

FCC PART 15C TEST REPORT FOR CERTIFICATION  
On Behalf of

DEI Sales Inc., dba Polk Audio

Home Theater Sound Bar

Model Number: MAGNIFI MAX SOUND BAR

FCC ID : WLQAM8218TX


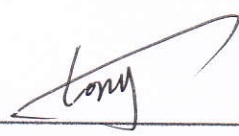

Prepared for:	DEI Sales Inc., dba Polk Audio
	1 Viper Way Vista, California 92081, USA
Prepared By:	EST Technology Co., Ltd.
	San Tun Management Zone, Houjie District, Dongguan, China
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Report Number:	ESTE-R1705053
Date of Test:	April 13 ~ May 06, 2017
Date of Report:	May 10, 2017

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## Test Report Verification

<b>Applicant:</b>	DEI Sales Inc., dba Polk Audio		
<b>Address:</b>	1 Viper Way Vista, California 92081, USA		
<b>Manufacturer Address:</b>	DEI Sales Inc., dba Polk Audio 1 Viper Way Vista, California 92081, USA		
<b>E.U.T:</b>	Home Theater Sound Bar		
<b>Model Number:</b>	MAGNIFI MAX SOUND BAR		
<b>Power Supply:</b>	DC 19V From Adapter Input AC 100-240V~50/60Hz		
<b>Test Voltage:</b>	DC 19V From Adapter Input AC 120V/60Hz DC 19V From Adapter Input AC 240V/60Hz		
<b>Trade Name:</b>	Polk	<b>Serial No.:</b>	-----
<b>Date of Receipt:</b>	April 01, 2017	<b>Date of Test:</b>	April 13 ~ May 06, 2017
<b>Test Specification:</b>	FCC Rules and Regulations Part 15 Subpart C:2016 ANSI C63.10:2013		
<b>Test Result:</b>	<p>The device described above is tested by EST Technology Co., Ltd.. The measurement results were contained in this test report and EST Technology Co., Ltd. was assumed full responsibility for the accuracy and completeness of these measurements. Also, this report shows that the EUT to be technically compliance with the FCC Rules and Regulations Part 15 Subpart C requirements.</p> <p>This report applies to above tested sample only and shall not be reproduced in part without written approval of EST Technology Co., Ltd.</p> <p style="text-align: right;">Date: May 10, 2017</p>		
<b>Prepared by:</b>	<b>Reviewed by:</b>	<b>Approved by:</b>	
			
Amy / Assistant	Tony/ Engineer	Iceman Hu / Manager	
<b>Other Aspects:</b>	None.		
<i>Abbreviations: OK/P=passed    fail/F=failed    n.a/N=not applicable    E.U.T=equipment under tested</i>			
<i>This test report is based on a single evaluation of one sample of above mentioned products ,It is not permitted to be duplicated in extracts without written approval of EST Technology Co., Ltd.</i>			

# 1. GENERAL INFORMATION

## 1.1. Description of Device (EUT)

Product Name	:	Home Theater Sound Bar
FCC ID	:	WLQAM8218TX
Model Number	:	MAGNIFI MAX SOUND BAR
Operation frequency	:	5743-5840 MHz
Number of channel	:	35
Antenna	:	PCB antenna Antenna A: 2.85 dBi gain Antenna B: 2.85 dBi gain Single input single output
Modulation	:	GFSK
Sample Type	:	Prototype production

## 2. SUMMARY OF TEST

### 2.1. Summary of test result

Description of Test Item	Standard	Results
Power Line Conducted Emissions	FCC Part 15C: 15.207 ANSI C63.10-2013	PASS
Radiated Emission Test	FCC Part 15C: 15.209 FCC Part 15C: 15.249 ANSI C63.10-2013	PASS
20 dB Bandwidth Test	FCC Part 15: 15.249 ANSI C63.10-2013	PASS
Band Edge Compliance Test	FCC Part 15: 15.215 ANSI C63.10-2013	PASS
Antenna requirement	FCC Part 15: 15.203	PASS
N/A is an abbreviation for Not Applicable.		

## 2.2. Test Facilities

EMC Lab	:	Certificated by CNAS, CHINA Registration No.: L5288 Date of registration: December 07, 2015  Certificated by FCC, USA Registration No.: 989591 Date of registration: November 15, 2016  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 District, Dongguan, Guangdong, China

### 2.3. Measurement uncertainty

Test Item	Uncertainty
Uncertainty for Conduction emission test	2.54dB
Uncertainty for Radiation Emission test (30MHz-1GHz)	3.62
Uncertainty for Radiation Emission test (1GHz to 18GHz)	4.86
Uncertainty for radio frequency	$7 \times 10^{-8}$
Uncertainty for conducted RF Power	0.20dB
Uncertainty for Power density test	0.26dB

Note: This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

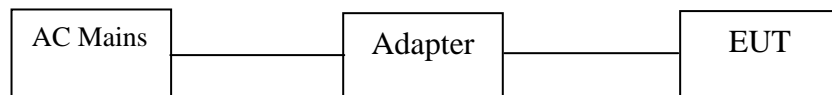
### 2.4. Assistant equipment used for test

#### 2.4.1. Adapter

M/N : DYS902-190473W  
 Input : AC 100-240V~50/60Hz 1.5A MAX  
 Output : DC 19V/4.73A

### 2.5. Block Diagram

For radiated emissions test: EUT was placed on a turn table, which is 0.8 or 1.5 meter high above ground. EUT was be set into TX test mode by software before test.



(EUT: Home Theater Sound Bar)

## 2.6. Test mode

The test software was used to control EUT work in Continuous TX mode, and select test channel, wireless mode

Mode	Channel	Frequency
TX	Low	5743MHz
	Middle	5792MHz
	High	5840MHz

## 2.7. Channel List for GFSK

Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)
1	5743	2	5747
3	5751	4	5752
5	5755	6	5758
7	5759	8	5763
9	5767	10	5771
11	5772	12	5775
13	5778	14	5779
15	5783	16	5787
17	5791	18	5792
19	5795	20	5798
21	5799	22	5803
23	5807	24	5811
25	5812	26	5815
27	5818	28	5819
29	5823	30	5827
31	5831	32	5832
33	5835	34	5837
35	5840	--	----



## 2.8. Test Equipment

### 2.8.1. For conducted emission test

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
EMI Test Receiver	Rohde & Schwarz	ESHS30	832354	June 25,16	1 Year
Artificial Mains Networ	Rohde & Schwarz	ENV216	101260	June 25,16	1 Year
Pulse Limiter	Rohde & Schwarz	ESH3-Z2	101100	June 25,16	1 Year

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

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
EMI Test Receiver	Rohde & Schwarz	ESVS10	100004	June 25,16	1 Year
Spectrum Analyzer	Agilent	E4411B	MY50140697	June 25,16	1 Year
Bilog Antenna	Teseq	CBL 6111D	27090	June 28,16	3 Year
Signal Amplifier	Agilent	310N	187037	June 25,16	1 Year

