



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):	662911 D01 v02r01 F)2)f)(i), 662911 D01 v02r01 E)1)		

DUT Configuration			
Mode:	802.11ax HE20 RU52	Duty Cycle (%):	96.4
Modulation Coding Scheme:	MCS2x1	DCCF (dB):	-
Antenna Configuration:	MIMO CDD	Peak Antenna Gain (dBi):	3.77
Active Port(s):	A+B (Core 0 + Core 1)	Active Chain(s):	0+1

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	Σ		
2412	17.17	17.32	-	-	20.25	30.00	-9.75
2442	16.87	17.29	-	-	20.10	30.00	-9.90
2472	-0.33	-0.08	-	-	2.81	30.00	-27.19

Table 56 - FCC Maximum Conducted (average) Output Power Results

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)	EIRP (dBm)	EIRP Limit (dBm)	EIRP Margin (dB)
	A	B	C	D	Σ					
2412	17.17	17.32	-	-	20.25	30.00	-9.75	24.02	36.00	-11.98
2442	16.87	17.29	-	-	20.10	30.00	-9.90	23.87	36.00	-12.13
2472	-0.33	-0.08	-	-	2.81	30.00	-27.19	6.58	36.00	-29.42

Table 57 - 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 RU106	Duty Cycle (%):	97.8
Modulation Coding Scheme:	MCS2x1	DCCF (dB):	-
Antenna Configuration:	SISO	Peak Antenna Gain (dBi):	3.77
Active Port(s):	A (Core 0)	Active Chain(s):	0

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	Σ		
2412	17.21	-	-	-	-	30.00	-12.79
2442	20.31	-	-	-	-	30.00	-9.69
2472	1.97	-	-	-	-	30.00	-28.03

Table 58 - FCC Maximum Conducted (average) Output Power Results

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)	EIRP (dBm)	EIRP Limit (dBm)	EIRP Margin (dB)
	A	B	C	D	Σ					
2412	17.21	-	-	-	-	30.00	-12.79	20.98	36.00	-15.02
2442	20.31	-	-	-	-	30.00	-9.69	24.08	36.00	-11.92
2472	1.97	-	-	-	-	30.00	-28.03	5.74	36.00	-30.26

Table 59 - 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):	662911 D01 v02r01 F)2f)(i), 662911 D01 v02r01 E)1)		

DUT Configuration			
Mode:	802.11ax HE20 RU106	Duty Cycle (%):	97.8
Modulation Coding Scheme:	MCS2x1	DCCF (dB):	-
Antenna Configuration:	MIMO CDD	Peak Antenna Gain (dBi):	3.77
Active Port(s):	A+B (Core 0 + Core 1)	Active Chain(s):	0+1

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	Σ		
2412	16.76	17.00	-	-	19.89	30.00	-10.11
2442	20.05	20.15	-	-	23.11	30.00	-6.89
2472	0.10	-0.16	-	-	2.97	30.00	-27.03

Table 60 - FCC Maximum Conducted (average) Output Power Results

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)	EIRP (dBm)	EIRP Limit (dBm)	EIRP Margin (dB)
	A	B	C	D	Σ					
2412	16.76	17.00	-	-	19.89	30.00	-10.11	23.66	36.00	-12.34
2442	20.05	20.15	-	-	23.11	30.00	-6.89	26.88	36.00	-9.12
2472	0.10	-0.16	-	-	2.97	30.00	-27.03	6.74	36.00	-29.26

Table 61 - 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 (b)

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.



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	Iso-tech	IDM101	2421	12	28-Oct-2022
Hygrometer	Rotronic	I-1000	3220	12	05-Nov-2022
Frequency Standard	Spectracom	SecureSync 1200-0408-0601	4393	6	30-Jun-2022
AC Programmable Power Supply	iTech	IT7324	5226	-	O/P Mon
MXA Signal Analyser	Keysight Technologies	N9020B	5529	24	06-Jun-2022
Signal Commissioning Unit	TUV SUD	SCU002	5759	12	30-Jun-2022
USB Power Sensor	Boonton	RTP5008	5830	12	10-May-2022
USB Power Sensor	Boonton	RTP5008	5832	12	10-May-2022
USB Power Sensor	Boonton	RTP5008	5833	12	10-May-2022
USB Power Sensor	Boonton	RTP5008	5834	12	10-May-2022
Modular Power System Mainframe	Keysight Technologies	N6701C	5835	-	TU
DC Power Module 60V 20A 300W	Keysight Technologies	N6754A	5836	-	O/P Mon

Table 62

TU - Traceability Unscheduled

O/P Mon – Output Monitored using calibrated equipment



2.4 Spurious Radiated Emissions

2.4.1 Specification Reference

FCC 47 CFR Part 15C, Clause 15.247 (d) and 15.209
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

A2681, S/N: DQH576VJ7N - Modification State 0
A2681, S/N: MW4P32N6T0 - Modification State 0

2.4.3 Date of Test

03-March-2022 to 29-March-2022

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.

Ports on the EUT were terminated with loads as described in ANSI C63.4 clause 6.2.4. For EUT's with multiple connectors of the same type, additional interconnecting cables were connected, and pre-scans performed to determine whether the level of the emissions were increased by >2 dB.

In the 30 MHz to 1 GHz range pre-scans were only performed on the mid channel (2437 MHz) only.

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

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

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

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

2.4.5 Test Setup Diagram

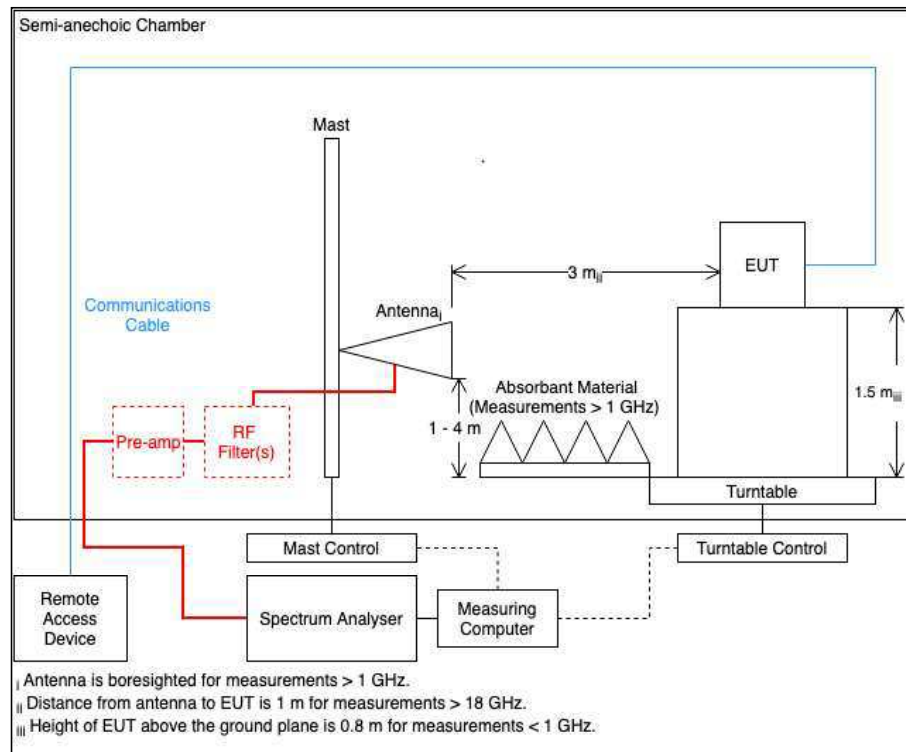


Figure 49

2.4.6 Environmental Conditions

Ambient Temperature	21.1 - 25.1 °C
Relative Humidity	29.4 - 33.2 %



2.4.7 Test Results

2.4 GHz WLAN

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

Table 63 - 2412 MHz (CH1), HT20, CDD, Core 0 + Core 1, 1 to 26 GHz

*No emissions found within 6 dB of the limit.

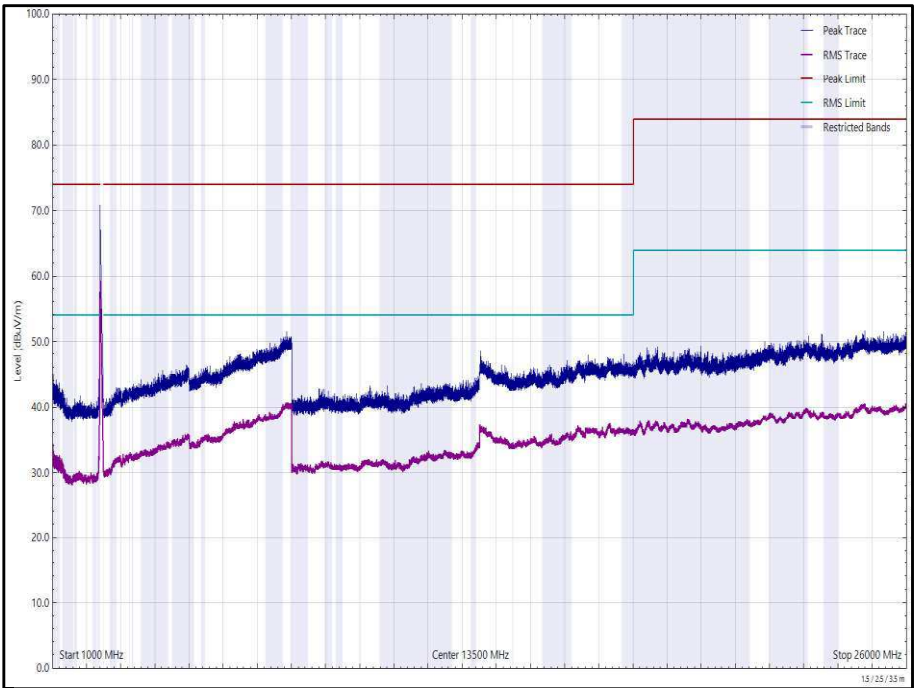


Figure 50 - 2412 MHz (CH1), HT20, CDD, Core 0 + Core 1, 1 GHz to 26 GHz, Horizontal

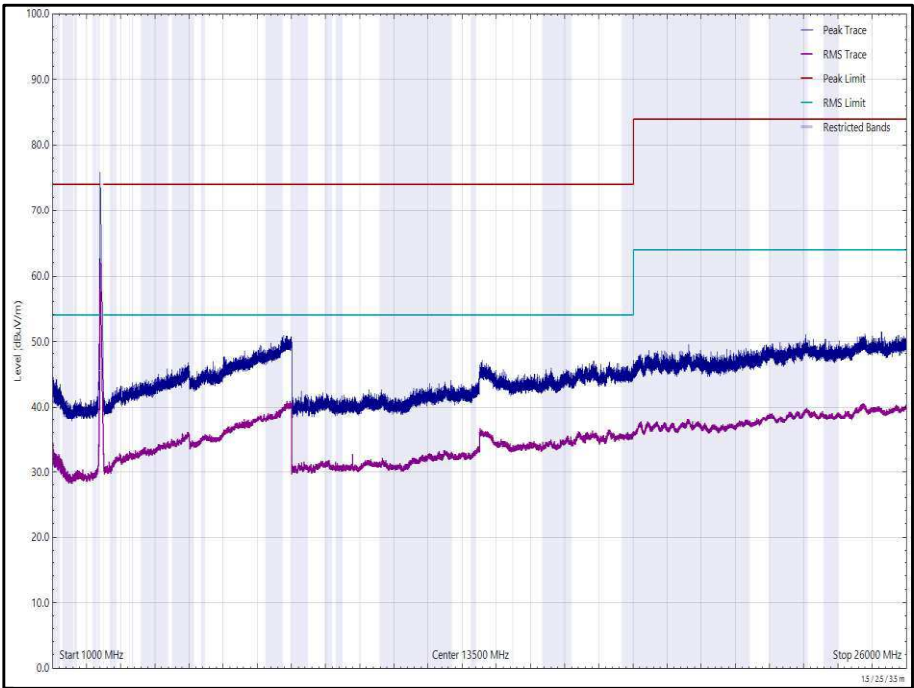


Figure 51 - 2412 MHz (CH1), HT20, CDD, Core 0 + Core 1, 1 GHz to 26 GHz, Vertical

Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
73.798	26.8	40.0	-13.2	Q-Peak	360	232	Horizontal
73.804	27.9	40.0	-12.1	Q-Peak	111	273	Vertical
110.011	35.1	43.5	-8.4	Q-Peak	105	100	Vertical
129.007	30.9	43.5	-12.6	Q-Peak	163	287	Horizontal
245.336	31.0	46.0	-15.0	Q-Peak	21	139	Horizontal

Table 64 - 2437 MHz (CH6), HT20, CDD, Core 0 + Core 1, 30 MHz to 26 GHz

No other emissions found within 6 dB of the limit.

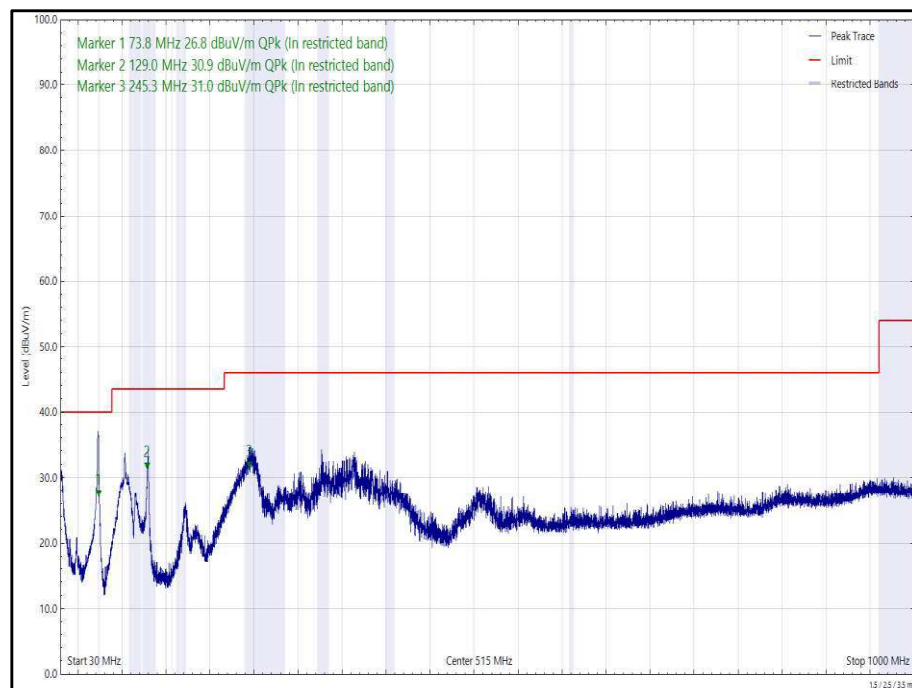


Figure 52 - 2437 MHz (CH6), HT20, CDD, Core 0 + Core 1, 30 MHz to 1 GHz, Horizontal (Peak)

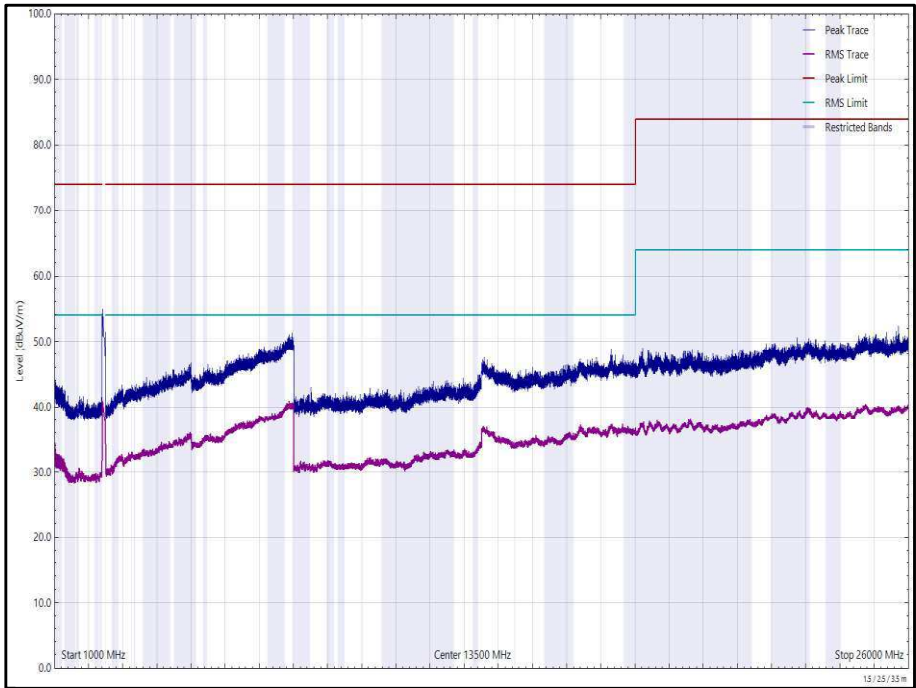


Figure 53 - 2437 MHz (CH6), HT20, CDD, Core 0 + Core 1, 1 GHz to 26 GHz, Horizontal

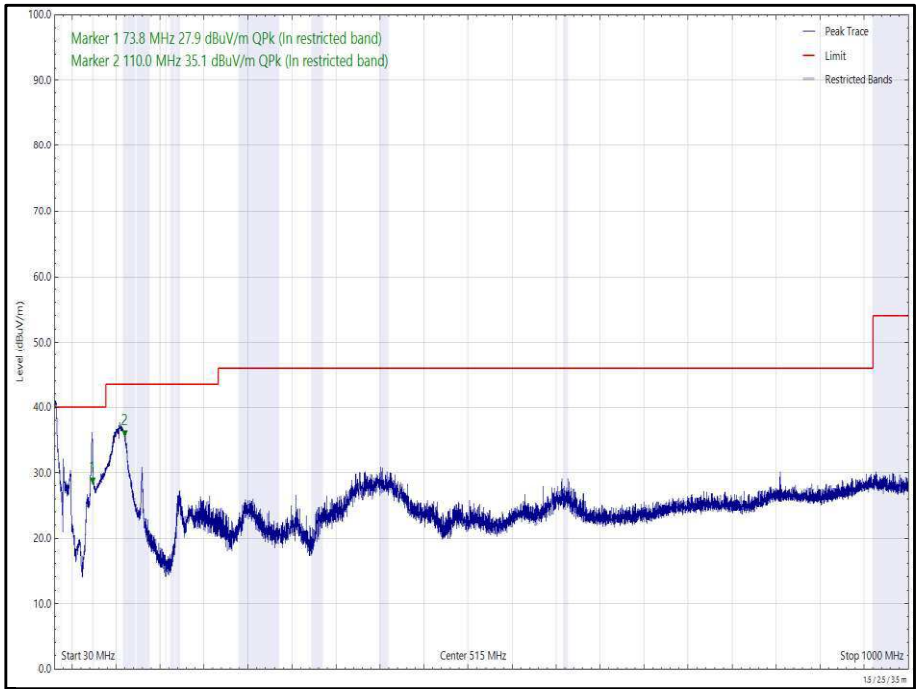


Figure 54 - 2437 MHz (CH6), HT20, CDD, Core 0 + Core 1, 30 MHz to 1 GHz, Vertical (Peak)

