

APPLICATION FOR VERIFICATION
On Behalf of
Shenzhen Krisvision Digital Technology Group Inc

KARAOKE PLAYER
Model No.: BM-4000

FCC ID: 2AAI5-BM4000

Prepared for : Shenzhen Krisvision Digital Technology Group Inc
Address : 4th Floor and 6th Floor, 2nd Building The West, Shenhua
Technology Ind. Park, Meihua Rd. Shenzhen, Guangdong,
China
Prepared by : Accurate Technology Co., Ltd.
Address : F1, Bldg. A&D, Changyuan New Material Port, Keyuan
Rd., Science & Industry Park, Nanshan District, Shenzhen
518057, P.R. China

Tel: +86-755-26503290
Fax: +86-755-26503396

Report No. : ATE20160837
Date of Test : May 10-20, 2016
Date of Report : May 20, 2016

TABLE OF CONTENTS

Description	Page
Test Report Declaration	
1. TEST RESULTS SUMMARY	4
2. GENERAL INFORMATION	5
2.1. Product of Device (EUT)	5
2.2. Accessory and Auxiliary Equipment	5
2.3. Description of Test Facility	6
2.4. Measurement Uncertainty	6
3. MEASURING DEVICE AND TEST EQUIPMENT	7
3.1. The Equipments Used to Measure Conducted Disturbance	7
3.2. The Equipments Used to Measure Radiated Disturbance	8
4. POWER LINE CONDUCTED MEASUREMENT	9
4.1. Block Diagram of Test Setup	9
4.2. The Emission Limit	9
4.3. Configuration of EUT on Measurement	10
4.4. Operating Condition of EUT	10
4.5. Test Procedure	10
4.6. Power Line Conducted Emission Measurement Results	11
5. RADIATED EMISSION MEASUREMENT	29
5.1. Block Diagram of Test Setup	29
5.2. The Emission Limit For Section 15.109 (a)	29
5.3. EUT Configuration on Measurement	30
5.4. Operating Condition of EUT	30
5.5. Test Procedure	30
5.6. Radiated Emission Noise Measurement Result	31

Test Report Declaration

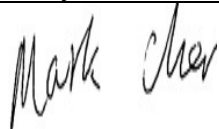
Applicant : Shenzhen Krisvision Digital Technology Group Inc
Manufacturer : Shenzhen Krisvision Digital Technology Group Inc
Product : KARAOKE PLAYER
Model No. : BM-4000
Trade Mark : N/A

Measurement Procedure Used:

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

The device described above is tested by Accurate Technology Co., Ltd. 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 Accurate Technology Co., Ltd. is assumed full responsibility for the accuracy and completeness of these measurements. Also, this report shows that the Equipment Under Test (EUT) is to be technically compliant with the FCC requirements.

This report applies to above tested sample only. This report shall not be reproduced in part without written approval of Accurate Technology Co., Ltd.

Date of Test :	May 10-20, 2016
Date of Report :	May 20, 2016
Prepared by :	 (Mark Chen, Engineer)
Approved & Authorized Signer :	 (Sean Liu, Manager)

1. TEST RESULTS SUMMARY

Test Items	Test Standard	Test Results
Power Line Conducted Emission	FCC Part 15.107	Pass
Radiated Emission	FCC Part 15.109	Pass

2. GENERAL INFORMATION

2.1.Product of Device (EUT)

EUT	:	KARAOKE PLAYER
Model Number	:	BM-4000
Power Supply	:	AC 100-240V, 50/60Hz
Remark(s)	:	The EUT highest operating frequency provided by Manufacturer is 1503MHz, the radiated emission measurement shall be made up to 8GHz
Applicant	:	Shenzhen Krisvision Digital Technology Group Inc
Address	:	4th Floor and 6th Floor, 2nd Building The West, Shenhua Technology Ind. Park, Meihua Rd. Shenzhen, Guangdong, China
Manufacturer	:	Shenzhen Krisvision Digital Technology Group Inc
Address	:	4th Floor and 6th Floor, 2nd Building The West, Shenhua Technology Ind. Park, Meihua Rd. Shenzhen, Guangdong, China
Date of sample received	:	May 10, 2016
Date of Test	:	May 10-20, 2016

2.2.Accessory and Auxiliary Equipment

LCD Monitor	:	Manufacturer: DELL M/N: 1704FPTt
Notebook PC	:	Manufacturer: LENOVO M/N: 4290-RT8 S/N: R9-FW93G 11/08
USB flash disk	:	Manufacturer: Kingston M/N: DTSE9H/32GB
MOUSE	:	Manufacturer: Logitech M/N: M-U0026

2.3. Description of Test Facility

EMC Lab : Accredited by TUV Rheinland Shenzhen, May 10, 2004

Listed by FCC

The Registration Number is 253065

Listed by FCC

The Registration Number is 752051

Listed by Industry Canada

The Registration Number is 5077A-1

Listed by Industry Canada

The Registration Number is 5077A-2

Accredited by China National Accreditation Committee for Laboratories

The Certificate Registration Number is L3193

Name of Firm : Accurate Technology Co., Ltd.

Site Location : F1, Bldg. A&D, Changyuan New Material Port, Keyuan Rd., Science & Industry Park, Nanshan District, Shenzhen 518057, P.R. China

2.4. Measurement Uncertainty

Conducted emission expanded uncertainty : U=2.23dB, k=2

Power disturbance expanded uncertainty : U=2.92dB, k=2

Radiated emission expanded uncertainty : U=3.08dB, k=2
(9kHz-30MHz)

Radiated emission expanded uncertainty : U=4.42dB, k=2
(30MHz-1000MHz)

Radiated emission expanded uncertainty : U=4.06dB, k=2
(Above 1GHz)

3. MEASURING DEVICE AND TEST EQUIPMENT

3.1. The Equipments Used to Measure Conducted Disturbance

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Test Receiver	Rohde & Schwarz	ESCS30	100307	Jan.9, 2016	1 Year
2.	Test Receiver	Rohde & Schwarz	ESPI	100396/003	Jan.9, 2016	1 Year
3.	Test Receiver	Rohde & Schwarz	ESPI	101526/003	Jan.9, 2016	1 Year
4.	Test Receiver	Rohde & Schwarz	ESR	101817	Jan.9, 2016	1 Year
5.	L.I.S.N.	Schwarzbeck	NLSK8126	8126431	Jan.9, 2016	1 Year
6.	L.I.S.N.	Rohde & Schwarz	ESH3-Z5	100305	Jan.9, 2016	1 Year
7.	L.I.S.N.	Rohde & Schwarz	ESH3-Z5	100310	Jan.9, 2016	1 Year
8.	L.I.S.N.	Rohde & Schwarz	ESH3-Z6	100132	Jan.9, 2016	1 Year
9.	L.I.S.N.	Rohde & Schwarz	ESH3-Z6	100979	Jan.9, 2016	1 Year
10.	Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100305	Jan.9, 2016	1 Year
11.	Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100312	Jan.9, 2016	1 Year
12.	Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100815	Jan.9, 2016	1 Year
13.	50Ω Coaxial Switch	Anritsu Corp	MP59B	6200283936	Jan.9, 2016	1 Year
14.	50Ω Coaxial Switch	Anritsu Corp	MP59B	6200283933	Jan.9, 2016	1 Year
15.	50Ω Coaxial Switch	Anritsu Corp	MP59B	6200506474	Jan.9, 2016	1 Year
16.	VOLTAGE PROBE	Schwarzbeck	TK9416	N/A	Jan.9, 2016	1 Year
17.	RF CURRENT PROBE	Rohde & Schwarz	EZ-17	100048	Jan.9, 2016	1 Year
18.	8-Wire Impedance Stabilisation Network	Schwarzbeck	CAT5 8158	8158-0035	Jan.9, 2016	1 Year
19.	RF Coaxial Cable	SUHNER	N-2m	No.2	Jan.9, 2016	1 Year
20.	RF Coaxial Cable	SUHNER	N-2m	No.3	Jan.9, 2016	1 Year
21.	RF Coaxial Cable	SUHNER	N-2m	No.14	Jan.9, 2016	1 Year

3.2. The Equipments Used to Measure Radiated Disturbance

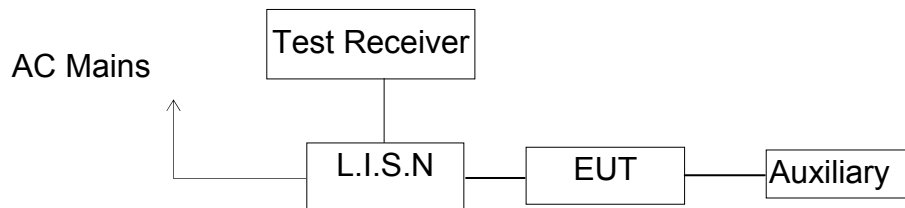
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum Analyzer	Agilent	E7405A	MY45115511	Jan.9, 2016	1 Year
2.	Spectrum Analyzer	Rohde&Schwarz	FSV40	101495	Jan.9, 2016	1 Year
3.	Test Receiver	Rohde&Schwarz	ESCS30	100307	Jan.9, 2016	1 Year
4.	Test Receiver	Rohde& Schwarz	ESPI	100396/003	Jan.9, 2016	1 Year
5.	Test Receiver	Rohde& Schwarz	ESPI	101526/003	Jan.9, 2016	1 Year
6.	Test Receiver	Rohde& Schwarz	ESR	101817	Jan.9, 2016	1 Year
7.	Bilog Antenna	Schwarzbeck	VULB9163	9163-194	Jan.14, 2016	1 Year
8.	Bilog Antenna	Schwarzbeck	VULB9163	9163-323	Jan.14, 2016	1 Year
9.	Log.-Per.Antenna	Schwarzbeck	VUSLP 9111B	9111B-074	Jan.14, 2016	1 Year
10.	Biconical Broad Band Antenna	Schwarzbeck	VHBB 9124+BBA 9106	9124-617	Jan.14, 2016	1 Year
11.	Loop Antenna	Schwarzbeck	FMZB1516	1516131	Jan.14, 2016	1 Year
12.	Horn Antenna	Schwarzbeck	BBHA9120D	9120D-655	Jan.14, 2016	1 Year
13.	Horn Antenna	Schwarzbeck	BBHA9120D	9120D-1067	Jan.14, 2016	1 Year
14.	Vertical Active Monopole Antenna	Schwarzbeck	VAMP 9243	9243-370	Jan.14, 2016	1 Year
15.	RF Switching Unit+PreAMP	Compliance Direction	RSU-M2	38322	Jan.9, 2016	1 Year
16.	Pre-Amplifier	Agilent	8447D	294A10619	Jan.9, 2016	1 Year
17.	Pre-Amplifier	Rohde&Schwarz	CBLU11835 40-01	3791	Jan.9, 2016	1 Year
18.	50 Coaxial Switch	Anritsu Corp	MP59B	6200237248	Jan.9, 2016	1 Year
19.	50 Coaxial Switch	Anritsu Corp	MP59B	6200506474	Jan.9, 2016	1 Year
20.	RF Coaxial Cable	Schwarzbeck	N-5m	No.1	Jan.9, 2016	1 Year
21.	RF Coaxial Cable	Schwarzbeck	N-1m	No.6	Jan.9, 2016	1 Year
22.	RF Coaxial Cable	Schwarzbeck	N-1m	No.7	Jan.9, 2016	1 Year
23.	RF Coaxial Cable	SUHNER	N-3m	No.8	Jan.9, 2016	1 Year
24.	RF Coaxial Cable	RESENBERGER	N-3.5m	No.9	Jan.9, 2016	1 Year
25.	RF Coaxial Cable	SUHNER	N-6m	No.10	Jan.9, 2016	1 Year
26.	RF Coaxial Cable	RESENBERGER	N-12m	No.11	Jan.9, 2016	1 Year
27.	RF Coaxial Cable	RESENBERGER	N-0.5m	No.12	Jan.9, 2016	1 Year
28.	RF Coaxial Cable	SUHNER	N-2m	No.13	Jan.9, 2016	1 Year
29.	RF Coaxial Cable	SUHNER	N-0.5m	No.15	Jan.9, 2016	1 Year
30.	RF Coaxial Cable	SUHNER	N-2m	No.16	Jan.9, 2016	1 Year
31.	RF Coaxial Cable	RESENBERGER	N-6m	No.17	Jan.9, 2016	1 Year

4. POWER LINE CONDUCTED MEASUREMENT

4.1. Block Diagram of Test Setup

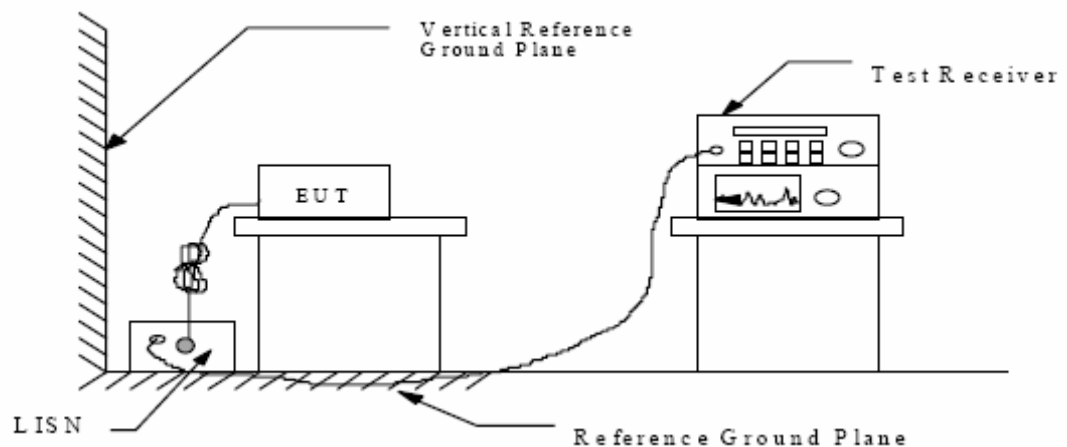
4.1.1. Block diagram of connection between the EUT and simulators

4.1.1.1. For Playing & USB Playing & Network



(EUT: KARAOKE PLAYER)

4.1.2. Shielding Room Test Setup Diagram



(EUT: KARAOKE PLAYER)

4.2. The Emission Limit

4.2.1. Conducted Emission Measurement Limits According to Section 15.107(a)

Frequency (MHz)	Limit dB(μV)	
	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

* Decreases with the logarithm of the frequency.

