

Prüfbericht-Nr.: <i>Test report no.:</i>	CN26MD02 001	Auftrags-Nr.: <i>Order no.:</i>	48304656	Seite 1 von 25 Page 1 of 25
Kunden-Referenz-Nr.: <i>Client reference no.:</i>	N/A	Auftragsdatum: <i>Order date:</i>	2026-05-04	
Auftraggeber: <i>Client:</i>	BLACK SHEEP IP HOLDING PTE. LTD. 190 JOO CHIAT ROAD, #2-10, SINGAPORE 427461 SINGAPORE			
Prüfgegenstand: <i>Test item:</i>	TBS Unify Pro32 DP (MMCX) - NDAA			
Bezeichnung / Typ-Nr.: <i>Identification / Type no.:</i>	UP32DP			
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>	2026-04-30			
Prüfmuster-Nr.: <i>Test sample no:</i>	A004266847-006, 007, 008 A004266847-009, 014			
Prüfzeitraum: <i>Testing period:</i>	2026-05-20 - 2026-05-21			
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>	Ausstellungsdatum: <i>Issue date:</i>			
Stellung / Position:	Stellung / Position:			
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>				

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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.
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.
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>
<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	2026-05-25

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 (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)	± 1.32 dB
Radiated Emission (200 MHz ~ 1 GHz)	± 1.31 dB
Radiated Emission (1 GHz ~ 18 GHz)	± 1.53 dB
Radiated Emission (18 GHz ~ 40 GHz)	± 2.50 dB
Mains Conducted Emission	± 1.65 dB

3. General Product Information

3.1 Product Function and Intended Use

The EUT is a TBS Unify Pro32 DP (MMCX) - NDAA. It contains 5GHz compatible module enabling the user to communicate data through 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	TBS Unify Pro32 DP (MMCX) - NDAA
Type Identification	UP32DP
FCC ID	2BQIX-UP32DPNDAA

Technical Specification of EUT

Item	EUT information
Operating Frequency	5765 ~ 5828 MHz
Operation Voltage	12 Vdc
Modulation	FM
Antenna Information	Refer to 5.1.1
Accessory Device	Refer to 4.3

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: The EUT has a serial interface which makes it possible to read data from the RFID reader. The RFID reader is permanently on.

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	N/A
---------------	-----

The samples were used as follows:

A004266847-006, 007, 008

A004266847-009, 014

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 **Z-plane**.
2. "-" means no effect.

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 (MHz)	Tested Frequency (MHz)
-	5765 ~ 5828	5765, 5800, 5828

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 (MHz)	Tested Frequency (MHz)
-	5765 ~ 5828	5765, 5800, 5828

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 (MHz)	Tested Frequency (MHz)
-	5765 ~ 5828	5765, 5800, 5828

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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 (MHz)	Tested Frequency (MHz)
-	5765 ~ 5828	5765

Test Condition

Test Item	Ambient Temperature	Relative Humidity	Tested by
Radiated Spurious Emissions	23-24.2 °C	54-58 %	Roger Liao
Field Strength of Fundamental Emissions	23-24.2 °C	54-58 %	Roger Liao
20 dB Bandwidth	23-24.2 °C	54-58 %	Roger Liao
Mains Conducted Emission	23.5 °C	66 %	Chuan Chu

4.3 Special Accessories and Auxiliary Equipment

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

Accessory of EUT

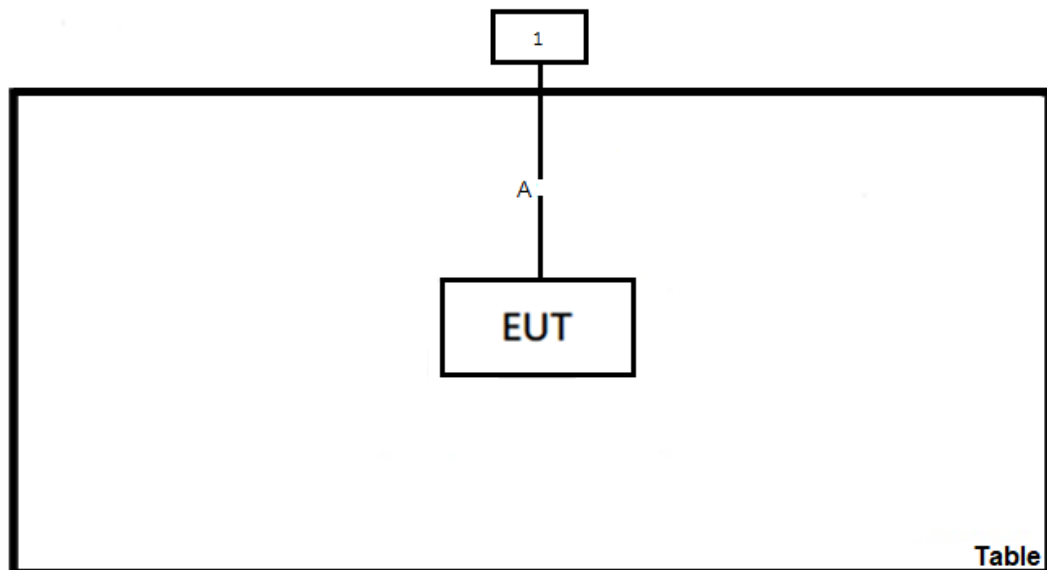
No.	Product	Brand	Model	Description
-	CPU	ST Microelectronics	STM32H523CEU6	-

