

TEST REPORT

Product : Eilik AI Station
Trade mark : Eilik AI Station
Model/Type reference : Ei-AI-Base
Serial Number : N/A
Report Number : EED32R80798702
FCC ID : 2BLNC-EIKSTATION
Date of Issue : Aug. 12, 2025
Test Standards : 47 CFR Part 15 Subpart C
Test result : PASS

Prepared for:

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Aug. 12, 2025



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2 Test Summary

Test Item	Test Requirement	Result
Antenna Requirement	47 CFR Part 15, Subpart C Section 15.203/15.247 (c)	PASS
AC Power Line Conducted Emission	47 CFR Part 15, Subpart C Section 15.207	PASS
Maximum Conducted Output Power	47 CFR Part 15, Subpart C Section 15.247 (b)(1)	NOTE
20dB Emission Bandwidth	47 CFR Part 15, Subpart C Section 15.247 (a)(1)	NOTE
Carrier Frequency Separation	47 CFR Part 15, Subpart C Section 15.247 (a)(1)	NOTE
Number of Hopping Channels	47 CFR Part 15, Subpart C Section 15.247 (a)(1)	NOTE
Time of Occupancy	47 CFR Part 15, Subpart C Section 15.247 (a)(1)	NOTE
Pseudorandom Frequency Hopping Sequence	47 CFR Part 15, Subpart C Section 15.247(b)(4)	NOTE
Band Edge Measurements	47 CFR Part 15, Subpart C Section 15.247(d)	NOTE
Conducted Spurious Emissions	47 CFR Part 15, Subpart C Section 15.247(d)	NOTE
Radiated Spurious emissions	47 CFR Part 15, Subpart C Section 15.205/15.209	PASS
Restricted bands around fundamental frequency	47 CFR Part 15, Subpart C Section 15.205/15.209	PASS

Remark:

NOTE: The test data refer to the module's (FCC ID: 2AL6KBL-M8821CS1) report of GTS20191209006-2-22.

3 General Information

3.1 Client Information

Applicant:	Shenzhen Zhuneng Technology Co., Ltd.
Address of Applicant:	405-1, Honglang North, Zhongli Venture Community, No. 49, Dabao Road, Xin'an Street, Baoan District
Manufacturer:	Shenzhen Zhuneng Technology Co., Ltd.
Address of Manufacturer:	405-1, Honglang North, Zhongli Venture Community, No. 49, Dabao Road, Xin'an Street, Baoan District
Factory:	Kpower Technology Co.,Ltd.
Address of Factory:	No.8, Changhong 4th Road, Zhangkeng Village, Hengli Town, Dongguan City, Guangdong Province

3.2 General Description of EUT

Product Name:	Eilik AI Station
Model No.:	Ei-AI-Base
Test Model No.:	Ei-AI-Base
Trade Mark:	Eilik AI Station
Product Type:	☐ Mobile ☐ Portable ☒ Fix Location
Operation Frequency:	2402MHz-2480MHz
Modulation Technique:	Frequency Hopping Spread Spectrum(FHSS)
Modulation Type:	GFSK, $\pi/4$ DQPSK, 8DPSK
Number of Channel:	79
Hopping Channel Type:	Adaptive Frequency Hopping systems
Antenna Type:	Dual-frequency copper tube antenna
Antenna Gain:	2.7dBi
Power Supply:	Adapter: DC 12V
Test Voltage:	DC 12V
Sample Received Date:	May 22, 2025
Sample tested Date:	Jun. 12, 2025 to Jul. 23, 2025

Operation Frequency each of channel							
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
0	2402	20	2422	40	2442	60	2462
1	2403	21	2423	41	2443	61	2463
2	2404	22	2424	42	2444	62	2464
3	2405	23	2425	43	2445	63	2465
4	2406	24	2426	44	2446	64	2466
5	2407	25	2427	45	2447	65	2467
6	2408	26	2428	46	2448	66	2468
7	2409	27	2429	47	2449	67	2469
8	2410	28	2430	48	2450	68	2470
9	2411	29	2431	49	2451	69	2471
10	2412	30	2432	50	2452	70	2472
11	2413	31	2433	51	2453	71	2473
12	2414	32	2434	52	2454	72	2474
13	2415	33	2435	53	2455	73	2475
14	2416	34	2436	54	2456	74	2476
15	2417	35	2437	55	2457	75	2477
16	2418	36	2438	56	2458	76	2478
17	2419	37	2439	57	2459	77	2479
18	2420	38	2440	58	2460	78	2480
19	2421	39	2441	59	2461		

Note:

In section 15.31(m), regards to the operating frequency range over 10 MHz, the Lowest frequency, the middle frequency, and the highest frequency of channel were selected to perform the test, and the selected channel see below:

Channel	Frequency(MHz)
The lowest channel (CH0)	2402
The middle channel (CH39)	2441
The highest channel (CH78)	2480

3.3 Test Configuration

EUT Test Software Settings:		
Test Software:	Cmd.exe	
EUT Power Grade:	Default (Power level is built-in set parameters and cannot be changed and selected)	
Use test software to set the lowest frequency, the middle frequency and the highest frequency keep transmitting of the EUT.		
Mode	Channel	Frequency(MHz)
DH1/DH3/DH5	CH0	2402
	CH39	2441
	CH78	2480
2DH1/2DH3/2DH5	CH0	2402
	CH39	2441
	CH78	2480
3DH1/3DH3/3DH5	CH0	2402
	CH39	2441
	CH78	2480

3.4 Test Environment

Operating Environment:	
Radiated Spurious Emissions:	
Temperature:	22~25.0 °C
Humidity:	50~55 % RH
Atmospheric Pressure:	1010mbar
Conducted Emissions:	
Temperature:	22~25.0 °C
Humidity:	50~55 % RH
Atmospheric Pressure:	1010mbar
RF Conducted:	
Temperature:	22~25.0 °C
Humidity:	50~55 % RH
Atmospheric Pressure:	1010mbar

3.5 Description of Support Units

The EUT has been tested with associated equipment below.

1) Support equipment

Description	Manufacturer	Model No.	Certification	Supplied by
Netbook	Dell	P77F	FCC&CE	CTI

3.6 Test Location

All tests were performed at:

Centre Testing International Group Co., Ltd

Hongwei Industrial Park, Zone 70, Bao'an District, Shenzhen, Guangdong, China

Telephone: +86 (0) 755 33683668 Fax: +86 (0) 755 33683385

No tests were sub-contracted.

FCC Designation No.: CN1164

3.7 Measurement Uncertainty (95% confidence levels, k=2)

No.	Item	Measurement Uncertainty
1	Radio Frequency	7.9×10^{-8}
2	RF power, conducted	0.46dB (30MHz-1GHz)
		0.55dB (1GHz-40GHz)
3	Radiated Spurious emission test	3.3dB (9kHz-30MHz)
		4.3dB (30MHz-1GHz)
		4.5dB (1GHz-18GHz)
		3.4dB (18GHz-40GHz)
4	Conduction emission	3.5dB (9kHz-150kHz)
		3.1dB (150kHz-30MHz)
5	Temperature test	0.64°C
6	Humidity test	3.8%
7	DC power voltages	0.026%

3.8 Equipment List

Conducted disturbance Test					
Equipment	Manufacturer	Model No.	Serial Number	Cal. date	Cal. Due date
				(mm-dd-yyyy)	(mm-dd-yyyy)
Receiver	R&S	ESCI	100435	04-08-2025	04-07-2026
Temperature/ Humidity Indicator	Defu	TH128	/	03-31-2025	03-30-2026
LISN	R&S	ENV216	100098	09-19-2024	09-18-2025
Barometer	changchun	DYM3	1188	---	---
Test software	Fara	EZ-EMC	EMC-CON 3A1.1	---	---
Capacitive voltage probe	Schwarzbeck	CVP 9222C	00124	06-07-2025	06-06-2026
ISN	TESEQ	ISN T800	30297	12-05-2024	12-04-2025

3M Semi-anechoic Chamber (2)- Radiated disturbance Test					
Equipment	Manufacturer	Model No.	Serial Number	Cal. date	Cal. Due date
				(mm-dd-yyyy)	(mm-dd-yyyy)
3M Chamber & Accessory Equipment	TDK	SAC-3	---	01/13/2024	01/12/2027
Receiver	R&S	ESCI7	100938-003	09/07/2024	09/06/2025
TRILOG Broadband Antenna	schwarzbeck	VULB 9163	9163-618	05/14/2025	05/13/2026
Loop Antenna	Schwarzbeck	FMZB 1519B	1519B-076	04/07/2025	04/06/2026
Microwave Preamplifier	Tonscend	EMC051845SE	980380	12/05/2024	12/04/2025
Horn Antenna	A.H.SYSTEMS	SAS-574	374	05/23/2025	05/22/2026
Horn Antenna	ETS-LINGREN	BBHA 9120D	9120D-1869	04/07/2025	04/06/2026
Preamplifier	Agilent	11909A	12-1	03/03/2025	03/02/2026
Preamplifier	CD	PAP-1840-60	6041.6042	06/19/2024 05/26/2025	06/18/2025 05/25/2026
Test software	Fara	EZ-EMC	EMEC-3A1-Pre	---	---
Cable line	Fulai(7M)	SF106	5219/6A	01/13/2024	01/12/2027
Cable line	Fulai(6M)	SF106	5220/6A	01/13/2024	01/12/2027
Cable line	Fulai(3M)	SF106	5216/6A	01/13/2024	01/12/2027
Cable line	Fulai(3M)	SF106	5217/6A	01/13/2024	01/12/2027

