

FCC PART 15E TEST REPORT FOR CERTIFICATION
On Behalf of

Bang & Olufsen a/s

Audio Converter Box

Model Number: BeoSound Core

FCC ID: TTUBSCORE

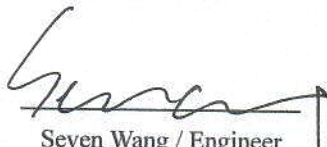
Applicant :	Bang & Olufsen a/s
Address:	Peter Bangs Vej 15, 7600 Struer, Denmark
Prepared By:	EST Technology Co., Ltd.
	Chilingxiang, Qishantou, Santun, Houjie, Dongguan, Guangdong, China
Tel: 86-769-83081888-808	

Report Number:	ESTE-R2211045
Date of Test:	Sep. 20~Nov. 05, 2022
Date of Report:	Nov. 07, 2022

TABLE OF CONTENTS

Description	Page
TEST REPORT VERIFICATION.....	3
1. GENERAL INFORMATION.....	4
1.1. Description of Device (EUT)	4
1.2. The antenna information for EUT	5
2. SUMMARY OF TEST	6
2.1. Summary of test result.....	6
2.2. Test Facilities	7
2.3. Measurement uncertainty for EST Technology Co., Ltd.	8
2.4. Assistant equipment used for test.....	8
2.5. Block Diagram	8
2.6. Test Mode.....	9
2.7. Channel List	10
2.8. Test Equipment List	11
3. UNWANTED EMISSIONS AND BAND EDGE	12
3.1. Limit.....	12
3.2. Test Setup.....	13
3.3. Spectrum Analyzer Setting.....	14
3.4. Test Procedure.....	15
3.5. Test Result.....	16
4. AC POWER LINE CONDUCTED EMISSIONS	18
4.1. Limit.....	18
4.2. Test Setup.....	18
4.3. Spectrum Analyzer Setting.....	18
4.4. Test Procedure.....	18
4.5. Test Result.....	19
5. TEST SETUP PHOTO	21
6. EUT PHOTO.....	23

EST Technology Co., Ltd.

Applicant:	Bang & Olufsen a/s		
Address:	Peter Bangs Vej 15, 7600 Struer, Denmark		
Manufacturer:	Bang & Olufsen a/s		
Address:	Peter Bangs Vej 15, 7600 Struer, Denmark		
E.U.T:	Audio Converter Box		
Model Number:	BeoSound Core		
Power Supply:	DC 5V From USB Type C Adapter Input AC 100~240V 50/60Hz		
Trade Name:	Bang & Olufsen	Serial No.:	-----
Date of Receipt:	Sep. 20, 2022	Date of Test:	Sep. 20~Nov. 05, 2022
Test Specification:	FCC Part 15 Subpart E 15.407 ANSI C63.10:2013 FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01 FCC KDB 662911 D01 Multiple Transmitter Output v02r01		
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 FCC Rules and Regulations Part 15 Subpart E requirements. This report applies to above tested sample only and shall not be reproduced in part without written approval of EST Technology Co., Ltd.		
Prepared by:	Reviewed by:	Date: Nov. 07, 2022	
 Ring Yang / Assistant	 Seven Wang / Engineer	 Approved by: Ice-man Hu / Manager	
Other Aspects:	This report base on the previous report with report number: C170503Z04-RP1-1, Change the power supply management IC and circuit of the RF module, and change the module model to stream810H3, So only need re-tested spurious emissions (30MHz-1GHz)、conducted emissions, other test item needn't re-tested.		
Abbreviations: OK/P=passed fail/F=failed n.a/N=not applicable E.U.T=equipment under tested			
This test report is based on a single evaluation of one sample of above mentioned products ,It is not permitted to be duplicated in extracts without written approval of EST Technology Co., Ltd.			

1. GENERAL INFORMATION

1.1. Description of Device (EUT)

FCC ID	:	TTUBSCORE
Product Name	:	Audio Converter Box
Model Number	:	BeoSound Core
Software Version	:	v4.0.1
Hardware Version	:	v4.0.1
Operation frequency	:	U-NII-1: 5150 MHz~5250 MHz U-NII-2A: 5250 MHz~5350 MHz U-NII-2C: 5470 MHz~5600 MHz & 5650 MHz~5725 MHz U-NII-3: 5725 MHz~5850 MHz
Number of channel	:	U-NII-1: IEEE 802.11a / n HT20 / ac VHT20: 4 Channels; IEEE 802.11n HT40 / ac VHT40: 2 Channels; IEEE 802.11ac VHT80: 1 Channel. U-NII-2A: IEEE 802.11a / n HT20 / ac VHT20: 4 Channels; IEEE 802.11n HT40 / ac VHT40: 2 Channels; IEEE 802.11ac VHT80: 1 Channel. U-NII-2C: IEEE 802.11a / n HT20 / ac VHT20: 8 Channels; IEEE 802.11n HT40 / ac VHT40: 3 Channels; IEEE 802.11ac VHT80: 1 Channel. U-NII-3: IEEE 802.11a / n HT20 / ac VHT20: 5 Channels; IEEE 802.11n HT40 / ac VHT40: 2 Channels; IEEE 802.11ac VHT80: 1 Channel.
Modulation	:	OFDM
Transmit Data Rate	:	IEEE 802.11a: 54, 48, 36, 24, 18, 12, 9, 6Mbps; IEEE 802.11n: up to 150Mbps; IEEE 802.11ac: up to 433.3Mbps;
Channels Spacing	:	IEEE 802.11a: 20MHz; IEEE 802.11n HT20: 20MHz; IEEE 802.11n HT40: 40MHz; IEEE 802.11ac VHT20: 20MHz; IEEE 802.11ac VHT40: 40MHz; IEEE 802.11ac VHT80: 80MHz;
Transmit Power	:	Prototype production

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

1.2. The antenna information for EUT

Ant No.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)
0	-	-	Integral	-	5.4
1	-	-	Integral	-	5.8

Remark:

- (1) After pre-test all antenna configurations, the worst case configuration as list below.
 (2) This information is provided by the applicant.

ANT No. TX Mode	SISO Configuration	MIMO Configuration
IEEE 802.11a	ANT 0 and Ant 1	/
IEEE 802.11n HT20	/	ANT0+ANT1
IEEE 802.11n HT40	/	ANT0+ANT1
IEEE 802.11ac VHT20	/	ANT0+ANT1
IEEE 802.11ac VHT40	/	ANT0+ANT1
IEEE 802.11ac VHT80	/	ANT0+ANT1

2. SUMMARY OF TEST

2.1. Summary of test result

No.	Description of Test Item	FCC Standard Section	Results
1	6dB Bandwidth & 26dB Bandwidth & 99% Occupied Bandwidth	15.407(a) 15.407(e)	N/A
2	Maximum Conducted Output Power	15.407(a)	N/A
3	Peak Power Spectral Density	15.407(a)	N/A
4	Unwanted Emissions and Band Edge	15.205 15.209 15.407(b)	PASS
5	Frequency Stability	15.407(g)	N/A
6	AC Power Line Conducted Emissions	15.207 15.407(b)(9)	PASS
7	Antenna Requirement	15.203	N/A

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

2.2. Test Facilities

EMC Lab : Certificated by CNAS, CHINA
Registration No.: L5288
This Certificate is valid until: November 12, 2023

Certificated by FCC, USA
Designation Number: CN1215
This Certificate is valid until: January 31, 2024

Certificated by A2LA, USA
Registration No.: 4366.01
This Certificate is valid until: January 31, 2024

Certificated by Industry Canada
CAB identifier No.: CN0035
This Certificate is valid until: January 31, 2024

Certificated by VCCI, Japan
Registration No.: C-14103; T-20073; R-13663;
R-20103; G-20097
Date of registration: Apr. 20, 2020
This Certificate is valid until: Apr. 19, 2023

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

Certificated 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 for EST Technology Co., Ltd.

Test Item	Uncertainty
Uncertainty for Conduction emission test	2.54dB
Uncertainty for spurious emissions test (Below 30MHz)	±1.62 dB
Uncertainty for Radiation Emission test (30MHz-1GHz)	3.62
Uncertainty for Radiation Emission test (1GHz to 18GHz)	4.86
Uncertainty for spurious emissions test (18GHz to 40GHz)	4.67
Uncertainty for radio frequency	7×10-8
Uncertainty for conducted RF Power	1.08dB
Uncertainty for Power density test	0.26dB
Temperature	±0.6°C
Humidity	±4.0 %
Volatage DC	±1.0%
Volatage (AC, <10KHz)	±1.5%

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

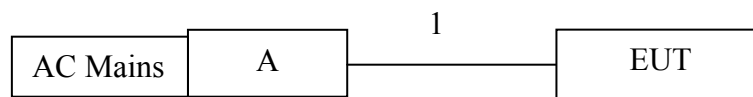
2.4. Assistant equipment used for test

Item	Equipment	Brand	Model Name/Type No.	FCC ID	Series No.
A	Adapter	-	DSA-45PDH	-	-

Item	Shielded Type	Ferrite Core	Length	Note
1	-	-	1.2m	USB Cable

2.5. Block Diagram

For radiated emissions test: EUT was placed on a turn table, which is 0.8 meter high above ground.



(EUT: Audio Converter Box)

2.6. Test Mode

Pre-scan has been combined all possible modulations and data rates to determine the worst case test mode, the worst case test mode was selected for the final test as listed below.

