

Prüfbericht-Nr.: <i>Test report no.:</i>	CN262IQI 001	Auftrags-Nr.: <i>Order no.:</i>	48274731	Seite 1 von 29 Page 1 of 29
Kunden-Referenz-Nr.: <i>Client reference no.:</i>	N/A	Auftragsdatum: <i>Order date:</i>	2025-03-27	
Auftraggeber: <i>Client:</i>	KAGA FEI Co., Ltd. Gunseisha ANNEX Bldg. 5th floor, 382-1, Kaminamie-machi, Takasaki, Gunma, 370-0801, Japan			
Prüfgegenstand: <i>Test item:</i>	Bluetooth Low Energy Module			
Bezeichnung / Typ-Nr.: <i>Identification / Type no.:</i>	EC4L15, EC4L10, EC4L05			
Auftrags-Inhalt: <i>Order content:</i>	FCC Part 15C Test report (IEEE802.15.4)			
Prüfgrundlage: <i>Test specification:</i>	FCC 47CFR Part 15: Subpart C Section 15.247			
Wareneingangsdatum: <i>Date of sample receipt:</i>	2025-07-22			
Prüfmuster-Nr.: <i>Test sample no.:</i>	A004050069-008 A004050069-020			
Prüfzeitraum: <i>Testing period:</i>	2025-10-15 - 2026-01-29			
Ort der Prüfung: <i>Place of testing:</i>	TÜV Rheinland Taiwan Ltd. New Taipei Branch			
Prüflaboratorium: <i>Testing laboratory:</i>	TÜV Rheinland Taiwan Ltd. Taipei Testing Laboratories			
Prüfergebnis*: <i>Test result*:</i>	Pass			
zusammengestellt von: <i>compiled by:</i>	genehmigt von: <i>authorized by:</i>			
Datum: <i>Date:</i>	2026-06-01	Ausstellungsdatum: <i>Issue date:</i>	2026-06-01	
Stellung / Position:	Pei-Shan Tsai Section Manager	Stellung / Position:	Brenda Chen Senior Project Manager	
Sonstiges / Other:				
Zustand des Prüfgegenstandes bei Anlieferung: <i>Condition of the test item at delivery:</i>		Prüfmuster vollständig und unbeschädigt <i>Test item complete and undamaged</i>		
* Legende: 1 = sehr gut 2 = gut 3 = befriedigend 4 = ausreichend 5 = mangelhaft P(ass) = entspricht o.g. Prüfgrundlage(n) F(ail) = entspricht nicht o.g. Prüfgrundlage(n) N/A = nicht anwendbar N/T = nicht getestet * Legend: 1 = very good 2 = good 3 = satisfactory 4 = sufficient 5 = poor P(ass) = passed a.m. test specification(s) F(ail) = failed a.m. test specification(s) N/A = not applicable N/T = not tested				
Dieser Prüfbericht bezieht sich nur auf das o.g. Prüfmuster und darf ohne Genehmigung der Prüfstelle nicht auszugsweise vervielfältigt werden. Dieser Bericht berechtigt nicht zur Verwendung eines Prüfzeichens. <i>This test report only relates to the a. m. test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any test mark.</i>				

Prüfbericht-Nr.:
Test report no.:

CN262IQI 001

Seite 2 von 29
Page 2 of 29

Anmerkungen Remarks

- | | |
|----------|--|
| 1 | <p>Alle eingesetzten Prüfmittel waren zum angegebenen Prüfzeitraum gemäß eines festgelegten Kalibrierungsprogramms unseres Prüfhauses kalibriert. Sie entsprechen den in den Prüfprogrammen hinterlegten Anforderungen. Die Rückverfolgbarkeit der eingesetzten Prüfmittel ist durch die Einhaltung der Regelungen unseres Managementsystems gegeben.</p> <p>Detaillierte Informationen bezüglich Prüfkonditionen, Prüfequipment und Messunsicherheiten sind im Prüflabor vorhanden und können auf Wunsch bereitgestellt werden.</p> <p><i>The equipment used during the specified testing period was calibrated according to our test laboratory calibration program. The equipment fulfils the requirements included in the relevant standards. The traceability of the test equipment used is ensured by compliance with the regulations of our management system. Detailed information regarding test conditions, equipment and measurement uncertainty is available in the test laboratory and could be provided on request.</i></p> |
| 2 | <p>Wie vertraglich vereinbart, wurde dieses Dokument nur digital unterzeichnet. Der TÜV Rheinland hat nicht überprüft, welche rechtlichen oder sonstigen diesbezüglichen Anforderungen für dieses Dokument gelten. Diese Überprüfung liegt in der Verantwortung des Benutzers dieses Dokuments. Auf Verlangen des Kunden kann der TÜV Rheinland die Gültigkeit der digitalen Signatur durch ein gesondertes Dokument bestätigen. Diese Anfrage ist an unseren Vertrieb zu richten. Eine Umweltgebühr für einen solchen zusätzlichen Service wird erhoben. Informationen zur Verifizierung der Authentizität unserer Dokumente erhalten Sie auf folgender Webseite: go.tuv.com/digital-signature</p> <p><i>As contractually agreed, this document has been signed digitally only. TUV Rheinland has not verified and unable to verify which legal or other pertaining requirements are applicable for this document. Such verification is within the responsibility of the user of this document. Upon request by its client, TUV Rheinland can confirm the validity of the digital signature by a separate document. Such request shall be addressed to our Sales department. An environmental fee for such additional service will be charged. For information on verifying the authenticity of our documents, please visit the following website: go.tuv.com/digital-signature</i></p> |
| 3 | <p>Prüfklausel mit der Note * wurden an qualifizierte Unterauftragnehmer vergeben und sind unter der jeweiligen Prüfklausel des Berichts beschrieben.</p> <p>Abweichungen von Prüfspezifikation(en) oder Kundenanforderungen sind in der jeweiligen Prüfklausel im Bericht aufgeführt.</p> <p><i>Test clauses with remark of * are subcontracted to qualified subcontractors and described under the respective test clause in the report.</i></p> <p><i>Deviations of testing specification(s) or customer requirements are listed in specific test clause in the report.</i></p> |
| 4 | <p>Die Entscheidungsregel für Konformitätserklärungen basierend auf numerischen Messergebnissen in diesem Prüfbericht basiert auf der "Null-Grenzwert-Regel" und der "Einfachen Akzeptanz" gemäß ILAC G8:2019 und IEC Guide 115:2023, es sei denn, in der auf Seite 1 dieses Berichts genannten angewandten Norm ist etwas anderes festgelegt oder vom Kunden gewünscht. Dies bedeutet, dass die Messunsicherheit nicht berücksichtigt wird und daher auch nicht im Prüfbericht angegeben wird. Zu weiteren Informationen bezüglich des Risikos durch diese Entscheidungsregel siehe ILAC G8:2019.</p> <p><i>The decision rule for statements of conformity, based on numerical measurement results, in this test report is based on the "Zero Guard Band Rule" and "Simple Acceptance" in accordance with ILAC G8:2019 and IEC Guide 115:2023, unless otherwise specified in the applied standard mentioned on Page 1 of this report or requested by the customer. This means that measurement uncertainty is not taken in account and hence also not declared in the test report. For additional information to the resulting risk based of this decision rule please refer to ILAC G8:2019.</i></p> |

Prüfbericht-Nr.: CN262IQI 001
Test report no.:Seite 3 von 29
Page 3 of 29

TEST SUMMARY

Report Section	FCC Clause	Test Item	Result
5.1.1	15.247(b) & 15.203	Antenna Requirement	Pass
5.1.2	15.247(b)(3)	Peak Output Power	Pass
5.1.3	15.247(a)(2)	6 dB Bandwidth	Pass
5.1.3	2.1049	99% Occupied Bandwidth	Pass
5.1.4	15.247(e)	Power Spectral Density	Pass
5.1.5	15.247(d)	Conducted Spurious Emissions and Band Edges	Pass
5.1.6	15.247(d) & 15.205 & 15.209	Radiated Spurious Emissions and Band Edges	Pass
5.2.1	15.207	Mains Conducted Emission	Pass

Note: Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.

Contents

HISTORY OF THIS TEST REPORT	6
1. GENERAL REMARKS	7
1.1 COMPLEMENTARY MATERIALS	7
1.2 DECISION RULE OF CONFORMITY	7
2. TEST SITES	8
2.1 TEST LABORATORY	8
2.2 TEST FACILITY	8
2.3 TRACEABILITY	9
2.4 CALIBRATION	9
2.5 MEASUREMENT UNCERTAINTY	9
3. GENERAL PRODUCT INFORMATION	10
3.1 PRODUCT FUNCTION AND INTENDED USE	10
3.2 SYSTEM DETAILS AND RATINGS	10
3.3 NOISE GENERATING AND NOISE SUPPRESSING PARTS	11
3.4 SUBMITTED DOCUMENTS	11
4. TEST SET-UP AND OPERATION MODES	12
4.1 PRINCIPLE OF CONFIGURATION SELECTION	12
4.2 CARRIER FREQUENCY AND CHANNEL	12
4.3 TEST OPERATION AND TEST SOFTWARE	13
4.4 SPECIAL ACCESSORIES AND AUXILIARY EQUIPMENT	14
4.5 TEST SETUP DIAGRAM	15
4.6 DUTY CYCLE OF TEST SIGNAL	16
5. TEST RESULTS	17
5.1 TRANSMITTER REQUIREMENT & TEST SUITES	17
5.1.1 Antenna Requirement	17
5.1.2 Peak Output Power	18
5.1.3 6 dB Bandwidth and 99% Occupied Bandwidth	20
5.1.4 Power Spectral Density	21
5.1.5 Conducted Spurious Emissions and Frequency Band Edges Measured in 100kHz Bandwidth	22
5.1.6 Radiated Spurious Emissions and Band Edges	23
5.2 MAINS EMISSION	28
5.2.1 Mains Conducted Emission	28

Prüfbericht-Nr.: **CN262IQI 001**
Test report no.:

Seite 5 von 29
Page 5 of 29

APPENDIX A - TEST RESULT OF CONDUCTED

APPENDIX B - TEST RESULT OF RADIATED EMISSIONS & MAINS CONDUCTED EMISSION

APPENDIX SP - PHOTOGRAPHS OF TEST SETUP

APPENDIX EP - PHOTOGRAPHS OF EUT

Prüfbericht-Nr.: **CN262IQI 001**
Test report no.:

Seite 6 von 29
Page 6 of 29

HISTORY OF THIS TEST REPORT

Revision	Description	Date Issued
R01	Original Release	2026-02-26
R02	Revise the product name, FCC ID, and antenna gain	2026-06-01

Prüfbericht-Nr.: CN262IQI 001
Test report no.:Seite 7 von 29
Page 7 of 29

1. General Remarks

1.1 Complementary Materials

All attachments are integral parts of this test report. This applies especially to the following appendix:

Appendix A - Test Result of Conducted

Appendix B - Test Result of Radiated Emissions & Mains Conducted Emission

Appendix SP - Photographs of Test Setup

Appendix EP - Photographs of EUT

Applied Standard and Test Levels

Radio
FCC 47CFR Part 15: Subpart C Section 15.247
FCC 47CFR Part 2: Subpart J Section 2.1049
ANSI C63.10-2020
KDB 558074 D01 15.247 Meas Guidance v05r02

1.2 Decision Rule of Conformity

The decision rule of conformity of this test report is following the requirements of the requested standard in the quotation, and agreed among testing laboratory and manufacturer (applicant) to exclude the consideration of Measurement Uncertainty, unless it is required by the specific standard.

Prüfbericht-Nr.: **CN262IQI 001**
Test report no.:

Seite 8 von 29
Page 8 of 29

2. Test Sites

2.1 Test Laboratory

TÜV Rheinland Taiwan Ltd. Taipei Testing Laboratories

11F. No.758, Sec. 4, Bade Rd., Songshan Dist.
Taipei City 105
Taiwan (R.O.C.)