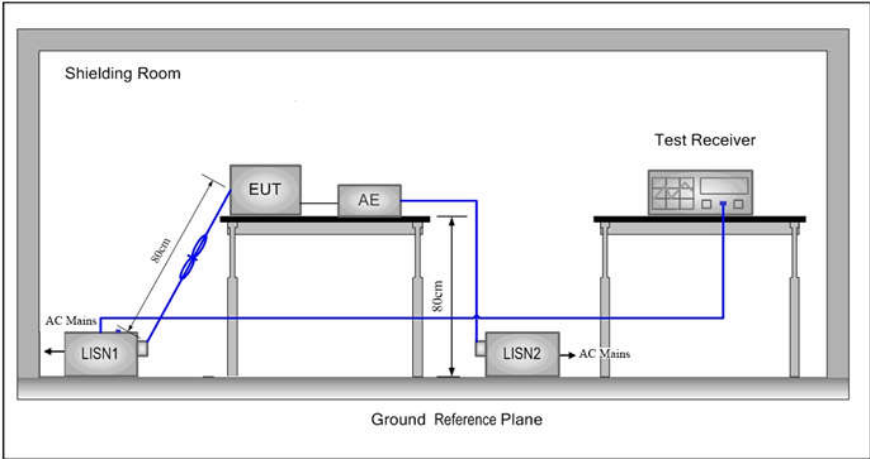
3M full-anechoic Chamber					
Equipment	Manufacturer	Model No.	Serial Number	Cal. Date (mm-dd-yyyy)	Cal. Due date (mm-dd-yyyy)
Fully Anechoic Chamber	TDK	FAC-3	---	01-09-2024	01-08-2027
Receiver	Keysight	N9038A	MY57290136	01-04-2025	01-03-2026
Spectrum Analyzer	Keysight	N9020B	MY57111112	01-14-2025	01-13-2026
Spectrum Analyzer	Keysight	N9030B	MY57140871	01-14-2025	01-13-2026
TRILOG Broadband Antenna	Schwarzbeck	VULB 9163	9163-1148	04-12-2025	04-11-2026
Horn Antenna	Schwarzbeck	BBHA 9170	9170-832	04-12-2025	04-11-2026
Horn Antenna	ETS-LINDGREN	3117	57407	07-03-2024 06-29-2025	07-02-2025 06-28-2026
Preamplifier	EMCI	EMC001330	980563	03-03-2025	03-02-2026
Preamplifier	Tonscend	TAP-011858	AP21B806112	07-18-2024 07-07-2025	07-17-2025 07-06-2026
Preamplifier	Tonscend	EMC051845SE	980380	12-05-2024	12-04-2025
Communication test set	R&S	CMW500	102898	01-04-2025	01-03-2026
Temperature/ Humidity Indicator	biaozhi	GM1360	EE1186631	03-31-2025	03-30-2026
RSE Automatic test software	JS Tonscend	JS36-RSE	V4.0.0.0	---	---
Cable line	Times	SFT205-NMSM-2.50M	394812-0001	01-09-2024	01-08-2027
Cable line	Times	SFT205-NMSM-2.50M	394812-0002	01-09-2024	01-08-2027
Cable line	Times	SFT205-NMSM-2.50M	394812-0003	01-09-2024	01-08-2027
Cable line	Times	SFT205-NMSM-2.50M	393495-0001	01-09-2024	01-08-2027
Cable line	Times	EMC104-NMNM-1000	SN160710	01-09-2024	01-08-2027
Cable line	Times	SFT205-NMSM-3.00M	394813-0001	01-09-2024	01-08-2027
Cable line	Times	SFT205-NMNM-1.50M	381964-0001	01-09-2024	01-08-2027
Cable line	Times	SFT205-NMSM-7.00M	394815-0001	01-09-2024	01-08-2027
Cable line	Times	HF160-KMKM-3.00M	393493-0001	01-09-2024	01-08-2027

4 Test results and Measurement Data

4.1 Antenna Requirement

Standard requirement:	47 CFR Part 15C Section 15.203 /247(c)
15.203 requirement: An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited. 15.247(b) (4) requirement: The conducted output power limit specified in paragraph (b) of this section is based on the use of antennas with directional gains that do not exceed 6 dBi. Except as shown in paragraph (c) of this section, if transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(1), (b)(2), and (b)(3) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.	
EUT Antenna:	Please see Internal photos
The antenna is Dual-frequency copper tube antenna. The best case gain of the antenna is 2.7dBi.	

4.2 AC Power Line Conducted Emissions

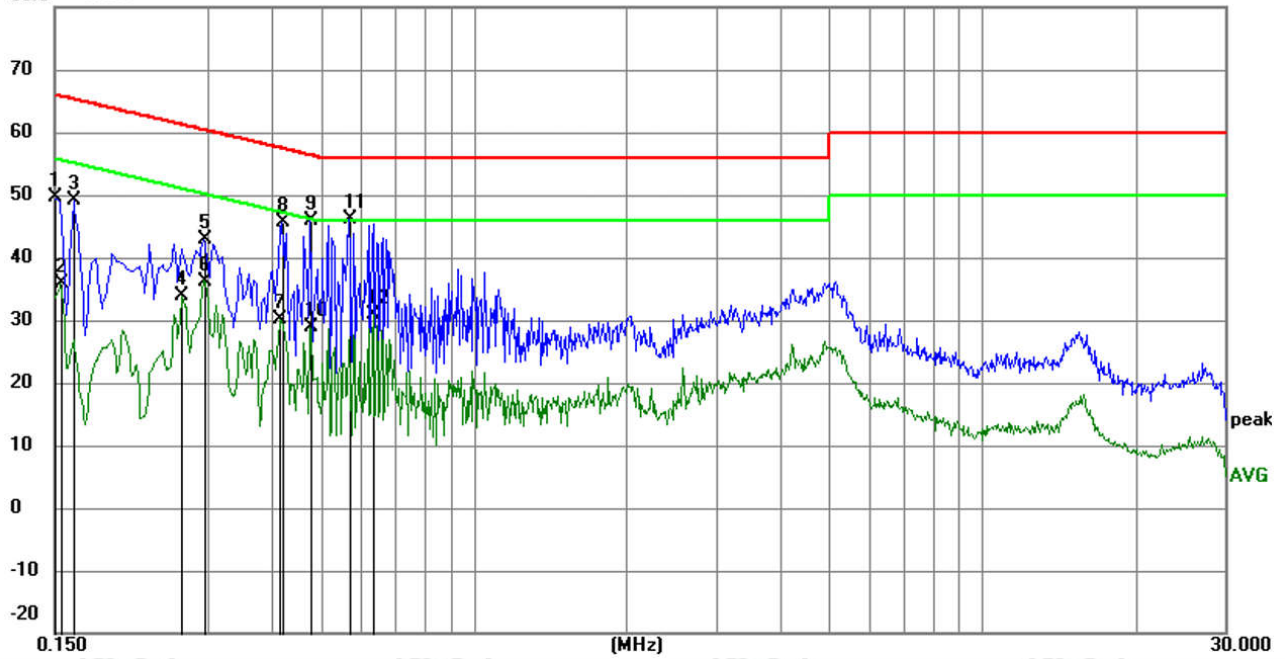
Test Requirement:	47 CFR Part 15C Section 15.207		
Test Method:	ANSI C63.10: 2013		
Test Frequency Range:	150kHz to 30MHz		
Receiver setup:	RBW=9 kHz, VBW=30 kHz, Sweep time=auto		
Limit:	Frequency range (MHz)	Limit (dBuV)	
		Quasi-peak	Average
	0.15-0.5	66 to 56*	56 to 46*
	0.5-5	56	46
	5-30	60	50
* Decreases with the logarithm of the frequency.			
Test Setup:			
Test Procedure:	1) The mains terminal disturbance voltage test was conducted in a shielded room. 2) The EUT was connected to AC power source through a LISN 1 (Line Impedance Stabilization Network) which provides a 50Ω/50μH + 5Ω linear impedance. The power cables of all other units of the EUT were connected to a second LISN 2, which was bonded to the ground reference plane in the same way as the LISN 1 for the unit being measured. A multiple socket outlet strip was used to connect multiple power cables to a single LISN provided the rating of the LISN was not exceeded. 3) The tabletop EUT was placed upon a non-metallic table 0.8m above the ground reference plane. And for floor-standing arrangement, the EUT was placed on the horizontal ground reference plane, 4) The test was performed with a vertical ground reference plane. The rear of the EUT shall be 0.4 m from the vertical ground reference plane. The vertical ground reference plane was bonded to the horizontal ground reference plane. The LISN 1 was placed 0.8 m from the boundary of the unit under test and bonded to a ground reference plane for LISNs mounted on top of the ground reference plane. This distance was between the closest points of the LISN 1 and the EUT. All other units of the EUT and associated equipment was at least 0.8 m from the LISN 2. 5) In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to		

	ANSI C63.10: 2013 on conducted measurement.
Exploratory Test Mode:	Non-hopping transmitting mode with all kind of modulation and all kind of data type at the lowest, middle, high channel.
Final Test Mode:	Through Pre-scan, find the DH5 of data type and GFSK modulation at the lowest channel is the worst case. Only the worst case is recorded in the report.
Test Results:	Pass

Measurement Data

Live line:

80.0 dBuV



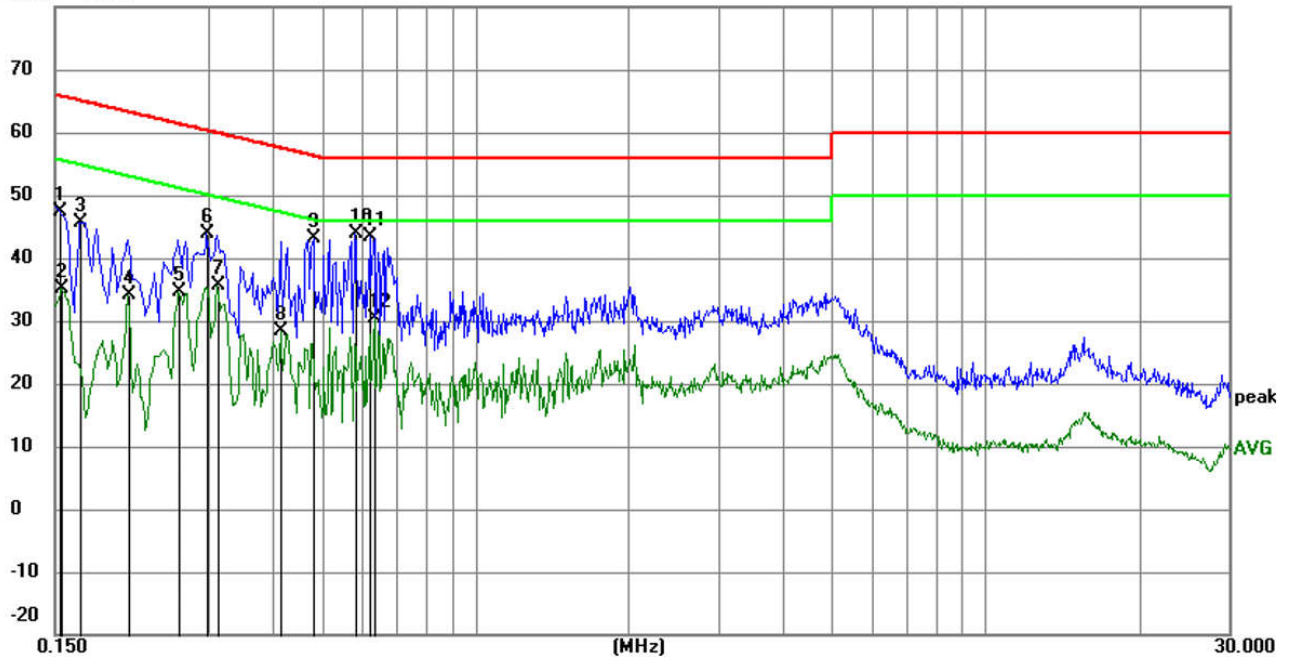
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Margin dB	Detector	Comment
1		0.1500	39.39	10.28	49.67	66.00	-16.33	QP	
2		0.1545	25.58	10.28	35.86	55.75	-19.89	AVG	
3		0.1635	38.78	10.26	49.04	65.28	-16.24	QP	
4		0.2670	23.79	10.16	33.95	51.21	-17.26	AVG	
5		0.2940	32.77	10.13	42.90	60.41	-17.51	QP	
6		0.2940	26.12	10.13	36.25	50.41	-14.16	AVG	
7		0.4155	20.10	10.09	30.19	47.54	-17.35	AVG	
8		0.4200	35.50	10.09	45.59	57.45	-11.86	QP	
9		0.4785	35.68	10.08	45.76	56.37	-10.61	QP	
10		0.4785	18.80	10.08	28.88	46.37	-17.49	AVG	
11	*	0.5685	35.93	10.09	46.02	56.00	-9.98	QP	
12		0.6360	20.70	10.11	30.81	46.00	-15.19	AVG	

Remark:

1. The following Quasi-Peak and Average measurements were performed on the EUT:
2. Final Test Level = Receiver Reading + LISN Factor + Cable Loss.
3. If the Peak value under Average limit, the Average value is not recorded in the report.

Neutral line:

80.0 dBuV

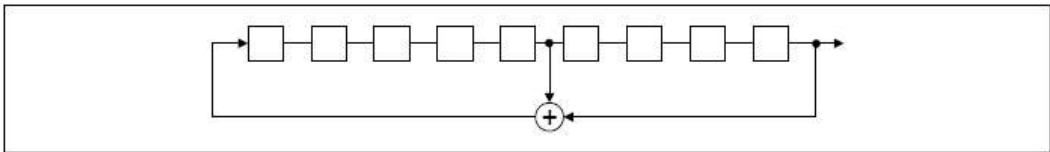
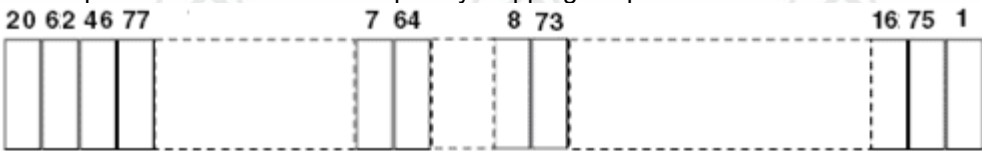


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Margin dB	Detector	Comment
1		0.1532	37.20	10.28	47.48	65.82	-18.34	QP	
2		0.1545	24.86	10.28	35.14	55.75	-20.61	AVG	
3		0.1680	35.45	10.26	45.71	65.06	-19.35	QP	
4		0.2085	23.81	10.20	34.01	53.26	-19.25	AVG	
5		0.2625	24.54	10.16	34.70	51.35	-16.65	AVG	
6		0.2985	33.66	10.13	43.79	60.28	-16.49	QP	
7		0.3120	25.61	10.13	35.74	49.92	-14.18	AVG	
8		0.4155	18.29	10.09	28.38	47.54	-19.16	AVG	
9		0.4830	32.98	10.08	43.06	56.29	-13.23	QP	
10	*	0.5820	33.70	10.10	43.80	56.00	-12.20	QP	
11		0.6225	33.27	10.11	43.38	56.00	-12.62	QP	
12		0.6360	20.35	10.11	30.46	46.00	-15.54	AVG	

Remark:

1. The following Quasi-Peak and Average measurements were performed on the EUT:
2. Final Test Level = Receiver Reading + LISN Factor + Cable Loss.
3. If the Peak value under Average limit, the Average value is not recorded in the report.

4.3 Pseudorandom Frequency Hopping Sequence

Test Requirement:	47 CFR Part 15C Section 15.247 (a)(1), (h) requirement:
The system shall hop to channel frequencies that are selected at the system hopping rate from a Pseudorandom ordered list of hopping frequencies. Each frequency must be used equally on the average by each transmitter. The system receivers shall have input bandwidths that match the hopping channel bandwidths of their corresponding transmitters and shall shift frequencies in synchronization with the transmitted signals. Frequency hopping spread spectrum systems are not required to employ all available hopping channels during each transmission. However, the system, consisting of both the transmitter and the receiver, must be designed to comply with all of the regulations in this section should the transmitter be presented with a continuous data (or information) stream. In addition, a system employing short transmission bursts must comply with the definition of a frequency hopping system and must distribute its transmissions over the minimum number of hopping channels specified in this section. The incorporation of intelligence within a frequency hopping spread spectrum system that permits the system to recognize other users within the spectrum band so that it individually and independently chooses and adapts its hopsets to avoid hopping on occupied channels is permitted. The coordination of frequency hopping systems in any other manner for the express purpose of avoiding the simultaneous occupancy of individual hopping frequencies by multiple transmitters is not permitted.	
Compliance for section 15.247(a)(1)	
According to Bluetooth Core Specification, the pseudorandom sequence may be generated in a nine-stage shift register whose 5th and 9th stage outputs are added in a modulo-two addition stage. And the result is fed back to the input of the first stage. The sequence begins with the first ONE of 9 consecutive ONES; i.e. the shift register is initialized with nine ones. • Number of shift register stages: 9 • Length of pseudo-random sequence: $2^9 - 1 = 511$ bits • Longest sequence of zeros: 8 (non-inverted signal)	
 <i>Linear Feedback Shift Register for Generation of the PRBS sequence</i> An example of Pseudorandom Frequency Hopping Sequence as follow: 	
Each frequency used equally on the average by each transmitter. According to Bluetooth Core Specification, Bluetooth receivers are designed to have input and IF bandwidths that match the hopping channel bandwidths of any Bluetooth transmitters and shift frequencies in synchronization with the transmitted signals.	
Compliance for section 15.247(g)	
According to Bluetooth Core Specification, the Bluetooth system transmits the packet with the pseudorandom hopping frequency with a continuous data and the short burst transmission from the Bluetooth system is also transmitted under the frequency hopping system with the pseudorandom	

hopping frequency system.

Compliance for section 15.247(h)

According to Bluetooth Core specification, the Bluetooth system incorporates with an adaptive system to detect other user within the spectrum band so that it individually and independently to avoid hopping on the occupied channels.

According to the Bluetooth Core specification, the Bluetooth system is designed not have the ability to coordinated with other FHSS System in an effort to avoid the simultaneous occupancy of individual hopping frequencies by multiple transmitter.