4.3. 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.

4.3.1.KARAOKE PLAYER (EUT)

Model Number: BM-4000

Serial Number: N/A

Manufacturer: Shenzhen Krisvision Digital Technology Group Inc

4.4. Operating Condition of EUT

4.4.1.Setup the EUT and simulator as shown as Section 3.2.

4.4.2.Turn on the power of all equipment.

4.4.3.Let the EUT work in test mode and measure it.

4.5. Test Procedure

The EUT is put on the plane 0.8m high above the ground by insulating support and 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 lines 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 ANSI C63.4: 2014 on Conducted Emission Measurement.

The bandwidth of test receiver (R & S ESCS30) is set at 9kHz.

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

4.6. Power Line Conducted Emission Measurement Results

PASS.

Test Mode: Playing (120V/60HZ)

MEASUREMENT RESULT: "PRAM001_fin"

2016-5-19 8:40

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.910000	41.10	11.6	56	14.9	QP	L1	GND
2.981000	47.00	11.7	56	9.0	QP	L1	GND
8.907500	46.70	11.9	60	13.3	QP	L1	GND

MEASUREMENT RESULT: "PRAM001_fin2"

2016-5-19 8:40

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.904000	32.20	11.6	46	13.8	AV	L1	GND
3.053000	33.20	11.7	46	12.8	AV	L1	GND
8.907500	41.50	11.9	50	8.5	AV	L1	GND

MEASUREMENT RESULT: "PRAM002_fin"

2016-5-19 8:43

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.904000	41.90	11.6	56	14.1	QP	N	GND
3.170000	46.50	11.7	56	9.5	QP	N	GND
8.912000	46.90	11.9	60	13.1	QP	N	GND

MEASUREMENT RESULT: "PRAM002_fin2"

2016-5-19 8:43

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.902000	32.70	11.6	46	13.3	AV	N	GND
3.174500	36.80	11.7	46	9.2	AV	N	GND
8.912000	41.50	11.9	50	8.5	AV	N	GND

Test Mode: USB Playing (120V/60HZ)

MEASUREMENT RESULT: "jh513006_fin"

5/13/2016 9:28AM

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.440000	44.20	10.7	57	12.9	QP	L1	GND
1.070000	44.50	10.9	56	11.5	QP	L1	GND
3.030000	47.40	11.1	56	8.6	QP	L1	GND

MEASUREMENT RESULT: "jh513006_fin2"

5/13/2016 9:28AM

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.440000	39.80	10.7	47	7.3	AV	L1	GND
1.070000	36.60	10.9	46	9.4	AV	L1	GND
2.960000	35.70	11.1	46	10.3	AV	L1	GND

MEASUREMENT RESULT: "jh51307_fin"

5/13/2016 9:34AM

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.440000	42.70	10.7	57	14.4	QP	N	GND
1.075000	42.70	10.9	56	13.3	QP	N	GND
2.960000	46.40	11.1	56	9.6	QP	N	GND

MEASUREMENT RESULT: "jh51307_fin2"

5/13/2016 9:34AM

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.440000	40.30	10.7	47	6.8	AV	N	GND
1.070000	39.50	10.9	46	6.5	AV	N	GND
2.780000	32.70	11.0	46	13.3	AV	N	GND

Test Mode: Network (120V/60HZ)

MEASUREMENT RESULT: "PRAM004_fin"

2016-5-19 8:52

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.410000	41.50	11.3	58	16.1	QP	L1	GND
0.900000	44.80	11.6	56	11.2	QP	L1	GND
2.904500	46.10	11.7	56	9.9	QP	L1	GND

MEASUREMENT RESULT: "PRAM004_fin2"

2016-5-19 8:52

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.410000	34.90	11.3	48	12.7	AV	L1	GND
0.900000	33.70	11.6	46	12.3	AV	L1	GND
2.904500	36.60	11.7	46	9.4	AV	L1	GND

MEASUREMENT RESULT: "PRAM003_fin"

2016-5-19 8:48

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.408000	41.50	11.3	58	16.2	QP	N	GND
0.900000	44.80	11.6	56	11.2	QP	N	GND
3.062000	47.00	11.7	56	9.0	QP	N	GND

MEASUREMENT RESULT: "PRAM003_fin2"

2016-5-19 8:48

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.408000	35.20	11.3	48	12.5	AV	N	GND
0.898000	33.80	11.6	46	12.2	AV	N	GND
3.066500	36.70	11.7	46	9.3	AV	N	GND

Test Mode: Playing (240V/60HZ)

MEASUREMENT RESULT: "PRAM012_fin"

2016-5-19 9:11

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.888000	45.80	11.6	56	10.2	QP	L1	GND
2.909000	46.30	11.7	56	9.7	QP	L1	GND
7.854500	42.40	11.8	60	17.6	QP	L1	GND

MEASUREMENT RESULT: "PRAM012_fin2"

2016-5-19 9:11

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.888000	35.10	11.6	46	10.9	AV	L1	GND
3.053000	35.50	11.7	46	10.5	AV	L1	GND
7.854500	35.80	11.8	50	14.2	AV	L1	GND

MEASUREMENT RESULT: "PRAM011_fin"

2016-5-19 9:09

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.408000	41.40	11.3	58	16.3	QP	N	GND
0.914000	43.50	11.6	56	12.5	QP	N	GND
3.089000	44.50	11.7	56	11.5	QP	N	GND

MEASUREMENT RESULT: "PRAM011_fin2"

2016-5-19 9:09

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.408000	35.00	11.3	48	12.7	AV	N	GND
0.892000	34.60	11.6	46	11.4	AV	N	GND
3.102500	36.30	11.7	46	9.7	AV	N	GND

Test Mode: USB Playing (240V/60HZ)

MEASUREMENT RESULT: "jh513002_fin"

5/13/2016 9:09AM

Frequency MHz	Level dBuV	Transd dB	Limit dBuV	Margin dB	Detector	Line	PE
0.385000	46.10	10.7	58	12.1	QP	L1	GND
2.900000	44.00	11.0	56	12.0	QP	L1	GND
8.870000	42.60	11.3	60	17.4	QP	L1	GND

MEASUREMENT RESULT: "jh513002_fin2"

5/13/2016 9:09AM

Frequency MHz	Level dBuV	Transd dB	Limit dBuV	Margin dB	Detector	Line	PE
0.385000	36.60	10.7	48	11.6	AV	L1	GND
2.670000	34.70	11.0	46	11.3	AV	L1	GND
8.910000	32.90	11.3	50	17.1	AV	L1	GND

MEASUREMENT RESULT: "jh513001_fin"

5/13/2016 9:05AM

Frequency MHz	Level dBuV	Transd dB	Limit dBuV	Margin dB	Detector	Line	PE
0.390000	44.90	10.7	58	13.2	QP	N	GND
2.870000	42.70	11.0	56	13.3	QP	N	GND
8.720000	41.10	11.3	60	18.9	QP	N	GND

MEASUREMENT RESULT: "jh513001_fin2"

5/13/2016 9:05AM

Frequency MHz	Level dBuV	Transd dB	Limit dBuV	Margin dB	Detector	Line	PE
0.395000	33.00	10.7	48	15.0	AV	N	GND
2.920000	34.60	11.1	46	11.4	AV	N	GND
8.720000	31.70	11.3	50	18.3	AV	N	GND

Test Mode: Network (240V/60HZ)

MEASUREMENT RESULT: "PRAM009_fin"

2016-5-19 9:04

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.410000	41.50	11.3	58	16.1	QP	L1	GND
0.884000	42.60	11.6	56	13.4	QP	L1	GND
2.891000	46.10	11.7	56	9.9	QP	L1	GND

MEASUREMENT RESULT: "PRAM009_fin2"

2016-5-19 9:04

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.410000	34.90	11.3	48	12.7	AV	L1	GND
0.882000	33.80	11.6	46	12.2	AV	L1	GND
2.895500	36.10	11.7	46	9.9	AV	L1	GND

MEASUREMENT RESULT: "PRAM010_fin"

2016-5-19 9:06

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.408000	41.50	11.3	58	16.2	QP	N	GND
0.890000	43.20	11.6	56	12.8	QP	N	GND
2.927000	46.80	11.7	56	9.2	QP	N	GND

MEASUREMENT RESULT: "PRAM010_fin2"

2016-5-19 9:06

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.408000	35.00	11.3	48	12.7	AV	N	GND
0.890000	32.50	11.6	46	13.5	AV	N	GND
2.927000	35.20	11.7	46	10.8	AV	N	GND

Emissions attenuated more than 20 dB below the permissible value are not reported.

The spectral diagrams are shown in the following pages.

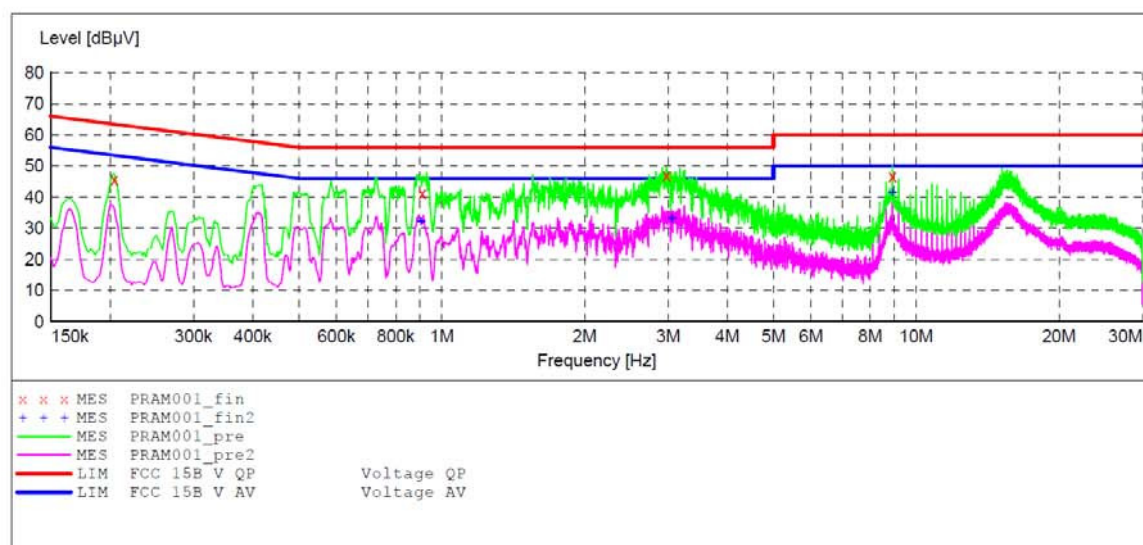
ACCURATE TECHNOLOGY CO., LTD

CONDUCTED EMISSION STANDARD FCC PART 15B

EUT: KARAOKE PLAYER M/N:BM-4000
 Manufacturer: Krisvision
 Operating Condition: Playing
 Test Site: 2#Shielding Room
 Operator: star
 Test Specification: L 120V/60Hz
 Comment: Report No.:ATE20160837
 Start of Test: 2016-5-19 / 8:38:38

SCAN TABLE: "V 150K-30MHz fin"

Short Description: SUB STD VTERM2 1.70
 Start Stop Step Detector Meas. IF Transducer
 Frequency Frequency Width Time Bandw.
 150.0 kHz 30.0 MHz 4.5 kHz QuasiPeak 1.0 s 9 kHz LISN(ESH3-Z5)
 Average



MEASUREMENT RESULT: "PRAM001_fin"

2016-5-19 8:40

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.910000	41.10	11.6	56	14.9	QP	L1	GND
2.981000	47.00	11.7	56	9.0	QP	L1	GND
8.907500	46.70	11.9	60	13.3	QP	L1	GND

MEASUREMENT RESULT: "PRAM001_fin2"

2016-5-19 8:40

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.904000	32.20	11.6	46	13.8	AV	L1	GND
3.053000	33.20	11.7	46	12.8	AV	L1	GND
8.907500	41.50	11.9	50	8.5	AV	L1	GND

