

Applicant: Teleportivity Inc.

Product: FONECOM Video Intercom 10

Model No.: FONECOM-10

Trademark: TELEPORTIVITY

Test Standards: FCC Part 15.249

Test result:

It is herewith confirmed and found to comply with the

requirements set up by ANSI C63.10 &FCC Part 15 Subpart C,

Paragraph 15.249 regulations for the evaluation

electromagnetic compatibility

Approved By

Terry Tang

Manager

Dated: October 10, 2022

Results appearing herein relate only to the sample tested The technical reports is issued errors and omissions exempt and is subject to withdrawal at

# SHENZHEN TIMEWAY TESTING LABORATORIES

Zone C, 1st Floor, Block B, Jun Xiang Da Building, Zhongshan Park Road West, Tong Le Village, Nanshan District, Shenzhen, China

Tel (755) 83448688, Fax (755) 83442996, E-Mail:info@timeway-lab.com



Report No.: TW2208385-02E Page 2 of 34

Date: 2022-10-10



## **Special Statement:**

The testing quality ability of our laboratory meet with "Quality Law of People's Republic of China" Clause 19.

The testing quality system of our laboratory meet with ISO/IEC-17025 requirements, which is approved by CNAS. This approval result is accepted by MRA of APLAC.

Our test facility is recognized, certified, or accredited by the following organizations:

## **CNAS-LAB Code: L2292**

The EMC Laboratory has been assessed and in compliance with CNAS-CL01 accreditation criteria for testing Laboratories (identical to ISO/IEC 17025:2017 General Requirements) for the Competence of testing Laboratories.

## FCC-Registration No.: 744189

The EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications commission. The acceptance letter from the FCC is maintained in our files. Registration No.: 744189.

## Industry Canada (IC) — Registration No.:5205A

The EMC Laboratory has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 5205A.

## A2LA (Certification Number:5013.01)

The EMC Laboratory has been accredited by the American Association for Laboratory Accreditation (A2LA). Certification Number:5013.01

Date: 2022-10-10



# Test Report Conclusion

#### Content 1.0 General Details 1.1 Test Lab Details.... 4 1.2 Applicant Details. 4 1.3 Description of EUT .... 1.4 Submitted Sample.... 4 Test Duration. 1.5 5 1.6 Test Uncertainty. 1.7 Test By..... 5 List of Measurement Equipment..... 2.0 3.0 7 Technical Details..... 3.1 Summary of Test Results.... 7 3.2 7 Test Standards.... 4.0 EUT Modification.... 7 Power Line Conducted Emission Test.... 5.0 8 Schematics of the Test..... 5.1 8 5.2 Test Method and Test Procedure. Configuration of the EUT..... 5.3 8 5.4 EUT Operating Condition. Conducted Emission Limit. 9 5.5 5.6 Test Result. 6.0 Radiated Emission test.... 12 Test Method and Test Procedure. 6.1 12 6.2 Configuration of the EUT.... 13 6.3 EUT Operation Condition. 13 Radiated Emission Limit. 14 6.4 6.5 Test Result. 15 7.0 Band Edge 23 7.1 Test Method and Test Procedure. 23 7.2 Radiated Test Setup. 23 7.3 Configuration of the EUT..... 23 7.4 EUT Operating Condition. 23 7.5 Band Edge Limit..... 23 7.6 Band Edge Test Result. 24 8.0 Antenna Requirement..... 28 20dB bandwidth measurement.... 9.0 29 FCC ID Label..... 10.0 32 Photo of Test Setup and EUT View.... 11.0

The report refers only to the sample tested and does not apply to the bulk.

This report is issued in confidence to the client and it will be strictly treated as such by the SHENZHEN TIMEWAY TESTING LABORATORIES. It may not be reproduced rather in its entirety or in part and it may not be used for adverting. The client to whom the report is issued may, however, show or send it . or a certified copy there of prepared by the SHENZHEN TIMEWAY TESTING LABORATORIES. to his customer. Supplier or others persons directly concerned. SHENZHEN TIMEWAY TESTING LABORATORIES. will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.

In the event of the improper use of the report. The SHENZHEN TIMEWAY TESTING LABORATORIES. reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.

Date: 2022-10-10



#### 1.0 General Details

#### 1.1 Test Lab Details

Name: SHENZHEN TIMEWAY TESTING LABORATORIES.

Address: Zone C, 1st Floor, Block B, Jun Xiang Da Building, Zhongshan Park Road West, Tong Le

Village, Nanshan District, Shenzhen, China

Telephone: (755) 83448688 Fax: (755) 83442996

Site on File with the Federal Communications Commission – United Sates

Registration Number: 744189 For 3m Anechoic Chamber

## 1.2 Applicant Details

Applicant: Teleportivity Inc.

Address: S200, 1390 Market St, San Francisco, CA 94102 USA

Telephone: +1 628 888 0679

Fax: --

## 1.3 Description of EUT

Product: FONECOM Video Intercom 10

Manufacturer: GLORY STAR TECHNICS (SHENZHEN) CO., LTD.

Address: Bldg., 9, 4/F., ZongYuntai Technology Industrial Park, Songbai Road, Shiyan

Street, Baoan, Shenzhen, China

Trademark: TELEPORTIVITY

Additional Trademark: N/A

Model Number: FONECOM-10

Additional Model Name N/A

Rating: Input: DC12V, 3A, 36W Max Switching Adapter: Model: SOY-1200500-327

Input: 100-240V~, 50/60Hz, 1.7A Max; Output: DC12V, 5.0A, 60W

Modulation Type: GFSK (Bluetooth Low Energy)

Operation Frequency: 2402-2480MHz

Channel Separate: 2MHz
Channel Number: 40
Hardware Version: V0.5
Software Version: Debian 11

Serial No.: FC101220900001

Antenna Designation FPC antenna with gain 2.11dBi Max (Get from the antenna specification)

The report refers only to the sample tested and does not apply to the bulk.

This report is issued in confidence to the client and it will be strictly treated as such by the SHENZHEN TIMEWAY TESTING LABORATORIES. It may not be reproduced rather in its entirety or in part and it may not be used for adverting. The client to whom the report is issued may, however, show or send it . or a certified copy there of prepared by the SHENZHEN TIMEWAY TESTING LABORATORIES. to his customer. Supplier or others persons directly concerned. SHENZHEN TIMEWAY TESTING LABORATORIES. will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.

