

TEST REPORT

Product Name : Professional Thermal Imager : UTi165K, UTi165B, UTi85K, UTi260K, UTi220K, Model Number UTi120B, UTi220B, UTi260B, UTi260A Prepared for UNI-TREND TECHNOLOGY (CHINA) CO., LTD. Address No 6, Gong Ye Bei 1 st Road, Songshan Lake National High-Tech Industrial Development Zone, Dongguan City, Guangdong Province, China Prepared by EMTEK (Dongguan) Co., Ltd. Address -1&2F., Building 2, Zone A, Zhongda Marine Biotechnology Research and Development Base, No. 9, Xincheng Avenue, Songshanhu High-technology Industrial Development Zone, Dongguan, Guangdong, China Tel: +86-0769-22807078 Fax: +86-0769-22807079

Report Number	:	EDG2205310081E00201RM2
Date(s) of Tests	:	March 30, 2020 to April 10, 2020
Date of issue	:	June 07, 2022



东莞市信测科控有限公司 地址∶广东省东莞市松山湖高新技术产业开发区新城大道9号中大海洋生物科技研发基地A区2号办公楼负一层. 第二层 网址∶Http://www.emtek.com.cn 邮箱∶E-mail: project@emtek.com.cn EMTEK (Dongguan) Co., Ltd. Add: -182/F ., Building 2, Zone A, Zhongda Marine Biotechnology Research and Development Base , No.9, Xincheng Avenue, Songshanhu High-technology Industrial Development Zone, Dongguan, Guangdong, China Http://www.emtek.com.cn E-mail: project@emtek.com.cn



TABLE OF CONTENT

1. SUMMARY OF TEST RESULTS	5
2. GENERAL INFORMATION	6
 2.1. Description of Device (EUT) 2.2. Input / Output Ports 2.3. Independent Operation Modes 	6
2.4. Test Manner	7 7
 2.6. Test Software 2.7. Description of Support Device	7
3. MEASURING DEVICE AND TEST EQUIPMENT	
3.1. For Conducted Emission at Mains Terminals Measurement 3.2. For Radiated Emission Measurement	
4. CONDUCTED EMISSION AT MAINS TERMINALS MEASUREMENT	9
4.1. Block Diagram of Test Setup4.2. Limits4.3. Test Procedure	9
4.4. Measuring Results	
5. RADIATED EMISSION MEASUREMENT	
 5.1. Block Diagram of Test Setup 5.2. Radiated Limit 5.3. Test Procedure 5.4. Measuring Results 	
6. RADIATED EMISSION MEASUREMENT (ABOVE 1GHZ)	
 6.1 Block Diagram of Test Setup 6.2 Radiated Limit 6.3 Test Procedure 6.4 Measuring Results 	
7. PHOTOGRAPHS	21
7.1. Photos of Conducted Emission Measurement7.2. Photos of Radiation Emission Measurement	

APPENDIX A: Label Requirements APPENDIX B: Warning Statement APPENDIX C: Photos of EUT



TEST REPORT DESCRIPTION

Applicant	:	UNI-TREND TECHNOLOGY (CHINA) CO.,LTD.
Manufacturer	:	UNI-TREND TECHNOLOGY (CHINA) CO.,LTD.
Factory	:	UNI-TREND TECHNOLOGY (CHINA) CO.,LTD.
Trade Mark	:	UNI-T
EUT	:	Professional Thermal Imager
Model No.	:	UTi165K, UTi165B, UTi85K, UTi260K, UTi220K, UTi120B, UTi220B, UTi260B, UTi260A
Power Supply	:	DC 5V from adapter DC 3.6V from Li-ion battery

Measurement Procedure Used:

FCC CFR Title 47, Part 15, Subpart B ANSI C63.4-2014

The device described above is tested by EMTEK (Dongguan) Co., Ltd. to determine the maximum emission levels emanating from the device and the severe levels of the device can endure and its performance criterion. The measurement results are contained in this test report and EMTEK (Dongguan) Co., Ltd. is assumed full of responsibility for the accuracy and completeness of these measurements. Also, this report shows that the EUT (Equipment Under Test) is technically compliant with the FCC requirements.

This report applies to above tested sample only and shall not be reproduced in part without written approval of EMTEK (Dongguan) Co., Ltd.

Date of Test	:	March 30, 2020 to April 10, 2020
Prepared by		Galen Xia.
		Galen Xiao /Editor
		Tim Dong
Reviewer	:	V
		Tim Dong /Supervisor
		DONGGUAN CO.LTD
Approved & Autho	rized Signer :	Sam Lv /Manager

东莞市信测科技有限公司 地址:广东省东莞市松山湖高新技术产业开发区新城大道9号中大海洋生物科技研发基地A区2号办公楼负一层. 第二层 网址:Http://www.emtek.com.cn 邮箱:E-mail: project@emtek.com.cn EMTEK (Dongguan) Co., Ltd. Add: -182/F ., Building 2, Zone A, Zhongda Marine Biotechnology Research and Development Base , No.9, Xincheng Avenue, Songshanhu High-technology Industrial Development Zone, Dongguan, Guangdong, China Http://www.emtek.com.cn E-mail: project@emtek.com.cn



Modified Information

Version	Report No.	Report No. Revision Data	
	ES200330005E	April 10, 2020	Original Version
M1	ES200330005E-1	November 26, 2020	Update the model number
M2	EDG2205310081E00201RM2	June 07, 2022	Add the model number



东莞市信测科技有限公司 地址:广东省东莞市松山湖高新技术产业开发区新城大道9号中大海洋生物科技研发基地A区2号办公楼负一层、第二层 网址:Http://www.emtek.com.cn 邮箱:E-mail: project@emtek.com.cn EMTEK (Dongguan) Co., Ltd. Add: -182/F , Building 2,Zone A,Zhongda Marine Biotechnology Research and Development Base. No.9. Xincheng Avenue Songshaphy High-technology Industrial Development Zong Add: -182/F ., Building 2, Zone A, Zhongda Marine Biotechnology Research and Development Base , No.9, Xincheng Avenue, Songshanhu High-technology Industrial Development Zone, Dongguan, Guangdong, China Http://www.emtek.com.cn E-mail: project@emtek.com.cn