2.2 Test Facility

TÜV Rheinland Taiwan Ltd. Taipei Testing Laboratories

No.458-18, Sec. 2, Fenliao Rd., Linkou Dist.,
New Taipei City 244
Taiwan (R.O.C.)
FCC Registration No.: 180491 (TW3567)
ISED Registration No.: 25563 (TW3567)

2.3 Traceability

All measurement equipment calibrations are traceable to NML(Taiwan)/NIST(USA) or where calibration is performed outside Taiwan, to equivalent nationally recognized standards organizations.

2.4 Calibration

Equipment requiring calibration is calibrated periodically in a suitably accredited Calibration Lab. Additionally all equipment is verified for proper performance on a regular basis using in house standards or comparisons.

2.5 Measurement Uncertainty

All measurement uncertainty values are shown with a coverage factor of $k=2$ to indicate a 95% level of confidence.

Emission Measurement Uncertainty

Parameter	Uncertainty
Radiated Emission (9 kHz ~ 30 MHz)	± 1.15 dB
Radiated Emission (30 MHz ~ 200 MHz)	± 1.30 dB
Radiated Emission (200 MHz ~ 1 GHz)	± 1.30 dB
Radiated Emission (1 GHz ~ 18 GHz)	± 1.54 dB
Radiated Emission (18 GHz ~ 40 GHz)	± 2.52 dB
Mains Conducted Emission	± 1.65 dB

3. General Product Information

3.1 Product Function and Intended Use

The EUT is a Bluetooth Low Energy Module. It contains a IEEE802.15.4 compatible module enabling the user to communicate data through a Wireless interface.

For details refer to the User Guide, Data Sheet and Circuit Diagram.

3.2 System Details and Ratings

Basic Information of EUT

Item	EUT information
Kind of Equipment/Test Item	Bluetooth Low Energy Module
Type Identification	EC4L15, EC4L10, EC4L05
FCC ID	2A6NFEC4L15

Note:

1. All models are listed as below.

Main Model (Test Model)	Series Model	Difference
EC4L15	EC4L10	There are two sister models (EC4L10, EC4L05) which use RF IC with different memory.
	EC4L05	

Technical Specification of EUT

Item	EUT information
Operating Frequency	2405 MHz ~ 2480 MHz
Channel Number	16
Operation Voltage	1.7 Vdc ~ 3.6 Vdc (nominal voltage: 3.0 Vdc)
Modulation	O-QPSK
Maximum Output Power (mW)	4.26
Antenna Information	Refer to 5.1.1
Accessory Device	Refer to 4.4

Prüfbericht-Nr.: CN262IQI 001
Test report no.:

Seite 11 von 29
Page 11 of 29

3.3 Noise Generating and Noise Suppressing Parts

Refer to the Circuit Diagram.

3.4 Submitted Documents

- Circuit Diagram
- Instruction Manual
- Rating Label
- Technical Description

4. Test Set-up and Operation Modes

4.1 Principle of Configuration Selection

The test modes were adapted accordingly in reference to the instructions for use.

During testing, Channel and Power Controlling Software provided by the customer was used to control the operating channel as well as the output power level. The RF output power selection is for the setting of RF output expected by the customer and is going to be fixed on the firmware of the final end product.

Table for Parameters of Test Software Setting

Frequency (MHz)	Power Setting
2405	7
2440	7
2480	7

4.2 Carrier Frequency and Channel

Channel	Freq. (MHz)	Channel	Freq. (MHz)
11	2405	19	2445
12	2410	20	2450
13	2415	21	2455
14	2420	22	2460
15	2425	23	2465
16	2430	24	2470
17	2435	25	2475
18	2440	26	2480

Prüfbericht-Nr.: CN262IQI 001
Test report no.:

Seite 13 von 29
Page 13 of 29

4.3 Test Operation and Test Software

Setup for testing: Test samples are provided with a USB interface which makes it possible to control them through a test software installed on a notebook computer.

This software was running on the laptop computer connected to the EUT. It was used to enable the operation modes listed as below.

Test Software	Radio Test Tool
---------------	-----------------

The samples were used as follows:

A004050069-008

A004050069-020

Full test was applied on all test modes, but only worst case was shown.

EUT Configure Mode	Applicable To				Description
	Antenna Port Conducted Measurement	Radiated Spurious Emissions above 1 GHz	Radiated Spurious Emissions below 1 GHz	Mains Conducted Emission	
-	√	√	√	√	-

Note:

1. The EUT had been pre-tested on the positioned of each 3 axis. The worst case was found when position on **Y-plane**.
2. "-" means no effect.

Antenna Port Conducted Measurement

- ☒ Pre-Scan full test was applied on all test modes, but only worst case was shown.
- ☒ Following channel(s) was (were) selected for the final test as listed below.

EUT Configure Mode	Available Frequency (MHz)	Tested Frequency (MHz)
-	2405 to 2480	2405, 2440, 2480

Radiated Spurious Emissions (Above 1 GHz)

- ☒ Pre-Scan full test was applied on all test modes, but only worst case was shown.
- ☒ Following channel(s) was (were) selected for the final test as listed below.

EUT Configure Mode	Available Frequency (MHz)	Tested Frequency (MHz)
-	2405 to 2480	2405, 2440, 2480

Radiated Spurious Emissions (Below 1 GHz)

- ☒ Pre-Scan full test was applied on all test modes, but only worst case was shown.
- ☒ Following channel(s) was (were) selected for the final test as listed below.

EUT Configure Mode	Available Frequency (MHz)	Tested Frequency (MHz)
-	2405 to 2480	2480

Mains Conducted Emission

- ☒ Pre-Scan full test was applied on all test modes, but only worst case was shown.
- ☒ Following channel(s) was (were) selected for the final test as listed below.

EUT Configure Mode	Available Frequency (MHz)	Tested Frequency (MHz)
-	2405 to 2480	2480

Prüfbericht-Nr.: CN262IQI 001
Test report no.:

Seite 14 von 29
Page 14 of 29

Test Condition

Test Item	Ambient Temperature	Relative Humidity	Tested by
Conducted Measurement	18.3-23.7 °C	54-56.2 %	Nick Hsu / Andy Chen
Radiated Spurious Emissions above 1 GHz	23.1-25.5 °C	49-52 %	Peter Chiou
Radiated Spurious Emissions below 1 GHz	23.1-25.5 °C	49-52 %	Peter Chiou
Mains Conducted Emission	23.5 °C	66 %	Chuan Chu

4.4 Special Accessories and Auxiliary Equipment

The product has been tested together with the following additional accessories:

Accessory of EUT

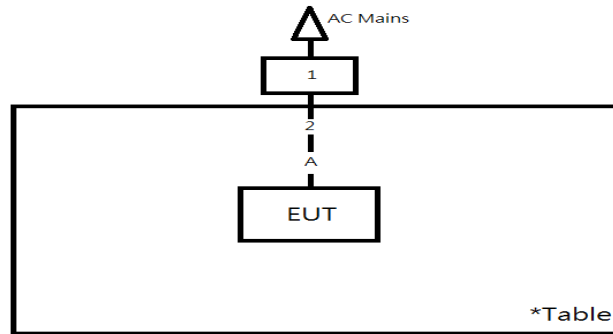
None

Support Unit

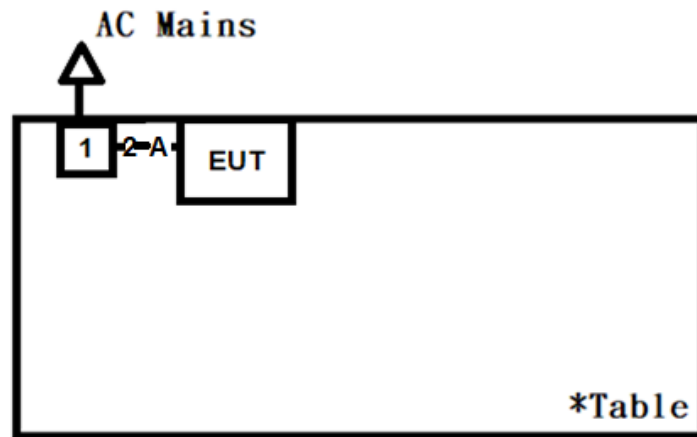
Support Unit								
No	Description	Brand	Model	S/N	Shielded	Ferrite Core (Qty)	Length (cm)	Remark
A	Power Supply Cable	KAGA FEI	KAGA FEI-Cable-001	N/A	NO	NO	40	Radiated
1	DC Power Supply	Gwinstek	GPS-3303	N/A	-	-	-	
2	Cable	TUV	TUV-01	N/A	N/A	NA	200	
A	Power Supply Cable	KAGA FEI	KAGA FEI-Cable-001	N/A	NO	NO	40	Mains Conducted
1	DC Power Supply	Gwinstek	GPS-3303	N/A	-	-	-	
2	Cable	TUV	TUV-002	N/A	NO	NO	100	
-	Notebook	DELL	Latitude 7490	887V7Y2	-	-	-	--
-	Power supply	Radio Tek	KEITHLEY	2303	-	-	-	--
-	USB Cable	TUV	TUV-08	1	NO	NO	100	--

4.5 Test Setup Diagram

<Radiated Spurious Emissions mode>



<Mains Conducted Emission mode>

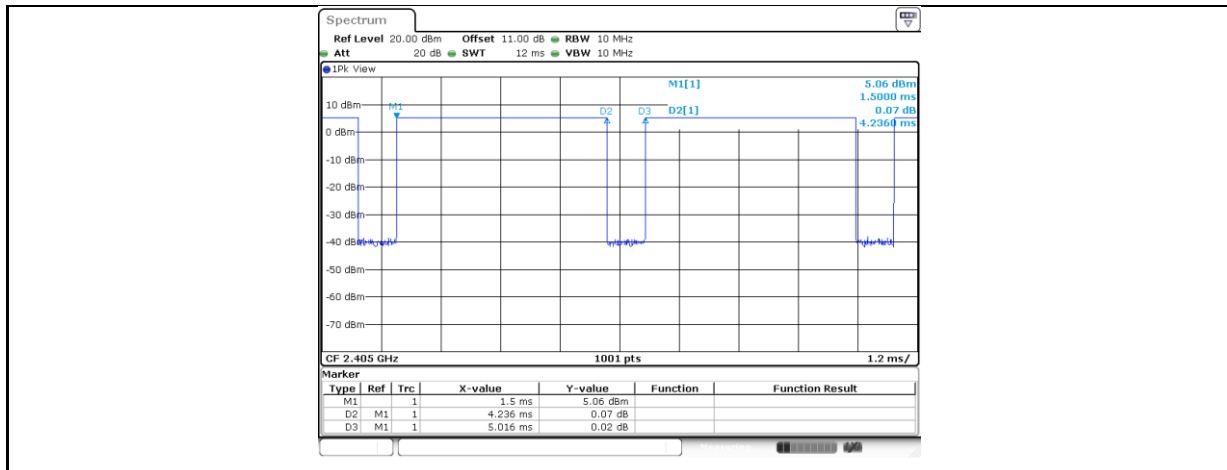


Prüfbericht-Nr.: **CN262IQI 001**
Test report no.:

Seite 16 von 29
Page 16 of 29

4.6 Duty Cycle of Test Signal

Mode	On + Off Time (ms)	On Time (ms)	Duty Cycle (%)	Duty Factor (dB)
IEEE802.15.4	5.02	4.24	84.45	0.73



Prüfbericht-Nr.: CN262IQI 001
Test report no.:Seite 17 von 29
Page 17 of 29

5. Test Results

5.1 Transmitter Requirement & Test Suites

5.1.1 Antenna Requirement

Requirement Use of approved antennas only

According to the manufacturer declaration, the EUT has an antenna with a directional gain of -2.9 dBi. The antenna is PCB antenna with no possibility of replacement with a non-approved antenna by the end-user. Therefore, the EUT is considered to comply with this provision.
Refer to EUT photo for details.

