

ADDRESS: No.85-5, Shir Men Road, Tu Cheng City,
Taipei Hsien, TAIWAN, R. O. C.
PHONE : 886-2-22608375 FAX : 886-2-22748013
E - mail : hometek@ms15.hinet.net

FCC TEST REPORT FOR

APPLICANT : DELTA ELECTRONICS INCORPORATED
ADDRESS : No. 3, Tung Yuan Road,
Chung Li Industrial Zone,
Taoyuan, Taiwan, R. O. C.
EUT : NOTEBOOK COMPUTER
MODEL NO. : DN-615
FCC ID : H79DN-615

Under Part 15, SUBPART B.

CLASS B

Certification

PREPARED BY :

HomeTek Technology Inc.

No. 85-5, Shir Men Road, Tu Cheng City,

Taipei Hsien. TAIWAN, R. O. C.

Report # : FB8G007



TABLE OF CONTENTS

GENERAL INFORMATION.....3

MODIFICATION LIST.....6

CONDUCTED POWER LINE TEST.....7

 1 TEST INSTRUMENTS & FACILITIES7

 2 TEST PROCEDURE8

 3 TEST SETUP10

 4 CONFIGURATION OF THE EUT15

 5 EUT OPERATING CONDITION15

 6 LIMIT OF CONDUCTED POWER LINE EMISSION CLASS B :16

 7 RESULT OF CONDUCTED POWER LINE TEST (1)17

 8 PHOTO OF CONDUCTED POWER LINE TEST18

 9 RESULT OF CONDUCTED POWER LINE TEST (2)19

 10 PHOTO OF CONDUCTED POWER LINE TEST20

 11 RESULT OF CONDUCTED POWER LINE TEST (3)21

 12 PHOTO OF CONDUCTED POWER LINE TEST22

RADIATED EMISSION TEST.....22

 1 TEST INSTRUMENTS & FACILITIES23

 2 TEST PROCEDURE23

 3 TEST SETUP24

 4 CONFIGURATION OF THE EUT24

 5 EUT OPERATING CONDITION24

 6 LIMIT OF RADIATED EMISSION CLASS B :25

 7 RESULT OF RADIATED EMISSION TEST (1).....27

 8 PHOTO OF RADIATED EMISSION TEST28

 9 RESULT OF RADIATED EMISSION TEST (2).....30

 10 PHOTO OF RADIATED EMISSION TEST31

 11 RESULT OF RADIATED EMISSION TEST (3).....33

 12 PHOTO OF RADIATED EMISSION TEST34

PHOTO OF FCC ID LABEL.....35

PHOTOS OF EUT.....36

PHOTOS OF EUT.....37

PHOTOS OF EUT.....38

PHOTOS OF EUT.....39

PHOTOS OF EUT.....40

PHOTOS OF EUT.....41

PHOTOS OF EUT.....42



PHOTOS OF EUT.....	43
PHOTOS OF EUT.....	44
PHOTOS OF EUT.....	45
PHOTOS OF EUT.....	46
PHOTOS OF EUT.....	47
PHOTOS OF EUT.....	48
PHOTOS OF EUT.....	49
PHOTOS OF EUT.....	50
PHOTOS OF EUT.....	51
PHOTOS OF EUT.....	52
PHOTOS OF EUT.....	53
PHOTOS OF EUT.....	54
PHOTOS OF EUT.....	56
PHOTOS OF EUT.....	60
APPENDIX A	
CIRCUIT (BLOCK) DIAGRAM	
APPENDIX B	
USER'S MANUAL	



GENERAL INFORMATION

1 APPLICANT : DELTA ELECTRONICS INCORPORATED
 2 ADDRESS : No. 3, Tung Yuan Road,
Chung Li Industrial Zone,
Taoyuan, Taiwan, R. O. C.

3 MANUFACTURER : DELTA ELECTRONICS INCORPORATED
 4 ADDRESS : No. 3, Tung Yuan Road,
Chung Li Industrial Zone,
Taoyuan, Taiwan, R. O. C.

5 DESCRIPTION OF EUT :
 EUT : NOTEBOOK COMPUTER
 FCC ID : H79DN-615
 Model Number : DN-615
 Serial # : N/A
 Data Cable : SHIELDED
 Power Cord : UN-SHIELDED
 Power Supply Type : ADAPTOR



