



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):	C (Core 1)	Active Chain(s):	1

Test Frequency (MHz)	6 dB Bandwidth (MHz)				Limit (kHz)
	A	B	C	D	
2412	-	-	15.540	-	≥500.0
2442	-	-	15.480	-	≥500.0
2472	-	-	16.140	-	≥500.0

**Table 18 - 6 dB Bandwidth Results**

Test Frequency (MHz)	99% Bandwidth (MHz)				Limit (kHz)
	A	B	C	D	
2412	-	-	16.620	-	-
2442	-	-	16.380	-	-
2472	-	-	16.560	-	-

**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):	C (Core 1)	Active Chain(s):	1

Test Frequency (MHz)	6 dB Bandwidth (MHz)				Limit (kHz)
	A	B	C	D	
2412	-	-	16.980	-	≥500.0
2442	-	-	15.780	-	≥500.0
2472	-	-	17.100	-	≥500.0

**Table 20 - 6 dB Bandwidth Results**

Test Frequency (MHz)	99% Bandwidth (MHz)				Limit (kHz)
	A	B	C	D	
2412	-	-	17.700	-	-
2442	-	-	17.580	-	-
2472	-	-	17.700	-	-

**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):	C (Core 1)	Active Chain(s):	1

Test Frequency (MHz)	6 dB Bandwidth (MHz)				Limit (kHz)
	A	B	C	D	
2412	-	-	18.720	-	≥500.0
2442	-	-	18.900	-	≥500.0
2472	-	-	19.080	-	≥500.0

**Table 22 - 6 dB Bandwidth Results**

Test Frequency (MHz)	99% Bandwidth (MHz)				Limit (kHz)
	A	B	C	D	
2412	-	-	18.960	-	-
2442	-	-	18.960	-	-
2472	-	-	18.960	-	-

**Table 23 - 99% Bandwidth Results**



**MIMO CDD**

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	-	15.780	16.440	-	≥500.0
2442	-	15.240	15.300	-	≥500.0
2472	-	17.700	17.100	-	≥500.0

**Table 24 - 6 dB Bandwidth Results**

Test Frequency (MHz)	99% Bandwidth (MHz)				Limit (kHz)
	A	B	C	D	
2412	-	17.700	17.700	-	-
2442	-	17.580	17.580	-	-
2472	-	17.700	17.700	-	-

**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	-	18.540	18.840	-	≥500.0
2437	-	18.900	18.960	-	≥500.0
2472	-	18.900	19.140	-	≥500.0

**Table 26 - 6 dB Bandwidth Results**

Test Frequency (MHz)	99% Bandwidth (MHz)				Limit (kHz)
	A	B	C	D	
2412	-	18.960	18.960	-	-
2437	-	18.960	18.900	-	-
2472	-	18.960	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 Expiry Date
Hygrometer	Rotronic	I-1000	3068	12	21-Sep-2023
Digital Multimeter	Fluke	115	6145	12	15-Jun-2024
MXA Signal Analyser	Keysight Technologies	N9020B	6417	24	26-Feb-2025
Signal Conditioning Unit	TUV SUD	SPECTRUM_SCU001	6518	12	26-May-2024
AC Programmable Power Supply	iTech	IT7324	6662	-	O/P Mon

**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**

A2991, S/N: Y7RPXWJ9N9 - Modification State 0

### **2.3.3 Date of Test**

10-August-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	22.2 °C
Relative Humidity	52.4 %



**2.3.6 Test Results**

2.4 GHz WLAN

SISO

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 (%):	99.4
Data Rate:	1 Mbps	DCCF (dB):	-
Antenna Configuration:	SISO	Peak Antenna Gain (dBi):	5.30
Active Port(s):	C (Core 1)	Active Chain(s):	1

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	Σ		
2412	-	-	18.94	-	-	30.00	-11.06
2442	-	-	18.73	-	-	30.00	-11.27
2472	-	-	15.70	-	-	30.00	-14.30

**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	-	-	18.94	-	-	30.00	-11.06	24.24	36.00	-11.76
2442	-	-	18.73	-	-	30.00	-11.27	24.03	36.00	-11.97
2472	-	-	15.70	-	-	30.00	-14.30	21.00	36.00	-15.00

**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 (%):	97.5
Data Rate:	12 Mbps	DCCF (dB):	-
Antenna Configuration:	SISO	Peak Antenna Gain (dBi):	5.30
Active Port(s):	C (Core 1)	Active Chain(s):	1

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	Σ		
2412	-	-	17.07	-	-	30.00	-12.93
2442	-	-	22.27	-	-	30.00	-7.73
2472	-	-	8.99	-	-	30.00	-21.01

**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	-	-	17.07	-	-	30.00	-12.93	22.37	36.00	-13.63
2442	-	-	22.27	-	-	30.00	-7.73	27.57	36.00	-8.43
2472	-	-	8.99	-	-	30.00	-21.01	14.29	36.00	-21.71

**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 (%):	96.7
Modulation Coding Scheme:	MCS2	DCCF (dB):	-
Antenna Configuration:	SISO	Peak Antenna Gain (dBi):	5.30
Active Port(s):	C (Core 1)	Active Chain(s):	1

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	Σ		
2412	-	-	16.29	-	-	30.00	-13.71
2442	-	-	22.26	-	-	30.00	-7.74
2472	-	-	8.22	-	-	30.00	-21.78

**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	-	-	16.29	-	-	30.00	-13.71	21.59	36.00	-14.41
2442	-	-	22.26	-	-	30.00	-7.74	27.56	36.00	-8.44
2472	-	-	8.22	-	-	30.00	-21.78	13.52	36.00	-22.48

**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 (%):	95.8
Modulation Coding Scheme:	MCS2x1	DCCF (dB):	-
Antenna Configuration:	SISO	Peak Antenna Gain (dBi):	5.30
Active Port(s):	C (Core 1)	Active Chain(s):	1

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	Σ		
2412	-	-	15.48	-	-	30.00	-14.52
2442	-	-	22.32	-	-	30.00	-7.68
2472	-	-	7.50	-	-	30.00	-22.50

**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	-	-	15.48	-	-	30.00	-14.52	20.78	36.00	-15.22
2442	-	-	22.32	-	-	30.00	-7.68	27.62	36.00	-8.38
2472	-	-	7.50	-	-	30.00	-22.50	12.80	36.00	-23.20

**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 (%):	96.7
Modulation Coding Scheme:	MCS2x1	DCCF (dB):	-
Antenna Configuration:	SISO	Peak Antenna Gain (dBi):	5.30
Active Port(s):	C (Core 1)	Active Chain(s):	1

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	Σ		
2412	-	-	14.26	-	-	30.00	-15.74
2442	-	-	14.30	-	-	30.00	-15.70
2472	-	-	-3.34	-	-	30.00	-33.34

**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	-	-	14.26	-	-	30.00	-15.74	19.56	36.00	-16.44
2442	-	-	14.30	-	-	30.00	-15.70	19.60	36.00	-16.40
2472	-	-	-3.34	-	-	30.00	-33.34	1.96	36.00	-34.04

**Table 38 - 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 RU52	Duty Cycle (%):	96.7
Modulation Coding Scheme:	MCS2x1	DCCF (dB):	-
Antenna Configuration:	SISO	Peak Antenna Gain (dBi):	5.30
Active Port(s):	C (Core 1)	Active Chain(s):	1

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	Σ		
2412	-	-	17.20	-	-	30.00	-12.80
2442	-	-	17.16	-	-	30.00	-12.84
2472	-	-	-1.16	-	-	30.00	-31.16

**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	-	-	17.20	-	-	30.00	-12.80	22.50	36.00	-13.50
2442	-	-	17.16	-	-	30.00	-12.84	22.46	36.00	-13.54
2472	-	-	-1.16	-	-	30.00	-31.16	4.14	36.00	-31.86

**Table 40 - 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 (%):	97.9
Modulation Coding Scheme:	MCS2x1	DCCF (dB):	-
Antenna Configuration:	SISO	Peak Antenna Gain (dBi):	5.30
Active Port(s):	C (Core 1)	Active Chain(s):	1

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	Σ		
2412	-	-	16.65	-	-	30.00	-13.35
2442	-	-	20.50	-	-	30.00	-9.50
2472	-	-	0.79	-	-	30.00	-29.21

**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	-	-	16.65	-	-	30.00	-13.35	21.95	36.00	-14.05
2442	-	-	20.50	-	-	30.00	-9.50	25.80	36.00	-10.20
2472	-	-	0.79	-	-	30.00	-29.21	6.09	36.00	-29.91

**Table 42 - ISED Maximum Conducted (average) Output Power Results**



MIMO CDD

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)(ii), 662911 D01 v02r01 E)1)		

DUT Configuration			
Mode:	802.11n HT20	Duty Cycle (%):	96.6
Modulation Coding Scheme:	MCS2	DCCF (dB):	-
Antenna Configuration:	MIMO CDD	Peak Antenna Gain (dBi):	7.28
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	-	14.52	14.65	-	17.59	28.72	-11.13
2442	-	22.06	22.38	-	25.23	28.72	-3.49
2472	-	7.86	7.73	-	10.80	28.72	-17.92

**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	-	14.52	14.65	-	17.59	30.00	-12.41	24.87	36.00	-11.13
2442	-	22.06	22.38	-	25.23	30.00	-4.77	32.51	36.00	-3.49
2472	-	7.86	7.73	-	10.80	30.00	-19.20	18.08	36.00	-17.92

**Table 44 - 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)2)f)(ii), 662911 D01 v02r01 E)1)		

DUT Configuration			
Mode:	802.11ax HE20 SU	Duty Cycle (%):	95.7
Modulation Coding Scheme:	MCS2x1	DCCF (dB):	-
Antenna Configuration:	MIMO CDD	Peak Antenna Gain (dBi):	7.28
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	-	12.86	12.69	-	15.79	28.72	-12.93
2437	-	22.19	22.32	-	25.26	28.72	-3.46
2472	-	7.12	7.00	-	10.07	28.72	-18.65

**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	-	12.86	12.69	-	15.79	30.00	-14.21	23.07	36.00	-12.93
2437	-	22.19	22.32	-	25.26	30.00	-4.74	32.54	36.00	-3.46
2472	-	7.12	7.00	-	10.07	30.00	-19.93	17.35	36.00	-18.65

**Table 46 - 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)2)f)(ii), 662911 D01 v02r01 E)1)		

DUT Configuration			
Mode:	802.11ax HE20 RU26	Duty Cycle (%):	96.7
Modulation Coding Scheme:	MCS2x1	DCCF (dB):	-
Antenna Configuration:	MIMO CDD	Peak Antenna Gain (dBi):	7.28
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	-	14.29	13.98	-	17.15	28.72	-11.57
2442	-	14.29	14.33	-	17.32	28.72	-11.40
2472	-	-8.69	-9.11	-	-5.89	28.72	-34.61

**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	-	14.29	13.98	-	17.15	30.00	-12.85	24.43	36.00	-11.57
2442	-	14.29	14.33	-	17.32	30.00	-12.68	24.60	36.00	-11.40
2472	-	-8.69	-9.11	-	-5.89	30.00	-35.89	1.39	36.00	-34.61

**Table 48 - 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)2)f)(ii), 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):	7.28
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	-	15.71	15.92	-	18.83	28.72	-9.89
2442	-	16.87	17.25	-	20.04	28.72	-8.68
2472	-	-5.59	-5.16	-	-2.36	28.72	-31.08

**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	-	15.71	15.92	-	18.83	30.00	-11.17	26.11	36.00	-9.89
2442	-	16.87	17.25	-	20.04	30.00	-9.96	27.32	36.00	-8.68
2472	-	-5.59	-5.16	-	-2.36	30.00	-32.36	4.92	36.00	-31.08

**Table 50 - 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)2)f)(ii), 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):	7.28
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	-	15.88	15.90	-	18.90	28.72	-9.82
2442	-	20.36	20.45	-	23.41	28.72	-5.31
2472	-	-4.17	-3.78	-	-0.96	28.72	-29.68

**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	-	15.88	15.90	-	18.90	30.00	-11.10	26.18	36.00	-9.82
2442	-	20.36	20.45	-	23.41	30.00	-6.59	30.69	36.00	-5.31
2472	-	-4.17	-3.78	-	-0.96	30.00	-30.96	6.32	36.00	-29.68

**Table 52 - ISED Maximum Conducted (average) Output Power Results**

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

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

ISED RSS-247, Limit Clause 5.4 (d)

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



### 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 Expiry Date
Hygrometer	Rotronic	I-1000	3068	12	21-Sep-2023
Digital Multimeter	Fluke	115	6145	12	15-Jun-2024
MXA Signal Analyser	Keysight Technologies	N9020B	6417	24	26-Feb-2025
Signal Conditioning Unit	TUV SUD	SPECTRUM_SCU001	6518	12	26-May-2024
USB Wideband Power Sensor	Boonton	RTP5008	6588	12	24-Apr-2024
USB Wideband Power Sensor	Boonton	RTP5008	6589	12	24-Apr-2024
AC Programmable Power Supply	iTech	IT7324	6662	-	O/P Mon

**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**

A2991, S/N: LRYJMC4D4 - Modification State 0  
A2991, S/N: N7RTH0WPW3 - Modification State 0  
A2991, S/N: XNJWHY732L - Modification State 0

### **2.4.3 Date of Test**

29-June-2023 to 07-August-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	20.9 - 24.2 °C
Relative Humidity	37.7 - 46.7 %



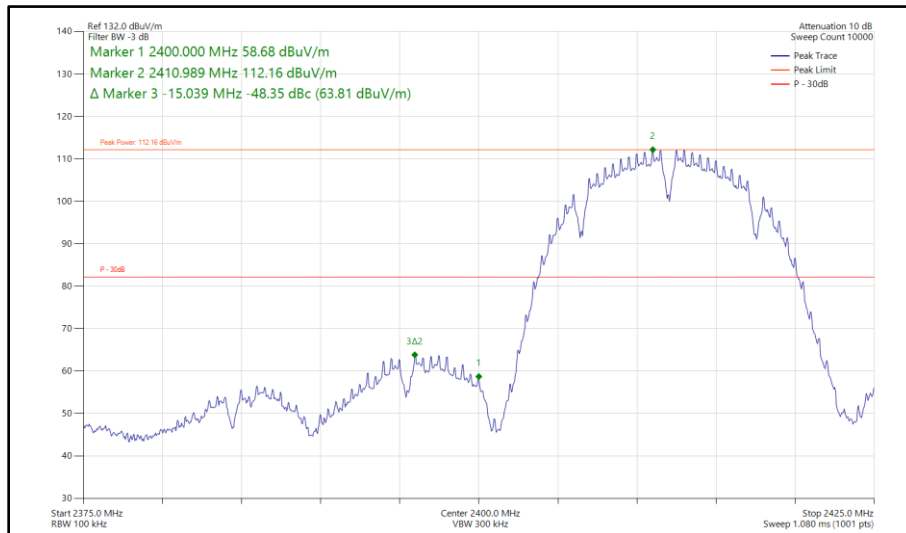
**2.4.6 Test Results**

2.4 GHz WLAN

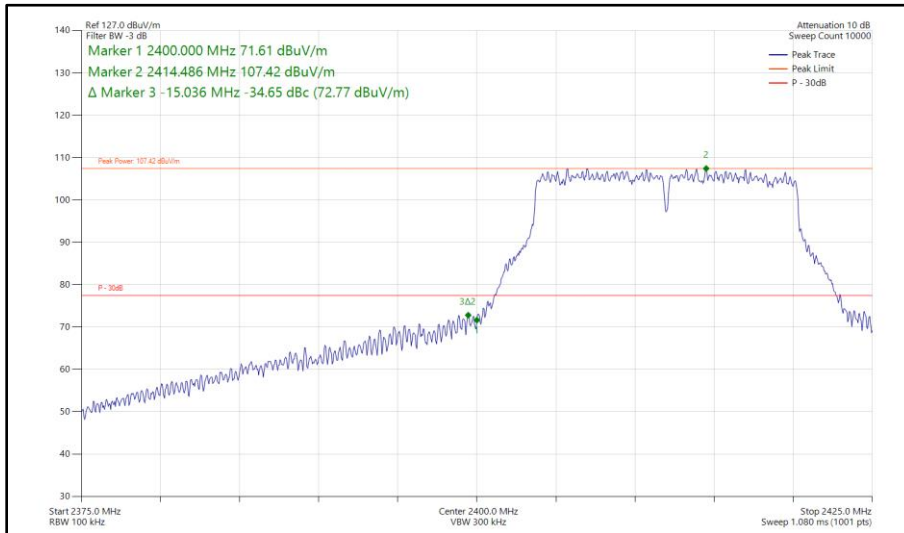
20 MHz Bandwidth - Core 0 (SISO)

Mode	Data Rate/ MCS	Resource Size	Resource Index	TX Frequency (MHz)	Band Edge Frequency (MHz)	Level (dBc)
802.11b	1 Mbps	-	-	2412	2400	-48.35
802.11g	54 Mbps	-	-	2412	2400	-34.65
802.11n HT20	MCS4	-	-	2412	2400	-34.76
802.11ax HE20	MCS9x1	SU	-	2412	2400	-34.66
802.11ax HE20	MCS9x1	106	53	2412	2400	-38.84