4.4 Radiated Spurious Emission & Restricted bands

Test Requirement:	47 CFR Part 15C Section 15.209 and 15.205				
Test Method:	ANSI C63.10: 2013				
Test Site:	Measurement Distance: 3m (Semi-Anechoic Chamber)				
Receiver Setup:	Frequency	Detector	RBW	VBW	Remark
	0.009MHz-0.090MHz	Peak	10kHz	30kHz	Peak
	0.009MHz-0.090MHz	Average	10kHz	30kHz	Average
	0.090MHz-0.110MHz	Quasi-peak	10kHz	30kHz	Quasi-peak
	0.110MHz-0.490MHz	Peak	10kHz	30kHz	Peak
	0.110MHz-0.490MHz	Average	10kHz	30kHz	Average
	0.490MHz -30MHz	Quasi-peak	10kHz	30kHz	Quasi-peak
	30MHz-1GHz	Peak	100 kHz	300kHz	Peak
	Above 1GHz	Peak	1MHz	3MHz	Peak
		Peak	1MHz	10kHz	Average
Limit:	Frequency	Field strength (microvolt/meter)	Limit (dBuV/m)	Remark	Measurement distance (m)
	0.009MHz-0.490MHz	2400/F(kHz)	-	-	300
	0.490MHz-1.705MHz	24000/F(kHz)	-	-	30
	1.705MHz-30MHz	30	-	-	30
	30MHz-88MHz	100	40.0	Quasi-peak	3
	88MHz-216MHz	150	43.5	Quasi-peak	3
	216MHz-960MHz	200	46.0	Quasi-peak	3
	960MHz-1GHz	500	54.0	Quasi-peak	3
	Above 1GHz	500	54.0	Average	3
	Note: 15.35(b), Unless otherwise specified, the limit on peak radio frequency emissions is 20dB above the maximum permitted average emission limit applicable to the equipment under test. This peak limit applies to the total peak emission level radiated by the device.				

Test Setup:

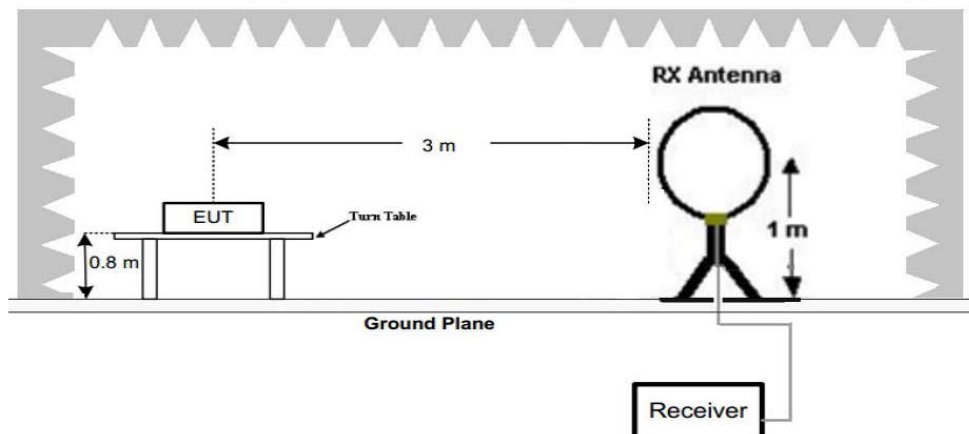


Figure 1. Below 30MHz

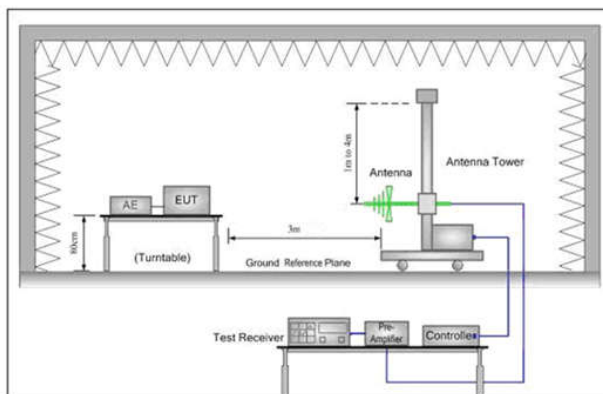


Figure 2. 30MHz to 1GHz

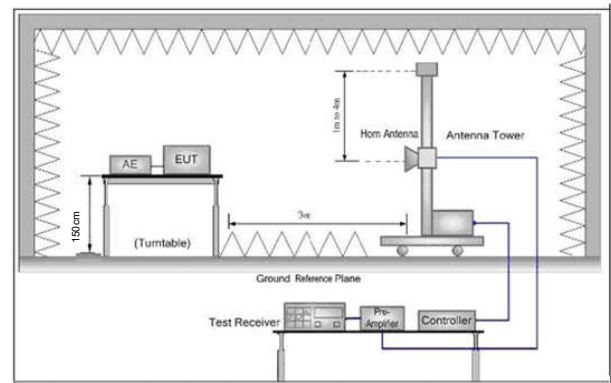


Figure 3. Above 1 GHz

Test Procedure:

- a. 1) Below 1G: The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- 2) Above 1G: The EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- Note: For the radiated emission test above 1GHz:
Place the measurement antenna away from each area of the EUT determined to be a source of emissions at the specified measurement distance, while keeping the measurement antenna aimed at the source of emissions at each frequency of significant emissions, with polarization oriented for maximum response. The measurement antenna may have to be higher or lower than the EUT, depending on the radiation pattern of the emission and staying aimed at the emission source for receiving the maximum signal. The final measurement antenna elevation shall be that which maximizes the emissions. The measurement antenna elevation for maximum emissions shall be restricted to a range of heights of from 1 m to 4 m above the ground or reference ground plane.
- 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 antenna height 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.

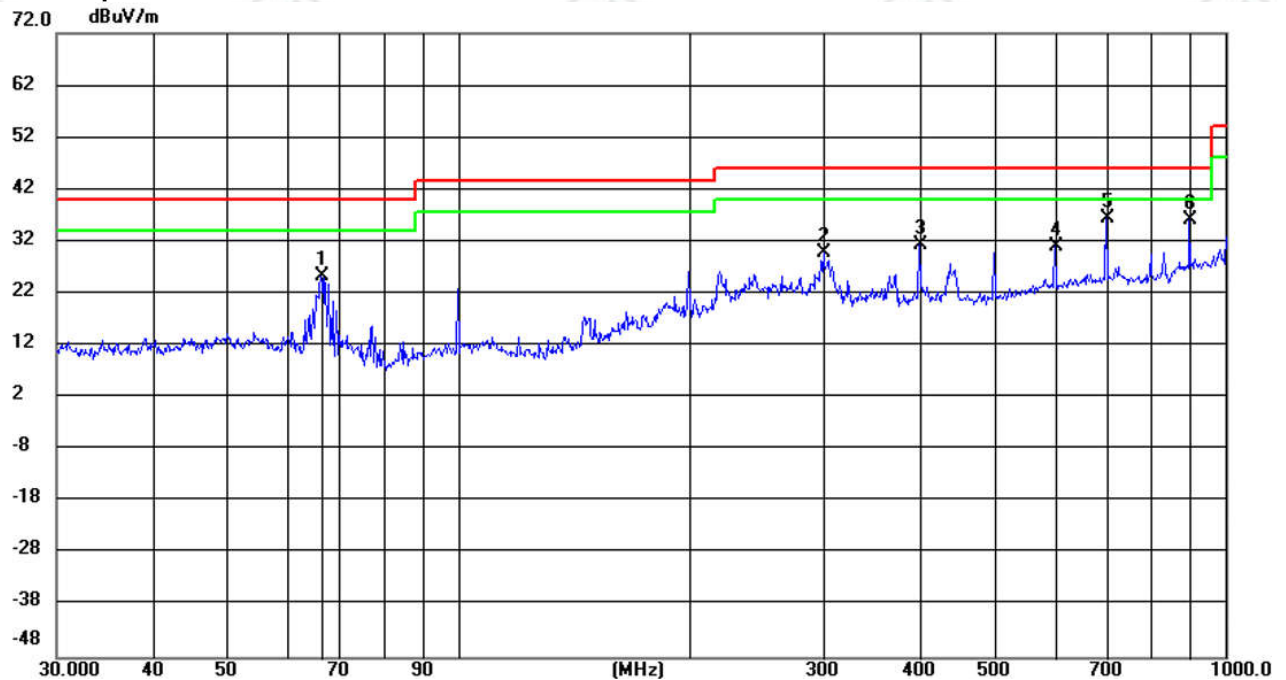
	d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading. e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode. f. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet. g. Test the EUT in the lowest channel (2402MHz),the middle channel (2441MHz),the Highest channel (2480MHz) h. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is the worst case. i. Repeat above procedures until all frequencies measured was complete.
Exploratory Test Mode:	Non-hopping transmitting mode with all kind of modulation and all kind of data type
Final Test Mode:	Through Pre-scan, find the DH5 of data type and GFSK modulation is the worst case. Pretest the EUT at Transmitting mode, For below 1GHz part, through pre-scan, the worst case is the lowest channel. Only the worst case is recorded in the report.
Test Results:	Pass

Radiated Spurious Emission below 1GHz:

During the test, the Radiates Emission from 30MHz to 1GHz was performed in all modes, only the worst case lowest channel of DH5 for GFSK was recorded in the report.