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

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
Horn Antenna	SCHWARZBECK	BBHA 9120 D	BBHA9120D 1002	June 28,16	3 Year
Signal Amplifier	SCHWARZBECK	BBV9718	9718-212	June 25,16	1 Year
Spectrum Analyzer	Agilent	E4408B	MY44211139	June 25,16	1 Year
RF Cable	Hubersuhner	RG 214/U	513423	June 25,16	1 Year

### 3. CONDUCTED EMISSION TEST

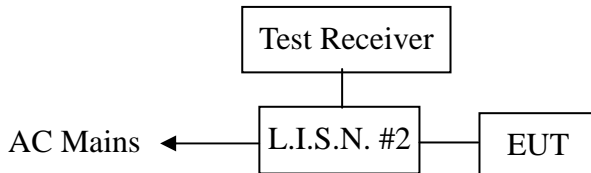
#### 3.1. Limit

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

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

#### 3.2. Block Diagram of Test Setup

Block diagram of connection between the EUT and simulators



#### 3.3. Test Procedure

The EUT was placed on a non-metallic table, 80cm above the ground plane. The EUT Power connected to the power mains through a line impedance stabilization network (L.I.S.N.#2). Please refer the block diagram of the test setup and photographs. Power on the PC and let it work normally, we use a keyboard test soft ware, let EUT working in test mode, then test it. Both sides of 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.

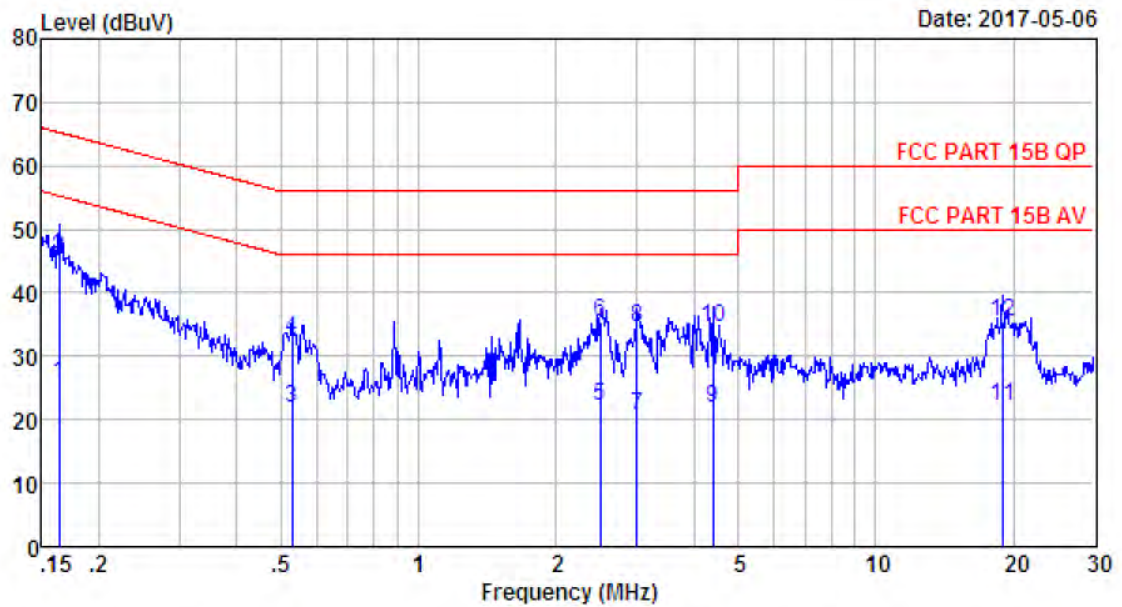
The frequency range from 150kHz to 30MHz is checked.

The test result are reported on Section 3.4.

#### 3.4. Test Result

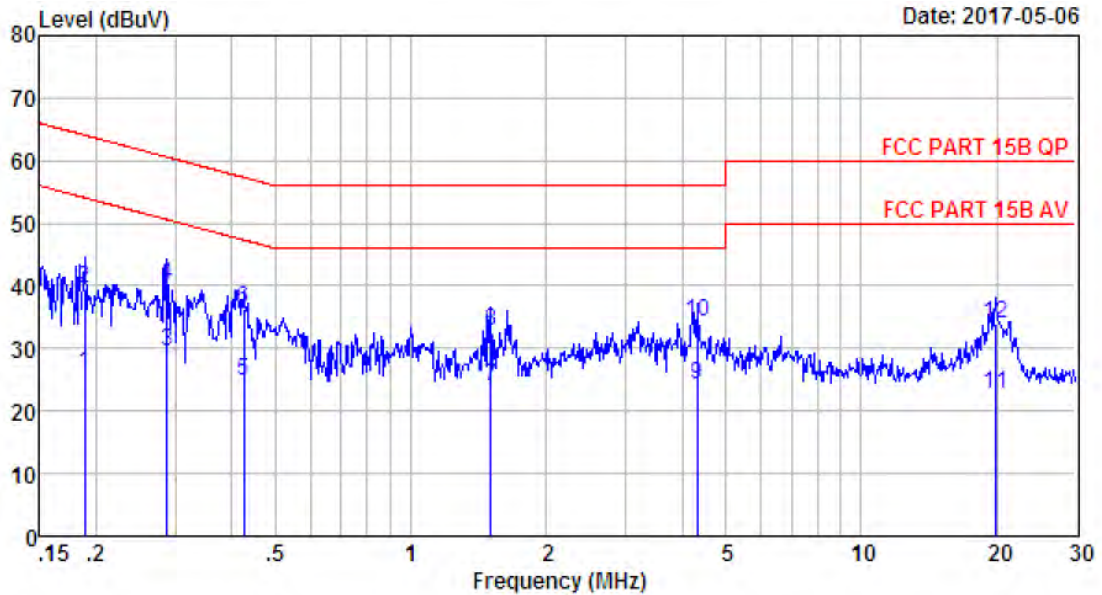
**PASS.** (All emissions not reported below are too low against the prescribed limits.)

### 3.5. Test Data



Site no : 844 Shield Room Data no. : 37  
 Env. / Ins. : Temp:24.3'C Humi:58% Press:101.50kPa LINE Phase : LINE  
 Limit : FCC PART 15B QP  
 Engineer : Tony  
 EUT : Home Theater Sound Bar  
 Power : DC 19V From Adapter Input AC 120V/60Hz  
 M/N : MAGNIFI MAX SOUND BAR  
 Test Mode : TX Mode

