Verification
On Behalf of

VCOM INTERNATIONAL LTD.

PC HEADPHONE
Model No.: DE143U, DE011, DE018, DE063, DE081, DE091, DE102, DE112, DE115, DE117, DE121, DE125, DE126, DE129, DE133, DE135, DE136, DE144, DE160, DE185, DE191, DE801, DE801M, DE802, DE803, DE805, DE811, DE812, DE813, DE814, DE815, DE816, DEXXXX(In Item No: DEXXXX,"X"can represent any letter from A-Z or any number from 0-9)

Prepared for	:	VCOM INTERNATIONAL LTD.
Address	:	Youke Business Center. Bulding D 2F/1, Kexin Rd, Tangxia, Tianhe District, Guangzhou City, Guangdong Province, China
Prepared By	:	Shenzhen Anbotek Compliance Laboratory Limited
Address	:	1/F., Building 1, SEC Industrial Park, No.0409 Qianhai Road, Nanshan District, Shenzhen, Guangdong, China Tel: (86) 755-26066544 Fax: (86) 755-26014772

Report Number	:	R0116121006E
Date of Test	:	Dec. 23~29, 2016
Date of Report	:	Dec. 29, 2016

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TEST REPORT VERIFICATION

Applicant	:	VCOM INTERNATIONAL LTD.
Manufacturer	:	Huizhou Weixin Electronic Technology Ltd.
EUT	:	PC HEADPHONE
Model No.	:	DE143U, DE011, DE018, DE063, DE081, DE091, DE102, DE112, DE115, DE117, DE121, DE125, DE126, DE129, DE133, DE135, DE136, DE144, DE160, DE185, DE191, DE801, DE801M, DE802, DE803, DE805, DE811, DE812, DE813, DE814, DE815, DE816, DEXXXX(In Item No: DEXXXX,"X"can represent any letter from A-Z or any number from 0-9)
Rating	:	DC 5V
Trade Mark	:	N.A.

Measurement Procedure Used:

FCC Rules and Regulations Part 15 Subpart B: 2016 / ANSI C63.4-2014

The device described above is tested by Shenzhen Anbotek Compliance Laboratory Limited To determine the maximum emission levels emanating from the device. The maximum emission levels are compared to the FCC Part 15 Subpart B Class B limits both radiated and conducted emissions. The measurement results are contained in this test report and Shenzhen Anbotek Compliance Laboratory Limited Is assumed full responsibility for the accuracy and completeness of these measurements.

This report applies to above tested sample only. This report shall not be reproduced in part without written approval of Shenzhen Anbotek Compliance Laboratory Limited

Date of Test : Dec. 23~29, 2016

Prepared by : Baron Wen
(Engineer/ Baron Wen)

Reviewer : Angel Deng
(Project Manager/ Angel Deng)

Approve & Authorized Signer :
(Manager/ Tom Chen)

1. GENERAL INFORMATION

1.1. Description of Device (EUT)

Description	:	PC HEADPHONE
Model Number	:	DE143U, DE011, DE018, DE063, DE081, DE091, DE102, DE112, DE115, DE117, DE121, DE125, DE126, DE129, DE133, DE135, DE136, DE144, DE160, DE185, DE191, DE801, DE801M, DE802, DE803, DE805, DE811, DE812, DE813, DE814, DE815, DE816, DEXXXX(In Item No: DEXXXX,"X"can represent any letter from A-Z or any number from 0-9) (Note: All samples are the same except the model number & appearance, so we prepare “DE143U” for EMC test only.)
Test Power Supply	:	DC 5V via USB Port
Applicant	:	VCOM INTERNATIONAL LTD.
Address	:	Youke Business Center. Bulding D 2F/1, Kexin Rd, Tangxia, Tianhe District, Guangzhou City, Guangdong Province, China
Manufacturer	:	Huizhou Weixin Electronic Technology Ltd.
Address	:	Xiao Penggang, LongXi, Boluo, Huizhou, Guangdong, China
Factory	:	Huizhou Weixin Electronic Technology Ltd.
Address	:	Xiao Penggang, LongXi, Boluo, Huizhou, Guangdong, China
Date of receipt	:	Dec. 23, 2016
Date of Test	:	Dec. 23~29, 2016

