

Test report No:
2521079R.702A

FCC TEST REPORT

Product Name	AI Dev Kit
Trademark	N/A
Model and /or type reference	T5AI-Board
FCC ID	2ANDL-T5KIT
Applicant's name / address	Hangzhou Tuya Information Technology Co., Ltd Room 301,Building 1,Huace Center,Xihu District, Hangzhou City,Zhejiang Province, China
Test method requested, standard	47 CFR FCC Part 15 (Section 15.247) ANSI C63.10: 2013
Verdict Summary	IN COMPLIANCE
Tested by (name / position & signature)	Tim Cao / Project Manager 
Approved by (name / position & signature)	Frank He / Technical Manager 
Date of issue	2025-05-16
Report Version	V1.0
Report template No	Template_FCC Part 15C-RF-V1.0

INDEX

	page
General conditions	4
Environmental conditions	4
Possible test case verdicts	5
Abbreviations.....	5
Document History.....	6
Remarks and Comments	6
Used Equipment.....	7
Uncertainty	10
1 General Information	11
1.1 General Description of the Item(s).....	11
1.2 Channel List.....	12
2 Description of Test Setup.....	13
2.1 Auxiliary equipment /Accessories/Test software for the EUT	13
3 Verdict summary section.....	14
3.1 Standards	14
3.2 Deviation(s) from the Standard(s) / Test Specification(s).....	14
3.3 Overview of results	15
3.4 Power setting in test	16
3.5 Test Matrix	16
3.6 Test Facility.....	17
4 Test Items of limit/setup/procedure.....	18
4.1 Maximum Conducted Output Power.....	18
4.1.1 Limit	18
4.1.2 Test Setup	18
4.1.3 Test Procedure	18
4.2 Emissions in Restricted Bands	19
4.2.1 Limit	19
4.2.2 Test Setup	20
4.2.3 Test Procedure	21
4.3 Band edge measurements	22
4.3.1 Limit	22
4.3.2 Test Setup	22
4.3.3 Test Procedure	22
5 Test setup photo and EUT Photo	23



6	Test Result	24
	Appendix A: Maximum Conducted Output Power	24
	Appendix B: Emissions in Restricted Band.....	25
	Appendix C: Band edge measurements	33

COMPETENCES AND GUARANTEES

DEKRA is a testing laboratory competent to carry out the tests described in this report.

In order to assure the traceability to other national and international laboratories, DEKRA has a calibration and maintenance program for its measurement equipment.

DEKRA guarantees the reliability of the data presented in this report, which is the result of the measurements and the tests performed to the item under test on the date and under the conditions stated in the report and it is based on the knowledge and technical facilities available at DEKRA at the time of performance of the test.

DEKRA is liable to the client for the maintenance of the confidentiality of all information related to the item under test and the results of the test.

The results presented in this Test Report apply only to the particular item under test established in this document.

IMPORTANT: No parts of this report may be reproduced or quoted out of context, in any form or by any means, except in full, without the previous written permission of DEKRA.

GENERAL CONDITIONS

Test Location A	No. 99, Hongye Road, Suzhou Industrial Park Suzhou, 215006, P.R. China
Test Location B	No. 8213, Fanhua Avenue, Baohe District, Hefei City, Anhui Province, China
Date(receive sample)	Feb. 28, 2025
Date (start test)	Mar. 25, 2025
Date (finish test)	Mar. 31, 2025

1. This report is only referred to the item that has undergone the test.
2. This report does not constitute or imply on its own an approval of the product by the Certification Bodies or Competent Authorities.
3. This document is only valid if complete; no partial reproduction can be made without previous written permission of DEKRA.
4. This test report cannot be used partially or in full for publicity and/or promotional purposes without previous written permission of DEKRA.

ENVIRONMENTAL CONDITIONS

The climatic conditions during the tests are within the limits specified by the manufacturer for the operation of the EUT and the test equipment. The climatic conditions during the tests were within the following limits:

Ambient temperature	15 °C – 35 °C
Relative Humidity air	30% - 60%

If explicitly required in the basic standard or applied product / product family standard the climatic values are recorded and documented separately in this test report.

POSSIBLE TEST CASE VERDICTS

Test case does not apply to test object	N/A
Test object does meet requirement	P (Pass) / PASS
Test object does not meet requirement	F (Fail) / FAIL
Not measured	N/M

ABBREVIATIONS

For the purposes of the present document, the following abbreviations apply:

EUT	: Equipment Under Test
QP	: Quasi-Peak
CAV	: CISPR Average
AV	: Average
CDN	: Coupling Decoupling Network
SAC	: Semi-Anechoic Chamber
OATS	: Open Area Test Site
BW	: Bandwidth
AM	: Amplitude Modulation
PM	: Pulse Modulation
HCP	: Horizontal Coupling Plane
VCP	: Vertical Coupling Plane
U_N	: Nominal voltage
T_x	: Transmitter
R_x	: Receiver
N/A	: Not Applicable
N/M	: Not Measured

DOCUMENT HISTORY

Report No.	Version	Description	Issued Date
2521079R.702A	V1.0	Initial issue of report.	2025-05-16

REMARKS AND COMMENTS

1. The equipment under test (EUT) does meet the essential requirements of the stated standard(s)/test(s).
2. This report is a limited report on the installation of a test module in a AI Dev Kit, and the customer declares that the RF parameters of the module installed in the host computer are exactly the same as those of the certified module. We verified the RF output power and radiated emissions of the equipment. For other test data, please refer to FCC ID: 2ANDL-T5-E1P. These test results on a sample of the device are for the purpose of demonstrating Compliance with 47 CFR FCC Part 15 (Section 15.247).
3. The measurement result is considered in conformance with the requirement if it is within the prescribed limit, It is not necessary to account the uncertainty associated with the measurement result.
4. The test results presented in this report relate only to the object tested.
5. The test report shall not be reproduced without the written approval of DEKRA Testing and Certification (Suzhou) Co., Ltd.
6. This report will not be used for social proof function in China market.
7. DEKRA declines any responsibility with the following test data provided by customer that may affect the validity of result:
 - Chapter 1.1 General Description of the Item(s);
 - Chapter 1.2 Channel List;

USED EQUIPMENT

Test Location A :Conducted Test/ TR8

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date
Wireless Connectivity Tester	R&S	CMW 270	102593	2024.05.15	2025.05.14
Coaxial Cable	N/A	N/A	2477	2024.06.11	2025.06.10
Coaxial Cable	N/A	N/A	2478	2024.06.11	2025.06.10
High and low temperature and fast temperature change test box	ASTUOD	ASTD-FBT-225K	N/A	2024.04.21	2025.04.20
Temperature/Humidity Meter	RTS	RTS-8S	RF07	2024.07.04	2025.07.03
Test system					
Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date
MAX Signal Analyzer	Keysight	N9010A	MY48030494	2024.10.26	2025.10.25
RF Control Unit	Tonscend	JS0806-2	22G8060594	2025.01.26	2026.01.25
MXG-B RF Vector Signal Generator	Keysight	N5182B	MY61252529	2024.05.12	2025.05.11
Frequency extender for EXG or MXG	Keysight	N5182BX07	MY59362500	2024.05.12	2025.05.11
EXG-B MW Analog Signal Generator	Keysight	N5173B	MY61252566	2024.07.06	2025.07.05
Test Software	Tonscend	TS1120	JS1120-3	N/A	N/A

Test Location A :Radiated Emission(9KHz-1GHz) / AC2

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date
EMI Test Receiver	R&S	ESCI	100176	2024.05.12	2025.05.11
Loop Antenna	R&S	HFH2-Z2E	101149	2024.03.27	2025.03.26
Bilog Antenna	Teseq GmbH	CBL6112D	27613	2024.09.08	2025.09.07
Temperature/Humidity Meter	RTS	RTS-8S	AC2-TH	2024.07.04	2025.07.03
Coaxial Cable	Huber+Suhner	SUCOFLEX 106	AC2-C	2024.04.27	2025.04.26
Dekra test software	Dekra	N/A	N/A	N/A	N/A

Test Location B: Radiated Emission Band Edge / AC103

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date
Signal analyzer	keysight	N9020B	MY63490118	2024.07.26	2025.07.25
Bilog Antenna	TESEQ	CBL6112D	64164	2024.11.23	2025.11.22
Horn Antenna	RF SPIN	DRH18-E	KV2D11A18ES	2024.11.02	2025.11.01
Broad-Band Horn Antenna	Schwarzbeck	BBHA9170	01312	2024.10.28	2025.10.27
Amplifier	ESE	LNA0118	LNA23100009	2024.08.10	2025.08.09
Amplifier	Tonscend	TAP01018048S	AP23J8060307	2024.11.16	2025.11.15

Band Reject Filter Group	Tonscend	JS0806-F	23G806F0701	2024.11.20	2025.11.19
Temperature/Humidity Meter	RTS	RTS-8S	026	2024.09.04	2025.09.03
Test Software	Tonscend	JS36	N/A	N/A	N/A

Test Location A :Conducted Test/ TR8

Instrument	Manufacturer	Model No.	Serial No.	Firmware Version	Software version
Wireless Connectivity Tester	R&S	CMW 270	102593	V 4.0.60	N/A
Coaxial Cable	N/A	N/A	2477	N/A	N/A
Coaxial Cable	N/A	N/A	2478	N/A	N/A
High and low temperature and fast temperature change test box	ASTUOD	ASTD-FBT-225K	N/A	N/A	N/A
Temperature/Humidity Meter	RTS	RTS-8S	RF07	N/A	N/A
Test system					
Instrument	Manufacturer	Model No.	Serial No.	Firmware Version	Software version
MAX Signal Analyzer	Keysight	N9010A	MY48030494	A.14.03	N/A
RF Control Unit	Tonscend	JS0806-2	22G8060594	N/A	N/A
MXG-B RF Vector Signal Generator	Keysight	N5182B	MY61252529	B.01.96	N/A
Frequency extender for EXG or MXG	Keysight	N5182BX07	MY59362500	N/A	N/A
EXG-B MW Analog Signal Generator	Keysight	N5173B	MY61252566	B.01.95	N/A
Test Software	Tonscend	TS1120	JS1120-3	N/A	V3.0.22

Test Location A :Radiated Emission(9KHz-1GHz) / AC2

Instrument	Manufacturer	Model No.	Serial No.	Firmware Version	Software version
EMI Test Receiver	R&S	ESCI	100176	4.42 SP3	N/A
Loop Antenna	R&S	HFH2-Z2E	101149	N/A	N/A
Bilog Antenna	Teseq GmbH	CBL6112D	27613	N/A	N/A
Temperature/Humidity Meter	RTS	RTS-8S	AC2-TH	N/A	N/A
Coaxial Cable	Huber+Suhner	SUCOFLEX 106	AC2-C	N/A	N/A
Dekra test software	Dekra	N/A	N/A	N/A	3

Test Location B: Radiated Emission Band Edge / AC103

Instrument	Manufacturer	Model No.	Serial No.	Firmware Version	Software version
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Signal analyzer	keysight	N9020B	MY63490118	A 08.54	N/A
Bilog Antenna	TESEQ	CBL6112D	64164	N/A	N/A
Horn Antenna	RF SPIN	DRH18-E	KV2D11A18ES	N/A	N/A
Broad-Band Horn Antenna	Schwarzbeck	BBHA9170	01312	N/A	N/A
Amplifier	ESE	LNA0118	LNA23100009	N/A	N/A
Amplifier	Tonscend	TAP01018048S	AP23J8060307	N/A	N/A
Band Reject Filter Group	Tonscend	JS0806-F	23G806F0701	N/A	N/A
Temperature/Humidity Meter	RTS	RTS-8S	026	N/A	N/A
Test Software	Tonscend	JS36	N/A	N/A	5.0.0

UNCERTAINTY

Uncertainties have been calculated according to the DEKRA internal document. The reported expanded uncertainties are based on a standard uncertainty multiplied by a coverage factor of $k=2$, providing a level of confidence of approximately 95%. The Uncertainties is comply with standard required as below.

