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RADIO TEST REPORT

REPORT NUMBER: M2210007-7

TEST STANDARD: FCC PART 15 SUBPART C SECTION 15.247
ISED RSS-247 SECTION 5.0

CLIENT: REDARC TECHNOLOGIES PTY LTD

DEVICE: MPC ENGINE BAY DC CHARGER

MODEL: BCDCX12050

FCC ID: 2BAH6-BCDCX01

IC: 30290-BCDCX01

DATE OF ISSUE: 8 AUGUST 2023

REVISION TABLE

Version	Sec/Para Changed	Change Made	Date
1		Initial issue of document	8/08/2023

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GRAPHS

TABLES

TEST CERTIFICATE

Device:	MPC Engine Bay DC Charger
Model:	BCDCX12050
Serial Number:	S00774
Radio:	Bluetooth Low Energy (Nordic nRF52833)
FCC ID:	2BAH6-BCDCX01
IC:	30290-BCDCX01
Tested for:	REDARC Technologies Pty Ltd
Address:	23 Brodie Rd, Lonsdale SA 5160, Australia
Contact:	Aly Virani
Phone Number:	+61 8 8322 4848
Email:	avirani@redarc.com.au
Standard:	FCC Part 15, Subpart C, Section 15.247 Operation within the bands 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz ISED RSS-247, Issue 2, Section 5 Standard specifications for frequency hopping systems and digital transmission systems operating in the bands 902-928 MHz, 2400-2483.5 MHz and 5725-5850 MHz
Result:	The MPC Engine Bay DC Charger complied with the applicable requirements of the above standards. Refer to Report M2210007-7 for full details.
Test Date:	02-09 February 2023
Issue Date:	8 August 2023
Test Engineer:	Ian Paul Ng
Attestation:	*I hereby certify that the device(s) described herein were tested as described in this report and that the data included is that which was obtained during such testing.*
Authorised Signatory:	Shabbir Ahmed, PhD Technical Director

Issued by: EMC Technologies Pty. Ltd.,
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RADIO TEST REPORT

1 TEST SUMMARY

Sec.	Description	FCC	ISED	Result(s)
6.1	Antenna Requirement	§15.203	RSS-Gen 6.8	Complied
6.2	Restricted Bands of Operation	§15.205	RSS-Gen 8.10	Complied
6.3	Conducted Limits	§15.207	RSS-Gen 8.8	Not Applicable
6.4	Radiated emission limits; general requirements	§15.209	RSS-Gen 8.9	Complied
6.5	6 dB Bandwidth	§15.247(a)(2)	RSS-247 5.2(a)	Complied
6.6	Peak Output Power	§15.247(b)(3)	RSS-247 5.4(d)	Complied
6.7	Out-of-Band/Spurious Emissions	§15.247(d)	RSS-247 5.5	Complied
6.8	Band-Edge Emission Measurements	§15.247(d)	RSS-247 5.5	Complied
6.9	Power spectral density	§15.247(e)	RSS-247 5.2(b)	Complied
6.10	Maximum Permissible Exposure	§15.247(i)	RSS-102	Complied
6.11	Occupied Bandwidth – 99% power	§15.215	RSS-Gen 6.7	Complied

2 TEST FACILITY

2.1 General

EMC Technologies Pty Ltd is accredited by the FCC as a test laboratory able to perform compliance testing for the public. EMC Technologies Pty Ltd has also been designated as a Conformity Assessment Body (CAB) by Australian Communications and Media Authority (ACMA) under the APECTEL MRA and is designated to perform compliance testing on equipment subject to Declaration of Conformity (DoC) and Certification under Parts 15 and 18 of the FCC Commission's rules – **Registration Number 494713 & Designation number AU0001**.

EMC Technologies Pty Ltd is also an ISED Canada recognized testing laboratory – **ISED company number: 3569B** and **CAB identifier number: AU0001.**

2.2 Test Laboratory/Accreditations

NATA is the Australian National laboratory accreditation body and has accredited EMC Technologies to operate to the IEC/ISO17025 requirements. A major requirement for accreditation is the assessment of the company and its personnel as being technically competent in testing to the standards. This requires fully documented test procedures, continued calibration of all equipment to the National Standard at the National Measurements Institute (NMI) and an internal quality system similar to ISO 9002. NATA has mutual recognition agreements with the National Voluntary Laboratory Accreditation Program (NVLAP) and the American Association for Laboratory Accreditation (A^2LA).

All testing in this report has been conducted in accordance with EMC Technologies' scope of NATA accreditation to ISO 17025 for both testing and calibration and ISO 17020 for Inspection – **Accreditation Number 5292**.

The current full scope of accreditation can be found on the NATA website: www.nata.com.au

3 TEST EQUIPMENT CALIBRATION

Measurement instrumentation and transducers were calibrated in accordance with the applicable standards by an independent NATA registered laboratory such as Keysight Technologies (Australia) Pty Ltd or the National Measurement Institute (NMI) or in-house. All equipment calibration is traceable to Australian national standards at the National Measurements Institute.

Equipment Type	Make/Model/Serial Number	Last Cal. dd/mm/yyyy	Due Date dd/mm/yyyy	Cal. Interval
Chamber	Frankonia SAC-3-2 (R-144)	10/08/2020	10/08/2023	3 Year*1
EMI Receiver	R&S ESW26 Sn: 101306 (R-143)	29/07/2022	29/07/2023	1 Year*2
Antennas	EMCO 6502 Active Loop Antenna Sn: 2021 (A-310)	20/09/2022	20/09/2024	2 Year*2
	SUNOL JB6 Sn. A012312 (A-363)	26/07/2022	26/07/2024	2 Year*2
	EMCO 3115 Horn Antenna Sn: 8908-3282 (A-004)	13/01/2022	13/01/2025	3 Year*1
	ETS-Lindgren 3160-09 Horn Antenna Sn: 66032 (A307)	30/04/2021	30/04/2024	3 Year*1
Cables*3	Huber & Suhner Sucoflex 104A Sn: 503061/4A (CL131123)	25/11/2022	25/11/2023	1 Year*1
	Huber & Suhner Sucoflex 104A Sn: 27319 (C-273)	20/04/2023	20/04/2024	1 Year*1

Note *1. Internal NATA calibration.
Note *2. External NATA / A2LA calibration.
Note *3. Cables are verified before measurements are taken.

4 MEASUREMENT UNCERTAINTY

EMC Technologies has evaluated the equipment and the methods used to perform the emissions testing. The estimated measurement uncertainties for emissions tests shown within this report are as follows:

Radiated Emissions:	9 kHz to 30 MHz	±4.1 dB
	30 MHz to 300 MHz	±5.1 dB
	300 MHz to 1000 MHz	±4.7 dB
	1 GHz to 18 GHz	±4.6 dB
	18 GHz to 40 GHz	±4.6 dB
Peak Output Power:		±1.5 dB

The above expanded uncertainties are based on standard uncertainties multiplied by a coverage factor of k=2, providing a level of confidence of approximately 95%.

Application of measurement uncertainty for this report:

The referenced uncertainty standard specifies that determination of compliance shall be based on measurements without considering measurement instrumentation uncertainty. However, the measurement uncertainty shall appear in the test report.

5 Device Details

(Information supplied by the Client)

The device is an engine bay DC charger.

5.1 EUT (Transmitter) Details

Radio:	Nordic Semiconductor nRF52833
Type:	Bluetooth Low Energy
Frequency band:	2400 – 2483.5 MHz
Number of Channels:	40
Operating Frequency:	Low Channel: 2402 MHz Mid Channel: 2440 MHz High Channel: 2480 MHz
Modulation:	Gaussian Frequency Shift Modulation (GFSK)
Nominal Bandwidth:	2 MHz
Data Rate:	2 Mbps
Antenna:	2.4GHz SMT MID Chip Antenna Molex (47980001)
Antenna Peak Gain:	3.7 dBi

5.2 EUT (Host) Details

Test Sample:	MPC Engine Bay DC Charger
Model:	BCDCX12050 (SN: S00774)
Variant Model:	BCDCX12025
Supply Rating:	DC Input: 9-32V

5.3 Test Configuration

Testing was performed with the EUT's Transceiver set to transmit continuously at Low Channel (2402 MHz), Mid Channel (2440 MHz) and High Channel (2480 MHz).

5.4 Modifications

No modifications were required to achieve compliance.

5.5 Deviations from the Standard

No deviation from the standard.

6 RESULTS

6.1 §15.203/ RSS-Gen 6.8 Antenna Requirement

The test sample's Bluetooth Transceiver incorporates a surface mount Antenna and cannot be replaced by another type.

Antenna Brand: Molex
Antenna Type: 2.4GHz SMT MID Chip Antenna (479480001)
Antenna Peak Gain: 3.7 dBi
Connector: Not Applicable

The above installation will prevent any unauthorised switching of antennas.

6.2 §15.205/ RSS-Gen 8.10/ RSS-247 3.3 Restricted Bands of Operation

The provisions of the §15.205/ RSS-Gen 8.10/ RSS-247 3.3 restricted bands of operation and §15.209 radiated emissions limits have been met, refer to section 6.7

6.3 §15.207/ RSS-Gen 8.8 Conducted Limits

The device is battery DC powered and does not connect directly or indirectly to the AC mains network. Test was not applicable.

6.4 §15.209/ RSS-Gen 8.9 Radiated Emission Limits; General Requirements

The provisions of the §15.205/ RSS-Gen 8.10/ RSS-247 3.3 restricted bands of operation and §15.209/ RSS-Gen 8.9 radiated emissions limits have been met, refer to section 6.7

6.5 §15.247(a)(2)/ RSS-247 5.2(a) 6 dB bandwidth

6.5.1 Test Procedure

The tests were performed in accordance with ANSI C63.10: 2013 Clause 11.8 DTS bandwidth.

The 6 dB bandwidth was measured while the device was transmitting with typical modulation applied. The resolution bandwidth of 100 kHz and the video bandwidth of 300 kHz were utilised when measuring the bandwidth.

6.5.2 Limits

In the band 2400-2483.5MHz, the minimum 6 dB bandwidth shall be at least 500 kHz.