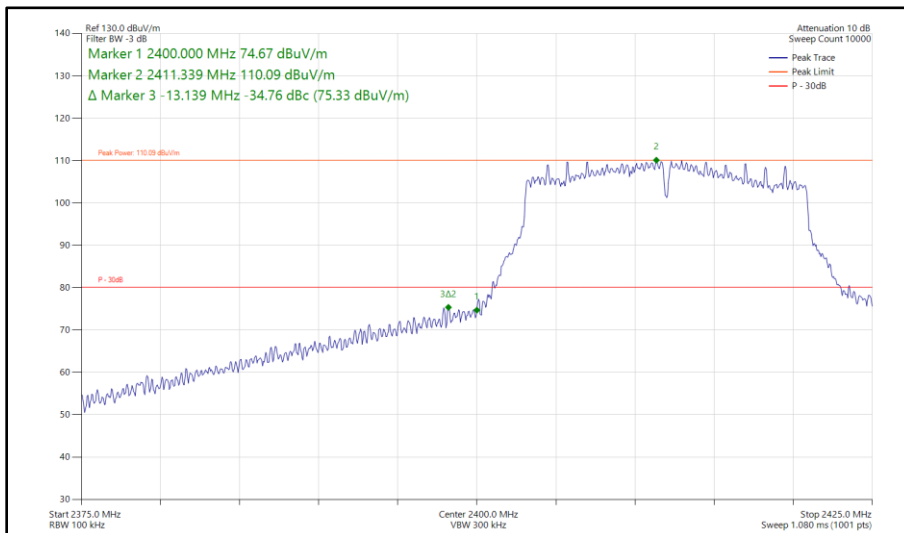
**Table 54 - SISO Authorised Band Edge Results**



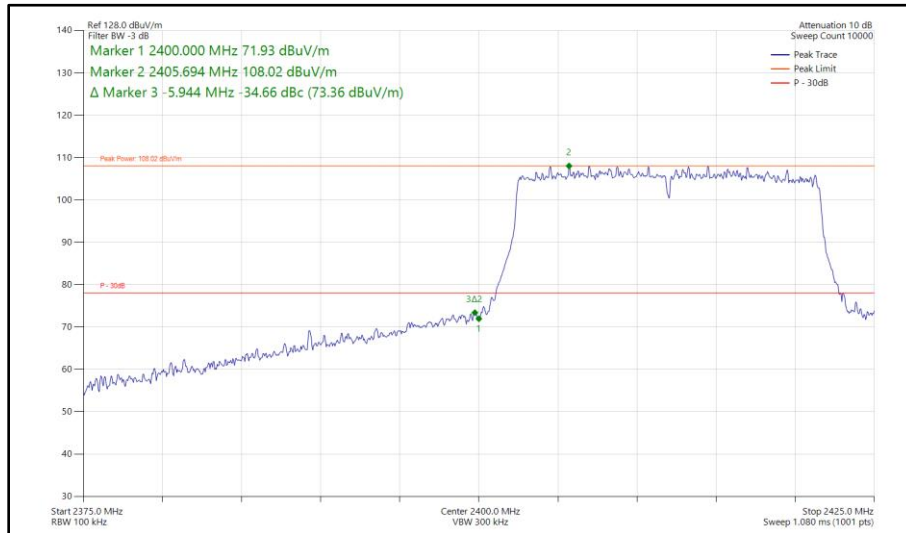
**Figure 77 - 802.11b, SISO, Core 0 - 2412 MHz  
 Band Edge Frequency 2400 MHz**



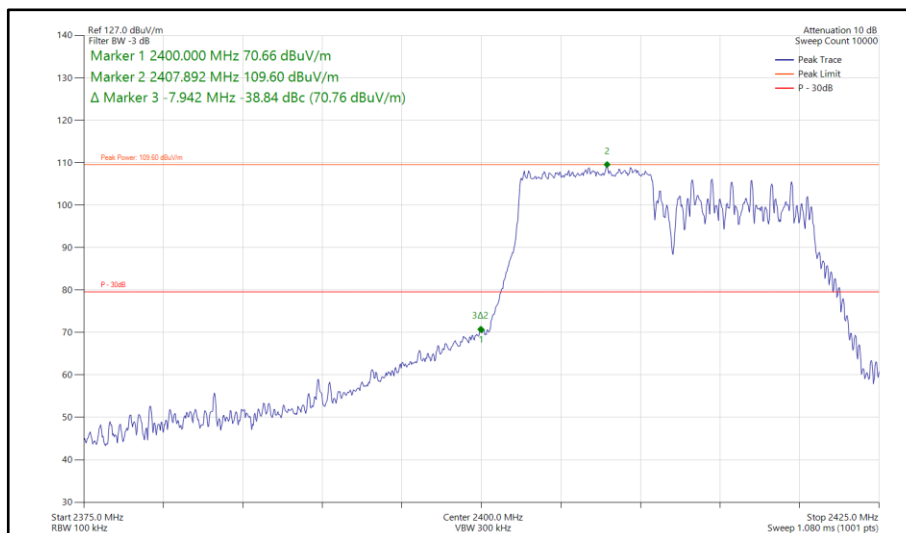
**Figure 78 - 802.11g, SISO, Core 0 - 2412 MHz  
Band Edge Frequency 2400 MHz**



**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**



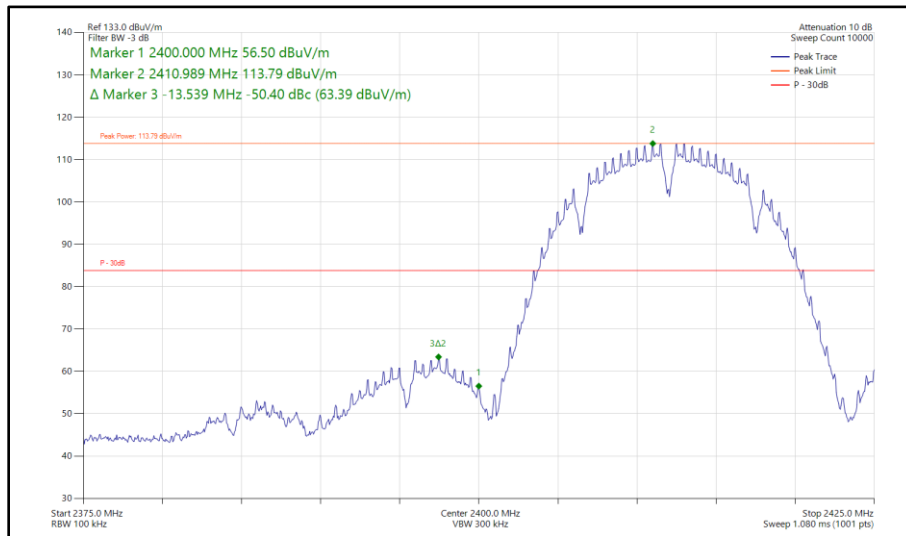
**Figure 81 - 802.11ax HE20, RU 106-53, SISO, Core 0 - 2412 MHz  
Band Edge Frequency 2400 MHz**



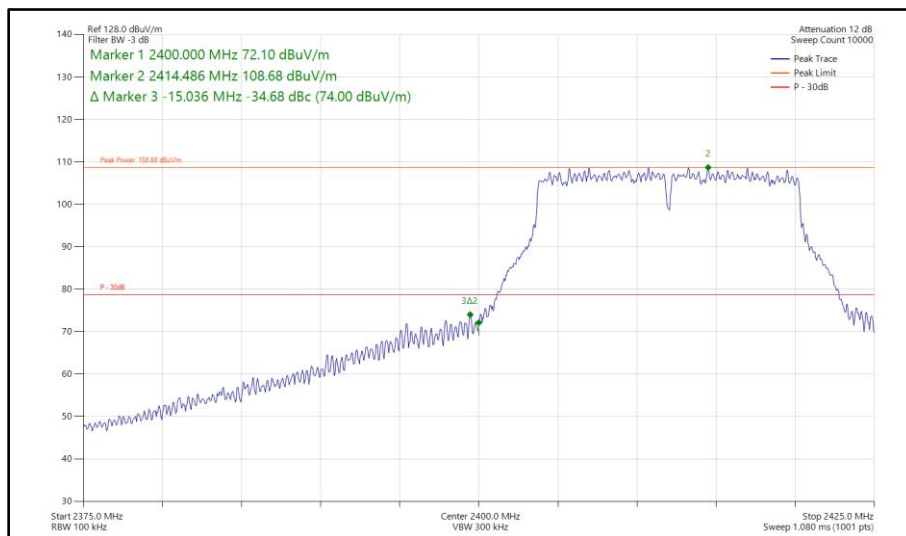
20 MHz Bandwidth - Core 1 (SISO)

Mode	Data Rate/ MCS	Resource Size	Resource Index	TX Frequency (MHz)	Band Edge Frequency (MHz)	Level (dBc)
802.11b	1 Mbps	-	-	2412	2400	-50.40
802.11g	54 Mbps	-	-	2412	2400	-34.68
802.11n HT20	MCS4	-	-	2412	2400	-34.67
802.11ax HE20	MCS9x1	SU	-	2412	2400	-34.52
802.11ax HE20	MCS9x1	106	53	2412	2400	-37.75

**Table 55 - SISO Authorised Band Edge Results**

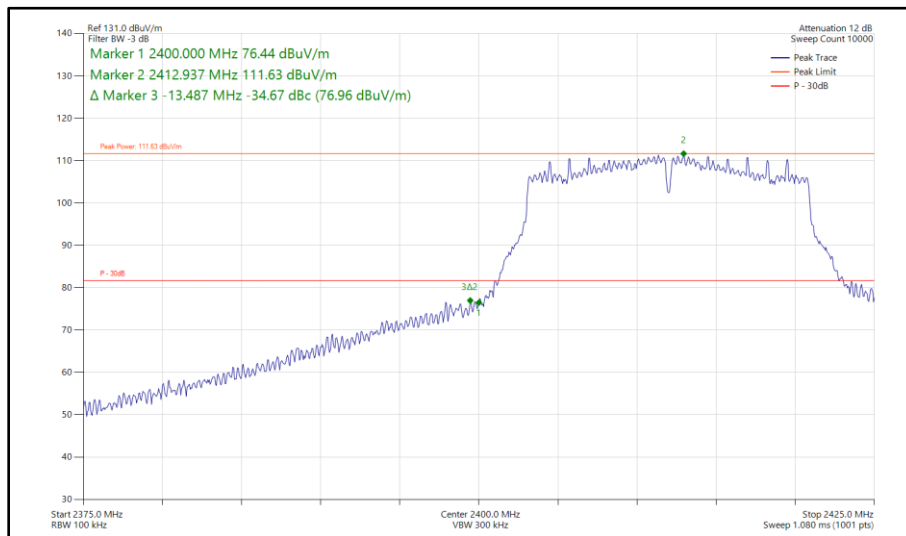


**Figure 82 - 802.11b, SISO, Core 1 - 2412 MHz  
 Band Edge Frequency 2400 MHz**

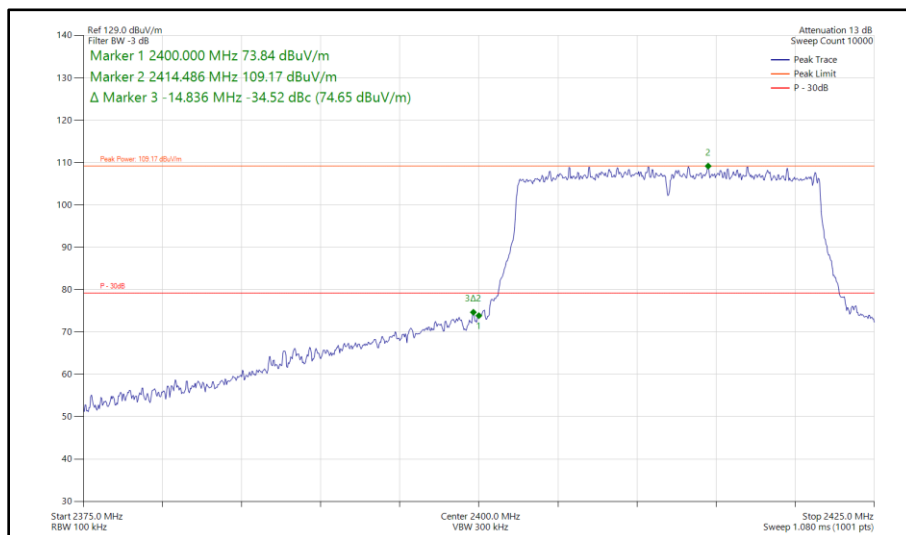


**Figure 83 - 802.11g, SISO, Core 1 - 2412 MHz  
 Band Edge Frequency 2400 MHz**

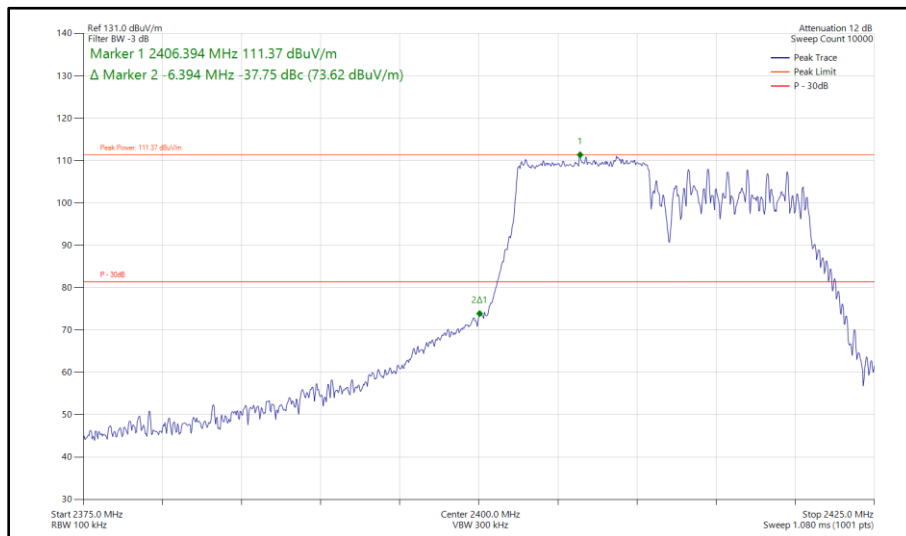




**Figure 84 - 802.11n HT20, SISO, Core 1 - 2412 MHz  
 Band Edge Frequency 2400 MHz**



**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 + Core 1 (CDD)

Mode	Data Rate/ MCS	Resource Size	Resource Index	TX Frequency (MHz)	Band Edge Frequency (MHz)	Level (dBc)
802.11n HT20	MCS4	-	-	2412	2400	-34.79
802.11ax HE20	MCS4x1	SU	-	2412	2400	-34.61
802.11ax HE20	MCS9x1	106	53	2412	2400	-40.18

Table 56 - CDD Authorised Band Edge Results

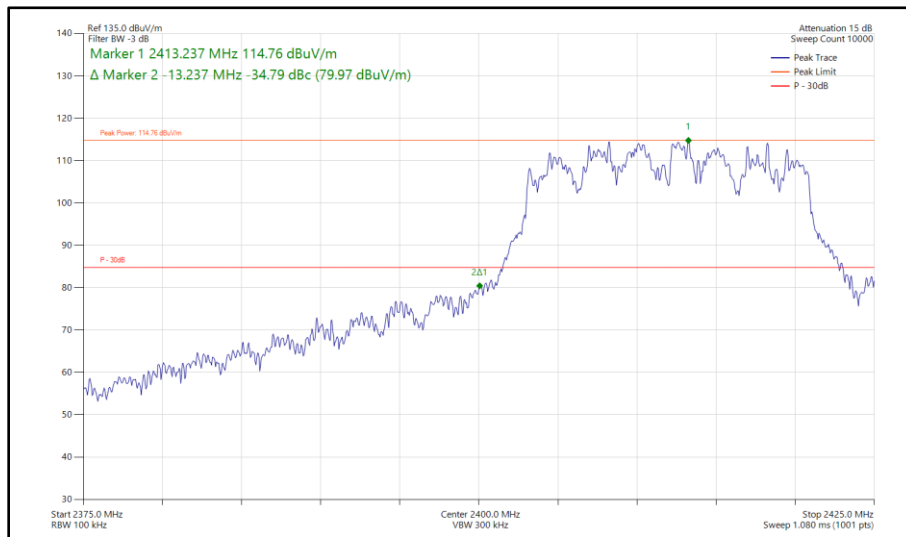


Figure 87 - 802.11n HT20, CDD, Core 0 + Core 1 - 2412 MHz  
 Band Edge Frequency 2400 MHz

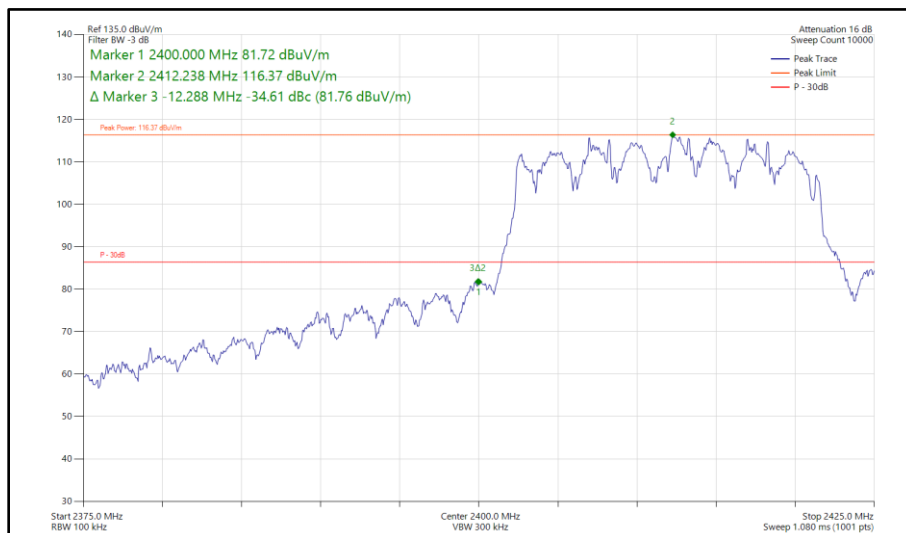
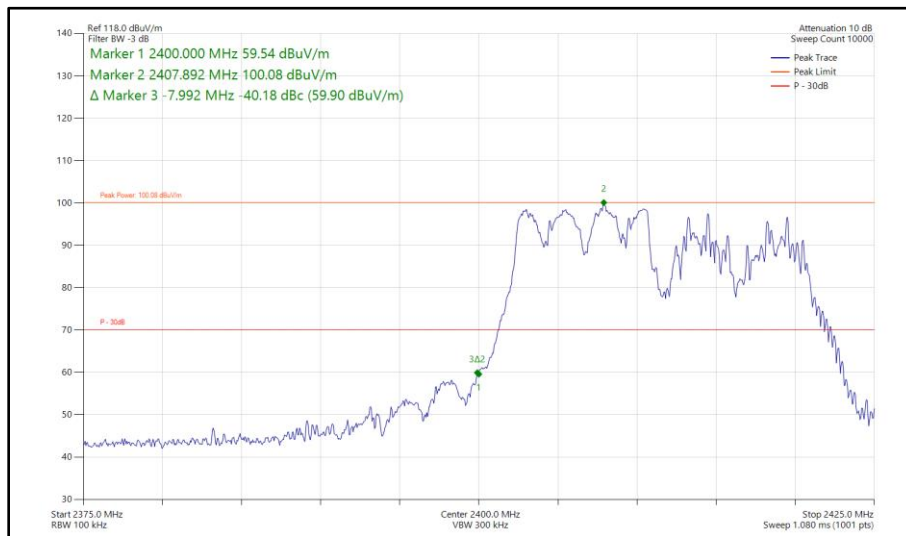


Figure 88 - 802.11ax HE20, SU, CDD, Core 0 + Core 1 - 2412 MHz  
 Band Edge Frequency 2400 MHz



**Figure 89 - 802.11ax HE20, RU 106-53, CDD, Core 0 + Core 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 14 and RF Chamber 15.