Test item Test Location A	Uncertainty
Peak Power Output	± 1.3 dB
Radiated Emission(30MHz~1GHz)	Horizontal: 30MHz~300MHz: 3.5 dB, 300MHz~1GHz: 3.6 dB Vertical: 30MHz~300MHz: 3.6 dB, 300MHz~1GHz: 3.5 dB
Radiated Emission(1GHz~40GHz)	Horizontal: 1GHz~40GHz: 5.0 dB Vertical: 1GHz~40GHz: 4.8 dB
RF antenna conducted test	± 1.3 dB
Radiated Emission Band Edge	± 5.0 dB
DTS Bandwidth	± 1 kHz
Occupied Bandwidth	± 1 kHz
Power Density	± 1.3 dB

Test item Test Location B	Uncertainty
Radiated Emission(30MHz~1GHz)	Horizontal: 30MHz~300MHz: 4.9 dB, 300MHz~1GHz: 4.9 dB Vertical: 30MHz~300MHz: 4.9 dB, 300MHz~1GHz: 4.9 dB
Radiated Emission(1GHz~40GHz)	Horizontal: 1GHz~40GHz: 6.0 dB Vertical: 1GHz~40GHz: 5.8 dB
Radiated Emission Band Edge	± 6.0 dB

1 GENERAL INFORMATION

1.1 General Description of the Item(s)

Product Name	AI Dev Kit				
Trademark	N/A				
Model No.	T5AI-Board				
FCC ID.	2ANDL-T5KIT				
Hardware Version	V1.0.1				
Software Version	V1.0.3				
Power Supply	DC: 5V, 2A 10W				
Manufacturer	Hangzhou Tuya Information Technology Co., Ltd				
Manufacturer address	Room 301,Building 1,Huace Center,Xihu District, Hangzhou City,Zhejiang Province, China				
Wireless specification	Bluetooth (LE)				
Operating frequency range(s)	2402~2480MHz				
Type of Modulation	GFSK				
PHYs	☒	LE 1M	☐	LE 2M	☐ LE Coded S=2/8
Data Rate	☒	1Mbit/s	☐	2Mbit/s	☐ 500/125 Kbit/s
Number of channels	40				
Antenna Type	PCB				
Antenna Gain	1.16 dBi				

1.2 Channel List

Bluetooth Working Frequency of Each Channel: (For LE)							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
00	2402 MHz	01	2404 MHz	02	2406 MHz	03	2408 MHz
04	2410 MHz	05	2412 MHz	06	2414 MHz	07	2416 MHz
08	2418 MHz	09	2420 MHz	10	2422 MHz	11	2424 MHz
12	2426 MHz	13	2428 MHz	14	2430 MHz	15	2432 MHz
16	2434 MHz	17	2436 MHz	18	2438 MHz	19	2440 MHz
20	2442 MHz	21	2444 MHz	22	2446 MHz	23	2448 MHz
24	2450 MHz	25	2452 MHz	26	2454 MHz	27	2456 MHz
28	2458 MHz	29	2460 MHz	30	2462 MHz	31	2464 MHz
32	2466 MHz	33	2468 MHz	34	2470 MHz	35	2472 MHz
36	2474 MHz	37	2476 MHz	38	2478 MHz	39	2480 MHz

Note: The General Description of the Item, antenna information, Test Data Rate and Channel List in clause 1 are provided and confirmed by the client.

2 DESCRIPTION OF TEST SETUP

2.1 Auxiliary equipment /Accessories/Test software for the EUT

Auxiliary equipment	Type / Version	Manufacturer	Supplied by
(1) Notebook	ThinkPad T14	Lenovo	Adapter
(2) LAN Control Cable	N/A	N/A	N/A
(3) LAN Control Cable	N/A	N/A	N/A
software	Type / Version	Manufacturer	Supplied by
Wi-Fi Test Tool	V1.8.0	N/A	N/A

3 VERDICT SUMMARY SECTION

This chapter presents an overview of standards and results. Refer to the next chapters for details of measured test results and applied test levels.

3.1 Standards

Standard	Year	Description
CFR 47, FCC Part 15 C	2024	Operation within the bands 902–928 MHz, 2400–2483.5 MHz, and 5725–5850 MHz.
ANSI C63.10	2013	American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices

3.2 Deviation(s) from the Standard(s) / Test Specification(s)

The following deviation(s) was / were made from the published requirements of the listed standards: N/A.

(Please define the deviations from the standard(s) if applicable)

3.3 Overview of results

Test Item	FCC Rule No.	Test Method	Result
Antenna Requirement	15.203/15.247(b)	--	PASS ²⁾
AC Power Line Conducted Emission	15.207	ANSI C63.10 2013 Section 6.2	N/A ¹⁾
Duty Cycle	--	--	PASS ²⁾
Conducted Output Power	15.247 (b)(3)	ANSI C63.10 2013 Section 11.9.2.3	PASS
DTS (6 dB) Bandwidth & 99% Occupied Bandwidth	15.247 (a)(2)	ANSI C63.10 2013 Section 11.8 Option 2 / 6.9.3	PASS ²⁾
Power Spectral Density	15.247 (e)	ANSI C63.10 2013 Section 11.10.2	PASS ²⁾
Band-Edge	15.247(d)	ANSI C63.10 2013 Section 11.11	PASS
RF Conducted Spurious Emissions	15.247(d)	ANSI C63.10 2013 Section 11.11	PASS ²⁾
Radiated Spurious Emissions	15.247(d);15.205/15.209	ANSI C63.10 2013 Section 11.12	PASS
Restricted bands around fundamental frequency (Radiated Emission)	15.247(d);15.205/15.209	ANSI C63.10 2013 Section 11.12	PASS ²⁾

Supplementary information:

1) The EUT uses DC power supply.

2) Only the Conducted Output Power and Band-Edge and Radiated Spurious were fully tested. These items please refer to the Wi-Fi2.4G Module report 24B0486R-RF-US-P06V02. The FCC ID is 2ANDL-T5-E1P has been certified, and the test report issued by DEKRA Testing and Certification (Suzhou) Co., Ltd. on 12/23/2024.

Requirement – Test Item	Standard(s)	Verdict	Test Location	Remark
Maximum Conducted Output Power	FCC 15.247(b)(1)	PASS	A	Test data please refer to Appendix A
Emissions in Restricted Bands	FCC 15.247(b)(3)	PASS	B	Test data please refer to Appendix B
Band edge measurements	FCC 15.247(d)	PASS	B	Test data please refer to Appendix C

3.4 Power setting in test

Mode	Channel	Frequency (MHz)	Power setting
BLE 1Mbps	00	2402	Default
	19	2440	Default
	39	2480	Default

3.5 Test Matrix

Test item	Model: T5AI-Board	
	#1	#2
Maximum Conducted Output Power	☒	☐
Emissions in Restricted Bands	☐	☒
Band edge measurements	☐	☒
Note1: The only difference between sample #1 and sample #2 is whether to keep the original antenna, sample #1 is a conduction test product that removes the original antenna and is equipped with SMA wires, and sample #2 is a complete product that retains the original antenna.		

3.6 Test Facility

Tset Location A : FCC Designation Number: CN1199

Tset Location B : FCC Designation Number: CN1321

4 TEST ITEMS OF LIMIT/SETUP/PROCEDURE

4.1 Maximum Conducted Output Power

VERDICT: PASS

4.1.1 Limit

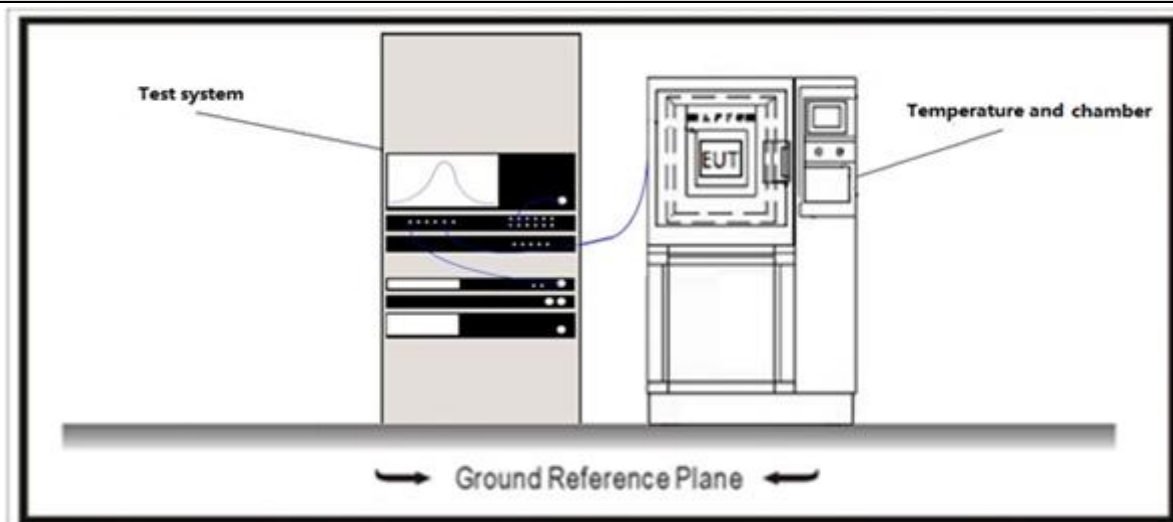
Standard FCC Part 15 Subpart C Paragraph 15.247 (b)(3);

☒	GTX < 6dBi	$P_{out} \leq 30 \text{ dBm}$
☐	GTX > 6dBi	
☐	Non-Fix point-point	$P_{out} \leq 30 - (GTX - 6)$
☐	Fix point-point	$P_{out} \leq 30 - [(GTX - 6)]/3$
☐	Point-to-multipoint	$P_{out} \leq 30 - (GTX - 6)$
☐	Overlap Beams	$P_{out} \leq 30 - [(GTX - 6)]/3$
☐	Aggregate power transmitted simultaneously on all beams	$P_{out} \leq 30 - [(GTX - 6)]/3$
☐	single directional beam	$P_{out} \leq 30 - [(GTX - 6)]/3 + 8 \text{ dB}$

Note 1 : GTX directional gain of transmitting antennas.

