Prüfbericht-Nr.: *Test report no.:*	CN239YK8 (P15C-SRD) 001	**Auftrags-Nr.:** *Order no.*:	48218000	
Kunden-Referenz-Nr.: *Client reference no.:*	N/A	**Auftragsdatum:** *Order date:*	2023-04-13	
Auftraggeber: *Client:*	Acrox Technologies Co. LTD 4F, No. 89, Minshan St., NeiHu Dist. Taipei City, R.O.C.			
Prüfgegenstand: *Test item:*	BE-PMRF3B			
Bezeichnung / Typ-Nr.: *Identification / Type no.:*	BE-PMRF3B			
Auftrags-Inhalt: *Order content*:	FCC Part 15C Test report			
Prüfgrundlage: *Test specification:*	FCC 47CFR Part 15: Subpart C Section 15.249			

Wareneingangsdatum: *Date of sample receipt:*	2023-04-11
Prüfmuster-Nr.: *Test sample no:*	A003454062-002
Prüfzeitraum: *Testing period:*	2023-04-27 - 2023-05-12
Ort der Prüfung: *Place of testing:*	EMC/RF Taipei Testing Site
Prüflaboratorium: *Testing laboratory:*	Taipei Testing Laboratories
Prüfergebnis*: *Test result*:*	Pass

überprüft von: *compiled by:*		**genehmigt von:** authorized by:	
Datum: *Date:* 2023-05-16	Anderson Chiu	**Ausstellungsdatum:** *Issue date:* 2023-05-16	Brenda Chen
Stellung / *Position:*	Senior Project Manager	**Stellung** / *Position:*	Senior Project Manager

Sonstiges / *Other:*

Zustand des Prüfgegenstandes bei Anlieferung: Prüfmuster vollständig und unbeschädigt
Condition of the test item at delivery: *Test item complete and undamaged*

* 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*

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	15.215 (c)	20 dB Bandwidth	Pass
5.1.4	2.1049	Occupied Bandwidth	Pass
-	15.207	Mains Conducted Emission	N/A

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

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HISTORY OF THIS TEST REPORT

Report No.	Description	Date Issued
CN239YK8 (P15C-SRD) 001	Original Release	2023-05-16

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
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 C63.10:2013

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

Taipei Testing Laboratories

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

2.2 Test Facility

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 basics 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 BE-PMRF3B. It contains a 2.4GHz 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	BE-PMRF3B
Type Identification	BE-PMRF3B
FCC ID	PRDMU125

Technical Specification of EUT

Item	EUT information
Operating Frequency	2402 ~ 2480 MHz
Operation Voltage	1.5 Vdc
Modulation	GFSK
Antenna Information	Refer to 5.1.1
Accessory Device	Refer to 4.4

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 Carrier Frequency and Channel

Channel	Freq. (MHz)	Channel	Freq. (MHz)	Channel	Freq. (MHz)	Channel	Freq. (MHz)
0	2402	10	2422	20	2442	30	2462
1	2404	11	2424	21	2444	31	2464
2	2406	12	2426	22	2446	32	2466
3	2408	13	2428	23	2448	33	2468
4	2410	14	2430	24	2450	34	2470
5	2412	15	2432	25	2452	35	2472
6	2414	16	2434	26	2454	36	2474
7	2416	17	2436	27	2456	37	2476
8	2418	18	2438	28	2458	38	2478
9	2420	19	2440	29	2460	39	2480

4.3 Test Operation and Test Software

Setup for testing: It was used to enable the operation modes through pressing button listed as below.

The samples were used as follows:
A003454062-002

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 & Occupied 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)
-	2402 ~ 2480	2402, 2440, 2480

Radiated Spurious Emission 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)
-	2402 ~ 2480	2402, 2440, 2480

Radiated Spurious Emission 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)
-	2402 ~ 2480	2480

20 dB Bandwidth & Occupied 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)
-	2402 ~ 2480	2402, 2440, 2480

Test Condition

Test Item	Ambient Temperature	Relative Humidity	Tested by
Radiated Spurious Emissions	22.6-24.5 °C	52-54 %	Roger Liao
Field Strength of Fundamental Emissions	22.6-24.5 °C	52-54 %	Roger Liao
20 dB Bandwidth & Occupied Bandwidth	22.6-24.5 °C	52-54 %	Roger Liao

4.4 Special Accessories and Auxiliary Equipment

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

Accessory of EUT

None

Support Unit

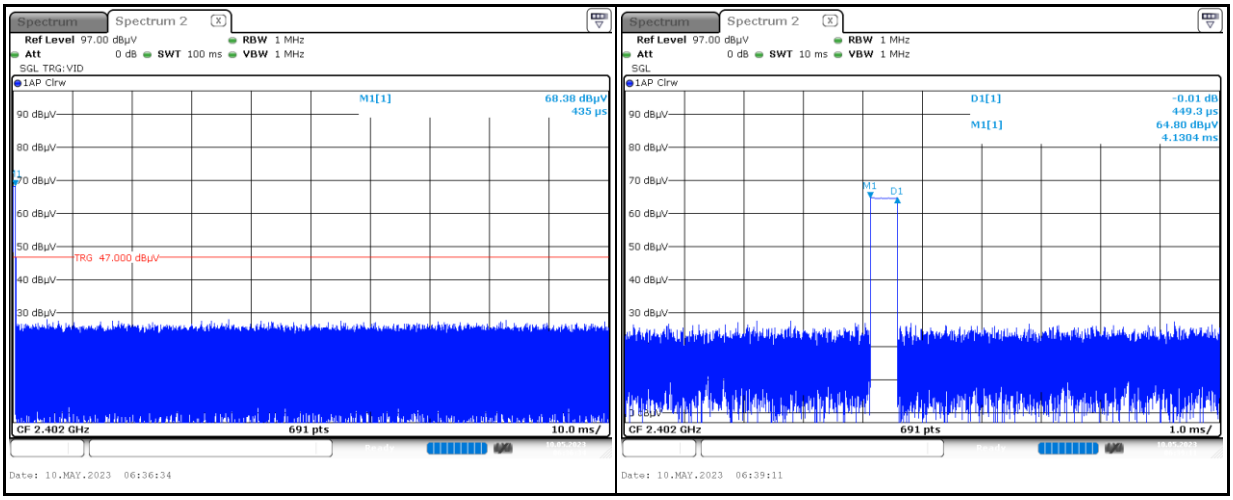
None

4.5 Test Setup Diagram

<Radiated Spurious Emissions mode>

4.6 Duty Cycle of Test Signal

Duty cycle correction factor = 20 log(Duty cycle) = 20 log(0.4493/100) = -46.95



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 3.22 dBi. The antenna is a 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.