In the event of the improper use of the report. The SHENZHEN TIMEWAY TESTING LABORATORIES. reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.

Report No.: TW2208385-02E Page 5 of 34

Date: 2022-10-10



1.4 Submitted Sample: 2 Samples

1.5 Test Duration 2022-08-24 to 2022-10-10

1.6 Test Uncertainty

Conducted Emissions Uncertainty =3.6dB

Radiated Emissions below 1GHz Uncertainty =4.7dB

Radiated Emissions above 1GHz Uncertainty =6.0dB

Conducted Power Uncertainty =6.0dB

Occupied Channel Bandwidth Uncertainty = 5%

Conducted Emissions Uncertainty =3.6dB

Note: The measurement uncertainty is for coverage factor of k=2 and a level of confidence of 95%.

1.7 Test Engineer

The sample tested by

Print Name: Andy Xing

Page 6 of 34

Report No.: TW2208385-02E

Date: 2022-10-10



2.0 Test Equipment					
Instrument Type	Manufacturer	Model	Serial No.	Date of Cal.	Due Date
ESPI Test Receiver	R&S	ESPI 3	100379	2022-07-15	2023-07-14
LISN	R&S	EZH3-Z5	100294	2022-07-18	2023-07-17
LISN	R&S	EZH3-Z5	100253	2022-07-18	2023-07-17
Impuls-Begrenzer	R&S	ESH3-Z2	100281	2022-07-18	2023-07-17
Loop Antenna	EMCO	6507	00078608	2022-07-18	2025-07-17
Spectrum	R&S	FSIQ26	100292	2022-07-15	2023-07-14
Horn Antenna	A-INFO	LB-180400-KF	J211060660	2022-07-18	2025-07-17
Horn Antenna	R&S	BBHA 9120D	9120D-631	2022-07-18	2024-07-17
Power meter	Anritsu	ML2487A	6K00003613	2022-07-18	2023-07-17
Power sensor	Anritsu	MA2491A	32263	2022-07-18	2023-07-17
Bilog Antenna	Schwarebeck	VULB9163	9163/340	2022-07-18	2025-07-17
9*6*6 Anechoic			N/A	2022-07-26	2025-07-25
EMI Test Receiver	RS	ESVB	826156/011	2022-07-15	2023-07-14
EMI Test Receiver	RS	ESCS 30	834115/006	2022-07-15	2023-07-14
Spectrum	HP/Agilent	E4407B	MY50441392	2022-07-15	2023-07-14
Spectrum	RS	FSP	1164.4391.38	2022-07-15	2023-07-14
RF Cable	Zhengdi	ZT26-NJ-NJ-8M/FA		2022-07-15	2023-07-14
RF Cable	Zhengdi	7m		2022-07-15	2023-07-14
Pre-Amplifier	Schwarebeck	BBV9743	#218	2022-07-15	2023-07-14
Pre-Amplifier	HP/Agilent	8449B	3008A00160	2022-07-15	2023-07-14
LISN	SCHAFFNER	NNB42	00012	2022-08-18	2023-07-17
ESPI Test Receiver	R&S	ESPI 3	100379	2022-07-15	2023-07-14
LISN	R&S	EZH3-Z5	100294	2022-07-18	2023-07-17

## 2.1 Automation Test Software

#### For Conducted Emission Test

Name	Version		
EZ-EMC	Ver.EMC-CON 3A1.1		

## For Radiated Emissions

Name	Version
EMI Test Software BL410-EV18.91	V18.905
EMI Test Software BL410-EV18.806 High Frequency	V18.06

The report refers only to the sample tested and does not apply to the bulk.

This report is issued in confidence to the client and it will be strictly treated as such by the SHENZHEN TIMEWAY TESTING LABORATORIES. It may not be reproduced rather in its entirety or in part and it may not be used for adverting. The client to whom the report is issued may, however, show or send it . or a certified copy there of prepared by the SHENZHEN TIMEWAY TESTING LABORATORIES. to his customer. Supplier or others persons directly concerned. SHENZHEN TIMEWAY TESTING LABORATORIES. will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.

In the event of the improper use of the report. The SHENZHEN TIMEWAY TESTING LABORATORIES. reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.

Page 7 of 34

Report No.: TW2208385-02E

Date: 2022-10-10



#### 3.0 Technical Details

## 3.1 Summary of test results

The EUT has	been teste	d according	to the	following	specifications:

Standard	Test Type	Result	Notes
FCC Part 15, Paragraph 15.203	Antenna Requirement	Pass	Complies
FCC Part 15, Paragraph 15.207	Conducted Emission Test	Pass	Complies
FCC Part 15 Subpart C Paragraph 15.249(a) & 15.249(b) Limit	Field Strength of Fundamental	Pass	Complies
FCC Part 15, Paragraph 15.209	Radiated Emission Test	Pass	Complies
FCC Part 15 Subpart C Paragraph 15.249(d) Limit	Band Edge Test	Pass	Complies

#### 3.2 Test Standards

FCC Part 15 Subpart C, Paragraph 15.249, ANSI C63.4:2014 and ANSI C63.10:2013

#### 4.0 EUT Modification

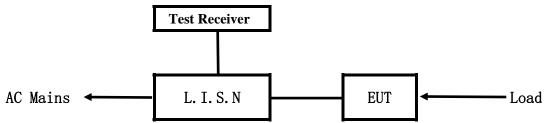
No modification by SHENZHEN TIMEWAY TESTING LABORATORIES

Date: 2022-10-10



#### 5. Power Line Conducted Emission Test

## 5.1 Schematics of the test

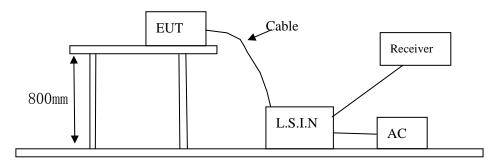


**EUT: Equipment Under Test** 

## 5.2 Test Method and test Procedure

The EUT was tested according to ANSI C63.10-2013. The Frequency spectrum from 0.15MHz to 30MHz was investigated. The LISN used was 50ohm/50uH as specified by section 5.1 of ANSI C63.10 –2013.

