

TEST REPORT

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Applicant : PETKIT Network Technology (Shanghai) Co., Ltd.
Address of Applicant : Room 4139, Building 2, 588 Zixing Road, Minhang District, Shanghai

Product Name : PETKIT PUROBOT ULTRA WITH CAMERA
SELF-CLEANING CAT LITTER BOX

Brand Name : PETKIT
Model Name : P9903
Sample Acquisition Method : Sent by Client
Sample No. : E24080007-01#01

Standards : MIC Notice No.88 Appendix No.43
Article 2, Paragraph 1, Item 19

Date of Receipt : 2024-07-04
Date of Test : 2024-08-29
Date of Issue : 2025-04-22

Remark:
This report details the results of the testing carried out on one sample, the results contained in this report do not relate to other samples of the same product. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report.

Prepared by: Erik Yang Reviewed by: Jennifer Zhou Approved by: Echo Mu
(Erik Yang) (Jennifer Zhou) (Authorized signatory: Echo Mu)

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1 General Information

1.1 Testing Laboratory

Company Name	ICAS Testing Technology Service (Shanghai) Co., Ltd.
Address	No.1298, Pingan Road, Minhang District, Shanghai, China
Telephone	0086 21-51682999
Fax	0086 21-54711112
Homepage	www.icasiso.com

1.2 Details of Application

Applicant Company Name	PETKIT Network Technology (Shanghai) Co., Ltd.
Address	Room 4139, Building 2, 588 Zixing Road, Minhang District, Shanghai
Contact Person	TingHe
Telephone	13916991059
Email	ting.he@petkit.com
Manufacturer Company Name	Dongguan Zhihang Electronic Technology Co., LTD.
Address	Room 701, Building 15, No.1, Pushi Road I, Qiaotou Town, Dongguan City,Guangdong Province, China.
Factory Company Name	Dongguan Zhihang Electronic Technology Co., LTD.
Address	Room 701, Building 15, No.1, Pushi Road I, Qiaotou Town, Dongguan City,Guangdong Province, China.

1.3 Details of EUT

Product Name	PETKIT PUROBOT ULTRA WITH CAMERA SELF-CLEANING CAT LITTER BOX
Brand Name	PETKIT
Model Name	P9903
Mode of Operation	Bluetooth LE
Operation Frequency Range	2402MHz ~ 2480MHz
Number of Channels	40 (at intervals of 2 MHz)
Modulation Type	BLE ☒ GFSK 1Mbps ☐ GFSK 2Mbps
Antenna Type	PCB Antenna
Antenna Gain	-5.45dBi
Extreme Temperature Range	0°C~ +40°C
Normal Temperature	25°C
Extreme Voltage Range	AC 90V-240V (Low Voltage is 90V; High Voltage is 240V)
Normal Test Voltage	Input: AC 100-240V 50/60Hz 1.5A Max Output: DC 12V 4A
Hardware Version	V1.0

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Software Version	2.49
RF power setting in TEST SW	EMI_TEST_V2.1_Power level setting_10.5dBm

Note:

1. The above information was declared by the manufacture.
2. EUT has only one antenna in use.
3. Only frequencies within 2402-2480MHz were tested according the standard requirement.
4. The EUT has single chip with one antenna and the output of the antenna feeder is 50 Ohm.
5. For more details, please refer to the User's manual of the EUT.

Channel List

Channel	Frequency	Channel	Frequency	Channel	Frequency
0	2.402GHz	14	2.430GHz	28	2.458GHz
1	2.404GHz	15	2.432GHz	29	2.460GHz
2	2.406GHz	16	2.434GHz	30	2.462GHz
3	2.408GHz	17	2.436GHz	31	2.464GHz
4	2.410GHz	18	2.438GHz	32	2.466GHz
5	2.412GHz	19	2.440GHz	33	2.468GHz
6	2.414GHz	20	2.442GHz	34	2.470GHz
7	2.416GHz	21	2.444GHz	35	2.472GHz
8	2.418GHz	22	2.446GHz	36	2.474GHz
9	2.420GHz	23	2.448GHz	37	2.476GHz
10	2.422GHz	24	2.450GHz	38	2.478GHz
11	2.424GHz	25	2.452GHz	39	2.480GHz
12	2.426GHz	26	2.454GHz		
13	2.428GHz	27	2.456GHz		

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1.4 Test Summary

No.	Test Item	Result
1	Frequency Error	Compliance
2	Occupied Bandwidth and Spreading Bandwidth	Compliance
3	Transmitter Spurious Emission Strength and Unwanted Emission Intensity	Compliance
4	Antenna Output Power and Output Power Tolerance	Compliance
5	Receiver Spurious Emission and Unwanted Emission Intensity	Compliance
6	Transmission Radiation Angle Width (3dB Beamwidth)	Not Applicable ^{Note 1}
7	Carrier sense capability	Not Applicable ^{Note 3}
8	Frequency Hopping Dwell Time	Not Applicable ^{Note 2}
9	Interference Prevention Function	Compliance
Note	Construction Protection Confirmation	Compliance

Note(s):

1. This test item will not be applied to this EUT.
2. Testing is only required for FHSS system devices.
3. Not apply to this devices, Since EIRP does not require compensation through Antenna Power.

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2 Test Condition

2.1 Environmental Conditions

Temperature (°C)	24.6°C
Humidity (%RH)	42%RH
Barometric Pressure (mbar)	1002mbar

Note: Actual values will be recorded during the test.

2.2 Equipment List

Name of Equipment	Manufacturer	Model	Serial No.	Cal. Date	Cal. Due	Calibration Company
Spectrum Analyzer	Keysight	N9020B	MY59260184	2024-06-26	2025-06-25	TI
DC Power Supply	ITECH	IT6512A	N/A	2024-06-27	2026-06-26	TI
Signal Generator	Rohde & Schwarz	SMR27	100184	2024-06-26	2025-06-25	TI
Digital Hygrograph	KE JIAN	HTC-1	N/A	2024-07-05	2025-07-04	NEM METROLOGY
Test Software	BL	BL410_R	Version:2.1.1.409	N/A	N/A	N/A

Note:

“TI” Full name is Shenzhen Branch of TI Testing and Certification Group Co., Ltd.
“NEM METROLOGY” Full name is Guangzhou NEW METROLOGY&TEST TECHNOLOGY CO., LTD.

2.3 Measurement Uncertainty

The uncertainty is calculated using the methods suggested in the “Guide to the Expression of Uncertainty in measurement” (GUM) published by CISPR and ANSI. The reported uncertainty of measurement $y \pm U$, where expended uncertainty U is based on a standard uncertainty multiplied by a coverage factor of $k=2$, providing a level of confidence of approximately 95.45%.

Parameter	Uncertainty
Bandwidth	± 0.20 ppm
Antenna Power	± 0.30 dB
Frequency Tolerance	± 5.00 ppm
Conducted spurious emission	± 1.5 dB

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3 Test Set-up and Operation Modes

3.1 Details of Test Mode

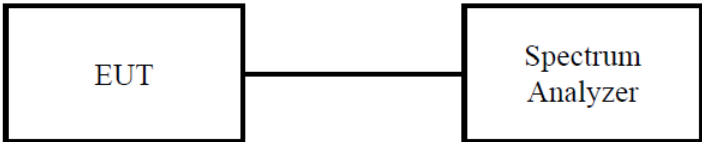
The transmitter module was tested while in a continuous transmitter/receiver mode.

The EUT was tuned to a low, middle, and high channel for all tests. For all test case pre/scans were completed in all modes to determine worst case levels.

Channel	Frequency
The lowest channel (CH00)	2402MHz
The middle channel (CH19)	2440MHz
The highest channel (CH39)	2480MHz

In addition during the input supply voltage to the EUT from the external power source is varied by +/- 10%, if output voltage had been confirmed that the fluctuation of power supply to the RF circuit of EUT (excluding power source) is equal to or less than +/-1%. Exempt extremely high and low supply voltage condition test, EUT only operated in normal voltage to test all regulations.

3.2 Block Diagram of Test Setup



3.3 Special Accessories and Auxiliary Equipment

Description	Manufacturer	Model Name	Serial No.
Laptop	HP	HP ZHAN 66 PRO G1	5CD7438R1J

3.4 Support Software

Description	Manufacturer	Software Name
Software	N/A	EMI_TEST_V2.1

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4 Test Results

4.1 FREQUENCY ERROR

4.1.1 Limit

Item	Limits
Frequency Tolerance (2402~2480MHz)	$\leq 50\text{ppm}$

4.1.2 Test Setup

Set the EUT to the measurement frequency without modulation.

Setting of SA is following as: RB: 10kHz / VB: 10kHz

Center Frequency: The center frequency of testing for EUT

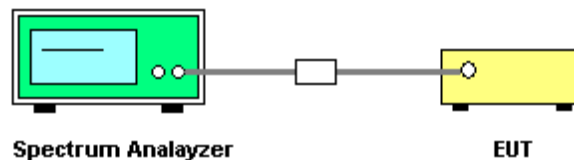
Sweep time: Auto

Sweep mode: Continuous sweep

Detect mode: Positive peak

Mark function: Frequency Counter (Resolution 100Hz)

If the EUT can't set at un-modulation mode, measure the 10dBc center frequency.



4.1.3 Test Record

Table 1_ Frequency Tolerance

Voltage (V)	Center Frequency (MHz)	Measure Frequency (MHz)	Frequency Tolerance (ppm)	Limit (ppm)	P/F
Normal	2402	2401.99466	-2.22	± 50	Pass
	2440	2439.99458	-2.22		Pass
	2480	2479.99390	-2.46		Pass
Low	2402	2401.99434	-2.36	± 50	Pass
	2440	2439.99442	-2.29		Pass
	2480	2479.99386	-2.48		Pass
High	2402	2401.99446	-2.31	± 50	Pass
	2440	2439.99446	-2.27		Pass
	2480	2479.99386	-2.48		Pass

Note: Frequency Tolerance (ppm) = $[(\text{Measure frequency} - \text{Center Frequency}) / \text{Center Frequency}] * 10^6$

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Normal Voltage

Figure 1-Test Frequency: 2402MHz

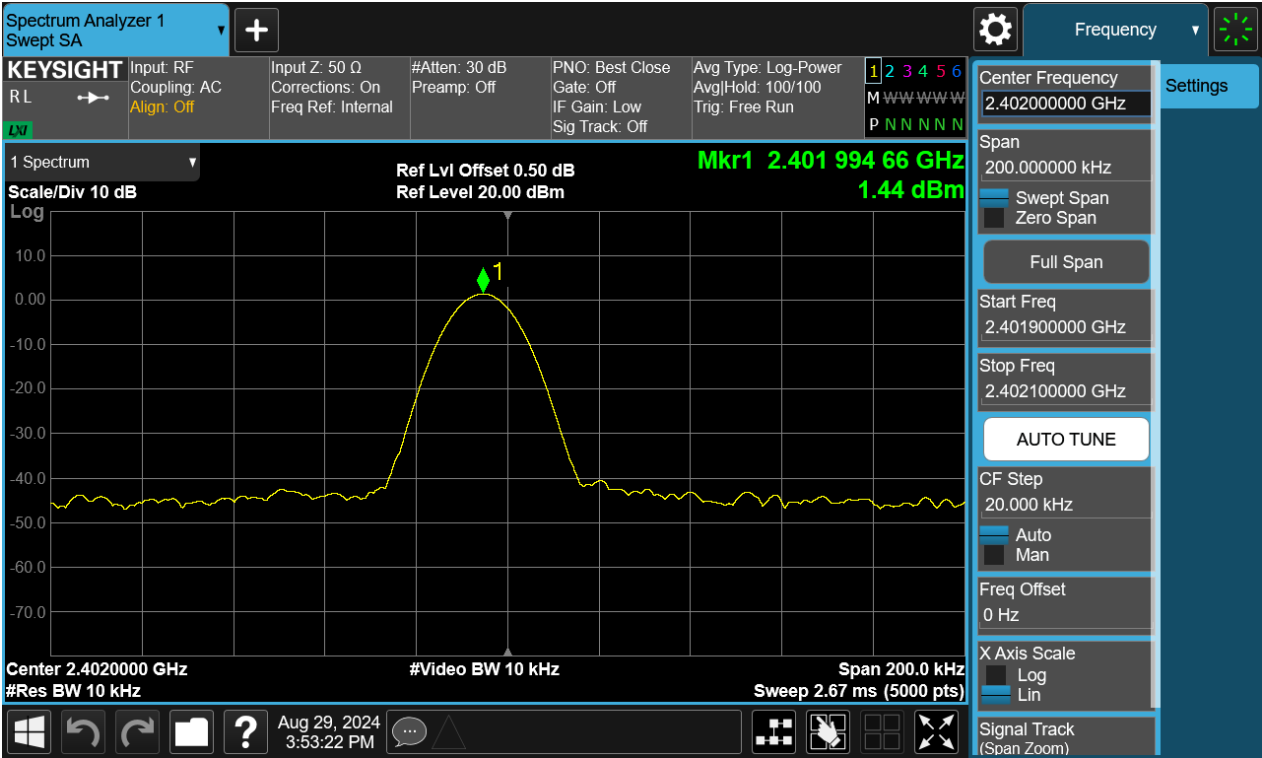
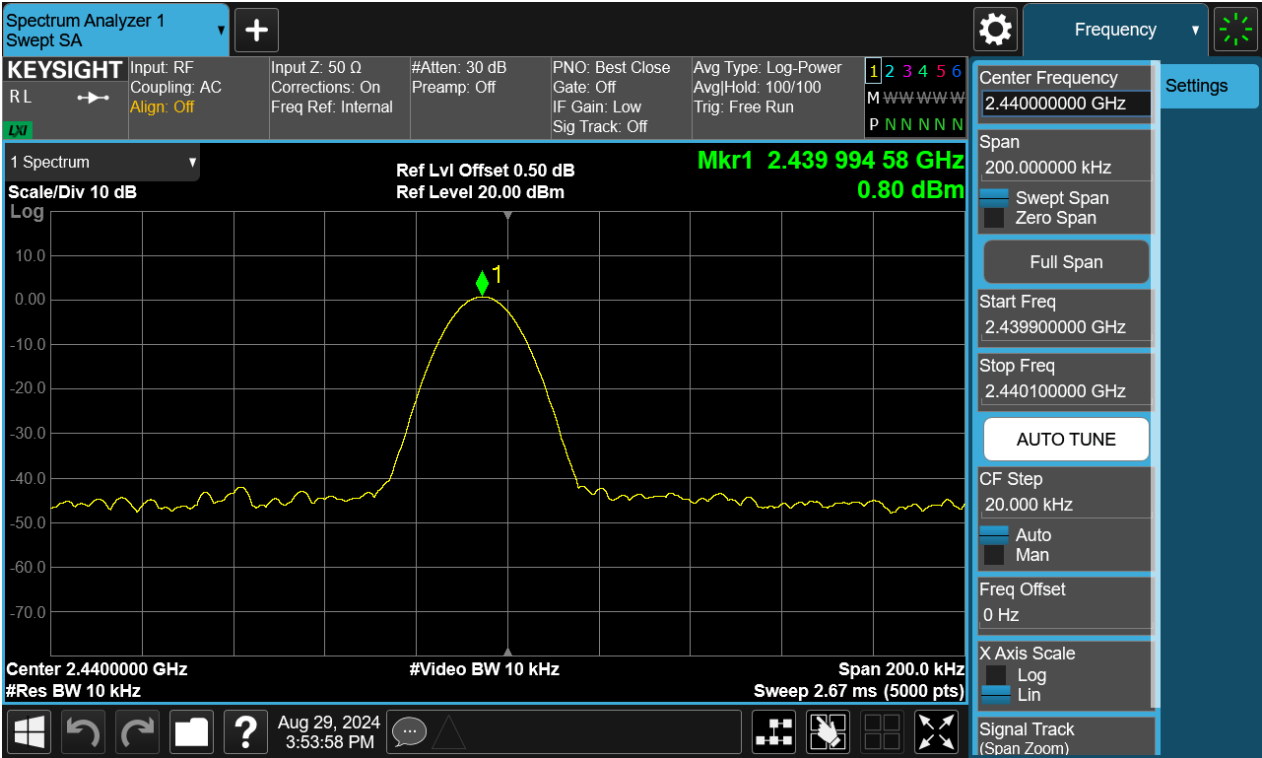


Figure 2-Test Frequency: 2440MHz



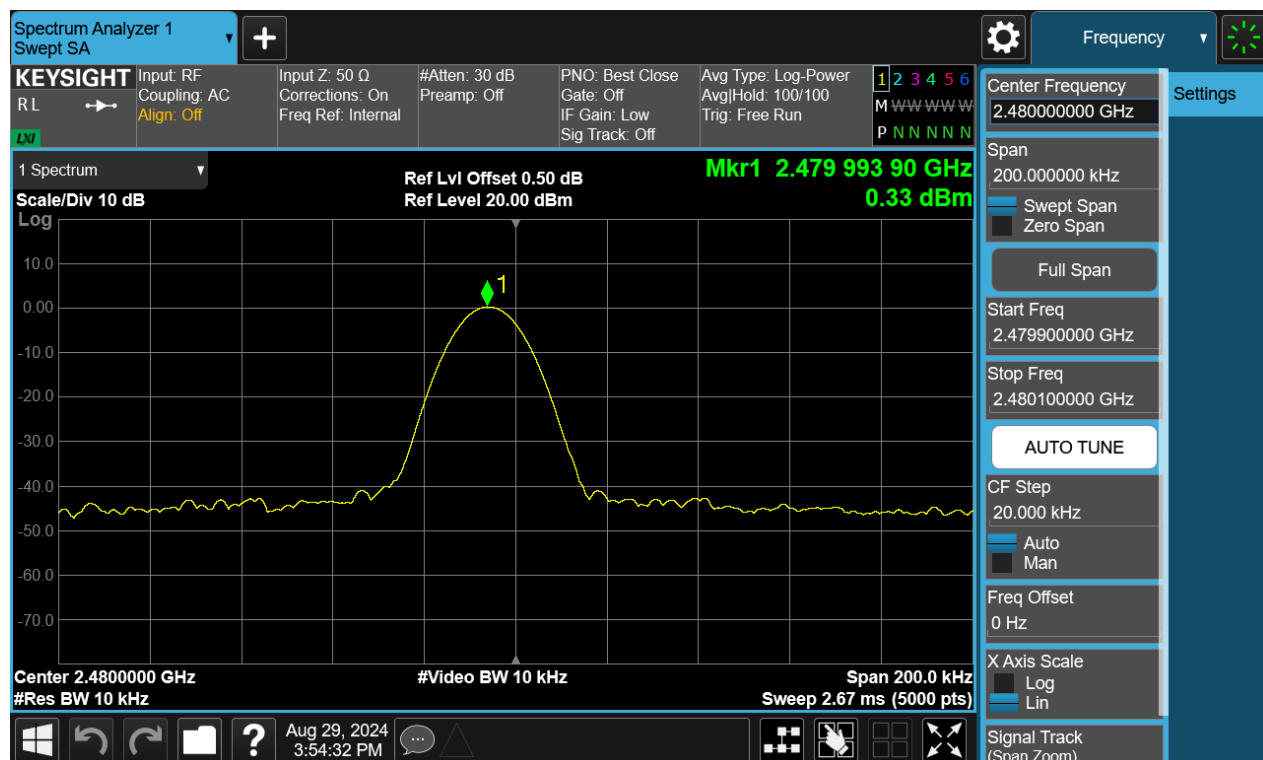
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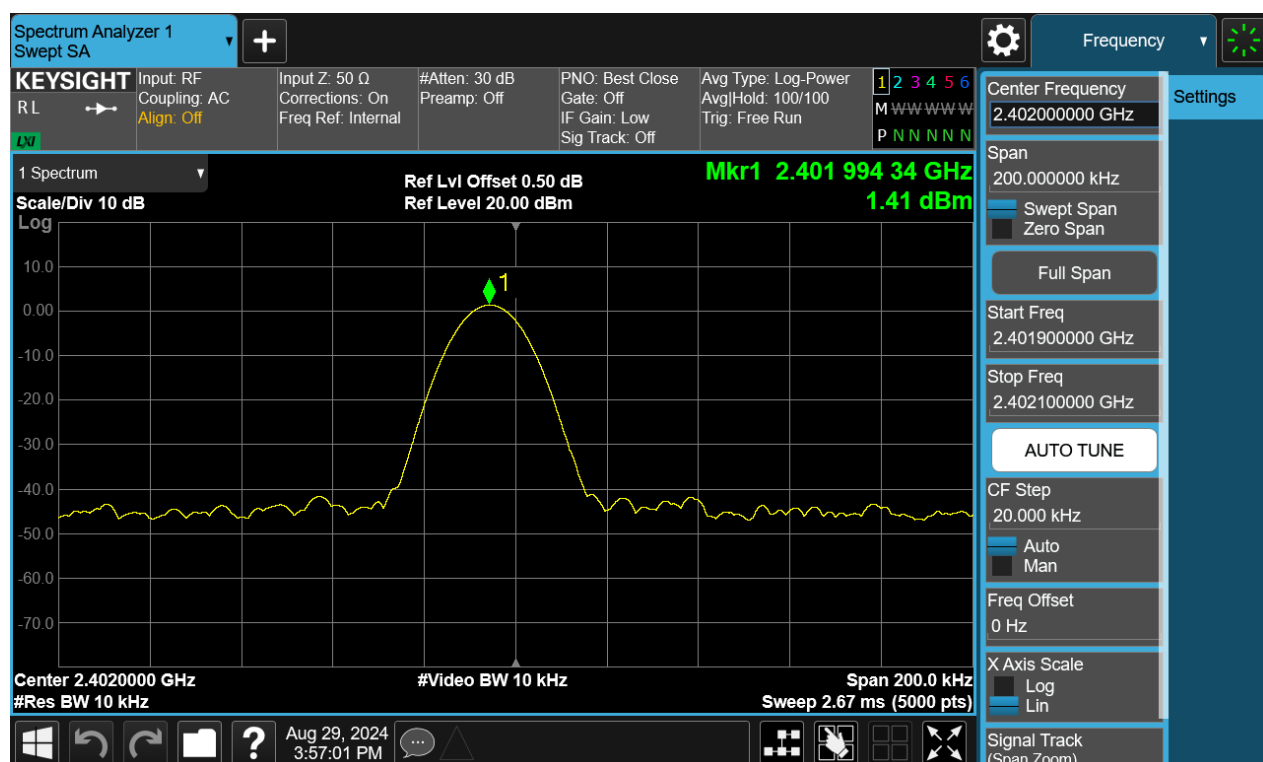
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Figure 3-Test Frequency: 2480MHz



Low Voltage

Figure 4-Test Frequency: 2402MHz



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Figure 5-Test Frequency: 2440MHz

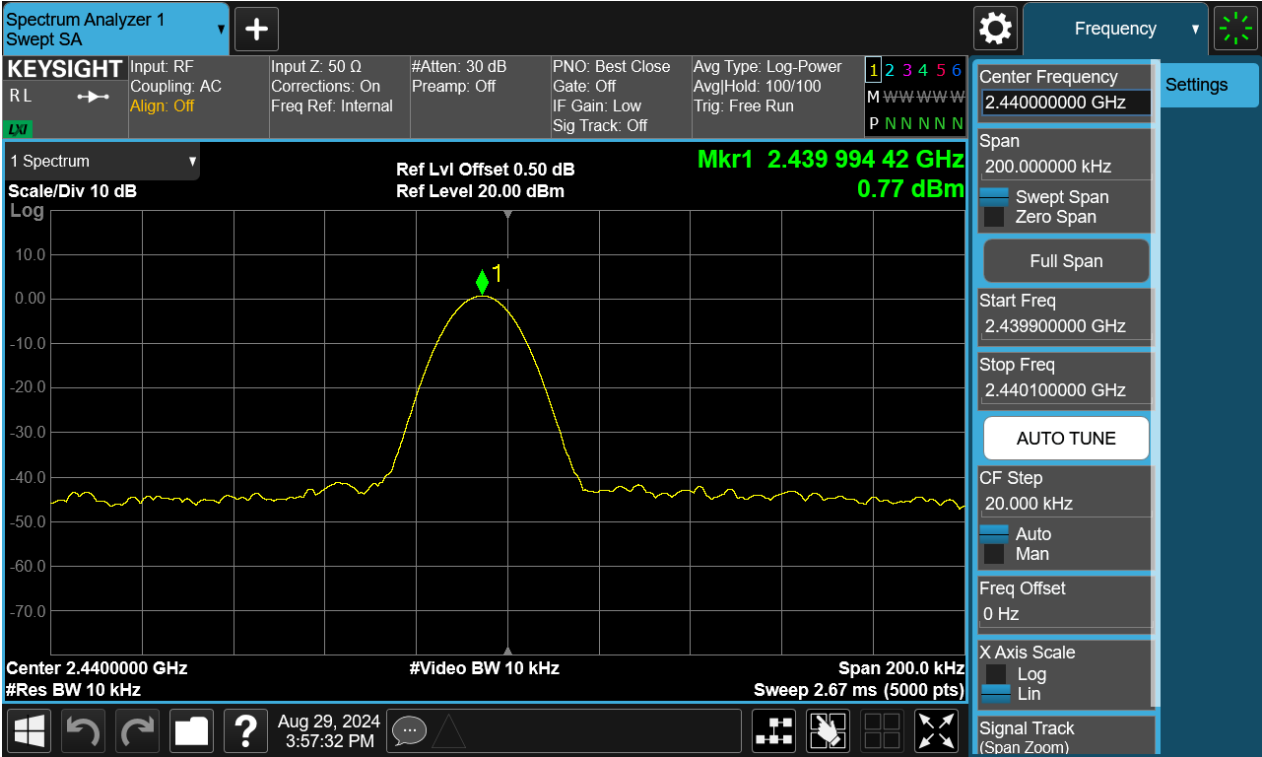
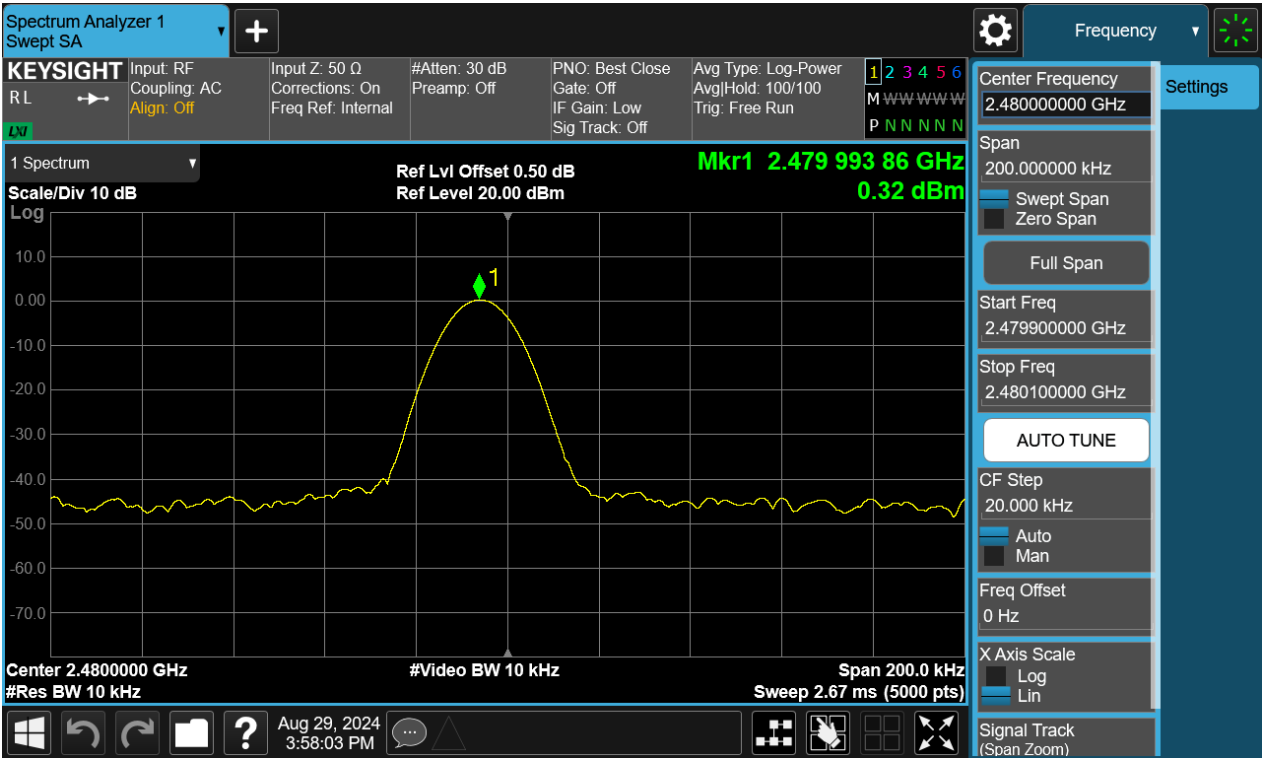


