Underwriters Laboratories Inc.

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Project:	09CA52757
File:	TC8352
Report:	09CA52757-FCC
Date:	May 12, 2010
Model:	AMM190WTD

FCC Test Report

For

LCD Color Medical Monitor

FCC Certification
Part 15 Subpart B Class B

ADVAN Int'l Corp.
47817 Fremont Blvd. Fremont CA 94538, Fremont, California, U.S.A

UL Korea, Ltd
33rd FL, Gangnam Finance Center, 737
Yeoksam-dong, Gangnam-gu, Seoul
135-984 Korea
Tel: +82.2.2009.9000, Fax:+82.2.2009.9405

Summary of Test Results:

The following tests were performed on a sample submitted for evaluation of compliance with 47CFR Part 15.107(a) / 47CFR Part 15.109(g)				
Test #	Test Name Test Requirement/Specification	Compliant	Not Compliant	See Remark
1	AC Power line Conducted Emission Test	X	-	-
2	Radiated Emission Test	X	-	-

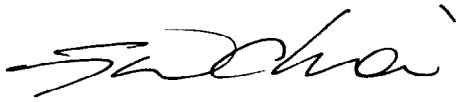
Conclusion:

The tests listed in the Summary of Testing section of this report have been performed as a witness testing and the results recorded by UL Korea Ltd. in accordance with the procedures stated in each test requirement and specification. The test list was determined by the Applicant as being applicable to the Equipment Under Test. As a result, the subject product has been verified to comply or not comply as noted in the Summary of Testing with each test specification. The test results relate only to the items tested.

The equipment under test has

☒ Met the technical requirements
☐ Not met the technical requirements

Tested by
Sung Hoon Baek, Project Engineer
Conformity Assessment Services – 3014ASEO
UL Korea Ltd.
May 13, 2010



Reviewed by
Jea Woon Choi, Senior Project Engineer
Conformity Assessment Services – 3014ASEO
UL Korea Ltd.
May 14, 2010

Test Report Details

Tests Performed By:	UL Korea Ltd. 33rd FL. GFC Bldg. 737 Yeoksam-dong, Kangnam-ku, Seoul, 135-984, Korea
Test Site:	CHUNGBUK TECHNOPARK 685-3 Yangcheong-ri, Ochang-eub,Cheongwon-kun,Chungbuk-province,Republic of Korea The test facility was deemed to have the environment and capabilities necessary to perform the tests included in the test package.
Applicant:	ADVAN Int'l Corp. 47817 Fremont Blvd. Fremont CA 94538, Fremont, California, U.S.A
Manufacturer:	ADVAN Int'l Corp. 47817 Fremont Blvd. Fremont CA 94538, Fremont, California, U.S.A
Factory:	D&T Inc. 59-9 JANG-DONG YUSEONG-GU DAEJEON 305-343 KOREA
Applicant Contact: Title: Phone: E-mail:	Dae Sung Oh General Manager 82-2-703-5197 pilotdan@advancorp.com
Product Type:	LCD Color Medical Monitor
Trademark:	ADVAN
Model Number:	AMM190WTD
FCC ID	QVXAMM190WTD
Product standards:	FCC Part 15 Subpart B Class B
Sample Serial Number:	N/A
Sample Receive Date:	January 29, 2010
Testing Start Date:	January 29, 2010
Date Testing Complete:	May 06, 2010
Test Report Date:	May 12, 2010
Overall Results:	**Pass**

UL Korea Ltd. reports apply only to the specific samples tested under stated test conditions. All samples tested were in good operating condition throughout the entire test program. It is the manufacturer's responsibility to assure that additional production units of this model are manufactured with identical electrical and mechanical components. UL Korea Ltd. shall have no liability for any deductions, inferences or generalizations drawn by the client or others from UL Korea Ltd. issued reports.

REPORT DIRECTORY

1. GENERAL PRODUCT DESCRIPTION

1.1 Report Revision History

Revision Date	Description	Remarks	Revision reviewed By
-	Original Report	-	-

1.2 Equipment Description

Description:
The AMM190WTD is intended for use by general surgeons, gynecologists, urologists, thoracic, orthopedic, ENT, and plastic surgeons adequately trained in these surgical procedures.

1.3 Details of Test Equipment (EUT)

Equipment Configuration:				
No.	Product Type	Manufacturer	Model	Comments
1	19" LCD COLOR MEDICAL MONITOR	ADVAN Int'l Corp.	AMM190WTD	-
2	AC/DC Adapter	Bridgepower	JMW1100KA1800F01	1 EA
3	DC Extension Cable	AULT Korea Corp	CB-1501047004	5 ft
4	DC Extension Cable	AULT Korea Corp	CB-1501047005	15 ft
5	DC Extension Cable	AULT Korea Corp	CB-1501047006	75 ft
6	DVI-D cable	-	-	1 EA
7	HD15 VGA cable	-	-	1 EA
8	Hospital-grade AC power cord	-	-	1 EA
9	Composite Video BNC Jack Cable	-	-	1 EA
10	Super Video Cable	-	-	1 EA

1.4 Technical Data

Item	Description
LCD Panel	19 TFT LCD Panel
Resolution	1680 x 1050 @ 60Hz
Input Signal (Analog & Digital)	DVI, HD15, SD/HD-SDI 1 and 2, Component Y/G, Pb/B, Pr/R, H/CS, VS, C-Video and S-Video
Display Size	16.1 x 10.1 (409.5mm x 255.94mm)
Power Source	Display Monitor: DC 18V 6.67A
	AC-Adapter: AC100~240V 50/60Hz, 1.4~0.6A

