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RADIO TEST REPORT – TRFWL

Project ID
PRJ0068088

Report ID
REP070639

Type of assessment:
Permissive Change verification

Type of radio equipment:
Zigbee device

Equipment class:
DTS

Applicant:
Trilliant Networks Inc.

Product:
Open Smart Device Interface Module

Models/HVINs:
CL-R0353A-6.3, CL-R0368A-1.4, CL-R0368B-1.2

FCC identifier:
FCC ID: TMB-OSDI4W1

ISED certification number:
IC: 6028A-ODI4W1

Specifications:

- FCC 47 CFR Part 15 Subpart C, §15.247
  - RSS-247, Issue 3, August 2023, Section 5

Date of issue: April 1, 2025

Atefeh Beiginezhad, EMC/RF Specialist
Tested by


Signature

Ketav Jani, EMC/RF Specialist
Reviewed by


Signature

Lab locations

Company name	Nemko Canada Inc.		
Facilities	*Ottawa site:* 303 River Road Ottawa, Ontario Canada K1V 1H2 Tel: +1 613 737 9680 Fax: +1 613 737 9691	*Montréal site:* 292 Labrosse Avenue Pointe-Claire, Québec Canada H9R 5L8 Tel: +1 514 694 2684 Fax: +1 514 694 3528	*Cambridge site:* 1-130 Saltsman Drive Cambridge, Ontario Canada N3E 0B2 Tel: +1 519 650 4811
Test site registration number:	– CA2040 (Ottawa) – CA2041 (Montreal) – CA0101 (Cambridge)		
Website	www.nemko.com		

Limits of responsibility

Note that the results contained in this report relate only to the items tested and were obtained in the period between the date of initial receipt of samples and the date of issue of the report.
This test report has been completed in accordance with the requirements of ISO/IEC 17025. All results contained in this report are within Nemko Canada's ISO/IEC 17025 accreditation.

Copyright notification

Table of Contents

Section 1 Report summary

1.1 Test specifications

FCC 47 CFR Part 15, Subpart C, Clause 15.247	Operation in the 902–928 MHz, 2400–2483.5 MHz, and 5725–585 MHz
RSS-247, Issue 3, August 2023, Section 5	Digital Transmission Systems (DTSs), Frequency Hopping Systems (FHSs) and Licence-Exempt Local Area Network (LE-LAN) Devices

1.2 Test methods

558074 D01 15.247 Meas Guidance v05r02 (April 2, 2019)	Guidance for compliance measurements on digital transmission system, frequency hopping spread spectrum system, and hybrid system devices operating under section 15.247 of the FCC rules.
RSS-Gen, Issue 5, April 2018	General Requirements for Compliance of Radio Apparatus
ANSI C63.10 v2013	American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices

1.3 Exclusions

Partial testing was performed on the product with the transmitter operating to confirm that after the antenna change in the product it still meets the FCC and ISED requirements. This investigation of the final product was done by spot checking emissions, band edge and output power from the device while operating the host as a composite system. This testing was performed with the host product configured in typical operational modes to check the spurious emissions and output power for compliance with all the applicable rules.

1.4 Statement of compliance

In the configuration tested, the EUT was found compliant.

Testing was performed against all relevant requirements of the test standard except as noted in section 1.3 above. Results obtained indicate that the product under test complies in full with the requirements tested. The test results relate only to the items tested.
Determining compliance is based on the results of the compliance measurement, not taking into account measurement uncertainty, in accordance with section 1.3 of ANSI C63.10 v2013.

See "Summary of test results" for full details.

1.5 Test report revision history

Table 1.5-1: *Test report revision history*

Revision #	Date of issue	Details of changes made to test report
REP070639	April 1, 2025	Original report issued

Section 2 Engineering considerations

2.1 Modifications incorporated in the EUT for compliance

There were no modifications performed to the EUT during this assessment.

2.2 Technical judgment

This test report covers only partial testing of unit for C2PC change in reference to original report “REP034463” FCC ID: TMB-OSDI4W1 and IC: 6028A-ODI4W1.

2.3 Model variant declaration

There were no model variants declared by the applicant.

2.4 Deviations from laboratory tests procedures

No deviations were made from laboratory procedures.

Section 3 Test conditions

3.1 Power supply range

The normal test voltage for equipment to be connected to the mains shall be the nominal mains voltage. For the purpose of the present document, the nominal voltage shall be the declared voltage, or any of the declared voltages ±5 %, for which the equipment was designed.

Section 4 Information provided by the applicant

4.1 Disclaimer

This section contains information provided by the applicant and has been utilized to support the test plan. Inaccurate information provided by the applicant can affect the validity of the results contained within this test report. Nemko accepts no responsibility for the information contained within this section and the impact it may have on the test plan and resulting measurements.

4.2 Applicant / Manufacturer

Name	Trilliant Networks Inc.
Address	401 Harrison Oaks Blvd, Suite 300 Cary, Borth Carolina, USA, 27513

4.3 EUT information

Product	Open Smart Device Interface Module
Model name	OSDI-4000-1x
Model numbers	CL-R0353A-6.3, CL-R0368A-1.4, CL-R0368B-1.2
Part number	CL-0368B
Power supply requirements	4.5 Vdc, 1.4 A provided by the host Trilliant Spectra Electric Meter supplied at 240 Vac 60 Hz
Product description and theory of operation	The Trilliant OSDI-4000-1x RF Module is a compact and versatile communication device. It can be easily integrated into a variety of third-party electric, water and gas meters, connected streetlights, and a host of other devices and sensors to implement AMI (Advanced Metering Infrastructure), Smart Grid, Smart City, and IoT Solutions. For this C2PC, it was integrated into the Trilliant Spectra Electric Meter.

4.4 Radio technical information

Classification	Other types of Wideband Data Transmission equipment (e.g. DSSS, OFDM, etc.).
Frequency band	2400–2483.5 MHz
Frequency Min	2405 MHz (OQPSK), 2409.6 MHz (OFDM)
Frequency Max	2475 MHz (OQPSK), 2467.2 MHz (OFDM)
Type of modulation	OQPSK and OFDM
Emission classification	W1D (OQPSK), F1D (OFDM)
Max EIRP, dBm	29.35@ OQPSK low channel
Antenna information	Antenna type: Monopole Antenna gain: 3.5 dBi Manufacturer: Shenzhen Vertex Technology Co., LTD

4.5 EUT setup details

4.5.1 Radio exercise details

Operating conditions	Continuously ON, while allowing the client to control the channels.
Transmitter state	Transmitter set into continuous mode.

