

EMC TEST REPORT For

SHENZHEN BEACON DISPLAY TECHNOLOGY CO., LTD.

LCD Monitor

Model No.: MDA2120-A, MDA2120-S

FCC ID: Z5QLCDMDA2120AS

Prepared for : SHENZHEN BEACON DISPLAY TECHNOLOGY CO., LTD.
Address : Room 201, Incubator Bld, CASTD, High-tech South 1st
Street, Nanshan District, Shenzhen 518057, China

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Report Number : ES121211050E
Date of Test : December 11, 2012 to December 24, 2012
Date of Report : December 31, 2012

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TEST REPORT DESCRIPTION

Applicant : SHENZHEN BEACON DISPLAY TECHNOLOGY CO., LTD.
Manufacturer : SHENZHEN BEACON DISPLAY TECHNOLOGY CO., LTD.
Trade Mark : N/A
EUT : LCD Monitor
Model No. : MDA2120-A, MDA2120-S
Power Supply : DC 12V from adapter

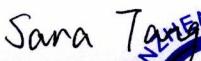
Measurement Procedure Used:

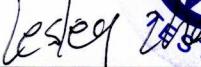
FCC Rules and Regulations Part 15: 2011 Subpart B Class B & FCC / ANSI C63.4-2009

The device described above is tested by SHENZHEN EMTEK CO., LTD. to determine the maximum emission levels emanating from the device and the severe levels of the device can endure and its performance criterion. The measurement results are contained in this test report and SHENZHEN EMTEK CO., LTD. is assumed full of responsibility for the accuracy and completeness of these measurements. Also, this report shows that the EUT (Equipment Under Test) is technically compliant with the FCC requirements.

This report applies to above tested sample only and shall not be reproduced in part without written approval of SHENZHEN EMTEK CO., LTD.

Date of Test : December 11, 2012 to December 24, 2012

Prepared by :  
Sara Tang/Editor

Reviewer :  
Lesley Zhang/Supervisor

Approved & Authorized Signer :


Lisa Wang/Manager

Modified History

Rev.	Summary	Date of Rev.	Report No.
V1.0	Original Report	2012-12-31	ES121211050E

1. SUMMARY OF TEST RESULT

Emission		
Description of Test Item	Standard & Limits	Results
Conducted Disturbance at Mains Terminals	FCC Part 15, Subpart B, Class B ANSI C63.4: 2009	Pass
Radiated Disturbance	FCC Part 15, Subpart B, Class B ANSI C63.4: 2009	Pass

2. GENERAL INFORMATION

2.1. Description of Device (EUT)

EUT : LCD Monitor

Model Number : MDA2120-A, MDA2120-S
(Note: All the models are the same, except their appearance, we take MDA2120-A for EMC test.)

Adapter : Model: PA-1081-01
Input: AC 100-240V, 50/60Hz
Output: DC 12V, 6.67A

Test Voltage : AC 120V/60Hz

Operating mode : VGA, DVI

Note : There is a USB interface on this EUT, however, the USB port is used for updated software only without data exchange function.

Applicant : SHENZHEN BEACON DISPLAY TECHNOLOGY CO., LTD.

Address : Room 201, Incubator Bld, CASTD, High-tech South 1st Street, Nanshan District, Shenzhen 518057, China

Manufacturer : SHENZHEN BEACON DISPLAY TECHNOLOGY CO., LTD.

Address : Room 201, Incubator Bld, CASTD, High-tech South 1st Street, Nanshan District, Shenzhen 518057, China

Factory : SHENZHEN BEACON DISPLAY TECHNOLOGY CO., LTD. BAOAN SUBSIDIARY

Address : 5F Building A8, Peking University Fouder Science Park, The North Side Of Songbai Road In Shiyan Street, Baoan District, Shenzhen, China

Date of Received : December 11, 2012

Date of Test : December 11, 2012 to December 24, 2012

2.2. Description of Support Device

PC (For EMI test) : Manufacturer: Lenovo
M/N: ThinkCentre 8701, S/N: 8701A53L3BC108
CE, FCC: DOC

Mouse : Manufacturer: HP
M/N: M-S48a, S/N: LZE14823966AW
CE, FCC: DOC

Keyboard : Manufacturer: HP
M/N: SK-2502C, S/N: C0111141546
CE, FCC: DOC

Printer : Manufacturer: HP
M/N: C89520, S/N: CN25S182N6
CE, FCC: DOC

2.3. Description of Test Facility

Site Description

EMC Lab.

: Accredited by CNAS, 2010.10.29
The certificate is valid until 2013.10.28
The Laboratory has been assessed and proved to be in compliance with
CNAS-CL01:2006 (identical to ISO/IEC 17025:2005)
The Certificate Registration Number is L2291.

Accredited by TUV Rheinland Shenzhen 2010.5.25
The Laboratory has been assessed according to the requirements
ISO/IEC 17025.

Accredited by FCC, October 28, 2010
The Certificate Registration Number is 406365.

Accredited by Industry Canada, March 5, 2010
The Certificate Registration Number is 46405-4480.

Name of Firm

: SHENZHEN EMTEK CO., LTD

Site Location

: Bldg 69, Majialong Industry Zone,
Nanshan District, Shenzhen, Guangdong, China

2.4. Measurement Uncertainty

Conducted Emission Uncertainty : 2.8dB

Radiated Emission Uncertainty : 3.3dB (30M~1GHz Polarize: H)
3.2dB (30M~1GHz Polarize: V)
3.7dB (1~18GHz Polarize: H)
3.6dB (1~18GHz Polarize: V)

3. MEASURING DEVICE AND TEST EQUIPMENT

3.1. For Power Line Conducted Emission Measurement

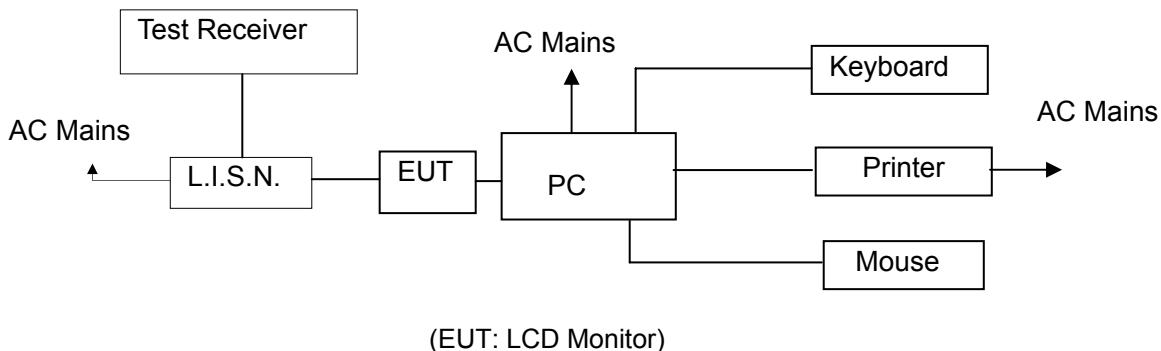
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Test Receiver	Rohde & Schwarz	ESCS30	100162	May 29, 2012	1 Year
2.	L.I.S.N.	Rohde & Schwarz	ENV216	101161	May 29, 2012	1 Year
3.	50Ω Coaxial Switch	Anritsu	MP59B	6100214550	N/A	N/A
4.	Voltage Probe	Rohde & Schwarz	TK9416	N/A	May 29, 2012	1 Year
5.	I.S.N	Teseq GmbH	ISN T800	30327	May 29, 2012	1 Year
6.	LCL adaoter	Teseq GmbH	ADT800-Cat.5	30327.01	May 29, 2012	1 Year
7.	LCL adaoter	Teseq GmbH	ADT800-Cat.3	30327.02	May 29, 2012	1 Year
8.	LCL adaoter	Teseq GmbH	ADT800-R	30327.02	May 29, 2012	1 Year

3.2. For Radiated Emission Measurement

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	EMI Test Receiver	Rohde & Schwarz	ESU	1302.6005.26	May 29, 2012	1 Year
2.	Pre-Amplifier	HP	8447D	2944A07999	May 29, 2012	1 Year
3.	Bilog Antenna	Schwarzbeck	VULB9163	142	May 29, 2012	1 Year
4.	Loop Antenna	ARA	PLA-1030/B	1029	May 29, 2012	1 Year
5.	Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170399	May 29, 2012	1 Year
6.	Horn Antenna	Schwarzbeck	BBHA 9120	D143	May 29, 2012	1 Year
7.	Cable	Schwarzbeck	AK9513	ACRX1	May 29, 2012	1 Year
8.	Cable	Rosenberger	N/A	FP2RX2	May 29, 2012	1 Year
9.	Cable	Schwarzbeck	AK9513	CRPX1	May 29, 2012	1 Year
10.	Cable	Schwarzbeck	AK9513	CRRX2	May 29, 2012	1 Year

4. POWER LINE CONDUCTED EMISSION MEASUREMENT

4.1. Block Diagram of Test Setup



4.2. Measuring Standard

FCC Part 15, Subpart B, Class B ANSI C63.4: 2009

4.3. Power Line Conducted Emission Limits (Class B)

Frequency (MHz)	Limit (dB μ V)	
	Quasi-peak Level	Average Level
0.15 ~ 0.50	66.0 ~ 56.0 *	56.0 ~ 46.0 *
0.50 ~ 5.00	56.0	46.0
5.00 ~ 30.00	60.0	50.0

NOTE1-The lower limit shall apply at the transition frequencies.

NOTE2-The limit decreases linearly with the logarithm of the frequency in the range 0.15MHz to 0.50MHz.

4.4. Configuration of EUT on Measurement

The following equipments are installed on Conducted Emission Measurement to meet FCC requirements and operating in a manner which tends to maximize its emission characteristics in a normal application.

EUT : LCD Monitor
Model Number : MDA2120-A

4.5. Operating Condition of EUT

4.5.1. Setup the EUT as shown on Section 4.1.

4.5.2. Turn on the power of all equipments.

4.5.3. Let the EUT work in measuring mode (VGA(1600*1200/60Hz, 1024*768/60Hz, 640*480/60Hz), DVI(1600*1200/60Hz, 1024*768/60Hz, 640*480/60Hz)) and measure it.

4.6. Test Procedure

The EUT is put on the plane 0.8m high above the ground by insulating support and connected to the AC mains through Line Impedance Stability Network (L.I.S.N). This provided a 50ohm coupling impedance for the tested equipments. Both sides of AC line are investigated to find out the maximum conducted emission according to the FCC regulations during conducted emission measurement.

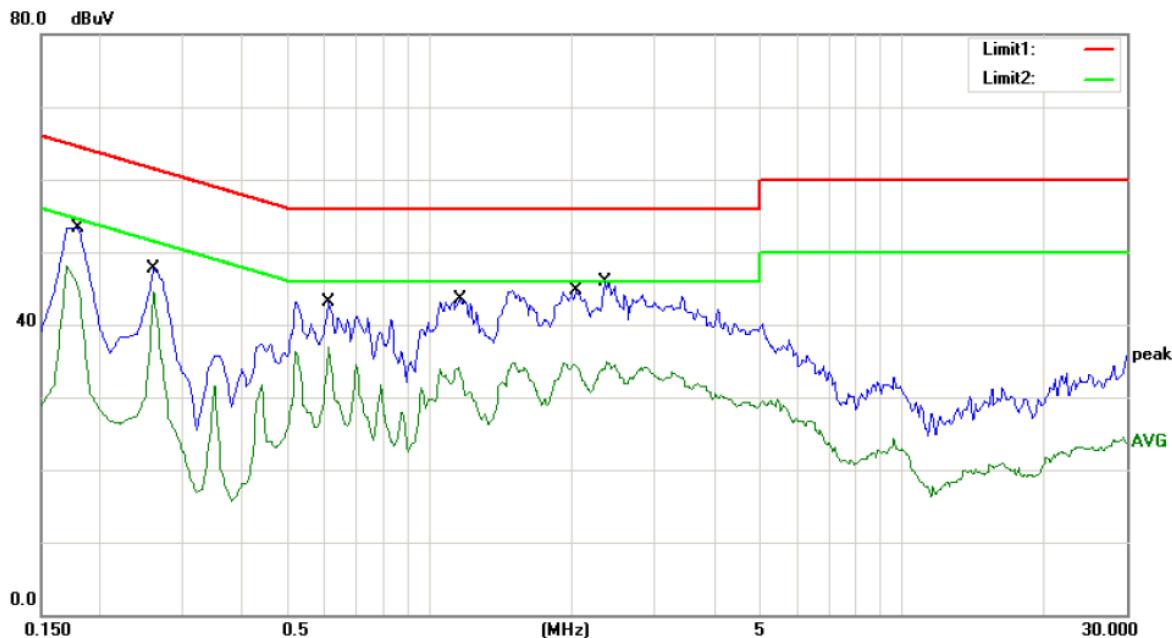
The bandwidth of the field strength meter (R&S Test Receiver ESCS30) is set at 9kHz in 150kHz~30MHz and 200Hz in 9kHz~150kHz.

The frequency range from 150kHz to 30MHz is investigated

4.7. Measuring Results

PASS.

Please refer to below a few pages.



Site Conduction #1

Phase: **L1**

Temperature: 26

Limit: (CE)FCC PART 15 class B_QP

Power: AC 120V/60Hz

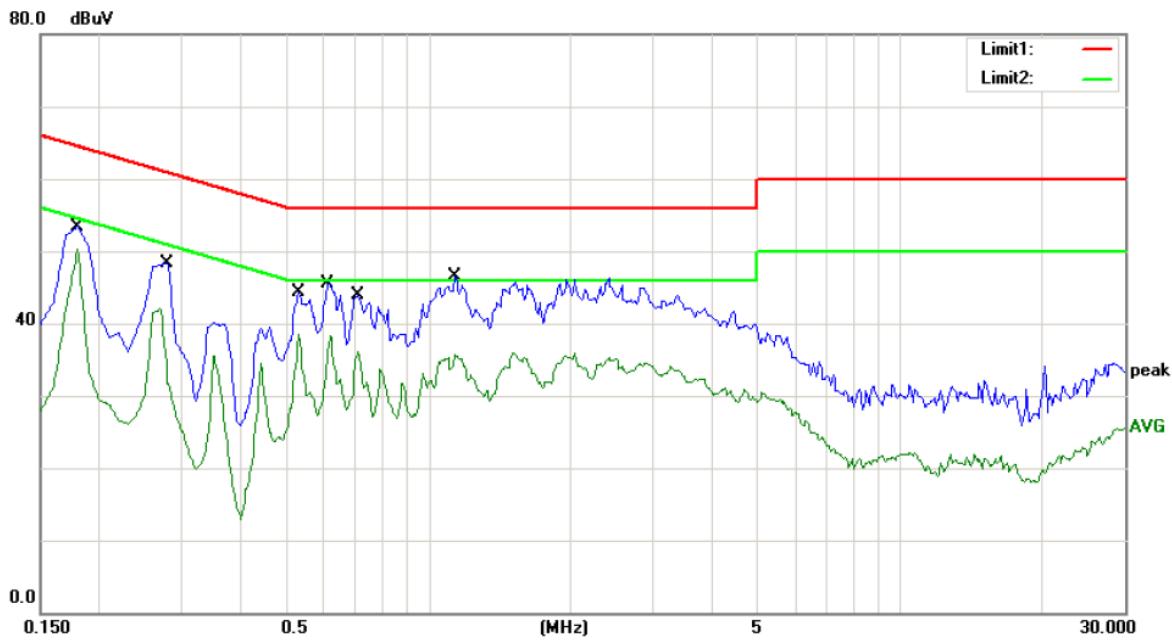
Humidity: 60 %

Mode: VGA(1600*1200/60Hz)