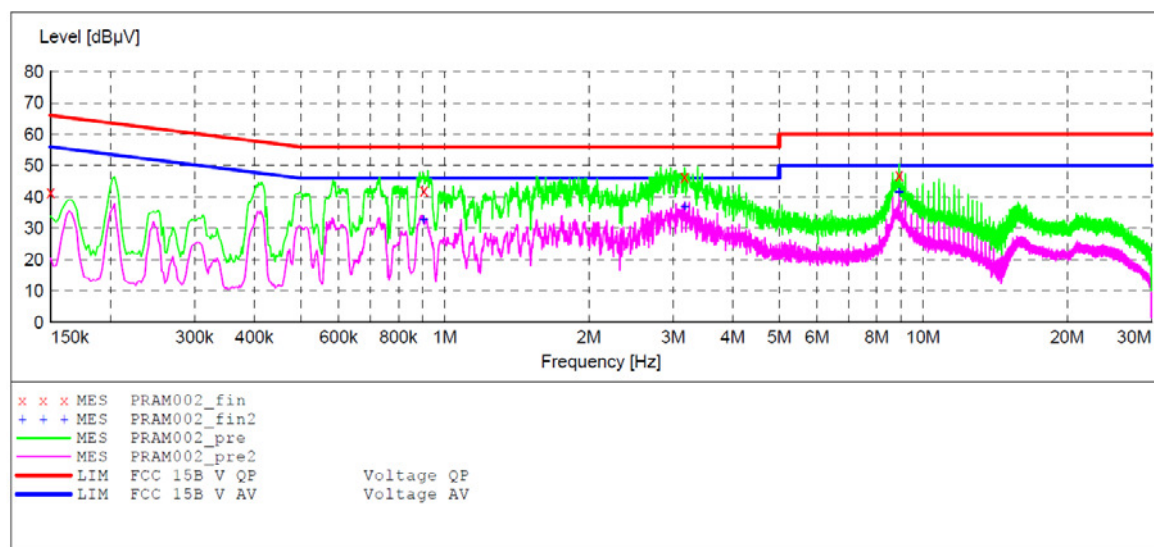
ACCURATE TECHNOLOGY CO., LTD

CONDUCTED EMISSION STANDARD FCC PART 15B

EUT: KARAOKE PLAYER M/N:BM-4000
 Manufacturer: Krisvision
 Operating Condition: Playing
 Test Site: 2#Shielding Room
 Operator: star
 Test Specification: N 120V/60Hz
 Comment: Report No.:ATE20160837
 Start of Test: 2016-5-19 / 8:41:41

SCAN TABLE: "V 150K-30MHz fin"

Short Description: SUB STD VTERM2 1.70
 Start Stop Step Detector Meas. IF Transducer
 Frequency Frequency Width Time Bandw.
 150.0 kHz 30.0 MHz 4.5 kHz QuasiPeak 1.0 s 9 kHz LISN (ESH3-Z5)
 Average



MEASUREMENT RESULT: "PRAM002_fin"

2016-5-19 8:43

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.904000	41.90	11.6	56	14.1	QP	N	GND
3.170000	46.50	11.7	56	9.5	QP	N	GND
8.912000	46.90	11.9	60	13.1	QP	N	GND

MEASUREMENT RESULT: "PRAM002_fin2"

2016-5-19 8:43

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.902000	32.70	11.6	46	13.3	AV	N	GND
3.174500	36.80	11.7	46	9.2	AV	N	GND
8.912000	41.50	11.9	50	8.5	AV	N	GND

ACCURATE TECHNOLOGY CO., LTD

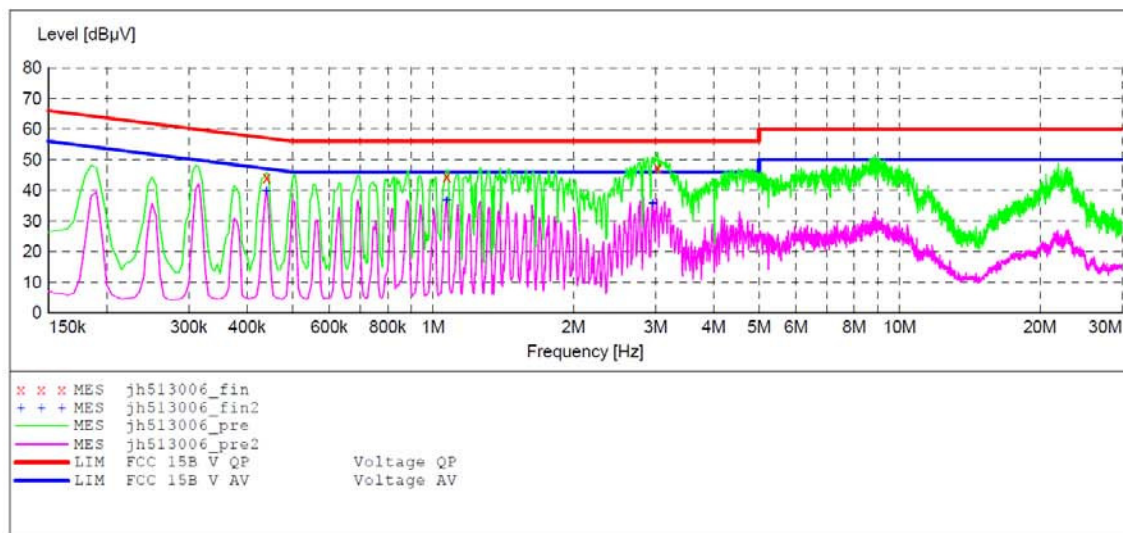
CONDUCTED EMISSION STANDARD FCC PART 15B

EUT: KARAOKE PLAYER M/N:BM-4000
 Manufacturer: Krisvision
 Operating Condition: USB Playing
 Test Site: 1#Shielding Room
 Operator: STAR
 Test Specification: L 120V/60Hz
 Comment: Report No.:ATE20160837
 Start of Test: 5/13/2016 / 9:24:25AM

SCAN TABLE: "V 9K-30MHz fin"

Short Description: SUB STD VTERM2 1.70

Start Frequency	Stop Frequency	Step Width	Detector	Meas. Time	IF Bandw.	Transducer
9.0 kHz	150.0 kHz	100.0 Hz	QuasiPeak	1.0 s	200 Hz	NSLK8126 2008
Average						
150.0 kHz	30.0 MHz	5.0 kHz	QuasiPeak	1.0 s	9 kHz	NSLK8126 2008
Average						



MEASUREMENT RESULT: "jh513006_fin"

5/13/2016 9:28AM

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.440000	44.20	10.7	57	12.9	QP	L1	GND
1.070000	44.50	10.9	56	11.5	QP	L1	GND
3.030000	47.40	11.1	56	8.6	QP	L1	GND

MEASUREMENT RESULT: "jh513006_fin2"

5/13/2016 9:28AM

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.440000	39.80	10.7	47	7.3	AV	L1	GND
1.070000	36.60	10.9	46	9.4	AV	L1	GND
2.960000	35.70	11.1	46	10.3	AV	L1	GND

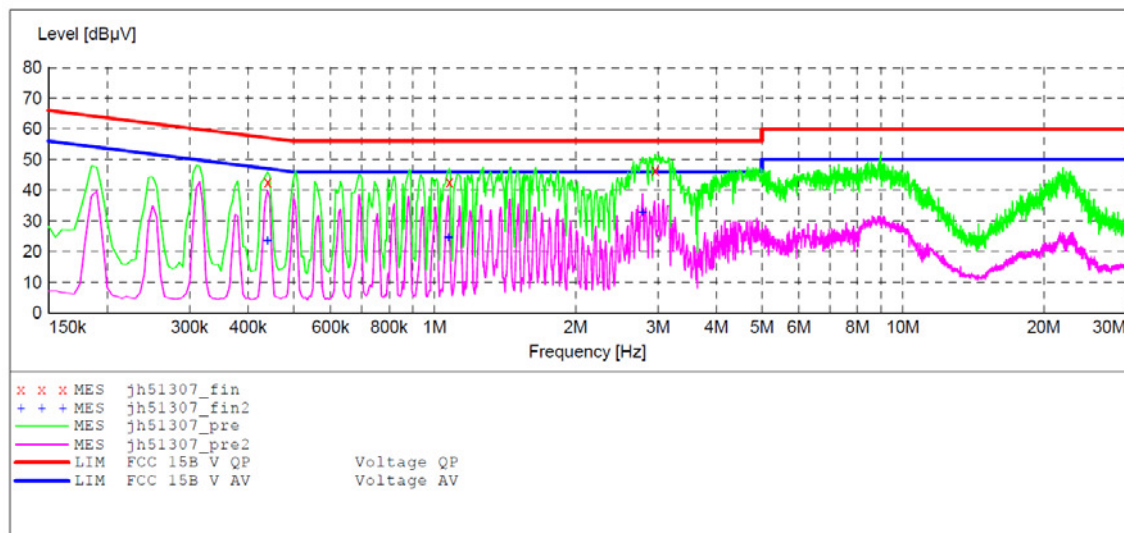
ACCURATE TECHNOLOGY CO.,LTD

CONDUCTED EMISSION STANDARD FCC PART 15B

EUT: KARAOKE PLAYER M/N:BM-4000
Manufacturer: Krisvision
Operating Condition: USB Playing
Test Site: 1#Shielding Room
Operator: STAR
Test Specification: N 120V/60Hz
Comment: Report No.:ATE20160837
Start of Test: 5/13/2016 / 9:30:39AM

SCAN TABLE: "V 9K-30MHz fin"

Short Description: SUB STD VTERM2 1.70
Start Stop Step Detector Meas. IF Transducer
Frequency Frequency Width Time Bandw.
9.0 kHz 150.0 kHz 100.0 Hz QuasiPeak 1.0 s 200 Hz NSLK8126 2008
Average
150.0 kHz 30.0 MHz 5.0 kHz QuasiPeak 1.0 s 9 kHz NSLK8126 2008
Average



MEASUREMENT RESULT: "jh51307_fin"

5/13/2016 9:34AM

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.440000	42.70	10.7	57	14.4	QP	N	GND
1.075000	42.70	10.9	56	13.3	QP	N	GND
2.960000	46.40	11.1	56	9.6	QP	N	GND

MEASUREMENT RESULT: "jh51307_fin2"

5/13/2016 9:34AM

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.440000	40.30	10.7	47	6.8	AV	N	GND
1.070000	39.50	10.9	46	6.5	AV	N	GND
2.780000	32.70	11.0	46	13.3	AV	N	GND

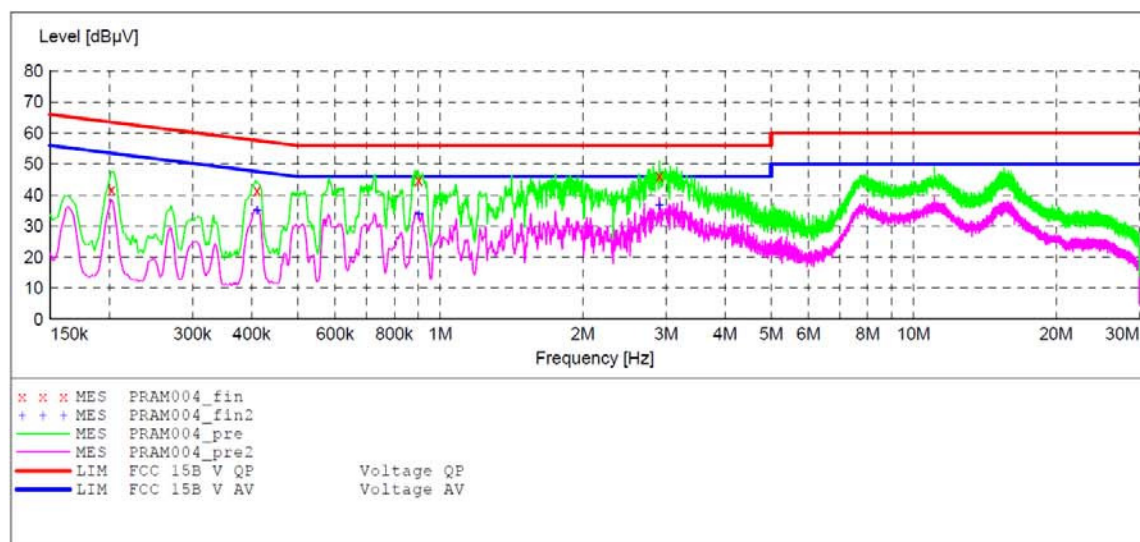
ACCURATE TECHNOLOGY CO., LTD

CONDUCTED EMISSION STANDARD FCC PART 15B

EUT: KARAOKE PLAYER M/N:BM-4000
Manufacturer: Krisvision
Operating Condition: Network
Test Site: 2#Shielding Room
Operator: star
Test Specification: L 120V/60Hz
Comment: Report No.:ATE20160837
Start of Test: 2016-5-19 / 8:51:31

SCAN TABLE: "V 150K-30MHz fin"

Short Description: SUB STD VTERM2 1.70
Start Stop Step Detector Meas. IF Transducer
Frequency Frequency Width Time Bandw.
150.0 kHz 30.0 MHz 4.5 kHz QuasiPeak 1.0 s 9 kHz LISN(ESH3-Z5)
Average



MEASUREMENT RESULT: "PRAM004_fin"

2016-5-19 8:52

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.410000	41.50	11.3	58	16.1	QP	L1	GND
0.900000	44.80	11.6	56	11.2	QP	L1	GND
2.904500	46.10	11.7	56	9.9	QP	L1	GND

MEASUREMENT RESULT: "PRAM004_fin2"

2016-5-19 8:52

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.410000	34.90	11.3	48	12.7	AV	L1	GND
0.900000	33.70	11.6	46	12.3	AV	L1	GND
2.904500	36.60	11.7	46	9.4	AV	L1	GND