Test Item	Test Mode	Channel	Modulation	Data rate
Unwanted Emissions Below 1GHz	IEEE 802.11n HT20	100	OFDM	MCS0
AC Power Line Conducted Emissions	IEEE 802.11n HT20	100	OFDM	MCS0

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. Channel List

Band	Mode	Channel	Frequency (MHz)
U-NII-1	IEEE 802.11a & n HT20 & ac VHT20	36	5180
		40	5200
		44	5220
		48	5240
	IEEE 802.11n HT40 & ac VHT40	38	5190
		46	5230
	IEEE 802.11ac VHT80	42	5210
U-NII-2A	IEEE 802.11a & n HT20 & ac VHT20	52	5260
		56	5280
		60	5300
		64	5320
	IEEE 802.11n HT40 & ac VHT40	54	5270
		62	5310
	IEEE 802.11ac VHT80	58	5290
U-NII-2C	IEEE 802.11a & n HT20 & ac VHT20	100	5500
		104	5520
		108	5540
		112	5560
		116	5580
		132	5660
		136	5680
		140	5700
	IEEE 802.11n HT40 & ac VHT40	102	5510
		110	5550
		134	5670
	IEEE 802.11ac VHT80	106	5530
U-NII-3	IEEE 802.11a & n HT20 & ac VHT20	149	5745
		153	5765
		157	5785
		161	5805
		165	5825
	IEEE 802.11n HT40 & ac VHT40	151	5755
		159	5795
	IEEE 802.11ac VHT80	155	5775

2.8. Test Equipment List

For AC power conducted emissions test						
Equipment	Manufacturer	Model No.	Serial No.	Calibration Body	Last Cal.	Next Cal.
EMI Test Receiver	Rohde & Schwarz	ESHS30	EST-E001	LISAI	June 13,22	1 Year
Artificial Mains Network	Rohde & Schwarz	ENV216	EST-E002	LISAI	June 13,22	1 Year
Pulse Limiter	Rohde & Schwarz	ESH3-Z2	EST-E078	LISAI	June 13,22	1 Year
Test Software	Audix	e3-6.111221a	N/A	N/A	N/A	N/A

For radiated emissions 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 13,22	1 Year
Active Loop Antenna	SCHWABE ECK	FMZB 1519B	EST-E054	LISAI	June 13,22	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(30MHz-1000MHz)						
Equipment	Manufacturer	Model No.	Serial No.	Calibration Body	Last Cal.	Next Cal.
EMI Test Receiver	Rohde & Schwarz	ESR7	EST-E047	LISAI	June 13,22	1 Year
Bilog Antenna	Teseq	CBL 6111D	EST-E034	LISAI	June 13,22	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

3. UNWANTED EMISSIONS AND BAND EDGE

3.1. Limit

The maximum emissions outside of the frequency bands of operation shall be attenuated in accordance with the following limits:

- (1) For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
- (2) For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
- (3) For transmitters operating in the 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
- (4) For transmitters operating in the 5.725-5.85 GHz band: All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

The unwanted emissions which fall in Restricted bands shall not exceed the field strength levels specified in the following table:

15.209 Radiated emission limits

Frequency (MHz)	Field Strength(μ V/m)	Distance(m)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

15.205 Restricted frequency band

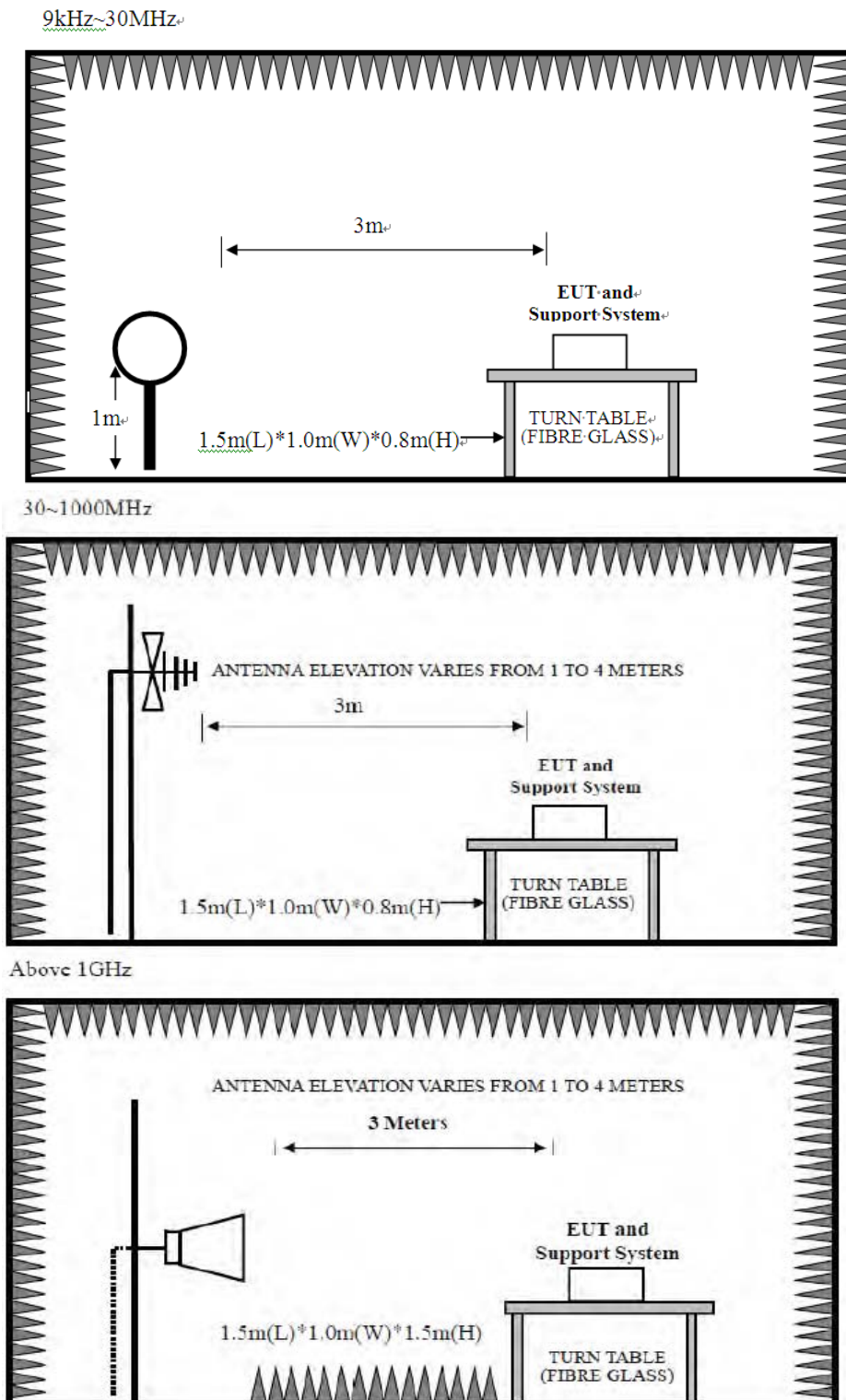
MHz	MHz	MHz	GHz
0.090 - 0.110	16.42 - 16.423	399.9 - 410	4.5 - 5.15
¹ 0.495 - 0.505	16.69475 - 16.69525	608 - 614	5.35 - 5.46
2.1735 - 2.1905	16.80425 - 16.80475	960 - 1240	7.25 - 7.75
4.125 - 4.128	25.5 - 25.67	1300 - 1427	8.025 - 8.5
4.17725 - 4.17775	37.5 - 38.25	1435 - 1626.5	9.0 - 9.2
4.20725 - 4.20775	73 - 74.6	1645.5 - 1646.5	9.3 - 9.5
6.215 - 6.218	74.8 - 75.2	1660 - 1710	10.6 - 12.7
6.26775 - 6.26825	108 - 121.94	1718.8 - 1722.2	13.25 - 13.4
6.31175 - 6.31225	123 - 138	2200 - 2300	14.47 - 14.5
8.291 - 8.294	149.9 - 150.05	2310 - 2390	15.35 - 16.2
8.362 - 8.366	156.52475 - 156.52525	2483.5 - 2500	17.7 - 21.4
8.37625 - 8.38675	156.7 - 156.9	2690 - 2900	22.01 - 23.12
8.41425 - 8.41475	162.0125 - 167.17	3260 - 3267	23.6 - 24.0
12.29 - 12.293	167.72 - 173.2	3332 - 3339	31.2 - 31.8
12.51975 - 12.52025	240 - 285	3345.8 - 3358	36.43 - 36.5
12.57675 - 12.57725	322 - 335.4	3600 - 4400	(²)

Note:

1. $\text{dB}\mu\text{V/m} = 20 \log(\mu\text{V/m})$
2. Above 1GHz the formula is used to convert the EIRP to field strength

$$E[\text{dB}\mu\text{V/m}] = \text{EIRP}[\text{dBm}] - 20 \log(d[\text{m}]) + 104.77,$$
 where E is field strength and d is distance at which the field strength limit is specified in the applicable requirements.
 for example, 3m field strength($\text{dB}\mu\text{V/m}$)= $\text{EIRP} - 20 \log(3) + 104.77 = \text{EIRP} + 95.2$

3.2. Test Setup



3.3. 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

Note : For 9KHz-90KHz&110KHz-150KHz,the detector is average,other frequency is CISPR QP detector.

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

Note : For 150KHz-490KHz,the detector is average,other frequency is CISPR QP detector.

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 $\geq 98\%$, VBW=10Hz Duty cycle $< 98\%$, VBW $\geq 1/T$ Video bandwidth mode=RMS (power averaging)
Start frequency	1GHz	
Stop frequency	40GHz	
Sweep Time	Auto	
Detector	PEAK	
Trace Mode	Max Hold	

3.4. Test Procedure

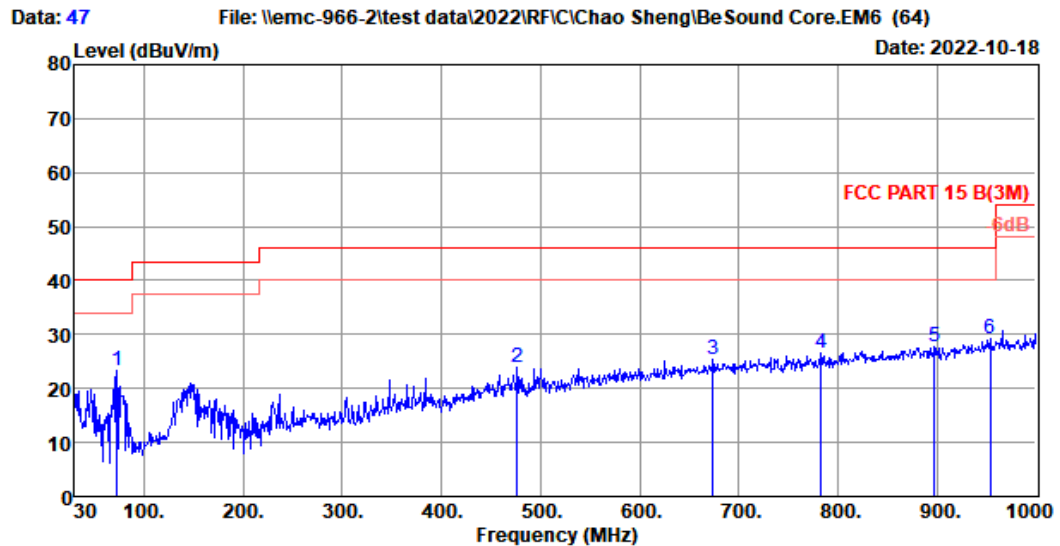
- a. EUT was placed on a turn table, which is 0.8 meter high above ground for below 1GHz test.
- b. EUT is set 3 meters away from the receiving antenna, which is mounted on a antenna tower.
- c. Set the EUT transmit continuously with maximum output power.
- d. The turn table can rotate 360 degrees to 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 3.3.
- g. Repeat above procedures until all channels were measured.
- h. Record the results in the test report.

