



# FCC Test Report

APPLICANT : Weifang GoerTek Electronics Co.,Ltd.  
EQUIPMENT : SRH-SA3  
BRAND NAME : SONY  
MODEL NAME : SRH-SA3  
FCC ID : SZGSRHSA3  
STANDARD : 47 CFR Part 15 Subpart B  
CLASSIFICATION : Certification  
TEST DATE(S) : Jul. 01, 2024 ~ Jul. 19, 2024

We, Sporton International Inc. (Kunshan), would like to declare that the tested sample has been evaluated in accordance with the test procedures given in ANSI C63.4-2014 and has been in compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of Sporton International Inc. (Kunshan), the test report shall not be reproduced except in full.

Jason Jia

Approved by: Jason Jia



**Sporton International Inc. (Kunshan)**

**No. 1098, Pengxi North Road, Kunshan Economic Development Zone Jiangsu Province 215300  
People's Republic of China**



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### REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FC420222-03	Rev. 01	Initial issue of report	Jul. 29, 2024



### SUMMARY OF TEST RESULT

Report Section	FCC Rule	Description	Limit	Result	Remark
3.1	15.107	AC Conducted Emission	< 15.107 limits	PASS	Under limit 10.75 dB at 0.529 MHz
3.2	15.109	Radiated Emission	< 15.109 limits	PASS	Under limit 5.03 dB at 54.25 MHz

**Conformity Assessment Condition:**

The test results (PASS/FAIL) with all measurement uncertainty excluded are presented against the regulation limits or in accordance with the requirements stipulated by the applicant/manufacturer who shall bear all the risks of non-compliance that may potentially occur if measurement uncertainty is taken into account. Please refer to each test results in the section "Measurement Uncertainty".

**Disclaimer:**

The product specifications of the EUT presented in the test report that may affect the test assessments are declared by the manufacturer who shall take full responsibility for the authenticity.



# 1. General Description

## 1.1. Applicant

**Weifang GoerTek Electronics Co.,Ltd.**

Gaoxin 2 Road,Free Trade Zone,Weifang,Shandong,261205,P.R.China

## 1.2. Manufacturer

**Sony Corporation**

1-7-1 Konan Minato-ku Tokyo, 108-0075 Japan

## 1.3. Product Feature of Equipment Under Test

Product Feature	
Equipment	SRH-SA3
Brand Name	SONY
Model Name	SRH-SA3
FCC ID	SZGSRHSA3
SN	Conduction/ Radiation: VHZJD2DVT21008
HW Version	R4
SW Version	V30
EUT Stage	Identical Prototype

**Remark:**

1. The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.
2. The EUT is Dock without RF function and test with XR Headset / Controller / Ring together.

## 1.4. Modification of EUT

No modifications are made to the EUT during all test items.



### 1.5. Test Location

Sporton International Inc. (Kunshan) is accredited to ISO/IEC 17025:2017 by American Association for Laboratory Accreditation with Certificate Number 5145.02.

<b>Test Firm</b>	Sporton International Inc. (Kunshan)		
<b>Test Site Location</b>	No. 1098, Pengxi North Road, Kunshan Economic Development Zone Jiangsu Province 215300 People’s Republic of China TEL : +86-512-57900158		
<b>Test Site No.</b>	<b>Sporton Site No.</b>	<b>FCC Designation No.</b>	<b>FCC Test Firm Registration No.</b>
	CO01-KS 03CH07-KS	CN1257	314309

### 1.6. Test Software

Item	Site	Manufacturer	Name	Version
1.	03CH07-KS	AUDIX	E3	210616
2.	CO01-KS	AUDIX	E3	6.2009-8-24

### 1.7. Applicable Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- ♦ 47 CFR Part 15 Subpart B
- ♦ ANSI C63.4-2014

**Remark:** All test items were verified and recorded according to the standards and without any deviation during the test.



