# FCC-

# **TEST REPORT**

**REPORT NO.: 45983** 

**No.** 45983

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# FCC listed testlab acc. to Section 2.948 of the FCC - Rules

## in compliance with the requirements of ANSI C63.4 - 2003

**Product**: AM/FM/Weather Band Recciver

**Product Class:** Communication Receiver (Super

Hetrodyne)

**Brand Name:** JENSEN

: JHD910(SSD-0910)

Importer /

Model

Manufacturer: SOUNDING AUDIO INDUSTRIAL

LIMITED

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## **LABORATORY - REPORT**

**APPLICANT:** 

SOUNDING AUDIO INDUSTRIAL LIMITED

ADDRESS:

Unit G, 7/F, Stage 2, Wah Fung Industrial Centre

33-39 Kwai Fung Road Kwai Chung, N.T.

Hong Kong

DATE OF SAMPLE RECEIVED:

2006-07-31

**DATE OF TESTING:** 

2006-08-04 to 2006-08-09

**DESCRIPTION OF SAMPLE:** 

Product:

AM/FM/Weather Band Receiver

Product class:

Communication Receiver (Super Hetrodyne)

Model no.:

JHD910(SSD-0910)

Rating: .

DC 12V (Car Battery)

**INVESTIGATIONS** 

**REQUESTED:** 

Measurements to the relevant clauses of F.C.C. Rules and Regulations

Part 15 Subpart B - 'Unintentional Radiators'

**RESULTS:** 

See the attached test sheets

**CONCLUSIONS:** 

From the measurement data obtained, the tested sample was considered to have COMPLIED with the requirements for the relevant clauses of Federal Communications Commission Rules as specified

above.

Authorized Signature

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## **Test Location**

International Electrical Certification Centre Ltd.
Unit 602-605, 31 Lok Yip Road, On Lok Tsuen, Fanling, N.T., Hong Kong

## **Summary of Test Results**

#### **Radiated Emission:**

Test result: O.K.

**Test data:** See attached data sheet

#### **Conducted Emission:**

Test result: N.A. Test data: N.A.

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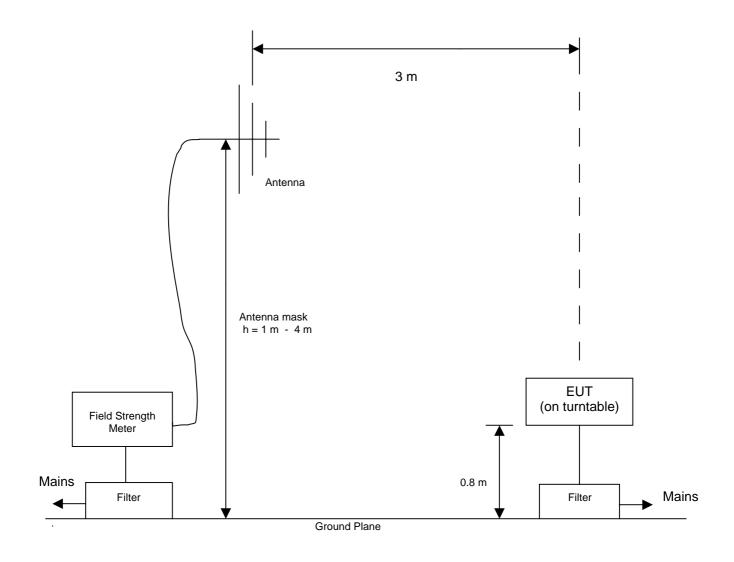
## TEST EQUIPMENT LIST

Equipment	Manufacturer	Model	Serial No.	Last Calibration Date	Next Calibration Date
Test Receiver	Rohde & Schwarz	ESVP	860688/022	14/11/2005	13/11/2006
Test Receiver	Rohde & Schwarz	ESH 3	863497/015	14/11/2005	13/11/2006
Antenna	Schaffner	CBL6111C	2791	25/05/2005	24/05/2008
Antenna	Schwarzbeck	BBA 9106 / UHALP 9107		29/03/2005	28/03/2008
Antenna Mast System	Schwarzbeck	AM9104			
Loop Antenna	Rohde & Schwarz	HFH2-Z2	871336/48	03/12/2003	02/12/2006
Turntable with Controller	Drehtisch	DT312			
Spectrum Analyzer with Q. Peak Advantest		R3132	140101852	16/11/2005	15/11/2006

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## Radiated Emission Test Setup (3 m diatance)



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## **Test Results**

#### **Radiated Emission:**

Test Requirement: FCC Part 15 Subpart B Section 15.109

Test Method: ANSI C63.4: 2003

Frequency Range: 30MHz – 1000MHz

Measurement Distance: 3 m

Detector: Quasi-Peak

#### **Sample Operation and Measurement:**

The sample was tested under normal operation for various modes (receiving FM / Weather Band signals and audio input) with supply from a 12V car battery. An initial pre-scan was performed in the Open Aera Test Site to find out the maximum emission level. Final measurement was then performed and the measurement data were shown on page 9 -13.