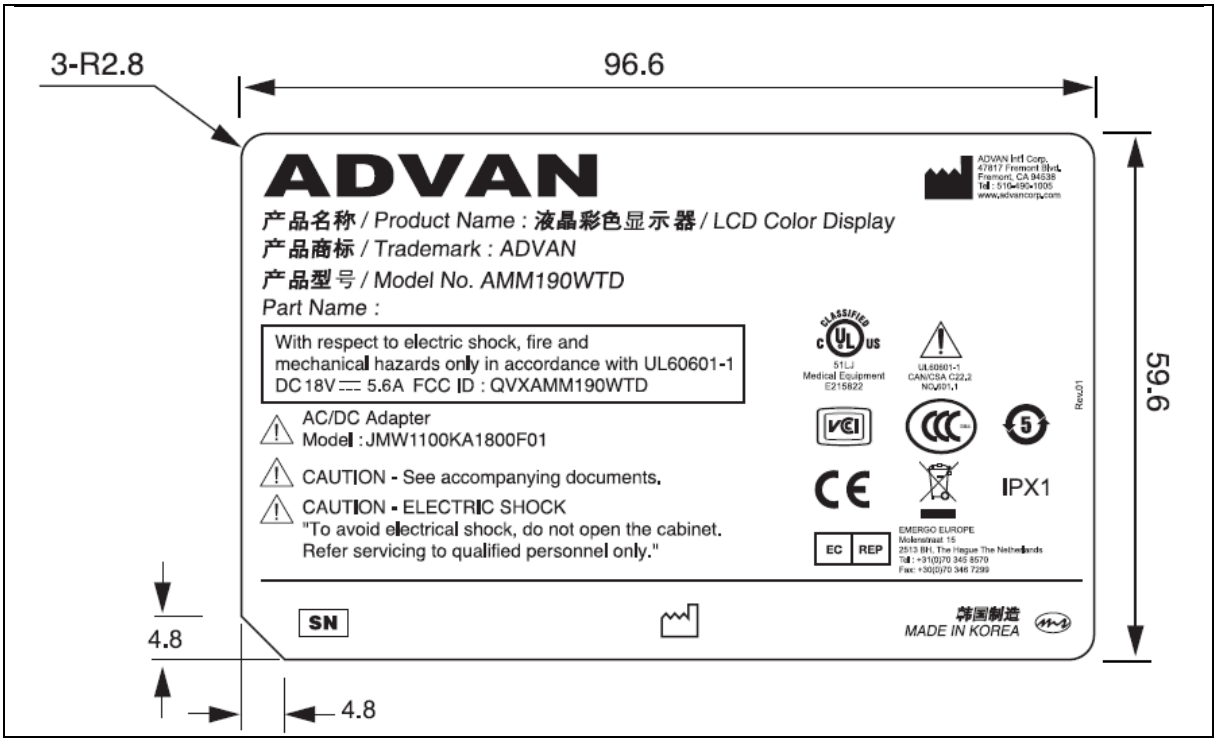
1.5 EUT Internal operating frequency

Frequency (MHz)	Description	Frequency (MHz)	Description
324.00 MHz	Memory Clock	27.000 MHz	System Clock
119.8 MHz	Display Clock	28.322 MHz	System Clock

1.6 Technical descriptions and documents

No.	Document Title and Description
1	AMM190WTD User Manual
Note: The manufacturer provided the following document.	

1.7 Equipment Marking Plate



2. TEST CONDITION

2.1 Equipment Used During Test:

Use*	Product Type	Manufacturer	Model	Comments
EUT	19" LCD COLOR MEDICAL MONITOR	ADVAN Int'l Corp.	AMM190WTD	-
EUT	AC/DC Adapter	Bridgepower	JMW1100KA1800F01	-
EUT	D.C. Extension Cable	AULT Korea Corp	CB-1501047004	5ft
EUT	D.C. Extension Cable	AULT Korea Corp	CB-1501047005	15ft
EUT	D.C. Extension Cable	AULT Korea Corp	CB-1501047006	75ft
AE	PC	DELL	OPTIPLEX 755	
AE	Headset	PILLAR	CH-1700	-
AE	Printer	SAMSUNG	ML-2250G	-
AE	USB mouse	LOGITECH	M-BJ58	-
AE	USB Keyboard	DELL	L30U	-
AE	Video Signal Generator	Quantum data	881	Used for SDI mode
AE	Pattern generator	Chroma	22291	Used for C-video, S-Video, Component mode
AE	LCD Monitor	ADVAN Int'l Corp.	AMM190WTD	Used for External monitor
AE	AC/DC Adapter	Bridgepower	JMW1100KA1800F01	Connected with External monitor
* **Note:** EUT -Equipment Under Test, AE -Auxiliary/Associated Equipment, SIM -Simulator (Not Subjected to Test)				

2.2 Power Interface:

Mode #	Voltage (V)	Current (A)	Power (W)	Frequency (DC/AC-Hz)	Comments
Rated	100-240 Vac	2.0 A	-	50-60	-
1	120 V	-	-	60	-

2.3 Input/Output Ports:

Port #	Name	Type*	Cable Max. >3m	Cable Shielded	Comments
1	Mains	AC	1.8 m	Unshielded	Hospital-grade AC power cord
2	DVI In	I/O	1.8 m	Shielded	24 pin DVI-D
3	VGA In	I/O	1.8 m	Shielded	15 pin D-Sub
4	SDI In, Out	I/O	1.8 m	Shielded	BNC
5	S-Video In, Out	I/O	1.8 m	Shielded	S-Video
6	C-Video In, Out	I/O	1.8 m	Shielded	BNC
7	Component In, Out	I/O	1.8 m	Shielded	BNC

Note:
*AC = AC Power Port, DC = DC Power Port, N/E = Non-Electrical, I/O= Signal Input or Output Port (Not Involved in Process Control), TP = Telecommunication Ports.
* RS-232 port is used for service purpose only. No user interface port

2.4 Test Mode of LCD Color Display Monitor for Test:

Mode #	Mode	Comments
1	DVI Mode	-
2	VGA Mode	Worst case condition
3	SDI In/Out Mode	-
4	S-VIDEO In/Out Mode	-
5	C-Video In/Out Mode	-
6	Component In/Out Mode	Worst case condition

Note:
1. All the configuration described above has been investigated during the preliminary testing and selected two cases as worst-case condition for final measurements.
2. EUT have been performed under continuous displaying "H" Patten for configuration modes of 1 to 2.
3. EUT has been performed under continuous displaying "Color Bar" Patten for configuration modes of 3 to 7.

2.5 Test Resolution of LCD Color Display Monitor for Test:

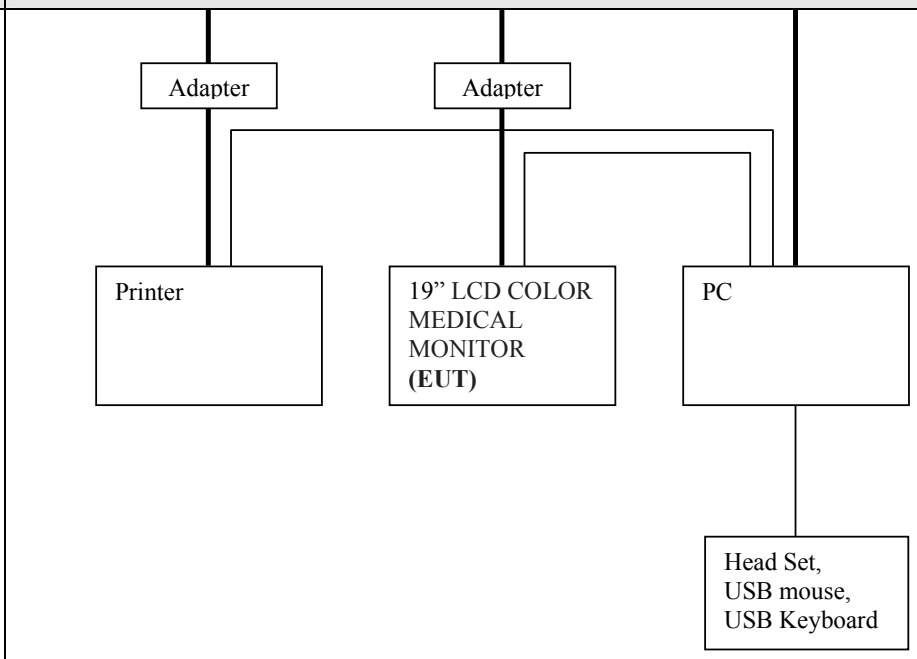
Mode #		Resolution	Comments
1	VGA Mode	640 * 480 @ 60Hz	-
2		1024 * 768 @ 60Hz	Worst case condition
3		1600 * 1200 @ 60Hz	-
4	Component Mode	1080i	Worst case condition

Note: Video resolution where it refers from above is representative worst case.

