


FCC Radio Test Report

FCC ID : HDC-649A
Equipment : WiFi6 module
Brand Name : 
Model Name : W649aYYYYYY(Y can be 0-9, a-z, A-Z, blank, "+" or "-" or "#")
Applicant : Adtran
901 Explorer Blvd., Huntsville, AL 35806, USA
Manufacturer : XAVi Technologies Corporation
22F., No.69, Sec. 2, Guangfu Rd., Sanchong Dist.,
New Taipei City 241, Taiwan (R.O.C.)
Standard : 47 CFR FCC Part 15.247

The product was received on Oct. 30, 2021, and testing was started from Nov. 15, 2021 and completed on Nov. 16, 2021. We, SPORTON INTERNATIONAL INC. Hsinhua Laboratory, would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.10-2013 and shown compliance with the applicable technical standards.

The test results in this variant report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC. Hsinhua Laboratory, the test report shall not be reproduced except in full.



Approved by: Allen Lin

SPORTON INTERNATIONAL INC. Hsinhua Laboratory

No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333411, Taiwan (R.O.C.)



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PHOTOGRAPHS OF EUT V02



History of this test report

Report No.	Version	Description	Issued Date
FR182006-02AL	01	Initial issue of report	Nov. 25, 2021
FR182006-02AL	02	Photographs of EUT was update. This report is the latest version replacing for the report issued on Nov. 25, 2021.	Nov. 29, 2021



Summary of Test Result

Report Clause	Ref.Std. Clause	Test Items	Result (PASS/FAIL)	Remark
1.1.2	15.203	Antenna Requirement	PASS	-
3.1	15.207	AC Power-line Conducted Emissions	PASS	-
-	15.247(a)	DTS Bandwidth	Not Required	Refer as 1.1.5
-	15.247(b)	Maximum Conducted Output Power	Not Required	Refer as 1.1.5
-	15.247(e)	Power Spectral Density	Not Required	Refer as 1.1.5
-	15.247(d)	Emissions in Non-restricted Frequency Bands	Not Required	Refer as 1.1.5
3.2	15.247(d)	Emissions in Restricted Frequency Bands	PASS	-

Declaration of Conformity:
The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.
Comments and explanations:
None

Reviewed by: Ben Tseng

Report Producer: Amber Chiu

1 General Description

1.1 Information

1.1.1 RF General Information

Frequency Range (MHz)	Bluetooth Mode	Ch. Frequency (MHz)	Channel Number
2400-2483.5	LE	2402-2480	0-39 [40]

Band	Mode	BWch (MHz)	Nant
2.4-2.4835GHz	BT-LE(1Mbps)	1.0	1TX

Note:

- ♦ Bluetooth LE uses a GFSK (1Mbps) modulation.
- ♦ BWch is the nominal channel bandwidth.

1.1.2 Antenna Information

Ant.	Brand	Model Name	Antenna Type	Connector	Support
5	GALTRONICS	60-2888-03-2	PCB antenna	U.FL	5G
6	GALTRONICS	60-2808-03	PCB antenna	U.FL	5G
7	GALTRONICS	60-2791-03	PCB antenna	U.FL	5G
8	GALTRONICS	60-3523-03-2	PCB antenna	U.FL	5G
9	GALTRONICS	60-2783-03	PCB antenna	U.FL	DFS RX
10	GALTRONICS	60-2961-03-5	PCB antenna	U.FL	BT

Ant.	Gain (dBi)	
	5G	BT
5	3.99	-
6	2.12	-
7	2.12	-
8	3.99	-
9	3.99	-
10	-	2.56

Note 1: The EUT has six antennas.

For BT function:

For IEEE 802.15.1 Bluetooth mode (1TX/1RX)

Ant. 10 can be used as transmitting/receiving antenna.

For 5GHz function:

For IEEE 802.11 a/n/ac/ax mode (4TX/4RX)

Ant. 5, Ant. 6, Ant. 7, Ant.8 and Ant. 9 could transmit/receive simultaneously.



1.1.3 EUT Information

Operational Condition	
EUT Power Type	From AC Adapter
EUT Function	<input checked="" type="checkbox"/> Point-to-multipoint <input type="checkbox"/> Point-to-point
Type of EUT	
<input type="checkbox"/>	Stand-alone
<input type="checkbox"/>	Combined (EUT where the radio part is fully integrated within another device)
	Combined Equipment - Brand Name / Model No.: ...
<input checked="" type="checkbox"/>	Plug-in radio (EUT intended for a variety of host systems)
	Host System - Brand Name / Model No.: ADTRAN/ 854-v6
<input type="checkbox"/>	Other:

1.1.4 Table for Multiple Listing

The model names in the following table are all refer to the identical product.

Model Name	Description
W649aYYYYYY(Y can be 0-9, a-z, A-Z, blank, "+" or "-" or "#")	All the models are identical, the different model served as marketing strategy.

1.1.5 Table for Permissive Change

This product is an extension of original one reported under Sporton project number: FR182006AL

Below is the table for the change of the product with respect to the original one.

