FCC Test Report

Report No.: AGC05915170608FE03

FCC ID : 2AB7K-A3106

APPLICATION PURPOSE: Class II Permissive Change

PRODUCT DESIGNATION: SoundCore2

BRAND NAME: Anker

MODEL NAME : A3105, A3106011, A3106091, A3106031,

A3105011, A3105091, A3105031

CLIENT : Anker Technology Co., Limited

DATE OF ISSUE : Jun.30, 2017

STANDARD(S)

TEST PROCEDURE(S)

: FCC Part 15 Rules

REPORT VERSION: V1.1

Attestation of Global Compliance (Shenzhen) Co., Ltd

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Report Revise Record

Report Version	Revise Time	Issued Date	Valid Version	Notes
V1.0	/	Mar.09, 2017	Valid	Original Report
V1.1	1 st	Jun.30, 2017	Valid	Revise Report

Note: Owing to the product under testing was identical with the AGC05915170203FE03's product except for the appearance materials, mainboard PCB and model name. So the test data may refer to the AGC05915170203FE03 except for the data of radiated emission, band edge emission and conducted emission.

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1. VERIFICATION OF CONFORMITY

Applicant	Anker Technology Co., Limited		
Address	Room 1318-19, Hollywood Plaza, 610 Nathan Road, Mongkok, Kowloon, Hongkong		
Manufacturer Anker Technology Co., Limited			
Address Room 1318-19, Hollywood Plaza, 610 Nathan Road, Mongkok, Kow Hongkong			
Product Designation	SoundCore2		
Brand Name Anker			
Test Model	A3105		
Series Model A3106, A3106011, A3106091, A3106031, A3105011, A3105091,			
Model difference	All the same except for the appearance		
Date of test Jun.18, 2017 to Jun.20, 2017			
Deviation None			
Condition of Test Sample	Normal		
Report Template	AGCRT-US-BR/RF		

We hereby certify that:

The above equipment was tested by Dongguan Precise Testing Service Co., Ltd. The test data, the energy emitted by the sample tested as described in this report is in compliance with the requirements of FCC Rules Part 15.249.

Tested By	Time thung-	
	Time Huang(Huang Nanhui)	Jun.20, 2017
Reviewed By	Lowery ce	
	Forrest Lei(Lei Yonggang)	Jun.30, 2017
Approved By	golga zbang	
-	Solger Zhang(Zhang Hongyi) Authorized Officer	Jun.30, 2017

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2. GENERAL INFORMATION

2.1. PRODUCT DESCRIPTION

A major technical description of EUT is described as following

Operation Frequency 2.402 GHz to 2.480GHz		
RF Output Power	1.38dBm(Max EIRP Power=Max radiation field-95.2)	
Bluetooth Version	V4.2	
Modulation	GFSK, π /4-DQPSK, 8DPSK	
Number of channels	79	
Hardware Version	С	
Software Version	V18	
Antenna Designation	PCB Antenna	
Antenna Gain	3.6dBi	
Power Supply	DC 7.4V by battery	

Note: The EUT didn't support BLE.

2.2. TABLE OF CARRIER FREQUENCYS

Frequency Band	Channel Number	Frequency
	0	2402MHz
	1	2403MHz
	:	:
	38	2440 MHz
2400~2483.5MHz	39	2441 MHz
	40	2442 MHz
	:	:
	77	2479 MHz
	78	2480 MHz

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3. MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement y $\pm U$, where expended uncertainty U is based on a standard uncertainty multiplied by a coverage factor of k=2, providing a level of confidence of approximately 95 % \circ

No.	Item	Uncertainty
1	Conducted Emission Test	±3.18dB
2	All emissions,radiated	±3.91dB
3	Temperature	±0.5°C
4	Humidity	±2%

4. DESCRIPTION OF TEST MODES

NO.	TEST MODE DESCRIPTION
1	Low channel TX(GFSK)
2	Middle channel TX (GFSK)
3	High channel TX (GFSK)
4	Low channel TX(π/4-DQPSK)
5	Middle channel TX(π/4-DQPSK)
6	High channel TX (π/4-DQPSK)
7	Low channel TX(8DPSK)
8	Middle channel TX (8DPSK)
9	High channel TX (8DPSK)
10	BT Link with charging
11	BT Link

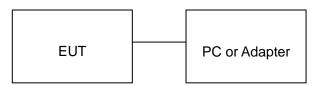
- 1. All the test modes can be supply by battery, only the result of the worst case was recorded in the report, if no other cases.
- 2. For Radiated Emission, 3axis were chosen for testing for each applicable mode.
- 3. The EUT used fully-charged battery when tested.

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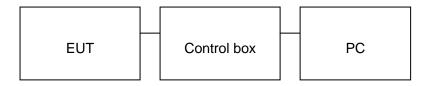
5. SYSTEM TEST CONFIGURATION

5.1. CONFIGURATION OF EUT SYSTEM

Configure 1: (Normal hopping)



Configure 2: (Control continuous TX)



5.2. EQUIPMENT USED IN EUT SYSTEM

Item	Equipment	Model No. ID or Specification		Remark
1	lpod	APPLE	APPLE A1367	
2	PC	Sony	E1412AYCW	A.E
3	PC Adapter	Sony	VGP-AC19V36	A.E
4	Control box	DOFLY	LY-USB-TIL V2.2	A.E
5	Adapter	IPRO	NTR-S01	A.E

5.3. SUMMARY OF TEST RESULTS

FCC RULES	DESCRIPTION OF TEST	RESULT
§15.249(a) §15.209	Radiated Emission	Compliant
§15.207	Conduction Emission	Compliant

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6. TEST FACILITY

Site Dongguan Precise Testing Service Co., Ltd.	
Location Building D,Baoding Technology Park,Guangming Road2,Dongcheng Distri Dongguan, Guangdong, China,	
FCC Registration No.	371540
Description	The test site is constructed and calibrated to meet the FCC requirements in documents ANSI C63.4:2014.

7 TEST METHODOLOGY

All measurements contained in this report were conducted with ANSI C63.10-2013.

