APPLICATION OF CERTIFICATION
For

TTE Technology Inc.

LCD TV

Brand Name	Model Number
TCL	LE48FHDF3310; LE48FHDF3310TA; LE48FHDF3311; LE48FHDF3312

FCC ID: W8U48F3310PE371C4

Prepared for : TTE Technology Inc.
1255 Graphite Drive, Corona, CA 92881, U.S.A.

Prepared By: Audix Technology (Shenzhen) Co., Ltd.
No. 6, Ke Feng Rd., 52 Block,
Shenzhen Science & Industrial Park,
Nantou, Shenzhen, Guangdong, China

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Report Number : ACS- F13099
Date of Test : Apr.02~14, 2013
Date of Report : Apr.25, 2013

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Test Report Certification

TEST REPORT CERTIFICATION

Applicant : TTE Technology Inc.
Manufacturer : TCL King Electrical Appliances (Huizhou) Co., Ltd.
EUT Description : LCD TV
FCC ID : W8U48F3310PE371C4

(A) Model No. & Brand Name :

Brand Name	Model Number
TCL	LE48FHDF3310; LE48FHDF3310TA; LE48FHDF3311; LE48FHDF3312

(B) Power Supply : AC 120V/60Hz

(C) Test Voltage : AC 120V/60Hz

Measurement Standard Used:

FCC Rules and Regulations Part 15 Subpart B Class B 2012, ANSI C63.4: 2009
ICES-003 Issue 4 February 2012.

The device described above is tested by AUDIX TECHNOLOGY (SHENZHEN) CO., LTD. to determine the maximum emission levels emanating from the device. The maximum emission levels are compared to the FCC Part 15 Subpart B Class B limits both conducted and radiated emissions. The test results are contained in this test report and AUDIX TECHNOLOGY (SHENZHEN) CO., LTD. is assumed of full responsibility for the accuracy and completeness of these tests. This report contains data that are not covered by the NVLAP accreditation.

After the test, our opinion is that EUT compliance with the requirement of the above standards.

This Report is made under FCC Part 2.1075. No modifications were required during testing to bring this product into compliance.

This report applies to above tested sample only. This report shall not be reproduced in parts without written approval of AUDIX TECHNOLOGY (SHENZHEN) CO., LTD.

The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government.

Date of Test : Apr.02~ 14, 2013 Report of date: Apr.25, 2013

Prepared by : Lisa Liang
Lisa Liang / Assistant

Reviewed by :
Sun Zeng / Supervisor

AUDIX 信華科技（深圳）有限公司
Audix Technology (Shenzhen) Co., Ltd.
EMC 部門報告專用章
Stamp only for EMC Dept. Report
Signature:

Approved & Authorized Signer :
Ken Lu / Manager

1. SUMMARY OF STANDARDS AND RESULTS

1.1.Description of Standards and Results

The EUT have been tested according to the applicable standards as referenced below.

EMISSION			
Description of Test Item	**Standard**	**Results**	**Remarks**
Power Line Conducted Emission Test	FCC Part 15: 2012 ANSI C63.4: 2009	PASS	Meets Class B Limit Minimum passing margin is 17.96dB at 0.18346 MHz
Radiated Emission Test (30-1000MHz)	FCC Part 15: 2012 ANSI C63.4: 2009	PASS	Meets Class B Limit Minimum passing margin is 3.34dB at 49.400MHz
Radiated Emission Test (1-2GHz)	FCC Part 15: 2012 ANSI C63.4: 2009	PASS	Meets Class B Limit Minimum passing margin is 7.93dB at 1494.987MHz

2. GENERAL INFORMATION

2.1.Description of Device (EUT)

Description : LCD TV

Model Number& Brand Name :

Brand Name	Model Number
TCL	LE48FHDF3310; LE48FHDF3310TA; LE48FHDF3311; LE48FHDF3312

Only the Model name ,appearance color and shell is different

FCC ID : W8U48F3310PE371C4

Applicant : TTE Technology Inc.
1255 Graphite Drive, Corona, CA 92881, U.S.A.

Manufacturer : TCL King Electrical Appliances (Huizhou) Co., Ltd.
Section 19, Zhongkai Development Zone for New and High-Level Tech Industries, Huizhou, Guangdong Province, China, 516006.

FREQUENCIES USED AND GENERATED WITHIN DEVICE		
LVDS(HD)	78MHz	
LVDS(FHD)	75MHz	
IF	6MHz	
DC-DC	U302->385KHz	
DDR	390MHz	
AMP	384KHz	

Power Cord : Unshielded, Undetachable, 2.0m

Date of Test : Apr.02~14, 2013

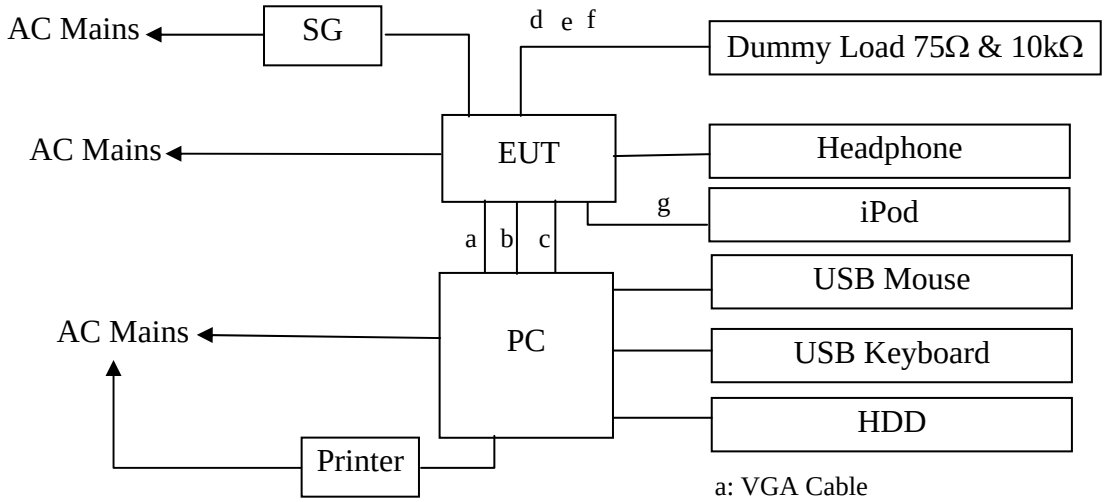
Date of Receipt : Apr.01, 2013

Sample Type : Prototype production

2.2.Tested Supporting System Details

	Description	ACS No.	Manufacturer	Model	Serial Number	Approved type
1.	Personal Computer	Test PC M	DELL	Studio 540	224XK2X	☑FCC DoC ☑BSMI ID:R33002
		Power Cord: Unshielded, Detachable, 1.8m Display Card: HD3450 (DVI+VGA+HDMI)				
2.	USB Keyboard	ACS-EMC- K04R	DELL	SK-8115	CN-ODJ313-71616-6BB-049J	☑ FCC DoC ☑BSMI ID: T3A002
		Power Cord: shielded, Undetachable, 2.0m				
3.	Headphone	ACS-EMC-EP03	OVANN	OV880V	N/A	☐FCC ID ☐BSMI ID
		Cable: Shielded, Undetachabled, 4.0m				
4.	Printer	ACS-EMC-PT04	HP	C9079A	N/A	☑FCC DoC ☑BSMI ID: R33001
		USB Cable: Shielded, Detachabled, 1.8m Power Cord: Unshielded, Detachabled, 1.8m Power Adapter: HP, M/N: 0957-2119, BSMI ID: R33030, DC Cable: Unshielded, Detachabled, 1.5m				
5.	USB Mouse	ACS-EMC-M04R	DELL	M056UO	512024282	☑ FCC DoC ☑BSMI ID: R41108
		Power Cord: shielded, Undetachable, 1.8m				
6.	iPod nano	ACS-EMC-IP03	APPLE	A1199	YM711H3LVQ5	☑FCC DoC ☑BSMI ID: R33057
		Data Cable: Shielded, Detachabled, 1.0m				
7.	HDD	ACS-EMC-HDD03	Terasys	F12-UF	A010021553900030	☑FCC DoC ☑BSMI ID: 4912A022
		USB Cable: Shielded, Detachable, 1.8m				
8.	Dummy Load (10KΩ &75Ω)	Component In Cable: Unshielded, Detachable, 1.5m (R+L) Audio Cable: Unshielded, Detachable, 1.5m SPDIF Cable: Unshielded, Detachable, 1.5m				
9.	D-Sub Cable: Shielded, Detachable, 1.5m HDMI Cable: Shielded, Detachable, 1.8m Audio Cable: Shielded, Detachable, 1.5m					

2.3.Block diagram of connection between the EUT and simulators



a: VGA Cable
b: HDMI*3 Cable
c: Audio In Cable
d: Component In Cable
e: SPDIF Cable
f: (R+L) Audio Cable
g: USB Cable

(EUT: LCD TV)

2.4.Test Facility

Site Description

Name of Firm	:	Audix Technology (Shenzhen) Co., Ltd. No. 6, Ke Feng Rd., 52 Block, Shenzhen Science & Industrial Park,Nantou, Shenzhen, Guangdong, China
3m Anechoic Chamber	:	Certificated by FCC, USA Registration Number: 90454 Valid Date: Feb.22, 2015
3m & 10m Anechoic Chamber	:	Certificated by FCC, USA Registration Number: 794232 Valid Date: Oct.31, 2015
EMC Lab.	:	Certificated by DAkkS, Germany Registration No: D-PL-12151-01-01 Valid Date: Feb.01, 2014 Accredited by NVLAP, USA NVLAP Code: 200372-0 Valid Date: Mar.31, 2014

2.5.Measurement Uncertainty (95% confidence levels, k=2)

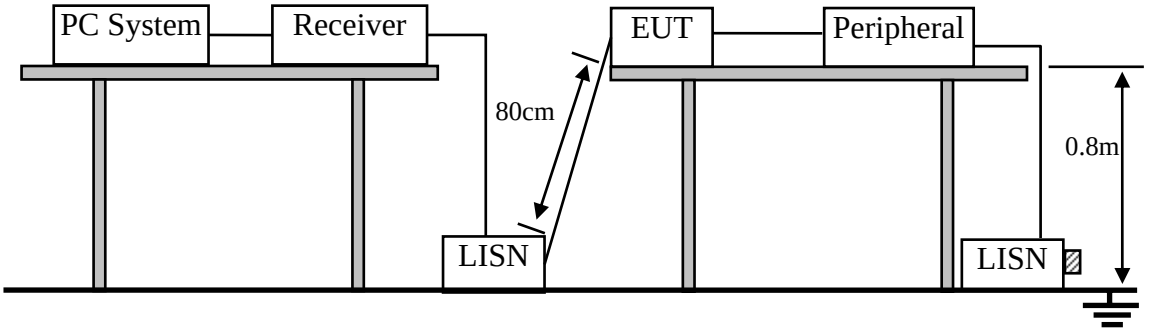
Test Item	Uncertainty
Uncertainty for Conduction emission test in No. 1 Conduction	3.48 dB(9KHz to 150KHz)
	3.06 dB(150KHz to 30MHz)
Uncertainty for Radiation Emission test in 3m chamber	3.6 dB(30~200MHz, Polarize: H)
	3.8dB(30~200MHz, Polarize: V)
	4.2dB(200M~1GHz, Polarize: H)
	3.8dB(200M~1GHz, Polarize: V)
Uncertainty for Radiated Emission test in 3m chamber (1GHz-18GHz)	3.1dB (Distance: 3m Polarization: V)
	3.7 dB (Distance: 3m Polarization: H)
Uncertainty for disturbance voltage at the antenna terminals	2.0 dB (30MHz～1000MHz)
	0.24 dB (1000MHz～2150MHz)
Uncertainty for test site temperature and humidity	3%
	0.6℃

3. POWER LINE CONDUCTED EMISSION TEST

3.1. Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Test Receiver	Rohde & Schwarz	ESHS10	838693/001	Oct.31, 12	1 Year
2.	L.I.S.N.#1	Rohde & Schwarz	ESH2-Z5	834066/011	Oct.31, 12	1 Year
3.	L.I.S.N.#3	Kyoritsu	KNW-242C	8-1920-1	May.08, 12	1 Year
4.	Terminator	Hubersuhner	50Ω	No. 1	May.08, 12	1 Year
5.	Terminator	Hubersuhner	50Ω	No. 2	May.08, 12	1 Year
6.	RF Cable	Fujikura	3D-2W	No.1	May.08, 12	1Year
7.	Coaxial Switch	Anritsu	MP59B	M50564	May.08, 12	1 Year
8.	Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100341	May.08, 12	1 Year

3.2. Block Diagram of Test Setup



▨ :50Ω Terminator

3.3. Power Line Conducted Emission Test Limits

Frequency	Maximum RF Line Voltage	
	Quasi-Peak Level dB(μV)	Average Level dB(μV)
150kHz ~ 500kHz	66 ~ 56*	56 ~ 46*
500kHz ~ 5MHz	56	46
5MHz ~ 30MHz	60	50

Notes: 1. * Decreasing linearly with logarithm of frequency.
2. The lower limit shall apply at the transition frequencies.

3.4. Configuration of EUT on Test

The following equipment are installed on Power Line Conducted Emission Test to meet the commission requirement and operating regulations in a manner which tends to maximize its emission characteristics in a normal application.

3.4.1. LCD TV (EUT)

Model Number : LE48FHDF3310
Serial Number : N/A

3.4.2. Support Equipment : As Tested Supporting System Detail, in Section 2.2.

3.5. Operating Condition of EUT

3.5.1. Setup the EUT and simulator as shown as Section 3.2.

3.5.2. Turn on the power of all equipment.

3.5.3. PC system ran the Self-test program “EMC Test. exe” by windows XP and sent “H” Character to LCD TV (EUT) , the Screen of EUT displayed and filled with “H” pattern, use white letters on a blackground, set the contrast control to maximum, set the brightness control to maximum and measure it.

3.5.4. The PC system was running the program “1kHz signal Playing” and sending sound to EUT.

3.5.5. The other peripheral devices were driven and operated in turn during all testing.

3.6. Test Procedure

The EUT was placed on a non-metallic table, 80cm above the ground plane. The EUT Power connected to the power mains through a line impedance stabilization network (L.I.S.N. 1#). This provided a 50-ohm coupling impedance for the EUT (Please refer to the block diagram of the test setup and photographs). The other peripheral devices power cord connected to the power mains through a line impedance stabilization network (L.I.S.N.#3). Both sides of power line were checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipments and all of the interface cables were changed according to ANSI C63.4: 2009 on conducted Emission test.

The bandwidth of test receiver (R&S TEST RECEIVER ESHS10) is set at 9kHz.

The frequency range from 150kHz to 30MHz is checked. The test result are reported on Section 3.7.

3.7. Conducted Disturbance at Mains Terminals Test Results

PASS. (All emissions not reported below are too low against the prescribed limits.)

The EUT with the following test modes were tested and selected to read Q.P values and average values, all the test results are listed in next pages.

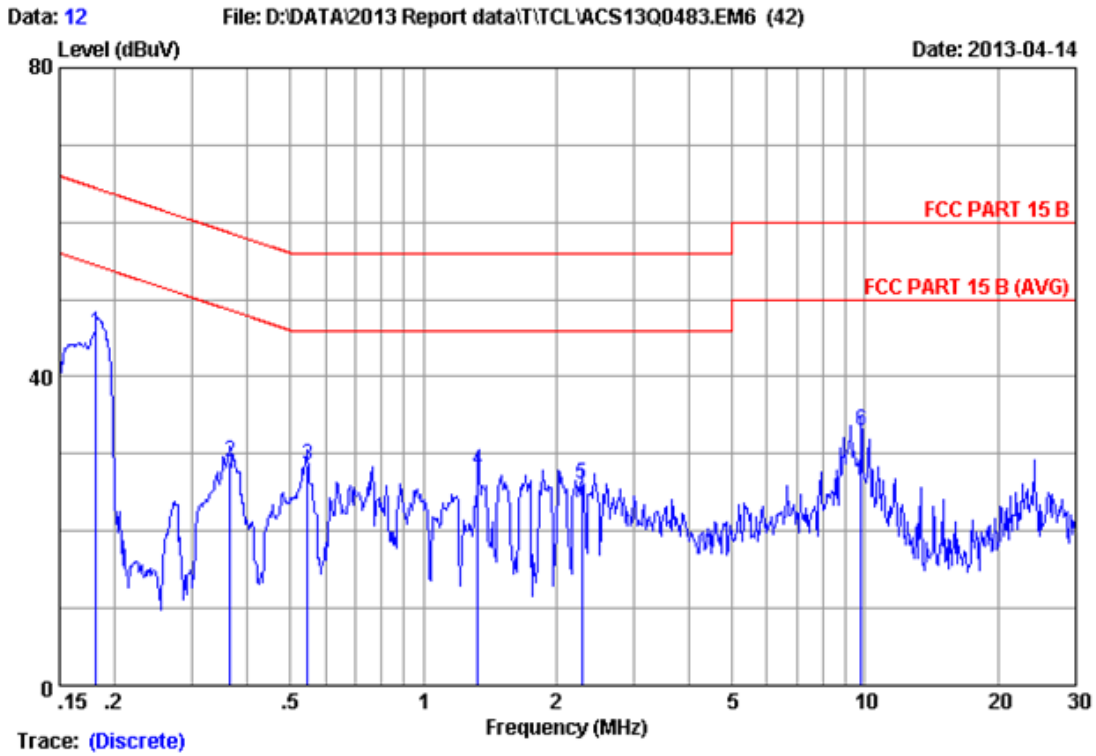
EUT: LCD TV Model No. : LE48FHDF3310

Test Date: Apr.14, 2013 Temperature: 24.4℃ Humidity: 61%

The details of test modes are as follows：

No.	Test Mode	Input Port	Resolution & Frequency	Reference Test Data No.	
				Line	Neutral
1.	PC Mode	VGA	640*480@60Hz	#12	#11
2.			1024*768@60Hz	#10	#9
3.			1920*1080@60Hz	#8	#7
4.		HDMI 1	1920*1080@60Hz	#2	#1
5.		HDMI 2	1920*1080@60Hz	#4	#3
6. ※		**HDMI 3**	**1920*1080@60Hz**	**#6**	**#5**

