APPLICATION CERTIFICATION FCC Part 15B On Behalf of Shenzhen Krisvision Digital Technology Group Inc.

KARAOKE PLAYER

Model No.: KB-816, BM-3000, BestSing, S-8160, SR-2500, MF-0608, SV-8161

FCC ID: 2AAI5-KB816

Prepared for : Shenzhen Krisvision Digital Technology Group Inc.

Address : 4th Floor and 6th Floor, 2nd Building The West, Shenhua

Technology Park, Meihua Rd., Shenzhen, Guangdong, China

Prepared by : ACCURATE TECHNOLOGY CO. LTD

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Report Number : ATE20131219

Date of Test : May 14-June 20, 2013

Date of Report : June 24, 2013

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Test Report Certification

Applicant : Shenzhen Krisvision Digital Technology Group Inc.

Manufacturer : Shenzhen Krisvision Digital Technology Group Inc.

EUT Description : KARAOKE PLAYER

(A) MODEL NO.: KB-816, BM-3000, BestSing, S-8160, SR-2500, MF-0608, SV-8161

(B) SERIAL NO.: N/A

(C) POWER SUPPLY: AC 100-240V, 50/60Hz;

IR Remote Controller: DC 3V ("AAA" battery $2\times$)

Measurement Procedure Used:

FCC Rules and Regulations Part 15 Subpart B ANSI C63.4: 2009

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 limits. 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 14-June 20, 2013	
Prepared by :	Kelly Cheng	
	(Kelly Cheng, Engineer)	
Approved & Authorized Signer :	Lemb	
	(Sean Liu, Manager)	

1. GENERAL INFORMATION

1.1.Description of Device (EUT)

EUT : KARAOKE PLAYER

Model Number : KB-816, BM-3000, BestSing, S-8160, SR-2500, MF-0608,

SV-8161

(Note: These samples are same except for the appearance color

is difference. So we prepare the KB-816 for FCC test.)

Power Supply : AC 100-240V, 50/60Hz;

IR Remote Controller: DC 3V ("AAA" battery $2\times$)

Highest operation : 900MHz

frequency of the EUT

Applicant : Shenzhen Krisvision Digital Technology Group Inc.

Address : 4th Floor and 6th Floor, 2nd Building The West, Shenhua

Technology 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 Park, Meihua Rd., Shenzhen, Guangdong, China

Date of sample : May 13, 2013

received

Date of Test : May 14-June 20, 2013

1.2. Accessory and Auxiliary Equipment

LCD COLOUR TV : Manufacturer: SHARP

M/N: LCD-19A33-BK

S/N: 709913440

TOUCHSCREEN : Manufacturer: LEJIA

M/N: LJ19A

MOUSE : Manufacturer: SUN FLOWER

M/N: SF-2019

USB Disk : Manufacturer: Kingston

M/N: UD-240

IR RECEPTION : Manufacturer: Worldwide

M/N: IRM338

MIC : Manufacturer: Takstar

M/N: PC-K500

1.3.Description of Test Facility

EMC Lab : Accredited by TUV Rheinland Shenzhen

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

1.4. Measurement Uncertainty

Conducted Emission Expanded Uncertainty = 2.23dB, k=2

Radiated emission expanded uncertainty 3.08dB, k=2

(9kHz-30MHz)

Radiated emission expanded uncertainty 4.42dB, k=2

(30MHz-1000MHz)

Radiated emission expanded uncertainty 4.06dB, k=2

(Above 1GHz)

2. MEASURING DEVICE AND TEST EQUIPMENT

Table 1: List of Test and Measurement Equipment

Kind of equipment	Manufacturer	Type	S/N	Calibrated date	Calibrated until
EMI Test Receiver	Rohde&Schwarz	ESCS30	100307	Jan. 12, 2013	Jan. 11, 2014
EMI Test Receiver	Rohde&Schwarz	ESPI3	101526/003	Jan. 12, 2013	Jan. 11, 2014
Spectrum Analyzer	Agilent	E7405A	MY45115511	Jan. 12, 2013	Jan. 11, 2014
Pre-Amplifier	Rohde&Schwarz	CBLU118354 0-01	3791	Jan. 12, 2013	Jan. 11, 2014
Loop Antenna	Schwarzbeck	FMZB1516	1516131	Feb. 06, 2013	Feb. 05, 2014
Bilog Antenna	Schwarzbeck	VULB9163	9163-323	Feb. 06, 2013	Feb. 05, 2014
Horn Antenna	Schwarzbeck	BBHA9120D	9120D-655	Feb. 06, 2013	Feb. 05, 2014
Horn Antenna	Schwarzbeck	BBHA9170	9170-359	Feb. 06, 2013	Feb. 05, 2014
LISN	Rohde&Schwarz	ESH3-Z5	100305	Jan. 12, 2013	Jan. 11, 2014
LISN	Schwarzbeck	NSLK8126	8126431	Jan. 12, 2013	Jan. 11, 2014

3. OPERATION OF EUT DURING TESTING

3.1.Operating Mode

The modes are used: 1) Playing

2) USB Playing

3) Network

3.2.Configuration and peripherals



(EUT: KARAOKE PLAYER)

4. TEST PROCEDURES AND RESULTS

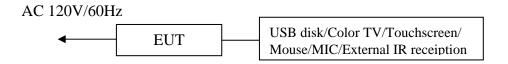
FCC Rules	Description of Test	Result
Section 15.107	Conducted Emission Test	Compliant
Section 15.109	Radiated Emission Test	Compliant

5. CONDUCTED EMISSION FOR FCC PART 15 SECTION 15.107(A)

5.1.Block Diagram of Test Setup

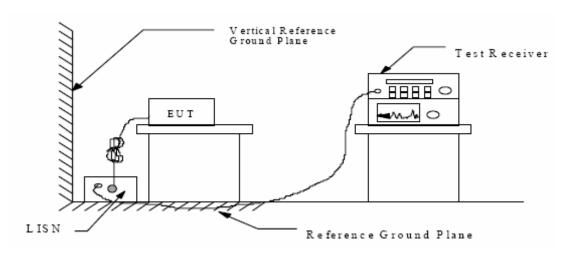
5.1.1.Block diagram of connection between the EUT and simulators

5.1.1.1.For Playing & USB Playing & Network



(EUT: KARAOKE PLAYER)

5.1.2. Shielding Room Test Setup Diagram



(EUT: KARAOKE PLAYER)

5.2. The Emission Limit

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

Frequency	Limit $dB(\mu V)$				
(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			

^{*} Decreases with the logarithm of the frequency.