1.2. Auxiliary Equipment Used during Test

PC	:	Manufacturer: DELL M/N: Optiplex 3020 MT S/N: CN-079V51-70163-4AD-089K-A00 Input Rating: AC 100-240V, 50-60Hz 5.4A CE , FCC DOC, CCC
MONITOR	:	Manufacturer: DELL M/N: UZ2215Hf S/N: CN-035VN6-72872-45A-A3AB Input Rating: AC 100-240V, 50-60Hz, 1.5A Output Rating: DC 19.5V, 4.62A TUV-GS FCC CE KCC VCCI
KEYBOARD	:	Manufacturer: DELL M/N: SK-8120 S/N: CN-0DJ365-71616-49J-0MVR-A00 Input Rating: DC 5V,0.05A CE FCC VCCI KCC TUV-GS Cable: 1.8m, unshielded
MOUSE	:	Manufacturer: DELL M/N: MS111-T S/N: CN-0KW2YH-71616-488-1CBJ Input Rating: DC 5V,0.1A Cable: 1.8m, unshielded CE FCC VCCI KCC TUV-GS
Printer	:	Manufacturer:Brother M/N: MFC-3360C S/N: N/A CE, FCC:DOC

1.3. Description of Test Facility

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

CNAS - LAB Code: L3503
Shenzhen Anbotek Compliance Laboratory Limited., Laboratory has been assessed and in compliance with CNAS/CL01: 2006 accreditation criteria for testing laboratories (identical to ISO/IEC 17025:2005 General Requirements) for the Competence of Testing Laboratories.

FCC-Registration No.: 752021
Shenzhen Anbotek Compliance Laboratory Limited, EMC Laboratory has been registed 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 752021, July 06, 2016

IC-Registration No.: 8058A-1
Shenzhen Anbotek Compliance Laboratory Limited., EMC Laboratory has been registered and fully described in a report filed with the (IC) Industry Canada. The acceptance letter from the IC is maintained in our files. Registration 8058A-1, Jun. 13, 2016

Test Location
All Emissions tests were performed
Shenzhen Anbotek Compliance Laboratory Limited. at 1/F., Building 1, SEC Industrial Park, No.0409 Qianhai Road, Nanshan District, Shenzhen, Guangdong, China

1.4. Measurement Uncertainty

Radiation Uncertainty	:	Ur = 4.1dB (Horizontal) Ur = 4.3dB (Vertical)
Conduction Uncertainty	:	Uc = 3.4dB

1.5. Test Summary

For the EUT described above. The standards used were FCC Part 15 Subpart B for Emissions.

Table 1 : Tests Carried Out Under FCC Part 15 Subpart B

Standard	Test Items	Status
FCC Part 15 Subpart B	Power Line Conducted Emission Test (150KHz To 30MHz)	√
FCC Part 15 Subpart B	Radiated Emission Test (30MHz To 1000MHz)	√

√ Indicates that the test is applicable
x Indicates that the test is not applicable

2. POWER LINE CONDUCTED MEASUREMENT

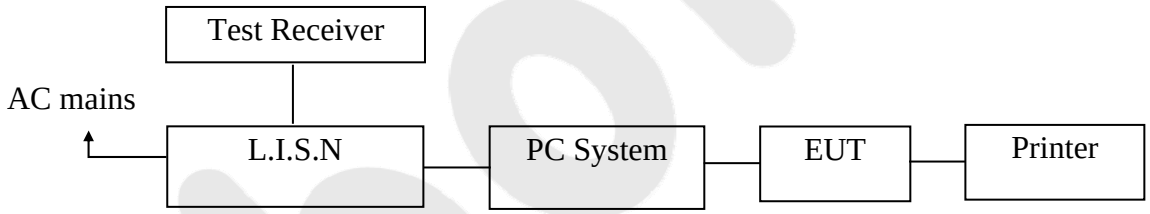
2.1. Test Equipment

The following test equipments are used during the power line conducted measurement:

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Two-Line V-network	Rohde & Schwarz	ENV216	100055	Jul. 19, 2016	1 Year
2.	EMI Test Receiver	Rohde & Schwarz	ESCI	100627	Jun. 17, 2016	1 Year
3.	RF Switching Unit	Compliance Direction	RSU-M2	38303	Jun. 17, 2016	1 Year

2.2. Block Diagram of Test Setup

2.2.1. Block diagram of connection between the EUT and simulators



2.3. Power Line Conducted Emission Measurement Limits (FCC Part 15 Class B)

Frequency MHz	Limits dB(μV)	
	Quasi-peak Level	Average Level
0.15 ~ 0.50	66 ~ 56*	56 ~ 46*
0.50 ~ 5.00	56	46
5.00 ~ 30.00	60	50

Notes: 1. *Decreasing linearly with logarithm of frequency.
2. The lower limit shall apply at the transition frequencies.

2.4. Configuration of EUT on Measurement

The following equipments are installed on Power Line Conducted Emission Measurement to meet the commission requirement and operating regulations in a manner which tends to maximize its emission characteristics in a normal application.

