FCC 47 CFR PART 15 SUBPART B

TEST REPORT
For

Wanlida Group Co., Ltd.

LED TV

Model No.: LE5033, LE-D5002

FCC ID: SMFLE5033

Prepared for	:	Wanlida Group Co., Ltd.
Address	:	No.618, Jiahe Road, Wanlida Industry Zone, Xiamen, Fujian, China. 361006
Prepared by	:	SHENZHEN EMTEK CO., LTD.
Address	:	Bldg 69, Majialong Industry Zone, Nanshan District, Shenzhen, Guangdong, China Tel: (0755) 26954280 Fax: (0755) 26954282

Report Number	:	ES130903014E
Date of Test	:	September 3, 2013 to September 5, 2013
Date of Report	:	September 5, 2013

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TEST REPORT DESCRIPTION

Applicant	:	Wanlida Group Co., Ltd.
Manufacturer	:	Wanlida Group Co., Ltd.
Trademark	:	LEGEND, malata
EUT	:	LED TV
Model No.	:	LE5033, LE-D5002
Power Supply	:	100-120V, 50/60Hz, 110W

Measurement Procedure Used:

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

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

This report applies to above tested sample only and shall not be reproduced in part without written approval of Global Certification Corp.

Date of Test : September 3, 2013 to September 5, 2013

Prepared by : Joe Xia

Joe Xia/Editor

Reviewer : June Xie

June xie/Supervisor

Approve & Authorized Signer :

Lisa Wang/Manager

1. SUMMARY OF TEST RESULT

Emission		
Description of Test Item	Standard & Limits	Results
Conducted Disturbance at Mains Terminals	FCC Part 15, Subpart B, Class B ANSI C63.4: 2009	Pass
Disturbance Voltage at the Antenna Terminal	FCC Part 15, Subpart B, Class B ANSI C63.4: 2009	Pass
Radiated Disturbance	FCC Part 15, Subpart B, Class B ANSI C63.4: 2009	Pass
Picture Sensitivity	FCC Part 15, Subpart B, Class B ANSI C63.4: 2009	Pass
Noise Figure	FCC Part 15, Subpart B, Class B ANSI C63.4: 2009	Pass
Note: N/A is an abbreviation for Not Applicable.		

2. GENERAL INFORMATION

2.1. Description of Device (EUT)

EUT	:	LED TV
Model Number	:	LE5033, LE-D5002 (Note: Both models are the same, except their model number and trademark. We take LE5033 for test.)
Operating Frequency	:	200MHz Max
Test Voltage	:	AC 120V/60Hz
Operating mode	:	ATSC, ATV, AV in, HDMI in, Y+Pb+Pr in, VGA, COAX in
Applicant	:	Wanlida Group Co., Ltd.
Address	:	No.618, Jiahe Road, Wanlida Industry Zone, Xiamen, Fujian, China. 361006
Manufacturer	:	Wanlida Group Co., Ltd.
Address	:	Wanlida Industry Zone, Nanjing, Zhangzhou, Fujian, China. 363601
Date of Received	:	September 3, 2013
Date of Test	:	September 3, 2013 to September 5, 2013

2.2. Description of Support Device

PC	:	Manufacturer: Lenovo M/N: ThinkCentre 8701 S/N: 8701A53L3BC108 CE, FCC: DOC	
Mouse	:	Manufacturer: HP M/N: M-S48a S/N: LZE14823966AW CE, FCC: DOC	
Keyboard	:	Manufacturer: HP M/N: SK-2502C S/N: C0111141546 CE, FCC: DOC	
Printer	:	Manufacturer: HP M/N: C89520 S/N: CN25S182N6 CE, FCC: DOC	
Signal Generator	:	Manufacturer: Philips M/N: PM5418 S/N: LO 604796	Manufacturer: Creastar M/N: CS2326 S/N: 7320018624

2.3. Measurement Uncertainty

Conducted Emission Uncertainty	:	2.8dB
Radiated Emission Uncertainty (3m Chamber)	:	3.3dB (30M~1GHz Polarize: H) 3.2dB (30M~1GHz Polarize: V) 3.7dB (1~18GHz Polarize: H) 3.6dB (1~18GHz Polarize: V)

3. MEASURING DEVICE AND TEST EQUIPMENT

3.1. For Power Line Conducted Emission Measurement

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Test Receiver	Rohde & Schwarz	ESCS30	100162	May 29, 2013	1 Year
2.	L.I.S.N.	Rohde & Schwarz	ENV216	101161	May 29, 2013	1 Year
3.	50Ω Coaxial Switch	Anritsu	MP59B	6100214550	N/A	N/A
4.	Voltage Probe	Rohde & Schwarz	TK9416	N/A	May 29, 2013	1 Year
5.	I.S.N	Teseq GmbH	ISN T800	30327	May 29, 2013	1 Year
6.	LCL adaoter	Teseq GmbH	ADT800-Cat.5	30327.01	May 29, 2013	1 Year
7.	LCL adaoter	Teseq GmbH	ADT800-Cat.3	30327.02	May 29, 2013	1 Year
8.	LCL adaoter	Teseq GmbH	ADT800-R	30327.02	May 29, 2013	1 Year

3.2. For Antenna Terminals Disturbance Voltage Measurement

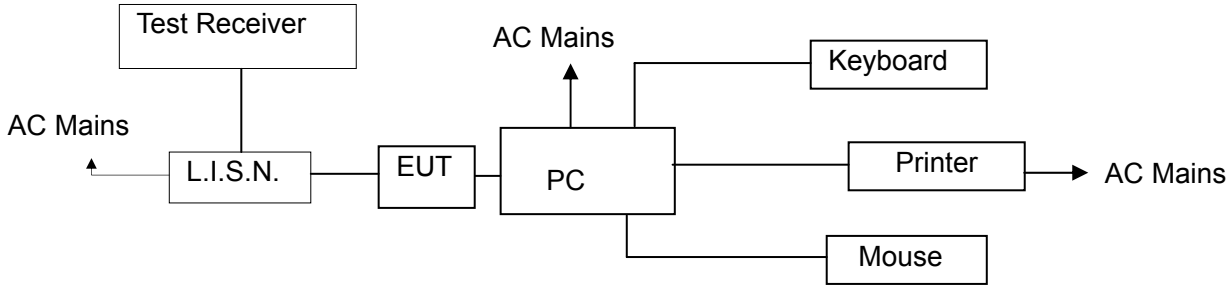
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Test Receiver	Rohde & Schwarz	ESCS30	8289851018	May 29, 2013	1 Year
2.	Matching network	Weinschel	1506A	PM203	May 29, 2013	1 Year

3.3. For Radiated Emission Measurement

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	EMI Test Receiver	Rohde & Schwarz	ESU	1302.6005.26	May 29, 2013	1 Year
2.	Pre-Amplifier	HP	8447D	2944A07999	May 29, 2013	1 Year
3.	Bilog Antenna	Schwarzbeck	VULB9163	142	May 14, 2013	1 Year
4.	Loop Antenna	Schwarzbeck	FMZB 1519	012	May 14, 2013	1 Year
5.	Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170399	May 14, 2013	1 Year
6.	Horn Antenna	Schwarzbeck	BBHA 9120	D143	May 14, 2013	1 Year
7.	Cable	Schwarzbeck	AK9513	ACRX1	May 29, 2013	1 Year
8.	Cable	Rosenberger	N/A	FP2RX2	May 29, 2013	1 Year
9.	Cable	Schwarzbeck	AK9513	CRPX1	May 29, 2013	1 Year
10.	Cable	Schwarzbeck	AK9513	CRRX2	May 29, 2013	1 Year
11.	Pre-Amplifier	A.H.	PAM-0126	1415261	May 29, 2013	1 Year

4. POWER LINE CONDUCTED EMISSION MEASUREMENT

4.1. Block Diagram of Test Setup



(EUT: LED TV)

4.2. Measuring Standard

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

4.3. Power Line Conducted Emission Limits (Class B)

Frequency (MHz)	Limit (dBμV)	
	Quasi-peak Level	Average Level
0.15 ~ 0.50	66.0 ~ 56.0 *	56.0 ~ 46.0 *
0.50 ~ 5.00	56.0	46.0
5.00 ~ 30.00	60.0	50.0
NOTE1-The lower limit shall apply at the transition frequencies. NOTE2-The limit decreases linearly with the logarithm of the frequency in the range 0.15MHz to 0.50MHz.		

4.4. Configuration of EUT on Measurement

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

EUT : LED TV
Model Number : LE5033

4.5. Operating Condition of EUT

4.5.1.Setup the EUT as shown on Section 4.1.

4.5.2.Turn on the power of all equipments.

4.5.3.Let the EUT work in measuring mode (ATSC, ATV, AV in, HDMI in, Y+Pb+Pr in, VGA, COAX in) and measure it.

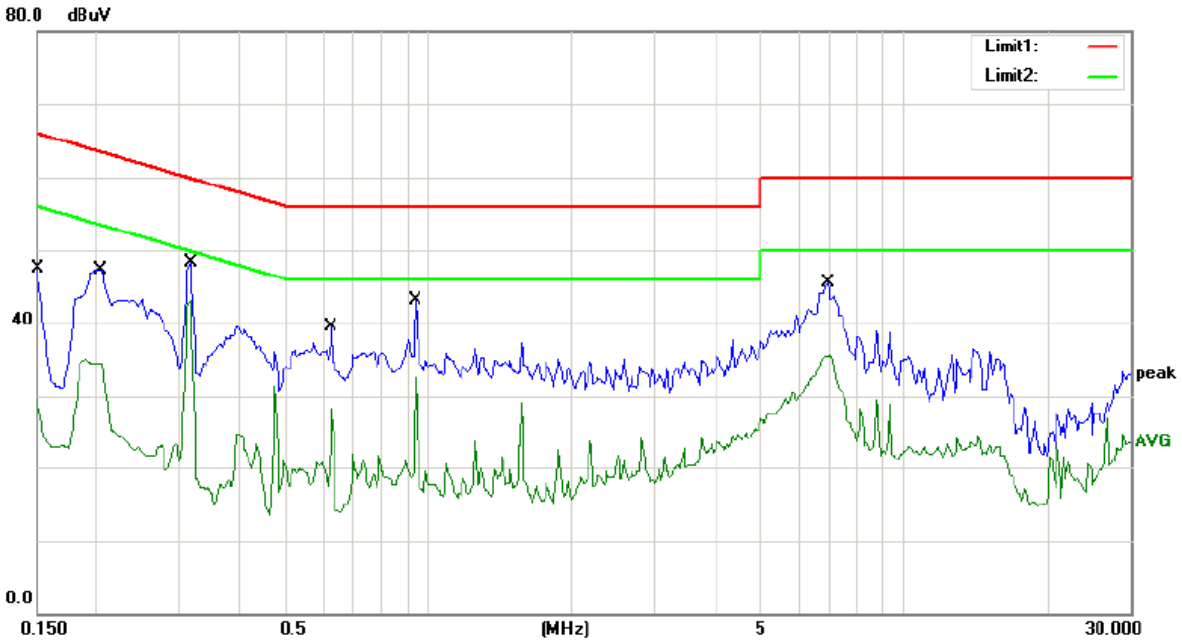
4.6. Test Procedure

The EUT is put on the plane 0.8m high above the ground by insulating support and connected to the AC mains through Line Impedance Stability Network (L.I.S.N). This provided a 50ohm coupling impedance for the tested equipments. Both sides of AC line are investigated to find out the maximum conducted emission according to the FCC regulations during conducted emission measurement.
The bandwidth of the field strength meter (R&S Test Receiver ESCS30) is set at 9kHz in 150kHz~30MHz and 200Hz in 9kHz~150kHz.
The frequency range from 150kHz to 30MHz is investigated
The worst scanning curves are attached the following pages.

4.7. Measuring Results

PASS.

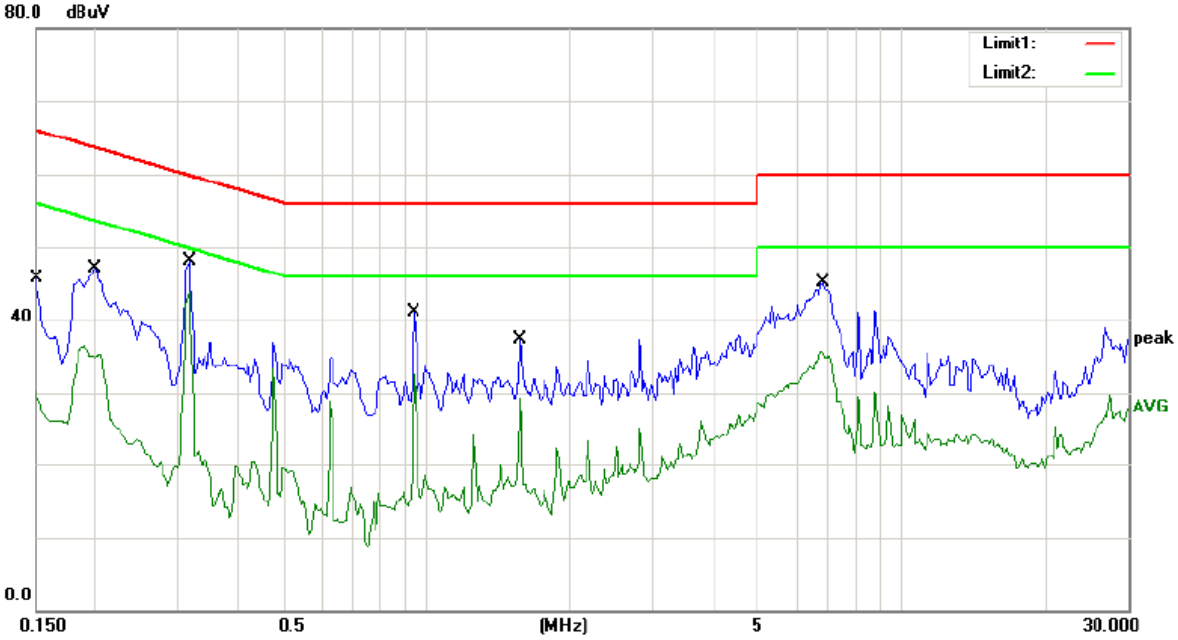
All the modes were tested and the data of the worst modes (ATSC 57MHz, ATV 55.25MHz, AV in, HDMI in, VGA 1920*1080, COAX in, Y+Pb+Pr in) are attached the following pages



Site Conduction #1 Phase: L1 Temperature: 26
Limit: (CE)FCC PART 15 class B_QP Power: AC 120V/60Hz Humidity: 60 %
EUT: LED TV
M/N: LE5033
Mode: ATSC(57MHz)
Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1500	47.50	0.00	47.50	66.00	-18.50	QP	
2		0.1500	29.78	0.00	29.78	56.00	-26.22	AVG	
3		0.2050	47.34	0.00	47.34	63.41	-16.07	QP	
4		0.2050	35.10	0.00	35.10	53.41	-18.31	AVG	
5		0.3150	48.27	0.00	48.27	59.84	-11.57	QP	
6	*	0.3150	43.04	0.00	43.04	49.84	-6.80	AVG	
7		0.6250	39.46	0.00	39.46	56.00	-16.54	QP	
8		0.6250	28.28	0.00	28.28	46.00	-17.72	AVG	
9		0.9400	43.03	0.00	43.03	56.00	-12.97	QP	
10		0.9400	32.51	0.00	32.51	46.00	-13.49	AVG	
11		6.9200	45.52	0.00	45.52	60.00	-14.48	QP	
12		6.9200	35.71	0.00	35.71	50.00	-14.29	AVG	

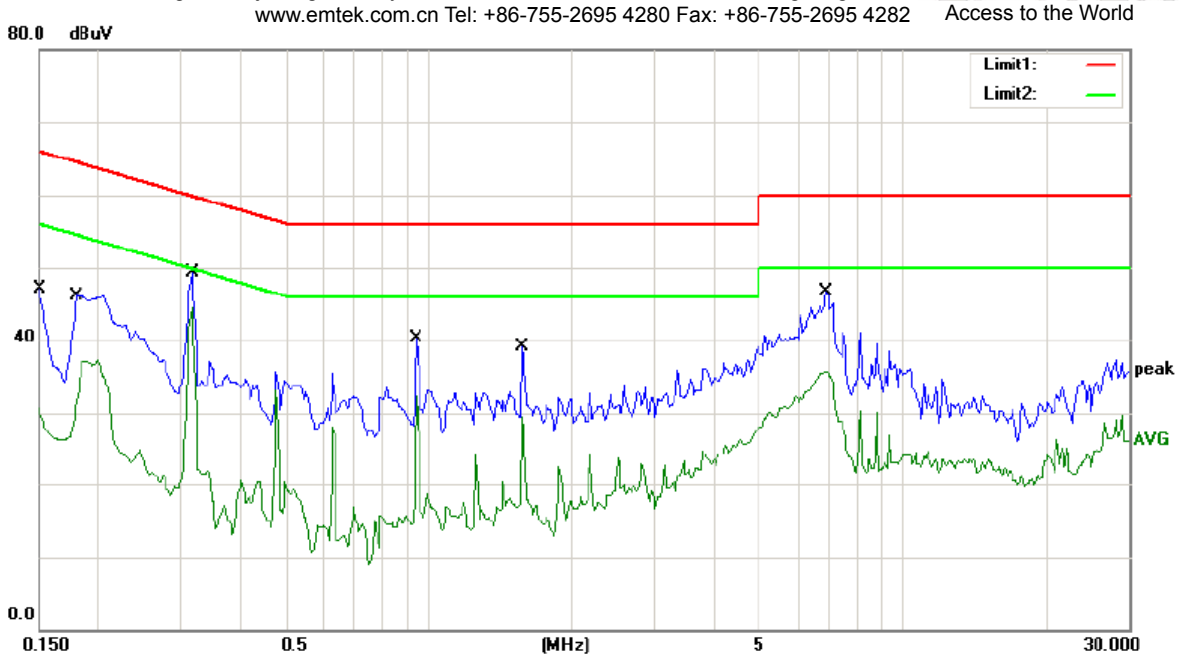
*:Maximum data x:Over limit !:over margin Comment: Factor build in receiver. Operator: HYL



Site Conduction #1 Phase: N Temperature: 26
Limit: (CE)FCC PART 15 class B_QP Power: AC 120V/60Hz Humidity: 60 %
EUT: LED TV
M/N: LE5033
Mode: ATSC(57MHz)
Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1500	45.70	0.00	45.70	66.00	-20.30	QP	
2		0.1500	30.27	0.00	30.27	56.00	-25.73	AVG	
3		0.2000	47.12	0.00	47.12	63.61	-16.49	QP	
4		0.2000	36.58	0.00	36.58	53.61	-17.03	AVG	
5		0.3150	48.07	0.00	48.07	59.84	-11.77	QP	
6	*	0.3150	43.95	0.00	43.95	49.84	-5.89	AVG	
7		0.9400	41.01	0.00	41.01	56.00	-14.99	QP	
8		0.9400	32.51	0.00	32.51	46.00	-13.49	AVG	
9		1.5700	37.40	0.00	37.40	56.00	-18.60	QP	
10		1.5700	29.29	0.00	29.29	46.00	-16.71	AVG	
11		6.8400	45.07	0.00	45.07	60.00	-14.93	QP	
12		6.8400	35.66	0.00	35.66	50.00	-14.34	AVG	