1. SUMMARY OF TEST RESULTS

EMISSION				
Description of Test Item	Standard & Limits	Results		
Conducted Emission at Mains Terminals	FCC Part 15, Subpart B, Class B ANSI C63.4-2014	Pass		
Radiated Emission	FCC Part 15, Subpart B, Class B ANSI C63.4-2014	Pass		



东莞市信測科技有限公司 地址:广东省东莞市松山湖高新技术产业开发区新城大道9号中大海洋生物科技研发基地A区2号办公楼负一层、第二层 网址:Http://www.emtek.com.cn 邮箱:E-mail: project@emtek.com.cn
EMTEK (Dongguan) Co., Ltd. Add: -1&2/F ,,Building 2,Zone A,Zhongda Marine Biotechnology Research and Development Base ,No.9, Xincheng Avenue,Songshanhu High-technology Industrial Development Zone, Dongguan, Guangdong, China Http://www.emtek.com.cn E-mail: project@emtek.com.cn



2. GENERAL INFORMATION

2.1. Description of Device (EUT)

EUT	:	Professional Thermal Imager			
Model Number	:	UTi165K, UTi165B, UTi85K, UTi260K, UTi220K, UTi120B, UTi220B, UTi260B, UTi260A (Note: These models are similar except software, so UTi165K was selected for full testing)			
Test Voltage	:	DC 5V from adapter, DC 3.6V from Li-ion battery			
Applicant	:	UNI-TREND TECHNOLOGY (CHINA) CO., LTD.			
Address	:	No 6, Gong Ye Bei 1 st Road, Songshan Lake National High-Tech Industrial Development Zone, Dongguan City, Guangdong Province, China			
Manufacturer	:	NI-TREND TECHNOLOGY (CHINA) CO., LTD.			
Address	:	o 6, Gong Ye Bei 1 st Road, Songshan Lake National High-Tech dustrial Development Zone, Dongguan City, Guangdong Province, hina			
Factory	:	UNI-TREND TECHNOLOGY (CHINA) CO., LTD.			
Address	:	No 6, Gong Ye Bei 1 st Road, Songshan Lake National High-Tech Industrial Development Zone, Dongguan City, Guangdong Province, China			
Date of Received	:	March 30, 2020			
Date of Test	:	March 30, 2020 to April 10, 2020			

2.2. Input / Output Ports

Port #	Name	Type*	Cable Max. >3m	Cable Shielded	Comments
0	Enclosure	N/E			None
1	DC Input Port	DC			1 Port
2	SD card Port	I/O			1 Port

* Note: Use abbreviations: AC= AC Power Port DC= DC Power Port N/E= Non-Electrical I/O= Signal Input or Output Port (Not Involved in Process Control) **TP=** Telecommunication Ports

2.3. Independent Operation Modes

- A. Testing
- B. Charging

EMTEK (Dongguan) Co., Ltd.

东莞市信测科技有限公司 地址:广东省东莞市松山湖高新技术产业开发区新城大道9号中大海洋生物科技研发基地A区2号办公楼负一层. 第二层 网址:Http://www.emtek.com.cn 邮箱:E-mail: project@emtek.com.cn Add: -182/F ., Building 2, Zone A, Zhongda Marine Biotechnology Research and Development Base , No.9, Xincheng Avenue, Songshanhu High-technology Industrial Development Zone, Dongguan, Guangdong, China Http://www.emtek.com.cn E-mail: project@emtek.com.cn



2.4. Test Manner

Test Items	Test Voltage	Operation Modes	Worst case
Conducted Emission	DC 5V from adapter	Mode B	/
Radiated Emission (Up to 1GHz)	DC 5V from adapter DC 3.6V from Li-ion battery	Mode A&B	/
Radiated Emission (Above 1GHz)	/	1	1

2.5. Description of Test Facility

Site Description EMC Lab.	 Accredited by CNAS, 2020.08.27 The certificate is valid until 2024.07.05 The Laboratory has been assessed and proved to be in compliance with CNAS/CL01:2018 The Certificate Registration Number is L3150 					
	Accredited by FCC Designation Number: CN1300 Test Firm Registration Number: 945551					
	Accredited by A2LA, April 05, 2021 The Certificate Registration Number is 4321.02					
	Accredited by Industry Canada The Certificate Registration Number is CN0113					
Name of Firm Site Location	 EMTEK (Dongguan) Co., Ltd. -1&2/F.,Buiding 2,Zone A,Zhongda Marine Biotechnology Research and Development Base,N.9,Xincheng Avenue,Songshanhu High-technology Industrial Development Zone, Dongguan, Guangdong, China 					
2.6. Test Software						
Item	Software					
Conducted Emission	: EMTEK(Ver.CON-03A1)-Shenzhen					
Radiated Emissio	n : EMTEK(Ver.RA-03A1)-Shenzhen					
2.7. Description of S	Support Device					
Adapter	: Model : YSV6-0501000 Input: AC 100-240V, 50/60Hz Output: DC 5V, 1000mA					
2.8. Measurement l	Jncertainty					
Test Item Conducted Emiss	Test Item Uncertainty Conducted Emission Uncertainty : 2.08dB(9k~150kHz Conduction 1#) 2.42dB(150k-30MHz Conduction 1#)					
Radiated Emissic (3m Chamber)	on Uncertainty : 3.32dB (30M~1GHz Polarize: H) 3.34dB (30M~1GHz Polarize: V) 4.98dB (1~6GHz) 5.20dB (6~18GHz)					