6 FEATURES OF EUT :

- CPU : Intel® Celeron™ Processor
(Socket 370 ,PPGA package)
- Core logic : Intel 440BX AGPset
- L2 Cache : On-die 128KB cache
- System BIOS : SystemSoft®
-256KB(2Mbit) Flash EPROM
-includes SMBIOS 2.1(DMI2.0),ACP 1.0
- Memory : 2x 144pin SODIMM slots
-Maximum capacity 256MB
- Display : -14.1”TFT LCD
-RESolution:1024X768(XGA)
-ONE chsnnel LVDS interface
- Video Processor : -ATI 3D RAGE LT PRO graphics accelerator
-2X AGP Bus
-HW 3D graphics user interface
-Motion compensation
-64 bit memory data bus
- Video Memory : -4 MB SGRAM
- CD-ROM : -(12.7mm high)
-CD POM: average 17X speed, maximum up to 24X speed
- FDD : (12.7mm high
-FDD:supports 3.5” disks with 1.44MB,1.2MB,or 720 KB capacity
- HDD : -Ultra-DMA/33,2.5”/9.5mm high
- Keyboard : -86,87 or 90 keys
-Windows keys
-Key spacing:19 mm
-Key travel: 3 mm
- Pointing Device : Touch pad with two buttons
- PCMCIA : -supports Type 1 (2),11(2),and 111(1)
-ExCA compatible
-ZV/CardBus support



- Audio Processor : Maestro-2E PCI audio accelerator
 - AC'97CODEC
 - 3D positional stereo surround support
 - 64-channel wave table synthesizer
 - Two Built-in stereo speakers
- External Connectors :
 - Serial port. 1
 - Bi-directional Parallel port (EPP/ECP) 1
 - VGA monitor port 1
 - PS/2 Keyboard/mouse port 1
 - USBx1
 - IR port 1 (Complies with ASK and IrDA, 4 Mbps and 115 Kbps)
 - Stereo Earphone-out port 1
 - Microphone port 1
 - Line in-portx 1
 - 2 buttons for volume control
 - RJ-11x1 (optional)
 - Kensington Security Lock x 1
 - RCA jack x 1 for TV-out (NTSC/PAL)
- Fax/MOdem : Internal 56Kbps V.90 PCI Modem
- Battery : Single Smart Battery System
 - Li-ion Battery Pack, 8-cells, 47.4 WH total
- AC adapter : Universal AC adapter
 - Input:100-240 v,50/60 Hz AC
 - Output:60W , 20V
- Dimensions : 312 (W) x 255 (D) x36.5 (H) mm
(12.3"x10"1.4")
- Weight : 7lbs (3.2kg)
- Accessory : Carrying Bag



MODIFICATION LIST

THE FOLLOWING ACCESSORIES WERE ADDED TO THE EUT DURING TESTING :

●DN-615

1. A metal-sheet is soldered on the AC/DC adapter motherboard.
2. A core is added on the DC cable of AC/DC adapter at P.C end.
3. A metal-sheet is screw with the LCD display cover as a shielding plate.
4. A conductive gasket is used to contact the PS2 connector ground.
5. A conductive gasket is used to contact the CD-ROM module frame.
6. Four conductive gaskets are pastes on the upper case.
7. This is a nickel-plated housing case.
8. A conductive gaskets are pastes on the ground pads of the audio (ear phone) jack.
9. Two conductive gasket is paste on the LCD cable to contact shielding plate.
10. A conductive gasket is used to contact the upper Case and Lower Case.
11. A ground wire is soldered on the touch-pad module screw on the case.
12. A ground wire is soldered on the metal-sheet of LCD display module and screw on the inverter module ground.

CONDUCTED POWER LINE TEST

1 TEST INSTRUMENTS & FACILITIES

The following test Instruments was used during the conducted test :

Item	Instruments/ Facilities	Specification	Manufacturer	Model #	Date Of Cal.
1	EMI Receiver	9KHz ~ 30MHz	ROHDE & SCHWARZ	ESHS 30	FEB/99
2	LISN	50 Ω/50uH/100A 9KHz ~ 30MHz	SCHWARZ BECK	NNLK 8121	FEB/99
3	LISN	9KHz ~ 30MHz	ROHDE & SCHWARZ	ESH3-Z5	FEB/99
4	ESXS-K1	Version 2.03b	ROHDE & SCHWARZ	1082.9678.02 840.913/246	FEB/99
5	Cables	10KHz ~ 30MHz		NO : 10	JUL/99
6	Pulse Limiter	9KHz ~ 30MHz	ROHDE & SCHWARZ	ESH3Z2 357.8810.52	JUL/99

2 TEST PROCEDURE

2.1 The EUT was tested according to **EN55022** Class B.

2.2 The EUT was placed 0.4 meter from the conducting wall of shielding room and kept at least 0.8 meter from any other grounded conducting surface.