5.1.2 Field Strength of Fundamental Emissions

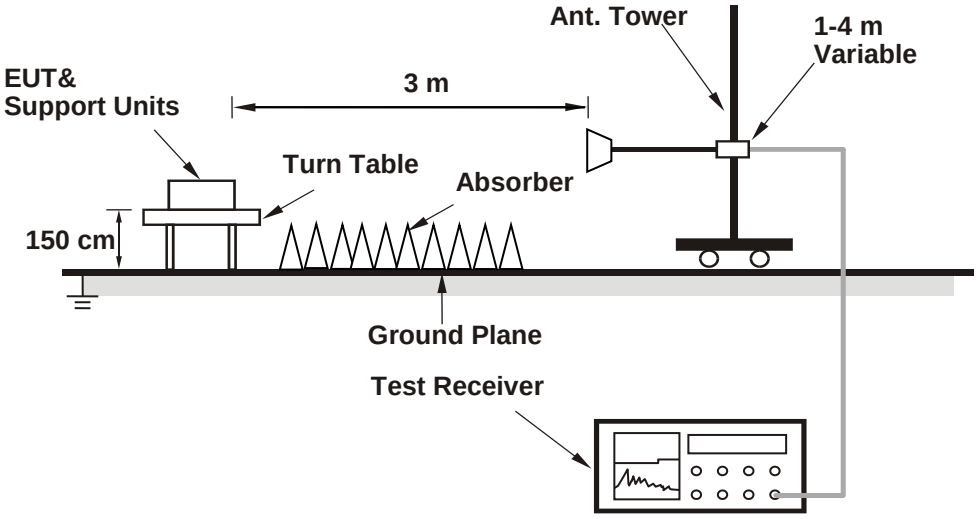
Limit

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).

Test Instruments

Kind of Equipment	Manufacturer	Type	S/N	Calibration Date	Calibration Due Date
Above 1 GHz					
Signal Analyzer	R&S	FSV40	101509	2023/4/26	2024/4/24
Horn Antenna	ETS-Lindgren	3117	00218929	2022/11/17	2023/11/16
HF-AMP + AC source	EMCI	EM01G18GA	980635	2023/2/16	2024/2/15
HF-AMP + AC source	EMCI	EMC184045SE	980656	2023/1/6	2024/1/5
Horn Antenna	SCHWARZBECK	BBHA 9170	00887	2023/3/31	2024/3/30
Test Software	Audix E3	15914a_20191106 tuv	PK-001087	N/A	N/A
30 MHz ~ 1 GHz					
Receiver	R&S	ESR7	102109	2023/2/24	2024/2/23
Bilog Antenna	SCHWARZBECK	VULB-9168	00951	2023/3/31	2024/3/29
LF-AMP	Agilent	8447D	2727A05146	2023/2/16	2024/2/15
Test Software	Audix E3	15914a_20191106 tuv	PK-001087	N/A	N/A
Below 30 MHz					
Receiver	R&S	ESR7	102109	2023/2/24	2024/2/23
Loop Antenna	SCHWARZBECK	FMZB 1519B	00215	2023/1/4	2024/1/3
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.
5. The calculation formula ix explained as follows:
   Factor (dB/m) = Antenna Factor (dB/m) + Cable Loss (dB)
   Level (dBuV/m) = Reading (dBuV) + Factor (dB/m)

Test Results

Fundamental Frequency (MHz)	Antenna Orientation	Detector or calculated value	Level (dBuV/m)	Limit (dBuV/m)	Result
2402	Horizontal	Peak	77.00	114.00	Pass
		Average	75.42	94.00	Pass
	Vertical	Peak	73.41	114.00	Pass
		Average	72.14	94.00	Pass
2440	Horizontal	Peak	75.84	114.00	Pass
		Average	74.72	94.00	Pass
	Vertical	Peak	70.18	114.00	Pass
		Average	68.61	94.00	Pass
2480	Horizontal	Peak	74.77	114.00	Pass
		Average	74.00	94.00	Pass
	Vertical	Peak	71.81	114.00	Pass
		Average	70.75	94.00	Pass

Please refer to Appendix A.

5.1.3 Radiated Spurious Emissions

Limit

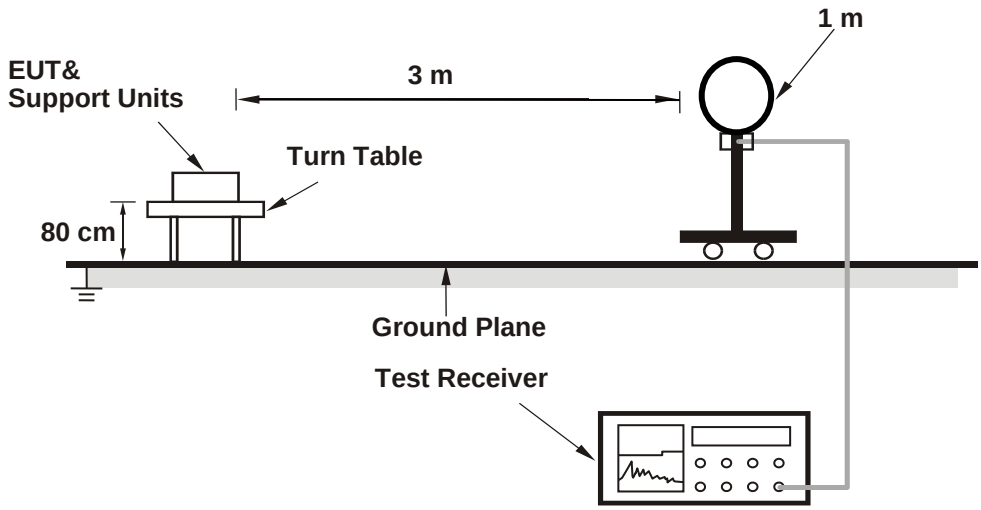
Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits as below table, whichever is the lesser attenuation.

