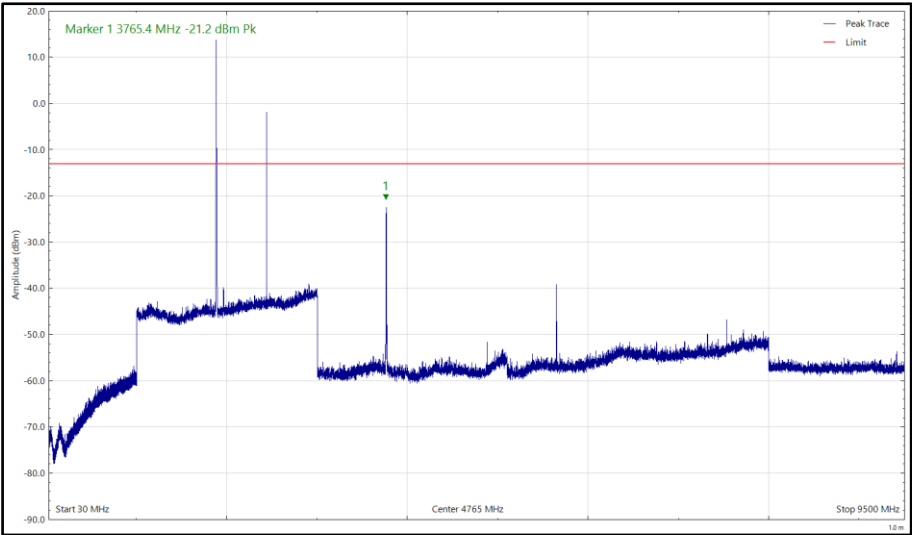


Figure 25 - B25_Z, 1882.5 + 2440 MHz, 30 MHz to 9.5 GHz, Vertical (Peak)



Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
3510.150	-24.10	-13.00	-11.10	Peak	72	158	Vertical
3510.200	-28.00	-13.00	-15.00	Peak	122	117	Horizontal

Table 28 - B66_X, 1745 + 2440 MHz, 30 MHz to 9 GHz

No other emissions found within 6 dB of the limit.

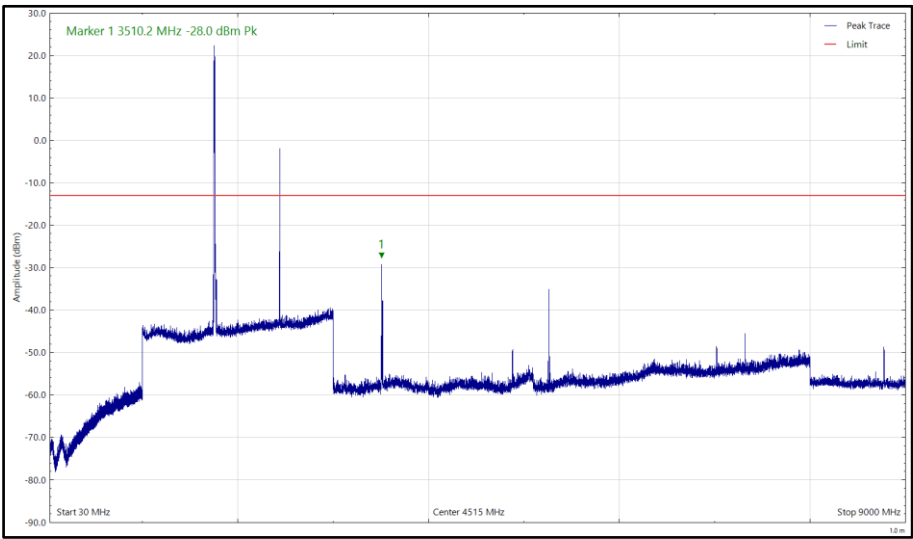


Figure 26 - B66_X, 1745 + 2440 MHz, 30 MHz to 9 GHz, Horizontal (Peak)