东莞市信測科技有限公司 地址:广东省东莞市松山湖高新技术产业开发区新城大道9号中大海洋生物科技研发基地A区2号办公楼负一层、第二层 网址:Http://www.emtek.com.cn 邮箱:E-mail: project@emtek.com.cn
EMTEK (Dongguan) Co., Ltd. Add: -1&2/F ,,Building 2,Zone A,Zhongda Marine Biotechnology Research and Development Base ,No.9, Xincheng Avenue,Songshanhu High-technology Industrial Development Zone, Dongguan, Guangdong, China Http://www.emtek.com.cn E-mail: project@emtek.com.cn



3. MEASURING DEVICE AND TEST EQUIPMENT

Used	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
\checkmark	Test Receiver	Rohde & Schwarz	ESCI	26115-010-0027	May 23, 2019	1 Year
V	AMN	Rohde & Schwarz	ENV216	101161	May 23, 2019	1 Year
V	50Ω Coaxial Switch	Anritsu	MP59B	6100175589	May 23, 2019	1 Year
V	Voltage Probe	Rohde & Schwarz	ESH2-Z3	100122	May 23, 2019	1 Year

3.1. For Conducted Emission at Mains Terminals Measurement

3.2. For Radiated Emission Measurement

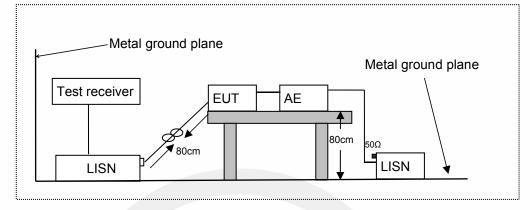
Used	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
	EMI Test Receiver	Rohde & Schwarz	ESCI	101414	May 23, 2019	1 Year
\checkmark	Pre-Amplifier	LUNAR-EM	LNA30M3G-25	J1010000071	May 23, 2019	1 Year
\checkmark	Bilog Antenna	Schwarzbeck	VULB9163	660	May 23, 2019	1 Year
\checkmark	Cable	H+B	NmSm-05-C15052	N/A	May 23, 2019	1 Year
\checkmark	Cable	H+B	NmSm-2-C15201	N/A	May 23, 2019	1 Year
\checkmark	Cable	H+B	NmNm-7-C15702	N/A	May 23, 2019	1 Year
	EMI Test Receiver	Rohde & Schwarz	FSV40	132.1-3008K39-1 00967-AP	May 23, 2019	1 Year
\checkmark	Pre-Amplifier	Lunar EM	LNA1G18-48	J1011131010001	May 23, 2019	1 Year
\checkmark	Horn Antenna	Schwarzbeck	BBHA 9120	1178	June 12, 2019	1 Year
\checkmark	Cable	H+B	SAC-40G-1	414	May 23, 2019	1 Year
\checkmark	Cable	H+B	SUCOFLEX104	MY14871/4	May 23, 2019	1 Year
Ø	Cable	H+B	BLU18A-NmSm-65 00	D8501	May 23, 2019	1 Year

东莞市信测科技有限公司 地址:广东省东莞市松山湖高新技术产业开发区新城大道9号中大海洋生物科技研发基地A区2号办公楼负一层、第二层 网址:Http://www.emtek.com.cn 邮箱:E-mail: project@emtek.com.cn EMTEK (Dongguan) Co., Ltd. Add: -1&2/F , Building 2, Zone A, Zhongda Marine Biotechnology Research and Development Base , No.9, Xincheng Avenue, Songshanhu High-technology Industrial Development Zone, Dongguan, Guangdong, China Http://www.emtek.com.cn E-mail: project@emtek.com.cn



4. CONDUCTED EMISSION AT MAINS TERMINALS MEASUREMENT

4.1. Block Diagram of Test Setup



LISN: Line Impedance Stabilization Network AE: Associated equipment EUT: Equipment under test

4.2. Limits

FCC Part 15, Subpart B, Class B

	Frequer	псу	Limit	(dBµV)
	(MHz)	Quasi-peak Level	Average Level
0.15	~	0.50	66.0 ~ 56.0 *	56.0 ~ 46.0 *
0.50	~	5.00	56.0	46.0
5.00	~	30.00	60.0	50.0

NOTE1-The lower limit shall apply at the transition frequencies. NOTE2-The limit decreases linearly with the logarithm of the frequency in the range 0.15MHz to 0.50MHz.

4.3. Test Procedure

The EUT was placed on a desk 0.8 m height from the metal ground plane and 0.4 m from the conducting wall of the shielding room and it was kept at least 0.8 m from any other grounded conducting surface. The size of the table will nominally be 1.5 m x1.0 m.

The rear of the arrangement shall be flush with the back of the supporting tabletop unless that would not be possible or typical of normal use.

All units of equipment forming the system under test (includes the EUT as well as connected peripherals and associated equipment or devices) shall be arranged such that a nominal 0.1 m separation is achieved between the neighboring units.

Connect EUT to the power mains through a line impedance stabilization network (LISN). Where the mains cable supplied by the manufacturer is longer than 1 m, the excess should be folded at the centre into a bundle no longer than 0.4 m, so that its length is shortened to 1 m.

All the support units are connecting to the other LISN.

The LISN provides 50 ohm coupling impedance for the measuring instrument.

Both sides of AC line were checked for maximum conducted interference.

 东莞市信測科技有限公司

 地址:广东省东莞市松山湖高新技术产业开发区新城大道9号中大海洋生物科技研发基地A区2号办公楼负一层、第二层 网址:Http://www.emtek.com.cn 邮箱:E-mail: project@emtek.com.cn

 EMTEK (Dongguan) Co., Ltd.

 Add: -182/F ,,Building 2,Zone A,Zhongda Marine Biotechnology Research and Development Base ,No.9, Xincheng Avenue,Songshanhu High-technology Industrial Development Zone,
 Dongguan, Guangdong,China Http://www.emtek.com.cn



The frequency range from 150 kHz to 30 MHz was sweep.

