FCC CERTIFICATION
On Behalf of
SHENZHEN VANKE LOUDSPEAKER PRODUCTS CO., LTD.

Soundbar
Model No.: A50-890, A50-989, A50-1000, SB2160

FCC ID: CADA50-890

Prepared for	:	SHENZHEN VANKE LOUDSPEAKER PRODUCTS CO., LTD.
Address	:	Vanke Industrial Park, Bingtang Mountain, Shaping Road, Shawan, Buji Town, Longgang District, Shenzhen, China
Prepared by	:	ACCURATE TECHNOLOGY CO. LTD
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Report Number	:	ATE20120569
Date of Test	:	April 1-6, 2012
Date of Report	:	April 6, 2012

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Description Page

Test Report Certification

Applicant	:	SHENZHEN VANKE LOUDSPEAKER PRODUCTS CO., LTD.
Manufacturer	:	SHENZHEN VANKE LOUDSPEAKER PRODUCTS CO., LTD.
EUT Description	:	Soundbar
		(A) MODEL NO.: A50-890, A50-989, A50-1000, SB2160
		(B) POWER SUPPLY: DC 12V(Adapter input)

Measurement Procedure Used:

FCC Rules and Regulations Part 15 Subpart C Section 15.249
ANSI C63.4: 2003

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 C Section15.249 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.

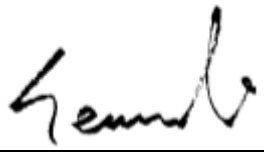
This report applies to above tested sample only. This report shall not be reproduced in part without written approval of ACCURATE TECHNOLOGY CO. LTD.

Date of Test : April 1-6, 2012

Prepared by :

(Engineer)

Approved & Authorized Signer :



(Manager)

1. GENERAL INFORMATION

1.1.Description of Device (EUT)

EUT : Soundbar

Model Number : A50-890, A50-989, A50-1000, SB2160
(Note: These samples are identical, except the appearance is difference. Therefore only model A50-890 is tested for FCC tests

Power Supply : DC 12V(Adapter input)

Adapter : Model number: FJ-SW1202000U
Input: AC 100-240V; 50/60Hz
Output: DC 12; 2000mA

Operate Frequency : 2404.000-2479.000MHz

Channel List :

Channel	Frequency	Channel	Frequency
1	2.404GHz	9	2.444GHz
2	2.409GHz	10	2.449GHz
3	2.413GHz	11	2.454GHz
4	2.419GHz	12	2.459GHz
5	2.424GHz	13	2.464GHz
6	2.429GHz	14	2.469GHz
7	2.434GHz	15	2.474GHz
8	2.439GHz	16	2.479GHz

Applicant : SHENZHEN VANKE LOUDSPEAKER PRODUCTS CO., LTD.

Address : Vanke Industrial Park, Bingtang Mountain, Shaping Road, Shawan, Buji Town, Longgang District, Shenzhen, China

Manufacturer : SHENZHEN VANKE LOUDSPEAKER PRODUCTS CO., LTD.

Address : Vanke Industrial Park, Bingtang Mountain, Shaping Road, Shawan, Buji Town, Longgang District, Shenzhen, China

Date of sample received : April 1, 2012

Date of Test : April 1-6, 2012

1.2.Description of Test Facility

EMC Lab	:	Accredited by TUV Rheinland Shenzhen Listed by FCC The Registration Number is 752051 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, Changyuan New Material Port, Keyuan Rd. Science & Industry Park, Nanshan, Shenzhen, Guangdong P.R. China

1.3.Measurement Uncertainty

Conducted Emission Expanded Uncertainty	=	2.23dB, k=2
Radiated emission expanded uncertainty (9kHz-30MHz)	=	3.08dB, k=2
Radiated emission expanded uncertainty (30MHz-1000MHz)	=	4.42dB, k=2
Radiated emission expanded uncertainty (Above 1GHz)	=	4.06dB, k=2

2. MEASURING DEVICE AND TEST EQUIPMENT

Table 1: List of Test and Measurement Equipment

Kind of equipment	Manufacturer	Type	S/N	Calibrated until
EMI Test Receiver	Rohde&Schwarz	ESCS30	100307	Jan. 7, 2013
EMI Test Receiver	Rohde&Schwarz	ESPI3	101526/003	Jan. 7, 2013
Spectrum Analyzer	Agilent	E7405A	MY45115511	Jan. 7, 2013
Pre-Amplifier	Rohde&Schwarz	CBLU1183540-01	3791	Jan. 7, 2013
Loop Antenna	Schwarzbeck	FMZB1516	1516131	Jan. 7, 2013
Bilog Antenna	Schwarzbeck	VULB9163	9163-323	Jan. 7, 2013
Horn Antenna	Schwarzbeck	BBHA9120D	9120D-655	Jan. 7, 2013
Horn Antenna	Schwarzbeck	BBHA9170	9170-359	Jan. 7, 2013
LISN	Rohde&Schwarz	ESH3-Z5	100305	Jan. 7, 2013
LISN	Schwarzbeck	NSLK8126	8126431	Jan. 7, 2013

3. SUMMARY OF TEST RESULTS

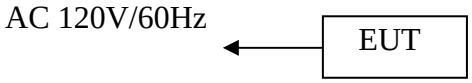
FCC Rules	**Description of Test**	**Result**
Section 15.207	Conducted Emission	Compliant
Section 15.249(a)	Fundamental and Harmonics Radiated Emission	Compliant
Section 15.249(d)	Spurious Radiated Emission	Compliant
Section 15.249(d)	Band Edge	Compliant
Section 15.203	Antenna Requirement	Compliant

Remark: “N/A” means “Not applicable”.

4. FUNDAMENTAL AND HARMONICS RADIATED EMISSION FOR SECTION 15.249(A)

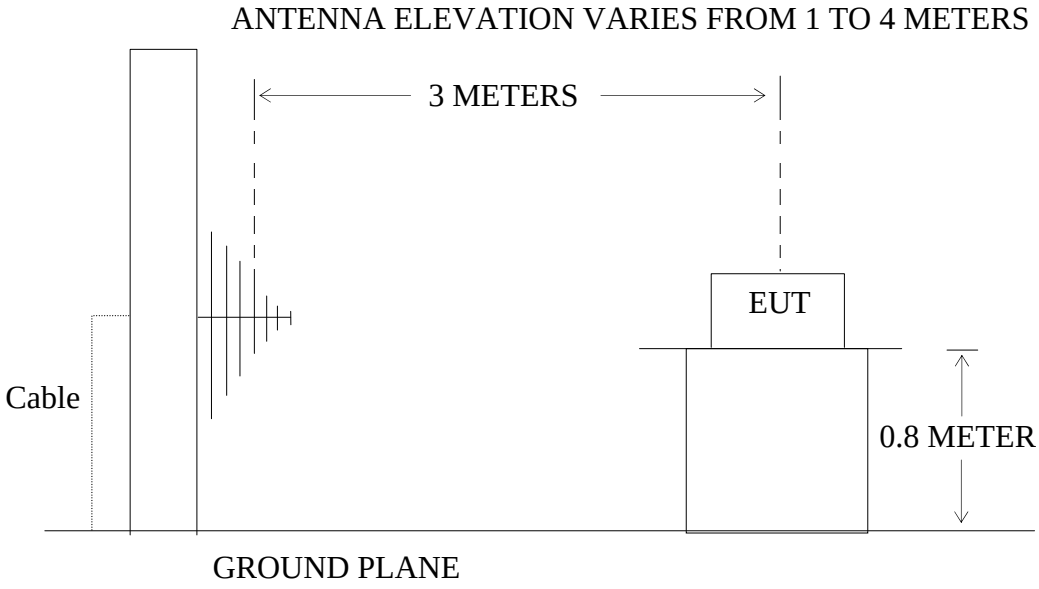
4.1.Block Diagram of Test Setup

4.1.1.Block diagram of connection between the EUT and simulators



(EUT: Soundbar)

4.1.2.Semi-Anechoic Chamber Test Setup Diagram



(EUT: Soundbar)

4.2.The Emission Limit

4.2.1.For intentional radiators, According to section 15.249(a), Operation within the frequency band of 2.4 to 2.4835GHz, The fundamental field strength shall not exceed 94 dBμV/m and the harmonics shall not exceed 54 dBμV/m.

Fundamental Frequency	Field Strength of Fundamental (millivolts/meter)	Field Strength of harmonics (microvolts/meter)
902-928MHz	50	500
2400-2483.5MHz	50	500
5725-5875MHz	50	500
24.0-24.25GHz	250	2500

4.2.2.According to section 15.249(e), as shown in section 15.35(b), the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation.

4.3.Configuration of EUT on Measurement

The following equipment 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.

4.3.1. Soundbar (EUT)

Model Number	**:**	A50-890
Serial Number	**:**	N/A
Manufacturer	**:**	SHENZHEN VANKE LOUDSPEAKER PRODUCTS CO., LTD.

4.4.Operating Condition of EUT

4.4.1.Setup the EUT and simulator as shown as Section 4.1.

4.4.2.Turn on the power of all equipment.

4.4.3. Let the EUT work in TX modes measure it. The transmit frequency are 2404.000 - 2479.000 MHz MHz. We are select 2404.000MHz, 2444.000MHz, 2479.000MHz TX frequency to transmit.

4.5. 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 bi-log 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: 2003 on radiated emission measurement. The EUT was tested in 3 orthogonal planes.

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

The frequency range from 30MHz to 25000MHz is checked.

4.6. The Field Strength of Radiation Emission Measurement Results

PASS.

Date of Test:	April 2, 2012	Temperature:	25°C
EUT:	Soundbar	Humidity:	50%
Model No.:	A50-890	Power Supply:	AC 120V/60Hz
Test Mode:	TX 2404.000MHz	Test Engineer:	Pei

Fundamental Radiated Emissions

Frequency (MHz)	Reading(dBμV/m)		Factor(dB) Corr.	Result(dBμV/m)		Limit(dBμV/m)		Margin(dB)		Polarization
	AV	PEAK		AV	PEAK	AV	PEAK	AV	PEAK	
2404.000	96.31	111.40	-7.45	88.86	103.95	94	114	-5.14	-10.05	Vertical
2404.000	97.67	112.37	-7.45	89.22	104.92	94	114	-4.78	-9.08	Horizontal

Harmonics Radiated Emissions

Frequency (MHz)	Reading(dBμV/m)		Factor(dB) Corr.	Result(dBμV/m)		Limit(dBμV/m)		Margin(dB)		Polarization
	AV	PEAK		AV	PEAK	AV	PEAK	AV	PEAK	
4808.000	35.93	48.87	-0.28	35.65	48.59	54	74	-18.35	-25.41	Vertical
4808.000	34.19	48.88	-0.28	33.91	48.60	54	74	-20.09	-25.40	Horizontal

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 in appendix I display the measurement of peak values.

Date of Test:	April 2, 2012	Temperature:	25°C
EUT:	Soundbar	Humidity:	50%
Model No.:	A50-890	Power Supply:	AC 120V/60Hz
Test Mode:	TX 2444.000MHz	Test Engineer:	Pei

Fundamental Radiated Emissions

Frequency (MHz)	Reading(dBμV/m)		Factor(dB) Corr.	Result(dBμV/m)		Limit(dBμV/m)		Margin(dB)		Polarization
	AV	PEAK		AV	PEAK	AV	PEAK	AV	PEAK	
2444.000	97.15	109.96	-7.35	89.80	102.61	94	114	-4.21	-11.39	Vertical
2444.000	94.66	108.58	-7.35	87.31	101.23	94	114	-6.69	-12.77	Horizontal

Harmonics Radiated Emissions

Frequency (MHz)	Reading(dBμV/m)		Factor(dB) Corr.	Result(dBμV/m)		Limit(dBμV/m)		Margin(dB)		Polarization
	AV	PEAK		AV	PEAK	AV	PEAK	AV	PEAK	
4888.000	38.22	51.32	0.17	38.39	51.49	54	74	-15.61	-22.51	Vertical
4888.000	35.15	47.97	0.17	35.32	48.14	54	74	-18.68	-25.86	Horizontal

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 in appendix I display the measurement of peak values.

Date of Test:	April 2, 2012	Temperature:	25°C
EUT:	Soundbar	Humidity:	50%
Model No.:	A50-890	Power Supply:	AC 120V/60Hz
Test Mode:	TX 2479.000MHz	Test Engineer:	Pei

Fundamental Radiated Emissions

Frequency (MHz)	Reading(dBμV/m)		Factor(dB) Corr.	Result(dBμV/m)		Limit(dBμV/m)		Margin(dB)		Polarization
	AV	PEAK		AV	PEAK	AV	PEAK	AV	PEAK	
2479.000	96.18	111.63	-7.37	88.81	104.26	94	114	-5.19	-9.74	Vertical
2479.000	96.52	111.83	-7.37	89.15	104.46	94	114	-4.85	-9.54	Horizontal

Harmonics Radiated Emissions

Frequency (MHz)	Reading(dBμV/m)		Factor(dB) Corr.	Result(dBμV/m)		Limit(dBμV/m)		Margin(dB)		Polarization
	AV	PEAK		AV	PEAK	AV	PEAK	AV	PEAK	
4958.000	36.21	49.78	0.51	36.72	50.29	54	74	-17.28	-23.71	Vertical
4958.000	38.59	49.48	0.51	39.10	49.99	54	74	-14.90	-24.01	Horizontal

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:

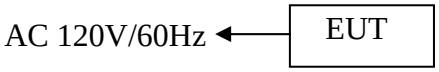
   Result = Reading + Corrected Factor

   Where Corrected Factor = Antenna Factor + Cable Loss + High Pass Filter Loss – Amplifier Gain
3. The spectral diagrams in appendix I display the measurement of peak values.

5. SPURIOUS RADIATED EMISSION FOR SECTION 15.249(D)

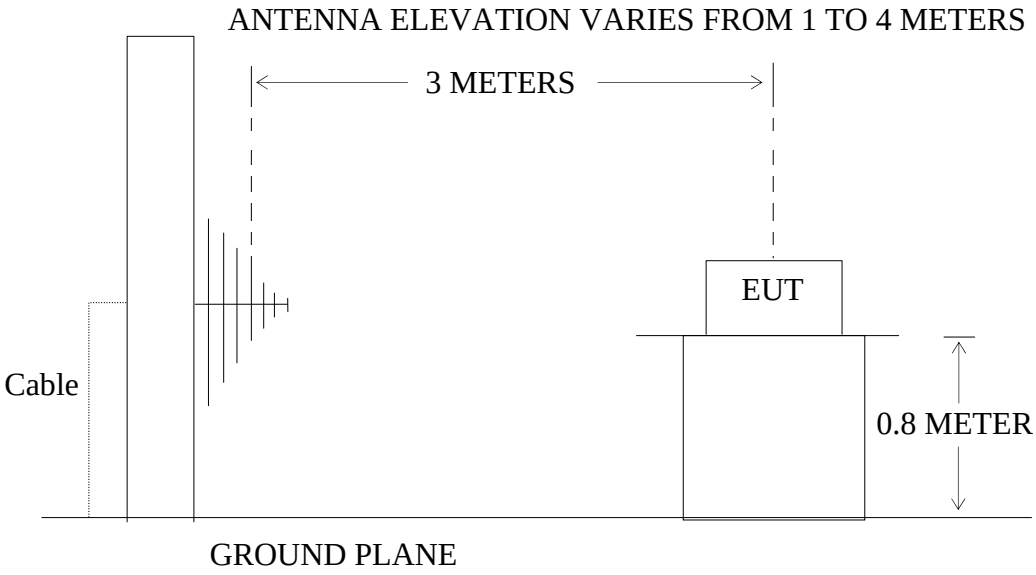
5.1.Block Diagram of Test Setup

5.1.1.Block diagram of connection between the EUT and simulators



(EUT: Soundbar)

5.1.2.Semi-Anechoic Chamber Test Setup Diagram



(EUT: Soundbar)

5.2.The Emission Limit For Section 15.249(d)

5.2.1.Emission radiated outside of the specified frequency bands, except for harmonics, shall be comply with the general radiated emission limits in Section 15.209.

Radiation Emission Measurement Limits According to Section 15.209

Frequency (MHz)	Limit		
	Field Strength (microvolts/meter)	Measurement Distance (meters)	The final measurement in band 9-90kHz, 110-490kHz and above 1000MHz is performed with Average detector.
0.009 – 0.490	2400/F(kHz)	300	

0.490 – 1.705	24000/F(kHz)	30	Except those frequency bands mention above, the final measurement for frequencies below 1000MHz is performed with Quasi Peak detector.
1.705 – 30.0	30	30	
30 - 88	100	3	
88 - 216	150	3	
216 - 960	200	3	
Above 960	500	3	

5.3.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.

5.3.1. Soundbar (EUT)

Model Number **:** A50-890
Serial Number **:** N/A
Manufacturer **:** SHENZHEN VANKE LOUDSPEAKER PRODUCTS CO., LTD.

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 TX modes measure it. The transmit frequency are 2404.000 - 2479.000 MHz. We are select 2404.000MHz, 2444.000MHz, 2479.000MHz TX frequency to transmit.

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: 2003 on radiated emission measurement. The EUT was tested in 3 orthogonal planes.

The bandwidth of test receiver is set at 9kHz in below 30MHz. and set at 120kHz in 30-1000MHz, and 1MHz in above 1000MHz.

The frequency range from 9kHz to 25GHz is checked.

The final measurement in band 9-90kHz, 110-490kHz and above 1000MHz is performed with Average detector. Except those frequency bands mention above, the final measurement for frequencies below 1000MHz is performed with Quasi Peak detector.

5.6. The Emission Measurement Result

PASS.