Instrument	Manufacturer	Type No.	TE No.	Calibration Period (months)	Calibration Expiry Date
Cable (18 GHz)	Rosenberger	LU7-071-1000	5096	12	23-Oct-2023
Emissions Software	TUV SUD	EmX V3.1.12	5125	-	Software
Pre-amplifier (30 dB, 1GHz to 18GHz)	Schwarzbeck	BBV 9718 C	5261	12	14-Apr-2024
EMI Test Receiver	Rohde & Schwarz	ESW44	5911	12	05-May-2024
Test Receiver	Rohde & Schwarz	ESW44	5914	12	24-Feb-2024
1500W (300V 12A) AC Power Supply	iTech	IT7324	5955	-	O/P Mon
1500W (300V 12A) AC Power Supply	iTech	IT7324	5956	-	O/P Mon
5m Semi-Anechoic Chamber (Dual-Axis)	Albatross Projects	RF Chamber 14	5958	36	26-Apr-2025
Compact Antenna Mast	Maturo Gmbh	CAM4.0-P	5959	-	TU
Mast & Turntable Controller	Maturo Gmbh	FCU3.0	5960	-	TU
Tilt Antenna Mast	Maturo Gmbh	BAM4.5-P	5961	-	TU
Turntable	Maturo Gmbh	TT1.5SI	5962	-	TU
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	05-Jun-2024
Cable (SMA to SMA 1m)	Junkosha	MWX221-01000AMSAMS/A	5997	12	14-Sep-2023
Cable (SMA to SMA 6.5m)	Junkosha	MWX221-06500AMSAMS/B	6003	12	05-Jun-2024
Cable (SMA to SMA 1m)	Junkosha	MWX221-01000AMSAMS/A	6007	12	05-Jun-2024
Cable (SMA to SMA 1m)	Junkosha	MWX221-01000AMSAMS/A	6008	12	05-Jun-2024
Cable (N to N 1m)	Junkosha	MWX221-01000AMSAMS/B	6009	12	05-Jun-2024
Cable (SMA to SMA 6.5m)	Junkosha	MWX221-06500AMSAMS/B	6014	12	08-Aug-2023
Cable (SMA to SMA 1m)	Junkosha	MWX221-01000AMSAMS/B	6019	12	05-Jun-2024
Horn Antenna (1-10 GHz)	Schwarzbeck	BBHA9120B	6140	12	21-Aug-2023
Horn Antenna (1-10 GHz)	Schwarzbeck	BBHA9120B	6141	12	21-Aug-2023
SAC Switch Unit	TUV SUD	TUV_SSU_001	6144	12	05-Dec-2023



Instrument	Manufacturer	Type No.	TE No.	Calibration Period (months)	Calibration Expiry Date
Digital Multimeter	Fluke	115	6145	12	15-Jun-2024
Digital Multimeter	Fluke	115	6147	12	16-Jun-2024
Humidity & Temperature meter	R.S Components	1364	6149	12	17-Sep-2023
SAC Switch Unit	TUV SUD	TUV_SSU_001	6191	12	12-Dec-2023
Cable (SMA to SMA 1m)	Junkosha	MWX221-01000AMSAMS/A	6315	12	04-Feb-2024
Humidity and Temperature Meter	R.S Components	1364	6486	12	18-Apr-2024

**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**

A2991, S/N: N7RTH0WPW3 - Modification State 0  
A2991, S/N: XNJWHY732L - Modification State 0

### **2.5.3 Date of Test**

17-July-2023 to 07-August-2023

### **2.5.4 Test Method**

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

For frequencies > 1 GHz, plots for average measurements were taken in accordance with ANSI C63.10, clause 11.12.2.5.2.

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

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 (2442 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 30 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:  
 $10^{(\text{Field Strength in dB}\mu\text{V}/\text{m}/20)}$ .

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

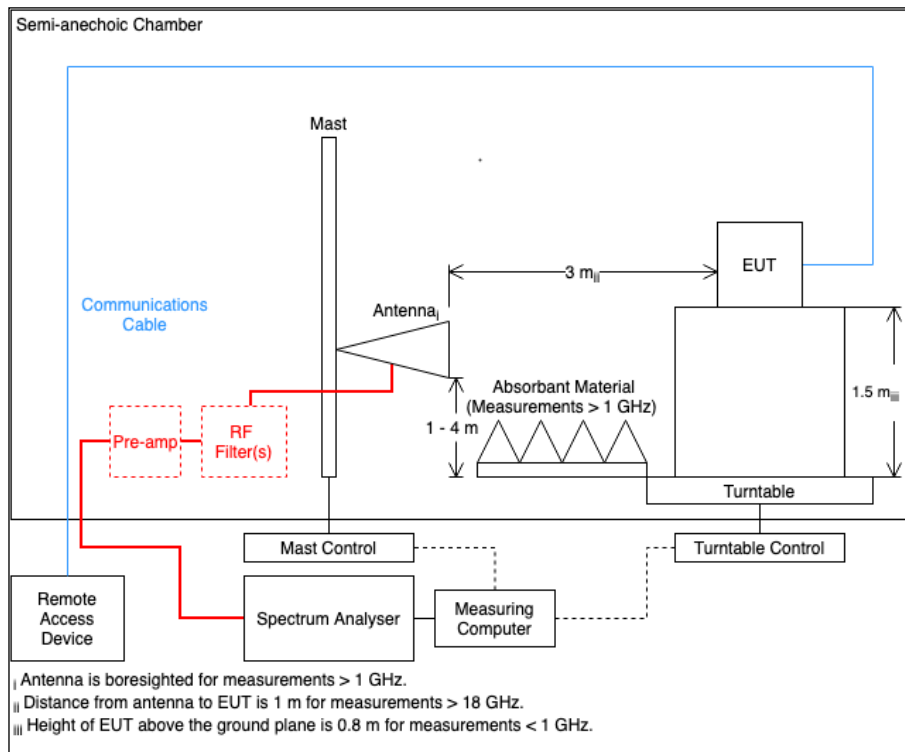


Figure 90

### 2.5.6 Environmental Conditions

Ambient Temperature	21.6 - 23.0 °C
Relative Humidity	41.5 - 50.9 %





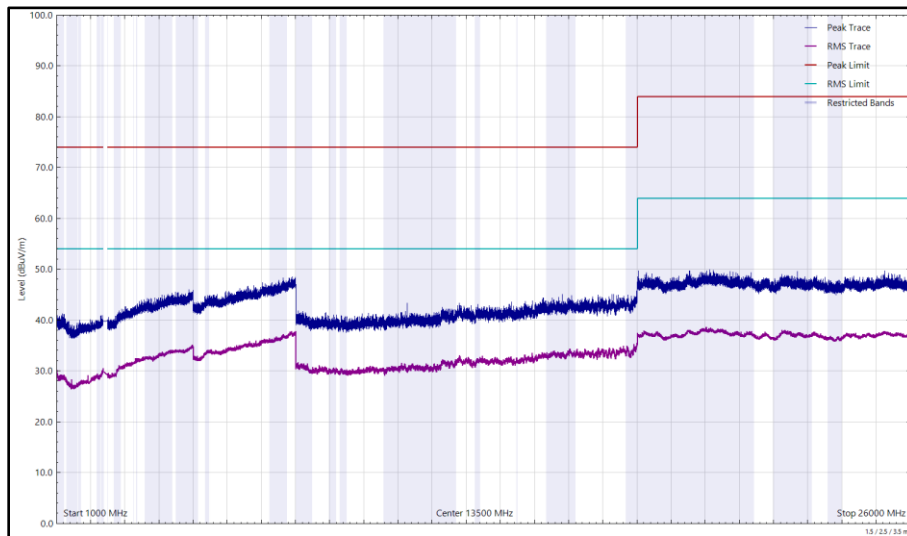
**2.5.7 Test Results**

2.4 GHz WLAN

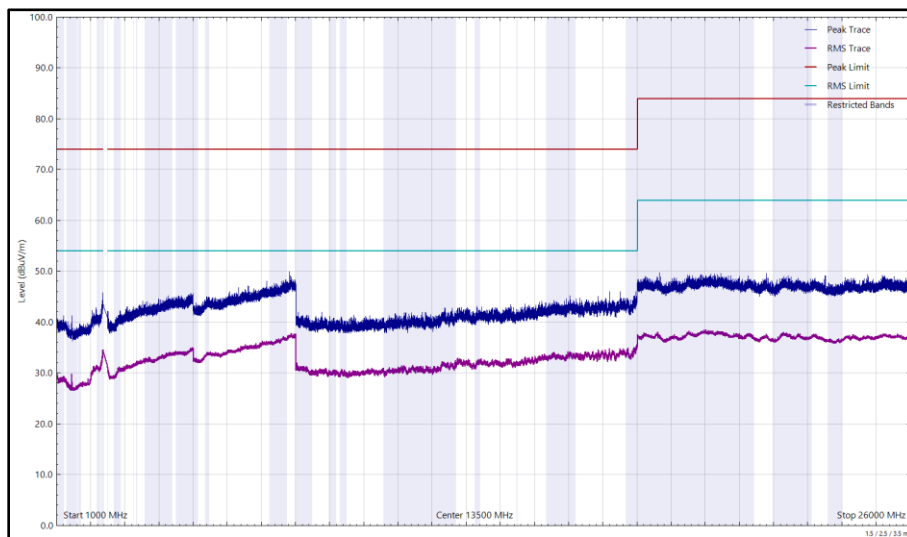
Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
*							

**Table 58 - 2412 MHz (CH1), 802.11b, Core 0, 1 GHz to 26 GHz**

\*No emissions found within 10 dB of the limit.



**Figure 91 - 2412 MHz (CH1), 802.11b, Core 0, 1 GHz to 26 GHz, Horizontal**



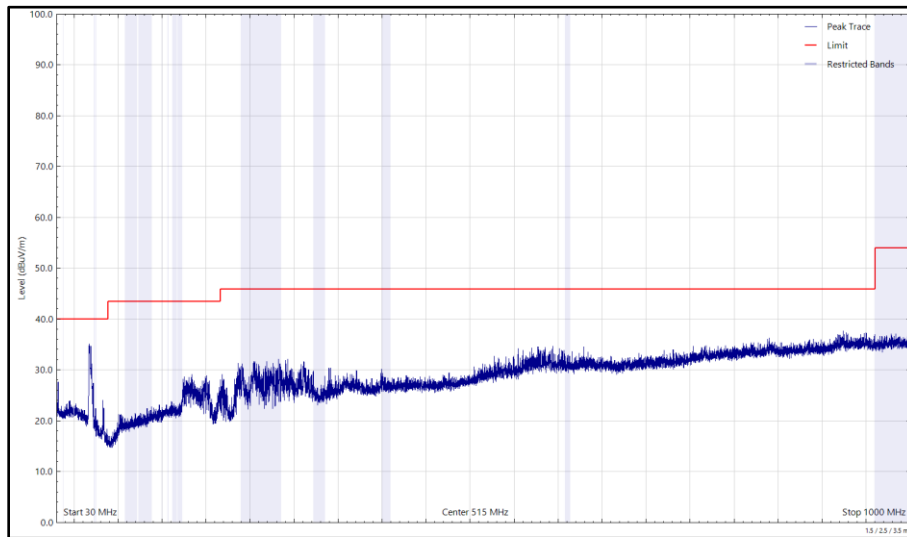
**Figure 92 - 2412 MHz (CH1), 802.11b, Core 0, 1 GHz to 26 GHz, Vertical**



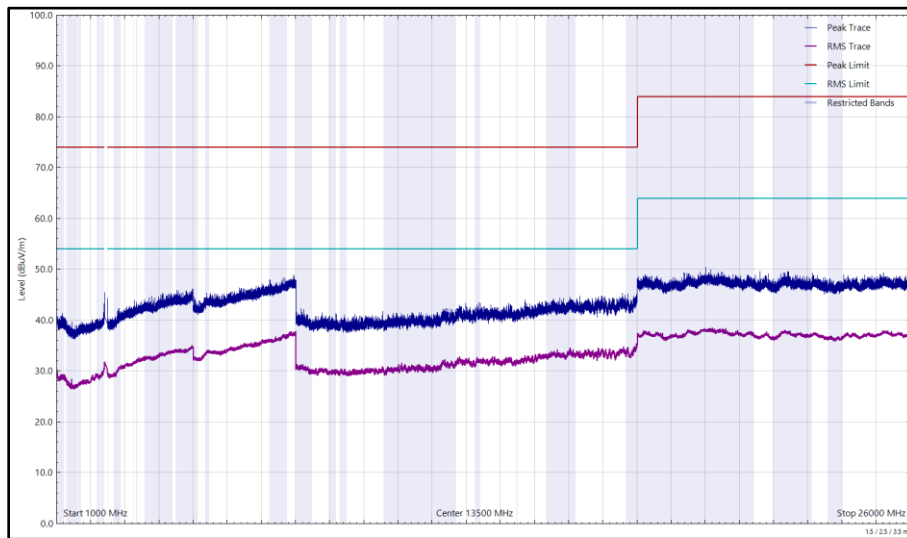
Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
322.223	28.09	46.00	-17.91	Q-Peak	269	129	Vertical

**Table 59 - 2442 MHz (CH7), 802.11b, Core 0, 30 MHz to 26 GHz**

No other emissions found within 10 dB of the limit.



**Figure 93 - 2442 MHz (CH7), 802.11b, Core 0, 30 MHz to 1 GHz, Horizontal (Peak)**



**Figure 94 - 2442 MHz (CH7), 802.11b, Core 0, 1 GHz to 26 GHz, Horizontal**

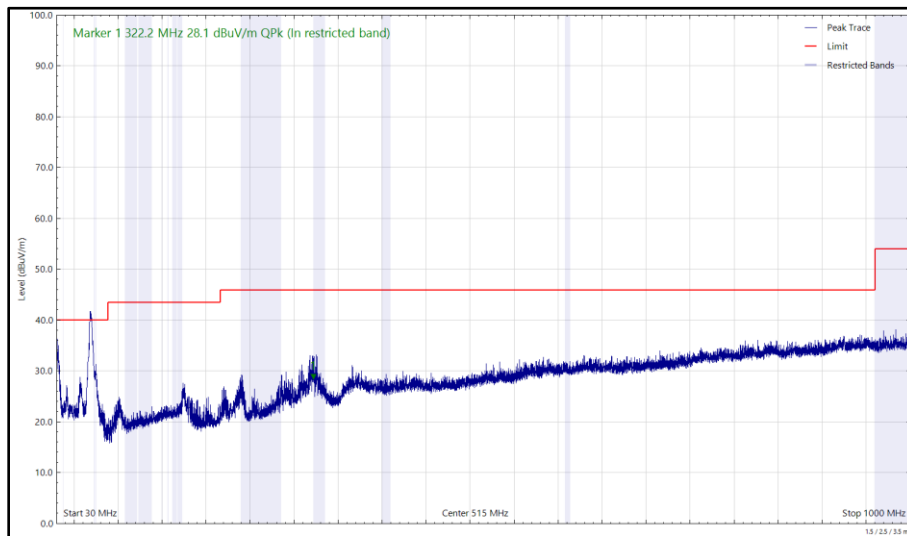


Figure 95 - 2442 MHz (CH7), 802.11b, Core 0, 30 MHz to 1 GHz, Vertical (Peak)