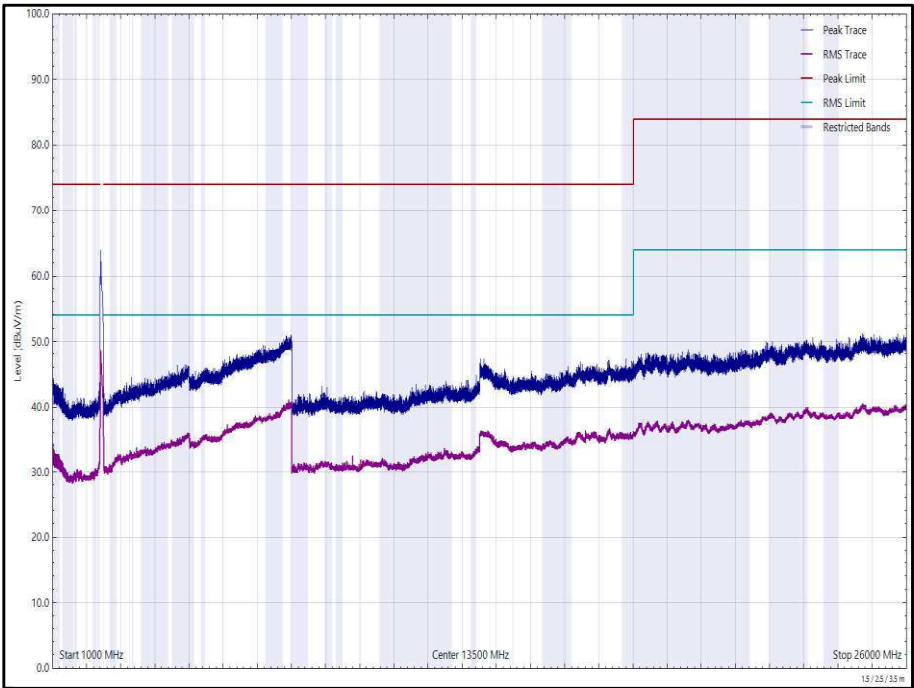


Figure 55 - 2437 MHz (CH6), HT20, CDD, Core 0 + Core 1, 1 GHz to 26 GHz, Vertical

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

Table 65 - 2472 MHz (CH13), HT20, CDD, Core 0 + Core 1, 1 GHz to 26 GHz

*No emissions found within 6 dB of the limit.

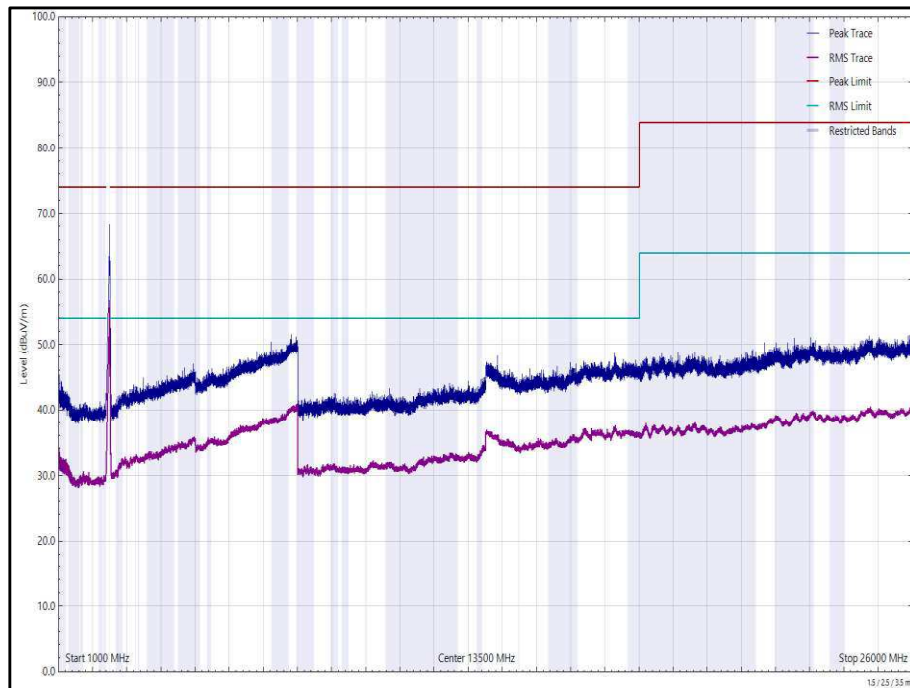


Figure 56 - 2472 MHz (CH13), HT20, CDD, Core 0 + Core 1, 1 GHz to 26 GHz, Horizontal

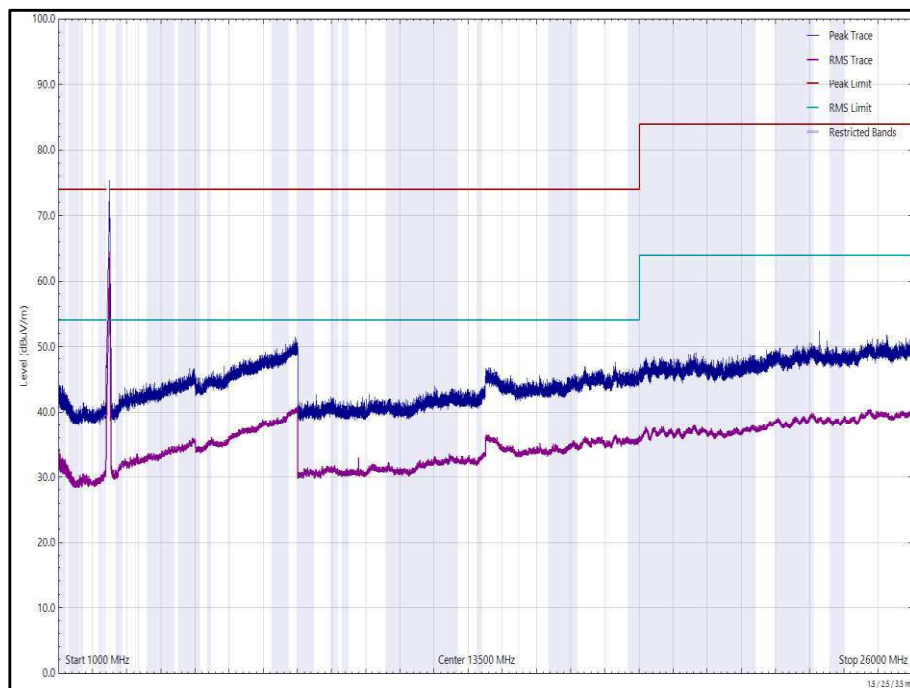


Figure 57 - 2472 MHz (CH13), HT20, CDD, Core 0 + Core 1, 1 GHz to 26 GHz, Vertical



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

Table 66 - 2412 MHz (CH1), 802.11g, Core 0, 1 GHz to 26 GHz

*No emissions found within 6 dB of the limit.

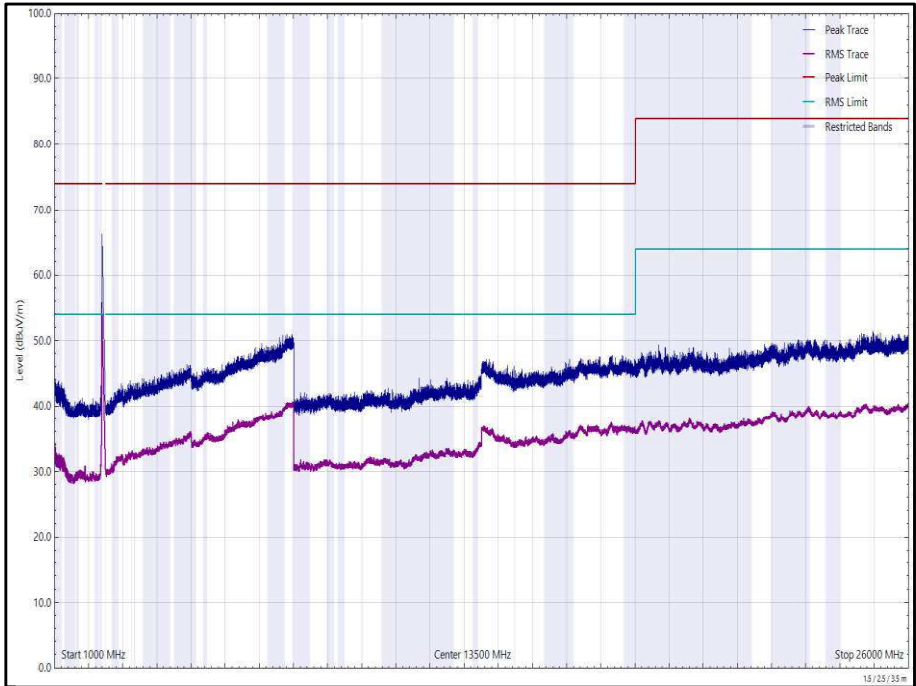


Figure 58 - 2412 MHz (CH1), 802.11g, Core 0, 1 GHz to 26 GHz, Horizontal

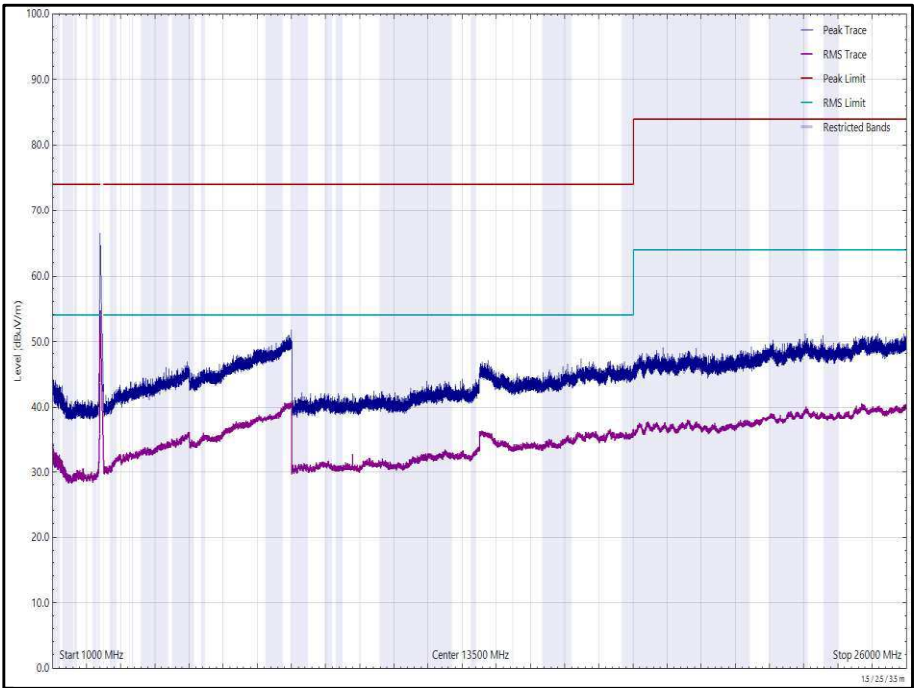


Figure 59 - 2412 MHz (CH1), 802.11g, Core 0, 1 GHz to 26 GHz, Vertical



Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
73.800	29.1	40.0	-10.9	Q-Peak	124	264	Vertical
73.803	28.4	40.0	-11.6	Q-Peak	360	249	Horizontal
110.875	35.0	43.5	-8.5	Q-Peak	122	100	Vertical
128.886	30.2	43.5	-13.4	Q-Peak	107	101	Vertical
129.480	31.2	43.5	-12.3	Q-Peak	168	272	Horizontal
248.946	29.6	46.0	-16.4	Q-Peak	18	100	Horizontal

Table 67 - 2437 MHz (CH6), 802.11g, Core 0, 30 MHz to 26 GHz

No other emissions found within 6 dB of the limit.

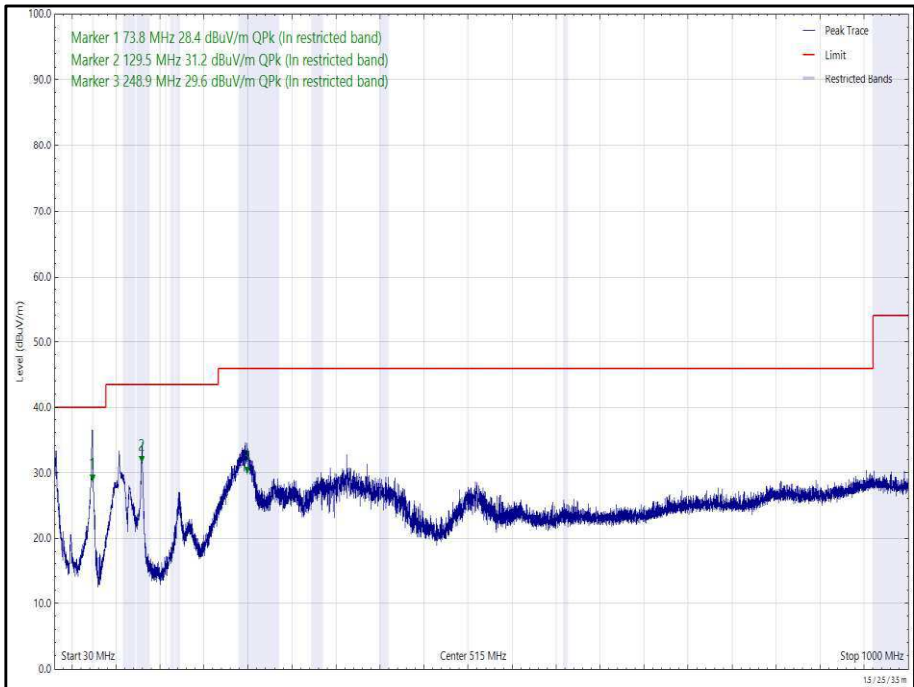


Figure 60 - 2437 MHz (CH6), 802.11g, Core 0, 30 MHz to 1 GHz, Horizontal (Peak)

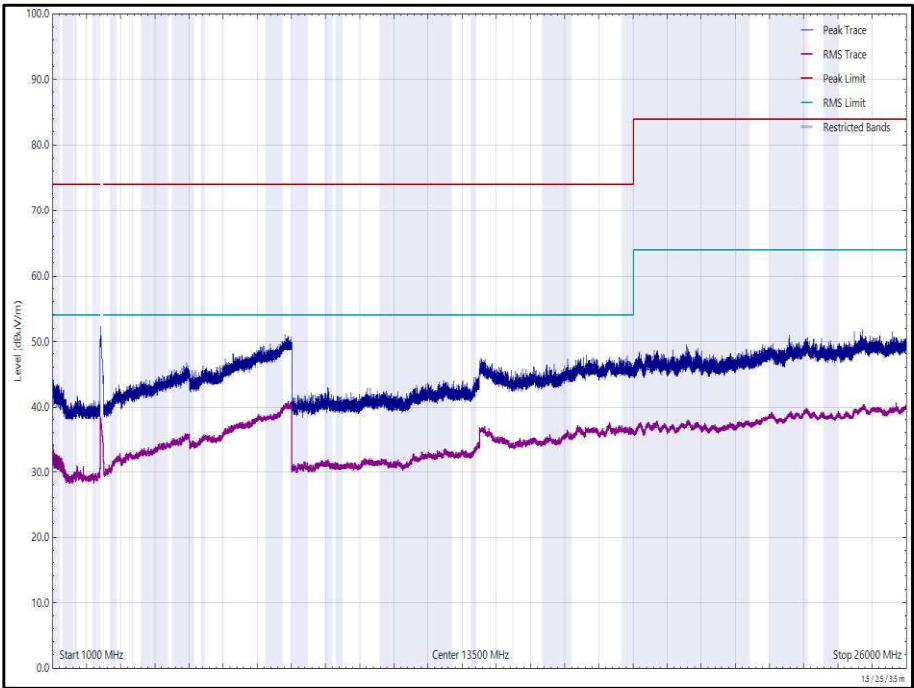


Figure 61 - 2437 MHz (CH6), 802.11g, Core 0, 1 GHz to 26 GHz, Horizontal

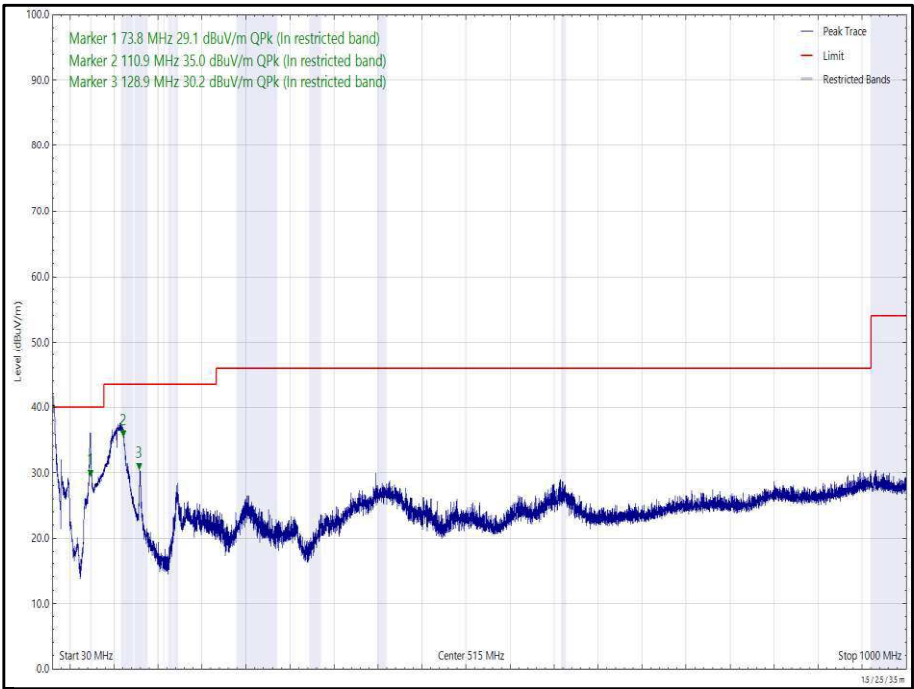


Figure 62 - 2437 MHz (CH6), 802.11g, Core 0, 30 MHz to 1 GHz, Vertical (Peak)

