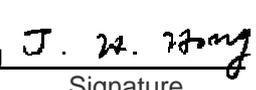




EMC - Test Report

Model: NE-1202

Product type	NeonHome-LAN Sub	Serial No.	-
Applicant	NEON GATE INC.		
Address	Yooil B/D 4F, 411-14, Dogok-dong, Gangnam-gu, Seoul, Korea.		
Manufacturer	NEON GATE INC.		
Address	Yooil B/D 4F, 411-14, Dogok-dong, Gangnam-gu, Seoul, Korea.		
<p>Test specification (Standard) : FCC Part15 Subpart B Class B</p> <p>Test Result : In compliance</p>			
<p><i>Tested by</i> (Test engineer)</p> <p>August 3, 2001 Michael Jang </p> <p>Date Name Signature</p>		<p><i>Reviewed by</i> (EMC Technical Manager)</p> <p>August 3, 2001 James, Hong </p> <p>Date Name Signature</p>	
<p>Definition <input checked="" type="checkbox"/> : Applicable, <input type="checkbox"/> : Not Applicable, N/A : Not Applicable, - : Not Applicable</p>			

The test result only responds to the tested sample.

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1. EUT description

Introduction

NE-1202 is a device for NeonHome-LAN subscribers. And it is a NeonHome-LAN Ethernet switch device, which is connected with PC through Ethernet (RJ-45) to provide internet access at 1.2 Mbps.

Identification

Receipt date : June 27, 2001
Model : NE-1202
Manufacturer : NEON GATE INC.
Address : Yooil B/D 4F, 411-14, Dogok-dong, Gangnam-gu, Seoul, Korea.
Contact person : Mr. Y. M. Yang
Telephone : +82-2-576-9730 (extension. : 241)
Serial No : -
EUT Size : 80 X 132 X 25mm

Peripheral Device Ports

Port name	Description
Telephone connection	RJ-11
Corporate line connection	RJ-11
10BASE-T	RJ-45
POWER	Connect to Adaptor