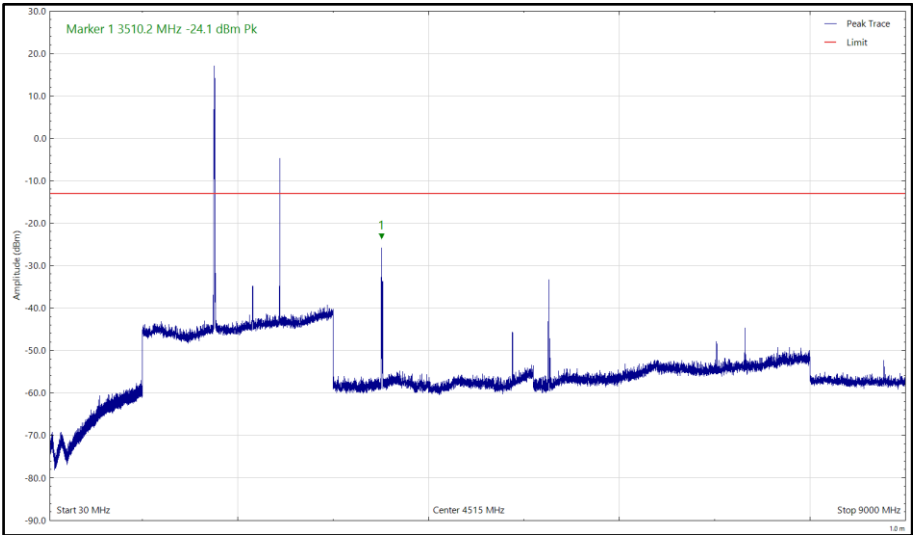


Figure 27 - B66_X, 1745 + 2440 MHz, 30 MHz to 9 GHz, Vertical (Peak)



Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
3510.200	-23.87	-13.00	-10.87	Peak	93	135	Horizontal
5265.250	-27.01	-13.00	-14.01	Peak	232	289	Horizontal

Table 29 - B66_Y, 1745 + 2440 MHz, 30 MHz to 9 GHz

No other emissions found within 6 dB of the limit.

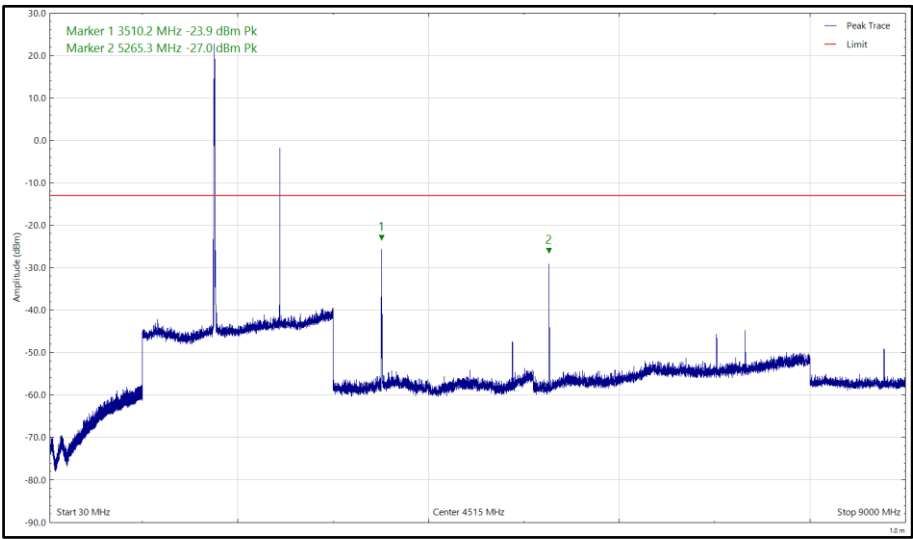


Figure 28 - B66_Y, 1745 + 2440 MHz, 30 MHz to 9 GHz, Horizontal (Peak)