6.5.3 Results

Table 6-1: 6 dB Bandwidth

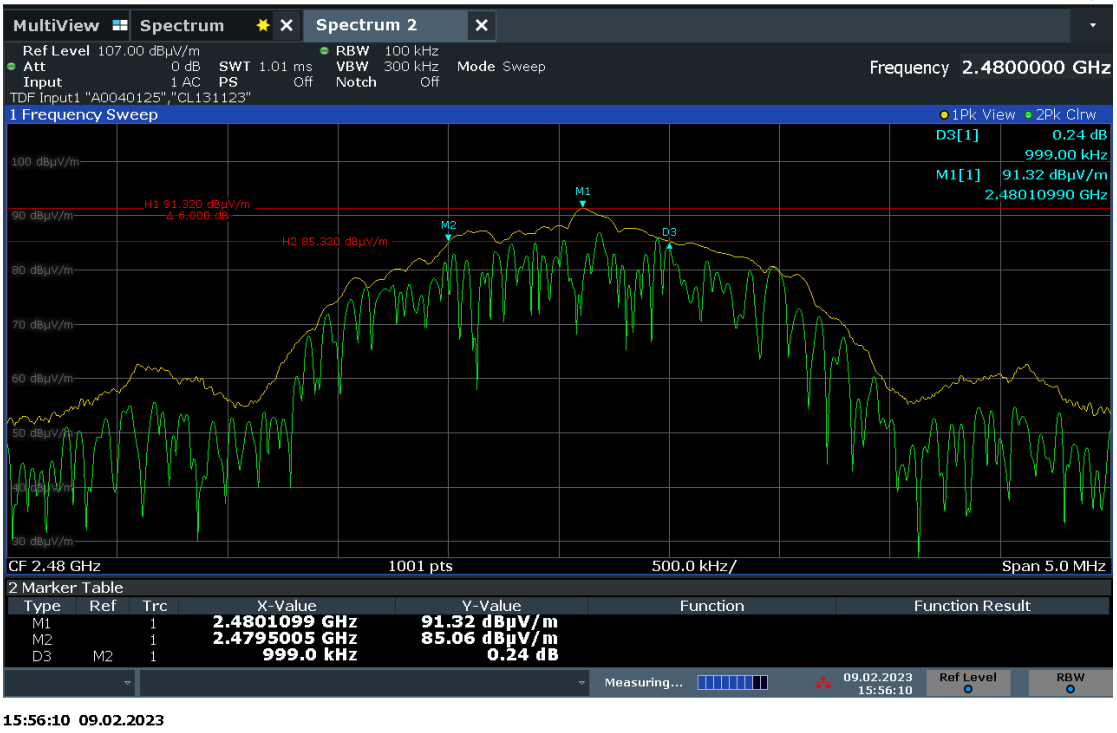
Frequency (MHz)	6 dB Bandwidth (kHz)	Limit (kHz)
2402	999	≥ 500
2440	1040	≥ 500
2480	999	≥ 500

15:47:52 09.02.2023

Graph 6-1: 6 dB bandwidth, 2402 MHz

15:51:02 09.02.2023

Graph 6-2: 6 dB bandwidth, 2440 MHz



15:56:10 09.02.2023

Graph 6-3: 6 dB bandwidth, 2480 MHz

6.6 §15.247(b)(3)/ RSS-247 5.4(d) Peak Output Power

6.6.1 Test Procedure

The maximum peak conducted output power was measured in accordance with ANSI C63.10: 2013 clause 11.9.1.1.

6.6.2 Limits

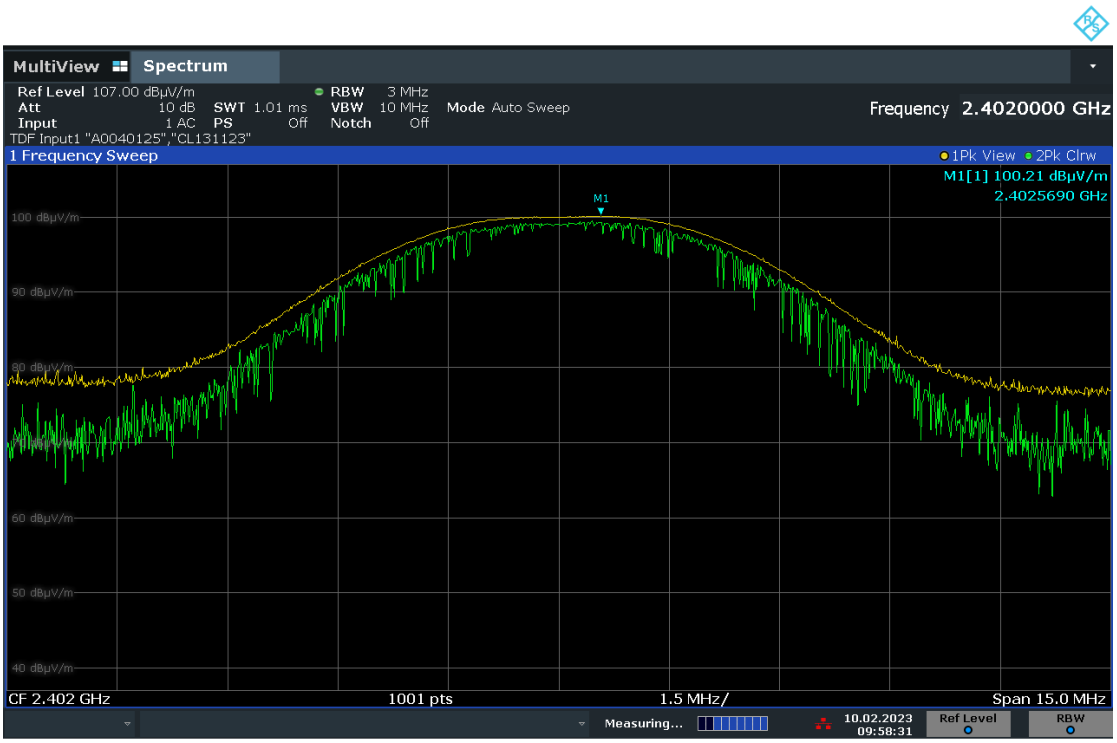
The maximum peak conducted output power at 2400-2483.5 MHz is 1 Watt or 30 dBm.

6.6.3 Results

Table 6-2: Maximum peak power

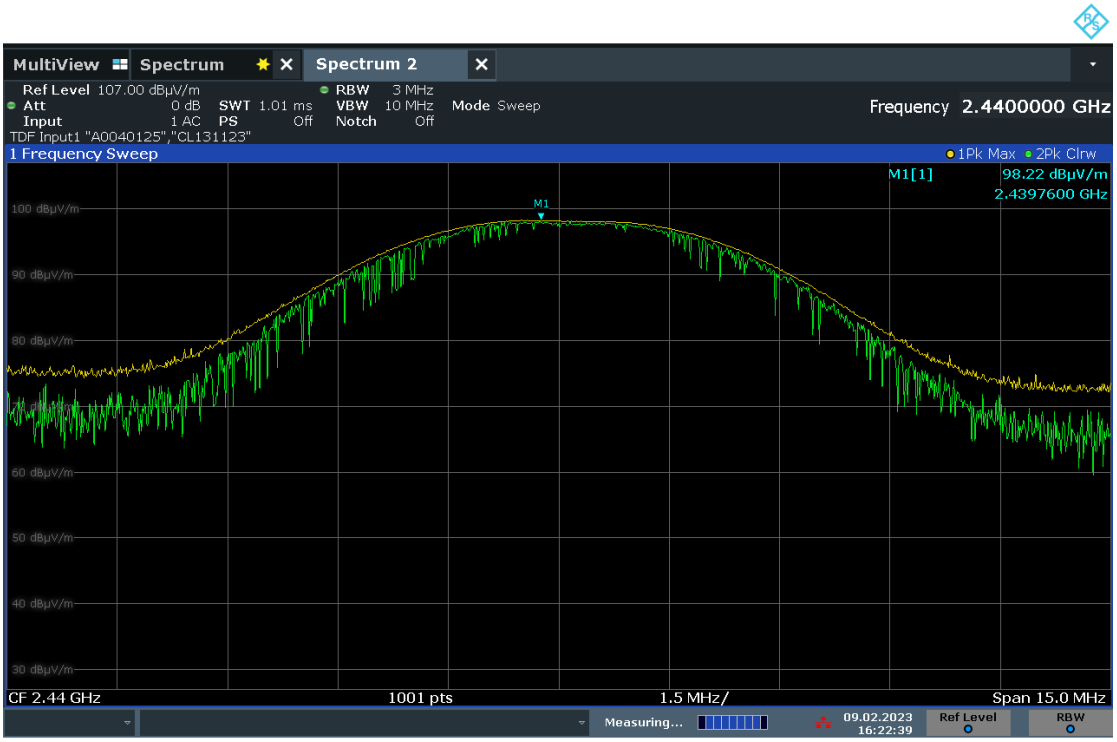
Freq. (MHz)	E-Field @ 3 m (dBµV/m)	EIRP (dBm)	Antenna Gain (dBi)	Equivalent Conducted Output Power (dBm)	Limit (dBm)	Results
2402	100.21	4.98	3.7	1.28	30	Complied
2440	98.22	2.99	3.7	-0.71	30	Complied
2480	93.32	-1.91	3.7	-5.61	30	Complied

The measured radiated field strength is converted to equivalent conducted output power for checking compliance (KDB 558074 D01 Section 3).



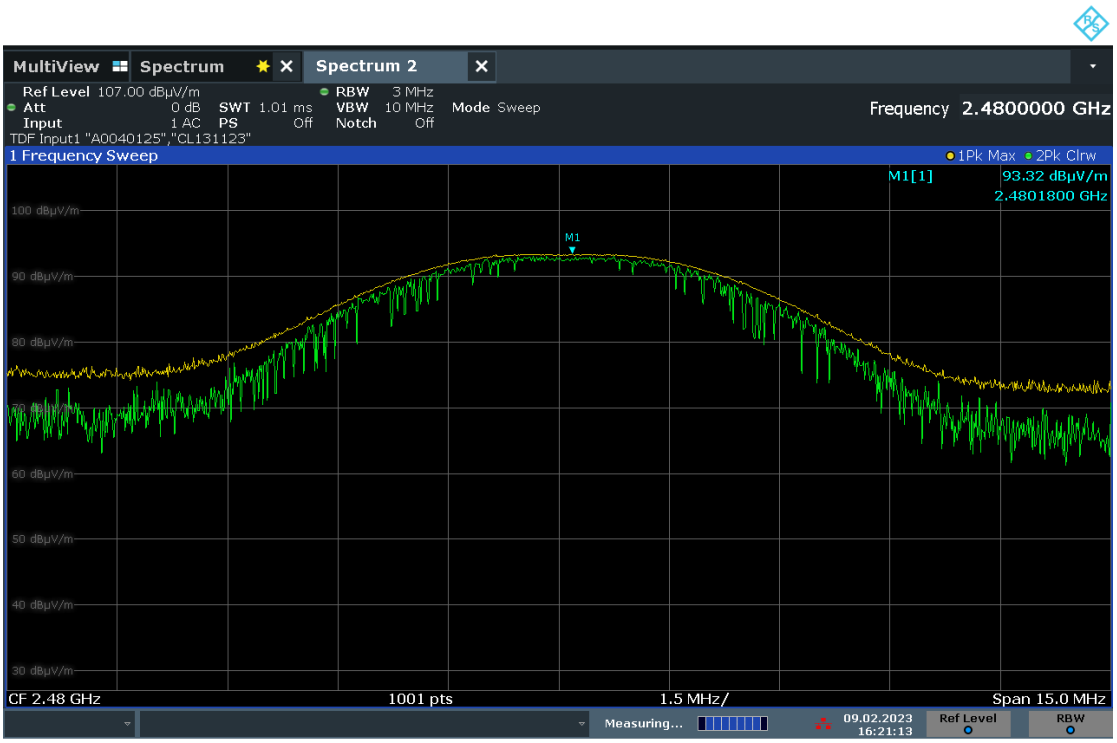
09:58:32 10.02.2023

Graph 6-4: Maximum EIRP, 2402 MHz



16:22:39 09.02.2023

Graph 6-5: Maximum EIRP, 2440 MHz



Graph 6-6: Maximum EIRP, 2480MHz

6.7 §15.247(d)/ RSS-247 5.5 Out-of-Band/Spurious Emissions

6.7.1 Test procedure

Radiated out-of-band/spurious emissions measurements were performed in a semi-anechoic chamber compliant with ANSI C63.4: 2014.

The test frequency range was sub-divided into smaller bands with the defined resolution bandwidths to permit reliable display and identification of emissions.

Frequency range (MHz)	Measurement Bandwidth (kHz)	Measurement Distance (m)	Antenna
0.009 to 0.150	0.2	3	0.6 metre loop antenna
0.150 to 30	9	3	
30 to 1000	120	3	Biconilog hybrid
1000 to 18 000	1000	3	Standard gain or broadband horn
18 000 to 40 000	1000	1	

EUT was set at a height of 0.8 m for measurements below 1000 MHz and set at a height of 1.5 m for measurements above 1000 MHz.