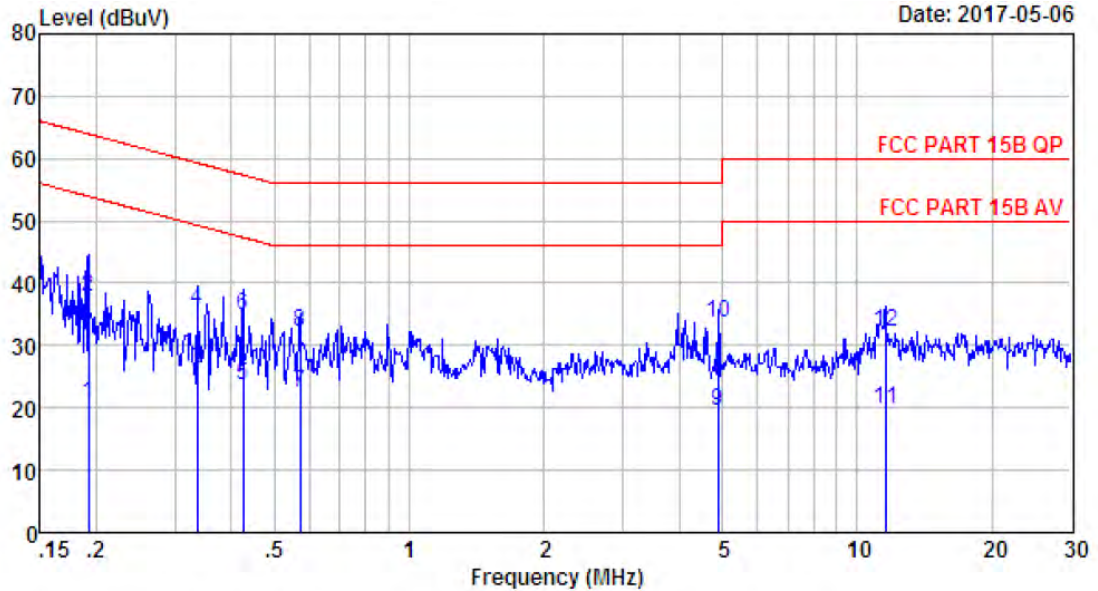
	Freq. (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.16	9.61	9.81	6.28	25.70	55.30	29.60	Average
2	0.16	9.61	9.81	26.05	45.47	65.30	19.83	QP
3	0.53	9.61	9.81	2.34	21.76	46.00	24.24	Average
4	0.53	9.61	9.81	13.29	32.71	56.00	23.29	QP
5	2.50	9.62	9.84	2.59	22.05	46.00	23.95	Average
6	2.50	9.62	9.84	15.93	35.39	56.00	20.61	QP
7	3.01	9.63	9.85	1.27	20.75	46.00	25.25	Average
8	3.01	9.63	9.85	15.07	34.55	56.00	21.45	QP
9	4.41	9.64	9.84	2.31	21.79	46.00	24.21	Average
10	4.41	9.64	9.84	15.16	34.64	56.00	21.36	QP
11	18.92	9.68	9.96	2.49	22.13	50.00	27.87	Average
12	18.92	9.68	9.96	15.77	35.41	60.00	24.59	QP



Site no : 844 Shield Room Data no. : 39  
 Env. / Ins. : Temp:24.3'C Humi:58% Press:101.50kPa LINE Phase : NEUTRAL  
 Limit : FCC PART 15B QP  
 Engineer : Tony  
 EUT : Home Theater Sound Bar  
 Power : DC 19V From Adapter Input AC 120V/60Hz  
 M/N : MAGNIFI MAX SOUND BAR  
 Test Mode : IX Mode

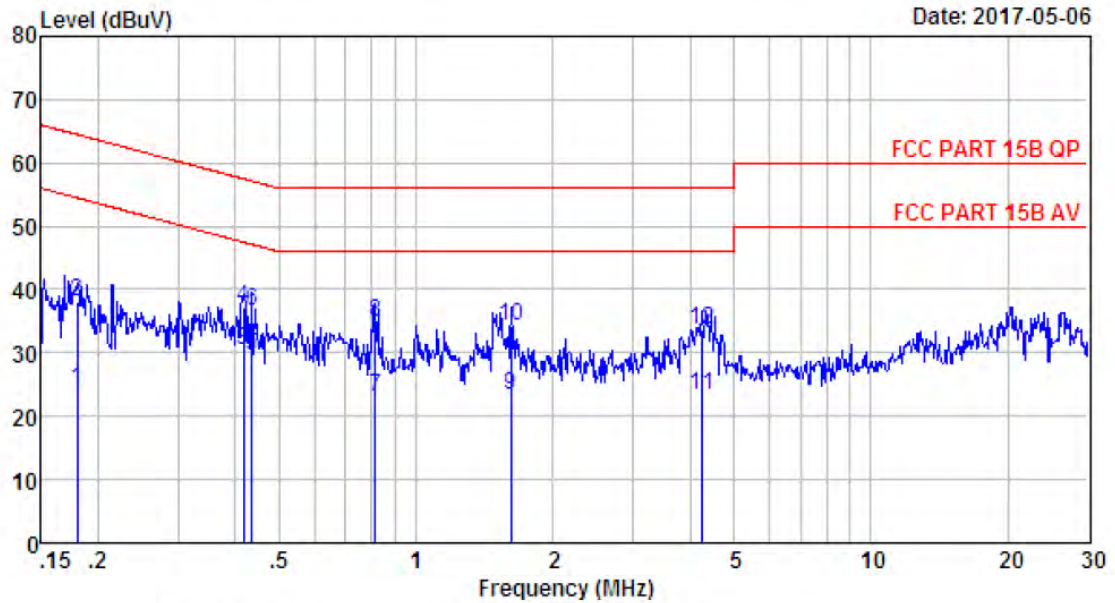
	Freq. (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.19	9.57	9.80	6.68	26.05	54.11	28.06	Average
2	0.19	9.57	9.80	20.30	39.67	64.11	24.44	QP
3	0.29	9.60	9.83	9.98	29.41	50.59	21.18	Average
4	0.29	9.60	9.83	20.76	40.19	60.59	20.40	QP
5	0.43	9.59	9.81	5.32	24.72	47.33	22.61	Average
6	0.43	9.59	9.81	16.82	36.22	57.33	21.11	QP
7	1.50	9.62	9.83	4.51	23.96	46.00	22.04	Average
8	1.50	9.62	9.83	13.22	32.67	56.00	23.33	QP
9	4.31	9.65	9.85	4.77	24.27	46.00	21.73	Average
10	4.31	9.65	9.85	14.82	34.32	56.00	21.68	QP
11	19.84	9.87	9.96	2.88	22.71	50.00	27.29	Average
12	19.84	9.87	9.96	14.24	34.07	60.00	25.93	QP





Site no : 844 Shield Room Data no. : 33  
 Env. / Ins. : Temp:24.3'C Humi:58% Press:101.50kPa LINE Phase : NEUTRAL  
 Limit : FCC PART 15B QP  
 Engineer : Tony  
 EUT : Home Theater Sound Bar  
 Power : DC 19V From Adapter Input AC 240V/60Hz  
 M/N : MAGNIFI MAX SOUND BAR  
 Test Mode : TX Mode