## 2. Test Configuration of Equipment Under Test

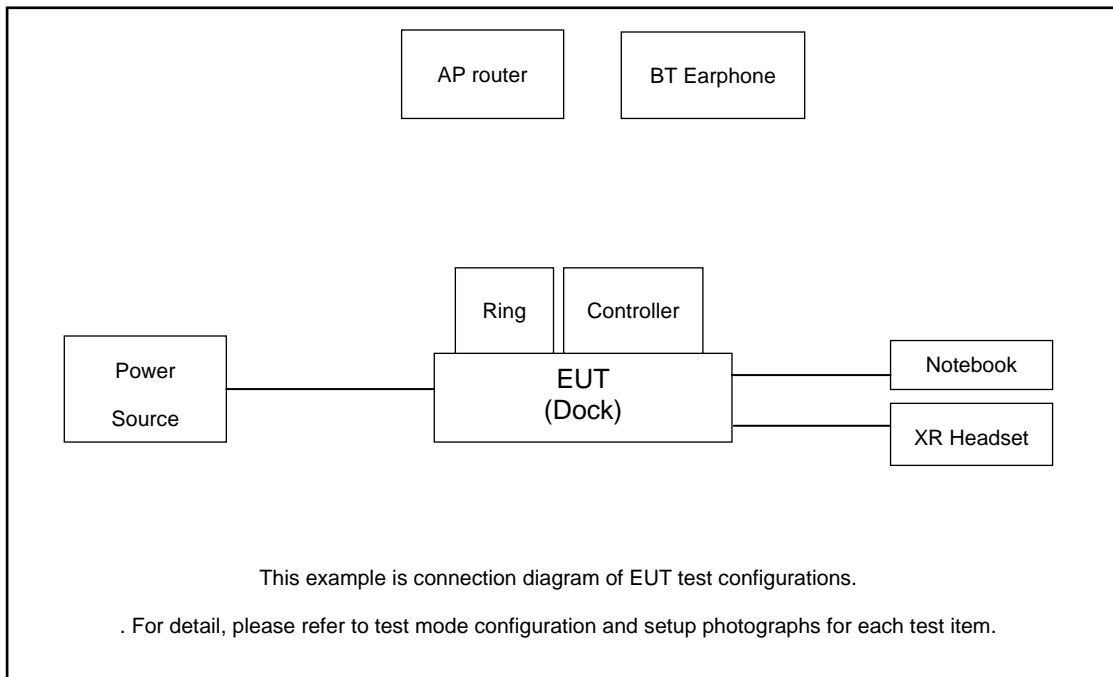
### 2.1. Test Mode

The EUT has been associated with peripherals pursuant to ANSI C63.4-2014 and configuration operated in a manner tended to maximize its emission characteristics in a typical application.

Frequency range investigated: conduction emission (150 kHz to 30 MHz), radiation emission (30MHz to the 5th harmonic of the highest frequency or to 40 GHz, whichever is lower).

Test Items	Function Type
AC Conducted Emission	<p>Mode 1: Controller charging by Dock + Ring charging by Dock + USB Cable 1( XR Charging from Dock) + USB Cable 2(Connect Dock and Adapter) + USB Cable 3(Connect Dock and Notebook)</p> <p>Mode 2: Controller charging by Dock + Ring charging by Dock+ USB Cable 1( XR Charging from Dock) + USB Cable 2(Connect Dock and Adapter) + USB Cable 3(Connect Dock and Notebook) Data Link with Notebook (Notebook to EUT)</p> <p>Mode 3: Controller charging by Dock + Ring charging by Dock + USB Cable1(XR Charging from Dock) + USB Cable2(Connect Dock and Adapter) + USB Cable3(Connect Dock and Notebook) Data Link with Notebook (EUT to Notebook)</p>
Radiated Emissions	<p>Mode 1: Controller charging by Dock + Ring charging by Dock + USB Cable 1( XR Charging from Dock) + USB Cable 2(Connect Dock and Adapter) + USB Cable 3(Connect Dock and Notebook)</p> <p>Mode 2: Controller charging by Dock + Ring charging by Dock+ USB Cable 1( XR Charging from Dock) + USB Cable 2(Connect Dock and Adapter) + USB Cable 3(Connect Dock and Notebook) Data Link with Notebook (Notebook to EUT)</p> <p>Mode 3: Controller charging by Dock + Ring charging by Dock + USB Cable1(XR Charging from Dock) + USB Cable2(Connect Dock and Adapter) + USB Cable3(Connect Dock and Notebook) Data Link with Notebook (EUT to Notebook)</p>
<p><b>Remark:</b></p> <ol style="list-style-type: none"> <li>The worst case of AC is mode 3; only the test data of this mode is reported.</li> <li>The worst case of RE is mode 2; only the test data of this mode is reported.</li> <li>Data Link with NB means data application transferred mode between EUT and Notebook.</li> </ol>	

## 2.2. Connection Diagram of Test System



The EUT has been associated with peripherals pursuant to ANSI C63.4-2014 and configuration operated in a manner tended to maximize its emission characteristics in a typical application

## 2.3. Support Unit used in test configuration and system

Item	Equipment	Model Name	FCC ID	Data Cable	Power Cord
1.	WLAN AP	D-link	DIR-655	KA21R655B1	N/A
2.	Bluetooth Earphone	Lenovo	thinkplus-BH3	N/A	N/A
3.	Notebook	Lenovo	V130-15IKB005	N/A	Unshielded AC I/P cable 1.8m
4.	Vector Signal Generator	R&S	SMBV100A	258305	N/A
5.	Hard DISK	WD	C6B	N/A	N/A
6.	Type-C Earphone	MOTO	LYEJ02LM	Unshielded AC I/P cable 1.0m	N/A
7.	AC Adapter	tianyin	TPD-71B120250CU01	N/A	N/A

## 2.4. EUT Operation Test Setup

The EUT was set in below conditions during testing.

