FCC RF EXPOSURE REPORT

CERTIFICATION TEST REPORT

For

Sound Tower

MODEL NUMBER: MX-ST9, MX-ST9***** ("*" represents any alphanumeric character, "-", "/" or blank)**

FCC ID: A3LMXST90B

REPORT NUMBER: 4790306708-6

ISSUE DATE: April 18, 2022

Prepared for

Samsung Electronics Co Ltd (FCC)
19 Chapin Rd., Building D Pine Brook New Jersey United States 07058

Prepared by

UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch

Building 10, Innovation Technology Park, No. 1, Li Bin Road, Song Shan Lake Hi-Tech Development Zone Dongguan, 523808, People's Republic of China

Tel: +86 769 22038881
Fax: +86 769 33244054
Website: www.ul.com

Revision History

Rev.	Issue Date	Revisions	Revised By
V0	04/18/2022	Initial Issue	

TABLE OF CONTENTS

1. ATTESTATION OF TEST RESULTS

Applicant Information

Company Name:	Samsung Electronics Co Ltd
Address:	19 Chapin Rd., Building D Pine Brook New Jersey United States 07058

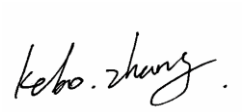
Company Name:	Samsung Electronics Co Ltd
Address:	19 Chapin Rd., Building D Pine Brook New Jersey United States 07058

EUT Information

EUT Name	Sound Tower
Model	MX-ST9**, MX-ST9***** ("*" represents any alphanumeric character, "-", "/" or blank)
Model Difference	Please refer to clause 4 Description of EUT
Brand:	SAMSUNG
Sample Received Date:	March 21, 2022
Sample Status:	Normal
Sample ID:	4780427
Date of Tested:	March 21, 2022~ April 6, 2022

APPLICABLE STANDARDS	
STANDARD	**TEST RESULTS**
FCC 47CFR§2.1091	PASS

Prepared By:



Kebo Zhang
Project Engineer

Checked By:

Shawn Wen
Laboratory Leader

Approved By:

Stephen Guo

Laboratory Manager

2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with 47 CFR FCC Part 2 Subpart J, section 2.1091.

3. FACILITIES AND ACCREDITATION

Accreditation Certificate	**A2LA (Certificate No.: 4102.01)** UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. has been assessed and proved to be in compliance with A2LA. **FCC (FCC Designation No.: CN1187)** UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. Has been recognized to perform compliance testing on equipment subject to the Commission's Delcaration of Conformity (DoC) and Certification rules **ISED (Company No.: 21320)** UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. has been registered and fully described in a report filed with ISED. The Company Number is 21320 and the test lab Conformity Assessment Body Identifier (CABID) is CN0046. **VCCI (Registration No.: G-20019, R-20004, C-20012 and T-20011)** UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. has been assessed and proved to be in compliance with VCCI, the Membership No. is 3793. Facility Name: Chamber D, the VCCI registration No. is G-20019 and R-20004 Shielding Room B , the VCCI registration No. is C-20012 and T-20011

Note: All tests measurement facilities use to collect the measurement data are located at Building 10, Innovation Technology Park, Song Shan Lake Hi tech Development Zone, Dongguan, 523808, China.

4. DESCRIPTION OF EUT

EUT Name	Sound Tower
Model	MX-ST9**, MX-ST9***** ("*" represents any alphanumeric character, "-", "/" or blank)
Model Difference	MX-ST9**, MX-ST9***** ("*" represents any alphanumeric character, "-", "/" or Blank) have the same technical construction including circuit diagram, PCB Layout, components and component layout, all electrical construction and mechanical construction with MX-ST90B. We select Sound Tower with model number "with MX-ST90B" as the representative model for compliance test. The difference lies only model number and marketing purpose.
Ratings	100-240V~ or 110-120V~ or 110-127V~ or 110-240V, 50/60Hz, 150 W

5. REQUIREMENT

LIMIT AND CALCULATION METHOD

Systems operating under the provisions of FCC 47 CFR section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission's guidelines.

In accordance with 47 CFR FCC Part 2 Subpart J, section 2.1091 this device has been defined as mobile device whereby a distance of 0.2m normally can be maintained between the user and the device, and below RF Permissible Exposure limit shall comply with.

Limits for General Population/Uncontrolled Exposure

RF EXPOSURE LIMIT

Frequency Range (MHz)	E-field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm^2)	Averaging Time $\|E\|^2$, $\|H\|^2$ or S (Minutes)
0.3 -- 1.34	614	1.63	(100)*	30
1.34 -- 30	824/f	2.19/f	($180/f^2$)*	30
30 -- 300	27.5	0.073	0.2	30
300 -- 1500	--	--	f/1500	30
1500 -- 100,000	--	--	1.0	30

CALCULATION METHOD

$S=PG/4\pi R^2$

Where:

S=power density

P=power input to antenna

G=power gain of the antenna in the direction of interest relative to an isotropic radiator

R=distance to the center of radiation of the antenna

CALCULATED RESULTS

Worst Case					
Mode	Output Power	Antenna Gain	Power Density	Power Density Limit	Test Result
	dBm	dBi	mW/cm2	mW/cm2	--
BLE	9	2.45	0.00278	1.0	Complies

Worst Case					
Mode	Output Power	Antenna Gain	Power Density	Power Density Limit	Test Result
	dBm	dBi	mW/cm2	mW/cm2	--
BT	10	2.45	0.00350	1.0	Complies

Note:

1. The Power comes from report operation description.
2. The EUT cannot support simultaneous emission.
3. The minimum separation distance of the device is greater than 20 cm.
3. Calculate by WORST-CASE mode.

END OF REPORT