

EMC Test Report

Applicant : InnoXings CO., LTD.

Product Name : Wi-Fi 6, 2x2 2.4Ghz and BT Combo Module

Trade Name : INNOXINGS

Model Number : AI5018H-1

Applicable Standard : FCC 47 CFR PART 15 SUBPART B

ANSI C63.4: 2014 ANSI C63.4a: 2017

Received Date : Oct. 02, 2023

Test Period : Dec. 25, 2023 ~ Mar. 04, 2024

Issued Date : Mar. 18, 2024

Issued by

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<u>Taiwan Accreditation Foundation accreditation number: 1330</u> Test Firm MRA designation number: TW1062 (Bade test site) TW1138 (Wugu test site)

Test Firm registration number: 510205 (Bade test site)

472531 (Wugu test site)

Note:

- 1. The test results are valid only for samples provided by customers and under the test conditions described in this report.
- 2. This report shall not be reproduced except in full, without the written approval of Eurofins E&E Wireless Taiwan Co., Ltd.
- 3.The relevant information is provided by customers in this test report. According to the correctness, appropriateness or completeness of the information provided by the customer, if there is any doubt or error in the information which affects the validity of the test results, the laboratory does not take the responsibility.







Revision History

Rev.	Issued Date	Description	Revised by
00	Mar. 18, 2024	Initial Issue	Emma Chao



Verification of Compliance

Applicant	InnoXings CO., LTD.	
Product Name	Wi-Fi 6, 2x2 2.4Ghz and BT Combo Module	
Trade Name	INNOXINGS	
Model Number	AI5018H-1	
Applicable Standard	FCC 47 CFR PART 15 SUBPART B ANSI C63.4: 2014 ANSI C63.4a: 2017	
Test Result	Complied	
Performing Lab.	Eurofins E&E Wireless Taiwan Co., Ltd. No. 140-1, Changan Street, Bade District, Taoyuan City 334025, Taiwan (R.O.C.) Tel: +886-3-2710188 / Fax: +886-3-2710190 Taiwan Accreditation Foundation accreditation number: 13	taperatory 1330
requirements set forth in the	tested by Eurofins E&E Wireless Taiwan Co., Ltd., and found compliance nnical standards mentioned above. The results of testing in this report appested. Other similar equipment will not necessarily produce the same resurement uncertainties.	oly only to
Approved By		



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Appendix A. Test Setup Photographs



1 General Information

1.1. Summary of Test Result

Emission					
Standard	Item	Verdict	Remark		
	Conducted Emission	PASS	Meet Class B limit Minimum margin is -10.18 dB at 0.5240 MHz		
FCC 47 CFR PART 15 SUBPART B ANSI C63.4 ANSI C63.4a	Radiated Emission below 1 GHz	PASS	Meet Class B limit Minimum margin is -4.42 dB at 31.9400 MHz		
7.115. 500. 14	Radiated Emission above 1 GHz	PASS	Meet Class B limit Minimum margin is -23.12 dB at 17847.000 MHz		

Decision Rule

- Uncertainty is not included.
- $\hfill\square$ Uncertainty is included.

1.2. Testing Location

Lab Name: Eurofins E&E Wireless Taiwan Co., Ltd.

Site Address: No. 140-1, Changan Street, Bade District, Taoyuan City 334025, Taiwan (R.O.C.)

Site Address: No. 2, Wuquan 5th Rd. Wugu Dist., New Taipei City, Taiwan (R.O.C.)



1.3. Measurement Uncertainty

The following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2

Test	Item	Test Site	Frequency Range	Uncertainty (dB)
	AC Power Port	Conduction01-BD	9 kHz ~ 150 kHz	± 3.7
Conducted Engine			150 kHz ~ 30 MHz	± 2.8
Conducted Emission		Conduction01-WG	9 kHz ~ 150 kHz	± 3.6
			150 kHz ~ 30 MHz	± 2.9

Test Item	Test Site	Frequency Range		Uncertainty (dB)
	4014 DD	00 MIL 4000 MIL	Horizontal	± 5.0
	10M-BD	30 MHz ~ 1000 MHz	Vertical	± 5.2
		30 MHz ~ 1	000 MHz	± 5.1
		1000 MHz ~	6000 MHz	± 4.8
	96601-BD	6000 MHz ~	18000 MHz	± 5.0
		18000 MHz ~	26500 MHz	± 4.9
		26500 MHz ~ 40000 MHz		± 4.8
	96602-BD	30 MHz ~ 1000 MHz		± 4.9
Radiated Emission		1000 MHz ~ 6000 MHz		± 4.7
		6000 MHz ~ 18000 MHz		± 4.8
		18000 MHz ~ 26500 MHz		± 4.7
		26500 MHz ~ 40000 MHz		± 4.7
		30 MHz ~ 1000 MHz		± 4.9
		1000 MHz ~ 6000 MHz		± 4.2
	96601-WG	6000 MHz ~ 18000 MHz		± 4.3
		18000 MHz ~ 26500 MHz		± 4.0
		26500 MHz ~ 40000 MHz		± 4.4