The sample was slowly rotated with the spectrum analyser set to Max-Hold. This was performed for at least two antenna heights. When an emission was located, it was positively identified, and its maximum level was found by rotating the automated turntable and by varying the antenna height. For below 1000 MHz the emissions were measured with a Quasi-Peak detector, and for above 1000 MHz the emissions were measured with Peak and Average detectors.

Measurements on the worst axis are presented.

The measurement data for each frequency range was corrected for cable losses, antenna factors and preamplifier gain. This process was performed for both horizontal and vertical polarisations of the measurement antenna.

6.7.2 Evaluation of field strength

Field strengths were calculated automatically by the software using pre-stored calibration data. The method of calculation is shown below:

$$E = V + AF - G + L$$

Where: *E* = Radiated Field Strength in dBμV/m.
V = EMI Receiver Voltage in dBμV.
AF = Antenna Factor in dB/m (stored as a data array).
G = Preamplifier Gain in dB (stored as a data array).
L = Cable loss in dB (stored as a data array of Insertion Loss versus frequency).

6.7.3 Limits

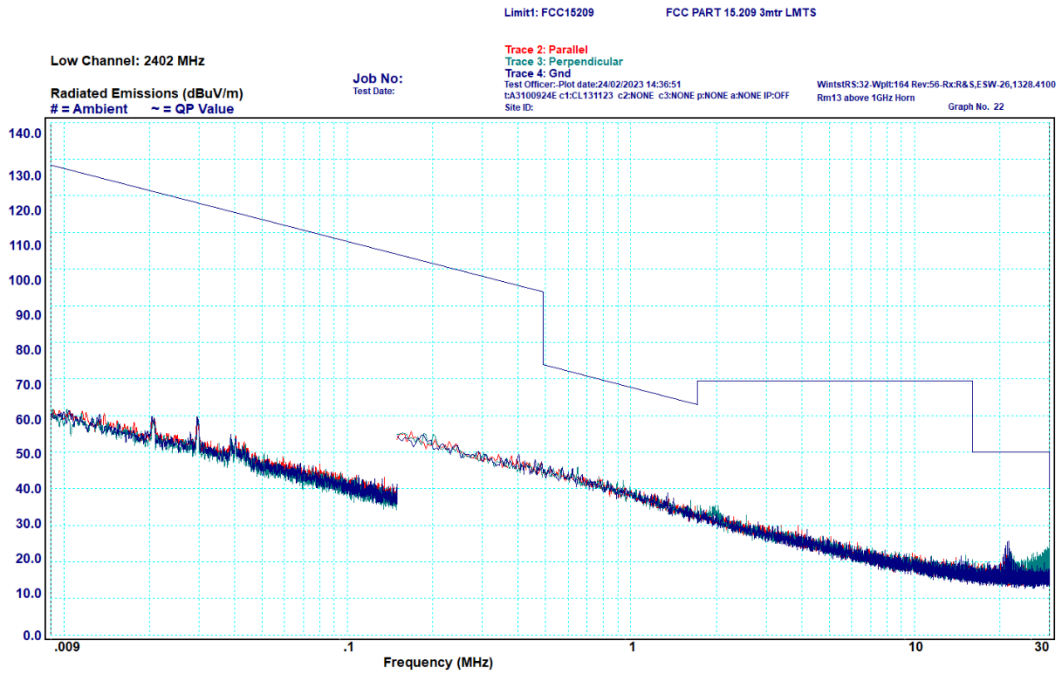
The limit applied is in accordance with the out-of-band/spurious emissions limit defined in §15.247(d).

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.

The in-band peak PSD in 100 kHz bandwidth were measured on all three channels. The maximum PSD level was used to establish the limit. However, the general limits of §15.209 apply for the restricted bands of operation defined in §15.205.

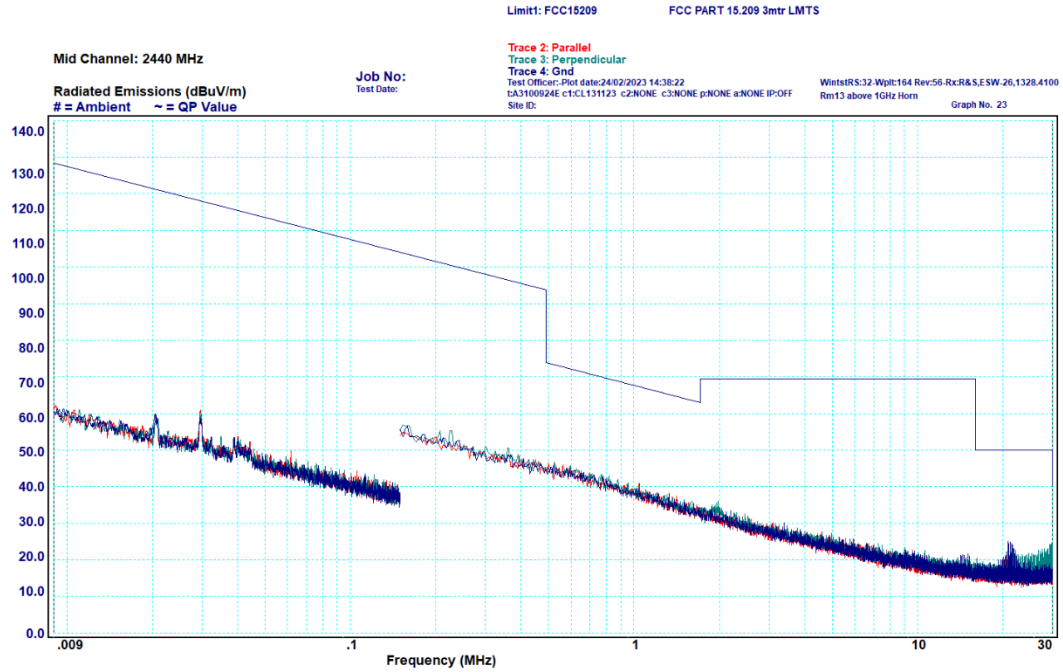
6.7.4 Transmitter Spurious Emissions: 9 kHz to 30 MHz

All emissions measured in the frequency band 9kHz - 30MHz complied with the requirements of the standard.



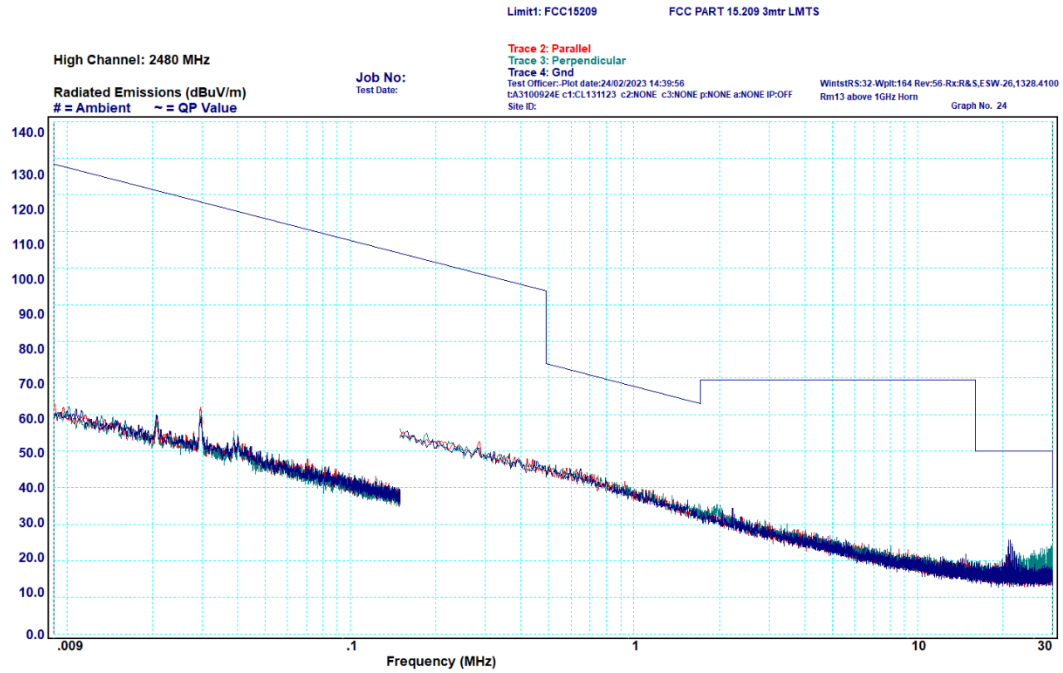
Graph 6-7: Transmitter Spurious Emissions, 9 kHz – 30 MHz, 2402 MHz

No peaks were measured within 10 dB of the limit.



Graph 6-8: Transmitter Spurious Emissions, 9 kHz – 30 MHz, 2440 MHz

No peaks were measured within 10 dB of the limit.

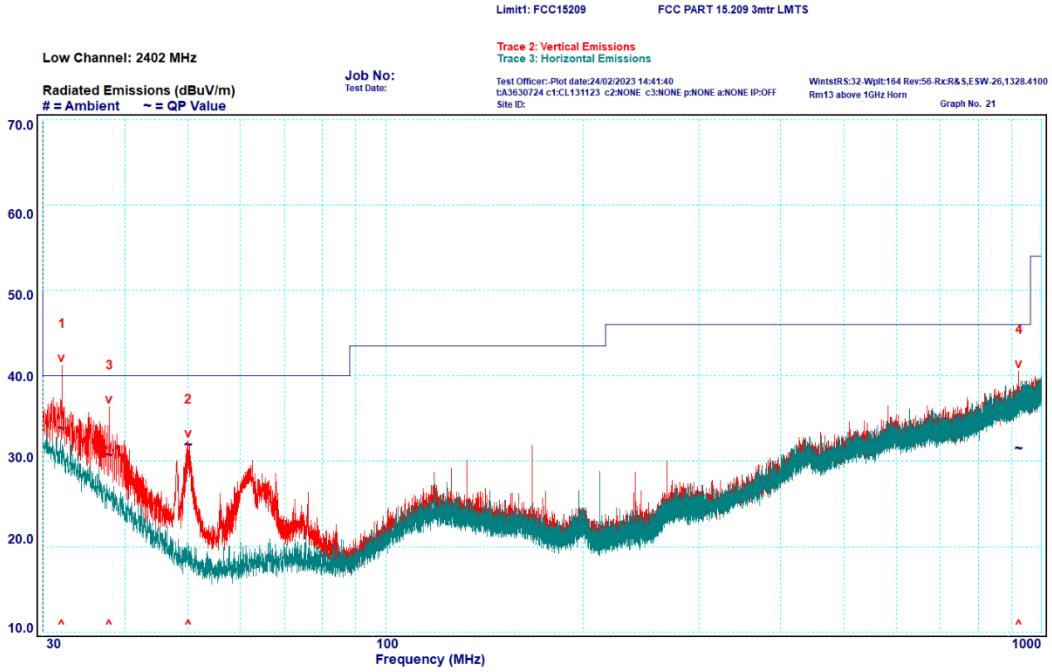


Graph 6-9: Transmitter Spurious Emissions, 9 kHz – 30 MHz, 2480 MHz

No peaks were measured within 10 dB of the limit.