Note:

No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Detector	Comment
			Level	Factor	ment				
		MHz	dBuV	dB	dBuV	dBuV	dB		
1		0.1800	53.32	0.00	53.32	64.49	-11.17	QP	
2		0.1800	45.71	0.00	45.71	54.49	-8.78	AVG	
3		0.2600	47.65	0.00	47.65	61.43	-13.78	QP	
4	*	0.2600	44.46	0.00	44.46	51.43	-6.97	AVG	
5		0.6100	43.08	0.00	43.08	56.00	-12.92	QP	
6		0.6100	36.84	0.00	36.84	46.00	-9.16	AVG	
7		1.1600	43.57	0.00	43.57	56.00	-12.43	QP	
8		1.1600	34.16	0.00	34.16	46.00	-11.84	AVG	
9		2.0400	44.67	0.00	44.67	56.00	-11.33	QP	
10		2.0400	34.78	0.00	34.78	46.00	-11.22	AVG	
11		2.3500	45.80	0.00	45.80	56.00	-10.20	QP	
12		2.3500	34.82	0.00	34.82	46.00	-11.18	AVG	

*:Maximum data x:Over limit !:over margin Comment: Factor build in receiver. Operator: Jason



Site Conduction #1

Phase: **N**

Temperature: 26

Limit: (CE)FCC PART 15 class B_QP

Power: AC 120V/60Hz

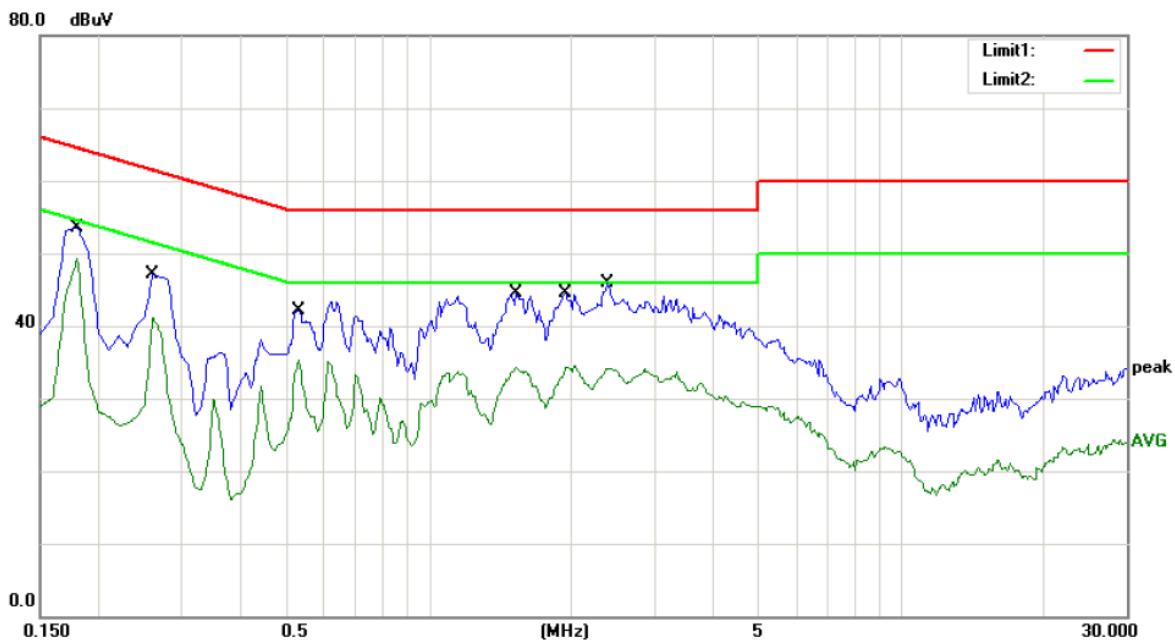
Humidity: 60 %

Mode: VGA(1600*1200/60Hz)

Note:

No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Detector	Comment
			Level	Factor	ment				
		MHz	dBuV	dB	dBuV	dB			
1		0.1800	53.40	0.00	53.40	64.49	-11.09	QP	
2	*	0.1800	50.35	0.00	50.35	54.49	-4.14	AVG	
3		0.2800	48.34	0.00	48.34	60.82	-12.48	QP	
4		0.2800	42.01	0.00	42.01	50.82	-8.81	AVG	
5		0.5300	44.26	0.00	44.26	56.00	-11.74	QP	
6		0.5300	38.45	0.00	38.45	46.00	-7.55	AVG	
7		0.6100	45.55	0.00	45.55	56.00	-10.45	QP	
8		0.6100	38.31	0.00	38.31	46.00	-7.69	AVG	
9		0.7100	43.92	0.00	43.92	56.00	-12.08	QP	
10		0.7100	36.19	0.00	36.19	46.00	-9.81	AVG	
11		1.1400	46.47	0.00	46.47	56.00	-9.53	QP	
12		1.1400	35.62	0.00	35.62	46.00	-10.38	AVG	

*:Maximum data x:Over limit !:over margin Comment: Factor build in receiver. Operator: Jason



Site Conduction #1

Phase: **L1**

Temperature: 26

Limit: (CE)FCC PART 15 class B_QP

Power: AC 120V/60Hz

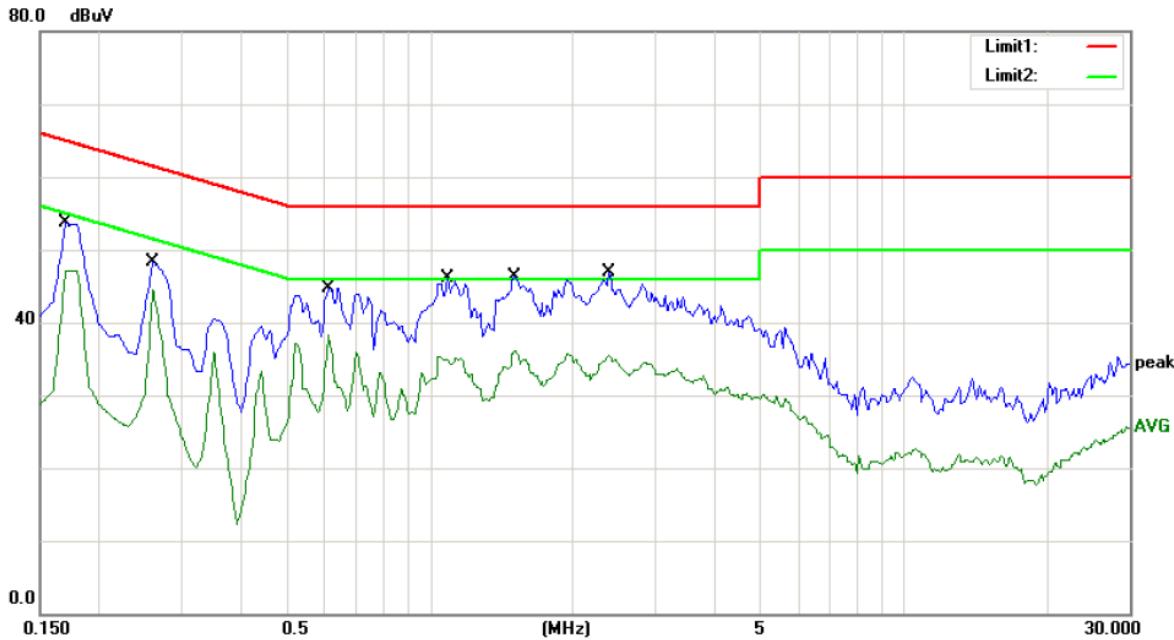
Humidity: 60 %

Mode: VGA(1024*768/60Hz)

Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
							dB	Detector
1		0.1800	53.56	0.00	53.56	64.49	-10.93	QP
2 *		0.1800	49.29	0.00	49.29	54.49	-5.20	AVG
3		0.2600	47.10	0.00	47.10	61.43	-14.33	QP
4		0.2600	41.15	0.00	41.15	51.43	-10.28	AVG
5		0.5300	42.17	0.00	42.17	56.00	-13.83	QP
6		0.5300	35.30	0.00	35.30	46.00	-10.70	AVG
7		1.5300	44.57	0.00	44.57	56.00	-11.43	QP
8		1.5300	34.21	0.00	34.21	46.00	-11.79	AVG
9		1.9400	44.45	0.00	44.45	56.00	-11.55	QP
10		1.9400	34.59	0.00	34.59	46.00	-11.41	AVG
11		2.3900	45.82	0.00	45.82	56.00	-10.18	QP
12		2.3900	34.19	0.00	34.19	46.00	-11.81	AVG

*:Maximum data x:Over limit !:over margin Comment: Factor build in receiver. Operator: Jason



Site Conduction #1

Phase: **N**

Temperature: 26

Limit: (CE)FCC PART 15 class B_QP

Power: AC 120V/60Hz

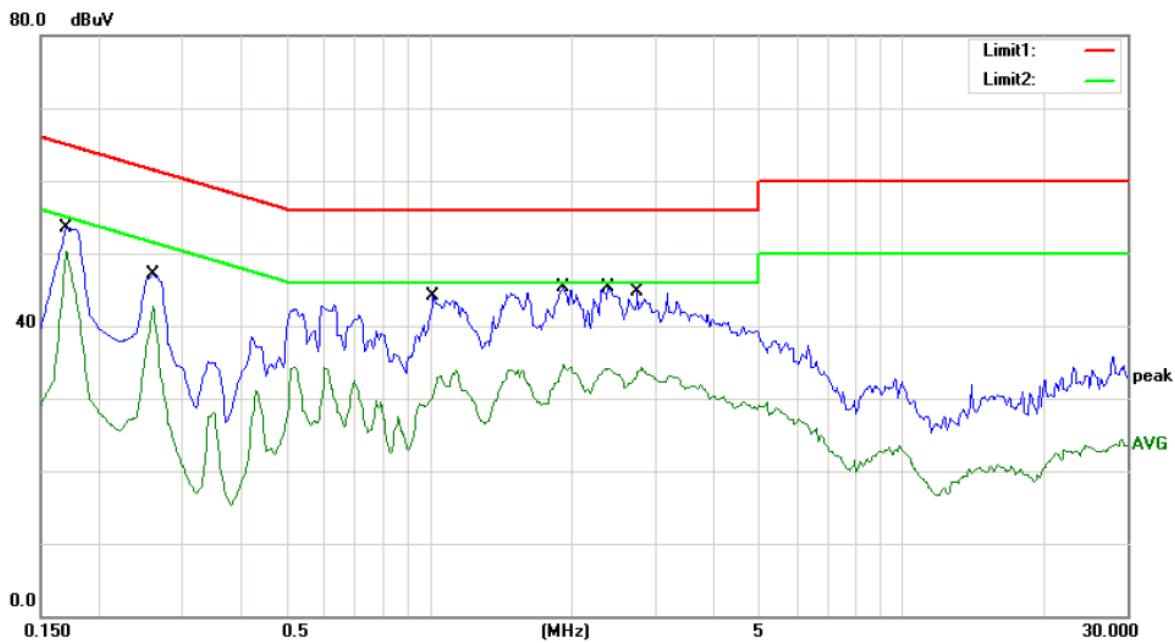
Humidity: 60 %

Mode: VGA(1024*768/60Hz)

Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over						
							MHz	dBuV	dB	dBuV	dB	Detector	Comment
1		0.1700	53.63	0.00	53.63	64.96	-11.33					QP	
2		0.1700	47.18	0.00	47.18	54.96	-7.78					AVG	
3		0.2600	48.37	0.00	48.37	61.43	-13.06					QP	
4	*	0.2600	44.46	0.00	44.46	51.43	-6.97					AVG	
5		0.6100	44.79	0.00	44.79	56.00	-11.21					QP	
6		0.6100	38.25	0.00	38.25	46.00	-7.75					AVG	
7		1.0900	46.02	0.00	46.02	56.00	-9.98					QP	
8		1.0900	34.89	0.00	34.89	46.00	-11.11					AVG	
9		1.5100	46.36	0.00	46.36	56.00	-9.64					QP	
10		1.5100	36.03	0.00	36.03	46.00	-9.97					AVG	
11		2.3900	46.81	0.00	46.81	56.00	-9.19					QP	
12		2.3900	35.49	0.00	35.49	46.00	-10.51					AVG	

*:Maximum data x:Over limit !:over margin Comment: Factor build in receiver. Operator: Jason



Site Conduction #1

Phase: **L1**

Temperature: 26

Limit: (CE)FCC PART 15 class B_QP

Power: AC 120V/60Hz

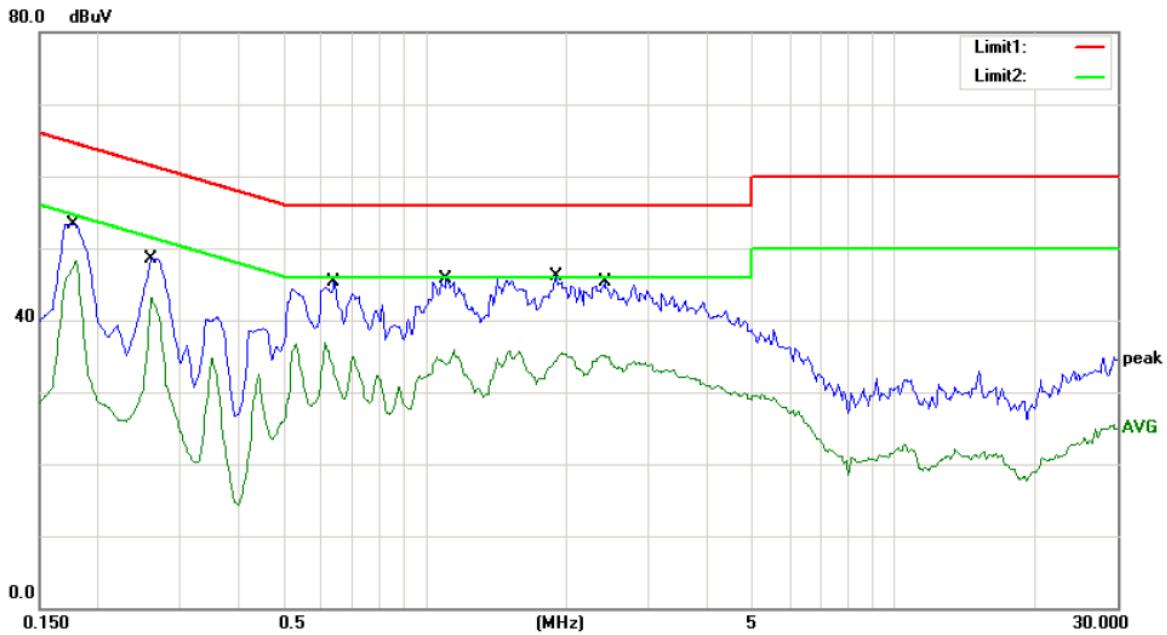
Humidity: 60 %

Mode: VGA(640*480/60Hz)

Note:

No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Detector	Comment
			Level	Factor	ment				
		MHz	dBuV	dB	dBuV	dBuV	dB		
1		0.1700	53.55	0.00	53.55	64.96	-11.41		QP
2 *		0.1700	50.36	0.00	50.36	54.96	-4.60		AVG
3		0.2600	47.06	0.00	47.06	61.43	-14.37		QP
4		0.2600	42.61	0.00	42.61	51.43	-8.82		AVG
5		1.0200	44.04	0.00	44.04	56.00	-11.96		QP
6		1.0200	30.59	0.00	30.59	46.00	-15.41		AVG
7		1.9200	45.21	0.00	45.21	56.00	-10.79		QP
8		1.9200	34.73	0.00	34.73	46.00	-11.27		AVG
9		2.3900	45.24	0.00	45.24	56.00	-10.76		QP
10		2.3900	34.14	0.00	34.14	46.00	-11.86		AVG
11		2.7600	44.64	0.00	44.64	56.00	-11.36		QP
12		2.7600	34.28	0.00	34.28	46.00	-11.72		AVG