Support Unit

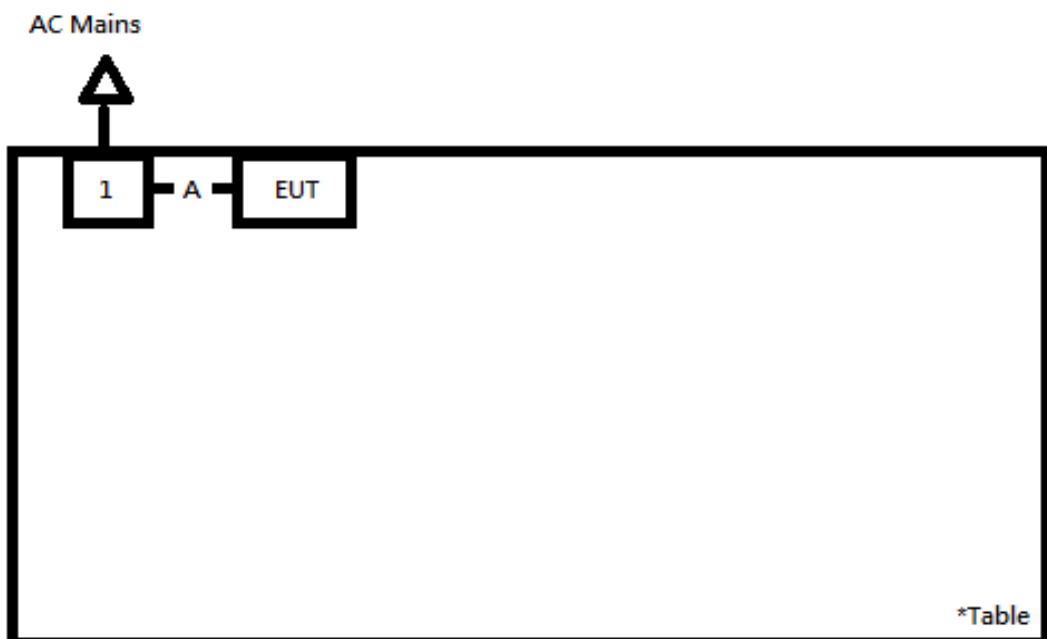
Support Unit								
No	Description	Brand	Model	S/N	Shielded	Ferrite Core (Qty)	Length (cm)	Remark
A	Fixture	Black Sheep	Black sheep-001	-	-	-	-	Radiated and Mains Conduction Test
1	USB Cable (to fixture)	Gwinstek	GPS-3303	-	-	-	-	

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 1.3 dBi. The antenna is a Omnidirectional / Dipole 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.

5.1.2 Field Strength of Fundamental Emissions

Limit

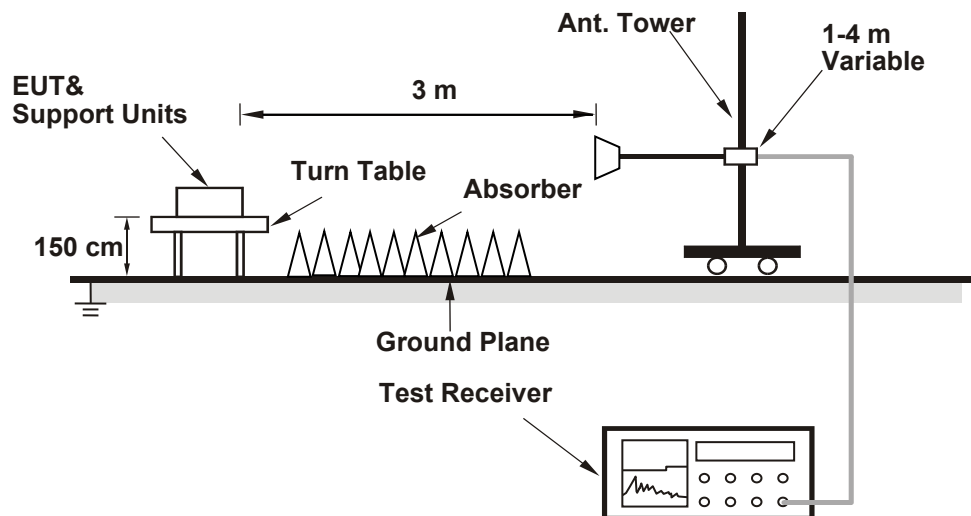
The field strength of emissions from intentional radiators operated within these frequency bands shall comply with the following:

Fundamental Frequency	Field Strength of Fundamental (millivolts/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: 2026/05/20 ~ 2026/05/21

Kind of Equipment	Manufacturer	Type	S/N	Calibration Date	Calibration Due Date
Above 1 GHz					
Signal Analyzer	R&S	FSV40	101509	2026/05/06	2027/05/05
Horn Antenna	ETS-Lindgren	3117	00218929	2025/11/20	2026/11/19
Horn Antenna	SCHWARZBECK	BBHA 9170	00890	2026/04/29	2027/04/28
HF-AMP + AC source	EMCI	EMC051845SE	980635	2026/03/31	2027/03/30
HF-AMP + AC source	EMCI	EMC184045SE	980656	2026/01/15	2027/01/14
Microwave Cable	EMCI	EM102A-KMKM-700	504231101002	2026/05/08	2027/05/07
Microwave Cable	HUBER+SUHNER	SUCOFLEX 102EA	800902/2EA	2025/06/06	2026/06/05
Microwave Cable	HUBER+SUHNER	SUCOFLEX 102EA	801026/2EA	2025/06/06	2026/06/05
3G High Pass Filter	EMCI	ZHPF3180	08223315	2025/12/18	2026/12/17
7G High Pass Filter	EMCI	ZHPF7125	08223317	2025/05/27	2026/05/26
Test Software	Audix E3	15914a_20191106_tuv	PK-001087	N/A	N/A
30 MHz – 1 GHz					
Receiver	R&S	ESR7	102109	2026/02/04	2027/02/03
Bilog Antenna	SCHWARZBECK	VULB-9168	00951	2026/05/11	2027/05/10
LF-AMP	Agilent	8447D	2727A05146	2026/01/15	2027/01/14
RF Cable	EM	RG 214_U/2*11N/7M	24038601	2026/02/25	2027/02/24
Microwave Cable	HUBER+SUHNER	SUCOFLEX 104	802244/4	2026/02/25	2027/02/24
Microwave Cable	HUBER+SUHNER	SUCOFLEX 104	MY37203/4	2026/02/25	2027/02/24
Test Software	Audix E3	15914a_20191106_tuv	PK-001087	N/A	N/A
Below 30 MHz					
Receiver	R&S	ESR7	102109	2026/02/04	2027/02/03
Loop Antenna	SCHWARZBECK	FMZB 1519B	00215	2025/12/16	2026/12/15
RF Cable	EM	RG 214_U/2*11N/7M	24038601	2026/02/25	2027/02/24
Microwave Cable	HUBER+SUHNER	SUCOFLEX 104	802244/4	2026/02/25	2027/02/24
Test Software	Audix E3	15914a_20191106_tuv	PK-001087	N/A	N/A

