

Figure 57 - 802.11n HT20 Minimum 6 dB EBW

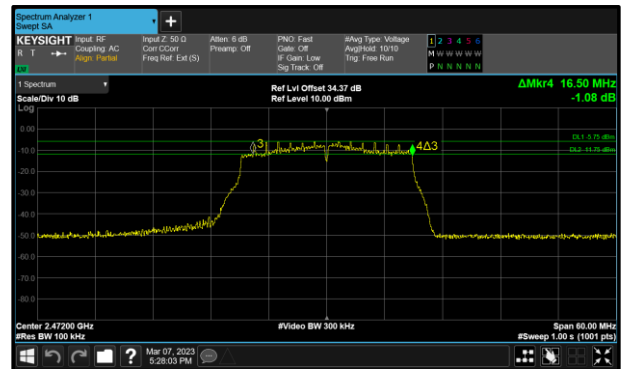


Figure 58 - 802.11n HT20 Maximum 6 dB EBW

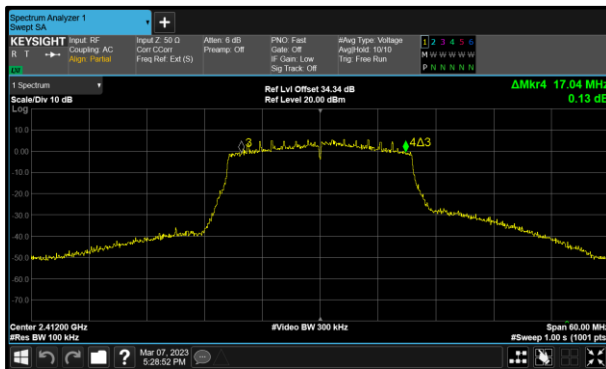


Figure 59 - 802.11ax HE20 SU Minimum 6 dB EBW

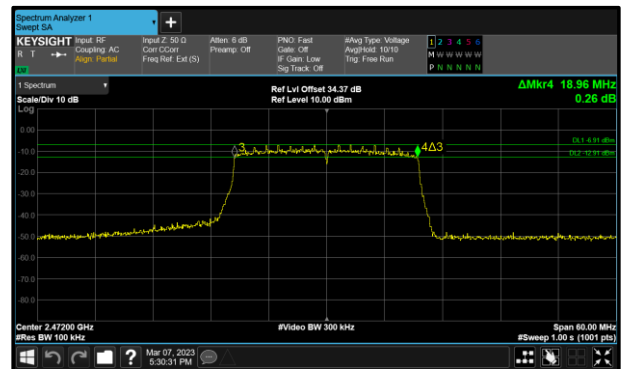


Figure 60 - 802.11ax HE20 SU Maximum 6 dB EBW



Protocol	99% Bandwidth (MHz)	
	Minimum	Maximum
802.11b	12.720	12.840
802.11g	16.320	16.620
802.11n HT20	17.520	17.700
802.11ax HE20 SU	18.840	18.900

Table 13 - 99% Bandwidth Summary Results - SISO

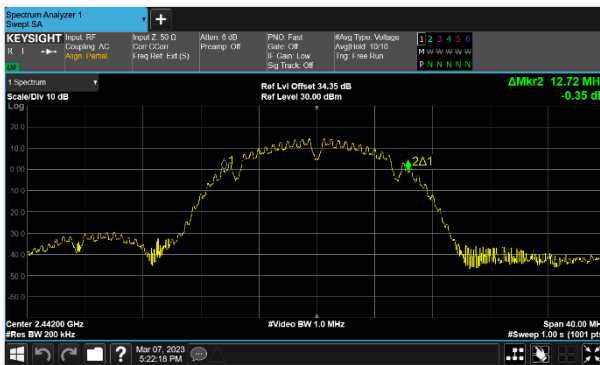


Figure 61 - 802.11b Minimum 99% OBW

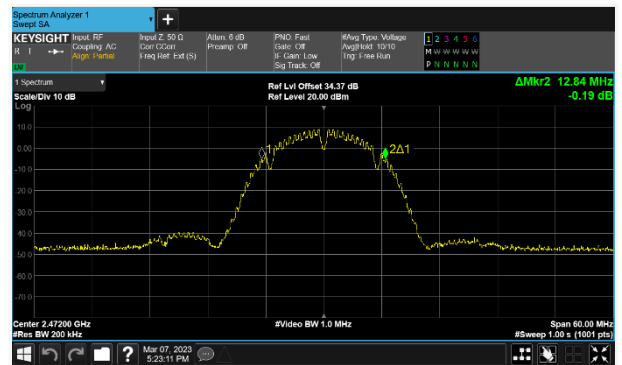


Figure 62 - 802.11b Maximum 99% OBW

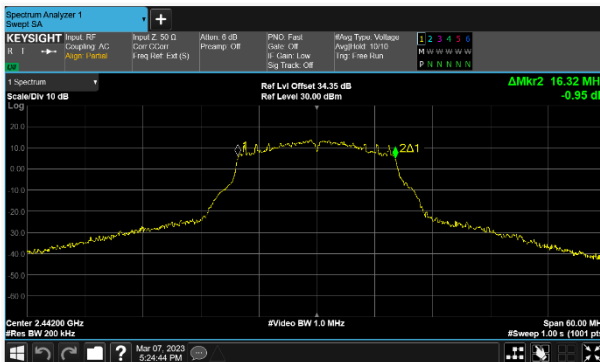


Figure 63 - 802.11g Minimum 99% OBW

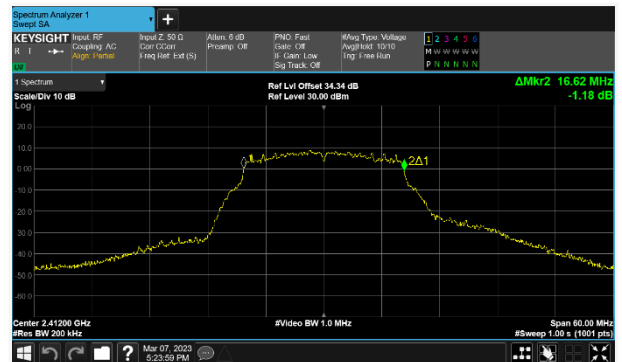


Figure 64 - 802.11g Maximum 99% OBW

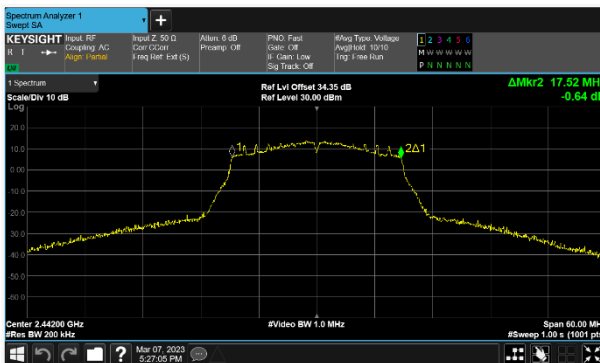


Figure 65 - 802.11n HT20 Minimum 99% OBW

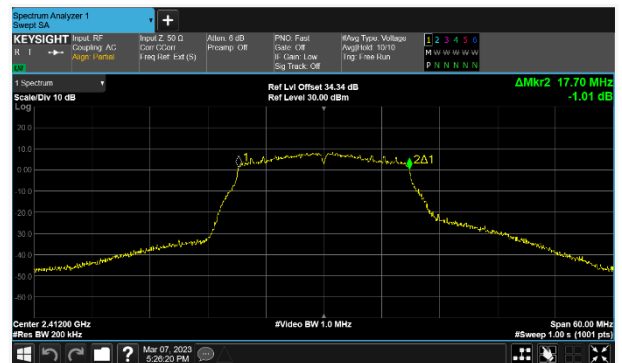


Figure 66 - 802.11n HT20 Maximum 99% OBW

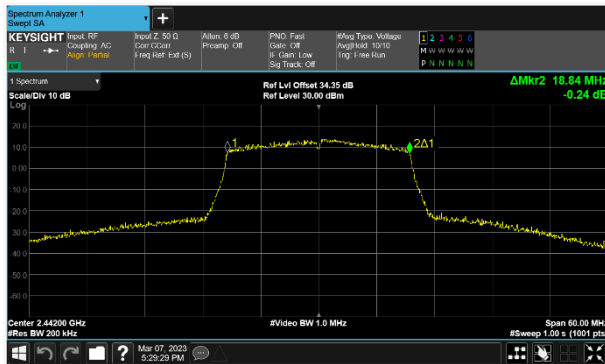


Figure 67 - 802.11ax HE20 SU Minimum
99% OBW

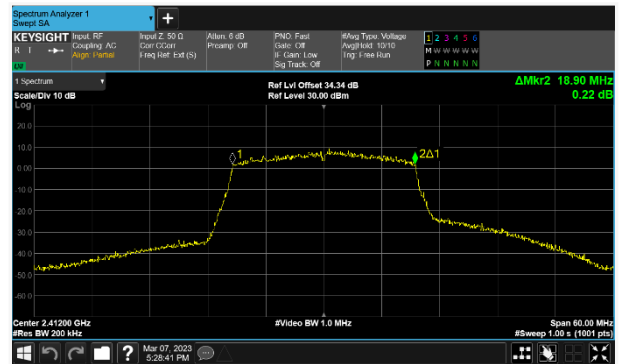


Figure 68 - 802.11ax HE20 SU Maximum
99% OBW



Protocol	6 dB Bandwidth (MHz)	
	Minimum	Maximum
802.11n HT20	15.240	17.400
802.11ax HE20 SU	15.960	18.960

Table 14 - 6 dB Bandwidth Summary Results - MIMO CDD

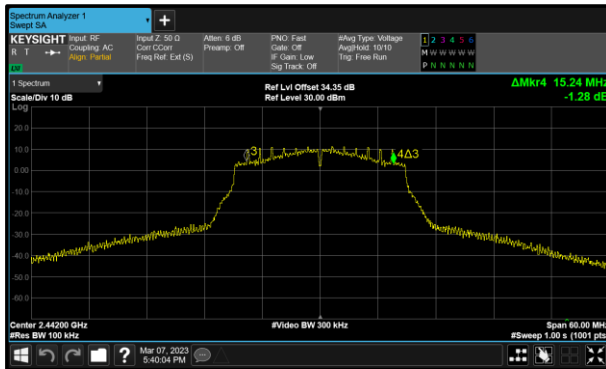


Figure 69 - 802.11n HT20 Minimum 6 dB EBW

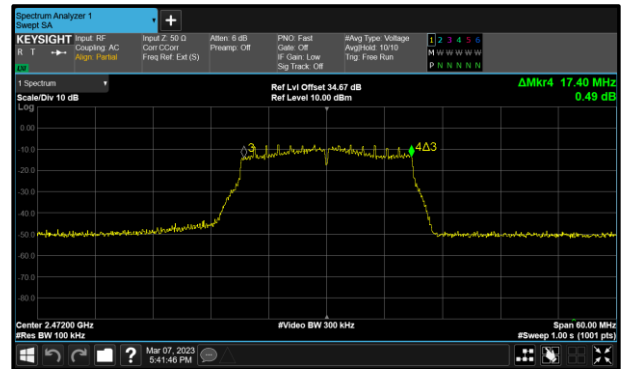


Figure 70 - 802.11n HT20 Maximum 6 dB EBW

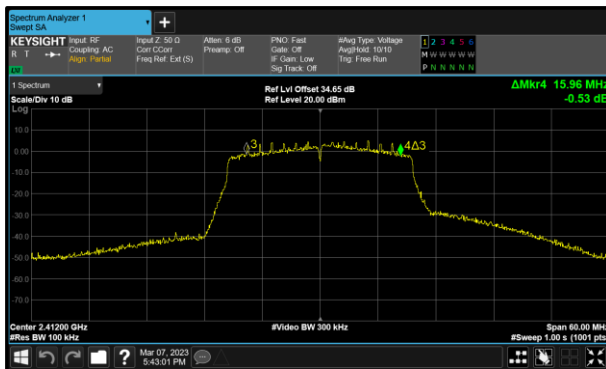


Figure 71 - 802.11ax HE20 SU Minimum 6 dB EBW

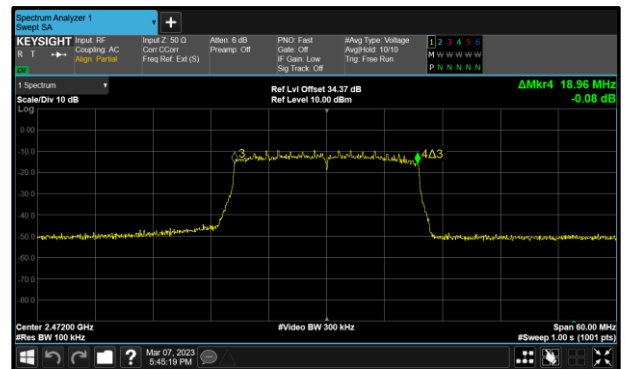


Figure 72 - 802.11ax HE20 SU Maximum 6 dB EBW



Protocol	99% Bandwidth (MHz)	
	Minimum	Maximum
802.11n HT20	17.460	17.760
802.11ax HE20 SU	18.840	18.960

Table 15 - 99% Bandwidth Summary Results - MIMO CDD

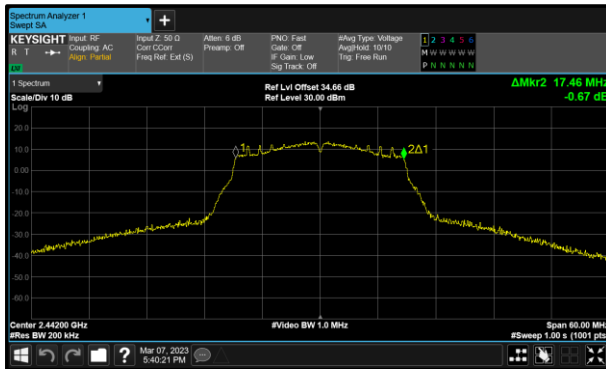


Figure 73 - 802.11n HT20 Minimum 99% OBW

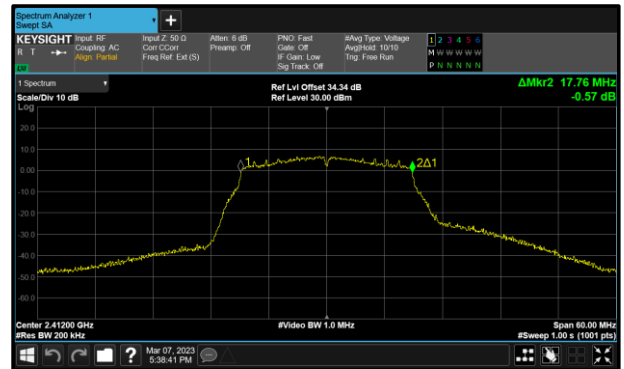


Figure 74 - 802.11n HT20 Maximum 99% OBW

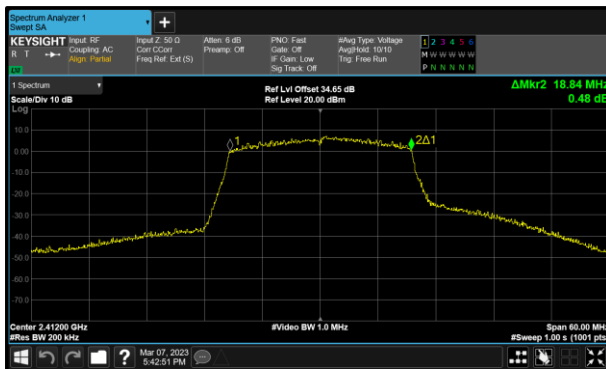


Figure 75 - 802.11ax HE20 SU Minimum 99% OBW

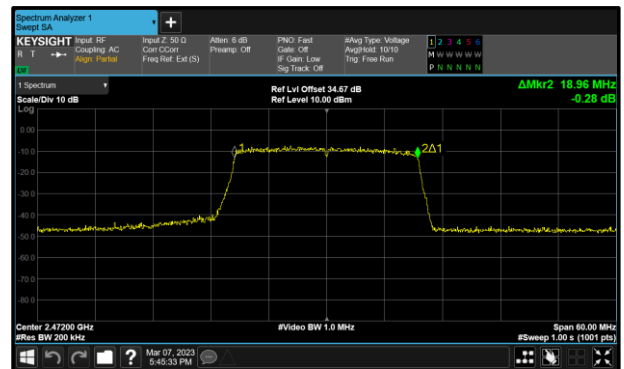


Figure 76 - 802.11ax HE20 SU Maximum 99% OBW



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):	-
Active Port(s):	B (Core 0)	Active Chain(s):	0

Test Frequency (MHz)	6 dB Bandwidth (MHz)				Limit (kHz)
	A	B	C	D	
2412	-	8.160	-	-	≥500.0
2442	-	8.600	-	-	≥500.0
2472	-	8.160	-	-	≥500.0

Table 16 - 6 dB Bandwidth Results

Test Frequency (MHz)	99% Bandwidth (MHz)				Limit (kHz)
	A	B	C	D	
2412	-	12.780	-	-	-
2442	-	12.720	-	-	-
2472	-	12.840	-	-	-

Table 17 - 99% Bandwidth Results



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:	12 Mbps	DCCF (dB):	-
Antenna Configuration:	SISO	Peak Antenna Gain (dBi):	-
Active Port(s):	B (Core 0)	Active Chain(s):	0

Test Frequency (MHz)	6 dB Bandwidth (MHz)				Limit (kHz)
	A	B	C	D	
2412	-	15.240	-	-	≥500.0
2442	-	15.240	-	-	≥500.0
2472	-	15.840	-	-	≥500.0

Table 18 - 6 dB Bandwidth Results

Test Frequency (MHz)	99% Bandwidth (MHz)				Limit (kHz)
	A	B	C	D	
2412	-	16.620	-	-	-
2442	-	16.320	-	-	-
2472	-	16.500	-	-	-

Table 19 - 99% Bandwidth Results



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:	MCS2	DCCF (dB):	-
Antenna Configuration:	SISO	Peak Antenna Gain (dBi):	-
Active Port(s):	B (Core 0)	Active Chain(s):	0

Test Frequency (MHz)	6 dB Bandwidth (MHz)				Limit (kHz)
	A	B	C	D	
2412	-	16.380	-	-	≥500.0
2442	-	15.240	-	-	≥500.0
2472	-	16.500	-	-	≥500.0

Table 20 - 6 dB Bandwidth Results

Test Frequency (MHz)	99% Bandwidth (MHz)				Limit (kHz)
	A	B	C	D	
2412	-	17.700	-	-	-
2442	-	17.520	-	-	-
2472	-	17.640	-	-	-

Table 21 - 99% Bandwidth Results



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:	MCS2x1	DCCF (dB):	-
Antenna Configuration:	SISO	Peak Antenna Gain (dBi):	-
Active Port(s):	B (Core 0)	Active Chain(s):	0

Test Frequency (MHz)	6 dB Bandwidth (MHz)				Limit (kHz)
	A	B	C	D	
2412	-	17.040	-	-	≥500.0
2442	-	18.360	-	-	≥500.0
2472	-	18.960	-	-	≥500.0

Table 22 - 6 dB Bandwidth Results

Test Frequency (MHz)	99% Bandwidth (MHz)				Limit (kHz)
	A	B	C	D	
2412	-	18.900	-	-	-
2442	-	18.840	-	-	-
2472	-	18.900	-	-	-

Table 23 - 99% Bandwidth Results



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:	MCS2	DCCF (dB):	-
Antenna Configuration:	MIMO CDD	Peak Antenna Gain (dBi):	-
Active Port(s):	B+C (Core 0 + Core 1)	Active Chain(s):	0+1

Test Frequency (MHz)	6 dB Bandwidth (MHz)				Limit (kHz)
	A	B	C	D	
2412	-	16.740	16.020	-	≥500.0
2442	-	15.240	15.300	-	≥500.0
2472	-	16.680	17.400	-	≥500.0

Table 24 - 6 dB Bandwidth Results

Test Frequency (MHz)	99% Bandwidth (MHz)				Limit (kHz)
	A	B	C	D	
2412	-	17.760	17.700	-	-
2442	-	17.520	17.460	-	-
2472	-	17.640	17.640	-	-

Table 25 - 99% Bandwidth Results



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:	MCS2x1	DCCF (dB):	-
Antenna Configuration:	MIMO CDD	Peak Antenna Gain (dBi):	-
Active Port(s):	B+C (Core 0 + Core 1)	Active Chain(s):	0+1

Test Frequency (MHz)	6 dB Bandwidth (MHz)				Limit (kHz)
	A	B	C	D	
2412	-	17.220	15.960	-	≥500.0
2437	-	18.900	18.900	-	≥500.0
2472	-	18.960	18.840	-	≥500.0

Table 26 - 6 dB Bandwidth Results

Test Frequency (MHz)	99% Bandwidth (MHz)				Limit (kHz)
	A	B	C	D	
2412	-	18.900	18.840	-	-
2437	-	18.840	18.900	-	-
2472	-	18.840	18.960	-	-

Table 27 - 99% Bandwidth Results

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.



