



2.4 GHz WLAN and Thread and 6 GHz WLAN

Frequency (MHz)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
30.217	20.65	40.00	-19.35	Q-Peak	350	263	Horizontal
32.565	24.75	40.00	-15.25	Q-Peak	262	101	Vertical
37.743	20.16	40.00	-19.84	Q-Peak	6	399	Horizontal
73.955	18.24	40.00	-21.76	Q-Peak	98	240	Vertical
164.108	21.40	43.50	-22.10	Q-Peak	266	349	Vertical
170.201	21.24	43.50	-22.26	Q-Peak	269	400	Horizontal
279.596	20.85	46.00	-25.15	Q-Peak	304	302	Horizontal
1196.206	32.40	54.00	-21.60	RMS	175	143	Vertical
1440.125	31.49	54.00	-22.51	RMS	125	289	Vertical

Table 43 - 2437 MHz (CH6), HT20, CDD, Core 0 + Core 1 and 6995 MHz (CH209), HE20, SU, CDD, Core 0 + Core 1 and 2455 MHz (CH21), Thread, iPA, Core 2, 30 MHz to 40 GHz

No other emissions found within 20 dB of the limit.

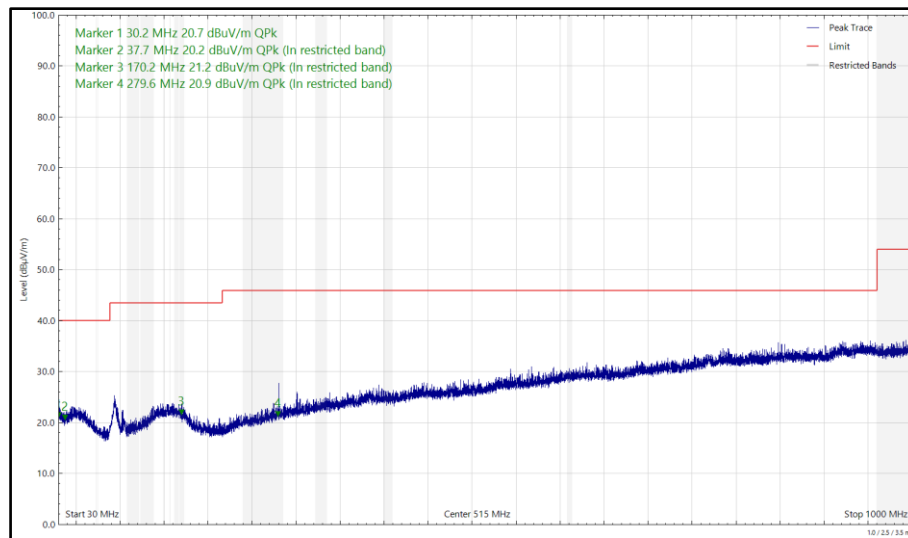


Figure 106 - 2437 MHz (CH6), HT20, CDD, Core 0 + Core 1 and 6995 MHz (CH209), HE20, SU, CDD, Core 0 + Core 1 and 2455 MHz (CH21), Thread, iPA, Core 2, 30 MHz to 1 GHz, Horizontal (Peak)

