# FCC PART 15C TEST REPORT FOR CERTIFICATION On Behalf of

Shenyang Tongfang Multimedia Technology Co., Limited

#### LED TV

Model Number: ELST4316S

Additional Model: 8037599, SE43FG, SE43FS, SE43FY, SE43HY19, SE43HY, ELEFT431, ELEFT438, SE43FYT, SE43FGT SE43XXXXXXXXX, ELEFW43XXXXXXXXX, ELEFT43XXXXXXXXXX

FCC ID: 2ACWIELST4316S

Prepared for : Shenyang Tongfang Multimedia Technology Co., Limited No. 10 Nanping East Road HunNan New District Shenyang, LiaoNing Province P.R. China

Prepared By: EST Technology Co., Ltd.
Santun(guantai Road), Houjie Town, DongGuan City,
GuangDong, China.

Tel: 86-769-83081888-808

Report Number: ESTE-R1603040 Date of Test : Feb 27~ Mar 15, 2016

Date of Report: Mar 16, 2016



## TABLE OF CONTENTS

Descr	Description				
TEST R	REPORT	T VERIFICATION	3		
1.	GEN	NERAL INFORMATION	5		
	1.1.	Description of Device (EUT)	5		
2.					
	2.1.	Summary of test result			
	2.2.	Test Facilities			
	2.3.	Assistant equipment used for test			
	2.4.	* *			
	2.5.	Test mode			
	2.6.	Channel List for wifi	9		
	2.7.	Test Equipment	10		
3	Pow	VER LINE CONDUCTED EMISSION TEST	11		
		Limit			
	3.3	Test Procedure	11		
	3.4.	Test Result	11		
	3.5.	Test data	12		
4	RAD	DIATED EMISSION TEST	16		
	4.1 ]	Limit	16		
	4.2.	Block Diagram of Test setup			
	4.3.	•			
	4.4.	Test Result	18		
	4.5.	Test Data	19		
5	BAN	ND EDGE COMPLIANCE TEST	91		
	5.1	Limit	91		
	5.2	Test Procedure	91		
	5.3	Test Result	91		
	5.4	Test Data	92		
6	6dB	3 & 20dB Bandwidth Test	108		
	6.1	Limit	108		
	6.2	Test Procedure	108		
	6.3	Test Result	108		
	6.4	6dB Test Data	110		
	6.5	20dB Test Data	118		
7	OUT	TPUT POWER TEST	126		
	7.1	Limit	126		
	7.2	Test Procedure	126		
	7.3	Test Procedure	126		
	7.4	Test Result	127		
	7.5	Test Data	128		
8	Pov	VER SPECTRAL DENSITY TEST	136		
	8.1	Limit	136		
	8.2	Test Procedure			



#### FCC ID:2ACWIELST4316S

	8.3	Test Result	137
	8.4	Test Data	138
9	Anti	ENNA REQUIREMENTS	146
		Limit	
		Result	
10	TEST	SETUP PHOTO	147
11	Рнот	TOS OF EUT	149

**Test Report Verification** 

	1est Report Verification	
Applicant:	Shenyang Tongfang Multimedia Technolo	C, ,
Applicant: Address:	No. 10 Nanping East Road HunNan New	District Shenyang,LiaoNing
Auuress.	Province P.R. China	
Manufacturer	Shenyang Tongfang Multimedia Technolo	
Address:	No. 10 Nanping East Road HunNan New	District Shenyang,LiaoNing
Auuress.	Province P.R. China	
Footowy	Shenyang Tongfang Multimedia Technolo	ogy Co., Limited
Factory Address:	No. 10 Nanping East Road HunNan New	District Shenyang,LiaoNing
Auuress:	Province P.R. China	
E.U.T:	LED TV	
Model Number:	ELST4316S	
	8037599, SE43FG, SE43FS, SE43FY, S	SE43HY19.
	SE43HY, ELEFT431, ELEFT438, SE43F	· ·
	SE43XXXXXXXXX, ELEFW43XXXXX	,
Additional Model:	ELEFT43XXXXXXXXXX (Where X wo	
	English letter or blank. Just model name is	
	same.)	and an end of the chart of the
Power Supply:	AC 100~240V;50/60Hz	
Test Voltage:	AC 120V/60Hz; AC 240V/60Hz	
rest voltage.	Flement THTE Fluid	
Trade Name:	Seiki, Westinghouse Serial No.:	
Data of Dogoints	Feb 27, 2016 Date of Test:	Feb 27~ Mar 15,2016
Date of Receipt:	,	<u> </u>
Test Specification:	FCC Rules and Regulations Part 15 Subpa ANSI C63.10:2013	art C.2013
<u>-</u>		CT T1 C- I 41 Th-
	The device described above is tested by E	
Test Result:	measurement results were contained in the	
	Co., Ltd. was assumed full responsibility	, ,
	of these measurements. Also, this report s	
	technically compliance with the FCC Rule	
	C requirements.	Shnology Co.
	This report applies to shave tested semple	anly and shall the range distant
	This report applies to above tested sample	
	in part without written approval of EST To	
D 11	T 11	Date: Mar 16, 2016
Prepared by:	Tested by:	Approved by thot
/		Ŧ 11
Ada	tom	Jemen Ku
Kur	2000	
Ada / Assistant	Tony.Tang/ Engineer	IcemanHu / Manager
Other Aspects: None.		
Abbreviations: OK/P=pas	sed fail/F=failed n.a/N=not applicable	E.U.T=equipment under tested
A THE PROPERTY OF THE PROPERTY OF	sea iau/r=iauea n.a/N=noi appucable	£.∪.1=equipmeni unaer testea



## 1. GENERAL INFORMATION

## 1.1. Description of Device (EUT)

Product Name	:	LED TV
Model Number	:	ELST4316S
Modulation	:	IEEE 802.11b mode: DSSS(CCK,QPSK, BPSK)
		IEEE 802.11g mode: OFDM (BPSK/QPSK/16QAM/64QAM)
		IEEE 802.11n HT20 MHz mode: OFDM (BPSK/QPSK/16QAM/64QAM)
		IEEE 802.11n HT40 MHz mode: OFDM (BPSK/QPSK/16QAM/64QAM)
Operation Frequency	:	IEEE 802.11b/g: 2412 ~ 2472 MHz
		IEEE 802.11n HT20 : 2412 ~ 2472 MHz
		IEEE 802.11n HT40 : 2422 ~ 2462 MHz
		IEEE 802.11b: 13 Channels
Number of channel		IEEE 802.11g: 13 Channels IEEE 802.11n HT20: 13 Channels
1 ( 41110 41 01 011411101		IEEE 802.11n HT20: 13 Channels
		IEEE 802.11n HT40: 9 Channels
10:		DOD A
Antenna and Gain	:	PCB Antenna with 2dBi gain (Max)

EST

## 2. SUMMARY OF TEST

## 2.1. Summary of test result

<b>Description of Test Item</b>	Standard	Results
	FCC Part 15: 15.207	DAGG
Power Line Conducted Emission	ANSI C63.10:2013	PASS
	FCC Part 15: 15.209	
Radiated Emission	ANSI C63.10:2013	PASS
	KDB 558074	
	FCC Part 15: 15.247	
Band Edge Compliance	ANSI C63.10:2013	PASS
	KDB 558074	
	FCC Part 15: 15.247	
Conducted spurious emissions	ANSI C63.10:2013	PASS
-	KDB 558074	
	FCC Part 15: 15.247	
6dB Bandwidth	ANSI C63.10:2013	PASS
	KDB 558074	
	FCC Part 15: 15.247	
Peak Output Power	ANSI C63.10:2013	PASS
•	KDB 558074	
	FCC Part 15: 15.247	
Power Spectral Density	ANSI C63.10:2013	PASS
	KDB 558074	
Antenna requirement	FCC Part 15: 15.203	PASS

Note: 558074 D01 DTS Meas Guidance v03r04

EST Technology Co., Ltd Report No. ESTE-R1603040 Page 6 of 156

#### 2.2. Test Facilities

EMC Lab : Certificated by CNAL, CHINA

Registration No.: L5288

Date of registration: December 07, 2015

Certificated by FCC, USA Registration No.: 989591

Date of registration: November 20, 2013

Certificated by Industry Canada Registration No.: 9405A-1

Date of registration: December 30, 2015

Certificated by VCCI, Japan

Registration No.: R-3663 & C-4103 Date of registration: July 25, 2011

Certificated by TUV Rheinland, Germany Registration No.: UA 50195514 0001 Date of registration: January 07, 2011

Certificated by TUV/PS, Shenzhen

Registration No.: SCN1017

Date of registration: January 27, 2011

Certificated by Intertek ETL SEMKO Registration No.: 2011-RTL-L1-18 Date of registration: April 28, 2011

Certificated by Siemic, Inc. Registration No.: SLCN021

Date of registration: November 8, 2011

Certificated by Nemko, Hong Kong

Registration No.: 175193

Date of registration: May 4, 2011

Name of Firm : EST Technology Co., Ltd.

Site Location : San Tun Management Zone, Houjie Town, Dongguan,

Guangdong, China

EST Technology Co., Ltd Report No. ESTE-R1603040 Page 7 of 156

## 2.3. Assistant equipment used for test

### 2.3.1. N/A

## 2.4. Block Diagram

For radiated emissions test: EUT was placed on a turn table, which is 0.8 meter high above ground.EUT was be set into Wifi test mode by software before test.



(EUT: LED TV)

EST Technology Co., Ltd Report No. ESTE-R1603040 Page 8 of 156

## 2.5. Test mode

A special test software was used to control EUT work in Continuous TX mode, and select test channel, wireless mode and data rate.

Test mode	Lower	Center	Upper
	channel	channel	channel
IEEE 802.11b;IEEE 802.11g;IEEE 802.11n HT20	2412MHz	2442MHz	2472MHz
Transmitting			
IEEE 802.11b;IEEE 802.11g;IEEE 802.11n HT20	2412MHz	2442MHz	2472MHz
Receiving			
IEEE 802.11n HT40 Transmitting	2422MHz	2442MHz	2462MHz
IEEE 802.11n HT40 Receiving	2422MHz	2442MHz	2462MHz

## 2.6. Channel List for wifi

Channel List for wifi							
IEEE 802.11b;IEEE 802.11g;IEEE 802.11n HT20							
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)		
1	2412	6	2437	11	2462		
2	2417	7	2442	12	2467		
3	2422	8	2447	13	2472		
4	2427	9	2452				
5	2432	10	2457				
IEEE 802.11n HT40							
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)		
1	2422	4	2437	7	2452		
2	2427	5	2442	8	2457		
3	2432	6	2447	9	2462		



## 2.7. Test Equipment

## 2.7.1. For conducted emission test

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
EMI Test Receiver	Rohde & Schwarz	ESHS30	832354	June,28,15	1 Year
Artificial Mains Networ	Rohde & Schwarz	ENV216	101260	June,28,15	1 Year
Pulse Limiter	Rohde & Schwarz	ESH3-Z2	101100	June,28,15	1 Year

## 2.7.2. For radiated emission test(30-1000MHz)

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
EMI Test Receiver	Rohde & Schwarz	ESVS10	100004	June,28,15	1 Year
Spectrum Analyzer	Agilent	E4411B	MY5014069	June,28,15	1 Year
Bilog Antenna	Teseq	CBL 6111D	27090	June,28,15	1 Year
Signal Amplifier	Agilent	310N	187037	June,28,15	1 Year

## 2.7.3. For radiated emission test(above 1GHz)

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
Horn Antenna	SCHWARZB ECK	BBHA 9120 D	BBHA9120D1 002	June,28,15	1 Year
Signal Amplifier	SCHWARZB ECK	BBV9718	9718-212	June,28,15	1 Year
Spectrum Analyzer	Agilent	E4408B	MY44211139	June,28,15	1 Year
RF Cable	Hubersuhner	RG 214/U	513423	June,28,15	1 Year

EST Technology Co., Ltd Report No. ESTE-R1603040 Page 10 of 156

### 3 POWER LINE CONDUCTED EMISSION TEST

#### 3.1. Limit

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

Notes: 1. \* Decreasing linearly with logarithm of frequency.

#### 3.3 Test Procedure

The EUT was placed on a non-metallic table, 10cm above the ground plane. The EUT Power connected to the power mains through a line impedance stabilization network (L.I.S.N. 1#). This provides a 50 ohm coupling impedance for the EUT (Please refer the block diagram of the test setup and photographs). The AC line are checked to find out the maximum conducted emission. In order to find the maximum emission levels, the relative positions of equipment and all of the interface cables shall be changed according to ANSI C63.10: 2013 on Conducted Emission Test.

The bandwidth of test receiver (R & S ESHS30) is set at 10kHz.

The frequency range from 150kHz to 30MHz is checked.

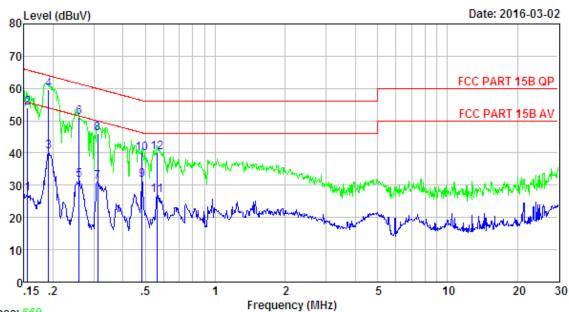
#### 3.4. Test Result

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

EST Technology Co., Ltd Report No. ESTE-R1603040 Page 11 of 156

<sup>2.</sup> The lower limit shall apply at the transition frequencies.

### 3.5. Test data



Trace: 669

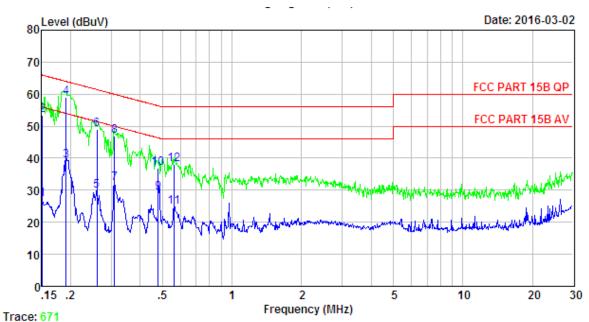
Site no : 844 Shield Room Data no. : 670 Env. / Ins. : Temp:24.3'C Humi:58% Press:101.50kPa LINE Phase : LINE

Limit : FCC PART 15B QP

Engineer : Bible
EUT : LED TV
Power : AC 120V/60Hz
M/N : ELST4316S
Test Mode : TX Mode

		LISN	Cable	2	Emission	L		
	Freq.	Factor	Loss	Reading		Limits	Margin	Remark
	(MHz)	(db)	(db)	dBuV)	(dBuv)	(dBuv)	(dB)	
1	0.156	9.61	9.81	8.13	27.55	55.69	28.14	Average
2	0.156	9.61	9.81	34.58	54.00	65.69	11.69	QP
3	0.191	9.61	9.80	21.00	40.41	53.98	13.57	Average
4	0.191	9.61	9.80	40.19	59.60	63.98	4.38	QP
5	0.259	9.61	9.82	12.07	31.50	51.47	19.97	Average
6	0.259	9.61	9.82	31.57	51.00	61.47	10.47	QP
7	0.312	9.61	9.83	11.65	31.09	49.93	18.84	Average
8	0.312	9.61	9.83	26.56	46.00	59.93	13.93	QP
9	0.484	9.61	9.81	12.10	31.52	46.27	14.75	Average
10	0.484	9.61	9.81	20.58	40.00	56.27	16.27	QP
11	0.561	9.60	9.82	7.41	26.83	46.00	19.17	Average
12	0.561	9.60	9.82	20.68	40.10	56.00	15.90	QP





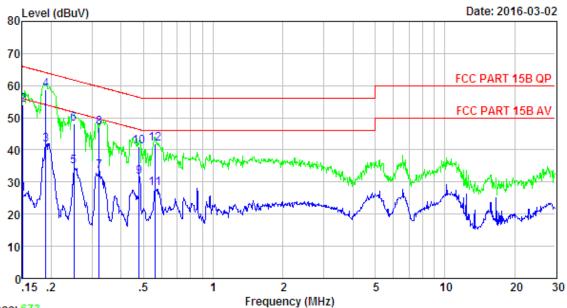
Site no : 844 Shield Room Data no. : 672
Env. / Ins. : Temp:24.3°C Humi:58% Press:101.50kPa LINE Phase : NEUTRAL

Limit : FCC PART 15B QP

Engineer : Bible
EUT : LED TV
Power : AC 120V/60Hz
M/N : ELST4316S
Test Mode : TX Mode

	Freq.	LISN Factor (db)	Cable Loss (db)	Reading dBuV)	Emission Level (dBuv)	Limits (dBuv)	Margin (dB)	Remark
1	0.151	9.46	9.81	7.77	27.04	55.96	28.92	Average
2	0.151	9.46	9.81	34.03	53.30	65.96	12.66	QP
3	0.191	9.58	9.80	19.82	39.20	53.98	14.78	Average
4	0.191	9.58	9.80	39.52	58.90	63.98	5.08	QP
5	0.260	9.60	9.82	10.29	29.71	51.42	21.71	Average
6	0.260	9.60	9.82	29.58	49.00	61.42	12.42	QP
7	0.310	9.60	9.83	12.70	32.13	49.97	17.84	Average
8	0.310	9.60	9.83	27.57	47.00	59.97	12.97	QP
9	0.479	9.59	9.81	9.75	29.15	46.36	17.21	Average
10	0.479	9.59	9.81	17.60	37.00	56.36	19.36	QP
11	0.561	9.60	9.82	5.32	24.74	46.00	21.26	Average
12	0.561	9.60	9.82	18.58	38.00	56.00	18.00	QP





Trace: 673

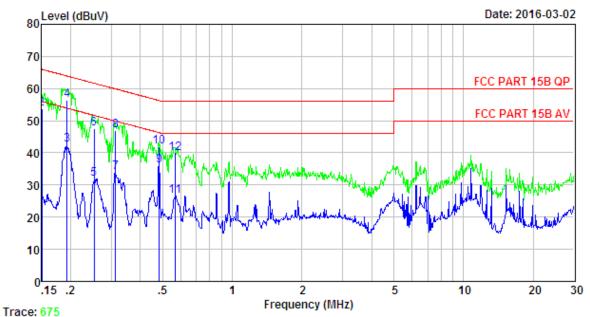
Site no : 844 Shield Room Data no. : 674 Env. / Ins. : Temp:24.3°C Humi:58% Press:101.50kPa LINE Phase : NEUTRAL

Limit : FCC PART 15B QP

Engineer : Bible
EUT : LED TV
Power : AC 240V/60Hz
M/N : ELST4316S
Test Mode : TX Mode

	Freq.	LISN Factor (db)	Cable Loss (db)	Reading dBuV)	Emission Level (dBuv)	Limits (dBuv)	Margin (dB)	Remark
1	0.151	9.46	9.81	7.11	26.38	55.96	29.58	Average
2	0.151	9.46	9.81	34.83	54.10	65.96	11.86	QP
3	0.189	9.58	9.80	22.35	41.73	54.06	12.33	Average
4	0.189	9.58	9.80	39.22	58.60	64.06	5.46	QP
5	0.251	9.60	9.82	15.37	34.79	51.73	16.94	Average
6	0.251	9.60	9.82	28.58	48.00	61.73	13.73	QP
7	0.322	9.59	9.83	13.93	33.35	49.66	16.31	Average
8	0.322	9.59	9.83	27.58	47.00	59.66	12.66	QP
9	0.479	9.59	9.81	12.14	31.54	46.36	14.82	Average
10	0.479	9.59	9.81	21.60	41.00	56.36	15.36	QP
11	0.561	9.60	9.82	8.69	28.11	46.00	17.89	Average
12	0.561	9.60	9.82	22.58	42.00	56.00	14.00	QP





Site no : 844 Shield Room Data no. : 676
Env. / Ins. : Temp:24.3'C Humi:58% Press:101.50kPa LINE Phase : LINE

Limit : FCC PART 15B QP

Engineer : Bible
EUT : LED TV
Power : AC 240V/60Hz
M/N : ELST4316S
Test Mode : TX Mode

		LISN	Cable	<b>e</b>	Emission			
	Freq.	Factor	Loss	Reading	Level	Limits	Margin	Remark
	(MHz)	(db)	(db)	dBuV)	(dBuv)	(dBuv)	(dB)	
1	0.150	9.61	9.81	7.14	26.56	56.00	29.44	Average
2	0.150	9.61	9.81	34.18	53.60	66.00	12.40	QP
3	0.193	9.61	9.80	23.12	42.53	53.89	11.36	Average
4	0.193	9.61	9.80	36.99	56.40	63.89	7.49	QP
5	0.253	9.61	9.82	12.53	31.96	51.64	19.68	Average
6	0.253	9.61	9.82	28.17	47.60	61.64	14.04	QP
7	0.313	9.61	9.83	14.56	34.00	49.88	15.88	Average
8	0.313	9.61	9.83	27.46	46.90	59.88	12.98	QP
9	0.484	9.61	9.81	16.59	36.01	46.27	10.26	Average
10	0.484	9.61	9.81	22.58	42.00	56.27	14.27	QP
11	0.567	9.60	9.82	7.10	26.52	46.00	19.48	Average
12	0.567	9.60	9.82	20.58	40.00	56.00	16.00	QP



## 4 RADIATED EMISSION TEST

### 4.1 Limit

4.1.1 15.209 limits

FREQUENCY	DISTANCE	FIELD STREN	NGTHS LIMIT	
MHz	Meters	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	
Above 1000	3	3 74.0 dB(μV)/m (Peak) 54.0 dB(μV)/m (Average)		

Remark : (1) Emission level  $dB\mu V = 20 \log Emission level \mu V/m$ 

- (2) The smaller limit shall apply at the cross point between two frequency bands.
- (3) Distance is the distance in meters between the measuring instrument, antenna and the closest point of any part of the device or system.

4.1.2 15.205 Restricted bands of operation

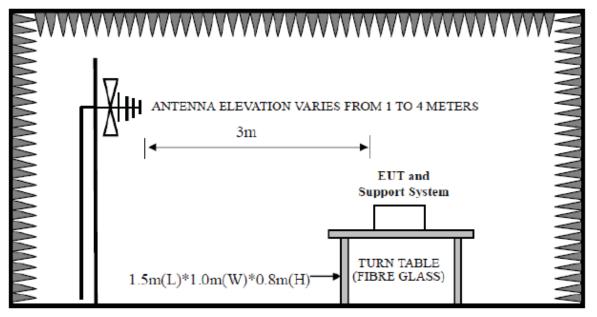
		_	
MHz	MHz	MHz	GHz
0.090 - 0.110	16.42 - 16.423	399.9 - 410	4.5 - 5.15
<sup>1</sup> 0.495 - 0.505	16.69475 - 16.69525	608 - 614	5.35 - 5.46
2.1735 - 2.1905	16.80425 - 16.80475	960 - 1240	7.25 - 7.75
4.125 - 4.128	25.5 - 25.67	1300 - 1427	8.025 - 8.5
4.17725 - 4.17775	37.5 - 38.25	1435 - 1626.5	9.0 - 9.2
4.20725 - 4.20775	73 - 74.6	1645.5 - 1646.5	9.3 - 9.5
6.215 - 6.218	74.8 - 75.2	1660 - 1710	10.6 - 12.7
6.26775 - 6.26825	108 - 121.94	1718.8 - 1722.2	13.25 - 13.4
6.31175 - 6.31225	123 - 138	2200 - 2300	14.47 - 14.5
8.291 - 8.294	149.9 - 150.05	2310 - 2390	15.35 - 16.2
8.362 - 8.366	156.52475 - 156.52525	2483.5 - 2500	17.7 - 21.4
8.37625 - 8.38675	156.7 - 156.9	2690 - 2900	22.01 - 23.12
8.41425 - 8.41475	162.0125 - 167.17	3260 - 3267	23.6 - 24.0
12.29 - 12.293	167.72 - 173.2	3332 - 3339	31.2 - 31.8
12.51975 - 12.52025	240 - 285	3345.8 - 3358	36.43 - 36.5
12.57675 - 12.57725	322 - 335.4	3600 - 4400	(2)

All the emissions appearing within 15.205 restricted frequency bands shall not exceed the limits shown in 15.209, all the other emissions shall be at least 20dB below the fundamental emissions, or comply with 15.209 limits.

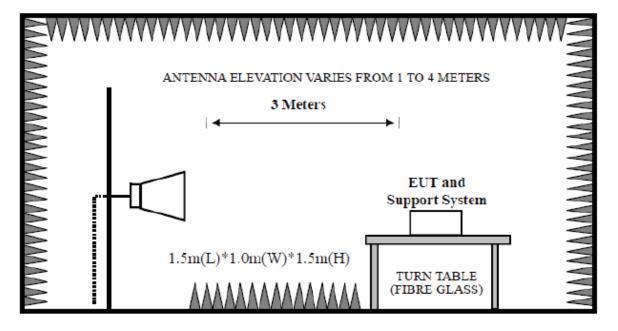


## 4.2. Block Diagram of Test setup

30~1000MHz



Above 1GHz





#### 4.3. Test Procedure

EUT and its simulators are placed on a turn table, which is 1.5 meter high above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. Power on the EUT and let it working in test mode, then test it. 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 between 1 meter and 4 meters to find out the maximum emission level. Broadband antenna (calibrated bilog antenna) is used as receiving antenna. Both horizontal and vertical polarization of the antenna are set on test.

The bandwidth of the EMI test receiver is set at 120kHz for frequency range from 30MHz to 1000 MHz.

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

PEAK detector, 1MHz/1MHz for PAEK measurement, PEAK detector, 1MHz/10Hz for Average measurement

The frequency range from 30MHz to 10<sup>th</sup> harmonic (25GHz) are checked.

#### 4.4. Test Result

#### PASS.

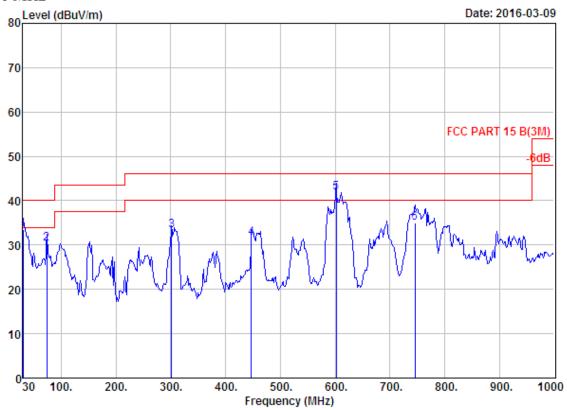
All the emissions from 30MHz to 25 GHz were comply with 15.209 limits.

- Note: 1. For emissions above 1GHz, if peak level comply with average limit, then the average level is deemed to comply with average limit.
  - 2. The frequency 2412MHz . 2422MHz . 2442MHz . 2462MHz and 2472 MHz is fundamental frequency which no limit, the limit on plots is automatically generated by the software, it's not fundamental limit, we can't remove it.