Electrical rating

Input : 5 Vdc, 800 mA

Output : -

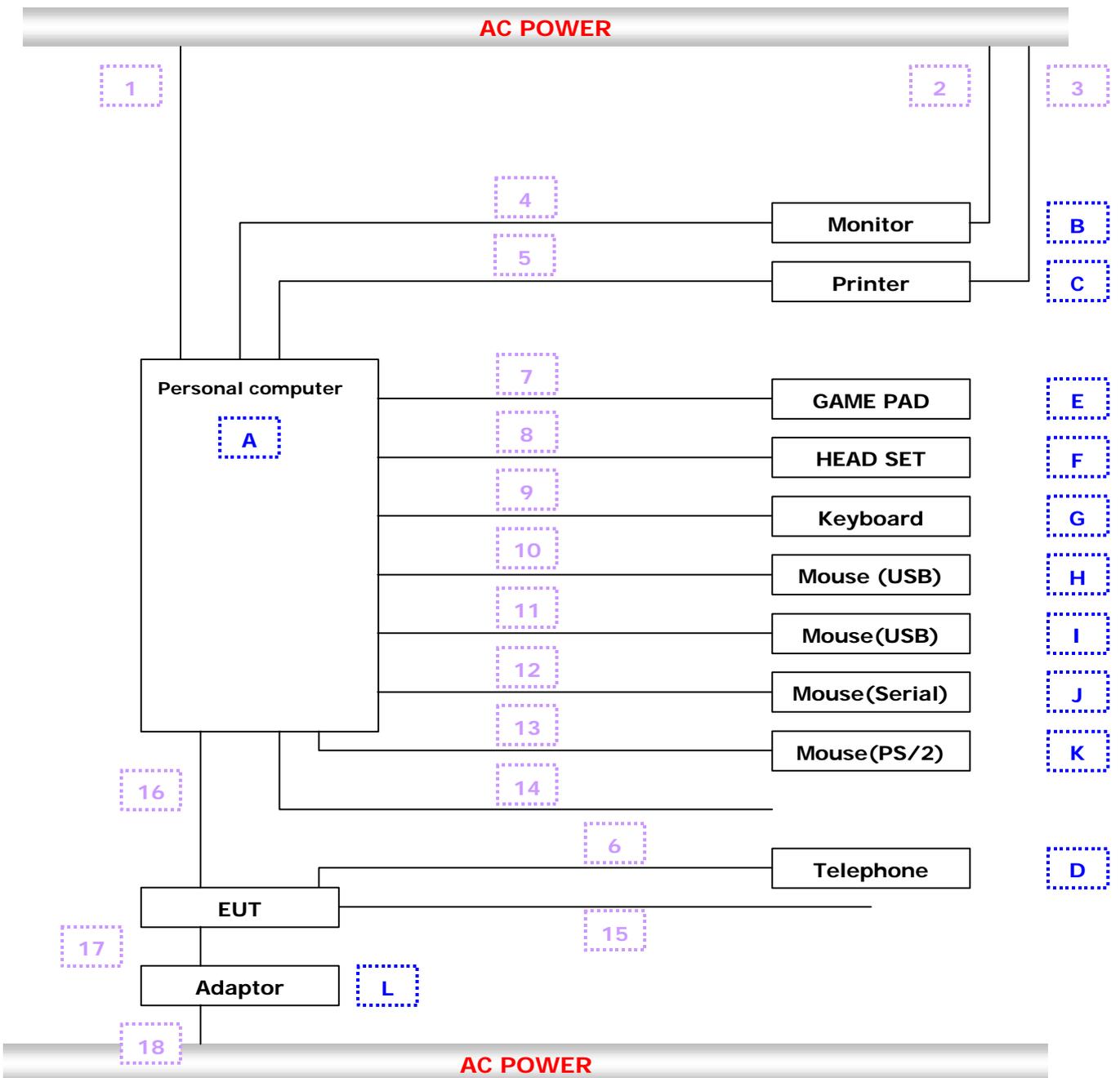


2. Test Set-up

Test Mode

Normal load: Ping test

Cable configuration



**Cable description**

Port name	Type	Length (m)	Remark	
1	PC Power cable	Unshielded	2.0	-
2	Monitor Power cable	Unshielded	2.0	-
3	Printer Power cable	Unshielded	2.0	-
4	Video cable	Shielded	1.6	-
5	Parallel cable	Shielded	2.0	-
6	Telephone cable	Unshielded	2.0	-
7	Game Pad cable	Unshielded	2.0	-
8	Head Set cable	Unshielded	2.0	-
9	Keyboard cable	Unshielded	2.0	-
10	Mouse(USB) cable	Unshielded	2.0	-
11	Mouse(USB) cable	Unshielded	2.0	-
12	Mouse(Serial) cable	Unshielded	2.0	-
13	Mouse(PS/2) cable	Unshielded	2.0	-
14	Line in cable	Unshielded	2.0	-
15	Corporate line cable	Unshielded	2.0	Connected to corporate line
16	10BASE-T cable	Unshielded	2.0	-
17	Adaptor output cable	Unshielded	1.8	-
18	Adaptor power input cable	Unshielded	-	Direct plug-in

Auxiliary equipment

Description	Model name	Serial No.	Manufacturer	FCC ID or DoC Info	
A	PC	DTPC-17	G1703009	HEWLETT PACKARD	DoC
B	Monitor	PG17HS	301661	SAMSUNG	DOC
C	Printer	C4530A	US7A91703J	HEWLETT PACKARD	DoC
D	Telephone	-	-	-	N/A
E	Game pad	Side Winder	03421317	Microsoft	C3KMGP1
F	Head set	Hi-sonic	-	-	N/A
G	Keyboard	SK-2502C	M000351491	HEWLETT PACKARD	DoC
H	Mouse(USB)	M-BB48	LZE93853157	LOGITECH	DoC
I	Mouse(USB)	M-BB48	LZE93853176	LOGITECH	DoC
J	Mouse(Serial)	M-S48	LZA91153127	SOTEC	DZL211153
K	Mouse(PS/2)	M-S48	LZA84601000	LOGITECH	JNZ201213
L	Adaptor	SFE1NG-004	0106 001503	Space one Co., Ltd.	Provided with EUT

Test software

Software name	Manufacturer	Version	Description
Ping	Microsoft	-	-



Measurement Procedures

Preliminary AC power line conducted emissions tests were performed shielded room. To find worst mode, several typical mode and typical cable position were tested.