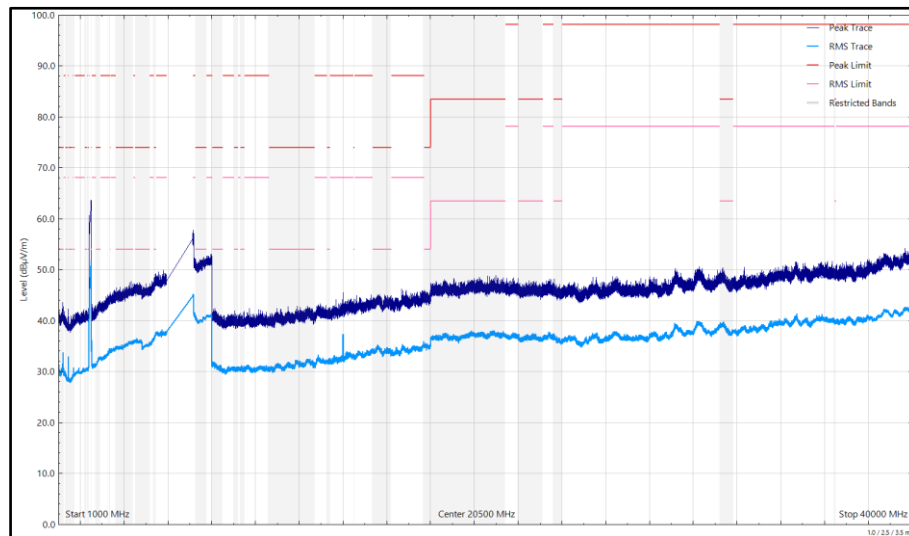


Figure 107 - 2437 MHz (CH6), HT20, CDD, Core 0 + Core 1 and 6995 MHz (CH209), HE20, SU, CDD, Core 0 + Core 1 and 2455 MHz (CH21), Thread, iPA, Core 2, 1 GHz to 40 GHz, Horizontal

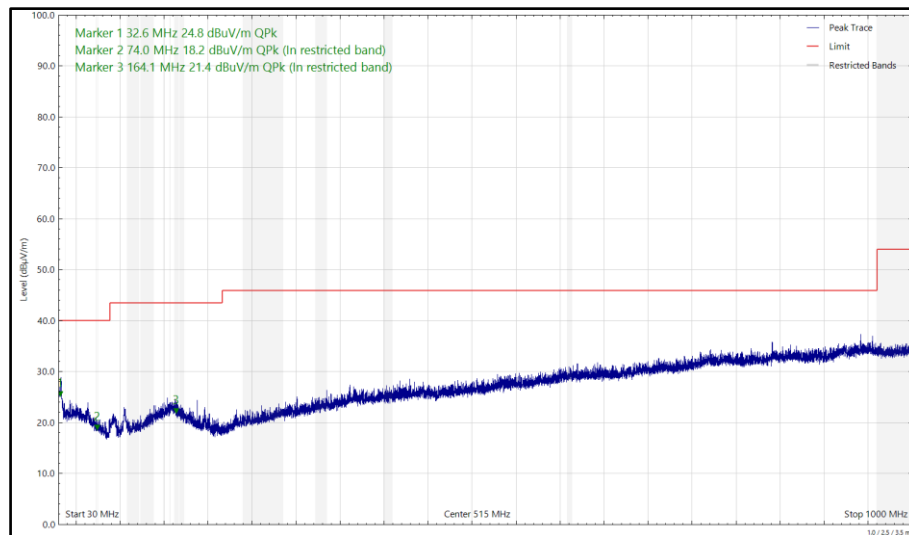


Figure 108 - 2437 MHz (CH6), HT20, CDD, Core 0 + Core 1 and 6995MHz (CH209), HE20, SU, CDD, Core 0 + Core 1 and 2455 MHz (CH21), Thread, iPA, Core 2, 30 MHz to 1 GHz, Vertical (Peak)

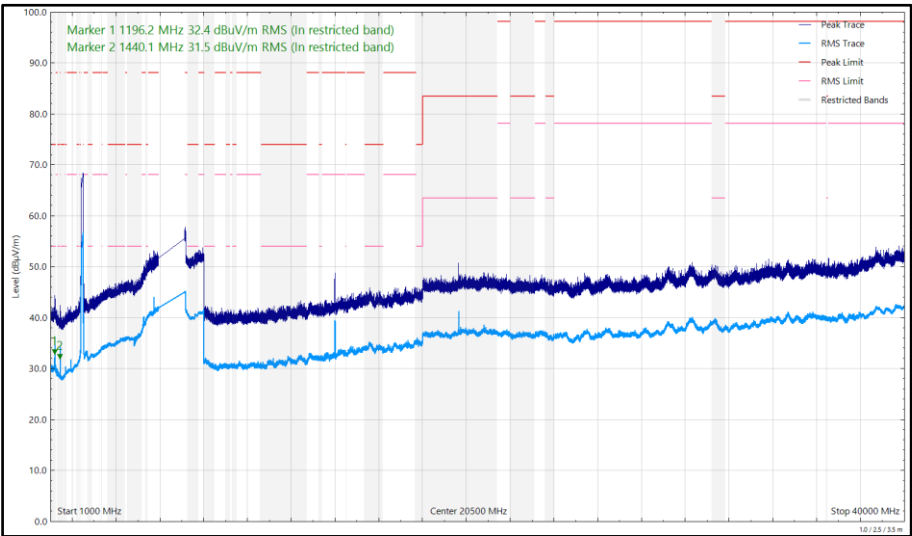


Figure 109 - 6995 MHz (CH6), HT20, CDD, Core 0 + Core 1 and 6995 MHz (CH209), HE20, SU, CDD, Core 0 + Core 1 and 2455 MHz (CH21), Thread, iPA, Core 2, 1 GHz to 40 GHz, Vertical

