



Prüfbericht-Nr.: <i>Test report no.:</i>	CN26G05E 001	Auftrags-Nr.: <i>Order no.:</i>	48304067	Seite 1 von 25 Page 1 of 25
Kunden-Referenz-Nr.: <i>Client reference no.:</i>	N/A	Auftragsdatum: <i>Order date:</i>	2026-04-13	
Auftraggeber: <i>Client:</i>	BenQ Corporation No. 16, Jihu Rd., Neihs Dist., Taipei City 114066, Taiwan (R.O.C.)			
Prüfgegenstand: <i>Test item:</i>	ScreenBar Max			
Bezeichnung / Typ-Nr.: <i>Identification / Type no.:</i>	CR25			
Auftrags-Inhalt: <i>Order content:</i>	FCC Part 15C Test report			
Prüfgrundlage: <i>Test specification:</i>	FCC 47CFR Part 15: Subpart C Section 15.249			
Wareneingangsdatum: <i>Date of sample receipt:</i>	2026-04-07			
Prüfmuster-Nr.: <i>Test sample no:</i>	A004245026-023, 025 A004245026-027, 030			
Prüfzeitraum: <i>Testing period:</i>	2026-04-27 - 2026-05-13			
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>	 Ryan Chen	genehmigt von: <i>authorized by:</i>	 Flight Hsieh	
Datum: <i>Date:</i>	2026-05-19	Ausstellungsdatum: <i>Issue date:</i>	2026-05-19	
Stellung / Position:	Senior Project Manager	Stellung / Position:	Project Engineer	
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 P(ass) = entspricht o.g. Prüfgrundlage(n)	2 = gut F(ail) = entspricht nicht o.g. Prüfgrundlage(n)	3 = befriedigend F(ail) = entspricht nicht o.g. Prüfgrundlage(n)	4 = ausreichend N/A = nicht anwendbar
* Legend:	1 = very good P(ass) = passed a.m. test specification(s)	2 = good F(ail) = failed a.m. test specification(s)	3 = satisfactory F(ail) = failed a.m. test specification(s)	4 = sufficient N/A = not applicable
5 = mangelhaft N/T = nicht getestet				
5 = poor N/T = not tested				
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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> |
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| 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> |

TEST SUMMARY

Report Section	FCC Clause	Test Item	Result
5.1.1	15.203	Antenna Requirement	Pass
5.1.2	15.249 (a)	Field Strength of Fundamental Emissions	Pass
5.1.3	15.249 (d)	Radiated Spurious Emissions	Pass
5.1.4	15.35	20 dB Bandwidth	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.

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

APPENDIX SP - PHOTOGRAPHS OF TEST SETUP

APPENDIX EP - PHOTOGRAPHS OF EUT

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HISTORY OF THIS TEST REPORT

Revision	Description	Date Issued
R01	Original Release	2026-05-19

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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 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 15.249 ANSI C63.10-2020

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.

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
ISED Registration No.: 25563

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
Radiated Emission (40 GHz ~ 100 GHz)	± 2.83 dB
Mains Conducted Emission	± 1.65 dB

3. General Product Information

3.1 Product Function and Intended Use

The EUT is a ScreenBar Max. It contains a 24GHz 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	ScreenBar Max
Type Identification	CR25
FCC ID	JVPCR25

Technical Specification of EUT

Item	EUT information
Operating Frequency	24.05 GHz ~ 24.25 GHz
Operation Voltage	Input: 100-240V AC, 50-60 Hz Output: 24Vdc
Modulation	FMCW
Field Strength	96.96 dBuV/m
Antenna Information	Refer to 5.1.1
Accessory Device	Refer to 4.3

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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 equipment under test (EUT) was configured to measure its maximum emission level. The test modes were adapted accordingly in reference to the instructions for use.

4.2 Test Operation and Test Software

Setup for testing: Test samples are provided with modified firmware which makes it possible to continue transmit when power on.

It was used to enable the operation modes listed as below.

The samples were used as follows:

A004245026-023, 025

A004245026-027, 030

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

EUT Configure Mode	Applicable To				Description
	Field Strength of Fundamental Emissions	Radiated Spurious Emissions	20 dB Bandwidth	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.
3. The ScreenBar Max supports either a base or a desk clamp, and the base is optional. For the test setup, the base was used for convenience.