Test Voltage: 120V~~, 60Hz Block diagram of Test setup



## 5.3 Configuration of the EUT

The EUT was configured according to ANSI C63.10-2013. All interface ports were connected to the appropriate peripherals. All peripherals and cables are listed below.

40 channels are provided to the EUT

## A. EUT

Device	Manufacturer	Model	FCC ID
FONECOM Video Intercom	GLORY STAR TECHNICS	FONECOM-10	2A8OL-FONECO
10	(SHENZHEN) CO., LTD.	FONECOM-10	M10

The report refers only to the sample tested and does not apply to the bulk.

Report No.: TW2208385-02E Page 9 of 34

Date: 2022-10-10



#### B. Internal Device

Device	Manufacturer	Model	FCC ID/DOC
N/A			

## C. Peripherals

Device	Manufacturer	Model	Rating
N/A			

5.4 EUT Operating Condition

Operating condition is according to ANSI C63.10-2013

- A Setup the EUT and simulators as shown on follow
- B Enable AF signal and confirm EUT active to normal condition

5.5 Power line conducted Emission Limit according to Paragraph 15.207

Frequency	Limits (dB μ V)				
(MHz)	Quasi-peak Level	Average Level			
$0.15 \sim 0.50$	66.0~56.0*	56.0~46.0*			
$0.50 \sim 5.00$	56.0	46.0			
5.00 ~ 30.00	60.0	50.0			

Notes: 1. \*Decreasing linearly with logarithm of frequency.

2. The tighter limit shall apply at the transition frequencies

5.6 Test Results:

Pass

Date: 2022-10-10



## A: Conducted Emission on Live Terminal (150kHz to 30MHz)

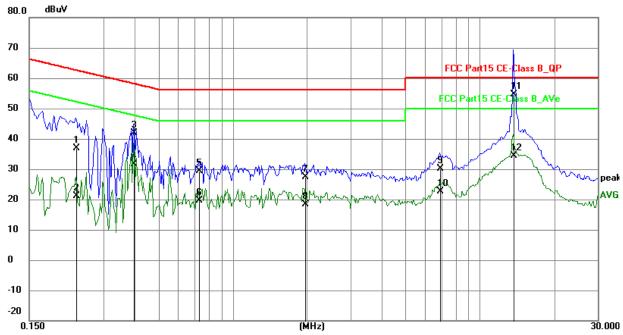
**EUT Operating Environment** 

Temperature: 25°C Humidity: 65%RH Atmospheric Pressure: 101 kPa

**EUT set Condition: Communication by BT** 

**Results: Pass** 

Please refer to following diagram for individual



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F
1	0.2319	27.05	9.75	36.80	62.38	-25.58	QP	Р
2	0.2319	11.49	9.75	21.24	52.38	-31.14	AVG	П
3	0.3957	32.11	9.76	41.87	57.94	-16.07	QP	Р
4	0.3957	21.76	9.76	31.52	47.94	-16.42	AVG	Р
5	0.7310	19.72	9.78	29.50	56.00	-26.50	QP	П
6	0.7310	9.73	9.78	19.51	46.00	-26.49	AVG	Л
7	1.9674	17.48	9.80	27.28	56.00	-28.72	QP	Р
8	1.9674	8.68	9.80	18.48	46.00	-27.52	AVG	Л
9	6.8922	20.17	10.01	30.18	60.00	-29.82	QP	Р
10	6.8922	12.61	10.01	22.62	50.00	-27.38	AVG	Р
11	13.6314	44.19	10.32	54.51	60.00	-5.49	QP	Р
12	13.6314	23.98	10.32	34.30	50.00	-15.70	AVG	Р

The report refers only to the sample tested and does not apply to the bulk.

This report is issued in confidence to the client and it will be strictly treated as such by the SHENZHEN TIMEWAY TESTING LABORATORIES. It may not be reproduced rather in its entirety or in part and it may not be used for adverting. The client to whom the report is issued may, however, show or send it . or a certified copy there of prepared by the SHENZHEN TIMEWAY TESTING LABORATORIES. to his customer. Supplier or others persons directly concerned. SHENZHEN TIMEWAY TESTING LABORATORIES. will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.

In the event of the improper use of the report. The SHENZHEN TIMEWAY TESTING LABORATORIES. reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.

Date: 2022-10-10



## B: Conducted Emission on Neutral Terminal (150kHz to 30MHz)

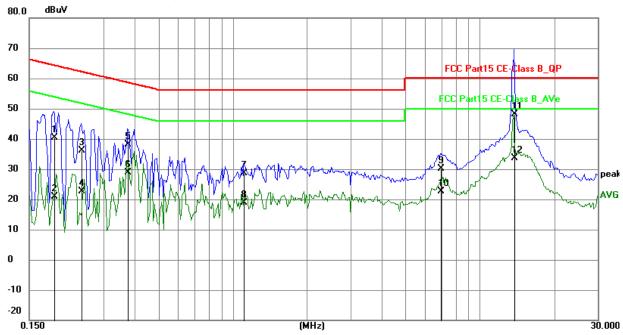
**EUT Operating Environment** 

Temperature: 25°C Humidity: 65%RH Atmospheric Pressure: 101 kPa

**EUT set Condition: Communication by BT** 

**Results: Pass** 

Please refer to following diagram for individual



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F
1	0.1890	30.64	9.76	40.40	64.08	-23.68	QP	Ч
2	0.1890	11.22	9.76	20.98	54.08	-33.10	AVG	Р
3	0.2436	26.46	9.75	36.21	61.97	-25.76	QP	Р
4	0.2436	12.79	9.75	22.54	51.97	-29.43	AVG	Р
5	0.3762	28.33	9.76	38.09	58.36	-20.27	QP	П
6	0.3762	19.01	9.76	28.77	48.36	-19.59	AVG	Л
7	1.1094	18.79	9.79	28.58	56.00	-27.42	QP	Р
8	1.1094	9.17	9.79	18.96	46.00	-27.04	AVG	Р
9	6.9312	20.14	10.01	30.15	60.00	-29.85	QP	Р
10	6.9312	12.55	10.01	22.56	50.00	-27.44	AVG	П
11	13.7757	37.73	10.33	48.06	60.00	-11.94	QP	Р
12	13.7757	23.23	10.33	33.56	50.00	-16.44	AVG	Р

The report refers only to the sample tested and does not apply to the bulk.

