



RF - TEST REPORT

- FCC Part 15.247, RSS-247 -

Model Name : ID My Cow

Product Description : Identification System

Applicant : DATAMARS SA

Address : Via Industria 16

6814 Lamone, SWITZERLAND

Manufacturer : DATAMARS Ltd

Address : Northern Region Industrial Estate No. 76/4

Moo 4, Tambol Ban Klang, Amphur Muang Lunphun,

Lumphun Province, THAILAND 51000

Test Result according to the standards
listed in clause 1 test standards:

POSITIVE

Test Report No. : 80200966-04 Rev_3

07. October 2025

Date of issue



Deutsche
Akkreditierungsstelle
D-PL-12030-01-00

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1 TEST STANDARDS

The tests were performed according to following standards:

FCC Rules and Regulations Part 15, Subpart A - General (July 2025)

Part 15, Subpart A, Section 15.31	Measurement standards
Part 15, Subpart A, Section 15.33	Frequency range of radiated measurements
Part 15, Subpart A, Section 15.35	Measurement detector functions and bandwidths

FCC Rules and Regulations Part 15, Subpart C - Intentional Radiators (July 2025)

Part 15, Subpart C, Section 15.203	Antenna requirement
Part 15, Subpart C, Section 15.204 modifications	External radio frequency power amplifiers and antenna
Part 15, Subpart C, Section 15.205	Restricted bands of operation
Part 15, Subpart C, Section 15.207	Conducted limits
Part 15, Subpart C, Section 15.209	Radiated emission limits, general requirements
Part 15, Subpart C, Section 15.247	Operation within the bands 902 - 928 MHz, 2400 - 2483.5 MHz and 5725 - 5850 MHz
ANSI C63.10: 2020 + Cor.1-2023 +C63.10a-2024 + Errata to C63.10a-2024	Testing Unlicensed Wireless Devices

ISED Canada Rules and Regulations

RSS-Gen, Issue 5 + Amendment 1 + 2	General Requirements for Compliance of Radio Apparatus
RSS-247, Issue 4	Digital Transmission Systems (DTSs), Frequency Hopping Systems (FHSs) and Licence-Exempt Local Area Network (LE-LAN) Devices
ANSI C63.10: 2020 + Cor.1-2023 +C63.10a-2024 + Errata to C63.10a-2024	Testing Unlicensed Wireless Devices

2 EQUIPMENT UNDER TEST

2.1 Information provided by the Client

Please note, we do not take any responsibility for information provided by the client or his representative which may have an influence on the validity of the test results.

2.2 Sampling

The customer is responsible for the choice of sample. Sample configuration, start-up and operation is carried out by the customer or according his/her instructions.

2.3 General remarks

None

2.4 Photo documentation of the EUT – Detailed photos see ATTACHMENT A

2.5 Equipment type

2.4 GHz Short range device

2.6 Short description of the equipment under test (EUT)

The EUT is the identification system IDMyCow. It is used to identify animals wearing EarTag and CollarTag and can be used to identify passing cows with high performance ID identification rate.

The IDMyCow system is composed of:

- Primary Reader
- Node Reader
- External Directional Antenna
- Power supply AC/DC IN 110V/230V OUT 15V GlobTek RR9KG4000T00CIMR6B

Wires and cables are part of the system:

- SMA-SMA coaxial cable
- USB cable connection 2m (USB-A to USB-B)
- USB cable connection 5m (USB-A to USB-B)

Number of tested samples: 1

Serial number: SAMPLE P-0009, SAMPLE -N-0009, SAMPLE-A-0009
(Note: P for Primary Reader, N for Node Reader, A for Activation Antenna)

Firmware version: Candle OpenWrt v1.0.3

2.7 Variants of the EUT

There are no variants.

2.8 Operation frequency and channel plan

The operating frequency is 2400 MHz to 2483.5 MHz.

Channel plan:

Channel	Frequency (MHz)	Channel	Frequency (MHz)
37	2402	18	2442
0	2404	19	2444
1	2406	20	2446
2	2408	21	2448
3	2410	22	2450
4	2412	23	2452
5	2414	24	2454
6	2416	25	2456
7	2418	26	2458
8	2420	27	2460
9	2422	28	2462
10	2424	29	2464
38	2426	30	2466
11	2428	31	2468
12	2430	32	2470
13	2432	33	2472
14	2434	34	2474
15	2436	35	2476
16	2438	36	2478
17	2440	39	2480

Note: the marked frequencies are determined for final testing.

2.9 Transmit operating modes

The EUT uses LI 4/5 Code Rate with a spreading factor of 6 and a bandwidth of 1625 kHz.

2.10 Antenna

The following antennas shall be used with the EUT:

External TX directional antenna with 7 dBi gain.

2.11 Power supply system utilised

Power supply voltage, V_{nom} : 10.8 V_{DC} (battery powered)
 Power supply voltage, alternative 1 : 15 V_{DC} (12 V_{DC} – 48 V_{DC})
 Power supply voltage, alternative 2 : 48 V_{DC} (PoE)

2.12 Peripheral devices and interface cables

The following peripheral devices and interface cables are connected during the measurements:

- _____ Model : _____

2.13 Determination of worst-case conditions for final measurement

Preliminary tests are performed in all three orthogonal axes of the EUT to locate at which position and at what setting of the EUT produces the maximum of the emissions.

For the final test the following channels and test modes are selected:

LoRa	Available channel	Tested channels	Power setting	Modulation	Modulation type
2.4 GHz band	37 - 39	37, 20, 39	P-10	LoRa	LI 4/5 Code Rate

2.13.1 Test jig

No test jig is used.

2.13.2 Test software

A special test software is used for setting TX continuous. The EUT's are set with another channel. After connection to power supply the EUT is transmitting in continuous mode.

3 TEST RESULT SUMMARY

Device using digital modulation and operating in the 2400 MHz – 2483.5 MHz band:

FCC Rule Part	RSS Rule Part	Description	Result
15.207(a)	RSS-Gen, 8.8	AC power line conducted emissions	passed
15.247(a)(2)	RSS-247, 6.3.1	-6 dB EBW	passed
15.247(b)(3) 15.247(b)(4)	RSS-247, 6.3.2	Maximum peak output power	passed
15.247(d)	RSS-247, 6.6	Spurious emissions	passed
15.209	RSS-Gen, 8.9 RSS-Gen 8.10	Restricted frequency bands	passed
15.247(e)	RSS-247, 5.2(b)	PSD	passed
15.35(c)	RSS-Gen, 8.2	Pulsed operation	passed
-	RSS-Gen, 6.7	99 % Bandwidth	passed
	RSS-Gen, 8.11	Transmitter frequency stability	passed

3.1 Revision history of test report

Test report No	Rev.	Issue Date	Changes
80200966-04	0	20 January 2025	Initial test report
80200966-04	1	31 July 2025	Technology designation corrected
80200966-04	2	07 August 2025	Limits corrected, band edge added
80200966-04	3	07 October 2025	Updated to newest standards

The test report with the highest revision number replaces the previous test reports.

3.2 Final assessment

The equipment under test fulfils the requirements cited in clause 1 test standards.

Date of receipt of test sample : acc. to storage records

Testing commenced on : 04 September 2024

Testing concluded on : 28 November 2024

Checked by:

Tested by:

Jürgen Pessinger
Radio Team

Christopher Thaller
Radio Team

4 TEST ENVIRONMENT

4.1 Address of the test laboratory

**CSA Group Bayern GmbH
Straubinger Straße 100
94447 PLATTLING
GERMANY**

4.2 Environmental conditions

During the measurement the environmental conditions were within the listed ranges:

Temperature:	<u>15 - 35 °C</u>
Humidity:	<u>30 - 60 %</u>
Atmospheric pressure:	<u>86 - 106 kPa</u>

4.3 Statement of the measurement uncertainty

The data and results referenced in this document are true and accurate. It is noted that the expanded measurement uncertainty corresponds to the measurement results from the standard measurement uncertainty multiplied by the coverage factor $k = 2$. The true value is located in the corresponding interval with a probability of 95 %. The measurement uncertainty was calculated for all measurements listed in this test report on basis of the ETSI Technical Report TR 100 028 Electromagnetic compatibility and Radio spectrum Matters (ERM); Uncertainties in the measurement of mobile radio equipment characteristics; Part 1 and Part 2. The results are documented in the quality system acc. to DIN EN ISO/IEC 17025. Furthermore, component and process variability of devices similar to that tested may result in additional deviation. The manufacturer has the sole responsibility of continued compliance of the device.

Measurement Type	Range	Confidence Level (%)	Calculated Uncertainty
AC Conducted Spurious Emissions	0.15 MHz to 30 MHz	95%	$\pm 3.29 \text{ dB}$
20 dB Bandwidth	Center frequency of EUT	95%	$\pm 2.5 \times 10^{-7}$
99% Occupied Bandwidth	Center frequency of EUT	95%	$\pm 2.5 \times 10^{-7}$
Radiated Spurious Emissions	9 kHz to 30 MHz	95%	$\pm 3.53 \text{ dB}$
Radiated Spurious Emissions	30 MHz to 1000 MHz	95%	$\pm 3.71 \text{ dB}$
Radiated Spurious Emissions	1000 MHz to 10000 MHz	95%	$\pm 2.34 \text{ dB}$
Peak conducted output power	902 MHz to 928 MHz	95%	$\pm 0.35 \text{ dB}$
Conducted Spurious Emissions	9 kHz to 10000 MHz	95%	$\pm 2.15 \text{ dB}$

4.4 Conformity Decision Rule

The applied conformity decision rule is based on ILAC G8:09/2019 clause 4.2.1 Binary Statement for Simple Acceptance Rule ($w = 0$).

Details can be found in the procedure CSA_B_V50_29.

4.5 Measurement protocol for FCC and ISED

4.5.1 General information

CSA Group Bayern GmbH is recognized as wireless testing laboratory under the CAB identifier:

FCC: DE 0011
ISED: DE0009

4.5.2 General Standard information

The test methods used comply with ANSI C63.10 - "Testing Unlicensed Wireless Devices".

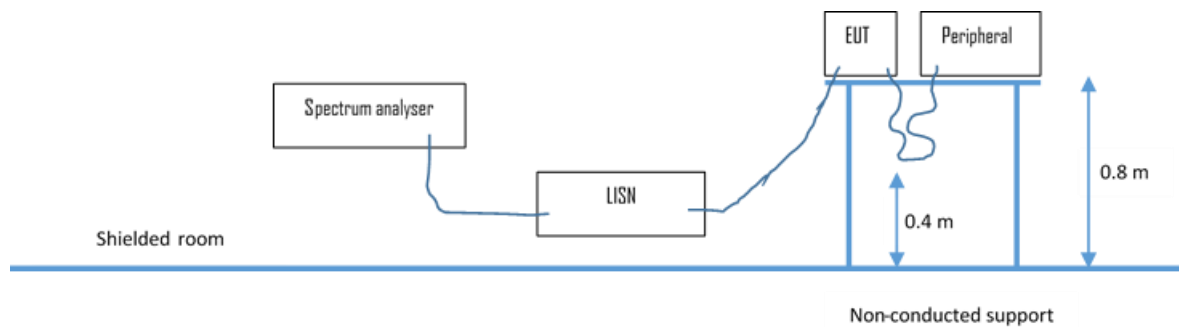
4.5.2.1 Justification

The equipment under test (EUT) is configured in a typical user arrangement in accordance with the manufacturer's instructions.

4.5.3 Details of test procedures

4.5.3.1 Conducted emission

Test setup according ANSI C63.10



The final level, expressed in dB μ V, is arrived at by taking the reading directly from the Spectrum analyser. This level is compared to the limit.

To convert between dB μ V and μ V, the following conversions apply:

$$\text{dB}\mu\text{V} = 20(\log \mu\text{V})$$

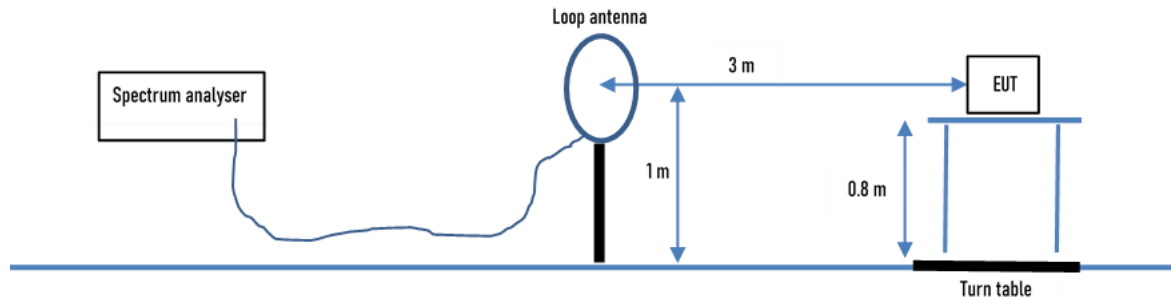
$$\mu\text{V} = \text{Inverse log}(\text{dB}\mu\text{V}/20)$$

Conducted emissions on the 50 Hz and/or 60 Hz power interface of the EUT are measured in the frequency range of 150 kHz to 30 MHz. The measurements are performed using a receiver, which has CISPR characteristic bandwidth and quasi-peak detection and a Line Impedance Stabilization Network (LISN) with 50 Ω / 50 μ H (CISPR 16) characteristics. The receiver is protected by means of an impedance matched pulse limiter connected directly to the RF input. Tabletop equipment is placed on a non-conducting table 80 centimetres above the floor and is positioned 40 centimetres from the vertical ground plane (wall) of the screen room. If the minimum limit margin appears to be less than 20 dB with a peak mode measurement, the emission is re-measured using a tuned receiver with quasi-peak and average detection and recorded on the data sheets.