 Note 2 : P_{out} is maximum peak conducted output power .

4.1.2 Test Setup



4.1.3 Test Procedure

	References Rule	Chapter	Description
☒	ANSI C63.10	7.8	Evaluation of frequency-hopping device parameters
☒	ANSI C63.10	7.8.5	Output power test procedure for frequency-hopping spread-spectrum (FHSS) devices

4.2 Emissions in Restricted Bands**VERDICT: PASS****4.2.1 Limit****Standard** FCC Part 15 Subpart C Paragraph 15.205

Restricted Bands of operation

Frequency (MHz)	Frequency (MHz)	Frequency (MHz)	Frequency (GHz)
0.090 – 0.110	16.42 – 16.423	399.9 – 410	4.5 – 5.15
0.495 – 0.505	16.69475 – 16.69525	608 – 614	5.35 – 5.46
2.1735 – 2.1905	16.80425 – 16.80475	960 – 1240	7.25 – 7.75
4.125 – 4.128	25.5 – 25.67	1300 – 1427	8.025 – 8.5
4.17725 – 4.17775	37.5 – 38.25	1435 – 1626.5	9.0 – 9.2
4.20725 – 4.20775	73 – 74.6	1645.5 – 1646.5	9.3 – 9.5
6.215 – 6.218	74.8 – 75.2	1660 – 1710	10.6 – 12.7
6.26775 – 6.26825	108 – 121.94	1718.8 – 1722.2	13.25 – 13.4
6.31175 – 6.31225	123 – 138	2200 – 2300	14.47 – 14.5
8.291 – 8.294	149.9 – 150.05	2310 – 2390	15.35 – 16.2
8.362 – 8.366	156.52475 – 156.52525	2483.5 – 2500	17.7 – 21.4
8.37625 – 8.38675	156.7 – 156.9	2690 – 2900	22.01 – 23.12
8.81425 – 8.81475	162.0125 – 167.17	3260 – 3267	23.6 – 24.0
12.29 – 12.293	167.72 – 173.2	3332 – 3339	31.2 – 31.8
12.51975 – 12.52025	240 – 285	3345.8 – 3358	36.43 – 36.5
12.57675 – 12.57725	322 – 335.4	3600 – 4400	
13.36 – 13.41			

Restricted Band Emissions Limit

FCC Part 15 Subpart C Paragraph 15.209

Frequency (MHz)	Field strength (μV/m)	Field strength (dBμV/m)	Measurement distance (m)
0.009 - 0.49	2400/F(kHz)	48.5 – 13.8	300 _(Note 1)
0.49 - 1.705	24000/F(kHz)	33.8 - 23	30 _(Note 1)
1.705 - 30	30	29.5	30 _(Note 1)
30 - 88	100	40	3 _(Note 2)
88 - 216	150	43.5	3 _(Note 2)
216 - 960	200	46	3 _(Note 2)
Above 960	500	54	3 _(Note 2)

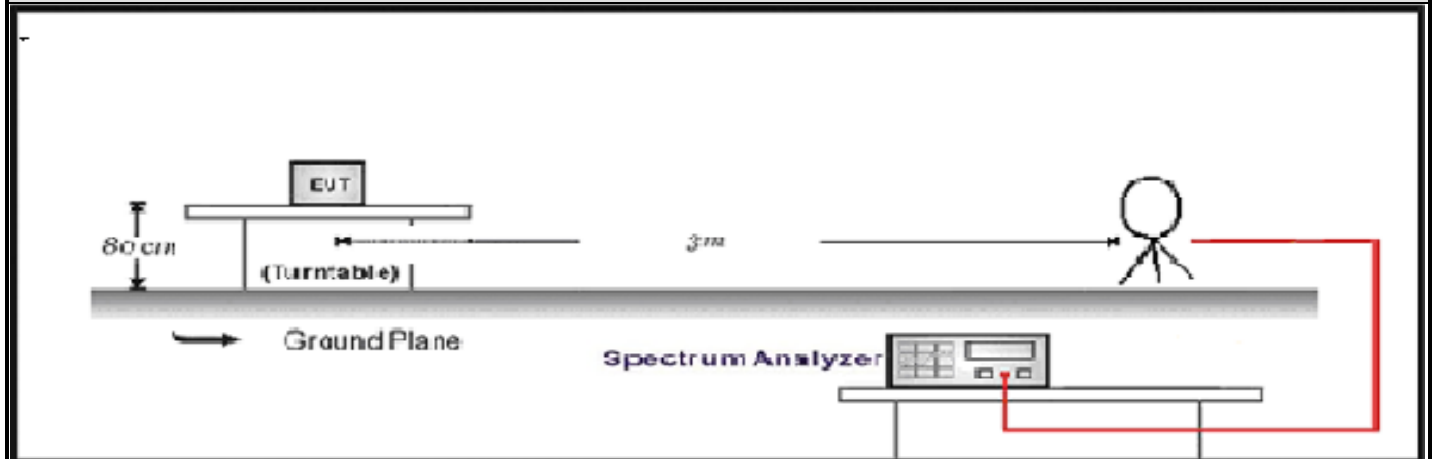
Note 1: At frequencies below 30 MHz, measurements may be performed at a distance closer than that specified in the regulations; however, an attempt should be made to avoid making measurements in the near field. Pending the development of an appropriate measurement procedure for measurements performed below 30 MHz, when performing measurements at a closer distance than specified, the results shall be extrapolated to the specified distance by either making measurements at a minimum of two 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).

Note 2: At frequencies at or above 30 MHz, measurements may be performed at a distance other than what is specified provided: measurements are not made in the near field except where it can be shown that near field measurements are appropriate due to the characteristics of the device; and it can be demonstrated that the signal levels needed to be measured at the distance employed can be detected by the measurement equipment. Measurements shall not be performed at a distance greater than 30 meters unless it can be further demonstrated that measurements at a distance of 30 meters or less are impractical. When performing measurements at a distance other than that specified, the results

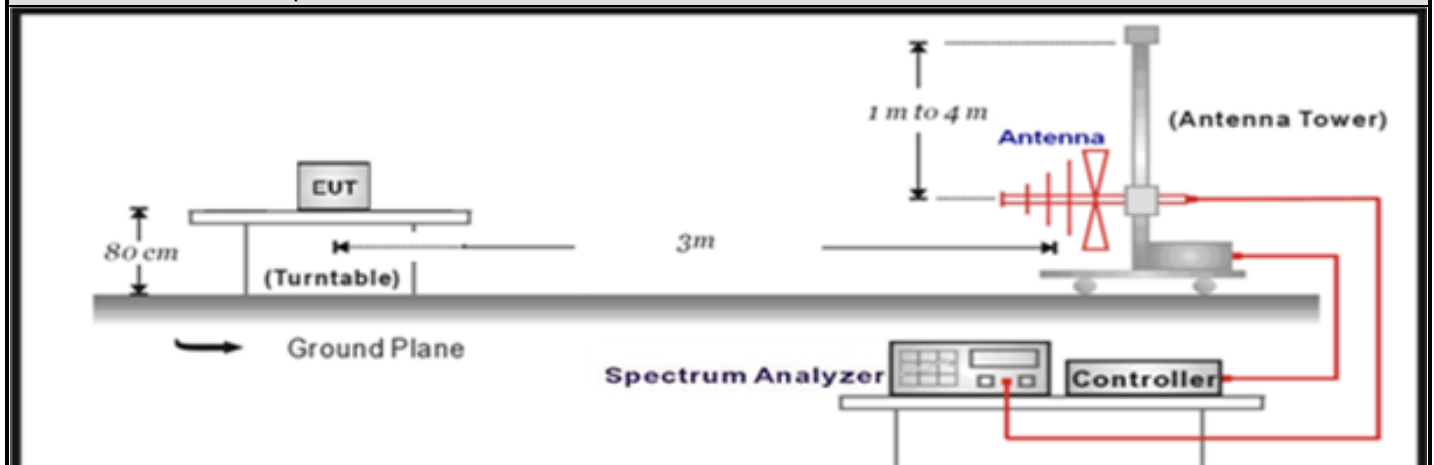
shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse linear-distance for field strength measurements; inverse-linear-distance-squared for power density measurements).

4.2.2 Test Setup

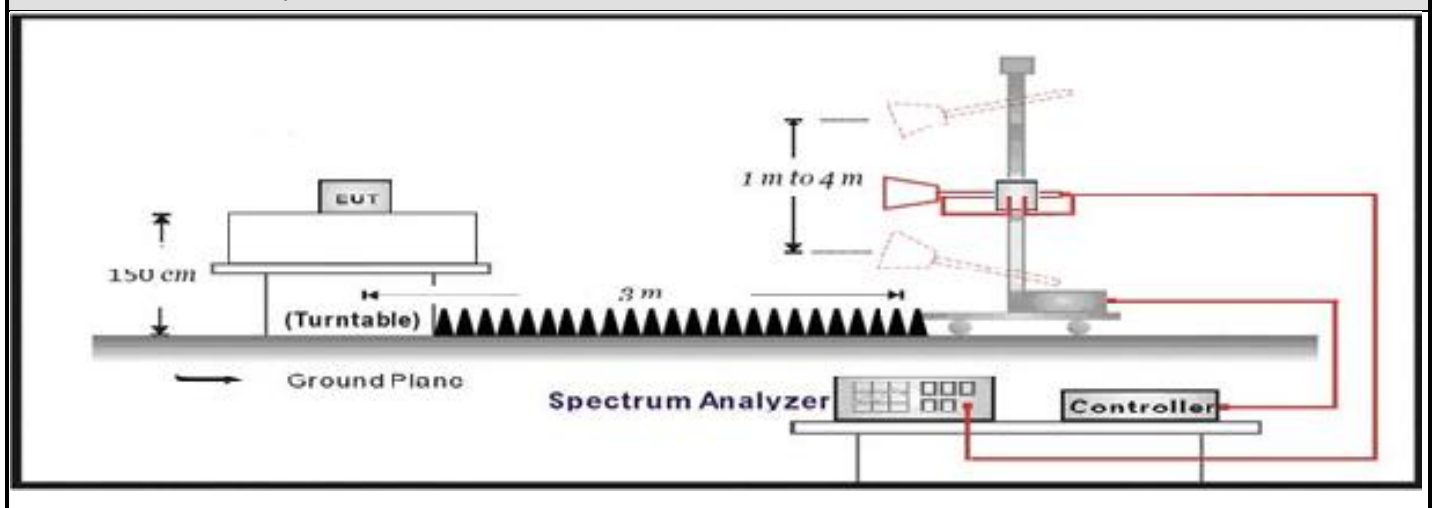
Below 30MHz Test Setup:



30MHz-1GHz Test Setup:



Above 1GHz Test Setup:



4.2.3 Test Procedure

	References Rule		Chapter	Description
☒	ANSI C63.10		11.12	Emissions in restricted frequency bands
	☒	ANSI C63.10	11.12.1	Radiated emission measurements
	☒	ANSI C63.10	11.12.2.7	Radiated spurious emission test
	☒	ANSI C63.10	6.4	Radiated emissions from unlicensed wireless devices below 30 MHz
	☒	ANSI C63.10	6.5	Radiated emissions from unlicensed wireless devices in the frequency range of 30 MHz to 1000 MHz
	☒	ANSI C63.10	6.6	Radiated emissions from unlicensed wireless devices above 1 GHz

4.3 Band edge measurements

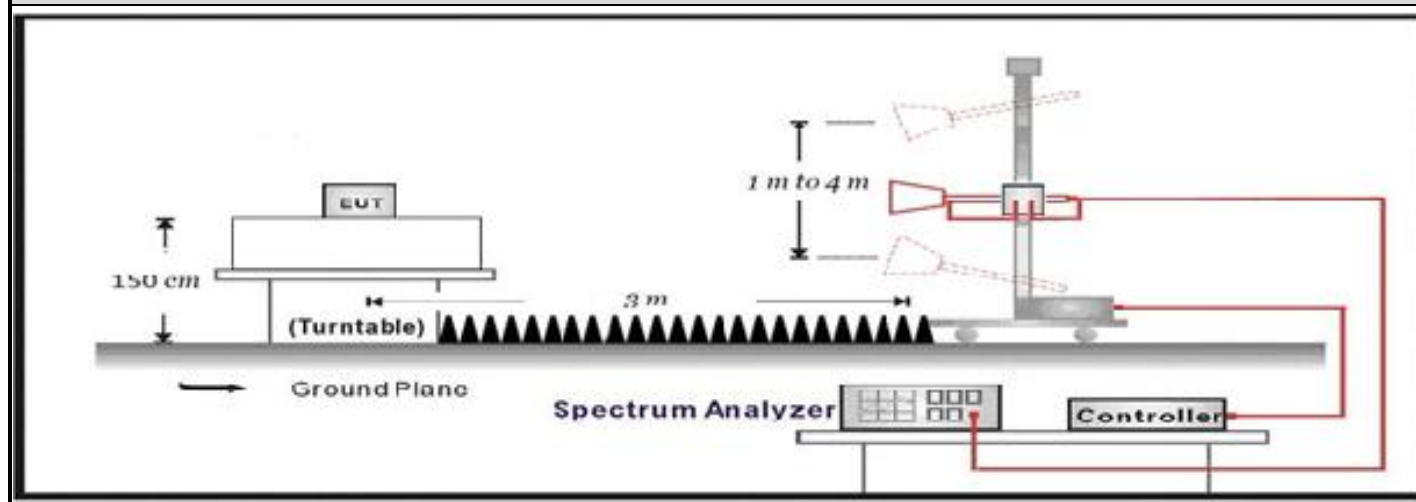
VERDICT: PASS

4.3.1 Limit

Standard				
FCC Part 15 Subpart C Paragraph 15.247(d) , 15.209				
Frequency bands (MHz)	Detector	Limit (dB μ V/m)	RBW (MHz)	Distance (m)
2310-2390	PK	74	1	3
2483.5-2500	AV	54	1	3

Note: The field strength of emissions appearing within these frequency bands shall not exceed the limits.

4.3.2 Test Setup



4.3.3 Test Procedure

Test Method			
	References Rule	Chapter	Description
☐	DA 00-705	N/A	duty cycle correction factor
☒	ANSI C63.10	6.10	Band-edge testing
☒	ANSI C63.10	6.10.5	Restricted-band band-edge measurements
☐	ANSI C63.10	6.10.6	Marker-delta method
☐	ANSI C63.10	6.4	Radiated emissions from unlicensed wireless devices below 30 MHz
☐	ANSI C63.10	6.5	Radiated emissions from unlicensed wireless devices in the frequency range of 30 MHz to 1000 MHz
☐	ANSI C63.10	6.6	Radiated emissions from unlicensed wireless devices above 1 GHz

5 TEST SETUP PHOTO AND EUT PHOTO

Remark: The test setup photo and EUT Photo please see appendix.

6 TEST RESULT

Appendix A: Maximum Conducted Output Power

Test Mode	Frequency [MHz]	Conducted Power[dBm]	Conducted Limit[dBm]	EIRP [dBm]	EIRP Limit[dBm]	Verdict
BLE 1Mbps	2402	5.17	≤30.00	6.33	≤36.00	PASS
	2440	6.27	≤30.00	7.43	≤36.00	PASS
	2480	6.13	≤30.00	7.29	≤36.00	PASS

Note 1: EIRP Power = Conducted Power + Antenna gain

Note 2: The Antenna gain please refer to clause 1.1

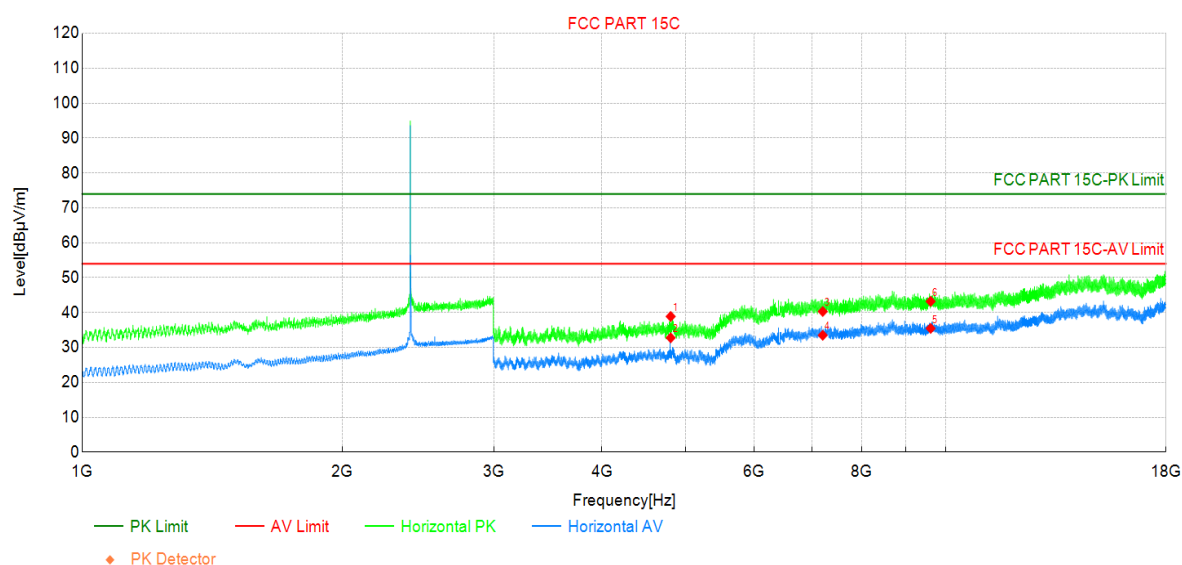
Appendix B: Emissions in Restricted Band

Test Report

Project Information

Profile:	2521079R	EUT:	AI Dev Kit
Mode:	Mode1:Transmit at 2402MHz by LE 1M	Voltage:	DC: 5Vdc
Environment:	Temp: 25°C; Humi:60%	Engineer	Reyn Chen
Test Standard:	FCC PART 15C		

Test Graph



Suspected Data List

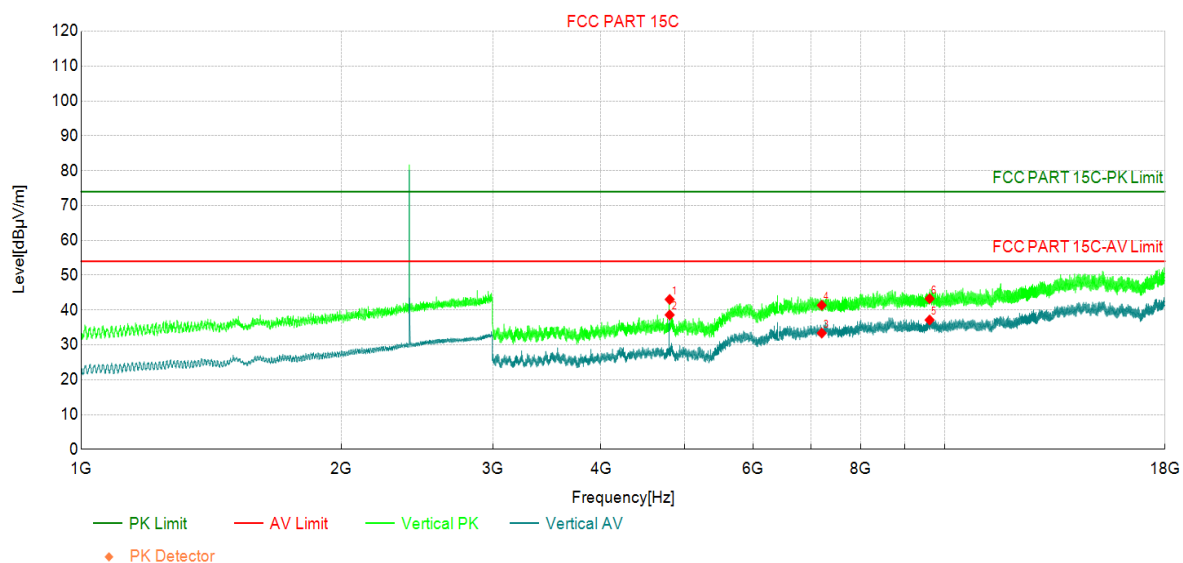
NO	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Det	Pol	Verdict
1	4804.00	44.91	38.88	-6.03	74.00	35.12	PK	Horizo	PASS
2	4804.00	38.79	32.76	-6.03	54.00	21.24	AV	Horizo	PASS
3	7206.00	37.34	40.31	2.97	74.00	33.69	PK	Horizo	PASS
4	7206.00	30.52	33.49	2.97	54.00	20.51	AV	Horizo	PASS
5	9608.00	29.52	35.46	5.94	54.00	18.54	AV	Horizo	PASS
6	9608.00	37.26	43.20	5.94	74.00	30.80	PK	Horizo	PASS