5.3. Configuration of EUT on Measurement

The following equipment are installed on the Conducted 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 : KB-816 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 5.1.
- 5.4.2. Turn on the power of all equipment.
- 5.4.3.Let the EUT work in modes (Playing & USB Playing & Network) and measure it.

5.5.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 500hm 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: 2009 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.

5.6. Power Line Conducted Emission Measurement Results

PASS.

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

Date of Test: May 14, 2013 Temperature: 25°C

EUT: KARAOKE PLAYER Humidity: 50%

Model No.: KB-816 Power Supply: AC 120V/60Hz
Test Mode: Playing Test Engineer: Alen

Frequency					Detector	Line	PE
MHz	dΒμV	dB	dΒμV	dB			
0.601760					QP	N	GND
0.841502						N	GND
2.492442	43.80	12.4	56	12.2	QP	N	GND
_							
Frequency					Detector	Line	PΕ
MHZ	dΒμV	αB	авил	dB			
0.361001	42.10	12.3	49	6.6	AV	N	GND
0.540273	36.20	12.6	46	9.8	AV	N	GND
0.601760	37.30	12.6	46	8.7	AV	N	GND
Frequency	Level	Transd	Limit	Margin	Detector	Line	PE
MHz	dΒμV	dB	dΒμV	dB			
1 000405	4E CO	10 5	E.C.	10 4	QP	т 1	CND
					QP QP		GND GND
6.419704	46.30	12.4				L1	GND
0.419704	40.30	12.2	60	13.7	QP	ΤΤ	GND
Enogueness	Torro 1	Trance	Timi+	Manain	Dotogton	Tino	DE
Frequency				_	Detector	ттие	PE
MHZ	авич	dB	авич	dB			
0.361001	42.00	12.3	49	6.7	AV	L1	GND
0.599363	37.60	12.6	46	8.4	AV	L1	GND
26.378454	43.40	12.0	50	6.6	AV	L1	GND

Date of Test:May 14, 2013Temperature:25°CEUT:KARAOKE PLAYERHumidity:50%Model No.:KB-816Power Supply:AC 120V/60HzTest Mode:USB PlayingTest Engineer:Alen

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.362445 0.604167 2.462770	43.00	12.6			QP	N N N	GND GND GND
Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.433769 0.618813 27.125974	37.50	12.6	46	8.9 8.5 6.3	AV	N N N	GND GND GND
Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.613892 2.522471 6.394128	47.50	12.4	56	11.2 8.5 15.6		L1 L1 L1	GND GND GND
Frequency MHz	Level dBµV		Limit dBµV	Margin dB	Detector	Line	PE
0.433769 2.482512 27.125974	38.50 35.00 44.20				AV AV AV	L1 L1 L1	GND GND GND

Date of Test:May 14, 2013Temperature:25°CEUT:KARAOKE PLAYERHumidity:50%Model No.:KB-816Power Supply:AC 120V/60HzTest Mode:NetworkTest Engineer:Alen

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.611446 0.855047 2.502412			56 56 56		ÕР	N N N	GND GND GND
Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.613892	39.20 38.90 43.70	12.6	47 46 50	8.1 7.1 6.3	AV	N N N	GND GND GND
Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.351053 2.502412 6.549129	44.40 49.10 46.20			14.5 6.9 13.8	QР	L1 L1 L1	GND GND GND
Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
	39.80 38.90 43.20	12.5 12.6 12.0	47 46 50	7.5 7.1 6.8		L1 L1 L1	GND GND GND

Emissions attenuated more than 20 dB below the permissible value are not reported. The spectral diagrams are attached as below.

CONDUCTED EMISSION STANDARD FCC PART 15 B

KARAOKE PLAYER M/N:KB-816

Manufacturer: Krisvision Operating Condition: Playing

Test Site: 1#Shielding Room

Operator: Alen

Test Specification: N 120V/60Hz

Report No:ATE20131219 Comment: 5/14/2013 / 10:18:53AM Start of Test:

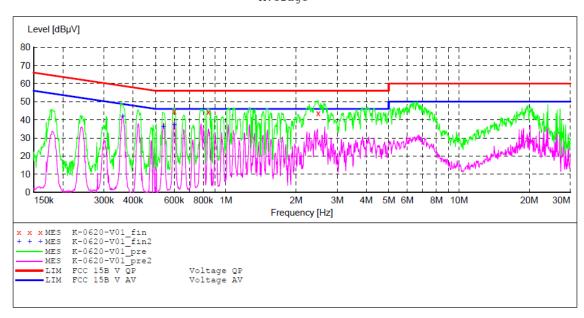
SCAN TABLE: "V 150K-30MHz fin"

_SUB_STD_VTERM2 1.70 Short Description:

JB_STD_vibla. Detector Meas. IF Time Bandw. Stop Start Step Transducer

Frequency Frequency Width 150.0 kHz 30.0 MHz 4.5 kHz QuasiPeak 1.0 s 9 kHz NSLK8126 2008

Average



MEASUREMENT RESULT: "K-0620-V01 fin"

5/14/2013 10:	21AM						
Frequency	Level	Transd	Limit	Margin	Detector	Line	PΕ
MHz	dΒμV	dB	dΒμV	dB			
0.601760	44.80	12.6	56	11.2	QP	N	GND
0.841502	44.20	12.5	56	11.8	QP	N	GND
2.492442	43.80	12.4	56	12.2	OP	N	GND

MEASUREMENT RESULT: "K-0620-V01 fin2"

5/14/2013	10:21AM						
Frequen	cy Level	Transd	Limit	Margin	Detector	Line	PΕ
M	Hz dBµV	dB	dΒμV	dB			
0.3610	01 42.10	12.3	49	6.6	AV	N	GND
0.5402	73 36.20	12.6			AV	N	GND
0.6017	60 37.30	12.6	46	8.7	AV	N	GND