### 4.5. Test Data

#### 30-1000 MHz



Site no. : 966 1# chamber Data no. : 177
Dis. / Ant. : 3m 27137 Ant. pol. : VERTICAL

Limit : FCC PART 15 B(3M)

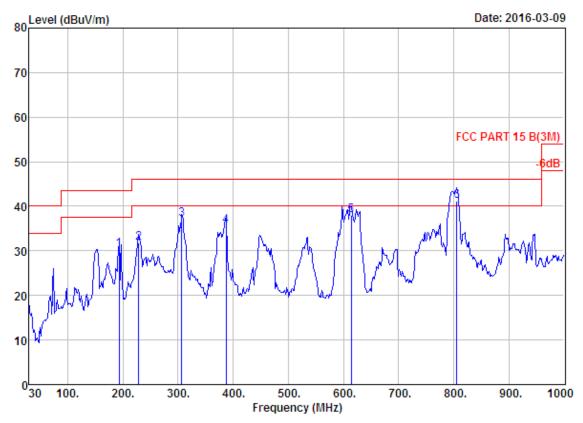
Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

Engineer : Dick
EUT : LED TV
Power : AC 120V/60Hz
M/N : ELST4316S

Test Mode : IEEE 802.11b CH1 2412TX

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	30.00	18.51	0.65	14.32	33.48	40.00	6.52	QP
2	73.65	6.22	1.15	22.98	30.35	40.00	9.65	QP
3	301.60	13.04	2.39	17.87	33.30	46.00	12.70	QP
4	447.10	16.40	2.98	12.20	31.58	46.00	14.42	QP
5	602.30	19.66	3.41	18.77	41.84	46.00	4.16	QP
6	745.86	22.26	3.90	8.80	34.96	46.00	11.04	QP





Site no. : 966 1# chamber Data no. : 178
Dis. / Ant. : 3m 27137 Ant. pol. : HORIZONTAL

Limit : FCC PART 15 B(3M)

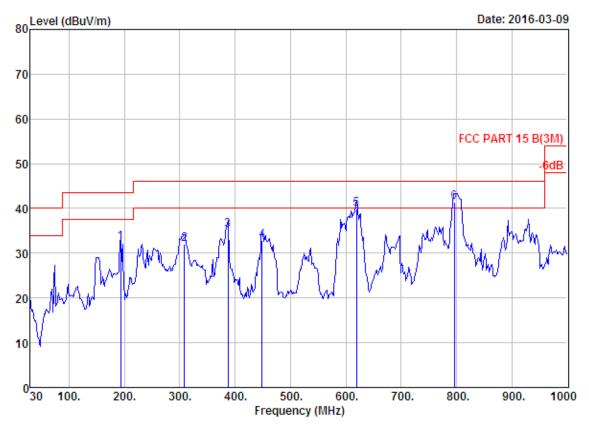
Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

Engineer : Dick
EUT : LED TV
Power : AC 120V/60Hz
M/N : ELST4316S

Test Mode : IEEE 802.11b CH1 2412TX

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	192.96	7.85	1.77	20.60	30.22	43.50	13.28	QP
2	228.85	9.45	2.08	20.27	31.80	46.00	14.20	QP
3	306.45	13.13	2.35	21.67	37.15	46.00	8.85	QP
4	386.96	15.42	2.65	17.62	35.69	46.00	10.31	QP
5	613.94	19.94	3.39	14.66	37.99	46.00	8.01	QP
6	806.00	22.24	3.84	15.00	41.08	46.00	4.92	QP





Site no. : 966 1# chamber Data no. : 179

Dis. / Ant. : 3m 27137 Ant. pol. : HORIZONTAL

Limit : FCC PART 15 B(3M)

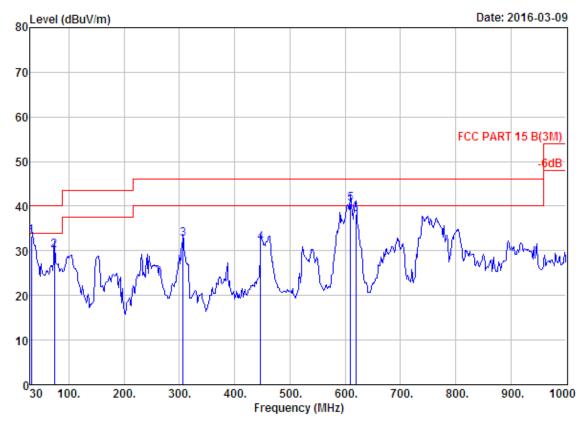
Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

Engineer : Dick
EUT : LED TV
Power : AC 120V/60Hz
M/N : ELST4316S

Test Mode : IEEE 802.11b CH7 2442TX

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	192.96	7.85	1.77	22.71	32.33	43.50	11.17	QP
2	308.39	13.17	2.44	16.49	32.10	46.00	13.90	QP
3	386.96	15.42	2.65	17.18	35.25	46.00	10.75	QP
4	449.04	16.45	2.95	13.46	32.86	46.00	13.14	QP
5	619.76	20.03	3.43	16.37	39.83	46.00	6.17	QP
6	796.30	22.03	3.92	15.38	41.33	46.00	4.67	QP





Site no. : 966 1# chamber Data no. : 180
Dis. / Ant. : 3m 27137 Ant. pol. : VERTICAL

Limit : FCC PART 15 B(3M)

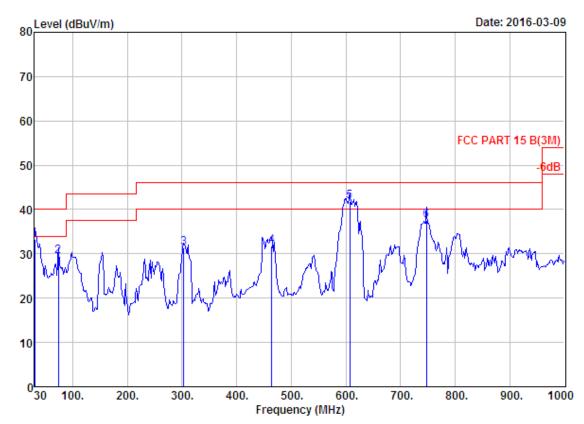
Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

Engineer : Dick
EUT : LED TV
Power : AC 120V/60Hz
M/N : ELST4316S

Test Mode : IEEE 802.11b CH7 2442TX

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	31.94	17.14	0.69	15.39	33.22	40.00	6.78	QP
2	73.65	6.22	1.15	22.76	30.13	40.00	9.87	QP
3	306.45	13.13	2.35	17.24	32.72	46.00	13.28	QP
4	447.10	16.40	2.98	12.33	31.71	46.00	14.29	QP
5	610.06	19.88	3.36	17.35	40.59	46.00	5.41	QP
6	619.76	20.03	3.43	14.75	38.21	46.00	7.79	QP





Site no. : 966 1# chamber Data no. : 181
Dis. / Ant. : 3m 27137 Ant. pol. : VERTICAL

Limit : FCC PART 15 B(3M)

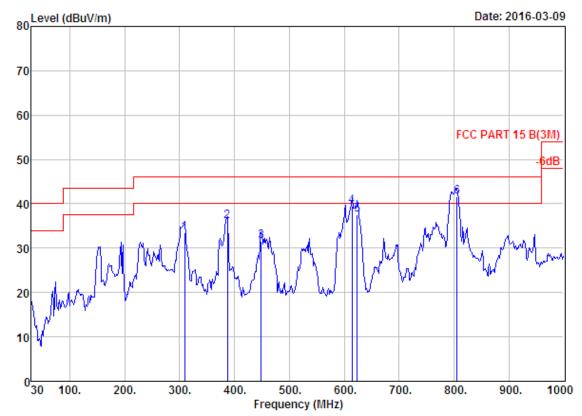
Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

Engineer : Dick
EUT : LED TV
Power : AC 120V/60Hz
M/N : ELST4316S

Test Mode : IEEE 802.11b CH13 2472TX

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	30.00	18.51	0.65	14.03	33.19	40.00	6.81	QP
2	73.65	6.22	1.15	22.09	29.46	40.00	10.54	QP
3	303.54	13.08	2.43	15.89	31.40	46.00	14.60	QP
4	464.56	17.01	3.02	11.80	31.83	46.00	14.17	QP
5	607.15	19.80	3.41	18.60	41.81	46.00	4.19	QP
6	747.80	22.22	3.91	11.43	37.56	46.00	8.44	QP





Site no. : 966 1# chamber Data no. : 182

Dis. / Ant. : 3m 27137 Ant. pol. : HORIZONTAL

Limit : FCC PART 15 B(3M)

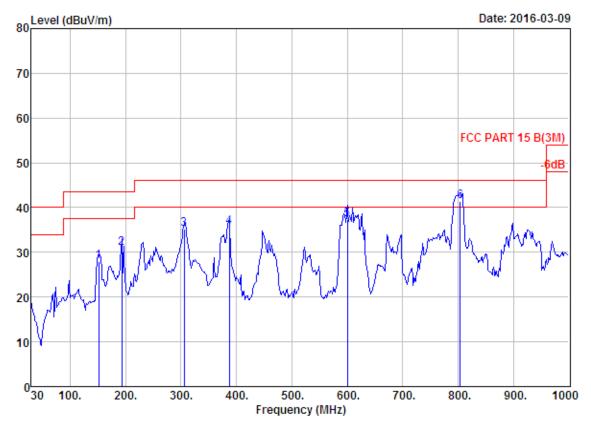
Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

Engineer : Dick
EUT : LED TV
Power : AC 120V/60Hz
M/N : ELST4316S

Test Mode : IEEE 802.11b CH13 2472TX

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	309.36	13.18	2.36	17.96	33.50	46.00	12.50	QP
2	386.96	15.42	2.65	18.08	36.15	46.00	9.85	QP
3	449.04	16.45	2.95	12.23	31.63	46.00	14.37	QP
4	613.94	19.94	3.39	16.04	39.37	46.00	6.63	QP
5	623.64	20.08	3.37	14.20	37.65	46.00	8.35	QP
6	806.00	22.24	3.84	15.45	41.53	46.00	4.47	QP





Site no. : 966 1# chamber Data no. : 183
Dis. / Ant. : 3m 27137 Ant. pol. : HORIZONTAL

Limit : FCC PART 15 B(3M)

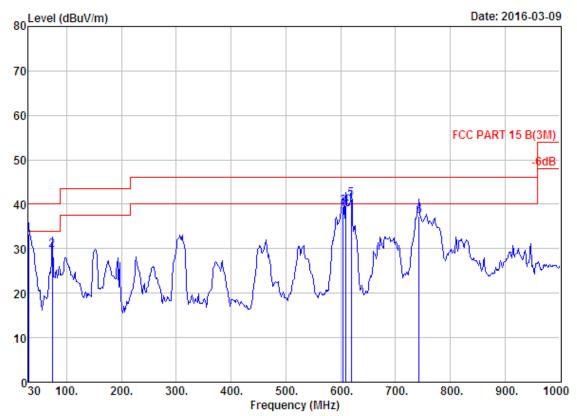
Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

Engineer : Dick
EUT : LED TV
Power : AC 120V/60Hz
M/N : ELST4316S

Test Mode : IEEE 802.11g CH1 2412TX

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	151.25	10.82	1.61	15.51	27.94	43.50	15.56	QP
2	192.96	7.85	1.77	21.38	31.00	43.50	12.50	QP
3	305.48	13.11	2.31	19.77	35.19	46.00	10.81	QP
4	386.96	15.42	2.65	17.45	35.52	46.00	10.48	QP
5	600.36	19.60	3.44	14.39	37.43	46.00	8.57	QP
6	804.06	22.17	3.87	15.37	41.41	46.00	4.59	QP





Site no. : 966 1# chamber Data no. : 184
Dis. / Ant. : 3m 27137 Ant. pol. : VERTICAL

Limit : FCC PART 15 B(3M)

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

Engineer : Dick

EUT : LED TV

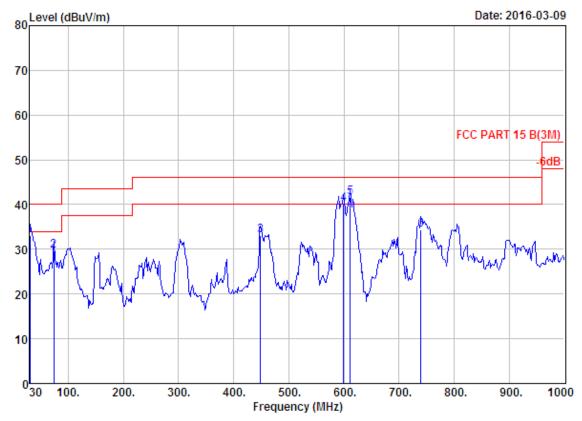
Power : AC 120V/60Hz

M/N : ELST4316S

Test Mode : IEEE 802.11g CH1 2412TX

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	30.00	18.51	0.65	14.18	33.34	40.00	6.66	QP
2	73.65	6.22	1.15	22.32	29.69	40.00	10.31	QP
3	604.24	19.71	3.41	16.38	39.50	46.00	6.50	QP
4	610.06	19.88	3.36	16.33	39.57	46.00	6.43	QP
5	619.76	20.03	3.43	17.63	41.09	46.00	4.91	QP
6	742.95	22.31	3.86	11.10	37.27	46.00	8.73	QP





Site no. : 966 1# chamber Data no. : 185
Dis. / Ant. : 3m 27137 Ant. pol. : VERTICAL

Limit : FCC PART 15 B(3M)

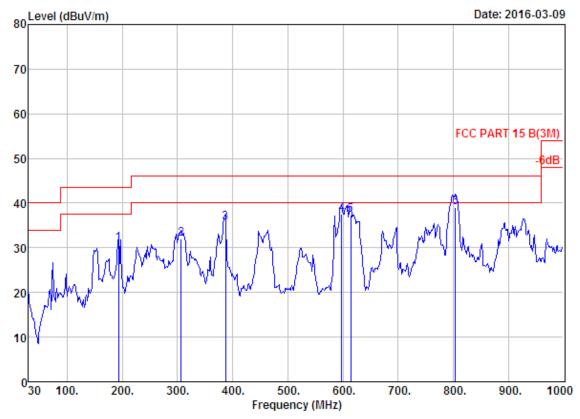
Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

Engineer : Dick
EUT : LED TV
Power : AC 120V/60Hz
M/N : ELST4316S

Test Mode : IEEE 802.11g CH7 2442TX

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	30.00	18.51	0.65	14.00	33.16	40.00	6.84	QP
2	73.65	6.22	1.15	22.35	29.72	40.00	10.28	QP
3	449.04	16.45	2.95	13.73	33.13	46.00	12.87	QP
4	599.39	19.58	3.47	17.14	40.19	46.00	5.81	QP
5	612.00	19.91	3.33	18.28	41.52	46.00	4.48	QP
6	740.04	22.36	3.84	8.16	34.36	46.00	11.64	QP





Site no. : 966 1# chamber Data no. : 186

Dis. / Ant. : 3m 27137 Ant. pol. : HORIZONTAL

Limit : FCC PART 15 B(3M)

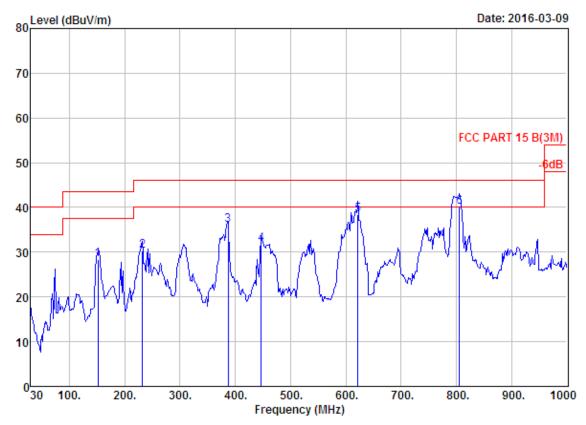
Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

Engineer : Dick
EUT : LED TV
Power : AC 120V/60Hz
M/N : ELST4316S

Test Mode : IEEE 802.11g CH7 2442TX

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	192.96	7.85	1.77	21.34	30.96	43.50	12.54	QP
2	306.45	13.13	2.35	16.44	31.92	46.00	14.08	QP
3	386.96	15.42	2.65	17.45	35.52	46.00	10.48	QP
4	597.45	19.55	3.39	14.64	37.58	46.00	8.42	QP
5	613.94	19.94	3.39	13.93	37.26	46.00	8.74	QP
6	804.06	22.17	3.87	13.02	39.06	46.00	6.94	QP





Site no. : 966 1# chamber Data no. : 187

Dis. / Ant. : 3m 27137 Ant. pol. : HORIZONTAL

Limit : FCC PART 15 B(3M)

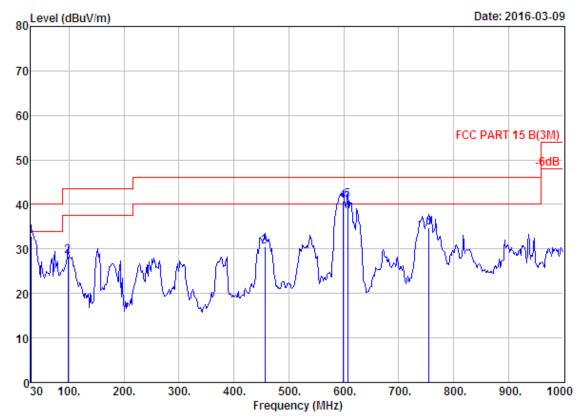
Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

Engineer : Dick
EUT : LED TV
Power : AC 120V/60Hz
M/N : ELST4316S

Test Mode : IEEE 802.11g CH13 2472TX

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	151.25	10.82	1.61	15.96	28.39	43.50	15.11	QP
2	231.76	9.54	2.07	18.77	30.38	46.00	15.62	QP
3	386.96	15.42	2.65	17.90	35.97	46.00	10.03	QP
4	447.10	16.40	2.98	12.38	31.76	46.00	14.24	QP
5	621.70	20.06	3.42	14.85	38.33	46.00	7.67	QP
6	806.00	22.24	3.84	14.07	40.15	46.00	5.85	QP





Site no. : 966 1# chamber Data no. : 188
Dis. / Ant. : 3m 27137 Ant. pol. : VERTICAL

Limit : FCC PART 15 B(3M)

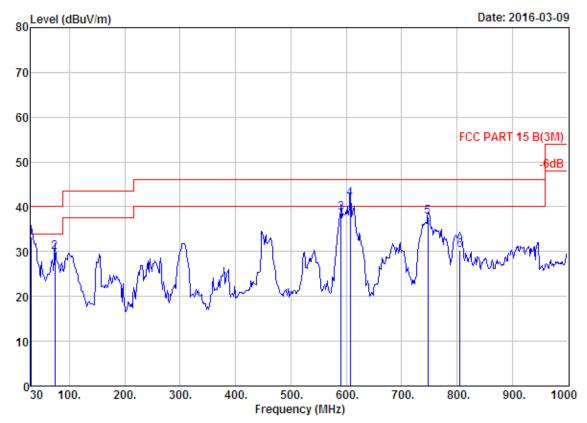
Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

Engineer : Dick
EUT : LED TV
Power : AC 120V/60Hz
M/N : ELST4316S

Test Mode : IEEE 802.11g CH13 2472TX

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	30.00	18.51	0.65	13.74	32.90	40.00	7.10	QP
2	97.90	9.13	1.33	18.01	28.47	43.50	15.03	QP
3	456.80	16.73	2.93	10.85	30.51	46.00	15.49	QP
4	598.42	19.57	3.43	17.83	40.83	46.00	5.17	QP
5	607.15	19.80	3.41	17.71	40.92	46.00	5.08	QP
6	755.56	22.10	3.87	8.79	34.76	46.00	11.24	QP





Site no. : 966 1# chamber Data no. : 189
Dis. / Ant. : 3m 27137 Ant. pol. : VERTICAL

Limit : FCC PART 15 B(3M)

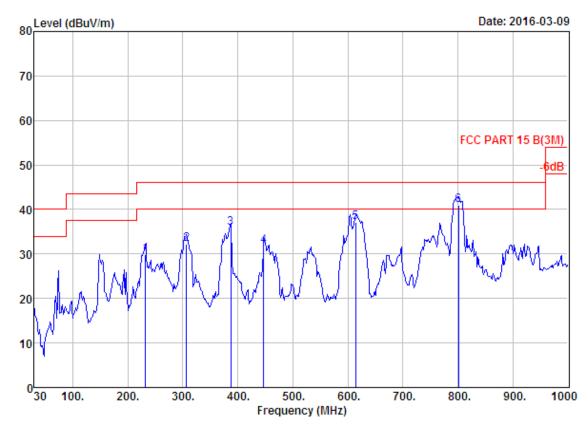
Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

Engineer : Dick
EUT : LED TV
Power : AC 120V/60Hz
M/N : ELST4316S

Test Mode : IEEE 802.11n HT20 CH1 2412TX

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	30.00	18.51	0.65	14.12	33.28	40.00	6.72	QP
2	73.65	6.22	1.15	22.44	29.81	40.00	10.19	QP
3	590.66	19.45	3.37	15.75	38.57	46.00	7.43	QP
4	607.15	19.80	3.41	18.70	41.91	46.00	4.09	QP
5	747.80	22.22	3.91	11.68	37.81	46.00	8.19	QP
6	806.00	22.24	3.84	4.31	30.39	46.00	15.61	QP





Site no. : 966 1# chamber

Data no. : 190 Ant. pol. : HORIZONTAL : 3m 27137 Dis. / Ant.

: FCC PART 15 B(3M) Limit

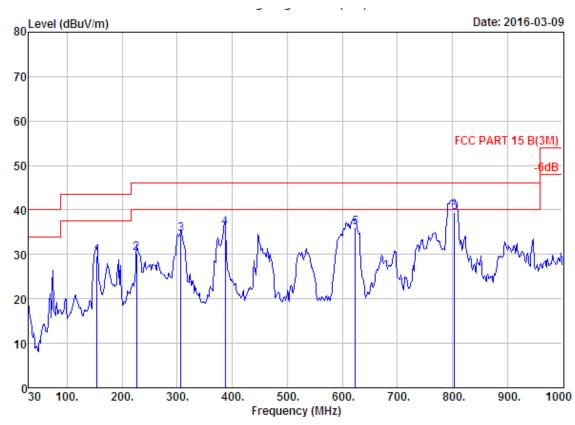
Env. / Ins. : Temp:23.6';Humi:56%;Press:101.52kPa

Engineer : Dick EUT : LED TV : AC 120V/60Hz Power M/N : ELST4316S

Test Mode : IEEE 802.11n HT20 CH1 2412TX

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	231.76	9.54	2.07	18.28	29.89	46.00	16.11	QP
2	306.45	13.13	2.35	16.78	32.26	46.00	13.74	QP
3	386.96	15.42	2.65	17.80	35.87	46.00	10.13	QP
4	447.10	16.40	2.98	12.35	31.73	46.00	14.27	QP
5	613.94	19.94	3.39	13.80	37.13	46.00	8.87	QP
6	801.15	22.07	3.83	15.07	40.97	46.00	5.03	QP





Site no. : 966 1# chamber Data no. : 191

Dis. / Ant. : 3m 27137 Ant. pol. : HORIZONTAL

Limit : FCC PART 15 B(3M)

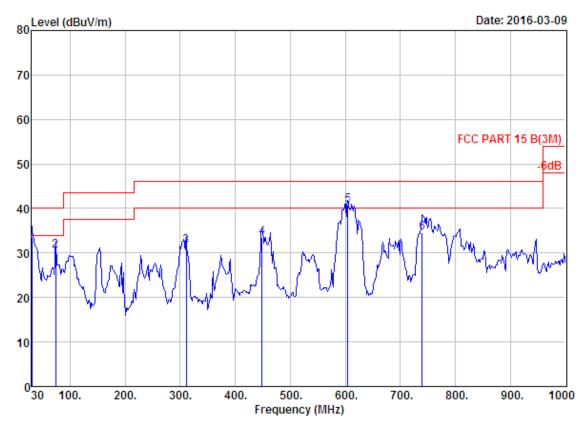
Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

Engineer : Dick
EUT : LED TV
Power : AC 120V/60Hz
M/N : ELST4316S

Test Mode : IEEE 802.11n HT20 CH7 2442TX

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	154.16	10.71	1.66	17.23	29.60	43.50	13.90	QP
2	225.94	9.47	1.99	18.81	30.27	46.00	15.73	QP
3	306.45	13.13	2.35	19.16	34.64	46.00	11.36	QP
4	386.96	15.42	2.65	17.88	35.95	46.00	10.05	QP
5	623.64	20.08	3.37	12.55	36.00	46.00	10.00	QP
6	804.06	22.17	3.87	13.43	39.47	46.00	6.53	QP





Site no. : 966 1# chamber Data no. : 192
Dis. / Ant. : 3m 27137 Ant. pol. : VERTICAL

Limit : FCC PART 15 B(3M)

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

Engineer : Dick

EUT : LED TV

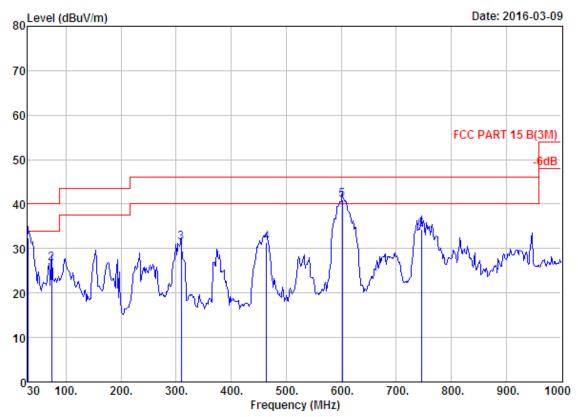
Power : AC 120V/60Hz

M/N : ELST4316S

Test Mode : IEEE 802.11n HT20 CH7 2442TX

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
 1	30.00	18.51	0.65	14.40	33.56	40.00	6.44	QP
2	73.65	6.22	1.15	23.19	30.56	40.00	9.44	QP
3	311.30	13.24	2.33	16.05	31.62	46.00	14.38	QP
4	449.04	16.45	2.95	14.05	33.45	46.00	12.55	QP
5	604.24	19.71	3.41	17.71	40.83	46.00	5.17	QP
6	740.04	22.36	3.84	8.35	34.55	46.00	11.45	QP





Site no. : 966 1# chamber Data no. : 193
Dis. / Ant. : 3m 27137 Ant. pol. : VERTICAL

Limit : FCC PART 15 B(3M)

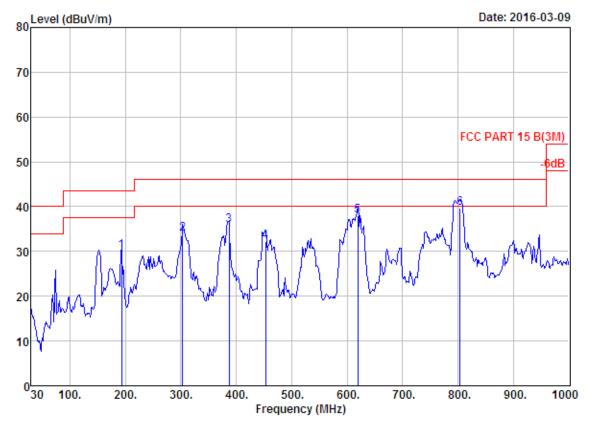
Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