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

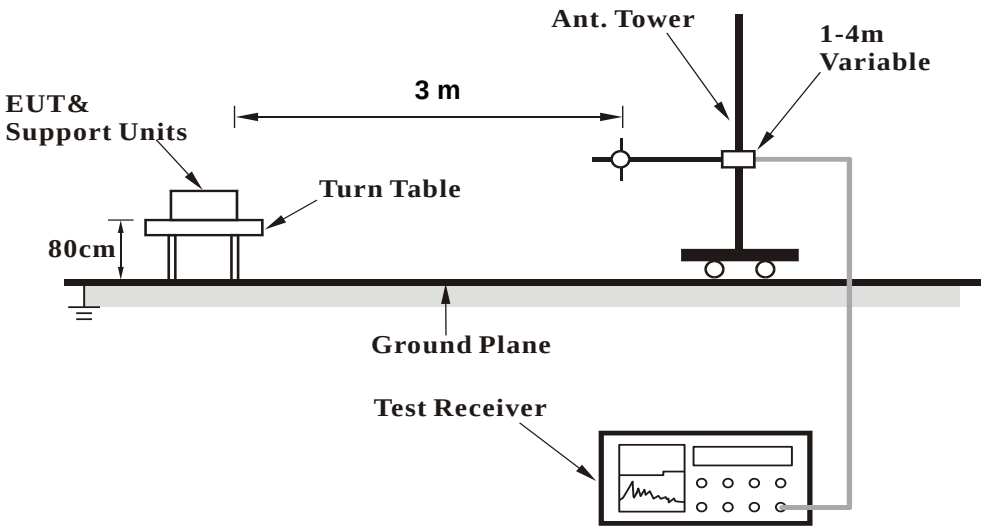
Kind of Test Site 3m Semi-Anechoic Chamber

Test Setup

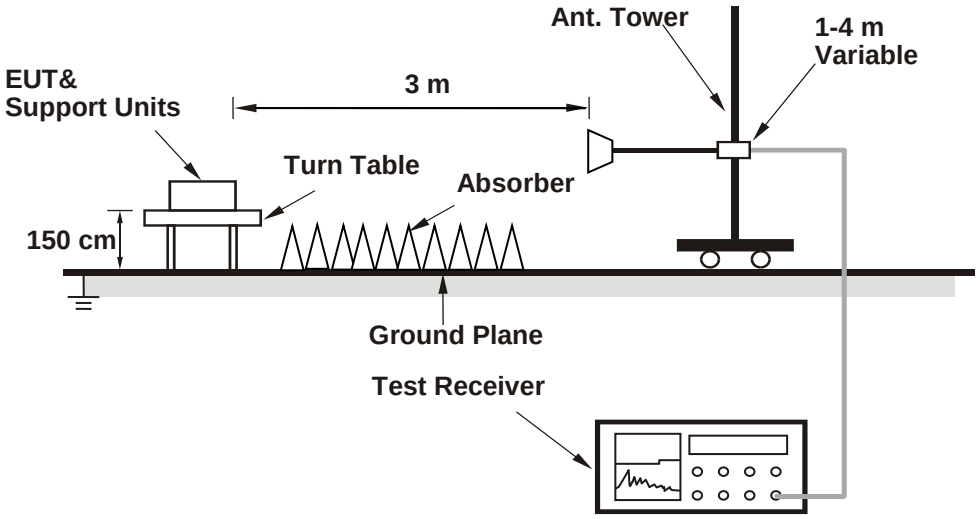
<Radiated Emissions below 30 MHz>



<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 average value of harmonic frequency is: Average value = Peak value + 20 log(Duty cycle)
   Where the duty cycle correction factor is calculated from following formula:
   20 log(Duty cycle) = 20 log(0.004493) = -46.95 dB

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.

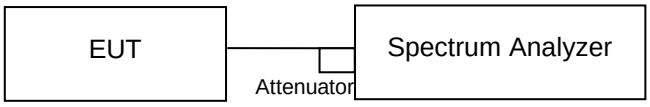
5.1.4 20 dB Bandwidth

Limit

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

Kind of Test Site 3m Semi-Anechoic Chamber

Test Setup



Test Instruments

Kind of Equipment	Manufacturer	Type	S/N	Calibration Date	Calibration Due Date	Test Date	
						From	Until
Signal Analyzer	R&S	FSV40	101508	2023/4/26	2024/4/24	2023/5/12	2023/5/12

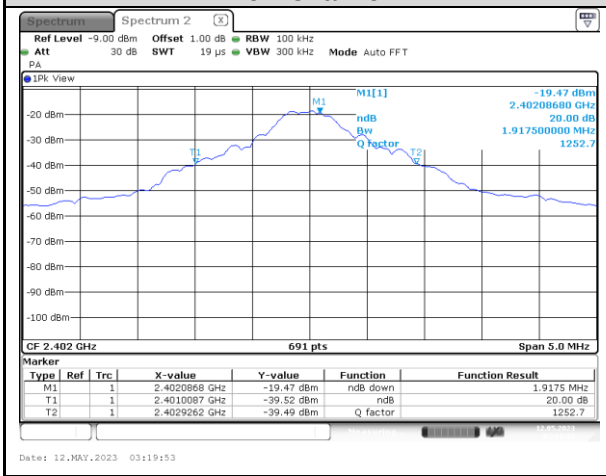
Test Procedures

a. Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
b. Turn on the EUT and connect it to measurement instrument. Then set it to any one convenient frequency within its operating range. Set a reference level on the measuring instrument equal to the highest peak value.
c. Measure the frequency difference of two frequencies that were attenuated 20 dB from the reference level. Record the frequency difference as the emission bandwidth.
d. Repeat above procedures until all frequencies measured were complete.