1. The EUT charge for Cotroller,Ring and XR Headset.
2. Execute the program for files transferring between EUT and storage device.
3. Monitor the data transmission by checking whether there some error or abnormal action occurred.





### 3. Test Result

#### 3.1. Test of AC Conducted Emission Measurement

##### 3.1.1 Limits of AC Conducted Emission

For equipment that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits in the following table.

<Class B Limit>

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

\*Decreases with the logarithm of the frequency.

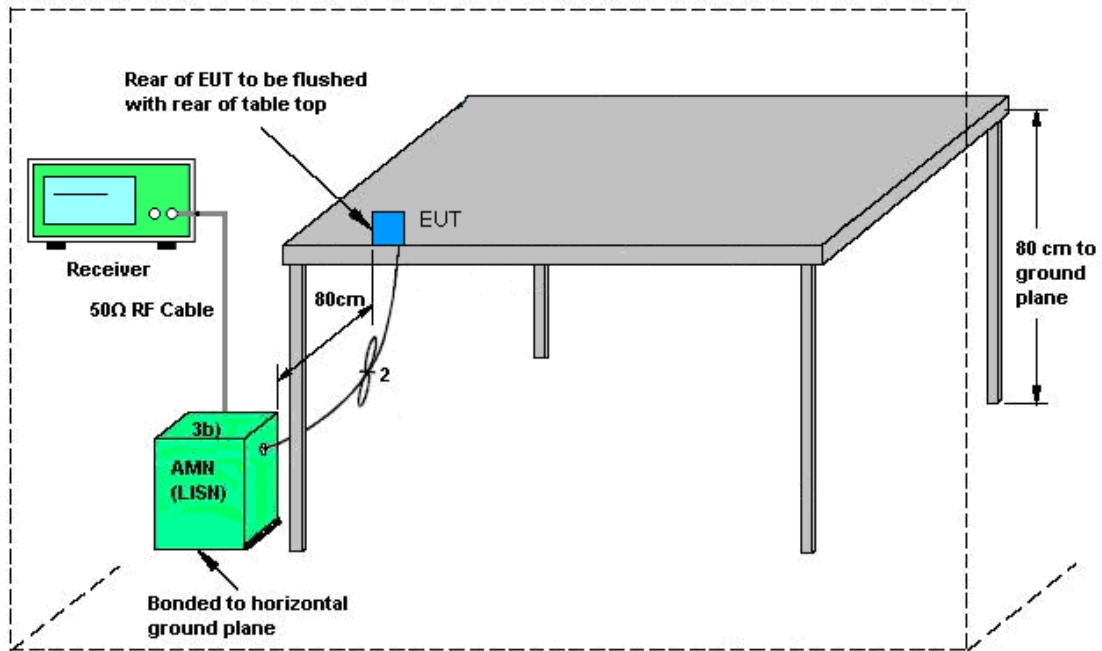
##### 3.1.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

##### 3.1.3 Test Procedure

1. The EUT was placed 0.4 meter from the conducting wall of the shielding room was kept at least 80 centimeters from any other grounded conducting surface.
2. Connect EUT to the power mains through a line impedance stabilization network (LISN).
3. All the support units are connecting to the other LISN.
4. The LISN provides 50 ohm coupling impedance for the measuring instrument.
5. The FCC states that a 50 ohm, 50 microhenry LISN should be used.
6. Both sides of AC line were checked for maximum conducted interference.
7. The frequency range from 150 kHz to 30 MHz was searched.
8. Set the test-receiver system to Peak Detect Function and specified bandwidth (IF Bandwidth = 9kHz) with Maximum Hold Mode. Then measurement is also conducted by Average Detector and Quasi-Peak Detector Function respectively.