*:Maximum data x:Over limit !:over margin Comment: Factor build in receiver. Operator: Jason



Site Conduction #1

Phase: **N**

Temperature: 26

Limit: (CE)FCC PART 15 class B_QP

Power: AC 120V/60Hz

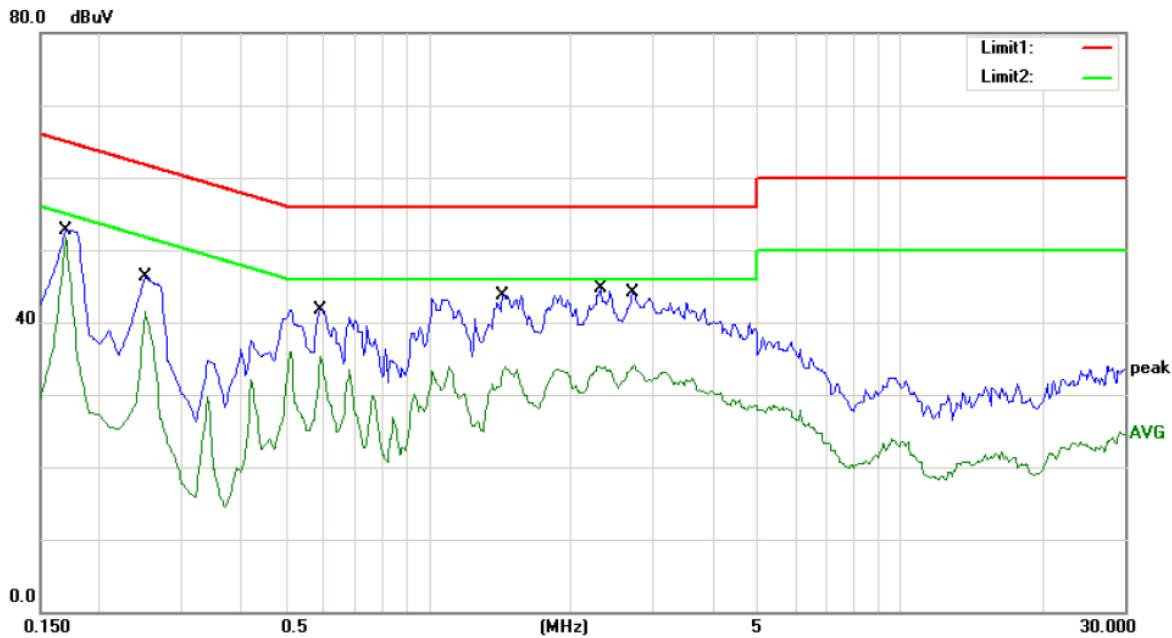
Humidity: 60 %

Mode: VGA(640*480/60Hz)

Note:

No.	Mk.	Freq.	Reading	Correct Factor	Measure- ment	Limit	Over	Detector	Comment
			Level						
		MHz	dBuV	dB	dBuV	dBuV	dB		
1		0.1787	53.25	0.00	53.25	64.55	-11.30	QP	
2	*	0.1787	48.32	0.00	48.32	54.55	-6.23	AVG	
3		0.2600	48.55	0.00	48.55	61.43	-12.88	QP	
4		0.2600	43.11	0.00	43.11	51.43	-8.32	AVG	
5		0.6400	45.30	0.00	45.30	56.00	-10.70	QP	
6		0.6400	36.92	0.00	36.92	46.00	-9.08	AVG	
7		1.1100	45.71	0.00	45.71	56.00	-10.29	QP	
8		1.1100	35.89	0.00	35.89	46.00	-10.11	AVG	
9		1.9000	46.13	0.00	46.13	56.00	-9.87	QP	
10		1.9000	35.57	0.00	35.57	46.00	-10.43	AVG	
11		2.4200	45.24	0.00	45.24	56.00	-10.76	QP	
12		2.4200	35.18	0.00	35.18	46.00	-10.82	AVG	

*:Maximum data x:Over limit !:over margin Comment: Factor build in receiver. Operator: Jason



Site Conduction #1

Phase: **L1**

Temperature: 26

Limit: (CE)FCC PART 15 class B_QP

Power: AC 120V/60Hz

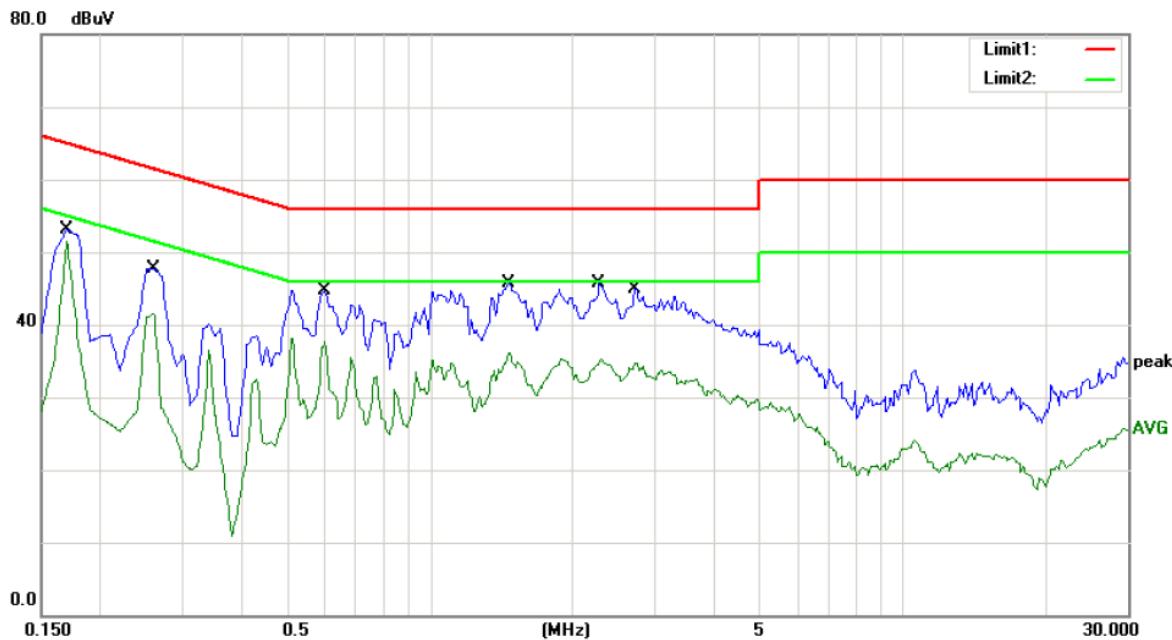
Humidity: 60 %

Mode: DVI(1600*1200/60Hz)

Note:

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dB	Over	
							Detector	Comment
1		0.1700	52.80	0.00	52.80	64.96	-12.16	QP
2 *		0.1700	51.61	0.00	51.61	54.96	-3.35	AVG
3		0.2500	46.37	0.00	46.37	61.76	-15.39	QP
4		0.2500	41.46	0.00	41.46	51.76	-10.30	AVG
5		0.5900	41.75	0.00	41.75	56.00	-14.25	QP
6		0.5900	35.24	0.00	35.24	46.00	-10.76	AVG
7		1.4400	43.79	0.00	43.79	56.00	-12.21	QP
8		1.4400	33.92	0.00	33.92	46.00	-12.08	AVG
9		2.3200	44.62	0.00	44.62	56.00	-11.38	QP
10		2.3200	33.93	0.00	33.93	46.00	-12.07	AVG
11		2.7100	44.18	0.00	44.18	56.00	-11.82	QP
12		2.7100	34.06	0.00	34.06	46.00	-11.94	AVG

*:Maximum data x:Over limit !:over margin Comment: Factor build in receiver. Operator: Jason



Site Conduction #1

Phase: *N*

Temperature: 26

Limit: (CE)FCC PART 15 class B_QP

Power: AC 120V/60Hz

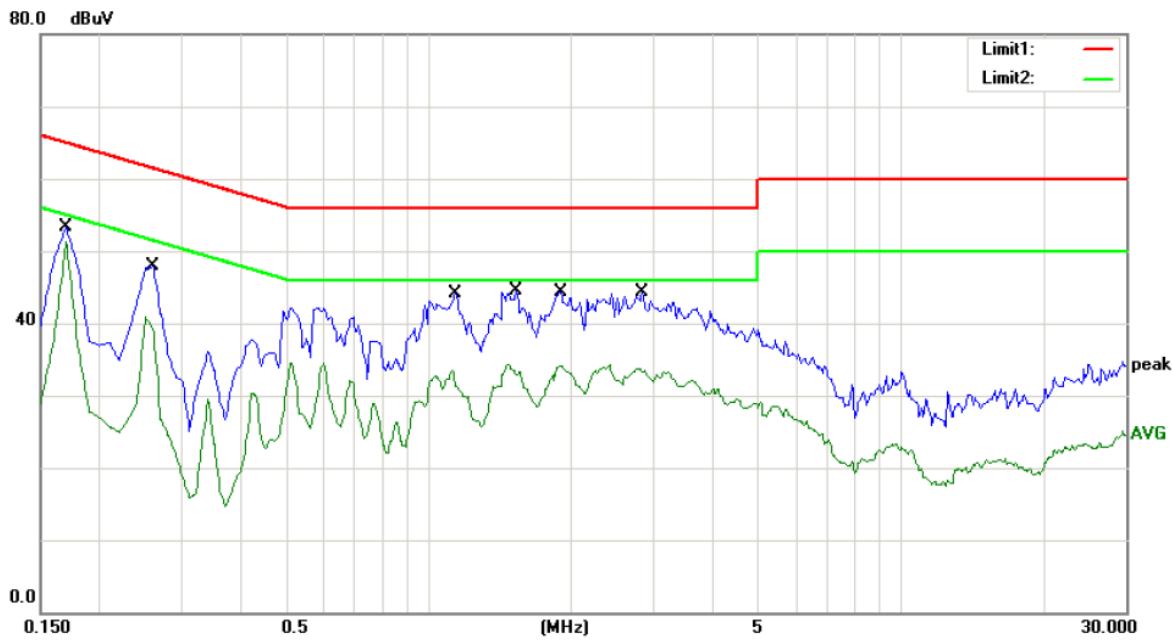
Humidity: 60 %

Mode: DVI(1600*1200/60Hz)

Note:

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over		Comment
							Detector		
1		0.1700	53.04	0.00	53.04	64.96	-11.92	QP	
2 *		0.1700	51.49	0.00	51.49	54.96	-3.47	AVG	
3		0.2600	47.63	0.00	47.63	61.43	-13.80	QP	
4		0.2600	41.55	0.00	41.55	51.43	-9.88	AVG	
5		0.6000	44.63	0.00	44.63	56.00	-11.37	QP	
6		0.6000	37.75	0.00	37.75	46.00	-8.25	AVG	
7		1.4700	45.72	0.00	45.72	56.00	-10.28	QP	
8		1.4700	36.16	0.00	36.16	46.00	-9.84	AVG	
9		2.2800	45.67	0.00	45.67	56.00	-10.33	QP	
10		2.2800	35.26	0.00	35.26	46.00	-10.74	AVG	
11		2.7200	44.92	0.00	44.92	56.00	-11.08	QP	
12		2.7200	34.66	0.00	34.66	46.00	-11.34	AVG	

*:Maximum data x:Over limit !:over margin Comment: Factor build in receiver. Operator: Jason



Site Conduction #1

Phase: **L1**

Temperature: 26

Limit: (CE)FCC PART 15 class B_QP

Power: AC 120V/60Hz

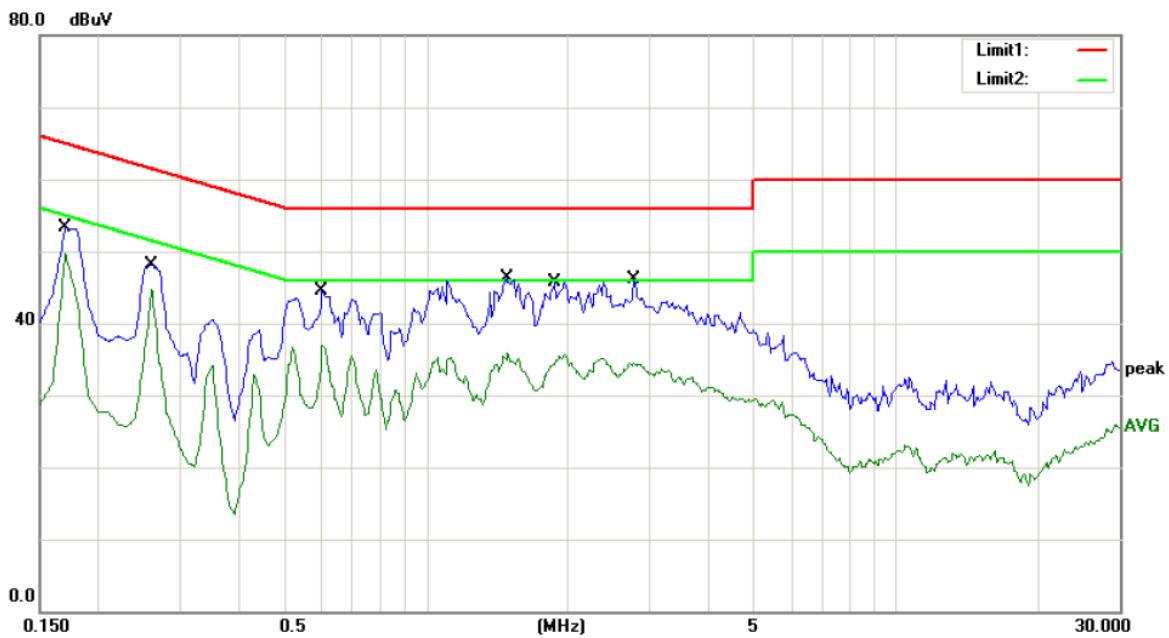
Humidity: 60 %

Mode: DVI(1024*768/60Hz)

Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Comment
							MHz	dBuV	
1		0.1700	53.26	0.00	53.26	64.96	-11.70		QP
2 *		0.1700	51.26	0.00	51.26	54.96	-3.70		AVG
3		0.2600	47.81	0.00	47.81	61.43	-13.62		QP
4		0.2600	40.93	0.00	40.93	51.43	-10.50		AVG
5		1.1400	44.08	0.00	44.08	56.00	-11.92		QP
6		1.1400	33.53	0.00	33.53	46.00	-12.47		AVG
7		1.5300	44.45	0.00	44.45	56.00	-11.55		QP
8		1.5300	33.29	0.00	33.29	46.00	-12.71		AVG
9		1.9000	44.40	0.00	44.40	56.00	-11.60		QP
10		1.9000	34.09	0.00	34.09	46.00	-11.91		AVG
11		2.8300	44.29	0.00	44.29	56.00	-11.71		QP
12		2.8300	33.70	0.00	33.70	46.00	-12.30		AVG

*:Maximum data x:Over limit !:over margin Comment: Factor build in receiver. Operator: Jason