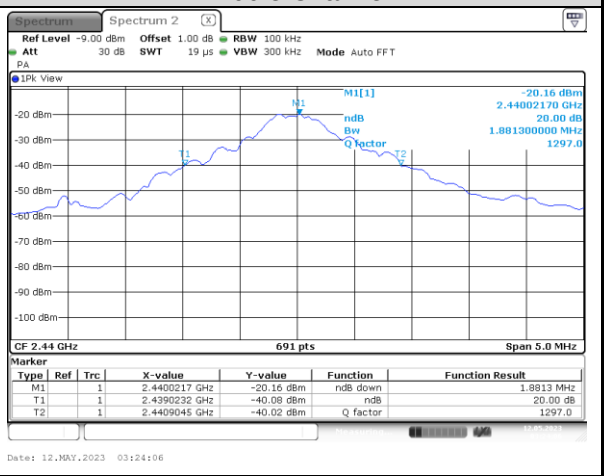
Test Results

Channel	Channel Frequency (MHz)	20 dB Bandwidth (MHz)
Low Channel	2402	1.918
Middle Channel	2440	1.881
High Channel	2480	1.961

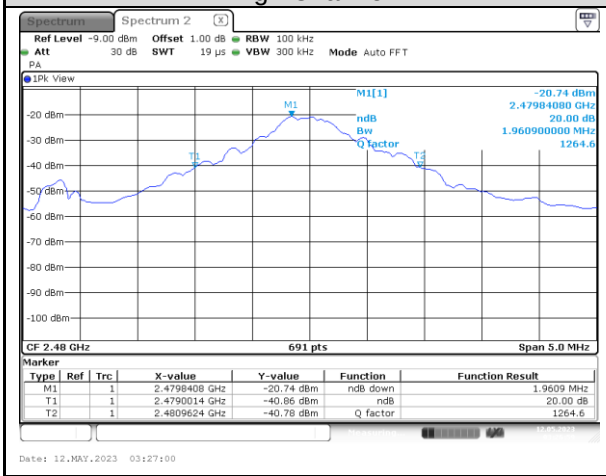
Low Channel



Middle Channel



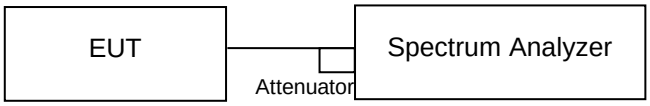
High Channel



5.1.5 Occupied Bandwidth

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
Signal Analyzer	R&S	FSV40	101508	2023/4/26	2024/4/24	2023/5/12	2023/5/12

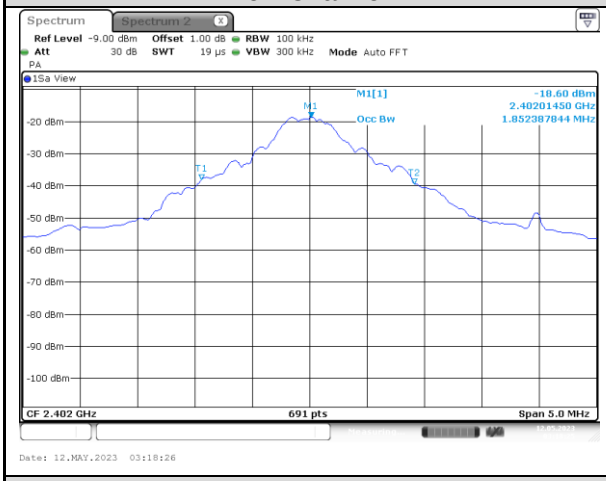
Test Procedures

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 Sampling. 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.

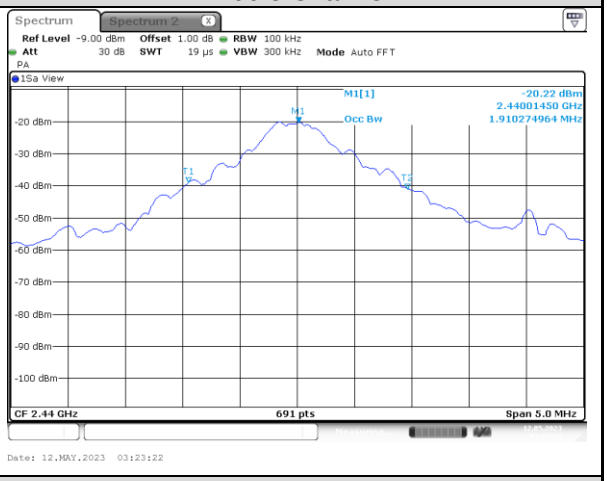
Test Results

Channel	Channel Frequency (MHz)	Occupied Bandwidth (MHz)
Low Channel	2402	1.852
Middle Channel	2440	1.910
High Channel	2480	1.954

