Report No.	C3115707
FCC ID	IOW1490UP
Specifications	FCC Part 15, Class B (Class II Permissive Changes)
Test Method	ANSI C63.4 1992
Applicant	Chic Technology Corp.
Applicant address	16F, No. 150, Chien-I Road, 235 Chung Ho City, Taipei Hsien, Taiwan, R.O.C.
Items tested	Wireless Optical Mouse (Sample # C31702)
Model No.	CHIC 2490UP
Frequency Range	26.96MHz to 27.28MHz
Results	**Compliance** (As detailed within this report)
Date	08/16/2002 (month / day / year)(Sample received) 09/11/2002 (month / day / year)(Tested)
Prepared by	Project Engineer
Authorized by	V.General Manager (Jacob Lin)
Issue date	October 7, 2002 (month / day / year)
Modifications	**None**
Tested by	Training Research Co., Ltd. **(Accredited by NVLAP)**
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Conditions of issue :

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- ***The test data in this test report are following the procedures in accordance with the terms of accreditation.***
- ***This test report and measurements made by TRC are traceable to the NIST only Conducted and Radiated Method (TRC is accredited by NVLAP, code No.: 200174-0).***
- ***The device has been tested is fully complied with the requirements the Directive FCC Part 15.***

Contents

Chapter 1 Introduction

Description of EUT:

This is a class II change application, the difference between original are:

1. **Charging method:**
   Modified: charging-bay on the Rx providing the Tx charging via the metallic charging-strip on each side. (AC-DC adapter is plugged with the Rx DC jack)
   Original: the AC-DC adapter is plugged directly to the DC jack on Tx.
2. **Component:**
   Modified:a. by adding 2 metallic charging-strips on the on both side.
   b. removing the DC jack on the Tx.
   Original: (Undo the modified part in the section)
3. **Soldering:**
   Modified: connecting both positive and negative polarity power to the bottom-end charging-strips.
   Original: connecting both positive and negative polarity power to the DC input jack.
4. **Mechanism:**
   Modified: equipped no DC jack but with the charging metallic strip at the bottom.
   Original: (Undo the modified part in this section)

EUT	:	Wireless Optical Mouse
Model No.	:	CHIC 2490UP
Product name	:	Wireless Optical Mouse
FCC ID	:	IOW1490UP
Frequency Range	:	26.96 – 27.28 MHz
Power Type	:	Powered by two 1.5VDC AA batteries

*This EUT has two channels (each with 256 IDs):

1. 27.0950 MHz 2. 27.0450 MHz

Test method:

All measurements contained in this report were performed according to the techniques described in Measurement procedure ANSI C63.4 – 1992.

Pretest was found that the emission of operating mode is worse than standby mode. So, The final test is made at the operating mode.

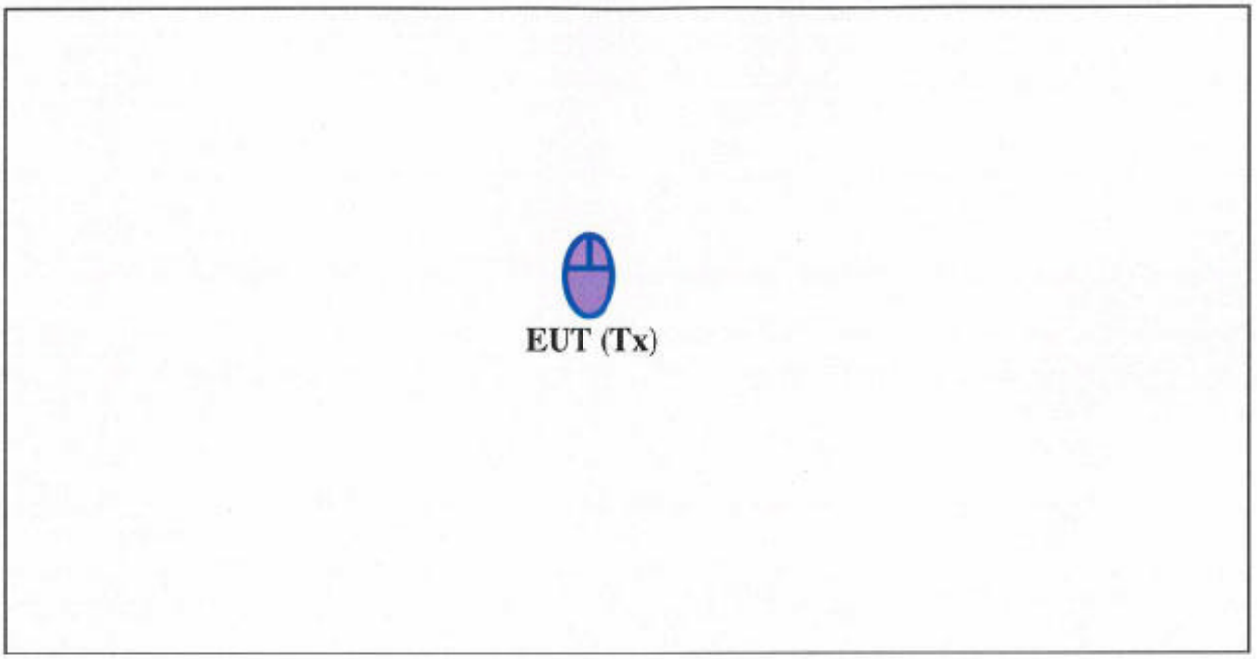
During the measurement, there are two channel and three modes tested: "Operating CH-1", "Operating CH-2" and "Charging" modes. The radiation pretest was found out the testing mode: "Operating CH-1" mode was the worst case and we only recorded the worst case in this report.

While testing, the EUT was made to transmit continuously and adjusted at a position, which transmitted the maximum emission.