CONDUCTED EMISSION STANDARD FCC PART 15 B

KARAOKE PLAYER M/N:KB-816

Manufacturer: Krisvision Operating Condition: Playing

Test Site: 1#Shielding Room

Operator: Alen

Test Specification: L 120V/60Hz

Report No:ATE20131219 Comment: Start of Test: 5/14/2013 / 10:23:10AM

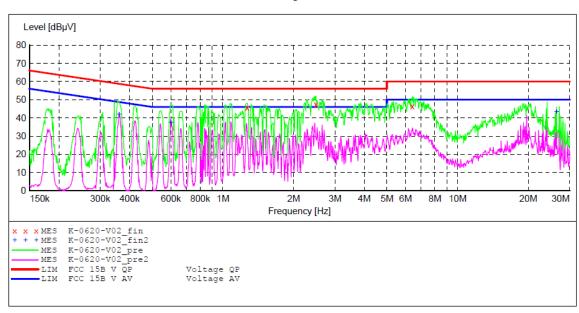
SCAN TABLE: "V 150K-30MHz fin"

_SUB_STD_VTERM2 1.70 Short Description:

Detector Meas. IF
Time Bandw. Step Transducer

Start Stop Step Frequency Frequency Width 150.0 kHz 30.0 MHz 4.5 kHz QuasiPeak 1.0 s 9 kHz NSLK8126 2008

Average



MEASUREMENT RESULT: "K-0620-V02 fin"

5/	14/2013 10:	25 AM						
	Frequency	Level	Transd	Limit	Margin	Detector	Line	PE
	MHz	dΒμV	dB	dΒμV	dB			
	1.269485	45.60	12.5	56	10.4	QP	$_{\rm L1}$	GND
	2.492442	47.30	12.4	56	8.7	QP	L1	GND
	6.419704	46.30	12.2	60	13.7	QP	L1	GND

MEASUREMENT RESULT: "K-0620-V02 fin2"

5/14/2013 10	:25AM						
Frequency	Level	Transd	Limit	Margin	Detector	Line	PE
MHZ	dBuV	dB	dBuV	dB			
			•				
0.361001	42.00	12.3	49	6.7	AV	L1	GND
0.599363	37.60	12.6	46	8.4	AV	L1	GND
26.378454	43.40	12.0	50	6.6	AV	L1	GND

CONDUCTED EMISSION STANDARD FCC PART 15 B

EUT: KARAOKE PLAYER M/N:KB-816

Manufacturer: Krisvision Operating Condition: USB Playing Test Site: 1#Shielding Room

Operator: Alen

Test Specification: N 120V/60Hz

Comment: Report No:ATE20131219 Start of Test: 5/14/2013 / 10:33:09AM

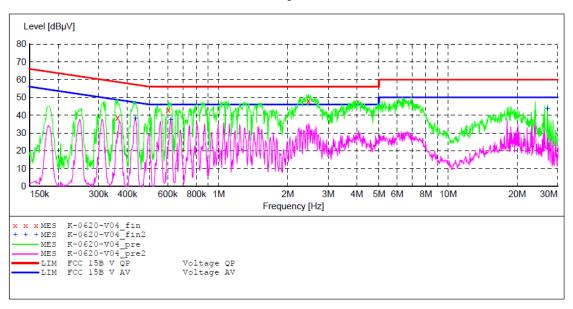
SCAN TABLE: "V 150K-30MHz fin"

Short Description:

_____SUB_STD_VTERM2 1.70
Step Detector Maga IF Start Stop Transducer Bandw. Frequency Frequency Width Time

150.0 kHz 30.0 MHz 4.5 kHz QuasiPeak 1.0 s 9 kHz NSLK8126 2008

Average



MEASUREMENT RESULT: "K-0620-V04 fin"

5/14/2013 10	:35AM						
Frequency	Level	Transd	Limit	Margin	Detector	Line	PE
MHz	dΒμV	dB	dΒμV	dB			
0.362445	38.40	12.3	59	20.3	QP	N	GND
0.604167	43.00	12.6	56	13.0	QP	N	GND
2.462770	48.10	12.4	56	7.9	QP	N	GND

MEASUREMENT RESULT: "K-0620-V04 fin2"

5/14/2013 10:	35 AM						
Frequency	Level	Transd	Limit	Margin	Detector	Line	PE
MHz	dΒμV	dB	dΒμV	dB			
0.433769	38.30	12.5	47	8.9	AV	N	GND
0.618813	37.50	12.6	46	8.5	AV	N	GND
27.125974	43.70	12.0	50	6.3	AV	N	GND

CONDUCTED EMISSION STANDARD FCC PART 15 B

KARAOKE PLAYER M/N:KB-816 EUT:

Manufacturer: Krisvision Operating Condition: USB Playing Test Site: 1#Shielding Room

Operator: Alen

Test Specification: L 120V/60Hz

Report No:ATE20131219 Comment: Start of Test: 5/14/2013 / 10:30:26AM

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

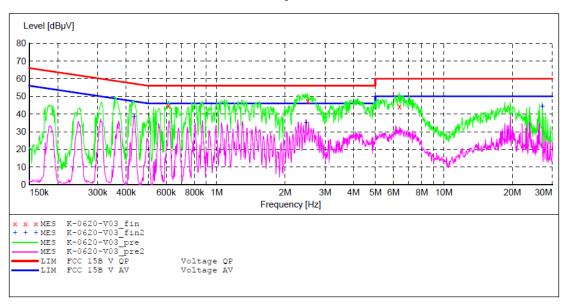
_____SUB_STD_VTERM2 1.70 Short Description:

Stop Step Detector Meas. IF Transducer

Time Bandw.