This report is issued in confidence to the client and it will be strictly treated as such by the SHENZHEN TIMEWAY TESTING LABORATORIES. It may not be reproduced rather in its entirety or in part and it may not be used for adverting. The client to whom the report is issued may, however, show or send it . or a certified copy there of prepared by the SHENZHEN TIMEWAY TESTING LABORATORIES. to his customer. Supplier or others persons directly concerned. SHENZHEN TIMEWAY TESTING LABORATORIES. will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.

In the event of the improper use of the report. The SHENZHEN TIMEWAY TESTING LABORATORIES. reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.

Report No.: TW2208385-02E Page 12 of 34

Date: 2022-10-10

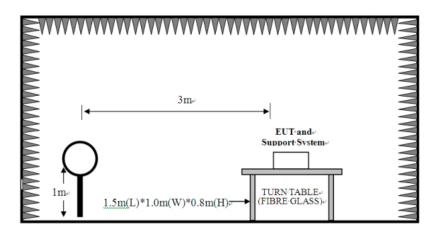


#### **6** Radiated Emission Test

- 6.1 Test Method and test Procedure:
- (1) The EUT was tested according to ANSI C63.10-2013. The radiated test was performed at Timeway EMC Laboratory. This site is on file with the FCC laboratory division, Registration No. 744189
- (2) The EUT, peripherals were put on the turntable which table size is 1m x 1.5 m, table high 0.8 m. All set up is according to ANSI C63.10-2013.
- (3) The frequency spectrum from 30 MHz to 25 GHz was investigated. All readings from 30 MHz to 1 GHz are quasi-peak values with a resolution bandwidth of 120 kHz. All readings are above 1 GHz, peak values with a resolution bandwidth of 1 MHz (Note: for Fundamental frequency radiated emission measurement, RBW=3MHz, VBW=10MHz). Measurements were made at 3 meters.
- (4) The antenna high is varied from 1 m to 4 m high to find the maximum emission for each frequency.
- (5) The antenna polarization: Vertical polarization and Horizontal polarization.

## **Block diagram of Test setup**

For radiated emissions from 9kHz to 30MHz



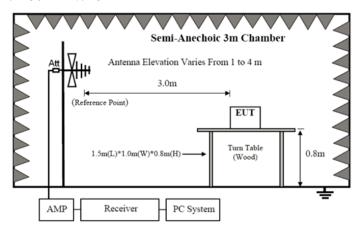
Page 13 of 34

Report No.: TW2208385-02E

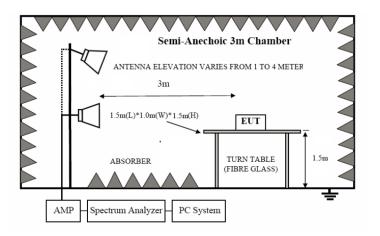
Date: 2022-10-10



For radiated emissions from 30MHz to1GHz



For radiated emissions above 1GHz



- 6.2 Configuration of The EUT

  Same as section 5.3 of this report
- 6.3 EUT Operating Condition

  Same as section 5.4 of this report.

Report No.: TW2208385-02E Page 14 of 34

Date: 2022-10-10



#### 6.4 Radiated Emission Limit

All emission from a digital device, including any network of conductors and apparatus connected thereto, shall not exceed the level of field strength specified below:

## A FCC Part 15 Subpart C Paragraph 15.249(a) Limit

Fundamental Frequency	Field Stre	Strength of Fundamental (3m)			Field Strength of Harmonics (3m)		
(MHz)	mV/m	dBuV/m		uV/m	dBu	V/m	
2400-2483.5	50	94 (Average)	114 (Peak)	500	54 (Average)	74 (Peak)	

Note:

- 1. RF Field Strength (dBuV) = 20 log RF Voltage (uV)
- 2.Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system.
- 3. The emission limit in this paragraph is based on measurement instrumentation employing an average detector.

## B. Frequencies in restricted band are complied to limit on Paragraph 15.209.

Frequency Range (MHz)	Distance (m)	Field strength (dB $\mu$ V/m)
0.009-0.490	3	20log(2400/F(kHz)) +40log (300/3)
0.490-1.705	3	20log(24000/F(kHz)) +40log (30/3)
1.705-30	3	69.5
30-88	3	40.0
88-216	3	43.5
216-960	3	46.0
Above 960	3	54.0

Note:

- 1. RF Voltage  $(dBuV) = 20 \log RF \text{ Voltage } (uV)$
- 2. In the Above Table, the tighter limit applies at the band edges.
- 3. Distance refers to the distance in meters between the measuring instrument antenna and the EUT
- 4. All scanning using PK detector. And the final emission level was get using QP detector for frequency range from 30-1000MHz.As to 1G-25G, the final emission level got using PK. For fundamental measurement, PK detector used.
- 5. For radiated emissions from 9kHz to 30MHz, the emission level is much less than the limit for more than 20dB. No necessary to take down the record.

Report No.: TW2208385-02E Page 15 of 34

Date: 2022-10-10

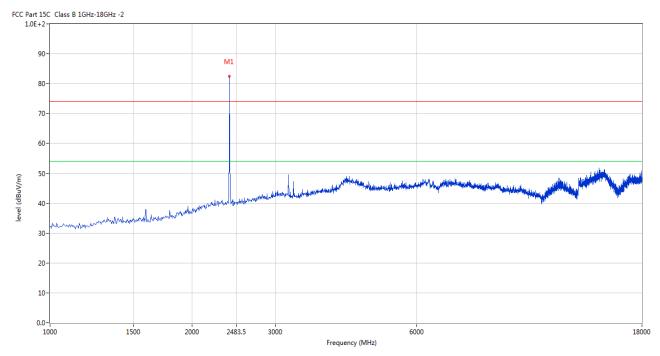


## 6.5 Test result

## A Fundamental & Harmonics Radiated Emission Data

Please refer to the following test plots for details: Low Channel-2402MHz

## Horizontal



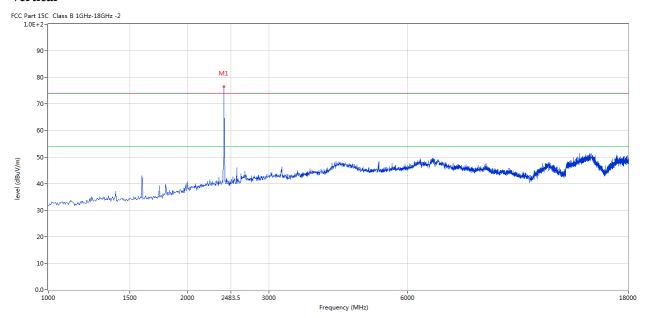
No.	Frequency	Results	Factor	Limit	Over Limit	Detector	Table (o)	Height	ANT	Verdict
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)			(cm)		
1	2402	81.57	-3.57	114.0	-32.43	Peak	141.00	100	Horizontal	Pass

