

# FCC TEST REPORT

**REPORT NO.:** RF940823L30  
**MODEL NO.:** MWL61-P  
**OEM MODEL NO.:** AMW14  
**RECEIVED:** Aug. 23, 2005  
**TESTED:** Sep. 16 ~ 20, 2005  
**ISSUED:** Sep. 20, 2005

**APPLICANT:** DEXIN Corporation

**ADDRESS:** 14F-8, No 258, Lian Cheng Rd., Chung Ho City, Taipei Hsien, Taiwan, R.O.C.

**ISSUED BY:** Advance Data Technology Corporation

**LAB ADDRESS:** No. 47, 14<sup>th</sup> Ling, Chia Pau Tsuen, Lin Kou Hsiang 244, Taipei Hsien, Taiwan, R.O.C.

**TEST LOCATION:** No. 19, Hwa Ya 2<sup>nd</sup> Rd., Wen Hwa Tsuen, Kwei Shan Hsiang, Taoyuan Hsien 333, Taiwan, R.O.C.

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## 1 CERTIFICATION

**PRODUCT:** Cordless Laser Mouse  
**MODEL:** MWL61-P  
**OEM MODEL:** AMW14  
**BRAND:** DEXIN  
**OEM BRAND:** TARGUS  
**APPLICANT:** DEXIN CORPORATION  
**TESTED:** Sep. 16 ~ 20, 2005  
**TEST SAMPLE:** ENGINEERING SAMPLE  
**STANDARDS:** FCC Part 15, Subpart C (Section 15.227),  
ANSI C63.4-2003

The above equipment has been tested by **Advance Data Technology Corporation**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's EMC characteristics under the conditions specified in this report.

**PREPARED BY** : Rennie Wang , **DATE:** Sep. 20, 2005  
Rennie Wang

**TECHNICAL ACCEPTANCE** : Gary Chang , **DATE:** Sep. 20, 2005  
Responsible for RF Gary Chang

**APPROVED BY** : Cody Chang , **DATE:** Sep. 20, 2005  
Cody Chang / Deputy Manager

## 2 SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

APPLIED STANDARD: FCC Part 15, Subpart C			
STANDARD PARAGRAPH	TEST TYPE	RESULT	REMARK
15.207	Conducted Emission Test	PASS	Minimum passing margin is -13.60dB at 0.451MHz
15.227 15.209	Radiated Emission Test	PASS	Minimum passing margin is -1.72dB at 407.11MHz

### 2.1 MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4:

MEASUREMENT	FREQUENCY	UNCERTAINTY
Conducted emissions	9kHz~30MHz	2.44 dB
Radiated emissions	30MHz ~ 200MHz	3.55 dB
	200MHz ~1000MHz	3.58 dB
	1GHz ~ 18GHz	1.10 dB
	18GHz ~ 40GHz	0.91 dB

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

### 3 GENERAL INFORMATION

#### 3.1 GENERAL DESCRIPTION OF EUT

<b>PRODUCT</b>	Cordless Laser Mouse
<b>MODEL NO.</b>	MWL61-P
<b>OEM MODEL NO.</b>	AMW14
<b>POWER SUPPLY</b>	3Vdc from batteries 5Vdc from host equipment
<b>MODULATION TYPE</b>	FSK
<b>CARRIER FREQUENCY OF EACH CHANNEL</b>	26.985, 27.015, 27.045, 27.075, 27.105, 27.135, 27.165, 27.195, 27.225, 27.255MHz
<b>NUMBER OF CHANNEL</b>	10
<b>ANTENNA TYPE</b>	Loop antenna
<b>DATA CABLE</b>	1.1m non-shielded cable without core (for charger) 1.5m non-shielded cable without core (for receiver)
<b>I/O PORTS</b>	USB
<b>ASSOCIATED DEVICES</b>	NA

**NOTE:**

1. The EUT is a set of Cordless Laser Mouse with receiver.
2. The following models are provided to this EUT.

<b>Brand</b>	<b>Model</b>	<b>Description</b>
DEXIN	MWL61-P	For transmitter
DEXIN	RX61	For receiver
TARGUS	AMW14	OEM model for transmitter & receiver

3. The above EUT information was declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications or User's Manual.

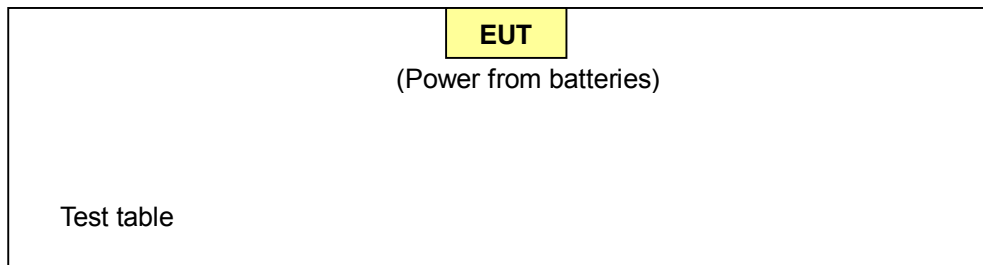
### 3.1 DESCRIPTION OF TEST MODES

Ten channels were provided to this EUT.