1.4. Test Site Environment

Test Item Items		Required (IEC 60068-1)	Interval(*)
	Temperature (°C)	15-35	15-30
Conducted Emission	Humidity (%RH)	25-75	45-75
	Barometric pressure (mbar)	860-1060	990-1005
	Temperature (°C)	15-35	15-30
Radiated Emission	Humidity (%RH)	25-75	45-75
	Barometric pressure (mbar)	860-1060	990-1005

^(*)The measurement ambient temperature is within this range.

Report No.: USEC23O010001 Issued Date: Mar. 18, 2024

2 **EUT Description**

The product specifications of the EUT presented in the report are declared by the manufacturer who shall take full responsibility for the authenticity.

Applicant	InnoXings CO., LTD. 13 F5, No. 155, Sec. 1, Keelung Rd., Xinyi Dist., Taipei City 110058, Taiwan (R.O.C.)	
Product Name	Wi-Fi 6, 2x2 2.4Ghz and BT Combo Module	
Trade Name	INNOXINGS	
Model Number	AI5018H-1	
FCC ID	2BDIDQ5018-IPA-W-01	
I/O Ports	Refer to the user manual provided by clients.	
Highest Operating Frequency	2.462 GHz	
EUT Power Rating	DC 3.3 V	



3 Test Methodology

3.1. Decision of Test Mode

3.1.1. The following test mode(s) were scanned during the preliminary test:

	Pre-Test Mode	
Mode 1: Wi-Fi (2.4 G) link mode		
Mode 2: Bluetooth link mode		

3.1.2. After the preliminary scan, the following test mode was final mode and found to produce the highest emission level.

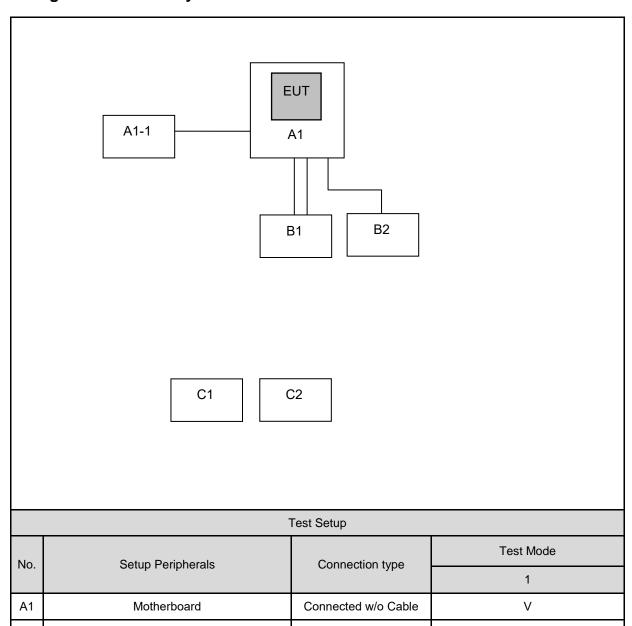
	Final Test Mode					
	Conducted Emission		Mode 1			
EMI	Radiated Emission	Below 1 GHz	Mode 1			
		Above 1 GHz	Mode 1			

3.2. EUT Test Step

- 1. Setup the EUT and simulators as shown on 3.3.
- 2.Turn on the power all equipment.
- 3. The EUT link to Notebook by Bluetooth.
- 4. The EUT link to AP by Wi-Fi.
- 5. Start to test till get the worst reading.