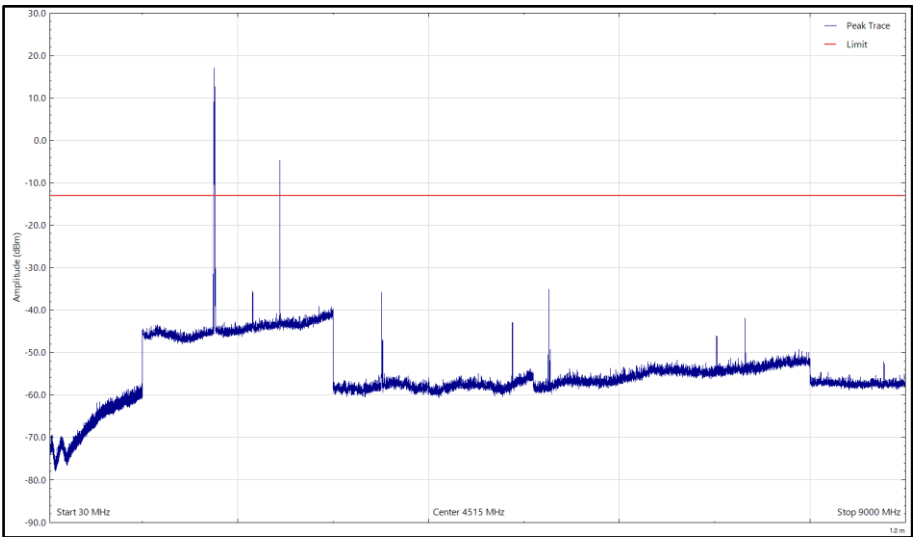


Figure 29 - B66_Y, 1745 + 2440 MHz, 30 MHz to 9 GHz, Vertical (Peak)



Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
3510.200	-24.54	-13.00	-11.54	Peak	197	149	Vertical
5265.200	-28.30	-13.00	-15.30	Peak	152	212	Vertical

Table 30 - B66_Z, 1745 + 2440 MHz, 30 MHz to 9 GHz

No other emissions found within 6 dB of the limit.

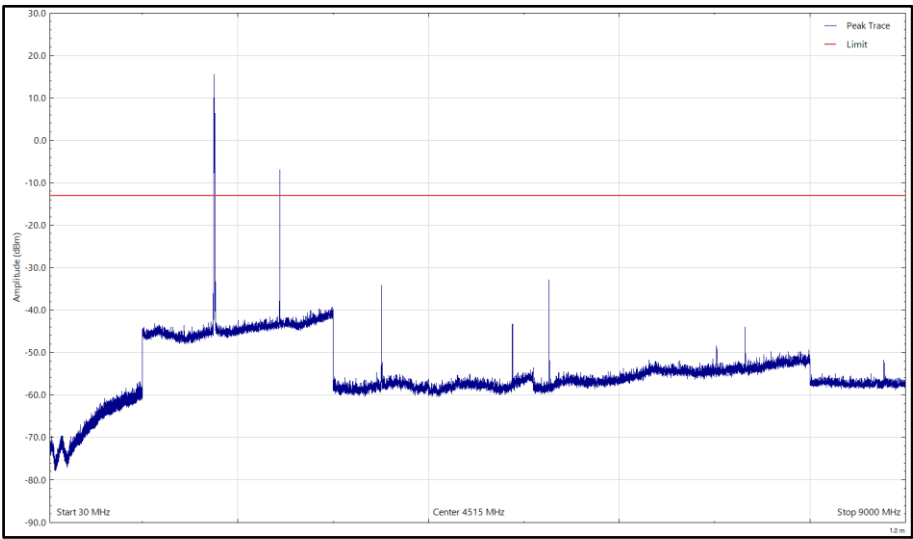


Figure 30 - B66_Z, 1745 + 2440 MHz, 30 MHz to 9 GHz, Horizontal (Peak)