2.3 The frequency range form 0.15 MHz to 30 MHz was investigated.

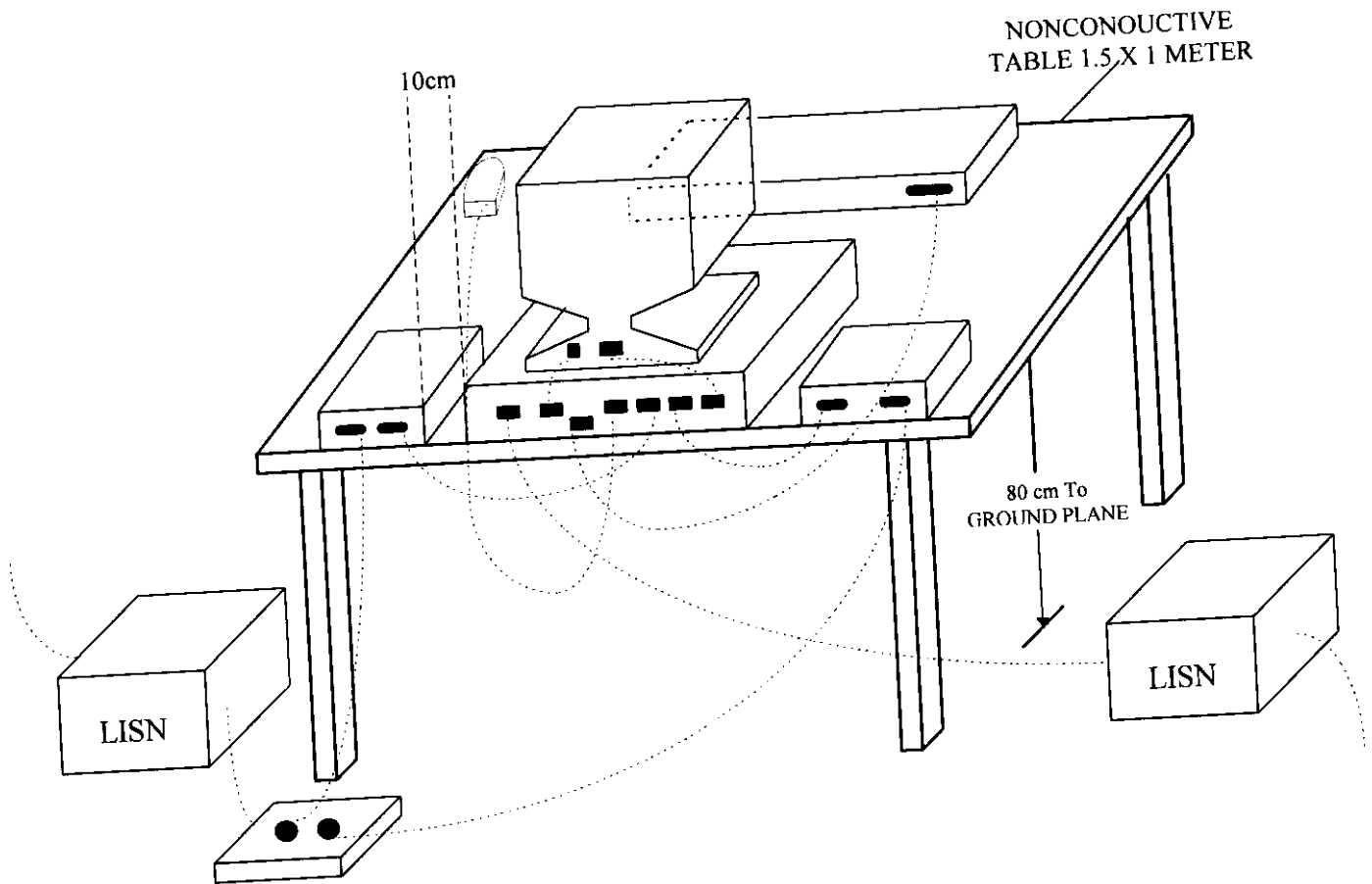
2.4 The LISN used was 50 Ohm / 50 uHenry as specified by **EN55022**, and AC power source is 110V/60Hz.

