

### HYUNDAI CALIBRATION & CERTIFICATION TECH. CO., LTD.

Product Compliance Division, EMC Team SAN 136-1, AMI-RI , BUBAL-EUP, ICHEON-SI, KYOUNKI-DO, 467-701, KOREA TEL: +82 31 639 8518 FAX: +82 31 639 8525

## **TEST REPORT**

Manufacture:

HYUNDAI IT CORP.

SAN 136-1, AMI-RI, BUBAL-EUB, ICHON-SI, KYOUNGKI-DO, 467-701, KOREA

Date of Issue: March 23, 2006

Test Report No.: HCT-F06-0309

**Test Site: HYUNDAI CALIBRATION & CERTIFICATION** 

TECHNOLOGIES CO., LTD.

HCT FRN: 0005-8664-21

FCC ID:

MODEL:

PJIL17A00000

L17A00000

**Rule Part(s):** Part 15 & 2

**Equipment Class:** FCC Class B Peripheral Device (JBP)

Standard(s): FCC Class B: (CISPR 22)

**EUT Type:** 17" LCD Monitor

Max. Resolution(s): 1280 X 1024 (@/75Hz), 1280 X 1024 (@/60Hz)

**Type No.:** L17A00000

Port/Connector(s) 15-pin D-sub DVI Audio in, Audio out LCD Panel SAMSUNG Electronics(LTM170E8-L02)

This equipment has been shown to be in compliance with the applicable technical standards as indicated in the measurement report and was tested in accordance with the measurement procedures specified in ANSI C63.4-2003

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.

Sh

Report prepared by : Kun-Hyoung Kim

**Test engineer of EMC Tech.Part** 

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Approved by : Sang Jun LEE

**Manager of EMC Tech.Part** 







### HYUNDAI CALIBRATION & CERTIFICATION TECH. CO., LTD.

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## **MEASUREMENT REPORT**

## 1.1 Scope

Measurement and determination of electromagnetic emissions (EME) of radio frequency devices including intentional and/or unintentional radiators for compliance with the technical rules and regulations of the Federal Communications Commission.

Applicant Name: HYUNDAI IMAGEQUEST

Address: SAN 136-1, AMI-RI, BUBAL-EUP, ICHEON-SI,

KYOUNKI-DO, 467-701, KOREA

• FCC ID: PJIL17A00000

• Equipment Class: FCC Class B Peripheral Device (JBP)

• EUT Type: 17 " LCD MONITOR

• Type No.: L17A00000

• Max. Resolution: 1280 X 1024 (@75Hz), 1280 X 1024 (@/60Hz)

• Power Cord: Unshielded

• Rule Part(s): FCC Part 15 Subpart B

• Test Procedure(s): ANSI C63.4 (2003)

• Dates of Tests: January 26, 2006 ~ February 01, 2006

• Place of Tests: 254-1,MAEKOK-RI,HOBUP-MYUN,ICHON-SI,KYOUNGKI-DO,467-701,KOREA

Report No.: HCT-F06-0601 3/24



### 2.1 INTRODUCTION

The measurement procedure described in American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9kHz to 40GHz (ANSIC63.4-2003) was used in determining radiated and conducted emissions emanating from **HYUNDAI IT CORP. LCD MONITOR Model: L17A00000** 

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 C63.4and CISPR Publication 22. Detailed description of test facility was submitted to the Commission and accepted dated July 23,2003 (Confirmation Number: EA90661)



### 3.1 PRODUCT INFORMATION

### 3.2 Equipment Description

Equipment Under Test (EUT) is HYUNDAI IT CORP. LCD MONITOR

(Model: L17A00000)

FCC ID: PJIL17A00000

Maximum Resolution(s): 1280 X 1024 (@75Hz)

Dimensions: 374mm(W) x 401mm(H) x 200mm(D)

Power Supply: DC 12 V 3.0 A

Port(s)/Input Connector(s): 15-pin D-sub DVI Audio

Cable(s): Shielded D-Sub (with ferrite on both ends), Audio cable(with ferrite on both ends)

