

Radio Test Report

Manufacturer: Data Sciences International

Model: SoHo-X02



In accordance with FCC 47 CFR Part 15.249 and
ISED RSS-210 and ISED RSS-GEN

Prepared for: Data Sciences International
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COMMERCIAL-IN-CONFIDENCE

Document 0721011606-03 Issue 01

SIGNATURE

A handwritten signature in blue ink, appearing to read 'Ferdinand Custodio', is written over a white rectangular background.

NAME	JOB TITLE	RESPONSIBLE FOR	ISSUE DATE
Ferdinand Custodio	Senior EMC Engineer / Wireless Team Lead	Authorized Signatory	August 07, 2025

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 15.249 October 2024, ISED RSS-210 Issue 11 June 2024 and ISED RSS-GEN 2016 Issue 5 April 2018, 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	08/07/2025

Table 1

1.2 Introduction

Applicant	Data Sciences International
Manufacturer	Data Sciences International
Model Number(s)	SoHo-X02
FCC ID	MHASOHOFLA
IC Number	5681A-SOHOFLA
Manufacturer Declared Variant(s)	SoHo-X02, SoHo-X01, SoHo-X00, SoHo-S02, SoHo-S01, SoHo-S00;(See Family of Models.pdf)
Serial Number(s)	1318288
Hardware Version(s)	PCBA-Rev02
Software Version(s)	Direct Test Mode V2.4.0
Number of Samples Tested	1
Test Specification/Issue/Date	FCC 47 CFR Part 15C, ISED RSS-210 and ISED RSS-GEN 2016, Issue 09 (08-2016), Issue 04 (11-2014)
Test Plan/Issue/Date	N/A
Order Number	0721011606
Date	19-June-2025
Date of Receipt of EUT	12-June-2025
Start of Test	23-June-2025
Finish of Test	30-July-2025
Name of Engineer(s)	Miguel Angel Rabago Garcia
Related Document(s)	WirelessTest_Instructions-Rev03.pdf ANSI C63.10 (2013) Family of models.pdf Hardware Software Versions.pdf



1.3 Brief Summary of Results

A brief summary of the tests carried out in accordance with FCC 47 CFR Part 15.249 and ISED RSS-210 and ISED RSS-GEN is shown below.

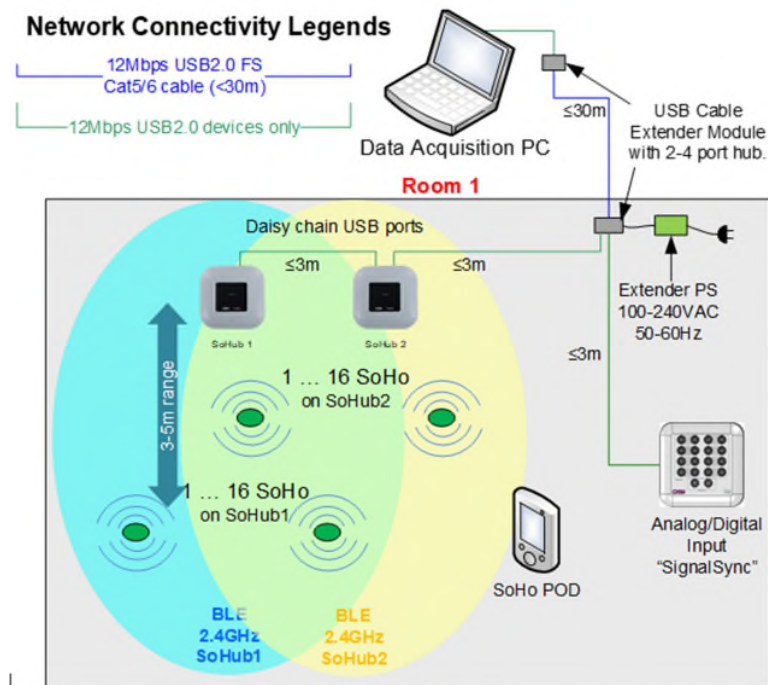
Section	Specification Clause	Test Description	Result	Comments/Base Standard
Configuration and Mode: DTM Test Configuration-_-Test Mode				
2.1	15.207, N/A and 8.8	AC Power Line Conducted Emissions	N/A	EUT it is battery powered
2.2	15.215 (c), N/A and 6.6	20 dB Bandwidth	Pass	-
2.3	15.249 (a), B.10 (a) and N/A.	Field Strength of Fundamental	Pass	-
2.4	15.249 (a)(d), B.10 (a) and N/A	Field Strength of Emissions	Pass	-
2.5	15.203	Antenna Requirement	Pass	-

Table 2

1.4 Product Information

1.4.1 Technical Description

The Equipment Under Test (EUT) is an Implant for Telemetry Acquisition System for socially (group) housed animals. The platform collects physiological data from identified, autoconfigured subjects and telemetries the high-quality digital physiological data back to acquisition computer. The platform consists of an acquisition computer with transceivers (SoHub) and implants (EUT). The cable communications between the acquisition computer and hubs are a USB link. If the cable needs to exceed 3m between the PC and first SoHub a USB extender (and power supply) is provided. The platform's telemetry protocol is Bluetooth Low Energy (BLE). The RF Network topology is a star network with up to 16 implants / hub. The EUT will have various model numbers associated with differing sensing technologies and number of channels, i.e. ECG, Pressure, Temperature, Activity, etc. but the RF technology will remain the same.



System Overview



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
Model: SoHo-X02, Serial Number: 1318288			
0	As supplied by the customer	Not Applicable	Not Applicable

Table 3

1.7 Test Location

TÜV SÜD conducted the following tests at our San Diego Test Laboratory.

Test Name Field Strength of Fundamental	Name of Engineer(s)
Configuration and Mode: DTM Test Configuration-_-Test Mode	
20 dB Bandwidth	Miguel Angel Rabago Garcia
Field Strength of Fundamental	Miguel Angel Rabago Garcia
Field Strength of Emissions	Miguel Angel Rabago Garcia
Antenna Requirement	Miguel Angel Rabago Garcia

Table 4

Laboratory Address: 10040 Mesa Rim Road,
San Diego, CA,
92121, US



2 Test Details

2.1 AC Power Line Conducted Emissions

2.1.1 Specification Reference

FCC 47 CFR Part 15C and ISSED RSS-GEN, Clause 15.207 and 8.8

2.1.2 Equipment Under Test and Modification State

S/N: 1318288 / N/A

2.1.3 Date of Test

N/A

2.1.4 Test Method

DTM Test Configuration- -Test Mode

The test was performed in accordance with ANSI-C63.10, clause 6.2

The EUT was placed on a non-conductive table 0.8m above a reference ground plane and 0.4m away from a vertical coupling plane.

All power was connected to the EUT through an Artificial Mains Network (AMN)

Conducted disturbance voltage measurements on mains lines were made at the output of the AMN

2.1.5 Environmental Conditions

N/A

2.1.6 Test Results

Not performed. EUT is an implantable device with an integral battery. There are no provisions for the EUT to connect to public AC Mains.

2.1.7 Test Location and Test Equipment Used

N/A



2.2 20 dB Bandwidth

2.2.1 Specification Reference

FCC 47 CFR Part 15C Clause 15.215 (c) and ISSED RSS-GEN clause 6.6

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.

Industry Canada RSS GEN, Limit Clause

None specified.

2.2.2 Equipment Under Test and Modification State

S/N: 1318288 - Modification State 0

2.2.3 Date of Test

24-June-2025

2.2.4 Test Method

DTM Test Configuration- -Test Mode

The test was performed in accordance with ANSI C63.10, clause 6.9.1.

2.2.5 Environmental Conditions

Ambient Temperature 24.5 °C

Relative Humidity 42.1 %

2.2.6 Test Results

DTM Test Configuration- -Test Mode

PHY	Frequency (MHz)	20 dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
1M PHY	2402	1.21	1.08
	2440	1.21	1.07
	2480	1.22	1.07
2M PHY	2402	2.12	2.049
	2440	2.14	2.05
	2480	2.16	2.056