2.2.7 Test Location and Test Equipment Used

This test was carried out in RF Laboratory 14.

Instrument	Manufacturer	Type No	TE No	Calibration Period (months)	Calibration Expires
Hygrometer	Rotronic	I-1000	3068	12	21-Sep-2023
Multi-GNSS Simulator (GPS)	Spirent	GSS6700	4596	12	22-Aug-2023
AC Programmable Power Supply	iTech	IT7324	5225	-	O/P Mon
MXA Signal Analyser	Keysight Technologies	N9020B	5529	24	13-Dec-2024
Signal Conditioning Unit	TUV SUD	SPECTRUM SCU001	5546	12	06-Apr-2023
Digital Multimeter	Fluke	115	6145	12	17-Jun-2023

Table 28

O/P Mon - Output Monitored using calibrated equipment



2.3 Maximum Conducted Output Power

2.3.1 Specification Reference

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

2.3.2 Equipment Under Test and Modification State

A2941, S/N: GF6K93M959 - Modification State 0

2.3.3 Date of Test

07-March-2023

2.3.4 Test Method

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

MIMO output port summing was performed in accordance with KDB 662911 D01. For the CDD results, the Directional Gain was calculated in accordance with clause F)2)f)(ii) using the calculations from F)2)f)(i) with worst-case individual gain and an array gain of zero.

2.3.5 Environmental Conditions

Ambient Temperature	21.5 °C
Relative Humidity	31.4 %



2.3.6 Test Results

2.4 GHz WLAN

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):	4.85
Active Port(s):	B (Core 0)	Active Chain(s):	0

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	Σ		
2412	-	22.27	-	-	-	30.00	-7.73
2442	-	22.37	-	-	-	30.00	-7.63
2472	-	16.77	-	-	-	30.00	-13.23

Table 29 - 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	-	22.27	-	-	-	30.00	-7.73	27.12	36.00	-8.88
2442	-	22.37	-	-	-	30.00	-7.63	27.22	36.00	-8.78
2472	-	16.77	-	-	-	30.00	-13.23	21.62	36.00	-14.38

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:	802.11g	Duty Cycle (%):	97.6
Data Rate:	12 Mbps	DCCF (dB):	-
Antenna Configuration:	SISO	Peak Antenna Gain (dBi):	4.85
Active Port(s):	B (Core 0)	Active Chain(s):	0

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	Σ		
2412	-	18.23	-	-	-	30.00	-11.77
2442	-	22.44	-	-	-	30.00	-7.56
2472	-	5.80	-	-	-	30.00	-24.20

Table 31 - 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	-	18.23	-	-	-	30.00	-11.77	23.08	36.00	-12.92
2442	-	22.44	-	-	-	30.00	-7.56	27.29	36.00	-8.71
2472	-	5.80	-	-	-	30.00	-24.20	10.65	36.00	-25.35

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:	802.11n HT20	Duty Cycle (%):	96.5
Modulation Coding Scheme:	MCS2	DCCF (dB):	-
Antenna Configuration:	SISO	Peak Antenna Gain (dBi):	4.85
Active Port(s):	B (Core 0)	Active Chain(s):	0

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	Σ		
2412	-	17.22	-	-	-	30.00	-12.78
2442	-	22.45	-	-	-	30.00	-7.55
2472	-	5.70	-	-	-	30.00	-24.30

Table 33 - 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	-	17.22	-	-	-	30.00	-12.78	22.07	36.00	-13.93
2442	-	22.45	-	-	-	30.00	-7.55	27.30	36.00	-8.70
2472	-	5.70	-	-	-	30.00	-24.30	10.55	36.00	-25.45

Table 34 - 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 (%):	95.7
Modulation Coding Scheme:	MCS2x1	DCCF (dB):	-
Antenna Configuration:	SISO	Peak Antenna Gain (dBi):	4.85
Active Port(s):	B (Core 0)	Active Chain(s):	0

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	Σ		
2412	-	16.34	-	-	-	30.00	-13.66
2442	-	22.46	-	-	-	30.00	-7.54
2472	-	4.50	-	-	-	30.00	-25.50

Table 35 - 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	-	16.34	-	-	-	30.00	-13.66	21.19	36.00	-14.81
2442	-	22.46	-	-	-	30.00	-7.54	27.31	36.00	-8.69
2472	-	4.50	-	-	-	30.00	-25.50	9.35	36.00	-26.65

Table 36 - 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 (%):	96.8
Modulation Coding Scheme:	MCS2x1	DCCF (dB):	-
Antenna Configuration:	SISO	Peak Antenna Gain (dBi):	4.85
Active Port(s):	B (Core 0)	Active Chain(s):	0

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	Σ		
2412	-	14.41	-	-	-	30.00	-15.59
2442	-	14.32	-	-	-	30.00	-15.68
2472	-	-3.79	-	-	-	30.00	-33.79

Table 37 - 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	-	14.41	-	-	-	30.00	-15.59	19.26	36.00	-16.74
2442	-	14.32	-	-	-	30.00	-15.68	19.17	36.00	-16.83
2472	-	-3.79	-	-	-	30.00	-33.79	1.06	36.00	-34.94

Table 38 - ISD 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 RU52	Duty Cycle (%):	96.3
Modulation Coding Scheme:	MCS2x1	DCCF (dB):	-
Antenna Configuration:	SISO	Peak Antenna Gain (dBi):	4.85
Active Port(s):	B (Core 0)	Active Chain(s):	0

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	Σ		
2412	-	17.17	-	-	-	30.00	-12.83
2442	-	17.16	-	-	-	30.00	-12.84
2472	-	0.37	-	-	-	30.00	-29.63

Table 39 - 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	-	-	-	30.00	-12.83	22.02	36.00	-13.98
2442	-	17.16	-	-	-	30.00	-12.84	22.01	36.00	-13.99
2472	-	0.37	-	-	-	30.00	-29.63	5.22	36.00	-30.78

Table 40 - ISD 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):	4.85
Active Port(s):	B (Core 0)	Active Chain(s):	0

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	Σ		
2412	-	17.24	-	-	-	30.00	-12.76
2442	-	20.27	-	-	-	30.00	-9.73
2472	-	1.76	-	-	-	30.00	-28.24

Table 41 - 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	-	17.24	-	-	-	30.00	-12.76	22.09	36.00	-13.91
2442	-	20.27	-	-	-	30.00	-9.73	25.12	36.00	-10.88
2472	-	1.76	-	-	-	30.00	-28.24	6.61	36.00	-29.39

Table 42 - ISD 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)2)f)(i), 662911 D01 v02r01 E)1)		

DUT Configuration			
Mode:	802.11n HT20	Duty Cycle (%):	96.5
Modulation Coding Scheme:	MCS2	DCCF (dB):	-
Antenna Configuration:	MIMO CDD	Peak Antenna Gain (dBi):	4.85
Active Port(s):	B+C (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	-	16.09	16.19	-	19.15	30.00	-10.85
2442	-	22.23	22.48	-	25.29	30.00	-4.71
2472	-	3.39	3.46	-	6.43	30.00	-23.57

Table 43 - 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	-	16.09	16.19	-	19.15	30.00	-10.85	24.00	36.00	-12.00
2442	-	22.23	22.48	-	25.29	30.00	-4.71	30.14	36.00	-5.86
2472	-	3.39	3.46	-	6.43	30.00	-23.57	11.28	36.00	-24.72

Table 44 - ISD 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)2)f)(i), 662911 D01 v02r01 E)1)		

DUT Configuration			
Mode:	802.11ax HE20 SU	Duty Cycle (%):	95.9
Modulation Coding Scheme:	MCS2x1	DCCF (dB):	-
Antenna Configuration:	MIMO CDD	Peak Antenna Gain (dBi):	4.85
Active Port(s):	B+C (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	-	15.12	15.40	-	18.27	30.00	-11.73
2437	-	22.12	22.49	-	25.32	30.00	-4.68
2472	-	1.60	1.85	-	4.73	30.00	-25.27

Table 45 - 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	-	15.12	15.40	-	18.27	30.00	-11.73	23.12	36.00	-12.88
2437	-	22.12	22.49	-	25.32	30.00	-4.68	30.17	36.00	-5.83
2472	-	1.60	1.85	-	4.73	30.00	-25.27	9.58	36.00	-26.42

Table 46 - ISD 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)2)f)(i), 662911 D01 v02r01 E)1)		

DUT Configuration			
Mode:	802.11ax HE20 RU26	Duty Cycle (%):	96.5
Modulation Coding Scheme:	MCS2x1	DCCF (dB):	-
Antenna Configuration:	MIMO CDD	Peak Antenna Gain (dBi):	4.85
Active Port(s):	B+C (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	-	13.98	14.16	-	17.08	30.00	-12.92
2442	-	14.09	14.20	-	17.15	30.00	-12.85
2472	-	-5.30	-6.15	-	-2.70	30.00	-32.70

Table 47 - 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	-	13.98	14.16	-	17.08	30.00	-12.92	21.93	36.00	-14.07
2442	-	14.09	14.20	-	17.15	30.00	-12.85	22.00	36.00	-14.00
2472	-	-5.30	-6.15	-	-2.70	30.00	-32.70	2.15	36.00	-33.85

Table 48 - ISD 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)2)f)(i), 662911 D01 v02r01 E)1)		

DUT Configuration			
Mode:	802.11ax HE20 RU52	Duty Cycle (%):	96.3
Modulation Coding Scheme:	MCS2x1	DCCF (dB):	-
Antenna Configuration:	MIMO CDD	Peak Antenna Gain (dBi):	4.85
Active Port(s):	B+C (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	-	17.18	17.48	-	20.31	30.00	-9.69
2442	-	17.16	17.14	-	20.11	30.00	-9.89
2472	-	-0.07	-0.12	-	2.87	30.00	-27.13

Table 49 - 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	-	17.18	17.48	-	20.31	30.00	-9.69	25.16	36.00	-10.84
2442	-	17.16	17.14	-	20.11	30.00	-9.89	24.96	36.00	-11.04
2472	-	-0.07	-0.12	-	2.87	30.00	-27.13	7.72	36.00	-28.28

Table 50 - ISD 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)2)f)(i), 662911 D01 v02r01 E)1)		

DUT Configuration			
Mode:	802.11ax HE20 RU106	Duty Cycle (%):	97.9
Modulation Coding Scheme:	MCS2x1	DCCF (dB):	-
Antenna Configuration:	MIMO CDD	Peak Antenna Gain (dBi):	4.85
Active Port(s):	B+C (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	-	16.71	17.09	-	19.88	30.00	-10.12
2442	-	20.19	20.21	-	23.14	30.00	-6.86
2472	-	-1.20	-0.68	-	2.07	30.00	-27.93

Table 51 - 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	-	16.71	17.09	-	19.88	30.00	-10.12	24.73	36.00	-11.27
2442	-	20.19	20.21	-	23.14	30.00	-6.86	27.99	36.00	-8.01
2472	-	-1.20	-0.68	-	2.07	30.00	-27.93	6.92	36.00	-29.08

Table 52 - ISD 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.



2.3.7 Test Location and Test Equipment Used

This test was carried out in RF Laboratory 14.

Instrument	Manufacturer	Type No	TE No	Calibration Period (months)	Calibration Expires
Hygrometer	Rotronic	I-1000	3068	12	21-Sep-2023
AC Programmable Power Supply	iTech	IT7324	5225	-	O/P Mon
Signal Conditioning Unit	TUV SUD	SPECTRUM SCU001	5546	12	06-Apr-2023
USB Power Sensor	Boonton	RTP5008	5821	12	06-Apr-2023
USB Power Sensor	Boonton	RTP5008	5831	12	06-Apr-2023
Digital Multimeter	Fluke	115	6145	12	17-Jun-2023

Table 53

O/P Mon - Output Monitored using calibrated equipment



2.4 Authorised Band Edges

2.4.1 Specification Reference

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

2.4.2 Equipment Under Test and Modification State

A2941, S/N: F91VYD72Q5 - Modification State 0

2.4.3 Date of Test

11-January-2023 to 18-January-2023

2.4.4 Test Method

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

2.4.5 Environmental Conditions

Ambient Temperature	21.0 - 24.4 °C
Relative Humidity	43.0 - 49.7 %



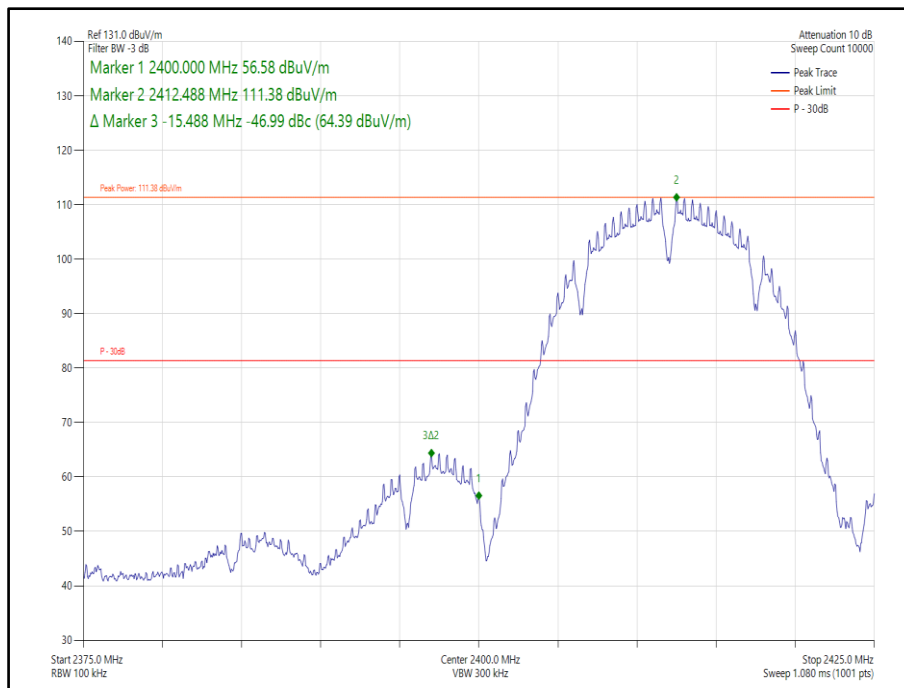
2.4.6 Test Results

2.4 GHz WLAN

20 MHz Bandwidth - Core 0 (SISO)

Mode	Data Rate/MCS	Resource Size	Resource Index	TX Frequency (MHz)	Band Edge Frequency (MHz)	Level (dBc)
802.11b	1 Mbps	-	-	2412	2400	-46.99
802.11g	24 Mbps	-	-	2412	2400	-34.77
802.11n HT20	MCS4	-	-	2412	2400	-34.51
802.11ax HE20	MCS9x1	SU	-	2412	2400	-35.18
802.11ax HE20	MCS9x1	106	53	2412	2400	-37.73