	Freq. (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBUV)	Emission Level (dBUV)	Limits (dBUV)	Margin (dB)	Remark
1	0.19	9.58	9.80	1.21	20.59	53.93	33.34	Average
2	0.19	9.58	9.80	18.29	37.67	63.93	26.26	QP
3	0.34	9.59	9.83	6.62	26.04	49.31	23.27	Average
4	0.34	9.59	9.83	16.20	35.62	59.31	23.69	QP
5	0.43	9.59	9.81	4.32	23.72	47.33	23.61	Average
6	0.43	9.59	9.81	15.46	34.86	57.33	22.47	QP
7	0.57	9.61	9.82	2.87	22.30	46.00	23.70	Average
8	0.57	9.61	9.82	12.74	32.17	56.00	23.83	QP
9	4.90	9.65	9.85	0.03	19.53	46.00	26.47	Average
10	4.90	9.65	9.85	14.13	33.63	56.00	22.37	QP
11	11.56	9.72	9.89	0.20	19.81	50.00	30.19	Average
12	11.56	9.72	9.89	12.67	32.28	60.00	27.72	QP



Site no : 844 Shield Room Data no. : 35  
 Env. / Ins. : Temp:24.3'C Humi:58% Press:101.50kPa LINE Phase : LINE  
 Limit : FCC PART 15B QP  
 Engineer : Tony  
 EUT : Home Theater Sound Bar  
 Power : DC 19V From Adapter Input AC 240V/60Hz  
 M/N : MAGNIFI MAX SOUND BAR  
 Test Mode : TX Mode

	Freq. (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.18	9.61	9.80	4.67	24.08	54.50	30.42	Average
2	0.18	9.61	9.80	18.64	38.05	64.50	26.45	QP
3	0.42	9.61	9.81	11.01	30.43	47.51	17.08	Average
4	0.42	9.61	9.81	17.70	37.12	57.51	20.39	QP
5	0.44	9.61	9.81	10.01	29.43	47.15	17.72	Average
6	0.44	9.61	9.81	17.20	36.62	57.15	20.53	QP
7	0.81	9.61	9.81	3.55	22.97	46.00	23.03	Average
8	0.81	9.61	9.81	15.35	34.77	56.00	21.23	QP
9	1.62	9.62	9.84	3.83	23.29	46.00	22.71	Average
10	1.62	9.62	9.84	14.81	34.27	56.00	21.73	QP
11	4.25	9.64	9.85	3.75	23.24	46.00	22.76	Average
12	4.25	9.64	9.85	14.23	33.72	56.00	22.28	QP

## 4. RADIATED EMISSIONS

### 4.1. Limit

FREQUENCY MHz	DISTANCE Meters	FIELD STRENGTHS LIMIT	
		$\mu\text{V}/\text{m}$	$\text{dB}(\mu\text{V})/\text{m}$
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	74.0 $\text{dB}(\mu\text{V})/\text{m}$ (Peak) 54.0 $\text{dB}(\mu\text{V})/\text{m}$ (Average)	

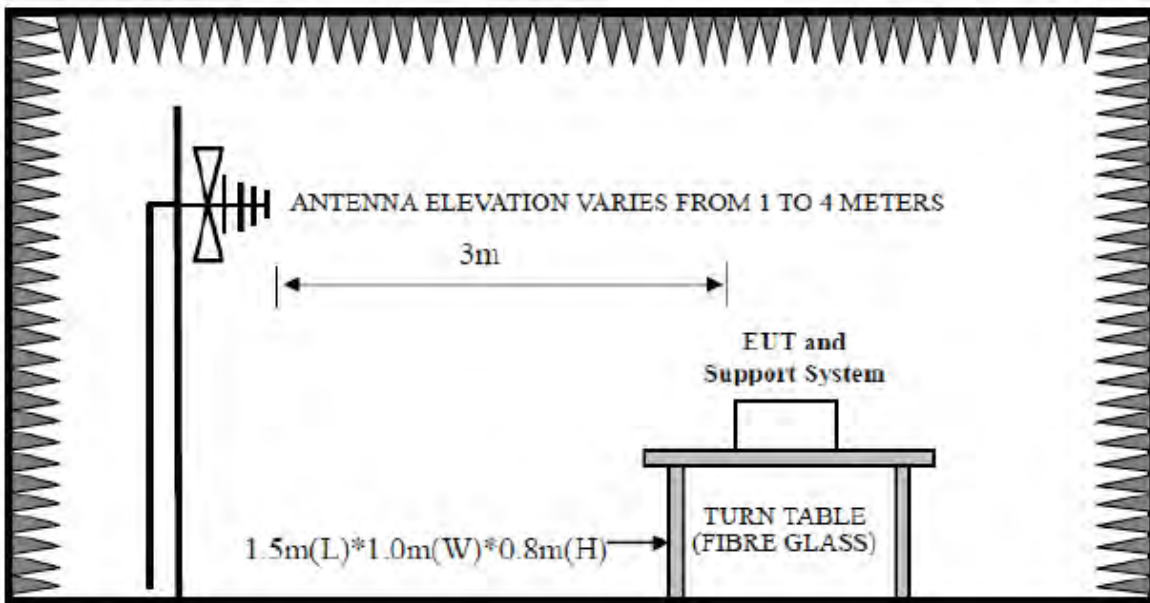
Remark : (1) Emission level  $\text{dB}\mu\text{V} = 20 \log$  Emission level  $\mu\text{V}/\text{m}$

(2) The smaller limit shall apply at the cross point between two frequency bands.

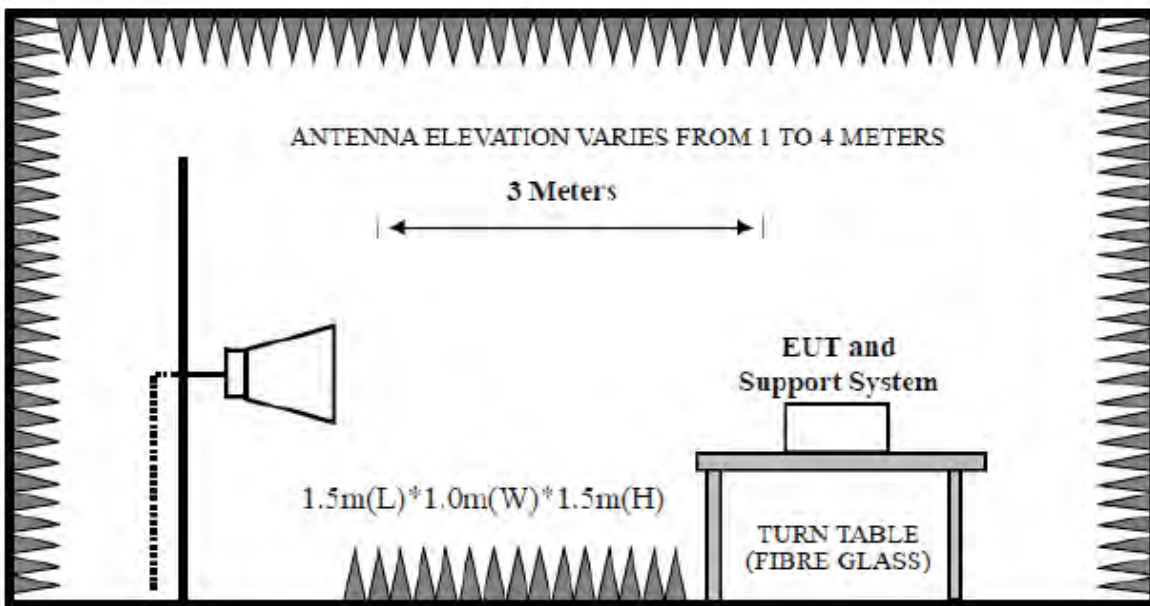
(3) Distance is the distance in meters between the measuring instrument, antenna and the closest point of any part of the device or system

### 4.2. Block Diagram of Test setup

30~1000MHz



Above 1GHz





### 4.3. Test Procedure

EUT was placed on a turn table, which is 0.8 meter high above ground for 30~1000MHz test, and which is 1.5 meter high above ground for above 1GHz test. 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 an antenna tower. The antenna can be moved up and down between 1 meter and 4 meters to find out the maximum emission level. Both horizontal and vertical polarization of the antenna are set on test.