Figure 6-Test Frequency: 2480MHz



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High Voltage

Figure 7-Test Frequency: 2402MHz

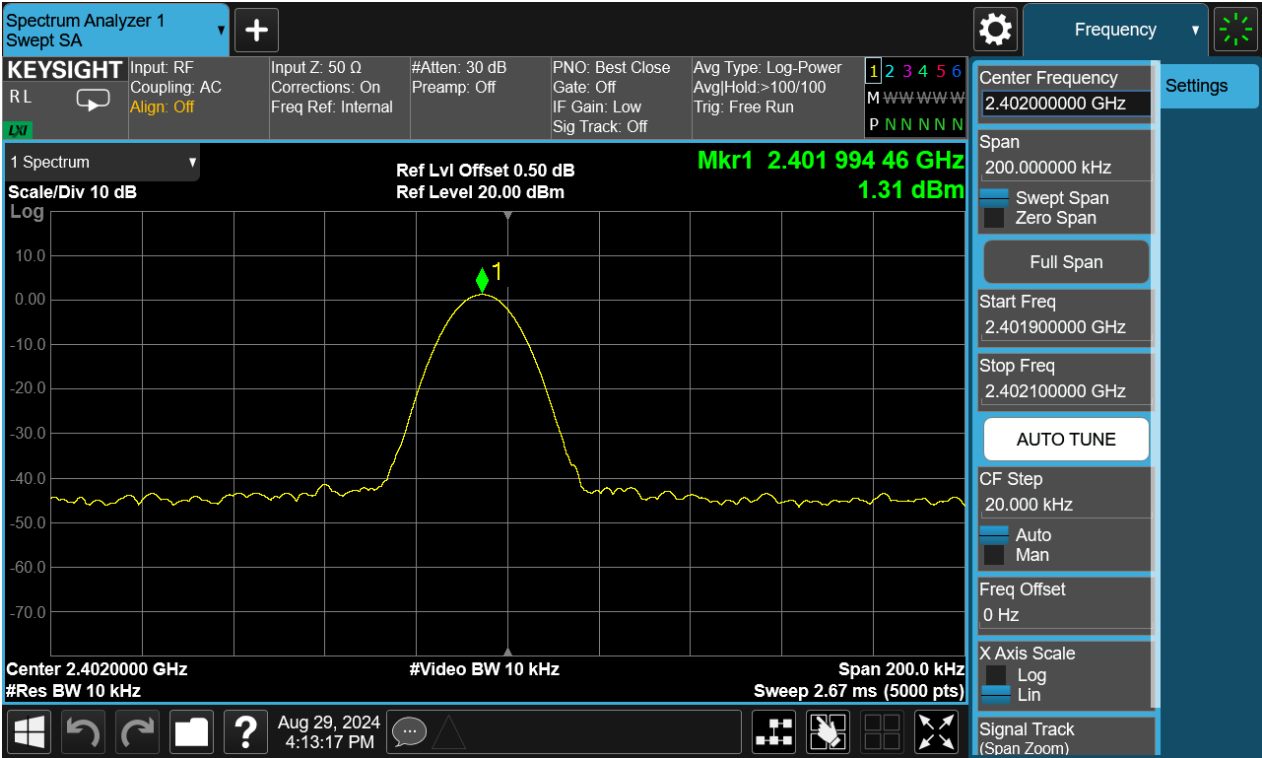
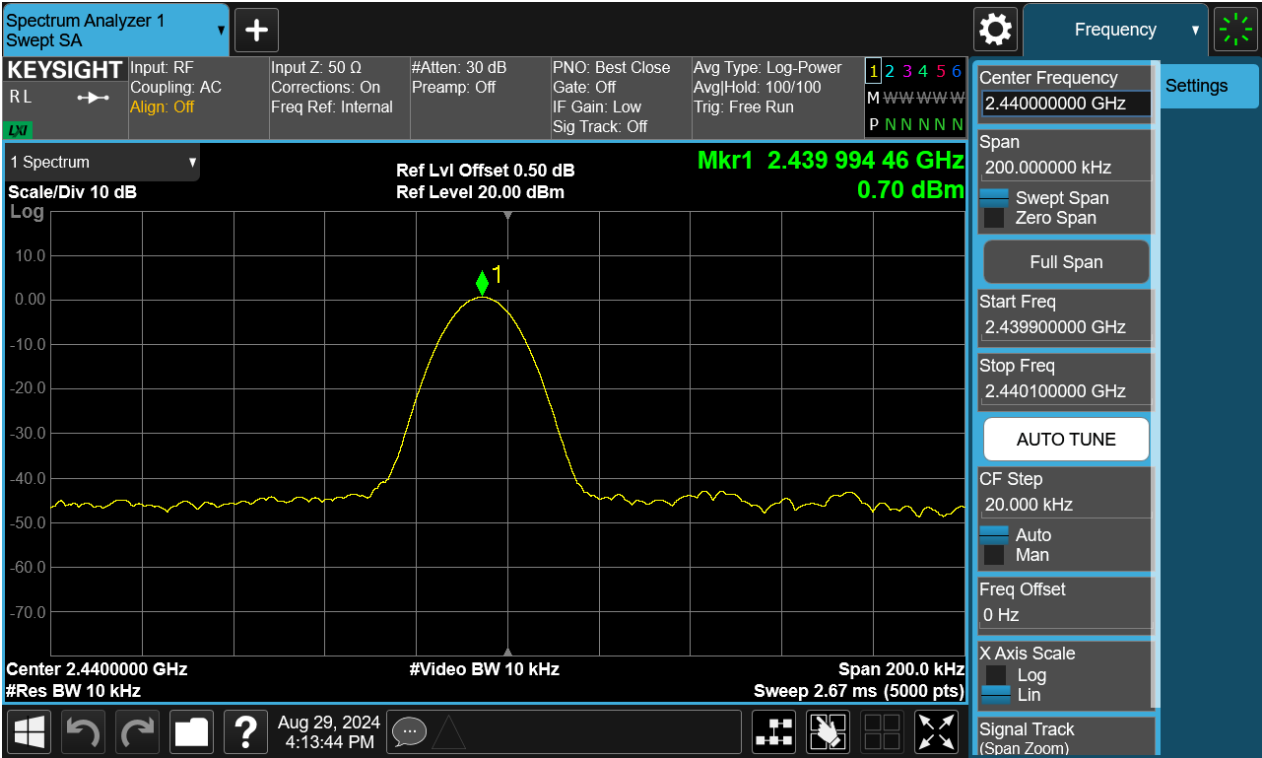


Figure 8-Test Frequency: 2440MHz



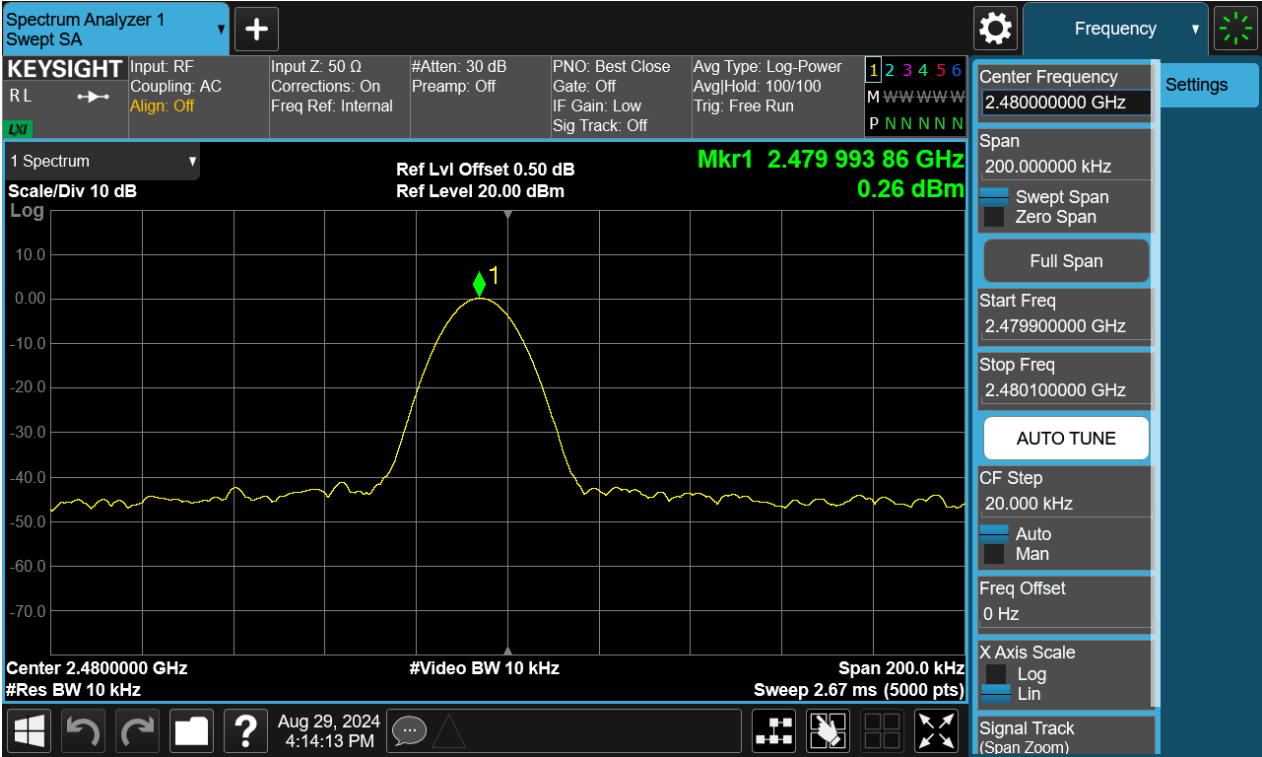
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Figure 9-Test Frequency: 2480MHz



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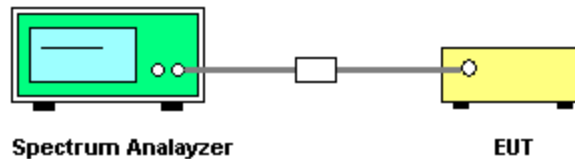
4.2 OCCUPIED BANDWIDTH

4.2.1 Limit

Item	Limits
Occupied Bandwidth:	FH $\leq$ 83.5MHz; DS $\leq$ 26 MHz; OFDM $\leq$ 40MHz; Others $\leq$ 26MHz

4.2.2 Test Setup

1. Setting of SA is following as: RB: 300 kHz / VB: 300 kHz / SPAN: 5 MHz / Sweep time: Auto / Sweep Mode: Continuous sweep / Detect mode: Positive peak / Trace mode: Max hold
2. EUT have transmitted the maximum modulation signal and fixed channelize. SA set to 99% of occupied bandwidth to measure occupied bandwidth.
3. EUT have transmitted the maximum modulation signal and fixed channelize. SA set to 90% of occupied bandwidth to measure spread bandwidth.
4. Spread Factor=Spread Bandwidth/modulation rate.



4.2.3 Test Record

Table 2_Occupied Bandwidth

Mode	Voltage (V)	Item	Result			Limit	P/F
			2402MHz	2440MHz	2480MHz		
BLE	Normal	Occupied Bandwidth (MHz)	1.2124	1.2129	1.2172	$\leq$ 26 MHz	Pass
	Low	Occupied Bandwidth (MHz)	1.2227	1.2132	1.2170	$\leq$ 26 MHz	Pass
	High	Occupied Bandwidth (MHz)	1.2225	1.2133	1.2082	$\leq$ 26 MHz	Pass

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Normal Voltage

Figure 10-Occupied Bandwidth of 2402MHz



Figure 11-Occupied Bandwidth of 2440MHz



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Figure 12-Occupied Bandwidth of 2480MHz



Low Voltage

Figure 13-Occupied Bandwidth of 2402MHz



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Figure 14-Occupied Bandwidth of 2440MHz



Figure 15-Occupied Bandwidth of 2480MHz



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High Voltage

Figure 16-Occupied Bandwidth of 2402MHz



Figure 17-Occupied Bandwidth of 2440MHz



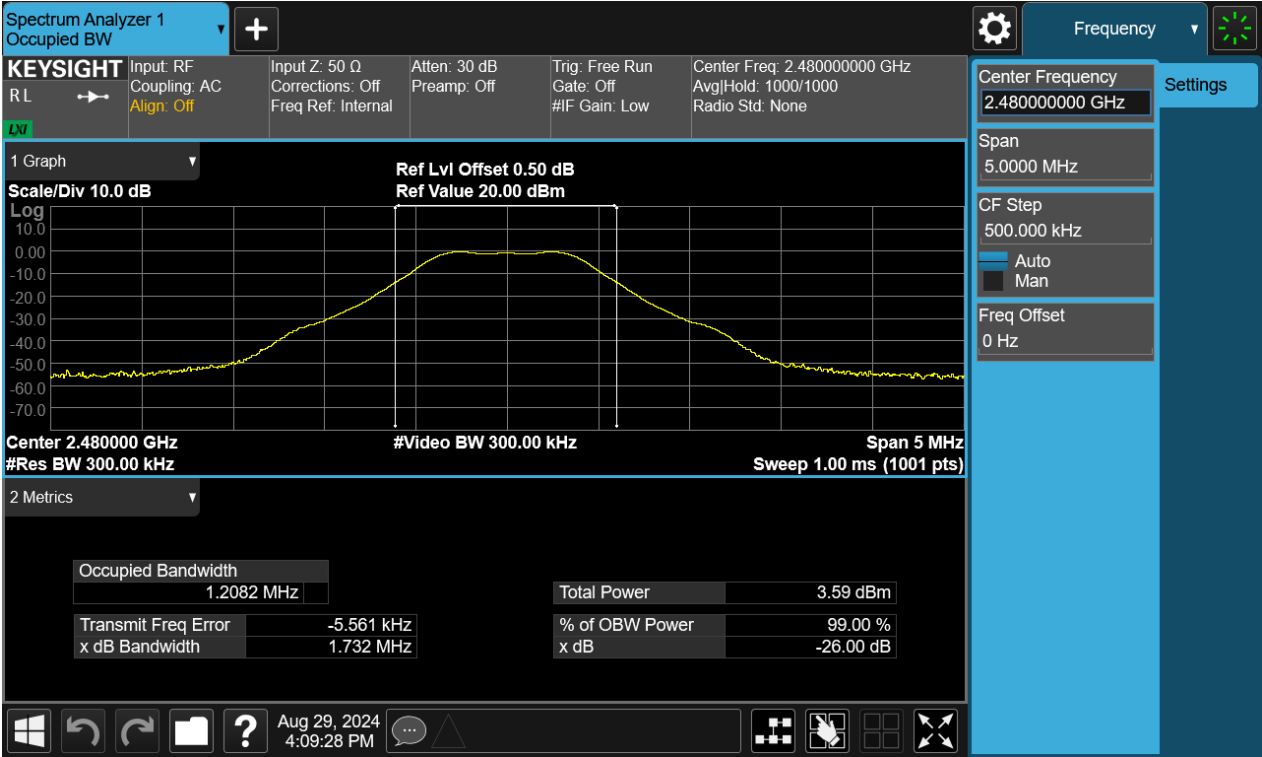
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Figure 18-Occupied Bandwidth of 2480MHz



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4.3 TRANSMITTER SPURIOUS EMISSION STRENGTH AND UNWANTED EMISSION INTENSITY

4.3.1 Limit

Item	Limits
TX Spurious Emission(2402~2480MHz)	$\leq 2.5\mu\text{W}(-26\text{dBm})$ ($30\text{MHz} \leq f \leq 1000\text{MHz}$)
	$\leq 2.5\mu\text{W}(-26\text{dBm})$ ($1000\text{MHz} < f \leq 2387\text{MHz}$)
	$\leq 25\mu\text{W}(-16\text{dBm})$ ($2387\text{MHz} < f \leq 2400\text{MHz}$)
	$\leq 25\mu\text{W}(-16\text{dBm})$ ($2483.5\text{MHz} \leq f < 2496.5\text{MHz}$)
	$\leq 2.5\mu\text{W}(-26\text{dBm})$ ($2496.5\text{MHz} \leq f < 12500\text{MHz}$)

4.3.2 Test Setup

The modulation state shall be in continuously transmitting mode.

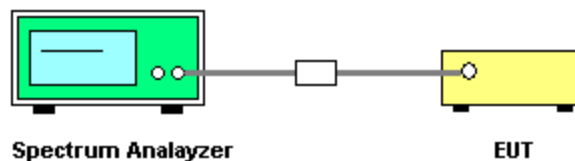
Setting of SA start 30MHz and stop frequency 1000MHz, RB:1MHz/VB:1MHz, Sweep time: Auto. Sweep mode: continuous sweep. Detect mode: Positive peak/Trace mode: max hold. Then to mark peak. reading value + cable loss shall be less than 2.5μW.

Setting of SA start 1000MHz and stop frequency 2387MHz, RB:1MHz/VB:1MHz, Sweep time: Auto. Sweep mode: continuous sweep. Detect mode: Positive peak/Trace mode: max hold. Then to mark peak. reading value + cable loss shall be less than 2.5μW.

Setting of SA start 2387MHz and stop frequency 2400MHz, RB:1MHz/VB:1MHz, Sweep time: Auto. Sweep mode: continuous sweep. Detect mode: Positive peak/Trace mode: max hold. Then to mark peak. reading value + cable loss shall be less than 25μW.

Setting of SA start 2483.5MHz and stop frequency 2496.5MHz, RB:1MHz/VB:1MHz, Sweep time: Auto. Sweep mode: continuous sweep. Detect mode: Positive peak/Trace mode: max hold. Then to mark peak. reading value + cable loss shall be less than 25μW.

Setting of SA start 2496.5MHz and stop frequency 12500MHz, RB:1MHz/VB:1MHz, Sweep time: Auto. Sweep mode: continuous sweep. Detect mode: Positive peak/Trace mode: max hold. Then to mark peak. reading value + cable loss shall be less than 2.5μW.



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4.3.3 Test Record

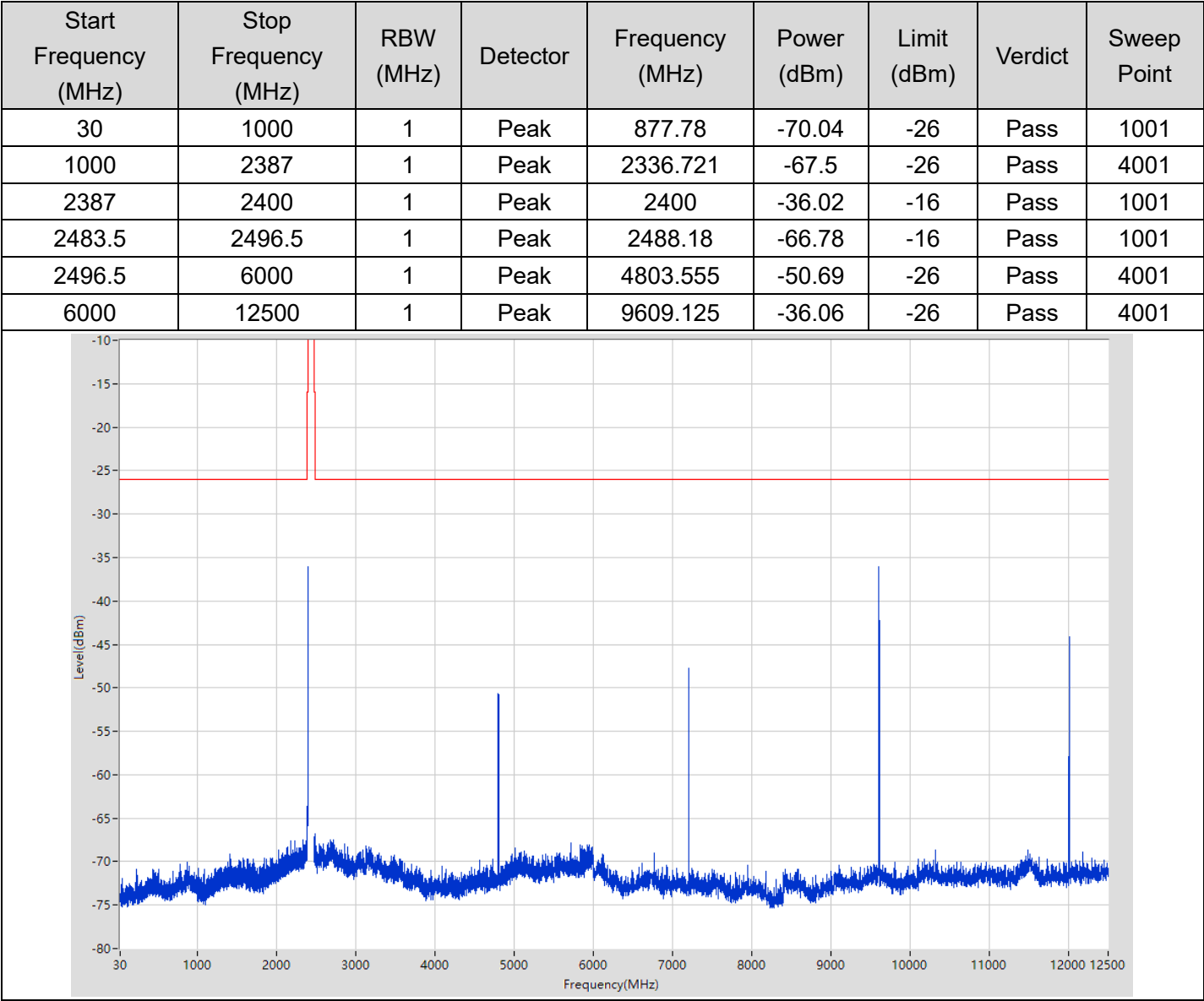
Table 3_TRANSMITTER SPURIOUS EMISSION STRENGTH AND UNWANTED EMISSION INTENSITY

Mode	Voltage (V)	Frequency Range (MHz)	Max Value (dBm)			Limit (dBm)	P/F
			2402MHz	2440MHz	2480MHz		
BLE	Normal	30 ~ 1000	-70.04	-70.28	-69.93	-26	Pass
		1000 ~ 2387	-67.50	-67.51	-67.63	-26	Pass
		2387 ~ 2400	-36.02	-65.67	-57.82	-16	Pass
		2483.5 ~ 2496.5	-66.78	-65.88	-59.59	-16	Pass
		2496.5 ~ 6000	-50.69	-51.73	-53.01	-26	Pass
		6000 ~ 12500	-36.06	-29.86	-33.65	-26	Pass
	Low	30 ~ 1000	-70.60	-70.22	-70.33	-26	Pass
		1000 ~ 2387	-67.25	-67.62	-67.96	-26	Pass
		2387 ~ 2400	-35.71	-65.40	-67.20	-16	Pass
		2483.5 ~ 2496.5	-66.67	-65.90	-59.42	-16	Pass
		2496.5 ~ 6000	-50.49	-51.64	-52.66	-26	Pass
		6000 ~ 12500	-36.34	-29.98	-33.62	-26	Pass
	High	30 ~ 1000	-70.65	-70.04	-70.48	-26	Pass
		1000 ~ 2387	-67.46	-67.06	-67.31	-26	Pass
		2387 ~ 2400	-35.83	-65.35	-66.92	-16	Pass
		2483.5 ~ 2496.5	-66.40	-65.99	-59.60	-16	Pass
		2496.5 ~ 6000	-50.41	-51.60	-52.79	-26	Pass
		6000 ~ 12500	-36.33	-30.04	-33.63	-26	Pass

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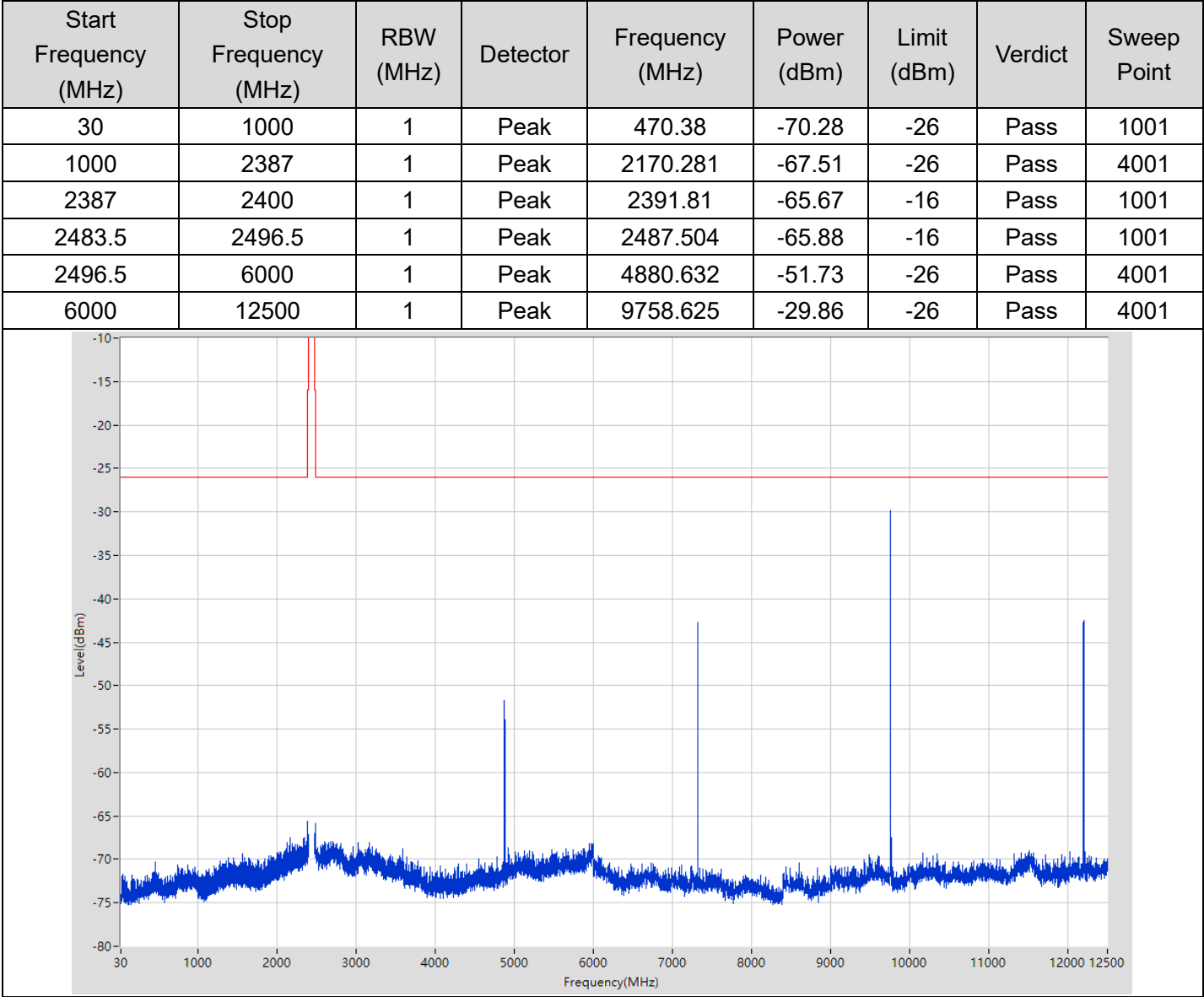
Normal Voltage

Figure 19-Test Frequency: 2402MHz



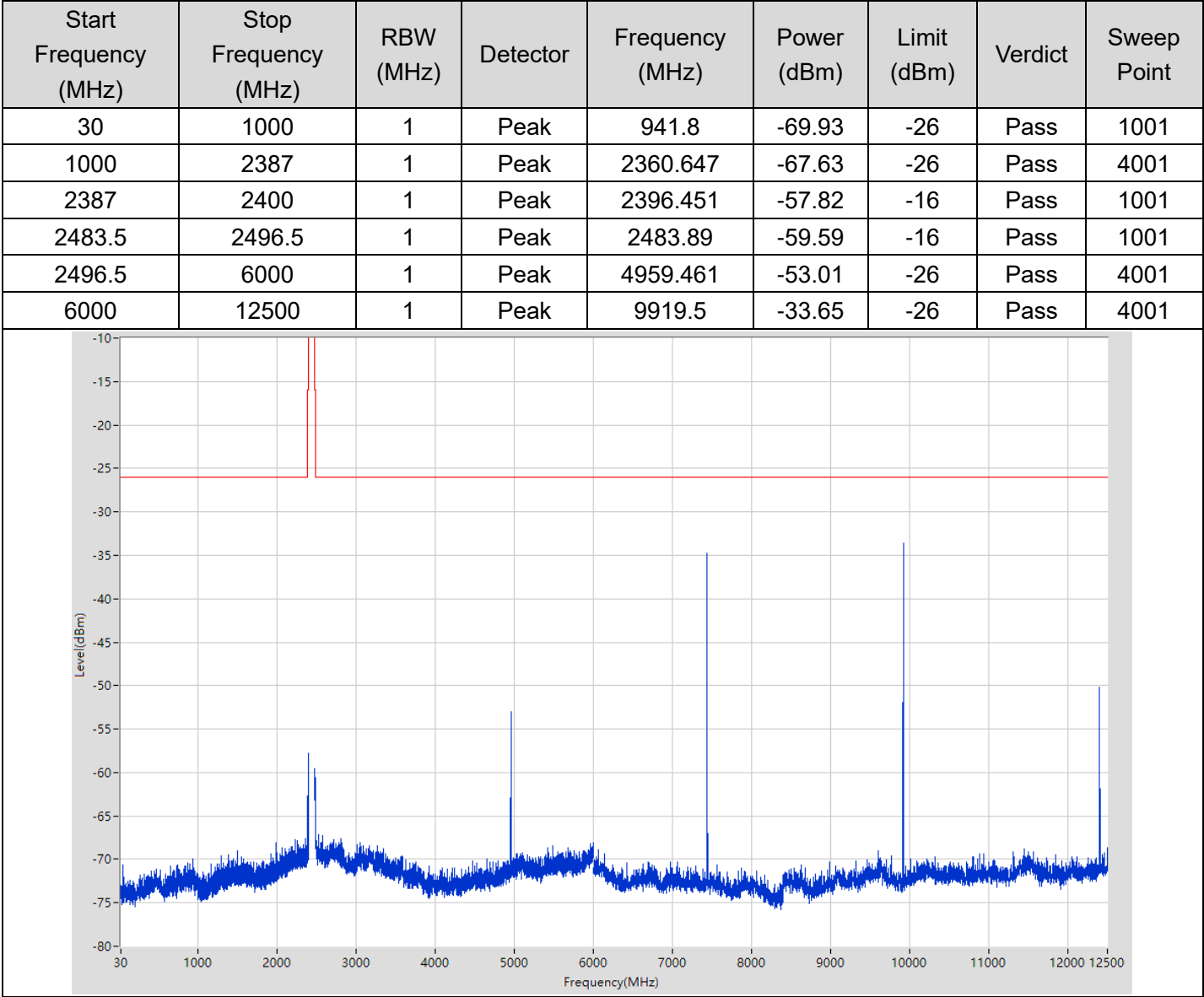
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Figure 20-Test Frequency: 2440MHz



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Figure 21-Test Frequency: 2480MHz