Report No.: TW2208385-02E Page 16 of 34

Date: 2022-10-10



#### Vertical



No.	Frequency	Results	Factor	Limit	Over Limit	Detector	Table	Height	ANT	Verdict
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)		(o)	(cm)		
1	2402	76.49	-3.57	114.0	-37.51	Peak	169.00	100	Vertical	Pass

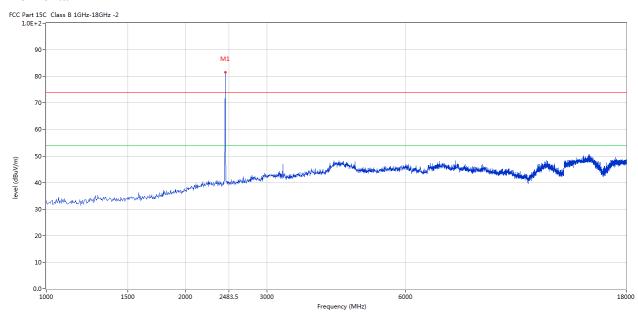
Report No.: TW2208385-02E Page 17 of 34

Date: 2022-10-10



Please refer to the following test plots for details: Middle Channel-2440MHz

#### **Horizontal**



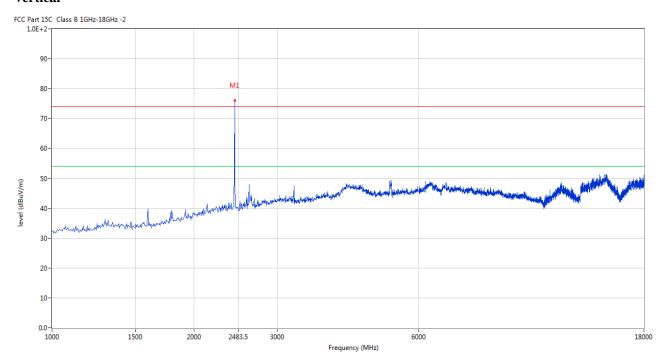
No.	Frequency	Results	Factor	Limit	Over Limit	Detector	Table	Height	ANT	Verdict
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)		(o)	(cm)		
1	2440	81.56	-3.57	114.0	-32.44	Peak	144.00	100	Horizontal	Pass

Report No.: TW2208385-02E Page 18 of 34

Date: 2022-10-10



#### Vertical



No.	Frequency	Results	Factor	Limit	Over Limit	Detector	Table (o)	Height	ANT	Verdict
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)			(cm)		
1	2440	76.07	-3.57	114.0	-37.93	Peak	174.00	100	Vertical	Pass

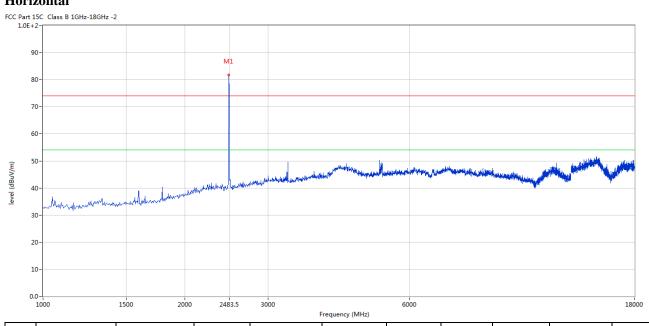
Report No.: TW2208385-02E Page 19 of 34

Date: 2022-10-10



Please refer to the following test plots for details: High Channel-2480MHz

#### Horizontal



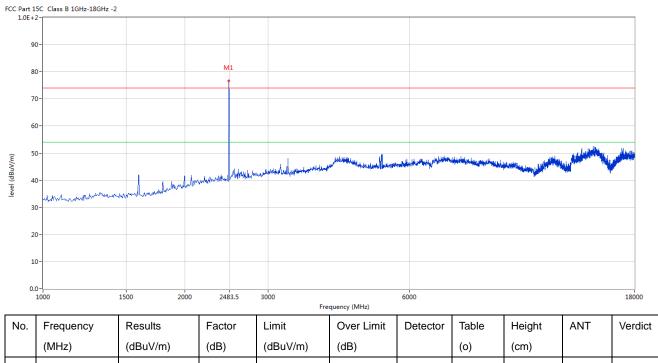
	No.	Frequency	Results	Factor	Limit	Over Limit	Detector	Table	Height	ANT	Verdict
		(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)		(o)	(cm)		
Ī	1	2480	81.72	-3.57	114.0	-32.28	Peak	149.00	100	Horizontal	Pass

Report No.: TW2208385-02E Page 20 of 34

Date: 2022-10-10



#### Vertical



ı	No.	Frequency	Results	Factor	Limit	Over Limit	Detector	Table	Height	ANT	Verdict
		(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)		(o)	(cm)		
	1	2480	76.80	-3.57	114.0	-37.20	Peak	173.00	100	Vertical	Pass

Note: (2) Emission Level = Reading Level + Antenna Factor + Cable Loss-Amplifier

- (3) Margin=Emission-Limits
- (4) According to section 15.35(b), the peak limit is 20dB higher than the average limit
- (5) For test purpose, keep EUT continuous transmitting
- (5) For emission above 18GHz and Below 30MHz, It is only the floor noise. No necessary to take down.
- (6) the measured PK value less than the AV limit.

