



TEST REPORT N°: BVC-08-AU-H1338-VTHFB-A1

TEST REPORT

To:	KAM LONG IND CO LTD.	To:	-
Attn:	Kong Lou	Attn:	-
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E-mail:	kong_lou@kamlong.com	E-mail:	-

Factory name:	Unidentified	Offer:	BVC08AU01-01VTHHFS-A1
Location:	Unidentified	Sample No:	(5208)238-0092
	Start date:	August 21, 2008	
	Finish date:	August 21, 2008	
	Test Requested:	FCC Part 15 Certification Procedure	
	Test Method:	ANSI C63.4 – 2003	
	Re-testing:	NONE	
MICKEY MICROPHONE		FCC ID: WOC00000001613	

The results given in this report are related to the tested specimen of the described electrical apparatus.

CONCLUSION: The submitted sample was found to COMPLY with requirement of FCC Part 15 Subpart C.

Authorized Signature:	
	
Reviewed by: Eric Wong	Approved by: Steven Tsang
Date: September 5, 2008	Date: September 5, 2008

BUREAU VERITAS HONG KONG LIMITED –
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Location of the test site

Radiated and Conducted emissions measurements are investigated and taken pursuant to the procedures of ANSI C63.4 – 2003. An Open Area Test Site and Full Anechoic Chamber (FCC Listed Site, Registration No. 642151) are set up for investigation and located at :

BUREAU VERITAS HONG KONG LIMITED, EMC CENTRE

No. 2106-2107, 21/F., Westin Centre,
26 Hung To Road,
Kwun Tong, Kowloon,
Hong Kong

List of measuring equipment

Radiated Emission

EQP NO.	DESCRIPTION	MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATION DUE
A801 0002	EMI TEST RECEIVER	R&S	ESCI	100379	13-APR-2009
A803 0003	HF LOOP ANTENNA	SCHAFFNER	HLA 6120	21728	31-AUG-2008
A803 0002	BILOG ANTENNA	SCHAFFNER	CBL6112D	25229	31-JAN-2009
A813 0001	OPEN AREA TEST SITE	BVCPS	N/A	N/A	05-JULY-2009
A814 0001	ANECHOIC CHAMBER	ALBATROSS	M-CDC	80374004499B	09-JULY-2009

Conducted Emission

EQP NO.	DESCRIPTION	MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATION DUE
A801 0001	EMI TEST RECEIVER	R&S	ESCS30	830986/030	19-OCT-2008
A808 0001	LISN	R&S	ESH3-Z5	100116	15-FEB-2009
A816 0001	PULSE LIMITER	R&S	ESH3 Z2	100088	17-APR-2009

Remarks:-

N/A : Not Applicable or Not Available

The measurement instrumentation uncertainty would be taking into consideration on each of the test result

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Equipment Under Test [EUT]

Description of Sample:

Model Name: MICKEY MICROPHONE
Model Number: N/A
Rating: 3Vd.c ("AA" size battery x 2)

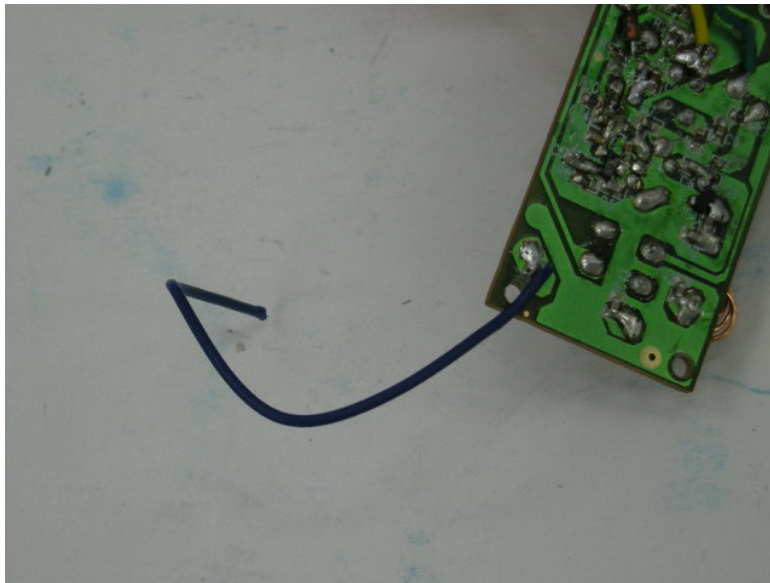
Description of EUT Operation:

The Equipment Under Test (EUT) is a **Kam Long Ind Co Ltd** of FM microphone. The transmitter is a 1 button transmitter and operating at 100.19MHz . The EUT continues to transmit while buttons is being pressed(on and off) and the EUT Modulation while trigger music or different sound by the microphone and type is frequency modulation.

Antenna Requirement (Section 15.203)

The EUT is use of a permanently antenna. It is soldered on the PCB. The antenna is not replaceable or user serviceable and is located inside the cabinet. The requirement of S15.203 are met. There are no deviations or exceptions to the specifications.

Connection of Antenna



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Radiated Emissions (Fundamental)

Test Requirement: FCC Part 15 Section 15.239

Test Method: ANSI C63.4:2003

Test Date(s): 2008-08-04

Mode of Operation: Transmission mode

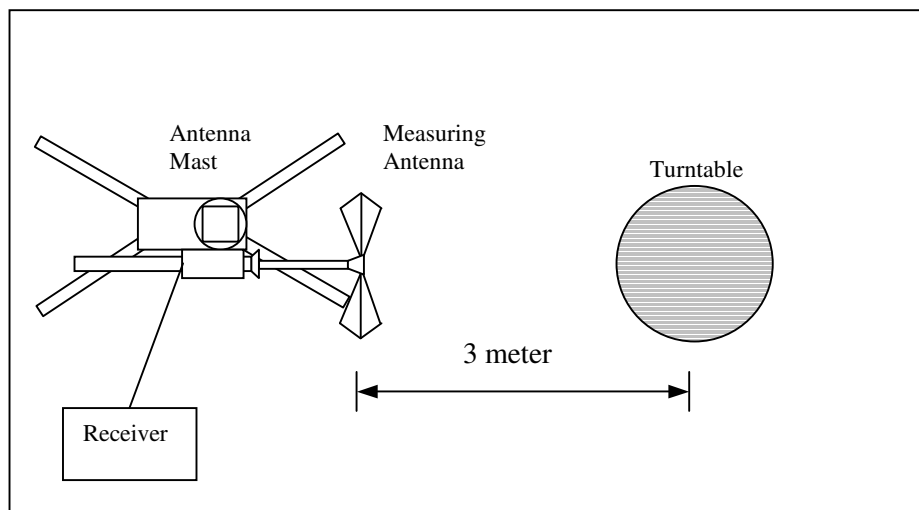
Test Procedure:

Radiated emissions measurements are investigated and taken pursuant to the procedures of ANSI C63.4 – 2003.

The equipment under test (EUT) was placed on a non-conductive turntable with dimensions of 1.5m x 1m and 0.8m high above the ground. 3m from the EUT, a broadband antenna mounting on the mast received the signal strength. During the test, each emission was maximized by: having the EUT continuously working, investigated all operating modes, rotated about all 3 axis (X, Y & Z) and considered typical configuration to obtain worst position, manipulating interconnecting cables, For battery operated equipment, the equipment tests shall be perform using new battery. The turntable was rotated to maximize the emission level. The antenna was then moving along the mast from 1m up to 4m until no more higher value was found. Both horizontal and vertical polarization of the antenna were placed and investigated.

For below 30MHz, a loop antenna with its vertical plane is place 3m from the EUT and rotated about its vertical axis for maximum response at each azimuth about the EUT. And the centre of the loop shall be 1m above the ground.