3.3. Configuration of Test System Details



Adapter	DC power Cable to A1	V
Notebook	USB Cable to A1	V
Notebook	LAN Cable to A1	V
Antenna*2	Antenna Cable*2	V
AP	Wi-Fi	V
Notebook	ВТ	V
	Notebook Notebook Antenna*2 AP	Notebook USB Cable to A1 Notebook LAN Cable to A1 Antenna*2 Antenna Cable*2 AP Wi-Fi



	Support Unit used in test configuration and system							
	Product	Trade Name	Model Number	Serial Number	Data Cable	Power Cord		
(1)	Adapter	Audio Authority	XH1200-5000	N/A	N/A	Non-Shielded, 1.5 m		
(2)	Motherboard	N/A	MQ5018-1	N/A	N/A	Non-Shielded, 1.0 m		
(3)	AP	TP-Link	Archer AX50	221B330002592	N/A	Non-Shielded, 1.2 m		
(4)	Notebook	ASUS	PU401L	0601A4210U	Non-Shielded, 0.9 m with one core	Non-Shielded, 1.0 m		
(5)	Notebook	ASUS	P2430U	GCNXCV04V6219B	N/A	N/A		
(6)	Antenna	M.gear	C2108-510001-A	N/A	Non-Shielded, 0.1 m	N/A		
(7)	Antenna	M.gear	C2108-510001-A	N/A	Non-Shielded, 0.1 m	N/A		



3.4. Test Instruments

Test Period: Dec. 25, 2023
Testing Engineer: Yang Wang

Conducted Emission test site									
Equipment	pment Manufacturer Model Number Serial Number Cal. Date Cal. Peri								
Test Receiver	R&S	ESR3	102919	Nov. 30, 2023	1 year				
LISN	R&S	ENV216 101139		Apr. 12, 2023	1 year				
Cable	EMCI	EMCCFD300-BM- NM-4000	220402	Jun. 08, 2023	1 year				
Software	ELEKTRA	5.01.0	5.01.0						
Test Site	Eurofins	Conduction01-WG	Conduction01-WG	N.C.R.					

Test Period: Dec. 29, 2023 ~ Feb. 04, 2024

Testing Engineer: David Hsu

		3 Meter Chamber			
Equipment	Manufacturer	Model Number	Serial Number	Cal. Date	Cal. Period
Receiver	R&S	ESR26	101775	Nov. 22, 2023	1 year
Amplifier (30-1000 MHz)	EMCI	EMC001330	980721	Dec. 15, 2023	1 year
Broadband Antenna (30-1000 MHz)	Schwarzbeck Mess-Elektronik	VULB9168	01276	Dec. 15, 2023	1 year
Cable (30-1000 MHz)	EMCI	EMCCFD400-NM-NM-2000	211005	Apr. 06, 2023	1 year
Cable (30-1000 MHz)	EMCI	EMCCFD400-NM-NM-2000	211013	Apr. 06, 2023	1 year
Cable (30-1000 MHz)	EMCI	EMCCFD400-NM-NM-6000	211016	Apr. 06, 2023	1 year
Software	EZ EMC	1.1.4.4			
Test Site(NSA)	Eurofins	96601-WG	96601-WG	Jan. 11, 2023 Jan. 11, 2024	1 year

Note: N.C.R. = No Calibration Request.



Test Period: Dec. 29, 2023 ~ Mar. 04, 2024

Testing Engineer: David Hsu

		3 Meter Chamber			
Equipment	Manufacturer	Model Number	Serial Number	Cal. Date	Cal. Period
Spectrum Analyzer	Keysight	N9010A	MY52221312	Jan. 07, 2023 Jan. 03, 2024	1 year
Receiver	R&S	ESR26	101775	Nov. 22, 2023	1 year
Preamplifier (1-18 GHz)	EMCI	EMC118A45SE	980823	Nov. 23, 2023	1 year
Broadband Horn Antenna (1-18 GHz)	RF SPIN	DRH18-E	210304A18ES	Nov. 21, 2023	1 year
Preamplifier (15-40 GHz)	EMCI	EMC184045SE	980861	Dec. 23, 2023	1 year
Broadband Horn Antenna (15-40 GHz)	Broadband Horn Antenna Schwarzbeck Mess-Flektronik		01133	Feb. 13, 2023 Jan. 18, 2024	1 year
Cable	EMCI	EMC101G-KM-KM-600	211211	Jan. 17, 2023 Jan. 14, 2024	1 year
Cable	EMCI	EMC101G-KM-KM-2000	211210	Jan. 17, 2023 Jan. 14, 2024	1 year
Cable	EMCI	EMC101G-KM-KM-6000	211209	Jan. 17, 2023 Jan. 14, 2024	1 year
Cable	EMCI	EMC104-SM-SM-1000	211030	Apr. 06, 2023	1 year
Cable	EMCI	EMC104-SM-SM-2000	211032	Apr. 06, 2023	1 year
Cable	EMCI	EMC104-SM-SM-8000	211040	Apr. 06, 2023	1 year
Software	EZ EMC	1.1.4.4			
Test Site(VSWR)	Eurofins	96601-WG	96601-WG	Jan. 10, 2023 Jan. 10, 2024	1 year

