FCC and ISED Test Report
Silicon Laboratories Finland Oy

Main Model: SiW917Y1GA
Series Model: SiW917Y1GN

In accordance with FCC 47 CFR Part 15C, ISED RSS-247 and ISED RSS-GEN (2.4 GHz WLAN)

TUV SUD Digitally signed by TUV SUD Date: 2024.09.04 12:42:00 +01'00'

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FCC ID: QOQ-917AC IC: 5123A-917AC

COMMERCIAL-IN-CONFIDENCE

Document 75960833-04 Issue 01

SIGNATURE			
NAME	**JOB TITLE**	**RESPONSIBLE FOR**	**ISSUE DATE**
Steve Marshall	Senior Engineer	Authorised Signatory	04 September 2024

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

ENGINEERING STATEMENT

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

RESPONSIBLE FOR	NAME	DATE	SIGNATURE
Testing	Thomas Biddlecombe	04 September 2024	
	Ahmad Javid	04 September 2024	
	George Williams	04 September 2024	

FCC Accreditation
492497/UK2010 Octagon House, Fareham Test Laboratory

ISED Accreditation
12669A Octagon House, Fareham Test Laboratory

EXECUTIVE SUMMARY

A sample of this product was tested and found to be compliant with FCC 47 CFR Part 15C: 2022, ISED RSS-247: Issue 3 (08-2023) and ISED RSS-GEN: Issue 5 (04-2018) + A2 (02-2021) for the tests detailed in section 1.3.

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Contents

1 Report Summary

1.1 Report Modification Record

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

Issue	Description of Change	Date of Issue
1	First Issue	04-September-2024

Table 1

1.2 Introduction

Applicant	Silicon Laboratories Finland Oy
Manufacturer	Silicon Laboratories Finland Oy
Model Number(s)	Main Model SiW917Y1GA Series Model: SiW917Y1GN
Serial Number(s)	WLAN MAC address: ec:f6:4c:a0:f:4 WLAN MAC address: ec:f6:4c:a0:ac:c
Hardware Version(s)	1.0
Software Version(s)	Stack's "Connectivity Firmware" version 2.10.1.2.0.4
Number of Samples Tested	2
Test Specification/Issue/Date	FCC 47 CFR Part 15C: 2022 ISED RSS-247: Issue 3 (08-2023) ISED RSS-GEN: Issue 5 (04-2018) + A2 (02-2021)
Order Number	PTP ~ 6000530772
Date	08-March-2024
Date of Receipt of EUT	21-February-2024 and 04-March-2024
Start of Test	03-April-2024
Finish of Test	10-July-2024
Name of Engineer(s)	Thomas Biddlecombe, Ahmad Javid and George Williams
Related Document(s)	ANSI C63.10 (2020) ANSI C63.10 (2013)

1.3 Brief Summary of Results

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

Section	Specification Clause			Test Description	Result	Comments/Base Standard
	Part 15C	RSS-247	RSS-GEN			
Configuration and Mode: 2.4 GHz WLAN Conducted Tests (SiW917Y1GN)						
2.1	15.247 (a)(2)	5.2	6.7	Emission Bandwidth	Pass	ANSI C63.10 (2020) ANSI C63.10 (2013)
2.2	15.247 (b)	5.4	6.12	Maximum Conducted Output Power	Pass	ANSI C63.10 (2020) ANSI C63.10 (2013)
2.3	15.247 (e)	5.2	6.12	Power Spectral Density	Pass	ANSI C63.10 (2020) ANSI C63.10 (2013)
Configuration and Mode: 2.4 GHz WLAN - PCB Trace Antenna (SiW917Y1GA)						
2.4	15.209 & 15.247 (d)	3.3 & 5.5	6.13 & 8.9	Spurious Radiated Emissions	Pass	ANSI C63.10 (2020) ANSI C63.10 (2013) ANSI C63.4 (2014)
2.5	15.205	3.3	8.10	Restricted Band Edges	Pass	ANSI C63.10 (2020) ANSI C63.10 (2013)
2.6	15.247 (d)	5.5	-	Authorised Band Edges	Pass	ANSI C63.10 (2020) ANSI C63.10 (2013)
-	15.203	-	-	Antenna Requirement	N/T	The device complies with the provisions of this section, as it uses permanently attached integral antennas.

Configuration and Mode: 2.4 GHz WLAN - ANT-2.4-CW-CT-SMA/RPS Antenna (SiW917Y1GN)						
2.4	15.209 & 15.247 (d)	3.3 & 5.5	6.13 & 8.9	Spurious Radiated Emissions	Pass	ANSI C63.10 (2020) KDB 996369 D04 Module Integration Guide v02 ANSI C63.10 (2013) ANSI C63.4 (2014)
2.5	15.205	3.3	8.10	Restricted Band Edges	Pass	ANSI C63.10 (2020) ANSI C63.10 (2013)
2.6	15.247 (d)	5.5	-	Authorised Band Edges	Pass	ANSI C63.10 (2020) ANSI C63.10 (2013)
-	15.203	-	-	Antenna Requirement	N/T	The device complies with the provisions of this section, as it uses a non-standard antenna jack.
Configuration and Mode: 2.4 GHz WLAN - Extreme Voltages (SiW917Y1GN)						
-	15.247 (b)	5.4	6.12	Maximum Conducted Output Power at Extreme Voltages	Pass	Refer to Annex A

Table 2

Note: For conducted testing, antenna gain was taken as 2.80 dBi as per the ANT-2.4-CW-CT-SMA/RPS Antenna as this is the highest gain antenna.

1.4 Application Form

Equipment Description

Technical Description: *(Please provide a brief description of the intended use of the equipment including the technologies the product supports)*	Bluetooth Low Energy (LE), and Wi-Fi 802.11b/g/n/ax wireless radio module		
Legal Manufacturer (Technology Owner):	Silicon Laboratories Finland Oy		
Model name(s):	Main Model: SiW917Y1GA (with integral antenna) Series Model: SiW917Y1GN (with no integral antenna but RF pin)		
Brand Name:	SILICON LABS		
Hardware Version:	1.0		
Software Version:	Connectivity Firmware (runs the wireless stacks): 2.10.1.2.0.4		
FCC ID of the product under test – see guidance here	QOQ-917AC		
IC ID of the product under test – see guidance here	5123A-917AC		
Device Category	Mobile ☒	Portable ☒	Fixed ☐
Equipment is fitted with an Audio Low Pass Filter		Yes ☐	No ☒

Table 3

Intentional Radiators

Technology	Bluetooth Low Energy	Wi-Fi 802.11b	Wi-Fi 802.11g	Wi-Fi 802.11n	Wi-Fi 802.11ax
Frequency Range (MHz to MHz)	2402-2480 MHz	2412-2462 MHz			
Conducted Declared Output Power (dBm)	Max: 9	Max: 20			Max: 18
Antenna Gain (dBi)	Integral Antenna: 2.26 External Reference Dipole Antenna (1/2 Wave Whip 2.4GHz RPS): 2.80				
Supported Bandwidth(s) (MHz) (e.g. 1 MHz, 20 MHz, 40 MHz)	1MBaud PHYs: 1 2MBaud PHY: 2	20			
Modulation Scheme(s) (e.g. GFSK, QPSK etc)	GFSK	DSSS / CCK	OFDM (Orthogonal Frequency Division Multiplexing) / Subcarriers: BPSK, QPSK, 16- QAM or 64-QAM / Up to MCS7		OFDMA (Orthogonal frequency-division multiple access) / Subcarriers: BPSK, QPSK, 16-QAM or 64-QAM / Up to MCS7
ITU Emission Designator (see guidance here) (not mandatory for Part 15 devices)					
Bottom Frequency (MHz)	Adv mode: 2402 Data mode: 2404	2412			
Middle Frequency (MHz)	Data mode: 2444	2437			
Top Frequency (MHz)	Adv mode: 2480 Data mode: 2478	2462			

Table 4

Un-intentional Radiators

Highest frequency generated or used in the device or on which the device operates or tunes	180 MHz (embedded MCU clock, for ARM® Cortex® M4 core) 40 MHz (module's on-board crystal, for radio portion)
Lowest frequency generated or used in the device or on which the device operates or tunes	
Class A Digital Device (Use in commercial, industrial or business environment) ☒ Class B Digital Device (Use in residential environment only) ☒	

Table 5

AC Power Source

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

Table 6

DC Power Source

Nominal voltage:	3.3	V
Extreme upper voltage:	3.63	V
Extreme lower voltage:	3.0	V
Max current:	400	mA

Table 7

Battery Power Source

Voltage:		V
End-point voltage:		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:	-40	°C
Maximum temperature:	+85	°C

Table 10

Cable Loss

Adapter Cable Loss (Conducted sample)	0.5 (u.FL and SMA connectors, plus coax cable, for external reference dipole antenna)	dB

Table 11

Antenna Characteristics

Antenna connector ☐			State impedance		Ohm
Temporary antenna connector ☐			State impedance		Ohm
Integral antenna ☒	Type:	PCB Trace	Gain	2.26	dBi
External antenna ☒	Type:	Dipole, 1/2 Wave Whip, 2.4GHz, RPS (reference only, not sold with module)	Gain	2.80	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 / RF Pin ☒ 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)

Legal Manufacturer (Technology Owner):	Silicon Laboratories Finland Oy	Brand Name:	SILICON LABS
Model(s):	Main Model: SiW917Y1GA (with integral antenna) Series Model: SiW917Y1GN (with no integral antenna but RF pin)	Country of Origin:	China

Table 13

Data in the tables above is provided by the Manufacturer.

1.5 Product Information

1.5.1 Technical Description

Bluetooth Low Energy (LE), and Wi-Fi 802.11b/g/n/ax wireless radio module.

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
Model: SiW917Y1GN, Serial Number: WLAN MAC address: ec:f6:4c:a0:f:4			
0	As supplied by the customer	Not Applicable	Not Applicable
Model: SiW917Y1GA, Serial Number: WLAN MAC address: ec:f6:4c:a0:ac:c			
0	As supplied by the customer	Not Applicable	Not Applicable

Table 14

Note: The serial numbers used throughout this report are the MAC address of the equipment under test.

1.8 Test Location

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

Test Name	Name of Engineer(s)	Accreditation
Configuration and Mode: 2.4 GHz WLAN Conducted Tests		
Emission Bandwidth	Thomas Biddlecombe	UKAS
Maximum Conducted Output Power	Thomas Biddlecombe	UKAS
Power Spectral Density	Thomas Biddlecombe	UKAS
Configuration and Mode: 2.4 GHz WLAN - PCB Trace Antenna		
Spurious Radiated Emissions	Ahmad Javid	UKAS
Restricted Band Edges	Ahmad Javid	UKAS
Authorised Band Edges	Ahmad Javid	UKAS
Configuration and Mode: 2.4 GHz WLAN - ANT-2.4-CW-CT-SMA/RPS Antenna		
Spurious Radiated Emissions	Ahmad Javid	UKAS
Restricted Band Edges	Ahmad Javid	UKAS
Authorised Band Edges	Ahmad Javid	UKAS
Configuration and Mode: 2.4 GHz WLAN - Extreme Voltages		
Maximum Conducted Output Power at Extreme Voltages	George Williams	UKAS

Table 15

Office Address:

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

2 Test Details

2.1 Emission Bandwidth

2.1.1 Specification Reference

FCC 47 CFR Part 15C, Clause 15.247 (a)(2),
ISED RSS-247, Clause 5.2
ISED RSS-GEN, Clause 6.7

2.1.2 Equipment Under Test and Modification State

SiW917Y1GN, S/N: WLAN MAC address: ec:f6:4c:a0:f:4 - Modification State 0

2.1.3 Date of Test

11-April-2024

2.1.4 Test Method

This test was performed in accordance with ANSI C63.10, clause 11.8.1 for 6 dB BW and 6.9.3 for 99% occupied bandwidth measurements.

The EUT was supplied with 3.3 VDC directly with a DC PSU.

2.1.5 Environmental Conditions

Ambient Temperature	21.3 °C
Relative Humidity	56.5 %

2.1.6 Test Results

2.4 GHz WLAN Conducted Tests

Test Configuration			
Frequency Range:	2400-2483.5 MHz	Band:	2.4 GHz
Limit Clause(s):	15.247 (a)(2) RSS-247 5.2 a)	Test Method(s):	C63.10 6.9.3 C63.10 11.8.1
Additional Reference(s):	-		

DUT Configuration			
Mode:	802.11b	Duty Cycle (%):	-
Data Rate:	1 Mbps	DCCF (dB):	-
Antenna Configuration:	SISO	Peak Antenna Gain (dBi):	-
Supply Voltage:	3.30 V	TX Mode:	Continuous Modulated Stream

Test Frequency (MHz)	Power Index	6 dB Bandwidth (MHz)				Limit (kHz)
		A	B	C	D	
2412	15.00	8.640	-	-	-	≥500.0
2437	20.00	9.120	-	-	-	≥500.0
2462	15.00	9.120	-	-	-	≥500.0

Table 16 - 6 dB Bandwidth Results

Test Frequency (MHz)	Power Index	99% Bandwidth (MHz)				Limit (kHz)
		A	B	C	D	
2412	15.00	13.740	-	-	-	-
2437	20.00	14.400	-	-	-	-
2462	15.00	13.500	-	-	-	-