Site Conduction #1

Phase: **N**

Temperature: 26

Limit: (CE)FCC PART 15 class B_QP

Power: AC 120V/60Hz

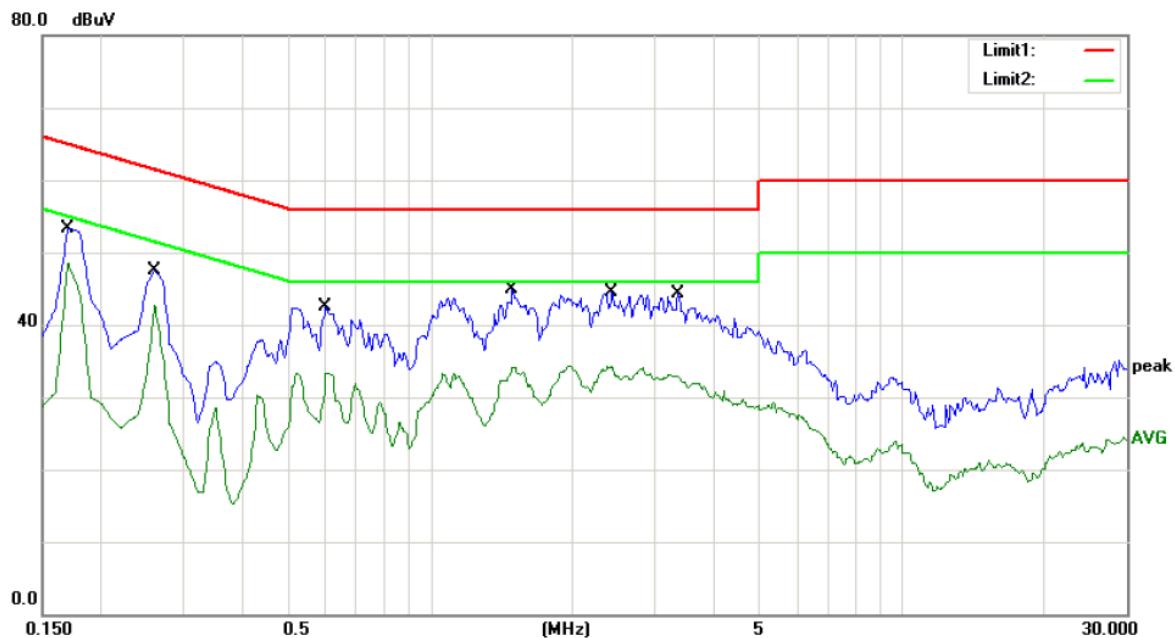
Humidity: 60 %

Mode: DVI(1024*768/60Hz)

Note:

No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Detector	Comment
			Level	Factor	ment				
		MHz	dBuV	dB	dBuV	dBuV	dB		
1		0.1700	53.27	0.00	53.27	64.96	-11.69		QP
2 *		0.1700	49.62	0.00	49.62	54.96	-5.34		AVG
3		0.2600	48.17	0.00	48.17	61.43	-13.26		QP
4		0.2600	44.66	0.00	44.66	51.43	-6.77		AVG
5		0.6000	44.41	0.00	44.41	56.00	-11.59		QP
6		0.6000	37.00	0.00	37.00	46.00	-9.00		AVG
7		1.4800	46.29	0.00	46.29	56.00	-9.71		QP
8		1.4800	35.90	0.00	35.90	46.00	-10.10		AVG
9		1.8800	45.74	0.00	45.74	56.00	-10.26		QP
10		1.8800	34.37	0.00	34.37	46.00	-11.63		AVG
11		2.7700	46.08	0.00	46.08	56.00	-9.92		QP
12		2.7700	34.42	0.00	34.42	46.00	-11.58		AVG

*:Maximum data x:Over limit !:over margin Comment: Factor build in receiver. Operator: Jason



Site Conduction #1

Phase: **L1**

Temperature: 26

Limit: (CE)FCC PART 15 class B_QP

Power: AC 120V/60Hz

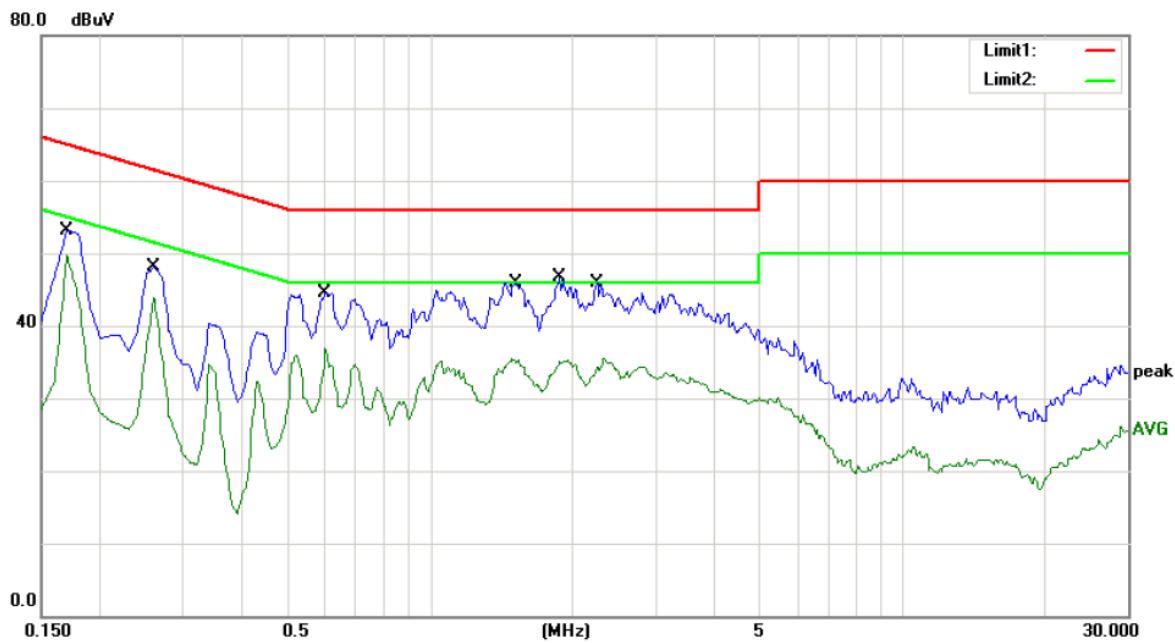
Humidity: 60 %

Mode: DVI(640*480/60Hz)

Note:

No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Detector	Comment
			Level	Factor	ment				
		MHz	dBuV	dB	dBuV	dBuV	dB		
1		0.1700	53.39	0.00	53.39	64.96	-11.57	QP	
2 *		0.1700	48.55	0.00	48.55	54.96	-6.41	AVG	
3		0.2600	47.43	0.00	47.43	61.43	-14.00	QP	
4		0.2600	42.70	0.00	42.70	51.43	-8.73	AVG	
5		0.6000	42.42	0.00	42.42	56.00	-13.58	QP	
6		0.6000	33.34	0.00	33.34	46.00	-12.66	AVG	
7		1.4900	44.99	0.00	44.99	56.00	-11.01	QP	
8		1.4900	34.10	0.00	34.10	46.00	-11.90	AVG	
9		2.4300	44.55	0.00	44.55	56.00	-11.45	QP	
10		2.4300	34.34	0.00	34.34	46.00	-11.66	AVG	
11		3.3500	44.23	0.00	44.23	56.00	-11.77	QP	
12		3.3500	32.95	0.00	32.95	46.00	-13.05	AVG	

*:Maximum data x:Over limit !:over margin Comment: Factor build in receiver. Operator: Jason



Site Conduction #1

Phase: *N*

Temperature: 26

Limit: (CE)FCC PART 15 class B_QP

Power: AC 120V/60Hz

Humidity: 60 %

Mode: DVI(640*480/60Hz)

Note:

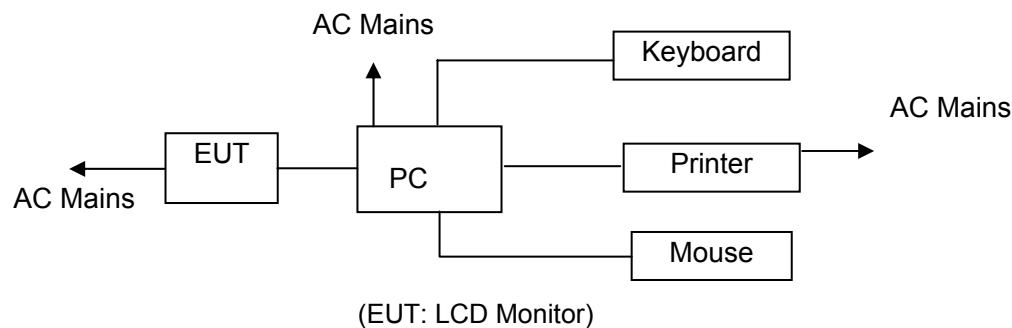
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over						
							MHz	dBuV	dB	dBuV	dB	Detector	Comment
1		0.1700	53.18	0.00	53.18	64.96	-11.78					QP	
2 *		0.1700	49.70	0.00	49.70	54.96	-5.26					AVG	
3		0.2600	48.05	0.00	48.05	61.43	-13.38					QP	
4		0.2600	43.95	0.00	43.95	51.43	-7.48					AVG	
5		0.6000	44.49	0.00	44.49	56.00	-11.51					QP	
6		0.6000	36.92	0.00	36.92	46.00	-9.08					AVG	
7		1.5200	45.94	0.00	45.94	56.00	-10.06					QP	
8		1.5200	35.48	0.00	35.48	46.00	-10.52					AVG	
9		1.8800	46.67	0.00	46.67	56.00	-9.33					QP	
10		1.8800	34.90	0.00	34.90	46.00	-11.10					AVG	
11		2.2600	45.97	0.00	45.97	56.00	-10.03					QP	
12		2.2600	34.28	0.00	34.28	46.00	-11.72					AVG	

*:Maximum data x:Over limit !:over margin Comment: Factor build in receiver. Operator: Jason

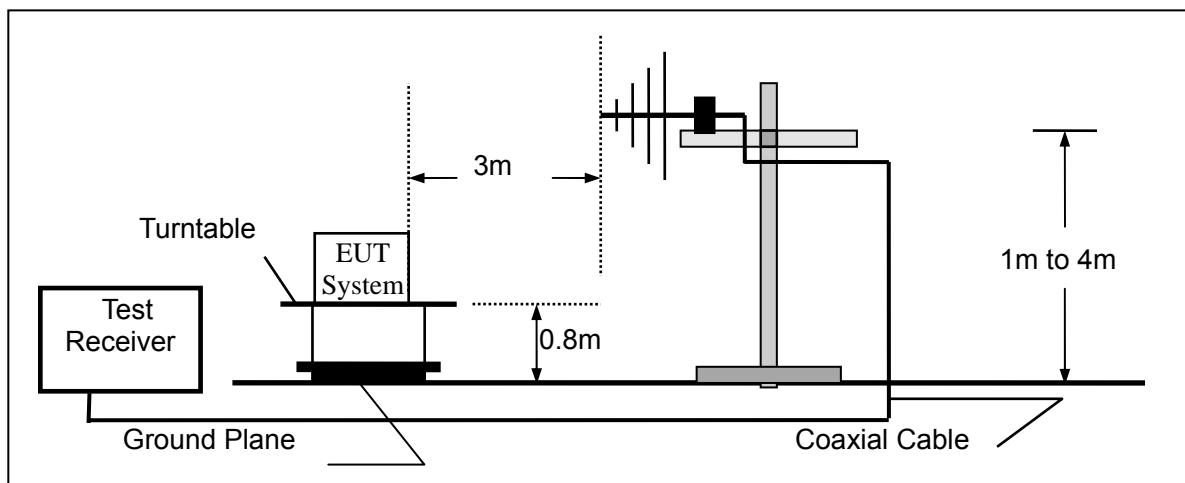
5. RADIATED EMISSION MEASUREMENT

5.1. Block Diagram of Test Setup

5.1.1. Block diagram of EUT System



5.1.2. Block diagram of test setup (In chamber)



(EUT: LCD Monitor)

5.2. Measuring Standard

FCC Part 15, Subpart B, Class B ANSI C63.4: 2009

5.3. Radiated Emission Limits (class B)

FREQUENCY MHz	DISTANCE Meters	FIELD STRENGTHS LIMIT	
		μ V/m	dB(μ V/m)
30 ~ 88	3	100	40.0
88 ~ 216	3	150	43.5
216 ~ 960	3	200	46.0
960 ~ 1000	3	500	54.0

Frequency (GHz)	Distance (Meters)	Field Strengths Limit	
		Average (dB μ V/m)	Peak (dB μ V/m)
1~6	3	54	74

Remark: (1) Emission level (dB) μ V = 20 log Emission level μ V/m
 (2) The smaller limit shall apply at the cross point between two frequency bands.
 (3) Distance is the distance in meters between the measuring instrument, antenna and the closest point of any part of the device or system.

5.4. Configuration of EUT on Measurement

The FCC Class B regulations test method must be used to find the maximum emission during radiated emission measurement.

EUT : LCD Monitor
 Model Number : MDA2120-A

5.5. Operating Condition of EUT

5.5.1. Setup the EUT as shown on Section 5.1.

5.5.2. Turn on the power of all equipments.

5.5.3. Let the EUT work in measuring mode (VGA(1600*1200/60Hz, 1024*768/60Hz, 640*480/60Hz), DVI(1600*1200/60Hz, 1024*768/60Hz, 640*480/60Hz)) and measure it.

5.6. Test Procedure

The EUT is placed on a turn table which is 0.8 meter high above the ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. The EUT is set 3 meters away from the receiving antenna which is mounted on a antenna tower. The antenna can be moved up and down from 1 to 4 meters to find out the maximum emission level. Bilog antenna (calibrated by Dipole Antenna) or horn antenna is used as a receiving antenna. Both horizontal and vertical polarization of the antenna are set on test.

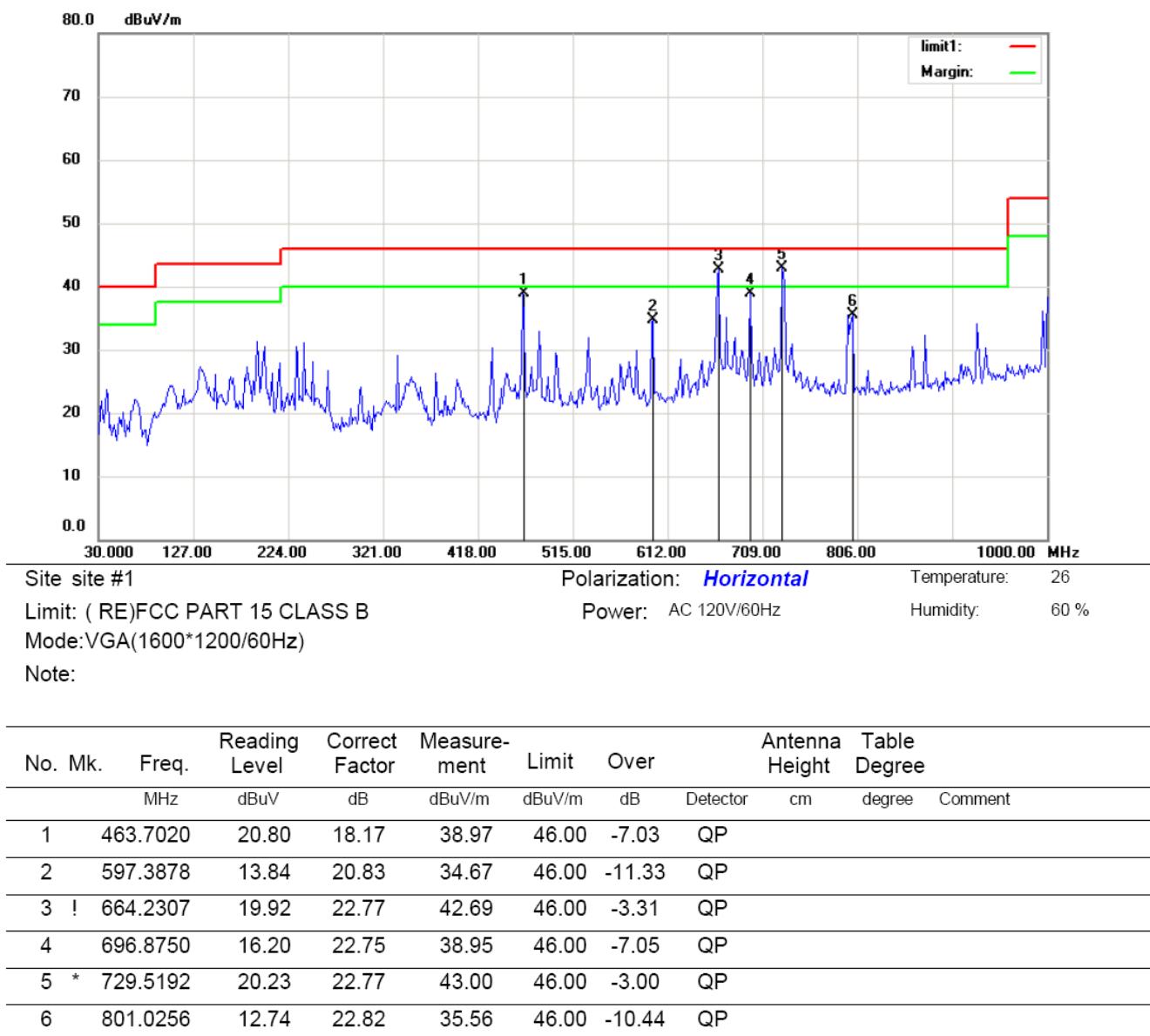
We Pre-scanned tests, X, Y, Z in the three orthogonal panels, the worse of the result x recorded in the following pages.