6.7.5 Transmitter Spurious Emissions: 30 - 1000 MHz

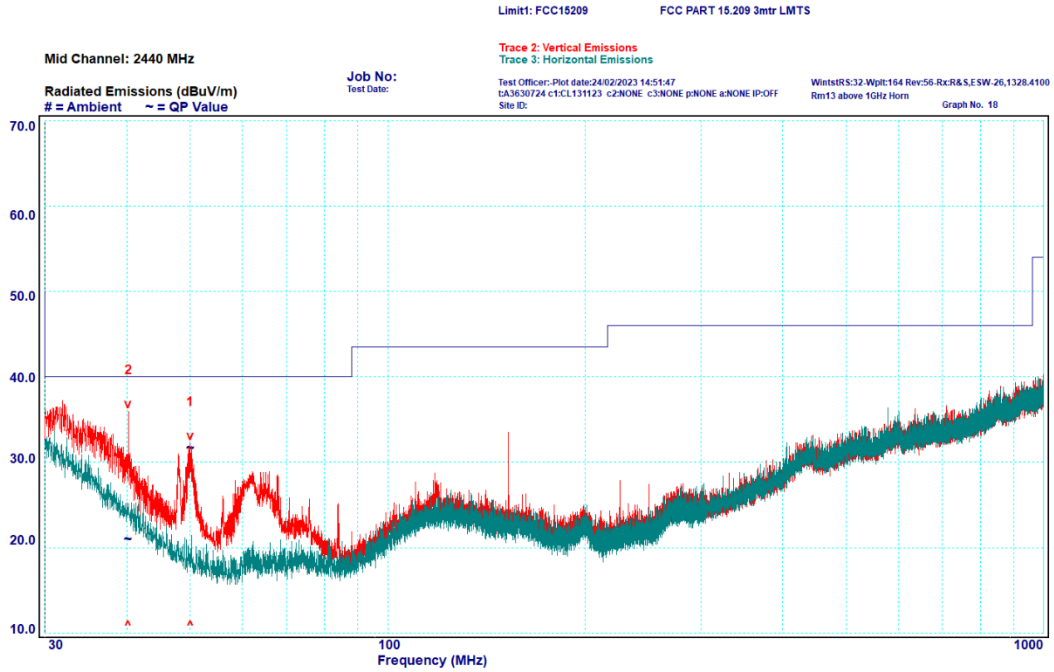
All emissions measured in the frequency band 30 – 1000 MHz complied with the requirements of the standard.



Graph 6-10: Transmitter Spurious Emissions, 30 – 1000 MHz, 2402 MHz

Table 6-3: Transmitter Spurious Emissions, 30 – 1000 MHz, 2402 MHz

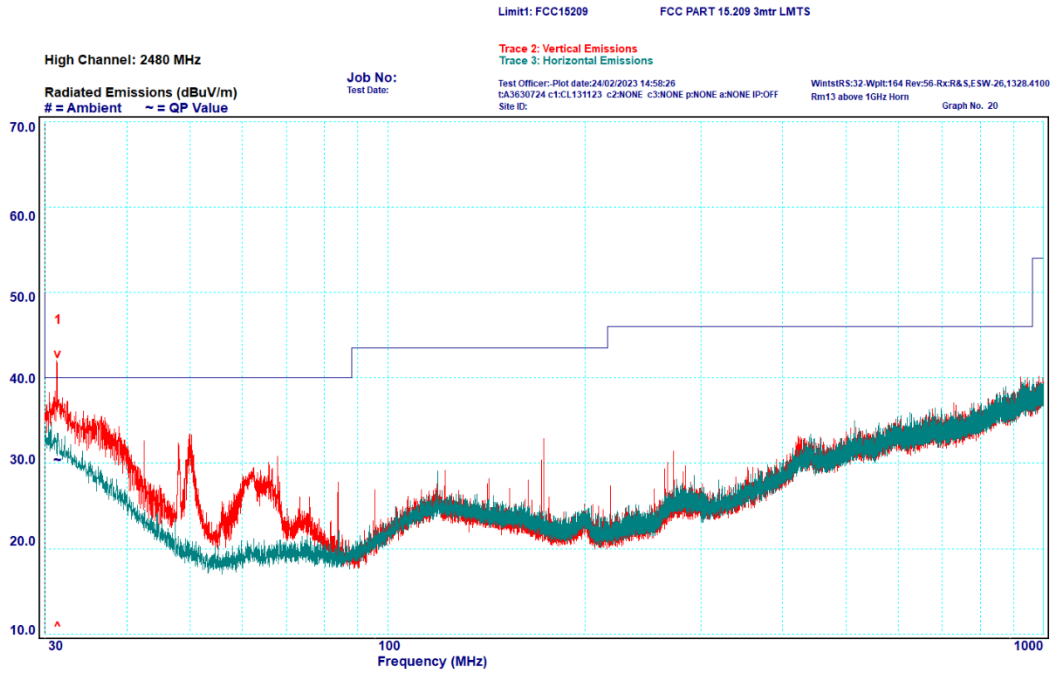
Peak	Frequency (MHz)	Polarisation	Quasi-Peak		
			Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)
1	32.06	Vertical	34.3	40.0	-5.7
2	50.00	Vertical	32.4	40.0	-7.6
3	37.89	Vertical	31.2	40.0	-8.8
4	922.86	Vertical	32.0	46.0	-14.0



Graph 6-11: Transmitter Spurious Emissions, 30 – 1000 MHz, 2440 MHz

Table 6-4: Transmitter Spurious Emissions, 30 – 1000 MHz, 2440 MHz

Peak	Frequency (MHz)	Polarisation	Quasi-Peak		
			Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)
1	50.00	Vertical	32.2	40.0	-7.8
2	40.23	Vertical	21.4	40.0	-18.6



Graph 6-12: Transmitter Spurious Emissions, 30 – 1000 MHz, 2480 MHz

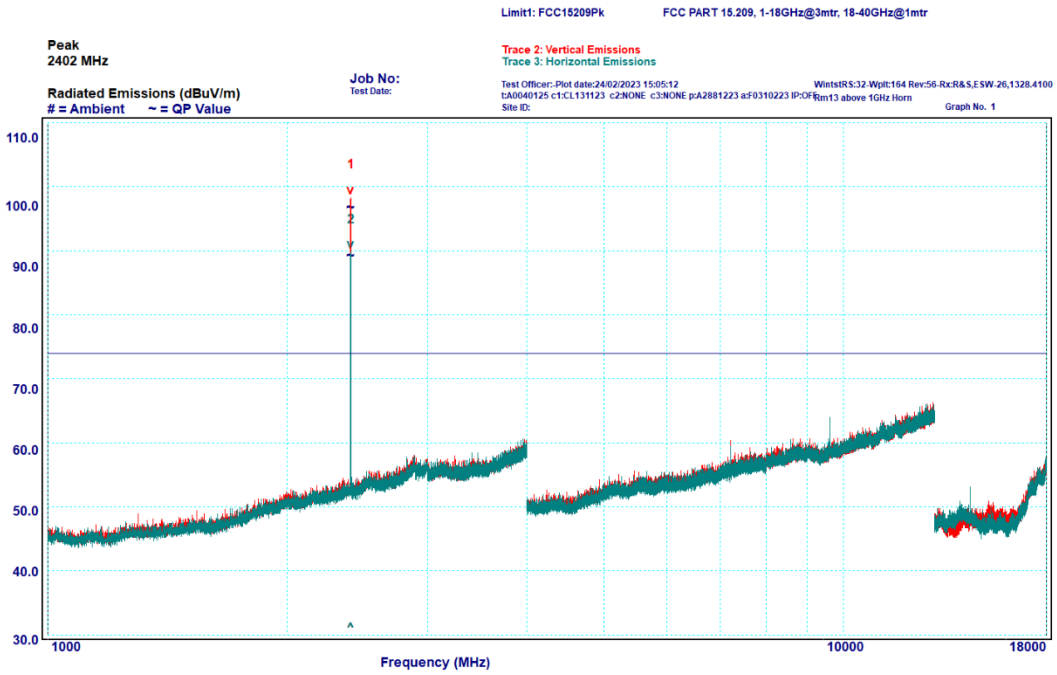
Table 6-5: Transmitter Spurious Emissions, 30 – 1000 MHz, 2480 MHz

Peak	Frequency (MHz)	Polarisation	Quasi-Peak		
			Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)
1	31.40	Vertical	30.8	40.0	-9.2

6.7.6 Transmitter Spurious Emissions: 1 - 18 GHz

All emissions measured in the frequency band 1 – 18 GHz complied with the requirements of the standard.

Peak Measurement:

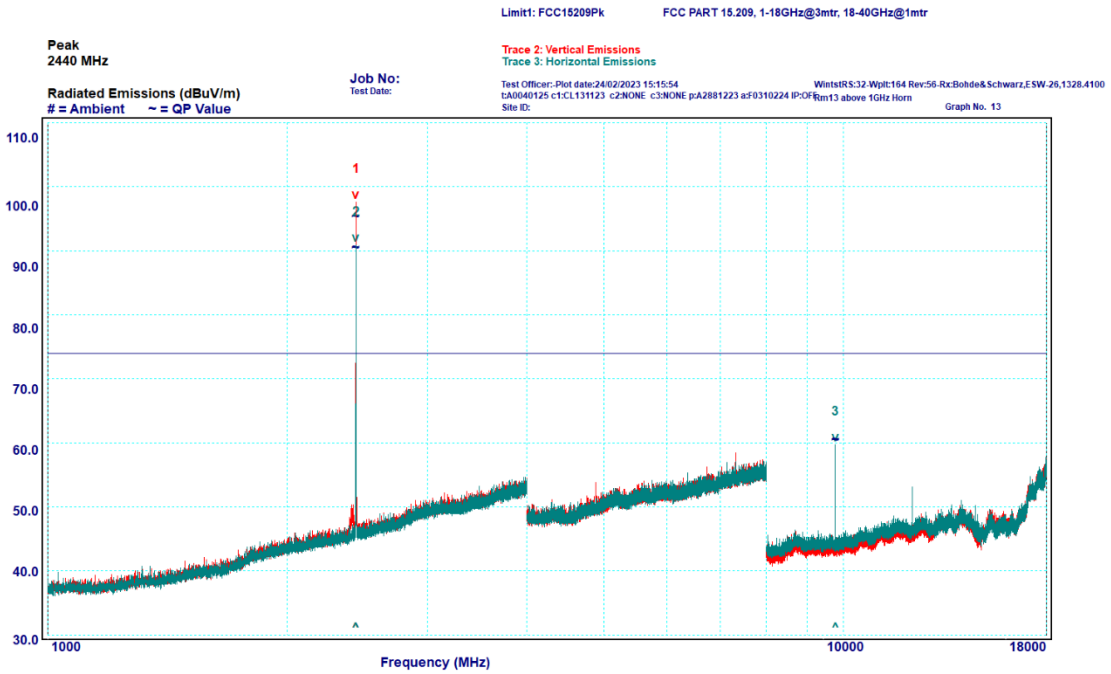


Graph 6-13: Transmitter Spurious Emissions, 1 – 18 GHz, 2402 MHz, Peak

Table 6-6: Transmitter Spurious Emissions, 1 – 18 GHz, 2402 MHz, Peak

Peak	Frequency (MHz)	Polarisation	Peak		
			Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)
1*	2402.09	Vertical	N/A	N/A	N/A
2*	2402.10	Horizontal	N/A	N/A	N/A

*Note: Peaks above the limit are the fundamental transmission and not subject to the spurious emissions limit of the standard