### 3.1.4 Test Setup

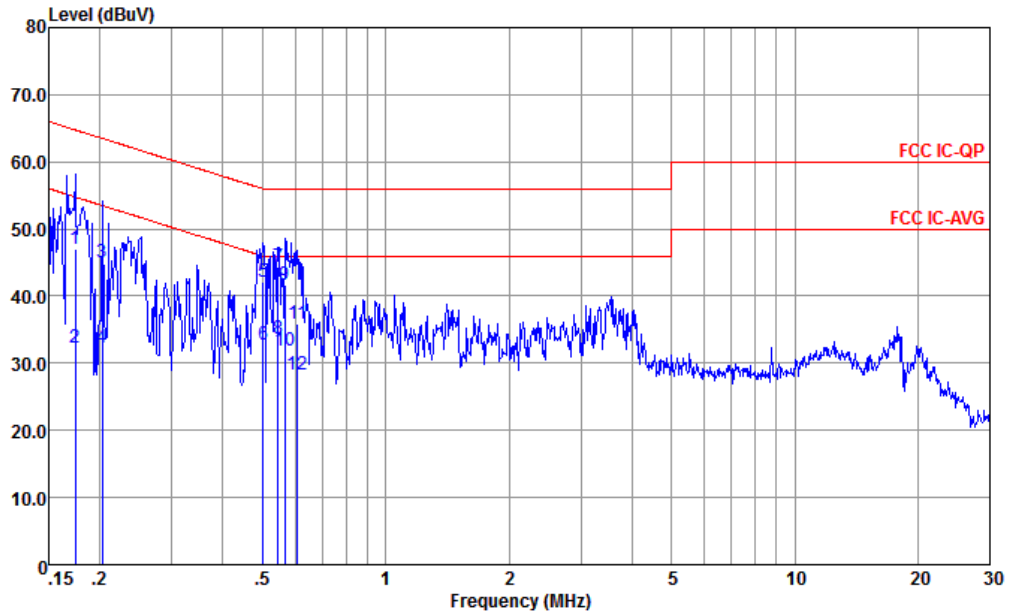


AMN = Artificial mains network (LISN)  
AE = Associated equipment  
EUT = Equipment under test  
ISN = Impedance stabilization network



3.1.5 Test Result of AC Conducted Emission

Test Engineer :	Amos Zhang	Temperature :	24.2~25.6°C
		Relative Humidity :	37~39%
Test Voltage :	120Vac / 60Hz	Phase :	Line
Remark :	All emissions not reported here are more than 10 dB below the prescribed limit.		

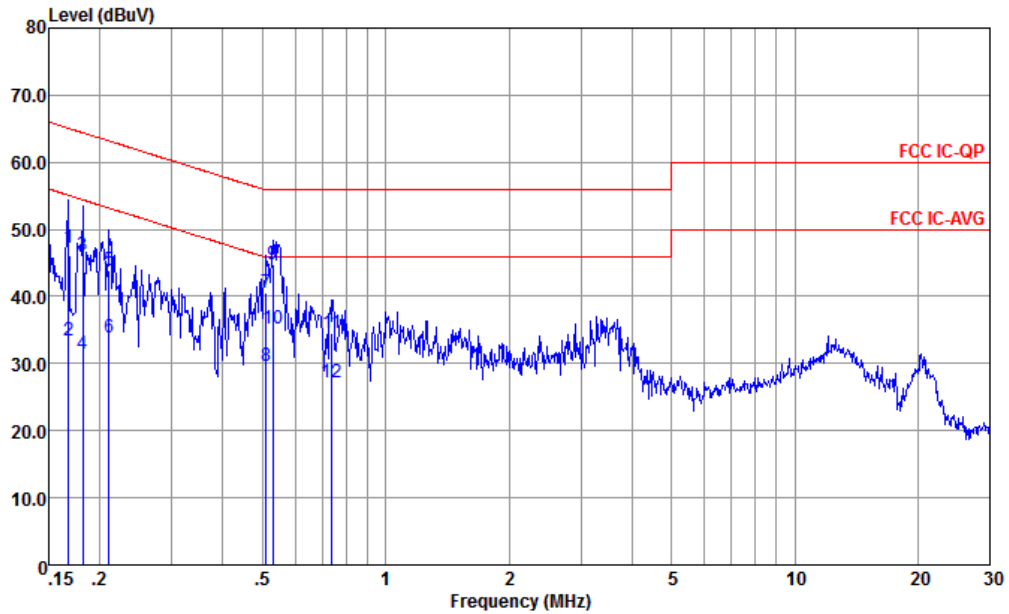


Site : CO01-KS  
 Condition : FCC IC-QP LISN-060105-L 2024 LINE

	Freq	Level	Over	Limit	Read	LISN	Cable	Remark
	MHz	dBuV	Limit	Line	Level	Factor	Loss	
			dB	dBuV	dBuV	dB	dB	
1	0.174	47.11	-17.66	64.77	36.60	0.10	10.41	QP
2	0.174	32.41	-22.36	54.77	21.90	0.10	10.41	Average
3	0.203	44.99	-18.50	63.49	34.50	0.08	10.41	QP
4	0.203	32.39	-21.10	53.49	21.90	0.08	10.41	Average
5	0.502	42.21	-13.79	56.00	32.10	-0.11	10.22	QP
6	0.502	32.71	-13.29	46.00	22.60	-0.11	10.22	Average
7 *	0.546	44.28	-11.72	56.00	34.20	-0.12	10.20	QP
8	0.546	33.68	-12.32	46.00	23.60	-0.12	10.20	Average
9	0.567	41.67	-14.33	56.00	31.61	-0.13	10.19	QP
10	0.567	31.77	-14.23	46.00	21.71	-0.13	10.19	Average
11	0.608	35.94	-20.06	56.00	25.90	-0.13	10.17	QP
12	0.608	28.24	-17.76	46.00	18.20	-0.13	10.17	Average