2.5. Operating Condition of EUT

2.5.1. Setup the EUT and simulator as shown as Section 2.2.

2.5.2. Turn on the power of all equipment.

2.5.3. Let the EUT work in test mode (On) and measure it.

2.6. Test Procedure

The EUT system is connected to the power mains through a line impedance stabilization network (L.I.S.N.). This provides a 50ohm coupling impedance for the EUT system. Please refer the block diagram of the test setup and photographs. Both sides of AC line are checked to find out the maximum conducted emission. In order to find the maximum emission levels, the relative positions of equipment and all of the interface cables shall be changed according to FCC ANSI C63.4-2014 on Conducted Emission Measurement.

The bandwidth of test receiver (ESCI) set at 9KHz.

The frequency range from 150KHz to 30MHz is checked.

The test result are reported on Section 2.7.

2.7. Power Line Conducted Emission Measurement Results

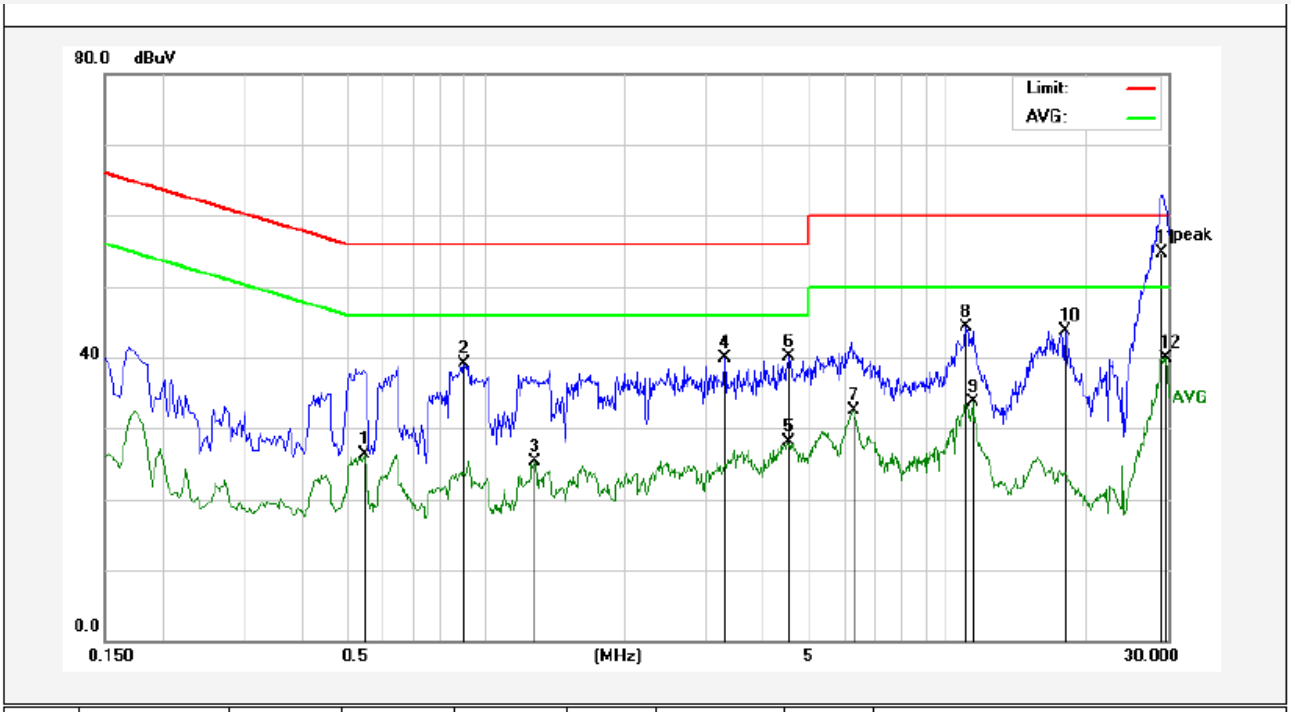
PASS

The frequency range from 150KHz to 30 MHz is investigated.

The test curves are shown in the following pages.