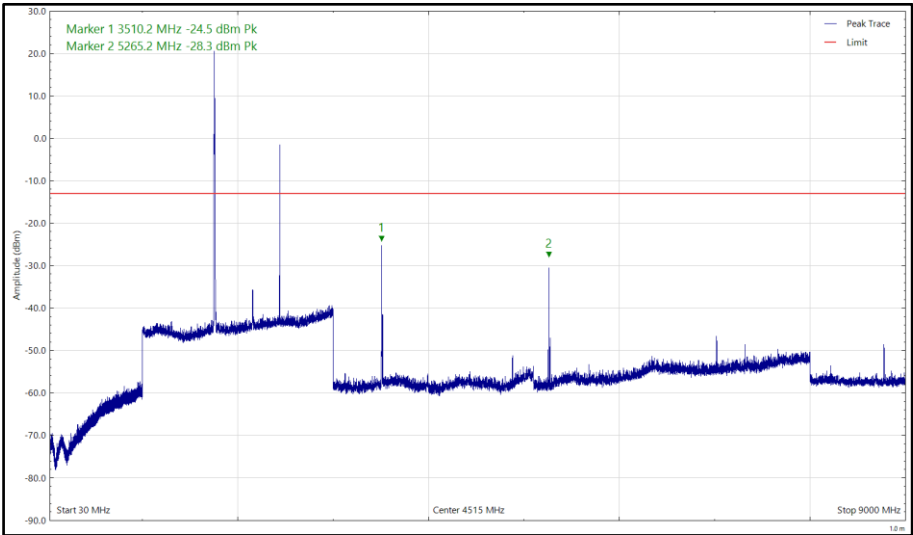


Figure 31 - B66_Z, 1745 + 2440 MHz, 30 MHz to 9 GHz, Vertical (Peak)

FCC 47 CFR and ISSED RSS :

Clause	LTE Bands	Limit
Part 22.917 (a) / RSS-132 Clause 5.5	FDD Band 5	-13 dBm (EIRP) / 82 dBμV/m at 3m.
Part 24.238 (a) / RSS-133 Clause 5.6	FDD Band 25	-13 dBm (EIRP) / 82 dBμV/m at 3m.
Part 27.53 (h) / RSS-139 Clause 5.6	FDD Band 66	-13 dBm (EIRP) / 82 dBμV/m at 3m.
Part 27.53 (g) / RSS-130 Clause 4.7	FDD Band 12	-13 dBm (EIRP) / 82 dBμV/m at 3m.
Part 27.53(c) and RSS-130 Clause 4.7.2	FDD Band 13	(c) For operations in the 746–758 MHz band and the 776–788 MHz band, the power of any emission outside the licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, in accordance with the following: (2) On any frequency outside the 776–788 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least $43 + 10 \log (P)$ dB; (4) On all frequencies between 763–775 MHz and 793–805 MHz, by a factor not less than $65 + 10 \log (P)$ dB in a 6.25 kHz band segment, for mobile and portable stations.

Table 31

ADD – B Battery Powered - 4G (LTE)

UE Cat	Freq Band	DL-EARFCN	DL Freq (MHz)	UL-EARFCN	UL Freq (MHz)	CH BW (MHz)	Modulation	#RB	RB Offset	Power Class
3	FDD 25	8365	1962.5	26365	1882.5	10	QPSK	1	25	3 (23 dBm)

Table 32 - EUT Configuration (LTE FDD)

Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
3765.000	-23.13	-13.00	-10.13	Peak	79	121	Vertical
3765.050	-29.82	-13.00	-16.82	Peak	106	107	Horizontal

Table 33 - B25_X, 1882.5 + 2440 MHz, 30 MHz to 9.5 GHz

No other emissions found within 6 dB of the limit.

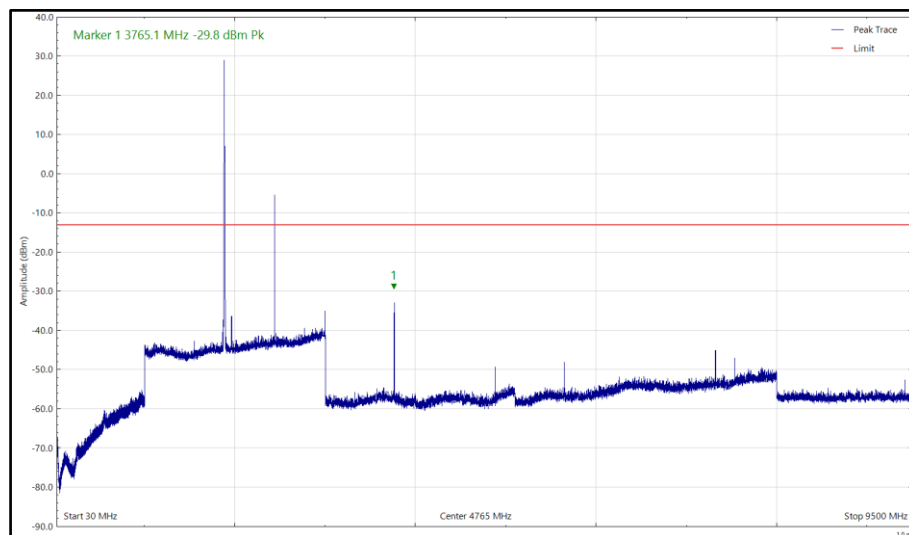


Figure 32 - B25_X, 1882.5 + 2440 MHz, 30 MHz to 9.5 GHz, Horizontal (Peak)