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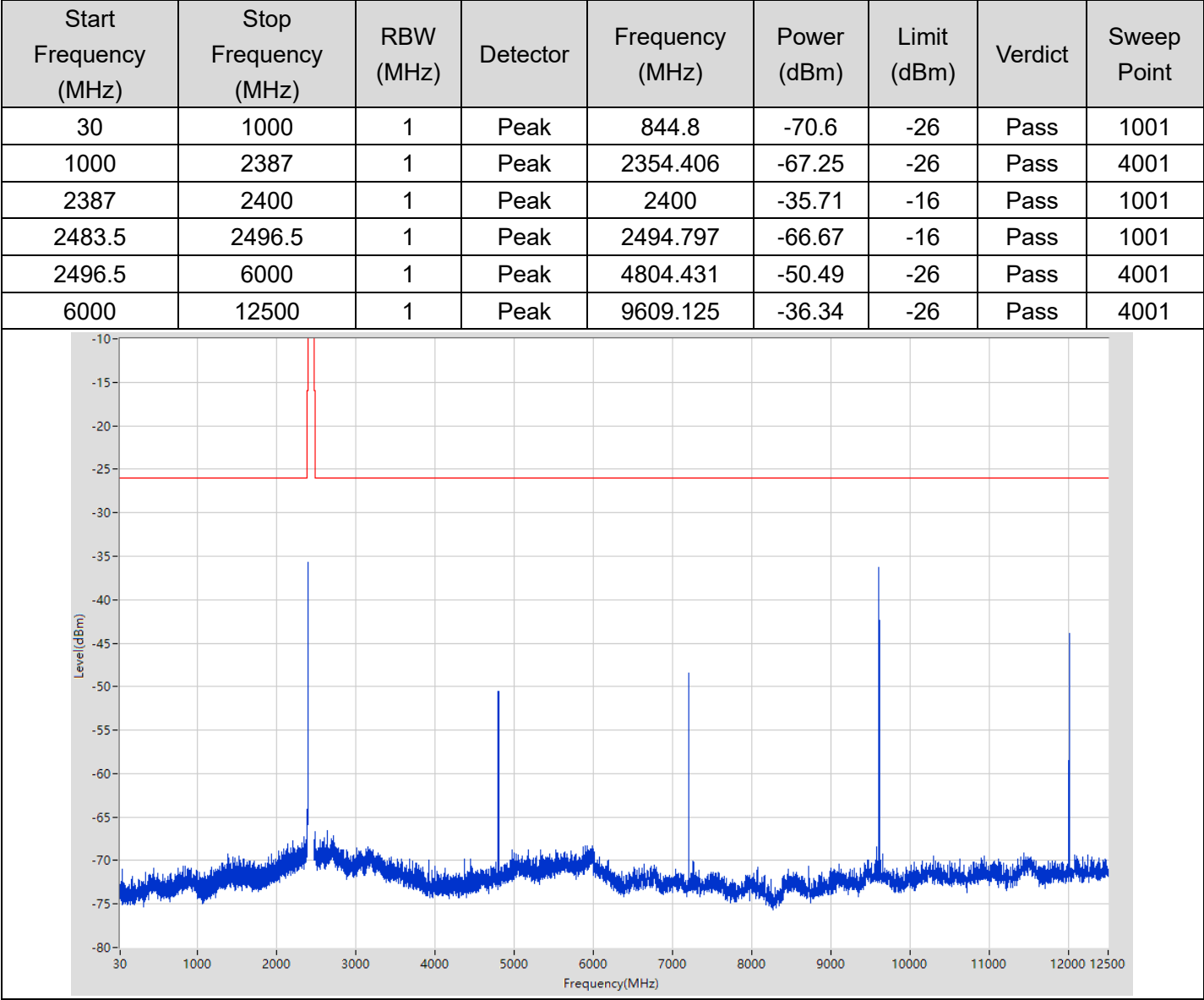
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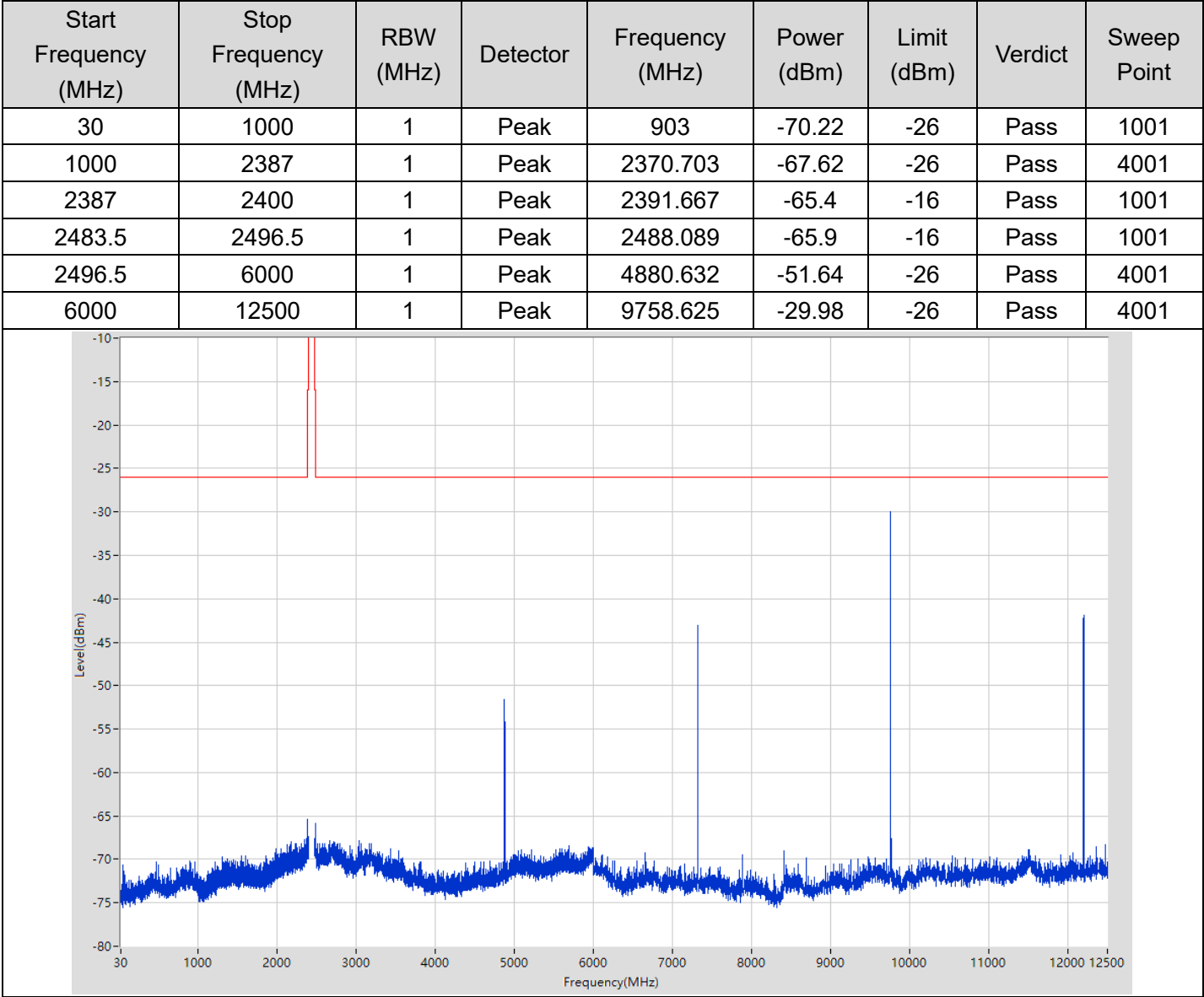
Low Voltage

Figure 22-Test Frequency: 2402MHz



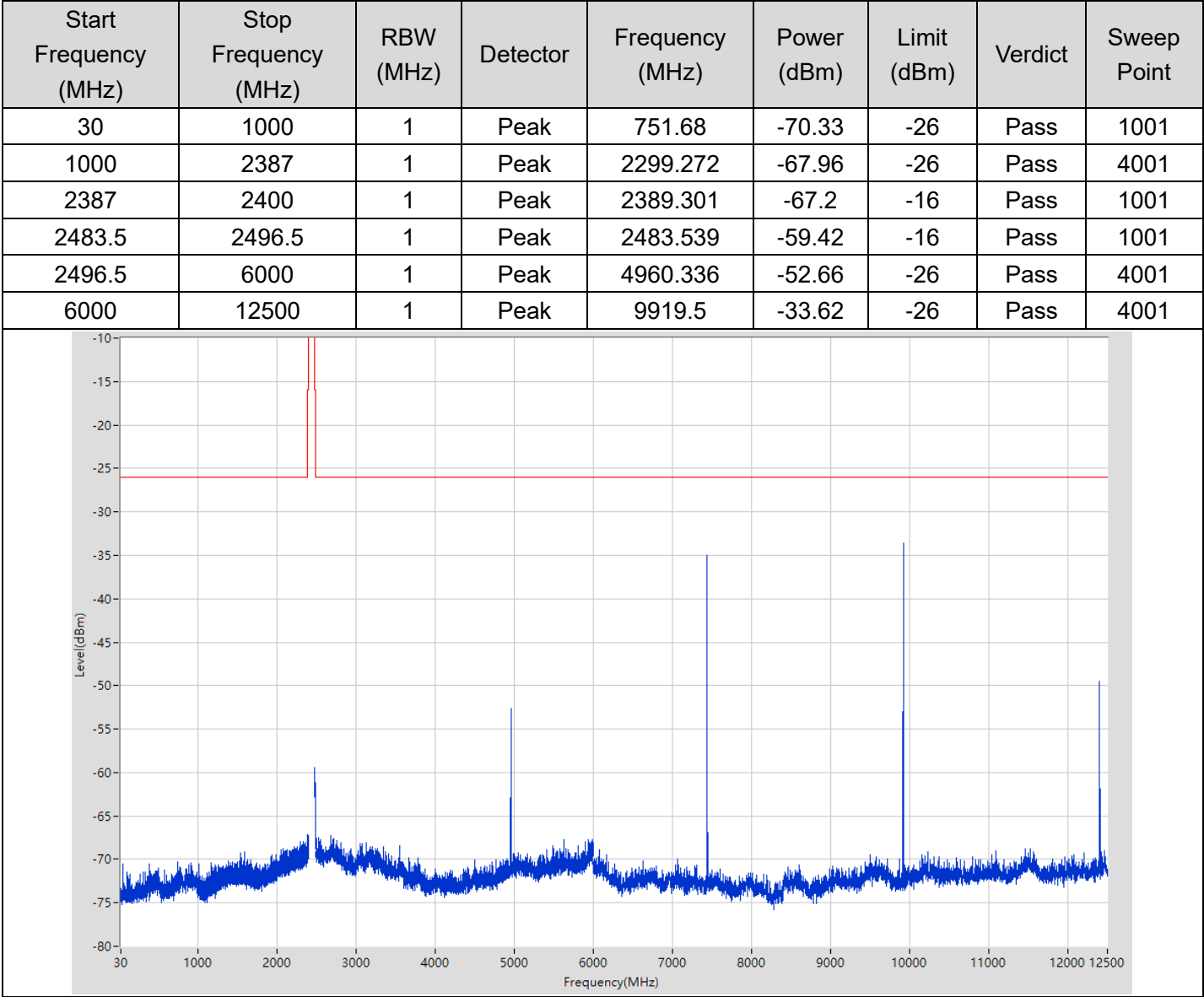
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Figure 23-Test Frequency: 2440MHz



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Figure 24-Test Frequency: 2480MHz



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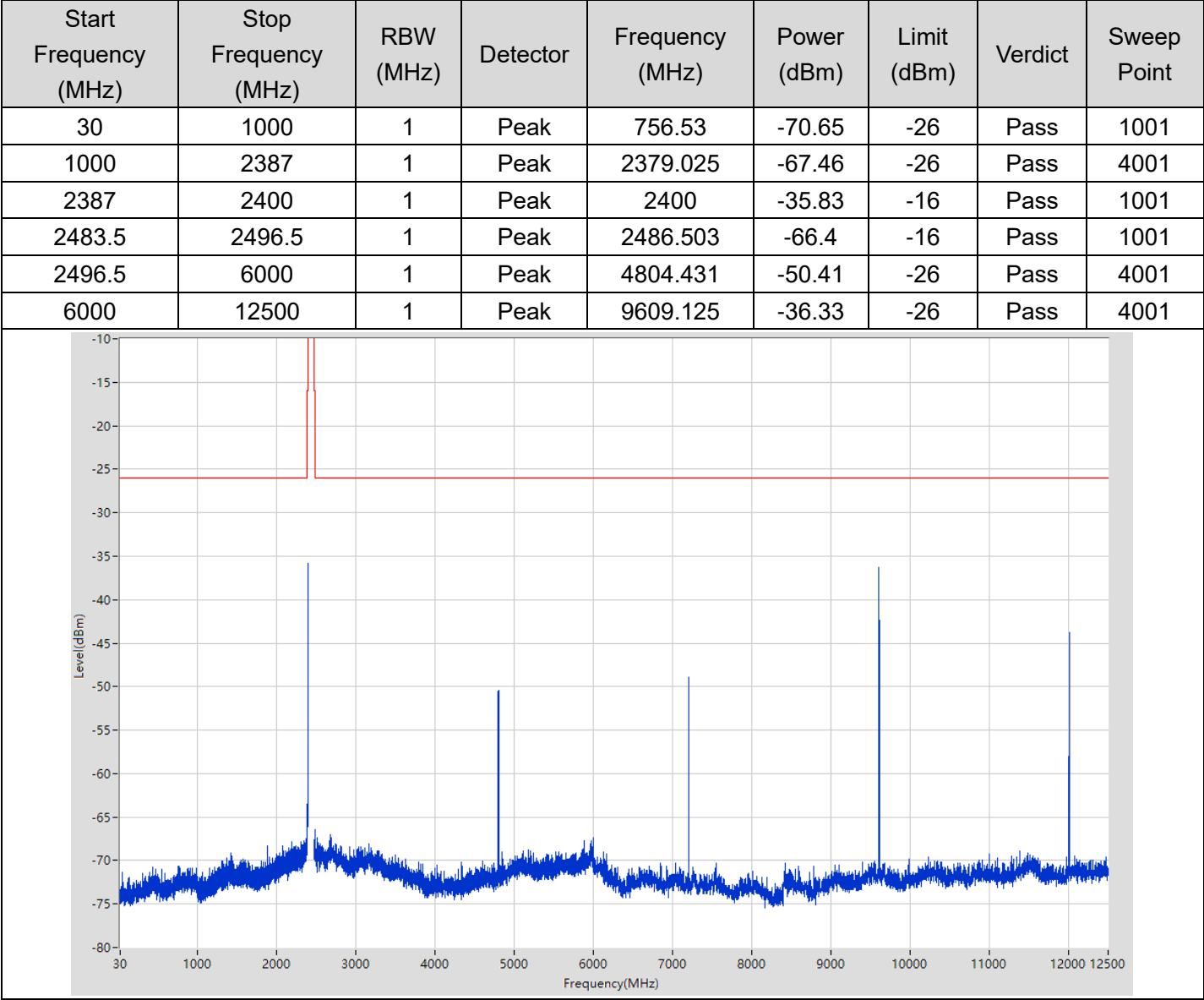
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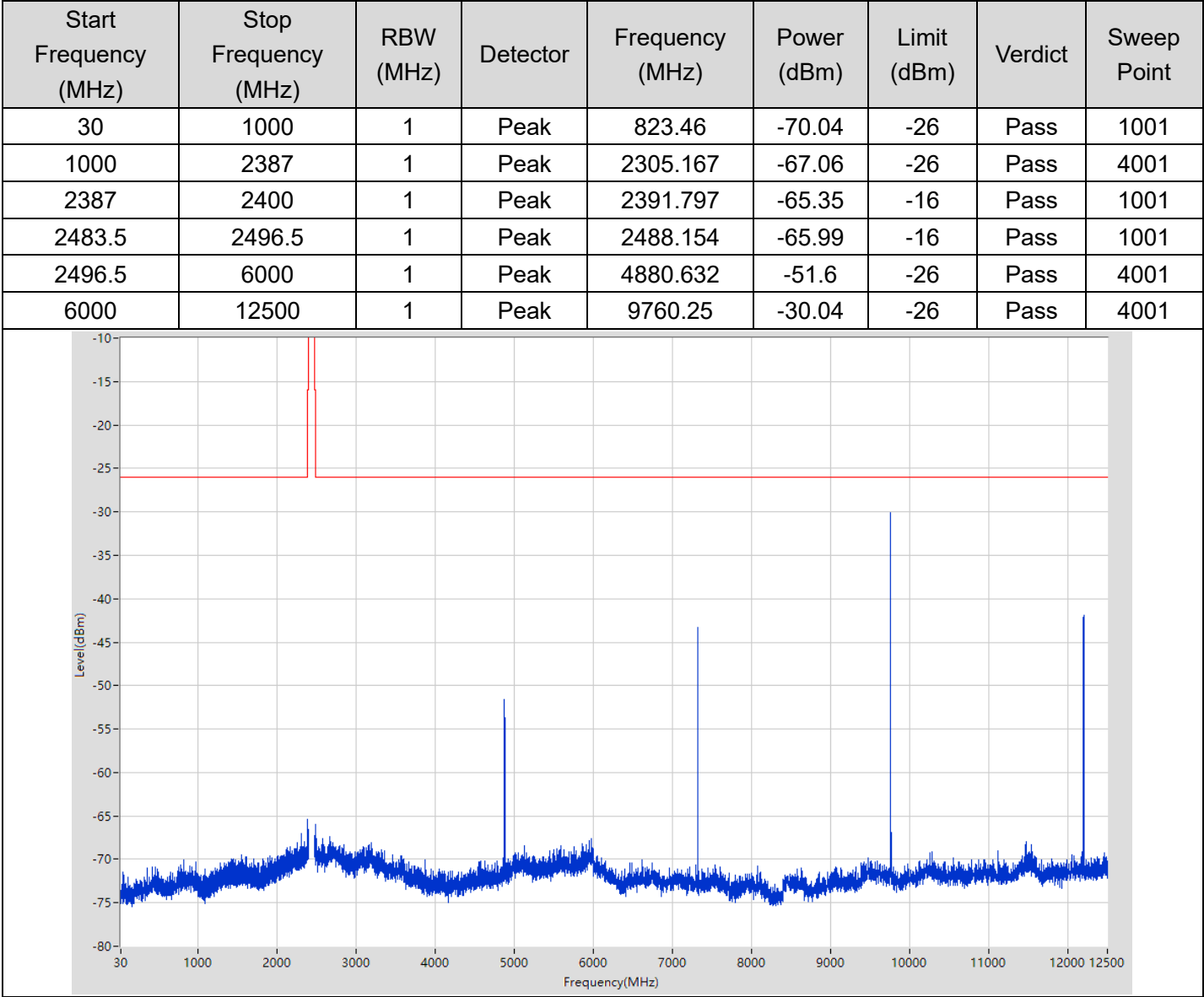
High Voltage

Figure 25-Test Frequency: 2402MHz



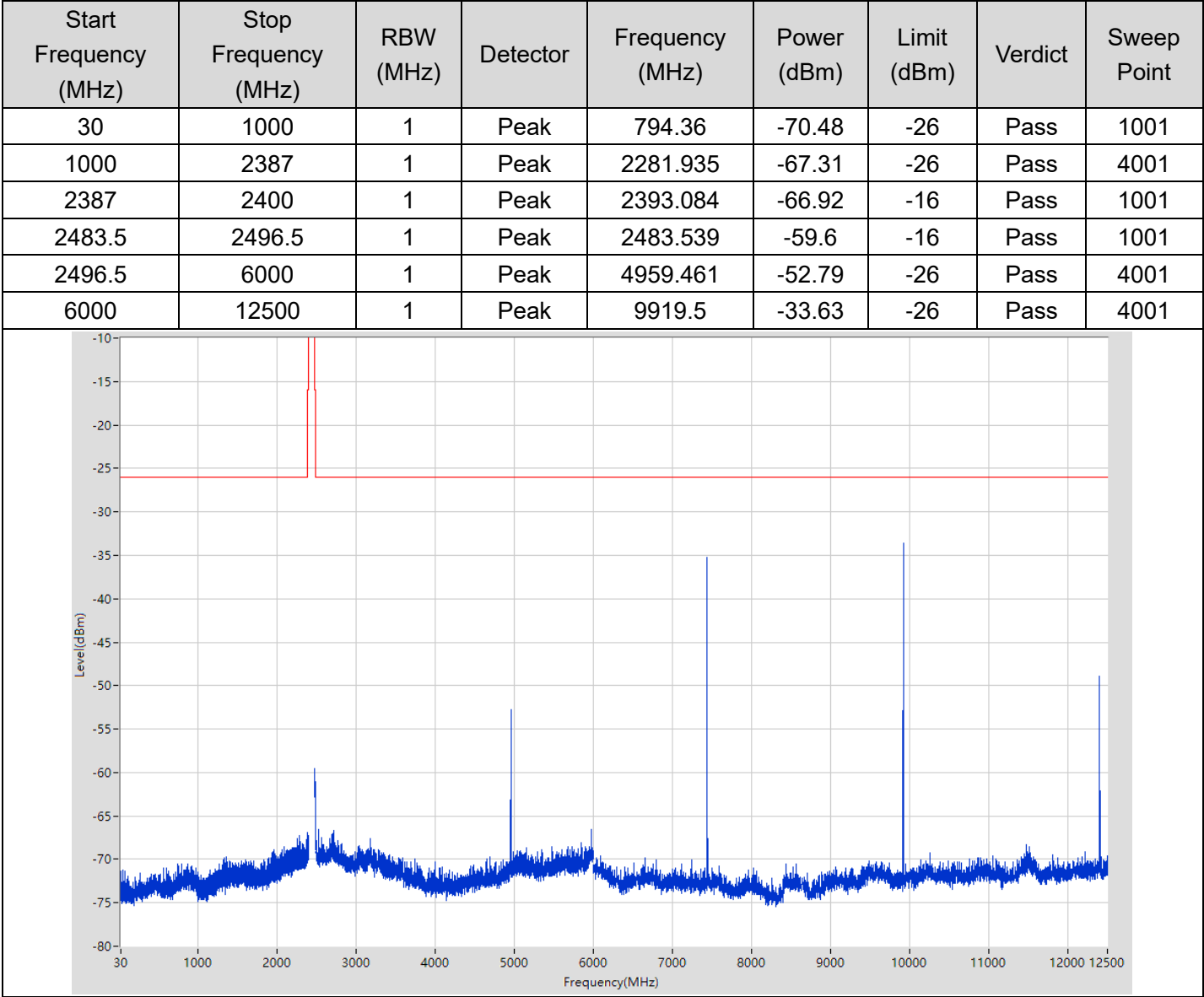
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Figure 26-Test Frequency: 2440MHz



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Figure 27-Test Frequency: 2480MHz



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4.4 ANTENNA OUTPUT POWER, ANTENNA POWER TOLERANCE AND TRANSMISSION ANTENNA GAIN

4.4.1 Limit

Item	Limits
Antenna Power	$\leq 10\text{mW}$ (other from 2400-2483.5 MHz)
E.I.R.P.	$\leq 12.14\text{dBm}$
Antenna Power Tolerance	+20%

Note:

E.I.R.P will not be applied to the transmission antenna which has a gain of 2.14dBi or less.

4.4.2 Test Setup

For other UUT:

Make the following changes to the settings of the spectrum analyser:

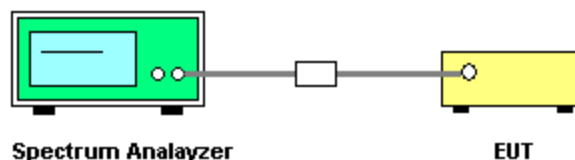
- Centre Frequency: The centre frequency of the channel under test.
- Span: 5MHz.
- RBW: 3 MHz.
- VBW: 8 MHz.
- Detector: Peak
- Trace Mode: Max Hold.

When the trace is complete, capture the trace, for example using the "View" option on the spectrum analyser. For Find the peak value of the trace and place the analyser marker on this peak. This level is recorded as D.

D shall be recorded in the test report.

The maximum PD, which is e.i.r.p. PSD (spectral density power) or power, is calculated from the above measured value D, and the applicable antenna assembly gain "G" in dBi, according to the formula below. If more than one antenna assembly is intended for this power setting, the gain of the antenna assembly with the highest gain shall be used.

$$PD = D + G$$



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4.4.3 Test Record

Table 4

Mode	Voltage (V)	Item	Result			Limit	P/F
			2402MHz	2440MHz	2480MHz		
BLE	Normal	Antenna Power (dBm)	1.58	0.86	-0.12	10dBm	Pass
		Antenna Power(mW)	1.44	1.22	0.97	10mW	Pass
		Declared Antenna Power(mW)	1.50	1.50	1.50	/	/
		Antenna Power Error	-4.00%	-18.67%	-35.33%	+20%	Pass
	Low	Antenna Power (dBm)	1.43	0.79	0.35	10dBm	Pass
		Antenna Power (mW)	1.39	1.20	1.08	10mW	Pass
		Declared Antenna Power(mW)	1.50	1.50	1.50	/	/
		Antenna Power Error	-7.33%	-20.00%	-28.00%	+20%	Pass
	High	Antenna Power (dBm)	1.38	0.77	0.33	10dBm	Pass
		Antenna Power (mW)	1.37	1.19	1.08	10mW	Pass
		Declared Antenna Power(mW)	1.50	1.50	1.50	/	/
		Antenna Power Error	-8.67%	-20.67%	-28.00%	+20%	Pass

Note(s):

1. The antenna gain is -5.45dBi.
2. Declared Antenna power is 1.50mW
3. Antenna Power Error = [(Antenna Power - Declared Antenna Power) / Declared Antenna Power] * 100%

TEST REPORT

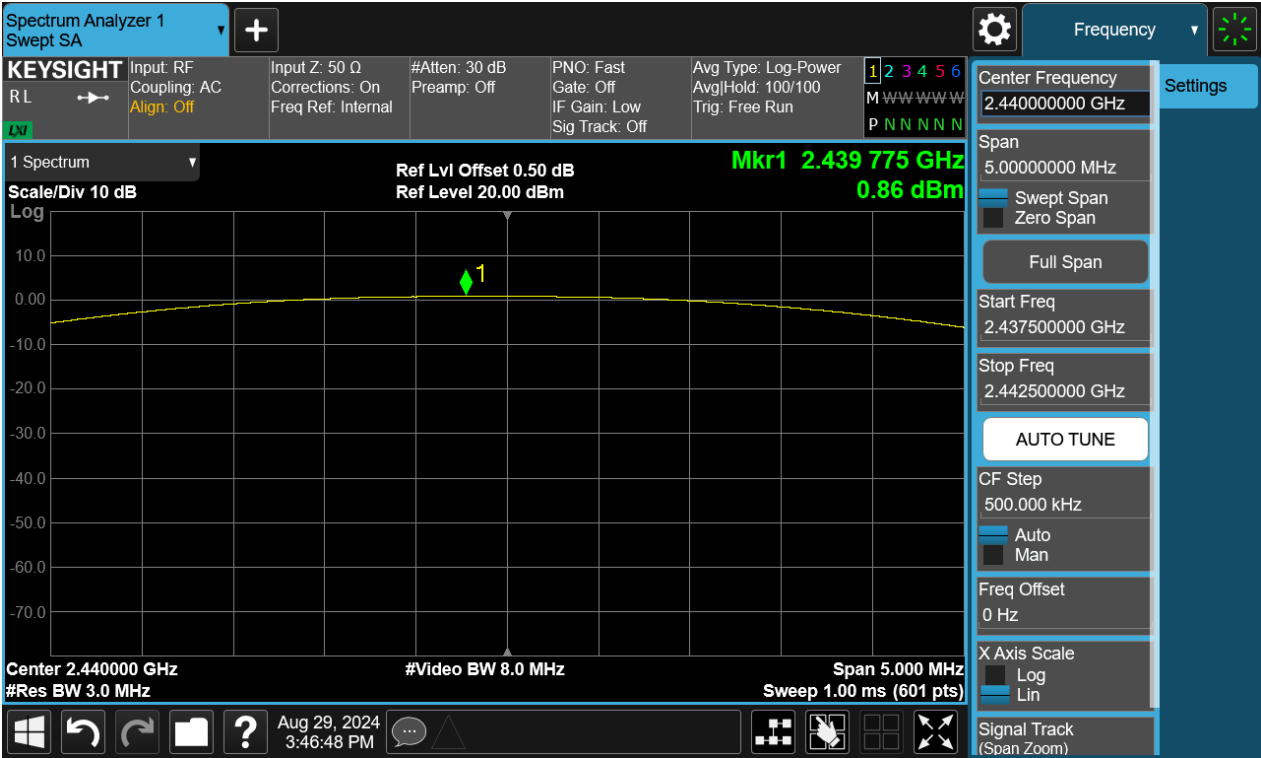
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Normal Voltage