Test Engineer :	Amos Zhang	Temperature :	24.2~25.6°C
		Relative Humidity :	37~39%
Test Voltage :	120Vac / 60Hz	Phase :	Neutral
Remark :	All emissions not reported here are more than 10 dB below the prescribed limit.		



Site : CO01-KS  
 Condition : FCC IC-QP LISN-060105-N 2024 NEUTRAL

	Freq	Level	Over	Limit	Read	LISN	Cable	Remark
	MHz	dBuV	Limit	Line	Level	Factor	Loss	
			dB	dBuV	dBuV	dB	dB	
1	0.168	47.14	-17.94	65.08	36.60	0.12	10.42	QP
2	0.168	33.34	-21.74	55.08	22.80	0.12	10.42	Average
3	0.182	46.14	-18.28	64.42	35.60	0.13	10.41	QP
4	0.182	31.44	-22.98	54.42	20.90	0.13	10.41	Average
5	0.211	44.00	-19.18	63.18	33.51	0.09	10.40	QP
6	0.211	33.80	-19.38	53.18	23.31	0.09	10.40	Average
7	0.510	40.66	-15.34	56.00	30.59	-0.15	10.22	QP
8	0.510	29.66	-16.34	46.00	19.59	-0.15	10.22	Average
9	0.529	44.85	-11.15	56.00	34.79	-0.15	10.21	QP
10 *	0.529	35.25	-10.75	46.00	25.19	-0.15	10.21	Average
11	0.739	34.46	-21.54	56.00	24.50	-0.17	10.13	QP
12	0.739	27.16	-18.84	46.00	17.20	-0.17	10.13	Average

Note:

- Level(dBμV) = Read Level(dBμV) + LISN Factor(dB) + Cable Loss(dB)
- Over Limit(dB) = Level(dBμV) – Limit Line(dBμV)



### 3.2. Test of Radiated Emission Measurement

#### 3.2.1. Limit of Radiated Emission

The emissions from an unintentional radiator shall not exceed the field strength levels specified in the following table:

<Class B Limit>

Frequency (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
30 – 88	100	3
88 – 216	150	3
216 - 960	200	3
Above 960	500	3