Table 54 - SISO Authorised Band Edge Results



**Figure 77 - 802.11b, SISO, Core 0 - 2412 MHz,
 Band Edge Frequency 2400 MHz**

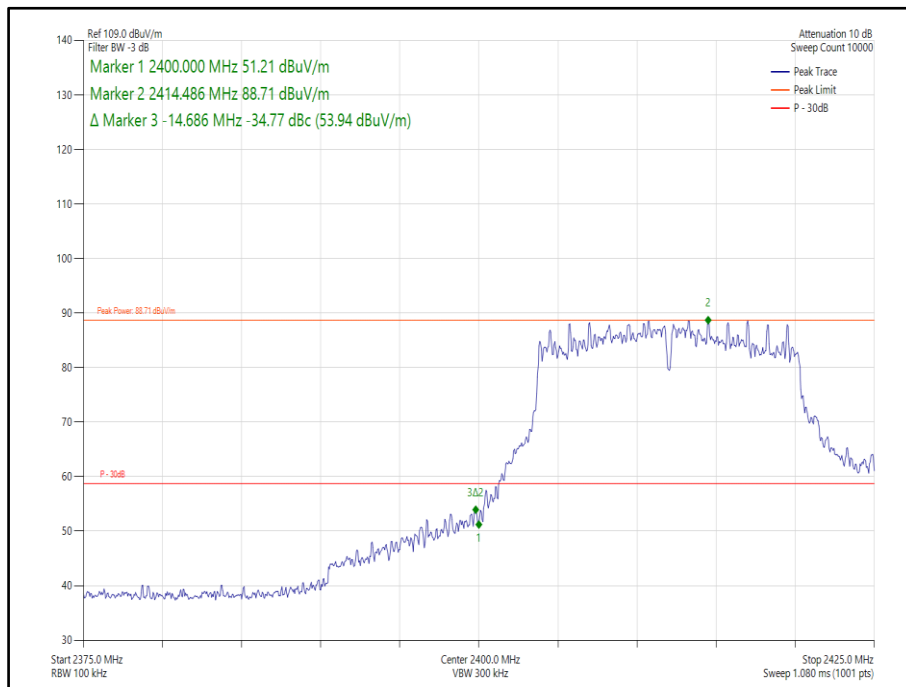


Figure 78 - 802.11g, SISO, Core 0 - 2412 MHz,
Band Edge Frequency 2400 MHz

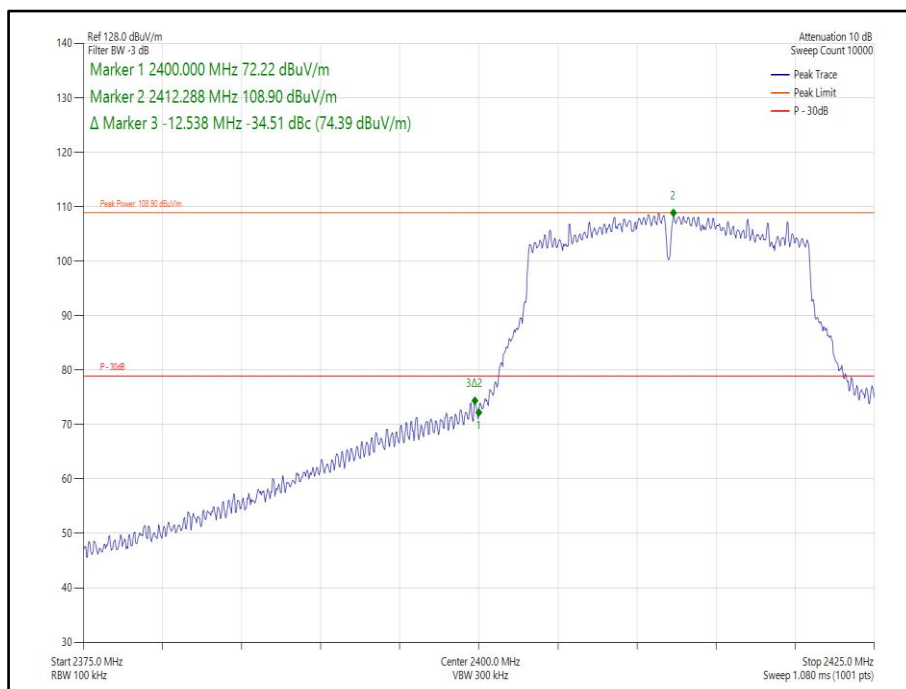
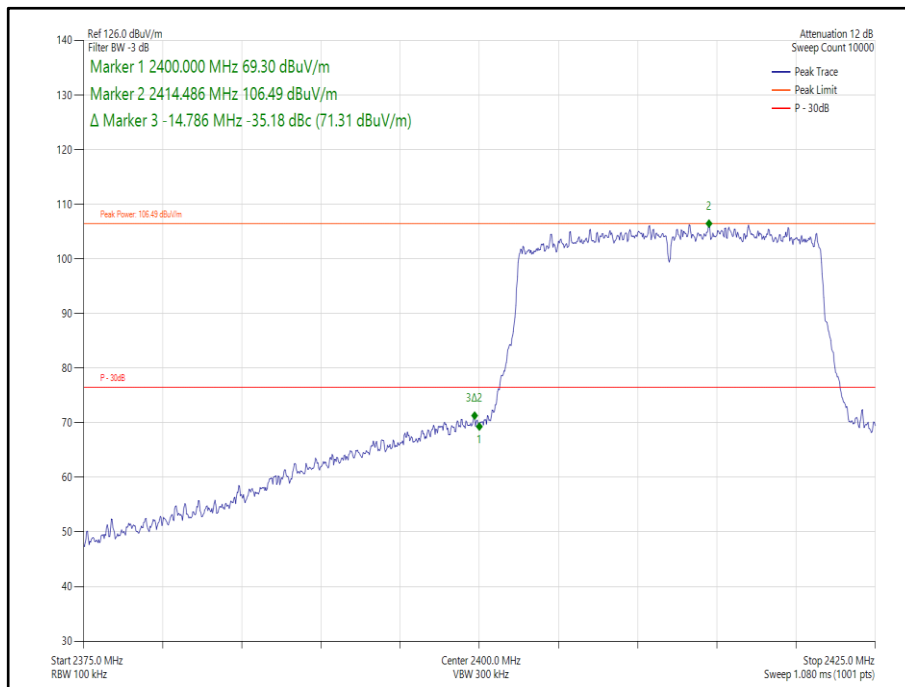
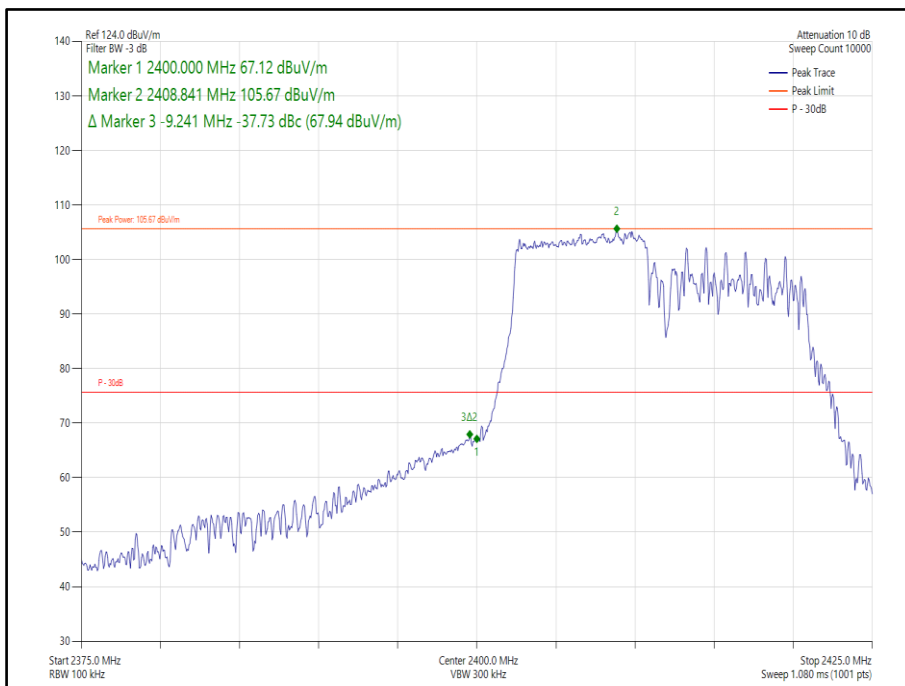


Figure 79 - 802.11n, HT20, SISO, Core 0 - 2412 MHz,
Band Edge Frequency 2400 MHz



**Figure 80 - 802.11ax, HE20, SU, SISO, Core 0 - 2412 MHz,
Band Edge Frequency 2400 MHz**



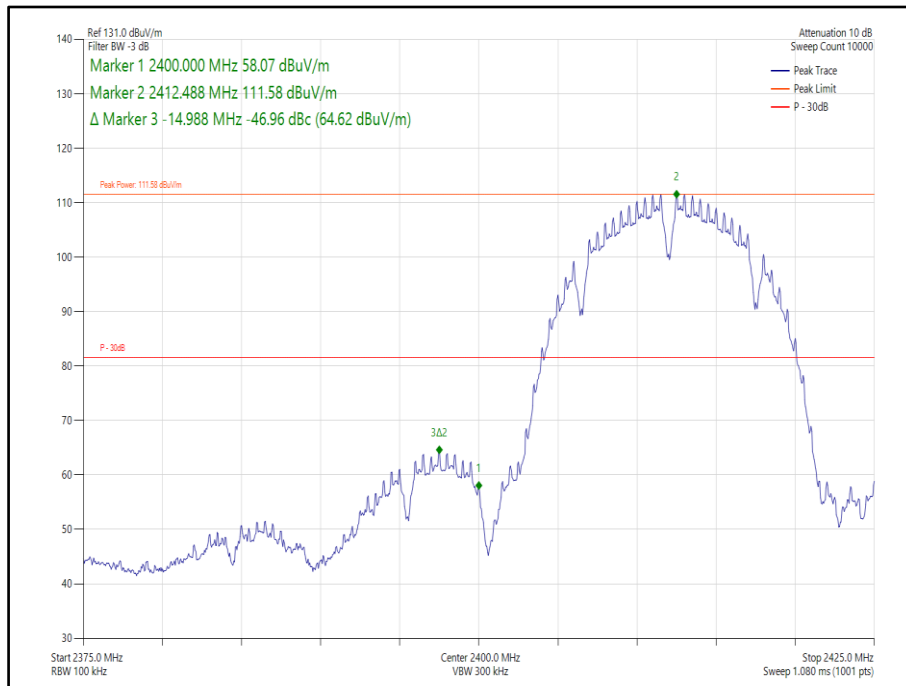
**Figure 81 - 802.11ax, HE20, RU 106-53, SISO, Core 0 - 2412 MHz,
Band Edge Frequency 2400 MHz**



20 MHz Bandwidth - Core 1 (SISO)

Mode	Data Rate/ MCS	Resource Size	Resource Index	TX Frequency (MHz)	Band Edge Frequency (MHz)	Level (dBc)
802.11b	1 Mbps	-	-	2412	2400	-46.96
802.11g	54 Mbps	-	-	2412	2400	-34.52
802.11n HT20	MCS7	-	-	2412	2400	-34.75
802.11ax HE20	MCS9x1	SU	-	2412	2400	-34.68
802.11ax HE20	MCS9x1	106	53	2412	2400	-37.85

Table 55 - SISO Authorised Band Edge Results



**Figure 82 - 802.11b, SISO, Core 1 - 2412 MHz,
 Band Edge Frequency 2400 MHz**

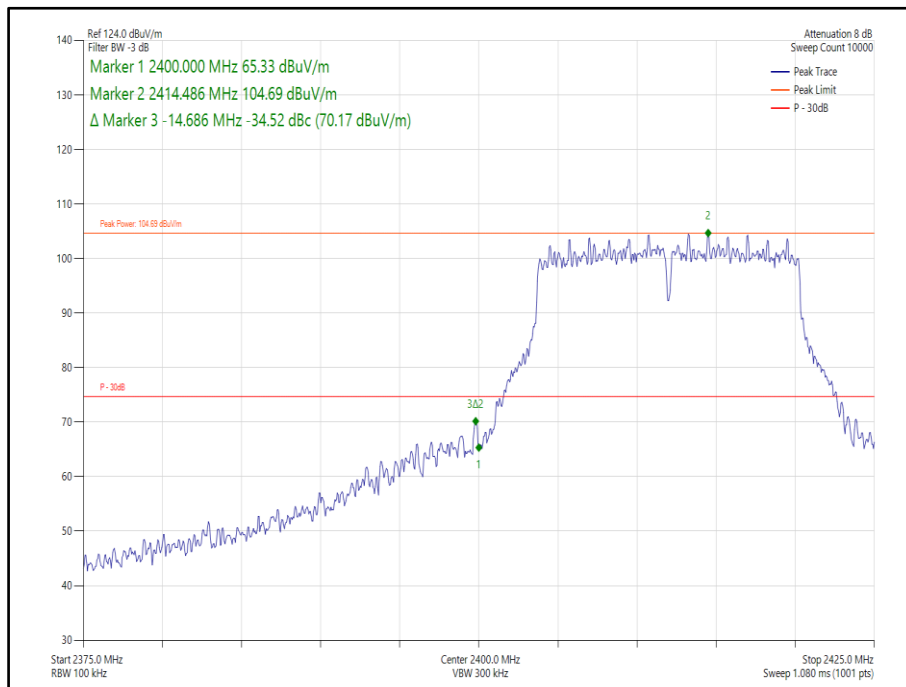


Figure 83 - 802.11g, SISO, Core 1 - 2412 MHz,
Band Edge Frequency 2400 MHz

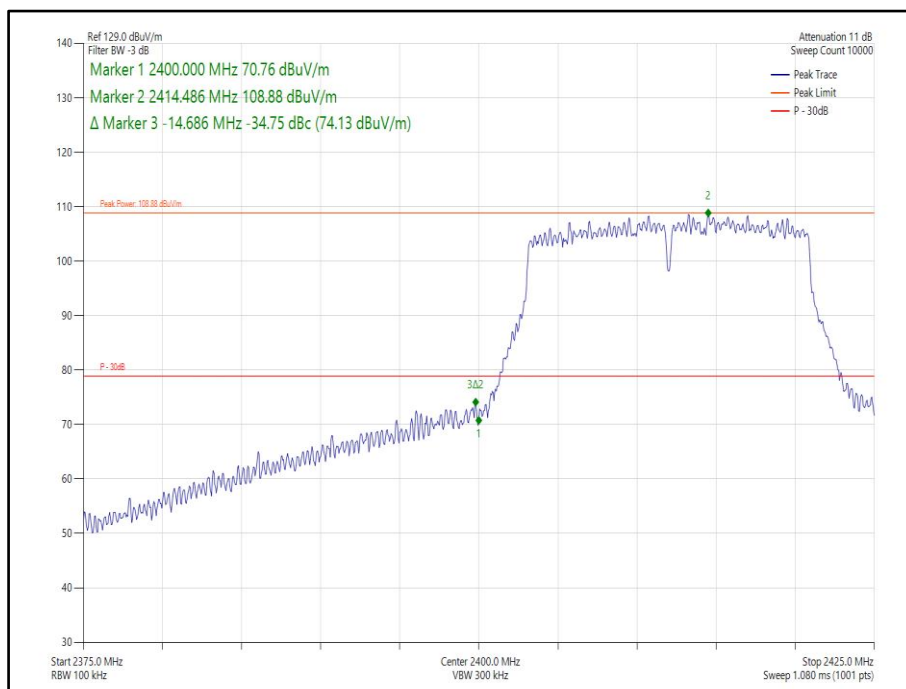
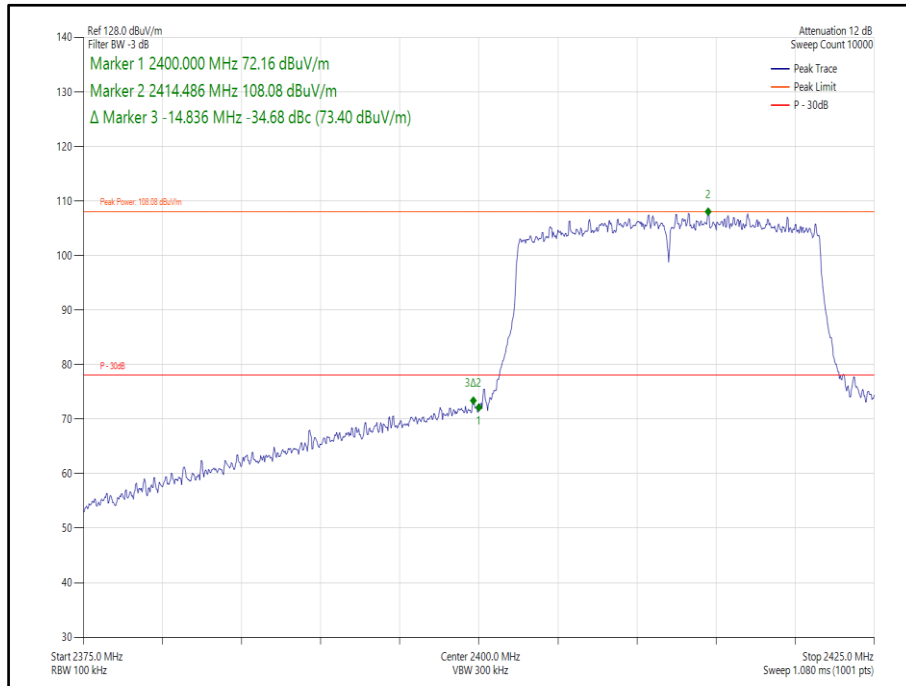
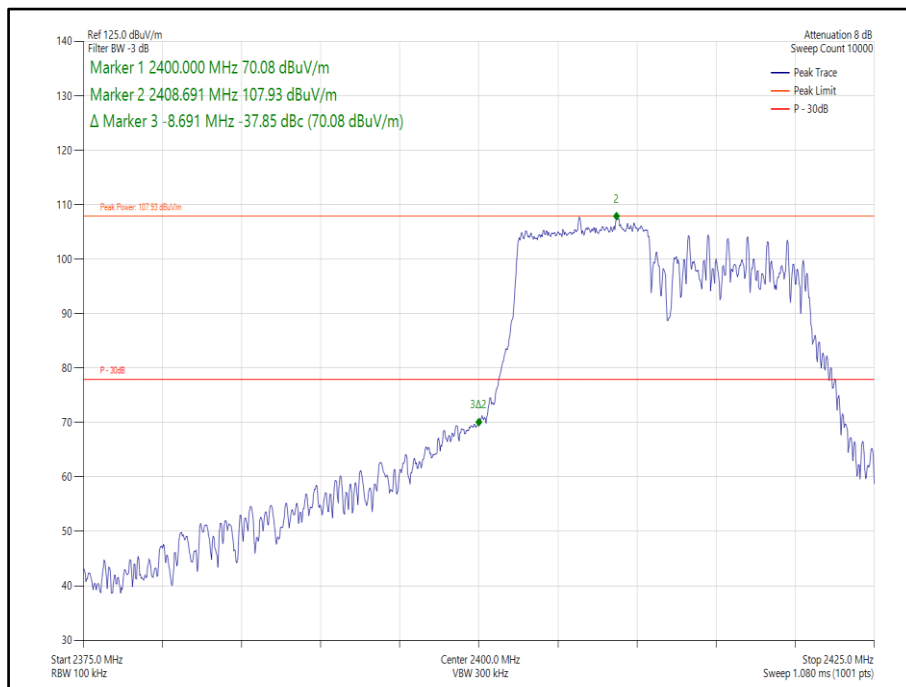


Figure 84 - 802.11n, HT20, SISO, Core 1 - 2412 MHz,
Band Edge Frequency 2400 MHz



**Figure 85 - 802.11ax, HE20, SU, SISO Core 1 - 2412 MHz,
Band Edge Frequency 2400 MHz**



**Figure 86 - 802.11ax, HE20, RU 106-53, SISO Core 1 - 2412 MHz,
Band Edge Frequency 2400 MHz**



20 MHz Bandwidth - Core 0-1 (CDD)

Mode	Data Rate/ MCS	Resource Size	Resource Index	TX Frequency (MHz)	Band Edge Frequency (MHz)	Level (dBc)
802.11n HT20	MCS7	-	-	2412	2400	-34.54
802.11ax HE20	MCS9x1	SU	-	2412	2400	-34.52
802.11ax HE20	MCS9x1	106	53	2412	2400	-38.72