Field Strength of Fundamental Emissions

☒ 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 (GHz)	Tested Frequency (GHz)
-	24.00 to 24.25	24.15

Radiated Spurious 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 (GHz)	Tested Frequency (GHz)
Tx / Rx		
-	24.00 to 24.25	24.15

20 dB Bandwidth

☒ 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 (GHz)	Tested Frequency (GHz)
-	24.00 to 24.25	24.15

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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 (GHz)	Tested Frequency (GHz)
-	24.00 to 24.25	24.15

Test Condition

Test Item	Ambient Temperature	Relative Humidity	Tested by
Field Strength of Fundamental Emissions	24.1-25.8 °C	50-55 %	Peter Chiou
Radiated Spurious Emissions	24.1-25.8 °C	50-55 %	Peter Chiou
20 dB Bandwidth	24.1-25.8 °C	50-55 %	Peter Chiou
Mains Conducted Emission	23.5-24.2 °C	62-66 %	Nick Guan

4.3 Special Accessories and Auxiliary Equipment

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

Accessory of EUT

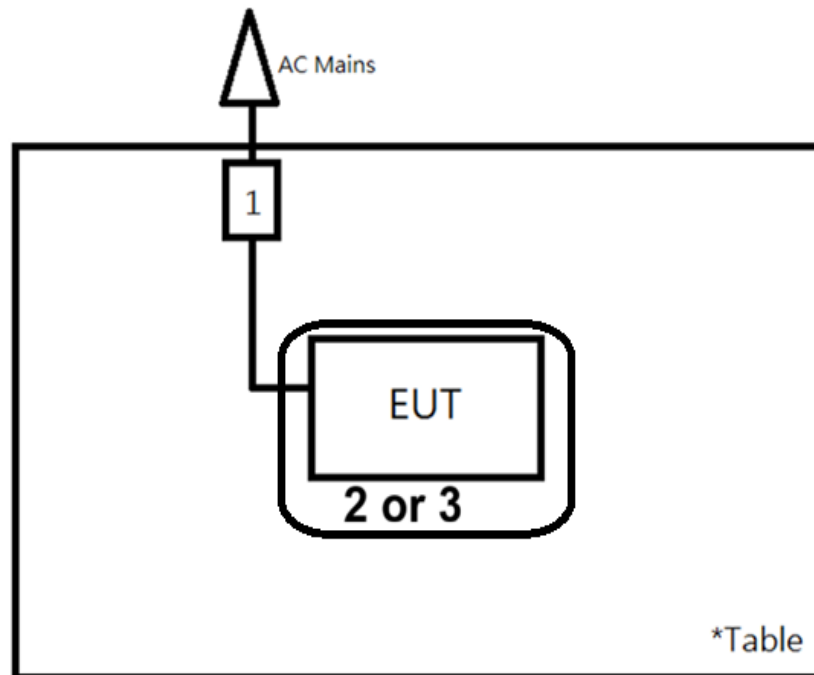
No.	Product	Brand	Model	Description
2	Wall-mounted Lamp with Desk Clamp	BenQ	CR25	optional accessories
3	Wall-mounted Lamp with Base	BenQ	CR25	-

Support Unit

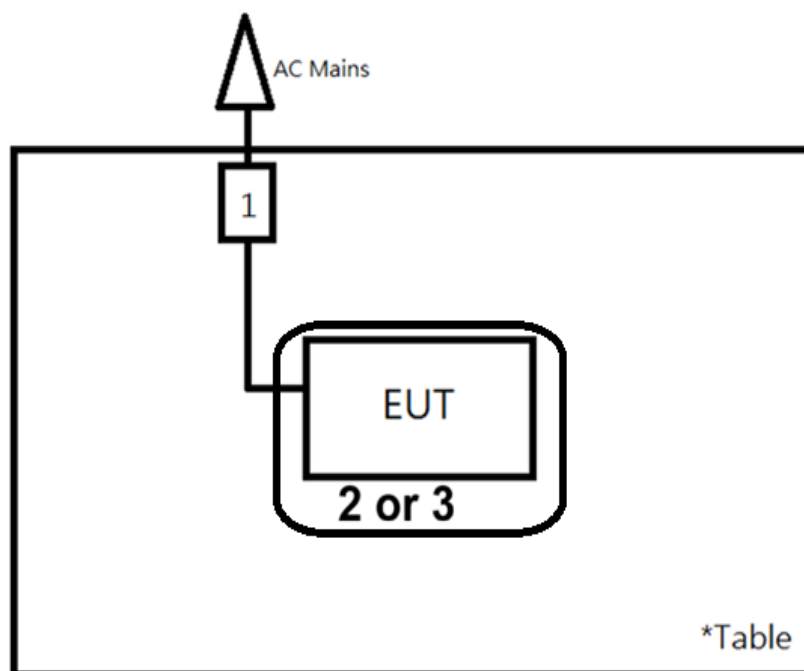
Support Unit					
No.	Description	Brand	Model	S/N	Remark
1	LED Driver	BenQ	1A98-XCDD	-	-

4.4 Test Setup Diagram

<Radiated Spurious Emissions Mode>



<Mains Conducted Emission Mode>



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 dBi. The antenna is an antenna in package 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.