4.5.2 EUT setup configuration

Table 4.5-1: *EUT interface ports*

Description	Qty.
Data port	1
Power input	1

Table 4.5-2: *Support equipment*

Description	Brand name	Model, Part number, Serial number, Revision level
Laptop	Dell	SN: 4XF49 A01, MN: Latitude E6430

Table 4.5-3: *Inter-connection cables*

Cable description	From	To	Length (m)
Data cable	[EUT]	laptop	1
Power cable	[EUT]	Power source	1

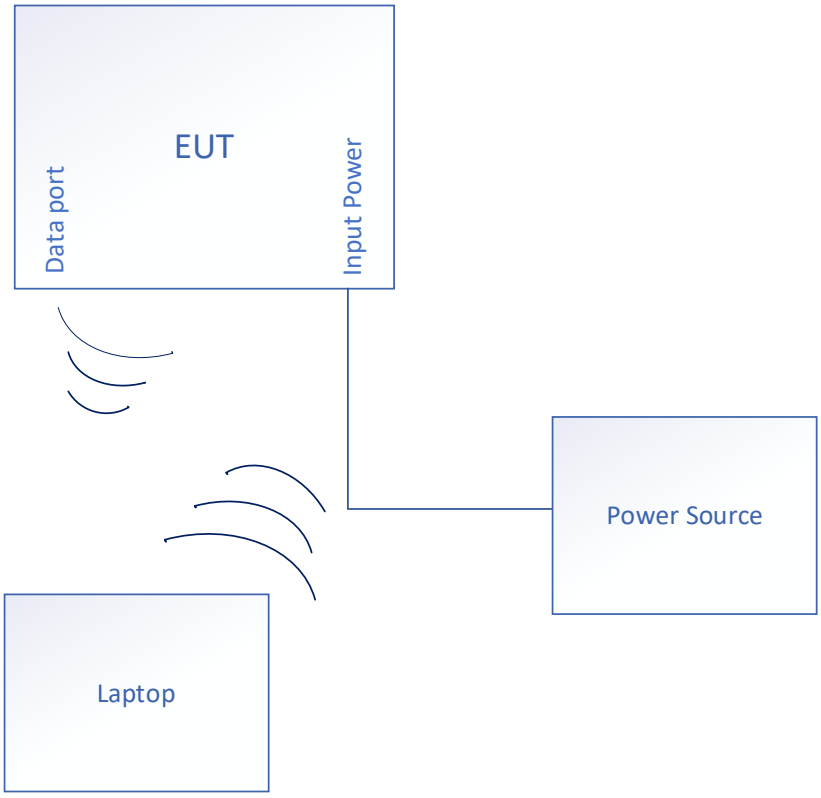


Figure 4.5-1: *Radiated testing block diagram*

Section 5 Summary of test results

5.1 Testing location

Test location (s)	Montreal

5.2 Testing period

Test start date	November 6, 2024	Test end date	November 20, 2024

5.3 Sample information

Receipt date	November 6, 2024	Nemko sample ID number(s)	PRJ00680880001

5.4 FCC test results

Table 5.4-1: *FCC requirements results*

Part	Test description	Verdict
§15.247(d)	Spurious emissions	Pass
15.247 (b)(3)	max peak output power	Pass

Notes: None

5.5 ISED test results

Table 5.5-1: *ISED requirements results*

Part	Test description	Verdict
RSS-247, 5.4	Transmitter output power and EIRP	Pass
RSS-247, 5.5	Unwanted emissions	Pass

Notes: None

Section 6 Test equipment

6.1 Test equipment list

Table 6.1-1: *Equipment list*

Equipment	Manufacturer	Model no.	Asset no.	Cal cycle	Next cal.
50 Ω coax cable	C.C.A.	None	FA003438	—	NCR
50 Ω coax cable	C.C.A.	None	FA002604	—	NCR
2.4 GHz band Notch Filter	Microwave Circuits	N0324413	FA002693	—	NCR
High Pass Filter (> 1100 MHz)	Microwave Circuits	H1G212G1	FA002689	—	NCR
3 m EMI test chamber (Emissions)	TDK	SAC-3	FA002532e	1 year	March 8, 2025
Flush mount turntable	Sunol	FM2022	FA002550	—	NCR
Antenna mast	Sunol	TLT2	FA002552	—	NCR
3 Phase AC Power Supply	apc AC Power	AFC-33045T	FA002677	—	NCR
Receiver/spectrum analyzer	Rohde & Schwarz	ESU 26	FA002043	1 year	December 19, 2024
Bilog antenna (20–2000 MHz)	Sunol	JB1	FA002517	1 year	June 6, 2025
Horn antenna (1–18 GHz)	EMCO	3115	FA001451	1 year	June 6, 2025
LNA (1-18 GHz)	Miteq	N/A	FA003391	1 year	January 9, 2025

Note: NCR - no calibration required,
All equipment related to the contribution of measurement has been included in this list. Such items include, but are not limited to, cables, attenuators, directional couplers, and pre-amps.

Table 6.1-2: *Automation software details*

Test description	Manufacturer of Software	Details
Radiated emissions as of January 29, 2021	Rohde & Schwarz	EMC32, Software for EMC Measurements, Version 10.60.20

6.2 Transmitter output power and e.i.r.p. requirements for DTS in 2.4 GHz

6.2.1 References, definitions and limits

FCC §15.247:

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

(3) For systems using digital modulation in the 2400–2483.5 MHz band: 1 W (30 dBm). As an alternative to a peak power measurement, compliance with the one Watt limit can be based on a measurement of the maximum conducted output power. Maximum Conducted Output Power is defined as the total transmit power delivered to all antennas and antenna elements averaged across all symbols in the signaling alphabet when the transmitter is operating at its maximum power control level. Power must be summed across all antennas and antenna elements. The average must not include any time intervals during which the transmitter is off or is transmitting at a reduced power level. If multiple modes of operation are possible (e.g., alternative modulation methods), the maximum conducted output power is the highest total transmit power occurring in any mode.

(4) The conducted output power limit specified in paragraph (b) of this section is based on the use of antennas with directional gains that do not exceed 6 dBi. Except as shown in paragraph (c) of this section, if transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(1), (b)(2), and (b)(3) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

(c) Operation with directional antenna gains greater than 6 dBi.

(1) Fixed point-to-point operation:

(i) Systems operating in the 2400–2483.5 MHz band that are used exclusively for fixed, point-to-point operations may employ transmitting antennas with directional gain greater than 6 dBi provided the maximum conducted output power of the intentional radiator is reduced by 1 dB for every 3 dB that the directional gain of the antenna exceeds 6 dBi.