3.5. 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. : 2# 966 chamber Data no. : 47
 Dis. / Ant. : 3m 47018 Ant. pol. : VERTICAL
 Limit : FCC PART 15 B(3M)
 Env. / Ins. : Temp:20.6°C;Humi:42%;Press:101.52kPa
 Engineer : Frank
 EUT : Audio Converter Box
 Power : DC 5V From Adapter Input AC 120V/60Hz
 M/N : BeoSound Core
 Test Mode : TX Mode

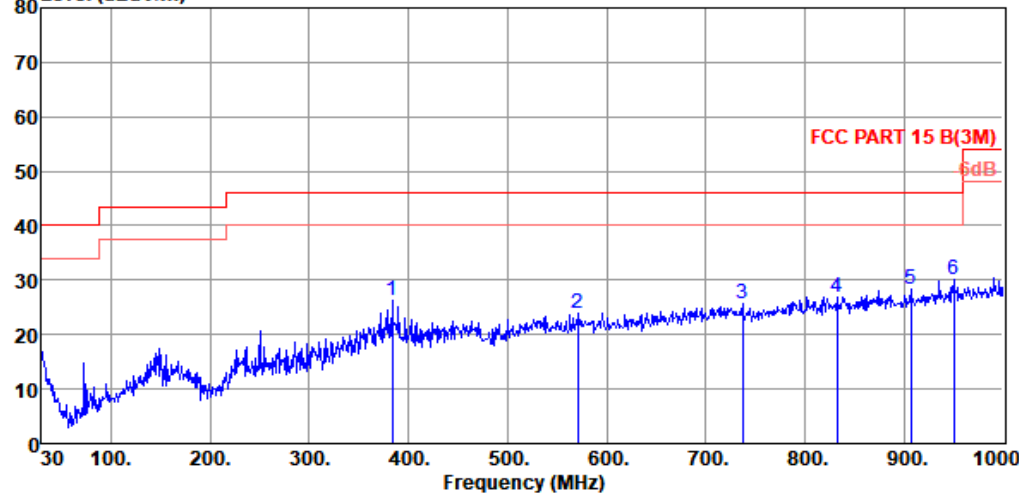
	Freq. (MHz)	ANT Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	72.68	6.62	0.52	16.04	23.18	40.00	16.82	QP
2	476.20	17.14	2.25	4.65	24.04	46.00	21.96	QP
3	674.08	21.50	2.76	1.05	25.31	46.00	20.69	QP
4	782.72	22.90	2.92	0.61	26.43	46.00	19.57	QP
5	897.18	23.84	3.31	0.63	27.78	46.00	18.22	QP
6	953.44	24.84	3.90	0.49	29.23	46.00	16.77	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

Data: 48 File: \\emc-966-2\test data\2022\RFIC\Chao Sheng\BeSound Core.EM6 (64) Date: 2022-10-18



Site no. : 2# 966 chamber Data no. : 48
Dis. / Ant. : 3m 47018 Ant. pol. : HORIZONTAL
Limit : FCC PART 15 B(3M)
Env. / Ins. : Temp:20.6°C;Humi:42%;Press:101.52kPa
Engineer : Frank
EUT : Audio Converter Box
Power : DC 5V From Adapter Input AC 120V/60Hz
M/N : BeoSound Core
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	384.05	15.98	1.84	8.51	26.33	46.00	19.67	QP
2	571.26	19.91	2.49	1.52	23.92	46.00	22.08	QP
3	737.13	21.87	3.07	0.78	25.72	46.00	20.28	QP
4	832.19	23.52	3.16	0.25	26.93	46.00	19.07	QP
5	906.88	24.04	3.28	0.97	28.29	46.00	17.71	QP
6	950.53	24.81	3.84	1.54	30.19	46.00	15.81	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.



4. AC POWER LINE CONDUCTED EMISSIONS

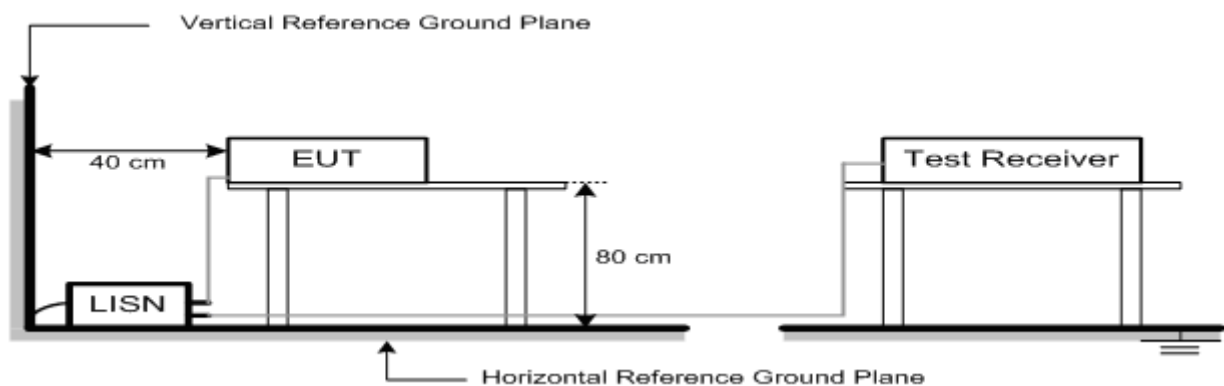
4.1. Limit

Frequency			Maximum RF Line Voltage	
			Quasi-Peak Level dB(μ V)	Average Level dB(μ V)
150kHz	~	500kHz	66 ~ 56*	56 ~ 46*
500kHz	~	5MHz	56	46
5MHz	~	30MHz	60	50

Notes:

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

4.2. Test Setup



4.3. 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

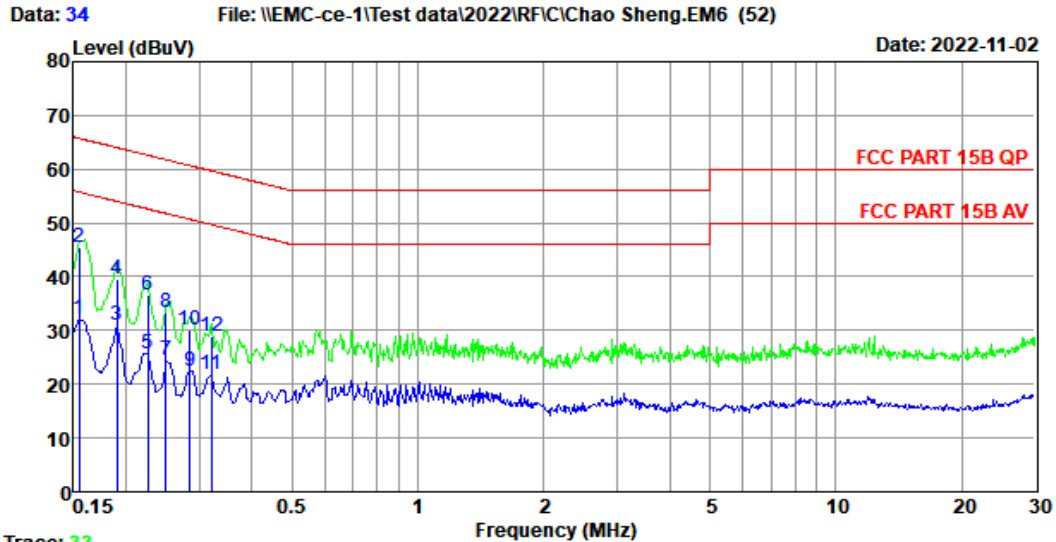
4.4. Test Procedure

- 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 4.3.
- 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.

