

HYUNDAI CALIBRATION & CERTIFICATION TECH. CO., LTD.

INT'L STANDARD CERTIFICATION TEAM
SAN 136-1, AMI-RI, BUBAL-EUP, ICHEON-SI, KYOUNGKI-DO, 467-701, KOREA
TEL : +82 31 639 8518 FAX : +82 31 639 8525

CERTIFICATION

Manufacture;
CORNEA TECHNOLOGY CO., Ltd.

**Rm#201, Na Dong, Shilla-Technoville, 39-3 Dong-Dong,
Kunpo-Shi, Kyunggi-Do, Korea**

Date of Issue: OCTOBER 12, 2001

Test Report No.: HCT-F01-1002

**Test Site: HYUNDAI CALIBRATION & CERTIFICATION
TECHNOLOGIES CO., LTD.**

FCC ID :

PL4CT1501

MODEL / TYPE :

CT1501

FCC Rule Part(s):

Part 15 & 2; ET Docket 95-19

Classification:

FCC Class B Peripheral Device (JBP)

Standard(s):

FCC Class B: 1998 (CISPR 22)

Equipment(EUT) Type:

15" LCD Monitor

Max Resolution:

1024 X 768 Non-interlaced (@60KHz/ 75Hz)

Port/ Connector(s)

15-pin D-sub VGA connector

The device bearing the trade name and model specified above, has been shown to comply with the applicable technical standards as indicated in the measurement report and was tested in accordance with the measurement procedures specified in ANSI C63.4-1992. (See Test Report if any modifications were made for compliance)

I attest to the accuracy of data. All measurements reported herein were performed by me or were made under my supervision and are correct to the best of my knowledge and belief. I assume full responsibility for the completeness of these measurements and vouch for the qualifications of all persons taking them.

HYUNDAI GTech. certifies that no party to application has been denied the FCC benefits pursuant to Section 5301 of the Anti-Drug Abuse of 1988, 21 U.S.C. 853(a).



Report prepared by : Ki-Soo Kim
Manager of EMC Tech. Part



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1. GENERAL INFORMATION

1.1 Product Description

The CORNEA TECHNOLOGY CO., LTD. Model CT1501 (referred to as the EUT in this report) is a 15"LCD Monitor with HOR. Freq. 60KHz (Max) and Resolution of 1024X768 (Non-Interlaced). Product specification information described herein was obtained from product data sheet or user's manual.

CHASSIS TYPE	PLASTIC
LIST OF EACH OSC. OR XTAL. FREQ.(FREQ. $\geq$ 1MHz)	12.46MHz , 32.0MHz
POWER REQUIREMENT	100 - 240 V~ 1.5A 60/50Hz
NUMBER OF LAYERS	MAIN BOARD 4 LAYER OSD BOARD 1 LAYER POWER BOARD 1 LAYER INVERTER BOARD 2 LAYER
MAX. RESOLUTION	1024 X 768 NON-INTERLACED(@60KHz/ 75Hz)
H-SYNC FREQUENCY RANGE	30KHz 60KHz
V-SYNC FREQUENCY RANGE	50Hz 75Hz
CRT TYPE	15" (LCD Type :HM15X11-200, HYUNDAI)

1.2 Related Submittal(s) / Grant(s)

ORIGINAL SUBMITTAL ONLY

1.3 Tested System Details

The Model names for all equipment, plus descriptions used in the tested system (including inserted cards) are:

DEVICE TYPE	MANUFACTURER	MODEL NUMBER	FCC ID / DoC	CONNECTED TO
MONITOR (EUT)	CORNEA TECHNOLOGY CO., LTD.	CT1501	PL4CT1501	HOST
PC(HOST)	H/P	DTPC-17	DoC	N/A
KEY BOARD	H/P	SK-2501-2D-K	GYUR385K	HOST
PRINTER	H/P	HP 895C	DoC	HOST
MODEM	3COM CORPORATION	56K FAX MODEM	DoC	HOST
VIDEO CARD	DIAMOND	3D3000	DoC	HOST
MOUSE	H/P	M-S34	DZL211029	HOST

1.4 Test Methodology

Both conducted and radiated testing were performed according to the procedures in ANSI C63.4/1992. Radiated testing was performed at an antenna to EUT distance of 10 meters.

1.5 Test Facility

The open area test site and conducted measurement facility used to collect the radiated data are located at the 254-1,MAEKOK-RI,HOBUP-MYUN,ICHON-SI,KYOUNGKI-DO, 467-701,KOREA. The site is constructed in conformance with the requirements of ANSI C63.4 and CISPR Publication 22. Detailed description of test facility was submitted to the Commission and accepted dated July 24,2000(Confirmation Number: EA90661)

2.SYSTEM TEST CONFIGURATION

2.1 Justification

The device was configured for testing in a typical fashion (as a customer would normally use it). During the tests, the following components and I/O cards inside the E.U.T were used.