Report No.: TW2208385-02E Page 21 of 34

Date: 2022-10-10

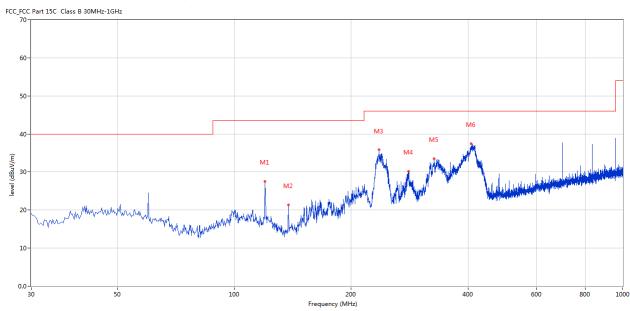


# B. General Radiated Emission Data Radiated Emission In Horizontal (30MHz----1000MHz)

EUT set Condition: Keep Tx transmitting

**Results:** Pass

Please refer to following diagram for individual



No.	Frequency	Results	Factor	Limit	Over Limit	Detector	Table	Height	ANT	Verdict
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)		(o)	(cm)		
1	119.945	27.53	-15.32	43.5	-15.97	Peak	342.00	100	Horizontal	Pass
2	137.643	21.32	-17.25	43.5	-22.18	Peak	318.00	100	Horizontal	Pass
3	236.073	35.79	-12.42	46.0	-10.21	Peak	326.00	100	Horizontal	Pass
4	281.167	30.24	-11.50	46.0	-15.76	Peak	272.00	100	Horizontal	Pass
5	327.231	33.48	-10.32	46.0	-12.52	Peak	334.00	100	Horizontal	Pass
6	406.993	37.40	-8.61	46.0	-8.60	Peak	225.00	100	Horizontal	Pass

Report No.: TW2208385-02E Page 22 of 34

Date: 2022-10-10

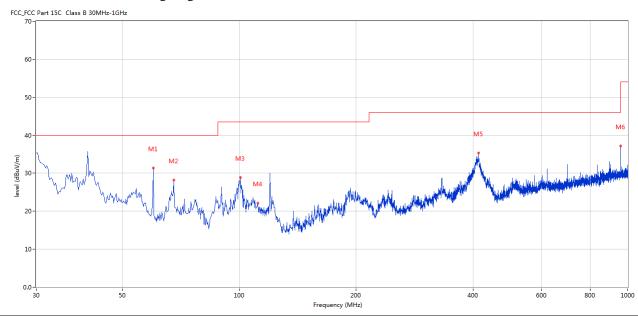


## Radiated Emission In Vertical (30MHz----1000MHz)

EUT set Condition: Keep Tx transmitting

**Results:** Pass

Please refer to following diagram for individual



No.	Frequency	Results	Factor	Limit	Over Limit	Detector	Table	Height	ANT	Verdict
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)		(o)	(cm)		
1	60.062	31.40	-12.97	40.0	-8.60	Peak	52.00	100	Vertical	Pass
2	67.821	28.22	-14.55	40.0	-11.78	Peak	333.00	100	Vertical	Pass
3	100.792	28.82	-13.46	43.5	-14.68	Peak	140.00	100	Vertical	Pass
4	111.702	22.21	-13.76	43.5	-21.29	Peak	201.00	100	Vertical	Pass
5	413.297	35.36	-8.30	46.0	-10.64	Peak	84.00	100	Vertical	Pass
6	959.755	37.23	-1.63	46.0	-8.77	Peak	155.00	100	Vertical	Pass

Date: 2022-10-10

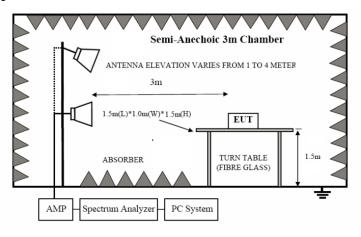


## 7. Band Edge

#### 7.1 Test Method and test Procedure:

- (1) The EUT was tested according to ANSI C63.10–2013. The radiated test was performed at Timeway EMC Laboratory. This site is on file with the FCC laboratory division, Registration No. 744189
- (2) Set Spectrum as RBW=1MHz, VBW=3MHz and Peak detector used for PK value. RBW=1MHz, VBW=10Hz and Peak detector used for AV value.
- (3) The antenna high is varied from 1 m to 4 m high to find the maximum emission for each frequency.
- (4) The antenna polarization: Vertical polarization and Horizontal polarization.

## 7. 2 Radiated Test Setup



For the actual test configuration, please refer to the related items – Photos of Testing

## 7.3 Configuration of The EUT

Same as section 5.3 of this report

## 7.4 EUT Operating Condition

Same as section 5.4 of this report.

## 7.5 Band Edge Limit

Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in Section 15.209, whichever is the lesser attenuation.

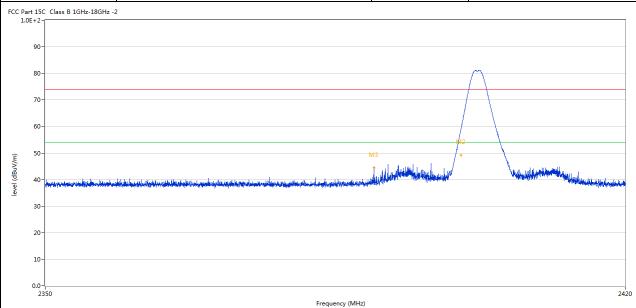
Report No.: TW2208385-02E Page 24 of 34

Date: 2022-10-10



## 7.6 Test Result

Product:	FONECOM Video Intercom 10	Polarity	Horizontal
Mode	Keeping Transmitting	Test Voltage	120V~
Temperature	24 deg. C,	Humidity	56% RH
Test Result:	Pass		



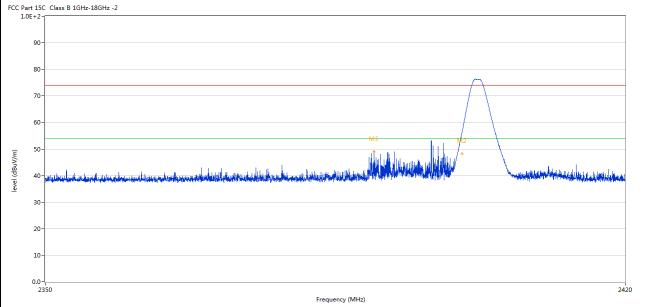
No.	Frequency	Results	Factor	Limit	Over Limit	Detector	Table	Height	ANT	Verdict
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)		(o)	(cm)		
1	2402.172	81.16	-3.57	74.0	7.16	Peak	141.00	100	Horizontal	N/A
2	2399.968	58.98	-3.57	74.0	-15.02	Peak	141.00	100	Horizontal	Pass
2**	2399.968	49.10	-3.57	54.0	-4.90	AV	141.00	100	Horizontal	Pass
3	2389.990	44.40	-3.53	74.0	-29.60	Peak	0.00	100	Horizontal	Pass