#### 3.2.2. Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

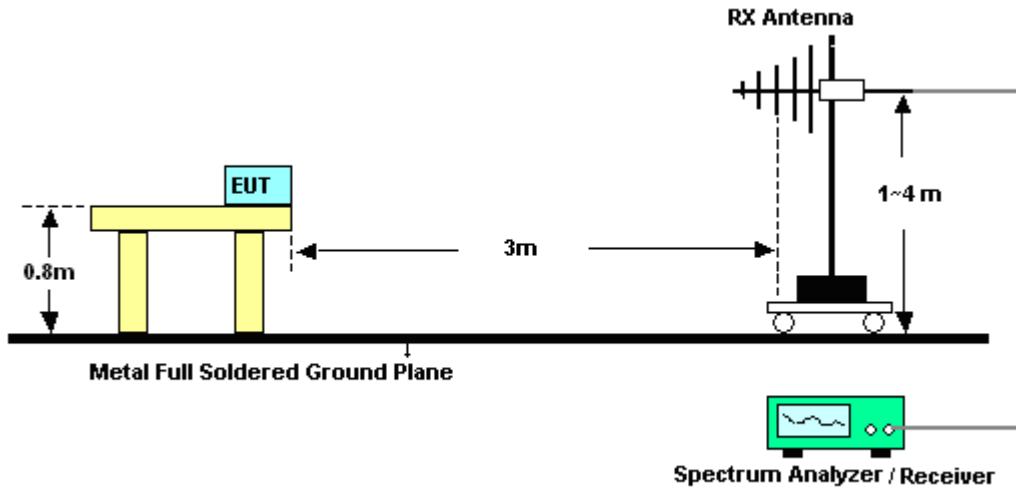


### **3.2.3. Test Procedures**

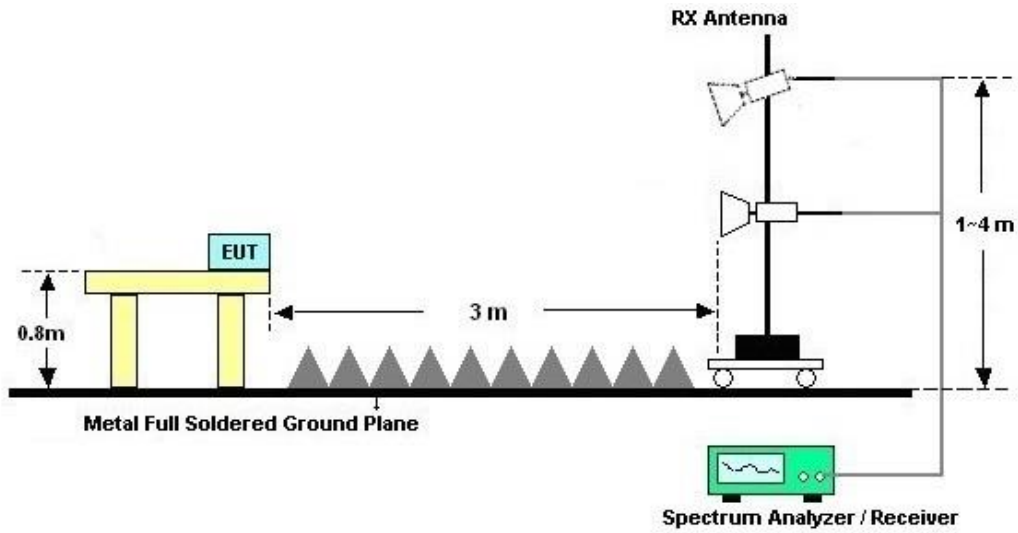
1. The EUT was placed on a turntable with 0.8 meter above ground.
2. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
3. The table was rotated 360 degrees to determine the position of the highest radiation.
4. The antenna is a Bi-Log antenna and its height is adjusted between one to four meters above ground to find the maximum value of the field strength for both horizontal polarization and vertical polarization of the antenna.
5. For each suspected emission, the EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading.
6. Set the test-receiver system to Peak Detect Function and specified bandwidth with Maximum Hold Mode (RBW=120kHz/VBW=300kHz for frequency below 1GHz; RBW=1MHz VBW=3MHz (Peak), RBW=1MHz/VBW=10Hz (Average) for frequency above 1GHz).
7. If the emission level of the EUT in peak mode was 3 dB lower than the limit specified, peak values of EUT will be reported. Otherwise, the emission will be repeated by using the quasi-peak method and reported.
8. Emission level (dB $\mu$ V/m) = 20 log Emission level ( $\mu$ V/m)
9. Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level
10. Exploratory radiated emissions testing of handheld and/or body-worn devices shall include rotation of the EUT through three orthogonal axes (X/Y/Z Plane) to determine the orientation (attitude) that maximizes the emissions.

### 3.2.4. Test Setup of Radiated Emission

For radiated emissions from 30MHz to 1GHz



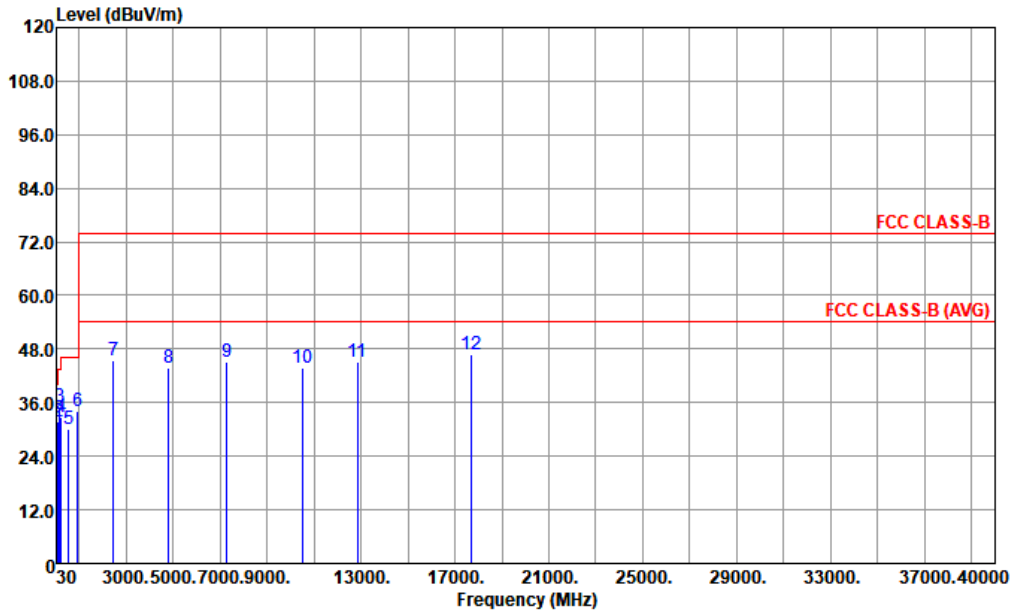
For radiated emissions above 1GHz





3.2.5. Test Result of Radiated Emission

Test Engineer :	Levi Zhuo	Temperature :	21~22°C
		Relative Humidity :	41~42%
Test Distance :	3m	Polarization :	Horizontal