Horizontal:

Test Graph

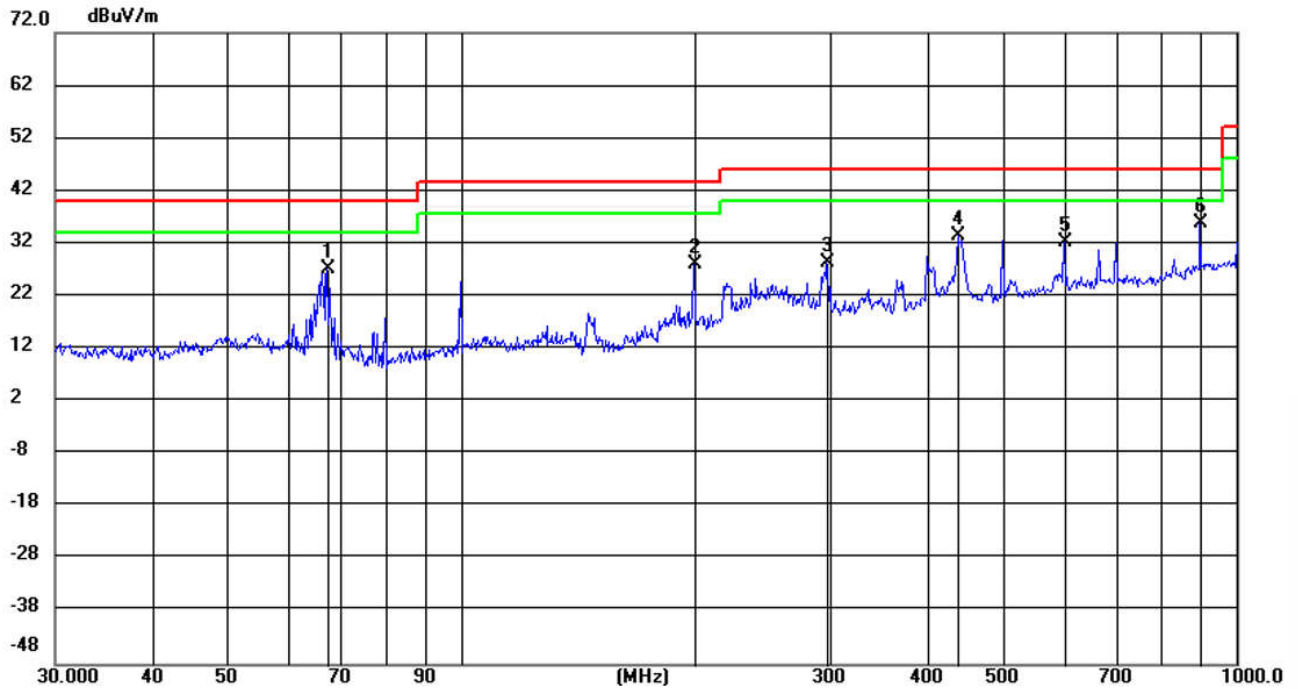


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB/m	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Antenna Height cm	Table Degree degree	Comment
1		66.3940	13.84	11.63	25.47	40.00	-14.53	QP 199	38	
2		299.3682	13.36	16.56	29.92	46.00	-16.08	QP 100	250	
3		400.0108	11.84	19.59	31.43	46.00	-14.57	QP 100	12	
4		600.0571	7.64	23.35	30.99	46.00	-15.01	QP 199	7	
5	*	700.0406	12.32	24.23	36.55	46.00	-9.45	QP 199	121	
6		900.1474	8.75	27.31	36.06	46.00	-9.94	QP 100	2	

Remark:

1. The following Quasi-Peak and Average measurements were performed on the EUT:
2. Final Test Level = Receiver Reading + LISN Factor + Cable Loss.
3. If the Peak value under Average limit, the Average value is not recorded in the report.

Vertical: Test Graph



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB/m	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Antenna Height cm	Table Degree degree	Comment
1		67.2257	15.73	11.40	27.13	40.00	-12.87	QP	200	270	
2		199.9856	15.32	12.78	28.10	43.50	-15.40	QP	100	90	
3		296.7553	12.02	16.45	28.47	46.00	-17.53	QP	200	167	
4		437.5800	13.34	20.05	33.39	46.00	-12.61	QP	100	152	
5		600.0573	9.04	23.35	32.39	46.00	-13.61	QP	100	141	
6	*	899.9896	8.43	27.31	35.74	46.00	-10.26	QP	100	7	

Remark:

1. The following Quasi-Peak and Average measurements were performed on the EUT:
2. Final Test Level = Receiver Reading + LISN Factor + Cable Loss.
3. If the Peak value under Average limit, the Average value is not recorded in the report.

Radiated Spurious Emission above 1GHz:

Mode:			GFSK Transmitting			Channel:		2402 MHz	
NO	Freq. [MHz]	Factor [dB]	Reading [dBμV]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Result	Polarity	Remark
1	1155.2103	11.49	37.50	48.99	74.00	25.01	Pass	H	PK
2	1684.1789	14.02	36.88	50.90	74.00	23.10	Pass	H	PK
3	3547.3365	-13.79	52.92	39.13	74.00	34.87	Pass	H	PK
4	4964.431	-8.06	50.07	42.01	74.00	31.99	Pass	H	PK
5	6864.5076	-3.55	46.93	43.38	74.00	30.62	Pass	H	PK
6	10253.8336	1.98	44.14	46.12	74.00	27.88	Pass	H	PK
7	1145.343	11.47	37.47	48.94	74.00	25.06	Pass	V	PK
8	1583.9056	13.60	36.00	49.60	74.00	24.40	Pass	V	PK
9	3195.013	-14.47	59.18	44.71	74.00	29.29	Pass	V	PK
10	4263.6842	-10.42	51.33	40.91	74.00	33.09	Pass	V	PK
11	6089.656	-5.19	47.53	42.34	74.00	31.66	Pass	V	PK
12	9206.6138	0.28	45.87	46.15	74.00	27.85	Pass	V	PK

Mode:			GFSK Transmitting			Channel:		2441 MHz	
NO	Freq. [MHz]	Factor [dB]	Reading [dBμV]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Result	Polarity	Remark
1	1142.5428	11.45	37.45	48.90	74.00	25.10	Pass	H	PK
2	1696.0464	14.05	36.30	50.35	74.00	23.65	Pass	H	PK
3	3376.3751	-13.99	53.64	39.65	74.00	34.35	Pass	H	PK
4	4881.8755	-8.36	51.31	42.95	74.00	31.05	Pass	H	PK
5	7290.9361	-2.90	47.28	44.38	74.00	29.62	Pass	H	PK
6	11780.1353	2.39	44.97	47.36	74.00	26.64	Pass	H	PK
7	1111.3408	11.29	38.27	49.56	74.00	24.44	Pass	V	PK
8	1709.2473	14.11	35.98	50.09	74.00	23.91	Pass	V	PK
9	3193.0629	-14.48	57.99	43.51	74.00	30.49	Pass	V	PK
10	5068.4379	-7.97	49.25	41.28	74.00	32.72	Pass	V	PK
11	7963.7309	-1.39	49.98	48.59	74.00	25.41	Pass	V	PK
12	11862.0408	2.59	45.54	48.13	74.00	25.87	Pass	V	PK

Mode:			GFSK Transmitting			Channel:		2480 MHz	
NO	Freq. [MHz]	Factor [dB]	Reading [dBμV]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Result	Polarity	Remark
1	1276.8185	11.81	36.85	48.66	74.00	25.34	Pass	H	PK
2	1654.1769	13.91	36.19	50.10	74.00	23.90	Pass	H	PK
3	3802.8035	-12.42	52.94	40.52	74.00	33.48	Pass	H	PK
4	4959.8807	-8.05	52.03	43.98	74.00	30.02	Pass	H	PK
5	7356.5904	-2.90	47.58	44.68	74.00	29.32	Pass	H	PK
6	10672.4615	2.36	42.82	45.18	74.00	28.82	Pass	H	PK
7	1164.5443	11.47	37.37	48.84	74.00	25.16	Pass	V	PK
8	1540.3027	13.49	36.49	49.98	74.00	24.02	Pass	V	PK
9	3198.2632	-14.46	58.36	43.90	74.00	30.10	Pass	V	PK
10	4978.0819	-8.09	50.93	42.84	74.00	31.16	Pass	V	PK
11	7863.6242	-1.55	47.15	45.60	74.00	28.40	Pass	V	PK
12	9633.6922	1.28	45.31	46.59	74.00	27.41	Pass	V	PK

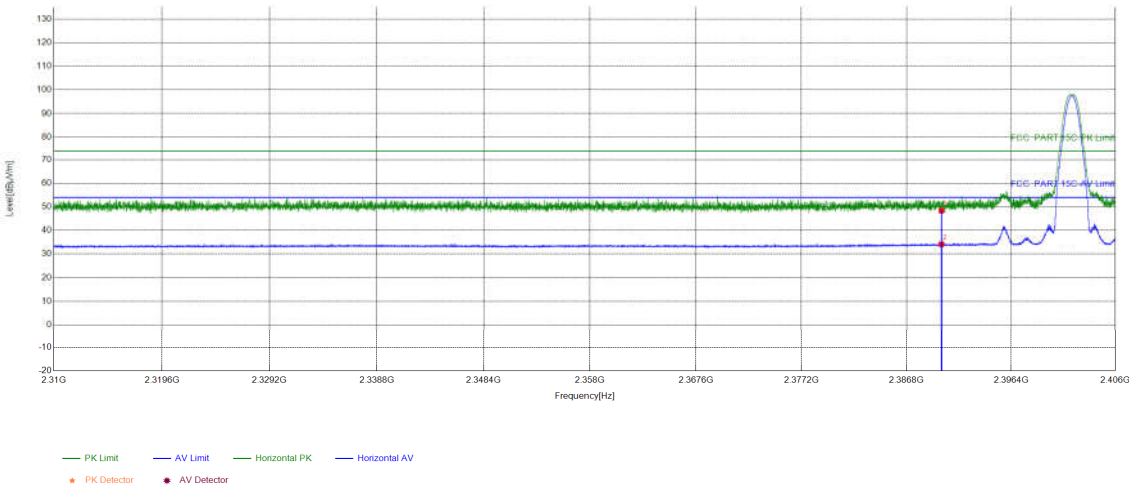
Remark:

- 1) The field strength is calculated by adding the Antenna Factor, Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows:
Final Test Level = Receiver Reading + Antenna Factor + Cable Factor – Preamplifier Factor
- 2) Scan from 9kHz to 25GHz, the disturbance above 10GHz and below 30MHz was very low. As shown in this section, for frequencies above 1GHz, the field strength limits are based on average limits. However, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation. So, only the peak measurements were shown in the report.