Report No.: TW2208385-02E Page 25 of 34

Date: 2022-10-10



Product:	FONECOM Video Intercom 10	Detector	Vertical						
Mode	Keeping Transmitting	Test Voltage	120V~						
Temperature	24 deg. C,	Humidity	56% RH						
Test Result:	Pass								
FCC Part 15C Class B 1GHz-18GHz -2 1.0E+2-									



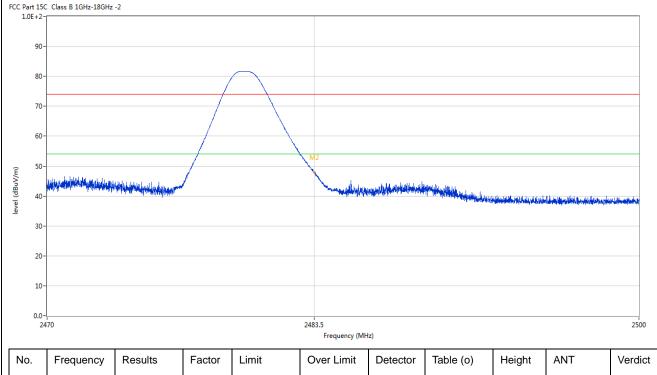
No.	Frequency	Results	Factor	Limit	Over Limit	Detector	Table	Height	ANT	Verdict
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)		(o)	(cm)		
1	2401.700	76.38	-3.57	74.0	2.38	Peak	172.00	100	Vertical	N/A
2	2400.090	56.18	-3.57	74.0	-17.82	Peak	172.00	100	Vertical	Pass
2**	2400.090	48.18	-3.57	54.0	-5.82	AV	172.00	100	Vertical	Pass
3	2389.953	48.91	-3.53	74.0	-25.09	Peak	279.00	100	Vertical	Pass

Report No.: TW2208385-02E Page 26 of 34

Date: 2022-10-10



Product:	FONECOM Video Intercom 10	Polarity	Horizontal
Mode	Keeping Transmitting	Test Voltage	120V~
Temperature	24 deg. C,	Humidity	56% RH
Test Result:	Pass		



(dBuV/m)	(dB)	(dBuV/m)	(dB)					
		( , , ,	(ub)			(cm)		
81.58	-3.57	74.0	7.58	Peak	143.00	100	Horizontal	N/A
47.75	-3.57	74.0	-26.25	Peak	143.00	100	Horizontal	Pass

Page 27 of 34

Report No.: TW2208385-02E

Date: 2022-10-10



	Product:		FONECOM Video Intercom 10				Detector			Vertical	
	Mode		Kee	ping Transn	nitting	Те	est Voltage		120V~	•	
	Temperature			24 deg. C	,	ŀ	Humidity	y 56% RH			
	Test Result:			Pass							
CC Part 1	5C Class B 1GHz-18GHz	: -2			,	•		•			
1.06+2	-										
90	)-										
80	)-										
70			/								
/(	,-										
	I		/	\							
60	)-										
_					M2						
_	)-	ر المعادل المع			M2	L. Lavel (II dds [4,1)64, [4	northeadile to the late of the		n saasalkishkood, kkaaliliissakish, ja p	Lacon salah, takah	
	)-	a Marilia and ad the Arthur agricus a			M2				a manghisha pa basalikan kista a	hrviji pilitik kareja	
_		والمرابع والمرابع المرابع المرابع والمرابع والمر			M2	ha Landyk da lajuhaji	ura benir ta kirbadi sabira ke	The part of the part of the control of	n aga nghisha ya khirakhirakhira di	hered graphed by the perfect	
50   40   40	o	a dikingila adalah dikila asaligi a n			M2				a managhinha an i Annaidh an Aiste an	An included by the property	
(m/nggn/w) 40/200		والمسترار والمراكب أنبار ووالمرار والمرار والمرار والمرار والمرار والمرار والمرار والمرار والمرار و			M2		produced by the second		a da illishi ya ki da illishi labad	ereizeide de profe	
(Magn/m)		a de la proposition del la proposition del la proposition del la proposition de la proposition de la proposition del la propo			M2		ura beekka kirkele edea ja		a alperiphish pap berealth, et black at	in it said to hardy	
(R/\ngp) 40 30 20		a del institute de de la del de de la constitución de la del de la constitución de la del de la constitución d			M2 2483.5		in a least to his find a few for		n staribilde yn hefedlûn ei bladd	2500	
30 30 10 10 10 10 10 10 10 10 10 10 10 10 10	)				2483.5 Frequency (MH				a da ishi da jah da kala da ka	1	
(R/\ngp) 40 30 20	Frequency	Results	Factor	Limit	2483.5 Frequency (MH		Table (o)	Height	ANT	2500	
30 30 10 10 10 10 10 10 10 10 10 10 10 10 10	)		Factor (dB)	(dBuV/m)	2483,5 Frequency (MH. Over Limit (dB)	z)			ANT	Verdict	
30 30 10 10 10 10 10 10 10 10 10 10 10 10 10	Frequency	Results			2483.5 Frequency (MH	z)		Height	ANT Vertical	1	

Note: The PK emission level less than the AV limit. No necessary to record the AV emission level.

Report No.: TW2208385-02E Page 28 of 34

Date: 2022-10-10



## 8.0 Antenna Requirement

## **Applicable Standard**

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section.