Table 17 - 99% Bandwidth Results

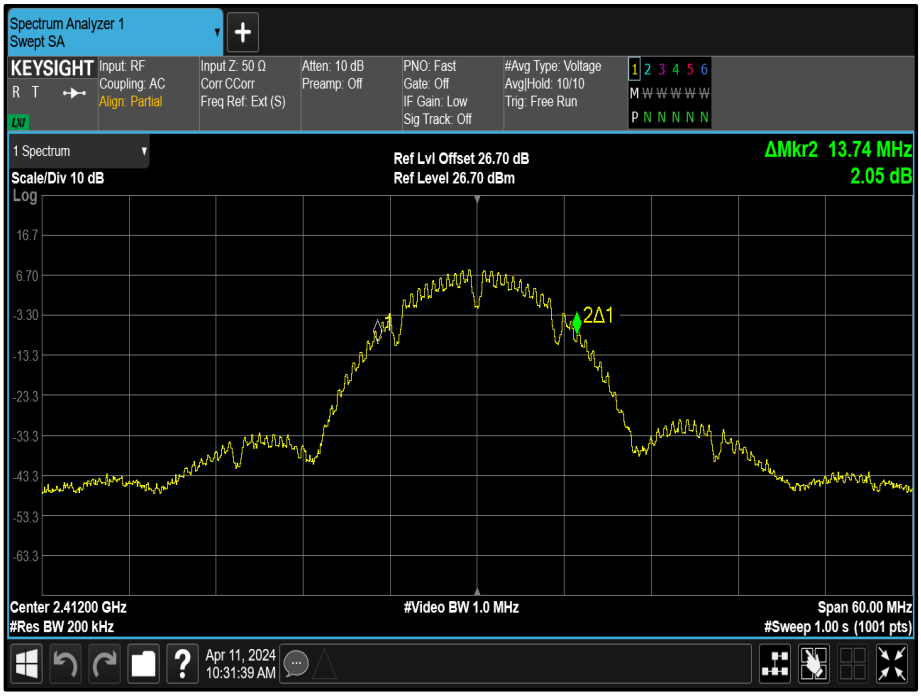

Figure 1 - 2412 MHz (CH1) 99% Bandwidth

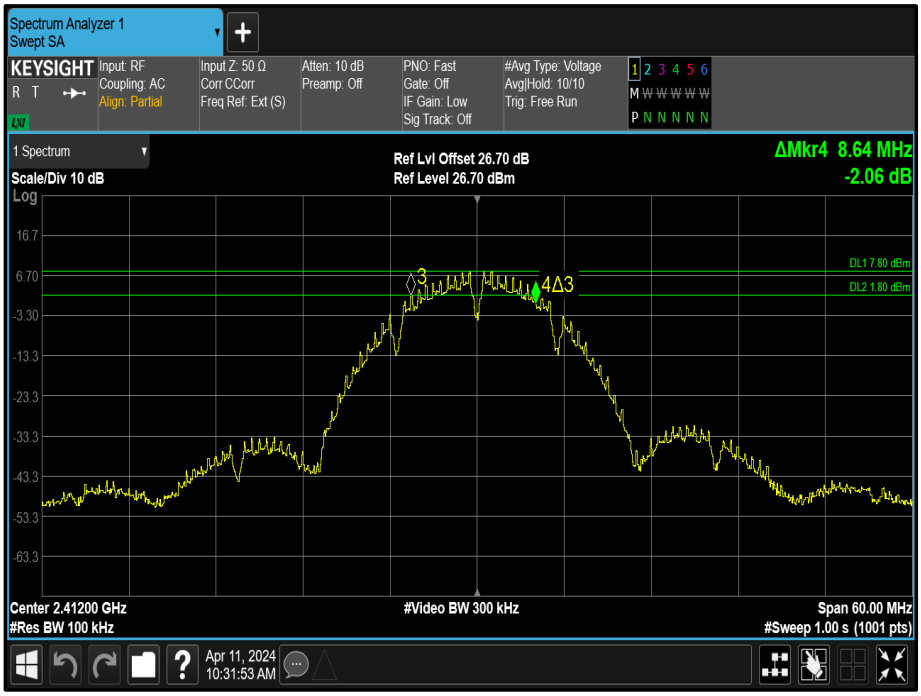

Figure 2 - 2412 MHz (CH1) 6 dB Bandwidth

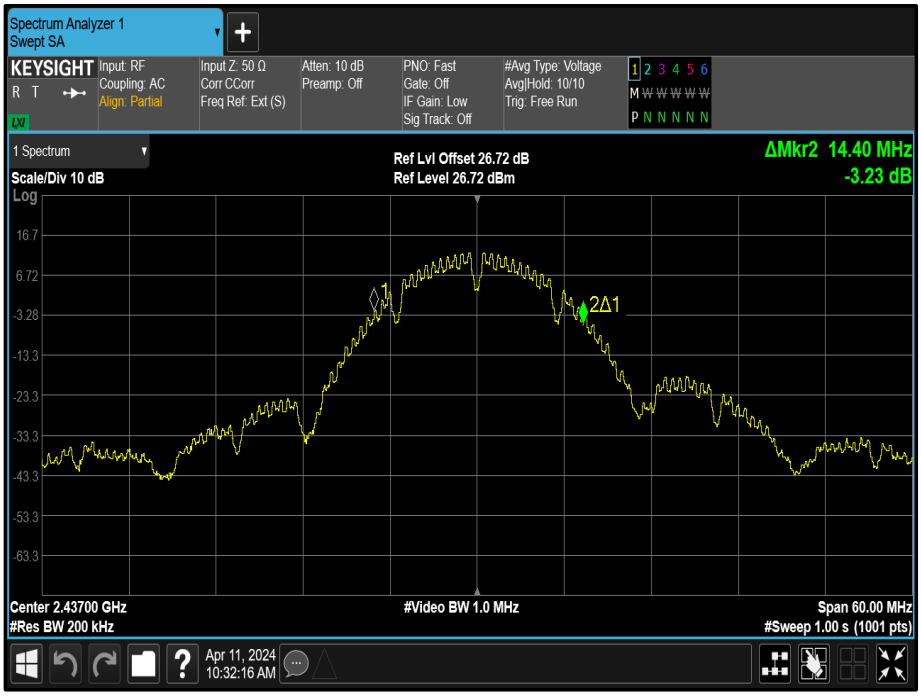

Figure 3 - 2437 MHz (CH6) 99% Bandwidth

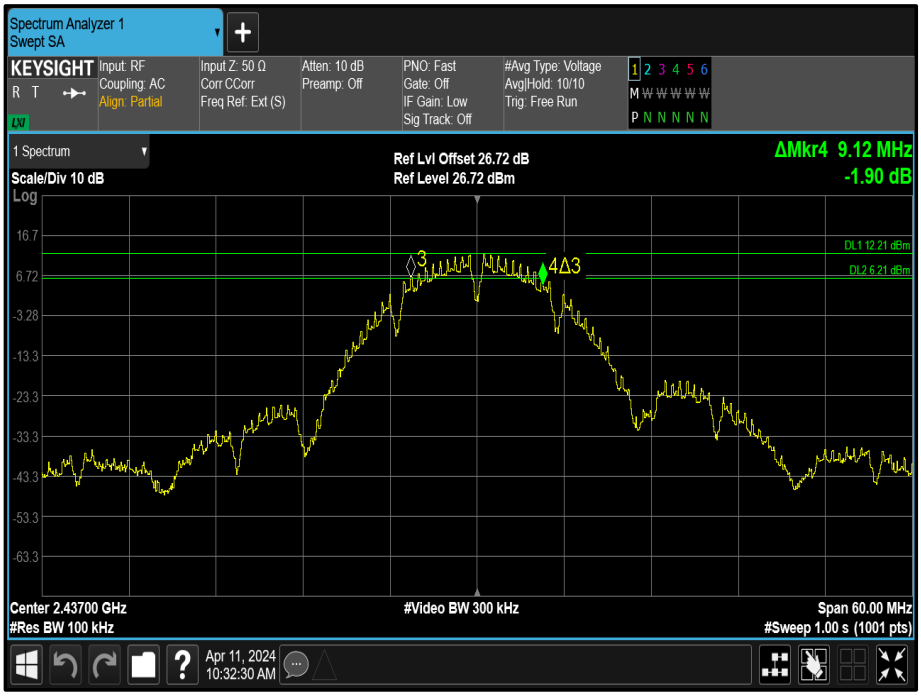

Figure 4 - 2437 MHz (CH6) 6 dB Bandwidth

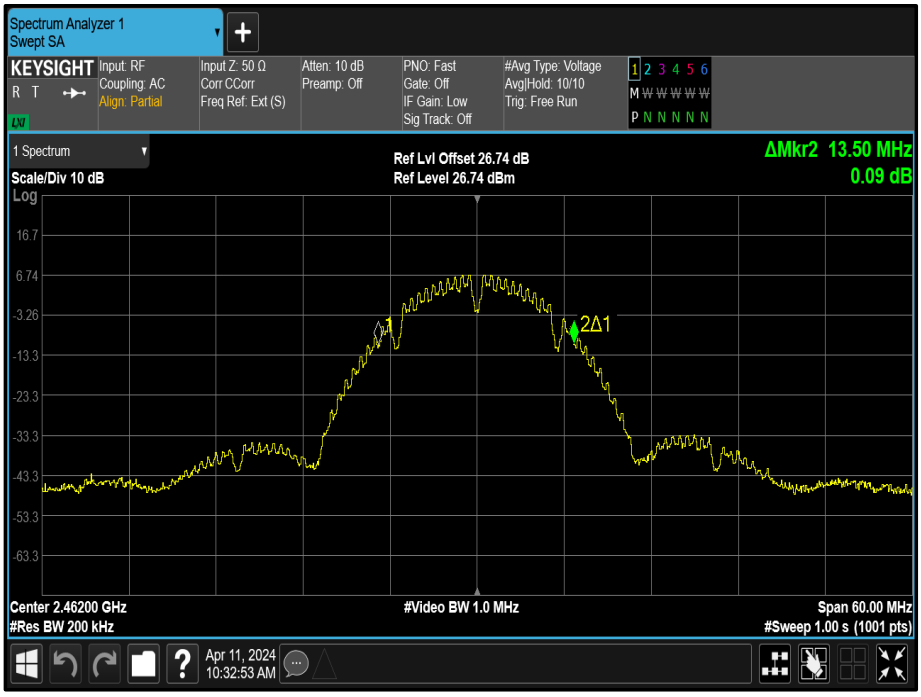

Figure 5 - 2462 MHz (CH11) 99% Bandwidth

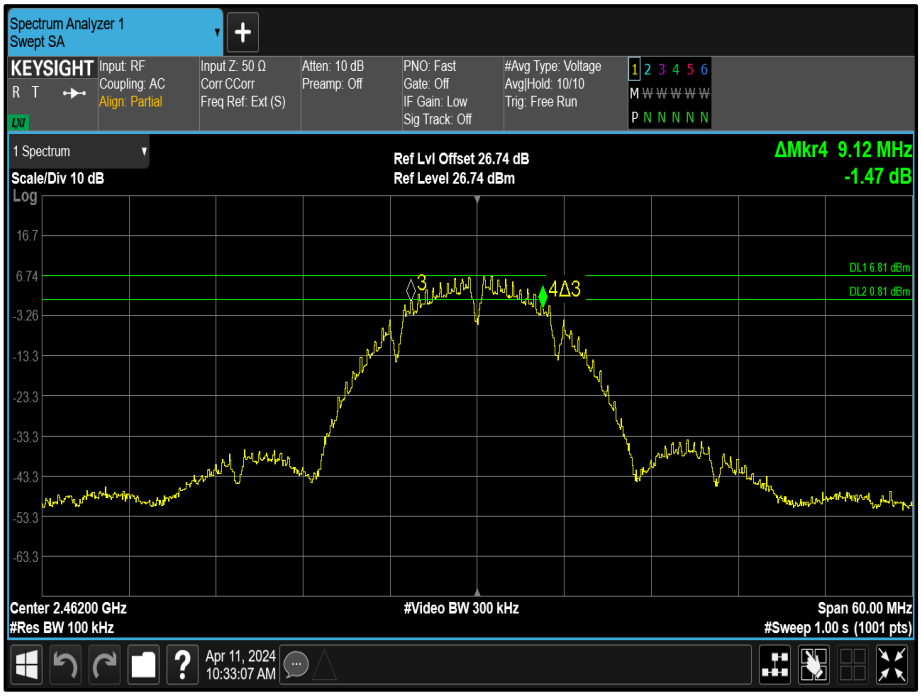

Figure 6 - 2462 MHz (CH11) 6 dB Bandwidth

Test Configuration			
Frequency Range:	2400-2483.5 MHz	Band:	2.4 GHz
Limit Clause(s):	15.247 (a)(2) RSS-247 5.2 a)	Test Method(s):	C63.10 6.9.3 C63.10 11.8.1
Additional Reference(s):	-		

DUT Configuration			
Mode:	802.11g	Duty Cycle (%):	-
Data Rate:	6 Mbps	DCCF (dB):	-
Antenna Configuration:	SISO	Peak Antenna Gain (dBi):	-
Supply Voltage:	3.30 V	TX Mode:	Continuous Modulated Stream

Test Frequency (MHz)	Power Index	6 dB Bandwidth (MHz)				Limit (kHz)
		A	B	C	D	
2412	11.00	16.680	-	-	-	≥500.0
2437	20.00	16.600	-	-	-	≥500.0
2462	10.00	16.620	-	-	-	≥500.0

Table 18 - 6 dB Bandwidth Results

Test Frequency (MHz)	Power Index	99% Bandwidth (MHz)				Limit (kHz)
		A	B	C	D	
2412	11.00	16.740	-	-	-	-
2437	20.00	26.500	-	-	-	-
2462	10.00	16.680	-	-	-	-

Table 19 - 99% Bandwidth Results

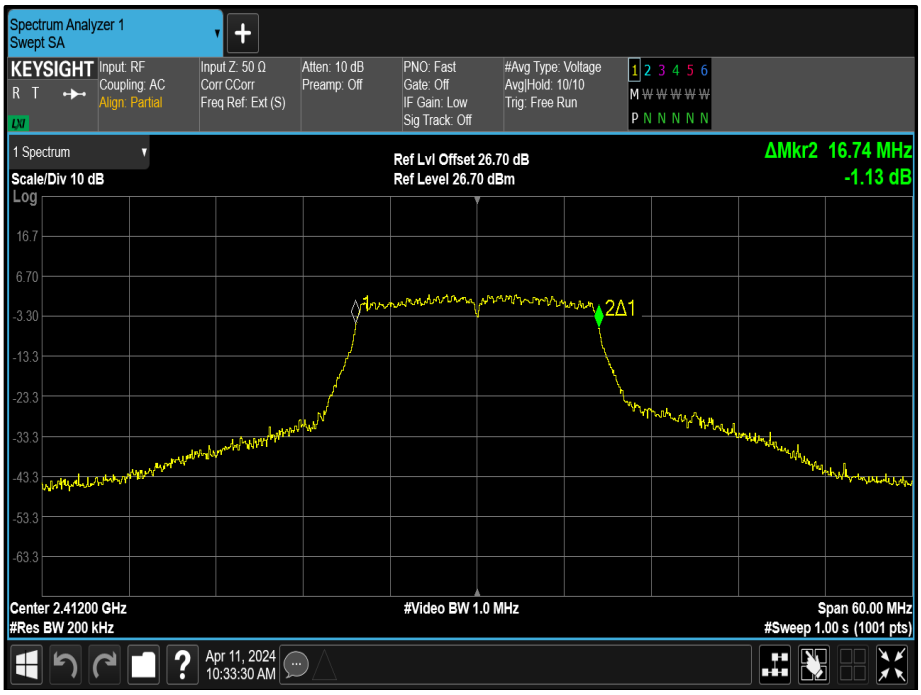

Figure 7 - 2412 MHz (CH1) 99% Bandwidth

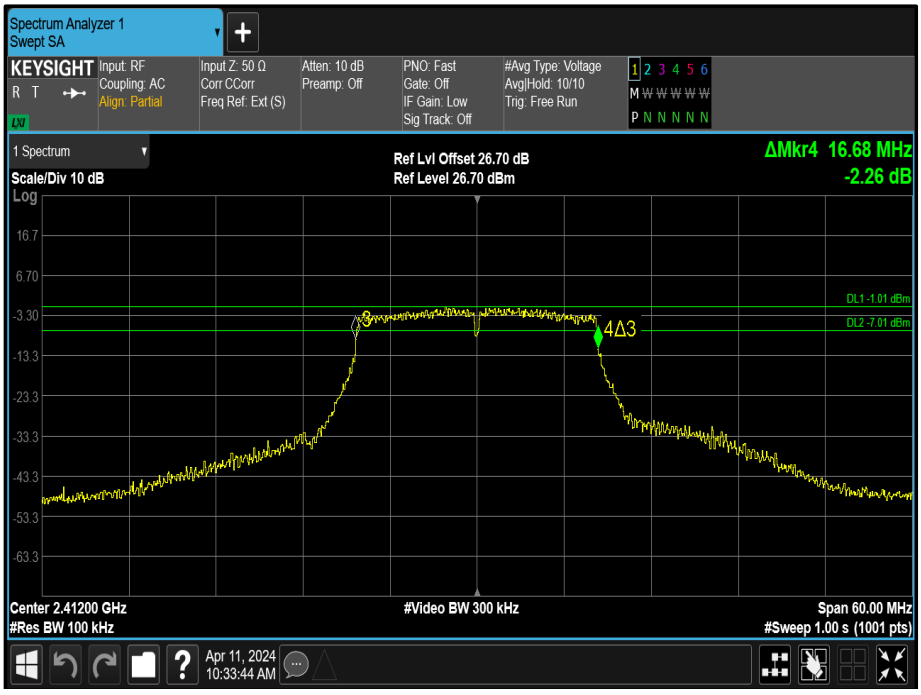

Figure 8 - 2412 MHz (CH1) 6 dB Bandwidth

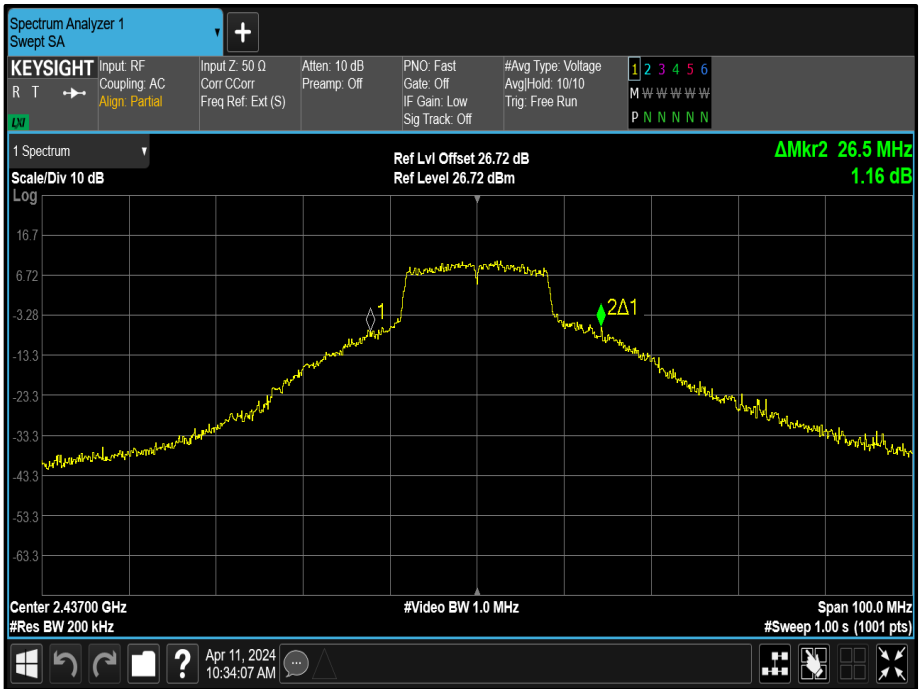

Figure 9 - 2437 MHz (CH6) 99% Bandwidth

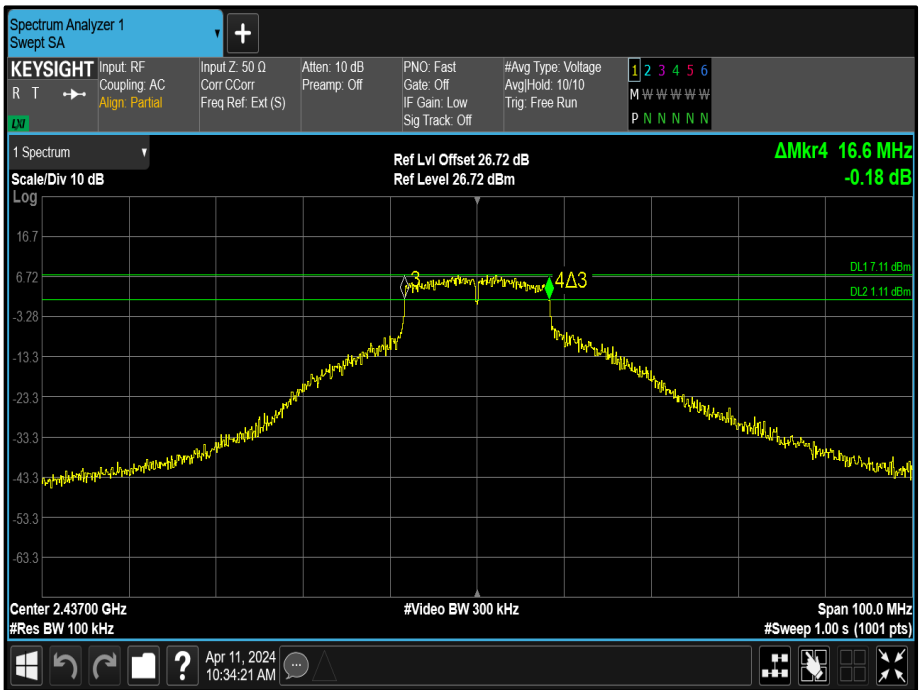

Figure 10 - 2437 MHz (CH6) 6 dB Bandwidth

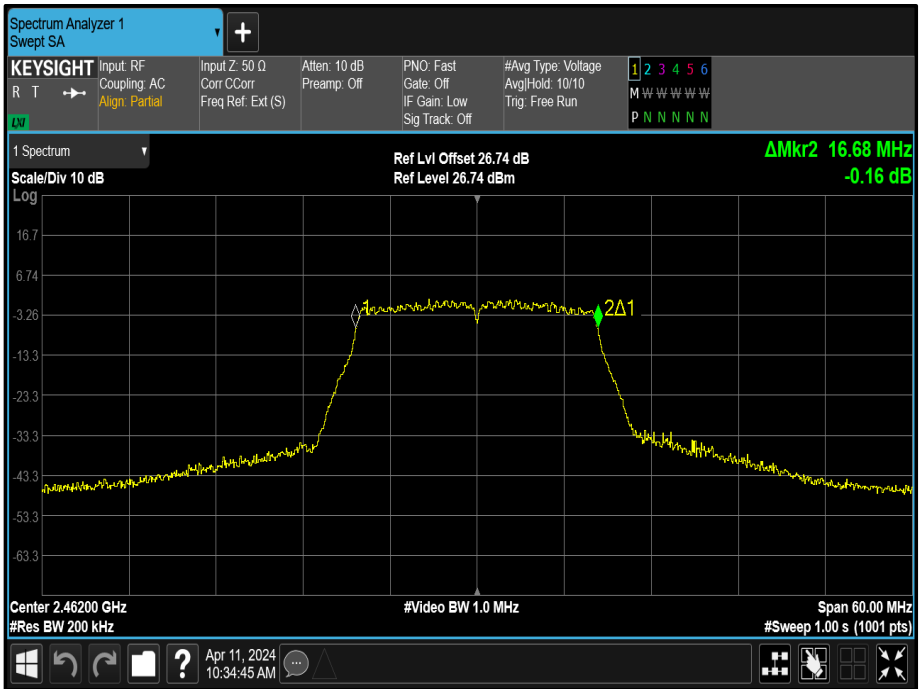

Figure 11 - 2462 MHz (CH11) 99% Bandwidth

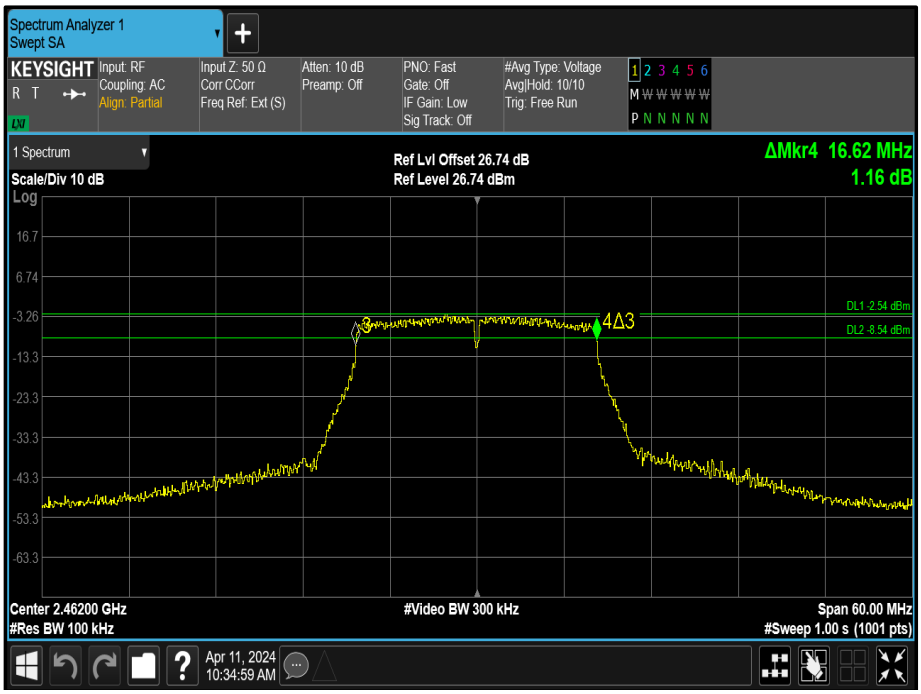

Figure 12 - 2462 MHz (CH11) 6 dB Bandwidth

Test Configuration			
Frequency Range:	2400-2483.5 MHz	Band:	2.4 GHz
Limit Clause(s):	15.247 (a)(2) RSS-247 5.2 a)	Test Method(s):	C63.10 6.9.3 C63.10 11.8.1
Additional Reference(s):	-		

DUT Configuration			
Mode:	802.11n HT20	Duty Cycle (%):	-
Modulation Coding Scheme:	MCS0	DCCF (dB):	-
Antenna Configuration:	SISO	Peak Antenna Gain (dBi):	-
Supply Voltage:	3.30 V	TX Mode:	Continuous Modulated Stream

Test Frequency (MHz)	Power Index	6 dB Bandwidth (MHz)				Limit (kHz)
		A	B	C	D	
2412	10.00	17.880	-	-	-	≥500.0
2437	20.00	17.900	-	-	-	≥500.0
2462	10.00	17.880	-	-	-	≥500.0

Table 20 - 6 dB Bandwidth Results

Test Frequency (MHz)	Power Index	99% Bandwidth (MHz)				Limit (kHz)
		A	B	C	D	
2412	10.00	17.880	-	-	-	-
2437	20.00	22.400	-	-	-	-
2462	10.00	17.940	-	-	-	-