The bandwidth of the Receiver (ESU26) is set at 120kHz.

5.7. Measuring Results

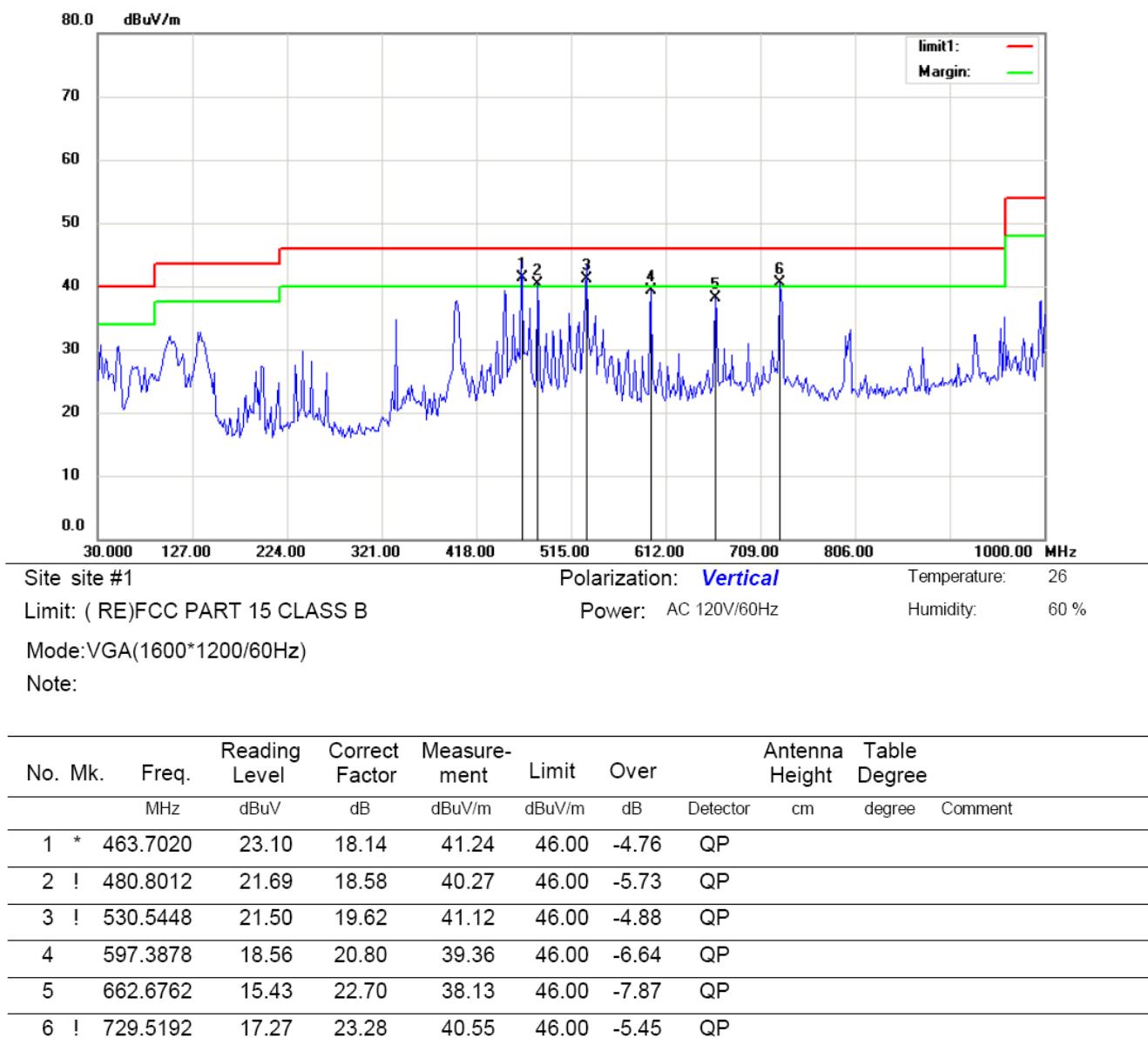
PASS.

The frequency range from 30MHz to 6GHz is investigated.
 Please refer to below a few pages.



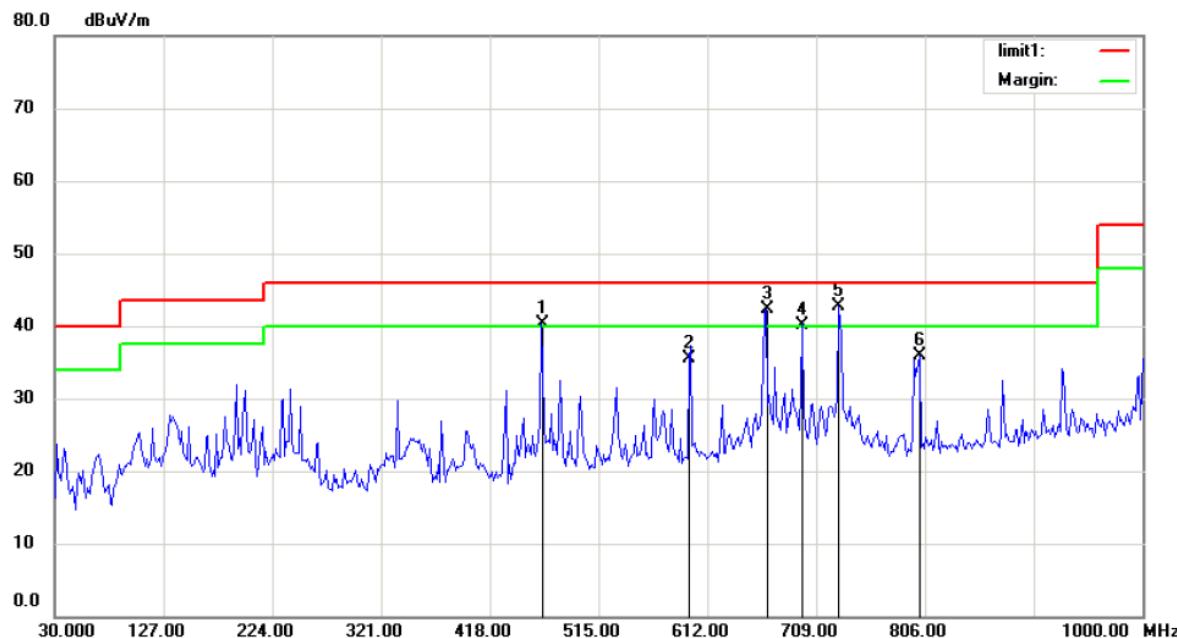
*:Maximum data x:Over limit !:over margin

Operator: YU



*:Maximum data x:Over limit !:over margin

Operator: YU



Site site #1

Polarization: **Horizontal**

Temperature: 26

Limit: (RE)FCC PART 15 CLASS B

Power: AC 120V/60Hz

Humidity: 60 %

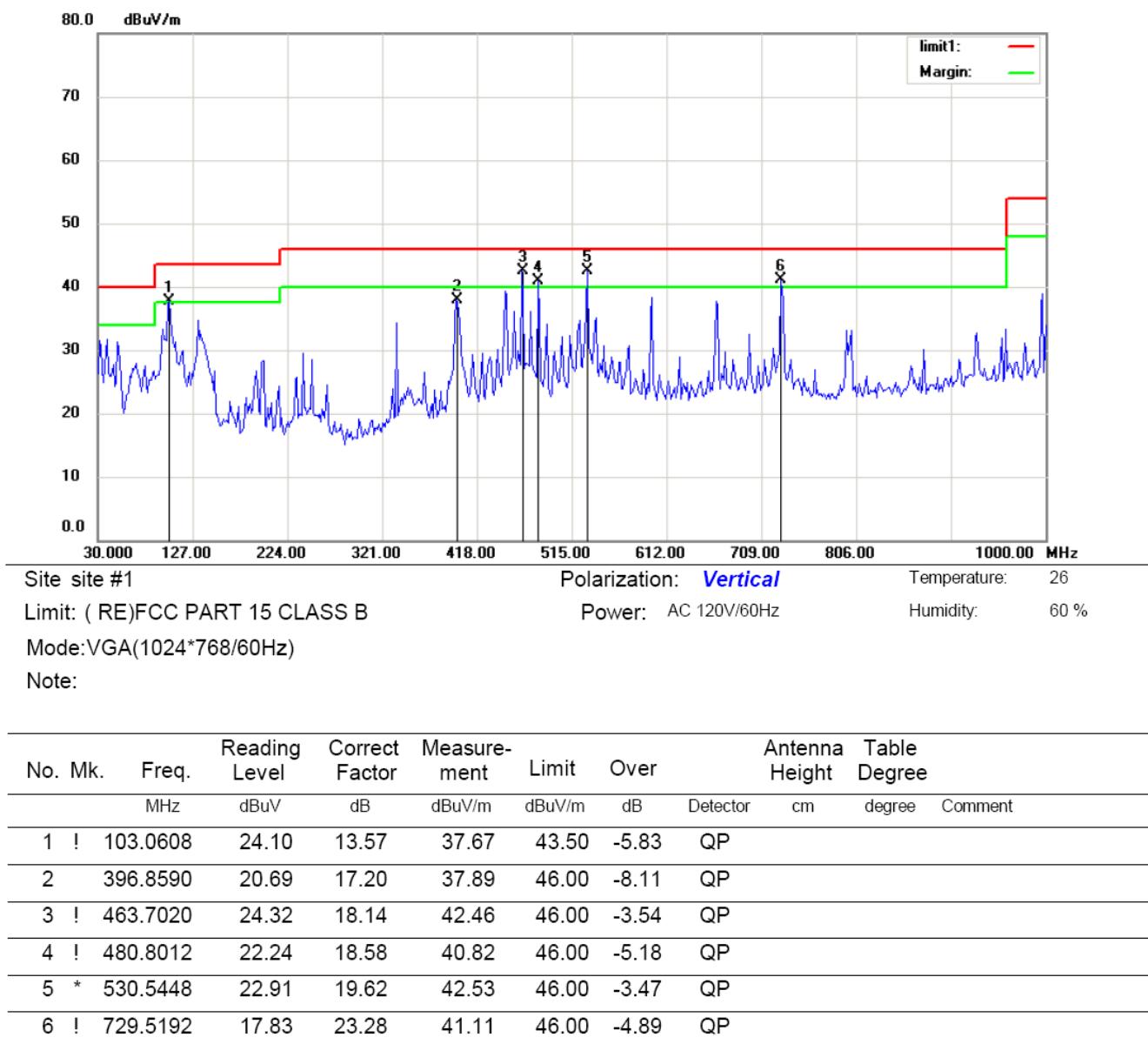
Mode: VGA(1024*768/60Hz)

Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	Antenna Height	Table Degree	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree
1	!	463.7020	22.12	18.17	40.29	46.00	-5.71	QP		
2		595.8333	14.79	20.71	35.50	46.00	-10.50	QP		
3	!	664.2308	19.47	22.77	42.24	46.00	-3.76	QP		
4	!	696.8750	17.45	22.75	40.20	46.00	-5.80	QP		
5	*	729.5192	20.02	22.77	42.79	46.00	-3.21	QP		
6		801.0256	13.12	22.82	35.94	46.00	-10.06	QP		

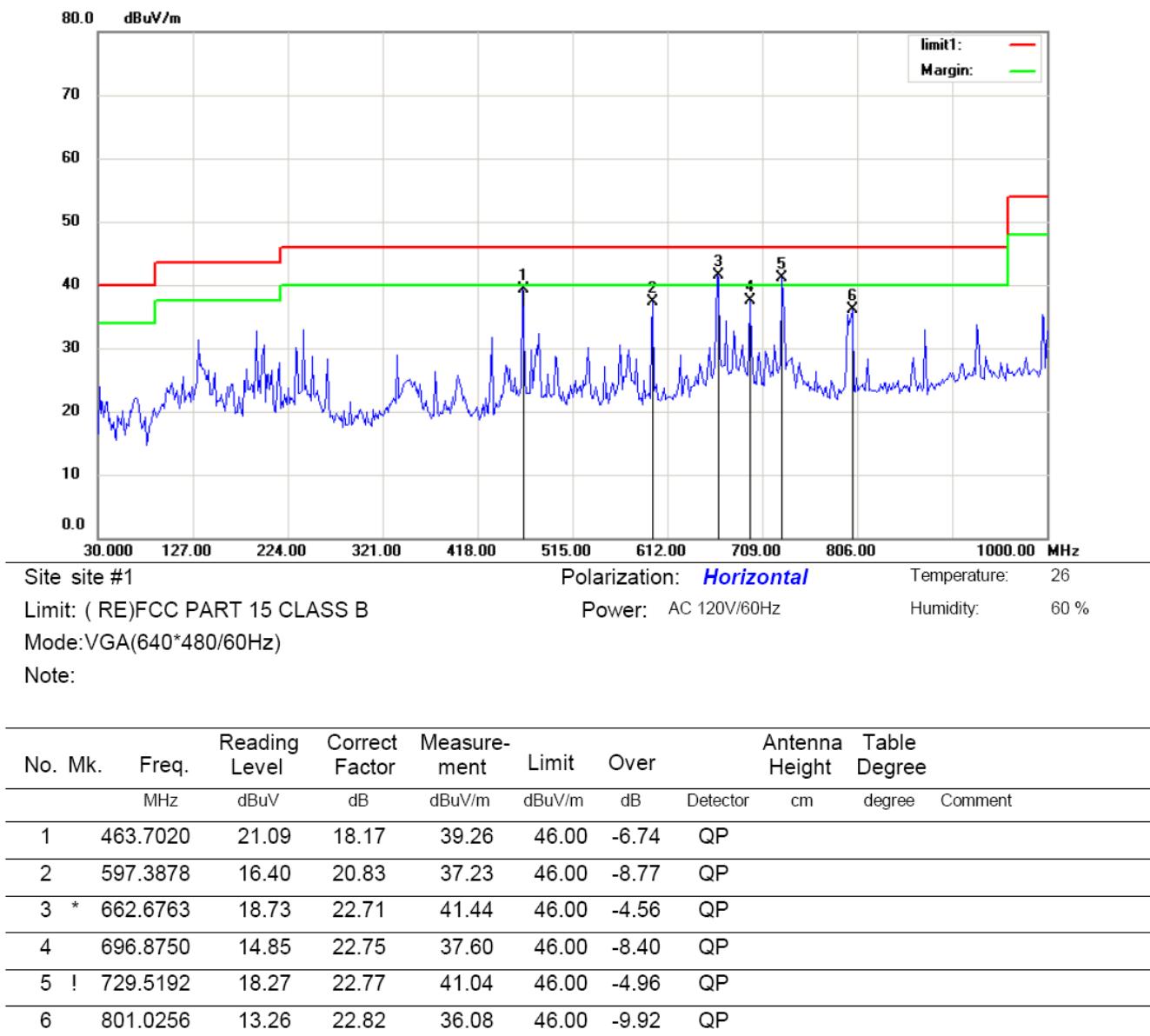
*:Maximum data x:Over limit !:over margin