Table 5

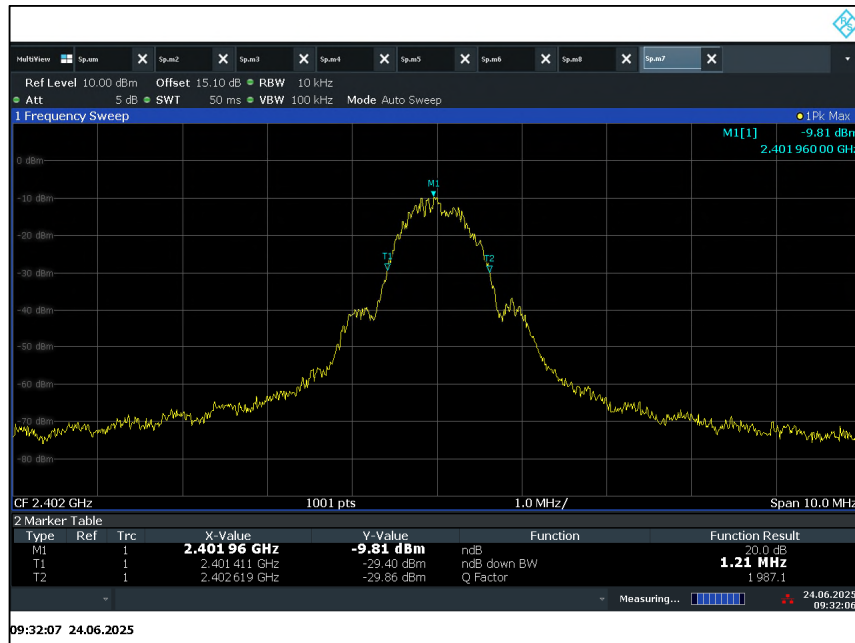


Figure 1 - Low Channel (2402 MHz 1M) 20 dB Bandwidth

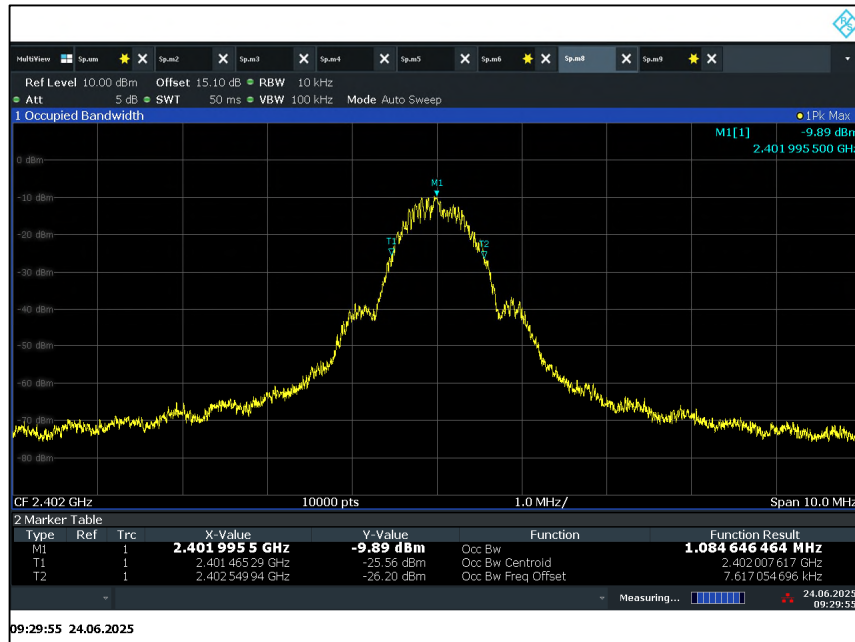


Figure 2 - Low Channel (2402 MHz 1M) 99% Occupied Bandwidth

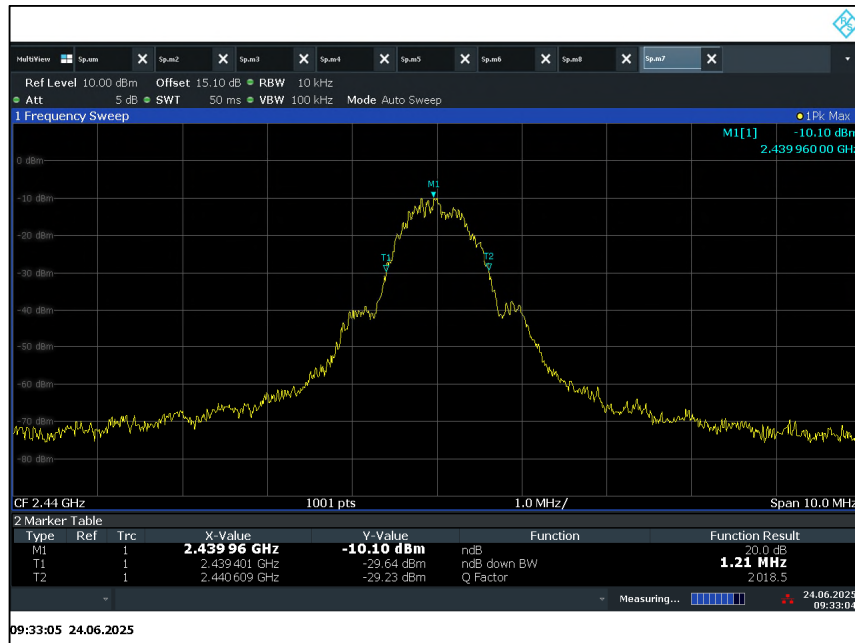


Figure 3 - Middle Channel (2440 MHz 1M) 20 dB Bandwidth

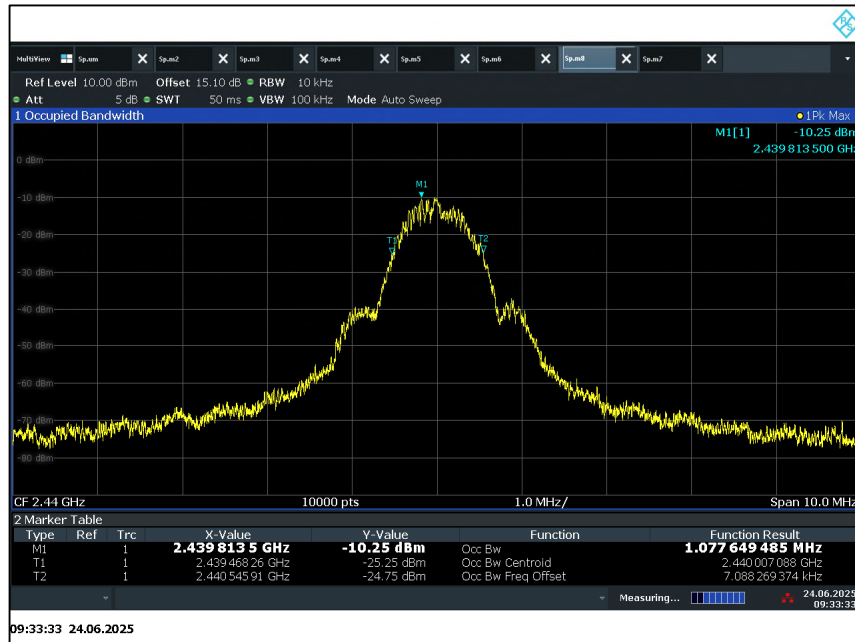


Figure 4 - Middle Channel (2440 MHz 1M) 99% Occupied Bandwidth



Figure 5 - High Channel (2480 MHz 1M) 20 dB Bandwidth

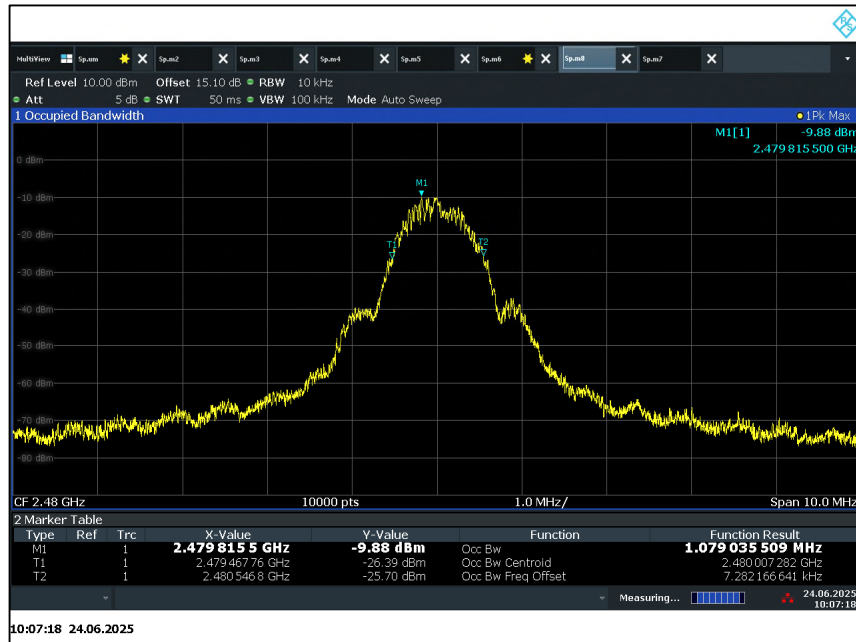


Figure 6 - High Channel (2480 MHz 1M) 99% Occupied Bandwidth

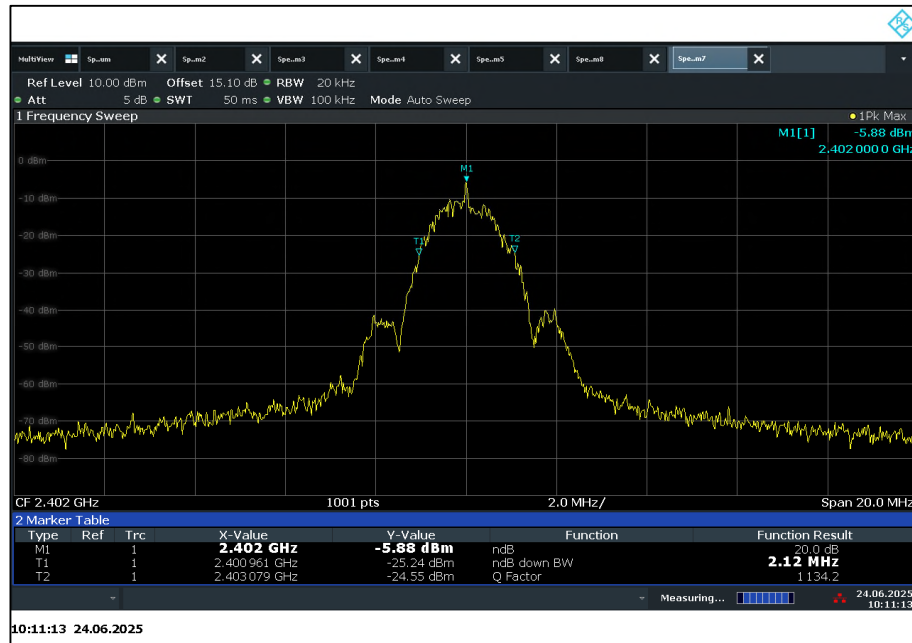


Figure 7 - Low Channel (2402 MHz 2M) 20 dB Bandwidth

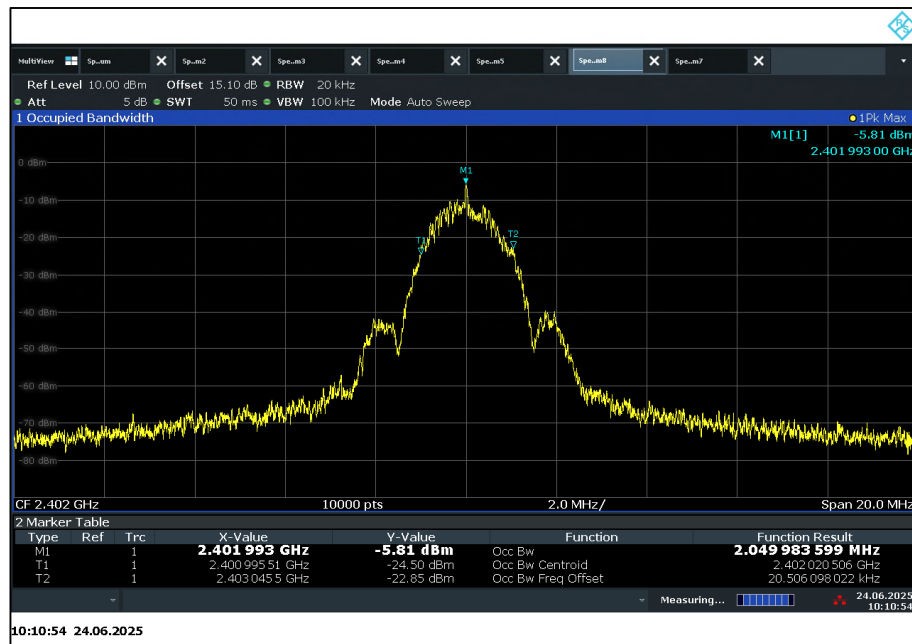


Figure 8 - Low Channel (2402 MHz 2M) 99% Occupied Bandwidth

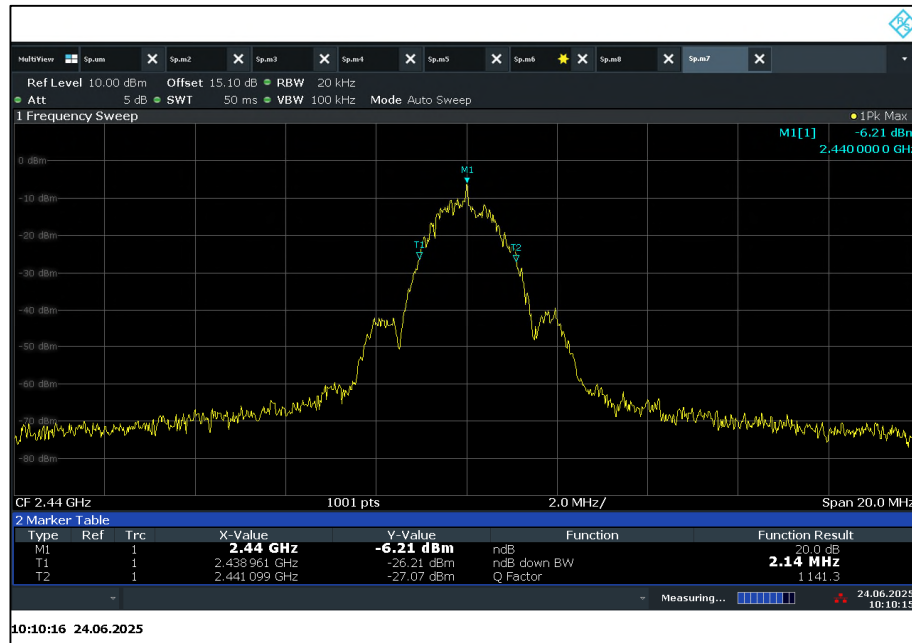


Figure 9 - Middle Channel (2440 MHz 2M) 20 dB Bandwidth

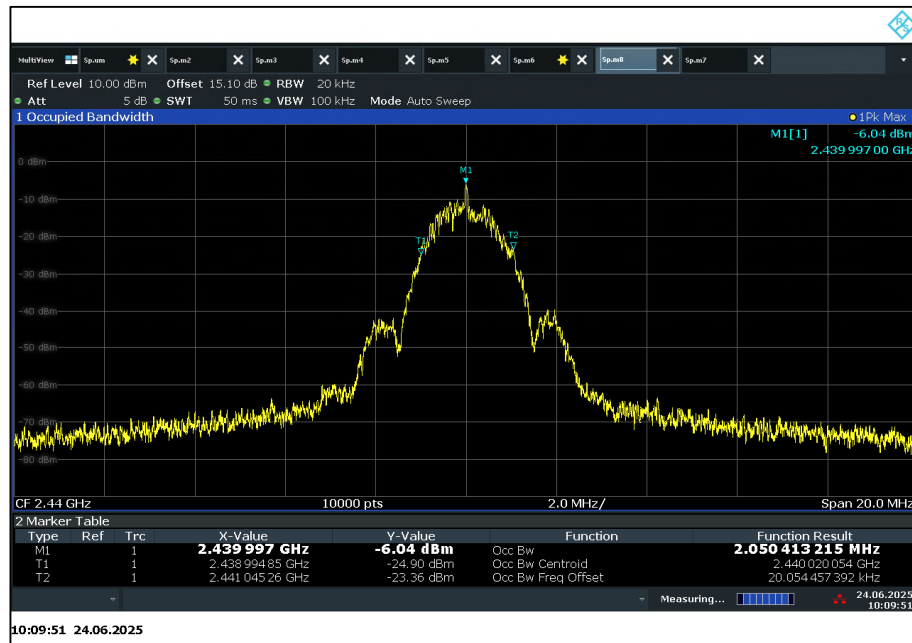


Figure 10 - Middle Channel (2440 MHz 2M) 99% Occupied Bandwidth

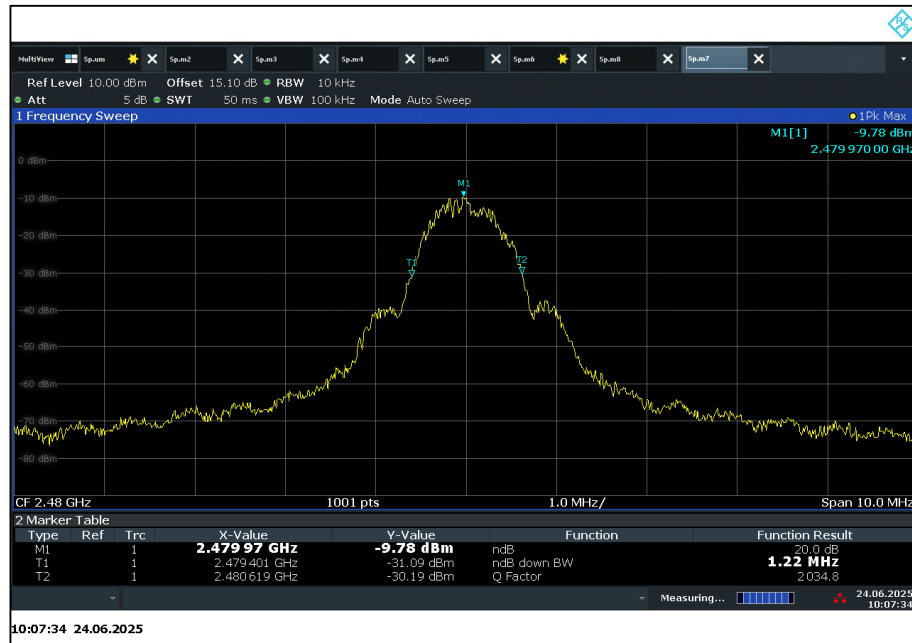


Figure 11 - High Channel (2480 MHz 2M) 20 dB Bandwidth

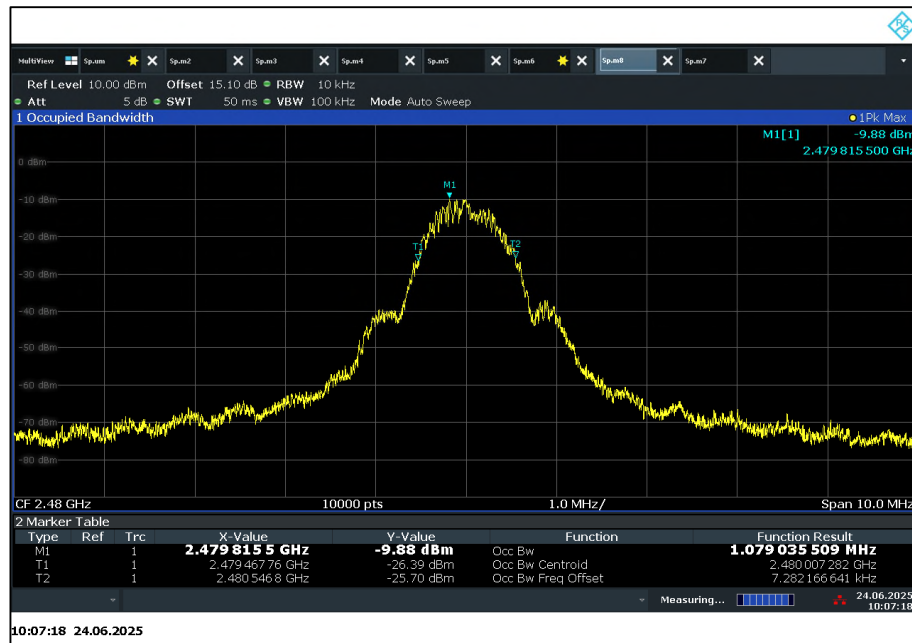


Figure 12 - High Channel (2480 MHz 2M) 99% Occupied Bandwidth



2.2.7 Test Location and Test Equipment Used

This test was carried out in SR5 (MM).

Instrument	Manufacturer	Type No	TE No	Calibration Period (months)	Calibration Expires
Signal & Spectrum Analyzer	Rohde & Schwarz	FSW26	30210	12 months	24-Feb-2026

Table 6



2.3 Field Strength of Fundamental

2.3.1 Specification Reference

FCC 47 CFR Part 15C Clause 15.249 (a), ISSED RSS-210 clause B.10 (a)

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

Fundamental Frequency (MHz)	Field Strength of Fundamental (mV/m)
902 to 928	50
2400 to 2483.5	50
5725 to 5875	50
24000 to 24250	250

Table 7

Industry Canada RSS-210, Limit Clause B.10 (a)

The field strength of fundamental and harmonic emissions, measured at 3 m, shall not exceed 50 mV/m and 0.5 mV/m respectively.