Table 21 - 99% Bandwidth Results

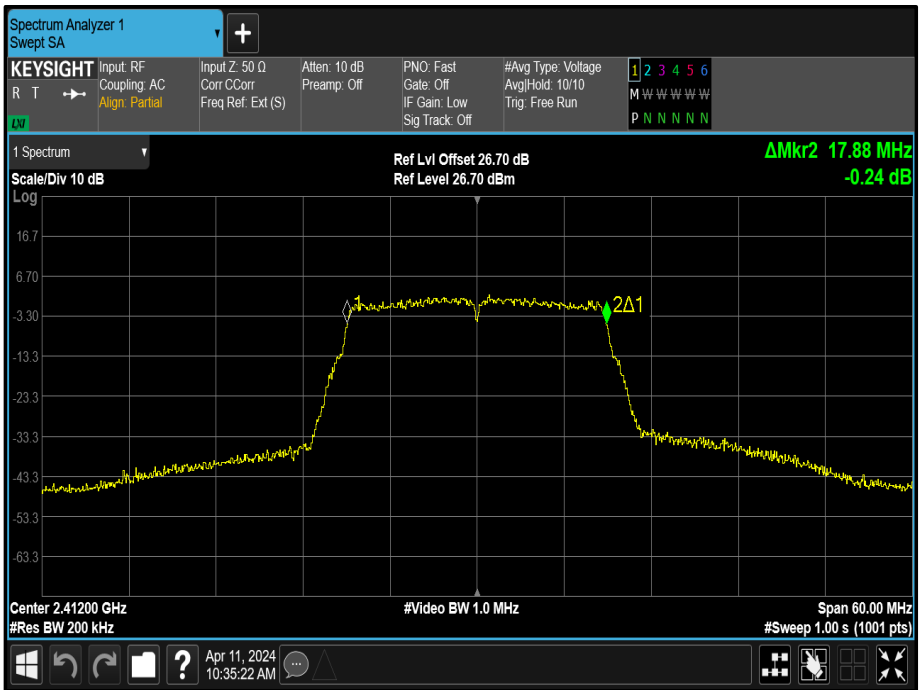

Figure 13 - 2412 MHz (CH1) 99% Bandwidth

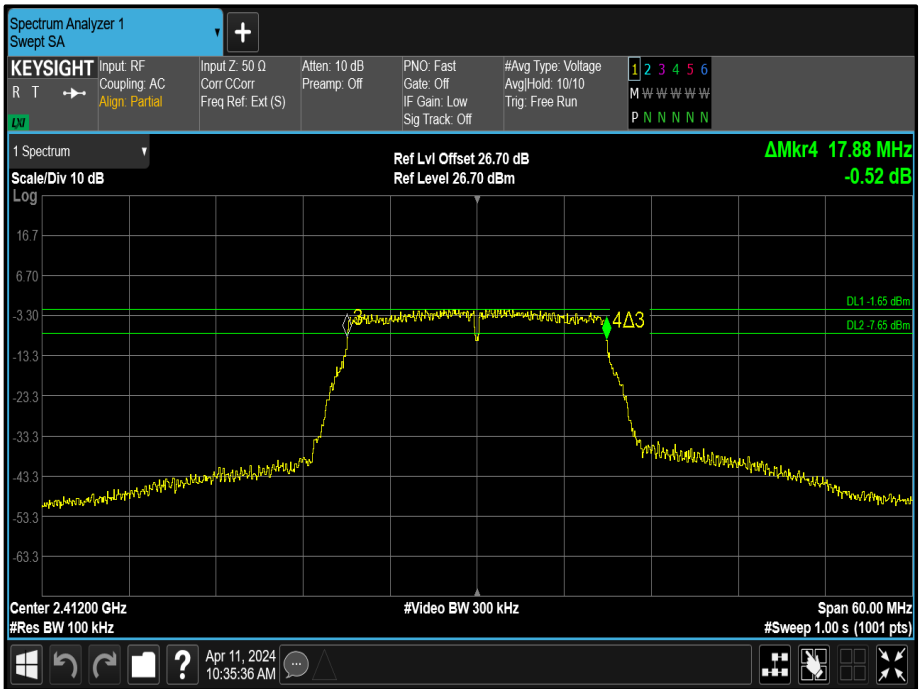

Figure 14 - 2412 MHz (CH1) 6 dB Bandwidth

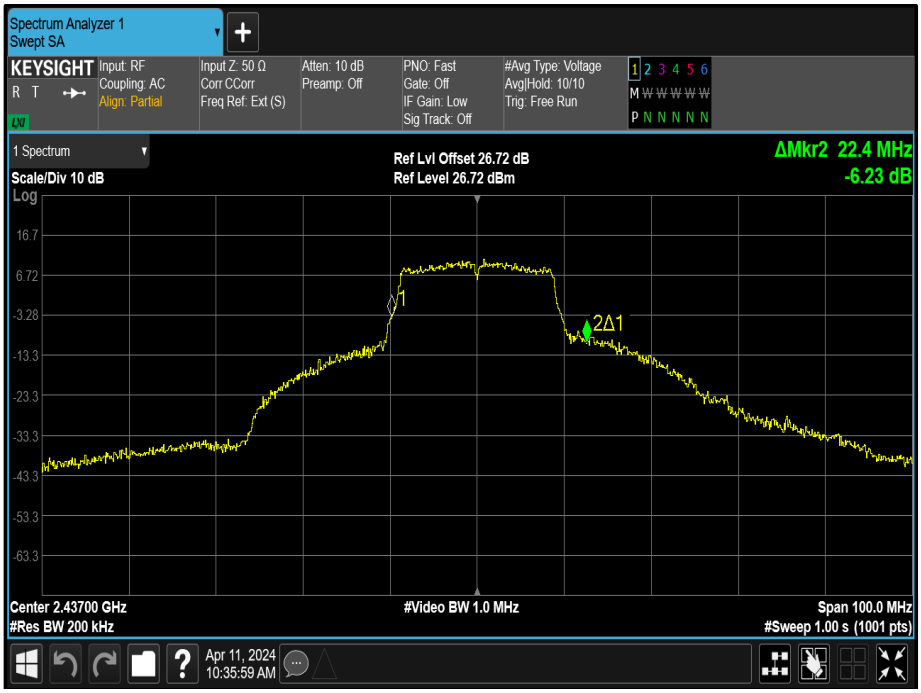

Figure 15 - 2437 MHz (CH6) 99% Bandwidth

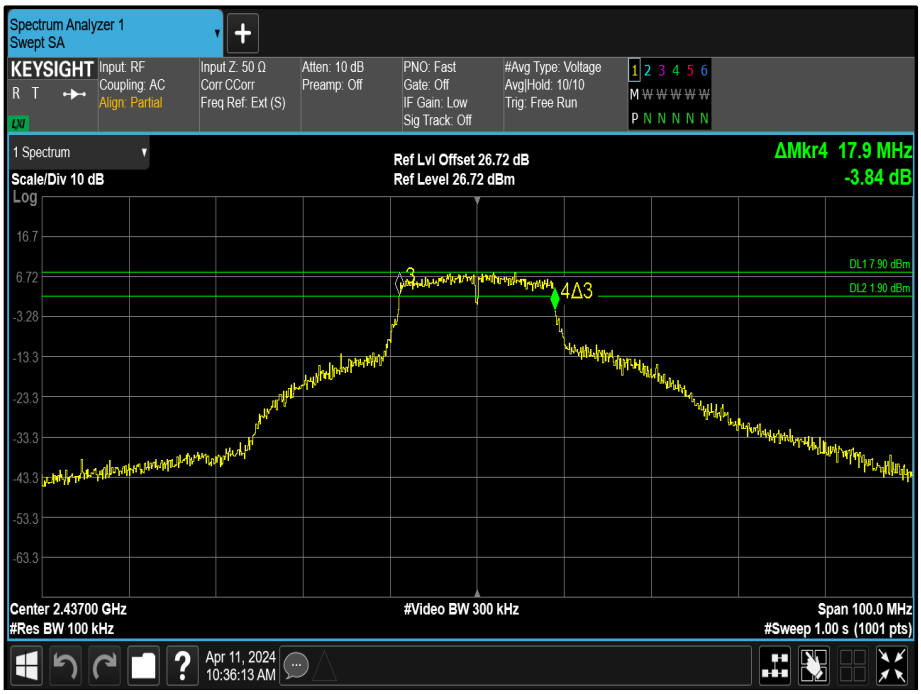

Figure 16 - 2437 MHz (CH6) 6 dB Bandwidth

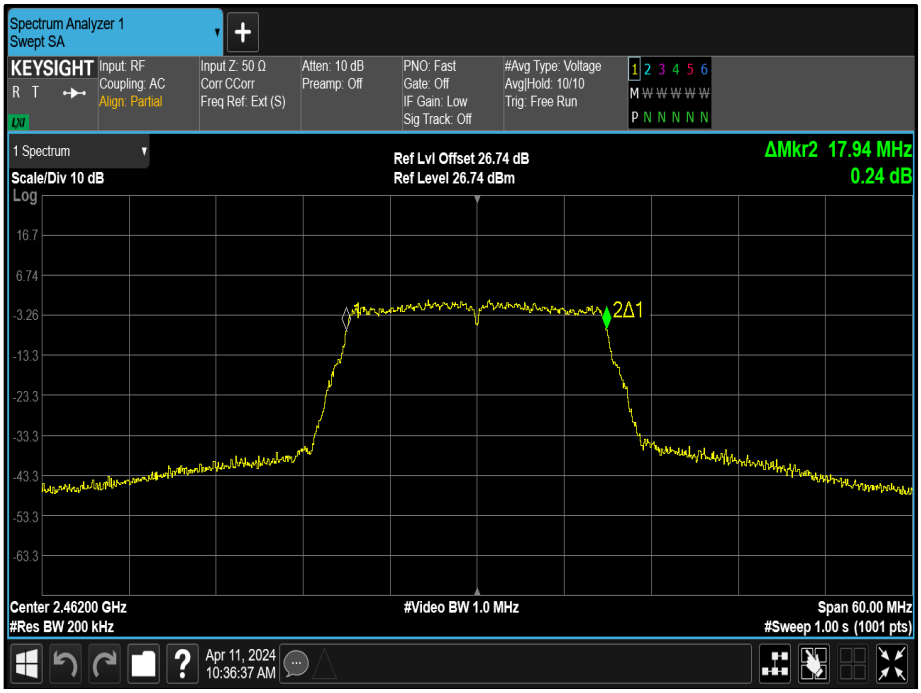

Figure 17 - 2462 MHz (CH11) 99% Bandwidth

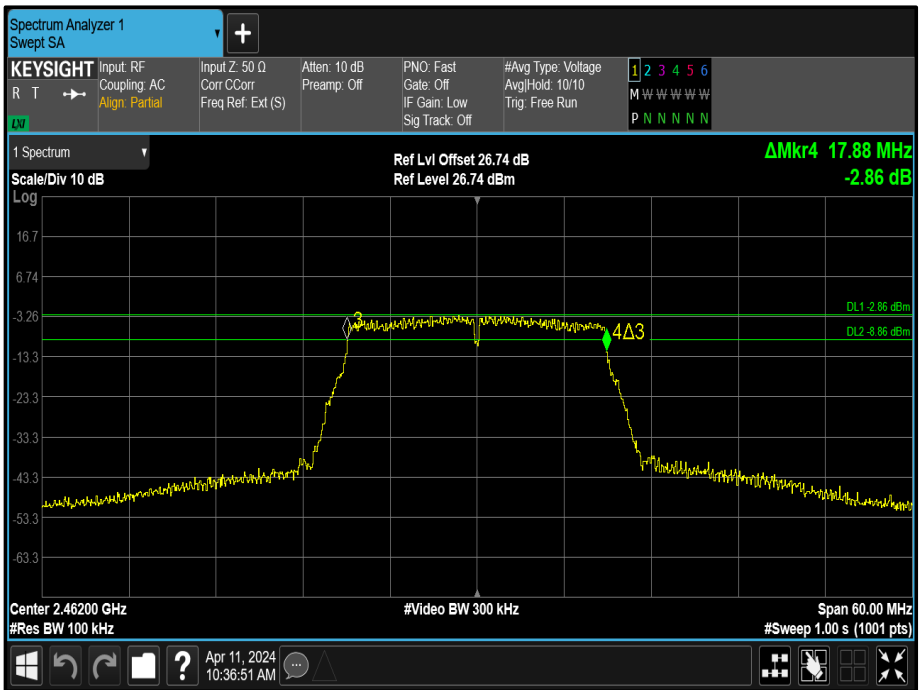

Figure 18 - 2462 MHz (CH11) 6 dB Bandwidth

Test Configuration			
Frequency Range:	2400-2483.5 MHz	Band:	2.4 GHz
Limit Clause(s):	15.247 (a)(2) RSS-247 5.2 a)	Test Method(s):	C63.10 6.9.3 C63.10 11.8.1
Additional Reference(s):	-		

DUT Configuration			
Mode:	802.11ax HE20 SU	Duty Cycle (%):	-
Modulation Coding Scheme:	MCS0x1	DCCF (dB):	-
Antenna Configuration:	SISO	Peak Antenna Gain (dBi):	-
Supply Voltage:	3.30 V	TX Mode:	Continuous Modulated Stream

Test Frequency (MHz)	Power Index	6 dB Bandwidth (MHz)				Limit (kHz)
		A	B	C	D	
2412	10.00	19.080	-	-	-	≥500.0
2437	18.00	19.200	-	-	-	≥500.0
2462	10.00	19.080	-	-	-	≥500.0

Table 22 - 6 dB Bandwidth Results

Test Frequency (MHz)	Power Index	99% Bandwidth (MHz)				Limit (kHz)
		A	B	C	D	
2412	10.00	18.840	-	-	-	-
2437	18.00	20.500	-	-	-	-
2462	10.00	18.900	-	-	-	-

Table 23 - 99% Bandwidth Results

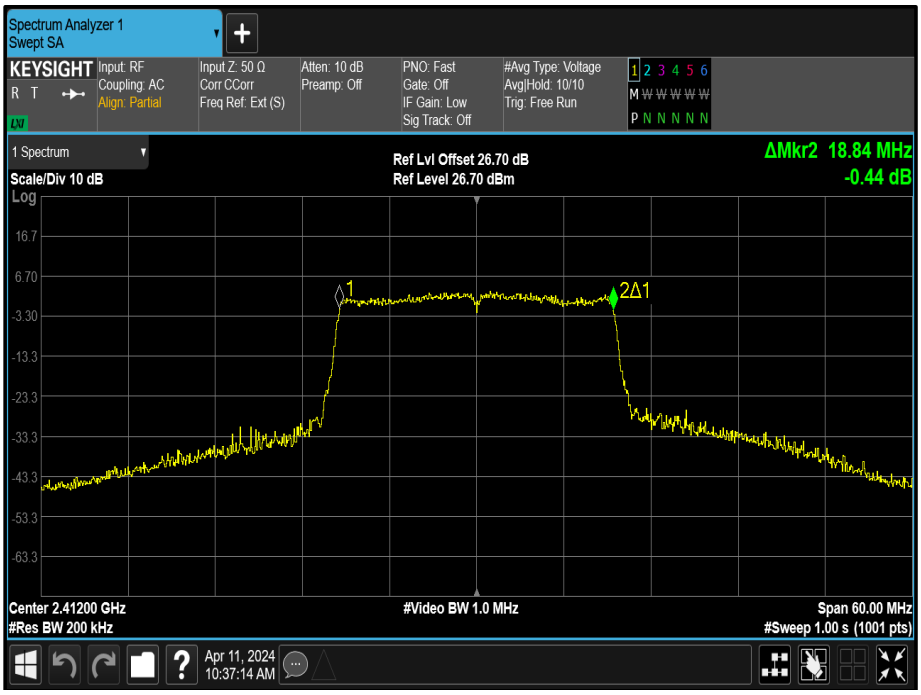

Figure 19 - 2412 MHz (CH1) 99% Bandwidth

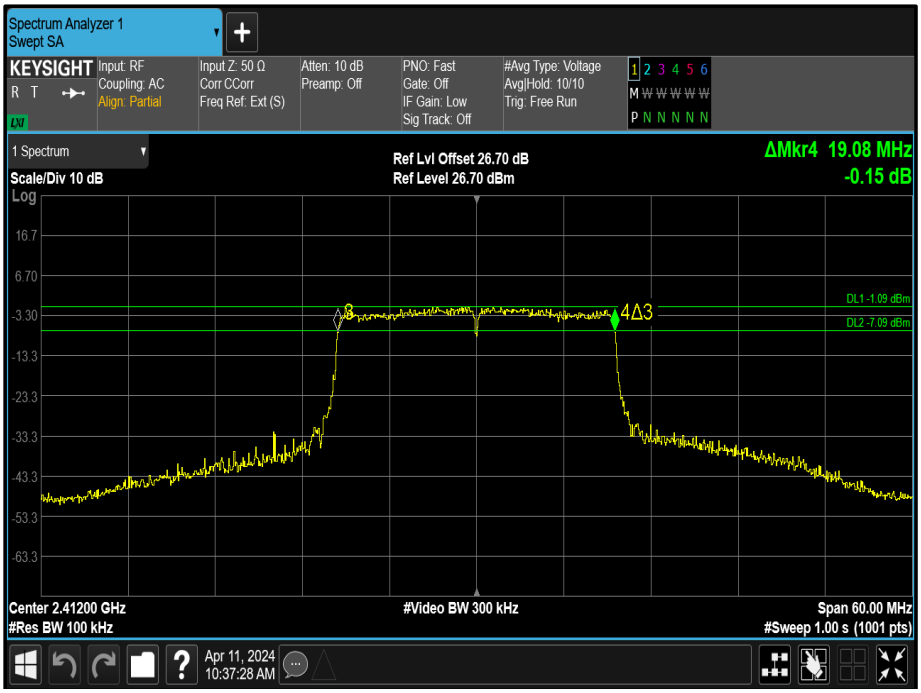

Figure 20 - 2412 MHz (CH1) 6 dB Bandwidth

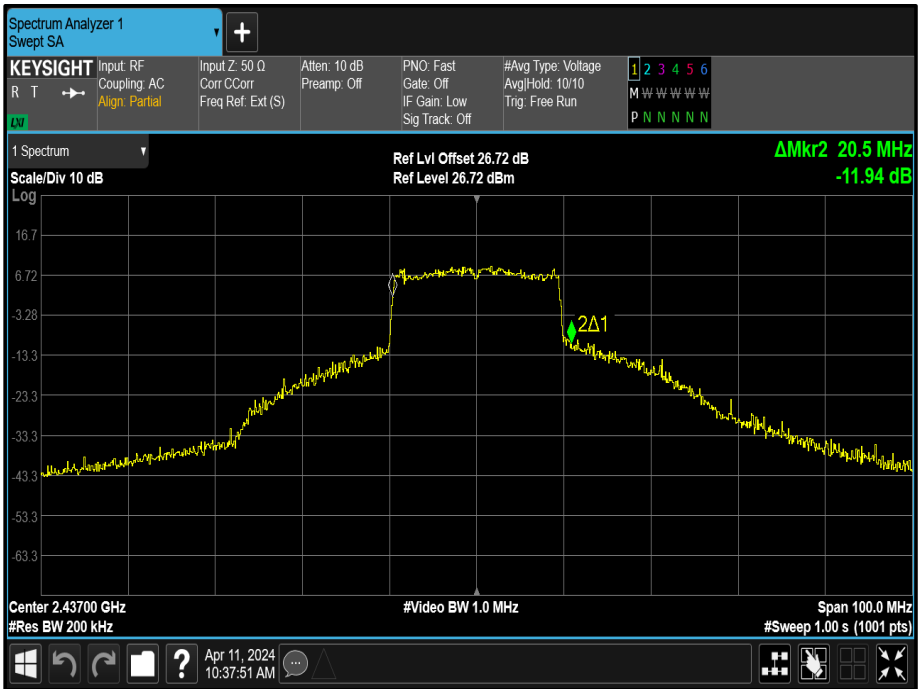

Figure 21 - 2437 MHz (CH6) 99% Bandwidth

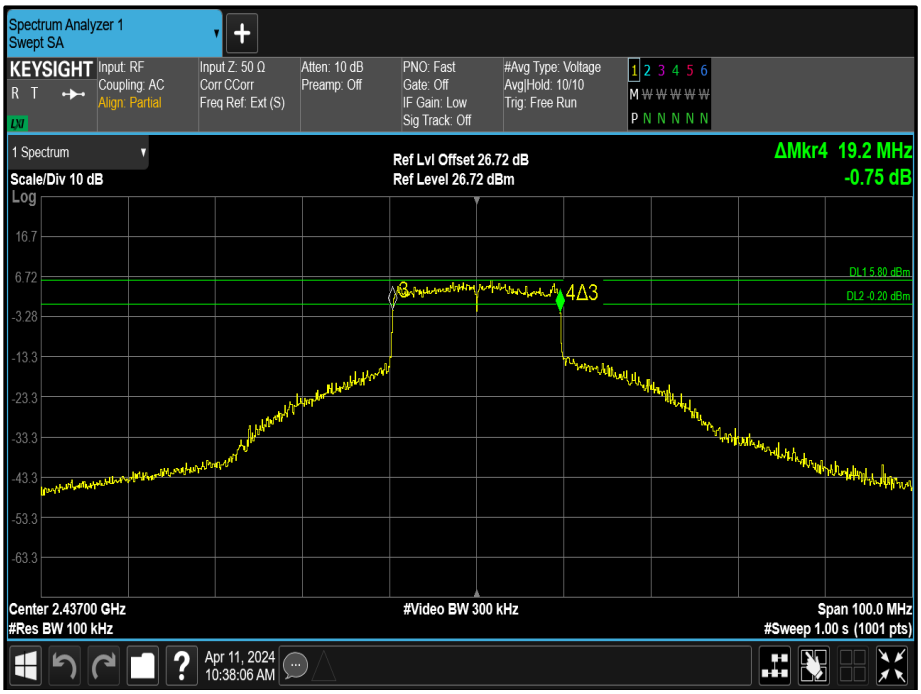

Figure 22 - 2437 MHz (CH6) 6 dB Bandwidth

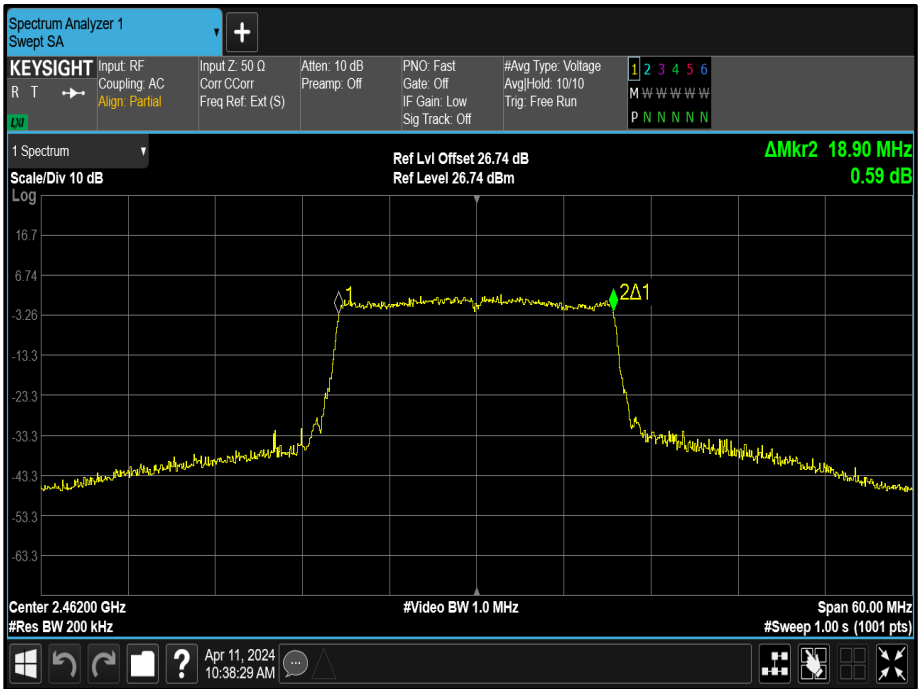

Figure 23 - 2462 MHz (CH11) 99% Bandwidth

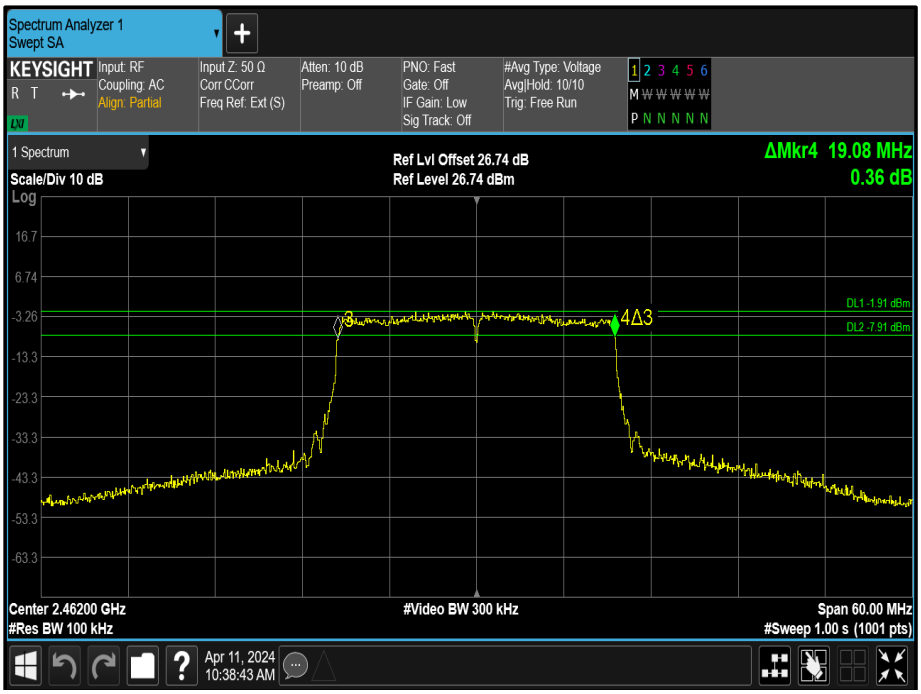

Figure 24 - 2462 MHz (CH11) 6 dB Bandwidth

FCC 47 CFR Part 15, Limit Clause 15.247(a)(2) and ISED RSS-247, Clause 5.2(a)

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

2.1.7 Test Location and Test Equipment Used

This test was carried out in RF Laboratory 1.