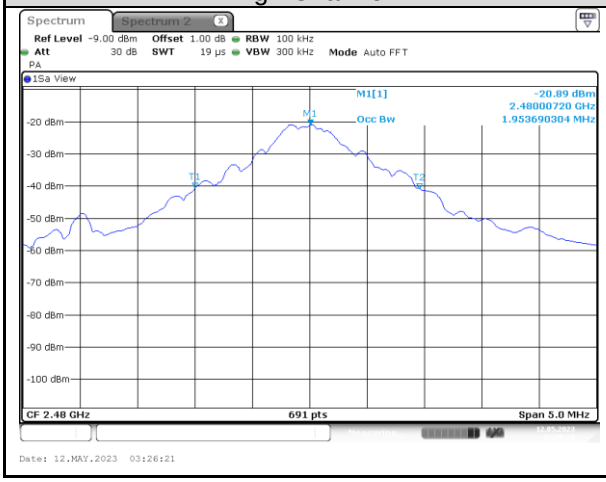
Low Channel



Middle Channel



High Channel



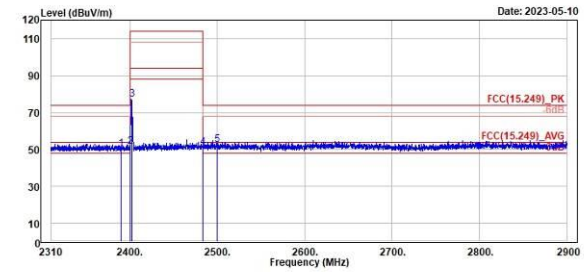
Appendix A: Test Results of Radiated Spurious Emissions Test

Band Edges, 2.31GHz ~ 2.9GHz

SRD

Low Channel (Horizontal) Peak

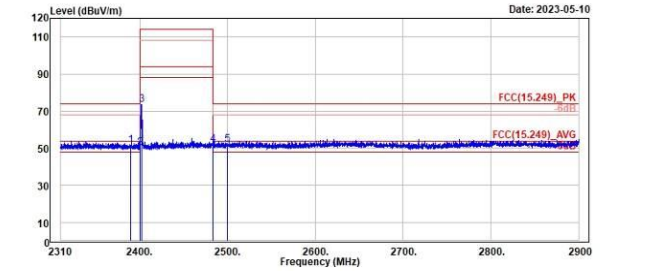
TUV Rheinland Taiwan Ltd.
No. 458-18, Sec 2, Fenliao, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel:+886-2172-1000 Fax:+886-2172-1322



	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	2390.00	50.12	12.20	37.92	74.00	-23.88	337	275	Peak	Horizontal	
2	2400.03	51.37	13.46	37.91	114.00	-62.63	337	275	Peak	Horizontal	
3	2402.00	77.00	39.07	37.93	114.00	-37.00	337	275	Peak	Horizontal	
4	2483.46	51.23	12.92	38.31	114.00	-62.77	337	275	Peak	Horizontal	
5	2499.98	52.30	13.97	38.33	74.00	-21.70	337	275	Peak	Horizontal	

Low Channel (Vertical) Peak

TUV 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

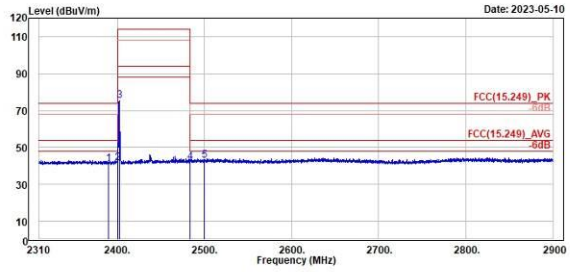


	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	2390.00	51.66	13.74	37.92	74.00	-22.34	346	80	Peak	Vertical	
2	2400.03	50.32	12.41	37.91	114.00	-63.68	346	80	Peak	Vertical	
3	2402.00	73.41	35.48	37.93	114.00	-40.59	346	80	Peak	Vertical	
4	2483.46	51.81	13.50	38.31	114.00	-62.19	346	80	Peak	Vertical	
5	2499.98	52.12	13.79	38.33	74.00	-21.88	346	80	Peak	Vertical	

SRD

Low Channel (Horizontal) Average

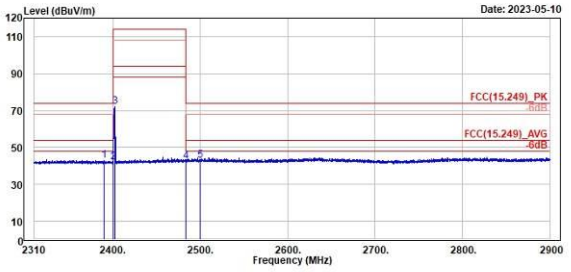
TUV Rheinland Taiwan Ltd.
No. 458-18, Sec 2, Fenliao, , Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel:+886-2172-1000 Fax:+886-2172-1322



	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	2390.00	41.26	3.34	37.92	54.00	-12.74	337	275	Average	Horizontal	
2	2400.03	41.31	3.40	37.91	94.00	-52.69	337	275	Average	Horizontal	
3	2402.00	75.42	37.49	37.93	94.00	-18.58	337	275	Average	Horizontal	
4	2483.46	42.06	3.75	38.31	94.00	-51.94	337	275	Average	Horizontal	
5	2499.98	42.98	4.65	38.33	54.00	-11.02	337	275	Average	Horizontal	

Low Channel (Vertical) Average

TUV 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

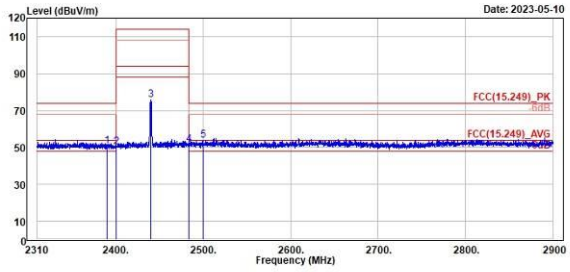


	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	2390.00	42.79	4.87	37.92	54.00	-11.21	346	80	Average	Vertical	
2	2400.03	41.79	3.88	37.91	94.00	-52.21	346	80	Average	Vertical	
3	2402.00	72.14	34.21	37.93	94.00	-21.86	346	80	Average	Vertical	
4	2483.46	42.34	4.03	38.31	94.00	-51.66	346	80	Average	Vertical	
5	2499.98	42.89	4.56	38.33	54.00	-11.11	346	80	Average	Vertical	

