

TEST REPORT

FCC ID: 2ARKF-1208

Product: HD Conference Camera with Wireless Speakerphone

Model No.: AUCTOPUS I-1208

Additional Model: AUCTOPUS I-1200, AUCTOPUS I-1300, AUCTOPUS I-1600, AUCTOPUS I-1700, AUCTOPUS I-1800, AUCTOPUS I-1900 HD Conference Camera.AUCTOPUS I-1308, AUCTOPUS I-1608, AUCTOPUS I-1708, **AUCTOPUS I-1808, AUCTOPUS I-1908**

Trade Mark: W INNOTRIK

音络

Report No.: TCT180808E020 Issued Date: Dec. 26, 2018

Issued for:

Shenzhen Innotrik Technology Co., Ltd Room 502 to 504, Deguanting Business Center, No.88 Xin'an 3rd, Dalang Community, Xin'an Street, Shenzhen, China

Issued By:

Shenzhen Tongce Testing Lab. 1B/F., Building 1, Yibaolai Industrial Park, Qiaotou, Fuyong, Baoan District, Shenzhen, Guangdong, China

> TEL: +86-755-27673339 FAX: +86-755-27673332

Note: This report shall not be reproduced except in full, without the written approval of Shenzhen Tongce Testing Lab. This document may be altered or revised by Shenzhen Tongce Testing Lab. personnel only, and shall be noted in the revision section of the document. The test results in the report only apply to the tested sample.

Hotline: 400-6611-140 Tel: 86-755-27673339 Fax: 86-755-27673332 http://www.tct-lab.com

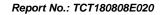




TABLE OF CONTENTS

1.	Test Certification		
2.	Test Result Summary		4
3.	EUT Description		5
4.	General Information) (,c	7
	4.1. Test Environment and Mode		7
	4.2. Description of Support Units		
5.	Facilities and Accreditations	(0)	8
	5.1. Facilities		8
	5.2. Location	<u> </u>	8
	5.3. Measurement Uncertainty		8
6.	Test Results and Measurement Data		9
	6.1. Antenna Requirement		9
	6.2. Conducted Emission		10
	6.3. Radiated Emission Measurement		11
	6.4. 20dB Occupied Bandwidth	.)	26
Ар	pendix A: Photographs of Test Setup		
Ap	pendix B: Photographs of EUT		



1. Test Certification

Product:	HD Conference Camera with Wireless Speakerphone				
Model No.:	AUCTOPUS I-1208				
Additional Model No.:	AUCTOPUS I-1200, AUCTOPUS I-1300, AUCTOPUS I-1600, AUCTOPUS I-1700, AUCTOPUS I-1800, AUCTOPUS I-1900 HD Conference Camera.AUCTOPUS I-1308, AUCTOPUS I-1608, AUCTOPUS I-1708, AUCTOPUS I-1808, AUCTOPUS I-1908				
Trade Mark:	於 INNOTRIK 音络 [®] AUCTOPUS [®]				
Applicant:	Shenzhen Innotrik Technology Co., Ltd				
Address:	Room 502 to 504, Deguanting Business Center, No.88 Xin'an 3rd, Dalang Community, Xin'an Street, Shenzhen, China				
Manufacturer:	Shenzhen Innotrik Technology Co., Ltd				
Address:	Room 502 to 504, Deguanting Business Center, No.88 Xin'an 3rd, Dalang Community, Xin'an Street, Shenzhen, China				
Date of Test:	Aug. 09, 2018 – Dec. 25, 2018				
Applicable Standards:	FCC CFR Title 47 Part 15 Subpart C Section 15.249				

The above equipment has been tested by Shenzhen Tongce Testing Lab. and found compliance with the requirements set forth in the technical standards mentioned above. The results of testing in this report apply only to the product/system, which was tested. Other similar equipment will not necessarily produce the same results due to production tolerance and measurement uncertainties.

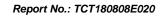
Tested By: Dec. 25, 2018

Brews Xu

Tomsin

Reviewed By: Date: Dec. 26, 2018

Approved By: Date: Dec. 26, 2018





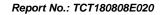
2. Test Result Summary

Requirement	CFR 47 Section	Result
Antenna Requirement	§15.203	PASS
AC Power Line Conducted Emission	§15.207	PASS
Field Strength of Fundamental	§15.249 (a)	PASS
Spurious Emissions	§2.1053 §15.249 (a) (d)/ §15.209	PASS
Band Edge	§2.1053 §15.249 (d)/ §15.205	PASS
20dB Occupied Bandwidth	§2.1049 §15.215 (c)	PASS

Note:

- 1. Pass: Test item meets the requirement.
- 2. Fail: Test item does not meet the requirement.
- 3. N/A: Test case does not apply to the test object.
- 4. The test result judgment is decided by the limit of test standard.







3. EUT Description

Product:	HD Conference Camera with Wireless Speakerphone		
Model No.:	AUCTOPUS I-1208		
Additional Model No.:	AUCTOPUS I-1200, AUCTOPUS I-1300, AUCTOPUS I-1600, AUCTOPUS I-1700, AUCTOPUS I-1800, AUCTOPUS I-1900 HD Conference Camera.AUCTOPUS I-1308, AUCTOPUS I-1608, AUCTOPUS I-1708, AUCTOPUS I-1808, AUCTOPUS I-1908		
Trade Mark:	₩ INNOTRIK 音络 W AUCTOPUS		
Operation Frequency:	2406MHz - 2474MHz		
Number of Channel:	18		
Modulation Technology:	GFSK		
Antenna Type:	PCB Antenna		
Antenna Gain:	3dBi		
Power Supply:	Rechargeable Li-ion Battery DC 3.7V		
Remark:	All models above are identical in interior structure, electrical circuits and components, and just model names are different for the marketing requirement.		
Note:	The main test model AUCTOPUS I-1208 is a product consisting of SPEAKERPHONE part and CAMERA part, and SPEAKERPHONE part test report is report No.: TCT180808E020, CAMERA part test report is report No.: TCT180905E006.		