Figure 28- Antenna Power- 2402



Figure 29- Antenna Power- 2440



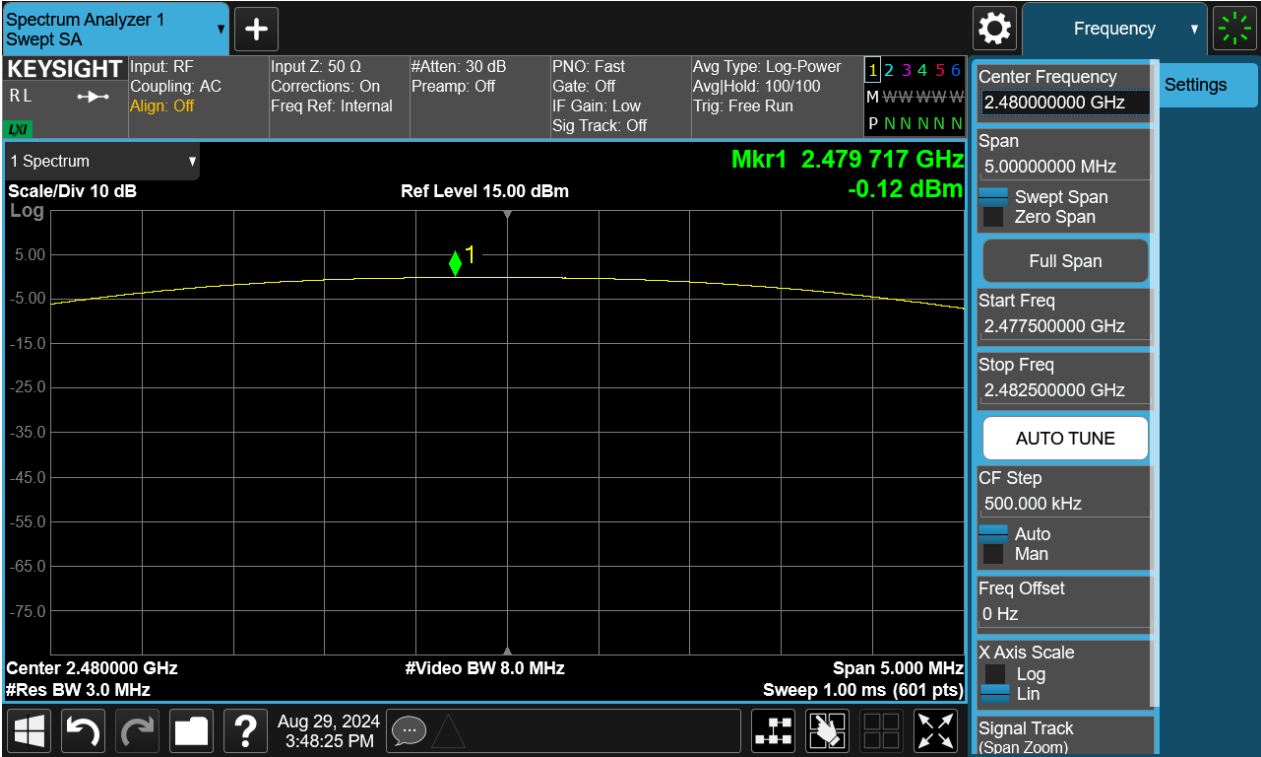
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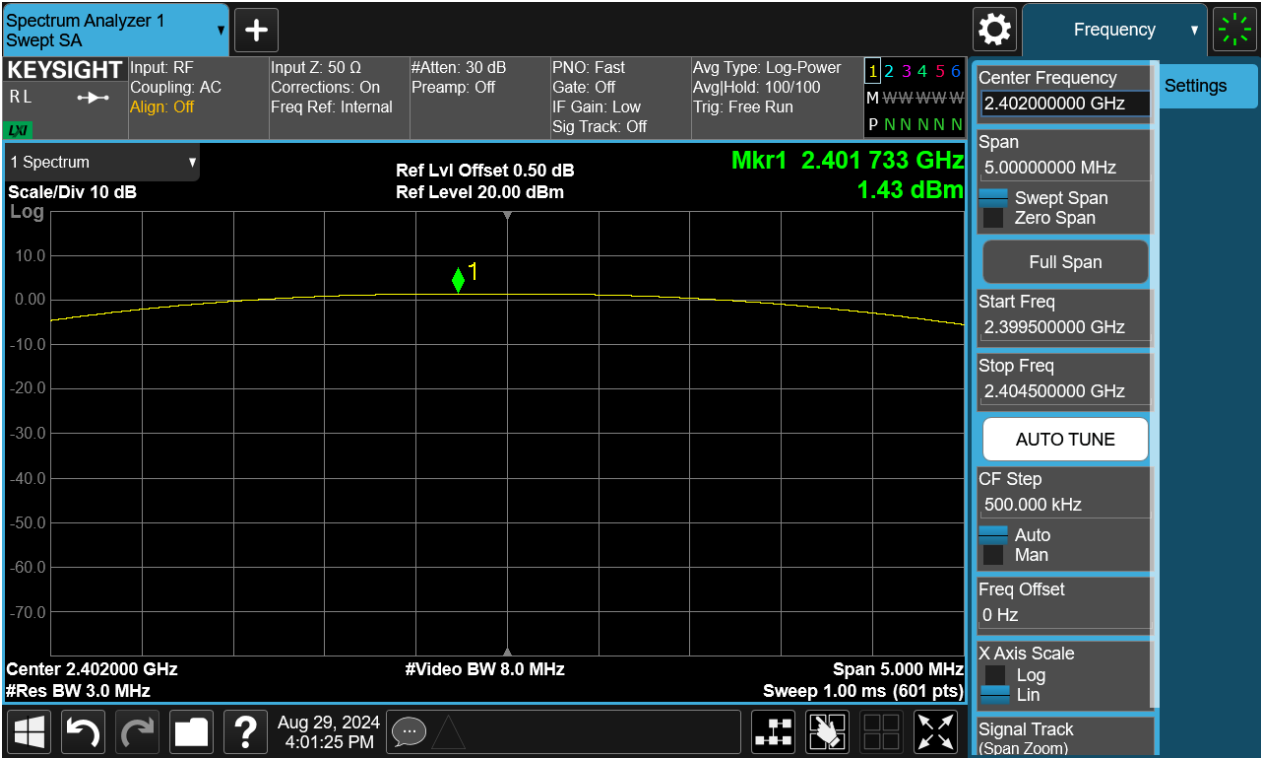
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Figure 30- Antenna Power-2480



Low Voltage

Figure 31- Antenna Power- 2402



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Figure 32- Antenna Power- 2440

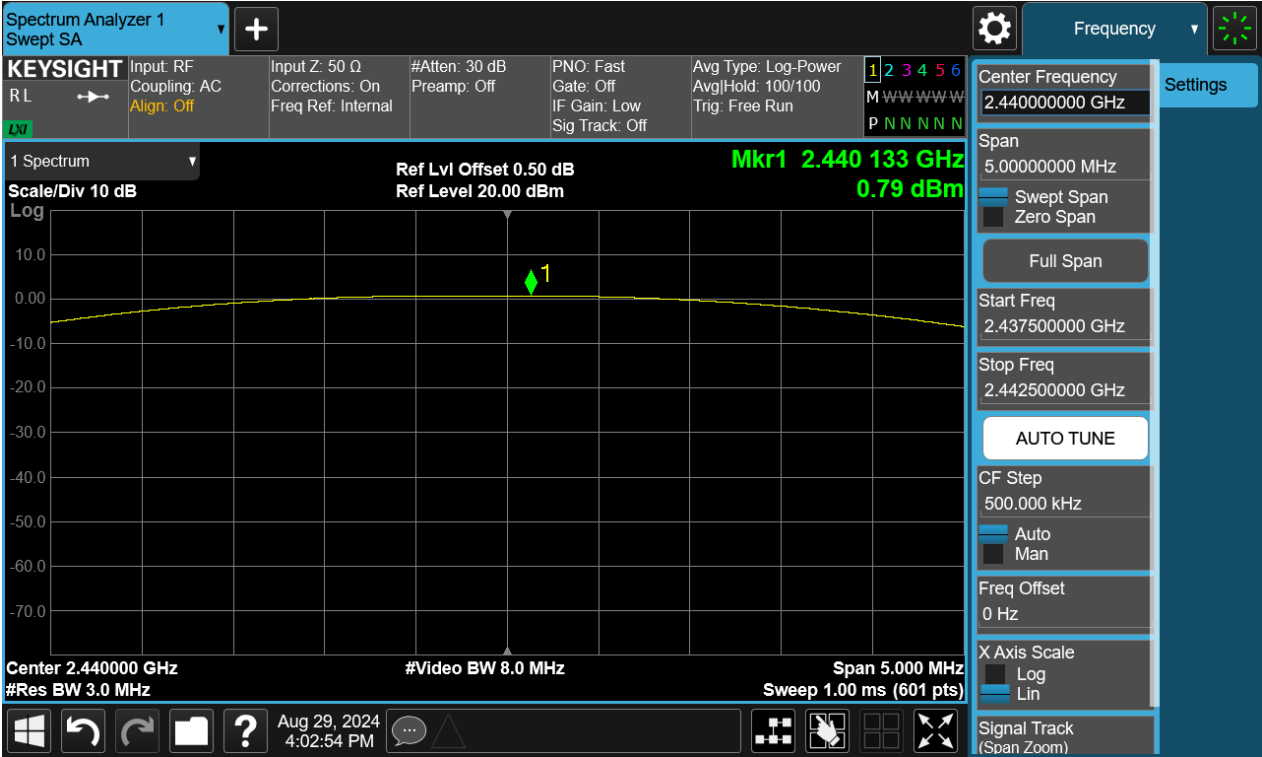
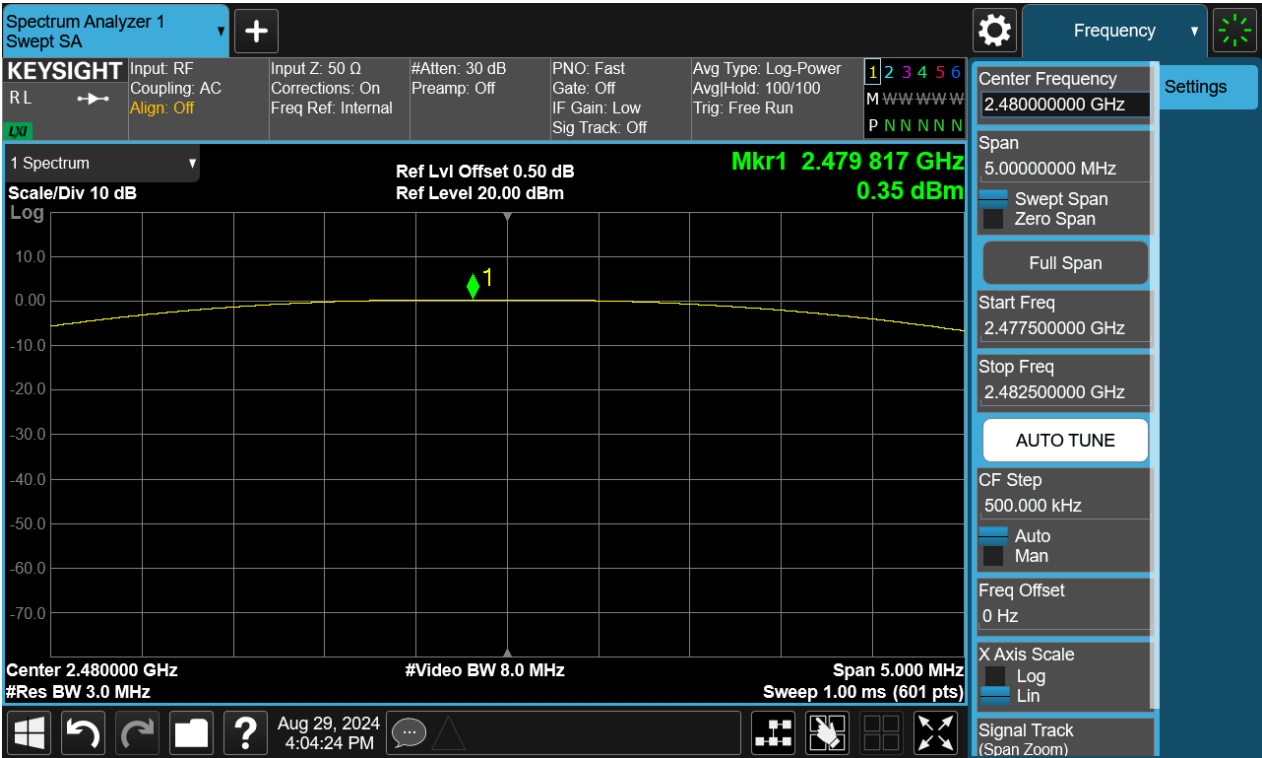


Figure 33- Antenna Power-2480



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High Voltage

Figure 34- Antenna Power- 2402

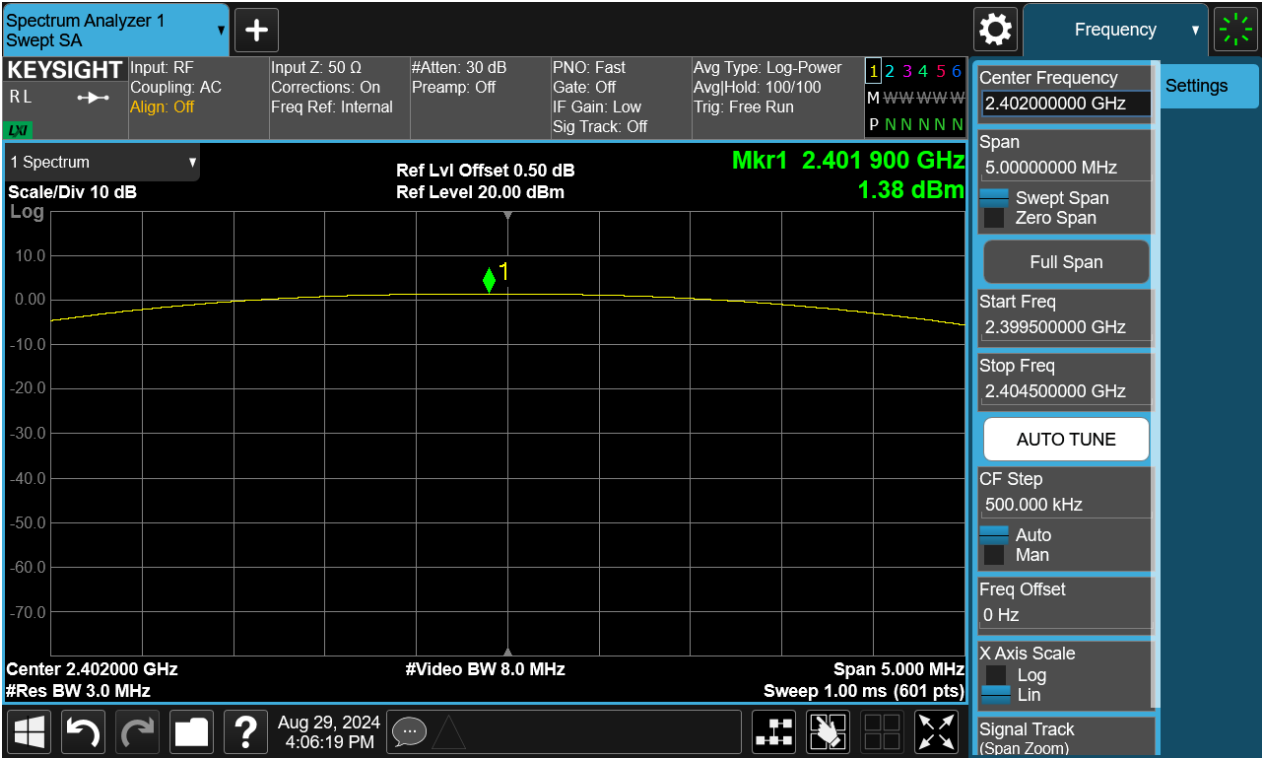
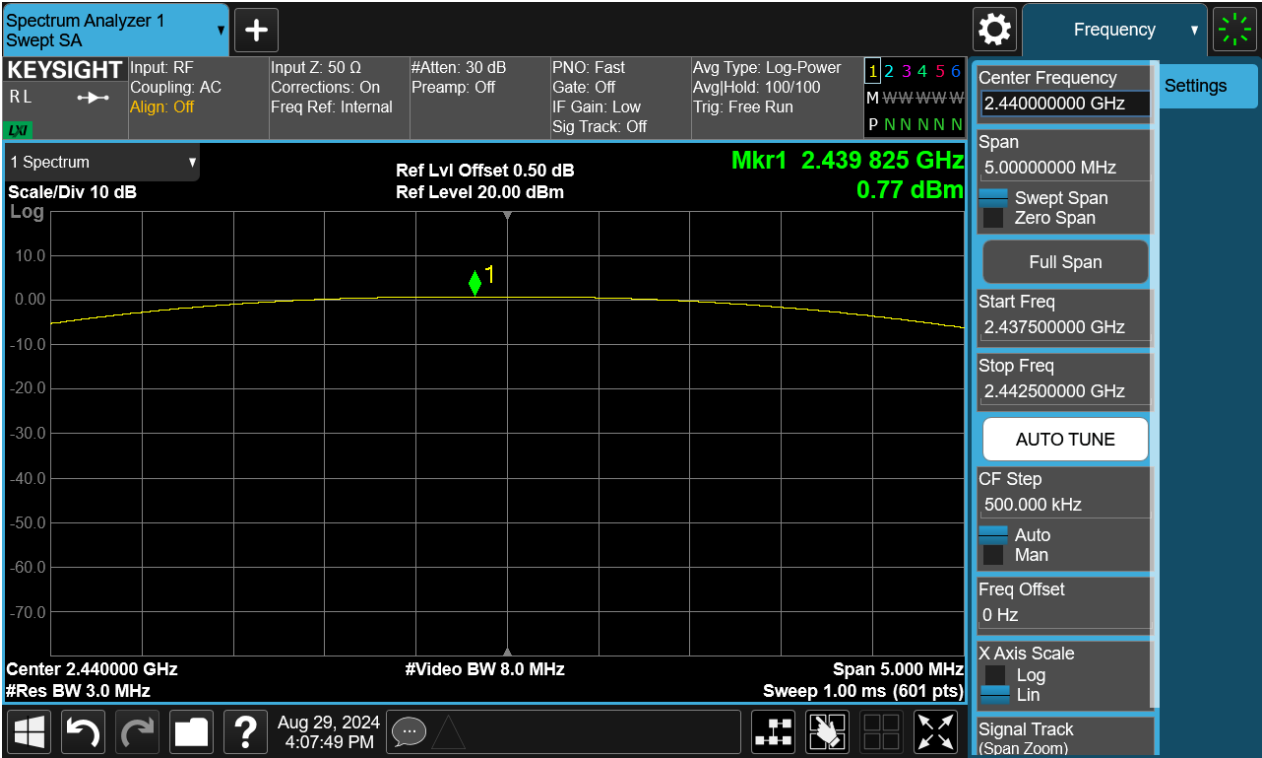


Figure 35- Antenna Power- 2440



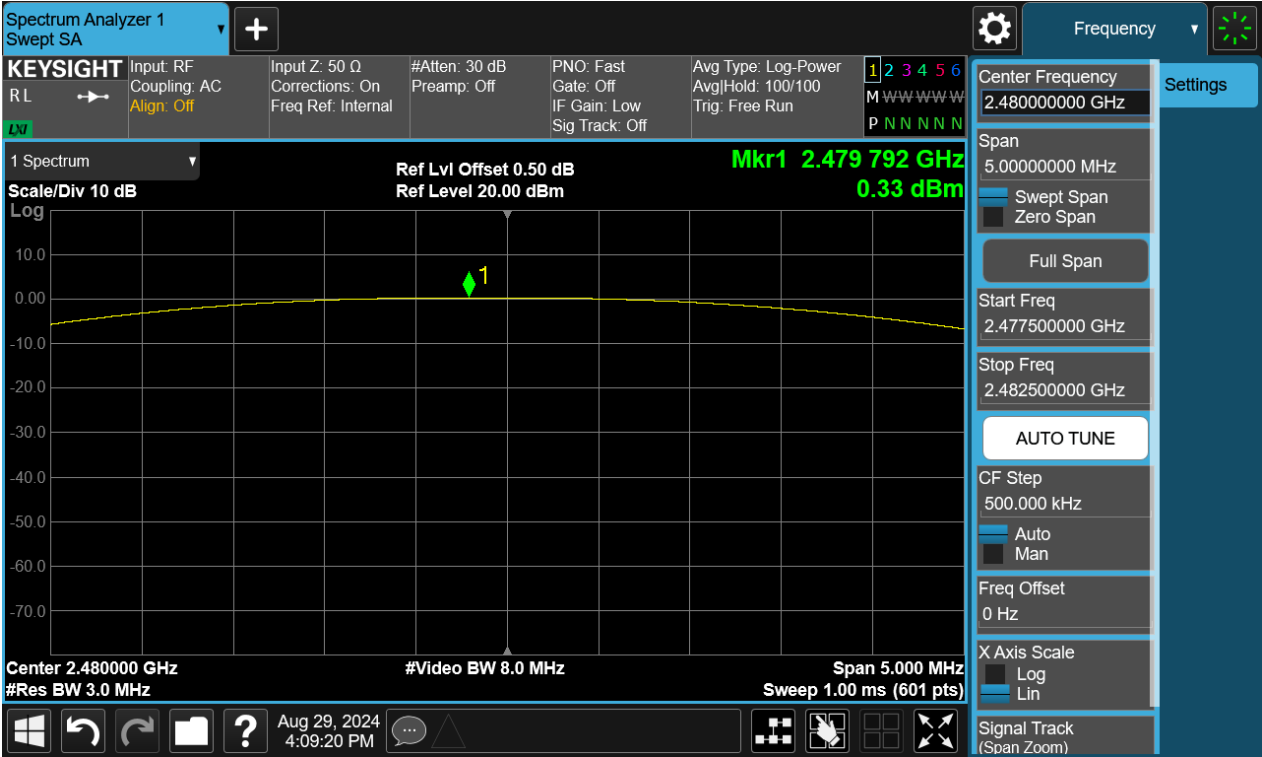
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Figure 36- Antenna Power-2480



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4.5 TRANSMISSION RADIATION ANGLE WIDTH (3DB BEAMWIDTH) MEASUREMENT

4.5.1 Limit

Item	Limits
3dB antenna beam width	360/A (If $A < 1$; then $A = 1$) $A = \{\text{EIRP Power [mW]} / 16.36 \text{ for DS, OFDM}\}$ or $A = \{\text{EIRP Power [mW]} / 4.9 \text{ for FH}\}$
Note: This test item is not applied for radio equipment with equivalent isotropic radiation power lower than 12.14dBm/MHz, but Antenna Power (Conducted) limit is 10mW/MHz (10dBm/MHz), So the test item will not be applied to the transmission antenna which has a gain of 2.14dBi or less	

4.5.2 Measuring Instruments and setting

Spectrum Parameter	Setting
Attenuation	Auto
Span Frequency	0 MHz
RB	1 MHz
VB	1 kHz
Detector	Peak
Trace	Max Hold
Sweep Time	Auto

4.5.3 Test Procedures

1. Set EUT and measuring antenna at the same height and roughly facing each other.
2. Set spectrum analyzer with condition in section 4.7.2 and tune reference level to observe receiving signal position.
3. Rotate directions of the EUT horizontally and vertically to find the maximum receiving power.
4. Move the measuring antenna height up and down within $\pm 50\text{cm}$ of EUT height and swing it to find the maximum output of measuring antenna. The output level at the spectrum analyzer is read as "E"
5. Calculate permitted radiation angle in horizontal and vertical using EIRP measured in another test method.
6. Calculate 3dB antenna beam width by the formula below $360/A$ (If $A < 1$; then $A = 1$).
 $A = \{\text{EIRP Power [mW]} / 16.36 \text{ for DS, OFDM}\}$ or
 $A = \{\text{EIRP Power [mW]} / 4.9 \text{ for FH}\}$

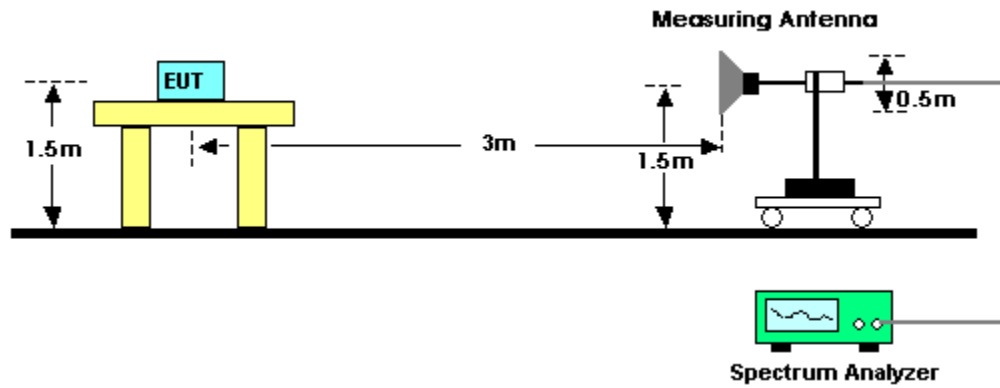
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4.5.4 Test Setup



4.5.5 Test Result

Note: This test item is not applicable

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4.6 RECEIVER SPURIOUS EMISSION AND UNWANTED EMISSION INTENSITY

4.6.1 Limit

Frequency Range	Limits
30MHz ~ 1GHz	4 nW (-54dBm)
1GHz ~ 12.5GHz	20 nW (-47dBm)

4.6.2 Test Setup

The modulation state shall be “continuous receiving mode”.

Start Frequency: Start Frequency of frequency range to measure (30MHz or 1GHz)

Stop Frequency: Stop Frequency of frequency range to measure (1GHz or 12.5GHz)

Span: AUTO (Measurement Range)

RBW: 100 kHz, VBW: 100 kHz for Frequency < 1 GHz

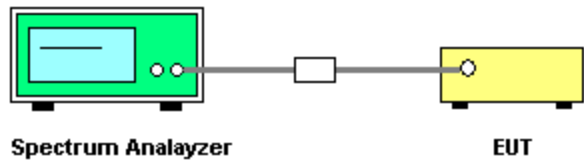
RBW: 1MHz, VBW: 1MHz for Frequency > 1 GHz

Sweep time: AUTO or more

Log scale: 10dB/Div, Data points: 501points (400 points or more)

Detection: Positive Peak

Reference Level: Enough level for maximum dynamic range



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4.6.3 Test Record

Table 5_RECEIVER SPURIOUS EMISSION AND UNWANTED EMISSION INTENSITY

Mode	Voltage (V)	Frequency Range (MHz)	Max Value (dBm)			Limit (dBm)	P/F
			2402MHz	2440MHz	2480MHz		
BLE	Normal	30 ~ 1000	-93.04	-92.25	-92.62	-54	Pass
		1000 ~ 6000	-77.27	-76.04	-75.08	-47	Pass
		6000 ~12500	-74.53	-70.06	-73.22	-47	Pass
	Low	30 ~ 1000	-92.65	-93.40	-93.20	-54	Pass
		1000 ~ 6000	-76.92	-76.27	-79.60	-47	Pass
		6000 ~12500	-74.47	-70.02	-80.15	-47	Pass
	High	30 ~ 1000	-92.65	-92.14	-92.11	-54	Pass
		1000 ~ 6000	-76.89	-76.28	-75.31	-47	Pass
		6000 ~12500	-74.88	-69.92	-73.27	-47	Pass

TEST REPORT

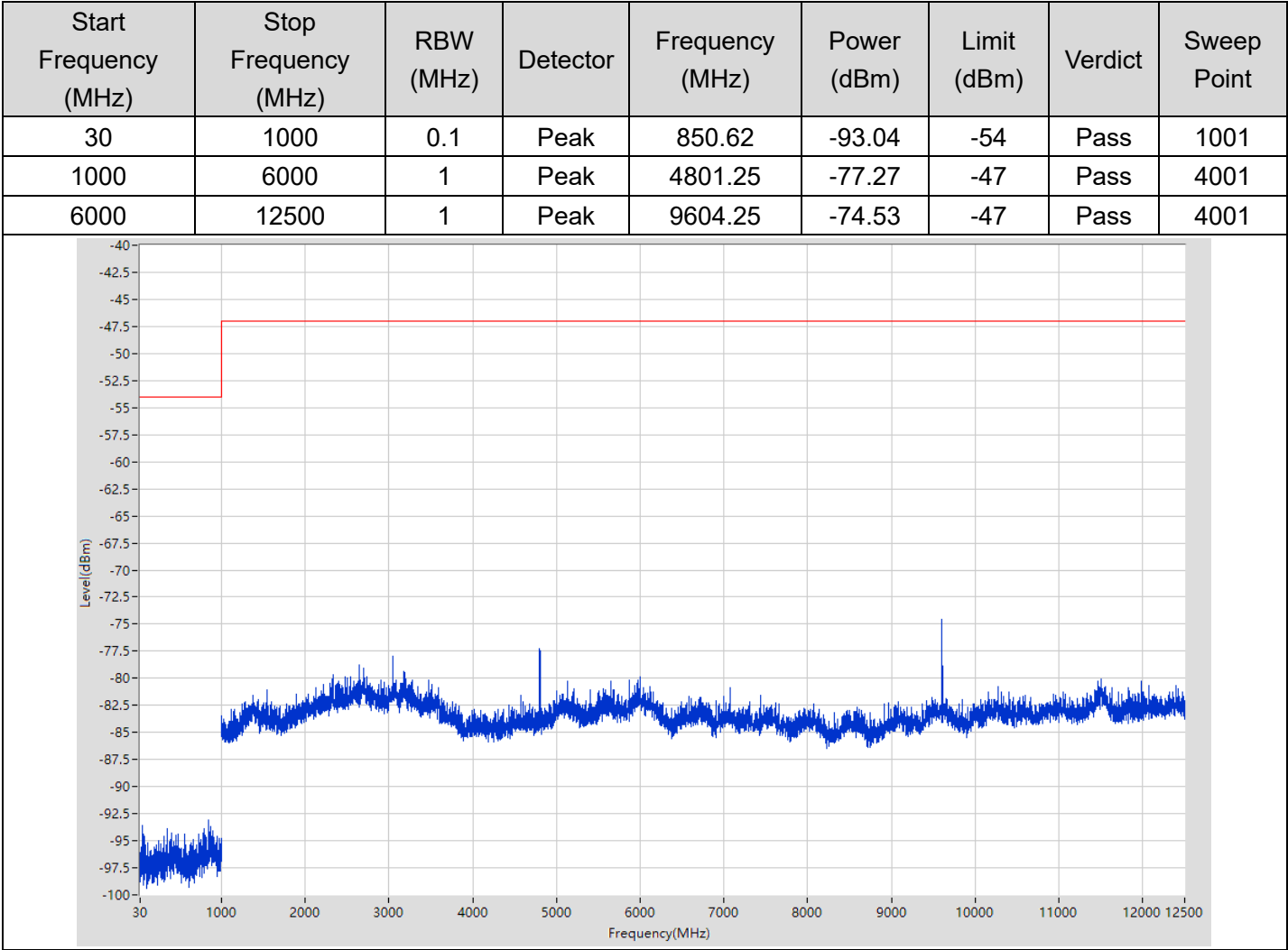
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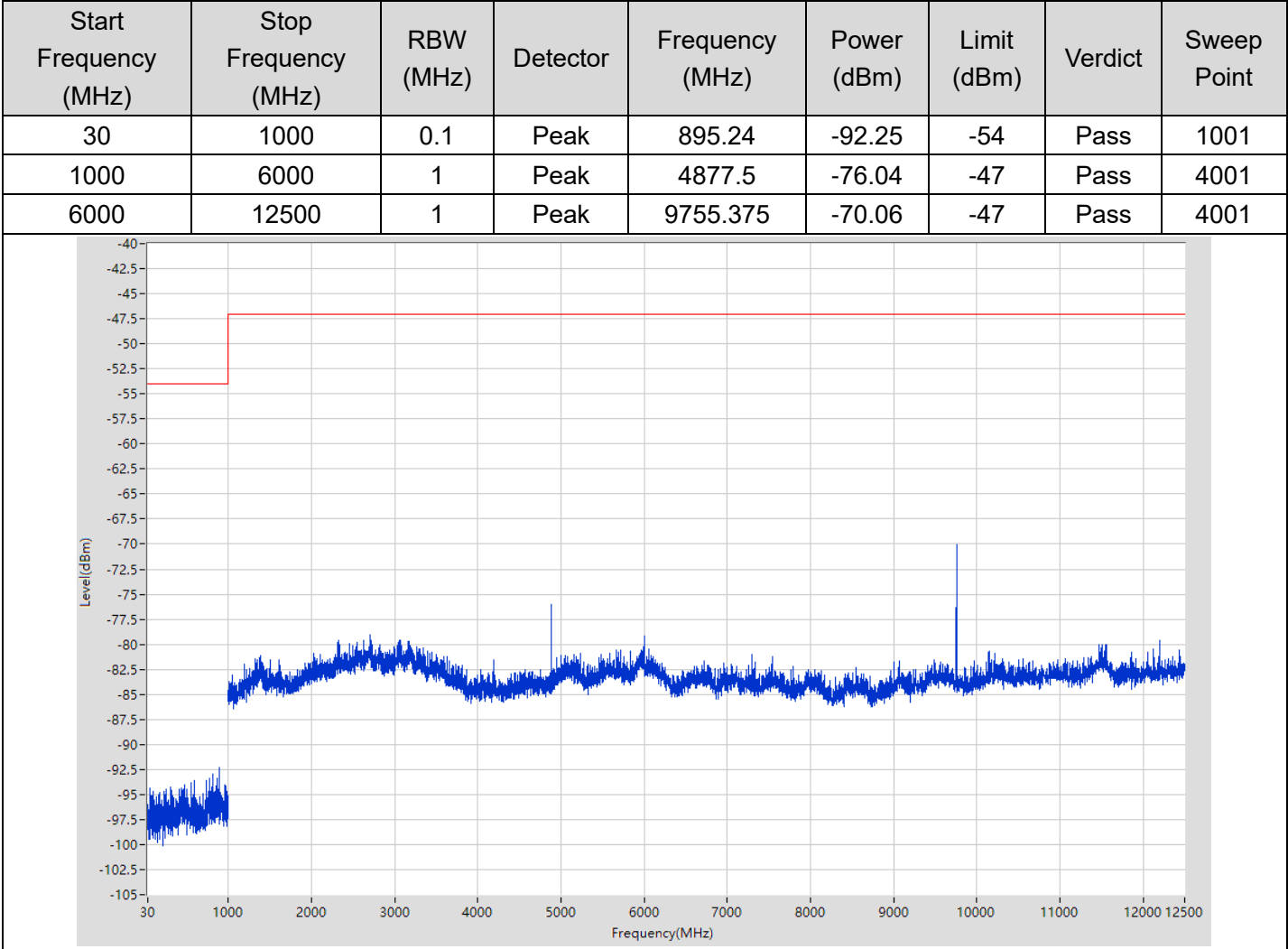
Normal Voltage