Modifications	Performance Checking
Host was added.	AC Power-line Conducted Emissions, Emissions in Restricted Frequency Bands below 1GHz

1.2 Testing Applied Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- ◆ 47 CFR FCC Part 15
- ◆ ANSI C63.10-2013

The following reference test guidance is not within the scope of accreditation of TAF:

- ◆ KDB 558074 D01 v05r02
- ◆ KDB 414788 D01 v01r01

1.3 Testing Location Information

Test Lab. : Sporton International Inc. Hsinhua Laboratory				
<input checked="" type="checkbox"/>	Hsinhua (TAF: 3785)	ADD: No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333411, Taiwan (R.O.C.)		
		TEL: 886-3-327-3456	FAX: 886-3-327-0973	
Test site Designation No. TW3785 with FCC.				
Test Condition	Test Site No.	Test Engineer	Test Environment	Test Date
AC Conduction	CO04-HY	Daniel Lin	21.7~22.1°C / 52~55%	16/Nov/2021
Radiated	03CH03-HY	Billy Wang	24.9~25.4°C / 49~50%	15/Nov/2021
<input type="checkbox"/>	Wen 33rd.St. (TAF: 3785)	ADD: No.14-1, Ln. 19, Wen 33rd St., Guishan Dist., Taoyuan City 333010, Taiwan (R.O.C.)		
		TEL: 886-3-318-0787	FAX: 886-3-318-0287	
Test site Designation No. TW0008 with FCC.				

1.4 Measurement Uncertainty




ISO/IEC 17025 requires that an estimate of the measurement uncertainties associated with the emissions test results be included in the report. The measurement uncertainties given below are based on a 95% confidence level (based on a coverage factor (k=2))

Test Items	Uncertainty	Remark
Conducted Emission (150kHz ~ 30MHz)	0.9 dB	Confidence levels of 95%
Radiated Emission (9kHz ~ 30MHz)	2.4 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	3.7 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	3.6 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	3.5 dB	Confidence levels of 95%
Conducted Emission	1.0 dB	Confidence levels of 95%
Temperature	0.41 °C	Confidence levels of 95%
Humidity	3.4 %	Confidence levels of 95%

2 Test Configuration of EUT

2.1 The Worst Case Measurement Configuration

The Worst Case Mode for Following Conformance Tests	
Tests Item	AC power-line conducted emissions
Condition	AC power-line conducted measurement for line and neutral Test Voltage: 120Vac / 60Hz
Operating Mode	CTX
1	Adapter mode

The Worst Case Mode for Following Conformance Tests			
Tests Item	Emissions in Restricted Frequency Bands		
Test Condition	Radiated measurement If EUT consist of multiple antenna assembly (multiple antenna are used in EUT regardless of spatial multiplexing MIMO configuration), the radiated test should be performed with highest antenna gain of each antenna type.		
Operating Mode < 1GHz	CTX		
1	Adapter mode		
Orthogonal Planes of EUT	X Plane	Y Plane	Z Plane
			
Worst Planes of EUT		V	



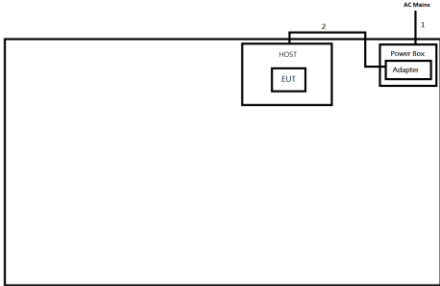
2.2 Support Equipment

Support Equipment – AC Conduction					
No.	Equipment	Brand Name	Model Name	FCC ID	Remark
1	Adapter	MASS POWER	S042-1A120300VU	-	Provided by Customer

Support Equipment – Radiated					
No.	Equipment	Brand Name	Model Name	FCC ID	Remark
1	Adapter	MASS POWER	S042-1A120300VU	-	Provided by Customer

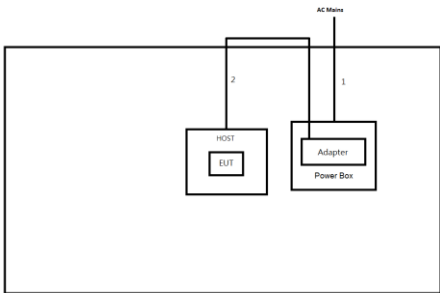
2.3 Test Setup Diagram

Test Setup Diagram – AC Line Conducted Emission Test



Item	Connection	Shielded	Length(m)	Remark
1	AC Power cable	No	1.8	-
2	DC Power cable	No	1.45	-

Test Setup Diagram - Radiated Test



Item	Connection	Shielded	Length(m)	Remark
1	AC Power cable	No	1.8	-
2	DC Power cable	No	1.45	-



3 Transmitter Test Result

3.1 AC Power-line Conducted Emissions

3.1.1 AC Power-line Conducted Emissions Limit

AC Power-line Conducted Emissions Limit		
Frequency Emission (MHz)	Quasi-Peak	Average
0.15-0.5	66 - 56 *	56 - 46 *
0.5-5	56	46
5-30	60	50

Note 1: * Decreases with the logarithm of the frequency.