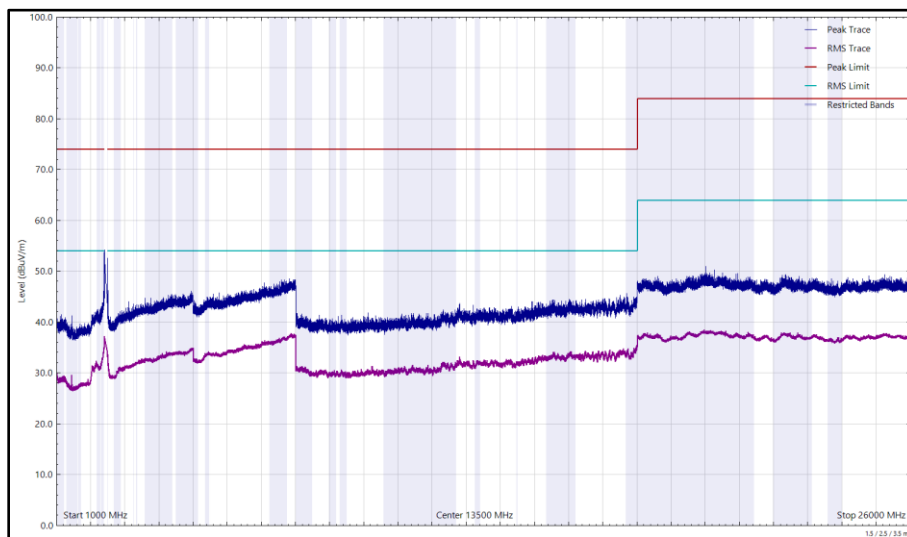


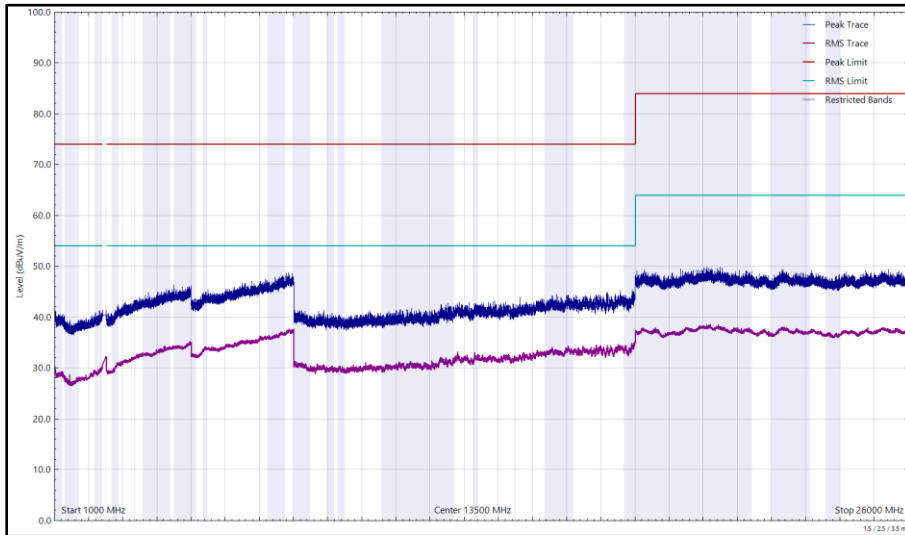
Figure 96 - 2442 MHz (CH7), 802.11b, Core 0, 1 GHz to 26 GHz, Vertical



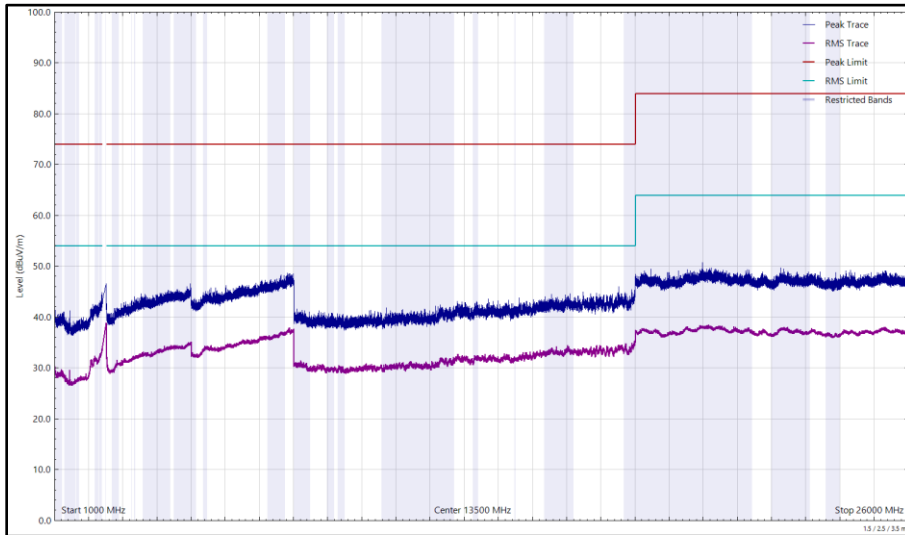
Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
*							

**Table 60 - 2472 MHz (CH13), 802.11b, Core 0, 1 GHz to 26 GHz**

\*No emissions found within 10 dB of the limit.



**Figure 97 - 2472 MHz (CH13), 802.11b, Core 0, 1 GHz to 26 GHz, Horizontal**



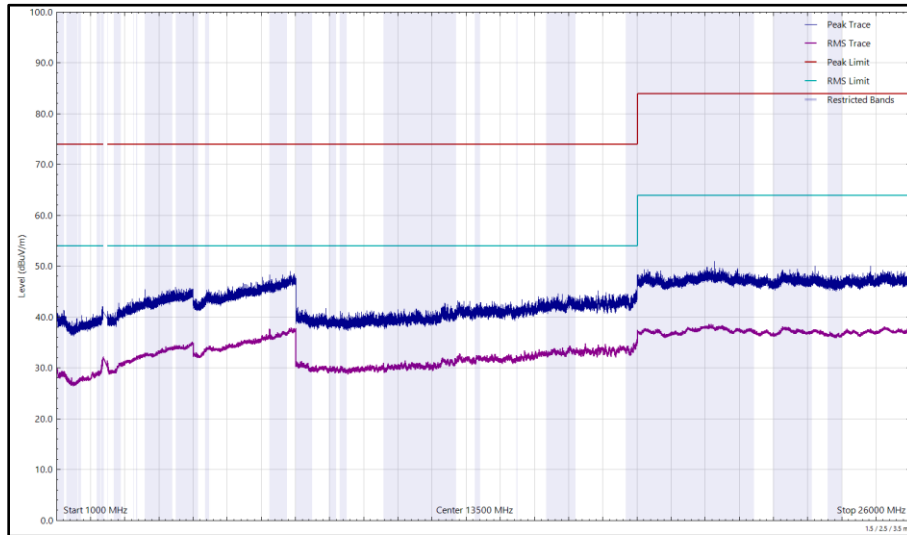
**Figure 98 - 2472 MHz (CH13), 802.11b, Core 0, 1 GHz to 26 GHz, Vertical**



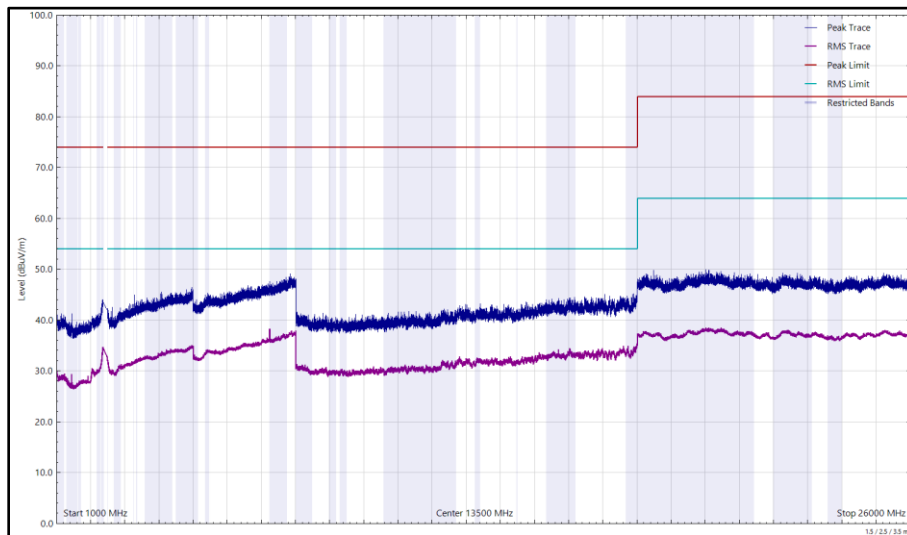
Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
*							

**Table 61 - 2412 MHz (CH1), 802.11b, Core 1, 1 GHz to 26 GHz**

\*No emissions found within 10 dB of the limit.



**Figure 99 - 2412 MHz (CH1), 802.11b, Core 1, 1 GHz to 26 GHz, Horizontal**



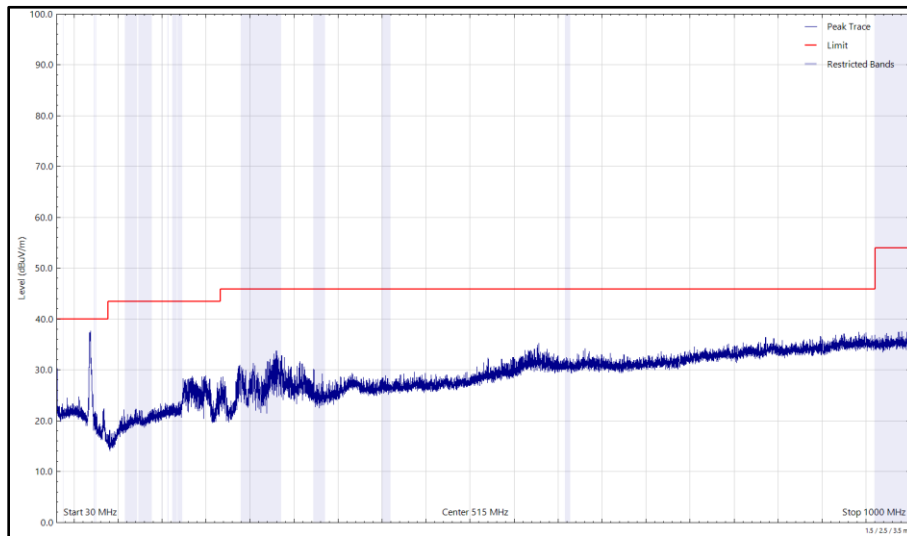
**Figure 100 - 2412 MHz (CH1), 802.11b, Core 1, 1 GHz to 26 GHz, Vertical**



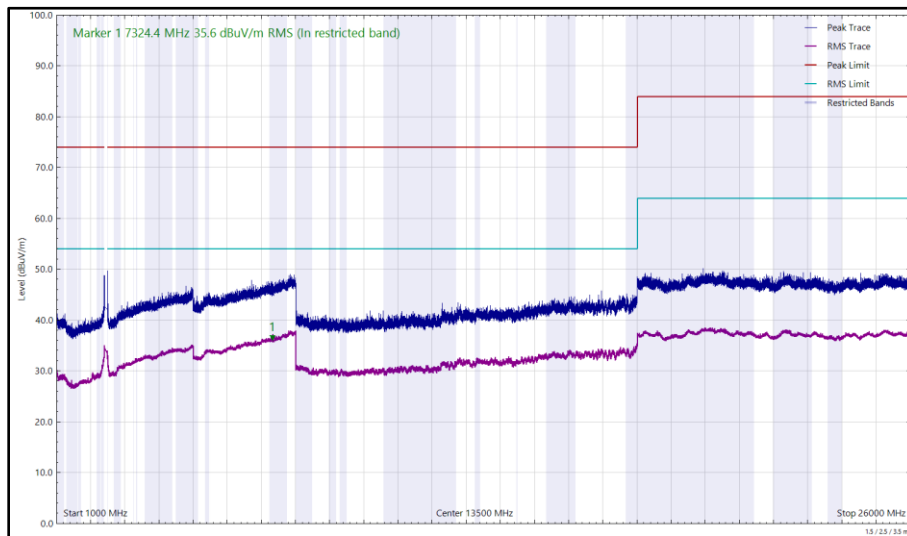
Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
73.506	26.05	40.00	-13.95	Q-Peak	134	102	Vertical
7324.401	35.62	54.00	-18.38	RMS	11	393	Horizontal
7324.895	40.36	54.00	-13.64	RMS	176	246	Vertical

**Table 62 - 2442 MHz (CH7), 802.11b, Core 1, 30 MHz to 26 GHz**

No other emissions found within 10 dB of the limit.



**Figure 101 - 2442 MHz (CH7), 802.11b, Core 1, 30 MHz to 1 GHz, Horizontal (Peak)**



**Figure 102 - 2442 MHz (CH7), 802.11b, Core 1, 1 GHz to 26 GHz, Horizontal**

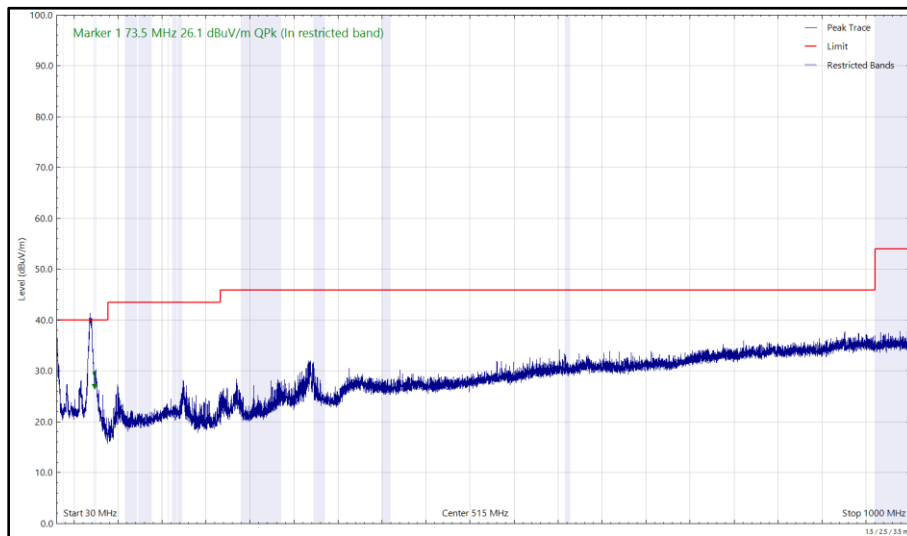


Figure 103 - 2442 MHz (CH7), 802.11b, Core 1, 30 MHz to 1 GHz, Vertical (Peak)

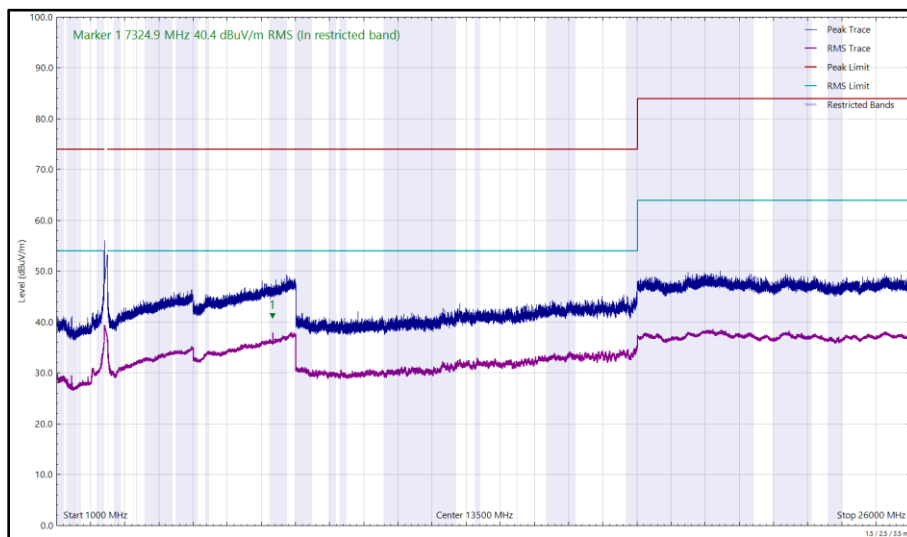


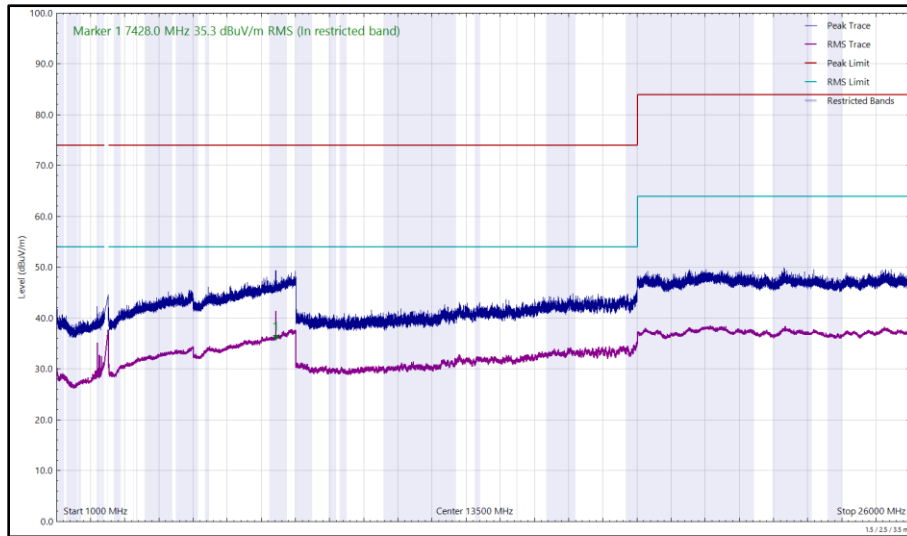
Figure 104 - 2442 MHz (CH7), 802.11b, Core 1, 1 GHz to 26 GHz, Vertical



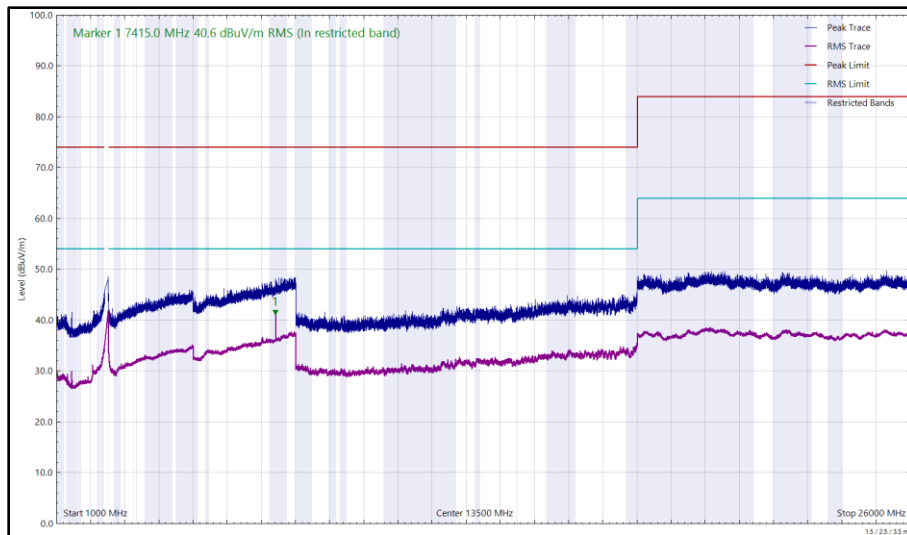
Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
7415.005	40.60	54.00	-13.40	RMS	176	295	Vertical
7428.020	35.34	54.00	-18.66	RMS	135	400	Horizontal

**Table 63 - 2472 MHz (CH13), 802.11b, Core 1, 1 GHz to 26 GHz**

No other emissions found within 10 dB of the limit.