4.5.3.2 Radiated emission

4.5.3.2.1 Anechoic chamber test site (9 kHz - 30 MHz):

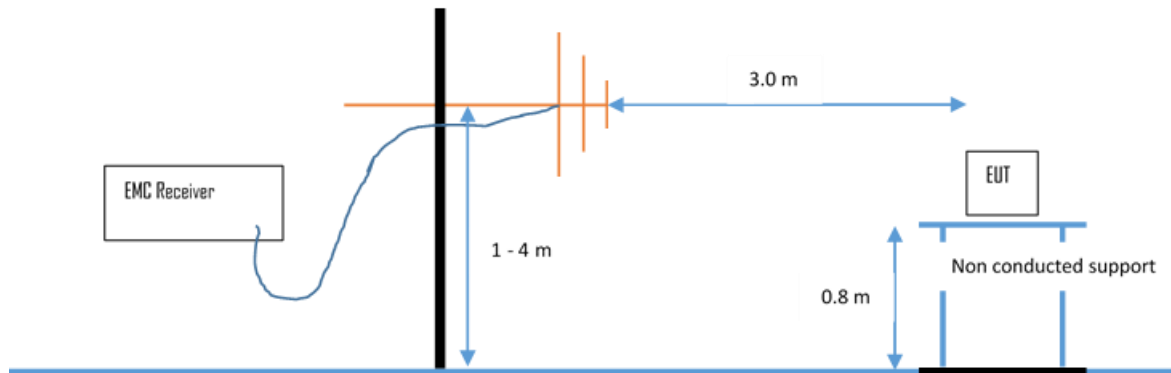
Test setup according ANSI C63.10



Emissions from the EUT are measured in the frequency range of 9 MHz to 30 MHz using a tuned receiver and a calibrated loop antenna. Table top equipment is placed on a 1.0 X 1.5 m non-conducting table 80 centimetres above the ground plane. Cables to simulators/testers (if used in this test) are routed through the centre of the table and to a screened room located outside the test area. The antenna is positioned 3, 10 or 30 metres horizontally from the EUT and is repeated vertically. To locate maximum emissions from the test sample the antenna is varied along the site axis and the EUT is rotated 360 degrees.

4.5.3.2.2 Anechoic chamber (30 MHz - 1 GHz):

Test setup according ANSI C63.10.



Spurious emissions from the EUT are measured in the frequency range of 30 MHz to 1000 MHz using a tuned receiver and appropriate broadband linearly polarised antennas. Measurements between 30 MHz and 1000 MHz are made with 120 kHz/6 dB bandwidth and quasi-peak detection. Tabletop equipment is placed on a 1.0 X 1.5 m non-conducting table 80 centimetres above the ground plane. Floor standing equipment is placed directly on the turntable/ground plane. Cables to simulators/testers (if used in this test) are routed through the centre of the table and to a screened room located outside the test area. To locate maximum emissions from the test sample the antenna is varied in height from 1 to 4 metres and the EUT is rotated 360 degrees. The final level in dB μ V/m is calculated by taking the reading from the EMI receiver (Level dB μ V) and adding the correction factors and cable loss factor (dB). The FCC limit is subtracted from this result in order to provide the limit margin listed in the measurement protocol.

The resolution bandwidth setting:

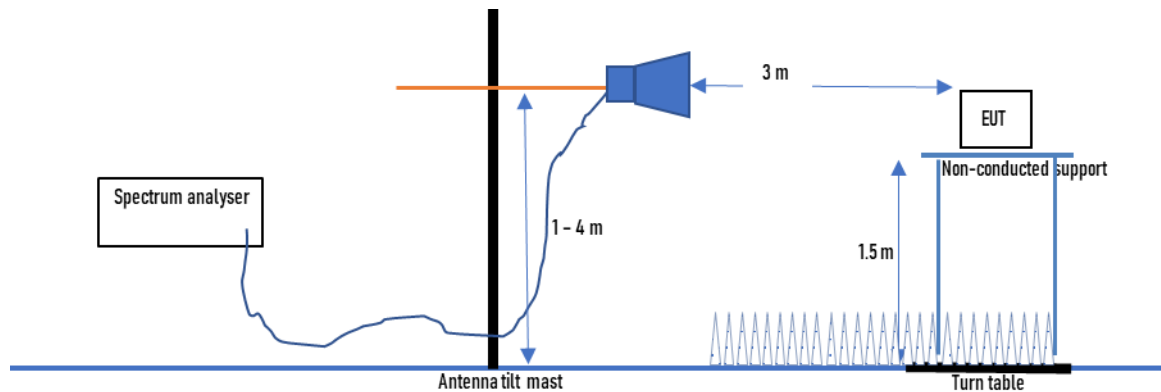
30 MHz – 1000 MHz: RBW: 120 kHz

Example:

Frequency (MHz)	Level (dB μ V)	+	Factor (dB)	=	Level (dB μ V/m)	-	Limit (dB μ V/m)	=	Delta (dB)
719.0	75.0	+	32.6	=	107.6	-	110.0	=	-2.4

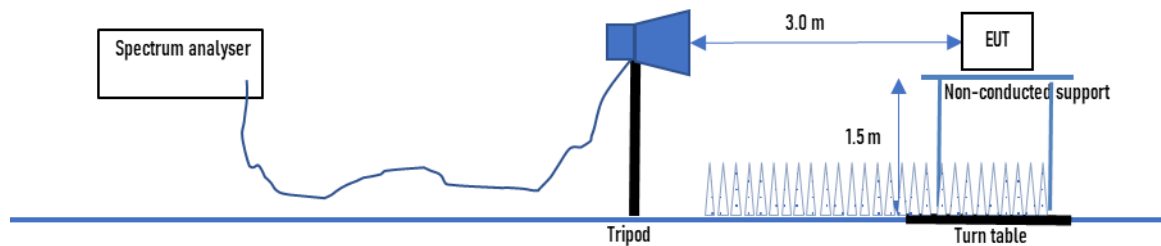
4.5.3.2.3 Anechoic chamber (1000 MHz – 18000 MHz)

Test setup according to ANSI C63.10.



Radiated emissions from the EUT are measured in the frequency range 1 GHz up to 18 GHz as specified in 47 CFR Part 15, Subpart A, Section 15.33, using a spectrum analyser and appropriate linearly polarized antennas. Tabletop equipment is placed on a non-conducting table, 1.5 metre above the ground plane. The turntable is fully covered with the appropriate absorber (Type VHP-12). Any controlling device is positioned such that it does not significantly influence the measurement results. Interconnecting cables that hang closer than 40 cm to the ground plane are folded back and forth in the centre, forming a bundle 30 cm to 40 cm long. Measurements are made in three orientations of the EUT and the horizontal and vertical polarization planes of measurement antenna in a fully anechoic room. The measurement antenna is adjusted and the EUT orientated to permit the measurement of the maximum emission from the EUT. The conditions determined as worst-case will then be used for the final measurements.

4.5.3.2.4 Anechoic chamber (18 GHz – 40 GHz)



Emissions from the EUT are measured in the frequency range 18 GHz up to 40 GHz as specified in 47 CFR Part 15, Subpart A, Section 15.33, using a spectrum analyser and appropriate linearly polarized antennas. Tabletop equipment is placed on a non-conducting table, 1.5 metre above the ground plane. The turntable is fully covered with the appropriate absorber (Type VHP-12). Any controlling device is positioned such that it does not significantly influence the measurement results. Interconnecting cables that hang closer than 40 cm to the ground plane are folded back and forth in the centre, forming a bundle 30 cm to 40 cm long. Measurements are made in three orientations of the EUT and the horizontal and vertical polarization planes of measurement antenna in a fully anechoic room. The measurement antenna is adjusted and the EUT orientated to permit the measurement of the maximum emission from the EUT. The conditions determined as worst-case will then be used for the final measurements. Where appropriate, the test distance may be reduced in order to detect emissions under better uncertainty. The limit is adopted.

5 TEST CONDITIONS AND RESULTS

5.1 AC power line conducted emissions

For test instruments and accessories used see section 6 Part A 4.

5.1.1 Description of the test location

Test location: Shielded Room SR2

5.1.2 Photo documentation of the test set-up

See Attachment B for detailed photo documentation of the test set-up.

5.1.3 Applicable standard

According to FCC Part 15, Section 15.207(a):

Except as shown in paragraphs (b) and (c) of this Section, for an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the given limits.

According to RSS-Gen 8.8:

Unless stated otherwise in the applicable RSS, for radio apparatus that are designed to be connected to the public utility AC power network, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the range 150 kHz to 30 MHz shall not exceed the limits in table 4, as measured using a 50 μ H / 50 Ω line impedance stabilization network. This requirement applies for the radio frequency voltage measured between each power line and the ground terminal of each AC power-line mains cable of the EUT.

5.1.4 Description of Measurement

The measurements are performed following the procedures set out in ANSI C63.10 described under item 4.4.3. If the minimum limit margin appears to be less than 20 dB with a peak mode measurement, the emissions are re-measured using a tuned receiver with quasi-peak and average detection and recorded on the data sheets.

5.1.5 Test result

Frequency range: 0.15 MHz - 30 MHz

Min. limit margin -10.4 dB at 27.6 MHz

Limit according to FCC Part 15, Section 15.207(a):

Frequency of Emission (MHz)	Conducted limit (dBμV)	
	Quasi-peak	Average
0.15-0.5	66 to 56 *	56 to 46 *
0.5-5	56	46
5-30	60	50

* Decreases with the logarithm of the frequency

Limit according to RSS-Gen 8.8:

Frequency of Emission (MHz)	Conducted limit (dBμV)	
	Quasi-peak	Average
0.15-0.5	66 to 56 *	56 to 46 *
0.5-5	56	46
5-30	60	50

* The level decreases linearly with the logarithm of the frequency.

The requirements are **FULFILLED**.

Remarks:

For detailed test result please refer to following test protocols.

AC/DC power supply Model GTM96600-6015-T2A

PoE Adaptor SonicWALL : 01-SSC-5546

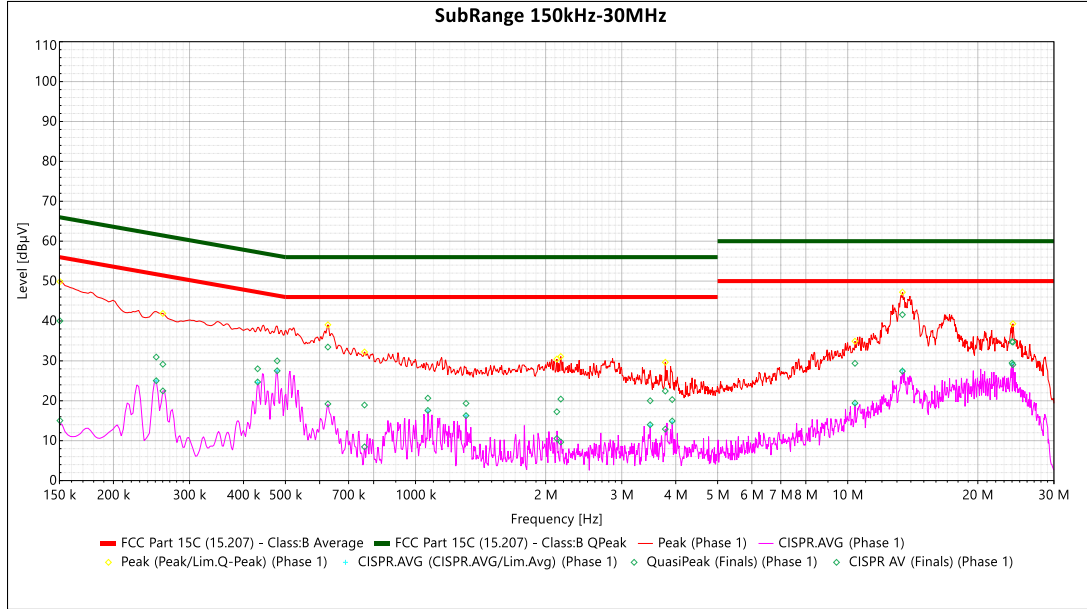
Date of test 13.09.2024.