Figure 37-Test Frequency: 2402MHz



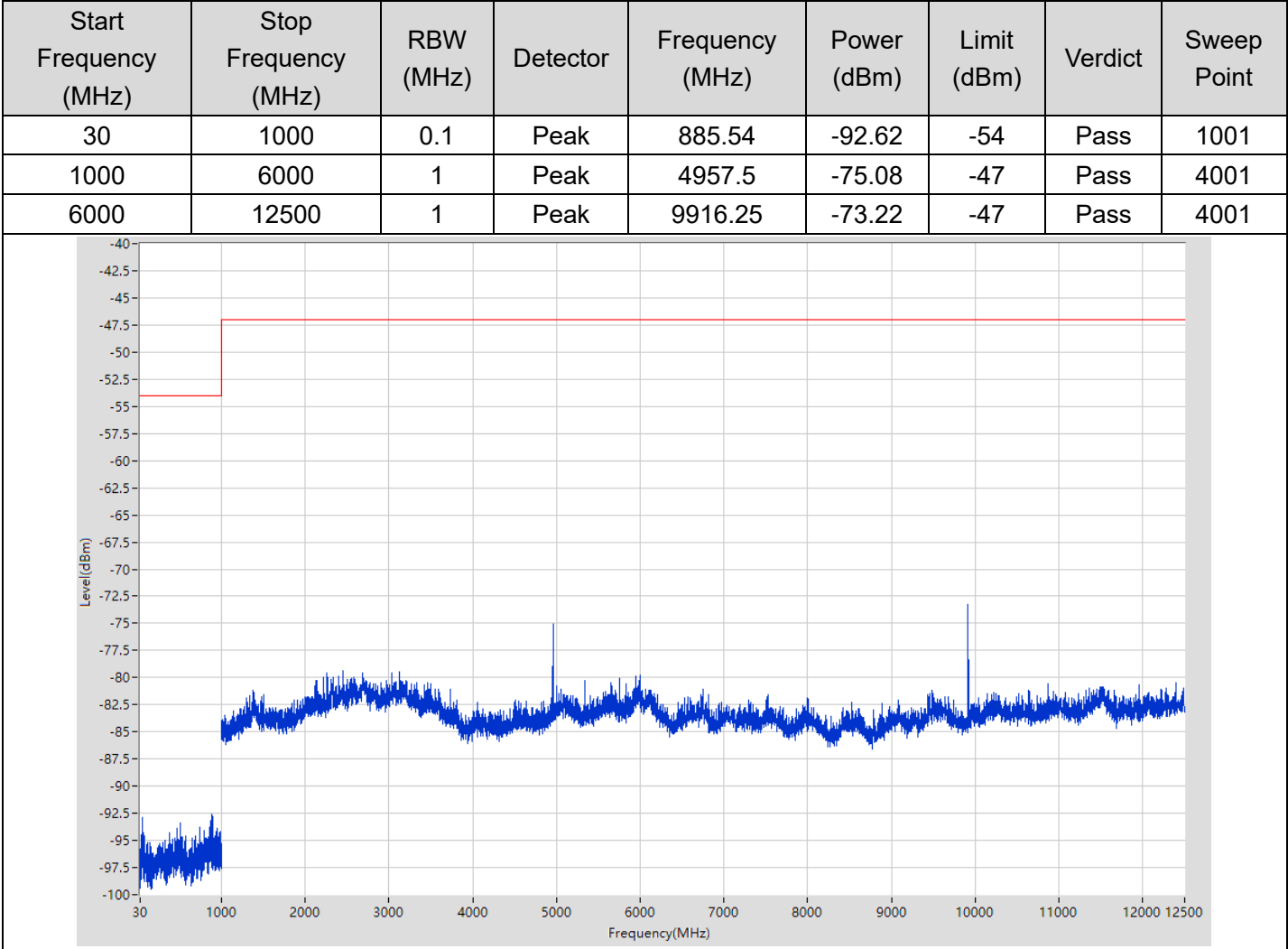
TEST REPORT

Figure 38-Test Frequency: 2440MHz



TEST REPORT

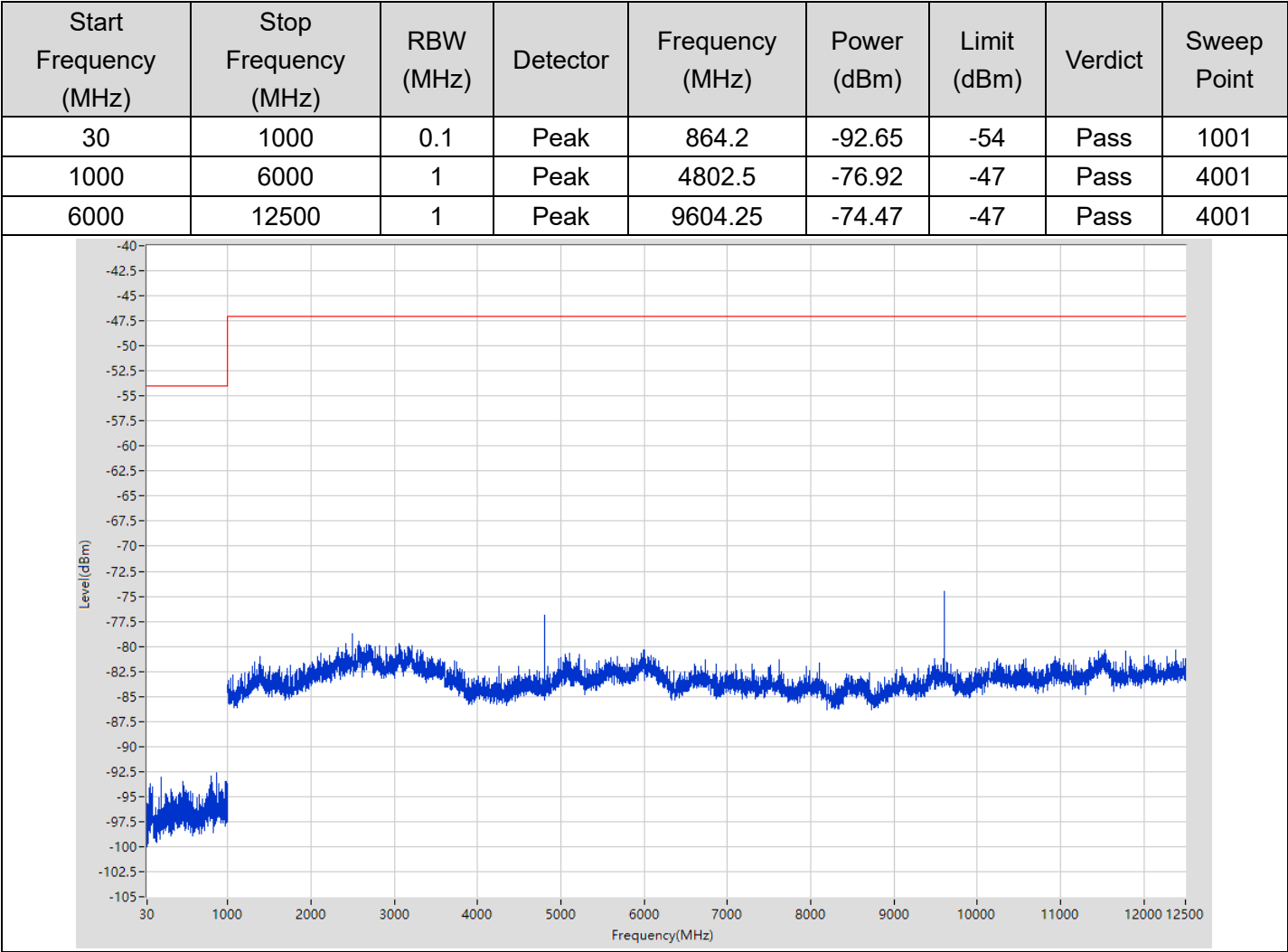
Figure 39-Test Frequency: 2480MHz



TEST REPORT

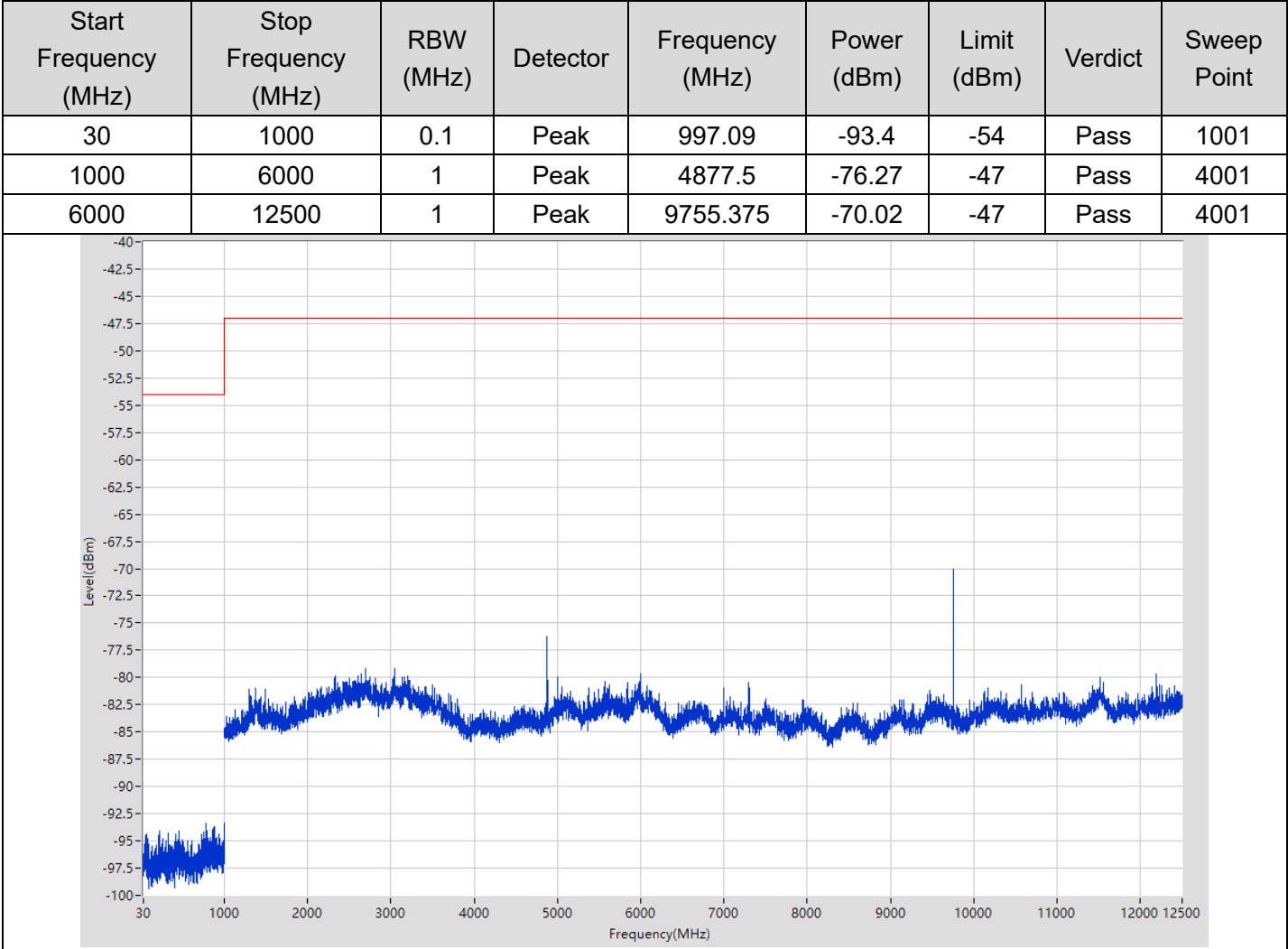
Low Voltage

Figure 40-Test Frequency: 2402MHz



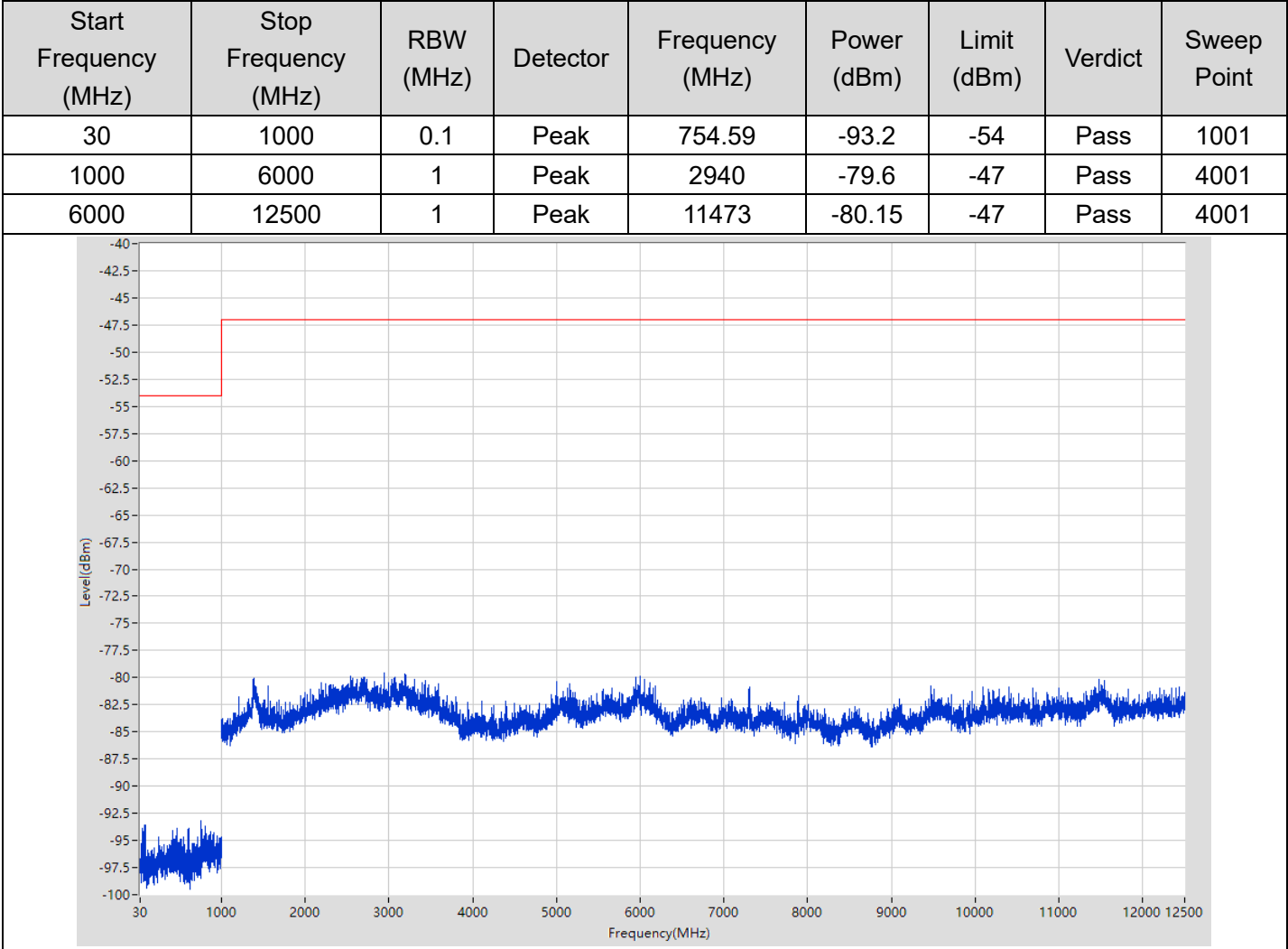
TEST REPORT

Figure 41-Test Frequency: 2440MHz



TEST REPORT

Figure 42-Test Frequency: 2480MHz



TEST REPORT

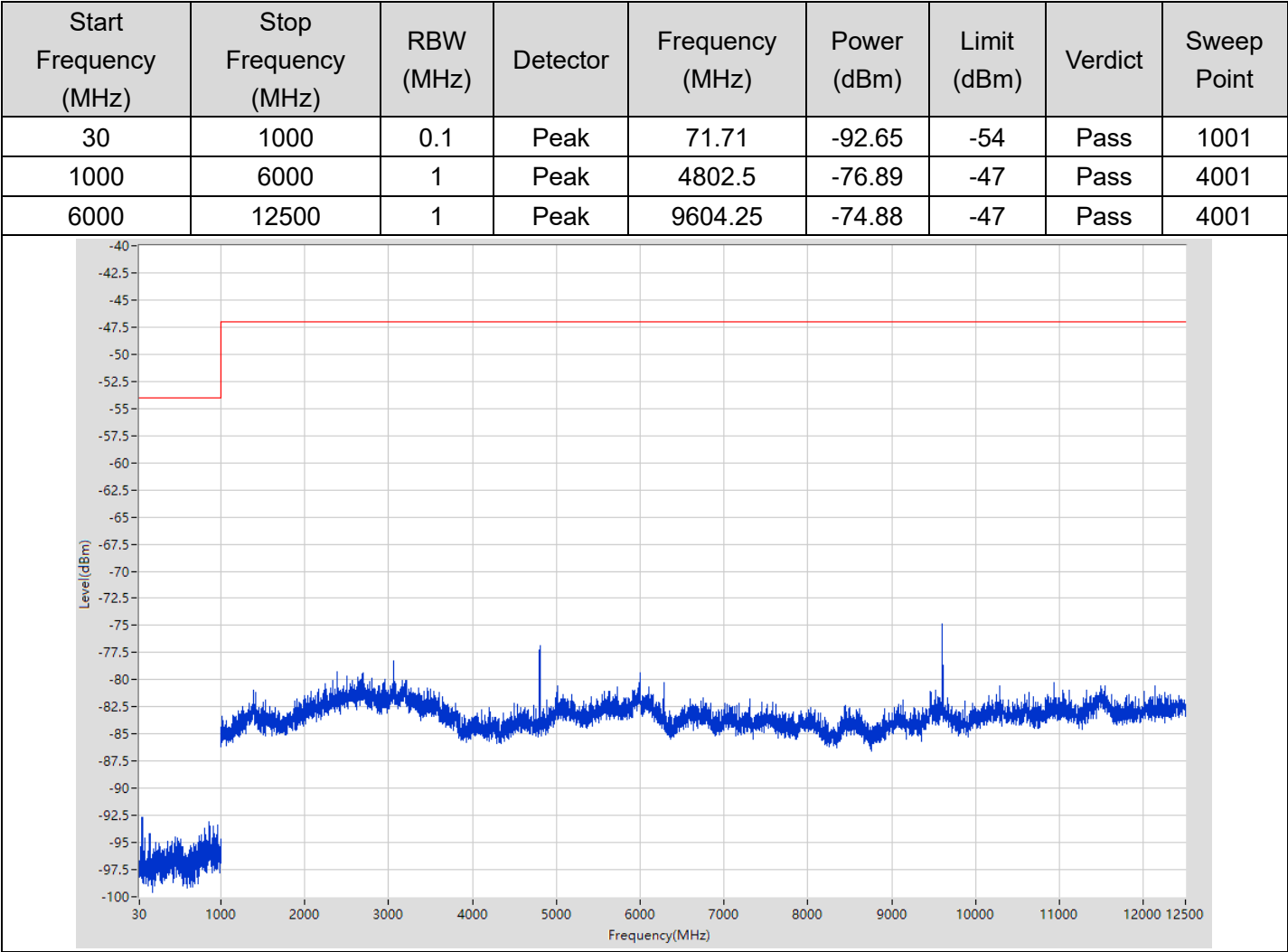
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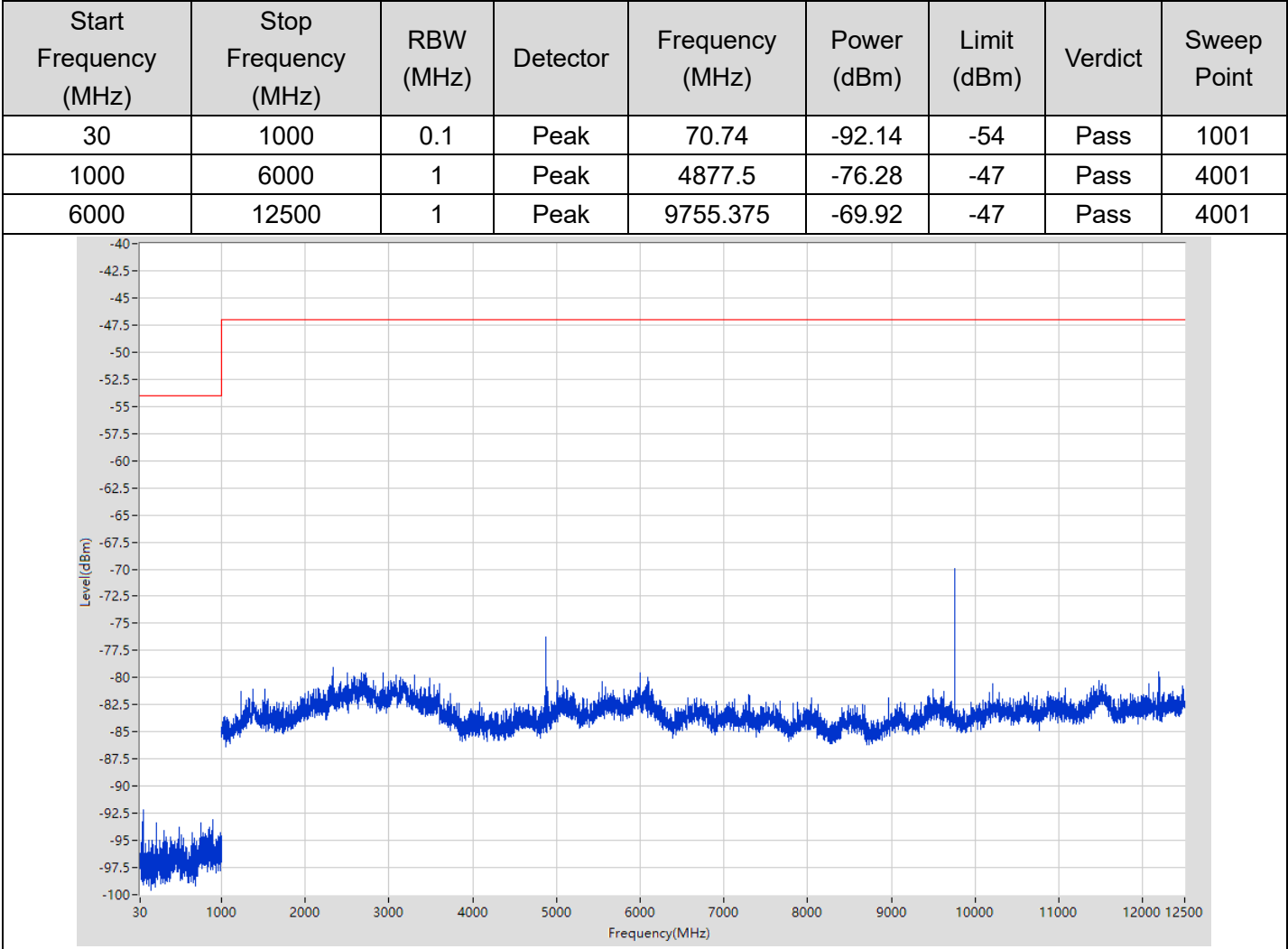
High Voltage

Figure 43-Test Frequency: 2402MHz



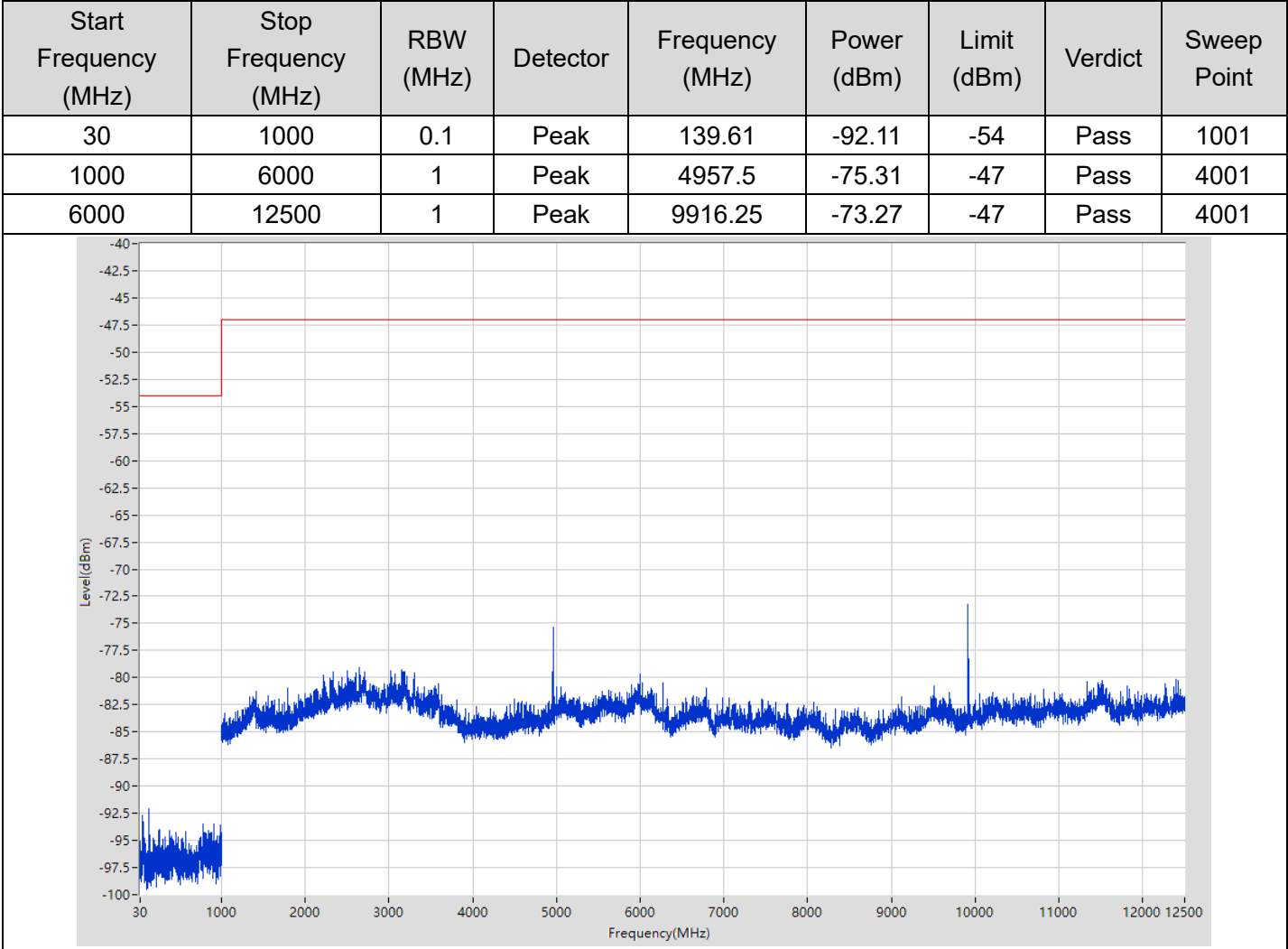
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Figure 44-Test Frequency: 2440MHz



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Figure 45-Test Frequency: 2480MHz



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4.7 RADIO INTERFERENCE PREVENTION CAPABILITY

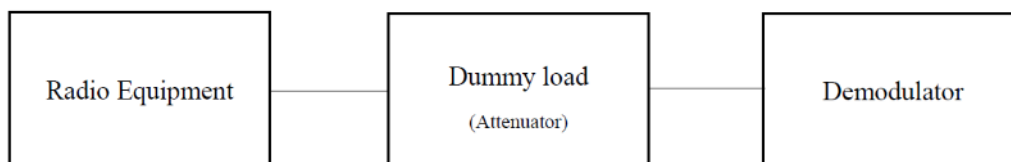
4.7.1 Limit

Item	Limit
Identification code	≥ 48 bits

4.7.2 Test Setup

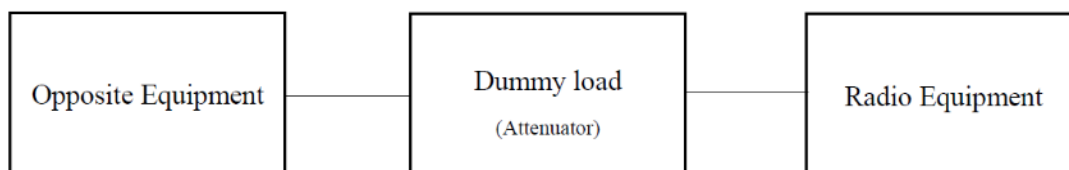
In the case that the EUT has the function of automatically transmitting the identification code:

- Transmit the assigned identification code from the radio equipment.
- Confirm the identification code received by the demodulator.