DEVICE TYPE	MANUFACTURE	MODEL/PART NUMBER
MAIN BOARD	HYUNDAI	HM15X-11
POWER BOARD	D-TECH	-
POWER BOARD	LISHIN	-
OSD BOARD	CORNEA TECHNOLOGY CO., LTD.	150000018
INVERTOR BOARD	CORNEA TECHNOLOGY CO., LTD.	K04C0200
LCD BOARD	CORNEA TECHNOLOGY CO., LTD.	5IT017003N102819

2.2 EUT exercise Software

The EUT exercise program used during radiated and conducted testing was designed to exercise the various system components in a manner similar to a typical use. The software, contained on a 3-1/2 inch disc, was inserted into drive A and is auto starting on power-up. Once loaded, the program sequentially exercises each system component in turn. The sequence used is :(1) Display test, (2) RS 232 test (3) Key board test,(4) Printer test,(5) FDD test,(6) HDD test. The complete cycle takes about 20 seconds and is repeated continuously. As the keyboard and mouse are strictly input devices, no data is transmitted to them during test. They are however, continuously scanned for data input activity. The video resolution modes setup and change program was used during the radiated and conducted emission testing.

2.3 Cable Description

The marked "(D)" means the Data Cable and "(P)" means the Power Cable.

	Power Cord Shielded (Y/N)	I/O Cable Shielded (Y/N)	Length (M)
MONITOR(EUT)	N	Y	1.8(P), 1.5(D)
PC(HOST)	N	N/A	1.8(P)
PRINTER	N	Y	2.0(P),1.8(D)
KEY BOARD	N/A	Y	2.0(D)
MODEM	N	Y	2.0(P),0.8(D)
MOUSE	N/A	Y	1.8(D)

2.4 Noise Suppression Parts on Cable. (I/O CABLE)

	Ferrite Bead (Y/N)	Location	Metal Hood (Y/N)	Location
MONITOR(EUT)	Y	PC END	Y	PC END
PRINTER	N	N/A	Y	BOTH END
KEY BOARD	Y	PC END	Y	PC END
MODEM	N	N/A	Y	BOTH END
MOUSE	N	N/A	Y	PC END

2.5 Equipment Modifications

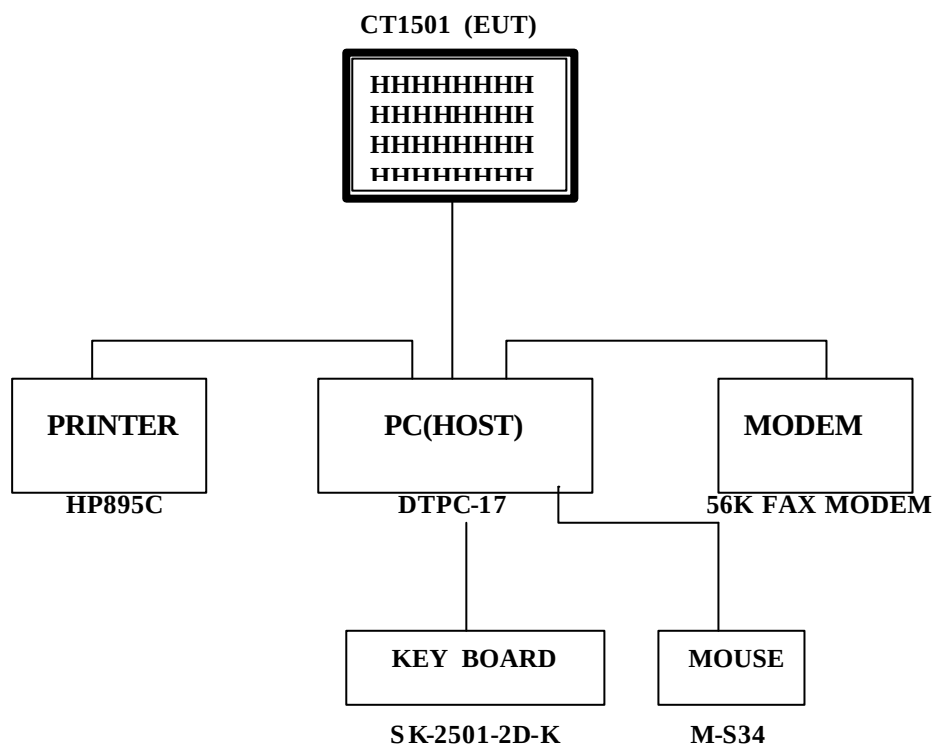
N/A

2.6 Configuration of Test system

Line Conducted Test : EUT was connected to LISN, all other supporting equipment were connected to another LISN.
Preliminary Power line Conducted Emission tests were performed by using the procedure in ANSI C63.4/1992 7.2.3 to determine the worse operating conditions.

Radiated Emission Test : Preliminary Radiated Emissions tests were conducted using the procedure in ANSI C63.4/1992 8.3.1.1 to determine the worse operating condition. Final Radiated Emission tests were conducted at 10 meter open area test site.