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.

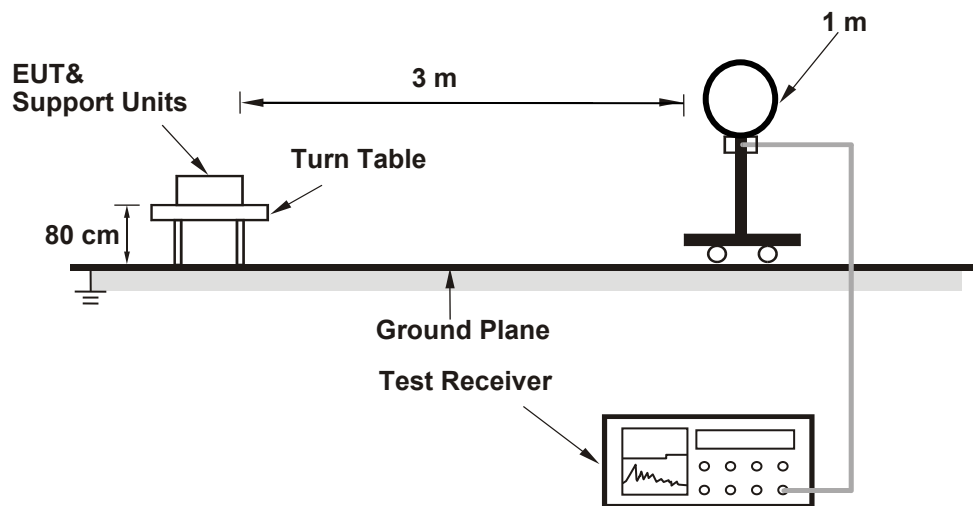
Frequencies (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
0.009 ~ 0.490	2400/F (kHz)	300
0.490 ~ 1.705	24000/F (kHz)	30
1.705 ~ 30.0	30	30
30 ~ 88	100	3
88 ~ 216	150	3
216 ~ 960	200	3
Above 960	500	3