2.3.2 Equipment Under Test and Modification State

S/N: 1318288 - Modification State 0

2.3.3 Date of Test

23-June-2025 and 30-July-2025

2.3.4 Test Method

DTM Test Configuration- -Test Mode

The test was performed in accordance with ANSI C63.10, clause 9.10.

2.3.5 Environmental Conditions

Ambient Temperature 24.2 and 25.1°C
Relative Humidity 43.5 and 45.8 %

2.3.6 Test Results

Bluetooth Test Mode- -Test Mode

Note: A measurement was performed on X,Y and Z axis to determine the worst-case-scenario position, which was on X axis.

Note: Only worst-case data rate presented (2M PHY) for this test

Frequency (MHz)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
2402.010	61.56	94.00	-32.44	RMS	238	340	Horizontal
2402.020	61.31	94.00	-32.69	RMS	343	113	Vertical
2402.060	71.60	114.00	-42.40	Peak	343	113	Vertical
2402.080	71.85	114.00	-42.15	Peak	238	340	Horizontal
2440.010	73.37	114.00	-40.63	Peak	352	168	Vertical
2440.010	63.13	94.00	-30.87	RMS	352	168	Vertical
2440.010	61.19	94.00	-32.81	RMS	236	323	Horizontal
2440.040	71.39	114.00	-42.61	Peak	236	323	Horizontal
2479.990	71.06	114.00	-42.94	Peak	246	374	Vertical
2480.000	60.81	94.00	-33.19	RMS	246	374	Vertical
2480.000	66.21	94.00	-27.79	RMS	179	106	Horizontal
2480.010	76.33	114.00	-37.67	Peak	179	106	Horizontal

Table 8 - Fundamental Field Strength Results

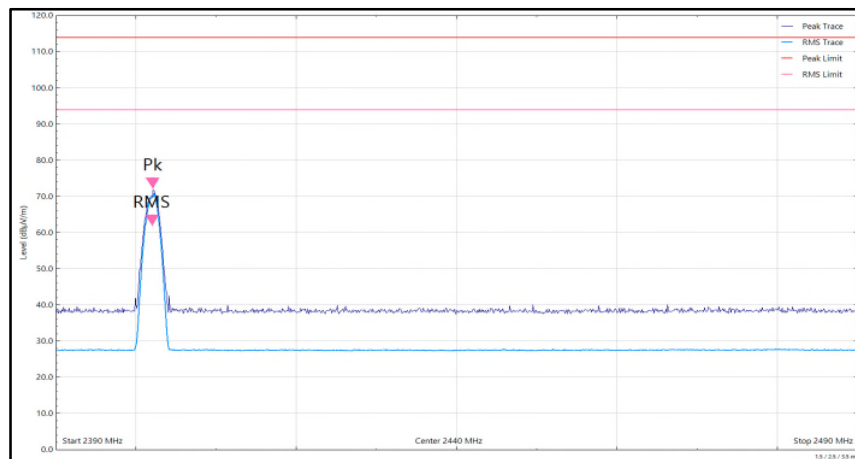


Figure 13 Low Channel 2402 MHz Horizontal

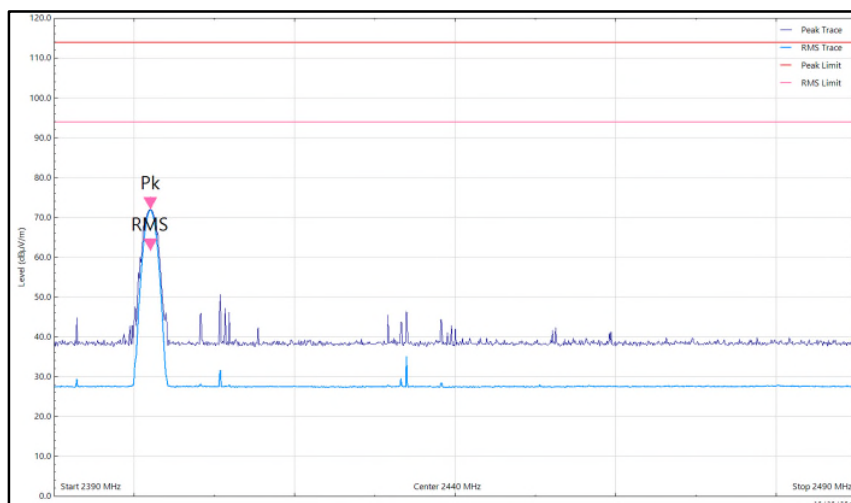


Figure 14 Low Channel 2402 MHz, Vertical

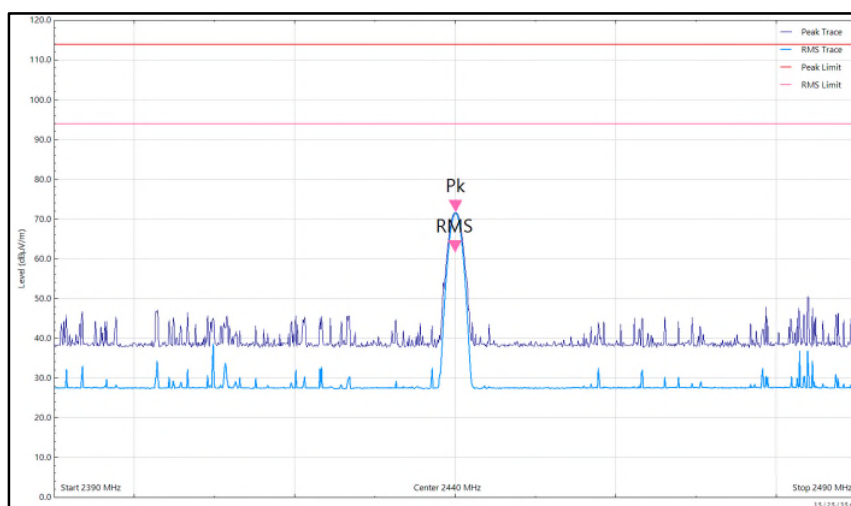


Figure 15 Middle Channel 2440 MHz, Horizontal

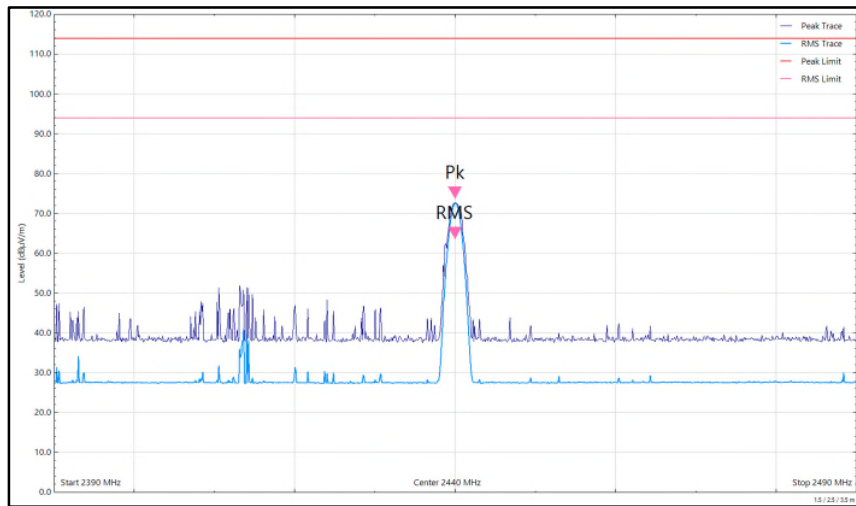


Figure 16 Middle Channel 2440 MHz, Vertical

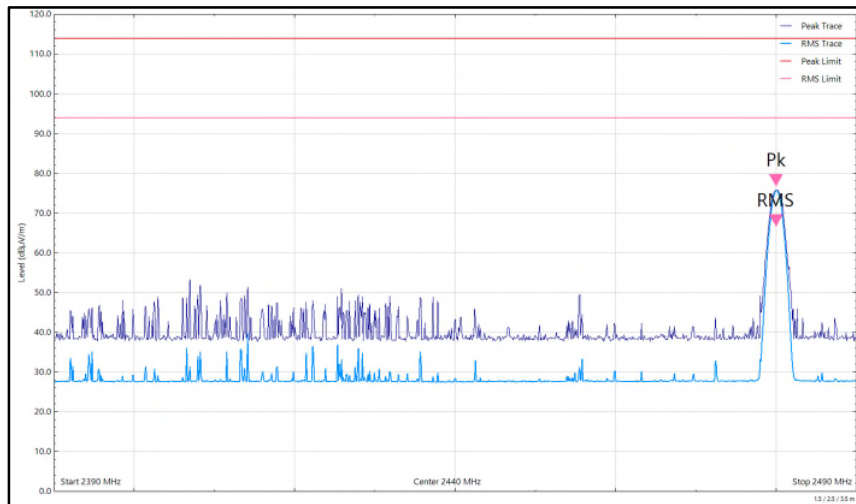


Figure 17 High Channel 2480 MHz, Horizontal

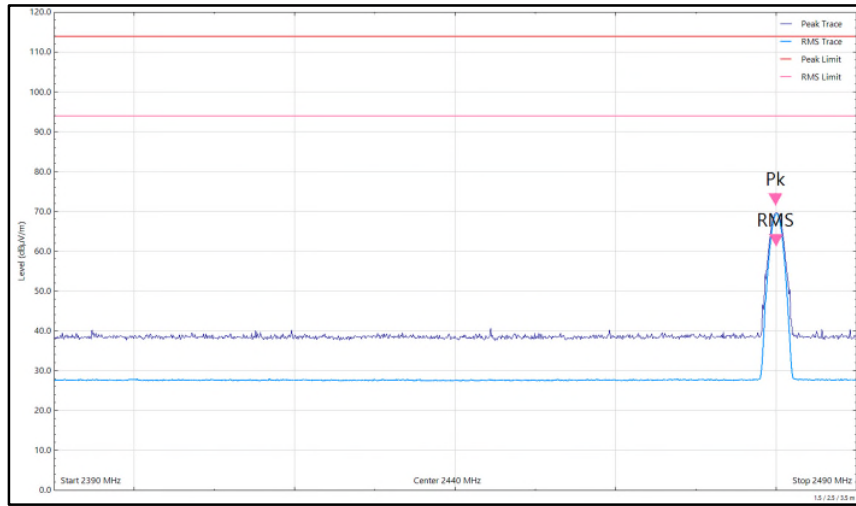


Figure 18 High Channel 2480 MHz, Vertical

2.3.7 Test Location and Test Equipment Used

This test was carried out in SR5 (MM)