[Configuration of Tested System]



3. PRELIMINARY TESTS

3.1 AC Power line Conducted Emission Tests

During Preliminary Tests, the following operating mode were investigated

Processor Speed (MHz)	Video Resolution (w/max)	The worst operating condition
Pentium 350 MHz	1024 x 768 Non-Interlaced (60 KHz/75Hz)	X
	1024 x 768 Non-Interlaced (56.6 KHz/70Hz)	
	800 x 600 Non-Interlaced (46.9 KHz/75Hz)	
	800 x 600 Non-Interlaced 87.9 KHz/60Hz)	
	640 x 480 Non-Interlaced 81.5 KHz/60Hz)	

NOTE :

This LCD monitor use the two kinds of AC adapter

We tested the all AC adapters, the D-Tech adapter of those is worst case.

4.2 Radiated Emission Tests

During Preliminary Tests, the following operating mode were investigated

Processor Speed (MHz)	Video Resolution (w/max)	The worst operating condition
Pentium 350 MHz	1024 x 768 Non-Interlaced (60 KHz/75Hz)	X
	1024 x 768 Non-Interlaced (56.6 KHz/70Hz)	
	800 x 600 Non-Interlaced (46.9 KHz/75Hz)	
	800 x 600 Non-Interlaced 87.9 KHz/60Hz)	
	640 x 480 Non-Interlaced 81.5 KHz/60Hz)	

NOTE :

This LCD monitor use the two kinds of AC adapter

We tested the all AC adapters, the D-Tech adapter of those is worst case.

Measured by : Kyoung-Hee Yoon / Engineer

Date : OCTOBER 7, 2001

4. FINAL CONDUCTED AND RADIATED EMISSION TESTS SUMMARY

4.1 Conducted Emission Test

The following table shows the highest levels of conducted emissions on both polarization of hot and neutral line.

Humidity Level	: 33%	Temperature	: 23 °C
Limit apply to	: CISPR 22		
Type of Tests	: CLASS B		
Date	: OCTOBER 7, 2001		
Result	: PASSED BY -3.6 dB		

EUT	: 15" LCD MONITOR(CT1501 with D-Tech Adapter)
Operating Condition	: 1024 X 768 Non-Interlaced (Hf : 60.0 KHz, Vf : 75Hz)
Detector	: CISPR Quasi-Peak (6 dB Bandwidth : 9 KHz)
	CISPR Average(6 dB Bandwidth : 9 KHz)

Line Conducted Emission Tabulated Data

Power Line Conducted Emissions			CISPR 22		
Frequency (MHz)	Amplitude (dBuV)	Conductor	Limit (dBuV)	Margin (dB)	Detector Mode
0.535	42.4	NEUTRAL	46.0	-3.6	AVERAGE
0.595	42.0	NEUTRAL	46.0	-4.0	AVERAGE
1.840	41.4	NEUTRAL	46.0	-4.6	AVERAGE
2.195	41.3	NEUTRAL	46.0	-4.7	AVERAGE
2.610	41.3	NEUTRAL	46.0	-4.7	AVERAGE

NOET:

1. All video modes and resolutions were investigated and the worst-case emissions are reported
Other video modes & resolution were tested and found to be in compliance.