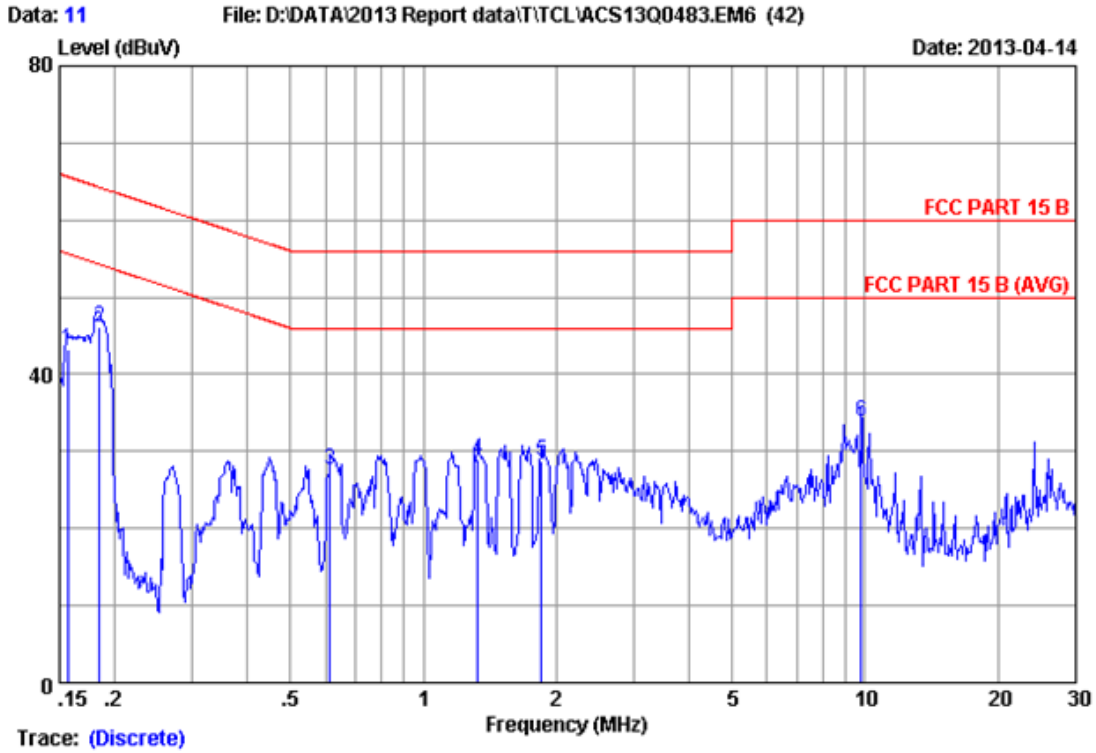
(※ Worst test mode)



Site no :1#conduction Data No :12
Dis./Ant. :** 2012 ESH2-Z5 LINE
Limit :FCC PART 15 B
Env./Ins. :24.4*C/61% Engineer :Nick_Huang
EUT :LCD TV M/N:LE48FHDF3310
Power Rating :AC 120V/60Hz
Test Mode :PC Mode
Running "H" Pattern And 1KHz Playing
VGA:640*480@60Hz

No	Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.18152	0.19	0.14	45.31	45.64	64.42	18.78	QP
2	0.36531	0.19	0.15	28.71	29.05	58.61	29.56	QP
3	0.54644	0.19	0.15	28.21	28.55	56.00	27.45	QP
4	1.331	0.22	0.14	27.53	27.89	56.00	28.11	QP
5	2.285	0.25	0.14	25.67	26.06	56.00	29.94	QP
6	9.809	0.44	0.17	32.33	32.94	60.00	27.06	QP

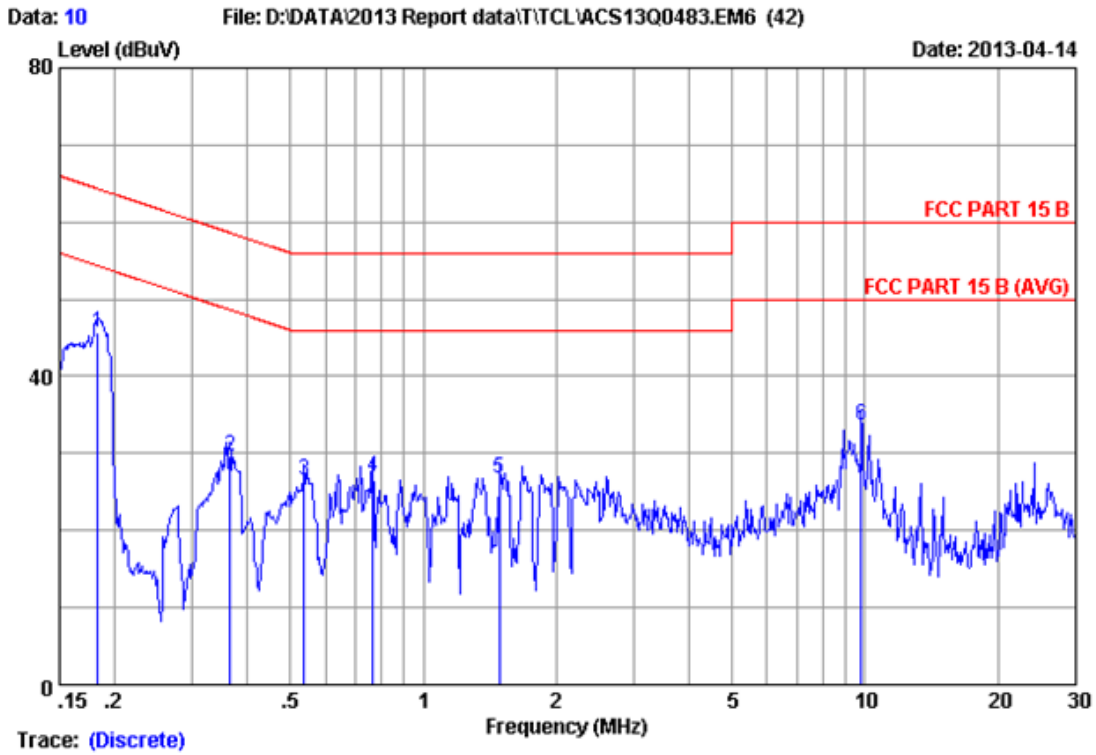
Remarks: 1.Emission Level=LISN Factor+Cable Loss+Reading.
2.If the average limit is met when useing a quasi-peak detector.
the EUT shall be deemed to meet both limits and measurement
with average detector is unnecessary.



Site no :1#conduction Data No :11
Dis./Ant. :** 2012 ESH2-Z5 NEUTRAL
Limit :FCC PART 15 B
Env./Ins. :24.4*C/61% Engineer :Nick_Huang
EUT :LCD TV M/N:LE48FHDF3310
Power Rating :AC 120V/60Hz
Test Mode :PC Mode
Running "H" Pattern And 1KHz Playing
VGA:640*480@60Hz

No	Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.15649	0.21	0.14	42.84	43.19	65.65	22.46	QP
2	0.18443	0.21	0.14	45.87	46.22	64.28	18.06	QP
3	0.61400	0.24	0.15	27.17	27.56	56.00	28.44	QP
4	1.331	0.26	0.14	28.67	29.07	56.00	26.93	QP
5	1.848	0.28	0.14	28.40	28.82	56.00	27.18	QP
6	9.809	0.44	0.17	33.17	33.78	60.00	26.22	QP

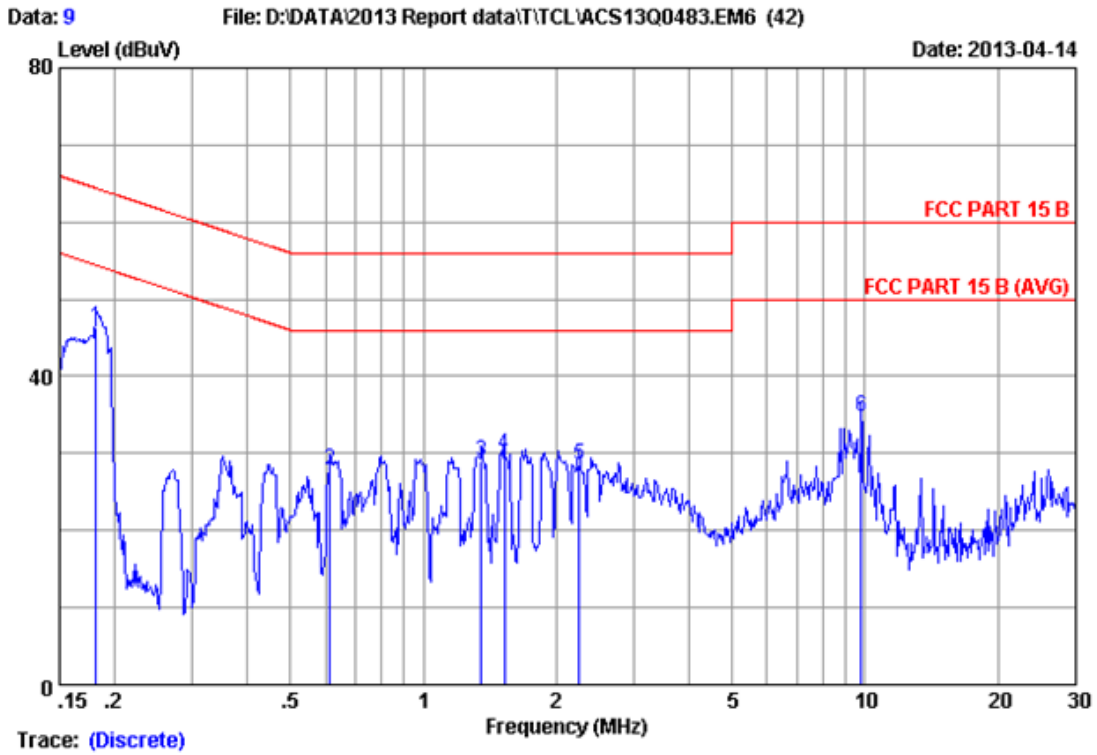
Remarks: 1.Emission Level=LISN Factor+Cable Loss+Reading.
2.If the average limit is met when useing a quasi-peak detector.
the EUT shall be deemed to meet both limits and measurement
with average detector is unnecessary.



Site no :1#conduction Data No :10
Dis./Ant. :** 2012 ESH2-Z5 LINE
Limit :FCC PART 15 B
Env./Ins. :24.4*C/61% Engineer :Nick_Huang
EUT :LCD TV M/N:LE48FHDF3310
Power Rating :AC 120V/60Hz
Test Mode :PC Mode
Running "H" Pattern And 1KHz Playing
VGA:1024*768@60Hz

No	Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.18346	0.19	0.14	45.44	45.77	64.33	18.56	QP
2	0.36531	0.19	0.15	29.19	29.53	58.61	29.08	QP
3	0.53782	0.19	0.15	26.24	26.58	56.00	29.42	QP
4	0.76702	0.20	0.15	26.55	26.90	56.00	29.10	QP
5	1.487	0.22	0.14	26.38	26.74	56.00	29.26	QP
6	9.809	0.44	0.17	33.11	33.72	60.00	26.28	QP

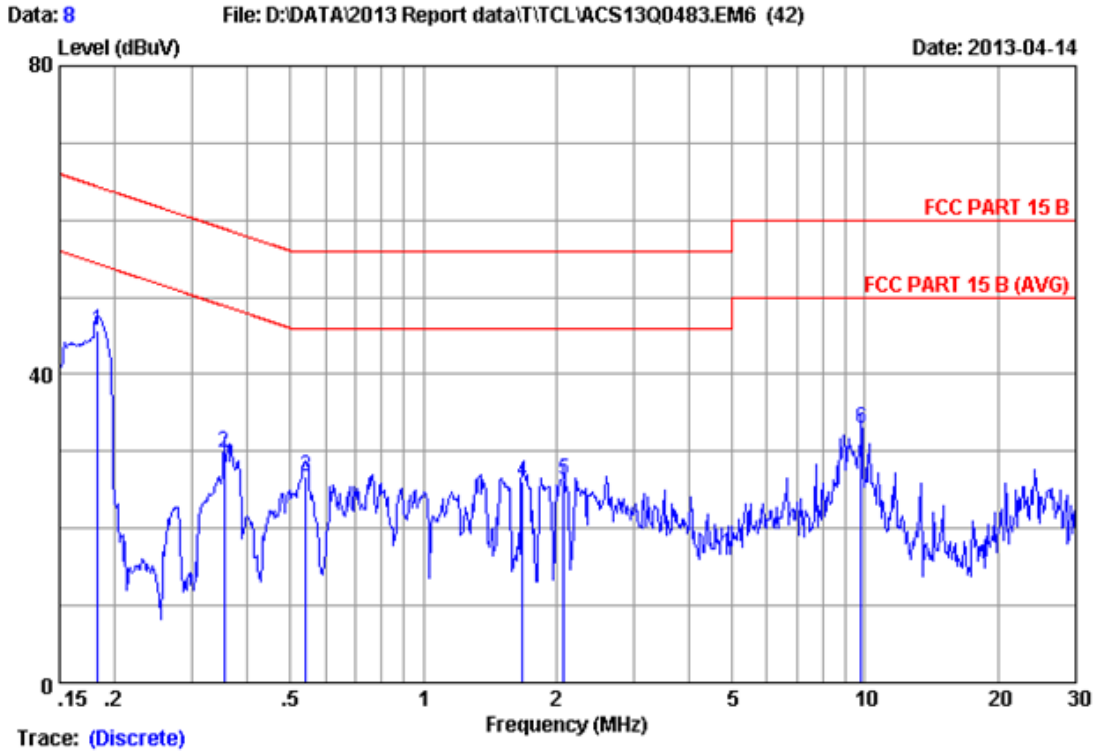
Remarks: 1.Emission Level=LISN Factor+Cable Loss+Reading.
2.If the average limit is met when useing a quasi-peak detector.
the EUT shall be deemed to meet both limits and measurement
with average detector is unnecessary.



Site no :1#conduction Data No :9
Dis./Ant. :** 2012 ESH2-Z5 NEUTRAL
Limit :FCC PART 15 B
Env./Ins. :24.4*C/61% Engineer :Nick_Huang
EUT :LCD TV M/N:LE48FHDF3310
Power Rating :AC 120V/60Hz
Test Mode :PC Mode
Running "H" Pattern And 1KHz Playing
VGA:1024*768@60Hz

No	Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.18152	0.21	0.14	46.02	46.37	64.42	18.05	QP
2	0.61400	0.24	0.15	27.56	27.95	56.00	28.05	QP
3	1.352	0.26	0.14	28.48	28.88	56.00	27.12	QP
4	1.527	0.26	0.14	29.45	29.85	56.00	26.15	QP
5	2.249	0.29	0.14	28.05	28.48	56.00	27.52	QP
6	9.809	0.44	0.17	34.09	34.70	60.00	25.30	QP

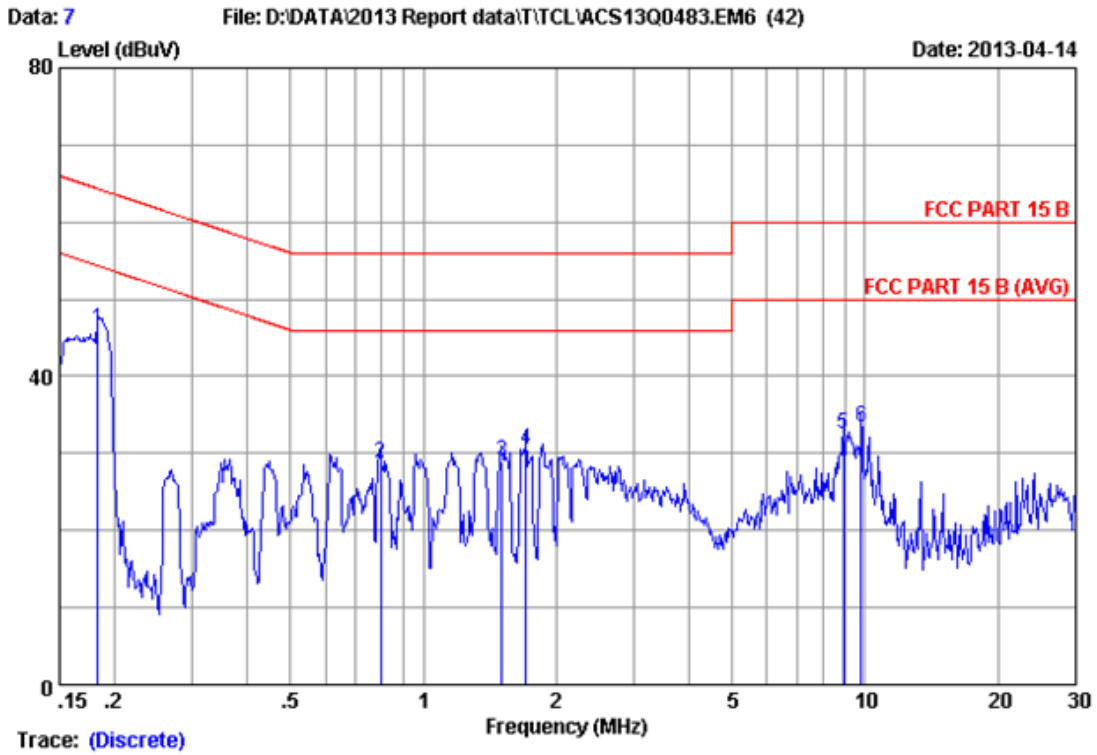
Remarks: 1.Emission Level=LISN Factor+Cable Loss+Reading.
2.If the average limit is met when useing a quasi-peak detector.
the EUT shall be deemed to meet both limits and measurement
with average detector is unnecessary.