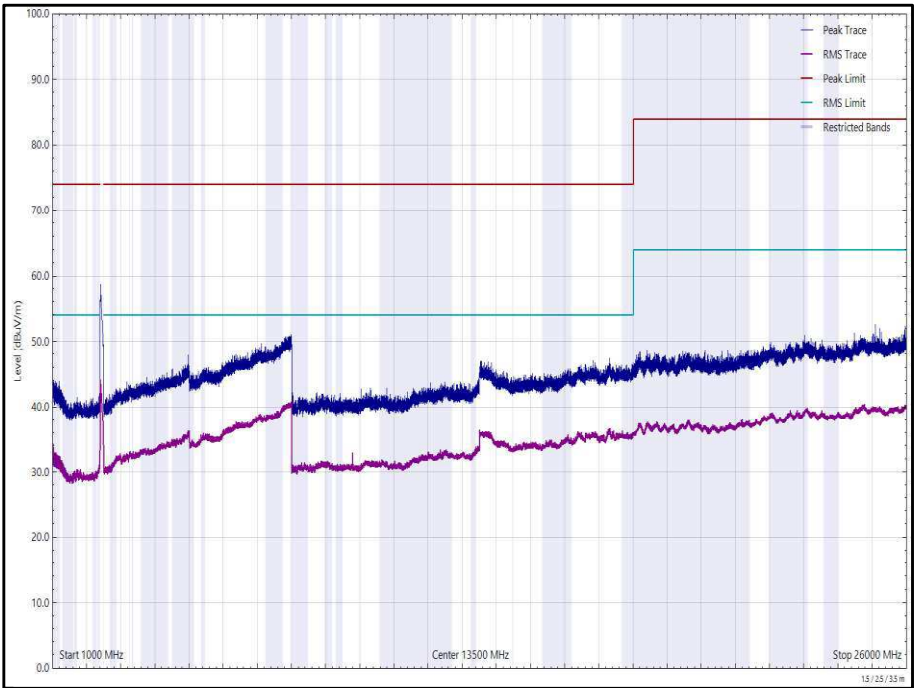


Figure 63 - 2437 MHz (CH6), 802.11g, Core 0, 1 GHz to 26 GHz, Vertical



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

Table 68 - 2472 MHz (CH13), 802.11g, Core 0, 1 GHz to 26 GHz

*No emissions found within 6 dB of the limit.

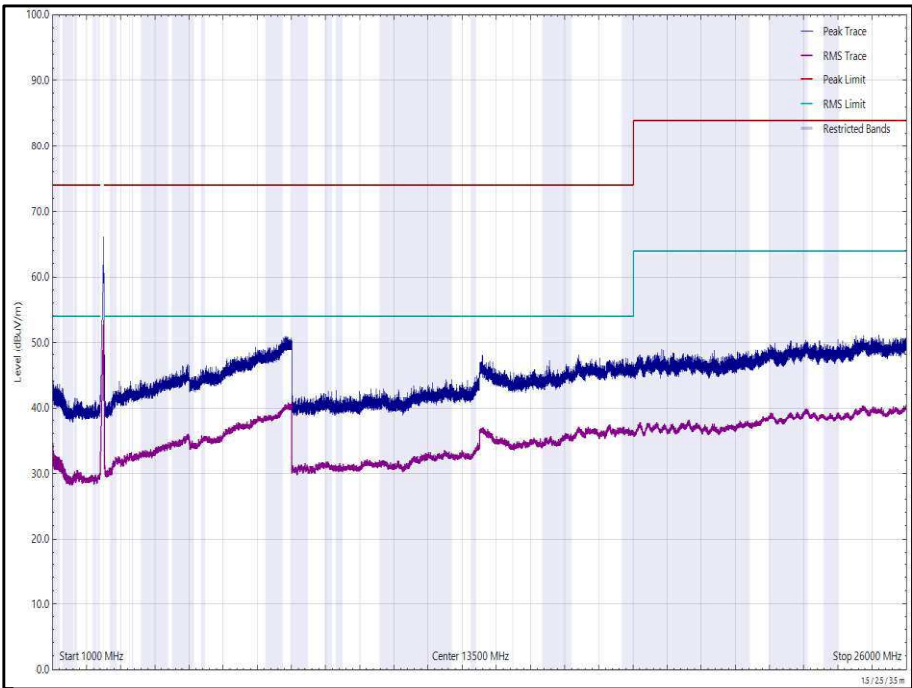


Figure 64 - 2472 MHz (CH13), 802.11g, Core 0, 1 GHz to 26 GHz, Horizontal

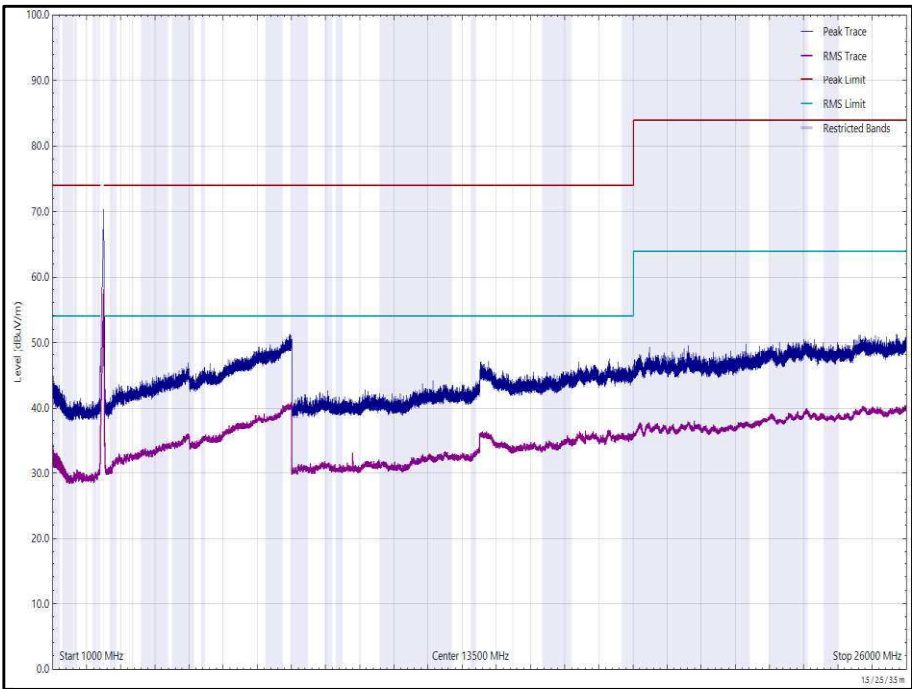


Figure 65 - 2472 MHz (CH13), 802.11g, Core 0, 1 GHz to 26 GHz, Vertical



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

Table 69 - 2412 MHz (CH1), 802.11g, Core 1, 1 GHz to 26 GHz

*No emissions found within 6 dB of the limit.

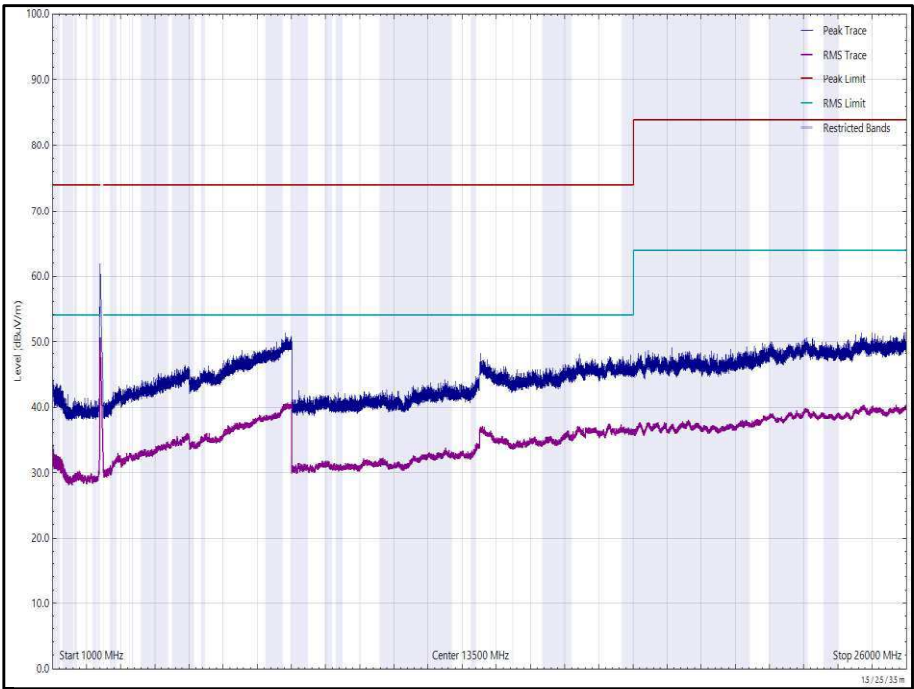


Figure 66 - 2412 MHz (CH1), 802.11g, Core 1, 1 GHz to 26 GHz, Horizontal

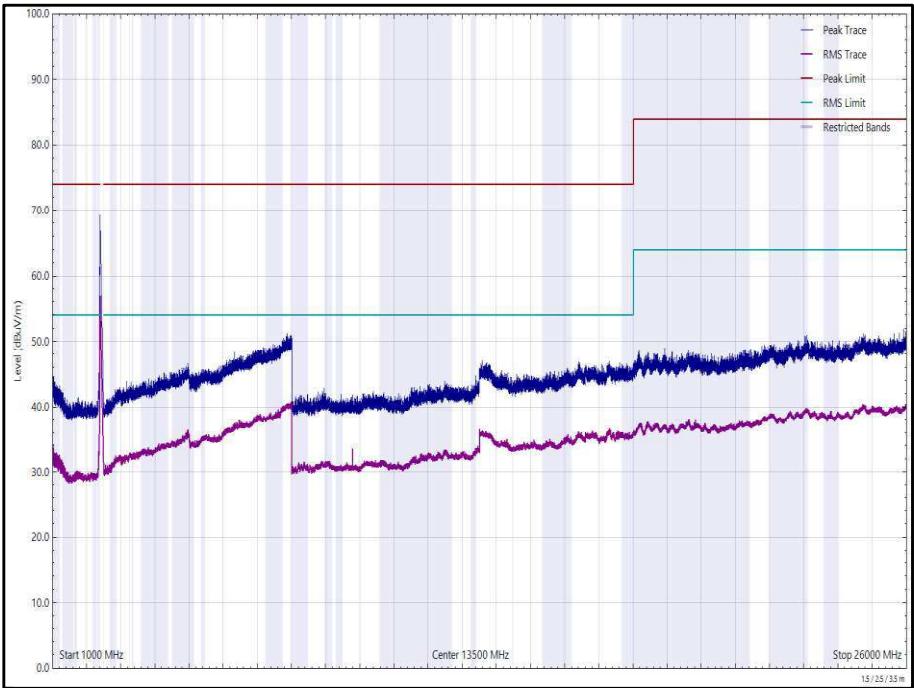


Figure 67 - 2412 MHz (CH1), 802.11g, Core 1, 1 GHz to 26 GHz, Vertical



Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
73.635	27.6	40.0	-12.4	Q-Peak	360	391	Horizontal
73.797	28.3	40.0	-11.7	Q-Peak	115	274	Vertical
110.699	31.6	43.5	-12.0	Q-Peak	102	100	Vertical
129.965	33.3	43.5	-10.2	Q-Peak	172	284	Horizontal
130.266	31.1	43.5	-12.4	Q-Peak	127	100	Vertical
246.357	30.5	46.0	-15.5	Q-Peak	26	106	Horizontal

Table 70 - 2437 MHz (CH6), 802.11g, Core 1, 1 GHz to 26 GHz

No other emissions found within 6 dB of the limit.

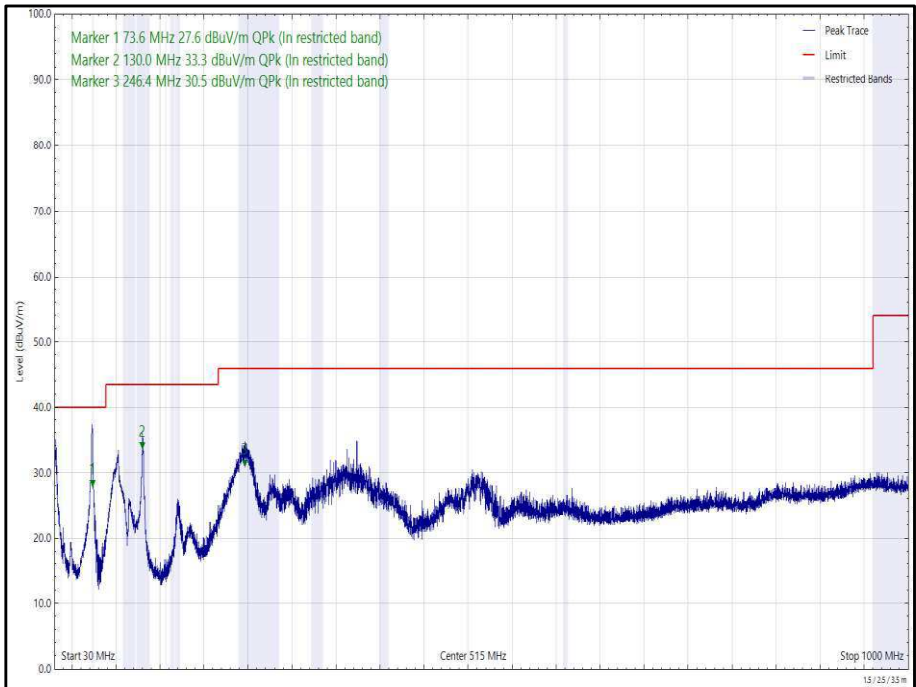


Figure 68 - 2437 MHz (CH6), 802.11g, Core 1, 30 MHz to 1 GHz, Horizontal (Peak)

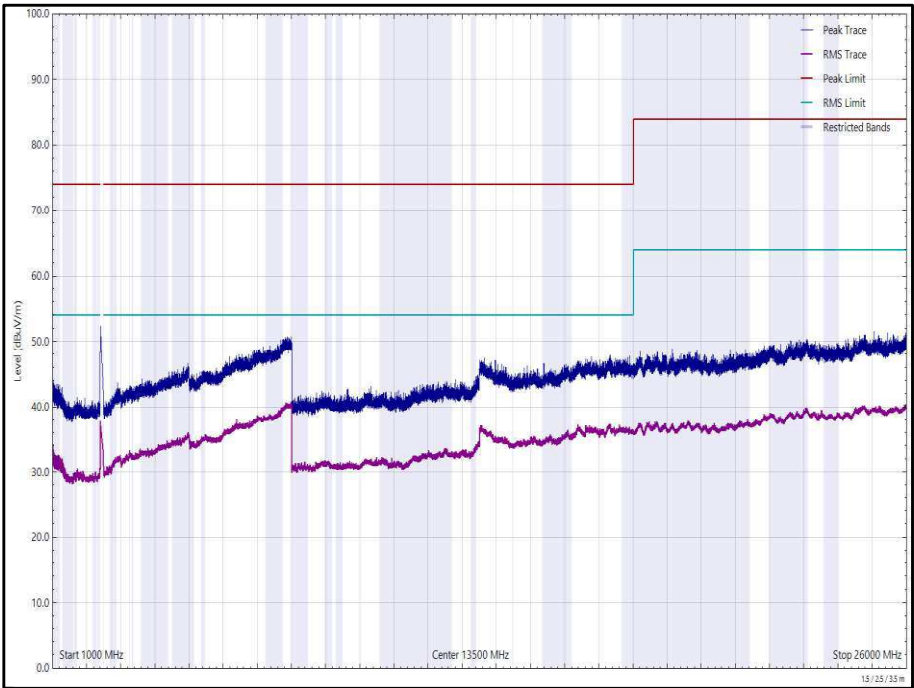


Figure 69 - 2437 MHz (CH6), 802.11g, Core 1, 1 GHz to 26 GHz, Horizontal

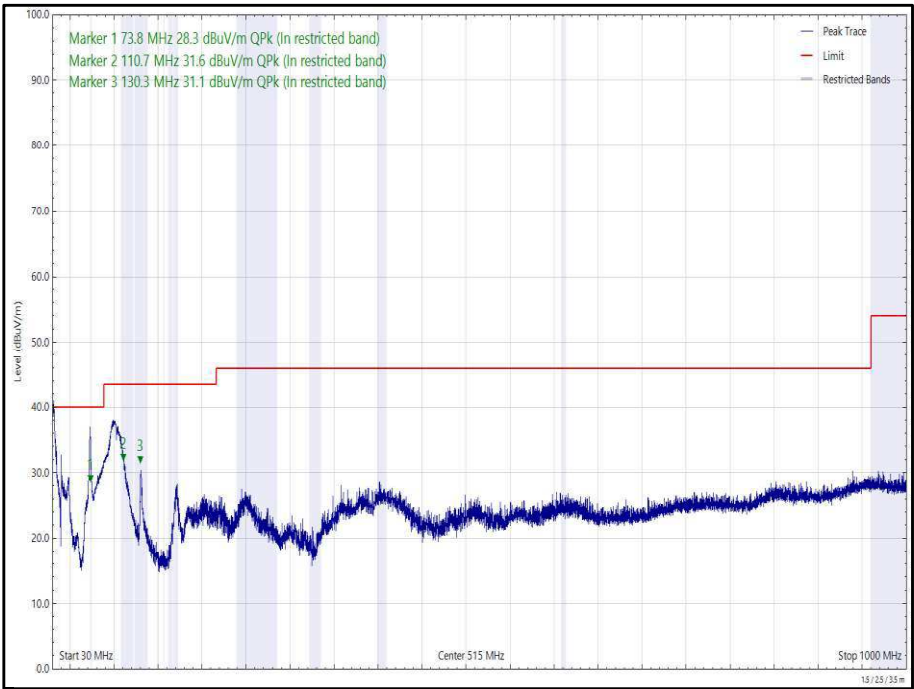


Figure 70 - 2437 MHz (CH6), 802.11g, Core 1, 30 MHz to 1 GHz, Vertical (Peak)

