ISED TEST REPORT FOR CERTIFICATION
On Behalf of

TCL OVERSEAS MARKETING LTD

Wireless Subwoofer

Model Number: S55H-SW

Additional Model: S55H1-SW, S55H5-SW, S55H7-SW

IC: 26250-S55HSW

Applicant:	TCL OVERSEAS MARKETING LTD
Address:	5/F, Building 22E, 22 Science Park East Avenue HongKong
	Science Park Shatin Hong Kong
Prepared By:	EST Technology Co., Ltd.
	Chilingxiang, Qishantou, Santun, Houjie, Dongguan, Guangdong, China
Tel: 86-769-83081888-808	

Report Number:	ESTE-R24013403-2
Date of Test:	Jan. 05~25, 2024
Date of Report:	Mar. 31, 2025

TABLE OF CONTENTS

Applicant: **Address:**	TCL OVERSEAS MARKETING LTD 5/F, Building 22E, 22 Science Park East Avenue HongKong Science Park Shatin Hong Kong
Manufacturer: **Address:**	TCL OVERSEAS MARKETING LTD 5/F, Building 22E, 22 Science Park East Avenue HongKong Science Park Shatin Hong Kong
Factory 1: **Address:**	Tonly Technology Co., Ltd. Tongqiao Factory A&B Building, NO. 88, North Of Luen Fat Road, Tongqiao Industrial Base, Zhongkai High-tech Development Zone, Huizhou City, Guangdong Province, P.R.China
Factory 2: **Address:**	Tonly Technology Co., Ltd. Zhongkai Factory Section 41, Zhongkai High-tech Development Zone, Huizhou City, Guangdong Province, China
Factory 3: **Address:**	Tonly Technology Co., Ltd. Chenjiang Factory No. 256, Zhongkai 6th Road, Chenjiang Street, Zhongkai High-tech Development Zone, Huizhou City, Guangdong Province, China
Factory 4: **Address:**	Tonly ElectronicsTechnology Viet Nam Co., Ltd. Lot CN-02, Dong Mai Industrial Zone, Dong Mai Ward, Quang Yen Town, Quang Ninh Province, Vietnam
Factory 5: **Address:**	Tonly Electronics Technology Viet Nam Co., Ltd. Lot CN-03, Dong Mai Industrial Zone, Dong Mai Ward, Quang Yen Town, Quang Ninh Province, Vietnam

E.U.T:	Wireless Subwoofer		
Model Number:	S55H-SW		
Additional Model:	S55H1-SW, S55H5-SW, S55H7-SW Note: They are identical except model name and sales channels; S55H1-SW for Walmart sales channels, S55H5-SW for best buy sales channels, S55H7-SW for costco sales channels.		
Power Supply:	AC 100-240V, 50/60Hz		
Trade Name:	TCL, FFALCON	Serial No.:	------
Date of Receipt:	Jan. 05, 2024	Date of Test:	Jan. 05~25, 2024
Test Specification:	RSS-247 Issue 3 RSS-Gen Issue 5 ANSI C63.10:2013		
Test Result:	The device described above is tested by EST Technology Co., Ltd. The measurement results were contained in this test report and EST Technology Co., Ltd. was assumed full responsibility for the accuracy and completeness of these measurements. Also, this report shows that the EUT to be technically compliance with the Regulations RSS-247 and RSS-Gen requirements. This report applies to above tested sample only and shall not be reproduced in part without written approval of EST Technology Co., Ltd.		

Date: Mar. 31, 2025

Prepared by:	Reviewed by:	Approved by:
Ring Yang / Assistant	Seven Wang / Engineer	Iceman Hu / Manager

Other Aspects: This report is based on the previous report with report number: ESTE-R2401403-1, factories were added in this report.

Abbreviations: OK/P=passed fail/F=failed n.a/N=not applicable E.U.T=equipment under tested

1.GENERAL INFORMATION

1.1.Description of Device (EUT)

Product Name	:	Wireless Subwoofer
Model Number	:	S55H-SW
Operation frequency	:	2402MHz~2480MHz
Number of channel	:	40
Max Output Power (PEAK)	:	6.54dBm
Modulation Type	:	SRD
Software Version	:	V03
Hardware Version	:	V02
Sample Type	:	Prototype production

Note: For a more detailed features description, please refer to the manufacturer's specifications or the user's manual.

1.2.Antenna Information

Ant No.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)
1	-	-	Internal	-	3.21
Note: 1.The antenna gain is declared by the customer and the laboratory is not responsible for the accuracy of the antenna gain. 2.The test results of this report only apply to the sample as received.					

1.3.Information of RF Cable

Cable Loss(dB)	Provided by
1.0	TCL OVERSEAS MARKETING LTD
Note: 1.The customer declared the loss value of the RF Cable. and the test results of this report only apply to the sample as received. 2.The laboratory is not responsible for the accuracy of the cable loss.	

2.SUMMARY OF TEST

2.1.Summary of test result

No.	Description of Test Item	IC Standards Section	Results
1	6dB Bandwidth & 99% Occupied Bandwidth	RSS-247 5.2 (a) RSS-Gen 6.7	PASS
2	Maximum Peak Output Power	RSS-247 5.4 (d)	PASS
3	Power Spectral Density	RSS-247 5.2 (b)	PASS
4	Conducted Band Edge	RSS-247 5.5	PASS
5	Conducted Spurious Emissions	RSS-247 5.5	PASS
6	Radiated Spurious Emissions and Band Edge	RSS-247 5.5 RSS-Gen 8.9 RSS-Gen 8.10	PASS
7	AC Power Line Conducted Emissions	RSS-Gen 8.8	PASS
8	Transmit Antenna	RSS-Gen 6.8	PASS

Note:“N/A” denotes test is not applicable in this test report.

2.2.Test Facilities

EMC Lab : Accredited by CNAS, CHINA
Registration No.: L5288
This Accreditation is valid until: November 12, 2029

Recognized by FCC, USA
Designation Number: CN1215
This Recognition is valid until: January 31, 2026

Accredited by A2LA, USA
Registration No.: 4366.01
This Accreditation is valid until: January 31, 2026

Recognized by Industry Canada
CAB identifier No.: CN0035
This Recognition is valid until: January 31, 2026

Recognized by VCCI, Japan
Registration No.:C-14103; T-20073; R-13663; R-20103; G-20097
Date of registration: Apr. 20, 2020
This Recognition is valid until: Apr. 19, 2026

Recognized by TUV Rheinland, Germany
Registration No.: UA 50413872 0001
Date of registration: July 31, 2018

Recognized by Intertek
Registration No.: 2011-RTL-L2-64
Date of registration: November 08, 2018

Name of Firm : EST Technology Co., Ltd.

Site Location : Chilingxiang, Qishantou, Santun, Houjie, Dongguan, Guangdong, China

2.3.Measurement uncertainty

Test Item	Uncertainty
Uncertainty for Conduction emission test	±3.48dB
Uncertainty for spurious emissions test (Below 30MHz)	±1.62 dB
Uncertainty for spurious emissions test (30MHz-1GHz)	±4.60 dB(Polarize: H)
	±4.68 dB(Polarize: V)
Uncertainty for spurious emissions test (1GHz to 25GHz)	±4.96dB
Uncertainty for radio frequency	7×10^{-8}
Uncertainty for conducted RF Power	1.08dB
Uncertainty for Power density test	0.26dB

Note: This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

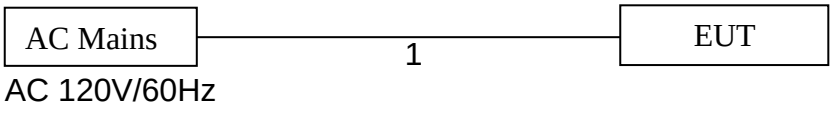
2.4.Assistant equipment used for test

Item	Equipment	Brand	Model Name/Type No.	IC ID	Series No.
-	-	-	-	-	-

Item	Shielded Type	Ferrite Core	Length	Note
1	NO	NO	1.5m	AC Cable

2.5.Block Diagram

For radiated emissions test: EUT was placed on a turn table, which is 0.8 (or 1.5) meter high above ground. EUT was beset into SRD test mode by software before test.



AC 120V/60Hz

(EUT: Wireless Subwoofer)

2.6.Test Mode

The test mode was selected for the final test as listed below.

Test Item	Modulation Type	Test Channel
6dB Bandwidth & 99% Occupied Bandwidth	SRD	Low/Middle/High
Maximum Peak Output Power	SRD	Low/Middle/High
Power Spectral Density	SRD	Low/Middle/High
Conducted Band Edge	SRD	Low/ High
Conducted Spurious Emissions	SRD	Low/Middle/High
Radiated Spurious Emissions(Below 1GHz)	SRD	Low/Middle/High
Radiated Spurious Emissions(Above 1GHz)	SRD	Low/Middle/High
Radiated Band Edge	SRD	Low/High
AC Power Line Conducted Emissions	SRD	Low/Middle/High

Note: In radiated measurement,the EUT had been pre-scan on the positioned of each 3 axis(X,Y,Z), the worst case was found when positioned on **X-plane.**

2.7.Power Setting of Test Software

Software Name	BT FCC Tool V2.25		
Frequency(MHz)	2402	2440	2480
SRD 1Mbps Setting	7	7	7
SRD 2Mbps Setting	7	7	7

Note: This information is provided by the applicant.

2.8.Duty Cycle

Refer to section 11: Appendix H

Note:

1. If duty cycle <98 %, the conducted average output power and average power spectral density should be add duty factor.
2. If duty cycle≥98 %,the EUT is consider to be transmitting continuously,the conducted average output power and average power spectral density no need to add duty factor(consider to be zero).
3. The conducted peak output power and peak power spectral density no need to consider duty factor.
4. The on-time time is transmission duration(T).

2.9.Channel List

Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)
0	2402	1	2404
2	2406	3	2408
4	2410	5	2412
6	2414	7	2416
8	2418	9	2420
10	2422	11	2424
12	2426	13	2428
14	2430	15	2432
16	2434	17	2436
18	2438	19	2440
20	2442	21	2444
22	2446	23	2448
24	2450	25	2452
26	2454	27	2456
28	2458	29	2460
30	2462	31	2464
32	2466	33	2468
34	2470	35	2472
36	2474	37	2476
38	2478	39	2480

2.10. Test Equipment List

Equipment List during the test period Jan. 05~25, 2024

For conducted emission test						
Equipment	Manufacturer	Model No.	Serial No.	Calibration Body	Last Cal.	Next Cal.
EMI Test Receiver	Rohde & Schwarz	ESHS30	EST-E001	LISAI	June 12,23	1 Year
Artificial Mains Network	Rohde & Schwarz	ENV216	EST-E002	LISAI	June 12,23	1 Year
Pulse Limiter	Rohde & Schwarz	ESH3-Z2	EST-E078	LISAI	June 12,23	1 Year
Test Software	Audix	e3-6.111221a	N/A	N/A	N/A	N/A

For radiated emission test(9kHz-30MHz)						
Equipment	Manufacturer	Model No.	Serial No.	Calibration Body	Last Cal.	Next Cal.
EMI Test Receiver	Rohde & Schwarz	ESR7	EST-E047	LISAI	June 12,23	1 Year
Active Loop Antenna	SCHWAREBECK	FMZB 1519B	EST-E054	LISAI	June 12,23	1 Year
Test Software	Audix	e3-6.111221a	N/A	N/A	N/A	N/A
9kHz-30MHz Cable	N/A	EST-001	N/A	N/A	N/A	N/A

For radiated emissions test (30-1000MHz)						
Equipment	Manufacturer	Model No.	Serial No.	Calibration Body	Last Cal.	Next Cal.
EMI Test Receiver	Rohde & Schwarz	ESR7	EST-E047	LISAI	June 12,23	1 Year
Bilog Antenna	Teseq	CBL 6111D	EST-E034	LISAI	June 12,23	1 Year
Test Software	Audix	e3-6.111221a	N/A	N/A	N/A	N/A
30-1000MHz Cable	N/A	EST-002	N/A	N/A	N/A	N/A

For radiated emission test(Above 1000MHz)						
Equipment	Manufacturer	Model No.	Serial No.	Calibration Body	Last Cal.	Next Cal.
Horn Antenna	SCHWARZBECK	BBHA9120D	EST-E144	LISAI	June 12,23	1 Year
Horn Antenna	Com-Power	AHA-840	EST-E133	LISAI	June 12,23	1 Year
Low Noise Amplifier	RF	TRLA-010180 G45N	EST-E142	LISAI	June 12,23	1 Year
Spectrum Analyzer	Rohde &Schwarz	FSV40	EST-E069	LISAI	June 12,23	1 Year
Test Software	Audix	e3-6.111221a	N/A	N/A	N/A	N/A
Above 1GHz Cable	N/A	EST-003	N/A	N/A	N/A	N/A

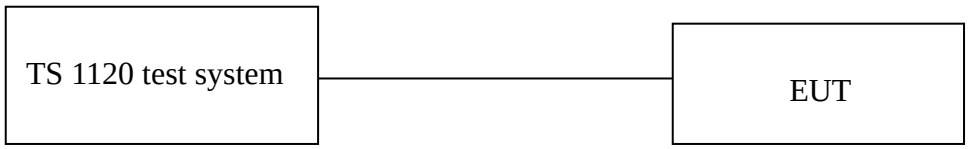
For connect EUT antenna terminal test						
Equipment	Manufacturer	Model No.	Serial No.	Calibration Body	Last Cal.	Next Cal.
TS 1120	Tonscend	/	/	/	/	/
Test Software	Tonscend	TS1120-3	3.3.38	/	/	/
RF Control Unit	Tonscend	JS0806-2	EST-E134	LISAI	June 12,23	1 Year
Signal and Spectrum Analyzer	Keysight	N9010B	EST-E141	LISAI	June 12,23	1 Year

3.6dB Bandwidth & 99% Occupied Bandwidth

3.1.Limit

Systems using digital modulation techniques operate in the 2400-2483.5 MHz,the minimum 6 dB bandwidth shall be at least 500 kHz.

3.2.Test Setup



3.3.Spectrum Analyzer Setting

Spectrum Parameters	Setting
RBW	100KHz
VBW	300KHz
Span	3MHz
Sweep Time	Auto
Detector	Peak
Trace Mode	Max Hold

3.4.Test Procedure

For 6dB Bandwidth Measurement :

a. Connect EUT antenna terminal to the spectrum analyzer with RF cable.
b. Spectrum analyzer setting parameters in accordance with section 3.3.
c. Set the EUT transmit continuously with maximum output power.
d. Allow trace to stabilize, use the ndB down function to measure 6dB Bandwidth.
e. Repeat above procedures until all channels were measured.
f. Record the results in the test report.

For 99% Occupied Bandwidth Measurement:

a. Connect EUT antenna terminal to the spectrum analyzer with RF cable.
b. Spectrum analyzer setting parameters in accordance with section 3.3.
c. Set the EUT transmit continuously with maximum output power.
d. Allow trace to stabilize, use the 99% occupied bandwidth function to measure 6dB Bandwidth.
e. Repeat above procedures until all channels were measured.
f. Record the results in the test report.

3.5.Test Result

Refer to section 11: Appendix A & B

4.MAXIMUM PEAK OUTPUT POWER

4.1.Limit

For DTSs employing digital modulation techniques operating in the bands 902-928 MHz and 2400-2483.5 MHz, the maximum peak conducted output power shall not exceed 1W(30dBm).

4.2.Test Setup

4.3.Spectrum Analyzer Setting

Spectrum Parameters	Setting
RBW	≥DTS Bandwidth
VBW	3*RBW
Span	≥3*DTS Bandwidth
Sweep Time	Auto
Detector	Peak
Trace Mode	Max Hold

4.4.Test Procedure

a. Connect EUT antenna terminal to the spectrum analyzer with RF cable.
b. Spectrum analyzer setting parameters in accordance with section 4.3.
c. Set the EUT transmit continuously with maximum output power.
d. Allow trace to stabilize, use the marker-to-peak function to set the marker to the peak of the emission.
e. Repeat above procedures until all channels were measured.
f. Record the results in the test report.

4.5.Test Result

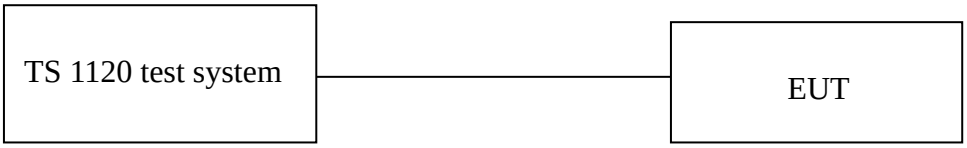
Refer to section 11: Appendix C

5.POWER SPECTRAL DENSITY

5.1.Limit

The transmitter power spectral density conducted from the transmitter to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.

5.2.Test Setup



5.3.Spectrum Analyzer Setting

Spectrum Parameters	Setting
RBW	3KHz
VBW	10KHz
Span	2MHz
Sweep Time	Auto
Detector	Peak
Trace Mode	Max Hold

5.4.Test Procedure

a. Connect EUT antenna terminal to the spectrum analyzer with RF cable.
b. Spectrum analyzer setting parameters in accordance with section 5.3.
c. Set the EUT transmit continuously with maximum output power.
d. Allow trace to stabilize, use the marker-to-peak function to set the marker to the peak of the emission.
e. Repeat above procedures until all channels were measured.
f. Record the results in the test report.

5.5.Test Result

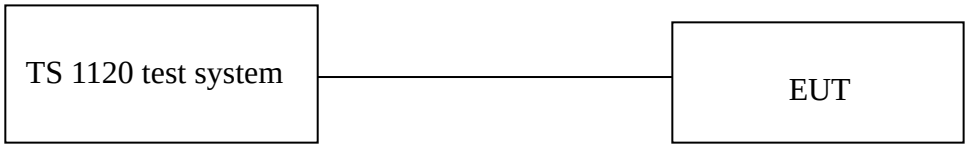
Refer to section 11: Appendix D

6.CONDUCTED BAND EDGE

6.1.Limit

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated device is operating, the RF power that is produced shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided that the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of root-mean-square averaging over a time interval, as permitted under section 5.4(d), the attenuation required shall be 30 dB instead of 20 dB. Attenuation below the general field strength limits specified in RSS-Gen is not required.

6.2.Test Setup



6.3.Spectrum Analyzer Setting

Spectrum Parameters	Setting
RBW	100KHz
VBW	300KHz
Span	100MHz
Sweep Time	Auto
Detector	Peak
Trace Mode	Max Hold

6.4.Test Procedure

a. Connect EUT antenna terminal to the spectrum analyzer with RF cable.
b. Spectrum analyzer setting parameters in accordance with section 6.3.
c. Set the EUT transmit continuously with maximum output power.
d. Allow trace to stabilize, use the marker function to mark the highest emission level outside the authorized band.
e. Repeat above procedures until all channels were measured.
f. Record the results in the test report.

6.5.Test Result

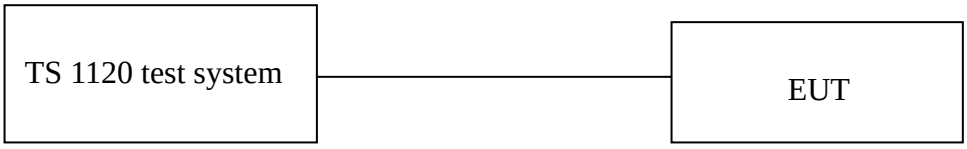
Refer to section 11: Appendix E & F

7.CONDUCTED SPURIOUS EMISSIONS

7.1.Limit

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated device is operating, the RF power that is produced shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided that the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of root-mean-square averaging over a time interval, as permitted under section 5.4(d), the attenuation required shall be 30 dB instead of 20 dB. Attenuation below the general field strength limits specified in RSS-Gen is not required.

7.2.Test Setup



7.3.Spectrum Analyzer Setting

Spectrum Parameters	Setting
RBW	100KHz
VBW	300KHz
Start frequency	30MHz
Stop frequency	26.5GHz
Sweep Time	Auto
Detector	Peak
Trace Mode	Max Hold

7.4.Test Procedure

a. Connect EUT antenna terminal to the spectrum analyzer with RF cable.
b. Spectrum analyzer setting parameters in accordance with section 7.3.
c. Set the EUT transmit continuously with maximum output power.
d. Allow trace to stabilize, use the marker function to mark the highest emission level outside the authorized band.
e. Repeat above procedures until all channels were measured.
f. Record the results in the test report.

7.5.Test Result

Refer to section 11: Appendix E & G

8.RADIATED SPURIOUS EMISSIONS AND BAND EDGE

8.1.Limit

Except where otherwise indicated in the applicable RSS, radiated emissions shall comply with the field strength limits shown in below. Additionally, the level of any transmitter unwanted emission shall not exceed the level of the transmitter's fundamental emission.

Restricted frequency band

MHz	MHz	GHz
0.090 - 0.110	149.9 - 150.05	9.0 - 9.2
0.495 - 0.505	156.52475 - 156.52525	9.3 - 9.5
2.1735 - 2.1905	156.7 - 156.9	10.6 - 12.7
3.020 - 3.026	162.0125 - 167.17	13.25 - 13.4
4.125 - 4.128	167.72 - 173.2	14.47 - 14.5
4.17725 - 4.17775	240 - 285	15.35 - 16.2
4.20725 - 4.20775	322 - 335.4	17.7 - 21.4
5.677 - 5.683	399.9 - 410	22.01 - 23.12
6.215 - 6.218	608 - 614	23.6 - 24.0
6.26775 - 6.26825	960 - 1427	31.2 - 31.8
6.31175 - 6.31225	1435 - 1626.5	36.43 - 36.5
8.291 - 8.294	1645.5 - 1646.5	Above 38.6
8.362 - 8.366	1660 - 1710	
8.37625 - 8.38675	1718.8 - 1722.2	
8.41425 - 8.41475	2200 - 2300	
12.29 - 12.293	2310 - 2390	
12.51975 - 12.52025	2483.5 - 2500	
12.57675 - 12.57725	2655 - 2900	
13.36 - 13.41	3260 - 3267	
16.42 - 16.423	3332 - 3339	
16.69475 - 16.69525	3345.8 - 3358	
16.80425 - 16.80475	3500 - 4400	
25.5 - 25.67	4500 - 5150	
37.5 - 38.25	5350 - 5460	
73 - 74.6	7250 - 7750	
74.8 - 75.2	8025 - 8500	
108 - 138	--	

General field strength limits at frequencies below 30 MHz

Frequency	Magnetic field strength (H-Field) (μA/m)	Measurement distance (m)
9 - 490 kHz	6.37/F(F in kHz)	300
490 - 1705 kHz	63.7/F(F in kHz)	30
1.705 - 30 MHz	0.08	30

Note: The emission limits for the ranges 9-90 kHz and 110-490 kHz are based on measurements
employing a linear average detector.

General field strength limits at frequencies above 30 MHz

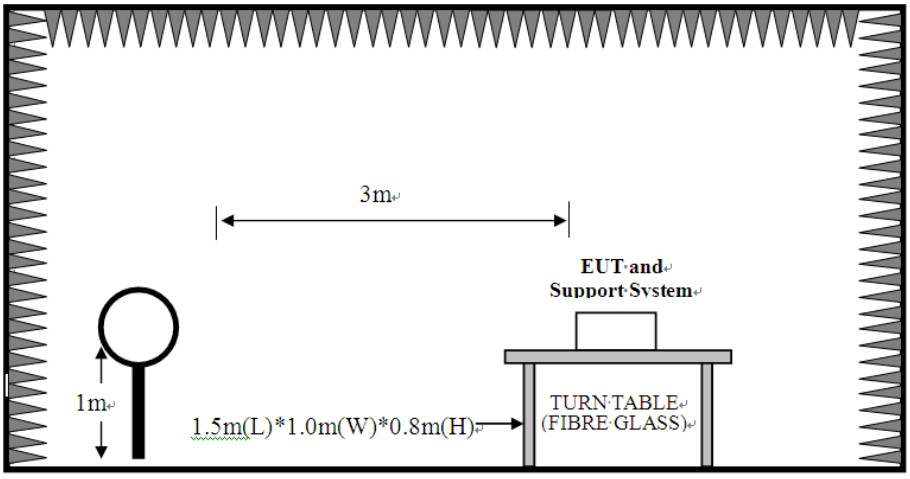
Frequency(MHz)	Field Strength(μV/m at 3 m)
30 - 88	100
88 - 216	150
216 - 960	200
Above 960	500

Note:

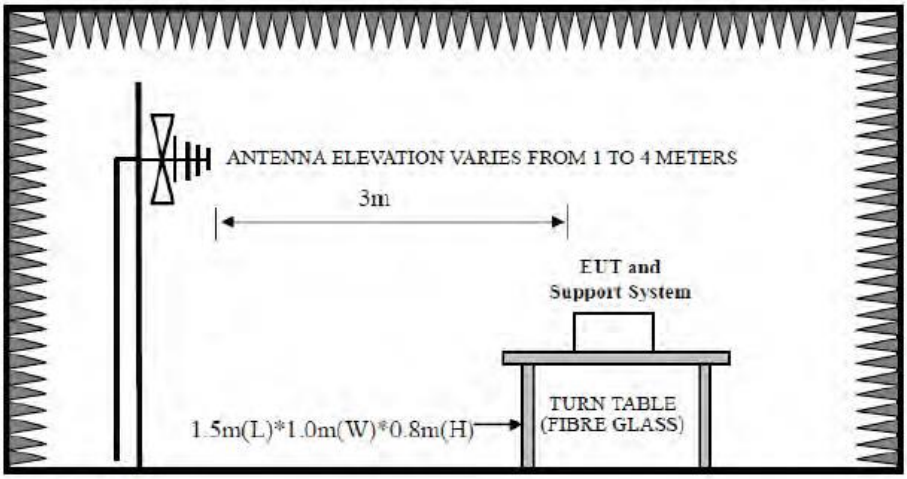
1. Emission level dBμV = 20 log Emission level μV/m.
2. The smaller limit shall apply at the cross point between two frequency bands.
3. Distance is the distance in meters between the measuring instrument,antenna and the closest point of any part of the device or system.

8.2.Test Setup

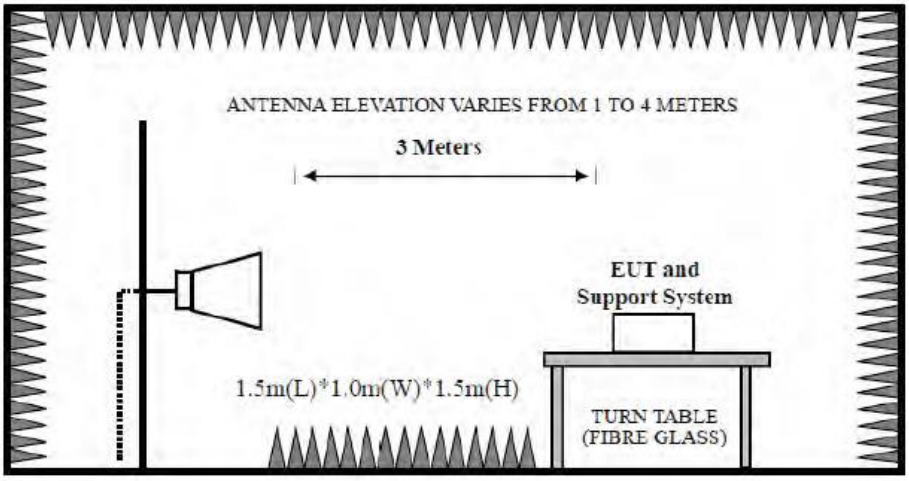
9kHz~30MHz



30~1000MHz



Above 1GHz



8.3.Spectrum Analyzer Setting

For 9KHz-150KHz

Spectrum Parameters	Setting
RBW	300Hz(for Peak&AVG)/CISPR 200Hz(for QP)
VBW	300Hz(for Peak&AVG)/CISPR 200Hz(for QP)
Start frequency	9KHz
Stop frequency	150KHz
Sweep Time	Auto
Detector	PEAK/QP/AVG
Trace Mode	Max Hold

For 150KHz-30MHz

Spectrum Parameters	Setting
RBW	9KHz
VBW	9KHz
Start frequency	150KHz
Stop frequency	30MHz
Sweep Time	Auto
Detector	QP
Trace Mode	Max Hold

For 30MHz-1GHz

Spectrum Parameters	Setting
RBW	120KHz
VBW	300KHz
Start frequency	30MHz
Stop frequency	1GHz
Sweep Time	Auto
Detector	QP
Trace Mode	Max Hold

For Above 1GHz

Spectrum Parameters	Setting	
RBW	1MHz	
VBW	PEAK Measurement	AVG Measurement
	3MHz	Duty cycle≥98%,VBW=10Hz
		Duty cycle＜98%,VBW≥1/T
Start frequency	1GHz	
Stop frequency	25GHz	
Sweep Time	Auto	
Detector	PEAK	
Trace Mode	Max Hold	

Note :T is the on-time time of the duty cycle,when EUT transmit continuously with maximum output power,unit is seconds. reference section 2.8 for the on-time time.

8.4.Test Procedure

a. EUT was placed on a turn table, which is 0.8 meter high above ground for below 1GHz test, and which is 1.5 meter high above ground for above 1GHz test.
b. EUT is set 3 meters away from the receiving antenna, which is mounted on a antenna tower.
c. Set the EUT transmit continuously with maximum output power.
d. The turn table can rotate 360 degrees to determine the position of the maximum emission level.
e. The antenna can be moved up and down between 1 meter and 4 meters to find out the maximum emission level. Both horizontal and vertical polarization of the antenna are set on test.
f. Spectrum analyzer setting parameters in accordance with section 8.3.
g. Repeat above procedures until all channels were measured.
h. Record the results in the test report.

Note:

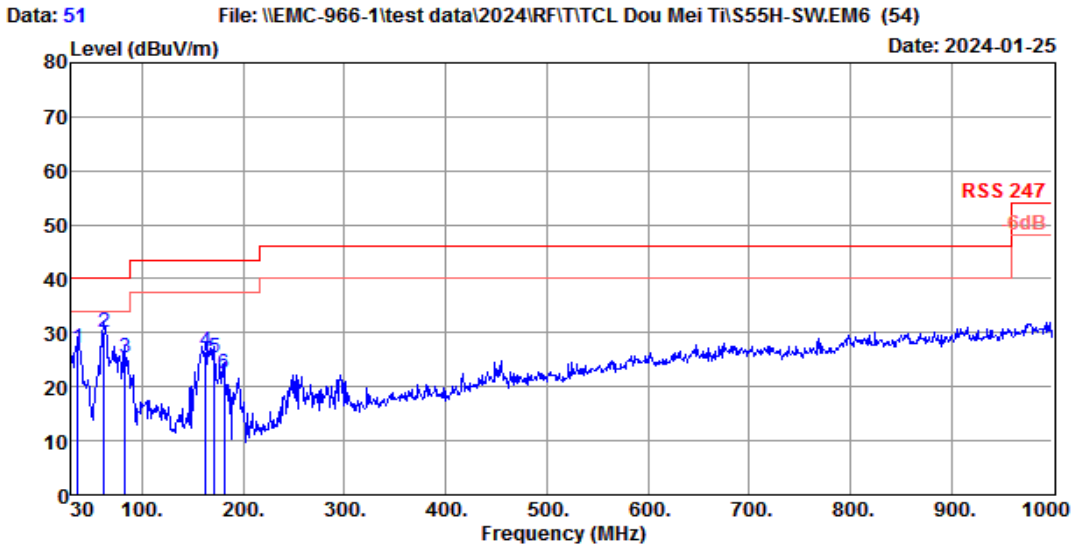
1. For emissions above 1GHz, if peak level comply with average limit, then the average level is deemed to comply with average limit.
2. The frequency 2402MHz ,2440MHz and 2480MHz is fundamental frequency which no limit, the limit on plots is automatically generated by the software, it's not fundamental limit, we can't remove it.
3. SRD 1Mbps and SRD 2Mbps mode all have been tested, only worse case SRD 1Mbps
mode is reported.