(iii) Fixed, point-to-point operation, as used in paragraphs (c)(1)(i) and (c)(1)(ii) of this section, excludes the use of point-to-multipoint systems, omnidirectional applications, and multiple co-located intentional radiators transmitting the same information. The operator of the spread spectrum or digitally modulated intentional radiator or, if the equipment is professionally installed, the installer is responsible for ensuring that the system is used exclusively for fixed, point-to-point operations. The instruction manual furnished with the intentional radiator shall contain language in the installation instructions informing the operator and the installer of this responsibility.

(2) In addition to the provisions in paragraphs (b)(1), (b)(3), (b)(4) and (c)(1)(i) of this section, transmitters operating in the 2400–2483.5 MHz band that emit multiple directional beams, simultaneously or sequentially, for the purpose of directing signals to individual receivers or to groups of receivers provided the emissions comply with the following:

(i) Different information must be transmitted to each receiver.

(ii) If the transmitter employs an antenna system that emits multiple directional beams but does not do emit multiple directional beams simultaneously, the total output power conducted to the array or arrays that comprise the device, i.e., the sum of the power supplied to all antennas, antenna elements, staves, etc. and summed across all carriers or frequency channels, shall not exceed the limit specified in paragraph (b)(1) or (b)(3) of this section, as applicable. However, the total conducted output power shall be reduced by 1 dB below the specified limits for each 3 dB that the directional gain of the antenna/antenna array exceeds 6 dBi. The directional antenna gain shall be computed as follows:

(A) The directional gain shall be calculated as the sum of 10 log (number of array elements or staves) plus the directional gain of the element or stave having the highest gain.

(B) A lower value for the directional gain than that calculated in paragraph (c)(2)(ii)(A) of this section will be accepted if sufficient evidence is presented, e.g., due to shading of the array or coherence loss in the beamforming.

(iii) If a transmitter employs an antenna that operates simultaneously on multiple directional beams using the same or different frequency channels, the power supplied to each emission beam is subject to the power limit specified in paragraph (c)(2)(ii) of this section. If transmitted beams overlap, the power shall be reduced to ensure that their aggregate power does not exceed the limit specified in paragraph (c)(2)(ii) of this section. In addition, the aggregate power transmitted simultaneously on all beams shall not exceed the limit specified in paragraph (c)(2)(ii) of this section by more than 8 dB.

(iv) Transmitters that emit a single directional beam shall operate under the provisions of paragraph (c)(1) of this section.

References, definitions and limits, continued

RSS-247, Clause 5.4:

Devices shall comply with the following requirements, where applicable:

d. For DTSs employing digital modulation techniques operating in the 2400–2483.5 MHz band,, 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).

As an alternative to a peak power measurement, compliance can be based on a measurement of the maximum conducted output power. The maximum conducted output power is the total transmit power delivered to all antennas and antenna elements, averaged across all symbols in the signalling alphabet when the transmitter is operating at its maximum power control level. Power must be summed across all antennas and antenna elements. The average must not include any time intervals during which the transmitter is off or transmitting at a reduced power level. If multiple modes of operation are implemented, the maximum conducted output power is the highest total transmit power occurring in any mode.

e. Fixed point-to-point systems in the 2400–2483.5 MHz band are permitted to have an e.i.r.p. higher than 4 W provided that the higher e.i.r.p. is achieved by employing higher gain directional antennas and not higher transmitter output powers. Point-to-multipoint systems, omnidirectional applications and multiple co-located transmitters transmitting the same information are prohibited from exceeding an e.i.r.p. of 4 W.

f. Transmitters operating in the band 2400–2483.5 MHz, may employ antenna systems that emit multiple directional beams simultaneously or sequentially, for the purpose of directing signals to individual receivers or to groups of receivers, provided that the emissions comply with the following:

i. Different information must be transmitted to each receiver.

ii. If the transmitter employs an antenna system that emits multiple directional beams, but does not emit multiple directional beams simultaneously, the total output power conducted to the array or arrays that comprise the device (i.e. the sum of the power supplied to all antennas, antenna elements, staves, etc., and summed across all carriers or frequency channels) shall not exceed the applicable output power limit specified in sections 5.4(b) and 5.4(d). However, the total conducted output power shall be reduced by 1 dB below the specified limits for each 3 dB that the directional gain of the antenna/antenna array exceeds 6 dBi. The directional antenna gain shall be computed as the sum of 10 log (number of array elements or staves) plus the directional gain of the element or stave having the highest gain.

iii. If a transmitter employs an antenna that operates simultaneously on multiple directional beams using the same or different frequency channels, the power supplied to each emission beam is subject to the applicable power limit specified in sections 5.4(b) and 5.4(d). If transmitted beams overlap, the power shall be reduced to ensure that their aggregate power does not exceed the applicable limit specified in sections 5.4(b) and 5.4(d). In addition, the aggregate power transmitted simultaneously on all beams shall not exceed the applicable limit specified in sections 5.4(b) and 5.4(d) by more than 8 dB.

iv. Transmitters that transmit a single directional beam shall operate under the provisions of sections 5.4(b), 5.4(d) and 5.4(e).

6.2.2 Test summary

Verdict	Pass		
Test date	November 20, 2024	Test engineer	Atefeh Beiginezhad

6.2.3 Observations, settings and special notes

Note The test was performed on the worst-case scenario based on the original report.REP034463

6.2.4 Test data

Table 6.2-1: *Output power and EIRP results (low channel) OQPK*

Frequency, MHz	Measured field strength, dBµV/m	Calculated EIRP, dBm	EIRP limit, dBm	EIRP margin, dB	Antenna gain, dBi	Calculated Conducted power, dBm	Output power limit, dBm	Output power margin, dB
2405	124.58	29.35	36.00	6.65	3.5	25.85	30.00	4.15

Note: EIRP [dBm] = Field Strength [dBµV/m] – 95.23 [dB]
Conducted output power [dBm] = EIRP [dBm] - Antenna gain [dBi]