Engineer : Dick
EUT : LED TV
Power : AC 120V/60Hz
M/N : ELST4316S

Test Mode : IEEE 802.11n HT20 CH13 2472TX

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	30.00	18.51	0.65	13.16	32.32	40.00	7.68	QP
2	73.65	6.22	1.15	19.24	26.61	40.00	13.39	QP
3	309.36	13.18	2.36	15.88	31.42	46.00	14.58	QP
4	464.56	17.01	3.02	11.43	31.46	46.00	14.54	QP
5	602.30	19.66	3.41	17.90	40.97	46.00	5.03	QP
6	745.86	22.26	3.90	8.21	34.37	46.00	11.63	QP





Site no. : 966 1# chamber Data no. : 194

Dis. / Ant. : 3m 27137 Ant. pol. : HORIZONTAL

Limit : FCC PART 15 B(3M)

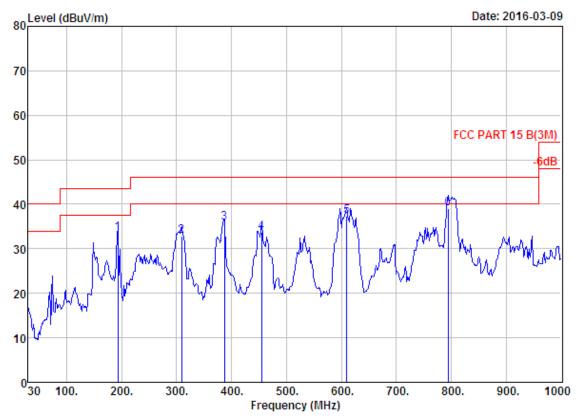
Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

Engineer : Dick
EUT : LED TV
Power : AC 120V/60Hz
M/N : ELST4316S

Test Mode : IEEE 802.11n HT20 CH13 2472TX

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	192.96	7.85	1.77	20.37	29.99	43.50	13.51	QP
2	303.54	13.08	2.43	18.47	33.98	46.00	12.02	QP
3	386.96	15.42	2.65	17.80	35.87	46.00	10.13	QP
4	452.92	16.58	2.97	12.69	32.24	46.00	13.76	QP
5	619.76	20.03	3.43	14.48	37.94	46.00	8.06	QP
6	804.06	22.17	3.87	13.56	39.60	46.00	6.40	QP





Dis. / Ant. : 3m 27137 Ant. pol. : HORIZONTAL

Limit : FCC PART 15 B(3M)

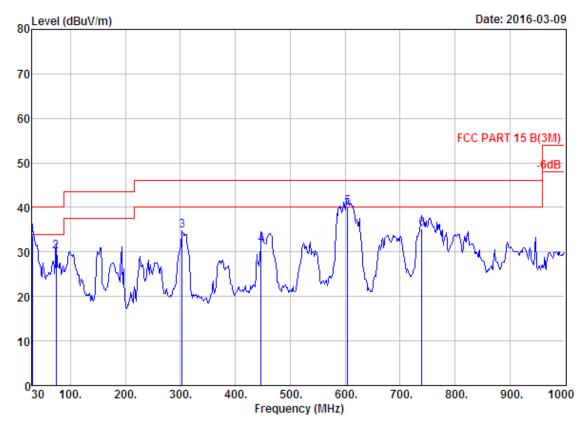
Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

Engineer : Dick
EUT : LED TV
Power : AC 120V/60Hz
M/N : ELST4316S

Test Mode : IEEE 802.11n HT40 CH1 2422TX

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	192.96	7.85	1.77	23.81	33.43	43.50	10.07	QP
2	309.36	13.18	2.36	17.41	32.95	46.00	13.05	QP
3	386.96	15.42	2.65	17.69	35.76	46.00	10.24	QP
4	454.86	16.65	2.94	14.22	33.81	46.00	12.19	QP
5	610.06	19.88	3.36	14.08	37.32	46.00	8.68	QP
6	794.36	22.04	3.89	13.05	38.98	46.00	7.02	QP





Site no. : 966 1# chamber Data no. : 196
Dis. / Ant. : 3m 27137 Ant. pol. : VERTICAL

Limit : FCC PART 15 B(3M)

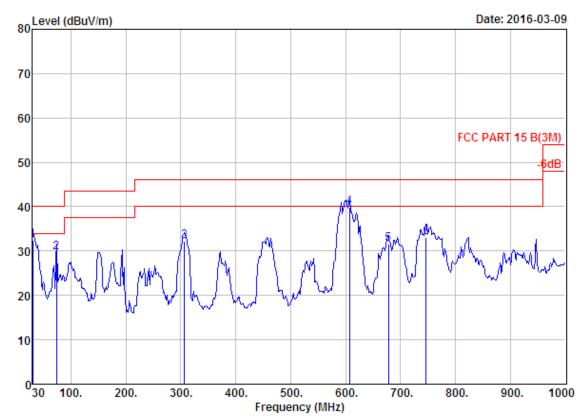
Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

Engineer : Dick
EUT : LED TV
Power : AC 120V/60Hz
M/N : ELST4316S

Test Mode : IEEE 802.11n HT40 CH1 2422TX

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	30.00	18.51	0.65	14.47	33.63	40.00	6.37	QP
2	73.65	6.22	1.15	22.69	30.06	40.00	9.94	QP
3	303.54	13.08	2.43	19.27	34.78	46.00	11.22	QP
4	447.10	16.40	2.98	12.27	31.65	46.00	14.35	QP
5	604.24	19.71	3.41	16.92	40.04	46.00	5.96	QP
6	740.04	22.36	3.84	8.98	35.18	46.00	10.82	QP





Site no. : 966 1# chamber Data no. : 197
Dis. / Ant. : 3m 27137 Ant. pol. : VERTICAL

Limit : FCC PART 15 B(3M)

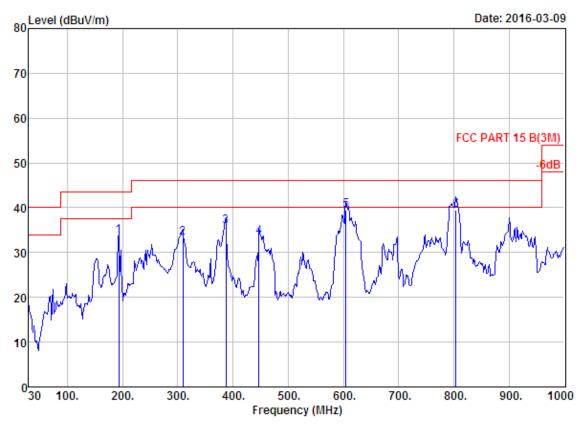
Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

Engineer : Dick
EUT : LED TV
Power : AC 120V/60Hz
M/N : ELST4316S

Test Mode : IEEE 802.11n HT40 CH5 2442TX

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	30.00	18.51	0.65	13.22	32.38	40.00	7.62	QP
2	73.65	6.22	1.15	22.19	29.56	40.00	10.44	QP
3	306.45	13.13	2.35	16.76	32.24	46.00	13.76	QP
4	607.15	19.80	3.41	16.62	39.83	46.00	6.17	QP
5	677.96	20.28	3.65	7.55	31.48	46.00	14.52	QP
6	746.83	22.24	3.96	6.88	33.08	46.00	12.92	QP





Dis. / Ant. : 3m 27137 Ant. pol. : HORIZONTAL

Limit : FCC PART 15 B(3M)

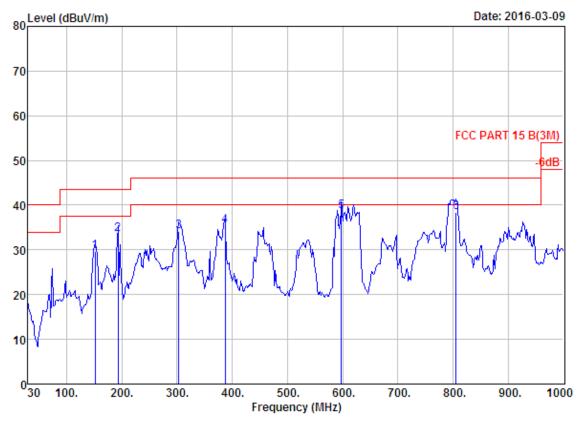
Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

Engineer : Dick
EUT : LED TV
Power : AC 120V/60Hz
M/N : ELST4316S

Test Mode : IEEE 802.11n HT40 CH5 2442TX

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	192.96	7.85	1.77	24.08	33.70	43.50	9.80	QP
2	309.36	13.18	2.36	17.69	33.23	46.00	12.77	QP
3	386.96	15.42	2.65	17.72	35.79	46.00	10.21	QP
4	447.10	16.40	2.98	14.03	33.41	46.00	12.59	QP
5	604.24	19.71	3.41	16.35	39.47	46.00	6.53	QP
6	804.06	22.17	3.87	13.39	39.43	46.00	6.57	QP





Dis. / Ant. : 3m 27137 Ant. pol. : HORIZONTAL

Limit : FCC PART 15 B(3M)

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

Engineer : Dick

EUT : LED TV

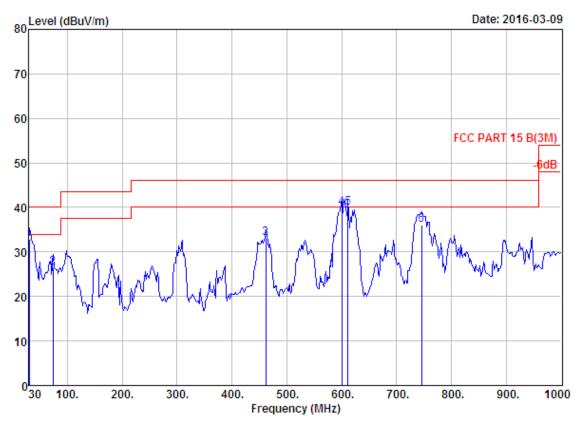
Power : AC 120V/60Hz

M/N : ELST4316S

Test Mode : IEEE 802.11n HT40 CH9 2462TX

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	151.25	10.82	1.61	17.28	29.71	43.50	13.79	QP
2	192.96	7.85	1.77	23.85	33.47	43.50	10.03	QP
3	303.54	13.08	2.43	18.65	34.16	46.00	11.84	QP
4	386.96	15.42	2.65	17.39	35.46	46.00	10.54	QP
5	597.45	19.55	3.39	15.73	38.67	46.00	7.33	QP
6	806.00	22.24	3.84	12.22	38.30	46.00	7.70	QP





Site no. : 966 1# chamber Data no. : 200
Dis. / Ant. : 3m 27137 Ant. pol. : VERTICAL

Limit : FCC PART 15 B (3M)

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

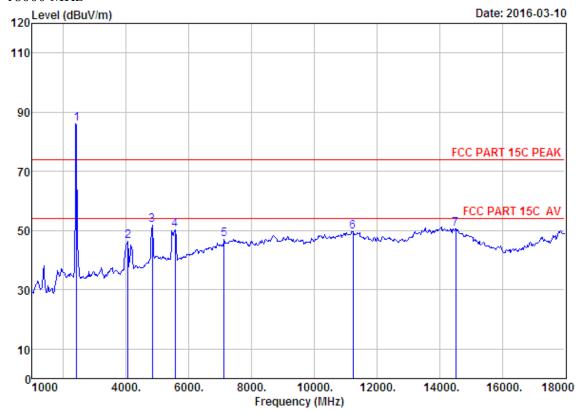
Engineer : Dick
EUT : LED TV
Power : AC 120V/60Hz
M/N : ELST4316S

Test Mode : IEEE 802.11n HT40 CH9 2462TX

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	30.00	18.51	0.65	13.62	32.78	40.00	7.22	QP
2	73.65	6.22	1.15	19.06	26.43	40.00	13.57	QP
3	461.65	16.91	3.01	13.04	32.96	46.00	13.04	QP
4	600.36	19.60	3.44	16.86	39.90	46.00	6.10	QP
5	612.00	19.91	3.33	16.67	39.91	46.00	6.09	QP
6	745.86	22.26	3.90	9.86	36.02	46.00	9.98	QP



## 1000-18000 MHz



Site no. : 1# 966 chamber Data no. : 289

Dis. / Ant. : 3m ANT 1-18G Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

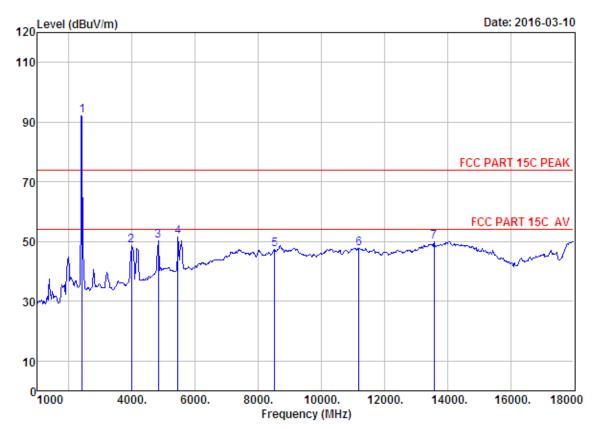
Engineer : Tony
EUT : LED TV
Power : AC 120V/60Hz
M/N : ELST4316S

Test Mode : IEEE 802.11b CH1 2412TX

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2412.00	27.60	6.64	34.64	86.53	86.13	74.00	-12.13	Peak
2	4060.00	29.77	10.83	36.18	41.95	46.37	74.00	27.63	Peak
3	4824.00	31.28	11.84	35.66	44.53	51.99	74.00	22.01	Peak
4	5556.00	31.97	12.00	36.07	42.26	50.16	74.00	23.84	Peak
5	7120.00	36.08	11.51	33.86	33.37	47.10	74.00	26.90	Peak
6	11234.00	39.37	11.12	33.25	32.35	49.59	74.00	24.41	Peak
7	14515.00	41.89	10.93	33.57	31.38	50.63	74.00	23.37	Peak

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





Dis. / Ant. : 3m ANT 1-18G Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

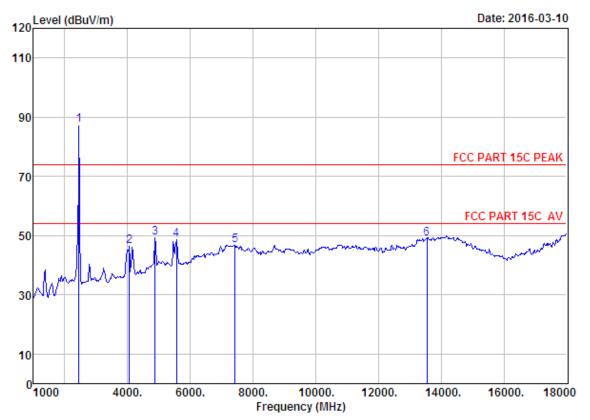
Engineer : Tony
EUT : LED TV
Power : AC 120V/60Hz
M/N : ELST4316S

Test Mode : IEEE 802.11b CH1 2412TX

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2412.00	27.60	6.64	34.64	92.49	92.09	74.00	-18.09	Peak
2	3975.00	29.60	10.81	36.42	44.68	48.67	74.00	25.33	Peak
3	4824.00	31.28	11.84	35.66	42.90	50.36	74.00	23.64	Peak
4	5454.00	31.83	12.05	35.90	43.56	51.54	74.00	22.46	Peak
5	8514.00	36.96	11.45	34.07	32.94	47.28	74.00	26.72	Peak
6	11200.00	39.39	11.14	33.24	30.44	47.73	74.00	26.27	Peak
7	13580.00	40.31	11.40	32.64	30.82	49.89	74.00	24.11	Peak

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





Site no. : 1# 966 chamber Data no. : 293
Dis. / Ant. : 3m ANT 1-18G Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

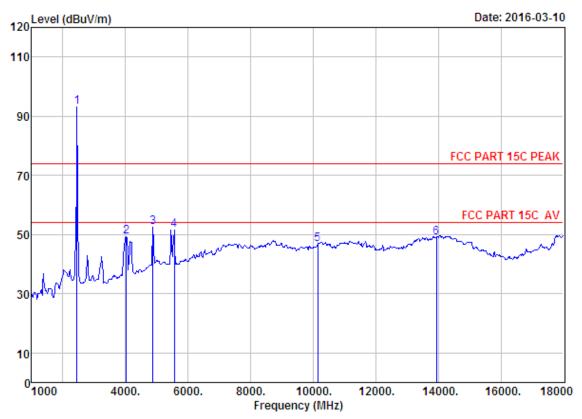
Engineer : Tony
EUT : LED TV
Power : AC 120V/60Hz
M/N : ELST4316S

Test Mode : IEEE 802.11b CH7 2442TX

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2442.00	27.60	6.67	34.85	87.84	87.26	74.00	-13.26	Peak
2	4060.00	29.77	10.83	36.18	41.92	46.34	74.00	27.66	Peak
3	4884.00	31.37	12.07	35.82	41.80	49.42	74.00	24.58	Peak
4	5556.00	31.97	12.00	36.07	40.67	48.57	74.00	25.43	Peak
5	7426.00	36.56	11.60	34.22	32.89	46.83	74.00	27.17	Peak
6	13546.00	40.21	11.44	32.61	30.04	49.08	74.00	24.92	Peak

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





Dis. / Ant. : 3m ANT 1-18G Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

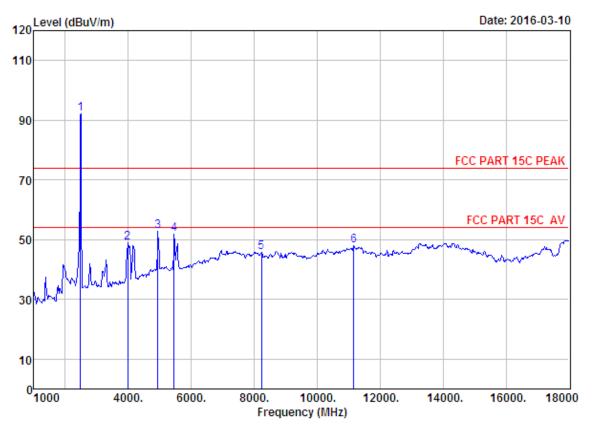
Engineer : Tony
EUT : LED TV
Power : AC 120V/60Hz
M/N : ELST4316S

Test Mode : IEEE 802.11b CH7 2442TX

	Ant.		Ant. Cable Amp					Emission			
	Freq.	Factor (dB/m)	Loss (dB)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark		
1	2442.00	27.60	6.67	34.85	93.56	92.98	74.00	-18.98	Peak		
2	4026.00	29.71	10.86	36.28	44.90	49.19	74.00	24.81	Peak		
3	4884.00	31.37	12.07	35.82	44.75	52.37	74.00	21.63	Peak		
4	5556.00	31.97	12.00	36.07	43.78	51.68	74.00	22.32	Peak		
5	10146.00	38.36	11.51	34.58	31.46	46.75	74.00	27.25	Peak		
6	13937.00	41.31	10.98	33.00	29.79	49.08	74.00	24.92	Peak		

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





Dis. / Ant. : 3m ANT 1-18G Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

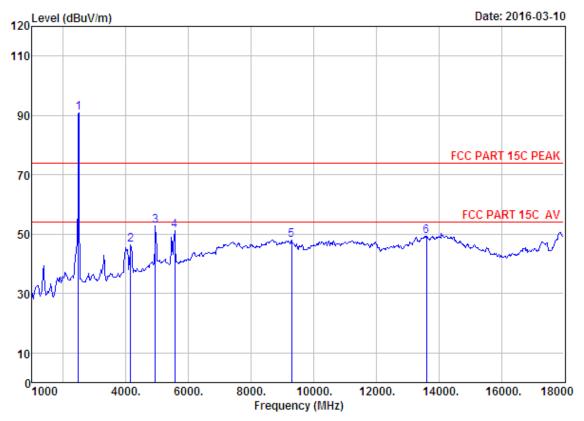
Engineer : Tony
EUT : LED TV
Power : AC 120V/60Hz
M/N : ELST4316S

Test Mode : IEEE 802.11b CH13 2472TX

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2472.00	27.58	6.71	35.11	92.93	92.11	74.00	-18.11	Peak
2	3975.00	29.60	10.81	36.42	45.01	49.00	74.00	25.00	Peak
3	4944.00	31.47	12.37	35.96	44.97	52.85	74.00	21.15	Peak
4	5454.00	31.83	12.05	35.90	43.87	51.85	74.00	22.15	Peak
5	8225.00	36.66	11.42	34.95	32.60	45.73	74.00	28.27	Peak
6	11166.00	39.41	11.17	33.31	30.68	47.95	74.00	26.05	Peak

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





Site no. : 1# 966 chamber Data no. : 296
Dis. / Ant. : 3m ANT 1-18G Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

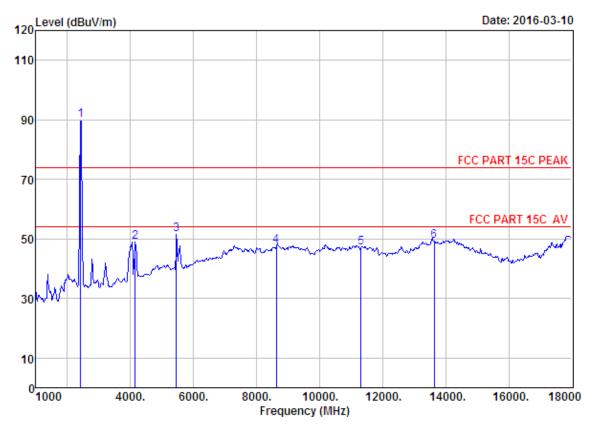
Engineer : Tony
EUT : LED TV
Power : AC 120V/60Hz
M/N : ELST4316S

Test Mode : IEEE 802.11b CH13 2472TX

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2472.00	27.58	6.71	35.11	91.70	90.88	74.00	-16.88	Peak
2	4145.00	29.88	10.75	35.98	41.89	46.54	74.00	27.46	Peak
3	4944.00	31.47	12.37	35.96	44.87	52.75	74.00	21.25	Peak
4	5556.00	31.97	12.00	36.07	43.38	51.28	74.00	22.72	Peak
5	9296.00	37.91	11.61	34.57	33.07	48.02	74.00	25.98	Peak
6	13614.00	40.40	11.36	32.68	30.34	49.42	74.00	24.58	Peak

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





Dis. / Ant. : 3m ANT 1-18G Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

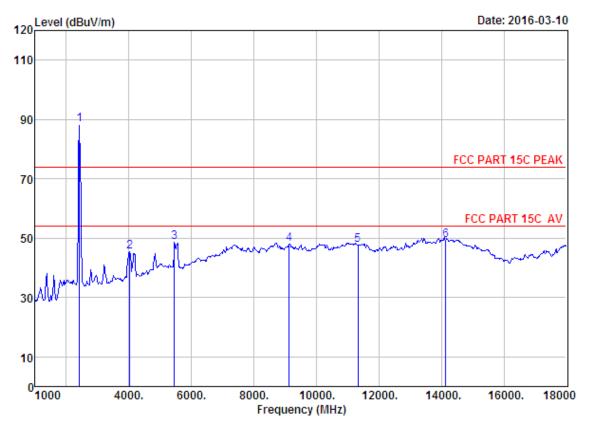
Engineer : Tony
EUT : LED TV
Power : AC 120V/60Hz
M/N : ELST4316S

Test Mode : IEEE 802.11g CH1 2412TX

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2412.00	27.60	6.64	34.64	90.17	89.77	74.00	-15.77	Peak
2	4145.00	29.88	10.75	35.98	44.22	48.87	74.00	25.13	Peak
3	5454.00	31.83	12.05	35.90	43.54	51.52	74.00	22.48	Peak
4	8633.00	37.24	11.45	33.73	32.70	47.66	74.00	26.34	Peak
5	11319.00	39.31	11.06	33.39	30.14	47.12	74.00	26.88	Peak
6	13631.00	40.45	11.34	32.72	30.12	49.19	74.00	24.81	Peak

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





Site no. : 1# 966 chamber Data no. : 300
Dis. / Ant. : 3m ANT 1-18G Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

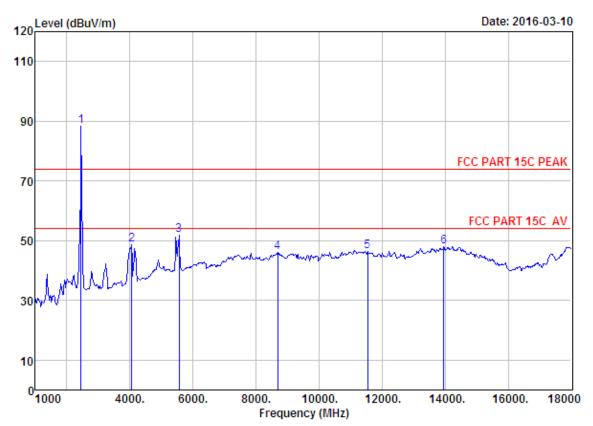
Engineer : Tony
EUT : LED TV
Power : AC 120V/60Hz
M/N : ELST4316S

Test Mode : IEEE 802.11g CH1 2412TX

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2412.00	27.60	6.64	34.64	88.63	88.23	74.00	-14.23	Peak
2	4026.00	29.71	10.86	36.28	41.01	45.30	74.00	28.70	Peak
3	5454.00	31.83	12.05	35.90	40.78	48.76	74.00	25.24	Peak
4	9126.00	37.62	11.52	34.09	32.90	47.95	74.00	26.05	Peak
5	11336.00	39.30	11.04	33.44	30.63	47.53	74.00	26.47	Peak
6	14141.00	41.58	10.91	33.28	30.21	49.42	74.00	24.58	Peak

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





Site no. : 1# 966 chamber Data no. : 303
Dis. / Ant. : 3m ANT 1-18G Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

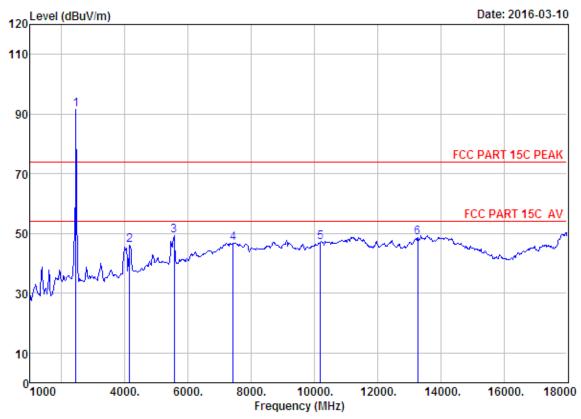
Engineer : Tony
EUT : LED TV
Power : AC 120V/60Hz
M/N : ELST4316S

Test Mode : IEEE 802.11g CH7 2442TX

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2442.00	27.60	6.67	34.85	88.90	88.32	74.00	-14.32	Peak
2	4060.00	29.77	10.83	36.18	44.20	48.62	74.00	25.38	Peak
3	5556.00	31.97	12.00	36.07	43.86	51.76	74.00	22.24	Peak
4	8684.00	37.32	11.45	33.66	30.96	46.07	74.00	27.93	Peak
5	11540.00	39.16	10.95	33.36	29.71	46.46	74.00	27.54	Peak
6	13954.00	41.35	10.96	32.99	28.61	47.93	74.00	26.07	Peak

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





Site no. : 1# 966 chamber Data no. : 304

Dis. / Ant. : 3m ANT 1-18G Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

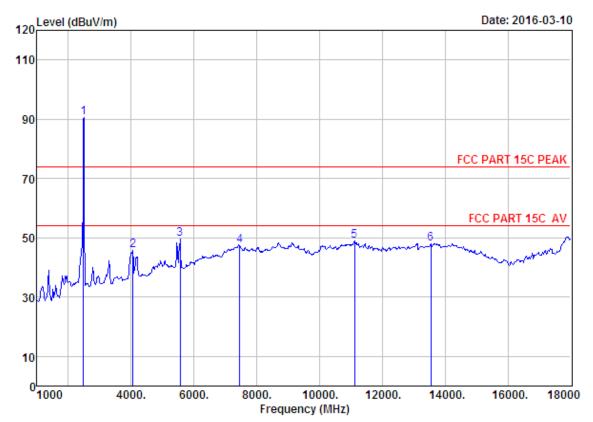
Engineer : Tony
EUT : LED TV
Power : AC 120V/60Hz
M/N : ELST4316S

Test Mode : IEEE 802.11g CH7 2442TX

	Freq.	Ant. Factor (dB/m)		Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2442.00	27.60	6.67	34.85	92.20	91.62	74.00	-17.62	Peak
2	4145.00	29.88	10.75	35.98	41.47	46.12	74.00	27.88	Peak
3	5556.00	31.97	12.00	36.07	41.36	49.26	74.00	24.74	Peak
4	7426.00	36.56	11.60	34.22	32.88	46.82	74.00	27.18	Peak
5	10197.00	38.45	11.48	34.51	31.48	46.90	74.00	27.10	Peak
6	13274.00	39.54	11.47	32.92	30.66	48.75	74.00	25.25	Peak

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





Site no. : 1# 966 chamber Data no. : 305 : 3m ANT 1-18G : FCC PART 15C PEAK Dis. / Ant. Ant. pol. : VERTICAL

Limit

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

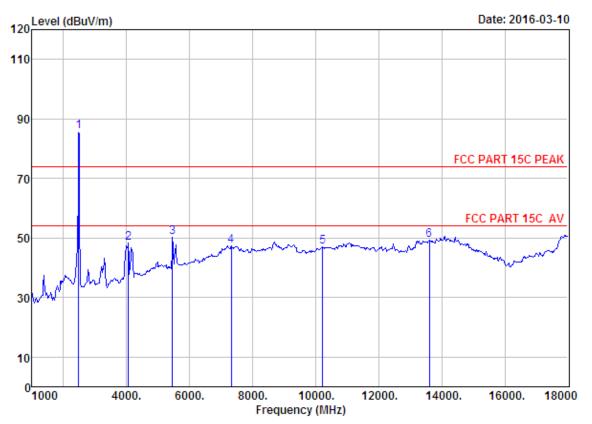
: Tony Engineer EUT : LED TV Power : AC 120V/60Hz M/N : ELST4316S

: IEEE 802.11g CH13 2472TX Test Mode

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2472.00	27.58	6.71	35.11	91.36	90.54	74.00	-16.54	Peak
2	4060.00	29.77	10.83	36.18	41.38	45.80	74.00	28.20	Peak
3	5556.00	31.97	12.00	36.07	41.60	49.50	74.00	24.50	Peak
4	7460.00	36.52	11.61	34.21	33.48	47.40	74.00	26.60	Peak
5	11115.00	39.44	11.20	33.55	31.99	49.08	74.00	24.92	Peak
6	13546.00	40.21	11.44	32.61	29.04	48.08	74.00	25.92	Peak

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





Site no. : 1# 966 chamber

Data no. : 306 Ant. pol. : HORIZONTAL : 3m ANT 1-18G Dis. / Ant.