Table 56 - CDD Authorised Band Edge Results

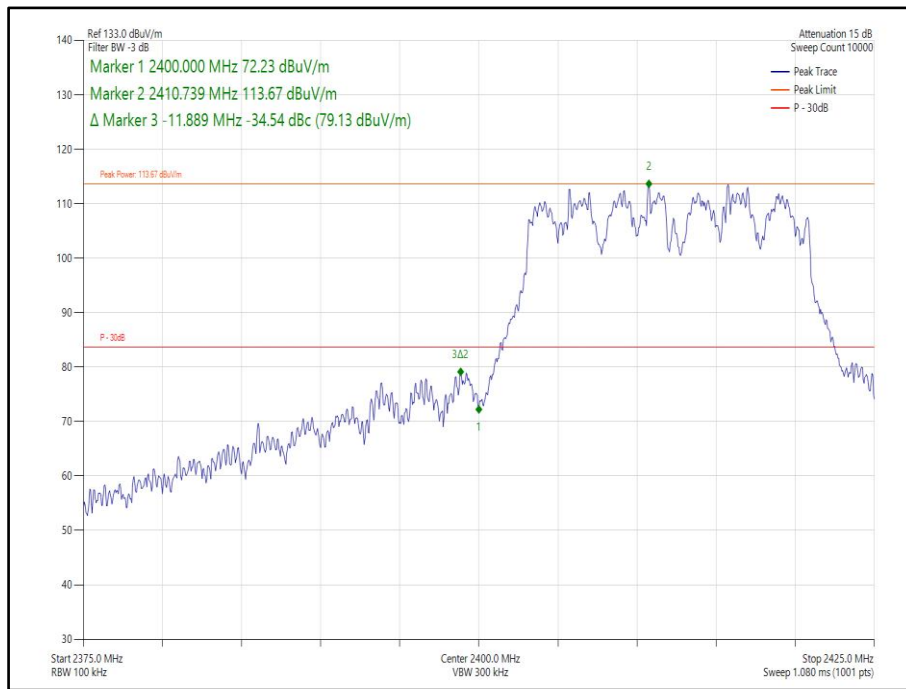
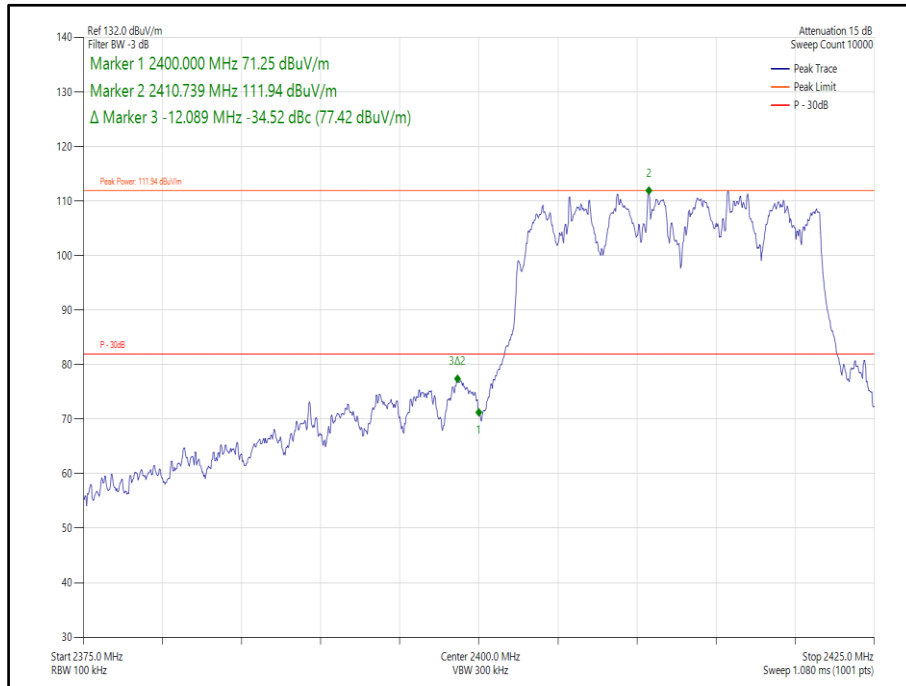
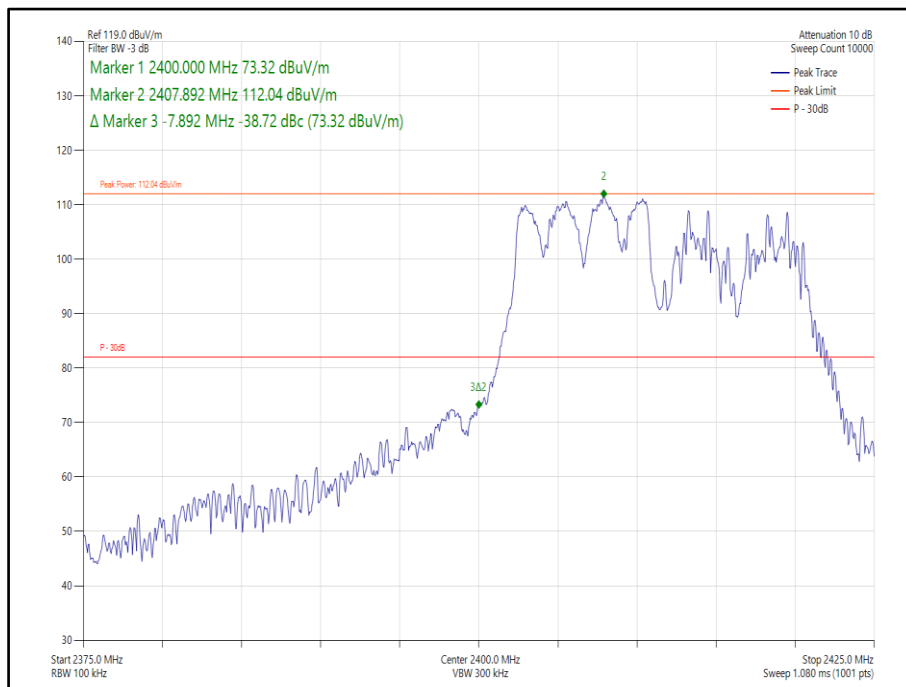


Figure 87 - 802.11n, HT20, CDD, Core 0-1 - 2412 MHz, Band Edge Frequency 2400 MHz



**Figure 88 - 802.11ax, HE20, SU, CDD, Core 0-1 - 2412 MHz,
Band Edge Frequency 2400 MHz**



**Figure 89 - 802.11ax, HE20, RU 106-53, CDD Core 0-1 - 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.



2.4.7 Test Location and Test Equipment Used

This test was carried out in RF Chamber 15.

Instrument	Manufacturer	Type No	TE No	Calibration Period (months)	Calibration Expires
Emissions Software	TUV SUD	EmX V3.1.10	5125	-	Software
1500W (300V 12A) AC Power Supply	iTech	IT7324	5956	-	O/P Mon
5m Semi-Anechoic Chamber (Dual-Axis)	Albatross Projects	RF Chamber 15	5963	36	28-Apr-2025
Compact Antenna Mast	Maturo Gmbh	CAM4.0-P	5964	-	TU
Mast & Turntable Controller	Maturo Gmbh	FCU3.0	5966	-	TU
Tilt Antenna Mast	Maturo Gmbh	BAM4.5-P	5967	-	TU
Turntable	Maturo Gmbh	TT1.5SI	5968	-	TU
Cable (SMA to SMA 1m)	Junkosha	MWX221-01000AMSAMS/A	5996	12	06-Jun-2023
Cable (N to N 1m)	Junkosha	MWX221-01000NMSNMS/B	5999	12	05-Jun-2023
Cable (N to N 7m)	Junkosha	MWX221-07000NMSNMS/B	6005	12	05-Jun-2023
Cable (N to N 8m)	Junkosha	MWX221-08000NMSNMS/A	6006	12	05-Jun-2023
Cable (SMA to SMA 1m)	Junkosha	MWX221-01000AMSAMS/A	6007	12	06-Jun-2023
Cable (SMA to SMA 6.5m)	Junkosha	MWX221-06500AMSAMS/B	6014	12	07-Jun-2023
Horn Antenna (1-10 GHz)	Schwarzbeck	BBHA9120B	6140	12	21-Jun-2023
Digital Multimeter	Fluke	115	6147	12	16-Jun-2023
Humidity & Temperature meter	R.S Components	1364	6150	12	17-Jun-2023

Table 57

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



2.5 Spurious Radiated Emissions

2.5.1 Specification Reference

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

2.5.2 Equipment Under Test and Modification State

A2941, S/N: F91VYD72Q5 - Modification State 0

2.5.3 Date of Test

21-February-2023 to 23-February-2023

2.5.4 Test Method

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

The EUT was placed on the non-conducting platform in a manner typical of a normal installation.

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 dB μ V/m to μ V/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.

2.5.5 Example Test Setup Diagram

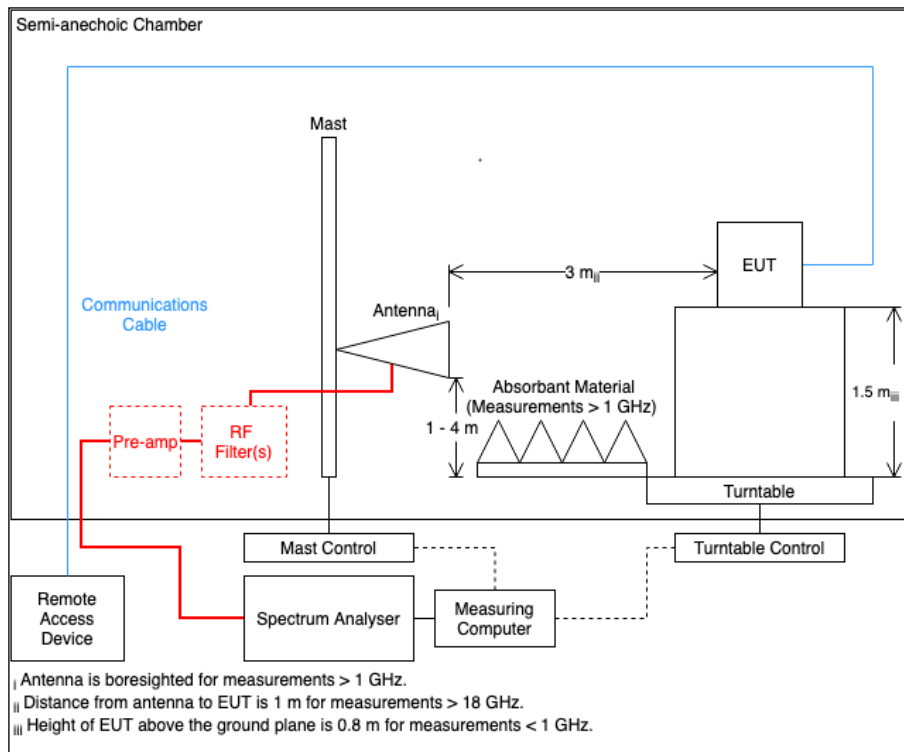


Figure 90

2.5.6 Environmental Conditions

Ambient Temperature 22.0 - 22.3 °C
Relative Humidity 42.3 - 45.5 %



2.5.7 Test Results

2.4 GHz WLAN

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

Table 58 - 2437 MHz (CH6), 802.11b, Core 0, 30 MHz to 26 GHz

*No emissions found within 10 dB of the limit.

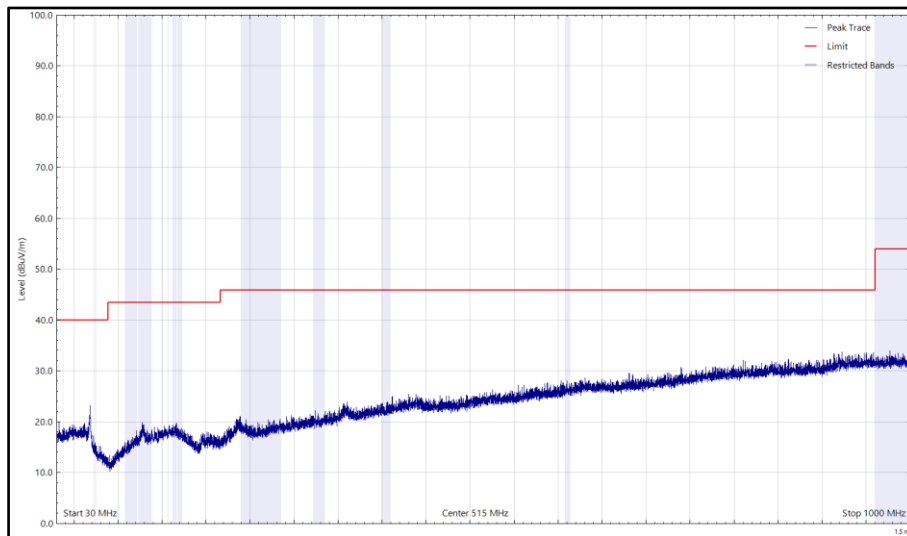


Figure 91 - 2437 MHz (CH6), 802.11b, Core 0, 30 MHz to 1 GHz, Horizontal (Peak)

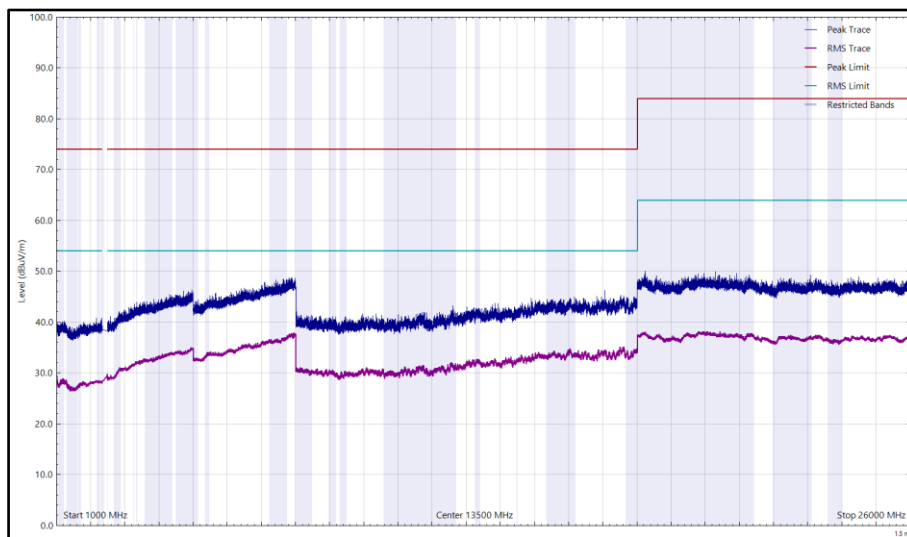


Figure 92 - 2437 MHz (CH6), 802.11b, Core 0, 1 GHz to 26 GHz, Horizontal

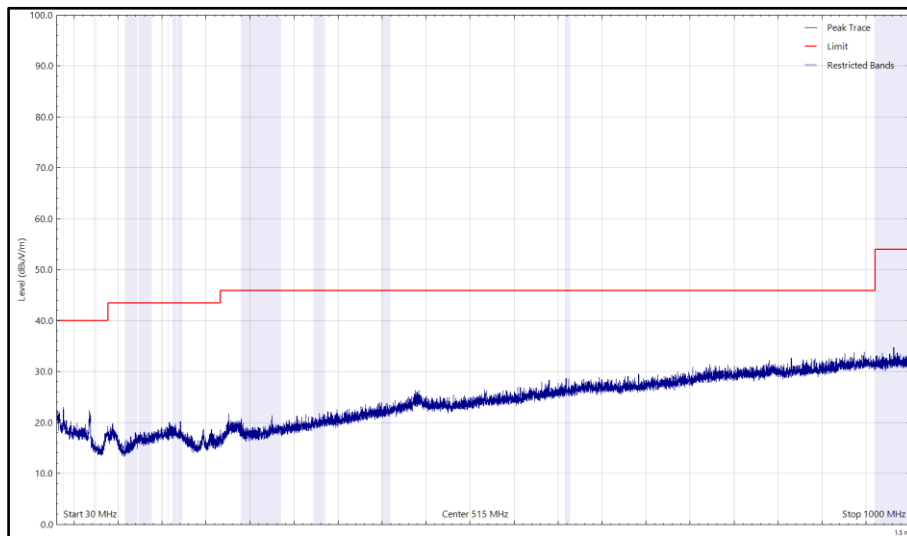


Figure 93 - 2437 MHz (CH6), 802.11b, Core 0, 30 MHz to 1 GHz, Vertical (Peak)

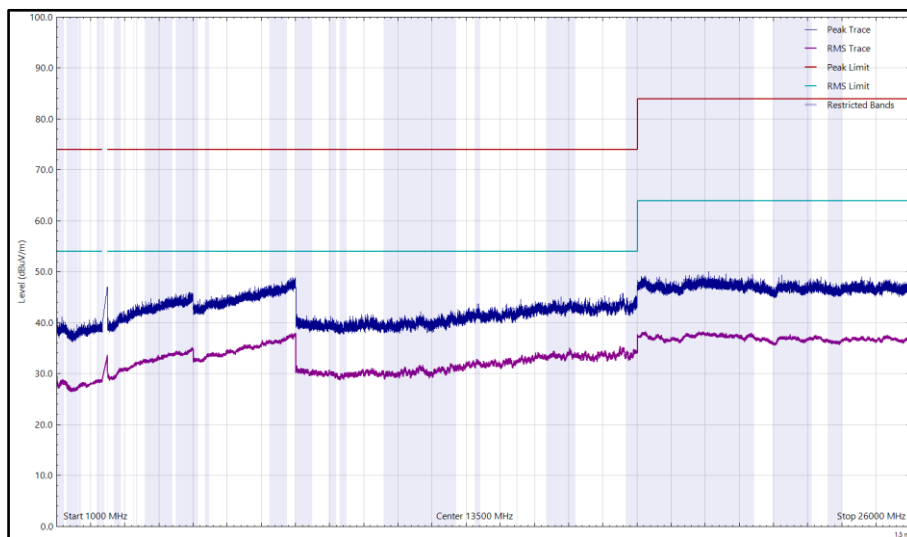


Figure 94 - 2437 MHz (CH6), 802.11b, Core 0, 1 GHz to 26 GHz, Vertical



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

Table 59 - 2437 MHz (CH6), 802.11b, Core 1, 30 MHz to 26 GHz

*No emissions found within 10 dB of the limit.

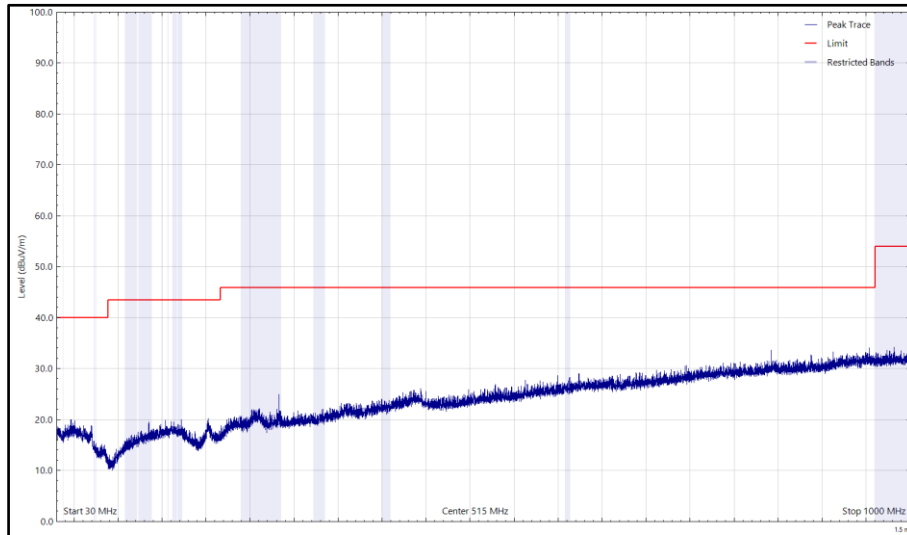


Figure 95 - 2437 MHz (CH6), 802.11b, Core 1, 30 MHz to 1 GHz, Horizontal (Peak)

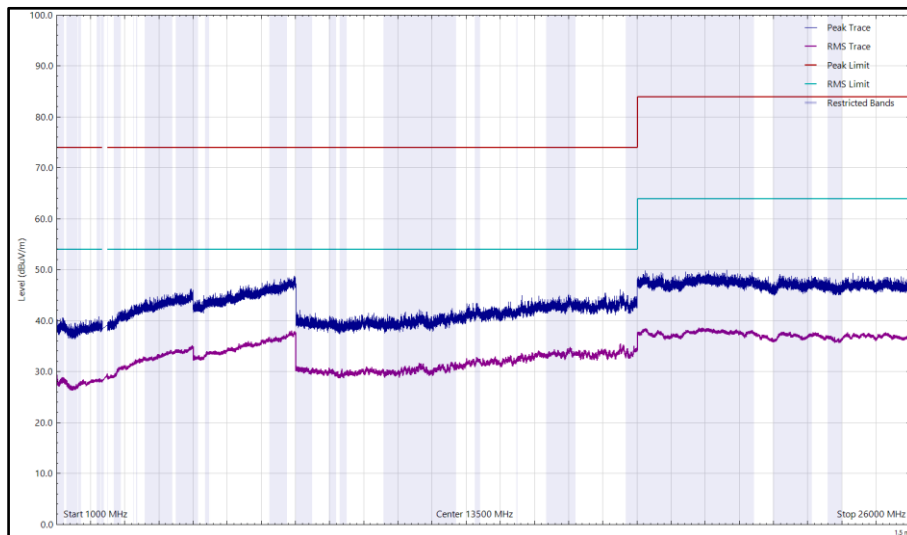


Figure 96 - 2437 MHz (CH6), 802.11b, Core 1, 1 GHz to 26 GHz, Horizontal

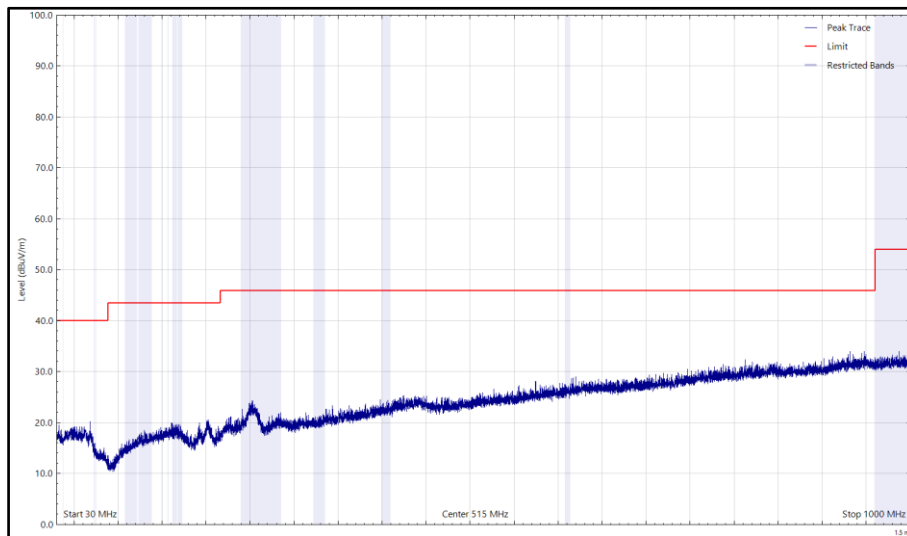


Figure 97 - 2437 MHz (CH6), 802.11b, Core 1, 30 MHz to 1 GHz, Vertical (Peak)