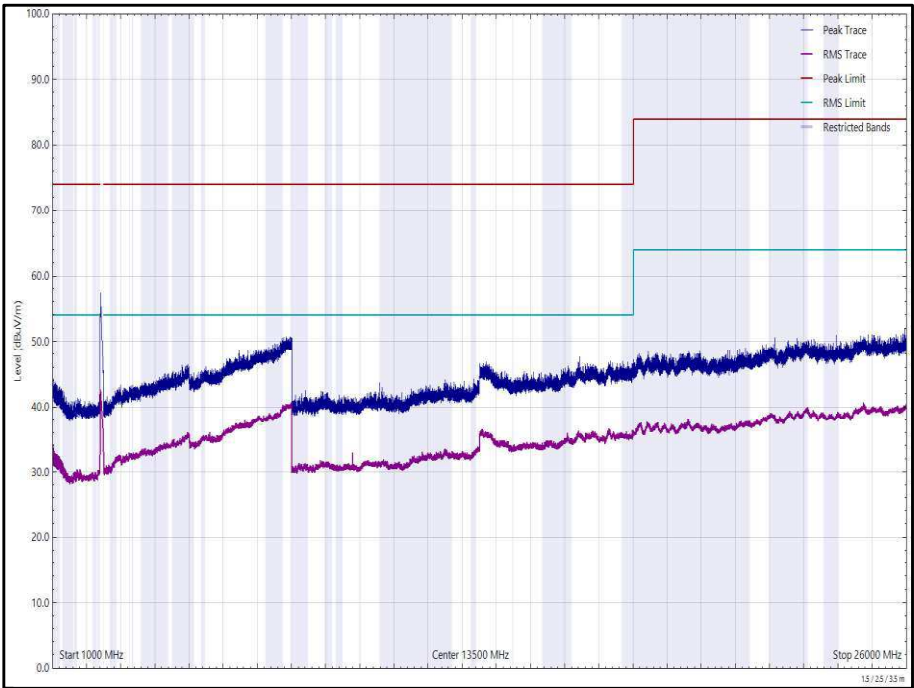


Figure 71 - 2437 MHz (CH6), 802.11g, Core 1, 1 GHz to 26 GHz, Vertical



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

Table 71 - 2472 MHz (CH13), 802.11g, Core 1, 1 GHz to 26 GHz

*No emissions found within 6 dB of the limit.

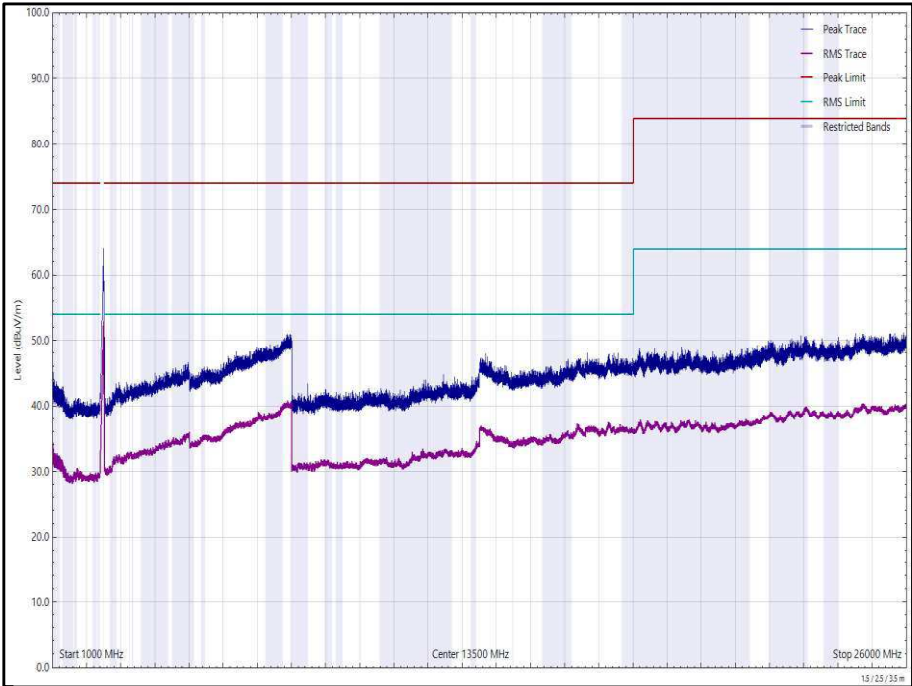


Figure 72 - 2472 MHz (CH13), 802.11g, Core 1, 1 GHz to 26 GHz, Horizontal

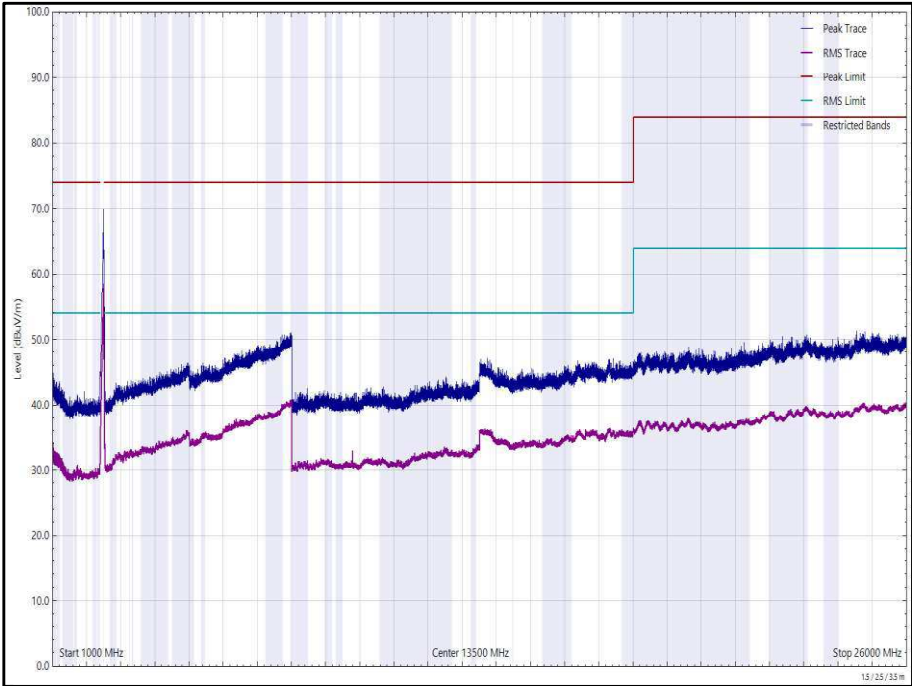


Figure 73 - 2472 MHz (CH13), 802.11g, Core 1, 1 GHz to 26 GHz, Vertical



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

Table 72 - 2412 MHz (CH1), 802.11b, Core 0, 1 GHz to 26 GHz

*No emissions found within 6 dB of the limit.

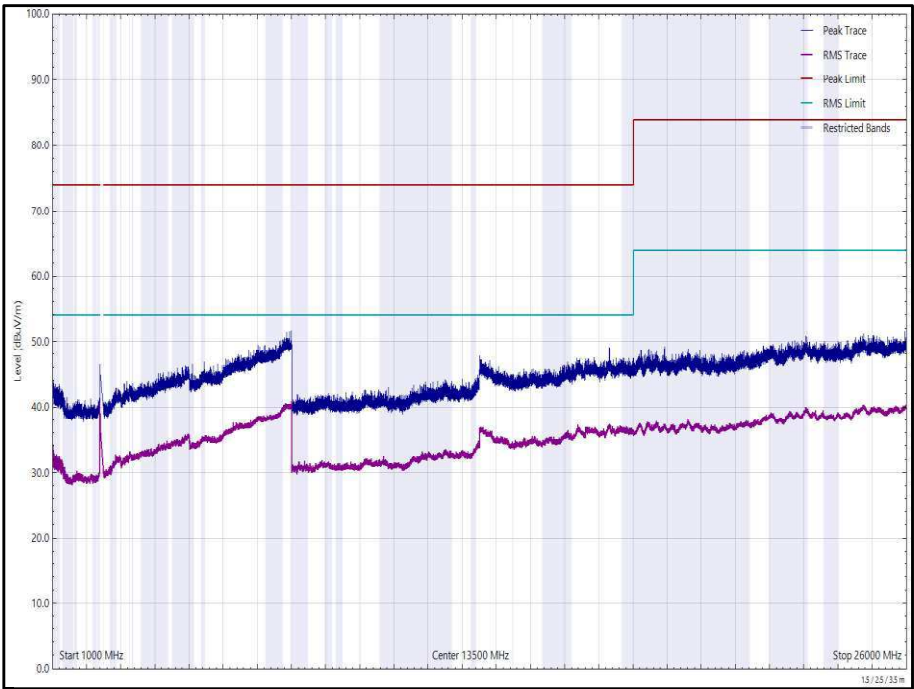


Figure 74 - 2412 MHz (CH1), 802.11b, Core 0, 1 GHz to 26 GHz, Horizontal

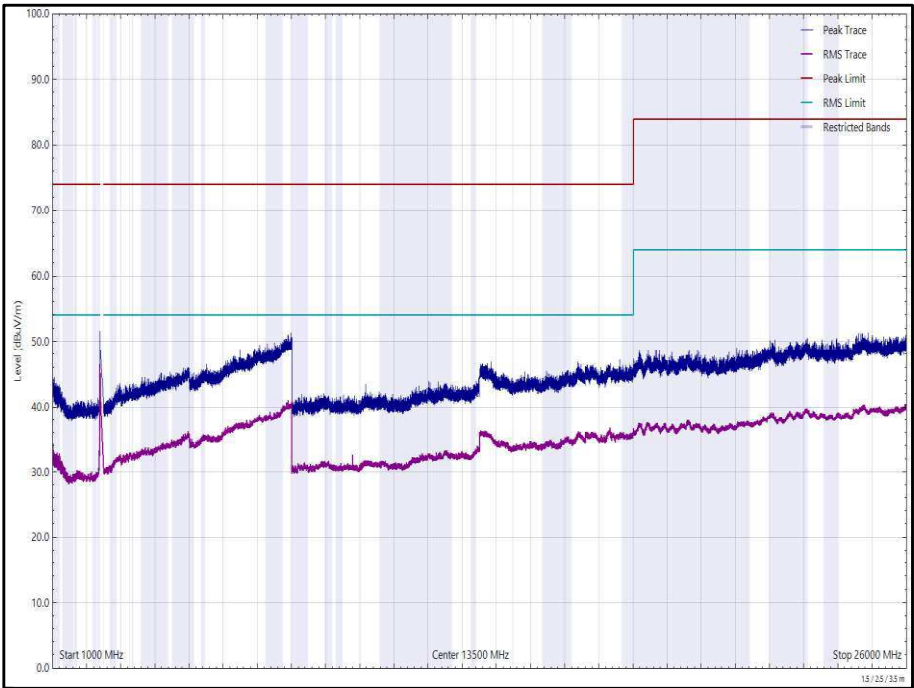


Figure 75 - 2412 MHz (CH1), 802.11b, Core 0, 1 GHz to 26 GHz, Vertical

Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
73.802	28.7	40.0	-11.3	Q-Peak	267	108	Vertical
111.083	33.1	43.5	-10.4	Q-Peak	106	105	Vertical
114.567	34.8	43.5	-8.7	Q-Peak	141	238	Horizontal
164.526	23.0	43.5	-20.6	Q-Peak	258	225	Horizontal
164.592	25.8	43.5	-17.7	Q-Peak	242	100	Vertical
246.766	27.3	46.0	-18.7	Q-Peak	16	165	Horizontal

Table 73 - 2437 MHz (CH6), 802.11b, Core 0, 1 GHz to 26 GHz

No other emissions found within 6 dB of the limit.

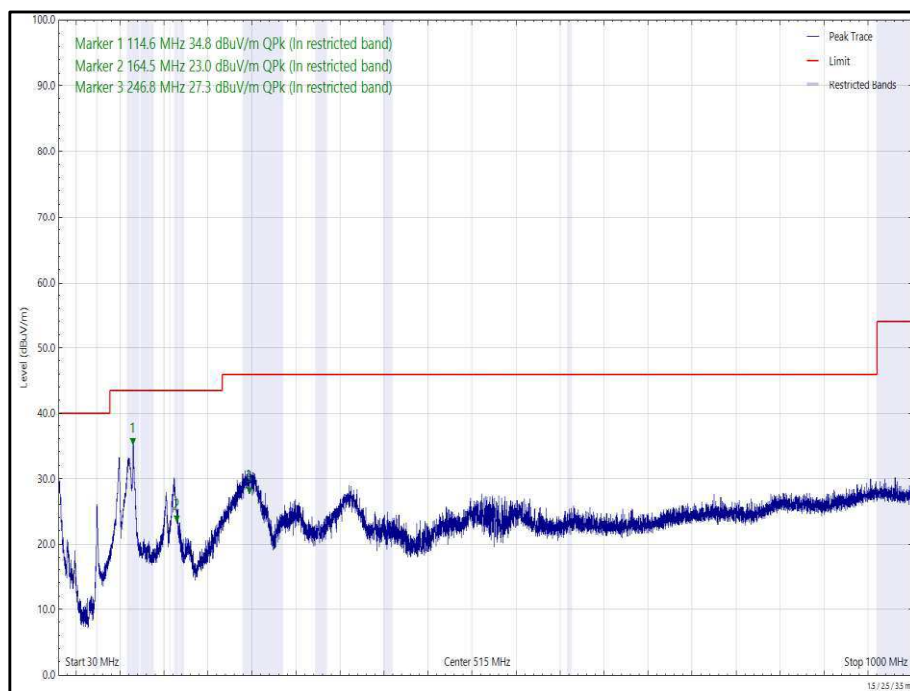


Figure 76 - 2437 MHz (CH6), 802.11b, Core 0, 30 MHz to 1 GHz, Horizontal (Peak)

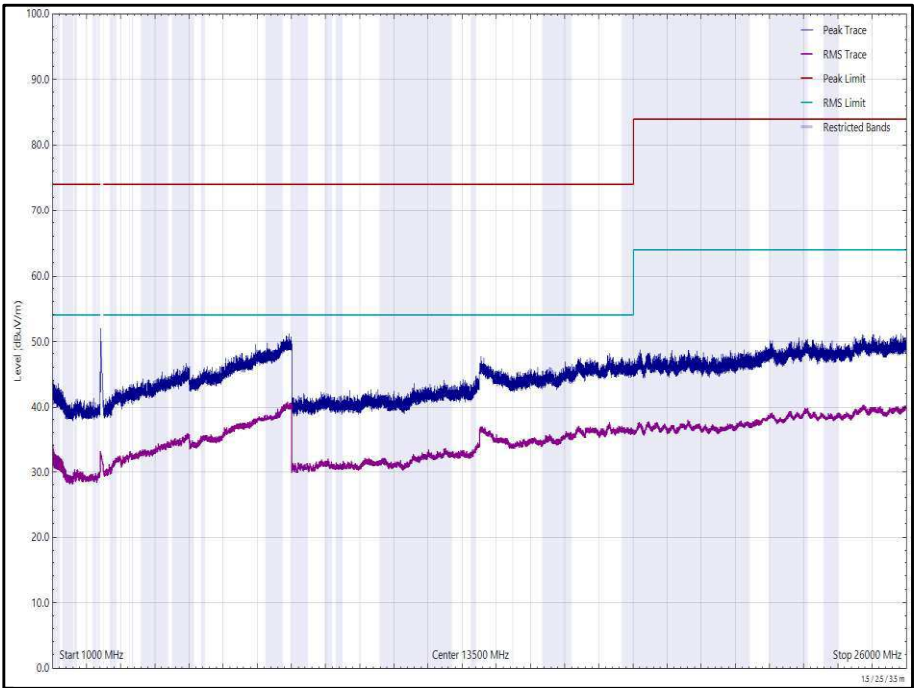


Figure 77 - 2437 MHz (CH6), 802.11b, Core 0, 1 GHz to 26 GHz, Horizontal

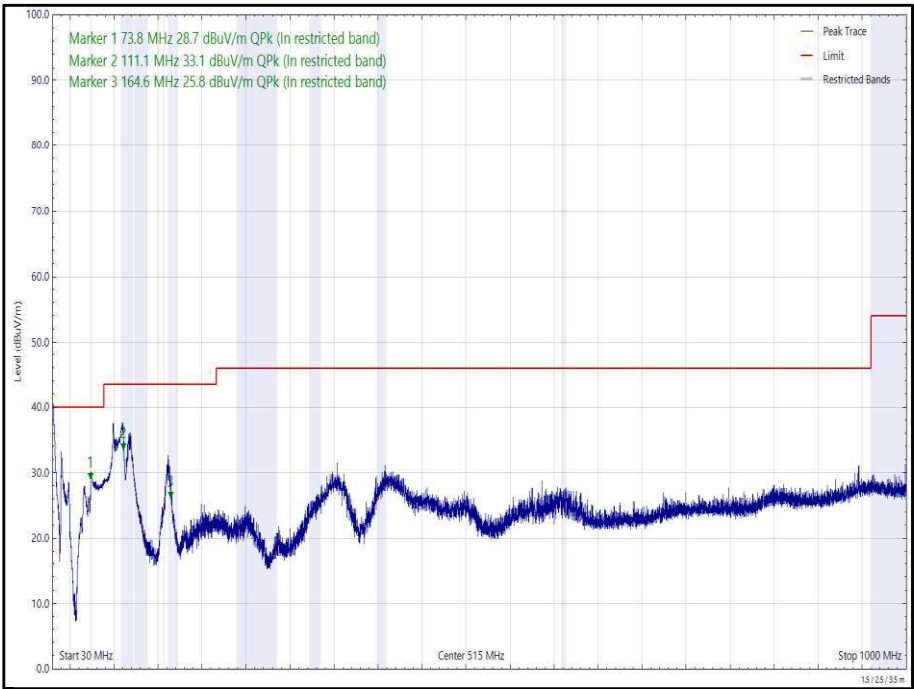


Figure 78 - 2437 MHz (CH6), 802.11b, Core 0, 30 MHz to 1 GHz, Vertical (Peak)