: FCC PART 15C PEAK Limit

Env. / Ins. : Temp:23.6';Humi:56%;Press:101.52kPa

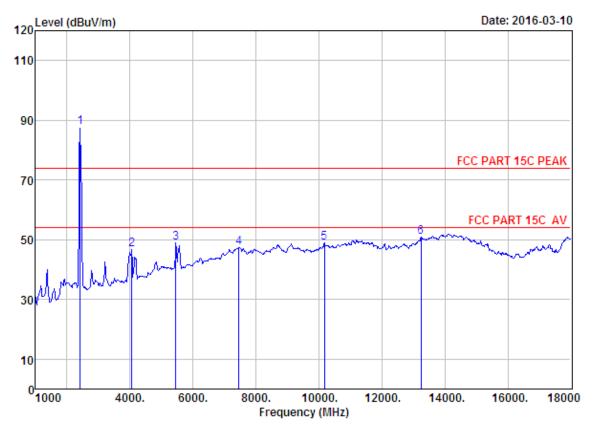
Engineer : Tony EUT : LED TV : AC 120V/60Hz Power : ELST4316S M/N

Test Mode : IEEE 802.11g CH13 2472TX

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2472.00	27.58	6.71	35.11	86.72	85.90	74.00	-11.90	Peak
2	4060.00	29.77	10.83	36.18	43.78	48.20	74.00	25.80	Peak
3	5454.00	31.83	12.05	35.90	42.37	50.35	74.00	23.65	Peak
4	7324.00	36.55	11.57	34.14	33.52	47.50	74.00	26.50	Peak
5	10214.00	38.48	11.47	34.50	31.46	46.91	74.00	27.09	Peak
6	13614.00	40.40	11.36	32.68	30.07	49.15	74.00	24.85	Peak

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





Site no. : 1# 966 chamber Data no. : 309
Dis. / Ant. : 3m ANT 1-18G Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

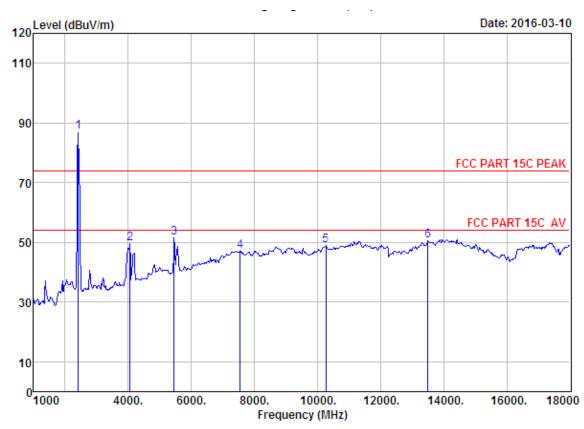
Engineer : Tony
EUT : LED TV
Power : AC 120V/60Hz
M/N : ELST4316S

Test Mode : IEEE 802.11n HT20 CH1 2412TX

Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
2412.00	27.60	6.64	34.64	88.03	87.63	74.00	-13.63	Peak
4060.00	29.77	10.83	36.18	42.44	46.86	74.00	27.14	Peak
5454.00	31.83	12.05	35.90	40.92	48.90	74.00	25.10	Peak
7460.00	36.52	11.61	34.21	33.49	47.41	74.00	26.59	Peak
10180.00	38.42	11.49	34.53	33.47	48.85	74.00	25.15	Peak
13240.00	39.46	11.46	32.88	32.78	50.82	74.00	23.18	Peak
	(MHz) 2412.00 4060.00 5454.00 7460.00 10180.00	Freq. Factor (dB/m)  2412.00 27.60 4060.00 29.77 5454.00 31.83 7460.00 36.52 10180.00 38.42	Freq. Factor Loss (MHz) (dB/m) (dB) 2412.00 27.60 6.64 4060.00 29.77 10.83 5454.00 31.83 12.05 7460.00 36.52 11.61 10180.00 38.42 11.49	Freq. Factor Loss Factor (MHz) (dB/m) (dB) (dB)  2412.00 27.60 6.64 34.64 4060.00 29.77 10.83 36.18 5454.00 31.83 12.05 35.90 7460.00 36.52 11.61 34.21 10180.00 38.42 11.49 34.53	Freq. Factor Loss Factor Reading (MHz) (dB/m) (dB) (dB) (dBUV)  2412.00 27.60 6.64 34.64 88.03 4060.00 29.77 10.83 36.18 42.44 5454.00 31.83 12.05 35.90 40.92 7460.00 36.52 11.61 34.21 33.49 10180.00 38.42 11.49 34.53 33.47	Freq. Factor Loss Factor Reading Level (MHz) (dB/m) (dB) (dB) (dBuV) (dBuV/m)  2412.00 27.60 6.64 34.64 88.03 87.63 4060.00 29.77 10.83 36.18 42.44 46.86 5454.00 31.83 12.05 35.90 40.92 48.90 7460.00 36.52 11.61 34.21 33.49 47.41 10180.00 38.42 11.49 34.53 33.47 48.85	Freq. Factor Loss Factor Reading Level Limits (MHz) (dB/m) (dB) (dB) (dBuV) (dBuV/m) (dBuV/m)  2412.00 27.60 6.64 34.64 88.03 87.63 74.00 4060.00 29.77 10.83 36.18 42.44 46.86 74.00 5454.00 31.83 12.05 35.90 40.92 48.90 74.00 7460.00 36.52 11.61 34.21 33.49 47.41 74.00 10180.00 38.42 11.49 34.53 33.47 48.85 74.00	Freq. Factor Loss Factor Reading Level Limits Margin (MHz) (dB/m) (dB) (dB) (dBuV) (dBuV/m) (dBuV/m) (dB)  2412.00 27.60 6.64 34.64 88.03 87.63 74.00 -13.63 4060.00 29.77 10.83 36.18 42.44 46.86 74.00 27.14 5454.00 31.83 12.05 35.90 40.92 48.90 74.00 25.10 7460.00 36.52 11.61 34.21 33.49 47.41 74.00 26.59 10180.00 38.42 11.49 34.53 33.47 48.85 74.00 25.15

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





Site no. : 1# 966 chamber Data no. : 310
Dis. / Ant. : 3m ANT 1-18G Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

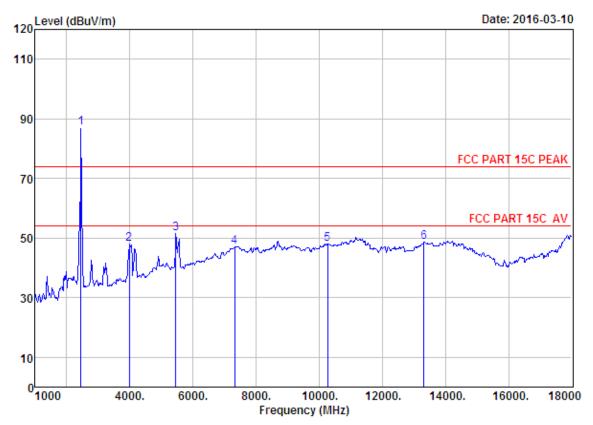
Engineer : Tony
EUT : LED TV
Power : AC 120V/60Hz
M/N : ELST4316S

Test Mode : IEEE 802.11n HT20 CH1 2412TX

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2412.00	27.60	6.64	34.64	87.33	86.93	74.00	-12.93	Peak
2	4060.00	29.77	10.83	36.18	45.18	49.60	74.00	24.40	Peak
3	5454.00	31.83	12.05	35.90	43.54	51.52	74.00	22.48	Peak
4	7545.00	36.43	11.60	34.15	33.21	47.09	74.00	26.91	Peak
5	10265.00	38.56	11.44	34.49	33.54	49.05	74.00	24.95	Peak
6	13495.00	40.07	11.50	32.65	31.57	50.49	74.00	23.51	Peak

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





Dis. / Ant. : 3m ANT 1-18G Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

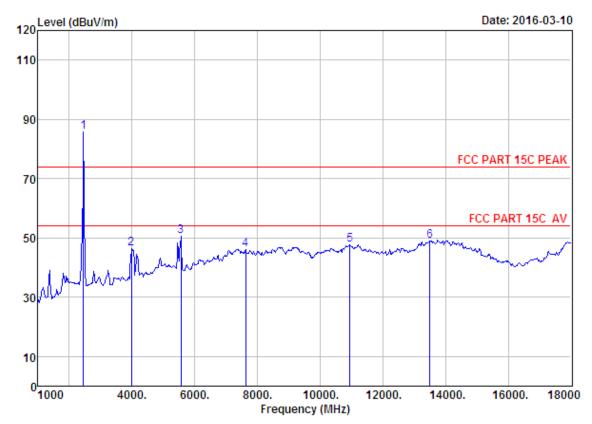
Engineer : Tony
EUT : LED TV
Power : AC 120V/60Hz
M/N : ELST4316S

Test Mode : IEEE 802.11n HT20 CH7 2442TX

n Remark
Peak

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





Site no. : 1# 966 chamber Data no. : 314

Dis. / Ant. : 3m ANT 1-18G Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

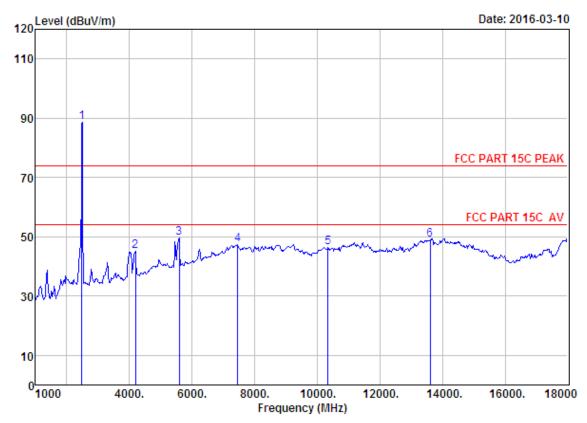
Engineer : Tony
EUT : LED TV
Power : AC 120V/60Hz
M/N : ELST4316S

Test Mode : IEEE 802.11n HT20 CH7 2442TX

	Freq. (MHz)	Ant. Factor (dB/m)		Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2442.00	27.60	6.67	34.85	86.36	85.78	74.00	-11.78	Peak
2	3975.00	29.60	10.81	36.42	42.46	46.45	74.00	27.55	Peak
3	5556.00	31.97	12.00	36.07	42.68	50.58	74.00	23.42	Peak
4	7630.00	36.41	11.56	34.19	32.22	46.00	74.00	28.00	Peak
5	10945.00	39.46	11.29	34.13	31.03	47.65	74.00	26.35	Peak
6	13495.00	40.07	11.50	32.65	30.08	49.00	74.00	25.00	Peak

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





Site no. : 1# 966 chamber Data no. : 315
Dis. / Ant. : 3m ANT 1-18G Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

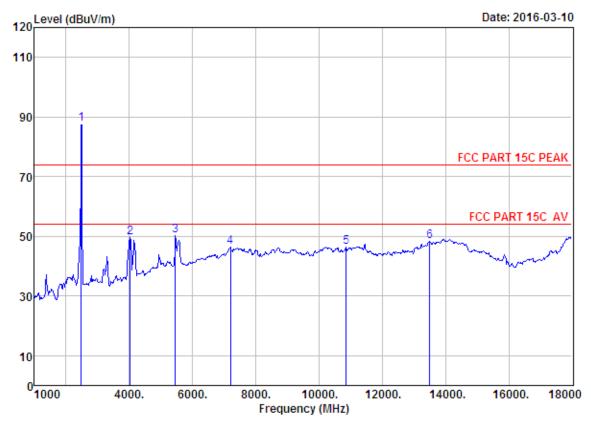
Engineer : Tony
EUT : LED TV
Power : AC 120V/60Hz
M/N : ELST4316S

Test Mode : IEEE 802.11n HT20 CH13 2472TX

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2472.00	27.58	6.71	35.11	89.53	88.71	74.00	-14.71	Peak
2	4196.00	29.95	10.70	35.87	40.34	45.12	74.00	28.88	Peak
3	5590.00	32.00	12.01	36.00	41.52	49.53	74.00	24.47	Peak
4	7460.00	36.52	11.61	34.21	33.30	47.22	74.00	26.78	Peak
5	10350.00	38.71	11.39	34.53	30.95	46.52	74.00	27.48	Peak
6	13614.00	40.40	11.36	32.68	29.73	48.81	74.00	25.19	Peak

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





Dis. / Ant. : 3m ANT 1-18G Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

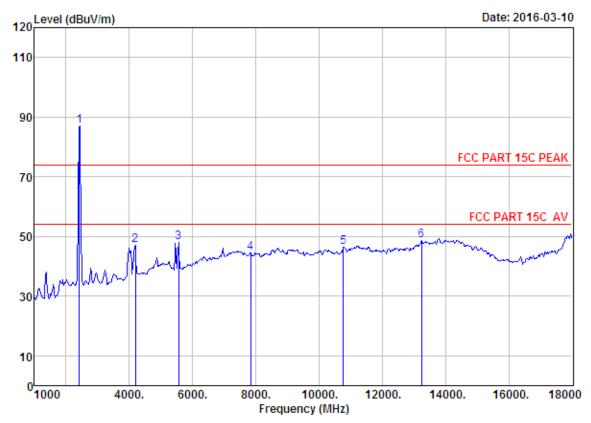
Engineer : Tony
EUT : LED TV
Power : AC 120V/60Hz
M/N : ELST4316S

Test Mode : IEEE 802.11n HT20 CH13 2472TX

Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
2472.00	27.58	6.71	35.11	88.36	87.54	74.00	-13.54	Peak
4026.00	29.71	10.86	36.28	45.39	49.68	74.00	24.32	Peak
5454.00	31.83	12.05	35.90	42.32	50.30	74.00	23.70	Peak
7205.00	36.52	11.54	33.92	32.10	46.24	74.00	27.76	Peak
10860.00	39.37	11.30	34.03	29.70	46.34	74.00	27.66	Peak
13495.00	40.07	11.50	32.65	29.40	48.32	74.00	25.68	Peak
	2472.00 4026.00 5454.00 7205.00 10860.00	Freq. Factor (dB/m)  2472.00 27.58  4026.00 29.71  5454.00 31.83  7205.00 36.52  10860.00 39.37	Freq. Factor Loss (MHz) (dB/m) (dB) 2472.00 27.58 6.71 4026.00 29.71 10.86 5454.00 31.83 12.05 7205.00 36.52 11.54 10860.00 39.37 11.30	Freq. Factor Loss Factor (MHz) (dB/m) (dB) (dB)  2472.00 27.58 6.71 35.11 4026.00 29.71 10.86 36.28 5454.00 31.83 12.05 35.90 7205.00 36.52 11.54 33.92 10860.00 39.37 11.30 34.03	Freq. Factor Loss Factor Reading (MHz) (dB/m) (dB) (dB) (dBUV)  2472.00 27.58 6.71 35.11 88.36 4026.00 29.71 10.86 36.28 45.39 5454.00 31.83 12.05 35.90 42.32 7205.00 36.52 11.54 33.92 32.10 10860.00 39.37 11.30 34.03 29.70	Freq. Factor Loss Factor Reading Level (MHz) (dB/m) (dB) (dB) (dBuV) (dBuV/m)  2472.00 27.58 6.71 35.11 88.36 87.54 4026.00 29.71 10.86 36.28 45.39 49.68 5454.00 31.83 12.05 35.90 42.32 50.30 7205.00 36.52 11.54 33.92 32.10 46.24 10860.00 39.37 11.30 34.03 29.70 46.34	Freq. Factor Loss Factor Reading Level Limits (MHz) (dB/m) (dB) (dB) (dBuV) (dBuV/m) (dBuV/m)  2472.00 27.58 6.71 35.11 88.36 87.54 74.00 4026.00 29.71 10.86 36.28 45.39 49.68 74.00 5454.00 31.83 12.05 35.90 42.32 50.30 74.00 7205.00 36.52 11.54 33.92 32.10 46.24 74.00 10860.00 39.37 11.30 34.03 29.70 46.34 74.00	Freq. Factor Loss Factor Reading Level Limits Margin (MHz) (dB/m) (dB) (dB) (dBuV) (dBuV/m) (dBuV/m) (dBuV/m) (dB)  2472.00 27.58 6.71 35.11 88.36 87.54 74.00 -13.54 4026.00 29.71 10.86 36.28 45.39 49.68 74.00 24.32 5454.00 31.83 12.05 35.90 42.32 50.30 74.00 23.70 7205.00 36.52 11.54 33.92 32.10 46.24 74.00 27.76 10860.00 39.37 11.30 34.03 29.70 46.34 74.00 27.66

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





Site no. : 1# 966 chamber Data no. : 319
Dis. / Ant. : 3m ANT 1-18G Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

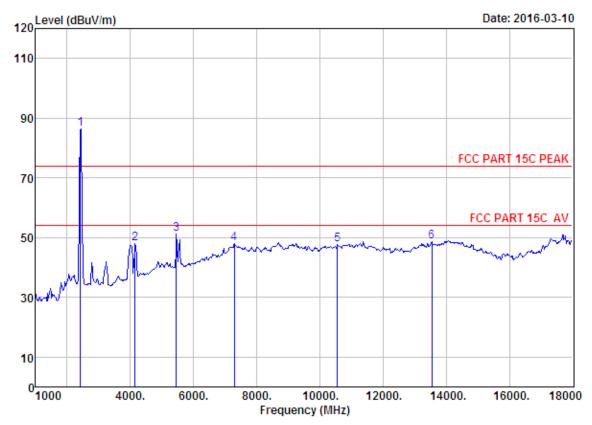
Engineer : Tony
EUT : LED TV
Power : AC 120V/60Hz
M/N : ELST4316S

Test Mode : IEEE 802.11n HT40 CH1 2422TX

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2422.00	27.60	6.66	34.74	87.52	87.04	74.00	-13.04	Peak
2	4196.00	29.95	10.70	35.87	42.42	47.20	74.00	26.80	Peak
3	5556.00	31.97	12.00	36.07	40.16	48.06	74.00	25.94	Peak
4	7834.00	36.68	11.47	34.96	31.41	44.60	74.00	29.40	Peak
5	10775.00	39.28	11.30	34.02	29.70	46.26	74.00	27.74	Peak
6	13240.00	39.46	11.46	32.88	30.69	48.73	74.00	25.27	Peak

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





Dis. / Ant. : 3m ANT 1-18G Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

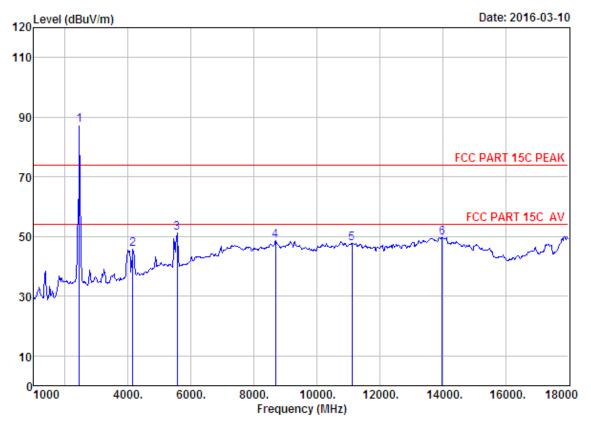
Engineer : Tony
EUT : LED TV
Power : AC 120V/60Hz
M/N : ELST4316S

Test Mode : IEEE 802.11n HT40 CH1 2422TX

Freq.			Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
2422.00	27.60	6.66	34.74	86.98	86.50	74.00	-12.50	Peak
4145.00	29.88	10.75	35.98	43.38	48.03	74.00	25.97	Peak
5454.00	31.83	12.05	35.90	43.08	51.06	74.00	22.94	Peak
7290.00	36.54	11.56	34.09	34.15	48.16	74.00	25.84	Peak
10554.00	39.04	11.31	34.45	31.69	47.59	74.00	26.41	Peak
13546.00	40.21	11.44	32.61	29.54	48.58	74.00	25.42	Peak
	(MHz) 2422.00 4145.00 5454.00 7290.00 10554.00	Freq. Factor (MHz) (dB/m) 2422.00 27.60 4145.00 29.88 5454.00 31.83 7290.00 36.54 10554.00 39.04	Freq. Factor Loss (MHz) (dB/m) (dB) 2422.00 27.60 6.66 4145.00 29.88 10.75 5454.00 31.83 12.05 7290.00 36.54 11.56 10554.00 39.04 11.31	Freq. Factor Loss Factor (MHz) (dB/m) (dB) (dB)  2422.00 27.60 6.66 34.74 4145.00 29.88 10.75 35.98 5454.00 31.83 12.05 35.90 7290.00 36.54 11.56 34.09 10554.00 39.04 11.31 34.45	Freq. Factor Loss Factor Reading (MHz) (dB/m) (dB) (dB) (dBuV)  2422.00 27.60 6.66 34.74 86.98 4145.00 29.88 10.75 35.98 43.38 5454.00 31.83 12.05 35.90 43.08 7290.00 36.54 11.56 34.09 34.15 10554.00 39.04 11.31 34.45 31.69	Freq. Factor Loss Factor Reading Level (MHz) (dB/m) (dB) (dB) (dBuV) (dBuV/m)  2422.00 27.60 6.66 34.74 86.98 86.50 4145.00 29.88 10.75 35.98 43.38 48.03 5454.00 31.83 12.05 35.90 43.08 51.06 7290.00 36.54 11.56 34.09 34.15 48.16 10554.00 39.04 11.31 34.45 31.69 47.59	Freq. Factor Loss Factor Reading Level Limits (MHz) (dB/m) (dB) (dB) (dBuV) (dBuV/m) (dBuV/m)  2422.00 27.60 6.66 34.74 86.98 86.50 74.00 4145.00 29.88 10.75 35.98 43.38 48.03 74.00 5454.00 31.83 12.05 35.90 43.08 51.06 74.00 7290.00 36.54 11.56 34.09 34.15 48.16 74.00 10554.00 39.04 11.31 34.45 31.69 47.59 74.00	Freq. Factor Loss Factor Reading Level Limits Margin (MHz) (dB/m) (dB) (dB) (dBuV) (dBuV/m) (dBuV/m) (dB)  2422.00 27.60 6.66 34.74 86.98 86.50 74.00 -12.50 4145.00 29.88 10.75 35.98 43.38 48.03 74.00 25.97 5454.00 31.83 12.05 35.90 43.08 51.06 74.00 22.94 7290.00 36.54 11.56 34.09 34.15 48.16 74.00 25.84 10554.00 39.04 11.31 34.45 31.69 47.59 74.00 26.41

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





Site no. : 1# 966 chamber Data no. : 323

Dis. / Ant. : 3m ANT 1-18G Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

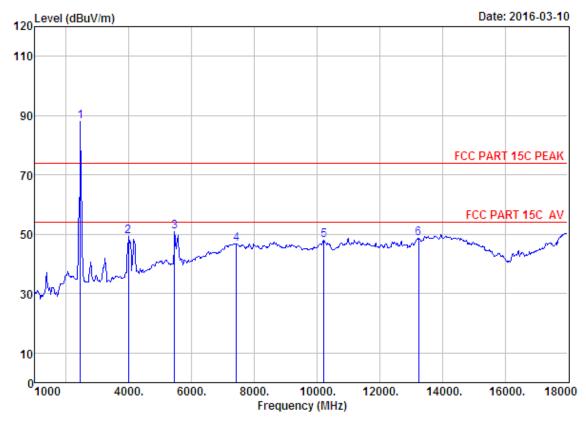
Engineer : Tony
EUT : LED TV
Power : AC 120V/60Hz
M/N : ELST4316S