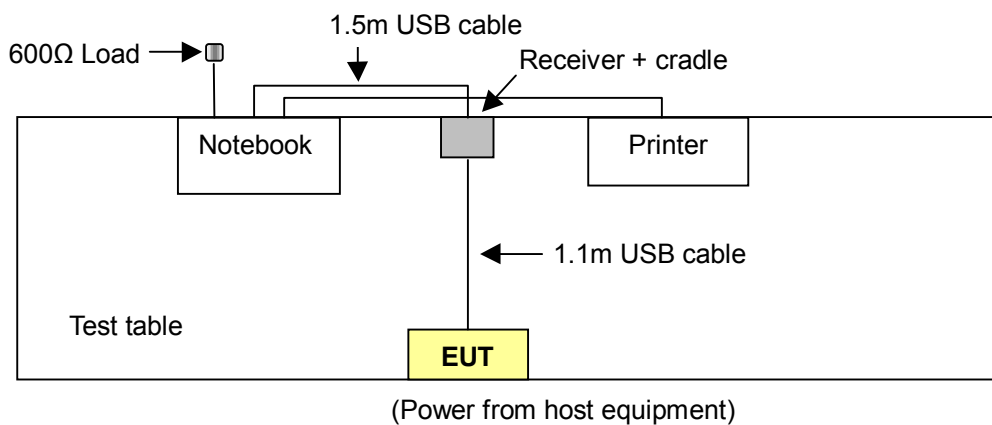
CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
1	26.985	6	27.135
2	27.015	7	27.165
3	27.045	8	27.195
4	27.075	9	27.225
5	27.105	10	27.255

#### 3.1.1 CONFIGURATION OF SYSTEM UNDER TEST

##### Test Mode 1\_Power from batteries



##### Test Mode 2\_Power from host equipment





**3.1.2 TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL**

EUT configure mode	Applicable to		Description
	PLC	RE<1G	
1	-	√	EUT power from batteries
2	√	√	EUT power from host equipment

Where PLC: Power Line Conducted Emission RE<1G RE: Radiated Emission below 1GHz

“-”: No need to concern of Conducted Emission due to the EUT is powered by batteries.

**Power Line Conducted Emission Test:**

Following channel(s) was (were) selected for the final test as listed below.

EUT configure mode	EUT	Available Channel	Tested Channel	Modulation Type
2	Mouse	1-10	6	FSK

**Radiated Emission Test (Below 1 GHz):**

Following channel(s) was (were) selected for the final test as listed below.

EUT configure mode	EUT	Available Channel	Tested Channel	Modulation Type
1	Mouse	1-10	6	FSK
2	Mouse	1-10	6	FSK

### 3.2 GENERAL DESCRIPTION OF APPLIED STANDARDS

The EUT is a Cordless Laser Mouse. According to the specifications of the manufacturer, it must comply with the requirements of the following standards:

**FCC Part 15, Subpart C. (15.227)**  
**ANSI C63.4-2003**

All test items have been performed and recorded as per the above standards.

### 3.3 DESCRIPTION OF SUPPORT UNITS

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

NO.	PRODUCT	BRAND	MODEL NO.	SERIAL NO.	FCC ID
1	NOTEBOOK	Compaq	N800C	470048-515	FCC DoC Approved
2	PRINTER	EPSON	LQ-300+	DCGY047265	FCC DoC Approved
3	600Ω LOAD	NA	NA	NA	NA

NO.	SIGNAL CABLE DESCRIPTION OF THE ABOVE SUPPORT UNITS
1	NA
2	1.2 m shielded cable without core
3	NA

**NOTE:** All power cords of the above support units are non shielded (1.8m).



## 4 TEST PROCEDURE AND RESULT

### 4.1 CONDUCTED EMISSION MEASUREMENT

#### 4.1.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT

FREQUENCY OF EMISSION (MHz)	CONDUCTED LIMIT (dB $\mu$ V)	
	Quasi-peak	Average
0.15-0.5	66 to 56	56 to 46
0.5-5	56	46
5-30	60	50

**NOTE:**

1. The lower limit shall apply at the transition frequencies.
2. All emanations from a class A/B digital device or system, including any network of conductors and apparatus connected thereto, shall not exceed the level of field strengths specified above.

#### 4.1.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED UNTIL
Test Receiver ROHDE & SCHWARZ	ESCS30	100288	Nov. 06, 2005
RF signal cable Woken	5D-FB	Cable-HyC02-01	Jan. 09, 2006
LISN ROHDE & SCHWARZ	ESH2-Z5	100100	Jan. 20, 2006
LISN ROHDE & SCHWARZ	ESH3-Z5	100311	Jan. 20, 2006
Software ADT	ADT_Cond_V3	NA	NA

- NOTE:**
1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
  2. The test was performed in HwaYa Shielded Room 3.
  3. The VCCI Site Registration No. is C-2047.