5.1.2 Field Strength of Fundamental Emissions

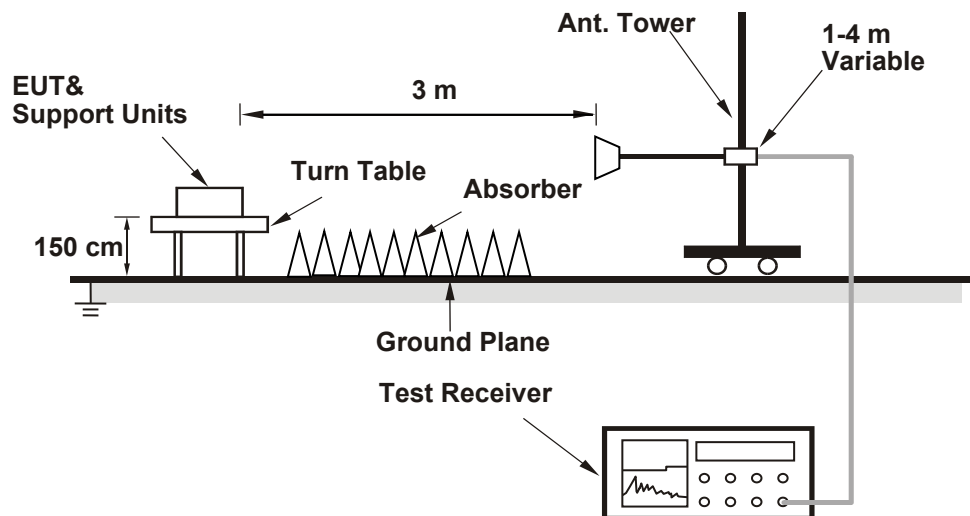
Limit

The field strength of emissions from intentional radiators operated within these frequency bands shall comply with the following:

Fundamental Frequency	Field Strength of Fundamental (microvolts/meter)	Field Strength of Harmonics (microvolts/meters)
902 ~ 928 MHz	50	500
2400 ~ 2483.5 MHz	50	500
5725 ~ 5875 MHz	50	500
24 ~ 24.25 GHz	250	2500

Kind of Test Site 3m Semi-Anechoic Chamber

Test Setup



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

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Test Instruments

Test Date: 2026/04/27 ~ 2026/04/28

Kind of Equipment	Manufacturer	Type	S/N	Calibration Date	Calibration Due Date
Above 1 GHz					
Signal Analyzer	R&S	FSV40	101512	2026/02/24	2027/02/23
Horn Antenna	ETS-Lindgren	3117	00218930	2025/12/11	2026/12/10
HF-AMP + AC source	EM	EM01G18GA	060967	2026/03/31	2027/03/30
HF-AMP + AC source	EMCI	EMC184045SE	980656	2026/01/15	2027/01/14
Horn Antenna	SCHWARZBECK	BBHA 9170	00896	2026/01/16	2027/01/15
Conical Horn Antenna	VDI	WR15CH	1-15	2023/08/22	2026/08/21
Conical Horn Antenna	VDI	WR10CH	1-10	2023/08/22	2026/08/21
Conical Horn Antenna	VDI	WR8.0CH	1-8.0	2023/08/22	2026/08/21
Mixer SA	VDI	SAX WR15	US54250104	2023/08/23	2026/08/22
Mixer SA	VDI	SAX WR10	US54250151	2023/08/23	2026/08/22
Mixer SA	VDI	SAX WR8.0	US53250003	2023/08/24	2026/08/23
Signal Analyzer	Agilent	N9010A	MY52221334	2026/02/24	2027/02/23
Microwave Cable	EM	EM102A-KMKM-700	001	2025/05/09	2026/05/08
Microwave Cable	HUBER+SUHNER	SUCOFLEX 102EA	800901/2EA	2025/10/23	2026/10/22
Microwave Cable	HUBER+SUHNER	SUCOFLEX 102EA	801027/2EA	2025/10/23	2026/10/22
Test Software	Audix E3	15914a_20191106_tuv	PK-001087	N/A	N/A
30 MHz ~ 1 GHz					
Receiver	R&S	ESR7	102108	2025/07/02	2026/07/01
Bilog Antenna	SCHWARZBECK	VULB-9168	00950	2025/05/15	2026/05/14
LF-AMP	Agilent	8447D	2944A107722	2026/03/19	2027/03/18
Test Software	Audix E3	15914a_20191106_tuv	PK-001087	N/A	N/A
Microwave Cable	HUBER+SUHNER	SUCOFLEX 104EA	800056/4EA	2026/03/20	2027/03/19
Microwave Cable	HUBER+SUHNER	SUCOFLEX 104	804680/4	2026/03/20	2027/03/19
Microwave Cable	HUBER+SUHNER	SUCOFLEX 104	MY37202/4	2026/03/20	2027/03/19
Below 30 MHz					
Receiver	R&S	ESR7	102108	2025/07/02	2026/07/01
Loop Antenna	SCHWARZBECK	FMZB 1519B	00215	2025/12/16	2026/12/15
Test Software	Audix E3	15914a_20191106_tuv	PK-001087	N/A	N/A
Microwave Cable	HUBER+SUHNER	SUCOFLEX 104EA	800056/4EA	2026/03/20	2027/03/19
Microwave Cable	HUBER+SUHNER	SUCOFLEX 104	804680/4	2026/03/20	2027/03/19

Test Procedures

- a. The EUT was placed on the top of a rotating table 0.8 meters (for 30 MHz ~ 1 GHz) or 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. All modes of operation were investigated and the worst-case emissions are reported.
4. 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.