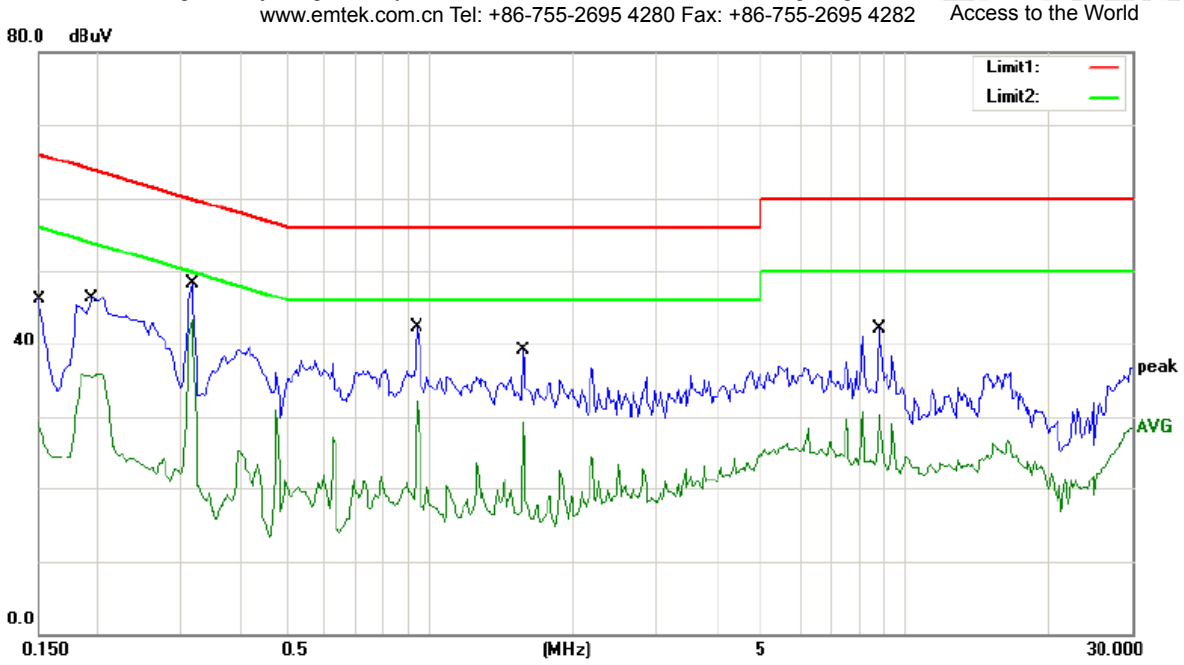
*:Maximum data x:Over limit !:over margin Comment: Factor build in receiver. Operator: HYL



Site Conduction #1 Phase: N Temperature: 26
Limit: (CE)FCC PART 15 class B_QP Power: AC 120V/60Hz Humidity: 60 %
EUT: LED TV
M/N: LE5033
Mode: ATSC(57MHz)
Note: Connect to GND

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1500	47.17	0.00	47.17	66.00	-18.83	QP	
2		0.1500	30.62	0.00	30.62	56.00	-25.38	AVG	
3		0.1800	46.20	0.00	46.20	64.49	-18.29	QP	
4		0.1800	37.28	0.00	37.28	54.49	-17.21	AVG	
5		0.3150	49.23	0.00	49.23	59.84	-10.61	QP	
6	*	0.3150	44.55	0.00	44.55	49.84	-5.29	AVG	
7		0.9400	40.37	0.00	40.37	56.00	-15.63	QP	
8		0.9400	32.24	0.00	32.24	46.00	-13.76	AVG	
9		1.5700	39.14	0.00	39.14	56.00	-16.86	QP	
10		1.5700	29.59	0.00	29.59	46.00	-16.41	AVG	
11		6.9100	46.68	0.00	46.68	60.00	-13.32	QP	
12		6.9100	35.79	0.00	35.79	50.00	-14.21	AVG	

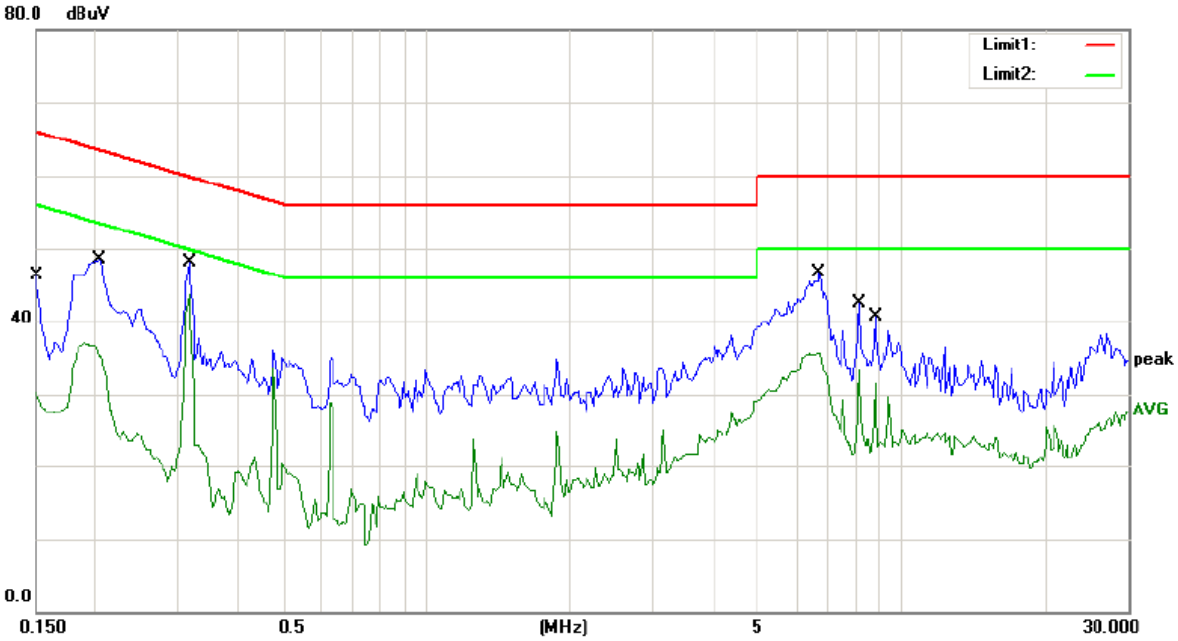
*:Maximum data x:Over limit !:over margin Comment: Factor build in receiver. Operator: HYL



Site Conduction #1 Phase: *L1* Temperature: 26
Limit: (CE)FCC PART 15 class B_QP Power: AC 120V/60Hz Humidity: 60 %
EUT: LED TV
M/N: LE5033
Mode: ATSC(57MHz)
Note: Connect to GND

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1500	46.19	0.00	46.19	66.00	-19.81	QP	
2		0.1500	29.38	0.00	29.38	56.00	-26.62	AVG	
3		0.1950	46.38	0.00	46.38	63.82	-17.44	QP	
4		0.1950	35.90	0.00	35.90	53.82	-17.92	AVG	
5		0.3150	48.29	0.00	48.29	59.84	-11.55	QP	
6	*	0.3150	43.31	0.00	43.31	49.84	-6.53	AVG	
7		0.9400	42.23	0.00	42.23	56.00	-13.77	QP	
8		0.9400	32.12	0.00	32.12	46.00	-13.88	AVG	
9		1.5700	39.10	0.00	39.10	56.00	-16.90	QP	
10		1.5700	29.29	0.00	29.29	46.00	-16.71	AVG	
11		8.7800	42.02	0.00	42.02	60.00	-17.98	QP	
12		8.7800	30.65	0.00	30.65	50.00	-19.35	AVG	

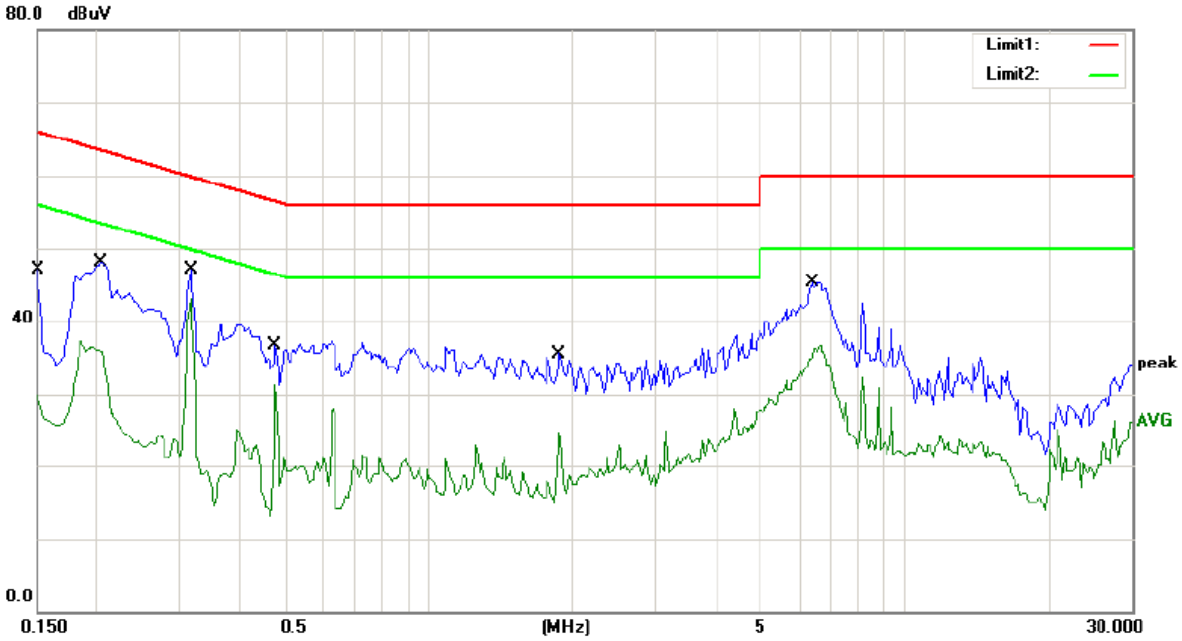
*:Maximum data x:Over limit !:over margin Comment: Factor build in receiver. Operator: HYL



Site Conduction #1 Phase: N Temperature: 26
Limit: (CE)FCC PART 15 class B_QP Power: AC 120V/60Hz Humidity: 60 %
EUT: LED TV
M/N: LE5033
Mode: ATV(55.25MHz)
Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1500	46.31	0.00	46.31	66.00	-19.69	QP	
2		0.1500	30.27	0.00	30.27	56.00	-25.73	AVG	
3		0.2050	48.42	0.00	48.42	63.41	-14.99	QP	
4		0.2050	37.02	0.00	37.02	53.41	-16.39	AVG	
5		0.3150	48.05	0.00	48.05	59.84	-11.79	QP	
6	*	0.3150	43.64	0.00	43.64	49.84	-6.20	AVG	
7		6.7300	46.61	0.00	46.61	60.00	-13.39	QP	
8		6.7300	35.75	0.00	35.75	50.00	-14.25	AVG	
9		8.1600	42.51	0.00	42.51	60.00	-17.49	QP	
10		8.1600	33.30	0.00	33.30	50.00	-16.70	AVG	
11		8.7900	40.64	0.00	40.64	60.00	-19.36	QP	
12		8.7900	31.57	0.00	31.57	50.00	-18.43	AVG	

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



Site Conduction #1 Phase: *L1* Temperature: 26

Limit: (CE)FCC PART 15 class B_QP Power: AC 120V/60Hz Humidity: 60 %

EUT: LED TV

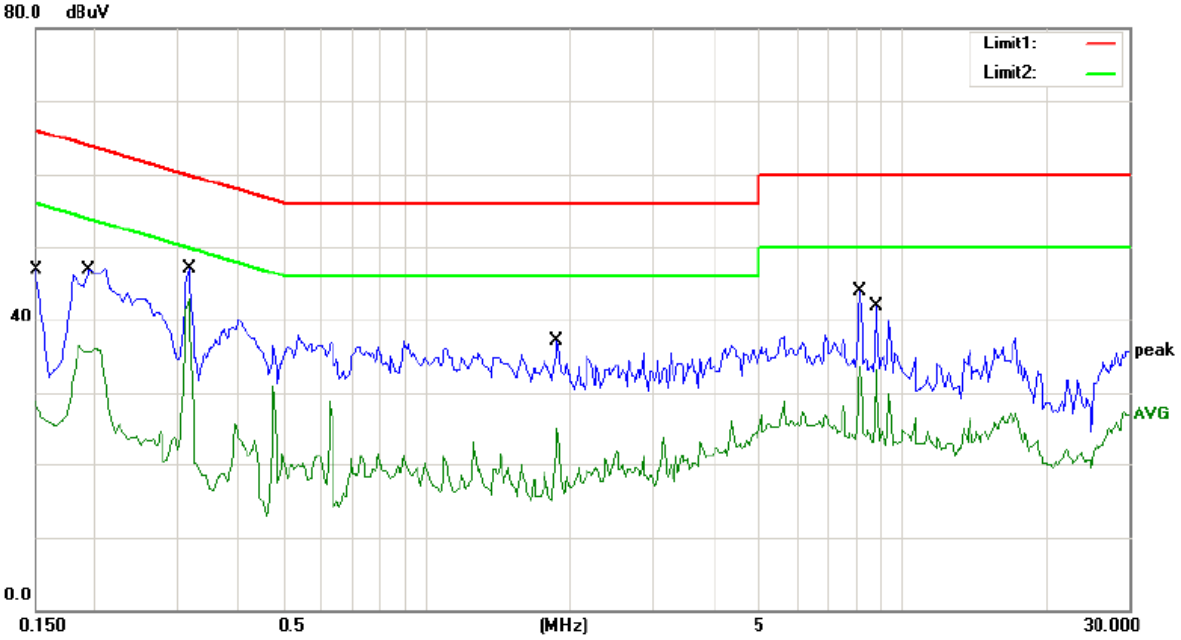
M/N: LE5033

Mode: ATV(55.25MHz)

Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1500	47.07	0.00	47.07	66.00	-18.93	QP	
2		0.1500	29.96	0.00	29.96	56.00	-26.04	AVG	
3		0.2050	48.16	0.00	48.16	63.41	-15.25	QP	
4		0.2050	37.35	0.00	37.35	53.41	-16.06	AVG	
5		0.3150	47.11	0.00	47.11	59.84	-12.73	QP	
6	*	0.3150	43.04	0.00	43.04	49.84	-6.80	AVG	
7		0.4750	36.67	0.00	36.67	56.43	-19.76	QP	
8		0.4750	31.33	0.00	31.33	46.43	-15.10	AVG	
9		1.8850	35.60	0.00	35.60	56.00	-20.40	QP	
10		1.8850	24.61	0.00	24.61	46.00	-21.39	AVG	
11		6.4100	45.28	0.00	45.28	60.00	-14.72	QP	
12		6.4100	36.67	0.00	36.67	50.00	-13.33	AVG	

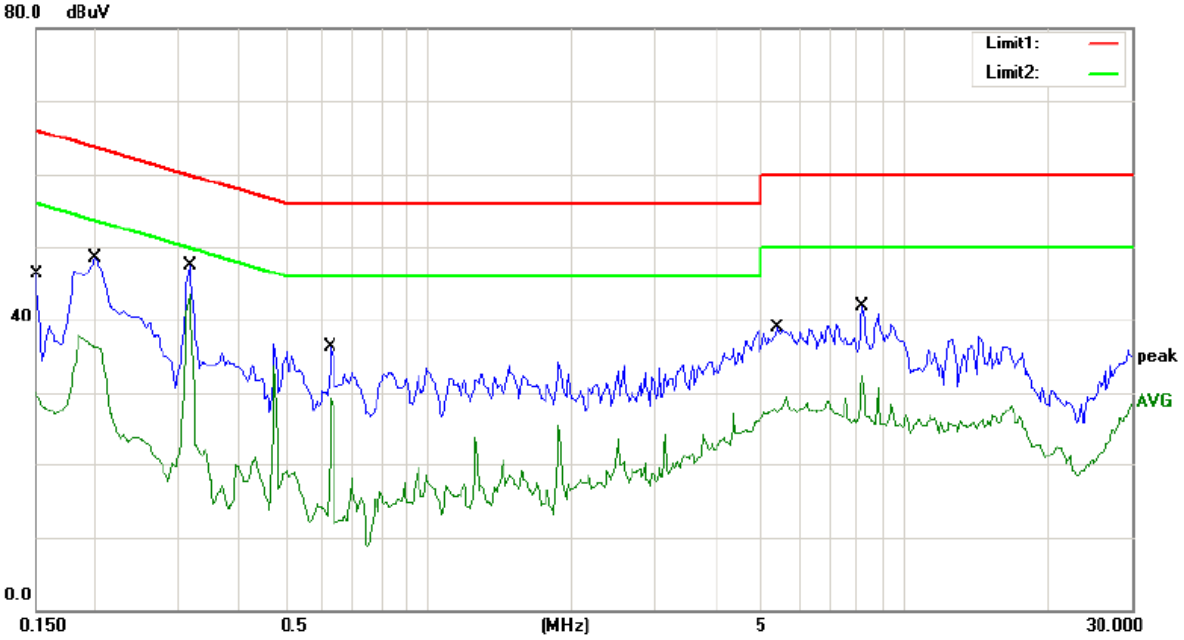
*:Maximum data x:Over limit !:over margin Comment: Factor build in receiver. Operator: HYL



Site Conduction #1 Phase: *L1* Temperature: 26
Limit: (CE)FCC PART 15 class B_QP Power: AC 120V/60Hz Humidity: 60 %
EUT: LED TV
M/N: LE5033
Mode: ATV(55.25MHz)
Note: Connect to GND

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1500	46.83	0.00	46.83	66.00	-19.17	QP	
2		0.1500	28.97	0.00	28.97	56.00	-27.03	AVG	
3		0.1950	46.94	0.00	46.94	63.82	-16.88	QP	
4		0.1950	36.58	0.00	36.58	53.82	-17.24	AVG	
5		0.3150	47.09	0.00	47.09	59.84	-12.75	QP	
6	*	0.3150	42.83	0.00	42.83	49.84	-7.01	AVG	
7		1.8850	37.17	0.00	37.17	56.00	-18.83	QP	
8		1.8850	25.17	0.00	25.17	46.00	-20.83	AVG	
9		8.1500	43.81	0.00	43.81	60.00	-16.19	QP	
10		8.1500	33.56	0.00	33.56	50.00	-16.44	AVG	
11		8.7800	41.92	0.00	41.92	60.00	-18.08	QP	
12		8.7800	33.06	0.00	33.06	50.00	-16.94	AVG	