Test Setup: Open Area Test Site



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Limits for Field Strength of Fundamental Emissions [FCC 47CFR 15.239]:

Frequency Range of Fundamental [MHz]	Field Strength of Fundamental Emission [Peak] [μV/m]	Field Strength of Fundamental Emission [Average] [μV/m]
88-108	2,500 (68dBμV/m)	250 (48dBμV/m)

Measurement Data

Test Result of (Transmission mode): Pass

Detection mode: Peak

Frequency (MHz)	Polarity (H/V)	Antenna Factor and Cable Loss (dB/m)	Field Strength at 3m (dBμV/m)	Limit at 3m (dBμV/m)	Margin (dB)
100.192	V	15.0	35.6	68.0	-32.4

Detection mode: # Average

Frequency (MHz)	Polarity (H/V)	Antenna Factor and Cable Loss (dB/m)	Field Strength at 3m (dBμV/m)	Limit at 3m (dBμV/m)	Margin (dB)
100.3	V	15.0	**35.3	48.0	-12.7

For Average detection, Receiver setting will be changed: RBW = 100KHz,
VBW = 10Hz

Note: Field Strength includes Antenna Factor and Cable Loss.

Receiver setting: RBW = 100KHz
VBW = 300KHz



TEST REPORT N°: BVC-08-AU-H1338-VTHFB-A1

Radiated Emissions (9kHz – 1GHz)

Test Requirement: FCC Part 15 Section 15.209

Test Method: ANSI C63.4:2003

Test Date(s): 2008-08-04

Mode of Operation: **Transmission mode**

Limits for Radiated Emissions [FCC 47 CFR 15.209]:

Frequency Range [MHz]	Quasi-Peak Limits [μ V/m]
1.705-30	300
30-88	100
88-216	150
216-960	200
Above960	500

Measurement Data

Test Result of (Transmission mode): Pass

Detection mode: Quasi-Peak

Frequency (MHz)	Polarity (H/V)	Antenna Factor and Cable Loss (dB/m)	Field Strength at 3m (dB μ V/m)	Limit at 3m (dB μ V/m)	Margin (dB)
200.4	V	15.3	15.3	43.5	-28.2
300.7	V	21.1	21.1	46.0	-24.9
401.1	V	25.2	25.2	46.0	-20.8
501.3	V	27.6	27.6	46.0	-18.4
601.6	V	31.7	31.7	46.0	-14.3
702.1	V	31.9	31.9	46.0	-14.1

Note: Field Strength includes Antenna Factor and Cable Loss.

Receiver setting: RBW = 120KHz
VBW = 120KHz



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20dB Bandwidth of Fundamental Emission

Test Requirement: FCC 47 CFR 15.239(a)
Test Method: ANSI C63.4:2003 (Section 13.1.7)
Test Date: 2008-08-04
Mode of Operation: Transmission mode

Test Method:

The bandwidth is measured at an amplitude level reduced from the reference level by a specified ratio. The reference level is the level of the highest amplitude signal observed from the transmitter at the fundamental frequency. Once the reference level is established, the equipment is conditioned with typical modulating signal to produce the worst-case (i.e. the widest) bandwidth.

For the voice transmission, It would try different type and very loud music in order to get worst result.