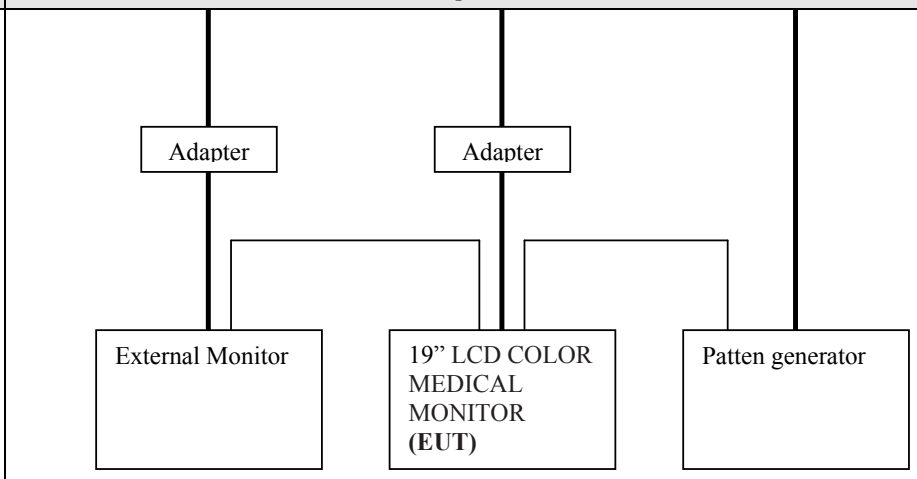
2.6 Used DC extension Cable for Test:

No.	Cable Length	Preliminary Test	Comment
1	5ft	DVI, VGA, SDI, S-Video, C-Video, Component Mode.	-
2	15ft		-
3	75ft		Worst case condition
Note: Radiated emission and conducted emission test were performed for all extension power cable during the preliminary testing and selected worst-case condition for final measurements.			

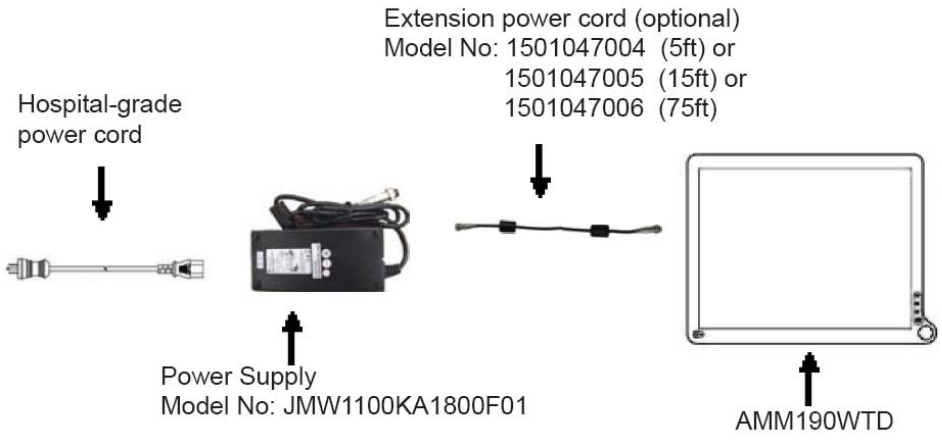
2.7 Test Configuration for VGA Mode:

Mode	VGA Mode
1	

2.8 Test Configuration for Component In, Out Mode:

Mode	Component In, Out Mode
2	

2.9 Test configuration of Extension cable:

Test configuration


3. TEST CONDITION AND RESULTS

3.1 Mains Terminal Disturbance Voltage Test

TEST: Limits of mains terminal disturbance voltage				
Method	Measurements were made on a ground plane that extends 1-meter minimum beyond all sides of the system under test. All power was connected to the system through Artificial Mains Network (AMN). Conducted voltage measurements on mains lines were made at the output of the AMN.			
Parameters recorded during the test		Laboratory Ambient Temperature	18.6 °C	
		Relative Humidity	39.1 %	
-		Frequency range on each side of line	Measurement Point	
Fully configured sample scanned over the following frequency range		150 kHz to 30 MHz	A. C. Input Power port of Adapter.	
Limits - Class B				
Frequency (MHz)	Limit (dBμV)			
	Quasi-Peak	Result	Average	Result
0.15 to 0.50	66 to 56	**Pass**	56 to 46	**Pass**
0.50 to 5	56	**Pass**	46	**Pass**
5 to 30	60	**Pass**	50	**Pass**
EUT Configuration Settings:				
Power Interface Mode # (See Section 2.3)		EUT Operation Mode # (See 2.4)	EUT Configurations Mode # (See Section 2.7)	
1		2 and 4	1 and 2	

Conducted Emissions Test Equipment used:				
Description	Manufacturer	Model	Identifier	Cal. Due
Test Receiver	Rohde & Schwarz	ESPI	101088	2011.04.24
LISN	Rohde & Schwarz	ESH2-Z5	100146	2011.04.24
LISN	Schwarzbeck	NNLK8129	8129162	2011.04.24