4.5. Test Result

EST Technology

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



Site no. : 1#CE Shield Room Data no. : 34
 Env. / Ins. : Temp:24.3°C Humi:51.6% Press:101.50kPa: NEUTRAL
 Limit : FCC PART 15B QP
 Engineer : CXQ
 EUT : Audio Converter Box
 Power : DC 5V From Adapter Input AC 120V/60Hz
 M/N : BeoSound Core
 Test Mode : TX Mode

	Freq. (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.15	10.14	9.69	12.28	32.11	55.74	23.63	Average
2	0.15	10.14	9.69	25.69	45.52	65.74	20.22	QP
3	0.19	10.37	9.77	10.84	30.98	54.02	23.04	Average
4	0.19	10.37	9.77	19.55	39.69	64.02	24.33	QP
5	0.23	10.31	9.84	5.56	25.71	52.61	26.90	Average
6	0.23	10.31	9.84	16.38	36.53	62.61	26.08	QP
7	0.25	10.24	9.92	4.29	24.45	51.78	27.33	Average
8	0.25	10.24	9.92	13.20	33.36	61.78	28.42	QP
9	0.28	10.21	9.92	2.40	22.53	50.68	28.15	Average
10	0.28	10.21	9.92	10.08	30.21	60.68	30.47	QP
11	0.32	10.18	9.92	1.67	21.77	49.71	27.94	Average
12	0.32	10.18	9.92	8.73	28.83	59.71	30.88	QP

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

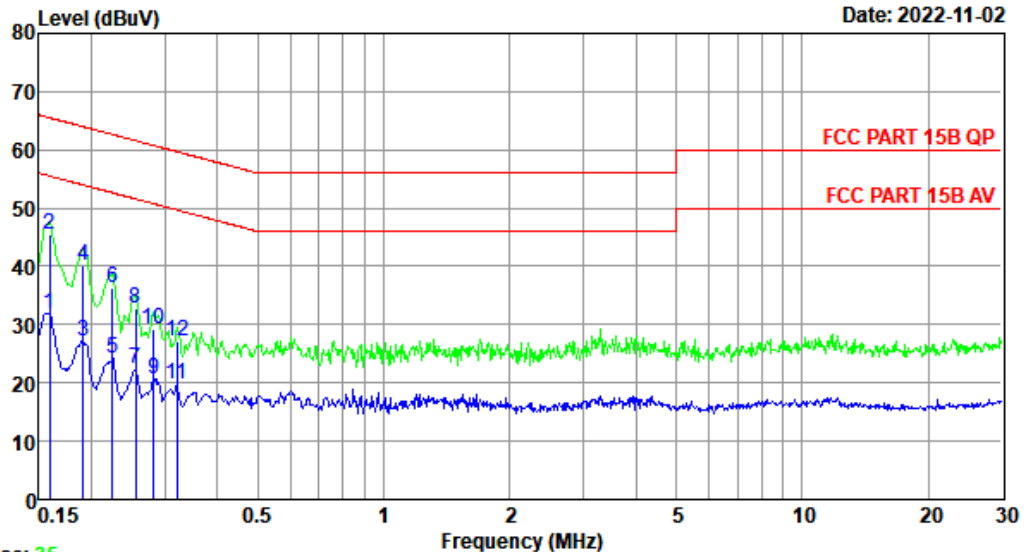
EST Technology

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

Data: 36

File: \\EMC-ce-1\Test data\2022\RFIC\Chao Sheng.EM6 (52)

Date: 2022-11-02



Trace: 35

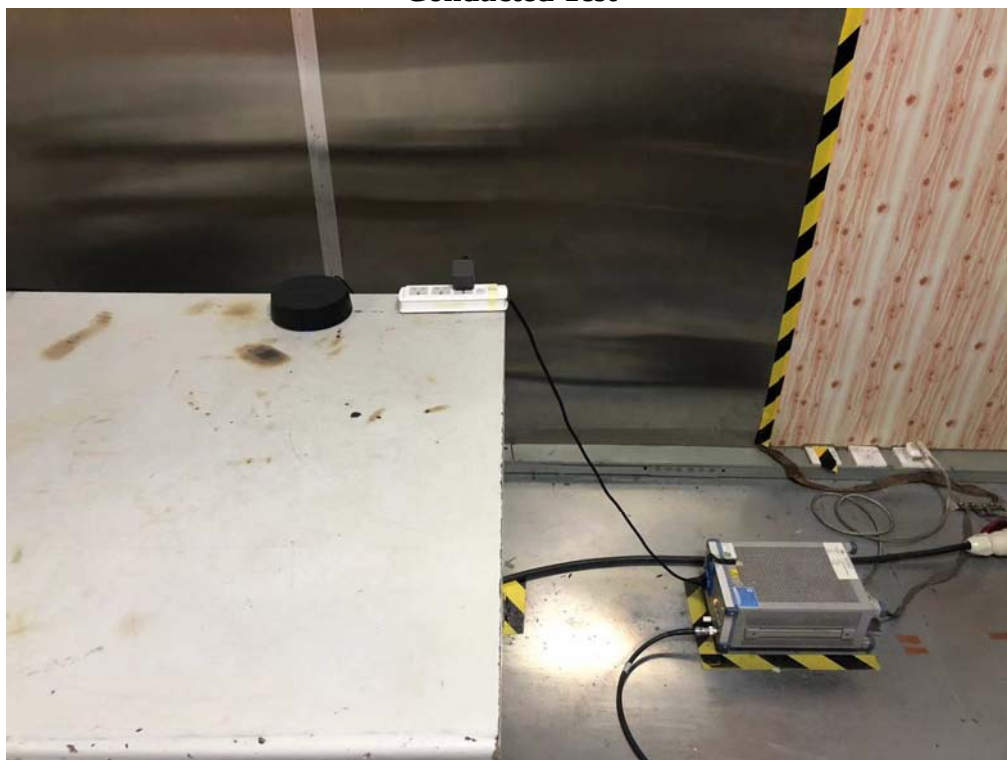
Site no. : 1#CE Shield Room Data no. : 36
 Env. / Ins. : Temp:24.3'C Humi:51.6% Press:101.50kPa: LINE
 Limit : FCC PART 15B QP
 Engineer : CXQ
 EUT : Audio Converter Box
 Power : DC 5V From Adapter Input AC 120V/60Hz
 M/N : BeoSound Core
 Test Mode : TX Mode

	Freq. (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.16	9.98	9.69	12.28	31.95	55.52	23.57	Average
2	0.16	9.98	9.69	25.72	45.39	65.52	20.13	QP
3	0.19	9.89	9.77	7.39	27.05	53.98	26.93	Average
4	0.19	9.89	9.77	20.51	40.17	63.98	23.81	QP
5	0.22	9.91	9.84	4.36	24.11	52.66	28.55	Average
6	0.22	9.91	9.84	16.42	36.17	62.66	26.49	QP
7	0.25	9.94	9.92	2.70	22.56	51.60	29.04	Average
8	0.25	9.94	9.92	12.79	32.65	61.60	28.95	QP
9	0.28	9.91	9.92	0.90	20.73	50.76	30.03	Average
10	0.28	9.91	9.92	9.49	29.32	60.76	31.44	QP
11	0.32	9.89	9.92	0.03	19.84	49.71	29.87	Average
12	0.32	9.89	9.92	7.32	27.13	59.71	32.58	QP

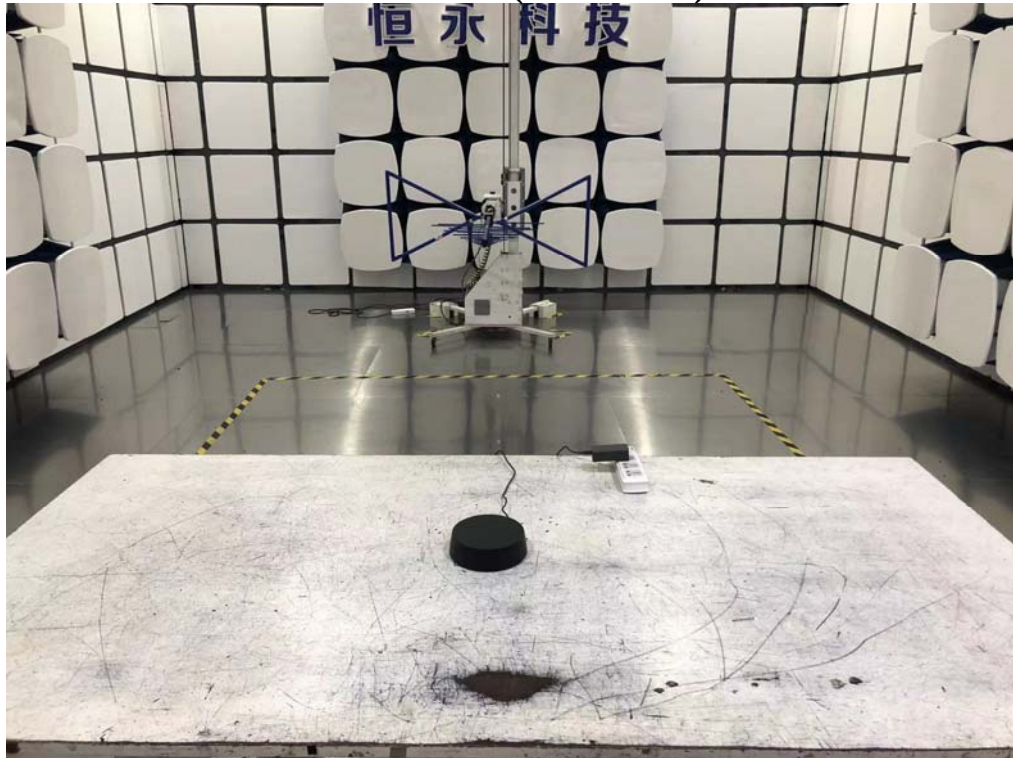
Remarks: 1. Emission Level= LISN Factor + Cable Loss + Reading.
 2. Margin= Limit - Emission Level.
 3. If the average limit is met when using a quasi-peak detector,
 the EUT shall be deemed to meet both limits and measurement
 with average detector is unnecessary.