CONDUCTED EMISSION TEST DATA

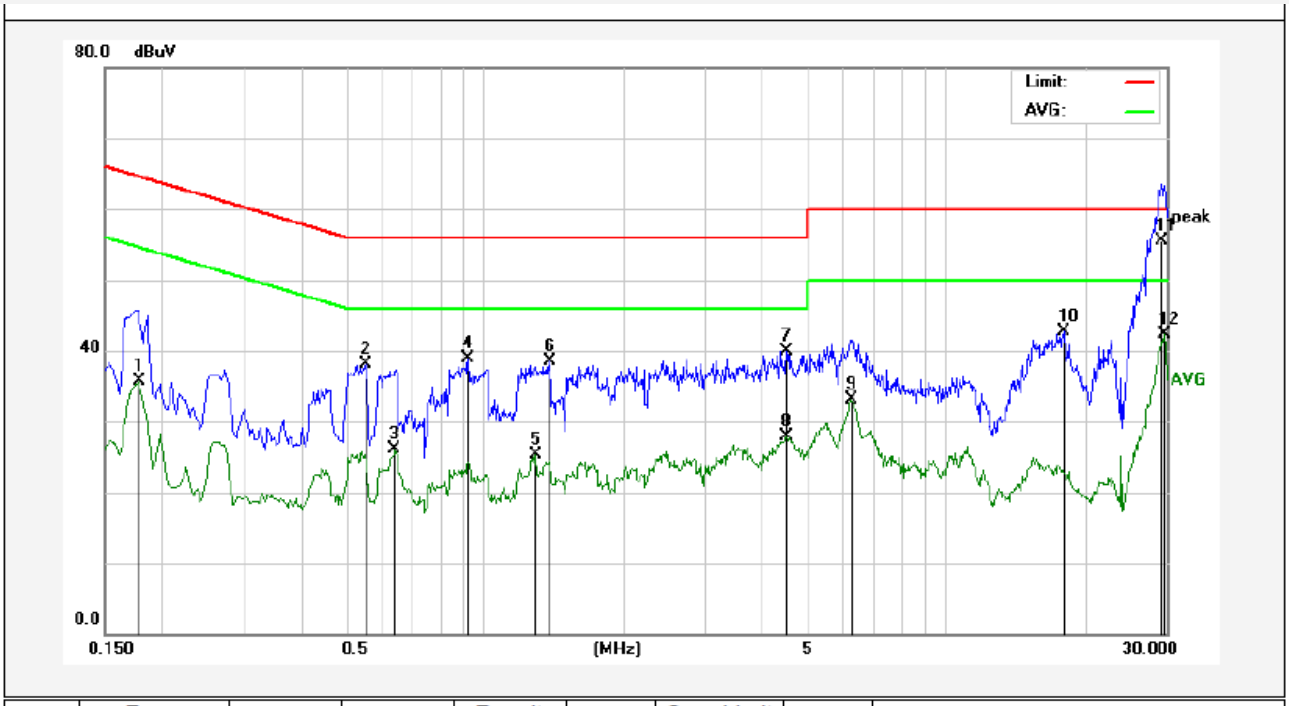
Test Site:	1# Shielded Room
Operating Condition:	On
Test Specification:	DC 5V via USB Port
Comment:	L
	Temp.: 25℃ Hum.: 50%



No.	Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit dBuV	Over Limit (dB)	Detector	Remark
1	0.5500	6.32	19.99	26.31	46.00	-19.69	AVG	
2	0.9020	19.05	20.09	39.14	56.00	-16.86	QP	
3	1.2860	5.08	20.13	25.21	46.00	-20.79	AVG	
4	3.2940	19.68	20.17	39.85	56.00	-16.15	QP	
5	4.5060	7.82	20.19	28.01	46.00	-17.99	AVG	
6	4.5340	19.85	20.19	40.04	56.00	-15.96	QP	
7	6.2380	12.20	20.24	32.44	50.00	-17.56	AVG	
8	10.9940	24.05	20.32	44.37	60.00	-15.63	QP	
9	11.3220	13.35	20.32	33.67	50.00	-16.33	AVG	
10	17.9820	23.49	20.31	43.80	60.00	-16.20	QP	
11	29.2140	34.43	20.27	54.70	60.00	-5.30	QP	
12	29.6980	19.57	20.27	39.84	50.00	-10.16	AVG	

CONDUCTED EMISSION TEST DATA

Test Site:	1# Shielded Room
Operating Condition:	On
Test Specification:	DC 5V via USB Port
Comment:	N
	Temp.: 25℃ Hum.: 50%



No.	Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit dBuV	Over Limit (dB)	Detector	Remark
1	0.1780	15.77	19.90	35.67	54.57	-18.90	AVG	
2	0.5540	18.01	20.00	38.01	56.00	-17.99	QP	
3	0.6380	6.07	20.02	26.09	46.00	-19.91	AVG	
4	0.9220	18.71	20.10	38.81	56.00	-17.19	QP	
5	1.2900	5.15	20.13	25.28	46.00	-20.72	AVG	
6	1.3820	18.31	20.13	38.44	56.00	-17.56	QP	
7	4.5060	19.68	20.19	39.87	56.00	-16.13	QP	
8	4.5060	7.66	20.19	27.85	46.00	-18.15	AVG	
9	6.1979	12.88	20.24	33.12	50.00	-16.88	AVG	
10	18.0060	22.33	20.31	42.64	60.00	-17.36	QP	
11	29.2460	35.29	20.27	55.56	60.00	-4.44	QP	
12	29.7180	21.95	20.27	42.22	50.00	-7.78	AVG	