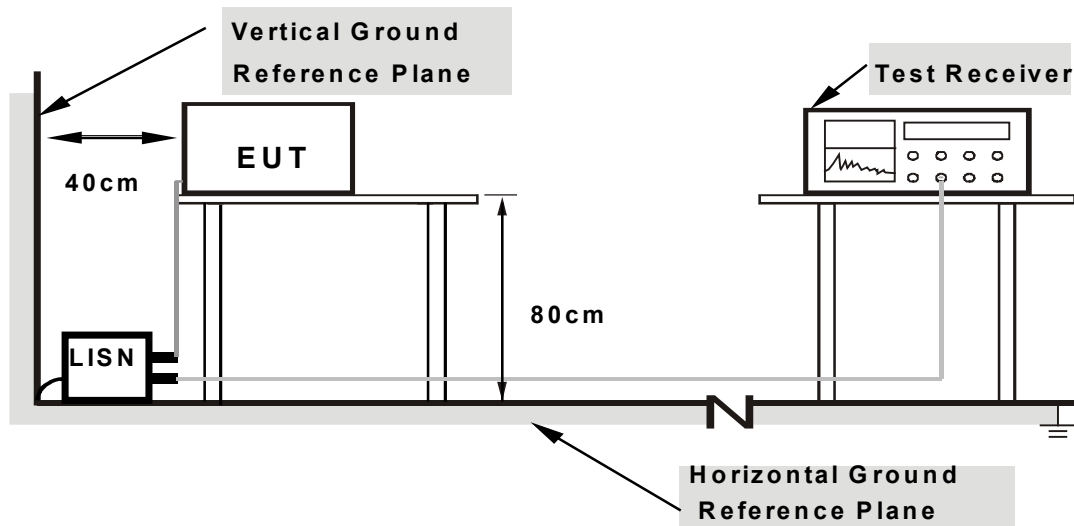
#### 4.1.3 TEST INSTRUMENTS

- a. The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling impedance for the measuring instrument.
- b. Both lines of the power mains connected to the EUT were checked for maximum conducted interference.
- c. The frequency range from 150kHz to 30MHz was searched. Emission levels under Limit - 20dB was not recorded.

#### 4.1.4 DEVIATION FROM TEST STANDARD

No deviation.

#### 4.1.5 TEST SETUP



- Note:**
1. Support units were connected to second LISN.
  2. Both of LISNs (AMN) are 80 cm from EUT and at least 80 from other units and other metal planes

For the actual test configuration, please refer to the related item – Photographs of the Test Configuration.

#### 4.1.6 EUT OPERATING CONDITIONS

Test mode 2:

- a. Connected the EUT via a USB cable to the notebook placed on the testing table.
- b. Set the EUT under charging condition.
- c. Set the EUT under transmitting condition.
- d. The notebook sent “H” messages to the printer and the printer printed them out.
- e. The notebook sent “H” messages to its screen and displayed them.
- f. Steps d ~ e was repeated.

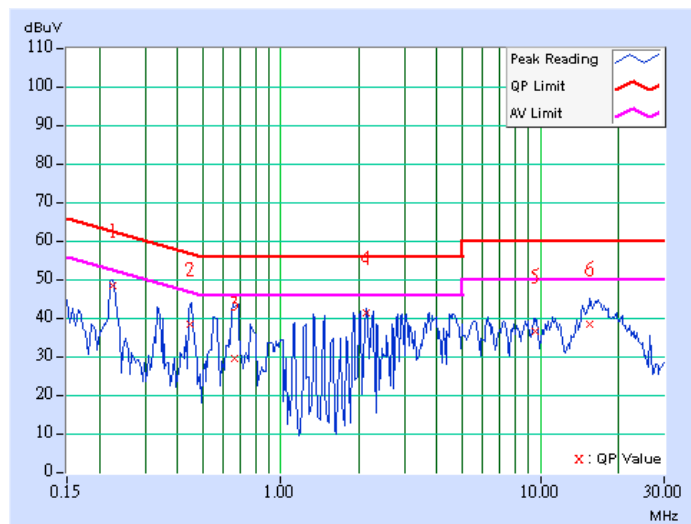
### 4.1.7 TEST RESULTS

#### Conducted Worst-Case Data\_Power from host equipment

<b>EUT</b>	Cordless Laser Mouse	<b>MEASUREMENT DETAIL</b>	
<b>MODEL</b>	MWL61-P	<b>PHASE</b>	Line 1
<b>CHANNEL</b>	Channel 6	<b>6dB BANDWIDTH</b>	9 kHz
<b>MODULATION TYPE</b>	FSK	<b>ENVIRONMENTAL CONDITIONS</b>	25deg. C, 65%RH, 991hPa
<b>TEST MODE</b>	2	<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz
<b>TESTED BY</b>	Jay Hsu		

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.224	0.11	47.82	-	47.93	-	62.66	52.66	-14.73	-
2	0.447	0.13	37.83	-	37.96	-	56.93	46.93	-18.97	-
3	0.667	0.17	28.98	-	29.15	-	56.00	46.00	-26.85	-
4	2.148	0.25	40.89	-	41.14	-	56.00	46.00	-14.86	-
5	9.590	0.43	36.11	-	36.54	-	60.00	50.00	-23.46	-
6	15.547	0.60	37.98	-	38.58	-	60.00	50.00	-21.42	-

- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
  2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
  3. The emission levels of other frequencies were very low against the limit.
  4. Margin value = Emission level - Limit value
  5. Correction factor = Insertion loss + Cable loss
  6. Emission Level = Correction Factor + Reading Value.