5. TEST SETUP PHOTO

Conducted Test

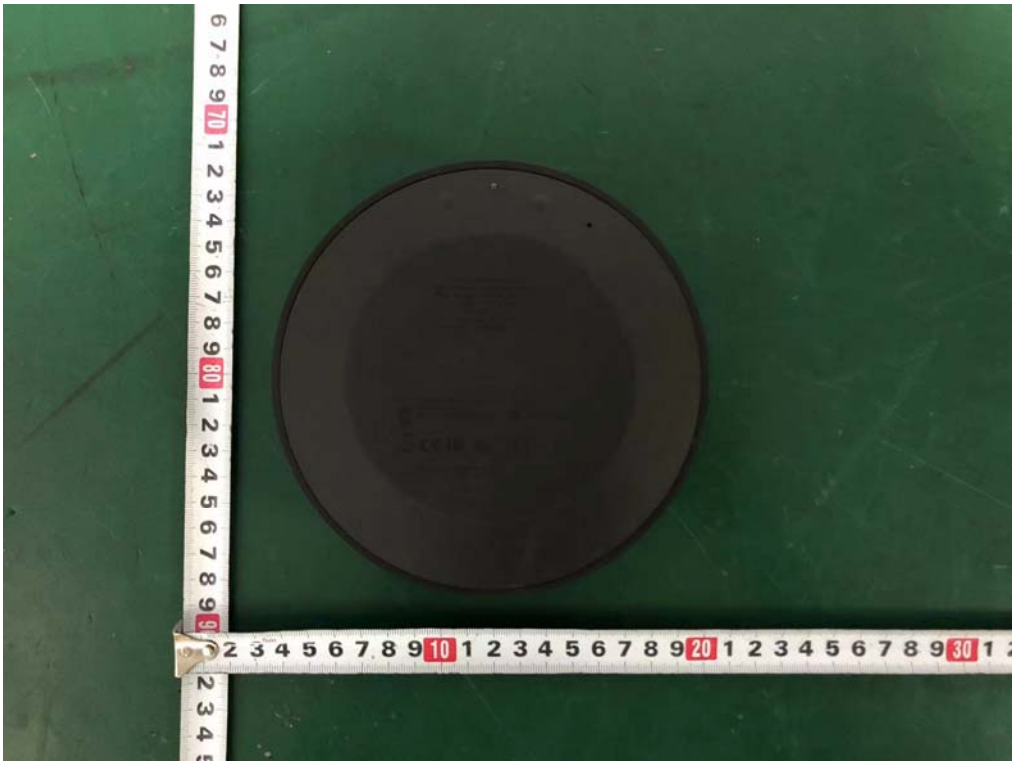
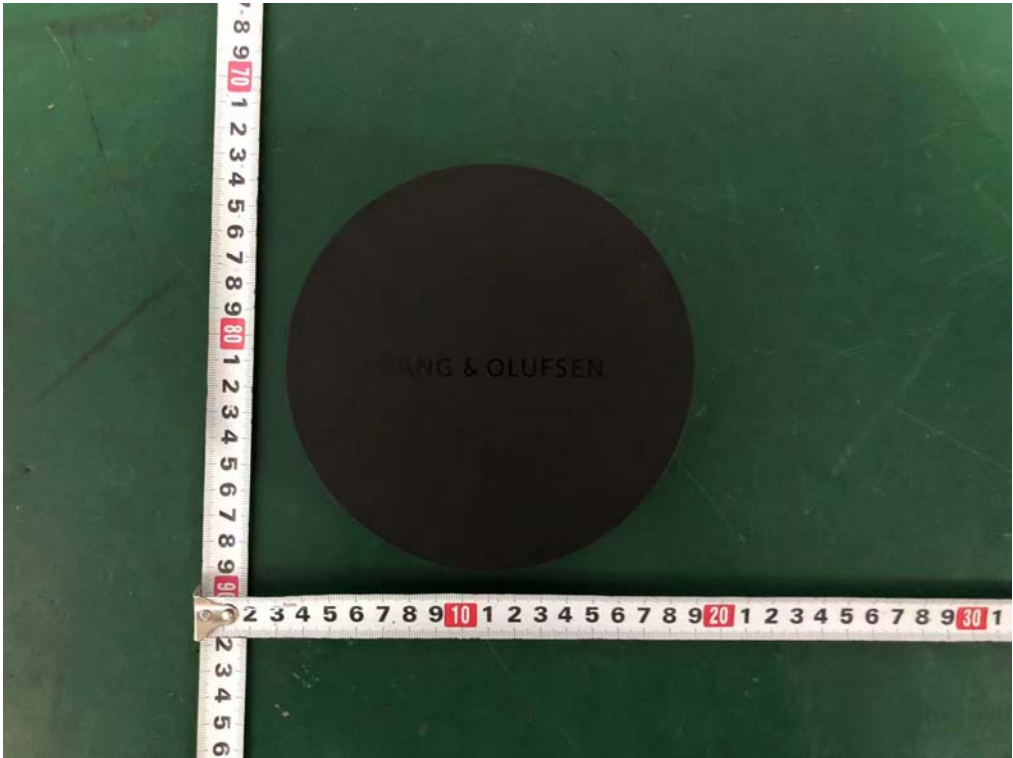


Radiated Test (Below 1GHz)