Instrument	Manufacturer	Type No	TE No	Calibration Period (months)	Calibration Expires
EMI Test Receiver	Rohde & Schwarz	ESW 44	68210	12 Months	29-Jun-2026
Broad Band Horn Antenna	Schwarzbeck Mess-Elektronik	BBHA 9120 B	69563	12 Months	06-Nov-2026
SSU	TUV SUD UK	TUV SSU 010 PLC US	74136	12 Months	16-Apr-2026

Table 9



2.4 Field Strength of Emissions

2.4.1 Specification Reference

FCC 47 CFR Part 15C Clause 15.249 (a)(d), ISSED RSS-210, Clause B.10 (a)

FCC 47 CFR Part 15, 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 15, Limit Clause 15.209

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

Table 10

Industry Canada RSS-210, Limit Clause B.10

The field strength of fundamental and harmonic emissions, measured at 3 m, shall not exceed 50 mV/m and 0.5 mV/m respectively.

The field strength limits shall be measured using an average detector, except for the fundamental emission in the frequency band 902-928 MHz, which is based on measurements using an International Special Committee on Radio Interference (CISPR) quasi-peak detector.

Emissions radiated outside of the specified frequency bands, except for harmonic emissions, shall be attenuated by at least 50 dB below the level of the fundamental emissions or to the general field strength limits listed in RSS-Gen, whichever is less stringent.

Industry Canada RSS-GEN, Limit Clause 8.9

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

Table 11

2.4.2 Equipment Under Test and Modification State

S/N: 1318288 - Modification State 0

2.4.3 Date of Test

23-June-2025, 16-July-2025 and 30-July-2025

2.4.4 Test Method

DTM Test Configuration- -Test Mode

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

2.4.5 Environmental Conditions

Ambient Temperature 23.8°C
Relative Humidity 45.5%

2.4.6 Test Results

DTM Test Configuration- -Test Mode

Note: Only worst-case data rate presented (2M PHY) for this test

Frequency (MHz)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Angle (°)	Height (m)	Polarization
46.920000	19.57	40.00	20.43	QuasiPeak	42.0	134.0	Vert
134.985000	26.14	43.50	17.36	QuasiPeak	300.0	104.0	Vert
629.640000	26.25	46.00	19.75	QuasiPeak	310.0	206.0	Vert
636.030000	18.26	46.00	27.74	QuasiPeak	110.0	250.0	Horiz
731.285000	25.55	46.00	20.46	QuasiPeak	172.0	103.0	Vert
873.885000	30.83	46.00	15.17	QuasiPeak	145.0	128.0	Vert

Table 12 – 30MHz to 1GHz Low Channel 2402 MHz -

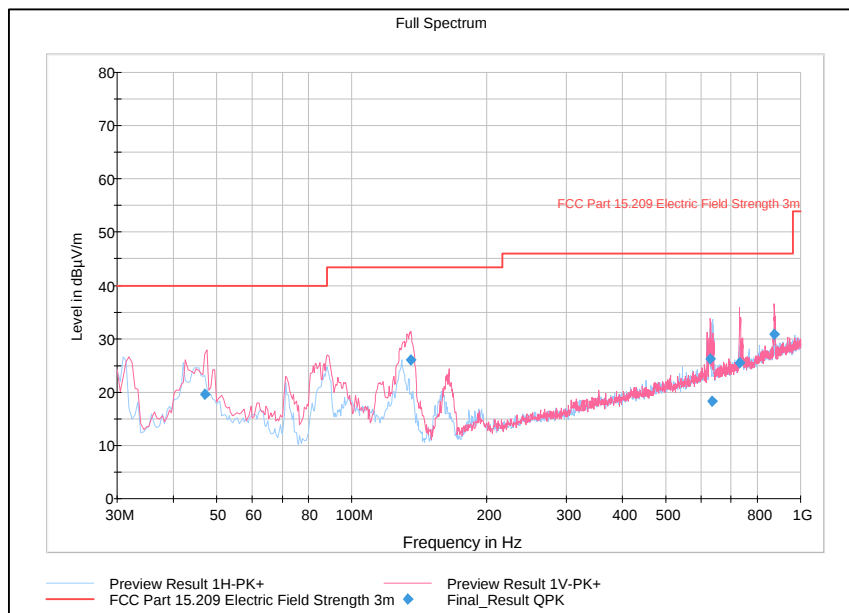


Figure 19- 30MHz to 1GHz Low Channel 2402 MHz Vertical and Horizontal

Frequency (MHz)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Angle (°)	Height (m)	Polarization
42.545000	11.90	40.00	28.10	QuasiPeak	15.0	122.0	Vert
45.140000	17.19	40.00	22.81	QuasiPeak	15.0	374.0	Horiz
130.250000	25.80	43.50	17.70	QuasiPeak	15.0	110.0	Vert
629.160000	29.05	46.00	16.95	QuasiPeak	138.0	108.0	Horiz
635.500000	23.34	46.00	22.66	QuasiPeak	101.0	401.0	Horiz
873.965000	30.33	46.00	15.67	QuasiPeak	30.0	122.0	Vert

Table 13 – 30MHz to 1GHz Middle Channel 2440 MHz -

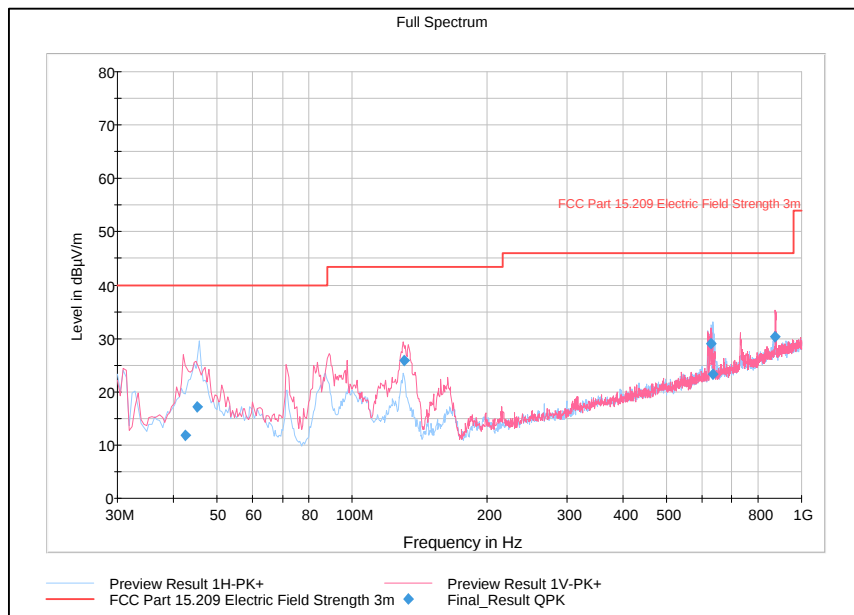


Figure 20 - 30MHz to 1GHz Middle Channel 2440 MHz Vertical and Horizontal -

Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector	Angle (°)	Height (m)	Polarization
30.550000	16.12	40.00	23.88	QuasiPeak	295.0	138.0	Horiz
46.510000	17.66	40.00	22.34	QuasiPeak	15.0	323.0	Horiz
88.335000	26.54	43.50	16.96	QuasiPeak	354.0	118.0	Vert
629.155000	27.92	46.00	18.08	QuasiPeak	322.0	109.0	Horiz
730.840000	22.45	46.00	23.55	QuasiPeak	19.0	110.0	Vert
873.235000	29.10	46.00	16.90	QuasiPeak	283.0	125.0	Vert

Table 14 – 30MHz to 1GHz High Channel 2440 MHz -

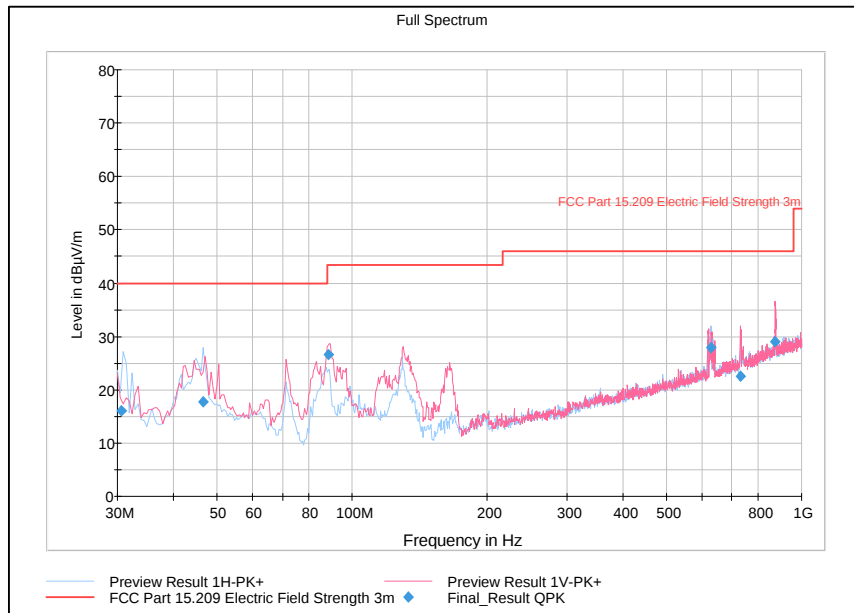


Figure 21- 30MHz to 1GHz High Channel 2440 MHz Vertical and Horizontal -

Frequency (MHz)	Final Peak (dB μ V/m)	Final Average (dB μ V/m)	Final Peak (μ V/m)	Final Average (μ V/m)	Angle (°)	Height (m)	Polarisation
1149.832	27.74	54.00	-26.26	RMS	55	123	Vertical
1197.734	39.73	74.00	-34.27	Peak	55	123	Vertical
1752.192	38.34	74.00	-35.66	Peak	339	131	Vertical
1752.822	27.01	54.00	-26.99	RMS	339	131	Vertical
2047.993	38.24	74.00	-35.76	Peak	163	142	Horizontal
2104.497	27.01	54.00	-26.99	RMS	163	142	Horizontal
2831.650	40.76	74.00	-33.24	Peak	45	108	Vertical
2858.294	28.87	54.00	-25.13	RMS	45	108	Vertical
2868.990	28.91	54.00	-25.09	RMS	124	102	Horizontal
2878.290	51.94	74.00	-22.06	Peak	124	102	Horizontal
3048.395	29.03	54.00	-24.97	RMS	345	102	Horizontal
3059.444	41.02	74.00	-32.98	Peak	345	102	Horizontal
7891.052	37.95	54.00	-16.05	RMS	340	112	Vertical
7899.304	49.83	74.00	-24.17	Peak	340	112	Vertical