Operation Frequency Each of Channel

Channel	Frequency	Channel	Frequency	Channel	Frequency		
1	2406MHz	7	2430MHz	13	2454MHz		
2	2410MHz	8	2434MHz	14	2458MHz		
3	2414MHz	9	2438MHz	15	2462MHz		
4	2418MHz	10	2442MHz	16	2466MHz		
5	2422MHz	11	2446MHz	17	2470MHz		
6	2426MHz	12	2450MHz	18	2474MHz		
Remarks Channel 1, 10 and 10 are calcuted to perform the tests							

Remark: Channel 1, 10 and 18 are selected to perform the tests.

Note:

In section 15.31(m), regards to the operating frequency range over 10 MHz, the Lowest frequency, the middle frequency, and the highest frequency of channel were selected to perform the test, and the selected channel see below:

Channel	Frequency
The lowest channel	2406MHz
The middle channel	2442MHz
The Highest channel	2474MHz





4. General Information

4.1. Test Environment and Mode

Operating Environment:	
Temperature:	25.0 °C
Humidity:	54 % RH
Atmospheric Pressure:	1010 mbar
Test Mode:	
Engineering mode:	Keep the EUT in continuous transmitting by select channel

The sample was placed (0.8m below 1GHz, 1.5m above 1GHz) above the ground plane of 3m chamber. Measurements in both horizontal and vertical polarities were performed. During the test, each emission was maximized by: having the EUT continuously working, investigated all operating modes, rotated about all 3 axis (X, Y & Z) and considered typical configuration to obtain worst position, manipulating interconnecting cables, rotating the turntable, varying antenna height from 1m to 4m in both horizontal and vertical polarizations. The emissions worst-case are shown in Test Results of the following pages.

4.2. Description of Support Units

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

Equipment	Model No.	Serial No.	FCC ID	Trade Name
1 (0)	1 6) /	(6) 1	

Note:

- 1. All the equipment/cables were placed in the worst-case configuration to maximize the emission during the test.
- 2. Grounding was established in accordance with the manufacturer's requirements and conditions for the intended use.





5. Facilities and Accreditations

5.1. Facilities

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

• FCC - Registration No.: 645098

Shenzhen Tongce Testing Lab

The 3m Semi-anechoic chamber has been registered and fully described in a report with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files.

IC - Registration No.: 10668A-1

The 3m Semi-anechoic chamber of Shenzhen TCT Testing Technology Co., Ltd. has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing

5.2.Location

Shenzhen Tongce Testing Lab

Address: 1B/F., Building 1, Yibaolai Industrial Park, Qiaotou, Fuyong, Baoan District,

Shenzhen, Guangdong, China

TEL: +86-755-27673339

5.3. Measurement Uncertainty

The reported uncertainty of measurement $y \pm U$, where expended uncertainty U is based on a standard uncertainty multiplied by a coverage factor of k=2, providing a level of confidence of approximately 95 %.

No.	Item	MU
7	Conducted Emission	±2.56dB
2	RF power, conducted	±0.12dB
3	Spurious emissions, conducted	±0.11dB
4	All emissions, radiated(<1GHz)	±3.92dB
5	All emissions, radiated(>1GHz)	±4.28dB
6	Temperature	±0.1°C
7	Humidity	±1.0%





6. Test Results and Measurement Data

6.1.Antenna Requirement

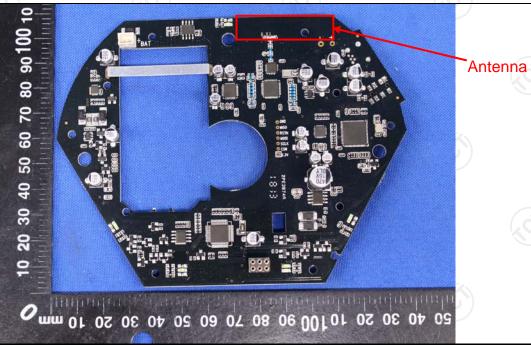
Standard requirement: FCC Part15 C Section 15.203

15.203 requirement:

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, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

E.U.T Antenna:

The EUT antenna is PCB antenna which permanently attached, and the best case gain of the antenna is 3dBi.