Prüfbericht-Nr.: **CN262IQI 001**
Test report no.:

Seite 18 von 29
Page 18 of 29

5.1.2 Peak Output Power

Limit 1 watt (30 dBm)

Kind of Test Site Shielded room

Test Setup



Test Instruments

Kind of Equipment	Manufacturer	Type	S/N	Calibration Date	Calibration Due Date	Test Date	
						From	Until
Power Meter	Anritsu	ML2495A	1901008	2025/02/26	2026/02/25	2025/10/15	2026/01/29
Power Sensor	Anritsu	MA2411B	1725269	2025/02/26	2026/02/25	2025/10/15	2026/01/29

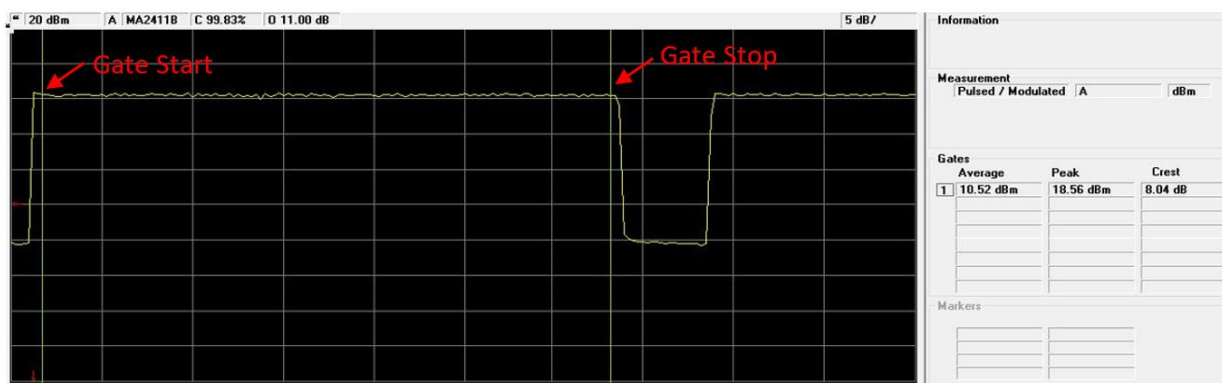
Test Procedures

A peak power sensor was used on the output port of the EUT. A power meter was used to read the response of the peak power sensor. Record the power level.

Average power sensor was used to perform output power measurement, trigger and gating function of wide band power meter is enabled to measure max output power of TX on burst. Duty factor is not added to measured value.

Gate Setup:

1. Select the [Gates] tab in the software.
2. Check the box (e.g., Gate 1) to display it on the trace.
3. Set Gate Position
 - Drag the gate line with the mouse to the desired point on the waveform, or
 - Enter Values using the [Set] button and input start/stop times.
4. Switch to the next measurement channel and repeat the same gate setup procedure.
5. The instrument calculates average/peak power only within the defined gate interval.



Prüfbericht-Nr.: CN262IQI 001
Test report no.:Seite 19 von 29
Page 19 of 29**Test Result****Peak Output Power**

Channel	Channel Frequency	Peak Output Power		Limit (dBm)
	(MHz)	(dBm)	(mW)	
Low Channel	2405	6.26	4.23	30
Middle Channel	2440	6.22	4.19	30
High Channel	2480	6.29	4.26	30

Average Power

Channel	Channel Frequency	Average Power	
	(MHz)	(dBm)	(mW)
Low Channel	2405	6.16	4.13
Middle Channel	2440	6.11	4.08
High Channel	2480	6.19	4.16

Prüfbericht-Nr.: **CN262IQI 001**
Test report no.:

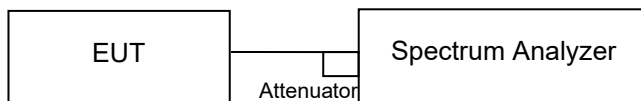
Seite 20 von 29
Page 20 of 29

5.1.3 6 dB Bandwidth and 99% Occupied Bandwidth

Limit The minimum 6 dB bandwidth shall be at least 500 kHz.

Kind of Test Site Shielded room

Test Setup



Test Instruments

Kind of Equipment	Manufacturer	Type	S/N	Calibration Date	Calibration Due Date	Test Date	
						From	Until
Spectrum Analyzer	R&S	FSV	101512	2025/02/26	2026/02/25	2025/10/15	2026/01/29

Test Procedure

- Set resolution bandwidth (RBW) = 100 kHz
- Set the video bandwidth (VBW) $\geq 3 \times$ RBW, Detector = Peak.
- Trace mode = max hold.
- Sweep = auto couple.
- Measure the maximum width of the emission that is constrained by the frequencies associated with the two amplitude points (upper and lower) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.
- For 99% occupied bandwidth measurement, the transmitter output was connected to the spectrum analyzer through an attenuator. The bandwidth of the fundamental frequency was measured by spectrum analyzer with resolution bandwidth in the range of 1% to 5% of the anticipated emission bandwidth, and a video bandwidth at least 3x the resolution bandwidth and set the detector to PEAK. The width of a frequency band such that, below the lower and above the upper frequency limits, the mean powers emitted are each equal to a specified percentage 0.5% of the total mean power of a given emission.

Test Results

Please refer to Appendix A.

Prüfbericht-Nr.: **CN262IQI 001**
Test report no.:

Seite 21 von 29
Page 21 of 29

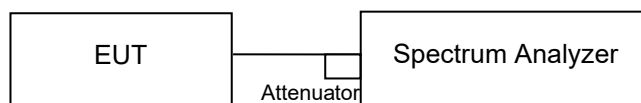
5.1.4 Power Spectral Density

Limit

The power spectral density shall not be greater than 8 dBm in any 3 kHz band.

Kind of Test Site Shielded room

Test Setup



Test Instruments

Kind of Equipment	Manufacturer	Type	S/N	Calibration Date	Calibration Due Date	Test Date	
						From	Until
Spectrum Analyzer	R&S	FSV	101512	2025/02/26	2026/02/25	2025/10/15	2026/01/29

Test Procedure

- Set analyzer center frequency to DTS channel center frequency.
- Set the span to 1.5 times the DTS bandwidth.
- Set the RBW to: $3 \text{ kHz} \leq \text{RBW} \leq 100 \text{ kHz}$.
- Set the VBW $\geq 3 \times \text{RBW}$.
- Detector = peak.
- Sweep time = auto couple.
- Trace mode = max hold.
- Allow trace to fully stabilize.
- Use the peak marker function to determine the maximum amplitude level within the RBW.

Test Results

Please refer to Appendix A.

Prüfbericht-Nr.: **CN262IQI 001**
Test report no.:

Seite 22 von 29
Page 22 of 29

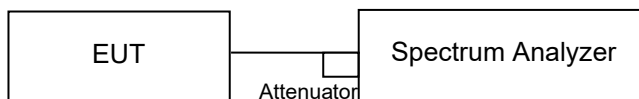
5.1.5 Conducted Spurious Emissions and Frequency Band Edges Measured in 100kHz Bandwidth

Limit

20dB (below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power.)

Kind of Test Site Shielded room

Test Setup



Test Instruments

Kind of Equipment	Manufacturer	Type	S/N	Calibration Date	Calibration Due Date	Test Date	
						From	Until
Spectrum Analyzer	R&S	FSV	101512	2025/02/26	2026/02/25	2025/10/15	2026/01/29

Test Procedure

Measurement procedure REF

1. Set the RBW = 100 kHz.
2. Set the VBW $\geq$ 300 kHz.
3. Detector = peak.
4. Sweep time = auto couple.
5. Trace mode = max hold.
6. Allow trace to fully stabilize.
7. Use the peak marker function to determine the maximum power level in any 100 kHz band segment within the fundamental EBW.

Measurement procedure OOBE

1. Set RBW = 100 kHz.
2. Set VBW $\geq$ 300 kHz.
3. Detector = peak.
4. Sweep = auto couple.
5. Trace Mode = max hold.
6. Allow trace to fully stabilize.
7. Use the peak marker function to determine the maximum amplitude level.

Test Results

Please refer to Appendix A.

5.1.6 Radiated Spurious Emissions and Band Edges

Limit

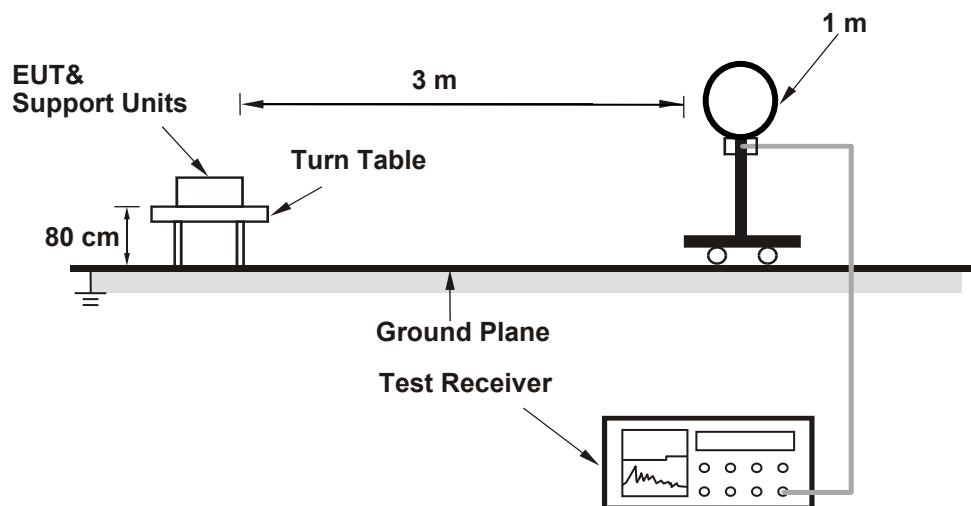
Radiated emissions which fall in the restricted bands, as defined in §15.205(a), must comply with the radiated emission limits specified in §15.209(a).

Emissions radiated outside the restricted and authorized frequency bands must either comply with the radiated emission limits specified for the restricted bands or in §15.247(d).