5.1.6 Test protocol

AC/DC power supply Model GTM96600-6015-T2A

Test point L1

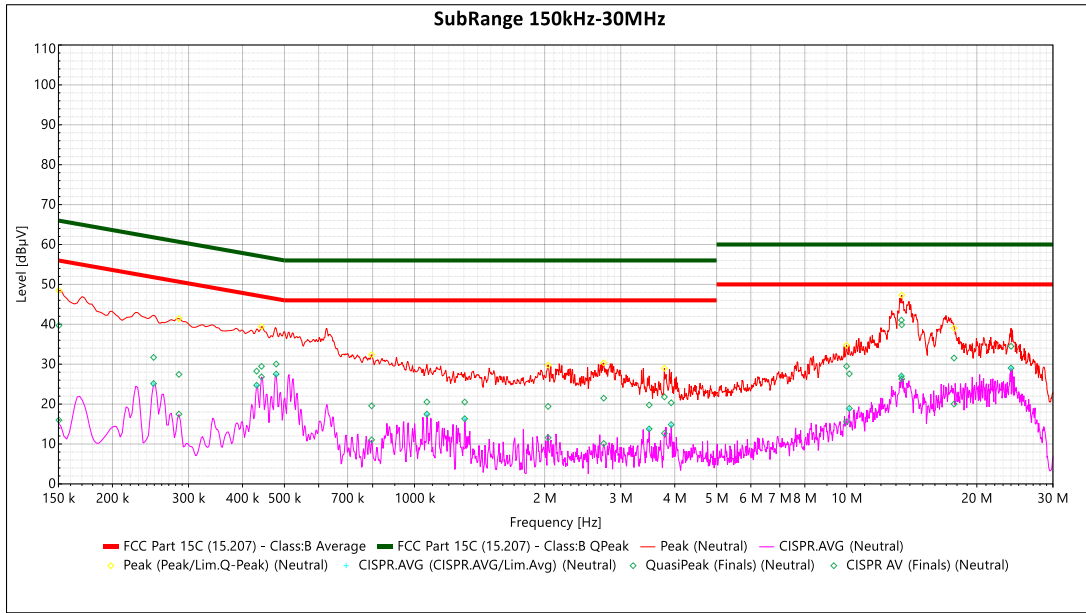
Result: passed



Frequency (Hz)	QuasiPeak (dBμV)	QP Margin	QP Limit (dBμV)	CISPR AV (dBμV)	CISPR AV Margin	AV Limit (dBμV)	Line	RBW (Hz)	Meas.Time (s)	Correction (dB)
150 k	40.025	-25.975	66	15.029	-40.971	56	Phase 1	9000	1	10.312
251.25 k	30.949	-30.767	61.716	25.035	-26.681	51.716	Phase 1	9000	1	10.323
260.25 k	29.151	-32.272	61.423	22.485	-28.939	51.423	Phase 1	9000	1	10.322
431.25 k	28.023	-29.206	57.229	24.711	-22.518	47.229	Phase 1	9000	1	10.341
478.5 k	30	-26.365	56.365	27.525	-18.84	46.365	Phase 1	9000	1	10.346
627 k	33.457	-22.543	56	19.208	-26.792	46	Phase 1	9000	1	10.359
762 k	18.933	-37.067	56	8.448	-37.552	46	Phase 1	9000	1	10.37
1.068 M	20.647	-35.353	56	17.579	-28.421	46	Phase 1	9000	1	10.389
1.30875 M	19.337	-36.663	56	16.283	-29.717	46	Phase 1	9000	1	10.419
2.12325 M	17.253	-38.747	56	10.539	-35.461	46	Phase 1	9000	1	10.491
2.16825 M	20.421	-35.579	56	9.659	-36.341	46	Phase 1	9000	1	10.493
3.49125 M	20.01	-35.99	56	14.003	-31.997	46	Phase 1	9000	1	10.541
3.78375 M	22.438	-33.562	56	12.897	-33.103	46	Phase 1	9000	1	10.546
3.9255 M	20.303	-35.697	56	14.942	-31.058	46	Phase 1	9000	1	10.547
10.39425 M	29.38	-30.62	60	19.419	-30.581	50	Phase 1	9000	1	10.5
13.3845 M	41.584	-18.416	60	27.416	-22.584	50	Phase 1	9000	1	10.604
24 M	34.827	-25.173	60	29.473	-20.527	50	Phase 1	9000	1	11.058
24.11025 M	34.699	-25.301	60	29.038	-20.962	50	Phase 1	9000	1	11.061

Test point: N

Result: passed

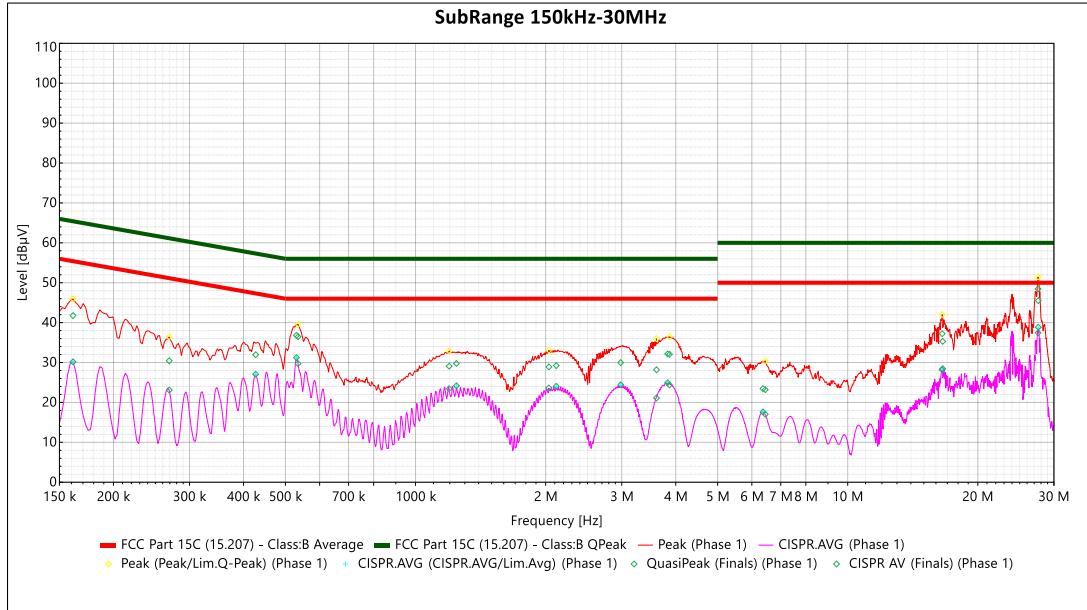


Frequency (Hz)	QuasiPeak (dBμV)	QP Margin	QP Limit (dBμV)	CISPR AV (dBμV)	CISPR AV Margin	AV Limit (dBμV)	Line	RBW (Hz)	Meas.Time (s)	Correction (dB)
150 k	39.724	-26.276	66	15.981	-40.019	56	Neutral	9000	1	10.322
249 k	31.715	-30.075	61.79	25.152	-26.639	51.79	Neutral	9000	1	10.323
285 k	27.441	-33.228	60.669	17.492	-33.177	50.669	Neutral	9000	1	10.327
431.25 k	28.269	-28.959	57.229	24.735	-22.494	47.229	Neutral	9000	1	10.341
442.5 k	29.46	-27.555	57.015	26.829	-20.186	47.015	Neutral	9000	1	10.342
478.5 k	30.027	-26.338	56.365	27.521	-18.844	46.365	Neutral	9000	1	10.346
795.75 k	19.572	-36.428	56	11.039	-34.961	46	Neutral	9000	1	10.382
1.068 M	20.537	-35.463	56	17.476	-28.524	46	Neutral	9000	1	10.405
1.3065 M	20.506	-35.494	56	16.342	-29.658	46	Neutral	9000	1	10.426
2.03775 M	19.418	-36.582	56	11.58	-34.42	46	Neutral	9000	1	10.479
2.73975 M	21.49	-34.51	56	10.131	-35.869	46	Neutral	9000	1	10.547
3.49125 M	19.775	-36.225	56	13.779	-32.221	46	Neutral	9000	1	10.576
3.786 M	21.8	-34.2	56	12.681	-33.319	46	Neutral	9000	1	10.578
3.9255 M	20.331	-35.669	56	14.859	-31.141	46	Neutral	9000	1	10.578
9.9915 M	29.468	-30.532	60	15.588	-34.412	50	Neutral	9000	1	10.599
10.14225 M	27.585	-32.415	60	18.922	-31.078	50	Neutral	9000	1	10.607
13.38225 M	41.042	-18.958	60	27.021	-22.979	50	Neutral	9000	1	10.794
13.407 M	39.89	-20.11	60	26.304	-23.696	50	Neutral	9000	1	10.796
17.71575 M	31.553	-28.447	60	20.019	-29.981	50	Neutral	9000	1	11.051
24 M	34.491	-25.509	60	29.037	-20.963	50	Neutral	9000	1	11.379

PoE Adaptor SonicWALL : 01-SSC-5546

Test point L1

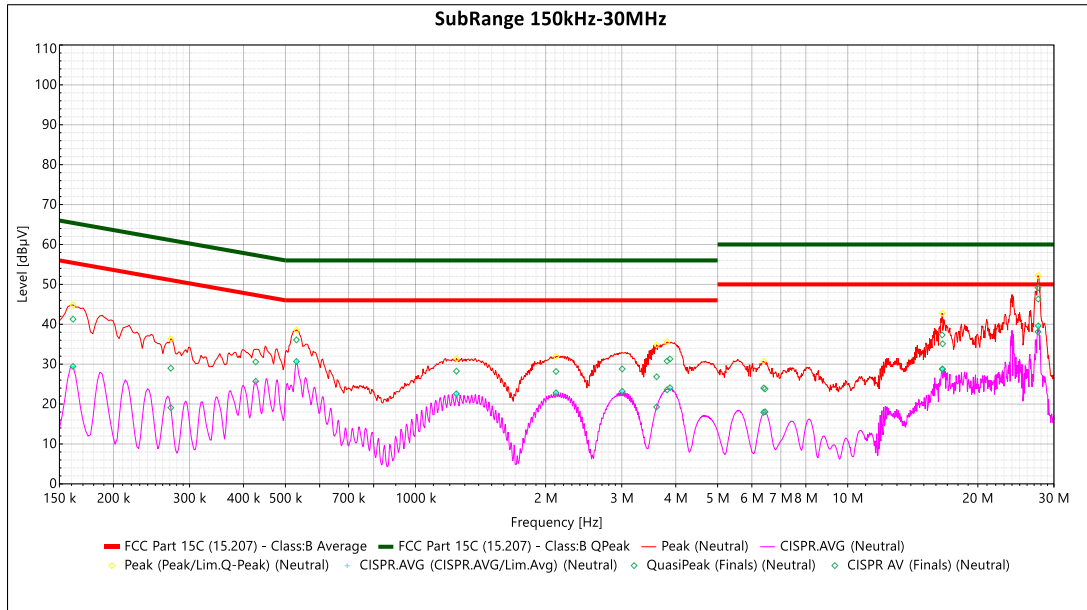
Result: passed



Frequency (Hz)	QuasiPeak (dBµV)	QP Margin	QP Limit (dBµV)	CISPR AV (dBµV)	CISPR AV Margin	AV Limit (dBµV)	Line	RBW (Hz)	Meas.Time (s)	Correction (dB)
161.25 k	41.76	-23.639	65.399	30.162	-25.237	55.399	Phase 1	9000	1	10.307
269.25 k	30.447	-30.695	61.141	23.087	-28.054	51.141	Phase 1	9000	1	10.321
426.75 k	31.962	-25.354	57.316	27.056	-20.26	47.316	Phase 1	9000	1	10.341
530.25 k	36.808	-19.192	56	31.243	-14.757	46	Phase 1	9000	1	10.35
534.75 k	36.45	-19.55	56	29.735	-16.265	46	Phase 1	9000	1	10.351
1.19625 M	29.092	-26.908	56	23.446	-22.554	46	Phase 1	9000	1	10.411
1.2435 M	29.767	-26.233	56	24.177	-21.823	46	Phase 1	9000	1	10.415
2.0355 M	28.91	-27.09	56	23.623	-22.377	46	Phase 1	9000	1	10.486
2.1165 M	29.224	-26.776	56	24.061	-21.939	46	Phase 1	9000	1	10.491
2.98275 M	29.98	-26.02	56	24.423	-21.577	46	Phase 1	9000	1	10.524
3.6105 M	28.194	-27.806	56	21.123	-24.877	46	Phase 1	9000	1	10.543
3.831 M	32.172	-23.828	56	24.925	-21.075	46	Phase 1	9000	1	10.546
3.86925 M	32.056	-23.944	56	24.373	-21.627	46	Phase 1	9000	1	10.546
6.36675 M	23.465	-36.535	60	17.623	-32.377	50	Phase 1	9000	1	10.478
6.4455 M	23.203	-36.797	60	17.026	-32.974	50	Phase 1	9000	1	10.475
16.54125 M	37.218	-22.782	60	28.165	-21.835	50	Phase 1	9000	1	10.751
16.584 M	35.299	-24.701	60	28.433	-21.567	50	Phase 1	9000	1	10.753
27.5685 M	48.445	-11.555	60	37.453	-12.547	50	Phase 1	9000	1	11.129
27.6 M	45.52	-14.48	60	38.861	-11.139	50	Phase 1	9000	1	11.13