Site no :1#conduction Data No :8
Dis./Ant. :** 2012 ESH2-Z5 LINE
Limit :FCC PART 15 B
Env./Ins. :24.4*C/61% Engineer :Nick_Huang
EUT :LCD TV M/N:LE48FHDF3310
Power Rating :AC 120V/60Hz
Test Mode :PC Mode
Running "H" Pattern And 1KHz Playing
VGA:1920*1080@60Hz

No	Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.18346	0.19	0.14	45.24	45.57	64.33	18.76	QP
2	0.35388	0.19	0.15	29.46	29.80	58.87	29.07	QP
3	0.54068	0.19	0.15	26.30	26.64	56.00	29.36	QP
4	1.680	0.23	0.14	25.63	26.00	56.00	30.00	QP
5	2.077	0.24	0.14	25.96	26.34	56.00	29.66	QP
6	9.809	0.44	0.17	32.45	33.06	60.00	26.94	QP

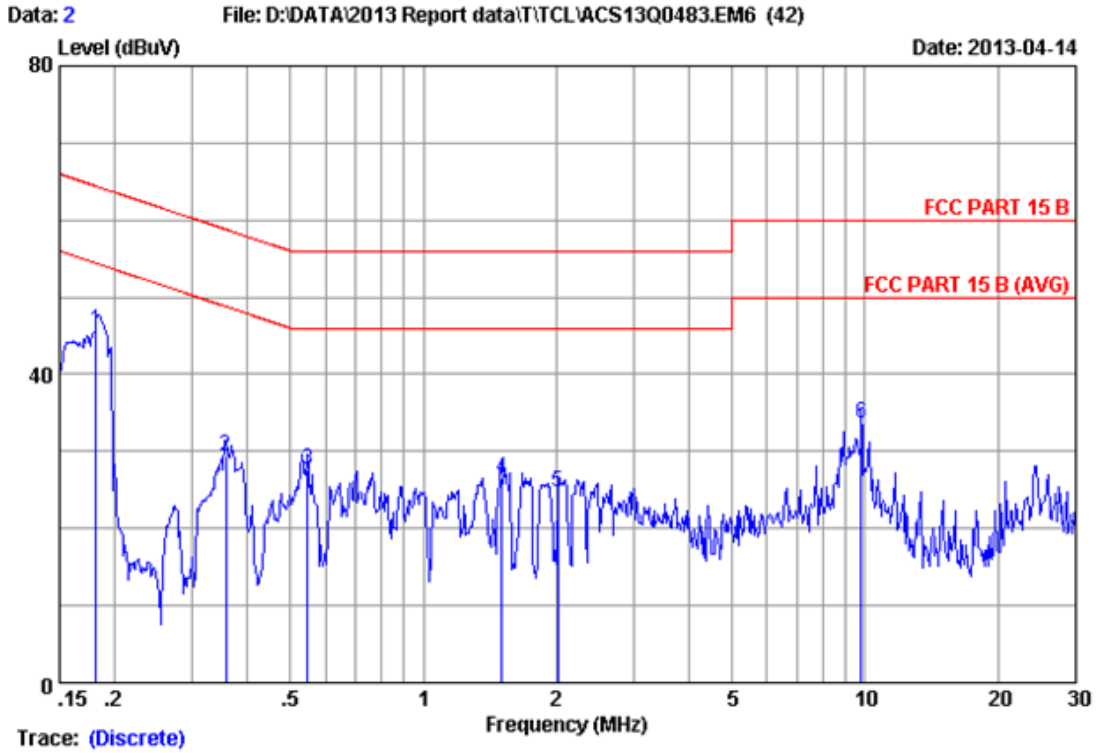
Remarks: 1.Emission Level=LISN Factor+Cable Loss+Reading.
2.If the average limit is met when useing a quasi-peak detector.
the EUT shall be deemed to meet both limits and measurement
with average detector is unnecessary.



Site no :1#conduction Data No :7
Dis./Ant. :** 2012 ESH2-Z5 NEUTRAL
Limit :FCC PART 15 B
Env./Ins. :24.4*C/61% Engineer :Nick_Huang
EUT :LCD TV M/N:LE48FHDF3310
Power Rating :AC 120V/60Hz
Test Mode :PC Mode
Running "H" Pattern And 1KHz Playing
VGA:1920*1080@60Hz

No	Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.18346	0.21	0.14	45.70	46.05	64.33	18.28	QP
2	0.80023	0.24	0.15	28.26	28.65	56.00	27.35	QP
3	1.503	0.26	0.14	28.47	28.87	56.00	27.13	QP
4	1.707	0.27	0.14	30.07	30.48	56.00	25.52	QP
5	8.916	0.43	0.16	31.87	32.46	60.00	27.54	QP
6	9.809	0.44	0.17	32.83	33.44	60.00	26.56	QP

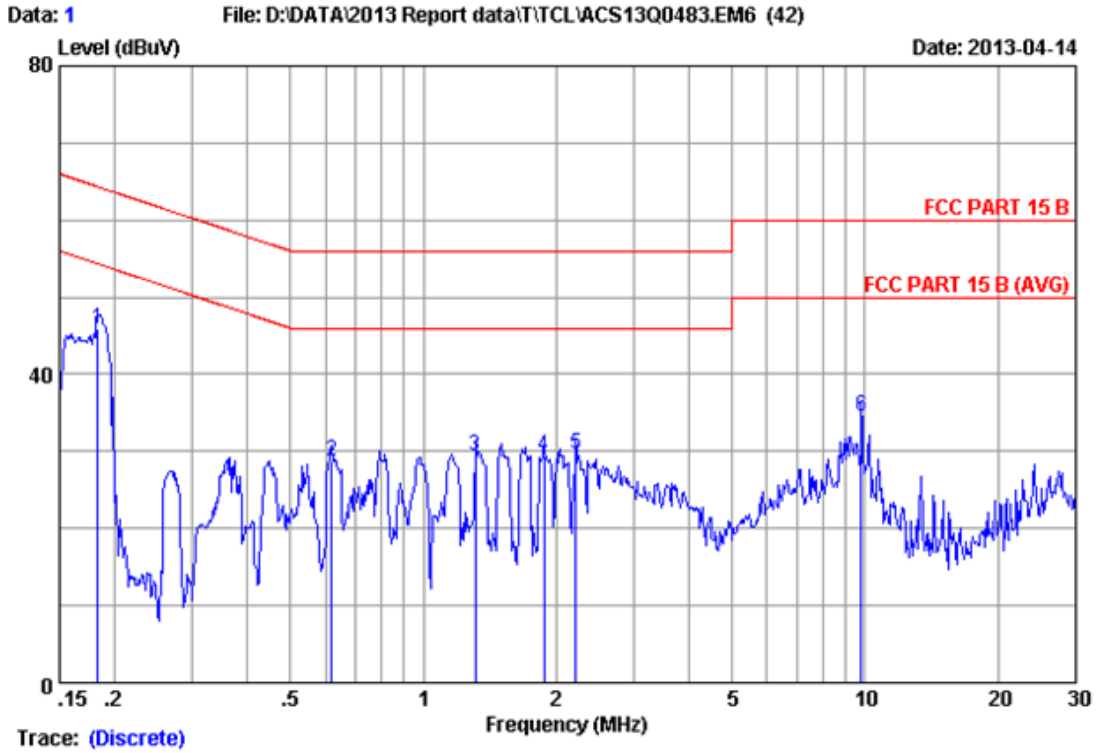
Remarks: 1.Emission Level=LISN Factor+Cable Loss+Reading.
2.If the average limit is met when useing a quasi-peak detector.
the EUT shall be deemed to meet both limits and measurement
with average detector is unnecessary.



Site no :1#conduction Data No :2
Dis./Ant. :** 2012 ESH2-Z5 LINE
Limit :FCC PART 15 B
Env./Ins. :24.4*C/61% Engineer :Nick_Huang
EUT :LCD TV M/N:LE48FHDF3310
Power Rating :AC 120V/60Hz
Test Mode :PC Mode
Running "H" Pattern And 1KHz Playing
HDMI 1:1920*1080@60Hz

No	Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.18152	0.19	0.14	45.44	45.77	64.42	18.65	QP
2	0.35765	0.19	0.15	29.18	29.52	58.78	29.26	QP
3	0.54644	0.19	0.15	27.32	27.66	56.00	28.34	QP
4	1.503	0.23	0.14	26.08	26.45	56.00	29.55	QP
5	2.012	0.24	0.14	24.46	24.84	56.00	31.16	QP
6	9.809	0.44	0.17	33.09	33.70	60.00	26.30	QP

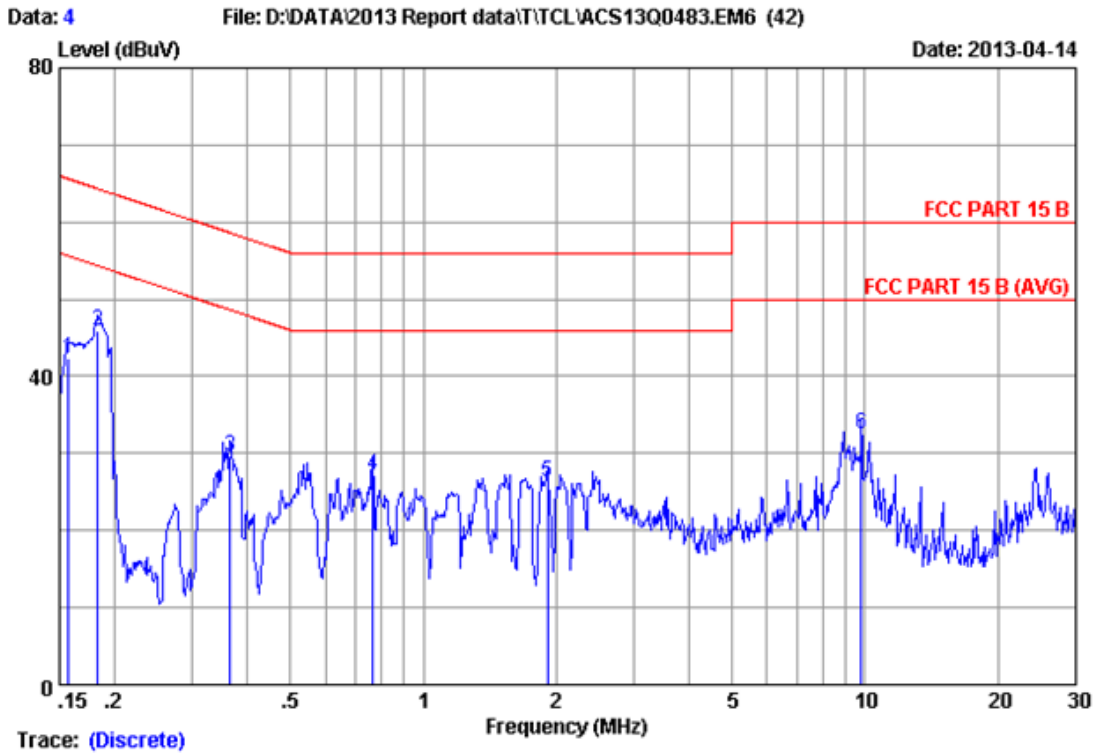
Remarks: 1.Emission Level=LISN Factor+Cable Loss+Reading.
2.If the average limit is met when useing a quasi-peak detector.
the EUT shall be deemed to meet both limits and measurement
with average detector is unnecessary.




```
Site no       :1#conduction                    Data No    :1
Dis./Ant.     :**   2012 ESH2-Z5 NEUTRAL
Limit         :FCC PART 15 B
Env./Ins.     :24.4*C/61%                      Engineer   :Nick_Huang
EUT           :LCD TV M/N:LE48FHDF3310
Power Rating  :AC 120V/60Hz
Test Mode     :PC Mode
               Running "H" Pattern And 1KHz Playing
               HDMI 1:1920*1080@60Hz
```

No	Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.18346	0.21	0.14	45.51	45.86	64.33	18.47	QP
2	0.62054	0.24	0.15	28.28	28.67	56.00	27.33	QP
3	1.310	0.26	0.14	28.91	29.31	56.00	26.69	QP
4	1.878	0.28	0.14	29.02	29.44	56.00	26.56	QP
5	2.213	0.29	0.14	29.17	29.60	56.00	26.40	QP
6	9.809	0.44	0.17	33.97	34.58	60.00	25.42	QP

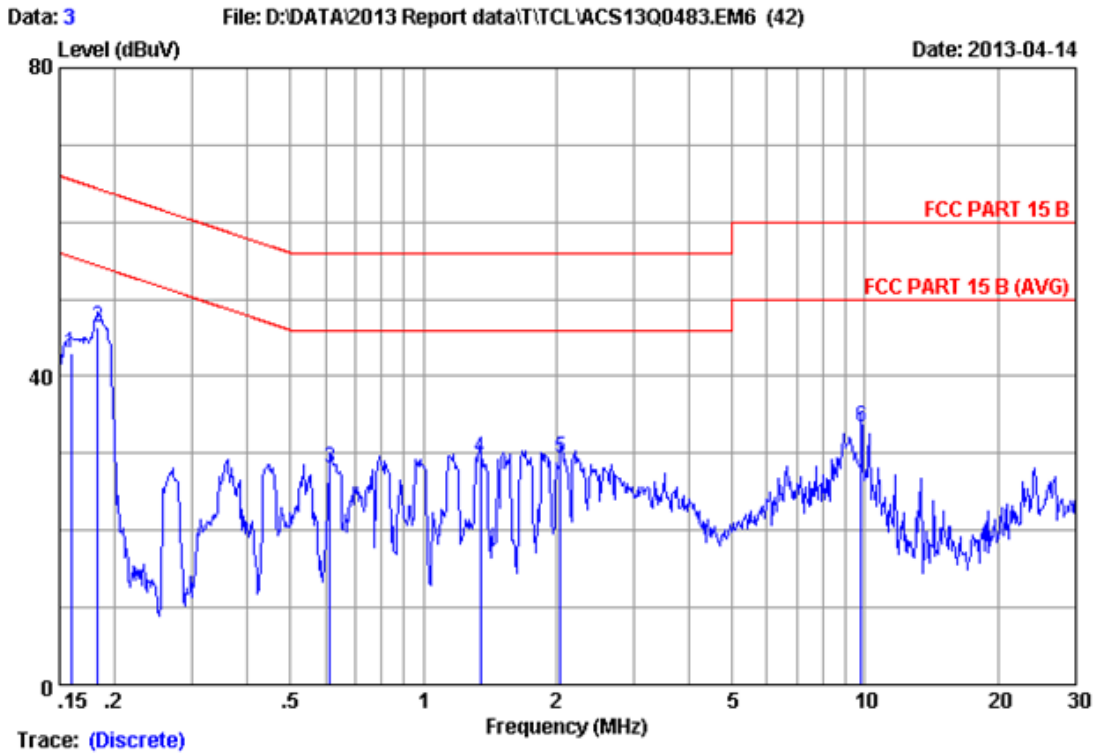
```
Remarks: 1.Emission Level=LISN Factor+Cable Loss+Reading.
         2.If the average limit is met when useing a quasi-peak detector.
           the EUT shall be deemed to meet both limits and measurement
           with average detector is unnecessary.
```



Site no :1#conduction Data No :4
Dis./Ant. :** 2012 ESH2-Z5 LINE
Limit :FCC PART 15 B
Env./Ins. :24.4*C/61% Engineer :Nick_Huang
EUT :LCD TV M/N:LE48FHDF3310
Power Rating :AC 120V/60Hz
Test Mode :PC Mode
Running "H" Pattern And 1KHz Playing
HDMI 2:1920*1080@60Hz

No	Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.15733	0.19	0.14	42.09	42.42	65.60	23.18	QP
2	0.18346	0.19	0.14	45.61	45.94	64.33	18.39	QP
3	0.36531	0.19	0.15	29.37	29.71	58.61	28.90	QP
4	0.76702	0.20	0.15	26.81	27.16	56.00	28.84	QP
5	1.908	0.24	0.14	25.86	26.24	56.00	29.76	QP
6	9.809	0.44	0.17	31.82	32.43	60.00	27.57	QP

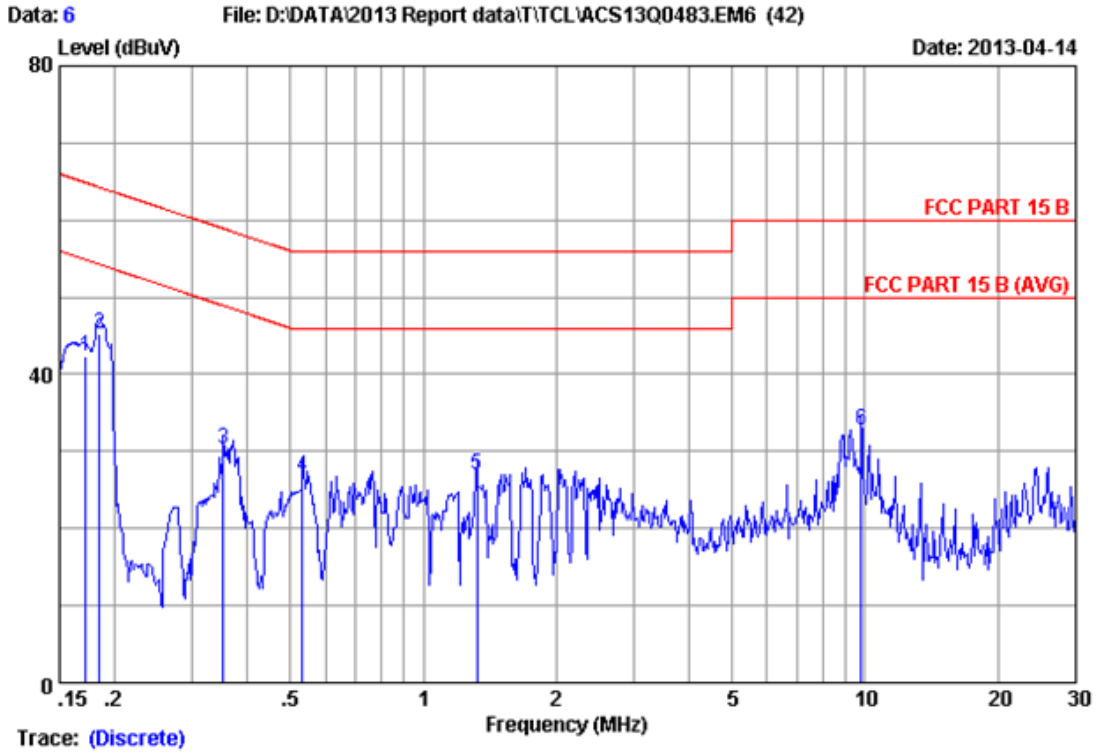
Remarks: 1.Emission Level=LISN Factor+Cable Loss+Reading.
2.If the average limit is met when useing a quasi-peak detector.
the EUT shall be deemed to meet both limits and measurement
with average detector is unnecessary.



