

APPLICATION OF CERTIFICATION For

TTE Technology Inc.

LED TV

Brand Name	Model Number
TCL	LE40FHDX10TA,
	LE46FHDX10TA

FCC ID: W8ULE46FHDP21TA

Prepared for: TTE Technology Inc.

5541 W. 74th St, Indianapolis, IN 46268, 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

Tel: (0755) 26639496 Fax: (0755) 26632877

Report Number : ACS- F10260-1

Date of Test : Oct.12~15, 2010

Date of Report : Nov.02, 2010



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TEST REPORT CERTIFICATION

Applicant : TTE Technology Inc.

Manufacturer : TCL King Electrical Appliances (Huizhou) Co., Ltd.

EUT Description : LED TV

FCC ID : W8ULE46FHDP21TA

(A) MODEL NO.&
Brand Name

Brand Name Model Number
TCL LE40FHDX10TA,LE46FHDX10TA

(B) SERIAL NO. : N/A

(C) TEST VOLTAGE: AC 120V/60Hz

Measurement Standard Used:

FCC Rules and Regulations Part 15 Subpart B Class B 2008, ANSI C63.4-2003

ICES-003 Issue 4 February 2004.

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.

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

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.

Date of Test :	Oct.24~26, 2010	Report of date: _	Nov.02, 2010	15
Prepared by :	Angel Li / Assistant	Reviewer by:	Richzhy Zhong / Assistant Manager	
		Audix Tech	深圳)有限公司 mology (Shenzhen) Co., Ltd. 引報告專用章	
Approved & Aut	horized Signer :	Stamp only for I	EMC Dept Report	
		Ken Lu /	Manager	



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1. DESCRIPTION OF VERSION

Edition No.	Date of Rev.	Summary	Report No.
0	Sep.10, 2010	Original Report	ACS-F10260
REV.1	Nov.02, 2010	 1.Add new TV model: LE40FHDX10TA, which has new enclosure shape 2. Add new TV model: LE46FHDX10TA, which has new enclosure shape and LCD panel supplier 3. Supplementary test data are recorded in this report. 	ACS- F10260-1

Remark for Rev.1:

- 1. This report is an additional version with original report number ACS- F10260.
- 2. Through evaluation of the above difference, all the items were needed to be re-performed.
- 3. The EUT was retested and all the test data were recorded in this report.
- 4. This report is based on report of ACS- F10260



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2. SUMMARY OF STANDARDS AND RESULTS

2.1.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: 2008 ANSI C63.4: 2003	PASS	Meets Class B Limit Minimum passing margin is 3.00 dB at 4.360 MHz		
Radiated Emission Test	FCC Part 15: 2008 ANSI C63.4: 2003	PASS	Meets Class B Limit Minimum passing margin is 5.47dB at 76.526MHz		



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3. GENERAL INFORMATION

3.1. Description of Device (EUT)

Description : LED TV

Model Number : LE40FHDX10TA,LE46FHDX10TA

Brand Name : TCL

Applicant : TTE Technology Inc.

5541 W. 74th St, Indianapolis, IN 46268, U.S.A.

Manufacturer : TCL King Electrical Appliances (Huizhou) Co., Ltd.

Section 19, Zhongkai Development Zone for New & High-Level Tech Industries, Huizhou, Guangdong Province,

China, 516006.

FREQUENCIES USED AND GENERATED WITHIN DEVICE					
X54M1	45-OSC54M-0Y1CR	54MHz			
LVDS CLOCK	80MHz				
IF	45.75MHz				
DC-DC	U302->385 KHz	U303->1MHz			
DDR	440MHz				
AMP IIS	384KHz				

Power Cord : Unshielded, Undetachable, 1.5m

Audio Cable : Shielded, Detachable, 1.8m

D-Sub Cable : Shielded, Detachable, 1.5m (Bonded two ferrite cores)

AV Cable Shielded, Detachable, 1.2m

Pb / Pr / Y Cable Shielded, Detachable, 1.2m

Date of Test : Oct.12~15, 2010

Date of Receipt : Oct.12, 2010

Sample Type : Prototype production

3.2. Tested Supporting System Details

	Description	ACS No.	Manufacturer	Model	Serial Number	Approved type
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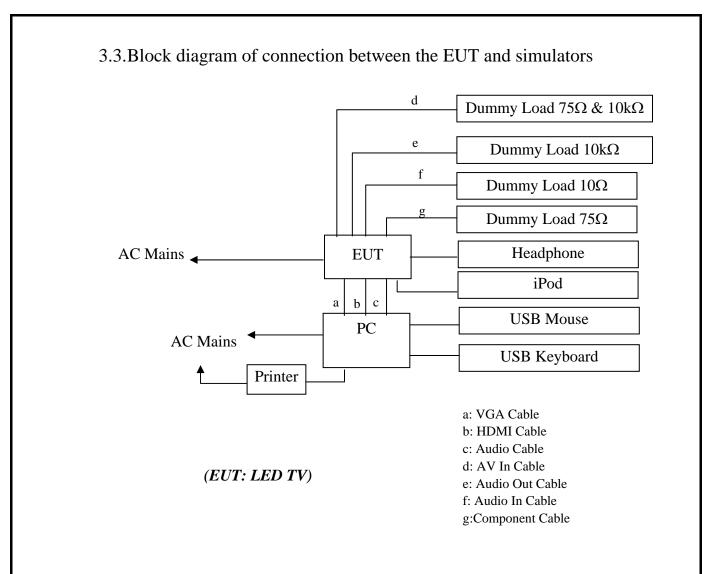


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	D.C.	Test PC P	DELL	Studio 540	124XK2X	☑FCC DoC ☑BSMI ID:R33002	
1	PC	Power Cord: Unshielded, Detachable, 1.8m Display Card: HD3450 (DVI+VGA+HDMI)					
						☑FCC DoC	
2	Printer	ACS-EMC-PT03	OKIPAGE	EN8060A	908A1001201	☑BSMI ID: 3882A463	
		USB Cable: Shielded Power Cord: Unshie					
3	Keyboard	ACS-EMC- K03R	DELL	SK-8115	CN-ODJ313-71 616-711-04WJ	☑ FCC DoC ☑BSMI ID: T3A002	
	Reyboard	Power Cord: shielde	d, Undetachable	e, 2.0m			
4	Mouse	ACS-EMC-M02R	DELL	M056UO	512024264	☑ FCC DoC ☑BSMI ID: R41108	
4	Wouse	Power Cord: shielde	d, Undetachable	e, 1.8m			
5	HDD	ACS-EMC-HDD01	Terasys	F12-UF	A0100215-5390 031	☑FCC DoC ☑BSMI ID: 4912A022	
		USB Cable: Shielded	d, Detachable, 1	.8m			
6	Headphone	ACS-EMC-EP01	OVANN	OV880V	-	□FCC DoC □BSMI ID	
		USB Cable: shield	ed, Detachable	e, 4.0m			
7	:Dad	ACS-EMC-IP01	APPLE	A1199	YM706MLDV Q5	☑FCC DoC ☑BSMI ID: R33057	
7	iPod	Data Cable: Shielded, Detachabled, 1.0m					
8	Dummy Load (75Ω)	Component In Cable: Unshielded, Detachabled, 1.5m					
9	Dummy Load	Audio In Cable: Unshielded, Detachabled, 1.5m					
10	$(10 \text{K}\Omega)$ Audio Out Cable: Unshielded, Detachabled, 1.5m Dummy Load $(10 \text{K}\Omega \& 75\Omega)$ AV In Cable: Unshielded, Detachabled, 1.5m						



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3.4. 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 : Mar. 31, 2009 File on Federal

Communication Commission Registration Number: 90454

3m & 10m Anechoic Chamber : Dec.30, 2009 File on Federal

Communication Commission Registration Number: 794232

EMC Lab. : Accredited by DATech, German

Registration Number: DAT-P-091/99-01

Feb,02, 2009

Accredited by NVLAP, USA

NVLAP Code: 200372-0

Apr. 01, 2010

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

Test Item	Uncertainty	
Uncertainty for Conduction emission test	3.64 dB (9kHz to 150kHz	
in No. 1 Conduction	3.22 dB(150kHz to 30MHz)	
Uncertainty for Radiation Emission test	4.20 dB (Polarize: V)	
in 3m chamber	4.66 dB (Polarize: H)	
Uncertainty for test site temperature and	0.3°C	
humidity	2%	

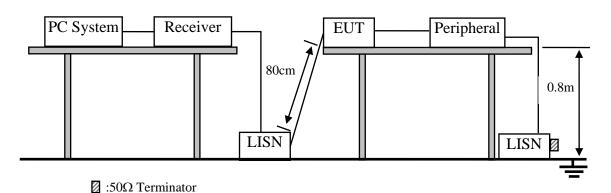
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4. POWER LINE CONDUCTED EMISSION TEST

4.1.Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Test Receiver	Rohde & Schwarz	ESHS10	838693/001	Dec.18, 09	1 Year
2.	L.I.S.N.#1	Rohde & Schwarz	ESH2-Z5	834066/011	Mar.30, 10	1 Year
3.	L.I.S.N.#3	Kyoritsu	KNW-242C	8-1920-1	May.08, 10	1 Year
4.	Terminator	Hubersuhner	50Ω	No. 1	May.08, 10	1 Year
5.	RF Cable	Fujikura	3D-2W	LISN Cable 1#	May.08, 10	1Year
6.	Coaxial Switch	Anritsu	MP59B	M55367	May.08, 10	1 Year
7.	Passive Probe	Rohde & Schwarz	ESH2-Z3	299.7810.52	May.08, 10	1 Year
8.	Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100341	May.08, 10	1 Year

4.2.Block Diagram of Test Setup

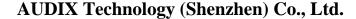


4.3. Power Line Conducted Emission Test Limits

	Maximum RF Line Voltage		
Frequency	Quasi-Peak Level	Average Level	
	$dB(\mu V)$	$dB(\mu V)$	
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.





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4.4.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.

4.4.1.LED TV (EUT)

Model Number: LE40FHDX10TA, LE46FHDX10TA

Serial Number : N/A

4.4.2. Support Equipment: As Tested Supporting System Detail, in Section 3.2.

4.5. Operating Condition of EUT

- 4.5.1. Setup the EUT and simulator as shown as Section 4.2.
- 4.5.2. Turn on the power of all equipment.
- 4.5.3. 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.
- 4.5.4. The PC system was running the program "1kHz signal Playing" and sending sound to EUT.
- 4.5.5. The other peripheral devices were driven and operated in turn during all testing.

4.6.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 C63.4-2003 on conducted Emission test.

The bandwidth of test receiver (R&S TEST RECEIVER ESHS10) is set at 10kHz.

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



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4.7. 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.

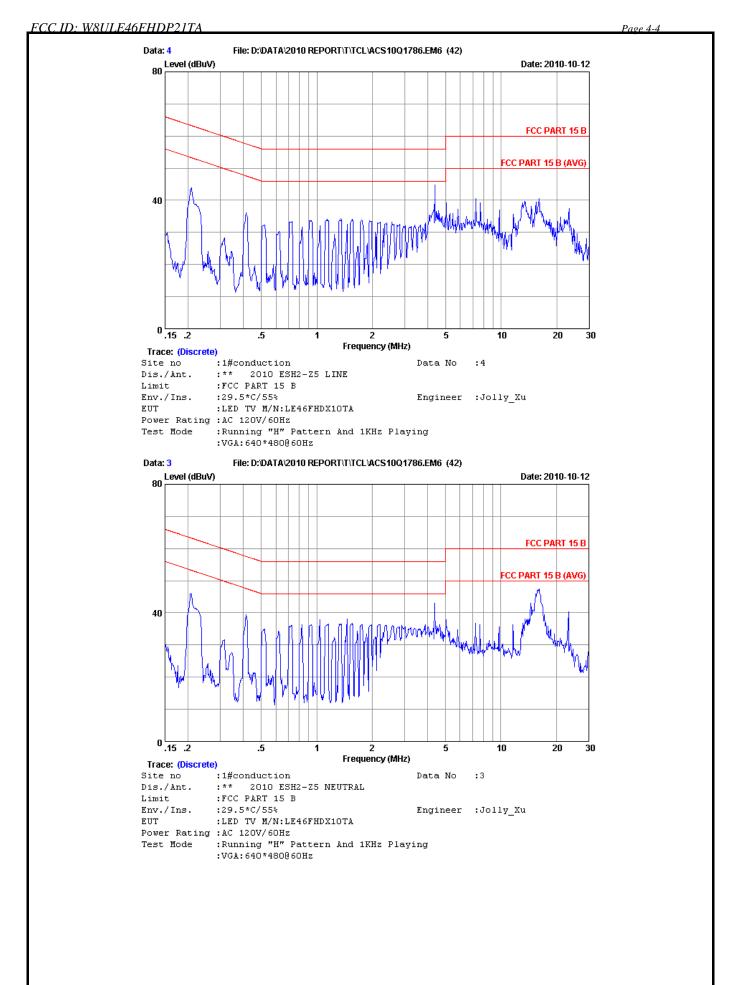
EUT: LED TV Model No. : LE46FHDX10TA

Test Date: Oct.12, 2010 Temperature: 23°C Humidity: 54%

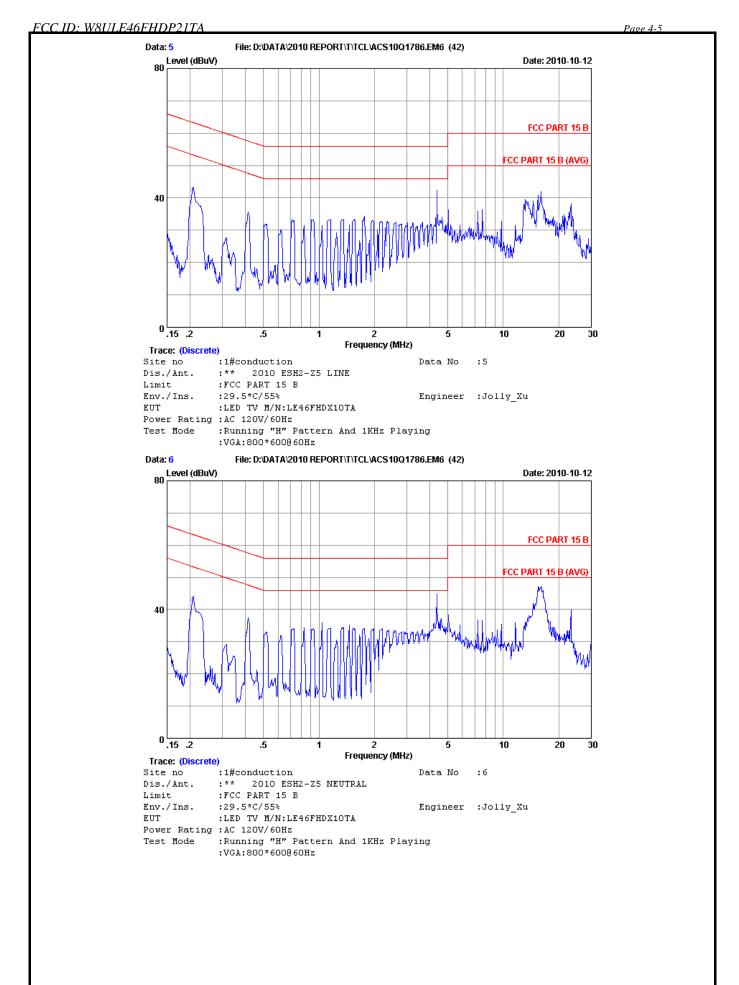
The details of test modes are as follows:

NO.	Resolution & Frequency	Reference Test Data No.		
NO.	Resolution & Prequency	LINE	NEUTRAL	
1.	VGA 640*480 60Hz	#4	#3	
2.	VGA 800*600 60Hz	#5	#6	
3.	VGA 1024*768 60Hz	#1	#2	
4.	HDMI1 1080P	#8	#7	
5.	HDMI2 1080P	#9	#10	
6.	HDMI3 1080P	#12	#11	
7.	HDMI4 1080P	#13	#14	
8. ※	HDMI5 1080P	#16	#15	

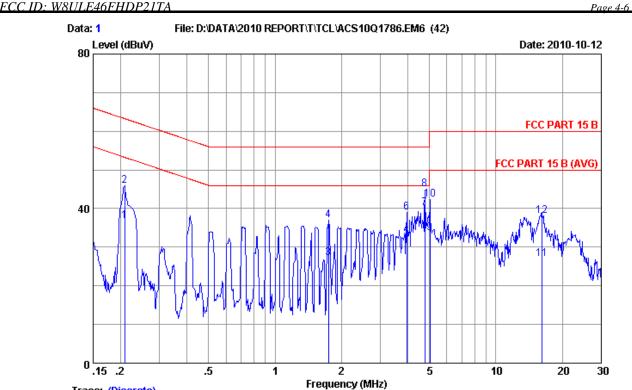












Trace: (Discrete)

Site no :1#conduction Data No :1

Dis./Ant. :** 2010 ESH2-Z5 LINE

Limit :FCC PART 15 B

Env./Ins. :29.5*C/55% Engineer :Jolly_Xu

EUT :LED TV M/N:LE46FHDX10TA

Power Rating :AC 120V/60Hz

Test Mode : Running "H" Pattern And 1KHz Playing

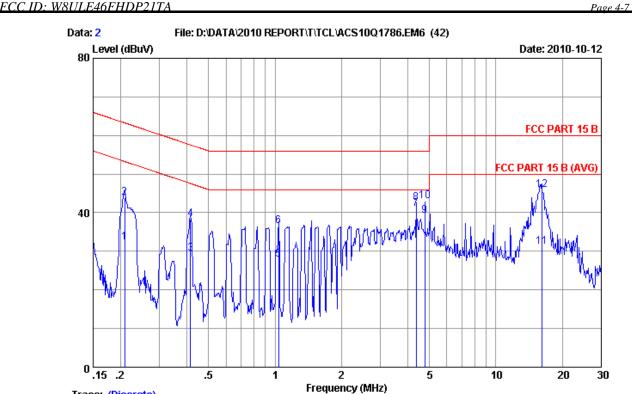
:VGA:1024*768@60Hz

No	Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emissio Level (dBuV)	n Limits (dBuV)	Margin (dB)	Remark
1	0.20833	0.22	9.88	26.60	36.70	53.27	16.57	Average
2	0.20833	0.22	9.88	35.77	45.87	63.27	17.40	QP
3	1.744	0.25	9.90	17.10	27.25	46.00	18.75	Average
4	1.744	0.25	9.90	26.78	36.93	56.00	19.07	QP
5	3.943	0.27	9.94	22.29	32.50	46.00	13.50	Average
6	3.943	0.27	9.94	28.81	39.02	56.00	16.98	QP
7	4.773	0.27	9.94	29.90	40.11	46.00	5.89	Average
8	4.773	0.27	9.94	34.89	45.10	56.00	10.90	QP
9	5.031	0.27	9.94	23.40	33.61	50.00	16.39	Average
10	5.031	0.27	9.94	32.12	42.33	60.00	17.67	QP
11	16.140	0.51	10.04	16.50	27.05	50.00	22.95	Average
12	16.140	0.51	10.04	27.55	38.10	60.00	21.90	QP

Remarks: 1.Emission Level=LISN Factor+Cable Loss(Include 10dB pulse limit) +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.





Trace: (Discrete)

Site no :1#conduction Data No :2

Dis./Ant. :** 2010 ESH2-Z5 NEUTRAL

Limit :FCC PART 15 B

Env./Ins. :29.5*C/55% Engineer :Jolly_Xu

EUT :LED TV M/N:LE46FHDX10TA

Power Rating :AC 120V/60Hz

Test Mode : Running "H" Pattern And 1KHz Playing

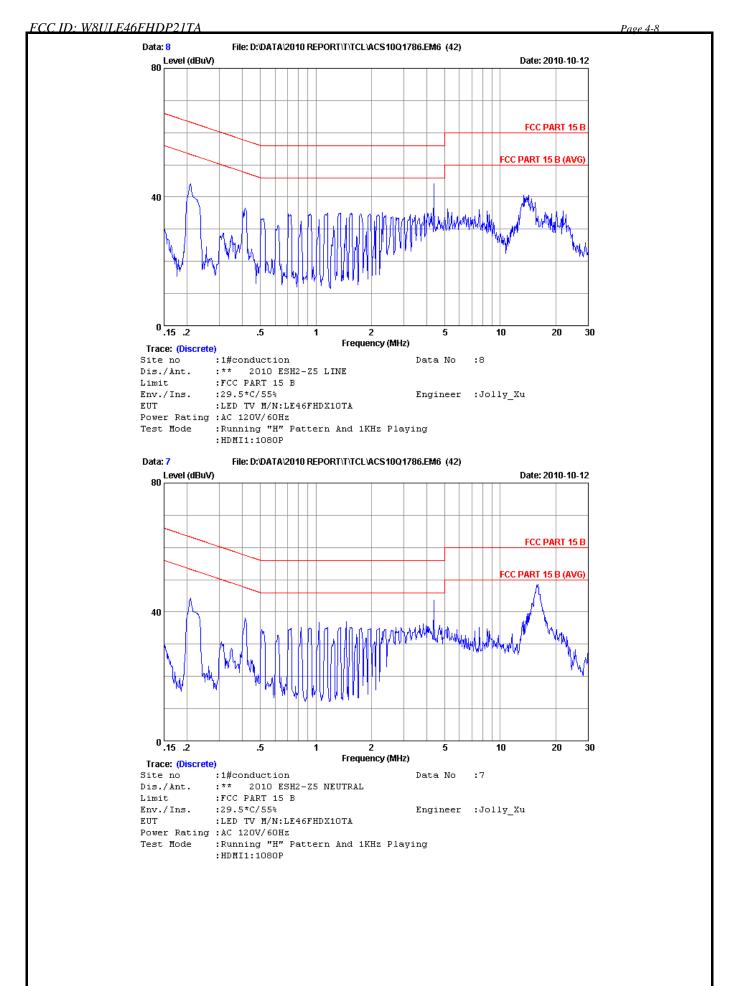
:VGA:1024*768@60Hz

		LISN	LISN Cable Emission					
No	Freq	Factor	Loss	Reading	Level	Limits	Margin	Remark
	(MHz)	(dB)	(dB)	(dBuV)	(dBuV)	(dBuV)	(dB)	
1	 0.20833	0.21	9.88	 22.30	32.39	53.27	 20.88	Average
2	0.20833	0.21	9.88	33.87	43.96	63.27	19.31	QP
3	0.41485	0.22	9.88	19.40	29.50	47.55	18.05	Average
4	0.41485	0.22	9.88	28.20	38.30	57.55	19.25	QP
5	1.037	0.25	9.89	17.70	27.84	46.00	18.16	Average
6	1.037	0.25	9.89	26.49	36.63	56.00	19.37	QP
7	4.361	0.28	9.94	30.70	40.92	46.00	5.08	Average
8	4.361	0.28	9.94	32.36	42.58	56.00	13.42	QP
9	4.773	0.28	9.94	28.90	39.12	46.00	6.88	Average
10	4.773	0.28	9.94	32.80	43.02	56.00	12.98	QP
11	16.140	0.62	10.04	20.50	31.16	50.00	18.84	Average
12	16.140	0.62	10.04	35.20	45.86	60.00	14.14	QP

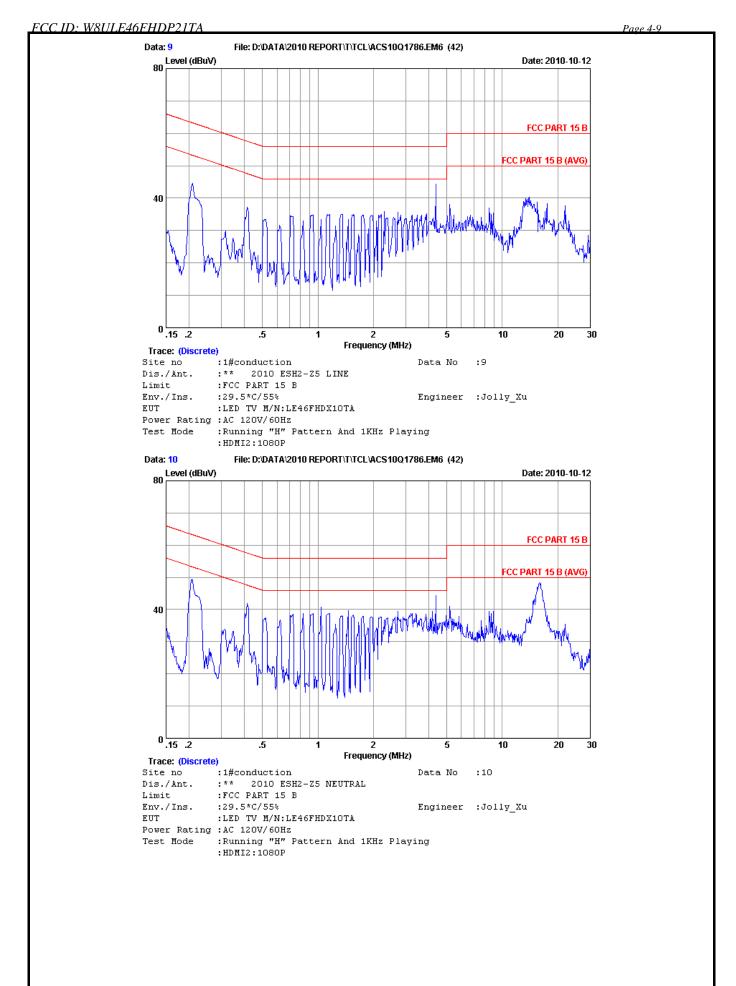
Remarks: 1.Emission Level=LISN Factor+Cable Loss(Include 10dB pulse limit) +Reading.

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.