Instrument	Manufacturer	Type No	TE No	Calibration Period (months)	Calibration Expires
Multimeter	Fluke	79 Series III	411	12	12-Jan-2025
Hygrometer	Rotronic	I-1000	3220	12	28-Nov-2024
MXA Signal Analyser	Keysight Technologies	N9020B	5528	24	18-Sep-2025
Modular Power System Mainframe	Keysight Technologies	N6701C	5835	-	TU
DC Power Module	Keysight Technologies	N6754A	5836	-	O/P Mon
GPSDR Frequency standard	Orolia	SecureSync 2402-053	6339	6	14-Sep-2024
Signal Conditioning Unit	TUV SUD	SPECTRUM_SCU001	6350	-	26-Jul-2024
SCU Cable Assembly SCU	TUV SUD	SPECTRUM_SCU_CA	6638	12	26-Jul-2024

Table 24

TU – Traceability Unscheduled
O/P Mon – Output Monitored

2.2 Maximum Conducted Output Power

2.2.1 Specification Reference

FCC 47 CFR Part 15C, Clause 15.247 (b),
ISED RSS-247, Clause 5.4
ISED RSS-GEN, Clause 6.12

2.2.2 Equipment Under Test and Modification State

SiW917Y1GN, S/N: WLAN MAC address: ec:f6:4c:a0:f:4 - Modification State 0

2.2.3 Date of Test

11-April-2024

2.2.4 Test Method

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

The EUT was supplied with 3.3 VDC directly with a DC PSU.

2.2.5 Environmental Conditions

Ambient Temperature	21.3 °C
Relative Humidity	56.5 %

2.2.6 Test Results

2.4 GHz WLAN Conducted Tests

Test Configuration			
Frequency Range:	2400-2483.5 MHz	Band:	2.4 GHz
Limit Clause(s):	15.247 (b)(3) RSS-247 5.4 d)	Test Method(s):	C63.10 11.9.2.3.2
Additional Reference(s):	-		

DUT Configuration			
Mode:	802.11b	Duty Cycle (%):	100.0
Data Rate:	1 Mbps	DCCF (dB):	-
Antenna Configuration:	SISO	Peak Antenna Gain (dBi):	2.80
Supply Voltage:	3.30 V	TX Mode:	Continuous Modulated Stream

Test Frequency (MHz)	Power Index	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
		A	B	C	D	∑		
2412 (CH1)	15.00	15.83	-	-	-	-	30.00	-14.17
2437 (CH6)	20.00	20.69	-	-	-	-	30.00	-9.31
2462 (CH11)	15.00	14.98	-	-	-	-	30.00	-15.02

Table 25 - FCC Maximum Conducted (average) Output Power Results

Test Frequency (MHz)	Power Index	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)	EIRP (dBm)	EIRP Limit (dBm)	EIRP Margin (dB)
		A	B	C	D	∑					
2412 (CH1)	15.00	15.83	-	-	-	-	30.00	-14.17	18.63	36.00	-17.37
2437 (CH6)	20.00	20.69	-	-	-	-	30.00	-9.31	23.49	36.00	-12.51
2462 (CH11)	15.00	14.98	-	-	-	-	30.00	-15.02	17.78	36.00	-18.22

Table 26 - ISED Maximum Conducted (average) Output Power Results

Test Configuration			
Frequency Range:	2400-2483.5 MHz	Band:	2.4 GHz
Limit Clause(s):	15.247 (b)(3) RSS-247 5.4 d)	Test Method(s):	C63.10 11.9.2.3.2
Additional Reference(s):	-		

DUT Configuration			
Mode:	802.11g	Duty Cycle (%):	100.0
Data Rate:	6 Mbps	DCCF (dB):	-
Antenna Configuration:	SISO	Peak Antenna Gain (dBi):	2.80
Supply Voltage:	3.30 V	TX Mode:	Continuous Modulated Stream

Test Frequency (MHz)	Power Index	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
		A	B	C	D	∑		
2412 (CH1)	11.00	12.63	-	-	-	-	30.00	-17.37
2437 (CH6)	20.00	20.16	-	-	-	-	30.00	-9.84
2462 (CH11)	10.00	10.90	-	-	-	-	30.00	-19.10

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

Test Frequency (MHz)	Power Index	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)	EIRP (dBm)	EIRP Limit (dBm)	EIRP Margin (dB)
		A	B	C	D	∑					
2412 (CH1)	11.00	12.63	-	-	-	-	30.00	-17.37	15.43	36.00	-20.57
2437 (CH6)	20.00	20.16	-	-	-	-	30.00	-9.84	22.96	36.00	-13.04
2462 (CH11)	10.00	10.90	-	-	-	-	30.00	-19.10	13.70	36.00	-22.30

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

Test Configuration			
Frequency Range:	2400-2483.5 MHz	Band:	2.4 GHz
Limit Clause(s):	15.247 (b)(3) RSS-247 5.4 d)	Test Method(s):	C63.10 11.9.2.3.2
Additional Reference(s):	-		

DUT Configuration			
Mode:	802.11n HT20	Duty Cycle (%):	100.0
Modulation Coding Scheme:	MCS0	DCCF (dB):	-
Antenna Configuration:	SISO	Peak Antenna Gain (dBi):	2.80
Supply Voltage:	3.30 V	TX Mode:	Continuous Modulated Stream

Test Frequency (MHz)	Power Index	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
		A	B	C	D	∑		
2412 (CH1)	10.00	11.38	-	-	-	-	30.00	-18.63
2437 (CH6)	20.00	19.99	-	-	-	-	30.00	-10.01
2462 (CH11)	10.00	10.34	-	-	-	-	30.00	-19.66

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

Test Frequency (MHz)	Power Index	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)	EIRP (dBm)	EIRP Limit (dBm)	EIRP Margin (dB)
		A	B	C	D	∑					
2412 (CH1)	10.00	11.38	-	-	-	-	30.00	-18.63	14.18	36.00	-21.83
2437 (CH6)	20.00	19.99	-	-	-	-	30.00	-10.01	22.79	36.00	-13.21
2462 (CH11)	10.00	10.34	-	-	-	-	30.00	-19.66	13.14	36.00	-22.86

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

Test Configuration			
Frequency Range:	2400-2483.5 MHz	Band:	2.4 GHz
Limit Clause(s):	15.247 (b)(3) RSS-247 5.4 d)	Test Method(s):	C63.10 11.9.2.3.2
Additional Reference(s):	-		

DUT Configuration			
Mode:	802.11ax HE20 SU	Duty Cycle (%):	100.0
Modulation Coding Scheme:	MCS0x1	DCCF (dB):	-
Antenna Configuration:	SISO	Peak Antenna Gain (dBi):	2.80
Supply Voltage:	3.30 V	TX Mode:	Continuous Modulated Stream

Test Frequency (MHz)	Power Index	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
		A	B	C	D	∑		
2412 (CH1)	10.00	12.03	-	-	-	-	30.00	-17.97
2437 (CH6)	18.00	17.81	-	-	-	-	30.00	-12.19
2462 (CH11)	10.00	10.72	-	-	-	-	30.00	-19.28

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

Test Frequency (MHz)	Power Index	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)	EIRP (dBm)	EIRP Limit (dBm)	EIRP Margin (dB)
		A	B	C	D	∑					
2412 (CH1)	10.00	12.03	-	-	-	-	30.00	-17.97	14.83	36.00	-21.17
2437 (CH6)	18.00	17.81	-	-	-	-	30.00	-12.19	20.61	36.00	-15.39
2462 (CH11)	10.00	10.72	-	-	-	-	30.00	-19.28	13.52	36.00	-22.48

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

Test Configuration			
Frequency Range:	2400-2483.5 MHz	Band:	2.4 GHz
Limit Clause(s):	15.247 (b)(3) RSS-247 5.4 d)	Test Method(s):	C63.10 11.9.2.3.2
Additional Reference(s):	-		

DUT Configuration			
Mode:	802.11ax HE20 RU26	Duty Cycle (%):	100.0
Modulation Coding Scheme:	MCS0x1	DCCF (dB):	-
Antenna Configuration:	SISO	Peak Antenna Gain (dBi):	2.80
Supply Voltage:	3.30 V	TX Mode:	Continuous Modulated Stream

Test Frequency (MHz)	Power Index	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
		A	B	C	D	∑		
2412 (CH1) (RU26.0)	10.00	11.46	-	-	-	-	30.00	-18.54
2437 (CH6) (RU26.0)	18.00	17.38	-	-	-	-	30.00	-12.62
2462 (CH11) (RU26.8)	10.00	10.16	-	-	-	-	30.00	-19.84

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

Test Frequency (MHz)	Power Index	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)	EIRP (dBm)	EIRP Limit (dBm)	EIRP Margin (dB)
		A	B	C	D	∑					
2412 (CH1) (RU26.0)	10.00	11.46	-	-	-	-	30.00	-18.54	14.26	36.00	-21.74
2437 (CH6) (RU26.0)	18.00	17.38	-	-	-	-	30.00	-12.62	20.18	36.00	-15.82
2462 (CH11) (RU26.8)	10.00	10.16	-	-	-	-	30.00	-19.84	12.96	36.00	-23.04

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

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

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

ISED RSS-247, Limit Clause 5.4 (d)

For DTSs employing digital modulation techniques operating in the bands 902-928 MHz and 2400-2483.5 MHz, the maximum peak conducted output power shall not exceed 1 W. The e.i.r.p. shall not exceed 4 W, except as provided in section 5.4(e) of the specification.

FCC 47 CFR Part 15, Limit Clause 15.247 (b)(2)

For frequency hopping systems operating in the 902–928 MHz band: 1 watt for systems employing at least 50 hopping channels; and, 0.25 watts for systems employing less than 50 hopping channels.

ISED RSS-247, Limit Clause 5.4 (a)

For FHSs operating in the band 902-928 MHz, the maximum peak conducted output power shall not exceed 1.0 W, and the e.i.r.p. shall not exceed 4 W if the hopset uses 50 or more hopping channels; the maximum peak conducted output power shall not exceed 0.25 W and the e.i.r.p. shall not exceed 1 W if the hopset uses less than 50 hopping channels.

2.2.7 Test Location and Test Equipment Used

This test was carried out in RF Laboratory 1.

Instrument	Manufacturer	Type No	TE No	Calibration Period (months)	Calibration Expires
Multimeter	Fluke	79 Series III	411	12	12-Jan-2025
Hygrometer	Rotronic	I-1000	3220	12	28-Nov-2024
USB Power Sensor	Boonton	RTP5008	5833	12	12-Jul-2024
Modular Power System Mainframe	Keysight Technologies	N6701C	5835	-	TU
DC Power Module	Keysight Technologies	N6754A	5836	-	O/P Mon
GPSDR Frequency standard	Orolia	SecureSync 2402-053	6339	6	14-Sep-2024
Signal Conditioning Unit	TUV SUD	SPECTRUM_SCU001	6350	-	26-Jul-2024
SCU Cable Assembly SCU	TUV SUD	SPECTRUM_SCU_CA	6638	12	26-Jul-2024

Table 35

TU – Traceability Unscheduled
O/P Mon – Output Monitored

2.3 Power Spectral Density

2.3.1 Specification Reference

FCC 47 CFR Part 15C, Clause 15.247 (e),
ISED RSS-247, Clause 5.2
ISED RSS-GEN, Clause 6.12

2.3.2 Equipment Under Test and Modification State

SiW917Y1GN, S/N: WLAN MAC address: ec:f6:4c:a0:f:4 - Modification State 0

2.3.3 Date of Test

11-April-2024

2.3.4 Test Method

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

The EUT was supplied with 3.3 VDC directly with a DC PSU.

2.3.5 Environmental Conditions

Ambient Temperature	21.3 °C
Relative Humidity	56.5 %

2.3.6 Test Results

2.4 GHz WLAN Conducted Tests

Test Configuration			
Frequency Range:	2400-2483.5 MHz	Band:	2.4 GHz
Limit Clause(s):	15.247 (e) RSS-247 5.2 b)	Test Method(s):	C63.10 11.10.5
Additional Reference(s):	-		

DUT Configuration			
Mode:	802.11b	Duty Cycle (%):	100.0
Data Rate:	1 Mbps	DCCF (dB):	0.00
Antenna Configuration:	SISO	Peak Antenna Gain (dBi):	-
Supply Voltage:	3.30 V	TX Mode:	Continuous Modulated Stream

Test Frequency (MHz)	Power Index	RBW (kHz)	PSD (dBm/RBW)					Limit (dBm/3 kHz)	Margin (dB)
			A	B	C	D	∑		
2412	15.00	100.0	-0.72	-	-	-	-	8.00	-8.72
2437	20.00	100.0	3.72	-	-	-	-	8.00	-4.28
2462	15.00	100.0	-2.06	-	-	-	-	8.00	-10.06

Table 36 - Maximum Power Spectral Density Results

Test Configuration			
Frequency Range:	2400-2483.5 MHz	Band:	2.4 GHz
Limit Clause(s):	15.247 (e) RSS-247 5.2 b)	Test Method(s):	C63.10 11.10.5
Additional Reference(s):	-		

DUT Configuration			
Mode:	802.11g	Duty Cycle (%):	100.0
Data Rate:	6 Mbps	DCCF (dB):	0.00
Antenna Configuration:	SISO	Peak Antenna Gain (dBi):	-
Supply Voltage:	3.30 V	TX Mode:	Continuous Modulated Stream

Test Frequency (MHz)	Power Index	RBW (kHz)	PSD (dBm/RBW)					Limit (dBm/3 kHz)	Margin (dB)
			A	B	C	D	∑		
2412	11.00	100.0	-7.13	-	-	-	-	8.00	-15.13
2437	20.00	100.0	0.35	-	-	-	-	8.00	-7.65
2462	10.00	100.0	-8.98	-	-	-	-	8.00	-16.98

Table 37 - Maximum Power Spectral Density Results

Test Configuration			
Frequency Range:	2400-2483.5 MHz	Band:	2.4 GHz
Limit Clause(s):	15.247 (e) RSS-247 5.2 b)	Test Method(s):	C63.10 11.10.5
Additional Reference(s):	-		

DUT Configuration			
Mode:	802.11n HT20	Duty Cycle (%):	100.0
Modulation Coding Scheme:	MCS0	DCCF (dB):	0.00
Antenna Configuration:	SISO	Peak Antenna Gain (dBi):	-
Supply Voltage:	3.30 V	TX Mode:	Continuous Modulated Stream

Test Frequency (MHz)	Power Index	RBW (kHz)	PSD (dBm/RBW)					Limit (dBm/3 kHz)	Margin (dB)
			A	B	C	D	∑		
2412	10.00	100.0	-8.34	-	-	-	-	8.00	-16.34
2437	20.00	100.0	0.58	-	-	-	-	8.00	-7.42
2462	10.00	100.0	-9.75	-	-	-	-	8.00	-17.75

Table 38 - Maximum Power Spectral Density Results

Test Configuration			
Frequency Range:	2400-2483.5 MHz	Band:	2.4 GHz
Limit Clause(s):	15.247 (e) RSS-247 5.2 b)	Test Method(s):	C63.10 11.10.5
Additional Reference(s):	-		

DUT Configuration			
Mode:	802.11ax HE20 SU	Duty Cycle (%):	100.0
Modulation Coding Scheme:	MCS0x1	DCCF (dB):	0.00
Antenna Configuration:	SISO	Peak Antenna Gain (dBi):	-
Supply Voltage:	3.30 V	TX Mode:	Continuous Modulated Stream

Test Frequency (MHz)	Power Index	RBW (kHz)	PSD (dBm/RBW)					Limit (dBm/3 kHz)	Margin (dB)
			A	B	C	D	∑		
2412	10.00	100.0	-9.26	-	-	-	-	8.00	-17.26
2437	18.00	100.0	-2.34	-	-	-	-	8.00	-10.34
2462	10.00	100.0	-10.53	-	-	-	-	8.00	-18.53

Table 39 - Maximum Power Spectral Density Results

Test Configuration			
Frequency Range:	2400-2483.5 MHz	Band:	2.4 GHz
Limit Clause(s):	15.247 (e) RSS-247 5.2 b)	Test Method(s):	C63.10 11.10.5
Additional Reference(s):	-		

DUT Configuration			
Mode:	802.11ax HE20 RU26	Duty Cycle (%):	100.0
Modulation Coding Scheme:	MCS0x1	DCCF (dB):	0.00
Antenna Configuration:	SISO	Peak Antenna Gain (dBi):	-
Supply Voltage:	3.30 V	TX Mode:	Continuous Modulated Stream

Test Frequency (MHz)	Power Index	RBW (kHz)	PSD (dBm/RBW)					Limit (dBm/3 kHz)	Margin (dB)
			A	B	C	D	∑		
2412	10.00	100.0	-0.63	-	-	-	-	8.00	-8.63
2437	18.00	51.0	3.11	-	-	-	-	8.00	-4.89
2462	10.00	100.0	-1.72	-	-	-	-	8.00	-9.72

Table 40 - Maximum Power Spectral Density Results

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

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

ISED RSS-247, Limit Clause 5.2(b)

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

2.3.7 Test Location and Test Equipment Used

This test was carried out in RF Laboratory 1.

Instrument	Manufacturer	Type No	TE No	Calibration Period (months)	Calibration Expires
Multimeter	Fluke	79 Series III	411	12	12-Jan-2025
Hygrometer	Rotronic	I-1000	3220	12	28-Nov-2024
MXA Signal Analyser	Keysight Technologies	N9020B	5528	24	18-Sep-2025
Modular Power System Mainframe	Keysight Technologies	N6701C	5835	-	TU
DC Power Module	Keysight Technologies	N6754A	5836	-	O/P Mon
GPSDR Frequency standard	Orolia	SecureSync 2402-053	6339	6	12-Mar-2024
GPSDR Frequency standard	Orolia	SecureSync 2402-053	6339	6	14-Sep-2024
Signal Conditioning Unit	TUV SUD	SPECTRUM_SCU001	6350	-	26-Jul-2024
SCU Cable Assembly SCU	TUV SUD	SPECTRUM_SCU_CA	6638	12	26-Jul-2024

Table 41

TU – Traceability Unscheduled
O/P Mon – Output Monitored

2.4 Spurious Radiated Emissions

2.4.1 Specification Reference

FCC 47 CFR Part 15C, Clause 15.209 and 15.247 (d)
ISED RSS-247, Clause 3.3 and 5.5
ISED RSS-GEN, Clause 6.13 and 8.9

2.4.2 Equipment Under Test and Modification State

SiW917Y1GA, S/N: WLAN MAC address: ec:f6:4c:a0:ac:c - Modification State 0

2.4.3 Date of Test

03-April-2024 to 10-April-2024

2.4.4 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 mobile/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 dBµV/m to µV/m:

10^(Field Strength in dBµV/m/20).

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

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

The EUT was supplied with 3.3 VDC by means of a regulator residing in the host certification board, which was in turn being powered over the host certification board's USB connector.

The Power Settings used for testing are as follows:
802.11b Channel 1, 15; Channel 6, 20; Channel 11, 15
802.11g Channel 1, 11; Channel 6, 20; Channel 11, 10
802.11n Channel 1, 10; Channel 6, 20; Channel 11, 10
802.11ax Channel 1, 10; Channel 6, 18; Channel 11, 10

2.4.5 Example Test Setup Diagram

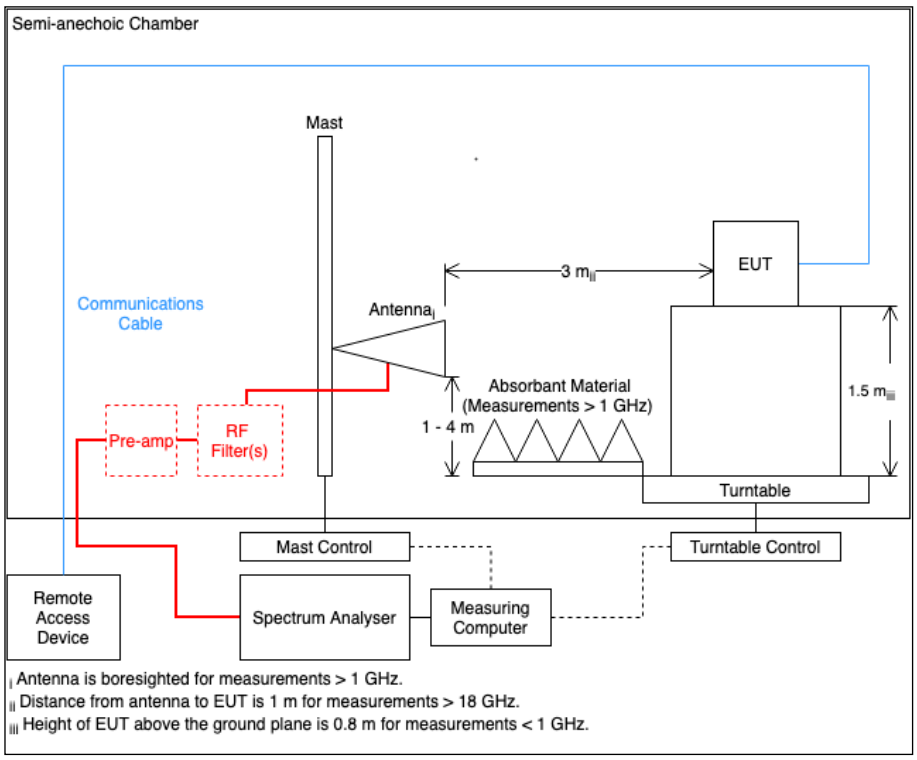

Figure 25

2.4.6 Environmental Conditions

Ambient Temperature	19.8 - 22.7 °C
Relative Humidity	46.1 - 49.3 %

2.4.7 Test Results

2.4 GHz WLAN - PCB Trace Antenna

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

Table 42 - CH1_802.11b_1Mbps_X, 2412 MHz, 30 MHz to 26 GHz

*No emissions found within 10 dB of the limit.