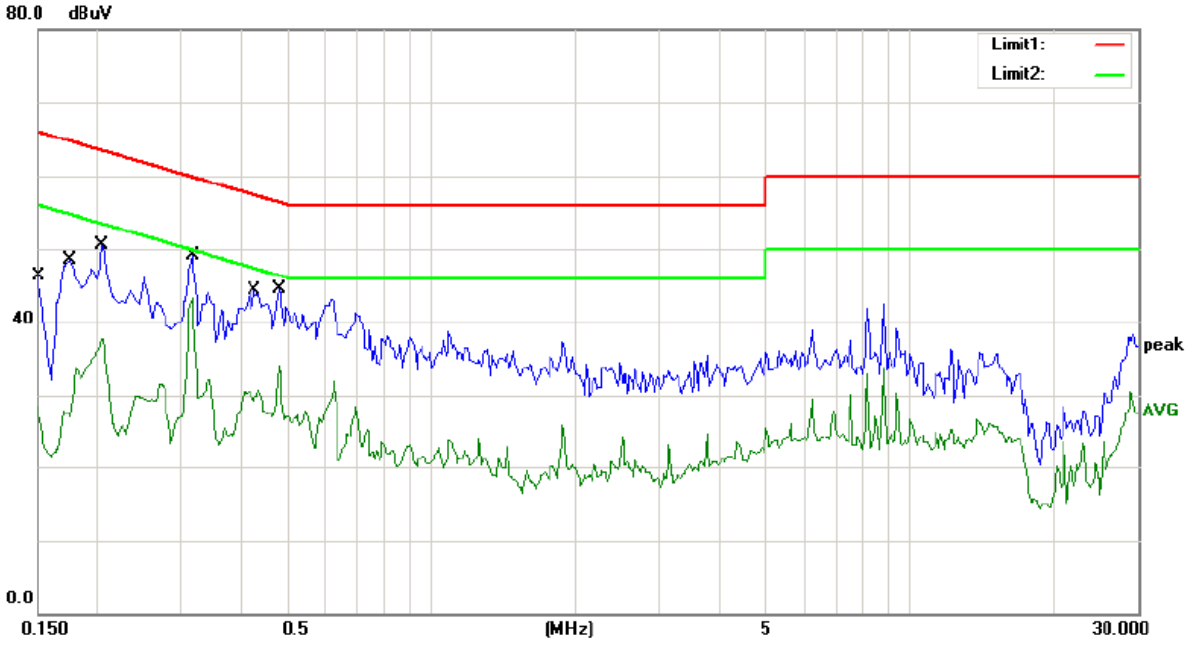
*:Maximum data x:Over limit !:over margin Comment: Factor build in receiver. Operator: HYL



Site Conduction #1 Phase: N Temperature: 26
Limit: (CE)FCC PART 15 class B_QP Power: AC 120V/60Hz Humidity: 60 %
EUT: LED TV
M/N: LE5033
Mode: ATV(55.25MHz)
Note: Connect to GND

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1500	46.23	0.00	46.23	66.00	-19.77	QP	
2		0.1500	30.08	0.00	30.08	56.00	-25.92	AVG	
3		0.2000	48.56	0.00	48.56	63.61	-15.05	QP	
4		0.2000	37.81	0.00	37.81	53.61	-15.80	AVG	
5		0.3150	47.51	0.00	47.51	59.84	-12.33	QP	
6	*	0.3150	43.44	0.00	43.44	49.84	-6.40	AVG	
7		0.6250	36.39	0.00	36.39	56.00	-19.61	QP	
8		0.6250	29.20	0.00	29.20	46.00	-16.80	AVG	
9		5.4100	38.82	0.00	38.82	60.00	-21.18	QP	
10		5.4100	29.45	0.00	29.45	50.00	-20.55	AVG	
11		8.1500	41.99	0.00	41.99	60.00	-18.01	QP	
12		8.1500	32.27	0.00	32.27	50.00	-17.73	AVG	

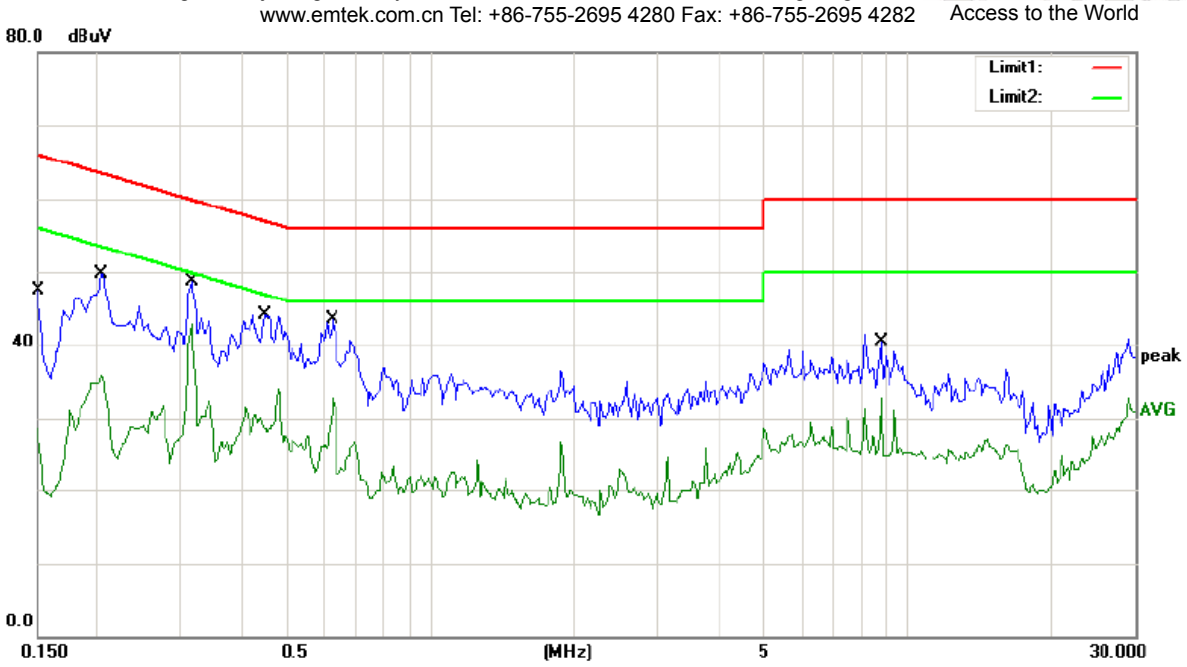
*:Maximum data x:Over limit !:over margin Comment: Factor build in receiver. Operator: HYL



Site Conduction #1 Phase: L1 Temperature: 26
Limit: (CE)FCC PART 15 class B_QP Power: AC 120V/60Hz Humidity: 60 %
EUT: LED TV
M/N: LE5033
Mode: AV IN
Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1500	46.33	0.00	46.33	66.00	-19.67	QP	
2		0.1500	28.53	0.00	28.53	56.00	-27.47	AVG	
3		0.1750	48.58	0.00	48.58	64.72	-16.14	QP	
4		0.1750	33.64	0.00	33.64	54.72	-21.08	AVG	
5		0.2050	50.42	0.00	50.42	63.41	-12.99	QP	
6		0.2050	37.74	0.00	37.74	53.41	-15.67	AVG	
7		0.3150	49.01	0.00	49.01	59.84	-10.83	QP	
8	*	0.3150	43.38	0.00	43.38	49.84	-6.46	AVG	
9		0.4250	44.28	0.00	44.28	57.35	-13.07	QP	
10		0.4250	30.70	0.00	30.70	47.35	-16.65	AVG	
11		0.4800	44.54	0.00	44.54	56.34	-11.80	QP	
12		0.4800	34.03	0.00	34.03	46.34	-12.31	AVG	

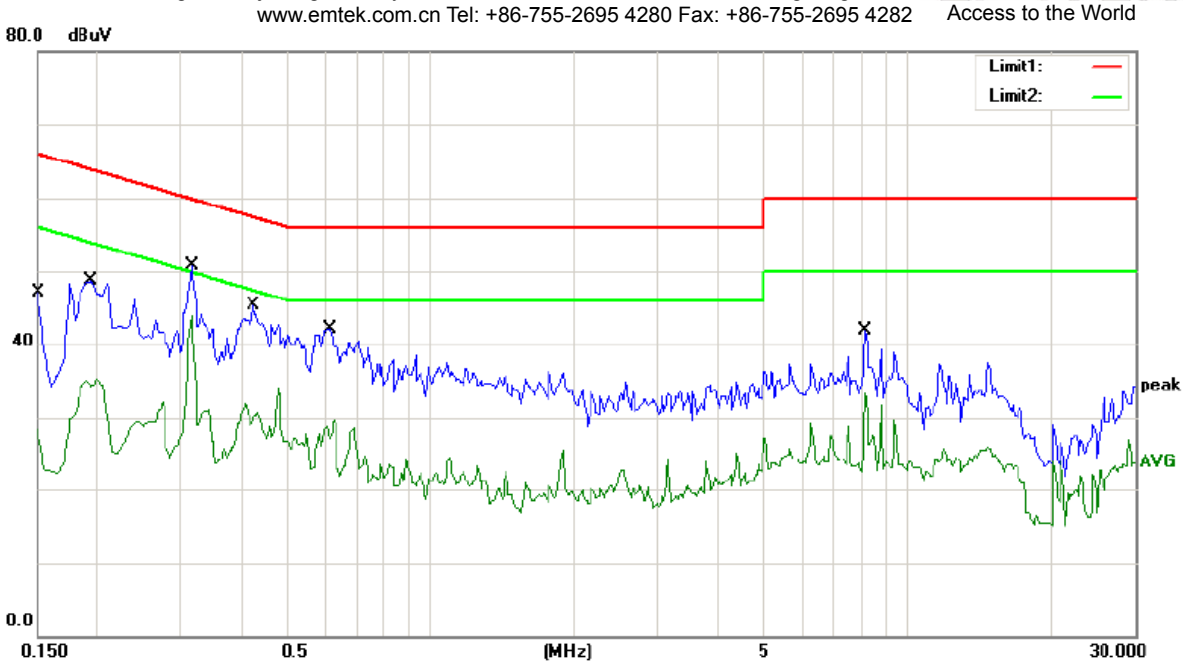
*:Maximum data x:Over limit !:over margin Comment: Factor build in receiver. Operator: HYL



Site Conduction #1 Phase: N Temperature: 26
Limit: (CE)FCC PART 15 class B_QP Power: AC 120V/60Hz Humidity: 60 %
EUT: LED TV
M/N: LE5033
Mode: AV IN
Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1500	47.48	0.00	47.48	66.00	-18.52	QP	
2		0.1500	28.68	0.00	28.68	56.00	-27.32	AVG	
3		0.2050	49.74	0.00	49.74	63.41	-13.67	QP	
4		0.2050	35.81	0.00	35.81	53.41	-17.60	AVG	
5		0.3150	48.71	0.00	48.71	59.84	-11.13	QP	
6	*	0.3150	42.90	0.00	42.90	49.84	-6.94	AVG	
7		0.4500	44.15	0.00	44.15	56.88	-12.73	QP	
8		0.4500	34.13	0.00	34.13	46.88	-12.75	AVG	
9		0.6250	43.46	0.00	43.46	56.00	-12.54	QP	
10		0.6250	32.62	0.00	32.62	46.00	-13.38	AVG	
11		8.8000	40.46	0.00	40.46	60.00	-19.54	QP	
12		8.8000	32.74	0.00	32.74	50.00	-17.26	AVG	

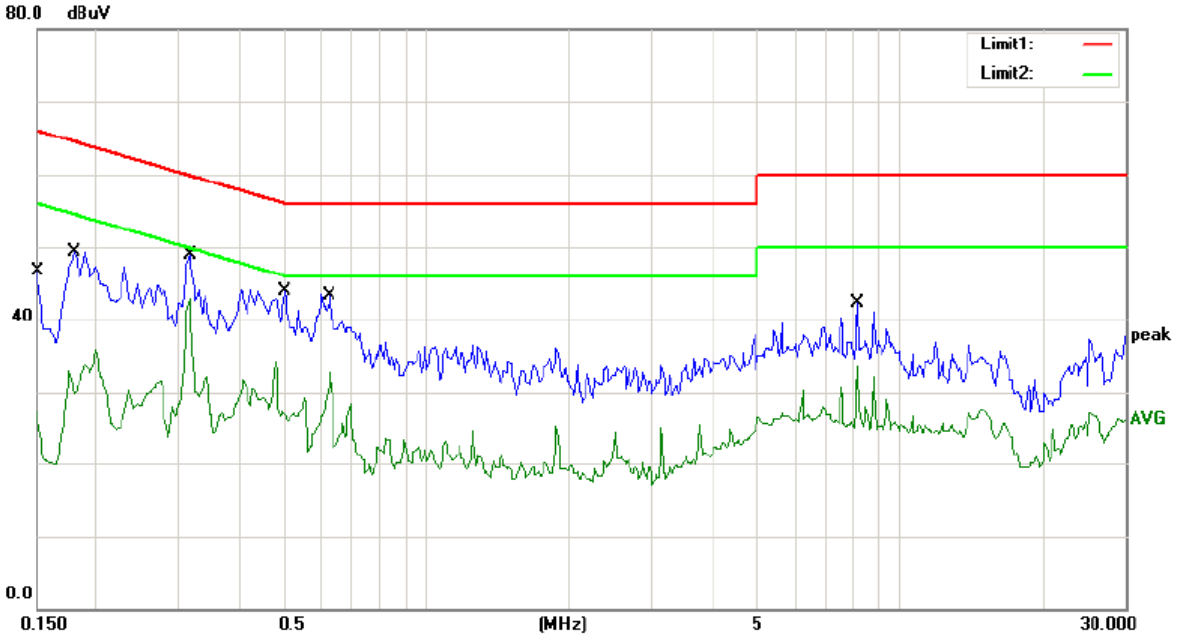
*:Maximum data x:Over limit I:over margin Comment: Factor build in receiver. Operator: HYL



Site Conduction #1 Phase: L1 Temperature: 26
Limit: (CE)FCC PART 15 class B_QP Power: AC 120V/60Hz Humidity: 60 %
EUT: LED TV
M/N: LE5033
Mode: HDMI in
Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1500	47.11	0.00	47.11	66.00	-18.89	QP	
2		0.1500	28.46	0.00	28.46	56.00	-27.54	AVG	
3		0.1950	48.64	0.00	48.64	63.82	-15.18	QP	
4		0.1950	35.22	0.00	35.22	53.82	-18.60	AVG	
5		0.3150	50.61	0.00	50.61	59.84	-9.23	QP	
6	*	0.3150	43.89	0.00	43.89	49.84	-5.95	AVG	
7		0.4250	45.22	0.00	45.22	57.35	-12.13	QP	
8		0.4250	31.88	0.00	31.88	47.35	-15.47	AVG	
9		0.6150	42.09	0.00	42.09	56.00	-13.91	QP	
10		0.6150	29.60	0.00	29.60	46.00	-16.40	AVG	
11		8.1800	41.93	0.00	41.93	60.00	-18.07	QP	
12		8.1800	33.34	0.00	33.34	50.00	-16.66	AVG	

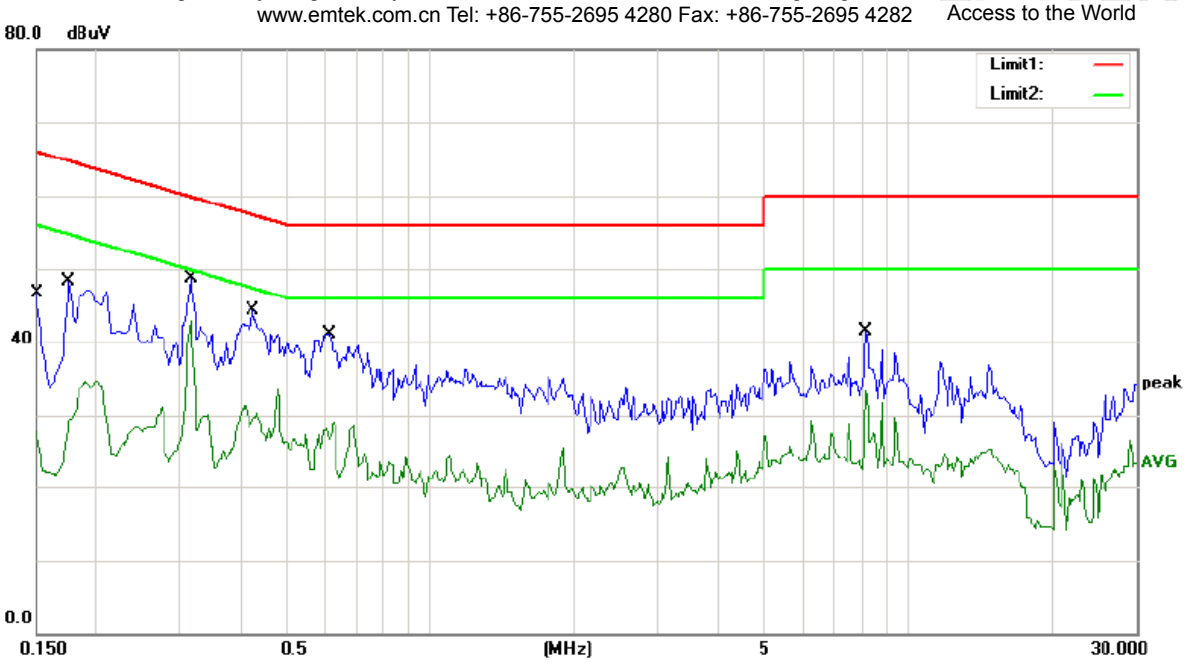
*:Maximum data x:Over limit !:over margin Comment: Factor build in receiver. Operator: HYL



Site Conduction #1 Phase: N Temperature: 26
Limit: (CE)FCC PART 15 class B_QP Power: AC 120V/60Hz Humidity: 60 %
EUT: LED TV
M/N: LE5033
Mode: HDMI in
Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1500	46.75	0.00	46.75	66.00	-19.25	QP	
2		0.1500	27.35	0.00	27.35	56.00	-28.65	AVG	
3		0.1800	49.30	0.00	49.30	64.49	-15.19	QP	
4		0.1800	33.84	0.00	33.84	54.49	-20.65	AVG	
5		0.3150	48.91	0.00	48.91	59.84	-10.93	QP	
6	*	0.3150	42.97	0.00	42.97	49.84	-6.87	AVG	
7		0.5000	43.81	0.00	43.81	56.00	-12.19	QP	
8		0.5000	34.26	0.00	34.26	46.00	-11.74	AVG	
9		0.6250	43.32	0.00	43.32	56.00	-12.68	QP	
10		0.6250	32.62	0.00	32.62	46.00	-13.38	AVG	
11		8.1700	42.33	0.00	42.33	60.00	-17.67	QP	
12		8.1700	33.56	0.00	33.56	50.00	-16.44	AVG	

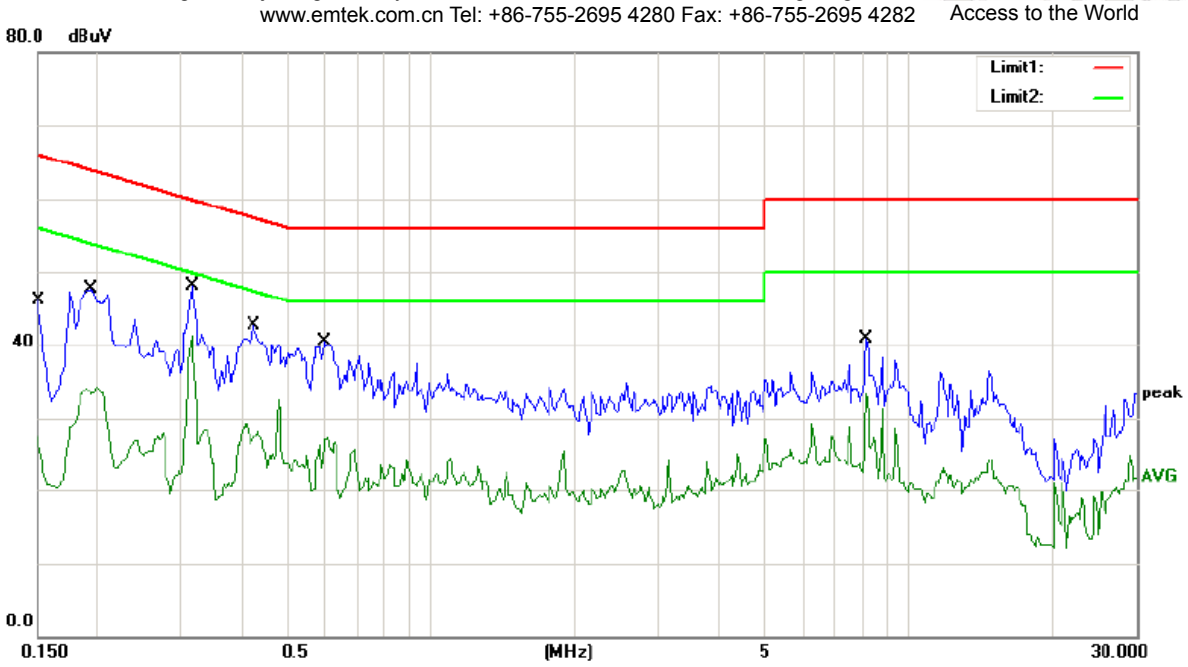
*:Maximum data x:Over limit !:over margin Comment: Factor build in receiver. Operator: HYL