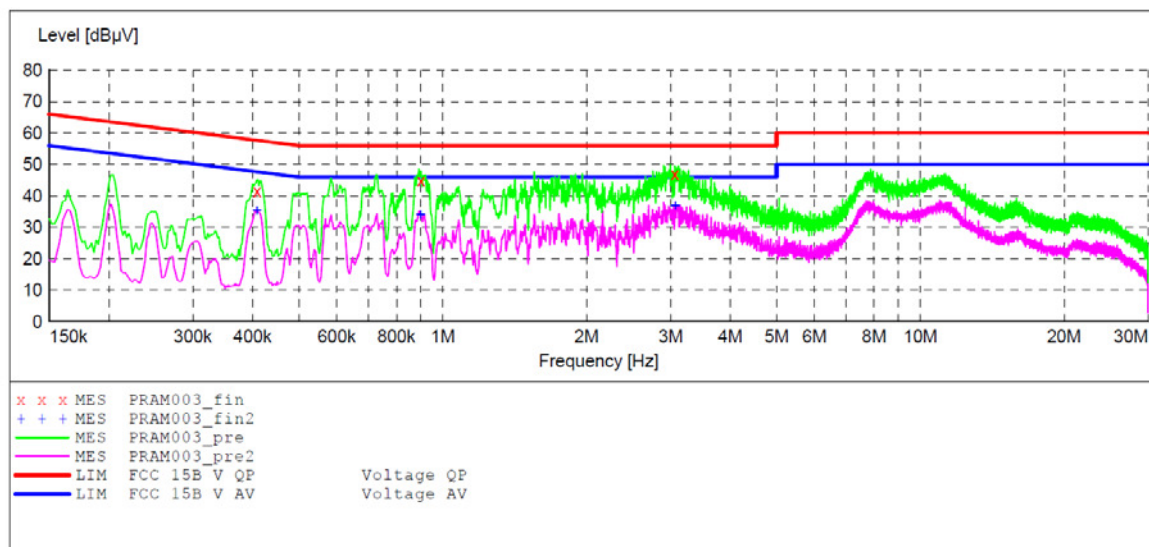
ACCURATE TECHNOLOGY CO., LTD

CONDUCTED EMISSION STANDARD FCC PART 15B

EUT: KARAOKE PLAYER M/N:BM-4000
Manufacturer: Krisvision
Operating Condition: Network
Test Site: 2#Shielding Room
Operator: star
Test Specification: N 120V/60Hz
Comment: Report No.:ATE20160837
Start of Test: 2016-5-19 / 8:47:10

SCAN TABLE: "V 150K-30MHz fin"

Short Description: SUB STD VTERM2 1.70
Start Stop Step Detector Meas. IF Transducer
Frequency Frequency Width Time Bandw.
150.0 kHz 30.0 MHz 4.5 kHz QuasiPeak 1.0 s 9 kHz LISN(ESH3-Z5)
Average



MEASUREMENT RESULT: "PRAM003_fin"

2016-5-19 8:48

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.408000	41.50	11.3	58	16.2	QP	N	GND
0.900000	44.80	11.6	56	11.2	QP	N	GND
3.062000	47.00	11.7	56	9.0	QP	N	GND

MEASUREMENT RESULT: "PRAM003_fin2"

2016-5-19 8:48

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.408000	35.20	11.3	48	12.5	AV	N	GND
0.898000	33.80	11.6	46	12.2	AV	N	GND
3.066500	36.70	11.7	46	9.3	AV	N	GND

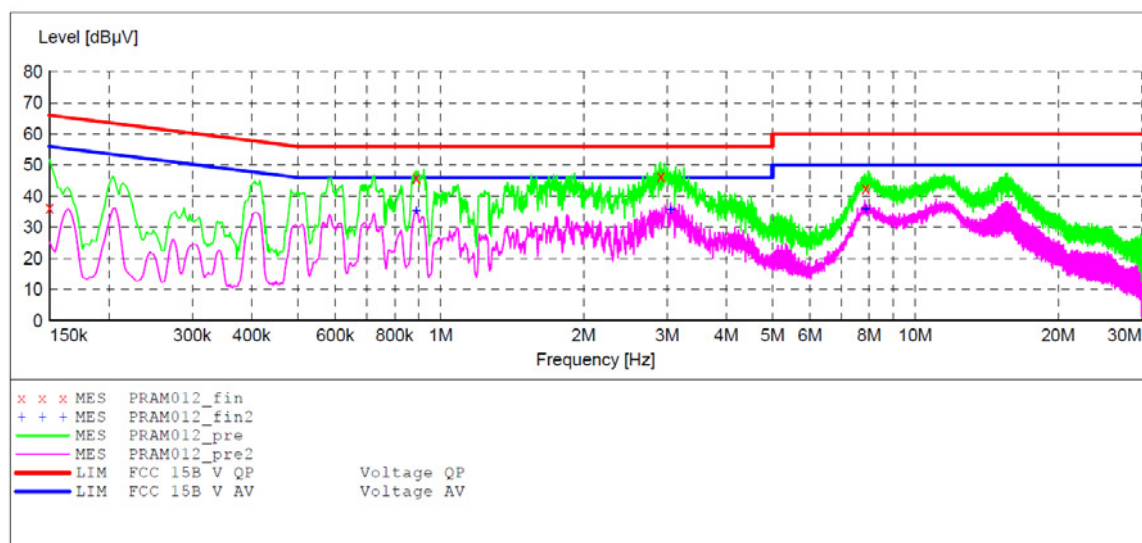
ACCURATE TECHNOLOGY CO., LTD

CONDUCTED EMISSION STANDARD FCC PART 15B

EUT: KARAOKE PLAYER M/N:BM-4000
Manufacturer: Krisvision
Operating Condition: Playing
Test Site: 2#Shielding Room
Operator: star
Test Specification: L 240V/60Hz
Comment: Report No.:ATE20160837
Start of Test: 2016-5-19 / 9:09:35

SCAN TABLE: "V 150K-30MHz fin"

Short Description: SUB STD VTERM2 1.70
Start Stop Step Detector Meas. IF Transducer
Frequency Frequency Width Time Bandw.
150.0 kHz 30.0 MHz 4.5 kHz QuasiPeak 1.0 s 9 kHz LISN (ESH3-Z5)
Average



MEASUREMENT RESULT: "PRAM012_fin"

2016-5-19 9:11

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.888000	45.80	11.6	56	10.2	QP	L1	GND
2.909000	46.30	11.7	56	9.7	QP	L1	GND
7.854500	42.40	11.8	60	17.6	QP	L1	GND

MEASUREMENT RESULT: "PRAM012_fin2"

2016-5-19 9:11

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.888000	35.10	11.6	46	10.9	AV	L1	GND
3.053000	35.50	11.7	46	10.5	AV	L1	GND
7.854500	35.80	11.8	50	14.2	AV	L1	GND

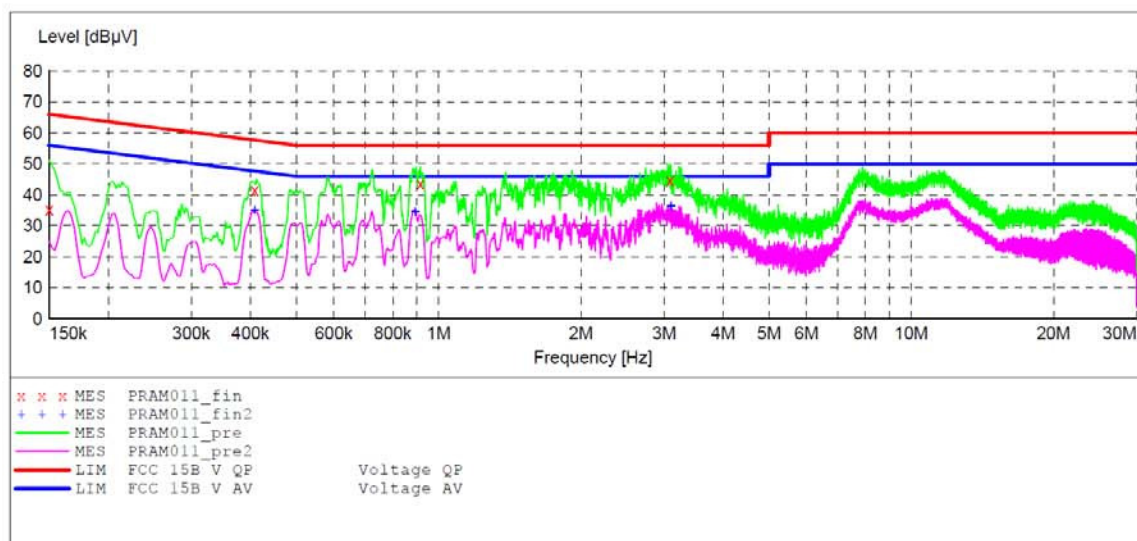
ACCURATE TECHNOLOGY CO., LTD

CONDUCTED EMISSION STANDARD FCC PART 15B

EUT: KARAOKE PLAYER M/N:BM-4000
Manufacturer: Krisvision
Operating Condition: Playing
Test Site: 2#Shielding Room
Operator: star
Test Specification: N 240V/60Hz
Comment: Report No.:ATE20160837
Start of Test: 2016-5-19 / 9:07:39

SCAN TABLE: "V 150K-30MHz fin"

Short Description: SUB STD VTERM2 1.70
Start Stop Step Detector Meas. IF Transducer
Frequency Frequency Width Time Bandw.
150.0 kHz 30.0 MHz 4.5 kHz QuasiPeak 1.0 s 9 kHz LISN(ESH3-Z5)
Average



MEASUREMENT RESULT: "PRAM011_fin"

2016-5-19 9:09

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.408000	41.40	11.3	58	16.3	QP	N	GND
0.914000	43.50	11.6	56	12.5	QP	N	GND
3.089000	44.50	11.7	56	11.5	QP	N	GND

MEASUREMENT RESULT: "PRAM011_fin2"

2016-5-19 9:09

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.408000	35.00	11.3	48	12.7	AV	N	GND
0.892000	34.60	11.6	46	11.4	AV	N	GND
3.102500	36.30	11.7	46	9.7	AV	N	GND

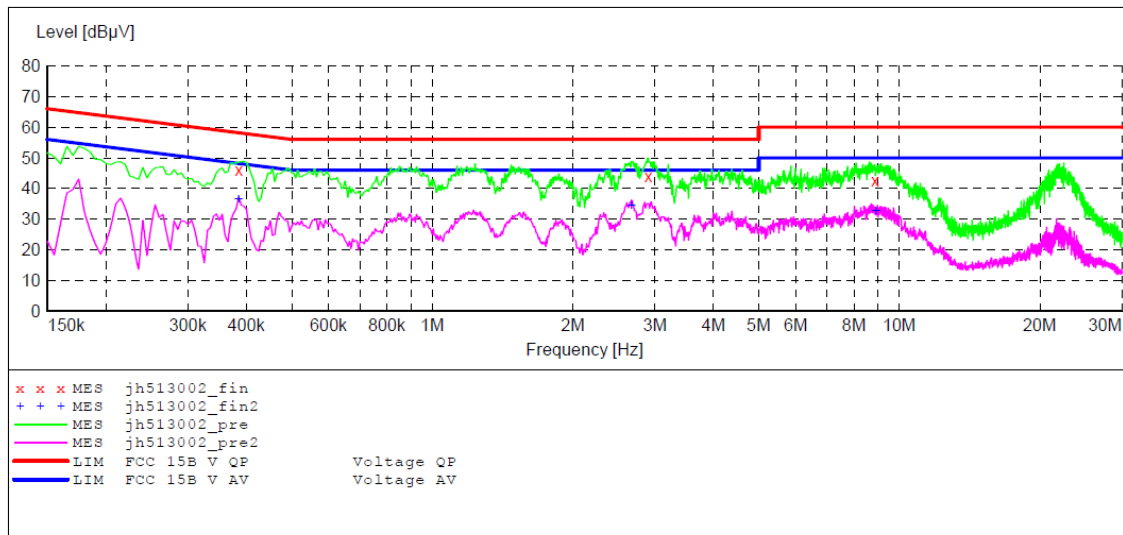
ACCURATE TECHNOLOGY CO.,LTD

CONDUCTED EMISSION STANDARD FCC PART 15B

EUT: KARAOKE PLAYER M/N:BM-4000
 Manufacturer: Krisvision
 Operating Condition: USB Playing
 Test Site: 1#Shielding Room
 Operator: STAR
 Test Specification: L 240V/60Hz
 Comment: Report No.:ATE20160837
 Start of Test: 5/13/2016 / 9:06:33AM

SCAN TABLE: "V 9K-30MHz fin"

Short Description: _SUB_STD_VTERM2 1.70
 Start Stop Step Detector Meas. IF Transducer
 Frequency Frequency Width Time Bandw.
 9.0 kHz 150.0 kHz 100.0 Hz QuasiPeak 1.0 s 200 Hz NSLK8126 2008
 Average
 150.0 kHz 30.0 MHz 5.0 kHz QuasiPeak 1.0 s 9 kHz NSLK8126 2008
 Average



MEASUREMENT RESULT: "jh513002_fin"

5/13/2016 9:09AM

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.385000	46.10	10.7	58	12.1	QP	L1	GND
2.900000	44.00	11.0	56	12.0	QP	L1	GND
8.870000	42.60	11.3	60	17.4	QP	L1	GND

MEASUREMENT RESULT: "jh513002_fin2"

5/13/2016 9:09AM

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.385000	36.60	10.7	48	11.6	AV	L1	GND
2.670000	34.70	11.0	46	11.3	AV	L1	GND
8.910000	32.90	11.3	50	17.1	AV	L1	GND