3. RADIATED EMISSION MEASUREMENT

3.1. Test Equipment

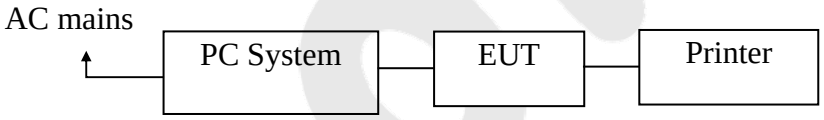
The following test equipments are used during the radiated emission measurement:

3.1.1. For Anechoic Chamber

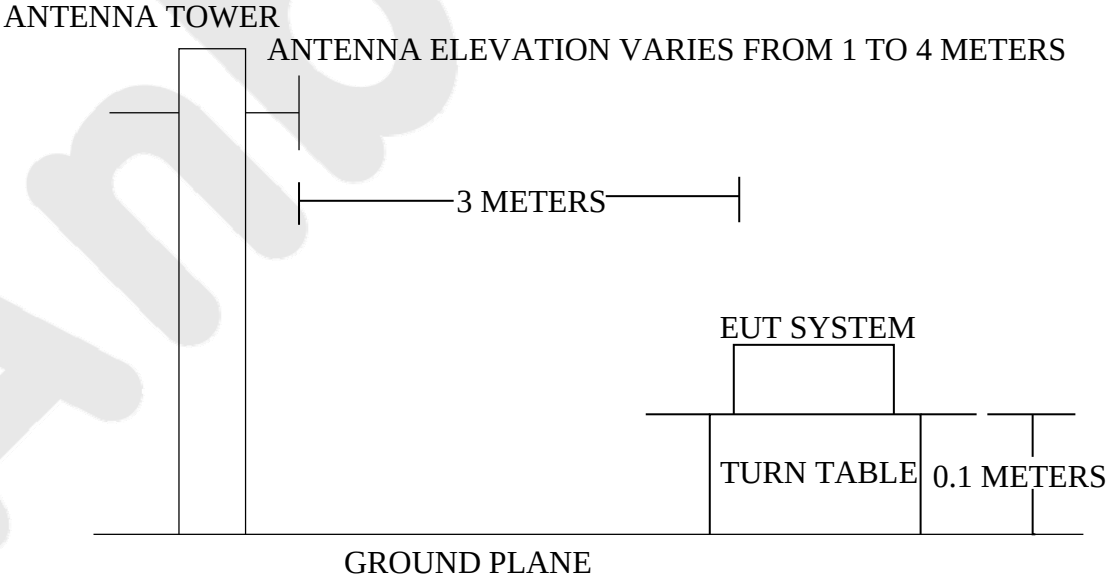
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	EMI Test Receiver	Rohde & Schwarz	ESPI	101604	Jun. 17, 2016	1 Year
2.	Bilog Broadband Antenna	Schwarzbeck	VULB9163	VULB 9163-289	May 06, 2016	1 Year
3.	Pre-amplifier	SONOMA	310N	186860	Jun. 17, 2016	1 Year

3.2. Block Diagram of Test Setup

3.2.1. Block diagram of connection between the EUT and simulators



3.2.2. Anechoic Chamber Test Setup Diagram



3.3. Radiated Emission Limit (Subpart B Class B)

FREQUENCY MHz	DISTANCE Meters	FIELD STRENGTHS LIMIT	
		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

Remark： (1) Emission level (dB)μV = 20 log Emission level μV/m
(2) The smaller limit shall apply at the cross point between two frequency bands.
(3) Distance is the distance in meters between the measuring instrument, antenna and the closest point of any part of the device or system.

3.4. EUT Configuration on Measurement

The following equipments are installed on Radiated Emission Measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

3.5. Operating Condition of EUT

3.5.1. Setup the EUT as shown in Section 3.2.

3.5.2. Let the EUT work in test mode (On) and measure it.

3.6. Test Procedure

EUT and its simulators are placed on a turn table, which is 0.1 meter high above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. EUT is set 3.0 meters away from the receiving antenna, which is mounted on a antenna tower. The antenna can be moved up and down between 1.0 meter and 4 meters to find out the maximum emission level. Broadband antenna (Trilog Broadband Antenna) is used as receiving antenna. Both horizontal and vertical polarizations of the antenna are set on measurement. In order to find the maximum emission levels, all of the interface cables must be manipulated according to ANSI C63.4-2014 on radiated emission measurement.