8. ALL TEST EQUIPMENT LIST

FOR RADIATED EMISSION TEST (BELOW 1GHz)

Radiated Emission Test Site						
Name of Equipment	Manufacturer	Model Number	Serial Number	Last Calibration	Due Calibration	
EMI Test Receiver	ROHDE & SCHWARZBECK	ESCI	101417	July 4, 2016	July 3, 2017	
Trilog Broadband Antenna (25M-1GHz)	SCHWARZBECK	VULB9160	9160-3355	July 4, 2016	July 3, 2017	
Signal Amplifier	SCHWARZBECK	BBV 9475	9745-0013	July 4, 2016	July 3, 2017	
RF Cable	SCHWARZBECK	AK9515E	96221	July 4, 2016	July 3, 2017	
Multi-Device Positioning Controller	MAX-FULL	MF-7802	MF780208339	N/A	N/A	
Active loop antenna (9K-30MHz)	SCHWARZBECK	FMZB1519	1519-038	June 6, 2017	June 5, 2018	
Spectrum Analyzer	AGILENT	E4407B	MY46185649	June 6, 2017	June 5, 2018	
Radiation Cable 1	MXT	RS1	R005	June 6, 2017	June 5, 2018	
Radiation Cable 2	MXT	RS1	R006	June 6, 2017	June 5, 2018	

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FOR RADIATED EMISSION TEST (1GHz ABOVE)

T GIVITO ID IN VIEW ENVIRON	ON NADIATED EMIGGION TEST (TOTIZADOVE)											
	Radiat	ted Emission Tes	t Site									
Name of Equipment	Manufacturer	Model Number	Serial Number	Last Calibration	Due Calibration							
EMI Test Receiver	ROHDE & SCHWARZBECK	ESCI	101417	July 4, 2016	July 3, 2017							
Horn Antenna (1G-18GHz)	SCHWARZBECK	BBHA9120D	9120D-1246	July 11, 2016	July 10, 2017							
Spectrum Analyzer	AGILENT	E4411B	MY4511453	July 4, 2016	July 3, 2017							
Signal Amplifier	SCHWARZBECK	BBV 9718	9718-269	July 7, 2016	July 6, 2017							
RF Cable	SCHWARZBECK	AK9515H	96220	July 8, 2016	July 7, 2017							
MULTI-DEVICE Positioning Controller	MAX-FULL	MF-7802	MF780208339	N/A	N/A							
Horn Ant (18G-40GHz)	SCHWARZBECK	BBHA 9170	9170-181	June 6, 2017	June 5, 2018							
Radiation Cable 1	MXT	RS1	R005	June 6, 2017	June 5, 2018							
Radiation Cable 2	MXT	RS1	R006	June 6, 2017	June 5, 2018							

	Conducted Emission Test Site												
Name of Equipment	Manufacturer	Model Number	Serial Number	Last Calibration	Due Calibration								
EMI Test Receiver	ROHDE & SCHWARZBECK	ESCI	101417	July 4, 2016	July 3, 2017								
Artificial Mains Network	NARDA	L2-16B	000WX31025	July 8, 2016	July 7, 2017								
Artificial Mains Network (AUX)	NARDA	L2-16B	000WX31026	July 8, 2016	July 7, 2017								
RF Cable	SCHWARZBECK	AK9515E	96222	July 4, 2016	July 3, 2017								
Shielded Room	CHENGYU	843	PTS-002	June 6, 2017	June 5, 2018								
Conduction Cable	MXT	SE1	S003	June 6, 2017	June 5, 2018								

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9. RADIATED EMISSION

9.1TEST LIMIT

Standard FCC15.249

Fundamental Frequency	Field Strength of Fundamental	Field Strength of Harmonics
	(millivolts/meter)	(microvolts/meter)
900-928MHz	50	500
2400-2483.5MHz	50	500
5725-5875MHz	50	500
24.0-24.25GHz	250	2500

Standard FCC 15.209

Frequency	Distance	Field Stre	ngths Limit
(MHz)	MHz) Meters		dB(μV)/m
0.009 ~ 0.490	300	2400/F(kHz)	
0.490 ~ 1.705	30	24000/F(kHz)	
1.705 ~ 30	30	30	
30 ~ 88	3	100	40.0
88 ~ 216	3	150	43.5
216 ~ 960	3	200	46.0
960 ~ 1000	3	500	54.0
Above 1000	3	Other:74.0 dB(µV)/m (Pea	k) 54.0 dB(μV)/m (Average)

Remark:

- (1) Emission level dB μ V = 20 log Emission level μ V/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.

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9.2. MEASUREMENT PROCEDURE

- 1. The measuring distance of 3m shall be used for measurements. The EUT was placed on the top of a rotating table 0.8 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation(Below 1GHz)
- 2. The height of the test antenna shall vary between 1m to 4m.Both horizontal and vertical polarization Of the antenna are set to make the measurement.
- 3. The initial step in collecting radiated emission data is a receive peak detector mode. Pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
- 4. All readings are peak unless otherwise stated QP in column of Note. Peak denoted that the Peak reading compliance with the QP limits and then QP Mode measurement didn't perform(Below 1GHz)

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The following table is the setting of spectrum analyzer and receiver.

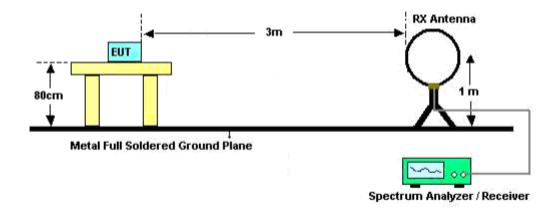
Spectrum Parameter	Setting
Start ~Stop Frequency	9KHz~150KHz/RB 200Hz for QP
Start ~Stop Frequency	150KHz~30MHz/RB 9KHz for QP
Start ~Stop Frequency	30MHz~1000MHz/RB 120KHz for QP

Receiver Parameter	Setting
Start ~Stop Frequency	9KHz~150KHz/RB 200Hz for QP
Start ~Stop Frequency	150KHz~30MHz/RB 9KHz for QP
Start ~Stop Frequency	30MHz~1000MHz/RB 120KHz for QP

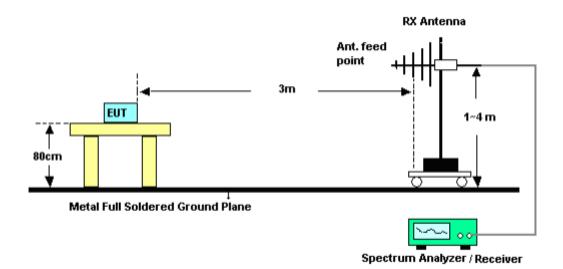
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9.3. TEST SETUP