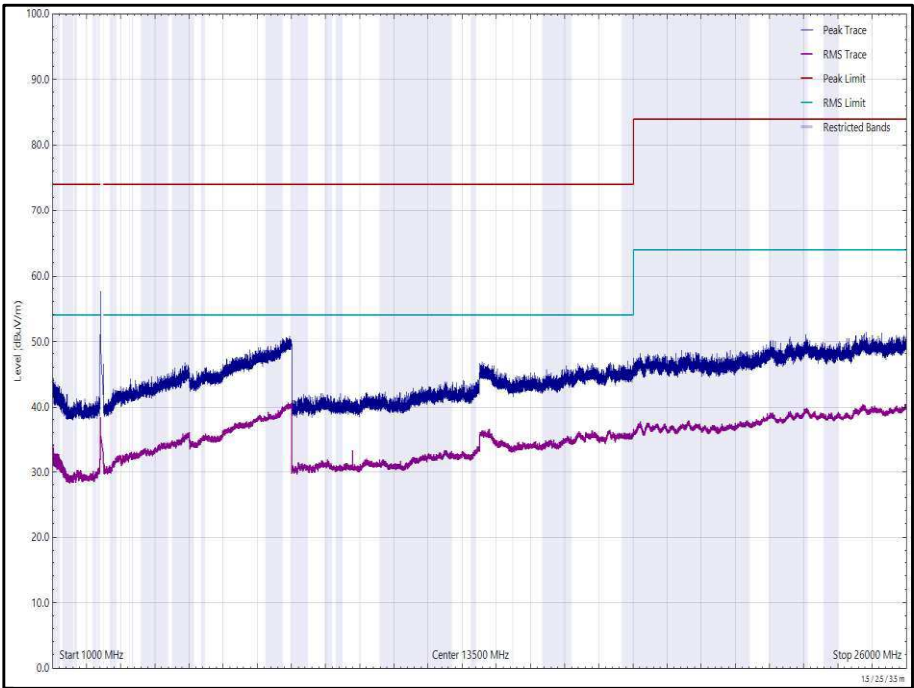


Figure 79 - 2437 MHz (CH6), 802.11b, Core 0, 1 GHz to 26 GHz, Vertical



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

Table 74 - 2472 MHz (CH13), 802.11b, Core 0, 1 GHz to 26 GHz

*No emissions found within 6 dB of the limit.

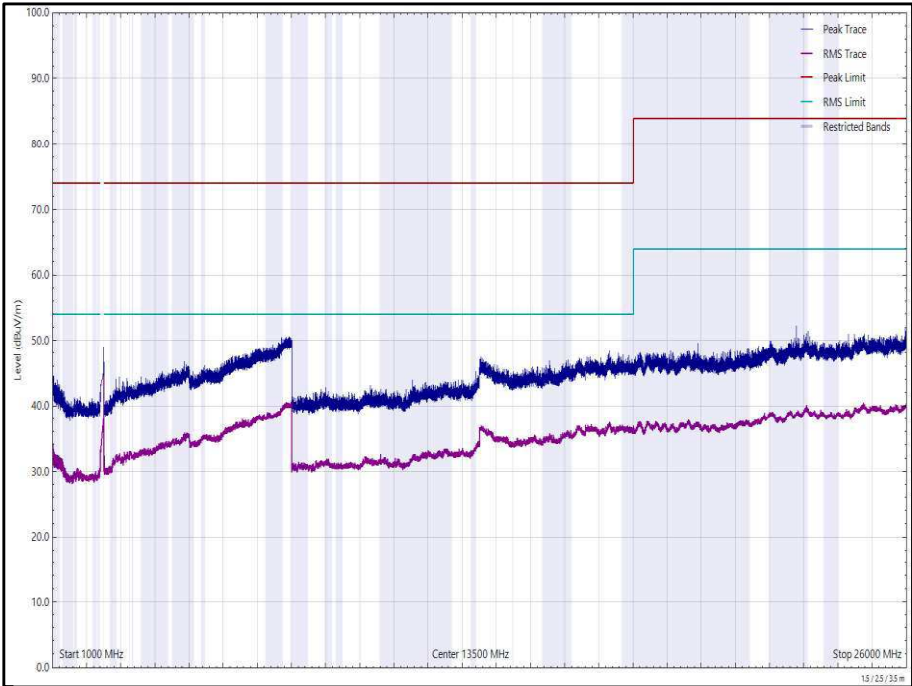


Figure 80 - 2472 MHz (CH13), 802.11b, Core 0, 1 GHz to 26 GHz, Horizontal

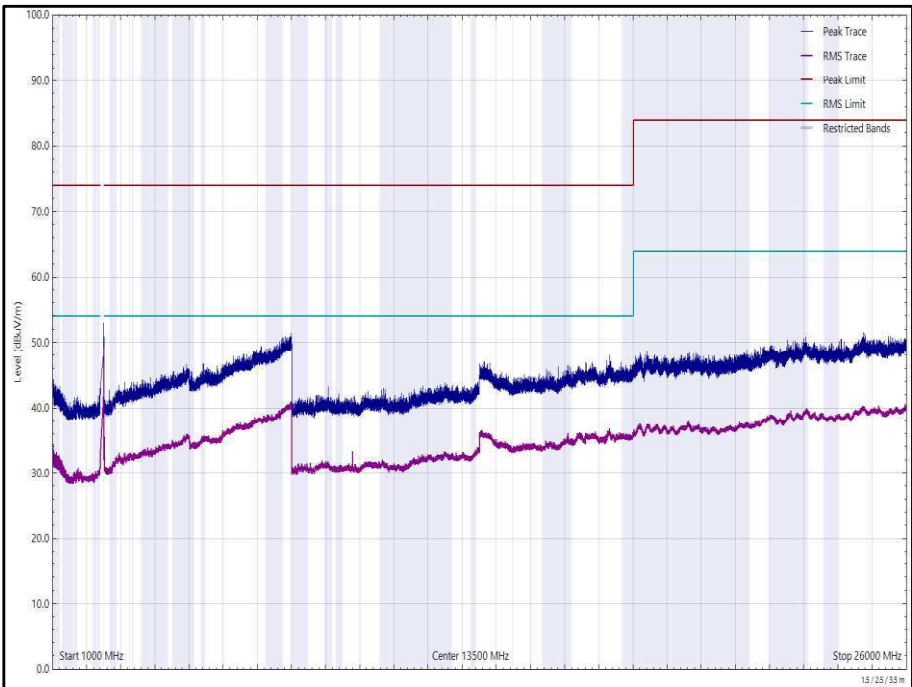


Figure 81 - 2472 MHz (CH13), 802.11b, Core 0, 1 GHz to 26 GHz, Vertical



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

Table 75 - 2412 MHz (CH1), 802.11b, Core 1, 1 GHz to 26 GHz

*No emissions found within 6 dB of the limit.

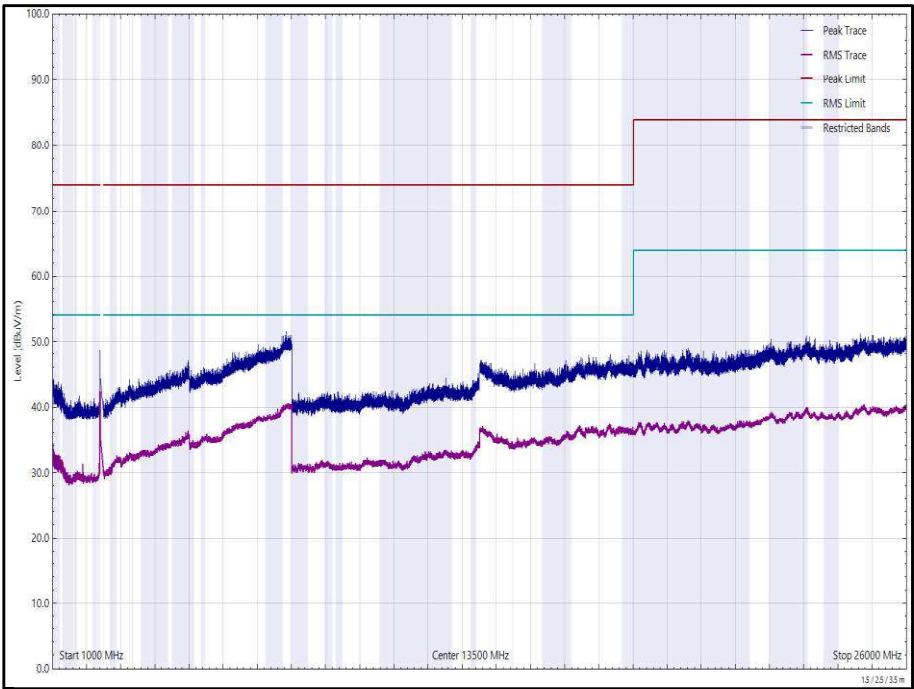


Figure 82 - 2412 MHz (CH1), 802.11b, Core 1, 1 GHz to 26 GHz, Horizontal

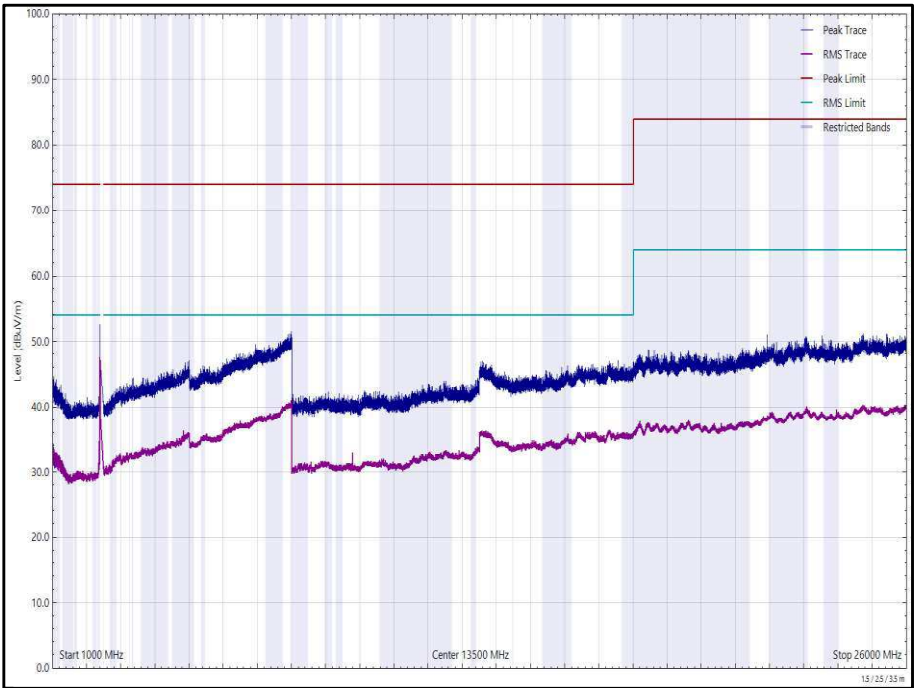


Figure 83 - 2412 MHz (CH1), 802.11b, Core 1, 1 GHz to 26 GHz, Vertical



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

Table 76 - 2437 MHz (CH6), 802.11b, Core 1, 1 GHz to 26 GHz

*No emissions found within 6 dB of the limit.

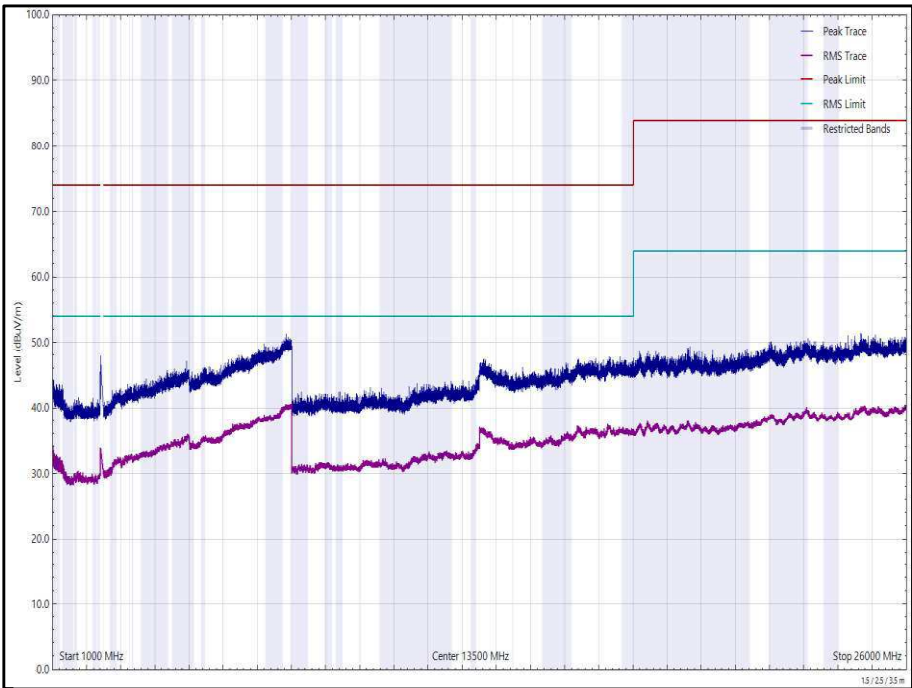


Figure 84 - 2437 MHz (CH6), 802.11b, Core 1, 1 GHz to 26 GHz, Horizontal

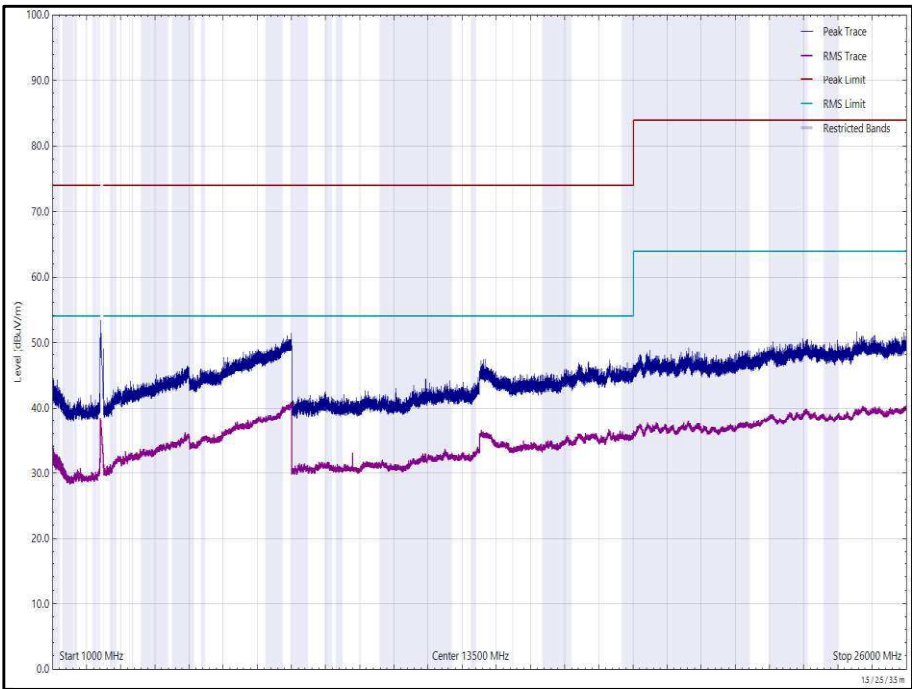


Figure 85 - 2437 MHz (CH6), 802.11b, Core 1, 1 GHz to 26 GHz, Vertical



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

Table 77 - 2472 MHz (CH13), 802.11b, Core 1, 1 GHz to 26 GHz

*No emissions found within 6 dB of the limit.