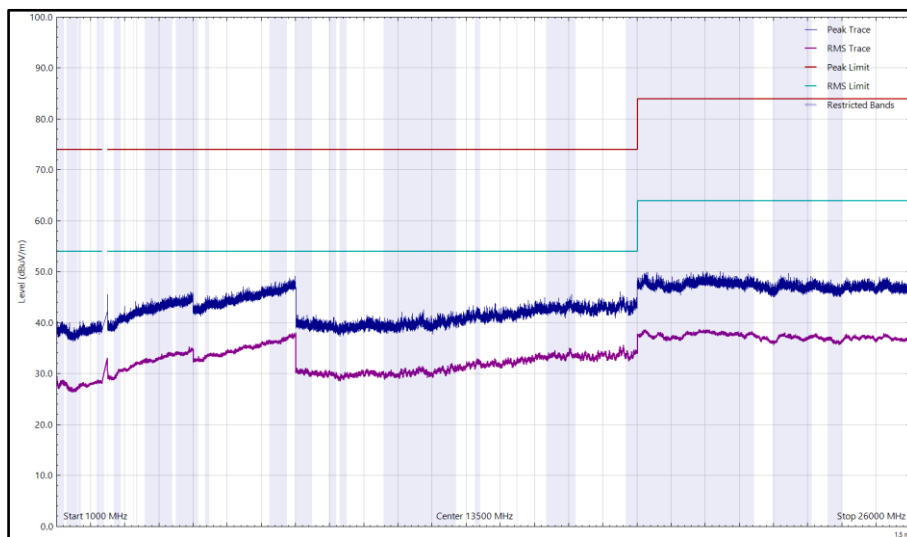


Figure 98 - 2437 MHz (CH6), 802.11b, Core 1, 1 GHz to 26 GHz, Vertical



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

Table 60 - 2437 MHz (CH6), 802.11g, Core 0, 30 MHz to 26 GHz

*No emissions found within 10 dB of the limit.

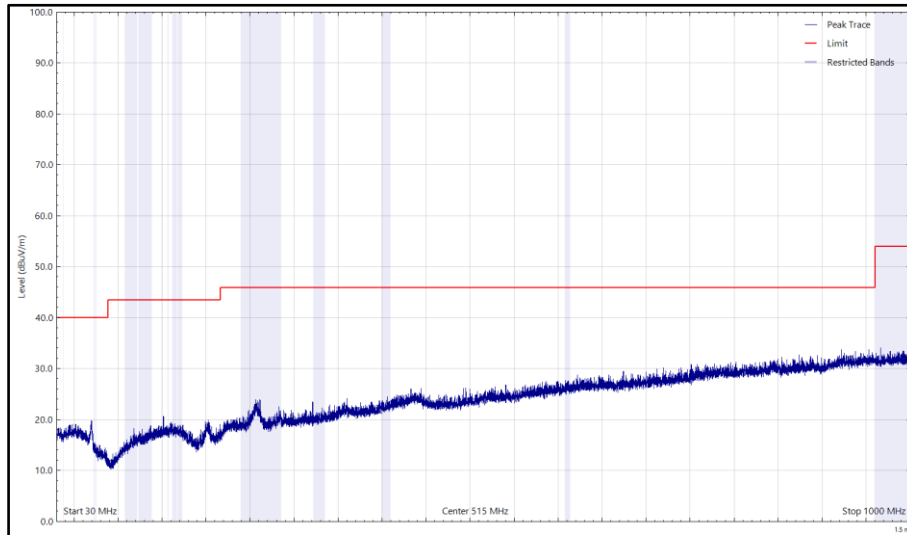


Figure 99 - 2437 MHz (CH6), 802.11g, Core 0, 30 MHz to 1 GHz, Horizontal (Peak)

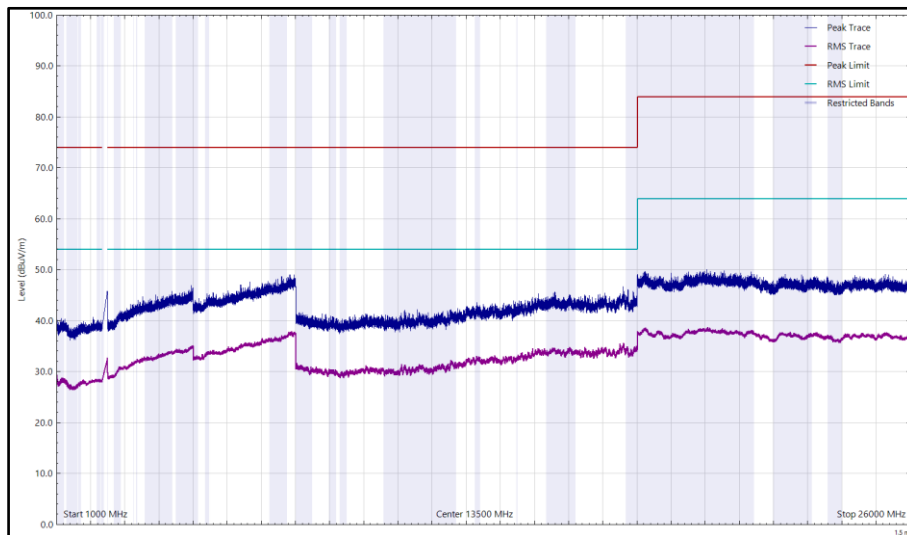


Figure 100 - 2437 MHz (CH6), 802.11g, Core 0, 1 GHz to 26 GHz, Horizontal

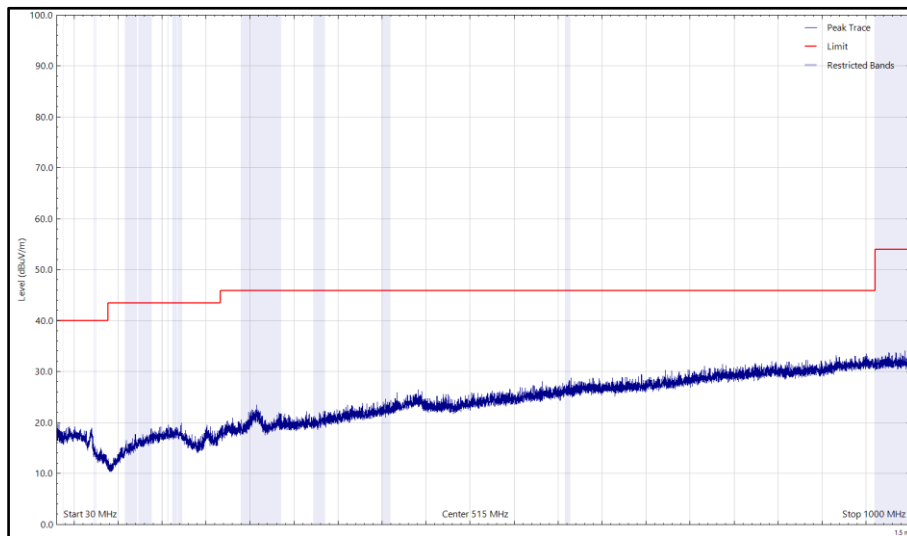


Figure 101 - 2437 MHz (CH6), 802.11g, Core 0, 30 MHz to 1 GHz, Vertical (Peak)

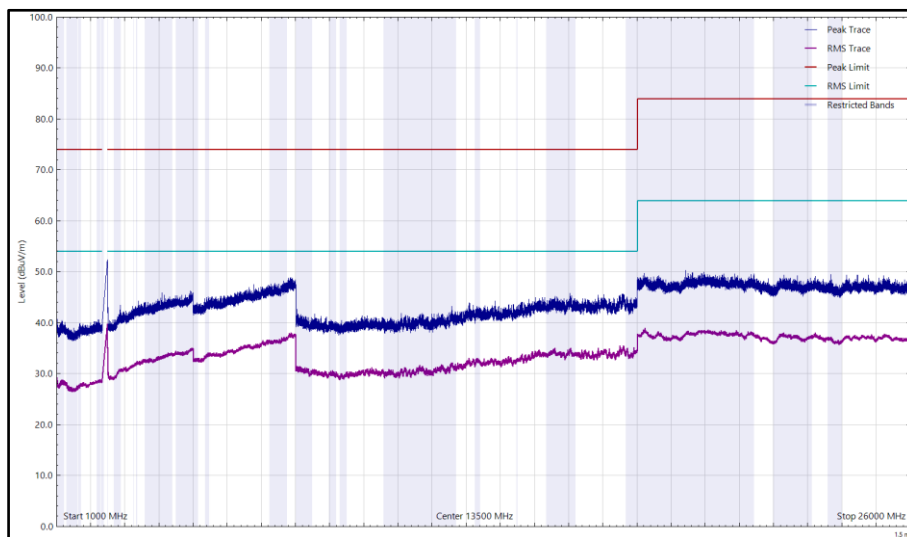


Figure 102 - 2437 MHz (CH6), 802.11g, Core 0, 1 GHz to 26 GHz, Vertical



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

Table 61 - 2437 MHz (CH6), 802.11g, Core 1, 30 MHz to 26 GHz

*No emissions found within 10 dB of the limit.

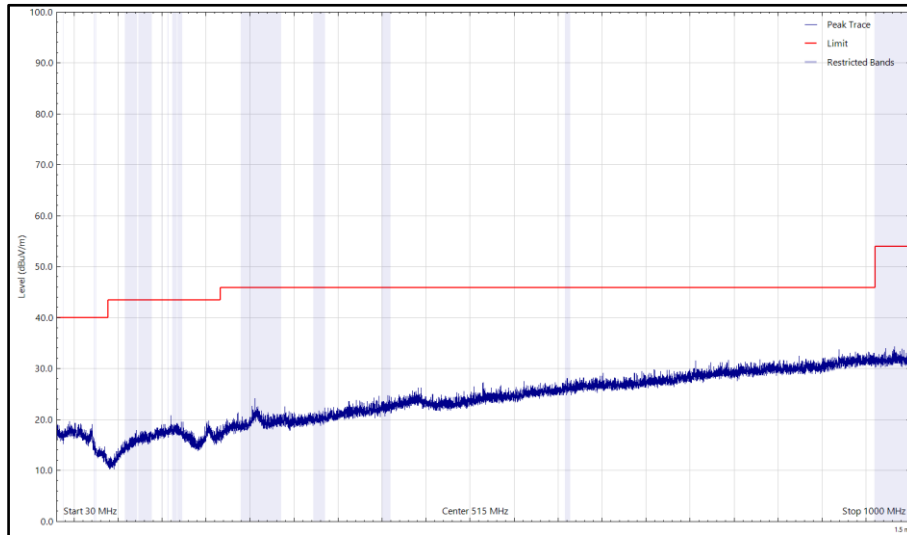


Figure 103 - 2437 MHz (CH6), 802.11g, Core 1, 30 MHz to 1 GHz, Horizontal (Peak)

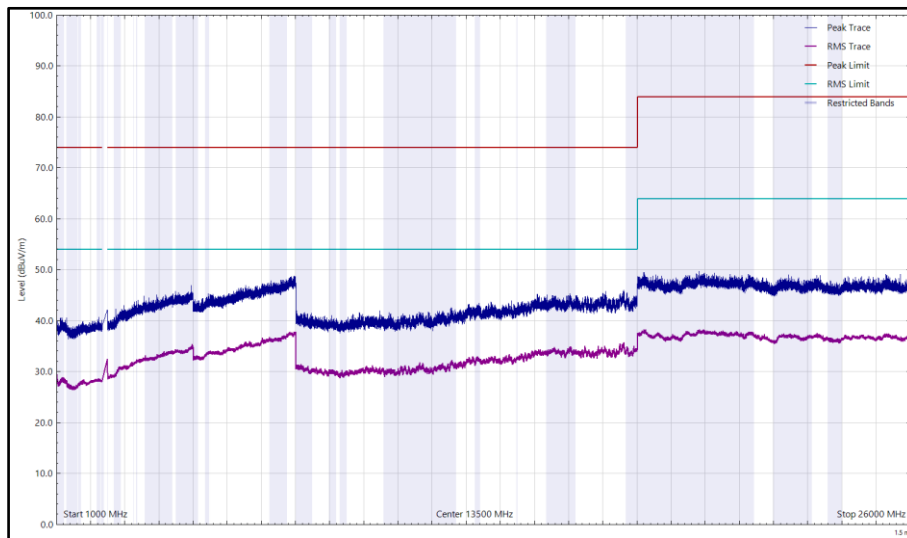


Figure 104 - 2437 MHz (CH6), 802.11g, Core 1, 1 GHz to 26 GHz, Horizontal

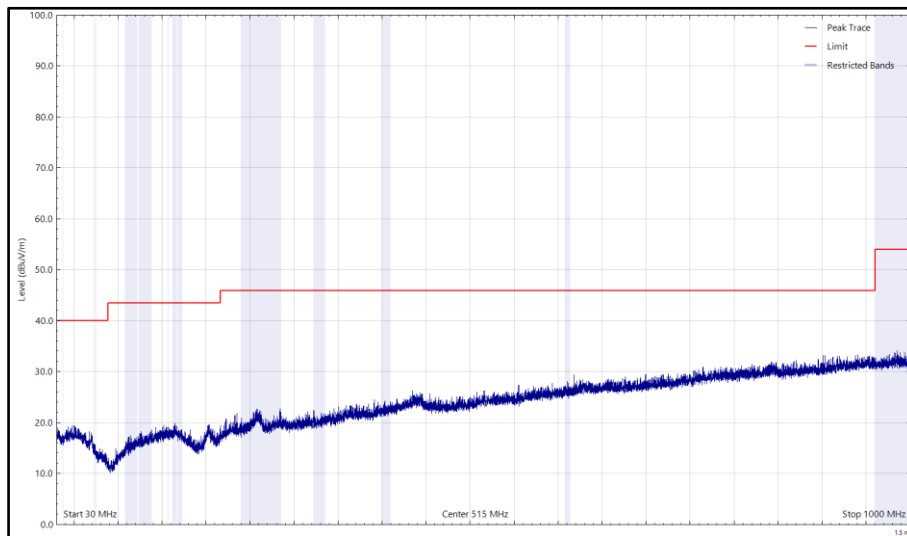


Figure 105 - 2437 MHz (CH6), 802.11g, Core 1, 30 MHz to 1 GHz, Vertical (Peak)

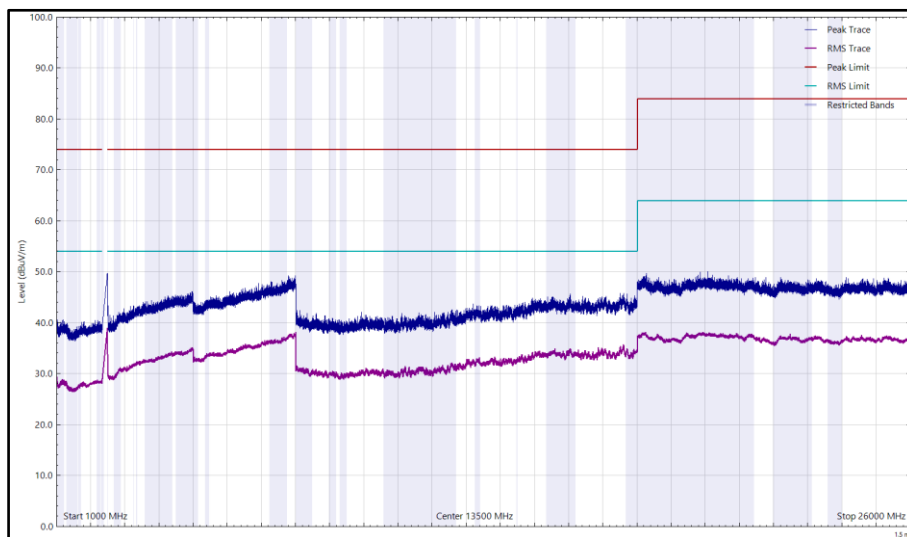


Figure 106 - 2437 MHz (CH6), 802.11g, Core 1, 1 GHz to 26 GHz, Vertical



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

Table 62 - 2437 MHz (CH6), HT20, CDD, Core 0 + Core 1, 30 MHz to 26 GHz

*No emissions found within 10 dB of the limit.