DVI(with ferrite on both ends)

Dimensions (WxHxD): 396x414x200mm (WxHxD)

Weight (Net):3.7Kg unpacked

Power Consumption: 35Watts

Weight (Net): 3.2Kg

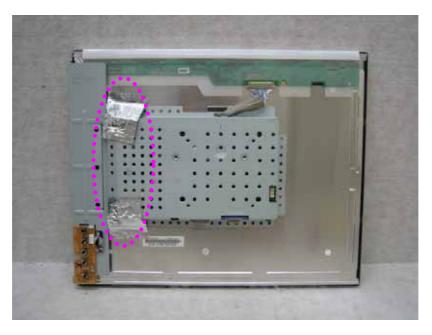
### **EMI Suppression Devices:**

Modifications were made to the device. Please refer to the next page.

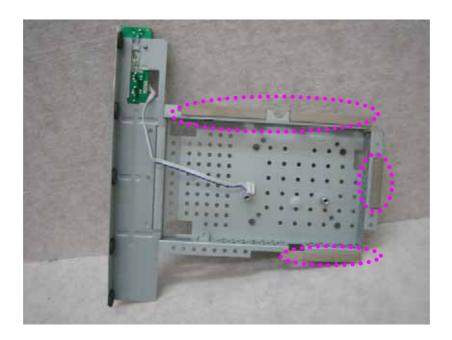




### 1. Attached a Copper Tape on the Board



### 1. Attached a Gasket on the Board



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## 4.1 Description of Tests(Conducted)

## 4.2 Powerline Conducted RFI (150kHz- 30MHz)

The power line conducted RFI measurements were performed according to CISPR 22.

The EUT was placed on a non-conducting 1.0 by 1.5 meter table which is 0.8 meters in height and 0.40 meters away from the vertical wall of the shielded enclosure. Power to the EUT is provided through a Rohde & Schwarz 50  $\Omega$  / 50 uH Line Impedance Stabilization Network (LISN) and the support equipment through a separate Solar 50  $\Omega$  / 50 uH Line- Conducted Test Facility LISN. Sufficient time for the EUT, support equipment, and test equipment were allowed in order for them to warm up to their normal operating condition. The RF output of the LISN was connected to the spectrum analyzer to determine the frequency producing the maximum EME. The spectrum was scanned from 150kHz to 30 MHz. Each maximum EME was remeasured using an EMI receiver. The detector function of the receiver was set to CISPR quasi- peak and average mode with the bandwidth set to 9 kHz. Each emission was maximized consistent with the typical applications by varying the configuration of the test sample. Interface cables were connected to the available interface ports of the test unit. The effect of varying the position of cables was investigated to find the configuration that produces maximum Diagram emission. Excess cable lengths were bundled at the center with 30- 40cm. in length. The worst-case configuration is noted in the test report and the photographs are attached.

RFI CONDUCTED	CISPR 22 CLASS B Limits dB(uV/m)					
Freq. Range	CISPR 22 Quasi-Peak	CISPR 22 Average				
150kHz - 0.5MHz	66-56**	56-46**				
0.5MHz - 5MHz	56	46				
5MHz - 30MHz	60	50				
**Limits decreases linearly with the logarithm of frequency						

**Table 1. RFI Conducted Limits** 

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## 4.3 Description of Tests(Radiated)