3.1.2 Measuring Instruments

Refer a test equipment and calibration data table in this test report.

3.1.3 Test Procedures

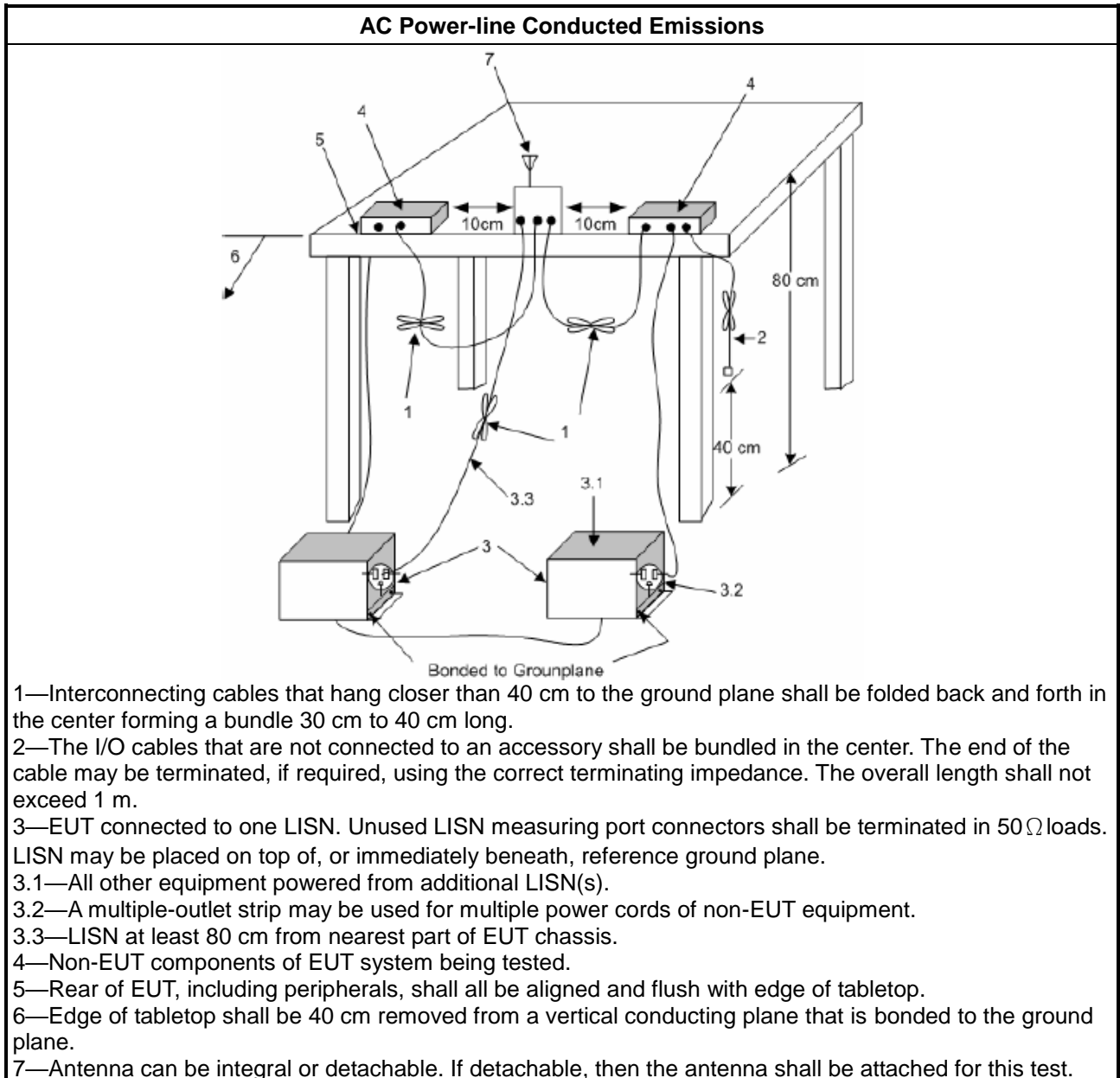
Test Method
▪ Refer as ANSI C63.10-2013, clause 6.2 foray power-line conducted emissions.

3.1.4 Measurement Results Calculation

The measured Level is calculated using:

Corrected Reading: Raw(Read Level) +LISN(LISN Factor) + CL(Cable Loss) + AT(Attenuator).

3.1.5 Test Setup



3.1.6 Test Result of AC Power-line Conducted Emissions

Refer as Appendix A

3.2 Emissions in Restricted Frequency Bands

3.2.1 Emissions in Restricted Frequency Bands Limit

Restricted Band Emissions Limit			
Frequency Range (MHz)	Field Strength (uV/m)	Field Strength (dBuV/m)	Measure Distance (m)
0.009~0.490	2400/F(kHz)	48.5 - 13.8	300
0.490~1.705	24000/F(kHz)	33.8 - 23	30
1.705~30.0	30	29	30
30~88	100	40	3
88~216	150	43.5	3
216~960	200	46	3
Above 960	500	54	3

Note 1: Test distance for frequencies at or above 30 MHz, measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of linear distance for field-strength measurements, inverse of linear distance-squared for power-density measurements).