**Figure 105 - 2472 MHz (CH13), 802.11b, Core 1, 1 GHz to 26 GHz, Horizontal**



**Figure 106 - 2472 MHz (CH13), 802.11b, Core 1, 1 GHz to 26 GHz, Vertical**

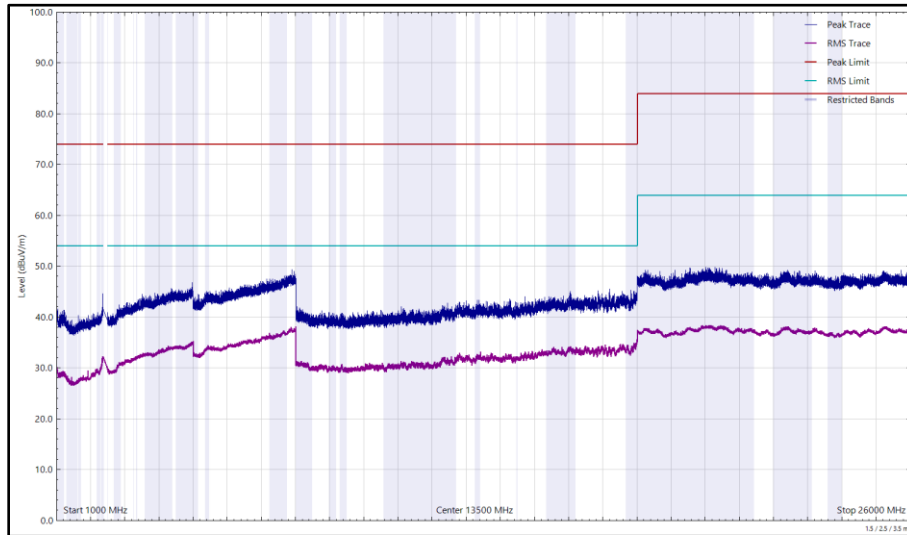




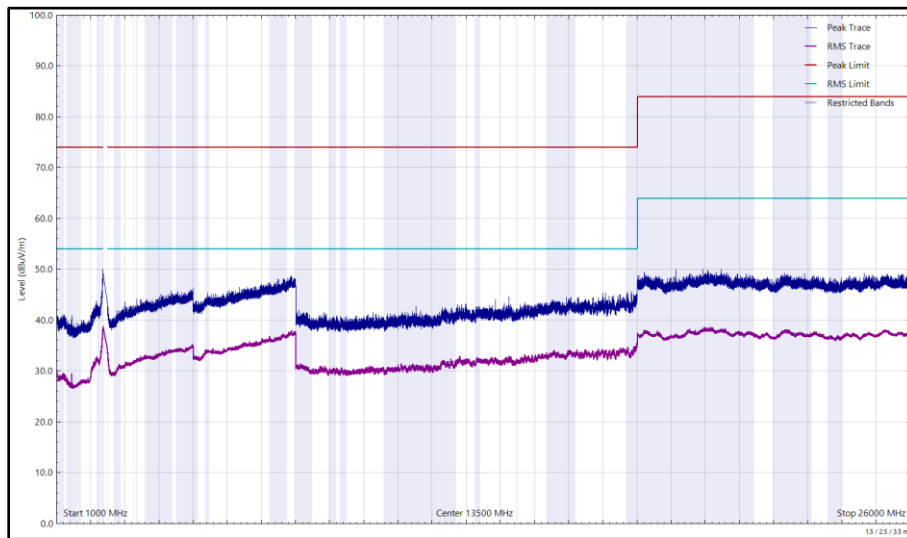
Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
*							

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

\*No emissions found within 10 dB of the limit.



**Figure 107 - 2412 MHz (CH1), 802.11g, Core 0, 1 GHz to 26 GHz, Horizontal**



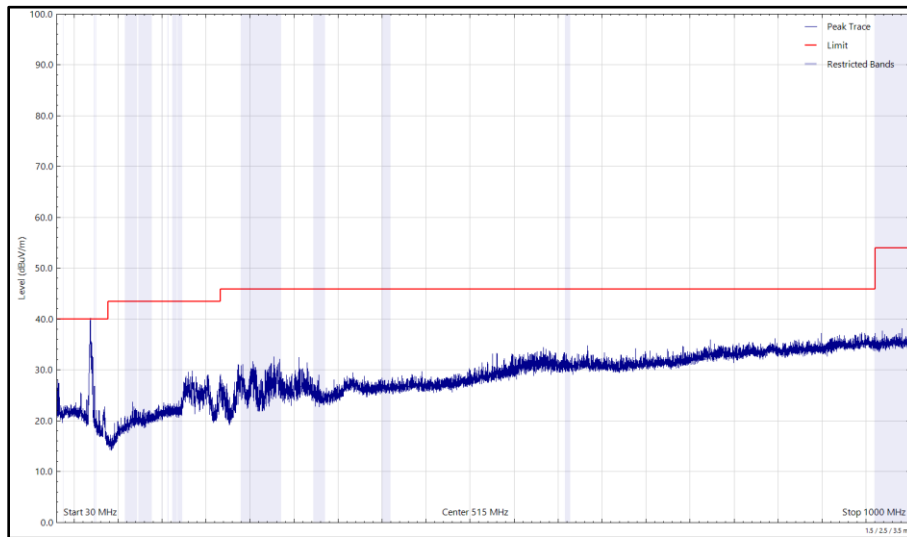
**Figure 108 - 2412 MHz (CH1), 802.11g, Core 0, 1 GHz to 26 GHz, Vertical**



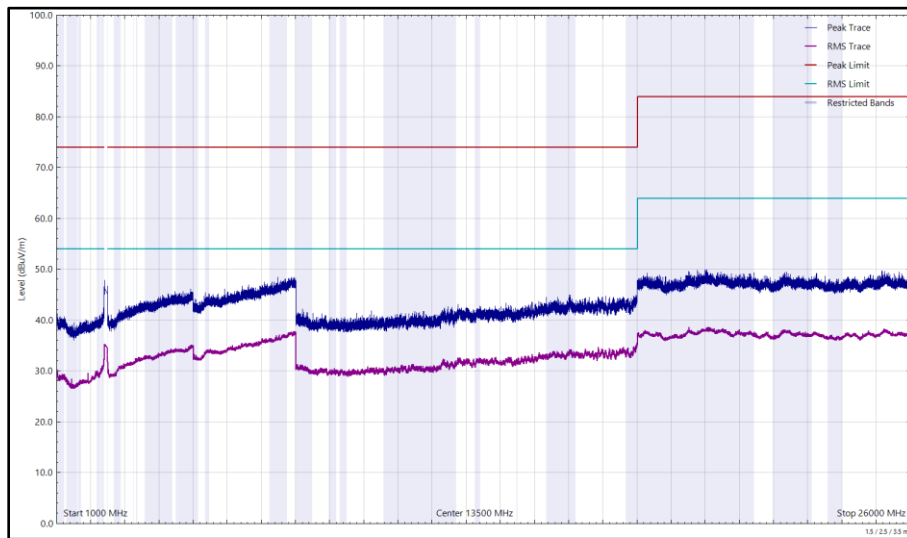
Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
74.417	24.02	40.00	-15.98	Q-Peak	119	178	Vertical

**Table 65 - 2442 MHz (CH7), 802.11g, Core 0, 30 MHz to 26 GHz**

No other emissions found within 10 dB of the limit.



**Figure 109 - 2442 MHz (CH7), 802.11g, Core 0, 30 MHz to 1 GHz, Horizontal (Peak)**



**Figure 110 - 2442 MHz (CH7), 802.11g, Core 0, 1 GHz to 26 GHz, Horizontal**

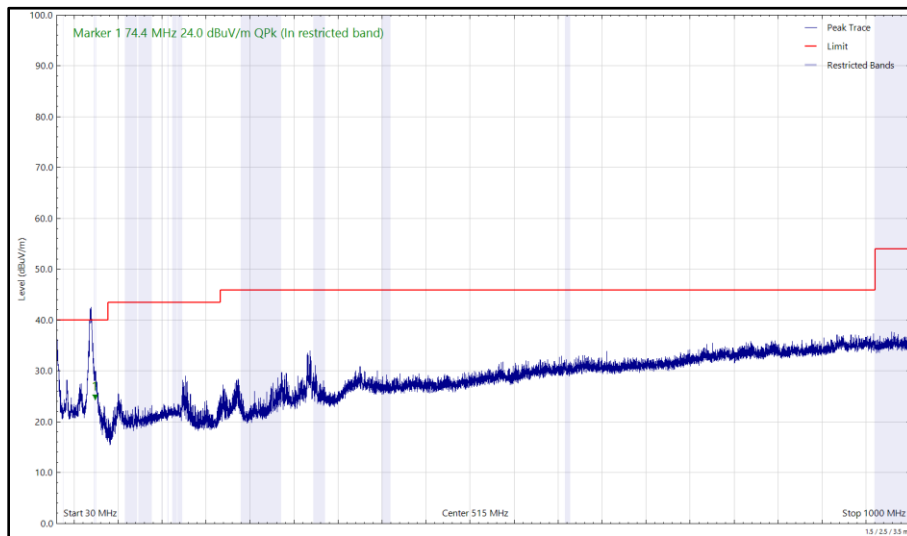


Figure 111 - 2442 MHz (CH7), 802.11g, Core 0, 30 MHz to 1 GHz, Vertical (Peak)

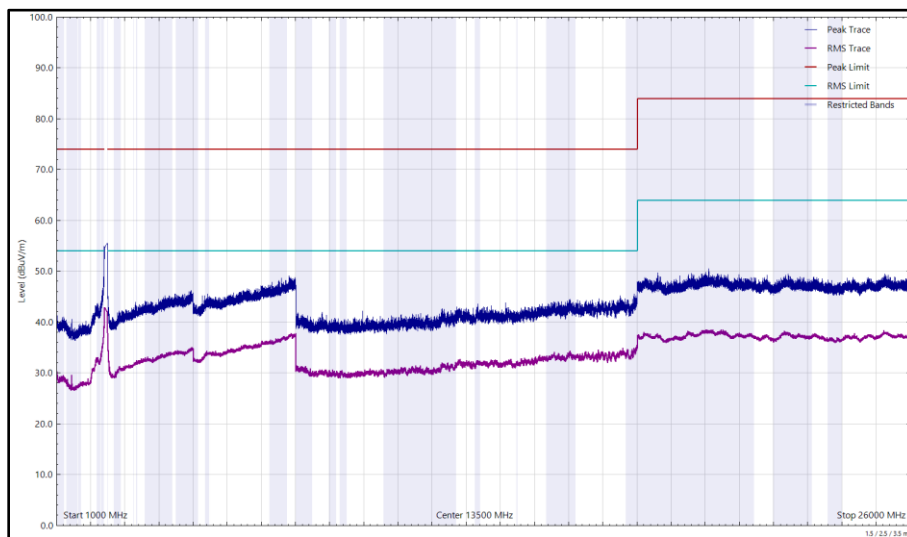


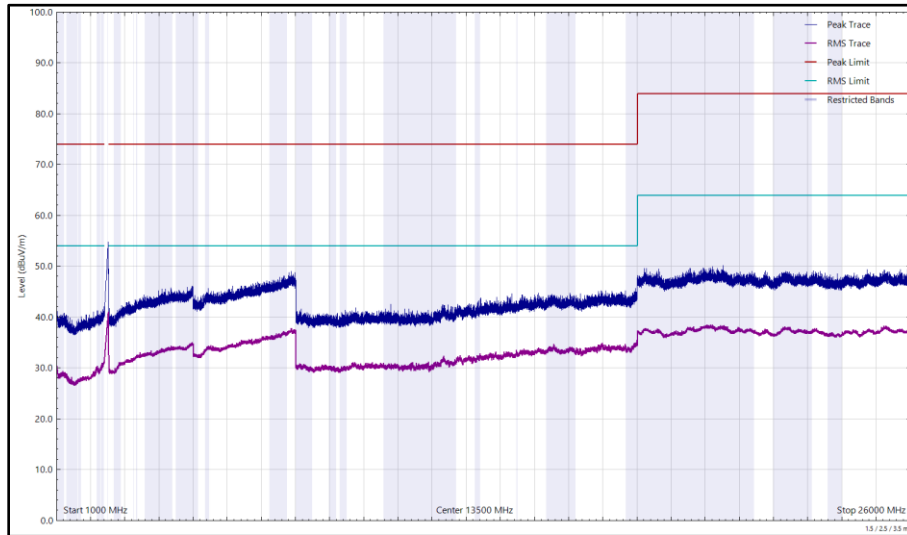
Figure 112 - 2442 MHz (CH7), 802.11g, Core 0, 1 GHz to 26 GHz, Vertical



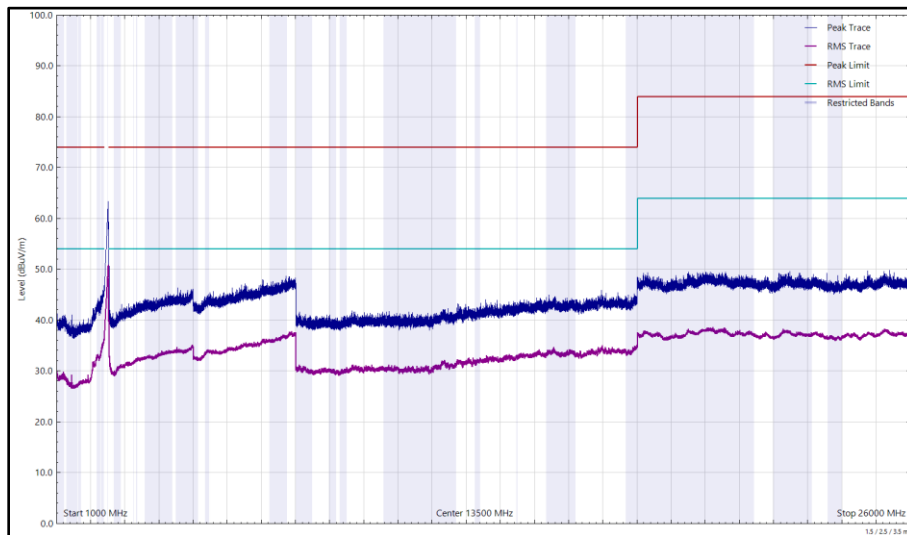
Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
*							

**Table 66 - 2472 MHz (CH13), 802.11g, Core 0, 1 GHz to 26 GHz**

\*No emissions found within 10 dB of the limit.