Date of Test:	April 2, 2012	Temperature:	25°C
EUT:	Soundbar	Humidity:	50%
Model No.:	A50-890	Power Supply:	AC 120V/60Hz
Test Mode:	TX 2404.000MHz	Test Engineer:	Pei

Below 30MHz

Frequency (MHz)	Reading (dBμV/m)	Factor(dB) Corr.	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
	QP		QP	QP	QP	
1.075	26.65	14.89	41.54	62.97	-21.43	X
1.075	26.08	14.89	40.97	62.97	-22.00	Y
1.075	26.23	14.89	41.12	62.97	-21.85	Z

30MHz-25GHz

Frequency (MHz)	Reading (dBμV/m)	Factor(dB) Corr.	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
	QP		QP	QP	QP	
48.5483	12.74	14.89	27.63	40.00	-12.37	Vertical
134.0194	18.27	14.72	32.99	43.50	-10.51	
398.2962	11.50	22.16	33.66	46.00	-12.34	
134.0194	20.92	14.72	35.64	43.50	-7.86	Horizontal
292.3643	23.26	18.61	41.87	46.00	-4.13	
809.9238	13.80	27.97	41.77	46.00	-4.23	

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 in appendix I display the measurement of peak values.

Date of Test:	April 2, 2012	Temperature:	25°C
EUT:	Soundbar	Humidity:	50%
Model No.:	A50-890	Power Supply:	AC 120V/60Hz
Test Mode:	TX 2444.000MHz	Test Engineer:	Pei

Below 30MHz

Frequency (MHz)	Reading (dBμV/m)	Factor(dB) Corr.	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
	QP		QP	QP	QP	
1.075	26.43	14.89	41.32	62.97	-21.65	X
1.075	26.52	14.89	41.41	62.97	-21.56	Y
1.075	26.31	14.89	41.20	62.97	-21.77	Z

30MHz-25GH

Frequency (MHz)	Reading (dBμV/m)	Factor(dB) Corr.	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
	QP		QP	QP	QP	
134.0194	18.56	14.72	33.28	43.50	-10.22	Vertical
319.2071	11.53	19.31	30.84	46.00	-15.16	
488.3263	9.12	23.92	33.04	46.00	-12.96	
292.3643	22.64	18.61	41.25	46.00	-4.75	Horizontal
363.5231	20.24	21.41	41.65	46.00	-4.35	
809.9238	13.21	27.97	41.18	46.00	-4.82	

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 in appendix I display the measurement of peak values.

Date of Test:	April 2, 2012	Temperature:	25°C
EUT:	Soundbar	Humidity:	50%
Model No.:	A50-890	Power Supply:	AC 120V/60Hz
Test Mode:	TX 2479.000MHz	Test Engineer:	Pei

Below 30MHz

Frequency (MHz)	Reading (dBμV/m)	Factor(dB) Corr.	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
	QP		QP	QP	QP	
1.075	27.02	14.89	41.91	62.97	-21.06	X
1.075	26.62	14.89	41.51	62.97	-21.56	Y
1.075	26.69	14.89	41.58	62.97	-21.39	Z

30MHz-25GH

Frequency (MHz)	Reading (dBμV/m)	Factor(dB) Corr.	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
	QP		QP	QP	QP	
48.3780	13.05	14.94	27.99	40.00	-12.01	Vertical
133.5493	18.09	14.74	32.83	43.50	-10.67	
488.3263	10.93	23.92	34.85	46.00	-11.15	
134.0194	21.64	14.72	36.36	43.50	-7.14	Horizontal
292.3643	23.13	18.61	41.74	46.00	-4.26	
809.9238	13.26	27.97	41.23	46.00	-4.77	

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 in appendix I display the measurement of peak values.

6. BAND EDGES

6.1.The Requirement

6.1.1.Band Edge from 2400MHz to 2483.5MHz. Emission radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in Section 15.209, whichever is the lesser attenuation.

6.2.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.

6.2.1. Soundbar (EUT)

Model Number	**:**	A50-890
Serial Number	**:**	N/A
Manufacturer	**:**	SHENZHEN VANKE LOUDSPEAKER PRODUCTS CO., LTD.

6.3.Operating Condition of EUT

6.3.1.Setup the EUT and simulator as shown as Section 4.1.

6.3.2.Turn on the power of all equipment.

6.3.3. Let the EUT work in TX modes measure it. The transmit frequency are 2404.000-2479.000MHz MHz. We are select 2404.000MHz, 2479.000MHz TX frequency to transmit.

6.4.Test Procedure

1. The EUT is placed on a turntable, which is 0.8m above the ground plane and worked at highest radiated power.
2. The turntable was rotated for 360 degrees to determine the position of maximum emission level.
3. EUT is set 3m away from the receiving antenna, which is varied from 1m to 4m to find out the highest emission.
4. Set the spectrum analyzer in the following setting in order to capture the lower and upper band-edges of the emission:
   RBW=1MHz, VBW=1MHz

6.5.The Measurement Result

Pass.

Date of Test:	April 2, 2012	Temperature:	25°C
EUT:	Soundbar	Humidity:	50%
Model No.:	A50-890	Power Supply:	AC 120V/60Hz
Test Mode:	TX 2404.000MHz	Test Engineer:	Pei

Frequency (MHz)	Reading(dBμV/m)		Factor(dB) Corr.	Result(dBμV/m)		Limit(dBμV/m)		Margin(dB)		Polarization
	AV	PEAK		AV	PEAK	AV	PEAK	AV	PEAK	
2399.939	48.64	58.66	-7.46	41.48	51.20	54	74	-12.82	-22.80	Vertical
2399.939	47.93	60.47	-7.46	40.47	53.01	54	74	-13.53	-20.99	Horizontal

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 in appendix I display the measurement of peak values.

Date of Test:	April 2, 2012	Temperature:	25°C
EUT:	Soundbar	Humidity:	50%
Model No.:	A50-890	Power Supply:	DC 3.0V
Test Mode:	TX 2479.000MHz	Test Engineer:	Pei

Frequency	Reading(dBμV/m)		Factor(dB)	Result(dBμV/m)		Limit(dBμV/m)		Margin(dB)		Polarization
(MHz)	AV	PEAK	Corr.	AV	PEAK	AV	PEAK	AV	PEAK	
2483.627	48.67	57.69	-7.37	41.30	50.32	54	74	-12.70	-23.68	Vertical
2483.627	48.24	57.55	-7.37	40.87	50.18	54	74	-13.13	-23.82	Horizontal

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:

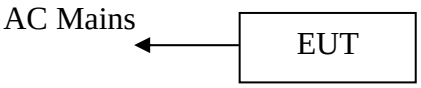
   Result = Reading + Corrected Factor

   Where Corrected Factor = Antenna Factor + Cable Loss + High Pass Filter Loss – Amplifier Gain
3. The spectral diagrams in appendix I display the measurement of peak values.

7. AC POWER LINE CONDUCTED EMISSION FOR FCC PART 15 SECTION 15.207(A)

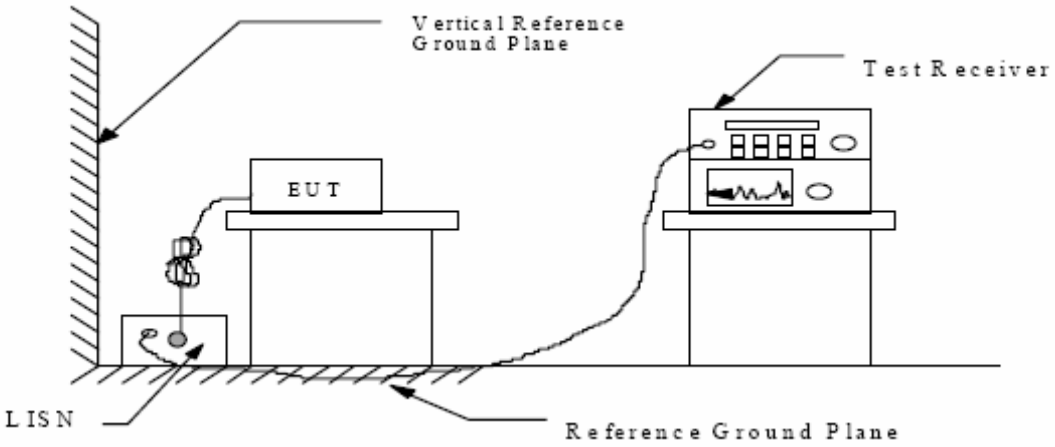
7.1.Block Diagram of Test Setup

7.1.1.Block diagram of connection between the EUT and simulators



(EUT: Soundbar)

7.1.2.Shielding Room Test Setup Diagram



(EUT: Soundbar)

7.2.The Emission Limit

7.2.1.Conducted Emission Measurement Limits According to Section 15.207(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.

7.3.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.

7.3.1.Soundbar (EUT)

Model Number	**:**	A50-890
Serial Number	**:**	N/A
Manufacturer	**:**	SHENZHEN VANKE LOUDSPEAKER PRODUCTS CO., LTD.

7.4.Operating Condition of EUT

7.4.1.Setup the EUT and simulator as shown as Section 7.1.

7.4.2.Turn on the power of all equipment.

7.4.3. Let the EUT work in Tx (Middle Channel: 2444MHz) mode measure it.

7.5.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: 2003 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.

7.6. Power Line Conducted Emission Measurement Results

PASS.

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

Date of Test:	April 2, 2012	Temperature:	25°C
EUT:	Soundbar	Humidity:	50%
Model No.:	A50-890	Power Supply:	AC 120V/ 60Hz
Test Mode:	Tx (Middle Channel: 2444MHz)	Test Engineer:	Kai

Frequency (MHz)	Result (dBμV)	Limit (dBμV)	Margin (dB)	Detector	Line
0.180236	44.70	64.5	-19.8	QP	Neutral
0.527486	40.30	56	-15.7	QP	
0.889871	31.60	56	-24.4	QP	
0.183870	31.40	54.3	-22.9	AV	
0.535976	26.60	46	-19.4	AV	
1.430998	19.50	46	-26.5	AV	
0.181681	44.60	64.4	-19.8	QP	Live
0.533841	40.30	56	-15.7	QP	
1.436722	33.20	56	-22.8	QP	
0.181681	31.90	54.4	-22.5	AV	
0.498814	26.40	46	-19.6	AV	
0.533841	26.60	46	-19.4	AV	

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

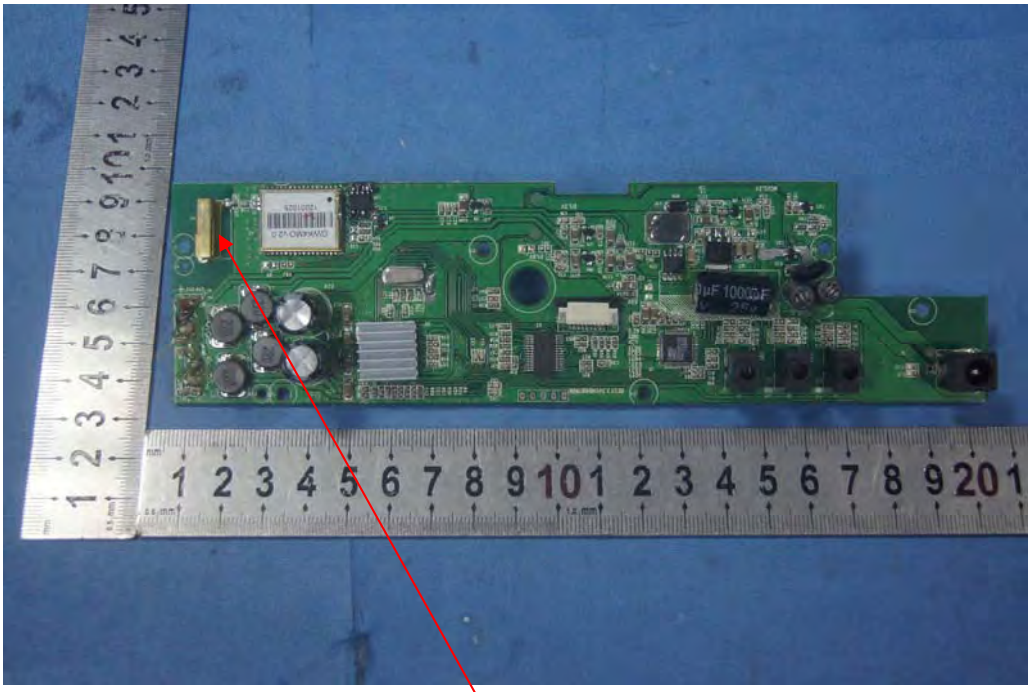
8. ANTENNA REQUIREMENT

8.1. The Requirement

8.1.1. According to Section 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.

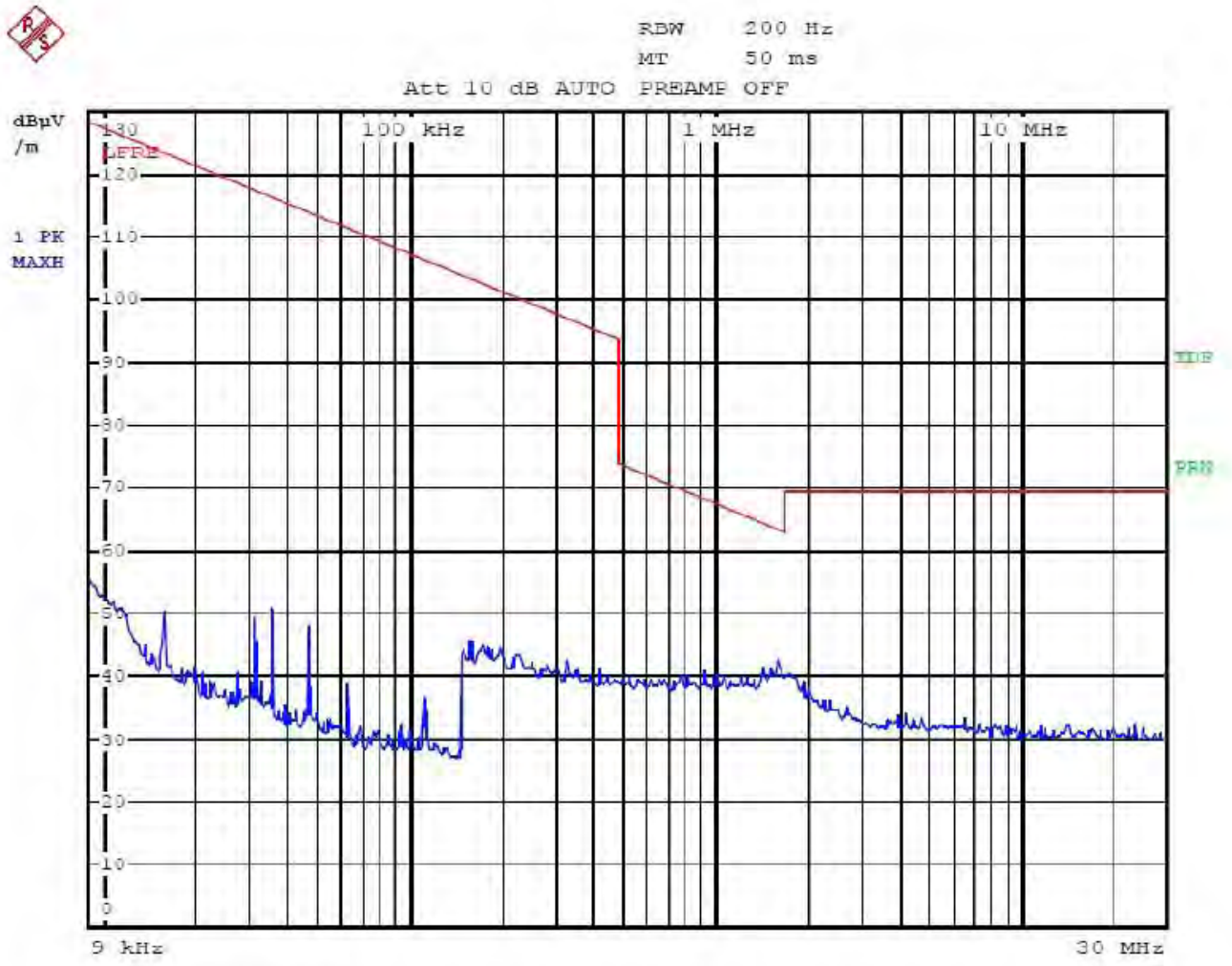
8.2. Antenna Construction

The antenna is PCB Layout antenna, no consideration of replacement.