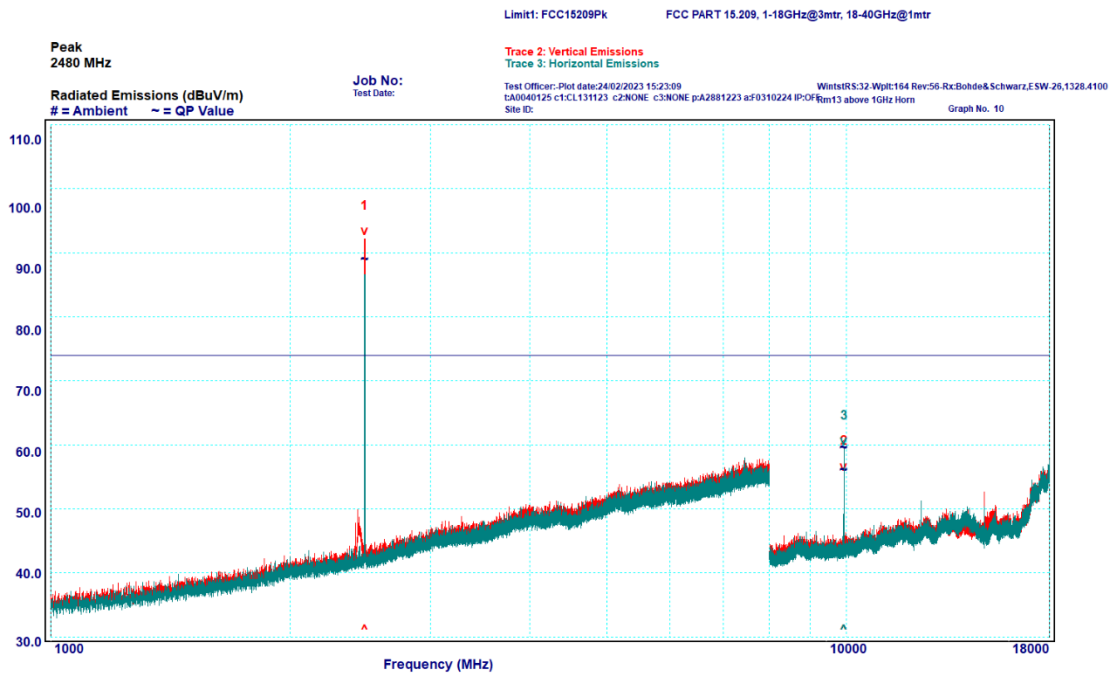


Graph 6-14: Transmitter Spurious Emissions, 1 – 18 GHz, 2440 MHz, Peak

Table 6-7: Transmitter Spurious Emissions, 1 – 18 GHz, 2440 MHz, Peak

Peak	Frequency (MHz)	Polarisation	Peak		
			Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)
1*	2440.08	Vertical	N/A	N/A	N/A
2*	2440.09	Horizontal	N/A	N/A	N/A
3	9762.33	Horizontal	61.0	74.0	-13.0

*Note: Peaks above the limit are the fundamental transmission and not subject to the spurious emissions limit of the standard



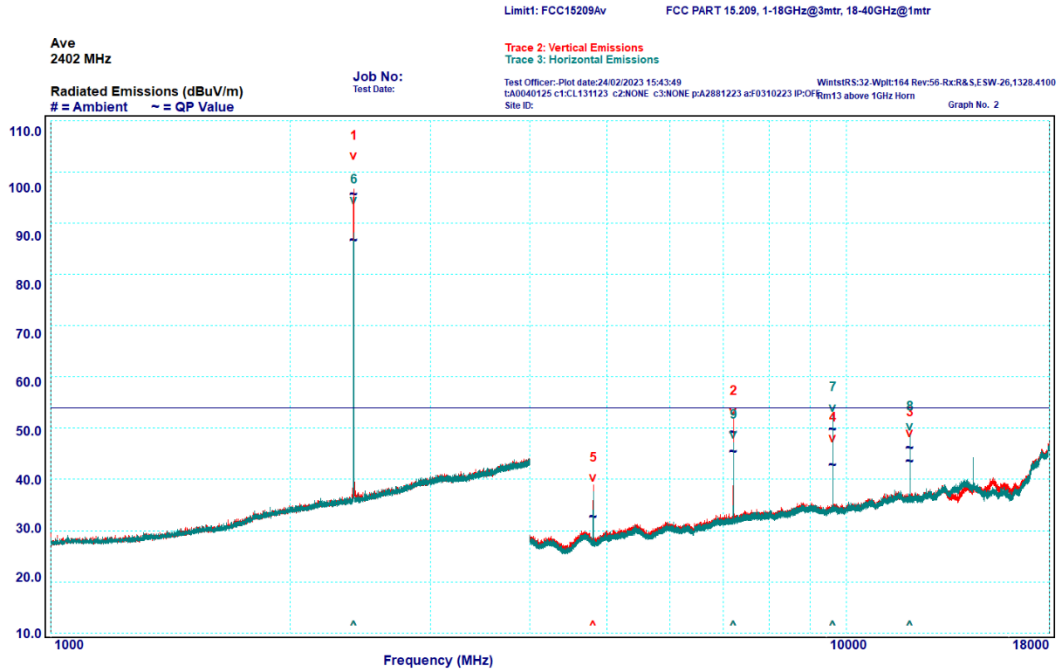
Graph 6-15: Transmitter Spurious Emissions, 1 – 18 GHz, 2480 MHz, Peak

Table 6-8: Transmitter Spurious Emissions, 1 – 18 GHz, 2480 MHz, Peak

Peak	Frequency (MHz)	Polarisation	Peak		
			Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)
1*	2480.10	Vertical	N/A	N/A	N/A
2	9922.31	Vertical	56.6	74.0	-17.4
3	9918.48	Horizontal	60.0	74.0	-14.0

*Note: Peaks above the limit are the fundamental transmission and not subject to the spurious emissions limit of the standard

Average Measurement:

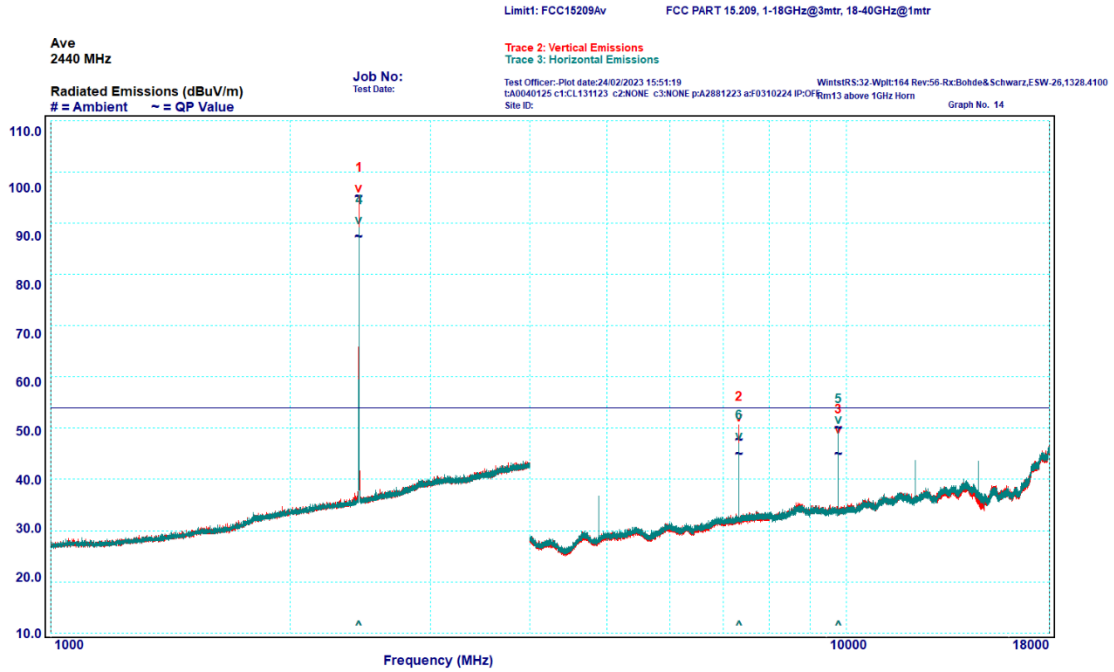


Graph 6-16: Transmitter Spurious Emissions, 1 – 18 GHz, 2402 MHz, Average

Table 6-9: Transmitter Spurious Emissions, 1 – 18 GHz, 2402 MHz, Average

Peak	Frequency (MHz)	Polarisation	Average		
			Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)
1*	2402.12	Vertical	N/A	N/A	N/A
2	7207.43	Vertical	49.6	54	-4.4
3	12012.67	Vertical	44	54	-10
4	9607.37	Vertical	43.3	54	-10.7
5	4804.16	Vertical	33.2	54	-20.8
6*	2402.11	Horizontal	N/A	N/A	N/A
7	9609.9	Horizontal	50.2	54	-3.8
8	12012.56	Horizontal	46.6	54	-7.4
9	7207.42	Horizontal	45.9	54	-8.1

*Note: Peaks above the limit are the fundamental transmission and not subject to the spurious emissions limit of the standard

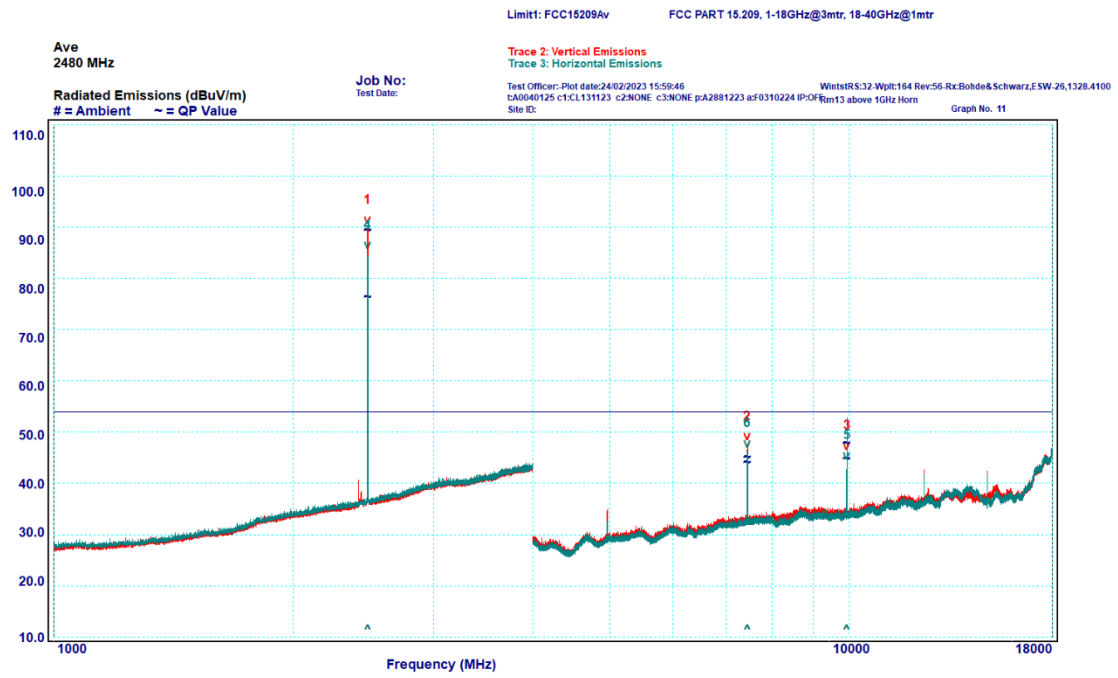


Graph 6-17: Transmitter Spurious Emissions, 1 – 18 GHz, 2440 MHz, Average

Table 6-10: Transmitter Spurious Emissions, 1 – 18 GHz, 2440 MHz, Average

Peak	Frequency (MHz)	Polarisation	Average		
			Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)
1*	2440.13	Vertical	N/A	N/A	N/A
2	7321.57	Vertical	48.2	54	-5.8
3	9762.05	Vertical	45.5	54	-8.5
4*	2440.12	Horizontal	N/A	N/A	N/A
5	**9762.06**	Horizontal	50.4	54	**-3.6**
6	7321.54	Horizontal	45.4	54	-8.6

*Note: Peaks above the limit are the fundamental transmission and not subject to the spurious emissions limit of the standard