### **Radiated Emissions**

Preliminary measurements were made indoors at 1 meter using broadband antennas, broadband amplifier, and spectrum analyzer to determine the frequency producing the maximum EME. Appropriate precaution was taken to ensure that all EME from the EUT were maximized and investigated. The spectrum was scanned from 30 to 300 MHz using biconical antenna, 300 to 1000 MHz using log-periodic antenna, and above 1 GHz using linearly polarized horn antennas. Final measurements were made outdoors at 10-meter test range using Dipole antennas and EMI receiver. For frequencies above 1 GHz, horn antennas were used. Sufficient time for the EUT, support equipment, and test equipment were allowed in order for them to warm up to their normal operating condition. The EMI receiver detector function was set to CISPR quasi-peak mode and the bandwidth of the receiver was set to 120 kHz. The EUT, support equipment, and interconnecting cables were arranged to the configuration that produces the maximum EME emission found during preliminary scan. The turntable containing the system was rotated; the antenna height was varied 1 to 4 meters and stopped at the azimuth or height producing the maximum emission. Horizontal and vertical antenna polarizations were checked. Each emission was maximized by: varying the mode of operation or resolution; clock or data exchange speed; scrolling H pattern to the EUT and/ or support equipment, and powering the monitor the computer aux AC outlet, if applicable; and changing the polarity of the antenna, whichever determined the worst-case emission.

ITE Radiated Limits									
Frequency (MHz)	FCC Limit @ 3m. Quasi- Peak dB[µV/m]	FCC Limit @ 10m.* Quasi – Peak dB [µV/m]	CISPR Limit @ 10m. Quasi-Peak dB [µV/m]						
30-88	40.0	29.5	30.0						
88-216	43.5	33.0	30.0						
216-230	46.0	35.6	30.0						
230-960	46.0	35.6	37.0						
960-1000	54.0	43.5	37.0						
> 1000	54.0	43.5	No Specified Limit						
	* Limit extrapol	ated 20 dB/decade	ı						

Table 2. Radiated Class B limits @ 10-meters

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# **5.1 Support Equipment Used**

DEVICE TYPE	MANUFACTURER	MODEL NUMBER	FCC ID / DoC	CONNECTED TO
LCD Monitor	HYUNDAI IT CORP.	L17A00000	DoC	PC END
EUT Adaptor	S I-TECH CO., Ltd.	<b>SAD04212-UV</b>	DoC	EUT END
PC	DELL	OPTIPLEXGX620	DoC	EUT END
Mouse	DELL	MO56UO	DoC	PC END
Key Board	DELL	SK-8115	DoC	PC END
Printer	н.Р	C4569A	DoC	PC END
Head-Set	HYUNDAI	JPC-914MV	DoC	EUT END
Serial Mouse	Radio Shack	FSUGMZE3	DoC	PC END

### **5.2 Cable Description**

Product Name	Port	Power Cord Shielded (Y/N)	I/O Cable Shielded (Y/N)	Length (M)
	D-Sub	N/A	Y	(D)1.6
LCD MONITOR	DVI	N/A	Y	(D)1.8
(EUT)	Audio In	N/A	Y	(D)1.3
	Audio Out	N/A	Y	(D)2.8
	DC In	N	N	(P)1.8
PC	USB	N/A	Y	(D)1.8
	USB	N/A	Y	(D)1.8
	Serial	N/A	Y	(D)1.6
	Parallel	N/A	Y	(D)1.8
	AC In	N	N	(P)1.8
Printer	AC In	N	N	(P)1.8

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

## **5.3 Noise Suppression Parts on Cable. (I/O CABLE)**

		Ferrite Bead (Y/N)	Location	Metal Hood (Y/N)	Location
	D-Sub	Y	BOTH END	Y	BOTH END
	DVI	Y	BOTH END	Y	BOTH END
LCD MONITOR	Audio In	Y	BOTH END	Y	BOTH END
	Audio Out	N	N/A	Y	Head-Set END
	DC In	Y	EUT END	Y	EUT END
PC	USB	N	N/A	Y	PC END
PC	USB	N	N/A	Y	PC END
	Parallel	N	N/A	Y	Both END
	Serial	N	N/A	Y	PC END
	AC In	N	N/A	N	N/A

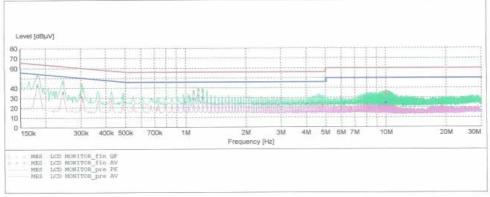
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### **6.1 LINE-CONDUCTED TEST DATA**