8.5.Test Result

Radiated Emissions Below 1GHz

EST Technology

Chilingxiang, Qishantou, Santun,
Houjie, Dongguan,Guangdong,China
Tel:+86-769-83081888
Fax:+86-769-83081878



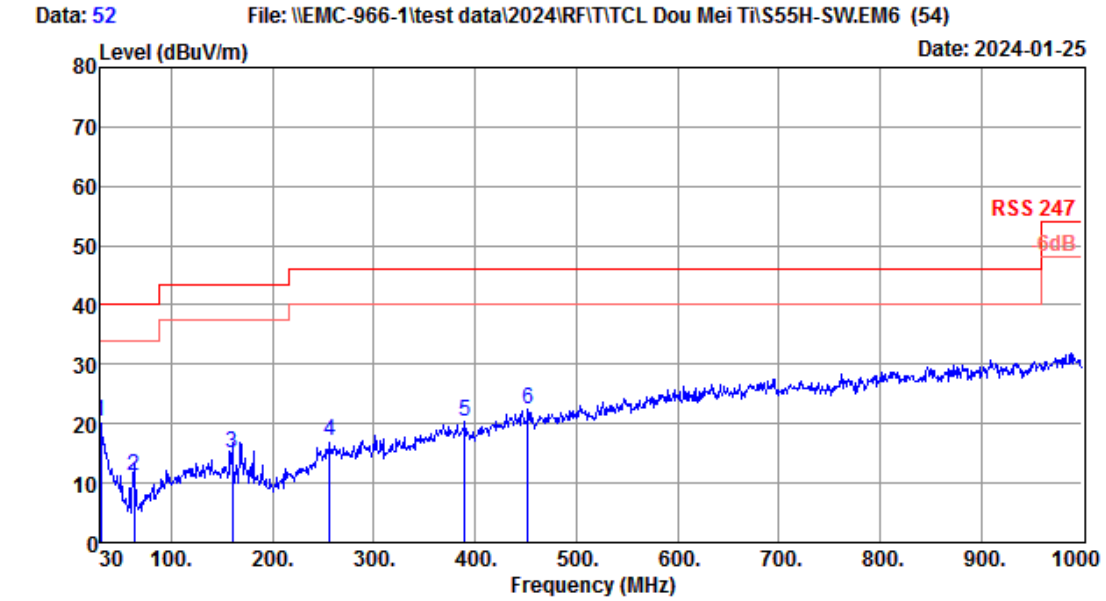
Site no. : 1# 966 Chamber Data no. : 51
Dis. / Ant. : 3m 37062 Ant. pol. : VERTICAL
Limit : RSS 247
Env. / Ins. : Temp:21.7℃.Humi:58%;Press:101.1KPa
Engineer : DCY
EUT : Wireless Subwoofer
Power : AC 120V/60Hz
M/N : S55H-SW
Test Mode : TX Mode

	Freq. (MHz)	ANT Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	36.79	14.60	0.79	11.75	27.14	40.00	12.86	QP
2	62.01	5.60	1.13	23.52	30.25	40.00	9.75	QP
3	83.35	8.30	1.26	15.82	25.38	40.00	14.62	QP
4	162.89	9.80	1.83	14.85	26.48	43.50	17.02	QP
5	171.62	9.40	1.89	14.18	25.47	43.50	18.03	QP
6	181.32	9.90	1.94	10.72	22.56	43.50	20.94	QP

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
2. Margin= Limit - Emission Level.
3. The emission levels that are 20dB below the official limit are not reported.

EST Technology

Chilingxiang, Qishantou, Santun,
Houjie, Dongguan,Guangdong,China
Tel:+86-769-83081888
Fax:+86-769-83081878



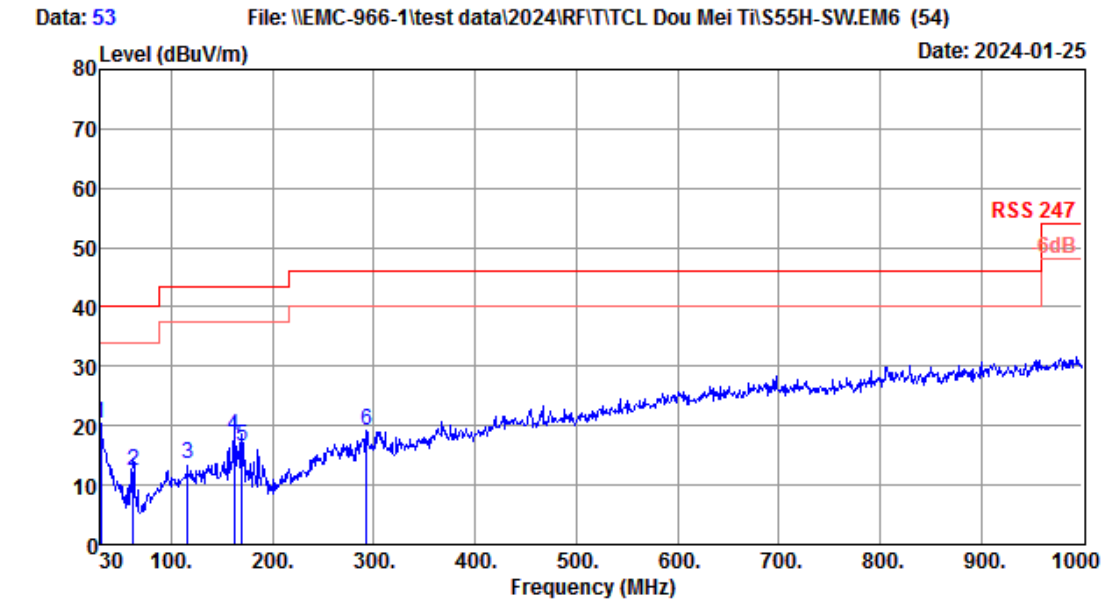
Site no. : 1# 966 Chamber Data no. : 52
Dis. / Ant. : 3m 37062 Ant. pol. : HORIZONTAL
Limit : RSS 247
Env. / Ins. : Temp:21.7℃.Humi:58%;Press:101.1KPa
Engineer : DCY
EUT : Wireless Subwoofer
Power : AC 120V/60Hz
M/N : S55H-SW
Test Mode : TX Mode

	Freq. (MHz)	ANT Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	30.00	19.00	0.70	0.54	20.24	40.00	19.76	QP
2	62.98	5.40	1.13	4.71	11.24	40.00	28.76	QP
3	159.98	11.00	1.82	2.13	14.95	43.50	28.55	QP
4	256.01	14.08	2.36	0.82	17.26	46.00	28.74	QP
5	389.87	16.30	3.02	1.02	20.34	46.00	25.66	QP
6	451.95	17.84	3.25	1.34	22.43	46.00	23.57	QP

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
2. Margin= Limit - Emission Level.
3. The emission levels that are 20dB below the official limit are not reported.

EST Technology

Chilingxiang, Qishantou, Santun,
Houjie, Dongguan,Guangdong,China
Tel:+86-769-83081888
Fax:+86-769-83081878



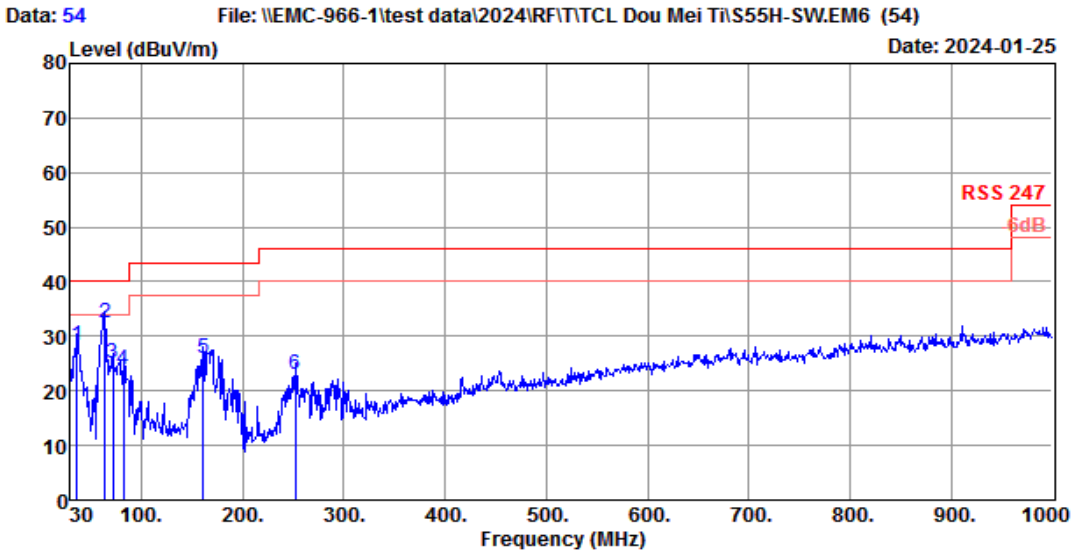
Site no. : 1# 966 Chamber Data no. : 53
Dis. / Ant. : 3m 37062 Ant. pol. : HORIZONTAL
Limit : RSS 247
Env. / Ins. : Temp:21.7℃.Humi:58%;Press:101.1KPa
Engineer : DCY
EUT : Wireless Subwoofer
Power : AC 120V/60Hz
M/N : S55H-SW
Test Mode : RX Mode

	Freq. (MHz)	ANT Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	30.00	19.00	0.70	0.62	20.32	40.00	19.68	QP
2	62.01	5.60	1.13	5.60	12.33	40.00	27.67	QP
3	116.33	11.90	1.52	0.12	13.54	43.50	29.96	QP
4	161.92	11.10	1.83	5.29	18.22	43.50	25.28	QP
5	169.68	10.10	1.87	4.68	16.65	43.50	26.85	QP
6	292.87	13.50	2.59	3.12	19.21	46.00	26.79	QP

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
2. Margin= Limit - Emission Level.
3. The emission levels that are 20dB below the official limit are not reported.

EST Technology

Chilingxiang, Qishantou, Santun,
Houjie, Dongguan,Guangdong,China
Tel:+86-769-83081888
Fax:+86-769-83081878



Site no. : 1# 966 Chamber Data no. : 54
Dis. / Ant. : 3m 37062 Ant. pol. : VERTICAL
Limit : RSS 247
Env. / Ins. : Temp:21.7℃.Humi:58%;Press:101.1KPa
Engineer : DCY
EUT : Wireless Subwoofer
Power : AC 120V/60Hz
M/N : S55H-SW
Test Mode : RX Mode

	Freq. (MHz)	ANT Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	36.79	14.60	0.79	13.01	28.40	40.00	11.60	QP
2	63.95	6.20	1.14	25.08	32.42	40.00	7.58	QP
3	71.71	6.80	1.17	17.00	24.97	40.00	15.03	QP
4	82.38	8.10	1.25	14.51	23.86	40.00	16.14	QP
5	160.95	10.40	1.82	13.84	26.06	43.50	17.44	QP
6	252.13	13.02	2.33	7.63	22.98	46.00	23.02	QP

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
2. Margin= Limit - Emission Level.
3. The emission levels that are 20dB below the official limit are not reported.

Note:

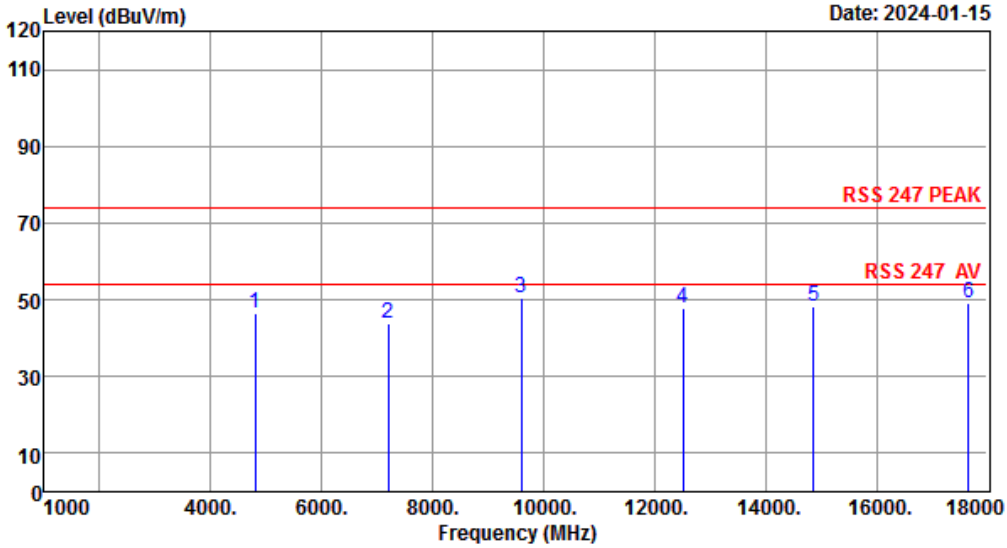
1. The amplitude of 9KHz to 30MHz spurious emission that is attenuated by more than 20dB below the permissible limit has no need to be reported.
2. All channels had been pre-test,only the worst case was reported.

Radiated Emissions Above 1G

EST Technology

Chilingxiang, Qishantou, Santun,
Houjie, Dongguan,Guangdong,China
Tel:+86-769-83081888
Fax:+86-769-83081878

Data: 25 File: \\EMC-966-1\test data\2024\RF\T\TCL Dou Mei Ti\S55H-SW.EM6 (56)



Site no. : 1# 966 Chamber Data no. : 25
Dis. / Ant. : 3m BBHA9120D-2667 Ant. pol. : VERTICAL
Limit : RSS 247 PEAK
Env. / Ins. : Temp:19.5℃;Humi:51%;Press:101.52kPa
Engineer : QQZ
EUT : Wireless Subwoofer
Power : AC 120V/60Hz
M/N : S55H-SW
Test Mode : SRD 1Mbps TX 2402MHz

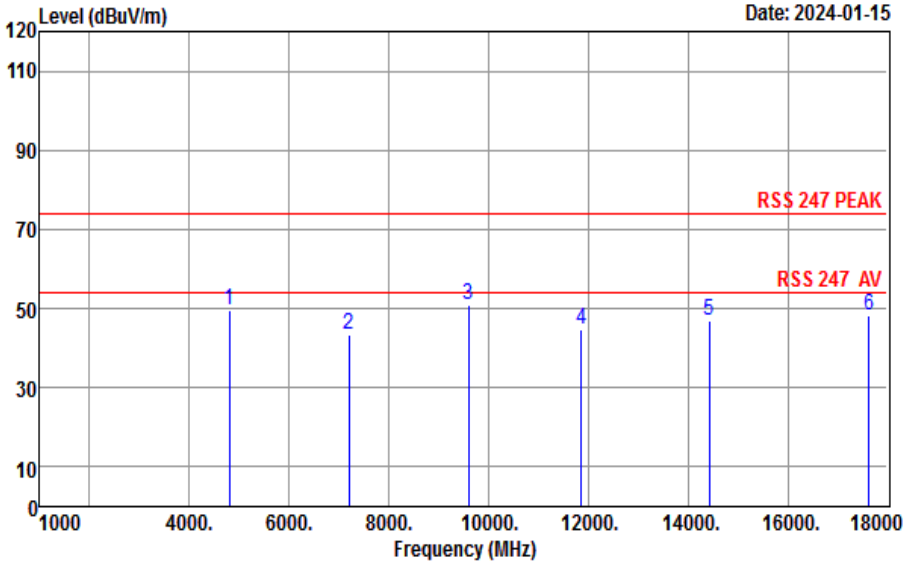
	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4804.00	32.39	5.20	44.49	53.32	46.42	74.00	27.58	Peak
2	7206.00	36.16	6.67	44.08	45.15	43.90	74.00	30.10	Peak
3	9602.00	38.12	7.77	43.64	48.15	50.40	74.00	23.60	Peak
4	12509.00	39.26	9.05	41.49	40.88	47.70	74.00	26.30	Peak
5	14872.00	39.56	10.18	42.96	41.55	48.33	74.00	25.67	Peak
6	17660.00	40.48	12.15	43.21	39.88	49.30	74.00	24.70	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.
2. Margin= Limit - Emission Level.
3. The emission levels that are 20dB below the official limit are not reported.

EST Technology

Chilingxiang, Qishantou, Santun,
Houjie, Dongguan,Guangdong,China
Tel:+86-769-83081888
Fax:+86-769-83081878

Data: 26 File: \\EMC-966-1\test data\2024\RF\T\TCL Dou Mei Ti\S55H-SW.EM6 (56)



Site no. : 1# 966 Chamber Data no. : 26
Dis. / Ant. : 3m BBHA9120D-2667 Ant. pol. : HORIZONTAL
Limit : RSS 247 PEAK
Env. / Ins. : Temp:19.5℃;Humi:51%;Press:101.52kPa
Engineer : QQZ
EUT : Wireless Subwoofer
Power : AC 120V/60Hz
M/N : S55H-SW
Test Mode : SRD 1Mbps TX 2402MHz

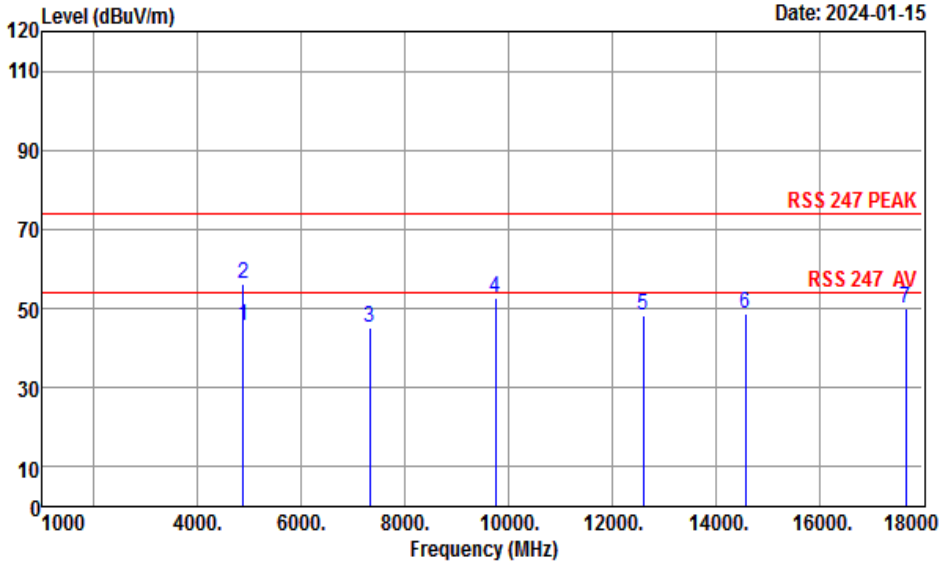
	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4804.00	32.39	5.20	44.49	56.34	49.44	74.00	24.56	Peak
2	7206.00	36.16	6.67	44.08	44.68	43.43	74.00	30.57	Peak
3	9602.00	38.12	7.77	43.64	48.56	50.81	74.00	23.19	Peak
4	11863.00	38.81	8.75	42.31	39.53	44.78	74.00	29.22	Peak
5	14430.00	39.78	9.97	41.86	38.95	46.84	74.00	27.16	Peak
6	17626.00	40.37	12.12	43.26	38.98	48.21	74.00	25.79	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.
2. Margin= Limit - Emission Level.
3. The emission levels that are 20dB below the official limit are not reported.

EST Technology

Chilingxiang, Qishantou, Santun,
Houjie, Dongguan,Guangdong,China
Tel:+86-769-83081888
Fax:+86-769-83081878

Data: 29 File: \\EMC-966-1\test data\2024\RF\T\TCL Dou Mei Ti\S55H-SW.EM6 (56)



Site no. : 1# 966 Chamber Data no. : 29
Dis. / Ant. : 3m BBHA9120D-2667 Ant. pol. : VERTICAL
Limit : RSS 247 PEAK
Env. / Ins. : Temp:19.5℃;Humi:51%;Press:101.52kPa
Engineer : QQZ
EUT : Wireless Subwoofer
Power : AC 120V/60Hz
M/N : S55H-SW
Test Mode : SRD 1Mbps TX 2440MHz

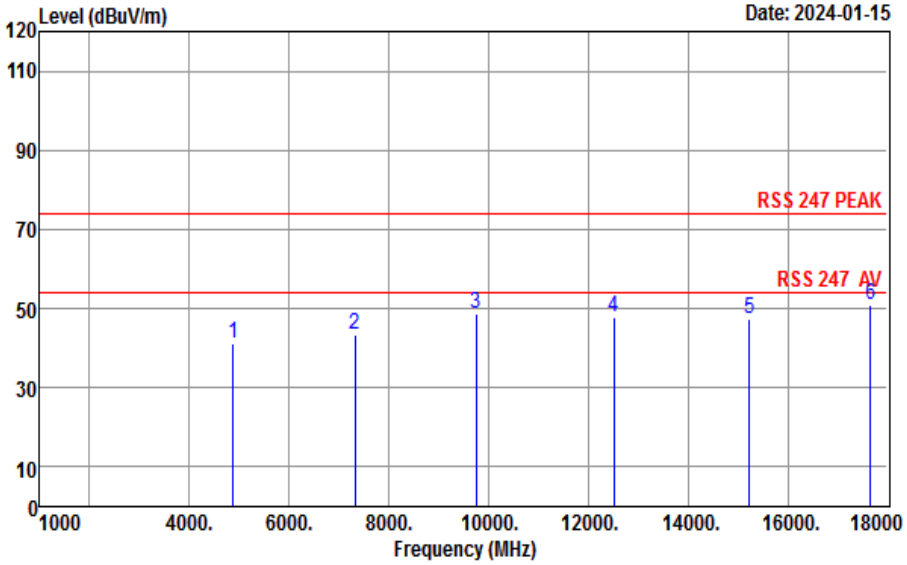
	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4880.00	32.55	5.28	44.42	52.31	45.72	54.00	8.28	Average
2	4880.00	32.55	5.28	44.42	62.91	56.32	74.00	17.68	Peak
3	7320.00	36.26	6.70	44.07	46.11	45.00	74.00	29.00	Peak
4	9755.00	38.15	7.77	43.70	50.55	52.77	74.00	21.23	Peak
5	12611.00	39.35	9.09	41.35	40.99	48.08	74.00	25.92	Peak
6	14583.00	39.71	10.05	42.24	41.17	48.69	74.00	25.31	Peak
7	17677.00	40.53	12.17	43.18	40.46	49.98	74.00	24.02	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.
2. Margin= Limit - Emission Level.
3. The emission levels that are 20dB below the official limit are not reported.

EST Technology

Chilingxiang, Qishantou, Santun,
Houjie, Dongguan,Guangdong,China
Tel:+86-769-83081888
Fax:+86-769-83081878

Data: 30 File: \\EMC-966-1\test data\2024\RF\T\TCL Dou Mei Ti\S55H-SW.EM6 (56)



Site no. : 1# 966 Chamber Data no. : 30
Dis. / Ant. : 3m BBHA9120D-2667 Ant. pol. : HORIZONTAL
Limit : RSS 247 PEAK
Env. / Ins. : Temp:19.5℃;Humi:51%;Press:101.52kPa
Engineer : QQZ
EUT : Wireless Subwoofer
Power : AC 120V/60Hz
M/N : S55H-SW
Test Mode : SRD 1Mbps TX 2440MHz

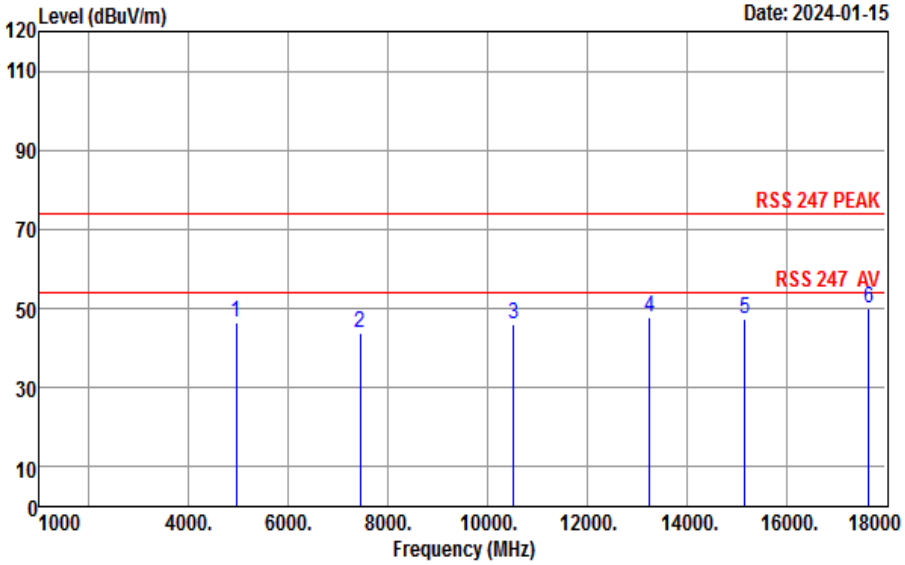
	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4880.00	32.55	5.28	44.42	47.68	41.09	74.00	32.91	Peak
2	7320.00	36.26	6.70	44.07	44.64	43.53	74.00	30.47	Peak
3	9755.00	38.15	7.77	43.70	46.66	48.88	74.00	25.12	Peak
4	12509.00	39.26	9.05	41.49	40.89	47.71	74.00	26.29	Peak
5	15229.00	39.11	10.34	43.48	41.27	47.24	74.00	26.76	Peak
6	17660.00	40.48	12.15	43.21	41.42	50.84	74.00	23.16	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.
2. Margin= Limit - Emission Level.
3. The emission levels that are 20dB below the official limit are not reported.

EST Technology

Chilingxiang, Qishantou, Santun,
Houjie, Dongguan,Guangdong,China
Tel:+86-769-83081888
Fax:+86-769-83081878

Data: 31 File: \\EMC-966-1\test data\2024\RF\T\TCL Dou Mei Ti\S55H-SW.EM6 (56)



Site no. : 1# 966 Chamber Data no. : 31
Dis. / Ant. : 3m BBHA9120D-2667 Ant. pol. : HORIZONTAL
Limit : RSS 247 PEAK
Env. / Ins. : Temp:19.5℃;Humi:51%;Press:101.52kPa
Engineer : QQZ
EUT : Wireless Subwoofer
Power : AC 120V/60Hz
M/N : S55H-SW
Test Mode : SRD 1Mbps TX 2480MHz

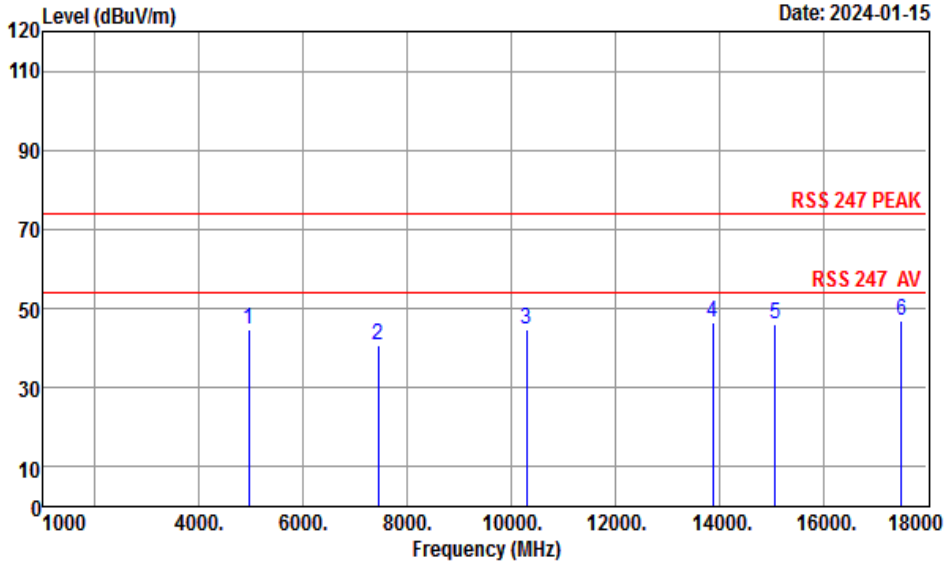
	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4960.00	32.72	5.37	44.33	52.65	46.41	74.00	27.59	Peak
2	7440.00	36.35	6.74	44.06	45.03	44.06	74.00	29.94	Peak
3	10520.00	38.56	8.03	43.38	42.75	45.96	74.00	28.04	Peak
4	13257.00	39.78	9.39	40.80	39.28	47.65	74.00	26.35	Peak
5	15178.00	39.20	10.32	43.44	41.33	47.41	74.00	26.59	Peak
6	17660.00	40.48	12.15	43.21	40.65	50.07	74.00	23.93	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.
2. Margin= Limit - Emission Level.
3. The emission levels that are 20dB below the official limit are not reported.

EST Technology

Chilingxiang, Qishantou, Santun,
Houjie, Dongguan,Guangdong,China
Tel:+86-769-83081888
Fax:+86-769-83081878

Data: 32 File: \\EMC-966-1\test data\2024\RF\T\TCL Dou Mei Ti\S55H-SW.EM6 (56)



Site no. : 1# 966 Chamber Data no. : 32
Dis. / Ant. : 3m BBHA9120D-2667 Ant. pol. : VERTICAL
Limit : RSS 247 PEAK
Env. / Ins. : Temp:19.5℃;Humi:51%;Press:101.52kPa
Engineer : QQZ
EUT : Wireless Subwoofer
Power : AC 120V/60Hz
M/N : S55H-SW
Test Mode : SRD 1Mbps TX 2480MHz

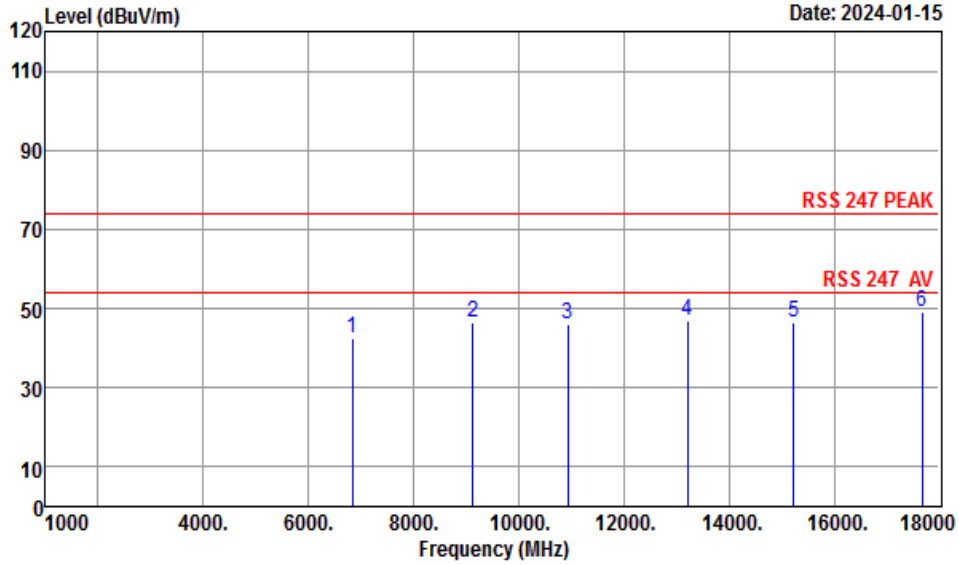
	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4960.00	32.72	5.37	44.33	51.06	44.82	74.00	29.18	Peak
2	7440.00	36.35	6.74	44.06	41.57	40.60	74.00	33.40	Peak
3	10299.00	38.41	7.92	43.56	42.15	44.92	74.00	29.08	Peak
4	13886.00	39.97	9.71	40.80	37.80	46.68	74.00	27.32	Peak
5	15076.00	39.37	10.28	43.36	39.83	46.12	74.00	27.88	Peak
6	17507.00	39.97	12.02	43.44	38.18	46.73	74.00	27.27	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.
2. Margin= Limit - Emission Level.
3. The emission levels that are 20dB below the official limit are not reported.

EST Technology

Chilingxiang, Qishantou, Santun,
Houjie, Dongguan,Guangdong,China
Tel:+86-769-83081888
Fax:+86-769-83081878

Data: 35 File: \\EMC-966-1\test data\2024\RF\T\TCL Dou Mei Ti\S55H-SW.EM6 (56)



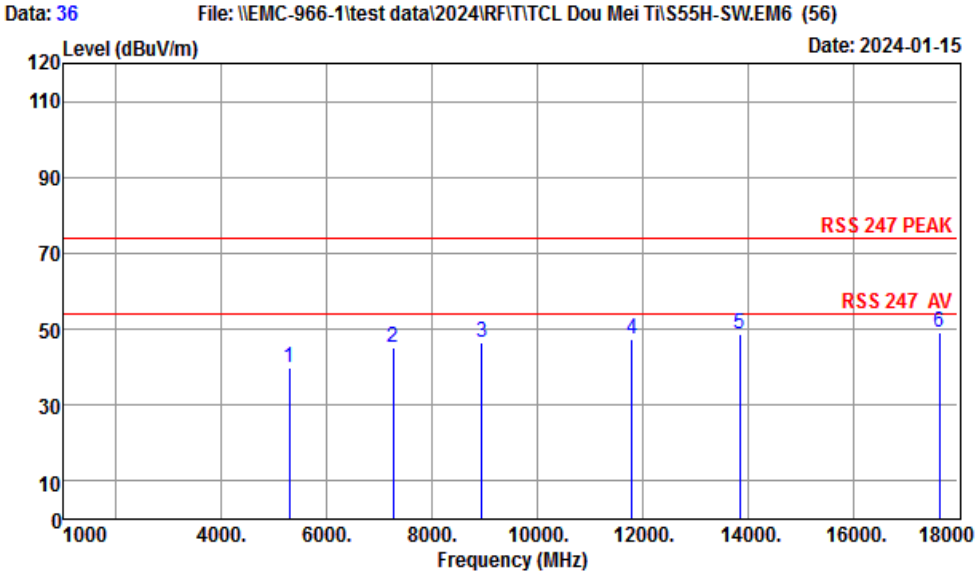
Site no. : 1# 966 Chamber Data no. : 35
Dis. / Ant. : 3m BBHA9120D-2667 Ant. pol. : HORIZONTAL
Limit : RSS 247 PEAK
Env. / Ins. : Temp:19.5℃;Humi:51%;Press:101.52kPa
Engineer : QQZ
EUT : Wireless Subwoofer
Power : AC 120V/60Hz
M/N : S55H-SW
Test Mode : RX Mode

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	6831.00	35.65	6.53	44.10	44.22	42.30	74.00	31.70	Peak
2	9126.00	38.03	7.78	43.45	43.95	46.31	74.00	27.69	Peak
3	10928.00	38.85	8.23	43.05	42.00	46.03	74.00	27.97	Peak
4	13206.00	39.76	9.36	40.80	38.79	47.11	74.00	26.89	Peak
5	15229.00	39.11	10.34	43.48	40.75	46.72	74.00	27.28	Peak
6	17677.00	40.53	12.17	43.18	39.77	49.29	74.00	24.71	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.
2. Margin= Limit - Emission Level.
3. The emission levels that are 20dB below the official limit are not reported.