Set the test-receiver system to quasi peak detect function and average detect function, and to measure the conducted emissions values.

Test results were obtained from the following equation: Emission Level (dBµV) = LISN Factor (dB) + Cable Loss (dB) + Reading (dBµV) Margin (dB) = Emission Level (dB μ V) - Limit (dB μ V)

4.4. Measuring Results

PASS.

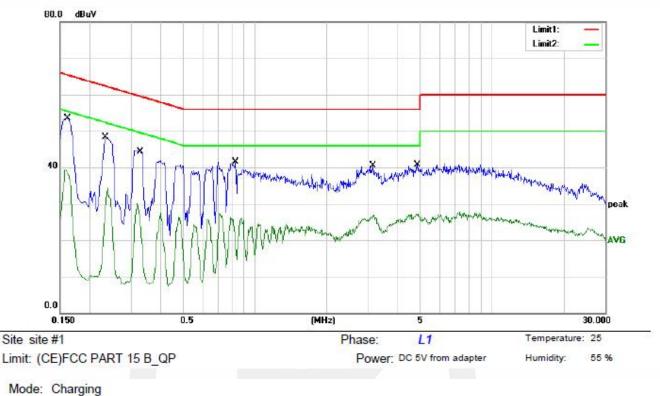
The test data are attach on following pages.



EMTEK (Dongguan) Co., Ltd.

东莞市信测科技有限公司 地址∶广东省东莞市松山湖高新技术产业开发区新城大道9号中大海洋生物科技研发基地A区2号办公楼负一层.第二层 网址∶Http://www.emtek.com.cn 邮箱∶E-mail: project@emtek.com.cn Add: -182/F ., Building 2, Zone A, Zhongda Marine Biotechnology Research and Development Base , No.9, Xincheng Avenue, Songshanhu High-technology Industrial Development Zone, Dongguan, Guangdong, China Http://www.emtek.com.cn E-mail: project@emtek.com.cn





Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	*	0.1620	43.51	10.02	53.53	65.36	-11.83	QP	
2		0.1620	29.36	10.02	39.38	55.36	-15.98	AVG	
3		0.2340	38.30	10.05	48.35	62.31	-13.96	QP	
4		0.2340	24.37	10.05	34.42	52.31	-17.89	AVG	
5	_	0.3321	33.89	10.10	43.99	59.40	-15.41	QP	
6		0.3321	17.33	10.10	27.43	49.40	-21.97	AVG	
7		0.8300	31.39	10.18	41.57	56.00	-14.43	QP	
8		0.8300	16.07	10.18	26.25	46.00	-19.75	AVG	
9		3.1540	30.24	10.18	40.42	56.00	-15.58	QP	
10		3.1540	16.81	10.18	26.99	46.00	-19.01	AVG	
11		4.8420	30.47	10.18	40.65	56.00	-15.35	QP	
12		4.8420	17.20	10.18	27.38	46.00	-18.62	AVG	

*:Maximum data

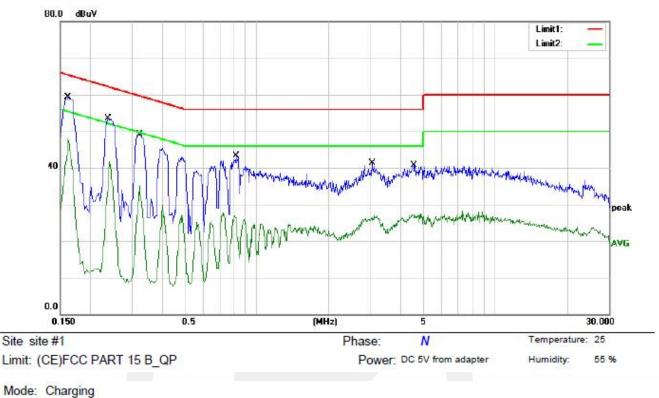
x:Over limit I:over margin

Comment: Factor build in receiver.

Operator: HU

东莞市信测科技有限公司 地址:广东省东莞市松山湖高新技术产业开发区新城大道9号中大海洋生物科技研发基地A区2号办公楼负一层、第二层网址:Http://www.emtek.com.cn邮箱:E-mail: project@emtek.com.cn EMTEK (Dongguan) Co., Ltd. Add: -1&2/F , Building 2, Zone A, Zhongda Marine Biotechnology Research and Development Base , No.9, Xincheng Avenue, Songshanhu High-technology Industrial Development Zone, Dongguan, Guangdong, China Http://www.emtek.com.cn E-mail: project@emtek.com.cn





Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	*	0.1620	49.18	10.02	59.20	65.36	-6.16	QP	
2		0.1620	37.97	10.02	47.99	55.36	-7.37	AVG	
3		0.2380	43.47	10.05	53.52	62.17	-8.65	QP	
4		0.2380	31.57	10.05	41.62	52.17	-10.55	AVG	
5		0.3220	39.01	10.09	49.10	59.66	-10.56	QP	
6		0.3220	25.06	10.09	35.15	49.66	-14.51	AVG	
7		0.8180	33.14	10.18	43.32	56.00	-12.68	QP	
8		0.8180	17.44	10.18	27.62	46.00	-18.38	AVG	
9		3.0540	31.04	10.18	41.22	56.00	-14.78	QP	
10		3.0540	16.97	10.18	27.15	46.00	-18.85	AVG	
11		4.5500	30.45	10.18	40.63	56.00	-15.37	QP	
12		4.5500	17.28	10.18	27.46	46.00	-18.54	AVG	

*:Maximum data

x:Over limit I:over margin Comment: Factor build in receiver.