SRD

Middle Channel (Horizontal) Peak

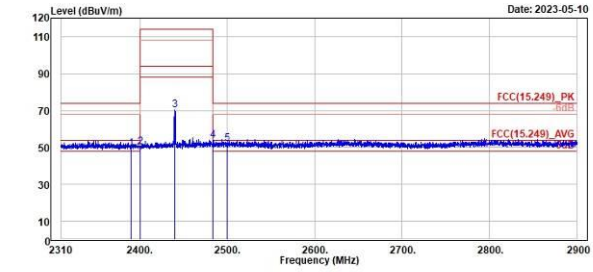
TUV Rheinland Taiwan Ltd.
No. 458-18, Sec 2, Fenliao, , Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel:+886-2172-1000 Fax:+886-2172-1322



	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	2390.00	50.86	12.94	37.92	74.00	-23.14	369	281	Peak	Horizontal	
2	2400.03	50.41	12.50	37.91	114.00	-63.59	369	281	Peak	Horizontal	
3	2440.00	75.84	37.64	38.20	114.00	-38.16	369	281	Peak	Horizontal	
4	2483.46	51.62	13.31	38.31	114.00	-62.38	369	281	Peak	Horizontal	
5	2499.98	53.64	15.31	38.33	74.00	-20.36	369	281	Peak	Horizontal	

Middle Channel (Vertical) Peak

TUV 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 Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	2390.00	49.25	11.33	37.92	74.00	-24.75	100	275	Peak	Vertical	
2	2400.03	50.00	12.09	37.91	114.00	-64.00	100	275	Peak	Vertical	
3	2440.00	70.18	31.98	38.20	114.00	-43.82	100	275	Peak	Vertical	
4	2483.46	53.68	15.37	38.31	114.00	-60.32	100	275	Peak	Vertical	
5	2499.98	52.00	13.67	38.33	74.00	-22.00	100	275	Peak	Vertical	

SRD

Middle Channel (Horizontal) Average

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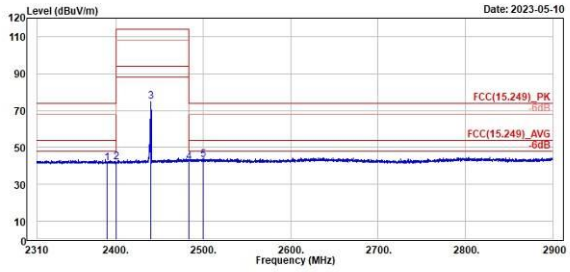
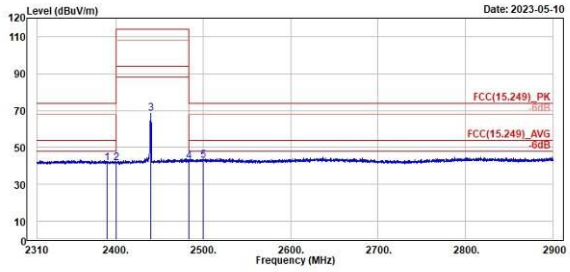


	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	2390.00	41.58	3.66	37.92	54.00	-12.42	369	281	Average	Horizontal	
2	2400.03	42.11	4.20	37.91	94.00	-51.89	369	281	Average	Horizontal	
3	2440.00	74.72	36.52	38.20	94.00	-19.28	369	281	Average	Horizontal	
4	2483.46	42.11	3.80	38.31	94.00	-51.89	369	281	Average	Horizontal	
5	2499.98	43.23	4.90	38.33	54.00	-10.77	369	281	Average	Horizontal	

Middle 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 Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	2390.00	41.59	3.67	37.92	54.00	-12.41	100	275	Average	Vertical	
2	2400.03	41.58	3.67	37.91	94.00	-52.42	100	275	Average	Vertical	
3	2440.00	68.61	30.41	38.20	94.00	-25.39	100	275	Average	Vertical	
4	2483.46	42.57	4.26	38.31	94.00	-51.43	100	275	Average	Vertical	
5	2499.98	43.01	4.68	38.33	54.00	-10.99	100	275	Average	Vertical	

SRD

High Channel (Horizontal) Peak

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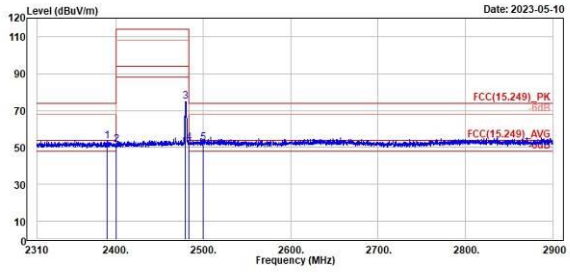

	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	2390.00	53.49	15.57	37.92	74.00	-20.51	255	280	Peak	Horizontal	
2	2400.03	51.69	13.78	37.91	114.00	-62.31	255	280	Peak	Horizontal	
3	2480.00	74.77	36.46	38.31	114.00	-39.23	255	280	Peak	Horizontal	
4	2483.46	52.39	14.08	38.31	114.00	-61.61	255	280	Peak	Horizontal	
5	2499.98	52.46	14.13	38.33	74.00	-21.54	255	280	Peak	Horizontal	

High Channel (Vertical) Peak

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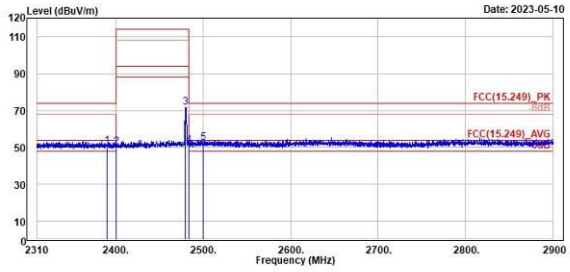
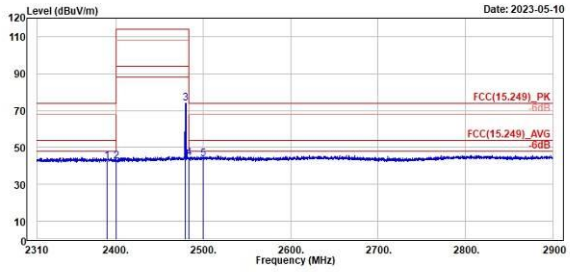