Kind of Test Site

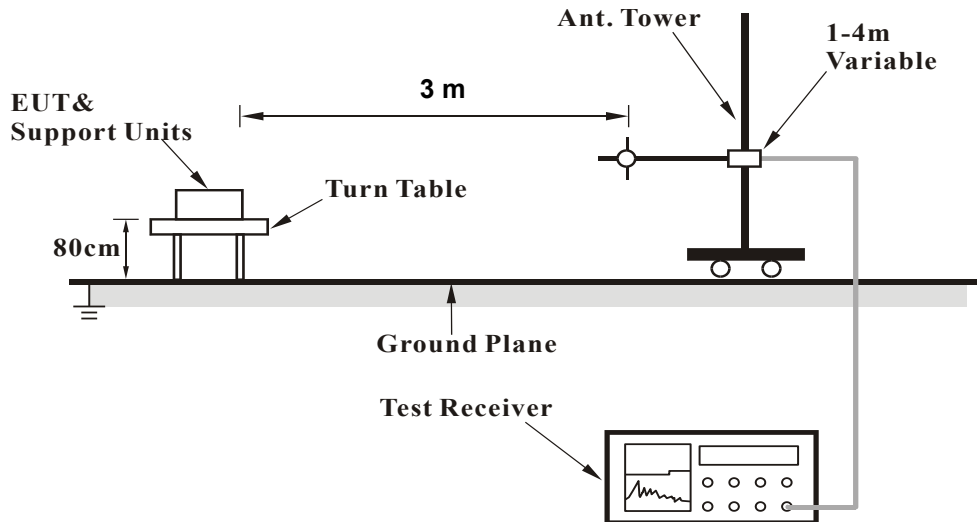
3m Semi-Anechoic Chamber

Test Setup

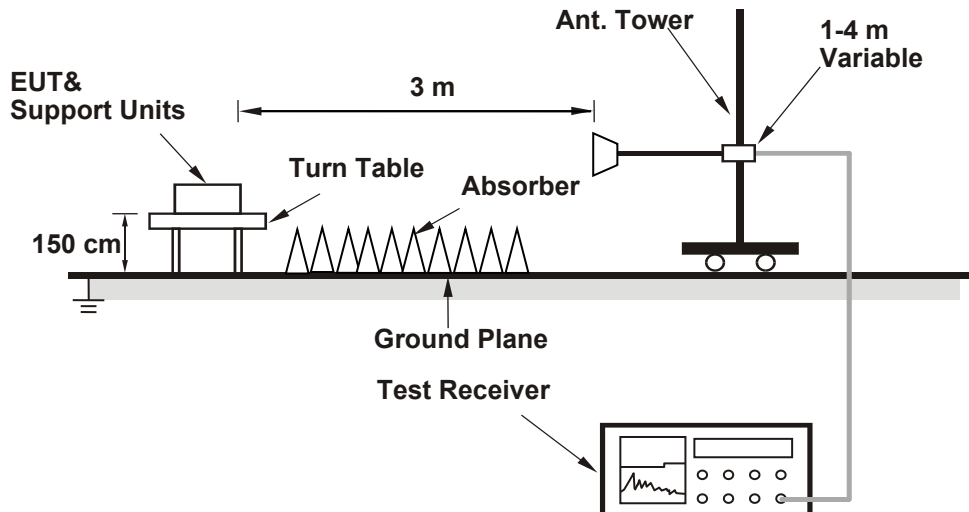
<Radiated Emissions below 30 MHz>



<Radiated Emissions 30 MHz to 1 GHz>



<Radiated Emission above 1 GHz>



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 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. 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.

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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.

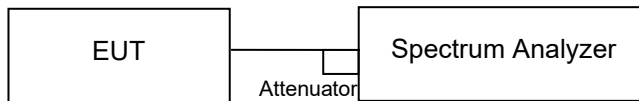
5.1.4 20 dB Bandwidth

Limit

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

Kind of Test Site Shielded room

Test Setup



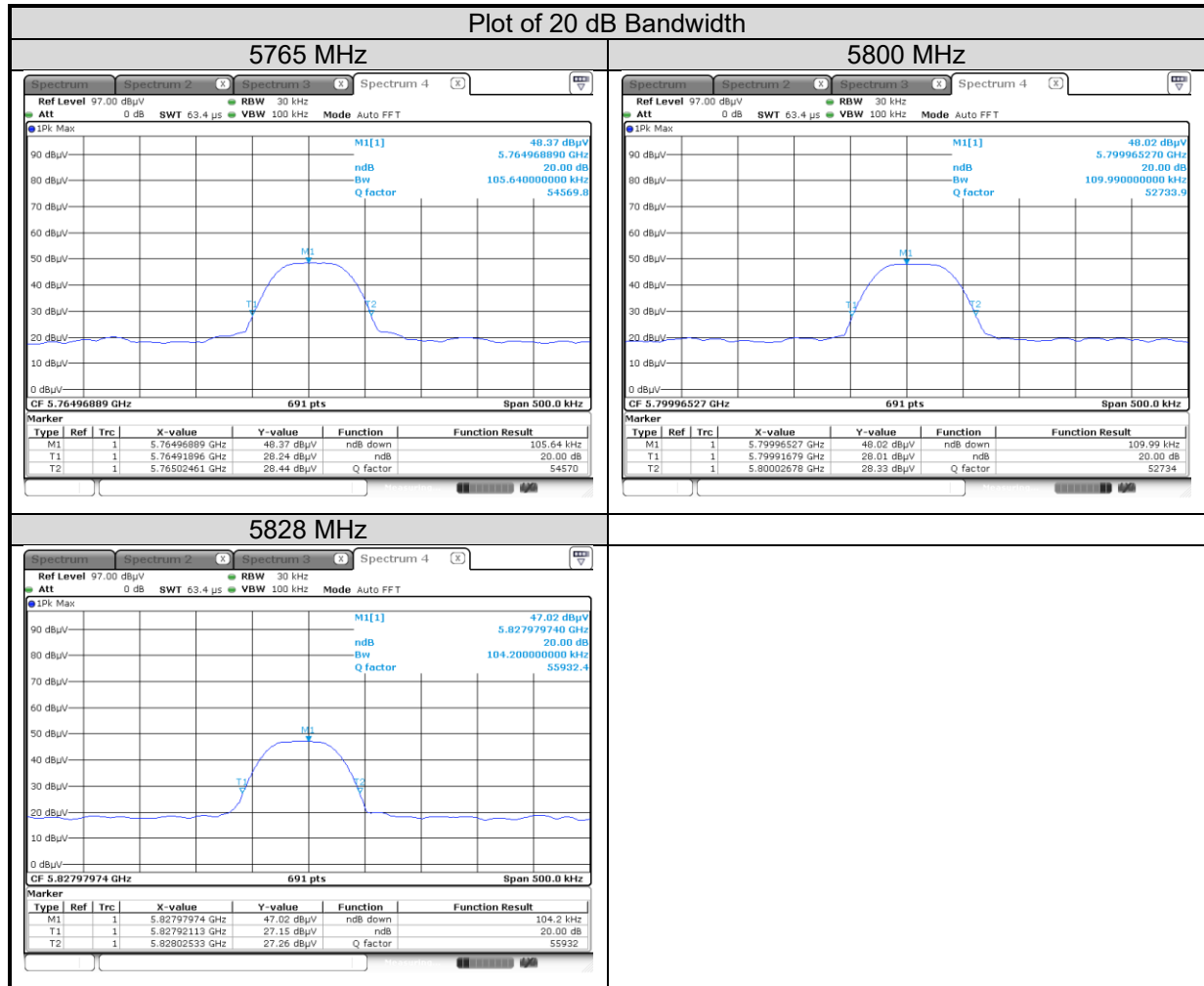
Test Instruments

Please refer to 5.1.2 Instruments.