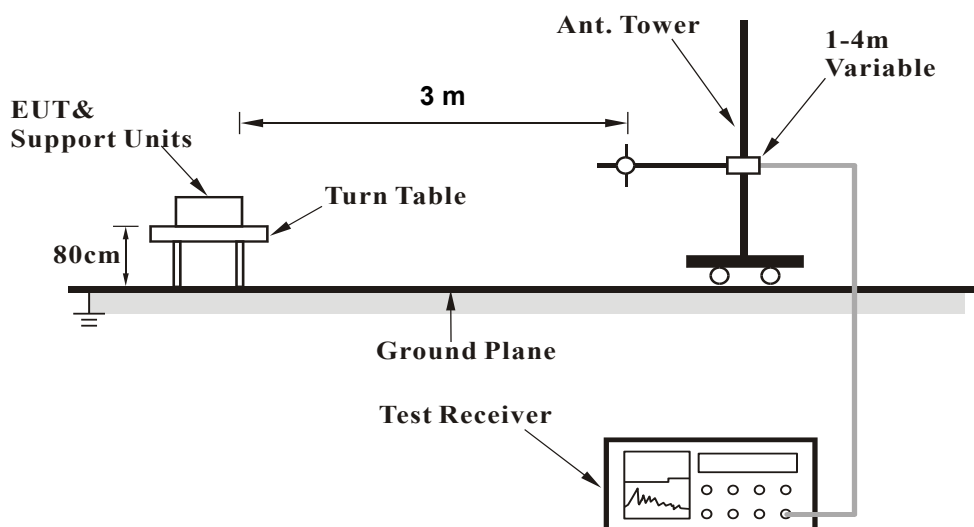
Kind of Test Site 3m Semi-Anechoic Chamber

Test Setup

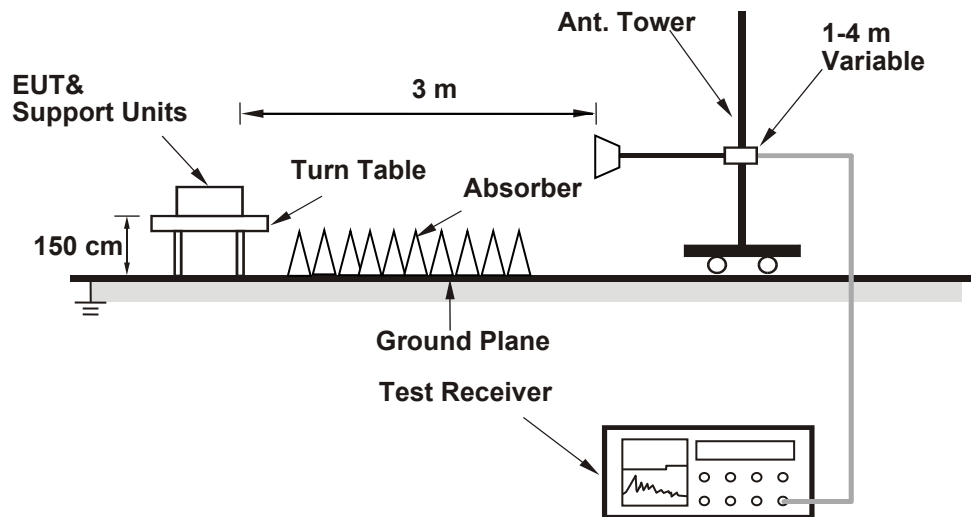
<Radiated Emissions below 30 MHz>



<Radiated Emissions 30 MHz to 1 GHz>



<Radiated Emissions above 1 GHz>



For the actual test configuration, please refer to the attached file (Test Setup Photo).

Prüfbericht-Nr.: CN262IQI 001
Test report no.:

Seite 25 von 29
Page 25 of 29

Test Instruments

Kind of Equipment	Manufacturer	Type	S/N	Calibration Date	Calibration Due Date
Above 1 GHz (Test Period: 2025-10-16)					
Signal Analyzer	R&S	FSV40	101509	2025/5/7	2026/5/6
Horn Antenna	ETS-Lindgren	3117	00218930	2024/12/10	2025/12/9
Horn Antenna	SCHWARZBECK	BBHA 9170	00887	2025/3/28	2026/3/27
Amplifier	EM	EM01G18GA	060967	2025/4/2	2026/4/1
Microwave Cable	EM	EM102A-KMKM-700	001	2025/05/09	2026/05/08
Microwave Cable	HUBER+SUHNER	SUCOFLEX 102EA	800901/2EA	2024/10/23	2025/10/22
Microwave Cable	HUBER+SUHNER	SUCOFLEX 102EA	801027/2EA	2024/10/23	2025/10/22
HF-AMP + AC source	EMCI	EMC184045SE	980657	2025/2/4	2026/2/3
Test Software	Audix E3	15914a_20191106_tuv	PK-001087	N/A	N/A
30 MHz ~ 1 GHz (Test Period: 2026-01-29)					
Receiver	R&S	ESR7	102109	2025/2/13	2026/2/12
Bilog Antenna	SCHWARZBECK	VULB-9168	00951	2025/4/8	2026/4/7
LF-AMP	Agilent	8447D	2944A107722	2025/3/19	2026/3/18
Microwave Cable	HUBER+SUHNER	SUCOFLEX 104EA	800056/4EA	2025/03/21	2026/3/20
Microwave Cable	HUBER+SUHNER	SUCOFLEX 104	804680/4	2025/03/21	2026/3/20
Microwave Cable	HUBER+SUHNER	SUCOFLEX 104	MY37202/4	2025/03/21	2026/3/20
Test Software	Audix E3	15914a_20191106_tuv	PK-001087	N/A	N/A
Below 30 MHz (Test Period: 2026-01-29)					
Receiver	R&S	ESR7	102109	2025/2/13	2026/2/12
Loop Antenna	SCHWARZBECK	FMZB 1519B	00215	2025/12/16	2026/12/15
Microwave Cable	HUBER+SUHNER	SUCOFLEX 104EA	800056/4EA	2025/03/21	2026/3/20
Microwave Cable	HUBER+SUHNER	SUCOFLEX 104	804680/4	2025/03/21	2026/3/20
Test Software	Audix E3	15914a_20191106_tuv	PK-001087	N/A	N/A

Test Procedures**For Radiated Emissions below 30 MHz**

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter chamber room. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. Parallel (OPEN), perpendicular (CLOSE), and ground-parallel (GROUND) orientations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to Quasi-Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.

Note:

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 9 kHz at frequency below 30 MHz.
2. All modes of operation were investigated and the worst-case emissions are reported.

For Radiated Emissions above 30 MHz

- a. The EUT was placed on the top of a rotating table 0.8 meters (for 30 MHz ~ 1 GHz) / 1.5 meters (for above 1 GHz) above the ground at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. The height of antenna is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to quasi-peak detect function and specified bandwidth with maximum hold mode when the test frequency is below 1 GHz.
- f. The test-receiver system was set to peak and average detected function and specified bandwidth with maximum hold mode when the test frequency is above 1 GHz. If the peak reading value also meets average limit, measurement with the average detector is unnecessary.

Note:

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120 kHz for Quasi-peak detection (QP) or Peak detection (PK) at frequency below 1 GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz for Peak detection (PK) at frequency above 1 GHz.
3. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is $\geq 1/T$ (Duty cycle $< 98\%$) or 10 Hz (Duty cycle $\geq 98\%$) for Average detection (AV) at frequency above 1 GHz.
4. All modes of operation were investigated and the worst-case emissions are reported.
5. The Radiated Emissions testing was performed in the X(E1), Y(H) and Z(E2) axis orientation. The worst-case Axis orientation is recorded in this test report.
6. The emission levels of other frequencies (including the 10th harmonic of the highest fundamental frequency) are very lower than the limit and are not shown in the test report.

Prüfbericht-Nr.: **CN262IQI 001**
Test report no.:

Seite 27 von 29
Page 27 of 29

Test Results

Factor (dB/m) = Antenna Factor (dB/m) + Cable Loss (dB) – Amplifier (dB)

Level (dBuV/m) = Reading (dBuV) + Factor (dB/m)

Please refer to Appendix B.

Prüfbericht-Nr.: **CN262IQI 001**
Test report no.:

Seite 28 von 29
Page 28 of 29

5.2 Mains Emission

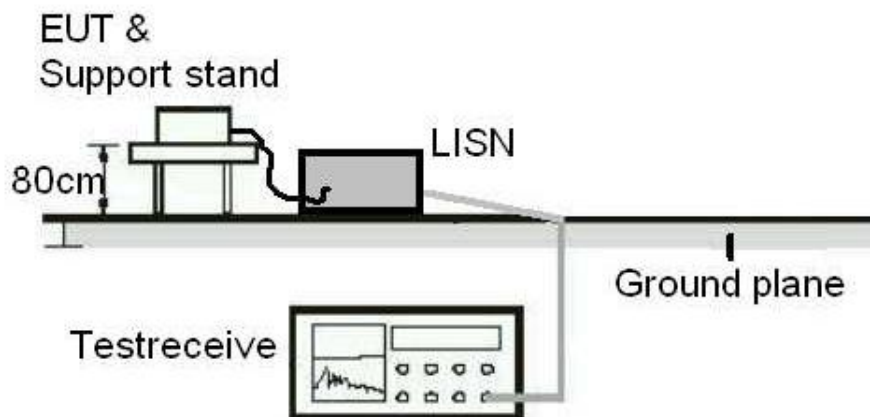
5.2.1 Mains Conducted Emission

Limit

Mains Conducted Emission as defined in §15.207 must comply with the mains conducted emission limits.

Kind of Test Site Shielded room

Test Setup



Test Instruments

Test Period: 2026-01-29

Kind of Equipment	Manufacturer	Type	S/N	Calibration Date	Calibration Due Date
Two-Line V-Network	SCHWARZBECK	NSLK 8127	8127-00976	2026/01/07	2027/01/06
EMI Test Receiver	R&S	ESCI	101094	2025/11/19	2026/11/18

Prüfbericht-Nr.: **CN262IQI 001**
Test report no.:

Seite 29 von 29
Page 29 of 29

Test Procedures

- a. The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/50 uH of coupling impedance for the measuring instrument.
- b. Both lines of the power mains connected to the EUT were checked for maximum conducted interference.
- c. The frequency range from 150 kHz to 30 MHz was searched. Emission levels under (Limit – 20 dB) was not recorded.

Note: The resolution bandwidth and video bandwidth of test receiver is 9 kHz for quasi-peak detection (QP) and average detection (AV) at frequency 0.15 MHz – 30 MHz.

Test Results

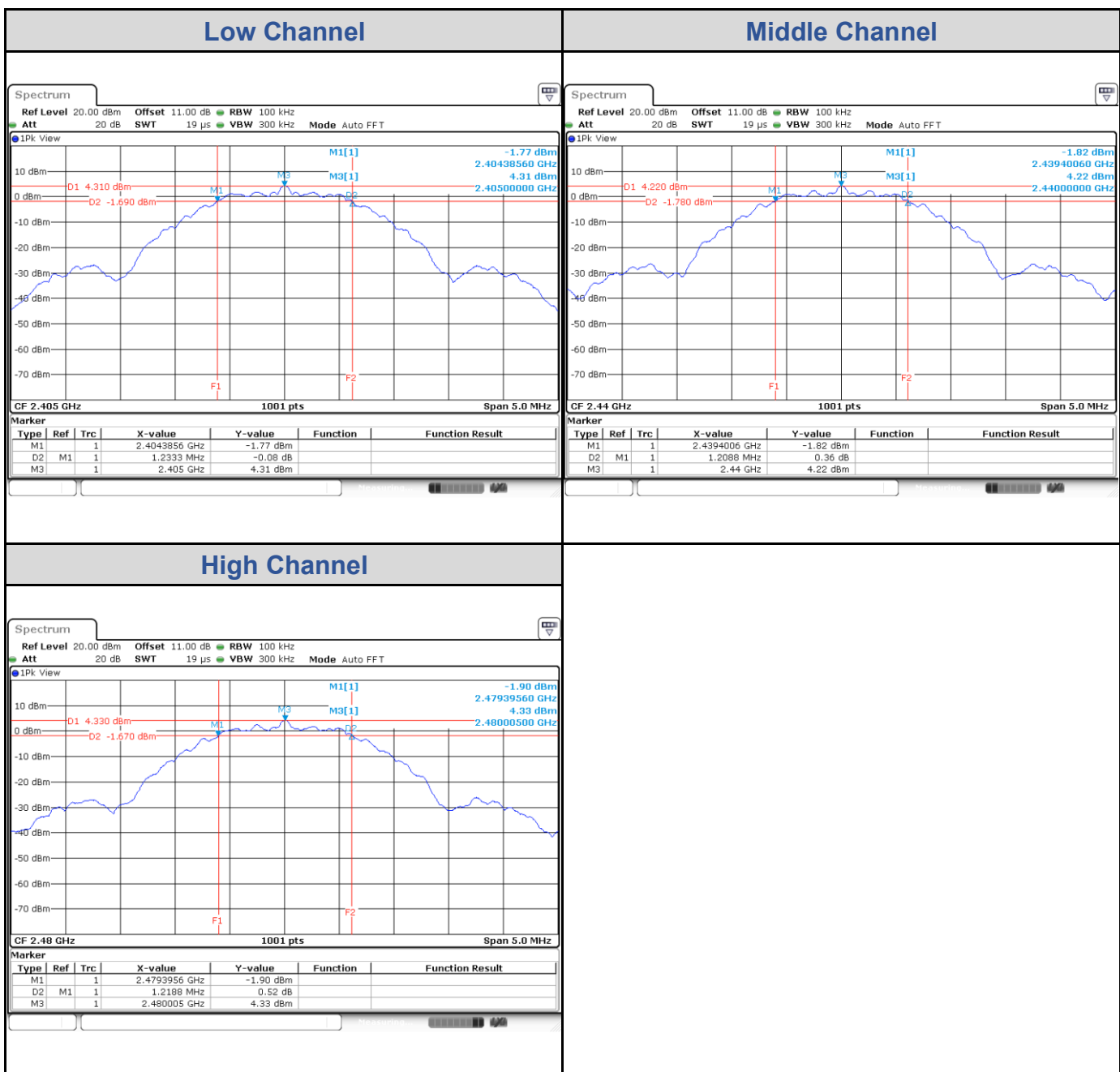
Please refer to Appendix B.