[D-SUB]

#### HCT EMC TEST LAB Manufacturer: HYUNDAI IT CORP. Operating Condition: 1280 X 1024 75Hz DSUB Test Site: SHIELD ROOM Operator: KH-KTM L17A00000 Operator: KH-KIM Test Specification: CISPR 22 CLASS B Comment: SCAN TABLE: "CISPR 22 Voltage" Short Description: CISPR 22 Voltage Start Stop Step Detector Meas Frequency Frequency Width Time 150.1 kHz 500.0 kHz 2.5 kHz MaxPeak 10.0 Detector Meas. IF Transducer Time Bandw. MaxPeak 10.0 ms 9 kHz None Average 500.0 kHz 5.0 MHz 5.0 kHz MaxPeak 10.0 ms 9 kHz None Average MaxPeak 5.0 MHz 30.0 MHz 5.0 kHz 10.0 ms 9 kHz Average Level [dBµV]



### MEASUREMENT RESULT: "LCD MONITOR\_fin QP"

6/14/2006 12:	31AM					
Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Line	PE
0.182600	53.70	10.1	64	10.7	222	
0.245100	45.80	10.1	62	16.1		
0.302600	43.80	10.1	60	16.4		
1.095000	35.90	10.1	56	20.1		
1.155000	39.30	10.1	56	16.7		
1.215000	38.00	10.2	56	18.0		
9.910000	33.80	10.4	60	26.2		
10.030000	35.00	10.4	60	25.0		
10.150000	35.00	10.4	60	25.0	551111	

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MEASUREMENT	RESULT	: "LCD	MONITO	OR_fin	AV"	
6/14/2006 12: Frequency MHz	31AM Level dBµV	Transd dB	Limit dBµV	Margin dB	Line	PE
0.182600	42.30	10.1	54	12.1		
0.245100	35.00	10.1	52	16.9		
0.302600	30.70	10.1	50	19.4		
1.095000	28.80	10.1	46	17.2		-
1.155000	31.90	10.1	46	14.1	44.46.80	(m,m) = 1
1.215000	30.50	10.2	46	15.5		
9.910000	23.90	10.4	50	26.1	-	
9.970000	25.30	10.4	50	24.7		
10.090000	25.00	10.4	50	25.0	***	$m \mapsto \infty$

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### EMC TEST LAB

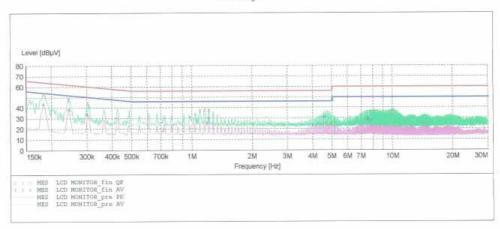
EUT: L17A00000

Manufacturer: HYUNDAI IT CORP.
Operating Condition: 1280 X 1024 75Hz DSUB
Test Site: SHIELD ROOM
Operator: KH-KIM

Test Specification: CISPR 22 CLASS B

Comment:

SCAN TABLE: "CISPR 22 Voltage"
Short Description: CISPR 22 Voltage
Start Stop Step Detector Meas. IF
Time Bandw. Transducer Frequency Frequency Width Time Bandw. 150.1 kHz 500.0 kHz 2.5 kHz MaxPeak 10.0 ms 9 kHz None Average 500.0 kHz 5.0 MHz 5.0 kHz MaxPeak 10.0 ms 9 kHz None Average 5.0 MHz 30.0 MHz 5.0 kHz MaxPeak 10.0 ms 9 kHz None Average



### MEASUREMENT RESULT: "LCD MONITOR fin QP"

6/14/2006	12:2	8AM					
Frequen M	cy Hz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Line	PE
0.1826	00	53.80	10.1	64	10.5		
0.2426	00	48.20	10.1	62	13.8		
0.3026	00	45.00	10.1	60	15.1		
1.0950	00	37.80	10.1	56	18.2		
1.1550	00	38.60	10.1	56	17.4		
1.2150	0.0	37.70	10.2	56	18.3		
8.0850	00	36.10	10.4	60	23.9		
9.9700	00	36.50	10.4	60	23.5		
10.0300	00	36.80	10.4	60	23.2		