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

The bandwidth of the Spectrum's VBW is set at 1MHz 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 PEAK measurement,

PEAK detector, 1MHz/10Hz for Average measurement

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

### 4.4. Test Result

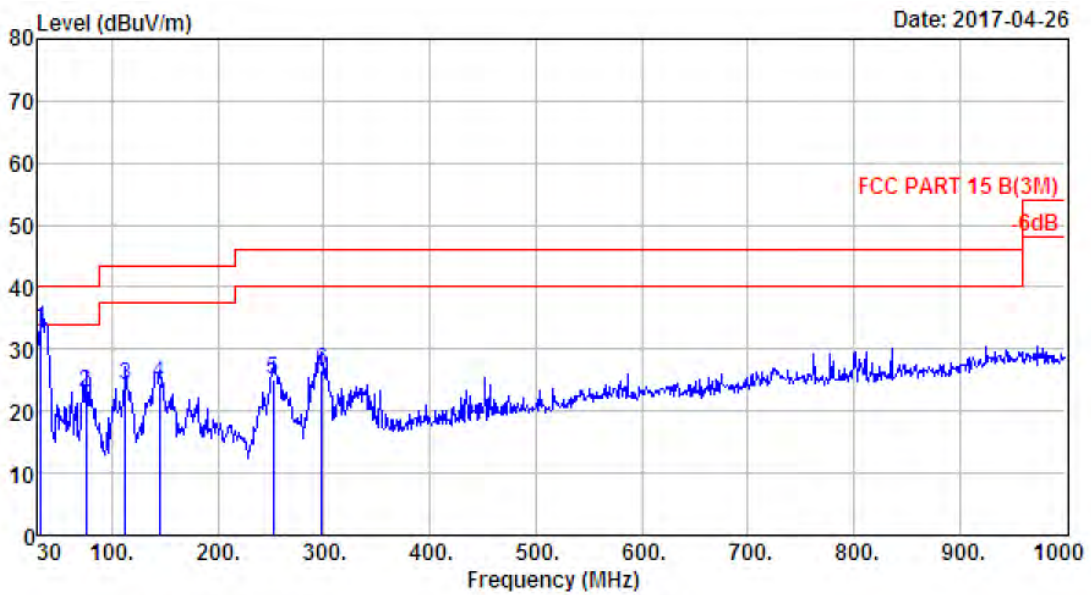
Pass

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 5743MHz 、 5792MHz and 5840MHz 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.

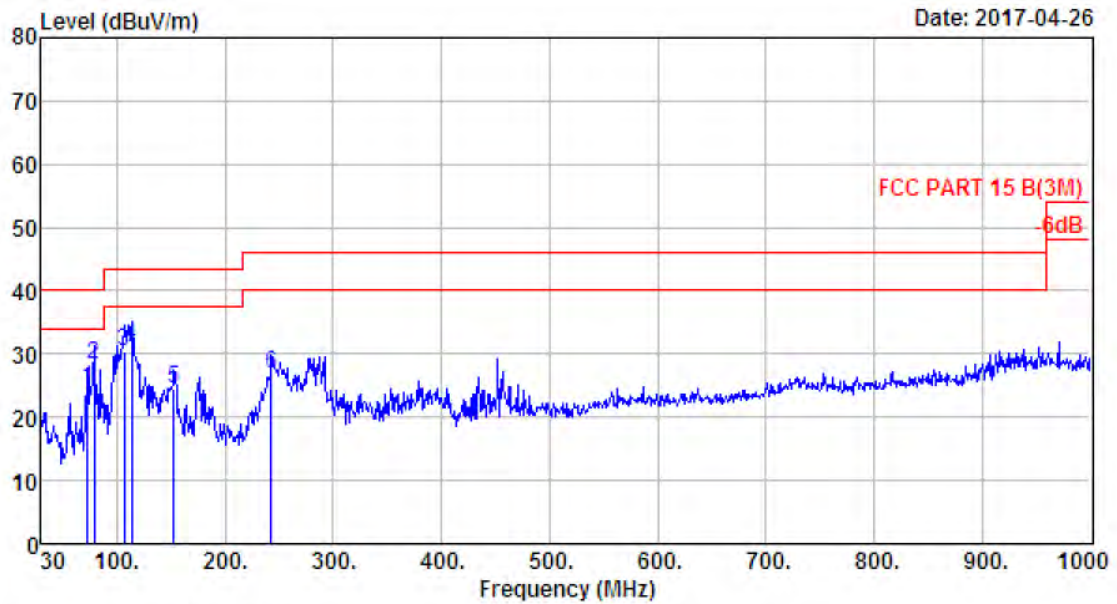
### 4.5. Test Data

#### 30 MHz – 1000 MHz



Site no. : 1# 966 Chamber                      Data no. : 151  
 Dis. / Ant. : 3m 27137                      Ant. pol. : VERTICAL  
 Limit : FCC PART 15 B(3M)  
 Env. / Ins. : Temp:23.6';Humi:56%;Press:101.52kPa  
 Engineer : Tony  
 EUT : Home Theater Sound Bar  
 Power : DC 19V From Adapter Input AC 120V/60Hz  
 M/N : MAGNIFI MAX SOUND BAR  
 Test Mode : GFSK TX 5743MHz  
                   Antenna A

	Freq. (MHz)	ANT Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	32.91	16.62	0.69	15.95	33.26	40.00	6.74	QP
2	75.59	6.51	1.19	15.44	23.14	40.00	16.86	QP
3	112.45	10.68	1.43	12.19	24.30	43.50	19.20	QP
4	144.46	11.26	1.54	11.72	24.52	43.50	18.98	QP
5	252.13	12.06	2.18	10.73	24.97	46.00	21.03	QP
6	297.72	12.99	2.36	11.32	26.67	46.00	19.33	QP