2.5 All the support peripherals are connect to the other LISN.

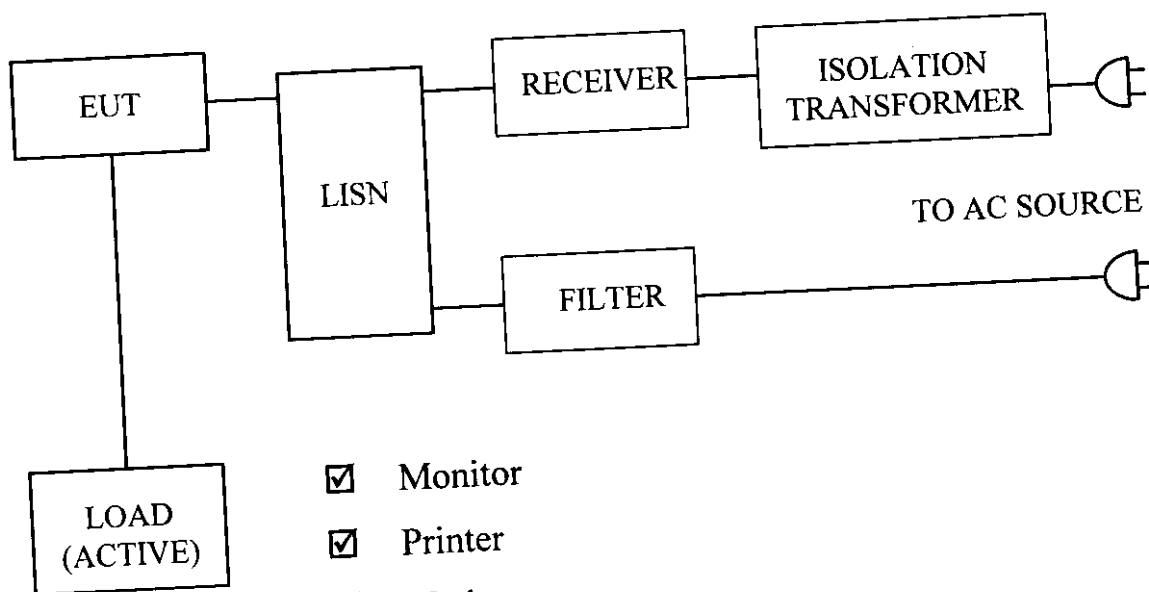
2.6 Cables and peripherals were moved to find the maximum emission levels for each frequency.

3 TEST SETUP

3.1 Typical : Setup Of Conducted Test



3.2 Block Diagram Of Conducted Test



- Monitor
- Printer
- Modem
- Mouse
- Key Board
- TV
- Micro Phone
- Walk Man
- Ear Phone
- Adaptor
- Memory Card



4 CONFIGURATION OF THE EUT

The EUT was configured according to **EN55022**. All I/O ports were connected to the appropriate peripherals. All peripherals and cables are listed below (including internal device) :

4.1 EUT

EUT Type : Proto Type Engineer Type Mass Production
Condition when received : Good Damage : _____
Connector Type : Metal Type Plastic Type
Device : NOTEBOOK COMPUTER
Manufacturer : DELTA
Model Number : DN-615
Serial Number : N/A
FCC ID : H79DN-615
Data Cable : Shielded
Power Cord & Adaptor (AC) : Un-Shielded, 1.8 m
Power Cord & Adaptor (DC) : Un-Shielded, 1.2 m

4.2 PERIPHERALS

Monitor

Manufacturer : GVC
Model Number : M1448P
Serial Number : 4PTA730020050
FCC ID : DK4M1448
Data Cable : Shielded, 1.5 m, Connected to the VGA port
Power Cord : Un-Shielded, 1.8 m



Printer

Manufacturer : HP
Model Number : DJ400
Serial Number : MY77T1D0DD
FCC ID : B94C2642X
Data Cable : Shielded, 1.5 m, Connected to the Printer port
Power Cord & Adaptor : Un-Shielded, 1.8 m

Modem

Manufacturer : DATATRONIC
Model Number : 2814CX
Serial Number : 1150541132
FCC ID : FCC DoC
Data Cable : Shielded, 1.5 m, Connected to the COM port
Power Cord & Adaptor : Un-Shielded, 1.8 m

Mouse (PSII)

Manufacturer : HP
Model Number : M-S34
Serial Number : LZA61236877
FCC ID : DZL210582
Data Cable : Shielded, 1.8 m, Connected to the PSII port
Power Cord : N/A



KeyBoard (USB)

Manufacturer : SILITEK
Model Number : SK-2000U
Serial Number : N/A
FCC ID : GYUR50SK
Data Cable : Shielded, 1.5 m, Connected to the USB port
Power Cord : N/A

TV

Manufacturer : NEC
Model Number : C-19R25(T)
Serial Number : N/A
FCC ID : N/A
Data Cable : Shielded, 1.5 m, Connected to the AV/S-Video port
Power Cord : Un-Shielded

Micro Phone

Manufacturer : SR
Model Number : SR-M02
Serial Number : N/A
FCC ID : N/A
Data Cable : Un-Shielded, Connected to the MIC port
Power Cord : N/A



Walk Man

Manufacturer : National
Model Number : RQ-310
Serial Number : N/A
FCC ID : N/A
Data Cable : Shielded, 1.5 m, Connected to the Line In port
Power Cord : N/A

Ear Phone

Manufacturer : SR
Model Number : SR-E11
Serial Number : N/A
FCC ID : N/A
Data Cable : Shielded, 0.8 m, Connected to the Line Out port
Power Cord : N/A

Adaptor

Manufacturer : DELTA
Model Number : ADP-60NB
Serial Number : GKC9920000038
FCC ID : N/A
Data Cable : Shielded
Power Cord : Un-Shielded, 1.8 m



Memory Card

Manufacturer : Kingmax
Model Number : ATA032M3T
Serial Number : N/A
FCC ID : N/A
Data Cable : N/A
Power Cord : N/A

