RF Exposure Report

Report No.:	SABHKO-WTW-P21091072
FCC ID:	A94435689
Test Model:	435689
Received Date:	2021/9/29
Test Date:	2021/10/8 ~ 2021/11/19
Issued Date:	2021/12/20
Applicant:	Bose Corporation
Address:	100 The Mountain Road Framingham Massachusetts 01701-9168 United States
Issued By:	Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch Lin Kou Laboratories
Lab Address:	No. 47-2, 14th Ling, Chia Pau Vil., Lin Kou Dist., New Taipei City, Taiwan
FCC Registration / Designation Number:	198487 / TW2021

Testing Laboratory
2021

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Release Control Record

Issue No.	Description	Date Issued
SABHKO-WTW-P21091072	Original release.	2021/12/20

1 Certificate of Conformity

Product:	Video Soundbar
Brand:	BOSE
Test Model:	435689
Sample Status:	Engineering sample
Applicant:	Bose Corporation
Test Date:	2021/10/8 ~ 2021/11/19
Standards:	FCC Part 2 (Section 2.1091)
References Test Guidance:	KDB 447498 D01 General RF Exposure Guidance v06

The above equipment has been tested by **Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's RF characteristics under the conditions specified in this report.

Prepared by : Annie Chang , **Date:** 2021/12/20

Annie Chang / Senior Specialist

Approved by : Jeremy Lin , **Date:** 2021/12/20

Jeremy Lin / Project Engineer

2 RF Exposure

2.1 Limits For Maximum Permissible Exposure (MPE)

Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm^2)	Average Time (minutes)
Limits For General Population / Uncontrolled Exposure				
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

f = Frequency in MHz ; *Plane-wave equivalent power density

2.2 MPE Calculation Formula

$Pd = (Pout*G) / (4*pi*r^2)$

where

Pd = power density in mW/cm^2

Pout = output power to antenna in mW

G = gain of antenna in linear scale

Pi = 3.1416

R = distance between observation point and center of the radiator in cm

2.3 Classification

The antenna of this product, under normal use condition, is at least 20cm away from the body of the user. So, this device is classified as **Mobile Device**.

2.4 Antenna Gain

Frequency Band	Gain (dBi)	Antenna Type	Connector Type
2.4GHz	3.45	PCB	ipex
5GHz	4.93	PCB	ipex

Note: The above Antenna information is declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications, the laboratory shall not be held responsible.

2.5 Calculation Result Of Maximum Conducted Power

Function	Frequency Band (MHz)	Max AV Power (dBm)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm^2)	Limit (mW/cm^2)
WLAN	2412-2462	16.77	3.45	20	0.021	1
WLAN	5180-5240	15.73	4.93	20	0.023	1
WLAN	5260-5320	15.69	4.93	20	0.023	1
WLAN	5500-5700	15.81	4.93	20	0.024	1
WLAN	5745-5825	15.77	4.93	20	0.023	1
BT LE	2402-2480	5.06	3.45	20	0.001	1
BT EDR	2402-2480	5.10	3.45	20	0.001	1

Note:
1. Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.
2. WLAN 2.4GHz & WLAN 5GHz & Bluetooth technologies cannot transmit at same time.

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