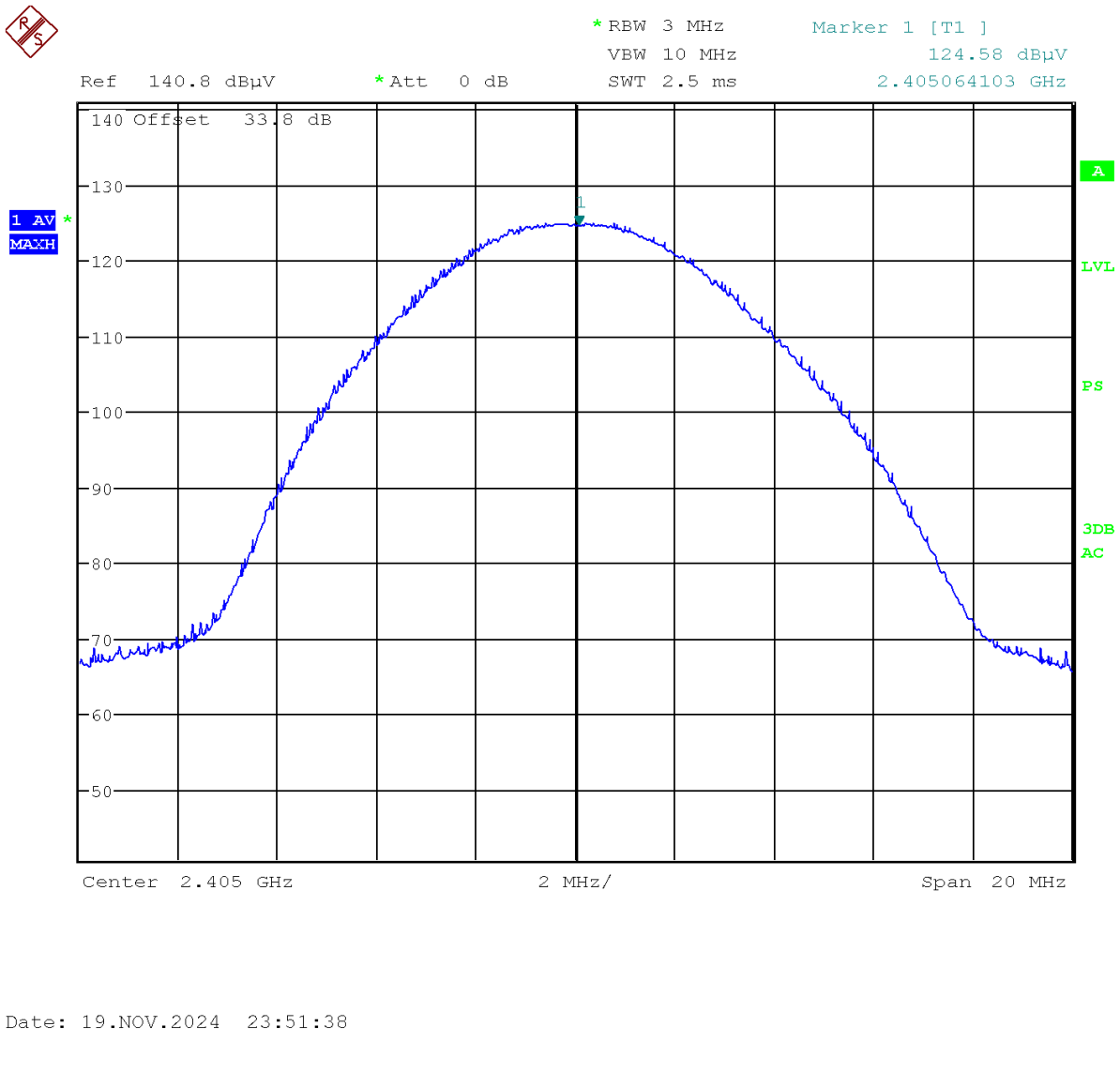


Figure 6.2-1: EIRP result, QPSK

Test data, continued

Table 6.2-2: *Output power and EIRP results (low channel) OFDM*

Frequency, MHz	Measured field strength, dBµV/m	Calculated EIRP, dBm	EIRP limit, dBm	EIRP margin, dB	Antenna gain, dBi	Calculated Conducted power, dBm	Output power limit, dBm	Output power margin, dB
2409.6	121.59	26.36	36.00	9.64	3.5	22.86	30.00	7.14

Note: EIRP [dBm] = Field Strength [dBµV/m] – 95.23 [dB]
Conducted output power [dBm] = EIRP [dBm] - Antenna gain [dBi]