Test Mode : IEEE 802.11n HT40 CH5 2442TX

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2442.00	27.60	6.67	34.85	87.80	87.22	74.00	-13.22	Peak
2	4145.00	29.88	10.75	35.98	41.18	45.83	74.00	28.17	Peak
3	5556.00	31.97	12.00	36.07	43.43	51.33	74.00	22.67	Peak
4	8684.00	37.32	11.45	33.66	33.37	48.48	74.00	25.52	Peak
5	11115.00	39.44	11.20	33.55	30.56	47.65	74.00	26.35	Peak
6	13988.00	41.45	10.92	33.00	30.33	49.70	74.00	24.30	Peak

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





Dis. / Ant. : 3m ANT 1-18G Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

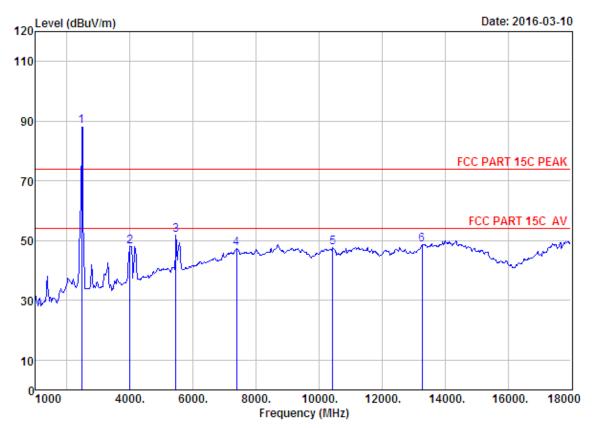
Engineer : Tony
EUT : LED TV
Power : AC 120V/60Hz
M/N : ELST4316S

Test Mode : IEEE 802.11n HT40 CH5 2442TX

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2442.00	27.60	6.67	34.85	88.64	88.06	74.00	-14.06	Peak
2	3975.00	29.60	10.81	36.42	45.35	49.34	74.00	24.66	Peak
3	5454.00	31.83	12.05	35.90	42.98	50.96	74.00	23.04	Peak
4	7426.00	36.56	11.60	34.22	32.93	46.87	74.00	27.13	Peak
5	10214.00	38.48	11.47	34.50	32.48	47.93	74.00	26.07	Peak
6	13240.00	39.46	11.46	32.88	30.69	48.73	74.00	25.27	Peak

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





Dis. / Ant. : 3m ANT 1-18G Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

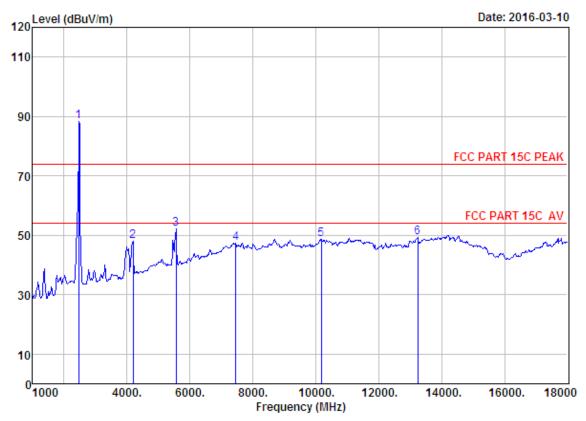
Engineer : Tony
EUT : LED TV
Power : AC 120V/60Hz
M/N : ELST4316S

Test Mode : IEEE 802.11n HT40 CH9 2462TX

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2462.00	27.58	6.69	34.98	88.90	88.19	74.00	-14.19	Peak
2	3992.00	29.65	10.89	36.38	43.95	48.11	74.00	25.89	Peak
3	5454.00	31.83	12.05	35.90	43.79	51.77	74.00	22.23	Peak
4	7375.00	36.57	11.59	34.21	33.40	47.35	74.00	26.65	Peak
5	10435.00	38.86	11.35	34.52	31.99	47.68	74.00	26.32	Peak
6	13274.00	39.54	11.47	32.92	30.58	48.67	74.00	25.33	Peak

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





Site no. : 1# 966 chamber Data no. : 326
Dis. / Ant. : 3m ANT 1-18G Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

Engineer : Tony
EUT : LED TV
Power : AC 120V/60Hz
M/N : ELST4316S

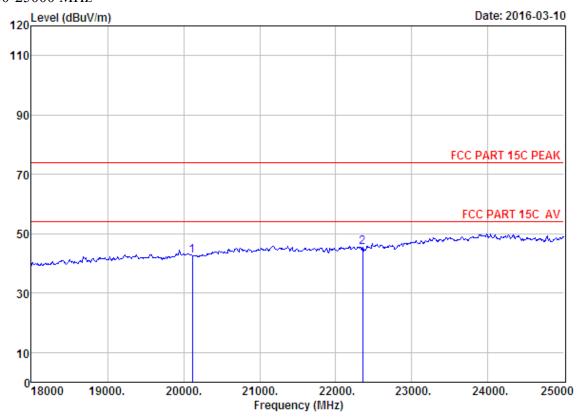
Test Mode : IEEE 802.11n HT40 CH9 2462TX

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2462.00	27.58	6.69	34.98	89.01	88.30	74.00	-14.30	Peak
2	4196.00	29.95	10.70	35.87	43.21	47.99	74.00	26.01	Peak
3	5556.00	31.97	12.00	36.07	44.29	52.19	74.00	21.81	Peak
4	7460.00	36.52	11.61	34.21	33.43	47.35	74.00	26.65	Peak
5	10180.00	38.42	11.49	34.53	33.15	48.53	74.00	25.47	Peak
6	13240.00	39.46	11.46	32.88	31.21	49.25	74.00	24.75	Peak

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



## 18000-25000 MHz



Site no. : 1# 966 chamber

Data no. : 329 Ant. pol. : HORIZONTAL : 3m ANT ABVOE 18G Dis. / Ant.

: FCC PART 15C PEAK Limit

Env. / Ins. : Temp:23.6';Humi:56%;Press:101.52kPa

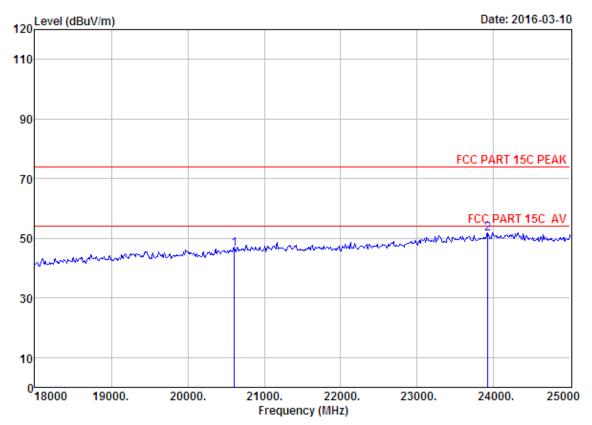
Engineer : Tony EUT : LED TV Power : AC 120V/60Hz M/N : ELST4316S

: IEEE 802.11b CH1 2412TX Test Mode

-	Factor	Factor	Reading	Emission Level (dBuV/m)		Margin (dB)	Remark
20114.00 22354.00				42.71 45.55	74.00 74.00	31.29 28.45	Peak Peak

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





Site no. : 1# 966 chamber Data no. : 330
Dis. / Ant. : 3m ANT ABOVE 18G Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

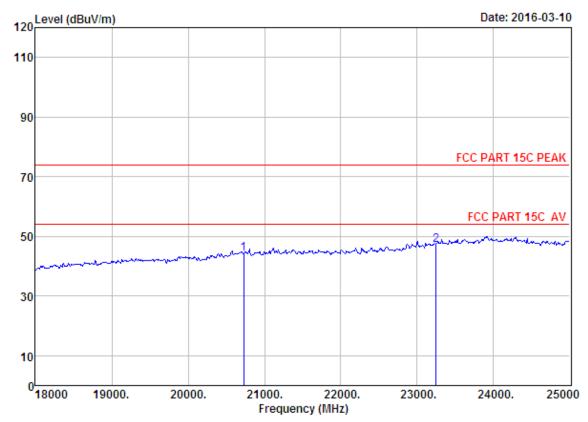
Engineer : Tony
EUT : LED TV
Power : AC 120V/60Hz
M/N : ELST4316S

Test Mode : IEEE 802.11b CH1 2412TX

-	Factor	Factor	Reading	Emission Level (dBuV/m)		Margin (dB)	Remark
20611.00 23922.00				46.52 51.56	74.00 74.00		Peak Peak

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





Site no. : 1# 966 chamber Data no. : 331
Dis. / Ant. : 3m ANT ABOVE 18G Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

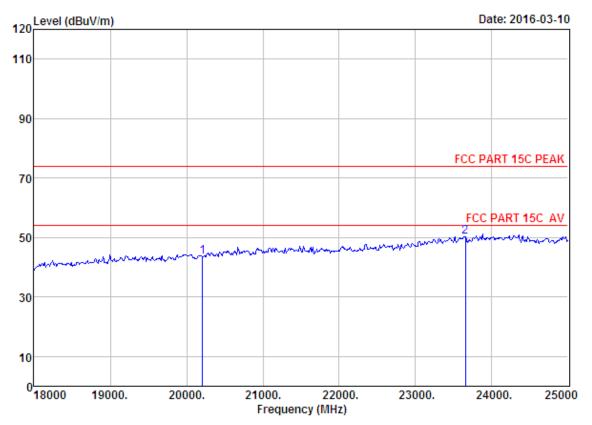
Engineer : Tony
EUT : LED TV
Power : AC 120V/60Hz
M/N : ELST4316S

Test Mode : IEEE 802.11b CH7 2442TX

Freq.	Factor	Loss	Factor	Reading	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
20730.00 23250.00					44.27 47.03	74.00 74.00	29.73 26.97	Peak Peak

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





Dis. / Ant. : 3m ANT ABVOE 18G Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

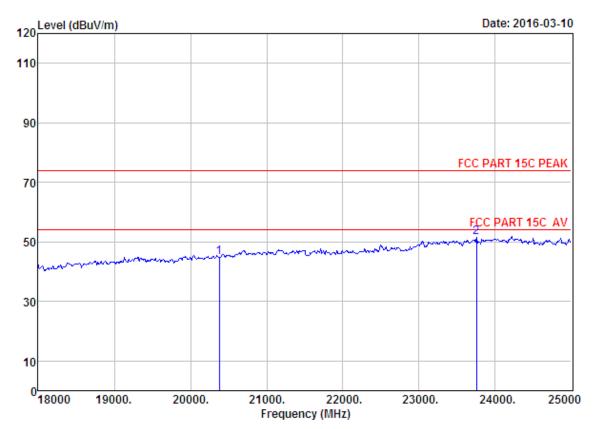
Engineer : Tony
EUT : LED TV
Power : AC 120V/60Hz
M/N : ELST4316S

Test Mode : IEEE 802.11b CH7 2442TX

Freq.	Factor	Factor	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
20212.00 23656.00				43.64 50.14	74.00 74.00	30.36 23.86	Peak Peak

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





Dis. / Ant. : 3m ANT ABVOE 18G Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

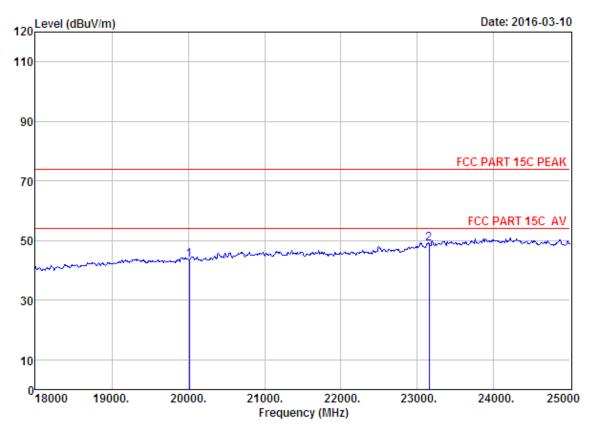
Engineer : Tony
EUT : LED TV
Power : AC 120V/60Hz
M/N : ELST4316S

Test Mode : IEEE 802.11b CH13 2472TX

-	Factor	-	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
20380.00 23754.00		 		44.95 51.42	74.00 74.00	29.05 22.58	Peak Peak

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





Site no. : 1# 966 chamber Data no. : 334

Dis. / Ant. : 3m ANT ABOVE 18G Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

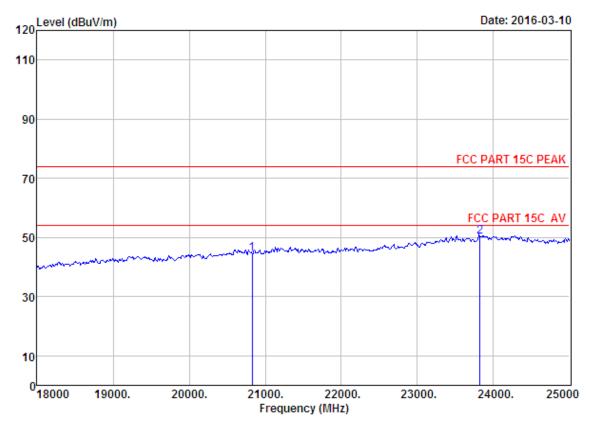
Engineer : Tony
EUT : LED TV
Power : AC 120V/60Hz
M/N : ELST4316S

Test Mode : IEEE 802.11b CH13 2472TX

-		Factor	_	Emission Level (dBuV/m)		Margin (dB)	Remark
20016.00 23152.00				43.40 48.89	74.00 74.00	30.60 25.11	Peak Peak

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





Site no. : 1# 966 chamber Data no. : 335
Dis. / Ant. : 3m ANT ABOVE 18G Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

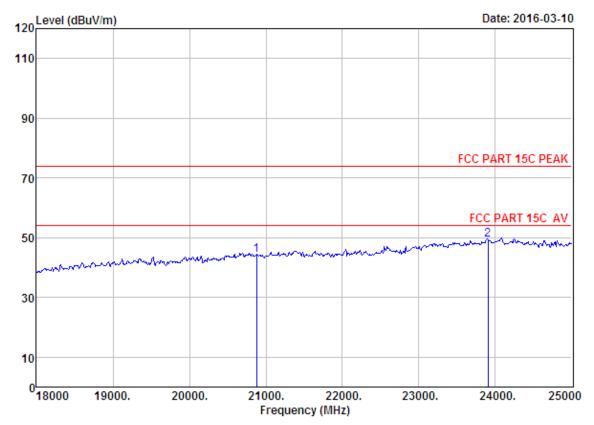
Engineer : Tony
EUT : LED TV
Power : AC 120V/60Hz
M/N : ELST4316S

Test Mode : IEEE 802.11g CH1 2412TX

-		•	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
0828.00 3824.00	 		14.17 15.62	44.46 50.16	74.00 74.00	29.54 23.84	Peak Peak

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





: 1# 966 chamber Data no. : 336 Site no.

: 3m ANT ABVOE 18G Dis. / Ant. Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6';Humi:56%;Press:101.52kPa

Engineer : Tony EUT : LED TV : AC 120V/60Hz Power

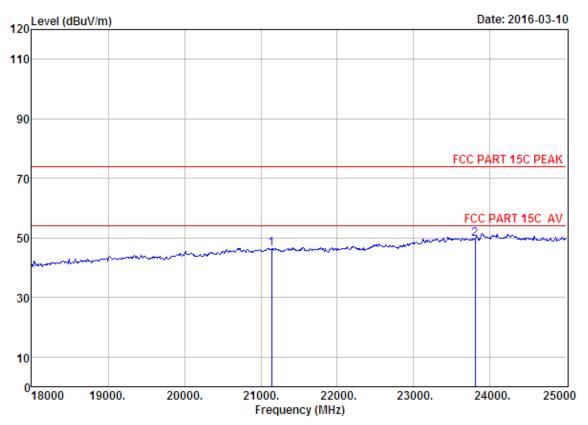
M/N : ELST4316S

Test Mode : IEEE 802.11g CH1 2412TX

Freq.		-	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
20877.00 23901.00	 		44.27 49.32	74.00 74.00	29.73 24.68	Peak Peak

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





Dis. / Ant. : 3m ANT ABVOE 18G Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

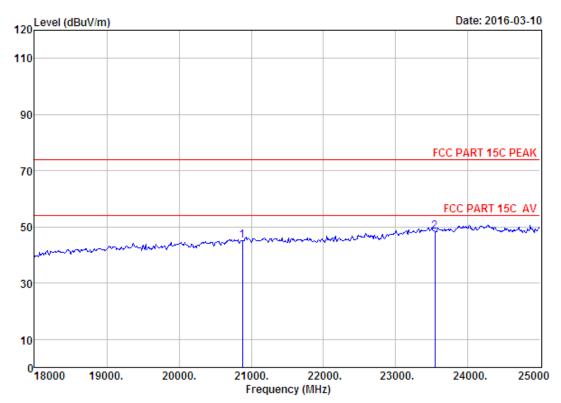
Engineer : Tony
EUT : LED TV
Power : AC 120V/60Hz
M/N : ELST4316S

Test Mode : IEEE 802.11g CH7 2442TX

-	Factor	Loss	-	_	Emission Level (dBuV/m)		Margin (dB)	Remark
21143.00 23803.00					46.27 49.63	74.00 74.00	27.73 24.37	Peak Peak

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





Site no. : 1# 966 chamber Data no. : 338
Dis. / Ant. : 3m ANT ABOVE 18G Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

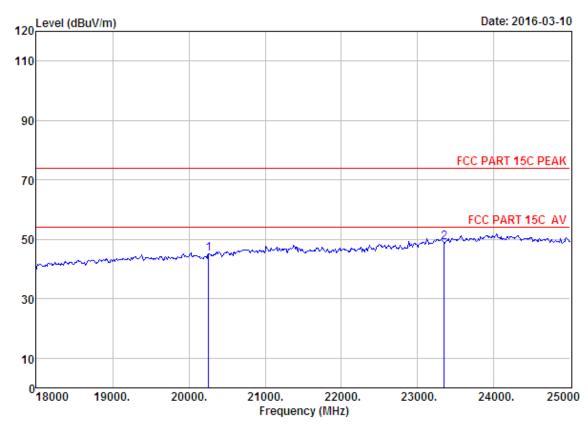
Engineer : Tony
EUT : LED TV
Power : AC 120V/60Hz
M/N : ELST4316S

Test Mode : IEEE 802.11g CH7 2442TX

-	Factor	Loss	Factor	Reading	Emission Level (dBuV/m)		Margin (dB)	Remark
20877.00 23544.00					45.06 48.44	74.00 74.00	28.94 25.56	Peak Peak

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





Site no. : 1# 966 chamber Data no. : 339
Dis. / Ant. : 3m ANT ABOVE 18G Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6';Humi:56%;Press:101.52kPa

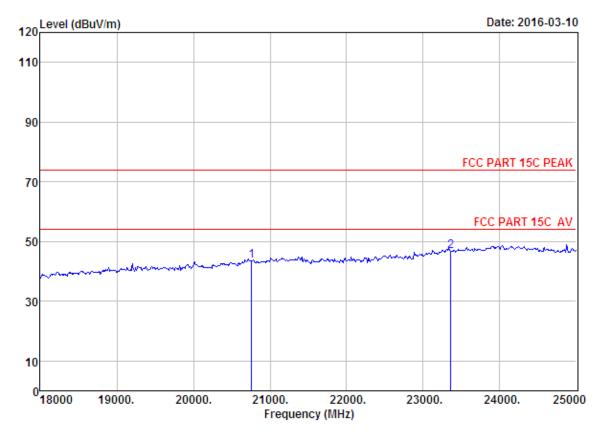
Engineer : Tony
EUT : LED TV
Power : AC 120V/60Hz
M/N : ELST4316S

Test Mode : IEEE 802.11g CH13 2472TX

Freq. (MHz)		Factor	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
20261.00 23348.00			15.69 15.18	45.06 48.83	74.00 74.00	28.94 25.17	Peak Peak

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





Dis. / Ant. : 3m ANT ABVOE 18G Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

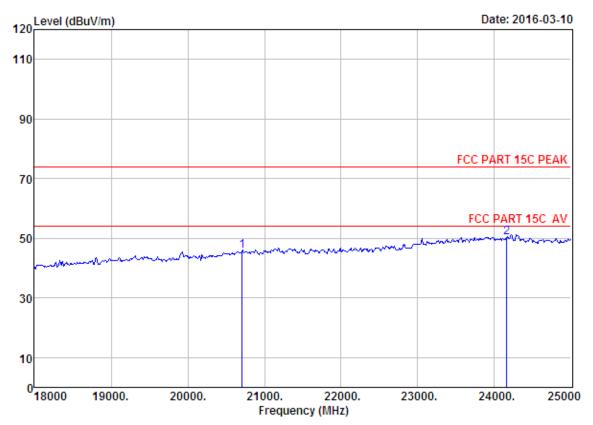
Engineer : Tony
EUT : LED TV
Power : AC 120V/60Hz
M/N : ELST4316S

Test Mode : IEEE 802.11g CH13 2472TX

	Freq. (MHz)		Factor	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
_	20758.00 23362.00	 			43.46 46.65	74.00 74.00	30.54 27.35	Peak Peak

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





Dis. / Ant. : 3m ANT ABVOE 18G Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

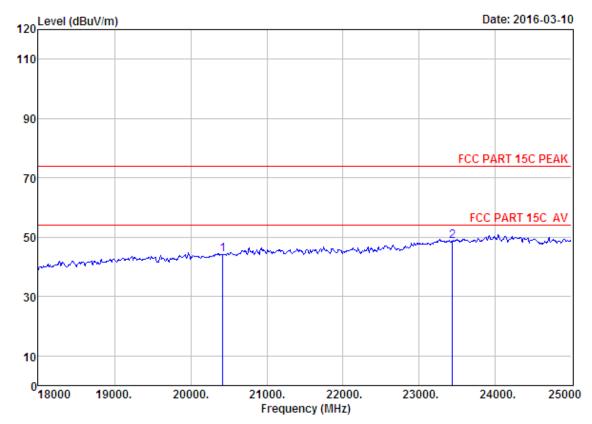
Engineer : Tony
EUT : LED TV
Power : AC 120V/60Hz
M/N : ELST4316S

Test Mode : IEEE 802.11n HT20 CH1 2412TX

Freq. (MHz)	Factor	Factor	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
20709.00 24160.00		 		45.82 50.17	74.00 74.00	28.18 23.83	Peak Peak

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





Site no. : 1# 966 chamber Data no. : 342
Dis. / Ant. : 3m ANT ABOVE 18G Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

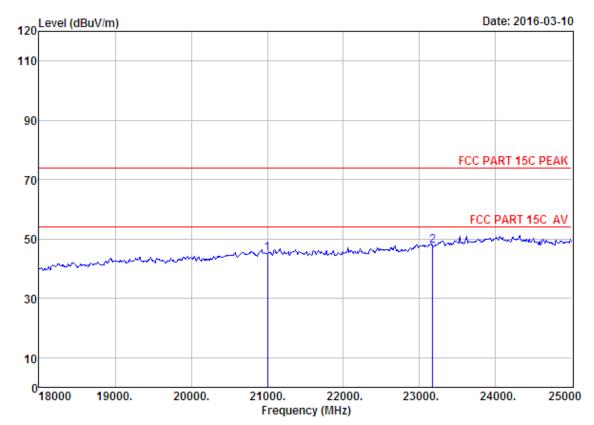
Engineer : Tony
EUT : LED TV
Power : AC 120V/60Hz
M/N : ELST4316S

Test Mode : IEEE 802.11n HT20 CH1 2412TX

Freq.	Factor	Loss	Factor	Reading	Emission Level (dBuV/m)		Margin (dB)	Remark
20422.00 23432.00					44.07 48.67	74.00 74.00	29.93 25.33	Peak Peak

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





Site no. : 1# 966 chamber Data no. : 343
Dis. / Ant. : 3m ANT ABOVE 18G Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

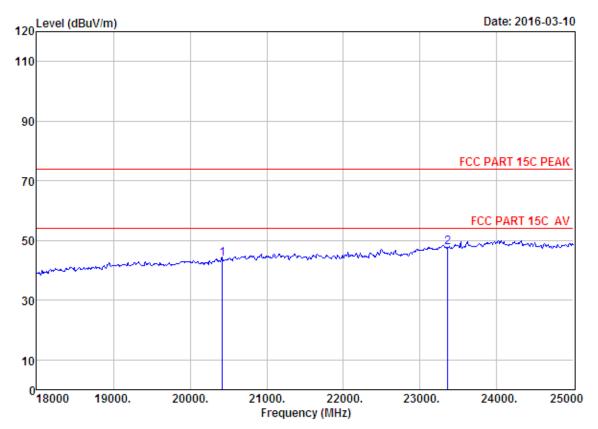
Engineer : Tony
EUT : LED TV
Power : AC 120V/60Hz
M/N : ELST4316S

Test Mode : IEEE 802.11n HT20 CH7 2442TX

Freq.		-	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
21003.00 23173.00				45.11 47.70	74.00 74.00	28.89 26.30	Peak Peak

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





Dis. / Ant. : 3m ANT ABVOE 18G Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

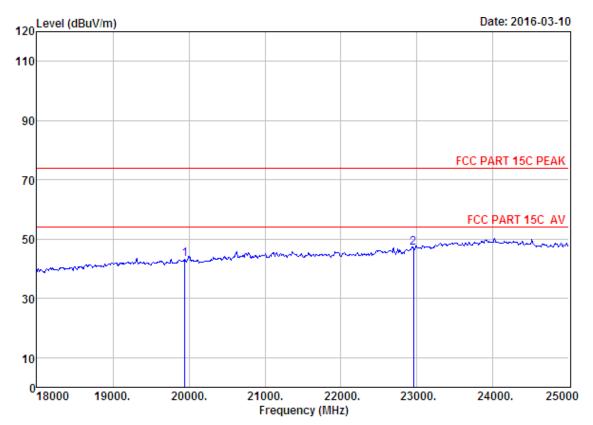
Engineer : Tony
EUT : LED TV
Power : AC 120V/60Hz
M/N : ELST4316S

Test Mode : IEEE 802.11n HT20 CH7 2442TX

-	Factor	Loss	Factor	Emission Level (dBuV/m)		Margin (dB)	Remark
20422.00 23362.00				43.97 47.58	74.00 74.00	30.03 26.42	Peak Peak

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





Dis. / Ant. : 3m ANT ABVOE 18G Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

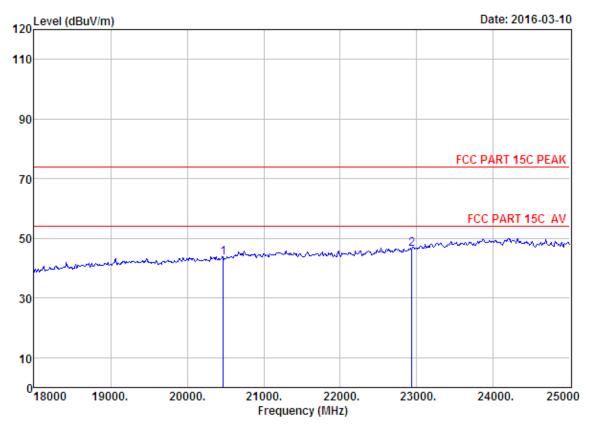
Engineer : Tony
EUT : LED TV
Power : AC 120V/60Hz
M/N : ELST4316S

Test Mode : IEEE 802.11n HT20 CH13 2472TX

Freq.	Factor	Factor	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
19946.00 22956.00				43.13 46.89	74.00 74.00	30.87 27.11	Peak Peak