**Figure 113 - 2472 MHz (CH13), 802.11g, Core 0, 1 GHz to 26 GHz, Horizontal**



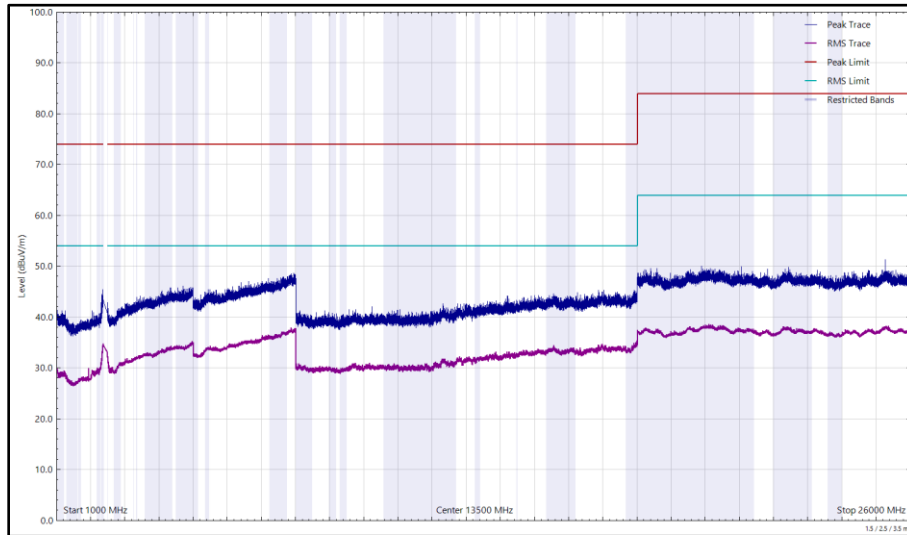
**Figure 114 - 2472 MHz (CH13), 802.11g, Core 0, 1 GHz to 26 GHz, Vertical**



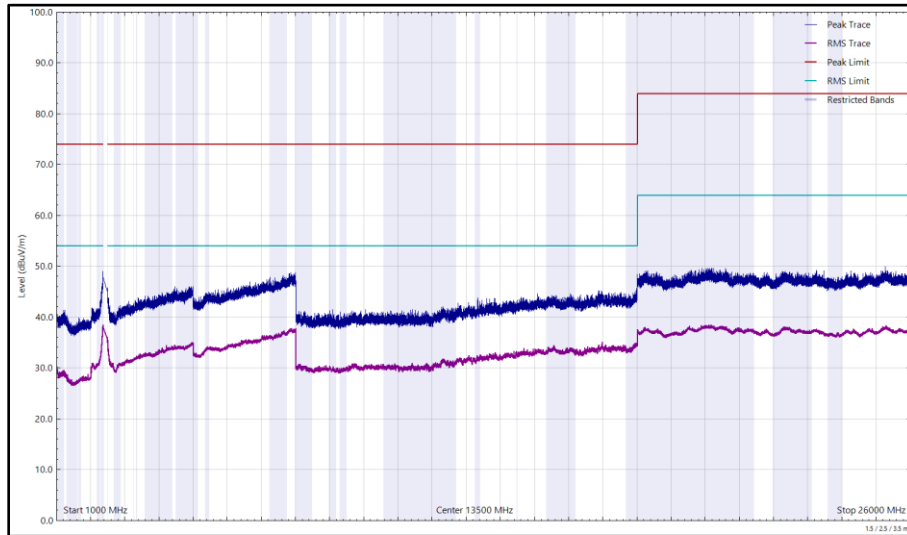
Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
*							

**Table 67 - 2412 MHz (CH1), 802.11g, Core 1, 1 GHz to 26 GHz**

\*No emissions found within 10 dB of the limit.



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



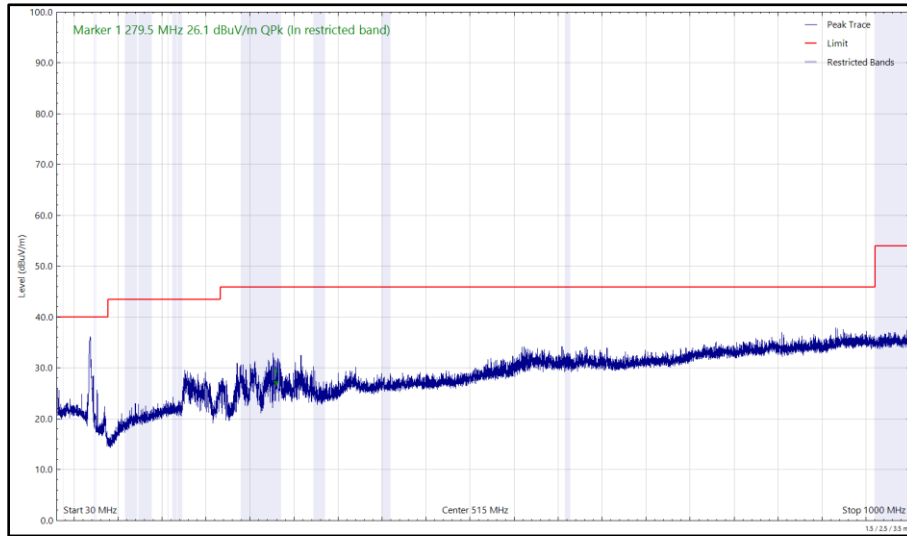
**Figure 116 - 2412 MHz (CH1), 802.11g, Core 1, 1 GHz to 26 GHz, Vertical**



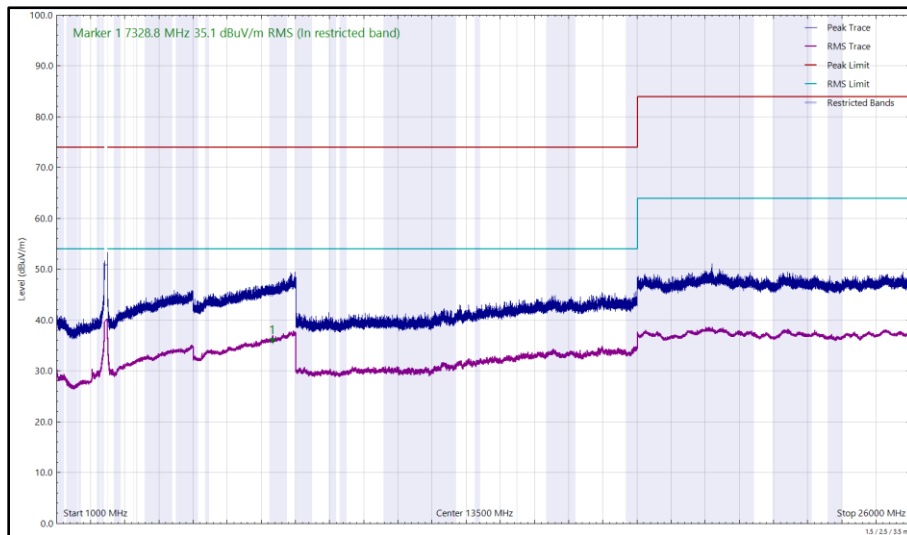
Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
73.520	25.87	40.00	-14.13	Q-Peak	129	101	Vertical
279.519	26.06	46.00	-19.94	Q-Peak	36	100	Horizontal
7328.424	35.15	54.00	-18.85	RMS	224	285	Vertical
7328.800	35.06	54.00	-18.94	RMS	70	443	Horizontal

**Table 68 - 2442 MHz (CH7), 802.11g, Core 1, 30 MHz to 26 GHz**

No other emissions found within 10 dB of the limit.



**Figure 117 - 2442 MHz (CH7), 802.11g, Core 1, 30 MHz to 1 GHz, Horizontal (Peak)**



**Figure 118 - 2442 MHz (CH7), 802.11g, Core 1, 1 GHz to 26 GHz, Horizontal**

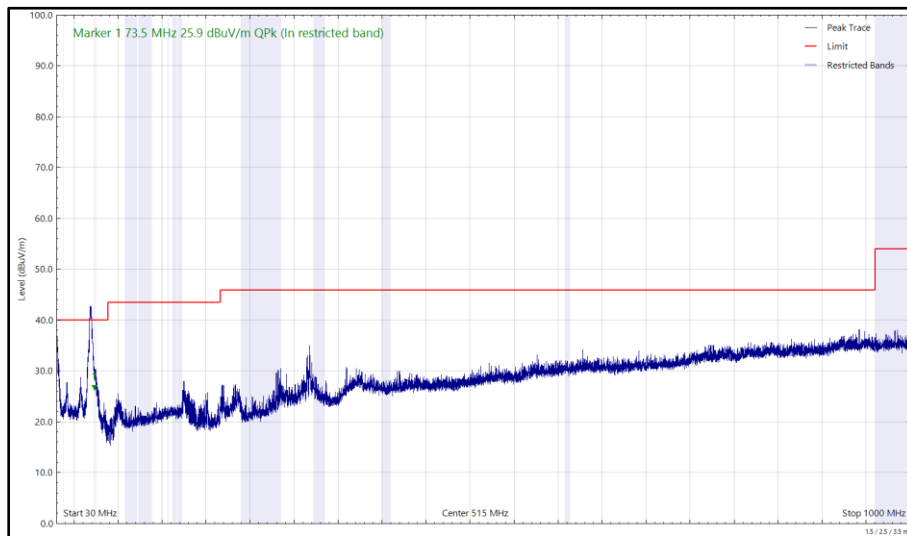


Figure 119 - 2442 MHz (CH7), 802.11g, Core 1, 30 MHz to 1 GHz, Vertical (Peak)

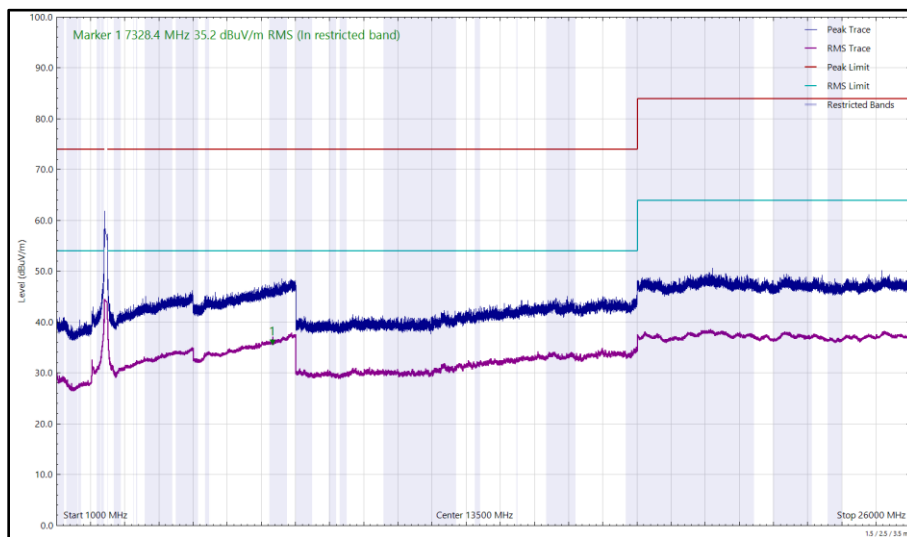


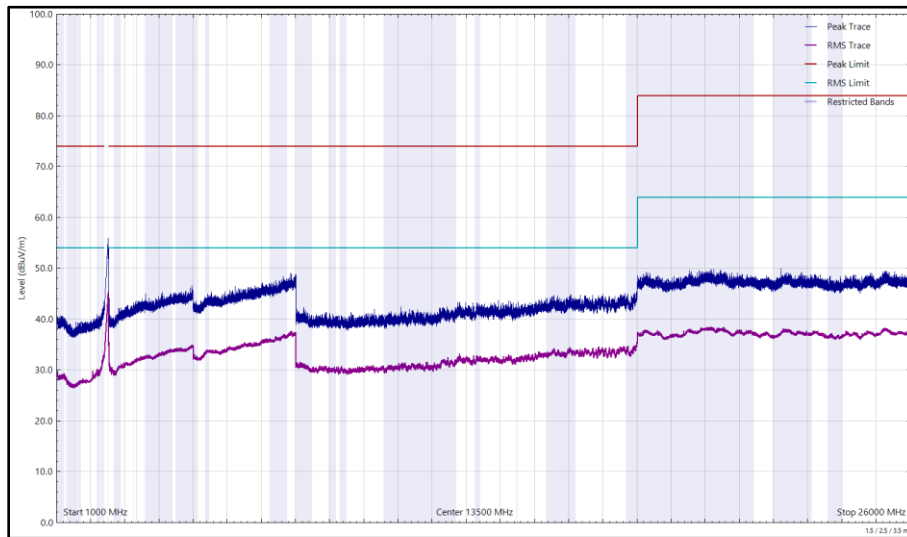
Figure 120 - 2442 MHz (CH7), 802.11g, Core 1, 1 GHz to 26 GHz, Vertical



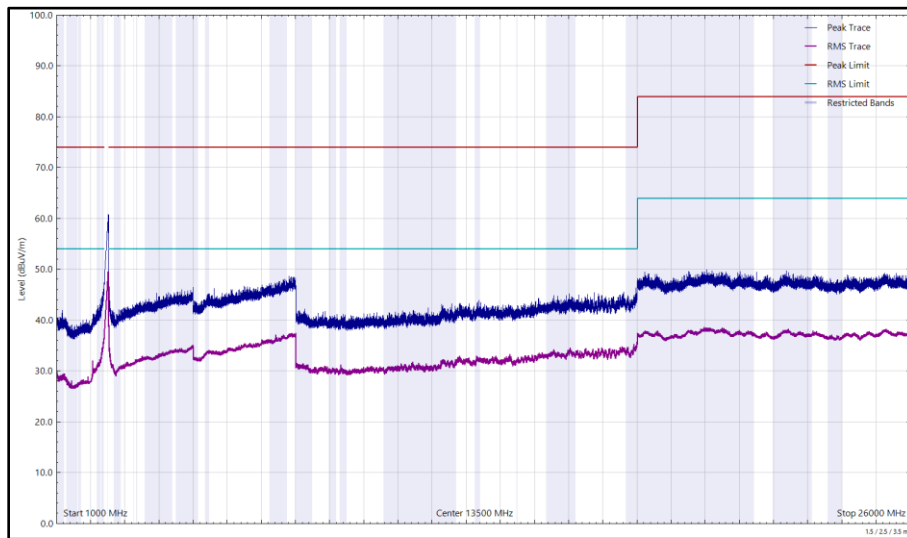
Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
*							

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

\*No emissions found within 10 dB of the limit.



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



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

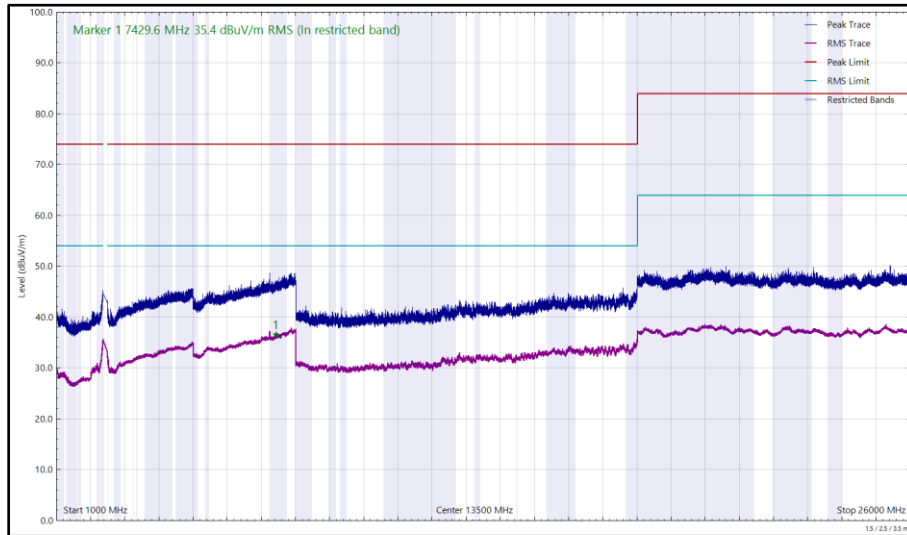




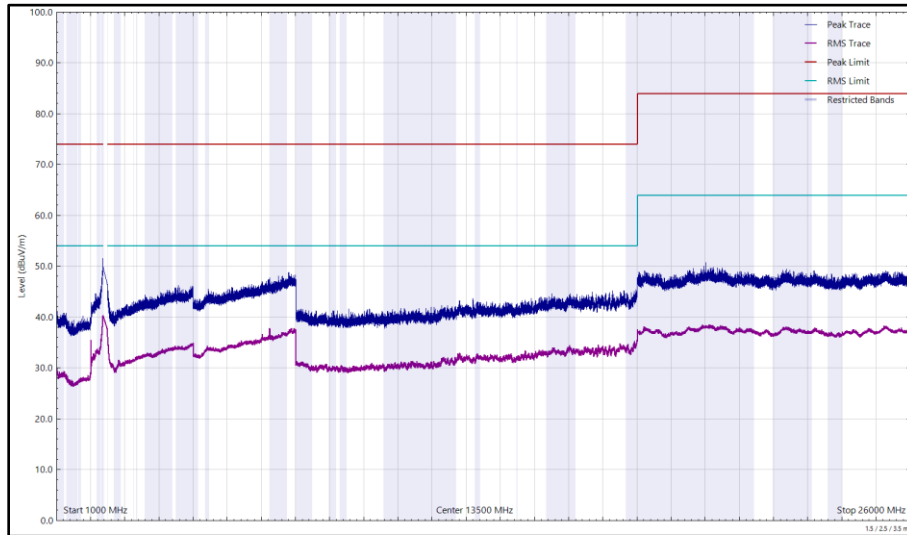
Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
7429.552	35.38	54.00	-18.62	RMS	210	273	Horizontal

**Table 70 - 2412 MHz (CH1), HT20, CDD, Core 0 + Core 1, 1 GHz to 26 GHz**

No other emissions found within 10 dB of the limit.