Table 15 –1 to 8GHz Low Channel 2402 MHz -

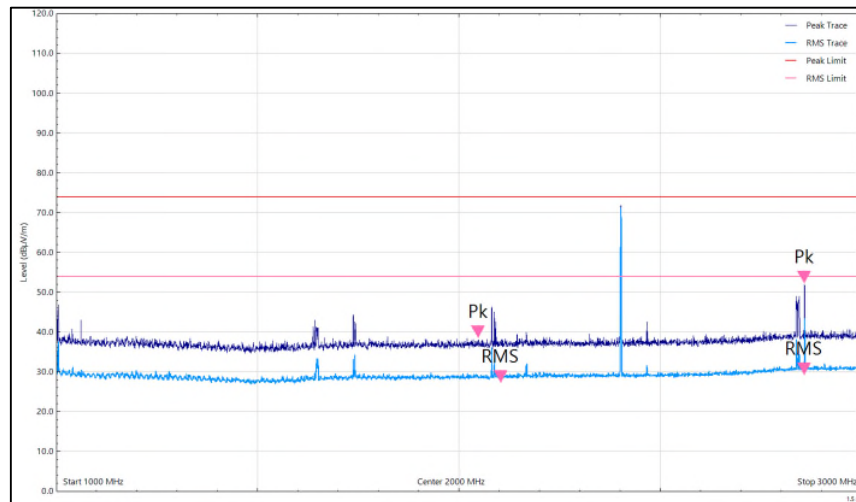


Figure 22- 1GHz to 3GHz Horizontal Low Channel 2402 MHz-

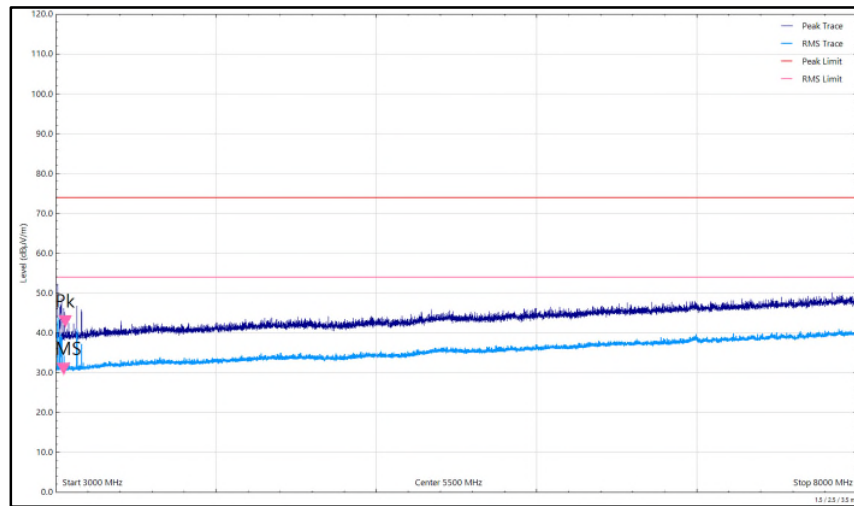


Figure 23- 3GHz to 8GHz Horizontal Low Channel 2402 MHz-

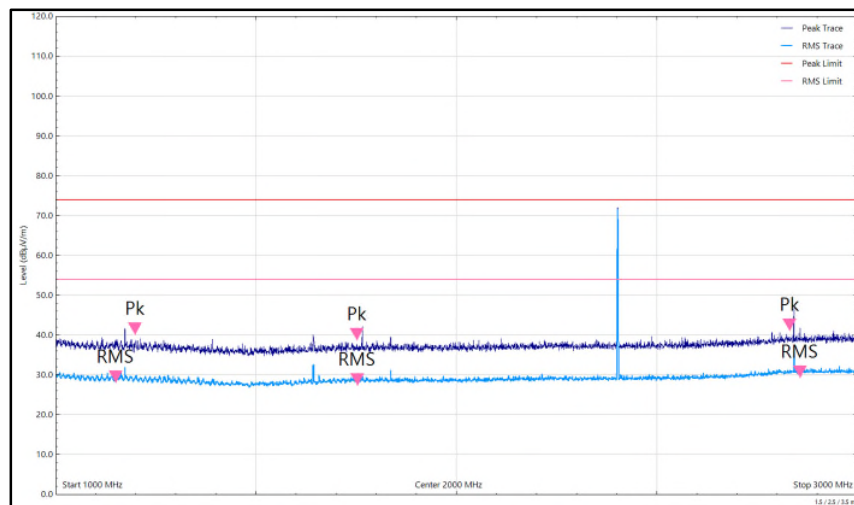


Figure 24- 1GHz to 3GHz Vertical Low Channel 2402 MHz-

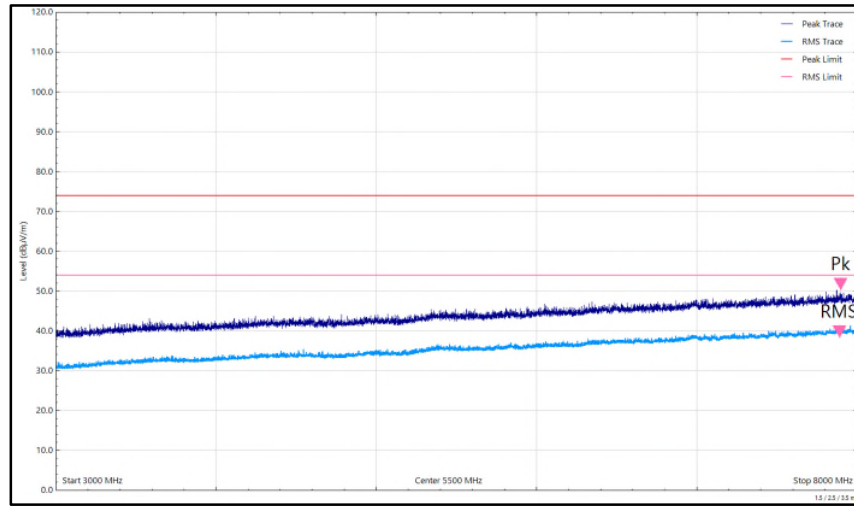


Figure 25- 3GHz to 8GHz Vertical Low Channel 2402 MHz-

Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
2061.455	38.62	74.00	-35.38	Peak	323	125	Horizontal
2093.622	27.00	54.00	-27.00	RMS	333	102	Vertical
2105.720	27.00	54.00	-27.00	RMS	323	125	Horizontal
2106.629	38.48	74.00	-35.52	Peak	333	102	Vertical
2831.696	41.34	74.00	-32.66	Peak	88	102	Horizontal
2840.017	28.82	54.00	-25.18	RMS	88	102	Horizontal
2893.311	28.97	54.00	-25.03	RMS	191	102	Vertical
2937.507	40.96	74.00	-33.04	Peak	191	102	Vertical
7337.986	36.72	54.00	-17.28	RMS	341	104	Horizontal
7358.615	48.15	74.00	-25.85	Peak	341	104	Horizontal
7747.577	49.25	74.00	-24.75	Peak	126	118	Vertical
7768.976	37.51	54.00	-16.49	RMS	126	118	Vertical

Table 16 – 1 to 8GHz Middle Channel 2440 MHz -

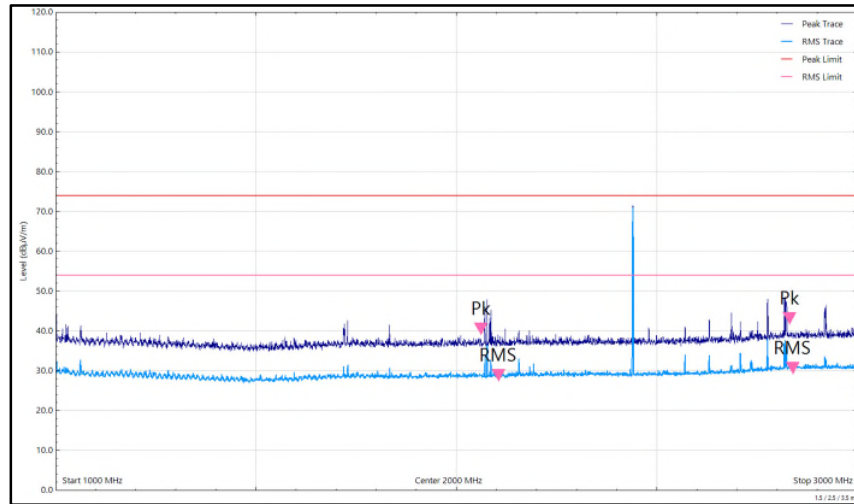


Figure 26- 1GHz to 3GHz Horizontal Middle Channel 2440 MHz-

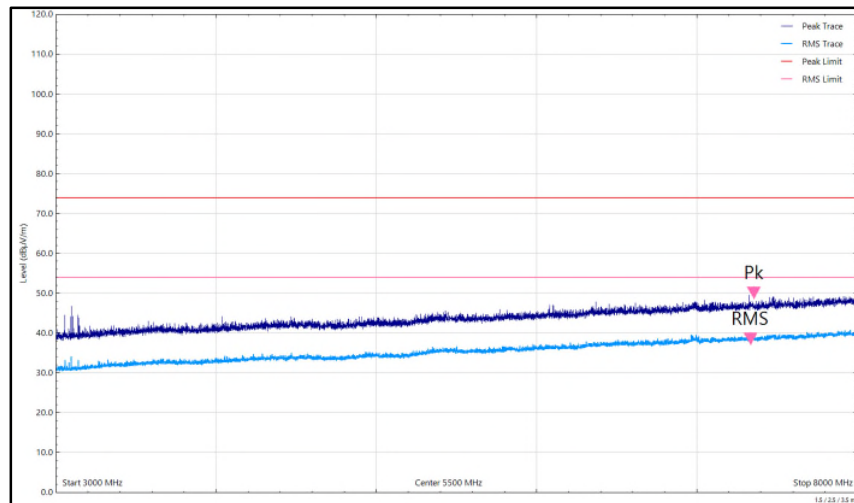


Figure 27- 3GHz to 8GHz Horizontal Middle Channel 2440 MHz-

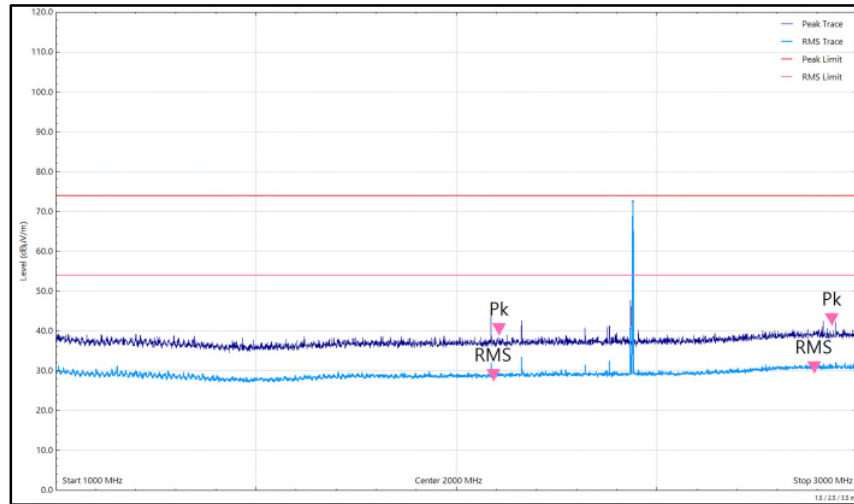


Figure 28- 1GHz to 3GHz Vertical Middle Channel 2440 MHz-

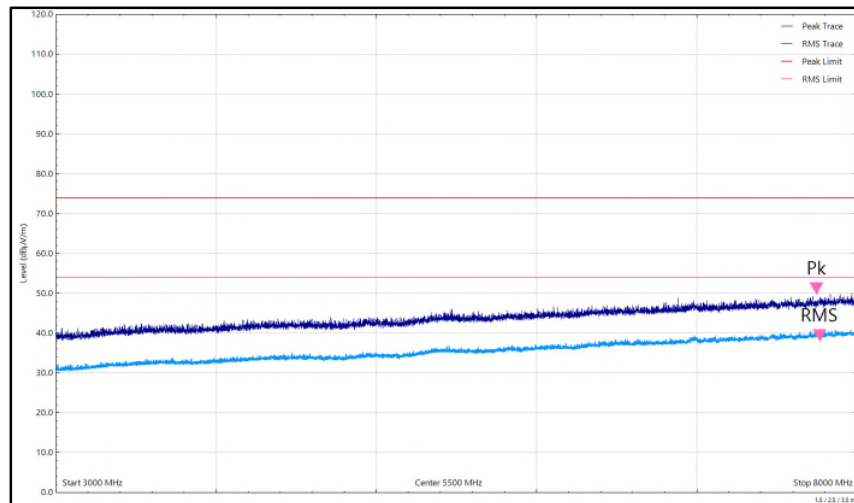


Figure 29- 3GHz to 8GHz Vertical Middle Channel 2440 MHz-



Frequency (MHz)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
1270.493	27.47	54.00	-26.53	RMS	167	102	Vertical
1292.871	38.58	74.00	-35.42	Peak	167	102	Vertical
1573.080	26.36	54.00	-27.64	RMS	323	102	Horizontal
1575.738	38.05	74.00	-35.95	Peak	323	102	Horizontal
2103.381	27.24	54.00	-26.76	RMS	157	105	Vertical
2141.563	38.67	74.00	-35.33	Peak	157	105	Vertical
2351.605	39.41	74.00	-34.59	Peak	40	102	Horizontal
2358.808	27.46	54.00	-26.54	RMS	40	102	Horizontal
2672.5	54.15	74.00	-19.85	Peak	93	102	Vertical
2698.514	28.12	54.00	-25.88	RMS	93	102	Vertical
2882.171	29.22	54.00	-24.78	RMS	339	102	Vertical
2893.5	52.81	74.00	-21.19	Peak	339	102	Vertical
3285.178	41.69	74.00	-32.31	Peak	333	108	Horizontal
3315.738	30.24	54.00	-23.76	RMS	333	108	Horizontal
4727.955	43.51	74.00	-30.49	Peak	343	196	Vertical
4743.899	31.95	54.00	-22.05	RMS	343	196	Vertical
6028.752	46.43	74.00	-27.57	Peak	304	171	Horizontal
6069.031	34.79	54.00	-19.21	RMS	304	171	Horizontal
7120.182	36.67	54.00	-17.33	RMS	333	302	Vertical
7130.881	48.37	74.00	-25.63	Peak	333	302	Vertical
7456.441	48.91	74.00	-25.09	Peak	323	102	Horizontal
7469.238	37.48	54.00	-16.52	RMS	323	102	Horizontal