EST Technology

Chilingxiang, Qishantou, Santun,
Houjie, Dongguan,Guangdong,China
Tel:+86-769-83081888
Fax:+86-769-83081878



Site no. : 1# 966 Chamber Data no. : 36
Dis. / Ant. : 3m BBHA9120D-2667 Ant. pol. : VERTICAL
Limit : RSS 247 PEAK
Env. / Ins. : Temp:19.5℃;Humi:51%;Press:101.52kPa
Engineer : QQZ
EUT : Wireless Subwoofer
Power : AC 120V/60Hz
M/N : S55H-SW
Test Mode : RX Mode

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	5284.00	33.11	5.63	44.24	45.52	40.02	74.00	33.98	Peak
2	7256.00	36.20	6.68	44.07	46.31	45.12	74.00	28.88	Peak
3	8939.00	37.93	7.72	43.44	44.49	46.70	74.00	27.30	Peak
4	11795.00	38.82	8.71	42.36	42.43	47.60	74.00	26.40	Peak
5	13852.00	39.96	9.69	40.80	39.69	48.54	74.00	25.46	Peak
6	17643.00	40.42	12.14	43.23	39.87	49.20	74.00	24.80	Peak

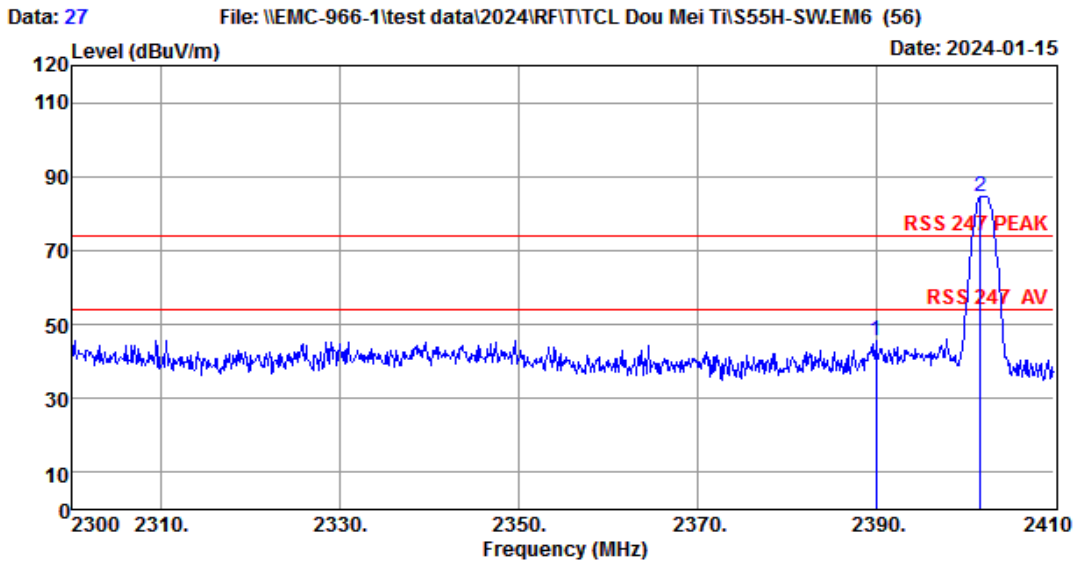
Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.
2. Margin= Limit - Emission Level.
3. The emission levels that are 20dB below the official limit are not reported.

Note: The amplitude of 18GHz to 25GHz spurious emission that is attenuated by more than 20dB below the permissible limit has no need to be reported.

Radiated Band Edge

EST Technology

Chilingxiang, Qishantou, Santun,
Houjie, Dongguan,Guangdong,China
Tel:+86-769-83081888
Fax:+86-769-83081878



Site no. : 1# 966 Chamber Data no. : 27
Dis. / Ant. : 3m BBHA9120D-2667 Ant. pol. : HORIZONTAL
Limit : RSS 247 PEAK
Env. / Ins. : Temp:19.5℃;Humi:51%;Press:101.52kPa
Engineer : QQZ
EUT : Wireless Subwoofer
Power : AC 120V/60Hz
M/N : S55H-SW
Test Mode : SRD 1Mbps TX 2402MHz

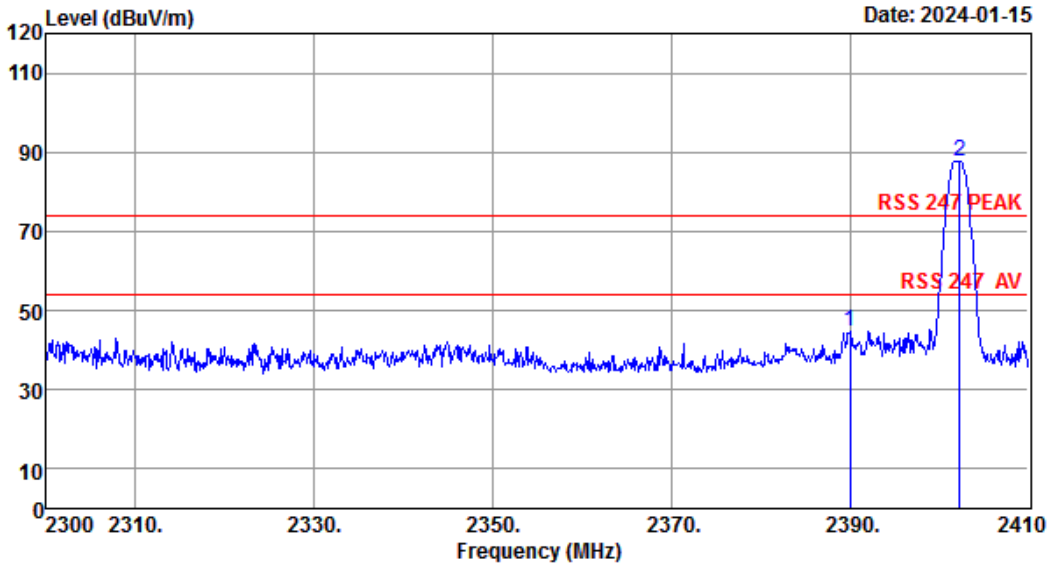
	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2390.00	27.43	3.55	45.01	59.64	45.61	74.00	28.39	Peak
2	2401.75	27.47	3.55	45.01	98.75	84.76	74.00	-10.76	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.
2. Margin= Limit - Emission Level.
3. The emission levels that are 20dB below the official limit are not reported.

EST Technology

Chilingxiang, Qishantou, Santun,
Houjie, Dongguan,Guangdong,China
Tel:+86-769-83081888
Fax:+86-769-83081878

Data: 28 File: \\EMC-966-1\test data\2024\RF\T\TCL Dou Mei Ti\S55H-SW.EM6 (56)



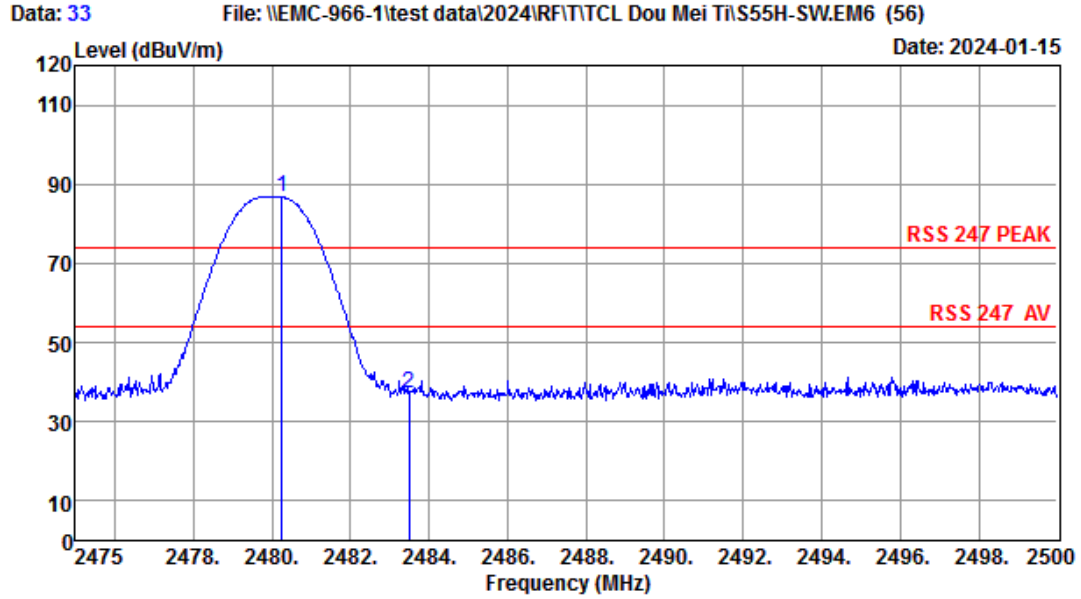
Site no. : 1# 966 Chamber Data no. : 28
Dis. / Ant. : 3m BBHA9120D-2667 Ant. pol. : VERTICAL
Limit : RSS 247 PEAK
Env. / Ins. : Temp:19.5℃;Humi:51%;Press:101.52kPa
Engineer : QQZ
EUT : Wireless Subwoofer
Power : AC 120V/60Hz
M/N : S55H-SW
Test Mode : SRD 1Mbps TX 2402MHz

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2390.00	27.43	3.55	45.01	58.90	44.87	74.00	29.13	Peak
2	2402.30	27.47	3.55	45.01	101.85	87.86	74.00	-13.86	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.
2. Margin= Limit - Emission Level.
3. The emission levels that are 20dB below the official limit are not reported.

EST Technology

Chilingxiang, Qishantou, Santun,
Houjie, Dongguan,Guangdong,China
Tel:+86-769-83081888
Fax:+86-769-83081878



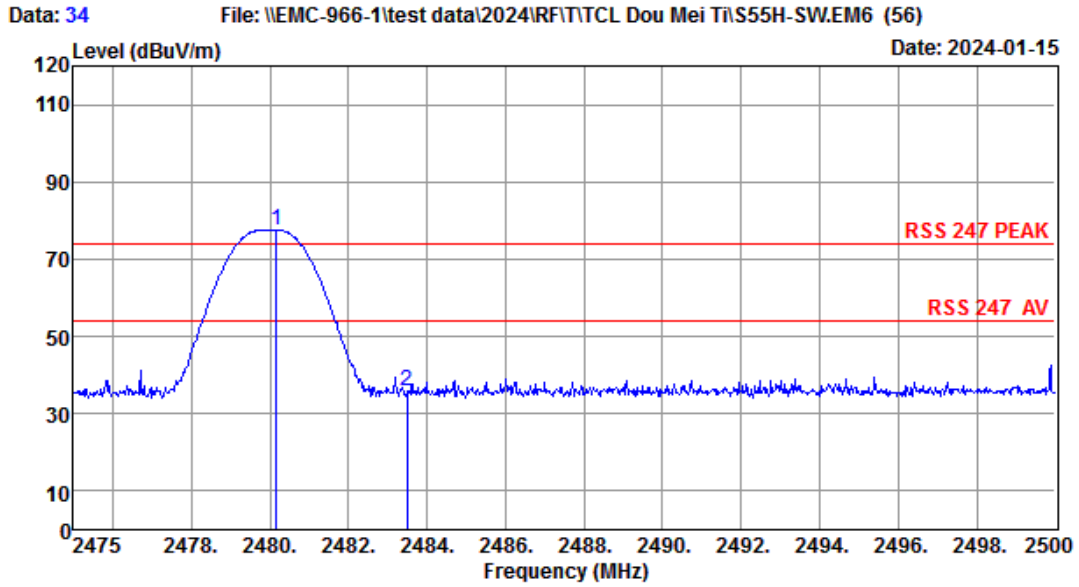
Site no. : 1# 966 Chamber Data no. : 33
Dis. / Ant. : 3m BBHA9120D-2667 Ant. pol. : VERTICAL
Limit : RSS 247 PEAK
Env. / Ins. : Temp:19.5℃;Humi:51%;Press:101.52kPa
Engineer : QQZ
EUT : Wireless Subwoofer
Power : AC 120V/60Hz
M/N : S55H-SW
Test Mode : SRD 1Mbps TX 2480MHz

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2480.25	27.69	3.62	44.93	100.36	86.74	74.00	-12.74	Peak
2	2483.50	27.70	3.62	44.93	50.91	37.30	74.00	36.70	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.
2. Margin= Limit - Emission Level.
3. The emission levels that are 20dB below the official limit are not reported.

EST Technology

Chilingxiang, Qishantou, Santun,
Houjie, Dongguan,Guangdong,China
Tel:+86-769-83081888
Fax:+86-769-83081878



Site no. : 1# 966 Chamber Data no. : 34
Dis. / Ant. : 3m BBHA9120D-2667 Ant. pol. : HORIZONTAL
Limit : RSS 247 PEAK
Env. / Ins. : Temp:19.5℃;Humi:51%;Press:101.52kPa
Engineer : QQZ
EUT : Wireless Subwoofer
Power : AC 120V/60Hz
M/N : S55H-SW
Test Mode : SRD 1Mbps TX 2480MHz

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2480.18	27.69	3.62	44.93	91.11	77.49	74.00	-3.49	Peak
2	2483.50	27.70	3.62	44.93	49.48	35.87	74.00	38.13	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.
2. Margin= Limit - Emission Level.
3. The emission levels that are 20dB below the official limit are not reported.

Note: All channels had been pre-test,only of the worst case channels were reported.

9.AC POWER LINE CONDUCTED EMISSIONS

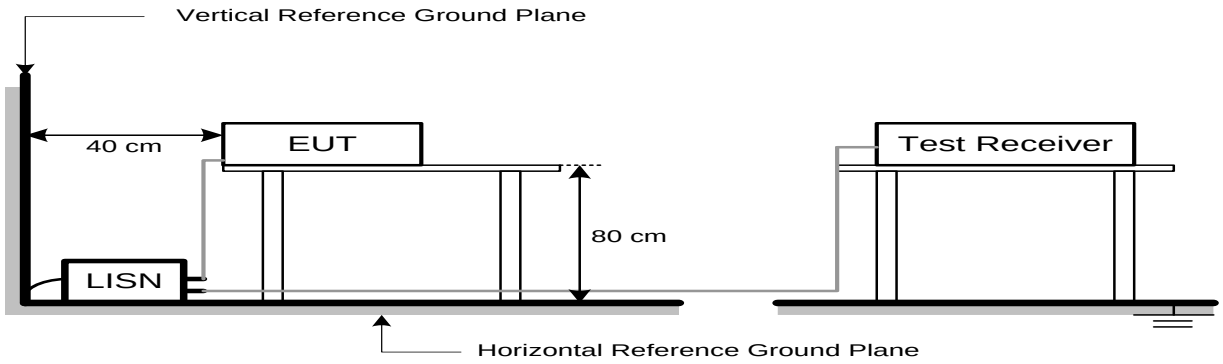
9.1.Limit

Frequency (MHz)	Conducted limit(dBμV)	
	Quasi-peak	Average
0.15 - 0.5	66 to 56*	56 to 46*
0.5 - 5	56	46
5 - 30	60	50

Note:

1. * Decreasing linearly with logarithm of frequency.
2. The lower limit shall apply at the transition frequencies.

9.2.Test Setup



9.3.Spectrum Analyzer Setting

Spectrum Parameters	Setting
RBW	9KHz
VBW	9KHz
Start frequency	150KHz
Stop frequency	30MHz
Sweep Time	Auto
Detector	QP/AVG
Trace Mode	Max Hold

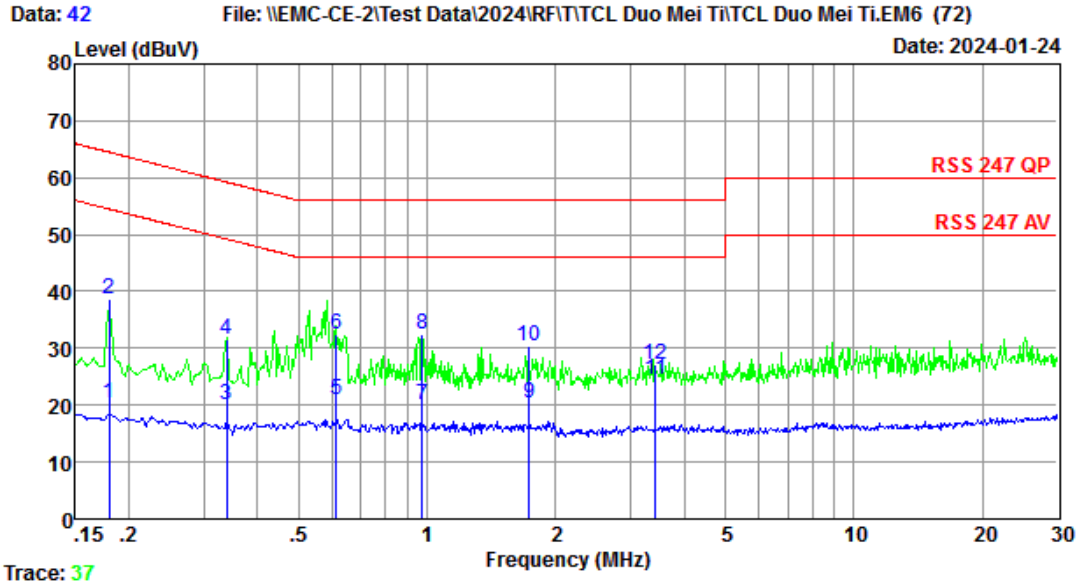
9.4.Test Procedure

a. The EUT was placed on a non-metallic table, 80cm above the ground plane.
b. The EUT Power connected to the power mains through a line impedance stabilization network.
c. Provides a 50 ohm coupling impedance for the EUT (Please refer the block diagram of the test setup and photographs).
d. Set the EUT transmit continuously with maximum output power.
e. Spectrum analyzer setting parameters in accordance with section 9.3.
f. The AC line are checked to find out the maximum conducted emission. In order to find the maximum emission levels, the relative positions of equipment and all of the interface cables shall be changed according to ANSI C63.10: 2013 on Conducted Emission Test.
g. Record the results in the test report.

9.5.Test Result

EST Technology

Chilingxiang, Qishantou, Santun,
Houjie, Dongguan,Guangdong,China
Tel:+86-769-83081888
Fax:+86-769-83081878



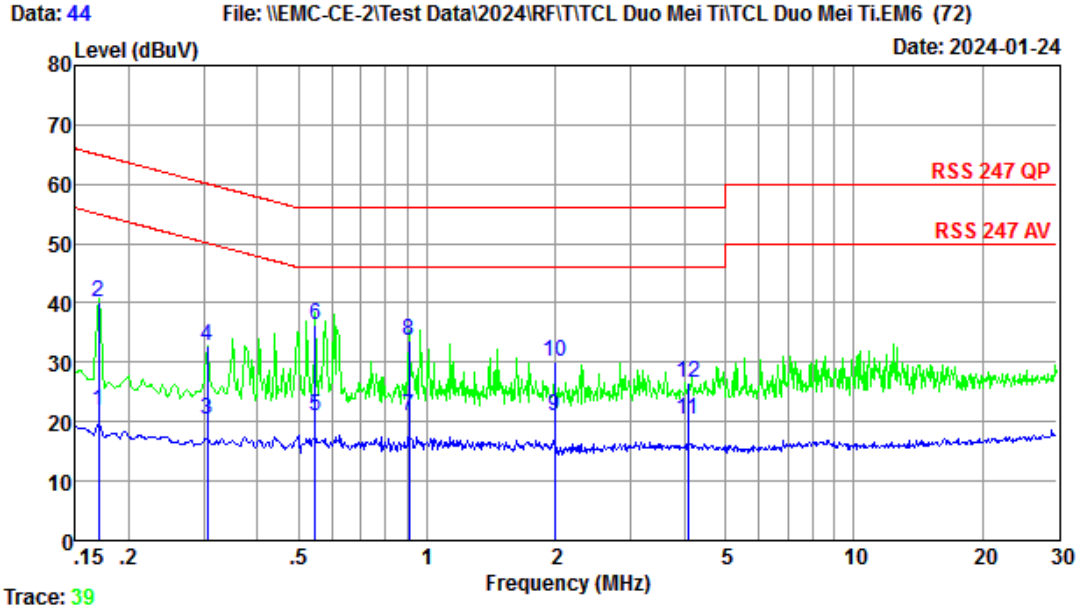
Site no : 2#CE Shield Room Data no. : 42
Env. / Ins. : Temp:22.8℃ Humi:49% Press:101.40kPa LINE Phase : LINE
Limit : RSS 247 QP
Engineer : ZSX
EUT : Wireless Subwoofer
Power : AC 120V/60Hz
M/N : S55H-SW
Test Mode : TX Mode

	Freq. (MHz)	LISN Factor (db)	Cable Loss (db)	Reading dBuV)	Emission Level (dBuv)	Limits (dBuv)	Margin (dB)	Remark
1	0.18	10.16	9.93	0.32	20.41	54.50	34.09	Average
2	0.18	10.16	9.93	18.64	38.73	64.50	25.77	QP
3	0.34	10.13	9.88	0.07	20.08	49.22	29.14	Average
4	0.34	10.13	9.88	11.50	31.51	59.22	27.71	QP
5	0.61	10.05	9.97	0.93	20.95	46.00	25.05	Average
6	0.61	10.05	9.97	12.39	32.41	56.00	23.59	QP
7	0.97	9.98	10.04	0.03	20.05	46.00	25.95	Average
8	0.97	9.98	10.04	12.60	32.62	56.00	23.38	QP
9	1.73	9.98	10.01	0.29	20.28	46.00	25.72	Average
10	1.73	9.98	10.01	10.30	30.29	56.00	25.71	QP
11	3.44	9.99	10.00	4.39	24.38	46.00	21.62	Average
12	3.44	9.99	10.00	7.10	27.09	56.00	28.91	QP

Remarks: 1. Emission Level= LISN Factor + Cable Loss + Reading.
2. Margin= Limit - Emission Level.
3. If the average limit is met when useing a quasi-peak detector, the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.

EST Technology

Chilingxiang, Qishantou, Santun,
Houjie, Dongguan,Guangdong,China
Tel:+86-769-83081888
Fax:+86-769-83081878



Site no : 2#CE Shield Room Data no. : 44
Env. / Ins. : Temp:22.8℃ Humi:49% Press:101.40kPa LINE Phase : NEUTRAL
Limit : RSS 247 QP
Engineer : ZSX
EUT : Wireless Subwoofer
Power : AC 120V/60Hz
M/N : S55H-SW
Test Mode : TX Mode

	Freq. (MHz)	LISN Factor (db)	Cable Loss (db)	Reading dBuV)	Emission Level (dBuv)	Limits (dBuv)	Margin (dB)	Remark
1	0.17	10.22	9.89	1.63	21.74	54.94	33.20	Average
2	0.17	10.22	9.89	20.00	40.11	64.94	24.83	QP
3	0.31	10.17	9.87	0.29	20.33	50.10	29.77	Average
4	0.31	10.17	9.87	12.60	32.64	60.10	27.46	QP
5	0.55	9.99	9.95	0.94	20.88	46.00	25.12	Average
6	0.55	9.99	9.95	16.41	36.35	56.00	19.65	QP
7	0.91	10.00	10.03	0.90	20.93	46.00	25.07	Average
8	0.91	10.00	10.03	13.50	33.53	56.00	22.47	QP
9	1.99	10.00	10.00	0.98	20.98	46.00	25.02	Average
10	1.99	10.00	10.00	10.20	30.20	56.00	25.80	QP
11	4.09	10.01	9.99	0.41	20.41	46.00	25.59	Average
12	4.09	10.01	9.99	6.50	26.50	56.00	29.50	QP

Remarks: 1. Emission Level= LISN Factor + Cable Loss + Reading.
2. Margin= Limit - Emission Level.
3. If the average limit is met when useing a quasi-peak detector, the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.

10. TRANSMIT ANTENNA

10.1. Limit

The applicant for equipment certification shall provide a list of all antenna types that may be used with the transmitter, where applicable (i.e. for transmitters with detachable antenna), indicating the maximum permissible antenna gain (in dBi) and the required impedance for each antenna. The test report shall demonstrate the compliance of the transmitter with the limit for maximum equivalent isotropically radiated power (e.i.r.p.) specified in the applicable RSS, when the transmitter is equipped with any antenna type, selected from this list.
For licence-exempt equipment with detachable antennas, the user manual shall also contain the following notice in a conspicuous location:
This radio transmitter [enter the device's ISED certification number] has been approved by Innovation, Science and Economic Development Canada to operate with the antenna types listed below, with the maximum permissible gain indicated. Antenna types not included in this list that have a gain greater than the maximum gain indicated for any type listed are strictly prohibited for use with this device.

10.2. Test Result

All antennas are listed in section 1.2. And the antennas used for this product is internal antenna, So the notice does not need to be displayed in the user manual.

11.APPENDIX

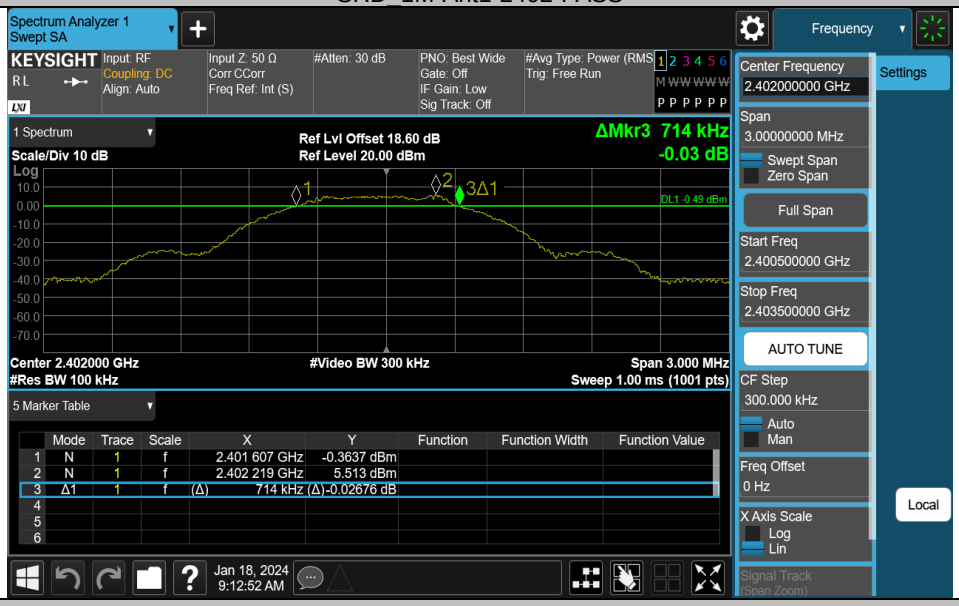
Appendix A: DTS Bandwidth

Test Result

TestMode	Antenna	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
SRD_1M	Ant1	2402	0.714	2401.607	2402.321	0.5	PASS
SRD_1M	Ant1	2440	0.708	2439.604	2440.312	0.5	PASS
SRD_1M	Ant1	2480	0.708	2479.607	2480.315	0.5	PASS
SRD_2M	Ant1	2402	1.146	2401.400	2402.546	0.5	PASS
SRD_2M	Ant1	2440	1.140	2439.388	2440.528	0.5	PASS
SRD_2M	Ant1	2480	1.248	2479.322	2480.570	0.5	PASS

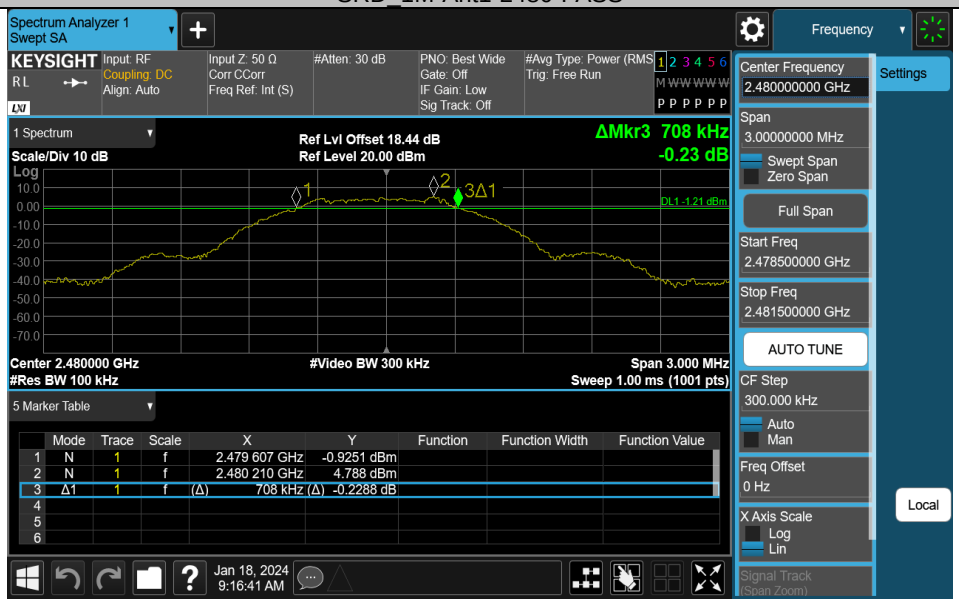
Test Graphs

SRD_1M-Ant1-2402-PASS



SRD_1M-Ant1-2440-PASS

SRD_1M-Ant1-2480-PASS



SRD_2M-Ant1-2402-PASS

SRD_2M-Ant1-2440-PASS

SRD_2M-Ant1-2480-PASS

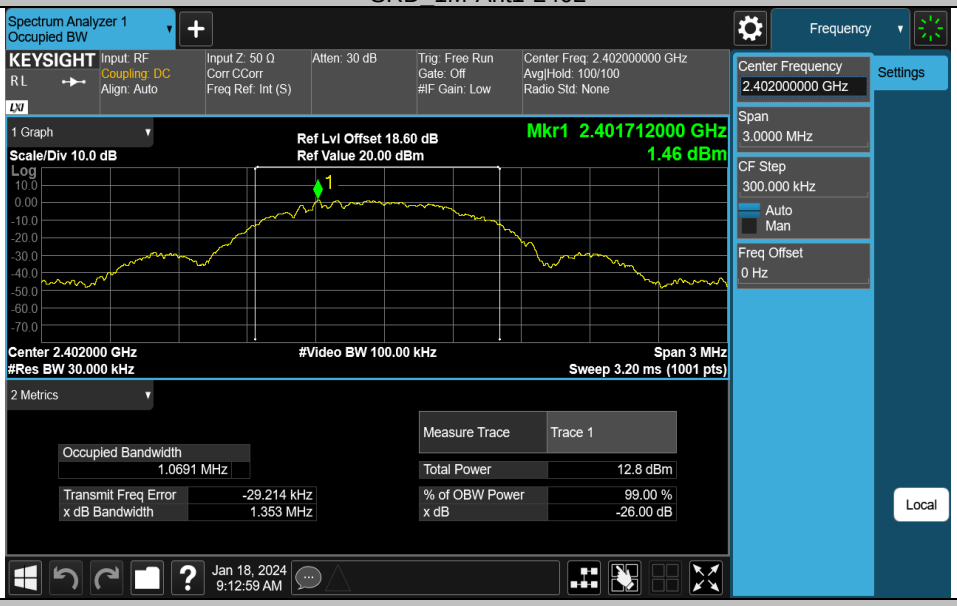
Appendix B: Occupied Channel Bandwidth

Test Result

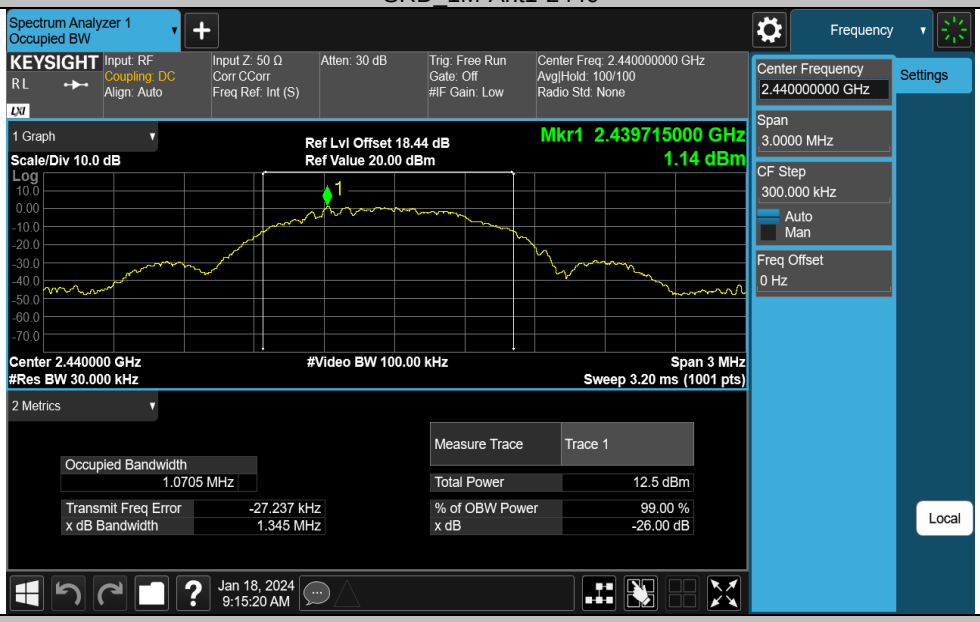
TestMode	Antenna	Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
SRD_1M	Ant1	2402	1.0691	2401.4362	2402.5053	---	---
SRD_1M	Ant1	2440	1.0705	2439.4375	2440.5080	---	---
SRD_1M	Ant1	2480	1.0692	2479.4351	2480.5043	---	---
SRD_2M	Ant1	2402	2.0728	2400.9406	2403.0134	---	---
SRD_2M	Ant1	2440	2.0702	2438.9461	2441.0163	---	---
SRD_2M	Ant1	2480	2.0726	2478.9405	2481.0131	---	---