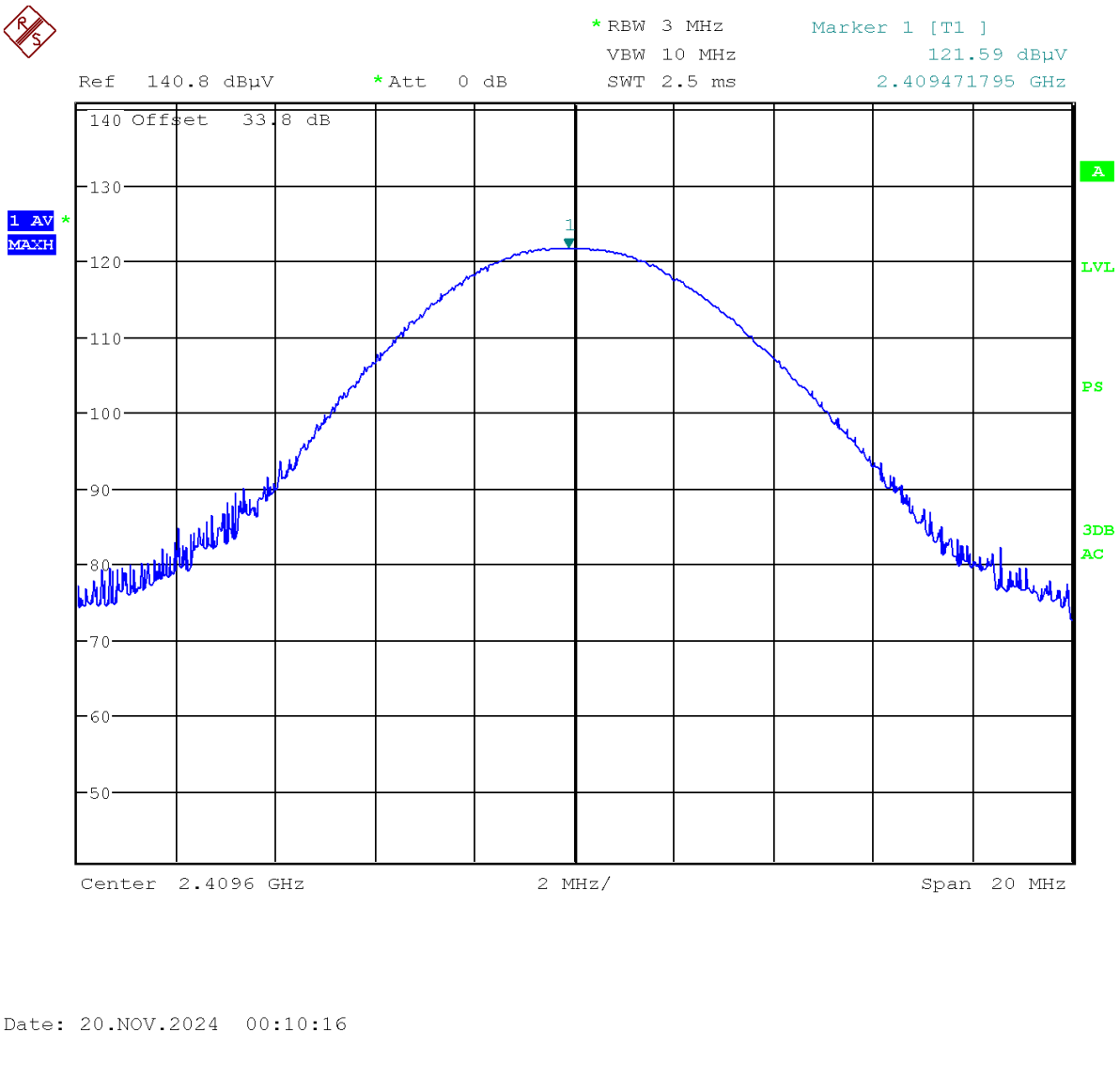


Figure 6.2-2: EIRP results

6.3 Spurious (out-of-band) unwanted emissions

6.3.1 References, definitions and limits

FCC §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) (see §15.205(c)).

RSS-247, 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(d), 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.

RSS-Gen:

8.9 Except where otherwise indicated in the applicable RSS, radiated emissions shall comply with the field strength limits shown in table below.

8.10 Restricted frequency bands are designated primarily for safety-of-life services (distress calling and certain aeronautical activities), certain satellite downlinks, radio astronomy and some government uses. The following conditions related to the restricted frequency bands apply:

a The transmit frequency, including fundamental components of modulation, of licence-exempt radio apparatus shall not fall within the restricted frequency bands.

b Unwanted emissions that fall into restricted frequency bands listed in table 7 shall comply with the limits specified in table below.

c Unwanted emissions that do not fall within the restricted frequency bands shall comply either with the limits specified in the applicable RSS or with those specified in table below.

Table 6.3-1: *FCC §15.209 and RSS-Gen – Radiated emission limits*

	Field strength of emissions		
Frequency, MHz	**µV/m**	**dBµV/m**	**Measurement distance, m**
0.009–0.490	2400/F	$67.6 - 20 \times \log_{10}(F)$	300
0.490–1.705	24000/F	$87.6 - 20 \times \log_{10}(F)$	30
1.705–30.0	30	29.5	30
30–88	100	40.0	3
88–216	150	43.5	3
216–960	200	46.0	3
above 960	500	54.0	3

Notes: In the emission table above, the tighter limit applies at the band edges.
For frequencies above 1 GHz the limit on peak RF emissions is 20 dB above the maximum permitted average emission limit applicable to the equipment under test.

References, definitions and limits, continued

Table 6.3-2: *ISED restricted frequency bands*

MHz	MHz	MHz	GHz
0.090–0.110	12.57675–12.57725	399.9–410	7.25–7.75
0.495–0.505	13.36–13.41	608–614	8.025–8.5
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	
8.41425–8.41475	167.72–173.2	3500–4400	Above 38.6
12.29–12.293	240–285	4500–5150	
12.51975–12.52025	322–335.4	5350–5460	

Note: Certain frequency bands listed in Table 6.3-2 and above 38.6 GHz are designated for licence-exempt applications. These frequency bands and the requirements that apply to related devices are set out in the 200 and 300 series of RSSs.

Table 6.3-3: *FCC restricted frequency bands*

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
13.36–13.41			

6.3.2 Test summary

Verdict	Pass				
Test date	November 6, 2024	Test engineer	Atefeh Beiginezhad		
Temperature	23 °C	Relative humidity	31 %	Air pressure	1011 mbar

6.3.3 Observations, settings and special notes

- As part of the current assessment, the test range of 9 kHz to 10th harmonic has been fully considered and compared to the actual frequencies utilized within the EUT. Since the EUT contains a transmitter in the GHz range, the EUT has been deemed compliant without formal testing in the 9 kHz to 30 MHz test range, therefore formal test results (tabular data and/or plots) are not provided within this test report.
- Radiated measurements were performed at a distance of 3 m.
- DTS emissions in non-restricted frequency bands test was performed as per KDB 558074, section 8.5 with reference to ANSI C63.10 subclause 11.11.
- DTS emissions in restricted frequency bands test was performed as per KDB 558074, section 8.6 with reference to ANSI C63.10 subclause 11.12.
- DTS band-edge emission measurements test was performed as per KDB 558074, section 8.7 with reference to ANSI C63.10 subclause 11.13.
- The DCCF value is calculated on the client side.

Spectrum analyser settings for radiated measurements within restricted bands below 1 GHz:

Resolution bandwidth:	100 kHz
Video bandwidth:	300 kHz
Detector mode:	Peak
Trace mode:	Max Hold

Spectrum analyser settings for peak radiated measurements within restricted bands above 1 GHz:

Resolution bandwidth:	1 MHz
Video bandwidth:	3 MHz
Detector mode:	Peak
Trace mode:	Max Hold

Spectrum analyser settings for average radiated measurements within restricted bands above 1 GHz:

Resolution bandwidth:	1 MHz
Video bandwidth:	10 Hz
Detector mode:	Peak
Trace mode:	Max Hold

6.3.1 Test data

Table 6.3-4: *Radiated field strength measurement results OFDM*

Channel	Frequency, MHz	Peak Field strength, dBµV/m		Margin, dB	Average Field strength, dBµV/m		Margin, dB
		Measured	Limit		Measured	Limit	
Low	2409.6	70.64	74	3.36	50.64	54	3.36
High	2467.2	70.15	74	3.85	50.15	54	3.85

Notes: Field strength includes correction factor of antenna, cable loss, amplifier, and attenuators where applicable.