Test Results

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

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

Please refer to Appendix A.

5.1.3 Radiated Spurious Emissions

Limit

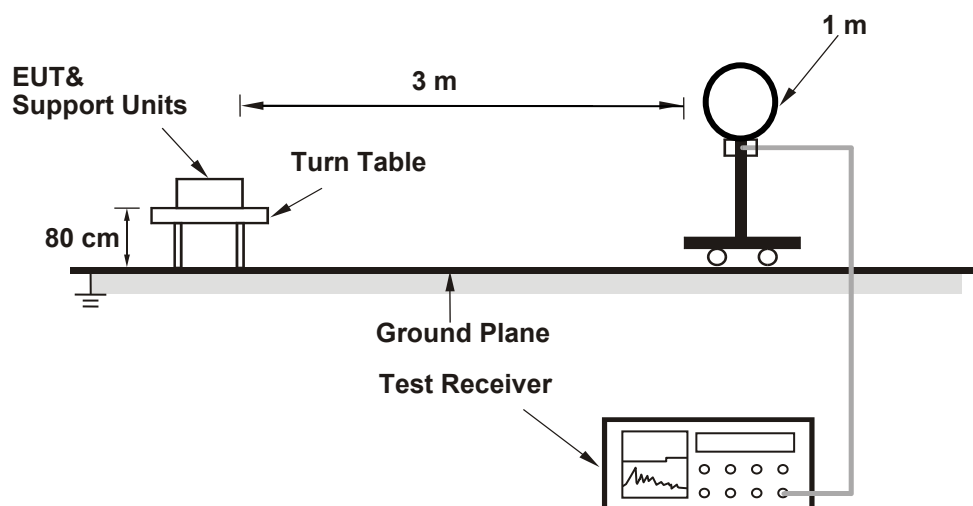
Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits as below table, whichever is the lesser attenuation.

Frequencies (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
0.009 ~ 0.490	2400/F (kHz)	300
0.490 ~ 1.705	24000/F (kHz)	30
1.705 ~ 30.0	30	30
30 ~ 88	100	3
88 ~ 216	150	3
216 ~ 960	200	3
Above 960	500	3

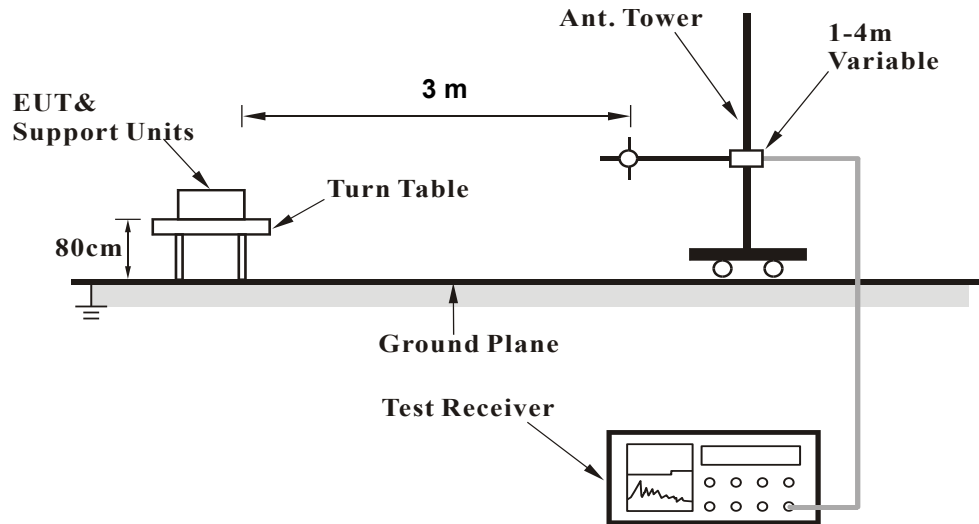
Kind of Test Site 3m Semi-Anechoic Chamber