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MEASUREMENT	RESULT	: "LCD	MONITO	OR_fin .	AV"	
6/14/2006 12: Frequency	28AM Level	Transd	Limit	Margin	Line	PE
MHz	dBµV	dB	dΒμV	dB		
0.182600	43.00	10.1	54	11.4		
0.245100	38.10	10.1	52	13.8		
0.302600	33.40	10.1	50	16.8		
1.215000	30.40	10.2	46	15.6	200 000 000	
4.560000	30.60	10.3	46	15.4		
4.620000	31.30	10.3	46	14.7		
7.540000	28.60	10.3	50	21.4	-	
7.600000	29.20	10.3	50	20.8		
7.845000	27.80	10.4	50	22.2		

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### [DBI]

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#### EMC TEST LAB

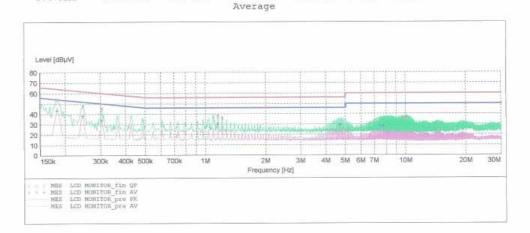
EUT: L17A00000

Manufacturer: HYUNDAI IT CORP.
Operating Condition: 1280 X 1024 60Hz DVI
Test Site: SHIELD ROOM
Operator: KH-KTM

Test Specification: CISPR 22 CLASS B

Comment:

SCAN TABLE: "CISPR 22 Voltage"
Short Description: CISPR 22 Voltage
Start Stop Step Detector Meas
Frequency Frequency Width Time
150.1 kHz 500.0 kHz 2.5 kHz MaxPeak 10.0 Detector Meas. IF
Time Bandw.
MaxPeak 10.0 ms 9 kHz Transducer None Average 500.0 kHz 5.0 MHz 5.0 kHz MaxPeak 10.0 ms 9 kHz None Average 5.0 MHz 30.0 MHz 5.0 kHz 10.0 ms 9 kHz None MaxPeak



### MEASUREMENT RESULT: "LCD MONITOR fin QP"

6/14/2006 12:	20AM					
Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Line	PE
0.182600	54.50	10.1	64	9.9		
0.245100	47.70	10.1	62	14.2		
0.305100	45.70	10.1	60	14.4		
1.095000	38.40	10.1	56	17.6		
1.155000	38.30	10.1	56	17.7	ment.	
1.215000	36.90	10.2	56	19.1		2000
9.730000	35.80	10.4	60	24.2		
10.035000	36.10	10.4	60	23.9		
10 095000	36.40	10.4	60	23.6		

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MEASUREMENT 6/14/2006 12:	RESULT	: "LCD	MONITO	OR_fin	AV"	
Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Line	PE
0.182600	43.60	10.1	54	10.8		
0.245100	38.30	10.1	52	13.6		
0.305100	33.80	10.1	50	16.3		
1.155000	30.20	10.1	4.6	15.8		-
4.685000	29.10	10.3	46	16.9		
4.745000	29.60	10.3	46	16.4		
7.540000	28.30	10.3	50	21.7	200.00	100 000 000
7.725000	28.00	10.3	50	22.0		
7.785000	28.40	10.4	50	21.6		20.00

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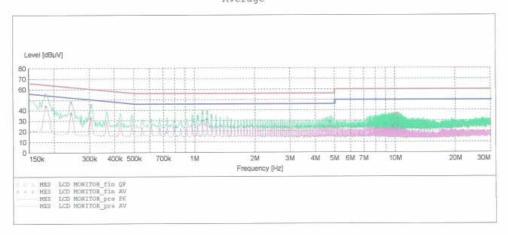
#### HCT