Operator: YU



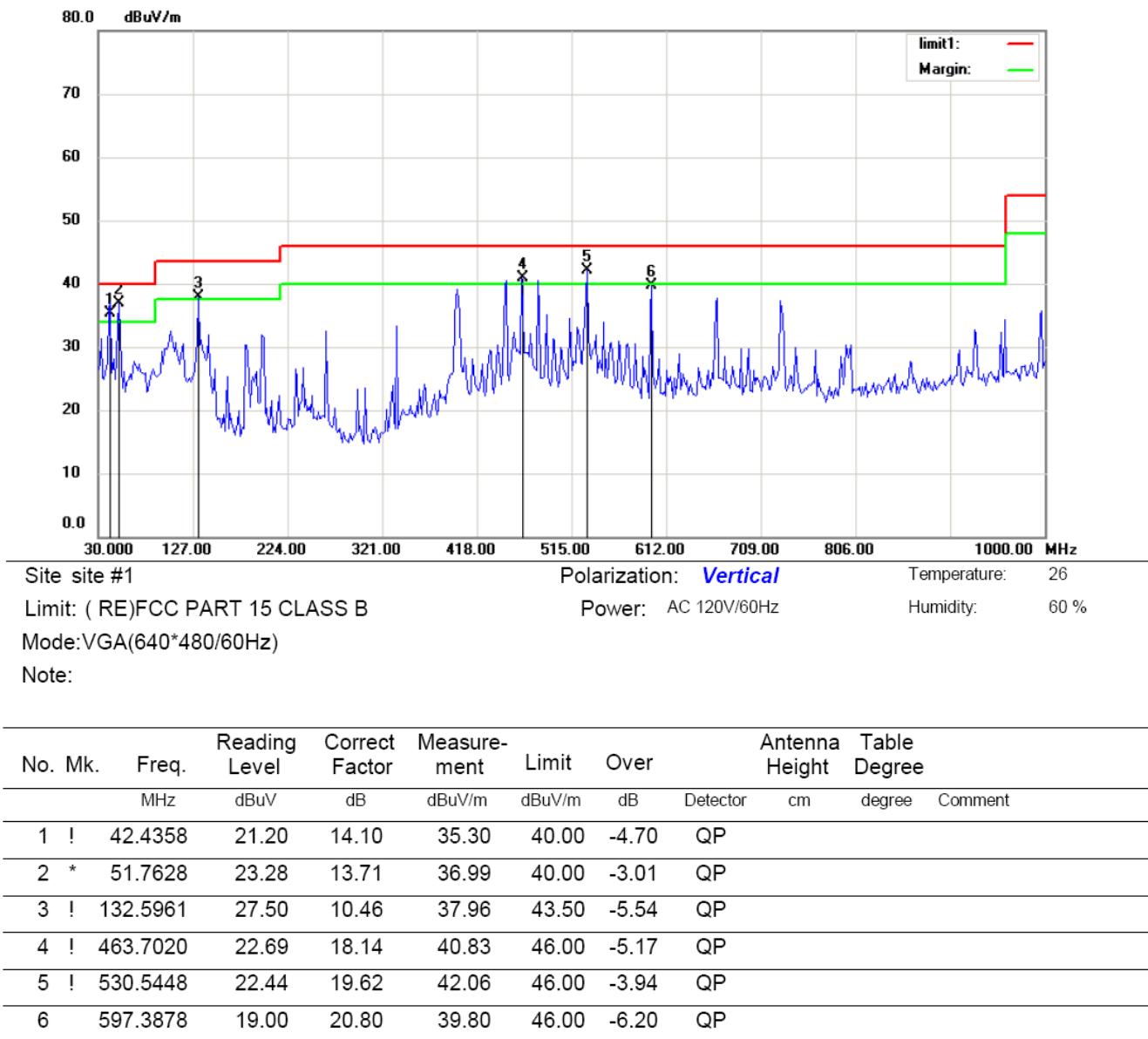
*:Maximum data x:Over limit !:over margin

Operator: YU



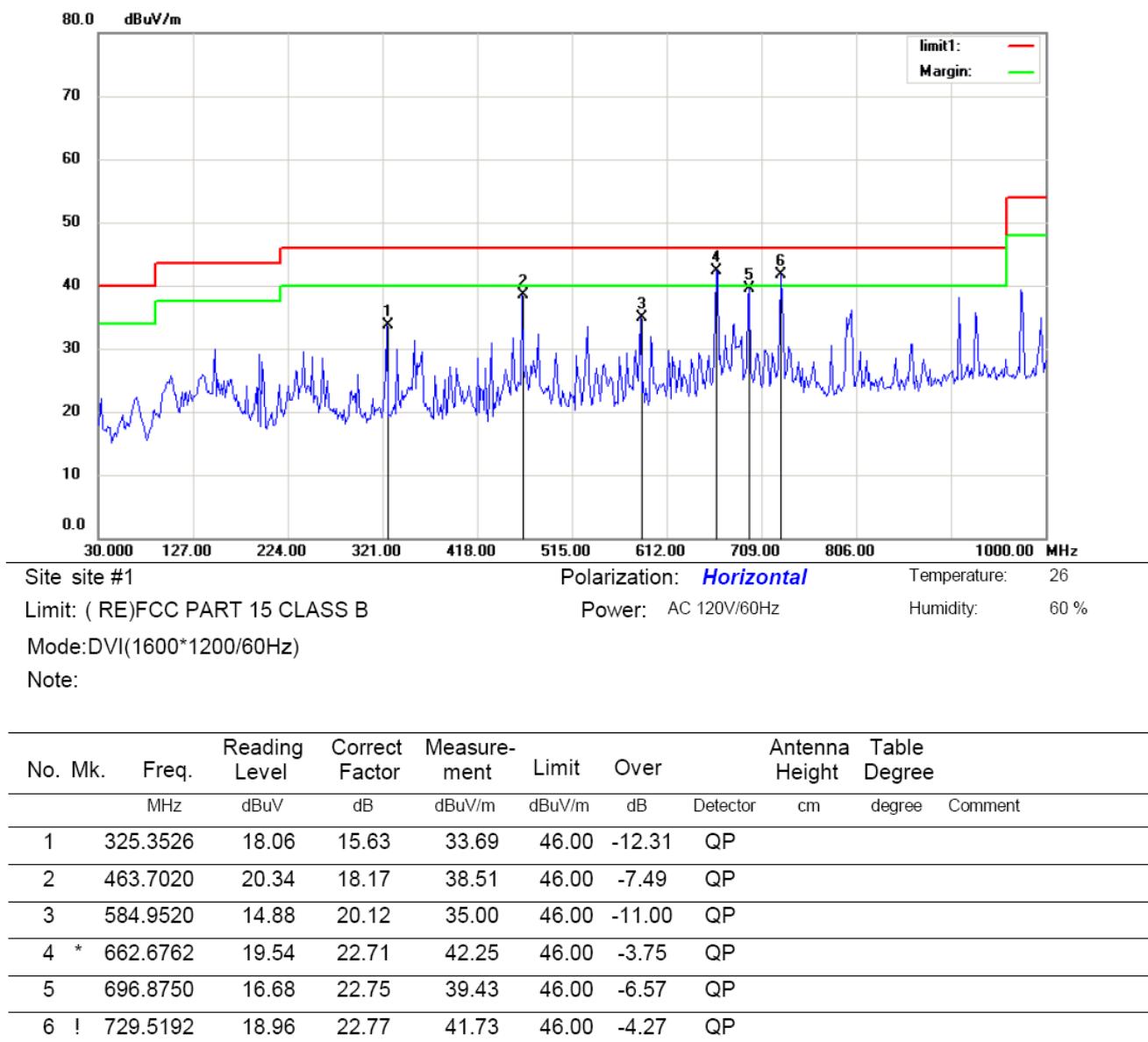
*:Maximum data x:Over limit !:over margin

Operator: YU



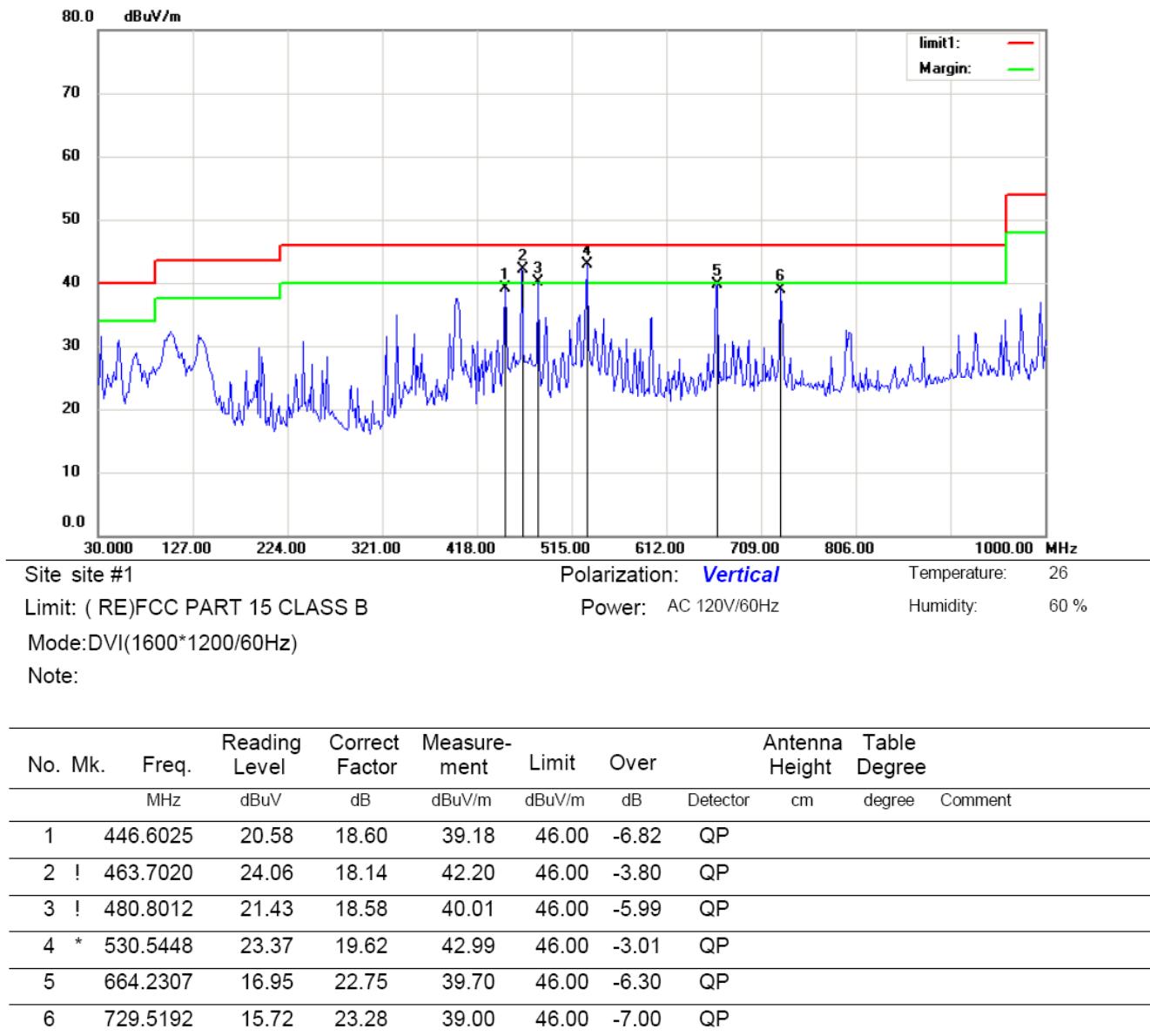
*:Maximum data x:Over limit !:over margin

Operator: YU



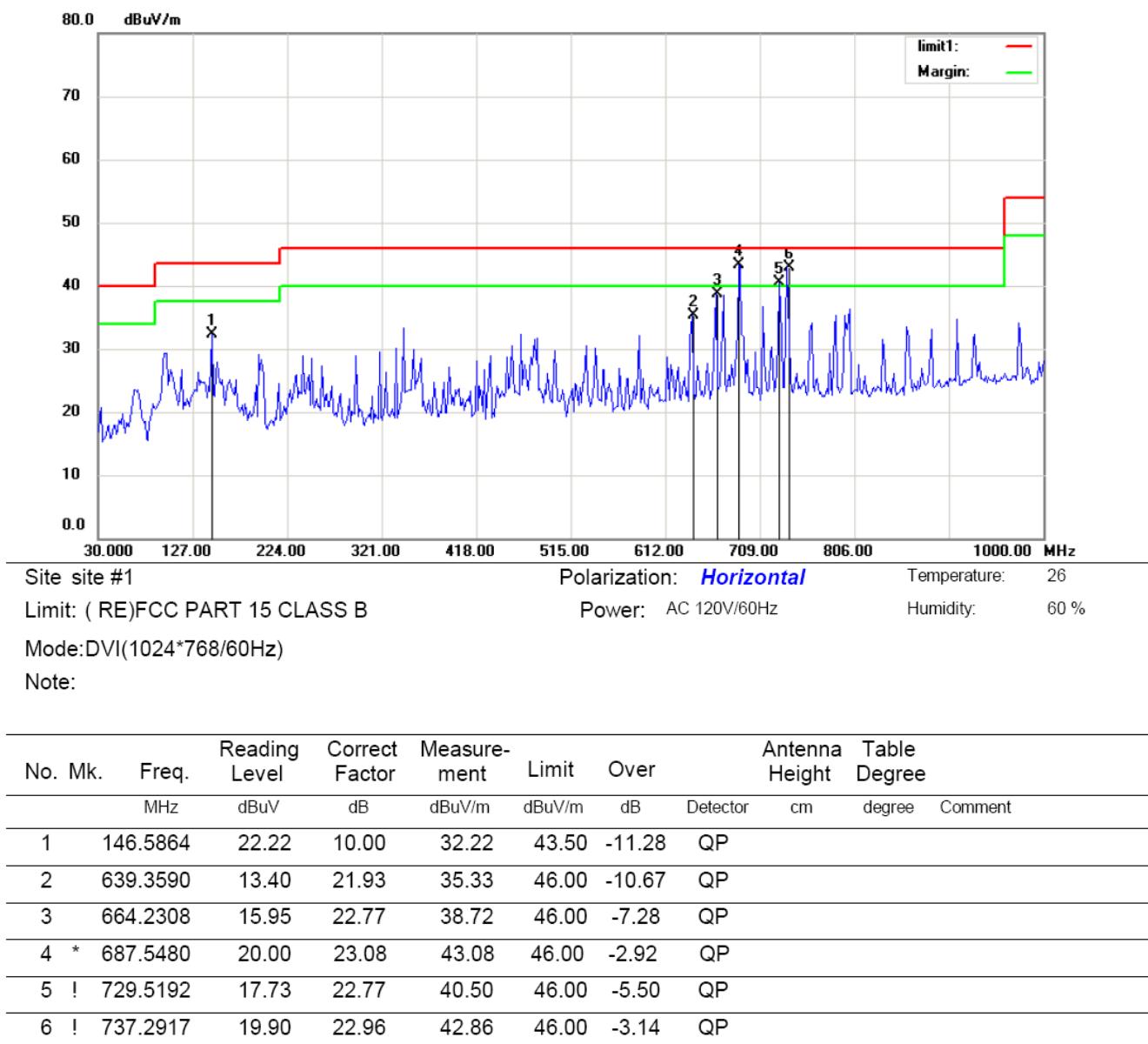
*:Maximum data x:Over limit !:over margin