Test point: N

Result: passed



Frequency (Hz)	QuasiPeak (dBμV)	QP Margin	QP Limit (dBμV)	CISPR AV (dBμV)	CISPR AV Margin	AV Limit (dBμV)	Line	RBW (Hz)	Meas.Time (s)	Correction (dB)
161.25 k	41.28	-24.119	65.399	29.428	-25.971	55.399	Neutral	9000	1	10.328
271.5 k	28.993	-32.079	61.072	19.106	-31.966	51.072	Neutral	9000	1	10.326
426.75 k	30.582	-26.734	57.316	25.706	-21.61	47.316	Neutral	9000	1	10.341
530.25 k	36.094	-19.906	56	30.669	-15.331	46	Neutral	9000	1	10.35
1.2435 M	28.251	-27.749	56	22.572	-23.428	46	Neutral	9000	1	10.423
2.11425 M	28.166	-27.834	56	22.819	-23.181	46	Neutral	9000	1	10.487
3.0075 M	28.809	-27.191	56	23.192	-22.808	46	Neutral	9000	1	10.565
3.61275 M	26.853	-29.147	56	19.279	-26.721	46	Neutral	9000	1	10.577
3.81975 M	30.79	-25.21	56	23.566	-22.434	46	Neutral	9000	1	10.578
3.87825 M	31.3	-24.7	56	24.12	-21.88	46	Neutral	9000	1	10.578
6.3915 M	24.015	-35.985	60	17.919	-32.081	50	Neutral	9000	1	10.531
6.43875 M	23.809	-36.191	60	18.07	-31.93	50	Neutral	9000	1	10.53
16.54125 M	37.331	-22.669	60	28.773	-21.227	50	Neutral	9000	1	10.981
16.5795 M	35.098	-24.902	60	28.761	-21.239	50	Neutral	9000	1	10.983
27.5685 M	49.154	-10.846	60	38.099	-11.901	50	Neutral	9000	1	11.532
27.6 M	46.314	-13.686	60	39.599	-10.401	50	Neutral	9000	1	11.534

5.2 EBW and OBW

For test instruments and accessories used see section 6 Part **MB**.

5.2.1 Description of the test location

Test location: Shielded Room SR6

5.2.2 Photo documentation of the test set-up

See Attachment B for detailed photo documentation of the test set-up.

5.2.3 Applicable standard

According to FCC Part 15, Section 15.247(a)(2):

Systems using digital modulation techniques may operate in the 902 - 928 MHz, 2400 – 2483.5 MHz and 5725 – 5850 MHz bands. The minimum 6 dB bandwidth shall be at least 500 kHz.

According to RSS-247 6.3.1:

The following applies to the bands 902-928 MHz and 2400-2483.5 MHz:

- a. the minimum 6 dB bandwidth shall be 500 kHz.

According to RSS-Gen 6.7:

The occupied bandwidth or the "99% emission bandwidth" is defined as the frequency range between two points, one above and the other below the carrier frequency, within which 99% of the total transmitted power of the fundamental transmitted emission is contained. The occupied bandwidth shall be reported for all equipment in addition to the specified bandwidth required in the applicable RSSs.

5.2.4 Description of Measurement

The bandwidth was measured at an amplitude level reduced from the reference level of a modulated channel by a ratio of -6 dB. The reference level is the level of the highest signal amplitude observed at the transmitter at either the fundamental frequency or the first order modulation products in all typical modes of operation, including the unmodulated carrier, even if atypical. An alternative is to use the bandwidth measurement of the analyser.

Spectrum analyser settings for EBW:

RBW: 100 kHz, VBW: 300 kHz, Detector: Max peak, Sweep time: auto, Span: 2 EBW;

Spectrum analyser settings for OBW:

RBW: 1-5% OBW, VBW: 3 RBW, Detector: Max peak, Sweep time: auto, Span: 2 OBW;

5.2.5 Test result

6dB bandwidth

Channel	Centre frequency (MHz)	6 dB bandwidth (kHz)	Minimum limit (MHz)
37	2402	1619.6	0.5
20	2446	1629.6	0.5
39	2480	1625.8	0.5

99% bandwidth

Channel	Centre frequency (MHz)	99 % bandwidth (kHz)
37	2402	1743.0
20	2446	1743.6
39	2480	1743.0

Emission bandwidth limit according to FCC Part 15, Section 15.247(a)(2):

Frequency (MHz)	6dB EBW Limit
902-928	> 500 kHz
2400-2483.5	> 500 kHz
5725-5850	> 500 kHz

Emission bandwidth limit according to RSS-247 6.3.1:

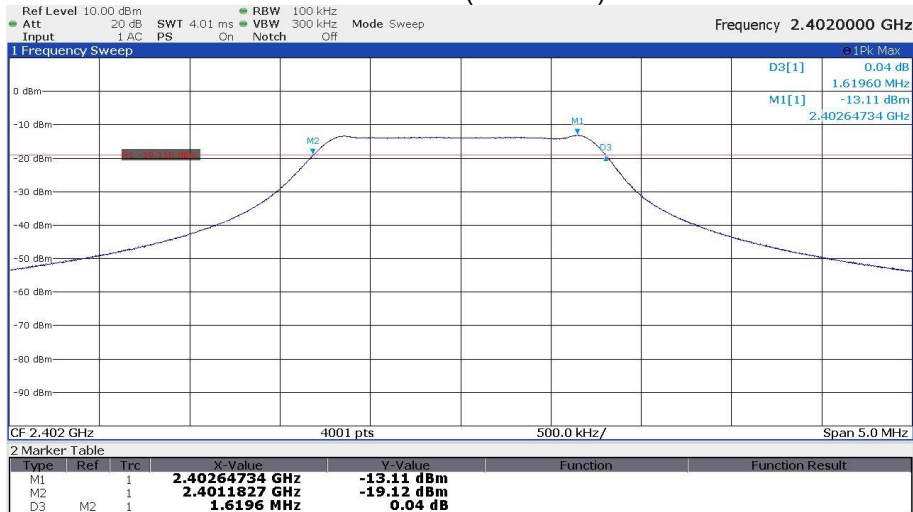
Frequency (MHz)	6dB EBW Limit
902-928	> 500 kHz
2400-2483.5	> 500 kHz

The requirements are **FULFILLED**.

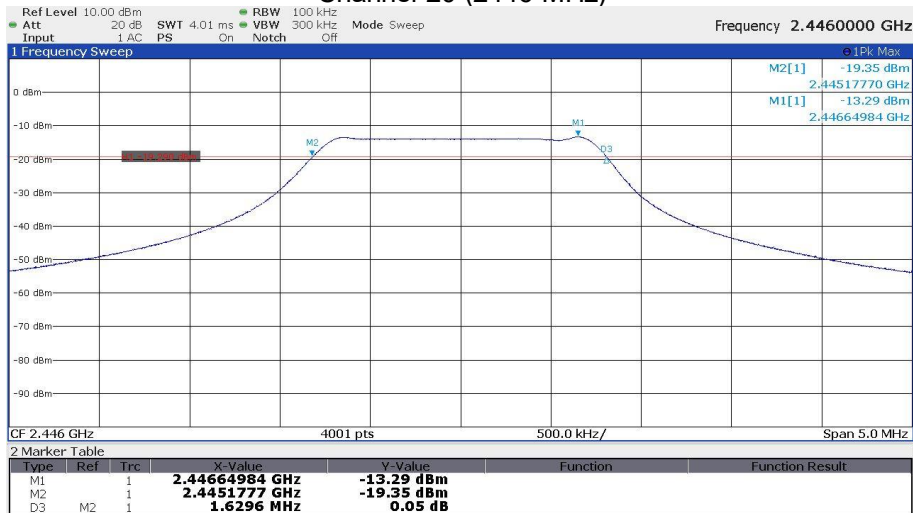
Remarks: For detailed test result please see the following test protocols

5.2.6 Test protocols EBW

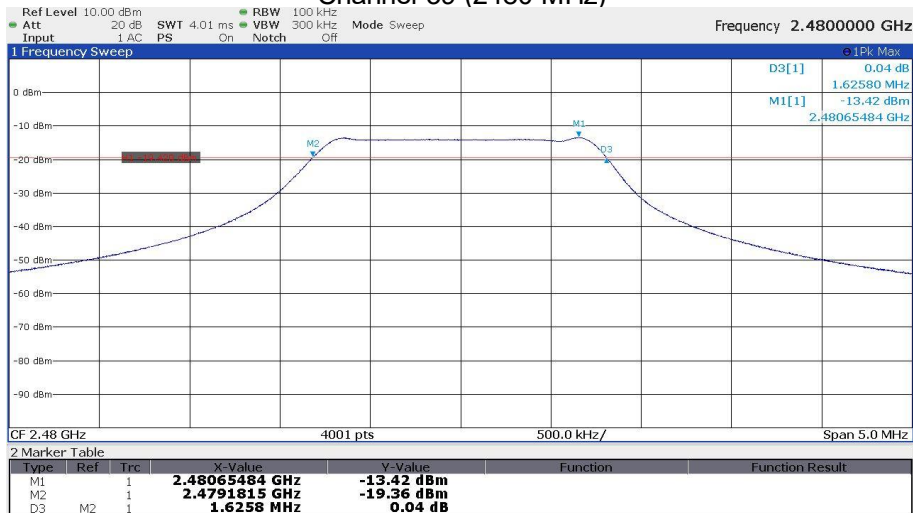
Channel 37 (2402 MHz)



Channel 20 (2446 MHz)



Channel 39 (2480 MHz)



5.2.7 Test protocols OBW

1 Mbps Channel 37 (2402 MHz)



Channel 20 (2446 MHz)



1 Mbps Channel 39 (2480 MHz)



5.3 Maximum peak output power

For test instruments and accessories used see section 6 Part **CPC**.

5.3.1 Description of the test location

Test location: Shielded Room SR6

5.3.2 Photo documentation of the test set-up

See Attachment B for detailed photo documentation of the test set-up.

5.3.3 Applicable standard

According to FCC Part 15, Section 15.247(b)(3):

The maximum peak conducted output power of the intentional radiator shall not exceed the following:

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

According to RSS-247 6.3.2:

For DTS operating in the band 2400-2483.5 MHz, the maximum peak conducted output power shall not exceed 1W, and the e.i.r.p. shall not exceed 4 W, except as provided in section 6.5 a) and b).

5.3.4 Description of Measurement

The maximum peak radiated output power is measured using a spectrum analyser following the procedure set out in ANSI C63.10, item 11.9.2.2. The EUT is set in TX continuous mode while measuring.

5.3.5 Test result

FCC §15.247 (b)(4)					
Modulation	Channel	Frequency	Measured Conducted TX Power	Conducted Tx Power Limit	Margin
		MHz	dBm	dBm	dB
DSSS	CH37	2402	-9.7	29.0	-38.7
	CH20	2446	-10.0	29.0	-39.0
	CH39	2480	-10.1	29.0	-39.1

RSS-247 5.4 (d)					
Modulation	Channel	Frequency	Measured Conducted TX Power	Conducted Tx Power Limit	Margin
		MHz	dBm	dBm	dB
DSSS	CH37	2402	-9.7	30.0	-39.7
	CH20	2446	-10.0	30.0	-40.0
	CH39	2480	-10.1	30.0	-40.1

RSS-247 5.4 (d)							
Modulation	Channel	Frequency	Measured Conducted TX Power	Antenna gain	EIRP	EIRP Limit	Margin
		MHz	dBm	dBd	dBm	dBm	dB
DSSS	CH37	2402	-9.7	7.0	-2.7	36.0	-38.7
	CH20	2446	-10.0	7.0	-3.0	36.0	-39.0
	CH39	2480	-10.1	7.0	-3.1	36.0	-39.1

Peak Power Limit according to FCC Part 15, Section 15.247(b)(4):

Frequency (MHz)	Peak Power Limit	
	(dBm)	(W)
902-928	30	1.0
2400-2483.5	29	1.0
5725-5850	30	1.0

Peak output power limit according to RSS-247 6.3.2:

Frequency (MHz)	Peak Power Limit	
	(dBm)	(W)
902-928	30	1.0
2400-2483.5	30	1.0

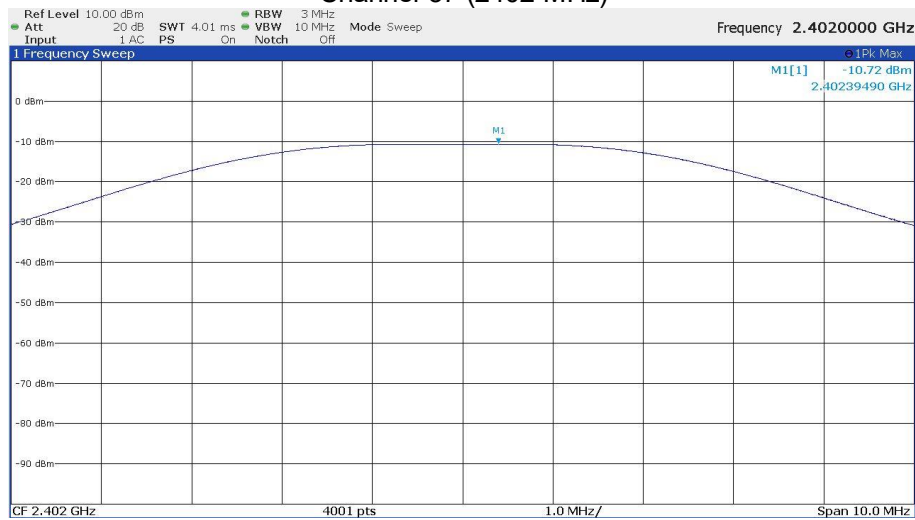
Frequency (MHz)	EIRP Limit	
	(dBm)	(W)
902-928	36	4.0
2400-2483.5	36	4.0

The requirements are **FULFILLED**.