Test Graphs

SRD_1M-Ant1-2402

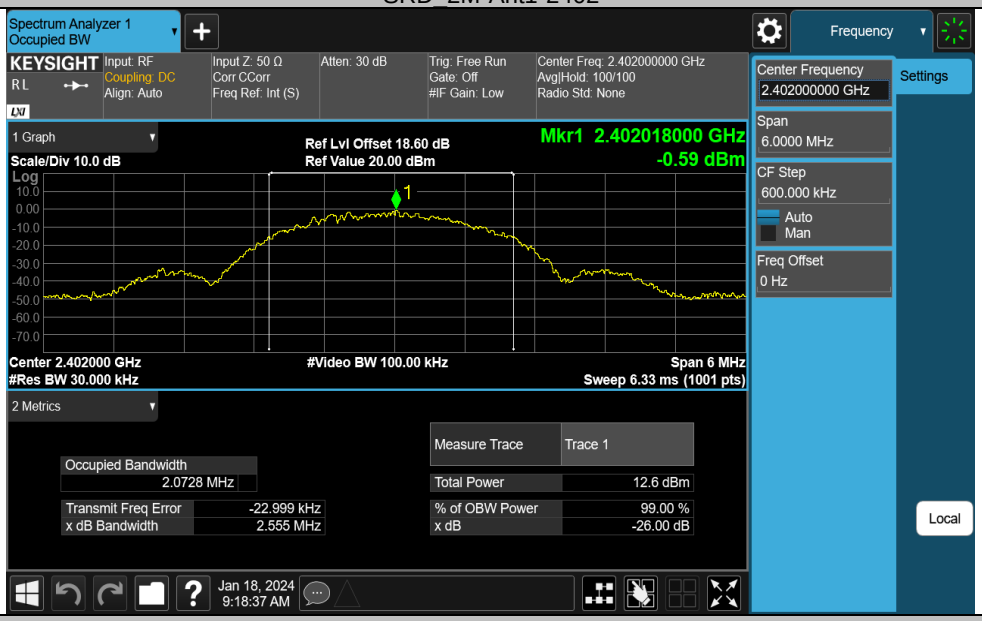


SRD_1M-Ant1-2440

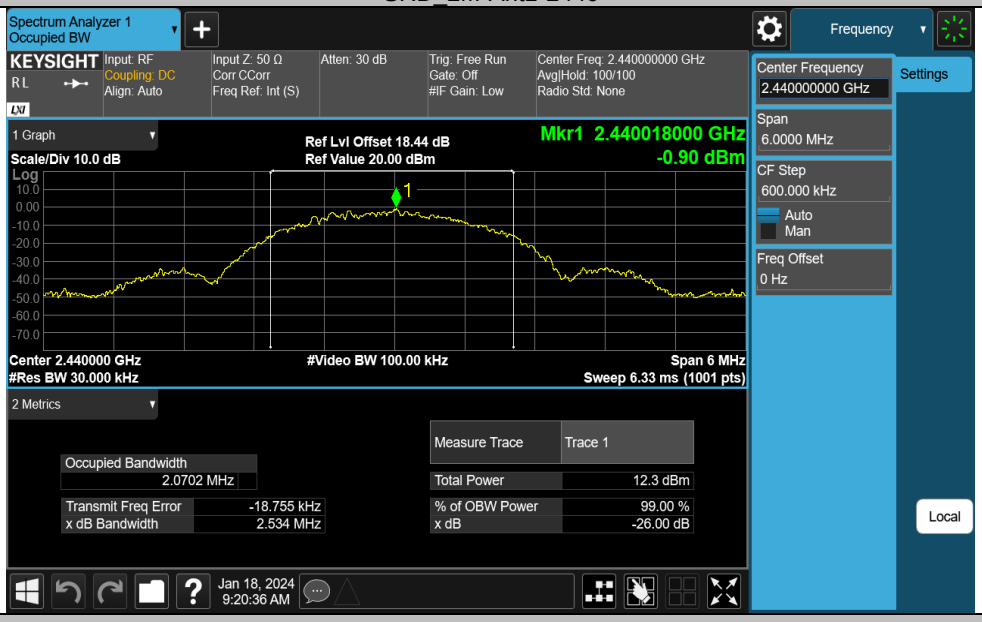


SRD_1M-Ant1-2480

SRD_2M-Ant1-2402



SRD_2M-Ant1-2440



SRD_2M-Ant1-2480

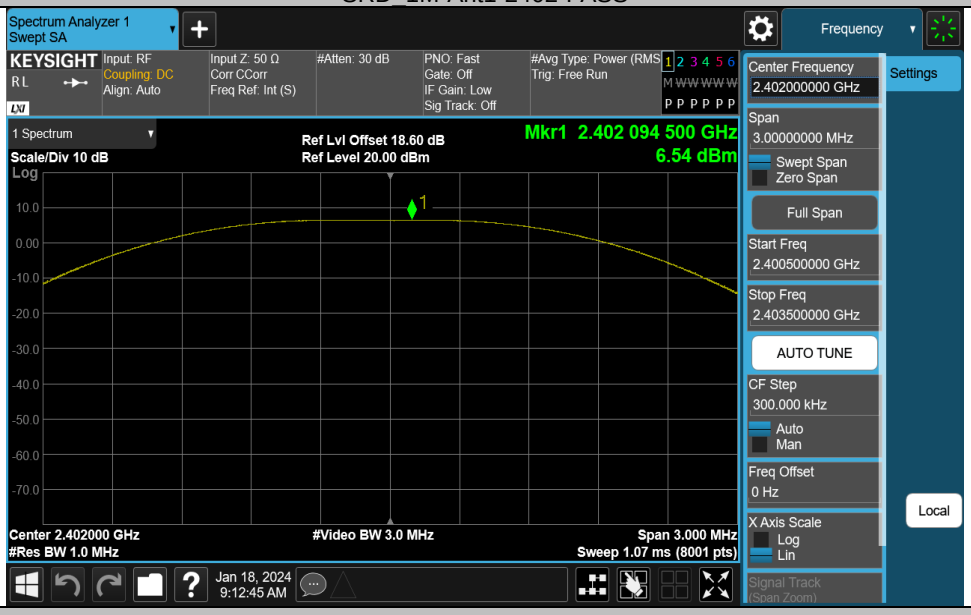
Appendix C: Maximum conducted output power

Test Result Peak

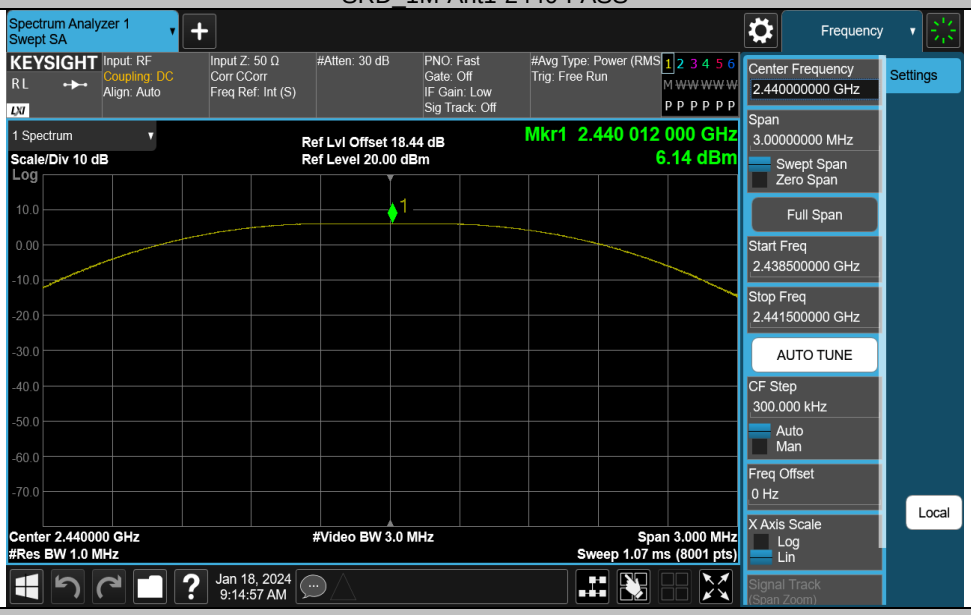
TestMode	Antenna	Frequency[MHz]	Conducted Peak Powert[dBm]	Conducted Limit[dBm]	Gain [dBi]	EIRP[dBm]	EIRP Limit[dBm]	Verdict
SRD_1M	Ant1	2402	6.54	≤30	1.69	8.23	≤36	PASS
SRD_1M	Ant1	2440	6.14	≤30	1.69	7.83	≤36	PASS
SRD_1M	Ant1	2480	5.76	≤30	1.69	7.45	≤36	PASS
SRD_2M	Ant1	2402	6.53	≤30	1.69	8.22	≤36	PASS
SRD_2M	Ant1	2440	6.09	≤30	1.69	7.78	≤36	PASS
SRD_2M	Ant1	2480	5.74	≤30	1.69	7.43	≤36	PASS

Test Graphs Peak

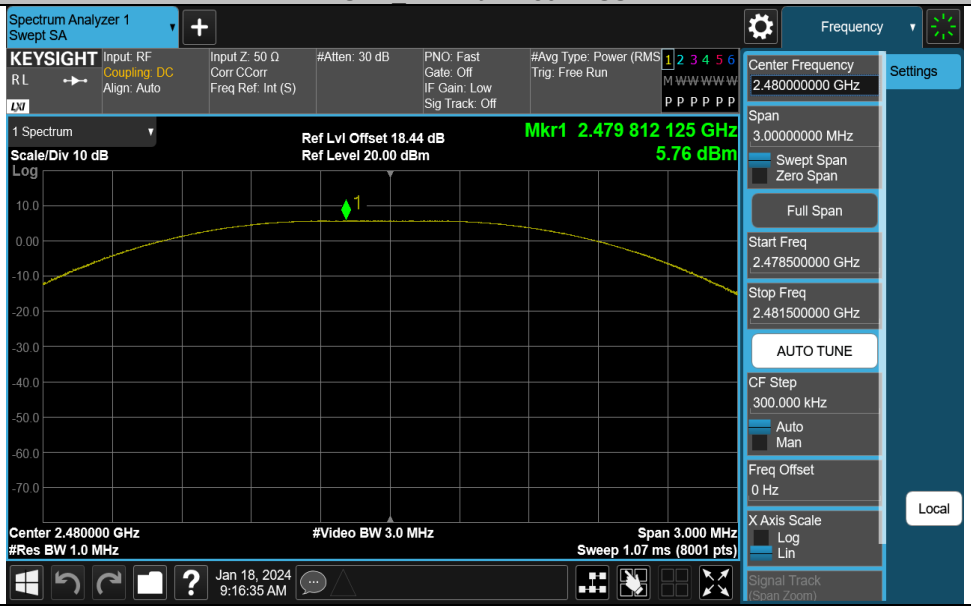
SRD_1M-Ant1-2402-PASS



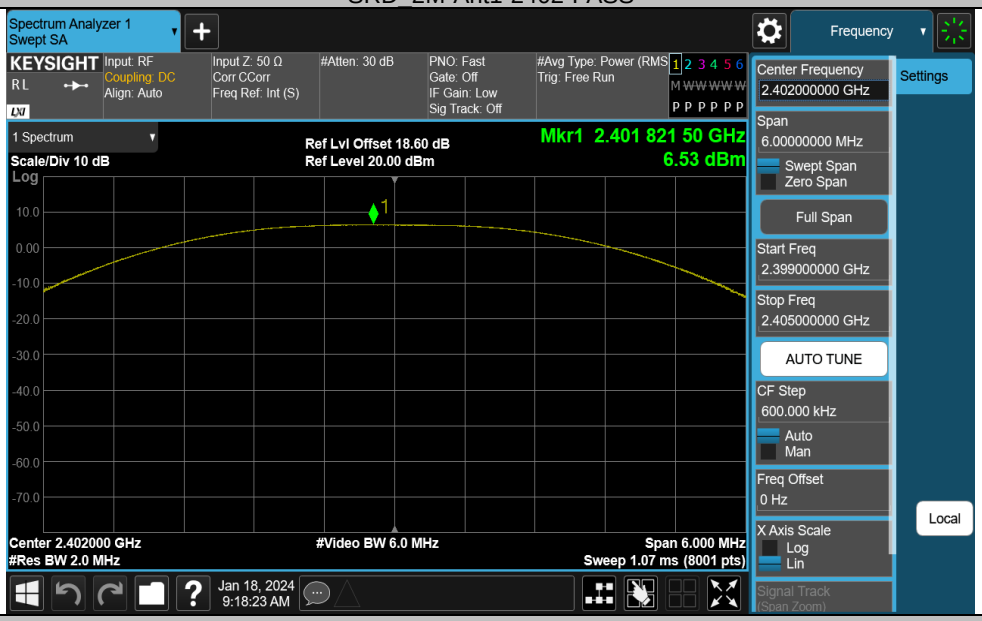
SRD_1M-Ant1-2440-PASS



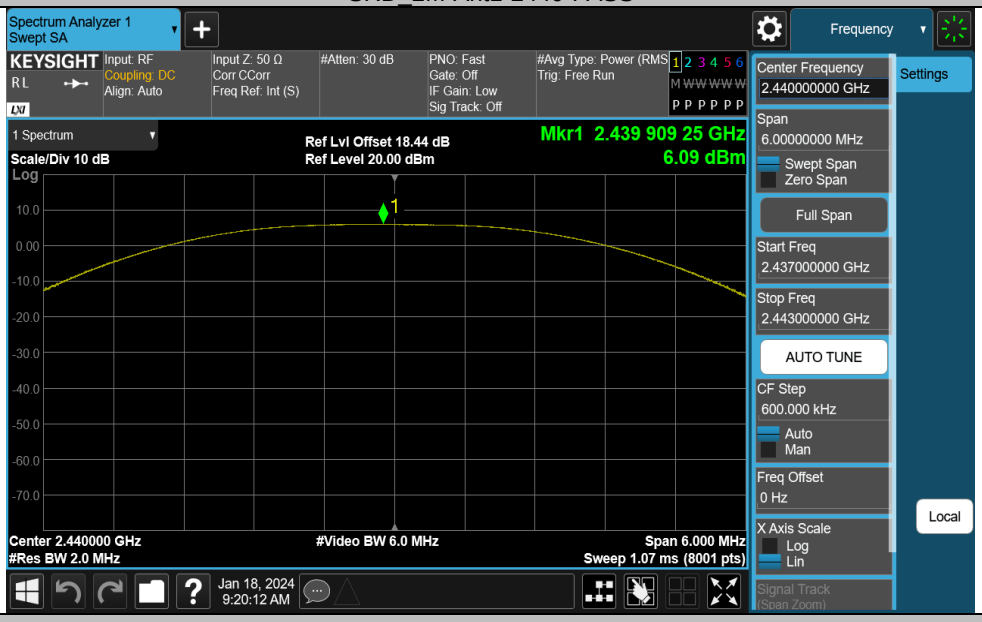
SRD_1M-Ant1-2480-PASS



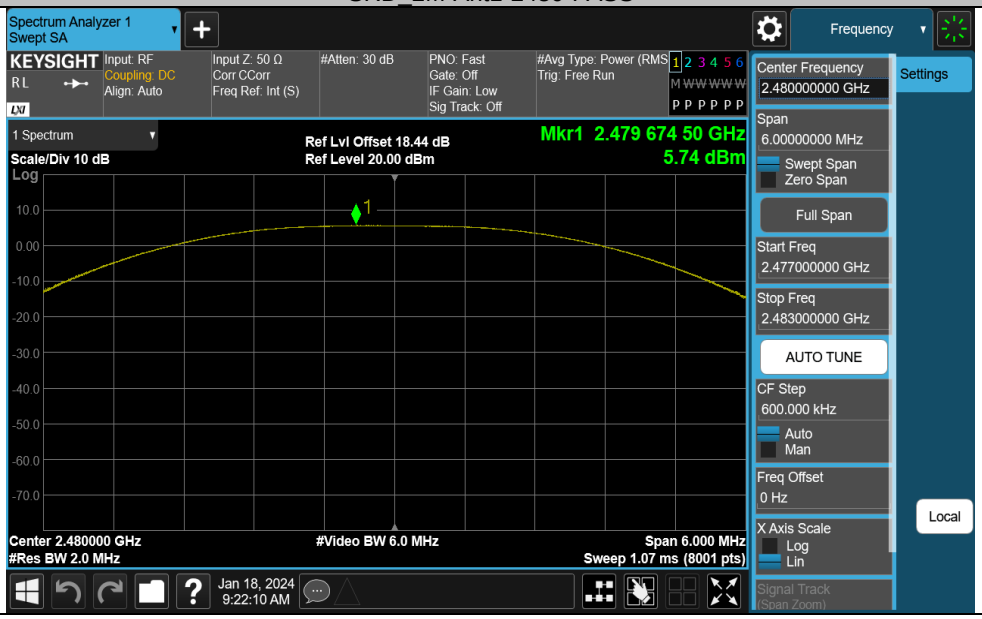
SRD_2M-Ant1-2402-PASS



SRD_2M-Ant1-2440-PASS



SRD_2M-Ant1-2480-PASS



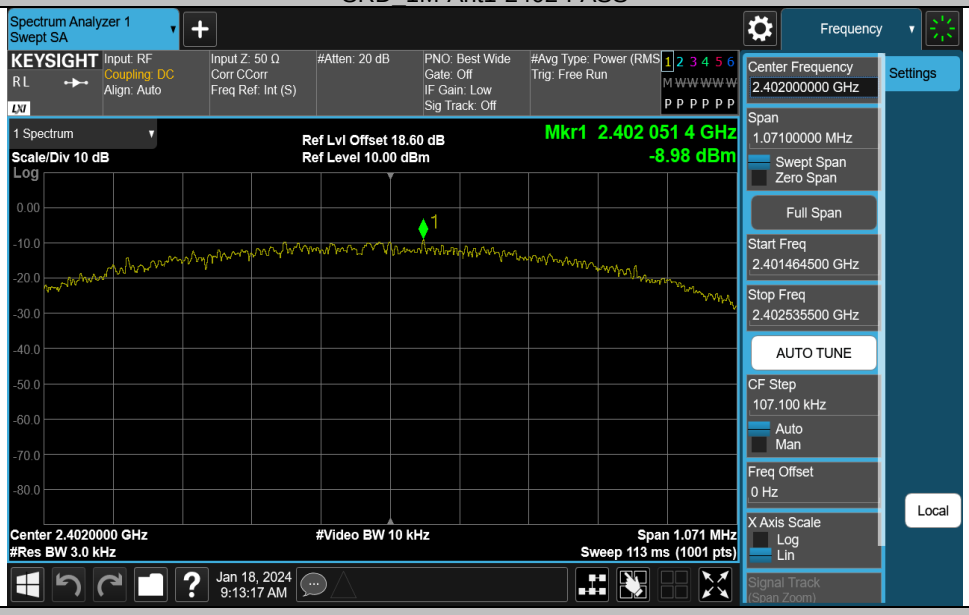
Appendix D: Maximum power spectral density

Test Result

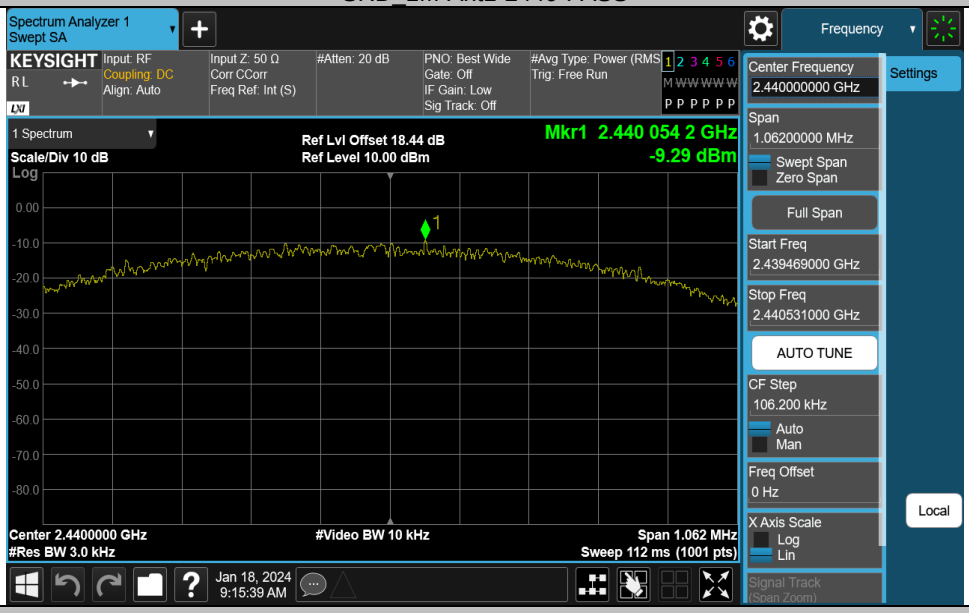
TestMode	Antenna	Frequency[MHz]	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
SRD_1M	Ant1	2402	-8.98	≤8.00	PASS
SRD_1M	Ant1	2440	-9.29	≤8.00	PASS
SRD_1M	Ant1	2480	-9.64	≤8.00	PASS
SRD_2M	Ant1	2402	-12.38	≤8.00	PASS
SRD_2M	Ant1	2440	-12.89	≤8.00	PASS
SRD_2M	Ant1	2480	-13.28	≤8.00	PASS

Test Graphs

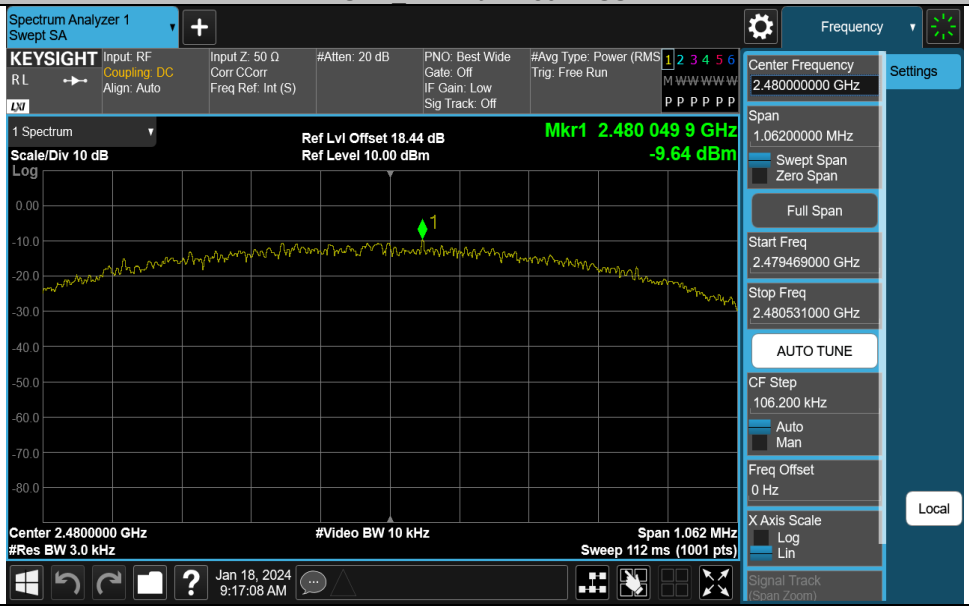
SRD_1M-Ant1-2402-PASS



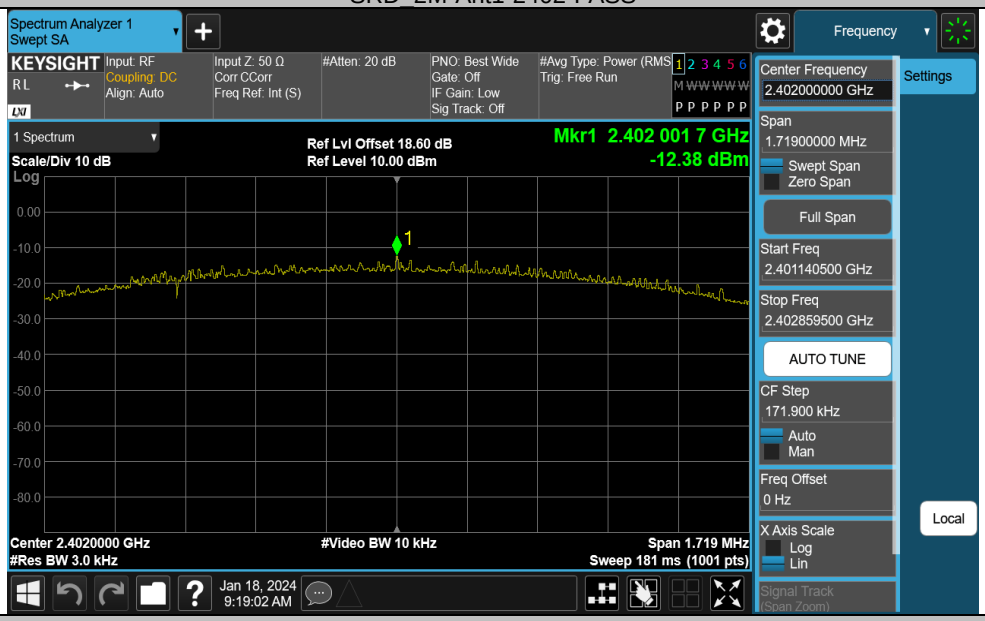
SRD_1M-Ant1-2440-PASS



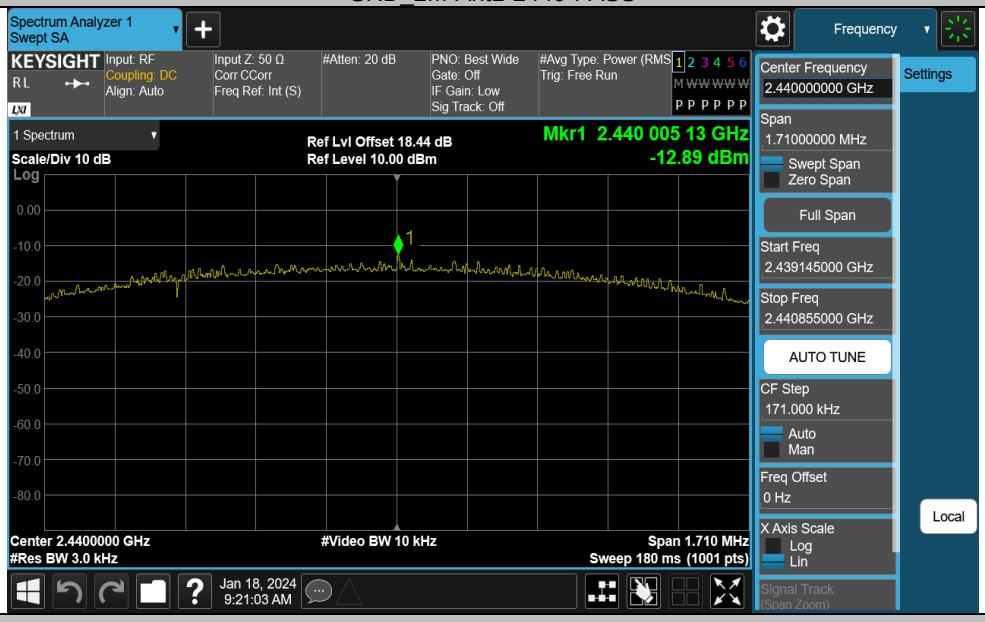
SRD_1M-Ant1-2480-PASS



SRD_2M-Ant1-2402-PASS



SRD_2M-Ant1-2440-PASS



SRD_2M-Ant1-2480-PASS

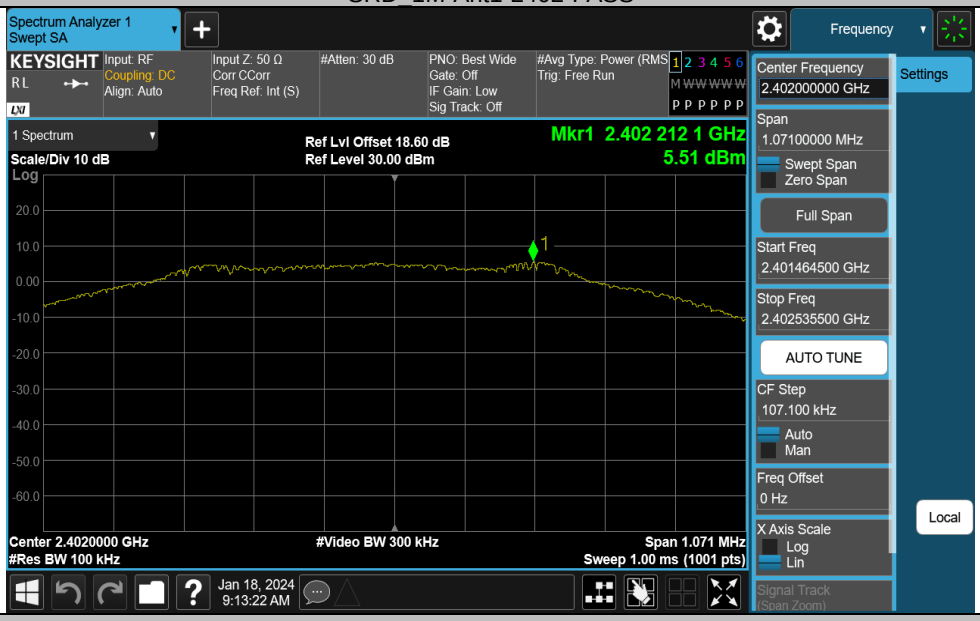
Appendix E: Reference level measurement

Test Result

TestMode	Antenna	Freq(MHz)	Max.Point[MHz]	Result[dBm]
SRD_1M	Ant1	2402	2402.21	5.51
SRD_1M	Ant1	2440	2440.21	5.16
SRD_1M	Ant1	2480	2480.21	4.73
SRD_2M	Ant1	2402	2401.96	4.90
SRD_2M	Ant1	2440	2439.99	4.53
SRD_2M	Ant1	2480	2479.45	3.73