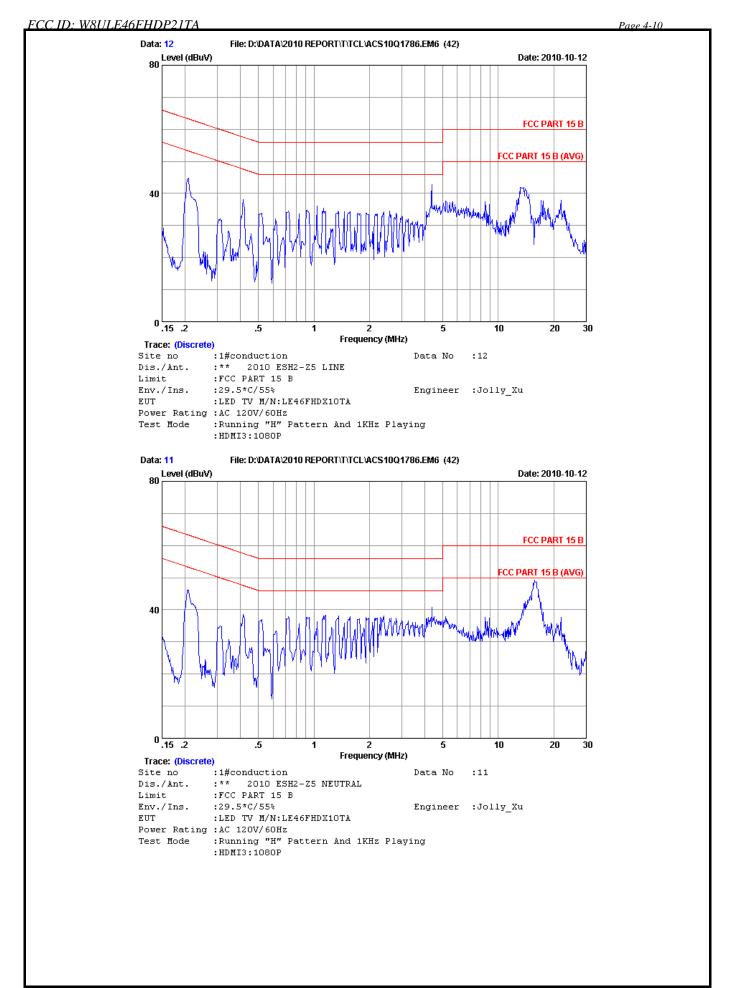




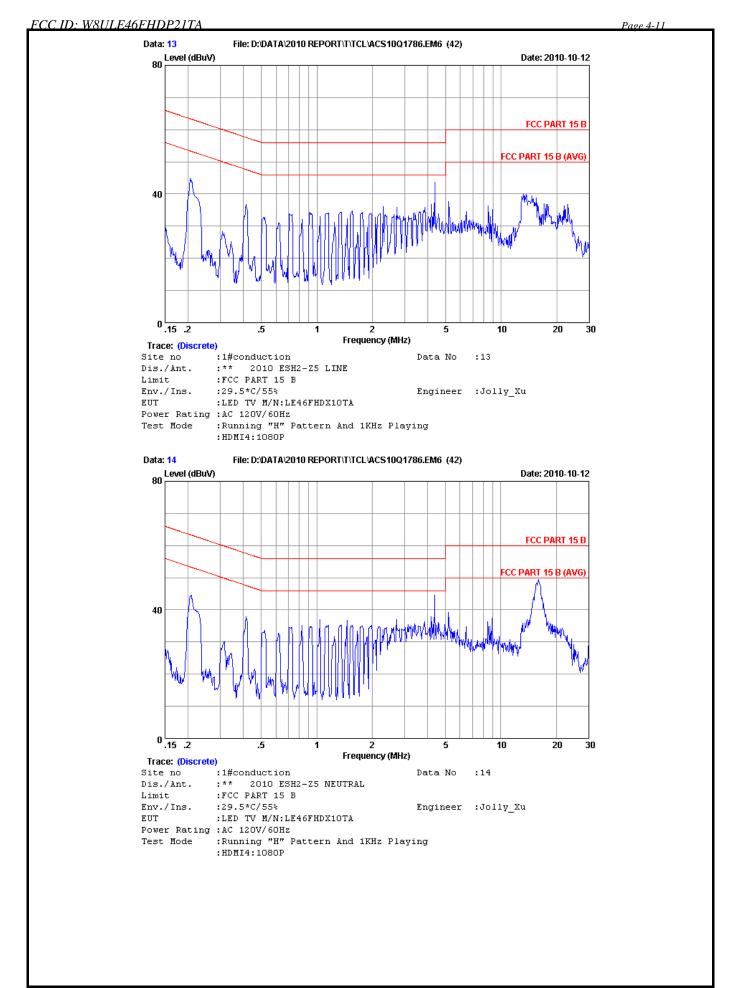




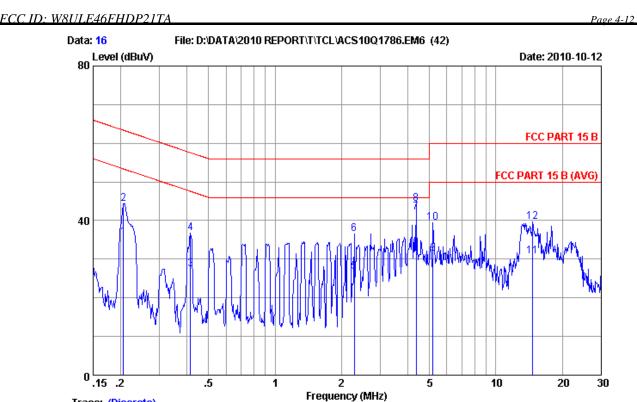












Trace: (Discrete)

Site no :1#conduction Data No

Dis./Ant. :** 2010 ESH2-Z5 LINE

Limit :FCC PART 15 B

Env./Ins. :29.5*C/55% Engineer :Jolly_Xu

EUT :LED TV M/N:LE46FHDX10TA

Power Rating :AC 120V/60Hz

Test Mode : Running "H" Pattern And 1KHz Playing

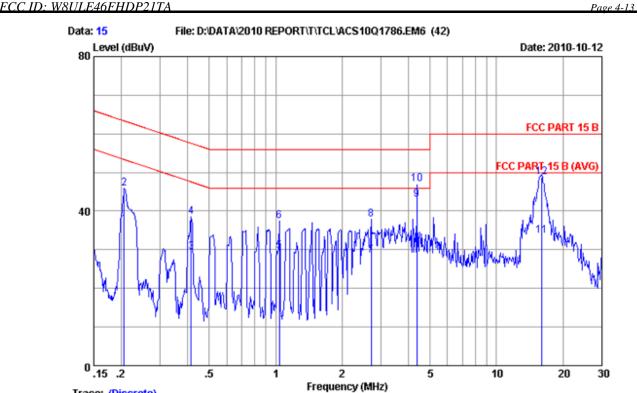
:HDMI5:1080P

		LISN	Cable		Emissio	n		
No	Freq	Factor	Loss	Reading	Level	Limits	Margin	Remark
	(MHz)	(dB)	(dB)	(dBuV)	(dBuV)	(dBuV)	(dB)	
1	0.20614	0.22	9.88	25.50	35.60	63.36	 27.76	
2	0.20614	0.22	9.88	34.35	44.45	63.36	18.91	QP
3	0.41485	0.24	9.88	17.30	27.42	47.55	20.13	Average
4	0.41485	0.24	9.88	26.73	36.85	57.55	20.70	QP
5	2.285	0.25	9.92	16.60	26.77	46.00	19.23	Average
6	2.285	0.25	9.92	26.35	36.52	56.00	19.48	QP
7	4.360	0.27	9.94	32.00	42.21	46.00	3.79	Average
8	4.360	0.27	9.94	34.10	44.31	56.00	11.69	QP
9	5.194	0.27	9.94	21.10	31.31	50.00	18.69	Average
10	5.194	0.27	9.94	29.20	39.41	60.00	20.59	QP
11	14.672	0.51	10.03	20.29	30.83	50.00	19.17	Average
12	14.672	0.51	10.03	29.01	39.55	60.00	20.45	QP

Remarks: 1.Emission Level=LISN Factor+Cable Loss(Include 10dB pulse limit) +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.





Data No

Trace: (Discrete)

Site no :1#conduction

Dis./Ant. :** 2010 ESH2-Z5 NEUTRAL

:FCC PART 15 B Limit

Env./Ins. :29.5*C/55% Engineer :Jolly_Xu

EUT :LED TV M/N:LE46FHDX10TA

Power Rating :AC 120V/60Hz

Test Mode :Running "H" Pattern And 1KHz Playing

:HDMI5:1080P

		LISN	Cable Emission					
No	Freq	Factor	Loss	Reading	Level	Limits	Margin	Remark
	(MHz)	(dB)	(dB)	(dBuV)	(dBuV)	(dBuV)	(dB)	
1	0.20614	0.21	9.88	26.50	36.59	53.36	16.77	Average
2	0.20614	0.21	9.88	35.77	45.86	63.36	17.50	QP
3	0.41485	0.22	9.88	19.30	29.40	47.55	18.15	Average
4	0.41485	0.22	9.88	28.44	38.54	57.55	19.01	QP
5	1.037	0.25	9.89	19.40	29.54	46.00	16.46	Average
6	1.037	0.25	9.89	27.21	37.35	56.00	18.65	QP
7	2.707	0.26	9.93	18.40	28.59	46.00	17.41	Average
8	2.707	0.26	9.93	27.58	37.77	56.00	18.23	QP
9	4.360	0.28	9.94	32.78	43.00	46.00	3.00	Average
10	4.360	0.28	9.94	36.70	46.92	56.00	9.08	QP
11	15.960	0.61	10.04	23.10	33.75	50.00	16.25	Average
12	15.960	0.61	10.04	38.10	48.75	60.00	11.25	QP

Remarks: 1. Emission Level=LISN Factor+Cable Loss(Include 10dB pulse limit) +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.



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5. RADIATED EMISSION TEST

5.1.Test Equipment

5.1.1.For frequency range 30MHz~1000MHz

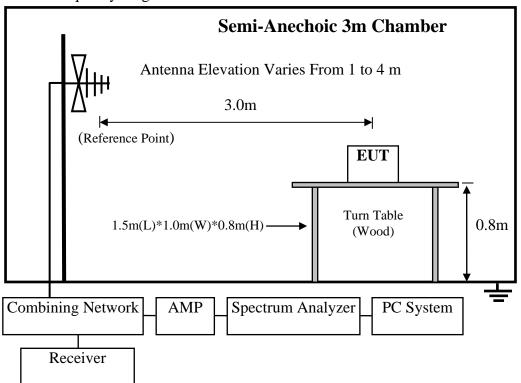
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1	3#Chamber	AUDIX	N/A	N/A	Dec.05,09	1 Year
2	EMI Spectrum	Agilent	E4407B	MY41440292	May.08, 10	1 Year
3	Test Receiver	Rohde & Schwarz	ESVS10	834468/011	May.08, 10	1 Year
4	Amplifier	HP	8447D	2648A04738	May.08, 10	1 Year
5	Bilog Antenna	Schaffner	CBL6111C	2598	Dec.14, 09	1 Year
6	RF Cable	MIYAZAKI	8D-FB	3# Chamber No.1	May.08, 10	1 Year
7	Coaxial Switch	Anritsu	MP59B	M73989	May.08, 10	1 Year

5.1.2.For frequency range 1GHz~6GHz

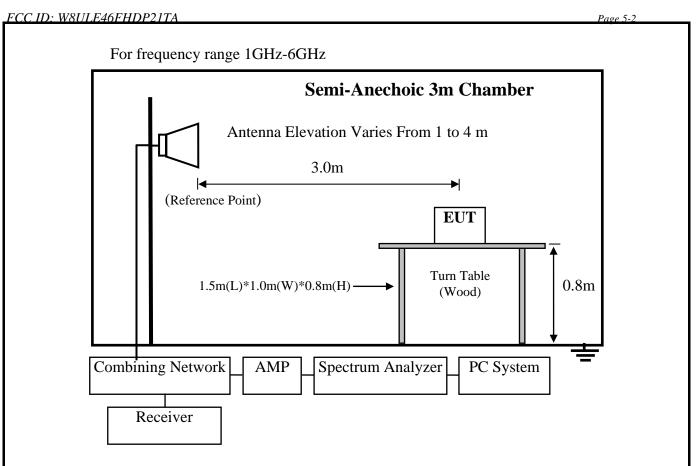
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1	Spectrum Analyzer	Agilent	E7405A	MY45116588	May.08, 10	1 Year
2	Horn Antenna	EMCO	3115	9607-4877	Nov.25, 09	1.5 Year
3	Amplifier	Agilent	8449B	3008A00863	May.08, 10	1 Year
4	RF Cable	Hubersuhner	SUCOFLEX102	28620/2	May.08, 10	1 Year
5	RF Cable	Hubersuhner	SUCOFLEX102	29091/2	May.08, 10	1 Year

5.2.Block Diagram of Test Setup

For frequency range 30MHz-1000MHz







5.3. Radiated Emission Limit

Frequency	Distance	Field Strengths Limits dB(μV)/m		
MHz	(Meters)			
30 ~ 88	3	40.0		
88 ~ 216	3	43.5		
216 ~ 960	3	46.0		
960 ~ 1000	3	54.0		
Above 6000	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.

5.4.EUT Configuration on Test

The configurations of EUT are listed in Section 4.4

5.5. Operating Condition of EUT

Same as Conducted Emission test that is listed in Section 4.5. except the test set up replaced by Section 5.2.

Page 5-3

5.6. 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 C63.4-2003 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.

The frequency range from 30MHz to 6000MHz is checked. The test result are reported on Section 5.7.

5.7. Radiated Disturbance 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, all the test results are listed in next pages.