4.3 REMARK :

5 EUT OPERATING CONDITION

- 5.1 Operating condition is according to **EN55022**.
- 5.2 CPU : Intel Celeron - 466 MHz
CPU Clock : 66 MHz
- 5.3 Turn on the power 110VAC/60Hz of all equipments.
- 5.4 Test program sent "H" pattern to peripherals as following :
 - 5.4.1 Printer
 - 5.4.2 Monitor
 - 5.4.3 Modem
 - 5.4.4 Keyboard

6 LIMIT OF CONDUCTED POWER LINE EMISSION CLASS B :

Frequency Range	Quasi Peak	Average
0.15 ~ 0.5 MHz	66 - 56 dBuV	56 - 46 dBuV
0.5 ~ 5 MHz	56 dBuV	46 dBuV
5 ~ 30 MHz	60 dBuV	50 dBuV

7 RESULT OF CONDUCTED POWER LINE TEST (1)

7.1 The frequency range from 0.15 MHz to 30 MHz was investigated. All readings are quasi-peak values and average.

7.2 IF bandwidth : 9 kHz, Meas Time : 1 sec.

7.3 Temperature : 27 °C, Humidity : 75 % RH.

7.4 Deviations from the specifications : None

7.5 Quasi-Peak :

Frequency (MHz)	Line 1 (dBuV)	Line 2 (dBuV)	Limit (dBuV)
0.189	57.78	59.04	64.08
0.378	42.93	45.22	58.32
0.880	33.05	34.30	56.00
4.720	35.84	36.96	56.00
6.800	33.92	33.21	60.00
21.520	31.07	29.91	60.00

7.6 Average :

Frequency (MHz)	Line 1 (dBuV)	Line 2 (dBuV)	Limit (dBuV)
0.189	49.96	50.86	54.08
0.377	40.65	42.68	48.35
0.880	32.60	33.89	46.00
4.720	34.02	35.49	46.00
9.125	26.36	28.73	50.00
26.480	38.04	37.52	50.00

REMARK :

1. Model : DN-615
2. Measuring mode : 1024 x 768
3. Uncertainty in conduction emission measured : < ± 2.0dB.
4. “ * ”, means this data is worse case emission level.
5. Result : **PASSED**



9 RESULT OF CONDUCTED POWER LINE TEST (2)

9.1 The frequency range from 0.15 MHz to 30 MHz was investigated. All readings are quasi-peak values and average.

9.2 IF bandwidth : 9 kHz, Meas Time : 1 sec.

9.3 Temperature : 27 °C, Humidity : 75 % RH.

9.4 Deviations from the specifications : None

9.5 Quasi-Peak :

Frequency (MHz)	Line 1 (dBuV)	Line 2 (dBuV)	Limit (dBuV)
0.188	57.76	56.73	64.12
0.375	42.30	42.30	58.39
0.880	33.05	34.30	56.00
4.720	35.84	35.54	56.00
8.750	32.31	33.20	60.00
26.480	40.41	37.30	60.00

9.6 Average :

Frequency (MHz)	Line 1 (dBuV)	Line 2 (dBuV)	Limit (dBuV)
0.188	49.73	50.51	54.12
0.375	40.14	39.70	48.39
0.880	32.60	33.89	46.00
4.720	34.02	27.13	46.00
8.750	28.89	30.19	50.00
26.480	38.04	28.39	50.00

REMARK :

1. Model : DN-615
2. Measuring mode : 800 x 600
3. Uncertainty in conduction emission measured : < ± 2.0dB.
4. “ * ”, means this data is worse case emission level.
5. Result : **PASSED**

11 RESULT OF CONDUCTED POWER LINE TEST (3)

11.1 The frequency range from 0.15 MHz to 30 MHz was investigated. All readings are quasi-peak values and average.

11.2 IF bandwidth : 9 kHz, Meas Time : 1 sec.

11.3 Temperature : 27 °C, Humidity : 75 % RH.

11.4 Deviations from the specifications : None

11.5 Quasi-Peak :

Frequency (MHz)	Line 1 (dBuV)	Line 2 (dBuV)	Limit (dBuV)
0.192	55.40	56.55	63.95
0.310	43.30	45.22	59.97
0.880	33.05	34.30	56.00
4.720	35.84	35.54	56.00
6.800	33.92	35.56	60.00
27.920	37.52	37.30	60.00

11.6 Average :

Frequency (MHz)	Line 1 (dBuV)	Line 2 (dBuV)	Limit (dBuV)
0.192	47.42	50.60	53.95
0.310	39.67	42.40	49.97
0.880	32.60	33.89	46.00
2.960	34.08	32.53	46.00
6.800	29.44	31.33	50.00
27.920	32.64	28.39	50.00

REMARK :

1. Model : DN-615
2. Measuring mode : 640 x 480
3. Uncertainty in conduction emission measured : $< \pm 2.0\text{dB}$.
4. “ * ”, means this data is worse case emission level.
5. Result : **PASSED**