Measured by : Kyoung-Hee Yoon / Engineer

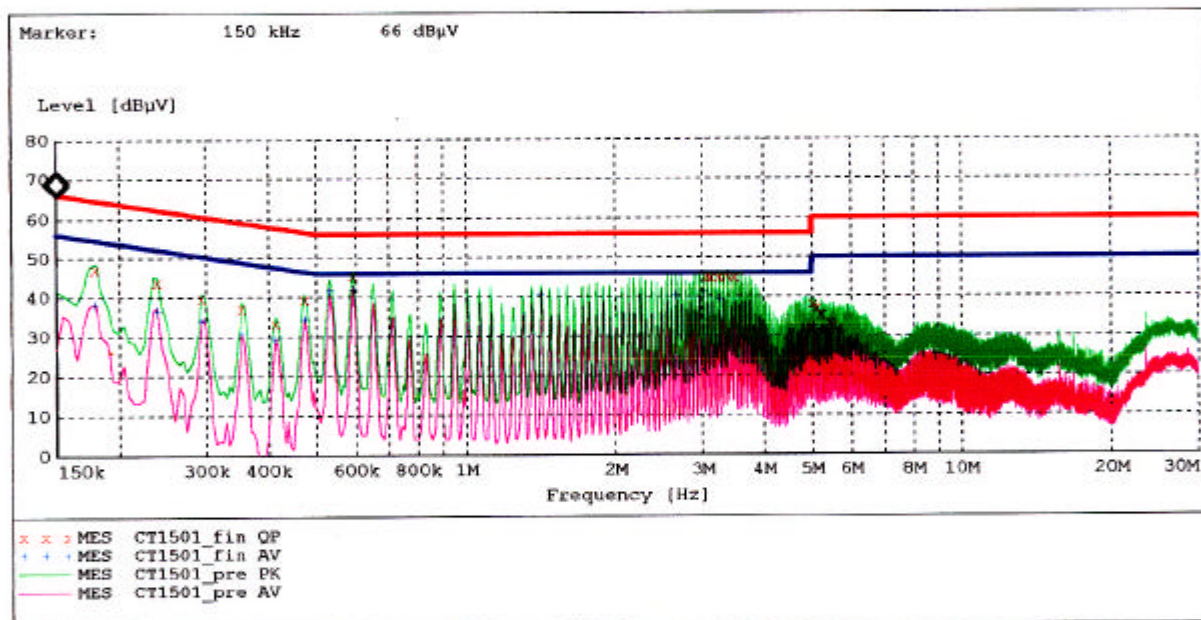
Date : OCTOBER 7, 2001

HYUNDAI C-TECH. CO., LTD.
EMC TEST LAB.

EUT: CT1501
 Manufacturer: CORNEA
 Operating Condition: 1024 X 768 60KHz 75Hz
 Test Site: Shield Room
 Operator: Keun-Ho Park
 Test Specification:
 Comment: H

SCAN TABLE: "EN 55022 V (PKH)"

Short Description:		EN 55022 Voltage		Detector	Meas. Time	IF Bandw.	Transducer
Start Frequency	Stop Frequency	Step Width					
150.0 kHz	500.0 kHz	5.0 kHz		MaxPeak	100.0 ms	9 kHz	CABLE LOSS (NEW)
				Average			
500.0 kHz	5.0 MHz	5.0 kHz		MaxPeak	10.0 ms	9 kHz	CABLE LOSS (NEW)
				Average			


MEASUREMENT RESULT: "CT1501_fin QP"

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Line	PE
0.180000	47.00	0.5	65	17.5	1	---
0.240000	43.80	0.5	62	18.3	1	---
0.295000	39.80	0.5	60	20.6	1	---
0.355000	37.00	0.5	59	21.9	1	---
0.415000	33.20	0.5	58	24.3	1	---
0.475000	39.40	0.5	56	17.0	1	---
0.595000	45.30	0.5	56	10.7	1	---
3.090000	45.10	0.6	56	10.9	1	---
3.150000	44.80	0.6	56	11.2	1	---
3.270000	44.70	0.6	56	11.3	1	---
3.390000	45.30	0.7	56	10.7	1	---
3.505000	44.80	0.7	56	11.2	1	---
5.000000	31.40	0.9	56	24.6	1	---
5.050000	38.10	0.9	60	21.9	1	---

MEASUREMENT RESULT: "CT1501_fin QP"

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Line	PE
5.110000	37.10	0.9	60	22.9	1	---
5.230000	35.40	0.9	60	24.6	1	---
5.470000	33.40	0.9	60	26.6	1	---
5.530000	32.60	1.0	60	27.4	1	---

MEASUREMENT RESULT: "CT1501_fin AV"

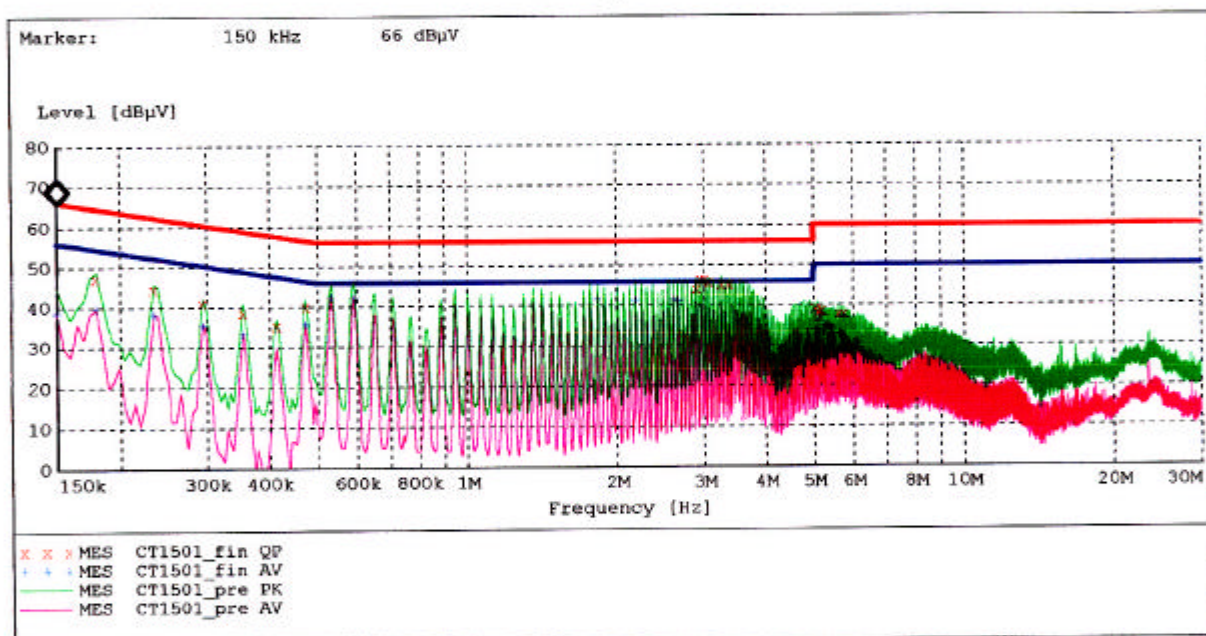
Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Line	PE
0.180000	38.30	0.5	55	16.1	1	---
0.240000	36.60	0.5	52	15.5	1	---
0.295000	34.20	0.5	50	16.2	1	---
0.355000	30.90	0.5	49	18.0	1	---
0.415000	29.40	0.5	48	18.1	1	---
0.475000	34.60	0.5	46	11.8	1	---
0.535000	41.60	0.5	46	4.4	1	---
0.595000	41.80	0.5	46	4.2	1	---
1.425000	40.50	0.5	46	5.5	1	---
2.675000	40.20	0.6	46	5.8	1	---
3.030000	41.00	0.6	46	5.0	1	---
3.270000	39.30	0.6	46	6.7	1	---
5.050000	32.40	0.9	50	17.6	1	---
5.230000	31.50	0.9	50	18.5	1	---
5.290000	31.30	0.9	50	18.7	1	---
5.350000	30.70	0.9	50	19.3	1	---
5.410000	29.90	0.9	50	20.1	1	---
5.705000	30.80	1.0	50	19.2	1	---