#### EMC TEST LAB

EUT: L17A00000
Manufacturer: HYUNDAI IT CORP.
Operating Condition: 1280 X 1024 60Hz DVI
Test Site: SHIELD ROOM
Operator: KH-KIM

Test Specification: CISPR 22 CLASS B Comment: N Comment:

SCAN TABLE: "CISPR 22 Voltage"
Short Description: CISPR 22 Voltage
Start Stop Step Detector Meas. IF
Time Bandw. Transducer Frequency Frequency Width 150.1 kHz 500.0 kHz 2.5 kHz MaxPeak 10.0 ms 9 kHz None Average 500.0 kHz 5.0 MHz 5.0 kHz 10.0 ms 9 kHz MaxPeak None Average MaxPeak 5.0 MHz 30.0 MHz 5.0 kHz 10.0 ms 9 kHz None Average



#### MEASUREMENT RESULT: "LCD MONITOR fin QP"

6/14/2006	12:14	MA					
Frequen M	cy Hz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Line	PE
0.1826	00	55.30	10.1	64	9.1		
0.2426	00	47.70	10.1	62	14.3		
0.3051	00	45.00	10.1	60	15.1		
1.0950	00	38.60	10.1	56	17.4		
1.1550	00	38.50	10.1	56	17.5		
1.2150	00	34.90	10.2	56	21.1		
9.9750	00	36.20	10.4	60	23.8		
10.2200	00	35.10	10.4	60	24.9		
10.2800	00	35.70	10.4	60	24.3		

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MEASUREMENT	RESULT	: "LCD	MONITO	OR_fin .	AV"	
6/14/2006 12: Frequency MHz	14AM Level dBµV	Transd dB	Limit dBµV	Margin dB	Line	PE
0.182600	43.80	10.1	54	10.6		
0.242600	36.70	10.1	52	15.3	-	-
0.305100	32.30	10.1	50	17.8		
1.095000	30.10	10.1	46	15.9		
1.155000	31.20	10.1	46	14.8		
4.745000	28.70	10.3	46	17.3		
9.795000	24.40	10.4	50	25.6		
9.975000	26.30	10.4	50	23.7		
10.340000	25.40	10.4	50	24.6	-	

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### **NOTES:**

- 1. All modes of operation were investigated and the worst-case emissions are reported.
- 2. The CISPR RFI conducted limits are listed on Table 1 (Page 6).
- 3. Line H = Phase Line N = Neutral Line

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<sup>\*\*</sup> Measurements using CISPR quasi-peak mode.



## 7.1 RADIATED TEST DATA

### [D-Sub]

Frequency MHz	Reading dBuV	Ant. Factor dB/m	Cable Loss dB	ANT POL (H/V)	Total dBuV/m	Limit dBuV/m	Margin dB
30.8	8.8	11.4	1.2	٧	21.4	30.0	8.6
93.6	5.6	8.4	2.2	V	16.2	30.0	13.8
186.4	8.9	10.5	3.1	H	22.5	30.0	7.5
269.7	16.3	11.7	3.8	٧	31.8	37.0	5.2
445.8	8.1	16.2	4.8	Н	29.1	37.0	7.9
631.9	4.6	19.5	5.8	Н	29.9	37.0	7.1

### [DVI]

Frequency	Reading	Ant. Factor	Cable Loss	ANT POL	Total	Limit	Margin
MHz	dBuV	dB/m	dB	(H/V)	dBuV/m	dBuV/m	dB
69.7	13.7	9.9	1.8	٧	25.4	30.0	4.6
114.0	8.5	10.5	2.4	Н	21.4	30.0	8.6
119.3	7.4	11.0	2.4	٧	20.8	30.0	9.2
324.0	14.2	13.2	4.1	٧	31.5	37.0	5.5
540.0	6.7	17.8	5.3	٧	29.8	37.0	7.2
648.0	4.9	19.7	5.8	Н	30.4	37.0	6.6

Radiated Measurements at 10-meters.