Site Conduction #1 Phase: *L1* Temperature: 26
Limit: (CE)FCC PART 15 class B_QP Power: AC 120V/60Hz Humidity: 60 %
EUT: LED TV
M/N: LE5033
Mode: Y+Pb+Pr in
Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1500	46.61	0.00	46.61	66.00	-19.39	QP	
2		0.1500	27.96	0.00	27.96	56.00	-28.04	AVG	
3		0.1750	48.38	0.00	48.38	64.72	-16.34	QP	
4		0.1750	34.72	0.00	34.72	54.72	-20.00	AVG	
5		0.3150	48.61	0.00	48.61	59.84	-11.23	QP	
6	*	0.3150	42.89	0.00	42.89	49.84	-6.95	AVG	
7		0.4250	44.22	0.00	44.22	57.35	-13.13	QP	
8		0.4250	31.38	0.00	31.38	47.35	-15.97	AVG	
9		0.6150	41.09	0.00	41.09	56.00	-14.91	QP	
10		0.6150	29.10	0.00	29.10	46.00	-16.90	AVG	
11		8.1800	41.43	0.00	41.43	60.00	-18.57	QP	
12		8.1800	33.34	0.00	33.34	50.00	-16.66	AVG	

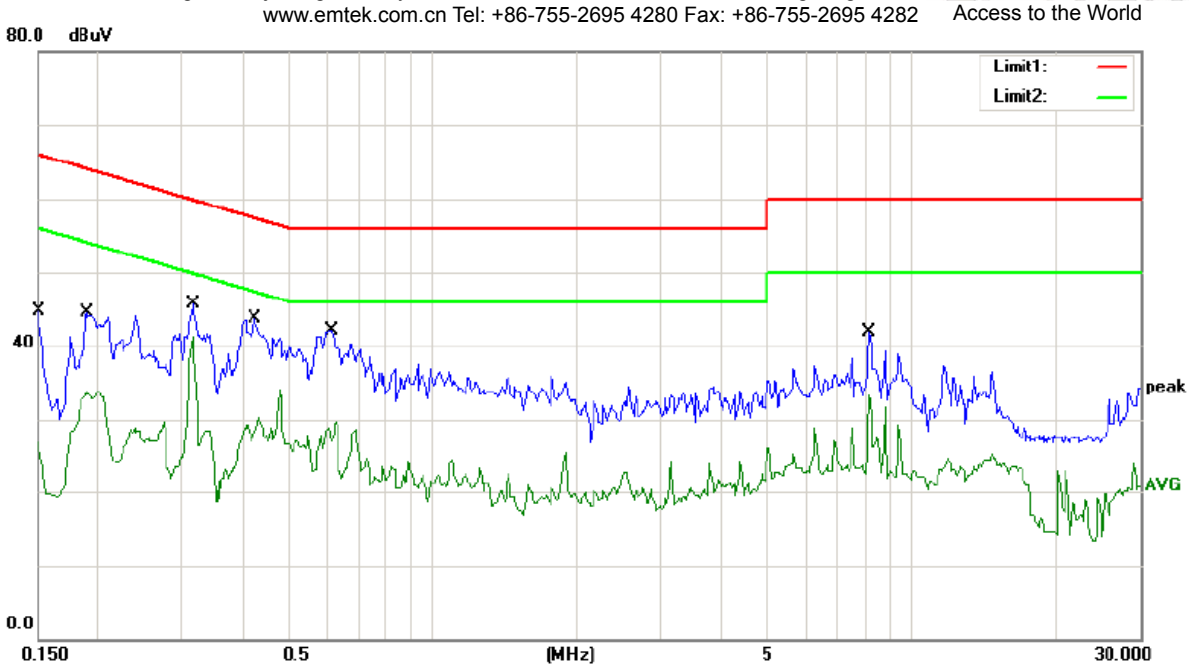
*:Maximum data x:Over limit !:over margin Comment: Factor build in receiver. Operator: HYL



Site Conduction #1 Phase: N Temperature: 26
Limit: (CE)FCC PART 15 class B_QP Power: AC 120V/60Hz Humidity: 60 %
EUT: LED TV
M/N: LE5033
Mode: Y+Pb+Pr in
Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1500	46.11	0.00	46.11	66.00	-19.89	QP	
2		0.1500	27.46	0.00	27.46	56.00	-28.54	AVG	
3		0.1950	47.64	0.00	47.64	63.82	-16.18	QP	
4		0.1950	34.22	0.00	34.22	53.82	-19.60	AVG	
5		0.3150	48.11	0.00	48.11	59.84	-11.73	QP	
6	*	0.3150	41.39	0.00	41.39	49.84	-8.45	AVG	
7		0.4250	42.72	0.00	42.72	57.35	-14.63	QP	
8		0.4250	29.38	0.00	29.38	47.35	-17.97	AVG	
9		0.5980	40.43	0.00	40.43	56.00	-15.57	QP	
10		0.5980	27.38	0.00	27.38	46.00	-18.62	AVG	
11		8.1800	40.93	0.00	40.93	60.00	-19.07	QP	
12		8.1800	33.34	0.00	33.34	50.00	-16.66	AVG	

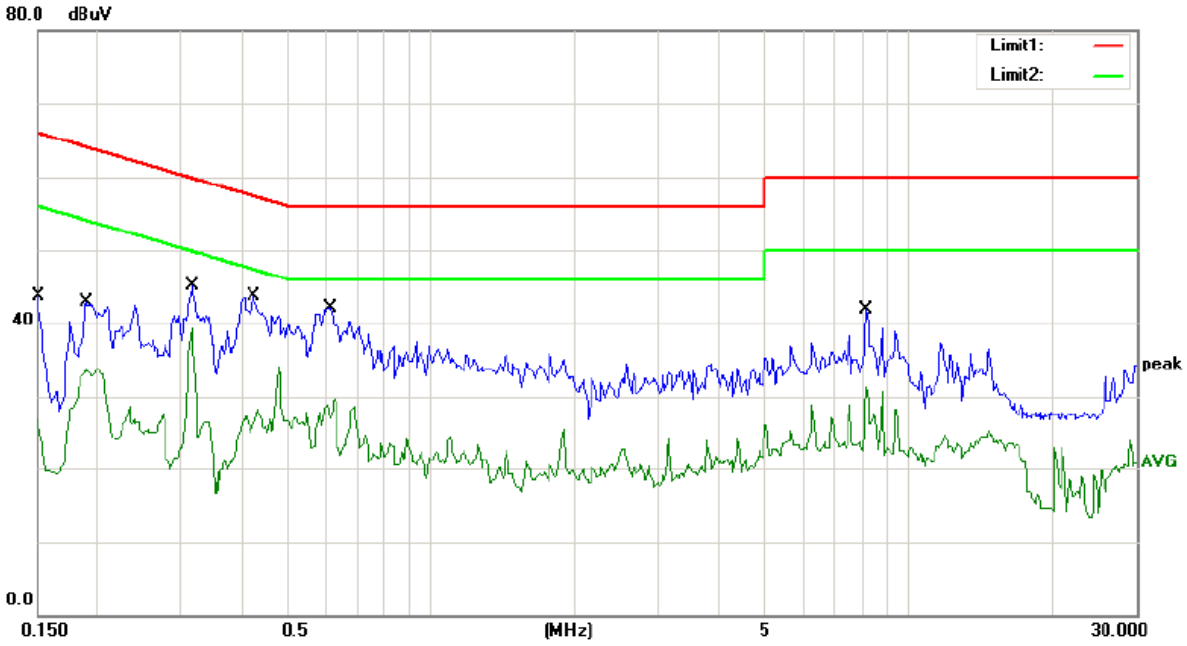
*:Maximum data x:Over limit !:over margin Comment: Factor build in receiver. Operator: HYL



Site Conduction #1 Phase: L1 Temperature: 26
Limit: (CE)FCC PART 15 class B_QP Power: AC 120V/60Hz Humidity: 60 %
EUT: LED TV
M/N: LE5033
Mode: COAX in
Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1500	44.61	0.00	44.61	66.00	-21.39	QP	
2		0.1500	26.96	0.00	26.96	56.00	-29.04	AVG	
3		0.1900	44.45	0.00	44.45	64.04	-19.59	QP	
4		0.1900	33.72	0.00	33.72	54.04	-20.32	AVG	
5		0.3150	45.61	0.00	45.61	59.84	-14.23	QP	
6	*	0.3150	41.39	0.00	41.39	49.84	-8.45	AVG	
7		0.4250	43.72	0.00	43.72	57.35	-13.63	QP	
8		0.4250	30.20	0.00	30.20	47.35	-17.15	AVG	
9		0.6150	42.09	0.00	42.09	56.00	-13.91	QP	
10		0.6150	29.60	0.00	29.60	46.00	-16.40	AVG	
11		8.1800	41.93	0.00	41.93	60.00	-18.07	QP	
12		8.1800	33.34	0.00	33.34	50.00	-16.66	AVG	

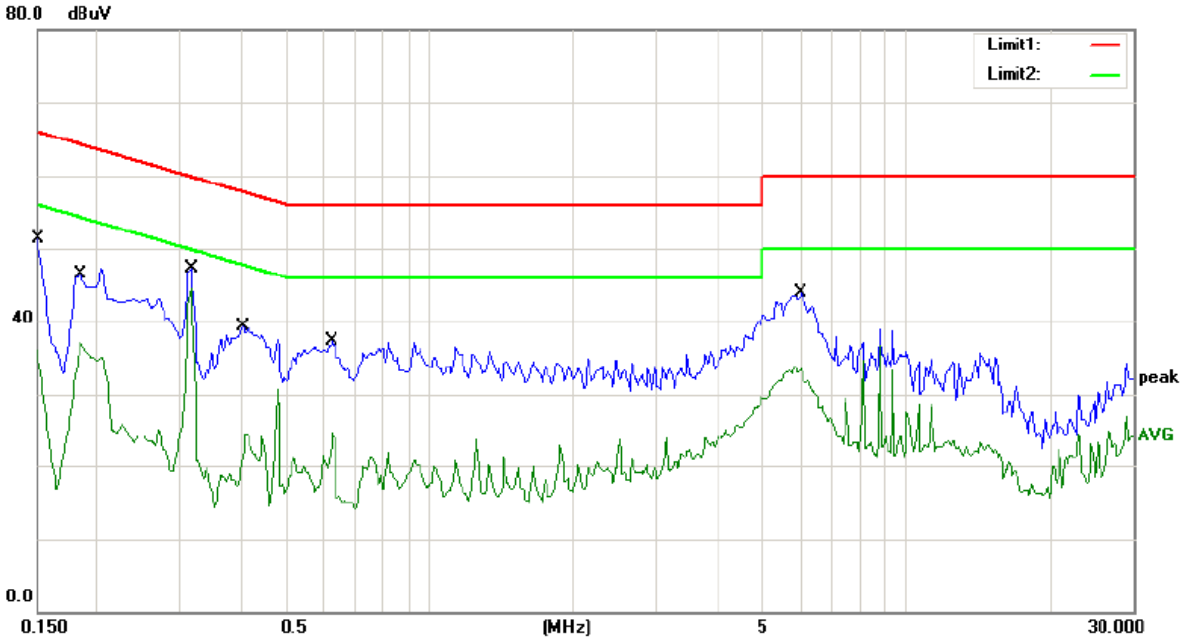
*:Maximum data x:Over limit I:over margin Comment: Factor build in receiver. Operator: HYL



Site Conduction #1 Phase: N Temperature: 26
Limit: (CE)FCC PART 15 class B_QP Power: AC 120V/60Hz Humidity: 60 %
EUT: LED TV
M/N: LE5033
Mode: COAX in
Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1500	43.61	0.00	43.61	66.00	-22.39	QP	
2		0.1500	26.96	0.00	26.96	56.00	-29.04	AVG	
3		0.1900	42.95	0.00	42.95	64.04	-21.09	QP	
4		0.1900	33.72	0.00	33.72	54.04	-20.32	AVG	
5		0.3150	45.11	0.00	45.11	59.84	-14.73	QP	
6	*	0.3150	39.39	0.00	39.39	49.84	-10.45	AVG	
7		0.4250	43.72	0.00	43.72	57.35	-13.63	QP	
8		0.4250	28.20	0.00	28.20	47.35	-19.15	AVG	
9		0.6150	42.09	0.00	42.09	56.00	-13.91	QP	
10		0.6150	29.60	0.00	29.60	46.00	-16.40	AVG	
11		8.1800	41.93	0.00	41.93	60.00	-18.07	QP	
12		8.1800	31.34	0.00	31.34	50.00	-18.66	AVG	

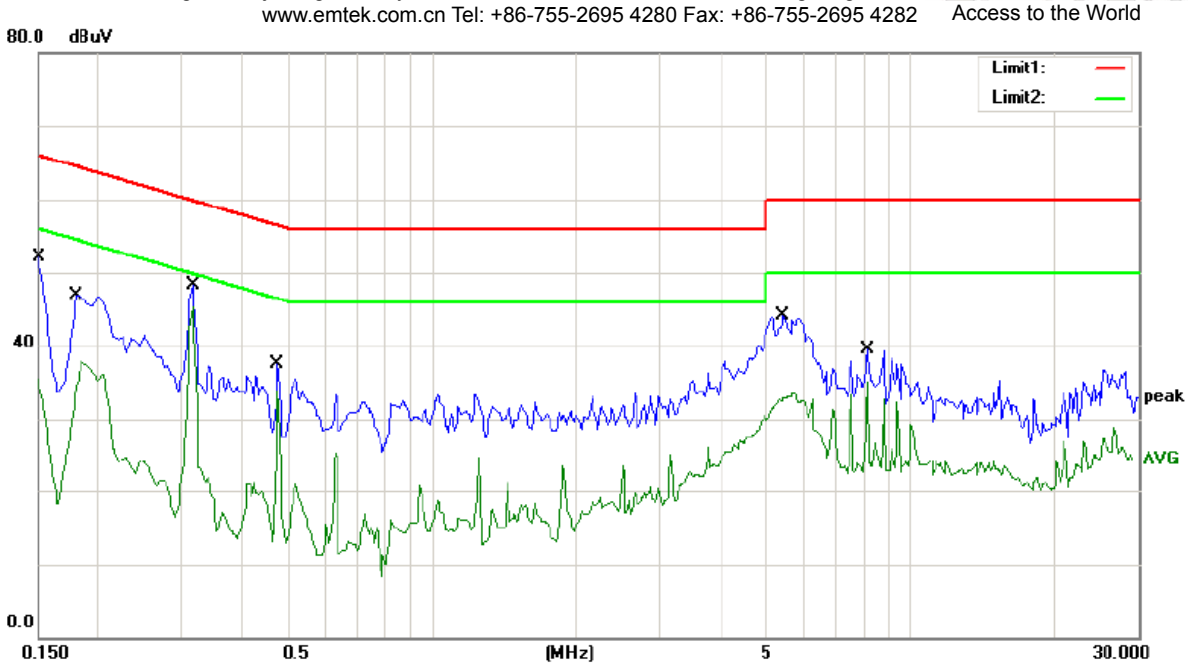
*:Maximum data x:Over limit !:over margin Comment: Factor build in receiver. Operator: HYL



Site Conduction #1 Phase: *L1* Temperature: 26
Limit: (CE)FCC PART 15 class B_QP Power: AC 120V/60Hz Humidity: 60 %
EUT: LED TV
M/N: LE5033
Mode: VGA(1920*1080)
Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1500	51.30	0.00	51.30	66.00	-14.70	QP	
2		0.1500	36.12	0.00	36.12	56.00	-19.88	AVG	
3		0.1850	46.43	0.00	46.43	64.26	-17.83	QP	
4		0.1850	37.02	0.00	37.02	54.26	-17.24	AVG	
5		0.3150	47.31	0.00	47.31	59.84	-12.53	QP	
6	*	0.3150	44.55	0.00	44.55	49.84	-5.29	AVG	
7		0.4050	39.25	0.00	39.25	57.75	-18.50	QP	
8		0.4050	24.46	0.00	24.46	47.75	-23.29	AVG	
9		0.6250	37.26	0.00	37.26	56.00	-18.74	QP	
10		0.6250	24.78	0.00	24.78	46.00	-21.22	AVG	
11		6.0400	43.89	0.00	43.89	60.00	-16.11	QP	
12		6.0400	33.75	0.00	33.75	50.00	-16.25	AVG	

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



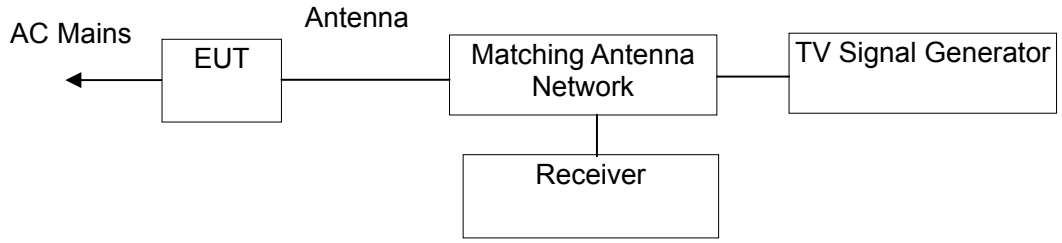
Site Conduction #1 Phase: N Temperature: 26
Limit: (CE)FCC PART 15 class B_QP Power: AC 120V/60Hz Humidity: 60 %
EUT: LED TV
M/N: LE5033
Mode: VGA(1920*1080)
Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1500	52.04	0.00	52.04	66.00	-13.96	QP	
2		0.1500	35.41	0.00	35.41	56.00	-20.59	AVG	
3		0.1800	46.98	0.00	46.98	64.49	-17.51	QP	
4		0.1800	37.81	0.00	37.81	54.49	-16.68	AVG	
5		0.3150	48.29	0.00	48.29	59.84	-11.55	QP	
6	*	0.3150	45.22	0.00	45.22	49.84	-4.62	AVG	
7		0.4750	37.57	0.00	37.57	56.43	-18.86	QP	
8		0.4750	33.84	0.00	33.84	46.43	-12.59	AVG	
9		5.4400	44.03	0.00	44.03	60.00	-15.97	QP	
10		5.4400	33.50	0.00	33.50	50.00	-16.50	AVG	
11		8.1700	39.57	0.00	39.57	60.00	-20.43	QP	
12		8.1700	35.04	0.00	35.04	50.00	-14.96	AVG	

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

5. ANTENNA POWER CONDUCTED LIMIT FOR RECEIVERS

5.1. Block Diagram of Test Setup



(EUT: LED TV)

5.2. Measuring Standard

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

5.3. Antenna Power Conducted Limits

The receiver antenna terminal connected to a resistive termination equal to the impedance specified or employed for the antenna, the power at the antenna terminal at any frequency within the range of measurements specified shall not exceed 2.0 nanowatts. The limit values specified correspond to a nominal impedance of 75Ω is 51.7dBuV.