Test Procedure

The bandwidth of the fundamental frequency was measured by spectrum analyzer with 1 kHz RBW and 3 kHz 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

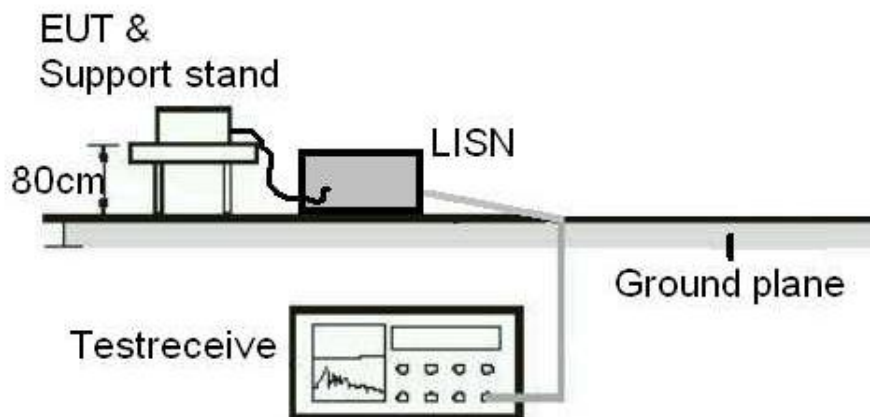
5.2.1 Mains Conducted Emission

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: 2026/05/21

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

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.

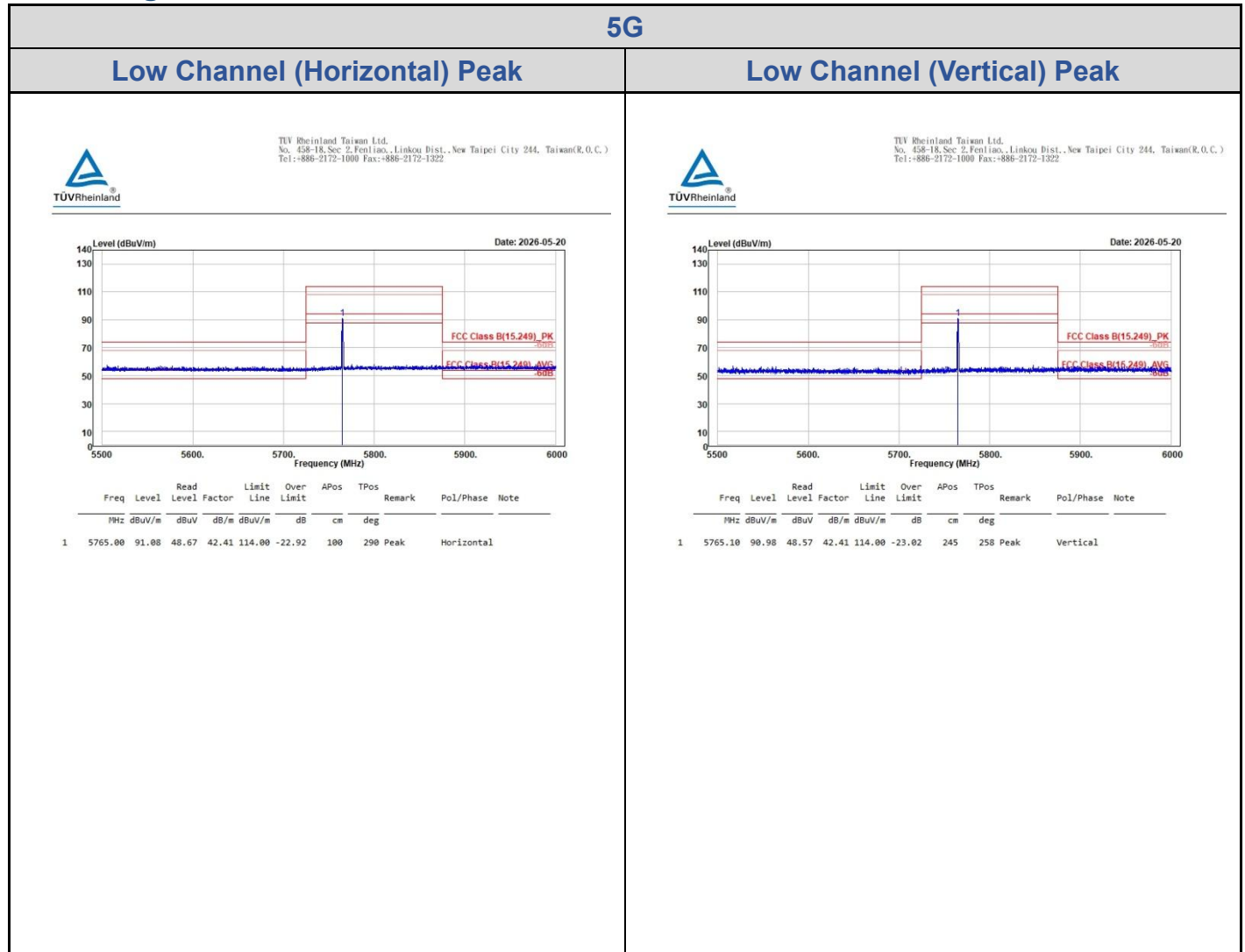
Test Results

Please refer to Appendix A.