Graph 6-18: Transmitter Spurious Emissions, 1 – 18 GHz, 2480 MHz, Average

Table 6-11: Transmitter Spurious Emissions, 1 – 18 GHz, 2480 MHz, Average

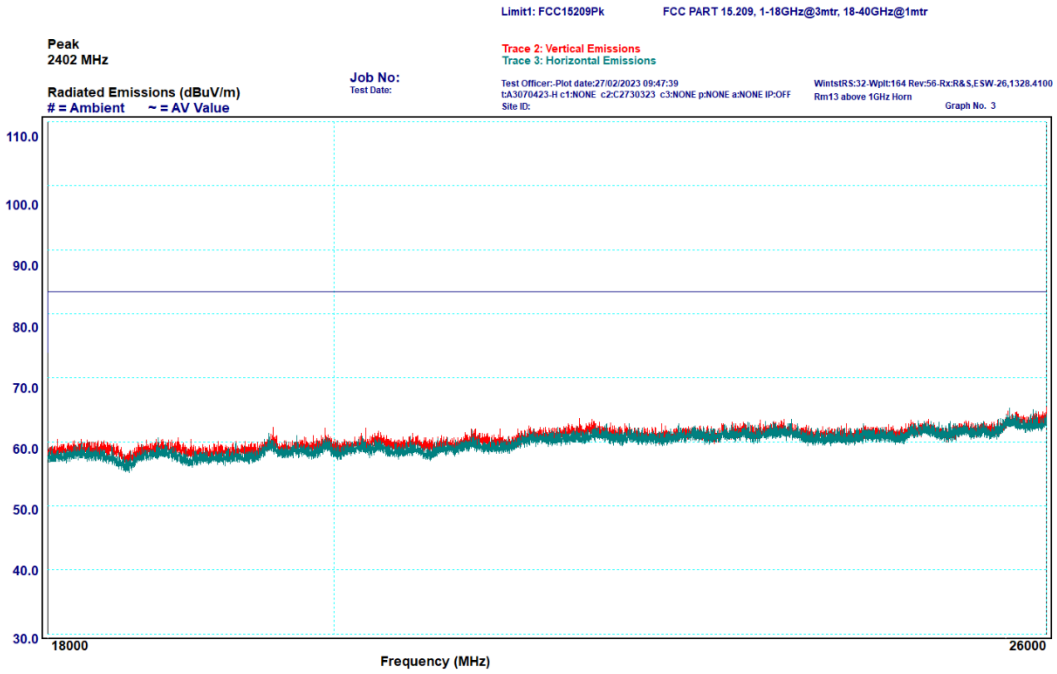
Peak	Frequency (MHz)	Polarisation	Average		
			Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)
1	2480.09	Vertical	N/A	N/A	N/A
2	7439.1	Vertical	45.6	54	-8.4
3	9918.89	Vertical	45.2	54	-8.8
4	2480.14	Horizontal	N/A	N/A	N/A
5	9918.59	Horizontal	48.4	54	-5.6
6	7439	Horizontal	44.6	54	-9.4

*Note: Peaks above the limit are the fundamental transmission and not subject to the spurious emissions limit of the standard

6.7.7 Transmitter Spurious Emissions: 18 – 26 GHz

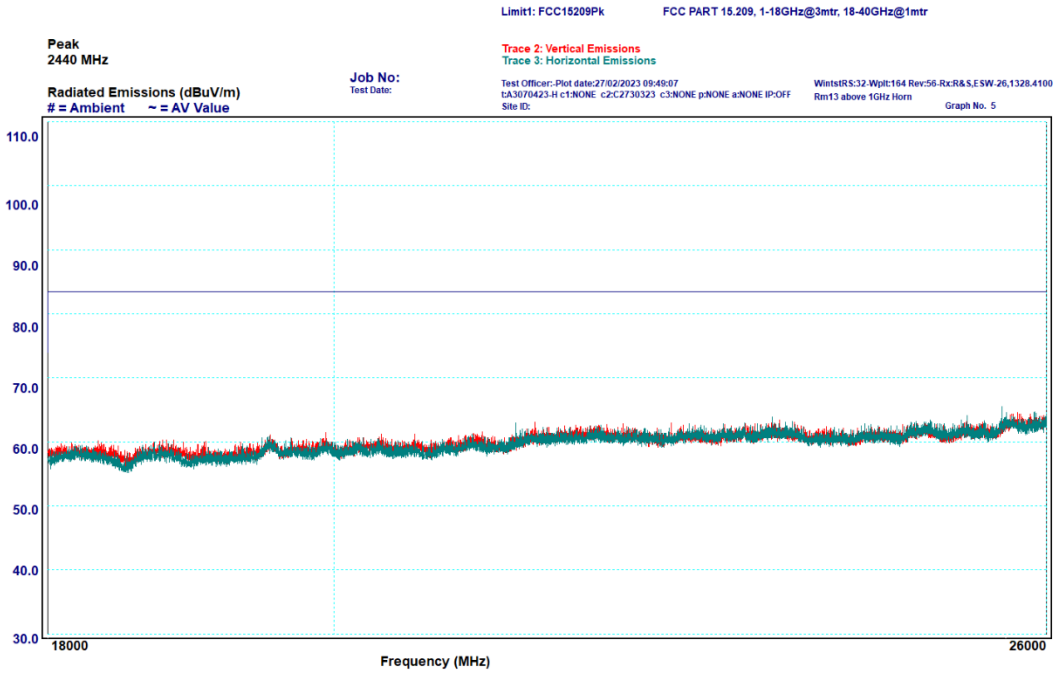
All emissions measured in the frequency band 18 – 26 GHz complied with the requirements of the standard.

Peak Measurement:



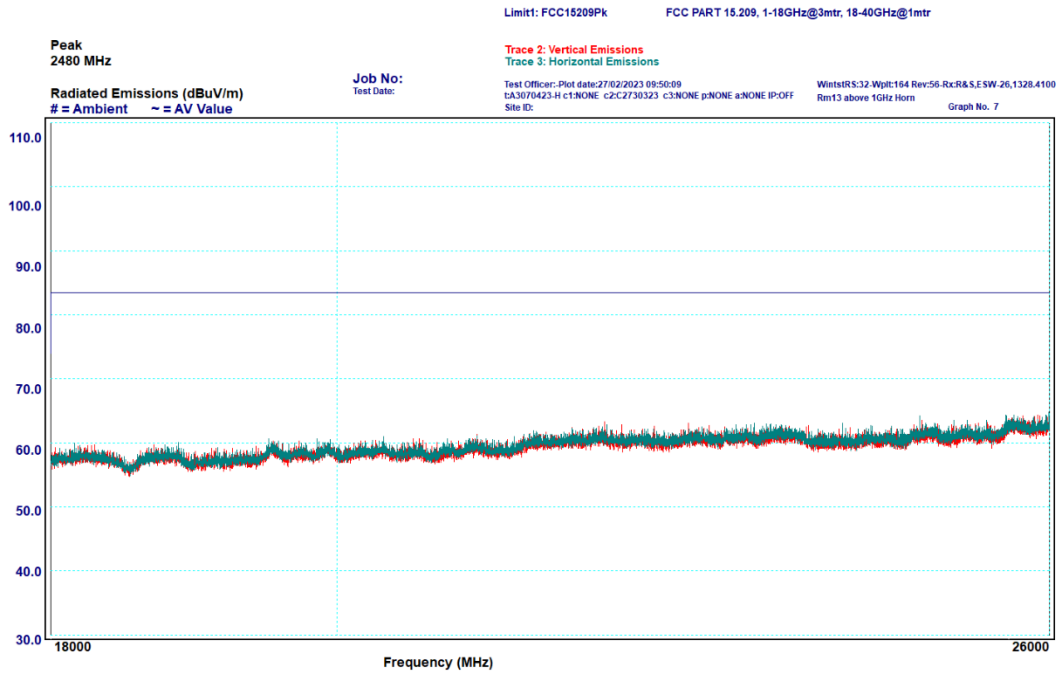
Graph 6-19: Transmitter Spurious Emissions, 18 – 26 GHz, 2402 MHz, Peak

No peaks were measured within 10 dB of the limit.



Graph 6-20: Transmitter Spurious Emissions, 18 – 26 GHz, 2440 MHz, Peak

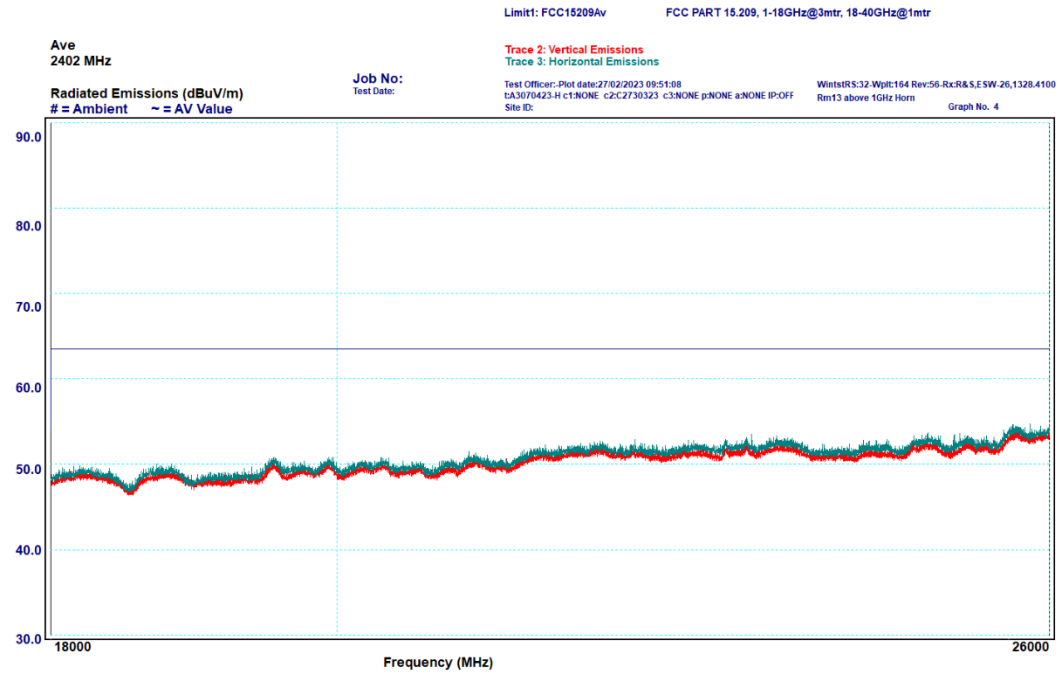
No peaks were measured within 10 dB of the limit.