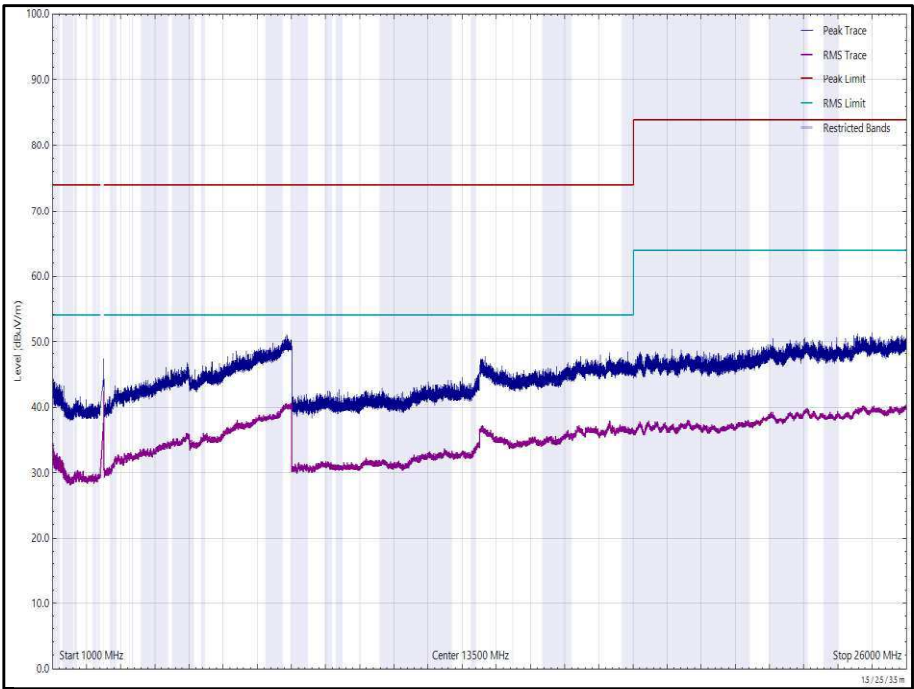


Figure 86 - 2472 MHz (CH13), 802.11b, Core 1, 1 GHz to 26 GHz, Horizontal

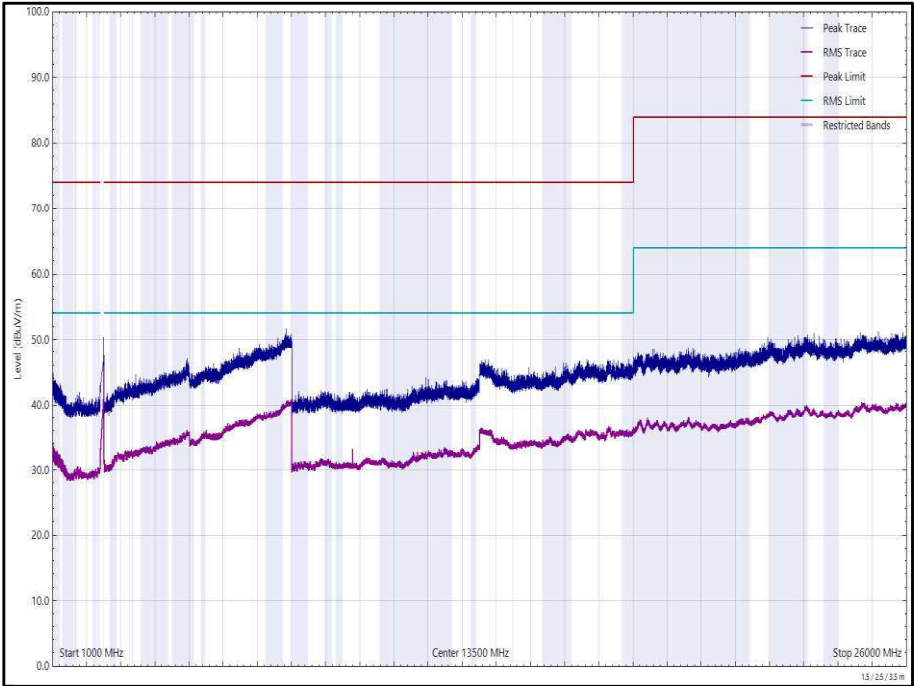


Figure 87 - 2472 MHz (CH13), 802.11b, Core 1, 1 GHz to 26 GHz, Vertical



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

Table 78 - 2412 MHz (CH1), HE20, RU26-0, Core 0 + Core 1, 1 GHz to 26 GHz

*No emissions found within 6 dB of the limit.

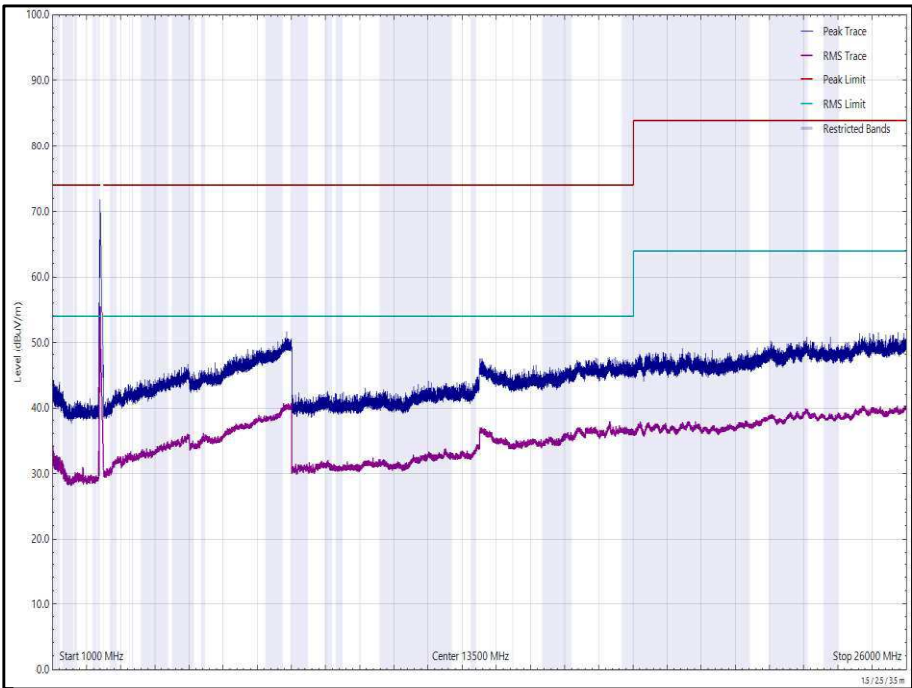


Figure 88 - 2412 MHz (CH1), HE20, RU26-0, Core 0 + Core 1, 1 GHz to 26 GHz, Horizontal

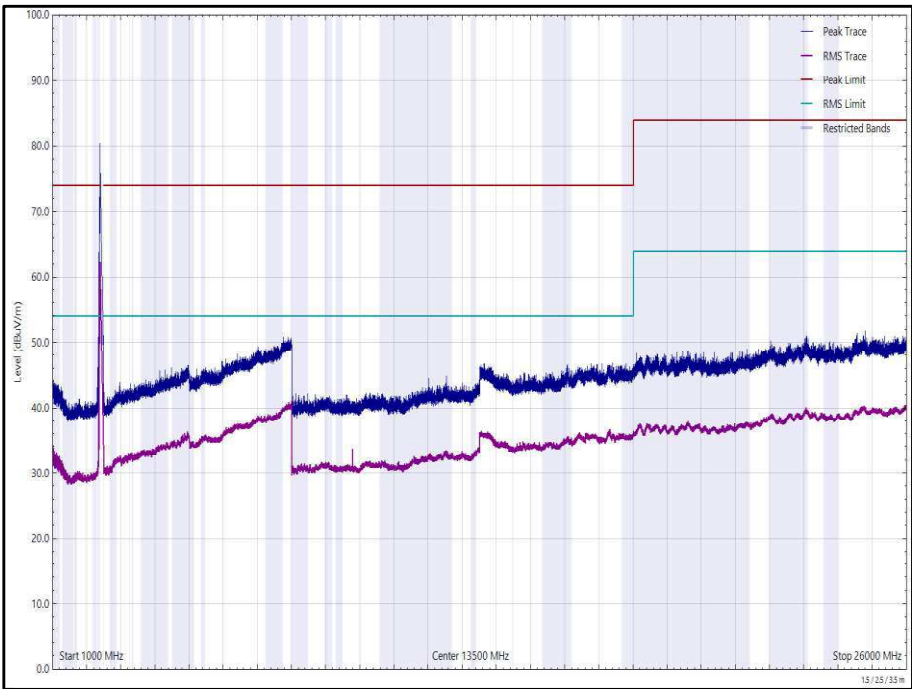


Figure 89 - 2412 MHz (CH1), HE20, RU26-0, Core 0 + Core 1, 1 GHz to 26 GHz, Vertical



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

Table 79 - 2437 MHz (CH6), HE20, RU26-0, Core 0 + Core 1, 1 GHz to 26 GHz

*No emissions found within 6 dB of the limit.

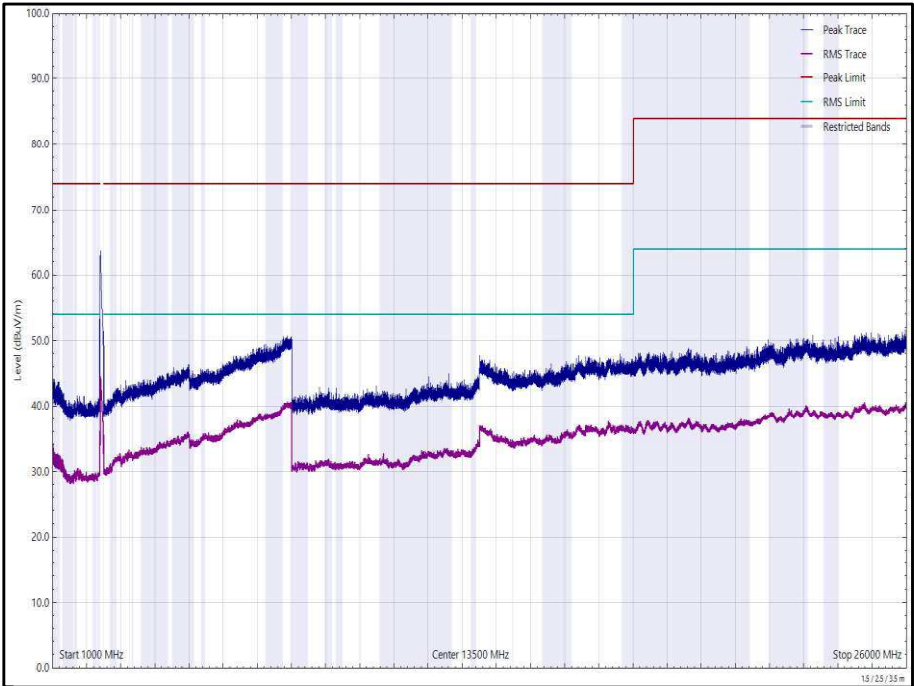


Figure 90 - 2437 MHz (CH6), HE20, RU26-0, Core 0 + Core 1, 1 GHz to 26 GHz, Horizontal

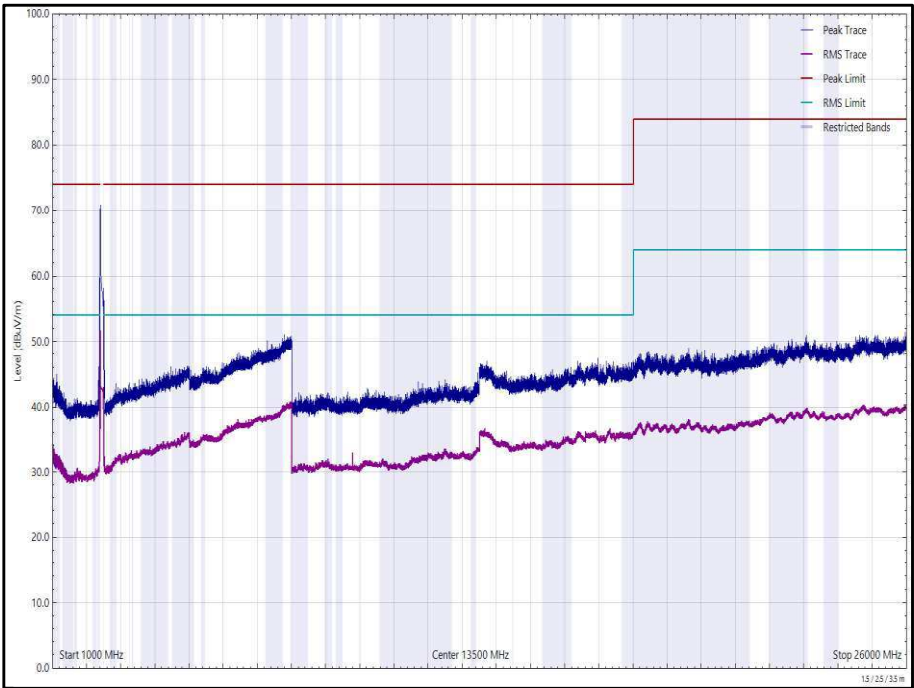


Figure 91 - 2437 MHz (CH6), HE20, RU26-0, Core 0 + Core 1, 1 GHz to 26 GHz, Vertical



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

Table 80 - 2472 MHz (CH13), HE20, RU26-0, Core 0 + Core 1, 1 GHz to 26 GHz

*No emissions found within 6 dB of the limit.

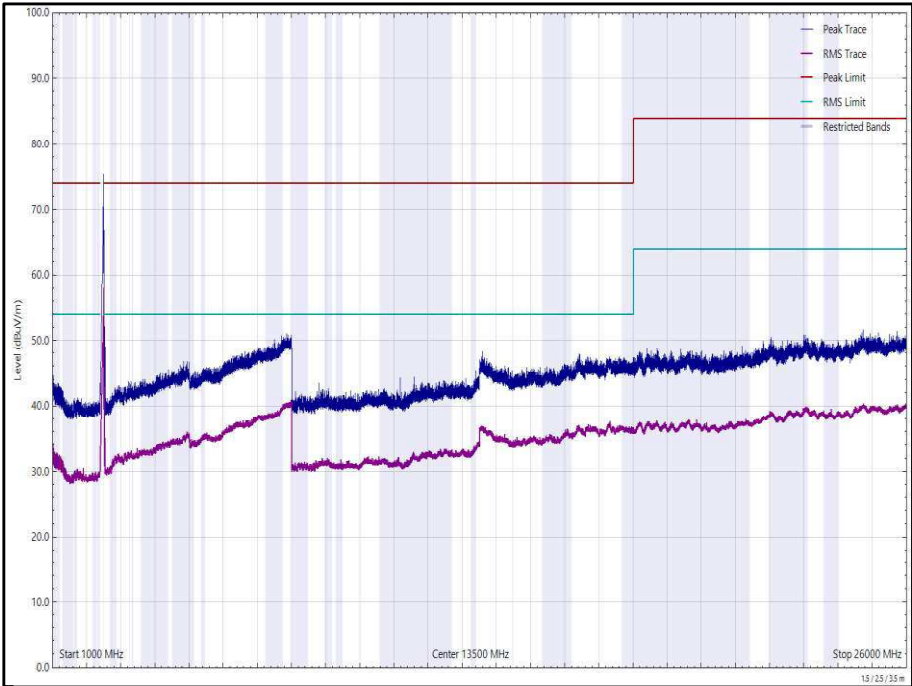


Figure 92 - 2472 MHz (CH13), HE20, RU26-0, Core 0 + Core 1, 1 GHz to 26 GHz, Horizontal

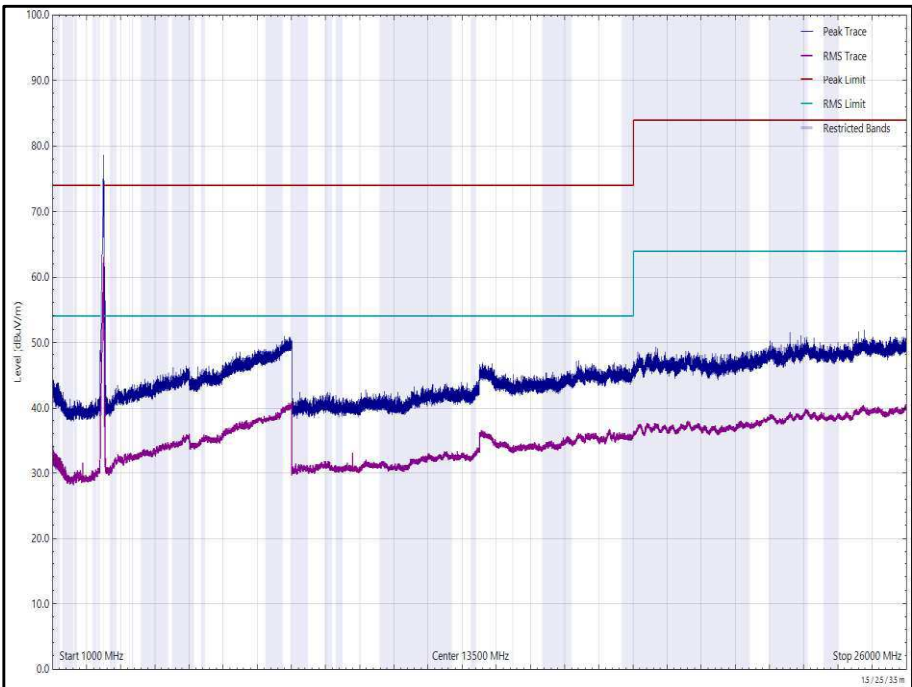


Figure 93 - 2472 MHz (CH13), HE20, RU26-0, Core 0 + Core 1, 1 GHz to 26 GHz, Vertical



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

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB.

Attenuation below the general limits specified in § 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in § 15.205(a), must also comply with the radiated emission limits specified in 15.209(a)

ISED RSS-247, Limit Clause 5.5

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated device is operating, the RF power that is produced shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided that the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of root-mean-square averaging over a time interval, as permitted under Section 5.4(4), the attenuation required shall be 30 dB instead of 20 dB. Attenuation below the general field strength limits specified in RSS-Gen is not required.

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

2.4.8 Test Location and Test Equipment Used

This test was carried out in EMC Chamber 5.