Note 2: Test distance for frequencies at below 30 MHz, measurements may be performed at a distance closer than the EUT limit distance; however, an attempt should be made to avoid making measurements in the near field. When performing measurements below 30 MHz at a closer distance than the limit distance, the results shall be extrapolated to the specified distance by either making measurements at a minimum of two or more distances on at least one radial to determine the proper extrapolation factor or by using the square of an inverse linear distance extrapolation factor (40 dB / decade). The test report shall specify the extrapolation method used to determine compliance of the EUT.

Note 3: Using the distance of 1m during the test for above 18 GHz, and the test value to correct for the distance factor at 3m.

3.2.2 Measuring Instruments

Refer a test equipment and calibration data table in this test report.

3.2.3 Test Procedures

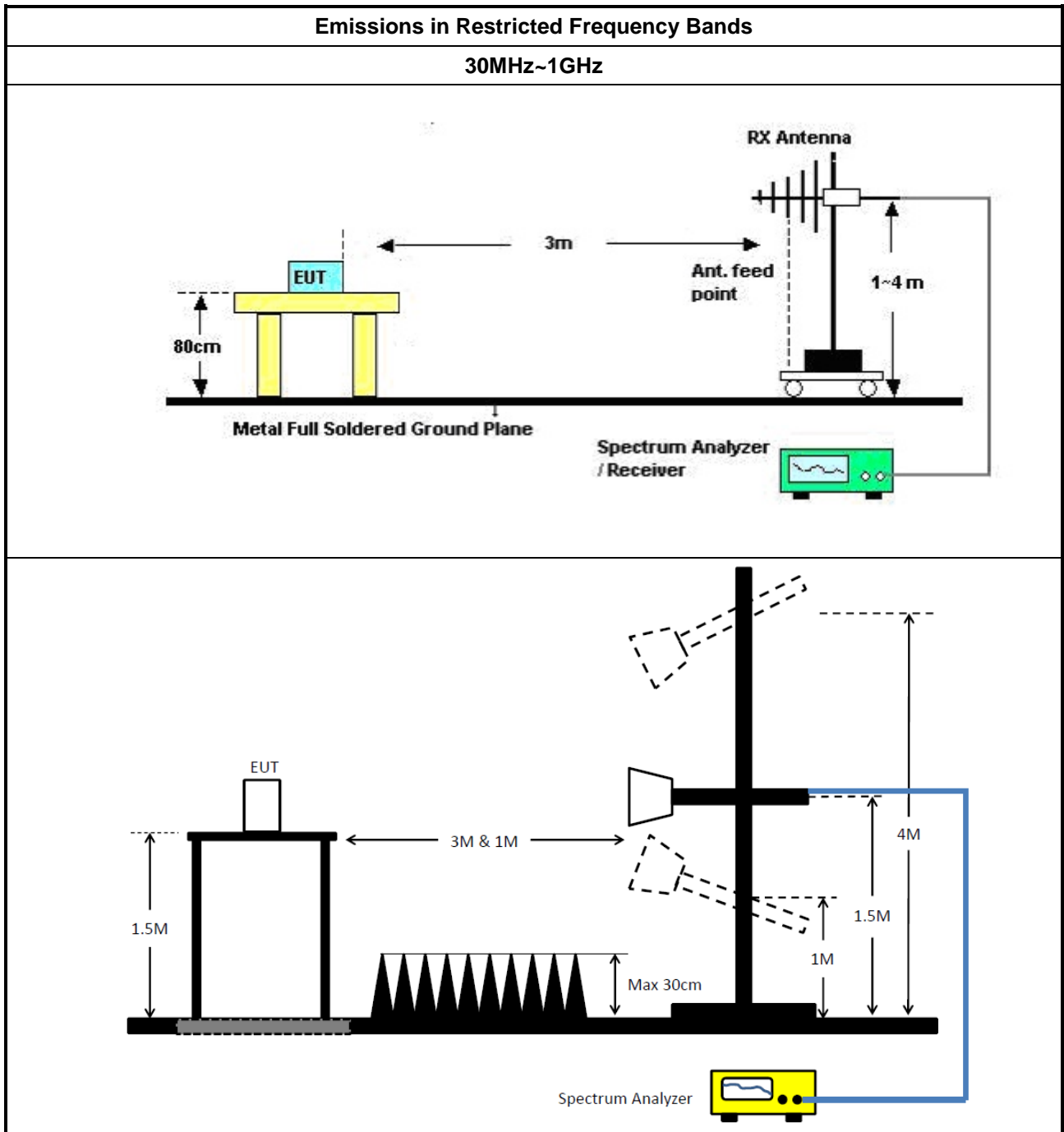
Test Method	
	<ul style="list-style-type: none"> ▪ The average emission levels shall be measured in [duty cycle ≥ 98 or duty factor].
	<ul style="list-style-type: none"> ▪ Refer as ANSI C63.10, clause 6.10.3 band-edge testing shall be performed at the lowest frequency channel and highest frequency channel within the allowed operating band.
	<ul style="list-style-type: none"> ▪ For the transmitter unwanted emissions shall be measured using following options below: <ul style="list-style-type: none"> ▪ Refer as KDB 558074, clause 8.6 (11.12 of ANSI C63.10) for restricted frequency bands.
	<ul style="list-style-type: none"> ▪ For the transmitter band-edge emissions shall be measured using following options below: <ul style="list-style-type: none"> ▪ Refer as KDB 558074 clause 8.7.1, When the performing peak or average radiated measurements, emissions within 2 MHz of the authorized band edge may be measured using the marker-delta method described below. ▪ Refer as KDB 558074, clause 8.7.2 (6.10.6 of ANSI C63.10) for marker-delta method for band-edge measurements. ▪ Refer as KDB 558074, clause 8.7.3 for narrower resolution bandwidth (100kHz) using the band power and summing the spectral levels.
	<ul style="list-style-type: none"> ▪ Use the following spectrum analyzer settings: <ul style="list-style-type: none"> ▪ Set RBW=100 kHz for f < 1 GHz; VBW=3 * RBW; Sweep = auto; Detector function = peak; Trace = max hold. ▪ Set RBW = 1 MHz, VBW= 3MHz for f ≥ 1 GHz for peak measurement. For average measurement, refer as 1.1.4.
	<ul style="list-style-type: none"> ▪ KDB 414788 Open-Field Test Sites and Chamber Correlation Justification. <ul style="list-style-type: none"> ▪ Based on FCC 15.31(f)(2): measurements may be performed at a distance closer than that specified in regulations; however, an attempt should be made to avoid making measurements in the near field. ▪ Open-field site and chamber correlation testing had been performed and chamber measured test result is the worst case test result.