EUT: LED TV Model No. : LE46FHDX10TA

Test Date: Oct.15, 2010 Temperature: 24°C Humidity: 56%

The details of test modes are as follows:

NO.	Resolution & Frequency	Reference Test Data No.			
NO.	Resolution & Flequency	Horizontal	Vertical		
1.	VGA 640*480 60Hz	#30	#29		
2.	VGA 800*600 60Hz	#27	#28		
3.	VGA 1024*768 60Hz	#26	#25		
4.	HDMI1 1080P	#31	#32		
5. ※	HDMI2 1080P	#34	#33		
6.	HDMI3 1080P	#35	#36		
7.	HDMI4 1080P	#38	#37		
8.	HDMI5 1080P	#39	#40		

(★ Worst test mode)



FCC ID: W8ULE46FHDP21TA

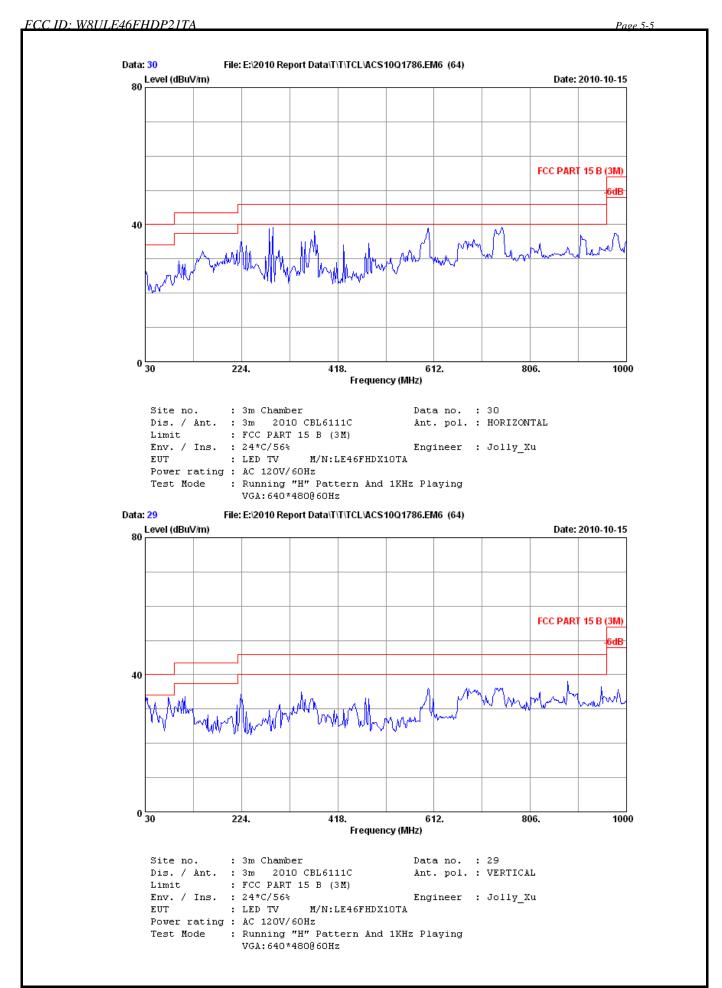
Page 5-4

For frequency range 1GHz~6GHz

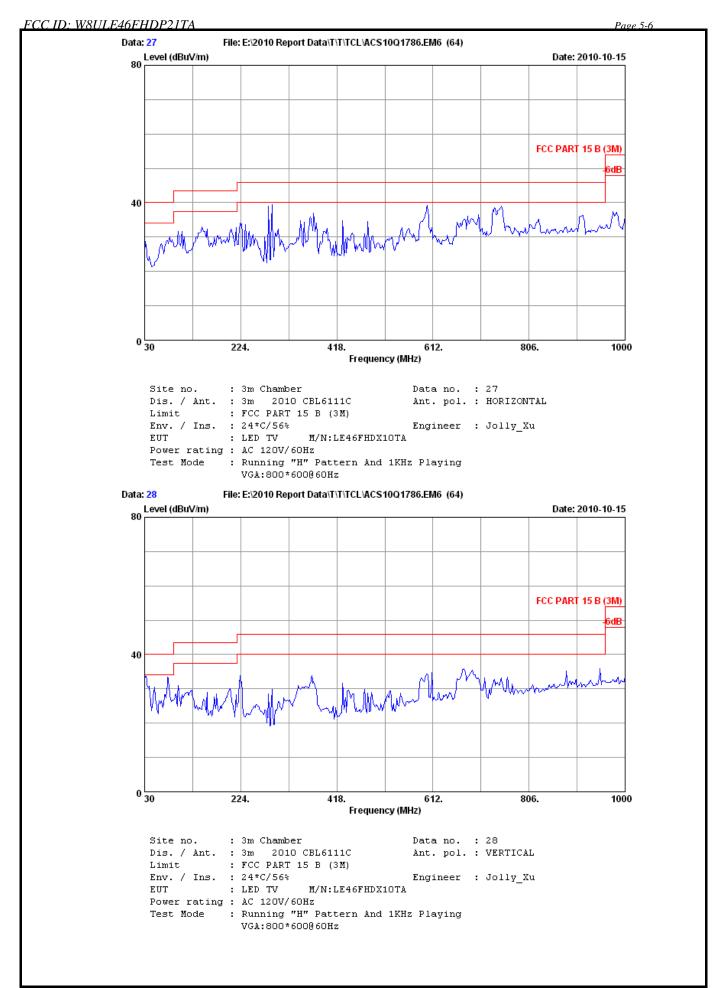
The EUT with below test modes ere measured within Anechoic Chamber and the test results listed in next pages

Test Da	te: Oct.15, 2010 Temp	erature: 24℃	Humidity: 56%		
NO.	Resolution & Frequency	Reference Test Data No.			
NO.	Resolution & Flequency	Horizontal	Vertical		
1.	VGA 1024*768 60Hz	#1, #2	#3, #4		
2.	HDMI1 1080P	#23, #24	#21, #22		
3.	HDMI2 1080P	#17, #18	#19, #20		
4.	HDMI3 1080P	#15, #16	#13, #14		
5.	HDMI4 1080P	#9, #10	#11, #12		
	HDMI5 1080P	#7, #8	#5, #6		

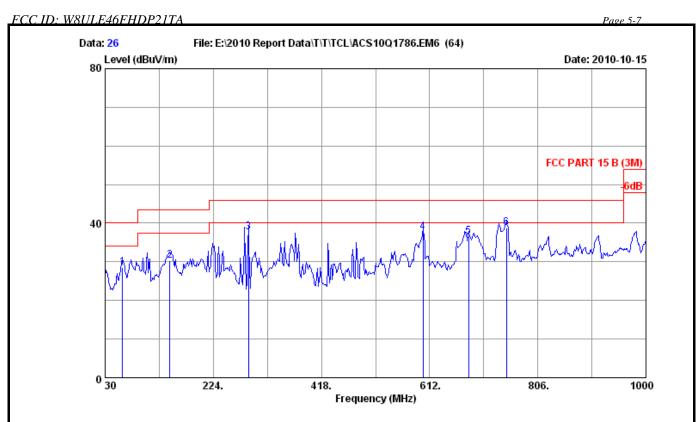












: 3m Chamber Site no. Data no. : 26

Dis. / Ant. : 3m 2010 CBL6111C Ant. pol. : HORIZONTAL

Limit : FCC PART 15 B (3M)

Env. / Ins. : 24*C/56% Engineer : Jolly_Xu

M/N:LE46FHDX10TA : LED TV

Power rating : AC 120V/60Hz

Test Mode : Running "H" Pattern And 1KHz Playing

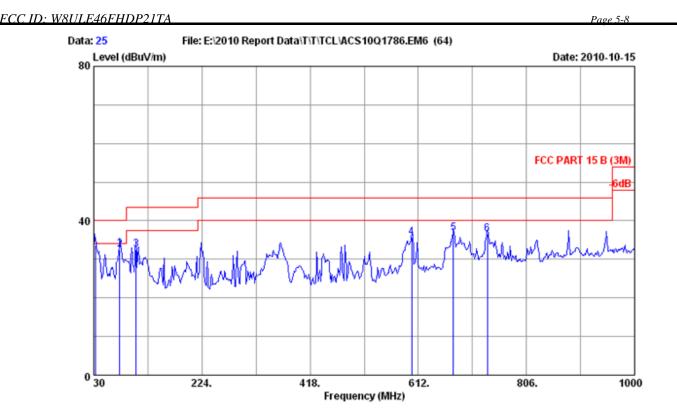
VGA:1024*768@60Hz

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	61.040	6.00	0.86	21.70	28.56	40.00	11.44	QP
2	146.400	11.84	1.14	17.30	30.28	43.50	13.22	QP
3	287.050	13.48	2.40	21.70	37.58	46.00	8.42	QP
4	600.360	19.90	4.12	13.70	37.72	46.00	8.28	QP
5	681.840	20.72	4.43	11.30	36.45	46.00	9.55	QP
6	749.740	22.00	4.70	12.10	38.80	46.00	7.20	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. : 25
Dis. / Ant. : 3m 2010 CBL6111C Ant. pol. : VERTICAL

Limit : FCC PART 15 B (3M)

Env. / Ins. : 24*C/56% Engineer : Jolly_Xu

EUT : LED TV M/N:LE46FHDX10TA

Power rating : AC 120V/60Hz

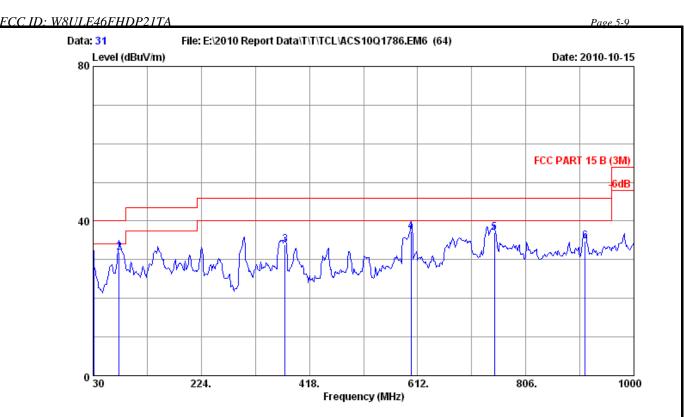
Test Mode : Running "H" Pattern And 1KHz Playing

VGA:1024*768@60Hz

No.	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	32.450	18.32	0.63	14.70	33.65	40.00	6.35	OP
2	76.560	7.47	0.97	24.19	32.63	40.00	7.37	QP
3	105.660	11.00	1.12	20.40	32.52	43.50	10.98	QP
4	600.360	19.90	4.12	11.70	35.72	46.00	10.28	QP
5	675.050	20.75	4.40	11.70	36.85	46.00	9.15	OP
6	736.160	21.60	4.64	10.30	36.54	46.00	9.46	_
6	736.160	21.00	4.04	10.30	36.34	46.00	9.40	QP

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.

The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber

Data no. : 31 Ant. pol. : HORIZONTAL Dis. / Ant. : 3m 2010 CBL6111C

: FCC PART 15 B (3M) Limit

Env. / Ins. : 24*C/56% Engineer : Jolly_Xu

: LED TV M/N:LE46FHDX10TA

Power rating : AC 120V/60Hz

Test Mode : Running "H" Pattern And 1KHz Playing

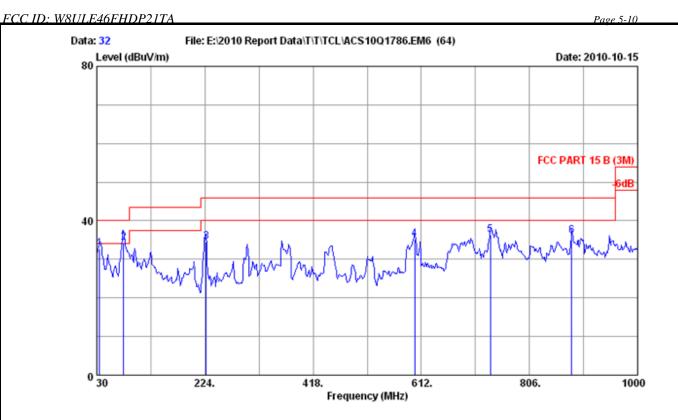
HDMI 1:1080P

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	30.986	19.44	0.62	10.30	30.36	40.00	9.64	QP
2	76.545	7.47	0.97	23.39	31.83	40.00	8.17	QP
3	374.326	15.58	2.80	15.50	33.88	46.00	12.12	QP
4	600.329	19.90	4.12	13.30	37.32	46.00	8.68	QP
5	749.740	22.00	4.70	10.30	37.00	46.00	9.00	QP
6	912.485	23.21	5.25	6.30	34.76	46.00	11.24	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 2010 CBL6111C Ant. pol. : VERTICAL

Limit : FCC PART 15 B (3M)

Env. / Ins. : 24*C/56% Engineer : Jolly_Xu

EUT : LED TV M/N:LE46FHDX10TA

Power rating : AC 120V/60Hz

Test Mode : Running "H" Pattern And 1KHz Playing

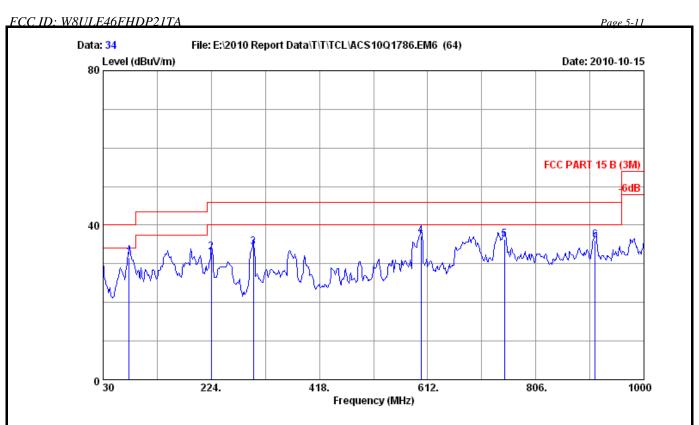
HDMI 1:1080P

No.	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	34.828	17.20	0.65	14.80	32.65	40.00	7.35	QP
2	78.159	7.63	0.98	25.80	34.41	40.00	5.59	QP
3	225.928	10.68	1.95	21.90	34.53	46.00	11.47	QP
4	600.327	19.90	4.12	11.20	35.22	46.00	10.78	QP
5	736.128	21.60	4.64	10.00	36.24	46.00	9.76	QP
6	881.616	22.82	5.14	8.10	36.06	46.00	9.94	QP

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.

The emission levels that are 20dB below the official limit are not reported.