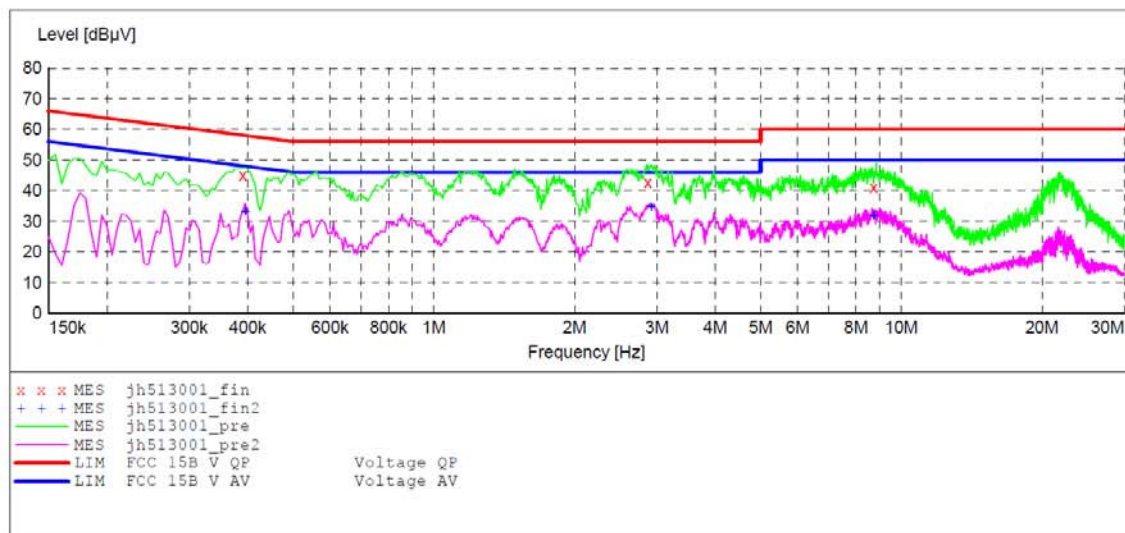
ACCURATE TECHNOLOGY CO., LTD

CONDUCTED EMISSION STANDARD FCC PART 15B

EUT: KARAOKE PLAYER M/N:BM-4000
Manufacturer: Krisvision
Operating Condition: USB Playing
Test Site: 1#Shielding Room
Operator: STAR
Test Specification: N 240V/60Hz
Comment: Report No.:ATE20160837
Start of Test: 5/13/2016 / 9:02:36AM

SCAN TABLE: "V 9K-30MHz fin"

Short Description: SUB STD VTERM2 1.70
Start Stop Step Detector Meas. IF Transducer
Frequency Frequency Width Time Bandw.
9.0 kHz 150.0 kHz 100.0 Hz QuasiPeak 1.0 s 200 Hz NSLK8126 2008
Average
150.0 kHz 30.0 MHz 5.0 kHz QuasiPeak 1.0 s 9 kHz NSLK8126 2008
Average



MEASUREMENT RESULT: "jh513001_fin"

5/13/2016 9:05AM

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.390000	44.90	10.7	58	13.2	QP	N	GND
2.870000	42.70	11.0	56	13.3	QP	N	GND
8.720000	41.10	11.3	60	18.9	QP	N	GND

MEASUREMENT RESULT: "jh513001_fin2"

5/13/2016 9:05AM

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.395000	33.00	10.7	48	15.0	AV	N	GND
2.920000	34.60	11.1	46	11.4	AV	N	GND
8.720000	31.70	11.3	50	18.3	AV	N	GND

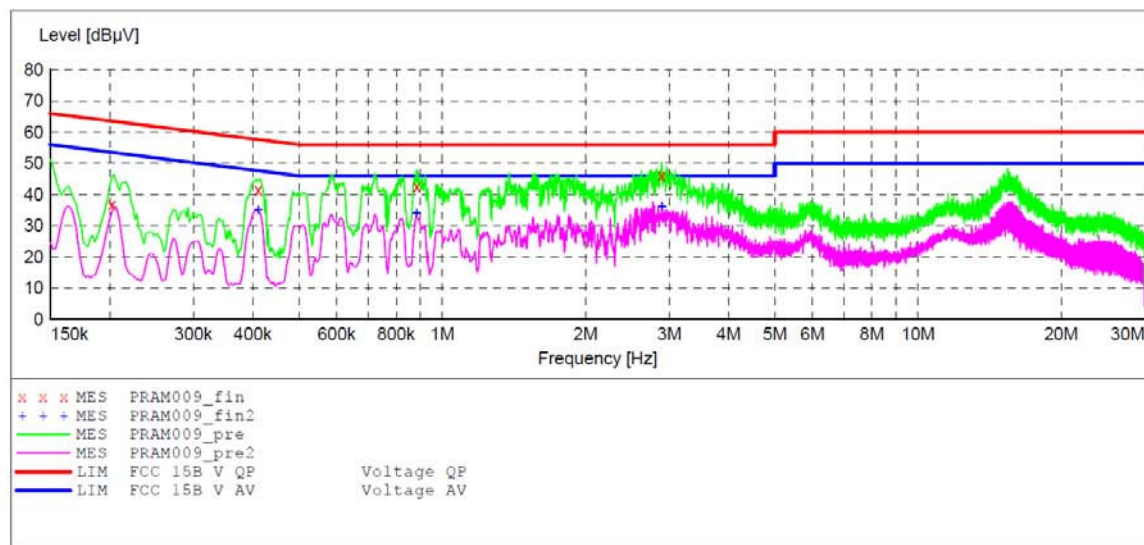
ACCURATE TECHNOLOGY CO., LTD

CONDUCTED EMISSION STANDARD FCC PART 15B

EUT: KARAOKE PLAYER M/N:BM-4000
Manufacturer: Krisvision
Operating Condition: Network
Test Site: 2#Shielding Room
Operator: star
Test Specification: L 240V/60Hz
Comment: Report No.:ATE20160837
Start of Test: 2016-5-19 / 9:02:49

SCAN TABLE: "V 150K-30MHz fin"

Short Description: SUB STD VTERM2 1.70
Start Stop Step Detector Meas. IF Transducer
Frequency Frequency Width Time Bandw.
150.0 kHz 30.0 MHz 4.5 kHz QuasiPeak 1.0 s 9 kHz LISN(ESH3-Z5)
Average



MEASUREMENT RESULT: "PRAM009_fin"

2016-5-19 9:04

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.410000	41.50	11.3	58	16.1	QP	L1	GND
0.884000	42.60	11.6	56	13.4	QP	L1	GND
2.891000	46.10	11.7	56	9.9	QP	L1	GND

MEASUREMENT RESULT: "PRAM009_fin2"

2016-5-19 9:04

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.410000	34.90	11.3	48	12.7	AV	L1	GND
0.882000	33.80	11.6	46	12.2	AV	L1	GND
2.895500	36.10	11.7	46	9.9	AV	L1	GND

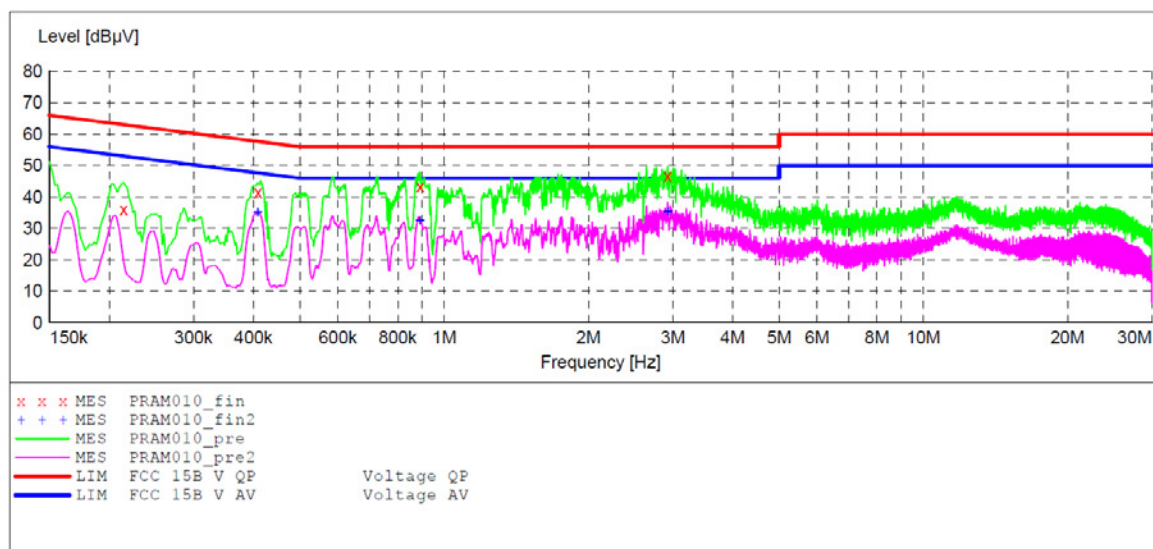
ACCURATE TECHNOLOGY CO., LTD

CONDUCTED EMISSION STANDARD FCC PART 15B

EUT: KARAOKE PLAYER M/N:BM-4000
Manufacturer: Krisvision
Operating Condition: Network
Test Site: 2#Shielding Room
Operator: star
Test Specification: N 240V/60Hz
Comment: Report No.:ATE20160837
Start of Test: 2016-5-19 / 9:05:04

SCAN TABLE: "V 150K-30MHz fin"

Short Description: SUB STD VTERM2 1.70
Start Stop Step Detector Meas. IF Transducer
Frequency Frequency Width Time Bandw.
150.0 kHz 30.0 MHz 4.5 kHz QuasiPeak 1.0 s 9 kHz LISN(ESH3-Z5)
Average



MEASUREMENT RESULT: "PRAM010_fin"

2016-5-19 9:06

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.408000	41.50	11.3	58	16.2	QP	N	GND
0.890000	43.20	11.6	56	12.8	QP	N	GND
2.927000	46.80	11.7	56	9.2	QP	N	GND

MEASUREMENT RESULT: "PRAM010_fin2"

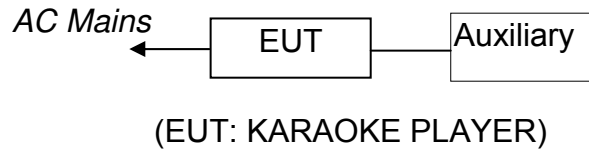
2016-5-19 9:06

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.408000	35.00	11.3	48	12.7	AV	N	GND
0.890000	32.50	11.6	46	13.5	AV	N	GND
2.927000	35.20	11.7	46	10.8	AV	N	GND

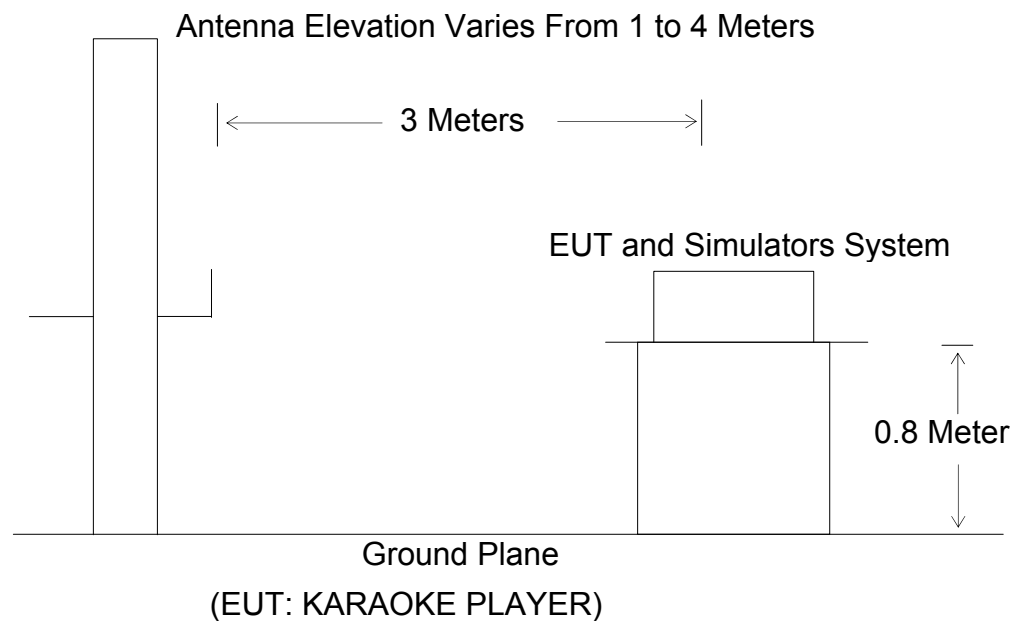
5. RADIATED EMISSION MEASUREMENT

5.1. Block Diagram of Test Setup

5.1.1. Block diagram of connection between the EUT and simulators



5.1.2. Semi-Anechoic Chamber Test Setup Diagram



5.2. The Emission Limit For Section 15.109 (a)

5.2.1. Radiation Emission Measurement Limits According to Section 15.109 (a).

Frequency MHz	Distance Meters	Field Strengths Limit	
		$\mu\text{V/m}$	$\text{dB}(\mu\text{V/m})$
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 $\text{dB}(\mu\text{V}) = 20 \log$ Emission level $\mu\text{V/m}$.
(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.

5.3.EUT Configuration on Measurement

The following equipment is 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.

5.3.1.KARAOKE PLAYER (EUT)

Model Number: BM-4000

Serial Number: N/A

Manufacturer: Shenzhen Krisvision Digital Technology Group Inc

5.4.Operating Condition of EUT

5.4.1.Setup the EUT and simulator as shown as Section 4.2.

5.4.2.Turn on the power of all equipment.

5.4.3.Let the EUT work in test mode (Playing, USB Playing, Network) and measure it.