RADIATED EMISSION TEST

1 TEST INSTRUMENTS & FACILITIES

The following test Instruments was used during the radiated emission test :

Item	Instruments /facilities	Specification	Manufacturer	Model # / S/N#	Location	Date of Cal.
1	OPEN AREA TEST SITE	<input type="checkbox"/> OATS 1 <input checked="" type="checkbox"/> OATS 2				JUN/99 JUN/99
2	SPECTRUM ANALYZER	9KHz ~ 1.8GHz	HP	HP8591 3710A06158	Open Site I	APR/99
3	EMI TEST RECEIVER	20MHz ~ 1GHz	ROHDE & SCHWARZ	ESVS10 845165/017	Open Site I	FEB/99
4	PRE-AMPLIFIER	0.1MHz ~ 1.3 GHz	HP	8447D 1937A02095	Open Site I	MAY/99
5	EMI TEST RECEIVER	20Hz ~ 26.5GHz	ROHDE & SCHWARZ	ESMI 845442/006	Open Site II	FEB/99
6	PRE-AMPLIFIER	20MHz ~ 7GHz	ROHDE & SCHWARZ	ESMI-Z7 846363/001	Open Site II	FEB/99
7	ANTENNA (BI-LOG)	25MHz ~ 2GHz	ARA	LPB2520 S/N:1096	Open Site II	MAR/99
8	ANTENNA (BI-LOG)	25MHz ~ 2GHz	ARA	LPB2520 S/N:1095	Open Site I	MAR/99
9	CABLES	30MHz ~ 1GHz		No. 2, No. 4 No. 1, No. 3	OATS 1 OATS 2	JUL/99 JUL/99
10	ANTENNA (DIPOLE)	30 ~ 300MHz	ROHDE & SCHWARZ	HZ-12 842899/08		JAN/99
11	ANTENNA (DIPOLE)	300 ~ 1000MHz	ROHDE & SCHWARZ	HZ-13 842007/0004		JAN/99
12	EMIVM	30 ~ 1000MHz	AUDIX	A582445 A582443	OATS 1 OATS 2	N/A

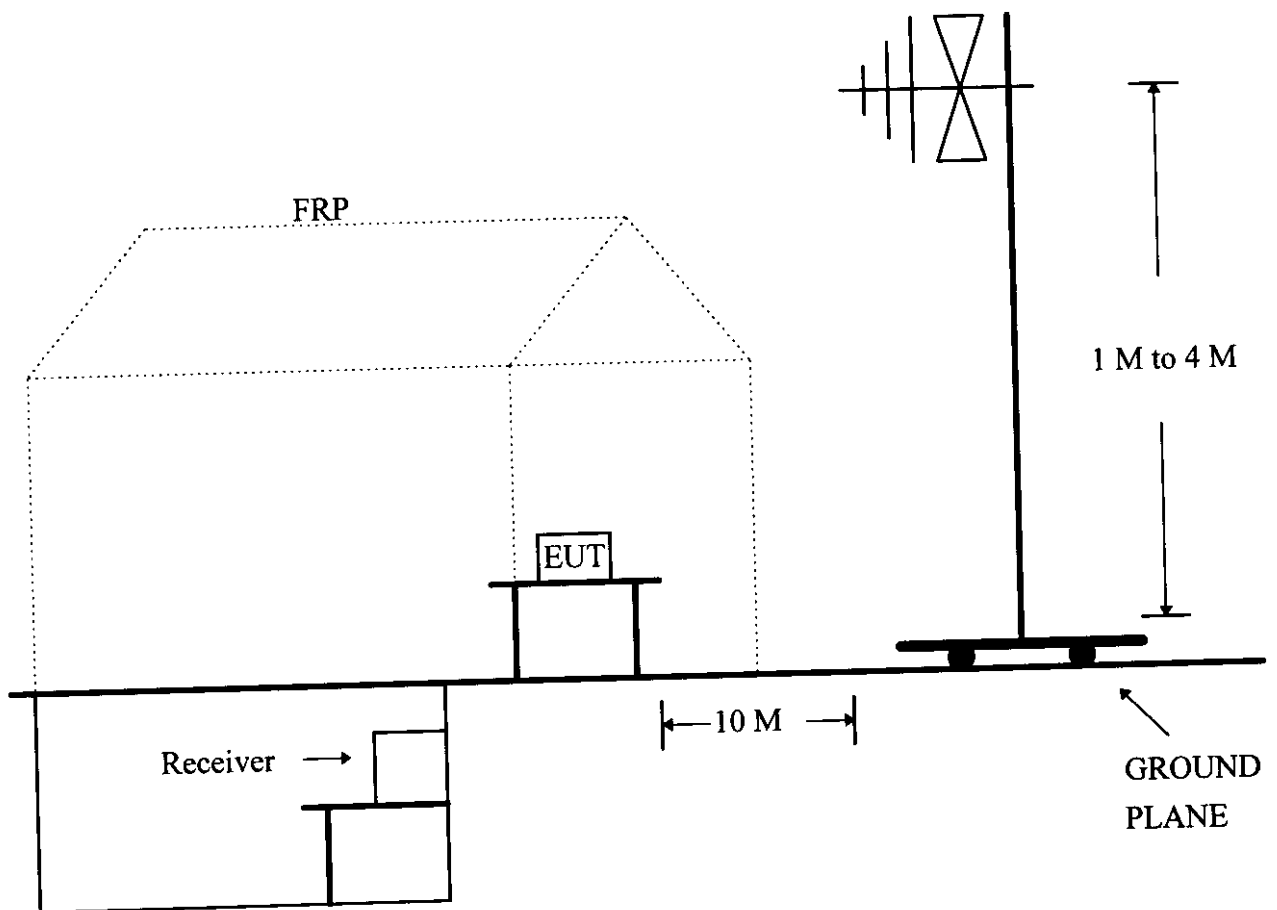
Note : 1. Items 1 ~ 9 upon which need to calibrated are with period of 1 year, except item 10-11.