	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	2390.00	50.86	12.94	37.92	74.00	-23.14	147	356	Peak	Vertical	
2	2400.03	50.20	12.29	37.91	114.00	-63.80	147	356	Peak	Vertical	
3	2480.00	71.81	33.50	38.31	114.00	-42.19	147	356	Peak	Vertical	
4	2483.46	51.03	12.72	38.31	114.00	-62.97	147	356	Peak	Vertical	
5	2499.98	52.50	14.17	38.33	74.00	-21.50	147	356	Peak	Vertical	

SRD

High Channel (Horizontal) Average

TUV 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 Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	2390.00	42.60	4.68	37.92	54.00	-11.40	255	280	Average	Horizontal	
2	2400.03	42.39	4.48	37.91	94.00	-51.61	255	280	Average	Horizontal	
3	2480.00	74.00	35.69	38.31	94.00	-20.00	255	280	Average	Horizontal	
4	2483.46	44.08	5.77	38.31	94.00	-49.92	255	280	Average	Horizontal	
5	2499.98	43.99	5.66	38.33	54.00	-10.01	255	280	Average	Horizontal	

High Channel (Vertical) Average

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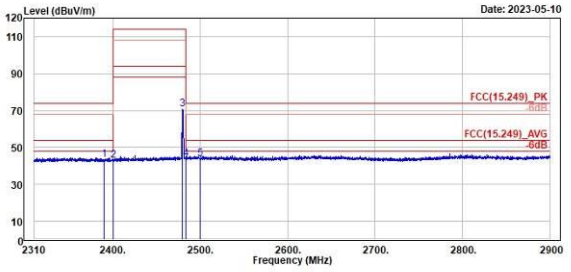

	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	2390.00	43.42	5.50	37.92	54.00	-10.58	147	356	Average	Vertical	
2	2400.03	43.11	5.20	37.91	94.00	-50.89	147	356	Average	Vertical	
3	2480.00	70.75	32.44	38.31	94.00	-23.25	147	356	Average	Vertical	
4	2483.46	43.71	5.40	38.31	94.00	-50.29	147	356	Average	Vertical	
5	2499.98	43.66	5.33	38.33	54.00	-10.34	147	356	Average	Vertical	

Spurious Emissions, Tx Mode, 9kHz ~ 30MHz

SRD

High Channel (Open) 9kHz~150kHz

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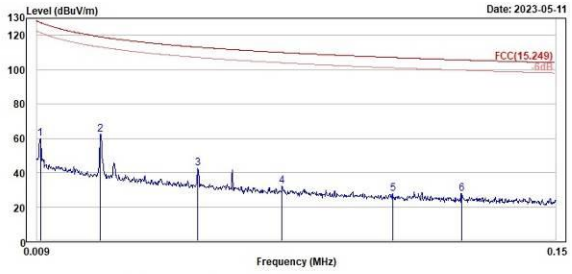

	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	0.01	59.78	42.06	17.72	127.60	-67.82	100	180	Peak	Open	
2	0.03	62.47	43.53	18.94	119.18	-56.71	100	238	Peak	Open	
3	0.05	42.70	23.65	19.05	113.13	-70.43	100	7	Peak	Open	
4	0.08	31.97	13.47	18.50	110.01	-78.04	100	241	Peak	Open	
5	0.11	27.56	9.62	17.94	107.11	-79.55	100	166	Peak	Open	
6	0.12	27.88	9.86	18.02	105.70	-77.82	100	278	Peak	Open	

High Channel (Open) 150kHz~30MHz

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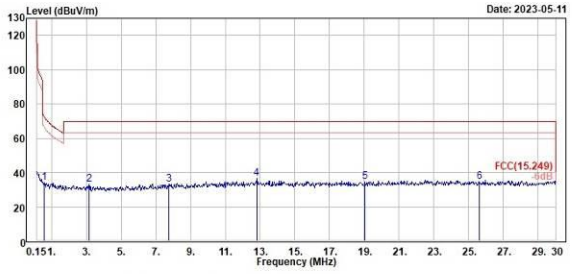

	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	0.60	34.18	15.29	18.89	72.07	-37.89	100	51	Peak	Open	
2	3.16	32.90	13.31	19.59	69.50	-36.60	100	191	Peak	Open	
3	7.76	33.04	12.47	20.57	69.50	-36.46	100	43	Peak	Open	
4	12.81	36.56	14.88	21.68	69.50	-32.94	100	147	Peak	Open	
5	19.05	34.52	12.42	22.10	69.50	-34.98	100	72	Peak	Open	
6	25.61	34.75	12.55	22.20	69.50	-34.75	100	222	Peak	Open	

Spurious Emissions, Tx Mode, 30MHz ~ 1GHz

SRD

High Channel (Horizontal)

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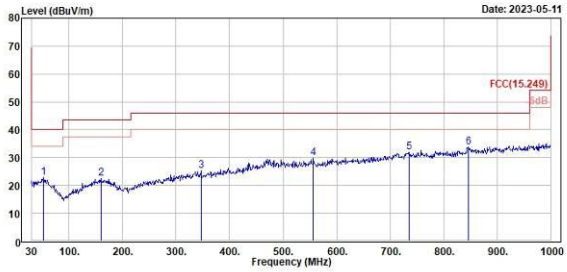

	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	52.31	22.95	28.62	-5.67	40.00	-17.05	200	232	Peak	Horizontal	
2	159.01	22.38	28.10	-5.72	43.50	-21.12	100	41	Peak	Horizontal	
3	346.22	25.25	29.21	-3.96	46.00	-20.75	300	349	Peak	Horizontal	
4	556.71	29.89	29.95	-0.06	46.00	-16.11	200	326	Peak	Horizontal	
5	736.16	31.95	29.49	2.46	46.00	-14.05	200	75	Peak	Horizontal	
6	846.74	33.91	29.81	4.10	46.00	-12.09	100	286	Peak	Horizontal	

High Channel (Vertical)