Site no. : 3m Chamber Data no. : 34

Dis. / Ant. : 3m 2010 CBL6111C Ant. pol. : HORIZONTAL

Limit : FCC PART 15 B (3M)

Env. / Ins. : 24*C/56% Engineer : Jolly_Xu

EUT : LED TV M/N:LE46FHDX10TA

Power rating : AC 120V/60Hz

Test Mode : Running "H" Pattern And 1KHz Playing

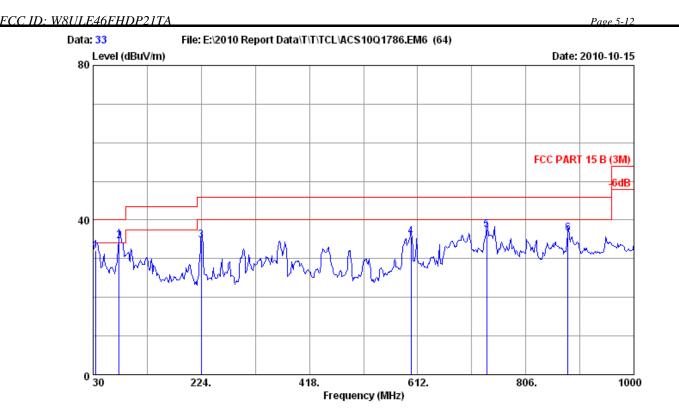
HDMI 2:1080P

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark	
1	76.477	7.47	0.97	23.29	31.73	40.00	8.27	QP	
2	224.266	10.52	1.94	20.60	33.06	46.00	12.94	QP	
3	299.611	13.70	2.48	18.10	34.28	46.00	11.72	QP	
4	600.323	19.90	4.12	13.10	37.12	46.00	8.88	QP	
5	749.740	22.00	4.70	9.70	36.40	46.00	9.60	QP	
6	912.299	23.21	5.25	7.60	36.06	46.00	9.94	QP	

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.

AS. 1. EMISSION DEVEL- ANCENNA PACCOL + CADIE DOSS + REAUTING.

The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 33
Dis. / Ant. : 3m 2010 CBL6111C Ant. pol. : VERTICAL

Limit : FCC PART 15 B (3M)

Env. / Ins. : 24*C/56% Engineer : Jolly_Xu

EUT : LED TV M/N:LE46FHDX10TA

Power rating : AC 120V/60Hz

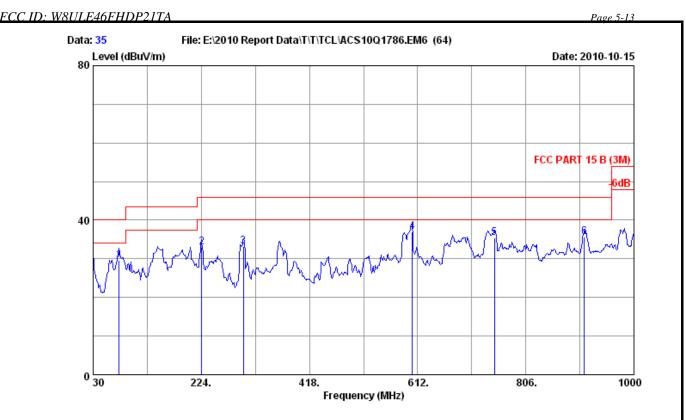
Test Mode : Running "H" Pattern And 1KHz Playing

HDMI 2:1080P

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	34.796	17.20	0.65	14.30	32.15	40.00	7.85	QP
2	76.526	7.47	0.97	26.09	34.53	40.00	5.47	QP
3	224.122	10.52	1.94	22.30	34.76	46.00	11.24	QP
4	600.317	19.90	4.12	11.60	35.62	46.00	10.38	QP
5	736.098	21.60	4.64	11.30	37.54	46.00	8.46	QP
6	881.622	22.82	5.14	8.50	36.46	46.00	9.54	QP

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.





Site no. : 3m Chamber Data no. : 35

Dis. / Ant. : 3m 2010 CBL6111C Ant. pol. : HORIZONTAL

Limit : FCC PART 15 B (3M)

Env. / Ins. : 24*C/56% Engineer : Jolly_Xu

EUT : LED TV M/N:LE46FHDX10TA

Power rating : AC 120V/60Hz

Test Mode : Running "H" Pattern And 1KHz Playing

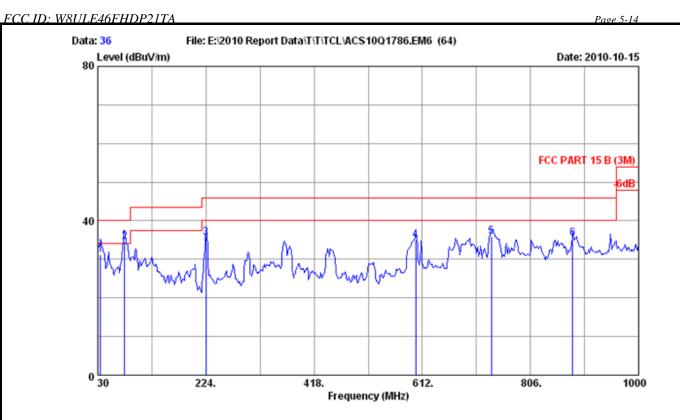
HDMI 3:1080P

_	No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark	
	1	76.492	7.47	0.97	21.19	29.63	40.00	10.37	QP	
	2	224.321	10.52	1.94	20.50	32.96	46.00	13.04	QP	
	3	299.628	13.70	2.48	17.10	33.28	46.00	12.72	QP	
	4	602.276	19.86	4.13	13.10	37.09	46.00	8.91	QP	
	5	749.738	22.00	4.70	8.70	35.40	46.00	10.60	QP	
	6	910.713	23.14	5.24	7.30	35.68	46.00	10.32	QP	

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.

The emission levels that are 20dB below the official limit are not reported.





Site no. : 3m Chamber Data no. : 36
Dis. / Ant. : 3m 2010 CBL6111C Ant. pol. : VERTICAL

Limit : FCC PART 15 B (3M)

Env. / Ins. : 24*C/56% Engineer : Jolly_Xu

EUT : LED TV M/N:LE46FHDX10TA

Power rating : AC 120V/60Hz

Test Mode : Running "H" Pattern And 1KHz Playing

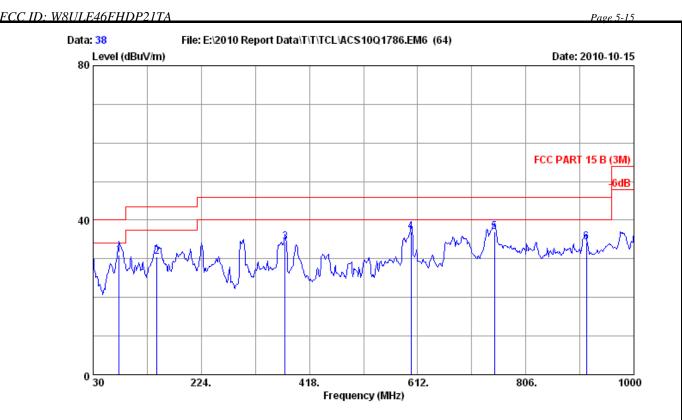
HDMI 3:1080P

No.	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	34.774	17.20	0.65	13.30	31.15	40.00	8.85	QP
2	78.388	7.63	0.98	25.90	34.51	40.00	5.49	QP
3	224.170	10.52	1.94	23.20	35.66	46.00	10.34	QP
4	600.315	19.90	4.12	10.90	34.92	46.00	11.08	QP
5	736.122	21.60	4.64	9.70	35.94	46.00	10.06	QP
6	881.598	22.82	5.14	7.40	35.36	46.00	10.64	QP

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.

2. The emission levels that are 20dB below the official limit are not reported.





Dis. / Ant. : 3m 2010 CBL6111C Ant. pol. : HORIZONTAL

Limit : FCC PART 15 B (3M)

Env. / Ins. : 24*C/56% Engineer : Jolly_Xu

EUT : LED TV M/N:LE46FHDX10TA

Power rating : AC 120V/60Hz

Test Mode : Running "H" Pattern And 1KHz Playing

HDMI 4:1080P

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	76.544	7.47	0.97	22.59	31.03	40.00	8.97	QP
2	144.445	11.92	1.14	17.49	30.55	43.50	12.95	QP
3	374.321	15.58	2.80	15.90	34.28	46.00	11.72	QP
4	600.288	19.90	4.12	12.90	36.92	46.00	9.08	QP
5	749.736	22.00	4.70	10.40	37.10	46.00	8.90	QP
6	914.629	23.28	5.26	5.80	34.34	46.00	11.66	QP

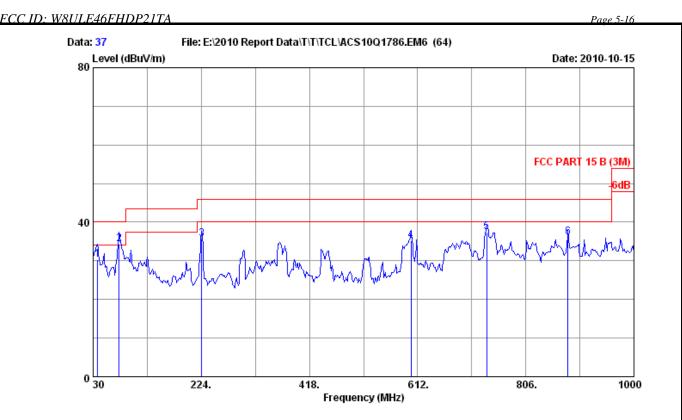
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.

rks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.

2. The emission levels that are 20dB below the official

The emission levels that are 20dB below the official limit are not reported.





Site no. : 3m Chamber Data no. : 37
Dis. / Ant. : 3m 2010 CBL6111C Ant. pol. : VERTICAL

Limit : FCC PART 15 B (3M)

Env. / Ins. : 24*C/56% Engineer : Jolly_Xu

EUT : LED TV M/N:LE46FHDX10TA

Power rating : AC 120V/60Hz

Test Mode : Running "H" Pattern And 1KHz Playing

HDMI 4:1080P

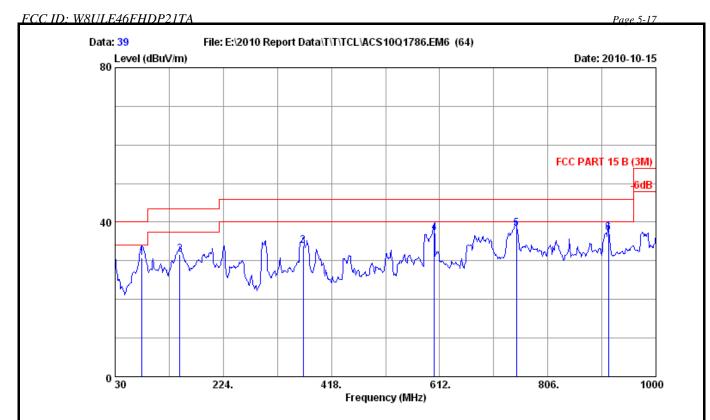
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark	
1	37.722	15.58	0.67	14.10	30.35	40.00	9.65	QP	
2	76.513	7.47	0.97	25.89	34.33	40.00	5.67	QP	
3	224.462	10.52	1.94	23.20	35.66	46.00	10.34	QP	
4	600.325	19.90	4.12	11.30	35.32	46.00	10.68	QP	
5	736.153	21.60	4.64	11.30	37.54	46.00	8.46	QP	
6	881.597	22.82	5.14	8.20	36.16	46.00	9.84	QP	

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.

: 1. Emission Level= Antenna Factor + Cable Loss + Reading. 2. The emission levels that are 20dB below the official

limit are not reported.





Dis. / Ant. : 3m 2010 CBL6111C Ant. pol. : HORIZONTAL

Limit : FCC PART 15 B (3M)

Env. / Ins. : 24*C/56% Engineer : Jolly_Xu

EUT : LED TV M/N:LE46FHDX10TA

Power rating : AC 120V/60Hz

Test Mode : Running "H" Pattern And 1KHz Playing

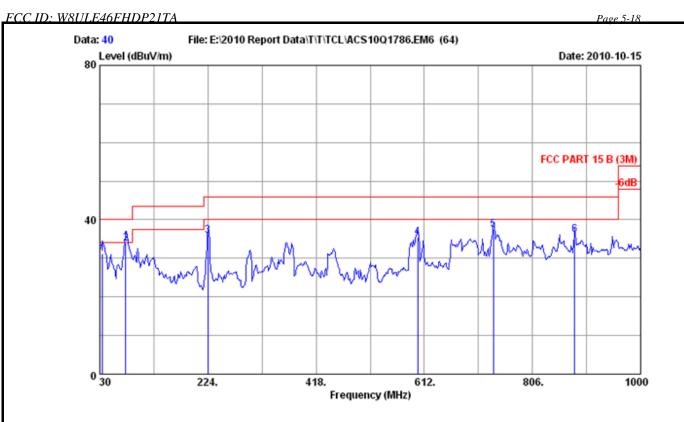
HDMI 5:1080P

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	78.446	7.63	0.98	22.20	30.81	40.00	9.19	QP
2	146.335	11.84	1.14	18.70	31.68	43.50	11.82	QP
3	367.564	15.53	2.77	15.60	33.90	46.00	12.10	QP
4	602.227	19.86	4.13	13.20	37.19	46.00	8.81	QP
5	749.721	22.00	4.70	11.60	38.30	46.00	7.70	QP
6	914.575	23.28	5.26	8.60	37.14	46.00	8.86	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 2010 CBL6111C Ant. pol. : VERTICAL

Limit : FCC PART 15 B (3M)

Env. / Ins. : 24*C/56% Engineer : Jolly_Xu

EUT : LED TV M/N:LE46FHDX10TA

Power rating : AC 120V/60Hz

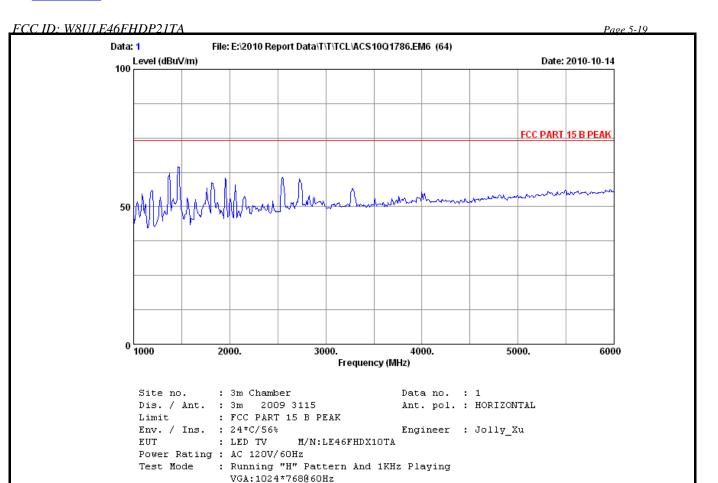
Test Mode : Running "H" Pattern And 1KHz Playing

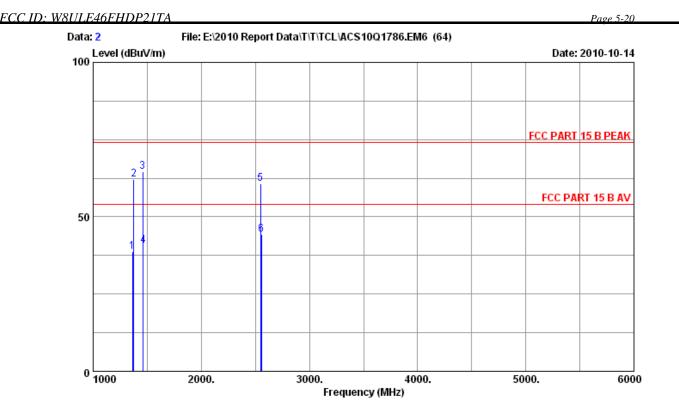
HDMI 5:1080P

No.	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	34.768	17.20	0.65	13.30	31.15	40.00	8.85	QP
2	76.436	7.47	0.97	25.49	33.93	40.00	6.07	QP
3	224.223	10.52	1.94	23.50	35.96	46.00	10.04	QP
4	600.329	19.90	4.12	11.40	35.42	46.00	10.58	QP
5	736.098	21.60	4.64	11.30	37.54	46.00	8.46	QP
6	881.612	22.82	5.14	8.10	36.06	46.00	9.94	QP

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.