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





Site no. : 1# 966 chamber Data no. : 346
Dis. / Ant. : 3m ANT ABOVE 18G Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

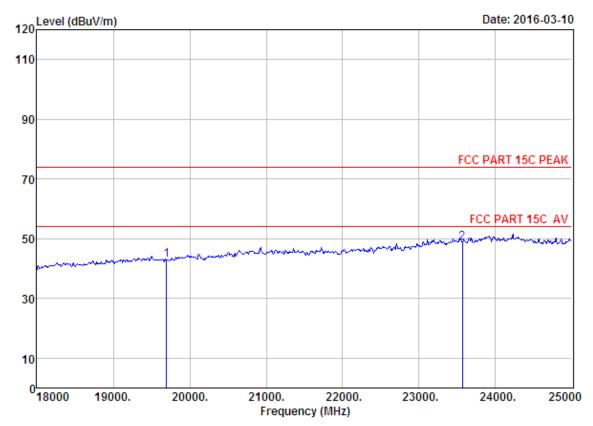
Engineer : Tony
EUT : LED TV
Power : AC 120V/60Hz
M/N : ELST4316S

Test Mode : IEEE 802.11n HT20 CH13 2472TX

Freq. (MHz)		-	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
20471.00 22935.00	 		13.89 13.60	43.52 46.41	74.00 74.00	30.48 27.59	Peak Peak

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





Site no. : 1# 966 chamber Data no. : 347
Dis. / Ant. : 3m ANT ABOVE 18G Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

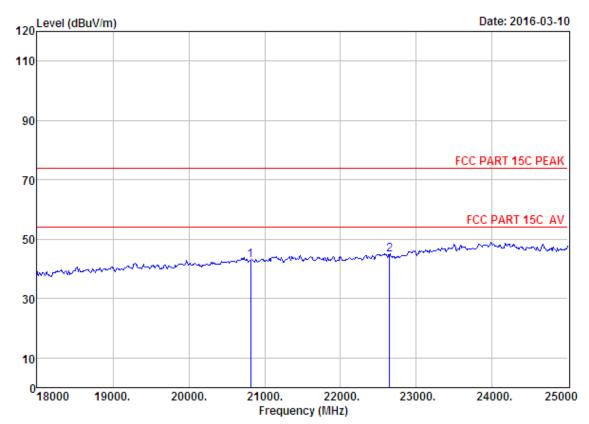
Engineer : Tony
EUT : LED TV
Power : AC 120V/60Hz
M/N : ELST4316S

Test Mode : IEEE 802.11n HT40 CH1 2422TX

		Ant.	Ant.	Cable	Amp		Emission			
	Freq.	Factor (dB/m)			_	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark	
1	19694.00	45.98	19.33	36.44	13.86	42.73	74.00	31.27	Peak	
2	23565.00	45.69	21.65	33.25	14.62	48.71	74.00	25.29	Peak	

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





Dis. / Ant. : 3m ANT ABVOE 18G Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

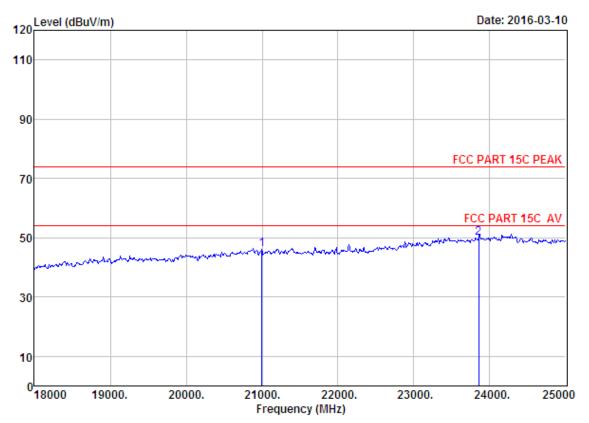
Engineer : Tony
EUT : LED TV
Power : AC 120V/60Hz
M/N : ELST4316S

Test Mode : IEEE 802.11n HT40 CH1 2422TX

	Freq.	Factor		Factor	Reading	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
	20814.00					42.94	74.00	31.06	Peak
2	22648.00	45.75	20.94	34.22	12.43	44.90	74.00	29.10	Peak

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





Dis. / Ant. : 3m ANT ABVOE 18G Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

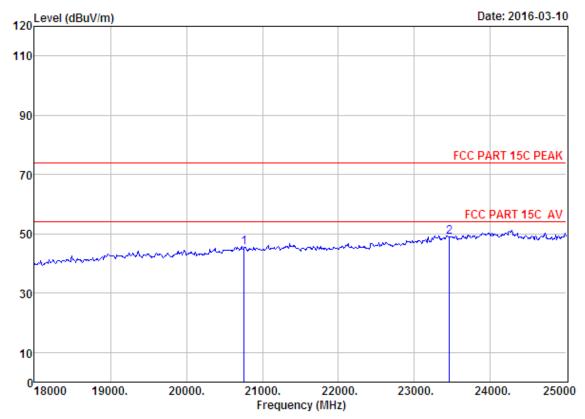
Engineer : Tony
EUT : LED TV
Power : AC 120V/60Hz
M/N : ELST4316S

Test Mode : IEEE 802.11n HT40 CH5 2442TX

	-	Factor	Loss	_	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
_	20996.00 23852.00			 	45.98 49.82	74.00 74.00	28.02 24.18	Peak Peak

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





Site no. : 1# 966 chamber Data no. : 350
Dis. / Ant. : 3m ANT ABOVE 18G Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

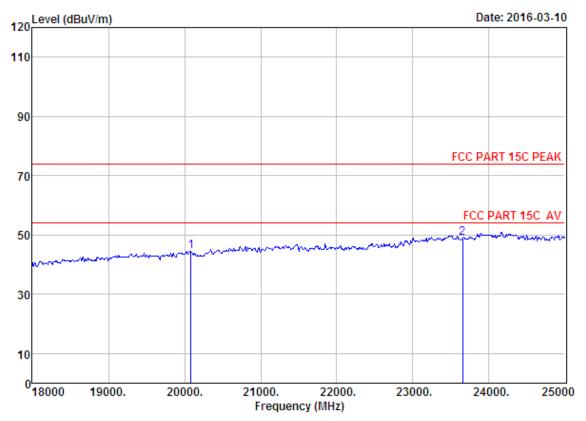
Engineer : Tony
EUT : LED TV
Power : AC 120V/60Hz
M/N : ELST4316S

Test Mode : IEEE 802.11n HT40 CH5 2442TX

-	Factor	Factor	_	Emission Level (dBuV/m)		Margin (dB)	Remark
20758.00 23460.00		 		45.37 49.05	74.00 74.00	28.63 24.95	Peak Peak

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





Site no. : 1# 966 chamber Data no. : 351
Dis. / Ant. : 3m ANT ABOVE 18G Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

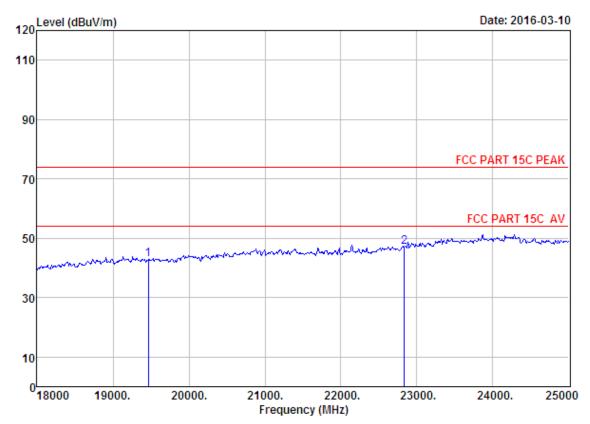
Engineer : Tony
EUT : LED TV
Power : AC 120V/60Hz
M/N : ELST4316S

Test Mode : IEEE 802.11n HT40 CH9 2462TX

Freq. (MHz)		Factor	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
20086.00 23656.00				44.42 48.90	74.00 74.00	29.58 25.10	Peak Peak

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





Dis. / Ant. : 3m ANT ABVOE 18G Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

Engineer : Tony
EUT : LED TV
Power : AC 120V/60Hz
M/N : ELST4316S

Test Mode : IEEE 802.11n HT40 CH9 2462TX

Freq. (MHz)		-	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
19463.00 22837.00				42.72 47.05	74.00 74.00	31.28 26.95	Peak Peak

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



# 5 BAND EDGE COMPLIANCE TEST

### 5.1 Limit

All the lower and upper band-edges emissions appearing within 2310MHz to 2390MHz and 2483.5MHz to 2500MHz restricted frequency bands shall not exceed the limits shown in 15.209, all the other emissions outside operation frequency band 2400MHz to 2483.5MHz shall be at least 20dB below the fundamental emissions, or comply with 15.209 limits

#### 5.2 Test Procedure

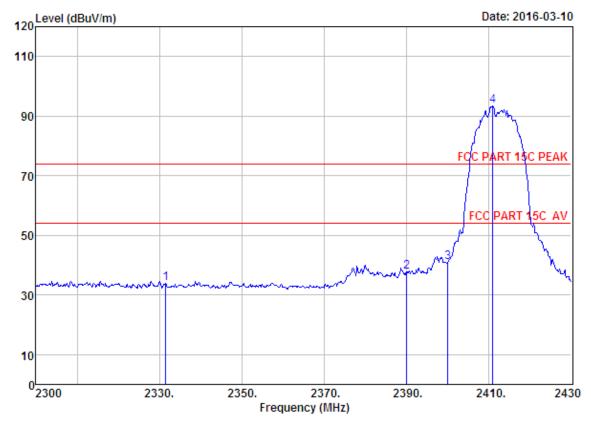
- 1. The EUT is placed on a turntable, which is 1.5m above the ground plane and worked at highest radiated power.
- 2. The turntable was rotated for 360 degrees to determine the position of maximum emission level.
- 3. EUT is set 3m away from the receiving antenna, which is varied from 1m to 4m to find out the highest emission.
- 4. Set the spectrum analyzer in the following setting in order to capture the lower and upper band-edges of the emission:
- (a) Peak: RBW = 1MHz, VBW = 1MHz, Detector=PEAK detector, Sweep time = auto (b) AV: RBW = 1MHz, VBW = 10Hz, Detector=PEAK detector, Sweep time = auto

### 5.3 Test Result

Pass (The testing data was attached in the next pages.)

- Note: 1. For emissions above 1GHz, if peak level comply with average limit, then the average level is deemed to comply with average limit.
  - 2. The frequency 2412MHz. 2422MHz . 2462MHz and 2472 MHz is fundamental frequency which no limit, the limit on plots is automatically generated by the software, it's not fundamental limit, we can't remove it.

## 5.4 Test Data



Site no. : 1# 966 chamber Data no. : 291
Dis. / Ant. : 3m ANT 1-18G Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

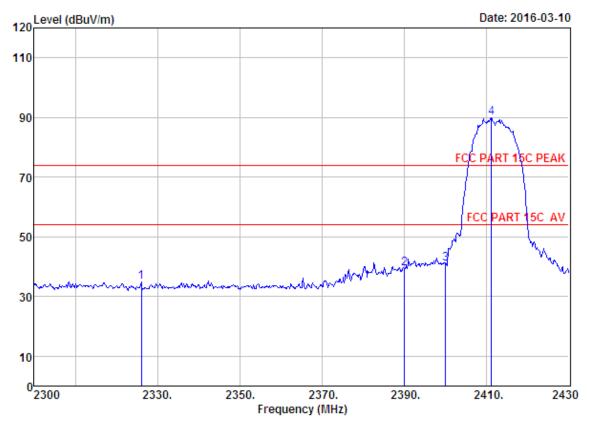
Engineer : Tony
EUT : LED TV
Power : AC 120V/60Hz
M/N : ELST4316S

Test Mode : IEEE 802.11b CH1 2412TX

	Freq.			-	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2331.46	27.73	6.54	34.59	34.20	33.88	74.00	40.12	Peak
2	2390.00	27.64	6.62	34.62	38.09	37.73	74.00	36.27	Peak
3	2400.00	27.61	6.62	34.64	41.35	40.94	74.00	33.06	Peak
4	2410.89	27.60	6.64	34.64	93.98	93.58	74.00	-19.58	Peak

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





Site no. : 1# 966 chamber Data no. : 292
Dis. / Ant. : 3m ANT 1-18G Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

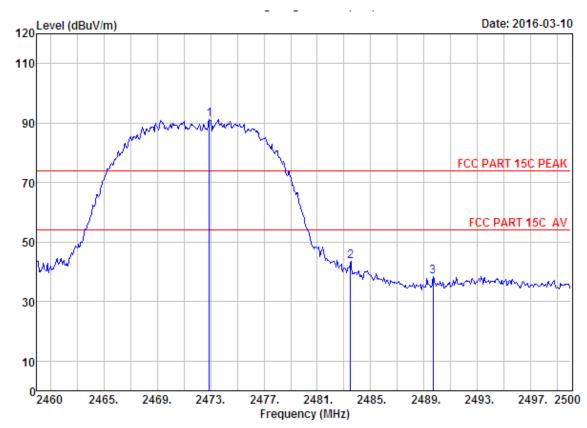
Engineer : Tony
EUT : LED TV
Power : AC 120V/60Hz
M/N : ELST4316S

Test Mode : IEEE 802.11b CH1 2412TX

	Freq.			-	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2326.00	27.73	6.54	34.60	35.15	34.82	74.00	39.18	Peak
2	2390.00	27.64	6.62	34.62	39.73	39.37	74.00	34.63	Peak
3	2400.00	27.61	6.62	34.64	41.50	41.09	74.00	32.91	Peak
4	2411.15	27.60	6.64	34.64	90.37	89.97	74.00	-15.97	Peak

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





Site no. : 1# 966 chamber Data no. : 297

Dis. / Ant. : 3m ANT 1-18G Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

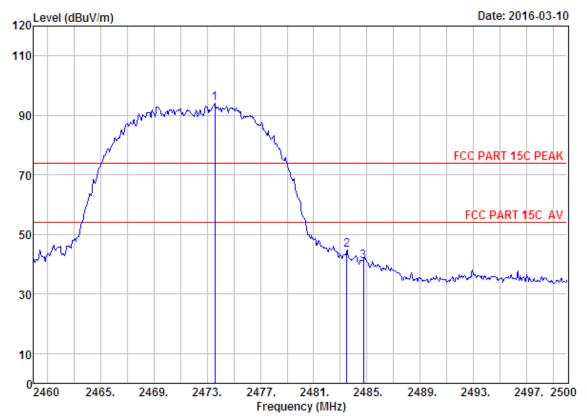
Engineer : Tony
EUT : LED TV
Power : AC 120V/60Hz
M/N : ELST4316S

Test Mode : IEEE 802.11b CH13 2472TX

		Freq.		Loss		Reading	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
_	1	2472.92	27.58	6.71	35.11	91.95	91.13	74.00	-17.13	Peak
	2	2483.50	27.58	6.71	35.11	44.32	43.50	74.00	30.50	Peak
	3	2489.68	27.58	6.73	35.24	39.29	38.36	74.00	35.64	Peak

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





Site no. : 1# 966 chamber Data no. : 298

Dis. / Ant. : 3m ANT 1-18G Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

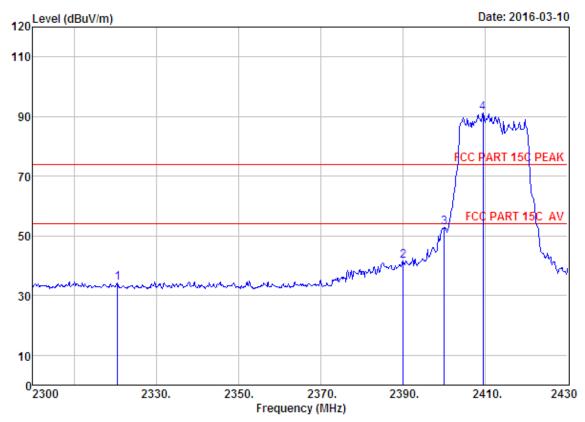
Engineer : Tony
EUT : LED TV
Power : AC 120V/60Hz
M/N : ELST4316S

Test Mode : IEEE 802.11b CH13 2472TX

	Freq.	Factor	Loss		_	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2473.60	27.58	6.71	35.11	94.98	94.16	74.00	-20.16	Peak
2	2483.50	27.58	6.71	35.11	45.76	44.94	74.00	29.06	Peak
3	2484.72	27.58	6.71	35.11	41.92	41.10	74.00	32.90	Peak

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





Site no. : 1# 966 chamber Data no. : 301
Dis. / Ant. : 3m ANT 1-18G Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

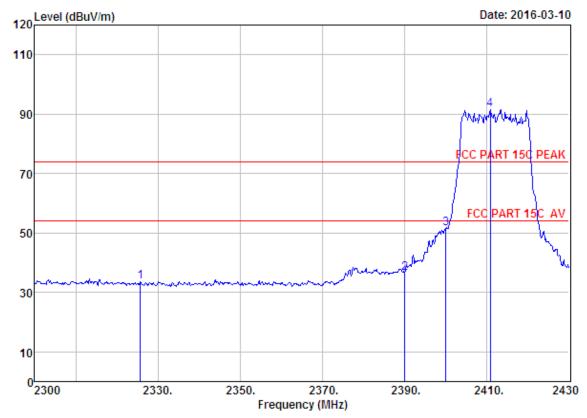
Engineer : Tony
EUT : LED TV
Power : AC 120V/60Hz
M/N : ELST4316S

Test Mode : IEEE 802.11g CH1 2412TX

	Freq.			-	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2320.54	27.76	6.54	34.60	34.69	34.39	74.00	39.61	Peak
2	2390.00	27.64	6.62	34.62	41.83	41.47	74.00	32.53	Peak
3	2400.00	27.61	6.62	34.64	53.20	52.79	74.00	21.21	Peak
4	2409.46	27.60	6.64	34.64	91.52	91.12	74.00	-17.12	Peak

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





Dis. / Ant. : 3m ANT 1-18G Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

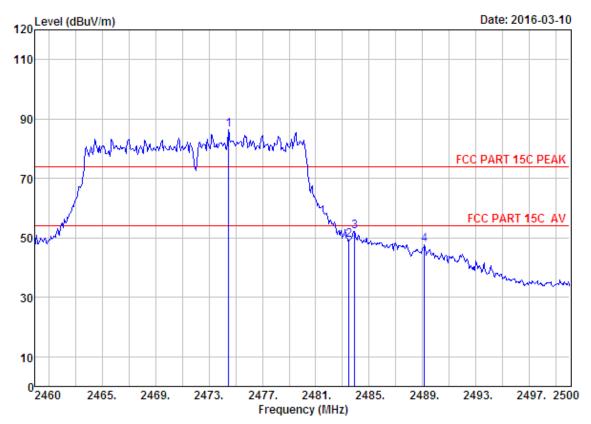
Engineer : Tony
EUT : LED TV
Power : AC 120V/60Hz
M/N : ELST4316S

Test Mode : IEEE 802.11g CH1 2412TX

	Freq. (MHz)			-	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2325.74	27.73	6.54	34.60	34.05	33.72	74.00	40.28	Peak
2	2390.00	27.64	6.62	34.62	36.71	36.35	74.00	37.65	Peak
3	2400.00	27.61	6.62	34.64	51.94	51.53	74.00	22.47	Peak
4	2410.76	27.60	6.64	34.64	91.90	91.50	74.00	-17.50	Peak

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





Dis. / Ant. : 3m ANT 1-18G Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

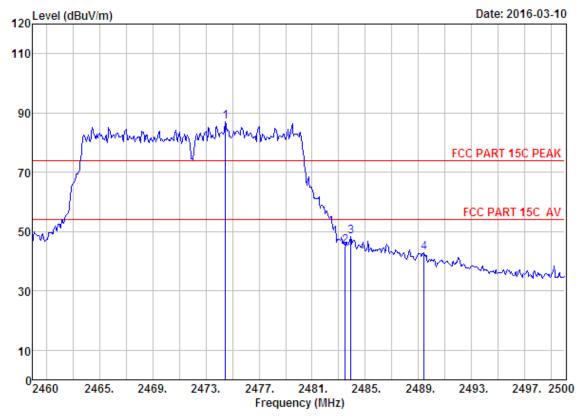
Engineer : Tony
EUT : LED TV
Power : AC 120V/60Hz
M/N : ELST4316S

Test Mode : IEEE 802.11g CH13 2472TX

	Freq.			-	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2474.48	27.58	6.71	35.11	87.33	86.51	74.00	-12.51	Peak
2	2483.50	27.58	6.71	35.11	50.00	49.18	74.00	24.82	Peak
3	2483.92	27.58	6.71	35.11	52.97	52.15	74.00	21.85	Peak
4	2489.12	27.58	6.73	35.24	48.54	47.61	74.00	26.39	Peak

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





Site no. : 1# 966 chamber Data no. : 308

Dis. / Ant. : 3m ANT 1-18G Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

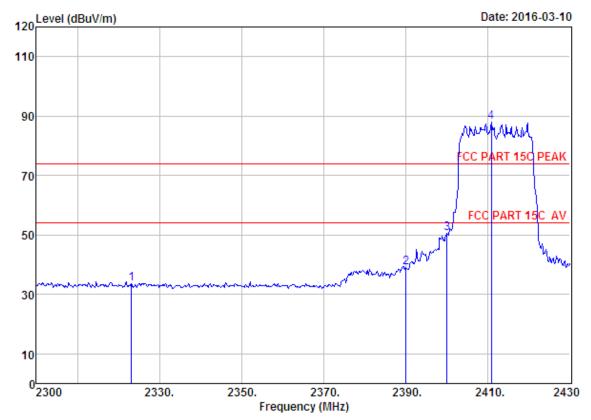
Engineer : Tony
EUT : LED TV
Power : AC 120V/60Hz
M/N : ELST4316S

Test Mode : IEEE 802.11g CH13 2472TX

	Freq.			-	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2474.48	27.58	6.71	35.11	88.00	87.18	74.00	-13.18	Peak
2	2483.50	27.58	6.71	35.11	46.07	45.25	74.00	28.75	Peak
3	2483.92	27.58	6.71	35.11	49.12	48.30	74.00	25.70	Peak
4	2489.40	27.58	6.73	35.24	43.68	42.75	74.00	31.25	Peak

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





Dis. / Ant. : 3m ANT 1-18G Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

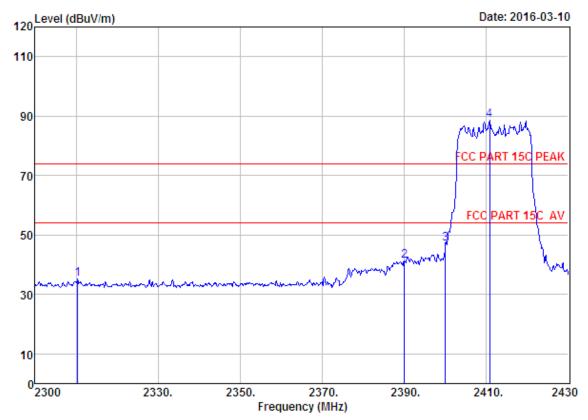
Engineer : Tony
EUT : LED TV
Power : AC 120V/60Hz
M/N : ELST4316S

Test Mode : IEEE 802.11n HT20 CH1 2412TX

	Freq.			-	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2323.14	27.73	6.54	34.60	34.04	33.71	74.00	40.29	Peak
2	2390.00	27.64	6.62	34.62	39.35	38.99	74.00	35.01	Peak
3	2400.00	27.61	6.62	34.64	50.81	50.40	74.00	23.60	Peak
4	2410.76	27.60	6.64	34.64	88.27	87.87	74.00	-13.87	Peak

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





Site no. : 1# 966 chamber Data no. : 312
Dis. / Ant. : 3m ANT 1-18G Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

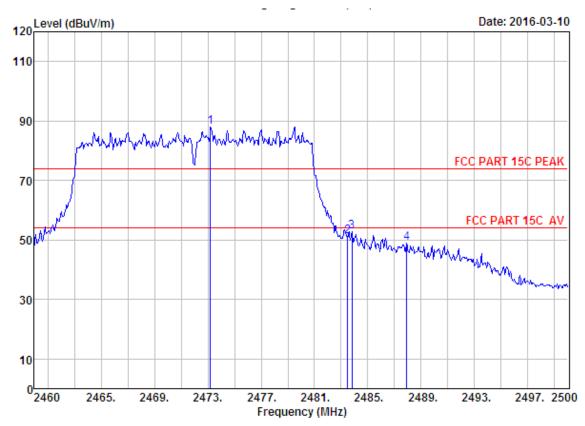
Engineer : Tony
EUT : LED TV
Power : AC 120V/60Hz
M/N : ELST4316S

Test Mode : IEEE 802.11n HT20 CH1 2412TX

	Freq. (MHz)			-	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2310.40	27.76	6.53	34.60	35.49	35.18	74.00	38.82	Peak
2	2390.00	27.64	6.62	34.62	41.58	41.22	74.00	32.78	Peak
3	2400.00	27.61	6.62	34.64	47.40	46.99	74.00	27.01	Peak
4	2410.76	27.60	6.64	34.64	89.10	88.70	74.00	-14.70	Peak

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





Site no. : 1# 966 chamber

Data no. : 317 Ant. pol. : HORIZONTAL : 3m ANT 1-18G Dis. / Ant.