FCC 47 CFR Part 15, ISED RSS-247, ISED RSS-248 and ISED RSS-GEN

The least stringent limit from the applicable rule parts was used to determine compliance for Radiated Emissions testing of multiple transmission sources.

The least stringent applicable limit was:

Clause	Limit
Part 15 247 (d) / RSS-247 Clause 6.6	-20 dBc
Part 15.407 (b) / RSS-248 Clause 4.6.2	Peak: -7 dBm/MHz e.i.r.p, Average: -27 dBm/MHz e.i.r.p.
Part 15.209 / RSS-GEN Clause 8.9	Peak: 74 dBµV/m at 3m, Average 54 dBµV/m at 3m (Restricted bands > 1 GHz)

Table 44



2.1.8 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
Emissions Software	TUV SUD	EmX V3.6	5125	-	TU
Test Receiver	Rohde & Schwarz	ESW44	5914	12	17-Jun-2026
DRG Horn Antenna (7.5-18GHz)	Schwarzbeck	HWRD750	5941	12	18-May-2026
TRILOG Super Broadband Test Antenna	Schwarzbeck	VULB 9168	5942	24	03-Jan-2027
1500W (300V 12A) AC Power Supply	iTech	IT7324	5956	-	TU
5m Semi-Anechoic Chamber (Dual-Axis), Chamber 15	Albatross Projects	RF Chamber 15	5963	36	23-Apr-2028
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	23-May-2026
Horn Antenna (1-10 GHz)	Schwarzbeck	BBHA9120B	6141	12	14-Sep-2026
SAC Switch Unit	TUV SUD	TUV_SSU_001	6144	12	05-Dec-2026
Digital Multimeter	Fluke	115	6146	12	05-Jun-2026
Double Ridge Active Horn Antenna (18-40 GHz)	Com-Power	AHA-840	6188	24	31-Jul-2026
8GHz Highpass Filter	Wainwright	WHKX 7150 8000 18000 50SS	6196	12	23-Apr-2026
Attenuator (4 dB)	Pasternack	PE7074-4	6202	24	03-Jan-2027
Cable (SMA to SMA 20cm)	TUV SUD	MH-FH 8-18	6220	12	23-Apr-2026
USB Spectrum Analyser	Signal Hound	SA124B	6297	-	TU
Humidity and Temperature Meter	R.S Components	1364	6486	12	01-Jul-2026
1m Cable	Junkosha	MWX241-01000AMSAMS/B	6740	12	27-Apr-2026
2m Cable	Junkosha	MWX241-02000KMSKMS/B	6742	12	27-Apr-2026



Instrument	Manufacturer	Type No.	TE No.	Calibration Period (months)	Calibration Expiry Date
1M SMA Cable	Junkosha	MWX221-01000AMSAMS/B	6831	12	18-Aug-2026
8M SMA Cable	Junkosha	MWX221-08000AMSAMS/B	6833	12	18-Aug-2026
8M SMA Cable	Junkosha	MWX221-08000AMSAMS/B	6834	12	18-Aug-2026
Cable Assembly	SpecTech	PE300-60	6856	-	TU
Cable Assembly	SpecTech	PE300-60	6862	-	TU
Cable Assembly	SpecTech	PE300-60	6868	-	TU
RF Amplifier BROADBAND AMPL/SMA/RoHS	Mini-Circuits	ZX60-83LN12+	6976	12	05-Apr-2026
Pre Amp 8 - 18 GHz	Wright Technologies	APS06-0061	6985	12	05-Apr-2026

Table 45

TU - Traceability Unscheduled



3 Measurement Uncertainty

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

Test Name	Measurement Uncertainty
Radiated Spurious Emissions (Simultaneous Transmission)	30 MHz to 1 GHz: ± 5.2 dB
	1 GHz to 40 GHz: ± 6.3 dB

Table 46

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.