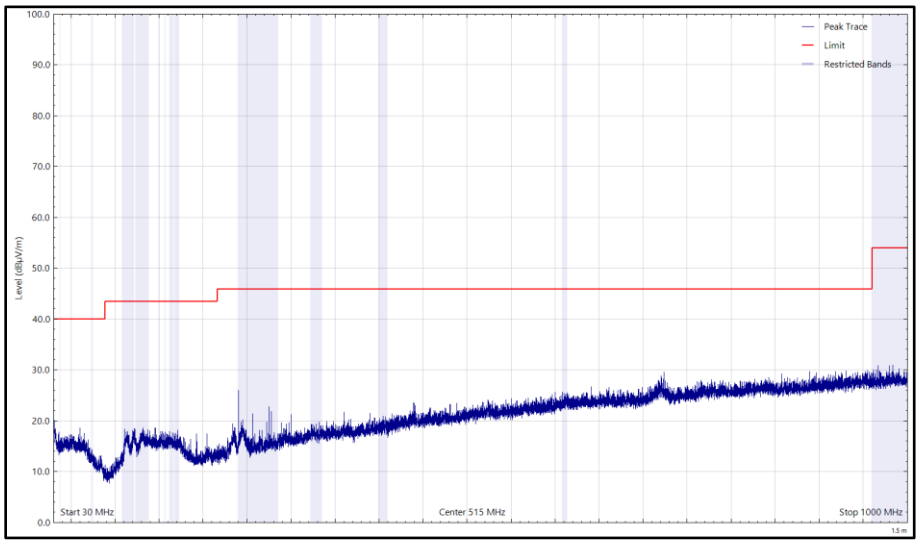

Figure 26 - CH1_802.11b_1Mbps_X, 2412 MHz, 30 MHz to 1 GHz, Horizontal (Peak)

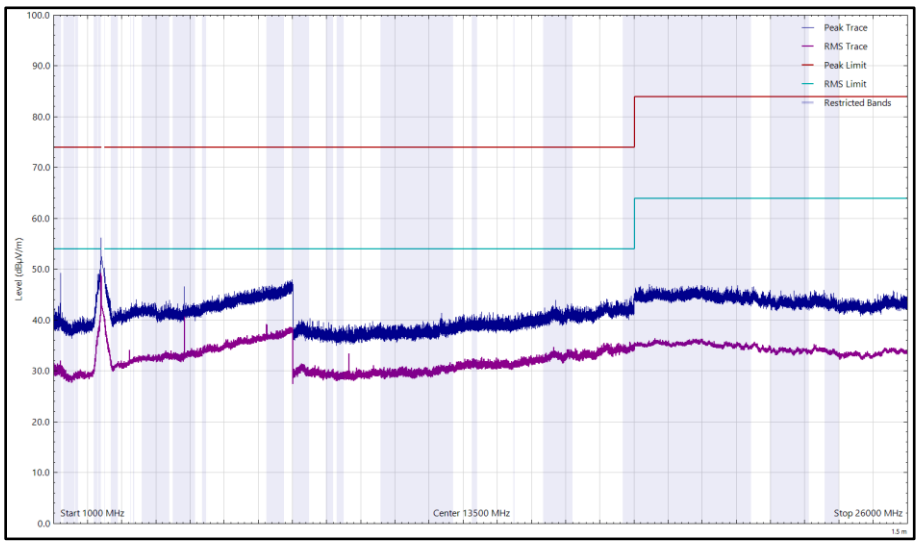

Figure 27 - CH1_802.11b_1Mbps_X, 2412 MHz, 1 GHz to 26 GHz, Horizontal

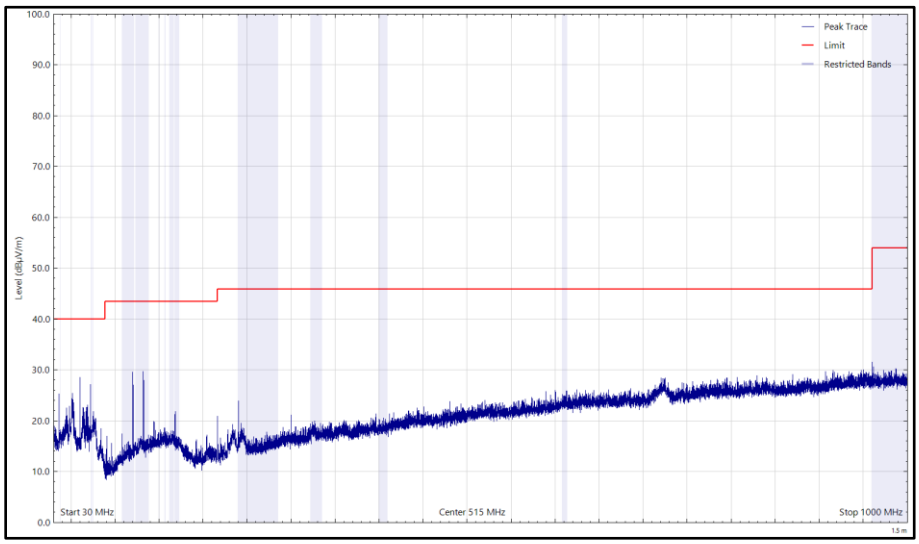

Figure 28 - CH1_802.11b_1Mbps_X, 2412 MHz, 30 MHz to 1 GHz, Vertical (Peak)

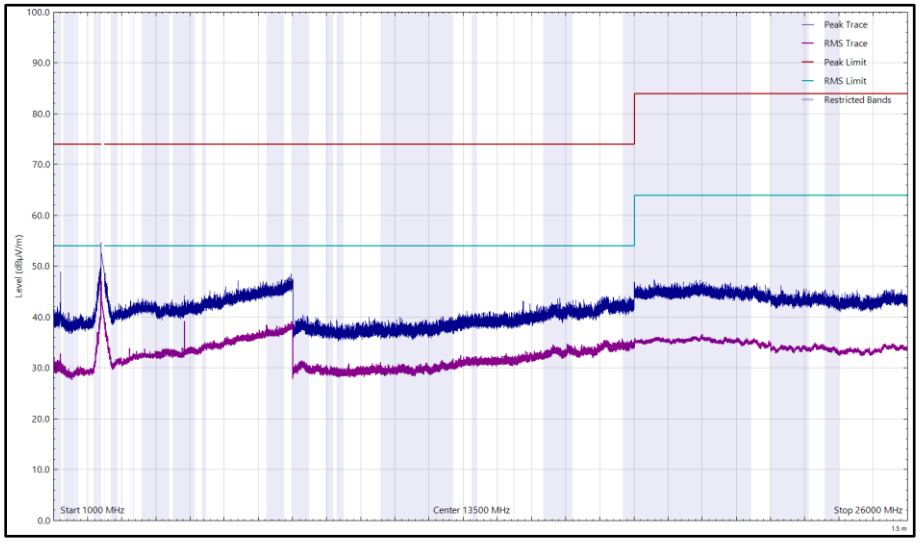

Figure 29 - CH1_802.11b_1Mbps_X, 2412 MHz, 1 GHz to 26 GHz, Vertical

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

Table 43 - CH1_802.11b_1Mbps_Y, 2412 MHz, 30 MHz to 26 GHz

*No emissions found within 10 dB of the limit.

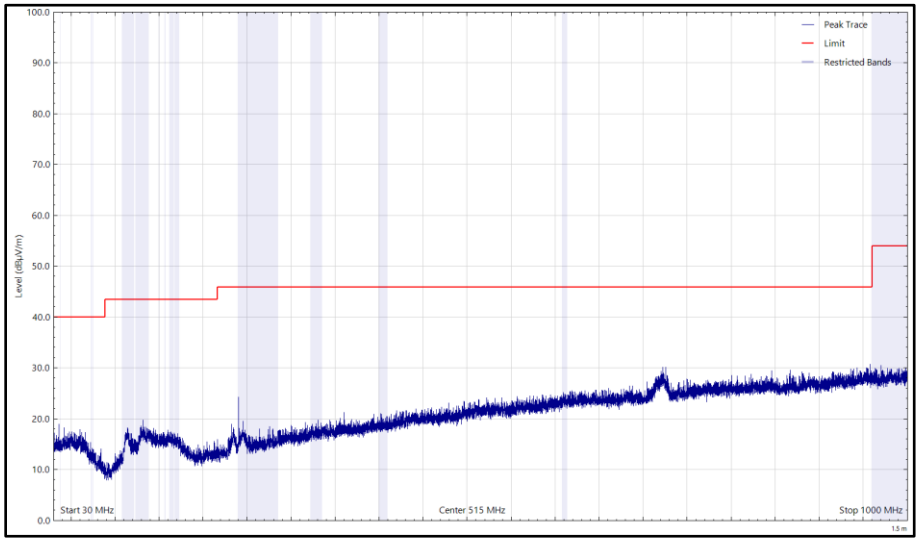

Figure 30 - CH1_802.11b_1Mbps_Y, 2412 MHz, 30 MHz to 1 GHz, Horizontal (Peak)

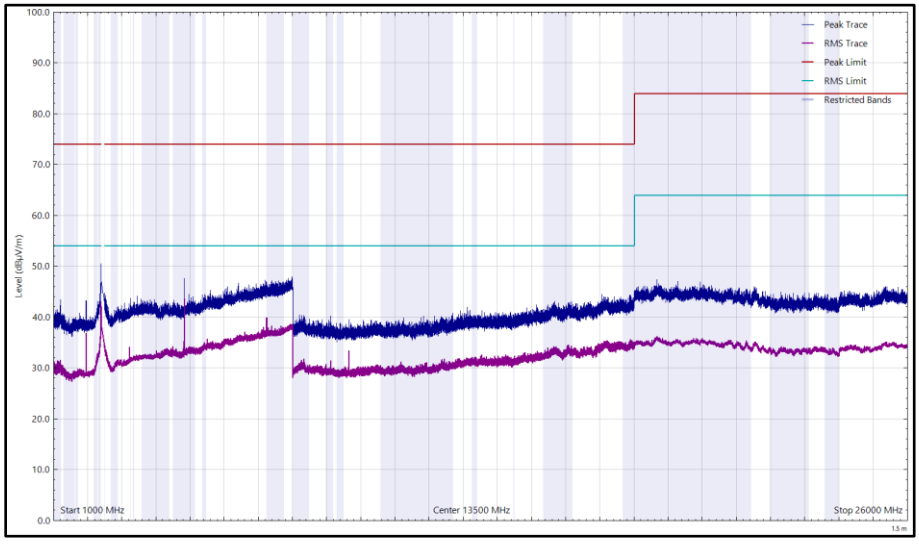

Figure 31 - CH1_802.11b_1Mbps_Y, 2412 MHz, 1 GHz to 26 GHz, Horizontal

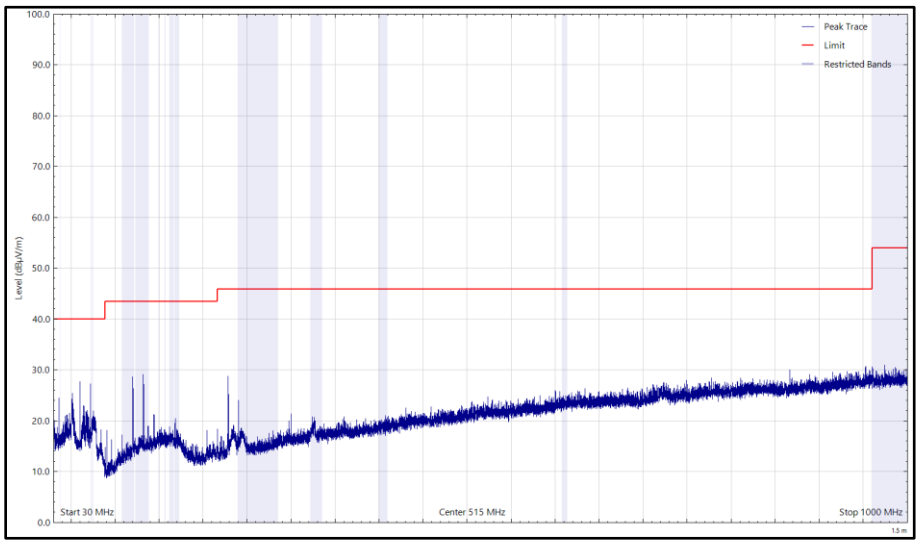

Figure 32 - CH1_802.11b_1Mbps_Y, 2412 MHz, 30 MHz to 1 GHz, Vertical (Peak)

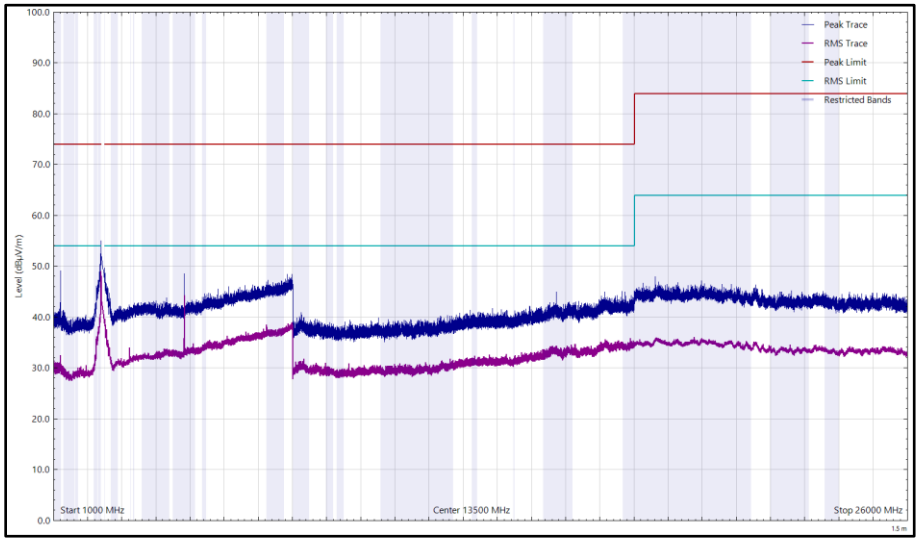

Figure 33 - CH1_802.11b_1Mbps_Y, 2412 MHz, 1 GHz to 26 GHz, Vertical

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

Table 44 - CH1_802.11b_1Mbps_Z, 2412 MHz, 30 MHz to 26 GHz

*No emissions found within 10 dB of the limit.

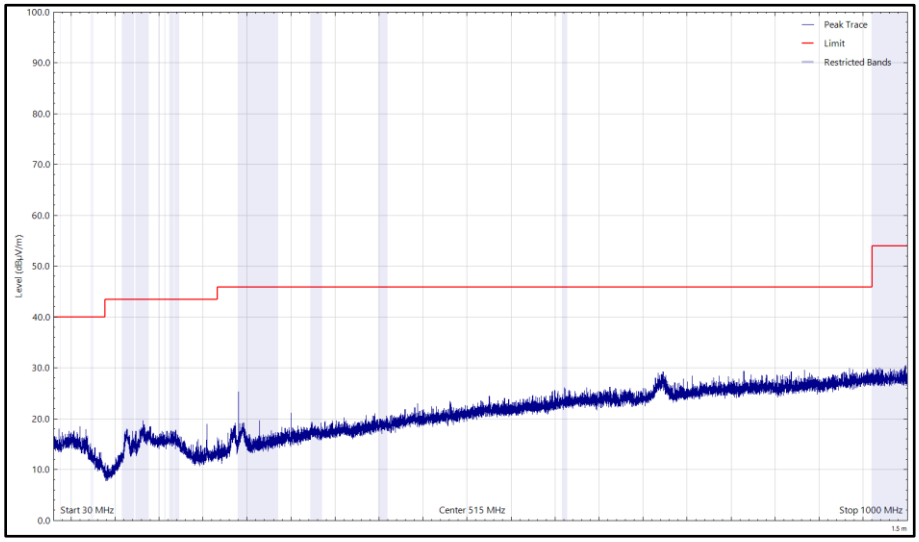

Figure 34 - CH1_802.11b_1Mbps_Z, 2412 MHz, 30 MHz to 1 GHz, Horizontal (Peak)

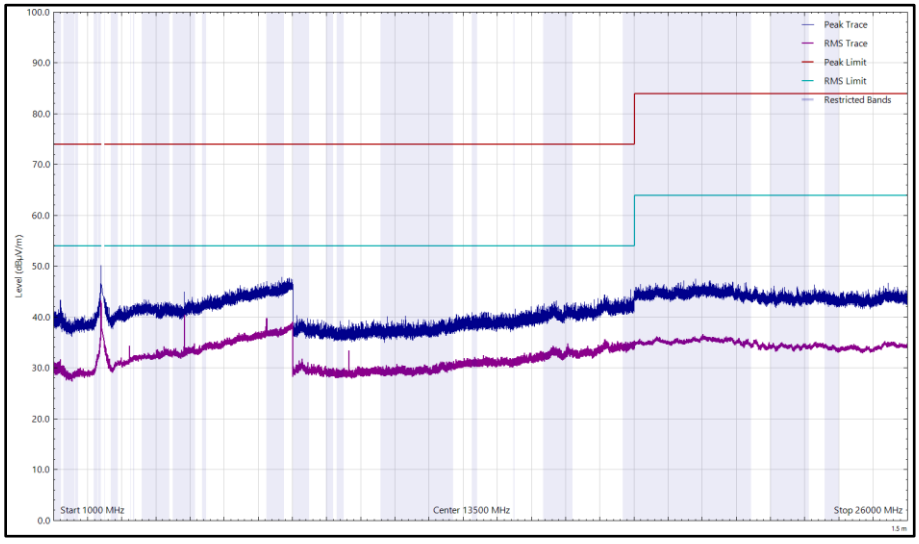

Figure 35 - CH1_802.11b_1Mbps_Z, 2412 MHz, 1 GHz to 26 GHz, Horizontal

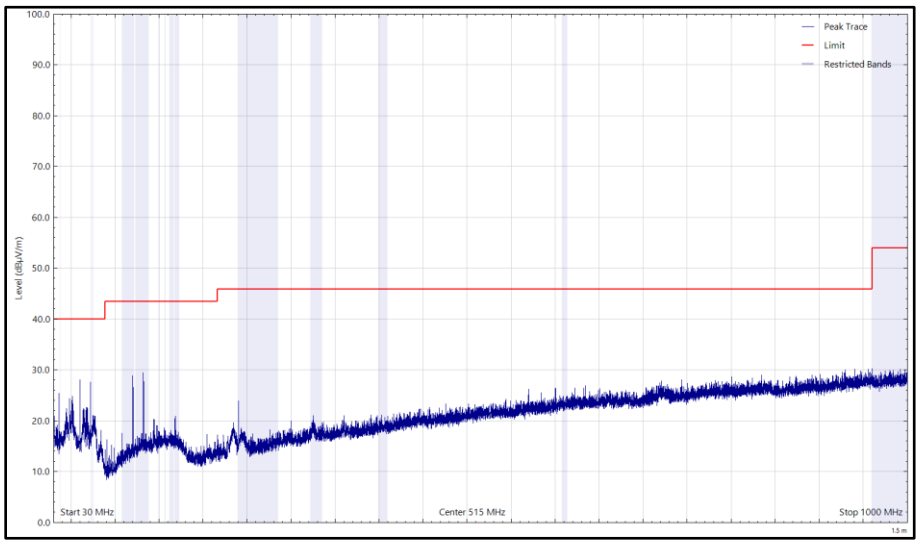

Figure 36 - CH1_802.11b_1Mbps_Z, 2412 MHz, 30 MHz to 1 GHz, Vertical (Peak)

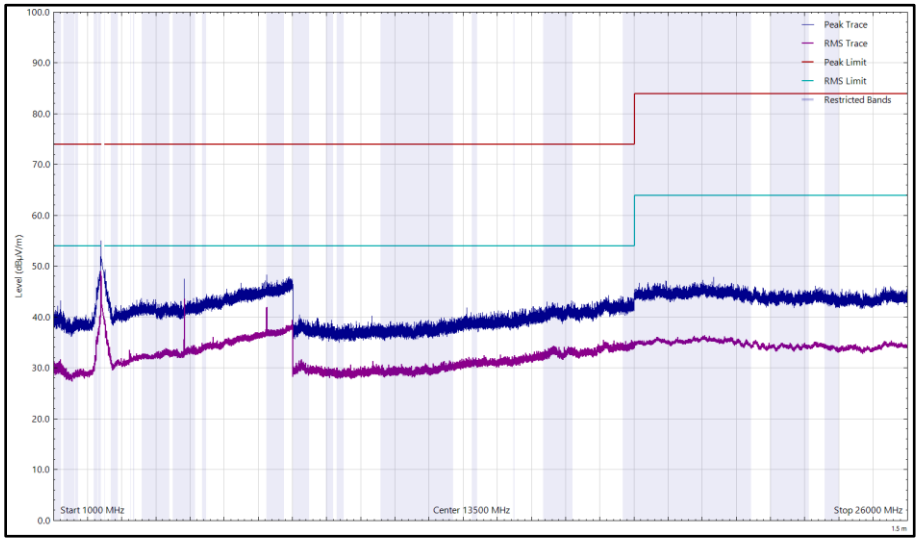

Figure 37 - CH1_802.11b_1Mbps_Z, 2412 MHz, 1 GHz to 26 GHz, Vertical

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

Table 45 - CH6_802.11b_1Mbps_X, 2437 MHz, 30 MHz to 26 GHz

*No emissions found within 10 dB of the limit.