Frequency Frequency Width 150.0 kHz 30.0 MHz 4.5 kH QuasiPeak 1.0 s 4.5 kHz 9 kHz NSLK8126 2008

Average



MEASUREMENT RESULT: "K-0620-V03_fin"

5	/14/2013 10: Frequency	Level				Detector	Line	PE
	MHz 0.613892	dBμV 44.80	12.6	dBμV 56	dB 11.2	QP	L1	GND
	2.522471 6.394128	47.50 44.40	12.4 12.2		8.5 15.6	~	L1 L1	GND GND

MEASUREMENT RESULT: "K-0620-V03 fin2"

5/	14/2013 10:	32 AM						
	Frequency	Level	Transd	Limit	Margin	Detector	Line	PE
	MHZ	dΒμV	dB	dΒμV	dB			
	0.433769	38.50	12.5	47	8.7	AV	L1	GND
	2.482512	35.00	12.4	46	11.0	AV	L1	GND
	27.125974	44.20	12.0	50	5.8	AV	L1	GND

CONDUCTED EMISSION STANDARD FCC PART 15 B

EUT: KARAOKE PLAYER M/N:KB-816

Manufacturer: Krisvision Operating Condition: Network

Test Site: 1#Shielding Room

Operator: Alen

Test Specification: N 120V/60Hz

Comment: Report No:ATE20131219 Start of Test: 5/14/2013 / 10:36:29AM

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

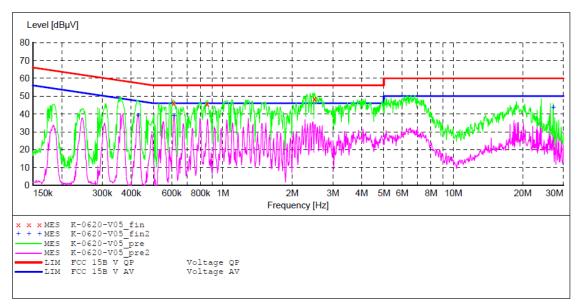
_SUB_STD_VTERM2 1.70 Short Description:

Detector Meas. IF Start Step Transducer Stop

Frequency Frequency Width 150.0 kHz 30.0 MHz 4.5 kHz Time Bandw.

QuasiPeak 1.0 s 9 kHz NSLK8126 2008

Average



MEASUREMENT RESULT: "K-0620-V05 fin"

5/14/2013 10 Frequency MHz			Margin dB	Detector	Line	PE
0.611446 0.855047 2.502412	12.5	56		ÕР	N N N	GND GND GND

MEASUREMENT RESULT: "K-0620-V05 fin2"

5/14/20	13 10:3	8AM						
Freq	uency	Level	Transd	Limit	Margin	Detector	Line	PE
	MHz	dΒμV	dB	dΒμV	dB			
0.4	28605	39.20	12.5	47	8.1	AV	N	GND
0.6	13892	38.90	12.6	46	7.1	AV	N	GND
27.1	25974	43.70	12.0	50	6.3	AV	N	GND

CONDUCTED EMISSION STANDARD FCC PART 15 B

KARAOKE PLAYER M/N:KB-816 EUT:

Manufacturer: Krisvision Operating Condition: Network

Test Site: 1#Shielding Room

Operator: Alen

Test Specification: L 120V/60Hz

Report No:ATE20131219 Comment: Start of Test: 5/14/2013 / 10:39:12AM

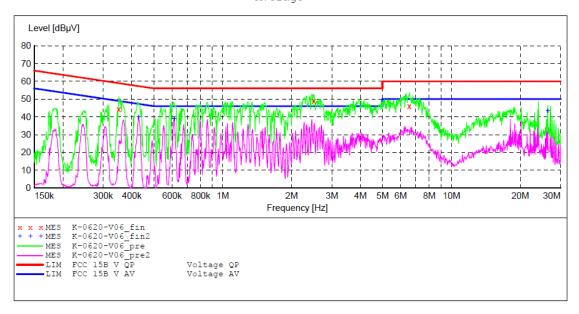
SCAN TABLE: "V 150K-30MHz fin"

Short Description:

____SUB_STD_VTERM2 1.70 Start Stop Detector Meas. IF Transducer Bandw. Time

Frequency Frequency Width 150.0 kHz 30.0 MHz 4.5 kHz 4.5 kHz QuasiPeak 1.0 s 9 kHz NSLK8126 2008

Average



MEASUREMENT RESULT: "K-0620-V06 fin"

5/	14/2013 10:	41AM						
	Frequency	Level	Transd	Limit	Margin	Detector	Line	PE
	MHz	dΒμV	dB	dΒμV	dB			
	0.351053	44.40	12.3	59	14.5	QP	L1	GND
	2.502412	49.10	12.4	56	6.9	QP	L1	GND
	6.549129	46.20	12.2	60	13.8	OP	L1	GND

MEASUREMENT RESULT: "K-0620-V06 fin2"

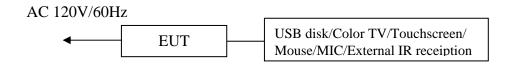
5/14/2013	10:41AM						
Frequen	cy Level	Transd	Limit	Margin	Detector	Line	PE
M	Hz dBµV	dB	dΒμV	dB			
0.4286	39.80	12.5	47	7.5	AV	L1	GND
0.6138	92 38.90	12.6	46	7.1	AV	L1	GND
26.3784	54 43.20	12.0	50	6.8	AV	L1	GND

6. RADIATED EMISSION FOR FCC PART 15 SECTION 15.109(A)

6.1.Block Diagram of Test Setup

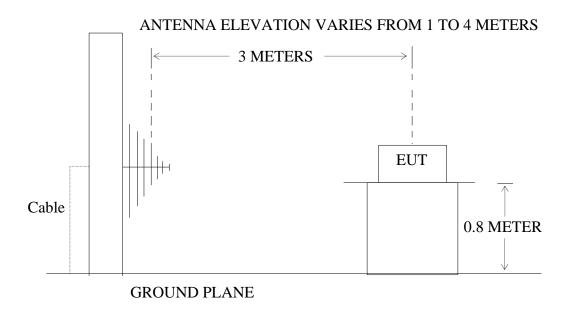
6.1.1.Block diagram of connection between the EUT and simulators

6.1.1.1.For Playing & USB Playing & Network



(EUT: KARAOKE PLAYER)

6.1.2.Semi-Anechoic Chamber Test Setup Diagram



(EUT: KARAOKE PLAYER)

6.2. The Emission Limit For Section 15.109 (a)

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

	Limit						
Frequency (MHz)	Field Strength of Quasi-peak Value (microvolts/m)	Field Strength of Quasi-peak Value $(dB\mu V/m)$					
30 - 88	100	40					
88 - 216	150	43.5					
216 - 960	200	46					
Above 960	500	54					

6.3.EUT Configuration on Measurement

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

6.3.1.KARAOKE PLAYER (EUT)

Model Number : KB-816 Serial Number : N/A

Manufacturer : Shenzhen Krisvision Digital Technology Group Inc.