5.5.Test Procedure

The EUT and its simulators are placed on a turntable, which is 0.8 meter high above ground. The turntable 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 an 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 (calibrated bilog 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 (R&S ESCS30) is set at 120kHz from 30MHz to 5000MHz.

The frequency range from 30MHz to 5000MHz is checked.

5.6.Radiated Emission Noise Measurement Result

PASS.

Model Number: BM-4000								
Test mode: Playing								
Horizontal	No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
	1	236.7923	61.54	-18.27	43.27	46.00	-2.73	QP
	2	298.5932	59.18	-16.30	42.88	46.00	-3.12	QP
	3	938.7137	45.58	-3.60	41.98	46.00	-4.02	QP
Vertical	No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
	1	236.7923	61.13	-18.27	42.86	46.00	-3.14	QP
	2	505.7891	53.34	-12.10	41.24	46.00	-4.76	QP
	3	887.3976	47.55	-4.39	43.16	46.00	-2.84	QP

Model Number: BM-4000								
Test mode: USB Playing								
Horizontal	No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
	1	236.7927	62.04	-18.27	43.77	46.00	-2.23	QP
	2	298.5932	58.68	-16.30	42.38	46.00	-3.62	QP
	3	887.3977	48.11	-4.39	43.72	46.00	-2.28	QP
Vertical	No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
	1	151.5567	62.76	-22.18	40.58	43.50	-2.92	QP
	2	236.7926	61.63	-18.27	43.36	46.00	-2.64	QP
	3	955.3509	46.39	-3.35	43.04	46.00	-2.96	QP

Model Number: BM-4000								
Test mode: Network								
Horizontal	No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
	1	236.7925	60.54	-18.27	42.27	46.00	-3.73	QP
	2	298.5932	59.68	-16.30	43.38	46.00	-2.62	QP
	3	938.7137	47.08	-3.60	43.48	46.00	-2.52	QP
Vertical	No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
	1	151.5567	63.26	-22.18	41.08	43.50	-2.42	QP
	2	236.7924	62.13	-18.27	43.86	46.00	-2.14	QP
	3	298.5932	58.30	-16.30	42.00	46.00	-4.00	QP



ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 1# Chamber

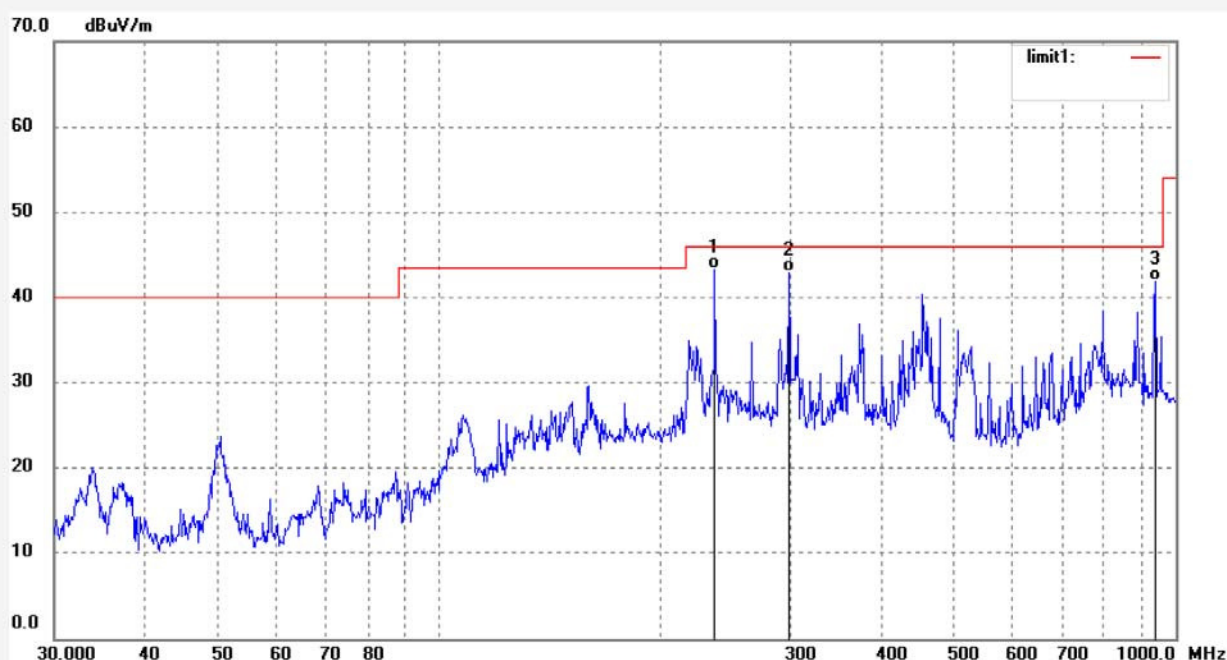
Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: STAR2016 #933
Standard: FCC Class B 3M Radiated
Test item: Radiation Test
Temp.(C)/Hum.(%) 25 C / 55 %
EUT: KARAOKE PLAYER
Mode: Playing
Model: BM-4000
Manufacturer: Krisvision

Polarization: Horizontal
Power Source: AC 120V/60Hz
Date: 16/05/13/
Time: 14/16/36
Engineer Signature: star
Distance: 3m

Note: Report No.:ATE20160837



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	236.7923	61.54	-18.27	43.27	46.00	-2.73	QP			
2	298.5932	59.18	-16.30	42.88	46.00	-3.12	QP			
3	938.7137	45.58	-3.60	41.98	46.00	-4.02	QP			



ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 1# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: STAR2016 #932

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 55 %

EUT: KARAOKE PLAYER

Mode: Playing

Model: BM-4000

Manufacturer: Krisvision

Polarization: Vertical

Power Source: AC 120V/60Hz

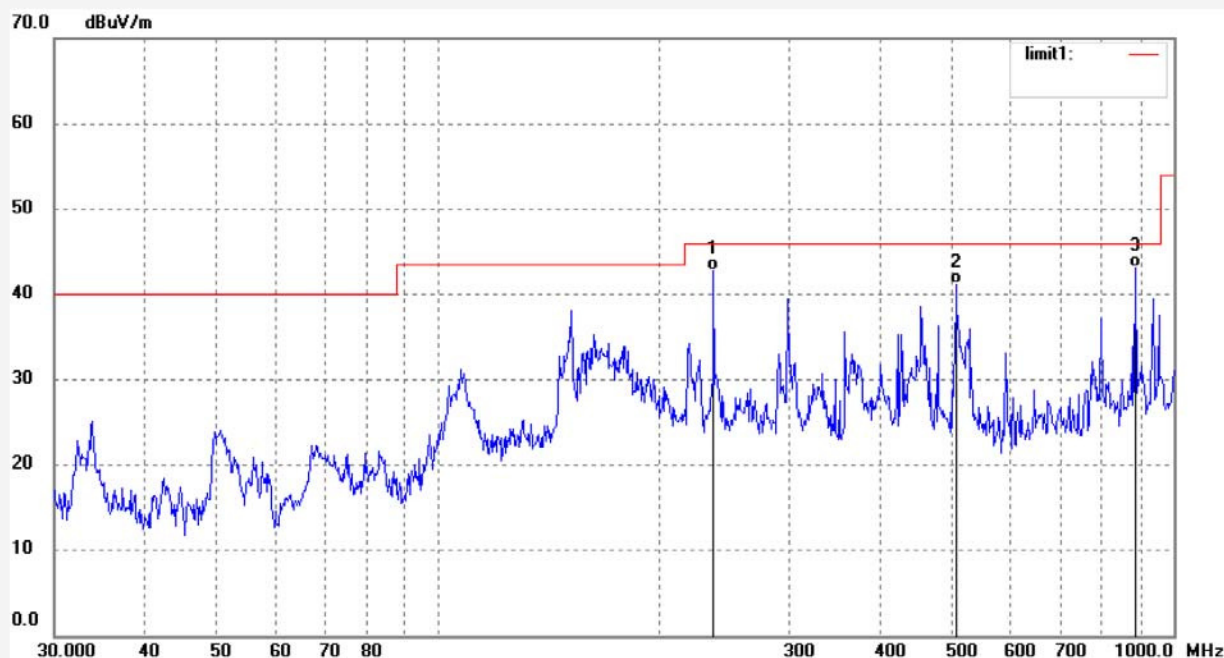
Date: 16/05/13/

Time: 14/12/44

Engineer Signature: star

Distance: 3m

Note: Report No.:ATE20160837



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	236.7923	61.13	-18.27	42.86	46.00	-3.14	QP			
2	505.7891	53.34	-12.10	41.24	46.00	-4.76	QP			
3	887.3976	47.55	-4.39	43.16	46.00	-2.84	QP			



ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 1# Chamber

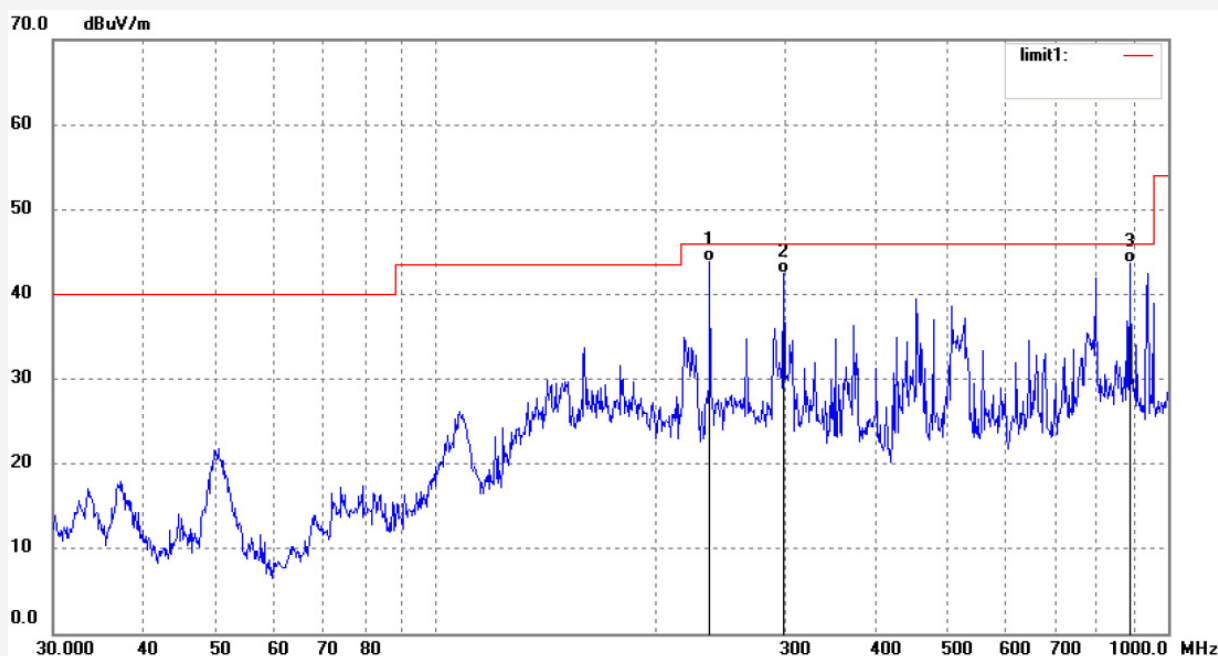
Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: star2016 #856
Standard: FCC Class B 3M Radiated
Test item: Radiation Test
Temp.(C)/Hum.(%) 25 C / 55 %
EUT: KARAOKE PLAYER
Mode: USB Playing
Model: BM-4000
Manufacturer: Krisvision

Polarization: Horizontal
Power Source: AC 120V/60Hz
Date: 16/05/13/
Time: 13/52/40
Engineer Signature: star
Distance: 3m

Note: Report No.:ATE20160837



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	236.7927	62.04	-18.27	43.77	46.00	-2.23	QP			
2	298.5932	58.68	-16.30	42.38	46.00	-3.62	QP			
3	887.3977	48.11	-4.39	43.72	46.00	-2.28	QP			



ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 1# Chamber

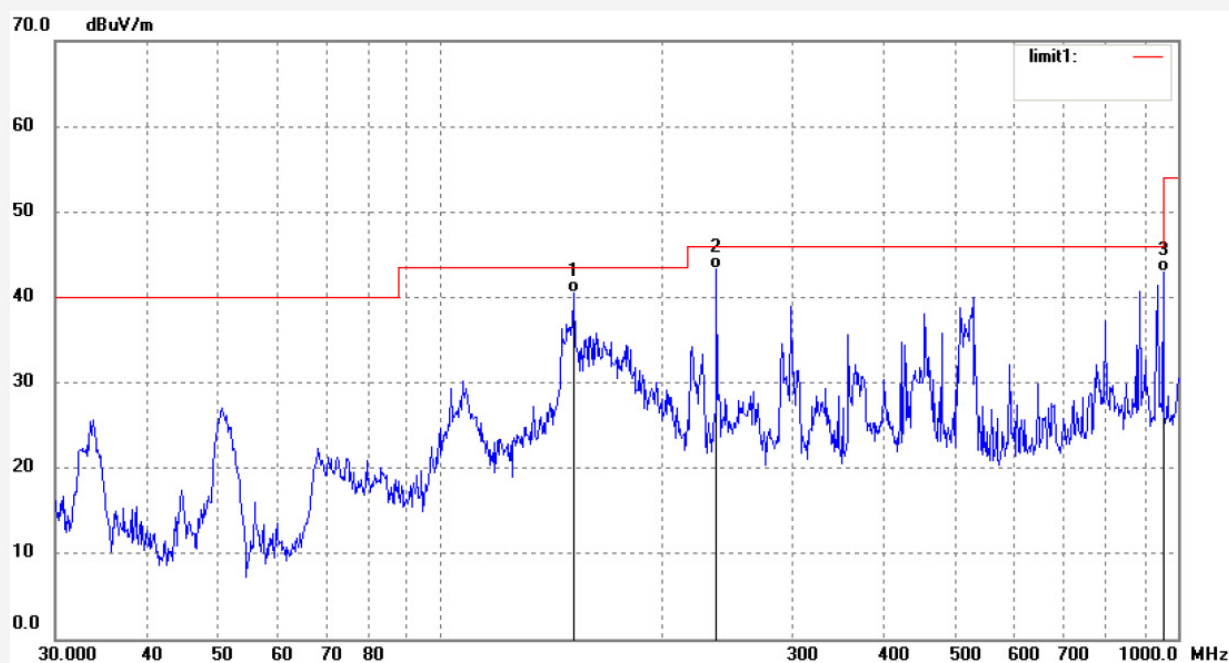
Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: star2016 #855
Standard: FCC Class B 3M Radiated
Test item: Radiation Test
Temp.(C)/Hum.(%) 25 C / 55 %
EUT: KARAOKE PLAYER
Mode: USB Playing
Model: BM-4000
Manufacturer: Krisvision