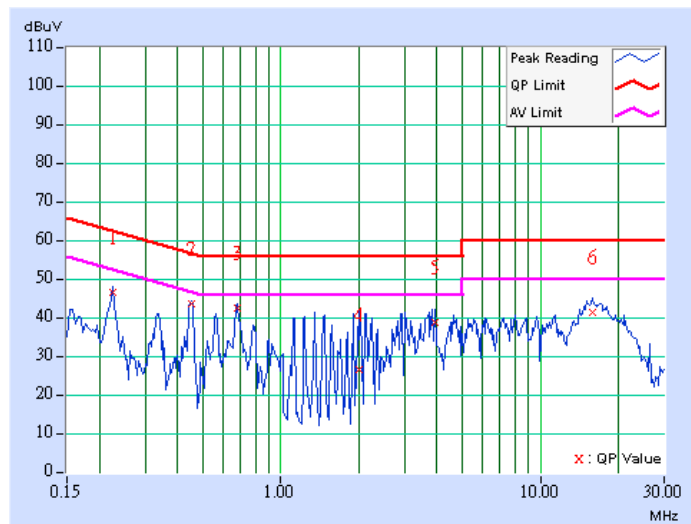




<b>EUT</b>	Cordless Laser Mouse	<b>MEASUREMENT DETAIL</b>	
<b>MODEL</b>	MWL61-P	<b>PHASE</b>	Line 2
<b>CHANNEL</b>	Channel 6	<b>6dB BANDWIDTH</b>	9 kHz
<b>MODULATION TYPE</b>	FSK	<b>ENVIRONMENTAL CONDITIONS</b>	25deg. C, 65%RH, 991hPa
<b>TEST MODE</b>	2	<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz
<b>TESTED BY</b>	Jay Hsu		

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.224	0.11	45.89	-	46.00	-	62.66	52.66	-16.66	-
2	<b>0.451</b>	<b>0.13</b>	<b>43.13</b>	-	<b>43.26</b>	-	<b>56.86</b>	<b>46.86</b>	<b>-13.60</b>	-
3	0.677	0.17	41.75	-	41.92	-	56.00	46.00	-14.08	-
4	2.008	0.25	26.02	-	26.27	-	56.00	46.00	-29.73	-
5	3.949	0.29	38.08	-	38.37	-	56.00	46.00	-17.63	-
6	15.992	0.72	40.65	-	41.37	-	60.00	50.00	-18.63	-

- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
  2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
  3. The emission levels of other frequencies were very low against the limit.
  4. Margin value = Emission level - Limit value
  5. Correction factor = Insertion loss + Cable loss
  6. Emission Level = Correction Factor + Reading Value.



## 4.2 RADIATED EMISSION MEASUREMENT

### 4.2.1 LIMITS OF RADIATED EMISSION MEASUREMENT

According to 15.227 the field strength of Emissions from intentional radiators operated under these frequencies bands shall not exceed the following:

Fundamental Frequency (MHz)	Field Strength of Fundamental (dBuV/m)	
	Peak	Average
26.96-27.28	100	80

Field strength limits are at the distance of 3 meters, Emissions radiated outside of the specified bands, shall be according to the general radiated limits in 15.209 as following:

Frequencies (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

As shown in 15.35(b), for frequencies above 1000MHz, the field strength limits are based on average detector, however, the peak field strength of any emission shall not exceed the maximum permitted average limits, specified above by more than 20dB under any condition of modulation.

## 4.2.2 TEST INSTRUMENT

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED UNTIL
Test Receiver ROHDE & SCHWARZ	ESI7	100033	May. 19, 2006
Spectrum Analyzer ROHDE & SCHWARZ	FSP40	100039	Nov. 21, 2006
BILOG Antenna SCHWARZBECK	VULB9168	9168-160	Jun. 01, 2006
HORN Antenna SCHWARZBECK	9120D	9120D-408	Jan. 17, 2006
HORN Antenna SCHWARZBECK	BBHA 9170	BBHA9170243	Jan. 23, 2006
Loop Antenna	HFH2-Z2	100070	Nov. 14, 2005
Preamplifier Agilent	8447D	2944A10633	Nov. 09, 2005
Preamplifier Agilent	8449B	3008A01964	Nov. 06, 2005
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	218183/4	Jan. 26, 2006
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	218195/4	Jan. 26, 2006
Software ADT.	ADT_Radiated_V5.14	NA	NA
Antenna Tower inn-co GmbH	MA 4000	013303	NA
Antenna Tower Controller inn-co GmbH	CO2000	017303	NA
Turn Table ADT.	TT100.	TT93021703	NA
Turn Table Controller ADT.	SC100.	SC93021703	NA

- NOTE:**
1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
  2. The test was performed in HwaYa Chamber 2.
  3. The horn antenna and HP preamplifier (model: 8449B) are used only for the measurement of emission frequency above 1GHz if tested.
  4. The VCCI Site Registration No. is R-237.
  5. The IC Site Registration No. is IC4924-3.