5.4. Configuration of EUT on Measurement

EUT and support equipment were set up on the wooden table as per step 9 of the preliminary test.

The receiver scanned from 30MHz to 2150 MHz, recorded the value, the local frequency, amplitude were recorded in which correction factors were used to calculate the emission level and compare reading to the applicable limit, The power at the antenna terminal at any frequency within the range of measurement shall not exceed 2.15GHz.

EUT	:	LED TV
Model Number	:	LE5033

5.5. Operating Condition of EUT

5.5.1.Setup the EUT as shown on Section 5.1.

5.5.2.Turn on the power of all equipments.

5.5.3.Let the EUT work in measuring mode (ATSC, ATV) and measure it.

5.6. Test Procedure

The test item can be in deliver on shielding room.

The equipment was set up as per the test configuration to simulate typical actual usage per the user's manual. When the EUT is a tabletop system, a wooden table with a height of 0.8 meters is used and is placed on the ground plane as per ANSI C63.4(see Test Facility for the dimensions of the ground plane used). When the EUT is a floor-standing equipment, it is placed on the ground plane which has a 3-12 mm non-conductive covering to insulate the EUT from the ground plane.

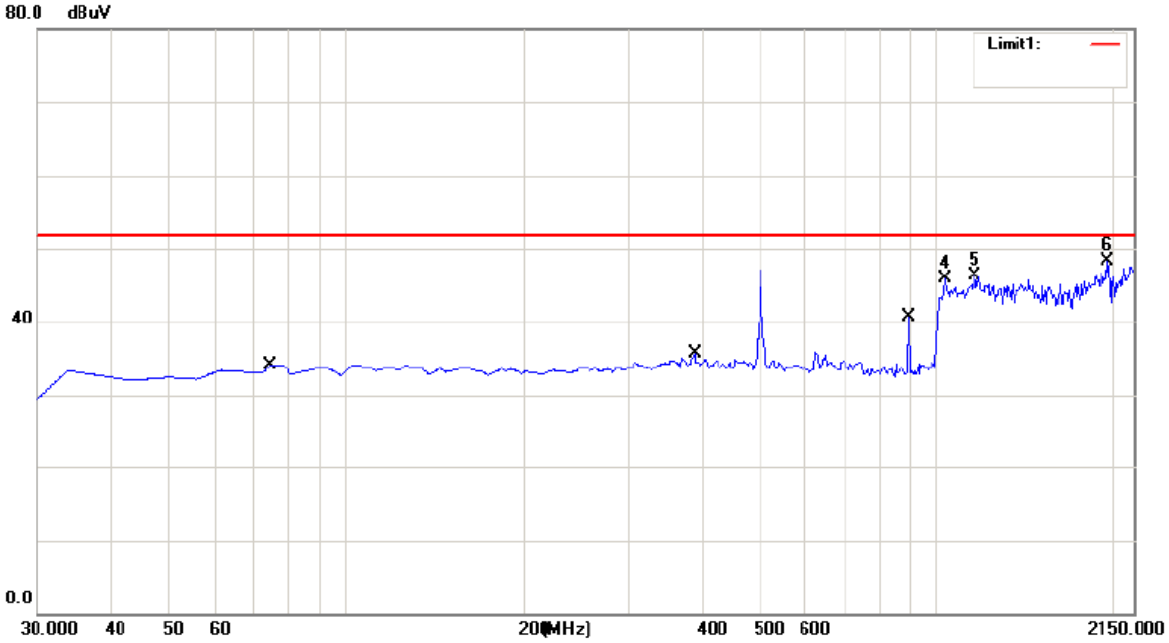
1) EUT receives AC power source from the outlet socket. All support equipment, if need, receives 120VAC/60Hz power from another socket.
2) With the 75~50Ω matching network when the connected coaxial cable of impedance not matching.
3) The output level of the auxiliary signal generator shall be set to give the value of 70Db(μV) for TV to the input of the frequency-modulation of television receiver respectively, on a 75Ω impedance, An additional amplifier should be insert at the generator output, if necessary.
4) All I/O cables were positioned to simulate typical actual usage as per ANSI C63.4.
5) The results shall be expressed in the terms of the substitution power in nanowatt(nW), as supplied by the standard signal generator. The specified source impedance of the receiver shall be stated with the results.
6) When measurements are made at the antenna terminals of the equipment under test, an auxiliary signal generator shall be used to feed the equipment under test input with a standard test signal at the receiver tuning frequency(30MHz to 2000MHz).
7) After the preliminary scan, we found the following test mode(s) producing the highest emission level.

5.7. Measuring Results

PASS.

The frequency range from 150kHz to 2150 MHz is investigated.
After the preliminary scan, we found the following test modes (ATV 503.25MHz) producing the highest emission level.

Please refer to the following pages.



Site Conduction #1 Phase: Temperature: 24

Limit: (CE)FCC PART 15 class B(ANT) Power: AC 120V/60Hz Humidity: 53 %

EUT: LED TV

M/N: LE5033

Mode: ATV (503.25MHZ)

Note:

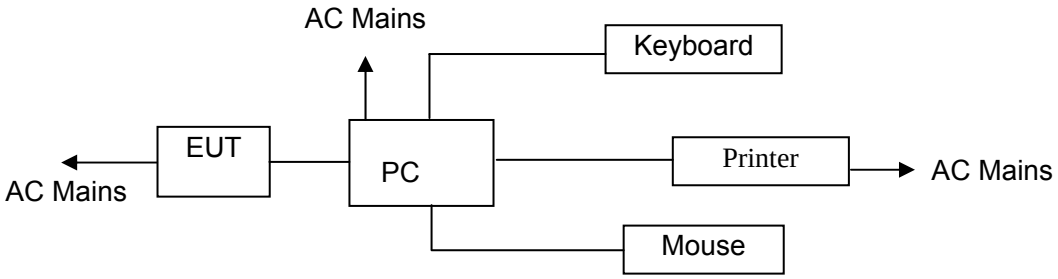
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		74.3750	34.11	0.00	34.11	51.70	-17.59	QP	
2		389.7500	35.76	0.00	35.76	51.70	-15.94	QP	
3		896.5625	40.68	0.00	40.68	51.70	-11.02	QP	
4		1033.500	45.97	0.00	45.97	51.70	-5.73	peak	
5		1161.250	46.22	0.00	46.22	51.70	-5.48	peak	
6	*	1948.750	48.22	0.00	48.22	51.70	-3.48	peak	

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

6. RADIATED EMISSION MEASUREMENT

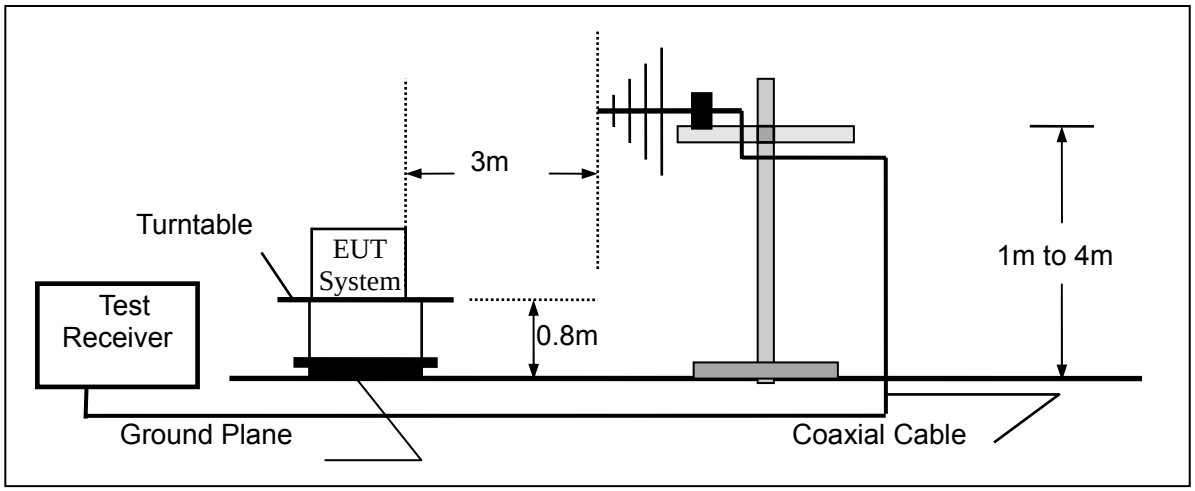
6.1. Block Diagram of Test Setup

6.1.1. Block diagram of EUT System



(EUT: LED TV)

6.1.2. Block diagram of test setup (In chamber)



(EUT: LED TV)

6.2. Measuring Standard

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

6.3. Radiated Emission Limits (class B)

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

Frequency (GHz)	Distance (Meters)	Field Strengths Limit	
		Average (dBμV/m)	Peak (dBμV/m)
1~2	3	54	74

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

6.4. Configuration of EUT on Measurement

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

EUT : LED TV
Model Number : LE5033

6.5. Operating Condition of EUT

6.5.1.Setup the EUT as shown on Section 6.1.

6.5.2.Turn on the power of all equipments.

6.5.3.Let the EUT work in measuring mode (ATSC, ATV, AV in, HDMI in, Y+Pb+Pr in, VGA, COAS in) and measure it.

6.6. Test Procedure

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

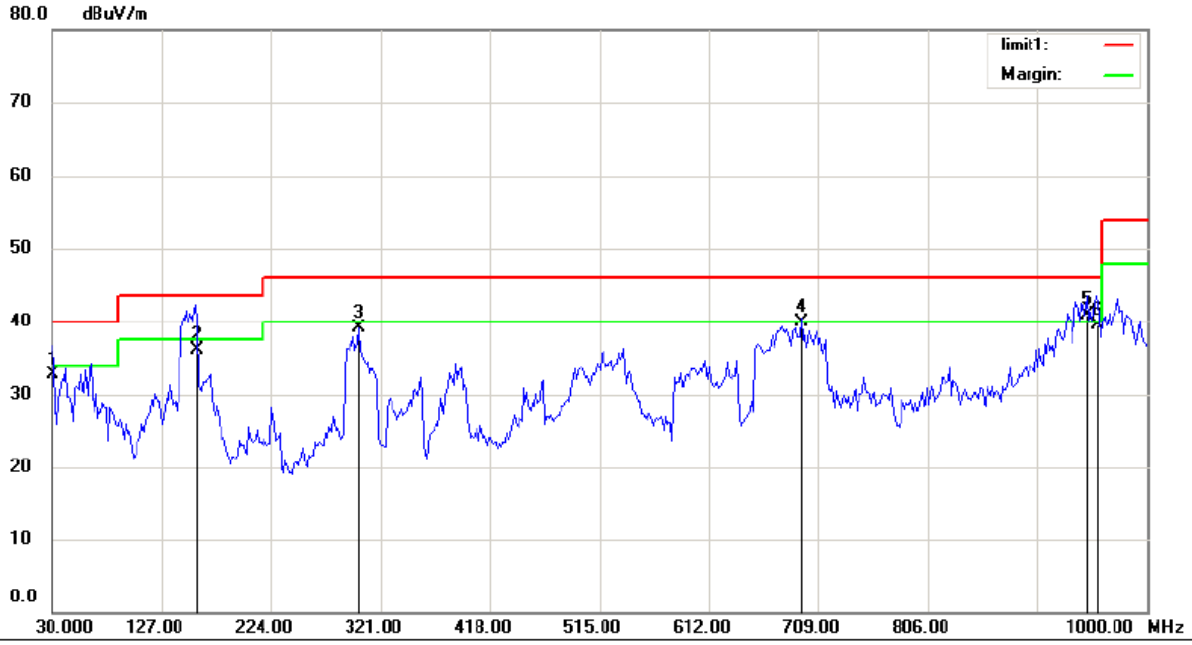
The bandwidth of the Receiver (ESU26) is set at 120kHz.
The worst scanning curves are attached in the following pages.

6.7. Measuring Results

PASS.

The frequency range from 30MHz to 2GHz is investigated.

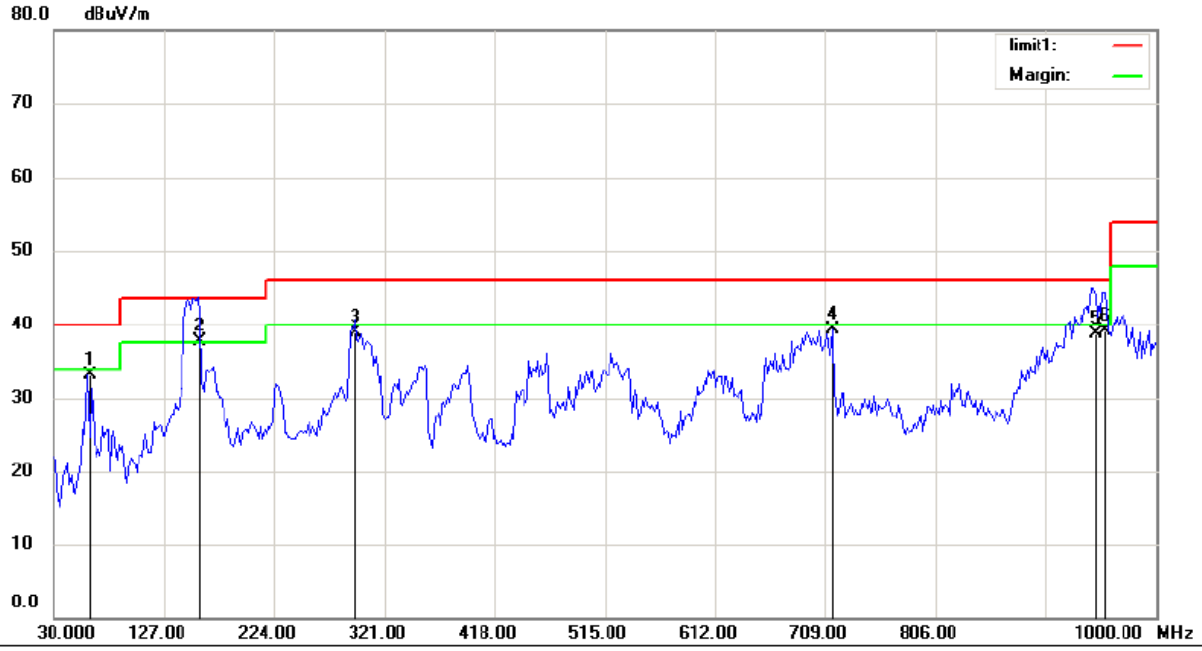
All the modes were tested and the data of the worst modes (ATSC 57MHz, ATV 503.25MHz, AV in, HDMI IN, VGA 1920*1080, COAX in, Y+Pb+Pr in) are attached the following pages



Site site #1 Polarization: *Vertical* Temperature: 24
Limit: (RE)FCC PART 15 CLASS B Power: AC 120V/60Hz Humidity: 53 %
EUT: LED TV
M/N: LE5033
Mode:ATV(503.25MHz)
Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		30.0000	20.10	12.66	32.76	40.00	-7.24	QP			
2		157.4680	25.00	11.05	36.05	43.50	-7.45	QP			
3		302.0350	22.72	16.35	39.07	46.00	-6.93	QP			
4		693.7660	15.50	24.43	39.93	46.00	-6.07	QP			
5	*	947.1474	14.20	26.70	40.90	46.00	-5.10	QP			
6		954.9200	12.80	26.70	39.50	46.00	-6.50	QP			

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



Site site #1 Polarization: *Horizontal* Temperature: 24

Limit: (RE)FCC PART 15 CLASS B Power: AC 120V/60Hz Humidity: 53 %

EUT: LED TV

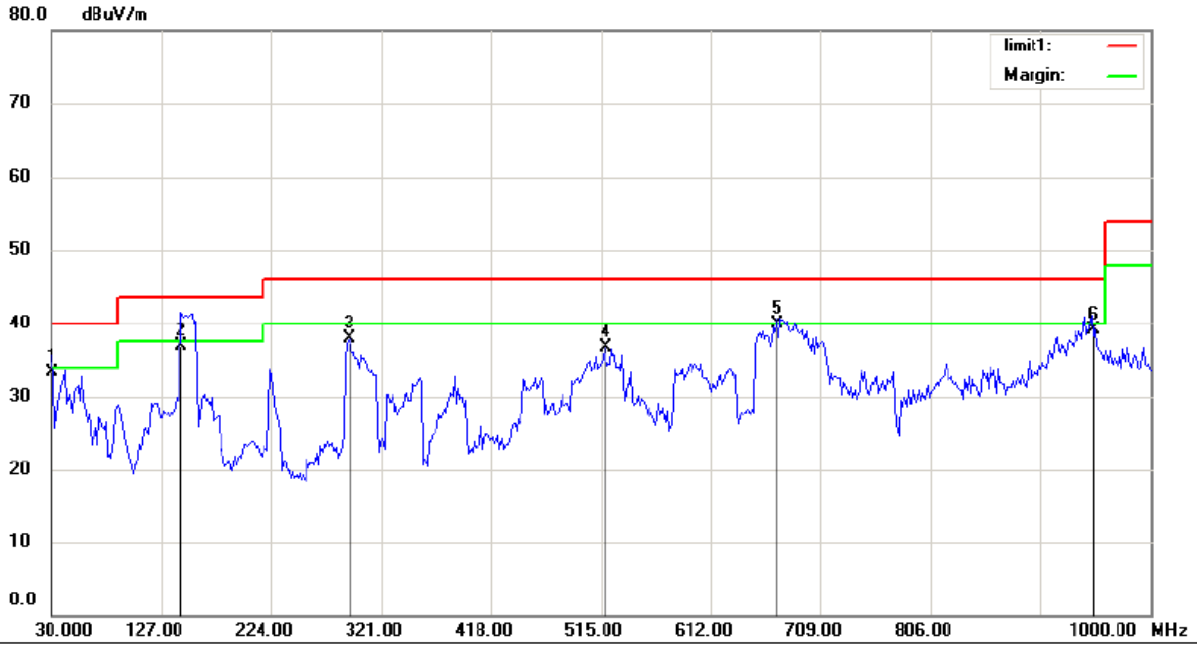
M/N: LE5033

Mode:ATV(503.25MHz)

Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		59.5353	19.57	13.51	33.08	40.00	-6.92	QP			
2	*	157.4680	26.70	11.04	37.74	43.50	-5.76	QP			
3		295.8173	22.80	16.13	38.93	46.00	-7.07	QP			
4		715.5288	15.02	24.19	39.21	46.00	-6.79	QP			
5		945.5930	12.10	26.66	38.76	46.00	-7.24	QP			
6		953.3654	12.50	26.68	39.18	46.00	-6.82	QP			