Polarization: Vertical
Power Source: AC 120V/60Hz
Date: 16/05/13/
Time: 13/51/04
Engineer Signature: star
Distance: 3m

Note: Report No.:ATE20160837



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	151.5567	62.76	-22.18	40.58	43.50	-2.92	QP			
2	236.7926	61.63	-18.27	43.36	46.00	-2.64	QP			
3	955.3509	46.39	-3.35	43.04	46.00	-2.96	QP			



ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 1# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: STAR2016 #933

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 55 %

EUT: KARAOKE PLAYER

Mode: Network

Model: BM-4000

Manufacturer: Krisvision

Polarization: Horizontal

Power Source: AC 120V/60Hz

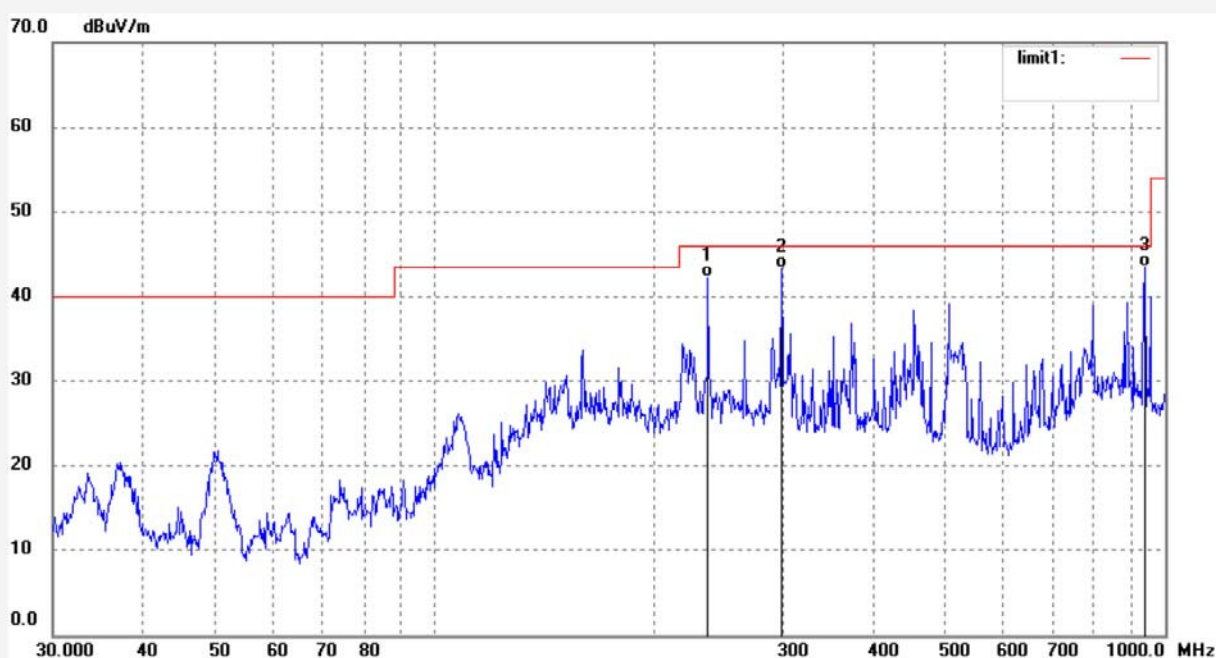
Date: 16/05/13/

Time: 14/16/36

Engineer Signature: star

Distance: 3m

Note: Report No.:ATE20160837



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	236.7925	60.54	-18.27	42.27	46.00	-3.73	QP			
2	298.5932	59.68	-16.30	43.38	46.00	-2.62	QP			
3	938.7137	47.08	-3.60	43.48	46.00	-2.52	QP			



ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg.A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 1# Chamber

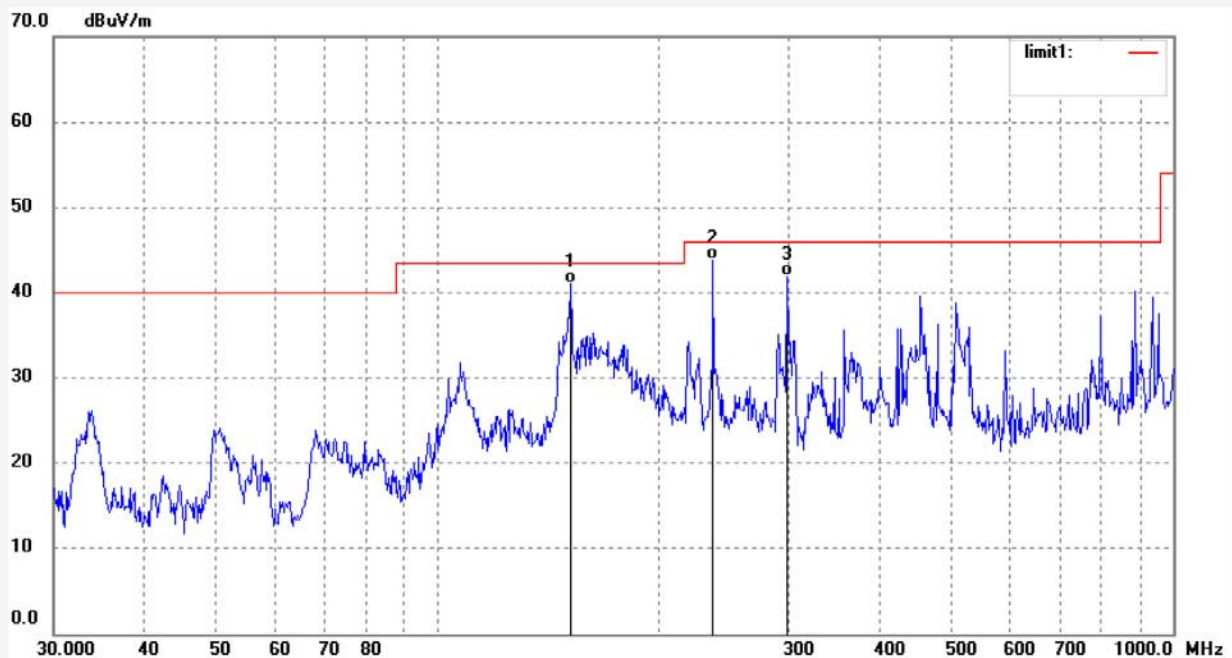
Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: STAR2016 #932
Standard: FCC Class B 3M Radiated
Test item: Radiation Test
Temp.(C)/Hum.(%) 25 C / 55 %
EUT: KARAOKE PLAYER
Mode: Network
Model: BM-4000
Manufacturer: Krisvision

Polarization: Vertical
Power Source: AC 120V/60Hz
Date: 16/05/13/
Time: 14/12/44
Engineer Signature: star
Distance: 3m

Note: Report No.:ATE20160837



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	151.5567	63.26	-22.18	41.08	43.50	-2.42	QP			
2	236.7924	62.13	-18.27	43.86	46.00	-2.14	QP			
3	298.5932	58.30	-16.30	42.00	46.00	-4.00	QP			



ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 1# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: star2016 #1027

Standard: FCC PK

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 55 %

EUT: KARAOKE PLAYER

Mode: Playing

Model: BM-4000

Manufacturer: Krisvision

Polarization: Horizontal

Power Source: AC 120V/60Hz

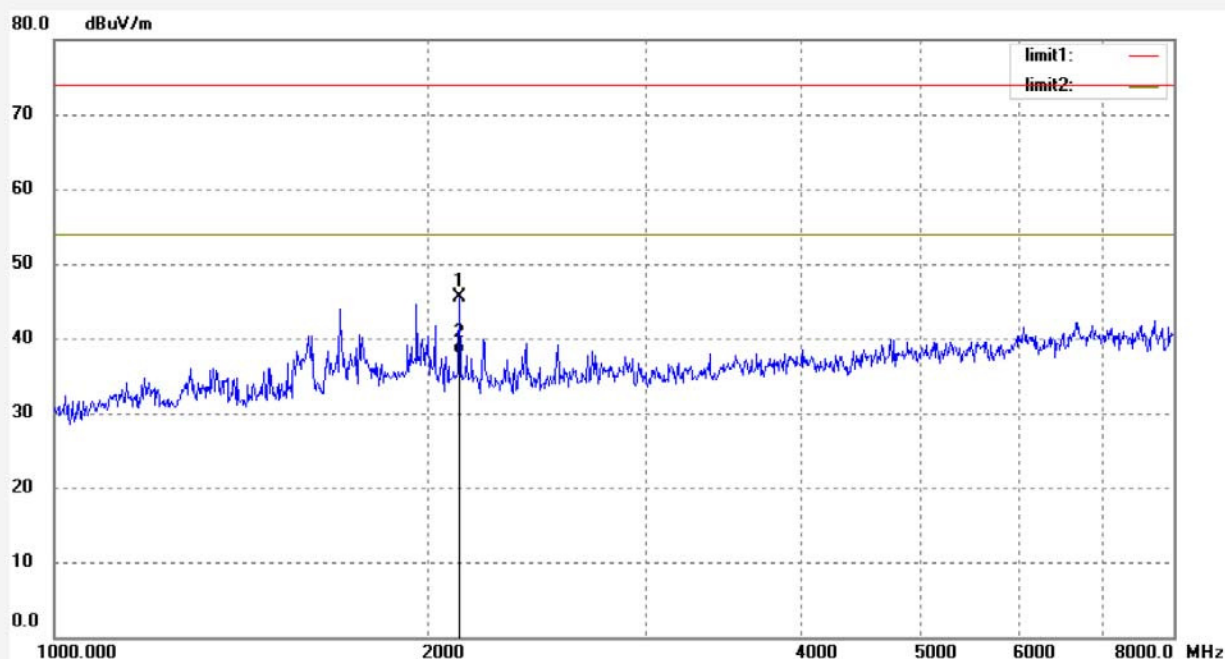
Date: 16/06/04/

Time: 9/17/01

Engineer Signature: star

Distance: 3m

Note: Report No.:ATE20160837



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2123.610	53.96	-8.41	45.55	74.00	-28.45	peak			
2	2123.610	46.28	-8.41	37.87	54.00	-16.13	AVG			



ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg.A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 1# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: star2016 #1028

Standard: FCC PK

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 55 %

EUT: KARAOKE PLAYER

Mode: Playing

Model: BM-4000

Manufacturer: Krisvision

Polarization: Vertical

Power Source: AC 120V/60Hz

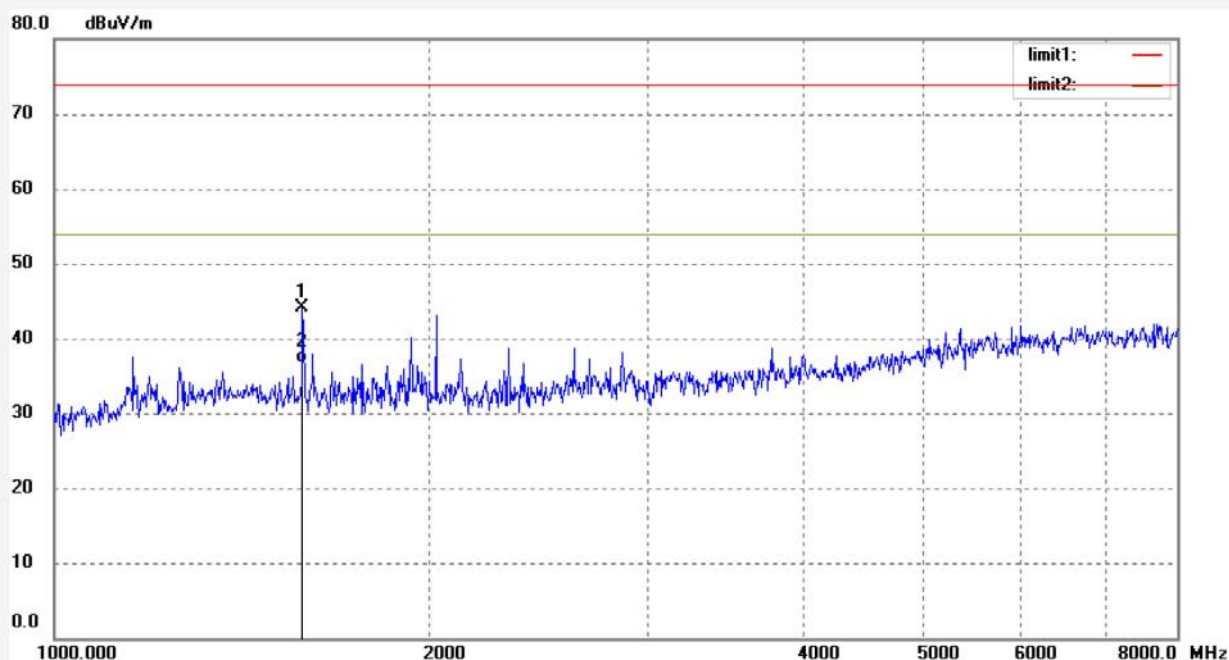
Date: 16/06/04/

Time: 9/18/32

Engineer Signature: star

Distance: 3m

Note: Report No.:ATE20160837



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	1584.452	54.37	-10.28	44.09	74.00	-29.91	peak			
2	1584.452	47.00	-10.28	36.72	54.00	-17.28	AVG			



ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 1# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: STAR2016 #936

Standard: FCC PK

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 55 %

EUT: KARAOKE PLAYER

Mode: USB Playing

Model: BM-4000

Manufacturer: Krisvision

Polarization: Horizontal

Power Source: AC 120V/60Hz

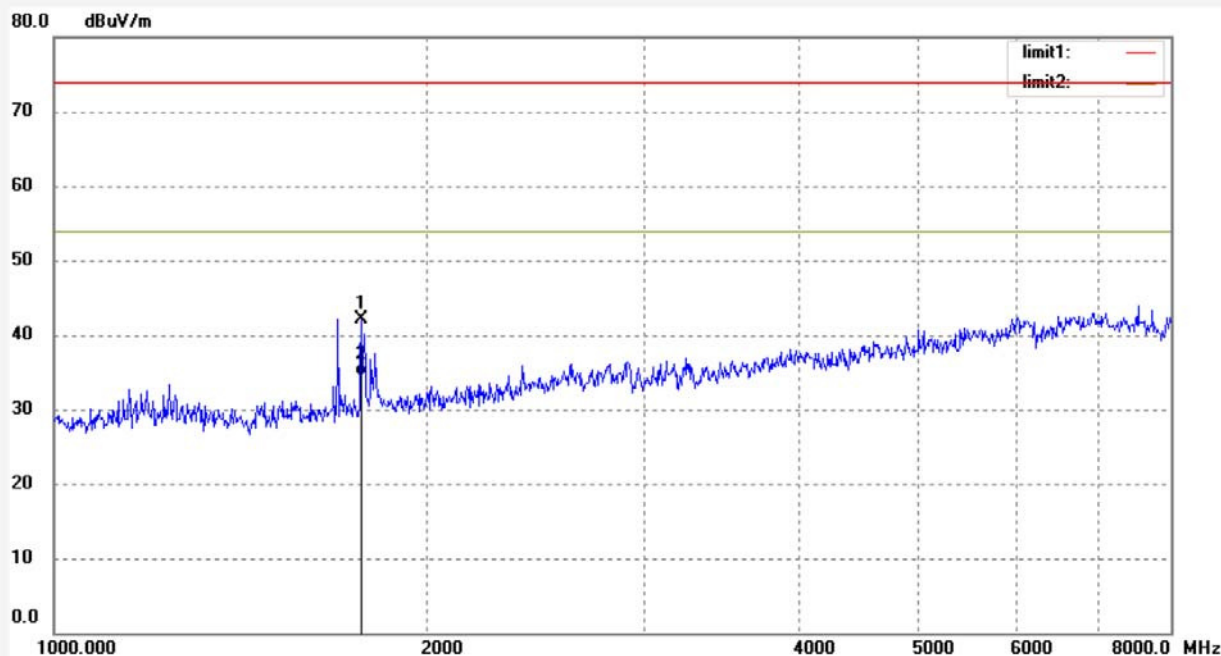
Date: 16/05/14/

Time: 10/31/30

Engineer Signature: star

Distance: 3m

Note: Report No.:ATE20160837



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	1773.946	51.74	-9.59	42.15	74.00	-31.85	peak			
2	1773.946	44.00	-9.59	34.41	54.00	-19.59	AVG			



ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 1# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: STAR2016 #937

Standard: FCC PK

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 55 %

EUT: KARAOKE PLAYER

Mode: USB Playing

Model: BM-4000

Manufacturer: Krisvision

Polarization: Vertical

Power Source: AC 120V/60Hz

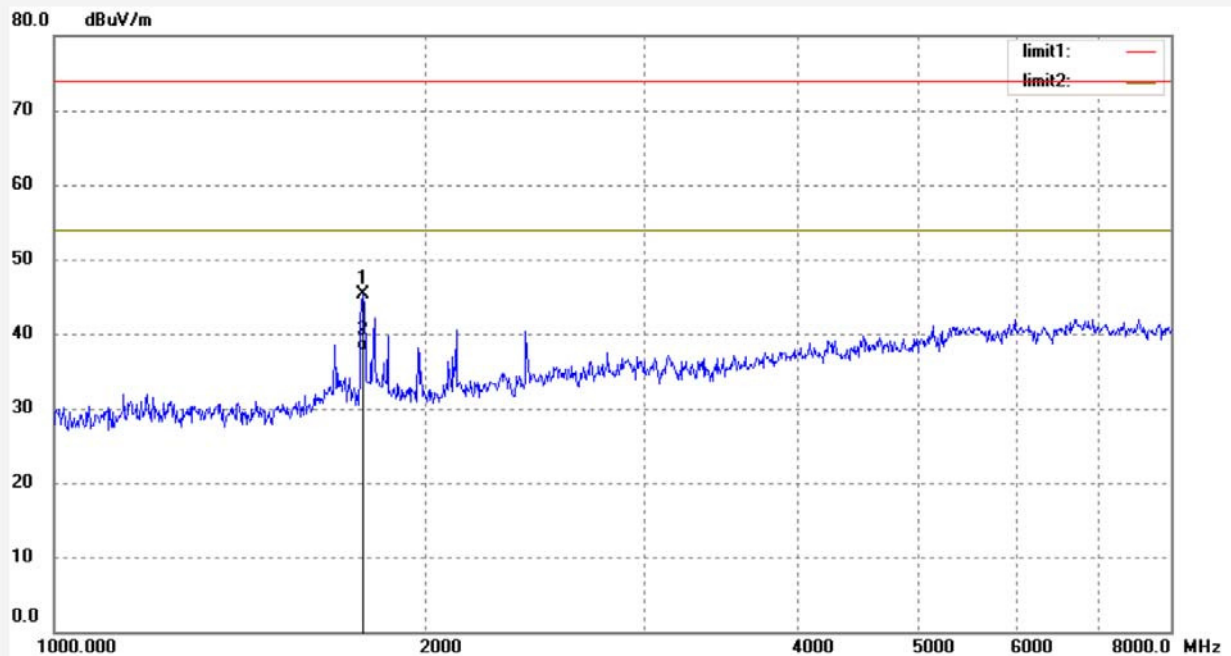
Date: 16/05/14/

Time: 10/35/19

Engineer Signature: star

Distance: 3m

Note: Report No.:ATE20160837



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	1777.660	54.84	-9.57	45.27	74.00	-28.73	peak			
2	1777.660	47.25	-9.57	37.68	54.00	-16.32	AVG			



ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 1# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: STAR2016 #935

Standard: FCC PK

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 55 %

EUT: KARAOKE PLAYER

Mode: Network

Model: BM-4000

Manufacturer: Krisvision

Polarization: Horizontal

Power Source: AC 120V/60Hz

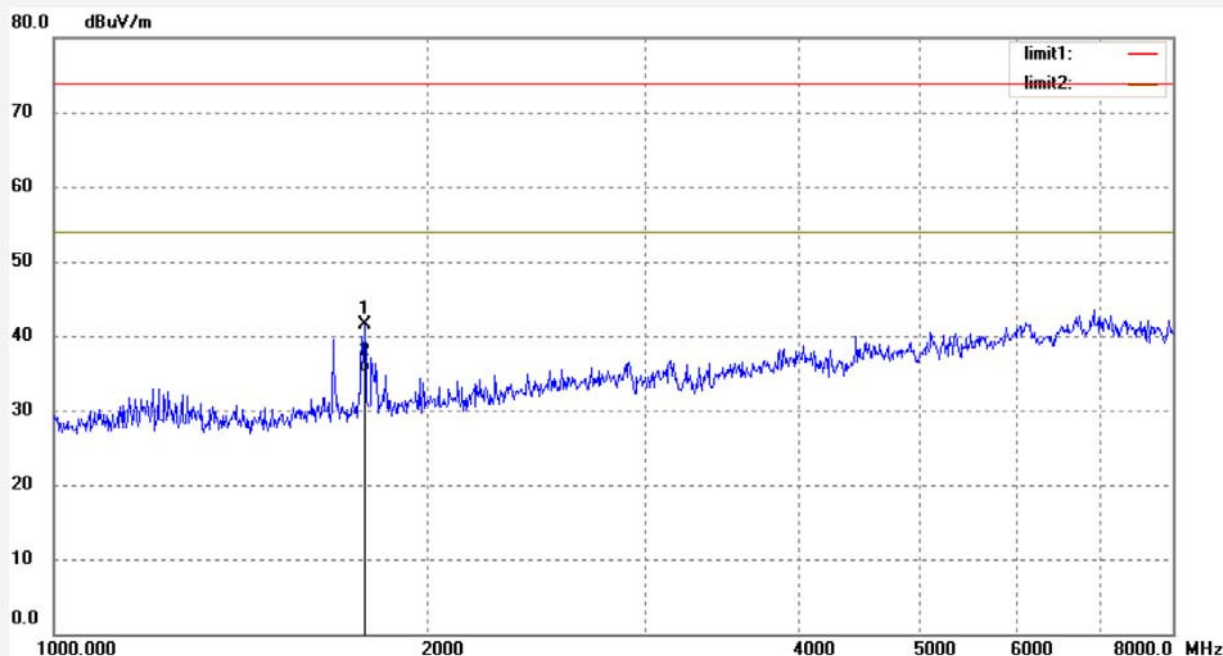
Date: 16/05/14/

Time: 10/26/56

Engineer Signature: star

Distance: 3m

Note: Report No.:ATE20160837



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	1781.383	51.11	-9.56	41.55	74.00	-32.45	peak			
2	1781.383	44.62	-9.56	35.06	54.00	-18.94	AVG			



ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 1# Chamber

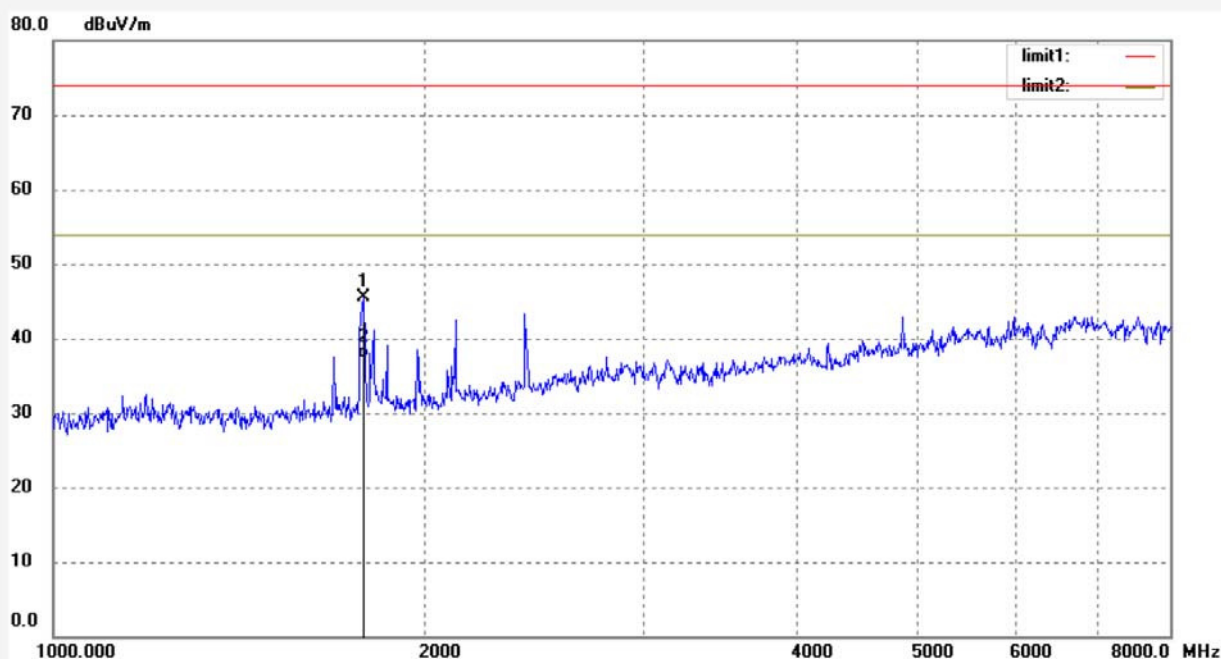
Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: STAR2016 #934
Standard: FCC PK
Test item: Radiation Test
Temp.(C)/Hum.(%) 25 C / 55 %
EUT: KARAOKE PLAYER
Mode: Network
Model: BM-4000
Manufacturer: Krisvision

Polarization: Vertical
Power Source: AC 120V/60Hz
Date: 16/05/14/
Time: 10/22/19
Engineer Signature: star
Distance: 3m

Note: Report No.:ATE20160837



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	1781.383	55.15	-9.56	45.59	74.00	-28.41	peak			
2	1781.383	46.78	-9.56	37.22	54.00	-16.78	AVG			