In the case of receiving the identification code:

- Transmit the assigned identification code from the opposite equipment.
- Confirm that the usual communication is available.
- Transmit the identification code distinct from the assigned one from the opposite equipment.
- Confirm that the radio equipment is stopped or an indication is displayed as the identification code is different.



4.7.3 Test Record

Test Result: Pass

MAC Address: A4:C1:38:68:3E:01

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4.8 CONSTRUCTION PROTECTION CONFIRMATION

4.8.1 Limit

The high-frequency section and modulation section of the radio equipment except for the antenna system shall not be capable of being opened easily.

4.8.2 Confirmation method

The RF and modulation portions are protected against illegal modification as following method:

Protected Method	Description
BT Module Package	BT Module Package of RF (U1: TLSR8258) and Modulation (TX: 24MHz) portions is QFN48 type.
Enclosure	RF and Modulation components are covered within case of EUT and this case used special screw to protect anybody to open this case.
User Manual	we will add some warning statements on the user manual to against illegal modification



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5 Appendixes

5.1 Photographs of the Sample



All of the sample



Front of the sample

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Rear of the sample



Left of the sample

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Right of the sample



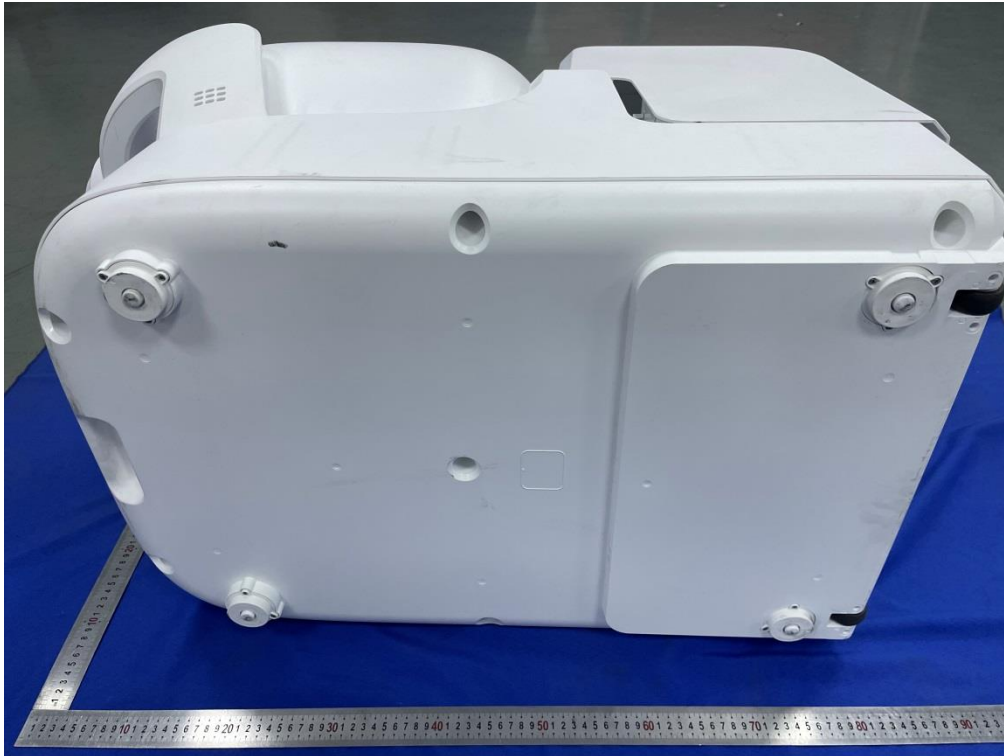
Top of the sample

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Bottom of the sample



Open-1 of the sample

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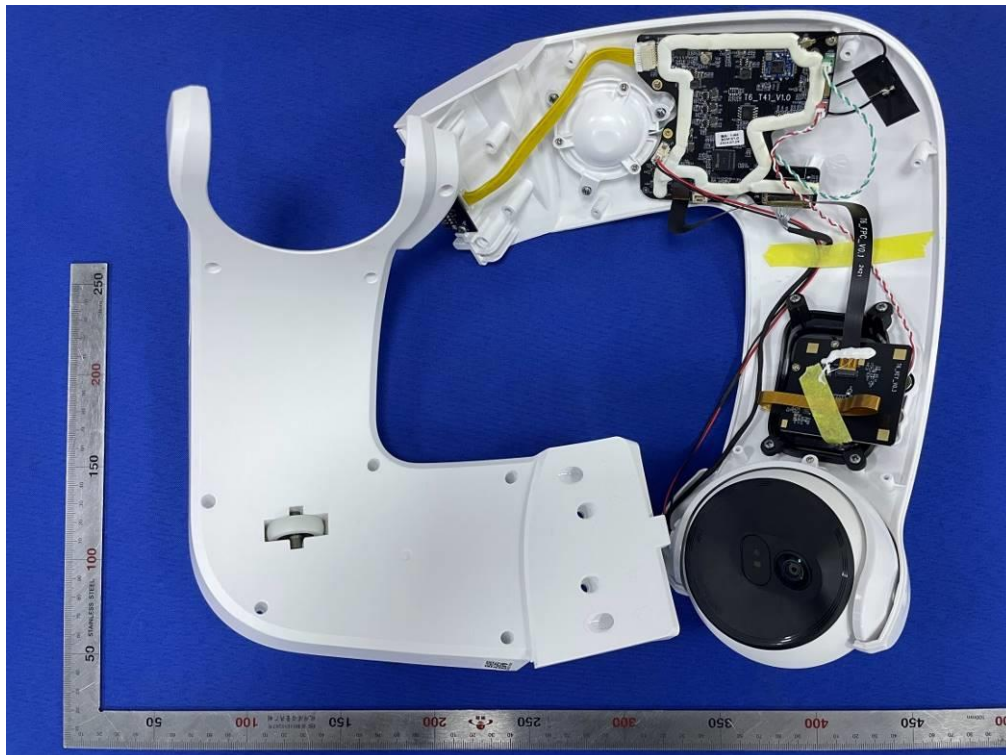
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Open-2 of the sample



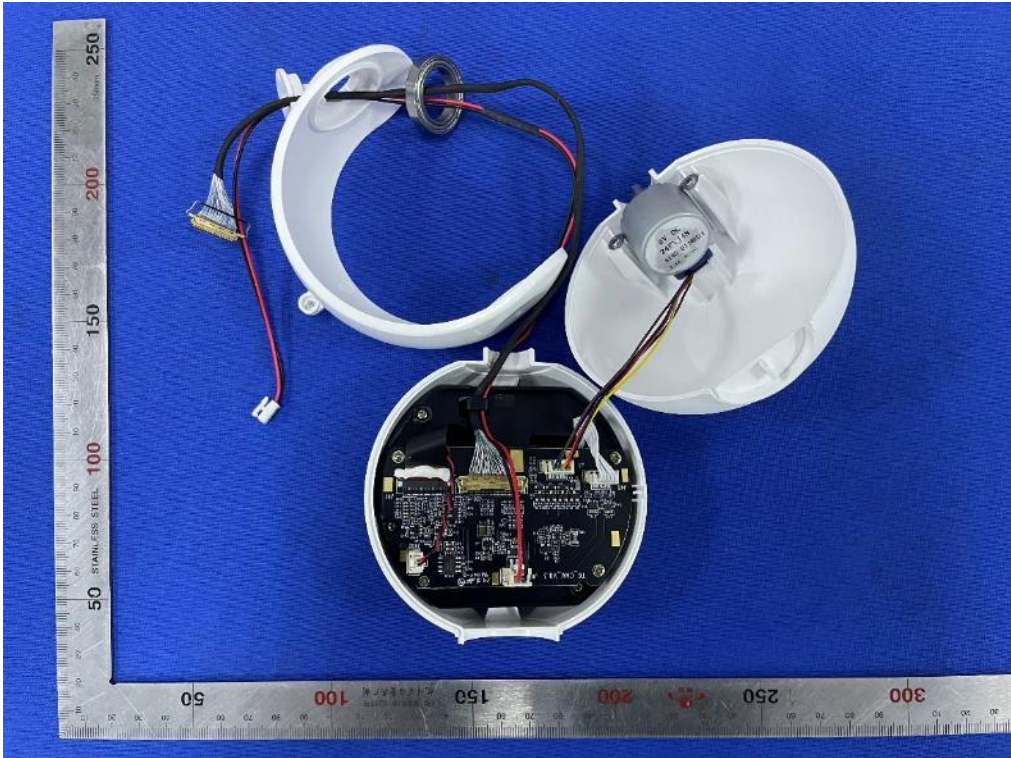
Open-3 of the sample

TEST REPORT

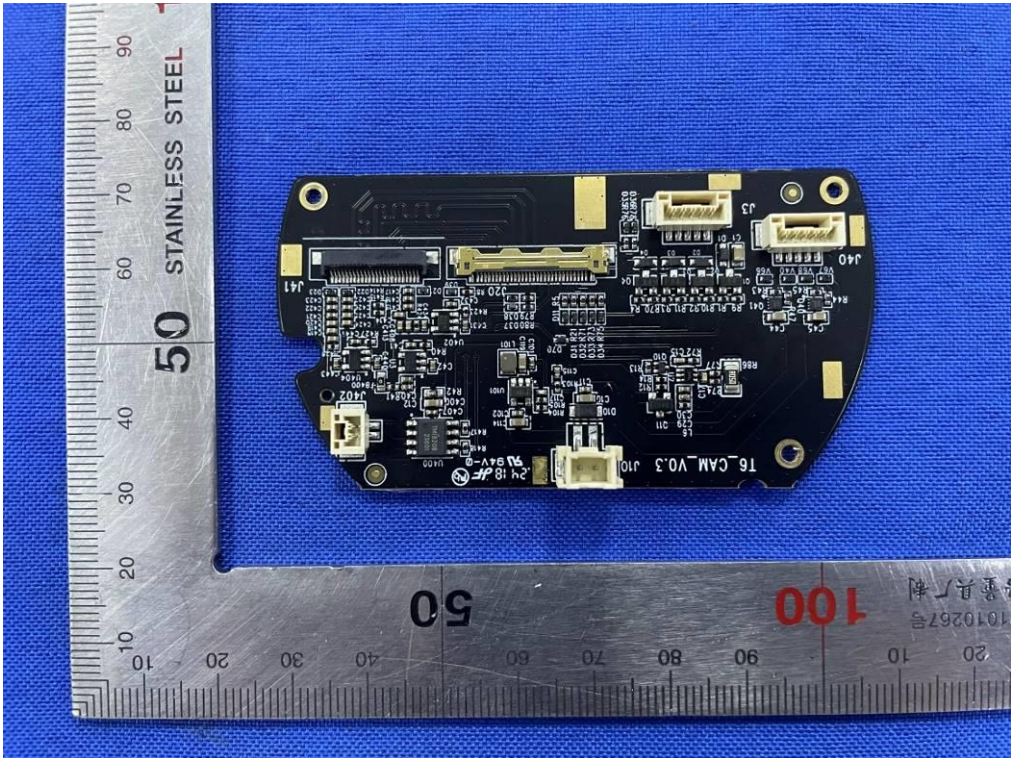
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Open-4 of the sample



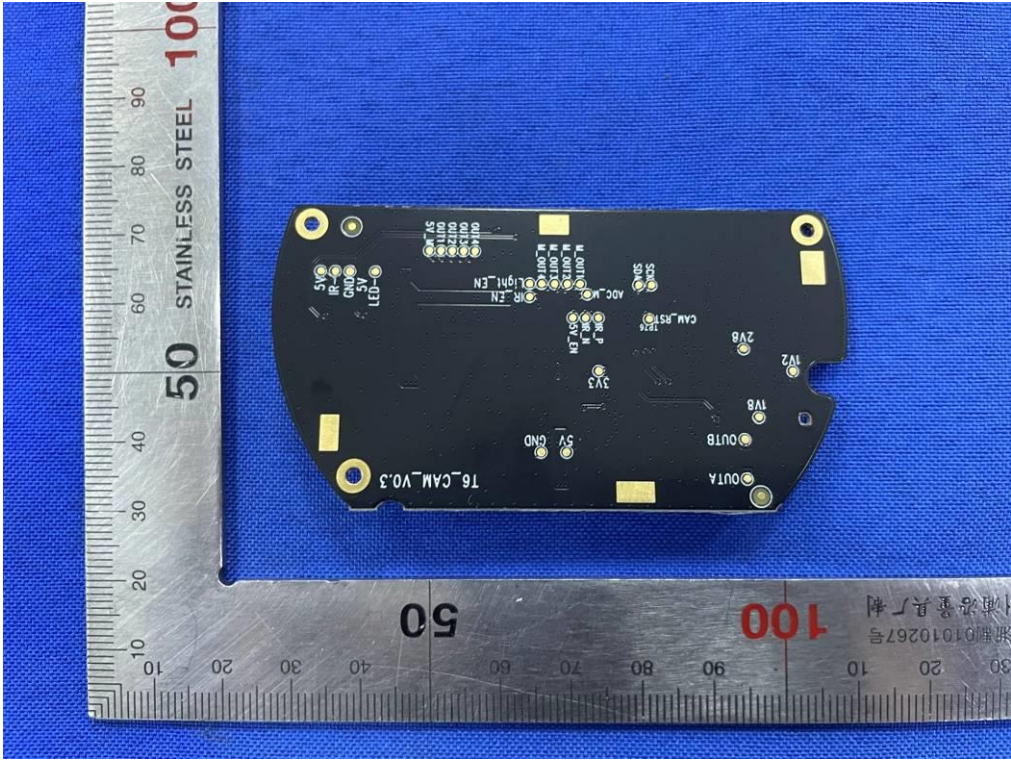
Internal-1 of the sample

TEST REPORT

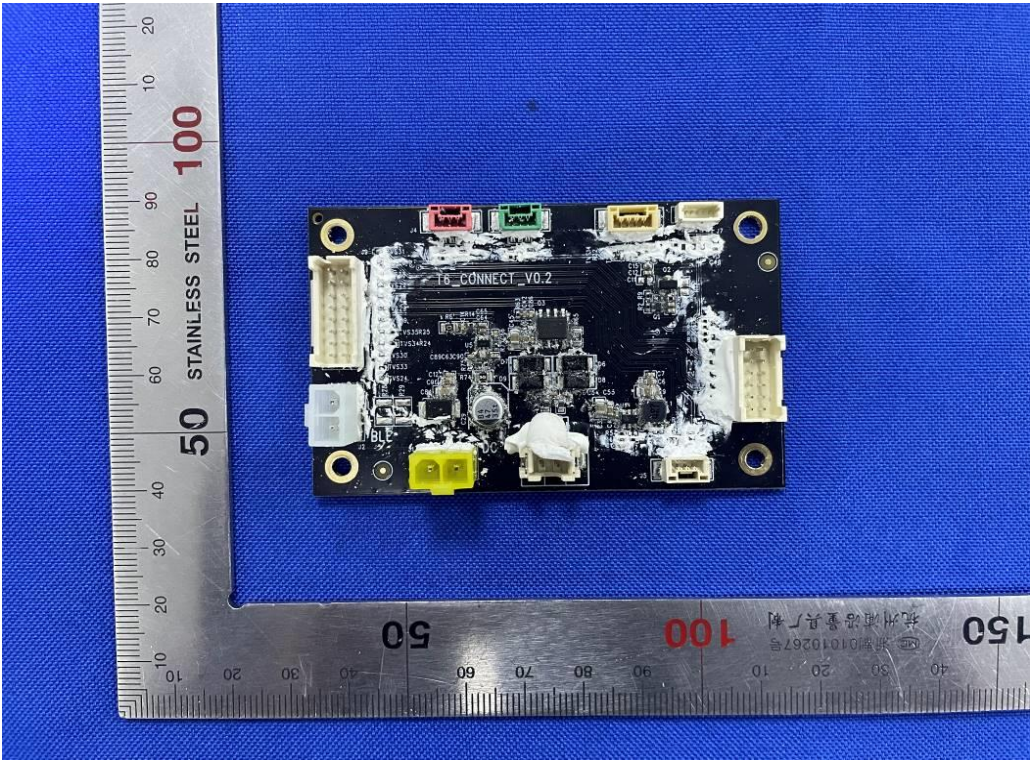
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Internal-2 of the sample



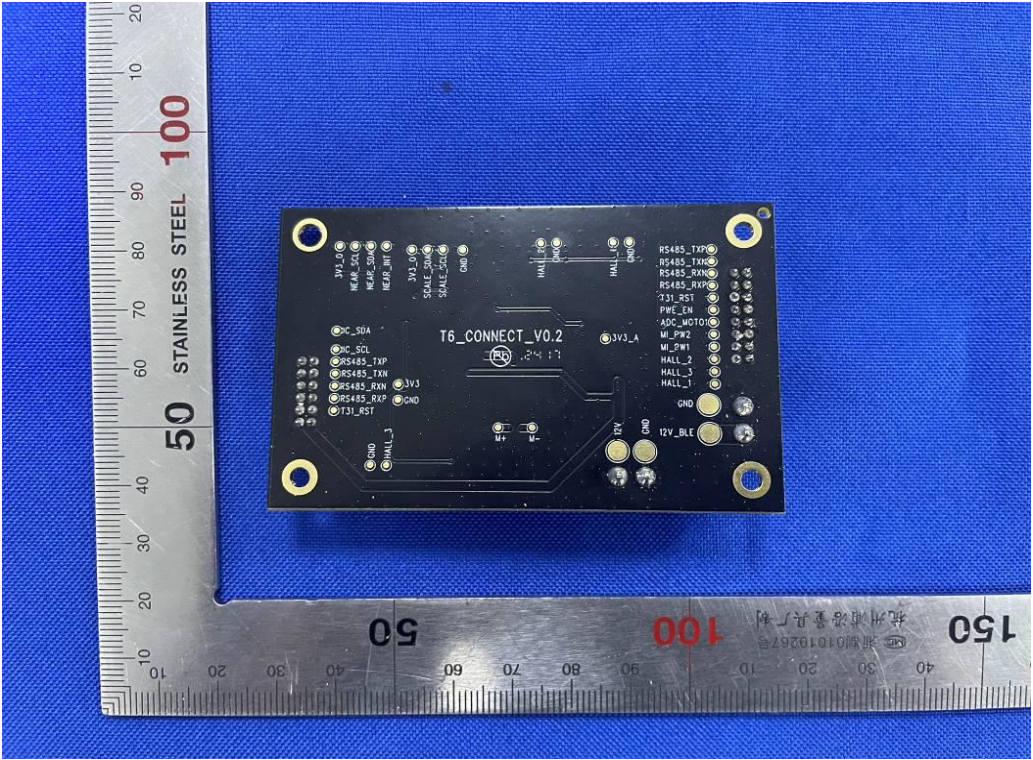
Internal-3 of the sample

TEST REPORT

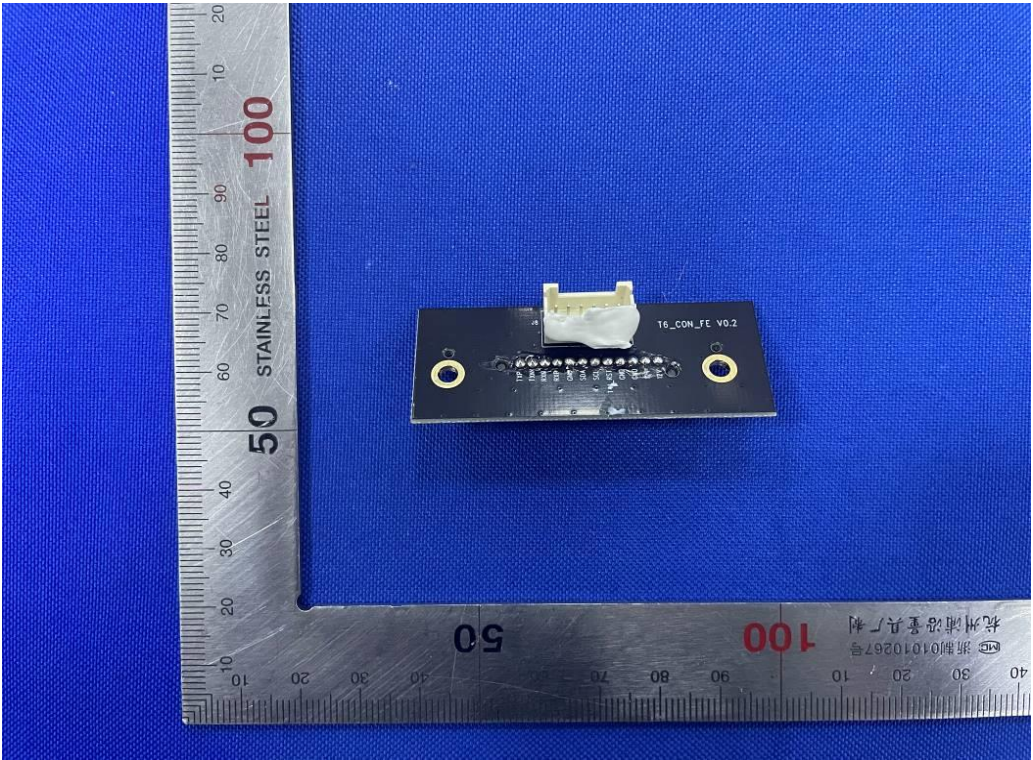
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Internal-4 of the sample



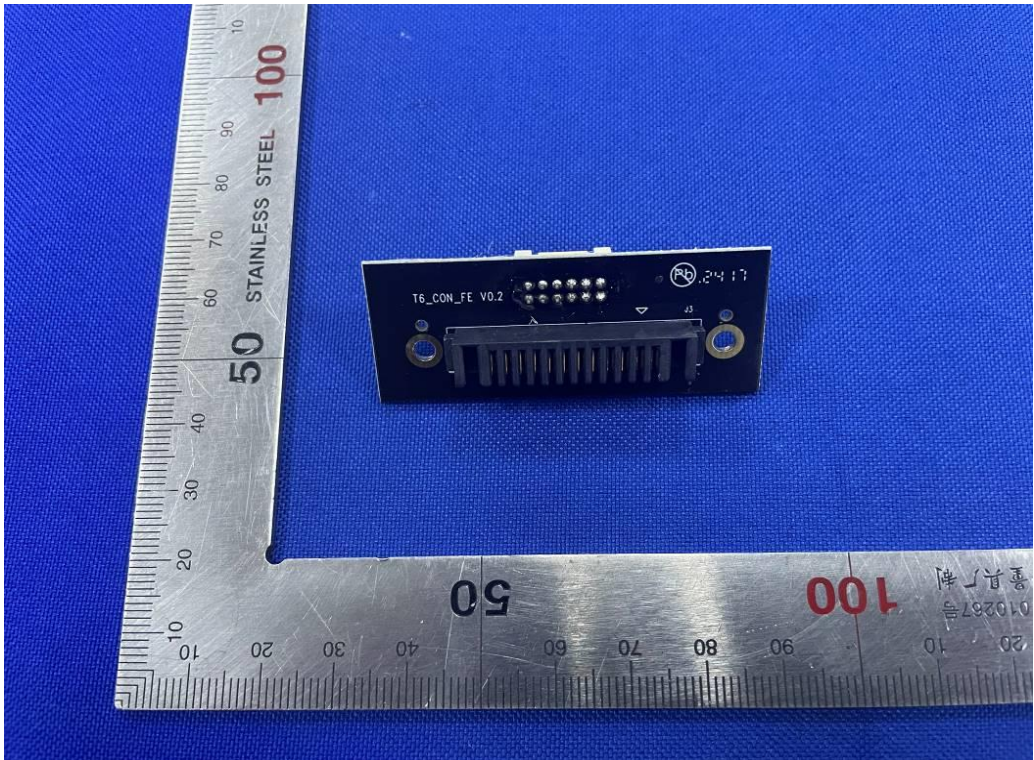
Internal-5 of the sample

TEST REPORT

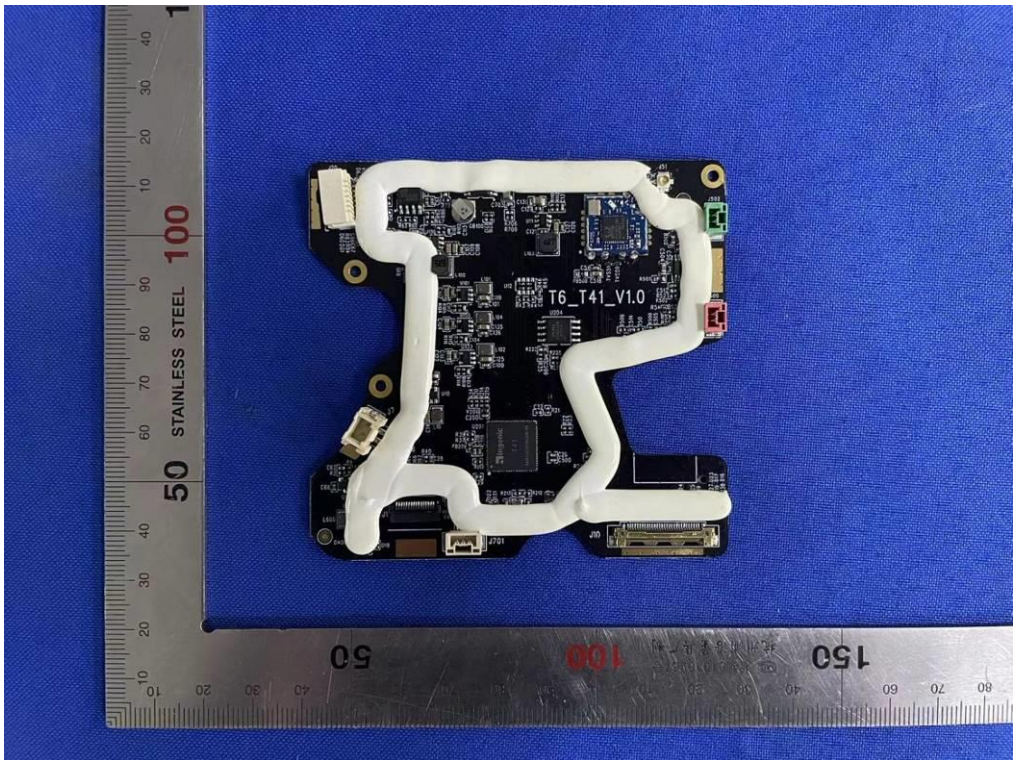
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Internal-6 of the sample



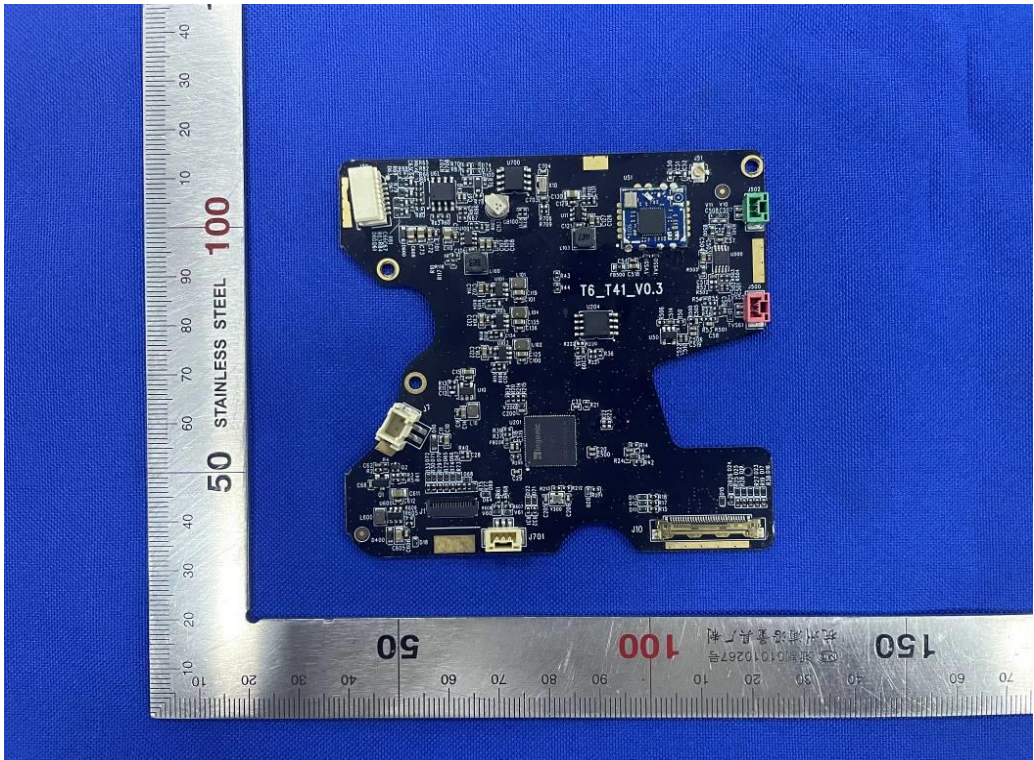
Internal-7 of the sample

TEST REPORT

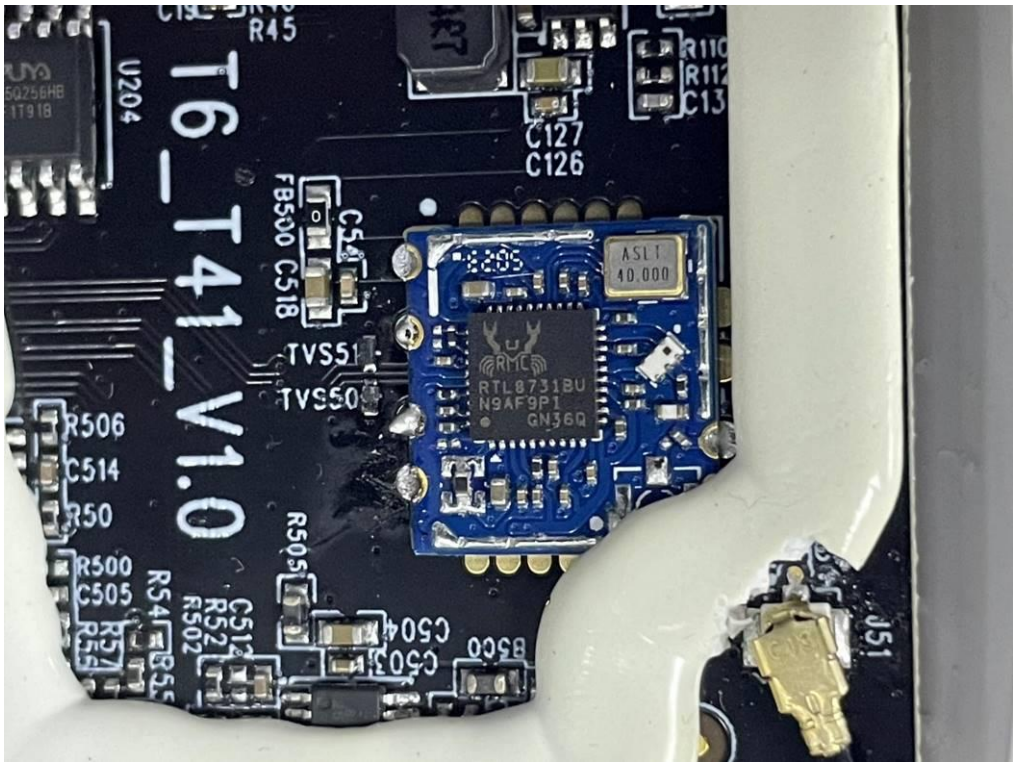
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Internal-8 of the sample



