Certificate # 2951.01

RF EXPOSURE REPORT

Applicant	BenQ Corporation
Address	16 Jihu Road, Neihu, Taipei 114, Taiwan

Manufacturer or Supplier	BenQ Corporation
Address	16 Jihu Road, Neihu, Taipei 114, Taiwan
Product	Integrated Video Conference Terminal
Brand Name	BenQ
Model	VC01A
Additional Model & Model Difference	VC01A*(* means 0~9, A~Z)
Date of tests	Oct. 14, 2021 ~ Dec. 31, 2021

☒ **FCC Part 2 (Section 2.1091)**
☒ **KDB 447498 D01**
☒ **IEEE C95.1**

CONCLUSION: The submitted sample was found to COMPLY with the test requirement

Tested by Andy Zhu Supervisor / EMC Department	Approved by Glyn He Assistant Manager / EMC Department
	 Date: Jan. 29, 2022

This report is governed by, and incorporates by reference, CPS Conditions of Service as posted at the date of issuance of this report at https://www.cps.bureauveritas.com/terms-conditions and is intended for your exclusive use. Any copying or replication of this report to or for any other person or entity, or use of our name or trademark, is permitted only with our prior written permission. This report sets forth our findings solely with respect to the test samples identified herein. The results set forth in this report are not indicative or representative of the quality or characteristics of the lot from which a test sample was taken or any similar or identical product unless specifically and expressly noted. Our report includes all of the tests requested by you and the results thereof based upon the information that you provided to us. Measurement uncertainty is only provided upon request for accredited tests. You have 60 days from date of issuance of this report to notify us of any material error or omission caused by our negligence or if you require measurement uncertainty; provided, however, that such notice shall be in writing and shall specifically address the issue you wish to raise. A failure to raise such issue within the prescribed time shall constitute you unqualified acceptance of the completeness of this report, the tests conducted and the correctness of the report contents.

TABLE OF CONTENTS

RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
FM2201WDG0200	Original release	Jan. 29, 2021

Bureau Veritas Shenzhen Co., Ltd. Dongguan Branch

No. 96, Guantai Road (Houjie Section), Houjie Town, Dongguan City, Guangdong Province. 523942. People's Republic of China.

Tel: +86 769 8998 2098
Fax: +86 769 8593 1080
Email: customerservice.dg@bureauveritas.com

1. CERTIFICATION

PRODUCT:	Integrated Video Conference Terminal
BRAND NAME:	BenQ
MODEL NO.:	VC01A
ADDITIONAL MODEL:	VC01A*(* means 0~9, A~Z)
FCC ID:	JVP-VC01A
TEST SAMPLE:	ENGINEERING SAMPLE
APPLICANT:	BenQ Corporation
TESTED DATES:	Oct. 14, 2021 ~ Dec. 31, 2021
STANDARDS:	FCC Part 2 (Section 2.1091) KDB 447498 D01 IEEE C95.1

NOTES:

1. EUT integrates two wireless modules, AIC8800 and RTL8822CU-CG respectively. For details about supported RF functions, see the following list:

Module	Supported RF functions	Remark
AIC8800	BT2.1+EDR	2.4GHz Wi-Fi & 5GHz Wi-Fi can't transmit at same time.
	BT-LE	
	2.4GHz Wi-Fi	
	5GHz Wi-Fi (U-NII-1/ U-NII-2A/ U-NII-2C)	
	5GHz Wi-Fi (U-NII-3)	
RTL8822CU-CG	5GHz Wi-Fi (U-NII-1)	
	5GHz Wi-Fi (U-NII-3)	

2. RF EXPOSURE LIMIT

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				
300-1500	…	…	F/1500	30
1500-100,000	…	…	1.0	30

F = Frequency in MHz

3. 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

4. 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**.

5. ANTENNA GAIN

The antennas provided to the EUT, please refer to the following table:

Module	Mode/ Frequency Band	Antenna Gain (dBi)	Antenna Type
AIC8800	BR/EDR	2.5	FPC
	BT-LE	2.5	FPC
	2.4GHz Wi-Fi	2.5	FPC
	5GHz Wi-Fi (U-NII-1)	3.85	FPC
	5GHz Wi-Fi (U-NII-2A)	3.96	FPC
	5GHz Wi-Fi (U-NII-2C)	4.05	FPC
	5GHz Wi-Fi (U-NII-3)	5.42	FPC
RTL8822CU-CG	5GHz Wi-Fi (U-NII-1)	4.19	PCB
	5GHz Wi-Fi (U-NII-3)	4.50	PCB

6. CALCULATION RESULT OF MAXIMUM CONDUCTED POWER

The tuned conducted Average Power (declared by client)

Module	Mode	Frequency Band (MHz)	Target Power (dBm)	Tolerance (dBm)	Lower Tolerance (dBm)	Upper Tolerance (dBm)
AIC8800	BR/DER	2402 ~ 2480	4	+-1	3	5
	BT-LE	2402 ~ 2480	4	+-1	3	5
	2.4GHz Wi-Fi	2412 ~ 2472	15	+-2	13	17
	5GHz Wi-Fi (U-NII-1)	5150 ~ 5250	11	+-2	9	13
	5GHz Wi-Fi (U-NII-2A)	5250 ~ 5350	10	+-2	8	12
	5GHz Wi-Fi (U-NII-2C)	5470 ~ 5725	12	+-2	10	14
	5GHz Wi-Fi (U-NII-3)	5725 ~ 5850	11	+-2	9	13
RTL8822CU-CG	5GHz Wi-Fi (U-NII-1)	5150 ~ 5250	10	+-2	8	12
	5GHz Wi-Fi (U-NII-3)	5725 ~ 5850	10	+-2	8	12

The measured conducted Average Power

Module	Mode	Frequency (MHz)	Averaged Power (dBm)
AIC8800	BR/DER	2441	4.52
	BT-LE	2440	4.55
	2.4GHz Wi-Fi	2462	15.63
	5GHz Wi-Fi (U-NII-1)	5180	11.26
	5GHz Wi-Fi (U-NII-2A)	5320	10.80
	5GHz Wi-Fi (U-NII-2C)	5580	12.50
	5GHz Wi-Fi (U-NII-3)	5745	11.46
RTL8822CU-CG	5GHz Wi-Fi (U-NII-1)	5240	9.10
	5GHz Wi-Fi (U-NII-3)	5745	10.26

FREQUENCY BAND (MHz)	MAX POWER (dBm)	ANTENNA GAIN (dBi)	DISTANCE (cm)	POWER DENSITY (mW/cm^2)	LIMIT (mW/cm^2)
BT	5	2.5	20	0.00112	1.0
Wi-Fi 2.4GHz(AIC8800)	17	2.5	20	0.01773	1.0
Wi-Fi 5GHz(AIC8800)	14	5.42	20	0.01741	1.0
Wi-Fi 5GHz (RTL8822CU-CG)	12	4.50	20	0.00889	1.0

CONCLUSION:

The Module AIC8800 and module RTL8822CU-CG can transmit simultaneously, but Module AIC8800's Wi-Fi 2.4GHz and Wi-Fi 5GHz can not transmit simultaneously, the formula of calculated the MPE is:

CPD1 / LPD1 + CPD2 / LPD2 + ……etc. < 1

CPD = Calculation power density

LPD = Limit of power density

Worst situation is (0.00112/1)+(0.01773/1)+(0.00889/1) = 0.02774 <1, which is less than the "1" limit.

--- END ---