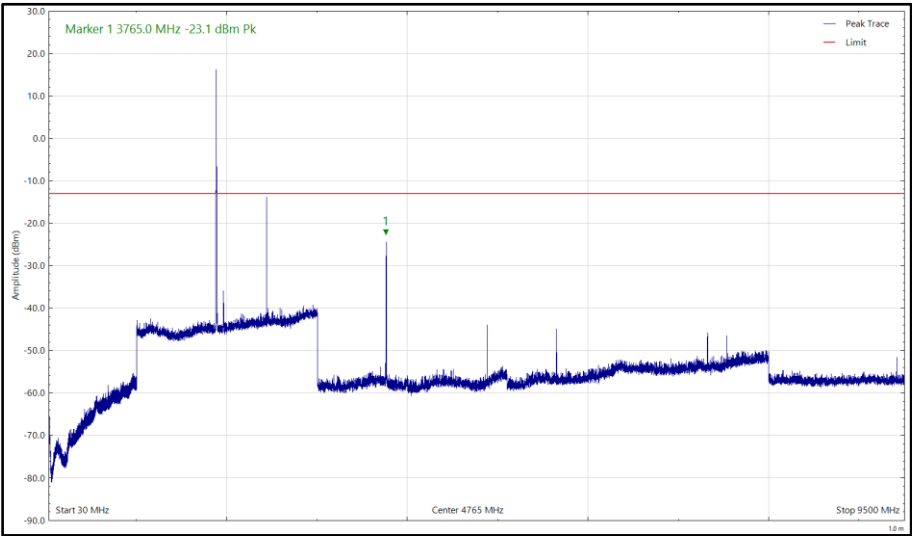


Figure 33 - B25_X, 1882.5 + 2440 MHz, 30 MHz to 9.5 GHz, Vertical (Peak)



Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
3765.050	-24.26	-13.00	-11.26	Peak	106	100	Horizontal

Table 34 - B25_Y, 1882.5 + 2440 MHz, 30 MHz to 9.5 GHz

No other emissions found within 6 dB of the limit.

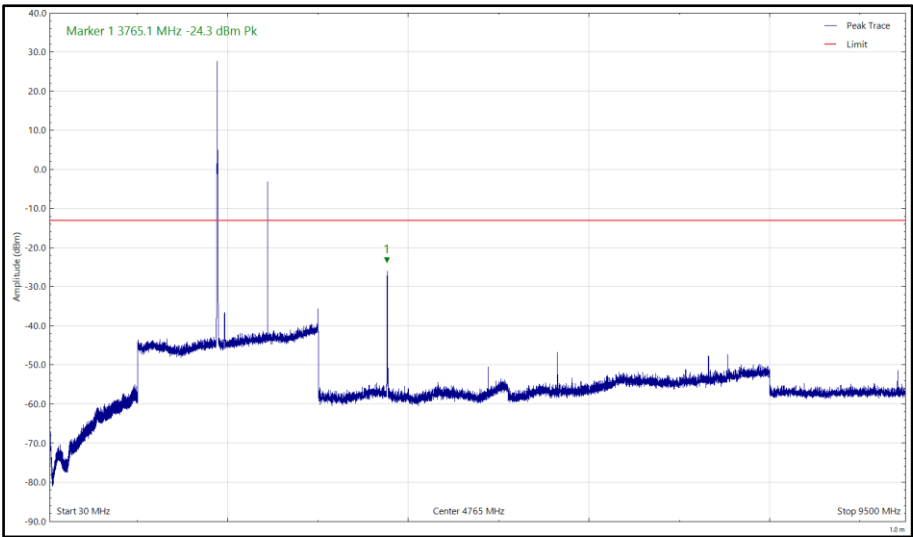


Figure 34 - B25_Y, 1882.5 + 2440 MHz, 30 MHz to 9.5 GHz, Horizontal (Peak)