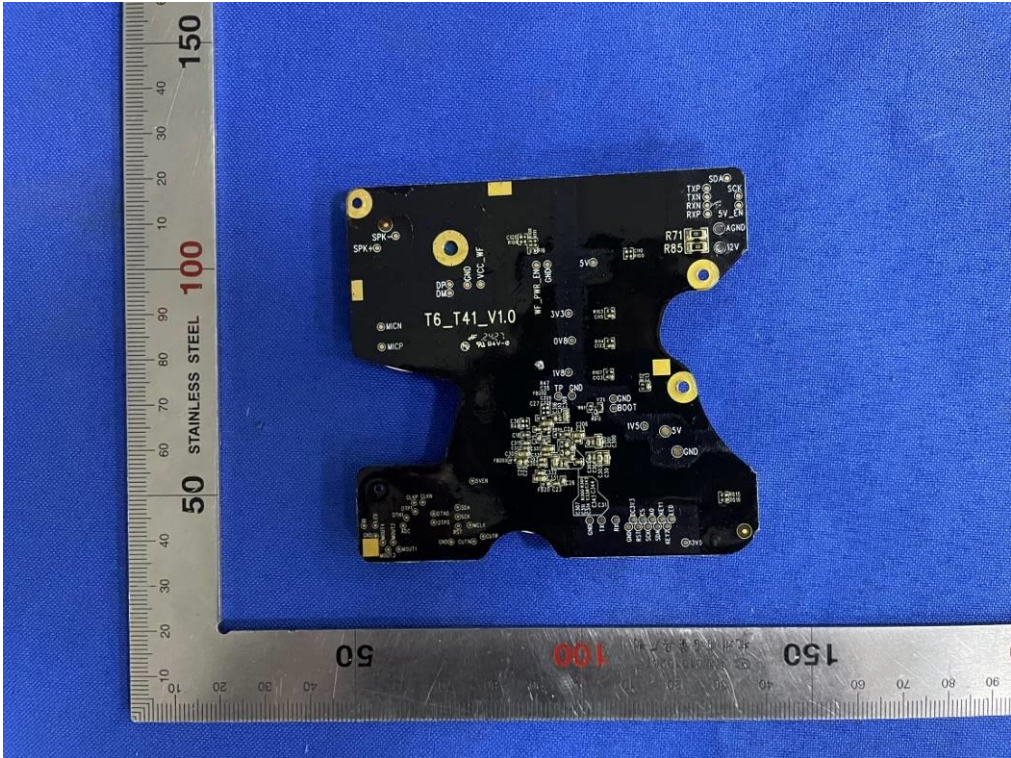
Internal-9 of the sample

TEST REPORT

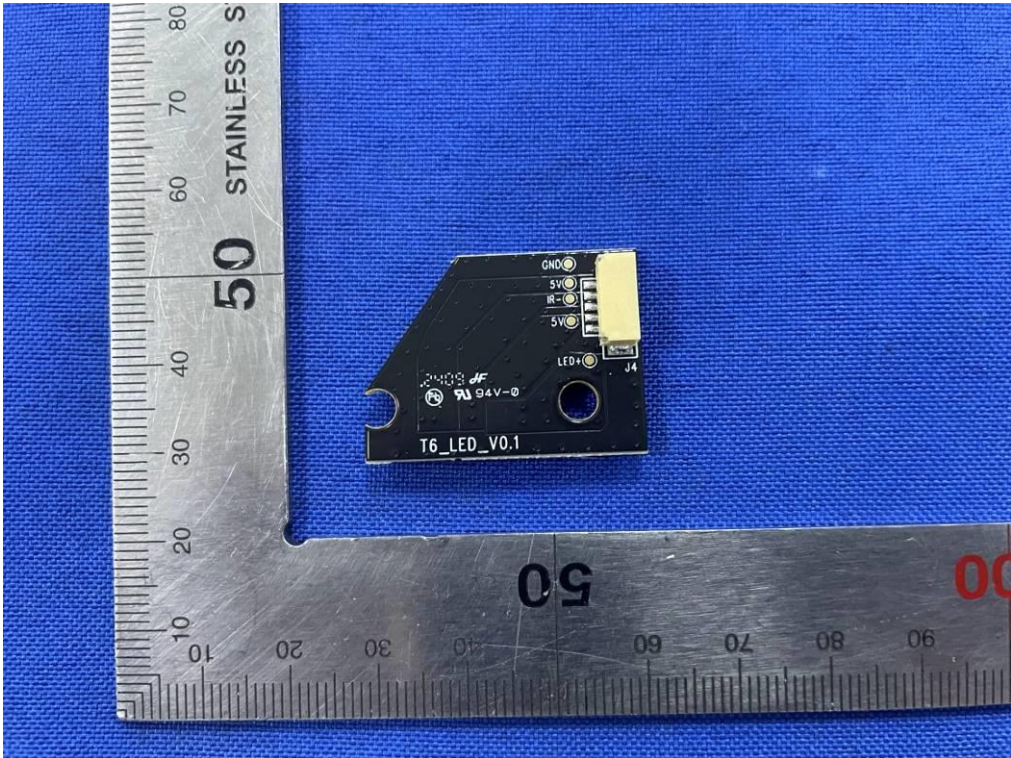
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Internal-10 of the sample



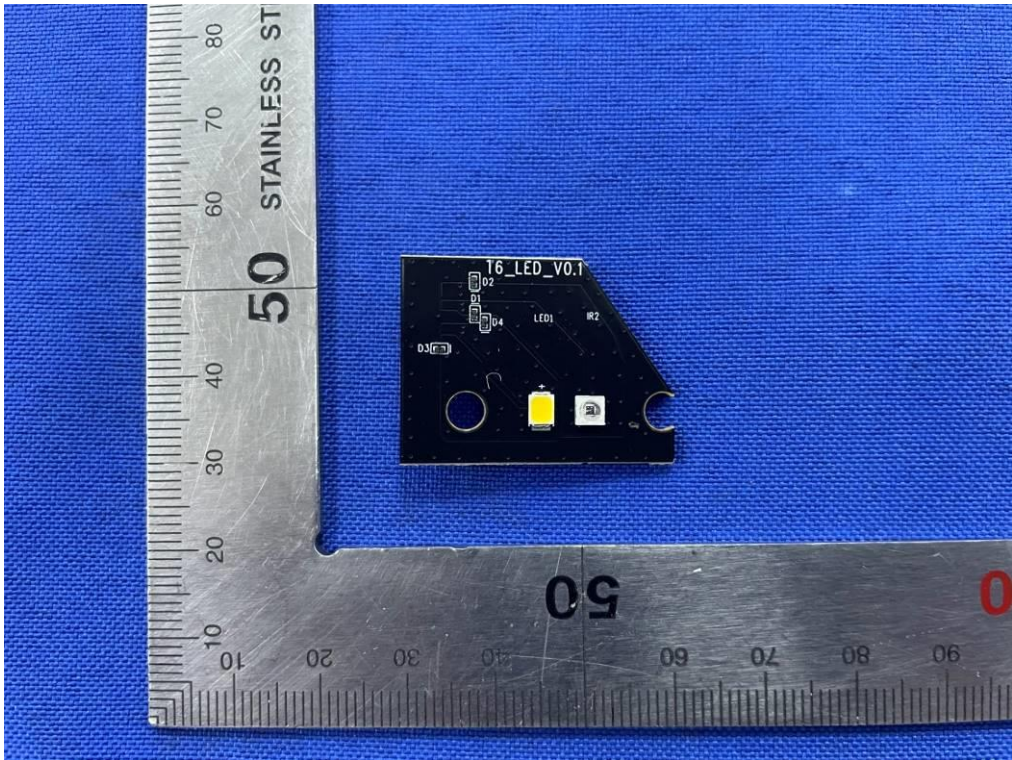
Internal-11 of the sample

TEST REPORT

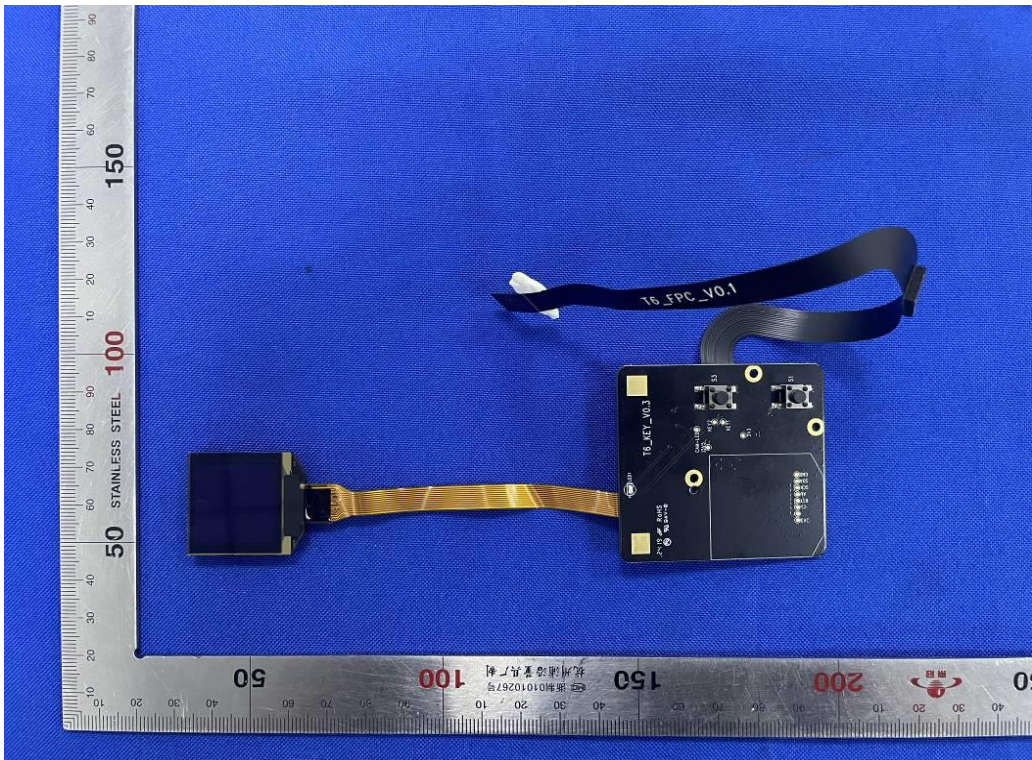
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Internal-12 of the sample



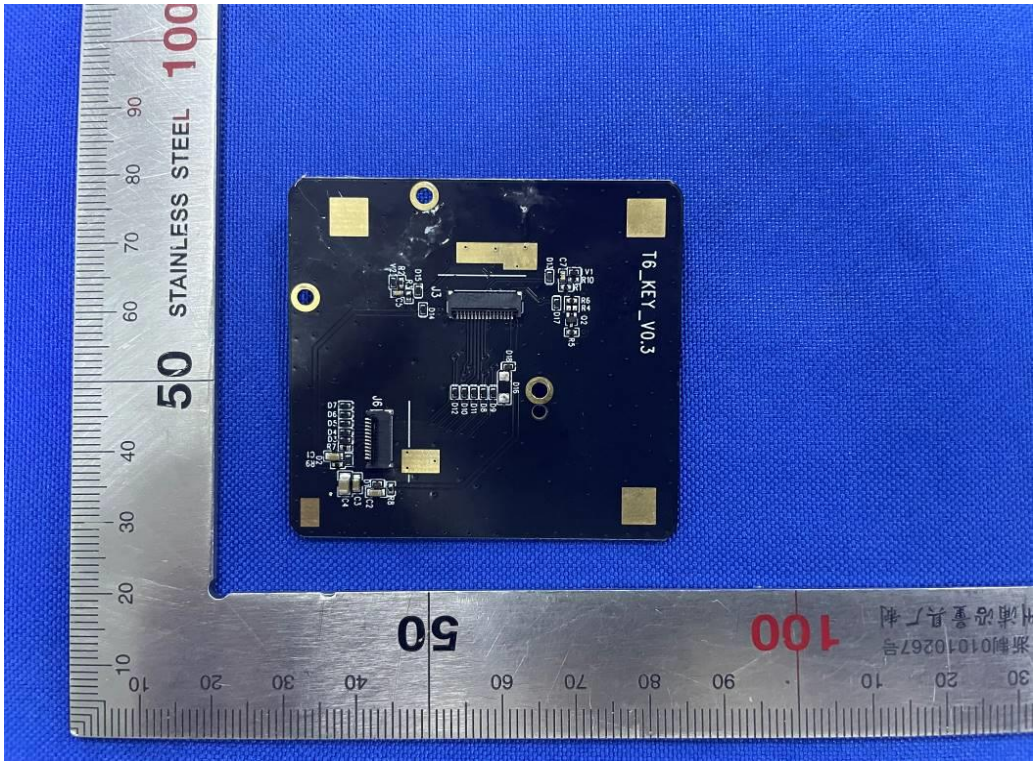
Internal-13 of the sample

TEST REPORT

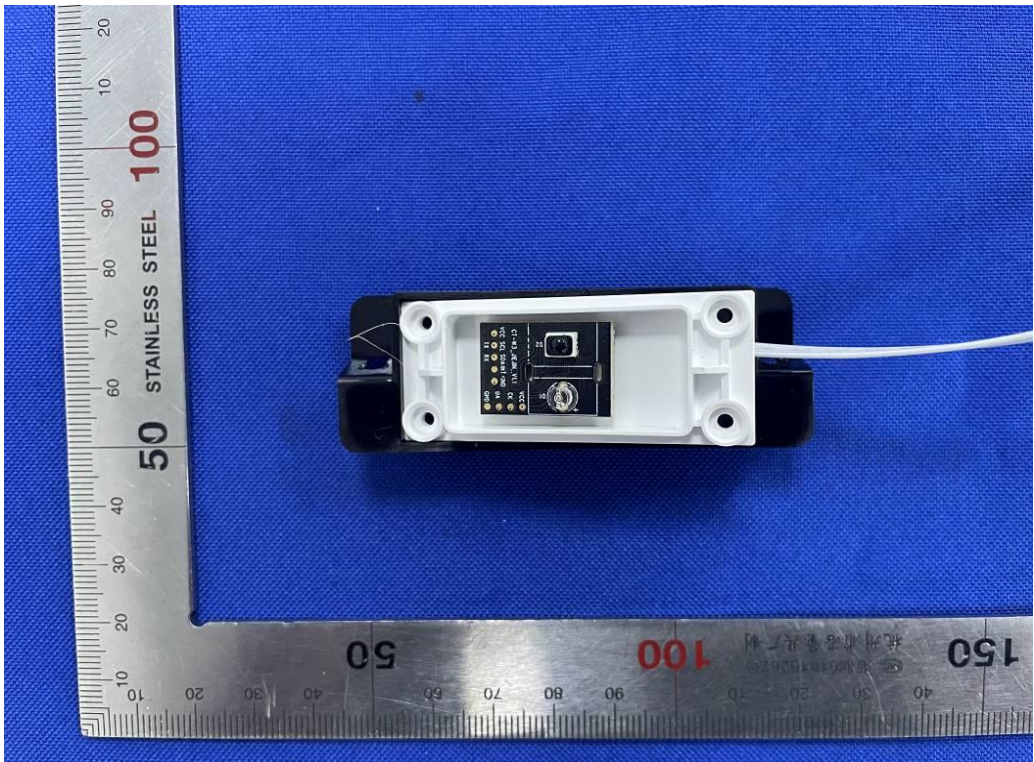
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Internal-14 of the sample



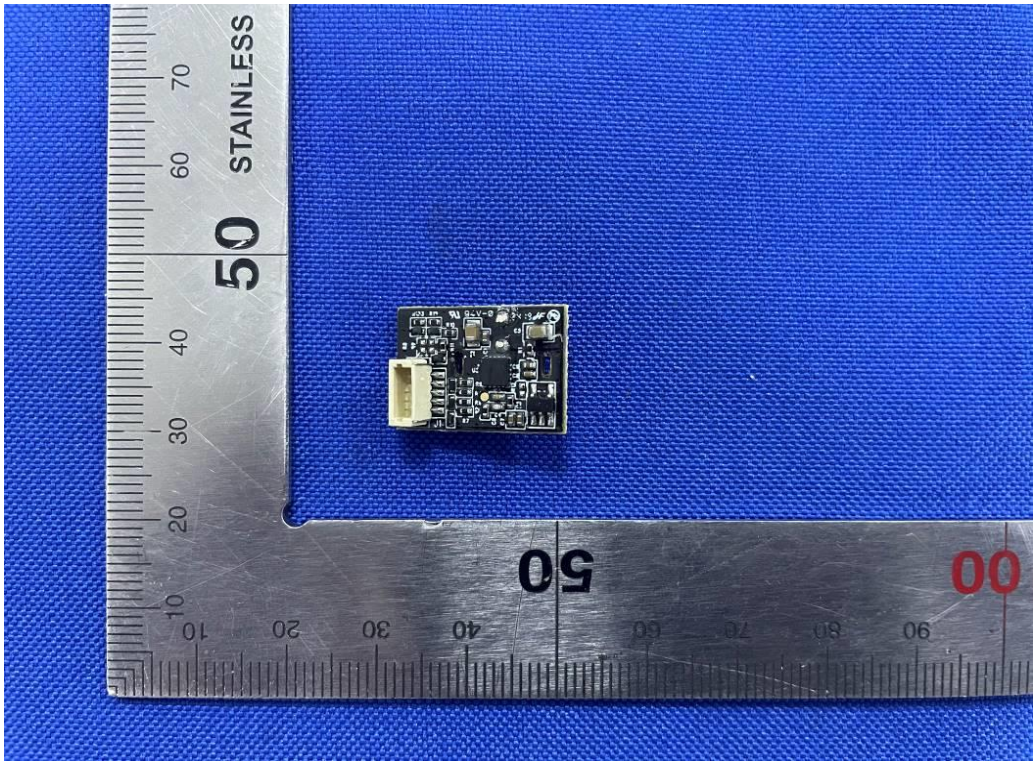
Internal-15 of the sample

TEST REPORT

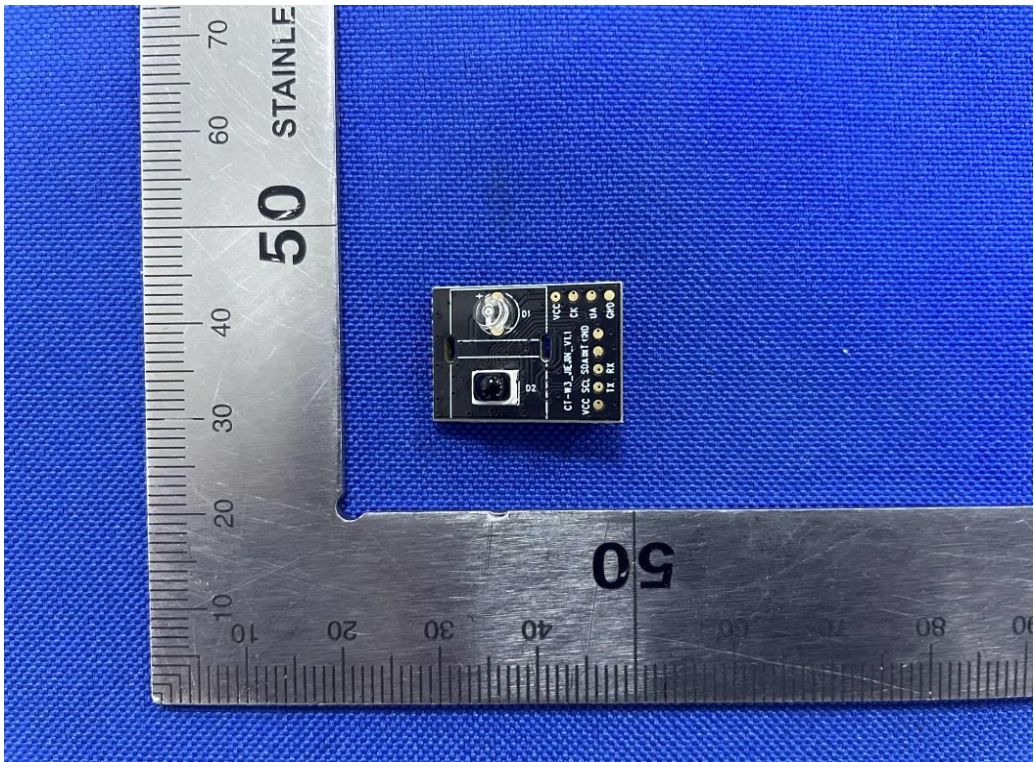
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Internal-16 of the sample



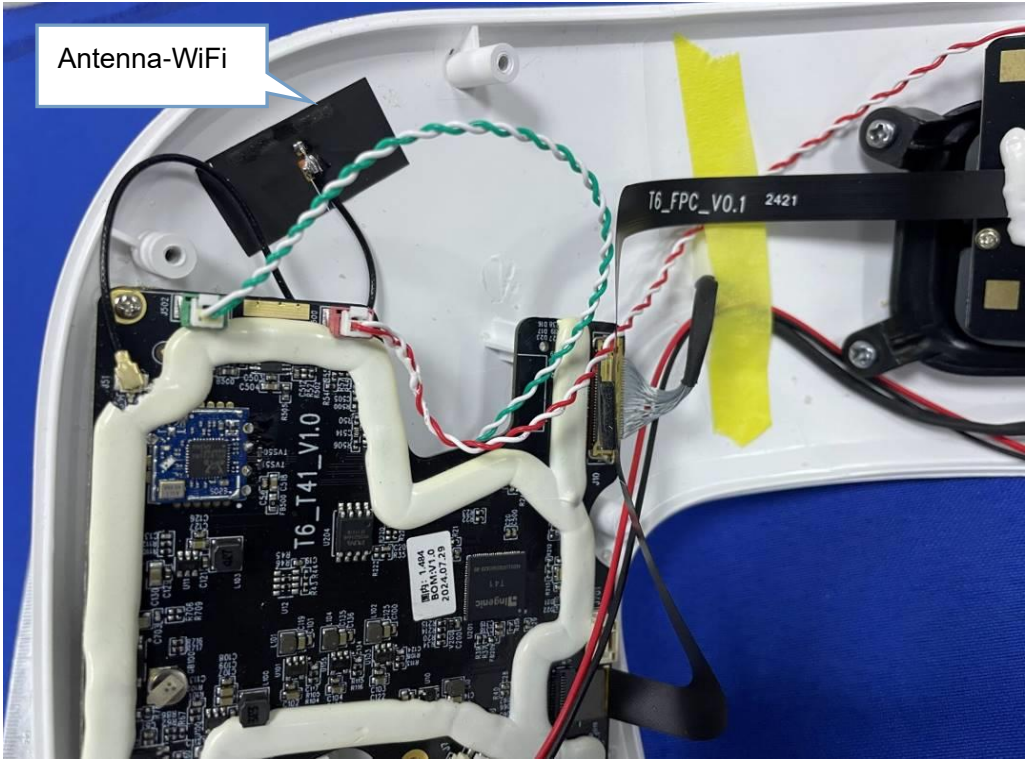
Internal-17 of the sample

TEST REPORT

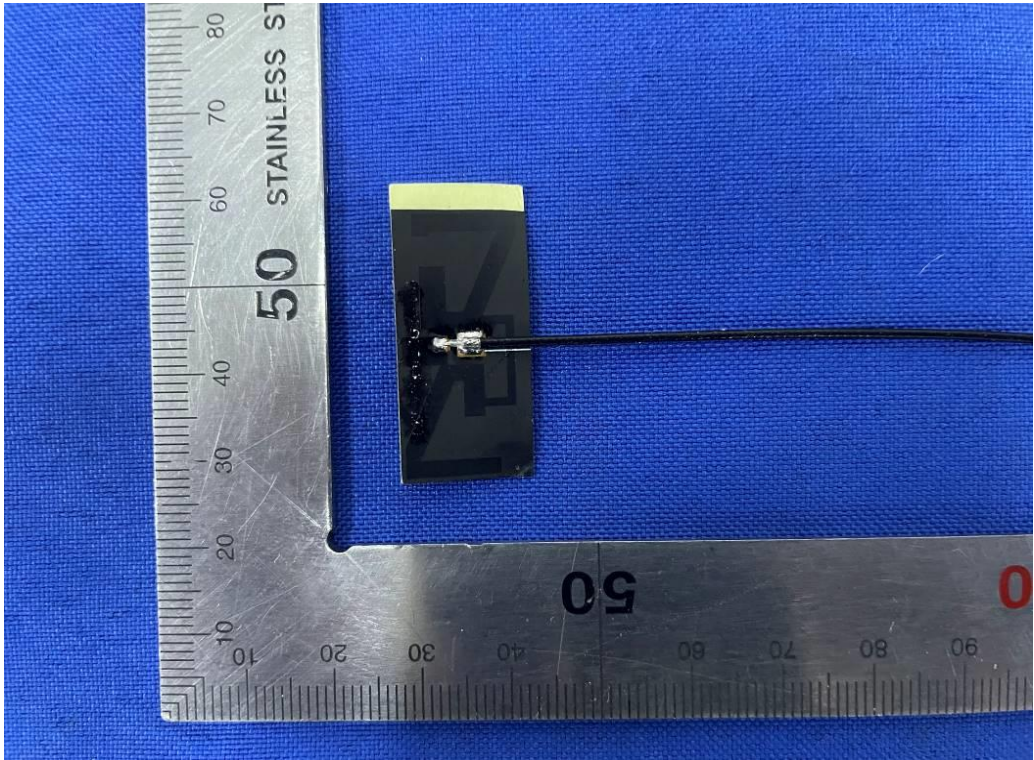
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Antenna position--WiFi



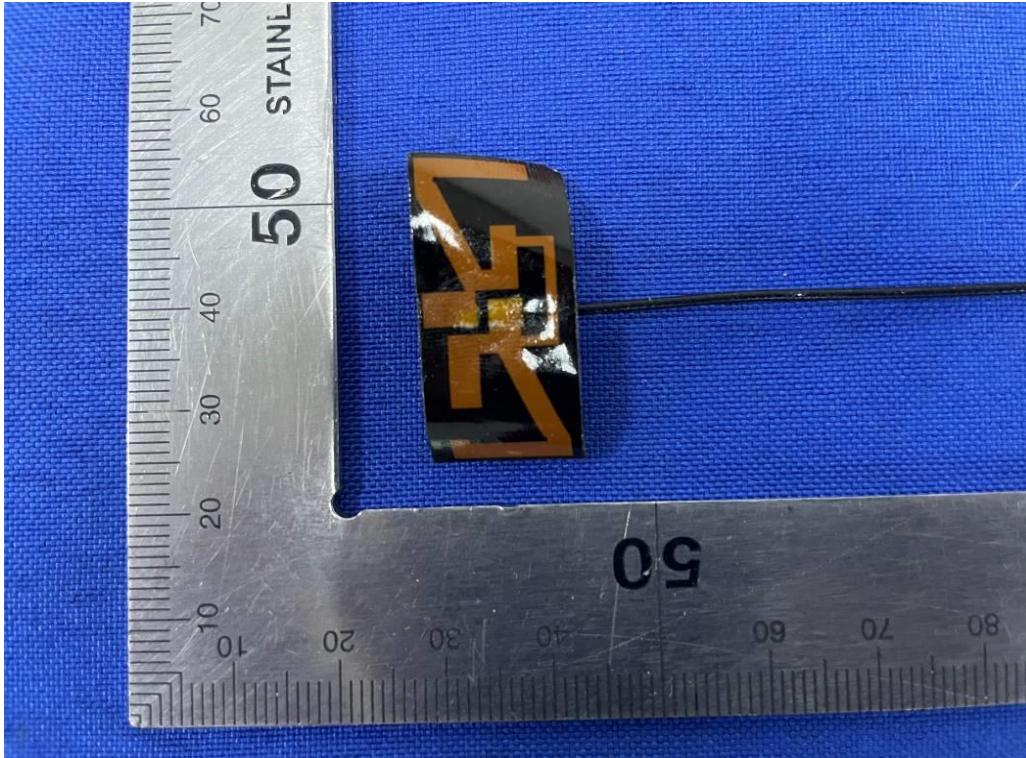
WiFi Antenna photo-1

TEST REPORT

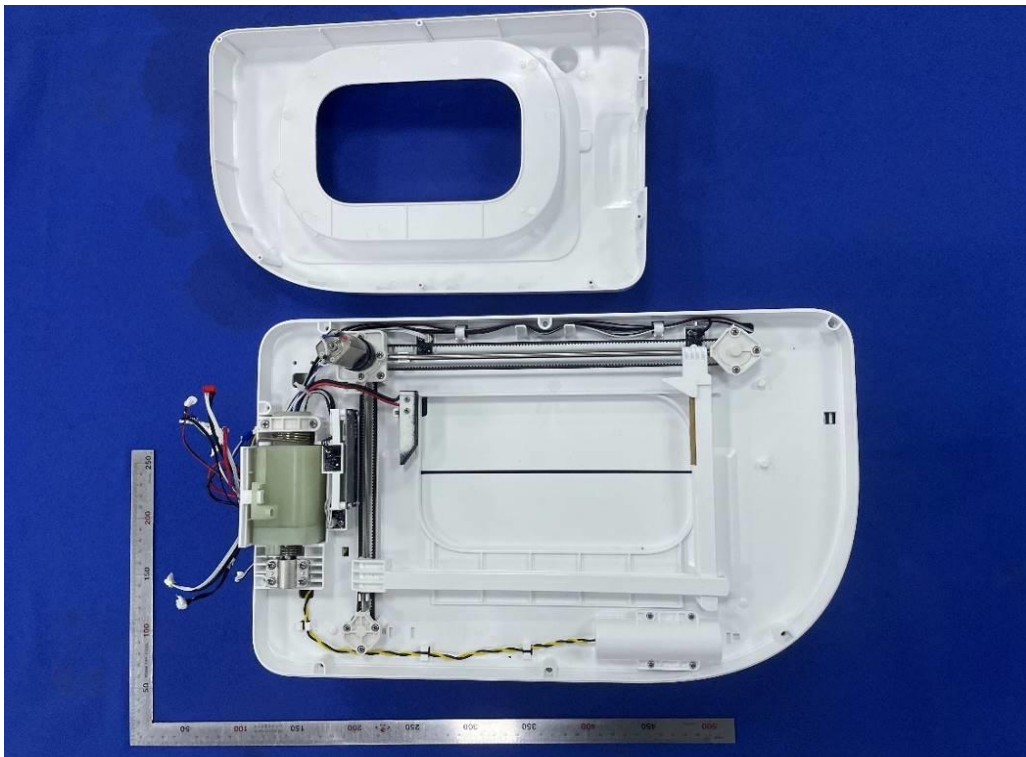
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WiFi Antenna photo-2