Test Setup

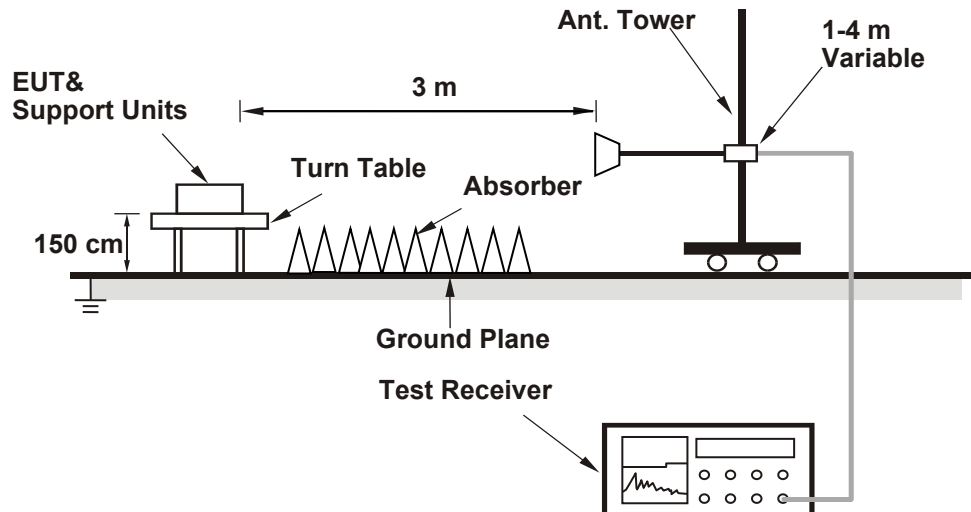
<Radiated Emissions below 30 MHz>



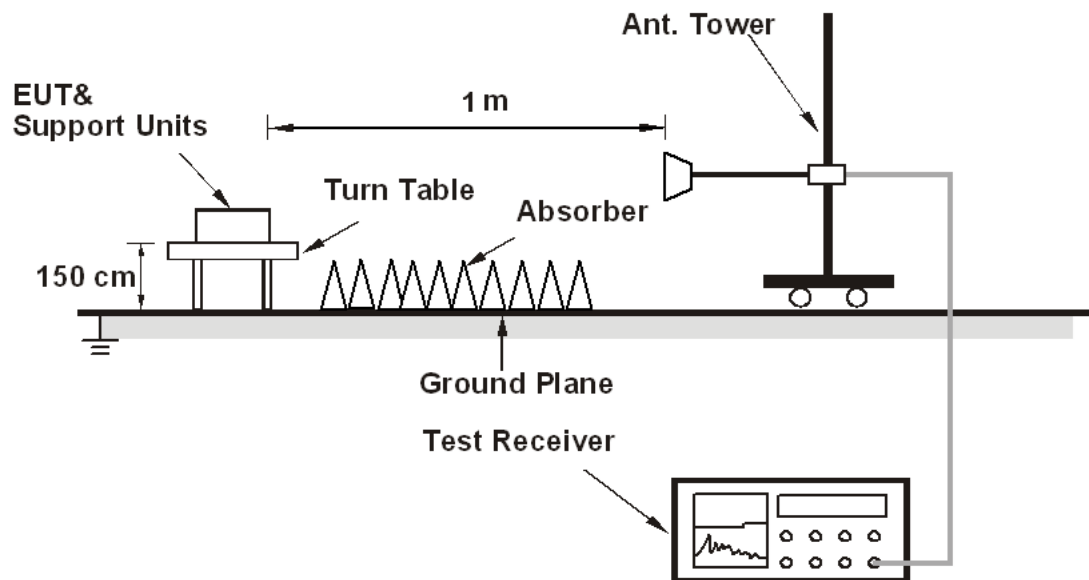
<Radiated Emissions 30 MHz to 1 GHz>



<Radiated Emission above 1 GHz>



<Radiated Emissions above 40 GHz>



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

Test Instruments

Please refer to 5.1.2 Instruments

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 30 MHz ~ 40 GHz

- 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. All modes of operation were investigated and the worst-case emissions are reported.
4. 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.
5. 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.

For Radiated Emissions above 40 GHz

- a. The EUT was placed on the top of a rotating table 1.5 meters 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 1 meter away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. 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 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. All modes of operation were investigated and the worst-case emissions are reported.
4. 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.
5. 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.

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 A.

Note: The emission levels were very low against the limit of frequency range 9kHz~30MHz: the amplitude of spurious emissions attenuated at least 20 dB below the permissible value to be reported.

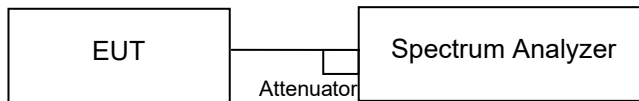
5.1.4 20 dB Bandwidth

Limit

The 20 dB bandwidth shall be specified in operating frequency band.