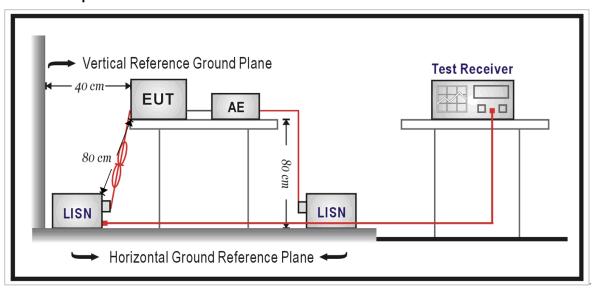
Note: N.C.R. = No Calibration Request.

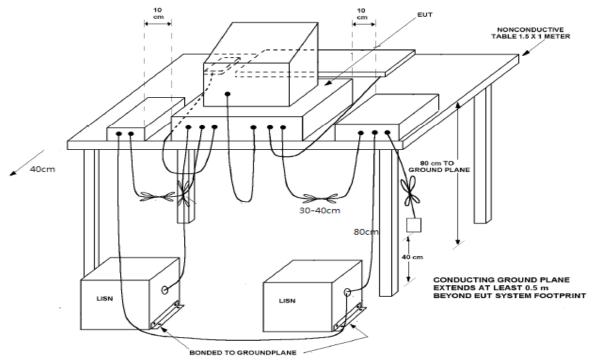


4 Measurement Procedure

4.1. Conducted Emission

■ Test Setup









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■ Test Procedure

The EUT and simulators are connected to the main power through a line impedance stabilization network (L.I.S.N.). This provides a 50 Ω // 50 uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN that provides a 50 Ω // 50 uH coupling impedance with 50 ohm termination.

Tabletop device shall be placed on a non-conducting platform, of nominal size 1 m by 1.5 m, raised 80 cm above the reference ground plane. The wall of screened room shall be located 40 cm to the rear of the EUT. Other surfaces of tabletop or floor standing EUT shall be at least 80 cm from any other ground conducting surface including one or more LISNs. For floor-standing device shall be placed under the EUT with a 12 mm insulating material.

Conducted emissions were investigated over the frequency range from 0.15 MHz to 30 MHz using a resolution bandwidth of 9 kHz. The equipment under test (EUT) shall be meet the limits in section 4.1.1, as applicable, including the average limit and the quasi-peak limit when using respectively, an average detector and quasi-peak detector measured in accordance with the methods described of related standard. When all of peak value were complied with quasi-peak and average limit from 150 kHz to 30 MHz then quasi-peak and average measurement was unnecessary.

The AMN shall be placed 0.8 m from the boundary of the unit under test and bonded to a ground reference plane for AMNs mounted on top of the ground reference plane. This distance is between the closest points of the AMN and the EUT. All other units of the EUT and associated equipment shall be at least 0.8 m from the AMN. If the mains power cable is longer than 1m then the cable shall be folded back and forth at the centre of the lead to form a bundle no longer than 0.4 m. All of interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 cm to 40 cm long. All of EUT and AE shall be separate place more than 0.1 m. All 50 Ω ports of the LISN shall be resistively terminated into 50 Ω loads when not connected to the measuring instrument.

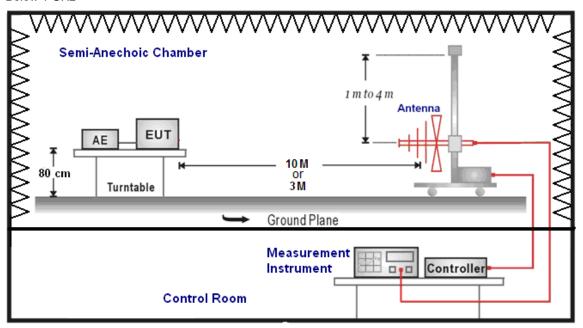
If the reading of the measuring receiver shows fluctuations close to the limit, the reading shall be observed for at least 15 s at each measurement frequency; the higher reading shall be recorded with the exception of any brief isolated high reading which shall be ignored.