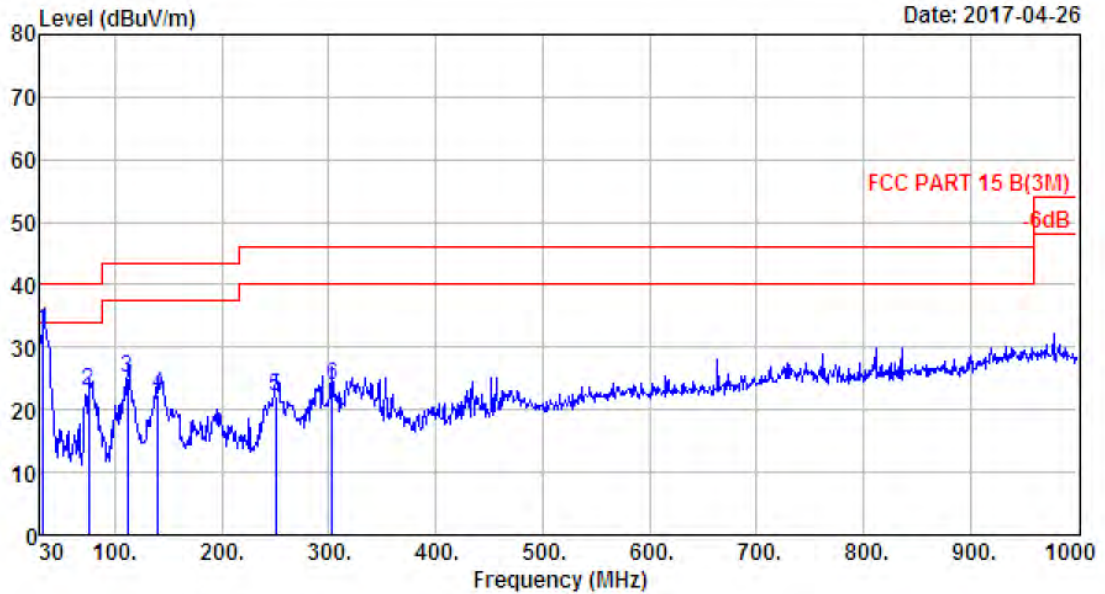


Site no. : 1# 966 Chamber                      Data no. : 152  
 Dis. / Ant. : 3m 27137                      Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15 B(3M)  
 Env. / Ins. : Temp:23.6';Humi:56%;Press:101.52kPa  
 Engineer : Tony  
 EUT : Home Theater Sound Bar  
 Power : DC 19V From Adapter Input AC 120V/60Hz  
 M/N : MAGNIFI MAX SOUND BAR  
 Test Mode : GFSK TX 5743MHz  
                   Antenna A

	Freq. (MHz)	ANT Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	72.68	6.12	1.13	17.14	24.39	40.00	15.61	QP
2	78.50	6.89	1.22	20.29	28.40	40.00	11.60	QP
3	106.63	10.15	1.38	18.91	30.44	43.50	13.06	QP
4	113.42	10.77	1.43	19.03	31.23	43.50	12.27	QP
5	152.22	10.78	1.62	12.17	24.57	43.50	18.93	QP
6	242.43	10.64	2.16	14.05	26.85	46.00	19.15	QP

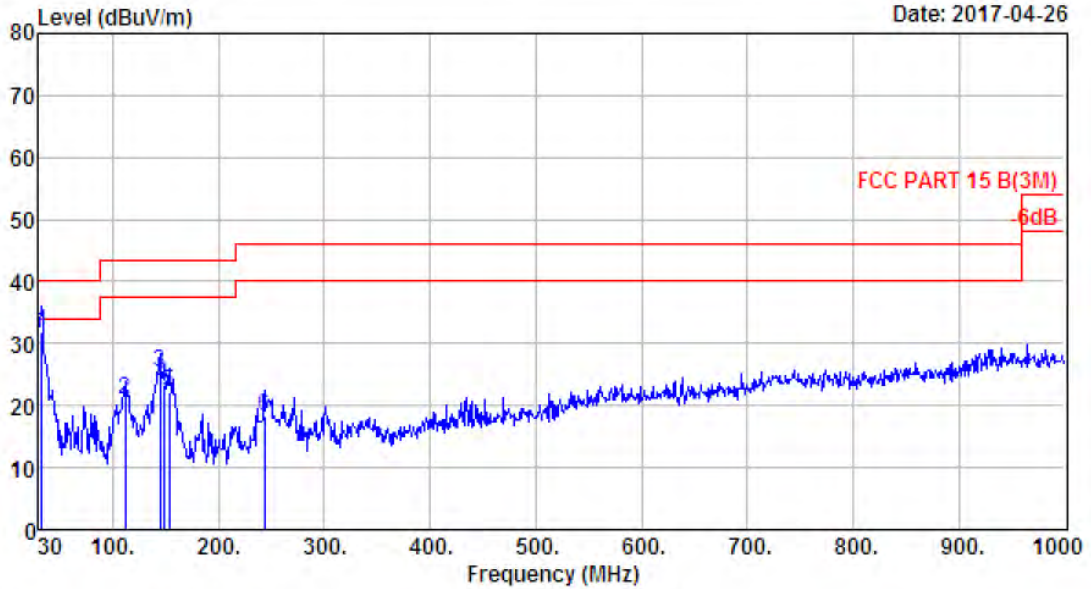






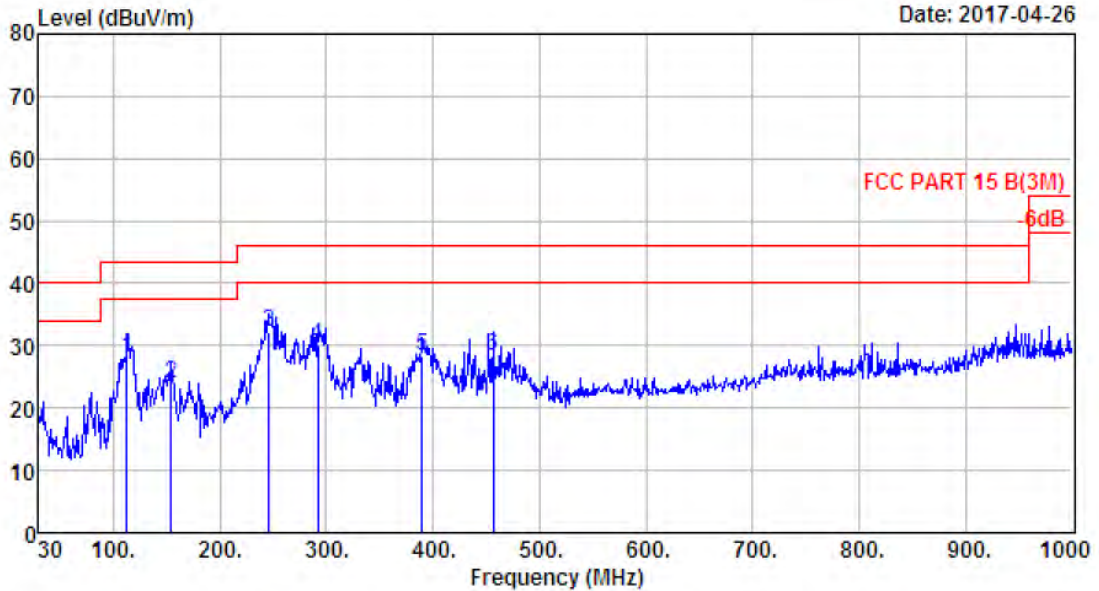
Site no. : 1# 966 Chamber Data no. : 154  
 Dis. / Ant. : 3m 27137 Ant. pol. : VERTICAL  
 Limit : FCC PART 15 B(3M)  
 Env. / Ins. : Temp:23.6';Humi:56%;Press:101.52kPa  
 Engineer : Tony  
 EUI : Home Theater Sound Bar  
 Power : DC 19V From Adapter Input AC 120V/60Hz  
 M/N : MAGNIFI MAX SOUND BAR  
 Test Mode : GFSK TX 5792MHz  
 Antenna A