6.2.Conducted Emission

6.2.1. Test Specification

Test Method: ANSI C63.10:2013 Frequency Range: Receiver setup: RBW=9 kHz, VBW=30 kHz, Sweep time=auto Frequency range Limit (dBuV) (MHz) Quasi-peak Average 0.15-0.5 66 to 56* 56 to 46* 0.5-5 56 46 5-30 60 50 Reference Plane LISN Frequency Range LISN Frequency range Limit (dBuV) (MHz) Quasi-peak Average 0.15-0.5 66 to 56* 56 to 46* 5-30 60 50 Reference Plane LISN Frequency range Limit (dBuV) Reference Plane Reference Plane LISN Frequency range Limit (dBuV) Reference Plane LISN Frequency range Linit (dBuV) Reference Plane Reference Plane LISN Frequency range Linit (dBuV) Reference Plane Reference Plane Reference Plane Reference Plane LISN Frequency range Linit (dBuV) Reference Plane R							
Receiver setup: RBW=9 kHz, VBW=30 kHz, Sweep time=auto Frequency range Limit (dBuV) (MHz) Quasi-peak Average 0.15-0.5 66 to 56* 56 to 46* 0.5-5 56 46 5-30 60 50 Reference Plane LISN AUX Equipment E.U.T Test table/Insulation plane Receiver Receiver Test Mode: Transmitting mode with modulation 1. The E.U.T and simulators are connected to the mair power through a line impedance stabilization network (L.I.S.N.). This provides a 500hm/50uH coupling impedance for the measuring equipment. 2. The peripheral devices are also connected to the mair power through a LISN that provides a 500hm/50uH coupling impedance with 500hm termination. (Please refer to the block diagram of the test setup and photographs). 3. Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.10:2013 on conducted measurement.	Test Requirement:	FCC Part15 C Section 15.207					
Receiver setup: RBW=9 kHz, VBW=30 kHz, Sweep time=auto	Test Method:	ANSI C63.10:2013					
Frequency range Limit (dBuV) (MHz) Quasi-peak Average 0.15-0.5 66 to 56* 56 to 46* 0.5-5 56 46 5-30 60 50 Reference Plane LISN AUX Equipment Lisn Filter Ac power EUT Equipment Under Test LISN Line impedence Stabilization Network Test table leight-0 8in 1. The E.U.T and simulators are connected to the mair power through a line impedance stabilization network (L.I.S.N.). This provides a 50ohm/50uH coupling impedance for the measuring equipment. 2. The peripheral devices are also connected to the mair power through a LISN that provides a 50ohm/50uH coupling impedance for the measuring equipment. 2. The peripheral devices are also connected to the mair power through a LISN that provides a 50ohm/50uH coupling impedance with 50ohm termination. (Please refer to the block diagram of the test setup and photographs). 3. Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.10:2013 on conducted measurement.	Frequency Range:	150 kHz to 30 MHz					
Comparison Com	Receiver setup:	RBW=9 kHz, VBW=30	kHz, Sweep time	=auto			
Test Setup: Consider Setup:		- / /					
Reference Plane LISN	Limite						
Reference Plane LISN	Limits:			-			
Test Setup: Reference Plane							
Test Setup: Remark		5-30	60	50			
Test Setup: Remark		Refere	nce Plane				
1. The E.U.T and simulators are connected to the main power through a line impedance stabilization network (L.I.S.N.). This provides a 50ohm/50uH coupling impedance for the measuring equipment. 2. The peripheral devices are also connected to the main power through a LISN that provides a 50ohm/50uH coupling impedance with 50ohm termination. (Please refer to the block diagram of the test setup and photographs). 3. Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all or the interface cables must be changed according to ANSI C63.10:2013 on conducted measurement.	Test Setup:	Remark E.U.T. Equipment Under Test LISN: Line Impedence Stabilization Test table height=0.8m	J.T EMI Receiver	ter — AC power			
power through a line impedance stabilization network (L.I.S.N.). This provides a 50ohm/50uH coupling impedance for the measuring equipment. 2. The peripheral devices are also connected to the main power through a LISN that provides a 50ohm/50uH coupling impedance with 50ohm termination. (Please refer to the block diagram of the test setup and photographs). 3. Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.10:2013 on conducted measurement.	Test Wode:						
Test Result: PASS	Test Procedure:	 The peripheral devices are also connected to the main power through a LISN that provides a 50ohm/50uH coupling impedance with 50ohm termination. (Please refer to the block diagram of the test setup and photographs). Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to 					
	Test Result:	PASS					



6.2.2. Test Instruments

Conducted Emission Shielding Room Test Site (843)								
Equipment	Manufacturer	Model Serial Num		Calibration Due				
Test Receiver	Test Receiver R&S		101402	Jul. 17, 2019				
LISN	LISN Schwarzbeck		8126453	Sep. 20, 2019				
Coax cable (9KHz-30MHz)	тст	CE-05	N/A	Sep. 16, 2019				
EMI Test Software	Shurple Technology	EZ-EMC	N/A	N/A				

Note: The calibration interval of the above test instruments is 12 months and the calibrations are traceable to international system unit (SI).



Page 11 of 37

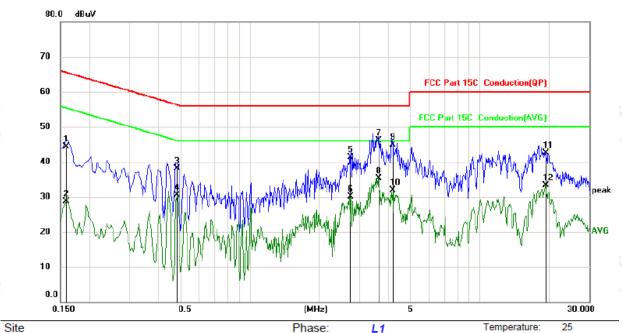
Hotline: 400-6611-140 Tel: 86-755-27673339 Fax: 86-755-27673332 http://www.tct-lab.com



6.2.3. Test data

Please refer to following diagram for individual

Conducted Emission on Line Terminal of the power line (150 kHz to 30MHz)



Limit: FCC Part 15C Conduction(QP)

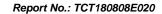
Power:

AC 120V/60Hz

Humidity: 55 %

Mode: TX+Charging

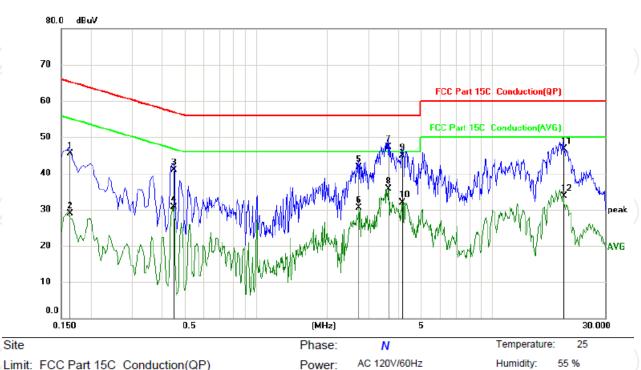
No. MI	k. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
	MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	0.1590	34.00	10.22	44.22	65.52	-21.30	QP	
2	0.1590	18.47	10.22	28.69	55.52	-26.83	AVG	
3	0.4830	27.80	10.22	38.02	56.29	-18.27	QP	
4	0.4830	20.33	10.22	30.55	46.29	-15.74	AVG	
5	2.7285	30.81	10.45	41.26	56.00	-14.74	QP	
6	2.7285	19.66	10.45	30.11	46.00	-15.89	AVG	
7 *	3.6240	35.70	10.47	46.17	56.00	-9.83	QP	
8	3.6240	24.83	10.47	35.30	46.00	-10.70	AVG	
9	4.1910	34.50	10.47	44.97	56.00	-11.03	QP	
10	4.1910	21.46	10.47	31.93	46.00	-14.07	AVG	
11	19.3515	31.50	11.04	42.54	60.00	-17.46	QP	
12	19.3515	22.21	11.04	33.25	50.00	-16.75	AVG	