Restricted bands:

EUT_Name		Test_Model	
Test_Mode	GFSK Transmitting	Test_Frequency	2402MHz
Tset_Engineer	chenjun	Test_Date	2025/06/24
Remark	21.3°C57.9%/		

Test Graph

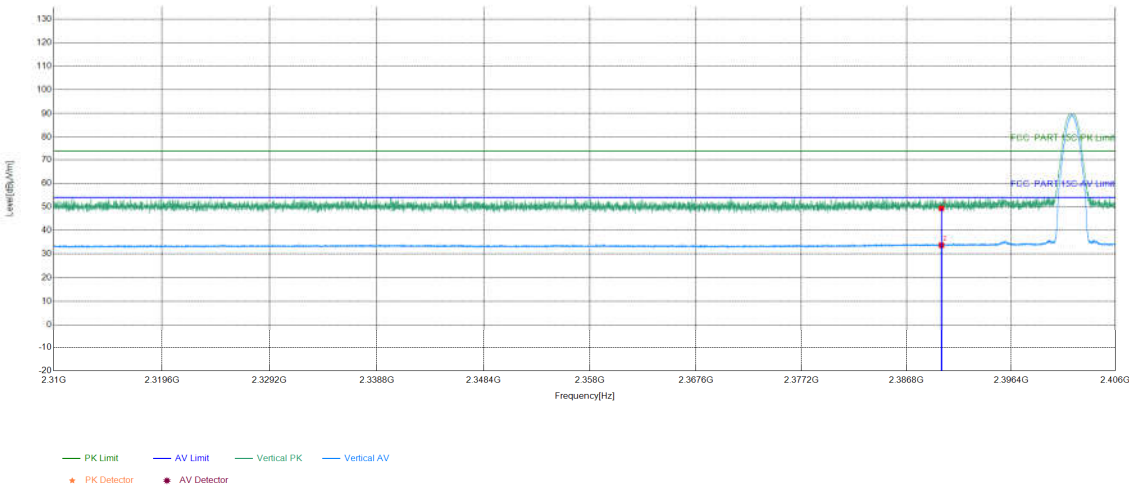


Suspected List

NO	Freq. [MHz]	Factor [dB]	Reading [dBμV]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Result	Polarity	Remark
1	2390	15.96	32.41	48.37	74.00	25.63	PASS	Horizontal	PK
2	2390	15.96	18.19	34.15	54.00	19.85	PASS	Horizontal	AV

EUT_Name		Test_Model	
Test_Mode	GFSK Transmitting	Test_Frequency	2402MHz
Tset_Engineer	chenjun	Test_Date	2025/06/24
Remark	21.3°C57.9%/		

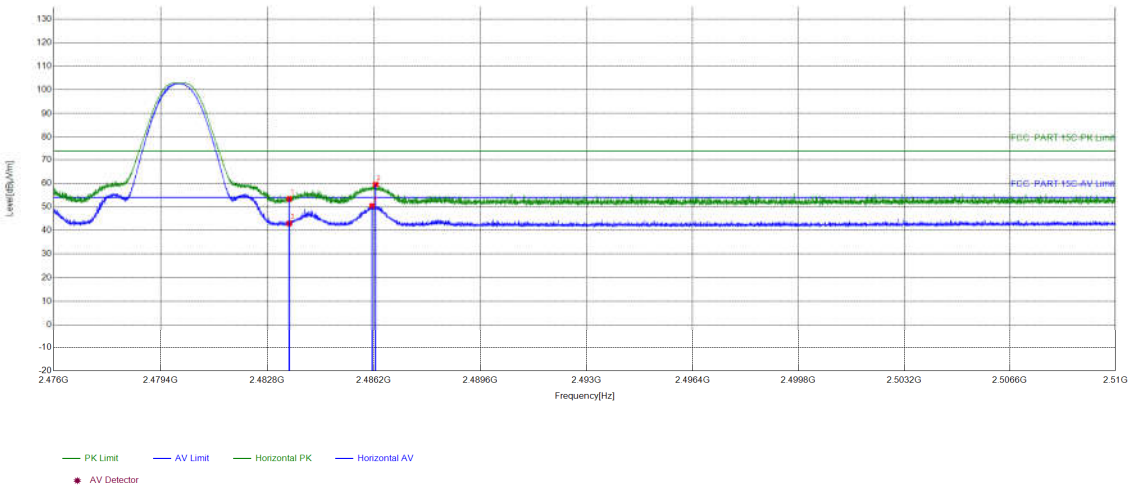
Test Graph



Suspected List									
NO	Freq. [MHz]	Factor [dB]	Reading [dBμV]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Result	Polarity	Remark
1	2390	15.96	33.46	49.42	74.00	24.58	PASS	Vertical	PK
2	2390	15.96	17.78	33.74	54.00	20.26	PASS	Vertical	AV

EUT_Name		Test_Model	
Test_Mode	GFSK Transmitting	Test_Frequency	2480MHz
Tset_Engineer	chenjun	Test_Date	2025/06/24
Remark	21.3°C57.9%/		

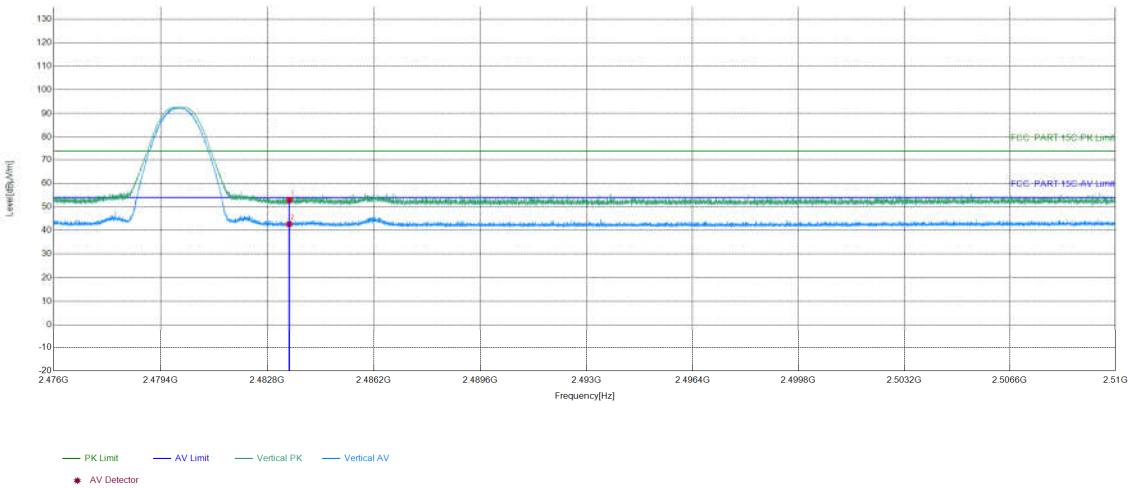
Test Graph



Suspected List									
NO	Freq. [MHz]	Factor [dB]	Reading [dBμV]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Result	Polarity	Remark
1	2483.5	16.29	37.08	53.37	74.00	20.63	PASS	Horizontal	PK
2	2486.258	16.24	43.20	59.44	74.00	14.56	PASS	Horizontal	PK
3	2483.5	16.29	26.69	42.98	54.00	11.02	PASS	Horizontal	AV
4	2486.146	16.24	34.22	50.46	54.00	3.54	PASS	Horizontal	AV

EUT_Name		Test_Model	
Test_Mode	GFSK Transmitting	Test_Frequency	2480MHz
Tset_Engineer	chenjun	Test_Date	2025/06/24
Remark	21.3°C57.9%/		

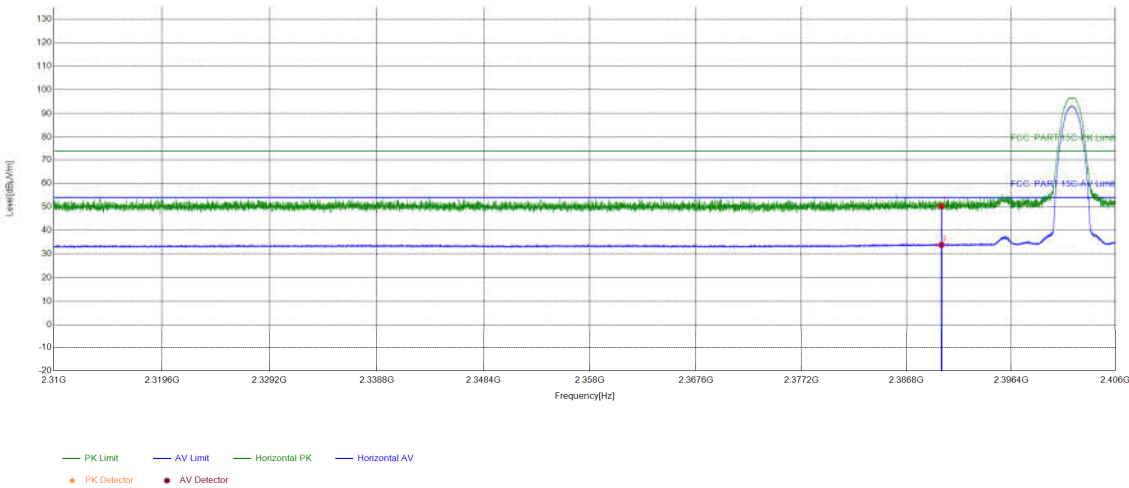
Test Graph



Suspected List									
NO	Freq. [MHz]	Factor [dB]	Reading [dBμV]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Result	Polarity	Remark
1	2483.5	16.29	36.56	52.85	74.00	21.15	PASS	Vertical	PK
2	2483.5	16.29	26.41	42.70	54.00	11.30	PASS	Vertical	AV