HYUNDAI C-TECH. CO., LTD.
EMC TEST LAB.

EUT: CT1501
 Manufacturer: CORNEA
 Operating Condition: 1024 X 768 60KHz 75Hz
 Test Site: Shield Room
 Operator: Keun-Ho Park
 Test Specification:
 Comment: N

SCAN TABLE: "EN 55022 V (PKH)"

Short Description:			EN 55022 Voltage			
Start	Stop	Step	Detector	Meas. Time	IF Bandw.	Transducer
Frequency	Frequency	Width				
150.0 kHz	500.0 kHz	5.0 kHz	MaxPeak	100.0 ms	9 kHz	CABLE LOSS (NEW)
			Average			
500.0 kHz	5.0 MHz	5.0 kHz	MaxPeak	10.0 ms	9 kHz	CABLE LOSS (NEW)
			Average			


MEASUREMENT RESULT: "CT1501_fin QP"

Frequency MHz	Level dBuV	Transd dB	Limit dBuV	Margin dB	Line	PE
0.180000	47.20	0.5	65	17.2	1	---
0.235000	44.50	0.5	62	17.8	1	---
0.295000	41.00	0.5	60	19.4	1	---
0.355000	38.50	0.5	59	20.3	1	---
0.415000	35.20	0.5	58	22.3	1	---
0.475000	39.90	0.5	56	16.5	1	---
2.910000	44.10	0.6	56	11.9	1	---
2.965000	46.50	0.6	56	9.5	1	---
3.025000	46.50	0.6	56	9.5	1	---
3.085000	45.70	0.6	56	10.3	1	---
3.265000	45.00	0.6	56	11.0	1	---
3.385000	45.00	0.7	56	11.0	1	---
5.045000	39.10	0.9	60	20.9	1	---
5.105000	38.20	0.9	60	21.8	1	---

MEASUREMENT RESULT "CT1501_fin QP"

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Line	PE
5.165000	37.10	0.9	60	22.9	1	---
5.220000	38.50	0.9	60	21.5	1	---
5.635000	37.80	1.0	60	22.2	1	---
5.755000	37.80	1.0	60	22.2	1	---

MEASUREMENT RESULT: "CT1501_fin AV"

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Line	PE
0.150000	38.70	0.5	56	17.3	1	---
0.180000	39.60	0.5	55	14.9	1	---
0.235000	38.20	0.5	52	14.1	1	---
0.295000	35.50	0.5	50	14.9	1	---
0.355000	33.40	0.5	49	15.4	1	---
0.475000	35.70	0.5	46	10.8	1	---
0.535000	42.40	0.5	46	3.6	1	---
0.595000	42.00	0.5	46	4.0	1	---
1.840000	41.40	0.6	46	4.6	1	---
2.195000	41.30	0.6	46	4.7	1	---
2.610000	41.30	0.6	46	4.7	1	---
2.670000	41.20	0.6	46	4.8	1	---
5.045000	33.80	0.9	50	16.2	1	---
5.225000	33.10	0.9	50	16.9	1	---
5.280000	34.70	0.9	50	15.3	1	---
5.340000	34.90	0.9	50	15.1	1	---
5.400000	34.10	0.9	50	15.9	1	---
5.635000	32.80	1.0	50	17.2	1	---

4.3 Conducted Emission Test

The following table shows the highest levels of conducted emissions on both polarization of hot and neutral line.