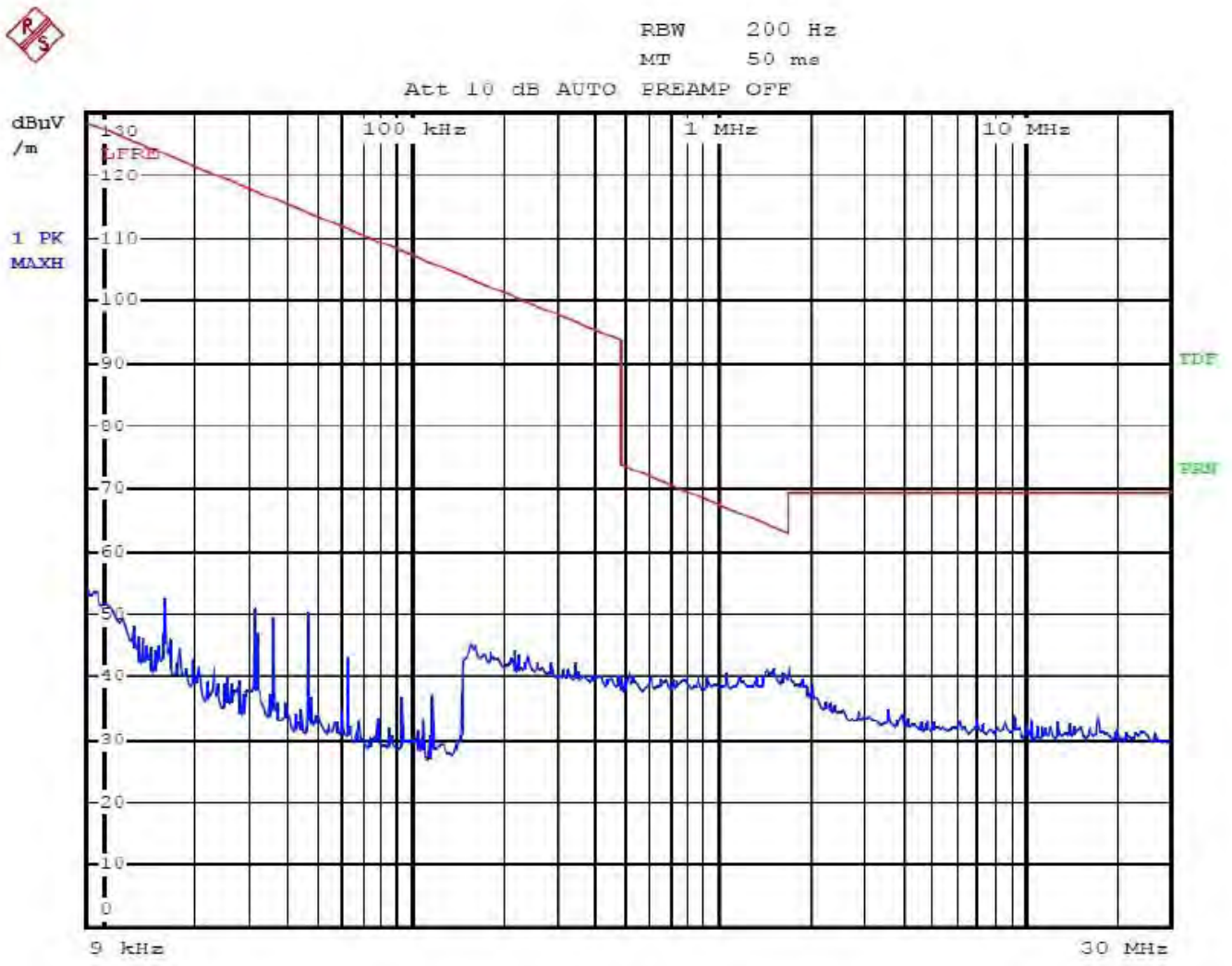


APPENDIX I
(Test Curves)

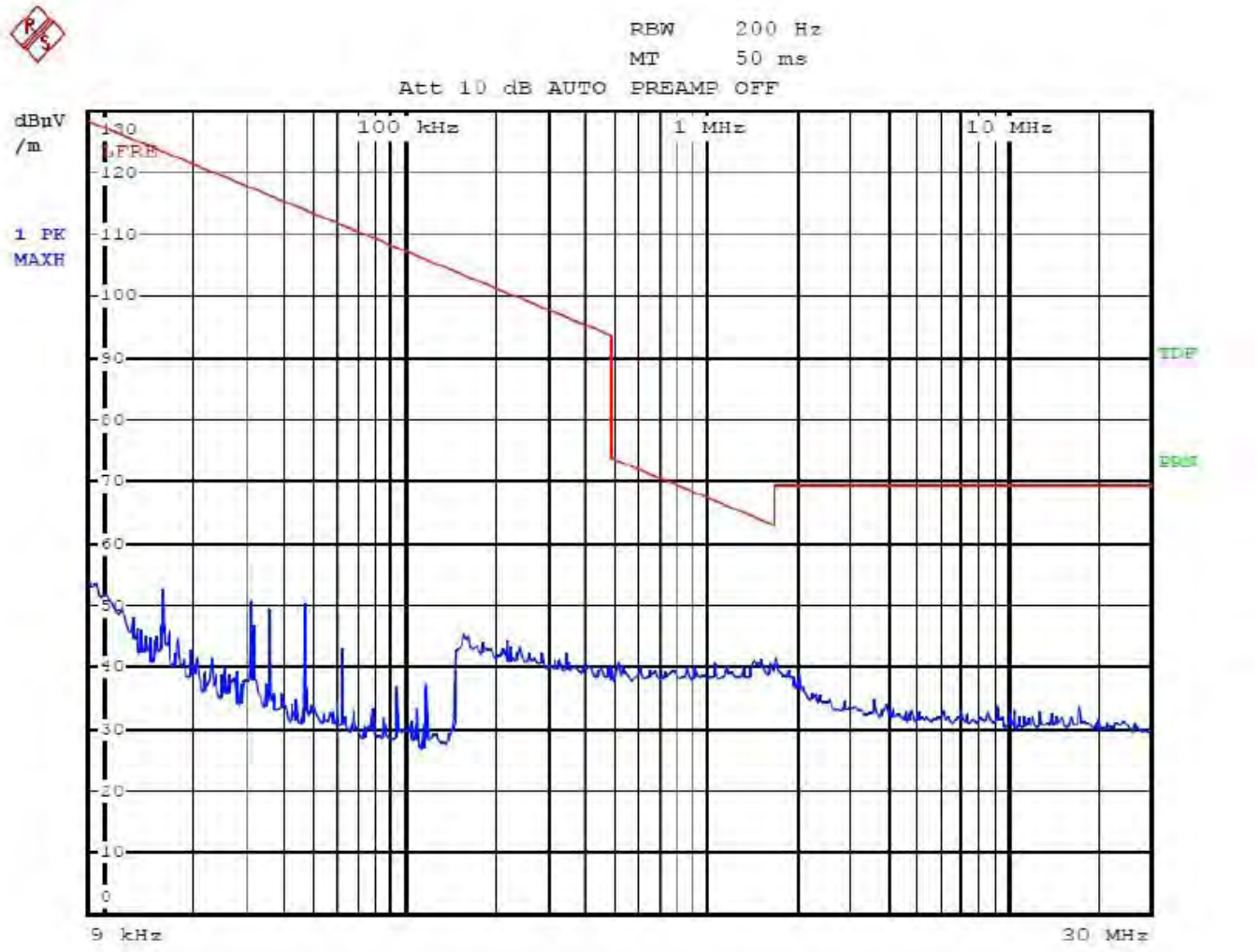
X(TX 2404):


RBW 200 Hz
MT 50 ms
Att 10 dB AUTO PREAMP OFF
dBµV
/m
1 PK
MAXH
130
120
110
100
90
80
70
60
50
40
30
20
10
0
100 kHz
1 MHz
10 MHz
9 kHz
30 MHz

Y: (TX 2404)


RBW 200 Hz
MT 50 ms
Att 10 dB AUTO PREAMP OFF
dBuV /m
1 PK MAXH
100 kHz
1 MHz
10 MHz
CLEAR
AVG
9 kHz
30 MHz

Z: (TX 2404)


RBW 200 Hz
MT 50 ms
Att 10 dB AUTO PREAMP OFF
dBuV /m
1 PK MAXH
100 kHz
1 MHz
10 MHz
130
120
110
100
90
80
70
60
50
40
30
20
10
0
9 kHz
30 MHz

ACCURATE TECHNOLOGY CO., LTD.
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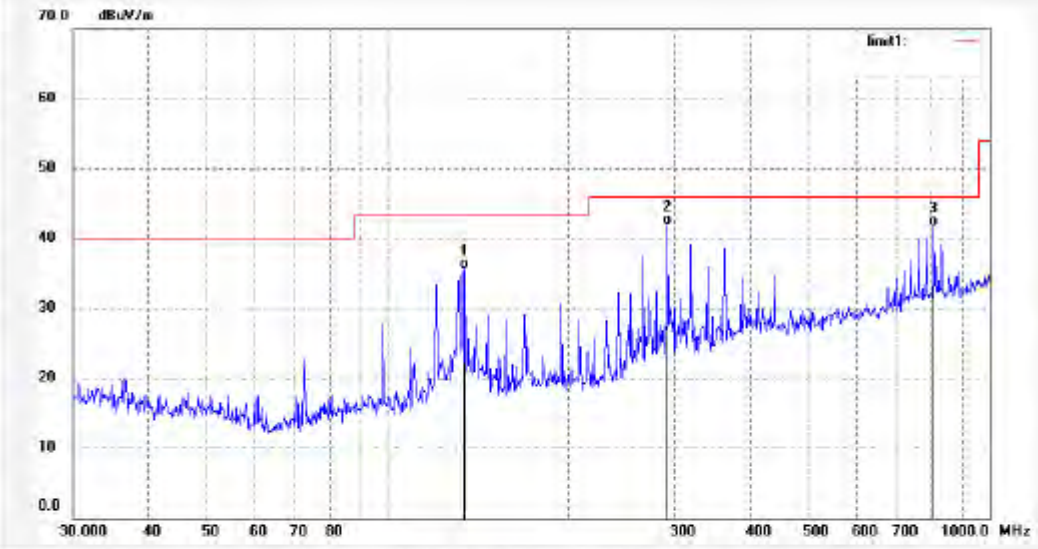
Job No.: Bob #1389	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 2012/04/02
Temp.(C)/Hum.(%) 24 C / 48 %	Time: 10:18:22
EUT: Soundbar	Engineer Signature:
Mode: TX 2404	Distance: 3m
Model: A50-890	
Manufacturer: VANKE	

Note: Reprot NO.:ATE20120569



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	134.0194	20.92	14.72	35.64	43.50	-7.86	QP			
2	292.3643	23.26	18.61	41.87	46.00	-4.13	QP			
3	809.9238	13.80	27.97	41.77	46.00	-4.23	QP			

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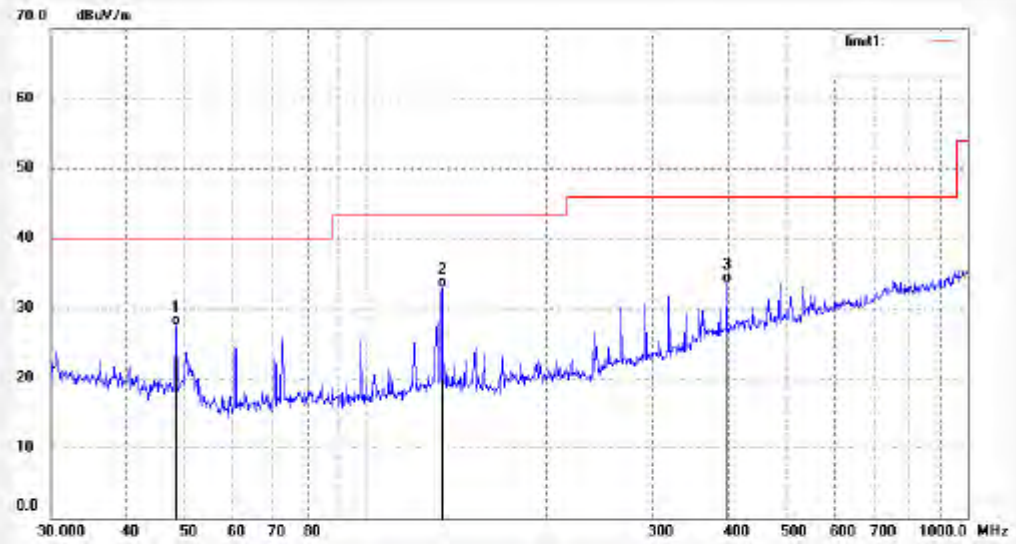
Job No.: Bob #1388	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 2012/04/02
Temp.(C)/Hum.(%) 24 C / 48 %	Time: 10:15:37
EUT: Soundbar	Engineer Signature:
Mode: TX 2404	Distance: 3m
Model: A50-890	
Manufacturer: VANKE	

Note: Reprot NO.:ATE20120569



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	48.5483	12.74	14.89	27.63	40.00	-12.37	QP			
2	134.0194	18.27	14.72	32.99	43.50	-10.51	QP			
3	398.2962	11.50	22.16	33.66	46.00	-12.34	QP			

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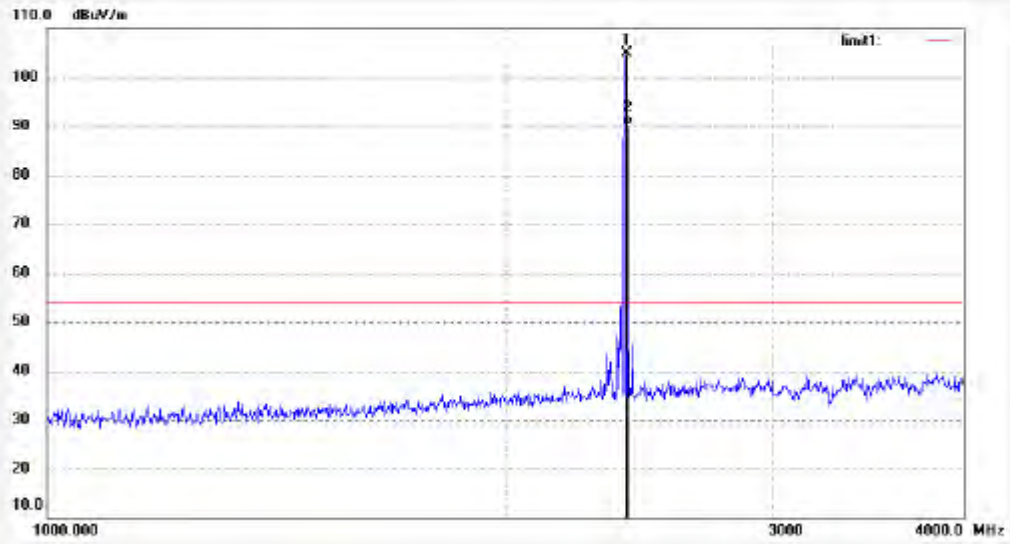
Fax:+86-0755-26503396

Job No.: Bob #1372	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 12/04/02/
Temp.(C)/Hum.(%) 24 C / 48 %	Time: 9/19/17
EUT: Soundbar	Engineer Signature:
Mode: TX 2404	Distance: 3m
Model: A50-890	
Manufacturer: VANKE	

Note: Reprot NO.:ATE20120569



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2404.000	112.37	-7.45	104.92	114.00	-9.08	peak			
2	2404.000	97.67	-7.45	89.22	94.00	-4.78	AVG			

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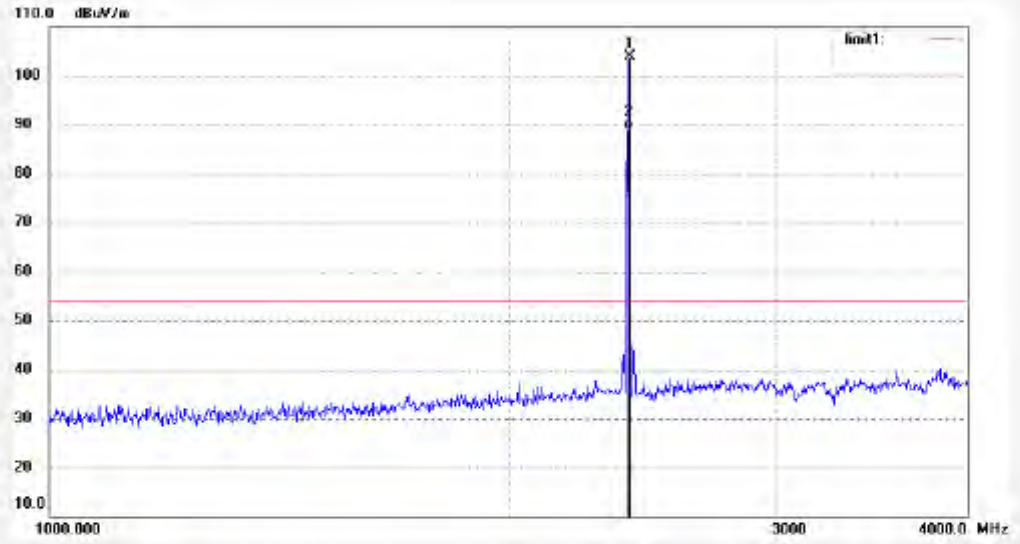
Job No.: Bob #1366
Standard: FCC Class B 3M Radiated
Test item: Radiation Test
Temp.(C)/Hum.(%) 24 C / 48 %
EUT: Soundbar
Mode: TX 2404
Model: A50-890
Manufacturer: VANKE

Polarization: Vertical
Power Source: AC 120V/60Hz
Date: 12/04/02/
Time: 9/03/41
Engineer Signature:
Distance: 3m

Note: Reprot NO.:ATE20120569



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2404.000	111.40	-7.45	103.95	114.00	-10.05	peak			
2	2404.000	96.31	-7.45	88.86	94.00	-5.14	AVG			

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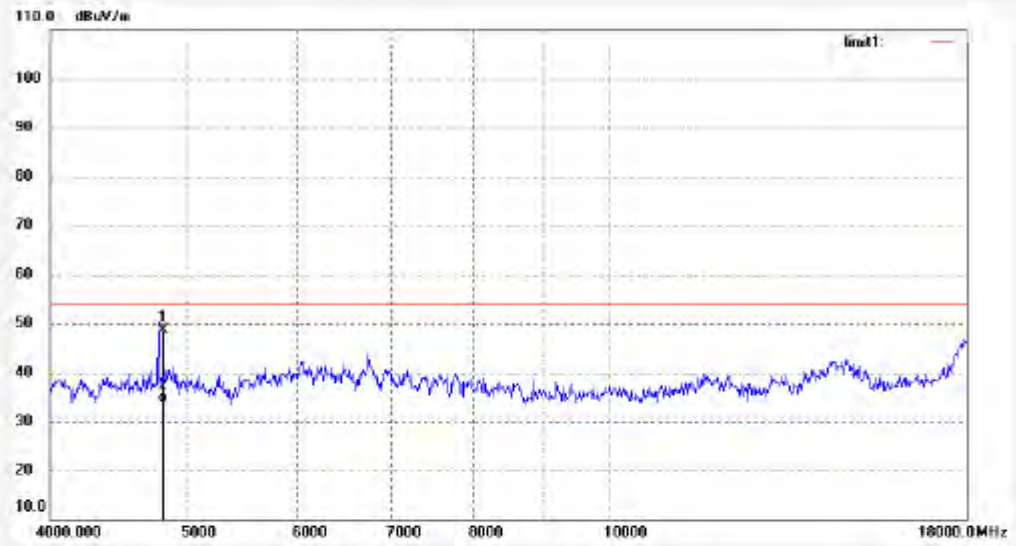
Job No.: Bob #1374
Standard: FCC Class B 3M Radiated
Test item: Radiation Test
Temp.(C)/Hum.(%) 24 C / 48 %
EUT: Soundbar
Mode: TX 2404
Model: A50-890
Manufacturer: VANKE