3.2.4 Measurement Results Calculation

The measured Level is calculated using:

Corrected Reading: Raw(Read Level) + AF(Antenna Factor) + CL(Cable Loss) - PA(Preamplifier Factor)

3.2.5 Test Setup



3.2.6 Test Result of Emissions in Restricted Frequency Bands (Below 30MHz)

The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

3.2.7 Test Result of Emissions in Restricted Frequency Bands

Refer as Appendix B

4 Test Equipment and Calibration Data

Instrument for AC Conduction

Instrument	Manufacturer /Brand	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
EMI Test Receiver	R&S	ESR3	102051	9kHz ~ 3.6GHz	21/May/2021	20/May/2022
LISN	R&S	ENV216	100003	9kHz ~ 30MHz	15/Dec/2020	14/Dec/2021
RF Cable 5m	TITAN	TITAN	CO04-cable-01	0.1MHz~200MHz	03/Mar/2021	02/Mar/2022
Impuls Begrenzer Pulse Limiter	SCHWARZBECK	VTSD 9561-F	9561-F041	9kHz ~ 30MHz	15/Sep/2021	14/Sep/2022

Instrument for Radiated Test

Instrument	Manufacturer /Brand	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH03-HY	30MHz~1GHz 3m	03/Aug/2021	02/Aug/2022
Signal Analyzer	R&S	FSV40	101500	10Hz~40GHz	12/Oct/2021	11/Oct/2022
Amplifier	HP	8447D	2944A08033	10kHz~1.3GHz	13/Apr/2021	12/Apr/2022
Bilog Antenna & 6dB Attenuator	SCHAFFNER / EMCI	CBL6112B / N-6-05	22237 / AT-N-0603	30MHz~1GHz	17/Oct/2021	16/Oct/2022
RF Cable-R03m	Jye Bao	RG142	CB021	9kHz~30MHz	16/Jun/2021	15/Jun/2022
RF Cable-R03m	Jye Bao	RG142	MY37335/4+CB 021-1+CB021-2	30MHz~1GHz	17/Mar/2021	16/Mar/2022
Loop Antenna	TESEQ	HLA 6120	31244	9kHz~30MHz	16/Mar/2021	15/Mar/2022
EMI Test Receiver	R&S	ESR3	102052	9kHz~3.6GHz	19/Apr/2021	18/Apr/2022