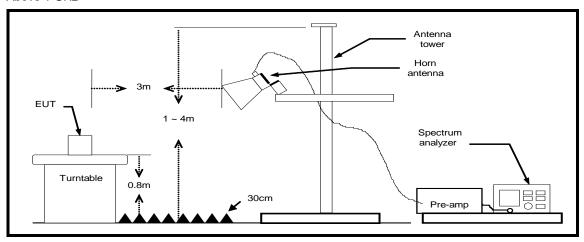
4.2. Radiated Emission

■ Test Setup

Below 1 GHz

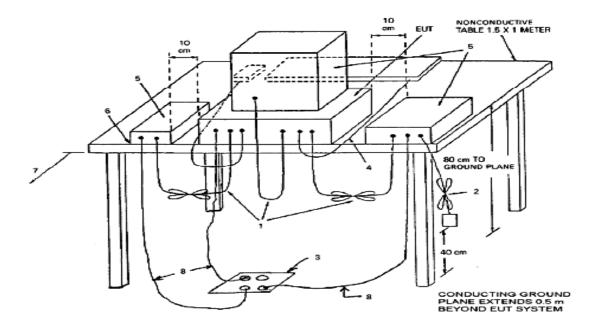


Above 1 GHz





Test arrangement for radiated emissions of tabletop equipment.



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■ Test Procedure

Below 1 GHz

The EUT and its simulators are placed on a turn table which is 0.8 meter above ground. When the EUT is floor-standing equipment, it is placed on the ground plane which has a 12 mm non-conductive covering to insulate the EUT from the ground plane.

The turn table is 0.8 m height and 2.0 m wide x 1.0 m deep size. It can rotate 360 degrees to determine the position of the maximum emission level. The spcing between the each equipment was 10 cm. The mains cables are dropped to floor and are round to recepatacle. Interconnecting cables of table top equipment that hang closer than 0.4 m to the ground plane are folded back and forth forming a bundle 0.3 m to 0.4 m long, hanging approximately in the middle between ground plane and table. The EUT was positioned such that the distance from antenna to the EUT was 10 or 3 meters and the receive antenna was moved from 1 m to 4 m to investigate maximum highest emission at least 6 points over the frequency range from 30 MHz to 1 GHz using a resolution bandwidth of 120 kHz and measured by the quasi-peak detector.

According to this standard paragraph 15.109, as an alternative to the radiated emission limits, digital devices may be shown to comply with the standards contained in Third Edition of the International Special Committee on Radio Interference (CISPR), Pub. 22, "Information Technology Equipment - Radio Disturbance Characteristics - Limits and Methods of Measurement".

Above 1 GHz

The Setup is same as Below 1 GHz placement. The turn table is 0.8 m height and 1.8 m wide x 1.0 m deep size. The turn table can rotate 360 degrees to determine the position of the maximum emission level. The EUT was positioned such that the distance from antenna to the EUT was 3 meter for above 1 GHz, the highest frequency performed according to internal source frequency of the EUT, the specification was below:

Highest frequency generated or used in the device or on which the device operates or tunes (MHz)	Upper frequency of measurement range (MHz)
Below 1.705	30
1.705 - 108	1000
108 - 500	2000
500 - 1000	5000
Above 1000	5th harmonic of the highest frequency or 40 GHz, whichever is lower

Absorber shall be spread between floor of a turn table and a receive antenna shown in 4.2.3. The antenna used boresight antenna master from 1 meter and 4 meters to find out the maximum emission level and find the highest emission at least 6 points. Both horizontal and vertical polarization of the antenna are set on measurement. In order to find the maximum emission, all of the interface cables must be manipulated on radiated measurement.

Radiated emissions were applied to above 1 GHz using a resolution bandwidth of 1 MHz and measured by the peak and average detector which antenna to the EUT distance was 3 meters. If the EUT was meet both limits and measurement with the average detector receiver is unnecessary.



5 Requirements and Performance Criteria

5.1. Conducted Emission

■ Limit

Fraguency (MLIz)	Class A	(dBuV)	Class B (dBuV)			
Frequency (MHz)	Quasi-peak	Average	Quasi-peak	Average		
0.15 - 0.5	79	66	66 - 56	56 - 46		
0.50 - 5.0	73	60	56	46		
5.0 - 30.0	73	60	60	50		

Note: (1) The lower limit shall apply at the transition frequencies.

⁽²⁾ The limit decreases in line with the logarithm of the frequency in the range 0.15 to 0.50 MHz.