Polarization: Horizontal
Power Source: AC 120V/60Hz
Date: 12/04/02/
Time: 9/29/39
Engineer Signature:
Distance: 3m

Note: Reprot NO.:ATE20120569



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	4808.000	48.88	-0.28	48.60	74.00	-25.40	peak			
2	4808.000	34.19	-0.28	33.91	54.00	-20.09	AVG			

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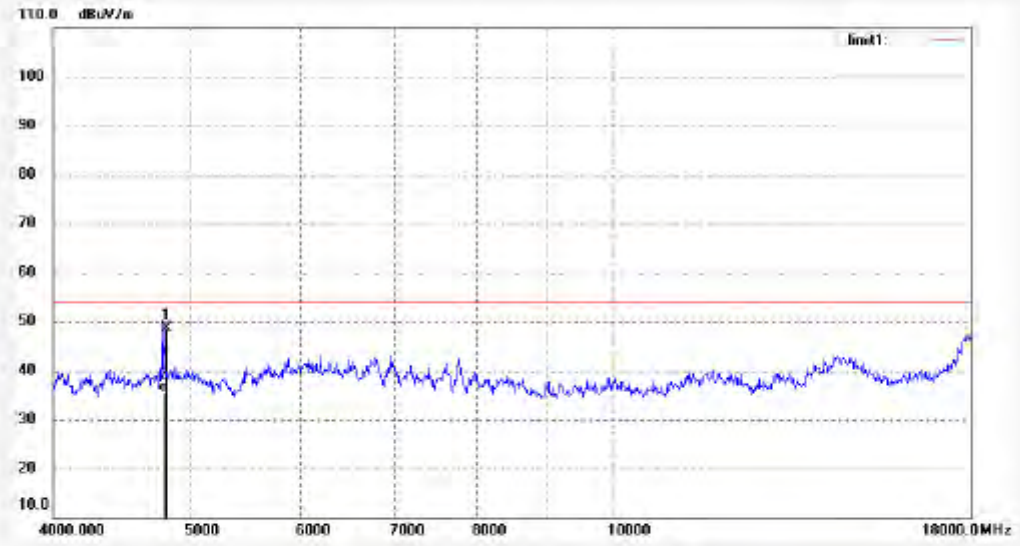
Fax:+86-0755-26503396

Job No.: Bob #1373	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 12/04/02/
Temp.(C)/Hum.(%) 24 C / 48 %	Time: 9/27/54
EUT: Soundbar	Engineer Signature:
Mode: TX 2404	Distance: 3m
Model: A50-890	
Manufacturer: VANKE	

Note: Reprot NO.:ATE20120569



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	4808.000	48.87	-0.28	48.59	74.00	-25.41	peak			
2	4808.000	35.93	-0.28	35.65	54.00	-18.35	AVG			

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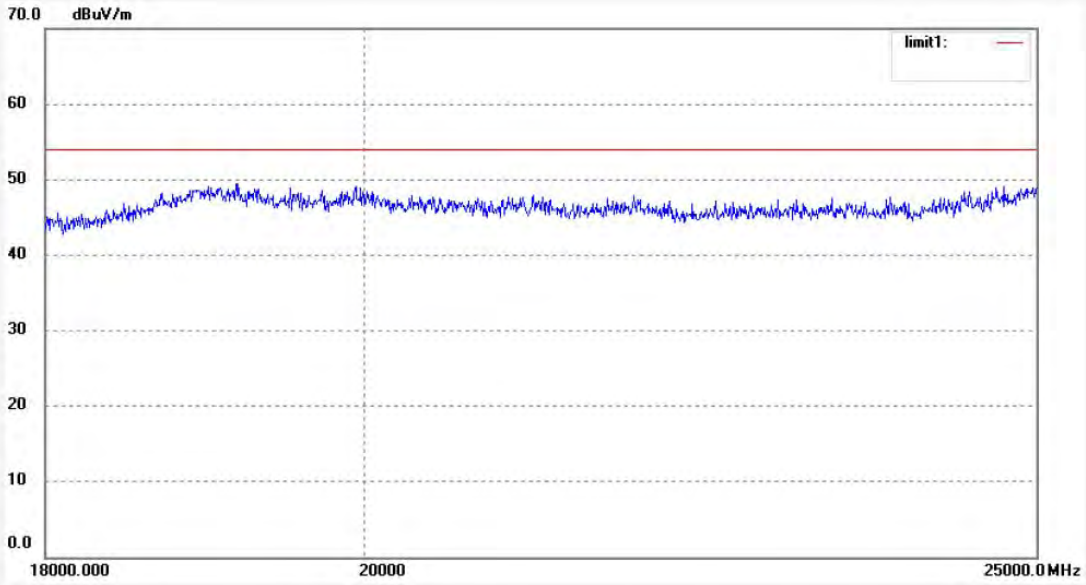
Job No.: Bob #899	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 2012/04/02
Temp.(C)/Hum.(%) 25 C / 50 %	Time: 11:44:35
EUT: Soundbar	Engineer Signature: Bob
Mode: TX 2404	Distance: 3m
Model: A50-890	
Manufacturer: VANKEI	

Note: Report No.:ATE20120569



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark

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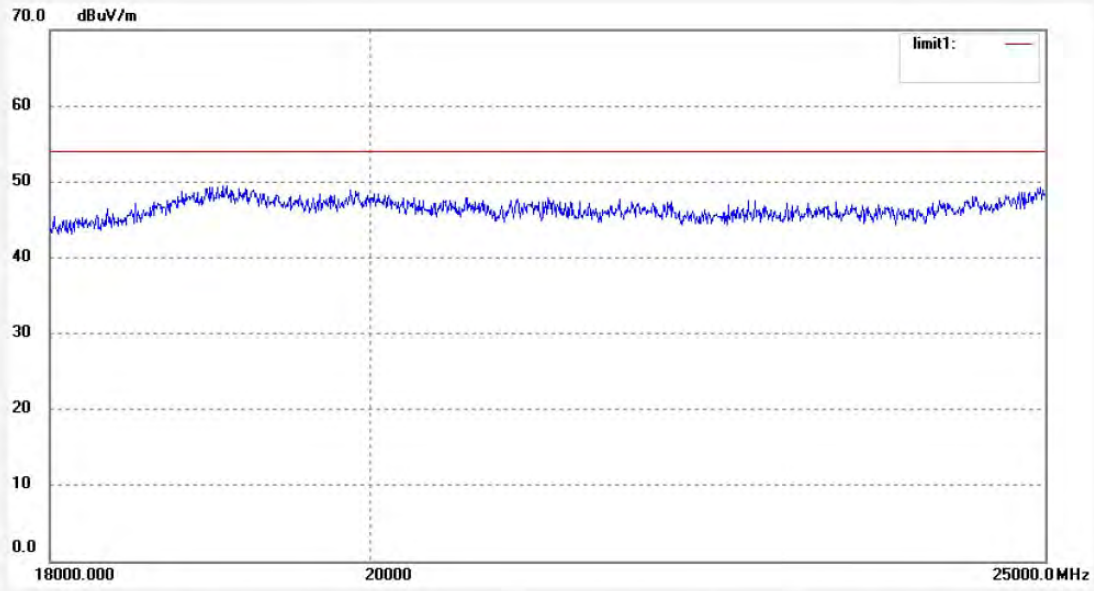
Fax:+86-0755-26503396

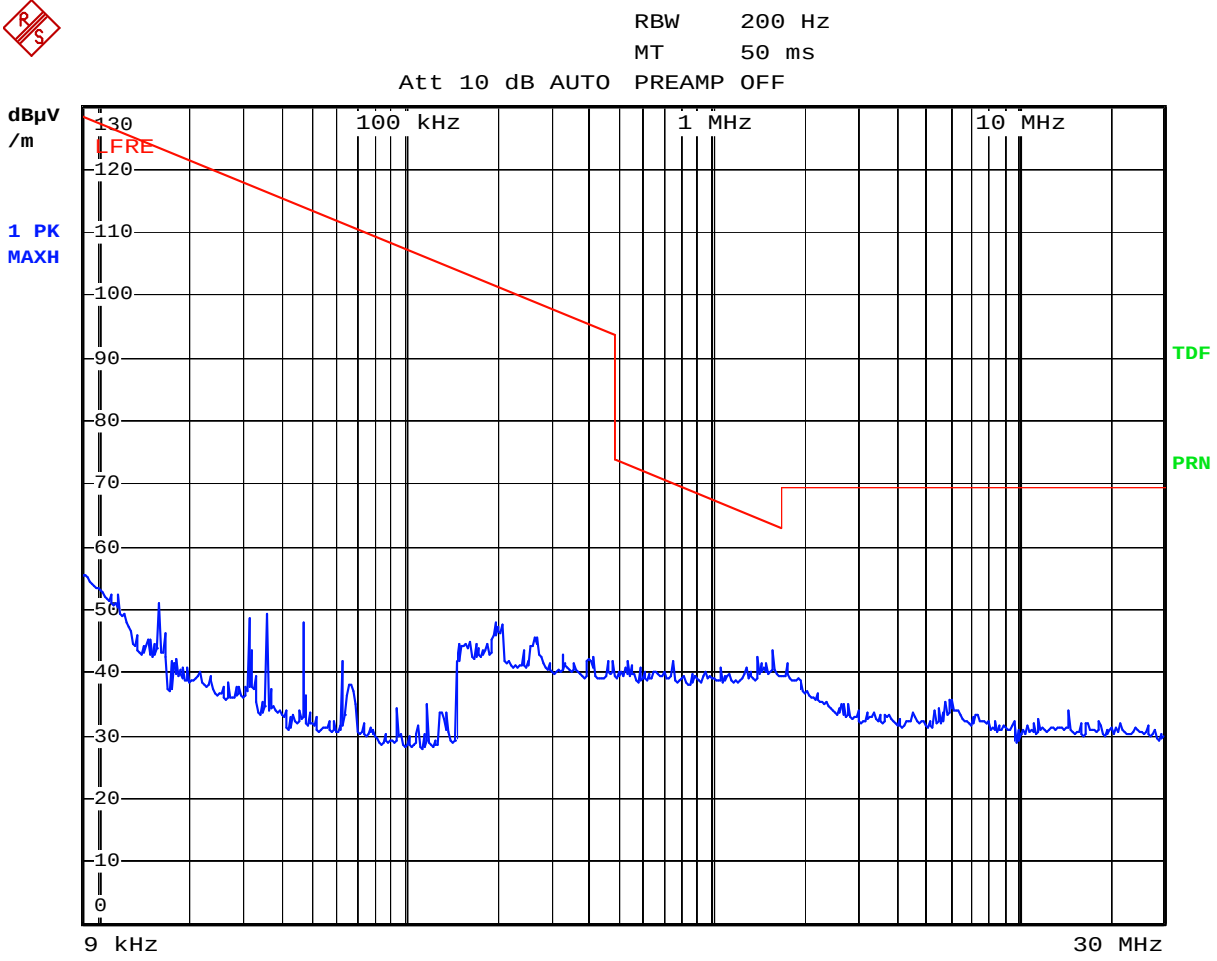
Job No.: Bob #898	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 2012/04/02
Temp.(C)/Hum.(%) 25 C / 50 %	Time: 11:40:09
EUT: Soundbar	Engineer Signature: Bob
Mode: TX 2404	Distance: 3m
Model: A50-890	
Manufacturer: VANKE	

Note: Report No.:ATE20120569

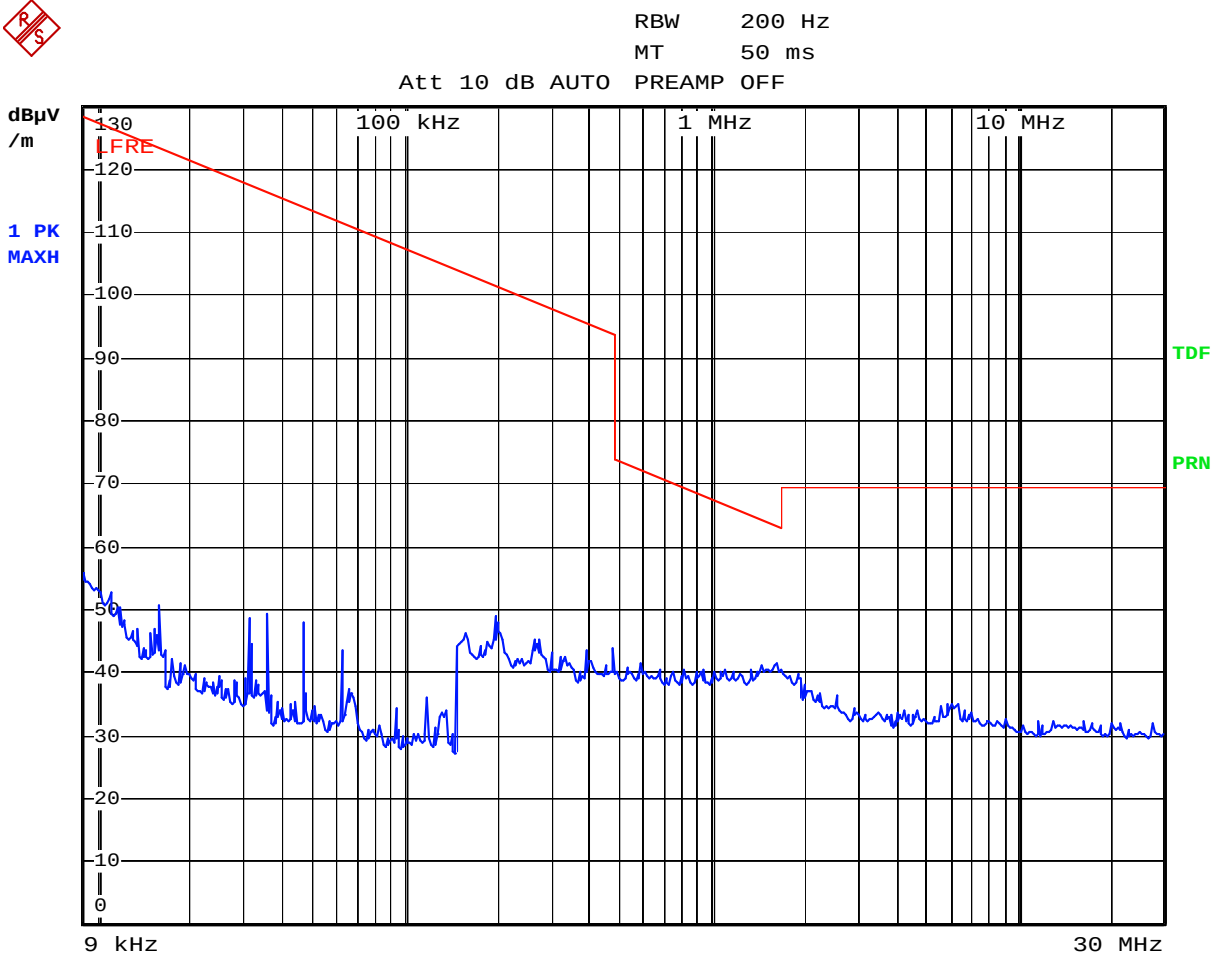


No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark

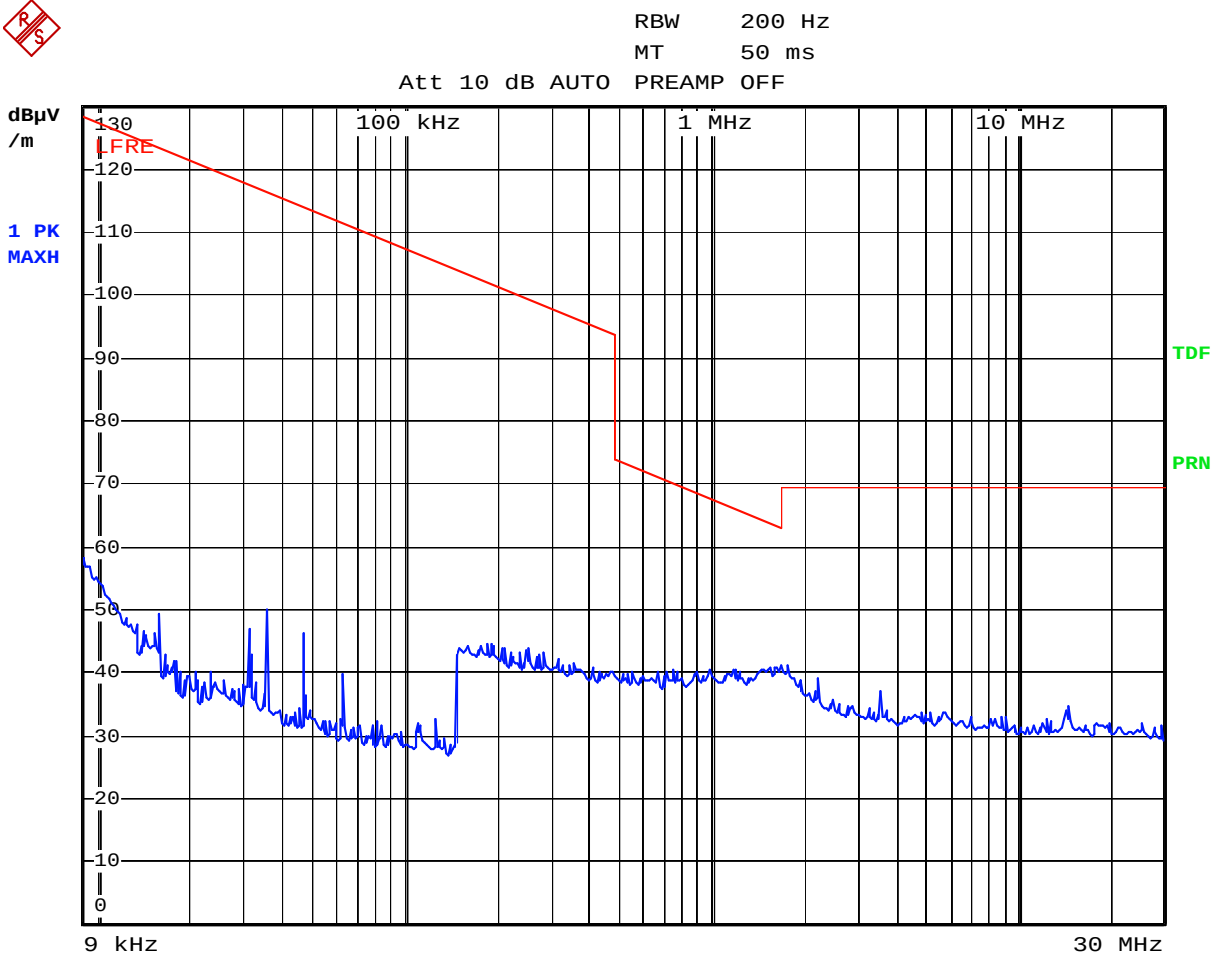
X(TX 2444):