2. Items 5 is used for the final measurement.

2 TEST PROCEDURE

- 2.1 The EUT was test according to **EN55022**.
- 2.2 The radiated test was performed at HomeTek Lab's Open Site II.
- 2.3 The frequency range from 30 MHz to 2 GHz, the measurement were made at 10 meters, with a BI-log antenna.

3 TEST SETUP





4 CONFIGURATION OF THE EUT
Same as "Conducted Power Line test", section 4

5 EUT OPERATING CONDITION

5.1 Same as "Conducted Power Line test", section 5

5.2 The radiated emission in the frequency range from 30 MHz - 2000 MHz was test in a horizontal and vertical polarization at HomeTek Lab's open site II.

6 LIMIT OF RADIATED EMISSION CLASS B :

Frequency (MHz)	Measurement Distance	Limit (dBuV/m)
30 - 230	10 (M)	30
230 - 2000	10 (M)	37



7 RESULT OF RADIATED EMISSION TEST (1)

- 7.1 The frequency range from 30 MHz to 2 GHz was investigated. All readings are quasi-peak values with resolution bandwidth of 120 kHz.
- 7.2 The measurements above 2 GHz with a resolution bandwidth of 1 MHz are peak reading at 10 meters.
- 7.3 The measurements were made at 10 meters of HomeTek Lab's open site II.
- 7.4 Temperature : 27 °C, Humidity : 75 % RH.
- 7.5 Radiated Emission data : **Horizontal**

Frequency (MHz)	Reading Level (dBuV)	ANT factor (dB/m)	Cable Loss (dB)	Emission Level (dBuV/m)	Limit (dBuV/m)
45.15	8.30	13.90	0.63	22.83	30
66.45	16.49	5.97	0.76	23.22	30
133.24	15.63	8.28	1.02	24.93	30
195.28	13.62	9.38	1.19	24.19	30
282.61	15.60	15.42	1.45	32.47	37
332.64	14.47	15.78	1.52	31.77	37
466.37	14.18	17.07	1.90	33.15	37
721.03	4.30	25.86	2.44	32.60	37

- Emission Level = Reading Level + ANT Factor + Cable Loss.
- Sample Calculation for 721.03 MHz .
- Corrected Reading : (4.30) + (25.86) + (2.44) = 32.60 . (Emission Level)



7.6 Radiated Emission data : **Vertical**

Frequency (MHz)	Reading Level (dBuV)	ANT factor (dB/m)	Cable Loss (dB)	Emission Level (dBuV/m)	Limit (dBuV/m)
45.50	12.61	13.41	0.63	26.65	30
73.72	16.34	8.47	0.76	25.57	30
157.47	15.74	8.47	1.09	25.30	30
211.70	14.82	10.90	1.22	26.94	30
282.62	18.12	13.00	1.45	32.57	37
333.21	16.98	13.81	1.52	32.31	37
466.45	14.77	16.94	1.90	33.61	37
721.42	6.77	22.44	2.44	31.65	37

- Emission Level = Reading Level + ANT Factor + Cable Loss.
- Sample Calculation for 721.42 MHz .
- Corrected Reading : (6.77) + (22.44) + (2.44) = 31.65 . (Emission Level)

REMARK :

1. Model : DN-615
2. Measuring mode : 1024 x 768
3. Uncertainty in radiated emission measured : $\pm 4.0\text{dB}$.
4. “ * ”, means this data is worse case emission level.
5. Result : **PASSED**