6.4. Operating Condition of EUT

6.4.1. Setup the EUT and simulator as shown as Section 6.1.

6.4.2. Turn on the power of all equipment.

6.4.3. Let the EUT work in (Playing &USB Playing & Network) mode measures it.

6.5. 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: 2009 on radiated emission measurement.

The bandwidth of test receiver is set at 120kHz in 30-1000MHz and 1MHz in above 1000MHz.

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

6.6.The Emission Measurement Result **PASS.**

Date of Test: June 20, 2013 Temperature: 25°C

EUT: KARAOKE PLAYER Humidity: 50%

Model No.: KB-816 Power Supply: AC 120V/60Hz

Test Mode: Playing Test Engineer: Alen

Frequency: 30	-1000MI	Hz						
Polarization								
	No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
Horizontal	1	148.4410	60.56	-23.77	36.79	43.50	-6.71	QP
Homzonta	2	202.1005	59.68	-20.16	39.52	43.50	-3.98	QP
	3	742.2586	51.74	-8.79	42.95	46.50	-3.55	QP
	No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
Vertical	1	85.8984	56.45	-21.57	34.88	40.00	-5.12	QP
, 0101001	2	202.1005	57.02	-20.16	36.86	43.50	-6.64	QP
	3	742.2587	48.28	-8.79	39.49	46.50	-7.01	QP
Frequency: 1	000-500	0MHz						
Polarization								
	No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
	1	1483.364	60.87	-9.73	51.14	74.00	-22.86	peak
	2	1483.364	57.98	-9.73	48.25	54.00	-5.75	AVG
Horizontal	3	1631.124	56.45	-9.20	47.25	74.00	-26.75	peak
	4	1631.124	53.87	-9.20	44.67	54.00	-9.33	AVG
	5	2225.298	57.72	-7.21	50.51	74.00	-23.49	peak
	6	2225.298	55.12	-7.21	47.91	54.00	-6.09	AVG
	No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
	1	1483.364	55.62	-9.73	45.89	74.00	-28.11	peak
	2	1483.364	53.12	-9.73	43.39	54.00	-10.61	AVG
Vertical	3	1631.124	53.09	-9.20	43.89	74.00	-30.11	peak
	4	1631.124	50.69	-9.20	41.49	54.00	-12.51	AVG
	5	2225.298	59.68	-7.21	52.47	74.00	-21.53	peak

Date of Test: June 20, 2013 Temperature: 25°C

EUT: KARAOKE PLAYER Humidity: 50%

Model No.: KB-816 Power Supply: AC 120V/60Hz

Test Mode: USB Playing Test Engineer: Alen

Frequency: 30-	-1000MF							
Polarization	10001111	12						
	No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
Horizontal	1	211.5264	60.21	-20.00	40.21	43.50	-3.29	QP
Horizontai	2	269.4284	58.86	-18.71	40.15	46.50	-6.35	QP
	3	742.2586	52.01	-8.79	43.22	46.50	-3.28	QP
	No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
Vertical	1	211.5264	60.03	-20.00	40.03	43.50	-3.47	QP
	2	269.4284	59.02	-18.71	40.31	46.50	-6.19	QP
	3	744.8660	49.21	-8.73	40.48	46.50	-6.02	QP
Frequency: 10	000-5000)MHz						
Polarization								
	No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
	1	1483.364	61.35	-9.73	51.62	74.00	-22.38	peak
	2	1483.364	58.79	-9.73	49.06	54.00	-4.94	AVG
Horizontal	3	1631.124	56.92	-9.20	47.72	74.00	-26.28	peak
	4	1631.124	54.35	-9.20	45.15	54.00	-8.85	AVG
	5	2225.298	57.21	-7.21	50.00	74.00	-24.00	peak
	6	2225.298	54.83	-7.21	47.62	54.00	-6.38	AVG
	No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
	1	1483.364	57.22	-9.73	47.49	74.00	-26.51	peak
	2	1483.364	54.69	-9.73	44.96	54.00	-9.04	AVG
Vertical	3	1919.035	56.50	-8.10	48.40	74.00	-25.60	peak
	4	1919.035	53.99	-8.10	45.89	54.00	-8.11	AVG
	5	2225.298	58.18	-7.21	50.97	74.00	-23.03	peak
	6	2225.298	55.75	-7.21	48.54	54.00	-5.46	AVG

Date of Test: June 20, 2013 Temperature: 25°C

EUT: KARAOKE PLAYER Humidity: 50%

Model No.: KB-816 Power Supply: AC 120V/60Hz

Test Mode: Network Test Engineer: Alen

Frequency: 30-1	000M	Hz						
Polarization								
	No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
Horizontal	1	148.4410	60.65	-23.77	36.88	43.50	-6.62	QP
110112011	2	211.5264	60.89	-20.00	40.89	43.50	-2.61	QP
	3	742.2586	52.01	-8.79	43.22	46.50	-3.28	QP
	No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
Vertical	1	148.4410	59.25	-23.77	35.48	43.50	-8.02	QP
	2	202.1005	61.04	-20.16	40.88	43.50	-2.62	QP
	3	742.2586	49.69	-8.79	40.90	46.50	-5.60	QP
Frequency: 100	00-500	0MHz						
Polarization								
	No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
	1	1483.364	61.03	-9.73	51.30	74.00	-22.70	peak
	2	1483.364	58.63	-9.73	48.90	54.00	-5.10	AVG
Horizontal	3	1631.123	56.90	-9.20	47.70	74.00	-26.30	peak
	4	1631.123	54.35	-9.20	45.15	54.00	-8.85	AVG
	5	2225.298	57.79	-7.21	50.58	74.00	-23.42	peak
	6	2225.298	55.32	-7.21	48.11	54.00	-5.89	AVG
	No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
	1	1483.364	56.53	-9.73	46.80	74.00	-27.20	peak
	2	1483.364	54.10	-9.73	44.37	54.00	-9.63	AVG
Vertical	3	1631.123	54.03	-9.20	44.83	74.00	-29.17	peak
	4	1631.124	51.65	-9.20	42.45	54.00	-11.55	AVG
	5	2225.298	60.07	-7.21	52.86	74.00	-21.14	peak
	6	2225.298	57.65	-7.21	50.44	54.00	-3.56	AVG

Note: 1. Emissions attenuated more than 20 dB below the permissible value are not reported.