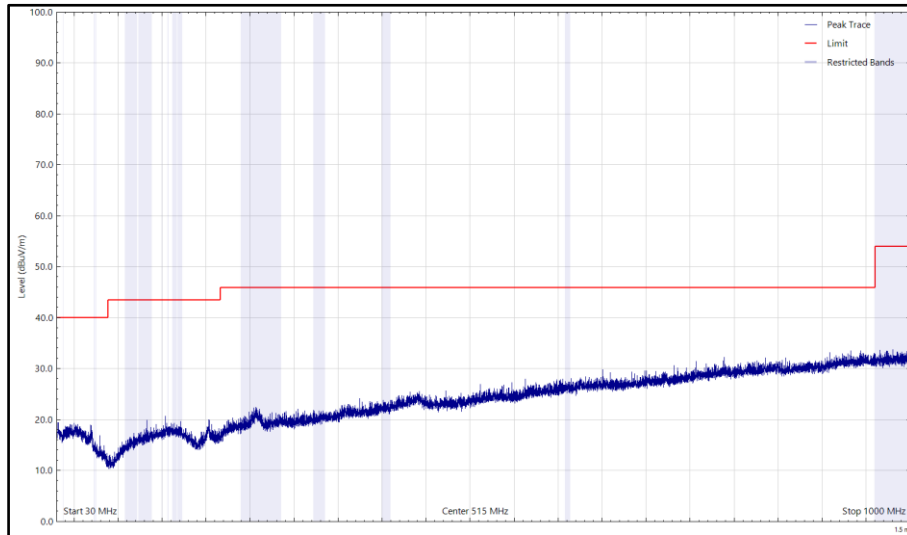


Figure 107 - 2437 MHz (CH6), HT20, CDD, Core 0 + Core 1, 30 MHz to 1 GHz, Horizontal (Peak)

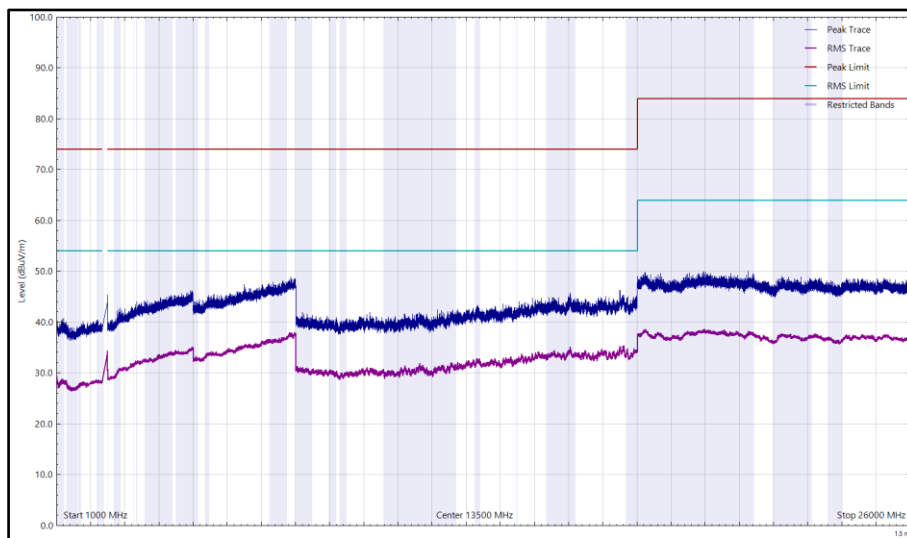


Figure 108 - 2437 MHz (CH6), HT20, CDD, Core 0 + Core 1, 1 GHz to 26 GHz, Horizontal

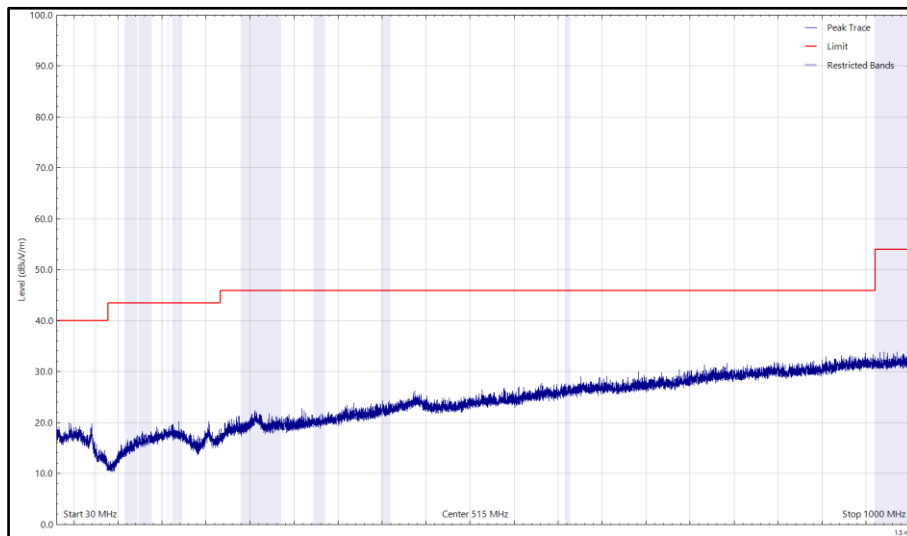


Figure 109 - 2437 MHz (CH6), HT20, CDD, Core 0 + Core 1, 30 MHz to 1 GHz, Vertical (Peak)

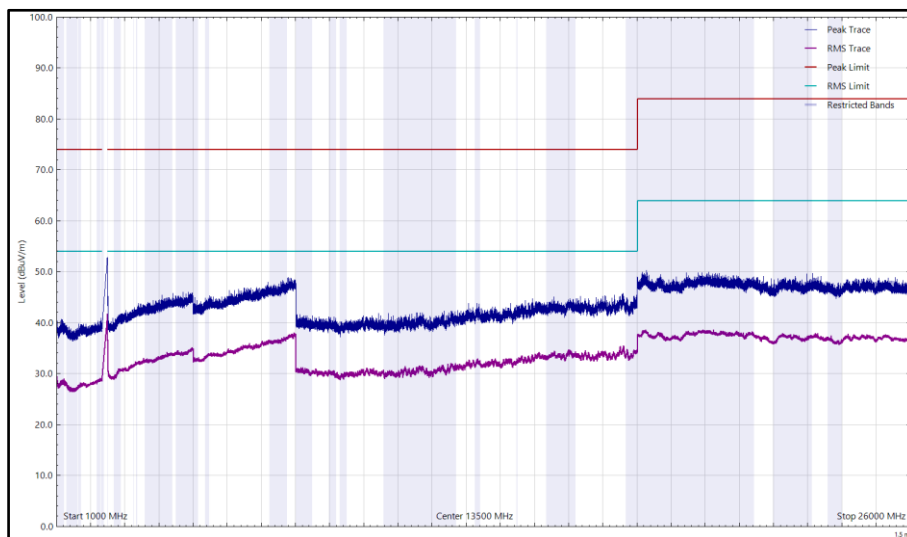


Figure 110 - 2437 MHz (CH6), HT20, CDD, Core 0 + Core 1, 1 GHz to 26 GHz, Vertical



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

Table 63 - 2437 MHz (CH6), HE20, RU26-0, CDD, Core 0 + Core 1, 30 MHz to 26 GHz

*No emissions found within 10 dB of the limit.

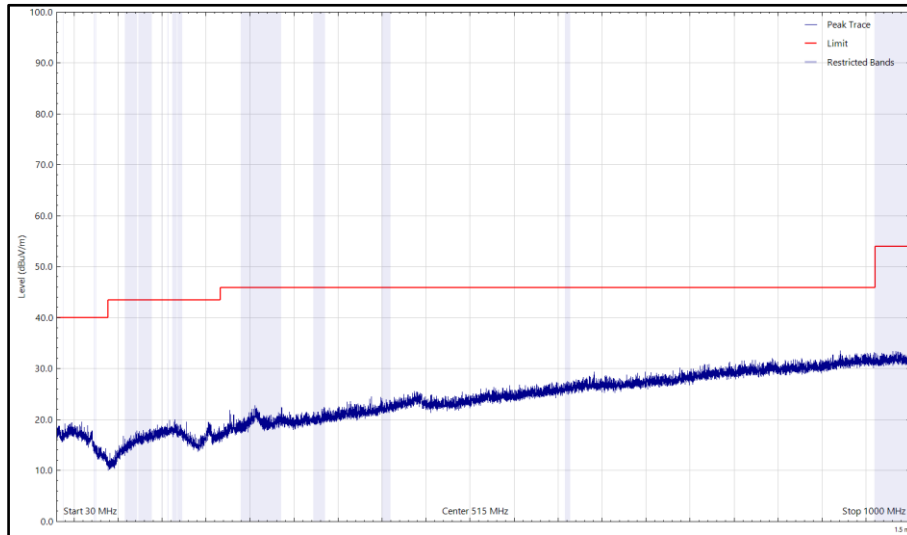


Figure 111 - 2437 MHz (CH6), HE20, RU26-0, CDD, Core 0 + Core 1, 30 MHz to 1 GHz, Horizontal (Peak)

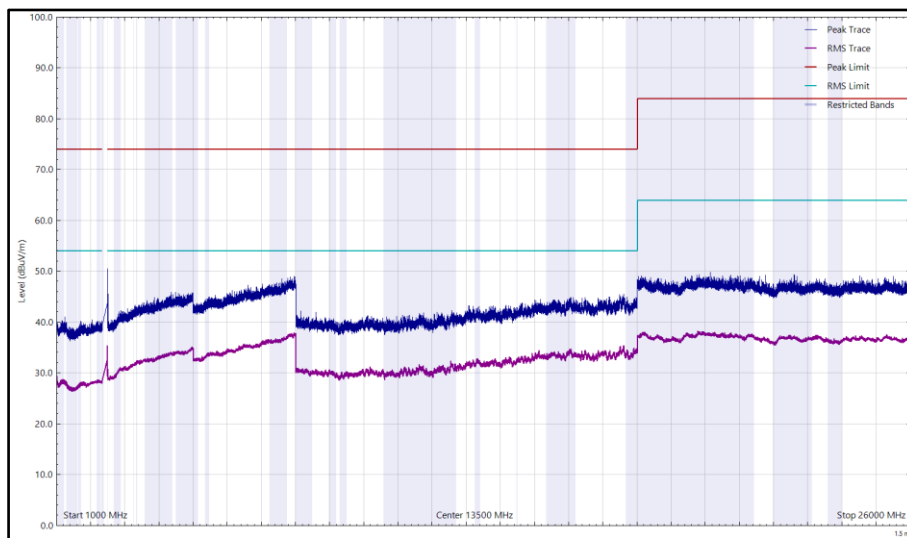


Figure 112 - 2437 MHz (CH6), HE20, RU26-0, CDD, Core 0 + Core 1, 1 GHz to 26 GHz, Horizontal

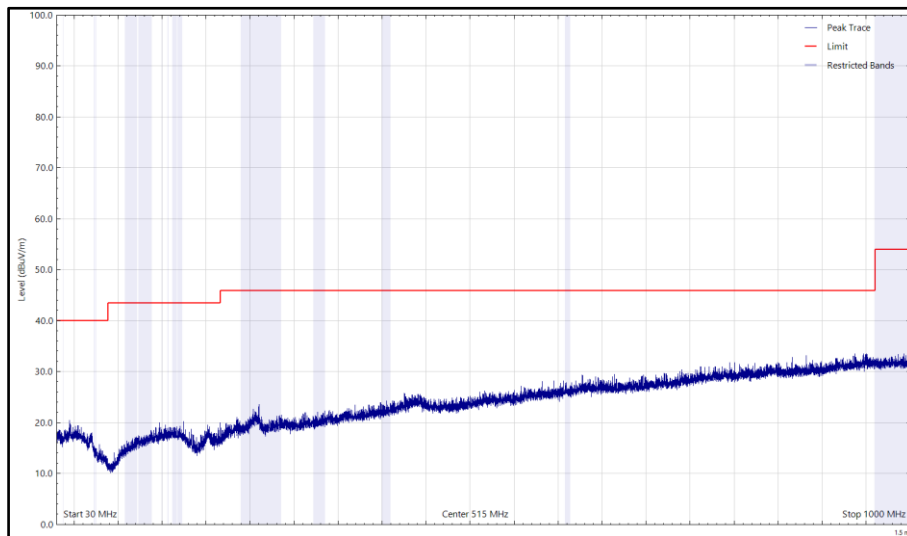


Figure 113 - 2437 MHz (CH6), HE20, RU26-0, CDD, Core 0 + Core 1, 30 MHz to 1 GHz, Vertical (Peak)

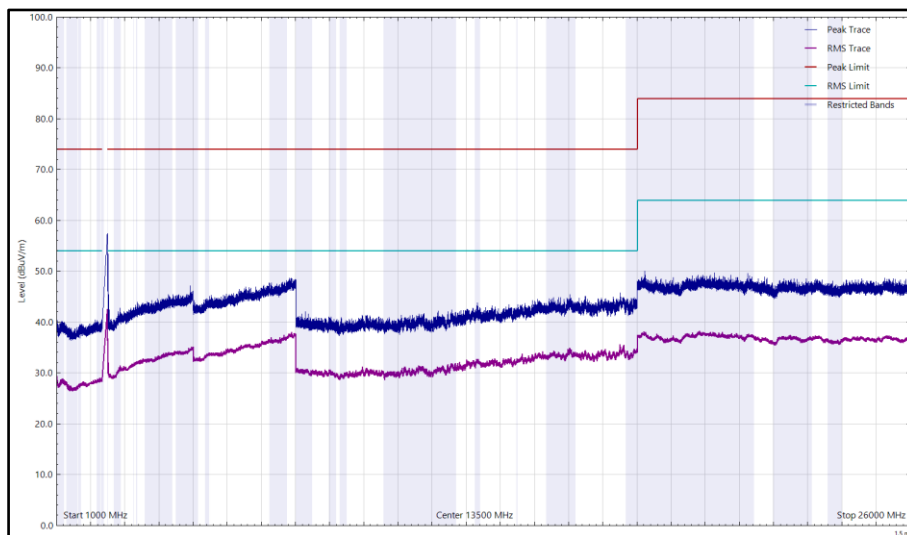


Figure 114 - 2437 MHz (CH6), HE20, RU26-0, CDD, Core 0 + Core 1, 1 GHz to 26 GHz, Vertical



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

Table 64 - 2412 MHz (CH1), 802.11b, Core 0, 1 GHz to 26 GHz

*No emissions found within 10 dB of the limit.

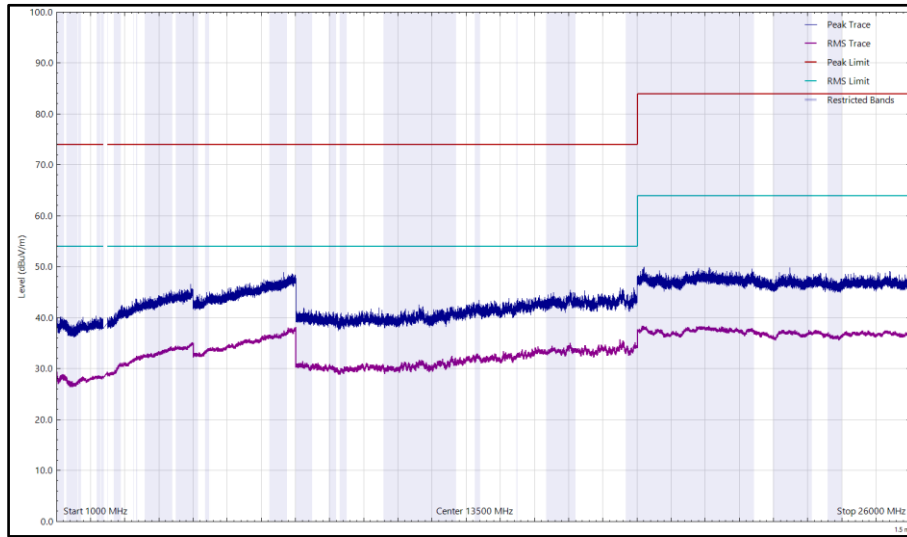


Figure 115 - 2412 MHz (CH1), 802.11b, Core 0, 1 GHz to 26 GHz, Horizontal

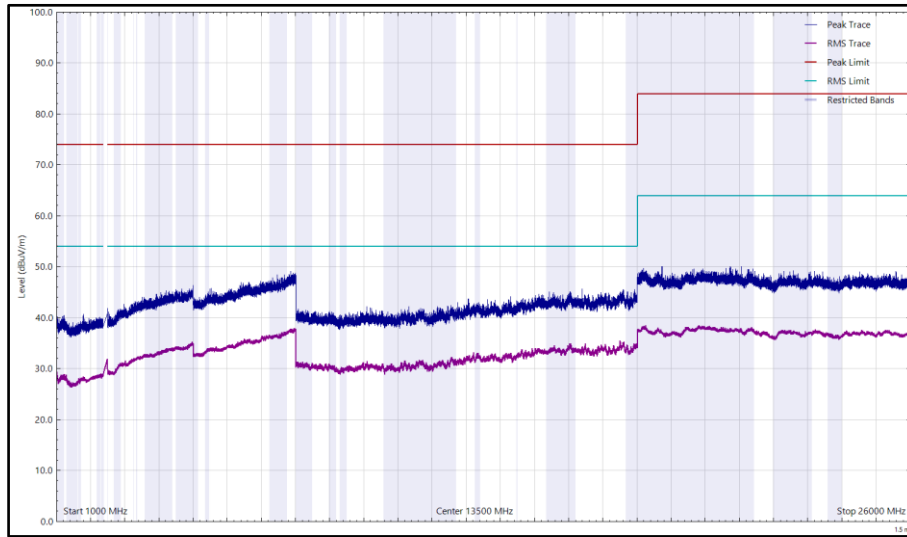


Figure 116 - 2412 MHz (CH1), 802.11b, Core 0, 1 GHz to 26 GHz, Vertical



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

Table 65 - 2472 MHz (CH13), 802.11b, Core 0, 1 GHz to 26 GHz

*No emissions found within 10 dB of the limit.

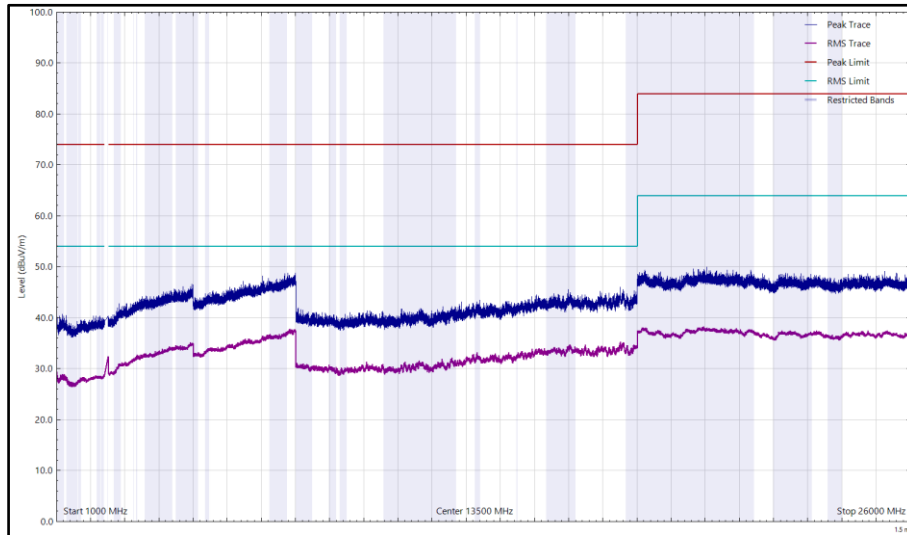


Figure 117 - 2472 MHz (CH13), 802.11b, Core 0, 1 GHz to 26 GHz, Horizontal

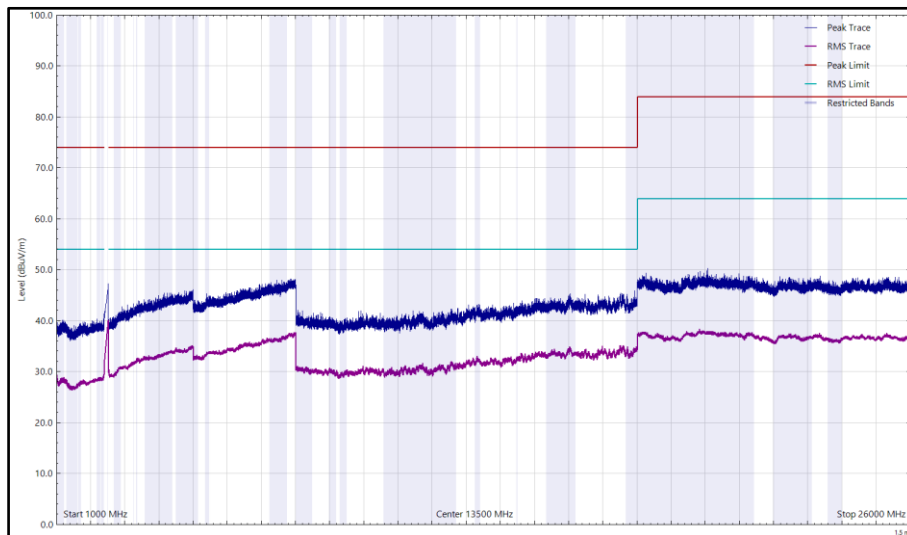


Figure 118 - 2472 MHz (CH13), 802.11b, Core 0, 1 GHz to 26 GHz, Vertical



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

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

*No emissions found within 10 dB of the limit.