#### 4.2.3 TEST PROCEDURE

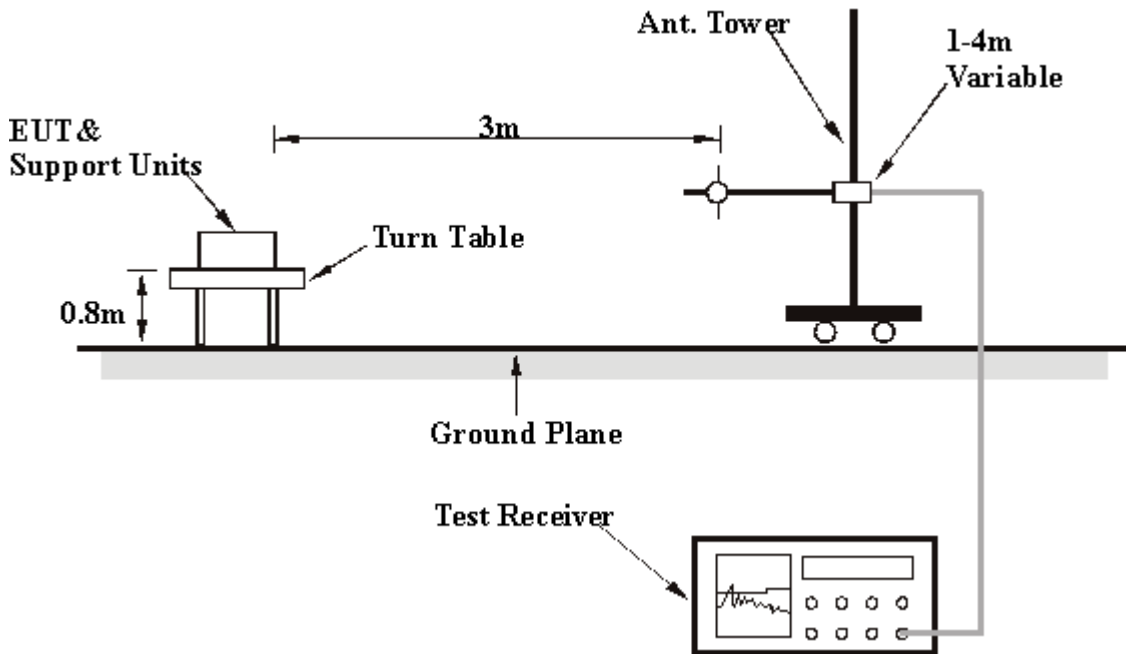
- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. The antenna is a broadband antenna, and its height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- f. If the emission level of the EUT in peak mode was 10 dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10 dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

**NOTE:**

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Peak detection (PK) and Quasi-peak detection (QP) at frequency below 1GHz.



#### 4.2.4 TEST SETUP



For the actual test configuration, please refer to the related item in this test report - Photographs of the Test Configuration.

#### 4.2.5 EUT OPERATING CONDITION

Test mode 1:

- a. Placed the EUT on the testing table.
- b. Set the EUT under transmitting condition.

Test mode 2:

- a. Connected the EUT via a USB cable to the notebook placed on the testing table.
- b. Set the EUT under charging condition.
- c. Set the EUT under transmitting condition.
- d. The notebook sent "H" messages to the printer and the printer printed them out.
- e. The notebook sent "H" messages to its screen and displayed them.
- f. Steps d ~ e was repeated.

## 4.2.6 TEST RESULTS

## Radiated Worst-Case Data

<b>EUT</b>	Cordless Laser Mouse	<b>MODEL</b>	MWL61-P
<b>INPUT POWER</b>	3Vdc	<b>FREQUENCY RANGE</b>	Below 1000 MHz
<b>ENVIRONMENTAL CONDITIONS</b>	25 deg. C, 69 % RH, 991 hPa	<b>DETECTOR FUNCTION</b>	Peak / Average
<b>TEST MODE</b>	2	<b>TESTED BY</b>	Morgan Chen

## TEST DISTANCE: 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*27.135	29.76 PK	100.00	-70.24	0.99	152	16.24	13.52
2	*27.135	5.80 AV	80.00	-74.20	1.00	152	-7.72	13.52

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
  2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value.
  5. "\*" = Fundamental frequency.
  6. Loop Antenna was used for all frequency below 30MHz.

## Radiated Worst-Case Data\_Power from batteries

<b>EUT</b>	Cordless Laser Mouse	<b>MODEL</b>	MWL61-P
<b>INPUT POWER</b>	3Vdc	<b>FREQUENCY RANGE</b>	Below 1000 MHz
<b>ENVIRONMENTAL CONDITIONS</b>	25 deg. C, 69 % RH, 991 hPa	<b>DETECTOR FUNCTION</b>	Quasi-Peak
<b>TEST MODE</b>	1	<b>TESTED BY</b>	Morgan Chen

**ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M**

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	624.83	37.28 QP	46.00	-8.72	1.25 H	100	14.21	23.07
2	733.69	36.30 QP	46.00	-9.70	1.00 H	37	11.06	25.24
3	788.12	36.60 QP	46.00	-9.40	1.00 H	13	10.41	26.19
4	842.55	40.35 QP	46.00	-5.65	1.50 H	58	13.68	26.67
5	896.97	38.88 QP	46.00	-7.12	1.25 H	277	11.77	27.12
6	924.19	38.29 QP	46.00	-7.71	1.25 H	88	10.79	27.49
7	951.40	43.16 QP	46.00	-2.84	1.25 H	283	15.29	27.87
8	976.67	42.16 QP	54.00	-11.84	1.25 H	100	14.22	27.94

**ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M**

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	407.11	33.88 QP	46.00	-12.12	1.25 V	328	15.66	18.21
2	679.26	32.96 QP	46.00	-13.04	1.00 V	25	9.36	23.61
3	733.69	31.24 QP	46.00	-14.76	1.25 V	184	6.00	25.24
4	842.55	31.37 QP	46.00	-14.63	1.50 V	184	4.70	26.67
5	896.97	32.33 QP	46.00	-13.67	1.25 V	355	5.21	27.12
6	951.40	34.18 QP	46.00	-11.82	1.25 V	343	6.31	27.87

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
  2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value.