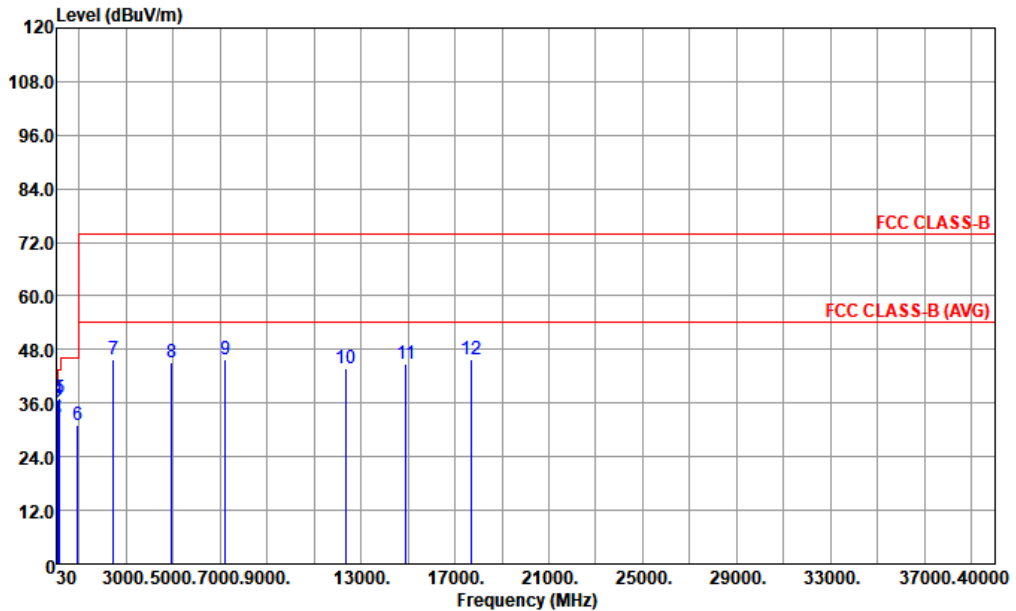
Site : 03CH07-KS  
 Condition : FCC CLASS-B 3m CBL6111D 59915 HORIZONTAL

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	A/Pos	T/Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	56.19	24.38	-15.62	40.00	43.20	12.38	0.86	32.06	---	---	Peak
2	122.15	31.81	-11.69	43.50	44.86	17.40	1.60	32.05	---	---	Peak
3 p	165.80	35.02	-8.48	43.50	49.33	15.93	1.86	32.10	---	---	Peak
4	232.73	32.75	-13.25	46.00	46.25	16.38	2.22	32.10	---	---	Peak
5	562.53	30.05	-15.95	46.00	32.74	26.17	3.45	32.31	---	---	Peak
6	945.68	34.20	-11.80	46.00	29.96	30.76	4.47	30.99	---	---	Peak
7	2462.00	45.31	-28.69	74.00	69.07	31.93	7.25	62.94	---	---	Peak
8	4808.00	43.90	-30.10	74.00	62.79	34.30	10.29	63.48	---	---	Peak
9	7290.00	45.28	-28.72	74.00	60.36	35.77	12.81	63.66	---	---	Peak
10	10486.00	43.87	-30.13	74.00	52.56	37.77	15.63	62.09	---	---	Peak
11	12849.00	44.96	-29.04	74.00	49.48	39.30	17.11	60.93	---	---	Peak
12	17711.00	46.84	-27.16	74.00	48.04	41.42	20.20	62.82	---	---	Peak





Test Engineer :	Levi Zhuo	Temperature :	21~22°C
		Relative Humidity :	41~42%
Test Distance :	3m	Polarization :	Vertical