RADIATED EMISSION TEST SETUP BELOW 30MHz

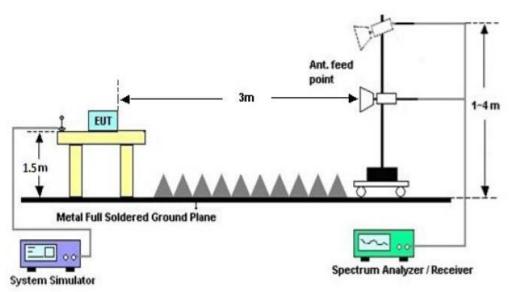


RADIATED EMISSION TEST SETUP 30MHz-1000MHz



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RADIATED EMISSION TEST SETUP ABOVE 1000MHz



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9.4. TEST RESULT

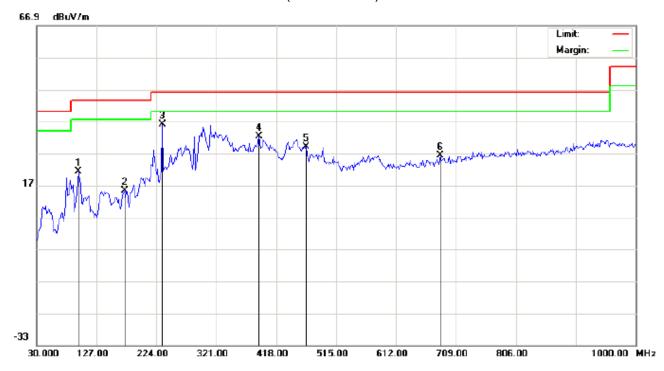
(Worst modulation:GFSK)

RADIATED EMISSION BELOW 30MHz

No emission found between lowest internal used/generated frequencies to 30MHz.

RADIATED EMISSION BELOW 1GHz

RADIATED EMISSION TEST- (30MHz-1GHz)-LOW CHANNEL-HORIZONTAL



Site: site #1 Polarization: Horizontal Temperature: 22.4
Limit: FCC Class B 3M Radiation Power: Humidity: 52.5 %

EUT: SoundCore2 Distance:

M/N: A3105

Mode: BT Link with charging

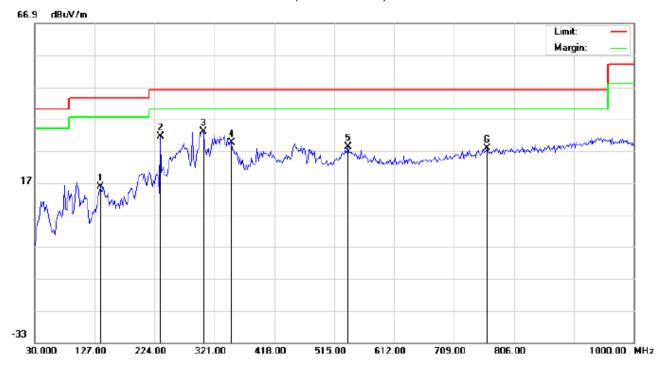
No.	Mk	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height		Comment
	-	MHz	dBu∀	dB/m	dBu∀/m	dBu∀/m	dB		cm	degree	
1		97.9000	12.91	8.38	21.29	43.50	-22.21	peak			
2		172.2667	4.48	10.78	15.26	43.50	-28.24	peak			
3	*	233.7000	27.57	8.56	36.13	46.00	-9.87	peak			
4		390.5167	13.25	19.01	32.26	46.00	-13.74	peak			
5		466.5000	8.30	20.77	29.07	46.00	-16.93	peak			
6		683.1333	1.47	24.74	26.21	46.00	-19.79	peak			

Temperature: 22.4

Humidity: 52.5 %

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RADIATED EMISSION TEST- (30MHz-1GHz)-LOW CHANNEL -VERTICAL



Polarization: Vertical

Site: site #1 Limit: FCC Class B 3M Radiation

EUT: SoundCore2

M/N: A3105

Mode: BT Link with charging

Note:

No.	Mk	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
	-	MHz	dBu∀	dB/m	dBu√/m	dBu∀/m	dB		cm	degree	
1		136.7000	2.11	13.66	15.77	43.50	-27.73	peak			
2		233.7000	22.95	8.56	31.51	46.00	-14.49	peak			
3	*	303.2167	17.39	15.62	33.01	46.00	-12.99	peak			
4		348.4833	10.87	18.64	29.51	46.00	-16.49	peak			
5		537.6333	6.05	22.15	28.20	46.00	-17.80	peak			
6		762.3500	1.09	26.80	27.89	46.00	-18.11	peak			

Power:

Distance:

RESULT: PASS

Note: 1. Factor=Antenna Factor + Cable loss, Margin=Measurement-Limit.

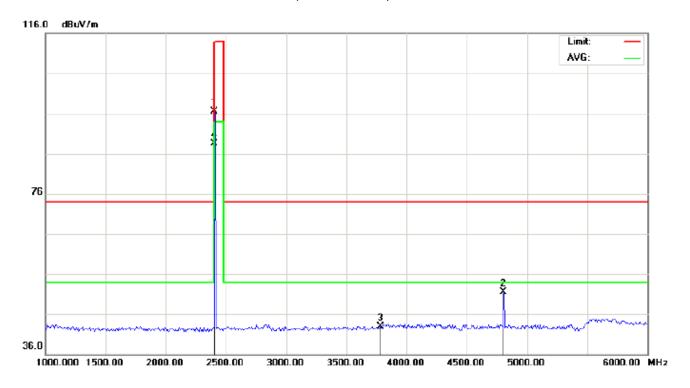
2. The "Factor" value can be calculated automatically by software of measurement system.

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RADIATED EMISSION ABOVE 1GHz

(Worst modulation: GFSK)

RADIATED EMISSION TEST- (ABOVE 1GHz)-LOW CHANNEL-HORIZONTAL



Site: site #1 Polarization: Horizontal Temperature: 22.7

Limit: FCC Class B 3M Radiation above 1GHz(PK)- Power: Humidity: 53.6 %

EUT: SoundCore2 Distance: M/N: A3105

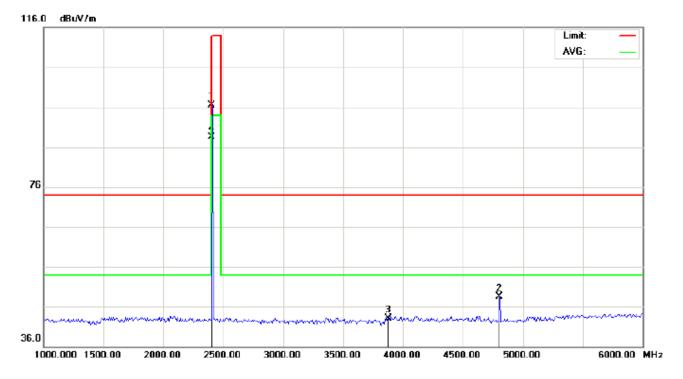
Mode: Low Channel TX

Note:

No.	Mk	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height		Comment
	-	MHz	dBu∀	dB/m	dBu∀/m	dBu∀/m	dB		cm	degree	
1		2402.000	86.17	10.32	96.49	114.00	-17.51	peak			
2		4804.000	43.74	7.69	51.43	74.00	-22.57	peak			
3		3783.333	29.14	13.86	43.00	74.00	-31.00	peak			
4	*	2402.000	78.13	10.32	88.45	94.00	-5.55	AVG	100	168	

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RADIATED EMISSION TEST- (ABOVE 1GHz)-LOW CHANNEL- VERTICAL



Site: site #1 Polarization: Vertical Temperature: 22.7

Limit: FCC Class B 3M Radiation above 1GHz(PK)- Power: Humidity: 53.6 %

EUT: SoundCore2 Distance:

M/N: A3105

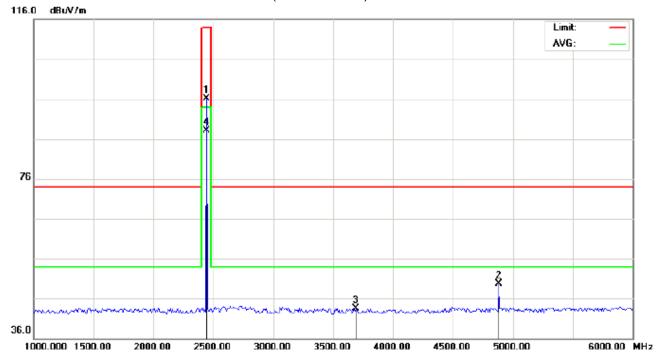
Mode: Low Channel TX

Note:

No.	Mk	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
		MHz	dBu∀	dB/m	dBu∀/m	dBu∀/m	dB		cm	degree	
1		2402.000	86.26	10.32	96.58	114.00	-17.42	peak			
2		4804.000	40.88	7.69	48.57	74.00	-25.43	peak			
3		3875.000	28.66	14.42	43.08	74.00	-30.92	peak			
4	*	2402.000	78.17	10.32	88.49	94.00	-5.51	AVG	100	277	

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RADIATED EMISSION TEST- (ABOVE 1GHz)-MIDDLE CHANNEL-HORIZONTAL



Site: site #1 Polarization: Horizontal Temperature: 22.7
Limit: FCC Class B 3M Radiation above 1GHz(PK)- Power: Humidity: 53.6 %

EUT: SoundCore2 Distance:

M/N: A3105

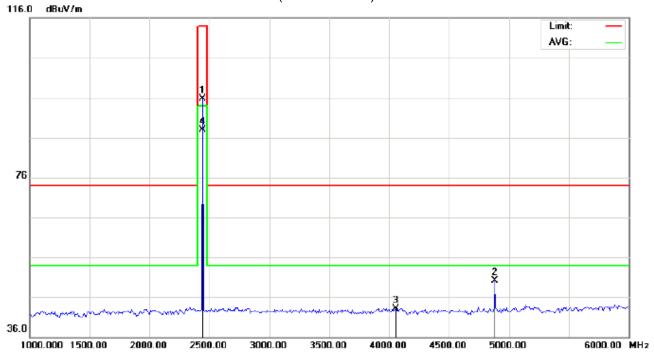
Mode: Middle Channel TX

Note:

N	0.	Mk	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
		-	MHz	dBu∀	dB/m	dBu∀/m	dBu∀/m	dB		cm	degree	
	1		2441.000	85.76	10.36	96.12	114.00	-17.88	peak			
7	2		4882.000	41.88	7.89	49.77	74.00	-24.23	peak			
	3		3691.667	30.29	13.29	43.58	74.00	-30.42	peak			
4	1	*	2441.000	77.67	10.36	88.03	94.00	-5.97	AVG	100	183	

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RADIATED EMISSION TEST- (ABOVE 1GHz)-MIDDLE CHANNEL- VERTICAL



Site: site #1 Polarization: Vertical Temperature: 22.7
Limit: FCC Class B 3M Radiation above 1GHz(PK)- Power: Humidity: 53.6 %

EUT: SoundCore2 Distance:

M/N: A3105

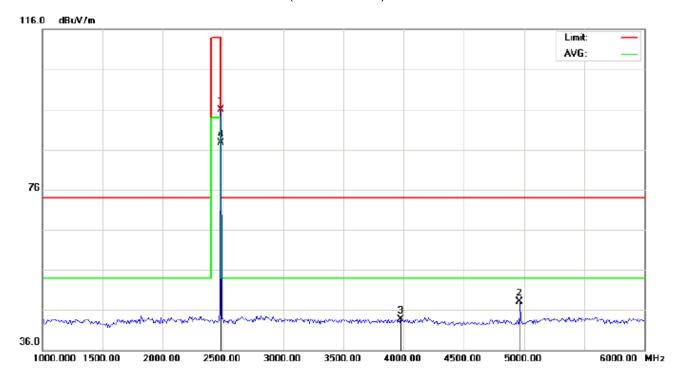
Mode: Middle Channel TX

Note:

No.	Mk	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
	-	MHz	dBu∀	dB/m	dBu∀/m	dBu∀/m	dB		cm	degree	
1		2441.000	85.43	10.36	95.79	114.00	-18.21	peak			
2		4882.000	42.31	7.89	50.20	74.00	-23.80	peak			
3		4058.333	28.91	14.22	43.13	74.00	-30.87	peak			
4	*	2441.000	77.55	10.36	87.91	94.00	-6.09	AVG	100	286	

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RADIATED EMISSION TEST- (ABOVE 1GHz)-HIGH CHANNEL-HORIZONTAL



Site: site #1 Polarization: Horizontal Temperature: 22.7
Limit: FCC Class B 3M Radiation above 1GHz(PK)- Power: Humidity: 53.6 %

EUT: SoundCore2 Distance:

M/N: A3105

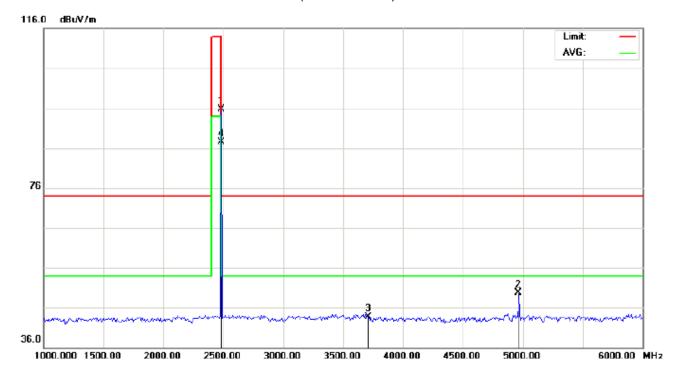
Mode: High Channel TX

Note:

No.	Mk	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
	- [MHz	dBu∀	dB/m	dBu∀/m	dBu∀/m	dB		cm	degree	
1		2480.000	85.51	10.41	95.92	114.00	-18.08	peak			
2		4960.000	40.01	8.09	48.10	74.00	-25.90	peak			
3		3975.000	28.75	15.04	43.79	74.00	-30.21	peak			
4	*	2480.000	77.33	10.41	87.74	94.00	-6.26	AVG	100	164	

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RADIATED EMISSION TEST- (ABOVE 1GHz)-HIGH CHANNEL- VERTICAL



Site: site #1 Polarization: Vertical Temperature: 22.7 Humidity: 53.6 %

Limit: FCC Class B 3M Radiation above 1GHz(PK)-Power:

EUT: SoundCore2 Distance:

M/N: A3105

Mode: High Channel TX

Note:

No.	Mk	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height		Comment
	-	MHz	dBu∀	dB/m	dBu∀/m	dBu∀/m	dB		cm	degree	
1		2480.000	85.22	10.41	95.63	114.00	-18.37	peak			
2		4960.000	41.66	8.09	49.75	74.00	-24.25	peak			
3		3708.333	30.39	13.39	43.78	74.00	-30.22	peak			
4	*	2480.000	77.16	10.41	87.57	94.00	-6.43	AVG	100	275	

RESULT: PASS

Note: 6~25GHz at least have 20dB margin. No recording in the test report.

Factor=Antenna Factor + Cable loss - Amplifier gain, Margin=Measurement-Limit.

The "Factor" value can be calculated automatically by software of measurement system.

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Field strength of the fundamental signal

1Mbps Result:

Peak value

Frequency	Reading Level	Factor	Measurement	Limit	Over	Antenna
(MHz)	(dBuv)	(dB/m)	(dBuv/m)	(dBuv/m)	(dB)	Polarization
2402	86.17	10.32	96.49	114	-17.51	Horizontal
2402	86.26	10.32	96.58	114	-17.42	Vertical
2441	85.76	10.36	96.12	114	-17.88	Horizontal
2441	85.43	10.36	95.79	114	-18.21	Vertical
2480	85.51	10.41	95.92	114	-18.08	Horizontal
2480	85.22	10.41	95.63	114	-18.37	Vertical

Average value

Frequency	Reading Level	Factor	Measurement	Limit	Over	Antenna
(MHz)	(dBuv)	(dB/m)	(dBuv/m)	(dBuv/m)	(dB)	Polarization
2402	78.13	10.32	88.45	94	-5.55	Horizontal
2402	78.17	10.32	88.49	94	-5.51	Vertical
2441	77.67	10.36	88.03	94	-5.97	Horizontal
2441	77.55	10.36	87.91	94	-6.09	Vertical
2480	77.33	10.41	87.74	94	-6.26	Horizontal
2480	77.16	10.41	87.57	94	-6.43	Vertical

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10. BAND EDGE EMISSION

10.1. MEASUREMENT PROCEDURE

1The EUT operates at hopping-off test mode. The lowest or highest channels are tested to verify the largest transmission and spurious emissions power at the continuous transmission mode.

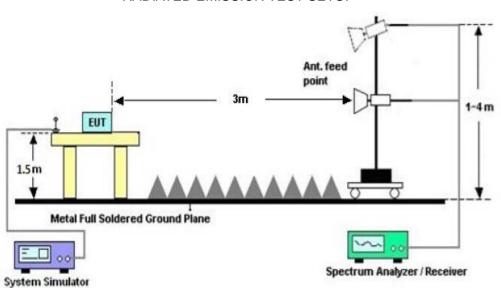
2Max hold the trace of the setup 1,and the EUT operates at hopping-on test mode to verify the largest spurious emissions power.

3Set the spectrum analyzer in the following setting in order to capture the lower and upper band-edges of the emission.

Start frequency(MHz)	Stop frequency(MHz)
2200	2405
2478	2500

10.2 TEST SETUP

RADIATED EMISSION TEST SETUP



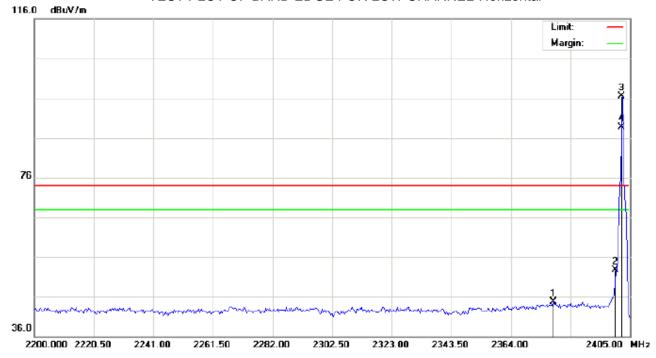
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10.3 RADIATED TEST RESULT

(Worst modulation: GFSK)

FOR BR/EDR

TEST PLOT OF BAND EDGE FOR LOW CHANNEL-Horizontal



Site: site #1 Polarization: Horizontal Temperature: 26
Limit: FCC Class B 3M Radiation above 1GHz(PK) Power: Humidity: 60 %

EUT: SoundCore2 Distance:

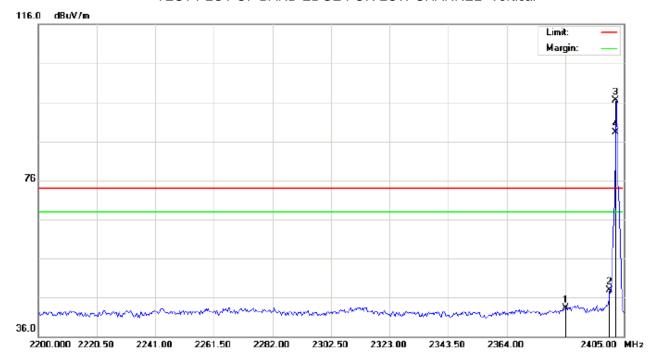
M/N: A3105

Mode: Low Channel TX

No.	Mk	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
		MHz	dBu∀	dB/m	dBu\//m	dBu∀/m	dB		cm	degree	
1		2378.692	34.33	10.30	44.63	74.00	-29.37	peak			
2		2400.000	42.47	10.32	52.79	74.00	-21.21	peak			
3	*	2402.000	86.22	10.32	96.54	74.00	22.54	peak			
4	Х	2402.000	78.37	10.32	88.69	74.00	14.69	AVG	100	162	