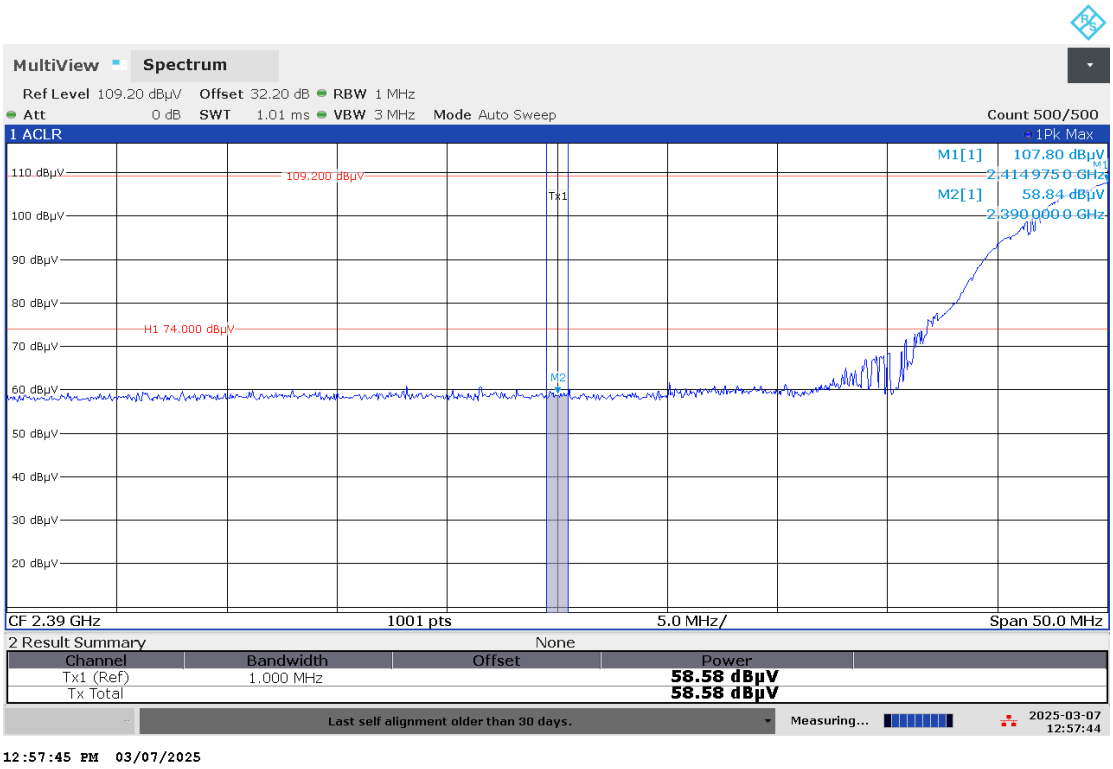


Figure 6.3-1: Radiated spurious emissions on lower band edge Pk

Test data continued

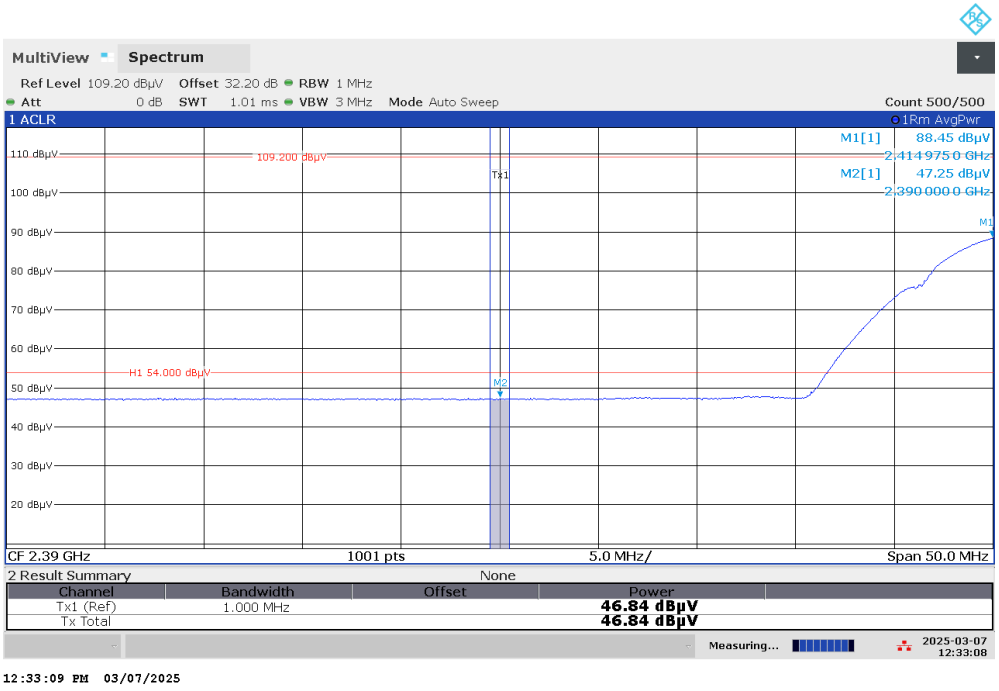


Figure 6.3-2: Radiated spurious emissions on lower band edge RMS

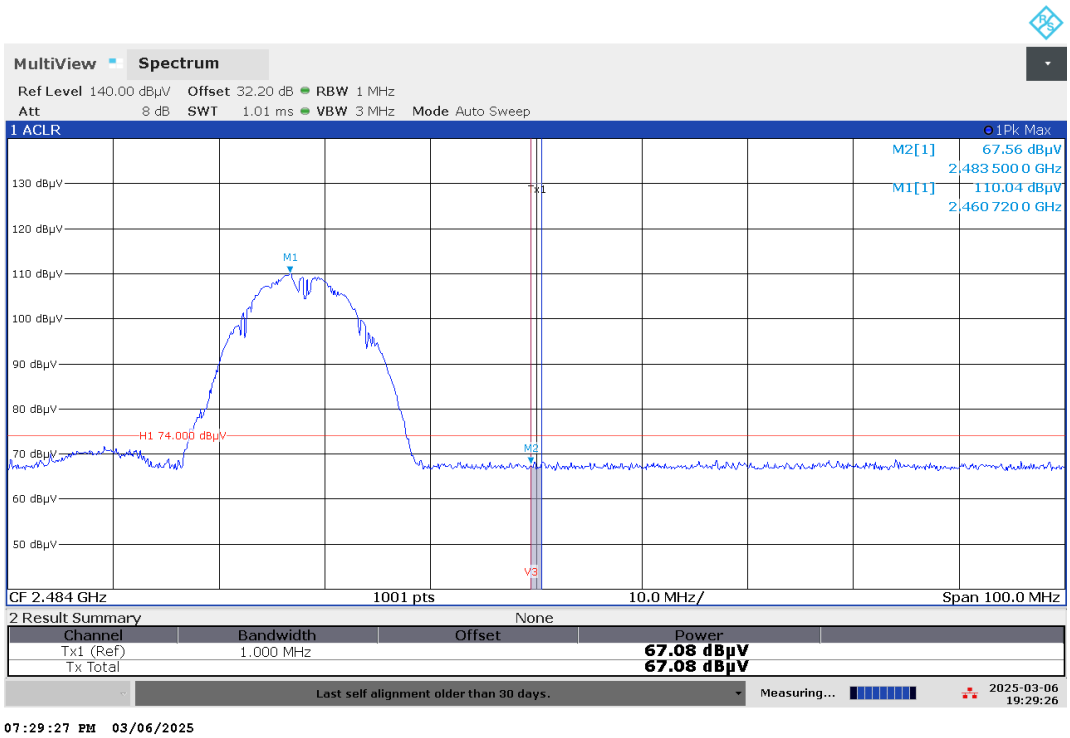


Figure 6.3-3: Radiated spurious emissions on Upper band edge Pk

Test data continued

Figure 6.3-4: Radiated spurious emissions on Upper band edge RMS