Kind of Test Site Shielded room

Test Setup



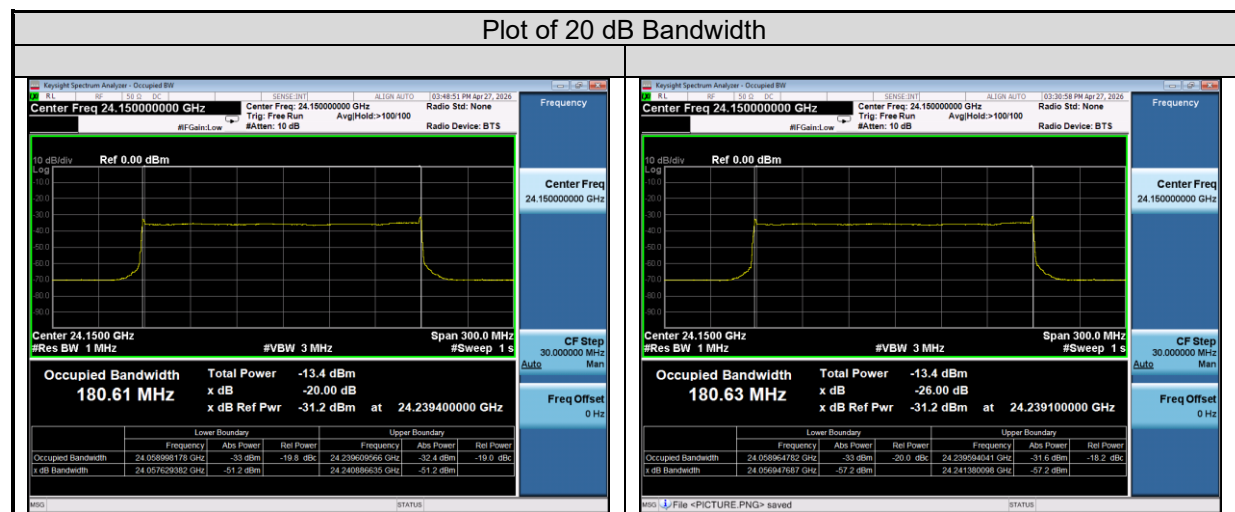
Test Instruments

Please refer to 5.1.2 Instruments.

Test Procedure

The bandwidth of the fundamental frequency was measured by spectrum analyzer with 1 MHz RBW and 3 MHz VBW. The 20 dB bandwidth is defined as the total spectrum the power of which is higher than peak power minus 20 dB.

Test Results



5.2 Mains Emission

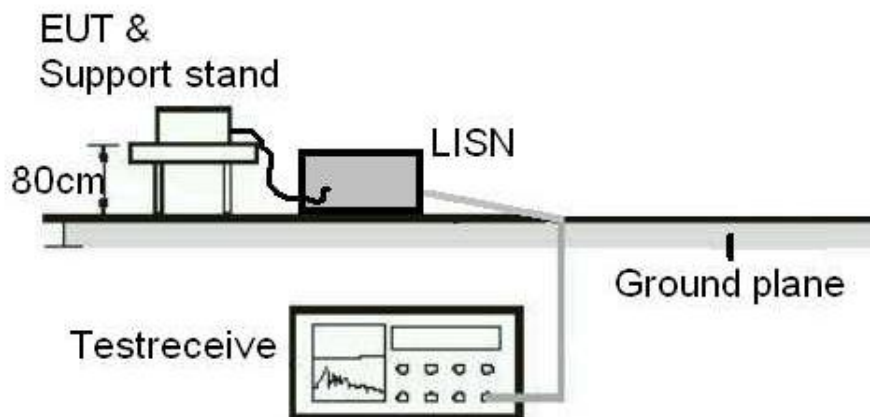
5.2.1 Mains Conducted Emission

Limit

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

Kind of Test Site Shielded room

Test Setup



Test Instruments

Test Date: 2026/05/13

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

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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 A.

Appendix A: Test Results of Radiated Emissions

Fundamental Emissions

24.15 GHz Radar

Horizontal_Peak



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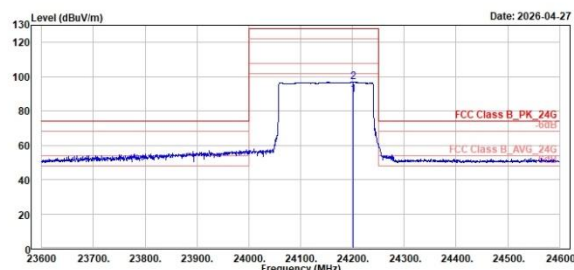
TÜV Rheinland Taiwan Ltd.

No. 458-18, Sec 2, Fenliao, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)

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Level (dBuV/m)

Date: 2026-04-27



Graph showing Horizontal Peak radiated emissions. The y-axis represents Level (dBuV/m) from 0 to 130. The x-axis represents Frequency (MHz) from 23600 to 24600. A red line indicates the FCC Class B, PK, 24G limit. A blue line shows the measured emission, which is below the limit. A peak is marked at 24202.00 MHz.

Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg				
1	24202.00	89.53	88.21	1.32	107.96	-18.43	180	271	Average	Horizontal	
2	24202.00	96.88	95.48	1.32	127.96	-31.16	180	271	Peak	Horizontal	

Vertical_Peak



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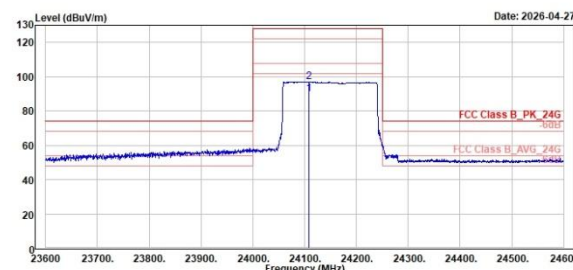
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Level (dBuV/m)

Date: 2026-04-27



Graph showing Vertical Peak radiated emissions. The y-axis represents Level (dBuV/m) from 0 to 130. The x-axis represents Frequency (MHz) from 23600 to 24600. A red line indicates the FCC Class B, PK, 24G limit. A blue line shows the measured emission, which is below the limit. A peak is marked at 24108.00 MHz.

Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg				
1	24108.00	89.77	88.53	1.24	107.96	-18.19	180	264	Average	Vertical	
2	24108.00	96.96	95.72	1.24	127.96	-31.00	180	264	Peak	Vertical	

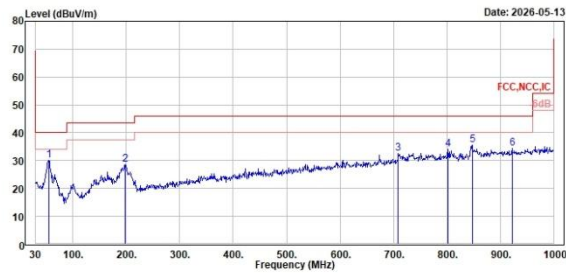
Spurious Emissions, Tx + Rx Mode, 30MHz ~ 1GHz

24.15 GHz Radar

Horizontal



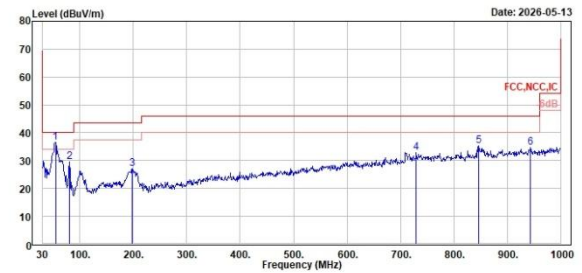
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Vertical



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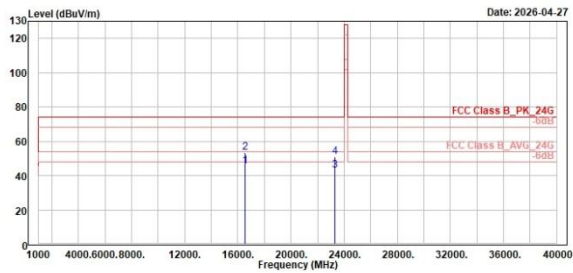
Spurious Emissions, Tx + Rx Mode, 1GHz ~ 40GHz

24.15 GHz Radar

Horizontal



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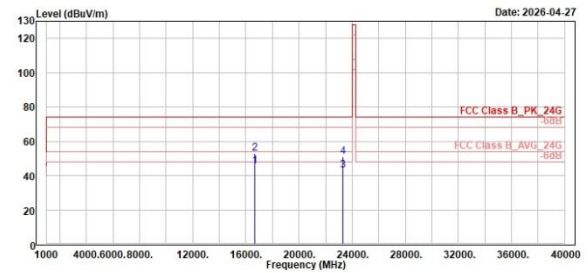


	Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg				
1	16551.00	45.63	37.23	8.40	54.00	-8.37	232	244	Average	Horizontal		
2	16551.00	53.15	44.75	8.40	74.00	-20.85	222	244	Peak	Horizontal		
3	23329.00	43.12	41.78	1.34	54.00	-10.88	300	12	Average	Horizontal		
4	23329.00	50.77	49.43	1.34	74.00	-23.23	300	12	Peak	Horizontal		

Vertical



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	Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg				
1	16656.00	45.33	36.92	8.41	54.00	-8.67	280	166	Average	Vertical		
2	16656.00	53.03	44.62	8.41	74.00	-20.97	280	166	Peak	Vertical		
3	23335.00	42.98	41.65	1.33	54.00	-11.02	300	37	Average	Vertical		
4	23335.00	50.76	49.43	1.33	74.00	-23.24	300	37	Peak	Vertical		