Appendix A: Test Results of Conducted Test

Test Result of 6 dB Bandwidth

IEEE 802.15.4

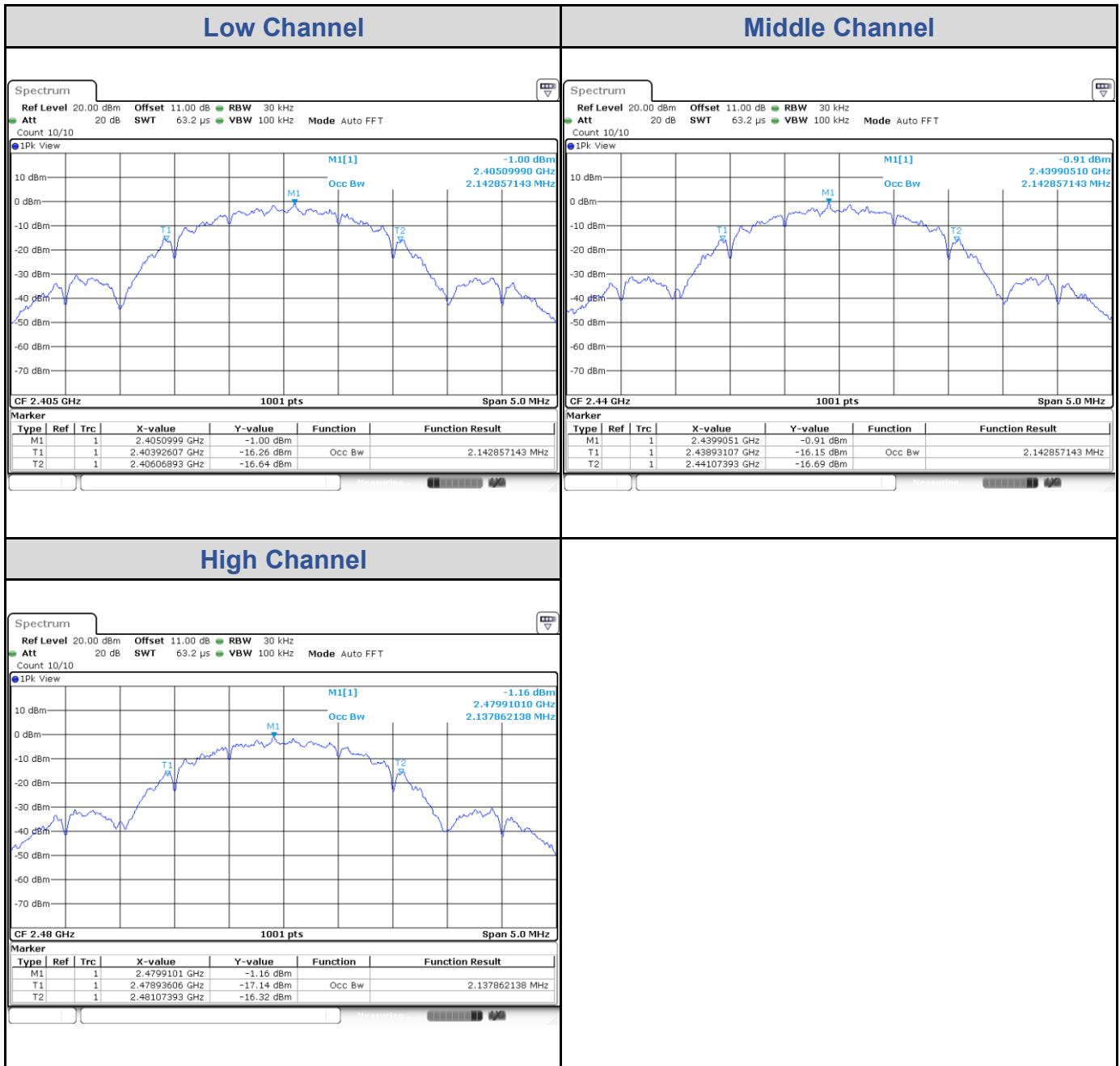
Channel	Channel Frequency (MHz)	6 dB Bandwidth (MHz)	Limit (MHz)	Result
Low Channel	2405	1.23	0.5	Pass
Middle Channel	2440	1.21	0.5	Pass
High Channel	2480	1.22	0.5	Pass



Test Result of 99% Occupied Bandwidth

IEEE 802.15.4

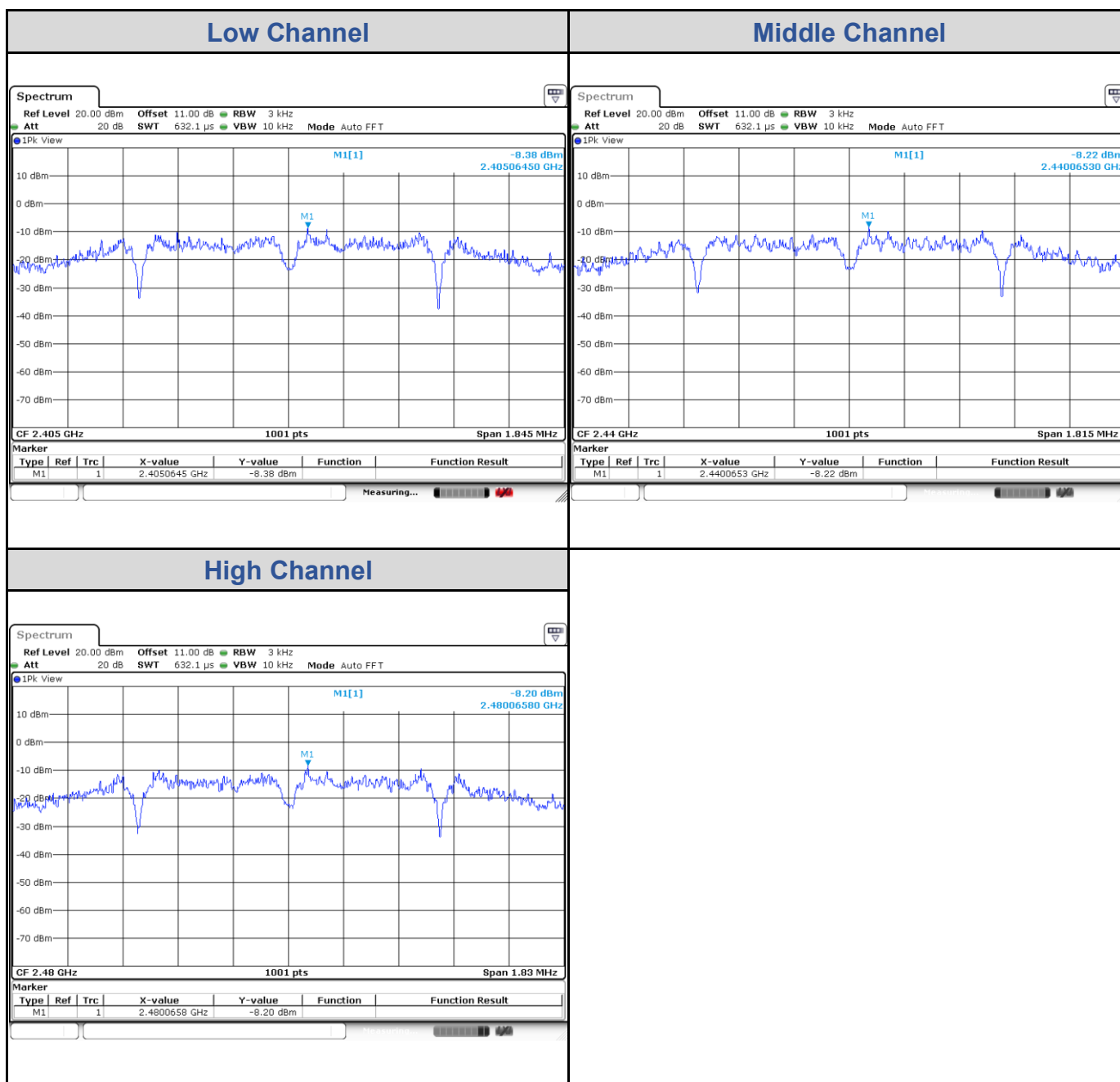
Channel	Channel Frequency (MHz)	99% Bandwidth (MHz)
Low Channel	2405	2.14
Middle Channel	2440	2.14
High Channel	2480	2.14



Test Result of Power Spectral Density

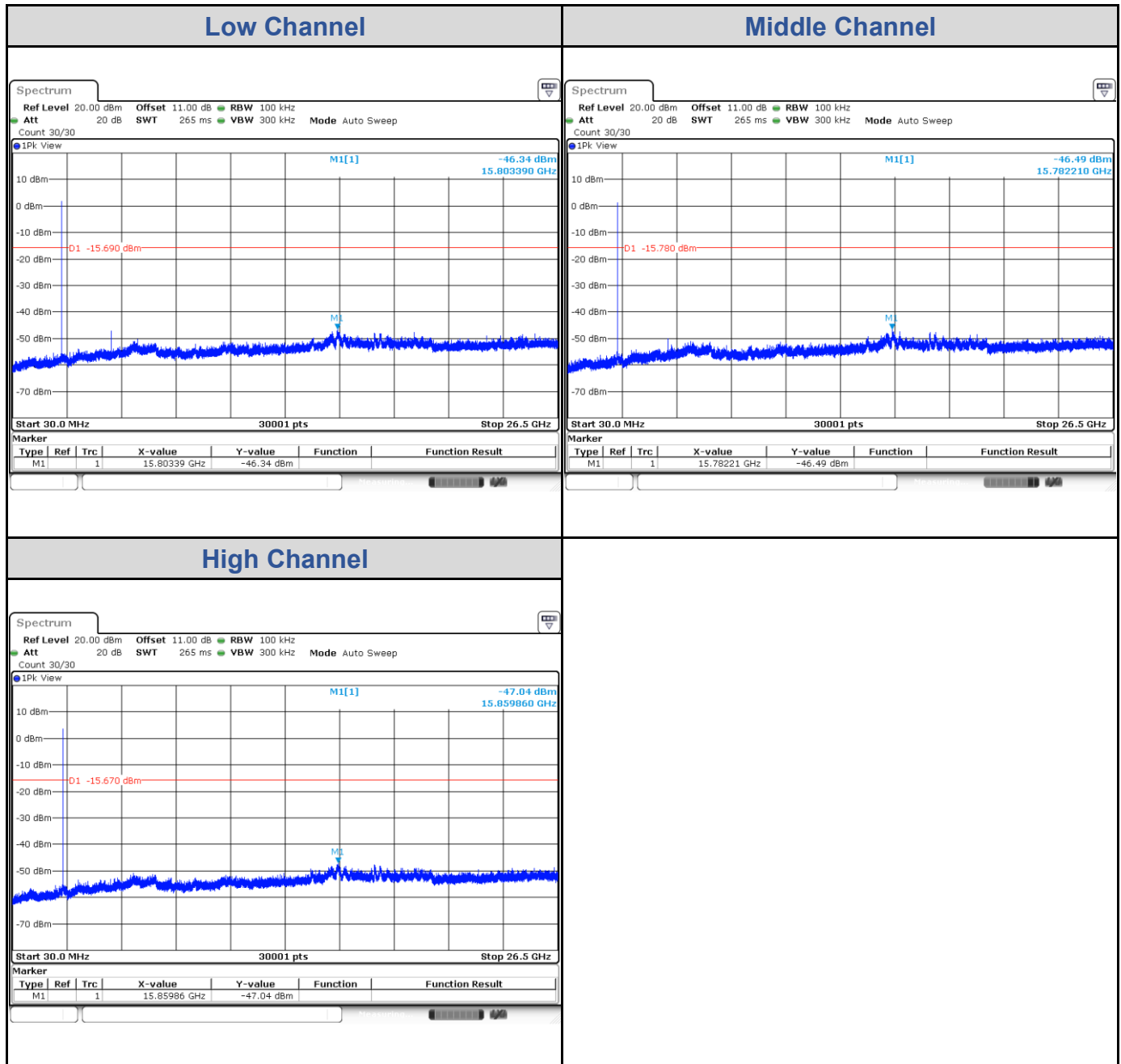
IEEE 802.15.4

Channel	Channel Frequency (MHz)	Power Density (dBm/3kHz)	Limit (dBm/3kHz)	Result
Low Channel	2405	-8.38	8	Pass
Middle Channel	2440	-8.22	8	Pass
High Channel	2480	-8.20	8	Pass