Remarks: For conducted measurement a 20cm MHF4-SMA cable with cable loss 1 dB was used.
For detailed test result please see the following test protocols.

5.3.6 Test protocols

Channel 37 (2402 MHz)



Channel 20 (2446 MHz)



Channel 39 (2480 MHz)



5.4 Power spectral density

For test instruments and accessories used see section 6 Part **MB**.

5.4.1 Description of the test location

Test location: Shielded Room SR6

5.4.2 Photo documentation of the test set-up

See Attachment B for detailed photo documentation of the test set-up.

5.4.3 Applicable standard

According to FCC Part 15, Section 15.247(e):

For digitally modulated systems, the power spectral density radiated 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. This power spectral density shall be determined in accordance with the provisions of paragraph (b) of this section. The same method of determining the radiated output power shall be used to determine the power spectral density.

According to RSS-247 6.3.1:

The following applies to the bands 902-928 MHz and 2400-2483.5 MHz:

- a. the minimum 6 dB bandwidth shall be 500 kHz.
- b. the transmitter power spectral density conducted from the transmitter to the antenna(s) shall not be greater than 8 dBm/3 kHz band during any time interval of continuous transmission. This power spectral density shall be determined in accordance with the provisions of section 6.3.2 The power spectral density shall be determined using the same method as is used to determine the maximum conducted output power

5.4.4 Description of Measurement

The measurement is performed using the procedure set out in 11.10 of ANSI C63.10. The power measurement was done as peak power measurement. Therefore, the PKPSD is measured. The max peak was located with the spectrum analyser and a marker set to peak.

Spectrum analyser settings:

RBW: 3 kHz, VBW: 10 kHz, Detector: Peak, Sweep time: Auto

5.4.5 Test result

FCC §15.247 (e) RSS-247 5.2 (b)					
Modulation	Channel	Frequency	Measured Conducted PSD	Conducted PSD Limit	Margin
		MHz	dBm/3kHz	dBm/3kHz	dB
DSSS	CH37	2402	-25.4	8.0	-33.4
	CH20	2440	-26.0	8.0	-34.0
	CH39	2480	-26.1	8.0	-34.1

Power spectral density limit according to FCC Part 15, Section 15.247(e):

Frequency (MHz)	Power spectral density limit (dBm/3 kHz)
902-928	8
2400 - 2483.5	8
5725-5850	8

Power spectral density limit according to RSS-247 5.2(b):

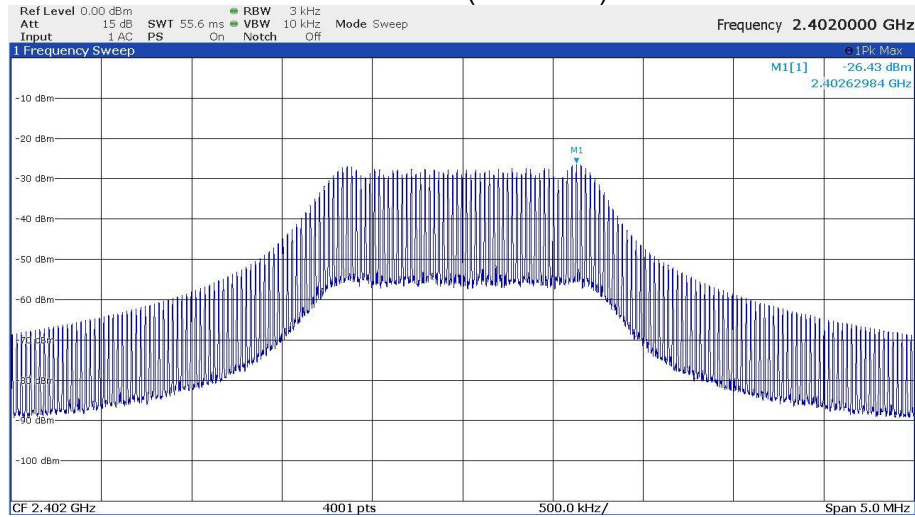
Frequency (MHz)	Power spectral density limit (dBm/3 kHz)
902-928	8
2400 - 2483.5	8

The requirements are **FULFILLED**.

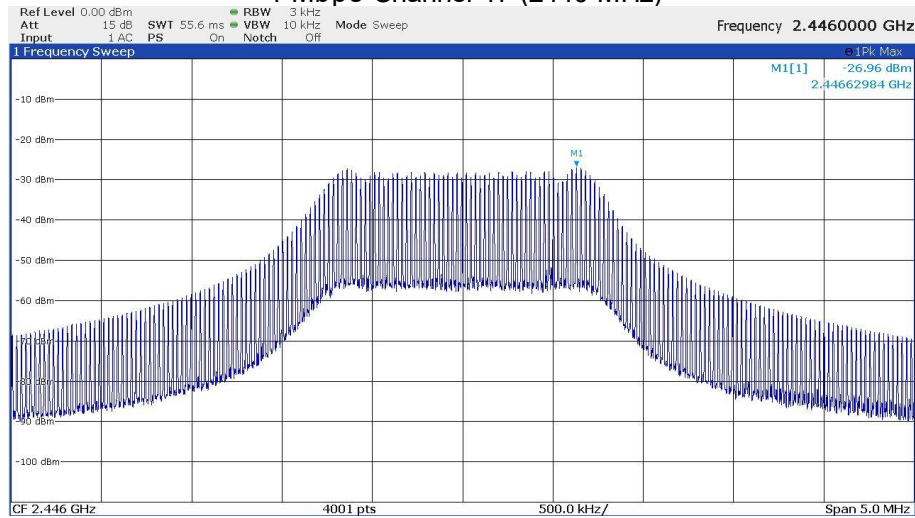
Remarks: For conducted measurement a 20cm MHF4-SMA cable with cable loss 1 dB was used.
For detailed test result please see the following test protocols.

5.4.6 Test protocols

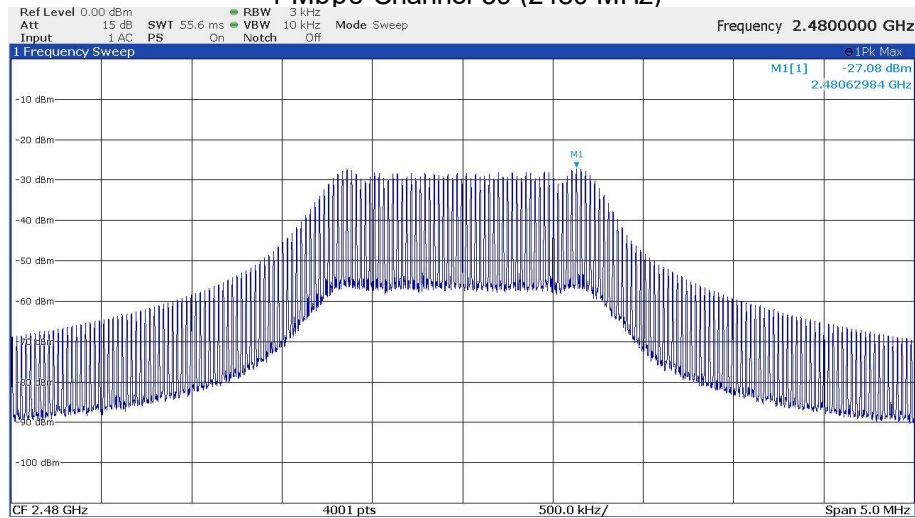
Channel 37 (2402 MHz)



1 Mbps Channel 17 (2440 MHz)



1 Mbps Channel 39 (2480 MHz)



5.5 Spurious emissions radiated

For test instruments and accessories used see section 6 Part **SER1, SER 2, SER 3**.

5.5.1 Description of the test location

Test location: Anechoic chamber SAC2
Test location: Anechoic chamber FAR1
Test distance: 3 m

5.5.2 Photo documentation of the test set-up

See Attachment B for detailed photo documentation of the test set-up.

5.5.3 Applicable standard

According to FCC Part 15, Section 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.

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) (see § 15.205(c)).

According to RSS-247 6.6:

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum device, digitally modulated device, or hybrid system 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 6.3.2, 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.

5.5.4 Description of Measurement

The restricted bands are measured radiated. The span of the spectrum analyser is set wide enough to capture the restricted band and measure the peak level of the emission operating on the channel closest to the band edge, as well as any modulation products which fall outside of the authorized band of operation. The restricted bands are measured falling emissions into it and the nearest restricted band are checked for emissions also the restricted band for the harmonics of the carrier.

The radiated power of the spurious emission from the EUT is measured in a test setup following the procedures set out in ANSI C63.10. If the emission level of the EUT in peak mode complies with the average limit is 20 dB lower, then testing will be stopped and peak values of the EUT will be reported, otherwise the emission will be measured in average mode again and reported.

Measurements are performed in following order:

1) Measurement of emissions according to General Limit specified in section 15.209(a):

Test receiver settings for SER1, SER2:

9kHz-150kHz RBW: 200 Hz Detector: Quasi peak* Meas. Time: 1 s,
 150kHz-30MHz RBW: 9 kHz Detector: Quasi peak* Meas. Time: 1 s,
 30MHz-1GHz RBW: 120 MHz Detector: Quasi peak Meas. Time: 1 s,
 *AV Detector in the ranges 9-90kHz and 110-490kHz

Spectrum analyser settings for SER3:

1GHz-26GHz RBW: 1 MHz Detector: Max. peak Trace: Max. hold Sweep: Auto

2) If emissions outside the Restricted Bands are above General Limit additional measurements of emissions according to Spurious Emissions Limit specified in section 15.247(d) are performed:

Spectrum analyser settings:

RBW: 100 kHz VBW: 300 kHz Detector: Max. peak Trace: Max. hold Sweep: Auto

Remarks: Radiated measurement was done on the 23.09.2024 and 25.09.2024

For detailed test result please see the following test protocols.