Operator: HU

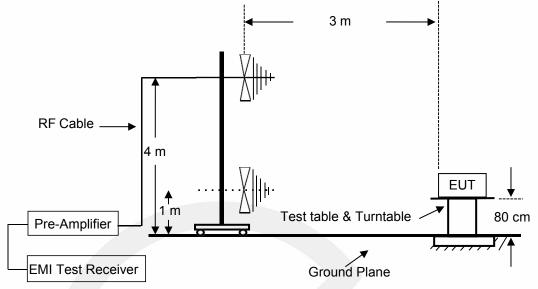
EMTEK (Dongguan) Co., Ltd.

东莞市信测科技有限公司 地址:广东省东莞市松山湖高新技术产业开发区新城大道9号中大海洋生物科技研发基地A区2号办公楼负一层、第二层网址:Http://www.emtek.com.cn邮箱:E-mail: project@emtek.com.cn Add: -182/F ., Building 2, Zone A, Zhongda Marine Biotechnology Research and Development Base , No.9, Xincheng Avenue, Songshanhu High-technology Industrial Development Zone, Dongguan, Guangdong, China Http://www.emtek.com.cn E-mail: project@emtek.com.cn



5. RADIATED EMISSION MEASUREMENT

5.1. Block Diagram of Test Setup



5.2. Radiated Limit

FCC Part 15, Subpart B, Class B

	Freque	ncy	Distance	Field Strengths Limit			
	MHz	Z	Meters	μV/m	dB(µV)/m		
30	~	88	3	100	40.0		
88	~	216	3	150	43.5		
216	~	960	3	200	46.0		
960	~	1000	3	500	54.0		

5.3. Test Procedure

The EUT was placed on a non-conductive table whose total height equaled 80cm. All units of equipment forming the system under test (includes the EUT as well as connected peripherals and associated equipment or devices) shall be arranged such that a nominal 0.1 m separation is achieved between the neighboring units. Where the mains cable supplied by the manufacturer is longer than 1 m, the excess should be folded at the centre into a bundle no longer than 0.4 m, so that its length is shortened to 1 m.

The EUT was set 3 meters away from the receiving antenna that was mounted on a non-conductive mast. The antenna can move up and down between 1 to 4 meters to find out the maximum emission level.

The turntable can rotate 360 degree to determine the position of the maximum emission level.

The initial testing identified the frequency that has the highest disturbance relative to the limit while operating the EUT in typical modes of operation and cable positions in a test setup representative of typical system configuration.

The identification of the frequency of highest emission with respect to the limit was found by investigating emissions at a number of significant frequencies. The probable frequency of maximum emission had been found and that the associated cable and EUT configuration and mode of operation had been identified.

The bandwidth of the Receiver is set at 120 kHz.

 东莞市信测科技有限公司
 地址:广东省东莞市松山湖高新技术产业开发区新城大道9号中大海洋生物科技研发基地A区2号办公楼负一层、第二层 网址:Http://www.emtek.com.cn 邮箱:E-mail: project@emtek.com.cn

 EMTEK (Dongguan) Co., Ltd.
 Add: -1&2/F ,,Building 2,Zone A,Zhongda Marine Biotechnology Research and Development Base ,No.9, Xincheng Avenue,Songshanhu High-technology Industrial Development Zone,

 Dongguan, Guangdong,China
 Http://www.emtek.com.cn



Test results were obtained from the following equation: Emission level (dBµV/m) = Antenna Factor - Amp Factor + Cable Loss + Reading Margin (dB) = Emission Level (dB μ V/m) - Limit (dB μ V/m)

5.4. Measuring Results

PASS.

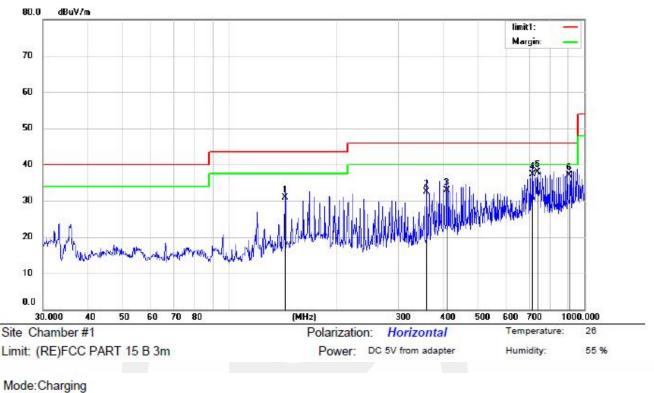
The test data are attach on following pages.



EMTEK (Dongguan) Co., Ltd.

东莞市信测科技有限公司 地址:广东省东莞市松山湖高新技术产业开发区新城大道9号中大海洋生物科技研发基地A区2号办公楼负一层、第二层网址:Http://www.emtek.com.cn邮箱:E-mail: project@emtek.com.cn Add: -182/F ., Building 2, Zone A, Zhongda Marine Biotechnology Research and Development Base , No.9, Xincheng Avenue, Songshanhu High-technology Industrial Development Zone, Dongguan, Guangdong, China Http://www.emtek.com.cn E-mail: project@emtek.com.cn





Note:

No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		143.8295	52.63	-21.66	30.97	43.50	-12.53	QP			
2		360.4476	44.57	-12.13	32.44	46.00	-13.56	QP			
3	1	408.9460	43.68	-10.84	32.84	46.00	-13.16	QP			
4		716.6820	41.40	-4.17	37.23	46.00	- <mark>8.77</mark>	QP			
5	*	739.6604	41.65	-3.75	37.90	46.00	-8.10	QP			
6		909.6666	38.64	-1.50	37.14	46.00	-8.86	QP			

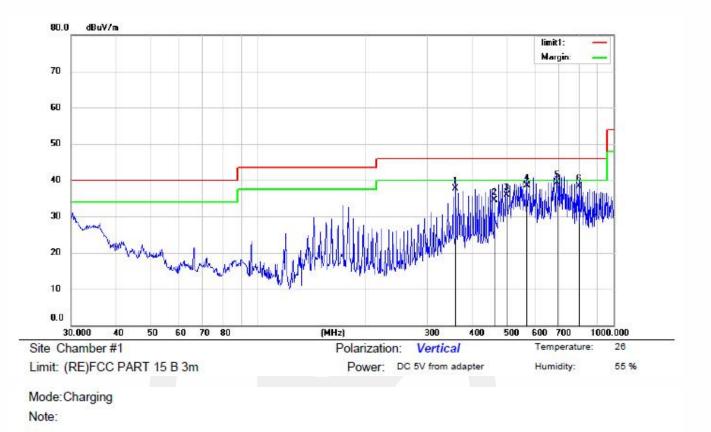
*:Maximum data x:Over limit 1:over margin

Operator: Lian

EMTEK (Dongguan) Co., Ltd.