The emission levels that are 20dB below the official limit are not reported.





Site no. : 3m Chamber

Data no. : 2 Ant. pol. : HORIZONTAL Dis. / Ant. : 3m 2009 3115

: FCC PART 15 B PEAK Limit

Env. / Ins. : 24*C/56% Engineer : Jolly Xu

M/N:LE46FHDX10TA : LED TV

Power Rating : AC 120V/60Hz

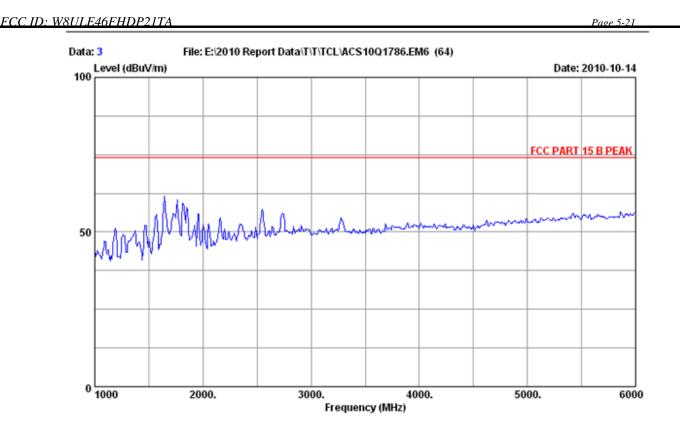
Test Mode : Running "H" Pattern And 1KHz Playing

VGA:1024*768@60Hz

		Ant.	Cable	AMP		Emission			
No.	Freq.	Factor	Loss	factor	Reading	Level	Limits	Margin	Remark
	(MHz)	(dB/m)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	
1	1365.000	25.26	4.45	35.72	44.87	38.86	54.00	15.14	Average
2	1375.000	25.25	4.47	35.72	68.06	62.06	74.00	11.94	Peak
3	1460.000	25.21	4.58	35.53	70.31	64.57	74.00	9.43	Peak
4	1464.800	25.21	4.58	35.47	46.36	40.68	54.00	13.32	Average
5	2550.000	29.46	6.07	33.82	58.88	60.59	74.00	13.41	Peak
6	2554.300	29.46	6.07	33.82	42.54	44.25	54.00	9.75	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp Factor

2. The emission levels that are 20dB below the official $% \left(1\right) =\left(1\right) ^{2}$ limit are not reported.



Dis. / Ant. : 3m 2009 3115 Ant. pol. : VERTICAL

Limit : FCC PART 15 B PEAK

Env. / Ins. : 24*C/56% Engineer : Jolly_Xu

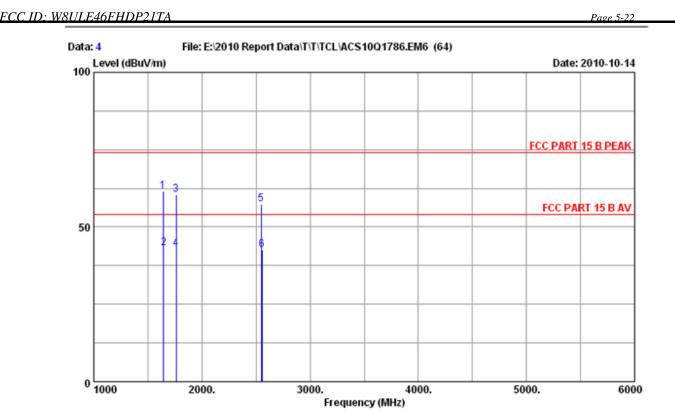
EUT : LED TV M/N:LE46FHDX10TA

Power Rating : AC 120V/60Hz

Test Mode : Running "H" Pattern And 1KHz Playing

VGA:1024*768@60Hz





Dis. / Ant. : 3m 2009 3115 Ant. pol. : VERTICAL

Limit : FCC PART 15 B PEAK

Env. / Ins. : 24*C/56% Engineer : Jolly_Xu

EUT : LED TV M/N:LE46FHDX10TA

Power Rating : AC 120V/60Hz

Test Mode : Running "H" Pattern And 1KHz Playing

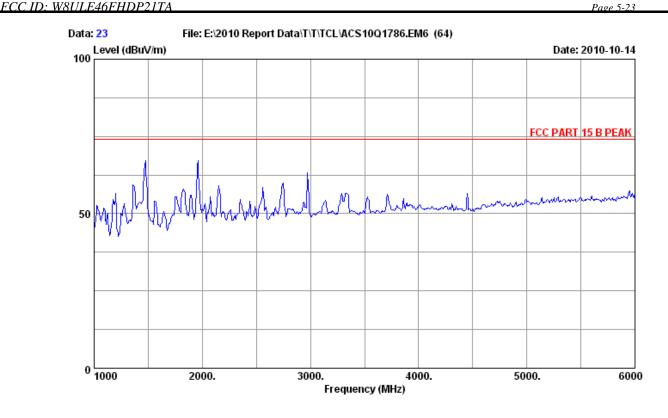
VGA:1024*768@60Hz

No.	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dBuV)	Reading (dBuV/m)	Emission Level (dBuV/m)	Limits (dB)	Margin (dB)	Remark
1	1640.000	25.53	4.84	35.01	66.27	61.63	74.00	12.37	Peak
2	1644.520	25.53 25.79	4.84	35.01	47.78	43.14	54.00	10.86	Average
3	1760.000 1762.340	25.79	5.00 5.00	34.75 34.75	64.28 46.83	60.32 42.87	74.00 54.00	13.68	Peak Average
5	2550.000	29.46	6.07	33.82	55.78	57.49	74.00	16.51	Peak
6	2557.580	29.51	6.09	33.82	40.92	42.70	54.00	11.30	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading

-Amp Factor

The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Dis. / Ant. : 3m 2009 3115 Data no. : 23

Ant. pol. : HORIZONTAL

: FCC PART 15 B PEAK Limit

Env. / Ins. : 24*C/56% Engineer : Jolly_Xu

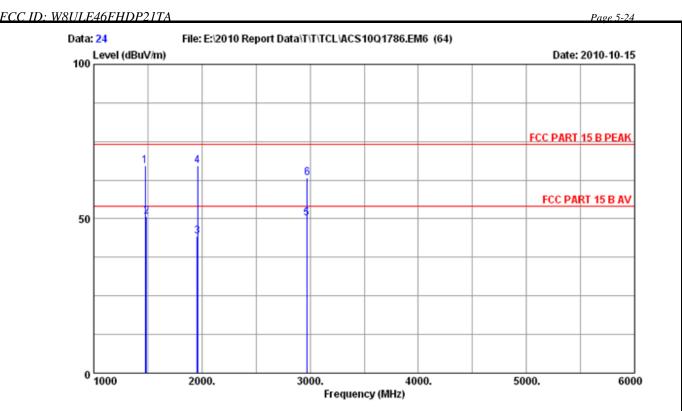
M/N:LE46FHDX10TA : LED TV

Power Rating : AC 120V/60Hz

Test Mode : Running "H" Pattern And 1KHz Playing

HDMI 1:1080P





Dis. / Ant. : 3m 2009 3115 Ant. pol. : HORIZONTAL

Limit : FCC PART 15 B PEAK

Env. / Ins. : 24*C/56% Engineer : Jolly_Xu

EUT : LED TV M/N:LE46FHDX10TA

Power Rating : AC 120V/60Hz

Test Mode : Running "H" Pattern And 1KHz Playing

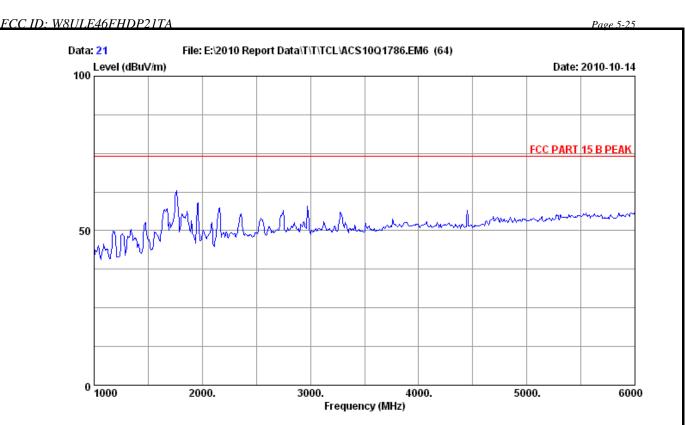
HDMI 1:1080P

(MHz) (dB/m) (dB) $(dBuV)$ $(dBuV/m)$ (dB) (dB)	
	_
1 1475.000 25.21 4.61 35.47 72.81 67.16 74.00 6.84 Peak	
2 1485.000 25.20 4.63 35.47 56.24 50.60 54.00 3.40 Aver	age
3 1957.800 26.19 5.26 34.23 47.12 44.34 54.00 9.66 Aver	age
4 1960.000 26.19 5.26 34.23 69.99 67.21 74.00 6.79 Peak	
5 2970.000 30.79 6.64 33.61 46.43 50.25 54.00 3.75 Aver	age
6 2975.000 30.79 6.64 33.61 59.30 63.12 74.00 10.88 Peak	

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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. : 21
Dis. / Ant. : 3m 2009 3115 Ant. pol. : VERTICAL

Limit : FCC PART 15 B PEAK

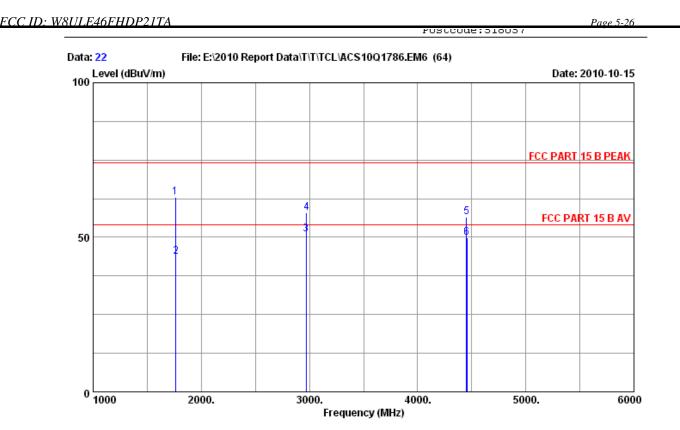
Env. / Ins. : 24*C/56% Engineer : Jolly_Xu

EUT : LED TV M/N:LE46FHDX10TA

Power Rating : AC 120V/60Hz

Test Mode : Running "H" Pattern And 1KHz Playing

HDMI 1:1080P



Site no. : 3m Chamber Data no. : 22
Dis. / Ant. : 3m 2009 3115 Ant. pol. : VERTICAL

Limit : FCC PART 15 B PEAK

Env. / Ins. : 24*C/56% Engineer : Jolly_Xu

EUT : LED TV M/N:LE46FHDX10TA

Power Rating : AC 120V/60Hz

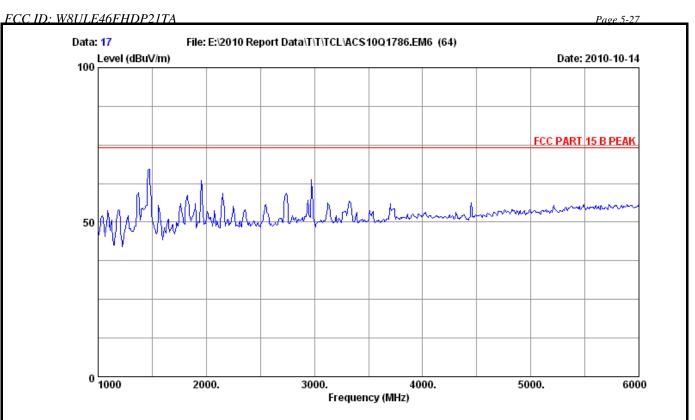
Test Mode : Running "H" Pattern And 1KHz Playing