EUT_Name		Test_Model	
Test_Mode	π/4DQPSK Transmitting	Test_Frequency	2402MHz
Tset_Engineer	chenjun	Test_Date	2025/06/24
Remark	21.3°C57.9%/		

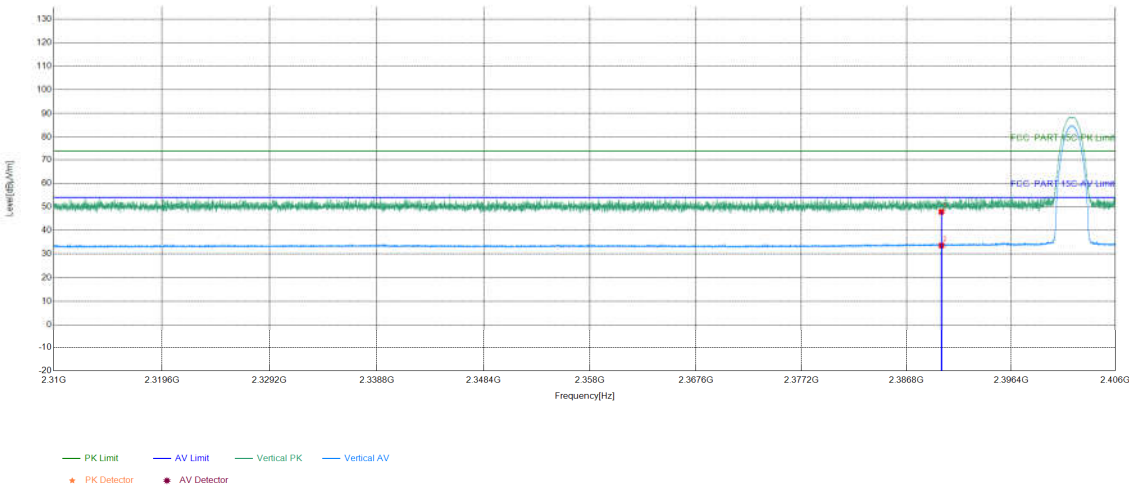
Test Graph



Suspected List									
NO	Freq. [MHz]	Factor [dB]	Reading [dBμV]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Result	Polarity	Remark
1	2390	15.96	34.20	50.16	74.00	23.84	PASS	Horizontal	PK
2	2390	15.96	17.97	33.93	54.00	20.07	PASS	Horizontal	AV

EUT_Name		Test_Model	
Test_Mode	π/4DQPSK Transmitting	Test_Frequency	2402MHz
Tset_Engineer	chenjun	Test_Date	2025/06/24
Remark	21.3°C57.9%/		

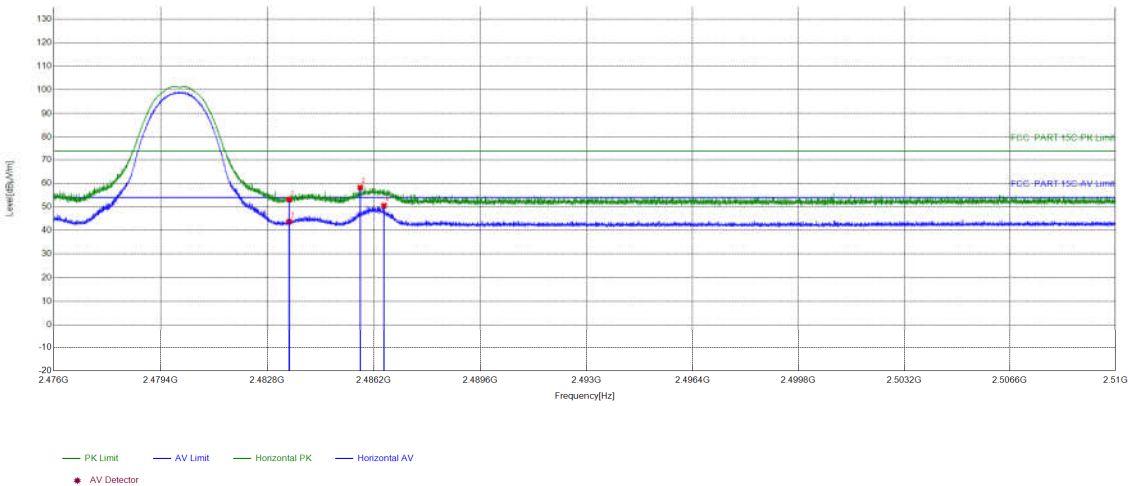
Test Graph



Suspected List									
NO	Freq. [MHz]	Factor [dB]	Reading [dBμV]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Result	Polarity	Remark
1	2390	15.96	31.93	47.89	74.00	26.11	PASS	Vertical	PK
2	2390	15.96	17.66	33.62	54.00	20.38	PASS	Vertical	AV

EUT_Name		Test_Model	
Test_Mode	π/4DQPSK Transmitting	Test_Frequency	2480MHz
Tset_Engineer	chenjun	Test_Date	2025/06/24
Remark	21.3°C57.9%/		

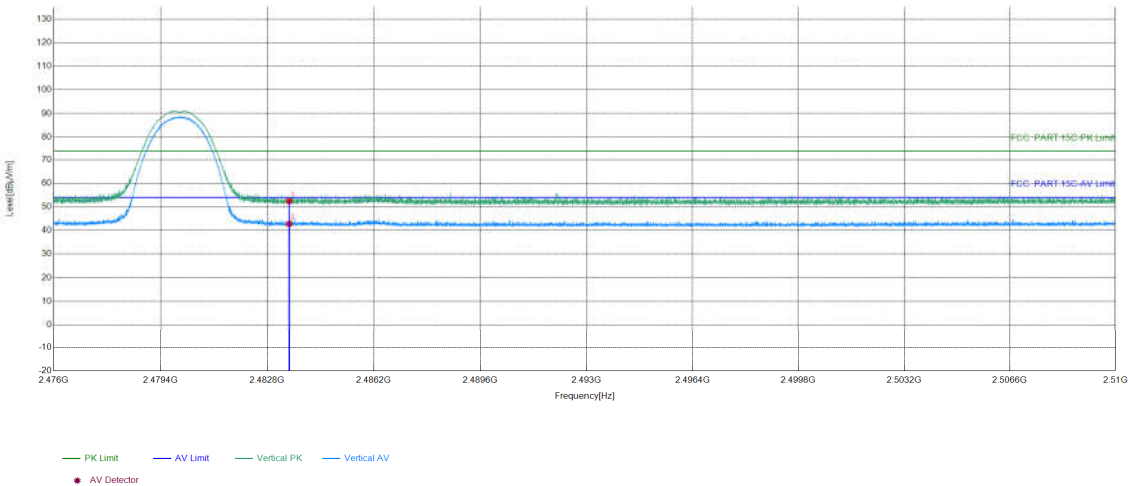
Test Graph



Suspected List									
NO	Freq. [MHz]	Factor [dB]	Reading [dBμV]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Result	Polarity	Remark
1	2483.5	16.29	36.81	53.10	74.00	20.90	PASS	Horizontal	PK
2	2485.769	16.25	41.93	58.18	74.00	15.82	PASS	Horizontal	PK
3	2483.5	16.29	27.44	43.73	54.00	10.27	PASS	Horizontal	AV
4	2486.527	16.23	34.27	50.50	54.00	3.50	PASS	Horizontal	AV

EUT_Name		Test_Model	
Test_Mode	π/4DQPSK Transmitting	Test_Frequency	2480MHz
Tset_Engineer	chenjun	Test_Date	2025/06/24
Remark	21.3°C57.9%/		

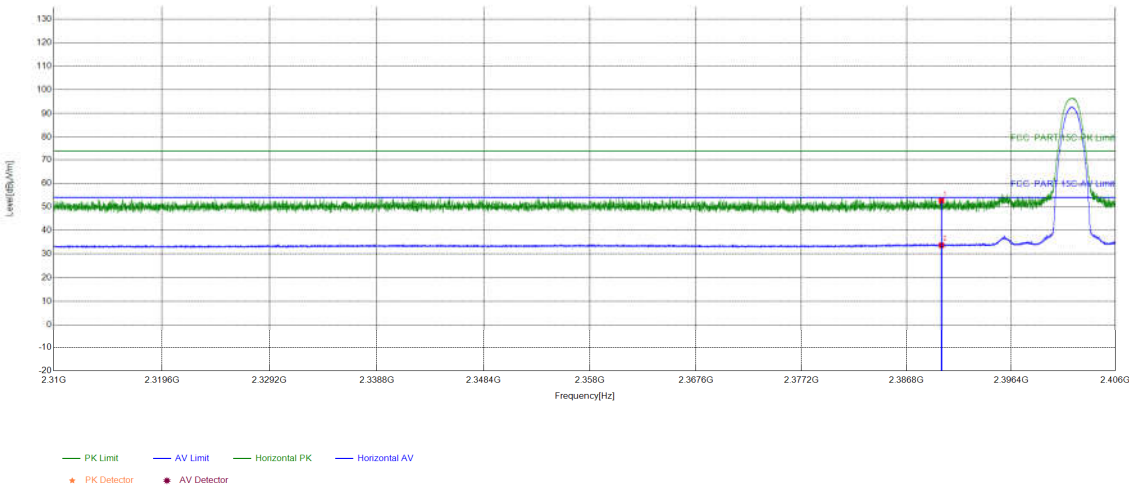
Test Graph



Suspected List									
NO	Freq. [MHz]	Factor [dB]	Reading [dBμV]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Result	Polarity	Remark
1	2483.5	16.29	36.11	52.40	74.00	21.60	PASS	Vertical	PK
2	2483.5	16.29	26.49	42.78	54.00	11.22	PASS	Vertical	AV