RBW 200 Hz
MT 50 ms
Att 10 dB AUTO PREAMP OFF
dBµV
/m
1 PK
MAXH
130
120
110
100
90
80
70
60
50
40
30
20
10
0
100 kHz
1 MHz
10 MHz
LFRE
TDF
PRN
9 kHz
30 MHz

Y: (TX 2444)


RBW 200 Hz
MT 50 ms
Att 10 dB AUTO PREAMP OFF
dBµV
/m
1 PK
MAXH
130
120
110
100
90
80
70
60
50
40
30
20
10
0
100 kHz
1 MHz
10 MHz
LFRE
TDF
PRN
9 kHz
30 MHz

Z: (TX 2444)


RBW 200 Hz
MT 50 ms
Att 10 dB AUTO PREAMP OFF
dBµV
/m
1 PK
MAXH
130
120
110
100
90
80
70
60
50
40
30
20
10
0
100 kHz
1 MHz
10 MHz
LFRE
TDF
PRN
9 kHz
30 MHz

ACCURATE TECHNOLOGY CO., LTD.
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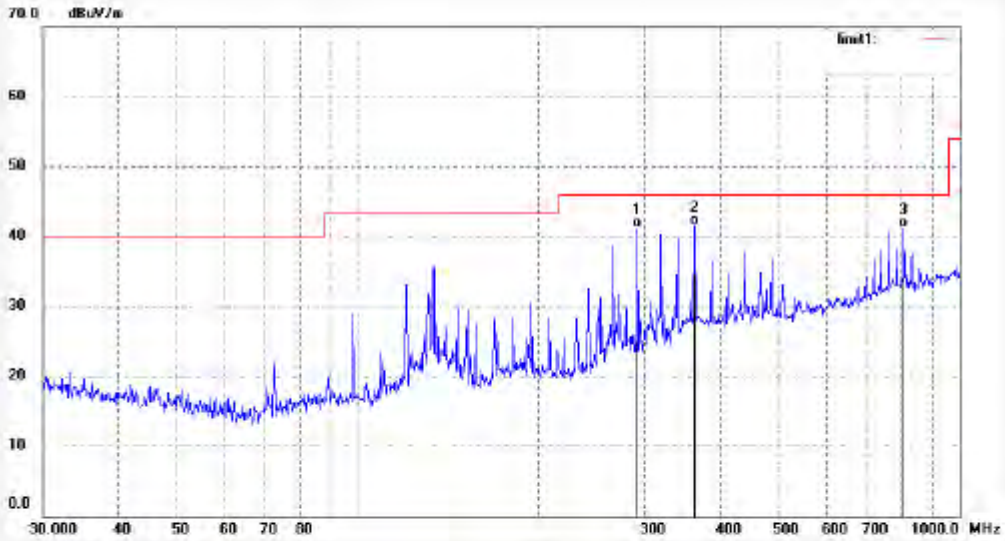
Job No.: Bob #1386
Standard: FCC Class B 3M Radiated
Test item: Radiation Test
Temp.(C)/Hum.(%) 24 C / 48 %
EUT: Soundbar
Mode: TX 2444
Model: A50-890
Manufacturer: VANKE

Polarization: Horizontal
Power Source: AC 120V/60Hz
Date: 2012/04/02
Time: 10:07:22
Engineer Signature:
Distance: 3m

Note: Reprot NO.:ATE20120569



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	292.3643	22.64	18.61	41.25	46.00	-4.75	QP			
2	363.5231	20.24	21.41	41.65	46.00	-4.35	QP			
3	809.9238	13.21	27.97	41.18	46.00	-4.82	QP			

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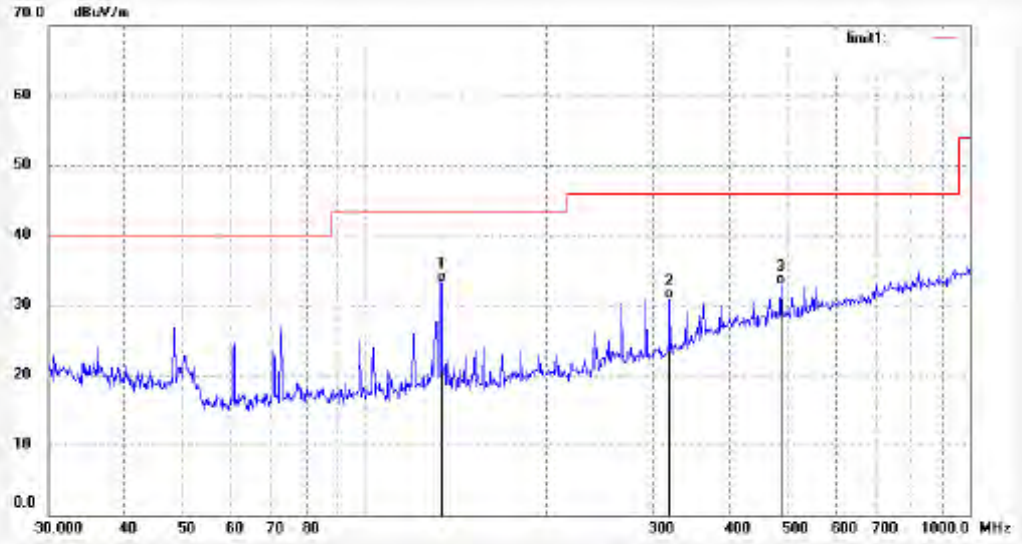
Fax:+86-0755-26503396

Job No.: Bob #1387
Standard: FCC Class B 3M Radiated
Test item: Radiation Test
Temp.(C)/Hum.(%) 24 C / 48 %
EUT: Soundbar
Mode: TX 2444
Model: A50-890
Manufacturer: VANKE

Polarization: Vertical
Power Source: AC 120V/60Hz
Date: 2012/04/02
Time: 10:10:37
Engineer Signature:
Distance: 3m

Note: Reprot NO.:ATE20120569



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	134.0194	18.56	14.72	33.28	43.50	-10.22	QP			
2	319.2071	11.53	19.31	30.84	46.00	-15.16	QP			
3	488.3263	9.12	23.92	33.04	46.00	-12.96	QP			

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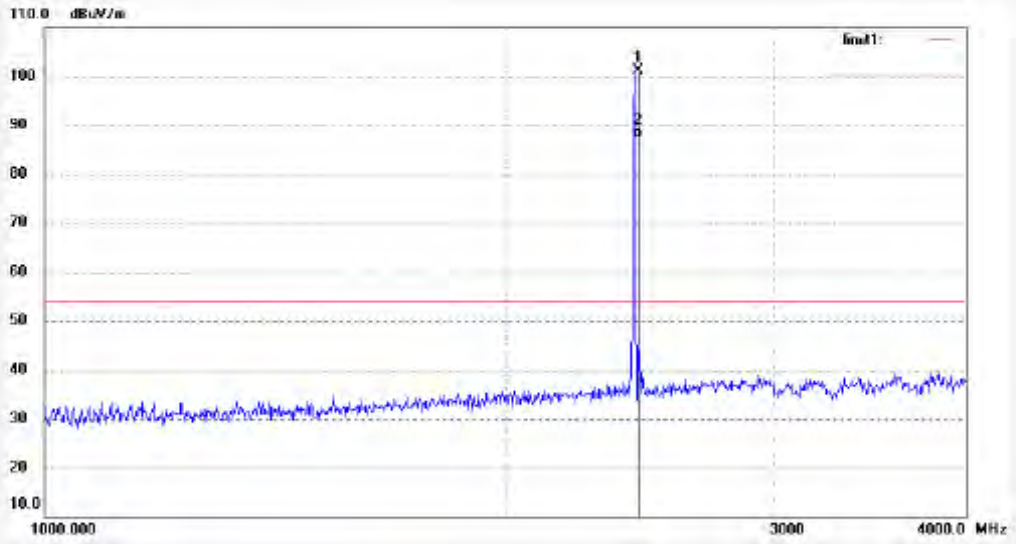
Site: 966 chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: Bob #1363
Standard: FCC Class B 3M Radiated
Test item: Radiation Test
Temp.(C)/Hum.(%) 24 C / 48 %
EUT: Soundbar
Mode: TX 2444
Model: A50-890
Manufacturer: VANKE

Polarization: Horizontal
Power Source: AC 120V/60Hz
Date: 12/04/02/
Time: 8/37/57
Engineer Signature:
Distance: 3m

Note: Reprot NO.:ATE20120569



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2444.000	108.58	-7.35	101.23	114.00	-12.77	peak			
2	2444.000	94.66	-7.35	87.31	94.00	-6.69	AVG			

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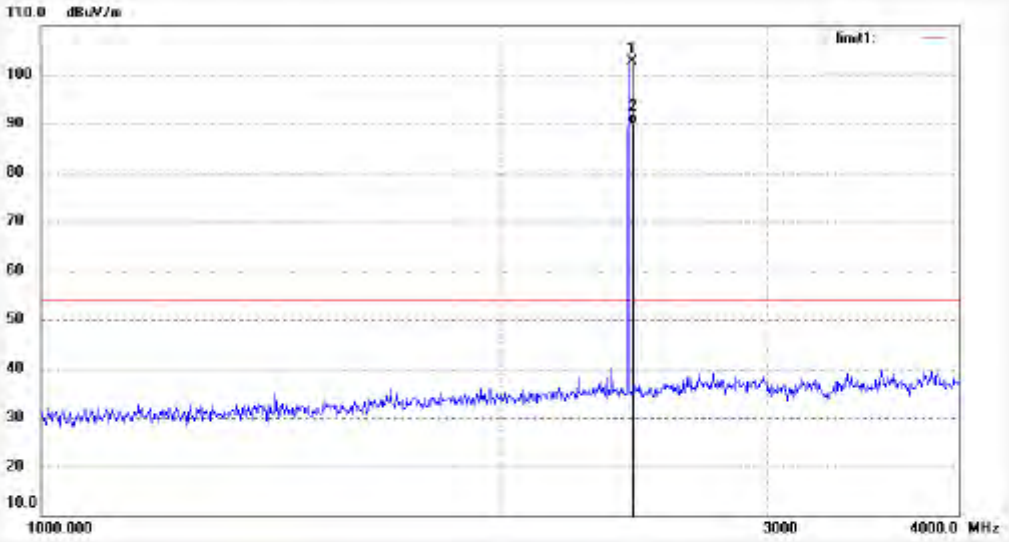
Fax:+86-0755-26503396

Job No.: Bob #1362	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 12/04/02/
Temp.(C)/Hum.(%) 24 C / 48 %	Time: 8/35/51
EUT: Soundbar	Engineer Signature:
Mode: TX 2444	Distance: 3m
Model: A50-890	
Manufacturer: VANKE	

Note: Reprot NO.:ATE20120569



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2444.000	109.96	-7.35	102.61	114.00	-11.39	peak			
2	2444.000	97.15	-7.35	89.80	94.00	-4.21	AVG			

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Site: 966 chamber
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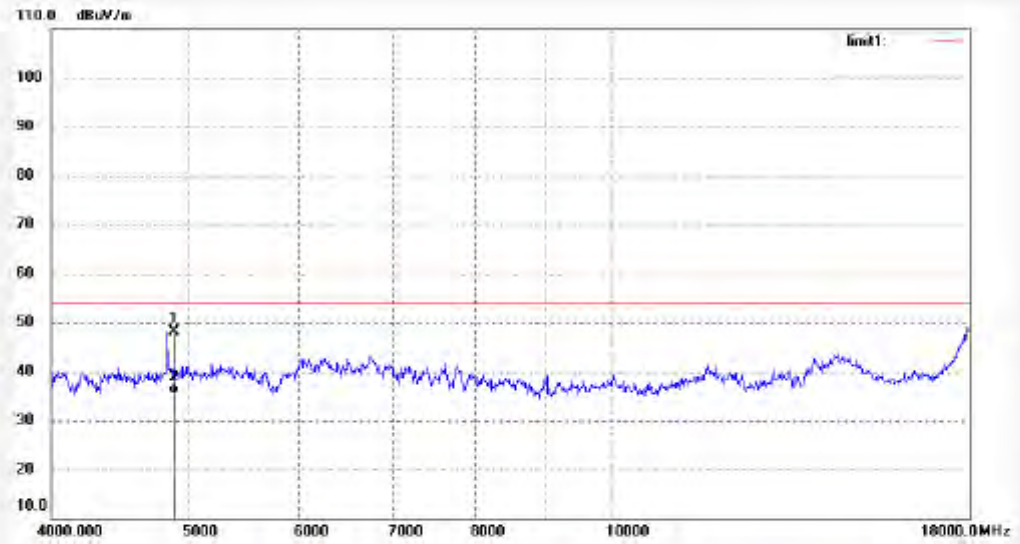
Fax:+86-0755-26503396

Job No.: Bob #1364
Standard: FCC Class B 3M Radiated
Test item: Radiation Test
Temp.(C)/Hum.(%) 24 C / 48 %
EUT: Soundbar
Mode: TX 2444
Model: A50-890
Manufacturer: VANKE

Polarization: Horizontal
Power Source: AC 120V/60Hz
Date: 12/04/02/
Time: 8/39/36
Engineer Signature:
Distance: 3m

Note: Reprot NO.:ATE20120569



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	4888.000	47.97	0.17	48.14	74.00	-25.86	peak			
2	4888.000	35.15	0.17	35.32	54.00	-18.68	AVG			

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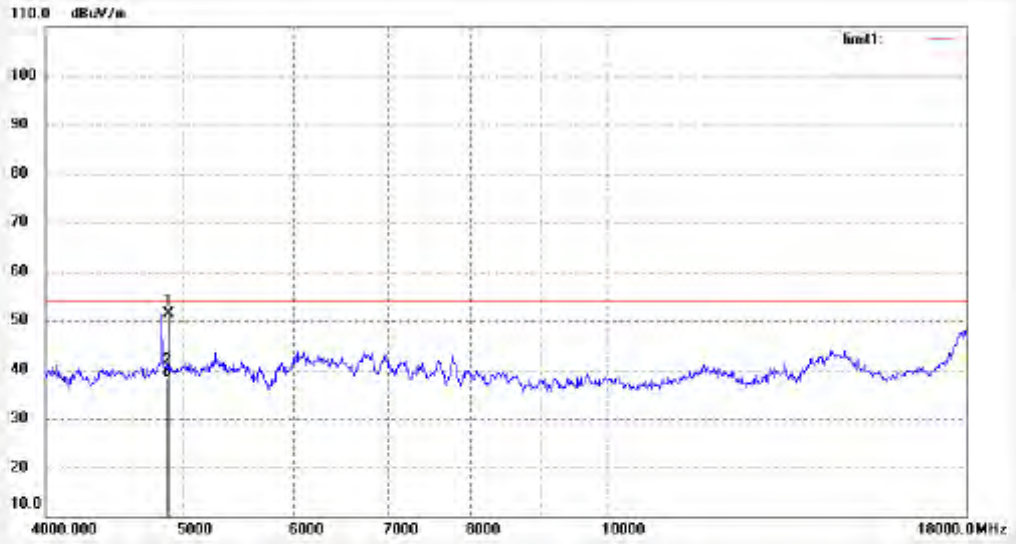
Job No.: Bob #1365
Standard: FCC Class B 3M Radiated
Test item: Radiation Test
Temp.(C)/Hum.(%) 24 C / 48 %
EUT: Soundbar
Mode: TX 2444
Model: A50-890
Manufacturer: VANKE

Polarization: Vertical
Power Source: AC 120V/60Hz
Date: 12/04/02/
Time: 8/43/13
Engineer Signature:
Distance: 3m