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



Site site #1 Polarization: *Vertical* Temperature: 24

Limit: (RE)FCC PART 15 CLASS B Power: AC 120V/60Hz Humidity: 53 %

EUT: LED TV

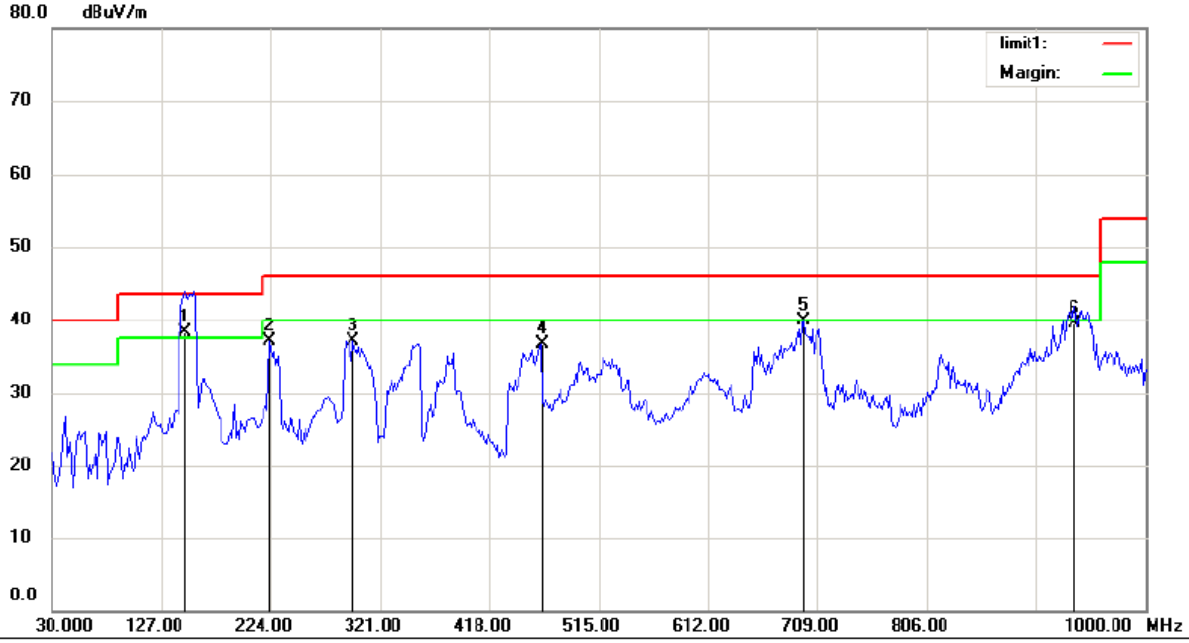
M/N: LE5033

Mode:ATSC(57MHz)

Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		30.0000	20.60	12.66	33.26	40.00	-6.74	QP			
2		145.0320	26.30	10.64	36.94	43.50	-6.56	QP			
3		292.7083	21.86	15.96	37.82	46.00	-8.18	QP			
4		518.1090	15.90	20.75	36.65	46.00	-9.35	QP			
5	*	670.4487	15.30	24.57	39.87	46.00	-6.13	QP			
6		948.7020	12.50	26.69	39.19	46.00	-6.81	QP			

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



Site site #1 Polarization: *Horizontal* Temperature: 24

Limit: (RE)FCC PART 15 CLASS B Power: AC 120V/60Hz Humidity: 53 %

EUT: LED TV

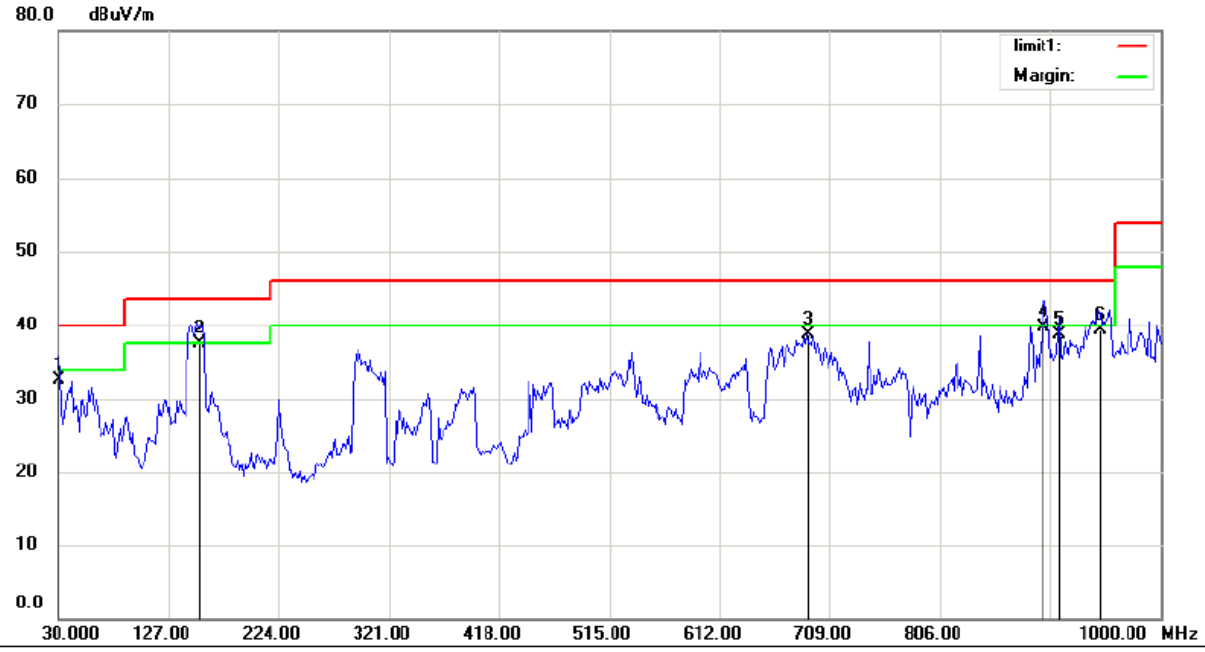
M/N: LE5033

Mode:ATSC(57MHz)

Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1	*	148.1410	27.60	10.70	38.30	43.50	-5.20	QP			
2		222.7564	23.27	13.86	37.13	46.00	-8.87	QP			
3		297.3716	20.90	16.21	37.11	46.00	-8.89	QP			
4		463.7020	17.13	19.60	36.73	46.00	-9.27	QP			
5		696.8750	15.58	24.34	39.92	46.00	-6.08	QP			
6		937.8205	12.80	26.62	39.42	46.00	-6.58	QP			

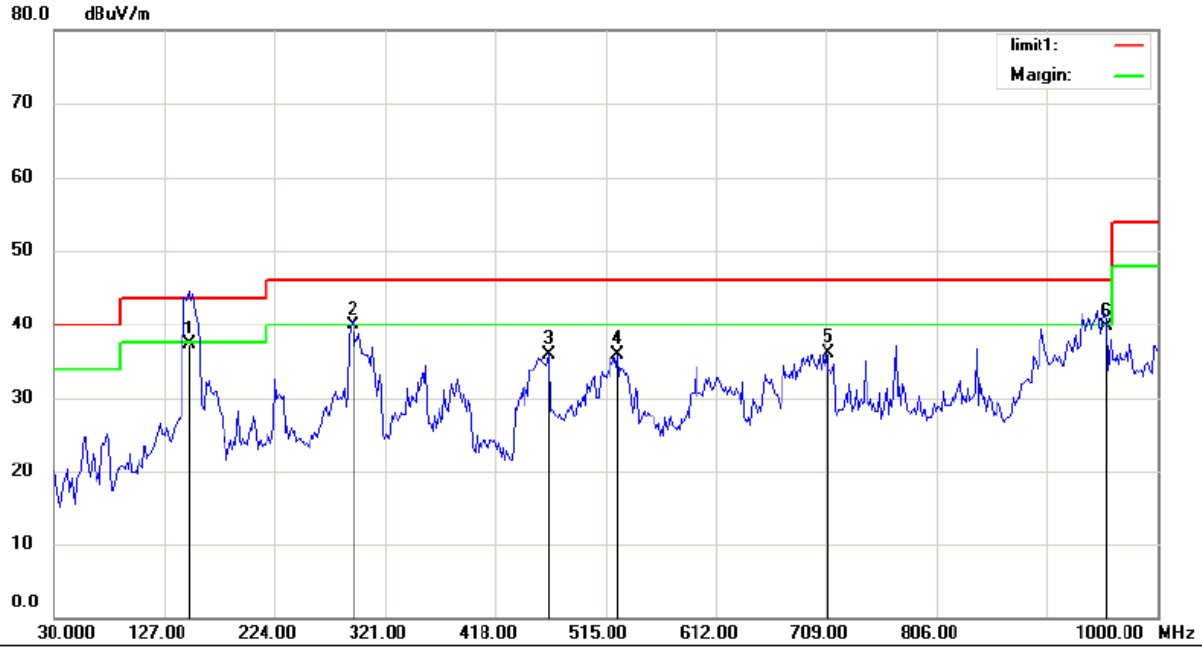
*:Maximum data x:Over limit !:over margin Operator: FENG



Site site #1 Polarization: *Vertical* Temperature: 24
Limit: (RE)FCC PART 15 CLASS B Power: AC 120V/60Hz Humidity: 53 %
EUT: LED TV
M/N: LE5033
Mode:HDMI in
Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		30.0000	19.90	12.66	32.56	40.00	-7.44	QP			
2	*	152.8045	26.60	10.83	37.43	43.50	-6.07	QP			
3		689.1026	14.06	24.59	38.65	46.00	-7.35	QP			
4		897.4038	13.80	25.85	39.65	46.00	-6.35	QP			
5		911.3942	12.50	26.19	38.69	46.00	-7.31	QP			
6		945.5930	12.60	26.70	39.30	46.00	-6.70	QP			

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



Site site #1 Polarization: *Horizontal* Temperature: 24

Limit: (RE)FCC PART 15 CLASS B Power: AC 120V/60Hz Humidity: 53 %

EUT: LED TV

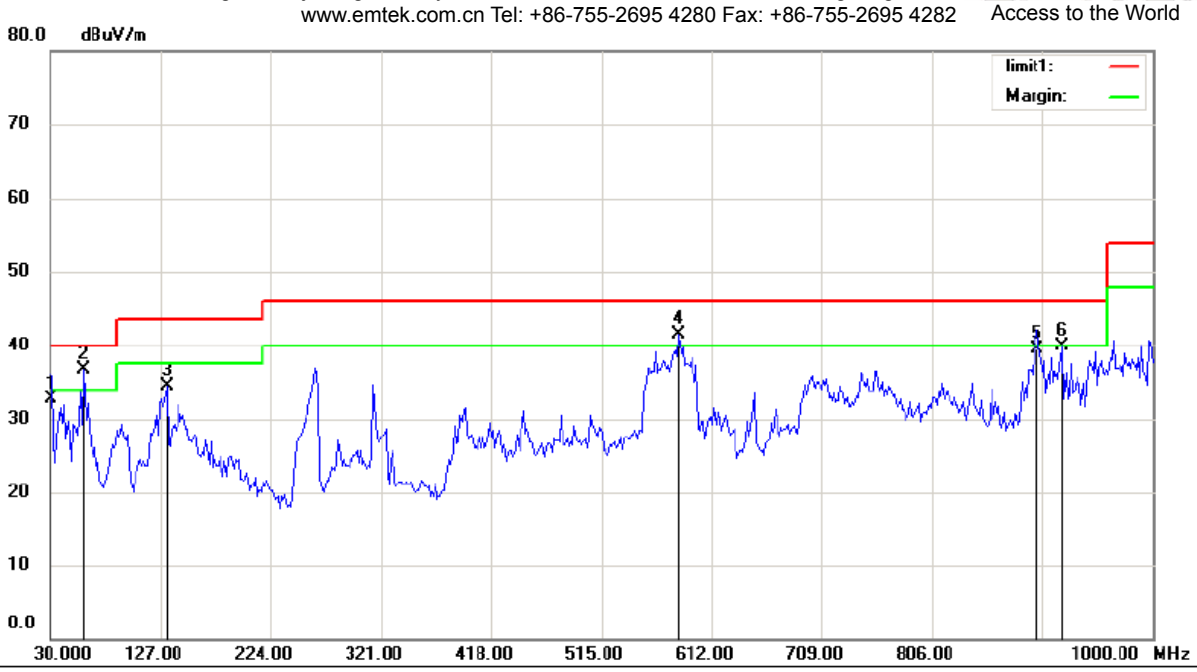
M/N: LE5033

Mode:HDMI in

Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		149.6954	26.60	10.71	37.31	43.50	-6.19	QP			
2	*	292.7083	23.90	15.97	39.87	46.00	-6.13	QP			
3		465.2564	16.35	19.65	36.00	46.00	-10.00	QP			
4		525.8814	14.88	21.01	35.89	46.00	-10.11	QP			
5		709.3110	11.92	24.21	36.13	46.00	-9.87	QP			
6		953.3654	13.10	26.68	39.78	46.00	-6.22	QP			

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



Site site #1 Polarization: *Vertical* Temperature: 24

Limit: (RE)FCC PART 15 CLASS B Power: AC 120V/60Hz Humidity: 53 %

EUT: LED TV

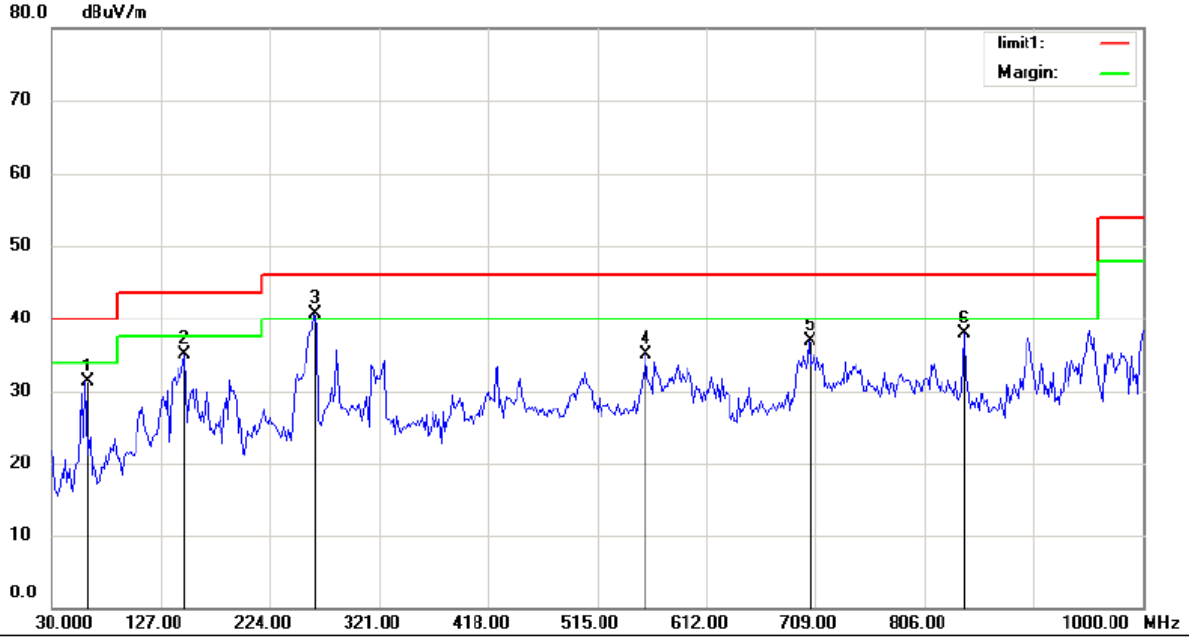
M/N: LE5033

Mode:AV in

Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		30.0000	20.00	12.66	32.66	40.00	-7.34	QP			
2	*	59.5352	23.32	13.47	36.79	40.00	-3.21	QP			
3		132.5961	23.38	11.08	34.46	43.50	-9.04	QP			
4	!	583.3973	19.83	21.62	41.45	46.00	-4.55	QP			
5		898.9583	13.50	25.91	39.41	46.00	-6.59	QP			
6		920.7211	13.52	26.39	39.91	46.00	-6.09	QP			

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



Site site #1 Polarization: *Horizontal* Temperature: 24

Limit: (RE)FCC PART 15 CLASS B Power: AC 120V/60Hz Humidity: 53 %

EUT: LED TV

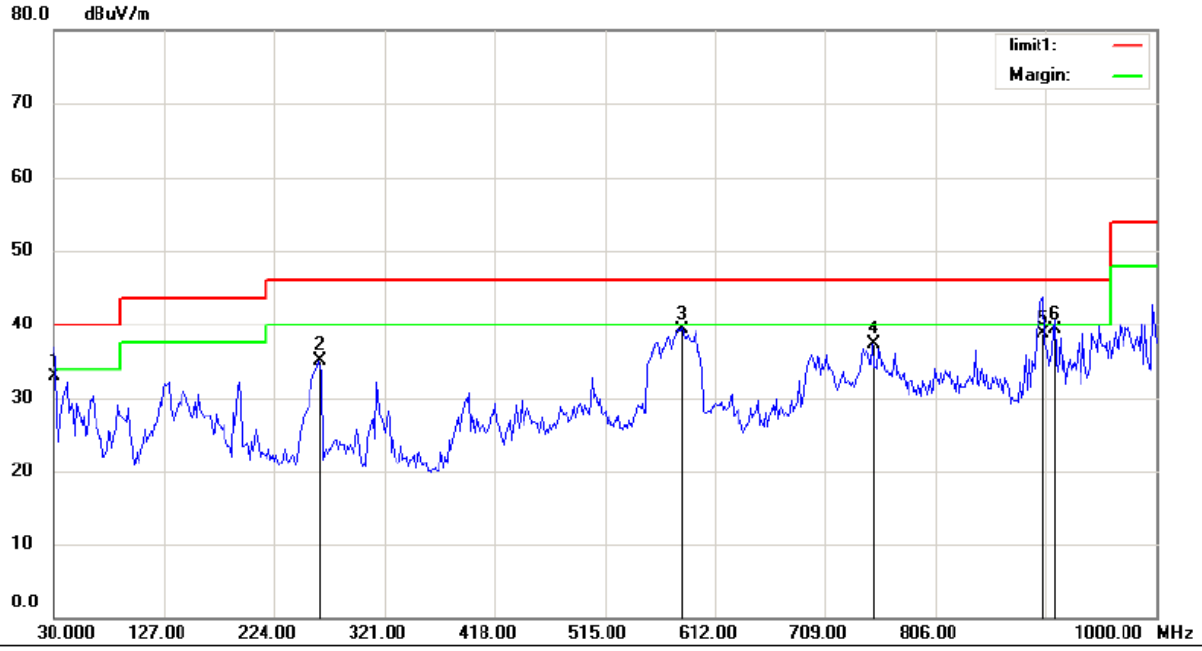
M/N: LE5033

Mode:AV in

Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		59.5353	17.73	13.51	31.24	40.00	-8.76	QP			
2		148.1410	24.37	10.70	35.07	43.50	-8.43	QP			
3	*	263.1731	25.58	15.15	40.73	46.00	-5.27	QP			
4		558.5256	13.76	21.30	35.06	46.00	-10.94	QP			
5		703.0930	12.75	24.23	36.98	46.00	-9.02	QP			
6		841.4423	13.15	24.76	37.91	46.00	-8.09	QP			