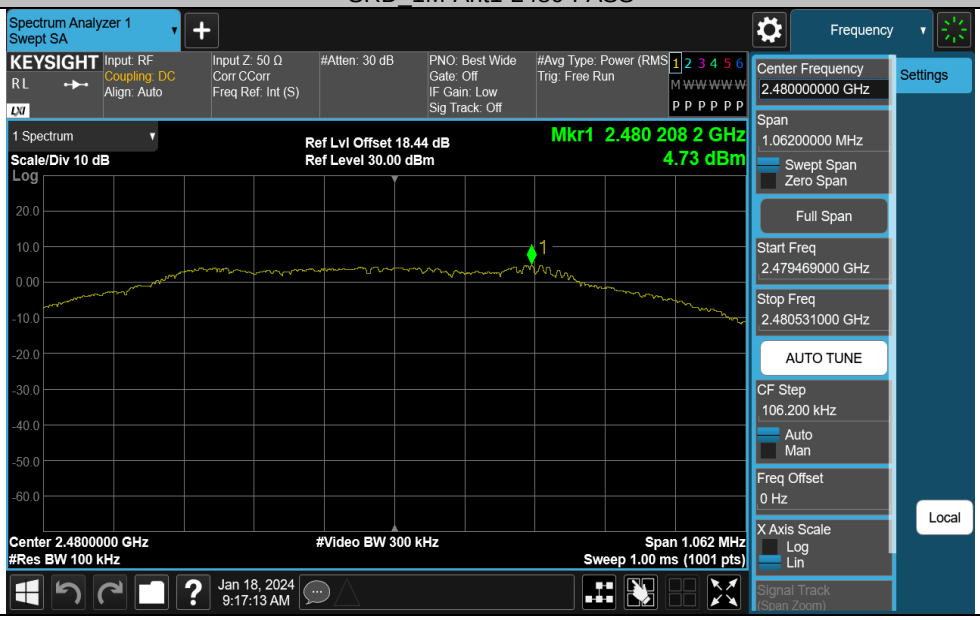
Test Graphs

SRD_1M-Ant1-2402-PASS

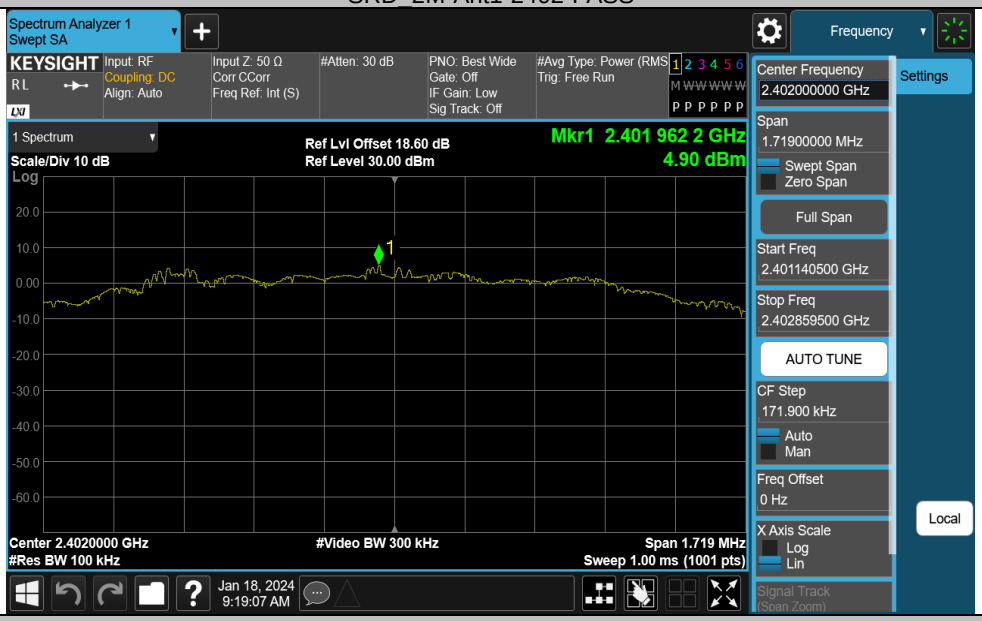


SRD_1M-Ant1-2440-PASS

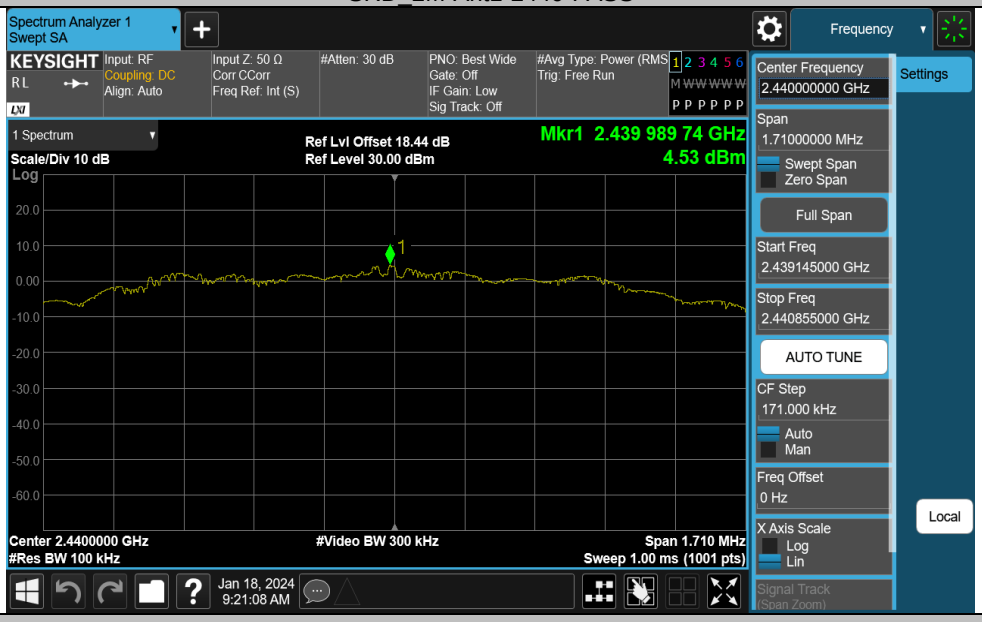
SRD_1M-Ant1-2480-PASS



SRD_2M-Ant1-2402-PASS



SRD_2M-Ant1-2440-PASS



SRD_2M-Ant1-2480-PASS

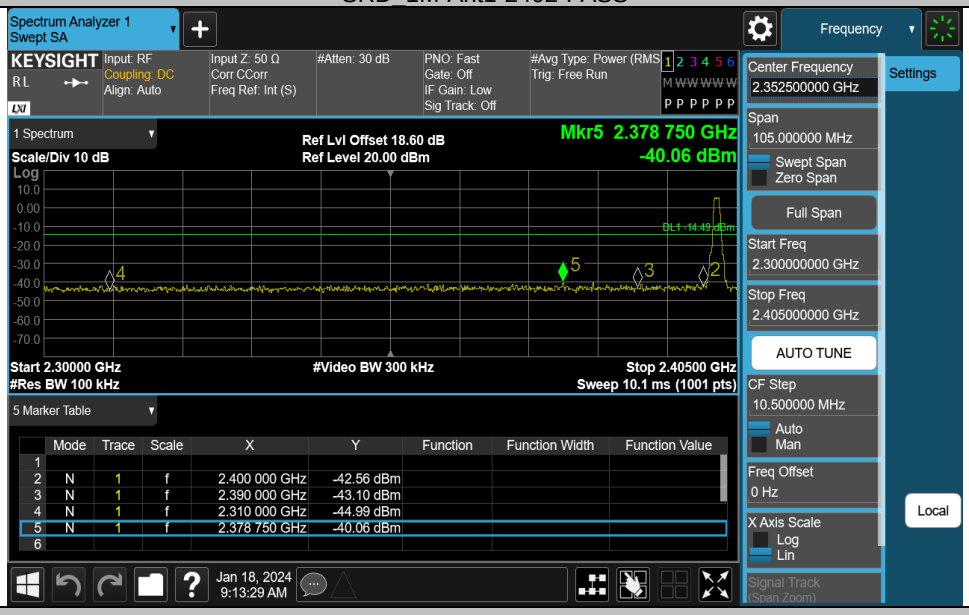
Appendix F: Band edge measurements

Test Result

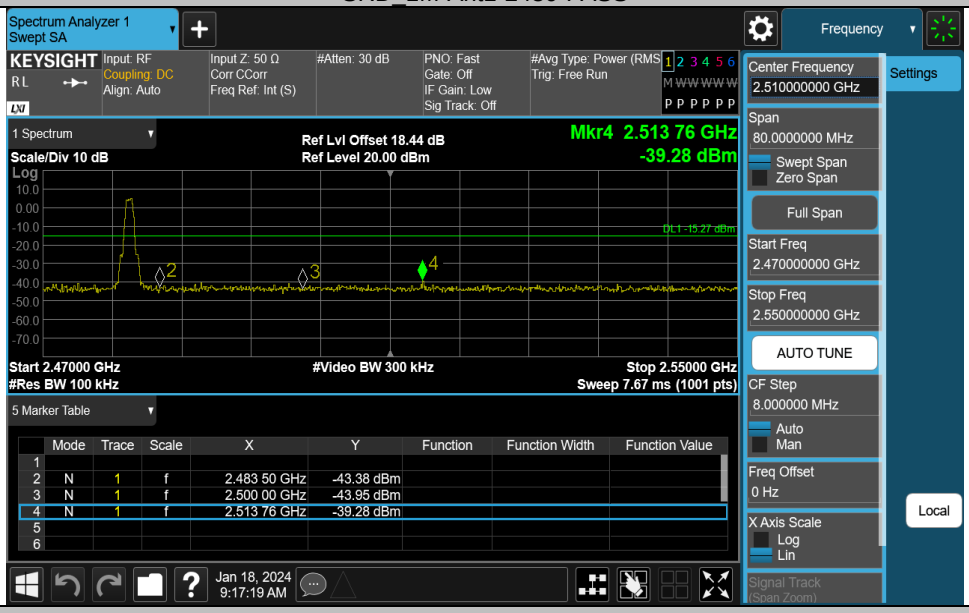
TestMode	Antenna	ChName	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
SRD_1M	Ant1	Low	2402	5.51	-40.06	≤-14.49	PASS
SRD_1M	Ant1	High	2480	4.73	-39.28	≤-15.27	PASS
SRD_2M	Ant1	Low	2402	4.90	-30.42	≤-15.1	PASS
SRD_2M	Ant1	High	2480	3.73	-40.07	≤-16.27	PASS

Test Graphs

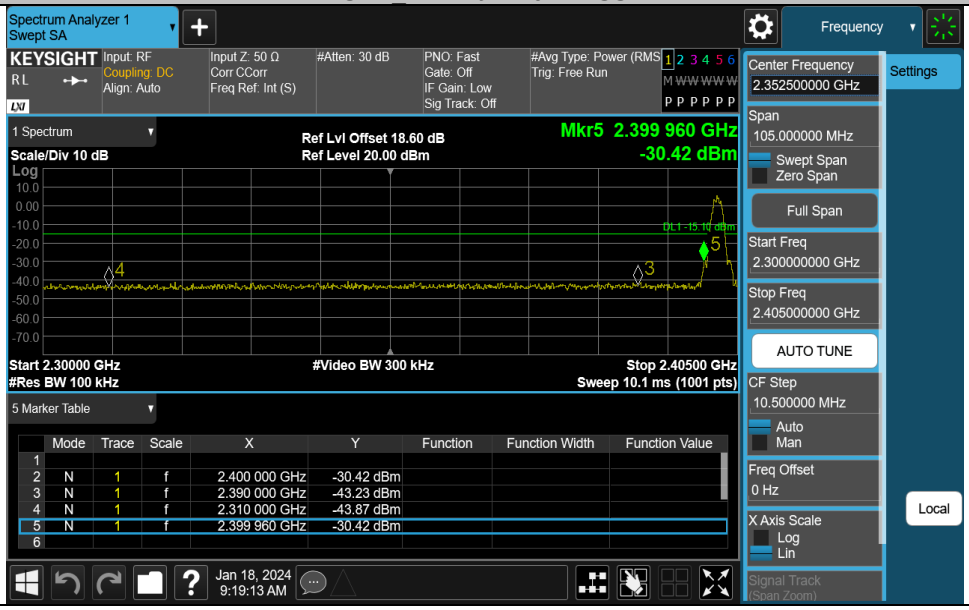
SRD_1M-Ant1-2402-PASS



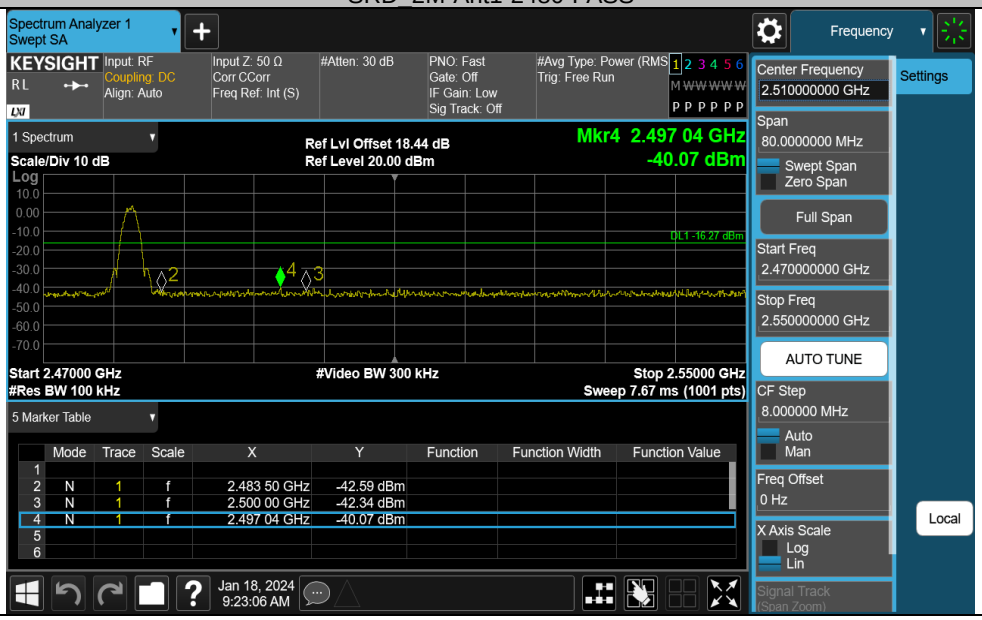
SRD_1M-Ant1-2480-PASS



SRD_2M-Ant1-2402-PASS



SRD_2M-Ant1-2480-PASS



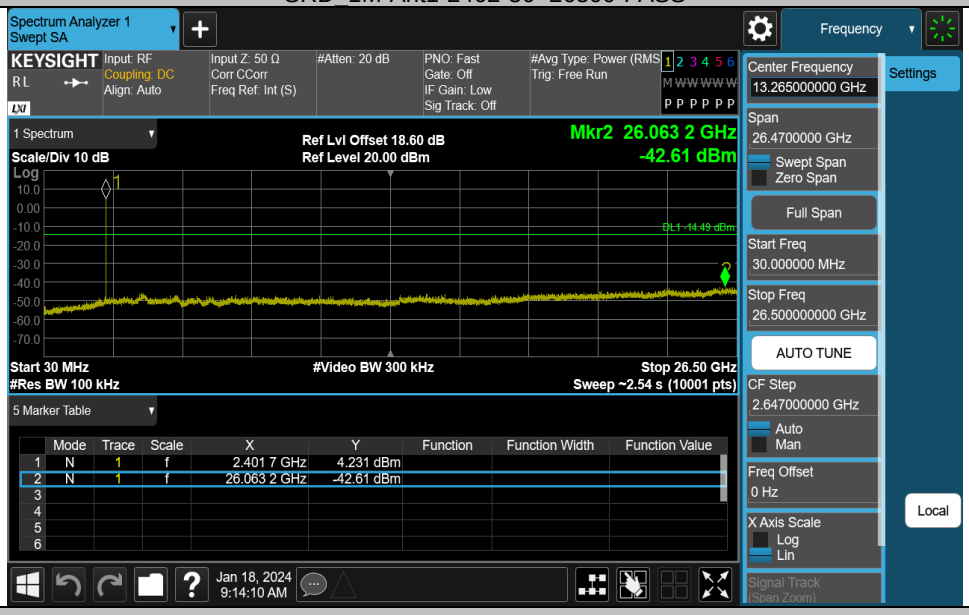
Appendix G: Conducted Spurious Emission

Test Result

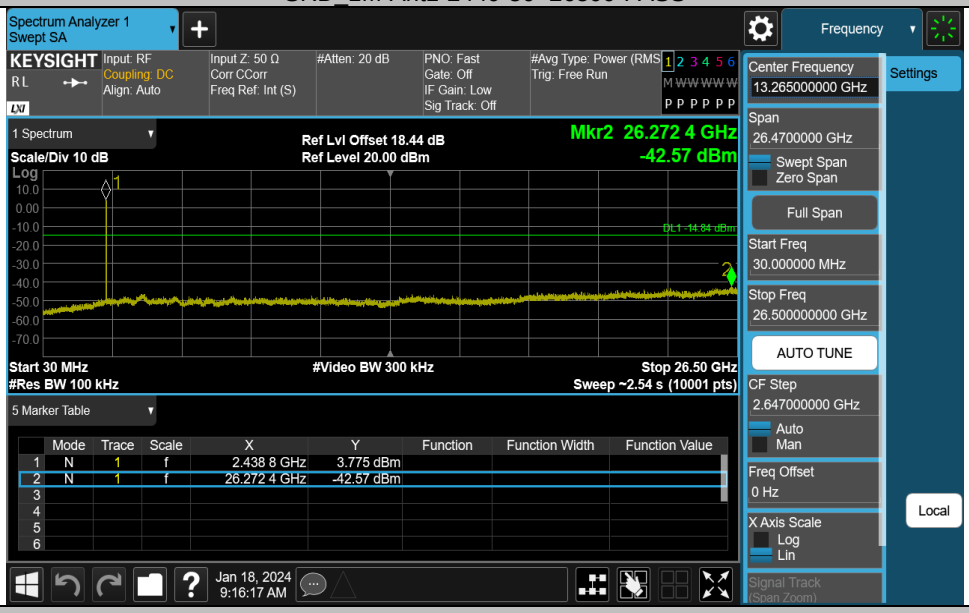
TestMode	Antenna	Frequency[MHz]	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
SRD_1M	Ant1	2402	30~26500	5.51	-42.61	≤-14.49	PASS
SRD_1M	Ant1	2440	30~26500	5.16	-42.57	≤-14.84	PASS
SRD_1M	Ant1	2480	30~26500	4.73	-42.28	≤-15.27	PASS
SRD_2M	Ant1	2402	30~26500	4.90	-42.22	≤-15.1	PASS
SRD_2M	Ant1	2440	30~26500	4.53	-42.71	≤-15.47	PASS
SRD_2M	Ant1	2480	30~26500	3.73	-42.82	≤-16.27	PASS

Test Graphs

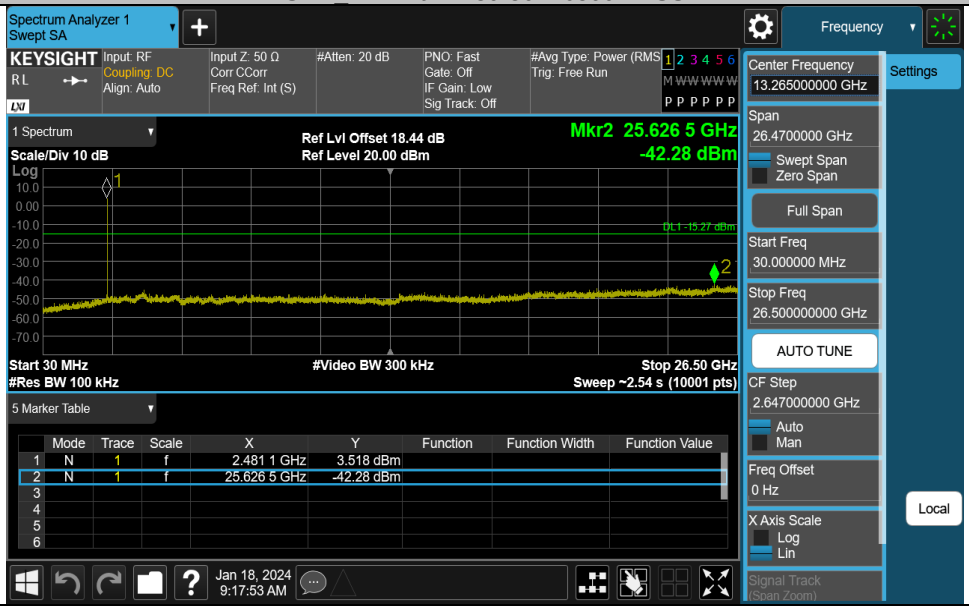
SRD_1M-Ant1-2402-30~26500-PASS



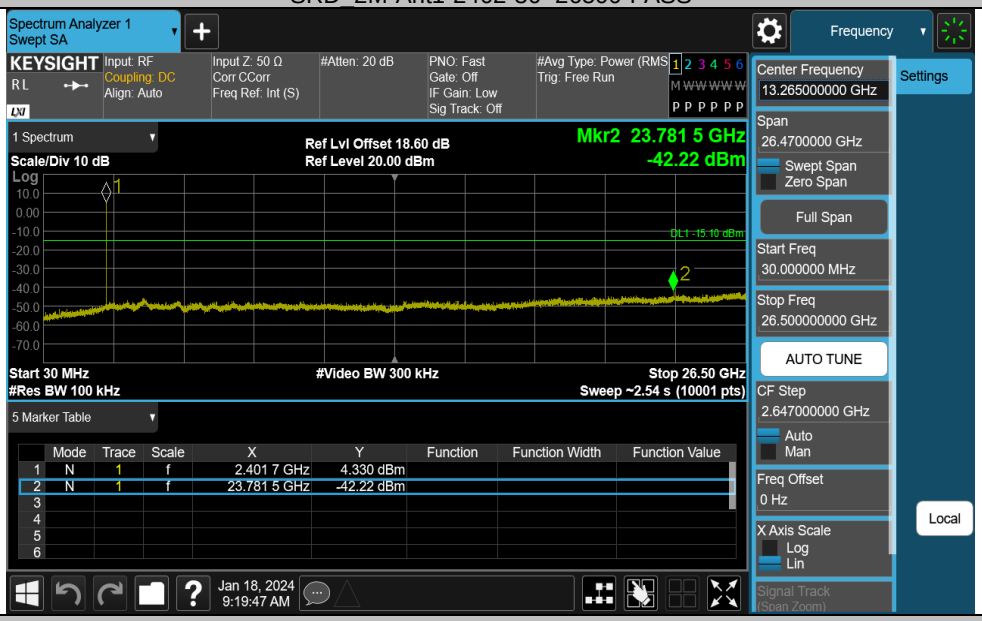
SRD_1M-Ant1-2440-30~26500-PASS



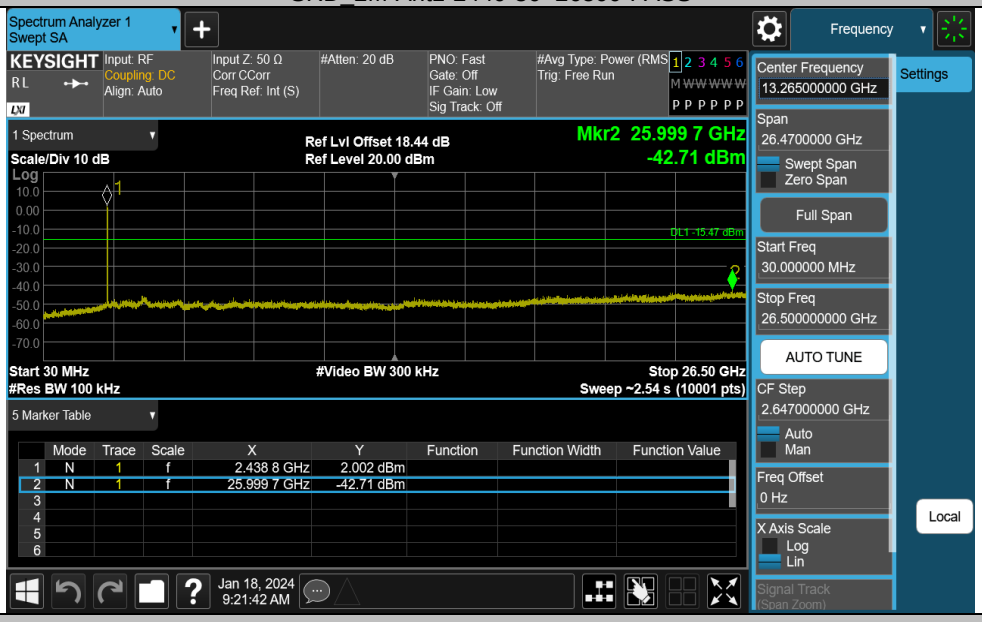
SRD_1M-Ant1-2480-30~26500-PASS



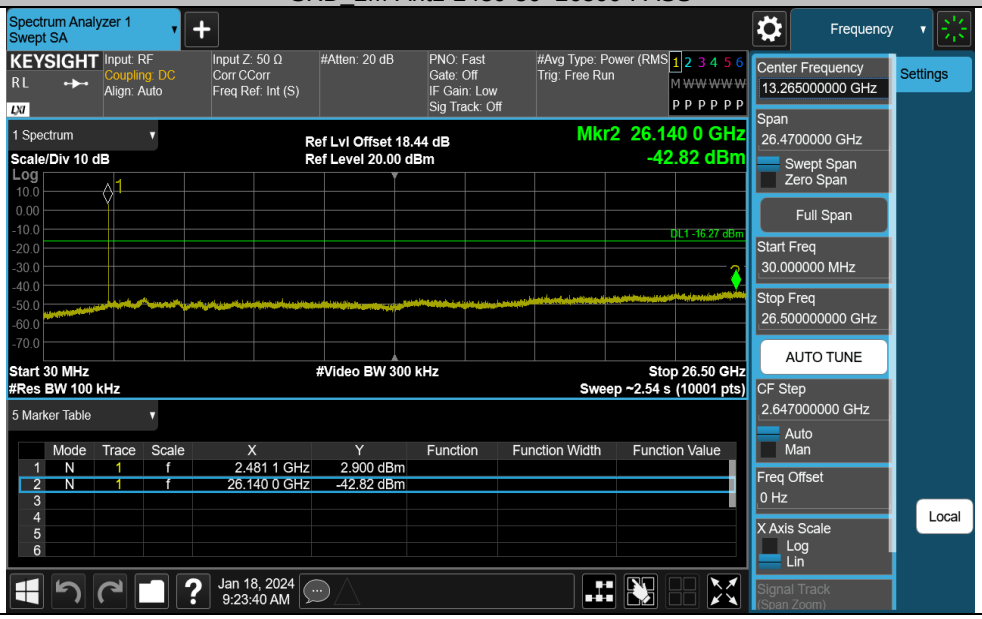
SRD_2M-Ant1-2402-30~26500-PASS



SRD_2M-Ant1-2440-30~26500-PASS



SRD_2M-Ant1-2480-30~26500-PASS



Appendix H: Duty Cycle

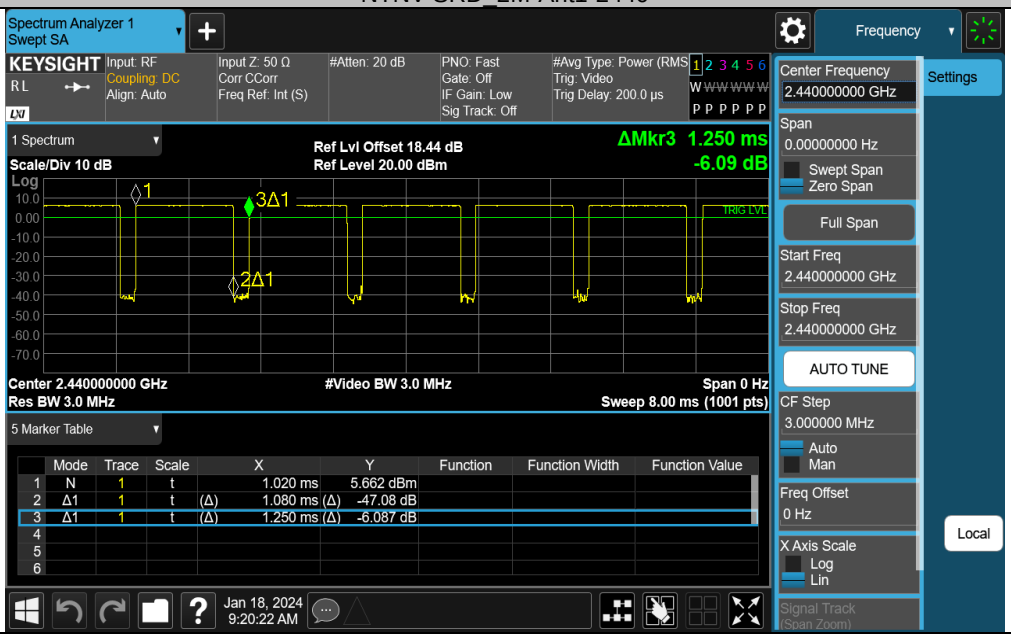
Test Result

TestMode	Antenna	Frequency[MHz]	ON Time [ms]	Period [ms]	Duty Cycle [%]	Duty Cycle Factor[dB]
SRD_1M	Ant1	2440	2.13	2.50	85.20	0.70
SRD_2M	Ant1	2440	1.08	1.25	86.40	0.63

Test Graphs

NTNV-SRD_1M-Ant1-2440

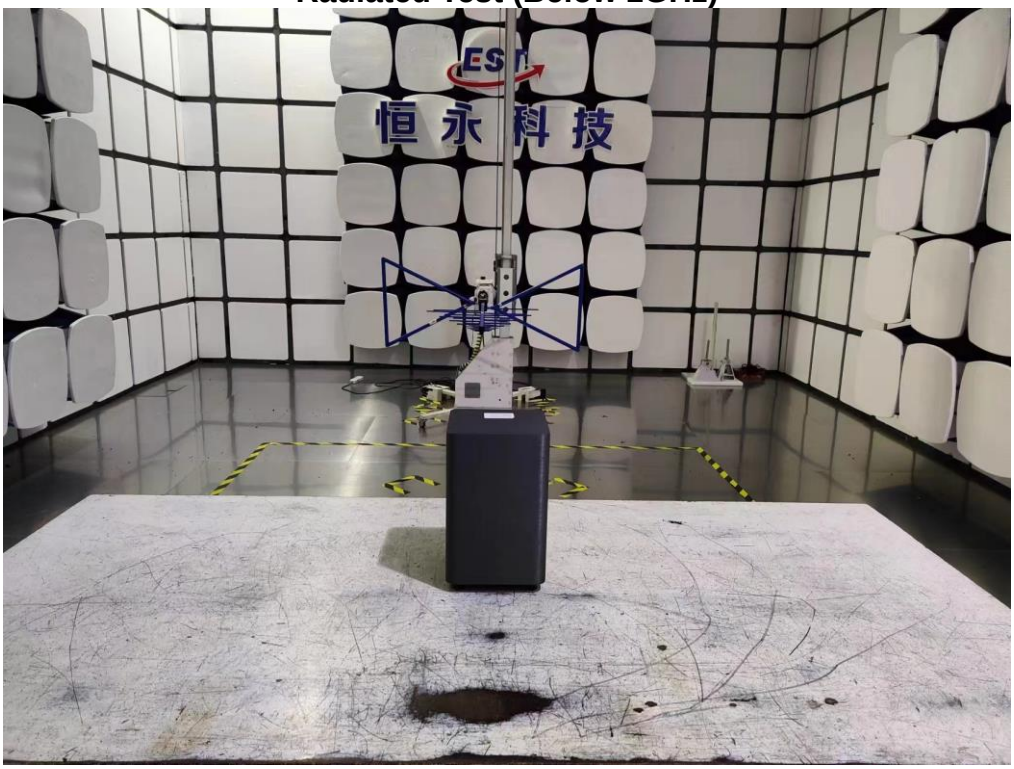
NTNV-SRD_2M-Ant1-2440



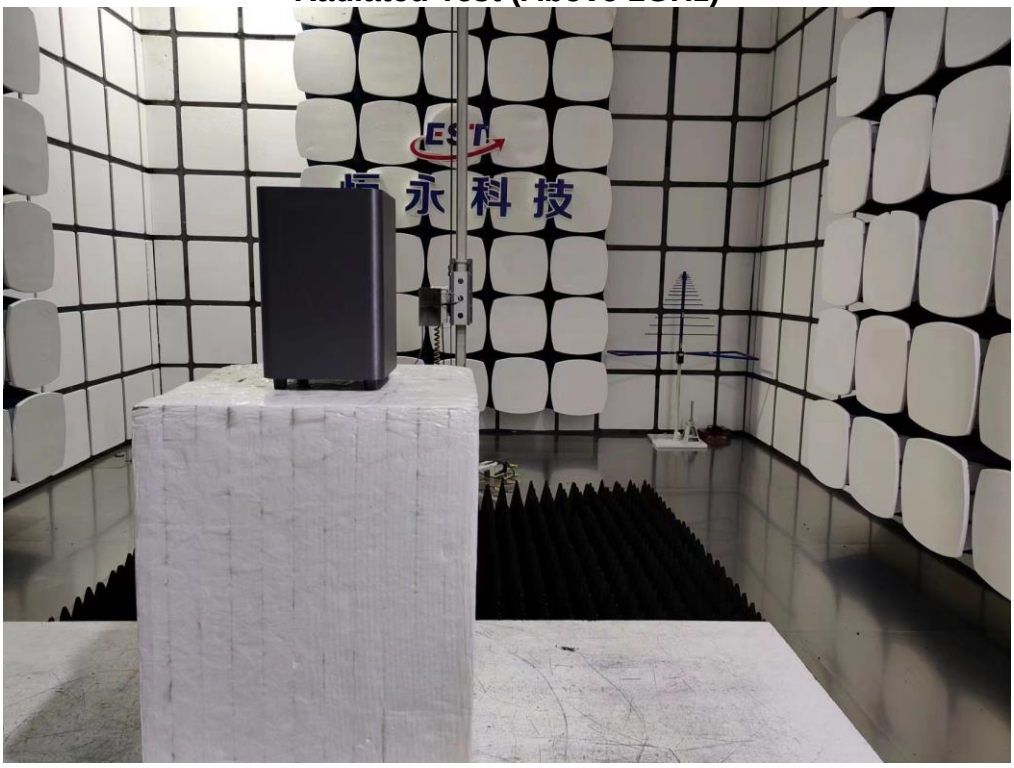
12. TEST SETUP PHOTO

Conducted Test

Radiated Test (Below 1GHz)