5.5.5 Test result

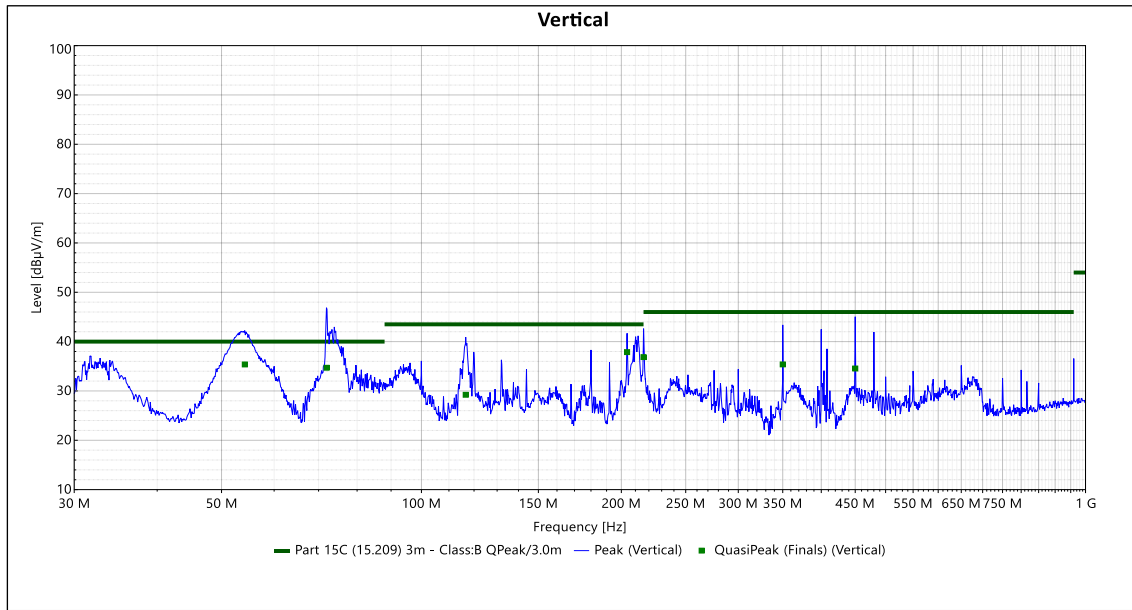
$f < 30$ MHz

Frequency (MHz)	Reading (dB μ V)	Correction * (dB)	Field strength (dB μ V/m)	Limit (dB μ V/m)	Dlimit (dB)
0.033	11.5	-60.8	-49.3	37.3	-86.6
0.225	31.6	17.8	-30.6	20.6	-51.2
1.800	17.9	18.3	-3.8	30.0	-33.8
2.200	22.2	18.3	0.5	30.0	-29.5
2.500	24.2	18.2	2.4	30.0	-27.6
12.890	15.6	18.1	-6.3	30.0	-36.3

Note: No emissions detected in the frequency range 9 kHz to 30 MHz. The recorded values are solely noise values.

30 MHz < f < 1000 MHz:

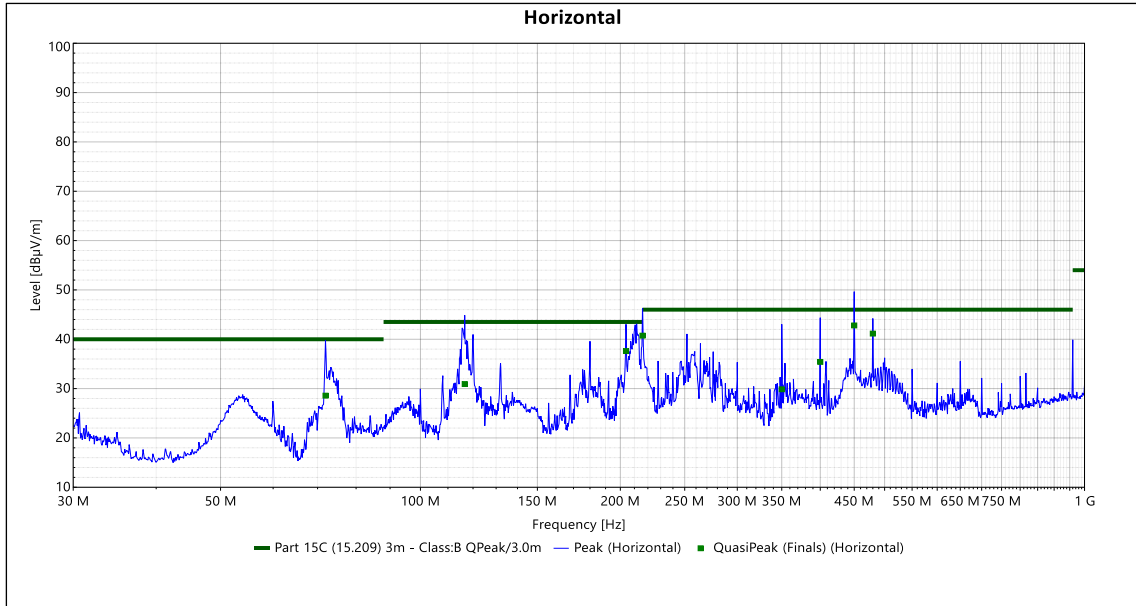
Position	Vertical		
Limit	FCC/Part 15C (15.209) 3m	Class	B



Finals

Frequency (Hz)	QuasiPeak (dBµV/m)	QP Margin	QP Limit (dBµV/m)	angle	height	polarization	RBW (Hz)	Correction (dB)
54.207 M	35.37	-4.63	40	357.98	1	Vertical	120000	-11.96
71.966 M	34.7	-5.3	40	237.11	1	Vertical	120000	-14.16
116.606 M	29.22	-14.28	43.5	131.01	1	Vertical	120000	-13.3
204.003 M	37.87	-5.63	43.5	96.66	1	Vertical	120000	-14.1
216.012 M	36.86	-9.14	46	71.17	1	Vertical	120000	-13.76
350.012 M	35.38	-10.62	46	0.3	1.5	Vertical	120000	-10.35
449.992 M	34.55	-11.45	46	213.53	1	Vertical	120000	-8.09

Position	Horizontal		
Limit	FCC/Part 15C (15.209) 3m	Class	B



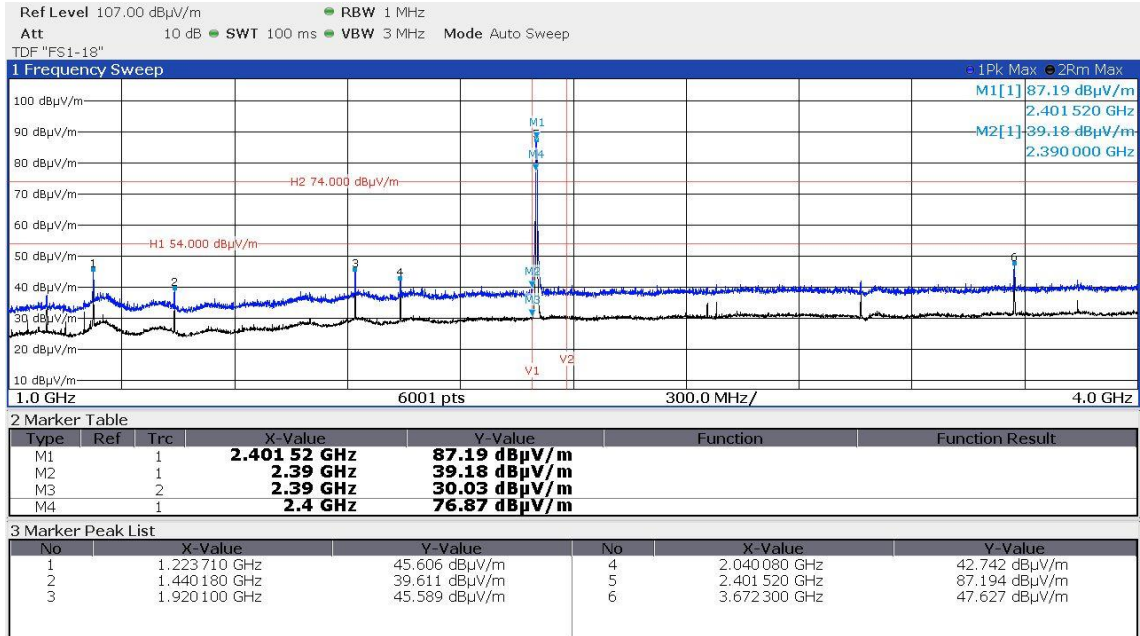
Finals

Frequency (Hz)	QuasiPeak (dBµV/m)	QP Margin	QP Limit (dBµV/m)	angle	height	polarization	RBW (Hz)	Correction (dB)
71.958 M	28.57	-11.43	40	84.65	3.5	Horizontal	120000	-13.95
116.612 M	30.92	-12.58	43.5	255.22	1.5	Horizontal	120000	-13.7
203.97 M	37.61	-5.89	43.5	2.73	1.5	Horizontal	120000	-14.13
215.967 M	40.73	-2.77	43.5	355.34	1.5	Horizontal	120000	-13.9
350.006 M	29.86	-16.14	46	227.37	1	Horizontal	120000	-10.19
399.994 M	35.41	-10.59	46	285.84	1	Horizontal	120000	-8.82
449.998 M	42.8	-3.2	46	289.25	1	Horizontal	120000	-7.91
479.969 M	41.15	-4.85	46	148.68	1	Horizontal	120000	-7.41

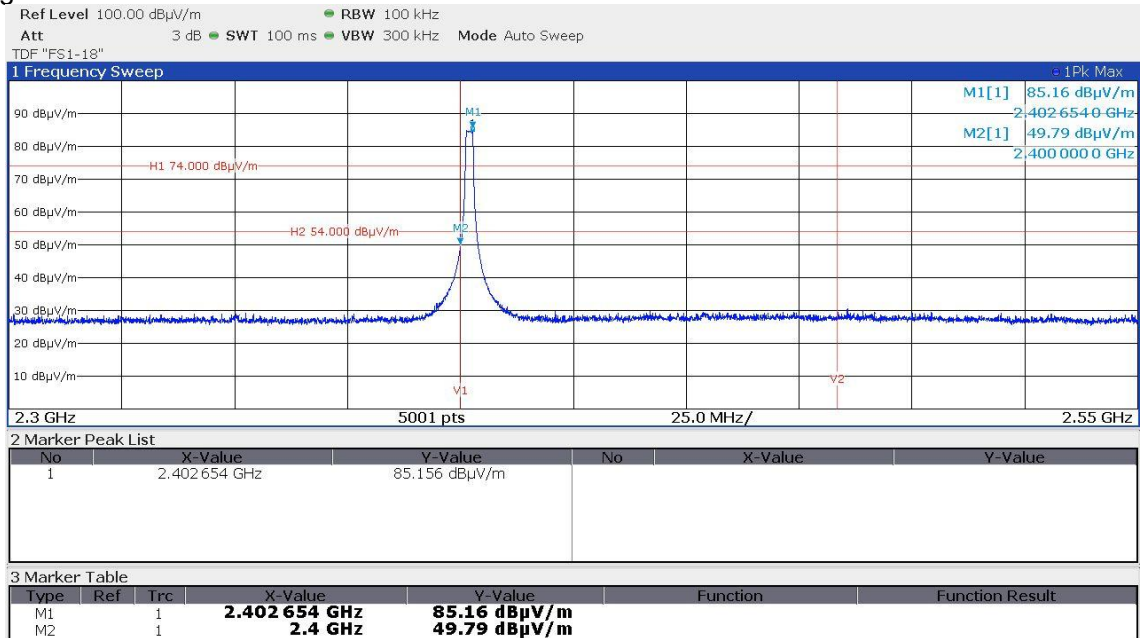
f > 1000 MHz

Lowest Channel

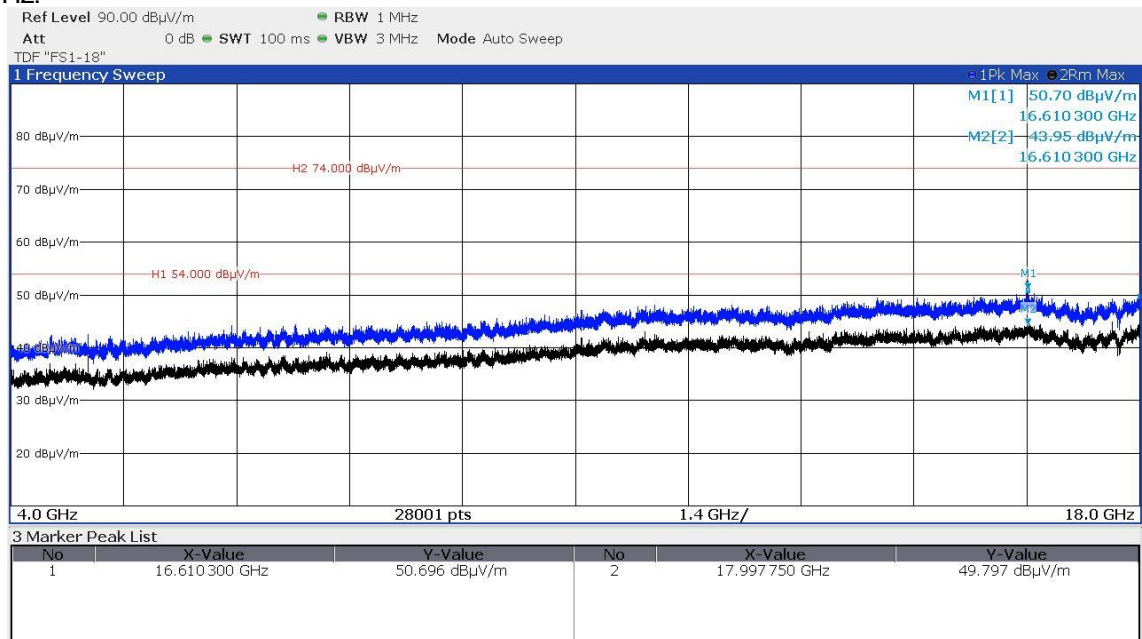
1 – 4 GHz:



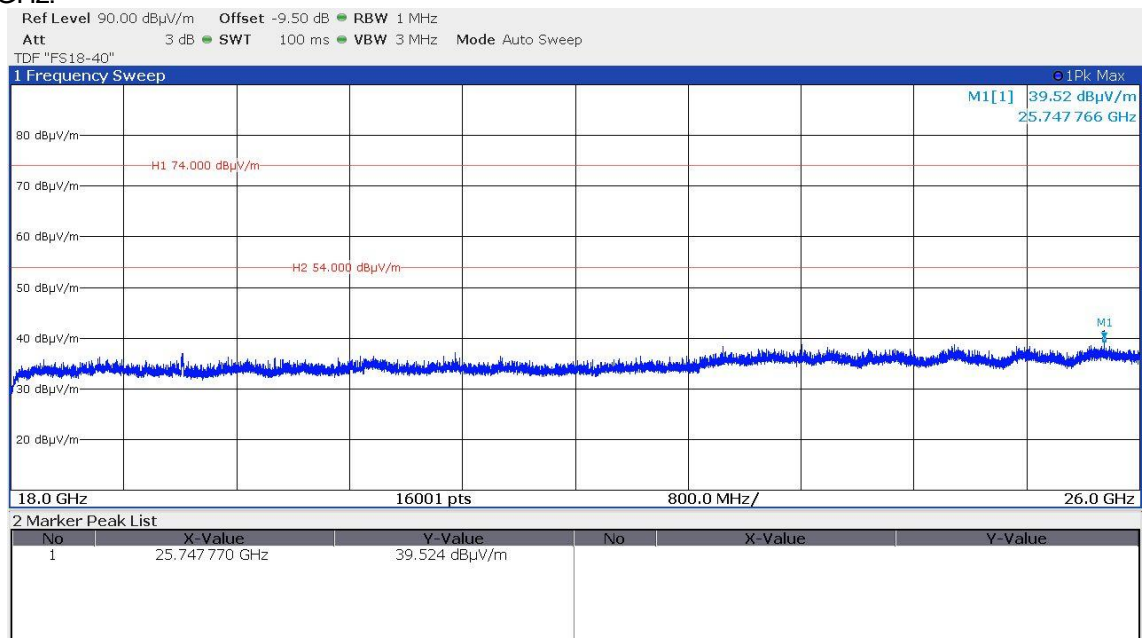
Band edge:



4 – 18 GHz:

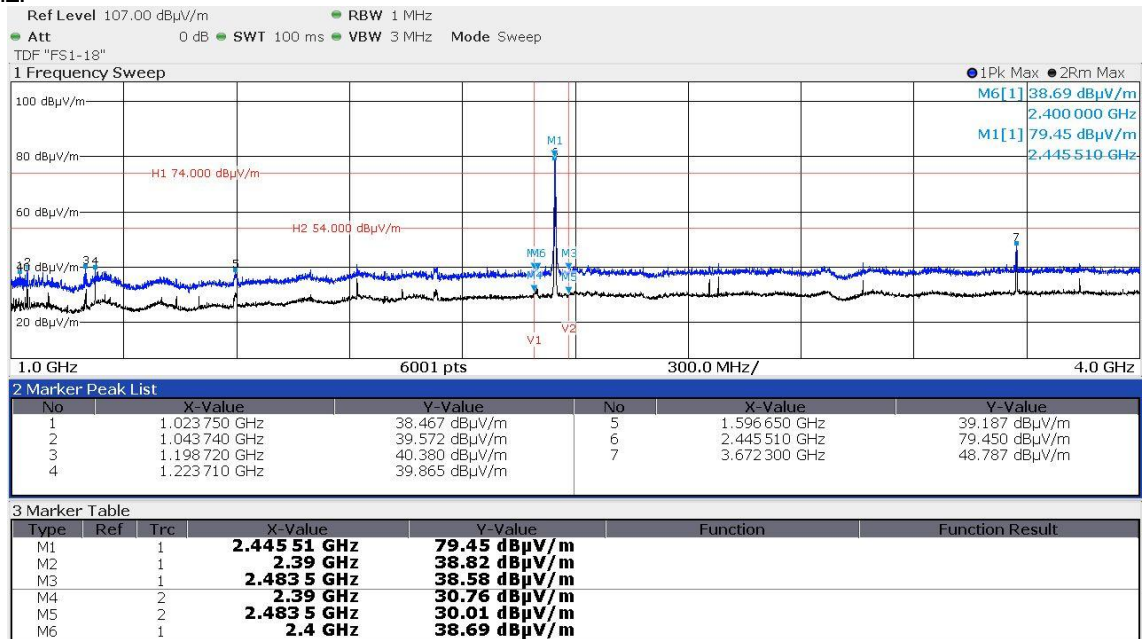


18 – 26 GHz:

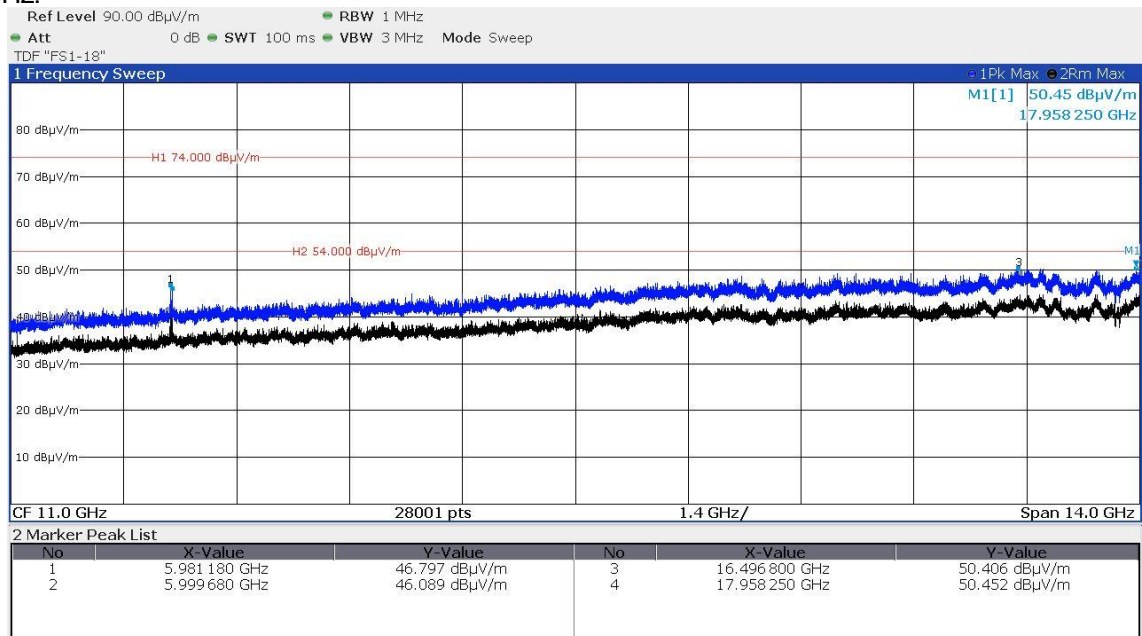


Middle Channel

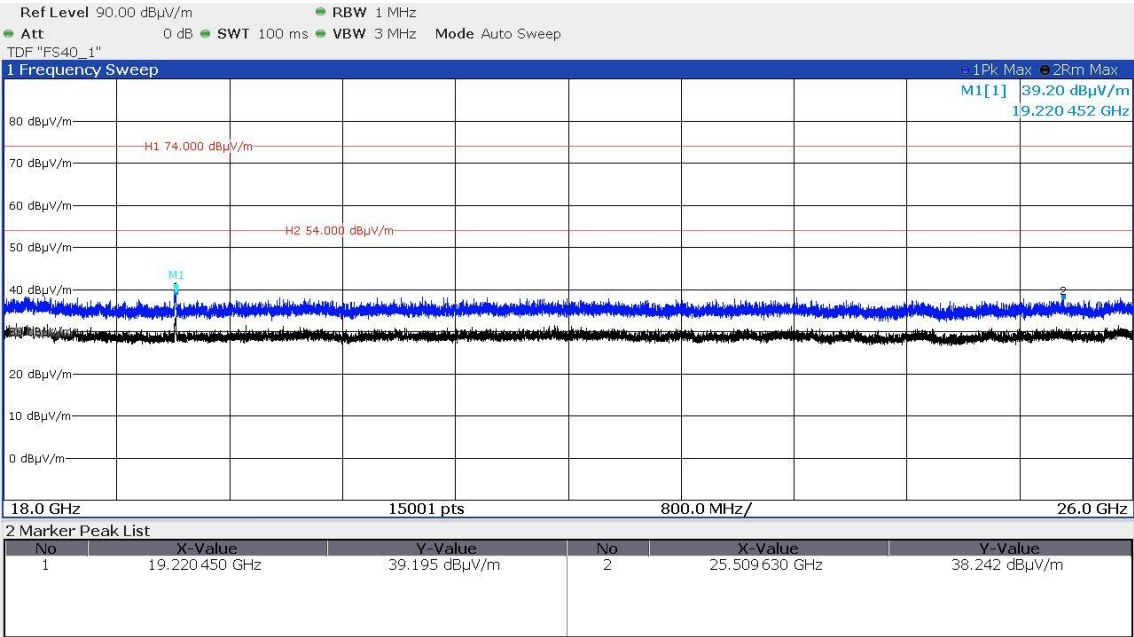
1 – 4 GHz:



4 – 18 GHz:

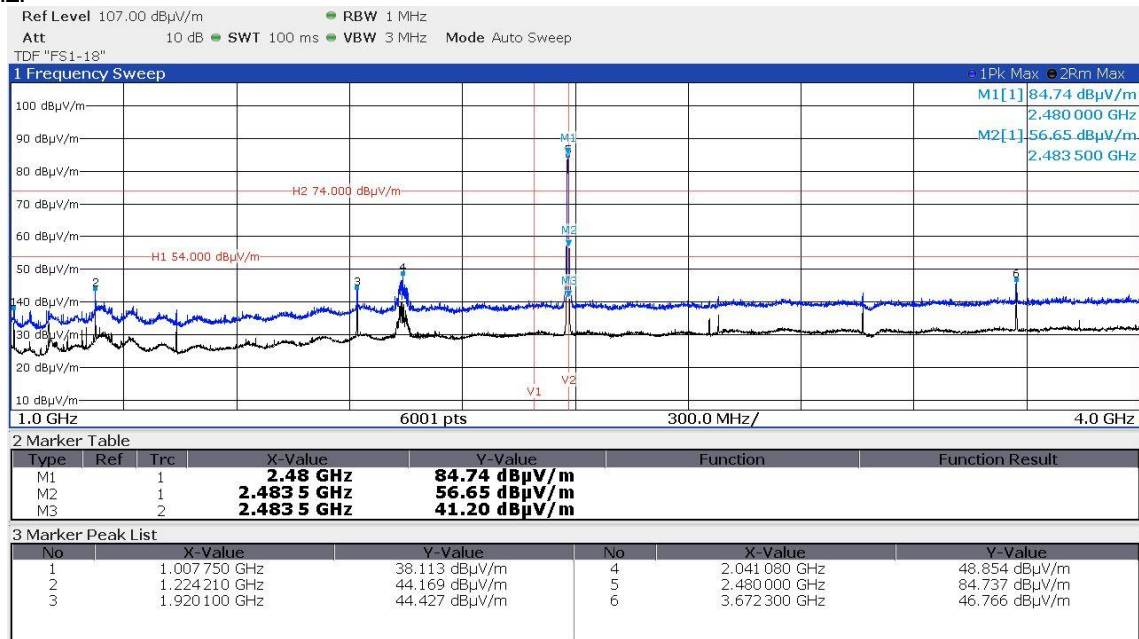


18 – 26 GHz:

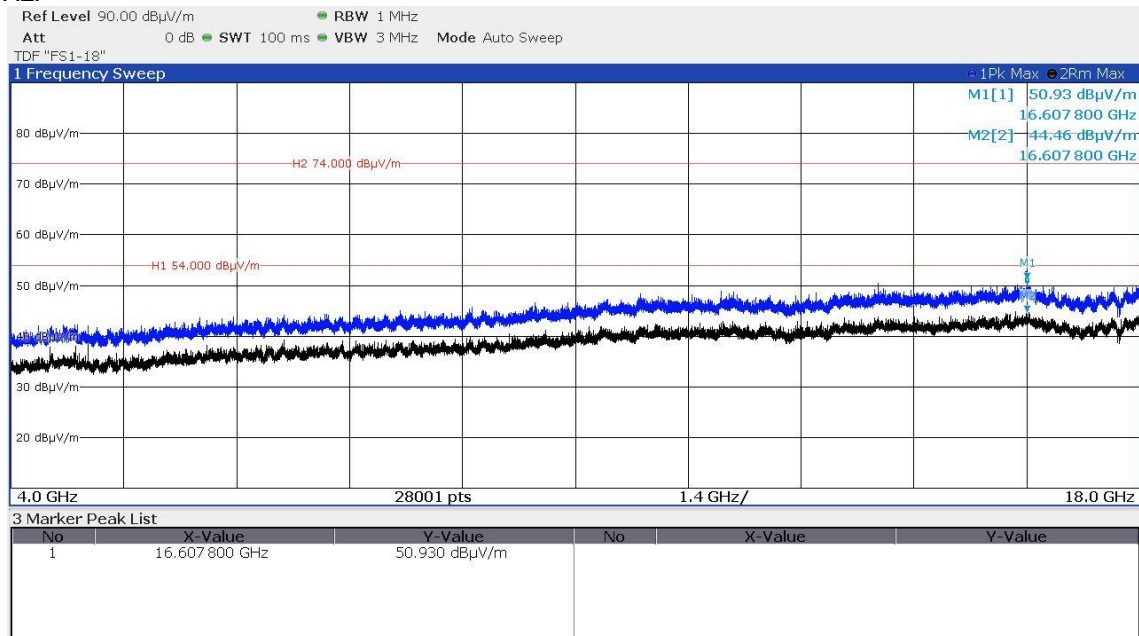


Highest Channel

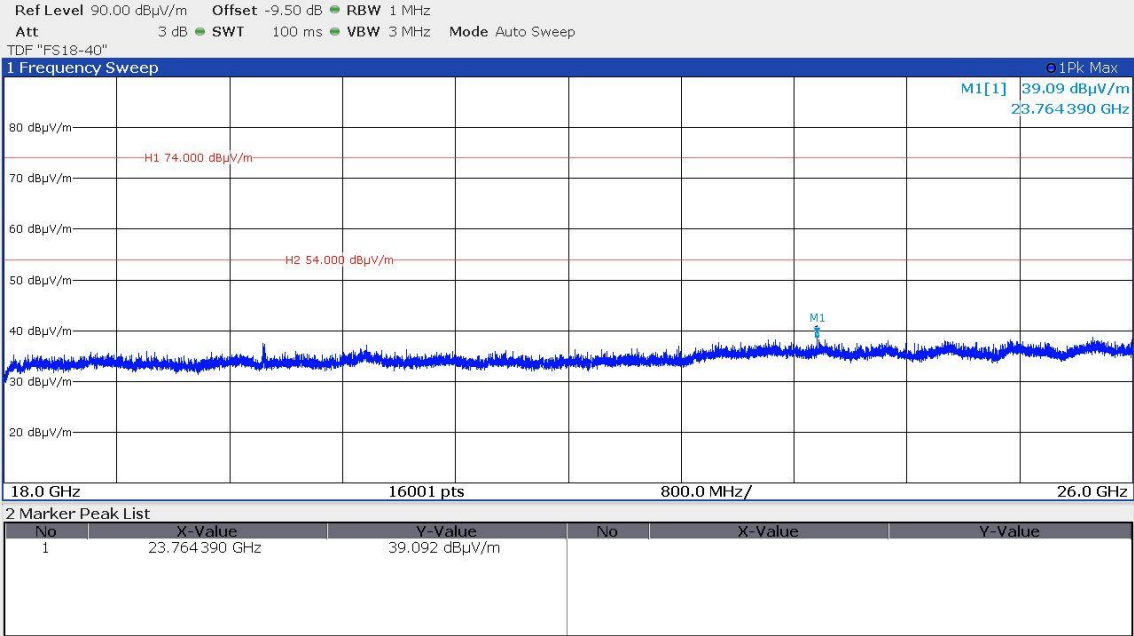
1 – 4 GHz:



4 – 18 GHz:



18 – 26 GHz:



Radiated limits according to FCC Part 15, Section 15.209 for spurious emissions which fall in restricted bands:

Frequency (MHz)	15.209 Limits (μV/m)	Measurement distance (m)
0.009 - -0.49	2400/f(kHz)	300
0.49 – 1.705	24000/f(kHz)	30
1.705 – 30.0	30	30
30 - 88	100	3
88 - 216	150	3
216 - 960	200	3
Above 960	500	3

Radiated limits according to RSS-Gen, 8.9 for spurious emissions which fall in restricted bands:

Frequency (MHz)	RSS-Gen Limits (μA/m)	Measurement distance (m)
0.009 - -0.49	63.7/f(kHz)	300
0.49 – 1.705	63.7/f(kHz)	30
1.705 – 30.0	0.08	30

Frequency (MHz)	RSS-Gen Limits (μV/m)	Measurement distance (m)
30 - 88	100	3
88 - 216	150	3
216 - 960	200	3
Above 960	500	3

Limit according to FCC Part 15, Section 15.247(d) for emissions falling not in restricted bands:

Frequency (MHz)	Spurious emission limit
Below 1000	20 dB below the highest level of the desired power
Above 1000	20 dB below the highest level of the desired power

Attenuation below the general limits specified in Section 15.209(a) is not required.

Limit according to RSS-247, 6.6 for emissions falling not in restricted bands:

Frequency (MHz)	Spurious emission limit
Below 1000	20 dB below the highest level of the desired power
Above 1000	20 dB below the highest level of the desired power

Attenuation below the general limits specified in RSS-Gen is not required.

Restricted bands of operation:

The field strength of emissions appearing within these frequency bands shall not exceed the limits shown in Section 15.209

MHz	MHz	MHz	GHz
0.090 – 0.110	16.42 – 16.423	399.9 – 410	4.5 – 5.15
0.495 – 0.505	16.69475 – 16.69525	608 – 614	5.35 – 5.46
2.1735 – 2.1905	16.80425 – 16.80475	960 – 1240	7.25 – 7.75
4.125 – 4.128	25.5 – 25.67	1300 – 1427	8.025 – 8.5
4.17725 – 4.17775	37.5 – 38.25	1435 – 1626.5	9.0 – 9.2
4.20725 – 4.20775	73 – 74.6	1645.5 – 1646.5	9.3 – 9.5
6.215 – 6.218	74.8 – 75.2	1660 – 1710	10.6 – 12.7
6.26775 – 6.26825	108 – 121.94	1718.8 – 1722.2	13.25 – 13.4
6.31175 – 6.31225	123 – 138	2200 – 2300	14.47 – 14.5
8.291 – 8.294	149.9 – 150.05	2310 – 2390	15.35 – 16.2
8.362 – 8.366	156.52475 – 156.52525	2483.5 – 2500	17.7 – 21.4
8.37625 – 8.38675	156.7 – 156.9	2690 – 2900	22.01 – 23.12
8.41425 – 8.41475	162.0125 – 167.17	3260 – 3267	23.6 – 24.0
12.29 – 12.293	167.72 – 173.2	3332 – 3339	31.2 – 31.8
12.51975 – 12.52025	240 – 285	3345.8 – 3358	36.43 – 36.5
12.57675 – 12.57725	322 – 335.4	3600 – 4400	Above 38.6

RSS-Gen, Table 6 – Restricted Frequency Bands

MHz	MHz	MHz	GHz
0.090 - 0.110	12.57675 - 12.57725	399.9 - 410	7.250 - 7.750
0.495 - 0.505	13.36 - 13.41	608 - 614	8.025 – 8.500
2.1735 - 2.1905	16.42 - 16.423	960 - 1427	9.0 - 9.2
3.020 - 3.026	16.69475 - 16.69525	1435 - 1626.5	9.3 - 9.5
4.125 - 4.128	16.80425 - 16.80475	1645.5 - 1646.5	10.6 - 12.7
4.17725 - 4.17775	25.5 - 25.67	1660 - 1710	13.25 - 13.4
4.20725 - 4.20775	37.5 - 38.25	1718.8 - 1722.2	14.47 - 14.5
5.677 - 5.683	73 - 74.6	2200 - 2300	15.35 - 16.2
6.215 - 6.218	74.8 - 75.2	2310 - 2390	17.7 - 21.4
6.26775 - 6.26825	108 – 138	2483.5 - 2500	22.01 - 23.12
6.31175 - 6.31225	149.9 - 150.05	2655 - 2900	23.6 - 24.0
8.291 - 8.294	156.52475 - 156.52525	3260 – 3267	31.2 - 31.8
8.362 - 8.366	156.7 - 156.9	3332 - 3339	36.43 - 36.5
8.37625 - 8.38675	162.0125 - 167.17	3345.8 - 3358	Above 38.6
8.41425 - 8.41475	167.72 - 173.2	3500 - 4400	
12.29 - 12.293	240 – 285	4500 - 5150	
12.51975 - 12.52025	322 - 335.4	5350 - 5460	

The requirements are **FULFILLED**.

Remarks: The measurement was performed up to the 10th harmonic. Only the worst-case plots are listed.

6 USED TEST EQUIPMENT AND ACCESSORIES

All test instruments used are calibrated and verified regularly. The calibration history is available on request.

Test ID	Model Type	Kind of Equipment	Manufacturer	Equipment No.	Next Calib.	Last Calib.	Next Verif.	Last Verif.
A 4	ESR3	EMI Test Receiver	Rohde & Schwarz Memmingen	09-02/03-21-001	03/07/2025	03/07/2024		
	ENV432	V-Netznachbildung	Rohde & Schwarz Memmingen	09-02/20-21-001	02/09/2026	02/09/2024	02/09/2025	02/09/2024
	KK-SPU195FR01-2X11N-3,5M	Kabelkonf. Spuma_195-	Huber + Suhner	09-02/50-21-037				
	KK-SPU195FR01-2X11N-2M	Kabelkonf. Spuma_195-	Huber + Suhner	09-02/50-21-040				
	CDB-10K-18-50V-NMF-I	DC Blocker	Tactron Elektronik	09-02/50-22-033			17/07/2025	17/07/2024
	BAT-EMC 2023.0.8.0	Nexio Software	EMCO Elektronik GmbH	09-02/68-21-002				
CPC 3	FSW43	Spectrum Analyser	Rohde & Schwarz München	02-02/11-21-001	26/08/2025	26/08/2024		
MB	FSW43	Spectrum Analyser	Rohde & Schwarz München	02-02/11-21-001	26/08/2025	26/08/2024		
SER 1	ESR 7	EMI Test Receiver	Rohde & Schwarz München	02-02/03-17-001	22/10/2025	22/10/2024		
	HFH 2 - Z 2	Antenna	Rohde & Schwarz München	02-02/24-05-020	01/06/2025	01/06/2022	04/09/2025	04/09/2024
SER 2	ESR7	EMI Test Receiver	Rohde & Schwarz Memmingen	09-02/03-21-004	05/08/2025	05/08/2024		
	BBV 9743 B	Broadb. Ampl. 10MHz-6GHz	Schwarzbeck Mess-Elektronik	09-02/17-21-002			19/12/2024	19/12/2023
	VULB9168	Trilog-Broadband	Schwarzbeck Mess-Elektronik	09-02/24-22-003	06/08/2025	06/08/2024	12/08/2025	12/08/2024
	KK-7.8F-2XNM_4.0M	Cable Assembly 7.8	Tactron Elektronik	09-02/50-21-018				
	KK-7.8F-2XNM-10.0M	Cable Assembly 7.8	Tactron Elektronik	09-02/50-21-019				
	KK-7.8F-2XNM_4.5M	Cable Assembly 7.8	Tactron Elektronik	09-02/50-21-023				
	KK-7.8F-2XNM_9.5M	Cable Assembly 7.8	Tactron Elektronik	09-02/50-21-025				
	50F-003 N 3dB	Attenuator 3dB	Tactron Elektronik	09-02/50-22-002				
	CDB-10K-18-50V-NMF-I	DC Blocker	Tactron Elektronik	09-02/50-22-031			17/07/2025	17/07/2024
	BAT-EMC 2023.0.8.0	Nexio Software	EMCO Elektronik GmbH	09-02/68-21-002				

The test report merely corresponds to the test sample. It is not permitted to copy extracts of these test results without the written permission of the test laboratory.

SER 3	ESW26	EMI Test Receiver	Rohde & Schwarz München	02-02/03-17-002	16/04/2025	16/04/2024		
	AMF-6D-01002000-22-10P	RF Amplifier	MITEQ, Inc.	02-02/17-15-004				
	LNA-40-18004000-33-5P	Amplifier 18-40 GHz	MITEQ, Inc.	02-02/17-20-002				
	BBHA 9170	SHF-EHF Horn Antenna	Schwarzbeck Mess-Elektronik	02-02/24-05-013	21/03/2026	21/03/2023		
	3117	Horn Antenna	ETS Lindgren	02-02/24-20-007	20/11/2025	20/11/2024		
	WHK 3.0/18G-10EF	High Pass Filter	Wainwright Instruments GmbH	02-02/50-05-180				
	BAM 4.5-P	Antenna Mast	maturo GmbH	02-02/50-17-024				
	KK-SF106-2X11N-6,5M	RF Cable	Huber + Suhner	02-02/50-18-016				
	0_5 Meter DC-18GHz	NMS111-GL200SC06_5	Tactron Elektronik	09-16/50-23-003				

- End of test report -

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