2. The field strength is calculated by adding the antenna factor, high pass filter loss(if used) and cable loss, and subtracting the amplifier gain(if any)from the measured reading. The basic equation calculation is as follows:

 $Result = Reading + Corrected \ Factor$

Where Corrected Factor = Antenna Factor + Cable Loss + High Pass Filter Loss - Amplifier Gain

3. The spectral diagrams are attached as below display the measurement of peak values.



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, Tel:+86-0755-26503290 na Fax:+86-0755-26503396

Site: 1# Chamber

Job No.: alen #743

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 55 % EUT: KARAOKE PLAYER

Mode: Playing Model: KB-816 Manufacturer: Krisvision

Note: Report No:ATE20131219

Polarization: Horizontal

Power Source: AC 120V/60Hz

Date: 13/06/20/ Time: 14/13/23 Engineer Signature: Distance: 3m



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark	
1	148.4410	60.56	-23.77	36.79	43.50	-6.71	QP				
2	202.1005	59.68	-20.16	39.52	43.50	-3.98	QP				
3	742.2586	51.74	-8.79	42.95	46.50	-3.55	QP				



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Site: 1# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: alen #742

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 55 % EUT: KARAOKE PLAYER

Mode: Playing Model: KB-816 Manufacturer: Krisvision

Polarization: Vertical

Power Source: AC 120V/60Hz

Date: 13/06/20/ Time: 14/11/35 **Engineer Signature:** Distance: 3m

Report No:ATE20131219 Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	85.8984	56.45	-21.57	34.88	40.00	-5.12	QP			
2	202.1005	57.02	-20.16	36.86	43.50	-6.64	QP			
3	742.2587	48.28	-8.79	39.49	46.50	-7.01	QP			

Site: 1# Chamber

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Polarization: Horizontal

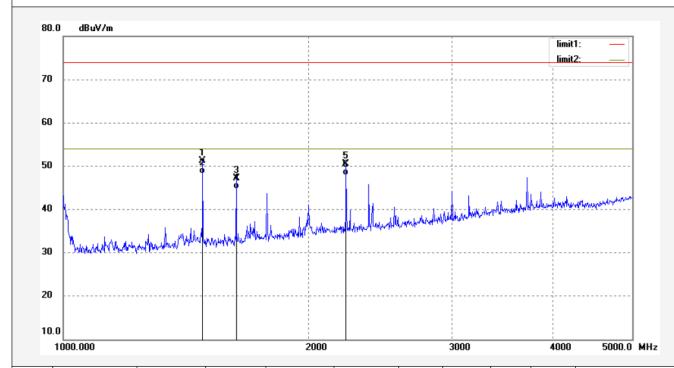
Power Source: AC 120V/60Hz

Date: 13/06/20/ Time: 14/32/29 Engineer Signature: Distance: 3m

Job No.: alen #752 Standard: FCC PK

Test item: Radiation Test
Temp.(C)/Hum.(%) 25 C / 55 %
EUT: KARAOKE PLAYER

Mode: Playing Model: KB-816 Manufacturer: Krisvision



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	1483.364	60.87	-9.73	51.14	74.00	-22.86	peak			
2	1483.364	57.98	-9.73	48.25	54.00	-5.75	AVG			
3	1631.124	56.45	-9.20	47.25	74.00	-26.75	peak			
4	1631.124	53.87	-9.20	44.67	54.00	-9.33	AVG			
5	2225.298	57.72	-7.21	50.51	74.00	-23.49	peak			
6	2225.298	55.12	-7.21	47.91	54.00	-6.09	AVG			



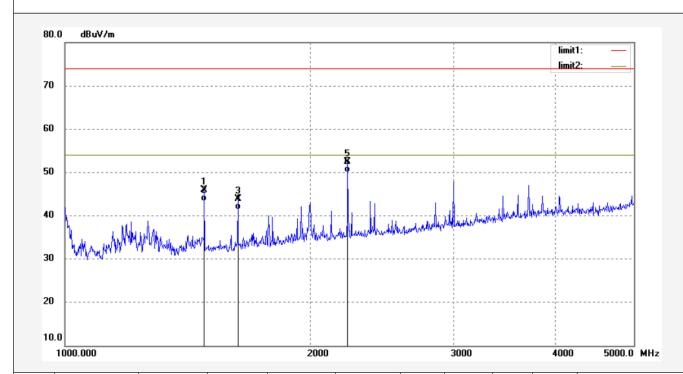
F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China Site: 1# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: alen #753 Polarization: Vertical

Standard: FCC PK Power Source: AC 120V/60Hz

Test item: Radiation Test Date: 13/06/20/
Temp.(C)/Hum.(%) 25 C / 55 % Time: 14/33/40
EUT: KARAOKE PLAYER Engineer Signature:
Mode: Playing Distance: 3m

Mode: Playing
Model: KB-816
Manufacturer: Krisvision



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	1483.364	55.62	-9.73	45.89	74.00	-28.11	peak			
2	1483.364	53.12	-9.73	43.39	54.00	-10.61	AVG			
3	1631.124	53.09	-9.20	43.89	74.00	-30.11	peak			
4	1631.124	50.69	-9.20	41.49	54.00	-12.51	AVG			
5	2225.298	59.68	-7.21	52.47	74.00	-21.53	peak			
6	2225.298	57.23	-7.21	50.02	54.00	-3.98	AVG			