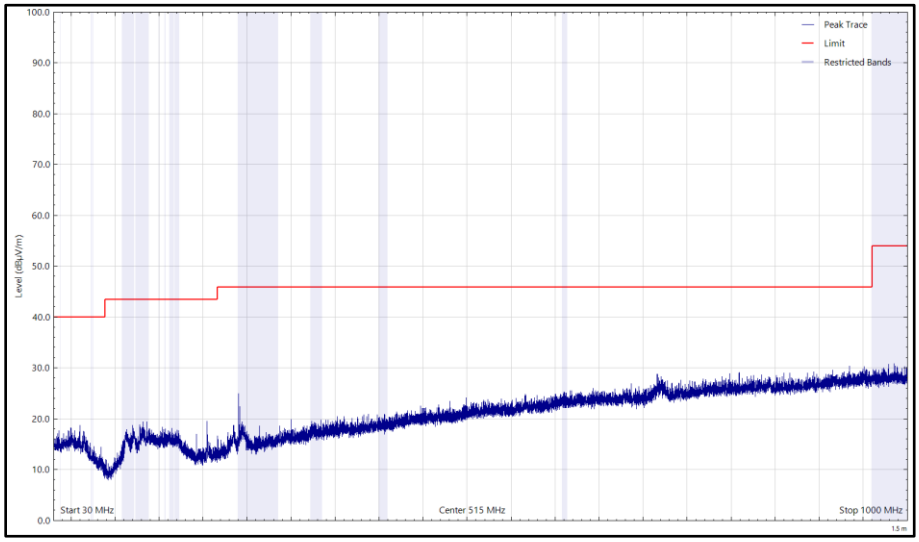

Figure 38 - CH6_802.11b_1Mbps_X, 2437 MHz, 30 MHz to 1 GHz, Horizontal (Peak)

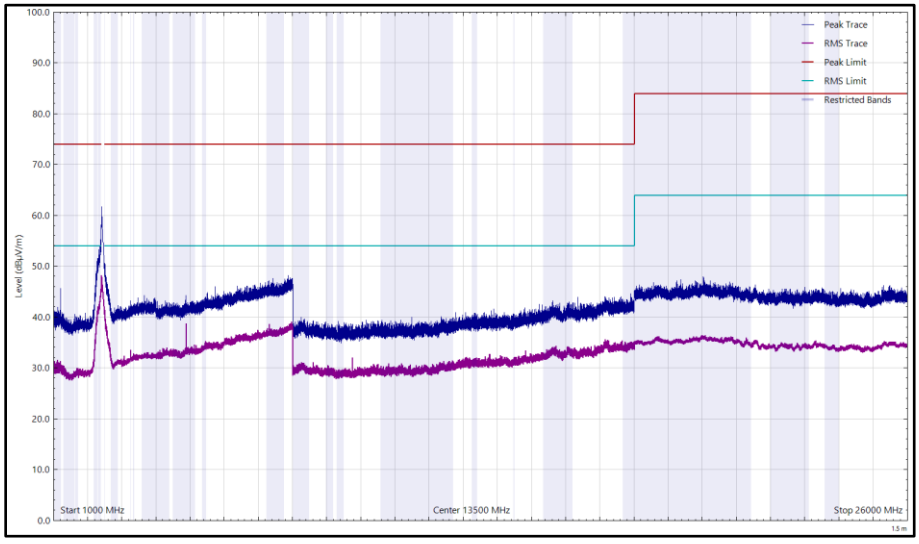

Figure 39 - CH6_802.11b_1Mbps_X, 2437 MHz, 1 GHz to 26 GHz, Horizontal

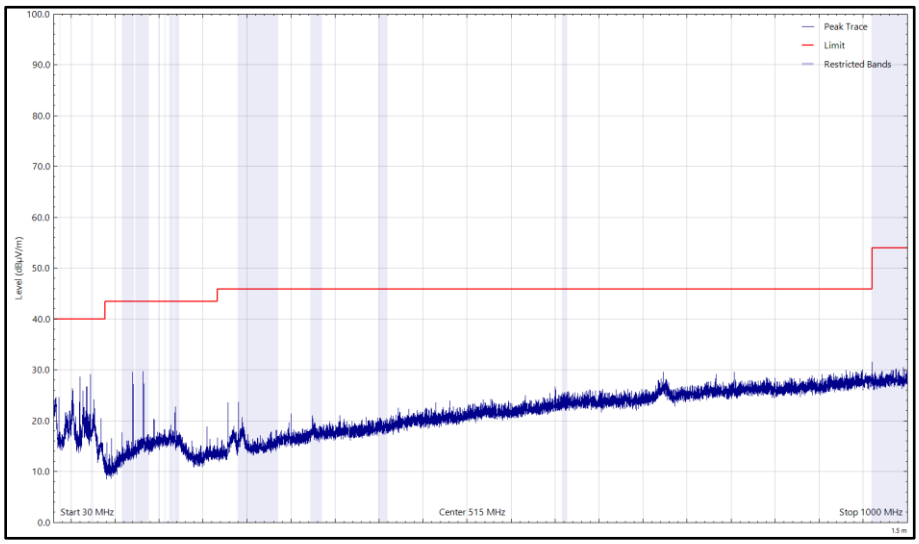

Figure 40 - CH6_802.11b_1Mbps_X, 2437 MHz, 30 MHz to 1 GHz, Vertical (Peak)

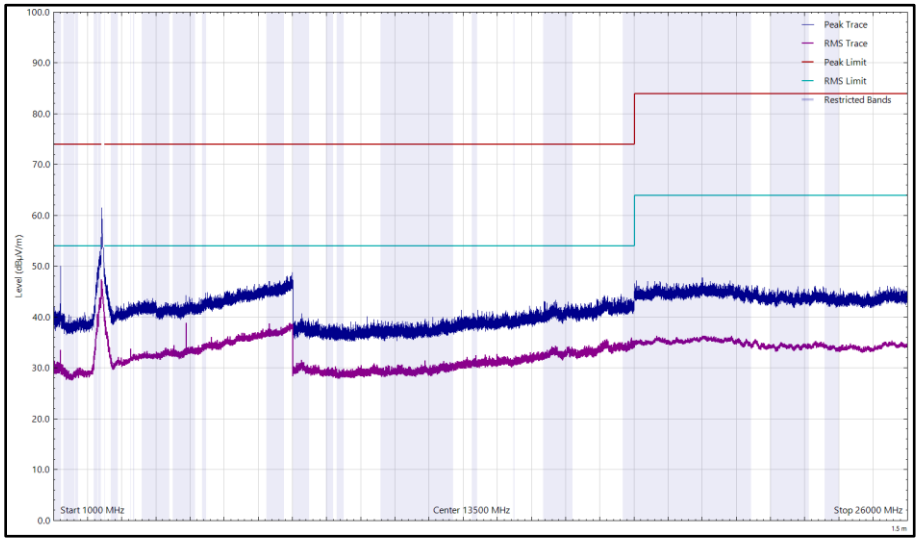

Figure 41 - CH6_802.11b_1Mbps_X, 2437 MHz, 1 GHz to 26 GHz, Vertical

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

Table 46 - CH6_802.11b_1Mbps_Y, 2437 MHz, 30 MHz to 26 GHz

*No emissions found within 10 dB of the limit.

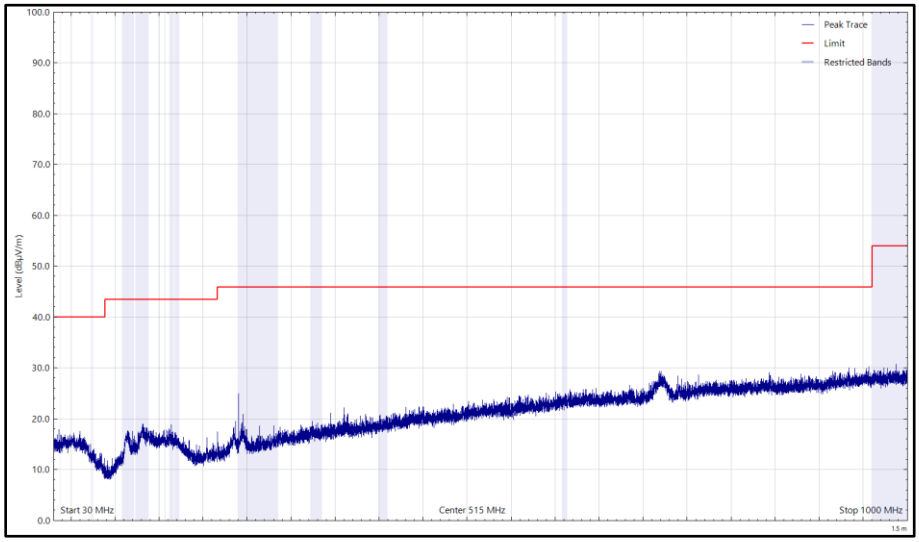

Figure 42 - CH6_802.11b_1Mbps_Y, 2437 MHz, 30 MHz to 1 GHz, Horizontal (Peak)

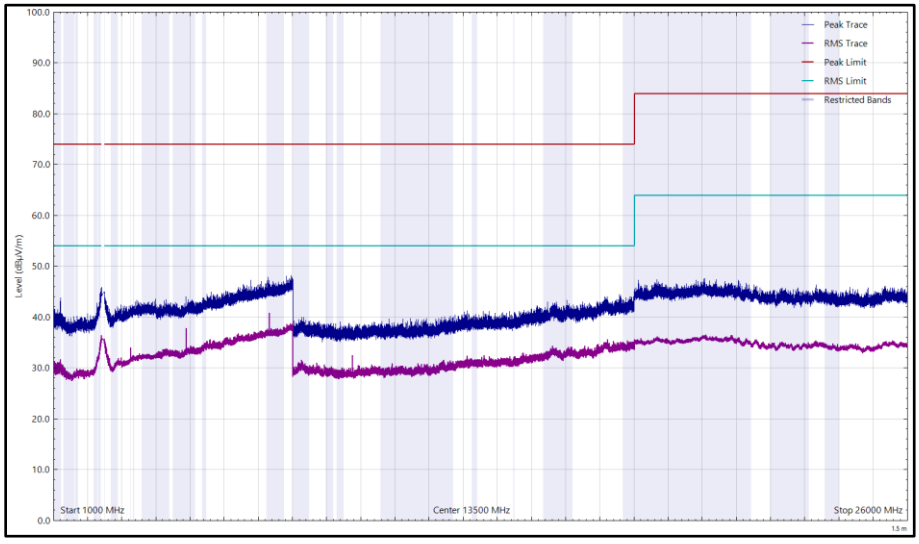

Figure 43 - CH6_802.11b_1Mbps_Y, 2437 MHz, 1 GHz to 26 GHz, Horizontal

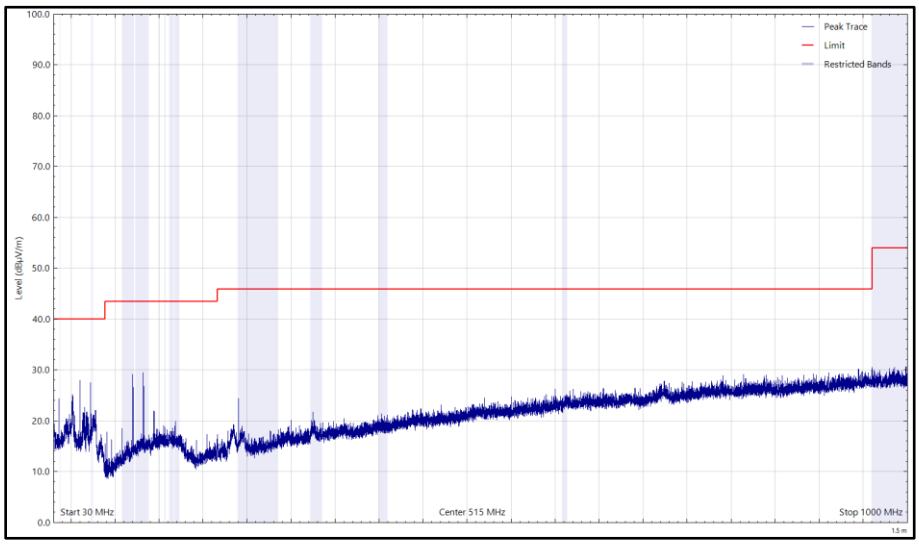

Figure 44 - CH6_802.11b_1Mbps_Y, 2437 MHz, 30 MHz to 1 GHz, Vertical (Peak)

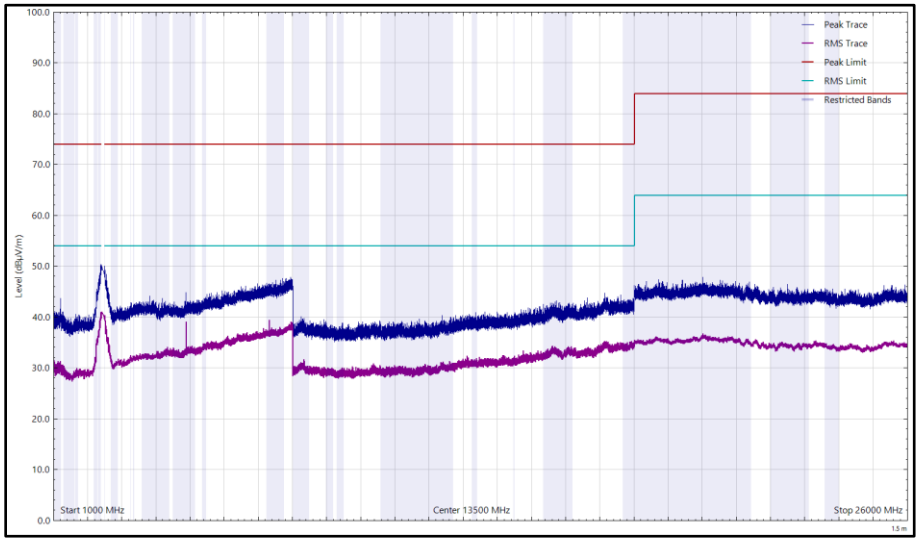

Figure 45 - CH6_802.11b_1Mbps_Y, 2437 MHz, 1 GHz to 26 GHz, Vertical

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

Table 47 - CH6_802.11b_1Mbps_Z, 2437 MHz, 30 MHz to 26 GHz

*No emissions found within 10 dB of the limit.

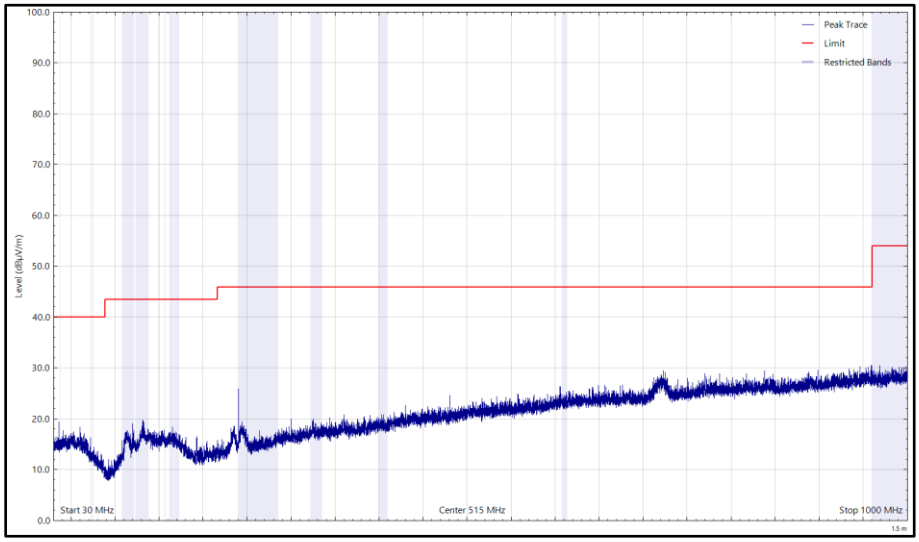

Figure 46 - CH6_802.11b_1Mbps_Z, 2437 MHz, 30 MHz to 1 GHz, Horizontal (Peak)

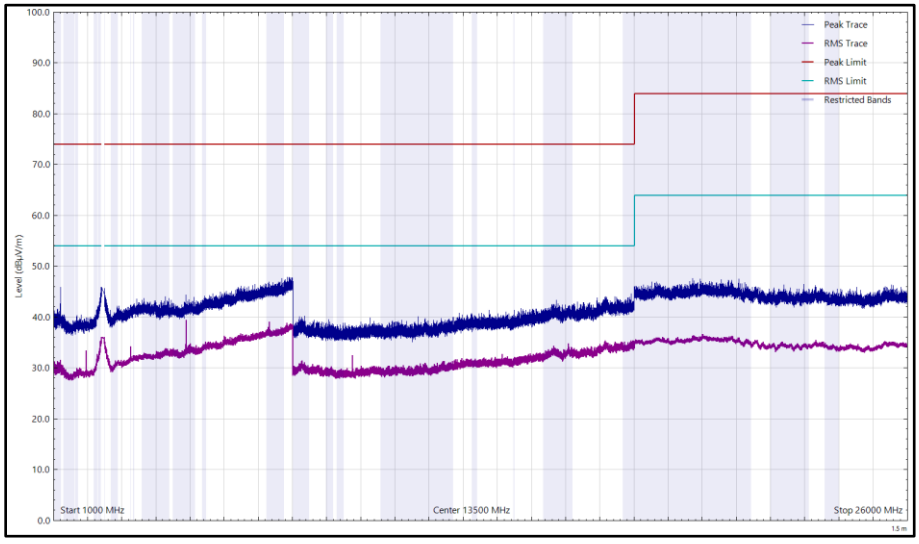

Figure 47 - CH6_802.11b_1Mbps_Z, 2437 MHz, 1 GHz to 26 GHz, Horizontal

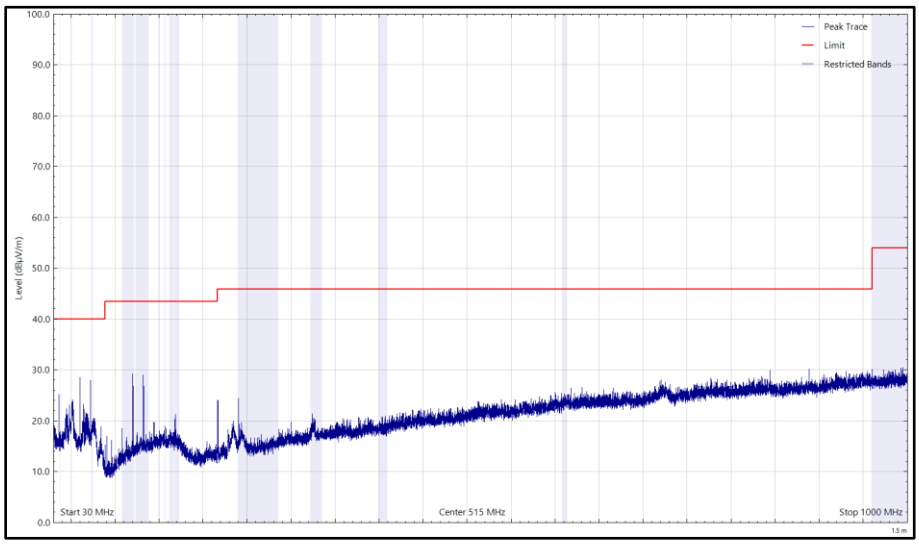

Figure 48 - CH6_802.11b_1Mbps_Z, 2437 MHz, 30 MHz to 1 GHz, Vertical (Peak)

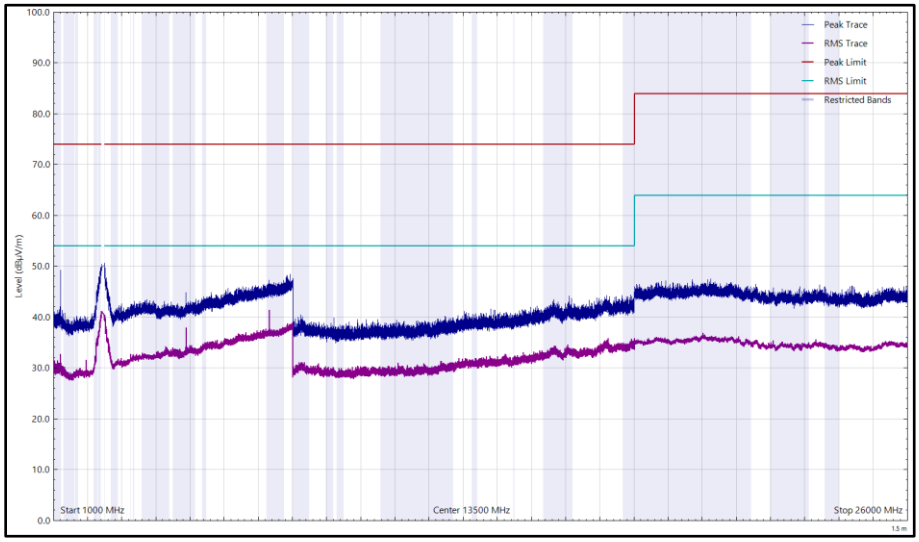

Figure 49 - CH6_802.11b_1Mbps_Z, 2437 MHz, 1 GHz to 26 GHz, Vertical

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

Table 48 - CH11_802.11b_1Mbps_X, 2462 MHz, 30 MHz to 26 GHz

*No emissions found within 10 dB of the limit.