Figure 1. Conducted Emission Test Setup

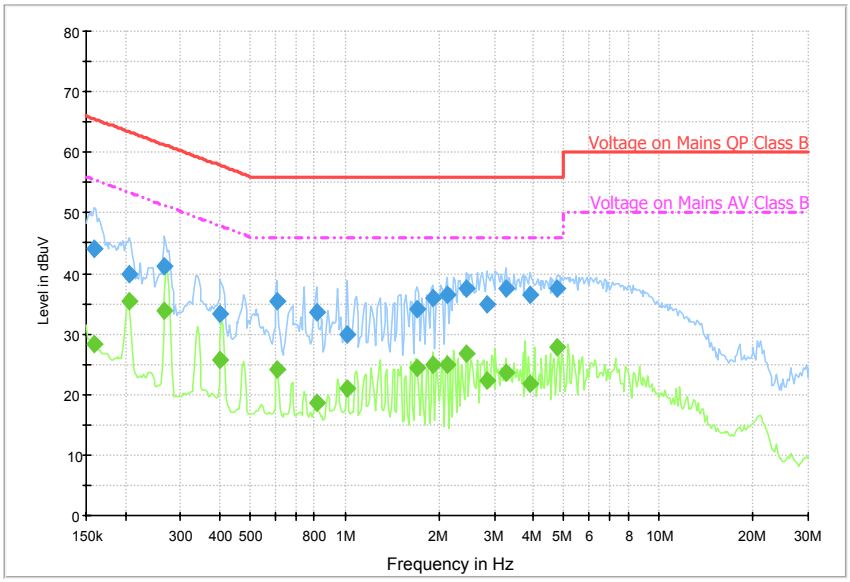
VGA mode

Figure 2. Conducted Emission Test Setup

Component In, Out Mode

Figure 3. Graphical representation of conducted emissions, VGA Mode

VGA Mode, Hot Line



VGA Mode, Neutral Line

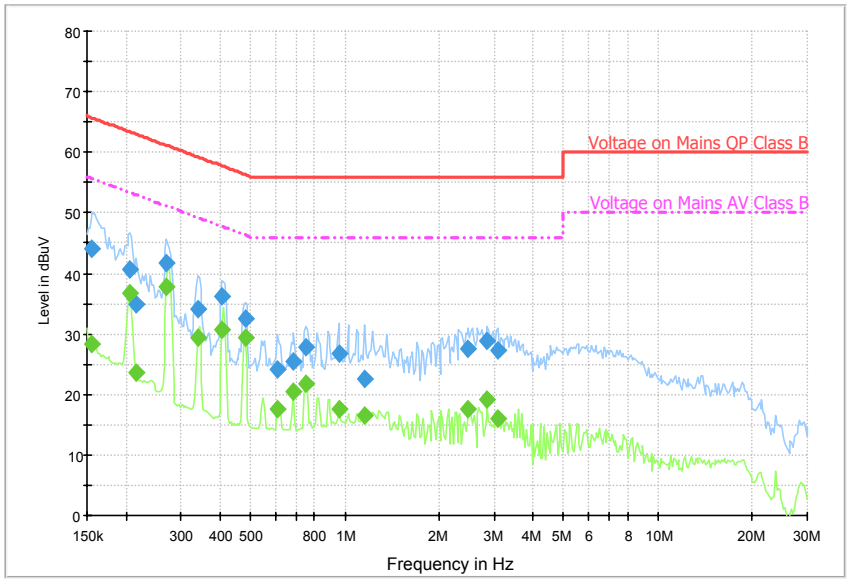
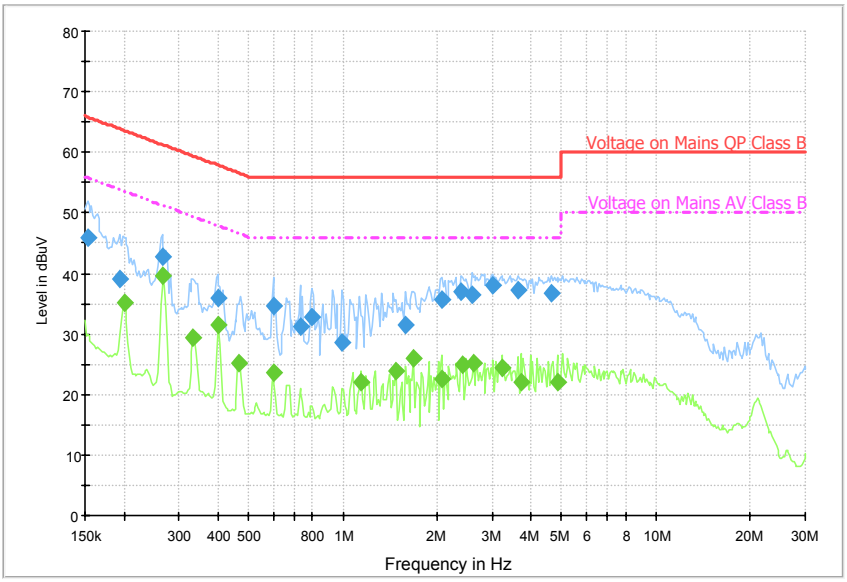


Figure 4. Graphical representation of conducted emissions, COMPONENT In, Out Mode

Component In, Out Mode, Hot Line



Component In, Out Mode, Neutral Line

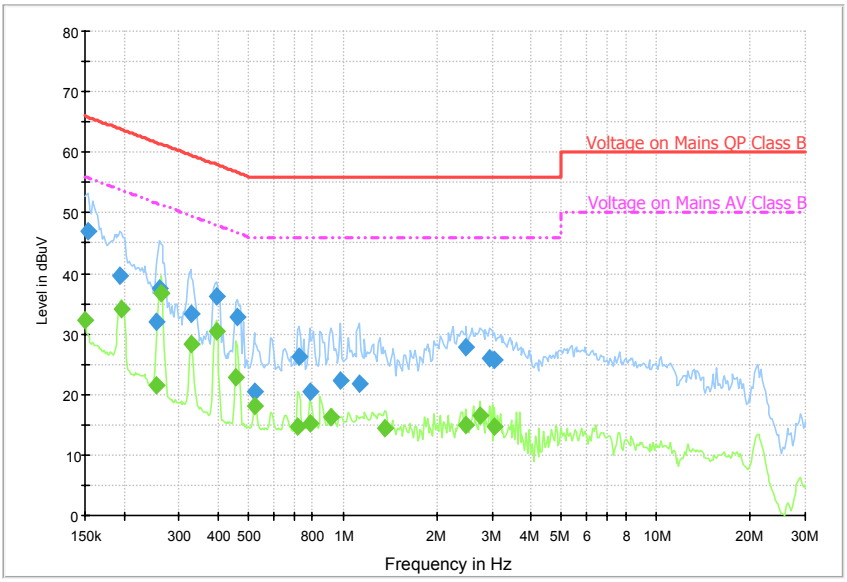


Table 1. Test data for conducted emission, VGA Mode

Test Frequency (MHz)	Correction Factor		Reading value (dBuV)		Line	Level (dBuV)		Limit (dBuV)		Margin (dB)	
	Cable	LISN	QP	AV		QP	AV	QP	AV	QP	AV
0.159	9.75	0.12	34.2	18.3	H	44.1	28.2	66.0	56.0	21.9	27.8
0.206	9.75	0.12	30.8	26.7	N	40.7	36.6	63.0	53.0	22.3	16.4
0.267	9.76	0.13	31.3	23.9	H	41.2	33.8	61.0	51.0	19.8	17.2
0.270	9.76	0.13	31.7	27.7	N	41.6	37.6	61.0	51.0	19.4	13.4
0.406	9.77	0.14	26.3	20.7	N	36.2	30.6	58.0	48.0	21.8	17.4
0.610	9.78	0.13	25.4	14.3	H	35.3	24.2	56.0	46.0	20.7	21.8
0.814	9.80	0.14	23.5	8.8	H	33.4	18.7	56.0	46.0	22.6	27.3
1.700	9.86	0.18	24.1	14.3	H	34.1	24.3	56.0	46.0	21.9	21.7
1.916	9.87	0.19	25.8	14.8	H	35.9	24.9	56.0	46.0	20.1	21.1
2.116	9.89	0.19	26.5	14.8	H	36.6	24.9	56.0	46.0	19.4	21.1
2.433	9.91	0.20	27.5	16.7	H	37.6	26.8	56.0	46.0	18.4	19.2
3.279	9.96	0.23	27.3	13.3	H	37.5	23.5	56.0	46.0	18.5	22.5
3.883	9.99	0.25	26.2	11.7	H	36.4	21.9	56.0	46.0	19.6	24.1
4.738	10.04	0.28	27.1	17.4	H	37.4	27.7	56.0	46.0	18.6	18.3

Note:
1. Margin (dB)= Limit (dBuV) - Level (dBuV)
2. If no frequencies are specified in the tables, no measurement for quasi-peak or average was necessary.

Table 2. Test data for conducted emission, Component In, Out Mode

Test Frequency (MHz)	Correction Factor		Reading value (dBuV)		Line	Level (dBuV)		Limit (dBuV)		Margin (dB)	
	Cable	LISN	QP	AV		QP	AV	QP	AV	QP	AV
0.153	9.75	0.12	36.9	22.3	N	46.8	32.2	66.0	56.0	19.2	23.8
0.254	9.76	0.13	22.0	11.6	N	31.9	21.5	62.0	52.0	30.1	30.5
0.264	9.76	0.13	32.8	29.7	H	42.7	39.6	61.0	51.0	18.3	11.4
0.394	9.77	0.14	26.2	20.5	N	36.1	30.4	58.0	48.0	21.9	17.6
0.520	9.78	0.15	10.5	8.3	N	20.4	18.2	56.0	46.0	35.6	27.8
0.598	9.78	0.13	24.8	13.8	H	34.7	23.7	56.0	46.0	21.3	22.3
0.723	9.79	0.16	16.3	4.8	N	26.3	14.8	56.0	46.0	29.7	31.2
0.782	9.79	0.16	10.5	5.2	N	20.5	15.2	56.0	46.0	35.5	30.8
2.075	9.88	0.19	25.7	12.3	H	35.8	22.4	56.0	46.0	20.2	23.6
2.482	9.91	0.22	17.6	5.0	N	27.7	15.1	56.0	46.0	28.3	30.9
3.058	9.94	0.24	15.5	4.4	N	25.7	14.6	56.0	46.0	30.3	31.4
3.622	9.98	0.24	26.9	11.9	H	37.1	22.1	56.0	46.0	18.9	23.9

Note:
1. Margin (dB)= Limit (dBuV) - Level (dBuV)
2. If no frequencies are specified in the tables, no measurement for quasi-peak or average was necessary.