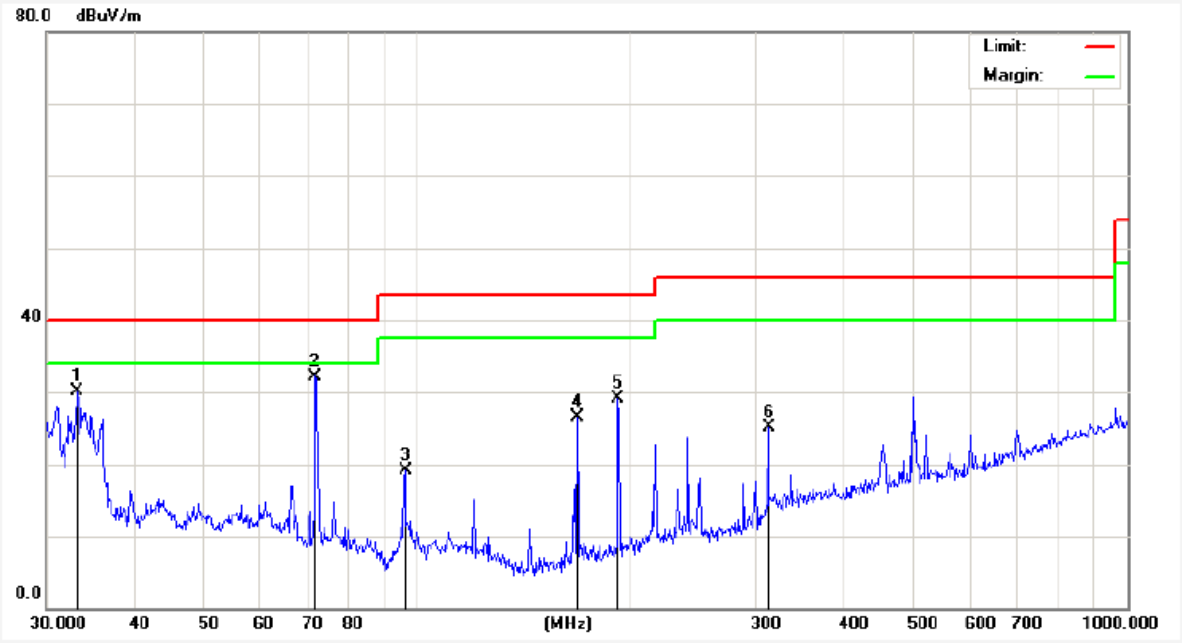
The bandwidth of the EMI test receiver (ESCI) is set at 120kHz.
The frequency range from 30MHz to 1000MHz is checked.
The test mode (On) is tested in chamber and all the test results are listed in Section 3.7.

3.7. Radiated Emission Measurement Results

PASS

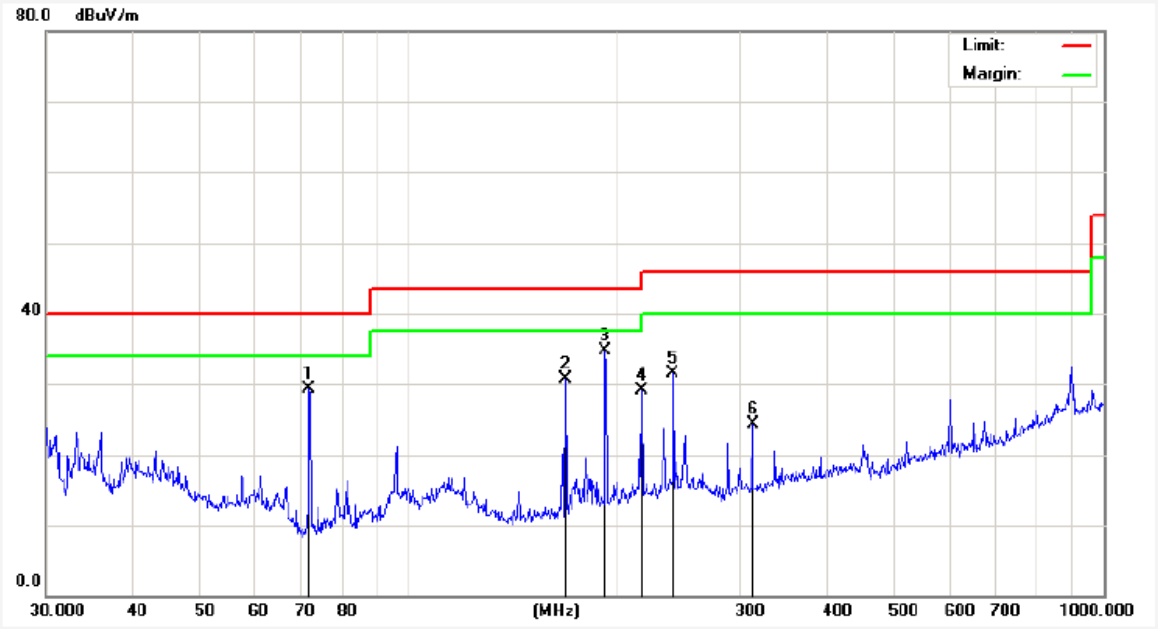
The test curves are shown in the following pages.