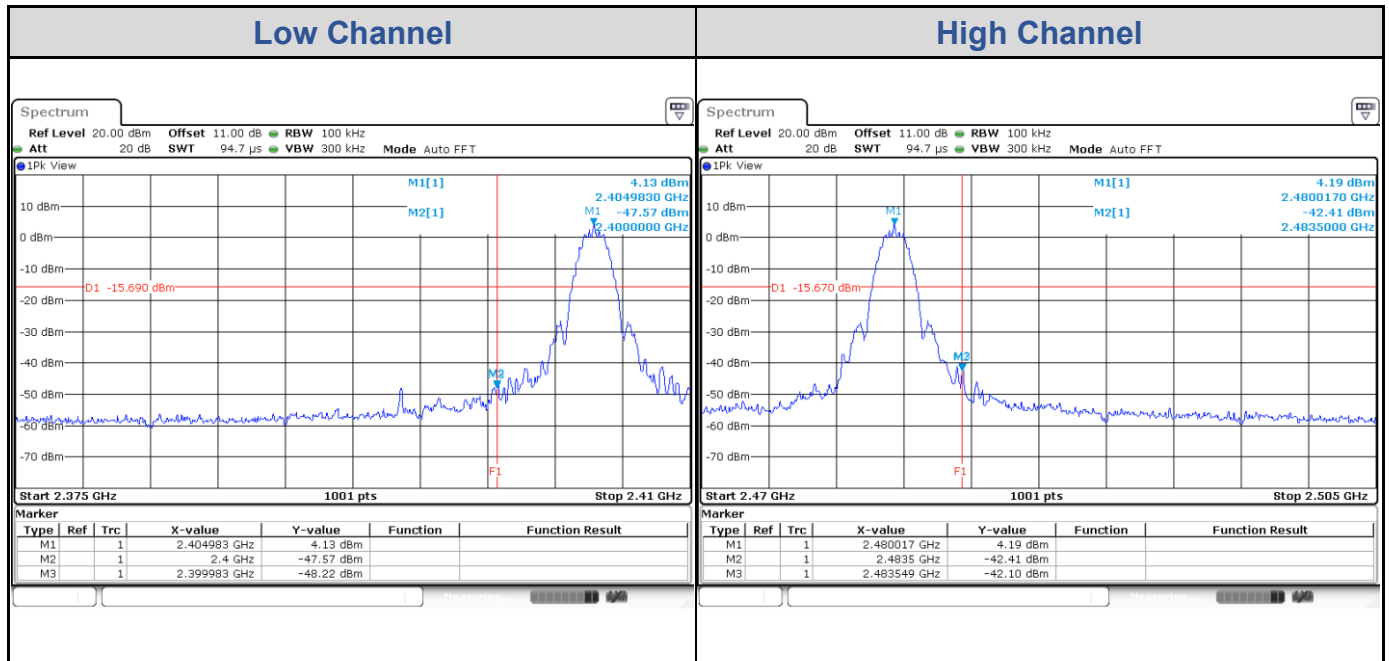
Test Result of Conducted Spurious Emissions

IEEE 802.15.4



Test Result of Conducted Band Edge

IEEE 802.15.4



Appendix B: Test Results of Radiated Spurious Emissions & Mains

Conducted Emission Test

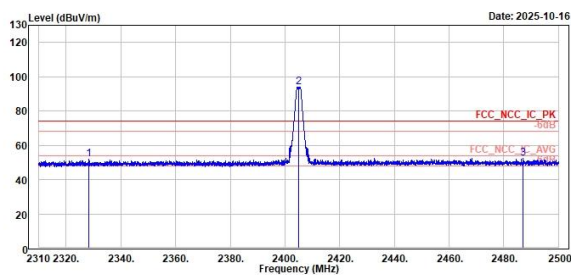
Band Edges, 2.31GHz ~ 2.5GHz

IEEE802.15.4

Low Channel (Horizontal) Peak



TÜV Rheinland Taiwan Ltd.
No. 438-18, Sec. 2, Fenliang, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel: +886-2172-1000 Fax: +886-2172-1322

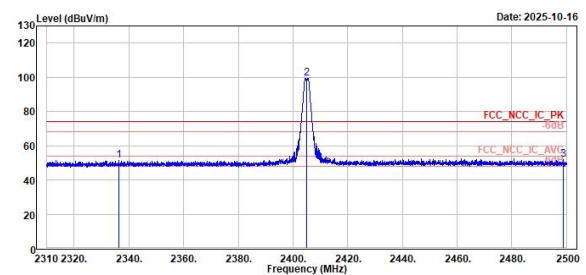


	Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	dB	cm	deg			
1	2328.35	51.69	47.05	4.64	74.00	-22.31	203	159 Peak		Horizontal		
2 *	2405.00	93.88	89.82	4.06	74.00	19.88	203	159 Peak		Horizontal		
3	2486.93	52.25	47.21	5.04	74.00	-21.75	203	159 Peak		Horizontal		

Low Channel (Vertical) Peak



TÜV Rheinland Taiwan Ltd.
No. 438-18, Sec. 2, Fenliang, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel: +886-2172-1000 Fax: +886-2172-1322



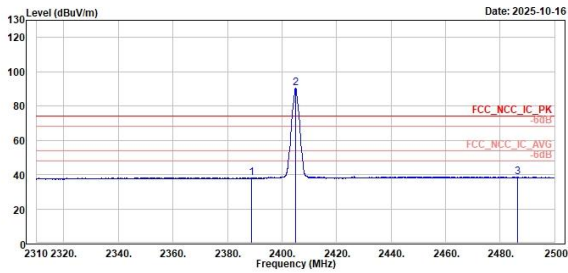
	Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	dB	cm	deg			
1	2336.37	51.55	46.86	4.69	74.00	-22.45	360	262 Peak		Vertical		
2 *	2405.00	99.18	94.32	4.86	74.00	25.18	360	262 Peak		Vertical		
3	2498.71	51.98	47.01	4.97	74.00	-22.02	360	262 Peak		Vertical		

IEEE802.15.4

Low Channel (Horizontal) Average



TÜV Rheinland Taiwan Ltd.
No. 458-18, Sec. 2, Fenliao, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel: +886-2172-1000 Fax: +886-2172-1322

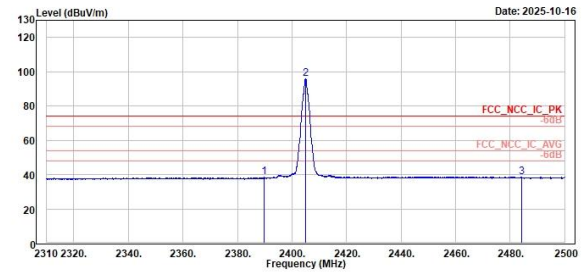


	Freq	Level	Read	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg		
1	2388.74	38.88	33.28	4.80	54.00	-15.92	283	159 Average	Horizontal	
2 *	2405.00	90.70	85.84	4.86	54.00	36.70	283	159 Average	Horizontal	
3	2486.43	38.52	33.48	5.04	54.00	-15.48	283	159 Average	Horizontal	

Low Channel (Vertical) Average



TÜV Rheinland Taiwan Ltd.
No. 458-18, Sec. 2, Fenliao, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel: +886-2172-1000 Fax: +886-2172-1322



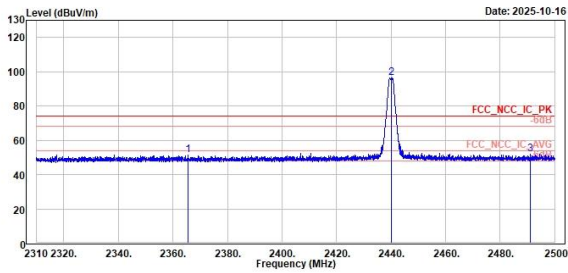
	Freq	Level	Read	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg		
1	2389.80	38.36	33.56	4.80	54.00	-15.64	368	262 Average	Vertical	
2 *	2405.00	96.05	91.19	4.86	54.00	42.05	368	262 Average	Vertical	
3	2484.19	38.47	33.42	5.05	54.00	-15.53	368	262 Average	Vertical	

IEEE802.15.4

Middle Channel (Horizontal) Peak



TÜV Rheinland Taiwan Ltd.
No. 458-18, Sec. 2, Fenlian, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel: +886-2172-1000 Fax: +886-2172-1322

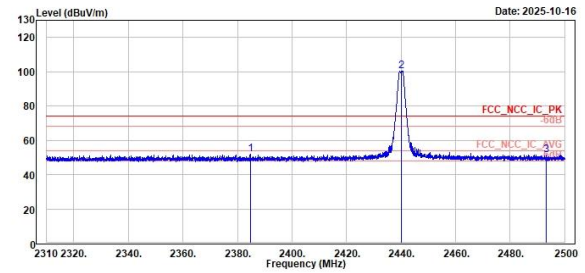


	Freq	Level	Read	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg		
1	2365.48	51.59	46.88	4.79	74.00	-22.41	178	312 Peak	Horizontal	
2 *	2440.00	96.23	91.08	5.15	74.00	22.23	178	312 Peak	Horizontal	
3	2491.07	51.85	46.84	5.01	74.00	-22.15	178	312 Peak	Horizontal	

Middle Channel (Vertical) Peak



TÜV Rheinland Taiwan Ltd.
No. 458-18, Sec. 2, Fenlian, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel: +886-2172-1000 Fax: +886-2172-1322



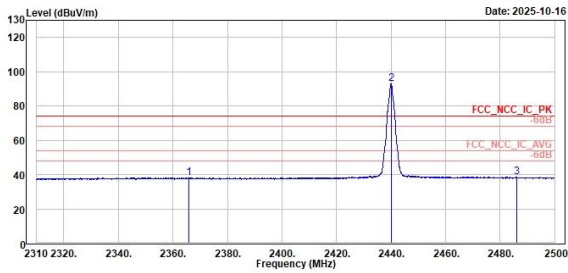
	Freq	Level	Read	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg		
1	2384.67	51.67	46.87	4.80	74.00	-22.33	391	260 Peak	Vertical	
2 *	2440.00	100.27	95.12	5.15	74.00	26.27	391	260 Peak	Vertical	
3	2493.20	51.40	46.40	5.00	74.00	-22.60	391	260 Peak	Vertical	