3.2 Radiated disturbance

TEST: Limits for radiated disturbance				
Method	A pretest was performed at 3m distances in an anechoic screened enclosure, scanning the frequency range, and locating any frequencies at the which EUT radiated. Frequency scans were conducted with a peak detector with horizontal and vertical polarization of the antenna. Measurements were done in the frequency range 30-1000 MHz. The main test was then conducted by measurements at each frequency found in the pretest. These measurements were done at an open area test site at 10m distances, with a quasi-peak detector. EUT was positioned on a wooden table 0.8m above the floor, at the edge of the turntable. Cables connected to EUT were fixed to cause maximum emission. A maximum emitting point for each frequency was found by turning EUT 0-360 degrees, and adjust the antenna height between 1-4m.			
Parameters recorded during the test		Laboratory Ambient Temperature	18.9 °C	
		Relative Humidity	38.5 %	
-		Frequency range	Measurement Point	
Fully configured sample scanned over the following frequency range		30 MHz – 2.0 GHz	10 meter measurement distance	
Limits – Class B				
Frequency (MHz)		Limit (dBµV/m)		
		Quasi-Peak	Results	
30 to 230		30	Pass	
230 to 1000		37	Pass	
1000 to 2000		54 (Average), 74 (Peak) at 3 m	Pass	
EUT Configuration Settings:				
Power Interface Mode # (See Section 2.3)		EUT Operation Mode # (See 2.4)	EUT Configurations Mode # (See Section 2.7)	
1		2 and 6	1 and 2	
Radiated Emissions Test Equipment:				
Description	Manufacturer	Model	Identifier	Cal. Due
Test Receiver	Rohde & Schwarz	ESIB26	100359	2011.04.24
BiconiLog ANT	Schaffner	CBL6112D	22022	2010.10.08
Horn Antenna	Schwarzbeck	BBHA9120D	9120D-539	2011.04.24

Figure 5. Photo of Radiated emission test setup, 30 MHz to 1000 MHz

VGA Mode

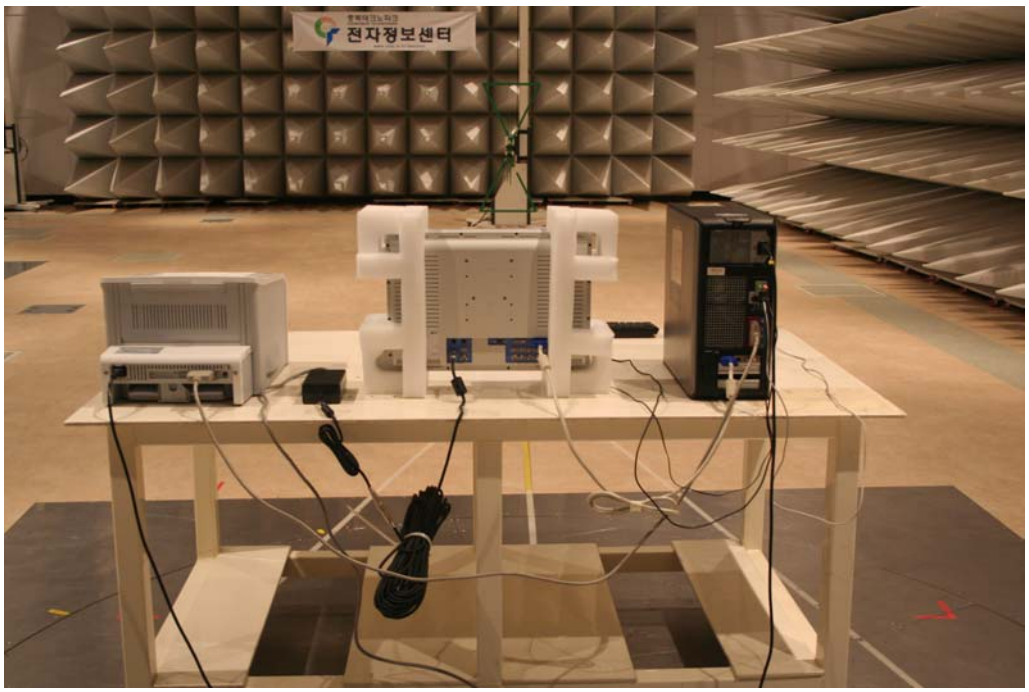


Figure 6. Graphical representation, 30 MHz to 1000 MHz

VGA Mode

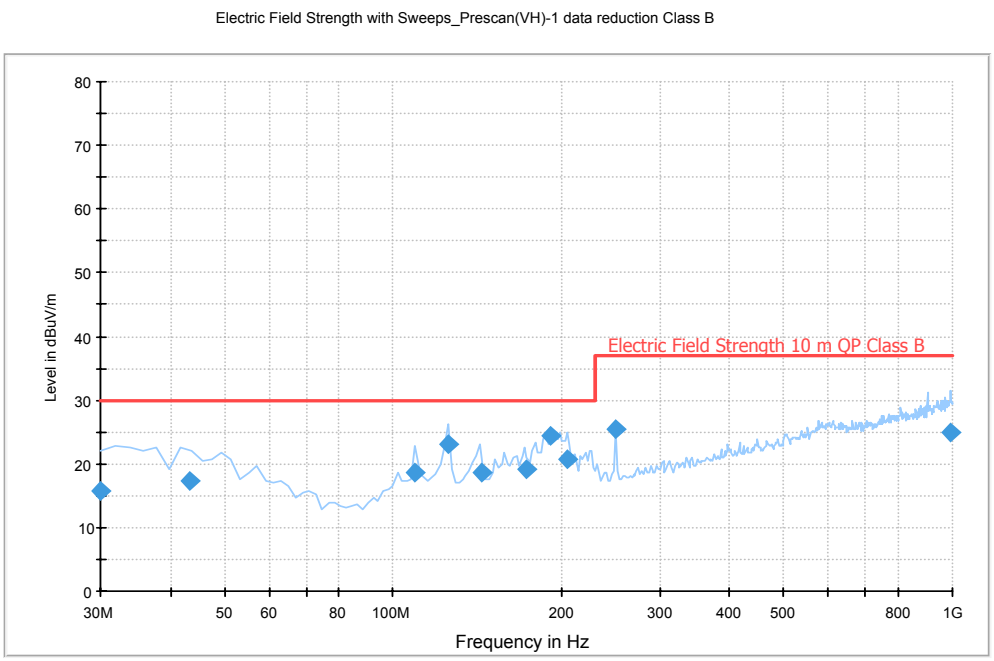


Table 3. Radiated emission Test data, VGA Mode, 30 MHz to 1000 MHz

Test Frequency (MHz)	Meter Reading (dBuV)	Detector (Pk/QP)	Polarity (V/H)	Azimuth (Degrees)	Antenna Height (m)	Cable Loss Factor (dB)	Antenna Factor (dB/m)	Level dBuV/m	Limit dBuV/m	Margin (dB)
43.43	5.66	QP	V	282	2.05	1.04	10.70	17.40	30.00	12.60
109.53	5.89	QP	V	353	1.00	1.62	11.20	18.70	30.00	11.30
125.17	9.22	QP	V	-1	1.00	1.77	12.01	23.00	30.00	7.00
144.03	5.96	QP	V	266	2.05	1.87	10.77	18.60	30.00	11.40
172.90	7.01	QP	V	26	1.05	2.09	10.00	19.10	30.00	10.90
191.99	11.79	QP	V	-1	1.00	2.19	10.32	24.30	30.00	5.70
204.89	7.69	QP	H	0	3.05	2.26	10.75	20.70	30.00	9.30
250.24	9.78	QP	V	315	1.05	2.55	13.17	25.50	37.00	11.50
996.00	-0.65	QP	H	0	2.95	5.46	19.99	24.80	37.00	12.20

Note:
1. Margin (dB)= Limit (dBuV) - Level (dBuV)
2. If no frequencies are specified in the tables, no measurement for quasi-peak or average was necessary.