东莞市信测科技有限公司 地址∶广东省东莞市松山湖高新技术产业开发区新城大道9号中大海洋生物科技研发基地A区2号办公楼负一层、第二层 网址∶Http://www.emtek.com.cn 邮箱∶E-mail: project@emtek.com.cn Add: -182/F ., Building 2, Zone A, Zhongda Marine Biotechnology Research and Development Base , No.9, Xincheng Avenue, Songshanhu High-technology Industrial Development Zone, Dongguan, Guangdong, China Http://www.emtek.com.cn E-mail: project@emtek.com.cn





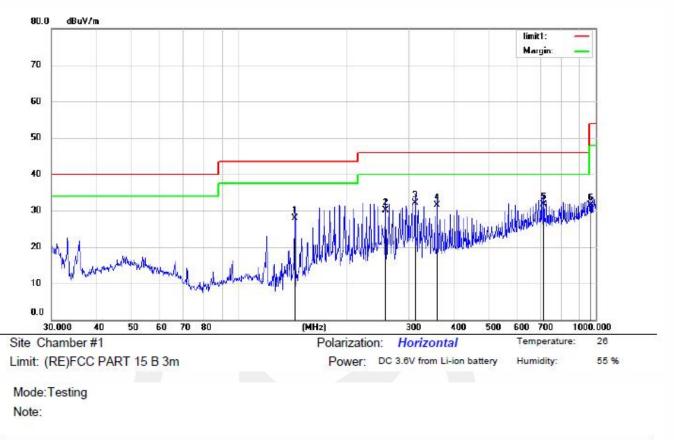
No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		360.4476	49.81	-12.13	37.68	46.00	-8.32	QP			
2		462.3455	44.36	-9.81	34.55	46.00	-11.45	QP			
3		499.4247	44.75	-8.83	35.92	46.00	-10.08	QP			
4		570.6100	45.69	-7.23	38.46	46.00	-7.54	QP			
5	*	691.9867	43.70	-4.40	39.30	46.00	-6.70	QP			
6		798.9797	41.52	-3.30	38.22	46.00	-7.78	QP			

*:Maximum data x:Over limit I:over margin Operator: Lian

EMTEK (Dongguan) Co., Ltd.

东莞市信测科技有限公司 地址:广东省东莞市松山湖高新技术产业开发区新城大道9号中大海洋生物科技研发基地A区2号办公楼负一层、第二层 网址:Http://www.emtek.com.cn 邮箱:E-mail: project@emtek.com.cn Add: -182/F ., Building 2, Zone A, Zhongda Marine Biotechnology Research and Development Base , No.9, Xincheng Avenue, Songshanhu High-technology Industrial Development Zone, Dongguan, Guangdong, China Http://www.emtek.com.cn E-mail: project@emtek.com.cn





No.	Mk.	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		143.8295	49.60	- <mark>21.66</mark>	27.94	43.50	-15.56	QP		-11-2	
2		258.3264	45.36	-15.20	30.16	46.00	-15.84	QP			
3	*	312.1794	45.74	-13.69	32.05	46.00	-13.95	QP			
4	. 3	360.4476	43.60	-12.13	31.47	46.00	-14.53	QP			
5		716.6820	35.96	-4.17	31.79	46.00	-14.21	QP			
6	1	968.9337	31.75	-0.18	31.57	54.00	-22.43	QP			

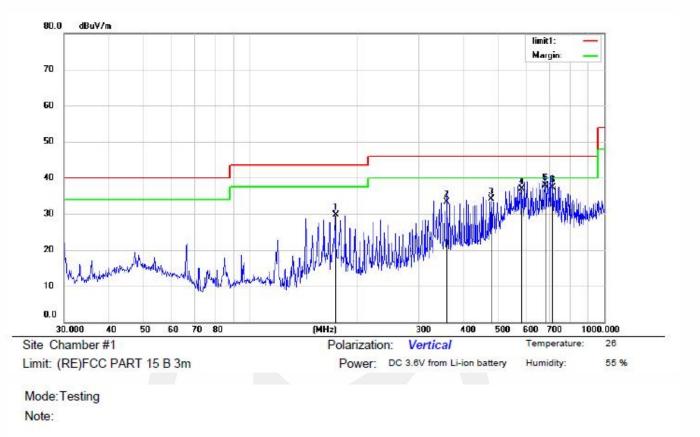
*:Maximum data x:Over limit I:over margin

Operator: Lian

EMTEK (Dongguan) Co., Ltd.