5.2. Radiated Emission

■ Limit

Under 1 GHz test shall not exceed following value

Cridor i Criz to	orider 1 Griz test shall not exceed following value												
FCC 47 CFR PART 15 SUBPART B													
Frequency		Clas	ss A			Clas	ss B						
range (MHz)	Distance (m)	dBuV/m	Distance (m)	dBuV/m	Distance (m)	dBuV/m	Distance (m)	dBuV/m					
30 to 88	10	39	3	49.5	10	29.5	3	40					
88 to 216	10	43.5	3	54	10	33.1	3	43.5					
216 to 960	10	46.4	3	56.9	10	35.6	3	46					
Above 960	10	49.5	3	60	10	43.5	3	54					

CISPR 22									
Frequency range	Clas	ss A	Clas	ss B					
(MHz)	Distance (m)	dBuV/m	Distance (m)	dBuV/m					
30 to 230	10	40	10	30					
230 to 1000	10	47	10	37					

Above 1 GHz test shall not exceed following value

_		dBuV/m (Di	stance 3 m)			
Frequency (MHz)	Clas	ss A	Clas	ss B		
(111112)	Average	Peak	Average	Peak		
1000 ~ 40000	60	80	54	74		

Remark:

- 1. The tighter limit shall apply at the edge between two frequency bands.
- 2. Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system.
- 3. RF Voltage (dBuV/m) = 20 log RF Voltage (uV/m)
- 4. Peak detector limit is corresponding to 20 dB above the maximum permitted average limit.

According to FCC Part 15.33 (b), for an unintentional radiator, including a digital device, the spectrum shall be investigated from the lowest radio frequency signal generated or used in the device, without going below the lowest frequency for which a radiated emission limit is specified, up to the frequency shown in the following table:

Highest frequency generated or used in the device or in which the device operated or tunes (MHz)	Upper frequency of measurement range (MHz)
Below 1.705	30
1.705-108	1000
108-500	2000
500-1000	5000
Above 1000	5th harmonic of the highest frequency or 40 GHz, whichever is lower



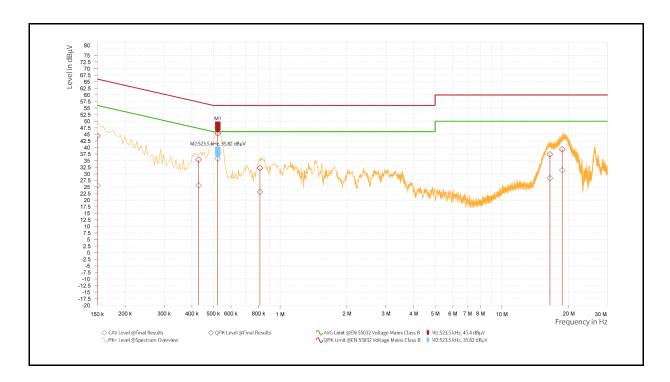
6 Test Result

6.1. Conducted Emission

■ Test Result

Test Standard: FCC Part 15B Power Line: L1
Test Mode: Mode 1 Test Power: AC 120 V / 60 Hz

Description:



Rg	Frequency [MHz]	QP Result [dBµV]	QP Limit [dBµV]	QP Margin [dB]	QP Reading [dBµV]	AVG Result [dBµV]	AVG Limit [dBµV]	AVG Margin [dB]	AVG Reading [dBµV]	Correction factor [dB]	Line
1	0.150	44.44	66.00	-21.56	34.80	25.53	56.00	-30.47	15.88	9.65	L1
2	0.429	35.36	57.27	-21.91	25.71	25.63	47.27	-21.64	15.98	9.65	L1
3	0.524	45.40	56.00	-10.60	35.74	35.82	46.00	-10.18	26.17	9.65	L1
4	0.812	32.19	56.00	-23.81	22.52	23.12	46.00	-22.88	13.45	9.67	L1
5	16.472	37.39	60.00	-22.61	27.35	28.34	50.00	-21.66	18.29	10.04	L1
6	18.722	39.29	60.00	-20.71	29.22	31.36	50.00	-18.64	21.29	10.07	L1

Note: 1. Result (dBuV) = Correction factor (dB) + Reading(dBuV).

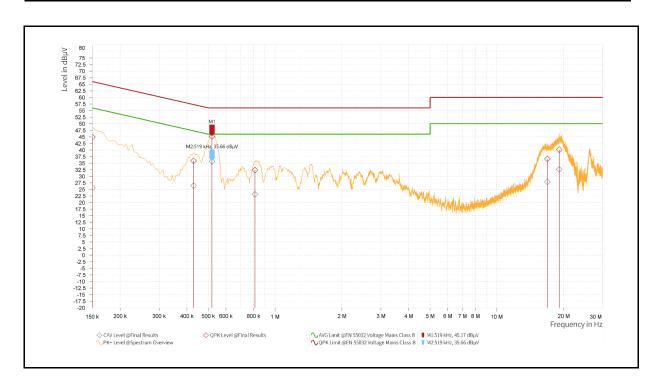
2. Correction factor (dB) = Cable loss (dB) + L.I.S.N. factor (dB).