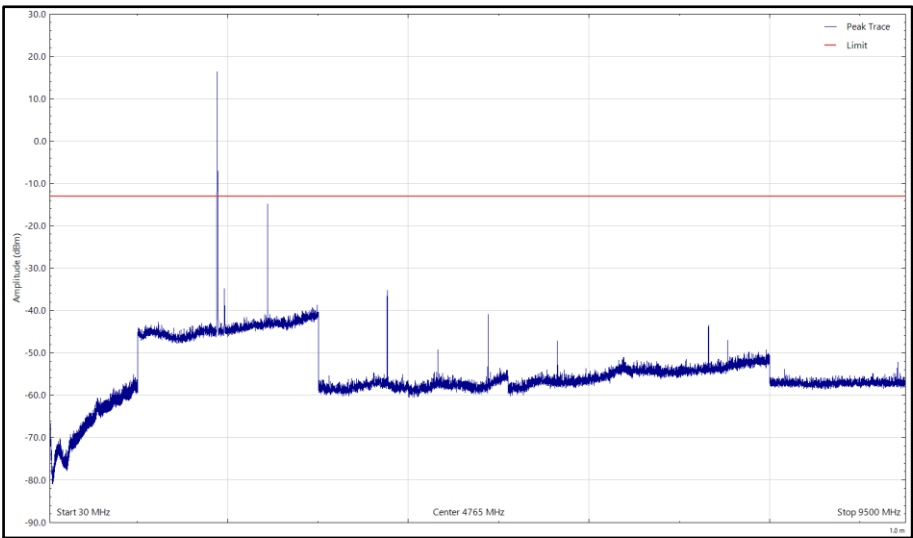


Figure 35 - B25_Y, 1882.5 + 2440 MHz, 30 MHz to 9.5 GHz, Vertical (Peak)



Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
3765.000	-25.06	-13.00	-12.06	Peak	186	114	Vertical

Table 35 - B25_Z, 1882.5 + 2440 MHz, 30 MHz to 9.5 GHz

No other emissions found within 6 dB of the limit.

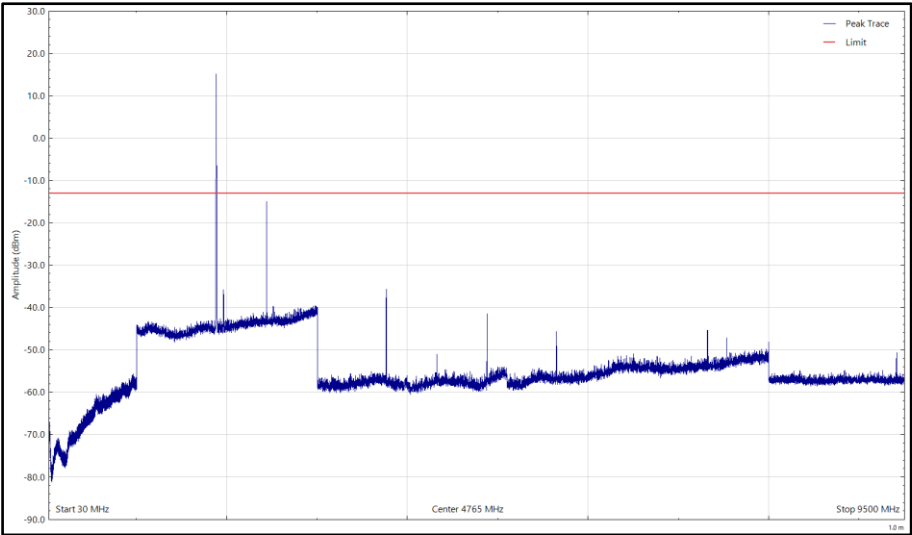


Figure 36 - B25_Z, 1882.5 + 2440 MHz, 30 MHz to 9.5 GHz, Horizontal (Peak)