Test Report

Project Information

Profile:	2521079R	EUT:	AI Dev Kit
Mode:	Mode1:Transmit at 2402MHz by LE 1M	Voltage:	DC: 5Vdc
Environment:	Temp: 25°C ; Humi:60%	Engineer	Reyn Chen
Test Standard:	FCC PART 15C		

Test Graph



Suspected Data List

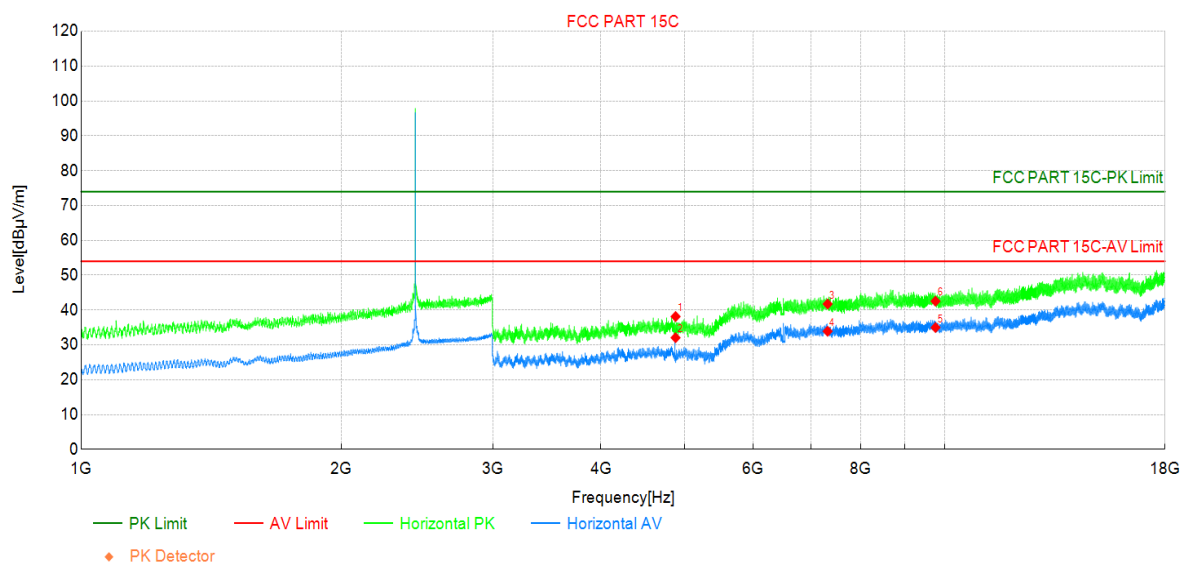
NO	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Det	Pol	Verdict
1	4804.00	49.06	43.03	-6.03	74.00	30.97	PK	Vertic	PASS
2	4804.00	44.63	38.60	-6.03	54.00	15.40	AV	Vertic	PASS
3	7206.00	30.41	33.38	2.97	54.00	20.62	AV	Vertic	PASS
4	7206.00	38.41	41.38	2.97	74.00	32.62	PK	Vertic	PASS
5	9608.00	31.19	37.13	5.94	54.00	16.87	AV	Vertic	PASS
6	9608.00	37.31	43.25	5.94	74.00	30.75	PK	Vertic	PASS

Test Report

Project Information

Profile:	2521079R	EUT:	AI Dev Kit
Mode:	Mode1:Transmit at 2440MHz by LE 1M	Voltage:	DC: 5Vdc
Environment:	Temp: 25°C ; Humi:60%	Enginee	Reyn Chen
Test Standard:	FCC PART 15C		

Test Graph



Suspected Data List

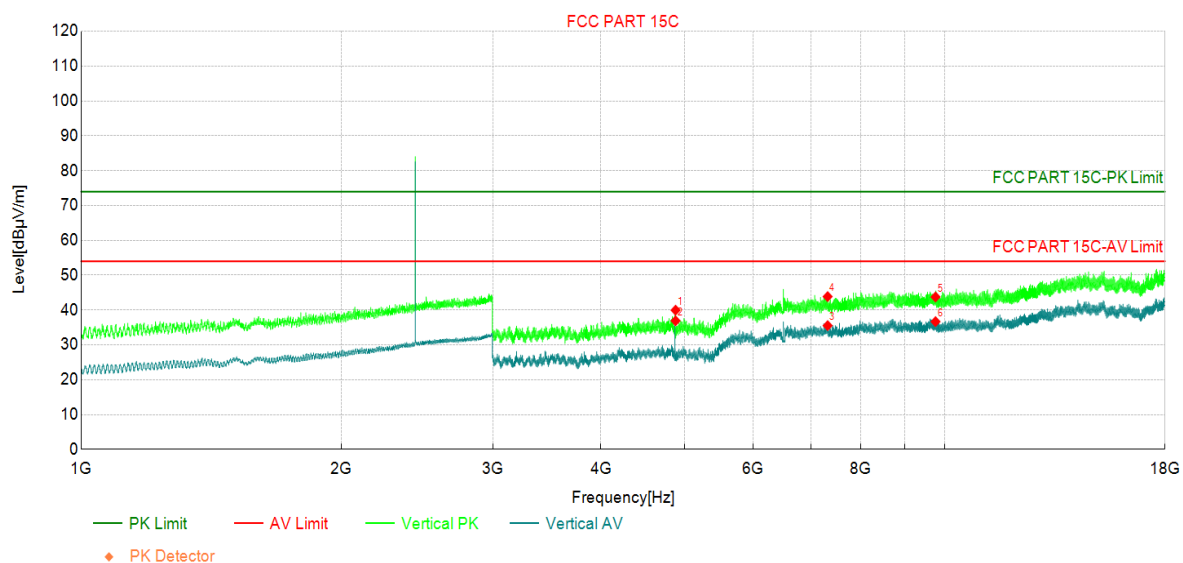
NO	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Det	Pol	Verdict
1	4880.00	44.20	38.12	-6.08	74.00	35.88	PK	Horizo	PASS
2	4880.00	38.13	32.05	-6.08	54.00	21.95	AV	Horizo	PASS
3	7320.00	38.93	41.73	2.80	74.00	32.27	PK	Horizo	PASS
4	7320.00	31.10	33.90	2.80	54.00	20.10	AV	Horizo	PASS
5	9760.00	28.85	34.98	6.13	54.00	19.02	AV	Horizo	PASS
6	9760.00	36.41	42.54	6.13	74.00	31.46	PK	Horizo	PASS

Test Report

Project Information

Profile:	2521079R	EUT:	AI Dev Kit
Mode:	Mode1:Transmit at 2440MHz by LE 1M	Voltage:	DC: 5Vdc
Environment:	Temp: 25°C ; Humi:60%	Engineer	Reyn Chen
Test Standard:	FCC PART 15C		

Test Graph



Suspected Data List

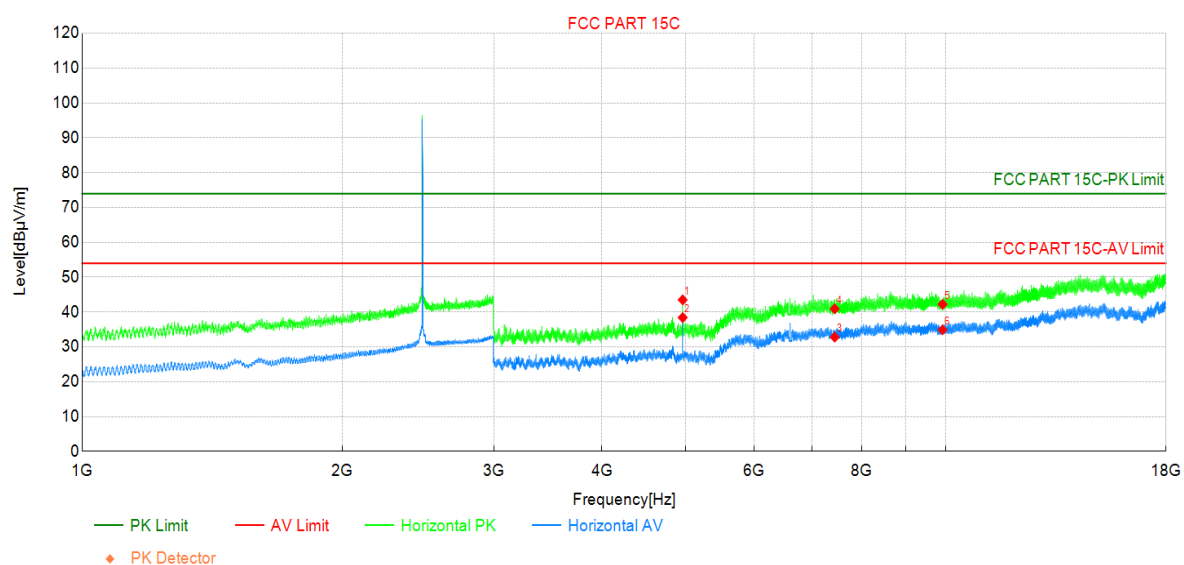
NO	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Det	Pol	Verdict
1	4880.00	46.04	39.96	-6.08	74.00	34.04	PK	Vertic	PASS
2	4880.00	42.99	36.91	-6.08	54.00	17.59	AV	Vertic	PASS
3	7320.00	32.72	35.52	2.80	54.00	18.48	AV	Vertic	PASS
4	7320.00	41.05	43.85	2.80	74.00	30.15	PK	Vertic	PASS
5	9760.00	37.61	43.74	6.13	74.00	30.26	PK	Vertic	PASS
6	9760.00	30.54	36.67	6.13	54.00	17.33	AV	Vertic	PASS

Test Report

Project Information

Profile:	2521079R	EUT:	AI Dev Kit
Mode:	Mode1:Transmit at 2480MHz by LE 1M	Voltage:	DC: 5Vdc
Environment:	Temp: 25°C ; Humi:60%	Engineer	Reyn Chen
Test Standard:	FCC PART 15C		