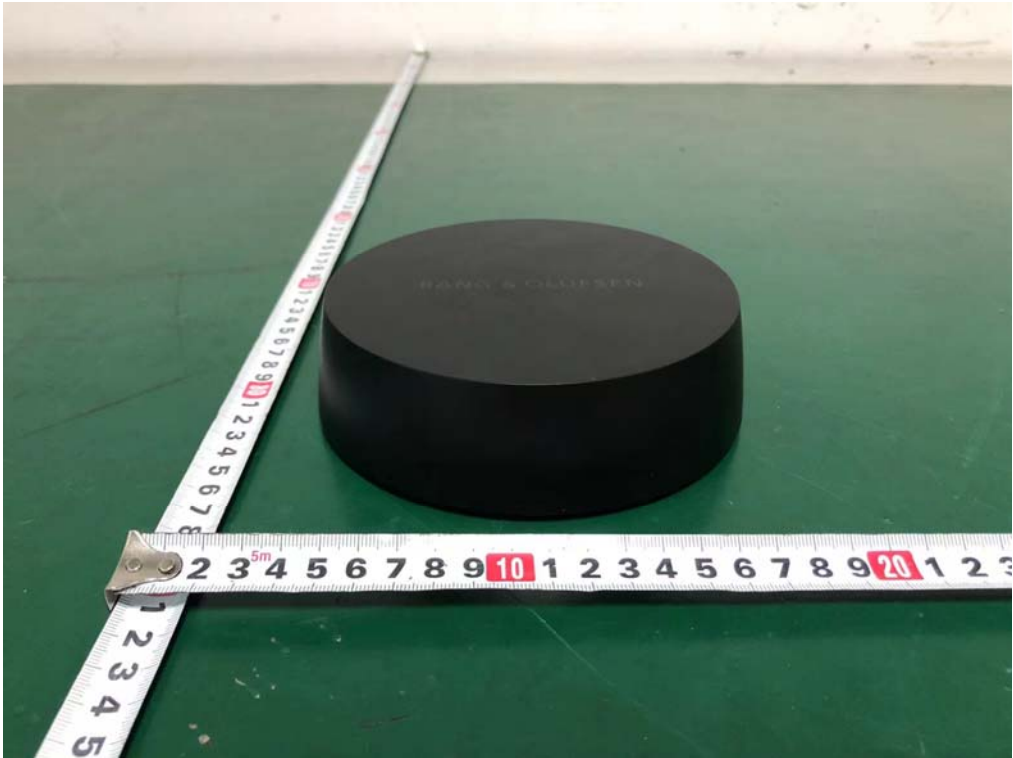


6. EUT PHOTO

External Photos
M/N: BeoSound Core



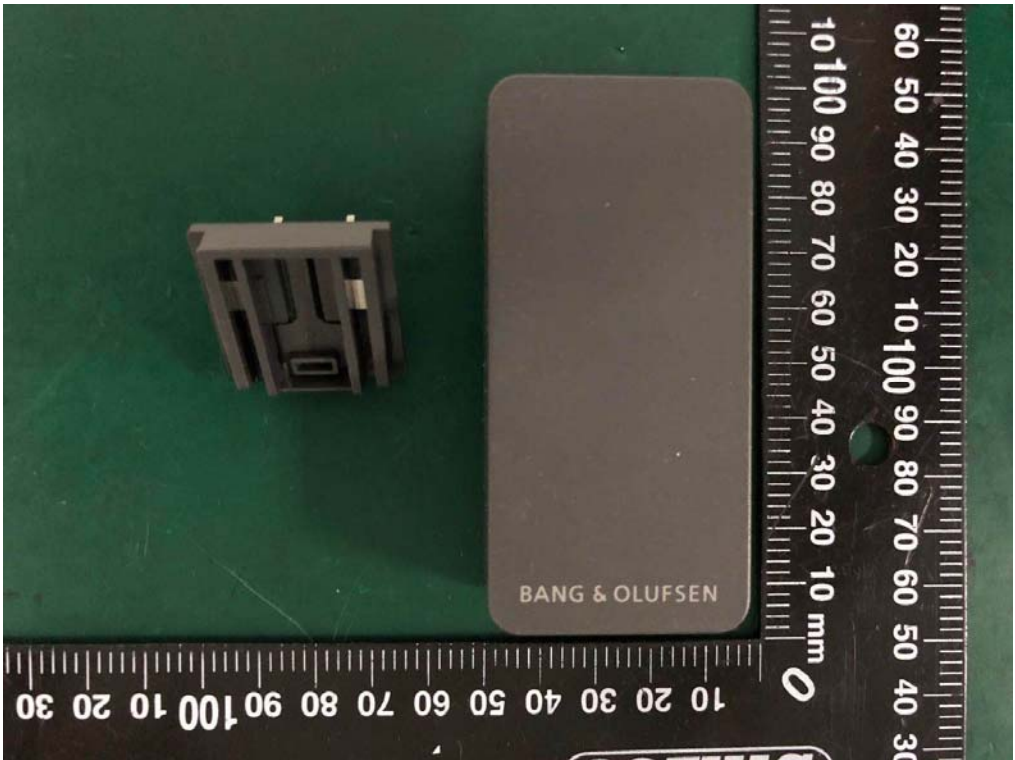
External Photos
M/N: BeoSound Core



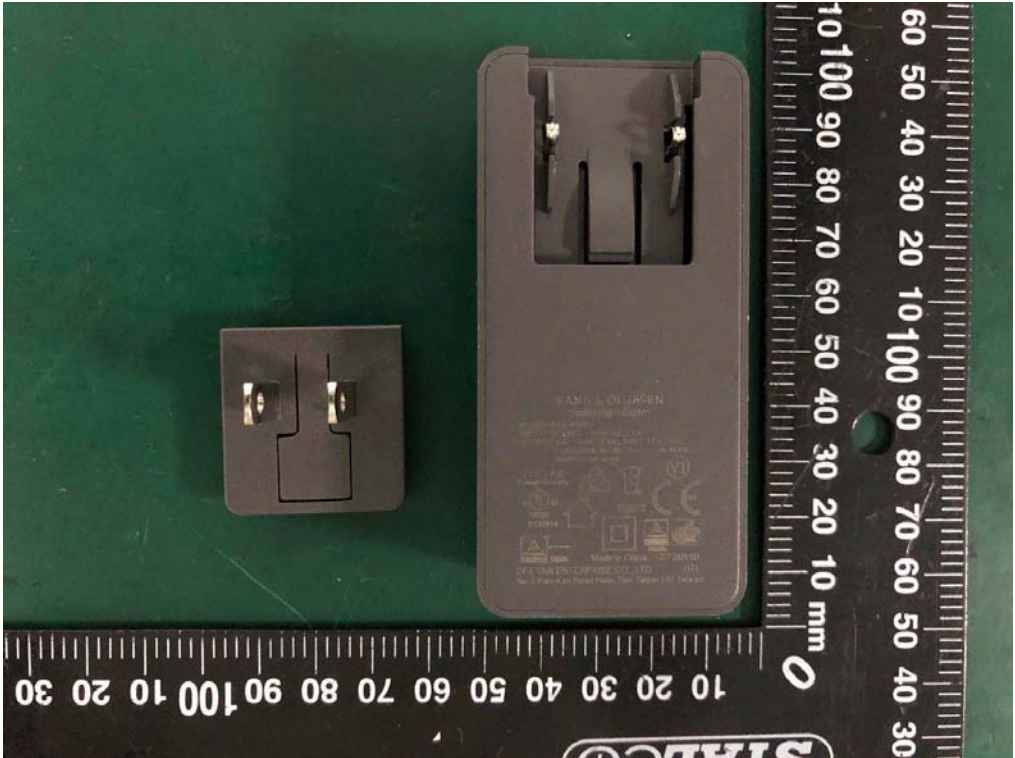
External Photos
M/N: BeoSound Core



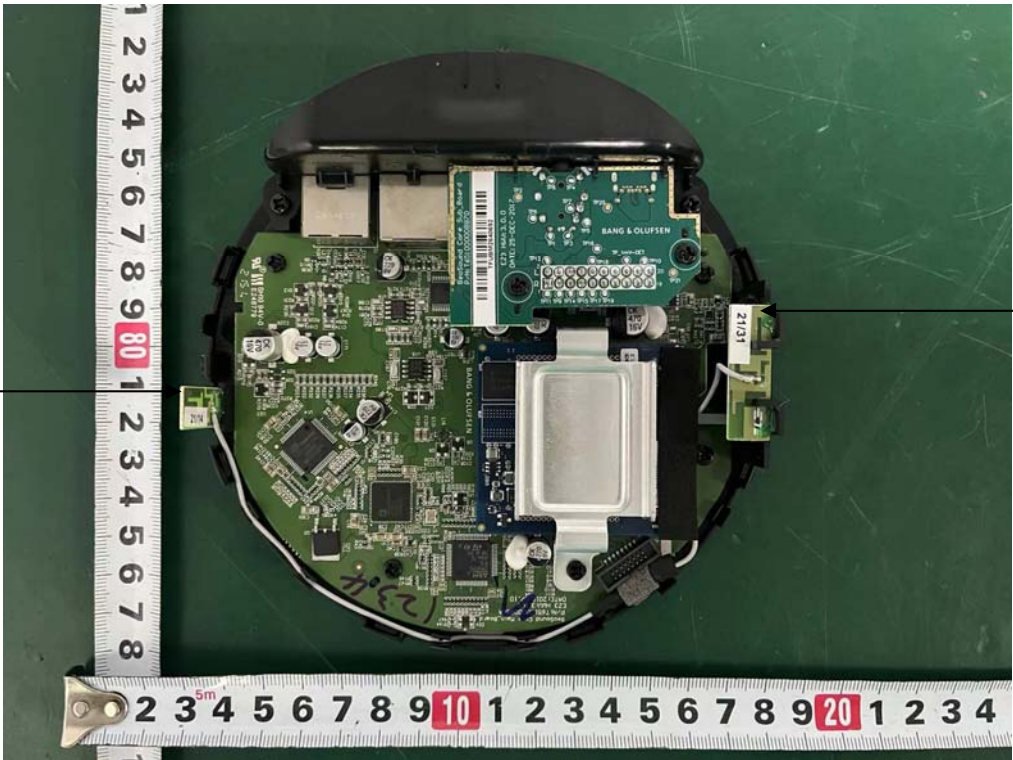
External Photos
M/N: BeoSound Core



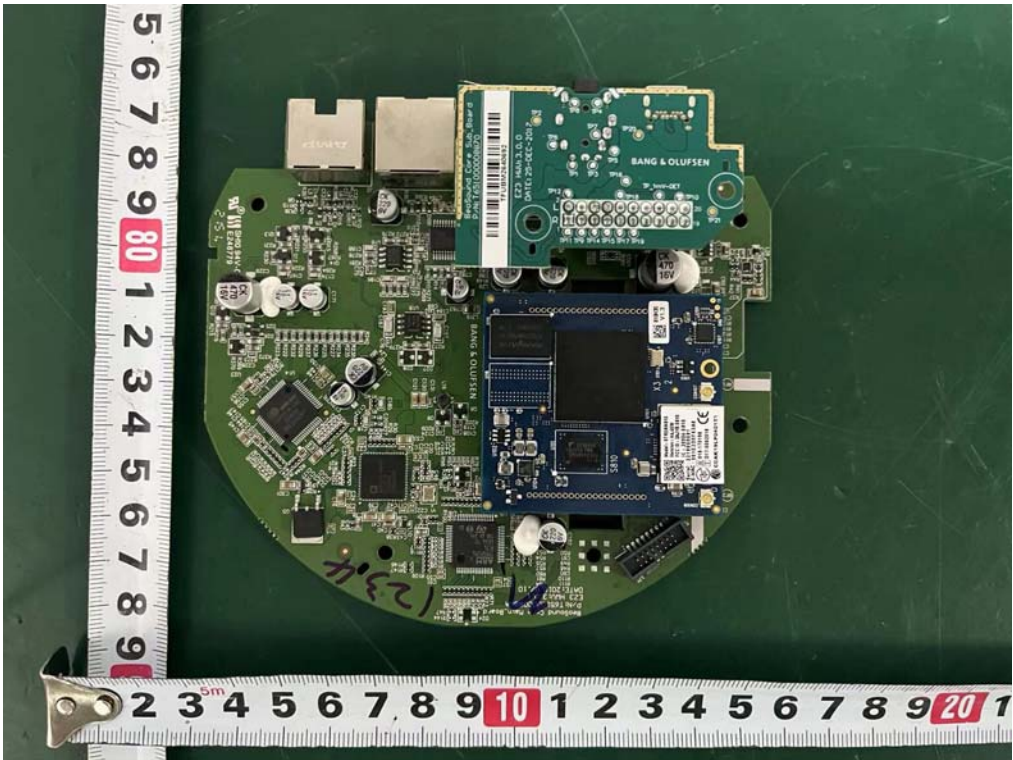
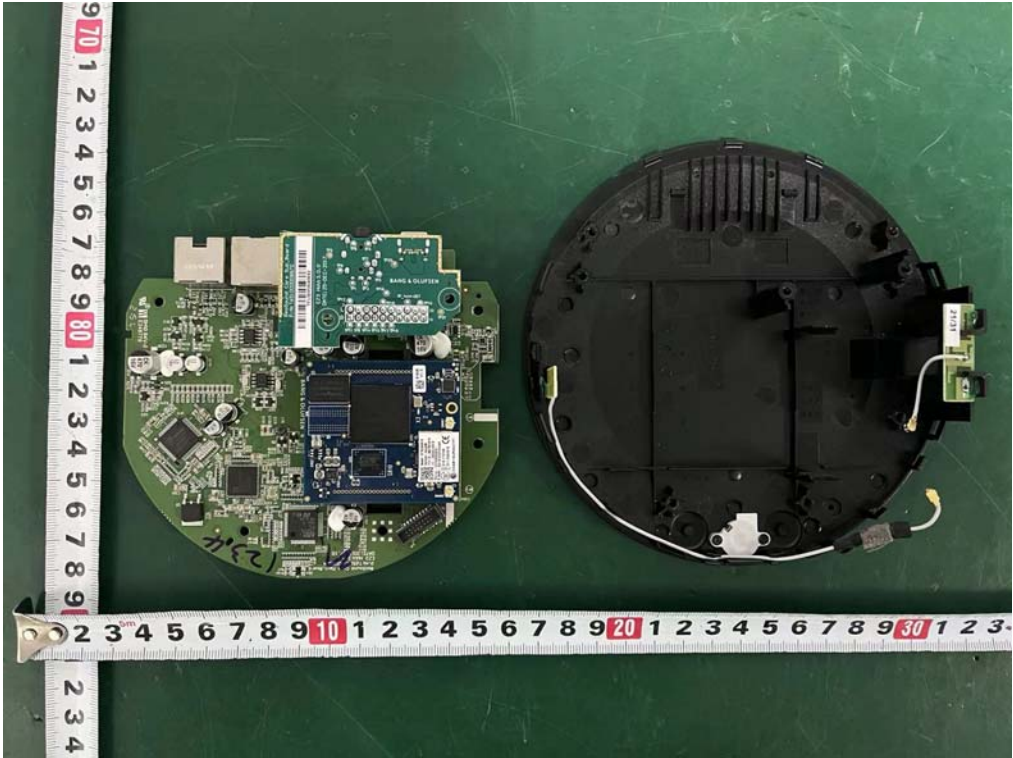
External Photos
M/N: BeoSound Core