Refer to page 14 for notes for radiation measurement.

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Receiver: ESVP Rohde & Schwarz

Antenna: Schaffner CBL6111C

Radiated Emission 30MHz to 1000MHz According: FCC Part 15 Subpart B (15.109)

**IECC Ref**: 45983

Model: JHD910(SSD-0910) Test Equipment

Applicant: SOUNDING AUDIO INDUSTRIAL

LIMITED

Ser.Nr.: --

Oper. Mode: FM Mode

InterFreq: 10.7 MHz

Receiving - frequency (MHz)	Oscillator- frequency (MHz)	Har- monics		teading dBμV	Polari- zation	Correction Factor (dB)		st Result 3(µV/m)	Limit dB(µV/m)
89.7	100.4	1	<	16.0	Н	10.1	٧	26.1	43.5
	200.8	2		20.0	Н	8.6		28.6	43.5
	301.2	3	<	16.0	Н	13.9	٧	29.9	46.0
	401.6	4	<	16.0	Н	16.9	٧	32.9	46.0
	502.0	5	<	16.0	Н	19.1	٧	35.1	46.0
	602.4	6	<	16.0	Н	20.9	٧	36.9	46.0
	702.8	7	<	16.0	Н	22.5	٧	38.5	46.0
	803.2	8	<	16.0	Н	24.0	٧	40.0	46.0
	903.6	9	<	16.0	Н	25.6	<	41.6	46.0
98.3	109.0	1		16.0	Н	10.6		26.6	43.5
	218.0	2		20.0	Н	8.7		28.7	46.0
	327.0	3	<	16.0	Н	14.6	<	30.6	46.0
	436.0	4	<	16.0	Н	17.8	٧	33.8	46.0
	545.0	5	<	16.0	Н	20.7	<	36.7	46.0
	654.0	6	<	16.0	Н	21.6	<	37.6	46.0
	763.0	7	<	16.0	Н	24.1	٧	40.1	46.0
	872.0	8	<	16.0	Н	25.3	٧	41.3	46.0
	981.0	9	<	16.0	Η	26.9	٧	42.9	54.0
107.9	118.6	1	<	16.0	Н	11.1	٧	27.1	43.5
	237.2	2		24.0	Н	11.0		35.0	46.0
	355.8	3	<	16.0	Н	15.5	<	31.5	46.0
	474.4	4	<	16.0	Н	18.6	٧	34.6	46.0
	593.0	5	<	16.0	Н	20.6	٧	36.6	46.0
	711.6	6	<	16.0	Н	22.9	٧	38.9	46.0
	830.2	7	<	16.0	Н	24.8	٧	40.8	46.0
	948.8	8	<	16.0	Н	27.6	٧	43.6	46.0

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Receiver: ESVP Rohde & Schwarz

Antenna: Schaffner CBL6111C

Radiated Emission 30MHz to 1000MHz According: FCC Part 15 Subpart B (15.109)