EUT_Name		Test_Model	
Test_Mode	8DPSK Transmitting	Test_Frequency	2402MHz
Tset_Engineer	chenjun	Test_Date	2025/06/24
Remark	21.3°C57.9%/		

Test Graph

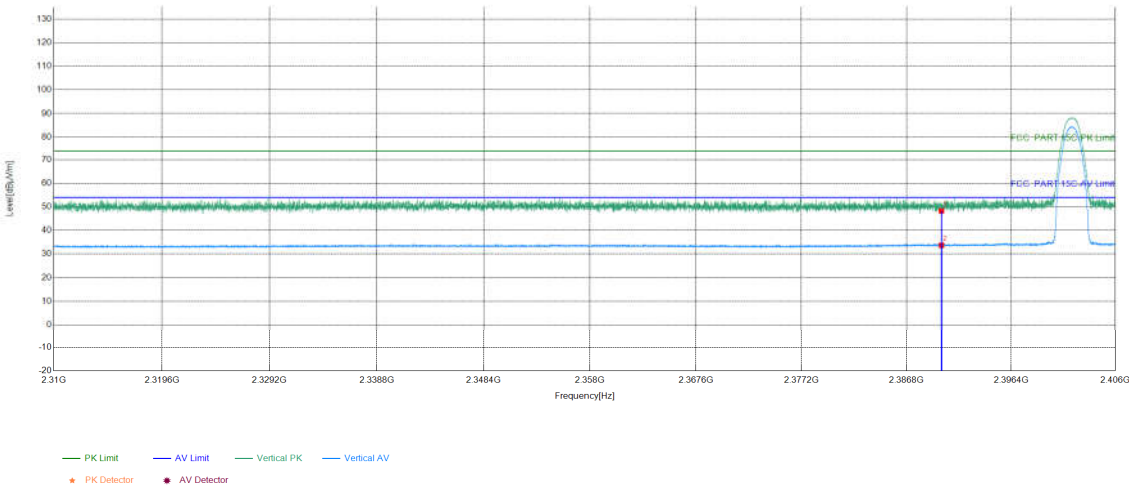


Suspected List

NO	Freq. [MHz]	Factor [dB]	Reading [dBμV]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Result	Polarity	Remark
1	2390	15.96	36.65	52.61	74.00	21.39	PASS	Horizontal	PK
2	2390	15.96	17.77	33.73	54.00	20.27	PASS	Horizontal	AV

EUT_Name		Test_Model	
Test_Mode	8DPSK Transmitting	Test_Frequency	2402MHz
Tset_Engineer	chenjun	Test_Date	2025/06/24
Remark	21.3°C57.9%/		

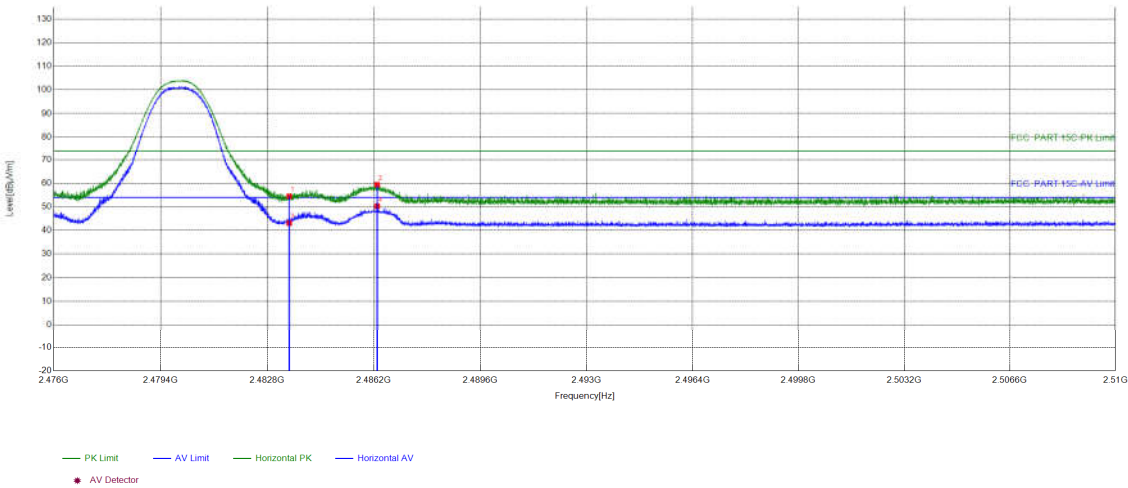
Test Graph



Suspected List									
NO	Freq. [MHz]	Factor [dB]	Reading [dBμV]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Result	Polarity	Remark
1	2390	15.96	32.30	48.26	74.00	25.74	PASS	Vertical	PK
2	2390	15.96	17.72	33.68	54.00	20.32	PASS	Vertical	AV

EUT_Name		Test_Model	
Test_Mode	8DPSK Transmitting	Test_Frequency	2480MHz
Tset_Engineer	chenjun	Test_Date	2025/06/24
Remark	21.3°C57.9%/		

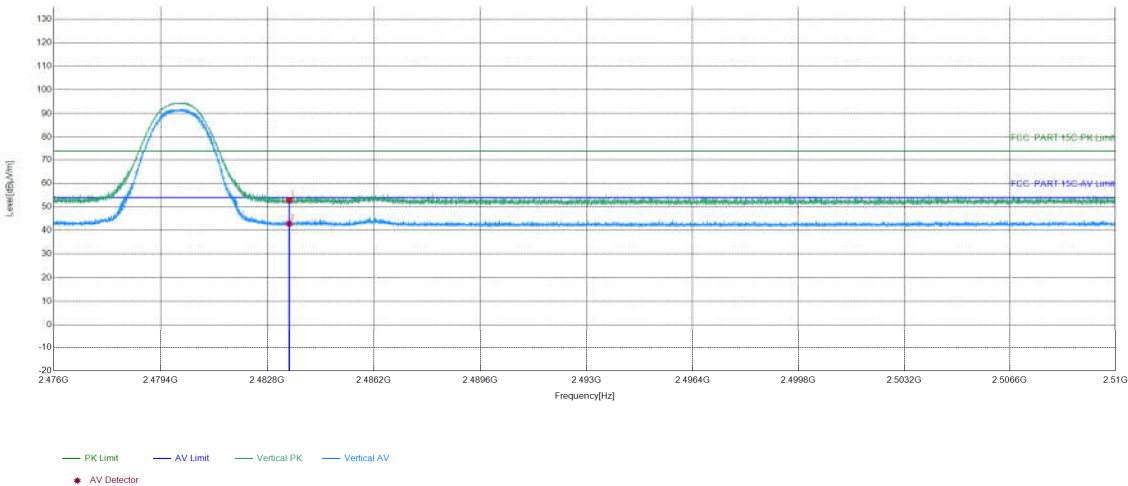
Test Graph



Suspected List									
NO	Freq. [MHz]	Factor [dB]	Reading [dBμV]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Result	Polarity	Remark
1	2483.5	16.29	38.19	54.48	74.00	19.52	PASS	Horizontal	PK
2	2486.306	16.23	43.17	59.40	74.00	14.60	PASS	Horizontal	PK
3	2483.5	16.29	26.87	43.16	54.00	10.84	PASS	Horizontal	AV
4	2486.309	16.23	34.06	50.29	54.00	3.71	PASS	Horizontal	AV

EUT_Name		Test_Model	
Test_Mode	8DPSK Transmitting	Test_Frequency	2480MHz
Tset_Engineer	chenjun	Test_Date	2025/06/24
Remark	21.3°C57.9%/		

Test Graph



Suspected List

NO	Freq. [MHz]	Factor [dB]	Reading [dBμV]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Result	Polarity	Remark
1	2483.5	16.29	36.51	52.80	74.00	21.20	PASS	Vertical	PK
2	2483.5	16.29	26.60	42.89	54.00	11.11	PASS	Vertical	AV

Note:

The field strength is calculated by adding the Antenna Factor, Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows:

Final Test Level = Receiver Reading - Correct Factor

Correct Factor = Preamplifier Factor - Antenna Factor - Cable Factor

6 PHOTOGRAPHS OF EUT Constructional Details

Refer to Report No.EED32R80798701 for EUT external and internal photos.

Statement

1. This report is considered invalid without approved signature, special seal and the seal on the perforation;
2. The Company Name shown on Report and Address, the sample(s) and sample information was/were provided by the applicant who should be responsible for the authenticity which CTI hasn't verified;
3. The result(s) shown in this report refer(s) only to the sample(s) tested;
4. Unless otherwise stated, the decision rule for conformity reporting is based on Binary Statement for Simple Acceptance Rule stated in ILAC-G8:09/2019/CNAS-GL015:2022;
5. Without written approval of CTI, this report can't be reproduced except in full;

*** End of Report ***