Job No.:	**AT0116121006E**	**Polarization:**	**Horizontal**
Standard:	**(RE)FCC Part 15 Subpart B _3m**	**Power Source:**	**DC 5V via USB Port**
Test item:	**Radiation Test**	**Temp.(℃)/Hum.(%RH):**	**24.3(℃)/55%RH**
Mode:	**On**	**Distance:**	**3m**



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	33.2112	56.31	-26.24	30.07	40.00	-9.93	peak			
2	71.8320	61.83	-29.63	32.20	40.00	-7.80	peak			
3	96.0986	48.92	-29.84	19.08	43.50	-24.42	peak			
4	167.8243	57.68	-31.23	26.45	43.50	-17.05	peak			
5	191.7450	58.53	-29.46	29.07	43.50	-14.43	peak			
6	312.1794	49.75	-24.71	25.04	46.00	-20.96	peak			

Job No.:	**AT0116121006E**	**Polarization:**	**Vertical**
Standard:	**(RE)FCC Part 15 Subpart B _3m**	**Power Source:**	**DC 5V via USB Port**
Test item:	**Radiation Test**	**Temp.(℃)/Hum.(%RH):**	**24.3(℃)/55%RH**
Mode:	**On**	**Distance:**	**3m**

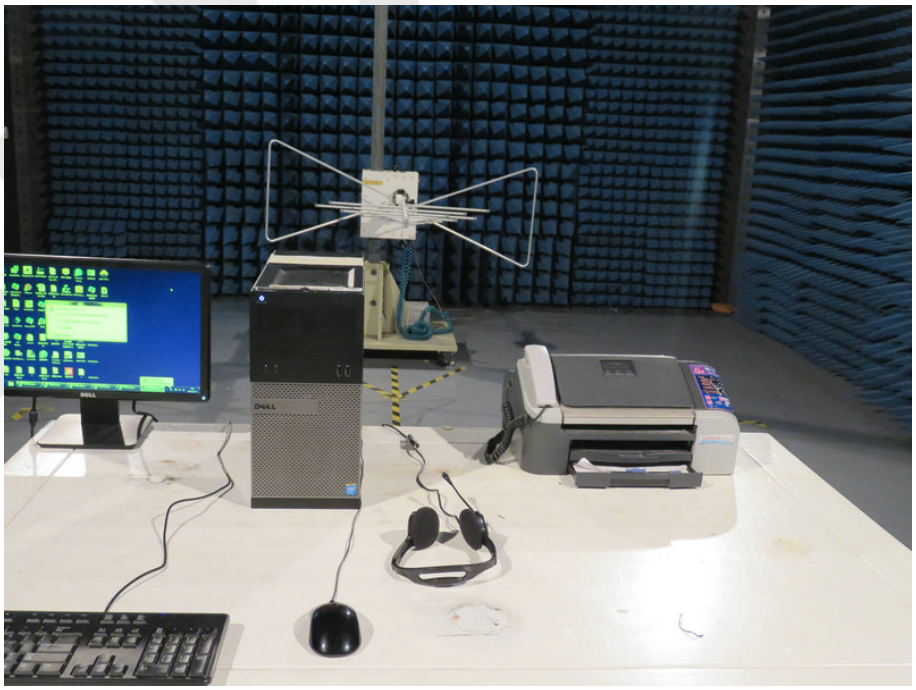


No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	71.8320	58.91	-29.63	29.28	40.00	-10.72	peak			
2	167.8243	56.92	-26.23	30.69	43.50	-12.81	peak			
3	191.7450	59.18	-24.46	34.72	43.50	-8.78	peak			
4	216.0240	52.79	-23.78	29.01	46.00	-16.99	peak			
5	239.9874	54.12	-22.60	31.52	46.00	-14.48	peak			
6	312.1794	47.30	-22.93	24.37	46.00	-21.63	peak			