Test Graph



Suspected Data List

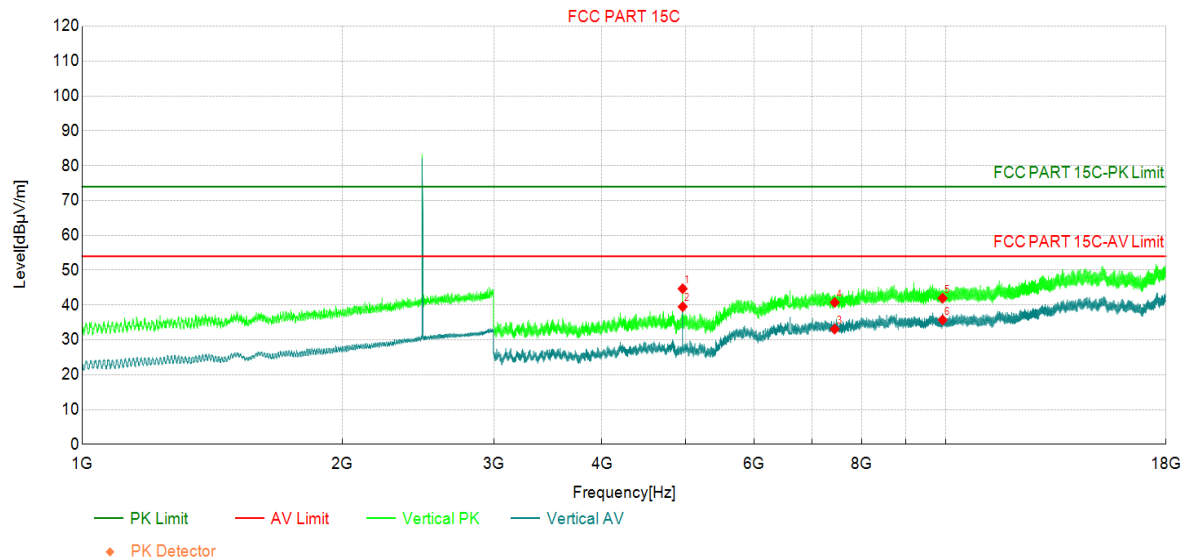
NO	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Det	Pol	Verdict
1	4960.00	48.76	43.49	-5.27	74.00	30.51	PK	Horizo	PASS
2	4960.00	43.67	38.40	-5.27	54.00	15.60	AV	Horizo	PASS
3	7440.00	30.24	32.80	2.56	54.00	21.20	AV	Horizo	PASS
4	7440.00	38.35	40.91	2.56	74.00	33.09	PK	Horizo	PASS
5	9920.00	36.60	42.22	5.62	74.00	31.78	PK	Horizo	PASS
6	9920.00	29.29	34.91	5.62	54.00	19.09	AV	Horizo	PASS

Test Report

Project Information

Profile:	2521079R	EUT:	AI Dev Kit
Mode:	Mode1:Transmit at 2480MHz by LE 1M	Voltage:	DC: 5Vdc
Environment:	Temp: 25°C ; Humi:60%	Engineer	Reyn Chen
Test Standard:	FCC PART 15C		

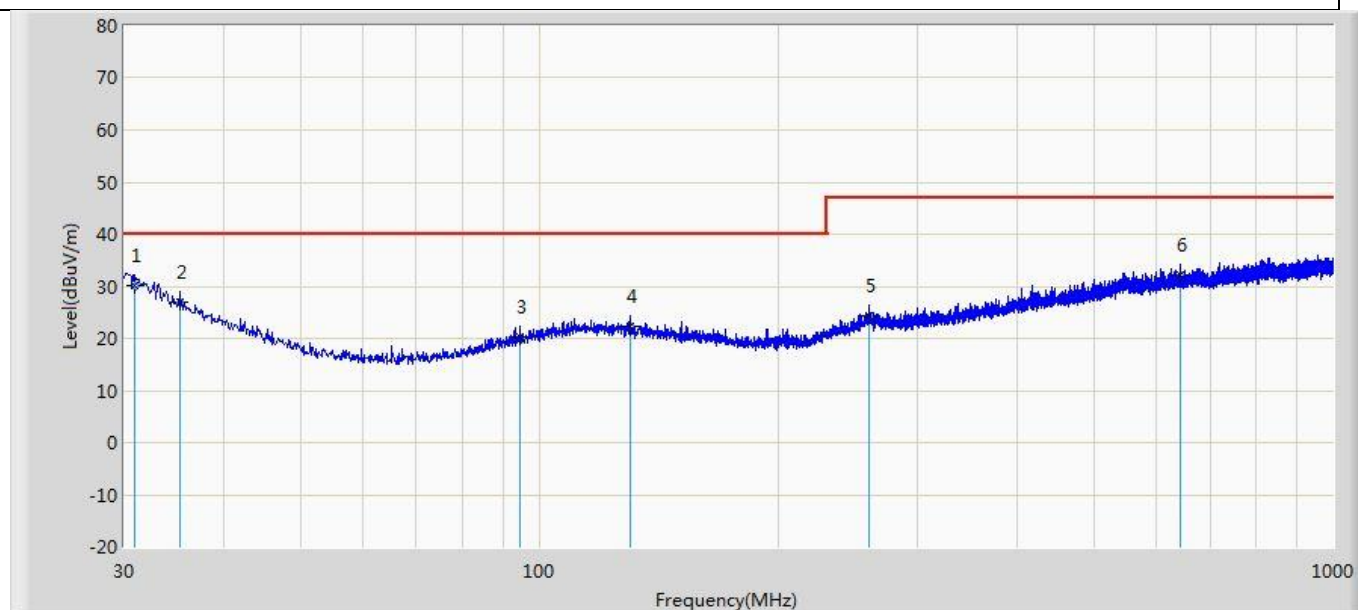
Test Graph



Suspected Data List

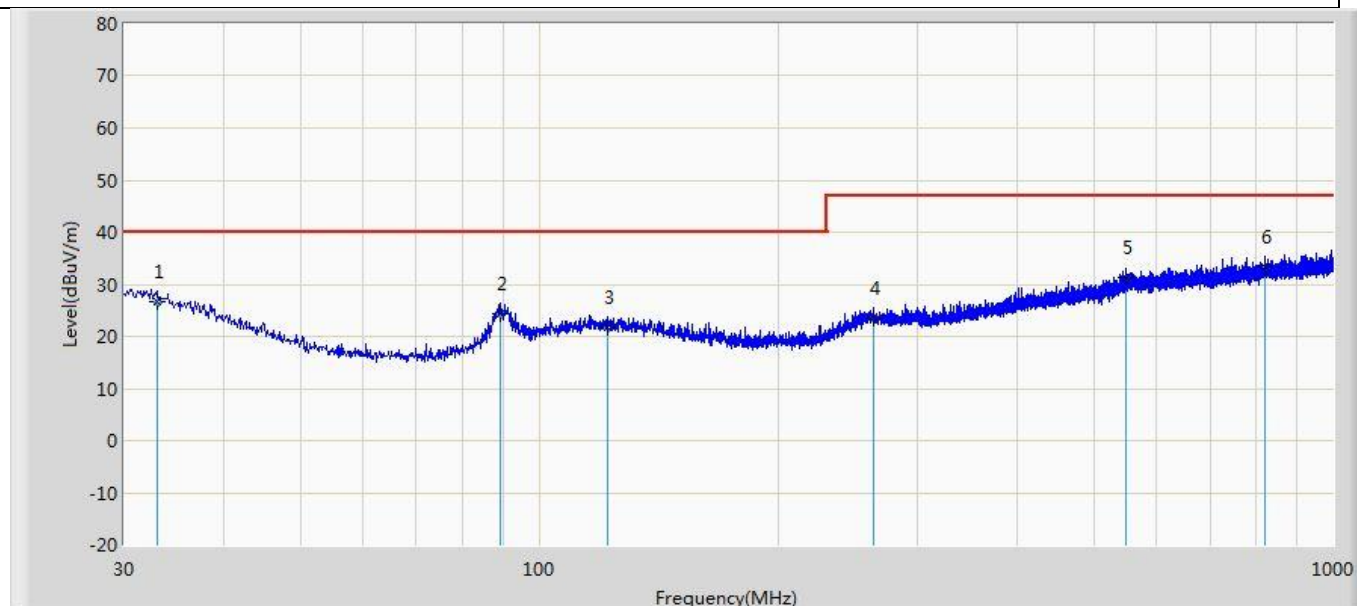
NO	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Det	Pol	Verdict
1	4960.00	49.95	44.68	-5.27	74.00	29.32	PK	Vertic	PASS
2	4960.00	44.79	39.52	-5.27	54.00	14.48	AV	Vertic	PASS
3	7440.00	30.53	33.09	2.56	54.00	20.91	AV	Vertic	PASS
4	7440.00	38.17	40.73	2.56	74.00	33.27	PK	Vertic	PASS
5	9920.00	36.34	41.96	5.62	74.00	32.04	PK	Vertic	PASS
6	9920.00	30.10	35.72	5.62	54.00	18.28	AV	Vertic	PASS

Profile: 2521079R	Page No.: 1
Engineer: Yuliu	
Site: AC2	Time: 2025/03/31
Limit: EN 55032_RE (3m)_Class B	Margin: 0
Probe: CBL6112B_2933(30-1000MHz)	Polarity: Horizontal
EUT: AI Dev Kit	Power: DC 5 Vdc
Note: Transmit at	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	31.200	30.483	5.803	-9.517	40.000	24.680	QP
2		35.424	27.379	4.739	-12.621	40.000	22.640	QP
3		94.957	20.511	3.579	-19.489	40.000	16.932	QP
4		130.452	22.536	3.655	-17.464	40.000	18.881	QP
5		260.271	24.571	3.277	-22.429	47.000	21.294	QP
6		642.704	32.360	4.552	-14.640	47.000	27.808	QP

Profile: 2521079R	Page No.: 2
Engineer: Yuliu	
Site: AC2	Time: 2025/03/31
Limit: EN 55032_RE (3m)_Class B	Margin: 0
Probe: CBL6112B_2933(30-1000MHz)	Polarity: Vertical
EUT: AI Dev Kit	Power: DC 5 Vdc
Note: Transmit at	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	33.231	26.928	3.151	-13.072	40.000	23.777	QP
2		89.612	24.647	8.705	-15.353	40.000	15.942	QP
3		122.066	22.010	2.834	-17.990	40.000	19.176	QP
4		264.505	23.799	2.795	-23.201	47.000	21.004	QP
5		549.544	31.439	3.943	-15.561	47.000	27.496	QP
6		822.285	33.457	3.788	-13.543	47.000	29.669	QP

Note:

1. Measurement Level = Reading Level + Factor(Probe+Cable-Amp)
2. The test frequency range, 9kHz~30MHz, worst case are at least 20dB below the limits, therefore no data appear in the report.
3. If the test result on peak is lower than average limit, then average measurement needn't be performed.
4. All test data above 18GHz are noise base, so no data shown in this report.
5. In the report, below 1G, only the verification test is carried out for the worst channel of 1~18G worst mode.
6. The below 1G test data was measured on the worst-case configuration selected from each transmission mode on the low and high channel.