Site no :1#conduction Data No :3
Dis./Ant. :** 2012 ESH2-Z5 NEUTRAL
Limit :FCC PART 15 B
Env./Ins. :24.4*C/61% Engineer :Nick_Huang
EUT :LCD TV M/N:LE48FHDF3310
Power Rating :AC 120V/60Hz
Test Mode :PC Mode
Running "H" Pattern And 1KHz Playing
HDMI 2:1920*1080@60Hz

No	Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.15900	0.21	0.14	42.75	43.10	65.52	22.42	QP
2	0.18346	0.21	0.14	45.98	46.33	64.33	18.00	QP
3	0.61400	0.24	0.15	27.68	28.07	56.00	27.93	QP
4	1.345	0.26	0.14	29.04	29.44	56.00	26.56	QP
5	2.044	0.28	0.14	29.00	29.42	56.00	26.58	QP
6	9.809	0.44	0.17	32.91	33.52	60.00	26.48	QP

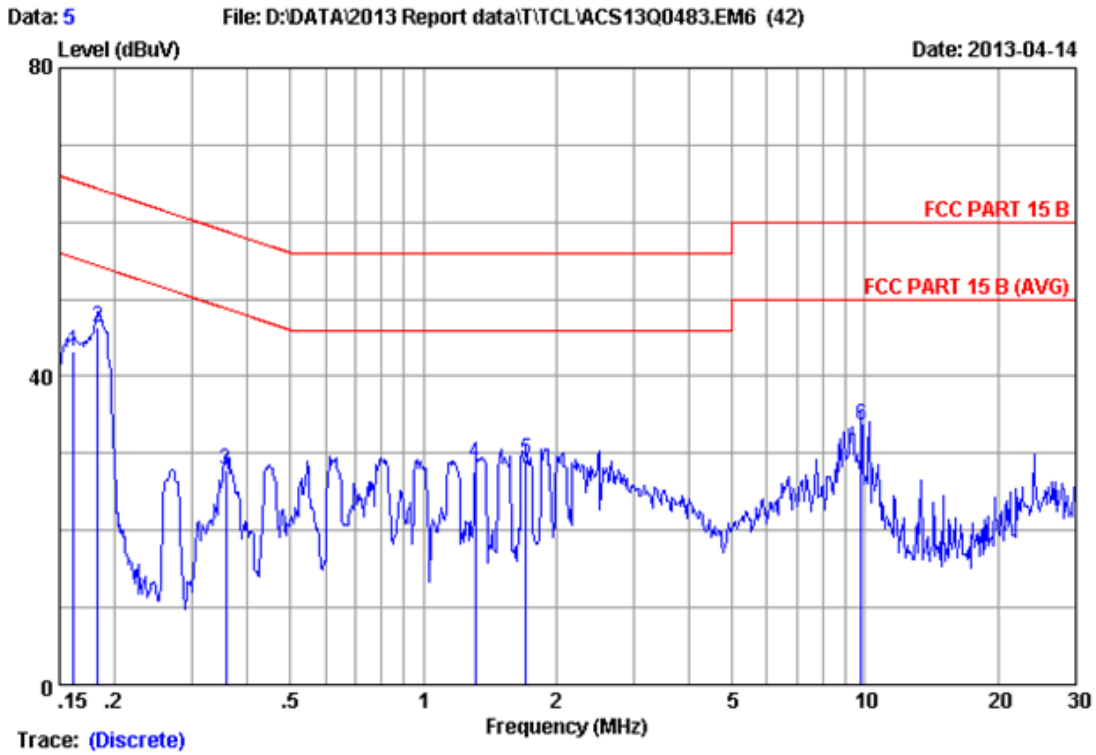
Remarks: 1.Emission Level=LISN Factor+Cable Loss+Reading.
2.If the average limit is met when useing a quasi-peak detector.
the EUT shall be deemed to meet both limits and measurement
with average detector is unnecessary.



Site no :1#conduction Data No :6
Dis./Ant. :** 2012 ESH2-Z5 LINE
Limit :FCC PART 15 B
Env./Ins. :24.4*C/61% Engineer :Nick_Huang
EUT :LCD TV M/N:LE48FHDF3310
Power Rating :AC 120V/60Hz
Test Mode :PC Mode
Running "H" Pattern And 1KHz Playing
HDMI 3:1920*1080@60Hz

No	Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.17215	0.19	0.14	42.07	42.40	64.86	22.46	QP
2	0.18443	0.19	0.14	44.97	45.30	64.28	18.98	QP
3	0.35201	0.19	0.15	29.86	30.20	58.91	28.71	QP
4	0.53215	0.19	0.15	26.36	26.70	56.00	29.30	QP
5	1.324	0.22	0.14	26.50	26.86	56.00	29.14	QP
6	9.809	0.44	0.17	32.04	32.65	60.00	27.35	QP

Remarks: 1.Emission Level=LISN Factor+Cable Loss+Reading.
2.If the average limit is met when useing a quasi-peak detector.
the EUT shall be deemed to meet both limits and measurement
with average detector is unnecessary.



Site no :1#conduction Data No :5
Dis./Ant. :** 2012 ESH2-Z5 NEUTRAL
Limit :FCC PART 15 B
Env./Ins. :24.4*C/61% Engineer :Nick_Huang
EUT :LCD TV M/N:LE48FHDF3310
Power Rating :AC 120V/60Hz
Test Mode :PC Mode
Running "H" Pattern And 1KHz Playing
HDMI 3:1920*1080@60Hz

No	Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.16155	0.21	0.14	42.81	43.16	65.38	22.22	QP
2	0.18346	0.21	0.14	46.02	46.37	64.33	17.96	QP
3	0.35765	0.22	0.15	27.41	27.78	58.78	31.00	QP
4	1.310	0.26	0.14	28.28	28.68	56.00	27.32	QP
5	1.707	0.27	0.14	28.82	29.23	56.00	26.77	QP
6	9.809	0.44	0.17	33.05	33.66	60.00	26.34	QP

Remarks: 1.Emission Level=LISN Factor+Cable Loss+Reading.
2.If the average limit is met when useing a quasi-peak detector.
the EUT shall be deemed to meet both limits and measurement
with average detector is unnecessary.

4. RADIATED EMISSION TEST

4.1.Test Equipment

4.1.1. For frequency range 30MHz~1000MHz

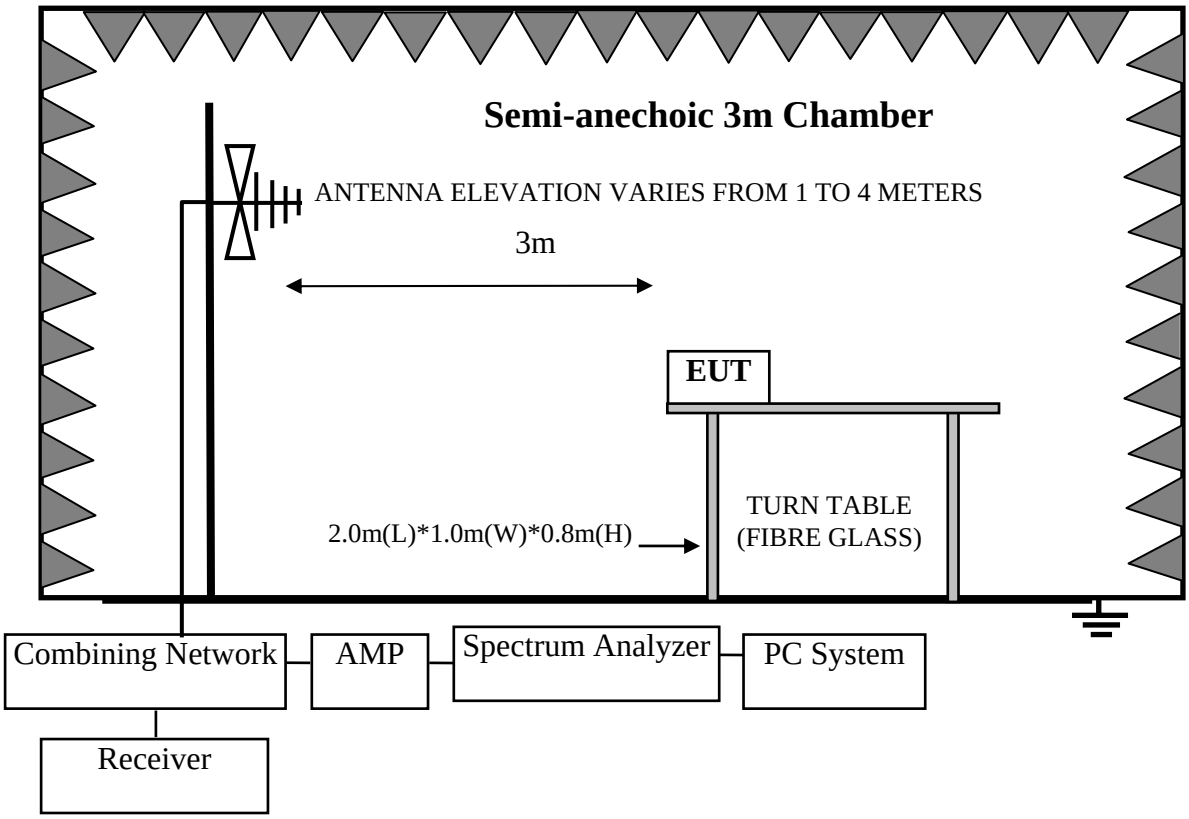
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1	3#Chamber	AUDIX	N/A	N/A	Nov.24,12	1 Year
2	EMI Spectrum	Agilent	E4407B	MY41440292	May.08, 12	1 Year
3	Test Receiver	Rohde & Schwarz	ESVS10	834468/011	May.08, 12	1 Year
4	Amplifier	HP	8447D	2648A04738	May.08, 12	1 Year
5	Trilog-Broadband Antenna	SCHWARZBECK	VULB 9168	9168-429	Nov.27, 12	1.0 Year
6	RF Cable	MIYAZAKI	CFD400-NL	3# Chamber No.1	May.08, 12	1 Year
7	Coaxial Switch	Anritsu	MP59B	M74389	May.08, 12	1 Year

4.1.2.For frequency range 1GHz~2GHz

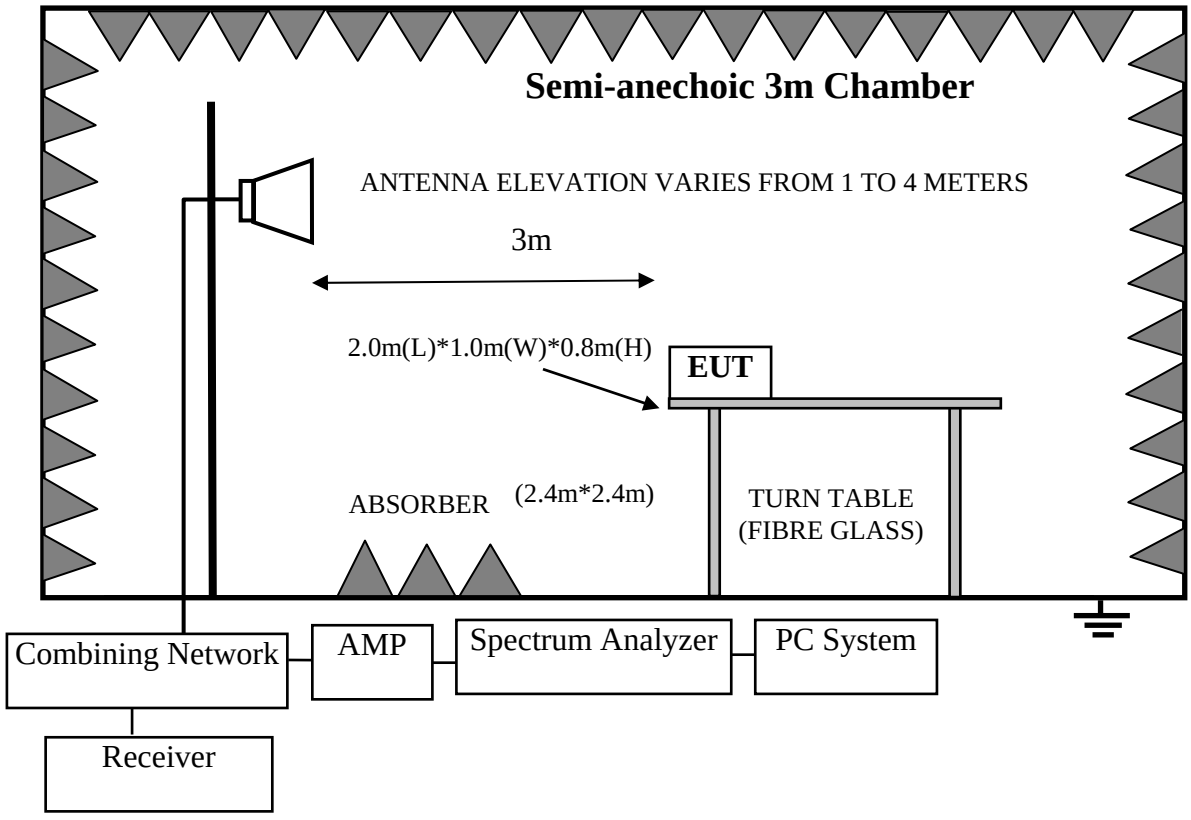
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1	Spectrum Analyzer	Agilent	E4407B	MY41440292	May.08, 12	1 Year
2	Horn Antenna	EMCO	3115	9510-4580	June.05, 12	1 Year
3	Amplifier	Agilent	8449B	3008A00863	May.08, 12	1 Year
4	RF Cable	Hubersuhner	SUCOFLEX106	77980/6	May.08, 12	1 Year
5	RF Cable	Hubersuhner	SUCOFLEX106	77977/6	May.08, 12	1 Year

4.2.Block Diagram of Test Setup

4.2.1.In Anechoic Chamber Test Setup Diagram for 30MHz~1000MHz



4.2.2.Frequency range above 1GHz



4.3. Radiated Emission Limit

Frequency MHz	Distance (Meters)	Field Strengths Limits dB(μV)/m
30 ~ 88	3	40.0
88 ~ 216	3	43.5
216 ~ 960	3	46.0
960 ~ 1000	3	54.0
Above 1000	3	74(Peak)54(Average)

Remark**:** (1) Emission level = Antenna Factor + Cable Loss + Reading
Emission level = Antenna Factor -Amp Factor +Cable Loss + Reading (above 1000MHz)

(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.

4.4. EUT Configuration on Test

The configurations of EUT are listed in Section 3.4

4.5. Operating Condition of EUT

Same as Conducted Emission test that is listed in Section 3.5. except the test set up replaced by Section 4.2.

4.6. Test Procedure

The EUT was placed on a non-metallic table, 80 cm above the ground plane inside a semi-anechoic chamber. An antenna was located 3m from the EUT on an adjustable mast. A pre-scan was first performed in order to find prominent radiated emissions. For final emissions measurements at each frequency of interest, the EUT were rotated and the antenna height was varied between 1m and 4m in order to maximize the emission. Measurements in both horizontal and vertical polarities were made and the data was recorded. In order to find the maximum emission, the relative positions of equipments and all of the interface cables were changed according to ANSI C63.4: 2009 on Radiated Emission test.

The bandwidth of the EMI test receiver (R&S ESVS10) is set at 120kHz for frequency range from 30MHz to 1000 MHz.

The bandwidth of the Spectrum's RBW is set at 1MHz and VBW is set at 3MHz for peak emissions measurement above 1GHz and 1MHz RBW, 10Hz VBW for average emissions measure above 1GHz.

4.7. Radiated Disturbance Test Results

PASS. (All emissions not reported below are too low against the prescribed limits.)

EUT: LCD TV Model No. : LE48FHDF3310

For frequency range 30MHz~1000MHz

The EUT with the following test modes were tested and selected to read Q.P values, all the test results are listed in next pages.

Test Date: Apr.02, 2013 Temperature: 24℃ Humidity: 56%

The details of test modes are as follows：

No.	Test Mode	Input Port	Resolution & Frequency	Reference Test Data No.	
				Horizontal	Vertical
1.	PC Mode	VGA	640*480@60Hz	#42	#41
2.			1024*768@60Hz	#39	#40
3. ※			**1920*1080@60Hz**	**#37**	**#38**
4.		HDMI 1	1920*1080@60Hz	#32	#31
5.		HDMI 2	1920*1080@60Hz	#33	#34
6.		HDMI 3	1920*1080@60Hz	#36	#35

(※ Worst test mode)

For frequency range 1GHz~2GHz

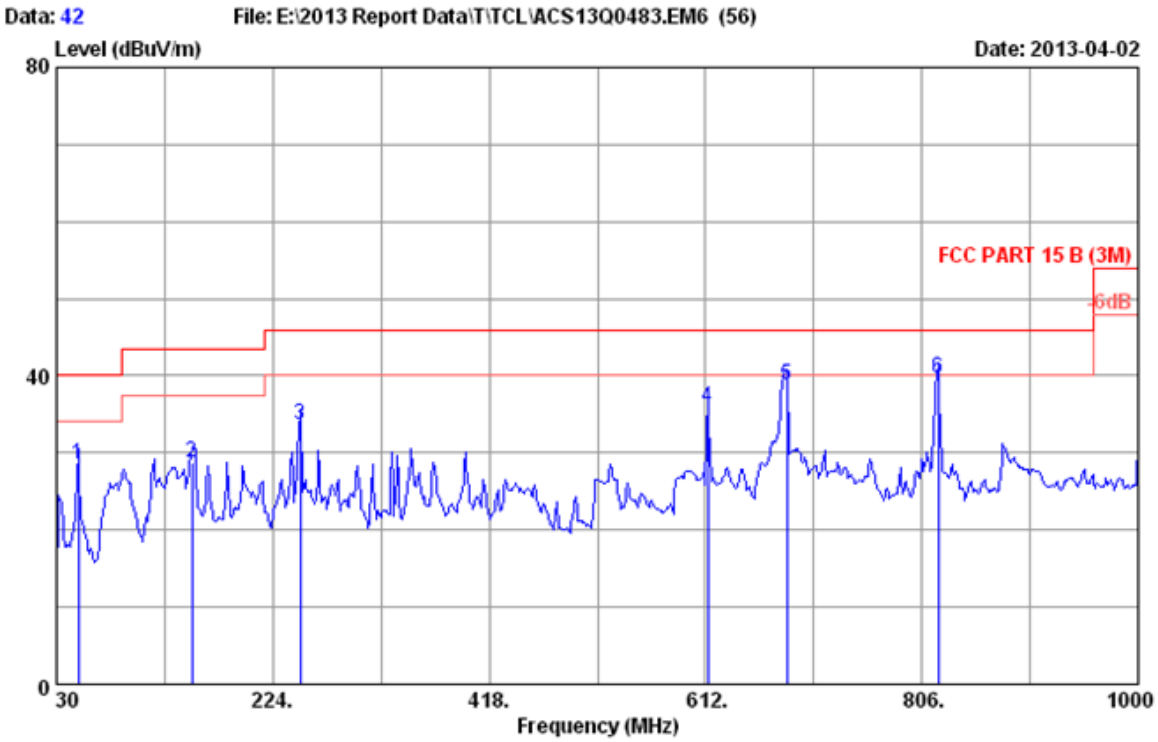
The EUT with below test mode were measured within Anechoic Chamber and the test results listed in next pages

Note: For all the emissions above 1GHz, the peak measured level comply with peak limit, so the average level were deemed to comply with average limit.