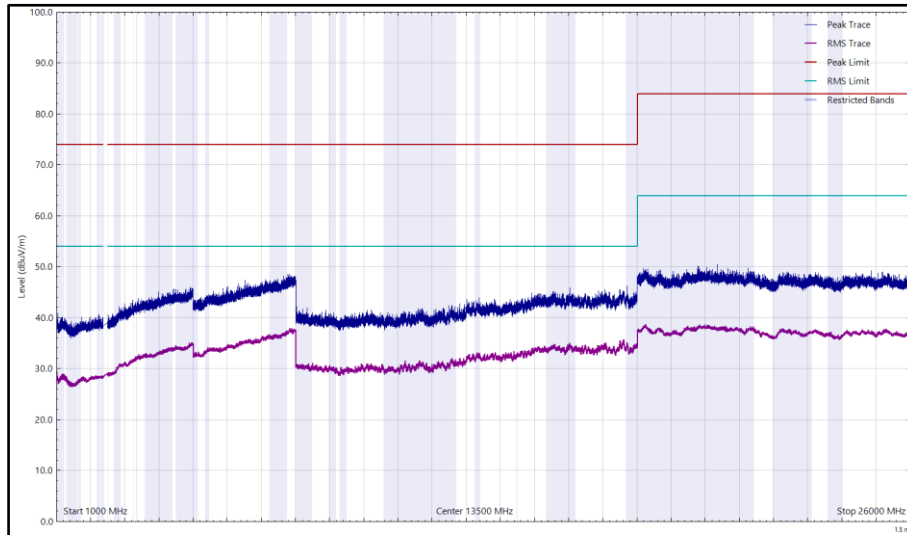


Figure 119 - 2412 MHz (CH1), 802.11b, Core 1, 1 GHz to 26 GHz, Horizontal

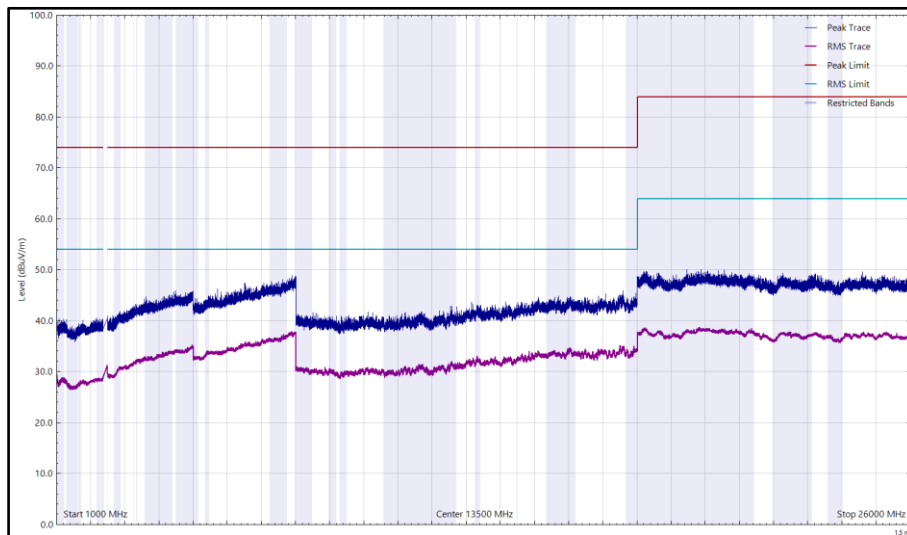


Figure 120 - 2412 MHz (CH1), 802.11b, Core 1, 1 GHz to 26 GHz, Vertical



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

Table 67 - 2472 MHz (CH13), 802.11b, Core 1, 1 GHz to 26 GHz

*No emissions found within 10 dB of the limit.

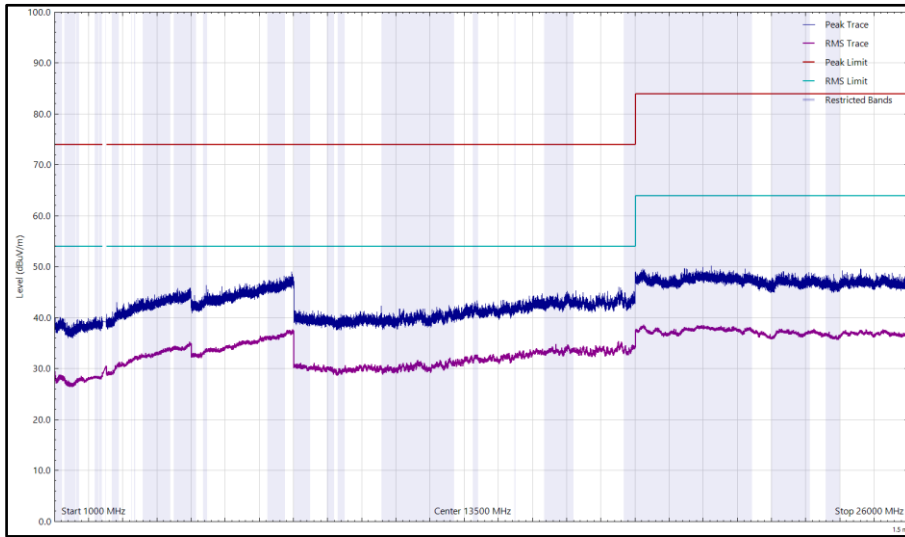


Figure 121 - 2472 MHz (CH13), 802.11b, Core 1, 1 GHz to 26 GHz, Horizontal

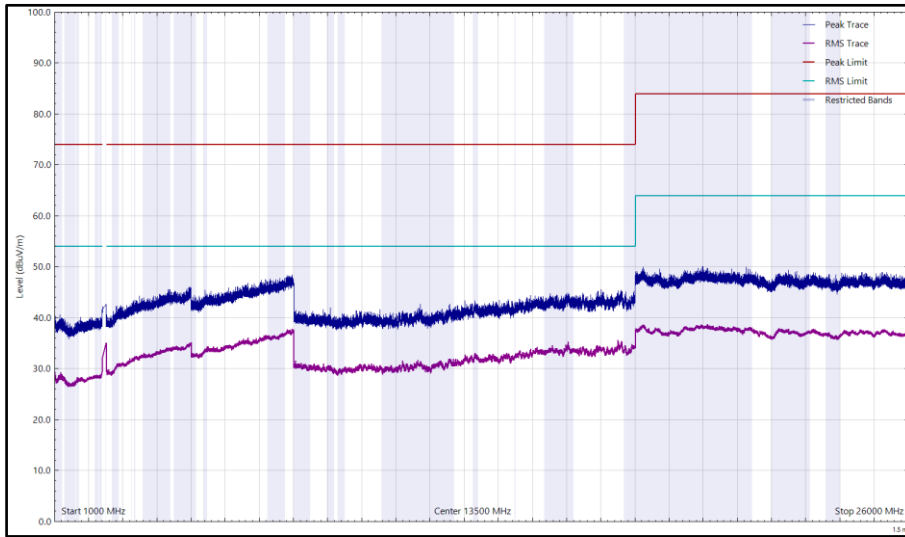


Figure 122 - 2472 MHz (CH13), 802.11b, Core 1, 1 GHz to 26 GHz, Vertical



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

Table 68 - 2412 MHz (CH1), 802.11g, Core 0, 1 GHz to 26 GHz

*No emissions found within 10 dB of the limit.

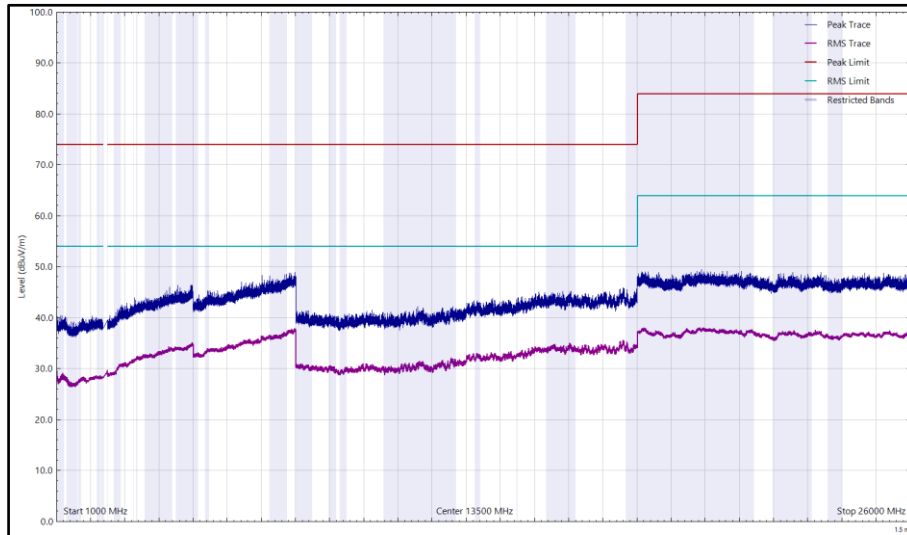


Figure 123 - 2412 MHz (CH1), 802.11g, Core 0, 1 GHz to 26 GHz, Horizontal

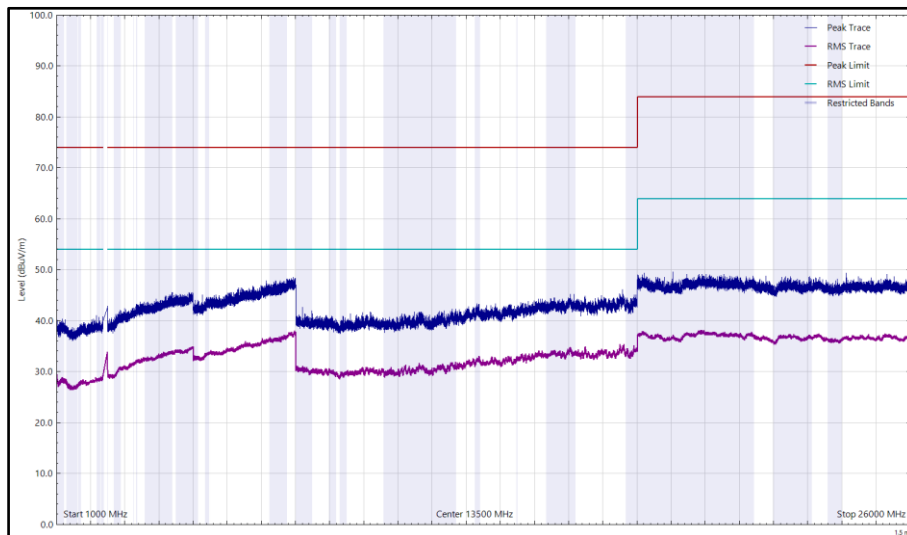


Figure 124 - 2412 MHz (CH1), 802.11g, Core 0, 1 GHz to 26 GHz, Vertical



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

Table 69 - 2472 MHz (CH13), 802.11g, Core 0, 1 GHz to 26 GHz

*No emissions found within 10 dB of the limit.

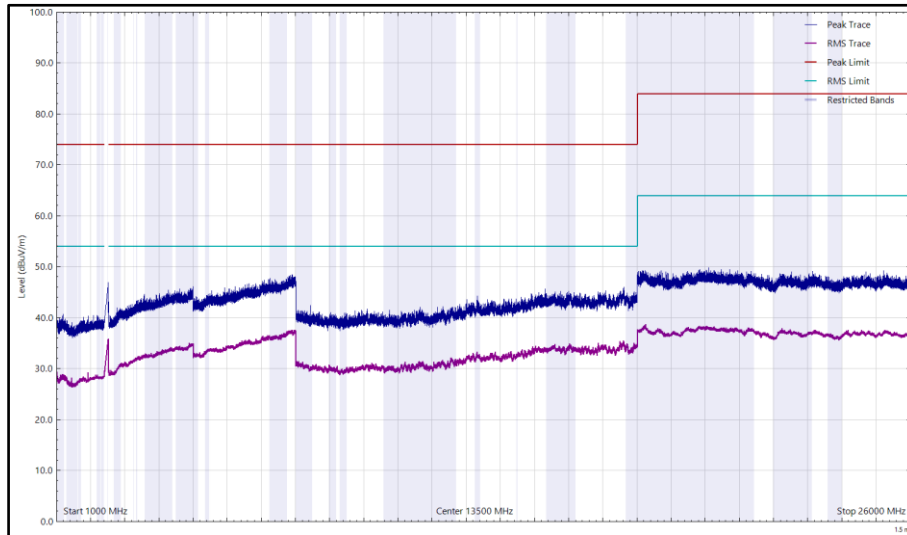


Figure 125 - 2472 MHz (CH13), 802.11g, Core 0, 1 GHz to 26 GHz, Horizontal

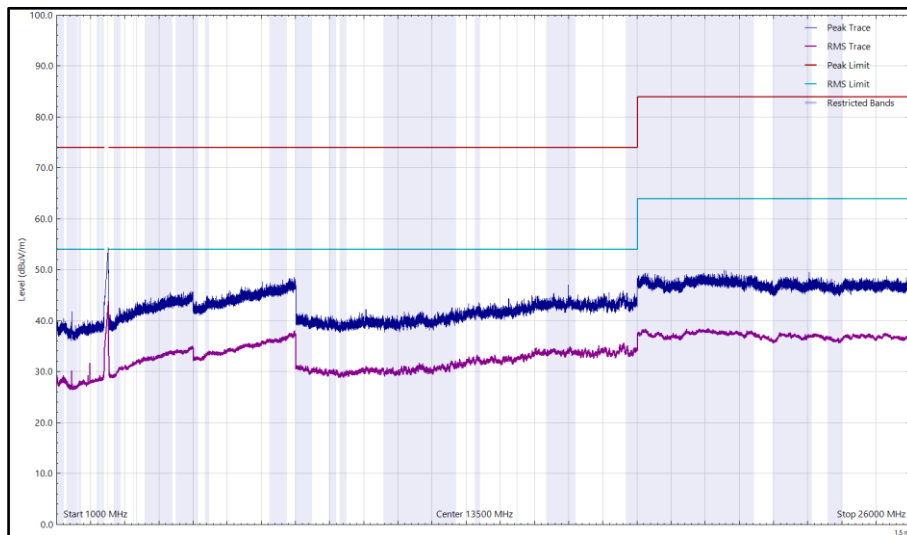


Figure 126 - 2472 MHz (CH13), 802.11g, Core 0, 1 GHz to 26 GHz, Vertical



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

Table 70 - 2412 MHz (CH1), 802.11g, Core 1, 1 GHz to 26 GHz

*No emissions found within 10 dB of the limit.

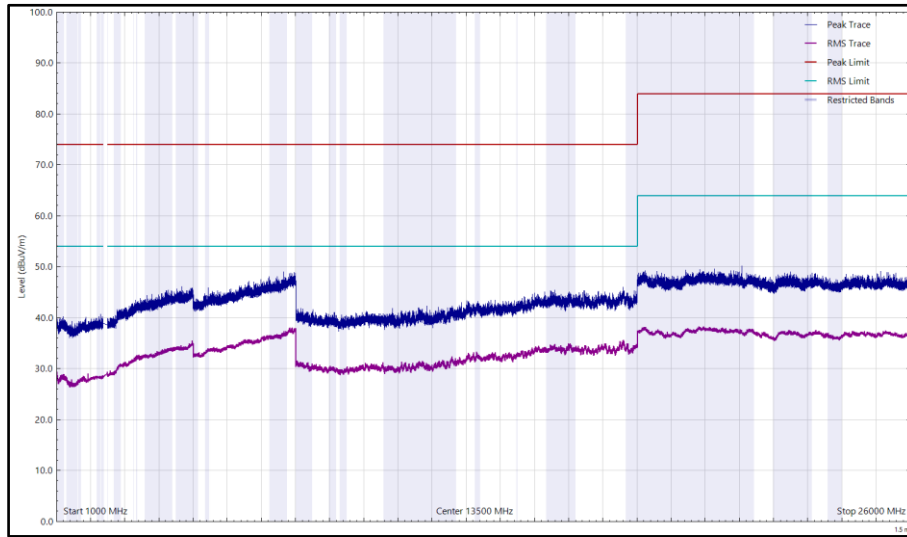


Figure 127 - 2412 MHz (CH1), 802.11g, Core 1, 1 GHz to 26 GHz, Horizontal

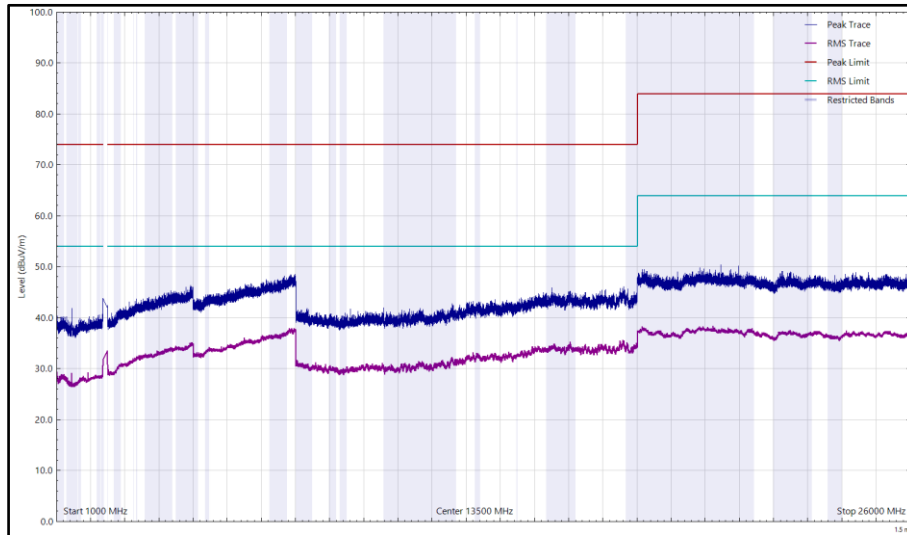


Figure 128 - 2412 MHz (CH1), 802.11g, Core 1, 1 GHz to 26 GHz, Vertical



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

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

*No emissions found within 10 dB of the limit.