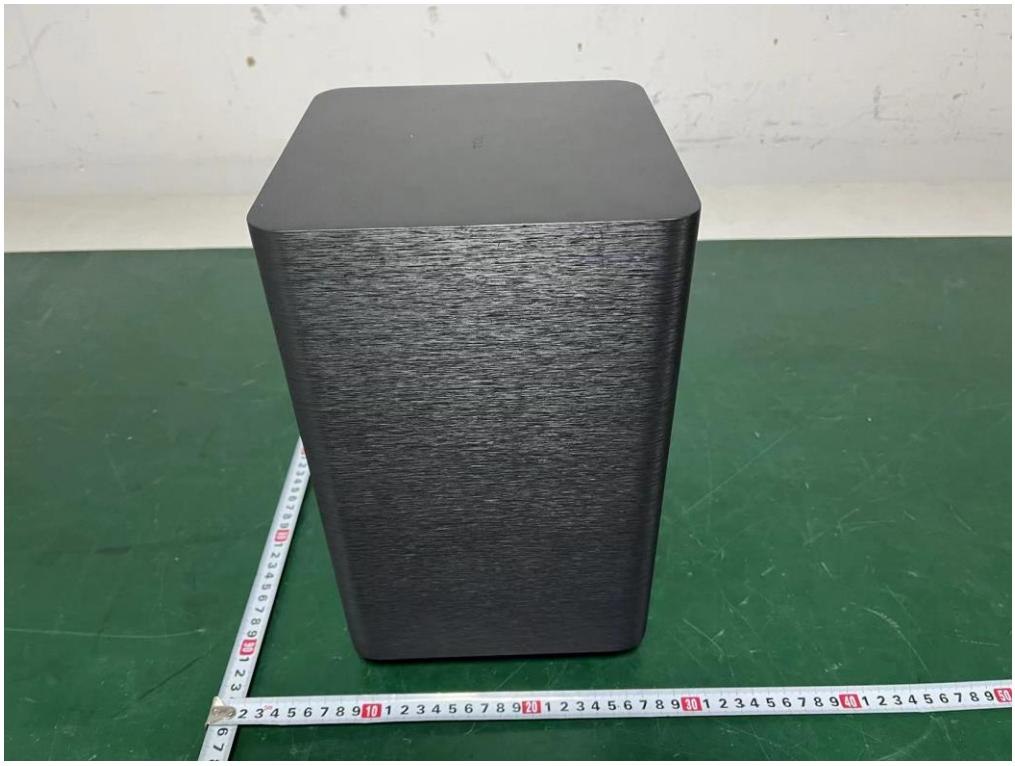
Radiated Test (Above 1GHz)