IEEE802.15.4

Middle Channel (Horizontal) Average



TÜV Rheinland Taiwan Ltd.
No. 458-18, Sec. 2, Fenlian, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel: +886-2172-1000 Fax: +886-2172-1322

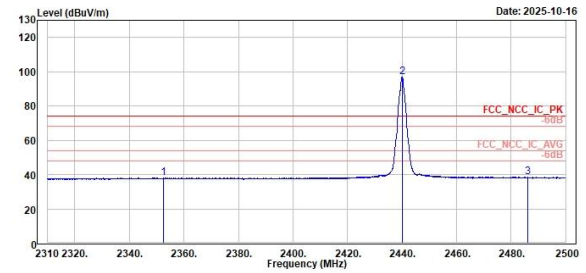


	Freq	Level	Read	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg		
1	2365.78	38.05	33.26	4.79	54.00	-15.95	178	312 Average	Horizontal	
2 *	2440.00	93.04	87.89	5.15	54.00	39.04	178	312 Average	Horizontal	
3	2486.09	38.44	33.40	5.04	54.00	-15.56	178	312 Average	Horizontal	

Middle Channel (Vertical) Average



TÜV Rheinland Taiwan Ltd.
No. 458-18, Sec. 2, Fenlian, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel: +886-2172-1000 Fax: +886-2172-1322



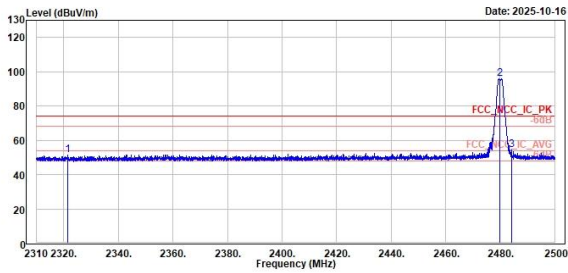
	Freq	Level	Read	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg		
1	2352.48	38.15	33.36	4.79	54.00	-15.85	391	260 Average	Vertical	
2 *	2440.00	97.03	91.88	5.15	54.00	43.03	391	260 Average	Vertical	
3	2486.13	38.50	33.46	5.04	54.00	-15.50	391	260 Average	Vertical	

IEEE802.15.4

High Channel (Horizontal) Peak



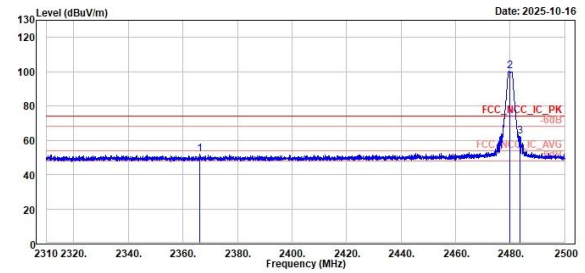
TÜV Rheinland Taiwan Ltd.
No. 458-18, Sec. 2, Fenliiao, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel: +886-2172-1000 Fax: +886-2172-1322



	Freq	Level	Read	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg		
1	2321.36	51.62	47.03	4.59	74.00	-22.38	100	177 Peak	Horizontal	
2 *	2480.00	95.81	90.74	5.07	74.00	21.81	100	177 Peak	Horizontal	
3	2484.15	54.47	49.41	5.06	74.00	-19.53	100	177 Peak	Horizontal	



TÜV Rheinland Taiwan Ltd.
No. 458-18, Sec. 2, Fenliiao, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel: +886-2172-1000 Fax: +886-2172-1322



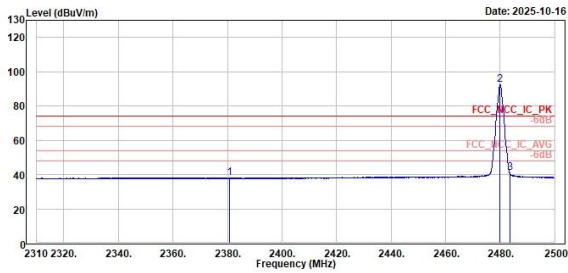
	Freq	Level	Read	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg		
1	2366.32	51.92	47.13	4.79	74.00	-22.08	334	259 Peak	Vertical	
2 *	2480.00	100.11	95.04	5.07	74.00	26.11	334	259 Peak	Vertical	
3	2483.74	62.44	57.38	5.06	74.00	-11.56	334	259 Peak	Vertical	

IEEE802.15.4

High Channel (Horizontal) Average



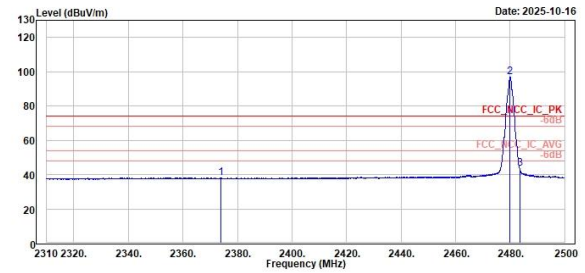
TÜV Rheinland Taiwan Ltd.
No. 458-18, Sec. 2, Fenliiao, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel: +886-2172-1000 Fax: +886-2172-1322



	Freq	Level	Read	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg		
1	2380.76	38.18	33.38	4.80	54.00	-15.82	180	177 Average	Horizontal	
2 *	2480.00	92.57	87.50	5.07	54.00	38.57	180	177 Average	Horizontal	
3	2483.51	41.00	35.94	5.06	54.00	-13.00	180	177 Average	Horizontal	



TÜV Rheinland Taiwan Ltd.
No. 458-18, Sec. 2, Fenliiao, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel: +886-2172-1000 Fax: +886-2172-1322



	Freq	Level	Read	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg		
1	2373.84	38.00	33.29	4.79	54.00	-15.92	334	259 Average	Vertical	
2 *	2480.00	96.92	91.85	5.07	54.00	42.92	334	259 Average	Vertical	
3	2483.51	43.25	38.19	5.06	54.00	-10.75	334	259 Average	Vertical	

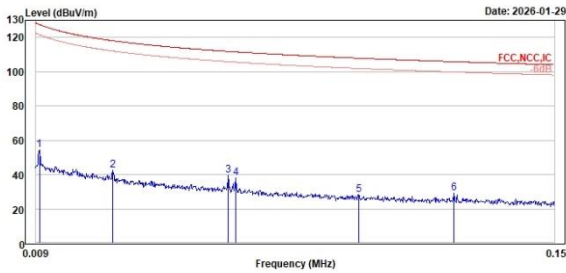
Spurious Emissions, Tx Mode, 9kHz ~ 30MHz

IEEE802.15.4

High Channel (Open) 9kHz~150kHz



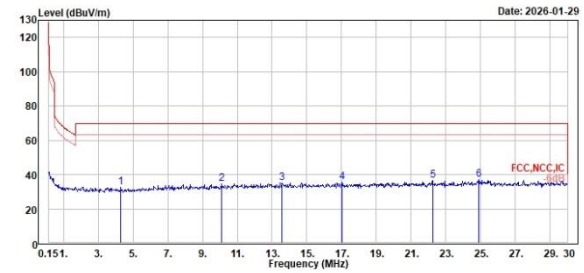
TÜV Rheinland Taiwan Ltd.
No. 458-18, Sec 2, Fenliao, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel: +886-2172-1000 Fax: +886-2172-1322



	Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	dB	cm	deg			
1	0.010	54.31	37.01	17.30	127.60	-73.29		100	98	Peak	Open	
2	0.030	42.31	23.10	19.21	118.05	-75.74		100	133	Peak	Open	
3	0.061	39.70	20.96	18.74	111.84	-72.14		100	149	Peak	Open	
4	0.063	37.84	19.23	18.61	111.55	-73.71		100	291	Peak	Open	
5	0.097	28.19	10.10	18.09	107.89	-79.70		100	235	Peak	Open	
6	0.123	29.14	10.86	18.28	105.82	-76.68		100	149	Peak	Open	



TÜV Rheinland Taiwan Ltd.
No. 458-18, Sec 2, Fenliao, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel: +886-2172-1000 Fax: +886-2172-1322



	Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	dB	cm	deg			
1	4.299	32.46	12.09	19.57	69.50	-37.04		100	82	Peak	Open	
2	10.120	34.50	13.20	21.30	69.50	-35.00		100	360	Peak	Open	
3	13.583	35.02	13.31	21.71	69.50	-34.48		100	181	Peak	Open	
4	17.045	35.42	13.23	22.19	69.50	-34.08		100	56	Peak	Open	
5	22.239	36.69	14.24	22.45	69.50	-32.81		100	315	Peak	Open	
6	24.896	37.30	13.80	23.50	69.50	-32.20		100	164	Peak	Open	

Spurious Emissions, Tx Mode, 30MHz ~ 1GHz

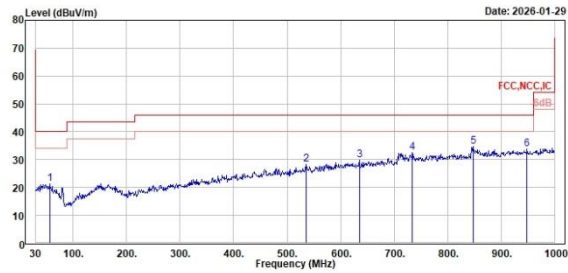
IEEE802.15.4

High Channel (Horizontal)

High Channel (Vertical)



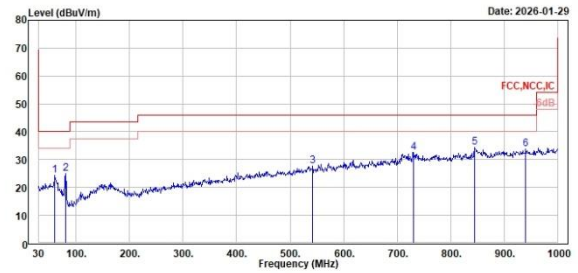
TÜV Rheinland Taiwan Ltd.
No. 438-18, Sec 2, Fenliao, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel: +886-2172-1000 Fax: +886-2172-1322



	Freq	Level	Read	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg		
1	56.198	21.27	28.03	-6.76	40.00	-18.73	390	123 Peak	Horizontal	
2	535.370	28.20	29.12	-0.92	46.00	-17.80	226	233 Peak	Horizontal	
3	635.280	29.83	29.84	0.79	46.00	-16.17	201	221 Peak	Horizontal	
4	734.220	32.49	29.84	2.65	46.00	-13.51	100	309 Peak	Horizontal	
5	847.710	34.73	30.56	4.17	46.00	-11.27	100	271 Peak	Horizontal	
6	948.598	33.68	28.03	5.65	46.00	-12.32	100	237 Peak	Horizontal	



TÜV Rheinland Taiwan Ltd.
No. 438-18, Sec 2, Fenliao, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel: +886-2172-1000 Fax: +886-2172-1322



	Freq	Level	Read	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg		
1	60.070	24.36	31.50	-7.14	40.00	-15.64	182	360 Peak	Vertical	
2	80.440	24.98	36.78	-11.80	40.00	-15.02	280	144 Peak	Vertical	
3	542.160	27.74	28.73	-0.99	46.00	-18.26	150	360 Peak	Vertical	
4	730.340	32.62	29.98	2.64	46.00	-13.38	300	176 Peak	Vertical	
5	844.800	34.48	30.44	4.04	46.00	-11.52	227	211 Peak	Vertical	
6	940.830	33.89	28.20	5.69	46.00	-12.11	200	302 Peak	Vertical	

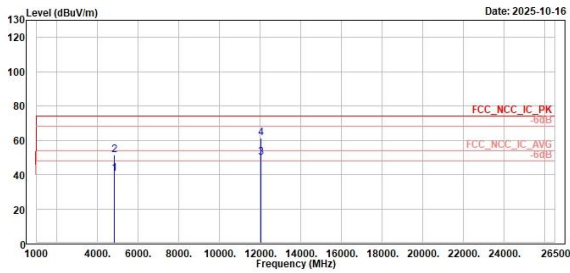
Spurious Emissions, Tx Mode, 1GHz ~ 26.5GHz