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Job No.: alen #744

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 55 % EUT: KARAOKE PLAYER

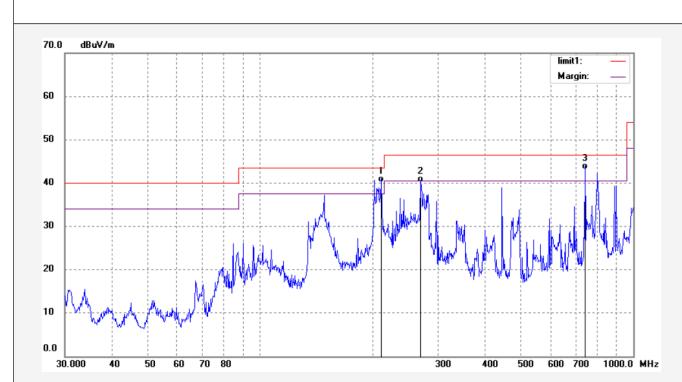
Mode: USB Playing Model: KB-816 Manufacturer: Krisvision

Note: Report No:ATE20131219

Polarization: Horizontal

Power Source: AC 120V/60Hz

Date: 13/06/20/ Time: 14/15/56 Engineer Signature: Distance: 3m



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	211.5264	60.21	-20.00	40.21	43.50	-3.29	QP			
2	269.4284	58.86	-18.71	40.15	46.50	-6.35	QP			
3	742.2586	52.01	-8.79	43.22	46.50	-3.28	QP			



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Job No.: alen #745

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 55 % EUT: KARAOKE PLAYER

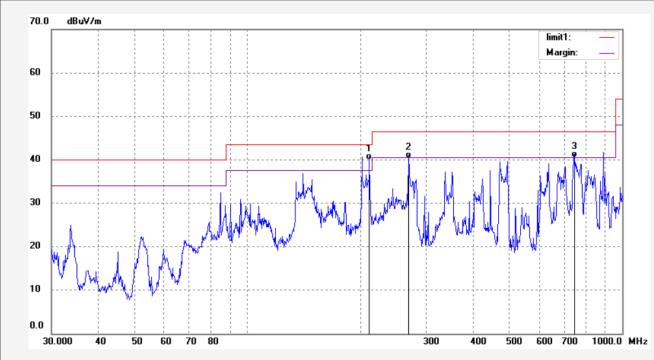
Mode: USB Playing Model: KB-816 Manufacturer: Krisvision

Note: Report No:ATE20131219

Polarization: Vertical

Power Source: AC 120V/60Hz

Date: 13/06/20/ Time: 14/17/46 Engineer Signature: Distance: 3m



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)		Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	211.5264	60.03	-20.00	40.03	43.50	-3.47	QP			
2	269.4284	59.02	-18.71	40.31	46.50	-6.19	QP			
3	744.8660	49.21	-8.73	40.48	46.50	-6.02	QP			



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Job No.: alen #751 Standard: FCC PK

Test item: Radiation Test

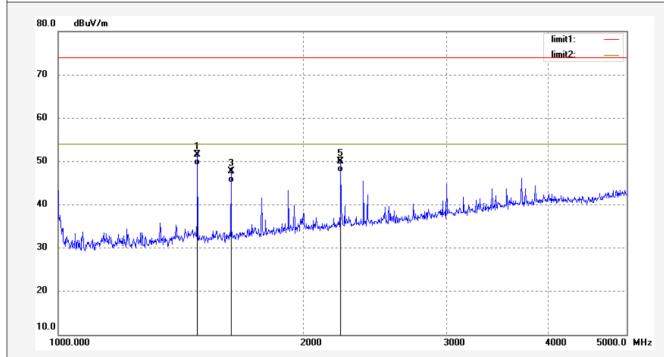
Temp.(C)/Hum.(%) 25 C / 55 % EUT: KARAOKE PLAYER

Mode: USB Playing Model: KB-816 Manufacturer: Krisvision Date: 13/06/20/ Time: 14/29/33 Engineer Signature: Distance: 3m

Horizontal

Power Source: AC 120V/60Hz

Polarization:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	1483.364	61.35	-9.73	51.62	74.00	-22.38	peak			
2	1483.364	58.79	-9.73	49.06	54.00	-4.94	AVG			
3	1631.124	56.92	-9.20	47.72	74.00	-26.28	peak			
4	1631.124	54.35	-9.20	45.15	54.00	-8.85	AVG			
5	2225.298	57.21	-7.21	50.00	74.00	-24.00	peak			
6	2225.298	54.83	-7.21	47.62	54.00	-6.38	AVG			



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Job No.: alen #750 Standard: FCC PK

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 55 % EUT: KARAOKE PLAYER

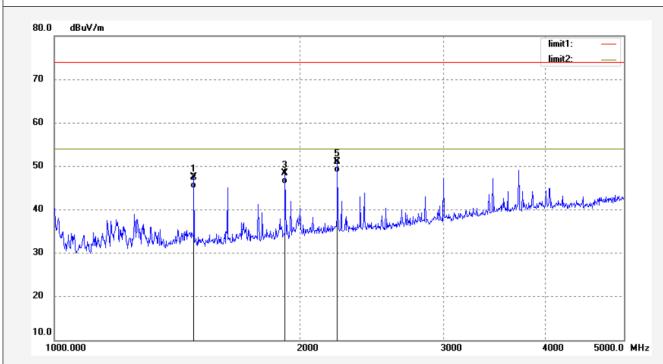
Mode: USB Playing Model: KB-816 Manufacturer: Krisvision

Note: Report No:ATE20131219

Polarization: Vertical

Power Source: AC 120V/60Hz

Date: 13/06/20/ Time: 14/28/24 Engineer Signature: Distance: 3m



				T						
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	1483.364	57.22	-9.73	47.49	74.00	-26.51	peak			
2	1483.364	54.69	-9.73	44.96	54.00	-9.04	AVG			
3	1919.035	56.50	-8.10	48.40	74.00	-25.60	peak			
4	1919.035	53.99	-8.10	45.89	54.00	-8.11	AVG			
5	2225.298	58.18	-7.21	50.97	74.00	-23.03	peak			
6	2225.298	55.75	-7.21	48.54	54.00	-5.46	AVG			