Humidity:



Conducted Emission on Neutral Terminal of the power line (150 kHz to 30MHz)



Limit: FCC Part 15C Conduction(QP)

Mode: TX+Charging

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1635	35.30	10.22	45.52	65.28	-19.76	QP	
2		0.1635	18.78	10.22	29.00	55.28	-26.28	AVG	
3		0.4470	30.70	10.22	40.92	56.93	-16.01	QP	
4		0.4470	20.39	10.22	30.61	46.93	-16.32	AVG	
5		2.7195	31.20	10.45	41.65	56.00	-14.35	QP	
6		2.7195	20.04	10.45	30.49	46.00	-15.51	AVG	
7	*	3.6285	36.90	10.47	47.37	56.00	-8.63	QP	
8		3.6285	25.33	10.47	35.80	46.00	-10.20	AVG	
9		4.1415	34.50	10.47	44.97	56.00	-11.03	QP	
10		4.1415	21.49	10.47	31.96	46.00	-14.04	AVG	
11		20.0670	35.70	11.07	46.77	60.00	-13.23	QP	
12		20.0670	22.61	11.07	33.68	50.00	-16.32	AVG	

Power:

Note:

Freq. = Emission frequency in MHz

Reading level $(dB\mu V)$ = Receiver reading

Corr. Factor (dB) = Antenna factor + Cable loss

Measurement $(dB\mu V)$ = Reading level $(dB\mu V)$ + Corr. Factor (dB)

 $Limit (dB\mu V) = Limit stated in standard$

 $Margin (dB) = Measurement (dB\mu V) - Limits (dB\mu V)$

Q.P. =Quasi-Peak

AVG =average

^{*} is meaning the worst frequency has been tested in the frequency range 150 kHz to 30MHz.



6.3. Radiated Emission Measurement

6.3.1. Test Specification

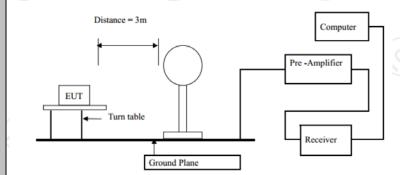
Total Boundary	E00.5 115		45.0007	B. (2)	0 () 0 . 40.70		
Test Requirement:	FCC Part15	C Section	15.209/	Part 2 J	Section 2.1053		
Test Method:	ANSI C63.1	0:2013					
Frequency Range:	9 kHz to 25	GHz	<u>(1)</u>		(3)		
Measurement Distance:	3 m						
Antenna Polarization:	Horizontal 8	& Vertical					
	Frequency 9kHz- 150kHz	Detector Quasi-peak	RBW 200Hz	VBW 1kHz	Remark Quasi-peak Value		
Receiver Setup:	150kHz- 30MHz	Quasi-peak	9kHz	30kHz	Quasi-peak Value		
	30MHz-1GHz	Quasi-peak	120kHz	300kHz	Quasi-peak Value		
	Above 1GHz	Peak	1MHz	3MHz	Peak Value		
	7.0000 10112	Peak	1MHz	10Hz	Average Value		
Limit(Field strength of the	Freque	ency	Limit (dBu\	//m @3m)	Remark		
`	7		94.	00	Average Value		
fundamental signal):	2400MHz-24	183.5IVIHZ	114.00		Peak Value		
	Freque	encv	Limit (dBuV/m @3m)		Remark		
	0.009-0		2400/F(KHz)		Quasi-peak Value		
	0.490-1		24000/F(KHz)		Quasi-peak Value		
	1.705		3(Quasi-peak Value		
Limit/Spurious Emissions).	30MHz-8	88MHz	40	.0	Quasi-peak Value		
Limit(Spurious Emissions):	88MHz-216MHz		43	.5	Quasi-peak Value		
	216MHz-960MHz		46	.0	Quasi-peak Value		
	960MHz-1GHz		54	.0	Quasi-peak Value		
	Above ²	1GHz	54.0		Average Value		
			74.0		Peak Value		
Limit (band edge) :	bands, exceleast 50 dB general rac whichever i	ept for har below the diated em s the lesse	monics, so level of the ission linger attenual in the income in the inco	shall be a he funda nits in S tion.			
Test Procedure:	 general radiated emission limits in Section 15.209, whichever is the lesser attenuation. 1. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter chamber in below 1GHz, 1.5m above the ground in above 1GHz. The table was rotated 360 degrees to determine the position of the highest radiation. 2. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower. 3. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make 						



the measurement.