	Freq. (MHz)	ANT Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	32.91	16.62	0.69	15.57	32.88	40.00	7.12	QP
2	75.59	6.51	1.19	15.41	23.11	40.00	16.89	QP
3	111.48	10.60	1.44	13.05	25.09	43.50	18.41	QP
4	140.58	11.40	1.49	9.41	22.30	43.50	21.20	QP
5	250.19	11.82	2.11	8.35	22.28	46.00	23.72	QP
6	303.54	13.08	2.43	8.31	23.82	46.00	22.18	QP



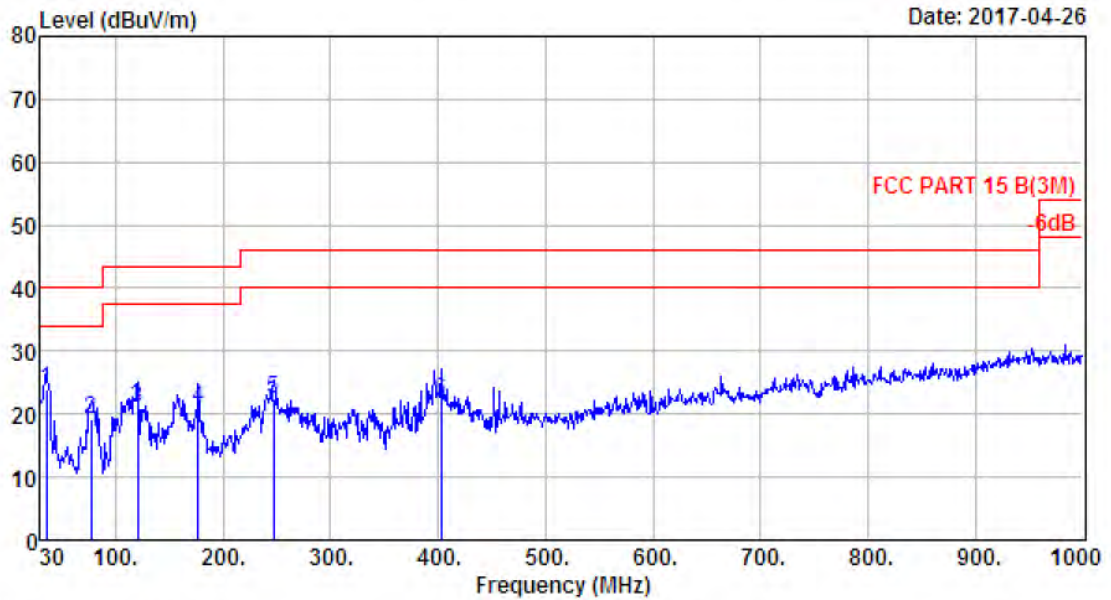
Site no. : 1# 966 Chamber Data no. : 155  
 Dis. / Ant. : 3m 27137 Ant. pol. : VERTICAL  
 Limit : FCC PART 15 B(3M)  
 Env. / Ins. : Temp:23.6';Humi:56%;Press:101.52kPa  
 Engineer : Tony  
 EUT : Home Theater Sound Bar  
 Power : DC 19V From Adapter Input AC 120V/60Hz  
 M/N : MAGNIFI MAX SOUND BAR  
 Test Mode : GFSK TX 5840MHz  
 Antenna A

	Freq. (MHz)	ANT Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	32.91	16.62	0.69	14.56	31.87	40.00	8.13	QP
2	111.48	10.60	1.44	8.79	20.83	43.50	22.67	QP
3	144.46	11.26	1.54	12.47	25.27	43.50	18.23	QP
4	148.34	11.00	1.69	10.77	23.46	43.50	20.04	QP
5	153.19	10.75	1.63	9.64	22.02	43.50	21.48	QP
6	243.40	10.78	2.14	5.40	18.32	46.00	27.68	QP



Site no. : 1# 966 Chamber Data no. : 156  
 Dis. / Ant. : 3m 27137 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15 B(3M)  
 Env. / Ins. : Temp:23.6';Humi:56%;Press:101.52kPa  
 Engineer : Tony  
 EUT : Home Theater Sound Bar  
 Power : DC 19V From Adapter Input AC 120V/60Hz  
 M/N : MAGNIFI MAX SOUND BAR  
 Test Mode : GFSK TX 5840MHz  
 Antenna A

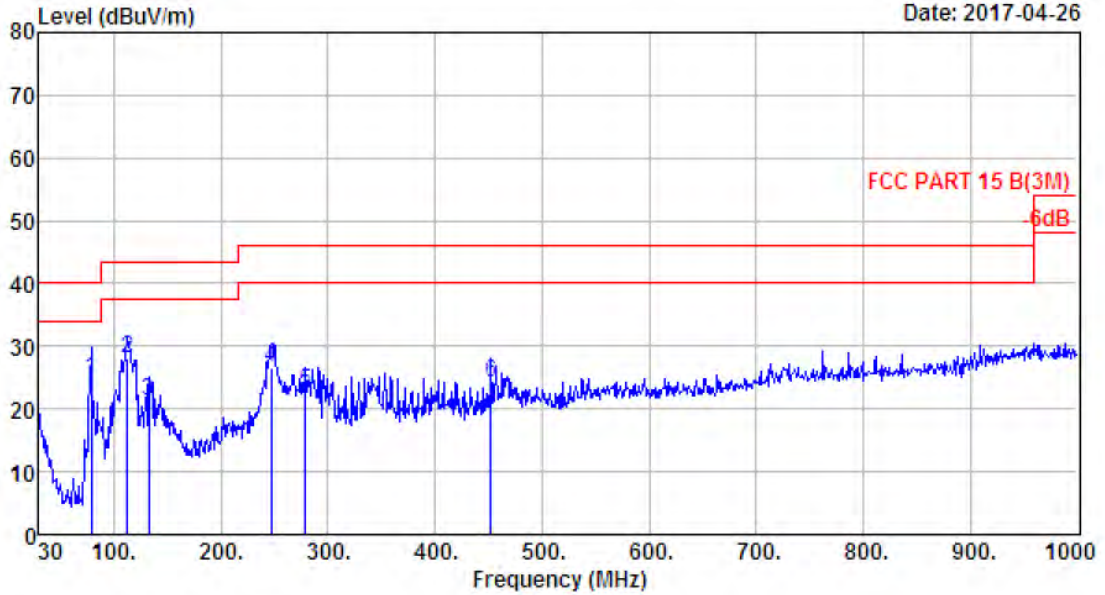
	Freq. (MHz)	ANT Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	112.45	10.68	1.43	15.82	27.93	43.50	15.57	QP
2	154.16	10.71	1.66	11.65	24.02	43.50	19.48	QP
3	246.31	11.21	2.12	18.94	32.27	46.00	13.73	QP
4	291.90	12.83	2.33	15.06	30.22	46.00	15.78	QP
5	389.87	15.60	2.65	9.96	28.21	46.00	17.79	QP
6	456.80	16.73	2.93	8.61	28.27	46.00	17.73	QP