4. PHOTOGRAPH

4.1. Photo of Power Line Conducted Emission Test

4.2. Photo of Radiated Emission Test



APPENDIX I
(Photos of EUT)

Figure 1
The EUT- Overall View

Figure 2
The EUT- Side View

Figure 3
The EUT- Side View

Figure 4
The EUT- Partial View

Figure 5
The EUT- Inside View

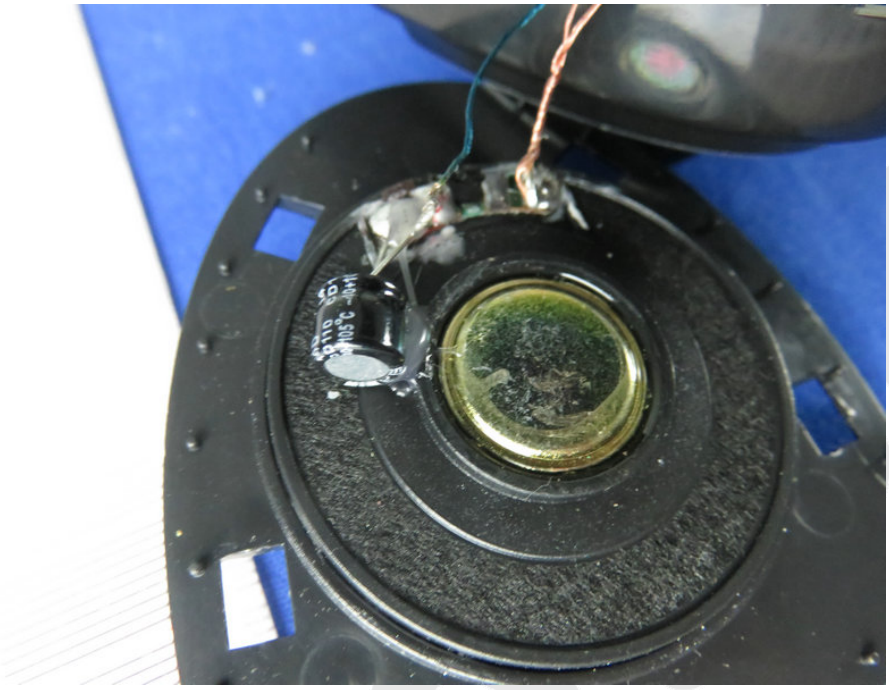


Figure 6
PCB of The EUT View

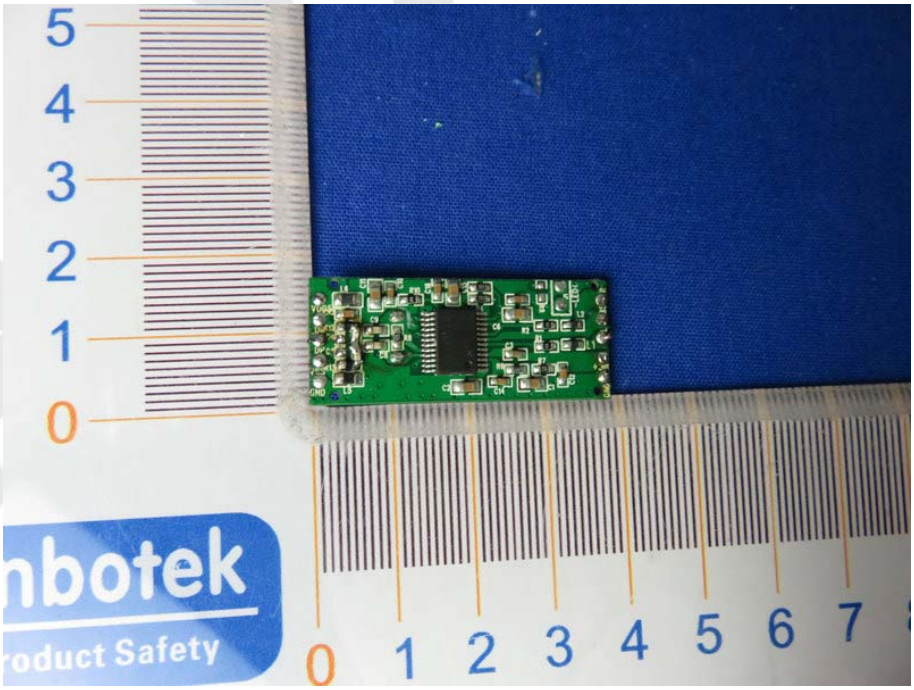


Figure 7
PCB of The EUT View