Test Date:Apr.03, 2013 Temperature: 24℃ Humidity: 56%

NO.	Test Mode	Resolution & Frequency	Reference Test Data No.	
			Horizontal	Vertical
1.	VGA	1920*1080@60Hz	#43	#44
2.	HDMI 1	1920*1080@60Hz	#46	#45
3.	HDMI 2	1920*1080@60Hz	#47	#48
4.	HDMI 3	1920*1080@60Hz	#50	#49

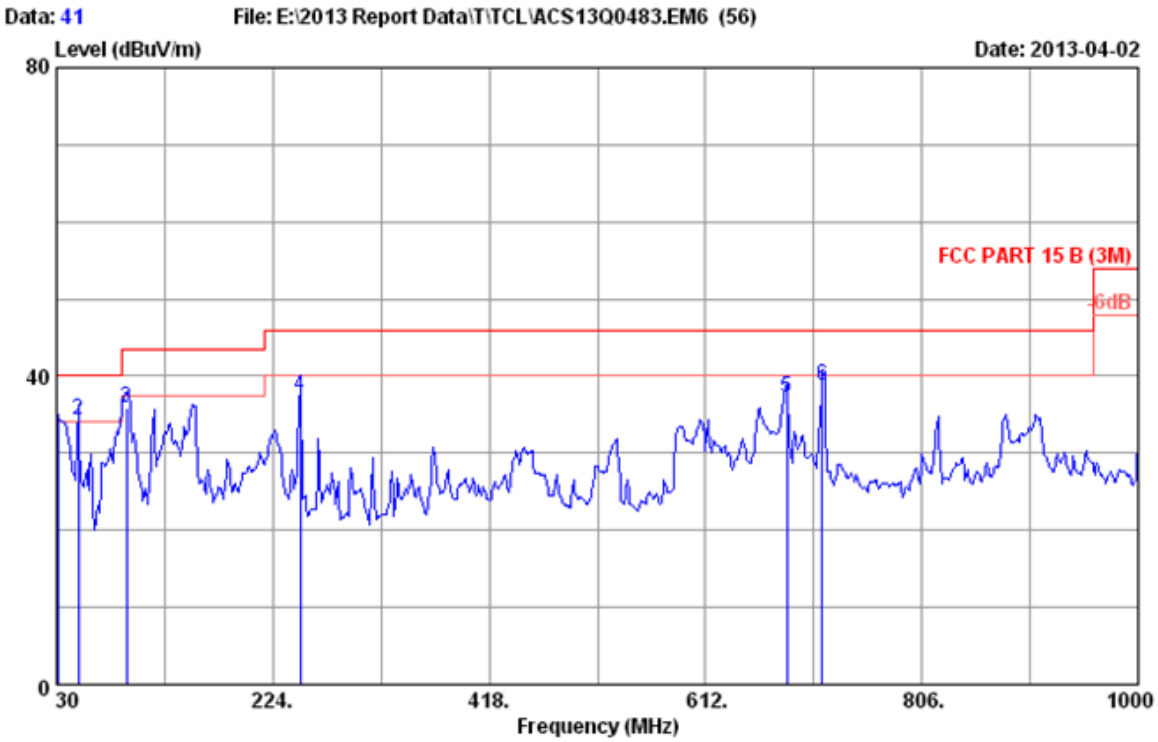
30MHz~1000MHz




```
Site no.      : 3m Chamber                  Data no.   : 42
Dis. / Ant.   : 3m   9168-429               Ant. pol.  : HORIZONTAL
Limit         : FCC PART 15 B (3M)
Env. / Ins.   : 24*C/65%                    Engineer   : Even_Deng
EUT           : LCD TV     M/N:LE48FHDF3310
Power rating  : AC 120V/60Hz
Test Mode     : Running "H" Pattern And 1KHz Playing
                VGA:640*480@60Hz
```

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	49.400	13.55	0.63	14.45	28.63	40.00	11.37	QP
2	151.250	14.16	0.96	13.60	28.72	43.50	14.78	QP
3	248.250	11.55	1.16	21.04	33.75	46.00	12.25	QP
4	613.940	18.59	2.15	15.22	35.96	46.00	10.04	QP
5	684.750	19.49	2.38	16.99	38.86	46.00	7.14	QP
6	820.550	20.84	2.72	16.15	39.71	46.00	6.29	QP

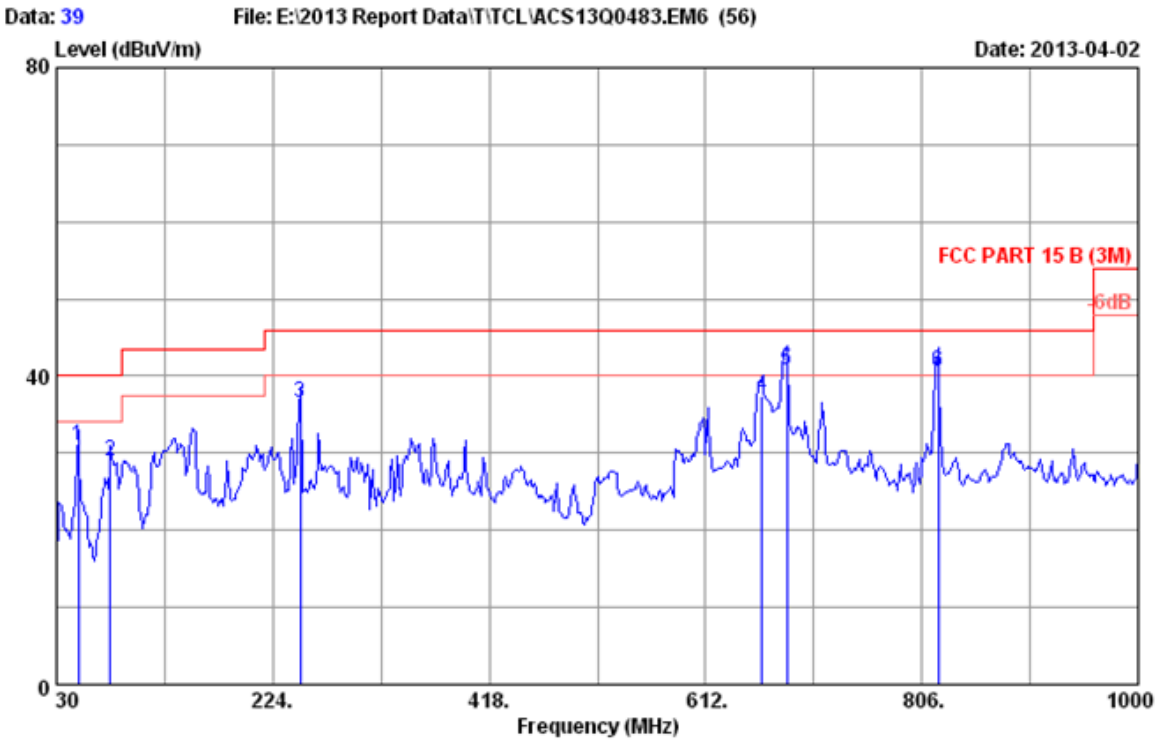
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 41
Dis. / Ant. : 3m 9168-429 Ant. pol. : VERTICAL
Limit : FCC PART 15 B (3M)
Env. / Ins. : 24*C/65% Engineer : Even_Deng
EUT : LCD TV M/N:LE48FHDF3310
Power rating : AC 120V/60Hz
Test Mode : Running "H" Pattern And 1KHz Playing
VGA:640*480@60Hz

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	31.940	13.29	0.45	18.63	32.37	40.00	7.63	QP
2	49.400	13.55	0.63	20.12	34.30	40.00	5.70	QP
3	93.050	9.66	0.82	25.45	35.93	43.50	7.57	QP
4	248.250	11.55	1.16	24.65	37.36	46.00	8.64	QP
5	684.750	19.49	2.38	15.42	37.29	46.00	8.71	QP
6	716.760	19.86	2.46	16.37	38.69	46.00	7.31	QP

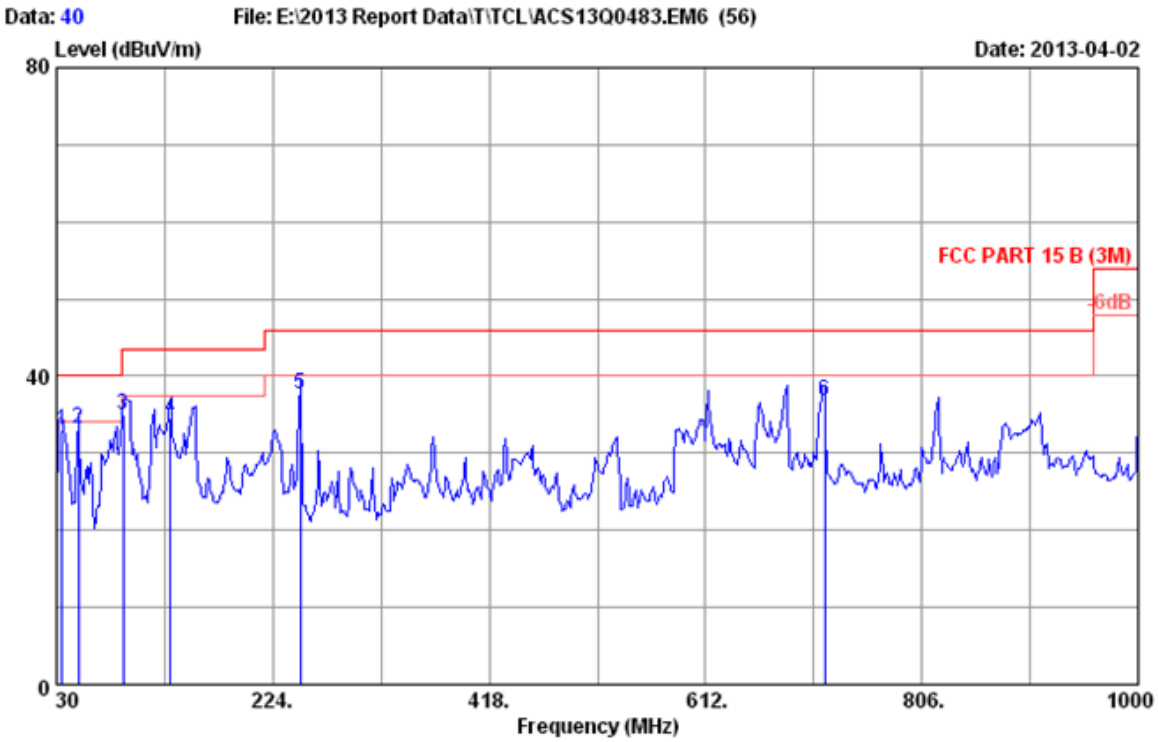
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 39
Dis. / Ant. : 3m 9168-429 Ant. pol. : HORIZONTAL
Limit : FCC PART 15 B (3M)
Env. / Ins. : 24*C/65% Engineer : Even_Deng
EUT : LCD TV M/N:LE48FHDF3310
Power rating : AC 120V/60Hz
Test Mode : Running "H" Pattern And 1KHz Playing
VGA:1024*768@60Hz

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	49.400	13.55	0.63	16.74	30.92	40.00	9.08	QP
2	78.500	9.52	0.76	18.78	29.06	40.00	10.94	QP
3	248.250	11.55	1.16	23.94	36.65	46.00	9.35	QP
4	662.440	19.25	2.30	15.87	37.42	46.00	8.58	QP
5	684.750	19.49	2.38	19.01	40.88	46.00	5.12	QP
6	820.550	20.84	2.72	17.08	40.64	46.00	5.36	QP

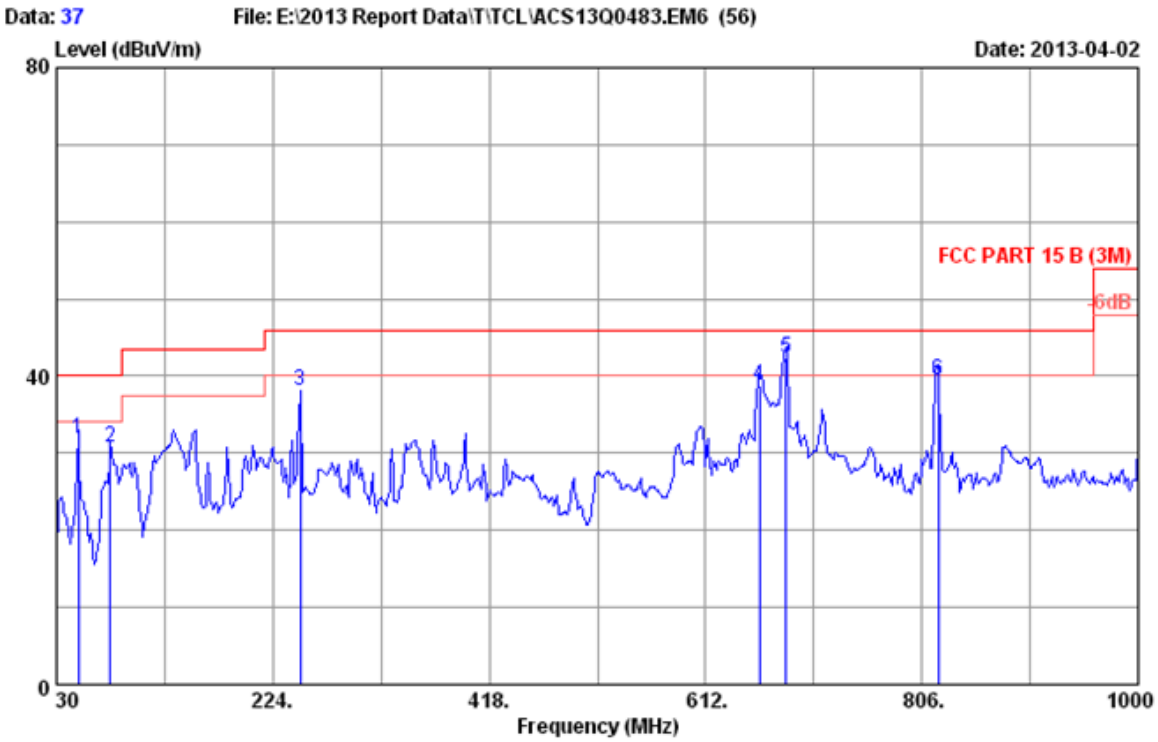
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 40
Dis. / Ant. : 3m 9168-429 Ant. pol. : VERTICAL
Limit : FCC PART 15 B (3M)
Env. / Ins. : 24*C/65% Engineer : Even_Deng
EUT : LCD TV M/N:LE48FHDF3310
Power rating : AC 120V/60Hz
Test Mode : Running "H" Pattern And 1KHz Playing
VGA:1024*768@60Hz

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	34.850	13.38	0.51	19.19	33.08	40.00	6.92	QP
2	49.400	13.55	0.63	19.05	33.23	40.00	6.77	QP
3	90.140	9.45	0.79	24.75	34.99	43.50	8.51	QP
4	131.850	12.92	0.91	20.68	34.51	43.50	8.99	QP
5	248.250	11.55	1.16	24.86	37.57	46.00	8.43	QP
6	718.700	19.89	2.46	14.42	36.77	46.00	9.23	QP

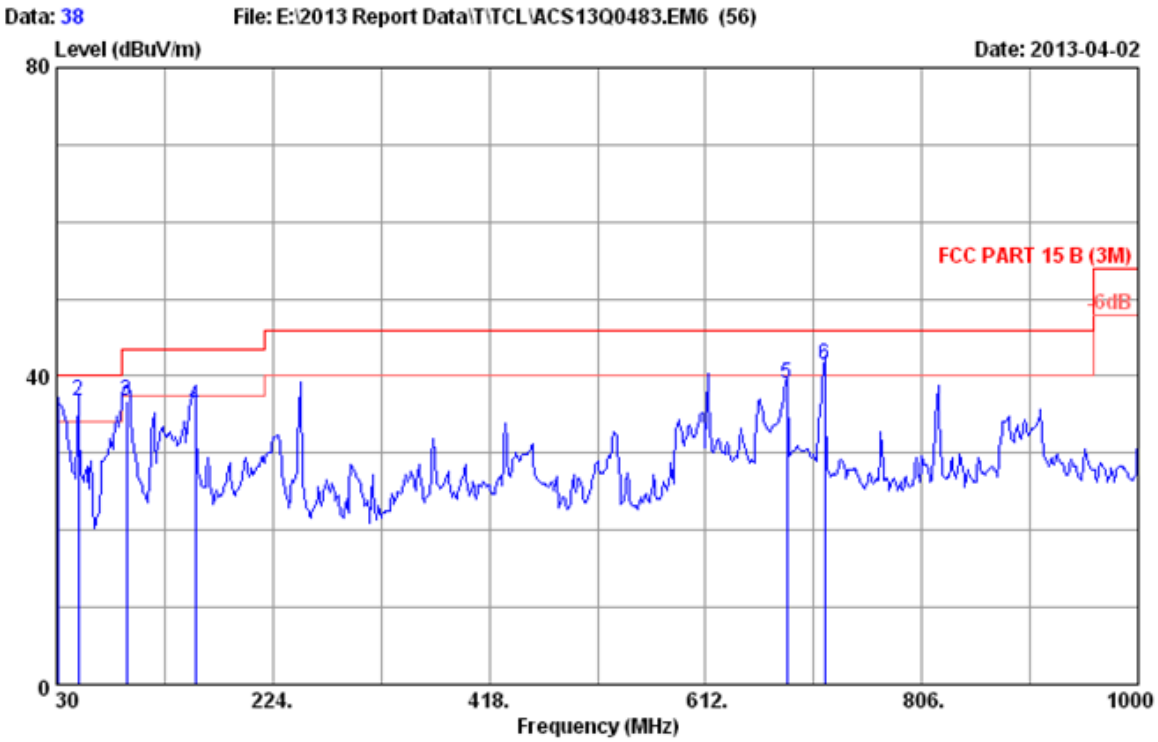
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber
Data no. : 37
Dis. / Ant. : 3m 9168-429
Ant. pol. : HORIZONTAL
Limit : FCC PART 15 B (3M)
Env. / Ins. : 24*C/65%
Engineer : Even_Deng
EUT : LCD TV M/N:LE48FHDF3310
Power rating : AC 120V/60Hz
Test Mode : Running "H" Pattern And 1KHz Playing
VGA:1920*1080@60Hz