: FCC PART 15C PEAK Limit

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

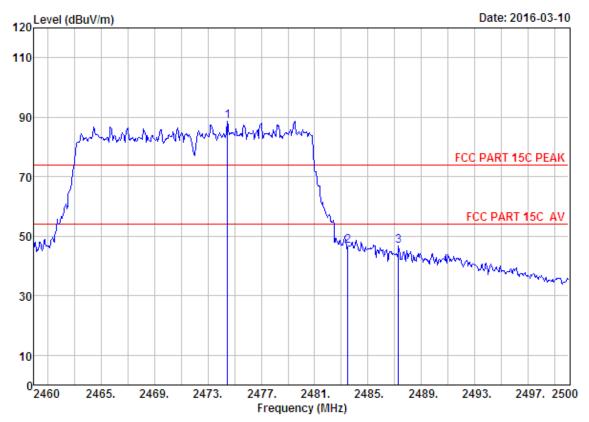
: Tony Engineer EUT : LED TV Power : AC 120V/60Hz : ELST4316S M/N

: IEEE 802.11n HT20 CH13 2472TX Test Mode

	Freq.			•	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2473.20	27.58	6.71	35.11	88.75	87.93	74.00	-13.93	Peak
2	2483.50	27.58	6.71	35.11	51.90	51.08	74.00	22.92	Peak
3	2483.80	27.58	6.71	35.11	53.49	52.67	74.00	21.33	Peak
4	2487.92	27.58	6.73	35.11	49.86	49.06	74.00	24.94	Peak

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





Site no. : 1# 966 chamber Data no. : 318

Dis. / Ant. : 3m ANT 1-18G Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

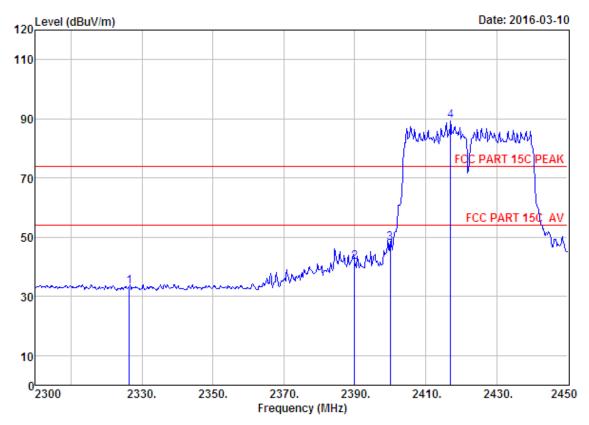
Engineer : Tony
EUT : LED TV
Power : AC 120V/60Hz
M/N : ELST4316S

Test Mode : IEEE 802.11n HT20 CH13 2472TX

	Freq.			-	_	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2474.48	27.58	6.71	35.11	89.52	88.70	74.00	-14.70	Peak
2	2483.50	27.58	6.71	35.11	47.65	46.83	74.00	27.17	Peak
3	2487.28	27.58	6.71	35.11	47.63	46.81	74.00	27.19	Peak

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





Site no. : 1# 966 chamber Data no. : 321
Dis. / Ant. : 3m ANT 1-18G Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

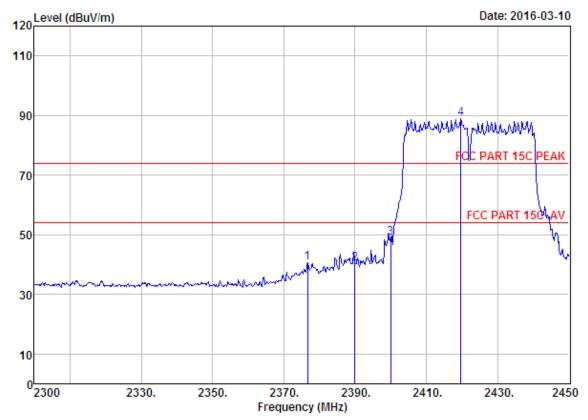
Engineer : Tony
EUT : LED TV
Power : AC 120V/60Hz
M/N : ELST4316S

Test Mode : IEEE 802.11n HT40 CH1 2422TX

	Freq.		Loss	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2326.40	27.73	6.54	34.60	33.69	33.36	74.00	40.64	Peak
2	2390.00	27.64	6.62	34.62	42.05	41.69	74.00	32.31	Peak
3	2400.00	27.61	6.62	34.64	48.48	48.07	74.00	25.93	Peak
4	2417.00	27.60	6.64	34.64	89.55	89.15	74.00	-15.15	Peak

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





Site no. : 1# 966 chamber Data no. : 322
Dis. / Ant. : 3m ANT 1-18G Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

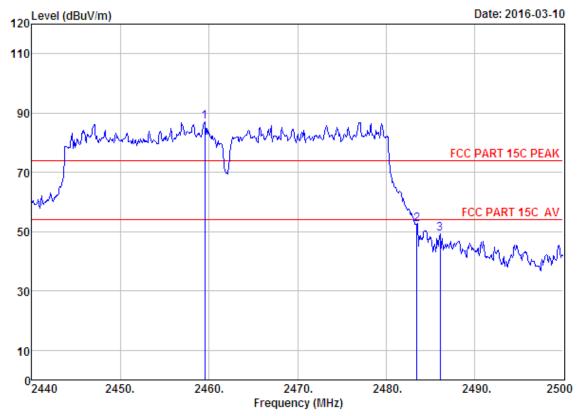
Engineer : Tony
EUT : LED TV
Power : AC 120V/60Hz
M/N : ELST4316S

Test Mode : IEEE 802.11n HT40 CH1 2422TX

	Freq.			-	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2376.65	27.64	6.60	34.59	40.96	40.61	74.00	33.39	Peak
2	2390.00	27.64	6.62	34.62	40.59	40.23	74.00	33.77	Peak
3	2400.00	27.61	6.62	34.64	49.36	48.95	74.00	25.05	Peak
4	2419.70	27.60	6.66	34.74	89.51	89.03	74.00	-15.03	Peak

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





Site no. : 1# 966 chamber Data no. : 327
Dis. / Ant. : 3m ANT 1-18G Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

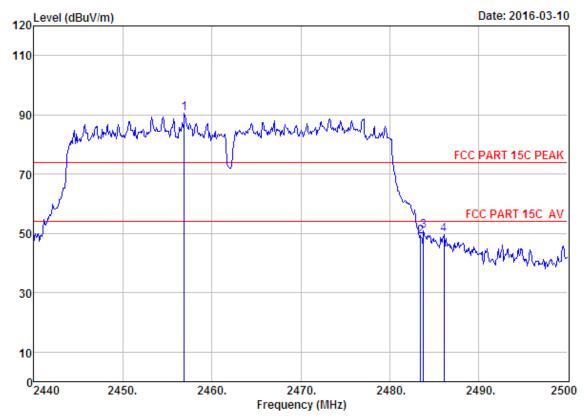
Engineer : Tony
EUT : LED TV
Power : AC 120V/60Hz
M/N : ELST4316S

Test Mode : IEEE 802.11n HT40 CH9 2462TX

		Freq. (MHz)		Loss	-	Reading (dBuV)		Limits (dBuV/m)	Margin (dB)	Remark
_	1	2459.50	27.59	6.69	34.98	87.75	87.05	74.00	-13.05	Peak
	2	2483.50	27.58	6.71	35.11	53.24	52.42	74.00	21.58	Peak
	3	2486.08	27.58	6.71	35.11	50.10	49.28	74.00	24.72	Peak

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





Dis. / Ant. : 3m ANT 1-18G Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

Engineer : Tony
EUT : LED TV
Power : AC 120V/60Hz
M/N : ELST4316S

Test Mode : IEEE 802.11n HT40 CH9 2462TX

	Freq.			-	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2456.92	27.59	6.69	34.98	91.29	90.59	74.00	-16.59	Peak
2	2483.50	27.58	6.71	35.11	49.88	49.06	74.00	24.94	Peak
3	2483.80	27.58	6.71	35.11	51.82	51.00	74.00	23.00	Peak
4	2486.08	27.58	6.71	35.11	50.34	49.52	74.00	24.48	Peak

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



## 6 6dB & 20dB Bandwidth Test

#### 6.1 Limit

For direct sequence systems, the minimum 6dB bandwidth shall be at least 500kHz

### 6.2 Test Procedure

- 1, Connected the EUT's antenna port to spectrum analyzer device.
- 2, Follow the test procedure as described in KDB 558074
  - (1). Set resolution bandwidth (RBW) = 100 kHz.
  - (2). Set the video bandwidth (VBW)  $\geq 3 \times RBW$ .
  - (3). Detector = Peak.
  - (4). Trace mode =  $\max$  hold.
  - (5). Sweep = auto couple.
  - (6). Allow the trace to stabilize.
  - (7). Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

# 6.3 Test Result

EUT: LED TV			
M/N: ELST4316S			
Test date: 2016-03-1	3	Tested by: Tony.Tang	Test site: RF Site
Test Mode	СН	6dB bandwidth (MHz)	Limit (KHz)
	CH1	10.125	>500
IEEE 802.11 b	CH7	9.516	>500
	CH13	9.498	>500
	CH1	16.609	>500
IEEE 802.11 g	CH7	16.630	>500
	CH13	16.603	>500
IEEE 802.11 n	CH1	17.875	>500
HT 20	CH7	17.890	>500
111 20	CH13	17.877	>500
IEEE 802.11 n	CH1	36.608	>500
HT 40	CH5	36.602	>500
111 70	CH9	36.609	>500
Conclusion: PASS			

EST Technology Co., Ltd Report No. ESTE-R1603040 Page 108 of 156

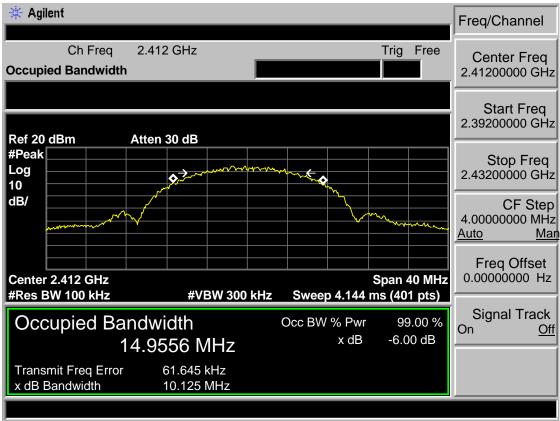
EUT: LED TV			
M/N: ELST4316S			
Test date: 2016-03-13		Tested by: Tony.Tang	Test site: RF Site
Test Mode	СН	20dB bandwidth (MHz)	Limit (KHz)
IEEE 802.11 b	CH1	17.468	/
	CH7	17.510	/
	CH13	17.486	/
IEEE 802.11 g	CH1	19.361	/
	CH7	19.436	/
	CH13	19.458	/
IEEE 802.11 n HT 20	CH1	20.329	/
	CH7	20.088	/
	CH13	20.106	/
IEEE 802.11 n HT 40	CH1	40.081	/
	CH5	40.045	/
	СН9	40.100	/
Conclusion: PASS			



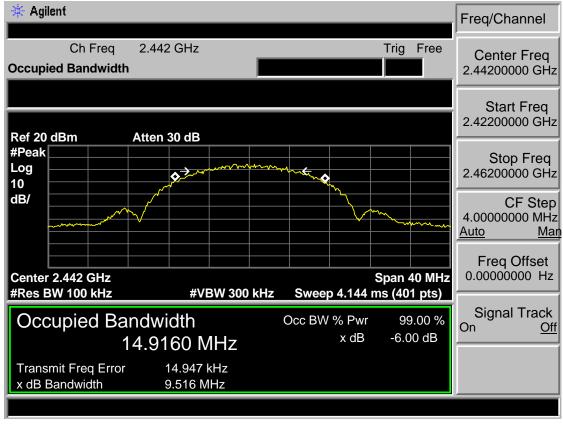
EST Technology Co., Ltd Report No. ESTE-R1603040 Page 109 of 156

## 6.4 6dB Test Data

Test Mode: IEEE 802.11b 2412MHz

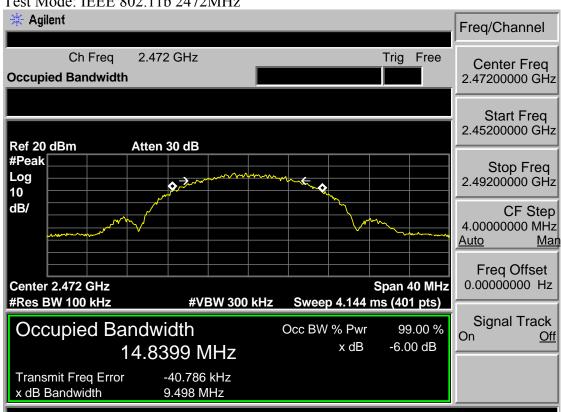


Test Mode: IEEE 802.11b 2442MHz



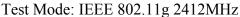


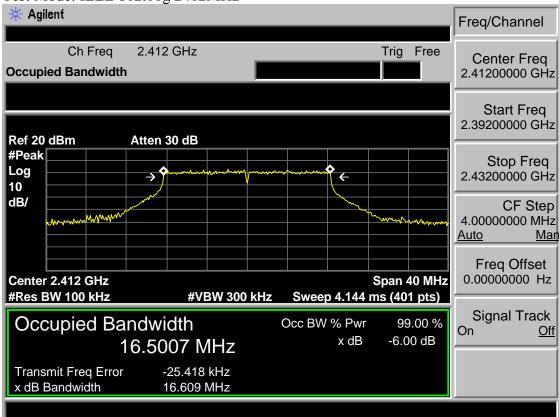
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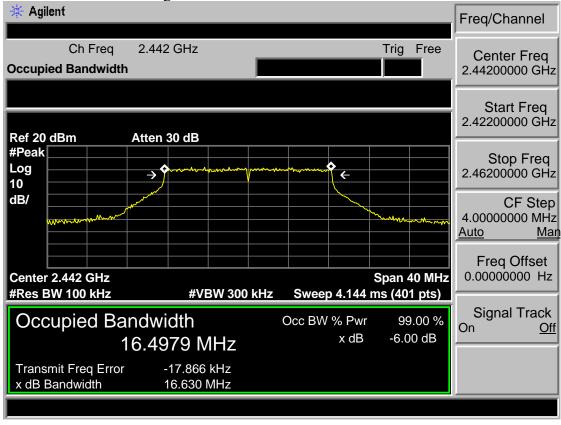




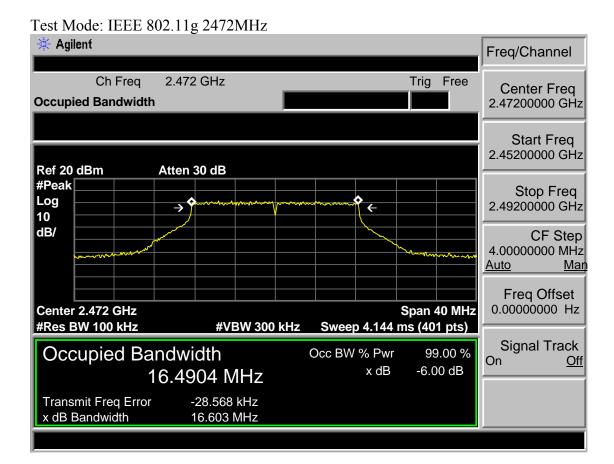




Test Mode: IEEE 802.11g 2442MHz

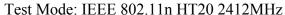


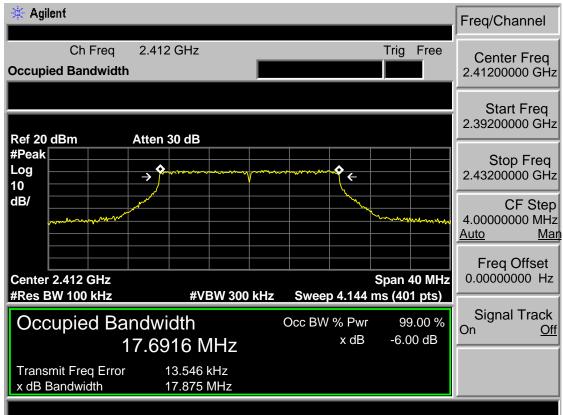




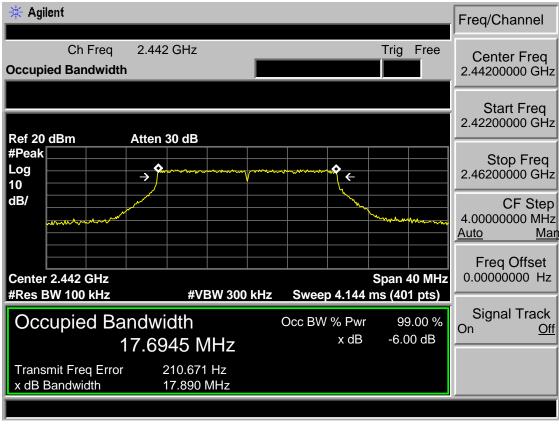


EST Technology Co., Ltd Report No. ESTE-R1603040

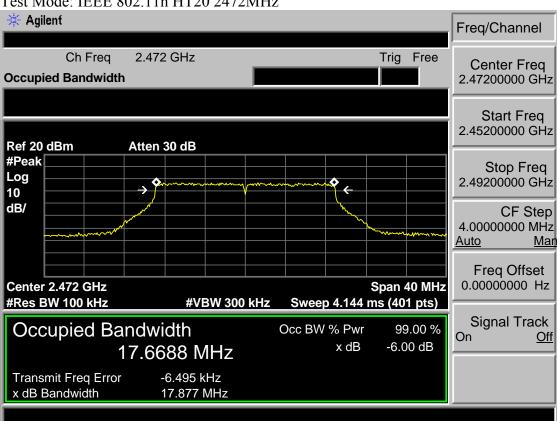


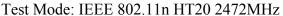


## Test Mode: IEEE 802.11n HT20 2442MHz

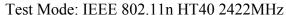


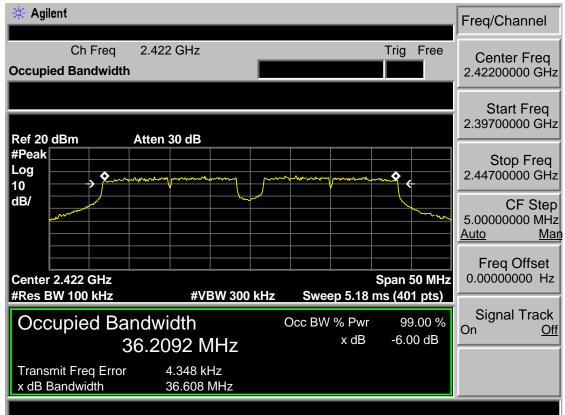




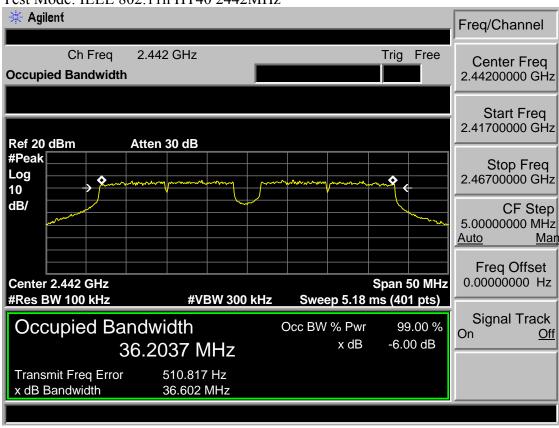




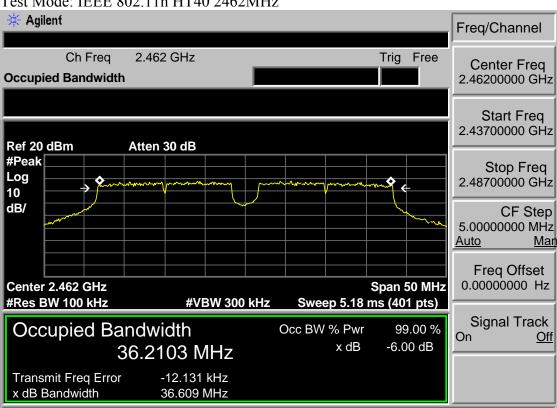




## Test Mode: IEEE 802.11n HT40 2442MHz





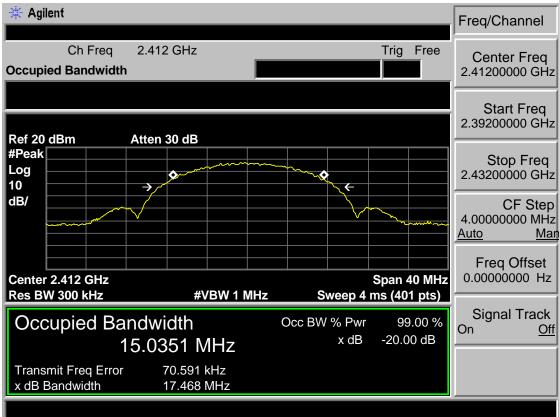




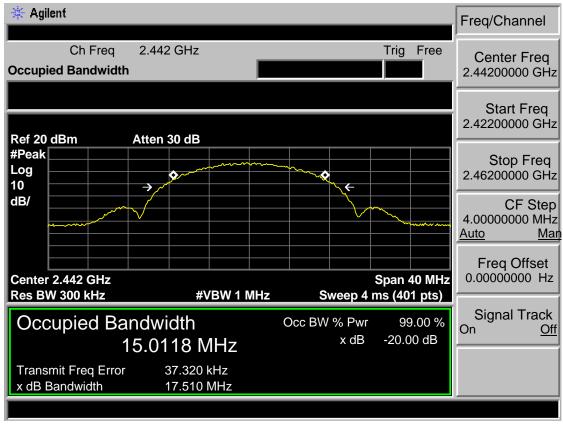


## 6.5 20dB Test Data

Test Mode: IEEE 802.11b 2412MHz

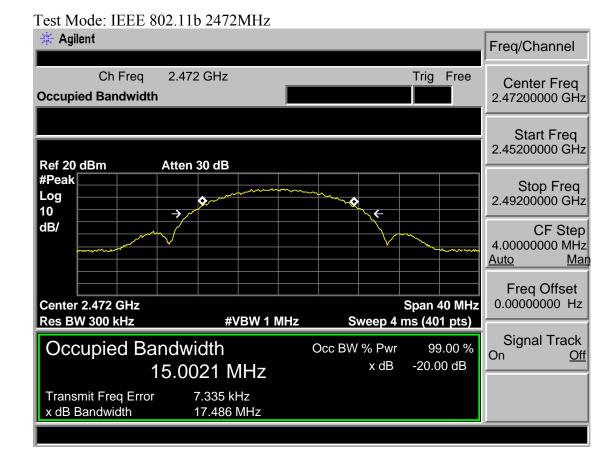


Test Mode: IEEE 802.11b 2442MHz



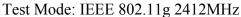


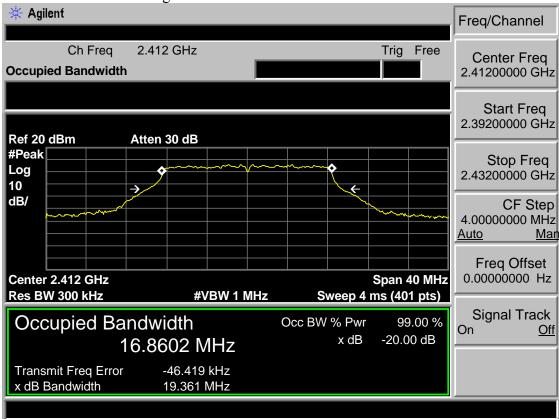
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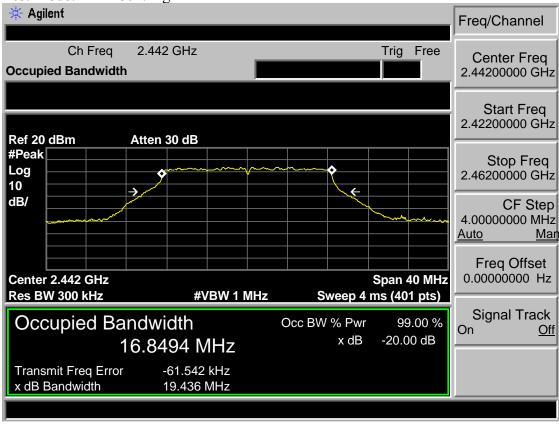


EST Technology Co., Ltd Report No. ESTE-R1603040 Page 119 of 156

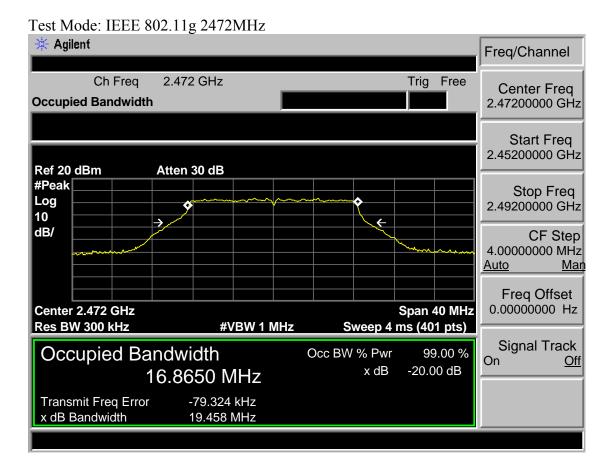




## Test Mode: IEEE 802.11g 2442MHz



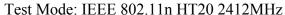


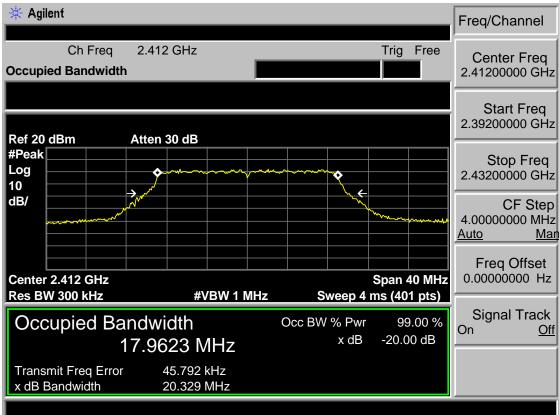




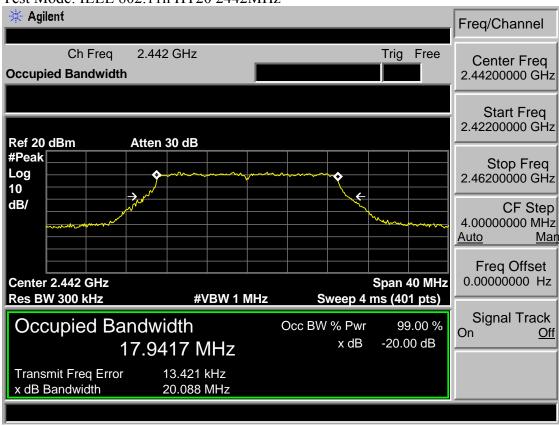
EST Technology Co., Ltd Report No. ESTE-R1603040

Page 121 of 156



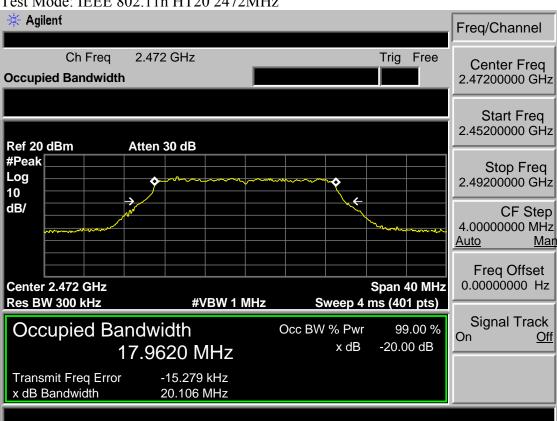


## Test Mode: IEEE 802.11n HT20 2442MHz



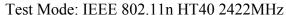


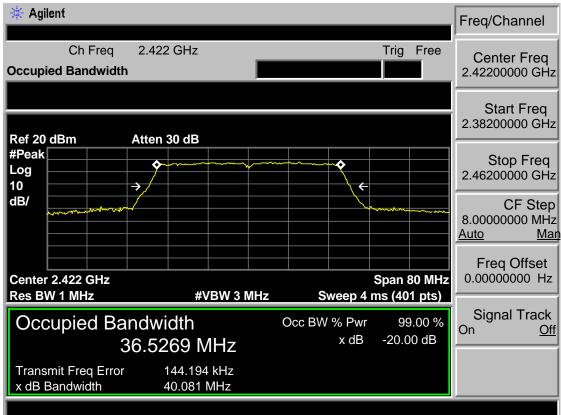
EST Technology Co., Ltd



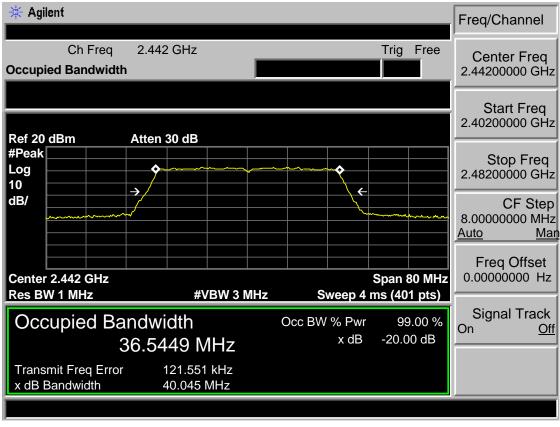
Test Mode: IEEE 802.11n HT20 2472MHz



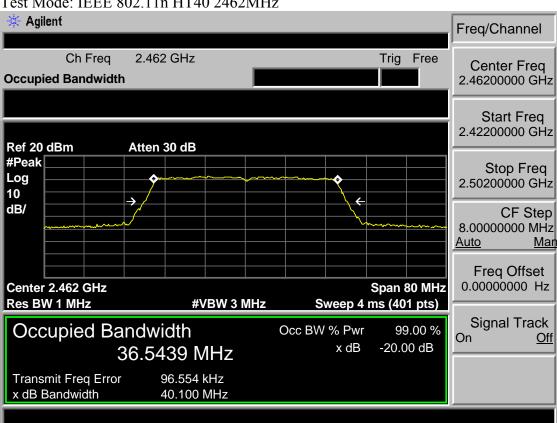




## Test Mode: IEEE 802.11n HT40 2442MHz







Test Mode: IEEE 802.11n HT40 2462MHz



## 7 OUTPUT POWER TEST

#### 7.1 Limit

For systems using digital modulation in the 2400—2483.5MHz, The Peak out put Power shall not exceed 1W(30dBm)

## 7.2 Test Procedure

## 7.3 Test Procedure

- 1, Connected the EUT's antenna port to spectrum analyzer device.
- 2, Follow the test procedure as described in KDB 558074
  - (1)Set span to at least 1.5 times the OBW.
  - (2)Set RBW = 1-5% of the OBW, not to exceed 1 MHz.
  - (3)Set VBW  $\geq$  3 x RBW.
  - (4)Number of points in sweep  $\geq 2 \times \text{span} / \text{RBW}$ . (This gives bin-to-bin spacing  $\leq \text{RBW}/2$ , so that narrowband signals are not lost between frequency bins.)
  - (4)Sweep time = auto.
  - (5) Detector = RMS (i.e., power averaging), if available. Otherwise, use sample detector mode.
  - (6)If transmit duty cycle < 98 %, use a sweep trigger with the level set to enable triggering only on full power pulses. The transmitter shall operate at maximum power control level for the entire duration of every sweep. If the EUT transmits continuously (i.e., with no off intervals) or at duty cycle ≥ 98 %, and if each transmission is entirely at the maximum power control level, then the trigger shall be set to "free run".
  - (7)Trace average at least 100 traces in power averaging (i.e., RMS) mode.
  - (8)Compute power by integrating the spectrum across the OBW of the signal using the instrument's band power measurement function, with band limits set equal to the OBW band edges. If the instrument does not have a band power function, sum the spectrum levels (in power units) at intervals equal to the RBW extending across the entire OBW of the spectrum.