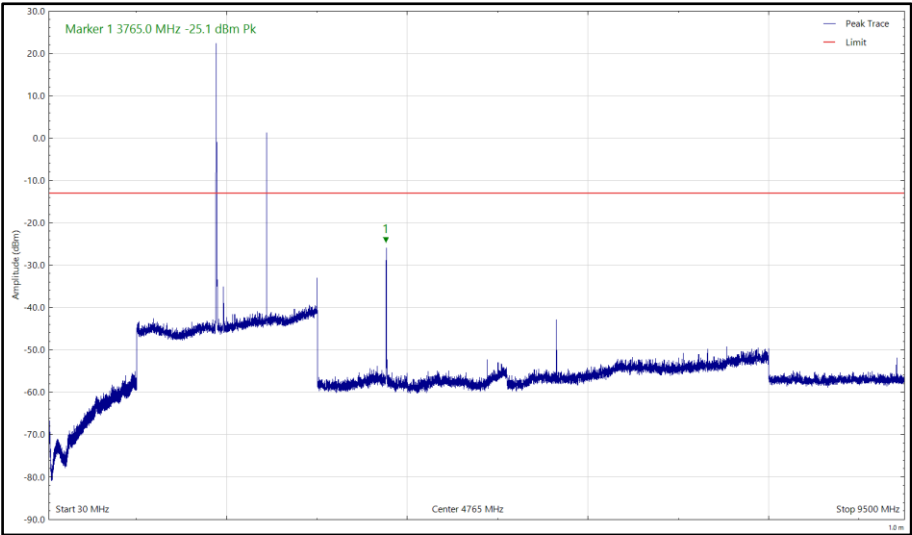


Figure 37 - B25_Z, 1882.5 + 2440 MHz, 30 MHz to 9.5 GHz, Vertical (Peak)



FCC 47 CFR Part 24 and ISED RSS- 133

Clause	Limit
Part 24.238 (a) / RSS-133 Clause 5.6	-13 dBm (EIRP) / 82 dBµV/m at 3m.

Table 36

2.1.8 Test Location and Test Equipment Used

This test was carried out in EMC Chamber 12.

Instrument	Manufacturer	Type No	TE No	Calibration Period (months)	Calibration Expires
Multimeter	Fluke	79 Series III	611	12	04-Feb-2027
Emissions Software	TUV SUD	EmX V3.6.3	5125	-	Software
1 GHz High Pass Filter	Mini-Circuits	NHP 1000+	5260	12	21-Aug-2026
Pre-Amplifier (1 GHz to 18 GHz)	Schwarzbeck	BBV 9718 C	5350	12	11-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
Power Supply	TTI	EX355R	5573	-	TU
Antenna (DRG, 7.5 GHz to 18 GHz)	Schwarzbeck	HWRD750	5610	12	29-Nov-2026
Antenna (DRG, 1 GHz to 10.5 GHz)	Schwarzbeck	BBHA9120B	5611	12	14-Sep-2026
Turntable & Mast Controller	Maturo Gmbh	NCD/498/2799.01	5612	-	TU
Tilt Antenna Mast	Maturo Gmbh	TAM 4.0-P	5613	-	TU
Antenna (Bi-Log, 30 MHz to 1 GHz)	Teseq	CBL6111D	5615	24	24-Apr-2027
3m Semi-Anechoic Chamber	MVG	EMC Chamber 12	5621	36	07-Aug-2026
Test Receiver	Rohde & Schwarz	ESW44	5802	12	05-Nov-2026
Pre-Amplifier (8 - 18GHz)	Wright Technologies	APS06-0061	6306	12	18-Jul-2026
Cable (2.92 mm(f)-N(m), 2 m)	Junkosha	MWX241-02000KFSNMS/B	6332	12	03-Oct-2026
Radio Communication Analyser	Anritsu	MT8821C	6895	12	15-Dec-2026
Cable Assy 8m (N to N) 18GHz	Junkosha	MWX221-08000NMSNMS/B	7052	12	05-Jun-2027