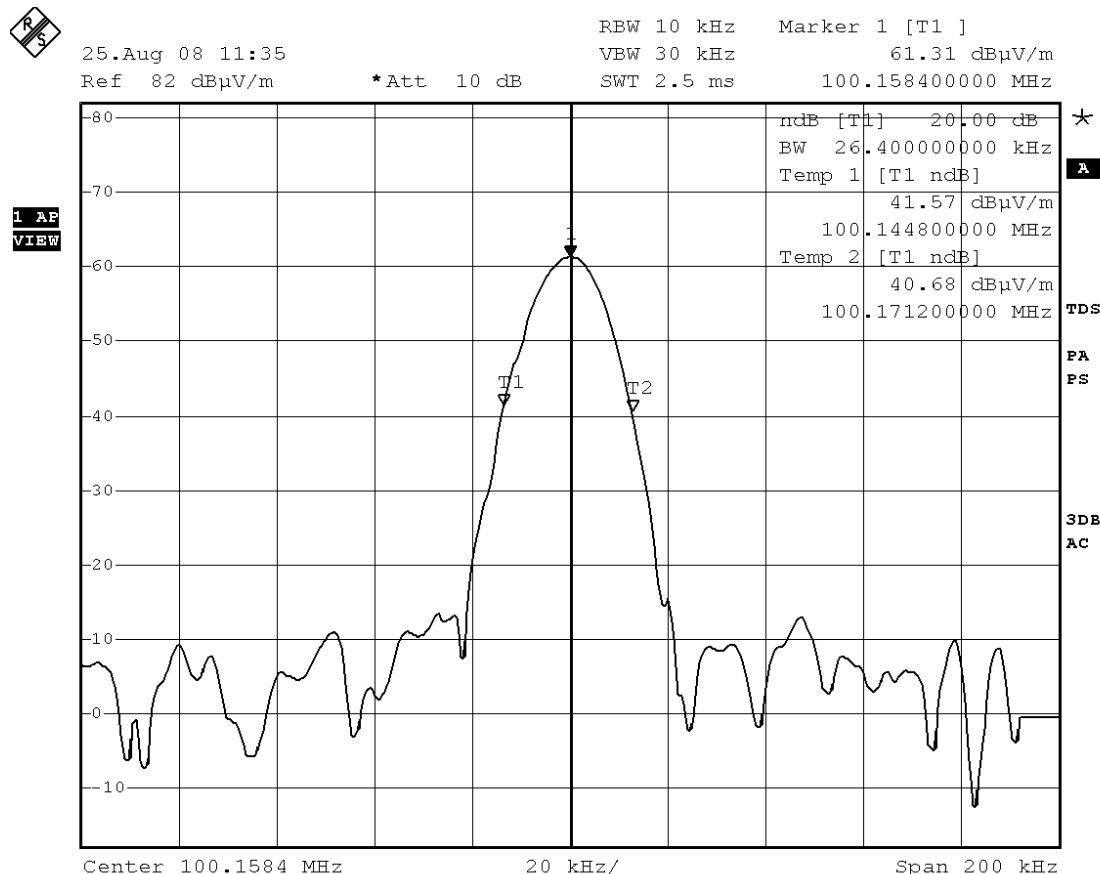
Limits for 26dB Bandwidth of Fundamental Emission:

Frequency [MHz]	20dB Bandwidth [KHz]	FCC Limits [KHz]
100.2	26.4	200

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Measurement Data :

Test Result of 20dB Bandwidth of Fundamental Emission: PASS



Date: 25.AUG.2008 11:35:02

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Photographs of EUT

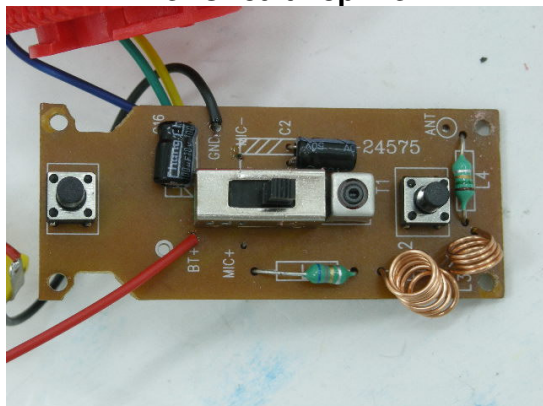
Front View of the product



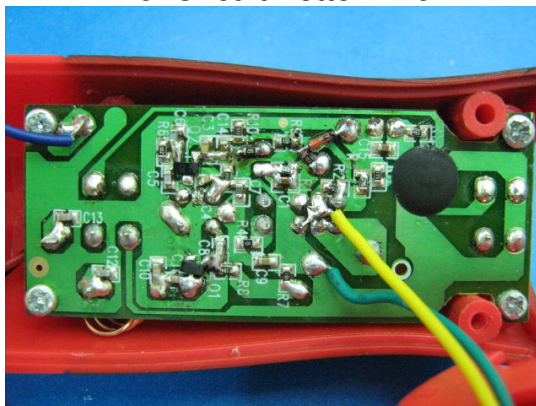
Rear View of the product



Inner Circuit Top View



Inner Circuit Bottom View



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Measurement of Radiated Emission Test Set Up



******* End of Report *******