Note: Reprot NO.:ATE20120569



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	4888.000	51.32	0.17	51.49	74.00	-22.51	peak			
2	4888.000	38.22	0.17	38.39	54.00	-15.61	AVG			

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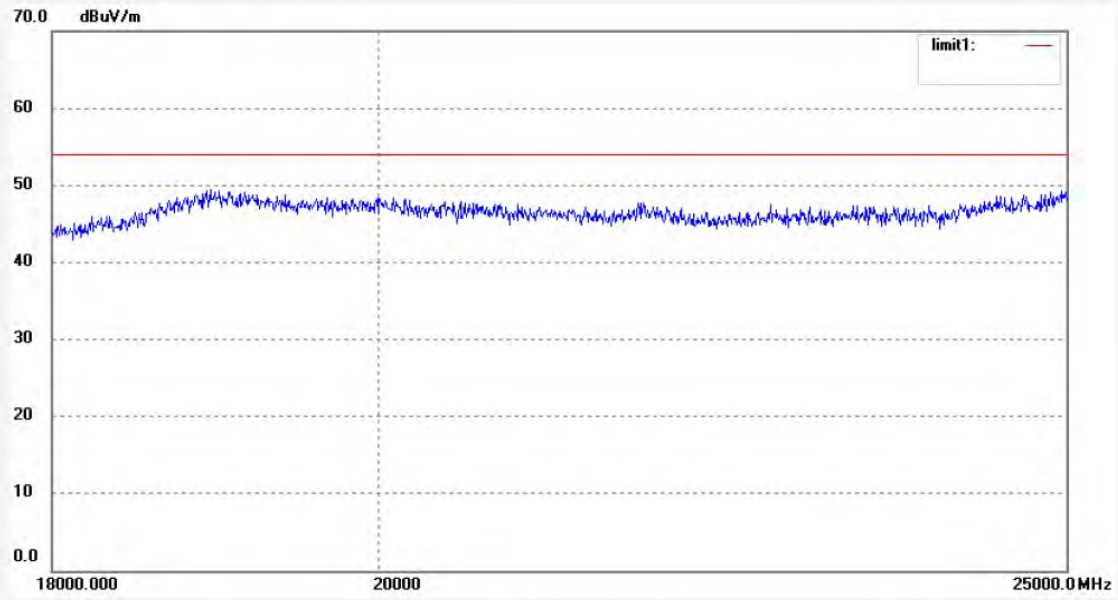
Fax:+86-0755-26503396

Job No.: Bob #896	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 2012/04/02
Temp.(C)/Hum.(%) 25 C / 50 %	Time: 11:30:31
EUT: Soundbar	Engineer Signature: Bob
Mode: TX 2444	Distance: 3m
Model: A50-890	
Manufacturer: VANKE	

Note: Report No.:ATE20120569



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark

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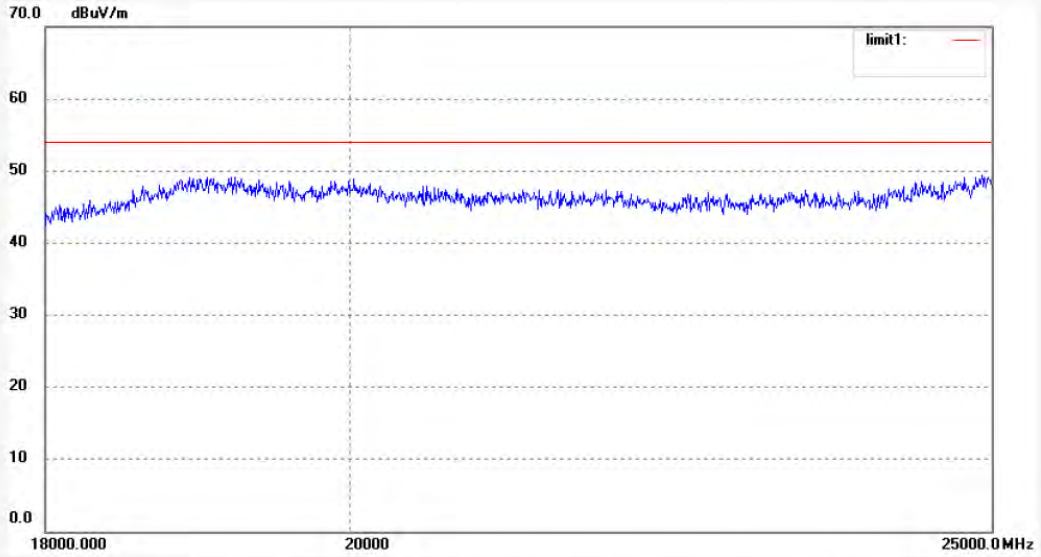
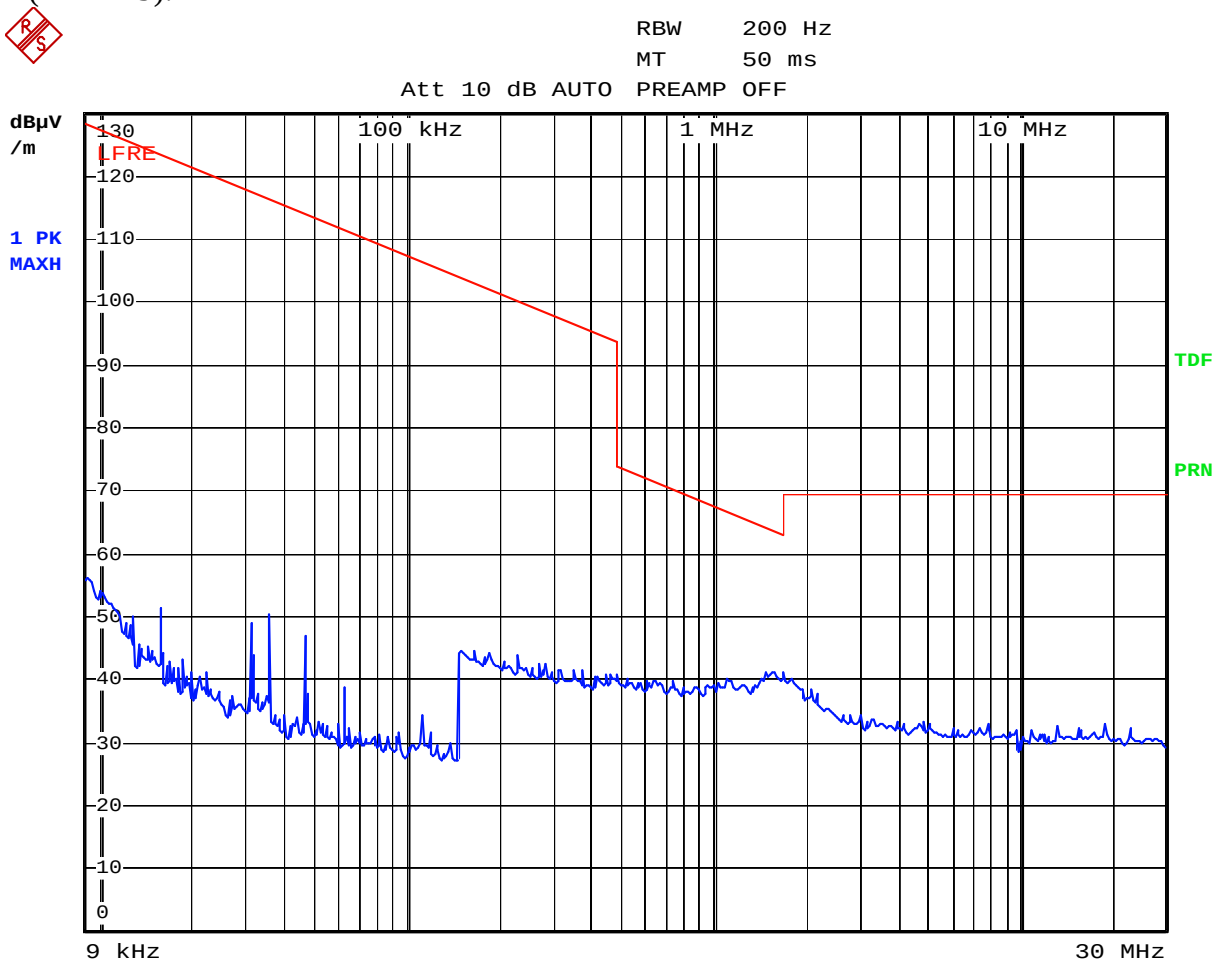
Job No.: Bob #897	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 2012/04/02
Temp.(C)/Hum.(%) 25 C / 50 %	Time: 11:34:51
EUT: Soundbar	Engineer Signature: Bob
Mode: TX 2444	Distance: 3m
Model: A50-890	
Manufacturer: VANKE	

Note: Report No.:ATE20120569

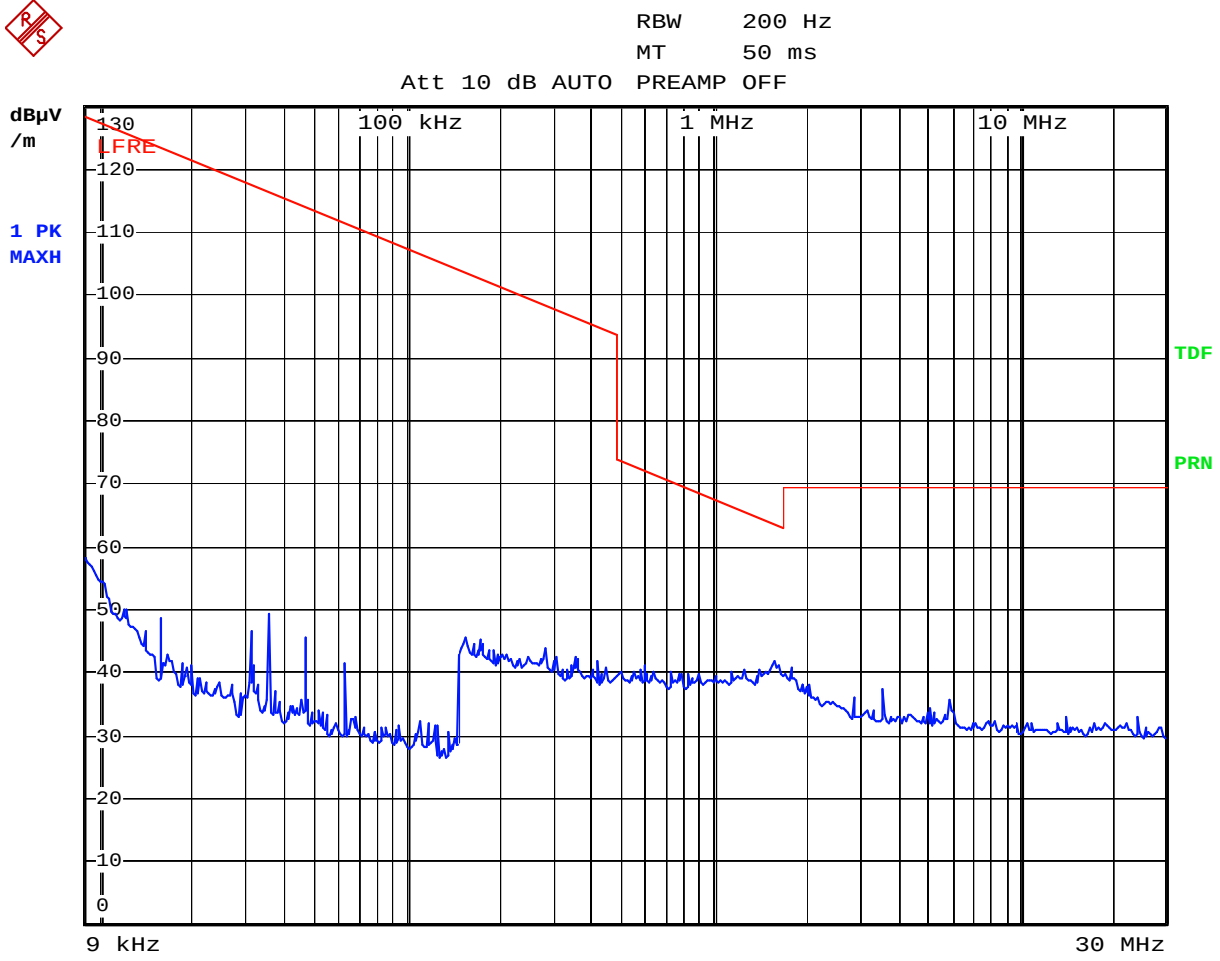


No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark

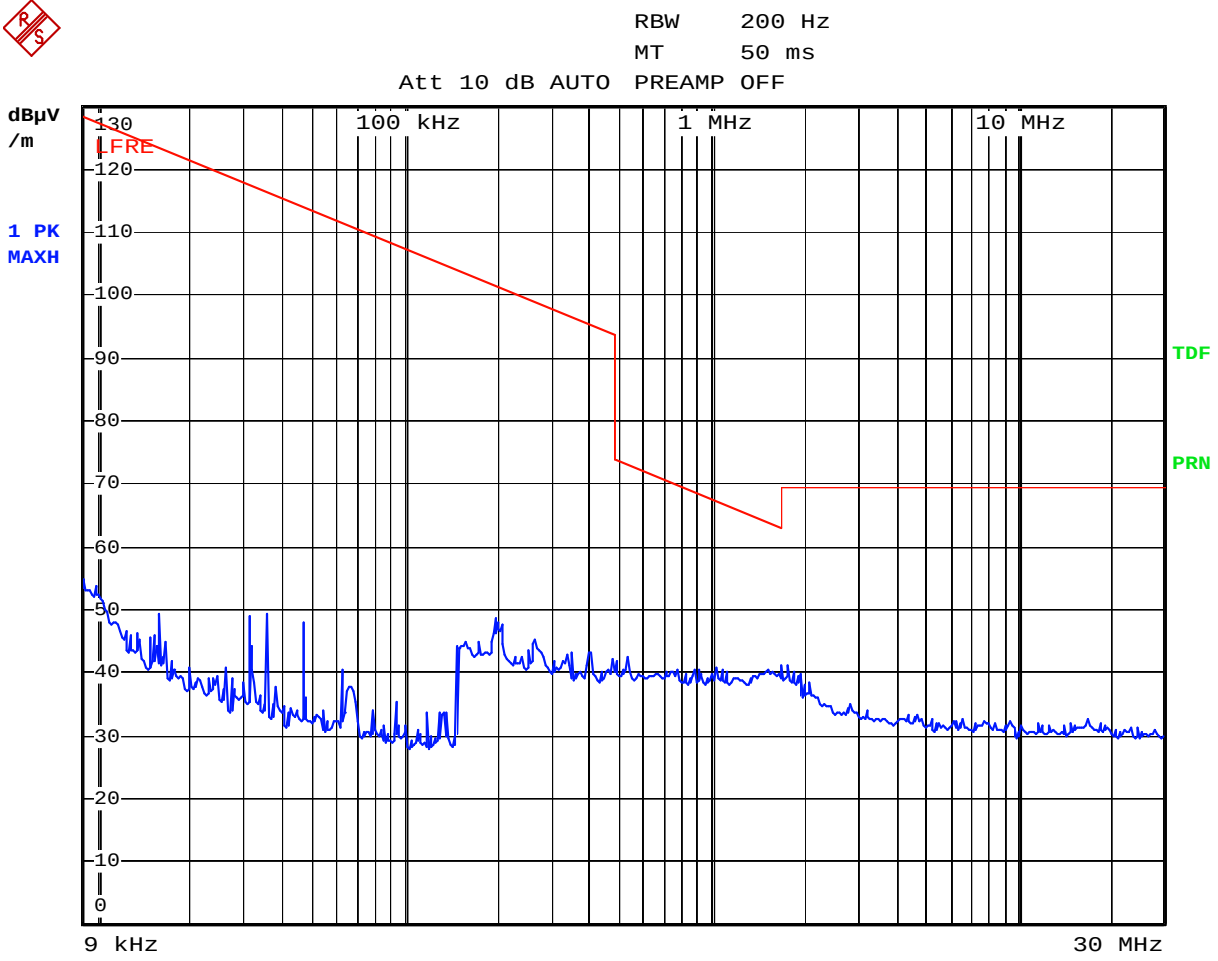
X(TX 2479):


RBW 200 Hz
MT 50 ms
Att 10 dB AUTO PREAMP OFF
dBµV
/m
1 PK
MAXH
130
120
110
100
90
80
70
60
50
40
30
20
10
0
100 kHz
1 MHz
10 MHz
TDF
PRN
9 kHz
30 MHz

Y: (TX 2479)


RBW 200 Hz
MT 50 ms
Att 10 dB AUTO PREAMP OFF
dBµV
/m
1 PK
MAXH
130
120
110
100
90
80
70
60
50
40
30
20
10
0
100 kHz
1 MHz
10 MHz
LFRE
TDF
PRN
9 kHz
30 MHz

Z: (TX 2479)


RBW 200 Hz
MT 50 ms
Att 10 dB AUTO PREAMP OFF
dBµV
/m
1 PK
MAXH
130
120
110
100
90
80
70
60
50
40
30
20
10
0
LFRE
100 kHz
1 MHz
10 MHz
TDF
PRN
9 kHz
30 MHz