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	49.400	13.55	0.63	17.76	31.94	40.00	8.06	QP
2	78.500	9.52	0.76	20.41	30.69	40.00	9.31	QP
3	248.250	11.55	1.16	25.33	38.04	46.00	7.96	QP
4	660.500	19.23	2.30	17.18	38.71	46.00	7.29	QP
5	684.370	19.49	2.36	20.50	42.35	46.00	3.65	QP
6	820.550	20.84	2.72	15.92	39.48	46.00	6.52	QP

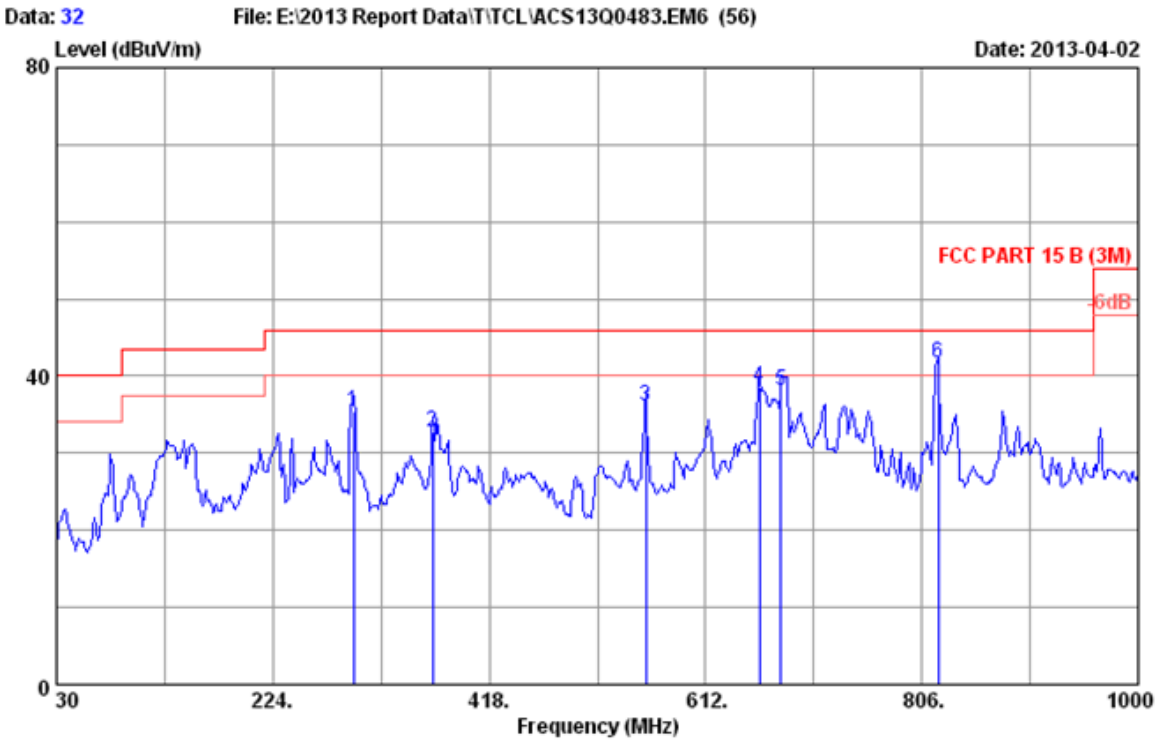
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 38
Dis. / Ant. : 3m 9168-429 Ant. pol. : VERTICAL
Limit : FCC PART 15 B (3M)
Env. / Ins. : 24*C/65% Engineer : Even_Deng
EUT : LCD TV M/N:LE48FHDF3310
Power rating : AC 120V/60Hz
Test Mode : Running "H" Pattern And 1KHz Playing
VGA:1920*1080@60Hz

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	31.940	13.29	0.45	20.85	34.59	40.00	5.41	QP
2	49.400	13.55	0.63	22.48	36.66	40.00	3.34	QP
3	93.050	9.66	0.82	26.31	36.79	43.50	6.71	QP
4	154.160	14.15	0.97	20.88	36.00	43.50	7.50	QP
5	684.750	19.49	2.38	17.11	38.98	46.00	7.02	QP
6	718.700	19.89	2.46	19.12	41.47	46.00	4.53	QP

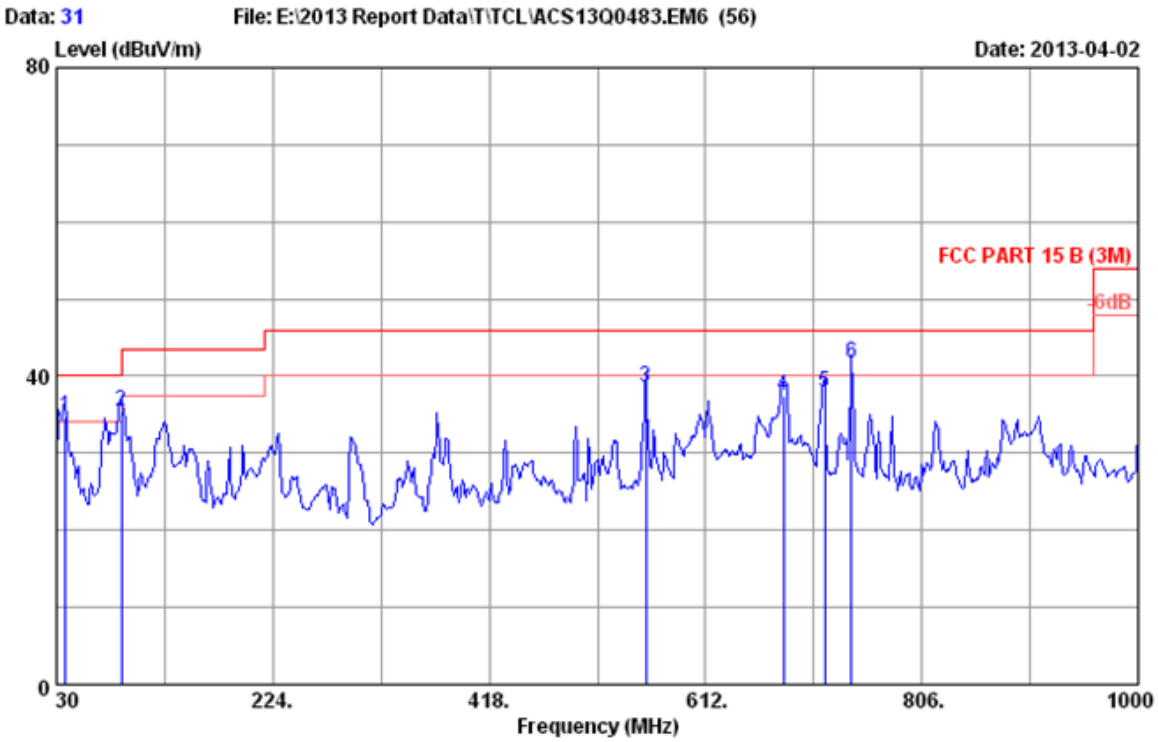
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 32
Dis. / Ant. : 3m 9168-429 Ant. pol. : HORIZONTAL
Limit : FCC PART 15 B (3M)
Env. / Ins. : 24*C/65% Engineer : Even_Deng
EUT : LCD TV M/N:LE48FHDF3310
Power rating : AC 120V/60Hz
Test Mode : Running "H" Pattern And 1KHz Playing
HDMI 1:1920*1080@60Hz

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	296.750	12.73	1.27	21.36	35.36	46.00	10.64	QP
2	367.560	14.17	1.46	17.22	32.85	46.00	13.15	QP
3	558.650	17.54	1.99	16.47	36.00	46.00	10.00	QP
4	660.500	19.23	2.30	16.91	38.44	46.00	7.56	QP
5	679.900	19.45	2.36	16.20	38.01	46.00	7.99	QP
6	820.550	20.84	2.72	18.02	41.58	46.00	4.42	QP

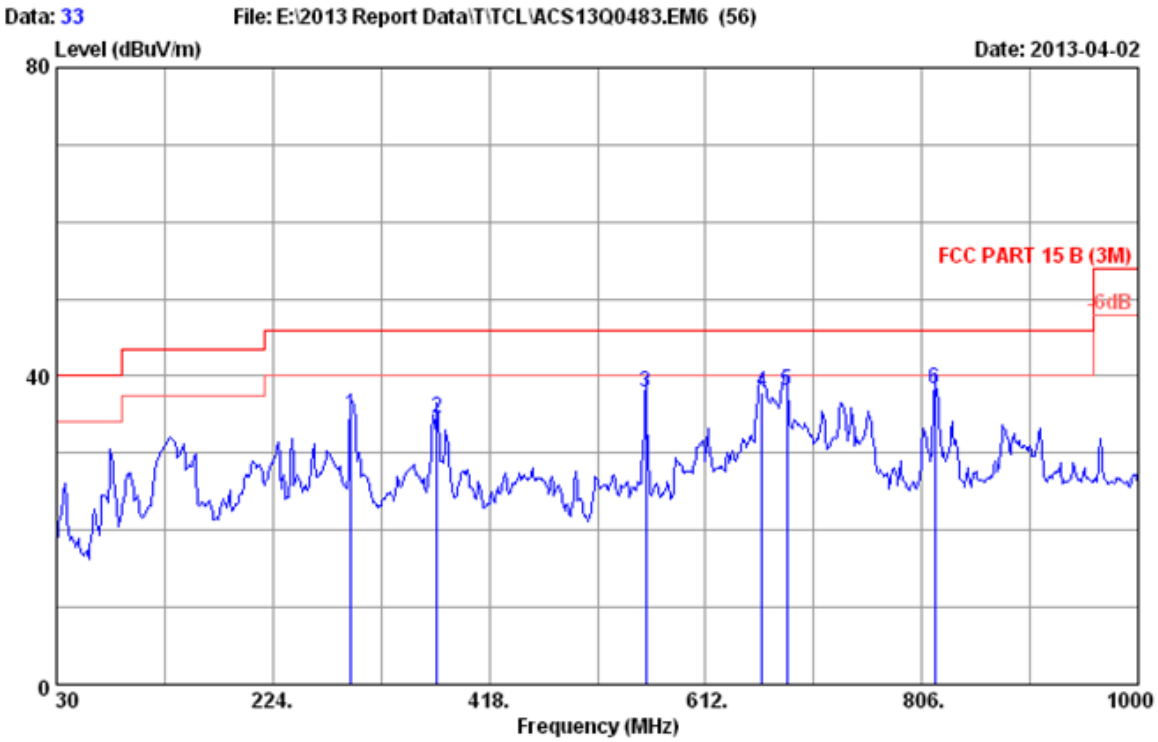
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 31
Dis. / Ant. : 3m 9168-429 Ant. pol. : VERTICAL
Limit : FCC PART 15 B (3M)
Env. / Ins. : 24*C/65% Engineer : Even_Deng
EUT : LCD TV M/N:LE48FHDF3310
Power rating : AC 120V/60Hz
Test Mode : Running "H" Pattern And 1KHz Playing
HDMI 1:1920*1080@60Hz

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	37.760	13.77	0.51	20.43	34.71	40.00	5.29	QP
2	88.200	9.41	0.79	25.22	35.42	43.50	8.08	QP
3	558.650	17.54	1.99	19.05	38.58	46.00	7.42	QP
4	681.840	19.47	2.36	15.67	37.50	46.00	8.50	QP
5	718.700	19.89	2.46	15.59	37.94	46.00	8.06	QP
6	742.950	20.19	2.54	18.95	41.68	46.00	4.32	QP

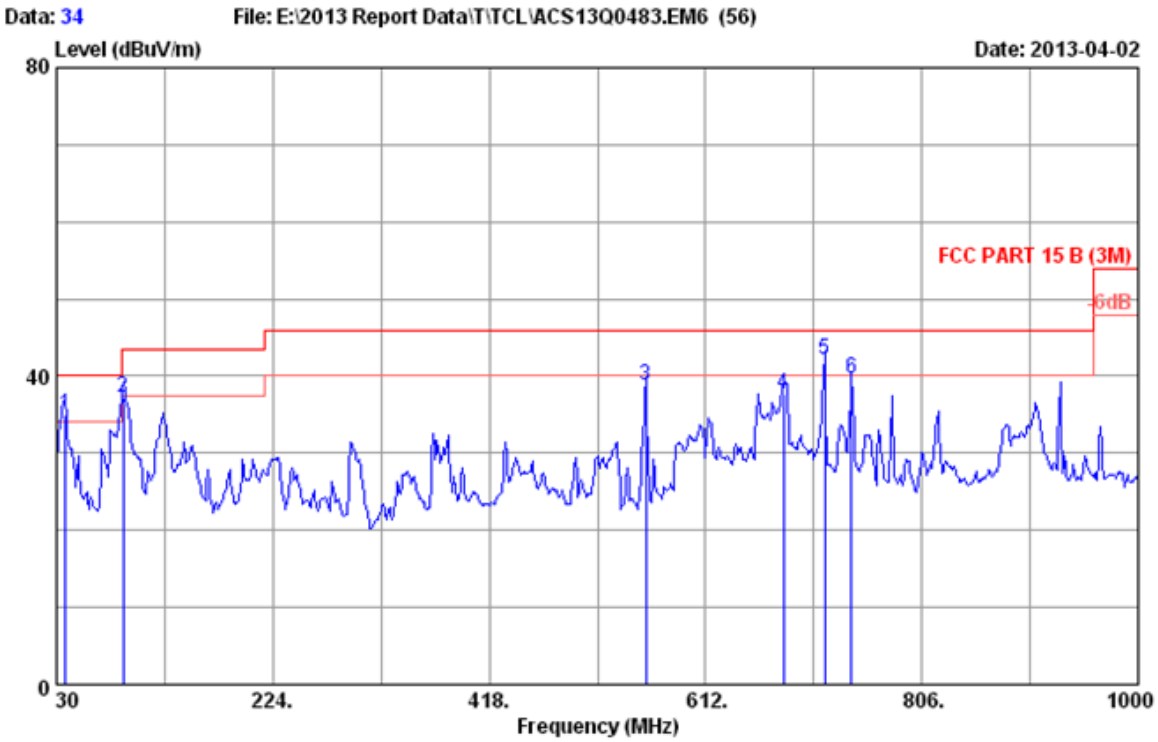
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber
Data no. : 33
Dis. / Ant. : 3m 9168-429
Ant. pol. : HORIZONTAL
Limit : FCC PART 15 B (3M)
Env. / Ins. : 24*C/65%
Engineer : Even_Deng
EUT : LCD TV M/N:LE48FHDF3310
Power rating : AC 120V/60Hz
Test Mode : Running "H" Pattern And 1KHz Playing
HDMI 2:1920*1080@60Hz

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	293.840	12.66	1.27	20.97	34.90	46.00	11.10	QP
2	371.440	14.25	1.48	18.85	34.58	46.00	11.42	QP
3	558.650	17.54	1.99	18.28	37.81	46.00	8.19	QP
4	662.440	19.25	2.30	16.43	37.98	46.00	8.02	QP
5	684.750	19.49	2.38	16.28	38.15	46.00	7.85	QP
6	817.640	20.82	2.72	14.87	38.41	46.00	7.59	QP

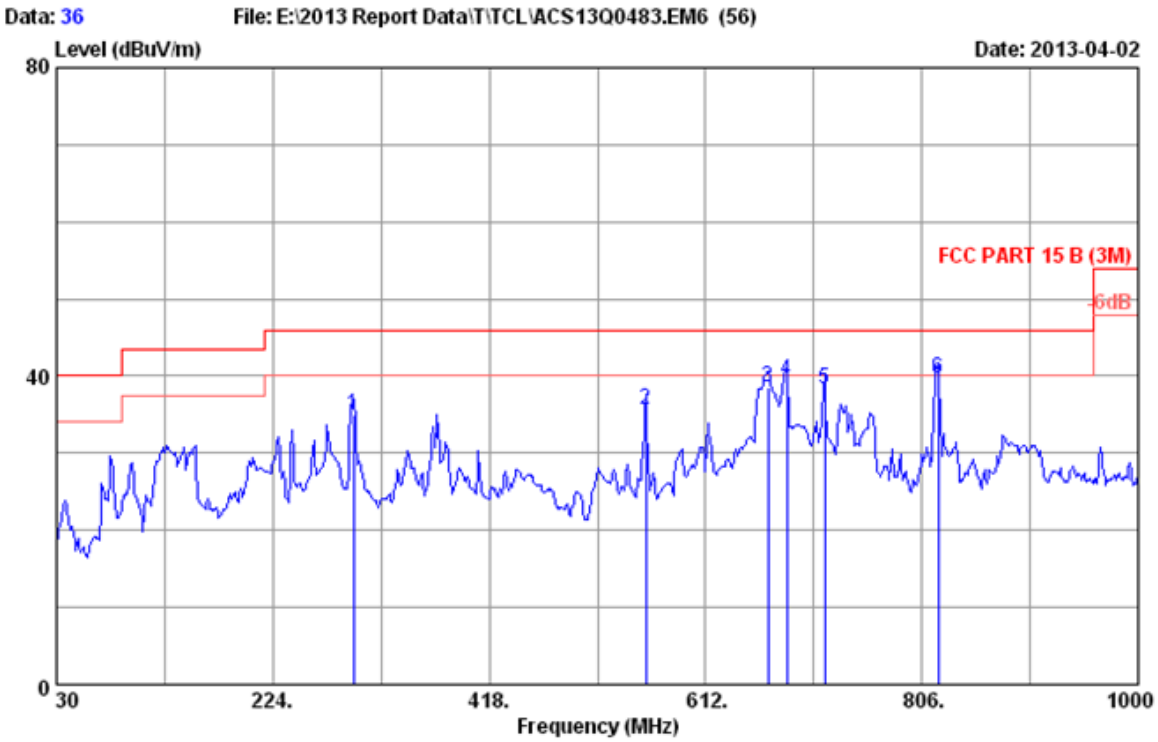
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 34
Dis. / Ant. : 3m 9168-429 Ant. pol. : VERTICAL
Limit : FCC PART 15 B (3M)
Env. / Ins. : 24*C/65% Engineer : Even_Deng
EUT : LCD TV M/N:LE48FHDF3310
Power rating : AC 120V/60Hz
Test Mode : Running "H" Pattern And 1KHz Playing
HDMI 2:1920*1080@60Hz