The test placement as the photographs showed is the worst case emission placed. (If the emission is close to the ambient, the resolution BW and view resolution will be reduced and the data will be recorded by detection of maximum hold peak mode.)

The testing configuration of test setup is showing in the next page.

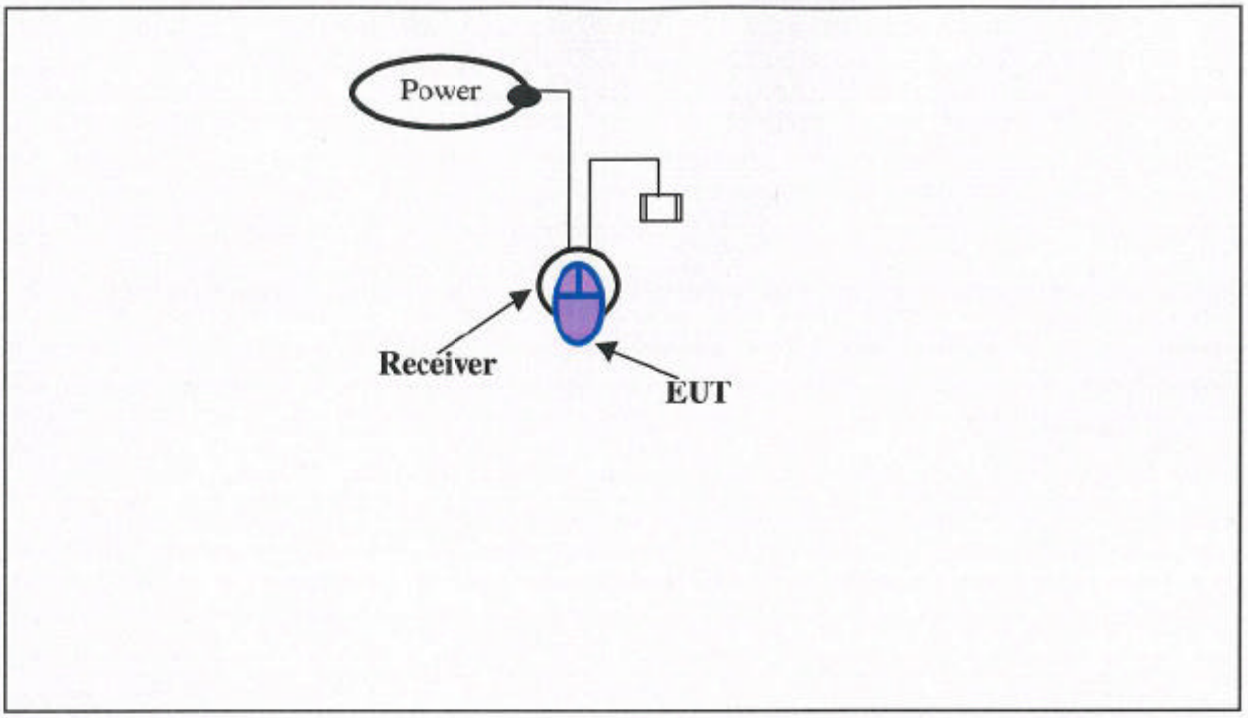
Configuration of Test Setup(Test mode: "Normal")



EUT:

Put two AA size, 1.5V battery into the battery cell of EUT, powers the subject device.
The EUT does not be connected with any product.

Configuration of Test Setup (Test mode: "Charging")



Connections:

EUT:

*Put two AA size, 1.5V battery into the battery cell of EUT, powers the subject device.
Put the EUT(Tx) on the EUT(Rx) to charge.

Receiver:

*USB Jack --- with a 142cm long shielded USB cable that terminated.

*Power Jack --- via a 1.86m long power cable with a adapter to the power source.

List of Support Equipment

Conducted (Radiated) test:

Receiver	:	**Chic Technology Corp.**
Model No.	:	CHIC 2490UP
Serial No.	:	N/A
FCC ID	:	Doc Approved
Power type	:	Operating by PC;
		Charging by adaptor: Input: 120VAC 60Hz, Output: 6VDC 300mA
Data cable	:	Shielded, 1.42m long, with ferrite core

Chapter 2 Conducted Emission Test

Test Condition and Setup:

All the equipment is placed and setup according to the ANSI C63.4 – 1992.
The EUT is assembled on a wooden table that is 80 cm high, is placed 40 cm from the back-wall that is a vertical conducting plane. One LISN is for EUT, the other LISN is for support equipment. They are all placed on the conductive ground. The EUT's LISN connect a line switch box for selecting L1 or L2, then connect to a preamplifier and Spectrum.

The spectrum measured from 150KHz to 30MHz. Conducted emission levels are detected at max. peak mode. But if the max. peak mode failed or over average limit, it will be measured by QP and average detection mode using the Receiver.

While testing, there is the worst-emission plot printed at peak detection mode, and there are more than 6 highest emissions relative to limit recorded. The plot is kept as the original data, not included in test report.

List of test Instrument :

				Calibration Date	
Instrument Name	Model No.	Brand	Serial No.	Last time	Next time
Receiver	SCR3102	SCHAFFNER	012	03/29/02	03/28/03
LISN (EUT)	3825/2	EMCO	9411-2284	06/17/02	06/16/03
LISN (Support E.)	3825/2	EMCO	9210-2007	05/31/02	05/31/03
Preamplifier	EQ3-006	TRC	---------	05/15/02	05/15/03
Line switch box	EQ3-007	TRC	---------	05/15/02	05/15/03

The level of confidence of 95% , the uncertainty of measurement of conducted emission is ± 2.02 dB .

Test Result: Pass (Appendix A)

Conducted Test Placement: (Photographs)