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



Site site #1 Polarization: *Vertical* Temperature: 24

Limit: (RE)FCC PART 15 CLASS B Power: AC 120V/60Hz Humidity: 53 %

EUT: LED TV

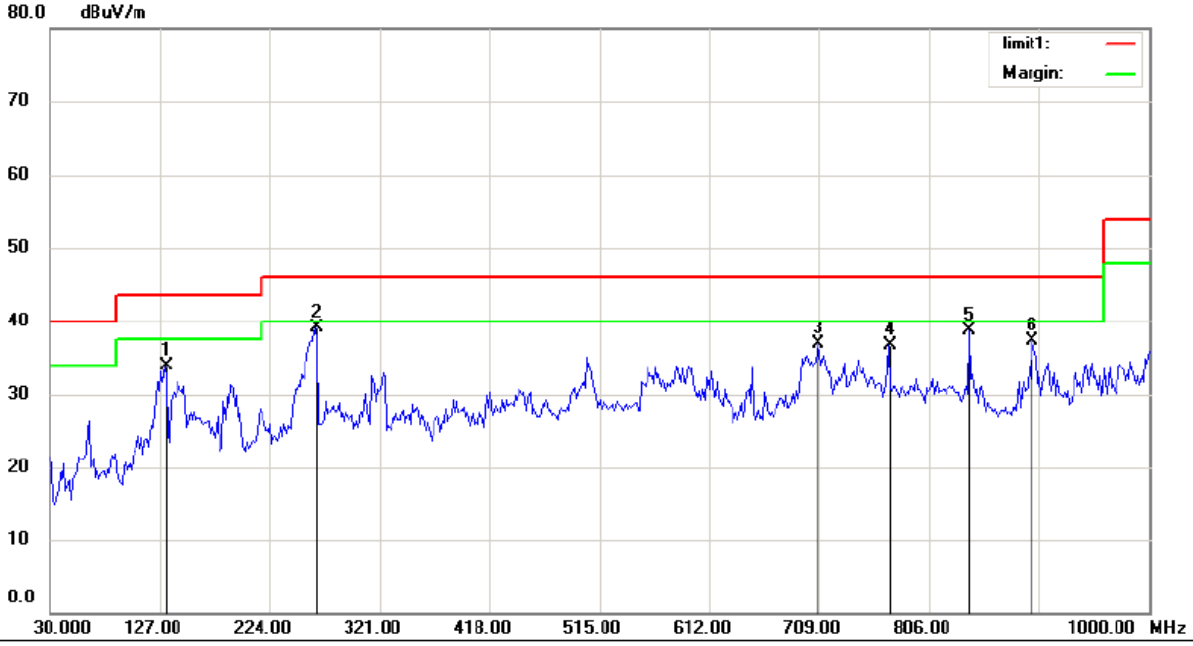
M/N: LE5033

Mode:COAX in

Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		30.0000	20.30	12.66	32.96	40.00	-7.04	QP			
2		263.1731	19.87	15.14	35.01	46.00	-10.99	QP			
3	*	583.3973	17.78	21.62	39.40	46.00	-6.60	QP			
4		751.2821	12.97	24.41	37.38	46.00	-8.62	QP			
5		900.5128	12.80	25.95	38.75	46.00	-7.25	QP			
6		911.3942	13.20	26.19	39.39	46.00	-6.61	QP			

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



Site site #1 Polarization: ***Horizontal*** Temperature: 24

Limit: (RE)FCC PART 15 CLASS B Power: AC 120V/60Hz Humidity: 53 %

EUT: LED TV

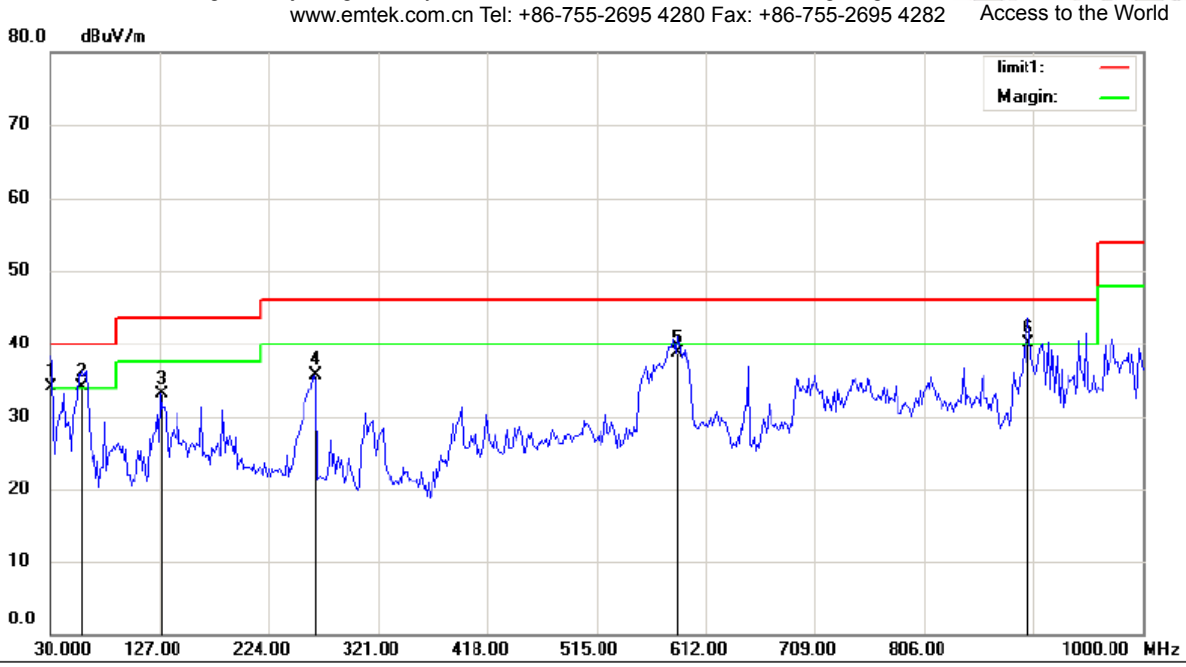
M/N: LE5033

Mode:COAX in

Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		131.0417	22.78	11.19	33.97	43.50	-9.53	QP			
2	*	264.7276	23.88	15.15	39.03	46.00	-6.97	QP			
3		707.7564	12.70	24.22	36.92	46.00	-9.08	QP			
4		769.9360	12.74	23.98	36.72	46.00	-9.28	QP			
5		841.4423	13.91	24.76	38.67	46.00	-7.33	QP			
6		897.4038	11.45	25.86	37.31	46.00	-8.69	QP			

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



Site site #1 Polarization: *Vertical* Temperature: 24

Limit: (RE)FCC PART 15 CLASS B Power: AC 120V/60Hz Humidity: 53 %

EUT: LED TV

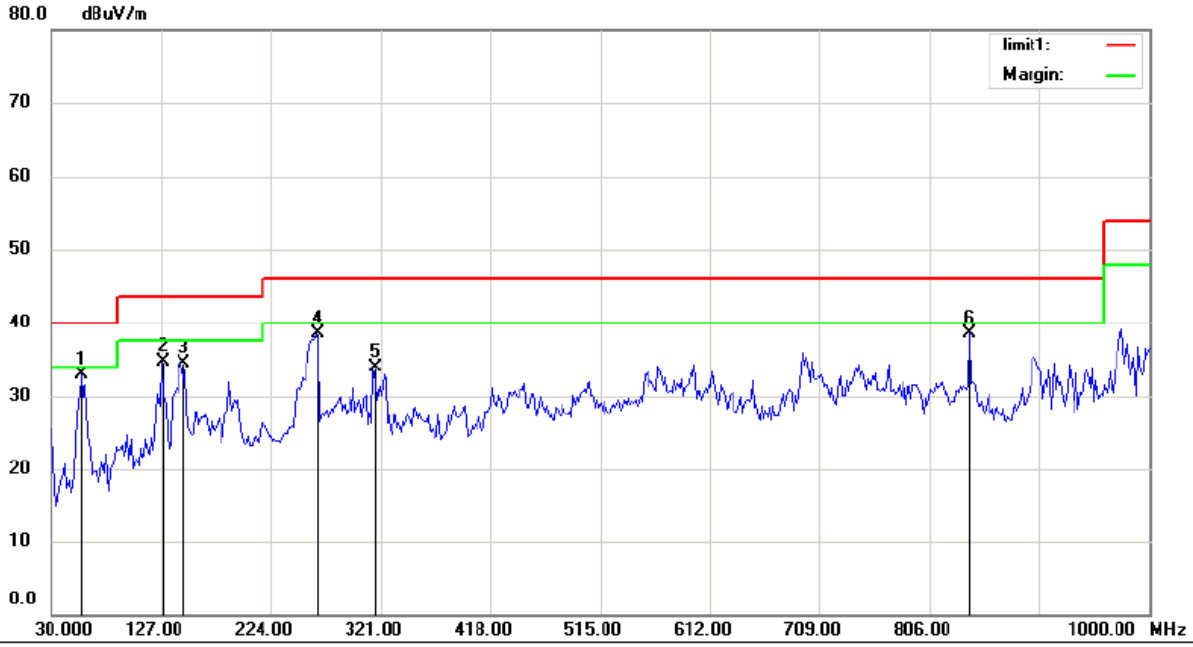
M/N: LE5033

Mode:Y+Pb+Pr in

Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1	*	30.0000	21.50	12.66	34.16	40.00	-5.84	QP			
2	!	57.9807	20.60	13.54	34.14	40.00	-5.86	QP			
3		127.9327	21.51	11.57	33.08	43.50	-10.42	QP			
4		264.7276	20.46	15.15	35.61	46.00	-10.39	QP			
5		586.5064	16.90	21.73	38.63	46.00	-7.37	QP			
6	!	898.9583	14.10	25.91	40.01	46.00	-5.99	QP			

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



Site site #1 Polarization: ***Horizontal*** Temperature: 24

Limit: (RE)FCC PART 15 CLASS B Power: AC 120V/60Hz Humidity: 53 %

EUT: LED TV

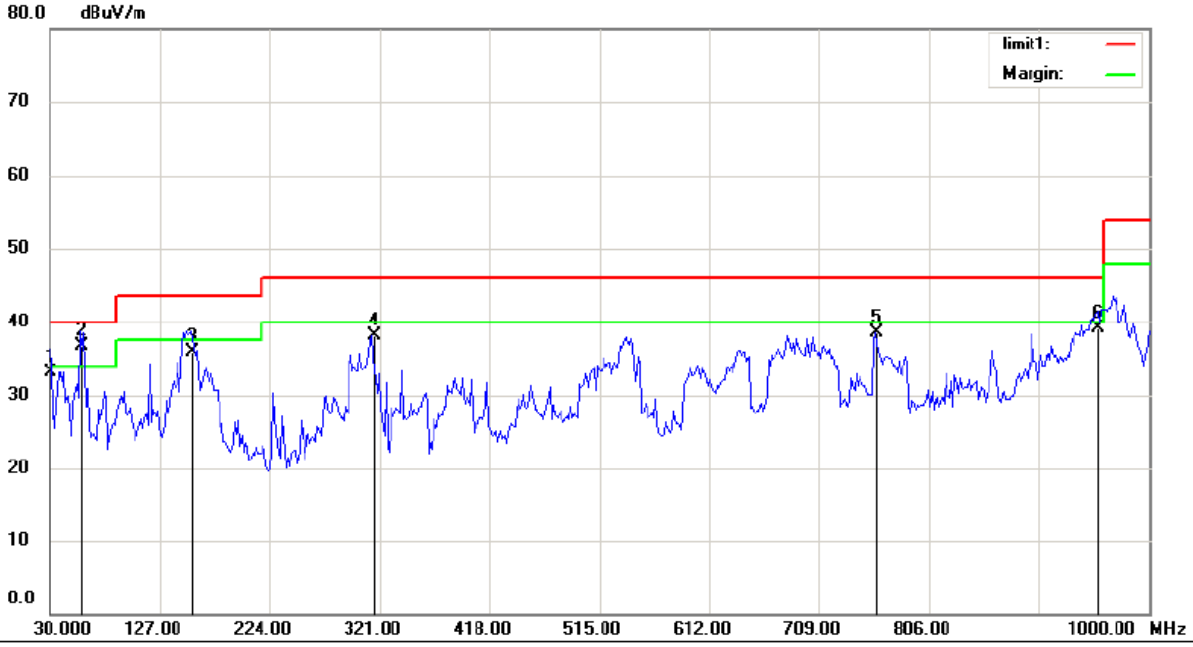
M/N: LE5033

Mode:Y+Pb+Pr in

Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1	*	56.4262	19.16	13.67	32.83	40.00	-7.17	QP			
2		127.9327	23.08	11.56	34.64	43.50	-8.86	QP			
3		145.0321	23.82	10.66	34.48	43.50	-9.02	QP			
4		264.7276	23.36	15.15	38.51	46.00	-7.49	QP			
5		314.4712	17.36	16.55	33.91	46.00	-12.09	QP			
6		841.4423	13.79	24.76	38.55	46.00	-7.45	QP			

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



Site site #1 Polarization: *Vertical* Temperature: 24

Limit: (RE)FCC PART 15 CLASS B Power: AC 120V/60Hz Humidity: 53 %

EUT: LED TV

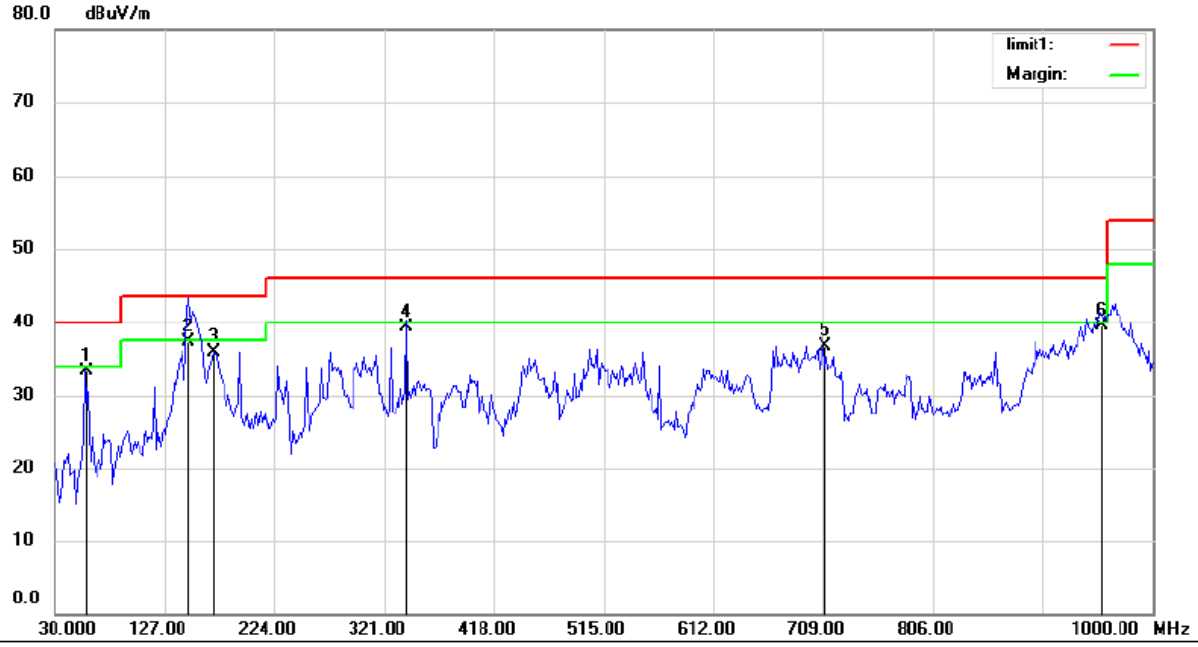
M/N: LE5033

Mode:VGA(1920*1080)

Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		30.0000	20.50	12.66	33.16	40.00	-6.84	QP			
2	*	56.4263	23.10	13.62	36.72	40.00	-3.28	QP			
3		154.3590	25.10	10.90	36.00	43.50	-7.50	QP			
4		314.4712	21.46	16.56	38.02	46.00	-7.98	QP			
5		759.0545	14.22	24.23	38.45	46.00	-7.55	QP			
6		953.3654	12.50	26.69	39.19	46.00	-6.81	QP			

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



Site site #1 Polarization: *Horizontal* Temperature: 24

Limit: (RE)FCC PART 15 CLASS B Power: AC 120V/60Hz Humidity: 53 %

EUT: LED TV

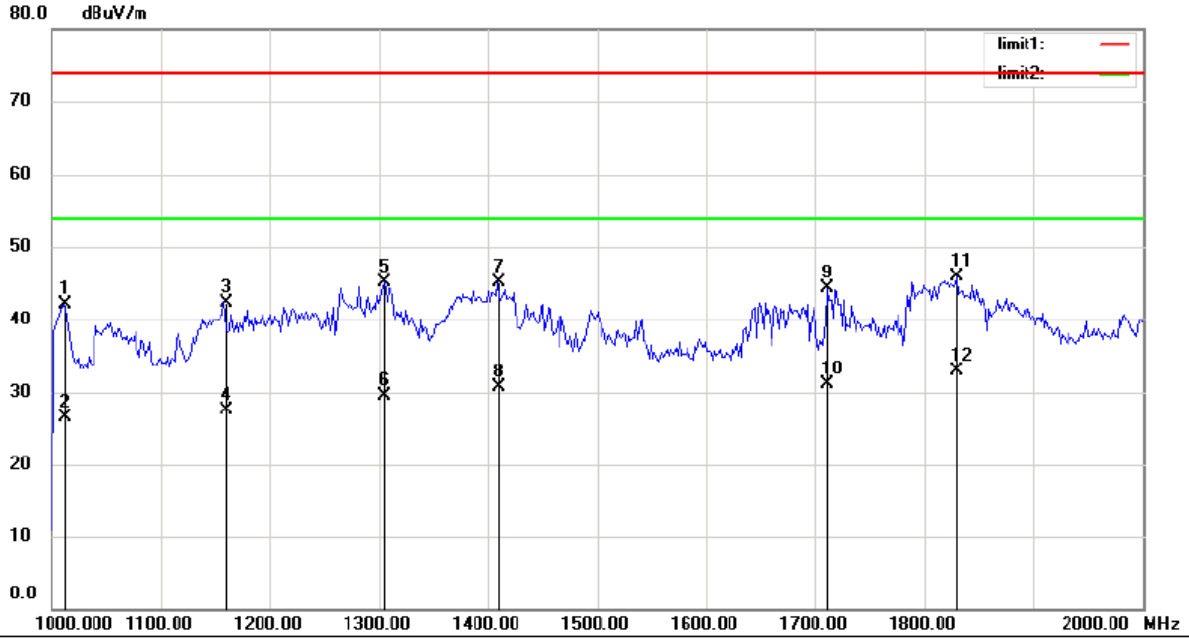
M/N: LE5033

Mode:VGA(1920*1080)

Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		56.4263	19.63	13.67	33.30	40.00	-6.70	QP			
2	*	148.1410	26.70	10.70	37.40	43.50	-6.10	QP			
3		169.9038	24.40	11.54	35.94	43.50	-7.56	QP			
4		340.8974	21.60	17.64	39.24	46.00	-6.76	QP			
5		709.3110	12.52	24.21	36.73	46.00	-9.27	QP			
6		953.3654	12.90	26.68	39.58	46.00	-6.42	QP			

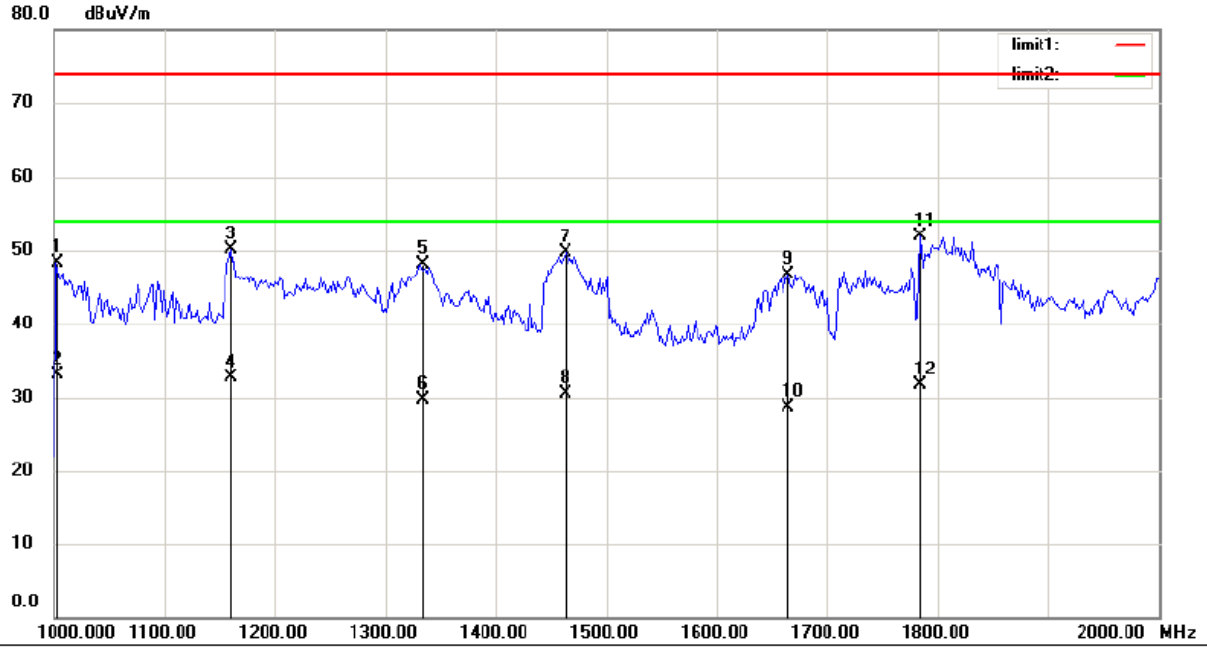
*:Maximum data x:Over limit !:over margin Operator: FENG