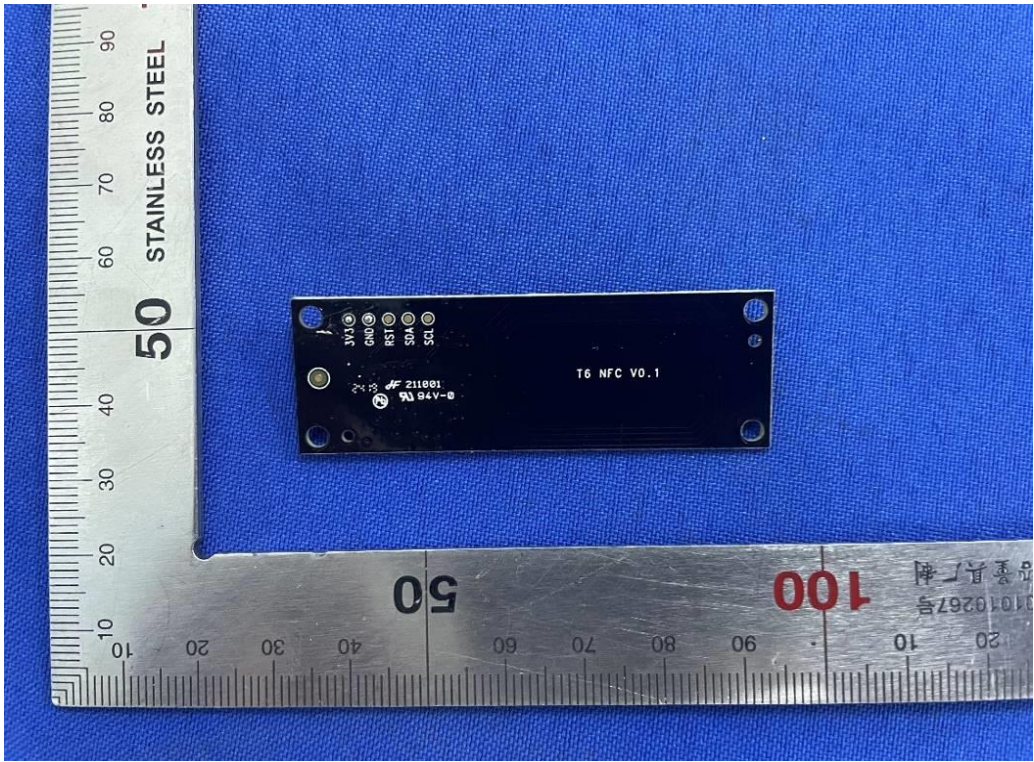
NFC-Open Photo

TEST REPORT

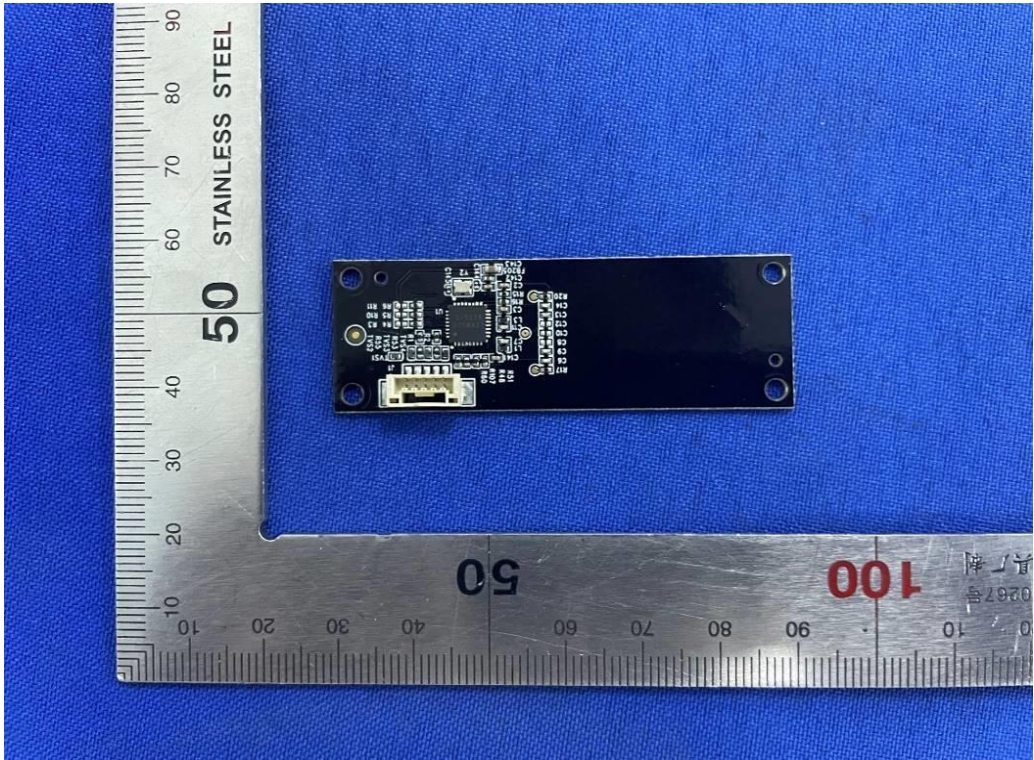
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NFC—PCB Board (Back)



NFC—PCB Board (Front)

TEST REPORT

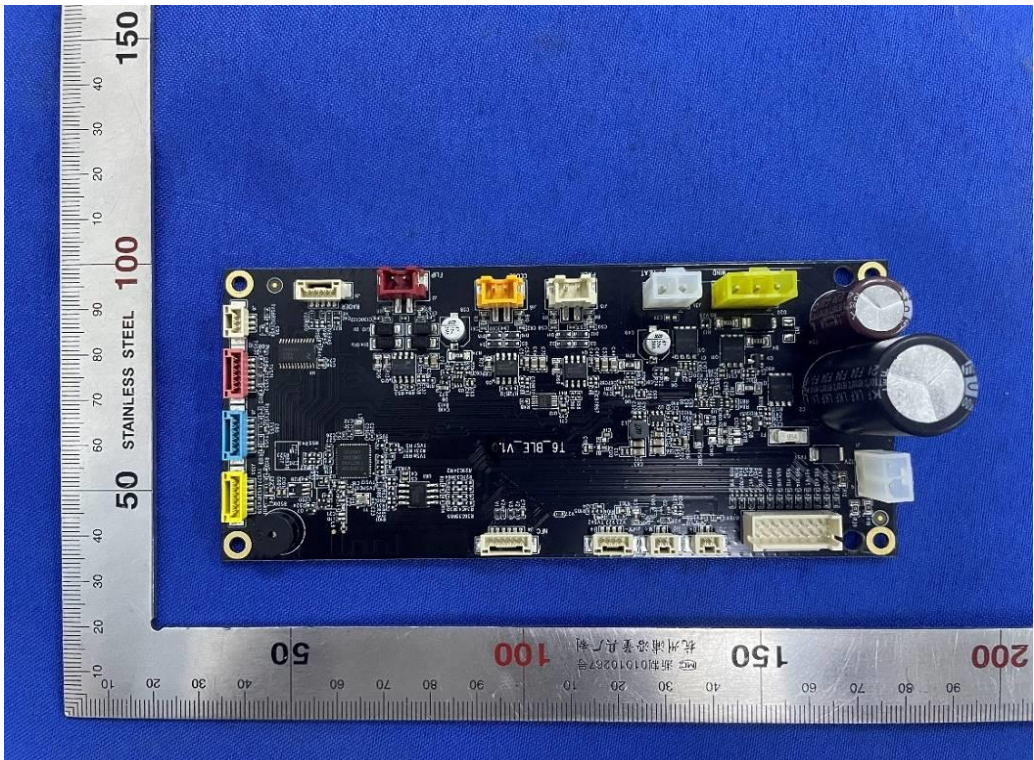
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Bluetooth LE-Open Photo



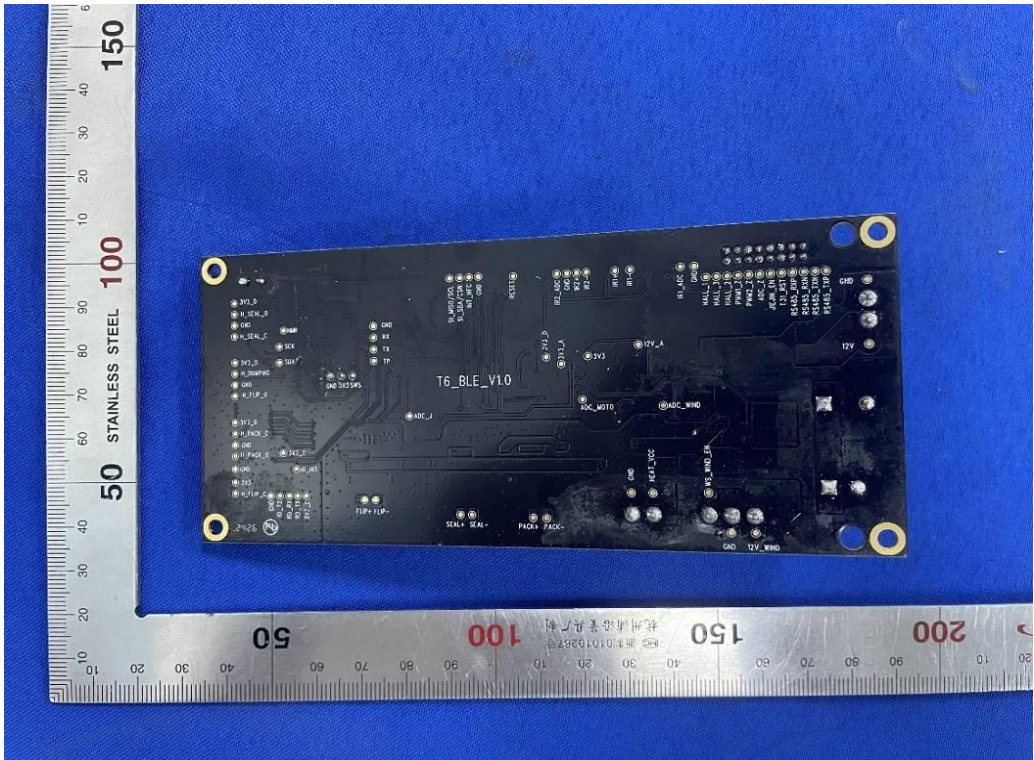
Bluetooth LE—PCB Board (Front)

TEST REPORT

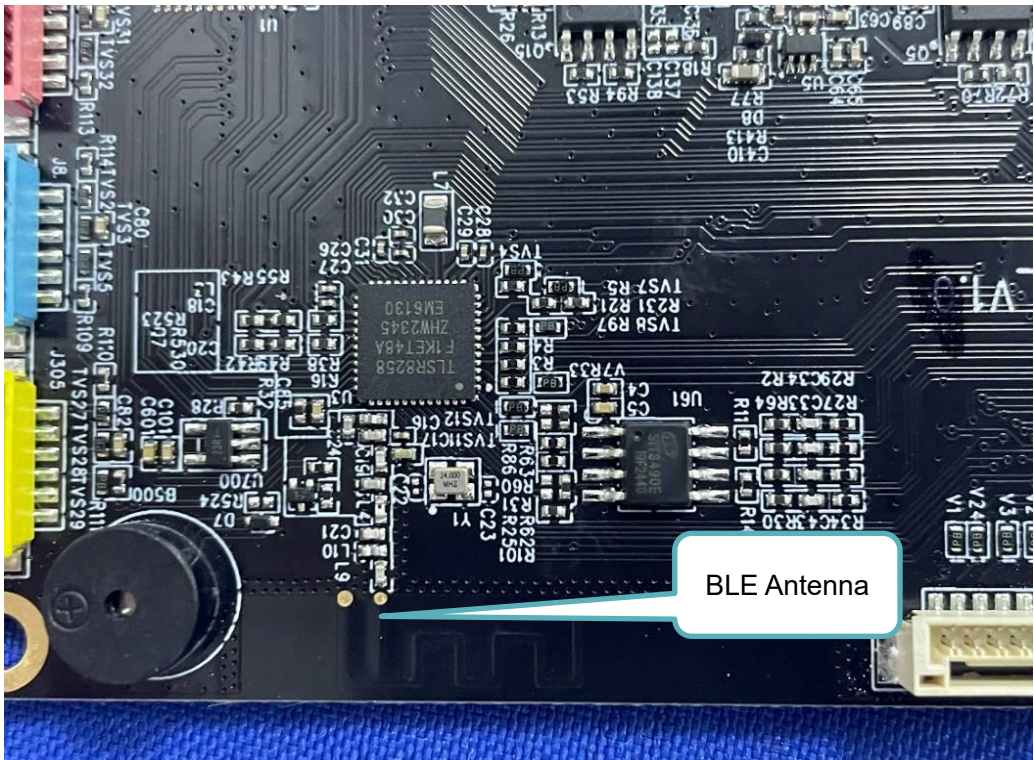
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Bluetooth LE—PCB Board (Back)



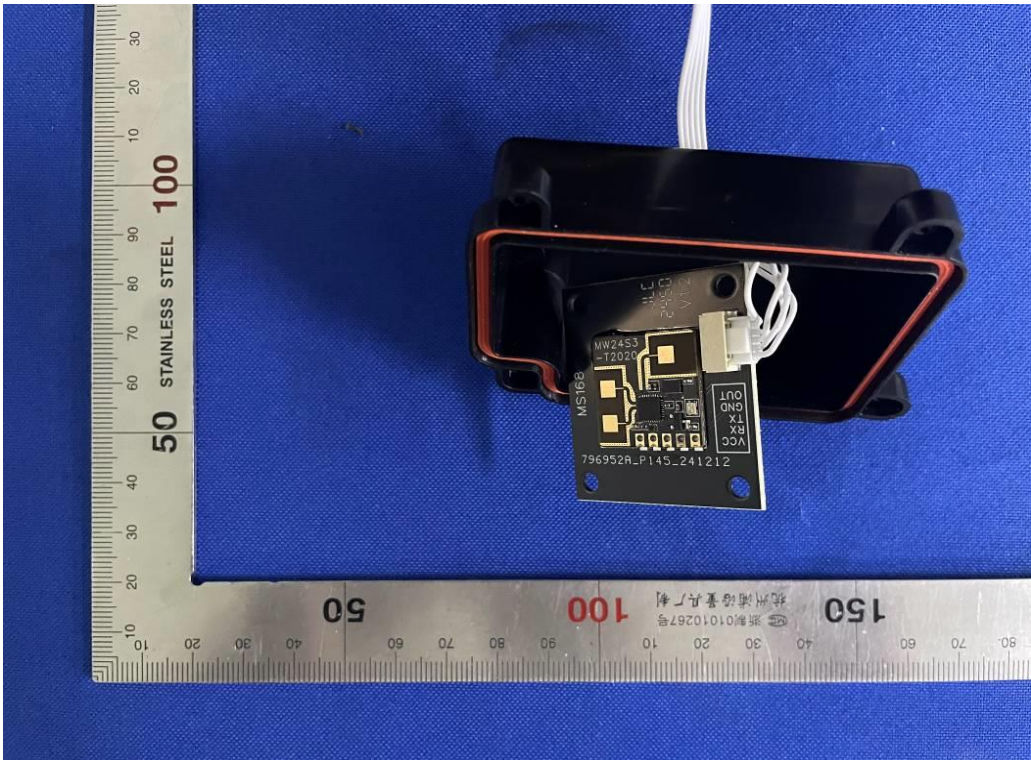
Bluetooth LE—Antenna Position

TEST REPORT

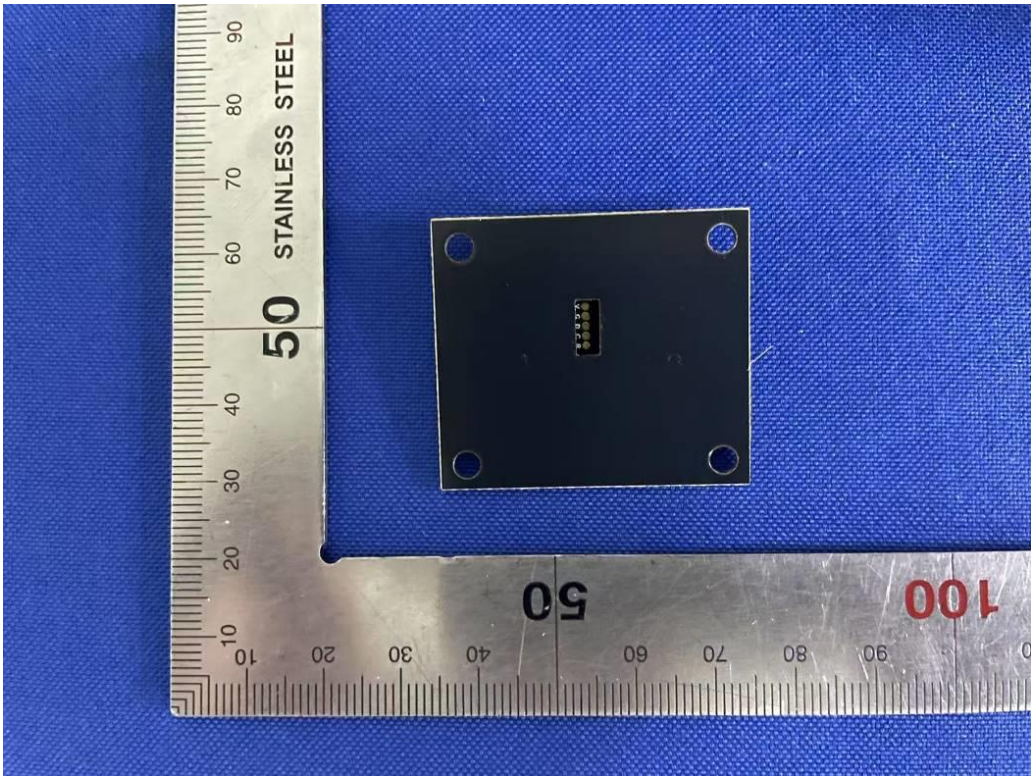
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Radar Photo-1



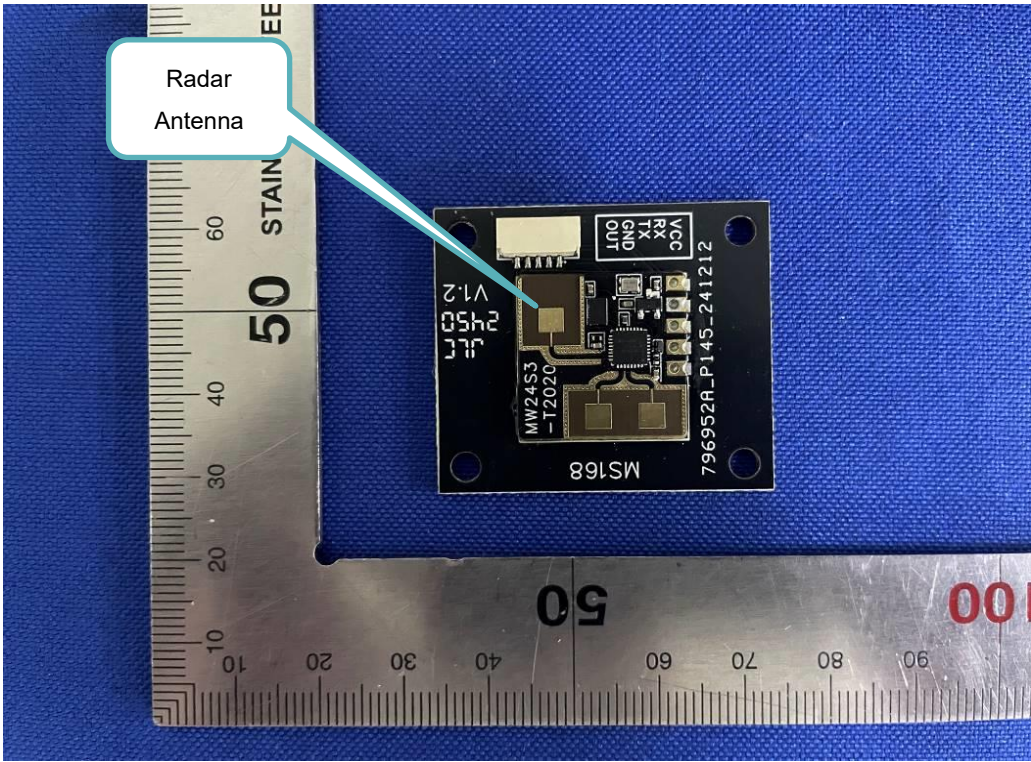
Radar Photo-2

TEST REPORT

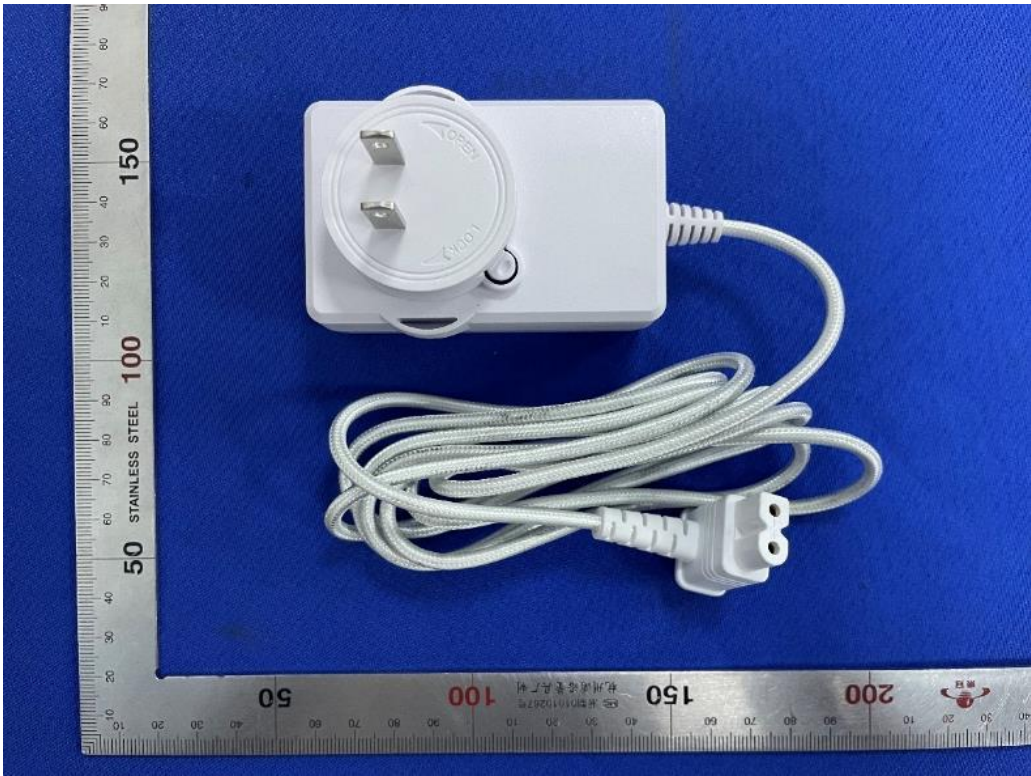
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Radar Photo-3



Adapter-1

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Adapter-2



Power Port

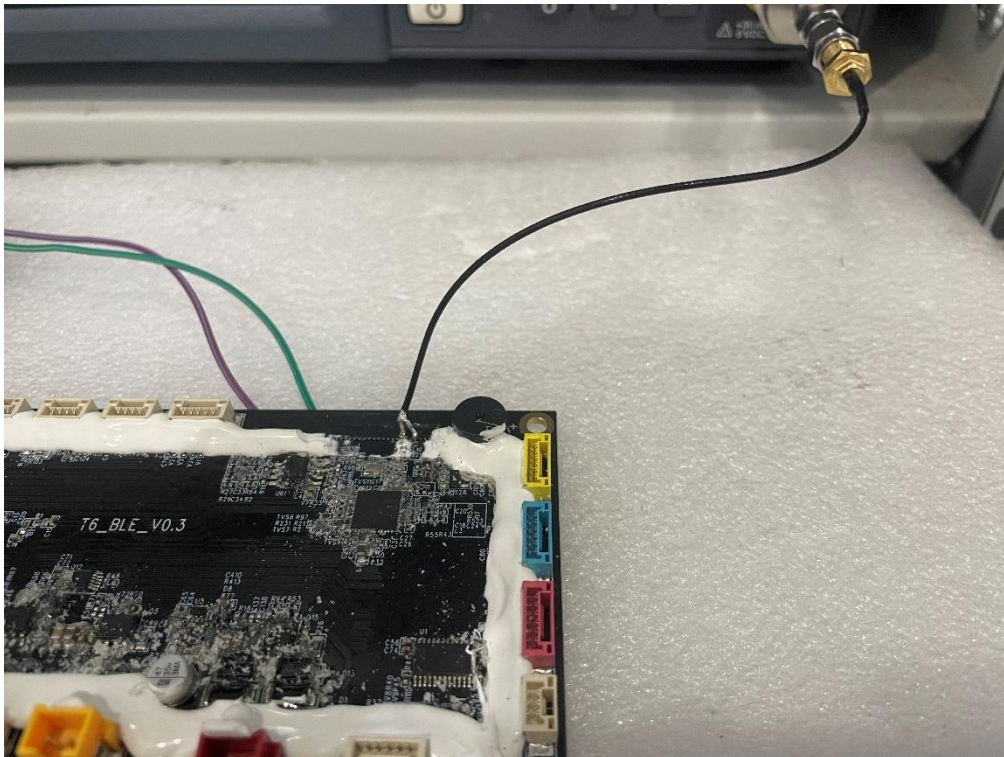
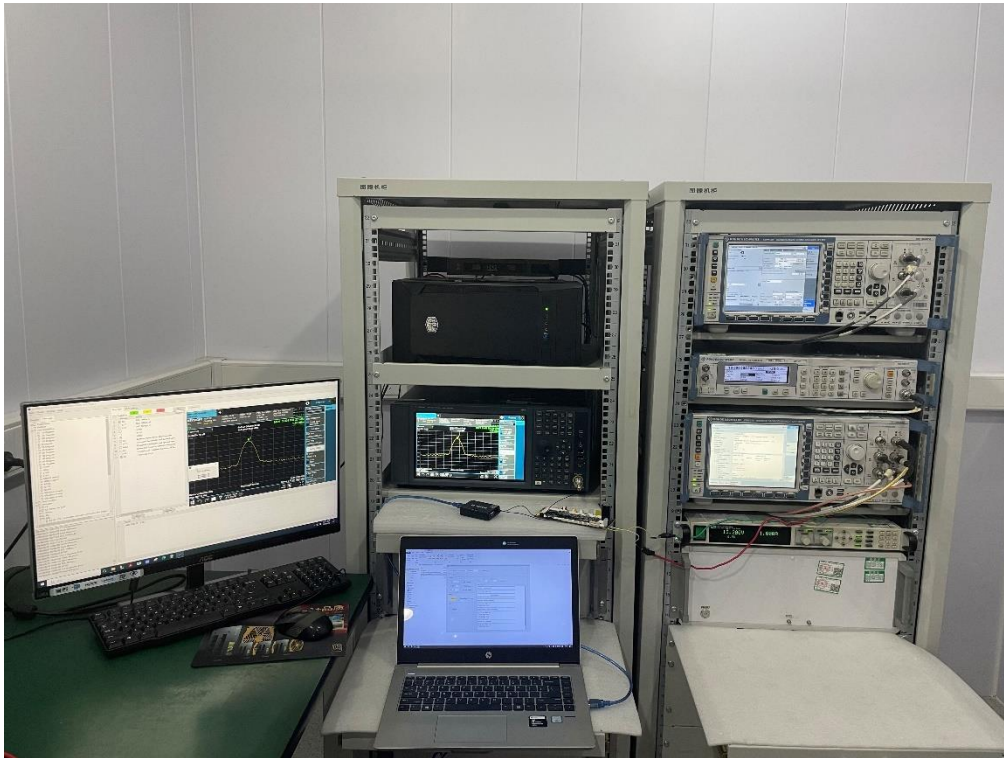
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5.2 Photographs of the Test Set-up



End of the report