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TEST PLOT OF BAND EDGE FOR LOW CHANNEL -Vertical



Site: site #1 Polarization: Vertical Temperature: 26
Limit: FCC Class B 3M Radiation above 1GHz(PK) Power: Humidity: 60 %

EUT: SoundCore2 Distance:

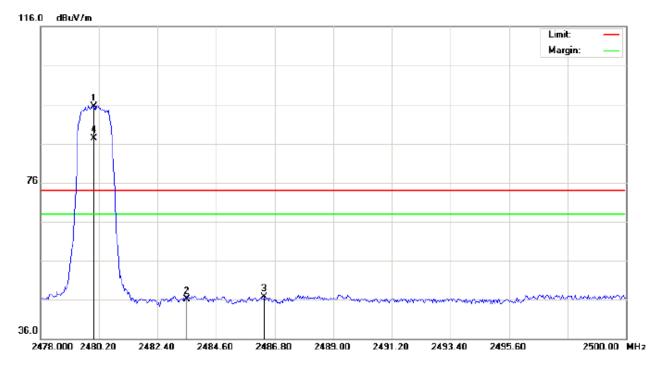
M/N: A3105

Mode: Low Channel TX

No.	Mk	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
	-	MHz	dBu∀	dB/m	dBu\//m	dBu∀/m	dB		cm	degree	
1		2384.500	33.09	10.30	43.39	74.00	-30.61	peak			
2		2400.000	37.56	10.32	47.88	74.00	-26.12	peak			
3	*	2402.000	86.09	10.32	96.41	74.00	22.41	peak			
4	Х	2402.000	78.06	10.32	88.38	74.00	14.38	AVG	100	271	

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TEST PLOT OF BAND EDGE FOR HIGH CHANNEL -Horizontal



Site: site #1 Polarization: Horizontal Temperature: 26
Limit: FCC Class B 3M Radiation above 1GHz(PK) Power: Humidity: 60 %

EUT: SoundCore2 Distance:

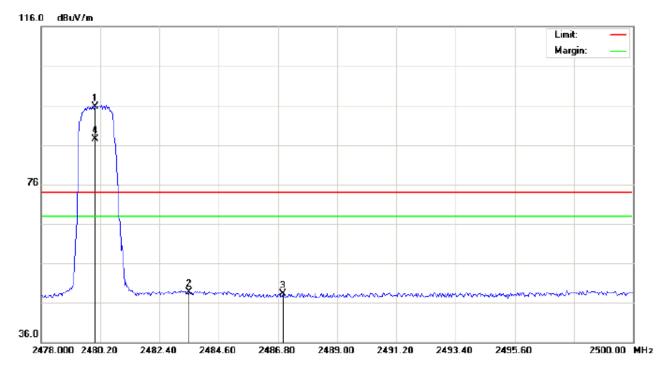
M/N: A3105

Mode: High Channel TX

No.	Mk	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
		MHz	dBu∀	dB/m	dBu∀/m	dBu∀/m	dB		cm	degree	
1	*	2480.000	85.05	10.41	95.46	74.00	21.46	peak			
2		2483.500	35.69	10.41	46.10	74.00	-27.90	peak			
3		2486.396	36.36	10.41	46.77	74.00	-27.23	peak			
4	Х	2480.000	76.98	10.41	87.39	74.00	13.39	AVG	100	142	

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TEST PLOT OF BAND EDGE FOR HIGH CHANNEL-Vertical



Site: site #1 Polarization: Vertical Temperature: 26
Limit: FCC Class B 3M Radiation above 1GHz(PK) Power: Humidity: 60 %

EUT: SoundCore2 Distance:

M/N: A3105

Mode: High Channel TX

Note:

No.	Mk	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height		Comment
	- [MHz	dBu∀	dB/m	dBu∀/m	dBu∀/m	dB		cm	degree	
1	*	2480.000	85.32	10.41	95.73	74.00	21.73	peak			
2		2483.500	38.26	10.41	48.67	74.00	-25.33	peak			
3		2486.983	37.88	10.42	48.30	74.00	-25.70	peak			
4	Х	2480.000	77.15	10.41	87.56	74.00	13.56	AVG	100	246	

RESULT: PASS

Note: Factor=Antenna Factor + Cable loss - Amplifier gain, Over=Measure-Limit.

The "Factor" value can be calculated automatically by software of measurement system.

Hopping on mode and Hopping off mode have been tested, but only worst case reported.

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11. FCC LINE CONDUCTED EMISSION TEST

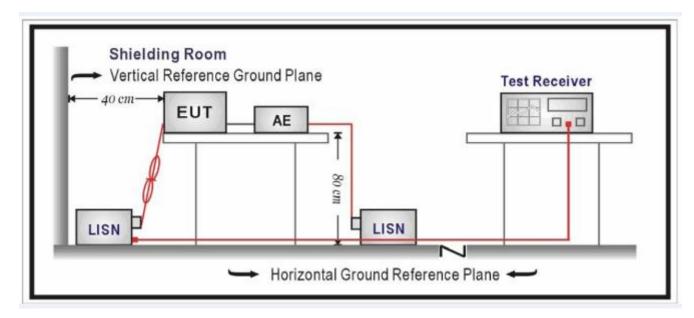
11.1. LIMITS OF LINE CONDUCTED EMISSION TEST

Framusan	Maximum RF Line Voltage							
Frequency	Q.P.(dBuV)	Average(dBuV)						
150kHz~500kHz	66-56	56-46						
500kHz~5MHz	56	46						
5MHz~30MHz	60	50						

Note:

- 1. The lower limit shall apply at the transition frequency.
- 2. The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.50 MHz.