## Radiated Worst-Case Data\_Power from host equipment

<b>EUT</b>	Cordless Laser Mouse	<b>MODEL</b>	MWL61-P
<b>INPUT POWER</b>	120Vac, 60 Hz	<b>FREQUENCY RANGE</b>	Below 1000 MHz
<b>ENVIRONMENTAL CONDITIONS</b>	25 deg. C, 69 % RH, 991 hPa	<b>DETECTOR FUNCTION</b>	Quasi-Peak
<b>TEST MODE</b>	2	<b>TESTED BY</b>	Morgan Chen

**ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M**

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	82.48	38.17 QP	40.00	-1.83	4.00 H	88	27.98	10.19
2	94.15	41.47 QP	43.50	-2.03	1.75 H	283	32.10	9.37
3	298.26	40.15 QP	46.00	-5.85	1.00 H	73	24.37	15.78
4	<b>407.11</b>	<b>44.28 QP</b>	<b>46.00</b>	<b>-1.72</b>	<b>1.00 H</b>	<b>283</b>	<b>26.07</b>	<b>18.21</b>
5	679.26	41.12 QP	46.00	-4.88	1.00 H	205	17.51	23.61
6	842.55	41.00 QP	46.00	-5.00	1.50 H	268	14.33	26.67
7	896.97	40.92 QP	46.00	-5.08	1.50 H	274	13.81	27.12
8	951.40	43.96 QP	46.00	-2.04	1.25 H	271	16.09	27.87
9	976.67	42.61 QP	54.00	-11.39	1.25 H	277	14.67	27.94

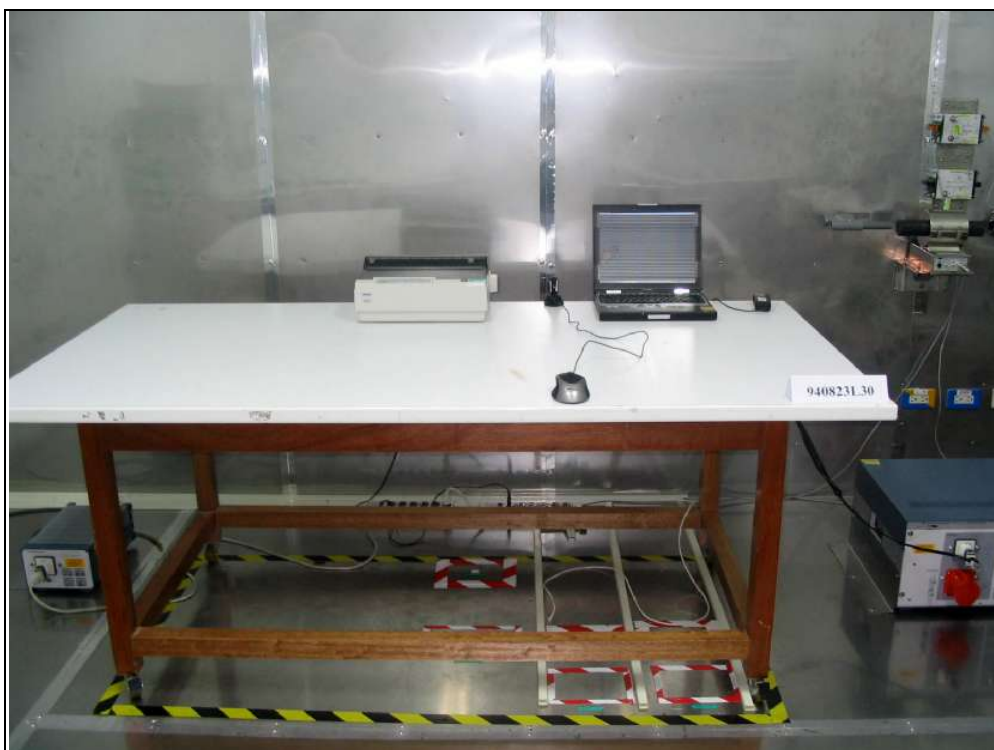
**ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M**

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	47.49	32.87 QP	40.00	-7.13	1.00 V	343	18.19	14.68
2	80.54	38.11 QP	40.00	-1.89	2.50 V	16	27.71	10.40
3	111.64	35.22 QP	43.50	-8.28	1.00 V	238	24.80	10.42
4	407.11	38.34 QP	46.00	-7.66	2.00 V	310	20.12	18.21
5	733.69	36.86 QP	46.00	-9.14	1.50 V	184	11.62	25.24
6	931.96	38.11 QP	46.00	-7.89	1.25 V	184	10.50	27.61