IEEE802.15.4

Low Channel (Horizontal)



TÜV Rheinland Taiwan Ltd.
No. 438-18, Sec 2, Fenliiao, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel: +886-2172-1000 Fax: +886-2172-1322

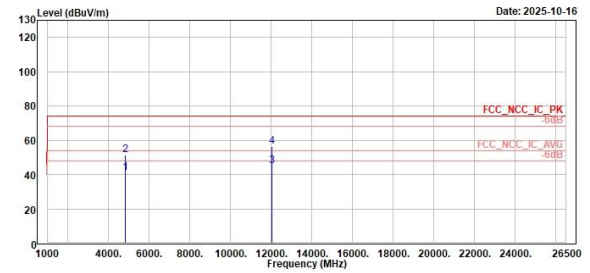


	Freq	Level	Read	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	Level Factor	Line	Limit	dB	cm	deg		
1	4810.00	40.55	32.13	8.42	54.00	-13.45	110	143 Average	Horizontal	
2	4810.00	51.35	42.93	8.42	74.00	-22.65	110	143 Peak	Horizontal	
3	12025.00	40.34	9.78	54.00	-3.88	100	333 Average	Horizontal		
4	12025.00	61.13	51.35	9.78	74.00	-12.87	100	333 Peak	Horizontal	

Low Channel (Vertical)



TÜV Rheinland Taiwan Ltd.
No. 438-18, Sec 2, Fenliiao, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel: +886-2172-1000 Fax: +886-2172-1322



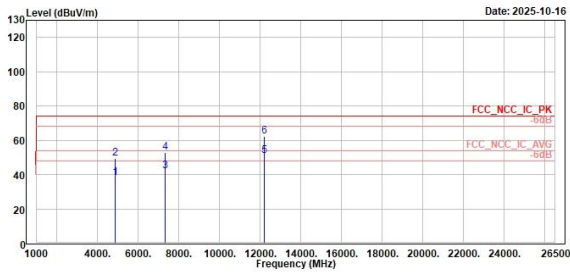
	Freq	Level	Read	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	Level Factor	Line	Limit	dB	cm	deg		
1	4810.00	40.96	32.54	8.42	54.00	-13.04	117	150 Average	Vertical	
2	4810.00	51.63	43.21	8.42	74.00	-22.37	117	150 Peak	Vertical	
3	12025.00	45.14	35.36	9.78	54.00	-8.86	100	353 Average	Vertical	
4	12025.00	56.56	46.78	9.78	74.00	-17.44	100	353 Peak	Vertical	

IEEE802.15.4

Middle Channel (Horizontal)



TÜV Rheinland Taiwan Ltd.
No. 438-18, Sec. 2, Fenliiao, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel: +886-2172-1000 Fax: +886-2172-1322

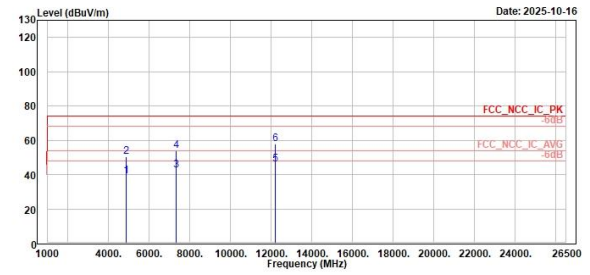


	Freq	Level	Read	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	Level Factor	Line	Limit	cm	deg			
1	4880.00	38.09	29.53	8.56	54.00	-15.91	100	148 Average	Horizontal	
2	4880.00	49.48	40.92	8.56	74.00	-24.52	100	148 Peak	Horizontal	
3	7320.00	41.96	32.74	9.22	54.00	-12.04	136	360 Average	Horizontal	
4	7320.00	52.90	43.68	9.22	74.00	-21.10	136	360 Peak	Horizontal	
5	12200.00	51.05	40.65	10.40	54.00	-2.95	106	326 Average	Horizontal	
6	12200.00	62.06	51.66	10.40	74.00	-11.94	106	326 Peak	Horizontal	

Middle Channel (Vertical)



TÜV Rheinland Taiwan Ltd.
No. 438-18, Sec. 2, Fenliiao, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel: +886-2172-1000 Fax: +886-2172-1322



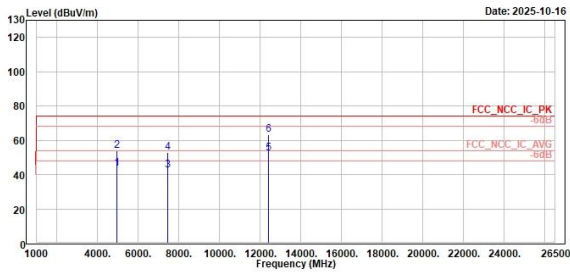
	Freq	Level	Read	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	Level Factor	Line	Limit	cm	deg			
1	4880.00	39.23	30.67	8.56	54.00	-14.77	300	13 Average	Vertical	
2	4880.00	50.25	41.69	8.56	74.00	-23.75	300	13 Peak	Vertical	
3	7320.00	42.74	33.52	9.22	54.00	-11.26	133	62 Average	Vertical	
4	7320.00	53.64	44.42	9.22	74.00	-20.36	133	62 Peak	Vertical	
5	12200.00	46.15	35.75	10.40	54.00	-7.85	100	26 Average	Vertical	
6	12200.00	57.74	47.34	10.40	74.00	-16.26	100	26 Peak	Vertical	

IEEE802.15.4

High Channel (Horizontal)



TÜV Rheinland Taiwan Ltd.
No. 438-18, Sec. 2, Fenliang, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel: +886-2172-1000 Fax: +886-2172-1322

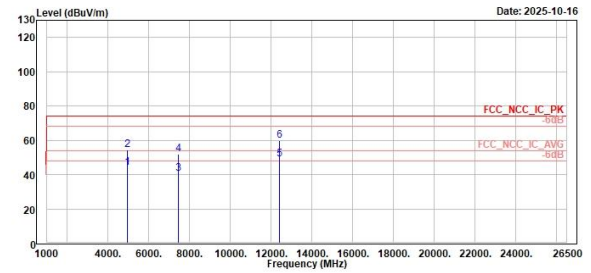


	Freq	Level	Read	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	Level Factor	Line	Limit	cm	deg			
1	4960.00	43.62	35.01	8.61	54.00	-10.38	102	147 Average	Horizontal	
2	4960.00	53.82	45.21	8.61	74.00	-20.18	102	147 Peak	Horizontal	
3	7440.00	42.40	33.39	9.01	54.00	-11.60	100	56 Average	Horizontal	
4	7440.00	53.05	44.04	9.01	74.00	-20.95	100	56 Peak	Horizontal	
5	12400.00	52.48	41.74	10.74	54.00	-1.52	110	301 Average	Horizontal	
6	12400.00	63.10	52.36	10.74	74.00	-10.90	110	301 Peak	Horizontal	

High Channel (Vertical)



TÜV Rheinland Taiwan Ltd.
No. 438-18, Sec. 2, Fenliang, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel: +886-2172-1000 Fax: +886-2172-1322



	Freq	Level	Read	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	Level Factor	Line	Limit	cm	deg			
1	4960.00	43.99	35.38	8.61	54.00	-10.01	100	360 Average	Vertical	
2	4960.00	54.24	45.63	8.61	74.00	-19.76	100	360 Peak	Vertical	
3	7440.00	40.64	31.63	9.01	54.00	-13.36	235	37 Average	Vertical	
4	7440.00	51.80	42.79	9.01	74.00	-22.20	235	37 Peak	Vertical	
5	12400.00	49.04	38.30	10.74	54.00	-4.96	103	341 Average	Vertical	
6	12400.00	59.70	48.96	10.74	74.00	-14.30	103	341 Peak	Vertical	

Mains Conducted Emission, TX 150kHz ~ 30MHz

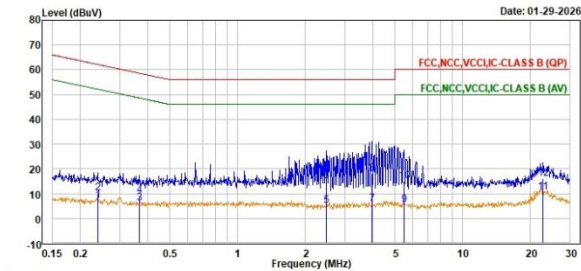
Worst Band

(Line)

(Neutral)



TÜV Rheinland Taiwan Ltd.
No. 458-18, Sec. 2, Fenhiao, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel: +886-2172-1000 Fax: +886-2172-1322

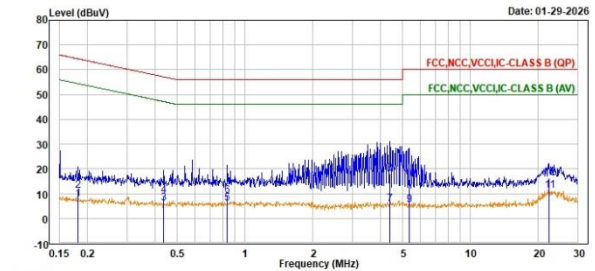


Trace: 1

	Freq	Level	Read	Limit	Over			
	MHz	dBuV	Level	Line	Limit	Remark	Pol/Phase	Note
	MHz	dBuV	Factor	dB	dB			
1	0.24	7.05	-2.88	9.93	52.15	-45.10 Average	line1	
2	0.24	10.22	0.29	9.93	62.15	-51.93 QP	line1	
3	0.36	6.13	-3.02	9.95	48.63	-42.50 Average	line1	
4	0.36	9.25	-0.70	9.95	58.63	-49.38 QP	line1	
5	2.47	5.11	-4.98	10.09	46.00	-40.89 Average	line1	
6	2.47	14.81	4.72	10.09	56.00	-41.19 QP	line1	
7	3.97	5.64	-4.49	10.13	46.00	-40.36 Average	line1	
8	3.97	10.07	7.94	10.13	56.00	-37.93 QP	line1	
9	5.48	5.47	-4.72	10.19	50.00	-44.53 Average	line1	
10	5.48	15.10	4.91	10.19	60.00	-44.90 QP	line1	
11	22.81	10.37	-0.27	10.64	50.00	-39.63 Average	line1	
12	22.81	15.92	5.28	10.64	60.00	-44.08 QP	line1	



TÜV Rheinland Taiwan Ltd.
No. 458-18, Sec. 2, Fenhiao, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel: +886-2172-1000 Fax: +886-2172-1322



Trace: 1

	Freq	Level	Read	Limit	Over			
	MHz	dBuV	Level	Line	Limit	Remark	Pol/Phase	Note
	MHz	dBuV	Factor	dB	dB			
1	0.18	7.71	-2.21	9.92	54.43	-46.72 Average	neutral	
2	0.18	11.21	1.29	9.92	64.43	-53.22 QP	neutral	
3	0.44	5.99	-3.94	9.93	47.14	-41.15 Average	neutral	
4	0.44	9.16	-0.77	9.93	57.14	-47.98 QP	neutral	
5	0.83	5.95	-4.02	9.97	46.00	-40.05 Average	neutral	
6	0.83	9.19	-0.78	9.97	56.00	-46.81 QP	neutral	
7	4.40	5.70	-4.35	10.05	46.00	-40.30 Average	neutral	
8	4.40	10.12	0.07	10.05	56.00	-37.88 QP	neutral	
9	5.35	5.48	-4.61	10.09	50.00	-44.52 Average	neutral	
10	5.35	15.59	5.50	10.09	60.00	-44.41 QP	neutral	
11	22.47	11.18	0.62	10.56	50.00	-38.82 Average	neutral	
12	22.47	16.41	5.85	10.56	60.00	-43.59 QP	neutral	