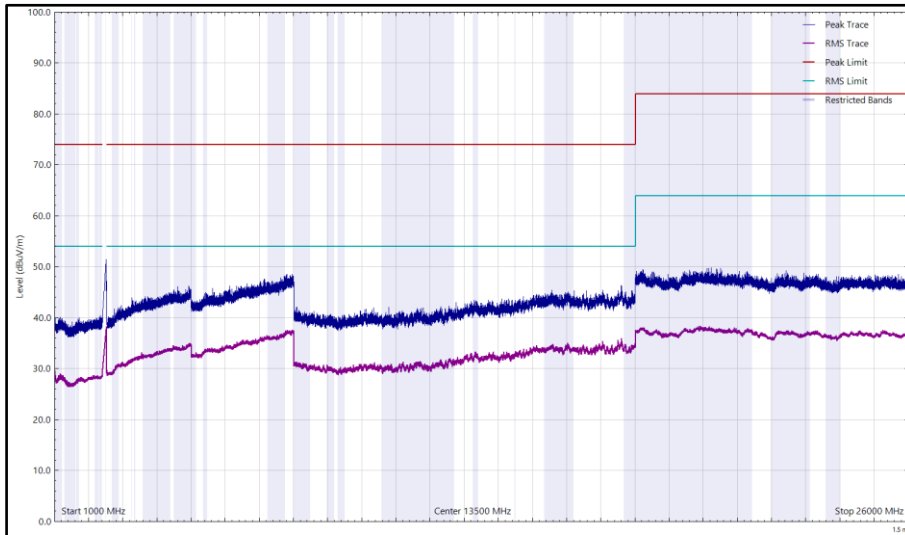


Figure 129 - 2472 MHz (CH13), 802.11g, Core 1, 1 GHz to 26 GHz, Horizontal

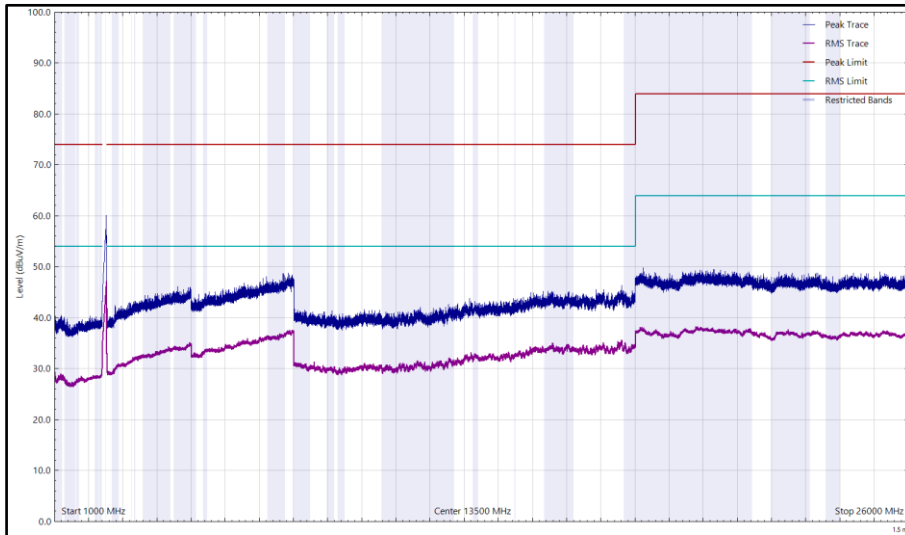


Figure 130 - 2472 MHz (CH13), 802.11g, Core 1, 1 GHz to 26 GHz, Vertical



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

Table 72 - 2412 MHz (CH1), HT20, CDD, Core 0 + Core 1, 1 GHz to 26 GHz

*No emissions found within 10 dB of the limit.

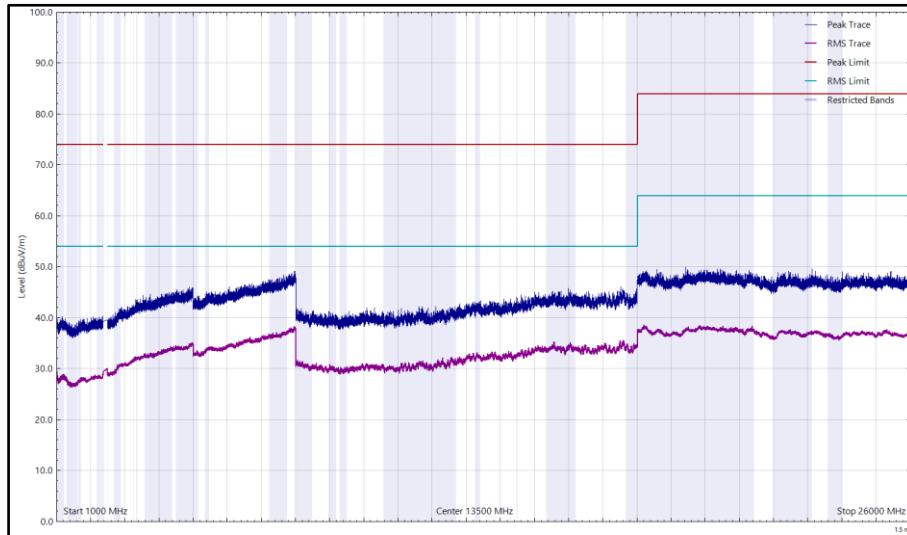


Figure 131 - 2412 MHz (CH1), HT20, CDD, Core 0 + Core 1, 1 GHz to 26 GHz, Horizontal

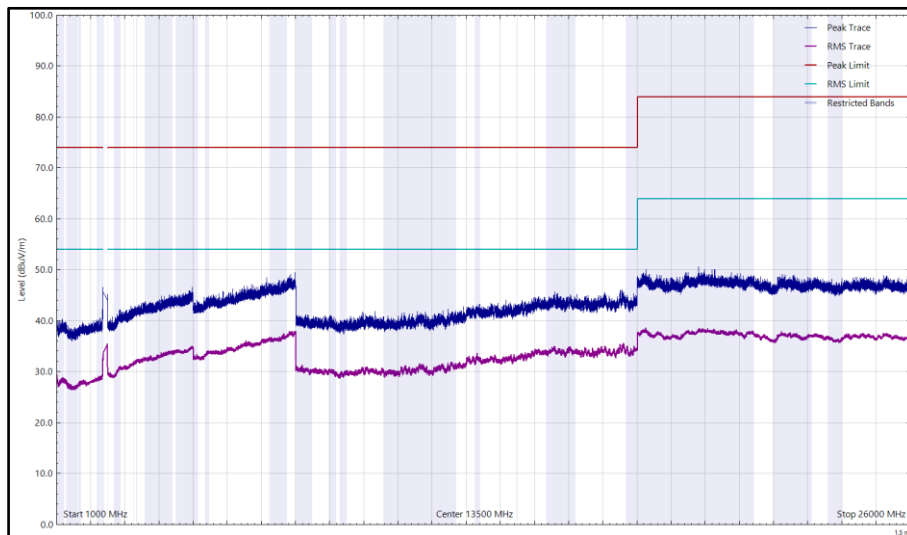


Figure 132 - 2412 MHz (CH1), HT20, CDD, Core 0 + Core 1, 1 GHz to 26 GHz, Vertical



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

Table 73 - 2472 MHz (CH13), HT20, CDD, Core 0 + Core 1, 1 GHz to 26 GHz

*No emissions found within 10 dB of the limit.

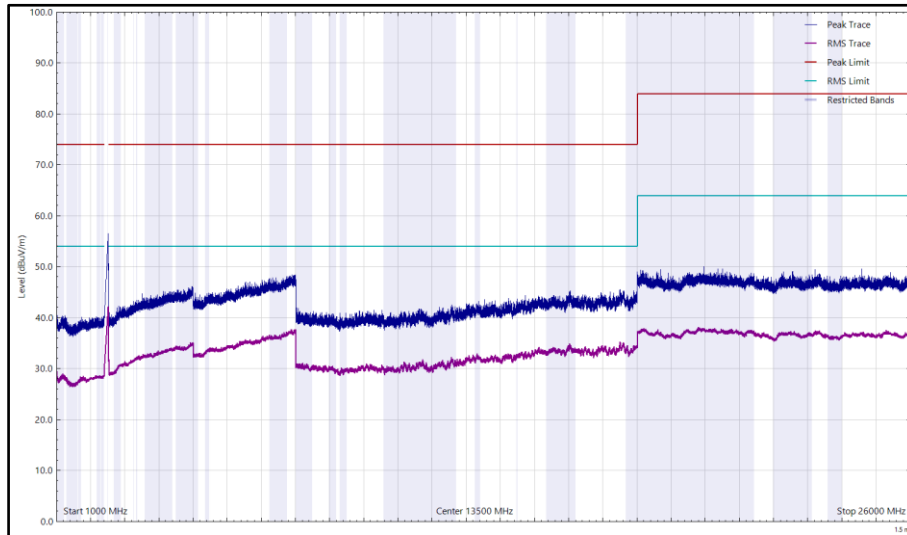


Figure 133 - 2472 MHz (CH13), HT20, CDD, Core 0 + Core 1, 1 GHz to 26 GHz, Horizontal

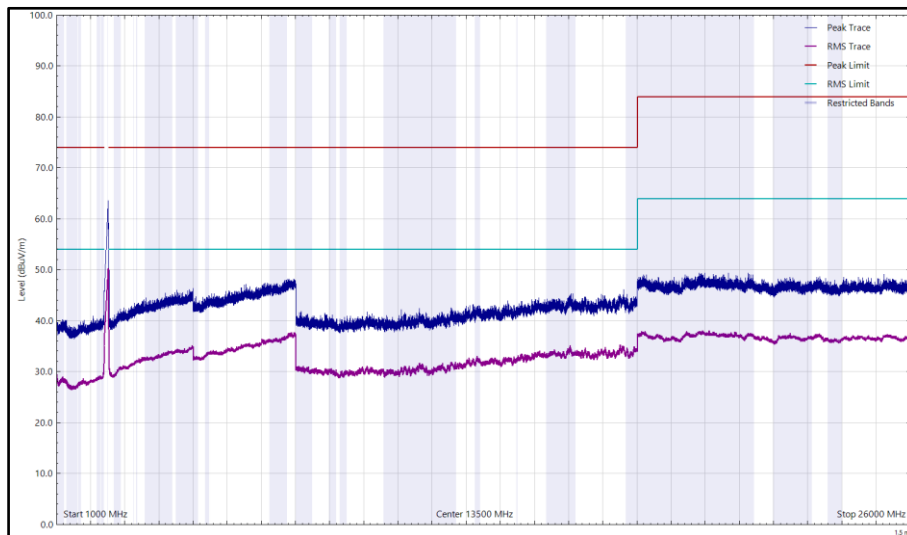


Figure 134 - 2472 MHz (CH13), HT20, CDD, Core 0 + Core 1, 1 GHz to 26 GHz, Vertical



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

Table 74 - 2412 MHz (CH1), HE20, RU26-0, CDD, Core 0 + Core 1, 1 GHz to 26 GHz

*No emissions found within 10 dB of the limit.

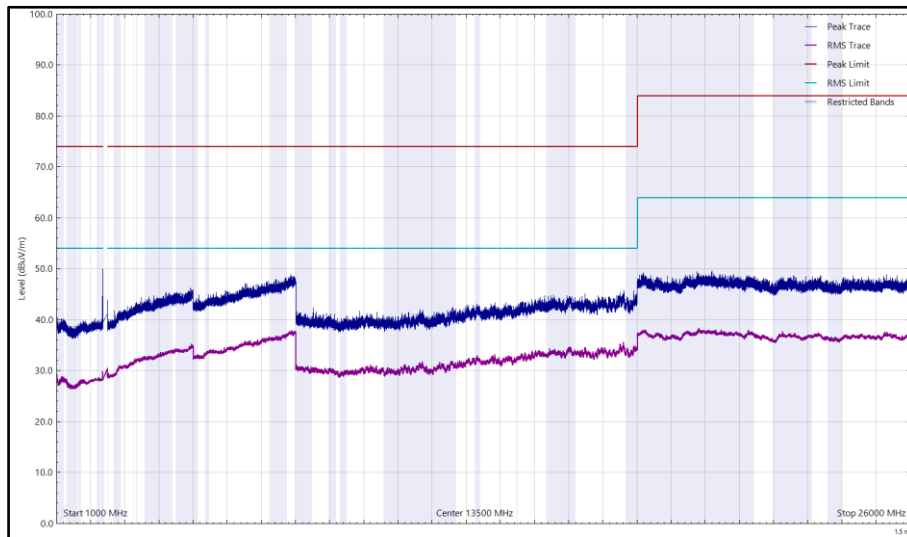


Figure 135 - 2412 MHz (CH1), HE20, RU26-0, CDD, Core 0 + Core 1, 1 GHz to 26 GHz, Horizontal

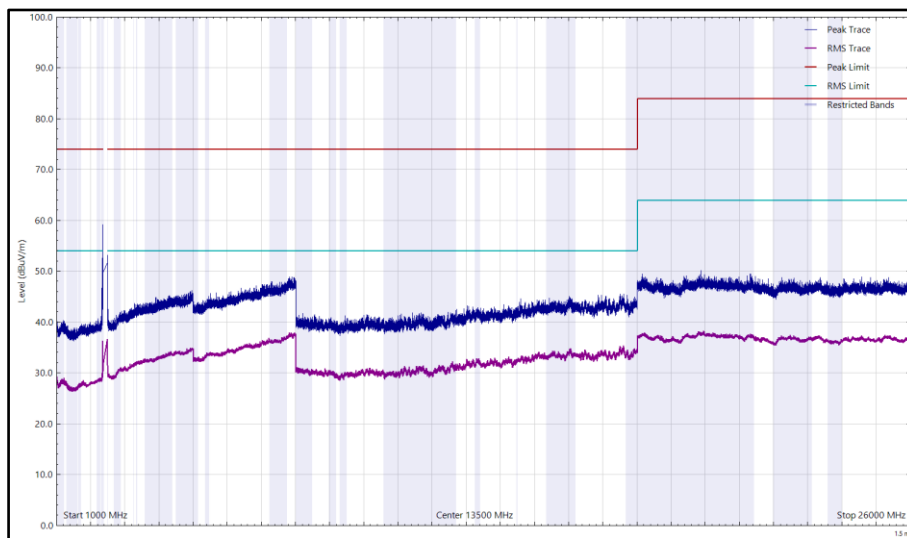


Figure 136 - 2412 MHz (CH1), HE20, RU26-0, CDD, Core 0 + Core 1, 1 GHz to 26 GHz, Vertical



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

Table 75 - 2472 MHz (CH13), HE20, RU26-0, CDD, Core 0 + Core 1, 1 GHz to 26 GHz

*No emissions found within 10 dB of the limit.

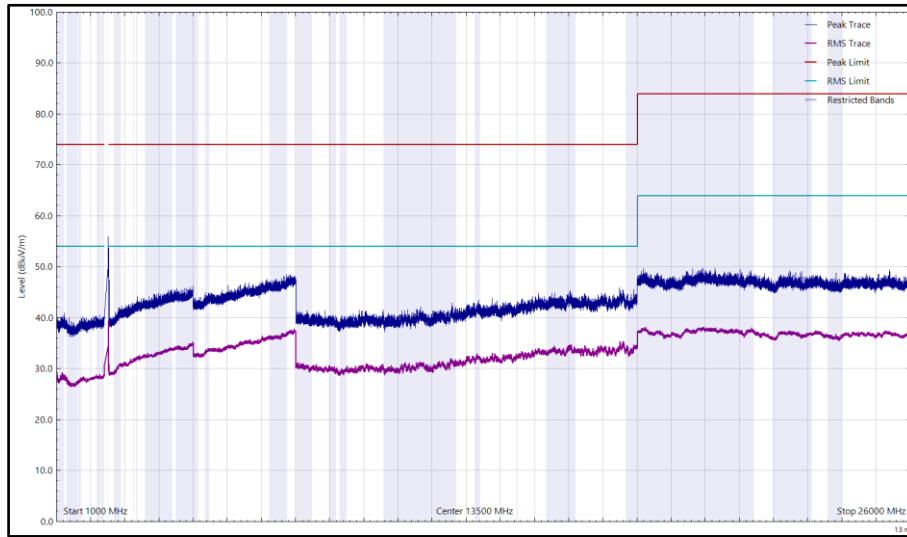


Figure 137 - 2472 MHz (CH13), HE20, RU26-0, CDD, Core 0 + Core 1, 1 GHz to 26 GHz, Horizontal

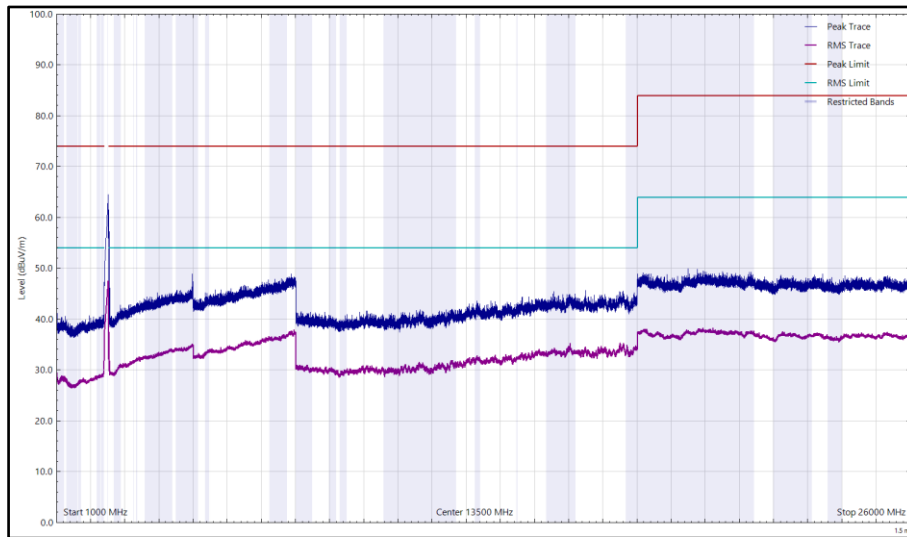


Figure 138 - 2472 MHz (CH13), HE20, RU26-0, CDD, Core 0 + Core 1, 1 GHz to 26 GHz, Vertical



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.

2.5.8 Test Location and Test Equipment Used

This test was carried out in RF Chamber 15.

Instrument	Manufacturer	Type No	TE No	Calibration Period (months)	Calibration Expires
Emissions Software	TUV SUD	EmX V3.1.10	5125	-	Software
EMI Test Receiver	Rohde & Schwarz	ESW44	5911	12	24-Feb-2023
Cable (K Type 2m)	Junkosha	MWX241-02000KMSKMS/B	5935	12	14-May-2023
DRG Horn Antenna (7.5-18GHz)	Schwarzbeck	HWRD750	5939	12	29-May-2023
TRILOG Super Broadband Test Antenna	Schwarzbeck	VULB 9168	5944	24	03-Feb-2024
1500W (300V 12A) AC Power Supply	iTech	IT7324	5956	-	O/P Mon
5m Semi-Anechoic Chamber (Dual-Axis)	Albatross Projects	RF Chamber 15	5963	36	28-Apr-2025
Compact Antenna Mast	Maturo Gmbh	CAM4.0-P	5964	-	TU
Mast & Turntable Controller	Maturo Gmbh	FCU3.0	5966	-	TU
Tilt Antenna Mast	Maturo Gmbh	BAM4.5-P	5967	-	TU



Instrument	Manufacturer	Type No	TE No	Calibration Period (months)	Calibration Expires
Turntable	Maturo Gmbh	TT1.5SI	5968	-	TU
Cable (N to N 1m)	Junkosha	MWX221-01000NMSNMS/B	5999	12	05-Jun-2023
Cable (N to N 7m)	Junkosha	MWX221-07000NMSNMS/B	6005	12	05-Jun-2023
Cable (N to N 8m)	Junkosha	MWX221-08000NMSNMS/A	6006	12	05-Jun-2023
Cable (SMA to SMA 1m)	Junkosha	MWX221-01000AMSAMS/A	6007	12	06-Jun-2023
Cable (SMA to SMA 6.5m)	Junkosha	MWX221-06500AMSAMS/B	6014	12	07-Jun-2023
Cable (SMA to SMA 1m)	Junkosha	MWX221-01000AMSAMS/B	6019	12	07-Jun-2023
Horn Antenna (1-10 GHz)	Schwarzbeck	BBHA9120B	6140	12	21-Jun-2023
Digital Multimeter	Fluke	115	6147	12	16-Jun-2023
Humidity & Temperature meter	R.S Components	1364	6150	12	17-Jun-2023
Double Ridge Active Horn Antenna (18-40 GHz)	Com-Power	AHA-840	6187	24	02-Jun-2024
SAC Switch Unit	TUV SUD	TUV_Ssu_001	6191	12	12-Dec-2023
8 GHz Highpass Filter	Wainwright	WHKX 7150 8000 18000 50SS	6195	12	15-Jul-2023
Pre Amp 8 - 18 GHz	Wright Technologies	APS06 0061	6198	12	19-Jul-2023
Attenuator 4dB	Pasternack	PE7074-4	6203	24	16-Jul-2024
Cable (SMA to SMA 20cm)	TUV SUD	MH-FH 8-18	6214	12	25-Jul-2023

Table 76

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