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	37.760	13.77	0.51	20.67	34.95	40.00	5.05	QP
2	90.140	9.45	0.79	26.87	37.11	43.50	6.39	QP
3	558.650	17.54	1.99	19.35	38.88	46.00	7.12	QP
4	681.840	19.47	2.36	15.88	37.71	46.00	8.29	QP
5	718.700	19.89	2.46	19.81	42.16	46.00	3.84	QP
6	742.950	20.19	2.54	16.92	39.65	46.00	6.35	QP

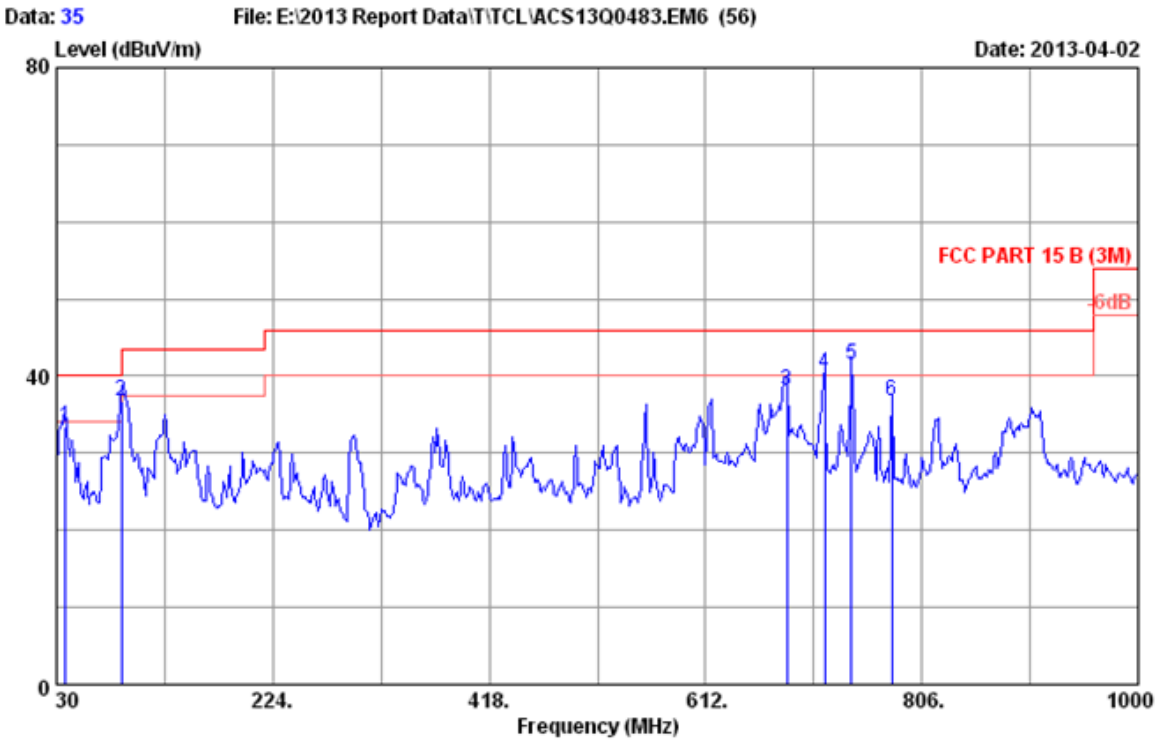
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 36
Dis. / Ant. : 3m 9168-429 Ant. pol. : HORIZONTAL
Limit : FCC PART 15 B (3M)
Env. / Ins. : 24*C/65% Engineer : Even_Deng
EUT : LCD TV M/N:LE48FHDF3310
Power rating : AC 120V/60Hz
Test Mode : Running "H" Pattern And 1KHz Playing
HDMI 3:1920*1080@60Hz

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	296.750	12.73	1.27	21.08	35.08	46.00	10.92	QP
2	558.650	17.54	1.99	16.05	35.58	46.00	10.42	QP
3	668.260	19.32	2.32	17.01	38.65	46.00	7.35	QP
4	684.750	19.49	2.38	17.49	39.36	46.00	6.64	QP
5	718.700	19.89	2.46	16.07	38.42	46.00	7.58	QP
6	820.550	20.84	2.72	16.14	39.70	46.00	6.30	QP

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

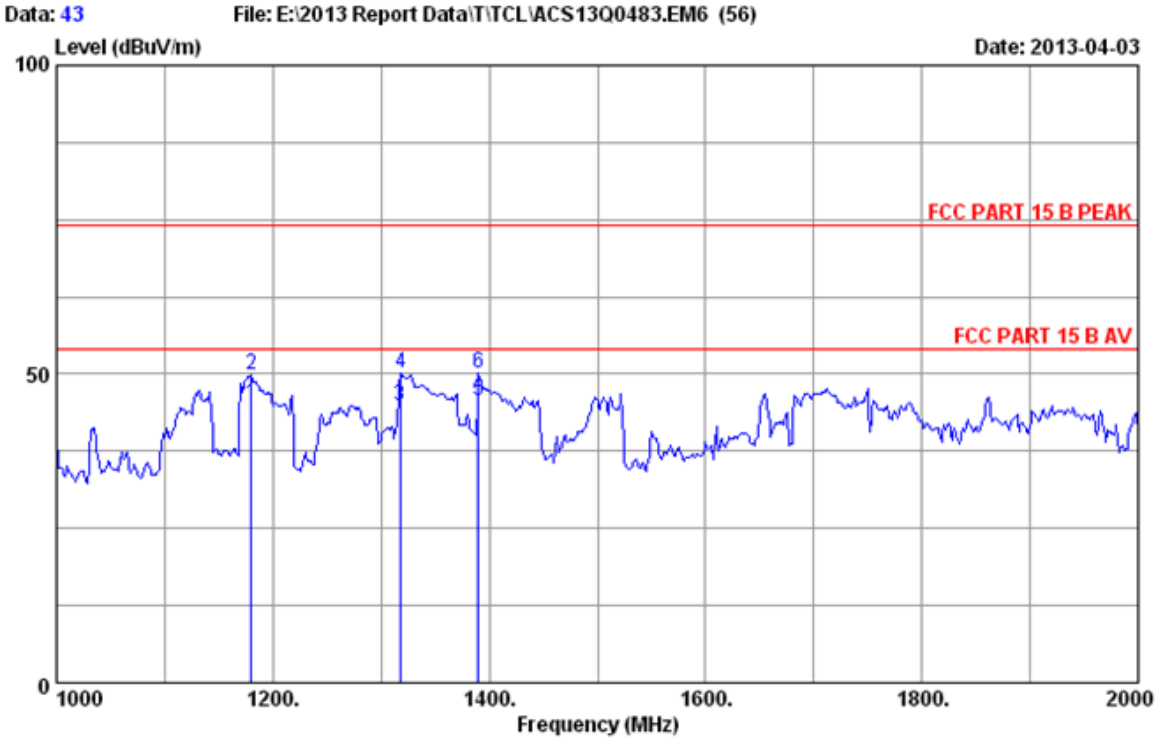


Site no. : 3m Chamber Data no. : 35
Dis. / Ant. : 3m 9168-429 Ant. pol. : VERTICAL
Limit : FCC PART 15 B (3M)
Env. / Ins. : 24*C/65% Engineer : Even_Deng
EUT : LCD TV M/N:LE48FHDF3310
Power rating : AC 120V/60Hz
Test Mode : Running "H" Pattern And 1KHz Playing
HDMI 3:1920*1080@60Hz

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	37.760	13.77	0.51	19.04	33.32	40.00	6.68	QP
2	88.200	9.41	0.79	26.66	36.86	43.50	6.64	QP
3	684.750	19.49	2.38	16.26	38.13	46.00	7.87	QP
4	718.700	19.89	2.46	18.08	40.43	46.00	5.57	QP
5	742.950	20.19	2.54	18.80	41.53	46.00	4.47	QP
6	778.840	20.56	2.64	13.52	36.72	46.00	9.28	QP