Summary

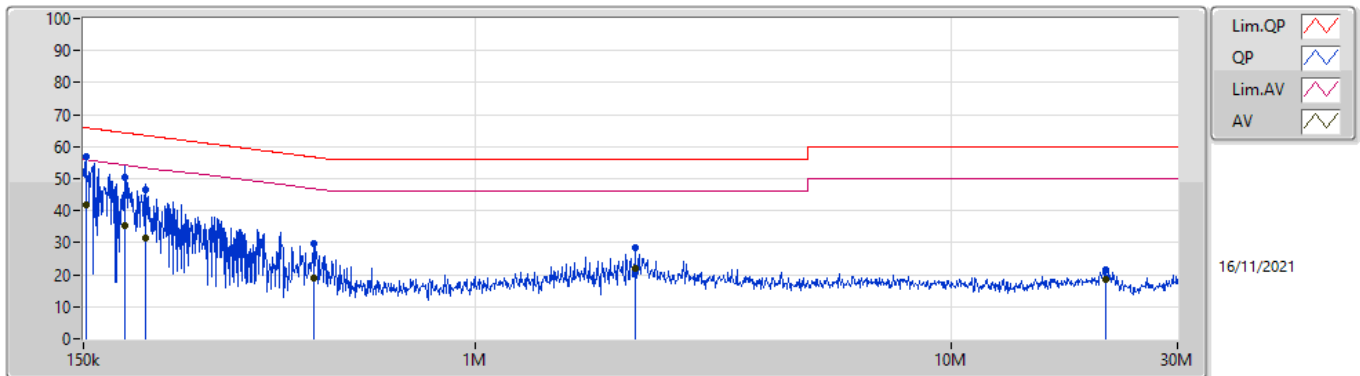
Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 1	Pass	QP	151.807k	57.05	65.90	-8.85	Line



Result

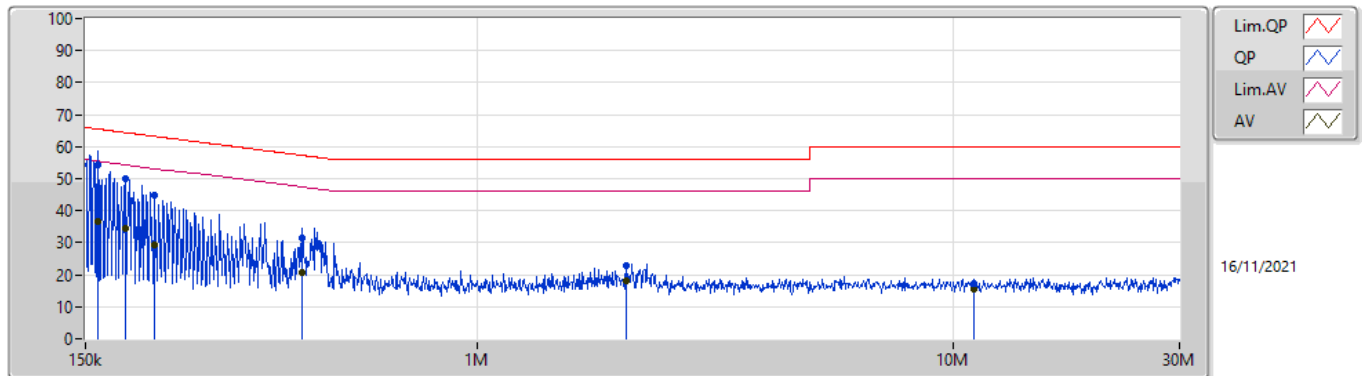
Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition	Comments
Mode 1	Pass	QP	151.807k	57.05	65.90	-8.85	Line	-
Mode 1	Pass	AV	151.807k	41.84	55.90	-14.06	Line	-
Mode 1	Pass	QP	183.87k	50.51	64.30	-13.79	Line	-
Mode 1	Pass	AV	183.87k	35.33	54.30	-18.97	Line	-
Mode 1	Pass	QP	203.167k	46.68	63.48	-16.80	Line	-
Mode 1	Pass	AV	203.167k	31.65	53.48	-21.83	Line	-
Mode 1	Pass	QP	456.875k	29.61	56.75	-27.14	Line	-
Mode 1	Pass	AV	456.875k	19.15	46.75	-27.60	Line	-
Mode 1	Pass	QP	2.167M	28.38	56.00	-27.62	Line	-
Mode 1	Pass	AV	2.167M	22.12	46.00	-23.88	Line	-
Mode 1	Pass	QP	21.263M	21.74	60.00	-38.26	Line	-
Mode 1	Pass	AV	21.263M	18.49	50.00	-31.51	Line	-
Mode 1	Pass	QP	159.256k	54.36	65.50	-11.14	Neutral	-
Mode 1	Pass	AV	159.256k	36.56	55.50	-18.94	Neutral	-
Mode 1	Pass	QP	181.681k	49.84	64.41	-14.57	Neutral	-
Mode 1	Pass	AV	181.681k	34.47	54.41	-19.94	Neutral	-
Mode 1	Pass	QP	208.925k	45.02	63.25	-18.23	Neutral	-
Mode 1	Pass	AV	208.925k	29.20	53.25	-24.05	Neutral	-
Mode 1	Pass	QP	426.898k	31.67	57.32	-25.65	Neutral	-
Mode 1	Pass	AV	426.898k	20.65	47.32	-26.67	Neutral	-
Mode 1	Pass	QP	2.058M	22.66	56.00	-33.34	Neutral	-
Mode 1	Pass	AV	2.058M	17.96	46.00	-28.04	Neutral	-
Mode 1	Pass	QP	11.093M	17.08	60.00	-42.92	Neutral	-
Mode 1	Pass	AV	11.093M	15.39	50.00	-34.61	Neutral	-