11.2. BLOCK DIAGRAM OF LINE CONDUCTED EMISSION TEST



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11.3. PRELIMINARY PROCEDURE OF LINE CONDUCTED EMISSION TEST

1. The equipment was set up as per the test configuration to simulate typical actual usage per the user's manual. When the EUT is a tabletop system, a wooden table with a height of 0.8 meters is used and is placed on the ground plane as per ANSI C63.10 (see Test Facility for the dimensions of the ground plane used). When the EUT is a floor-standing equipment, it is placed on the ground plane which has a 3-12 mm non-conductive covering to insulate the EUT from the ground plane.

- 2. Support equipment, if needed, was placed as per ANSI C63.10.
- 3. All I/O cables were positioned to simulate typical actual usage as per ANSI C63.10.
- 4. All support equipments received AC120V/60Hz power from a LISN, if any.
- 5. The EUT received DC charging voltage by adapter or PC which received 120V/60Hzpower by a LISN.
- 6. The test program was started. Emissions were measured on each current carrying line of the EUT using a spectrum Analyzer / Receiver connected to the LISN powering the EUT. The LISN has two monitoring points: Line 1 (Hot Side) and Line 2 (Neutral Side). Two scans were taken: one with Line 1 connected to Analyzer / Receiver and Line 2 connected to a 50 ohm load; the second scan had Line 1 connected to a 50 ohm load and Line 2 connected to the Analyzer / Receiver.
- 7. Analyzer / Receiver scanned from 150 kHz to 30MHz for emissions in each of the test modes.
- 8. During the above scans, the emissions were maximized by cable manipulation.
- 9. The test mode(s) were scanned during the preliminary test.

Then, the EUT configuration and cable configuration of the above highest emission level were recorded for reference of final testing.

11.4. FINAL PROCEDURE OF LINE CONDUCTED EMISSION TEST

- 1. EUT and support equipment was set up on the test bench as per step 2 of the preliminary test.
- 2. A scan was taken on both power lines, Line 1 and Line 2, recording at least the six highest emissions. Emission frequency and amplitude were recorded into a computer in which correction factors were used to calculate the emission level and compare reading to the applicable limit. If EUT emission level was less –2dB to the A.V. limit in Peak mode, then the emission signal was re-checked using Q.P and Average detector.
- 3. The test data of the worst case condition(s) was reported on the Summary Data page.

Temperature: 26

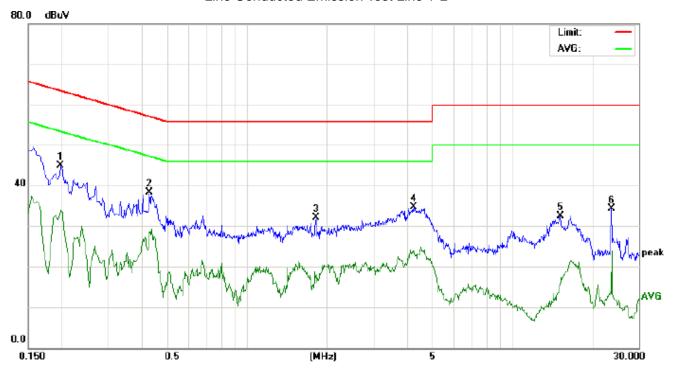
Humidity: 60 %

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11.5. TEST RESULT OF LINE CONDUCTED EMISSION TEST

By adapter(worst case)

Line Conducted Emission Test Line 1-L



Phase:

Power:

L1

Site: Conduction

Limit: FCC Class B Conduction(QP)

EUT: SoundCore2

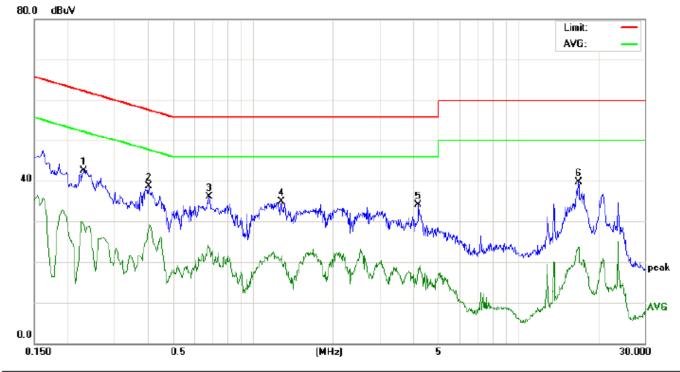
M/N: A3105

Mode: BT Link with charging

No.	Freq.		ding_L (dBuV)		Correct Factor	Measurement (dBuV)			nit uV)	Mai (d	rgin IB)	P/F	Comment	
	(MHz)	Peak	QP	AVG	dB	Peak	QP	AVG	QP	AVG	QP	AVG		
1	0.1980	34.68		23.68	10.21	44.89		33.89	63.69	53.69	-18.80	-19.80	Р	
2	0.4300	27.88		18.20	10.35	38.23		28.55	57.25	47.25	-19.02	-18.70	Р	
3	1.8220	21.80		6.81	10.28	32.08		17.09	56.00	46.00	-23.92	-28.91	Р	
4	4.2538	24.35		12.98	10.32	34.67		23.30	56.00	46.00	-21.33	-22.70	Р	
5	15.1579	22.47		5.34	10.12	32.59		15.46	60.00	50.00	-27.41	-34.54	Р	
6	23.6500	24.23		3.37	10.11	34.34		13.48	60.00	50.00	-25.66	-36.52	Р	

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Line Conducted Emission Test Line 2-N



Site: Conduction Phase: N Temperature: 26
Limit: FCC Class B Conduction(QP) Power: Humidity: 60 %

EUT: SoundCore2 M/N: A3105

Mode: BT Link with charging

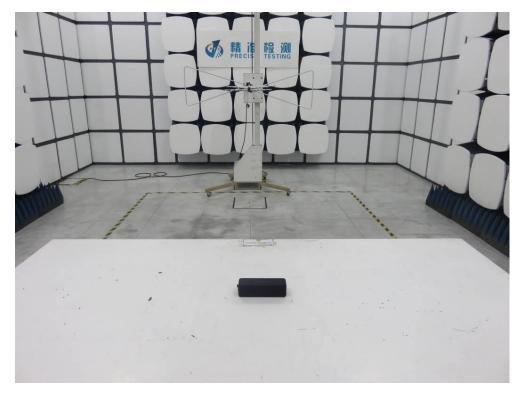
No.	Freq.		ding_L (dBuV)		Correct Factor	Measurement (dBuV)			ı	nit uV)		rgin IB)	P/F	Comment
	(MHz)	Peak	QP	AVG	dB	Peak	QP	AVG	QP	AVG	QP	AVG		
1	0.2303	32.23		18.84	10.25	42.48		29.09	62.44	52.44	-19.96	-23.35	Р	
2	0.4060	28.46		18.23	10.33	38.79		28.56	57.73	47.73	-18.94	-19.17	Р	
3	0.6860	25.71		13.42	10.34	36.05		23.76	56.00	46.00	-19.95	-22.24	Р	
4	1.2820	24.48		10.82	10.38	34.86		21.20	56.00	46.00	-21.14	-24.80	Р	
5	4.2138	23.76		7.83	10.34	34.10		18.17	56.00	46.00	-21.90	-27.83	Р	
6	16.9219	29.52		13.51	10.13	39.65		23.64	60.00	50.00	-20.35	-26.36	Р	