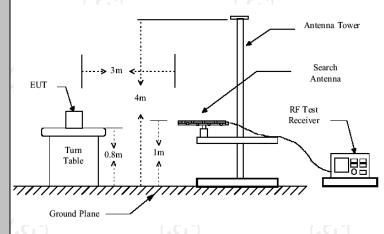
- 4. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- 6. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

For radiated emissions below 30MHz



30MHz to 1GHz

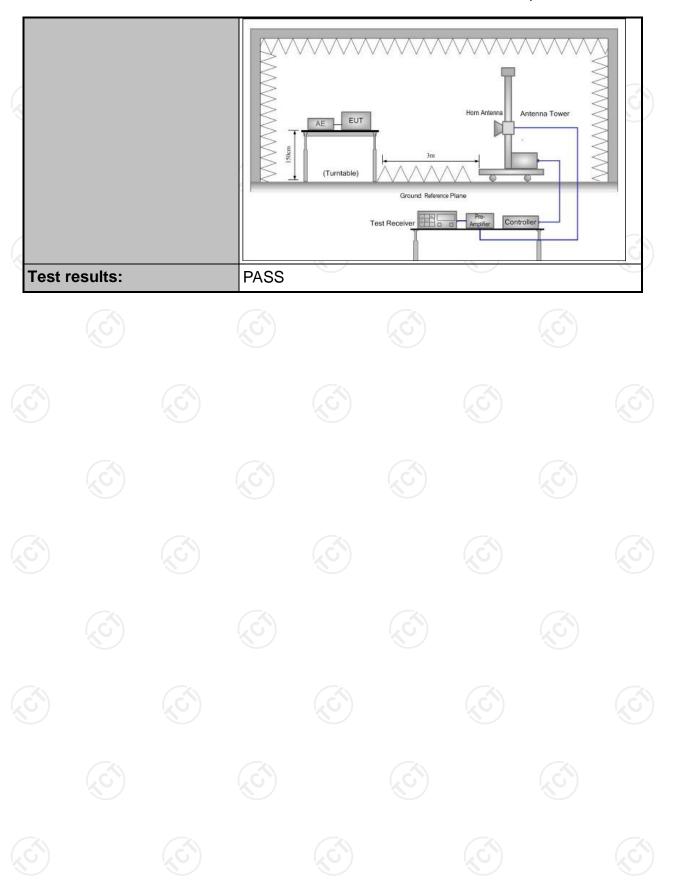
Test setup:



Above 1GHz

(The diagram below shows the test setup that is utilized to make the measurements for emission from 1GHz to the tenth harmonic of the highest fundamental frequency or to 40GHz emissions, whichever is lower.)









6.3.2. Test Instruments

	Radiated Em	ission Test Site	e (966)	
Name of Equipment	Manufacturer	Model	Serial Number	Calibration Due
Test Receiver	ROHDE&SCHW ARZ	ESIB7	100197	Jul. 17, 2019
Spectrum Analyzer	ROHDE&SCHW ARZ	FSQ40	200061	Sep. 20, 2019
Pre-amplifier	EM Electronics Corporation CO.,LTD	EM30265	07032613	Sep. 16, 2019
Pre-amplifier	HP	8447D	2727A05017	Sep. 16, 2019
Loop antenna	ZHINAN	ZN30900A	12024	Oct. 20, 2019
Broadband Antenna	Schwarzbeck	VULB9163	340	Sep. 02, 2019
Horn Antenna	Schwarzbeck	BBHA 9120D	631	Oct. 20, 2019
Horn Antenna	A-INFO	LB-180400-KF	J211020657	Sep. 16, 2019
Antenna Mast	Keleto	RE-AM	N/A	N/A
Coax cable (9KHz-1GHz)	тст	RE-low-01	N/A	Sep. 16, 2019
Coax cable (9KHz-40GHz)	тст	RE-high-02	N/A	Sep. 16, 2019
Coax cable (9KHz-1GHz)	тст	RE-low-03	N/A	Sep. 16, 2019
Coax cable (9KHz-40GHz)	тст	RE-high-04	N/A	Sep. 16, 2019
EMI Test Software	Shurple Technology	EZ-EMC	N/A	N/A

Note: The calibration interval of the above test instruments is 12 months and the calibrations are traceable to international system unit (SI).





6.3.3. Test Data

Field Strength of Fundamental

Frequency (MHz)	Emission PK/AV (dBuV/m)	Horizontal /Vertical	Limits PK/AV (dBuV/m)	Margin (dB)
2406	88.76(PK)	Н	114/94	-25.24
2406	86.63(AV)	Н	114/94	-7.37
2442	87.10(PK)	Н	114/94	-26.90
2442	85.17(AV)	Н	114/94	-8.83
2474	85.94(PK)	(C)H	114/94	-28.06
2474	83.86(AV)	Н	114/94	-10.14
2406	85.43(PK)	V	114/94	-28.57
2406	83.29(AV)	V	114/94	-10.71
2442	84.37(PK)	V	114/94	-29.63
2442	82.22(AV)	V	114/94	-11.78
2474	83.07(PK)	V	114/94	-30.93
2474	81.09(AV)	V	114/94	-12.91

Spurious Emissions

Frequency Range (9 kHz-30MHz)

Frequency (MHz)	Level@3m (dBµV/m)	Limit@3m (dBµV/m)			
(
	(I)	(1)			
(c)-	(c) (c)	- (, Ġ`)			

Note: 1. Emission Level=Reading+ Cable loss-Antenna factor-Amp factor

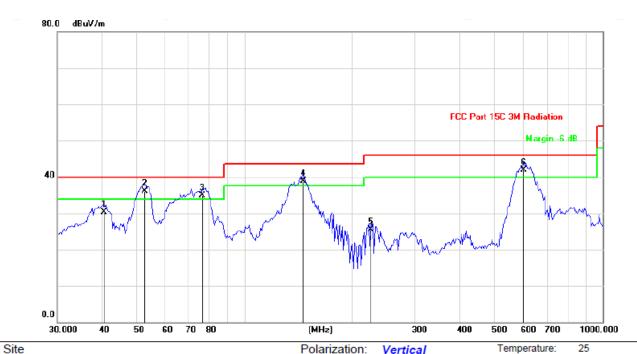
2. The emission levels are 20 dB below the limit value, which are not reported. It is deemed to comply with the requirement

Page 18 of 37



Frequency Range (30MHz-1GHz)

Horizontal:



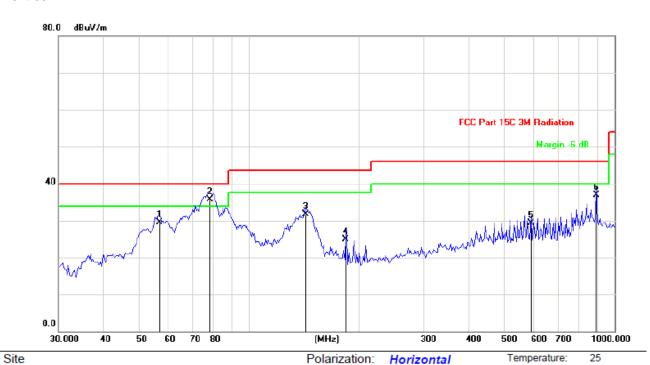
ORC .	i olulization. Volular	
Limit: FCC Part 15C 3M Radiation	Power: DC 3.7V	Humidity: 55 %

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBu∨	dB	dBuV/m	dB/m	dB	Detector	cm	degree	Comment
1		56.8644	41.10	-11.64	29.46	40.00	-10.54	QP	287.3	52.10	
2	*	78.0143	52.20	-16.49	35.71	40.00	-4.29	QP	263.4	44.64	
3		142.7692	47.80	-16.13	31.67	43.50	-11.83	QP	211.2	175.3	
4		183.8660	39.60	-14.73	24.87	43.50	-18.63	QP	201.5	253.4	
5		590.3509	35.40	-6.02	29.38	46.00	-16.62	QP	105.2	145.0	
6		893.6557	40.20	-3.32	36.88	46.00	-9.12	QP	100.0	23.70	





Vertical:



	i didiledidi.	
Limit: ECC Part 15C 3M Radiation	Power DC 3.7V	Humidity: 55 %

No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBu∀	dB	dBuV/m	dB/m	dB	Detector	cm	degree	Comment
1		40.5837	41.30	-10.99	30.31	40.00	-9.69	QP	100.0	58.40	
2	*	52.6345	46.70	-10.63	36.07	40.00	-3.93	QP	100.0	102.1	
3	ļ	76.3867	51.30	-16.32	34.98	40.00	-5.02	QP	100.0	78.20	
4	İ	145.8109	55.10	-16.19	38.91	43.50	-4.59	QP	100.0	183.4	
5		225.4267	38.80	-13.28	25.52	46.00	-20.48	QP	100.0	285.5	
6	ļ	602.9287	47.70	-5.78	41.92	46.00	-4.08	QP	100.0	146.0	

Note: Measurements were conducted in all channels (high, middle, low), and the worst case (low channel) was submitted only.





Above 1GHz

	Low channel: 2406 MHz											
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBµV)	AV reading (dBuV)	Correction Factor (dB/m)	Emission Level Peak AV (dBµV/m) (dBµV/m)		Peak limit (dBµV/m)	AV limit (dBµV/m)	Margin (dB)			
4812.00	Н	52.82		-3.94	48.88		74	54	-5.12			
7218.00	Н	47.53		0.52	48.05		74	54	-5.95			
4812.00	V	48.24		-3.94	44.30		74	54	-9.70			
7218.00	V	45.75	-420	0.52	46.27	(C) } -	74	54	-7.73			
						<u></u>						

		Middle channel: 2442 MHz										
	Eroguenev	Ant Bol	Peak	AV	Correction	Emissic	n Level	Peak limit	AV limit	Margin		
K	Frequency (MHz)	H/V	reading	reading	Factor	Peak	/\ \ /		(dBµV/m)	(dB)		
	(IVII IZ)	1 1/ V	(dBµV)	(dBµV)	(dB/m)	(dBµV/m)	(dBµV/m)	(ασμ ν/ιιι)	(ασμ ν/ιτι)	(ub)		
	4884.00	Η	53.13		-3.98	49.15		74	54	-4.85		
	7326.00	Н	48.04		0.57	48.61		74	54	-5.39		
		(- -		(<u></u>		(())			
	,											
	4884.00	V	51.93		-3.98	47.95	-	74	54	-6.05		
	7326.00	V	50.21		0.57	50.78		74	54	-3.22		
	~~		/ /			X						
	O		(2G)		(20	((0)				(20		

	High channel: 2474 MHz												
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBµV)	AV reading (dBµV)	Correction Factor (dB/m)	Peak	n Level AV (dBµV/m)	Peak limit (dBµV/m)	AV limit (dBµV/m)	Margin (dB)				
4948.00	(GH)	50.69	- 1 -, C	-3.98	46.71	(C) 1) -	74	54	-7.29				
7422.00	H	49.18		0.57	49.75	<u></u>	74	54	-4.25				
4948.00	V	51.36		-3.98	47.38		74	54	-6.62				
7422.00	V	48.47		0.57	49.04		74	54	-4.96				

Note:

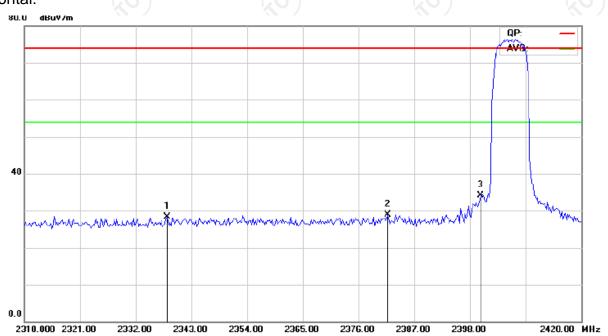
- 1. Emission Level=Peak Reading + Correction Factor; Correction Factor= Antenna Factor + Cable loss Pre-amplifier
- 2. $Margin (dB) = Emission Level (Peak) (dB\mu V/m)-Average limit (dB\mu V/m)$
- 3. The emission levels of other frequencies are very lower than the limit and not show in test report.
- 4. Measurements were conducted from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 5. Data of measurement shown "---"in the above table mean that the reading of emissions is attenuated more than 20 dB below the limits or the field strength is too small to be measured.