9 RESULT OF RADIATED EMISSION TEST (2)

- 9.1 The frequency range from 30 MHz to 2 GHz was investigated. All readings are quasi-peak values with resolution bandwidth of 120 kHz.
- 9.2 The measurements above 2 GHz with a resolution bandwidth of 1 MHz are peak reading at 10 meters.
- 9.3 The measurements were made at 10 meters of HomeTek Lab's open site II.
- 9.4 Temperature : 27 °C, Humidity : 75 % RH.
- 9.5 Radiated Emission data : **Horizontal**

Frequency (MHz)	Reading Level (dBuV)	ANT factor (dB/m)	Cable Loss (dB)	Emission Level (dBuV/m)	Limit (dBuV/m)
69.30	17.58	5.32	0.71	23.61	30
133.20	16.01	8.28	1.02	25.31	30
164.27	14.78	8.91	1.04	24.73	30
196.59	14.31	9.42	1.14	24.87	30
266.28	16.86	14.92	1.37	33.15	37
307.22	14.24	15.91	1.46	31.61	37
466.36	13.25	17.07	1.90	32.22	37
666.09	4.38	24.91	2.39	31.68	37

- Emission Level = Reading Level + ANT Factor + Cable Loss.
- Sample Calculation for 666.09 MHz .
- Corrected Reading : (4.38) + (24.91) + (2.39) = 31.68 . (Emission Level)

9.6 Radiated Emission data : **Vertical**

Frequency (MHz)	Reading Level (dBuV)	ANT factor (dB/m)	Cable Loss (dB)	Emission Level (dBuV/m)	Limit (dBuV/m)
66.37	15.78	9.66	0.76	26.20	30
83.20	16.37	6.90	0.76	24.03	30
172.02	14.26	10.12	1.12	25.50	30
205.59	12.56	10.51	1.19	24.26	30
238.86	17.97	12.39	1.37	31.73	37
282.61	17.46	13.00	1.45	31.91	37
466.36	12.54	16.94	1.90	31.38	37
665.79	4.08	21.95	2.41	28.44	37

- Emission Level = Reading Level + ANT Factor + Cable Loss.
- Sample Calculation for 665.79 MHz .
- Corrected Reading : (4.08) + (21.95) + (2.41) = 28.44 . (Emission Level)

REMARK :

1. Model : DN-615
2. Measuring mode : 800 x 600
3. Uncertainty in radiated emission measured : $\lt; \pm 4.0\text{dB}$.
4. “ * ”, means this data is worse case emission level.
5. Result : **PASSED**

11 RESULT OF RADIATED EMISSION TEST (3)

- 11.1 The frequency range from 30 MHz to 2 GHz was investigated. All readings are quasi-peak values with resolution bandwidth of 120 kHz.
- 11.2 The measurements above 2 GHz with a resolution bandwidth of 1 MHz are peak reading at 10 meters.
- 11.3 The measurements were made at 10 meters of HomeTek Lab's open site II.
- 11.4 Temperature : 27 °C, Humidity : 75 % RH.
- 11.5 Radiated Emission data : **Horizontal**

Frequency (MHz)	Reading Level (dBuV)	ANT factor (dB/m)	Cable Loss (dB)	Emission Level (dBuV/m)	Limit (dBuV/m)
58.94	11.57	7.87	0.71	20.15	30
86.02	15.13	6.25	0.86	22.24	30
164.28	14.47	8.91	1.04	24.42	30
196.60	14.59	9.42	1.14	25.15	30
266.48	17.44	14.92	1.37	33.73	37
466.37	13.27	17.07	1.90	32.24	37
500.57	13.29	17.80	2.03	33.12	37
863.15	4.18	22.58	2.77	29.53	37

- Emission Level = Reading Level + ANT Factor + Cable Loss.
- Sample Calculation for 863.15 MHz .
- Corrected Reading : (4.18) + (22.58) + (2.77) = 29.53 . (Emission Level)

11.6 Radiated Emission data : **Vertical**

Frequency (MHz)	Reading Level (dBuV)	ANT factor (dB/m)	Cable Loss (dB)	Emission Level (dBuV/m)	Limit (dBuV/m)
51.44	11.88	12.24	0.66	24.78	30
86.01	16.83	7.08	0.86	24.77	30
150.06	14.82	8.41	1.04	24.27	30
229.99	12.15	11.86	1.28	25.29	30
265.94	16.93	13.00	1.37	31.30	37
294.94	16.49	13.00	1.45	30.94	37
400.03	13.14	15.27	1.78	30.19	37
721.39	7.36	22.44	2.44	32.24	37

- Emission Level = Reading Level + ANT Factor + Cable Loss.
- Sample Calculation for 721.39 MHz .
- Corrected Reading : (7.36) + (22.44) + (2.44) = 32.24 . (Emission Level)

REMARK :

1. Model : DN-615
2. Measuring mode : 640 x 480
3. Uncertainty in radiated emission measured : <math>< \pm 4.0\text{dB}</math>.
4. “ * ”, means this data is worse case emission level.
5. Result : **PASSED**