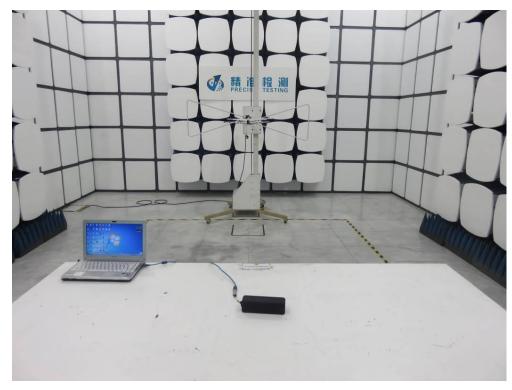
APPENDIX A: PHOTOGRAPHS OF TEST SETUP

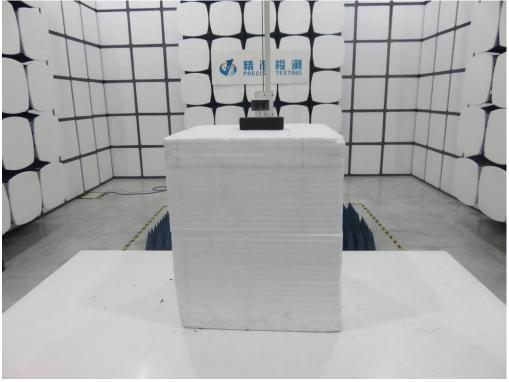
FCC LINE CONDUCTED EMISSION TEST SETUP

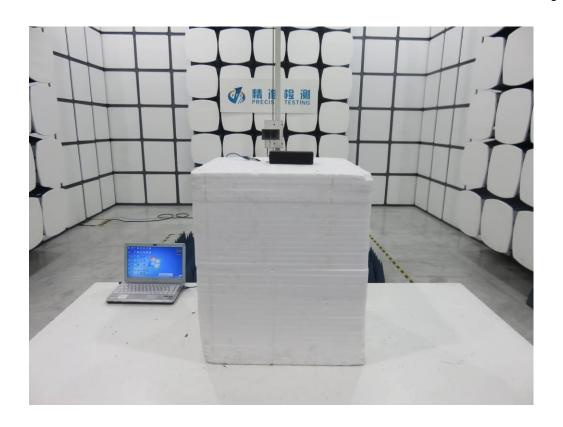


FCC RADIATED EMISSION TEST SETUP









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APPENDIX B: PHOTOGRAPHS OF EUT

TOP VIEW OF EUT



BOTTOM VIEW OF EUT



FRONT VIEW OF EUT



BACK VIEW OF EUT



LEFT VIEW OF EUT



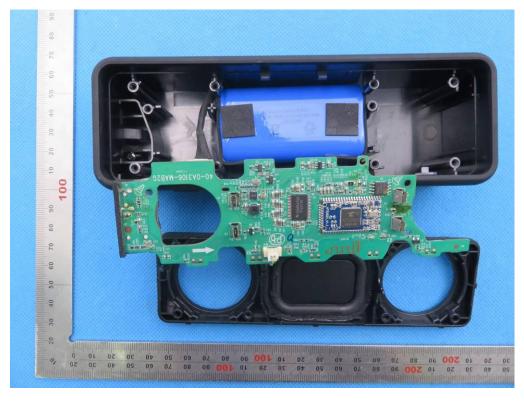
RIGHT VIEW OF EUT



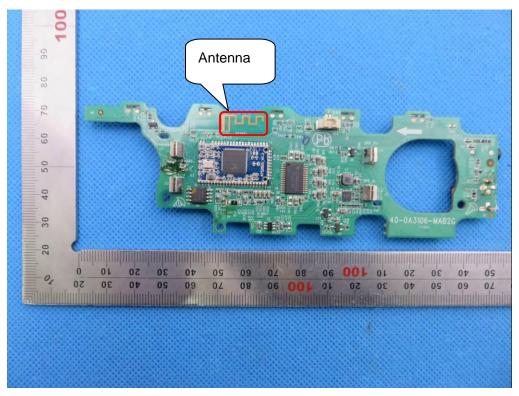
VIEW OF EUT (PORT)



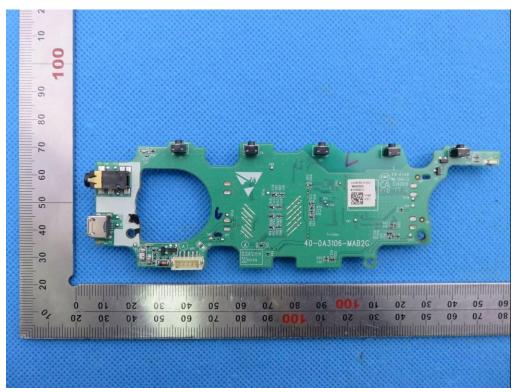
OPEN VIEW OF EUT



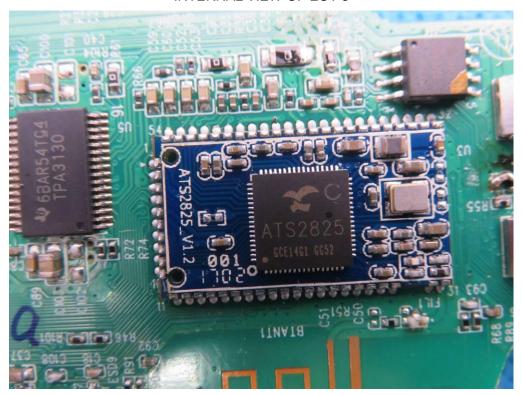
INTERNAL VIEW OF EUT-1



INTERNAL VIEW OF EUT-2



INTERNAL VIEW OF EUT-3



VIEW OF ADAPTER (AE)



THE ADAPTER SUPPLIED BY AGC

----END OF REPORT----