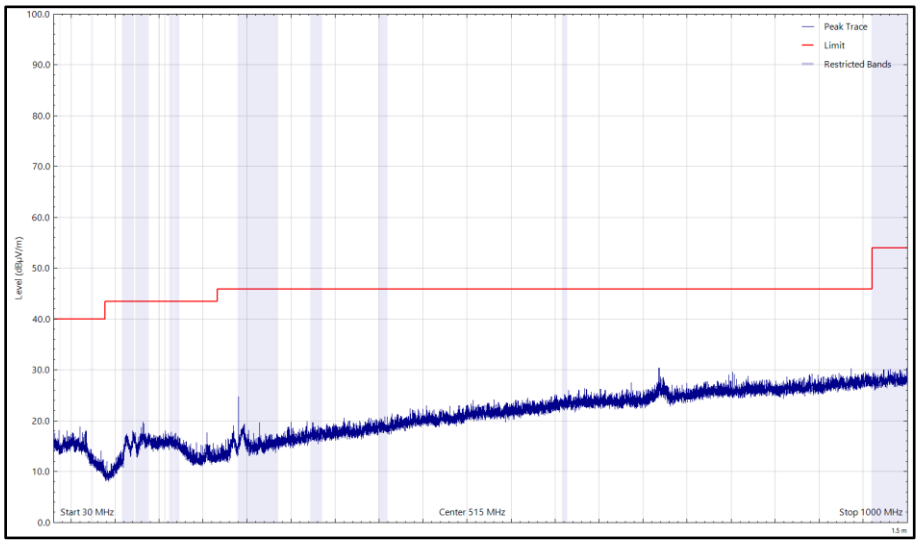

Figure 50 - CH11_802.11b_1Mbps_X, 2462 MHz, 30 MHz to 1 GHz, Horizontal (Peak)

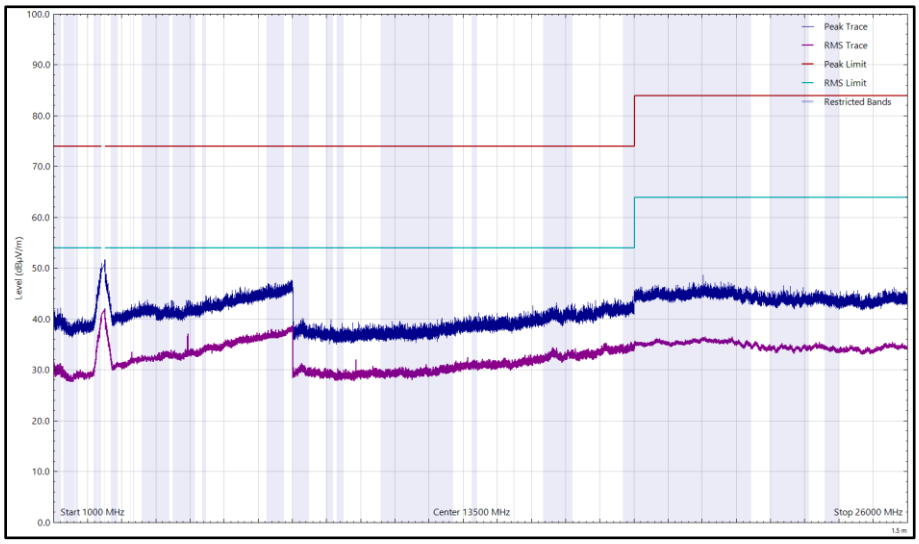

Figure 51 - CH11_802.11b_1Mbps_X, 2462 MHz, 1 GHz to 26 GHz, Horizontal

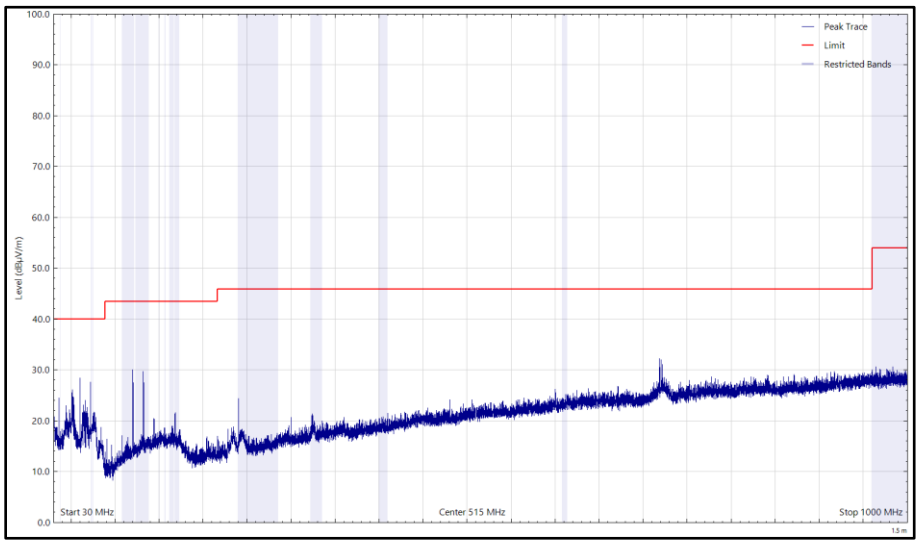

Figure 52 - CH11_802.11b_1Mbps_X, 2462 MHz, 30 MHz to 1 GHz, Vertical (Peak)

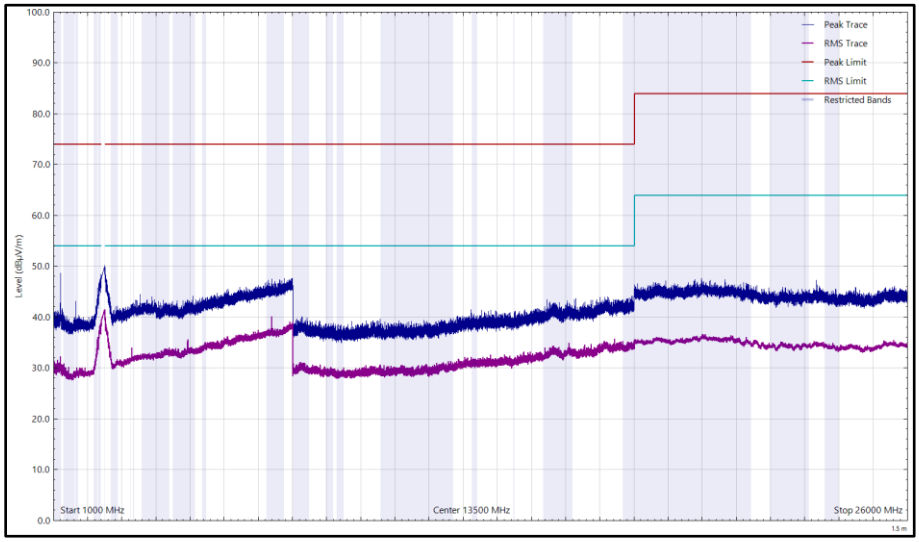

Figure 53 - CH11_802.11b_1Mbps_X, 2462 MHz, 1 GHz to 26 GHz, Vertical

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

Table 49 - CH11_802.11b_1Mbps_Y, 2462 MHz, 30 MHz to 26 GHz

*No emissions found within 10 dB of the limit.

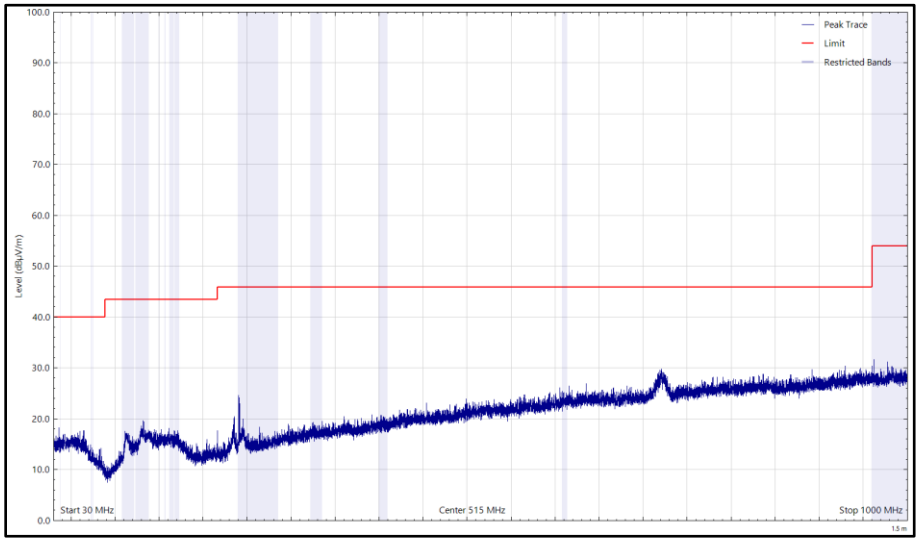

Figure 54 - CH11_802.11b_1Mbps_Y, 2462 MHz, 30 MHz to 1 GHz, Horizontal (Peak)

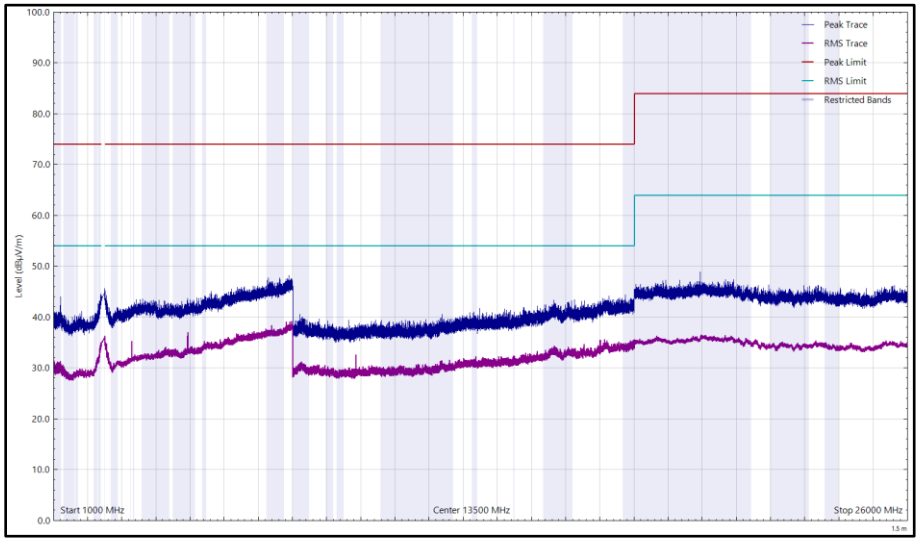

Figure 55 - CH11_802.11b_1Mbps_Y, 2462 MHz, 1 GHz to 26 GHz, Horizontal

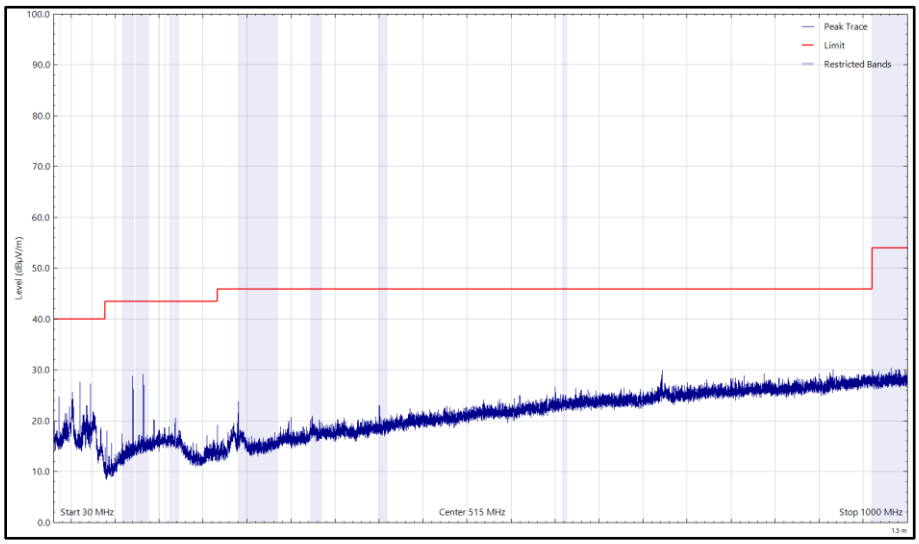

Figure 56 - CH11_802.11b_1Mbps_Y, 2462 MHz, 30 MHz to 1 GHz, Vertical (Peak)

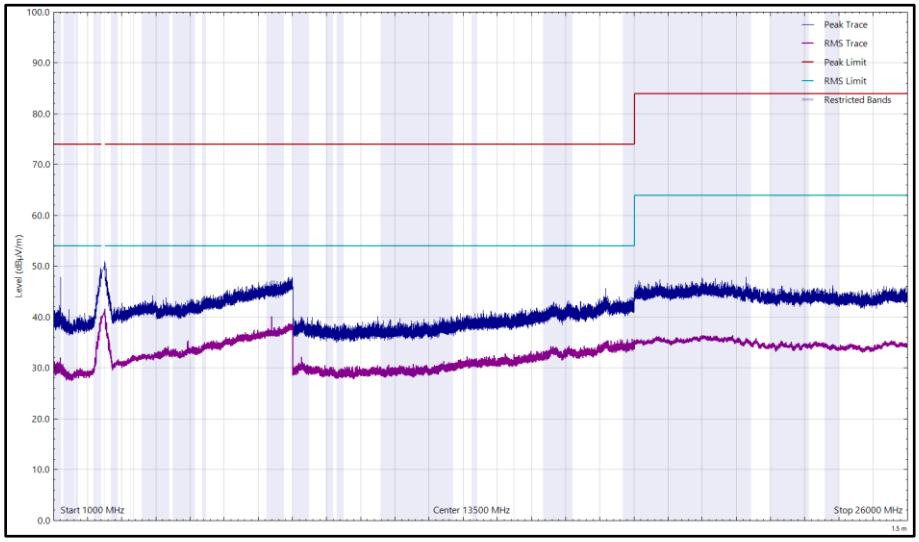

Figure 57 - CH11_802.11b_1Mbps_Y, 2462 MHz, 1 GHz to 26 GHz, Vertical

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

Table 50 - CH11_802.11b_1Mbps_Z, 2462 MHz, 30 MHz to 26 GHz

*No emissions found within 10 dB of the limit.

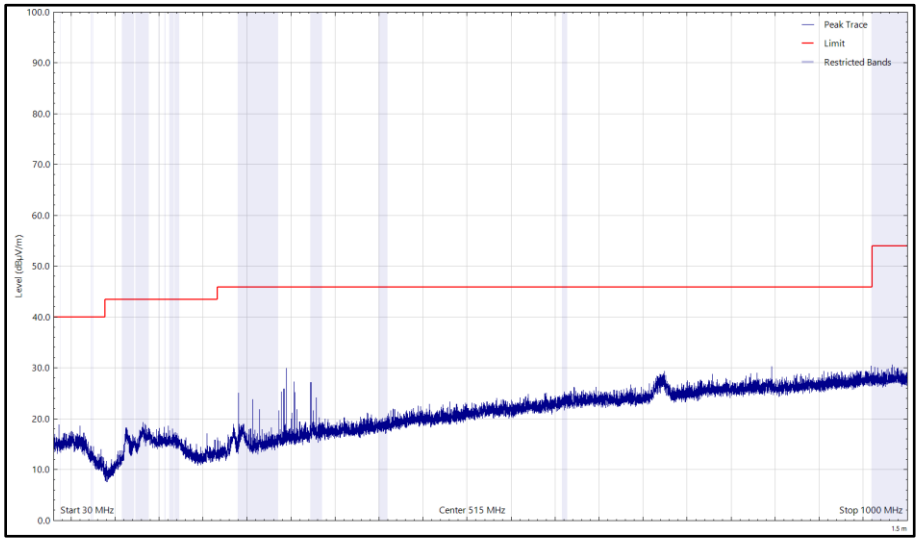

Figure 58 - CH11_802.11b_1Mbps_Z, 2462 MHz, 30 MHz to 1 GHz, Horizontal (Peak)

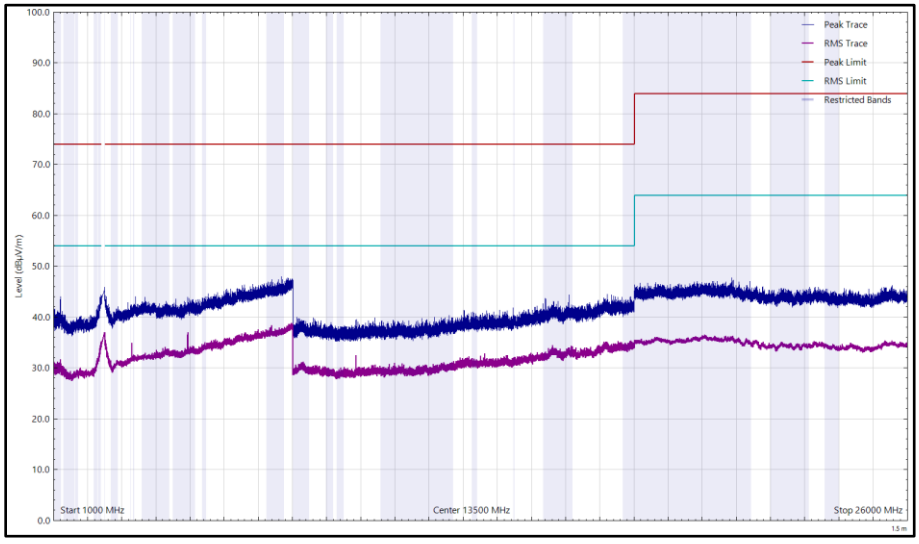

Figure 59 - CH11_802.11b_1Mbps_Z, 2462 MHz, 1 GHz to 26 GHz, Horizontal

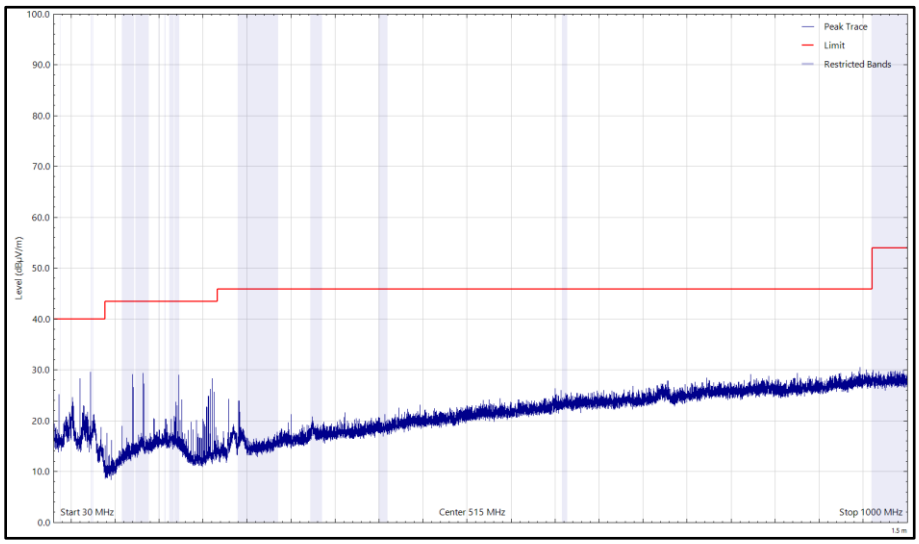

Figure 60 - CH11_802.11b_1Mbps_Z, 2462 MHz, 30 MHz to 1 GHz, Vertical (Peak)

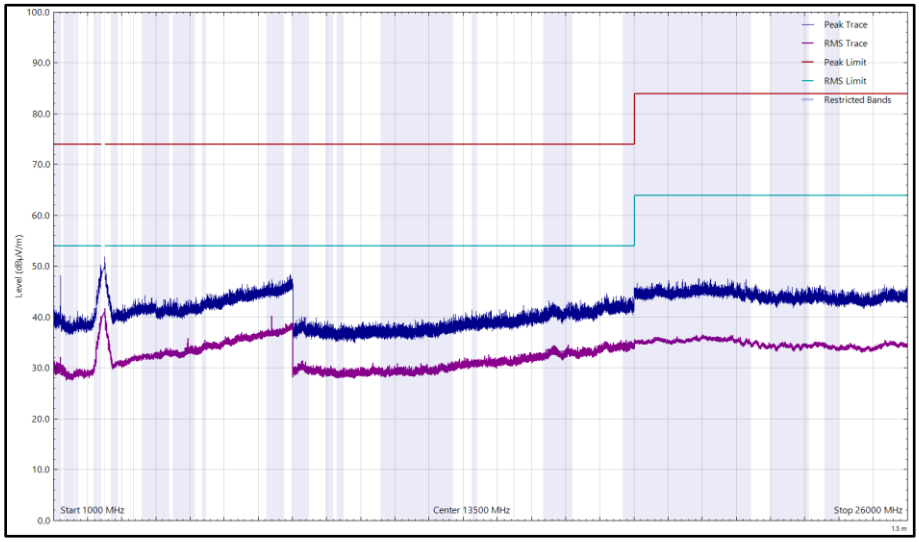

Figure 61 - CH11_802.11b_1Mbps_Z, 2462 MHz, 1 GHz to 26 GHz, Vertical

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

Table 51 - CH1_802.11g_6Mbps_X, 2412 MHz, 30 MHz to 26 GHz

*No emissions found within 10 dB of the limit.