### NOTES:

- 1. All modes of operation were investigated, and the worst-case emissions are reported(Page 15).
- 2. The radiated limits are listed on Table 2 (Page 7).

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<sup>\*\*\*</sup> Measurements using CISPR quasi-peak mode. Above 1GHz, peak detector function mode is used using a resolution bandwidth of 1MHz and a video bandwidth of 1MHz. The peak level complies with the average limit. Peak mode is used with linearly polarized horn antenna and low-loss microwave cable.



## 8.1 Sample Calculations

 $dB \mu V = 20 \log_{10}(\mu V/m)$ 

[D-Sub]

### 8.2 Example 1:

@ 0.1826 MHz

Class B limit =  $64.3 \text{ dB } \mu\text{V}$ 

Reading =  $53.8 \text{ dB } \mu\text{V}$  (calibrated level)

**Margin** =  $64.3 - 53.8 = 10.5 \text{ dB } \mu\text{V}$ 

= 10.5 dB below limit

**8.3 Example 2:** 

@269.7 MHz

Class B limit =  $37.0 \text{ dB } \mu\text{V/m}$ 

Reading =  $16.3 \text{ dB } \mu\text{V/m}$  (calibrated level)

Antenna Factor + Cable Loss = 15.5 dBTotal =  $31.8 \text{ dB } \mu\text{V/m}$ 

**Margin** =  $37.0 - 31.8 = 5.2 \text{ dB } \mu\text{V/m}$ 

= 5.2 dB below limit

[DVI]

8.2 Example 1:

@ 0.1826 MHz

Class B limit =  $64.4 \text{ dB } \mu\text{V}$ 

Reading =  $55.3 \text{ dB } \mu\text{V}$  (calibrated level)

**Margin** =  $64.4 - 55.3 = 9.1 dB \mu V$ 

= 9.1 dB below limit

**8.3 Example 2:** 

@69.7 MHz

Class B limit =  $30.0 \text{ dB } \mu\text{V/m}$ 

Reading =  $13.7 \text{ dB } \mu\text{V/m} \text{ (calibrated level)}$ 

Antenna Factor + Cable Loss = 11.7 dBTotal =  $25.4 \text{ dB } \mu\text{V/m}$ 

**Margin** =  $30.0 - 25.4 = 4.6 \text{ dB } \mu\text{V/m}$ 

4.6 dB below limit





# 9.1 Test Equipment

<u>Type</u>	<u>Manufacture</u>	Model Number	<b>CAL Due Date</b>
EMI Test Receiver	Rohde & Schwarz	ESI40	2006.11.16
EMI Test Receiver	Rohde & Schwarz	ESCI	2006.09.13
LISN	Rohde & Schwarz	ESH2-Z5	2007.04.26
LISN	EMCO	703125	2007.04.26
TRILOG Antenna	Schwarzbeck	VULB 9160	2007.04.17
<b>Antenna Position Tower</b>	HD	MA240	N/A
Turn Table	EMCO	1050	N/A
Power Analyzer	Voltech	PM 3300	2007.03.22
Reference Network Impedance	Voltech	IEC 555	N/A
<b>AC Power Source</b>	PACIFIC	Magnetic Module	N/A
AC Power Source	PACIFIC	360-AMX	2006.11.25
Controller	HD GmbH	HD 100	N/A
SlideBar	HD GmbH	KMS 560	N/A
PULSE LIMITER	Rohde & Schwarz	ESH3-Z2	2006.11.16

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### 10.1 Test Software Used

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.

NOTE: This is a sample of the basic program used during the test. However, during testing, a different software program may be used; whichever determines the worst-case condition. In addition, the program used also depends on the number and type of devices being tested.

Actual program used is the "H" pattern in Notepad under Windows environment. All resolution modes ( 1280x1024, 1024x768, 800x600, 640x480, 720x400) were investigated and tested

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## 11.1 Conclusion

The data collected shows that **HYUNDAI IT CORP. LCD MONITOR(Model : L17A00000)** complies with §15.107 and §15.109 of the FCC Rules.

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