Test Standard: FCC Part 15B Power Line: N

Test Mode: Mode 1 Test Power: AC 120 V / 60 Hz

Description:



Rg	Frequency [MHz]	QP Result [dBµV]	QP Limit [dBµV]	QP Margin [dB]	QP Reading [dBµV]	AVG Result [dBµV]	AVG Limit [dBµV]	AVG Margin [dB]	AVG Reading [dBµV]	Correction factor [dB]	Line
1	0.150	44.84	66.00	-21.16	35.21	25.62	56.00	-30.38	15.98	9.64	N
2	0.429	35.89	57.27	-21.38	26.24	26.44	47.27	-20.84	16.79	9.65	N
3	0.519	45.17	56.00	-10.83	35.52	35.66	46.00	-10.34	26.01	9.65	N
4	0.812	32.37	56.00	-23.63	22.70	23.17	46.00	-22.83	13.50	9.67	N
5	16.913	36.61	60.00	-23.39	26.46	27.88	50.00	-22.12	17.73	10.15	N
6	19.122	40.13	60.00	-19.87	29.93	32.62	50.00	-17.38	22.43	10.19	N

Note: 1. Result (dBuV) = Correction factor (dB) + Reading(dBuV).

2. Correction factor (dB) = Cable loss (dB) + L.I.S.N. factor (dB).



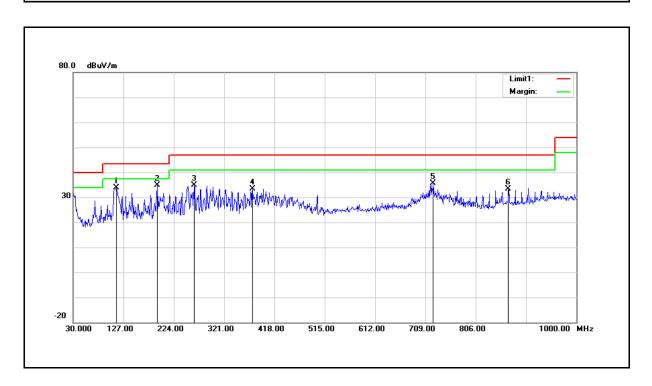
6.2. Radiated Emission

■ Test Result

Test Standard: FCC Part 15B Test Distance: 3 m

Test Mode: Mode 1 Test Power: DC 3.3 V

Measurement Range: 30 MHz~1 GHz Ant.Polar.: Horizontal



Nia	Frequency	Reading	Correct Factor	Result	Limit	Margin	Height	Degree	Damade
No.	(MHz)	(MHz) (dBuV) (dB	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	(°)	Remark
1	113.4200	48.72	-14.92	33.80	43.50	-9.70	100	360	QP
2	191.9900	49.71	-14.81	34.90	43.50	-8.60	100	216	QP
3	263.7700	47.63	-12.68	34.95	47.00	-12.05	100	282	QP
4	375.3200	43.10	-9.75	33.35	47.00	-13.65	100	157	QP
5	723.5500	38.96	-3.30	35.66	47.00	-11.34	100	124	QP
6	869.0500	34.96	-1.60	33.36	47.00	-13.64	100	113	QP

Note: 1. Result (dBuV/m) = Correction factor (dB/m) + Reading(dBuV).