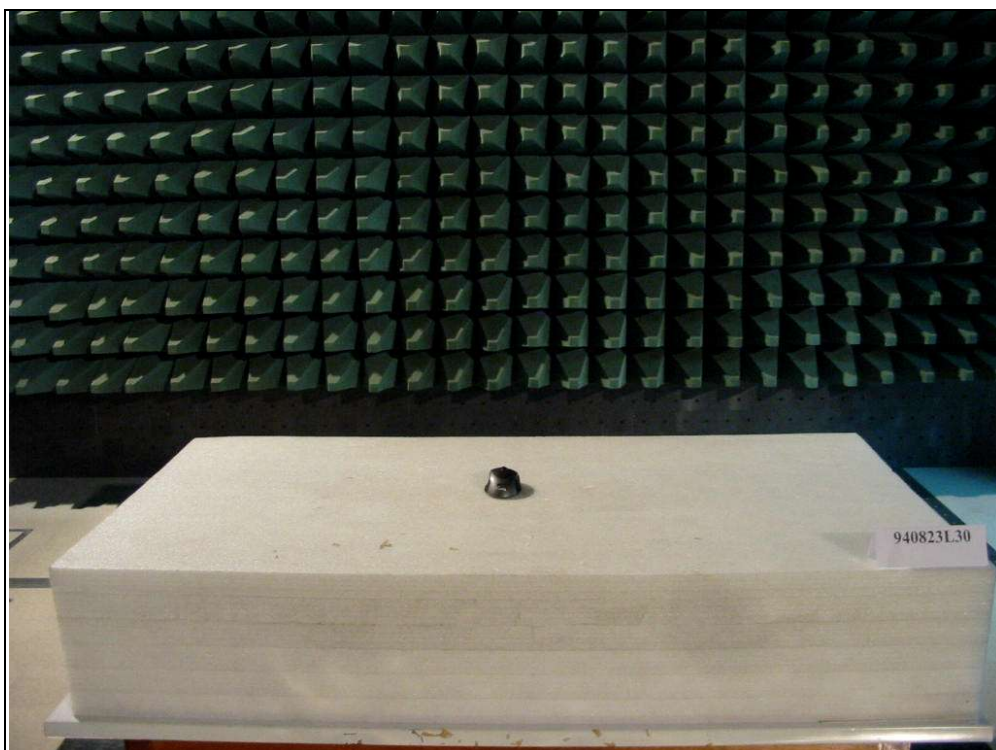
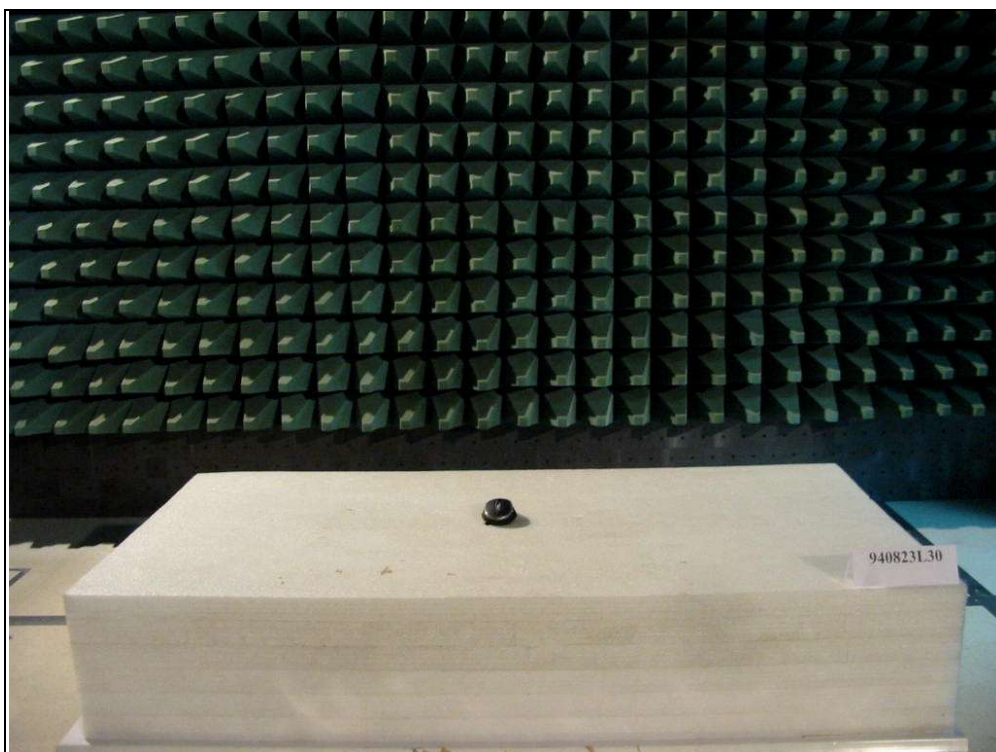
- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
  2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value.

