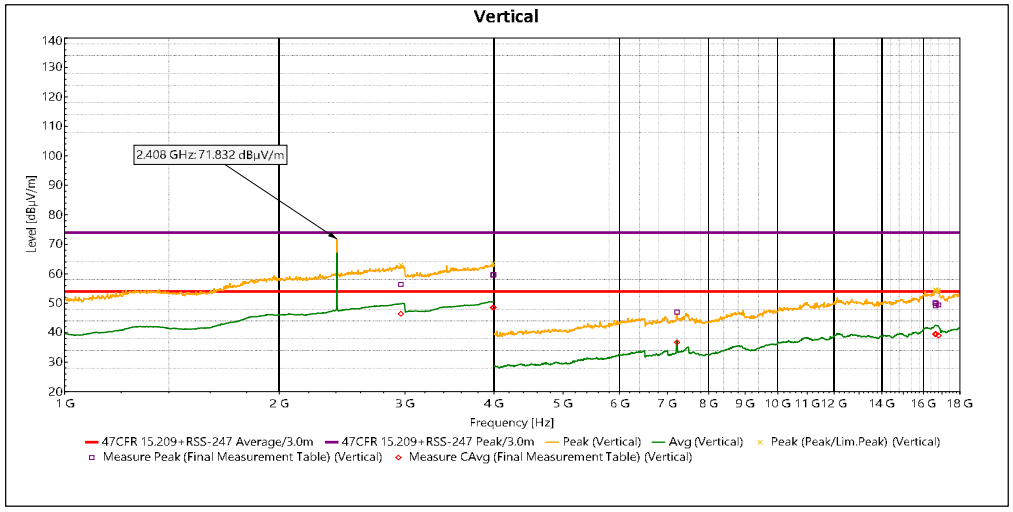
Operating mode ..... :	1
Frequency range / Polarization:	1 GHz to 18 GHz / Vertical
Used mains voltage/frequency ... :	3 Vdc (fully charged battery)
Verdict..... :	Pass

Start Frequency: 1 GHz; Stop Frequency: 4 GHz; Step: 6000 Pts; Sweep Time: 3 s; RF Attenuation: 10 dB; RBW: 1 MHz; VBW: 3 MHz; Preamplifier: ON; Preselector: ON
Start Frequency: 4 GHz; Stop Frequency: 18 GHz; Step: 28000 Pts; Sweep Time: 3 s; RF Attenuation: 0 dB; RBW: 1 MHz; VBW: 3 MHz; Preamplifier: OFF; Preselector: ON



Final measurement

☐ The emissions are below the measurement system noise floor or 20 dB or more below the limit

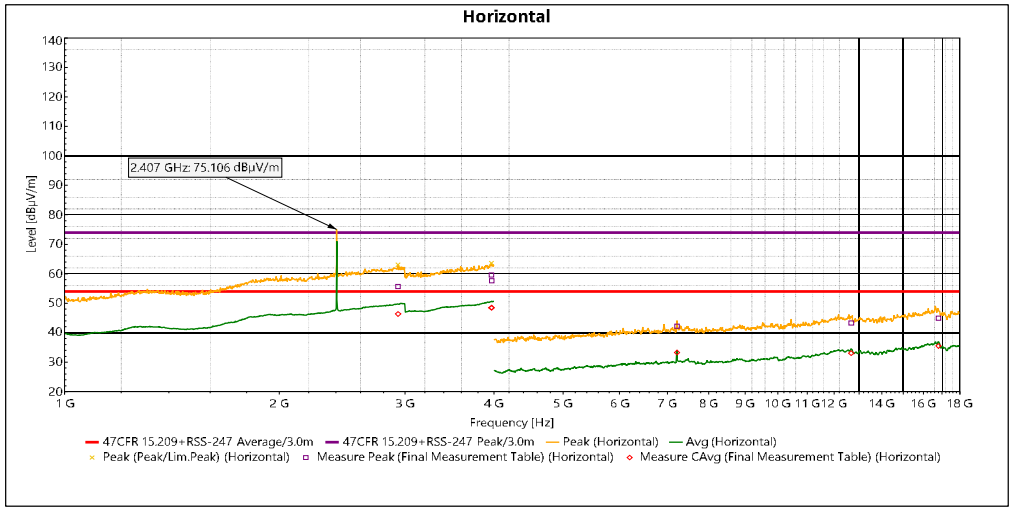
☒ The measurement results of highest emissions relative to the limit for each detector type are shown below:

Frequency	SR #	Measure Peak (dBµV/m)	Limit Peak (dBµV/m)	Margin Peak (dB)	Measure CAvg (dBµV/m)	Limit Avg (dBµV/m)	Margin Avg (dB)	Height (m)	Angle (°)	Polarization	RBW (Hz)	Meas.Time (s)	Comments	Correction (dB)
2.962 GHz	1	56.383	74	-17.617	46.422	54	-7.578	2.501	209.6	Vertical	1 M	5	Pass	37.189
3.986 GHz	1	59.6	74	-14.4	48.524	54	-5.476	1.002	179.7	Vertical	1 M	5	Pass	38.612
3.997 GHz	1	59.67	74	-14.33	48.557	54	-5.443	1.501	329.6	Vertical	1 M	5	Pass	38.618
7.223 GHz	2	46.992	74	-27.008	36.764	54	-17.236	1.501	0.3	Vertical	1 M	5	Pass	1.896
16.625 GHz	2	50.133	74	-23.867	39.437	54	-14.563	3.998	270.4	Vertical	1 M	5	Pass	12.035
16.649 GHz	2	49.12	74	-24.88	39.632	54	-14.368	3.001	300.4	Vertical	1 M	5	Pass	12.089
16.66 GHz	2	49.892	74	-24.108	39.506	54	-14.494	2.998	150.3	Vertical	1 M	5	Pass	12.097
16.811 GHz	2	49.427	74	-24.573	39.04	54	-14.96	3.998	150.3	Vertical	1 M	5	Pass	12.02

NOTE: Radiated emissions meet limits also in restricted bands near allocated band

Operating mode ..... :	1
Frequency range / Polarization:	1 GHz to 18 GHz / Horizontal
Used mains voltage/frequency ... :	3 Vdc (fully charged battery)
Verdict..... :	Pass

Start Frequency: 1 GHz; Stop Frequency: 4 GHz; Step: 6000 Pts; Sweep Time: 3 s; RF Attenuation: 10 dB; RBW: 1 MHz; VBW: 3 MHz; Preamplifier: ON; Preselector: ON
Start Frequency: 4 GHz; Stop Frequency: 18 GHz; Step: 28000 Pts; Sweep Time: 3 s; RF Attenuation: 0 dB; RBW: 1 MHz; VBW: 3 MHz; Preamplifier: OFF; Preselector: ON



Final measurement

☐ The emissions are below the measurement system noise floor or 20 dB or more below the limit

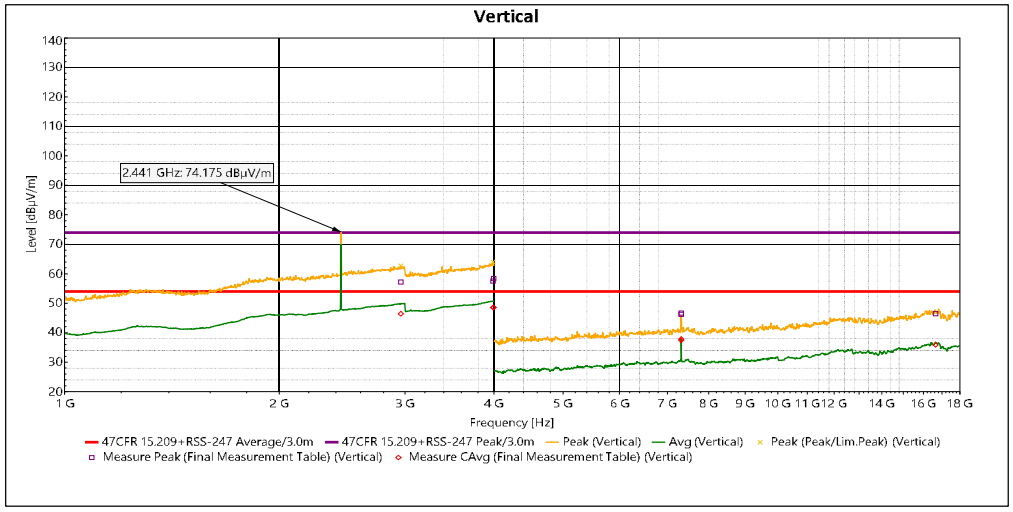
☒ The measurement results of highest emissions relative to the limit for each detector type are shown below:

Frequency	SR #	Measure Peak (dBµV/m)	Limit Peak (dBµV/m)	Margin Peak (dB)	Measure CAvg (dBµV/m)	Limit Avg (dBµV/m)	Margin Avg (dB)	Height (m)	Angle (°)	Polarization	RBW (Hz)	Meas.Time (s)	Comments	Correction (dB)
2.935 GHz	1	55.709	74	-18.291	46.369	54	-7.631	1.998	210.4	Horizontal	1 M	5	Pass	37.158
3.965 GHz	1	59.621	74	-14.379	48.465	54	-5.535	3.498	329.3	Horizontal	1 M	5	Pass	38.599
3.972 GHz	1	57.639	74	-16.361	48.477	54	-5.523	1.002	120.3	Horizontal	1 M	5	Pass	38.603
7.223 GHz	2	42.25	74	-31.75	33.295	54	-20.705	1.498	270.3	Horizontal	1 M	5	Pass	1.896
12.68 GHz	2	43.332	74	-30.668	33.079	54	-20.921	1.501	300.3	Horizontal	1 M	5	Pass	9.823
16.805 GHz	2	44.958	74	-29.042	35.484	54	-18.516	2.001	300.3	Horizontal	1 M	5	Pass	12.022

NOTE: Radiated emissions meet limits also in restricted bands near allocated band

Operating mode ..... :	2
Frequency range / Polarization:	1 GHz to 18 GHz / Vertical
Used mains voltage/frequency ... :	3 Vdc (fully charged battery)
Verdict..... :	Pass

Start Frequency: 1 GHz; Stop Frequency: 4 GHz; Step: 6000 Pts; Sweep Time: 3 s; RF Attenuation: 10 dB; RBW: 1 MHz; VBW: 3 MHz; Preamplifier: ON; Preselector: ON
Start Frequency: 4 GHz; Stop Frequency: 18 GHz; Step: 28000 Pts; Sweep Time: 3 s; RF Attenuation: 0 dB; RBW: 1 MHz; VBW: 3 MHz; Preamplifier: OFF; Preselector: ON



Final measurement

☐ The emissions are below the measurement system noise floor or 20 dB or more below the limit

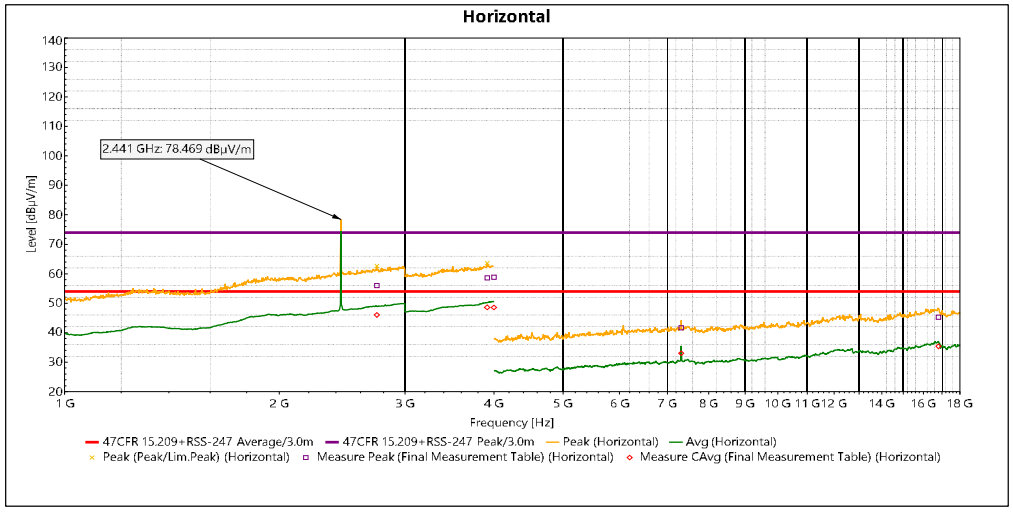
☒ The measurement results of highest emissions relative to the limit for each detector type are shown below:

Frequency	SR #	Measure Peak (dBµV/m)	Limit Peak (dBµV/m)	Margin Peak (dB)	Measure CAvg (dBµV/m)	Limit Avg (dBµV/m)	Margin Avg (dB)	Height (m)	Angle (°)	Polarization	RBW (Hz)	Meas.Time (s)	Comments	Correction (dB)
2.961 GHz	1	57.157	74	-16.843	46.434	54	-7.566	1.002	180.3	Vertical	1 M	5	Pass	37.183
3.989 GHz	1	57.562	74	-16.438	48.557	54	-5.443	1.498	150.3	Vertical	1 M	5	Pass	38.614
3.996 GHz	1	58.419	74	-15.581	48.572	54	-5.428	3.998	0.3	Vertical	1 M	5	Pass	38.618
7.321 GHz	2	46.698	74	-27.302	37.84	54	-16.16	1.998	329.7	Vertical	1 M	5	Pass	2.021
7.324 GHz	2	46.249	74	-27.751	37.457	54	-16.543	1.998	329.7	Vertical	1 M	5	Pass	2.025
16.649 GHz	2	46.458	74	-27.542	35.903	54	-18.097	1.315	329.7	Vertical	1 M	5	Pass	12.09

NOTE: Radiated emissions meet limits also in restricted bands near allocated band

Operating mode ..... :	2
Frequency range / Polarization:	1 GHz to 18 GHz / Horizontal
Used mains voltage/frequency ... :	3 Vdc (fully charged battery)
Verdict..... :	Pass

Start Frequency: 1 GHz; Stop Frequency: 4 GHz; Step: 6000 Pts; Sweep Time: 3 s; RF Attenuation: 10 dB; RBW: 1 MHz; VBW: 3 MHz; Preamplifier: ON; Preselector: ON
Start Frequency: 4 GHz; Stop Frequency: 18 GHz; Step: 28000 Pts; Sweep Time: 3 s; RF Attenuation: 0 dB; RBW: 1 MHz; VBW: 3 MHz; Preamplifier: OFF; Preselector: ON



Final measurement

☐ The emissions are below the measurement system noise floor or 20 dB or more below the limit

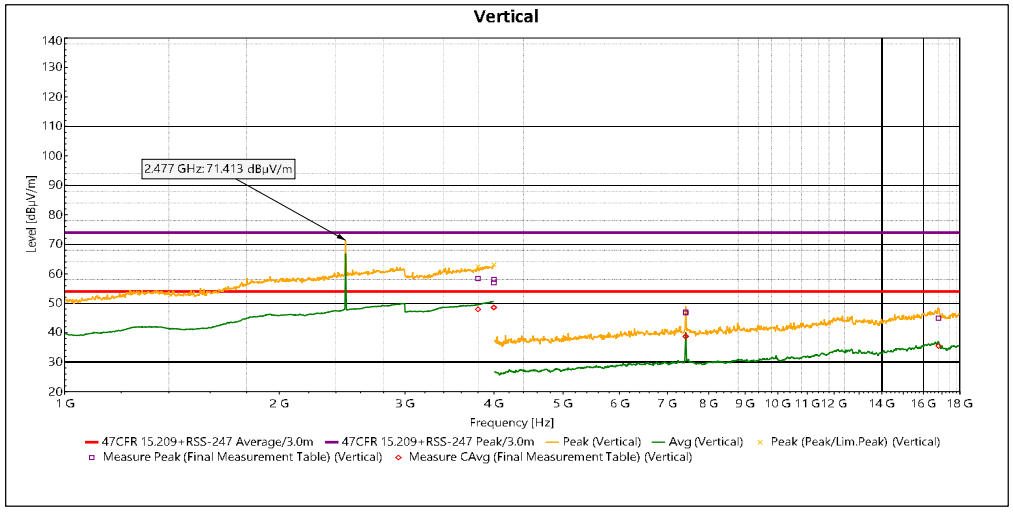
☒ The measurement results of highest emissions relative to the limit for each detector type are shown below:

Frequency	SR #	Measure Peak (dBµV/m)	Limit Peak (dBµV/m)	Margin Peak (dB)	Measure CAvg (dBµV/m)	Limit Avg (dBµV/m)	Margin Avg (dB)	Height (m)	Angle (°)	Polarization	RBW (Hz)	Meas.Time (s)	Comments	Correction (dB)
2.74 GHz	1	56.03	74	-17.97	46.049	54	-7.951	1.998	59.8	Horizontal	1 M	5	Pass	36.751
3.912 GHz	1	58.628	74	-15.372	48.576	54	-5.424	1.501	329.6	Horizontal	1 M	5	Pass	38.537
3.998 GHz	1	58.84	74	-15.16	48.564	54	-5.436	1.998	119.6	Horizontal	1 M	5	Pass	38.619
7.324 GHz	2	41.634	74	-32.366	33.035	54	-20.965	2.001	300.3	Horizontal	1 M	5	Pass	2.025
16.804 GHz	2	45.243	74	-28.757	35.375	54	-18.625	3.498	270.4	Horizontal	1 M	5	Pass	12.022

NOTE: Radiated emissions meet limits also in restricted bands near allocated band

Operating mode ..... :	3
Frequency range / Polarization:	1 GHz to 18 GHz / Vertical
Used mains voltage/frequency ... :	3 Vdc (fully charged battery)
Verdict..... :	Pass

Start Frequency: 1 GHz; Stop Frequency: 4 GHz; Step: 6000 Pts; Sweep Time: 3 s; RF Attenuation: 10 dB; RBW: 1 MHz; VBW: 3 MHz; Preamplifier: ON; Preselector: ON
Start Frequency: 4 GHz; Stop Frequency: 18 GHz; Step: 28000 Pts; Sweep Time: 3 s; RF Attenuation: 0 dB; RBW: 1 MHz; VBW: 3 MHz; Preamplifier: OFF; Preselector: ON



Final measurement

☐ The emissions are below the measurement system noise floor or 20 dB or more below the limit

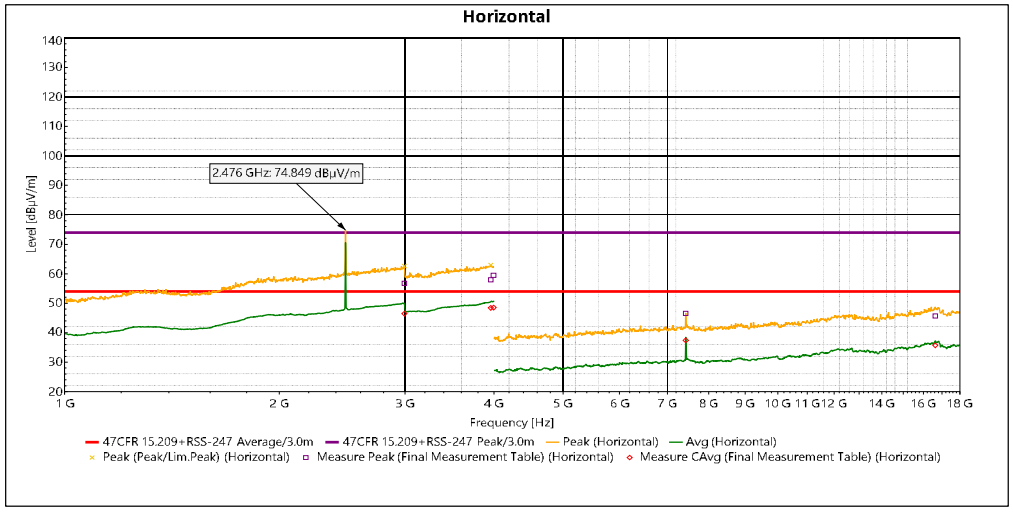
☒ The measurement results of highest emissions relative to the limit for each detector type are shown below:

Frequency	SR #	Measure Peak (dBµV/m)	Limit Peak (dBµV/m)	Margin Peak (dB)	Measure CAvg (dBµV/m)	Limit Avg (dBµV/m)	Margin Avg (dB)	Height (m)	Angle (°)	Polarization	RBW (Hz)	Meas.Time (s)	Comments	Correction (dB)
3.799 GHz	1	58.423	74	-15.577	47.938	54	-6.062	3.001	329.6	Vertical	1 M	5	Pass	38.329
3.998 GHz	1	56.915	74	-17.085	48.562	54	-5.438	1.501	329.6	Vertical	1 M	5	Pass	38.619
3.999 GHz	1	58.117	74	-15.883	48.568	54	-5.432	3.998	300.4	Vertical	1 M	5	Pass	38.62
7.429 GHz	2	47.012	74	-26.988	38.689	54	-15.311	2.498	329.7	Vertical	1 M	5	Pass	2.23
7.432 GHz	2	46.73	74	-27.27	38.834	54	-15.166	1.998	329.7	Vertical	1 M	5	Pass	2.233
16.8 GHz	2	44.942	74	-29.058	35.499	54	-18.501	1.498	329.7	Vertical	1 M	5	Pass	12.023

NOTE: Radiated emissions meet limits also in restricted bands near allocated band

Operating mode ..... :	3
Frequency range / Polarization:	1 GHz to 18 GHz / Horizontal
Used mains voltage/frequency ... :	3 Vdc (fully charged battery)
Verdict..... :	Pass

Start Frequency: 1 GHz; Stop Frequency: 4 GHz; Step: 6000 Pts; Sweep Time: 3 s; RF Attenuation: 10 dB; RBW: 1 MHz; VBW: 3 MHz; Preamplifier: ON; Preselector: ON
Start Frequency: 4 GHz; Stop Frequency: 18 GHz; Step: 28000 Pts; Sweep Time: 3 s; RF Attenuation: 0 dB; RBW: 1 MHz; VBW: 3 MHz; Preamplifier: OFF; Preselector: ON



Final measurement

☐ The emissions are below the measurement system noise floor or 20 dB or more below the limit

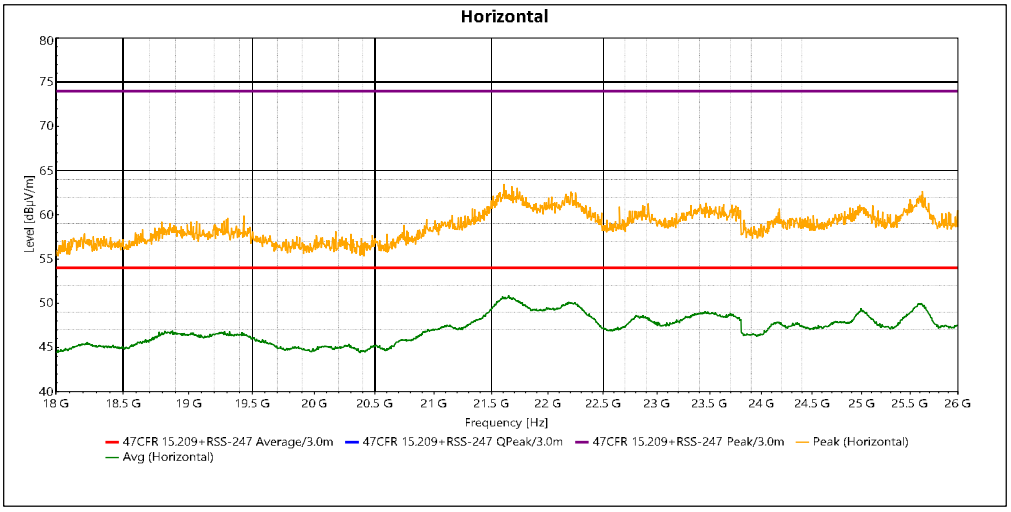
☒ The measurement results of highest emissions relative to the limit for each detector type are shown below:

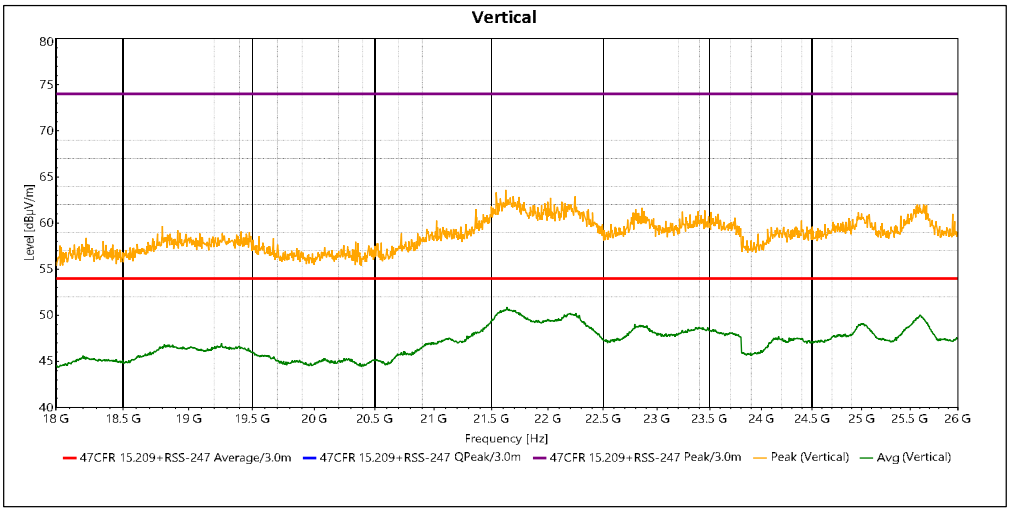
Frequency	SR #	Measure Peak (dBµV/m)	Limit Peak (dBµV/m)	Margin Peak (dB)	Measure CAvg (dBµV/m)	Limit Avg (dBµV/m)	Margin Avg (dB)	Height (m)	Angle (°)	Polarization	RBW (Hz)	Meas.Time (s)	Comments	Correction (dB)
2.996 GHz	1	56.757	74	-17.243	46.483	54	-7.517	3.999	329.8	Horizontal	1 M	5	Pass	37.234
3.958 GHz	1	57.962	74	-16.038	48.431	54	-5.569	2.498	210.4	Horizontal	1 M	5	Pass	38.595
3.994 GHz	1	59.501	74	-14.499	48.543	54	-5.457	1.998	270.4	Horizontal	1 M	5	Pass	38.616
7.432 GHz	2	46.523	74	-27.477	37.404	54	-16.596	2.498	210.3	Horizontal	1 M	5	Pass	2.233
16.63 GHz	2	45.661	74	-28.339	35.729	54	-18.271	3.498	90.4	Horizontal	1 M	5	Pass	12.046