Table 17 –1 to 8GHz High Channel 2480 MHz -

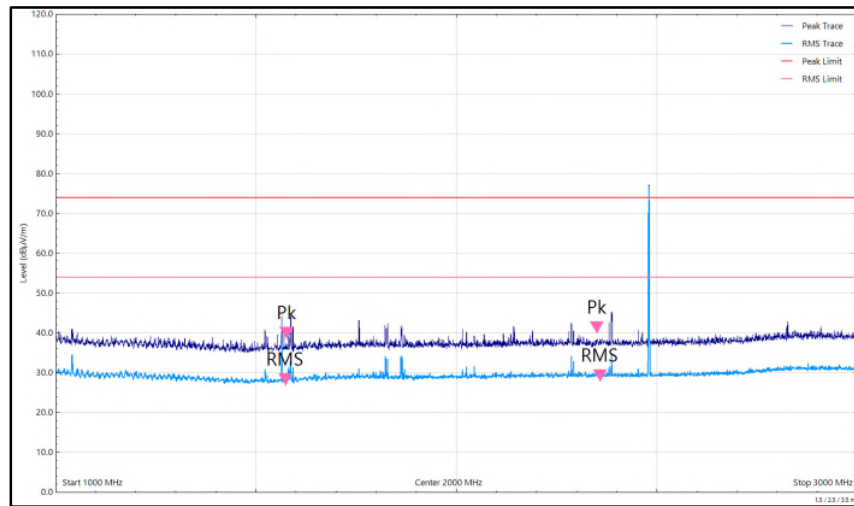


Figure 30- 1GHz to 3GHz Horizontal High Channel 2448 MHz-

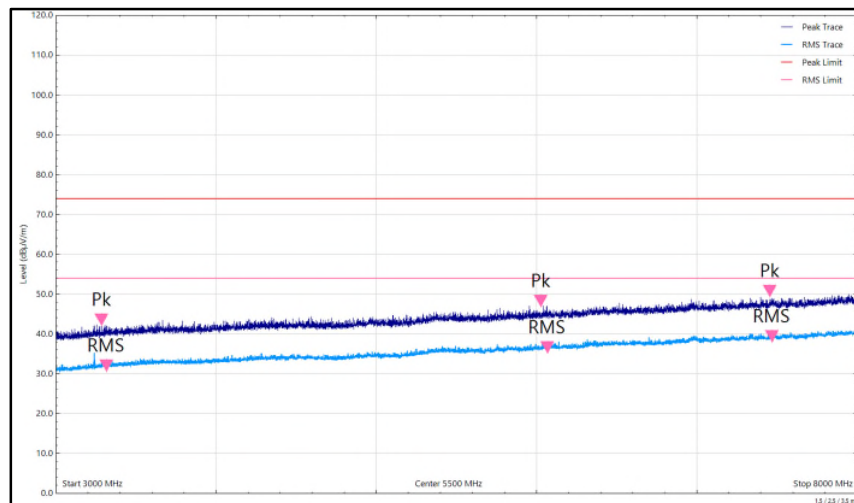


Figure 31- 3GHz to 8GHz Horizontal High Channel 2448 MHz-

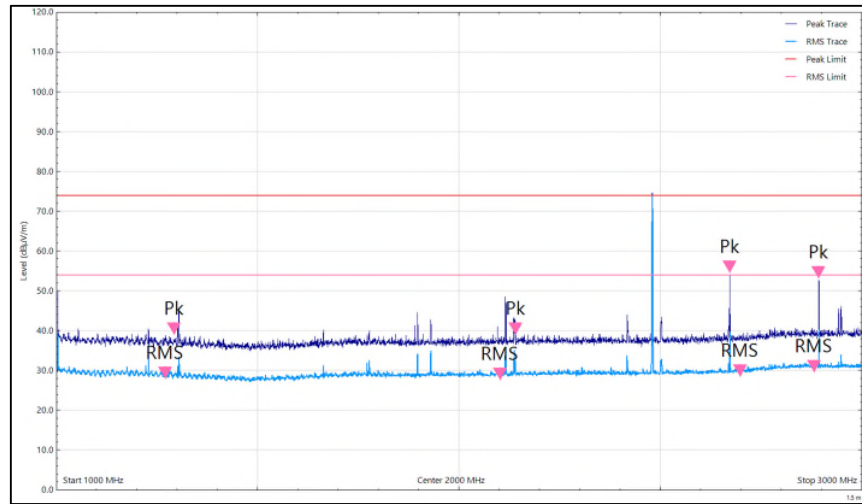


Figure 32- 1GHz to 3GHz Vertical High Channel 2448 MHz-

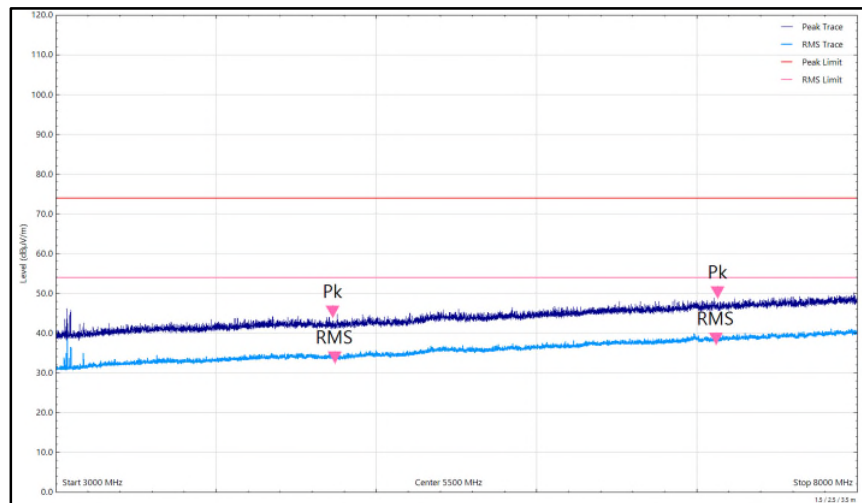


Figure 33- 3GHz to 8GHz Vertical High Channel 2448 MHz-

Frequency (MHz)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
2390	53.03	74	-20.97	pk	178	118	Worst Case
2390	40.65	54	-13.35	cav	178	118	Worst Case
2483.5	50.73	74	-23.27	pk	186	101.8	Worst Case
2483.5	40.99	54	-13.01	cav	186	101.8	Worst Case

Table 18 –Radiated Band Edge Low and High Channel -

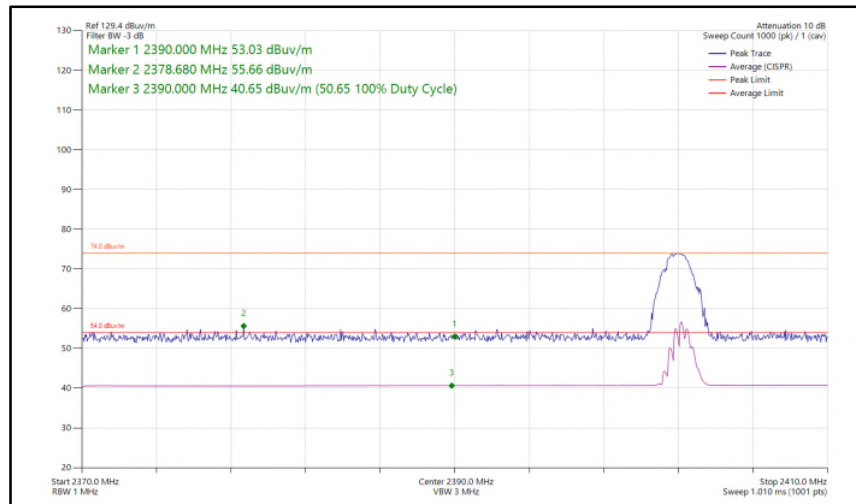


Figure 34- Low Edge 2390 MHz-

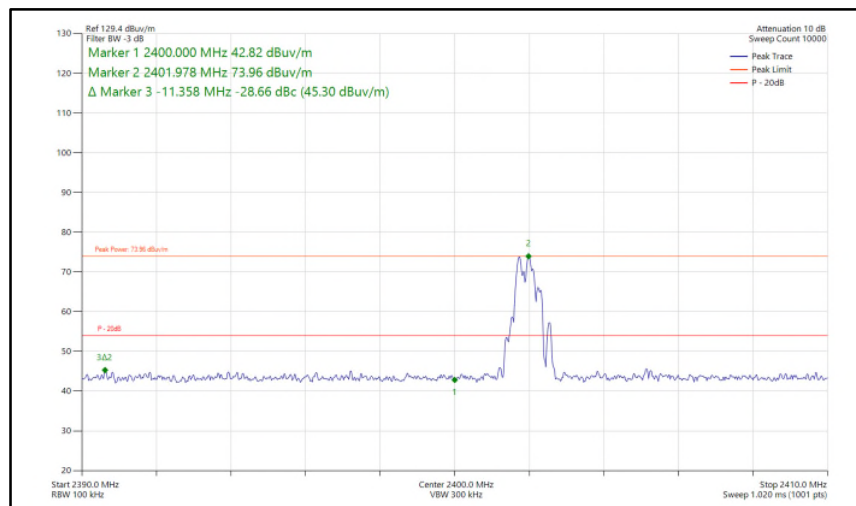


Figure 35- Low Channel -20 dBc-

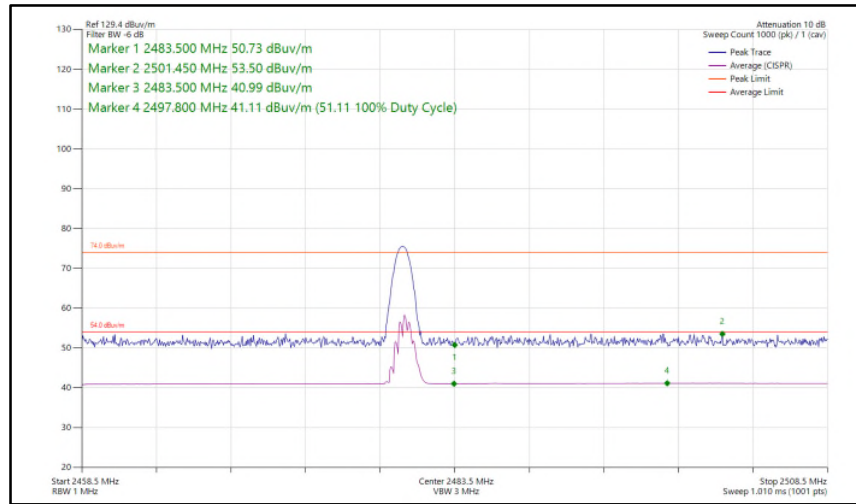


Figure 36- High Edge 2483.5 MHz-

Frequency (MHz)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
8173.430	50.04	74.00	-23.96	Peak	241	111	Horizontal
8205.590	38.64	54.00	-15.36	RMS	241	111	Horizontal
8444.410	50.65	74.00	-23.35	Peak	34	108	Vertical
8497.360	38.70	54.00	-15.30	RMS	34	108	Vertical
11497.710	52.13	74.00	-21.87	Peak	333	104	Horizontal
11504.500	40.93	54.00	-13.07	RMS	333	104	Horizontal
12474.190	52.83	74.00	-21.17	Peak	181	102	Vertical
12482.980	41.79	54.00	-12.21	RMS	181	102	Vertical
15041.710	54.46	74.00	-19.54	Peak	143	102	Horizontal
15100.850	42.94	54.00	-11.06	RMS	143	102	Horizontal
17330.070	60.24	74.00	-13.76	Peak	333	102	Vertical
17350.650	48.06	54.00	-5.94	RMS	333	102	Vertical
17761.260	60.71	74.00	-13.29	Peak	289	102	Horizontal
17767.250	49.47	54.00	-4.53	RMS	289	102	Horizontal