HDMI 1:1080P

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dBuV)	Reading (dBuV/m)	Emission Level (dBuV/m)	Limits (dB)	Margin (dB)	Remark
1	1760.000	25.79	5.00	34.75	66.82	62.86	74.00	11.14	Peak
2	1763.330	25.79	5.00	34.68	47.75	43.86	54.00	10.14	Average
3	2970.000	30.79	6.64	33.61	47.16	50.98	54.00	3.02	Average
4	2975.000	30.79	6.64	33.61	54.03	57.85	74.00	16.15	Peak
5	4450.000	32.86	7.83	33.24	49.19	56.64	74.00	17.36	Peak
6	4455.000	32.86	7.83	33.24	42.27	49.72	54.00	4.28	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. : 17

Dis. / Ant. : 3m 2009 3115 Ant. pol. : HORIZONTAL

Limit : FCC PART 15 B PEAK

Env. / Ins. : 24*C/56% Engineer : Jolly_Xu

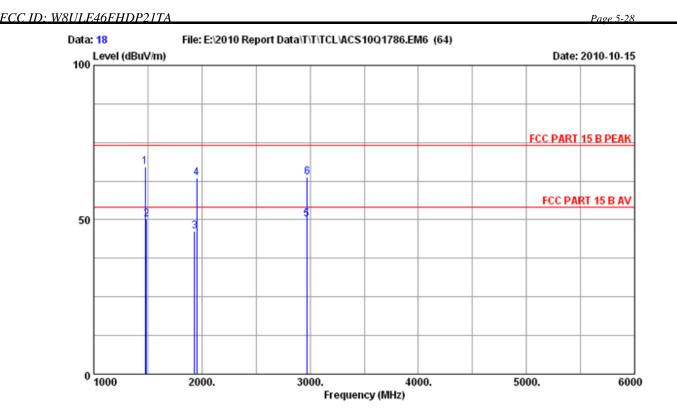
EUT : LED TV M/N:LE46FHDX10TA

Power Rating : AC 120V/60Hz

Test Mode : Running "H" Pattern And 1KHz Playing

HDMI 2:1080P





Dis. / Ant. : 3m 2009 3115 Ant. pol. : HORIZONTAL

Limit : FCC PART 15 B PEAK

Env. / Ins. : 24*C/56% Engineer : Jolly_Xu

EUT : LED TV M/N:LE46FHDX10TA

Power Rating : AC 120V/60Hz

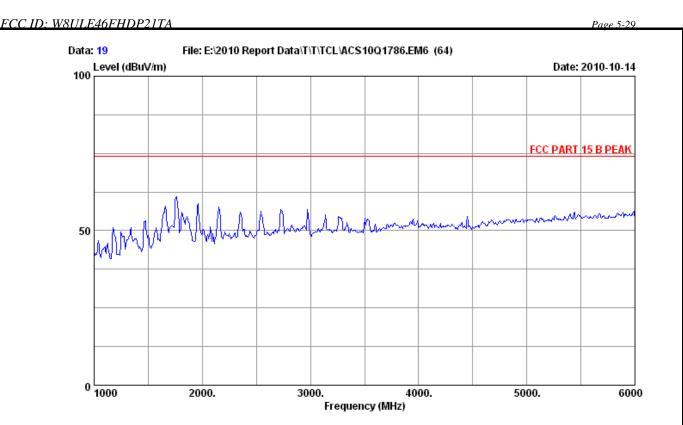
Test Mode : Running "H" Pattern And 1KHz Playing

HDMI 2:1080P

No.	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dBuV)	Reading (dBuV/m)	Emission Level (dBuV/m)	Limits (dB)	Margin (dB)	Remark
1	1475.000	25.21	4.61	35.47	72.87	67.22	74.00	6.78	Peak
2	1485.100	25.20	4.63	35.47	55.72	50.08	54.00	3.92	Average
3	1930.500	26.15	5.23	34.29	49.15	46.24	54.00	7.76	Average
4	1950.000	26.19	5.26	34.23	66.19	63.41	74.00	10.59	Peak
5	2970.000	30.79	6.64	33.61	46.26	50.08	54.00	3.92	Average
6	2975.000	30.79	6.64	33.61	59.94	63.76	74.00	10.24	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp Factor

The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 19
Dis. / Ant. : 3m 2009 3115 Ant. pol. : VERTICAL

Limit : FCC PART 15 B PEAK

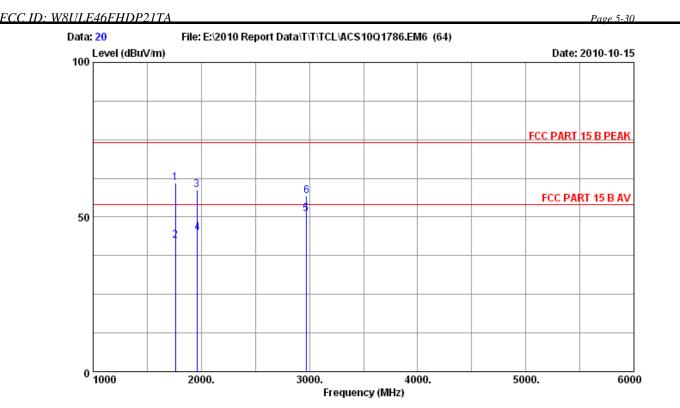
Env. / Ins. : 24*C/56% Engineer : Jolly_Xu

EUT : LED TV M/N:LE46FHDX10TA

Power Rating : AC 120V/60Hz

Test Mode : Running "H" Pattern And 1KHz Playing

HDMI 2:1080P



Site no. : 3m Chamber Data no. : 20
Dis. / Ant. : 3m 2009 3115 Ant. pol. : VERTICAL

Limit : FCC PART 15 B PEAK

Env. / Ins. : 24*C/56% Engineer : Jolly_Xu

EUT : LED TV M/N:LE46FHDX10TA

Power Rating : AC 120V/60Hz

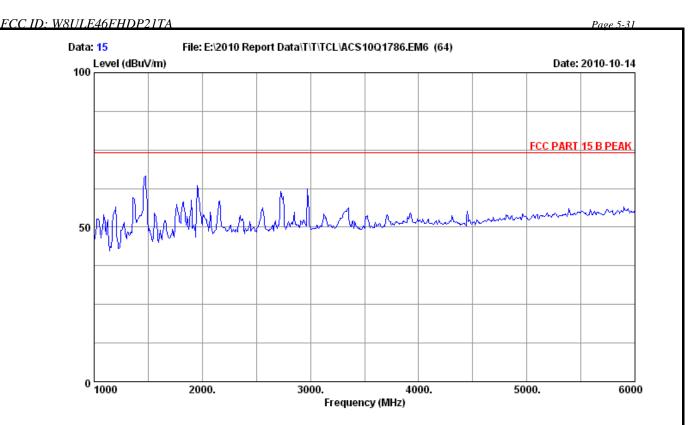
Test Mode : Running "H" Pattern And 1KHz Playing

HDMI 2:1080P

		Ant.	Cable	AMP		Emission			
No.	Freq.	Factor	Loss	factor	Reading	Level	Limits	Margin	Remark
	(MHz)	(dB/m)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	
1	1760.000	25.79	5.00	34.75	65.01	61.05	74.00	12.95	Peak
2	1761.880	25.79	5.00	34.75	46.39	42.43	54.00	11.57	Average
3	1960.000	26.19	5.26	34.23	61.60	58.82	74.00	15.18	Peak
4	1962.750	26.23	5.28	34.16	47.40	44.75	54.00	9.25	Average
5	2970.000	30.79	6.64	33.61	47.07	50.89	54.00	3.11	Average
6	2975.000	30.79	6.64	33.61	53.08	56.90	74.00	17.10	Peak

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Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp Factor



Dis. / Ant. : 3m 2009 3115 Ant. pol. : HORIZONTAL

Limit : FCC PART 15 B PEAK

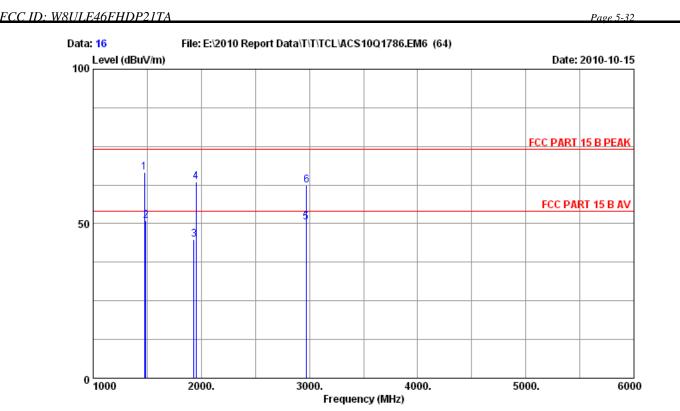
Env. / Ins. : 24*C/56% Engineer : Jolly_Xu

EUT : LED TV M/N:LE46FHDX10TA

Power Rating : AC 120V/60Hz

Test Mode : Running "H" Pattern And 1KHz Playing

HDMI 3:1080P



Site no. : 3m Chamber Data no. : 16

Dis. / Ant. : 3m 2009 3115 Ant. pol. : HORIZONTAL

Limit : FCC PART 15 B PEAK

Env. / Ins. : 24*C/56% Engineer : Jolly_Xu

EUT : LED TV M/N:LE46FHDX10TA

Power Rating : AC 120V/60Hz

Test Mode : Running "H" Pattern And 1KHz Playing

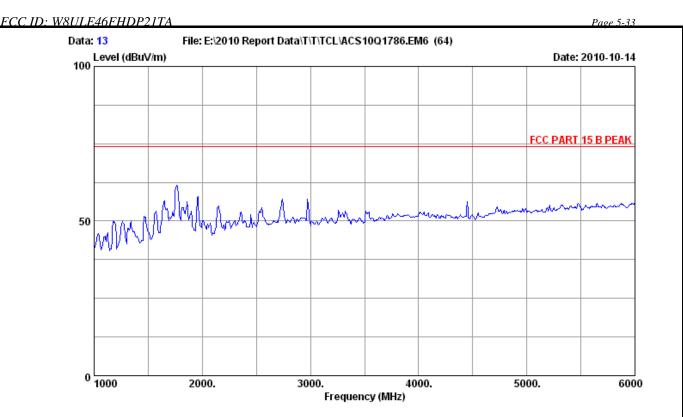
HDMI 3:1080P

		Ant.	Cable	AMP		Emission			
No.	Freq.	Factor	Loss	factor	Reading	Level	Limits	Margin	Remark
	(MHz)	(dB/m)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	
1	1475.000	25.21	4.61	35.47	72.35	66.70	74.00	7.30	Peak
2	1485.000	25.20	4.63	35.47	56.52	50.88	54.00	3.12	Average
3	1930.500	26.15	5.23	34.29	47.65	44.74	54.00	9.26	Average
4	1950.000	26.19	5.26	34.23	66.26	63.48	74.00	10.52	Peak
5	2970.100	30.79	6.64	33.61	46.55	50.37	54.00	3.63	Average
6	2975.000	30.79	6.64	33.61	58.52	62.34	74.00	11.66	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. : 13
Dis. / Ant. : 3m 2009 3115 Ant. pol. : VERTICAL

Limit : FCC PART 15 B PEAK

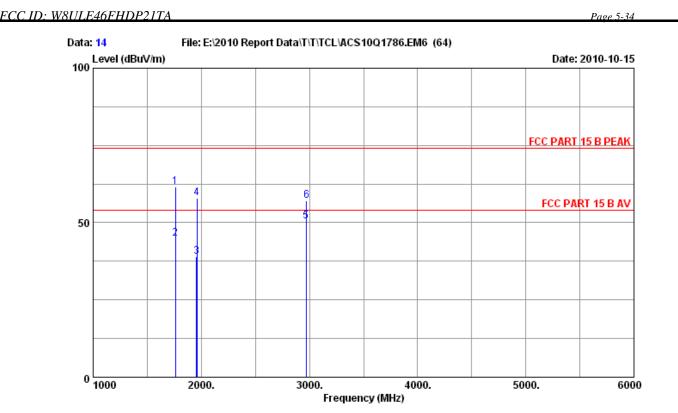
Env. / Ins. : 24*C/56% Engineer : Jolly_Xu

EUT : LED TV M/N:LE46FHDX10TA

Power Rating : AC 120V/60Hz

Test Mode : Running "H" Pattern And 1KHz Playing

HDMI 3:1080P



Site no. : 3m Chamber Data no. : 14
Dis. / Ant. : 3m 2009 3115 Ant. pol. : VERTICAL

Limit : FCC PART 15 B PEAK

Env. / Ins. : 24*C/56% Engineer : Jolly_Xu

EUT : LED TV M/N:LE46FHDX10TA

Power Rating : AC 120V/60Hz

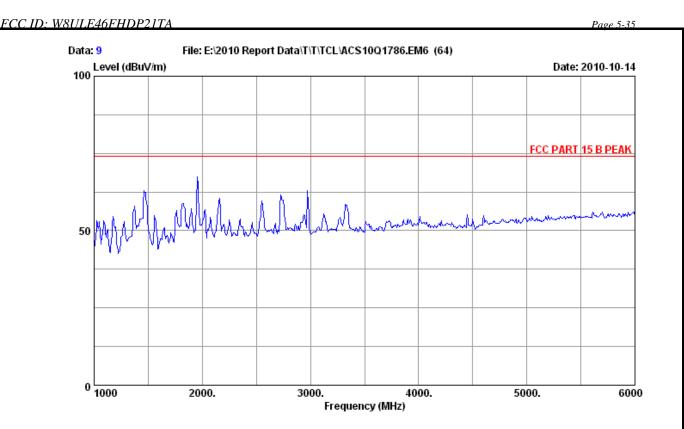
Test Mode : Running "H" Pattern And 1KHz Playing