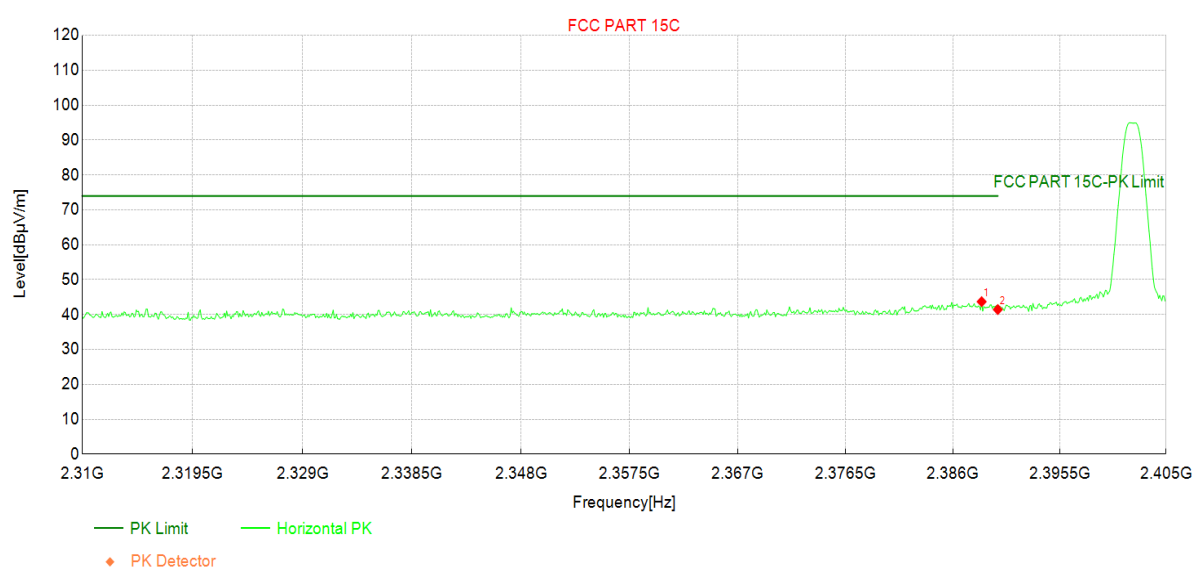
Appendix C: Band edge measurements

Test Report

Project Information

Profile:	2521079R	EUT:	AI Dev Kit
Mode:	Mode1:Transmit at 2402MHz by LE 1M	Voltage:	DC: 5Vdc
Environment:	Temp: 25°C; Humi:60%	Enginee	Reyn Chen
Test Standard:	FCC PART 15C		

Test Graph



Suspected Data List

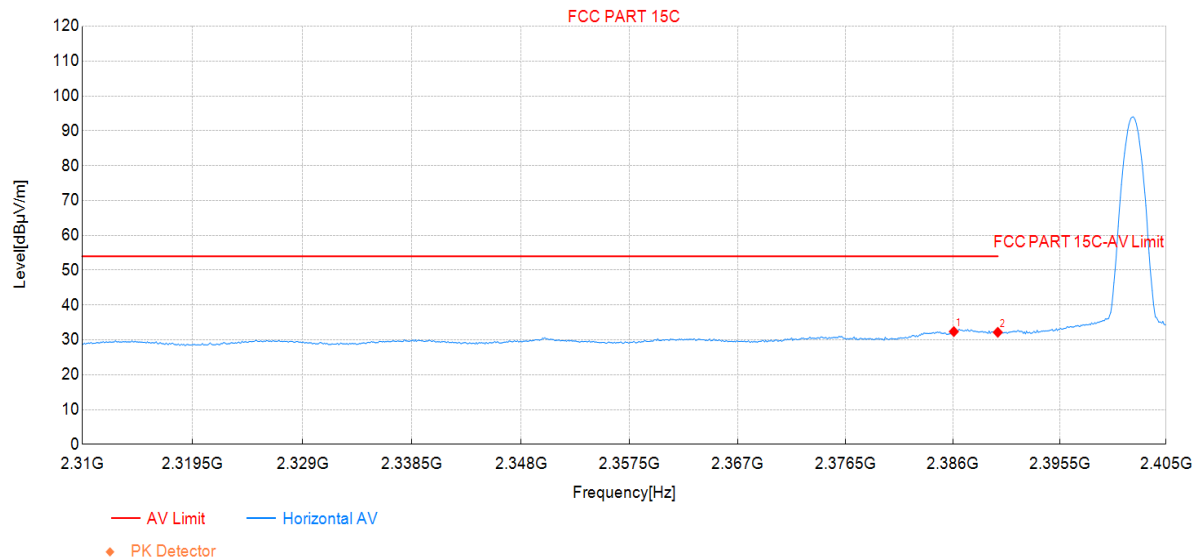
NO	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Det	Pol	Verdict
1	2388.57	40.05	43.69	3.64	74.00	30.31	PK	Horizo	PASS
2	2390.00	37.79	41.44	3.65	74.00	32.56	PK	Horizo	PASS

Test Report

Project Information

Profile:	2521079R	EUT:	AI Dev Kit
Mode:	Mode1:Transmit at 2402MHz by LE 1M	Voltage:	DC: 5Vdc
Environment:	Temp: 25°C ; Humi:60%	Engineer	Reyn Chen
Test Standard:	FCC PART 15C		

Test Graph



Suspected Data List

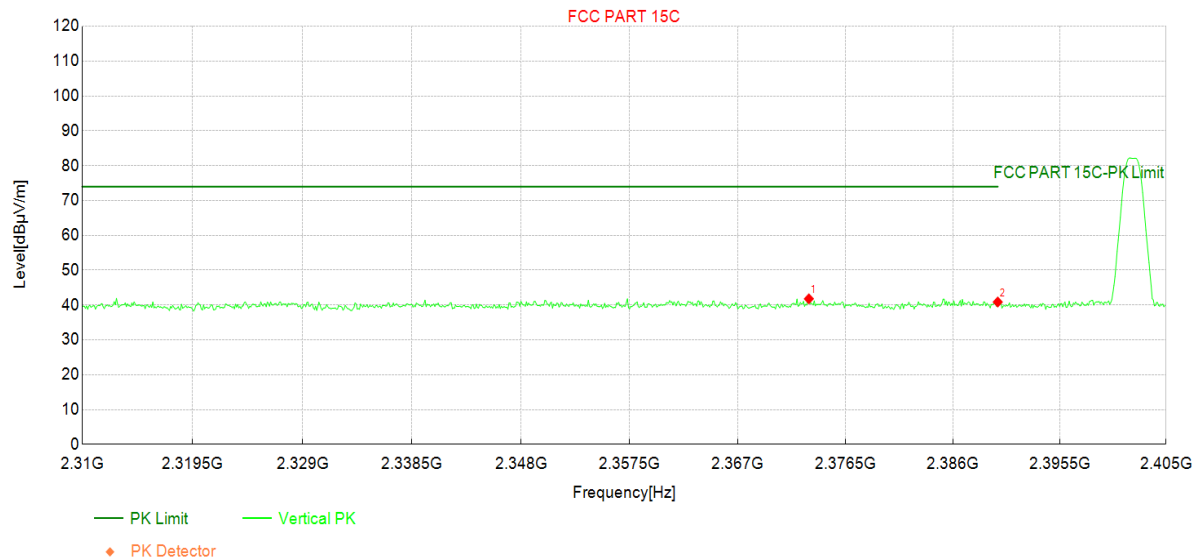
NO	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Det	Pol	Verdict
1	2386.10	28.75	32.38	3.63	54.00	21.62	AV	Horizo	PASS
2	2390.00	28.52	32.17	3.65	54.00	21.83	AV	Horizo	PASS

Test Report

Project Information

Profile:	2521079R	EUT:	AI Dev Kit
Mode:	Mode1:Transmit at 2402MHz by LE 1M	Voltage:	DC: 5Vdc
Environment:	Temp: 25°C ; Humi:60%	Enginee	Reyn Chen
Test Standard:	FCC PART 15C		

Test Graph



Suspected Data List

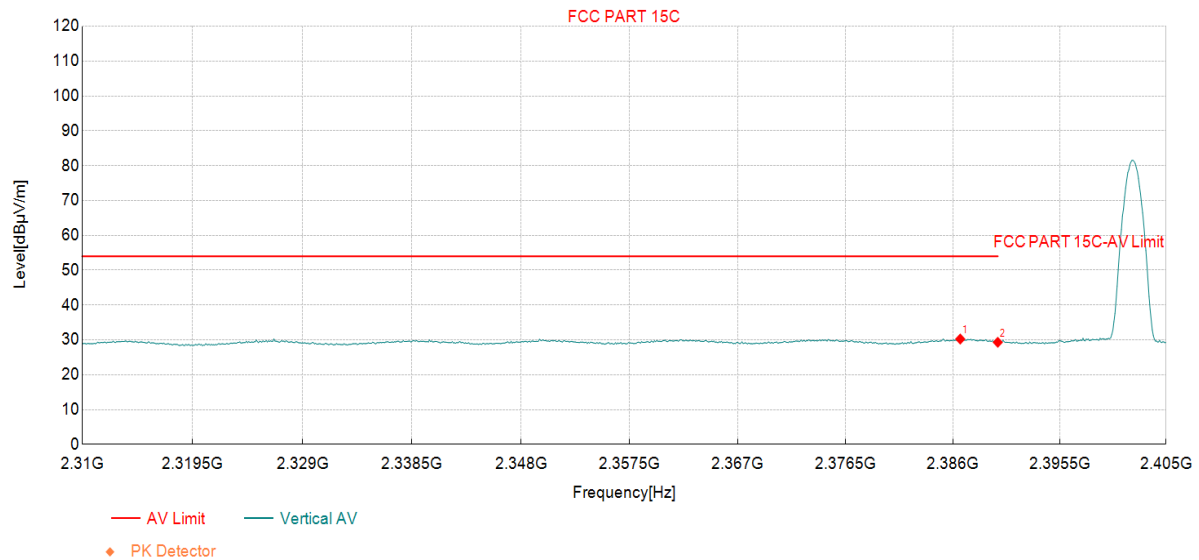
NO	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Det	Pol	Verdict
1	2373.27	38.21	41.78	3.57	74.00	32.22	PK	Vertic	PASS
2	2390.00	37.21	40.86	3.65	74.00	33.14	PK	Vertic	PASS

Test Report

Project Information

Profile:	2521079R	EUT:	AI Dev Kit
Mode:	Mode1:Transmit at 2402MHz by LE 1M	Voltage:	DC: 5Vdc
Environment:	Temp: 25°C ; Humi:60%	Engineer	Reyn Chen
Test Standard:	FCC PART 15C		