Operator: YU



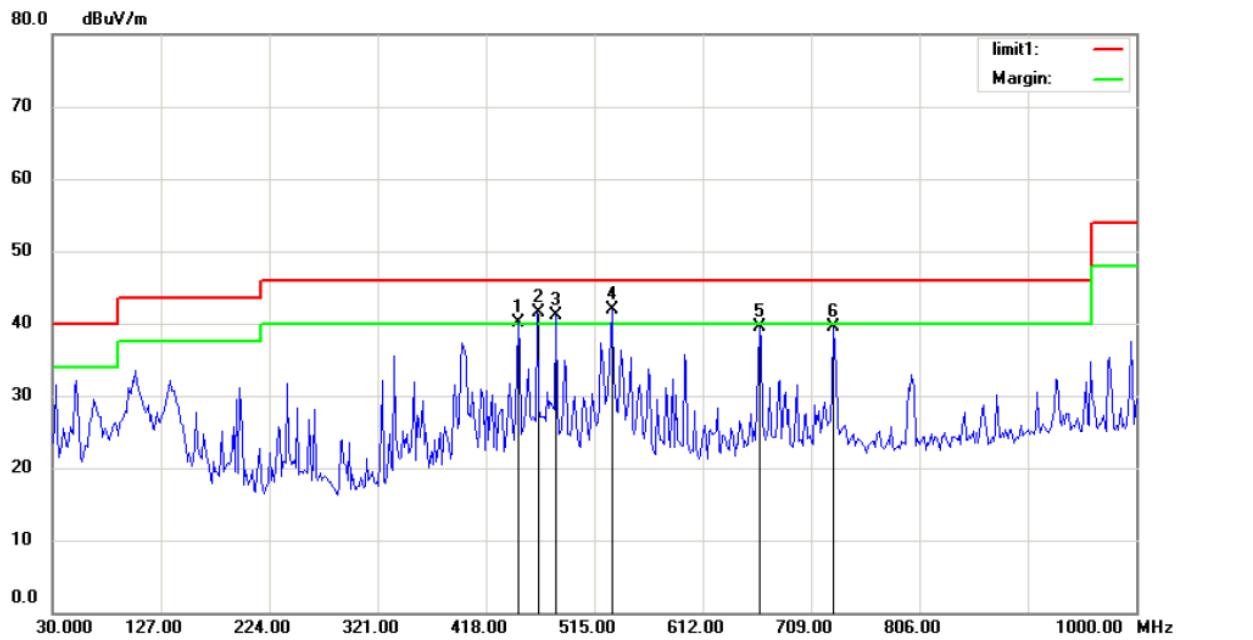
*:Maximum data x:Over limit !:over margin

Operator: YU



*:Maximum data x:Over limit !:over margin

Operator: YU



Site site #1

Polarization: **Vertical**

Temperature: 26

Limit: (RE)FCC PART 15 CLASS B

Power: AC 120V/60Hz

Humidity: 60 %

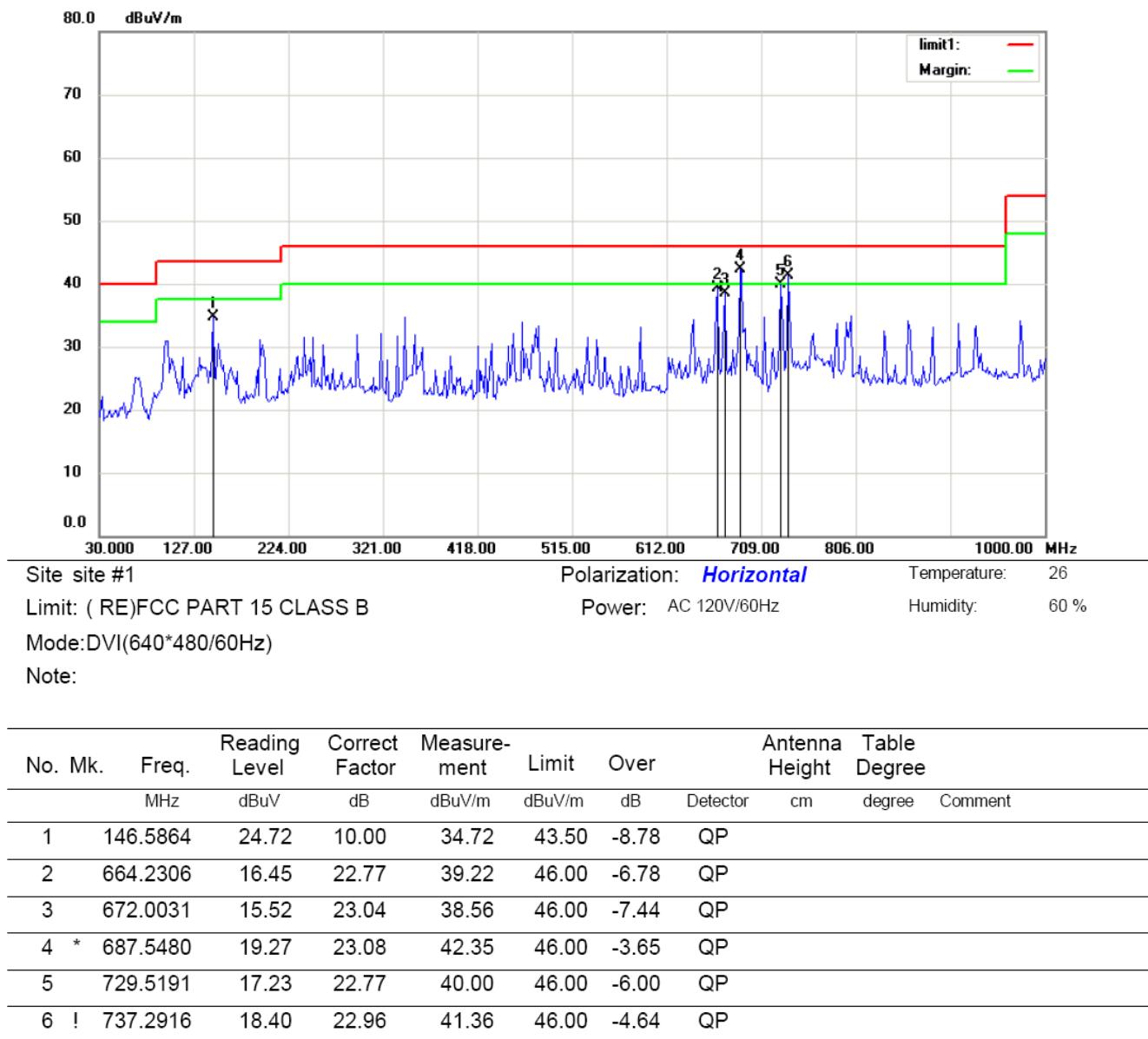
Mode:DVI(1024*768/60Hz)

Note:

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Antenna Height cm	Table Degree degree	Comment
1	!	446.6025	21.46	18.60	40.06	46.00	-5.94	QP		
2	!	463.7020	23.44	18.14	41.58	46.00	-4.42	QP		
3	!	480.8012	22.50	18.58	41.08	46.00	-4.92	QP		
4	*	530.5448	22.32	19.62	41.94	46.00	-4.06	QP		
5		662.6762	16.74	22.70	39.44	46.00	-6.56	QP		
6		729.5192	16.24	23.28	39.52	46.00	-6.48	QP		

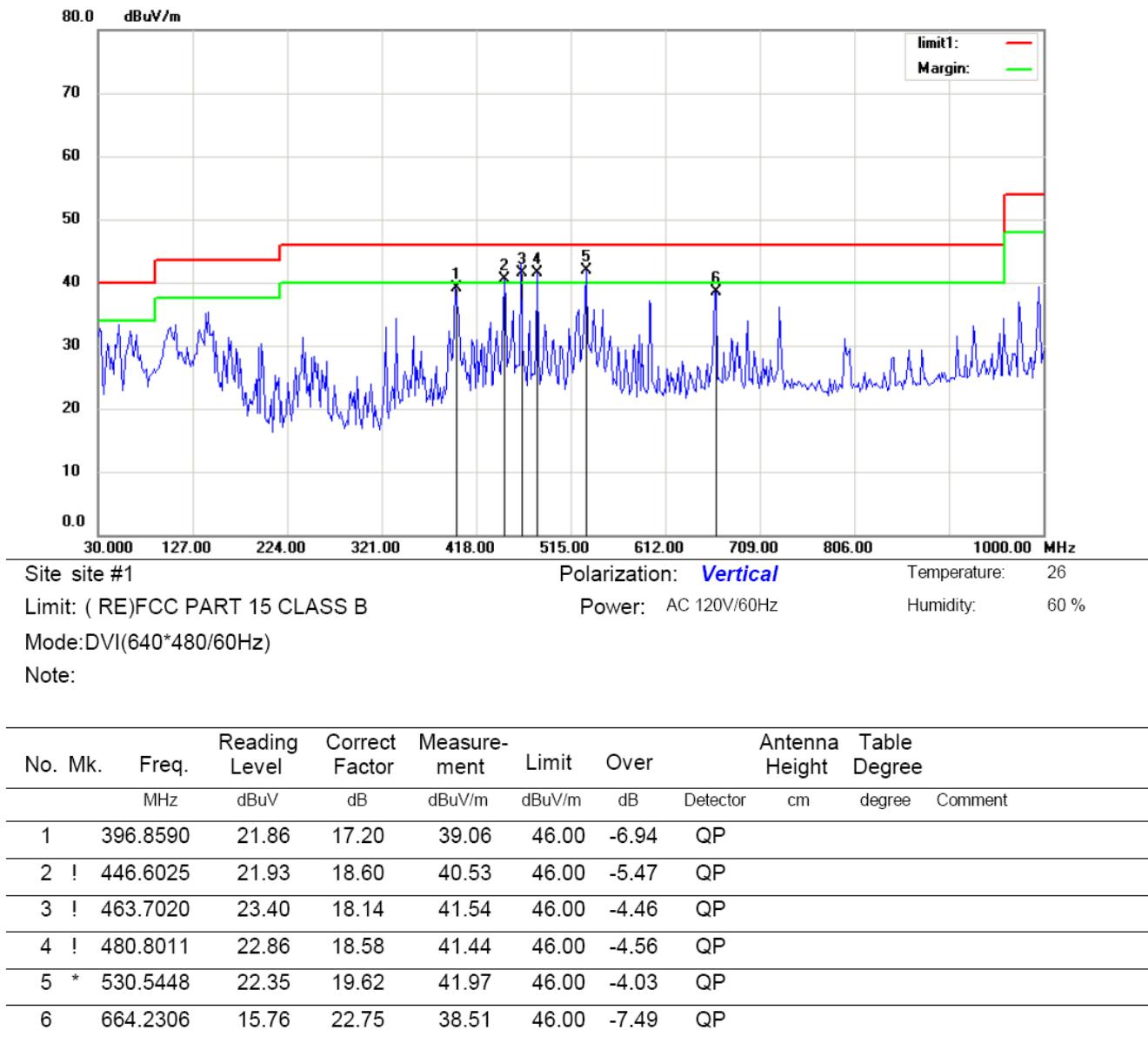
*:Maximum data x:Over limit !:over margin

Operator: YU



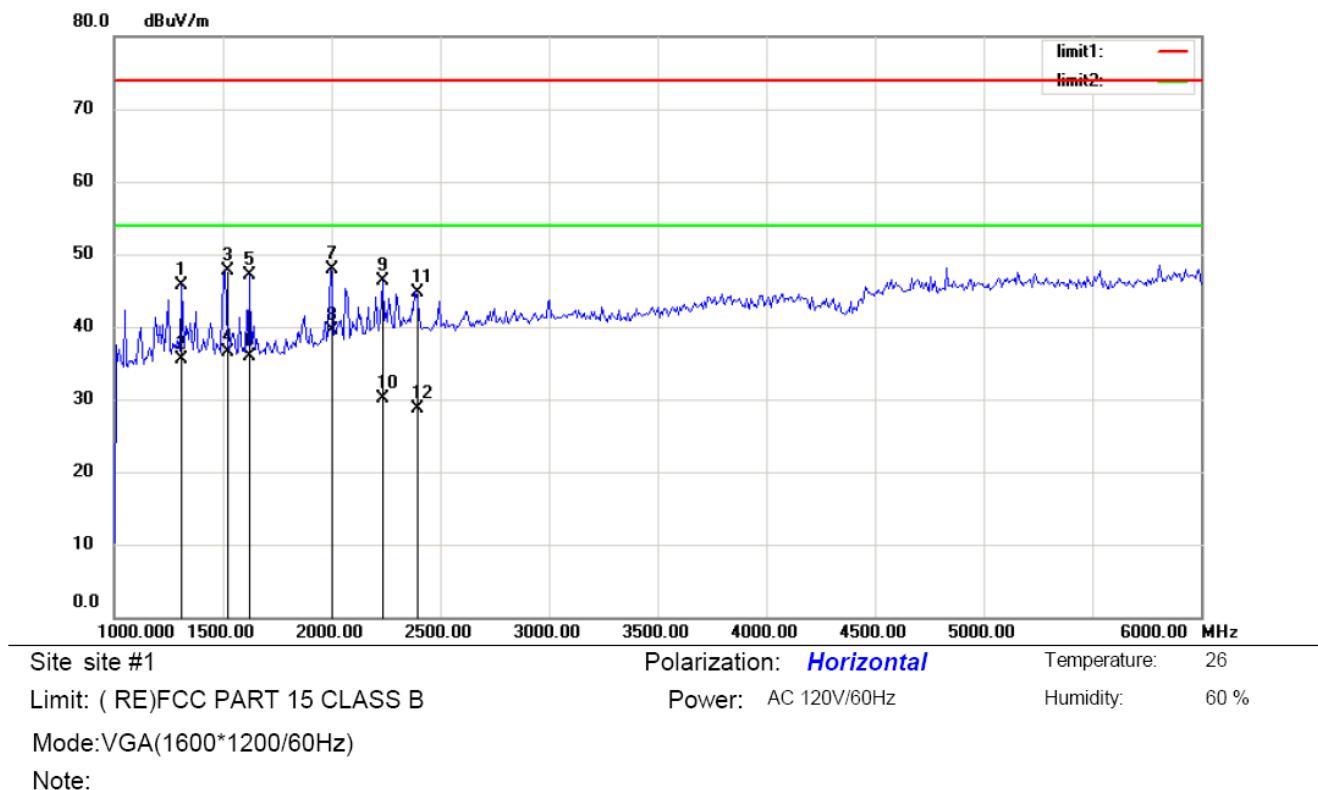
*:Maximum data x:Over limit !:over margin