Appendix A: Test Results of Radiated Spurious Emissions & AC

Mains Conducted Emission Test

Band Edges, 5.5GHz ~ 6GHz

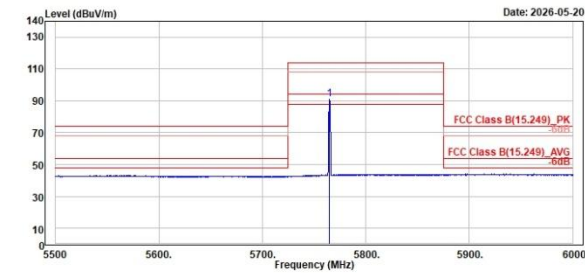


5G

Low Channel (Horizontal) Average



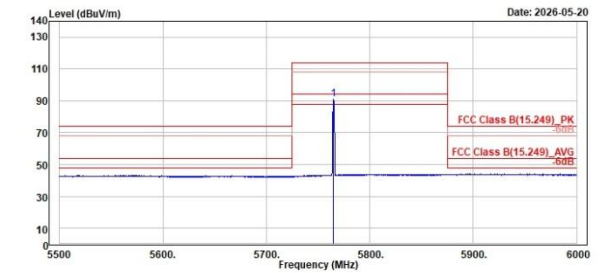
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Low Channel (Vertical) Average



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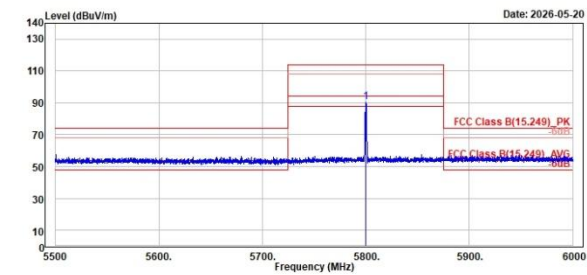
5G

Middle Channel (Horizontal) Peak

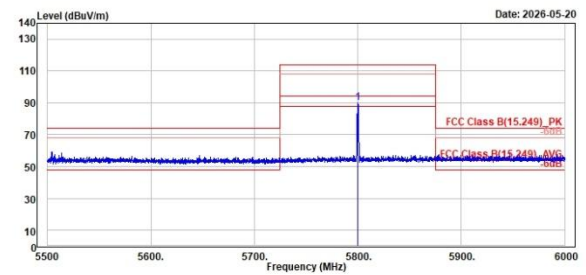
Middle Channel (Vertical) Peak



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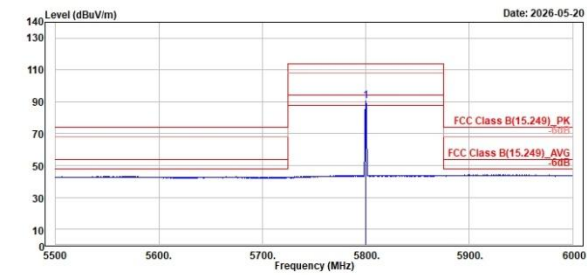


5G

Middle Channel (Horizontal) Average



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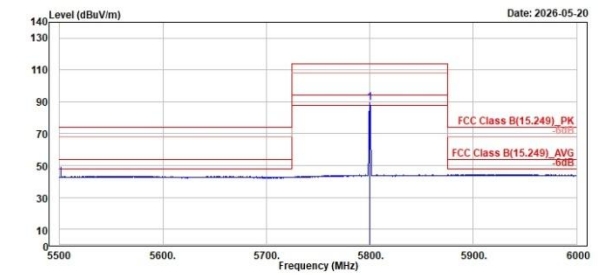


Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg				
1	5800.00	90.55	47.90	42.65	94.00	-3.45	100	289	Average	Horizontal	

Middle Channel (Vertical) Average



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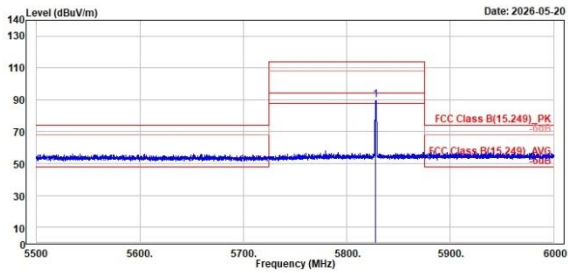
Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg				
1	5800.00	89.69	47.04	42.65	94.00	-4.31	264	255	Average	Vertical	

5G

High Channel (Horizontal) Peak



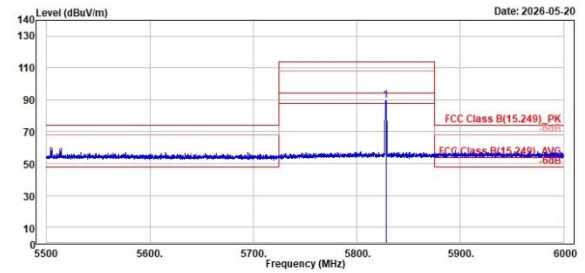
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Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg				
1 5828.00	89.88	47.32	42.56	114.00	-24.12	100	293	Peak	Horizontal		



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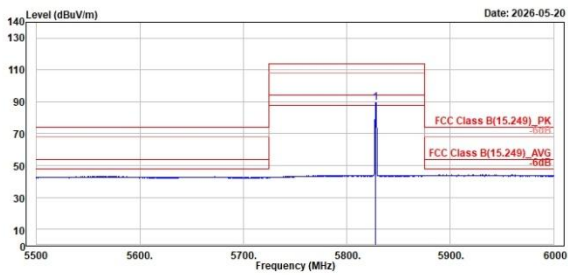
Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg				
1 5828.10	89.68	47.12	42.56	114.00	-24.32	251	257	Peak	Vertical		

5G

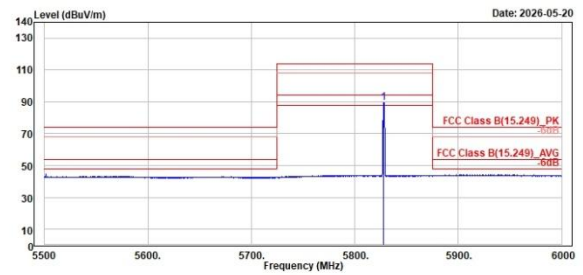
High Channel (Horizontal) Average



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Spurious Emissions, Tx Mode, 30MHz ~ 1GHz