HDMI 3:1080P

		Ant.	Cable	AMP		Emission			
No.	Freq.	Factor	Loss	factor	Reading	Level	Limits	Margin	Remark
	(MHz)	(dB/m)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	
1	1760.000	25.79	5.00	34.75	65.56	61.60	74.00	12.40	Peak
2	1761.500	25.79	5.00	34.75	48.80	44.84	54.00	9.16	Average
3	1955.500	26.19	5.26	34.23	41.77	38.99	54.00	15.01	Average
4	1960.000	26.19	5.26	34.23	60.74	57.96	74.00	16.04	Peak
5	2970.000	30.79	6.64	33.61	46.72	50.54	54.00	3.46	Average
6	2975.000	30.79	6.64	33.61	53.32	57.14	74.00	16.86	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading

-Amp Factor



Data no. : 9

Site no. : 3m Chamber Dis. / Ant. : 3m 2009 3115 Ant. pol. : HORIZONTAL

: FCC PART 15 B PEAK Limit

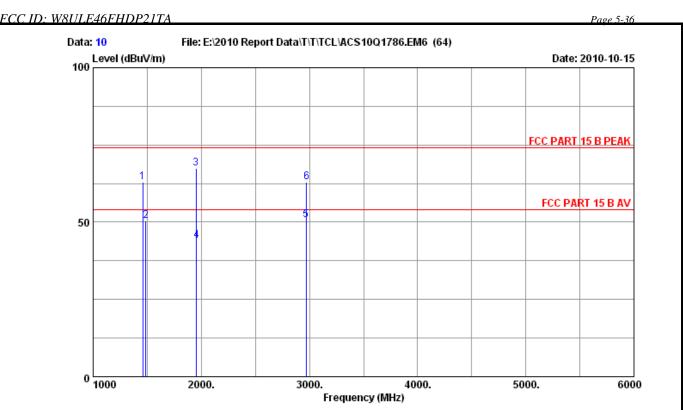
Env. / Ins. : 24*C/56% Engineer : Jolly_Xu

M/N:LE46FHDX10TA : LED TV

Power Rating : AC 120V/60Hz

Test Mode : Running "H" Pattern And 1KHz Playing

HDMI 4:1080P



Site no. : 3m Chamber Data no. : 10

Dis. / Ant. : 3m 2009 3115 Ant. pol. : HORIZONTAL

Limit : FCC PART 15 B PEAK

Env. / Ins. : 24*C/56% Engineer : Jolly_Xu

EUT : LED TV M/N:LE46FHDX10TA

Power Rating : AC 120V/60Hz

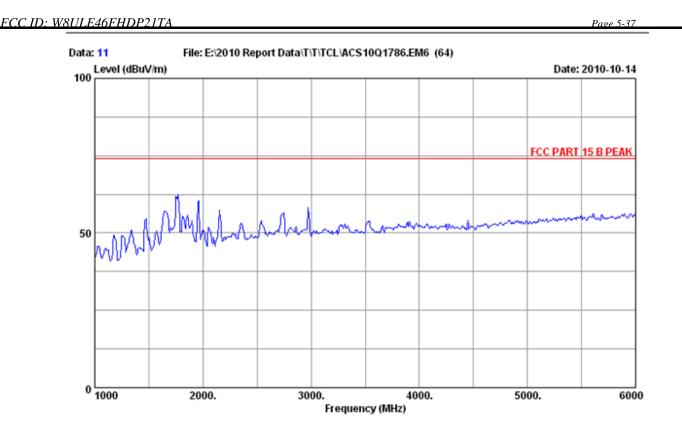
Test Mode : Running "H" Pattern And 1KHz Playing

HDMI 4:1080P

		Ant.	Cable	AMP	Emission				
No.	Freq. (MHz)	Factor (dB/m)	Loss (dB)	factor (dBuV)	Reading (dBuV/m)	Level (dBuV/m)	Limits (dB)	Margin (dB)	Remark
1	1460.000	25.21	4.58	35.53	68.65	62.91	74.00	11.09	Peak
2	1485.000	25.20	4.63	35.47	55.98	50.34	54.00	3.66	Average
3	1950.000	26.19	5.26	34.23	70.14	67.36	74.00	6.64	Peak
4	1956.400	26.19	5.26	34.23	46.74	43.96	54.00	10.04	Average
5	2970.000	30.79	6.64	33.61	46.92	50.74	54.00	3.26	Average
6	2975.000	30.79	6.64	33.61	59.25	63.07	74.00	10.93	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.



Dis. / Ant. : 3m 2009 3115 Ant. pol. : VERTICAL

Limit : FCC PART 15 B PEAK

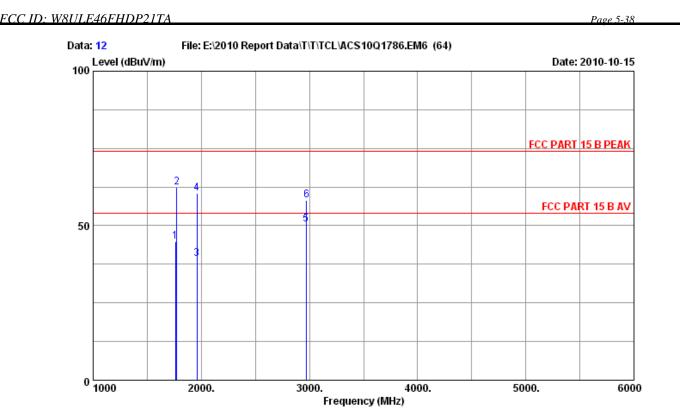
Env. / Ins. : 24*C/56% Engineer : Jolly_Xu

EUT : LED TV M/N:LE46FHDX10TA

Power Rating : AC 120V/60Hz

Test Mode : Running "H" Pattern And 1KHz Playing

HDMI 4:1080P



Site no. : 3m Chamber Data no. : 12
Dis. / Ant. : 3m 2009 3115 Ant. pol. : VERTICAL

Limit : FCC PART 15 B PEAK

Env. / Ins. : 24*C/56% Engineer : Jolly_Xu

EUT : LED TV M/N:LE46FHDX10TA

Power Rating : AC 120V/60Hz

Test Mode : Running "H" Pattern And 1KHz Playing

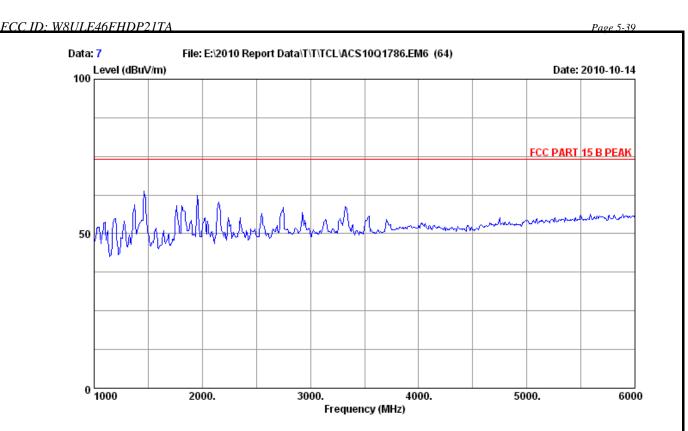
HDMI 4:1080P

		Ant.	Cable	AMP		Emission			
No.	Freq. (MHz)	Factor (dB/m)	Loss (dB)	factor (dBuV)	Reading (dBuV/m)	Level (dBuV/m)	Limits (dB)	Margin (dB)	Remark
	(HHZ)	(ub/m)	(ав) 	(ubuv)	(ubuv/m)	(GBGV/RI)	(ub) 	(ub) 	
1	1761.300	25.79	5.00	34.75	48.76	44.80	54.00	9.20	Average
2	1775.000	25.82	5.02	34.68	66.26	62.42	74.00	11.58	Peak
3	1959.000	26.19	5.26	34.23	42.02	39.24	54.00	14.76	Average
4	1960.000	26.19	5.26	34.23	63.36	60.58	74.00	13.42	Peak
5	2970.000	30.79	6.64	33.61	46.71	50.53	54.00	3.47	Average
6	2975.000	30.79	6.64	33.61	54.34	58.16	74.00	15.84	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading

- Amm Footor

-Amp Factor



Data no. : 7

Site no. : 3m Chamber Dis. / Ant. : 3m 2009 3115 Ant. pol. : HORIZONTAL

: FCC PART 15 B PEAK Limit

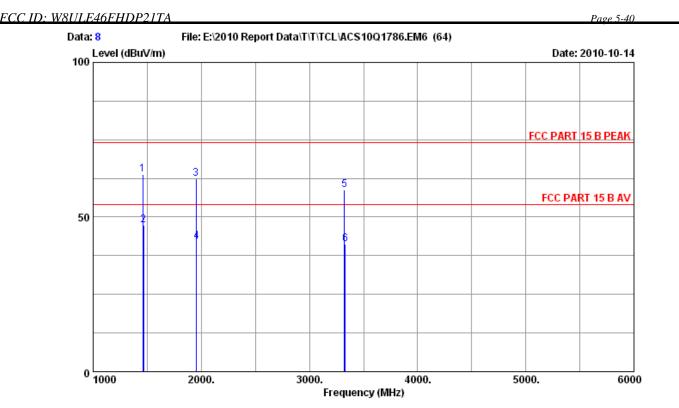
Env. / Ins. : 24*C/56% Engineer : Jolly_Xu

M/N:LE46FHDX10TA : LED TV

Power Rating : AC 120V/60Hz

Test Mode : Running "H" Pattern And 1KHz Playing

HDMI 5:1080P



Site no. : 3m Chamber

Data no. : 8 Ant. pol. : HORIZONTAL Dis. / Ant. : 3m 2009 3115

: FCC PART 15 B PEAK Limit

Env. / Ins. : 24*C/56% Engineer : Jolly_Xu

: LED TV M/N:LE46FHDX10TA

Power Rating : AC 120V/60Hz

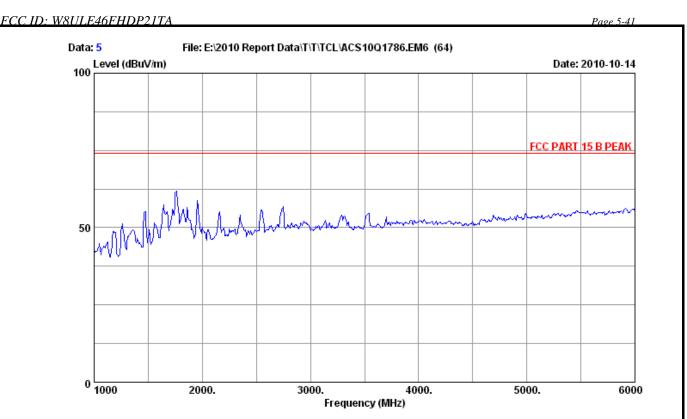
Test Mode : Running "H" Pattern And 1KHz Playing

HDMI 5:1080P

		Ant.	Cable	AMP	Emission				
No.	Freq. (MHz)	Factor (dB/m)	Loss (dB)	factor (dBuV)	Reading (dBuV/m)	Level (dBuV/m)	Limits (dB)	Margin (dB)	Remark
1	1460.000	25.21	4.58	35.53	69.51	63.77	74.00	10.23	Peak
2	1465.800	25.21	4.58	35.47	52.99	47.31	54.00	6.69	Average
3	1950.000	26.19	5.26	34.23	65.07	62.29	74.00	11.71	Peak
4	1955.800	26.19	5.26	34.23	44.96	42.18	54.00	11.82	Average
5	3325.000	31.16	6.94	33.44	54.05	58.71	74.00	15.29	Peak
6	3330.580	31.16	6.94	33.44	36.54	41.20	54.00	12.80	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. : 5
Dis. / Ant. : 3m 2009 3115 Ant. pol. : VERTICAL

Limit : FCC PART 15 B PEAK

Env. / Ins. : 24*C/56% Engineer : Jolly_Xu

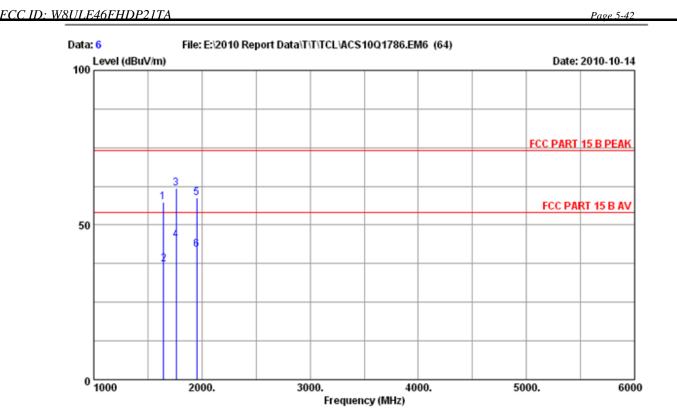
EUT : LED TV M/N:LE46FHDX10TA

Power Rating : AC 120V/60Hz

Test Mode : Running "H" Pattern And 1KHz Playing

HDMI 5:1080P





Dis. / Ant. : 3m 2009 3115 Ant. pol. : VERTICAL

Limit : FCC PART 15 B PEAK

Env. / Ins. : 24*C/56% Engineer : Jolly_Xu

EUT : LED TV M/N:LE46FHDX10TA

Power Rating : AC 120V/60Hz

Test Mode : Running "H" Pattern And 1KHz Playing

HDMI 5:1080P

No.	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dBuV)	Reading (dBuV/m)	Emission Level (dBuV/m)	Limits (dB)	Margin (dB)	Remark
1	1640.000	25.53	4.84	35.01	61.90	57.26	74.00	16.74	Peak
2	1644.290	25.53	4.84	35.01	41.92	37.28	54.00	16.72	Average
3	1760.000	25.79	5.00	34.75	65.91	61.95	74.00	12.05	Peak
4	1760.800	25.79	5.00	34.75	48.97	45.01	54.00	8.99	Average
5	1950.000	26.19	5.26	34.23	61.65	58.87	74.00	15.13	Peak
6	1953.630	26.19	5.26	34.23	44.82	42.04	54.00	11.96	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp Factor

The emission levels that are 20dB below the official limit are not reported.