NOTE: Radiated emissions meet limits also in restricted bands near allocated band

Operating mode ..... :	1
Frequency range / Polarization:	18 GHz to 26 GHz / Both
Used mains voltage/frequency ... :	3 Vdc (fully charged battery)
Verdict..... :	Pass

Start Frequency: 18 GHz; Stop Frequency: 26 GHz; Step: 16000 Pts; Sweep Time: 5 s; RF Attenuation: 0 dB; RBW: 1 MHz; VBW: 3 MHz; Preamplifier: OFF; Preselector: OFF
Start Frequency: 18 GHz; Stop Frequency: 26 GHz; Step: 16000 Pts; Sweep Time: 5 s; RF Attenuation: 0 dB; RBW: 1 MHz; VBW: 3 MHz; Preamplifier: OFF; Preselector: OFF





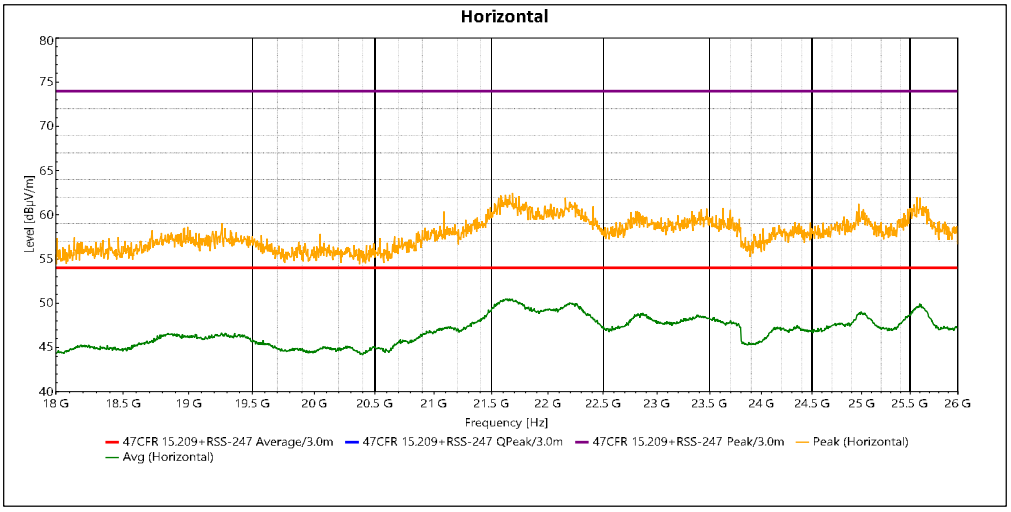
Final measurement

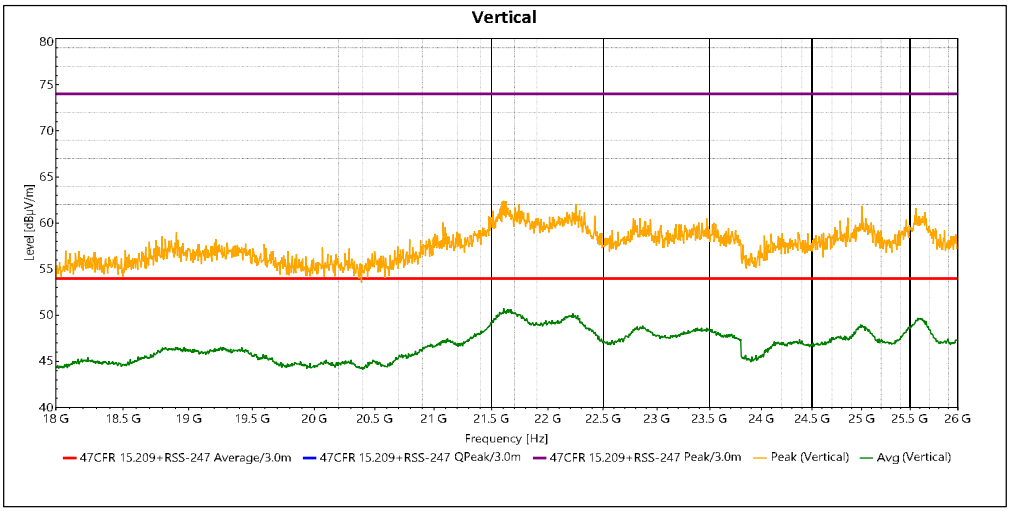
☒ The emissions are below the measurement system noise floor or 20 dB or more below the limit

☐ The measurement results of highest emissions relative to the limit for each detector type are shown below:

Operating mode ..... :	2
Frequency range / Polarization:	18 GHz to 26 GHz / Both
Used mains voltage/frequency ... :	3 Vdc (fully charged battery)
Verdict..... :	Pass

Start Frequency: 18 GHz; Stop Frequency: 26 GHz; Step: 16000 Pts; Sweep Time: 5 s; RF Attenuation: 0 dB; RBW: 1 MHz; VBW: 3 MHz; Preamplifier: OFF; Preselector: ON
Start Frequency: 18 GHz; Stop Frequency: 26 GHz; Step: 16000 Pts; Sweep Time: 5 s; RF Attenuation: 0 dB; RBW: 1 MHz; VBW: 3 MHz; Preamplifier: OFF; Preselector: ON





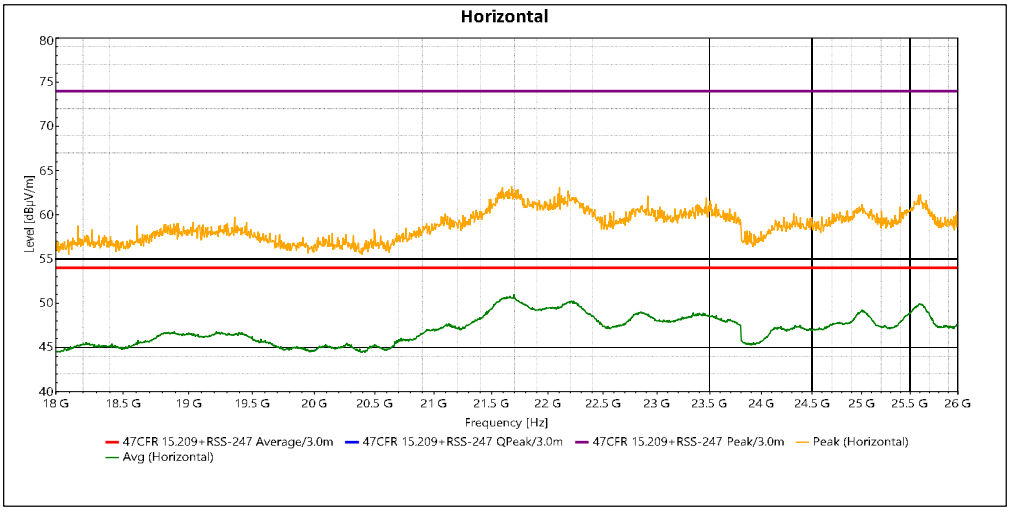
Final measurement

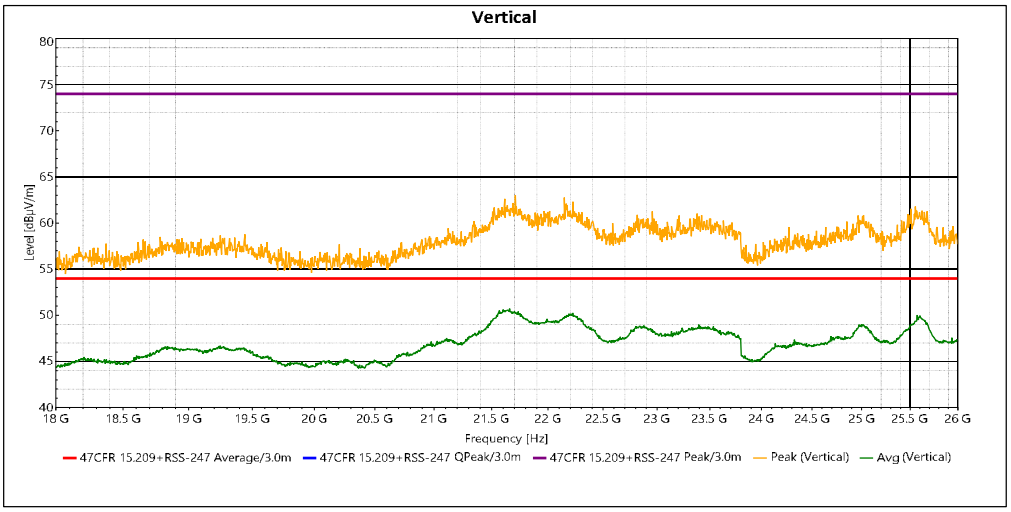
☒ The emissions are below the measurement system noise floor or 20 dB or more below the limit

☐ The measurement results of highest emissions relative to the limit for each detector type are shown below:

Operating mode ..... :	3
Frequency range / Polarization:	18 GHz to 26 GHz / Both
Used mains voltage/frequency ... :	3 Vdc (fully charged battery)
Verdict..... :	Pass

Start Frequency: 18 GHz; Stop Frequency: 26 GHz; Step: 16000 Pts; Sweep Time: 5 s; RF Attenuation: 0 dB; RBW: 1 MHz; VBW: 3 MHz; Preamplifier: OFF; Preselector: ON
Start Frequency: 18 GHz; Stop Frequency: 26 GHz; Step: 16000 Pts; Sweep Time: 5 s; RF Attenuation: 0 dB; RBW: 1 MHz; VBW: 3 MHz; Preamplifier: OFF; Preselector: ON





Final measurement

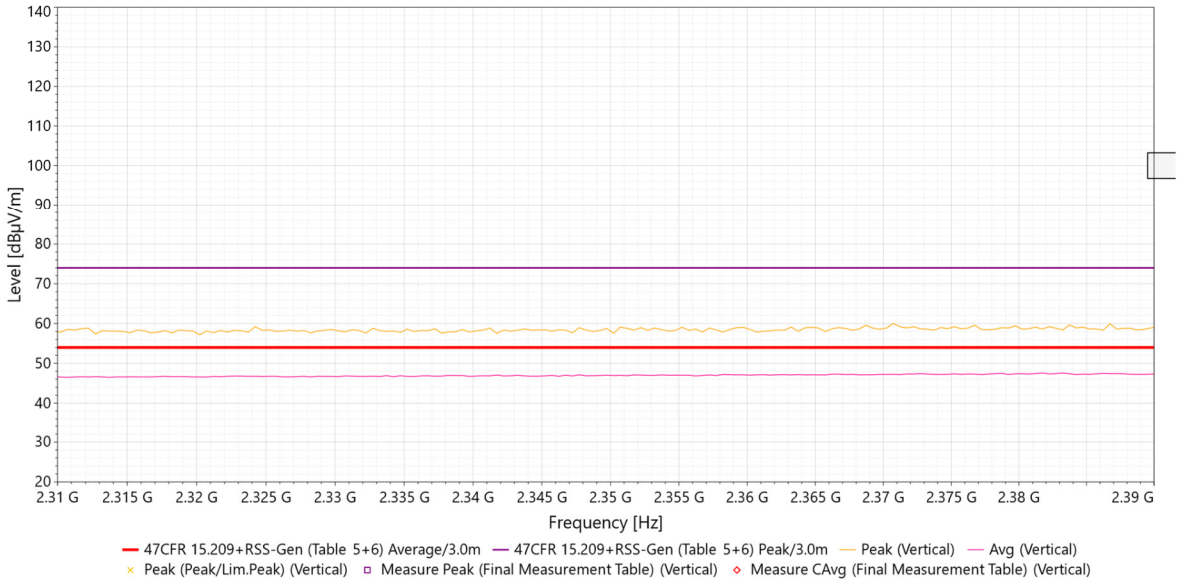
☒ The emissions are below the measurement system noise floor or 20 dB or more below the limit