Humidity Level : 33% Temperature : 23 °C
 Limit apply to : CISPR 22
 Type of Tests : CLASS B
 Date : OCTOBER 7, 2001
 Result : PASSED BY -3.4 dB

EUT : 15" LCD MONITOR(CT1501 with Lishin Adapter)
 Operating Condition : 1024 X 768 Non-Interlaced (Hf : 60.0 KHz, Vf : 75Hz)
 Detector : CISPR Quasi-Peak (6 dB Bandwidth : 9 KHz)
 CISPR Average(6 dB Bandwidth : 9 KHz)

Line Conducted Emission Tabulated Data

Power Line Conducted Emissions			CISPR 22		
Frequency (MHz)	Amplitude (dBuV)	Conductor	Limit (dBuV)	Margin (dB)	Detector Mode
1.850	42.6	NEUTRAL	46.0	-3.4	Average
2.690	39.9	HOT	46.0	-6.1	Average
2.715	40.2	NEUTRAL	46.0	-5.8	Average
3.085	40.1	NEUTRAL	46.0	-5.9	Average

NOET:

1. All video modes and resolutions were investigated and the worst-case emissions are reported
 Other video modes & resolution were tested and found to be in compliance.

Measured by : Kyoung-Hee Yoon / Engineer

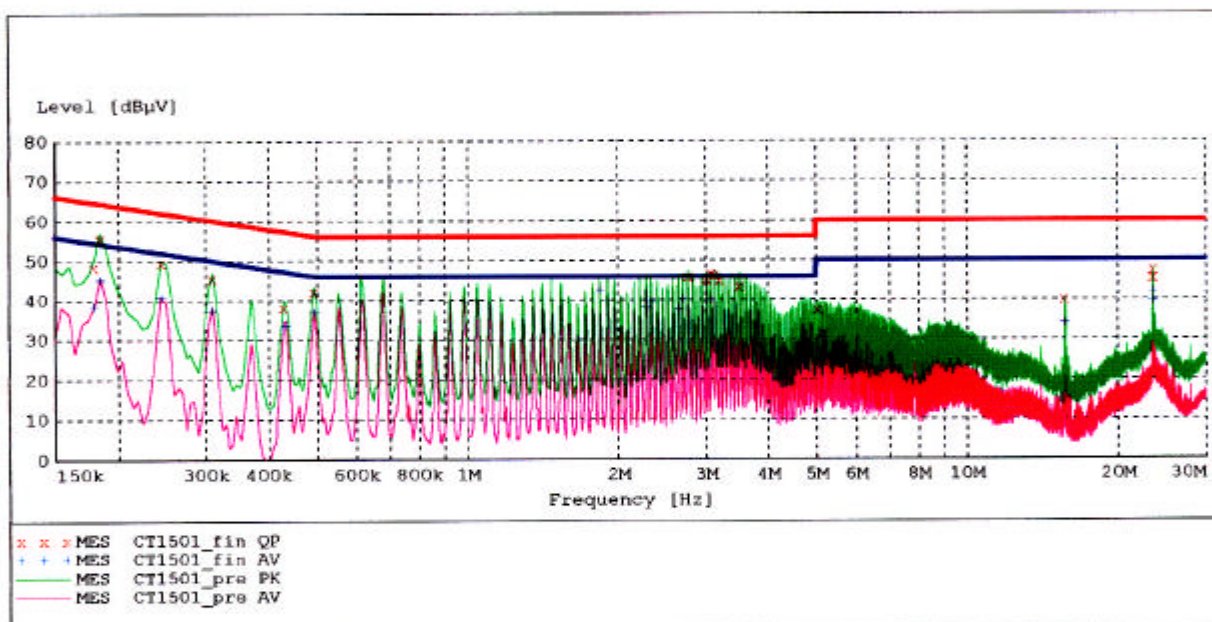
Date : OCTOBER 7, 2001

**HYUNDAI C-TECH. CO., LTD.
EMC TEST LAB.**

EUT: CT1501
 Manufacturer: CORNEA
 Operating Condition: 1024 X 768 60KHz 75Hz
 Test Site: Shield Room
 Operator: Kyoung-Hee Yoon
 Test Specification:
 Comment: H

SCAN TABLE: "EN 55022 V (PKH)"

Short Description:			EN 55022 Voltage			
Start	Stop	Step	Detector	Meas. Time	IF Bandw.	Transducer
Frequency	Frequency	Width				
150.0 kHz	500.0 kHz	5.0 kHz	MaxPeak	100.0 ms	9 kHz	CABLE LOSS (NEW)
			Average			
500.0 kHz	5.0 MHz	5.0 kHz	MaxPeak	10.0 ms	9 kHz	CABLE LOSS (NEW)
			Average			

**MEASUREMENT RESULT: "CT1501_fin QP"**

Frequency MHz	Level dBuV	Transd dB	Limit dBuV	Margin dB	Line	PE
0.180000	48.50	0.5	65	16.0	1	---
0.185000	55.60	0.5	64	8.7	1	---
0.245000	49.40	0.5	62	12.5	1	---
0.310000	45.40	0.5	60	14.5	1	---
0.430000	38.10	0.5	57	19.2	1	---
0.495000	42.10	0.5	56	14.0	1	---
2.775000	45.80	0.6	56	10.2	1	---
3.025000	45.20	0.6	56	10.8	1	---
3.085000	46.70	0.6	56	9.3	1	---
3.145000	46.30	0.6	56	9.7	1	---
3.210000	44.90	0.6	56	11.1	1	---
3.520000	43.30	0.7	56	12.7	1	---
5.000000	24.50	0.9	56	31.5	1	---
5.045000	37.40	0.9	60	22.6	1	---