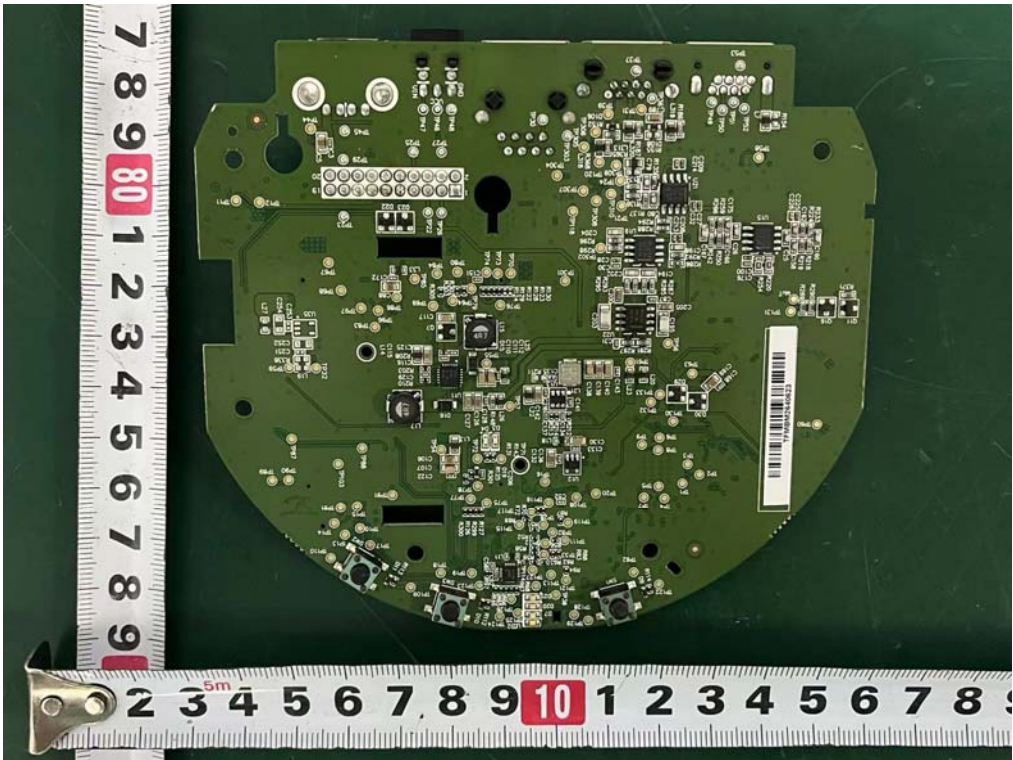
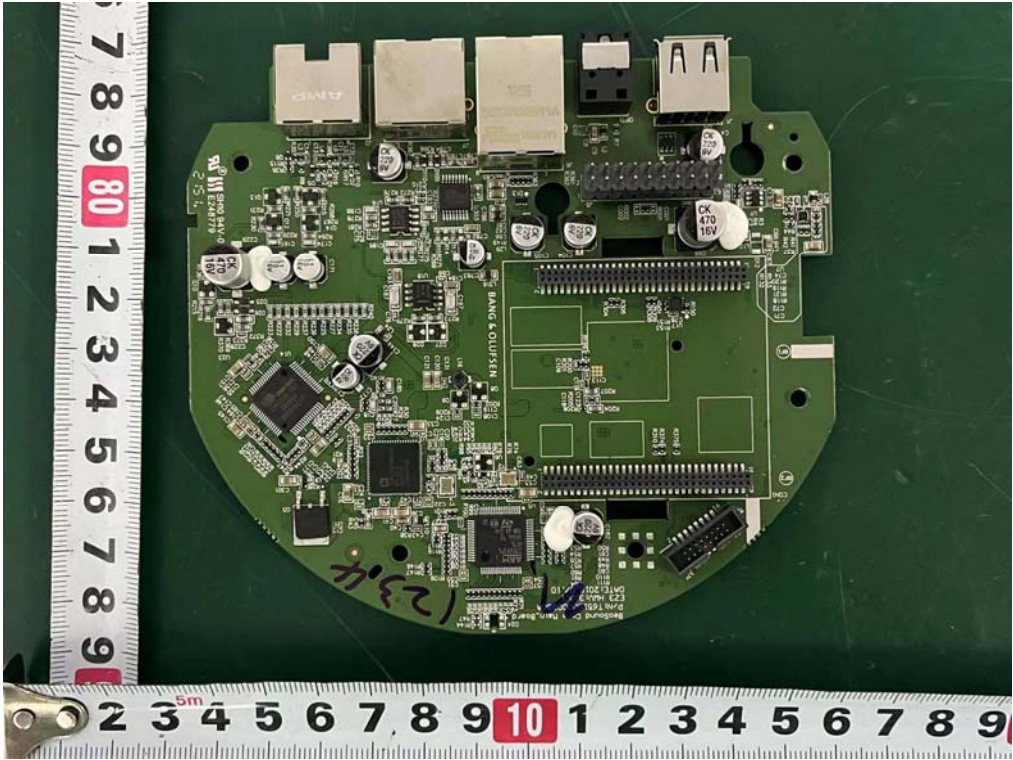
Internal Photos
M/N: BeoSound Core



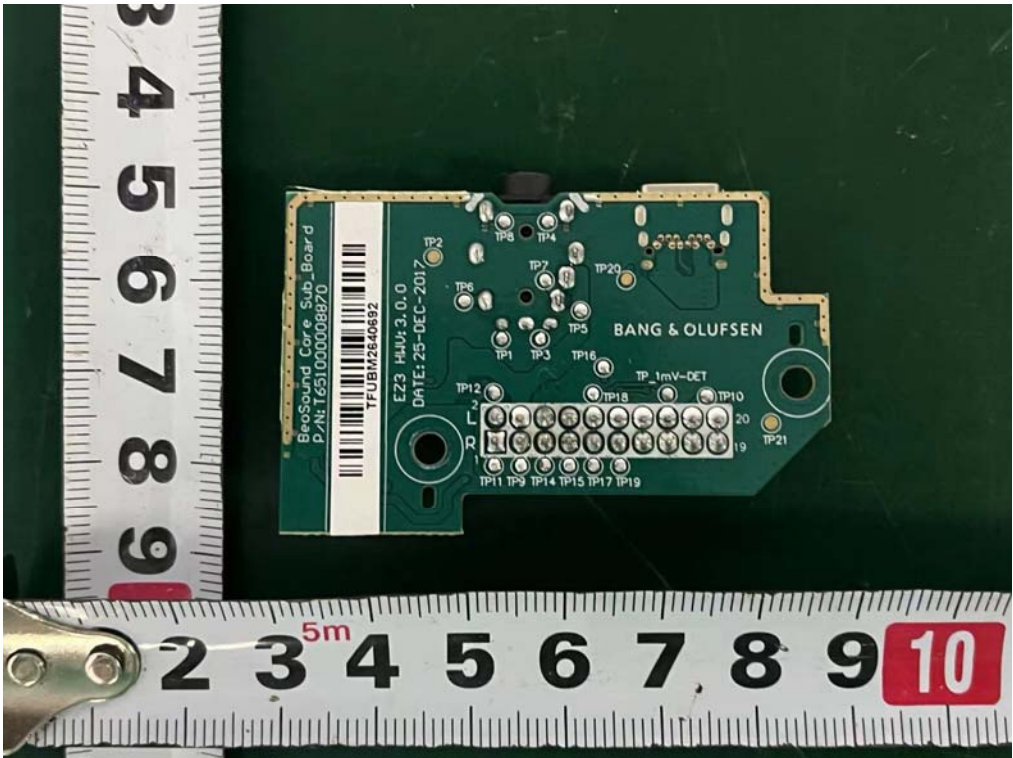
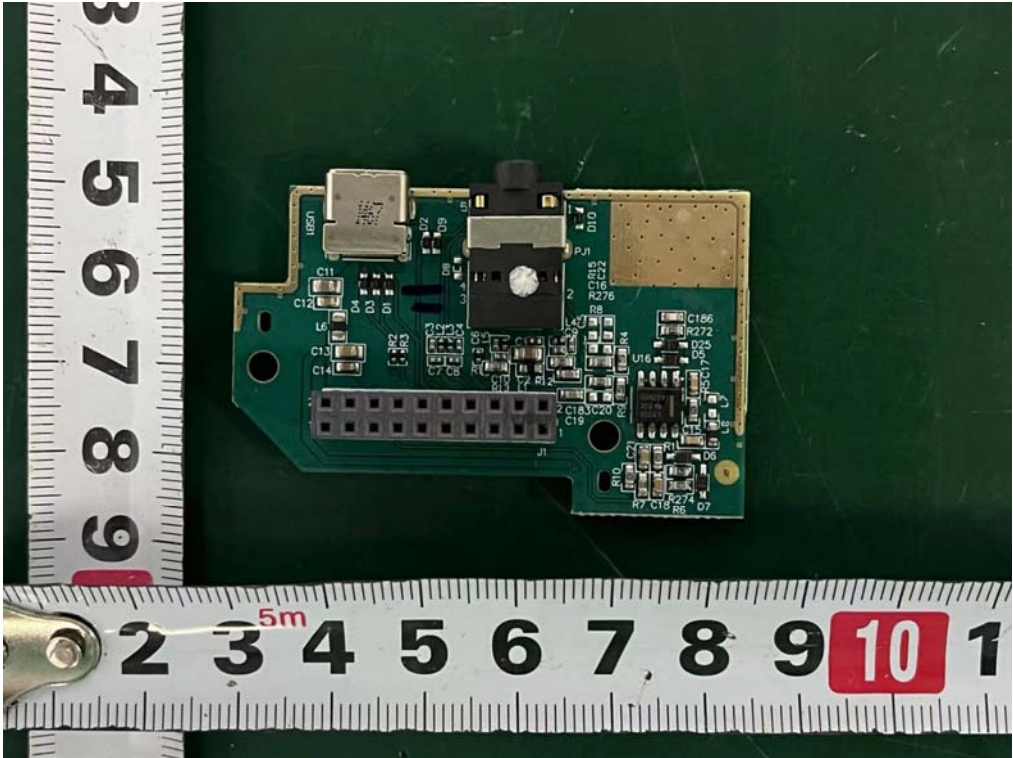
Internal Photos
M/N: BeoSound Core