Figure 7. Photo of Radiated emission test setup, 1.0 GHz to 2.0 GHz

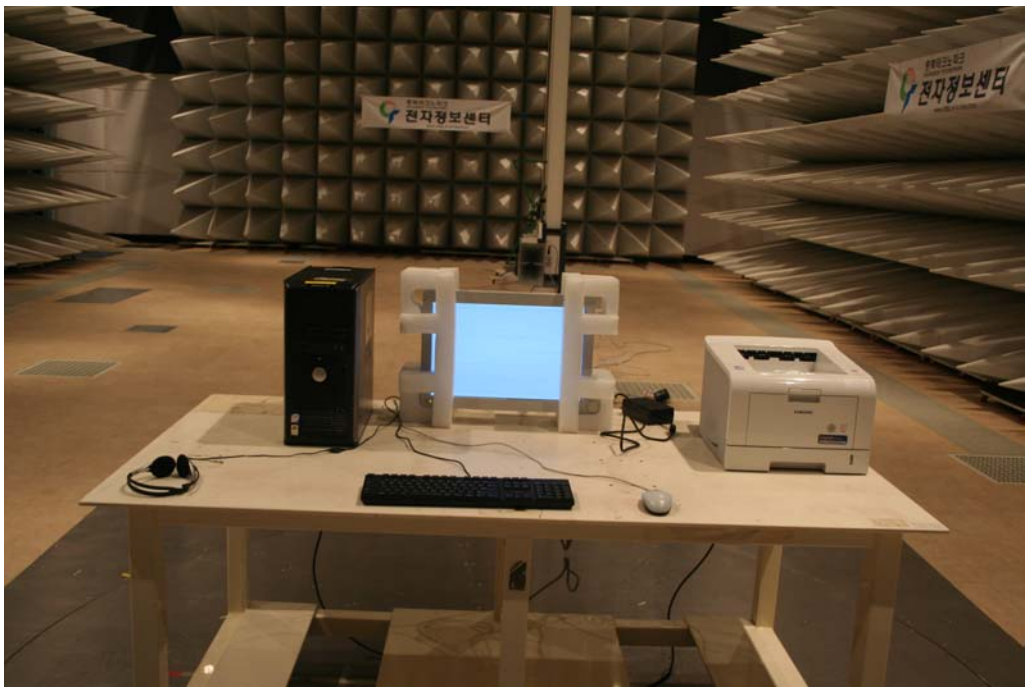
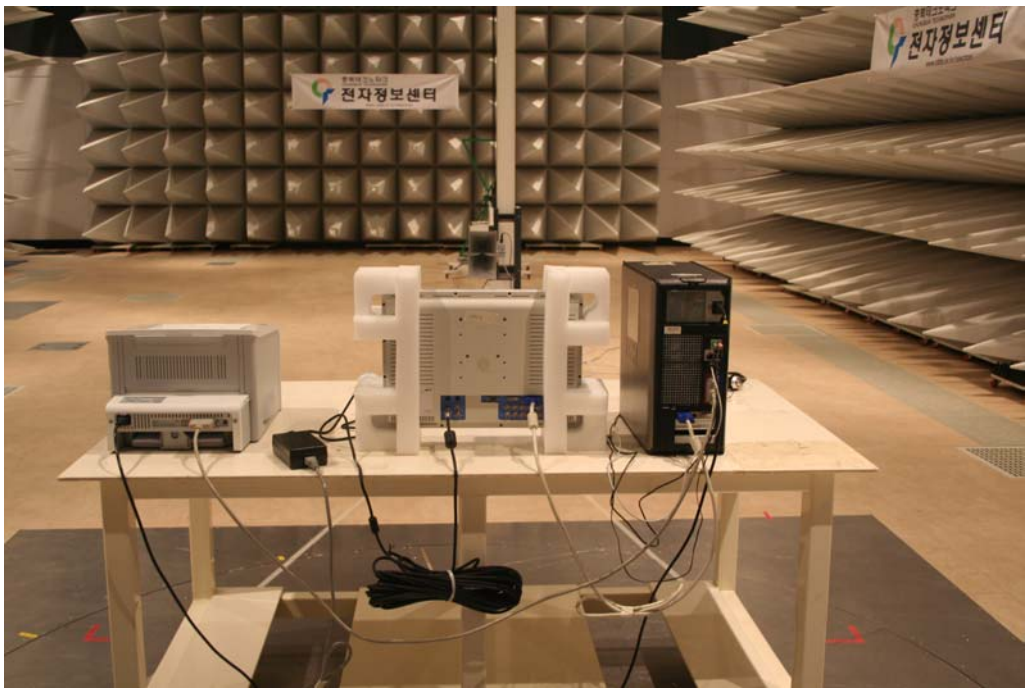
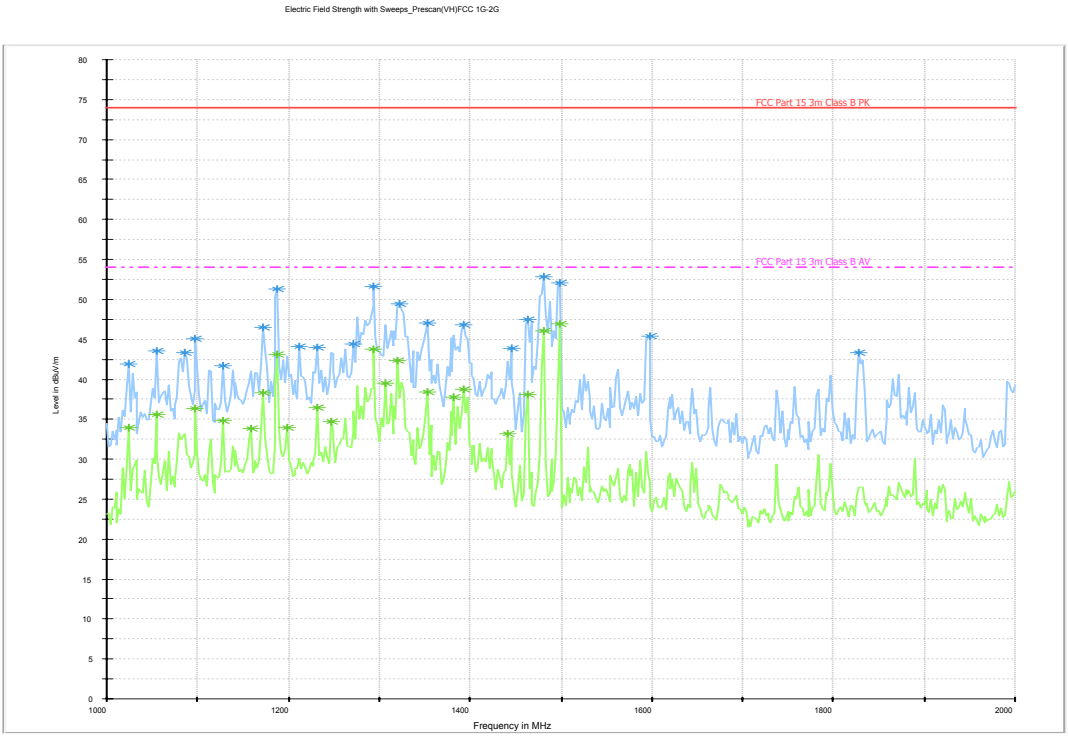
VGA Mode