**IECC Ref:** 45983

Model: JHD910(SSD-0910) Test Equipment

Applicant: SOUNDING AUDIO INDUSTRIAL

LIMITED

Ser.Nr.: --

Oper. Mode: FM Mode

InterFreq: 10.7 MHz

Receiving - frequency (MHz)	Oscillator- frequency (MHz)	Har- monics		nding BµV	Polari- zation	Correction Factor (dB)		t Result (µV/m)	Limit dB(µV/m	n)
89.7	100.4	1	2	22.0	V	10.1		32.1	43.5	
	200.8	2	< 1	16.0	V	8.6	<	24.6	43.5	
	301.2	3	< 1	16.0	V	13.9	<	29.9	46.0	
	401.6	4	< 1	16.0	V	16.9	<	32.9	46.0	
	502.0	5	< 1	16.0	V	19.1	<	35.1	46.0	
	602.4	6	< 1	16.0	V	20.9	<	36.9	46.0	
	702.8	7	< 1	16.0	V	22.5	<	38.5	46.0	
	803.2	8	< 1	16.0	V	24.0	<	40.0	46.0	
	903.6	9	< 1	16.0	V	25.6	٧	41.6	46.0	
98.3	109.0	1	1	19.0	V	10.6		29.6	43.5	
	218.0	2	< 1	16.0	V	8.7	٧	24.7	46.0	
	327.0	3	< 1	16.0	V	14.6	٧	30.6	46.0	
	436.0	4	< 1	16.0	V	17.8	٧	33.8	46.0	
	545.0	5		16.0	V	20.7	٧	36.7	46.0	
	654.0	6	< 1	16.0	V	21.6	٧	37.6	46.0	
	763.0	7	< 1	16.0	V	24.1	٧	40.1	46.0	
	872.0	8	< 1	16.0	V	25.3	٧	41.3	46.0	
	981.0	9	< 1	16.0	V	26.9	٧	42.9	54.0	
107.9	118.6	1	2	20.0	V	11.1		31.1	43.5	
	237.2	2	2	27.0	V	11.0		38.0	46.0	
	355.8	3	< 1	16.0	V	15.5	<	31.5	46.0	
	474.4	4	< 1	16.0	V	18.6	<	34.6	46.0	
	593.0	5	< 1	16.0	V	20.6	<	36.6	46.0	
	711.6	6	< 1	16.0	V	22.9	<	38.9	46.0	
	830.2	7	< 1	16.0	V	24.8	<	40.8	46.0	
	948.8	8	< 1	16.0	V	27.6	<	43.6	46.0	

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Receiver: ESVP Rohde & Schwarz

Antenna: Schaffner CBL6111C

Radiated Emission 30MHz to 1000MHz According: FCC Part 15 Subpart B (15.109)

**IECC Ref:** 45983

Model: JHD910(SSD-0910) Test Equipment

Applicant: SOUNDING AUDIO INDUSTRIAL

LIMITED

Ser.Nr.: --

Oper. Mode: Weather Band

InterFreq: 10.7 MHz

Receiving - frequency (MHz)	Oscillator- frequency (MHz)	Har- monics	ı	Reading dBµV	Polari- zation	Correction Factor (dB)	_	est Result B(µV/m)	Limit dB(µV/m)
162.4	173.100	1	<	16.0	Ι	9.2	<	25.2	43.5
	346.200	2	<	16.0	Н	15.3	<	31.3	46.0
	519.300	3	<	16.0	Н	19.5	<	35.5	46.0
	692.400	4	<	16.0	Н	22.3	<	38.3	46.0
	865.500	5	<	16.0	Н	25.4	<	41.4	46.0
162.475	173.175	1	<	16.0	Н	9.2	<	25.2	43.5
	346.350	2	<	16.0	Н	15.3	<	31.3	46.0
	519.525	3	<	16.0	Н	19.5	<	35.5	46.0
	692.700	4	<	16.0	Н	22.3	<	38.3	46.0
	865.875	5	<	16.0	Н	25.4	<	41.4	46.0
162.55	173.250	1	<	16.0	Н	9.2	<	25.2	43.5
	346.500	2	<	16.0	Н	15.3	<	31.3	46.0
	519.750	3	<	16.0	Н	19.5	<	35.5	46.0
	693.000	4	<	16.0	Н	22.3	<	38.3	46.0
	866.250	5	<	16.0	Н	25.4	<	41.4	46.0

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Receiver: ESVP Rohde & Schwarz

Antenna: Schaffner CBL6111C

Radiated Emission 30MHz to 1000MHz According: FCC Part 15 Subpart B (15.109)

**IECC Ref:** 45983

Model: JHD910(SSD-0910) Test Equipment

Applicant: SOUNDING AUDIO INDUSTRIAL

LIMITED

Ser.Nr.: --

Oper. Mode: Weather Band

InterFreq: 10.7 MHz

Receiving - frequency (MHz)	Oscillator- frequency (MHz)	Har- monics		Reading dBμV	Polari- zation	Correction Factor (dB)		st Result B(µV/m)	Limit dB(µV/m)
162.4	173.100	1	<	16.0	V	9.2	<	25.2	43.5
	346.200	2	<	16.0	V	15.3	<	31.3	46.0
	519.300	3	<	16.0	V	19.5	<	35.5	46.0
	692.400	4	<	16.0	V	22.3	<	38.3	46.0
	865.500	5	<	16.0	V	25.4	<	41.4	46.0
162.475	173.175	1	<	16.0	V	9.2	<	25.2	43.5
	346.350	2	<	16.0	V	15.3	<	31.3	46.0
	519.525	3	<	16.0	V	19.5	<	35.5	46.0
	692.700	4	<	16.0	V	22.3	<	38.3	46.0
	865.875	5	<	16.0	V	25.4	<	41.4	46.0
162.55	173.250	1	<	16.0	V	9.2	<	25.2	43.5
	346.500	2	<	16.0	V	15.3	<	31.3	46.0
	519.750	3	<	16.0	V	19.5	<	35.5	46.0
	693.000	4	<	16.0	V	22.3	<	38.3	46.0
	866.250	5	<	16.0	V	25.4	<	41.4	46.0