东莞市信测科技有限公司 地址∶广东省东莞市松山湖高新技术产业开发区新城大道9号中大海洋生物科技研发基地A区2号办公楼负一层.第二层 网址∶Http://www.emtek.com.cn 邮箱∶E-mail: project@emtek.com.cn Add: -182/F ., Building 2, Zone A, Zhongda Marine Biotechnology Research and Development Base , No.9, Xincheng Avenue, Songshanhu High-technology Industrial Development Zone, Dongguan, Guangdong, China Http://www.emtek.com.cn E-mail: project@emtek.com.cn





No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		174.4241	49.80	-20.01	29.79	43.50	-13.71	QP			
2		360.4476	45.43	-12.13	33.30	46.00	-12.70	QP			
3		480.5276	43.65	-9.58	34.07	46.00	-11.93	QP			
4		582.7425	43.87	-6.89	36.98	46.00	-9.02	QP			
5	*	679.9600	42.66	-4.69	37.97	46.00	-8.03	QP			
6		716.6820	41.39	-4.17	37.22	46.00	-8.78	QP			

*:Maximum data

x:Over limit I:over margin Operator: Lian

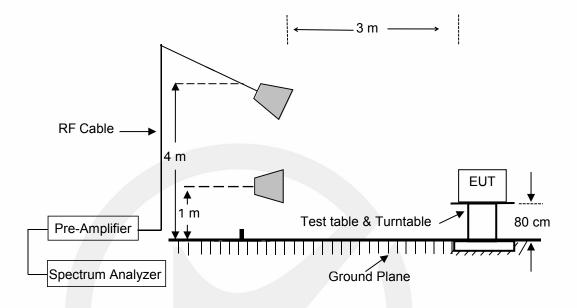
EMTEK (Dongguan) Co., Ltd.

东莞市信测科技有限公司 地址∶广东省东莞市松山湖高新技术产业开发区新城大道9号中大海洋生物科技研发基地A区2号办公楼负一层.第二层 网址∶Http://www.emtek.com.cn 邮箱∶E-mail: project@emtek.com.cn Add: -182/F ., Building 2, Zone A, Zhongda Marine Biotechnology Research and Development Base , No.9, Xincheng Avenue, Songshanhu High-technology Industrial Development Zone, Dongguan, Guangdong, China Http://www.emtek.com.cn E-mail: project@emtek.com.cn



6. RADIATED EMISSION MEASUREMENT (ABOVE 1GHZ)

6.1 Block Diagram of Test Setup



6.2 Radiated Limit

FCC Part 15, Subpart B, Class B

Frequency range	Average limit	Peak limit		
GHz	dB(μV/m)	dB(μV/m)		
Above 1000	54	74		

Note: The highest internal source of an EUT is defined as the highest frequency generated or used in the device or on which the EUT operates or tunes. If the highest frequency of the internal sources of the EUT is less than 1.705 MHz, the measurement shall only be made up to 30 MHz. If the highest frequency of the internal sources of the EUT is between 1.705 MHz and 108 MHz, the measurement shall only be made up to 1 GHz. If the highest frequency of the internal sources of the EUT is between 108 MHz and 500 MHz the measurement shall only be made up to 2 GHz. If the highest frequency of the internal sources of the EUT is between 500 MHz and 1 GHz, the measurement shall only be made up to 5 GHz. If the highest frequency of the internal sources of the EUT is above 1 GHz, the measurement shall be made up to 5 times the highest frequency or 40 GHz, whichever is less.

6.3 Test Procedure

The EUT was placed on a non-conductive table whose total height equaled 80cm. All units of equipment forming the system under test (includes the EUT as well as connected peripherals and associated equipment or devices) shall be arranged such that a nominal 0.1 m separation is achieved between the neighboring units. Where the mains cable supplied by the manufacturer is longer than 1 m, the excess should be folded at the centre into a bundle no longer than 0.4 m, so that its length is shortened to 1 m.

The EUT was set 3 meters away from the receiving antenna that was mounted on a non-conductive mast. The antenna can move up and down between 1 to 4 meters to find out the

EMTEK (Dongguan) Co., Ltd.

东要市信调料转有限公司 地址:广东省东莞市松山湖高新技术产业开发区新城大道9号中大海洋生物科技研发基地A区2号办公楼负一层、第二层 网址:Http://www.emtek.com.cn 邮箱:E-mail: project@emtek.com.cn Add: -1&2/F ..Building 2,Zone A,Zhongda Marine Biotechnology Research and Development Base .No.9, Xincheng Avenue,Songshanhu High-technology Industrial Development Zone. Dongguan, Guangdong, China Http://www.emtek.com.cn E-mail: project@emtek.com.cn



maximum emission level.

The turntable can rotate 360 degree to determine the position of the maximum emission level.

The initial testing identified the frequency that has the highest disturbance relative to the limit while operating the EUT in typical modes of operation and cable positions in a test setup representative of typical system configuration.

The identification of the frequency of highest emission with respect to the limit was found by investigating emissions at a number of significant frequencies. The probable frequency of maximum emission had been found and that the associated cable and EUT configuration and mode of operation had been identified.

The frequency range above 1GHz the measuring instrument use RBW=1 MHz and VBW=3 MHz with peak detector for peak values, and use RBW=1 MHz and VBW=10 Hz with peak detector for Average Values.

Test results were obtained from the following equation: Emission level $(dB\mu V/m)$ = Antenna Factor - Amp Factor +Cable Loss + Reading Margin (dB) = Emission Level $(dB\mu V/m)$ - Limit $(dB\mu V/m)$

- 6.4 Measuring Results
 - N/A.

赤葉市信測科技有限公司 地址:广东省东莞市松山湖高新技术产业开发区新城大道9号中大海洋生物科技研发基地A区2号办公楼负一层、第二层 网址:Http://www.emtek.com.cn 邮箱:E-mail: project@emtek.com.cn EMTEK (Dongguan) Co., Ltd. Add: -182/F ,Building 2,Zone A,Zhongda Marine Biotechnology Research and Development Base ,No.9, Xincheng Avenue,Songshanhu High-technology Industrial Development Zone, Dongguan, Guangdong,China Http://www.emtek.com.cn E-mail: project@emtek.com.cn