Instrument	Manufacturer	Type No	TE No	Calibration Period (months)	Calibration Expires
LISN	Rohde & Schwarz	ESH3-Z5	1390	12	31-Jan-2023
Screened Room (5)	Rainford	Rainford	1545	36	15-Apr-2024
Turntable Controller	Inn-Co GmbH	CO 1000	1606	-	TU
Programmable Power Supply	Iso-tech	IPS 2010	2437	-	O/P Mon
Multimeter	Fluke	79 Series II	3057	12	23-Aug-2022
Mast Controller	Maturo GmbH	NCD	4810	-	TU
Tilt Antenna Mast	Maturo GmbH	TAM 4.0-P	4811	-	TU
Double Ridge Broadband Horn Antenna	Schwarzbeck	BBHA 9120 B	4848	12	01-Apr-2022
8 - 18 GHz pre amp	Wright Technologies	PS06-0061/PS06-0060	4971	6	09-Nov-2022
Band Reject Filter - 2.425 GHz	Wainwright	WRCGV14-2390-2400-2450-2460-50SS	5067	12	29-Sep-2022



Instrument	Manufacturer	Type No	TE No	Calibration Period (months)	Calibration Expires
Band Reject Filter - 2.4585 GHz	Wainwright	WRCGV14-2423.5-2433.5-2483.5-2493.5-50SS	5069	12	11-Oct-2022
Emissions Software	TUV SUD	EmX V2.1.12	5125	-	Software
Horn Antenna (15-40GHz)	Schwarzbeck	BBHA 9170	5217	12	25-Jan-2023
Preamplifier (30dB 18-40GHz)	Schwarzbeck	BBV 9721	5218	12	25-Jan-2023
3 GHz High pass filter	Wainwright	WHKX12-2580-3000-18000-80SS	5220	12	23-Mar-2023
Preamplifier (30dB 1GHz to 18GHz)	Schwarzbeck	BBV 9718 C	5261	12	08-Apr-2022
Antenna (DRG Horn 7.5-18GHz)	Schwarzbeck	HWRD750	5348	12	15-Oct-2022
1m -SMA Cable	Junkosha	MWX221-01000AMSAMS/A	5513	12	09-Apr-2022
1m -SMA Cable	Junkosha	MWX221-01000AMSAMS/A	5514	12	09-Apr-2022
2m SMA Cable	Junkosha	MWX221-02000AMSAMS/A	5517	12	09-Apr-2022
8m N Type Cable	Junkosha	MWX221-08000NMSNMS/B	5519	12	07-Mar-2023
8m N-Type Cable	Junkosha	MWX221-08000NMSNMS/B	5520	12	24-Mar-2023
Cable (K-Type to K-Type, 2 m)	Junkosha	MWX241-02000KMSKMS/A	5524	12	24-Mar-2022
Cable (K-Type to K-Type, 2 m)	Junkosha	MWX241-02000KMSKMS/A	5524	12	21-Mar-2023
EMI Test Receiver	Rohde & Schwarz	ESW44	5527	12	15-Apr-2022
7 GHz High pass Filter	Wainwright	WHKX12-5850-6800-18000-80SS	5549	12	20-May-2022
1200 MHz Low Pass Filter (01)	Mini-Circuits	VLF-1200+	5559	12	24-May-2022
Thermo-Hygro-Barometer	PCE Instruments	PCE-THB 40	5605	12	23-Sep-2022
Antenna (Bi-Log, 30 MHz to 1 GHz)	Teseq	CBL6111D	5615	24	16-Oct-2022

Table 81



2.5 Authorised Band Edges

2.5.1 Specification Reference

FCC 47 CFR Part 15C, Clause 15.247 (d)
ISED RSS-247, Clause 5.5

2.5.2 Equipment Under Test and Modification State

A2681, S/N: DQH576VJ7N - Modification State 0

2.5.3 Date of Test

08-February-2022 to 08-April-2022

2.5.4 Test Method

The test was performed in accordance with ANSI C63.10, clause 6.10.4.

2.5.5 Environmental Conditions

Ambient Temperature	18.9 - 23.2 °C
Relative Humidity	26.9 - 46.5 %

2.5.6 Test Results

2.4 GHz WLAN

Mode	Data Rate /MCS	Resource size	Resource Index	TX Frequency (MHz)	Band Edge Frequency (MHz)	Level (dBc)
802.11b, Core 0	1 Mbps	-	-	2412	2400	47.23
802.11g, Core 0	54 Mbps	-	-	2412	2400	40.80
802.11n HT20, Core 0	MCS4	-	-	2412	2400	37.22
802.11ax HE20, Core 0	MCS9	SU	-	2412	2400	42.58
802.11ax HE20, Core 0	MCS9	26	0	2412	2400	48.91

Table 82 - SISO Authorised Band Edge Results

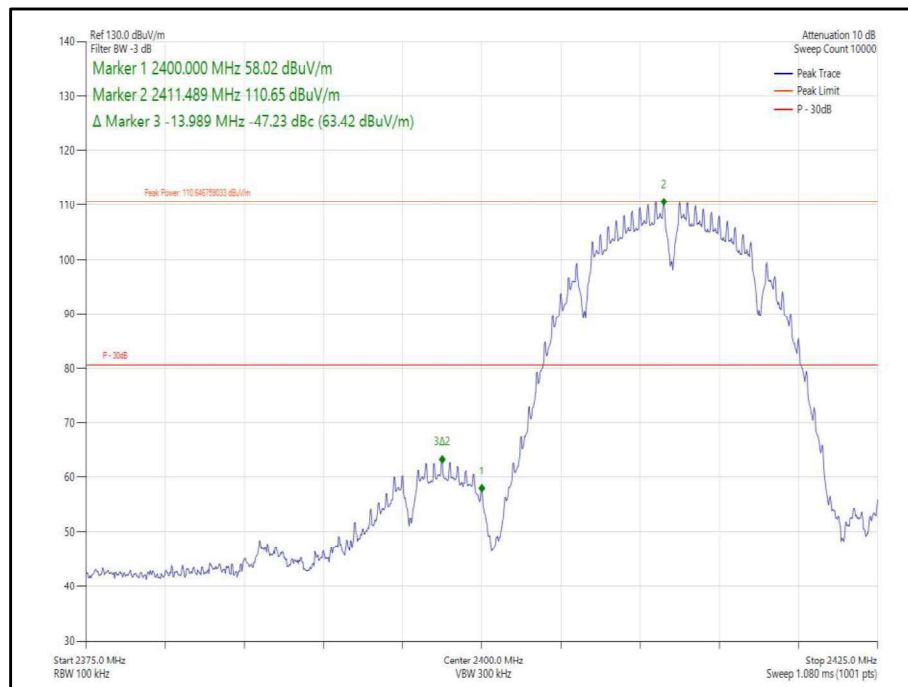


Figure 94 - 802.11b, Core 0 - 2412 MHz
Band Edge Frequency 2400 MHz

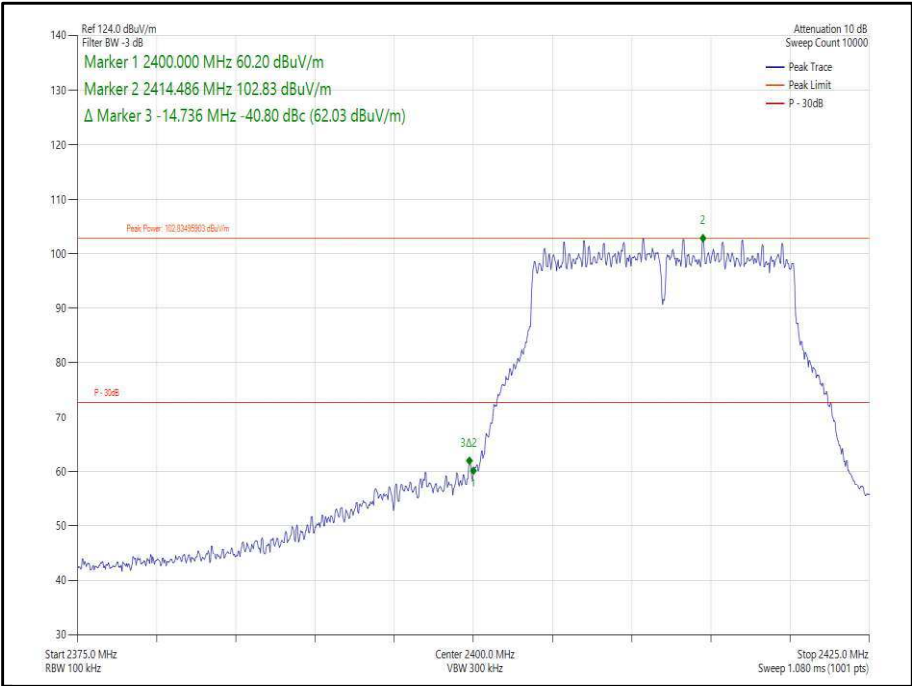


Figure 95- 802.11g, Core 0 - 2412 MHz
Band Edge Frequency 2400 MHz

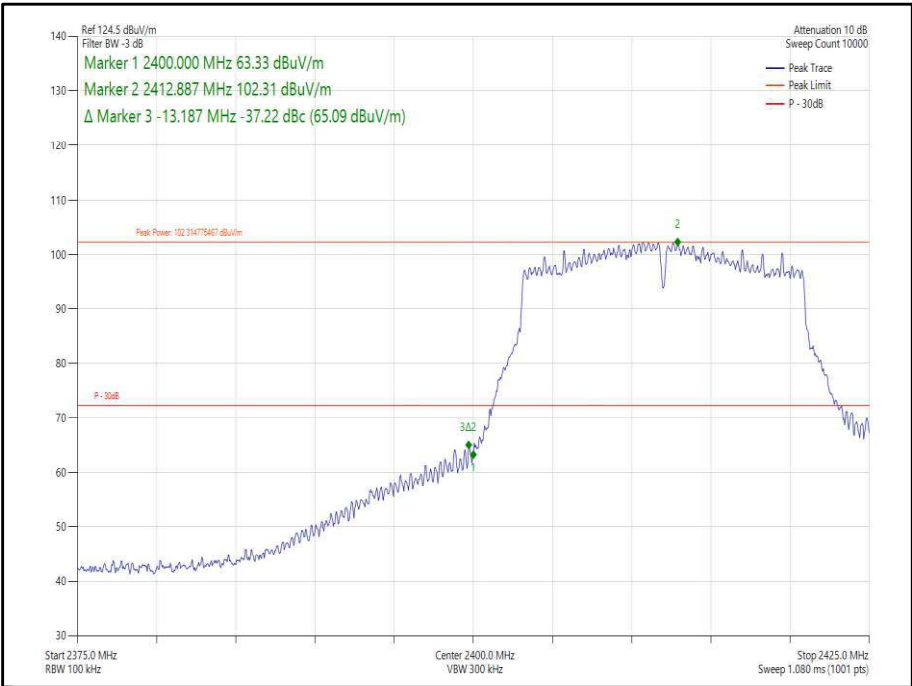


Figure 96- 802.11n HT20, Core 0 - 2412 MHz
Band Edge Frequency 2400 MHz

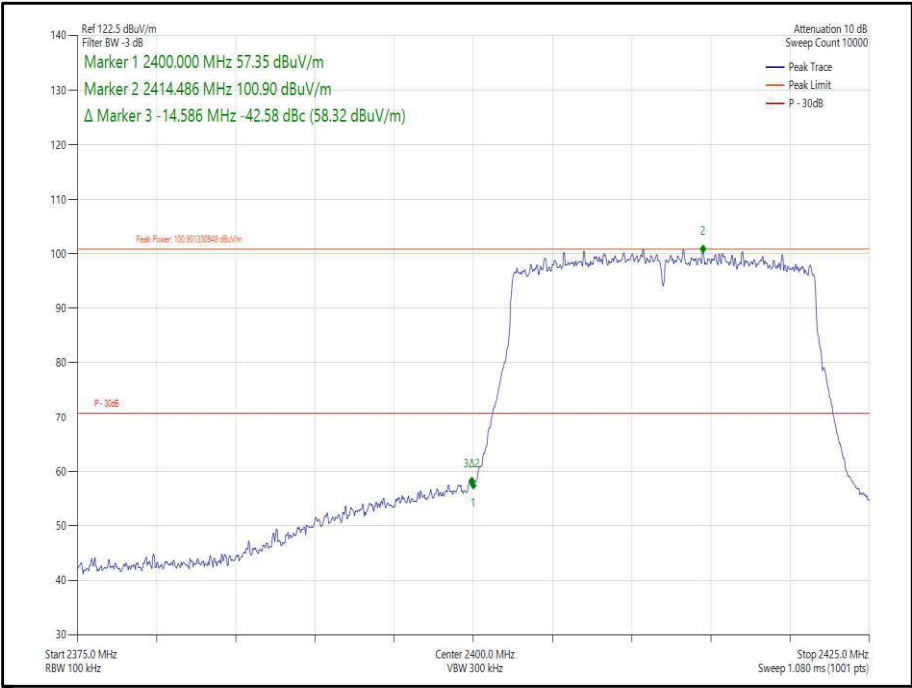


Figure 97- 802.11ax HE20, Core 0, SU - 2412 MHz
Band Edge Frequency 2400 MHz

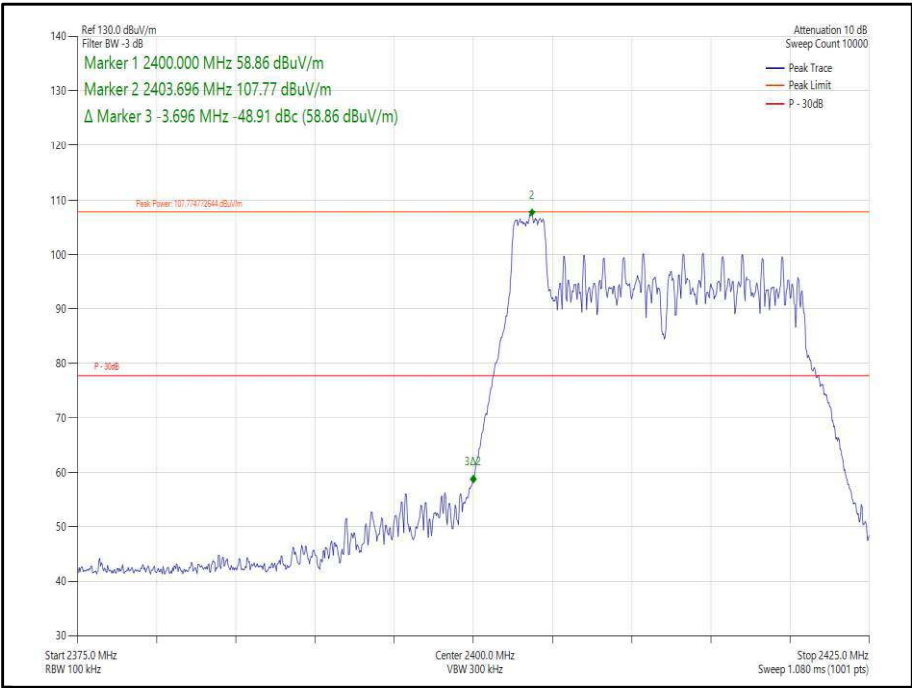


Figure 98- 802.11ax HE20, Core 0, 26-0 - 2412 MHz
Band Edge Frequency 2400 MHz



Mode	Data Rate /MCS	Resource size	Resource Index	TX Frequency (MHz)	Band Edge Frequency (MHz)	Level (dBc)
802.11n HT20, Cores 0-1	MCS4	-	-	2412	2400	41.44
802.11ax HE20, Cores 0 -1	MCS4	SU	-	2412	2400	42.31
802.11ax HE20, Cores 0 -1	MCS9	26	0	2412	2400	49.35