13. EUT PHOTO

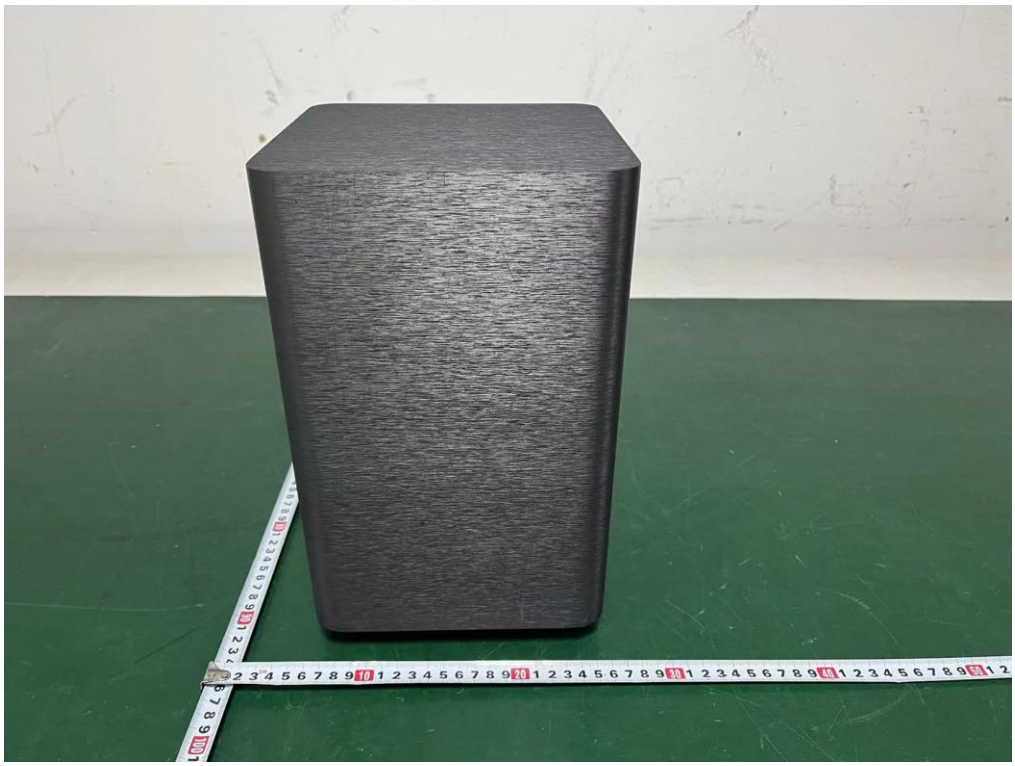
External Photos

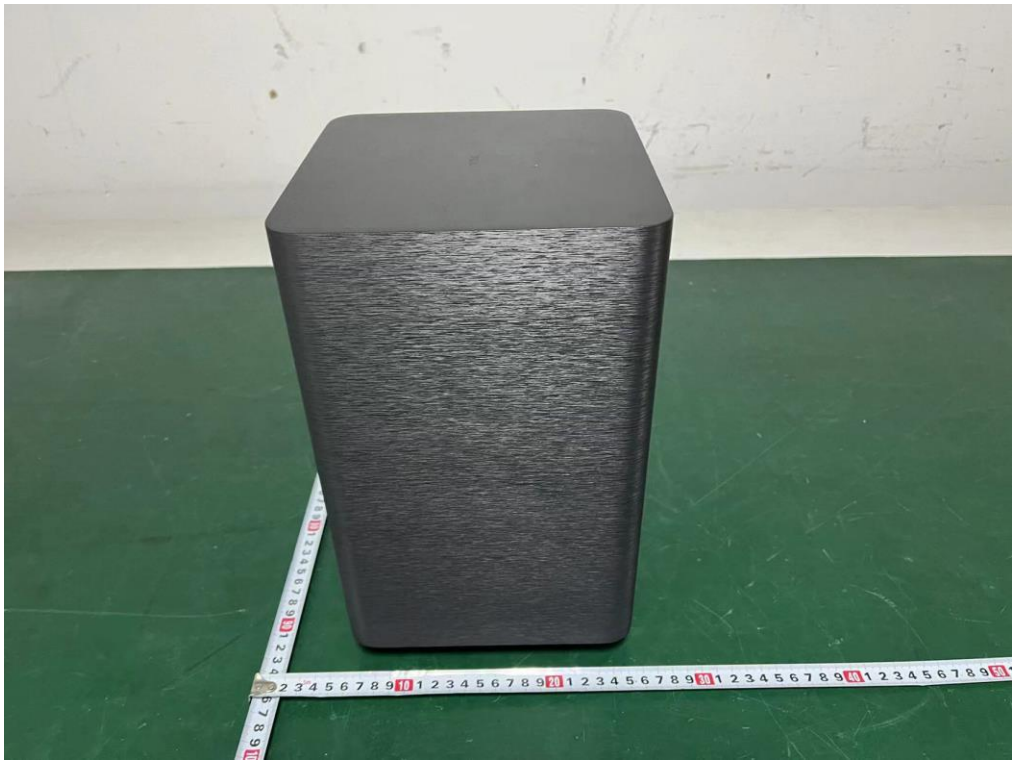
M/N: S55H-SW



External Photos

M/N: S55H-SW





External Photos

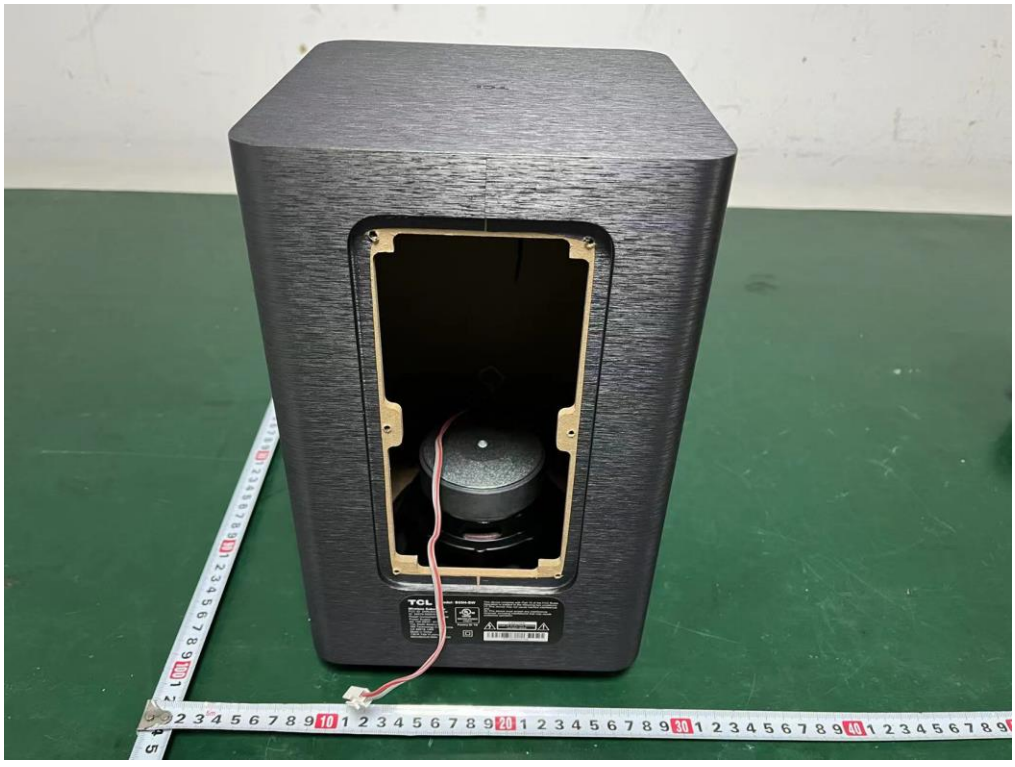
M/N: S55H-SW

External Photos

M/N: S55H-SW

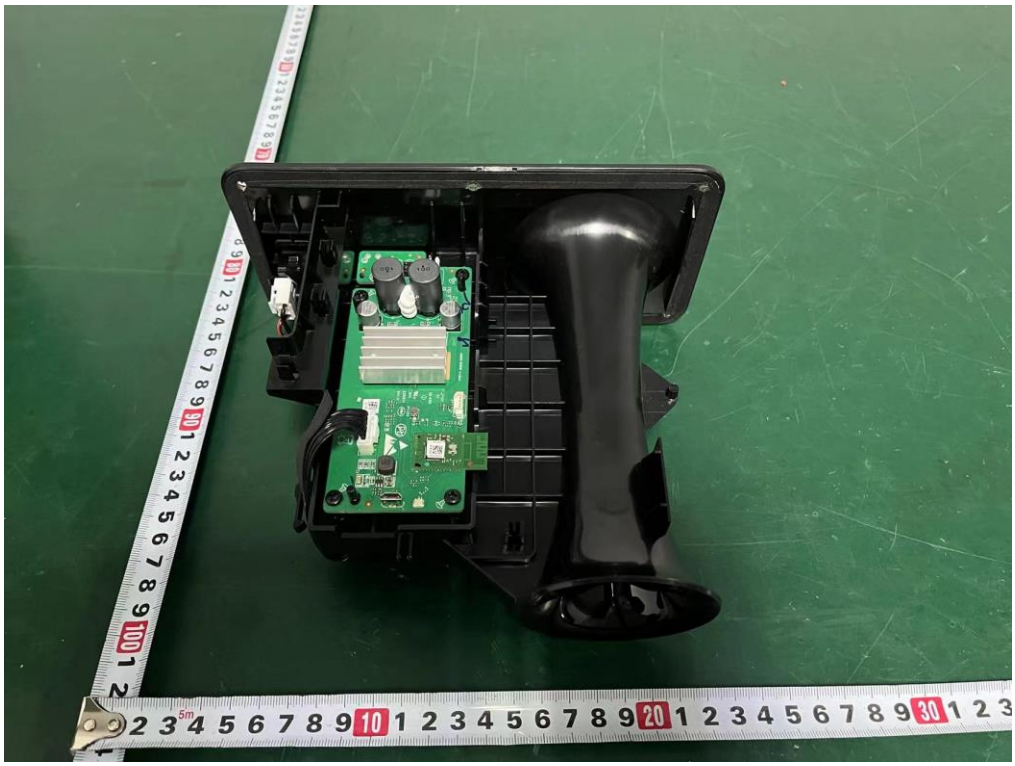
Internal Photos

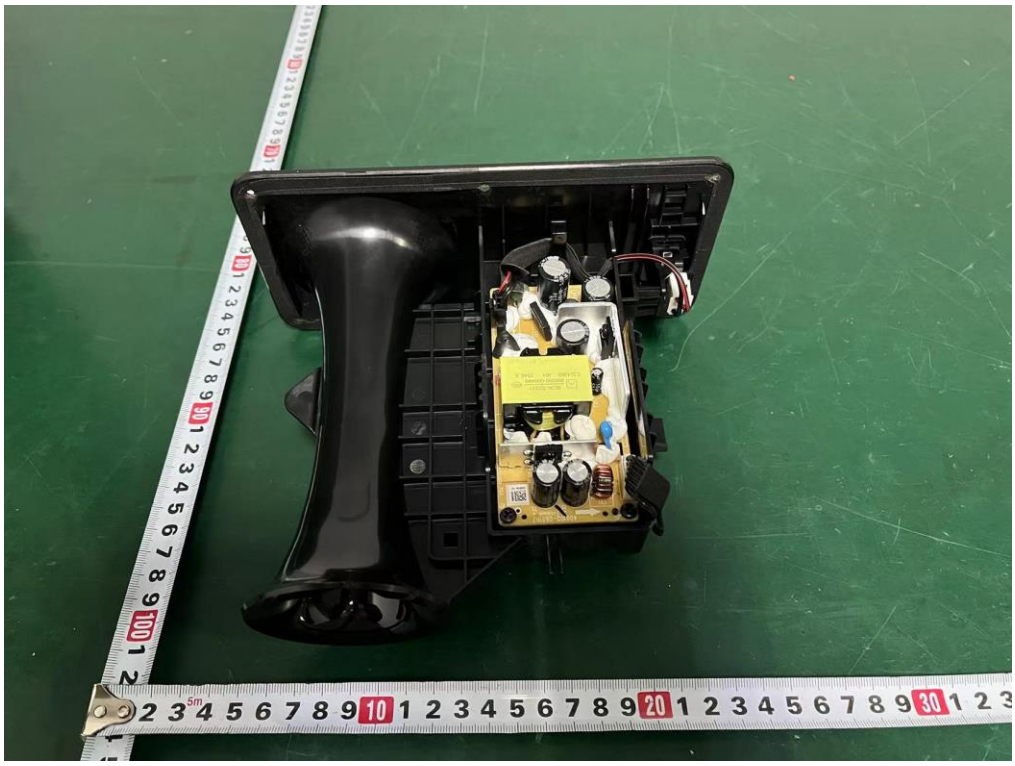
M/N: S55H-SW



Internal Photos

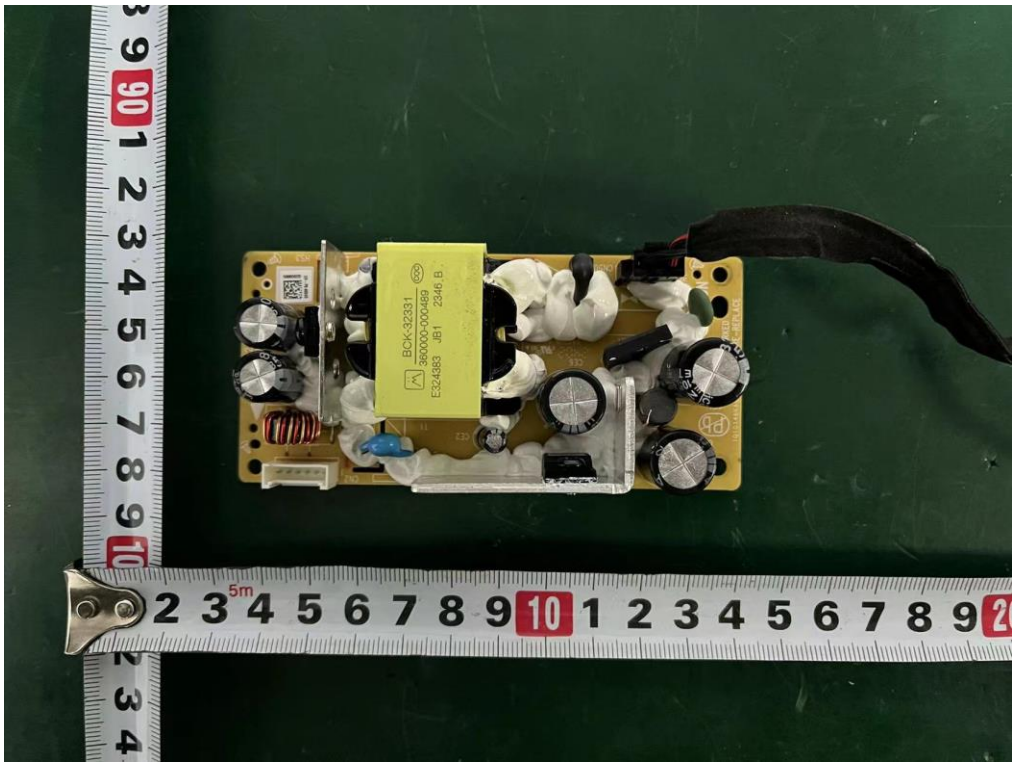
M/N: S55H-SW

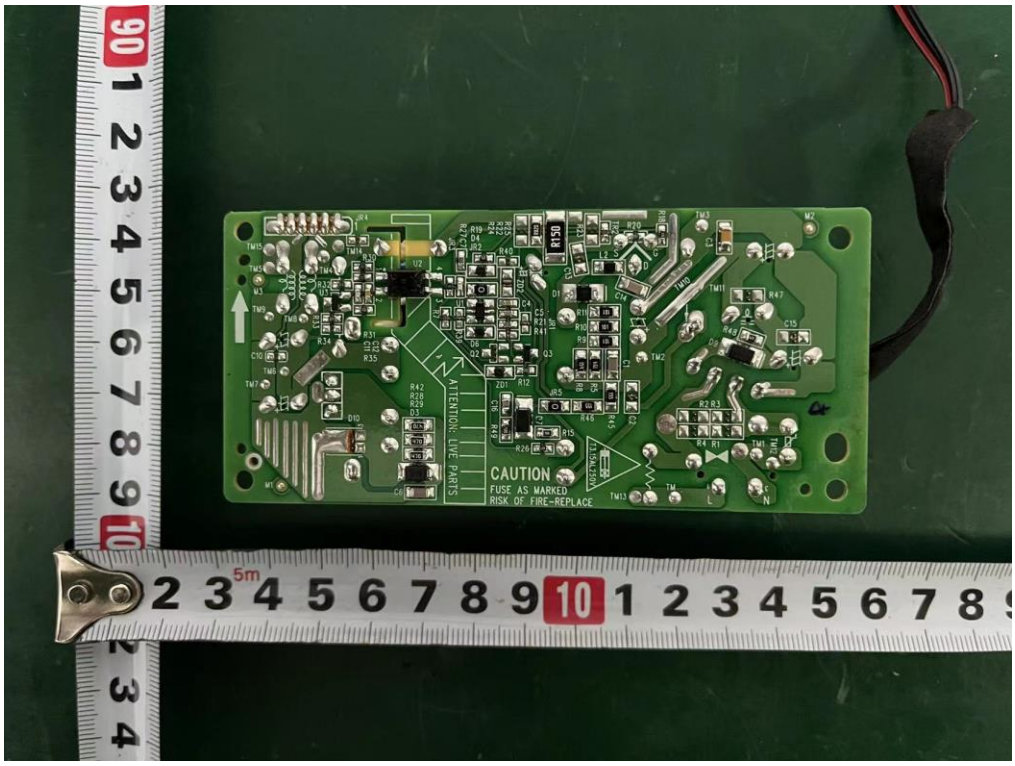




Internal Photos

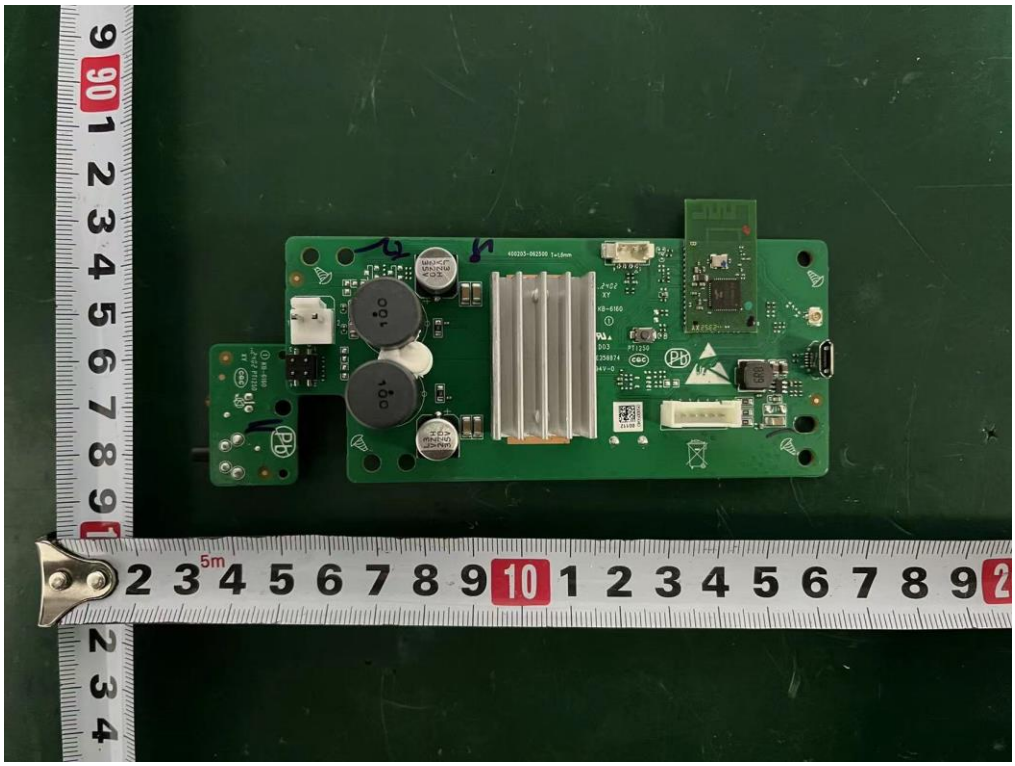
M/N: S55H-SW

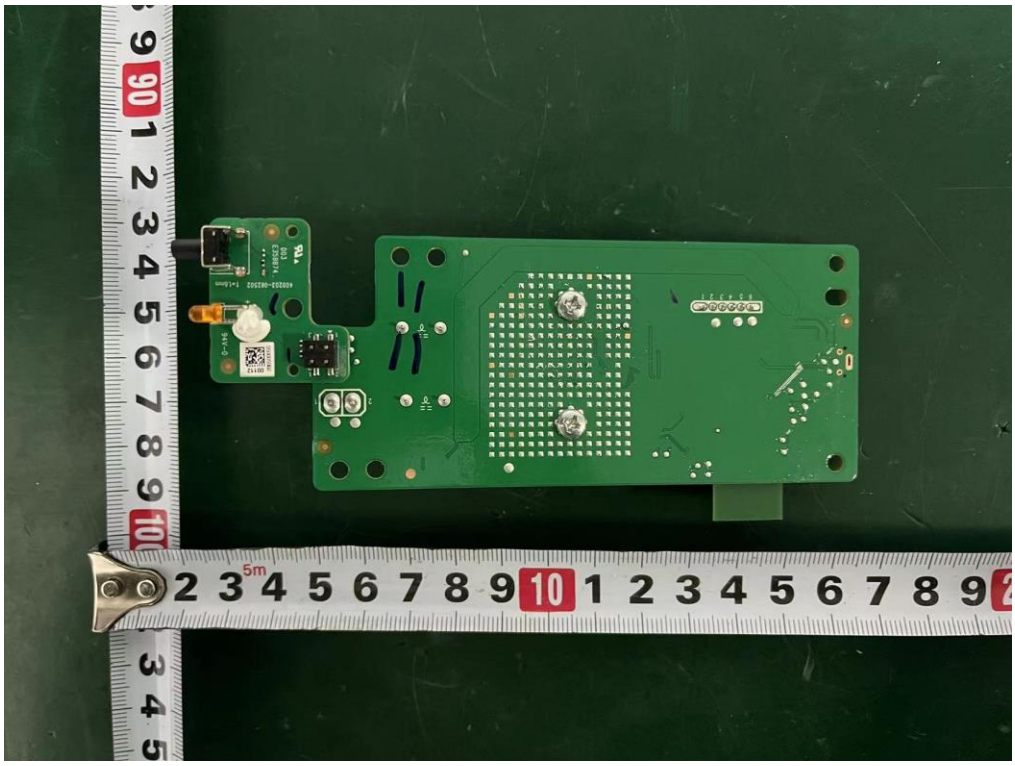




Internal Photos

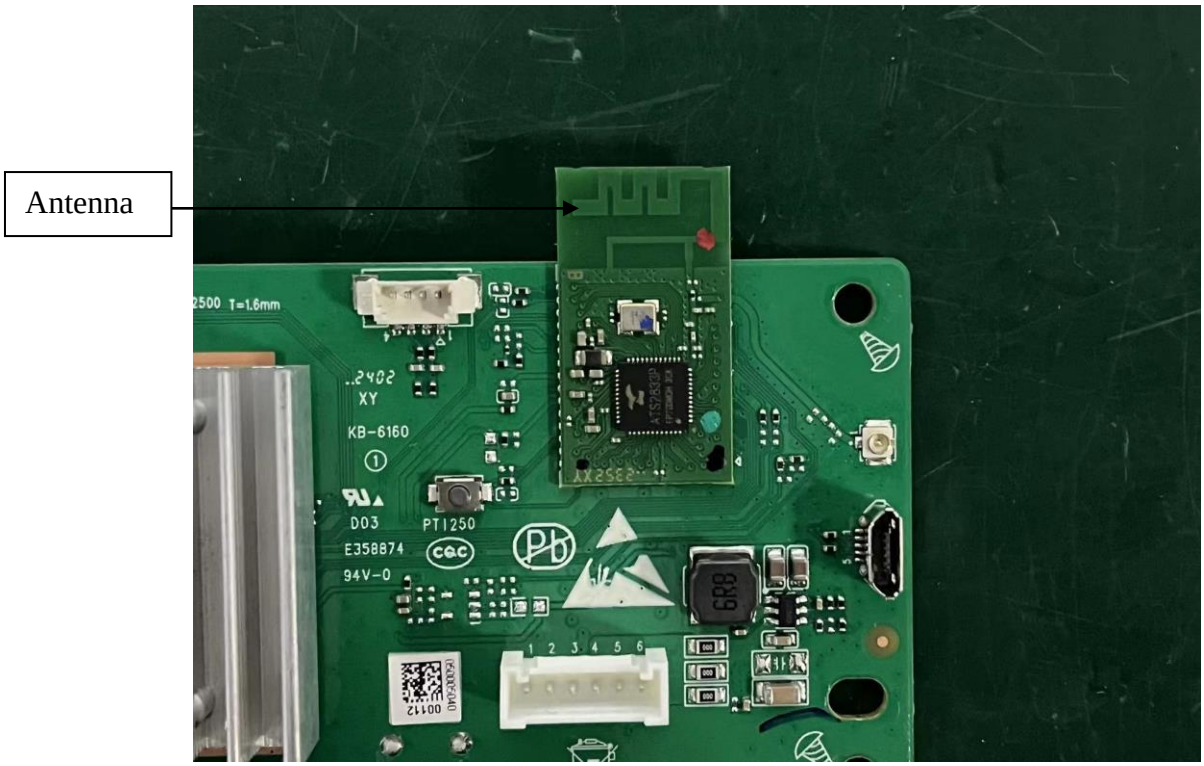
M/N: S55H-SW





Internal Photos

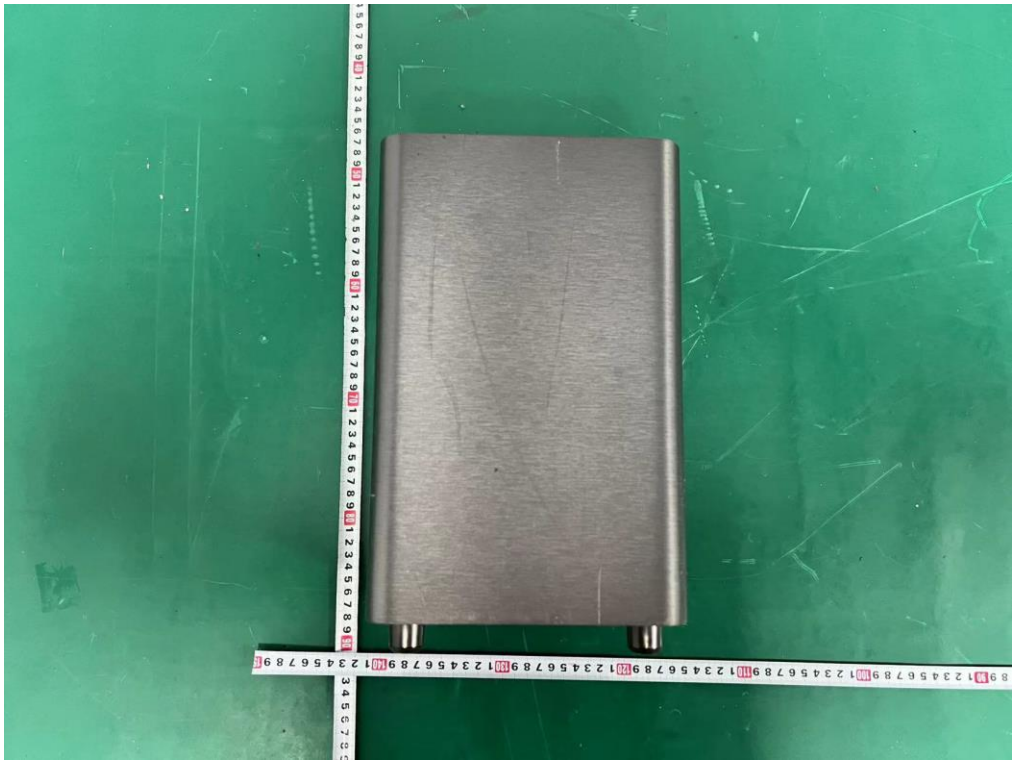
M/N: S55H-SW



New photos

External Photos

M/N: S55H1-SW



External Photos

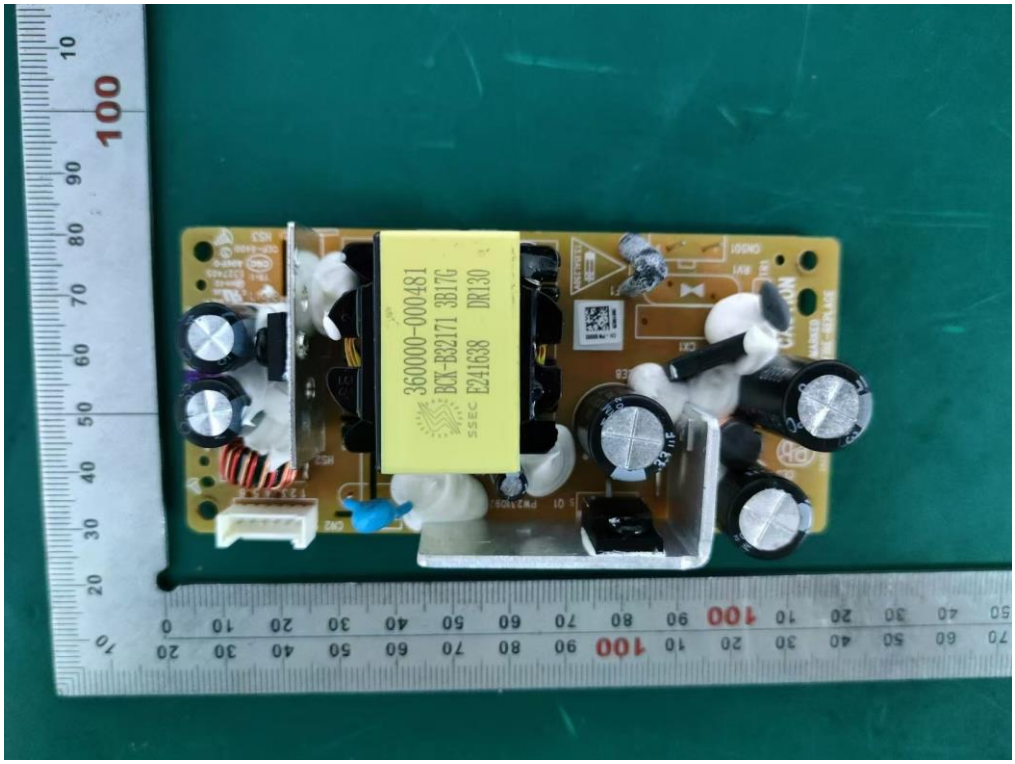
M/N: S55H1-SW

External Photos

M/N: S55H1-SW

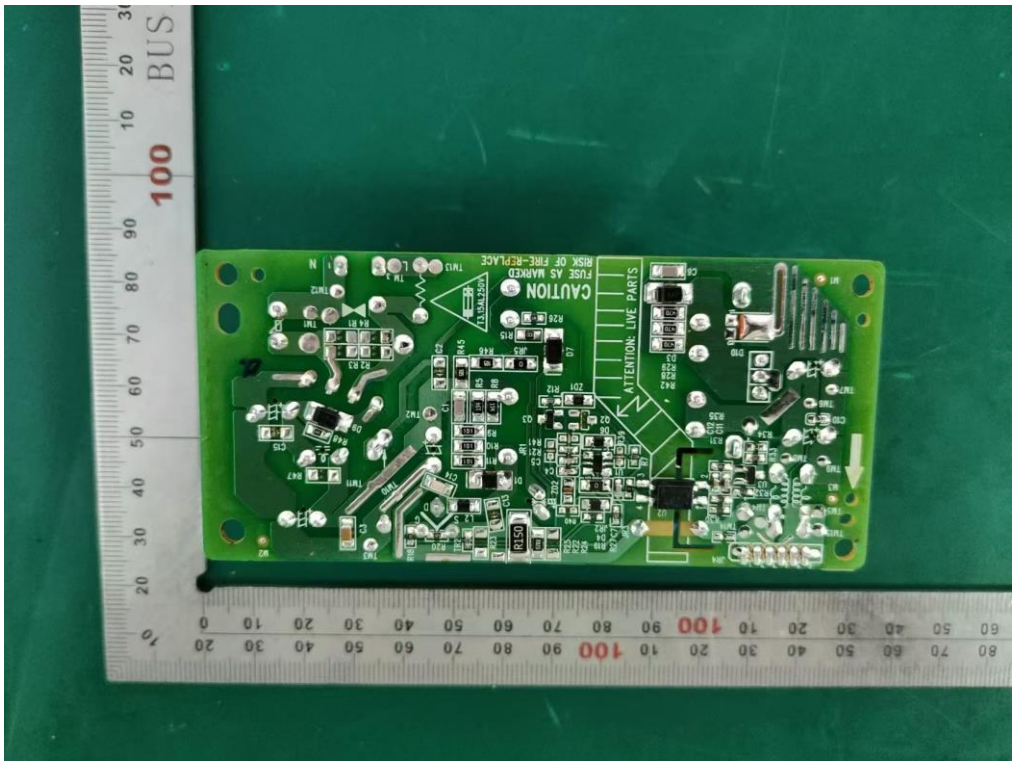
Internal Photos

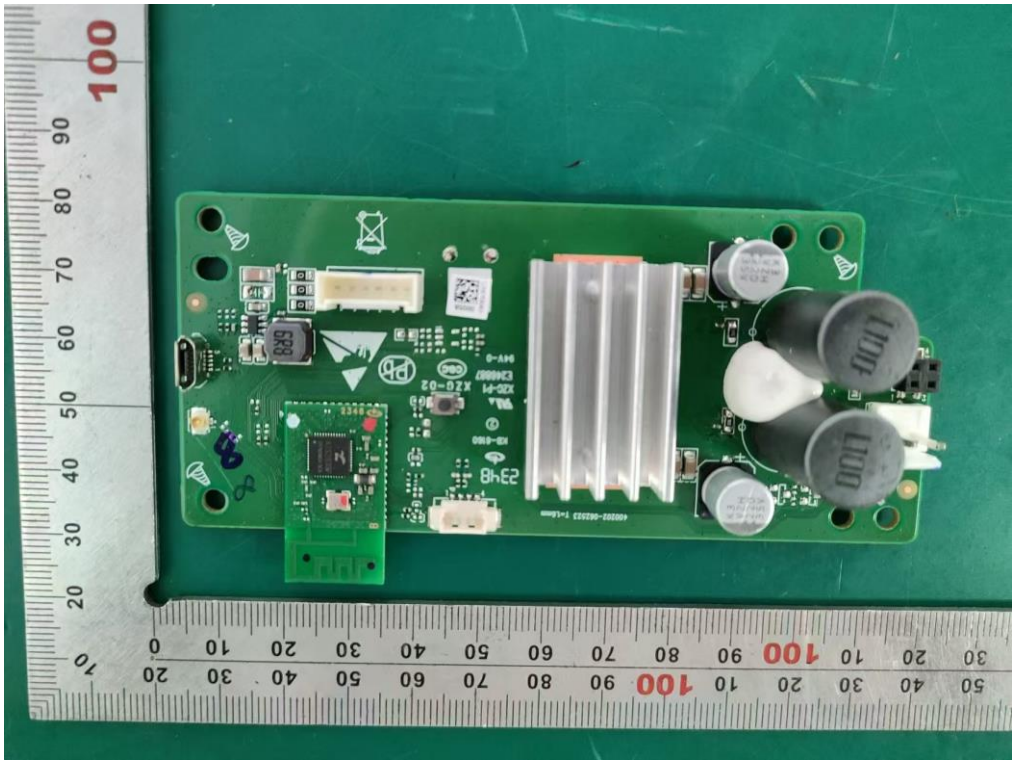
M/N: S55H1-SW



Internal Photos

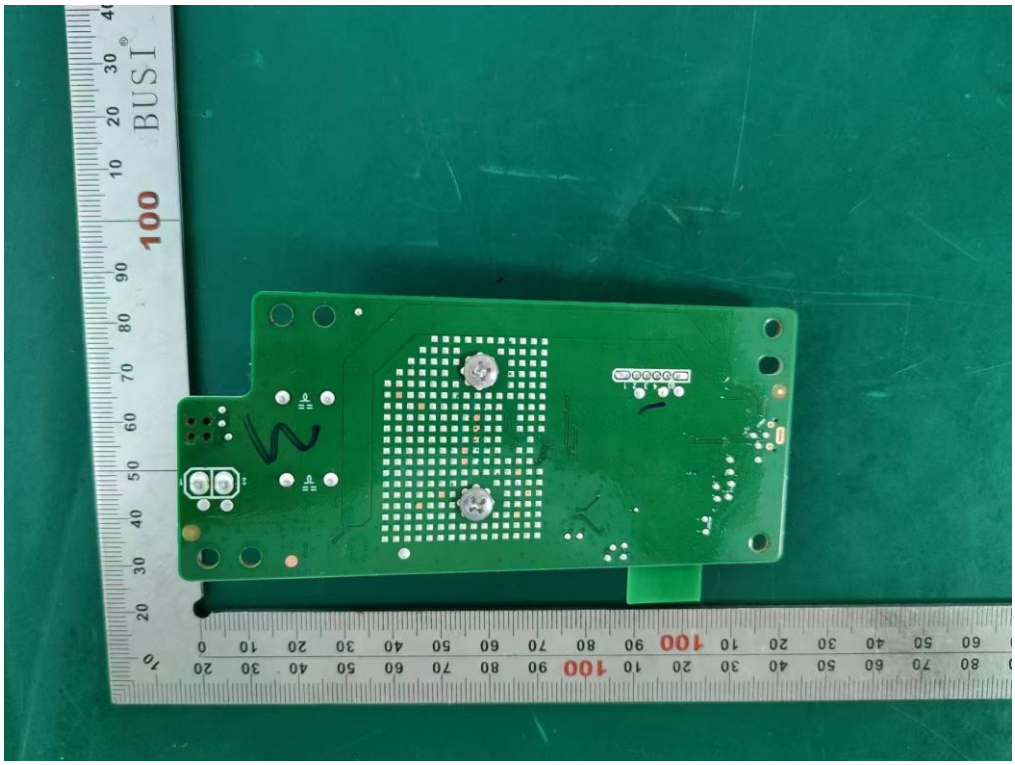
M/N: S55H1-SW

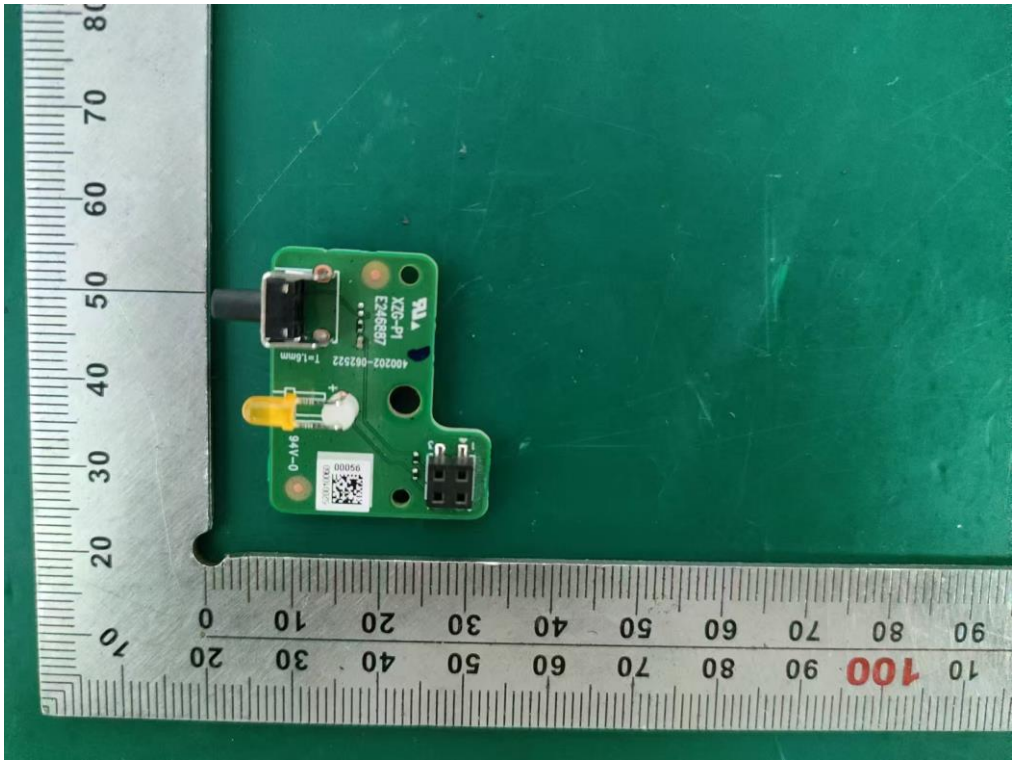




Internal Photos

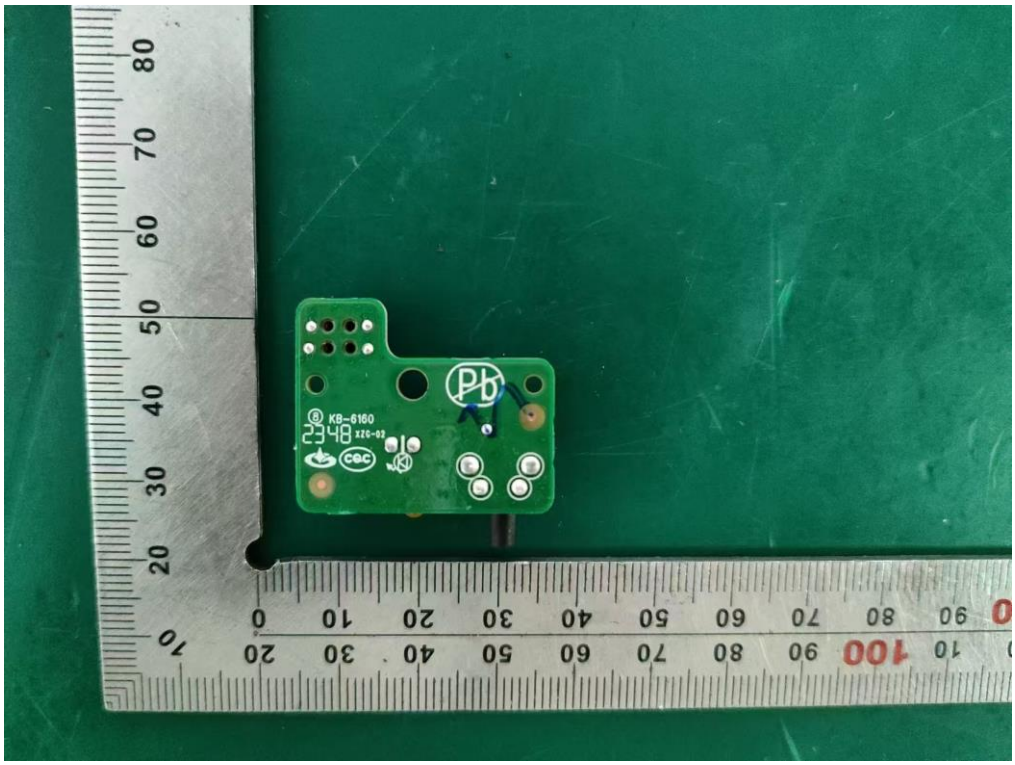
M/N: S55H1-SW

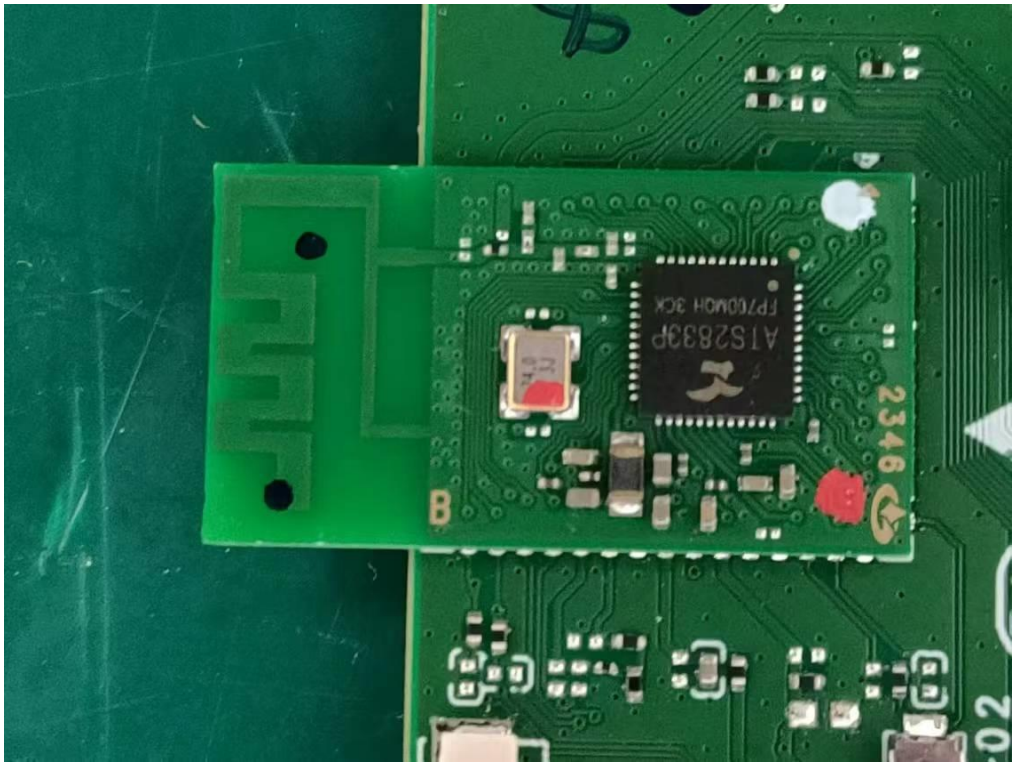




Internal Photos

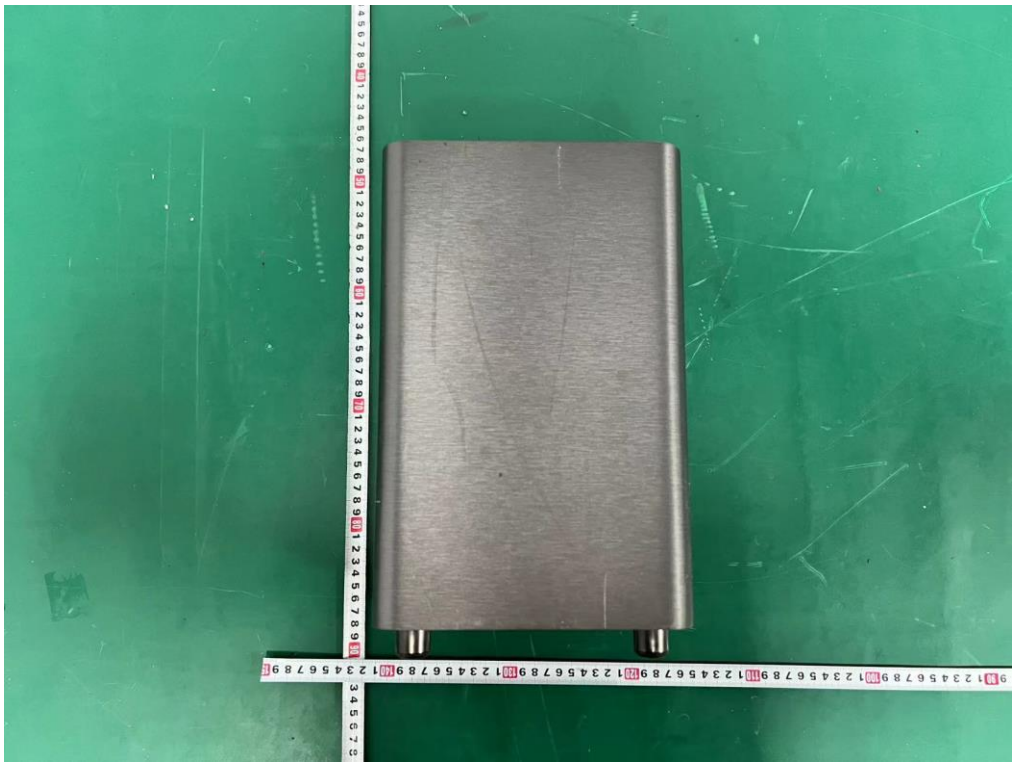