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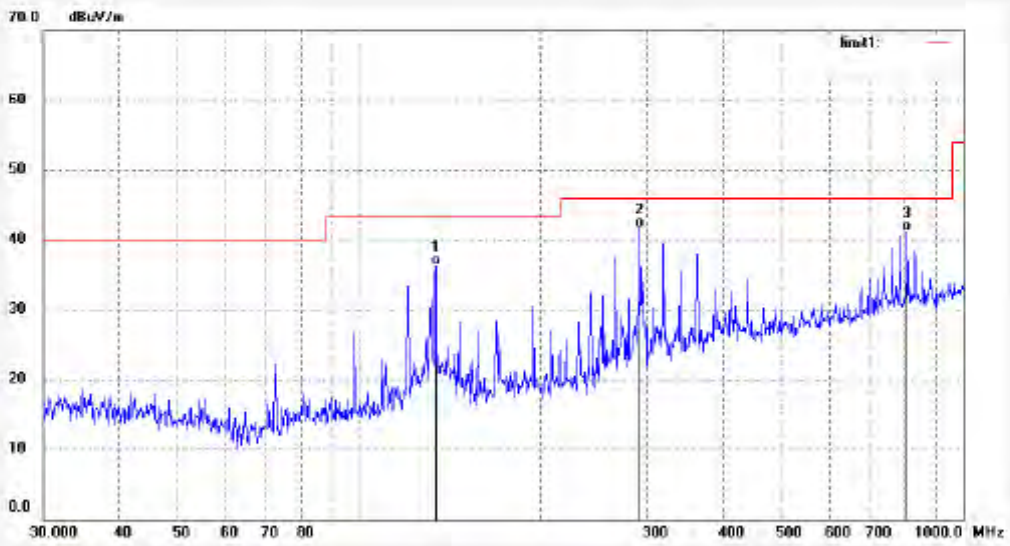
Fax:+86-0755-26503396

Job No.: Bob #1385
Standard: FCC Class B 3M Radiated
Test item: Radiation Test
Temp.(C)/Hum.(%) 24 C / 48 %
EUT: Soundbar
Mode: TX 2479
Model: A50-890
Manufacturer: VANKE

Polarization: Horizontal
Power Source: AC 120V/60Hz
Date: 2012/04/02
Time: 10:04:11
Engineer Signature:
Distance: 3m

Note: Reprot NO.:ATE20120569



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	134.0194	21.64	14.72	36.36	43.50	-7.14	QP			
2	292.3643	23.13	18.61	41.74	46.00	-4.26	QP			
3	809.9238	13.26	27.97	41.23	46.00	-4.77	QP			

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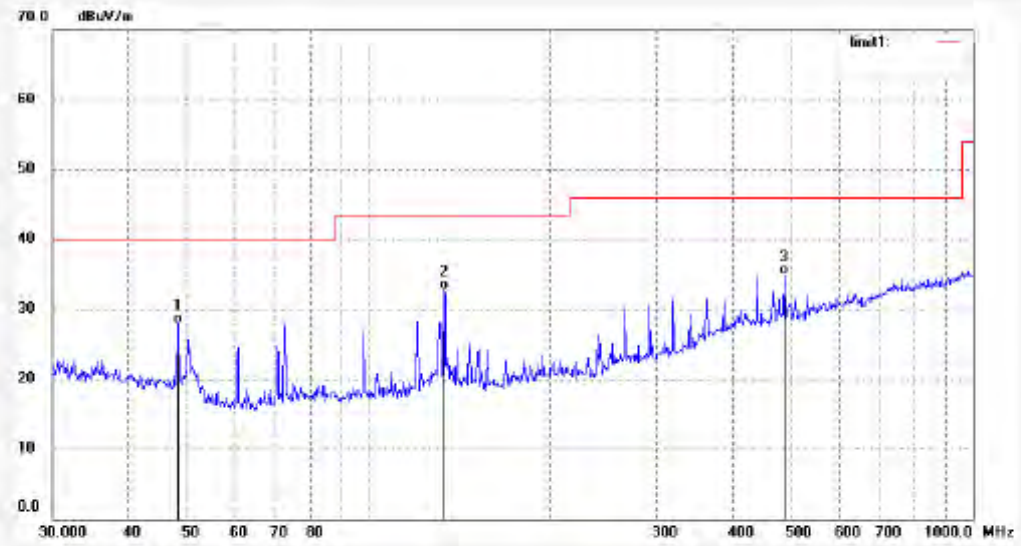
Fax:+86-0755-26503396

Job No.: Bob #1384	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 12/04/02/
Temp.(C)/Hum.(%) 24 C / 48 %	Time: 10/00/41
EUT: Soundbar	Engineer Signature:
Mode: TX 2479	Distance: 3m
Model: A50-890	
Manufacturer: VANKE	

Note: Reprot NO.:ATE20120569



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	48.3780	13.05	14.94	27.99	40.00	-12.01	QP			
2	133.5493	18.09	14.74	32.83	43.50	-10.67	QP			
3	488.3263	10.93	23.92	34.85	46.00	-11.15	QP			

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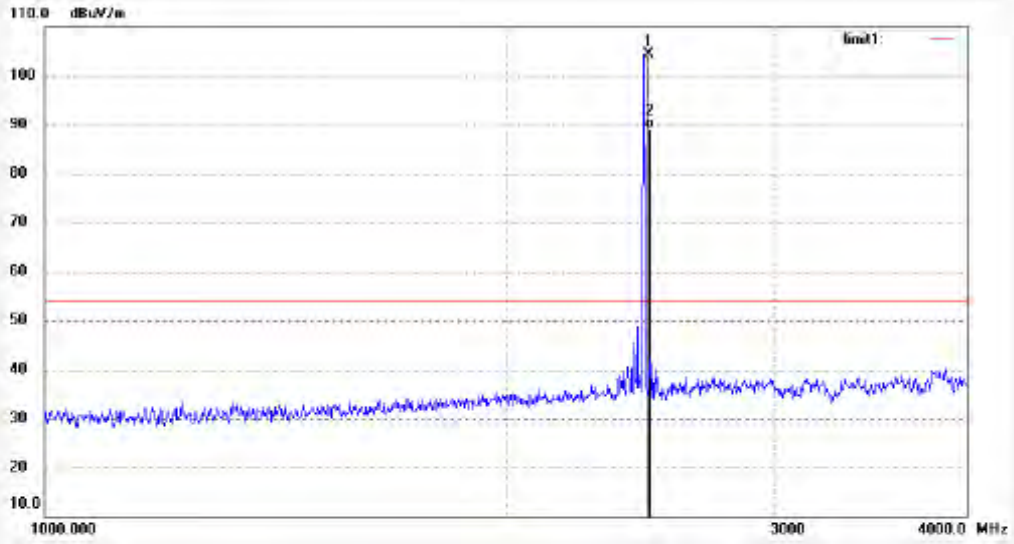
Fax:+86-0755-26503396

Job No.: Bob #1382
Standard: FCC Class B 3M Radiated
Test item: Radiation Test
Temp.(C)/Hum.(%) 24 C / 48 %
EUT: Soundbar
Mode: TX 2479
Model: A50-890
Manufacturer: VANKE

Polarization: Horizontal
Power Source: AC 120V/60Hz
Date: 12/04/02/
Time: 9/51/11
Engineer Signature:
Distance: 3m

Note: Reprot NO.:ATE20120569



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2479.000	111.83	-7.37	104.46	114.00	-9.54	peak			
2	2479.000	96.52	-7.37	89.15	94.00	-4.85	AVG			

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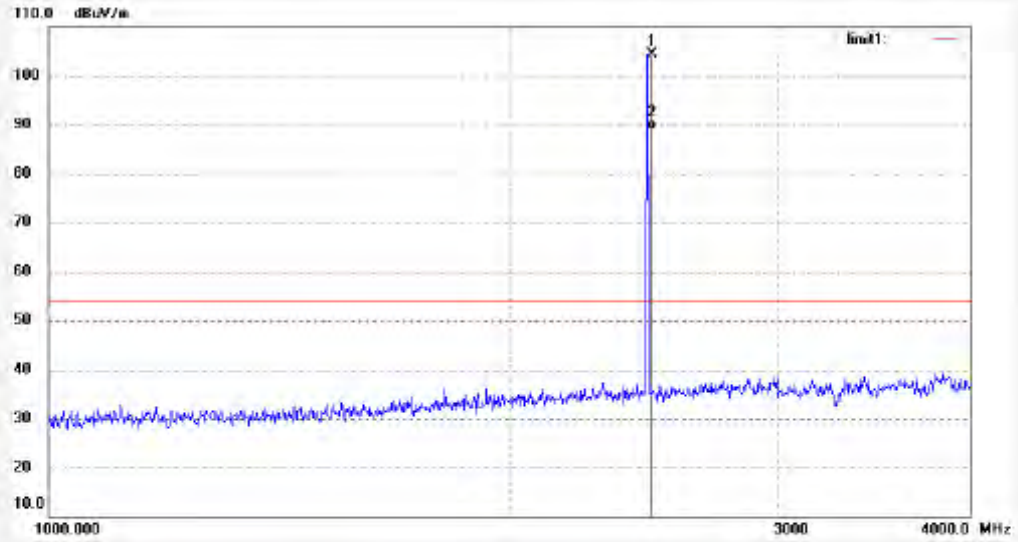
Fax:+86-0755-26503396

Job No.: Bob #1377	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 12/04/02/
Temp.(C)/Hum.(%) 24 C / 48 %	Time: 9/35/55
EUT: Soundbar	Engineer Signature:
Mode: TX 2479	Distance: 3m
Model: A50-890	
Manufacturer: VANKE	

Note: Reprot NO.:ATE20120569



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2479.000	111.63	-7.37	104.26	114.00	-9.74	peak			
2	2479.000	96.18	-7.37	88.81	94.00	-5.19	AVG			

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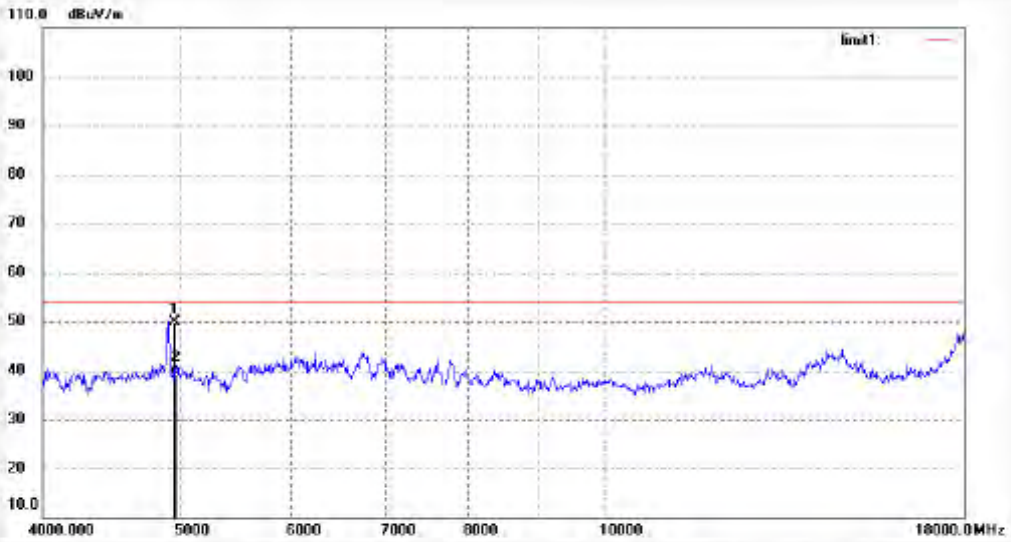
Fax:+86-0755-26503396

Job No.: Bob #1375
Standard: FCC Class B 3M Radiated
Test item: Radiation Test
Temp.(C)/Hum.(%) 24 C / 48 %
EUT: Soundbar
Mode: TX 2479
Model: A50-890
Manufacturer: VANKE

Polarization: Horizontal
Power Source: AC 120V/60Hz
Date: 12/04/02/
Time: 9/32/32
Engineer Signature:
Distance: 3m

Note: Reprot NO.:ATE20120569



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	4958.000	49.48	0.51	49.99	74.00	-24.01	peak			
2	4958.000	38.59	0.51	39.10	54.00	-14.90	AVG			

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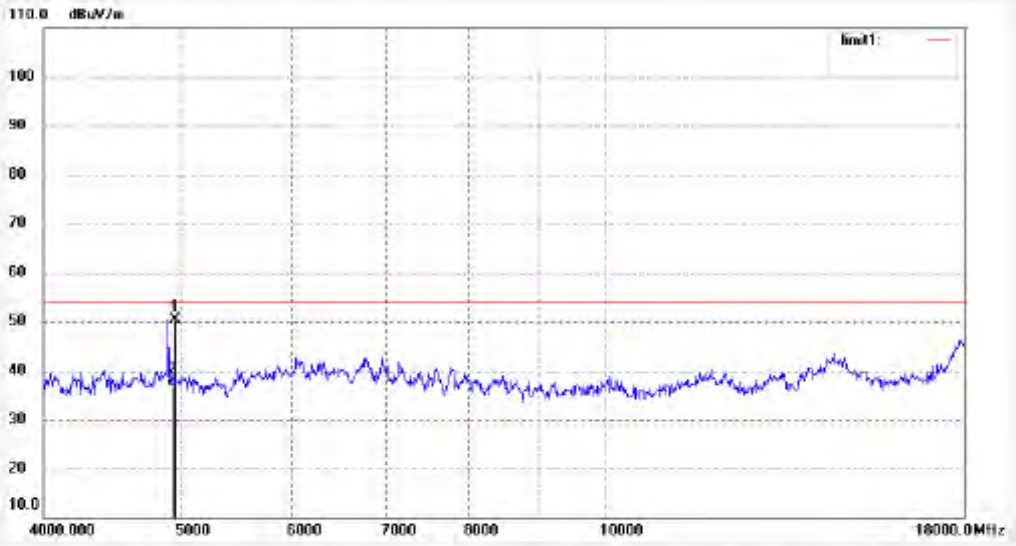
Job No.: Bob #1376
Standard: FCC Class B 3M Radiated
Test item: Radiation Test
Temp.(C)/Hum.(%) 24 C / 48 %
EUT: Soundbar
Mode: TX 2479
Model: A50-890
Manufacturer: VANKE

Polarization: Vertical
Power Source: AC 120V/60Hz
Date: 12/04/02/
Time: 9/33/33
Engineer Signature:
Distance: 3m

Note: Reprot NO.:ATE20120569



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	4958.000	49.78	0.51	50.29	74.00	-23.71	peak			
2	4958.000	36.21	0.51	36.72	54.00	-17.28	AVG			

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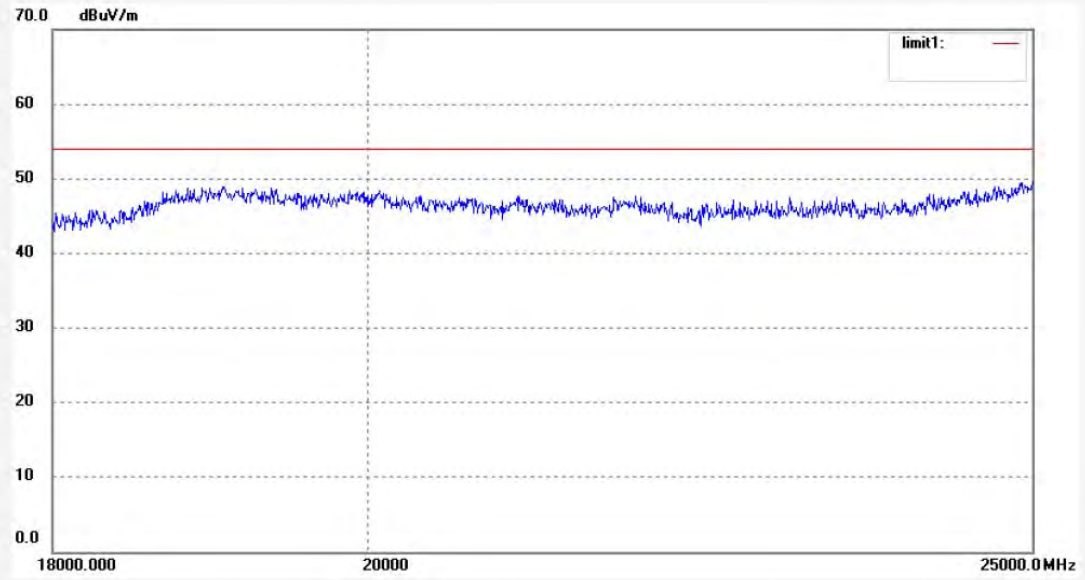
Job No.: Bob #895	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 2012/04/02
Temp.(C)/Hum.(%) 25 C / 50 %	Time: 11:25:08
EUT: Soundbar	Engineer Signature: Bob
Mode: TX 2479	Distance: 3m
Model: A50-890	
Manufacturer: VANKE	

Note: Report No.:ATE20120569



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark

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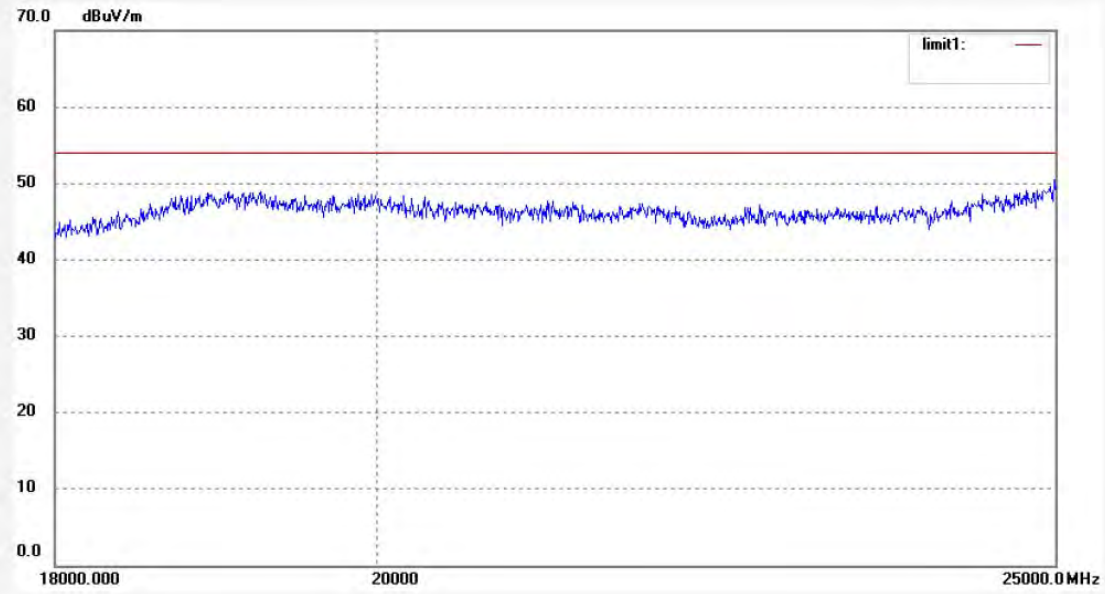
Fax:+86-0755-26503396