Figure 8. Graphical representation, 1.0 GHz to 2.0 GHz

VGA Mode



Note: Blue: Vertical, Green: Horizontal

Table 4-1. Radiated emission Test data, VGA Mode, 1.0 GHz to 2.0 GHz

Frequency (MHz)	Correction Factor			Antenna Height (m)	Peak				
	Antenna (dB/m)	Amp (dB)	Cable (dB)		Polarity	Limit (dBuV/m)	Reading (dBuV)	Result (dBuV)	Margin (dB)
1188.38	24.33	41.00	5.27	1.00	H	74.00	39.90	51.30	22.70
1294.59	24.99	41.00	4.91	1.00	V	74.00	40.60	51.70	22.30
1322.65	25.05	41.00	4.95	1.00	H	74.00	38.40	49.40	24.60
1462.93	24.99	41.31	5.63	2.00	V	74.00	36.80	47.50	26.50
1480.96	24.95	41.40	5.76	2.00	H	74.00	42.20	52.90	21.10
1499.00	24.90	41.49	5.99	2.00	H	74.00	41.50	52.10	21.90

Table 4-2. Radiated emission Test data, VGA Mode, 1.0 GHz to 2.0 GHz

Frequency (MHz)	Correction Factor			Antenna Height (m)	Average				
	Antenna (dB/m)	Amp (dB)	Cable (dB)		Polarity	Limit (dBuV/m)	Reading (dBuV)	Result (dBuV)	Margin (dB)
1188.38	24.33	41.00	5.27	1.00	H	54.00	31.70	43.10	10.90
1294.59	24.99	41.00	4.91	1.00	V	54.00	32.60	43.70	10.30
1322.65	25.05	41.00	4.95	1.00	H	54.00	26.50	37.50	16.50
1462.93	24.99	41.31	5.63	2.00	V	54.00	27.40	38.10	15.90
1480.96	24.95	41.40	5.76	2.00	H	54.00	35.30	46.00	8.00
1499.00	24.90	41.49	5.99	2.00	H	54.00	36.30	46.90	7.10

Figure 9. Photo of Radiated emission test setup for 30 MHz to 1000 MHz

Component In, Out Mode

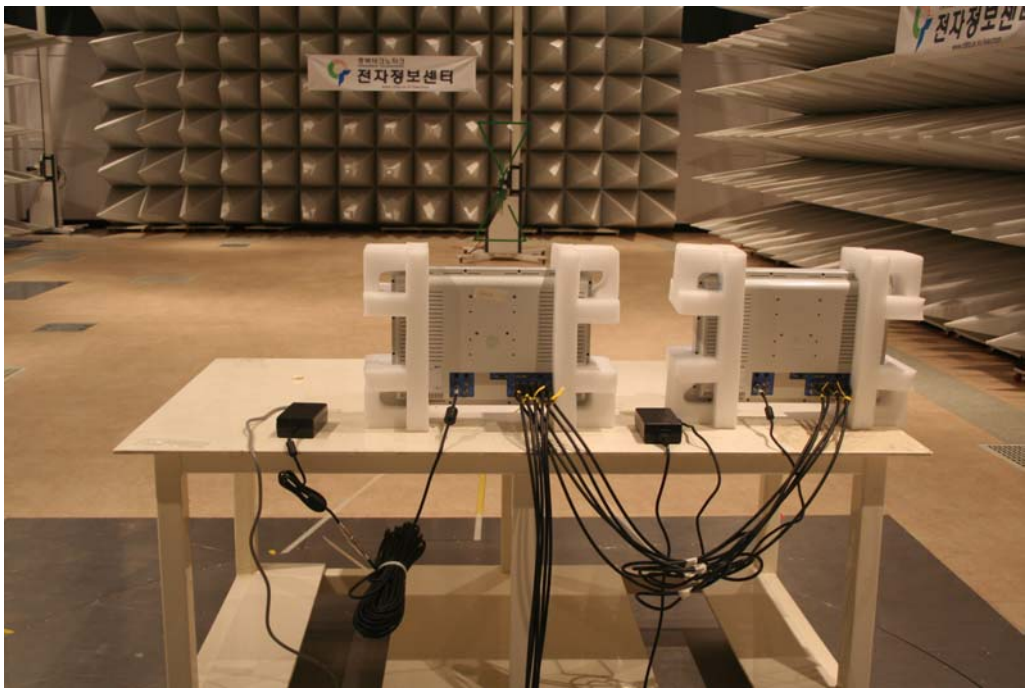


Figure 10. Graphical representation_ 30 MHz to 1000 MHz

Component In, Out Mode

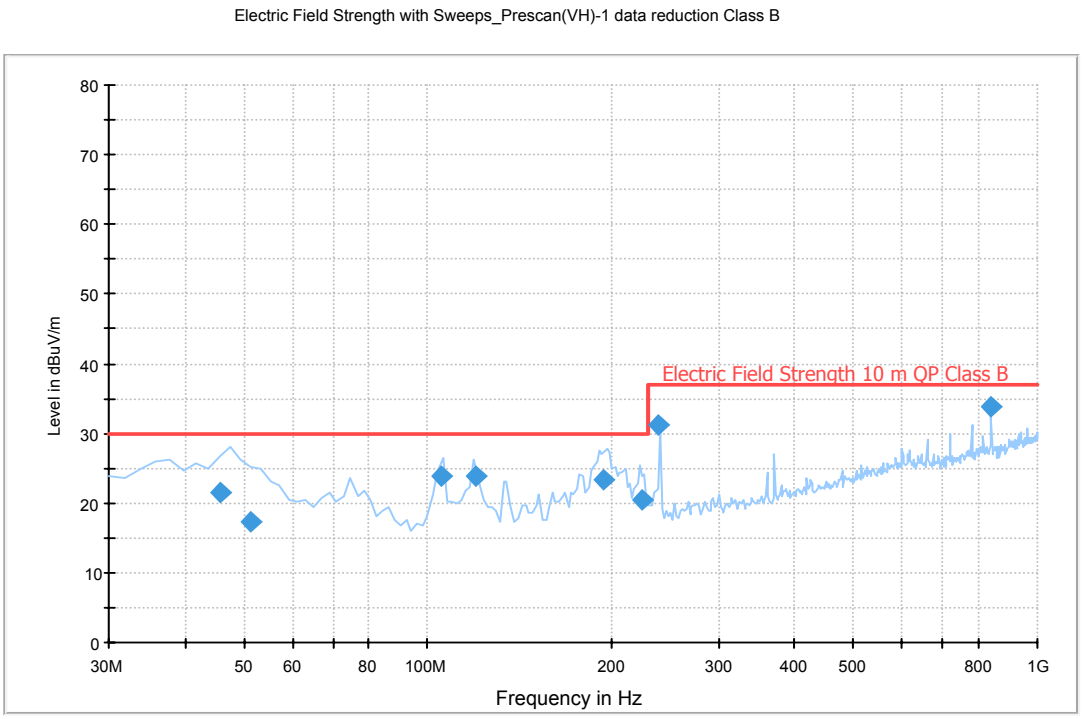


Table 5. Radiated emission Test data, Component In, Out Mode, 30 MHz to 1000 MHz

Test Frequency (MHz)	Meter Reading (dBuV)	Detector (Pk/QP)	Polarity (V/H)	Azimuth (Degrees)	Antenna Height (m)	Cable Loss Factor (dB)	Antenna Factor (dB/m)	Level dBuV/m	Limit dBuV/m	Margin (dB)
45.54	10.92	QP	V	280	1.05	1.07	9.61	21.60	30.00	8.40
51.27	8.92	QP	V	243	2.05	1.10	7.27	17.30	30.00	12.70
105.51	11.44	QP	V	5	1.05	1.58	10.98	24.00	30.00	6.00
119.87	10.33	QP	V	0	1.05	1.72	11.75	23.80	30.00	6.20
194.72	10.72	QP	V	36	1.00	2.20	10.38	23.30	30.00	6.70
223.86	6.35	QP	H	36	3.05	2.38	11.77	20.50	30.00	9.50
239.63	16.10	QP	V	0	1.05	2.48	12.61	31.20	37.00	5.80
838.75	10.09	QP	V	0	3.05	5.04	18.77	33.90	37.00	3.10

Note:
1. Margin (dB)= Limit (dBuV) - Level (dBuV)
2. If no frequencies are specified in the tables, no measurement for quasi-peak or average was necessary.