Test data, continued

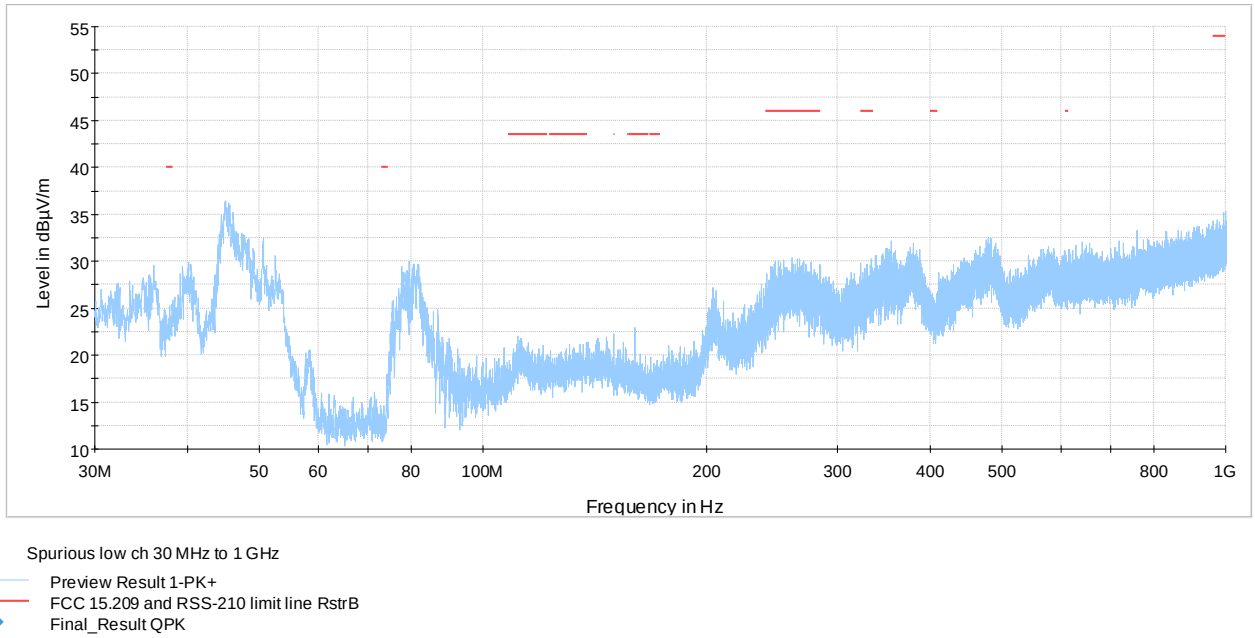


Figure 6.3-5: *radiated spurious emissions from 30 MHz to 1000 MHz low CH OFDM*

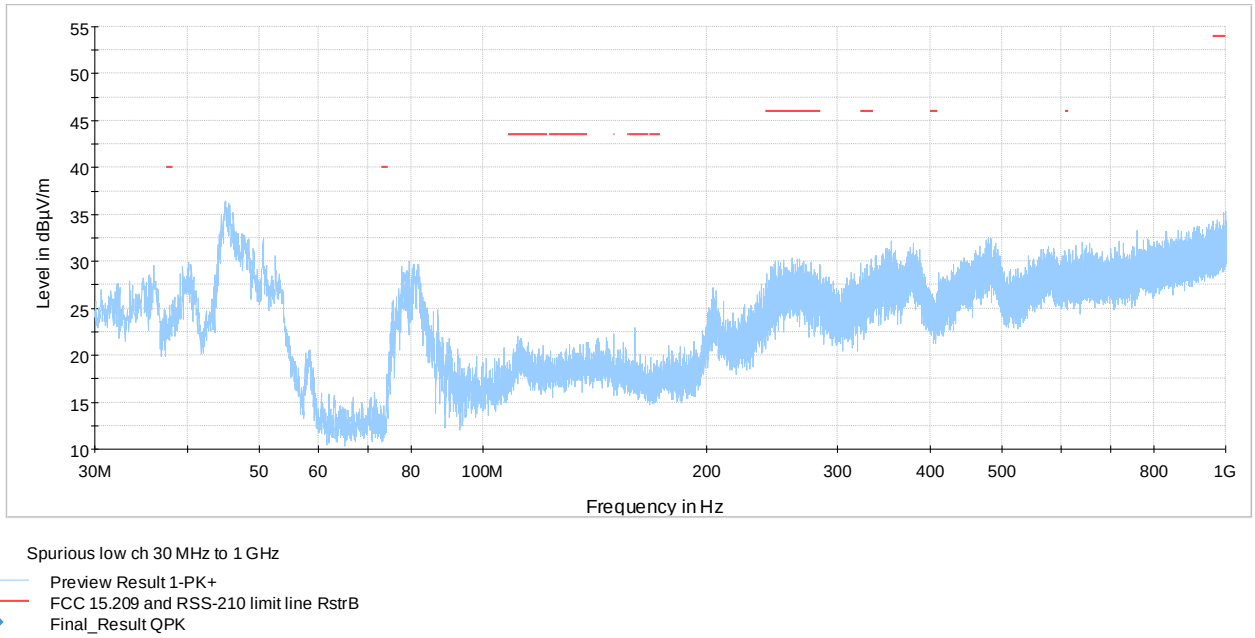


Figure 6.3-6: *radiated spurious emissions from 30 MHz to 1000 MHz low CH OQPSK*

Test data, continued

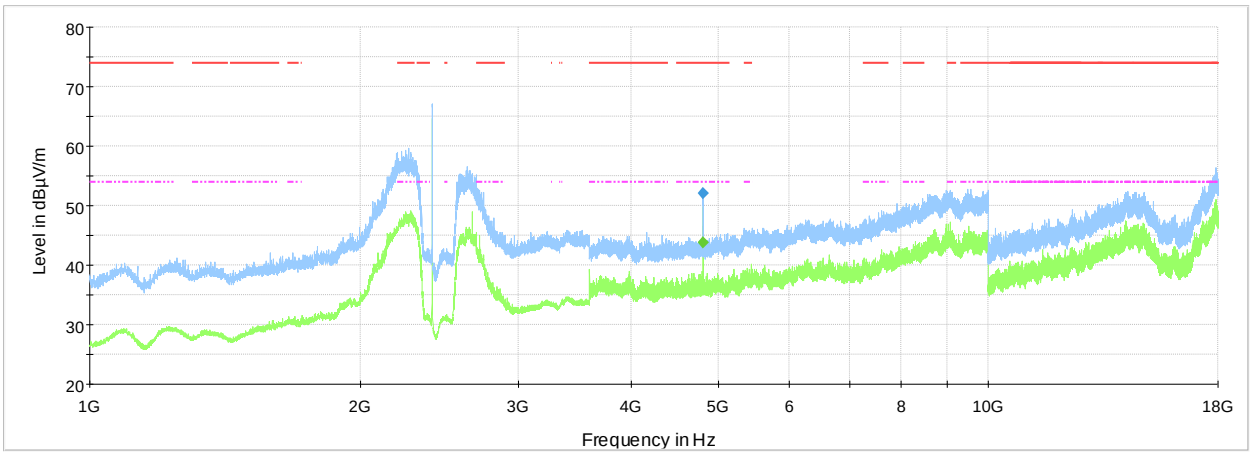


Figure 6.3-7: *radiated spurious emissions from 1 GHz to 18 GHz low CH OQPSK*