Table 19 – 8 to 18GHz Low Channel 2402 MHz-

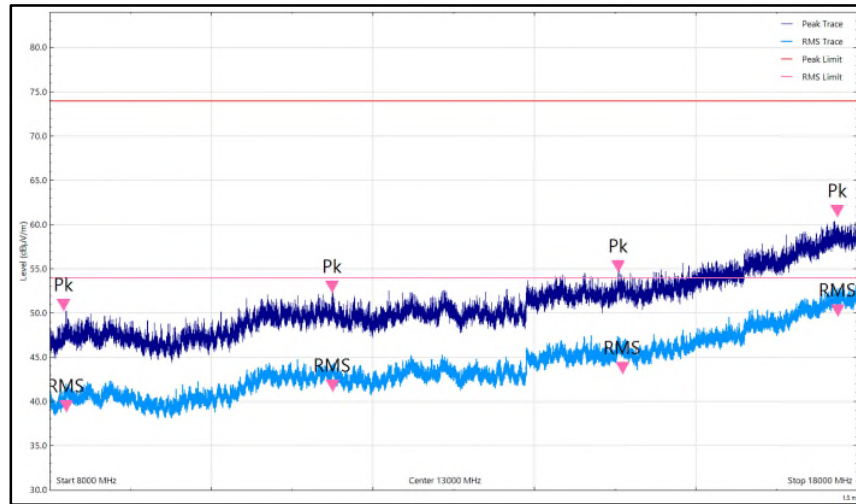


Figure 37- 8GHz to 18GHz Horizontal Low Channel 2402 MHz-

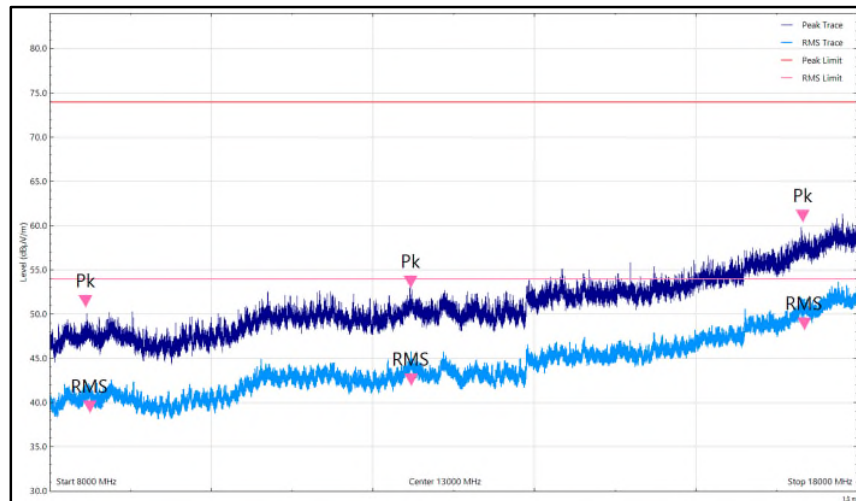


Figure 38- 8GHz to 18GHz Vertical Low Channel 2402 MHz-

Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
8202.680	38.47	54.00	-15.53	RMS	352	102	Vertical
8219.660	49.98	74.00	-24.02	Peak	352	102	Vertical
8943.990	38.01	54.00	-15.99	RMS	20	102	Horizontal
8955.980	49.20	74.00	-24.80	Peak	20	102	Horizontal
11196.130	52.05	74.00	-21.95	Peak	304	105	Horizontal
11239.680	40.51	54.00	-13.49	RMS	304	105	Horizontal
11326.490	40.73	54.00	-13.27	RMS	29	108	Vertical
11330.480	51.78	74.00	-22.22	Peak	29	108	Vertical
15034.500	42.99	54.00	-11.01	RMS	130	102	Vertical
15054.080	55.20	74.00	-18.80	Peak	130	102	Vertical
15198.650	54.29	74.00	-19.71	Peak	67	108	Horizontal
15199.750	42.83	54.00	-11.17	RMS	67	108	Horizontal
17768.940	49.37	54.00	-4.63	RMS	229	125	Vertical
17809.240	49.43	54.00	-4.57	RMS	227	102	Horizontal
17814.400	61.08	74.00	-12.92	Peak	229	125	Vertical
17816.830	60.84	74.00	-13.16	Peak	227	102	Horizontal

Table 20 – 8 to 18GHz Middle Channel 2440 MHz–

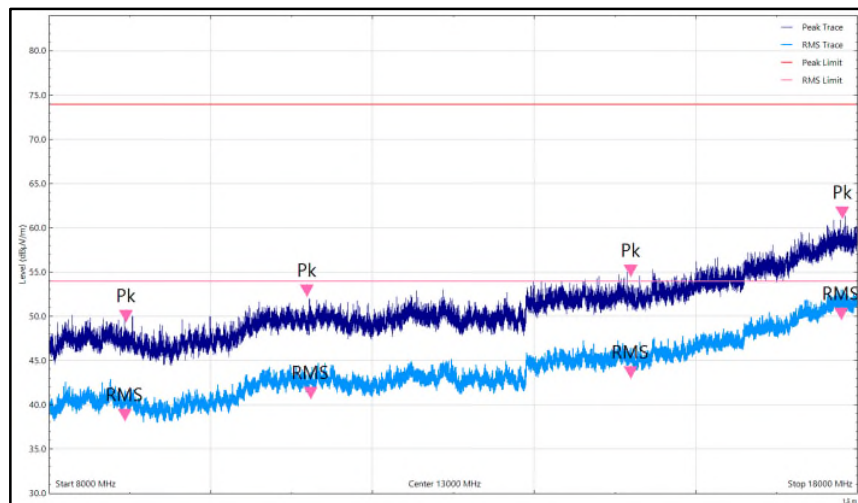


Figure 39- 8GHz to 18GHz Horizontal Middle Channel 2440 MHz–

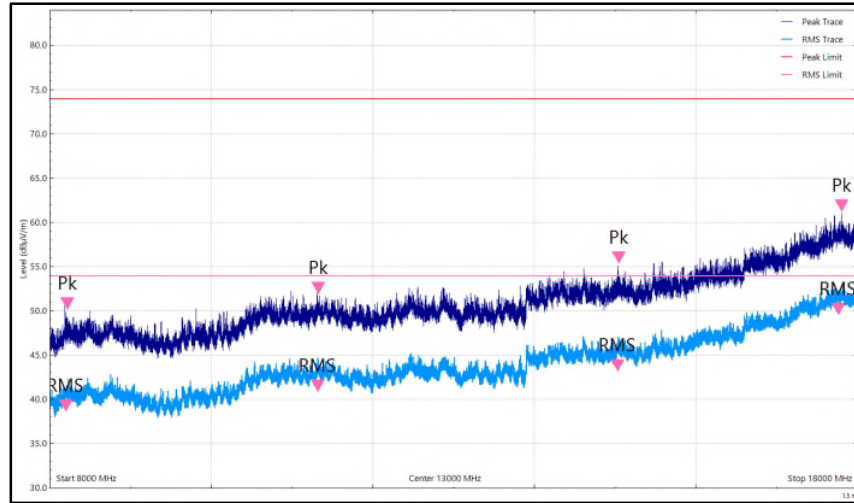


Figure 40- 8GHz to 18GHz Vertical Middle Channel 2440 MHz-

Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
8473.980	50.15	74.00	-23.85	Peak	109	122	Horizontal
8478.470	38.62	54.00	-15.38	RMS	109	122	Horizontal
8745.530	38.82	54.00	-15.18	RMS	4	108	Vertical
8802.170	50.46	74.00	-23.54	Peak	4	108	Vertical
13909.900	42.46	54.00	-11.54	RMS	166	105	Horizontal
13911.100	53.67	74.00	-20.33	Peak	166	105	Horizontal
14615.820	43.03	54.00	-10.97	RMS	343	102	Vertical
14621.410	54.53	74.00	-19.47	Peak	343	102	Vertical
17755.050	49.34	54.00	-4.66	RMS	333	104	Horizontal
17755.550	60.79	74.00	-13.21	Peak	333	104	Horizontal
17763.000	60.95	74.00	-13.05	Peak	159	133	Vertical
17766.800	49.42	54.00	-4.58	RMS	159	133	Vertical

Table 21 – 8 to 18GHz High Channel 2480 MHz-

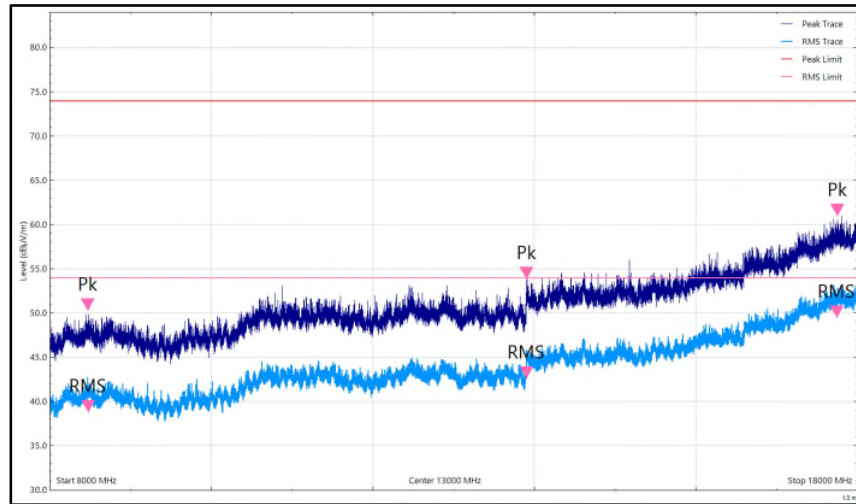


Figure 41- 8GHz to 18GHz Horizontal High Channel 2480 MHz-

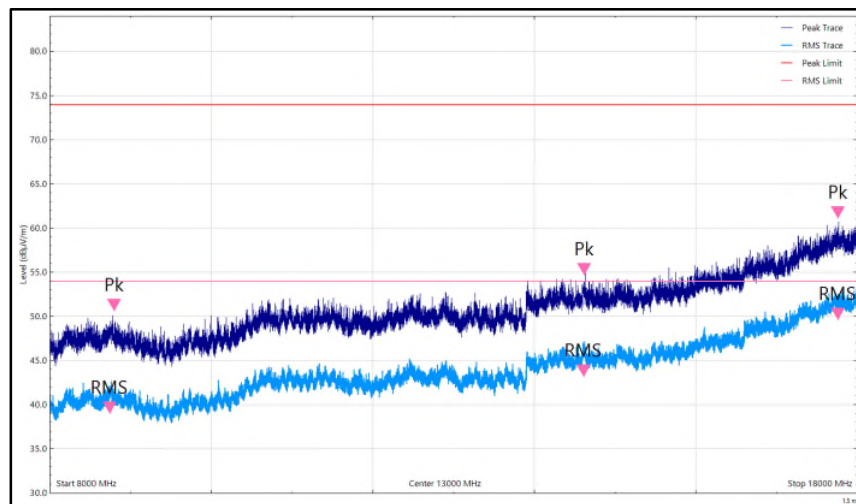


Figure 42- 8GHz to 18GHz Vertical High Channel 2480 MHz-

Frequency (MHz)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
18219.012	32.59	54.00	-21.41	RMS	41	100	Horizontal
18223.248	43.91	74.00	-30.09	Peak	41	100	Horizontal
18951.051	32.25	54.00	-21.75	RMS	218	100	Vertical
18965.437	43.52	74.00	-30.48	Peak	218	100	Vertical
21790.705	45.21	74.00	-28.79	Peak	202	100	Horizontal
21804.291	33.48	54.00	-20.52	RMS	202	100	Horizontal
22839.547	45.42	74.00	-28.58	Peak	278	100	Vertical
22843.623	33.89	54.00	-20.11	RMS	278	100	Vertical
25260.608	47.25	74.00	-26.75	Peak	333	100	Horizontal
25286.982	35.94	54.00	-18.06	RMS	333	100	Horizontal
25889.799	47.84	74.00	-26.16	Peak	12	100	Vertical
25895.153	36.47	54.00	-17.53	RMS	12	100	Vertical