Site : 03CH07-KS  
 Condition : FCC CLASS-B 3m CBL6111D 59915 VERTICAL

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	A/Pos	T/Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	33.88	32.51	-7.49	40.00	41.23	22.95	0.55	32.22	---	---	Peak
2	54.25	34.97	-5.03	40.00	53.33	12.87	0.83	32.06	100	307	Peak
3	75.59	32.52	-7.48	40.00	50.54	12.92	1.12	32.06	---	---	Peak
4	117.30	36.63	-6.87	43.50	49.86	17.25	1.57	32.05	---	---	Peak
5	170.65	37.13	-6.37	43.50	51.84	15.51	1.89	32.11	---	---	Peak
6	945.68	31.11	-14.89	46.00	26.87	30.76	4.47	30.99	---	---	Peak
7	2445.00	45.83	-28.17	74.00	69.67	31.90	7.22	62.96	---	---	Peak
8	4944.00	45.11	-28.89	74.00	63.90	34.20	10.49	63.48	---	---	Peak
9	7239.00	45.94	-28.06	74.00	61.07	35.70	12.80	63.63	---	---	Peak
10	12339.00	43.63	-30.37	74.00	48.69	39.13	16.68	60.87	---	---	Peak
11	14923.00	44.85	-29.15	74.00	48.21	40.30	18.46	62.12	---	---	Peak
12	17711.00	45.93	-28.07	74.00	47.13	41.42	20.20	62.82	---	---	Peak

Note:

- Level(dBuV/m) = Read Level(dBuV) + Antenna Factor(dB/m) + Cable Loss(dB) - Preamp Factor(dB)
- Over Limit(dB) = Level(dBuV/m) – Limit Line(dBuV/m)



### 4. List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
EMI Receiver	R&S	ESCI7	100768	9kHz~7GHz;	Apr. 18, 2024	Jul. 19, 2024	Apr. 17, 2025	Conduction (CO01-KS)
AC LISN (for auxiliary equipment)	MessTec	AN3016	060103	9kHz~30MHz	Oct. 11, 2023	Jul. 19, 2024	Oct. 10, 2024	Conduction (CO01-KS)
AC LISN	MessTec	AN3016	060105	9kHz~30MHz	Apr. 18, 2024	Jul. 19, 2024	Apr. 17, 2025	Conduction (CO01-KS)
AC Power Source	Chroma	61602	ABP0000008 11	AC 0V~300V, 45Hz~1000Hz	Oct. 11, 2023	Jul. 19, 2024	Oct. 10, 2024	Conduction (CO01-KS)
EMI Test Receiver	R&S	ESR7	101403	9kHz~7GHz;Ma x 30dBm	Oct. 11, 2023	Jul. 01, 2024	Oct. 10, 2024	Radiation (03CH07-KS)
EXA Spectrum Analyzer	Keysight	N9010A	MY55370528	10Hz-44G,MAX 30dB	Oct. 11, 2023	Jul. 01, 2024	Oct. 10, 2024	Radiation (03CH07-KS)
Bilog Antenna	TeseQ	CBL6111D	59913	30MHz-1GHz	Aug. 19, 2023	Jul. 01, 2024	Aug. 18, 2024	Radiation (03CH07-KS)
Double Ridge Horn Antenna	ETS-Lindgren	3117	75957	1GHz~18GHz	Dec. 21, 2023	Jul. 01, 2024	Dec. 20, 2024	Radiation (03CH07-KS)
SHF-EHF Horn	Com-power	AH-840	101115	18GHz~40GHz	Oct. 15, 2023	Jul. 01, 2024	Oct. 14, 2024	Radiation (03CH07-KS)
Amplifier	SONOMA	310N	413741	9KHz-1GHz	Jan. 04, 2024	Jul. 01, 2024	Jan. 03, 2025	Radiation (03CH07-KS)
Amplifier	EM	EM01G18GA	060834	1Ghz-18Ghz	Oct. 11, 2023	Jul. 01, 2024	Oct. 10, 2024	Radiation (03CH07-KS)
Amplifier	EM	EM18G40GGA	060851	18~40GHz	Jan. 03, 2024	Jul. 01, 2024	Jan. 02, 2025	Radiation (03CH07-KS)
AC Power Source	Chroma	61601	61601000247 3	N/A	NCR	Jul. 01, 2024	NCR	Radiation (03CH07-KS)
Turn Table	EM	EM 1000-T	N/A	0~360 degree	NCR	Jul. 01, 2024	NCR	Radiation (03CH07-KS)
Antenna Mast	EM	EM 1000-A	N/A	1 m~4 m	NCR	Jul. 01, 2024	NCR	Radiation (03CH07-KS)

NCR: No Calibration Required



## 5. Measurement Uncertainty

### Uncertainty of Conducted Emission Measurement (150 kHz ~ 30 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	2.84dB
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### Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	6.06dB
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### Uncertainty of Radiated Emission Measurement (1000 MHz ~ 18000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	5.16dB
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### Uncertainty of Radiated Emission Measurement (18000 MHz ~ 40000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	5.28dB
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----- THE END -----