Figure 11. Photo of Radiated emission test setup, COMPONENT in, out Mode, 1.0 GHz to 2.0 GHz

Component In, Out Mode

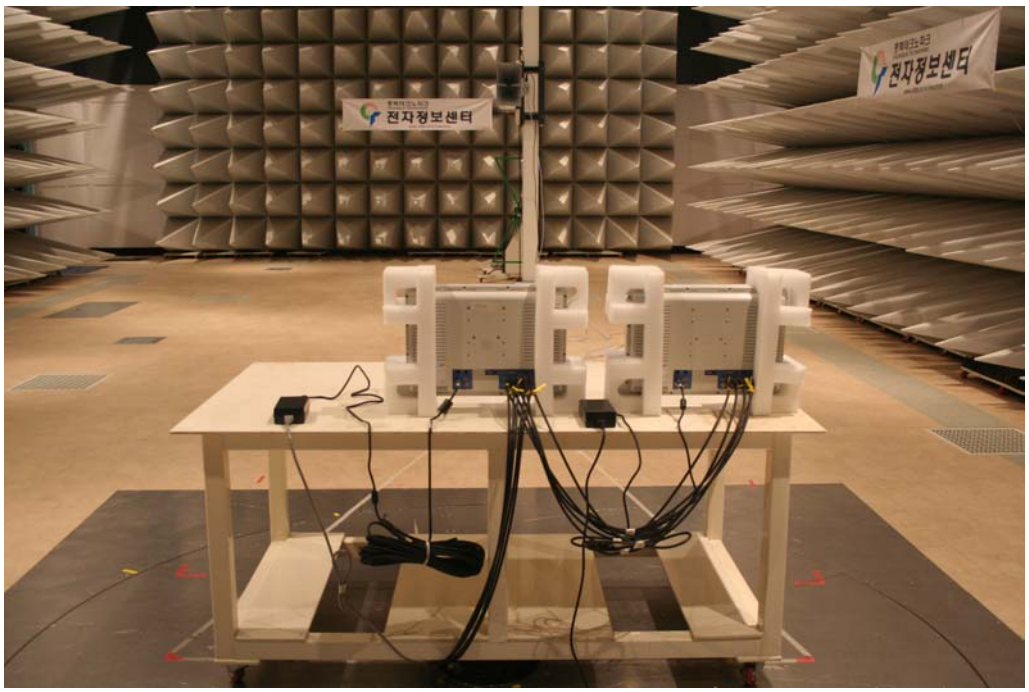


Figure 12. Graphical representation, 1.0 GHz to 2.0 GHz

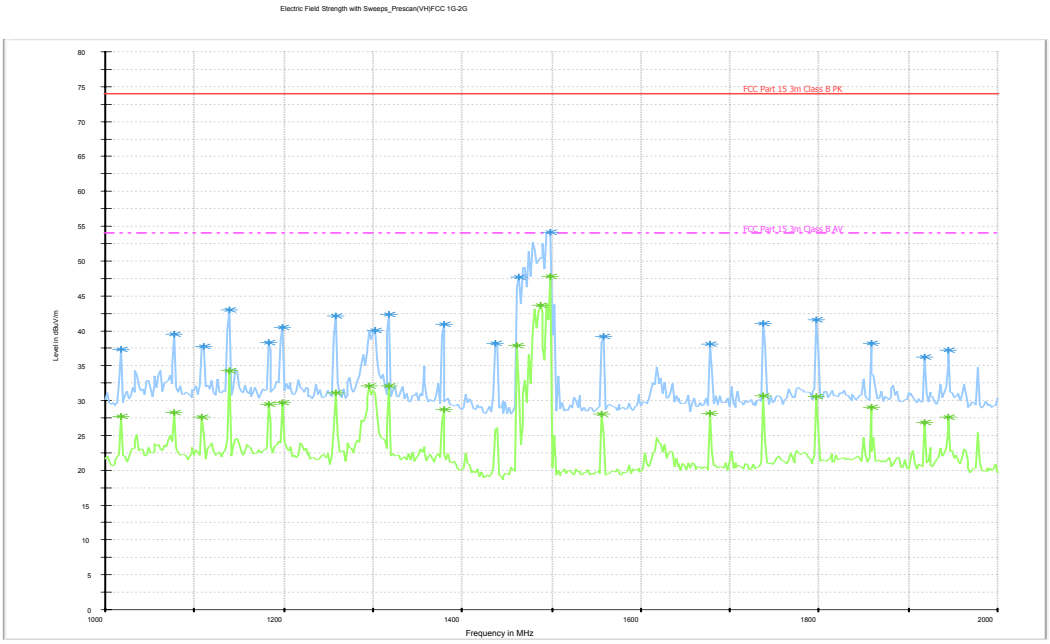
Component In, Out Mode

Note: Blue: Vertical, Green: Horizontal

Table 6-1. Radiated emission Test data, Component in, out Mode, 1.0 GHz to 2.0 GHz

Frequency (MHz)	Correction Factor			Antenna Height (m)	Peak				
	Antenna (dB/m)	Amp (dB)	Cable (dB)		Polarity	Limit (dBuV/m)	Reading (dBuV)	Result (dBuV)	Margin (dB)
1018.04	24.23	41.57	5.44	1.00	V	74.00	25.40	37.30	36.70
1138.28	24.23	41.00	5.37	1.00	V	74.00	31.60	43.00	31.00
1258.52	24.75	41.00	5.05	1.00	V	74.00	30.90	42.10	31.90
1318.64	25.05	41.00	4.95	1.00	V	74.00	31.30	42.30	31.70
1462.93	24.99	41.31	5.63	2.00	H	74.00	37.00	47.70	26.30
1499.00	24.90	41.49	5.99	2.00	H	74.00	43.60	54.20	19.80

Table 6-2. Radiated emission Test data, Component in, out Mode, 1.0 GHz to 2.0 GHz

Frequency (MHz)	Correction Factor			Antenna Height (m)	Average				
	Antenna (dB/m)	Amp (dB)	Cable (dB)		Polarity	Limit (dBuV/m)	Reading (dBuV)	Result (dBuV)	Margin (dB)
1018.04	24.23	41.57	5.44	1.00	V	54.00	15.80	27.70	26.30
1138.28	24.23	41.00	5.37	1.00	V	54.00	22.80	34.20	19.80
1258.52	24.75	41.00	5.05	1.00	V	54.00	19.90	31.10	22.90
1318.64	25.05	41.00	4.95	1.00	V	54.00	21.10	32.10	21.90
1462.93	24.99	41.31	5.63	2.00	H	54.00	21.30	32.00	22.00
1499.00	24.90	41.49	5.99	2.00	H	54.00	37.20	47.80	6.20