Table 22 – 18 to 26GHz Low Channel 2402 MHz–

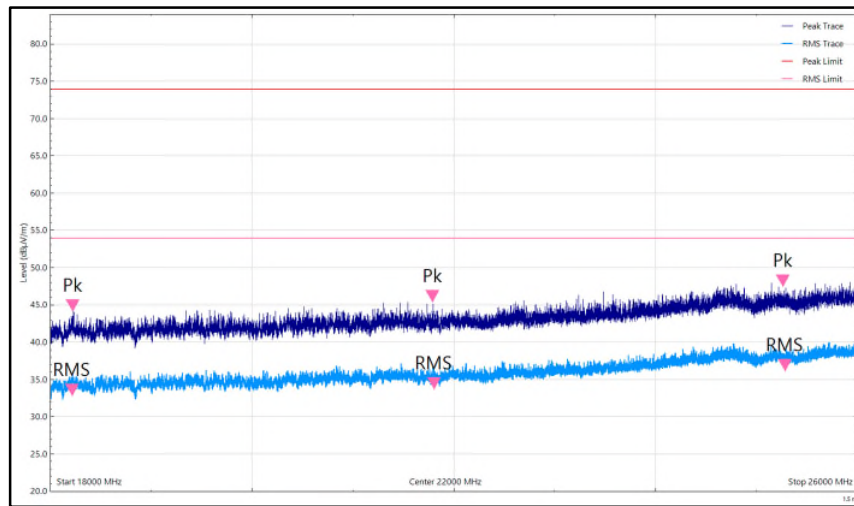


Figure 43- 18GHz to 26GHz Horizontal Low Channel 2402 MHz-

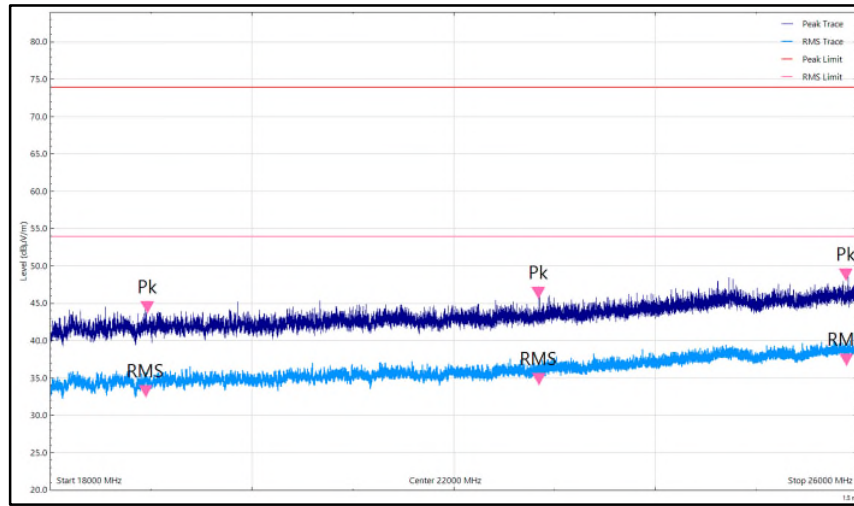


Figure 44- 18GHz to 26GHz Vertical Low Channel 2402 MHz-

Frequency (MHz)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
18496.244	43.64	74.00	-30.36	Peak	323	100	Horizontal
18508.472	32.42	54.00	-21.58	RMS	323	100	Horizontal
19415.337	44.11	74.00	-29.89	Peak	353	100	Vertical
19460.572	32.67	54.00	-21.33	RMS	353	100	Vertical
21427.940	45.10	74.00	-28.90	Peak	182	100	Horizontal
21435.532	33.42	54.00	-20.58	RMS	182	100	Horizontal
22563.053	33.97	54.00	-20.03	RMS	84	100	Vertical
22563.613	45.24	74.00	-28.76	Peak	84	100	Vertical
25626.524	36.29	54.00	-17.71	RMS	146	100	Vertical
25630.540	36.36	54.00	-17.64	RMS	33	100	Horizontal
25646.345	47.81	74.00	-26.19	Peak	146	100	Vertical
25659.232	47.98	74.00	-26.02	Peak	33	100	Horizontal

Table 23 – 18 to 26GHz Middle Channel 2440 MHz-

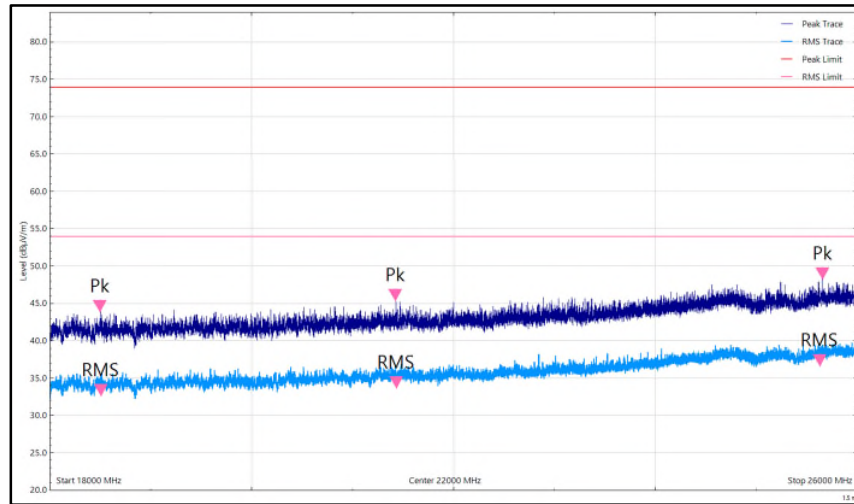


Figure 45- 18GHz to 26GHz Horizontal Middle Channel 2440 MHz-

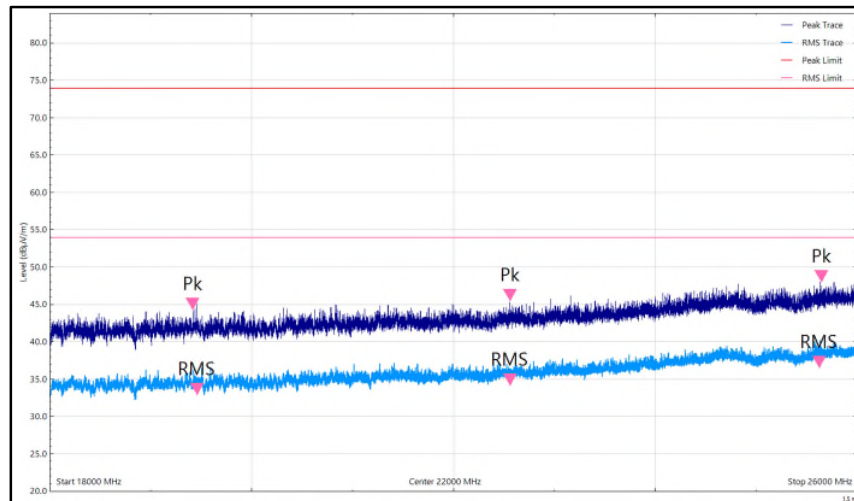


Figure 46- 18GHz to 26GHz Vertical Middle Channel 2440 MHz-



Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
18664.924	32.53	54.00	-21.47	RMS	224	100	Vertical
18685.304	43.97	74.00	-30.03	Peak	224	100	Vertical
19627.352	32.77	54.00	-21.23	RMS	171	100	Horizontal
19678.980	44.48	74.00	-29.52	Peak	171	100	Horizontal
21629.259	44.21	74.00	-29.79	Peak	307	100	Horizontal
21678.890	33.30	54.00	-20.70	RMS	122	100	Vertical
21684.404	33.34	54.00	-20.66	RMS	307	100	Horizontal
21687.201	45.20	74.00	-28.80	Peak	122	100	Vertical
24723.762	47.61	74.00	-26.39	Peak	335	100	Horizontal
24749.976	36.15	54.00	-17.85	RMS	335	100	Horizontal
25116.907	47.61	74.00	-26.39	Peak	349	100	Vertical
25166.697	36.01	54.00	-17.99	RMS	349	100	Vertical

Table 24 – 18 to 26GHz High Channel 2480 MHz–

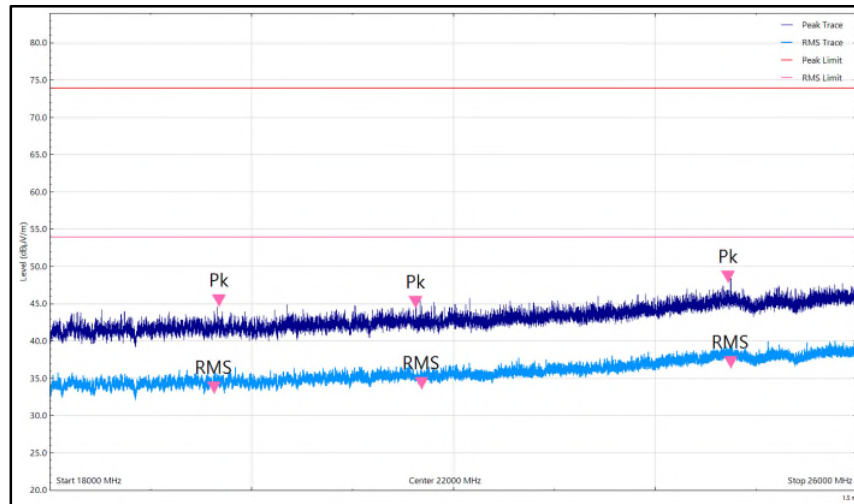


Figure 47- 18GHz to 26GHz Horizontal High Channel 2480MHz-

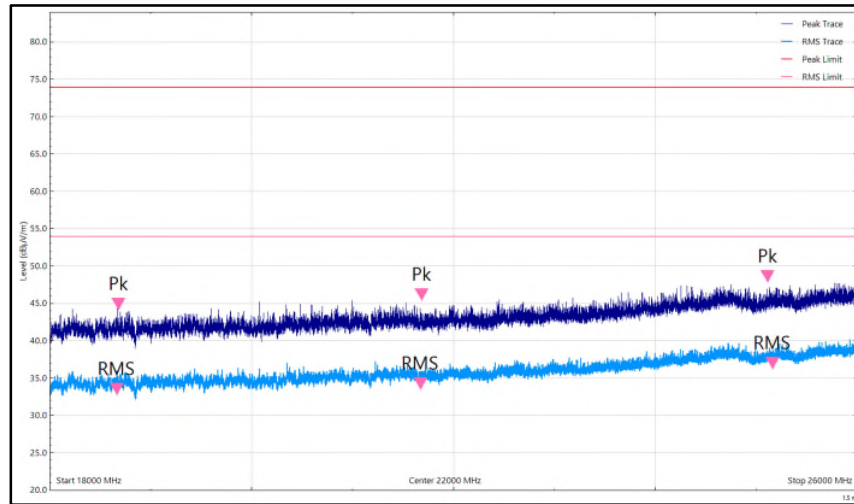


Figure 48- 18GHz to 26GHz Vertical High Channel 2480MHz-

2.4.7 Test Location and Test Equipment Used

This test was carried out in Mira Mesa and Rancho Bernardo Facilities.

Instrument	Manufacturer	Type No	TE No	Calibration Period (months)	Calibration Expires
EMI Test Receiver	Rohde &Schwarz	ESW 44	68210	12 Months	29-Jun-2026
EMI Test Receiver	Rohde &Schwarz	ESW 44	68302	12 Months	02-Sept-2025
Trilog Broadband Antenna	Schwarzbeck Mess-Elektronik	VULB 9162	64249	12 Months	04-Dec-2025
Broad Band Horn Antenna	Schwarzbeck Mess-Elektronik	BBHA 9120 B	69563	12 Months	06-Nov-2025
Double Ridge Horn Antenna	Schwarzbeck Mess-Elektronik	HWRD 750	69562	12 Months	06-Nov-2025
HF Horn Antenna	Custom Microwave, Inc.	HO42S	30572	12 Months	26-Oct-2025
Preamplifier	Com Power	PA-122	46797	12 Months	06-Jan-2026
RF Pre-Amp	SONOMA	310	51236	12 Months	29-July-2026
SSU	TUV SUD UK	TUV SSU 010 PLC US	74136	12 Months	16-Apr-2026

Note: Test equipment was within calibration during testing

Table 25



2.5 Antenna Requirement

2.5.1 Specification Reference

FCC 47 CFR Part 15C, ISSED RSS-210 and ISSED RSS-GEN, Clause 15.203

2.5.2 Equipment Under Test and Modification State

S/N: 1318288 - Modification State 0

2.5.3 Date of Test

23-June-2025

2.5.4 Test Method

Visual Confirmation

2.5.5 Test Results

EUT Uses a permanently attached antenna so is considered sufficient to comply with the provisions of section FCC 47 CFR Part 15, Clause 15.203

2.5.6 Test Location and Test Equipment Used

This verification was carried out in SR5 (MM)



3 Test Equipment Information

3.1 General Test Equipment Used

Instrument	Manufacturer	Type No	TE No	Calibration Period (months)	Calibration Expires
Temp, Humidity and Barometric Sensor	Omega	iBTHX-W	12 months	22-May-2026	Temp, Humidity and Barometric Sensor
True RMS Multimeter	Fluke	85 III	12 months	09-Oct-2025	True RMS Multimeter

3.2 Customer Support Equipment

No customer supplied test equipment was used during testing.



4 Measurement Uncertainty

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

Test Name	Measurement Uncertainty
AC Power Line Conducted Emissions	N/A
20 dB Bandwidth	1.04 dB
Field Strength of Fundamental	30 MHz to 1 GHz: 5.94 dB 1 GHz to 40 GHz: 4.71 dB
Field Strength of Emissions	30 MHz to 1 GHz: 5.94 dB 1 GHz to 40 GHz: 4.71 dB

Table 26

Measurement Uncertainty Decision Rule

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

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