Graph 6-21: Transmitter Spurious Emissions, 18 – 26 GHz, 2480 MHz, Peak

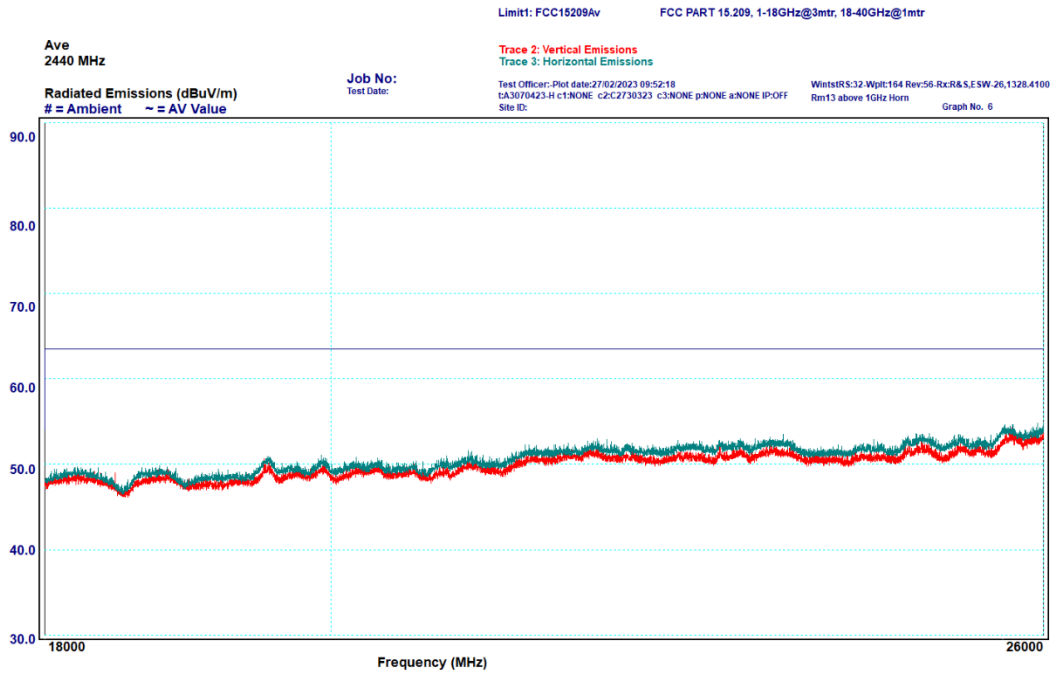
No peaks were measured within 10 dB of the limit.

Average Measurement:



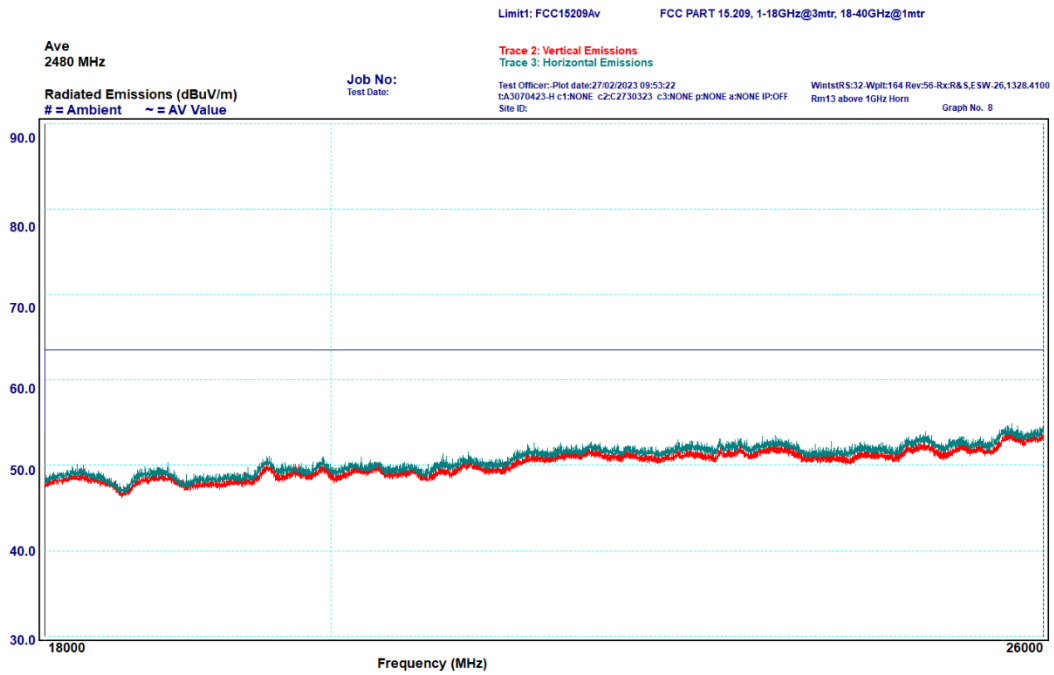
Graph 6-22: Transmitter Spurious Emissions, 18 – 26 GHz, 2402 MHz, Average

No peaks were measured within 10 dB of the limit.



Graph 6-23: Transmitter Spurious Emissions, 18 – 26 GHz, 2440 MHz, Average

No peaks were measured within 10 dB of the limit.

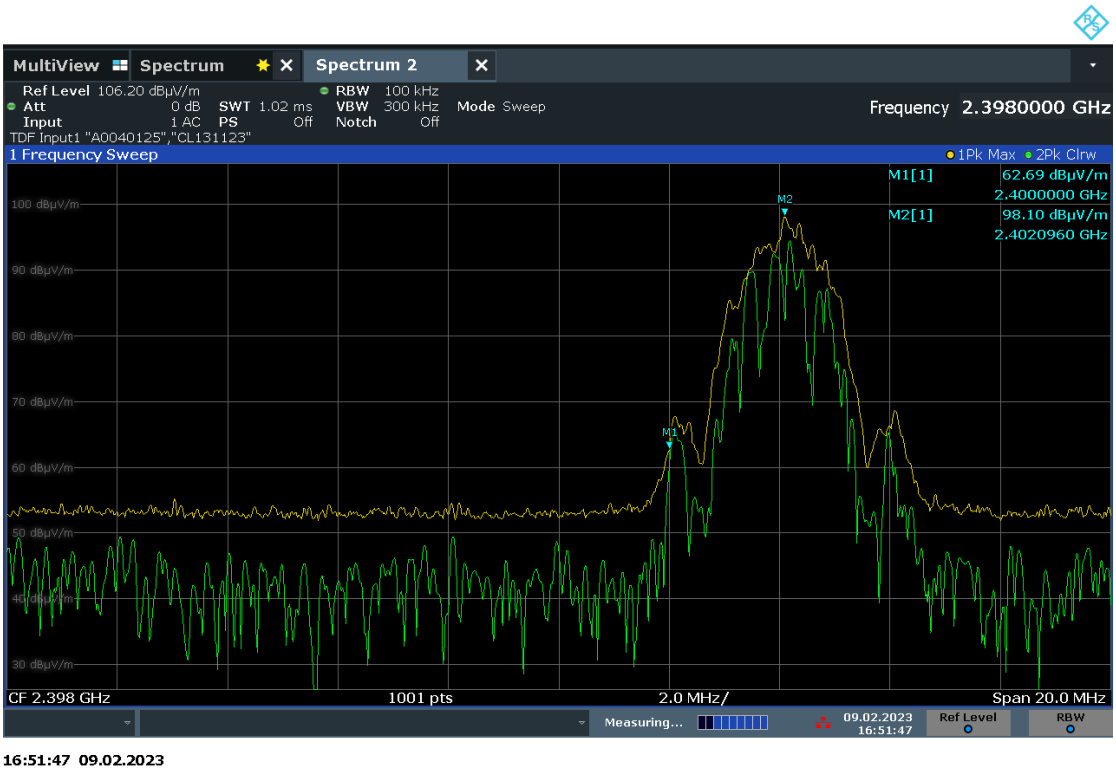


Graph 6-24: Transmitter Spurious Emissions, 18 – 26 GHz, 2480 MHz, Average

No peaks were measured within 10 dB of the limit.

6.8 §15.247(d)/ RSS-247 5.5 Band Edge Emission Measurements

Band-edge radiated measurements were done in accordance with ANSI C63.10 clause 6.10. All emissions measured near the lower and higher band edge complied with the requirements of §15.247/ RSS-247 5.0.



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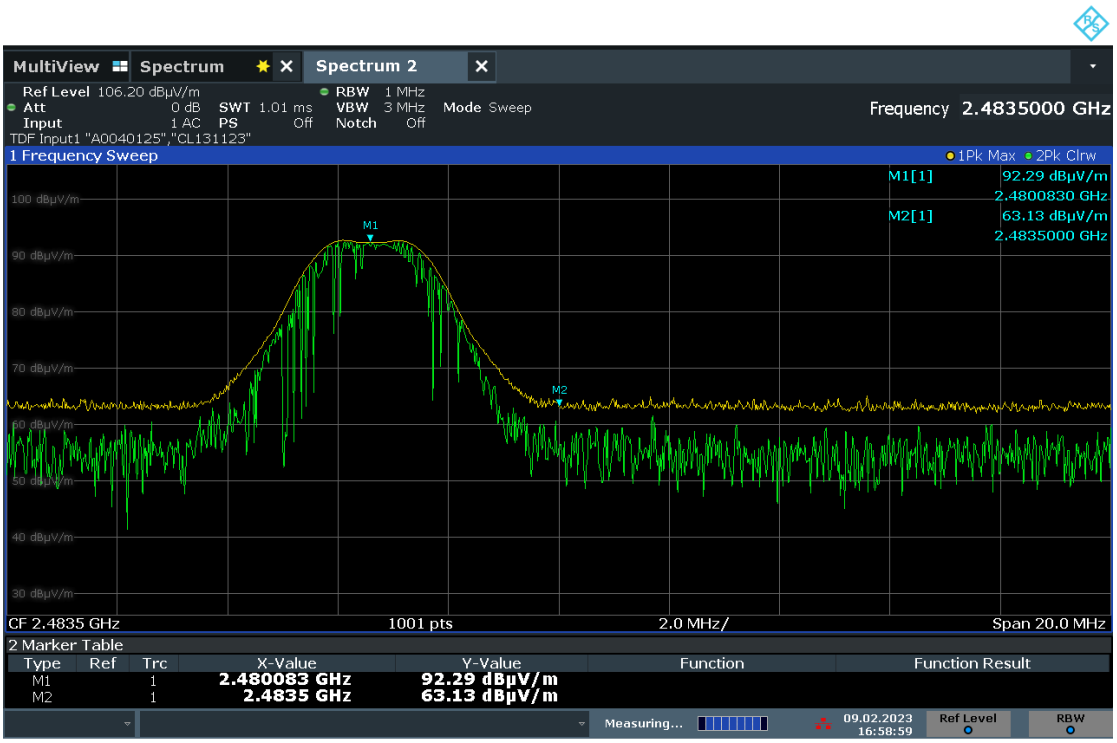
Graph 6-25: Band Edge Emission, Lower Band-edge

Table 6-12: Band Edge Emission, Lower Band-edge

Measurement Type	Freq (MHz)	Measurement (dBµV/m)	Limit (dBµV/m)	Result
Peak	2400	62.69	74	Complied



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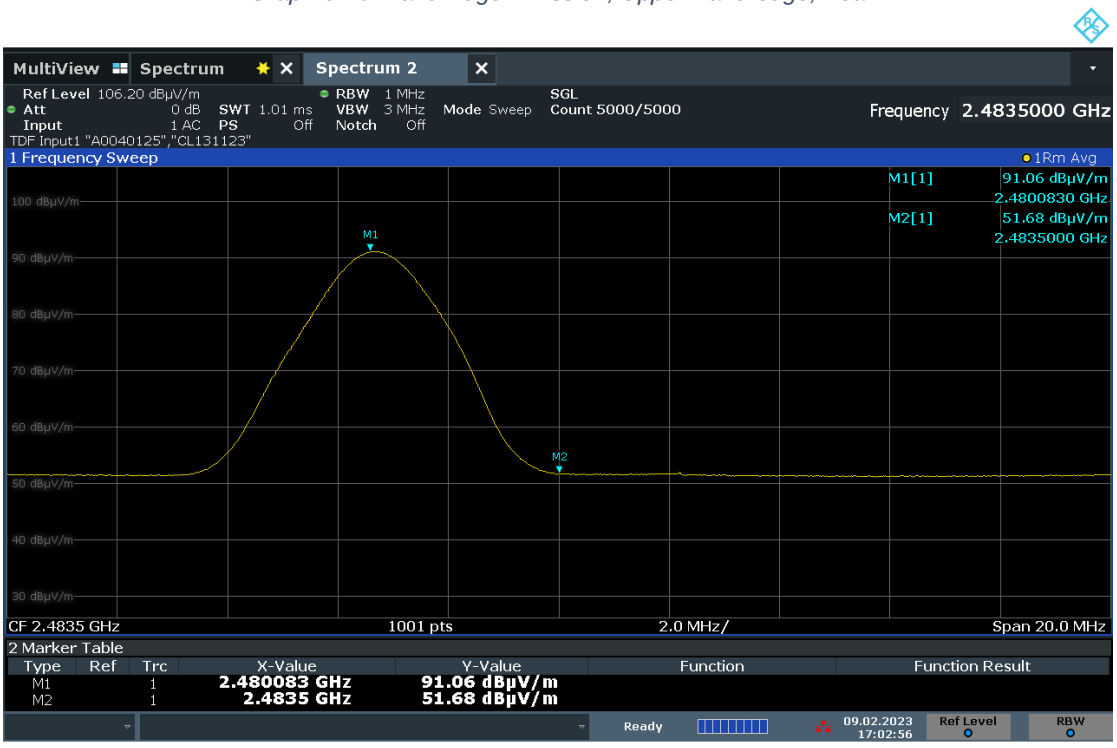
Graph 6-26: Band Edge Emission, Upper Band-edge, Peak