**Figure 123 - 2412 MHz (CH1), HT20, CDD, Core 0 + Core 1, 1 GHz to 26 GHz, Horizontal**



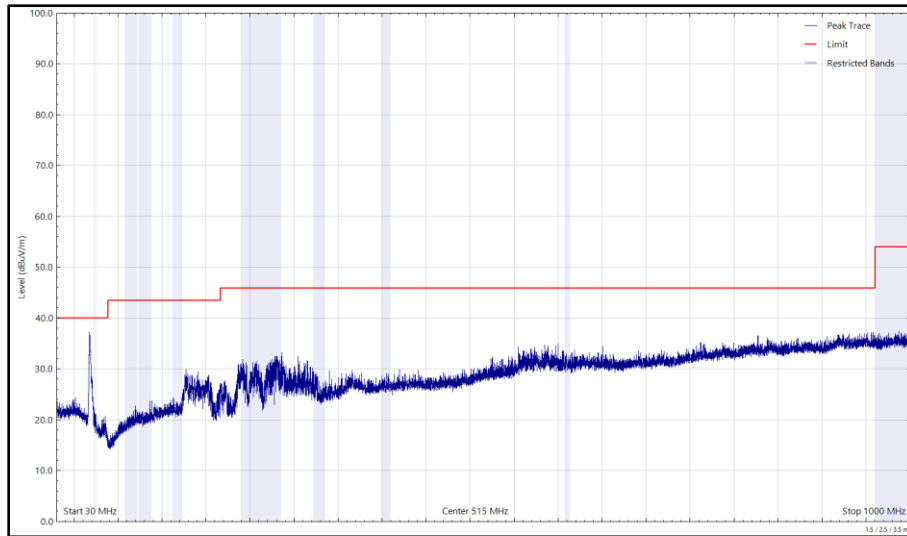
**Figure 124 - 2412 MHz (CH1), HT20, CDD, Core 0 + Core 1, 1 GHz to 26 GHz, Vertical**



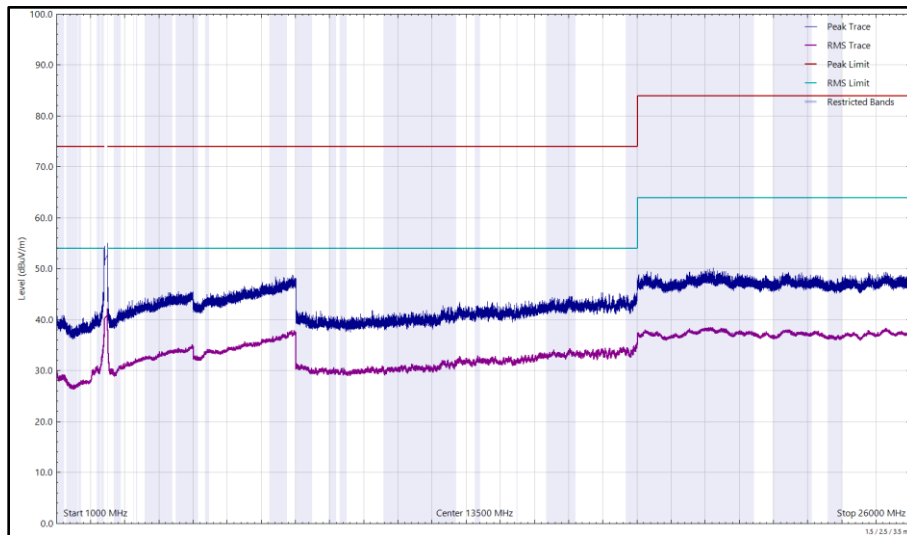
Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
73.507	24.24	40.00	-15.76	Q-Peak	112	181	Vertical
7327.823	35.40	54.00	-18.60	RMS	152	320	Vertical

**Table 71 - 2442 MHz (CH7), HT20, CDD, Core 0 + Core 1, 30 MHz to 26 GHz**

No other emissions found within 10 dB of the limit.



**Figure 125 - 2442 MHz (CH7), HT20, CDD, Core 0 + Core 1, 30 MHz to 1 GHz, Horizontal (Peak)**



**Figure 126 - 2442 MHz (CH7), HT20, CDD, Core 0 + Core 1, 1 GHz to 26 GHz, Horizontal**

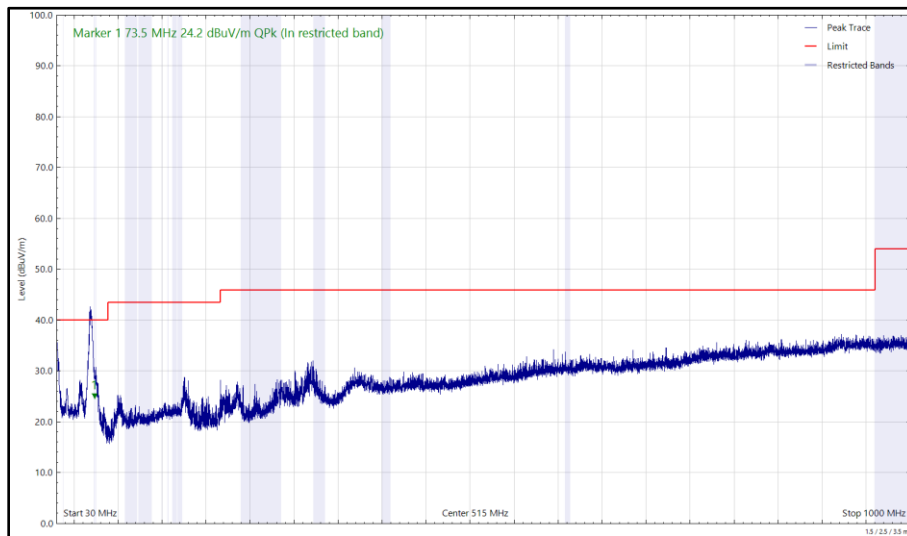


Figure 127 - 2442 MHz (CH7), HT20, CDD, Core 0 + Core 1, 30 MHz to 1 GHz, Vertical (Peak)

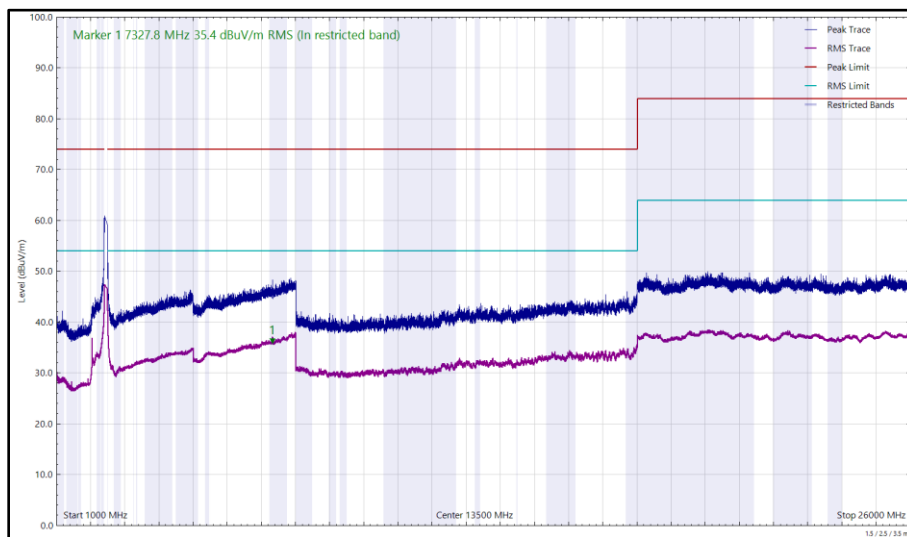


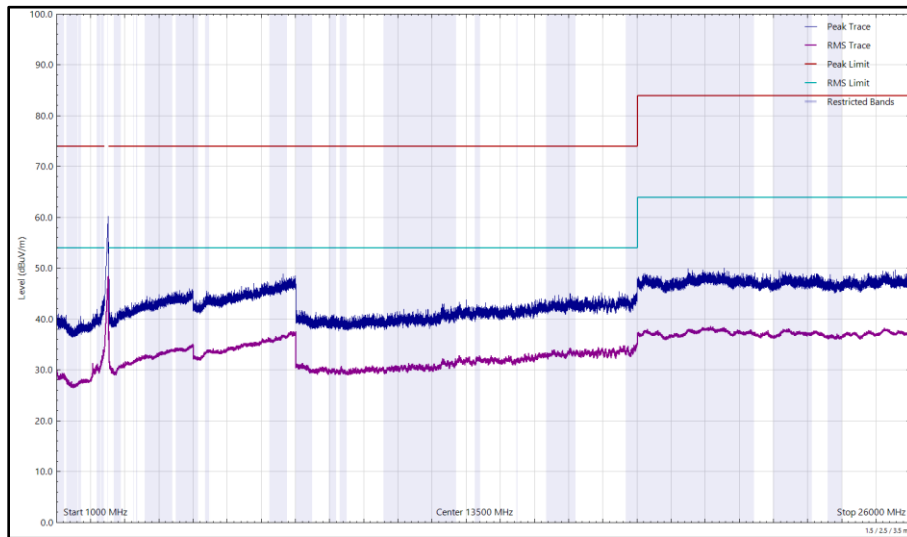
Figure 128 - 2442 MHz (CH7), HT20, CDD, Core 0 + Core 1, 1 GHz to 26 GHz, Vertical



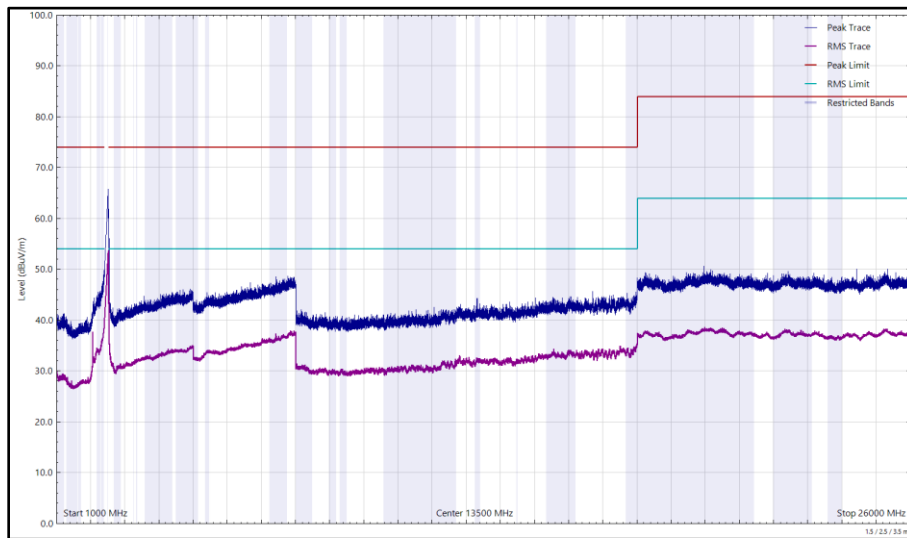
Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
*							

**Table 72 - 2472 MHz (CH13), HT20, CDD, Core 0 + Core 1, 1 GHz to 26 GHz**

\*No emissions found within 10 dB of the limit.



**Figure 129 - 2472 MHz (CH13), HT20, CDD, Core 0 + Core 1, 1 GHz to 26 GHz, Horizontal**



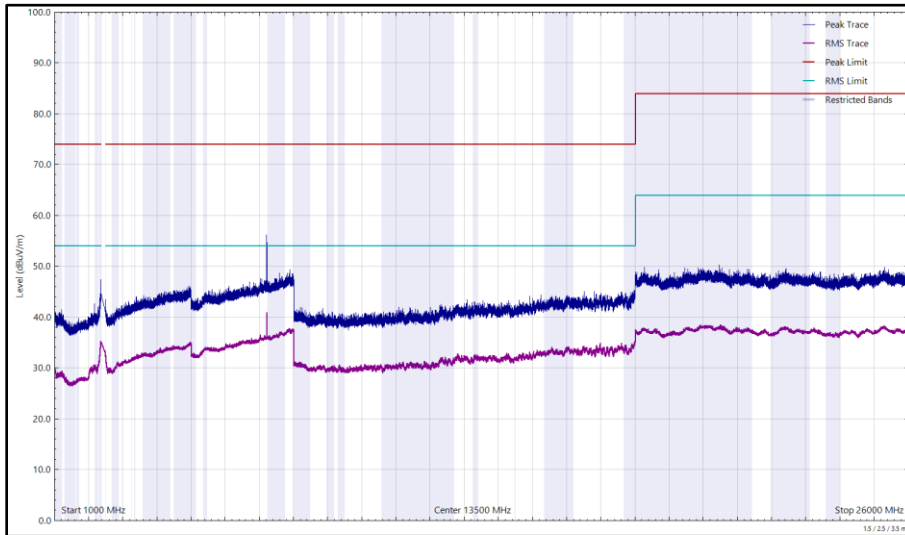
**Figure 130 - 2472 MHz (CH13), HT20, CDD, Core 0 + Core 1, 1 GHz to 26 GHz, Vertical**



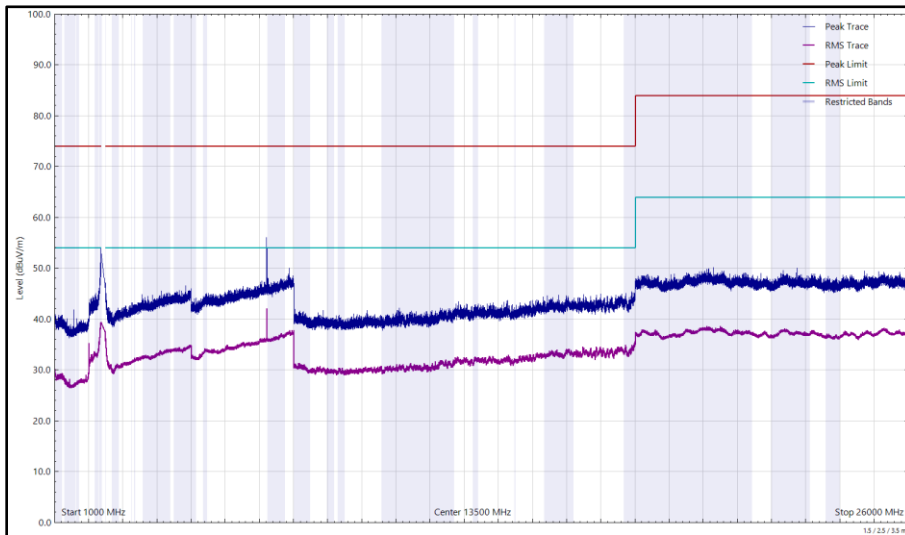
Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
*							

**Table 73 - 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 131 - 2412 MHz (CH1), HE20, RU26-0, CDD, Core 0 + Core 1, 1 GHz to 26 GHz, Horizontal**



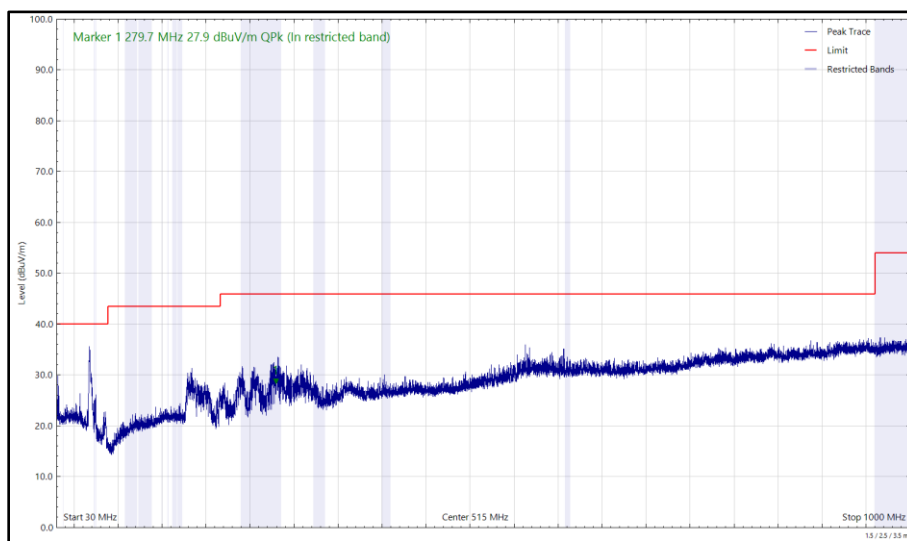
**Figure 132 - 2412 MHz (CH1), HE20, RU26-0, CDD, Core 0 + Core 1, 1 GHz to 26 GHz, Vertical**



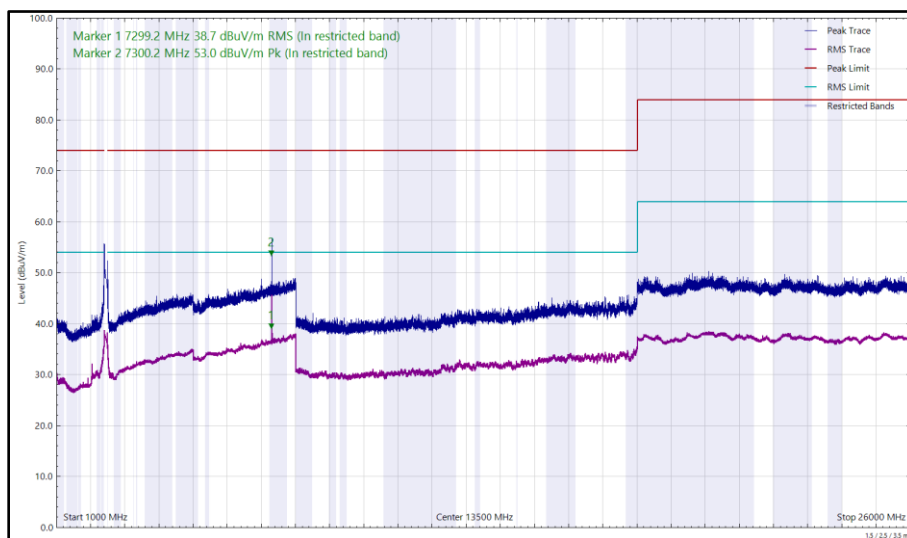
Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
73.472	25.70	40.00	-14.30	Q-Peak	137	107	Vertical
279.696	27.90	46.00	-18.10	Q-Peak	32	106	Horizontal
7299.150	38.72	54.00	-15.28	RMS	196	396	Horizontal
7299.190	39.22	54.00	-14.78	RMS	175	253	Vertical
7299.192	57.90	74.00	-16.10	Peak	177	261	Vertical
7300.203	52.95	74.00	-21.05	Peak	147	312	Horizontal

**Table 74 - 2442 MHz (CH7), HE20, RU26-0, CDD, Core 0 + Core 1, 30 MHz to 26 GHz**

No other emissions found within 10 dB of the limit.