Band Edge Requirement

Low Edge





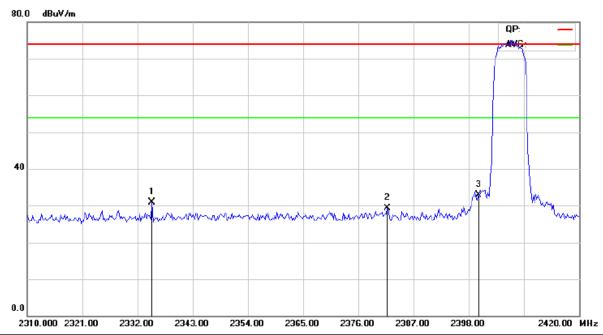
Site Polarization: Horizontal Temperature: 25 (C)
Limit: FCC part 15 (PK) Power: DC 3.7V Humidity: 55 %

No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		2338.216	41.61	-13.33	28.28	74.00	-45.72	peak	
2		2381.864	42.03	-13.18	28.85	74.00	-45.15	peak	
3	*	2400.000	47.30	-13.12	34.18	74.00	-39.82	peak	





Vertical:



Site Polarization: Vertical Temperature: 25 (C)
Limit: FCC part 15 (PK) Power: DC 3.7V Humidity: 55 %

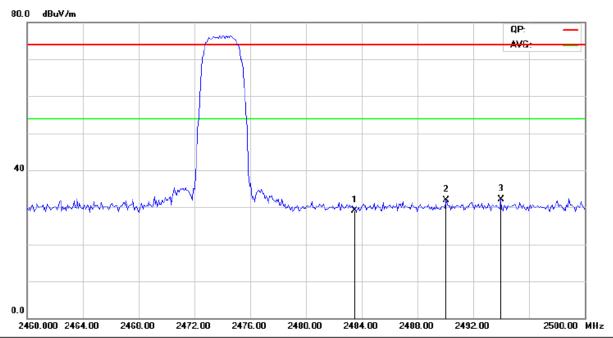
No	o. M	lk. I	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over			
			MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment	
	1	2334	4.910	44.13	-13.24	30.89	74.00	-43.11	peak		
- 2	2	238′	1.864	42.38	-13.08	29.30	74.00	-44.70	peak		
,	3 *	2400	0.000	45.83	-13.02	32.81	74.00	-41.19	peak		





High Edge

Horizontal:



Site Polarization: Horizontal Temperature: 25 (C)

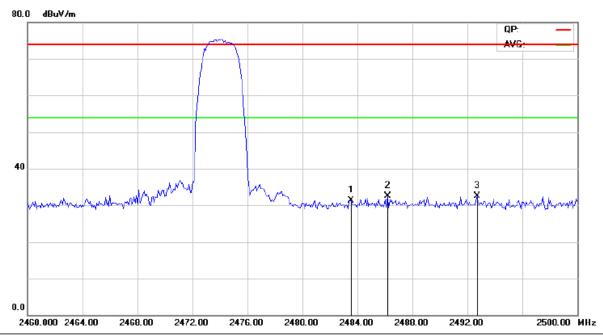
Limit: FCC part 15 (PK) Power: DC 3.7V Humidity: 55 %

No. M	k. Freq.			Measure- ment	Limit	Over		
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2483.500	41.98	-12.84	29.14	74.00	-44.86	peak	
2	2490.060	44.73	-12.81	31.92	74.00	-42.08	peak	
3 *	2493.988	44.81	-12.80	32.01	74.00	-41.99	peak	





Vertical:

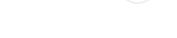


Site Polarization: Vertical Temperature: 25 (C)
Limit: FCC part 15 (PK) Power: DC 3.7V Humidity: 55 %

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over			
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment	
1		2483.500	44.07	-12.74	31.33	74.00	-42.67	peak		
2		2486.212	45.18	-12.73	32.45	74.00	-41.55	peak		
3	*	2492.705	45.16	-12.70	32.46	74.00	-41.54	peak		

Note:

- 1. Emission Level=Peak Reading + Correction Factor; Correction Factor= Antenna Factor + Cable loss Pre-amplifier
- 2. Margin (dB) = Emission Level (Peak/Average)(dBμV/m)-(Peak/Average) limit (dBμV/m)





20dB Occupied Bandwidth

6.3.4. Test Specification

Test Requirement:	FCC Part15 C Section 15.215(c)/ Part 2 J Section 2.1049
Test Method:	ANSI C63.10: 2013
Limit:	N/A
	 According to the follow Test-setup, keep the relative position between the artificial antenna and the EUT. Set to the maximum power setting and enable the EUT transmit continuously. Use the following spectrum analyzer settings for 20dB Bandwidth measurement. Span = approximately 2 to 3 times the 20 dB bandwidth, centered on a hopping channel; RBW≥1% of the 20 dB bandwidth; VBW≥RBW; Sweep = auto; Detector function = peak; Trace = max hold. Measure and record the results in the test report.
Test setup:	Spectrum Analyzer EUT
Test Mode:	Transmitting mode with modulation
Test results:	PASS

6.3.5. Test Instruments

RF Test Room									
Equipment Manufacturer Model Serial Number Calibra									
Spectrum Analyzer	Agilent	N9020A	MY49100619	Sep. 20, 2019					

Note: The calibration interval of the above test instruments is 12 months and the calibrations are traceable to international system unit (SI).