Final AC power line conducted emissions test was performed shielded room. (Location is same as Preliminary test) Based on the preliminary tests of the EUT, final test was proceeded worst case test mode and cable configuration.

Preliminary radiated emissions tests were performed anechoic chamber (Distance of antenna and EUT was 3m). To find worst mode, several typical mode and typical cable position were tested and peak level and frequency were recorded.

Final radiated emissions test was performed Open Area Test Site. Based on the preliminary tests of the EUT, final test was proceeded worst case test mode and cable configuration.

* Measurement procedures was In accordance with ANSI C63.4-1992 7.2.3, 7.2.4 and 8.3.1.1, 8.3.1.2



3. Test Result

Test summary

Test	Result	Remark
Emission test (EMI)		
Radiated emission	Met	
Conducted emission	Met	

Measurement uncertainty (k=2)

150kHz~30MHz: ± 2.68 , 30MHz~300MHz: +4.58, -4.66, 300MHz ~ 1GHz: +3.78, -3.74

Uncertainty parameter was calculated according to 'NAMAS Publication NIS 80'

The tested NE-1202 fully meets the Requirements of ANSI C63.4-1992, when operated as described in this report.



Radiated emission

Test result: **Met**

Date of testing : June 29, 2001

Ambient temperature: 29°C, Relative humidity: 56%, Atmospheric pressure: 1002hPa(mbar)

Test site type: Open area test site

Reference Standard: FCC Part15 Subpart B , Class B

Test and measurement equipment (Main equipment)

Model name	Manufacturer	Description	Serial No.
BBA9106	Schwarzbeck	Biconical antenna	41-00210
3146	EMCO	Log-periodic antenna	9607-4567
ESVS30	Rohde Schwarz	Field strength meter	826638/008
-	-	-	-

Frequency Band 30MHz - 1000MHz

Antenna distance 3m (From the EUT)

Test data sheet

Frequency [MHz]	Reading [dBuV/m]	Pol.	Height [m]	Correction Factor		Limits [dBuV/m]	Result [dBuV/m]	Margin [dB]
				Antenna	Cable			
34.70	9.2	V	1.5	12.85	0.50	40.0	22.53	17.47
90.80	8.1	V	1.0	9.60	1.00	43.5	18.73	24.77
100.20	11.0	V	1.0	10.20	1.00	43.5	22.15	21.35
119.80	14.2	H	4.0	11.30	1.10	43.5	26.56	16.94
420.80	10.2	H	4.0	16.04	2.90	46.0	29.09	16.91
641.30	4.3	H	3.5	19.96	3.70	46.0	27.98	18.02
660.50	7.0	H	3.8	20.48	3.80	46.0	31.29	14.71

Comment:



Conducted emission

Test result: **Met**
 Date of testing : June 29, 2001
 Ambient temperature: 26°C, Relative humidity: 53%, Atmospheric pressure: 999hPa(mbar)
 Test site type: Shielded room
 Reference Standard: FCC Part15 Subpart B , Class B

Test and measurement equipment (Main equipment)

Model name	Manufacturer	Description	Serial No.
3825/2	EMCO	LISN	9206-1971
ESHS30	Rohde Schwarz	Field strength meter	828144/002
-	-	-	-

Test data sheet

Frequency [MHz]	Correction Factor		Line	Quasi-peak				Average			
	Factor			Limit	Reading	Result	Margin	Limit	Reading	Result	Margin
	LISN	Cable		[dBuV]	[dBuV]	[dBuV]	[dB]	[dBuV]	[dBuV]	[dBuV]	[dB]
0.46	0.3	0.1	H	48.0	38.2	38.6	9.4				
0.99	0.2	0.1	H	48.0	33.2	33.5	14.5				
1.65	0.3	0.1	H	48.0	34.6	35.0	13.0				
2.24	0.3	0.1	N	48.0	37.0	37.4	10.7				
4.88	0.3	0.1	H	48.0	31.5	31.9	16.1				
6.53	0.2	0.2	N	48.0	26.7	27.1	20.9				

Comment:



Test data graphic