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Test Equipment

Receiver: ESVP Rohde & Schwarz

Antenna: Schaffner CBL6111C

Radiated Emission 30MHz-1000MHz Acc: FCC Part 15 Subpart B (15.109)

**IECC Ref:** 45983

Model: JHD910(SSD-0910)

Applicant: SOUNDING AUDIO INDUSTRIAL

LIMITED

Ser.Nr.: --

**Set under test:** AM/FM/Weather Band Receiver

Connected sets:

Operating mode: Audio Input (tested with 1 kHz signal)

Frequency (MHz)	Horz. Reading dB(µV)		Vert. Reading dB(μV)		Corr. Factor (dB)	Horiz. Test Result dB(µV/m)		R	rt. Test esult (µV/m)	Limit dB(µV/m)
30	<	16.0	٧	16.0	17.6	٧	33.6	٧	33.6	40.0
100	<	16.0	<	16.0	10.1	<	26.1	٧	26.1	43.5
200	<	16.0	<	16.0	8.6	٧	24.6	٧	24.6	43.5
300	<	16.0	<	16.0	13.9	<	29.9	٧	29.9	46.0
500	<	16.0	<	16.0	19.1	<	35.1	٧	35.1	46.0
1000	<	16.0	<	16.0	27.3	<	43.3	<	43.3	54.0

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## **Notes for Radiated Emission Measurement**

#### 1. Measurement facility:

Measurement facility located at Fanling (Hong Kong), placed on file with the FCC Pursuant to Section 2.948 of the FCC Rules (FCC Registration No.: 97774).

#### 2. Distance between the EUT and measuring antenna:

3 meters.

#### 3. Measuring instrumentations:

Rohde & Schwarz ESVP Test Receiver (20 - 1300 MHz) or the equivalent with a CISPR weighting QP detector, 6 dB bandwidth set at 120 KHz.

#### 4. Measuring antenna:

Broad-band antenna for the frequency range 30 - 1000 MHz, connected with 10 meters coaxial cable. Cable loss of the coaxial cable included in the Antenna Factor for measurement data. The antenna is capable of measuring both horizontal and vertical polarizations. The antenna was raised from 1 to 4 meters to find out the maximum emission level from the EUT.

#### 5. Frequency range scanned:

The frequency range 30 - 1000 MHz has been scanned. Readings of the highest emissions relating to the limit were reported as above.

#### 6. Arrangement of EUT:

During the test, the sample was placed on a turn table and operated under various modes at rated supply voltage. The table is 0.8 meter above ground and can rotate 360 degrees to determine the position of the maximum emission level.

#### 7. Measuring Procedure:

In accordance with the relevant sections of the American National Standards Institute (ANSI) C63.4-2003 'Methods of Measurement of Radio Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9KHz to 40GHz'.

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## **Photographs**

Radiated Emission Test setup

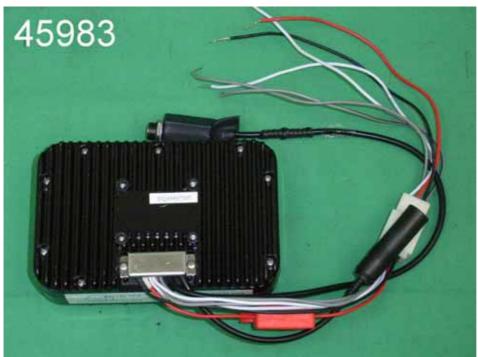




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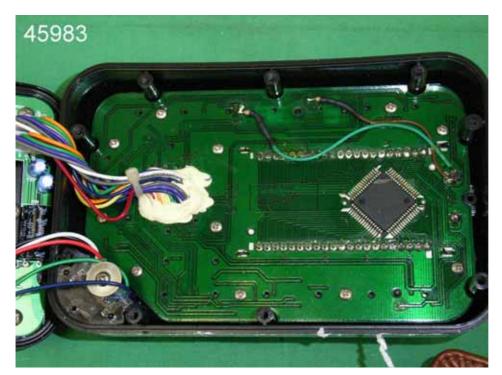
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