Note: The cable loss and attenuator loss were offset into measure device as an amplitude offset.

EST Technology Co., Ltd Report No. ESTE-R1603040 Page 126 of 156

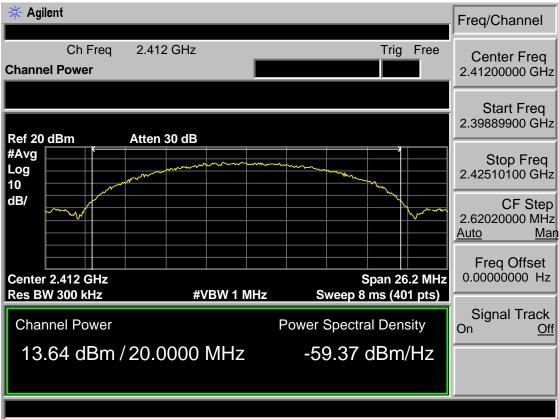
## 7.4 Test Result

EUT: LED TV			
M/N: ELST4316S			
Test date: 2016-03-13		Tested by: Tony.Tang	Test site: RF Site
		Pass	
Test Mode	СН	Conducted Power (dBm)	Limit (dBm)
IEEE 802.11 b	CH1	13.64	30
	CH7	13.06	30
	CH13	12.71	30
IEEE 802.11 g	CH1	11.91	30
	CH7	11.78	30
	CH13	11.87	30
IEEE 002 11	CH1	10.26	30
IEEE 802.11 n HT 20	CH7	8.80	30
П1 20	CH13	8.76	30
IEEE 002 11	CH1	9.52	30
IEEE 802.11 n HT 40	CH5	7.58	30
	CH9	7.44	30

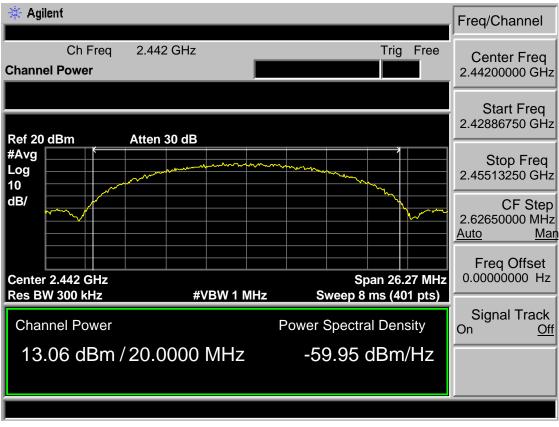
EST Technology Co., Ltd Report No. ESTE-R1603040 Page 127 of 156

#### 7.5 Test Data

Test Mode: IEEE 802.11 b 2412MHz



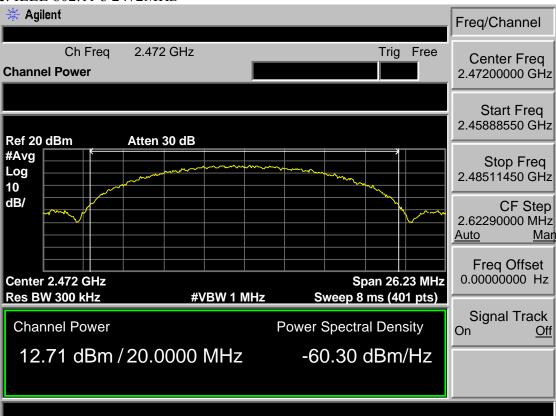
Test Mode: IEEE 802.11 b 2442MHz





EST Technology Co., Ltd Report No. ESTE-R1603040

Test Mode: IEEE 802.11 b 2472MHz

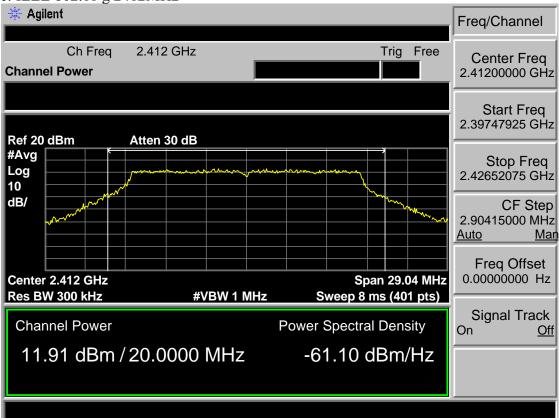




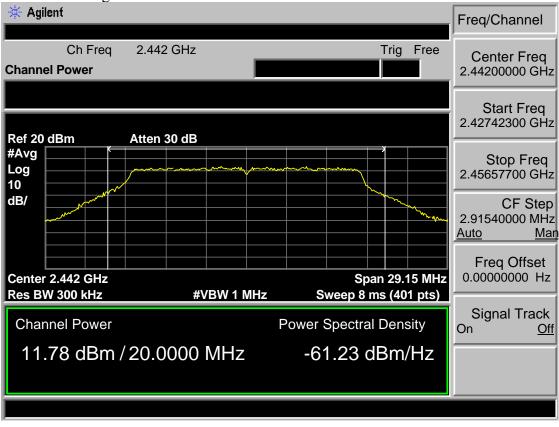
EST Technology Co., Ltd Report No. ESTE-R1603040

Page 129 of 156

Test Mode: IEEE 802.11 g 2412MHz



Test Mode: IEEE 802.11 g 2442MHz





🔆 Agilent Freq/Channel 2.472 GHz Trig Free Ch Freq Center Freq **Channel Power** 2.47200000 GHz Start Freq 2.45740650 GHz Ref 20 dBm Atten 30 dB #Avg Stop Freq Log 2.48659350 GHz 10 dB/ CF Step 2.91870000 MHz <u>Auto</u> Man Freq Offset 0.00000000 Hz

**#VBW 1 MHz** 

**Span 29.19 MHz** 

Signal Track

Off

On

Sweep 8 ms (401 pts)

-61.53 dBm/Hz

Power Spectral Density

Test Mode: IEEE 802.11 g 2472MHz

Center 2.472 GHz

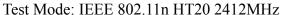
**Channel Power** 

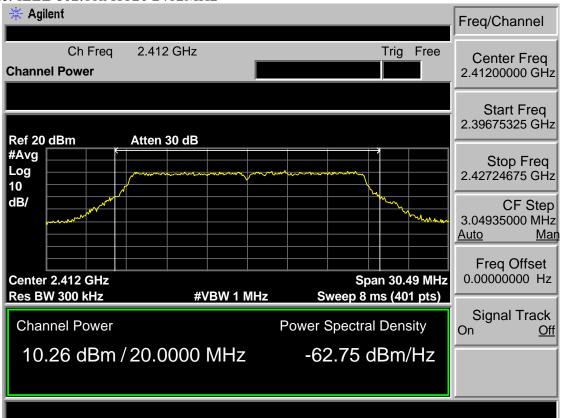
11.87 dBm / 20.0000 MHz

Res BW 300 kHz

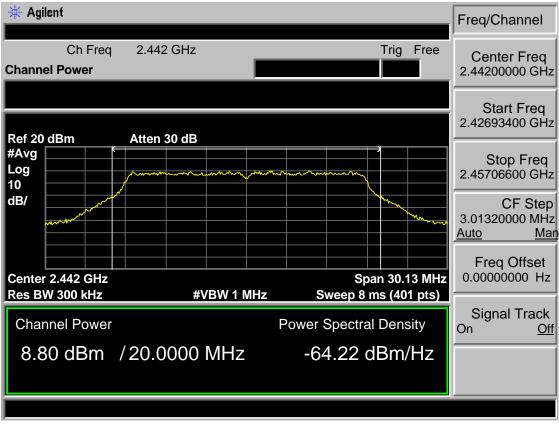


EST Technology Co., Ltd Report No. ESTE-R1603040 Page 131 of 156

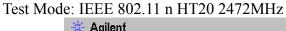


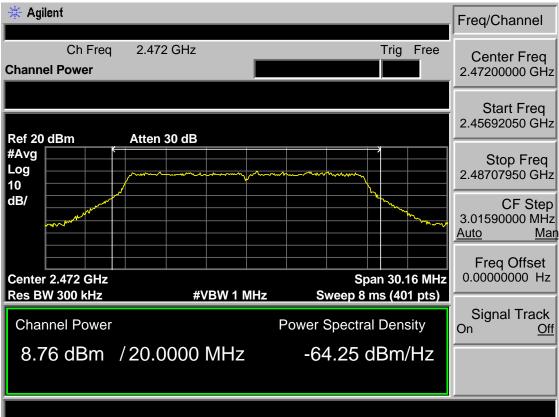


#### Test Mode: IEEE 802.11 n HT20 2442MHz



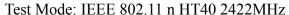






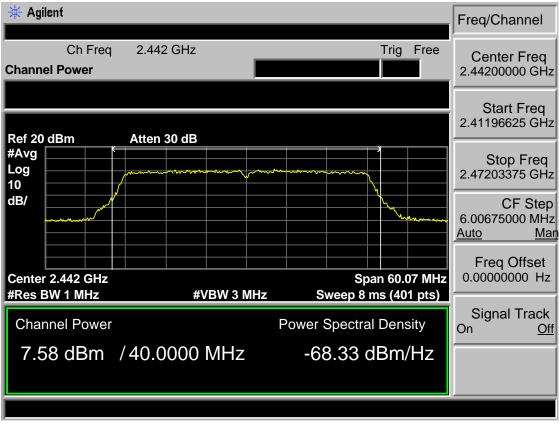


EST Technology Co., Ltd Report No. ESTE-R1603040 Page 133 of 156

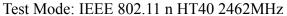


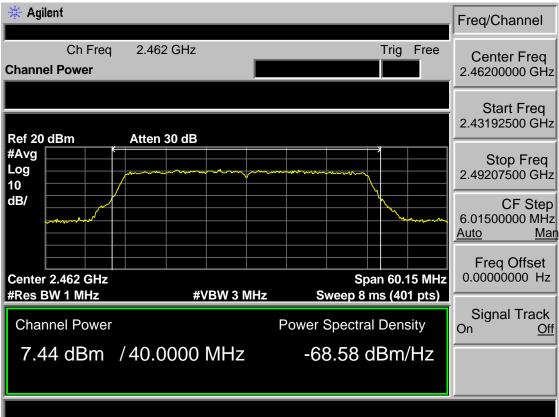


#### Test Mode: IEEE 802.11 n HT40 2442MHz











EST Technology Co., Ltd Report No. ESTE-R1603040 Page 135 of 156

## 8 POWER SPECTRAL DENSITY TEST

## 8.1 Limit

For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8dBm in any 3kHz band during any time interval of continuous transmission.

## 8.2 Test Procedure

- 1, Connected the EUT's antenna port to spectrum analyzer device.
- 2, Follow the test procedure as described in KDB 558074
- (1). Set analyzer center frequency to DTS channel center frequency.
- (2). Set the span to 1.5 times the DTS bandwidth.
- (3). Set the RBW to:  $3 \text{ kHz} \leq \text{RBW} \leq 100 \text{ kHz}$ .
- (4). Set the VBW  $\geq$  3 RBW.
- (5). Detector = peak.
- (6). Sweep time = auto couple.
- (7). Trace mode = max hold.
- (8). Allow trace to fully stabilize.
- (9). Use the peak marker function to determine the maximum amplitude level.
- (10). If measured value exceeds limit, reduce RBW (no less than 3 kHz) and repeat.

EST Technology Co., Ltd Report No. ESTE-R1603040 Page 136 of 156



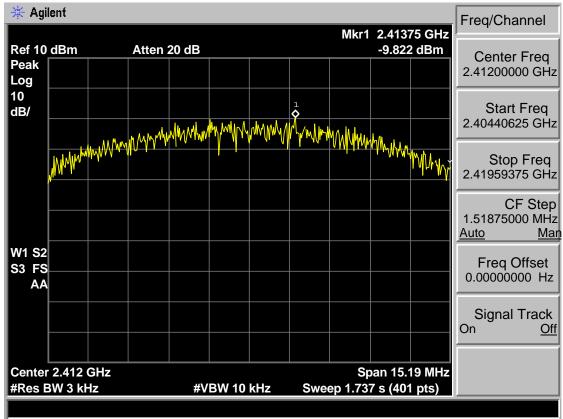
# 8.3 Test Result

EUT: LED TV			
M/N: ELST4316S			
Test date: 2016-03-13		Tested by: Tony Tang	Test site: RF site
		Pass	•
Test Mode	СН	Power density (dBm/3kHz)	Limit (dBm/3kHz)
IEEE 802.11 b	CH1	-9.822	8
	CH7	-11.180	8
	CH13	-10.160	8
IEEE 802.11 g	CH1	-15.770	8
	CH7	-14.490	8
	CH13	-14.930	8
IEEE 802.11 n HT 20	CH1	-16.190	8
	CH7	-14.590	8
	CH13	-15.840	8
IEEE 900 11	CH1	-17.810	8
IEEE 802.11 n HT 40	CH5	-20.140	8
	СН9	-20.230	8
Conclusion: PASS			

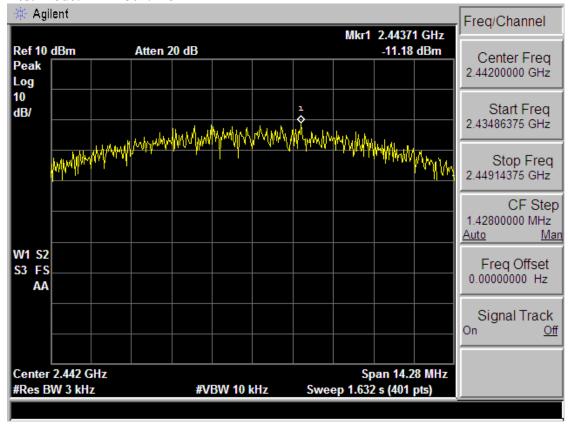
EST Technology Co., Ltd Report No. ESTE-R1603040 Page 137 of 156

## 8.4 Test Data

Test Mode: IEEE 802.11b 2412MHz



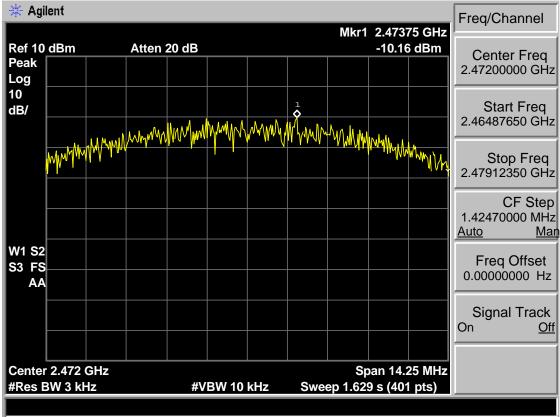
Test Mode: IEEE 802.11b 2442MHz



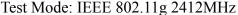


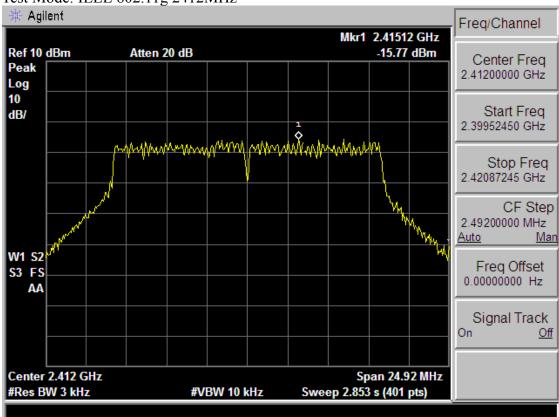
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Test Mode: IEEE 802.11b 2472MHz 🔆 Agilent

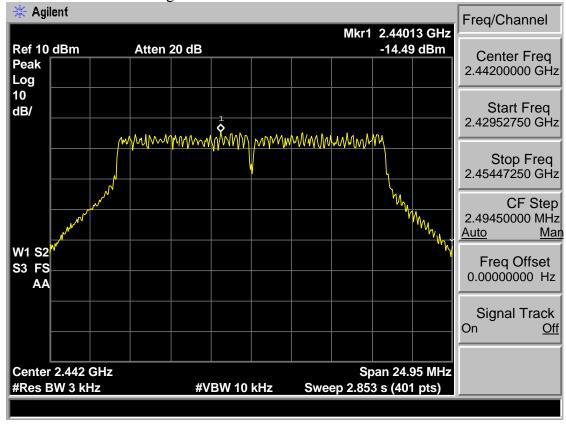








Test Mode: IEEE 802.11g 2442MHz

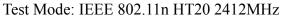


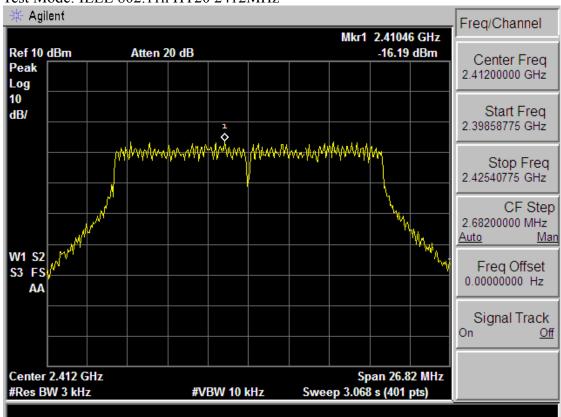


Test Mode: IEEE 802.11g 2472MHz Agilent Freq/Channel Mkr1 2.47169 GHz Ref 10 dBm Atten 20 dB -15.76 dBm Center Freq Peak 2.47200000 GHz Log 10 Start Freq dB/ 2.45951925 GHz Stop Freq 2.48442925 GHz CF Step 2.49100000 MHz Man W1 S2 Freq Offset 0.00000000 Hz S3 FS AA Signal Track On <u>Off</u> Center 2.472 GHz Span 24.91 MHz #Res BW 3 kHz Sweep 2.855 s (401 pts) #VBW 10 kHz

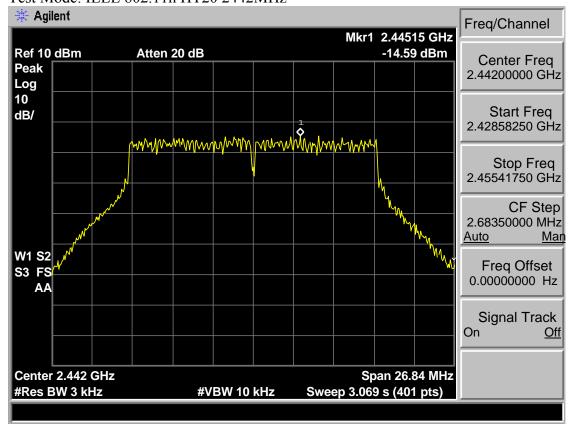


EST Technology Co., Ltd Report No. ESTE-R1603040 Page 141 of 156

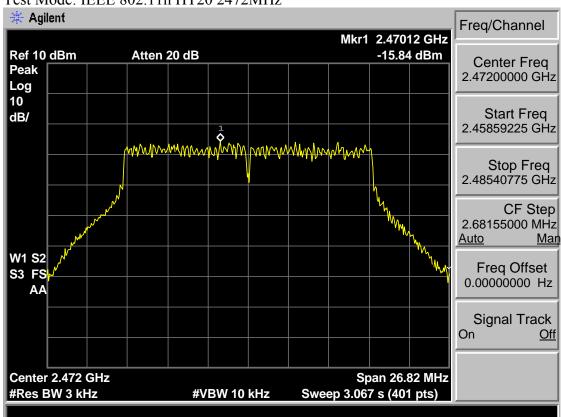




Test Mode: IEEE 802.11n HT20 2442MHz

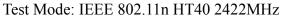


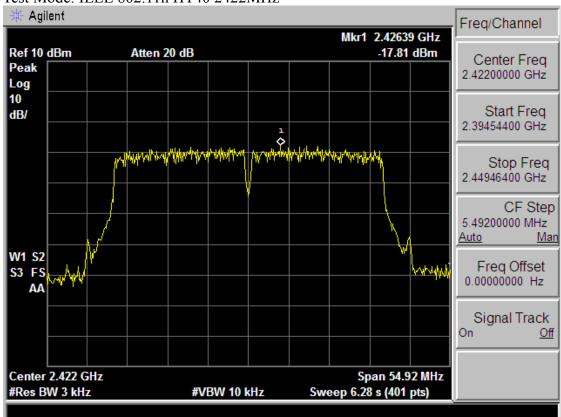




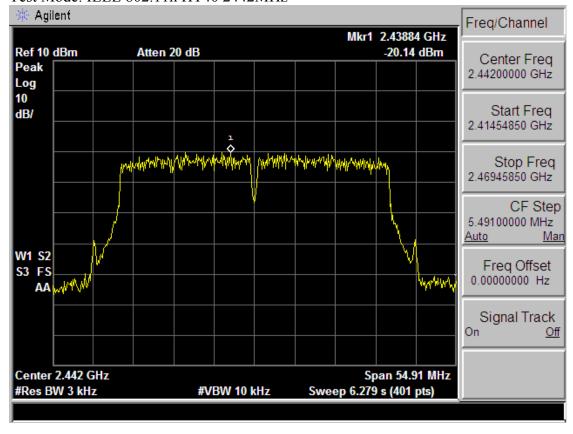




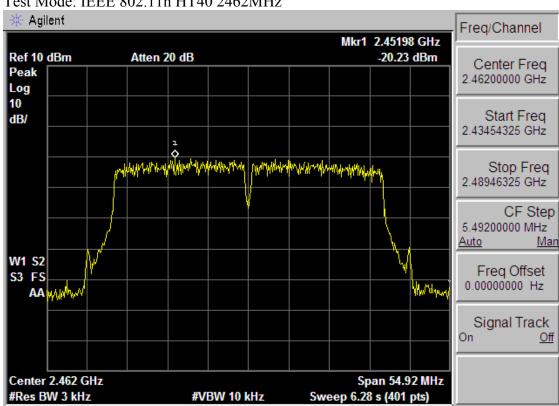




Test Mode: IEEE 802.11n HT40 2442MHz







Test Mode: IEEE 802.11n HT40 2462MHz



#### 9 ANTENNA REQUIREMENTS

#### 9.1 Limit

For intentional device, according to FCC 47 CFR Section 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. And according to FCC 47 CFR Section 15.247 (b), if transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

#### 9.2 Result

The antennas used for this product are Integral antenna and that no antenna other than that furnished by the responsible party shall be used with the device, the maximum peak gain of the transmit antenna is only 2 dBi.

EST Technology Co., Ltd Report No. ESTE-R1603040 Page 146 of 156

### 10 TEST SETUP PHOTO

Conducted Test







Radiated Test (30-1000 MHz)



Radiated Test (1000-25000 MHz)





# 11 PHOTOS OF EUT

External Photos







**External Photos** M/N: ELST4316S







External Photos







**External Photos** M/N: ELST4316S







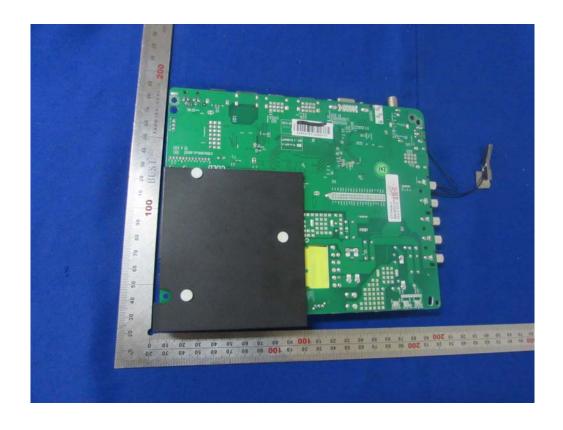
Internal Photos





# Internal Photos

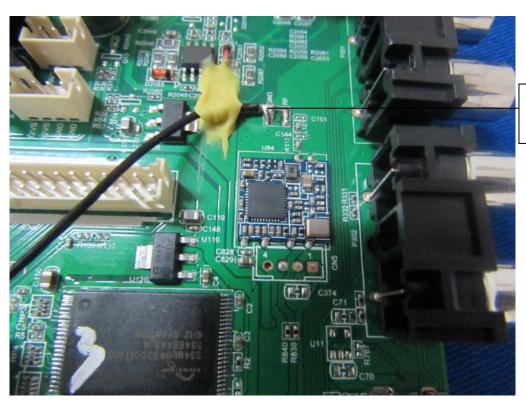






# **Internal Photos**





Wifi Antenna



## **Internal Photos**