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

1GHz~2GHz

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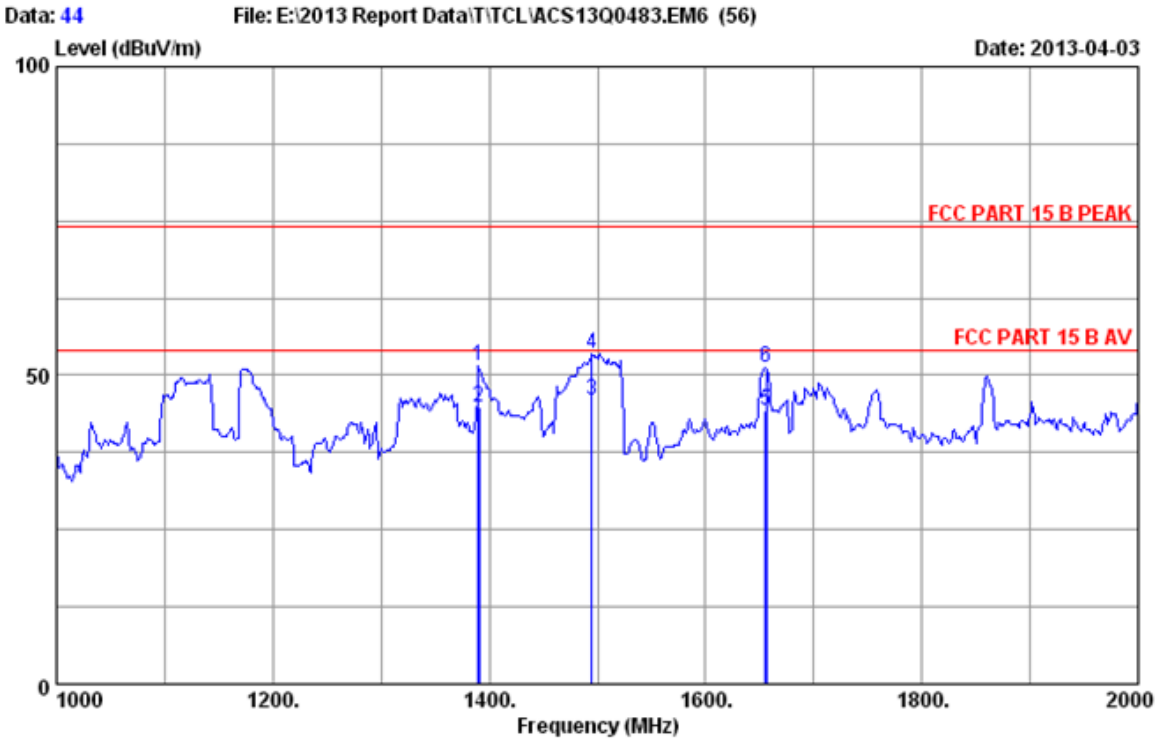
Site no.      : site                          Data no.   : 43
Dis. / Ant.   : 3m   2011 3115  9607-4877    Ant. pol.  : HORIZONTAL
Limit         : FCC PART 15 B PEAK
Env. / Ins.   : 24*C/56%                      Engineer   : Even_Deng
EUT           : LCD TV     M/N:LE48FHDF3310
Power Rating  : AC 120V/60Hz
Test Mode     : Running "H" Pattern And 1KHz Playing
                VGA:1920*1080@60Hz
```

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	1179.652	24.11	0.98	36.31	56.30	45.08	54.00	8.92	Average
2	1180.236	24.11	0.98	36.31	61.00	49.78	74.00	24.22	Peak
3	1317.254	24.77	1.00	0.00	19.10	44.87	54.00	9.13	Average
4	1318.258	24.77	1.00	36.14	60.49	50.12	74.00	23.88	Peak
5	1390.147	25.10	1.01	0.00	19.50	45.61	54.00	8.39	Average
6	1390.236	25.10	1.01	36.06	59.97	50.02	74.00	23.98	Peak

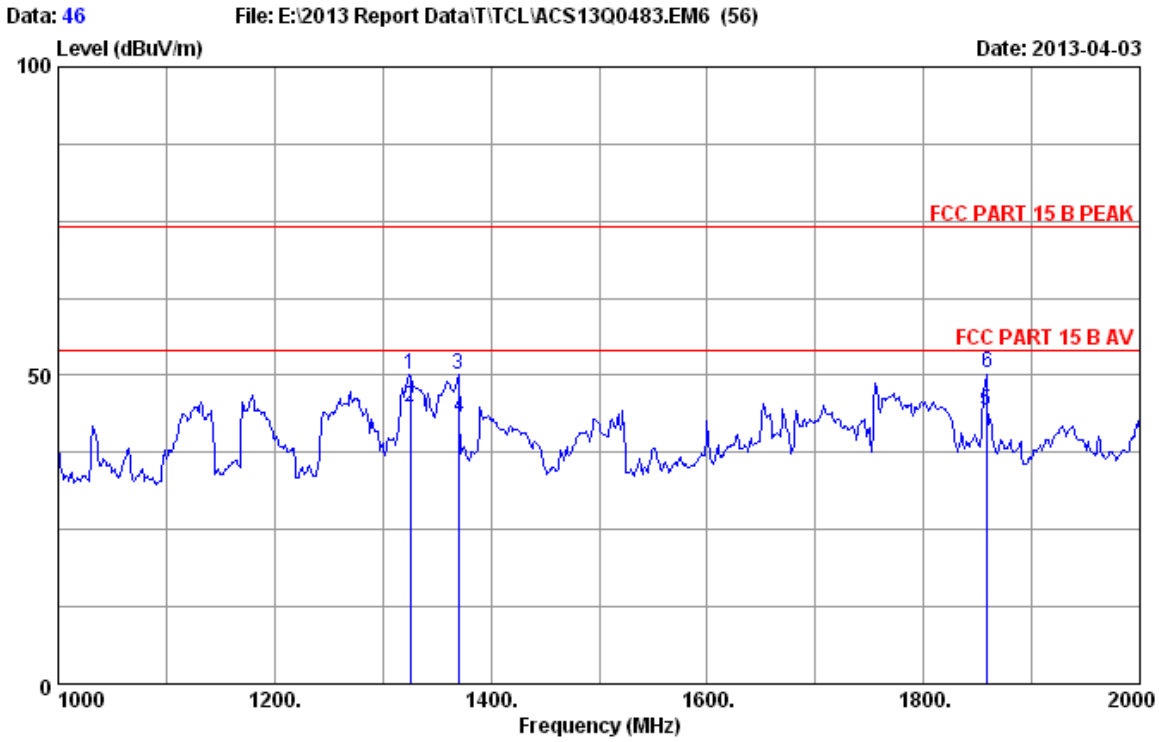
```
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
            -Amp Factor
         2. The emission levels that are 20dB below the official
            limit are not reported.
```



Site no. : 3m Chamber Data no. : 44
Dis. / Ant. : 3m 2011 3115 9607-4877 Ant. pol. : VERTICAL
Limit : FCC PART 15 B PEAK
Env. / Ins. : 24*C/56% Engineer : Even_Deng
EUT : LCD TV M/N:LE48FHDF3310
Power Rating : AC 120V/60Hz
Test Mode : Running "H" Pattern And 1KHz Playing
VGA:1920*1080@60Hz

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	1390.257	25.10	1.01	36.06	61.54	51.59	74.00	22.41	Peak
2	1390.785	25.10	1.01	36.06	54.70	44.75	54.00	9.25	Average
3	1494.987	25.60	1.02	35.95	55.40	46.07	54.00	7.93	Average
4	1495.147	25.60	1.02	35.95	62.83	53.50	74.00	20.50	Peak
5	1655.485	26.23	1.06	35.78	52.70	44.21	54.00	9.79	Average
6	1655.985	26.23	1.06	35.78	59.63	51.14	74.00	22.86	Peak

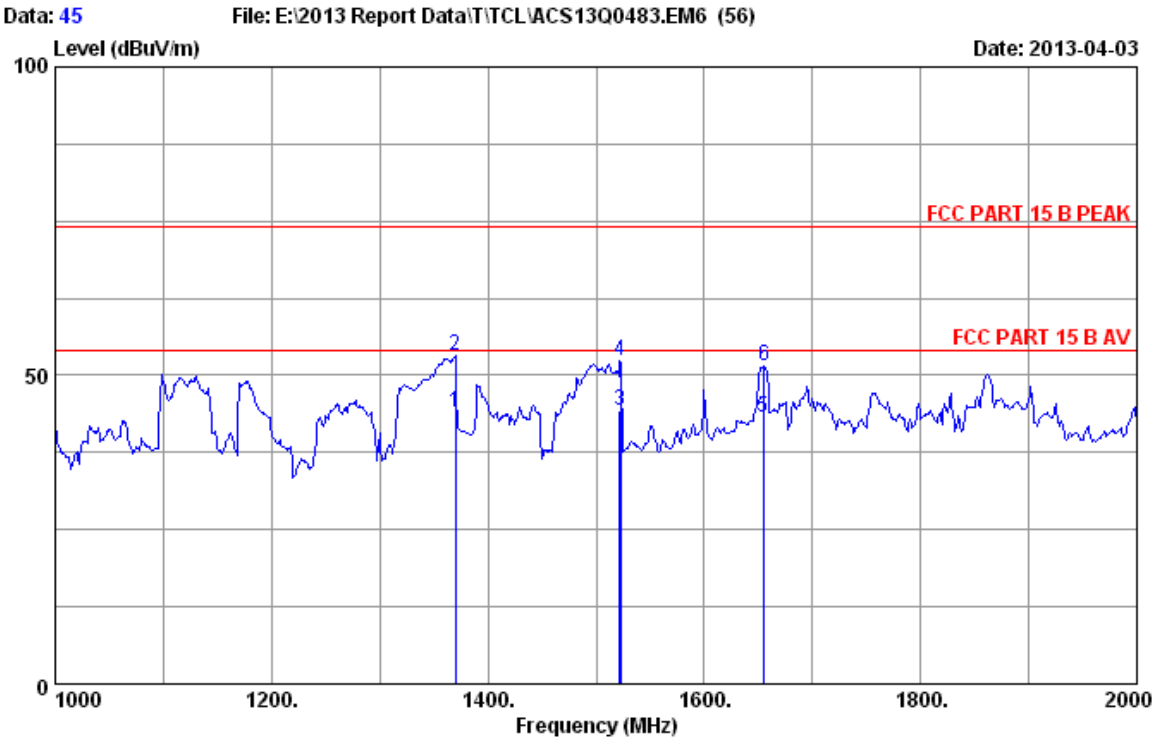
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp Factor
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 46
Dis. / Ant. : 3m 2011 3115 9607-4877 Ant. pol. : HORIZONTAL
Limit : FCC PART 15 B PEAK
Env. / Ins. : 24*C/56% Engineer : Even_Deng
EUT : LCD TV M/N:LE48FHDF3310
Power Rating : AC 120V/60Hz
Test Mode : Running "H" Pattern And 1KHz Playing
HDMI 1:1920*1080@60Hz

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	1325.258	24.77	1.00	36.14	60.64	50.27	74.00	23.73	Peak
2	1325.584	24.77	1.00	36.14	55.20	44.83	54.00	9.17	Average
3	1370.147	25.02	1.00	36.09	60.16	50.09	74.00	23.91	Peak
4	1370.981	25.02	1.00	36.09	53.31	43.24	54.00	10.76	Average
5	1857.954	26.93	1.10	35.57	51.90	44.36	54.00	9.64	Average
6	1858.568	26.99	1.10	35.57	57.81	50.33	74.00	23.67	Peak

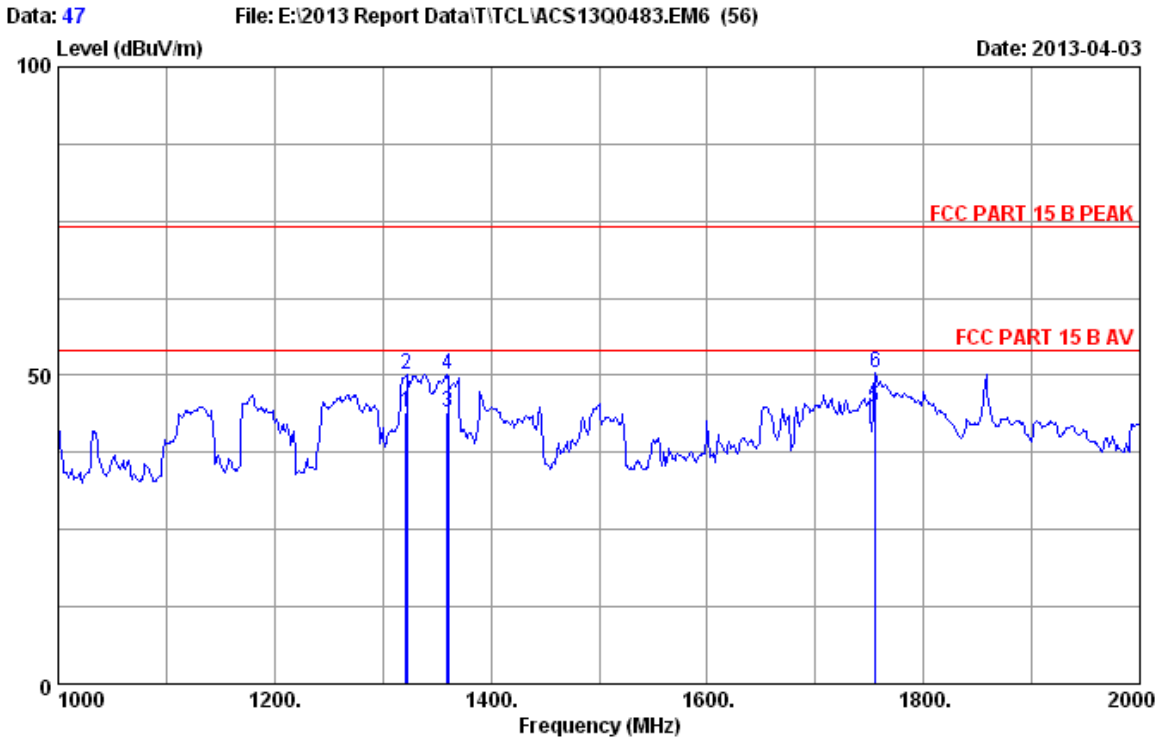
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
-Amp Factor
2. The emission levels that are 20dB below the official
limit are not reported.



Site no. : 3m Chamber Data no. : 45
Dis. / Ant. : 3m 2011 3115 9607-4877 Ant. pol. : VERTICAL
Limit : FCC PART 15 B PEAK
Env. / Ins. : 24*C/56% Engineer : Even_Deng
EUT : LCD TV M/N:LE48FHDF3310
Power Rating : AC 120V/60Hz
Test Mode : Running "H" Pattern And 1KHz Playing
HDMI 1:1920*1080@60Hz

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	1369.954	25.02	1.00	36.09	54.11	44.04	54.00	9.96	Average
2	1370.147	25.02	1.00	36.09	63.38	53.31	74.00	20.69	Peak
3	1521.951	25.73	1.03	35.92	53.39	44.23	54.00	9.77	Average
4	1522.358	25.73	1.03	35.92	61.43	52.27	74.00	21.73	Peak
5	1654.951	26.23	1.06	35.78	51.59	43.10	54.00	10.90	Average
6	1655.236	26.23	1.06	35.78	59.89	51.40	74.00	22.60	Peak

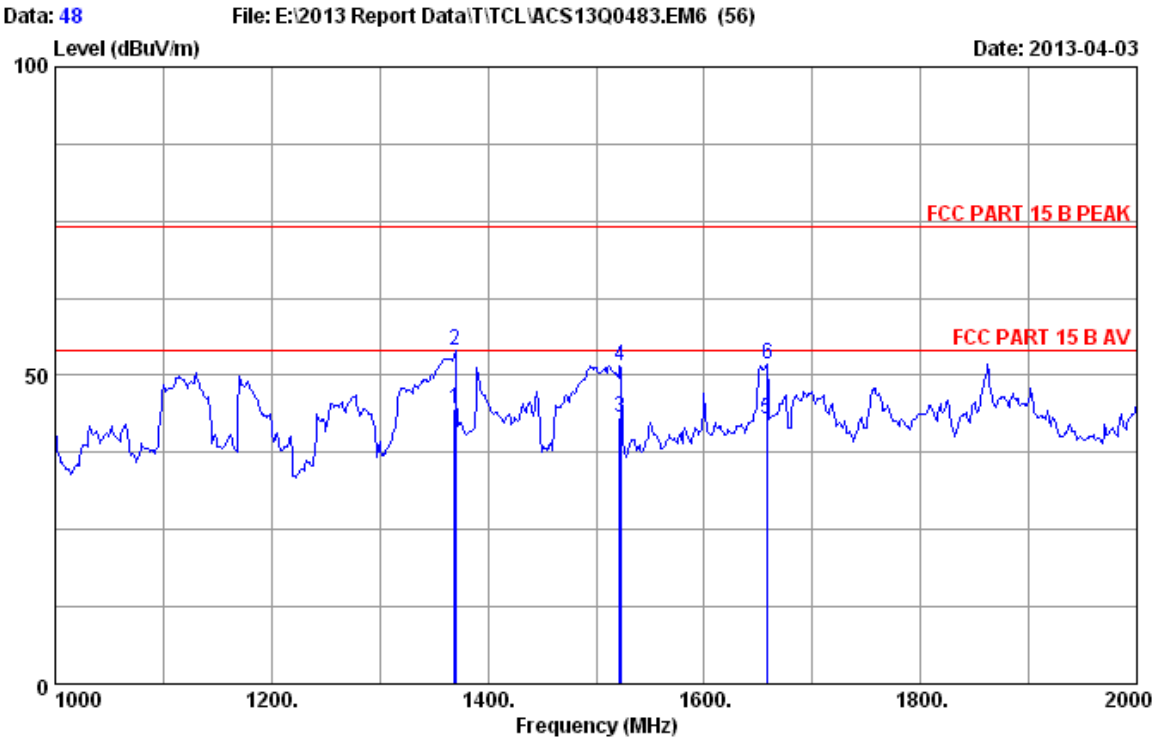
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
-Amp Factor
2. The emission levels that are 20dB below the official
limit are not reported.



Site no. : 3m Chamber Data no. : 47
Dis. / Ant. : 3m 2011 3115 9607-4877 Ant. pol. : HORIZONTAL
Limit : FCC PART 15 B PEAK
Env. / Ins. : 24*C/56% Engineer : Even_Deng
EUT : LCD TV M/N:LE48FHDF3310
Power Rating : AC 120V/60Hz
Test Mode : Running "H" Pattern And 1KHz Playing
HDMI 2:1920*1080@60Hz

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	1321.924	24.77	1.00	36.14	54.30	43.93	54.00	10.07	Average
2	1322.257	24.77	1.00	36.14	60.61	50.24	74.00	23.76	Peak
3	1359.853	24.94	1.00	36.12	54.30	44.12	54.00	9.88	Average
4	1360.146	24.94	1.00	36.12	60.24	50.06	74.00	23.94	Peak
5	1754.742	26.55	1.08	35.68	52.90	44.85	54.00	9.15	Average
6	1755.952	26.55	1.08	35.68	58.49	50.44	74.00	23.56	Peak

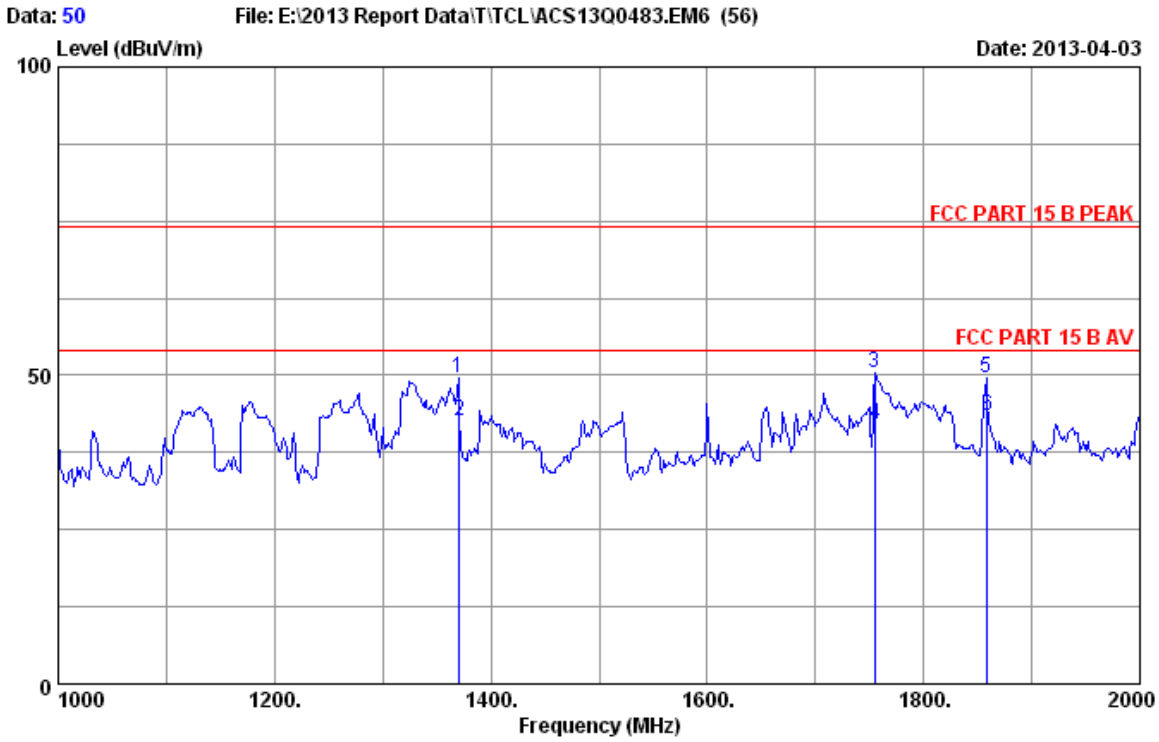
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp Factor
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 48
Dis. / Ant. : 3m 2011 3115 9607-4877 Ant. pol. : VERTICAL
Limit : FCC PART 15 B PEAK
Env. / Ins. : 24*C/56% Engineer : Even_Deng
EUT : LCD TV M/N:LE48FHDF3310
Power Rating : AC 120V/60Hz
Test Mode : Running "H" Pattern And 1KHz Playing
HDMI 2:1920*1080@60Hz

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	1369.523	25.02	1.00	36.09	54.51	44.44	54.00	9.56	Average
2	1370.125	25.02	1.00	36.09	64.02	53.95	74.00	20.05	Peak
3	1522.125	25.73	1.03	35.92	52.29	43.13	54.00	10.87	Average
4	1522.578	25.73	1.03	35.92	60.83	51.67	74.00	22.33	Peak
5	1657.957	26.23	1.06	35.78	51.30	42.81	54.00	11.19	Average
6	1658.521	26.23	1.06	35.78	60.23	51.74	74.00	22.26	Peak

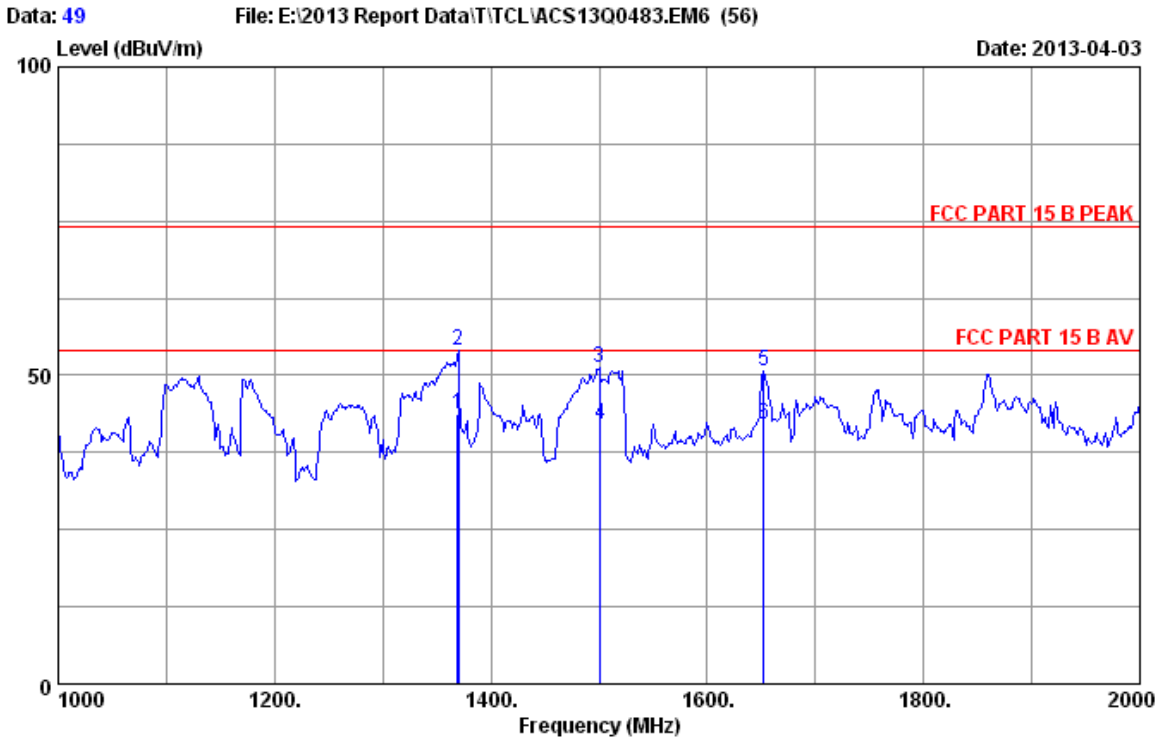
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp Factor
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 50
Dis. / Ant. : 3m 2011 3115 9607-4877 Ant. pol. : HORIZONTAL
Limit : FCC PART 15 B PEAK
Env. / Ins. : 24*C/56% Engineer : Even_Deng
EUT : LCD TV M/N:LE48FHDF3310
Power Rating : AC 120V/60Hz
Test Mode : Running "H" Pattern And 1KHz Playing
HDMI 3:1920*1080@60Hz

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	1370.000	25.02	1.00	36.09	59.66	49.59	74.00	24.41	Peak
2	1370.958	25.02	1.00	36.09	52.71	42.64	54.00	11.36	Average
3	1755.000	26.55	1.08	35.68	58.48	50.43	74.00	23.57	Peak
4	1755.471	26.55	1.08	35.68	50.10	42.05	54.00	11.95	Average
5	1858.000	26.93	1.10	35.57	57.04	49.50	74.00	24.50	Peak
6	1858.581	26.99	1.10	35.57	50.91	43.43	54.00	10.57	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
-Amp Factor
2. The emission levels that are 20dB below the official
limit are not reported.



Site no. : 3m Chamber Data no. : 49
Dis. / Ant. : 3m 2011 3115 9607-4877 Ant. pol. : VERTICAL
Limit : FCC PART 15 B PEAK
Env. / Ins. : 24*C/56% Engineer : Even_Deng
EUT : LCD TV M/N:LE48FHDF3310
Power Rating : AC 120V/60Hz
Test Mode : Running "H" Pattern And 1KHz Playing
HDMI 3:1920*1080@60Hz

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	1369.578	25.02	1.00	36.09	53.91	43.84	54.00	10.16	Average
2	1370.254	25.02	1.00	36.09	64.22	54.15	74.00	19.85	Peak
3	1500.257	25.60	1.02	35.95	60.48	51.15	74.00	22.85	Peak
4	1500.947	25.60	1.02	35.95	51.50	42.17	54.00	11.83	Average
5	1652.000	26.17	1.05	35.78	59.24	50.68	74.00	23.32	Peak
6	1652.369	26.17	1.05	35.78	50.50	41.94	54.00	12.06	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
-Amp Factor
2. The emission levels that are 20dB below the official
limit are not reported.

5. DEVIATION TO TEST SPECIFICATIONS

[NONE]