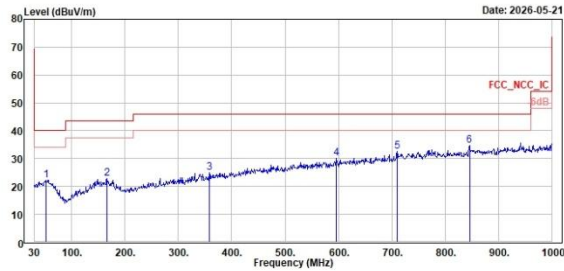
5G

Low Channel (Horizontal)

Low Channel (Vertical)



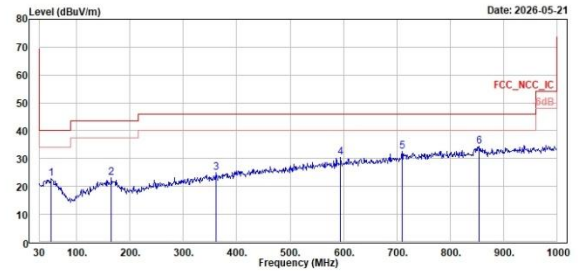
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	Freq	Level	Read	Level	Factor	Limit	Over	Apos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg				
1	51.34	22.28	28.16	-5.88	40.00	-17.72	200			1 Peak	Horizontal	
2	165.80	22.73	28.46	-5.73	43.50	-20.77	174			360 Peak	Horizontal	
3	357.86	24.98	29.30	-4.32	46.00	-21.02	200			277 Peak	Horizontal	
4	596.48	29.97	29.57	0.40	46.00	-16.03	200			157 Peak	Horizontal	
5	709.97	32.41	30.06	2.35	46.00	-13.59	160			360 Peak	Horizontal	
6	845.77	34.60	30.57	4.03	46.00	-11.40	100			183 Peak	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	52.31	22.92	28.86	-5.94	40.00	-17.08	100			314 Peak	Vertical	
2	164.83	23.21	28.95	-5.74	43.50	-20.29	100			16 Peak	Vertical	
3	361.74	25.05	29.22	-4.17	46.00	-20.95	200			208 Peak	Vertical	
4	594.54	30.39	30.08	0.31	46.00	-15.61	100			76 Peak	Vertical	
5	709.97	32.45	30.10	2.35	46.00	-13.55	200			68 Peak	Vertical	
6	854.50	34.32	30.01	4.31	46.00	-11.68	100			260 Peak	Vertical	

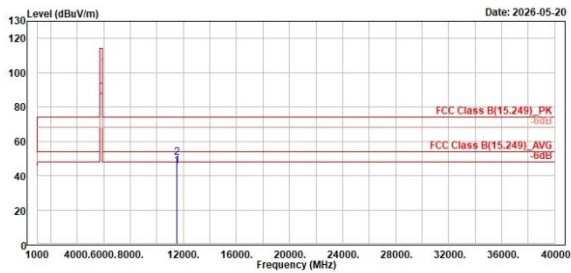
Spurious Emissions, Tx Mode, 1GHz ~ 40GHz

5G

Low Channel (Horizontal)



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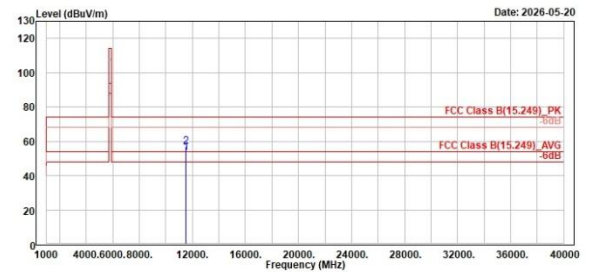


	Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	dB	cm	deg			
1	11530.00	45.42	46.11	-0.69	54.00	-8.58	100	248	Average	Horizontal		
2	11530.00	50.58	51.27	-0.69	74.00	-23.42	100	248	Peak	Horizontal		

Low Channel (Vertical)



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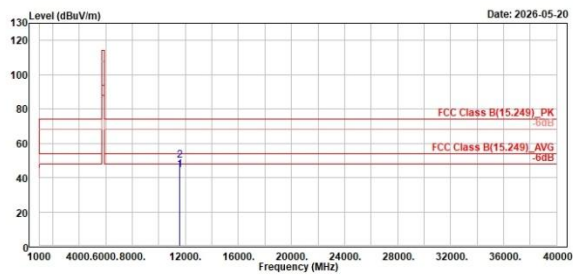
	Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	dB	cm	deg			
1	11530.00	53.56	54.25	-0.69	54.00	-0.44	106	276	Average	Vertical		
2	11530.00	56.91	57.60	-0.69	74.00	-17.09	106	276	Peak	Vertical		

5G

Middle Channel (Horizontal)



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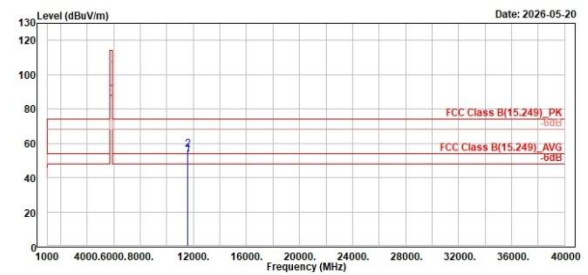


	Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	dB	cm	deg			
1	11600.00	44.58	45.28	-0.62	54.00	-9.42	180	248	Average	Horizontal		
2	11600.00	49.98	50.68	-0.62	74.00	-24.02	180	248	Peak	Horizontal		