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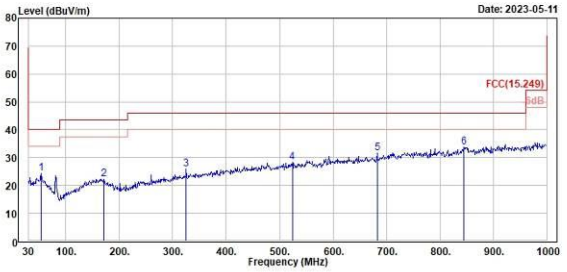


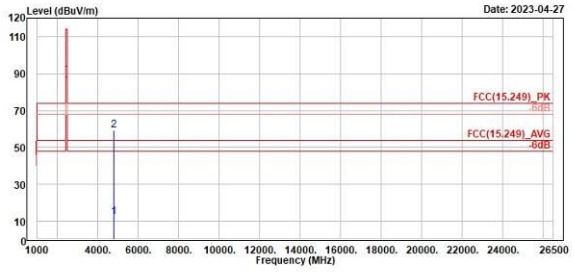
	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	53.28	24.24	29.90	-5.66	40.00	-15.76	300	249	Peak	Vertical	
2	170.65	22.32	28.25	-5.93	43.50	-21.18	300	223	Peak	Vertical	
3	324.88	25.84	29.91	-4.07	46.00	-20.16	100	57	Peak	Vertical	
4	523.73	28.31	29.19	-0.88	46.00	-17.69	400	335	Peak	Vertical	
5	682.81	31.70	30.21	1.49	46.00	-14.30	400	277	Peak	Vertical	
6	844.80	33.77	29.65	4.12	46.00	-12.23	100	42	Peak	Vertical	

Spurious Emissions, Tx Mode, 1GHz ~ 26.5GHz

SRD

Low Channel (Horizontal)

TUV 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 Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	4804.00	12.53	20.39	-7.86	54.00	-41.47	100	75	Average	Horizontal	CF
2	4804.00	59.49	67.35	-7.86	74.00	-14.51	100	75	Peak	Horizontal	

Low Channel (Vertical)

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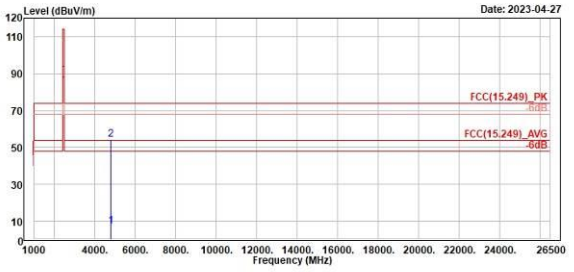

	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	4804.00	7.21	15.07	-7.86	54.00	-46.79	400	273	Average	Vertical	CF
2	4804.00	54.16	62.02	-7.86	74.00	-19.84	400	273	Peak	Vertical	

SRD

Middle Channel (Horizontal)

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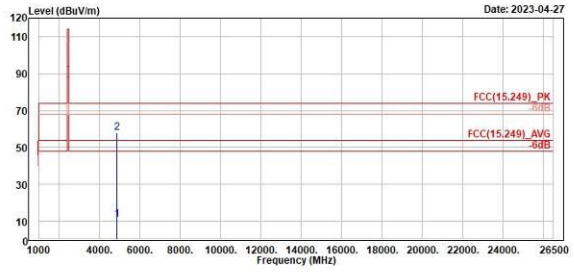

	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	4880.00	10.84	18.70	-7.86	54.00	-43.16	100	78	Average	Horizontal	CF
2	4880.00	57.78	65.64	-7.86	74.00	-16.22	100	78	Peak	Horizontal	

Middle Channel (Vertical)

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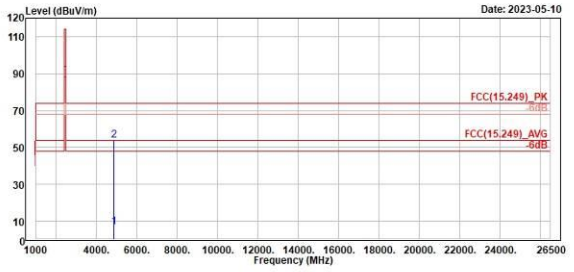

	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	4880.00	6.87	14.73	-7.86	54.00	-47.13	299	42	Average	Vertical	CF
2	4880.00	53.82	61.68	-7.86	74.00	-20.18	299	42	Peak	Vertical	

SRD

High Channel (Horizontal)

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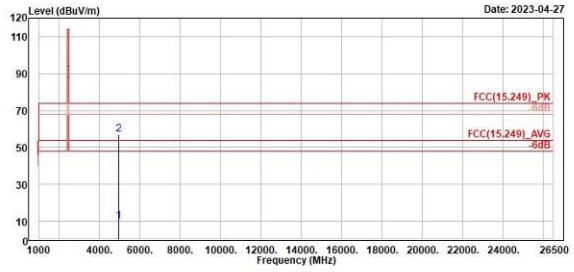

	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	4960.00	10.24	17.89	-7.65	54.00	-43.76	100	69	Average	Horizontal	CF
2	4960.00	57.20	64.85	-7.65	74.00	-16.80	100	69	Peak	Horizontal	

High Channel (Vertical)

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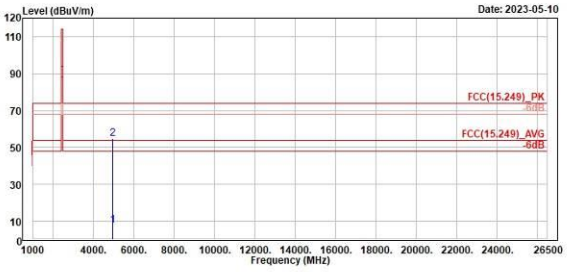

	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	4960.00	7.95	15.60	-7.65	54.00	-46.05	300	141	Average	Vertical	CF
2	4960.00	54.90	62.55	-7.65	74.00	-19.10	300	141	Peak	Vertical	