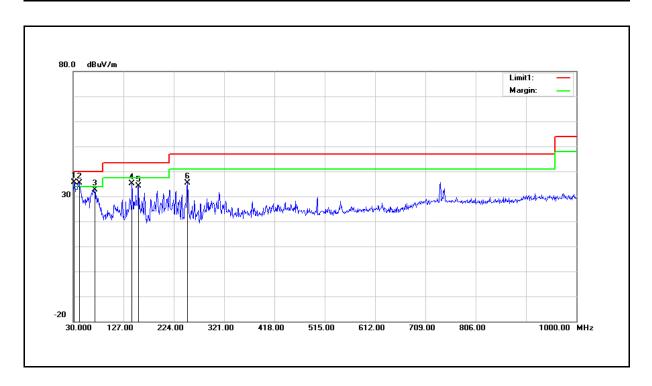
Issued Date: Mar. 18, 2024



Test Standard: FCC Part 15B Test Distance: 3 m

Test Mode: Mode 1 Test Power: DC 3.3 V

Measurement Range: 30 MHz~1 GHz Ant.Polar.: Vertical



No.	Frequency	Reading	Correct Factor	Result	Limit	Margin	Height	Degree	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	(°)	
1	31.9400	49.08	-13.50	35.58	40.00	-4.42	100	171	QP
2	41.6400	47.77	-12.44	35.33	40.00	-4.67	200	282	QP
3	71.7100	47.10	-14.42	32.68	40.00	-7.32	100	131	QP
4	143.4900	47.57	-12.41	35.16	43.50	-8.34	100	113	QP
5	156.1000	45.98	-11.94	34.04	43.50	-9.46	200	241	QP
6	250.1900	48.75	-13.26	35.49	47.00	-11.51	100	154	QP

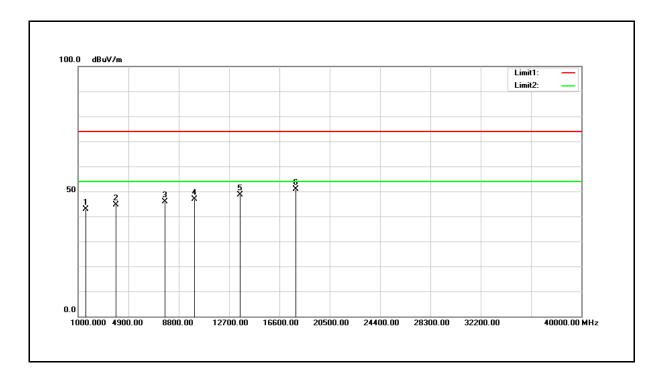
Note: 1. Result (dBuV/m) = Correction factor (dB/m) + Reading(dBuV).



Report No.: USEC23O010001 Issued Date: Mar. 18, 2024

Test Standard: FCC Part 15B Test Distance: 3 m

Test Mode: Test Power: DC 3.3 V Mode 1 Measurement Range: 1 GHz~40 GHz Ant.Polar.: Horizontal



No.	Frequency	Reading	Correct Factor	Result	Limit	Margin	Height	Degree	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	(°)	
1	1578.000	64.16	-21.16	43.00	74.00	-31.00	100	233	peak
2	3924.000	55.84	-11.25	44.59	74.00	-29.41	100	110	peak
3	7698.000	50.38	-4.40	45.98	74.00	-28.02	100	68	peak
4	9976.000	49.11	-2.14	46.97	74.00	-27.03	100	80	peak
5	13546.000	46.89	1.80	48.69	74.00	-25.31	100	319	peak
6	17847.000	44.53	6.35	50.88	74.00	-23.12	100	71	peak

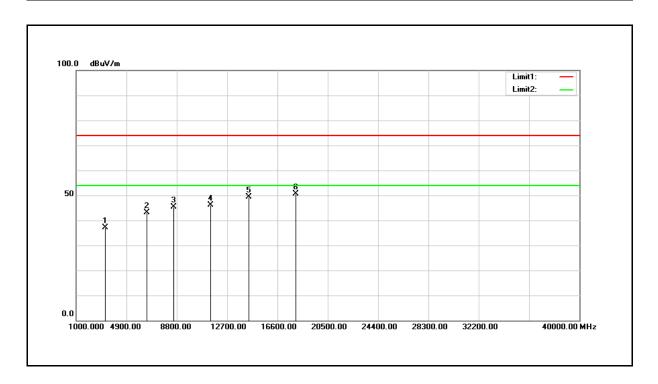
Note: 1. Result (dBuV/m) = Correction factor (dB/m) + Reading(dBuV).



Test Standard: FCC Part 15B Test Distance: 3 m

Test Mode: Mode 1 Test Power: DC 3.3 V

Measurement Range: 1 GHz~40 GHz Ant.Polar.: Vertical



No.	Frequency	Reading	Correct Factor	Result	Limit	Margin	Height	Degree	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	(°)	
1	3261.000	52.08	-14.94	37.14	74.00	-36.86	100	60	peak
2	6457.000	47.92	-4.72	43.20	74.00	-30.80	100	60	peak
3	8565.000	48.28	-2.78	45.50	74.00	-28.50	100	62	peak
4	11387.000	47.58	-1.52	46.06	74.00	-27.94	100	279	peak
5	14362.000	45.96	3.31	49.27	74.00	-24.73	100	81	peak
6	17983.000	43.51	7.08	50.59	74.00	-23.41	100	139	peak

Note: 1. Result (dBuV/m) = Correction factor (dB/m) + Reading(dBuV).