MEASUREMENT RESULT: "CT1501_fin QP"

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Line	PE
5.175000	31.50	0.9	60	28.5	1	---
15.730000	40.10	1.5	60	19.9	1	---
23.590000	45.40	2.0	60	14.6	1	---
23.650000	47.50	2.0	60	12.5	1	---

MEASUREMENT RESULT: "CT1501_fin AV"

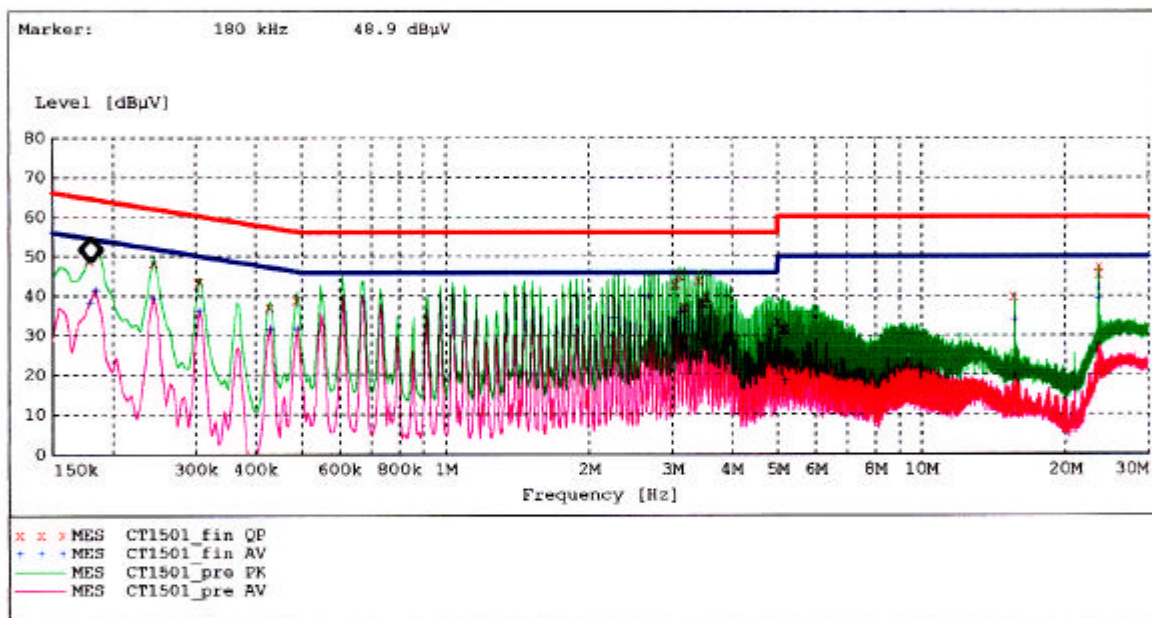
Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Line	PE
0.180000	38.50	0.5	55	16.0	1	---
0.185000	45.20	0.5	54	9.0	1	---
0.245000	40.90	0.5	52	11.1	1	---
0.310000	37.40	0.5	50	12.6	1	---
0.435000	33.60	0.5	47	13.6	1	---
0.495000	36.90	0.5	46	9.2	1	---
1.850000	42.60	0.6	46	3.4	1	---
2.285000	38.00	0.6	46	8.0	1	---
2.345000	39.70	0.6	46	6.3	1	---
2.655000	37.50	0.6	46	8.5	1	---
2.715000	40.20	0.6	46	5.8	1	---
3.085000	40.10	0.6	46	5.9	1	---
5.170000	27.50	0.9	50	22.5	1	---
5.295000	25.50	0.9	50	24.5	1	---
5.725000	24.90	1.0	50	25.1	1	---
15.730000	34.20	1.5	50	15.8	1	---
23.590000	39.60	2.0	50	10.4	1	---
23.650000	41.90	2.0	50	8.1	1	---

HYUNDAI C-TECH. CO., LTD.
EMC TEST LAB.