Conducted Emissions at Powerline_Mode 1



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)
QP	151.807k	57.05	65.90	-8.85	19.62	Line	-	37.43	9.69	0.04	9.89
AV	151.807k	41.84	55.90	-14.06	19.62	Line	-	22.22	9.69	0.04	9.89
QP	183.87k	50.51	64.30	-13.79	19.61	Line	-	30.90	9.68	0.04	9.89
AV	183.87k	35.33	54.30	-18.97	19.61	Line	-	15.72	9.68	0.04	9.89
QP	203.167k	46.68	63.48	-16.80	19.61	Line	-	27.07	9.68	0.04	9.89
AV	203.167k	31.65	53.48	-21.83	19.61	Line	-	12.04	9.68	0.04	9.89
QP	456.875k	29.61	56.75	-27.14	19.62	Line	-	9.99	9.67	0.06	9.89
AV	456.875k	19.15	46.75	-27.60	19.62	Line	-	-0.47	9.67	0.06	9.89
QP	2.167M	28.38	56.00	-27.62	19.67	Line	-	8.71	9.69	0.10	9.88
AV	2.167M	22.12	46.00	-23.88	19.67	Line	-	2.45	9.69	0.10	9.88
QP	21.263M	21.74	60.00	-38.26	19.98	Line	-	1.76	9.78	0.31	9.89
AV	21.263M	18.49	50.00	-31.51	19.98	Line	-	-1.49	9.78	0.31	9.89

Conducted Emissions at Powerline_Mode 1



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)
QP	159.256k	54.36	65.50	-11.14	19.62	Neutral	-	34.74	9.69	0.04	9.89
AV	159.256k	36.56	55.50	-18.94	19.62	Neutral	-	16.94	9.69	0.04	9.89
QP	181.681k	49.84	64.41	-14.57	19.61	Neutral	-	30.23	9.68	0.04	9.89
AV	181.681k	34.47	54.41	-19.94	19.61	Neutral	-	14.86	9.68	0.04	9.89
QP	208.925k	45.02	63.25	-18.23	19.61	Neutral	-	25.41	9.68	0.04	9.89
AV	208.925k	29.20	53.25	-24.05	19.61	Neutral	-	9.59	9.68	0.04	9.89
QP	426.898k	31.67	57.32	-25.65	19.62	Neutral	-	12.05	9.67	0.06	9.89
AV	426.898k	20.65	47.32	-26.67	19.62	Neutral	-	1.03	9.67	0.06	9.89
QP	2.058M	22.66	56.00	-33.34	19.66	Neutral	-	3.00	9.68	0.10	9.88
AV	2.058M	17.96	46.00	-28.04	19.66	Neutral	-	-1.70	9.68	0.10	9.88
QP	11.093M	17.08	60.00	-42.92	19.92	Neutral	-	-2.84	9.82	0.21	9.89
AV	11.093M	15.39	50.00	-34.61	19.92	Neutral	-	-4.53	9.82	0.21	9.89



Summary

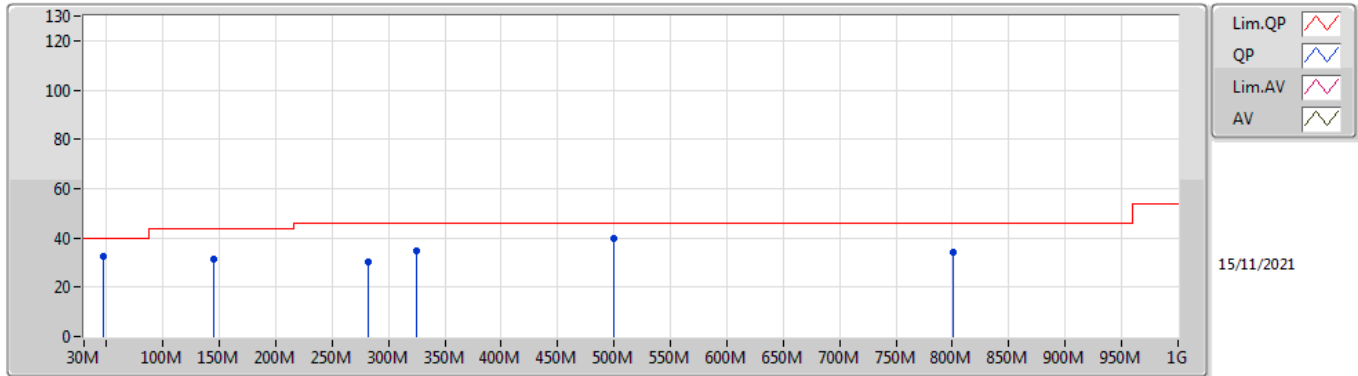
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-
BT-LE(1Mbps)	Pass	PK	499.48M	40.02	46.00	-5.98	3	Vertical	0	1.00	-