Site site #1 Polarization: *Vertical* Temperature: 24
Limit: (RE)FCC PART 15 CLASS B Power: AC 120V/60Hz Humidity: 53 %
EUT: LED TV
M/N: LE5033
Mode:VGA(1920*1080)
Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		1011.218	55.35	-13.33	42.02	74.00	-31.98	QP			
2		1011.218	39.90	-13.33	26.57	54.00	-27.43	AVG			
3		1158.654	55.11	-12.71	42.40	74.00	-31.60	QP			
4		1158.654	40.30	-12.71	27.59	54.00	-26.41	AVG			
5		1304.487	56.81	-11.79	45.02	74.00	-28.98	QP			
6		1304.487	41.20	-11.79	29.41	54.00	-24.59	AVG			
7		1408.654	56.91	-11.87	45.04	74.00	-28.96	QP			
8		1408.654	42.50	-11.87	30.63	54.00	-23.37	AVG			
9		1711.538	56.26	-11.96	44.30	74.00	-29.70	QP			
10		1711.538	43.10	-11.96	31.14	54.00	-22.86	AVG			
11		1830.128	57.33	-11.45	45.88	74.00	-28.12	QP			
12	*	1830.128	44.30	-11.45	32.85	54.00	-21.15	AVG			

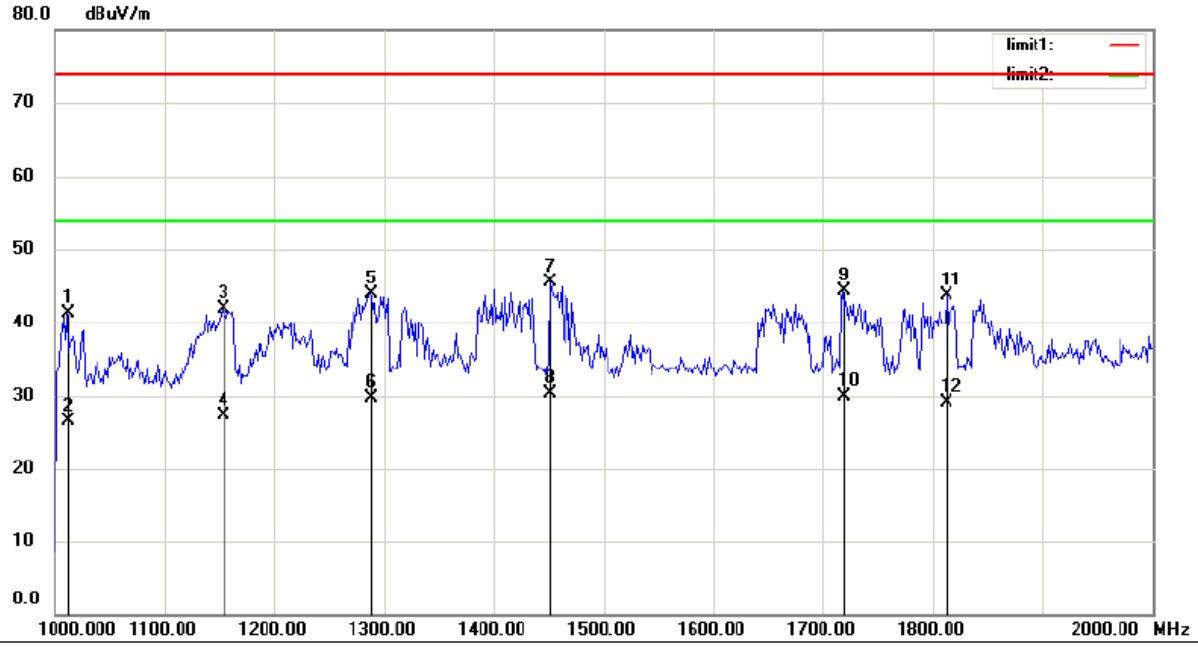
*:Maximum data x:Over limit !:over margin Operator: FENG



Site site #1 Polarization: *Horizontal* Temperature: 24
Limit: (RE)FCC PART 15 CLASS B Power: AC 120V/60Hz Humidity: 53 %
EUT: LED TV
M/N: LE5033
Mode:VGA(1920*1080)
Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		1001.603	63.06	-14.75	48.31	74.00	-25.69	QP			
2	*	1001.603	47.90	-14.75	33.15	54.00	-20.85	AVG			
3		1160.256	63.88	-13.82	50.06	74.00	-23.94	QP			
4		1160.256	46.50	-13.82	32.68	54.00	-21.32	AVG			
5		1331.731	61.10	-13.07	48.03	74.00	-25.97	QP			
6		1331.731	42.80	-13.07	29.73	54.00	-24.27	AVG			
7		1463.141	62.24	-12.54	49.70	74.00	-24.30	QP			
8		1463.141	43.10	-12.54	30.56	54.00	-23.44	AVG			
9		1665.064	58.42	-11.80	46.62	74.00	-27.38	QP			
10		1665.064	40.50	-11.80	28.70	54.00	-25.30	AVG			
11		1785.256	63.25	-11.37	51.88	74.00	-22.12	QP			
12		1785.256	43.10	-11.37	31.73	54.00	-22.27	AVG			

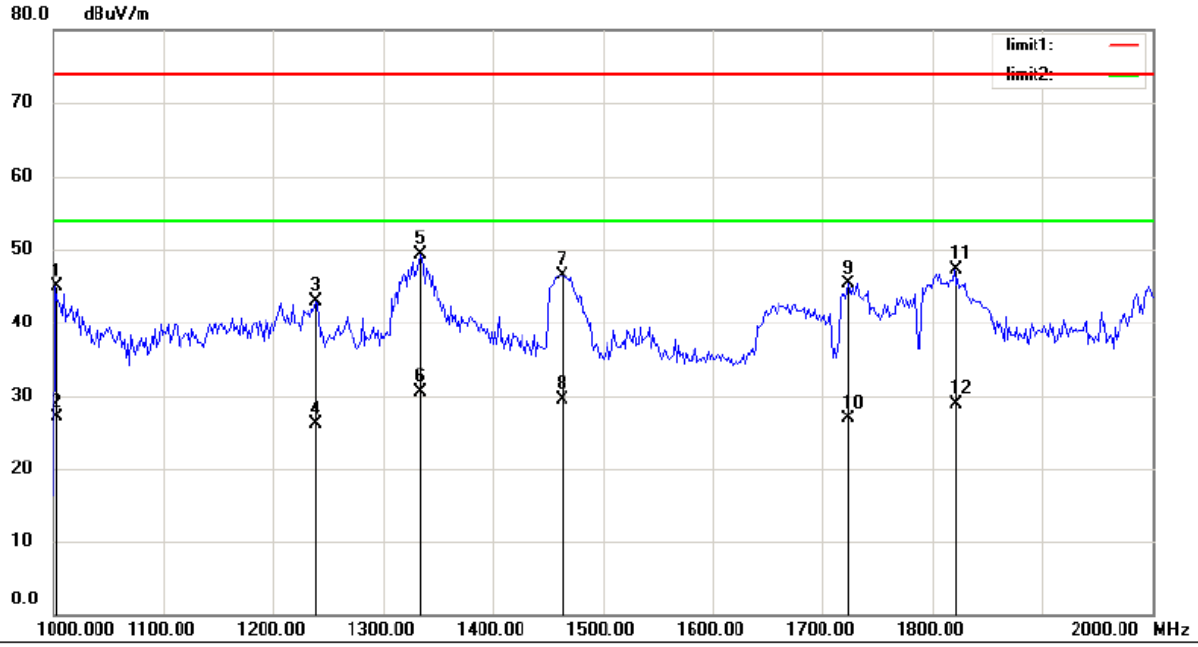
*:Maximum data x:Over limit !:over margin Operator: FENG



Site site #1 Polarization: *Vertical* Temperature: 24
Limit: (RE)FCC PART 15 CLASS B Power: AC 120V/60Hz Humidity: 53 %
EUT: LED TV
M/N: LE5033
Mode:HDMI in
Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		1011.218	54.67	-13.33	41.34	74.00	-32.66	QP			
2		1011.218	39.80	-13.33	26.47	54.00	-27.53	AVG			
3		1152.244	54.71	-12.76	41.95	74.00	-32.05	QP			
4		1152.244	40.10	-12.76	27.34	54.00	-26.66	AVG			
5		1286.859	55.67	-11.86	43.81	74.00	-30.19	QP			
6		1286.859	41.60	-11.86	29.74	54.00	-24.26	AVG			
7		1451.923	57.36	-11.90	45.46	74.00	-28.54	QP			
8	*	1451.923	42.30	-11.90	30.40	54.00	-23.60	AVG			
9		1717.949	56.22	-11.94	44.28	74.00	-29.72	QP			
10		1717.949	41.80	-11.94	29.86	54.00	-24.14	AVG			
11		1812.500	55.30	-11.57	43.73	74.00	-30.27	QP			
12		1812.500	40.70	-11.57	29.13	54.00	-24.87	AVG			

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



Site site #1 Polarization: *Horizontal* Temperature: 24
Limit: (RE)FCC PART 15 CLASS B Power: AC 120V/60Hz Humidity: 53 %
EUT: LED TV
M/N: LE5033
Mode:HDMI in
Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		1001.603	59.64	-14.75	44.89	74.00	-29.11	QP			
2		1001.603	41.80	-14.75	27.05	54.00	-26.95	AVG			
3		1238.782	56.34	-13.44	42.90	74.00	-31.10	QP			
4		1238.782	39.60	-13.44	26.16	54.00	-27.84	AVG			
5		1333.333	62.43	-13.07	49.36	74.00	-24.64	QP			
6	*	1333.333	43.50	-13.07	30.43	54.00	-23.57	AVG			
7		1463.141	59.09	-12.54	46.55	74.00	-27.45	QP			
8		1463.141	42.10	-12.54	29.56	54.00	-24.44	AVG			
9		1722.756	56.91	-11.59	45.32	74.00	-28.68	QP			
10		1722.756	38.50	-11.59	26.91	54.00	-27.09	AVG			
11		1820.513	58.56	-11.25	47.31	74.00	-26.69	QP			
12		1820.513	40.10	-11.25	28.85	54.00	-25.15	AVG			

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

7. PICTURE SENSITIVITY MEASUREMENT

7.1. FCC Part 15 Section 15.117(f) Require

The picture sensitivity of a TV broadcast receiver averaged for all channels between 14 and 69 inclusive shall not be more than 8 dB larger than the peak picture sensitivity of that receiver averaged for all channels between 2 and 13 inclusive.

7.2. Test Result

VHF Band		Antenna Input Level (dBμV)	UHF Band		Antenna Input Level (dBμV)
Channel	Frequency Range (MHz)		Channel	Frequency Range (MHz)	
2	55.250	26	14	471.250	25
3	61.250	28	20	507.250	28
4	67.250	27	26	543.250	27
5	77.250	26	32	579.250	27
6	83.250	28	38	615.250	28
7	175.250	26	44	651.250	27
8	181.250	25	50	687.250	28
9	187.250	27	56	723.250	28
10	193.250	25	62	759.250	27
11	199.250	27	69	801.250	25
12	205.250	28			
13	211.250	26			
Average (VHF)		26.58	Average (UHF)		27.0
Average (UHF) – Average (VHF) = 0.42 dB (Limit 8.0dB)					

8. NOISE FIGURE MEASUREMENT

8.1. FCC Part 15 Section 15.117(g) Require

The noise figure for any television channel 14 to 69 inclusive shall not exceed 14 dB. A TV receiver model is considered to comply with this noise figure if the maximum noise figure for channels 14-69 inclusive of 97.5% of all receivers within that model does not exceed 14 dB

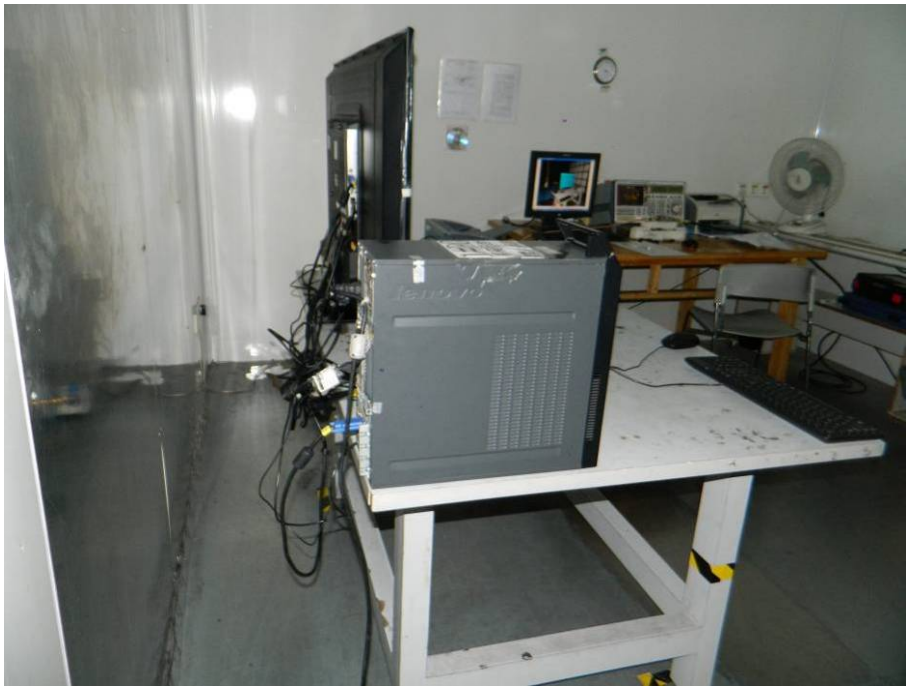
8.2. Test Result

Channel	Measured Frequency (MHz)	Gain (dB)	Noise Figure (dB)	Limit (dB)
14	471.250	>30.0	≤3.5	14
20	507.250	>30.0	≤3.5	14
26	543.250	>30.0	≤3.5	14
32	579.250	>30.0	≤3.5	14
38	615.250	>30.0	≤3.5	14
44	651.250	>30.0	≤3.5	14
50	687.250	>30.0	≤3.5	14
56	723.250	>30.0	≤3.5	14
62	759.250	>30.0	≤3.5	14
69	801.250	>30.0	≤3.5	14

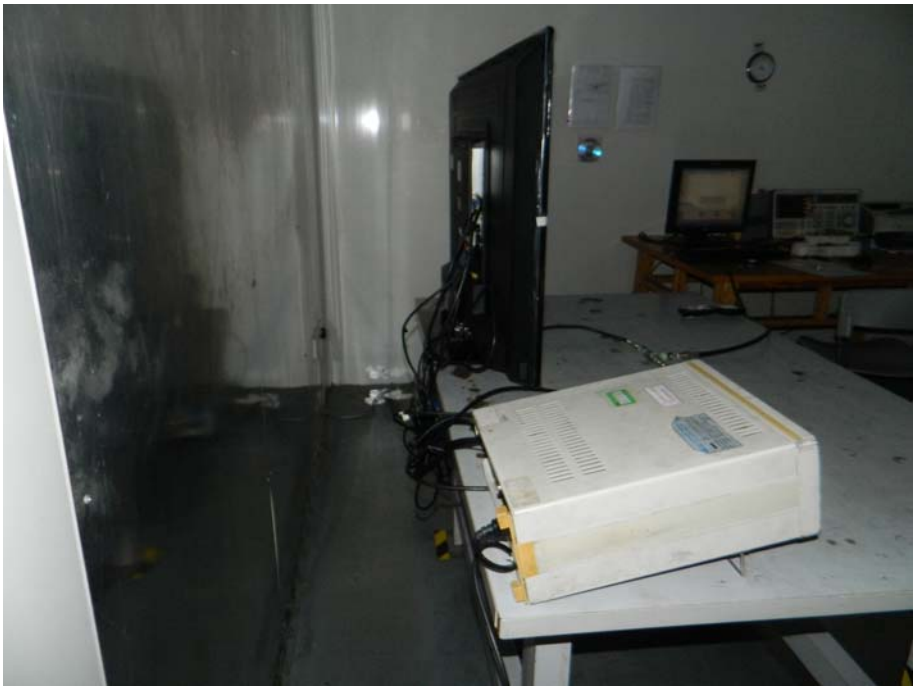
Remark: The specification was provided by tuner manufacturer.

9. PHOTOGRAPHS

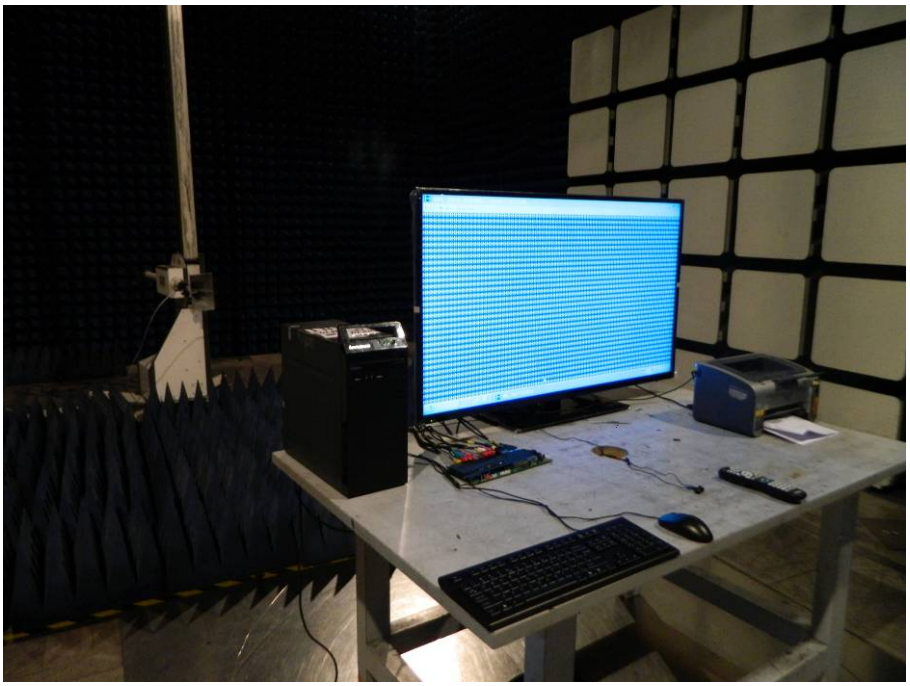
9.1. Photo of Power line Conducted Emission Measurement



9.2. Photo of Antenna Conducted Emission Measurement



9.3. Photo of Radiation Emission Measurement



APPENDIX
(Photos of EUT)