Page 26 of 37

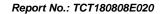


6.3.6. Test data

Test Channel	20dB Occupy Bandwidth (kHz)	Limit	Conclusion
Lowest	4199		PASS
Middle	4193		PASS
Highest	4152	(A)	PASS

Test plots as follows:







Lowest channel



Middle channel

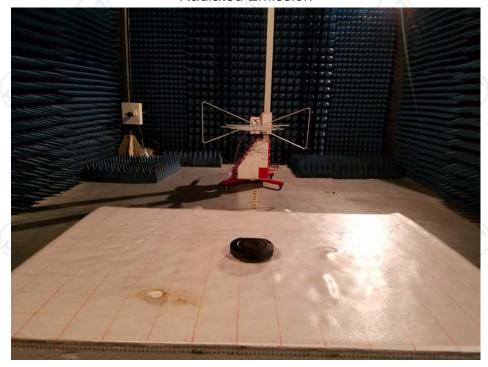


Highest channel





Appendix A: Photographs of Test Setup
Product: HD Conference Camera with Wireless Speakerphone Model: AUCTOPUS I-1208 Radiated Emission







CE





Appendix B: Photographs of EUT Product: HD Conference Camera with Wireless Speakerphone Model: AUCTOPUS I-1208 External Photos













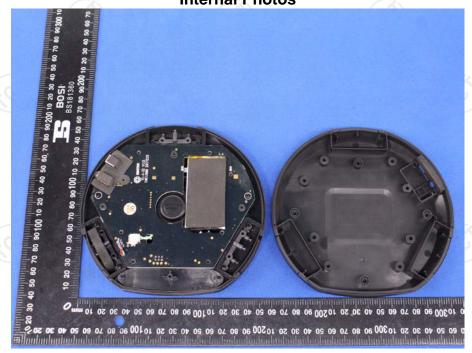


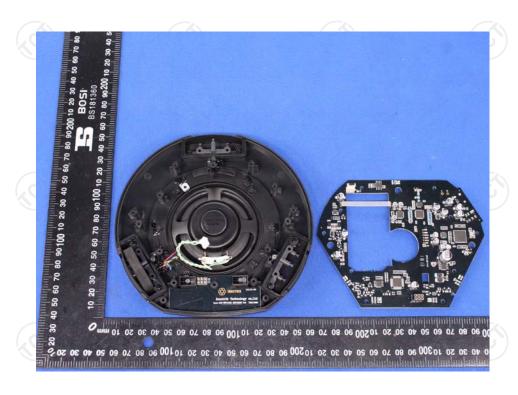


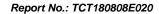




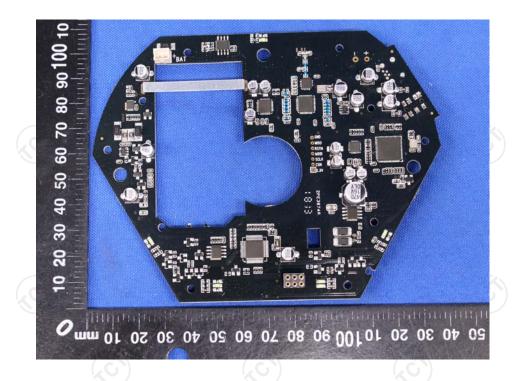
Appendix B: Photographs of EUT Product: HD Conference Camera with Wireless Speakerphone Model: AUCTOPUS I-1208 Internal Photos

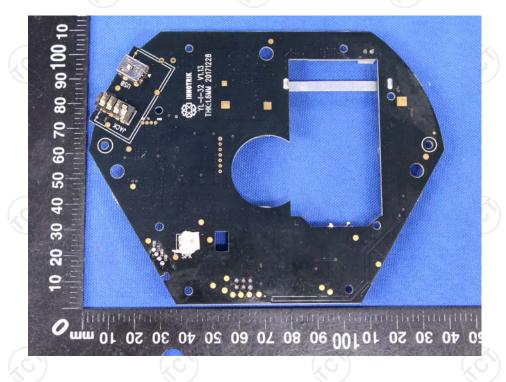


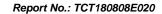




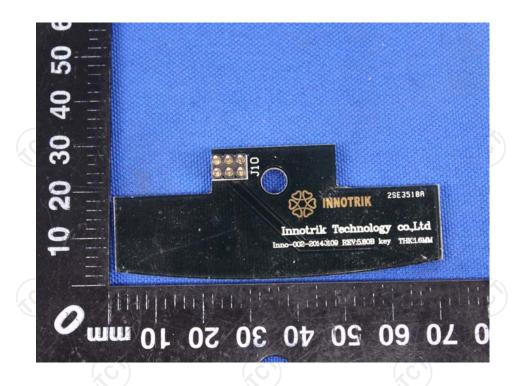


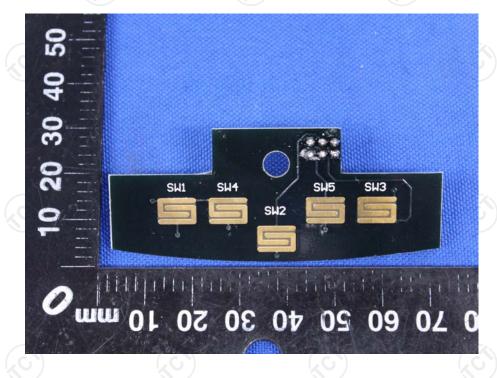






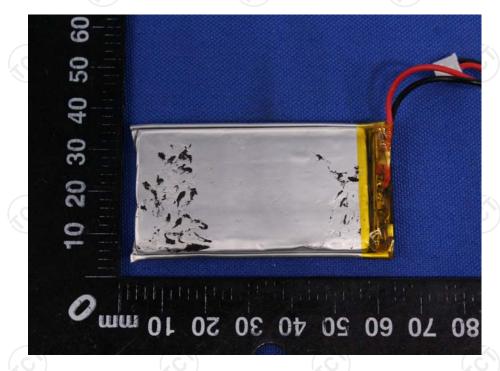












*****END OF REPORT****