Result

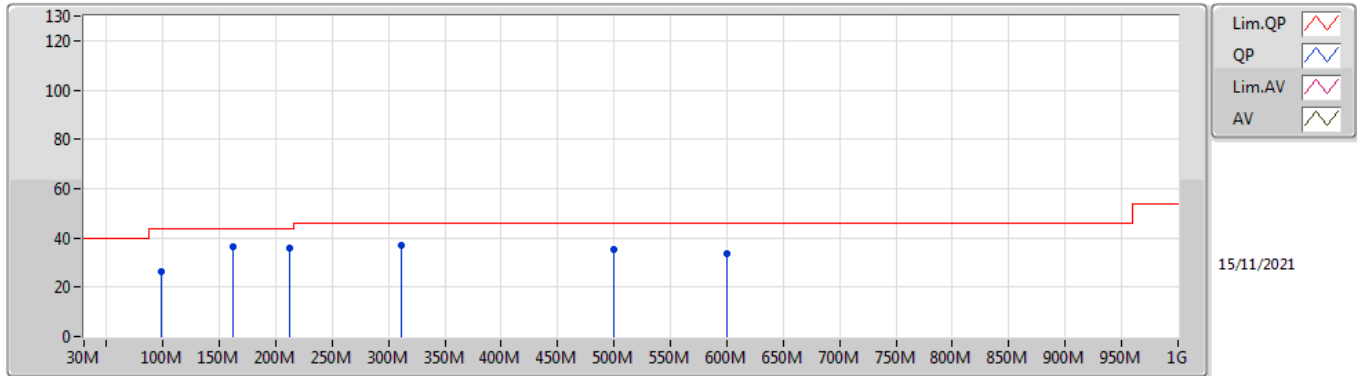
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
BT-LE(1Mbps)	-	-	-	-	-	-	-	-	-	-	-
2440MHz	Pass	PK	47.46M	32.78	40.00	-7.22	3	Vertical	0	1.00	-
2440MHz	Pass	PK	144.46M	31.44	43.50	-12.06	3	Vertical	0	1.00	-
2440MHz	Pass	PK	282.2M	30.30	46.00	-15.70	3	Vertical	0	1.00	-
2440MHz	Pass	PK	324.88M	34.55	46.00	-11.45	3	Vertical	0	1.00	-
2440MHz	Pass	PK	499.48M	40.02	46.00	-5.98	3	Vertical	0	1.00	-
2440MHz	Pass	PK	800.18M	34.39	46.00	-11.61	3	Vertical	0	1.00	-
2440MHz	Pass	PK	97.9M	26.28	43.50	-17.22	3	Horizontal	360	1.00	-
2440MHz	Pass	PK	161.92M	36.51	43.50	-6.99	3	Horizontal	360	1.00	-
2440MHz	Pass	PK	212.36M	35.64	43.50	-7.86	3	Horizontal	360	1.00	-
2440MHz	Pass	PK	311.3M	36.94	46.00	-9.06	3	Horizontal	360	1.00	-
2440MHz	Pass	PK	499.48M	35.52	46.00	-10.48	3	Horizontal	360	1.00	-
2440MHz	Pass	PK	600.36M	33.69	46.00	-12.31	3	Horizontal	360	1.00	-

BT-LE(1Mbps)
2440MHz_Adapter



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
PK	47.46M	32.78	40.00	-7.22	-12.26	3	Vertical	0	1.00	-	45.04	14.24	1.11	27.61
PK	144.46M	31.44	43.50	-12.06	-9.40	3	Vertical	0	1.00	-	40.84	15.84	2.02	27.26
PK	282.2M	30.30	46.00	-15.70	-6.06	3	Vertical	0	1.00	-	36.36	17.88	2.83	26.77
PK	324.88M	34.55	46.00	-11.45	-4.98	3	Vertical	0	1.00	-	39.53	18.81	3.09	26.88
PK	499.48M	40.02	46.00	-5.98	-1.13	3	Vertical	0	1.00	-	41.15	22.68	3.87	27.68
PK	800.18M	34.39	46.00	-11.61	2.35	3	Vertical	0	1.00	-	32.04	25.10	5.14	27.89

BT-LE(1Mbps)
2440MHz_Adapter



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
PK	97.9M	26.28	43.50	-17.22	-10.14	3	Horizontal	360	1.00	-	36.42	15.60	1.68	27.42
PK	161.92M	36.51	43.50	-6.99	-10.20	3	Horizontal	360	1.00	-	46.71	14.85	2.14	27.19
PK	212.36M	35.64	43.50	-7.86	-10.55	3	Horizontal	360	1.00	-	46.19	13.95	2.47	26.97
PK	311.3M	36.94	46.00	-9.06	-5.21	3	Horizontal	360	1.00	-	42.15	18.62	3.00	26.83
PK	499.48M	35.52	46.00	-10.48	-1.13	3	Horizontal	360	1.00	-	36.65	22.68	3.87	27.68
PK	600.36M	33.69	46.00	-12.31	0.11	3	Horizontal	360	1.00	-	33.58	23.76	4.39	28.04