M/N: S55H1-SW





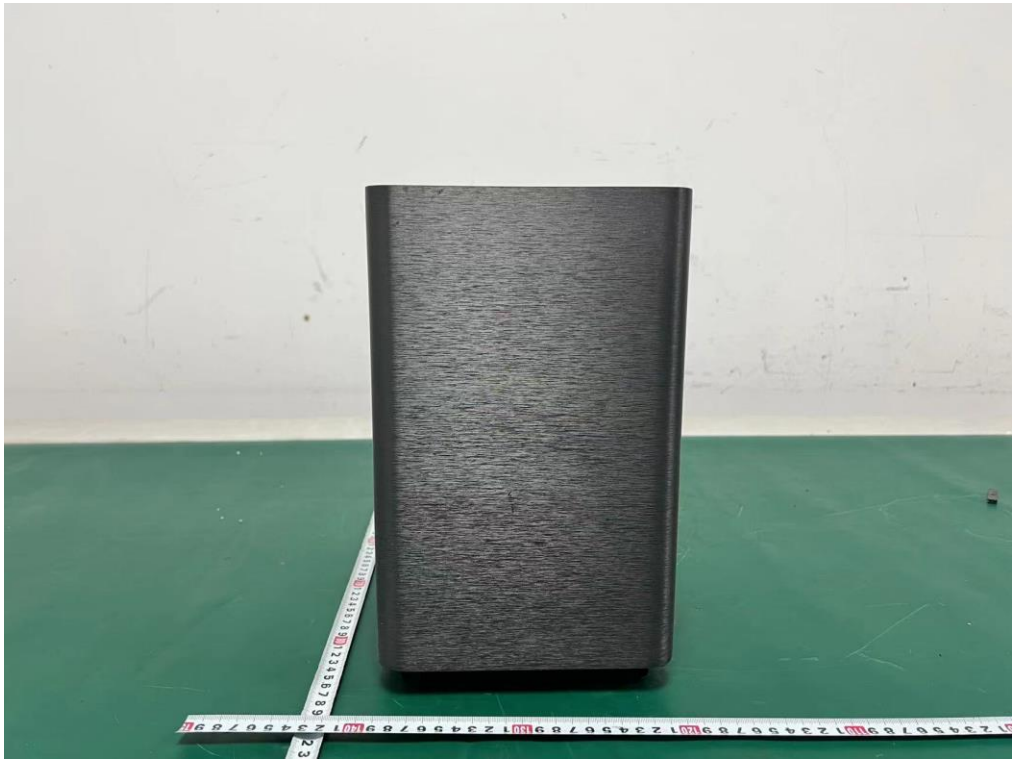
External Photos

M/N: S55H5-SW



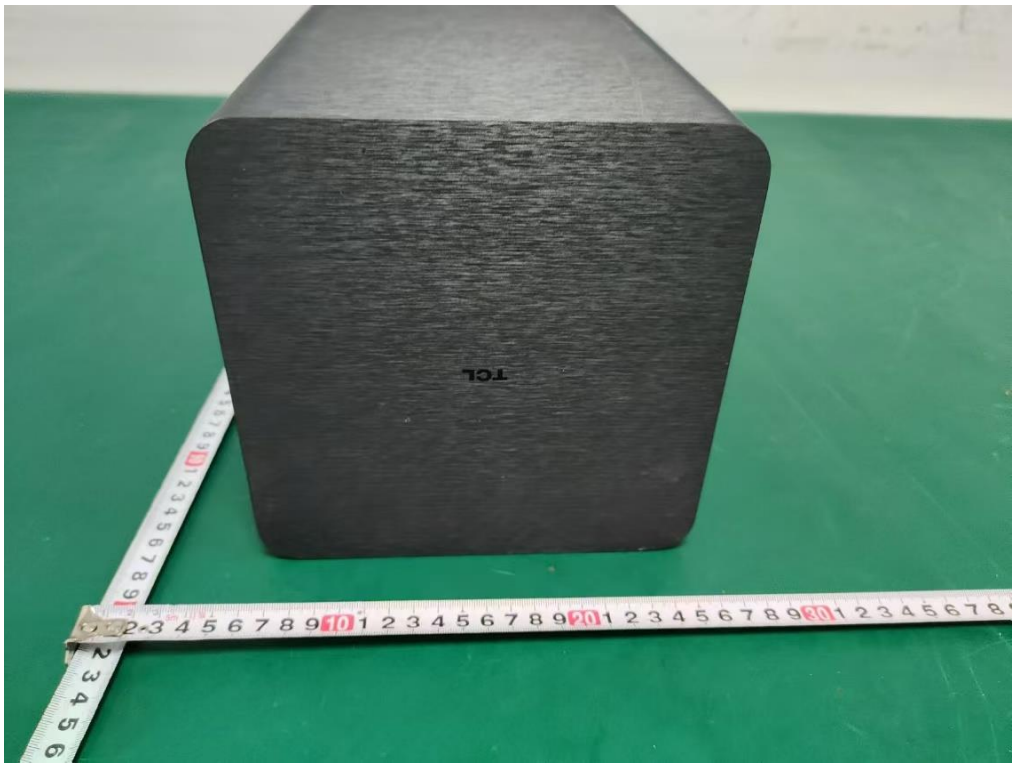
External Photos

M/N: S55H5-SW



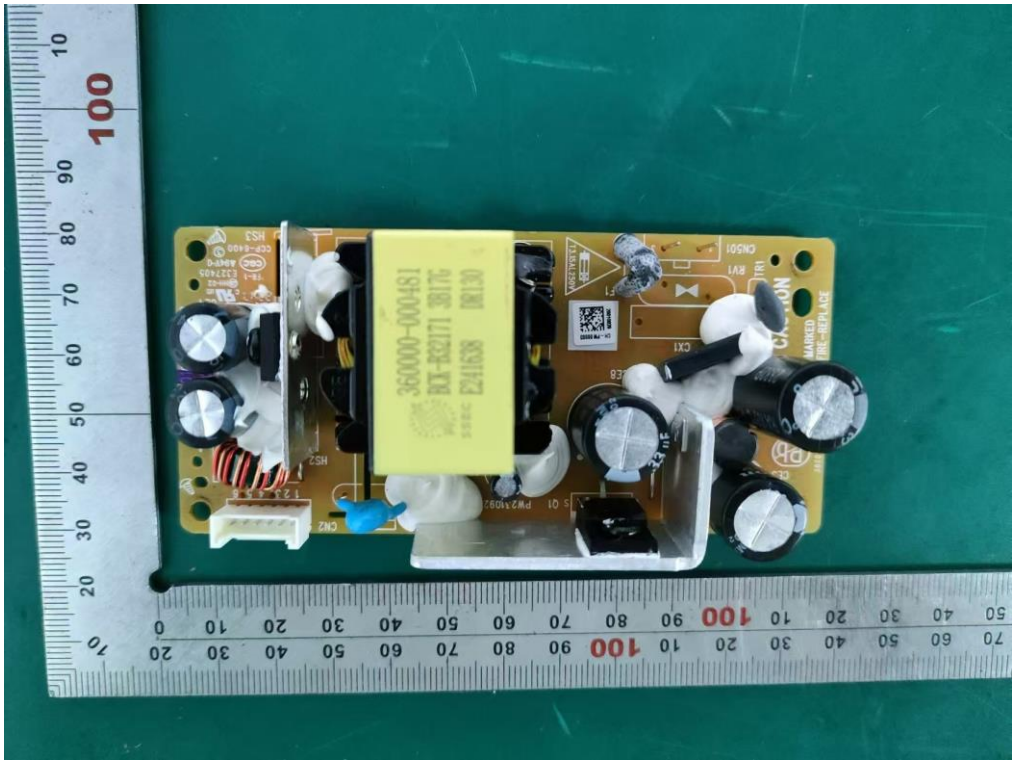
External Photos

M/N: S55H5-SW



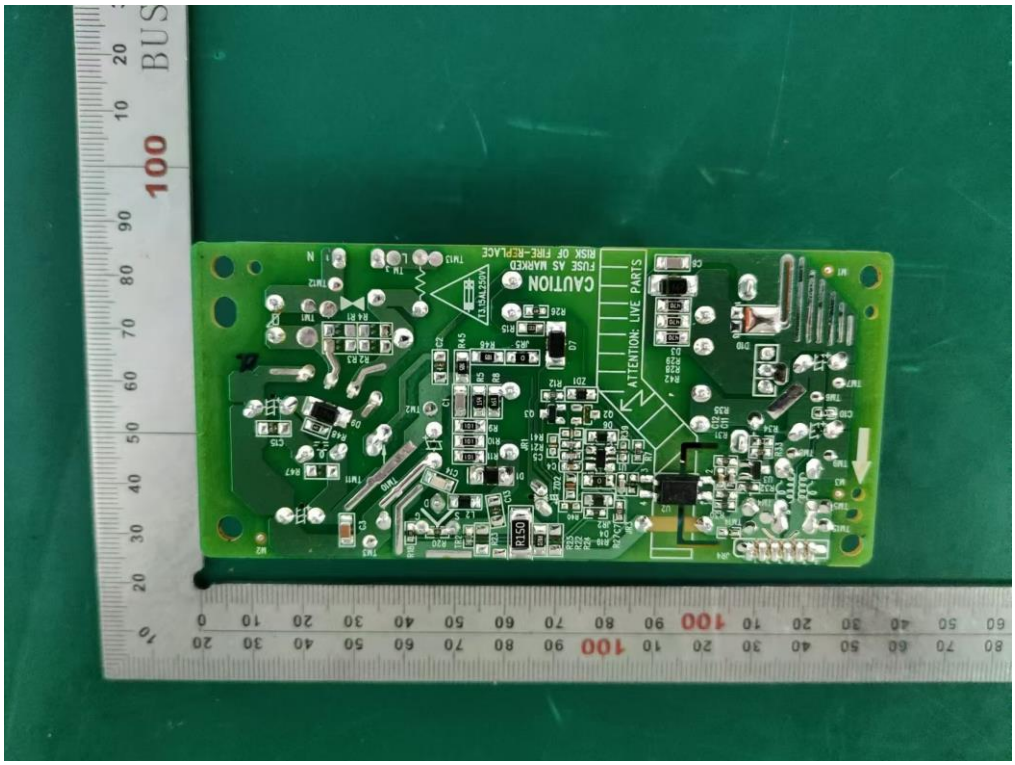
Internal Photos

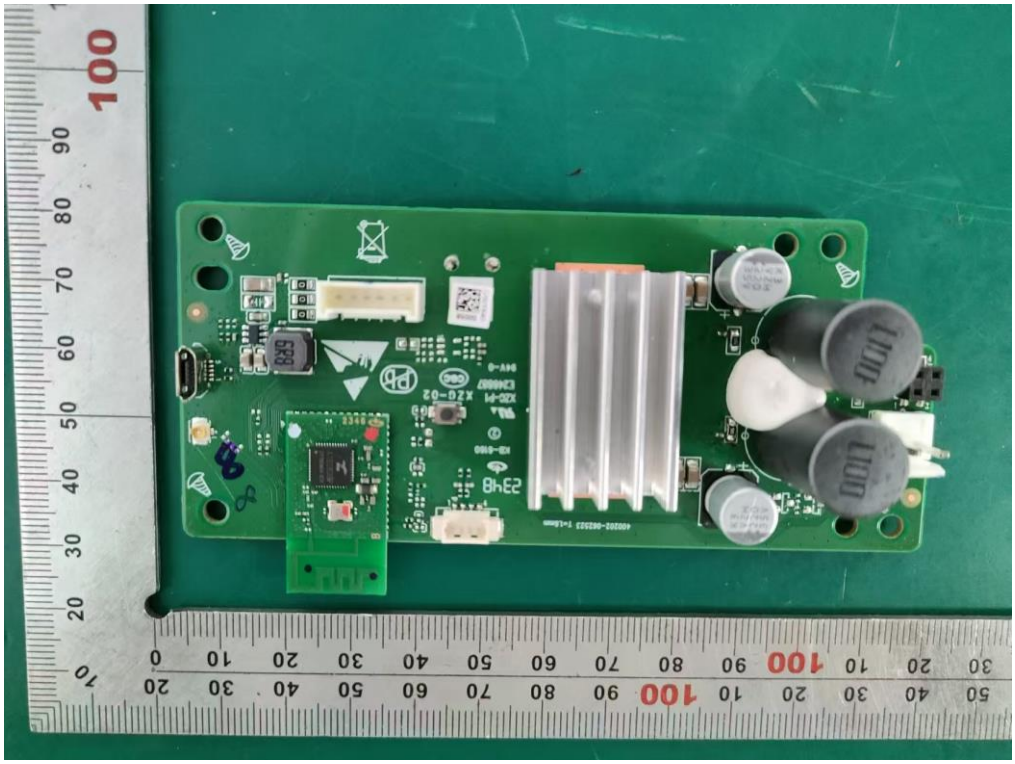
M/N: S55H5-SW



Internal Photos

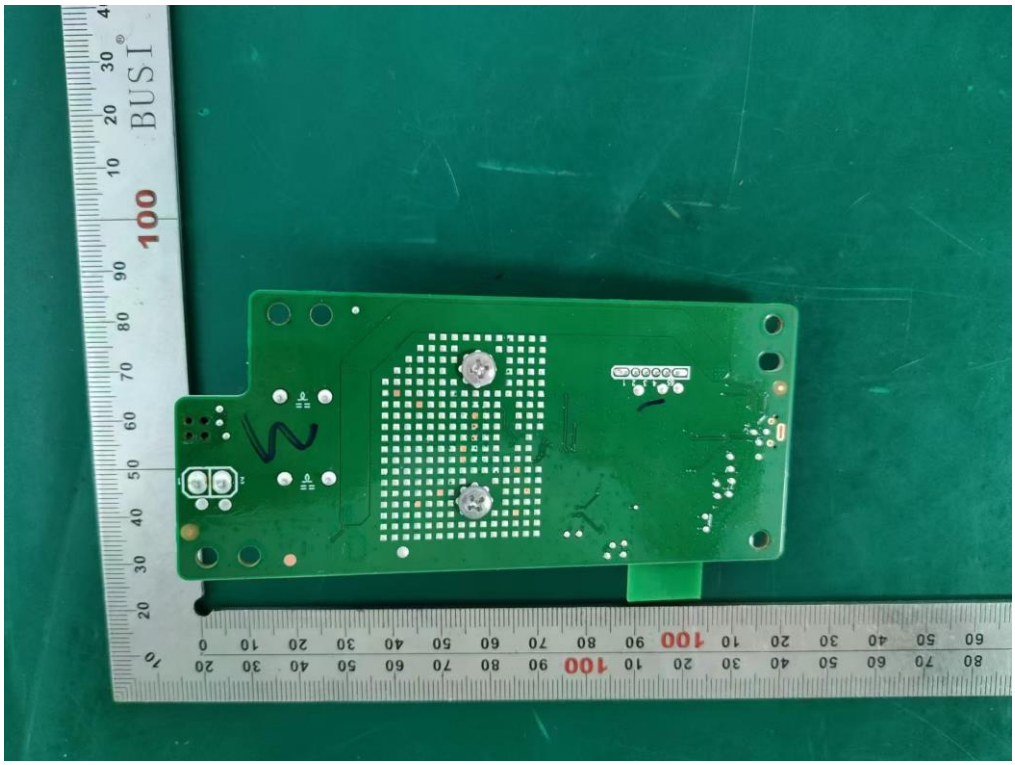
M/N: S55H5-SW

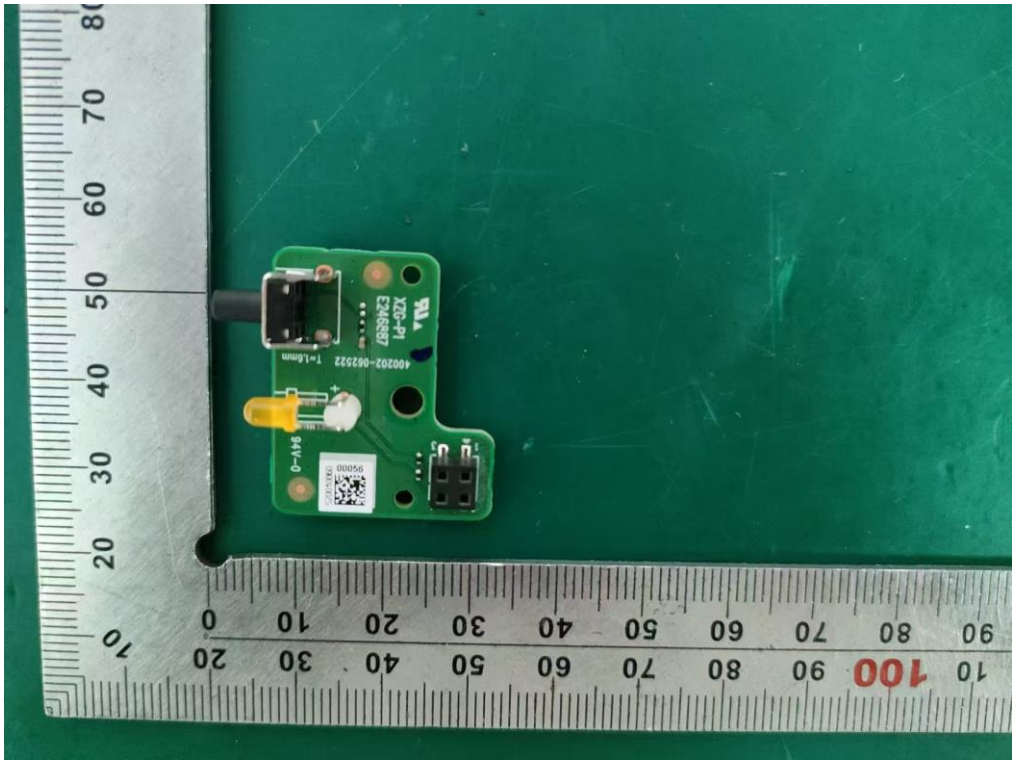




Internal Photos

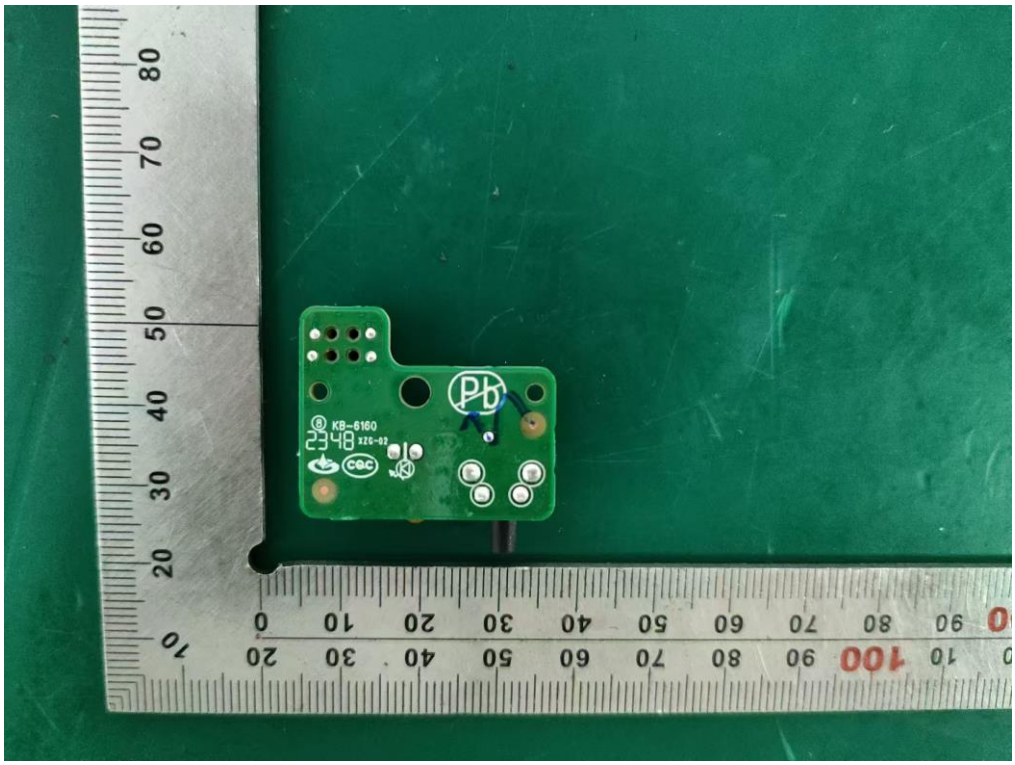
M/N: S55H5-SW

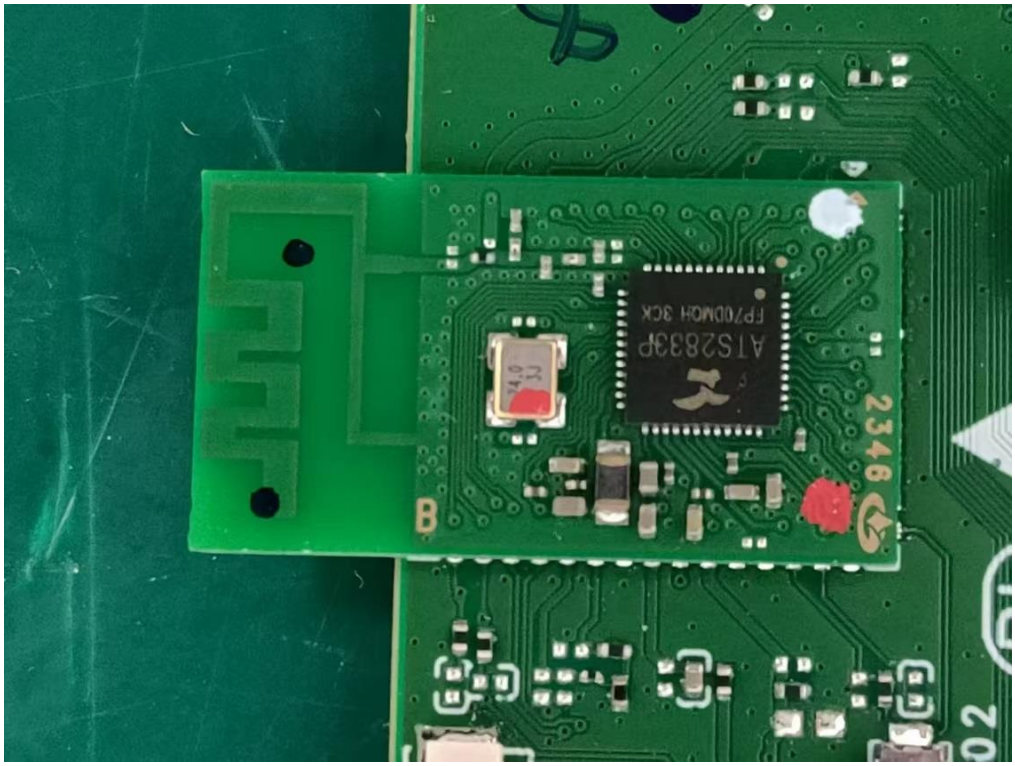




Internal Photos

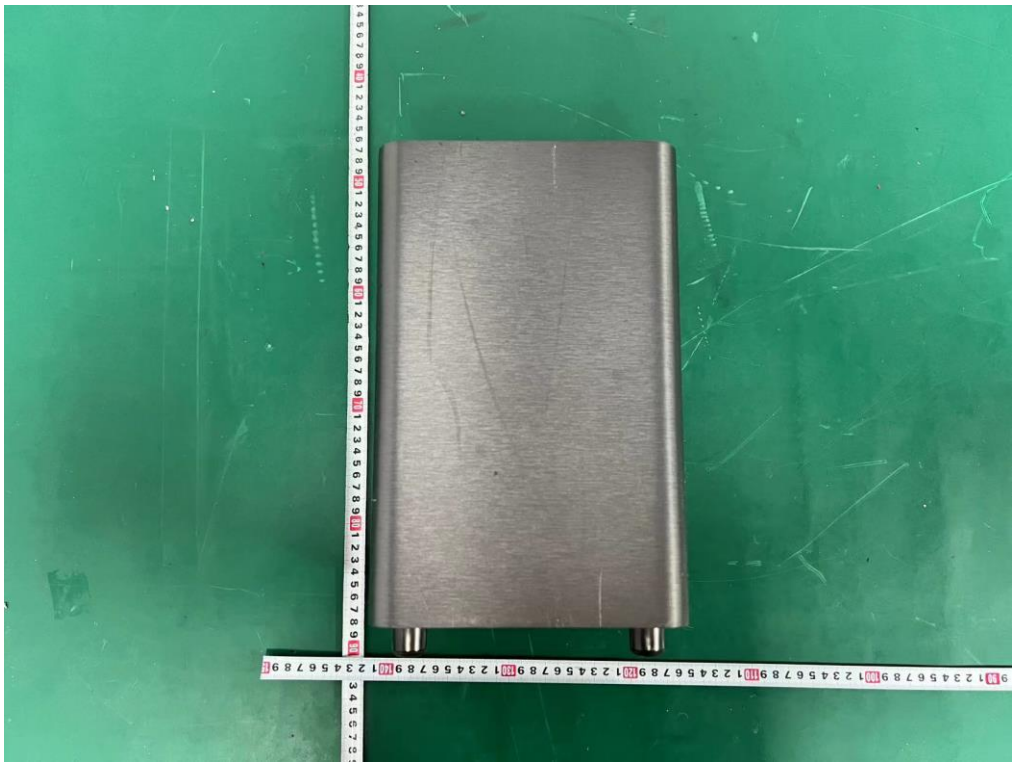
M/N: S55H5-SW





External Photos

M/N: S55H7-SW

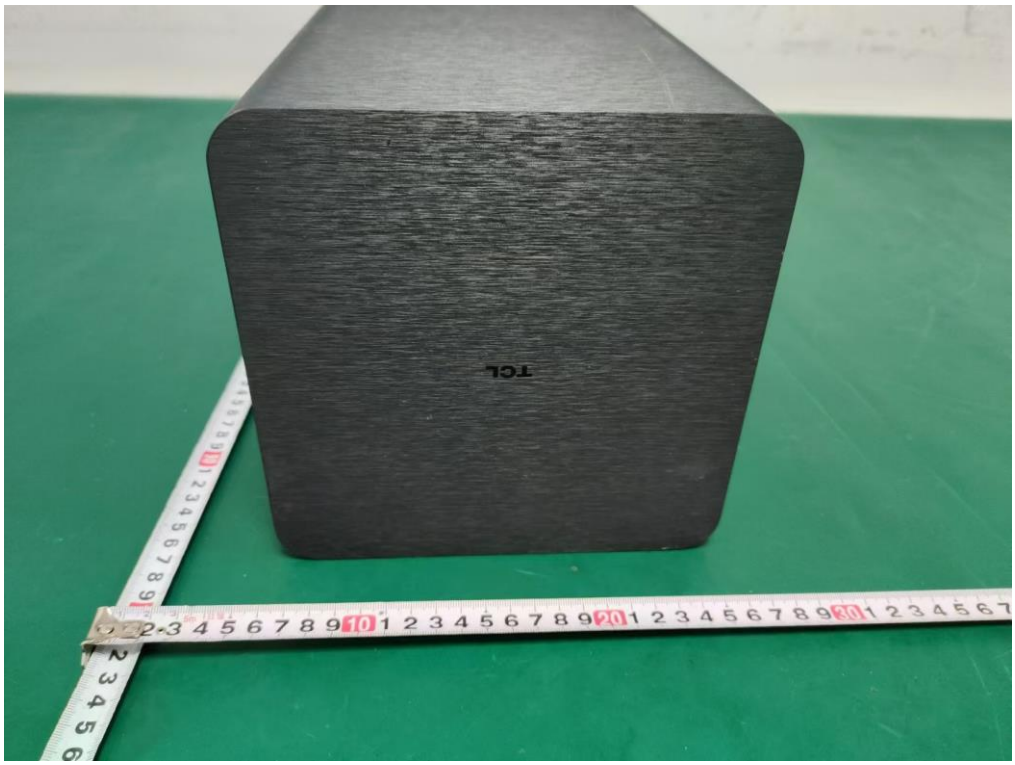


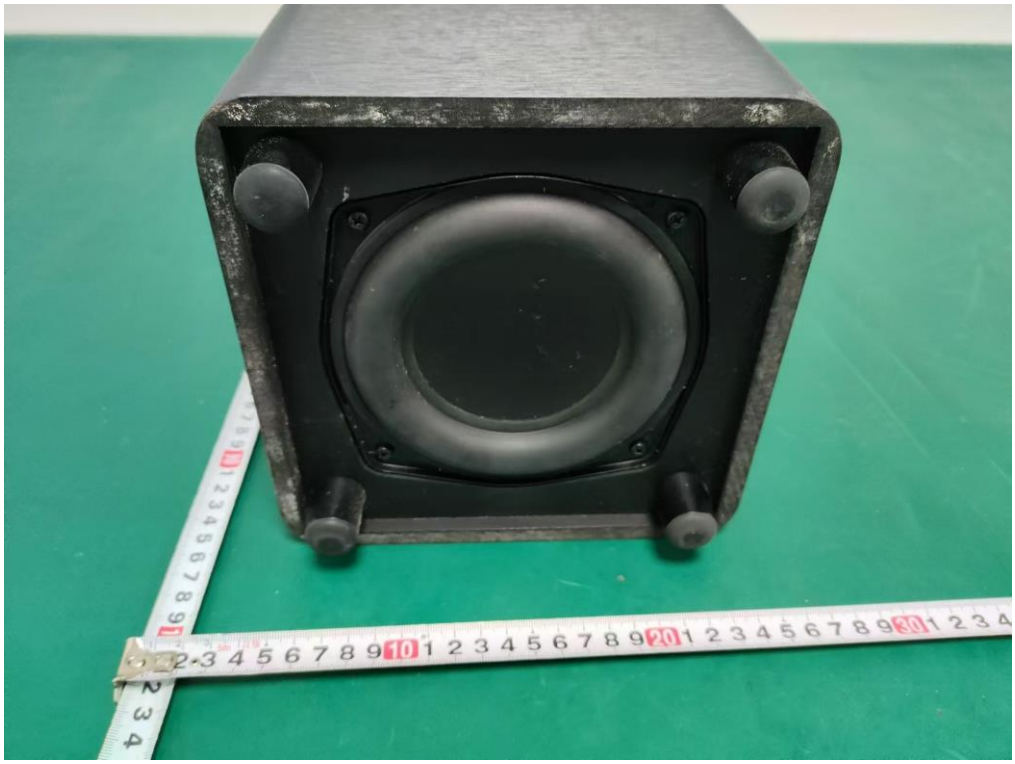
External Photos

M/N: S55H7-SW

External Photos

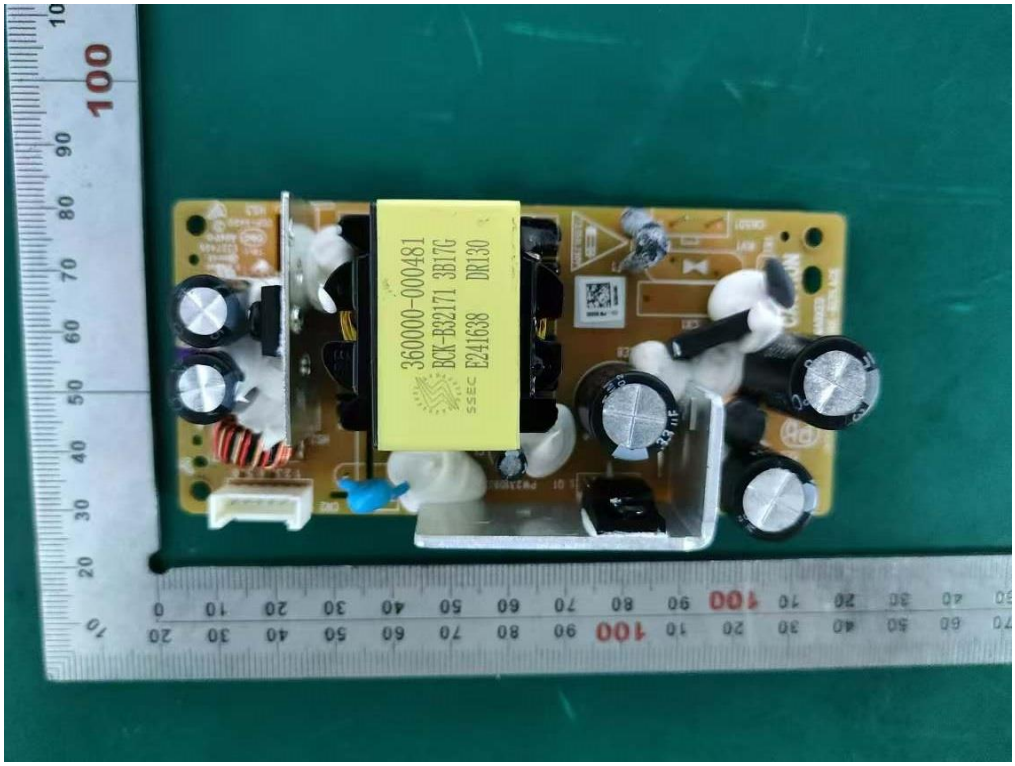
M/N: S55H7-SW





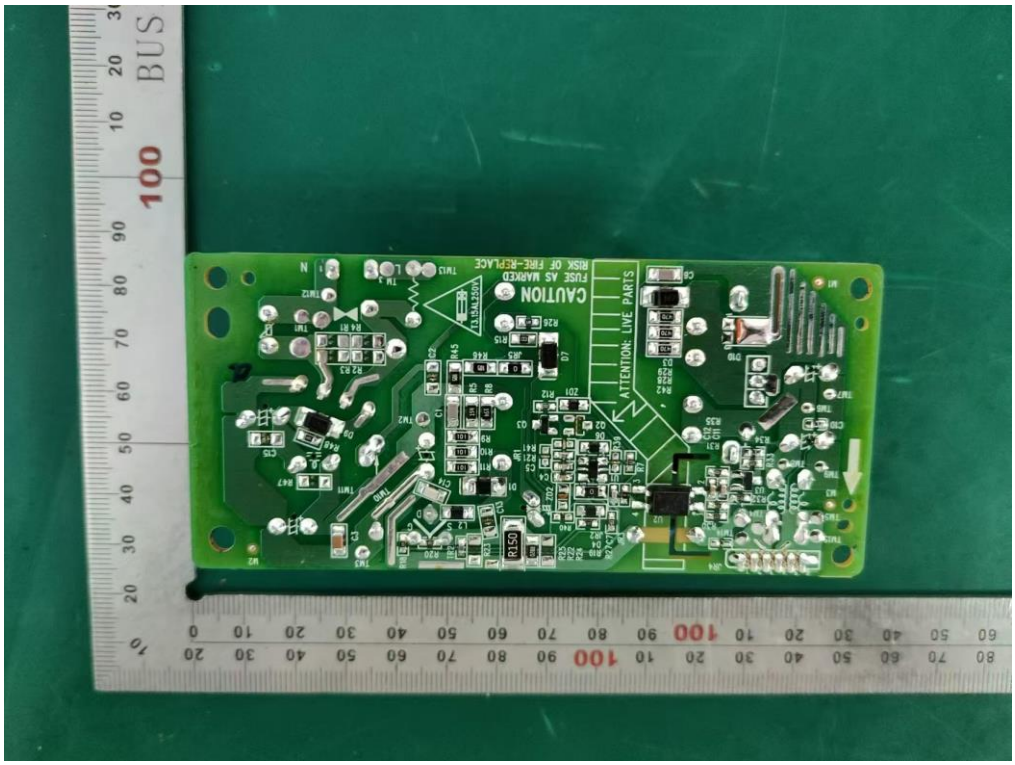
Internal Photos

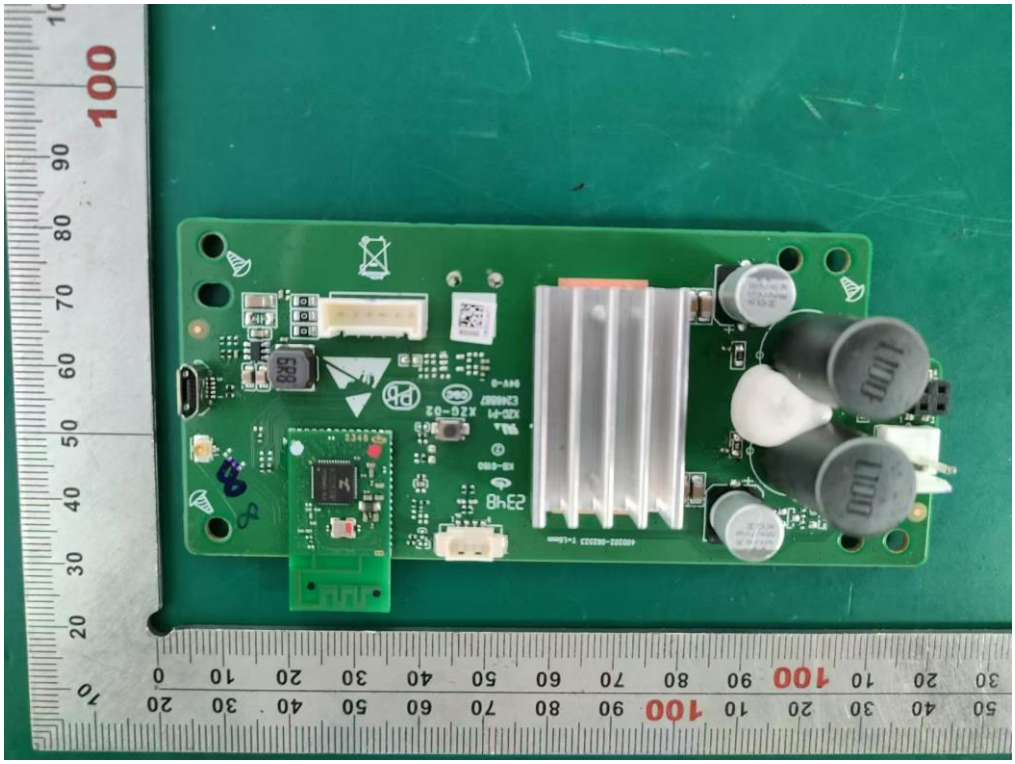
M/N: S55H7-SW



Internal Photos

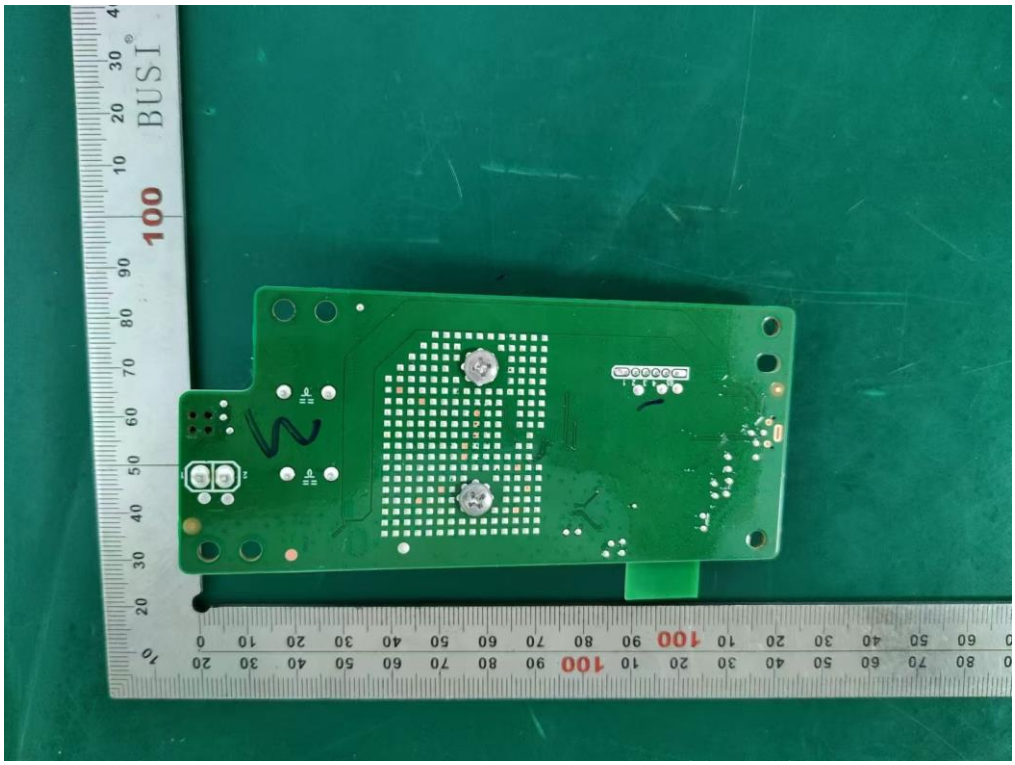
M/N: S55H7-SW

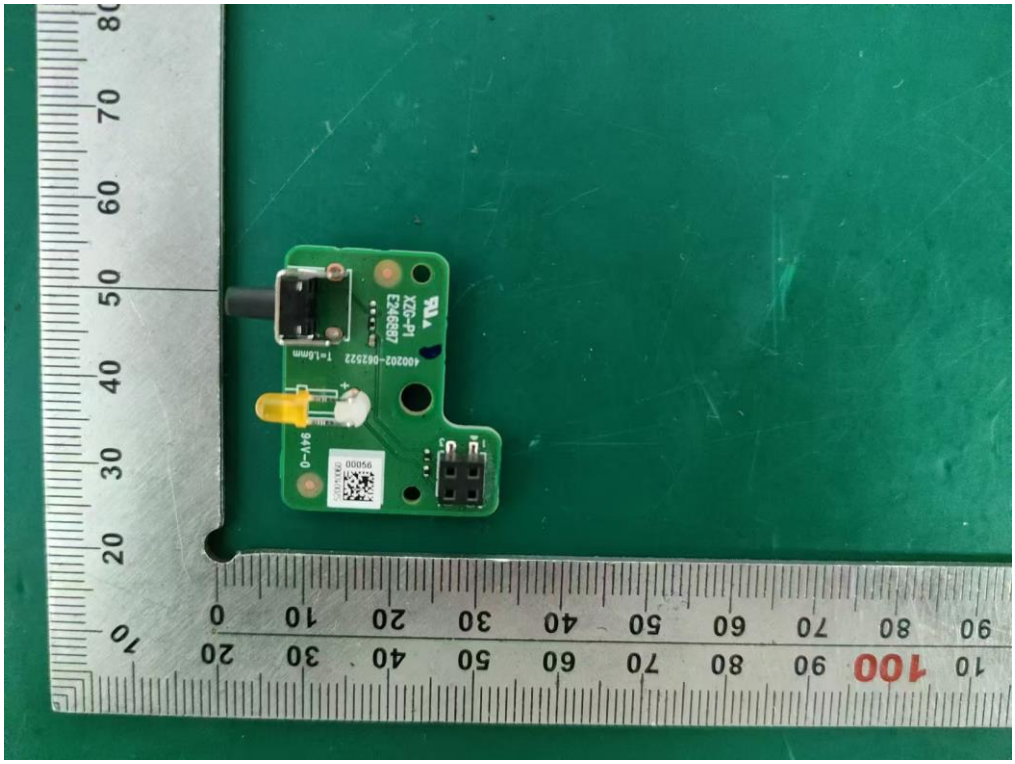




Internal Photos

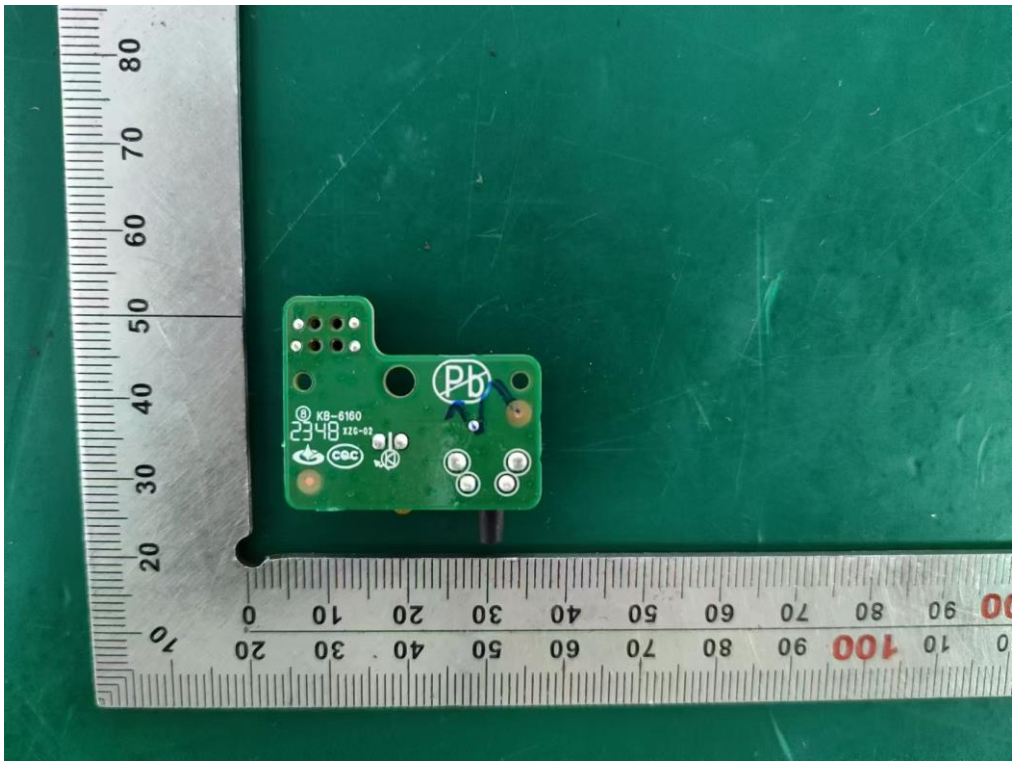
M/N: S55H7-SW

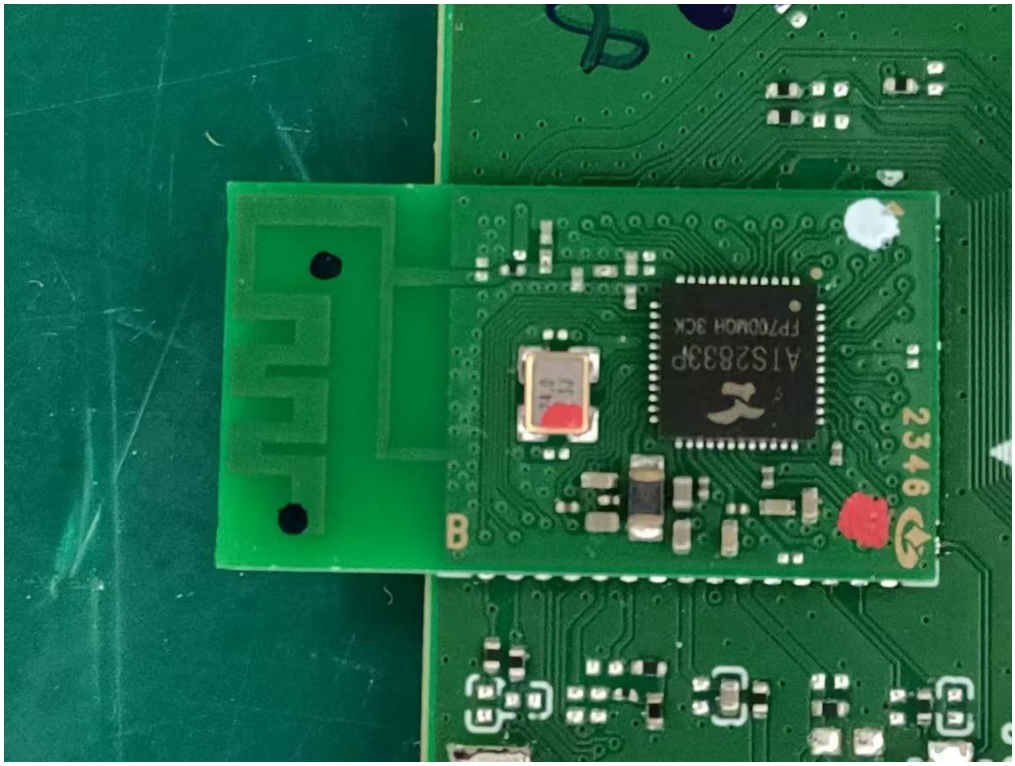




Internal Photos

M/N: S55H7-SW





End of Test Report