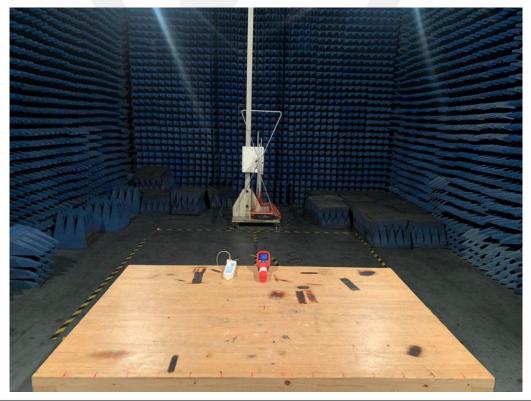


7. PHOTOGRAPHS

7.1. Photos of Conducted Emission Measurement



7.2. Photos of Radiation Emission Measurement



奈莞市信測科技有限公司地址:广东省东莞市松山湖高新技术产业开发区新城大道9号中大海洋生物科技研发基地A区2号办公楼负一层、第二层 网址:Http://www.emtek.com.cn 邮箱:E-mail:project@emtek.com.cn
EMTEK(Dongguan) Co., Ltd. Add: -182/F .,Building 2,Zone A,Zhongda Marine Biotechnology Research and Development Base ,No.9, Xincheng Avenue,Songshanhu High-technology Industrial Development Zone. Add: -182/F ., Building 2, Zone A, Zhongda Marine Biotechnology Research and Development Base , No.9, Xincheng Avenue, Songshanhu High-technology Industrial Development Zone, Dongguan, Guangdong, China Http://www.emtek.com.cn E-mail: project@emtek.com.cn



APPENDIX A: Label Requirements

(1) Receivers associated with the operation of a licensed radio service, e.g., FM broadcast under part 73 of this chapter, land mobile operation under part 90 of this chapter, etc., shall bear the following statement in a conspicuous location on the device:

This device complies with part 15 of the FCC Rules. Operation is subject to the condition that this device does not cause harmful

interference.

(2) A stand-alone cable input selector switch, shall bear the following statement in a conspicuous location on the device:

This device complies with part 15 of the FCC Rules for use with cable television service.

(3) All other devices shall bear the following statement in a conspicuous location on the device: 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.

EMTEK (Dongguan) Co., Ltd.



APPENDIX B: Warning Statement

(a) For a Class A digital device or peripheral, the instructions furnished the user shall include the following or similar statement, placed in a prominent location in the text of the manual:

NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

(b) For a Class B digital device or peripheral, the instructions furnished the user shall include the following or similar statement, placed in a prominent location in the text of the manual:

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device. pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

-Reorient or relocate the receiving antenna.

-Increase the separation between the equipment and receiver.

-Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

Consult the dealer or an experienced radio/TV technician for help.

Warning: Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.



APPENDIX C: Photos of EUT



东莞市信测科技有限公司 地址:广东省东莞市松山湖高新技术产业开发区新城大道9号中大海洋生物科技研发基地A区2号办公楼负一层、第二层 网址:Http://www.emtek.com.cn 邮箱:E-mail: project@emtek.com.cn EMTEK (Dongguan) Co., Ltd. Add: -1&2/F , Building 2,Zone A,Zhongda Marine Biotechnology Research and Development Base ,No.9, Xincheng Avenue,Songshanhu High-technology Industrial Development Zone. Add: -182/F ., Building 2, Zone A, Zhongda Marine Biotechnology Research and Development Base , No.9, Xincheng Avenue, Songshanhu High-technology Industrial Development Zone, Dongguan, Guangdong, China Http://www.emtek.com.cn E-mail: project@emtek.com.cn







奈莞市信測科技有限公司地址:广东省东莞市松山湖高新技术产业开发区新城大道9号中大海洋生物科技研发基地A区2号办公楼负一层、第二层 网址:Http://www.emtek.com.cn 邮箱:E-mail:project@emtek.com.cn
EMTEK(Dongguan) Co., Ltd. Add: -182/F .,Building 2,Zone A,Zhongda Marine Biotechnology Research and Development Base ,No.9, Xincheng Avenue,Songshanhu High-technology Industrial Development Zone. Add: -182/F ., Building 2, Zone A, Zhongda Marine Biotechnology Research and Development Base , No.9, Xincheng Avenue, Songshanhu High-technology Industrial Development Zone, Dongguan, Guangdong, China Http://www.emtek.com.cn E-mail: project@emtek.com.cn







*** End of Report ***

EMTEK (Dongguan) Co., Ltd.

东莞市信测科技有限公司 地址:广东省东莞市松山湖高新技术产业开发区新城大道9号中大海洋生物科技研发基地A区2号办公楼负一层、第二层 网址:Http://www.emtek.com.cn 邮箱:E-mail:project@emtek.com.cn Add: -182/F ., Building 2, Zone A, Zhongda Marine Biotechnology Research and Development Base , No.9, Xincheng Avenue, Songshanhu High-technology Industrial Development Zone, Dongguan, Guangdong, China Http://www.emtek.com.cn E-mail: project@emtek.com.cn



声 明

Statement

1. 本报告无授权批准人签字及"检验报告专用章"无效;

This report will be void without authorized signature or special seal for testing report.

2. 未经许可本报告不得部分复制;

This report shall not be copied partly without authorization.

3. 本报告的检测结果仅对送测样品有效,委托方对样品的代表性和资料的真实性负责;

The test results or observations are applicable only to tested sample. Client shall be responsible for representativenes of the sample and authenticity of the material.

 本检测报告中检测项目标注有特殊符号则该项目不在资质认定范围内,仅作为客户委托、科研、教学或内部 质量控制等目的使用;

The observations or tests with special mark fall outside the scope of accreditation, and are only used for purpose of commission, research, training, internal quality control etc.

5. 本检测报告以实测值进行符合性判定,未考虑不确定度所带来的风险,本实验室不承担相关责任,特别约定、标准或规范中有明确规定的除外;

The test results or observations are provided in accordance with measured value, without taking risks caused by uncertainty into account. Without explicit stipulation in special agreements, standards or regulations, EMTEK shall not assume any responsibility.

6. 对本检测报告若有异议,请于收到报告之日起20日内提出;

Objections shall be raised within 20 days from the date receiving the report.