Table 83 - MIMO 2TX Authorised Band Edge Results

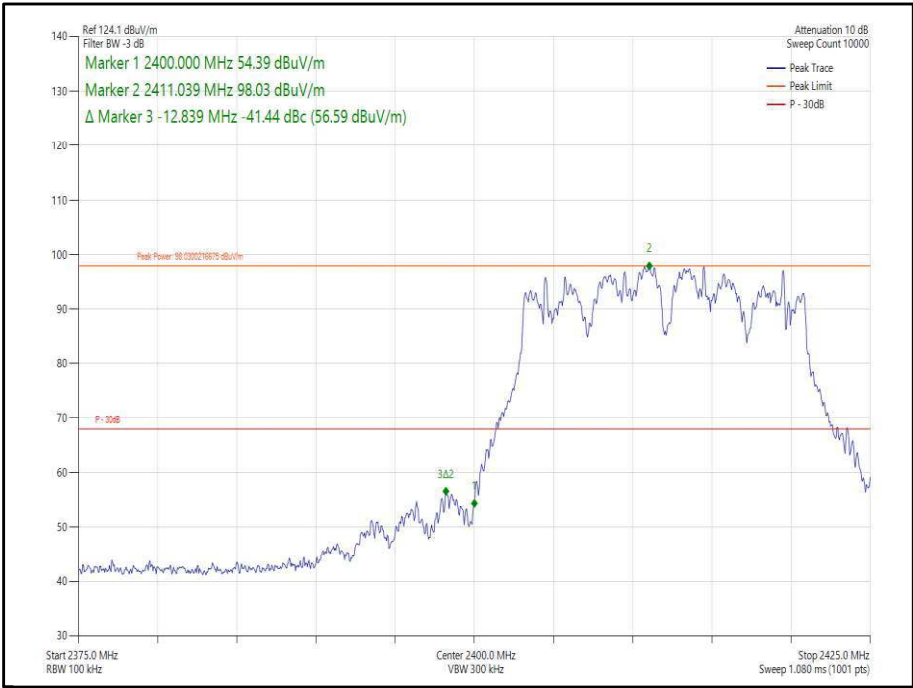


Figure 99 - 802.11n HT20, Cores 0-1 - 2412 MHz
Band Edge Frequency 2400 MHz

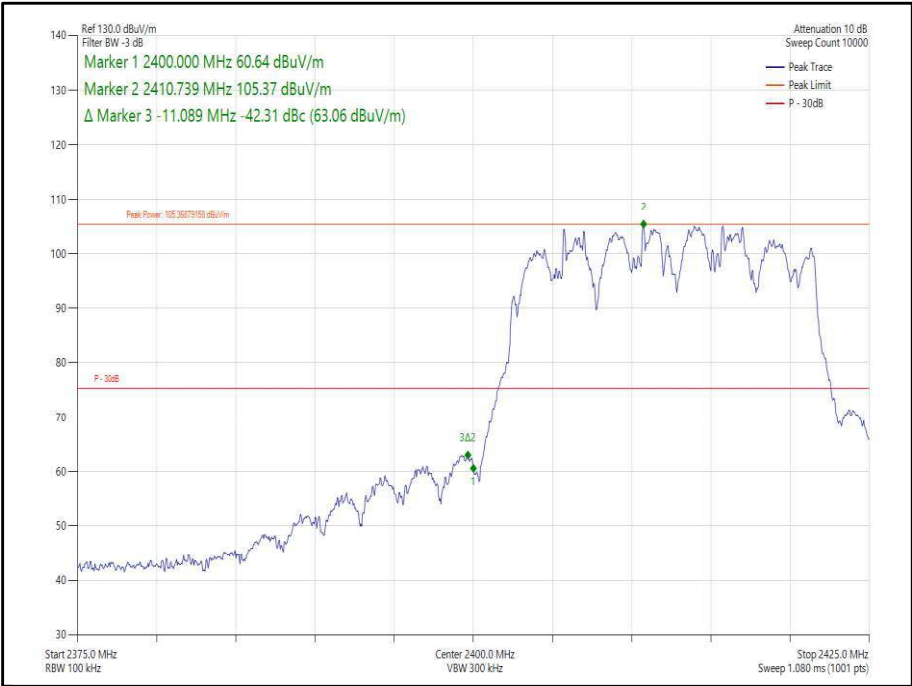


Figure 100- 802.11ax HE20, Cores 0-1, SU - 2412 MHz
Band Edge Frequency 2400 MHz

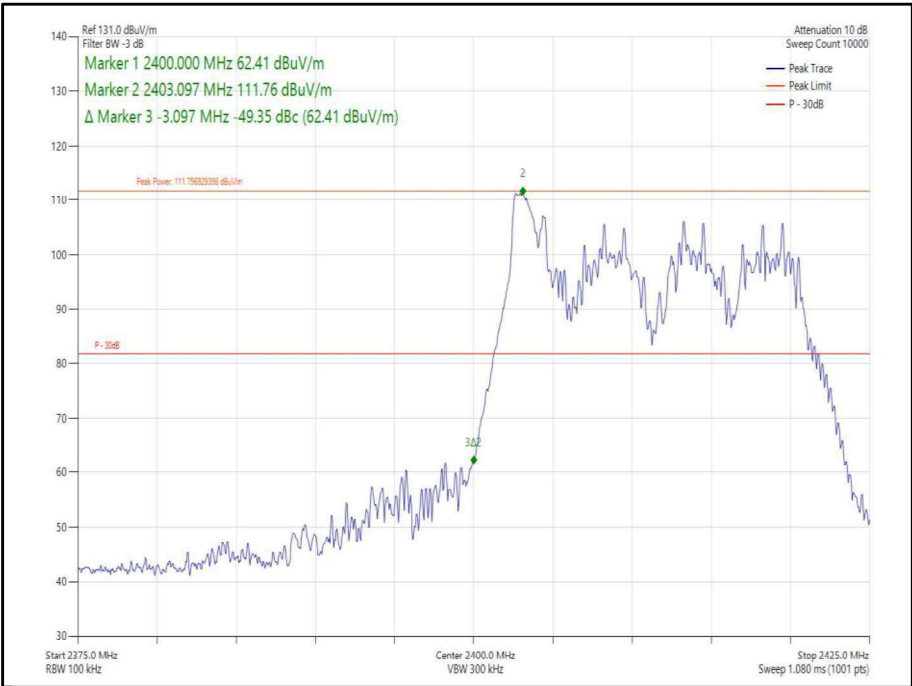


Figure 101- 802.11ax HE20, Cores 0-1, 26-0 - 2412 MHz
Band Edge Frequency 2400 MHz



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

20 dB below the fundamental measured in a 100 kHz bandwidth using a peak detector. If the transmitter complies with the conducted power limits, based on the use of RMS averaging over a time interval, the attenuation required shall be 30 dB below the fundamental instead of 20 dB.

ISED RSS-247, Limit Clause 5.5

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated device is operating, the RF power that is produced shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided that the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of root-mean-square averaging over a time interval, as permitted under Section 5.4(4), the attenuation required shall be 30 dB instead of 20 dB. Attenuation below the general field strength limits specified in RSS-Gen is not required.

2.5.7 Test Location and Test Equipment Used

This test was carried out in RF Chamber 11.

Instrument	Manufacturer	Type No.	TE No.	Calibration Period (months)	Calibration Expiry Date
Screened Room (5)	Rainford	Rainford	1545	36	15-Apr-2024
Double Ridge Broadband Horn Antenna	Schwarzbeck	BBHA 9120 B	4848	12	01-May-2022
Screened Room (11)	Rainford	Rainford	5136	36	24-Nov-2024
Horn Antenna (1-10GHz)	Schwarzbeck	BBHA 9120 B	5215	12	01-May-2022
Preamplifier (30dB 1GHz to 18GHz)	Schwarzbeck	BBV 9718 C	5261	12	08-Apr-2023
Attenuator 5W 10dB DC-18GHz	Aaren	AT40A-4041-D18-10	5495	12	11-Oct-2022
1m -SMA Cable	Junkosha	MWX221-01000AMSAMS/A	5513	12	12-Apr-2023
2m SMA Cable	Junkosha	MWX221-02000AMSAMS/A	5517	12	12-Apr-2023
2m SMA Cable	Junkosha	MWX221-02000AMSAMS/A	5518	12	09-Apr-2022
8m N-Type Cable	Junkosha	MWX221-08000NMSNMS/B	5520	12	24-Mar-2023
8m N Type Cable	Junkosha	MWX221-08000NMSNMS/B	5522	12	24-Mar-2023
EMI Test Receiver	Rohde & Schwarz	ESW44	5527	12	15-Apr-2022
Thermo-Hygro-Barometer	PCE Instruments	PCE-THB 40	5604	12	22-Sep-2022
Thermo-Hygro-Barometer	PCE Instruments	PCE-THB 40	5605	12	23-Sep-2022
EMI Test Receiver	Rohde & Schwarz	ESW44	5911	12	24-Feb-2023

Table 84



2.6 Power Spectral Density

2.6.1 Specification Reference

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

2.6.2 Equipment Under Test and Modification State

A2681, S/N: TN4J7KWW5H - Modification State 0

2.6.3 Date of Test

24-March-2022

2.6.4 Test Method

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

Where the EUT duty cycle was < 98 % and repeatable within 2 %, the spectrum analyser was set to trace (power) averaging and a duty cycle correction was added as calculated in the result tables below (Method AVGPSD-2).

MIMO output port summing was performed in accordance with KDB 662911 D01 E)2)b).

2.6.5 Environmental Conditions

Ambient Temperature	23.4 °C
Relative Humidity	22.7 %



2.6.6 Test Results

2.4 GHz WLAN

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):	-		
Note(s):	DCCF was added to the spectrum analyser reference level offset.		

DUT Configuration			
Mode:	802.11b	Duty Cycle (%):	98.8
Data Rate:	1 Mbps	DCCF (dB):	0.05
Antenna Configuration:	SISO	Peak Antenna Gain (dBi):	-
Active Port(s):	A (Core 0)	Active Chain(s):	0

Test Frequency (MHz)	RBW (kHz)	PSD (dBm/RBW)					Limit (dBm/3 kHz)	Margin (dB)
		A	B	C	D	Σ		
2412	100.0	6.71	-	-	-	-	8.00	-1.29
2442	100.0	7.07	-	-	-	-	8.00	-0.93
2472	100.0	1.08	-	-	-	-	8.00	-6.93

Table 85 - 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):	-		
Note(s):	DCCF was added to the spectrum analyser reference level offset.		

DUT Configuration			
Mode:	802.11g	Duty Cycle (%):	97.7
Data Rate:	12 Mbps	DCCF (dB):	0.10
Antenna Configuration:	SISO	Peak Antenna Gain (dBi):	-
Active Port(s):	A (Core 0)	Active Chain(s):	0

Test Frequency (MHz)	RBW (kHz)	PSD (dBm/RBW)					Limit (dBm/3 kHz)	Margin (dB)
		A	B	C	D	Σ		
2412	100.0	2.58	-	-	-	-	8.00	-5.42
2442	100.0	5.22	-	-	-	-	8.00	-2.78
2472	100.0	-11.22	-	-	-	-	8.00	-19.22

Table 86 - 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):	-		
Note(s):	DCCF was added to the spectrum analyser reference level offset.		

DUT Configuration			
Mode:	802.11n HT20	Duty Cycle (%):	96.4
Modulation Coding Scheme:	MCS2	DCCF (dB):	0.16
Antenna Configuration:	SISO	Peak Antenna Gain (dBi):	-
Active Port(s):	A (Core 0)	Active Chain(s):	0

Test Frequency (MHz)	RBW (kHz)	PSD (dBm/RBW)					Limit (dBm/3 kHz)	Margin (dB)
		A	B	C	D	Σ		
2412	100.0	1.13	-	-	-	-	8.00	-6.87
2442	100.0	5.32	-	-	-	-	8.00	-2.68
2472	100.0	-11.40	-	-	-	-	8.00	-19.40

Table 87 - 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):	662911 D01 v02r01 E)2)b)		
Note(s):	DCCF was added to the spectrum analyser reference level offset.		

DUT Configuration			
Mode:	802.11n HT20	Duty Cycle (%):	96.5
Modulation Coding Scheme:	MCS2	DCCF (dB):	0.15
Antenna Configuration:	MIMO CDD	Peak Antenna Gain (dBi):	-
Active Port(s):	A+B (Core 0 + Core 1)	Active Chain(s):	0+1

Test Frequency (MHz)	RBW (kHz)	PSD (dBm/RBW)					Limit (dBm/3 kHz)	Margin (dB)
		A	B	C	D	Σ		
2412	100.0	-0.96	-0.49	-	-	2.29	8.00	-5.71
2442	51.0	2.74	2.62	-	-	5.69	8.00	-2.31
2472	100.0	-14.32	-14.36	-	-	-11.33	8.00	-19.33

Table 88 - 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):	-		
Note(s):	DCCF was added to the spectrum analyser reference level offset.		

DUT Configuration			
Mode:	802.11ax HE20 SU	Duty Cycle (%):	95.9
Modulation Coding Scheme:	MCS2x1	DCCF (dB):	0.18
Antenna Configuration:	SISO	Peak Antenna Gain (dBi):	-
Active Port(s):	A (Core 0)	Active Chain(s):	0

Test Frequency (MHz)	RBW (kHz)	PSD (dBm/RBW)					Limit (dBm/3 kHz)	Margin (dB)
		A	B	C	D	Σ		
2412	100.0	-1.25	-	-	-	-	8.00	-9.25
2442	100.0	3.53	-	-	-	-	8.00	-4.47
2472	100.0	-15.00	-	-	-	-	8.00	-23.00

Table 89 - 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):	662911 D01 v02r01 E)2)b)		
Note(s):	DCCF was added to the spectrum analyser reference level offset.		

DUT Configuration			
Mode:	802.11ax HE20 SU	Duty Cycle (%):	95.8
Modulation Coding Scheme:	MCS2x1	DCCF (dB):	0.19
Antenna Configuration:	MIMO CDD	Peak Antenna Gain (dBi):	-
Active Port(s):	A+B (Core 0 + Core 1)	Active Chain(s):	0+1

Test Frequency (MHz)	RBW (kHz)	PSD (dBm/RBW)					Limit (dBm/3 kHz)	Margin (dB)
		A	B	C	D	Σ		
2412	100.0	-2.56	-2.06	-	-	0.71	8.00	-7.29
2442	100.0	3.32	2.86	-	-	6.11	8.00	-1.89
2472	100.0	-17.75	-17.76	-	-	-14.74	8.00	-22.74

Table 90 - 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):	-		
Note(s):	DCCF was added to the spectrum analyser reference level offset.		

DUT Configuration			
Mode:	802.11ax HE20 RU26	Duty Cycle (%):	96.5
Modulation Coding Scheme:	MCS2x1	DCCF (dB):	0.16
Antenna Configuration:	SISO	Peak Antenna Gain (dBi):	-
Active Port(s):	A (Core 0)	Active Chain(s):	0

Test Frequency (MHz)	RBW (kHz)	PSD (dBm/RBW)					Limit (dBm/3 kHz)	Margin (dB)
		A	B	C	D	Σ		
2412	100.0	3.11	-	-	-	-	8.00	-4.90
2442	100.0	2.93	-	-	-	-	8.00	-5.07
2472	100.0	-13.38	-	-	-	-	8.00	-21.38

Table 91 - 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):	662911 D01 v02r01 E)2)b)		
Note(s):	DCCF was added to the spectrum analyser reference level offset.		

DUT Configuration			
Mode:	802.11ax HE20 RU26	Duty Cycle (%):	96.5
Modulation Coding Scheme:	MCS2x1	DCCF (dB):	0.16
Antenna Configuration:	MIMO CDD	Peak Antenna Gain (dBi):	-
Active Port(s):	A+B (Core 0 + Core 1)	Active Chain(s):	0+1

Test Frequency (MHz)	RBW (kHz)	PSD (dBm/RBW)					Limit (dBm/3 kHz)	Margin (dB)
		A	B	C	D	Σ		
2412	100.0	3.03	2.75	-	-	5.91	8.00	-2.09
2442	100.0	2.95	2.94	-	-	5.96	8.00	-2.04
2472	100.0	-16.55	-16.18	-	-	-13.35	8.00	-21.35

Table 92 - 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):	-		
Note(s):	DCCF was added to the spectrum analyser reference level offset.		

DUT Configuration			
Mode:	802.11ax HE20 RU52	Duty Cycle (%):	96.4
Modulation Coding Scheme:	MCS2x1	DCCF (dB):	0.16
Antenna Configuration:	SISO	Peak Antenna Gain (dBi):	-
Active Port(s):	A (Core 0)	Active Chain(s):	0

Test Frequency (MHz)	RBW (kHz)	PSD (dBm/RBW)					Limit (dBm/3 kHz)	Margin (dB)
		A	B	C	D	Σ		
2412	100.0	3.40	-	-	-	-	8.00	-4.60
2442	100.0	3.16	-	-	-	-	8.00	-4.84
2472	100.0	-12.89	-	-	-	-	8.00	-20.89

Table 93 - 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):	662911 D01 v02r01 E)2)b)		
Note(s):	DCCF was added to the spectrum analyser reference level offset.		

DUT Configuration			
Mode:	802.11ax HE20 RU52	Duty Cycle (%):	96.4
Modulation Coding Scheme:	MCS2x1	DCCF (dB):	0.16
Antenna Configuration:	MIMO CDD	Peak Antenna Gain (dBi):	-
Active Port(s):	A+B (Core 0 + Core 1)	Active Chain(s):	0+1

Test Frequency (MHz)	RBW (kHz)	PSD (dBm/RBW)					Limit (dBm/3 kHz)	Margin (dB)
		A	B	C	D	Σ		
2412	100.0	3.09	3.56	-	-	6.34	8.00	-1.66
2442	100.0	2.67	3.23	-	-	5.97	8.00	-2.03
2472	100.0	-13.72	-13.92	-	-	-10.81	8.00	-18.81

Table 94 - 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):	-		
Note(s):	DCCF was added to the spectrum analyser reference level offset.		

DUT Configuration			
Mode:	802.11ax HE20 RU106	Duty Cycle (%):	97.8
Modulation Coding Scheme:	MCS2x1	DCCF (dB):	0.10
Antenna Configuration:	SISO	Peak Antenna Gain (dBi):	-
Active Port(s):	A (Core 0)	Active Chain(s):	0

Test Frequency (MHz)	RBW (kHz)	PSD (dBm/RBW)					Limit (dBm/3 kHz)	Margin (dB)
		A	B	C	D	Σ		
2412	100.0	0.44	-	-	-	-	8.00	-7.56
2442	100.0	3.72	-	-	-	-	8.00	-4.28
2472	100.0	-14.73	-	-	-	-	8.00	-22.73

Table 95 - 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):	662911 D01 v02r01 E)2)b)		
Note(s):	DCCF was added to the spectrum analyser reference level offset.		

DUT Configuration			
Mode:	802.11ax HE20 RU106	Duty Cycle (%):	97.8
Modulation Coding Scheme:	MCS2x1	DCCF (dB):	0.10
Antenna Configuration:	MIMO CDD	Peak Antenna Gain (dBi):	-
Active Port(s):	A+B (Core 0 + Core 1)	Active Chain(s):	0+1

Test Frequency (MHz)	RBW (kHz)	PSD (dBm/RBW)					Limit (dBm/3 kHz)	Margin (dB)
		A	B	C	D	Σ		
2412	100.0	0.19	0.45	-	-	3.33	8.00	-4.67
2442	100.0	3.20	3.02	-	-	6.12	8.00	-1.88
2472	100.0	-16.23	-16.67	-	-	-13.44	8.00	-21.44

Table 96 - 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

2.6.7 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	Iso-tech	IDM101	2421	12	28-Oct-2022
Hygrometer	Rotronic	I-1000	3220	12	05-Nov-2022
Frequency Standard	Spectracom	SecureSync 1200-0408-0601	4393	6	30-Jun-2022
AC Programmable Power Supply	iTech	IT7324	5226	-	O/P Mon
MXA Signal Analyser	Keysight Technologies	N9020B	5529	24	06-Jun-2022
Signal Commissioning Unit	TUV SUD	SCU002	5759	12	30-Jun-2022
USB Power Sensor	Boonton	RTP5008	5830	12	10-May-2022
USB Power Sensor	Boonton	RTP5008	5832	12	10-May-2022
USB Power Sensor	Boonton	RTP5008	5833	12	10-May-2022
USB Power Sensor	Boonton	RTP5008	5834	12	10-May-2022
Modular Power System Mainframe	Keysight Technologies	N6701C	5835	-	TU
DC Power Module 60V 20A 300W	Keysight Technologies	N6754A	5836	-	O/P Mon

Table 97

TU - Traceability Unscheduled

O/P Mon – Output Monitored using calibrated equipment



3 Measurement Uncertainty

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

Test Name	Measurement Uncertainty
Restricted Band Edges	30 MHz to 1 GHz: ± 5.2 dB 1 GHz to 40 GHz: ± 6.3 dB
Emission Bandwidth	± 279.05 kHz
Maximum Conducted Output Power	± 3.2 dB
Spurious Radiated Emissions	30 MHz to 1 GHz: ± 5.2 dB 1 GHz to 40 GHz: ± 6.3 dB
Authorised Band Edges	30 MHz to 1 GHz: ± 5.2 dB 1 GHz to 40 GHz: ± 6.3 dB
Power Spectral Density	± 3.2 dB

Table 98

Measurement Uncertainty Decision Rule – Accuracy Method

Determination of conformity with the specification limits is based on the decision rule according to IEC Guide 115:2007, Clause 4.4.3 and 4.5.1. (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.