Operator: YU



*:Maximum data x:Over limit !:over margin

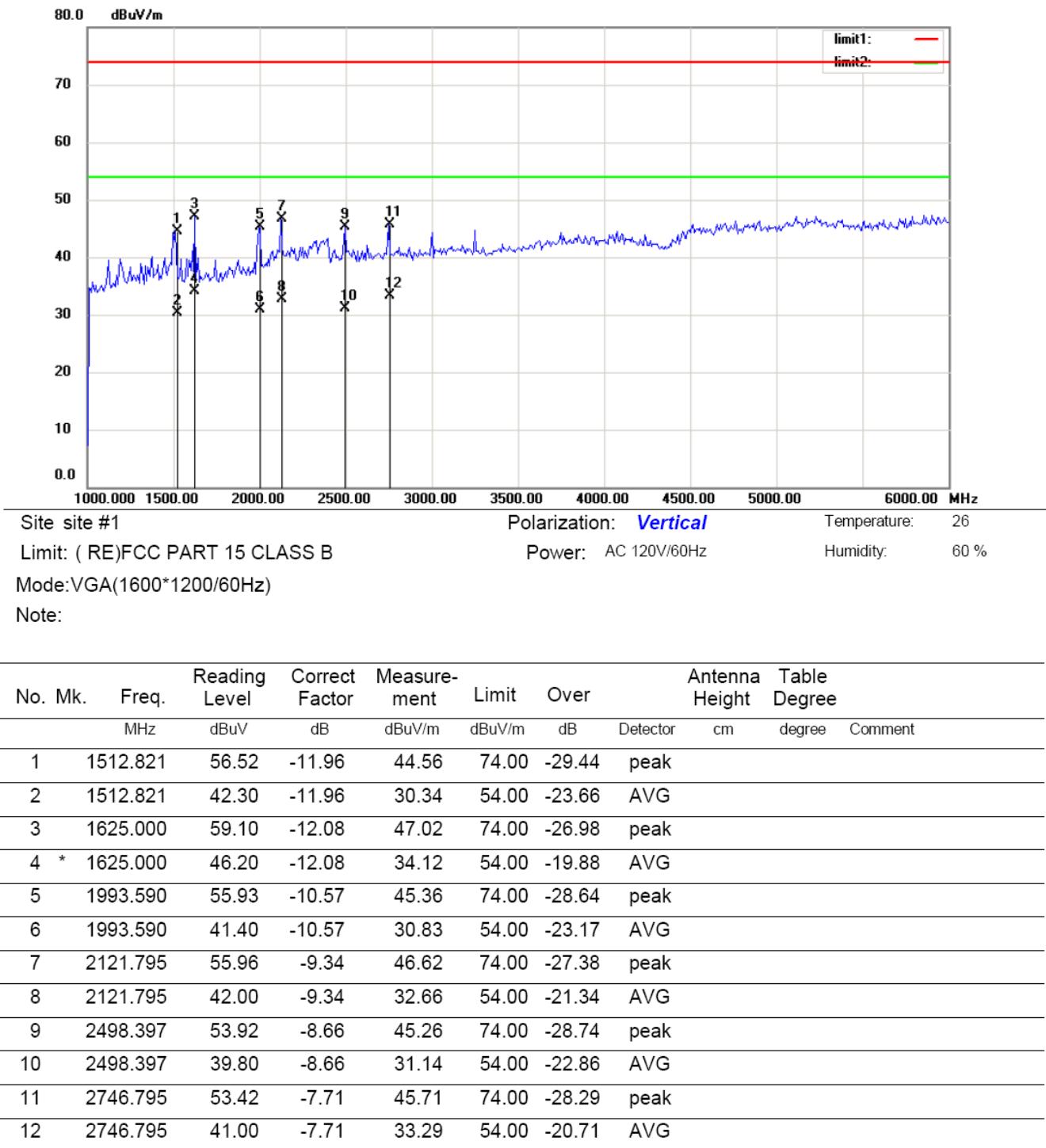
Operator: YU



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Antenna Height cm	Table Degree	Comment
1		1312.500	57.51	-11.79	45.72	74.00	-28.28	peak			
2		1312.500	47.30	-11.79	35.51	54.00	-18.49	AVG			
3		1512.821	59.64	-11.95	47.69	74.00	-26.31	peak			
4		1512.821	48.36	-11.95	36.41	54.00	-17.59	AVG			
5		1625.000	59.19	-12.09	47.10	74.00	-26.90	peak			
6		1625.000	47.90	-12.09	35.81	54.00	-18.19	AVG			
7		1993.590	58.45	-10.56	47.89	74.00	-26.11	peak			
8	*	1993.590	50.00	-10.56	39.44	54.00	-14.56	AVG			
9		2233.974	54.75	-8.48	46.27	74.00	-27.73	peak			
10		2233.974	38.60	-8.48	30.12	54.00	-23.88	AVG			
11		2386.218	53.47	-8.67	44.80	74.00	-29.20	peak			
12		2386.218	37.40	-8.67	28.73	54.00	-25.27	AVG			

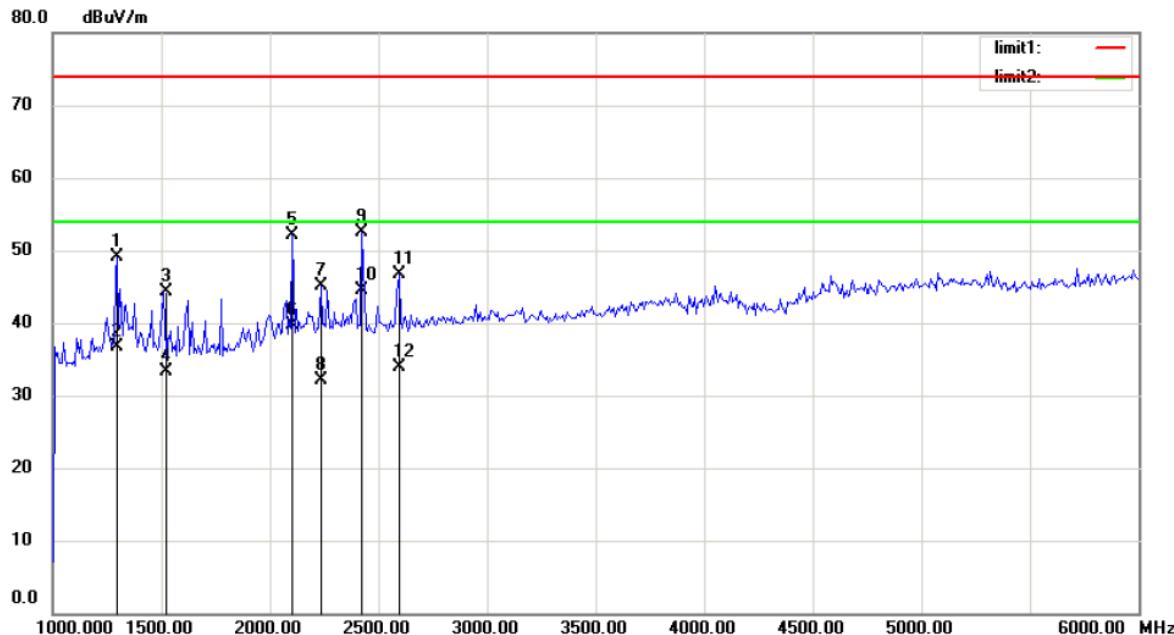
*:Maximum data x:Over limit !:over margin

Operator: YU



*:Maximum data x:Over limit !:over margin

Operator: YU



Site site #1

Polarization: **Horizontal**

Temperature: 26

Limit: (RE)FCC PART 15 CLASS B

Power: AC 120V/60Hz

Humidity: 60 %

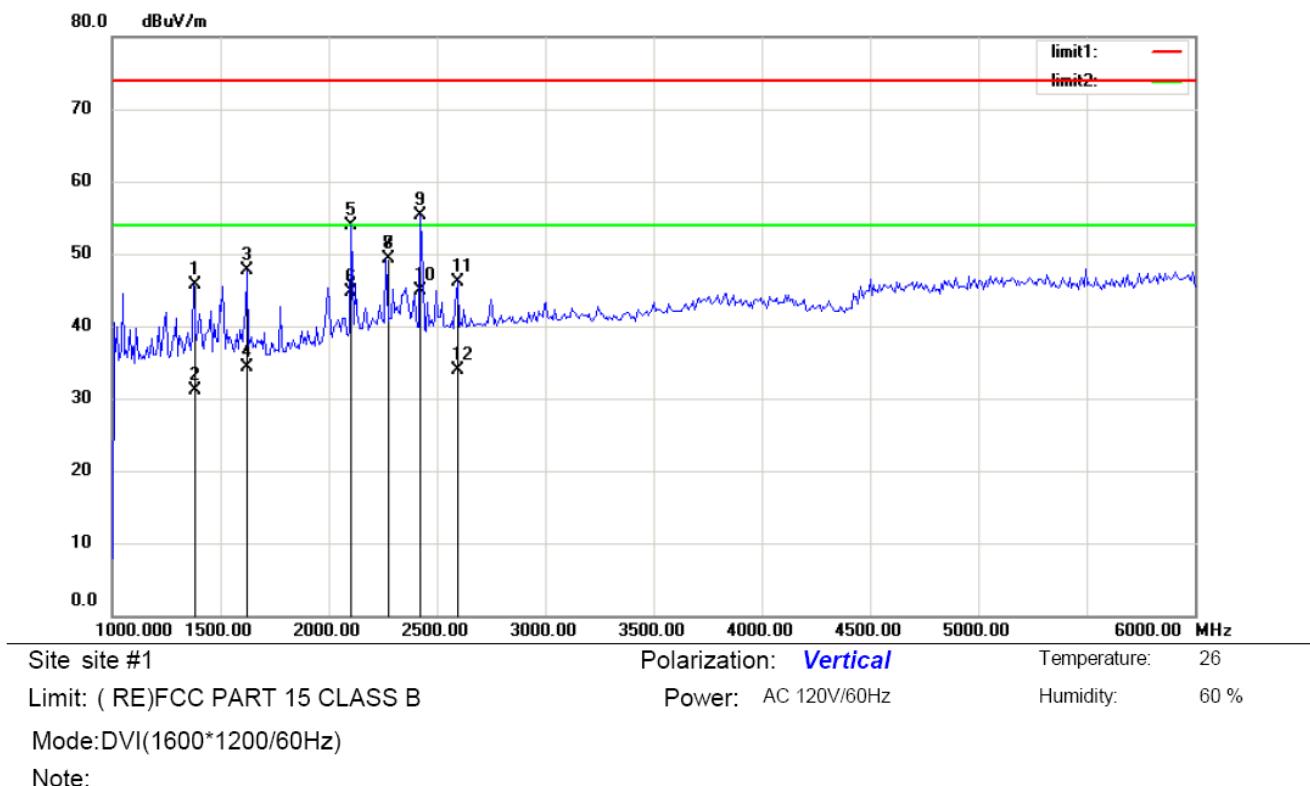
Mode:DVI(1600*1200/60Hz)

Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	Antenna Height	Table Degree	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree
1		1296.474	60.97	-11.80	49.17	74.00	-24.83	peak		
2		1296.474	48.60	-11.80	36.80	54.00	-17.20	AVG		
3		1512.821	56.30	-11.95	44.35	74.00	-29.65	peak		
4		1512.821	45.30	-11.95	33.35	54.00	-20.65	AVG		
5		2105.769	61.52	-9.51	52.01	74.00	-21.99	peak		
6		2105.769	49.30	-9.51	39.79	54.00	-14.21	AVG		
7		2233.974	53.54	-8.48	45.06	74.00	-28.94	peak		
8		2233.974	40.60	-8.48	32.12	54.00	-21.88	AVG		
9		2426.282	61.11	-8.69	52.42	74.00	-21.58	peak		
10	*	2426.282	53.20	-8.69	44.51	54.00	-9.49	AVG		
11		2594.551	54.93	-8.32	46.61	74.00	-27.39	peak		
12		2594.551	42.30	-8.32	33.98	54.00	-20.02	AVG		

*:Maximum data x:Over limit !:over margin

Operator: YU



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Antenna Height cm	Table Degree	Comment
1	1376.603	57.57	-11.84	45.73	74.00	-28.27	peak			
2	1376.603	43.00	-11.84	31.16	54.00	-22.84	AVG			
3	1625.000	59.87	-12.08	47.79	74.00	-26.21	peak			
4	1625.000	46.30	-12.08	34.22	54.00	-19.78	AVG			
5	2105.769	63.35	-9.51	53.84	74.00	-20.16	peak			
6	2105.769	54.30	-9.51	44.79	54.00	-9.21	AVG			
7	2266.026	57.67	-8.44	49.23	74.00	-24.77	peak			
8	* 2266.026	57.67	-8.44	49.23	54.00	-4.77	AVG			
9	2426.282	63.96	-8.68	55.28	74.00	-18.72	peak			
10	2426.282	53.60	-8.68	44.92	54.00	-9.08	AVG			
11	2594.551	54.51	-8.31	46.20	74.00	-27.80	peak			
12	2594.551	42.30	-8.31	33.99	54.00	-20.01	AVG			

*:Maximum data x:Over limit !:over margin

Operator: YU

6. PHOTOGRAPHS

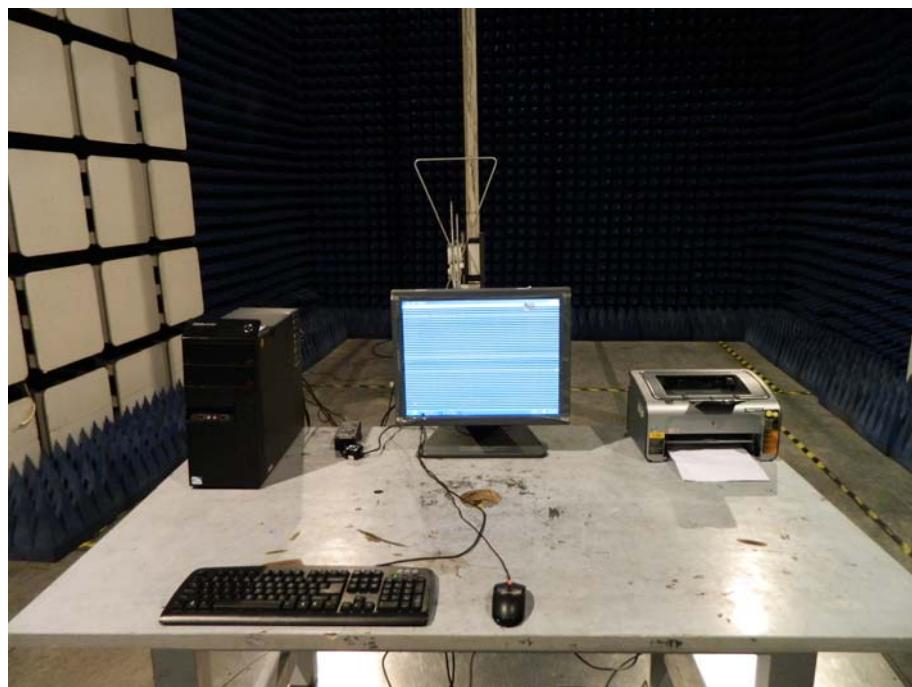
6.1. DVI mode Photo of Power line Conducted Emission Measurement



6.2. VGA mode Photo of Power line Conducted Emission Measurement



6.3. DVI mode Photo of Radiation Emission Measurement





6.4. VGA mode Photo of Radiation Emission Measurement