Test Graph



Suspected Data List

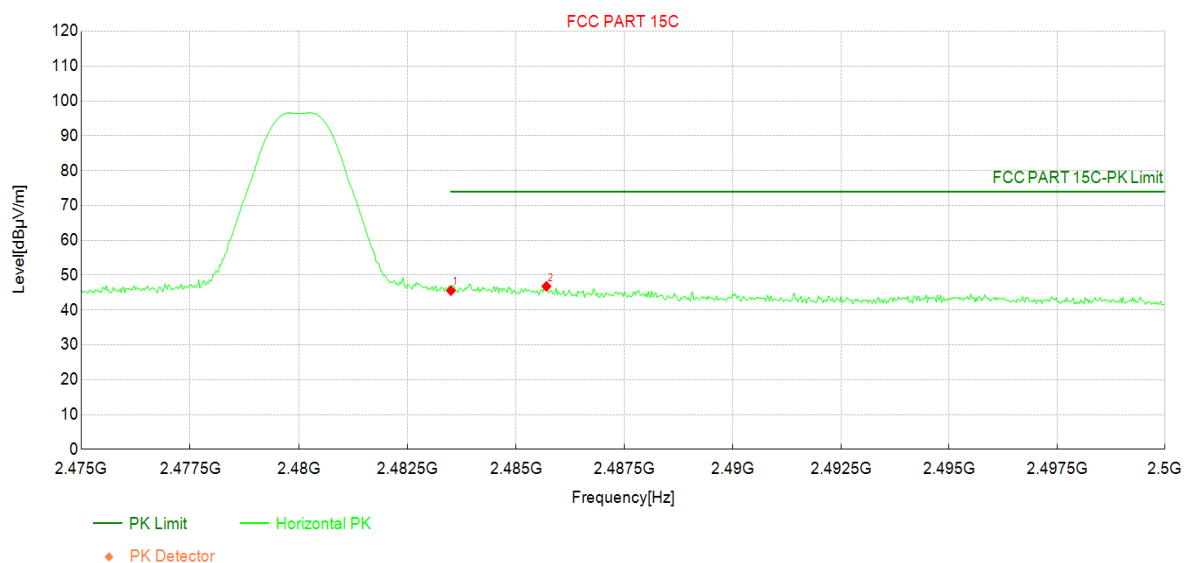
NO	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Det	Pol	Verdict
1	2386.67	26.61	30.24	3.63	54.00	23.76	AV	Vertic	PASS
2	2390.00	25.65	29.30	3.65	54.00	24.70	AV	Vertic	PASS

Test Report

Project Information

Profile:	2521079R	EUT:	AI Dev Kit
Mode:	Mode1:Transmit at 2480MHz by LE 1M	Voltage:	DC: 5Vdc
Environment:	Temp: 25°C ; Humi:60%	Engineer	Reyn Chen
Test Standard:	FCC PART 15C		

Test Graph



Suspected Data List

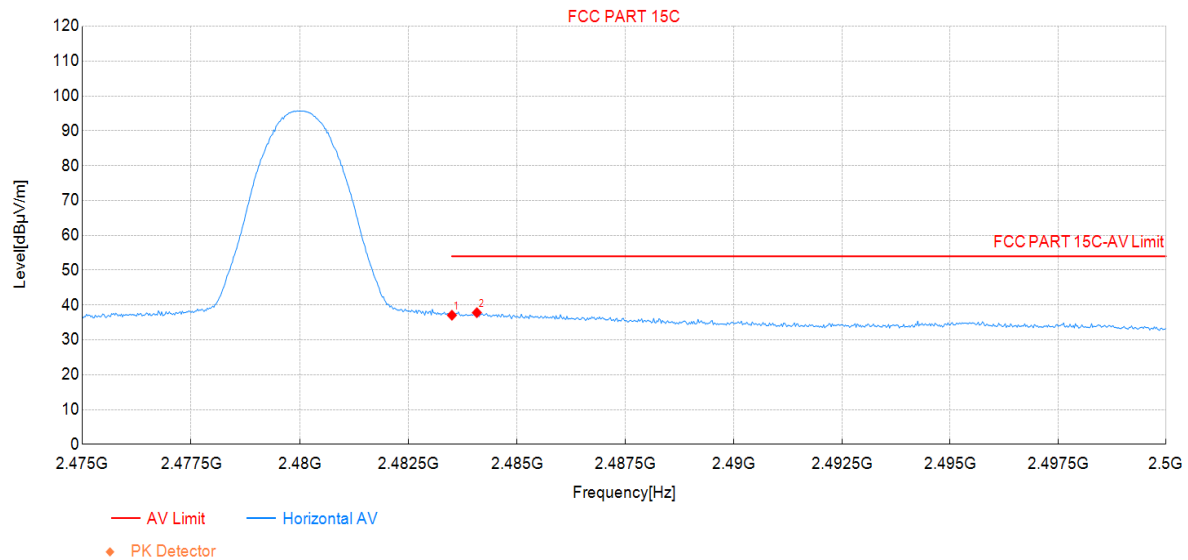
NO	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Det	Pol	Verdict
1	2483.50	41.48	45.57	4.09	74.00	28.43	PK	Horizo	PASS
2	2485.70	42.68	46.79	4.11	74.00	27.21	PK	Horizo	PASS

Test Report

Project Information

Profile:	2521079R	EUT:	AI Dev Kit
Mode:	Mode1:Transmit at 2480MHz by LE 1M	Voltage:	DC: 5Vdc
Environment:	Temp: 25°C ; Humi:60%	Engineer	Reyn Chen
Test Standard:	FCC PART 15C		

Test Graph



Suspected Data List

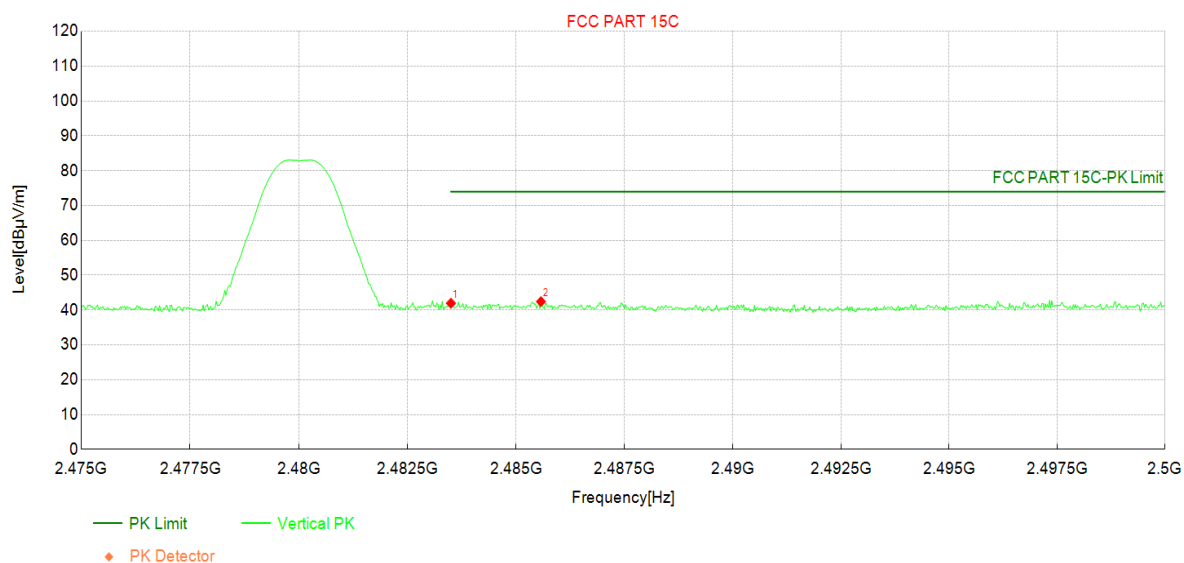
NO	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Det	Pol	Verdict
1	2483.50	32.98	37.07	4.09	54.00	16.93	AV	Horizo	PASS
2	2484.08	33.69	37.80	4.11	54.00	16.20	AV	Horizo	PASS

Test Report

Project Information

Profile:	2521079R	EUT:	AI Dev Kit
Mode:	Mode1:Transmit at 2480MHz by LE 1M	Voltage:	DC: 5Vdc
Environment:	Temp: 25°C ; Humi:60%	Engineer	Reyn Chen
Test Standard:	FCC PART 15C		

Test Graph



Suspected Data List

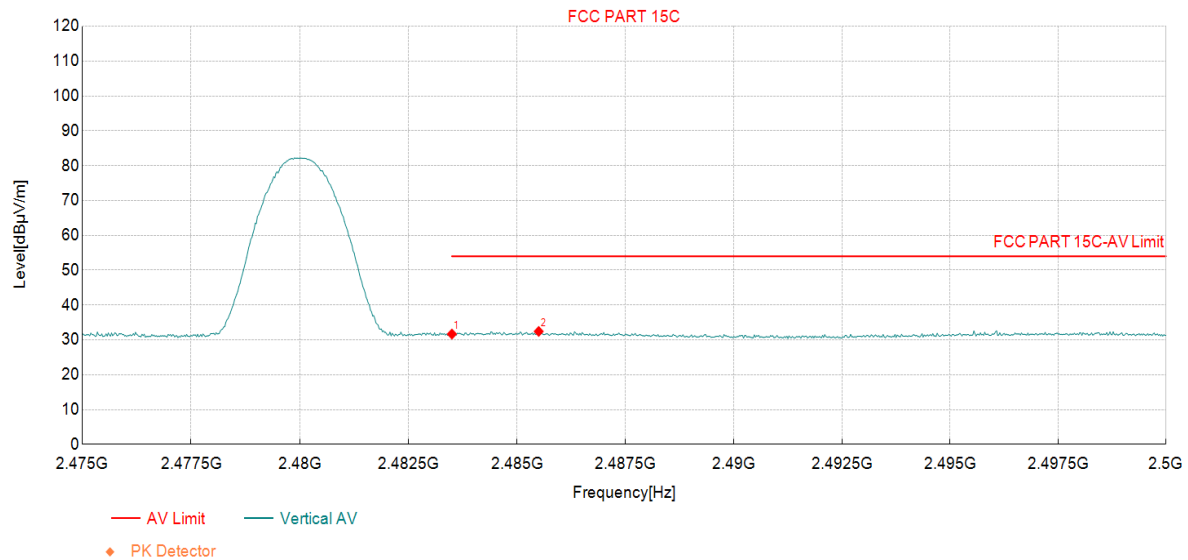
NO	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Det	Pol	Verdict
1	2483.50	37.86	41.95	4.09	74.00	32.05	PK	Vertic	PASS
2	2485.58	38.31	42.42	4.11	74.00	31.58	PK	Vertic	PASS

Test Report

Project Information

Profile:	2521079R	EUT:	AI Dev Kit
Mode:	Mode1:Transmit at 2480MHz by LE 1M	Voltage:	DC: 5Vdc
Environment:	Temp: 25℃; Humi:60%	Engineer	Reyn Chen
Test Standard:	FCC PART 15C		

Test Graph



Suspected Data List

NO	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Det	Pol	Verdict
1	2483.50	27.57	31.66	4.09	54.00	22.34	AV	Vertic	PASS
2	2485.50	28.31	32.42	4.11	54.00	21.58	AV	Vertic	PASS

Note:(1)Level=Reading+Factor

(2)Margin=Limit-Level

The End