**Figure 133 - 2442 MHz (CH7), HE20, RU26-0, CDD, Core 0 + Core 1, 30 MHz to 1 GHz, Horizontal (Peak)**



**Figure 134 - 2442 MHz (CH7), HE20, RU26-0, CDD, Core 0 + Core 1, 1 GHz to 26 GHz, Horizontal**

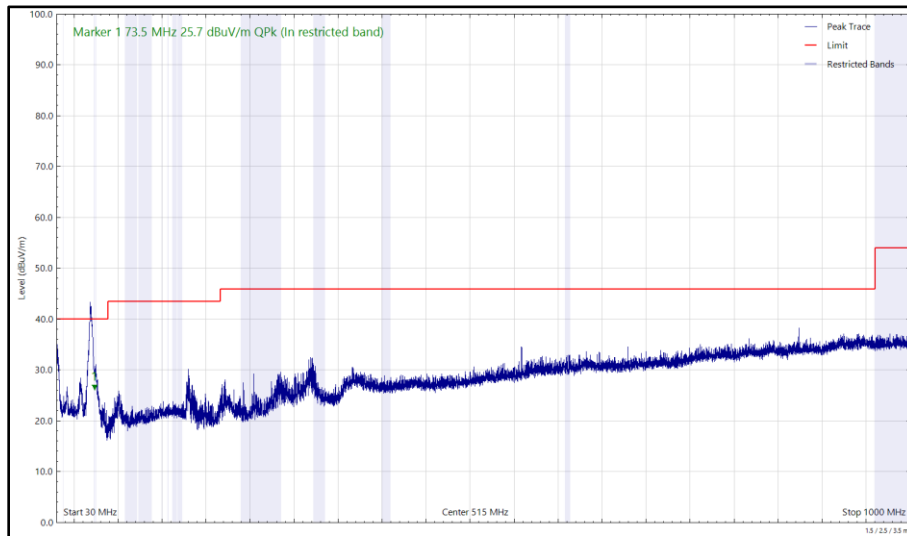


Figure 135 - 2442 MHz (CH7), HE20, RU26-0, CDD, Core 0 + Core 1, 30 MHz to 1 GHz, Vertical (Peak)

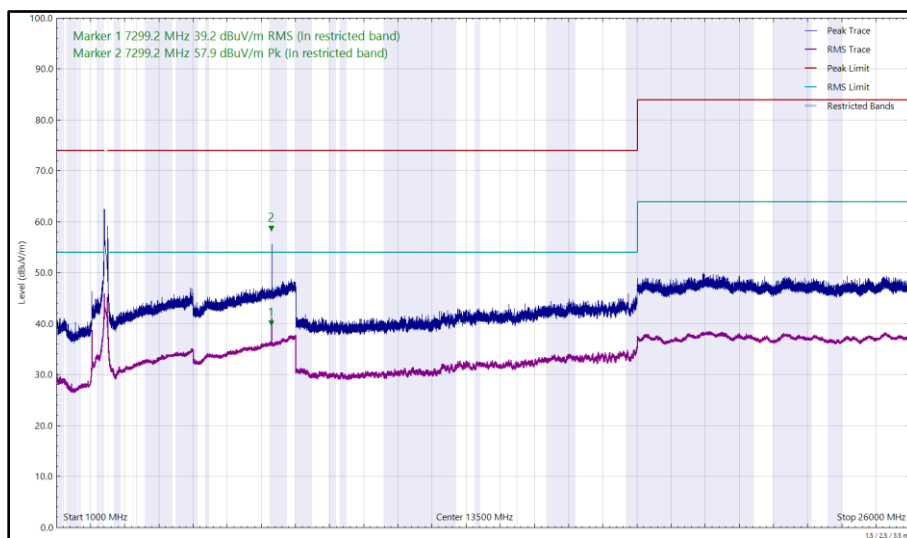


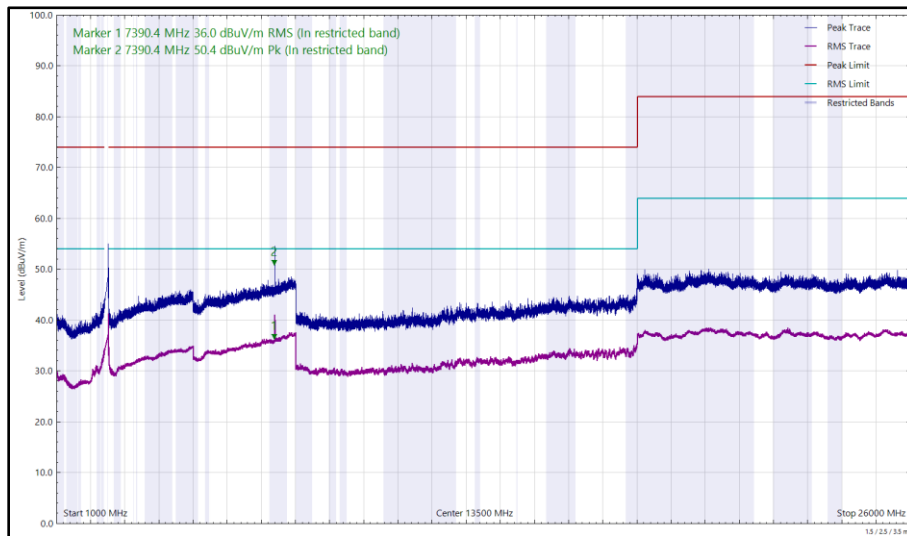
Figure 136 - 2442 MHz (CH7), HE20, RU26-0, CDD, Core 0 + Core 1, 1 GHz to 26 GHz, Vertical



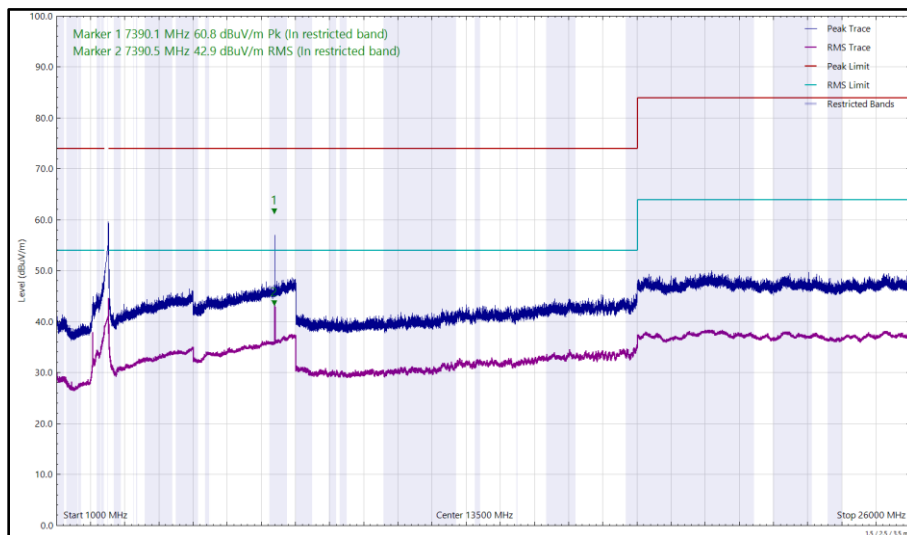
Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
7390.109	60.82	74.00	-13.18	Peak	180	271	Vertical
7390.362	35.95	54.00	-18.05	RMS	242	238	Horizontal
7390.442	50.42	74.00	-23.58	Peak	242	238	Horizontal
7390.467	42.85	54.00	-11.15	RMS	180	271	Vertical

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

No other 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 Expiry Date
Cable (18 GHz)	Rosenberger	LU7-071-1000	5096	12	23-Oct-2023
Emissions Software	TUV SUD	EmX V3.1.12	5125	-	Software
EMI Test Receiver	Rohde & Schwarz	ESW44	5912	12	17-Apr-2024
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), Chamber 15	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	05-Jun-2024



Cable (N to N 1m)	Junkosha	MWX221-01000NMSNMS/B	5999	12	05-Jun-2024
Cable (N to N 7m)	Junkosha	MWX221-07000NMSNMS/B	6005	12	05-Jun-2024
Cable (N to N 8m)	Junkosha	MWX221-08000NMSNMS/A	6006	12	05-Jun-2024
Cable (SMA to SMA 1m)	Junkosha	MWX221-01000AMSAMS/A	6007	12	05-Jun-2024
Cable (SMA to SMA 6.5m)	Junkosha	MWX221-06500AMSAMS/B	6014	12	24-Aug-2023
Cable (N to N 7m)	Junkosha	MWX221-07000NMSNMS/B	6016	12	05-Jun-2024
Horn Antenna (1-10 GHz)	Schwarzbeck	BBHA9120B	6140	12	17-Aug-2023
Digital Multimeter	Fluke	115	6147	12	16-Jun-2024
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	24-Jul-2024*
Pre Amp 8 - 18 GHz	Wright Technologies	APS06 0061	6200	12	14-Jul-2024
Attenuator (4 dB)	Pasternack	PE7074-4	6202	24	16-Jul-2024
Cable (SMA to SMA 20cm)	TUV SUD	MH-FH 8-18	6214	12	24-Jul-2024*
Cable (SMA to SMA 1m)	Junkosha	MWX221-01000AMSAMS/A	6315	12	04-Feb-2024
Cable (K Type 2m)	Junkosha	MWX241-02000KMSKMS/B	6324	12	04-Feb-2024
Humidity and Temperature Meter	R.S Components	1364	6346	12	28-Feb-2024
DRG Horn Antenna	Schwarzbeck	HWRD750	6458	12	09-Jul-2024

**Table 76**

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

\* This equipment was only used within its valid calibration period.



## **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**

A2991, S/N: Y7RPXWJ9N9 - Modification State 0

### **2.6.3 Date of Test**

10-August-2023

### **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	22.2 °C
Relative Humidity	52.4 %



**2.6.6 Test Results**

2.4 GHz WLAN

SISO

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 (%):	99.4
Data Rate:	1 Mbps	DCCF (dB):	0.03
Antenna Configuration:	SISO	Peak Antenna Gain (dBi):	-
Active Port(s):	C (Core 1)	Active Chain(s):	1

Test Frequency (MHz)	RBW (kHz)	PSD (dBm/RBW)					Limit (dBm/3 kHz)	Margin (dB)
		A	B	C	D	Σ		
2412	100.0	-	-	2.26	-	-	8.00	-5.74
2442	100.0	-	-	2.23	-	-	8.00	-5.77
2472	100.0	-	-	-0.89	-	-	8.00	-8.89

**Table 77 - 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 (%):	97.5
Data Rate:	12 Mbps	DCCF (dB):	0.11
Antenna Configuration:	SISO	Peak Antenna Gain (dBi):	-
Active Port(s):	C (Core 1)	Active Chain(s):	1

Test Frequency (MHz)	RBW (kHz)	PSD (dBm/RBW)					Limit (dBm/3 kHz)	Margin (dB)
		A	B	C	D	Σ		
2412	100.0	-	-	-1.33	-	-	8.00	-9.33
2442	100.0	-	-	4.53	-	-	8.00	-3.47
2472	100.0	-	-	-9.00	-	-	8.00	-17.00

**Table 78 - 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 (%):	96.7
Modulation Coding Scheme:	MCS2	DCCF (dB):	0.15
Antenna Configuration:	SISO	Peak Antenna Gain (dBi):	-
Active Port(s):	C (Core 1)	Active Chain(s):	1

Test Frequency (MHz)	RBW (kHz)	PSD (dBm/RBW)					Limit (dBm/3 kHz)	Margin (dB)
		A	B	C	D	Σ		
2412	100.0	-	-	-2.25	-	-	8.00	-10.25
2442	100.0	-	-	3.73	-	-	8.00	-4.27
2472	100.0	-	-	-10.83	-	-	8.00	-18.83

**Table 79 - 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 (%):	95.8
Modulation Coding Scheme:	MCS2x1	DCCF (dB):	0.18
Antenna Configuration:	SISO	Peak Antenna Gain (dBi):	-
Active Port(s):	C (Core 1)	Active Chain(s):	1

Test Frequency (MHz)	RBW (kHz)	PSD (dBm/RBW)					Limit (dBm/3 kHz)	Margin (dB)
		A	B	C	D	Σ		
2412	100.0	-	-	-4.58	-	-	8.00	-12.58
2442	100.0	-	-	2.32	-	-	8.00	-5.68
2472	100.0	-	-	-13.00	-	-	8.00	-21.00

**Table 80 - 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 (%):	96.7
Modulation Coding Scheme:	MCS2x1	DCCF (dB):	0.15
Antenna Configuration:	SISO	Peak Antenna Gain (dBi):	-
Active Port(s):	C (Core 1)	Active Chain(s):	1

Test Frequency (MHz)	RBW (kHz)	PSD (dBm/RBW)					Limit (dBm/3 kHz)	Margin (dB)
		A	B	C	D	Σ		
2412	100.0	-	-	1.70	-	-	8.00	-6.30
2442	100.0	-	-	1.80	-	-	8.00	-6.20
2472	100.0	-	-	-15.72	-	-	8.00	-23.72

**Table 81 - 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 (%):	96.7
Modulation Coding Scheme:	MCS2x1	DCCF (dB):	0.14
Antenna Configuration:	SISO	Peak Antenna Gain (dBi):	-
Active Port(s):	C (Core 1)	Active Chain(s):	1

Test Frequency (MHz)	RBW (kHz)	PSD (dBm/RBW)					Limit (dBm/3 kHz)	Margin (dB)
		A	B	C	D	Σ		
2412	100.0	-	-	2.18	-	-	8.00	-5.82
2442	100.0	-	-	1.85	-	-	8.00	-6.15
2472	100.0	-	-	-16.23	-	-	8.00	-24.23

**Table 82 - 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 (%):	97.9
Modulation Coding Scheme:	MCS2x1	DCCF (dB):	0.09
Antenna Configuration:	SISO	Peak Antenna Gain (dBi):	-
Active Port(s):	C (Core 1)	Active Chain(s):	1

Test Frequency (MHz)	RBW (kHz)	PSD (dBm/RBW)					Limit (dBm/3 kHz)	Margin (dB)
		A	B	C	D	Σ		
2412	100.0	-	-	-1.45	-	-	8.00	-9.45
2442	100.0	-	-	2.32	-	-	8.00	-5.68
2472	100.0	-	-	-17.24	-	-	8.00	-25.24

**Table 83 - Maximum Power Spectral Density Results**



**MIMO CDD**

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 (%):	96.6
Modulation Coding Scheme:	MCS2	DCCF (dB):	0.15
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)	RBW (kHz)	PSD (dBm/RBW)					Limit (dBm/3 kHz)	Margin (dB)
		A	B	C	D	Σ		
2412	100.0	-	-4.06	-4.12	-	-1.08	8.00	-9.08
2442	51.0	-	1.66	1.50	-	4.59	8.00	-3.41
2472	100.0	-	-10.99	-11.04	-	-8.00	8.00	-16.00

**Table 84 - 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 (%):	95.7
Modulation Coding Scheme:	MCS2x1	DCCF (dB):	0.19
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)	RBW (kHz)	PSD (dBm/RBW)					Limit (dBm/3 kHz)	Margin (dB)
		A	B	C	D	Σ		
2412	100.0	-	-6.93	-6.86	-	-3.89	8.00	-11.89
2437	51.0	-	0.24	-0.35	-	2.97	8.00	-5.03
2472	100.0	-	-13.93	-13.51	-	-10.71	8.00	-18.71

**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):	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 (%):	96.7
Modulation Coding Scheme:	MCS2x1	DCCF (dB):	0.15
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)	RBW (kHz)	PSD (dBm/RBW)					Limit (dBm/3 kHz)	Margin (dB)
		A	B	C	D	Σ		
2412	100.0	-	1.85	2.05	-	4.96	8.00	-3.04
2442	100.0	-	1.99	1.97	-	4.99	8.00	-3.01
2472	100.0	-	-22.81	-22.98	-	-19.88	8.00	-27.88

**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):	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 (%):	96.3
Modulation Coding Scheme:	MCS2x1	DCCF (dB):	0.16
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)	RBW (kHz)	PSD (dBm/RBW)					Limit (dBm/3 kHz)	Margin (dB)
		A	B	C	D	Σ		
2412	100.0	-	0.51	0.73	-	3.63	8.00	-4.37
2442	51.0	-	-0.59	-1.21	-	2.12	8.00	-5.88
2472	100.0	-	-20.57	-21.04	-	-17.79	8.00	-25.79

**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:	802.11ax 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):	B+C (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	-	-2.13	-2.10	-	0.90	8.00	-7.10
2442	51.0	-	-0.72	-0.42	-	2.44	8.00	-5.56
2472	100.0	-	-22.15	-22.04	-	-19.08	8.00	-27.08

**Table 88 - 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 14.

Instrument	Manufacturer	Type No.	TE No.	Calibration Period (months)	Calibration Expiry Date
Hygrometer	Rotronic	I-1000	3068	12	21-Sep-2023
Digital Multimeter	Fluke	115	6145	12	15-Jun-2024
MXA Signal Analyser	Keysight Technologies	N9020B	6417	24	26-Feb-2025
Signal Conditioning Unit	TUV SUD	SPECTRUM_SCU001	6518	12	26-May-2024
USB Wideband Power Sensor	Boonton	RTP5008	6588	12	24-Apr-2024
USB Wideband Power Sensor	Boonton	RTP5008	6589	12	24-Apr-2024
AC Programmable Power Supply	iTech	IT7324	6662	-	O/P Mon

**Table 89**

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: $\pm 5.2$ dB 1 GHz to 40 GHz: $\pm 6.3$ dB
Emission Bandwidth	$\pm 83.14$ kHz
Maximum Conducted Output Power	$\pm 1.38$ dB
Authorised Band Edges	30 MHz to 1 GHz: $\pm 5.2$ dB 1 GHz to 40 GHz: $\pm 6.3$ dB
Spurious Radiated Emissions	30 MHz to 1 GHz: $\pm 5.2$ dB 1 GHz to 40 GHz: $\pm 6.3$ dB
Power Spectral Density	$\pm 1.49$ dB

**Table 90**

#### Measurement Uncertainty Decision Rule – Accuracy Method

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

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