EUT: CT1501
 Manufacturer: CORNEA
 Operating Condition: 1024 X 768 60KHz 75Hz
 Test Site: Shield Room
 Operator: Kyoung-Hee Yoon
 Test Specification:
 Comment: N

SCAN TABLE: "EN 55022 V (PKH) "

Short Description: EN 55022 Voltage			Detector	Meas. Time	IF Bandw.	Transducer
Start Frequency	Stop Frequency	Step Width				
150.0 kHz	500.0 kHz	5.0 kHz	MaxPeak	100.0 ms	9 kHz	CABLE LOSS (NEW)
500.0 kHz	5.0 MHz	5.0 kHz	Average	10.0 ms	9 kHz	CABLE LOSS (NEW)
			MaxPeak			
			Average			


MEASUREMENT RESULT: "CT1501_fin QP"

Frequency MHz	Level dBuV	Transd dB	Limit dBuV	Margin dB	Line	PE
0.180000	48.90	0.5	65	15.5	1	---
0.185000	52.30	0.5	64	12.0	1	---
0.245000	48.30	0.5	62	13.6	1	---
0.305000	43.60	0.5	60	16.5	1	---
0.430000	37.00	0.5	57	20.2	1	---
0.490000	38.90	0.5	56	17.3	1	---
3.060000	42.90	0.6	56	13.1	1	---
3.120000	45.10	0.6	56	10.9	1	---
3.185000	37.20	0.6	56	18.8	1	---
3.425000	43.90	0.7	56	12.1	1	---
3.490000	38.20	0.7	56	17.8	1	---
3.550000	39.70	0.7	56	16.3	1	---
5.000000	33.50	0.9	56	22.5	1	---
5.125000	31.60	0.9	60	28.4	1	---

MEASUREMENT RESULT: "CT1501_fin QP"

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Line	PE
5.185000	31.70	0.9	60	28.3	1	---
15.730000	40.00	1.5	60	20.0	1	---
23.590000	45.70	2.0	60	14.3	1	---
23.650000	47.80	2.0	60	12.2	1	---

MEASUREMENT RESULT: "CT1501_fin AV"

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Line	PE
0.180000	38.40	0.5	55	16.1	1	---
0.185000	41.40	0.5	54	12.8	1	---
0.245000	39.40	0.5	52	12.5	1	---
0.305000	36.30	0.5	50	13.8	1	---
0.430000	31.60	0.5	47	15.6	1	---
0.490000	31.80	0.5	46	14.4	1	---
2.265000	34.60	0.6	46	11.4	1	---
2.690000	39.90	0.6	46	6.1	1	---
3.060000	33.40	0.6	46	12.6	1	---
3.120000	35.80	0.6	46	10.2	1	---
3.185000	27.00	0.6	46	19.0	1	---
3.490000	29.00	0.7	46	17.0	1	---
5.000000	25.40	0.9	46	20.6	1	---
5.125000	23.80	0.9	50	26.2	1	---
5.190000	18.70	0.9	50	31.3	1	---
15.730000	34.10	1.5	50	15.9	1	---
23.595000	39.50	2.0	50	10.5	1	---
23.650000	42.20	2.0	50	7.8	1	---

5. Field Strength Calculation

The field strength is calculated by adding the Antenna Factor and Cable Factor.
The basic equation with a sample calculation is as follows:

$$FS = RA + AF + CF$$

where FS = Field Strength

RA = Receiver Amplitude

AF = Antenna Factor

CF = Cable Attenuation Factor

Assume a receiver reading of 21.5 dBuV is obtained. The Antenna Factor of 7.4 and a Cable Factor of 1.1 is added. The 30 dBuV/m value was mathematically converted to its corresponding level in uV/m.

$$FS = 21.5 + 7.4 + 1.1 = 30 \text{ dBuV/m}$$

$$\text{Level in uV/m} = \text{Common Antilogarithm} [(30 \text{ dBuV/m})/20] = 31.6 \text{ uV/m}$$

6. LIST OF TEST EQUIPMENT

TYPE	MANUFACTURE	MODEL	CAL. DATE
EMI Test Receiver	Rohde & Schwarz	ESH3	2001.6.26
EMI Test Receiver	Rohde & Schwarz	ESVP	2001.2.14
EMI Test Receiver	Rohde & Schwarz	ESI40	2001.1.18
EMI Test Receiver	Rohde & Schwarz	ESVS30	2001.6.26
Spectrum Monitor	Rohde & Schwarz	EZM	N.A
Graphic Plotter	Rohde & Schwarz	DOP2	N.A
Printer	Rohde & Schwarz	PDN	N.A
Spectrum Analyzer	H.P	8591EM	2001.7.11
LISN	EMCO	3825/2	2001.7.13
LISN	Rohde & Schwarz	ESH2-Z5	2001.7.19
Amplifier	Hewlett-Packard	8447E	2001.3.2
Dipole Antennas	Rohde & Schwarz	VHAP	2001.6.28
Dipole Antennas	Rohde & Schwarz	UHAP	2001.6.28
Biconical Antenna	Rohde & Schwarz	BBA-9106	2001.6.28
Log-Periodic Antenna	Rohde & Schwarz	UHALP-9107	2001.6.26
Antenna Position Tower	EMCO	1051-12	N.A
Turn Table	EMCO	1060-06	N.A
Line Filter	KEENE	ULW 2X30-60	N.A
Power Analyzer	Voltech	PM 3300	2001.2.20
Reference Network Impedance	Voltech	IEC 555	N.A
AC Power Source	PACIFIC	Magnetic Module	N.A
AC Power Source	PACIFIC	360AMX	N.A