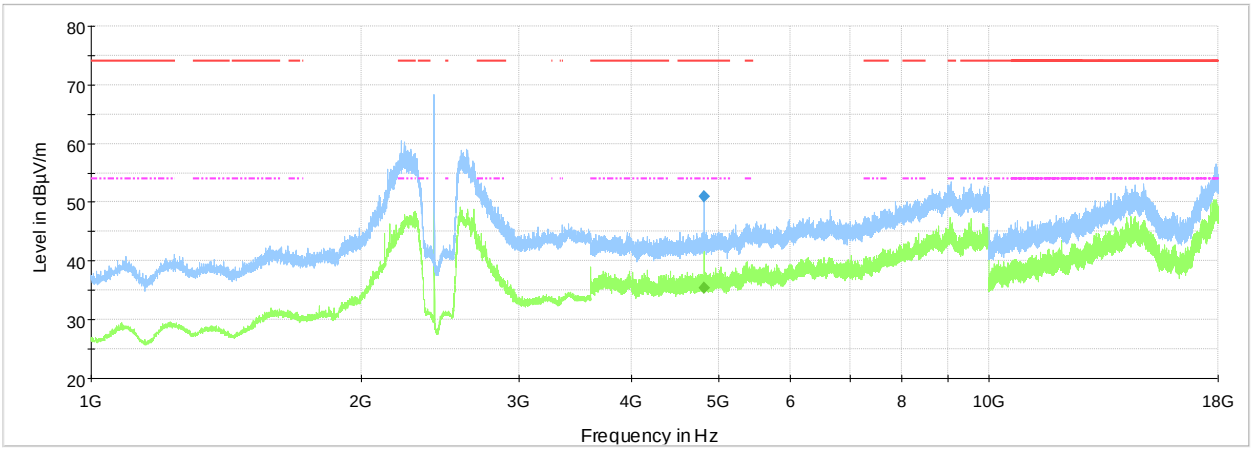
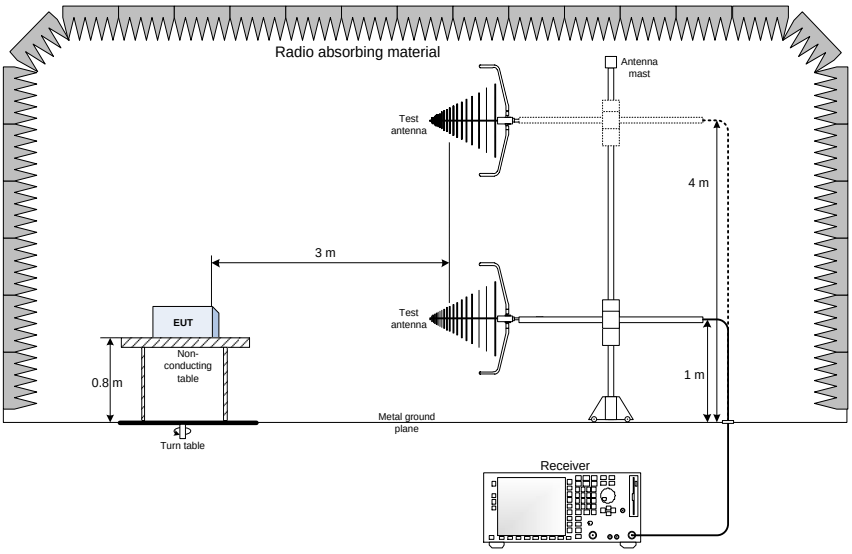


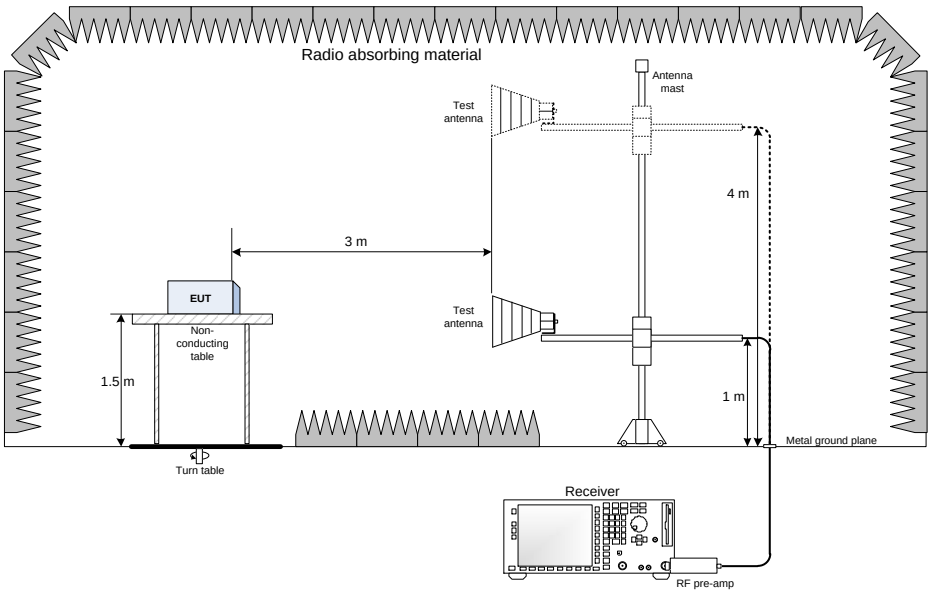
Figure 6.3-8: *radiated spurious emissions from 1 GHz to 18 GHz low CH OFDM*

Section 7 Test setup diagrams

7.1 Radiated emissions set-up for frequencies below 1 GHz



7.2 Radiated emissions set-up for frequencies above 1 GHz



End of the test report