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Job No.: alen #747

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 55 % EUT: KARAOKE PLAYER

Mode: Network

Model: KB-816

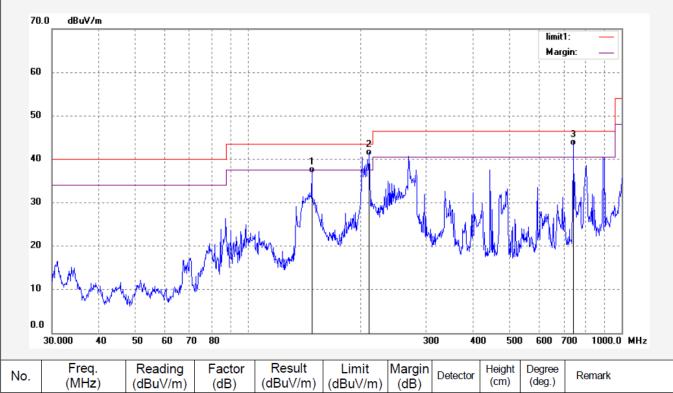
Manufacturer: Krisvision

Note: Report No:ATE20131219

Polarization: Horizontal

Power Source: AC 120V/60Hz

Date: 13/06/20/ Time: 14/22/05 Engineer Signature: Distance: 3m



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	148.4410	60.65	-23.77	36.88	43.50	-6.62	QP			
2	211.5264	60.89	-20.00	40.89	43.50	-2.61	QP			
3	742.2586	52.01	-8.79	43.22	46.50	-3.28	QP			

Site: 1# Chamber

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Polarization: Vertical

Power Source: AC 120V/60Hz

Date: 13/06/20/ Time: 14/19/25 Engineer Signature: Distance: 3m

Job No.: alen #746

Standard: FCC Class B 3M Radiated

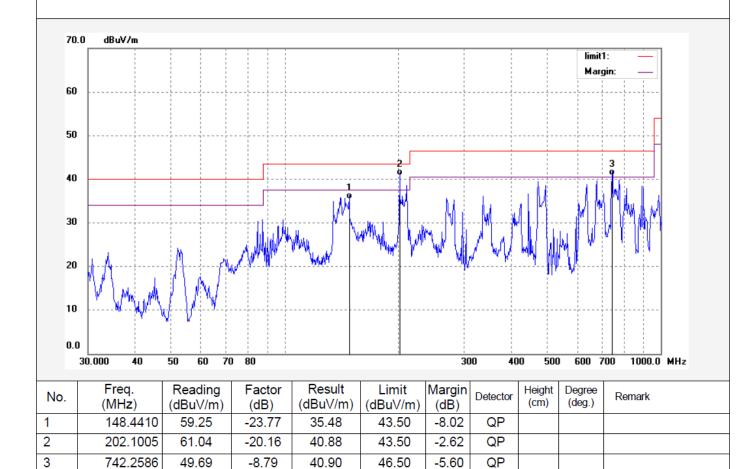
Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 55 % EUT: KARAOKE PLAYER

Mode: Network

Model: KB-816

Manufacturer: Krisvision





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Job No.: alen #748 Standard: FCC PK

Test item: Radiation Test
Temp.(C)/Hum.(%) 25 C / 55 %
EUT: KARAOKE PLAYER

Mode: Network

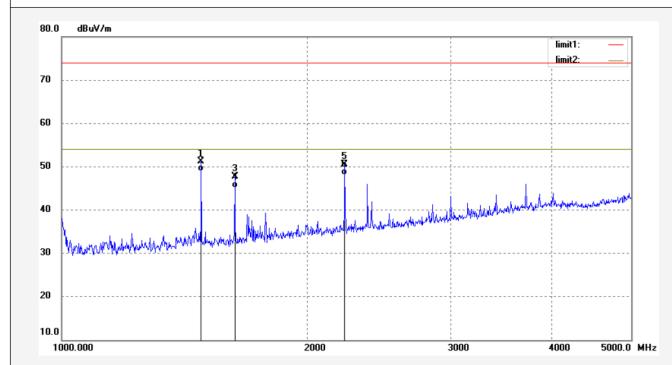
Model: KB-816

Manufacturer: Krisvision

Polarization: Horizontal

Power Source: AC 120V/60Hz

Date: 13/06/20/ Time: 14/24/12 Engineer Signature: Distance: 3m



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	1483.364	61.03	-9.73	51.30	74.00	-22.70	peak			
2	1483.364	58.63	-9.73	48.90	54.00	-5.10	AVG			
3	1631.123	56.90	-9.20	47.70	74.00	-26.30	peak			
4	1631.123	54.35	-9.20	45.15	54.00	-8.85	AVG			
5	2225.298	57.79	-7.21	50.58	74.00	-23.42	peak			
6	2225.298	55.32	-7.21	48.11	54.00	-5.89	AVG			



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Job No.: alen #749 Standard: FCC PK

Test item: Radiation Test
Temp.(C)/Hum.(%) 25 C / 55 %

EUT: KARAOKE PLAYER

Mode: Network

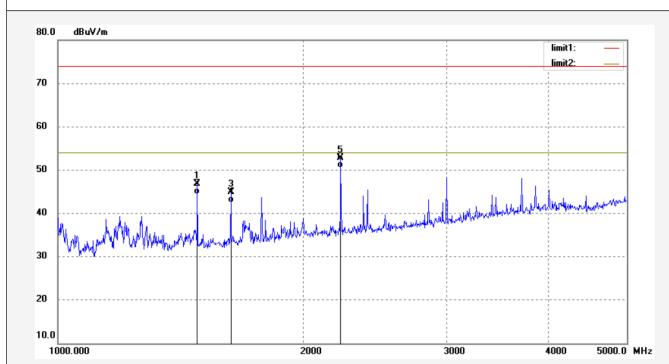
Model: KB-816

Manufacturer: Krisvision

Polarization: Vertical

Power Source: AC 120V/60Hz

Date: 13/06/20/ Time: 14/25/45 Engineer Signature: Distance: 3m



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	1483.364	56.53	-9.73	46.80	74.00	-27.20	peak			
2	1483.364	54.10	-9.73	44.37	54.00	-9.63	AVG			
3	1631.123	54.03	-9.20	44.83	74.00	-29.17	peak			
4	1631.124	51.65	-9.20	42.45	54.00	-11.55	AVG			
5	2225.298	60.07	-7.21	52.86	74.00	-21.14	peak			
6	2225.298	57.65	-7.21	50.44	54.00	-3.56	AVG			