☐ The measurement results of highest emissions relative to the limit for each detector type are shown below:

Restricted bands evaluation:

Operating mode ..... :	1
Frequency range / Polarization:	2310 MHz to 2390 MHz / Vertical (worst case)
Restricted band ..... :	Lower restricted band
Used mains voltage/frequency ... :	3 Vdc (fully charged battery)
Verdict..... :	Pass

Start Frequency: 1 GHz; Stop Frequency: 4 GHz; Step: 6000 Pts; Sweep Time: 3 s; RF Attenuation: 10 dB; RBW: 1 MHz; VBW: 3 MHz; Preamplifier: ON; Preselector: ON
Start Frequency: 4 GHz; Stop Frequency: 18 GHz; Step: 28000 Pts; Sweep Time: 3 s; RF Attenuation: 0 dB; RBW: 1 MHz; VBW: 3 MHz; Preamplifier: OFF; Preselector: ON

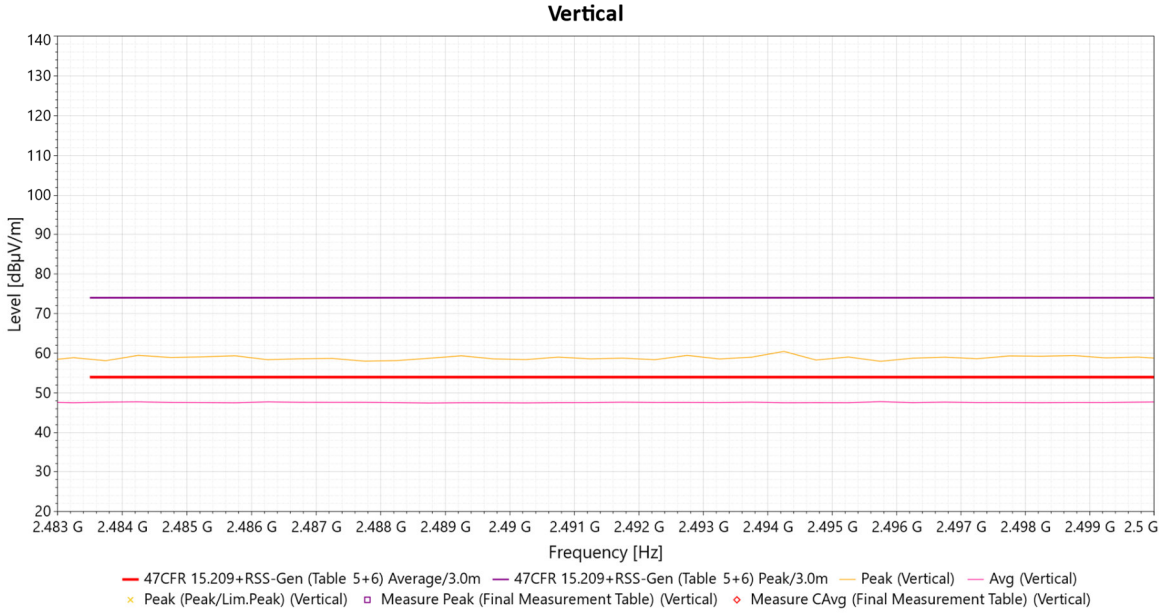


Final measurement

☒ The emissions are below the measurement system noise floor or 6 dB or more below the limit

☐ The measurement results of highest emissions relative to the limit for each detector type are shown below:

Operating mode ..... :	3
Frequency range / Polarization:	2483.5 MHz to 2500 MHz / Vertical (worst case)
Restricted band ..... :	Top restricted band
Used mains voltage/frequency ... :	3 Vdc (fully charged battery)
Verdict..... :	Pass



Start Frequency: 1 GHz; Stop Frequency: 4 GHz; Step: 6000 Pts; Sweep Time: 3 s; RF Attenuation: 10 dB; RBW: 1 MHz; VBW: 3 MHz; Preamplifier: ON; Preselector: ON
Start Frequency: 4 GHz; Stop Frequency: 18 GHz; Step: 28000 Pts; Sweep Time: 3 s; RF Attenuation: 0 dB; RBW: 1 MHz; VBW: 3 MHz; Preamplifier: OFF; Preselector: ON

Final measurement

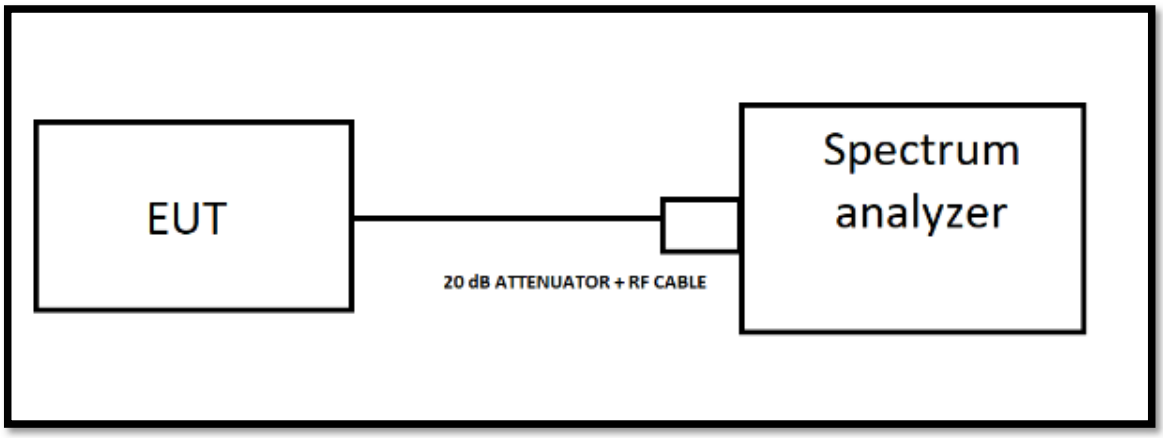
☒ The emissions are below the measurement system noise floor or 6 dB or more below the limit

☐ The measurement results of highest emissions relative to the limit for each detector type are shown below:

5.2 6 dB emission bandwidth

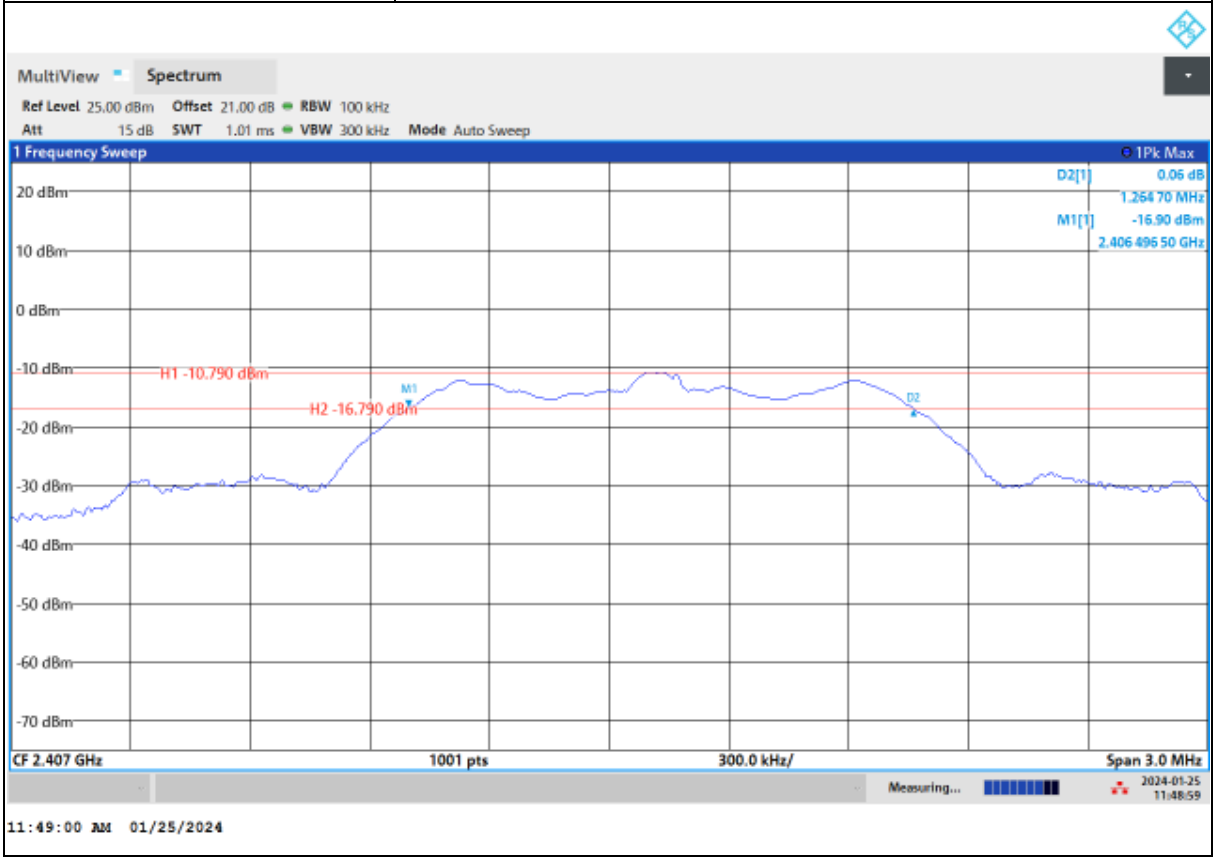
Tested by:	Andrea Giovanni Galbiati	
Test date:	2024-01-25	
Test location (stand):	☒	Laboratory area
	☐	Climatic chamber
	☐	SAC/OATS
Ambient temperature:	22 °C	
Relative humidity:	31 %	
Atmospheric pressure:	998 mbar	
FCC requirements (clauses):	15.247(a)(2)	
ISED requirements (clauses):	RSS-Gen 6.7, RSS-247 5.2(a)	
ANSI C63.10 test method (clause):	11.8.1 Option 1	
EUT Test set-up:	Antenna port connected to a spectrum analyzer by a RF cable and an attenuator, if needed.	
Supplementary test set-up description:	Insertion loss of the chain is already compensated in the measure.	
Used mains voltage/frequency:	3 Vdc (fully charged battery)	
Supplementary information:	---	

Block diagram of the test setup:

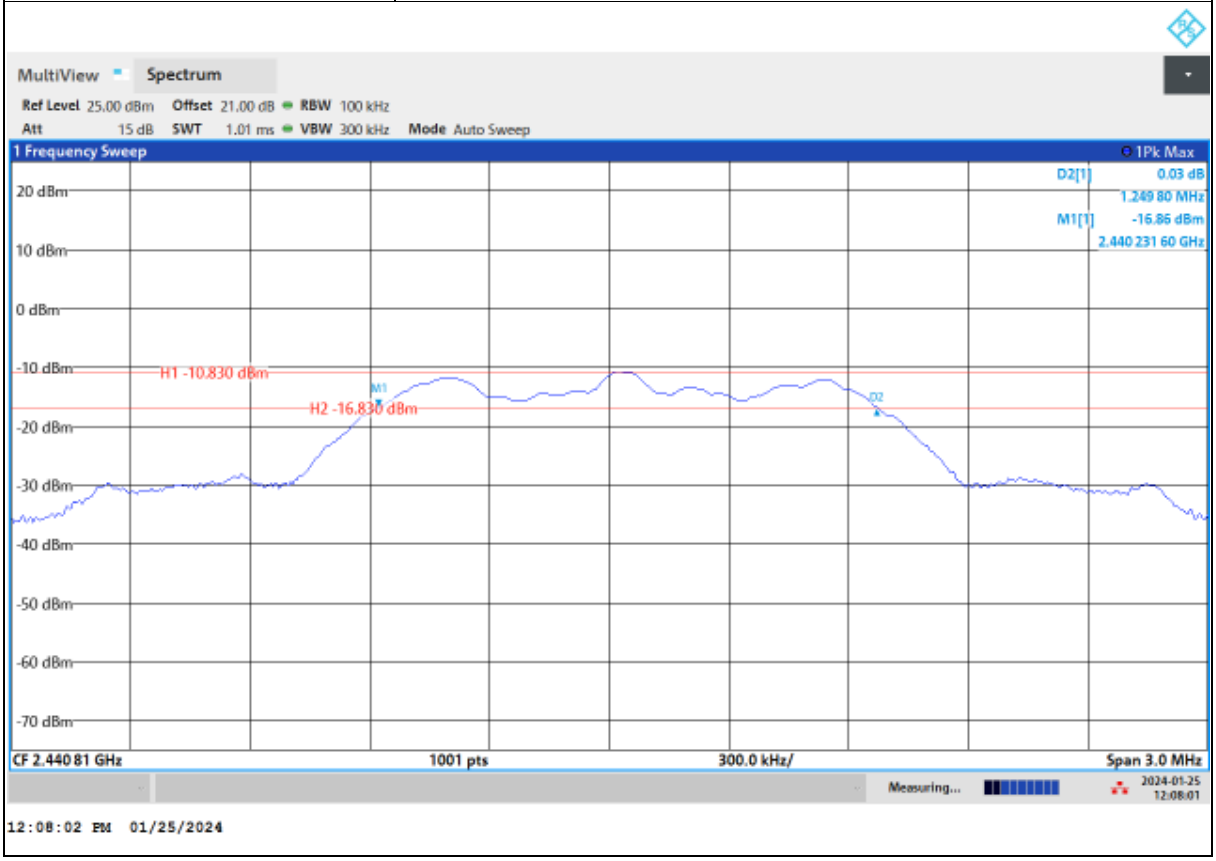


Results

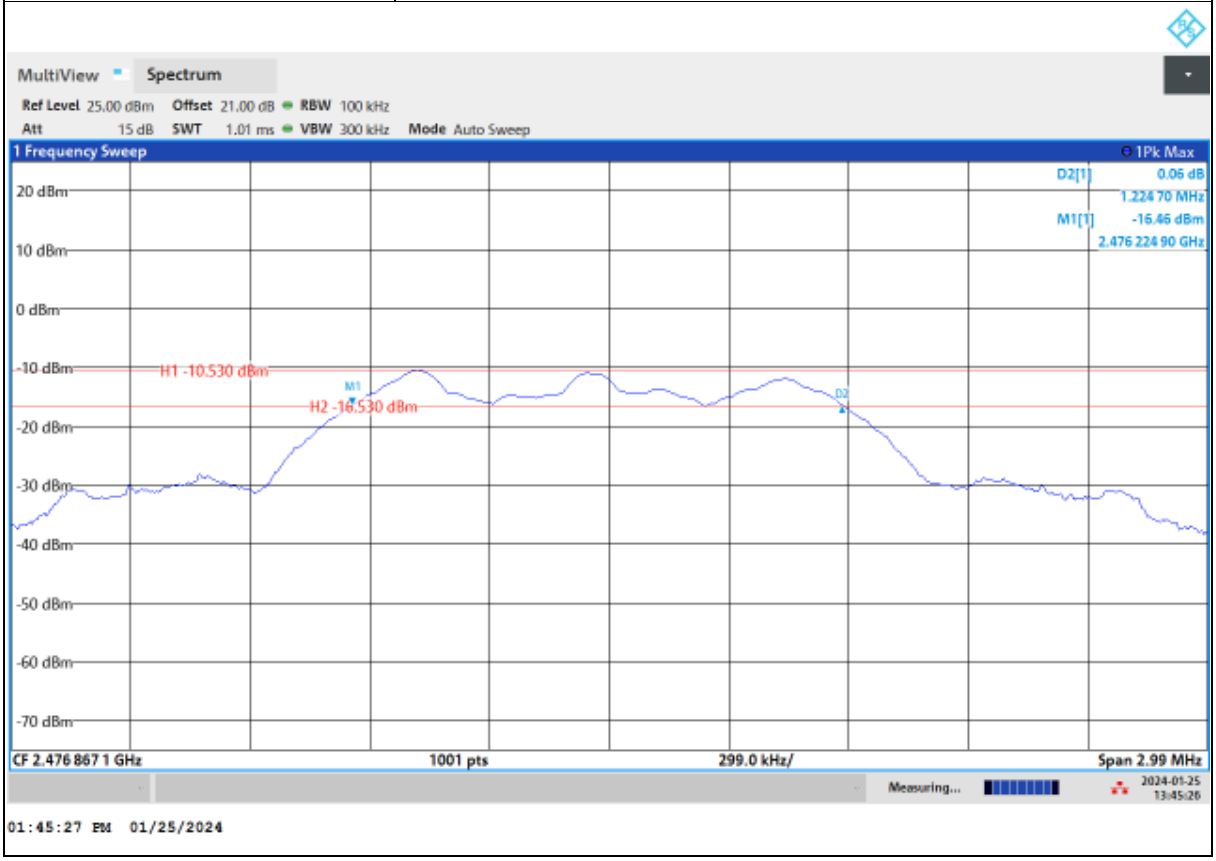
Operating mode ..... :	1
Used mains voltage/frequency ... :	3 Vdc (fully charged battery)
Verdict..... :	Pass



Operating mode ..... :	2
Used mains voltage/frequency ... :	3 Vdc (fully charged battery)
Verdict..... :	Pass



Operating mode ..... :	3
Used mains voltage/frequency ... :	3 Vdc (fully charged battery)
Verdict..... :	Pass



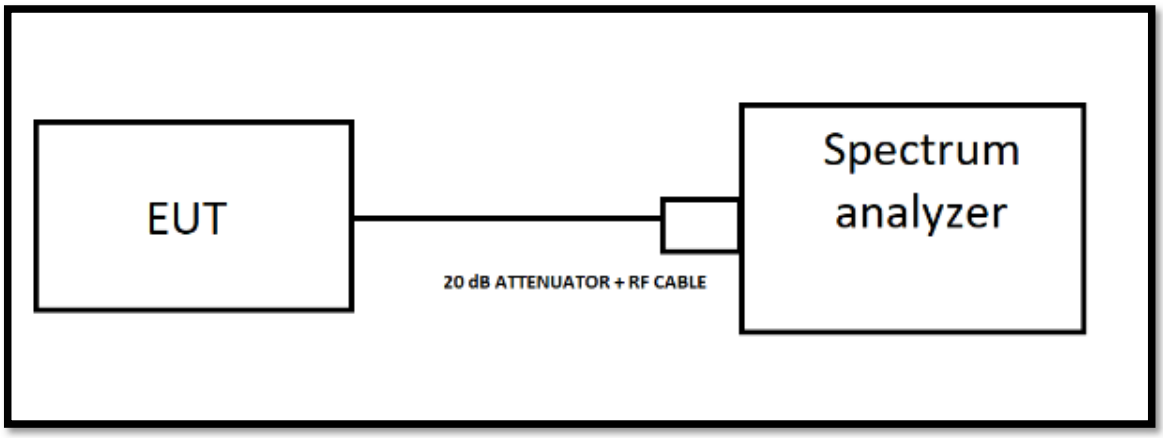
Final measurement table

Channel	6 dB Bandwidth (kHz)	Limit (kHz)	Result
Bottom	1264.70	≥ 500	Pass
Middle	1249.80	≥ 500	Pass
Top	1224.70	≥ 500	Pass

5.3 99% emission bandwidth

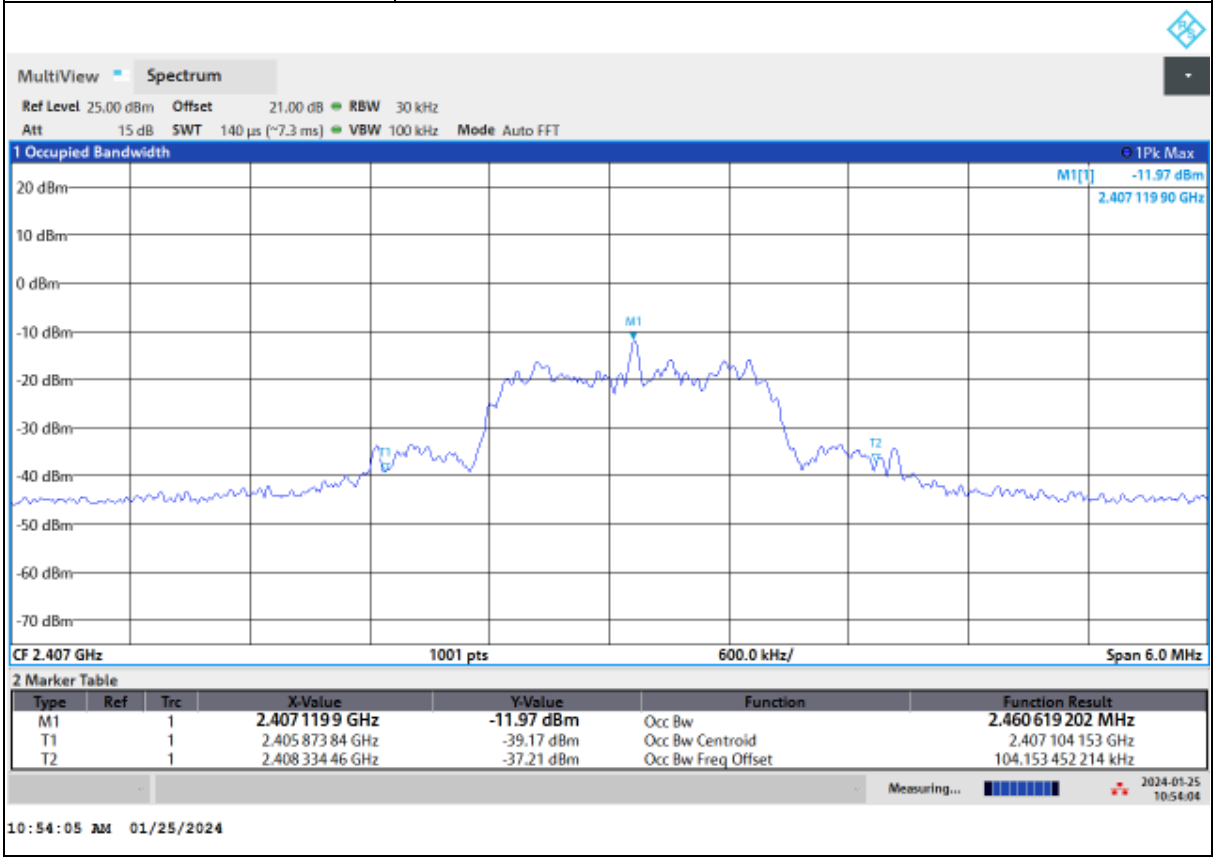
Tested by:	Andrea Giovanni Galbiati	
Test date:	2024-01-25	
Test location (stand):	☒	Laboratory area
	☐	Climatic chamber
	☐	SAC/OATS
Ambient temperature:	22 °C	
Relative humidity:	31 %	
Atmospheric pressure:	998 mbar	
FCC requirements (clauses):	None	
ISED requirements (clauses):	RSS-Gen 6.7	
ANSI C63.10 test method (clause):	6.9.3	
EUT Test set-up:	Antenna port connected to a spectrum analyzer by a RF cable and an attenuator, if needed.	
Supplementary test set-up description:	Insertion loss of the chain is already compensated in the measure.	
Used mains voltage/frequency:	3 Vdc (fully charged battery)	
Supplementary information:	---	

Block diagram of the test setup:

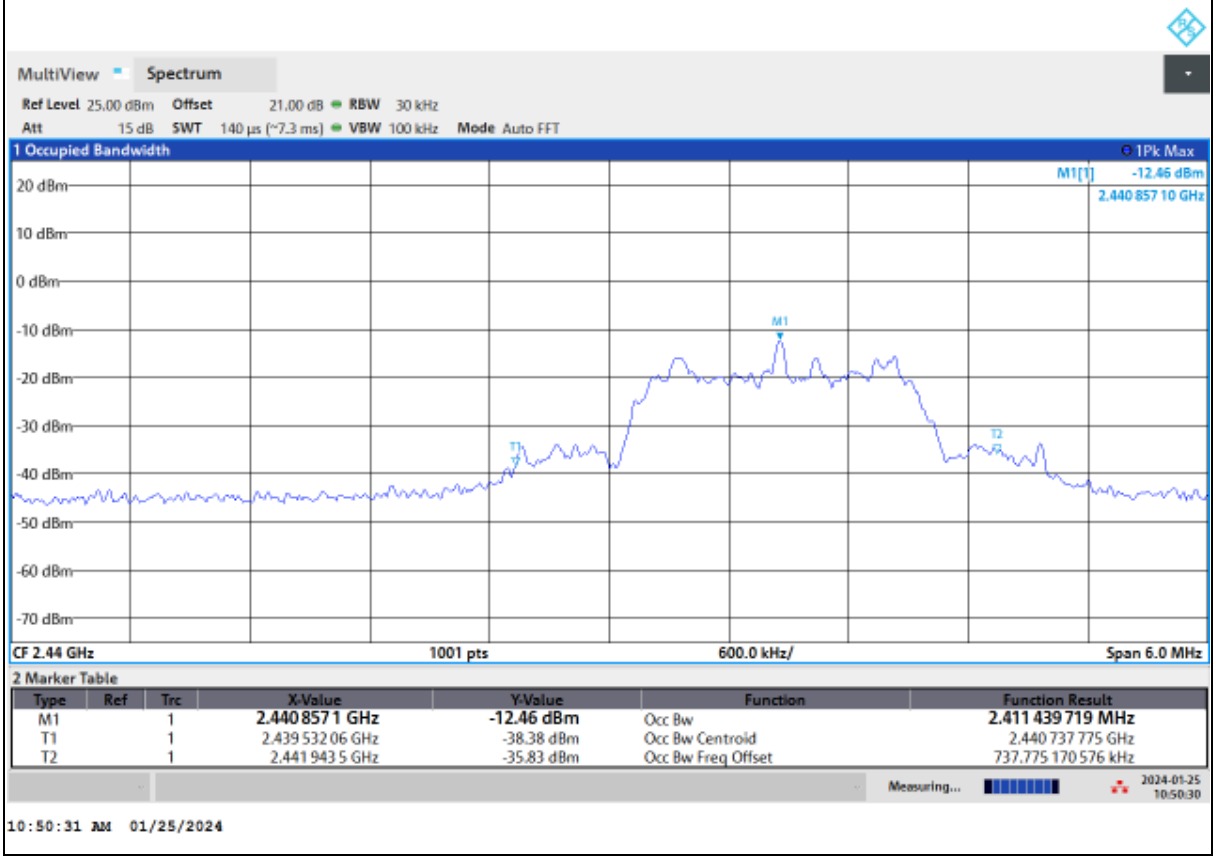


Results

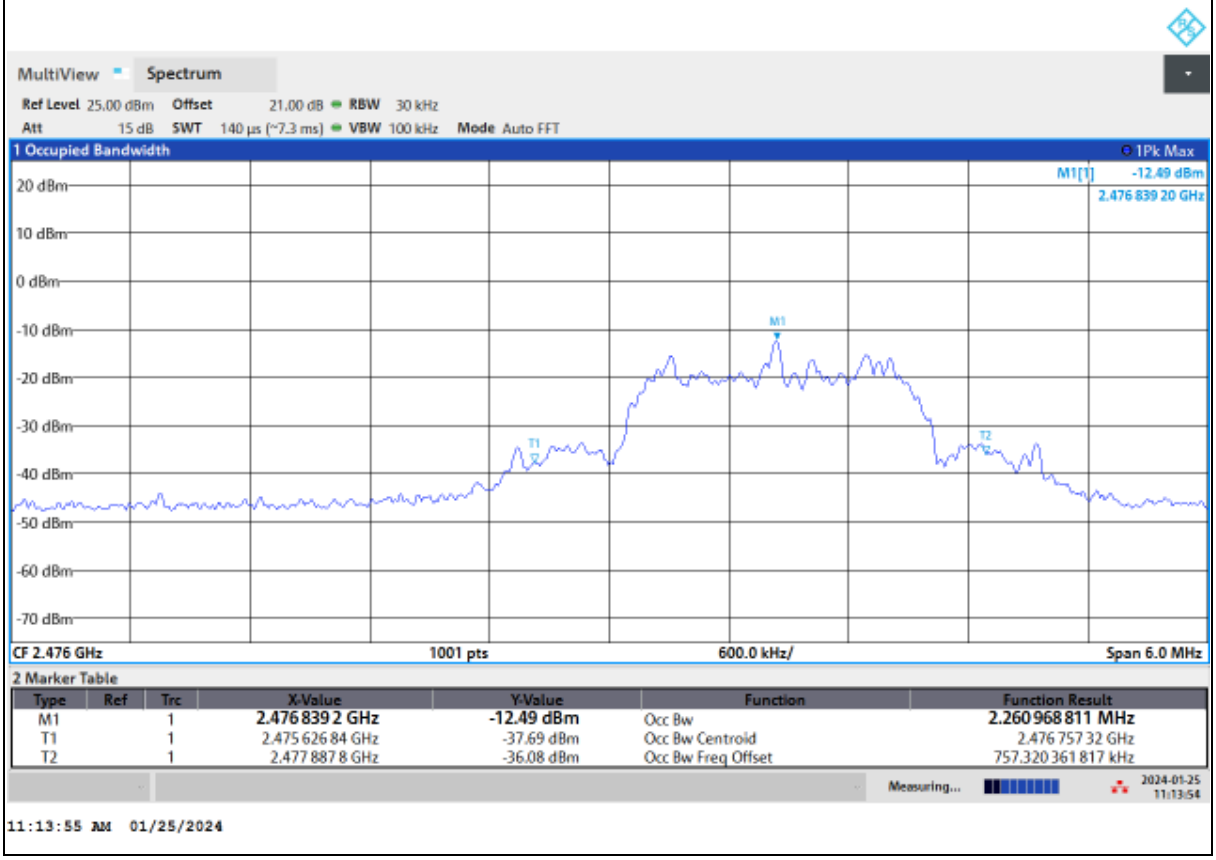
Operating mode ..... :	1
Used mains voltage/frequency ... :	3 Vdc (fully charged battery)
Verdict..... :	Pass



Operating mode ..... :	2
Used mains voltage/frequency ... :	3 Vdc (fully charged battery)
Verdict..... :	Pass



Operating mode ..... :	3
Used mains voltage/frequency ... :	3 Vdc (fully charged battery)
Verdict..... :	Pass



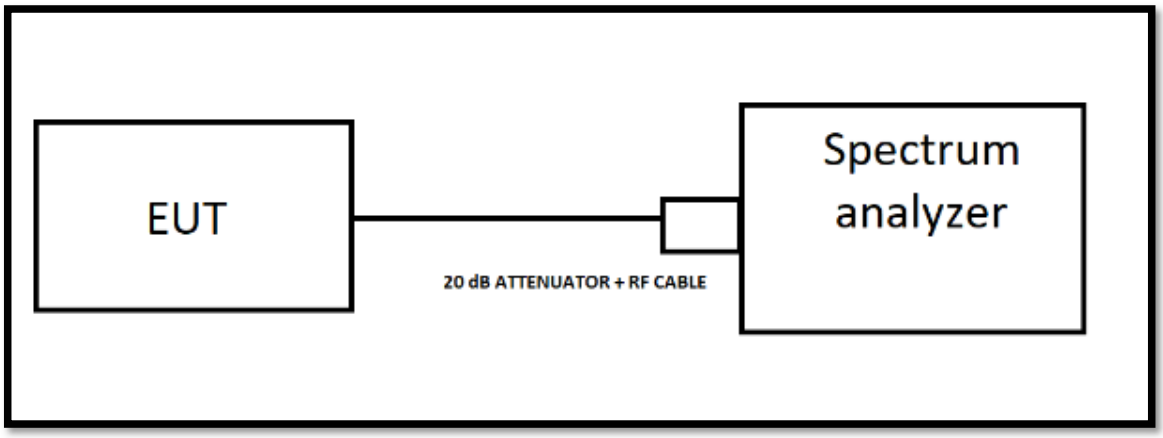
Final measurement table

Channel	Frequency Low (MHz)	Frequency High (MHz)	99% Emission Bandwidth (kHz)
Bottom	2405.873	2408.334	2460.619
Middle	2439.532	2441.943	2411.439
Top	2475.626	2477.887	2260.968

5.4 Maximum peak conducted output power

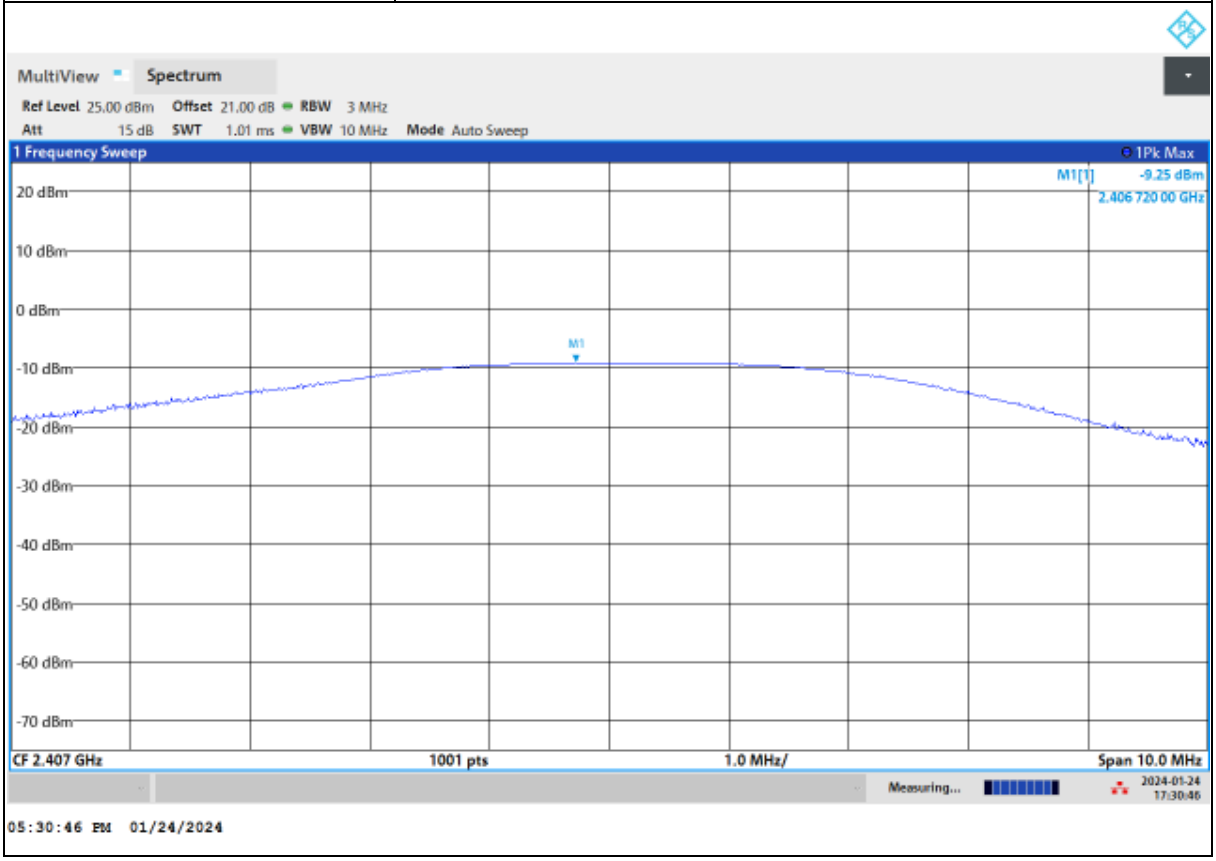
Tested by:	Andrea Giovanni Galbiati	
Test date:	2024-01-25	
Test location (stand):	☒	Laboratory area
	☐	Climatic chamber
	☐	SAC/OATS
Ambient temperature:	22 °C	
Relative humidity:	31 %	
Atmospheric pressure:	998 mbar	
FCC requirements (clauses):	15.247(b)(3)	
ISED requirements (clauses):	RSS-Gen 6.12, RSS-247 5.4(d)	
ANSI C63.10 test method (clause):	11.9.1.1	
EUT Test set-up:	Antenna port connected to a spectrum analyzer by a RF cable and an attenuator, if needed.	
Supplementary test set-up description:	Insertion loss of the chain is already compensated in the measure.	
Used mains voltage/frequency:	3 Vdc (fully charged battery)	
Supplementary information:	---	

Block diagram of the test setup:

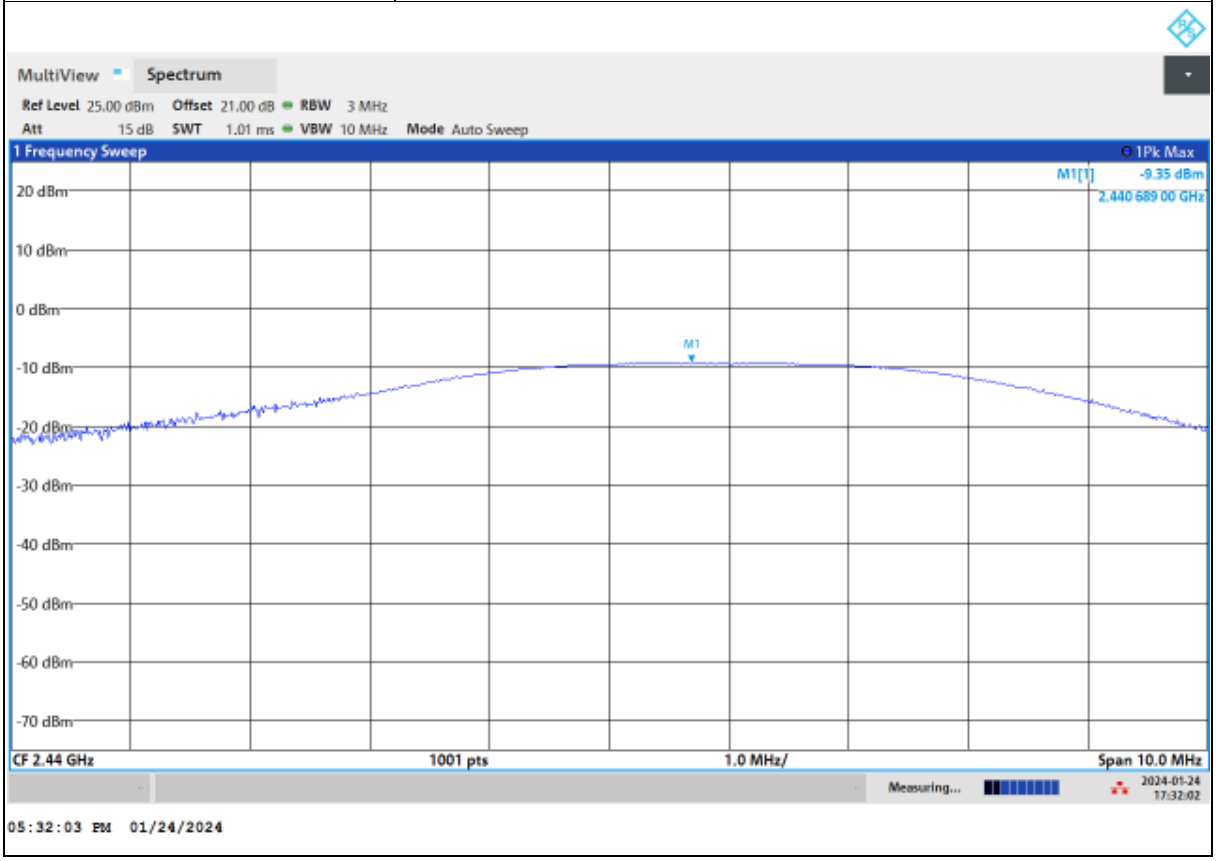


Results

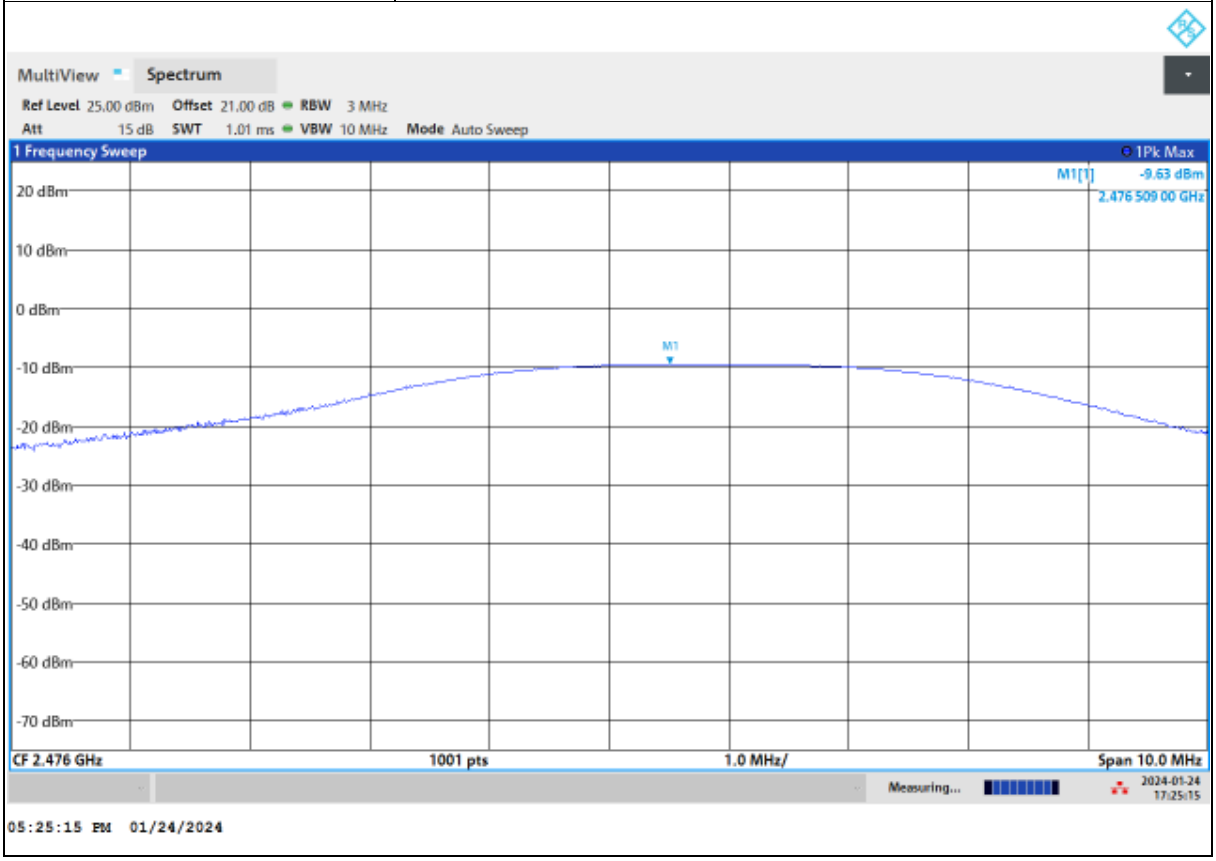
Operating mode ..... :	1
Used mains voltage/frequency ... :	3 Vdc (fully charged battery)
Verdict..... :	Pass



Operating mode ..... :	2
Used mains voltage/frequency ... :	3 Vdc (fully charged battery)
Verdict..... :	Pass



Operating mode ..... :	3
Used mains voltage/frequency ... :	3 Vdc (fully charged battery)
Verdict..... :	Pass



Final measurement table

Channel	Conducted Peak Power (dBm)	Conducted Peak Power Limit (dBm)	Result
Bottom	-9.25	≤ 30	Pass
Middle	-9.35	≤ 30	Pass
Top	-9.63	≤ 30	Pass

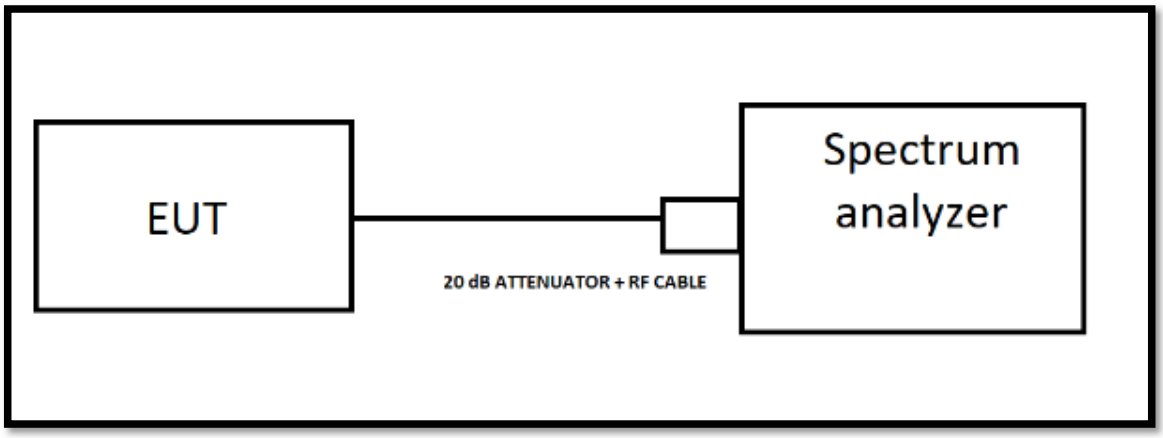
Channel	EIRP (dBm)	EIRP Limit (dBm)	Result
Bottom	-15.25	≤ 36	Pass
Middle	-15.35	≤ 36	Pass
Top	-15.63	≤ 36	Pass

EIRP = Conducted Peak Power (dBm) + Gain (dBi).
Gain considered = -6 dBi

5.5 100 kHz bandwidth of frequency band edge

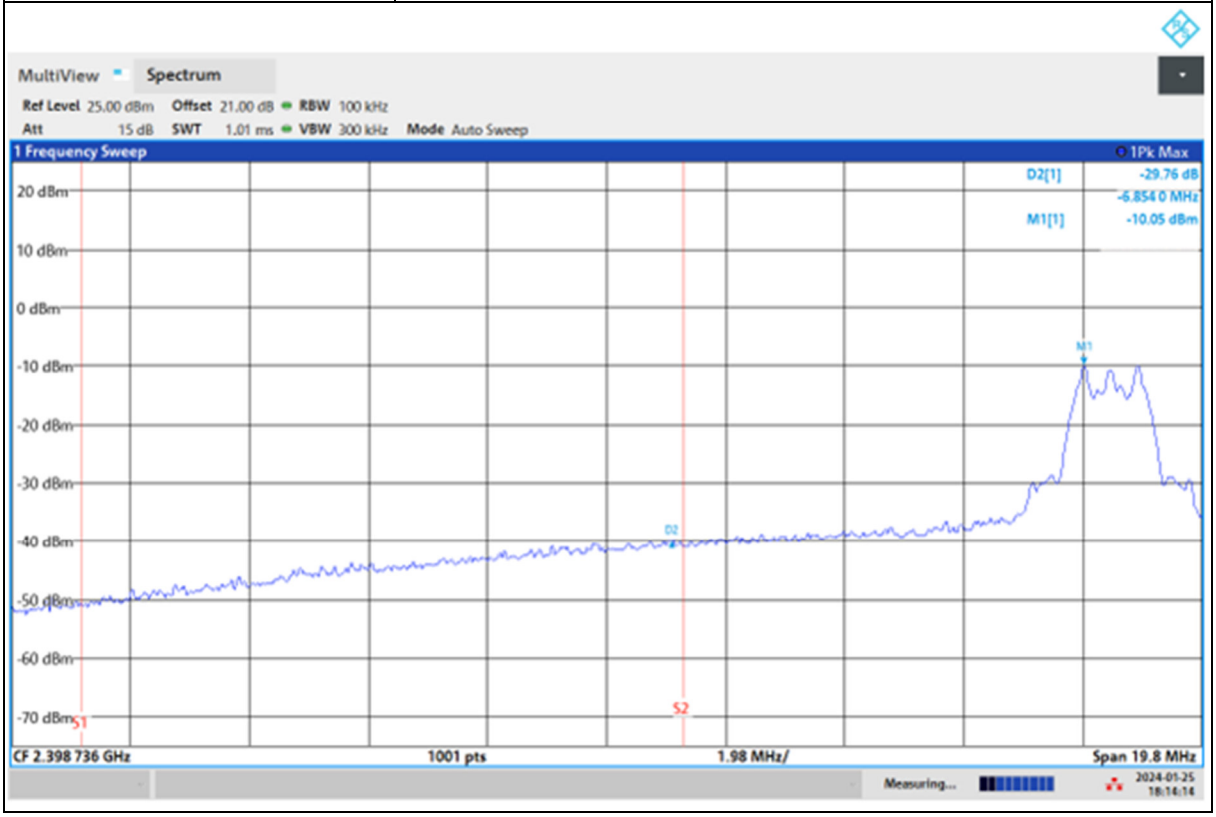
Tested by:	Andrea Giovanni Galbiati	
Test date:	2024-01-25	
Test location (stand):	☒	Laboratory area
	☐	Climatic chamber
	☐	SAC/OATS
Ambient temperature:	22 °C	
Relative humidity:	31 %	
Atmospheric pressure:	998 mbar	
FCC requirements (clauses):	15.247(d)	
ISED requirements (clauses):	RSS-247 5.5	
ANSI C63.10 test method (clause):	6.10	
EUT Test set-up:	Antenna port connected to a spectrum analyzer by a RF cable and an attenuator, if needed.	
Supplementary test set-up description:	Insertion loss of the chain is already compensated in the measure.	
Used mains voltage/frequency:	3 Vdc (fully charged battery)	
Supplementary information:	---	

Block diagram of the test setup:

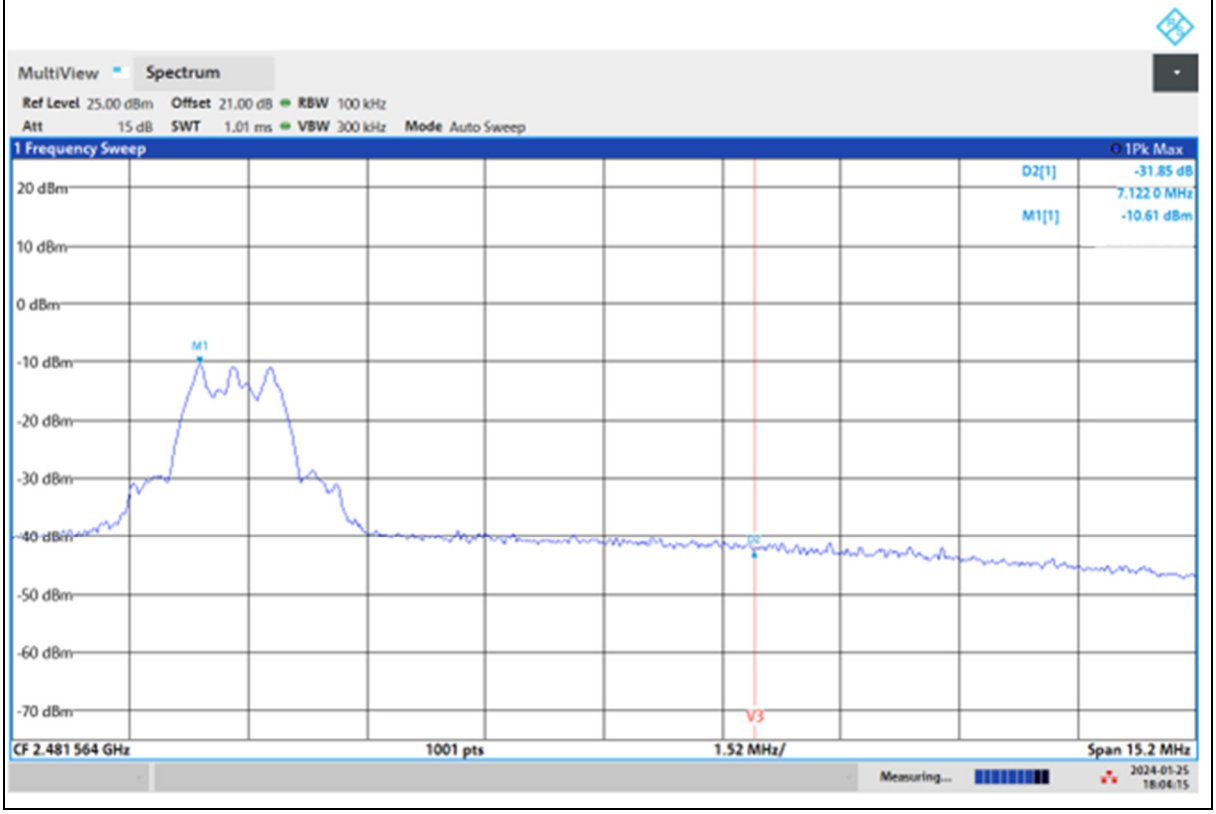


Results

Operating mode ..... :	1
Used mains voltage/frequency ... :	3 Vdc
Verdict..... :	Pass



Operating mode ..... :	3
Used mains voltage/frequency ... :	3 Vdc
Verdict..... :	Pass



Final measurement table

Channel	Max peak of in-band emission (dBm)	Frequency of max peak at the band edge (MHz)	Delta (dB)	Margin (dB)	Result
Bottom	-10.05	2400	29.76	>20 dB	Pass
Top	-10.61	2483.5	31.85	>20 dB	Pass

NOTE: 20 dB margin applied because conducted output power was measured using Peak detector.

6 List of test equipment

Equipment	Type	Inventory number	Manufacturer	Serial number	Last calibration date	Calibration due date
Test Stand: Conducted tests						
20dB-2W ATTENUATOR	PE7004-20	71483	Pasternack Enterprises	None	2023-06-19	2024-06-28
1.0 m Coaxial Cable 0-18GHz	AK 9515 H	137975	Schwarzbeck Mess-Elektronik OHG	#42	2023-05-02	2024-05-28
Signal and Spectrum Analyzer 44 GHz	FSV3044	213658	Rohde & Schwarz	-	2024-01-26	2024-03-28
Test Stand: Radiated emission 9 kHz to 30 MHz						
Software - EMC	BAT-EMC	156535	Nexio Technologies		-	-
Active Loop Antenna	HLA 6121	155933	Teseq, Inc	45746	2023-02-06	2025-02-28
N-N Cable 18 GHz 12m	SUCOFLEX_126_E	175756	Huber+Suhner	504343/126 EA	2023-04-12	2024-04-28
Center, Modular RF Platform	7000-011	210859	ETS-Lindgren	00231682	-	-
DC Power Injector	PI 6121	155980	Teseq, Inc	-	-	-
Antenna Tripod	CTP 6099	155934	Teseq, Inc	-	-	-
N-N Cable 18 GHz 3m	SUCOFLEX_126_E	175755	Huber+Suhner	504396/126 EA	2023-04-12	2024-04-28
SEMI-ANECHOIC CHAMBER	FACT3-1.2 STD	210407	ETS-Lindgren	-	-	-
EMI TEST RECEIVER	ESR7	82570	Rohde & Schwarz (Koeln) GmbH & Co. KG	101114	2023-08-08	2024-08-28
Test Stand: Radiated emission 30 MHz to 1 GHz						
Tilting Antenna Mast Positioning Tower	2171B/2170B	135821	ETS-Lindgren (Cedar Park, Texas)	-	-	-
Cable 2000mm - 18 GHz	SF126/11SMA/11N/2000	220503	Huber+Suhner	554756/126	2023-05-03	2024-05-28
Cable 8000mm - 18 GHz	SF126/11N/11N/8000	220502	Huber+Suhner	556226/126	2023-05-03	2024-05-28
Software - EMC	BAT-EMC	156535	Nexio Technologies		-	-
NSA Normalized Site Attenuation	NSA FACT3-1.2 STD	210410	ETS-Lindgren	NSA FACT3-1.2 STD	2022-04-12	2025-04-28
EMI TEST RECEIVER	ESR7	82570	Rohde & Schwarz (Koeln) GmbH & Co. KG	-	2023-08-08	2024-08-28
6dB Attenuator	DGA 9552 N	210263	Schwarzbeck Mess-Elektronik OHG	CH9006	2023-09-06	2024-09-28
SEMI-ANECHOIC CHAMBER	FACT3-1.2 STD	210407	ETS-Lindgren	-	-	-
Center, Modular RF Platform	7000-011	210859	ETS-Lindgren	00231682	-	-
Trilog-Broadband Antenna	VULB 9168	210290	Schwarzbeck Mess-Elektronik OHG	1244	2023-08-25	2025-08-28

Test Stand: Radiated emission 1 GHz to 18 GHz						
Cable 2000mm - 18 GHz	SF126/11SMA/11N/2000	220503	Huber+Suhner	554756/126	2023-05-03	2024-05-28
Low Noise Preamplifier	BLMA 0118-4A	209025	BONN Elektronik	2113244A	2023-03-09	2024-03-28
Microwave Coaxial Cable N to Sma-M	AK 9515 H	213198	Schwarzbeck Mess-Elektronik OHG	00168	2023-05-02	2024-05-28
Absorber High Frequency	EHP-12	212616	ETS-Lindgren	-	-	-
Software - EMC	BAT-EMC	156535	Nexio Technologies		-	-
SVSWR Voltage Standing Wave Ratio	SVSWR FACT3-1.2 STD	210409	ETS-Lindgren	SVSWR FACT3-1.2 STD	2022-04-12	2025-04-28
Signal and Spectrum Analyzer 44 GHz	FSV3044	213658	Rohde & Schwarz	-	2024-01-26	2024-03-28
Tilting Antenna Mast Positioning Tower	2171B/2170B	135821	ETS-Lindgren (Cedar Park, Texas)	-	-	-
SEMI-ANECHOIC CHAMBER	FACT3-1.2 STD	210407	ETS-Lindgren	-	-	-
Center, Modular RF Platform	7000-011	210859	ETS-Lindgren	00231682	-	-
Double-Ridged Waveguide Horn Antennas 1-18GHz	3117	138662	ETS-Lindgren (Cedar Park, Texas)	00208482	2023-01-20	2025-01-28
Cable 8000mm - 18 GHz	SF126/11N/11N/8000	220502	Huber+Suhner	556226/126	2023-05-03	2024-05-28
Test Stand: Radiated emission 18 GHz to 26 GHz						
Center, Modular RF Platform	7000-011	210859	ETS-Lindgren	00231682	-	-
Cable 6000mm - 0.04 to 26.5 GHz	SF526S-600-2X11PC35501	216873	Huber+Suhner	536580/2E	2023-03-09	2024-03-28
Red Horn Antenna 18-40GHz	3116C	210452	ETS-Lindgren	2717237001	2021-04-26	2024-04-28
Low Noise Preamplifier	BLMA 1840-1A	209026	BONN Elektronik	00240011	2023-06-27	2024-06-28
Signal and Spectrum Analyzer 44 GHz	FSV3044	213658	Rohde & Schwarz	-	2024-01-26	2024-03-28
Tilting Antenna Mast Positioning Tower	2171B/2170B	135821	ETS-Lindgren (Cedar Park, Texas)	-	-	-
Absorber High Frequency	EHP-12	212616	ETS-Lindgren	-	-	-
Software - EMC	BAT-EMC	156535	Nexio Technologies		-	-
Cable 500mm - 0.04 to 40 GHz	SF102E-50-2X11SK252	216877	Huber+Suhner	-	2023-03-09	2024-03-28
SEMI-ANECHOIC CHAMBER	FACT3-1.2 STD	210407	ETS-Lindgren	2113244B	-	-
Test Stand: Auxiliary equipment						
Mini Datalogger	174H	211147	Testo	1040495	2023-10-18	2024-10-28
CLIMATIC CENTRAL UNIT	iBTHX-W	70611	Omega Engineering Inc.	210743764	2023-04-06	2024-04-28
Laser Measure	RSLDM-50H	224436	RS Pro	40780217	2023-11-10	2024-11-28
TRUE-RMS DIGITAL MULTIMETER	289	169495	Fluke Corporation	83306371	2023-04-05	2024-04-28
Bench top power supply	IPS 2303	230929	RS COMPONENTS LTD	243A006G2	-	-

7 Measurement instrumentation uncertainties

The Uncertainty of Measurement (UoM) for each unit measured in this Test Report was estimated in accordance with the UL International Italia document No. 23-CL-G0025 and is retained on file. Details of the estimation of UoM may be made available upon request, in particular for quantities not listed.

Measurement	Range	Ulab	Unit
Frequency	2400-2483.5 MHz	0.5	kHz
Time	0.7 µs to 16000 s	3.00	%
Conducted power, by spectrum analyzer	2400-2483.5 MHz	0.45	dB
Conducted power, by fast power meter	2400-2483.5 MHz	0.41	dB
Temperature (ambient)	15 to 35 °C	0.72	°C
Temperature (climatic chamber)	-40 to 100 °C	1.63	°C
Humidity (ambient)	30 to 70 %	5.76	%RH
Humidity (climatic chamber)	30 to 95 %	3.95	%RH
Supply voltage (AC)	0 to 500 V	3.00	%
Supply voltage (DC)	0 to 15 V	0.28	%
Conducted disturbance at mains and other port power using V-AMN	9 kHz to 150 kHz	3.71	dB
Conducted disturbance at mains and other port power using V-AMN	150 kHz to 30 MHz	3.32	dB
Radiated disturbance (magnetic field using a loop antenna)	9 kHz to 30 MHz	3.16	dB
Radiated disturbance (electric field strength in SAC 3, hybrid antenna, Hor)	30 MHz to 1000 MHz	4.22	dB
Radiated disturbance (electric field strength in SAC 3, hybrid antenna, Ver)	30 MHz to 1000 MHz	5.64	dB
Radiated disturbance (electric field strength in SAC 5, hybrid antenna, Hor)	30 MHz to 1000 MHz	3.98	dB
Radiated disturbance (electric field strength in SAC 5, hybrid antenna, Ver)	30 MHz to 1000 MHz	5.66	dB
Radiated disturbance (electric field strength in FSOATS 3) **(1)**	1 GHz to 6 GHz	5.43	dB
Radiated disturbance (electric field strength in FSOATS 3) **(2)**	1 GHz to 6 GHz	4.29	dB
Radiated disturbance (electric field strength in FSOATS 3) **(1)**	6 GHz to 18 GHz	5.18	dB
Radiated disturbance (electric field strength in FSOATS 3) **(2)**	6 GHz to 18 GHz	4.22	dB
Radiated disturbance (electric field strength in FSOATS 5) **(1)**	1 GHz to 6 GHz	5.12	dB
Radiated disturbance (electric field strength in FSOATS 5) **(2)**	1 GHz to 6 GHz	4.13	dB
Radiated disturbance (electric field strength in FSOATS 5) **(1)**	6 GHz to 18 GHz	5.63	dB
Radiated disturbance (electric field strength in FSOATS 5) **(2)**	6 GHz to 18 GHz	4.54	dB
Radiated disturbance (electric field strength in FSOATS 3) **(1)**	18 GHz to 40 GHz	7.63	dB
Radiated disturbance (electric field strength in FSOATS 5) **(1)**	18 GHz to 40 GHz	7.63	dB
Radiated Spurious Emission (ERP/EIRP, Substitution Method)	25 MHz to 26 GHz	5.97	dB

Legend/Remarks:
n.d.: not defined
(1) Using external EMI preamplifier.
(2) Not using external EMI preamplifier.
Supplementary information:
- The measurement uncertainty values are calculated and correspond to an expansion factor (coverage factor) k = 2 (which provide confidence level of 95.45 % in the case where the distributions characterizing the actual measurement uncertainties are normal (Gaussian)).
- Listed values are intendended with prefix "±".

< END OF TEST REPORT >