#### 4 PHOTOGRAPHS OF THE TEST CONFIGURATION

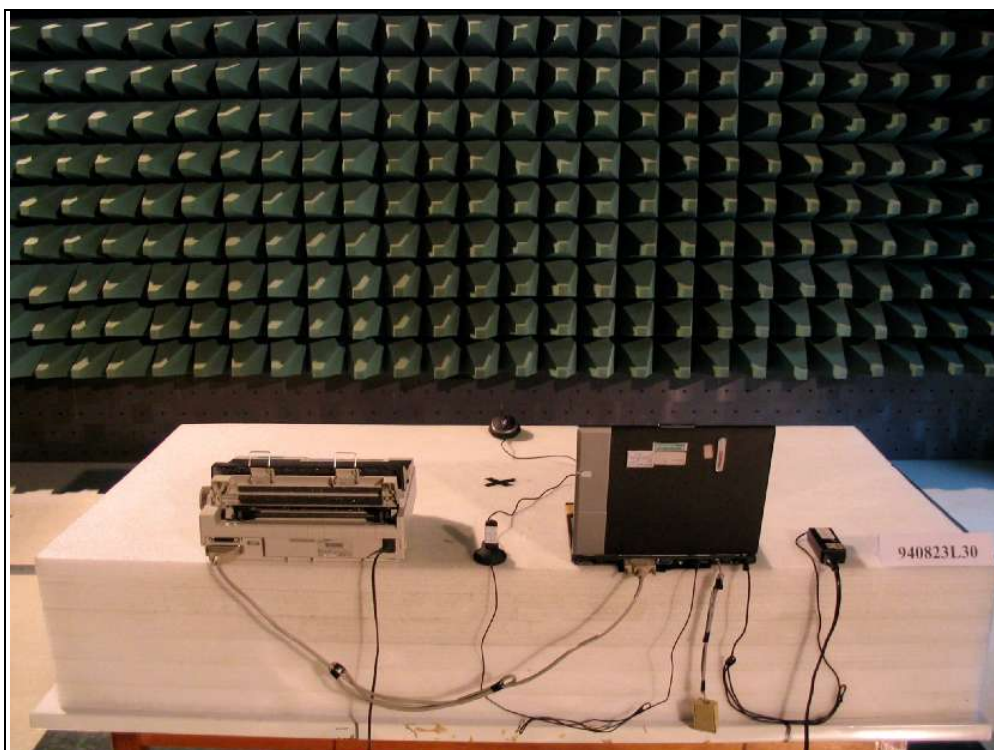
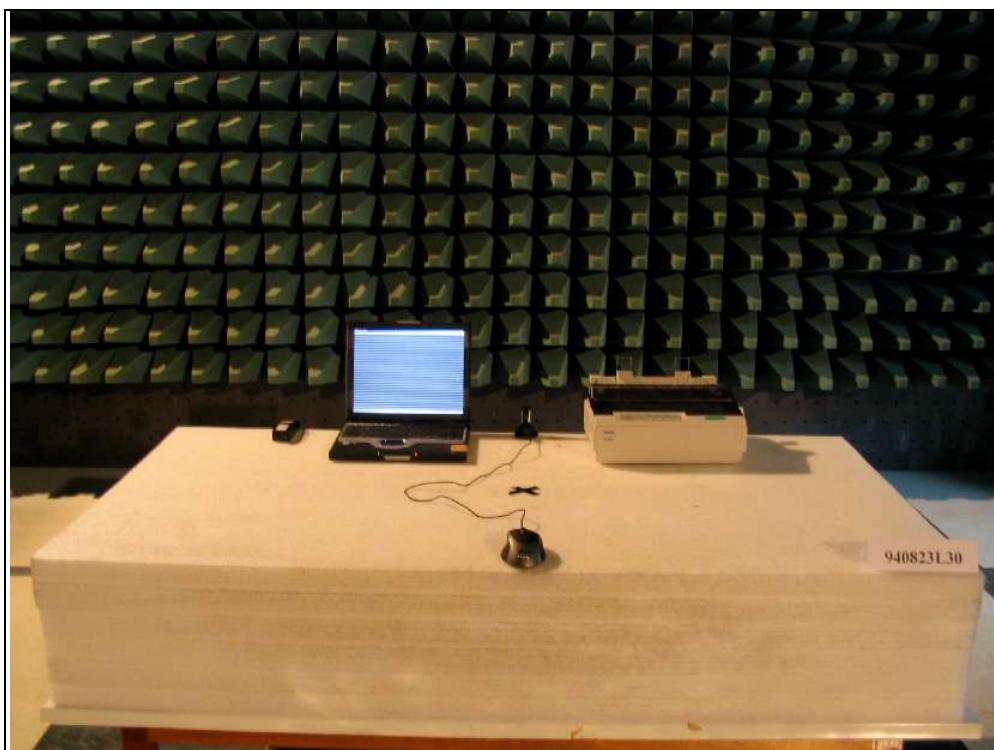
##### CONDUCTED EMISSION TEST (TEST MODE 2)



### RADIATED EMISSION TEST (TEST MODE 1)



### RADIATED EMISSION TEST (TEST MODE 2)





## 5 INFORMATION ON THE TESTING LABORATORIES

We, ADT Corp., were founded in 1988 to provide our best service in EMC, Radio, Telecom and Safety consultation. Our laboratories are accredited and approved by the following approval agencies according to ISO/IEC 17025.

<b>USA</b>	FCC, NVLAP, UL , A2LA
<b>Germany</b>	TUV Rheinland
<b>Japan</b>	VCCI
<b>Norway</b>	NEMKO
<b>Canada</b>	INDUSTRY CANADA , CSA
<b>R.O.C.</b>	CNLA, BSMI, DGT
<b>Netherlands</b>	Telefication
<b>Singapore</b>	PSB , GOST-ASIA(MOU)
<b>Russia</b>	CERTIS(MOU)

Copies of accreditation certificates of our laboratories obtained from approval agencies can be downloaded from our web site: [www.adt.com.tw/index.5/phtml](http://www.adt.com.tw/index.5/phtml).  
If you have any comments, please feel free to contact us at the following:

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**Linko RF Lab.**

Tel: 886-3-3270910  
Fax: 886-3-3270892

**Web Site:** [www.adt.com.tw](http://www.adt.com.tw)

The address and road map of all our labs can be found in our web site also.





## **APPENDIX-A**

### **MODIFICATIONS RECORDERS FOR ENGINEERING CHANGES TO THE EUT BY THE LAB**

No any modifications are made to the EUT by the lab during the test.