Job No.: Bob #894	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 2012/04/02
Temp.(C)/Hum.(%) 25 C / 50 %	Time: 11:20:46
EUT: Soundbar	Engineer Signature: Bob
Mode: TX 2479	Distance: 3m
Model: A50-890	
Manufacturer: VANKE	

Note: Report No.:ATE20120569



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark

ACCURATE TECHNOLOGY CO., LTD.
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Science & Industry Park,Nanshan Shenzhen,P.R.China
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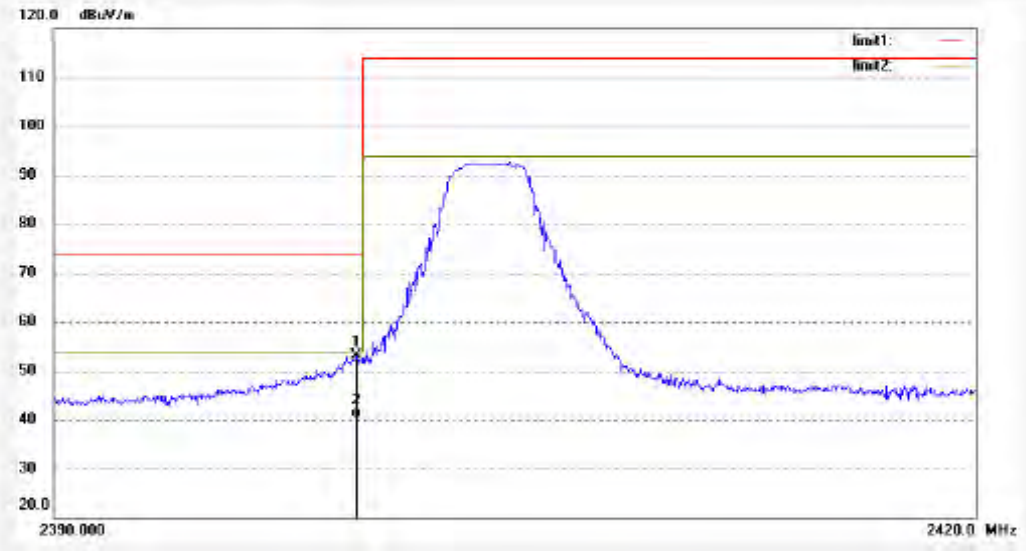
Fax:+86-0755-26503396

Job No.: Bob #1369	Polarization: Horizontal
Standard: FCC Part 15 PEAK 2.4G	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 12/04/02/
Temp.(C)/Hum.(%) 24 C / 48 %	Time: 9/12/29
EUT: Soundbar	Engineer Signature:
Mode: TX 2404	Distance: 3m
Model: A50-890	
Manufacturer: VANKE	

Note: Reprot NO.:ATE20120569



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2399.939	60.47	-7.46	53.01	74.00	-20.99	peak			
2	2399.939	47.93	-7.46	40.47	54.00	-13.53	AVG			

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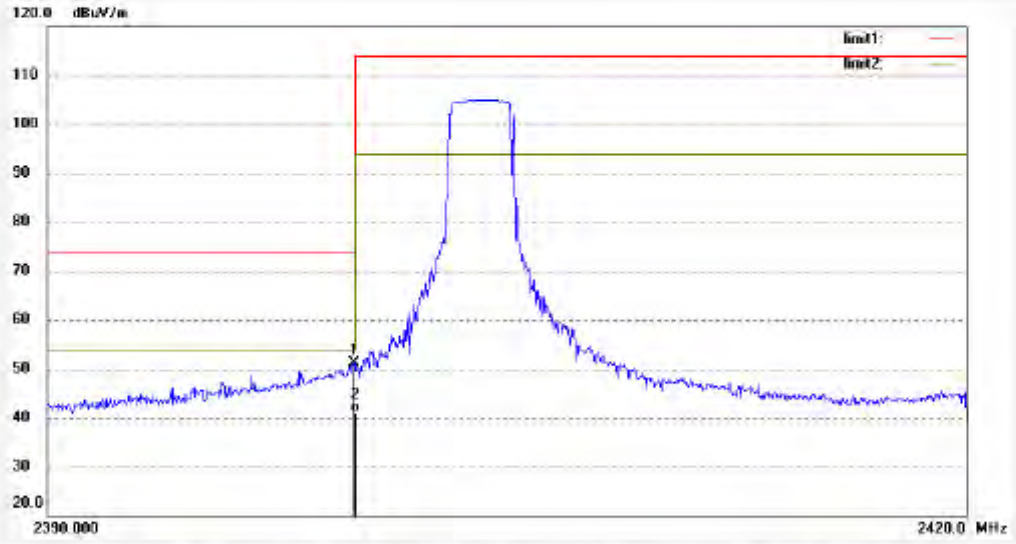
Fax:+86-0755-26503396

Job No.: Bob #1367
Standard: FCC Part 15 PEAK 2.4G
Test item: Radiation Test
Temp.(C)/Hum.(%) 24 C / 48 %
EUT: Soundbar
Mode: TX 2404
Model: A50-890
Manufacturer: VANKE

Polarization: Vertical
Power Source: AC 120V/60Hz
Date: 12/04/02/
Time: 9/05/45
Engineer Signature:
Distance: 3m

Note: Reprot NO.:ATE20120569



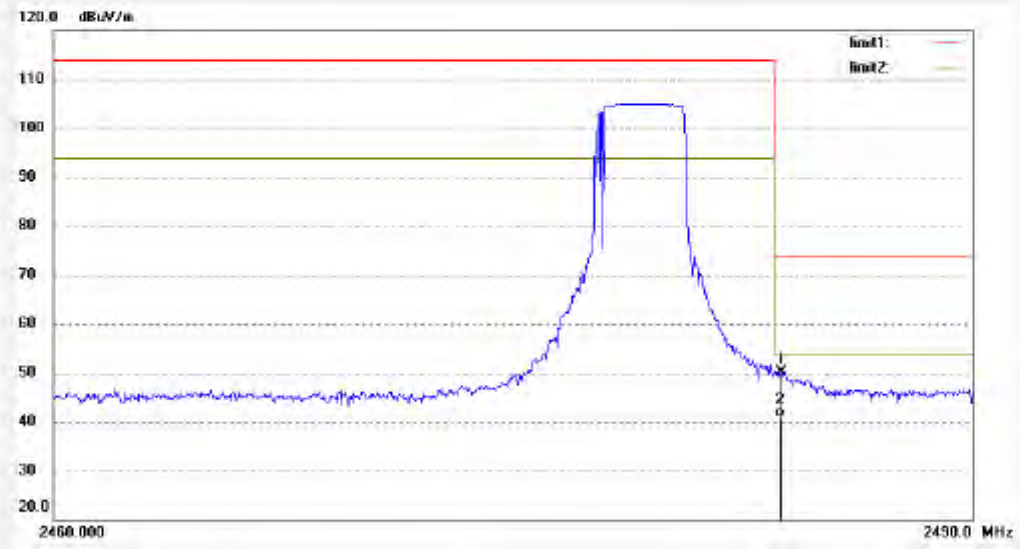
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2399.939	58.66	-7.46	51.20	74.00	-22.80	peak			
2	2399.939	48.64	-7.46	41.18	54.00	-12.82	AVG			

ACCURATE TECHNOLOGY CO., LTD.
F1,Bldg.A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China
Site: 966 chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: Bob #1380
Standard: FCC Part 15 PEAK 2.4G
Test item: Radiation Test
Temp.(C)/Hum.(%) 24 C / 48 %
EUT: Soundbar
Mode: TX 2479
Model: A50-890
Manufacturer: VANKE

Polarization: Horizontal
Power Source: AC 120V/60Hz
Date: 12/04/02/
Time: 9/47/26
Engineer Signature:
Distance: 3m

Note: Reprot NO.:ATE20120569



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2483.627	57.55	-7.37	50.18	74.00	-23.82	peak			
2	2483.627	48.24	-7.37	40.87	54.00	-13.13	AVG			

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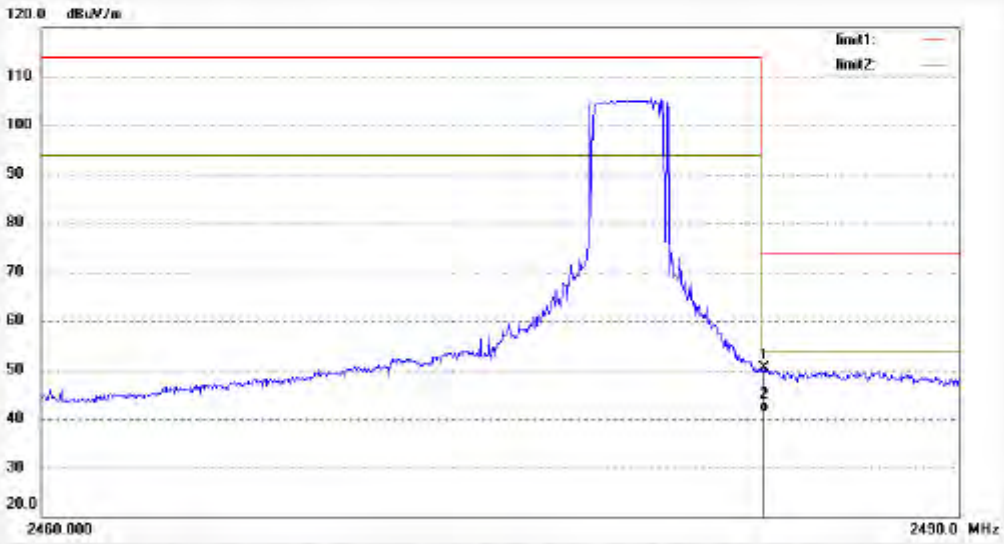
Science & Industry Park,Nanshan Shenzhen,P.R.China
Site: 966 chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: Bob #1378
Standard: FCC Part 15 PEAK 2.4G
Test item: Radiation Test
Temp.(C)/Hum.(%) 24 C / 48 %
EUT: Soundbar
Mode: TX 2479
Model: A50-890
Manufacturer: VANKE

Polarization: Vertical
Power Source: AC 120V/60Hz
Date: 12/04/02/
Time: 9/39/57
Engineer Signature:
Distance: 3m

Note: Reprot NO.:ATE20120569



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2483.627	57.69	-7.37	50.32	74.00	-23.68	peak			
2	2483.627	48.67	-7.37	41.30	54.00	-12.70	AVG			

ACCURATE TECHNOLOGY CO.,LTD

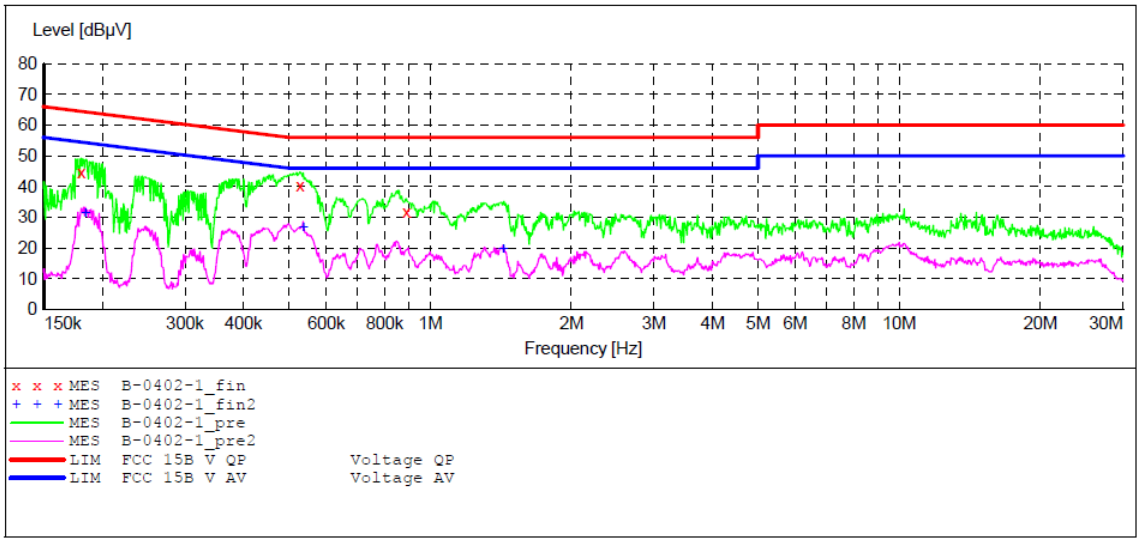
CONDUCTED EMISSION STANDARD FCC PART 15 B

EUT: Soundbar M/N:A50-890
Manufacturer: VANKE
Operating Condition: TX
Test Site: 1#Shielding Room
Operator: Bob
Test Specification: N 120V/60Hz
Comment: Report NO.:ATE20120569
Start of Test: 4/2/2012 / 10:20:14AM

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

Short Description: _SUB_STD_VTERM2 1.70

Start Frequency	Stop Frequency	Step Width	Detector	Meas. Time	IF Bandw.	Transducer
150.0 kHz	30.0 MHz	0.8 %	QuasiPeak Average	1.0 s	9 kHz	NSLK8126 2008



MEASUREMENT RESULT: "B-0402-1_fin"

4/2/2012 10:22AM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.180236	44.70	11.2	64.5	19.8	QP	N	GND
0.527486	40.30	12.0	56	15.7	QP	N	GND
0.889871	31.60	11.9	56	24.4	QP	N	GND

MEASUREMENT RESULT: "B-0402-1_fin2"

4/2/2012 10:22AM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.183870	31.40	11.2	54.3	22.9	AV	N	GND
0.535976	26.60	12.0	46	19.4	AV	N	GND
1.430998	19.50	11.7	46	26.5	AV	N	GND

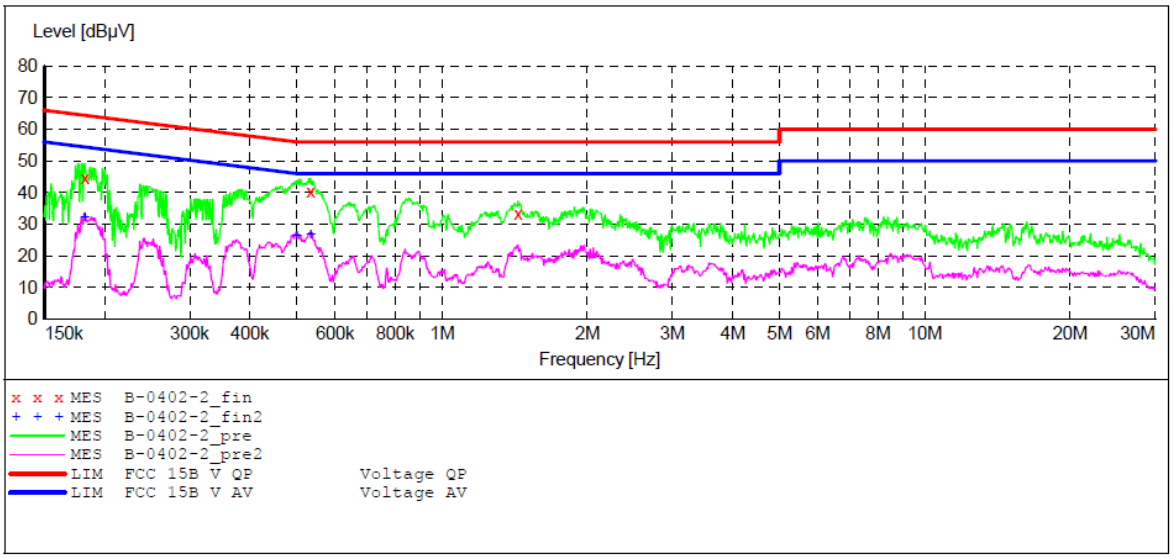
ACCURATE TECHNOLOGY CO.,LTD

CONDUCTED EMISSION STANDARD FCC PART 15 B

```
EUT:                  Soundbar  M/N:A50-890
Manufacturer:         VANKE
Operating Condition:  TX
Test Site:            1#Shielding Room
Operator:             Bob
Test Specification:   L 120V/60Hz
Comment:              Report NO.:ATE20120569
Start of Test:        4/2/2012 / 10:23:06AM
```

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   0.8 %       QuasiPeak 1.0 s     9 kHz    NSLK8126 2008
                                    Average
```



MEASUREMENT RESULT: "B-0402-2_fin"

4/2/2012 10:25AM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.181681	44.60	11.2	64.4	19.8	QP	L1	GND
0.533841	40.30	12.0	56	15.7	QP	L1	GND
1.436722	33.20	11.7	56	22.8	QP	L1	GND

MEASUREMENT RESULT: "B-0402-2_fin2"

4/2/2012 10:25AM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.181681	31.90	11.2	54.4	22.5	AV	L1	GND
0.498814	26.40	12.0	46	19.6	AV	L1	GND
0.533841	26.60	12.0	46	19.4	AV	L1	GND