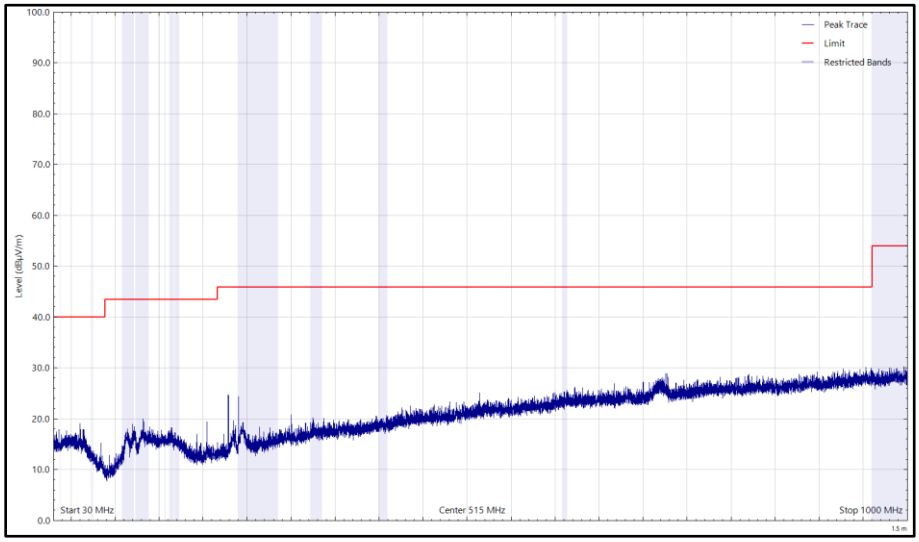

Figure 62 - CH1_802.11g_6Mbps_X, 2412 MHz, 30 MHz to 1 GHz, Horizontal (Peak)

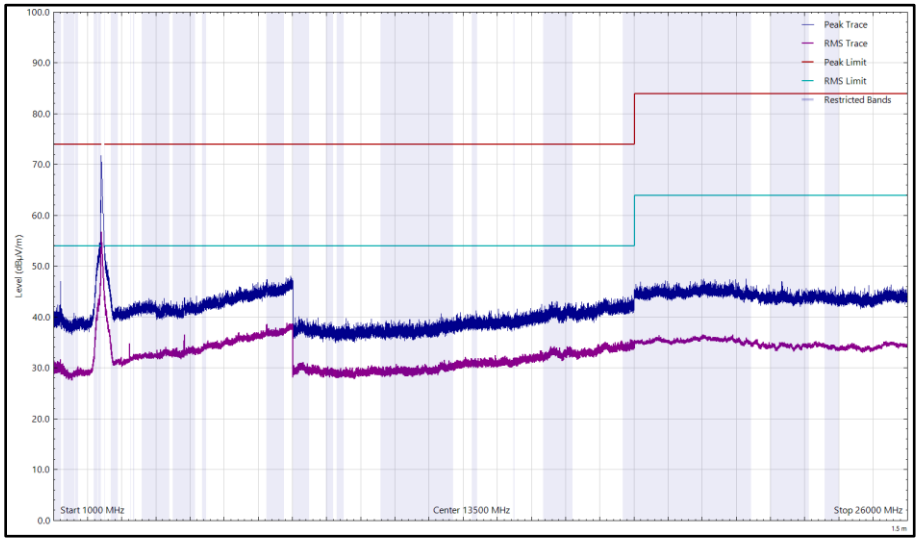

Figure 63 - CH1_802.11g_6Mbps_X, 2412 MHz, 1 GHz to 26 GHz, Horizontal

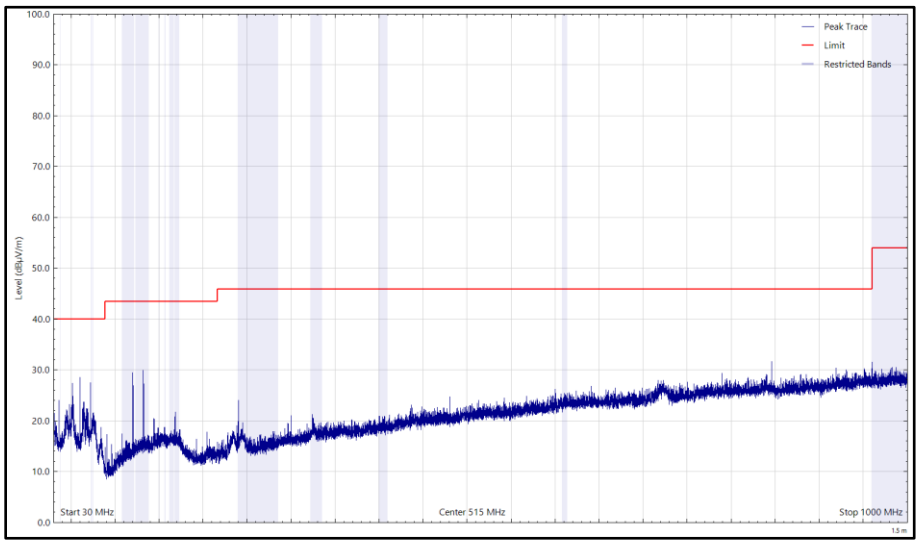

Figure 64 - CH1_802.11g_6Mbps_X, 2412 MHz, 30 MHz to 1 GHz, Vertical (Peak)

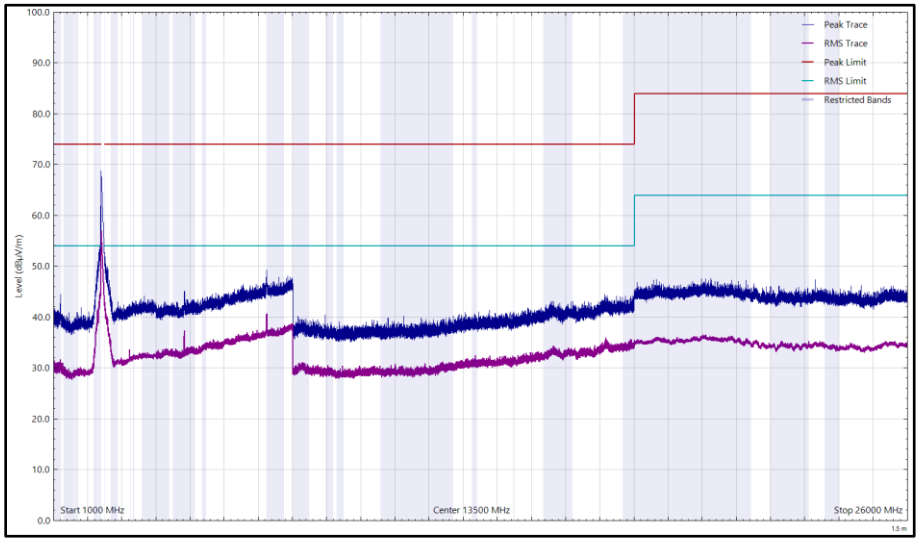

Figure 65 - CH1_802.11g_6Mbps_X, 2412 MHz, 1 GHz to 26 GHz, Vertical

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

Table 52 - CH1_802.11g_6Mbps_Y, 2412 MHz, 30 MHz to 26 GHz

*No emissions found within 10 dB of the limit.

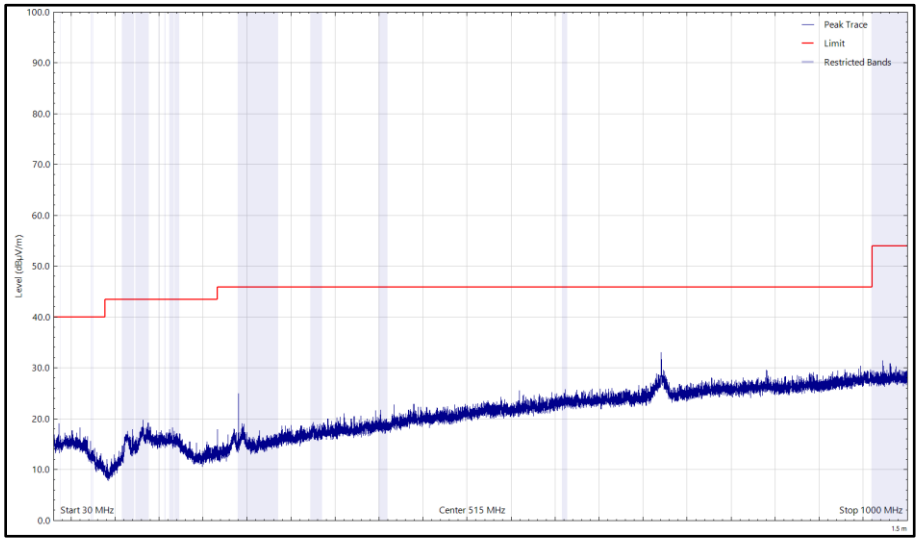

Figure 66 - CH1_802.11g_6Mbps_Y, 2412 MHz, 30 MHz to 1 GHz, Horizontal (Peak)

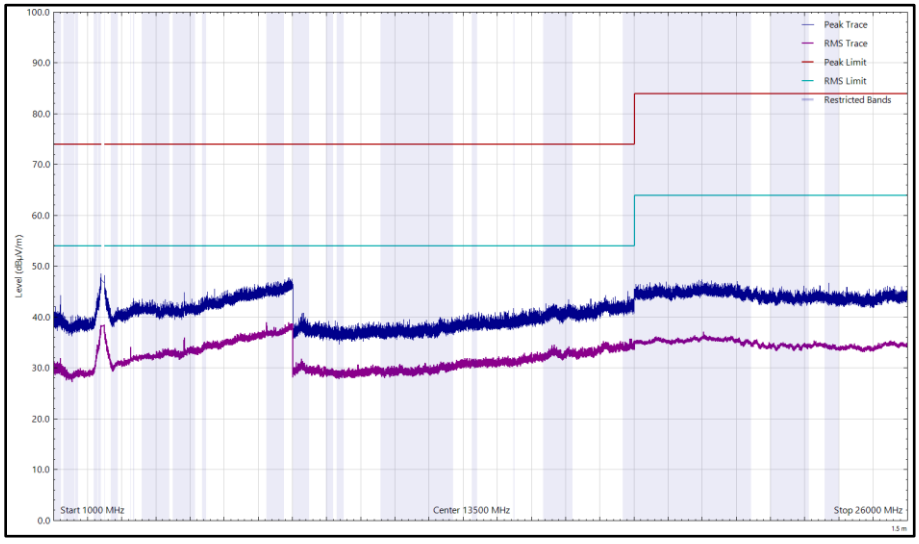

Figure 67 - CH1_802.11g_6Mbps_Y, 2412 MHz, 1 GHz to 26 GHz, Horizontal

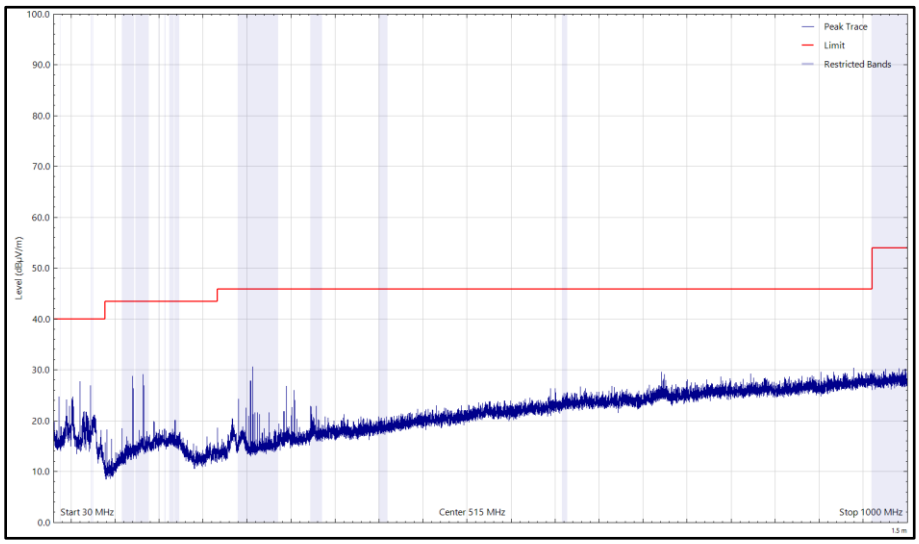

Figure 68 - CH1_802.11g_6Mbps_Y, 2412 MHz, 30 MHz to 1 GHz, Vertical (Peak)

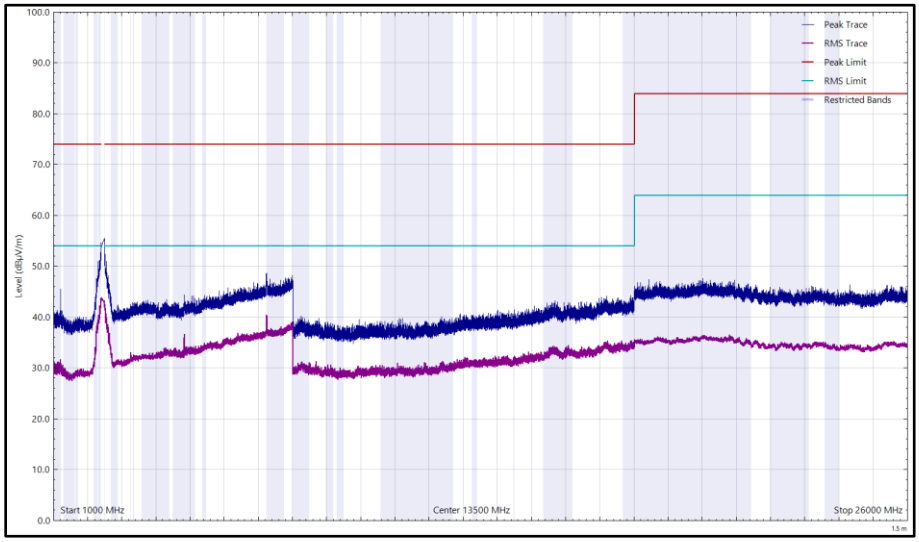

Figure 69 - CH1_802.11g_6Mbps_Y, 2412 MHz, 1 GHz to 26 GHz, Vertical

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

Table 53 - CH1_802.11g_6Mbps_Z, 2412 MHz, 30 MHz to 26 GHz

*No emissions found within 10 dB of the limit.

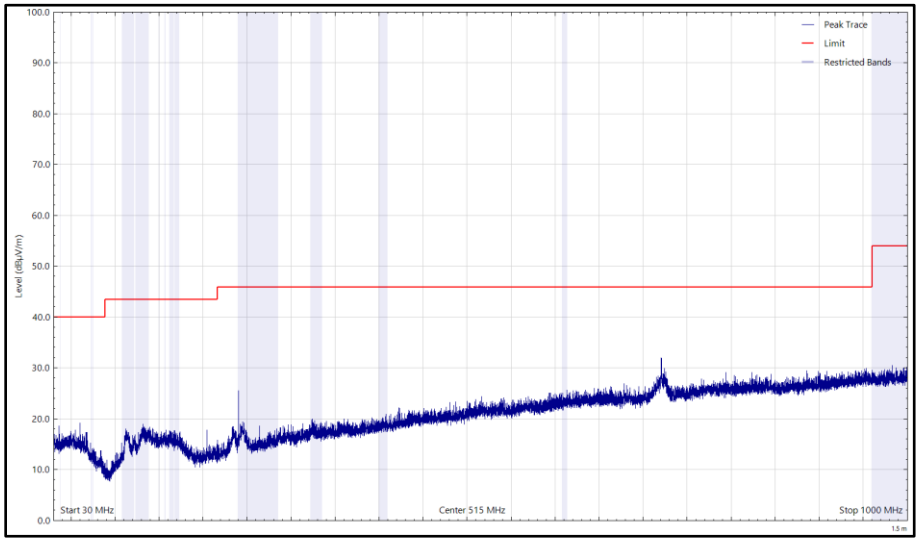

Figure 70 - CH1_802.11g_6Mbps_Z, 2412 MHz, 30 MHz to 1 GHz, Horizontal (Peak)

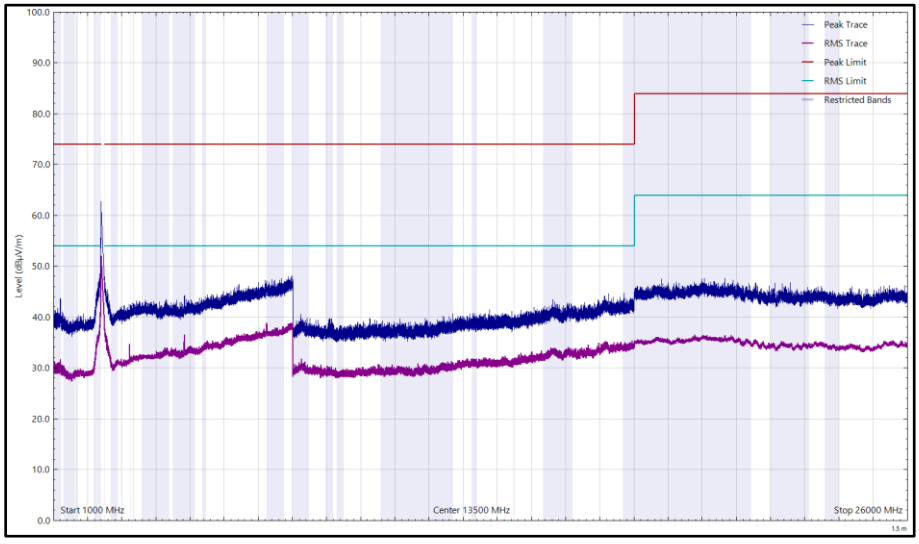

Figure 71 - CH1_802.11g_6Mbps_Z, 2412 MHz, 1 GHz to 26 GHz, Horizontal

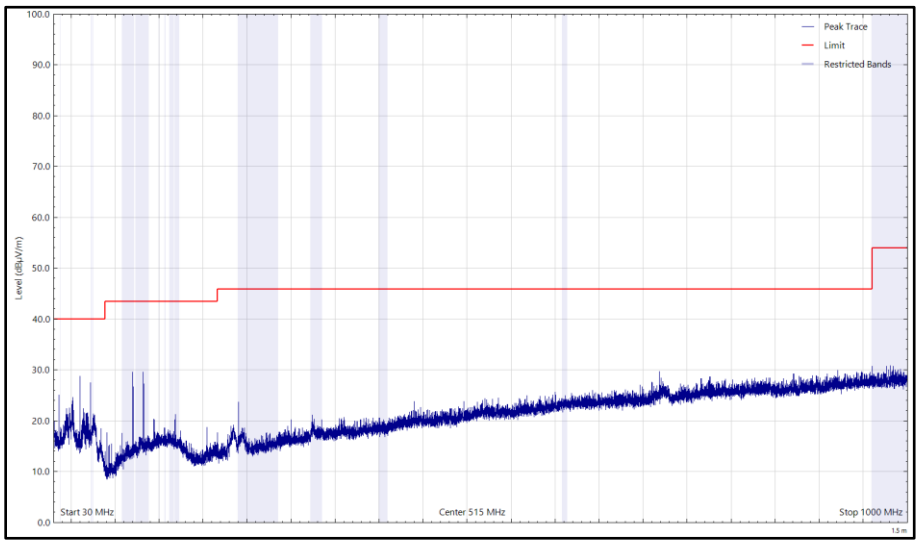

Figure 72 - CH1_802.11g_6Mbps_Z, 2412 MHz, 30 MHz to 1 GHz, Vertical (Peak)

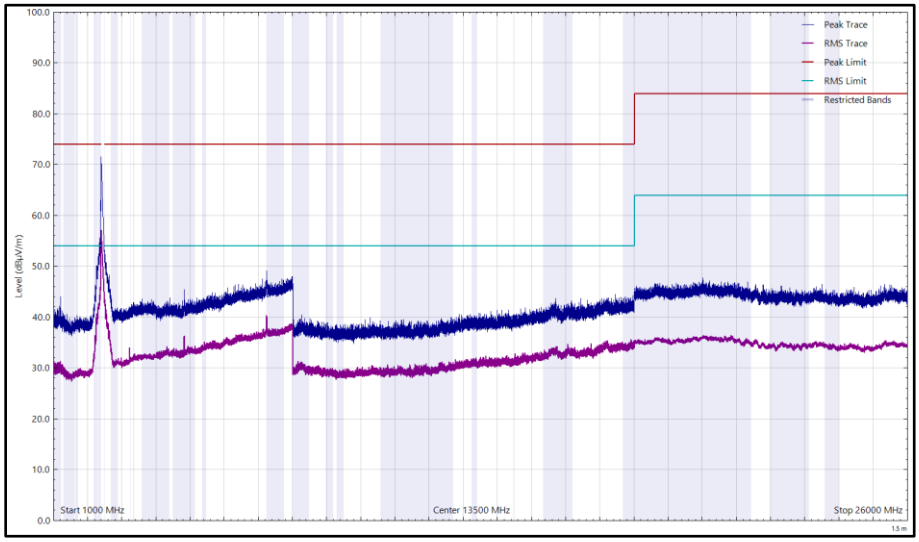

Figure 73 - CH1_802.11g_6Mbps_Z, 2412 MHz, 1 GHz to 26 GHz, Vertical

Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
*							

Table 54 - CH6_802.11g_6Mbps_X, 2437 MHz, 30 MHz to 26 GHz

*No emissions found within 10 dB of the limit.

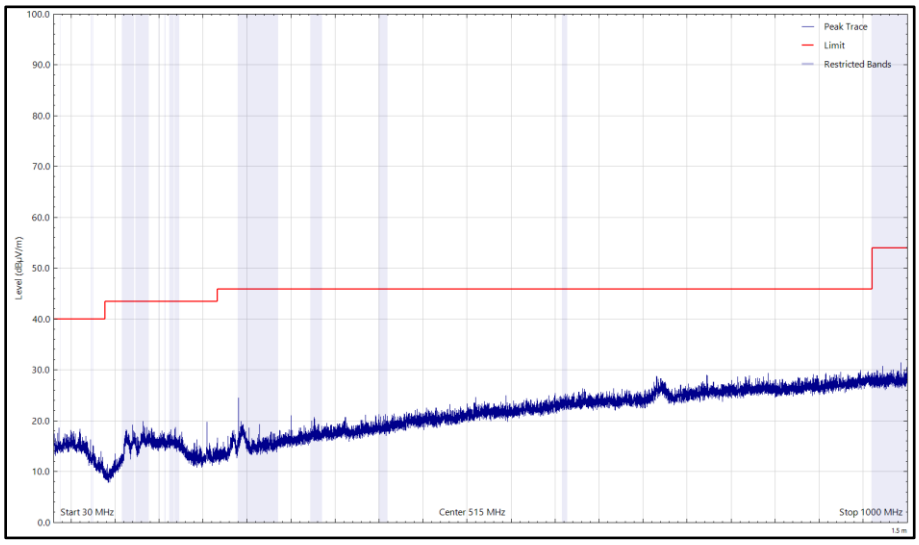

Figure 74 - CH6_802.11g_6Mbps_X, 2437 MHz, 30 MHz to 1 GHz, Horizontal (Peak)

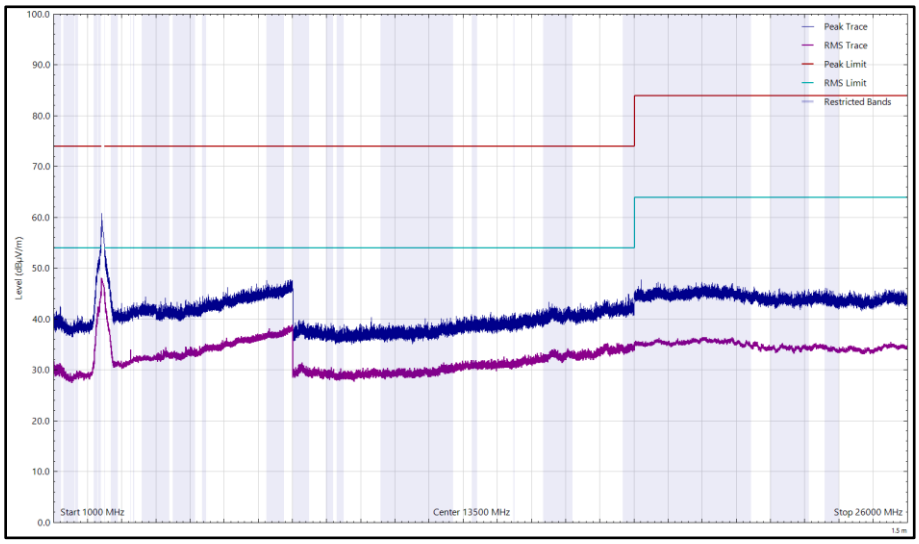

Figure 75 - CH6_802.11g_6Mbps_X, 2437 MHz, 1 GHz to 26 GHz, Horizontal