Middle Channel (Vertical)



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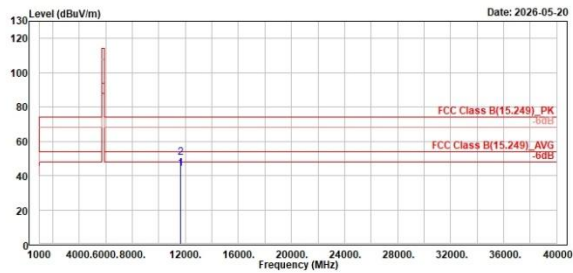
	Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	dB	cm	deg			
1	11600.00	53.16	53.78	-0.62	54.00	-0.84	120	264	Average	Vertical		
2	11600.00	56.19	56.81	-0.62	74.00	-17.81	120	264	Peak	Vertical		

5G

High Channel (Horizontal)



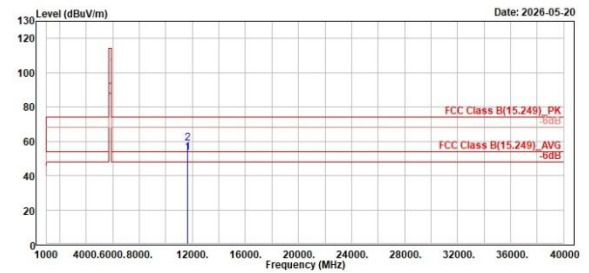
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	Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	dB	cm	deg			
1	11656.00	44.14	44.54	-0.40	54.00	-9.86	100	247	Average	Horizontal		
2	11656.00	50.38	50.78	-0.40	74.00	-23.62	100	247	Peak	Horizontal		



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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	dB	cm	deg			
1	11656.00	53.57	53.97	-0.40	54.00	-0.43	116	270	Average	Vertical		
2	11656.00	58.59	58.99	-0.40	74.00	-15.41	116	270	Peak	Vertical		

AC Mains Conducted Emission, Tx Mode, 150kHz ~ 30MHz

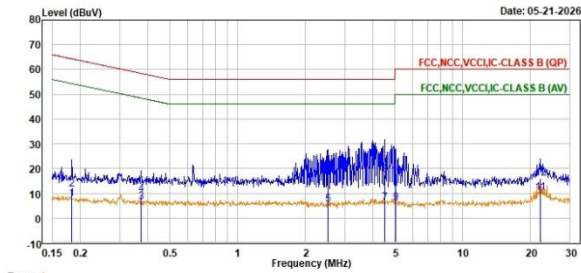
Worst Band

(Line)

(Neutral)



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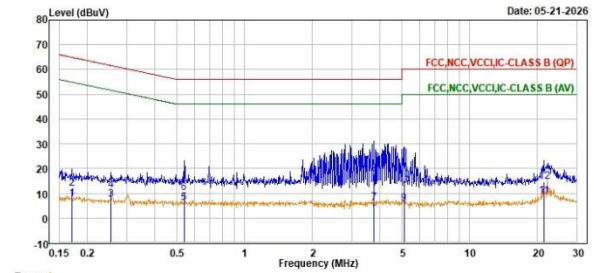


Trace: 1

Line	Freq (MHz)	Level (dBuV)	Read Level (dBuV)	Factor	Limit (dBuV)	Over Limit (dB)	Remark	Pol/Phase	Note
1	0.18	7.96	-1.98	9.94	54.34	-46.38	Average	line1	
2	0.18	11.63	1.69	9.94	64.34	-52.71	QP	line1	
3	0.37	6.26	-3.70	9.96	48.47	-42.21	Average	line1	
4	0.37	9.53	-0.43	9.96	58.47	-48.94	QP	line1	
5	2.53	5.57	-4.53	10.10	46.00	-40.43	Average	line1	
6	2.53	16.88	6.78	10.10	56.00	-39.12	QP	line1	
7	4.49	6.21	-3.96	10.17	46.00	-39.79	Average	line1	
8	4.49	17.49	7.32	10.17	56.00	-38.51	QP	line1	
9	5.04	6.08	-4.11	10.19	50.00	-43.92	Average	line1	
10	5.04	16.81	6.62	10.19	60.00	-43.19	QP	line1	
11	22.13	10.05	-0.59	10.64	50.00	-39.95	Average	line1	
12	22.13	15.84	5.20	10.64	60.00	-44.16	QP	line1	



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Trace: 1

Line	Freq (MHz)	Level (dBuV)	Read Level (dBuV)	Factor	Limit (dBuV)	Over Limit (dB)	Remark	Pol/Phase	Note
1	0.17	7.75	-2.19	9.94	54.97	-47.22	Average	neutral	
2	0.17	11.75	1.81	9.94	64.97	-53.22	QP	neutral	
3	0.25	7.40	-2.53	9.93	51.61	-44.21	Average	neutral	
4	0.25	11.06	1.13	9.93	61.61	-50.55	QP	neutral	
5	0.54	6.06	-3.89	9.95	46.00	-39.94	Average	neutral	
6	0.54	10.20	0.25	9.95	56.00	-45.80	QP	neutral	
7	3.75	5.95	-4.09	10.04	46.00	-40.05	Average	neutral	
8	3.75	17.74	7.70	10.04	56.00	-38.26	QP	neutral	
9	5.11	5.75	-4.35	10.10	50.00	-44.25	Average	neutral	
10	5.11	15.44	5.34	10.10	60.00	-44.56	QP	neutral	
11	21.38	8.78	-1.78	10.56	50.00	-41.22	Average	neutral	
12	21.38	14.54	3.98	10.56	60.00	-45.46	QP	neutral	