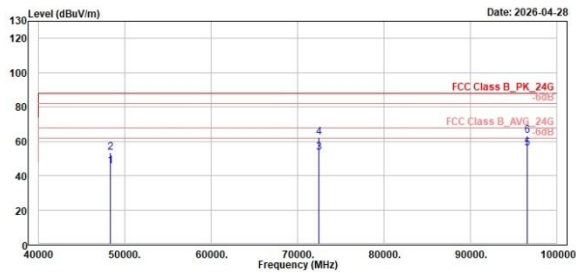
Spurious Emissions, Tx + Rx Mode, 40GHz ~ 100GHz

24.15 GHz Radar

Horizontal



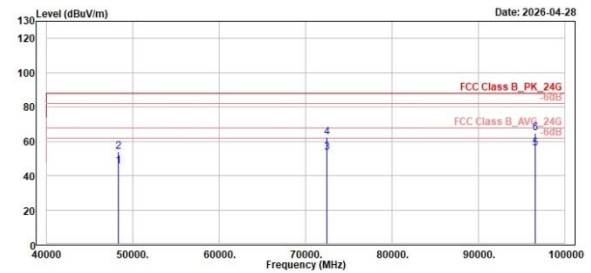
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Vertical



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Mains Conducted Emission, Tx + Rx Mode, 150kHz ~ 30MHz

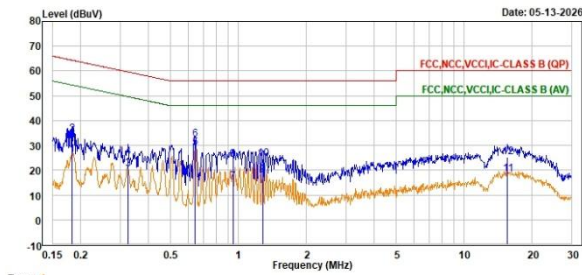
Worst Band

(Line)

(Neutral)



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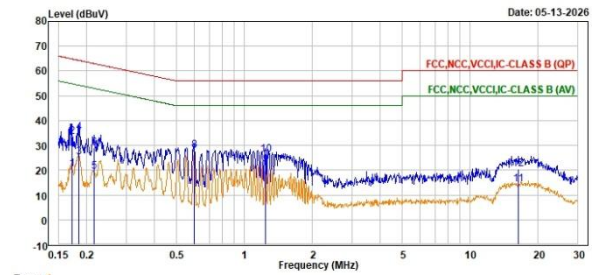


Trace: 1

Freq	Level	Read	Level	Factor	Limit	Over	Remark	Pol/Phase	Note
MHz	dBuV	dBuV	dB		dBuV	dB			
1	0.18	26.36	16.38	9.98	54.34	-27.98	Average	line1	
2	0.18	34.61	24.63	9.98	64.34	-29.73	QP	line1	
3	0.32	20.32	10.32	10.00	49.58	-29.26	Average	line1	
4	0.32	25.17	15.17	10.00	59.58	-34.41	QP	line1	
5	0.64	29.13	19.05	10.08	46.00	-16.87	Average	line1	
6	0.64	32.30	22.22	10.08	56.00	-23.70	QP	line1	
7	0.94	15.45	5.33	10.12	46.00	-30.55	Average	line1	
8	0.94	24.32	14.20	10.12	56.00	-31.68	QP	line1	
9	1.28	18.07	7.93	10.14	46.00	-27.93	Average	line1	
10	1.28	24.73	14.59	10.14	56.00	-31.27	QP	line1	
11	15.62	18.56	7.68	10.88	50.00	-31.44	Average	line1	
12	15.62	25.16	14.28	10.88	60.00	-34.84	QP	line1	



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Trace: 1

Freq	Level	Read	Level	Factor	Limit	Over	Remark	Pol/Phase	Note
MHz	dBuV	dBuV	dB		dBuV	dB			
1	0.17	20.33	10.35	9.98	54.88	-34.55	Average	neutral	
2	0.17	33.55	23.57	9.98	64.88	-31.33	QP	neutral	
3	0.18	25.34	15.37	9.97	54.26	-28.92	Average	neutral	
4	0.18	35.26	25.29	9.97	64.26	-28.98	QP	neutral	
5	0.21	19.46	9.49	9.97	53.02	-33.56	Average	neutral	
6	0.21	29.07	19.10	9.97	63.02	-33.95	QP	neutral	
7	0.60	26.43	16.40	10.03	46.00	-19.57	Average	neutral	
8	0.60	27.90	17.87	10.03	56.00	-28.10	QP	neutral	
9	1.24	22.08	12.01	10.07	46.00	-23.92	Average	neutral	
10	1.24	26.18	16.11	10.07	56.00	-29.82	QP	neutral	
11	16.33	14.43	3.58	10.85	50.00	-35.57	Average	neutral	
12	16.33	20.40	9.55	10.85	60.00	-39.60	QP	neutral	