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Graph 6-27: Band Edge Emission, Upper Band-edge, Average

Table 6-13: Band Edge Emission, Upper Band-edge

Measurement Type	Freq (MHz)	Measurement (dBµV/m)	Limit (dBµV/m)	Result
Peak	2483.5	63.13	74	Complied
Average	2483.5	51.68	54	Complied

6.9 §15.247(e)/ RSS-247 5.2(b) Power Spectral Density

6.9.1 Test procedure

Maximum power spectral density level in the fundamental emission was measured in accordance with ANSI C63.10: 2013 Clause 11.10

6.9.2 Limits

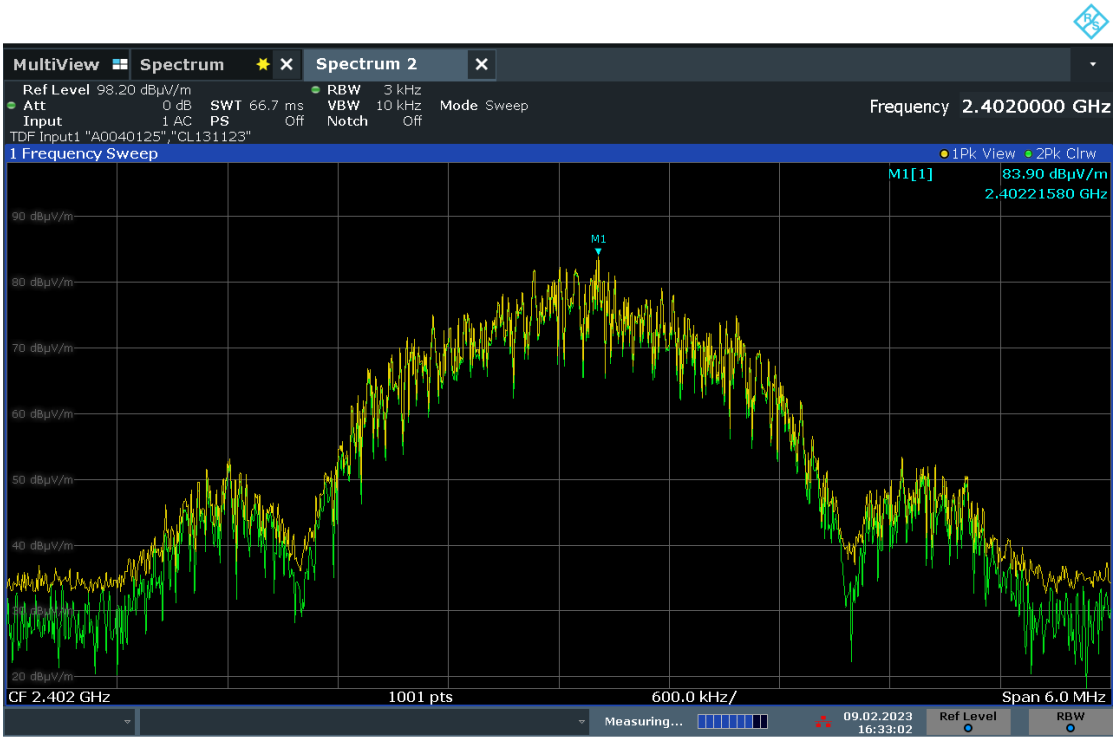
The maximum peak conducted power spectral density (PSD) is 8 dBm per 3 kHz.

6.9.3 Results

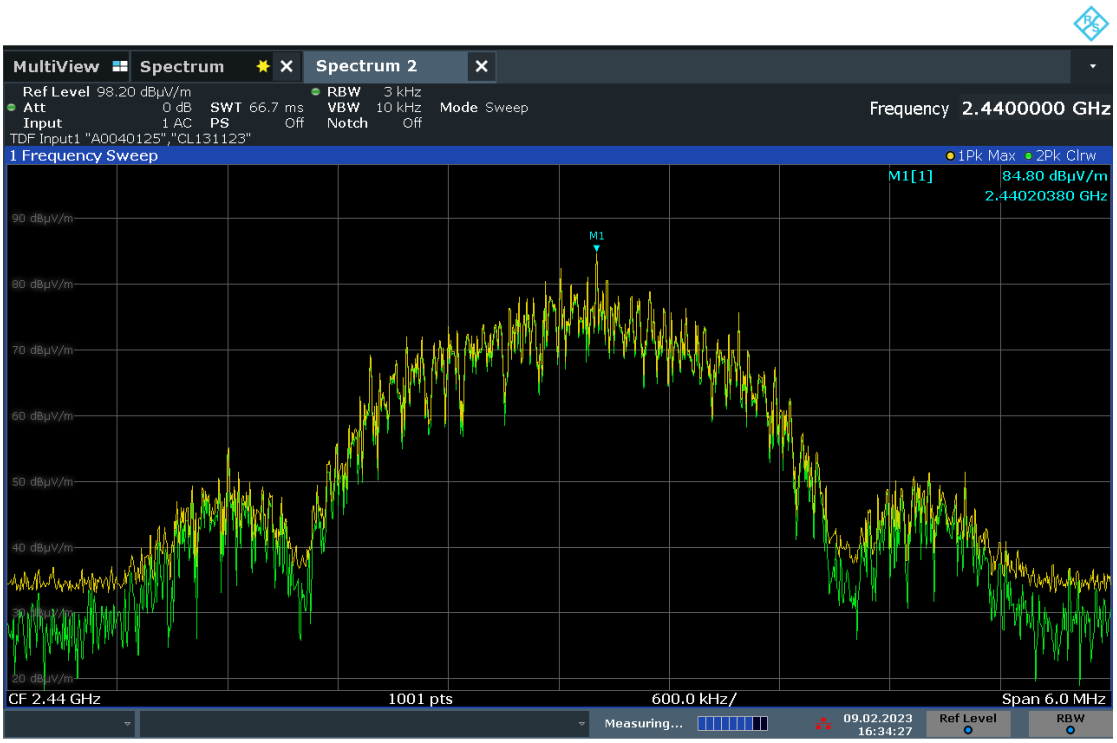
Table 6-14: Power spectral density

Freq. (MHz)	E-Field @ 3 m (dBµV/m)	EIRP (dBm)	Antenna Gain (dBi)	Equivalent Conducted Output PSD (dBm)	Limit (dBm)	Results
2402	83.90	-11.33	3.7	-15.03	8	Complied
2440	84.80	-10.43	3.7	-14.13	8	Complied
2480	77.23	-18.00	3.7	-21.7	8	Complied

The measured radiated field strength is converted to equivalent conducted output power for checking compliance (KDB 558074 D01 Section 3).



Graph 6-28: Radiated - Power Spectral Density, 2402 MHz



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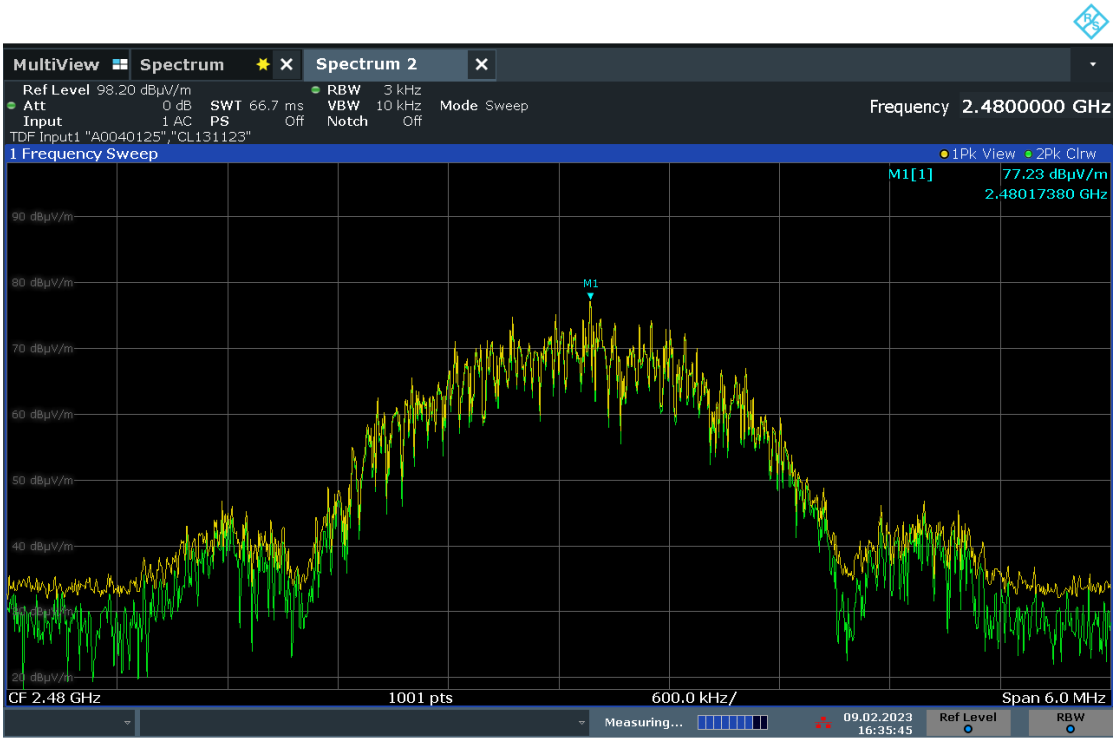
Graph 6-29: Radiated - Power Spectral Density, 2440 MHz



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Graph 6-30: Radiated - Power Spectral Density, 2480 MHz

6.10 §15.247(i)/ RSS-Gen 3.4/RSS-102 Maximum Permissible Exposure

The EUT complied with the applicable maximum permissible exposure levels. Refer to EMC Technologies report M2210007-11 and M2210007-13.

6.11 §15.215/ RSS-Gen 6.7 Occupied Bandwidth – 99% power

6.11.1 Test procedure

The bandwidth containing 99% power of the transmitted signal was measured using the procedure from ANSI C63.10 section 6.9.

6.11.2 Limits

The 99% power should be contained within the frequency band 2400 – 2483.5 MHz.

6.11.3 Results

Table 6-15: Occupied Bandwidth

Freq. (MHz)	99% Bandwidth (MHz)	Lower Frequency (MHz)	Upper Frequency (MHz)	Result
2402	2.0877	2401.037	2403.125	Complied
2440	2.1104	2439.017	2441.128	Complied
2480	2.0994	2479.029	2481.128	Complied

Graph 6-31: Occupied bandwidth, 2402 MHz

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Graph 6-32: Occupied bandwidth, 2440 MHz

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Graph 6-33: Occupied bandwidth, 2480 MHz

END OF REPORT