Table 37

TU - Traceability Unscheduled

3 Photographs

3.1 ADD-B.



Figure 38 - X – Orientation



Figure 39 - Y - Orientation



Figure 40 - Z – Orientation



Figure 41 - Set up for 30MHz-1GHz

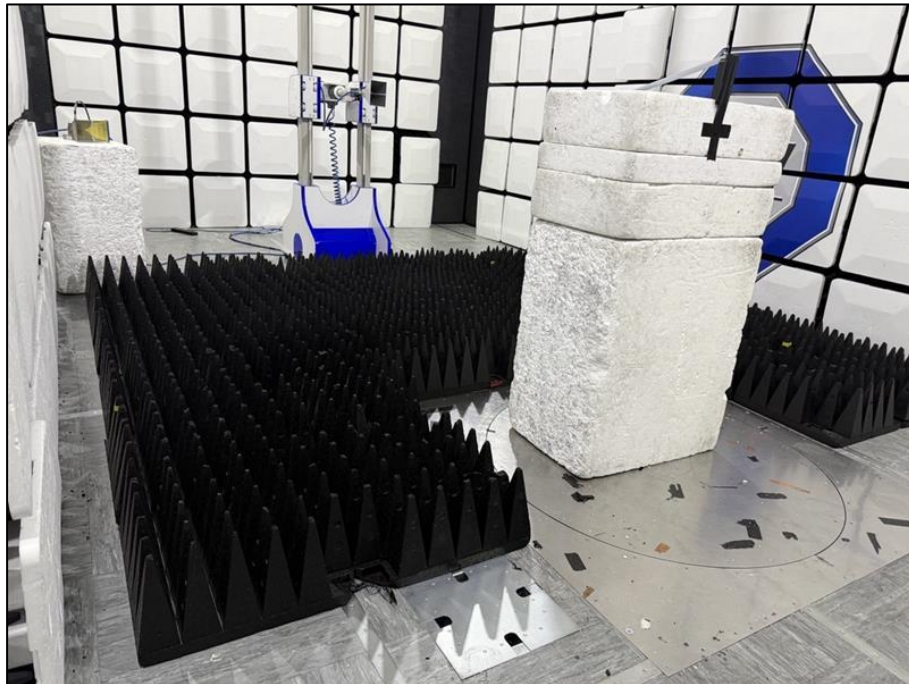


Figure 42 - Set up for 1GHz - 10GHz

Rechargeable Unit :



Figure 43 - X - Orientation



Figure 44 - Y - Orientation



Figure 45 - Z – Orientation



Figure 46 - Set up for 30MHz-1GHz

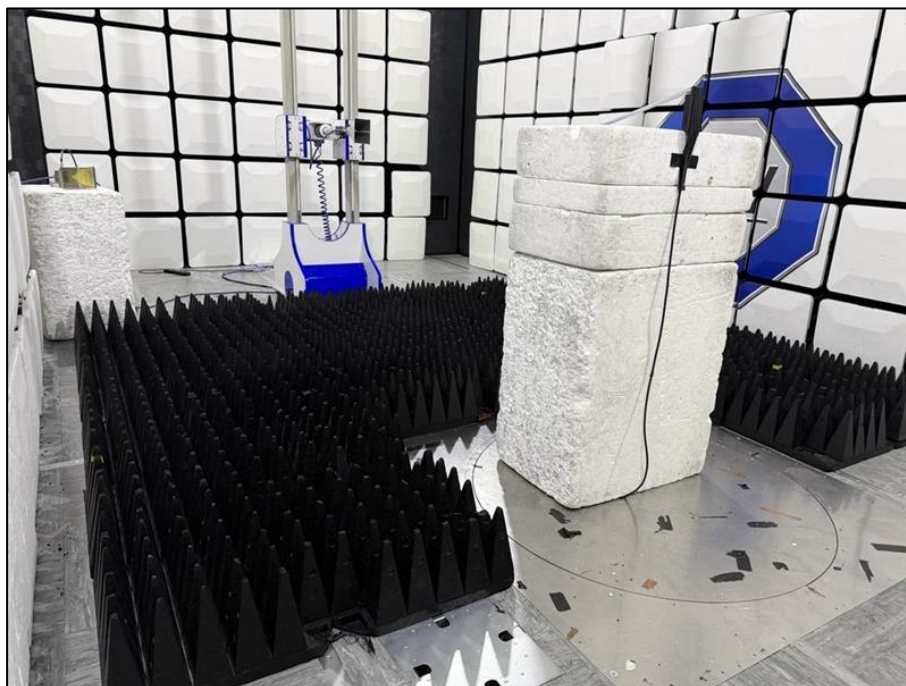


Figure 47 - Set up for 1GHz - 10GHz



4 Measurement Uncertainty

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

Test Name	Measurement Uncertainty
Radiated Spurious Emissions	30 MHz to 1 GHz: ± 5.2 dB 1 GHz to 40 GHz: ± 6.3 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.