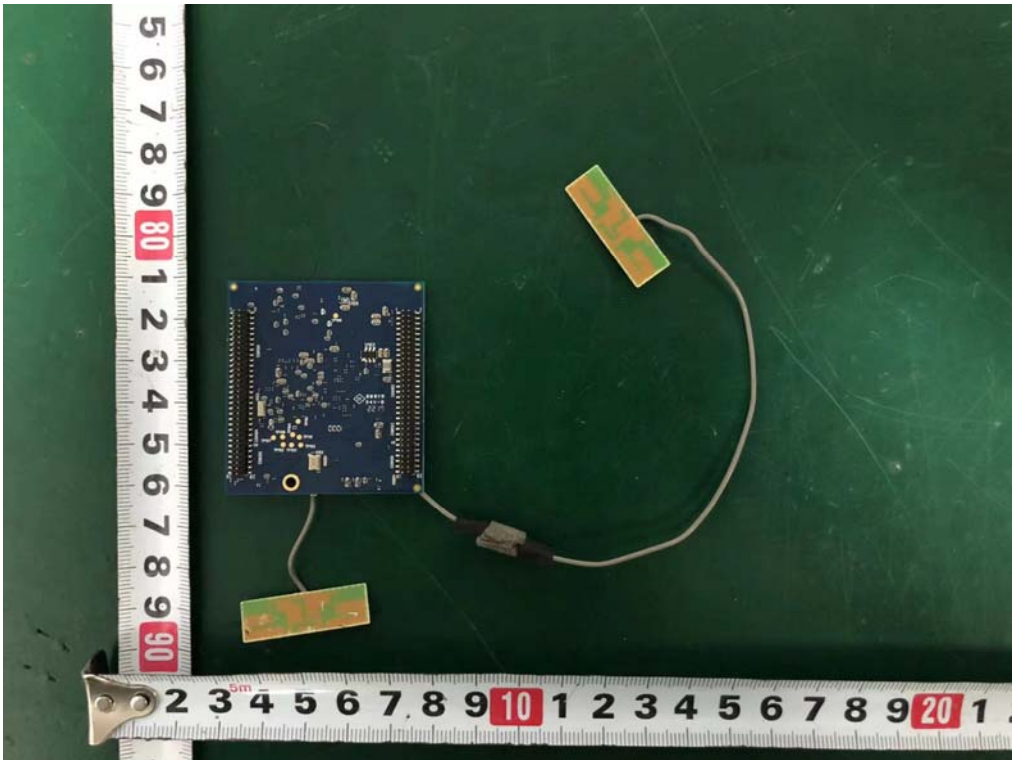
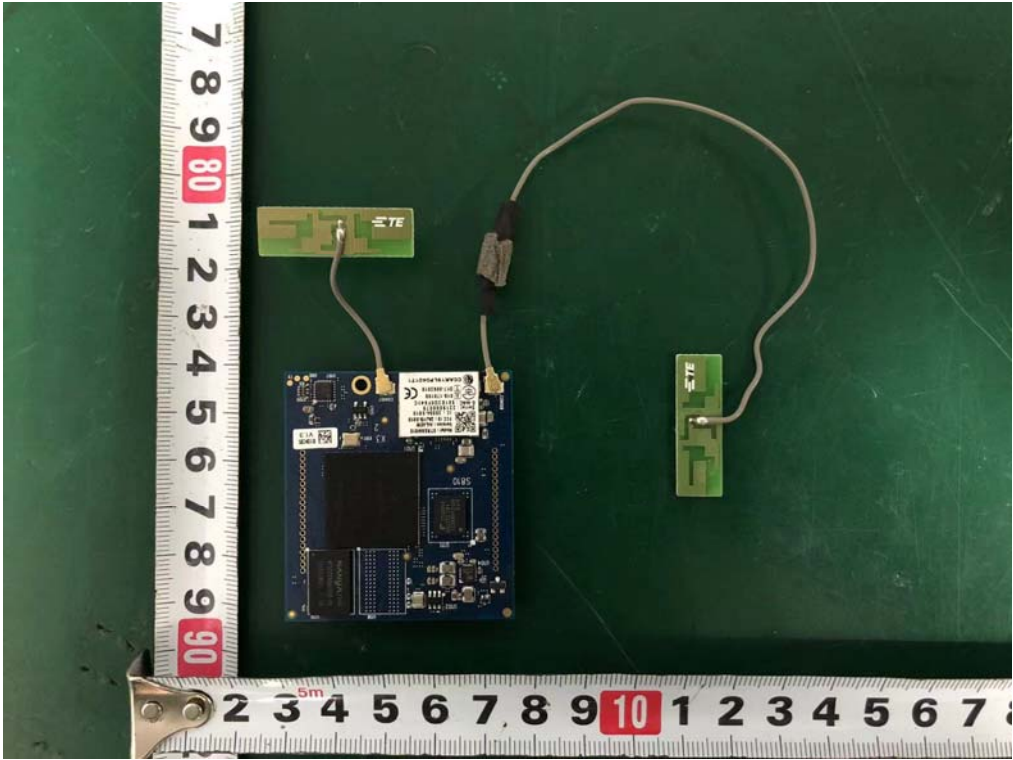
Internal Photos
M/N: BeoSound Core



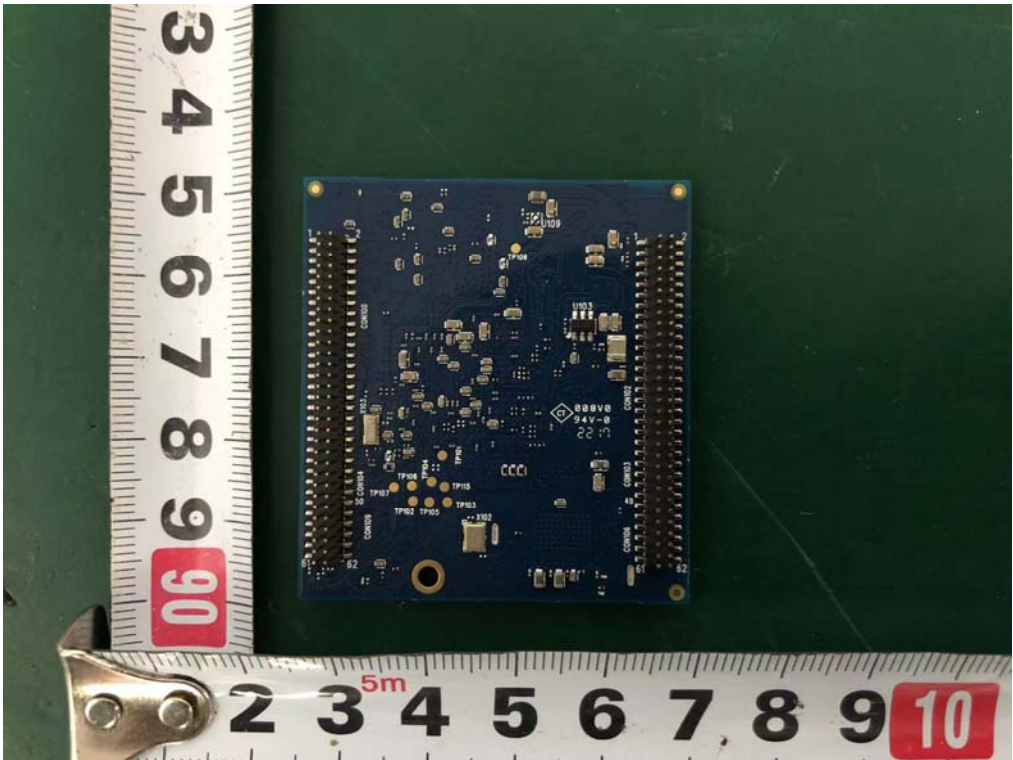
Internal Photos
M/N: BeoSound Core



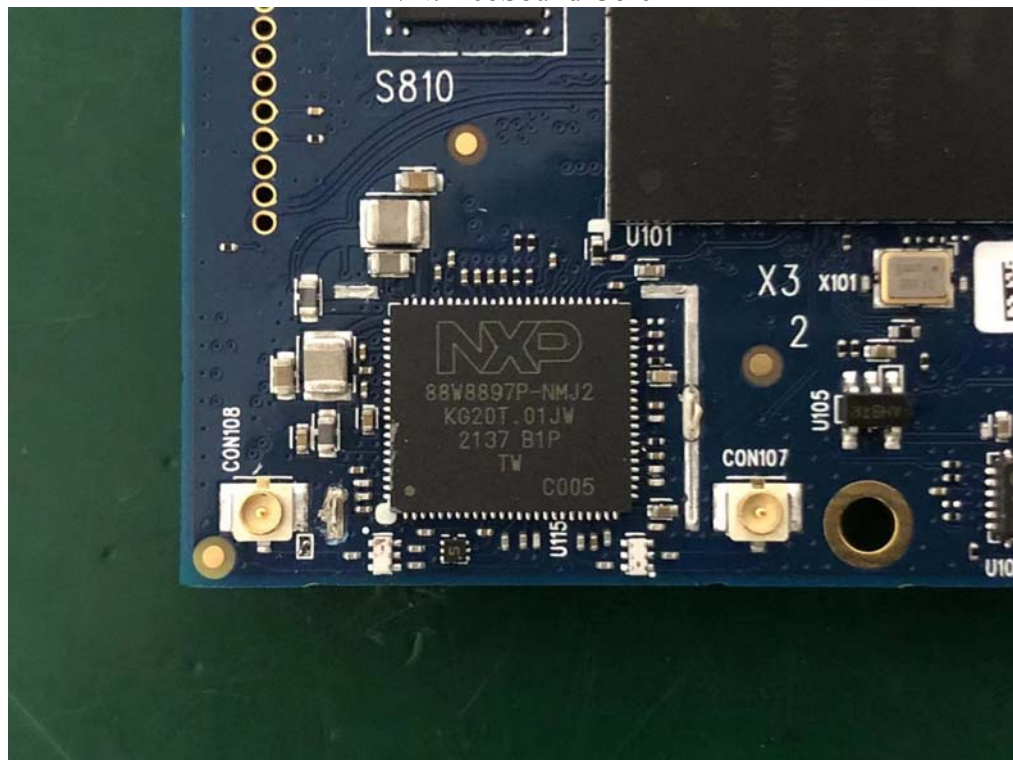
Internal Photos
M/N: BeoSound Core



Internal Photos
M/N: BeoSound Core



Internal Photos
M/N: BeoSound Core



End of Test Report