This product has an FPC antenna. The antenna gain is 2.11dBi Max. It fulfills the requirement of this section. Test Result: Pass

Page 29 of 34

Date: 2022-10-10

Report No.: TW2208385-02E



<b>9.0</b> 20dB Bandwidth I	Measurement				
Product:	FONECOM Video Intercom	10	Test Mode:	Keep t	ransmitting
Mode	Keeping Transmitting		Test Voltage	120V~ 56% RH	
Temperature	24 deg. C,		Humidity		
Test Result:	Pass		Detector		PK
20dB Bandwidth	1.208MHz	1.208MHz			
Ŕ	Marker 1 [T1 ndB]	RBW	100 kHz	RF Att	20 dB
Ref Lvl	ndB 20.00 dB	VBW	300 kHz		
10 dBm	BW 1.20841683 MHz	SWT	5 ms	Unit	dBm
10			▼ <sub>1</sub> [T1	] -	2.70 dBm
				2.4017	
0	<u> </u>	_	ndB	2	0.00 dB
			BW ▼ <sub>T1 [T</sub>	1.2084	
-10					8377 GHz
			<b>T</b> T2 [T		2.72 dBm
-20	7		A 5	2.4025	9218 GHz 1MA
IMAX					IMA
-30					
-40					
-50					W. wal
-60					
-70					
-80					
-90 Center 2.40	)2 GHz 300	kHz/	1	Sp	an 3 MHz
Date: 22.SI	EP.2022 16:41:37			_	

Page 30 of 34

Report No.: TW2208385-02E

Date: 2022-10-10



Product:	FONECOM Vio	deo Intercom 10	Test Mode:	Keep tra	ansmitting
Mode	Keeping Tı	ransmitting	Test Voltage	12	0V~
Temperature	24 de	eg. C,	Humidity	569	% RH
Test Result:	Pa	ass	Detector	]	PK
20dB Bandwidth	1.208	BMHz			
	Marker 1	[T1 ndB]	RBW 100 k	Hz RF Att	20 dB
Ref Lvl	ndB	20.00 dB	VBW 300 k		
10 dBm	BW 1.2	0841683 MHz	SWT 5 m	s Unit	dBm
			▼1	[T1] -1	.00 dBm
0		<u>1</u>		2.43973	848 GHz
			ndF	3 20041	.00 dB
			BW ∇ <sub>T</sub>	1.20841 [T1] -20	.85 dBm
-10	/			2.43938	
	T		D. T.	2 [T1] -21	.15 dBm
-20 1MAX	7		7	2.44059	218 GHz <b>1MA</b>
IMAX					IMA
-30					
-40					
-50					M.
					u u u
-60					
-70					
, j					
-80					
-80					
-90					
Center 2	.44 GHz	300 kF	Hz/	Spa	an 3 MHz
Date: 22	.SEP.2022 16:48	8:30			

Page 31 of 34

Report No.: TW2208385-02E

Date: 2022-10-10



Product:	FONECOM V	ideo Intercom 10	Te	est Mode:	Keep tra	nsmitting	
Mode	Keeping 7	Transmitting	Tes	st Voltage	12	0V~	
Temperature	24 d	Н	Iumidity	56% RH PK			
Test Result:	P	Ι	Detector				
20dB Bandwidth	1.20	8MHz					
	Marker 1	[T1 ndB]	RBW	100 kHz	RF Att	20 dB	
Ref Lvl	ndB	20.00 dB	VBW	300 kHz			
10 dBm	BW 1.2	20841683 MHz	SWT	5 ms	Unit	dBm	
				<b>▼</b> 1 [T	-0	.37 dBm	A
0		1			2.47974	449 GHz	
			<u> </u>	ndB	20	.00 dB	
				BW ▼T1 [	1.20841 T11 -20	683 MHz	
-10					2.47938		
	Ţ			√ <sub>F2</sub> [	T1] -20	.72 dBm	
-20 1MAX	<u> </u>				2.48059	218 GHz	MA
IMAX						1.	
-30	~~~				\ m		
-40							
					\	\u	
-50						Mohan	
						V (4000	
-60							
-70							
-80							
-90							
Center 2	.48 GHz	300 k	Hz/		Spa	n 3 MHz	
Date: 22	.SEP.2022 16:4	19:26					

Report No.: TW2208385-02E Page 32 of 34

Date: 2022-10-10



## 10.0 FCC ID Label

#### FCC ID: 2A8OL-FONECOM10

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation

The label must not be a stick-on paper label. The label on these products must be permanently affixed to the product and readily visible at the time of purchase and must last the expected lifetime of the equipment not be readily detachable.

## **Mark Location:**



Page 33 of 34

Report No.: TW2208385-02E

Date: 2022-10-10



#### 11.0 Photo of testing

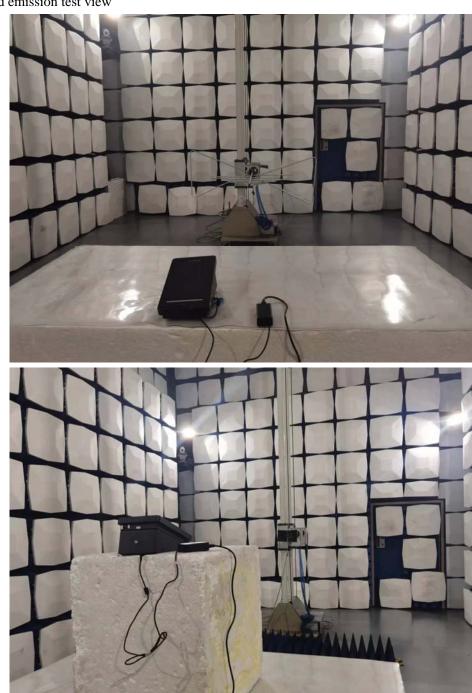
#### 11.1 Conducted test View--



Date: 2022-10-10



## Radiated emission test view



## Photographs - EUT

Please refer test report TW2208385-01E

## -- End of the report--

The report refers only to the sample tested and does not apply to the bulk.

This report is issued in confidence to the client and it will be strictly treated as such by the SHENZHEN TIMEWAY TESTING LABORATORIES. It may not be reproduced rather in its entirety or in part and it may not be used for adverting. The client to whom the report is issued may, however, show or send it . or a certified copy there of prepared by the SHENZHEN TIMEWAY TESTING LABORATORIES. to his customer. Supplier or others persons directly concerned. SHENZHEN TIMEWAY TESTING LABORATORIES. will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.

In the event of the improper use of the report. The SHENZHEN TIMEWAY TESTING LABORATORIES. reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.