Site no. : site Data no. : 173  
 Dis. / Ant. : 3m 27137 Ant. pol. : VERTICAL  
 Limit : FCC PART 15 B(3M)  
 Env. / Ins. : Temp:23.6';Humi:56%;Press:101.52kPa  
 Engineer : Blake  
 EUT : Home Theater Sound Bar  
 Power : DC 19V From Adapter Input AC 120V/60Hz  
 M/N : MAGNIFI MAX SOUND BAR  
 Test Mode : GFSK TX 5743MHz  
 Antenna B

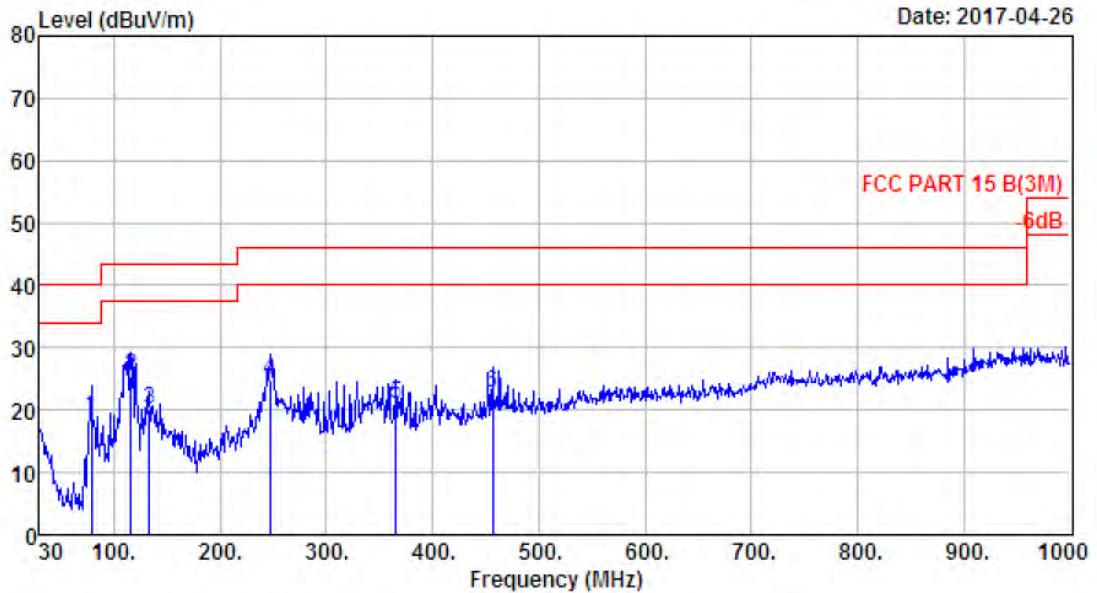
	Freq. (MHz)	ANT Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	35.82	14.99	0.75	8.05	23.79	40.00	16.21	QP
2	77.53	6.80	1.20	11.22	19.22	40.00	20.78	QP
3	120.21	11.16	1.41	8.46	21.03	43.50	22.47	QP
4	176.47	8.98	1.67	10.26	20.91	43.50	22.59	QP
5	247.28	11.36	2.15	8.88	22.39	46.00	23.61	QP
6	402.48	16.12	2.74	3.20	22.06	46.00	23.94	QP





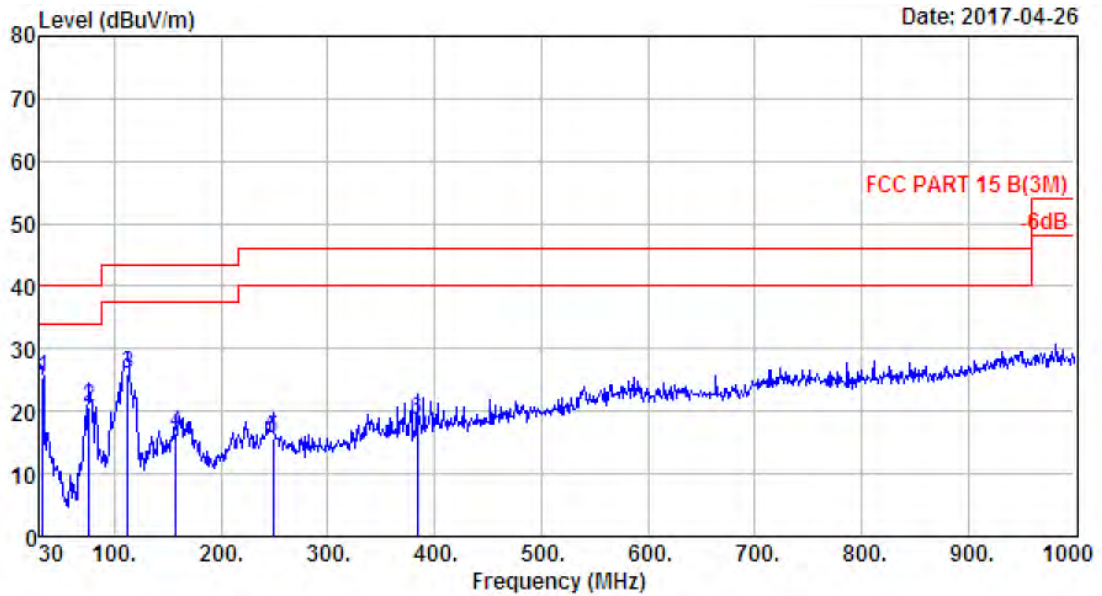
Site no. : 1# 966 Chamber Data no. : 174  
 Dis. / Ant. : 3m 27137 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15 B(3M)  
 Env. / Ins. : Temp:23.6';Humi:56%;Press:101.52kPa  
 Engineer : Blake  
 EUT : Home Theater Sound Bar  
 Power : DC 19V From Adapter Input AC 120V/60Hz  
 M/N : MAGNIFI MAX SOUND BAR  
 Test Mode : GFSK TX 5743MHz  
 Antenna B

	Freq. (MHz)	ANT Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	78.50	6.89	1.22	16.80	24.91	40.00	15.09	QP
2	112.45	10.68	1.43	16.04	28.15	43.50	15.35	QP
3	132.82	11.35	1.53	8.33	21.21	43.50	22.29	QP
4	247.28	11.36	2.15	12.95	26.46	46.00	19.54	QP
5	279.29	12.37	2.23	8.07	22.67	46.00	23.33	QP
6	451.95	16.54	2.95	4.64	24.13	46.00	21.87	QP



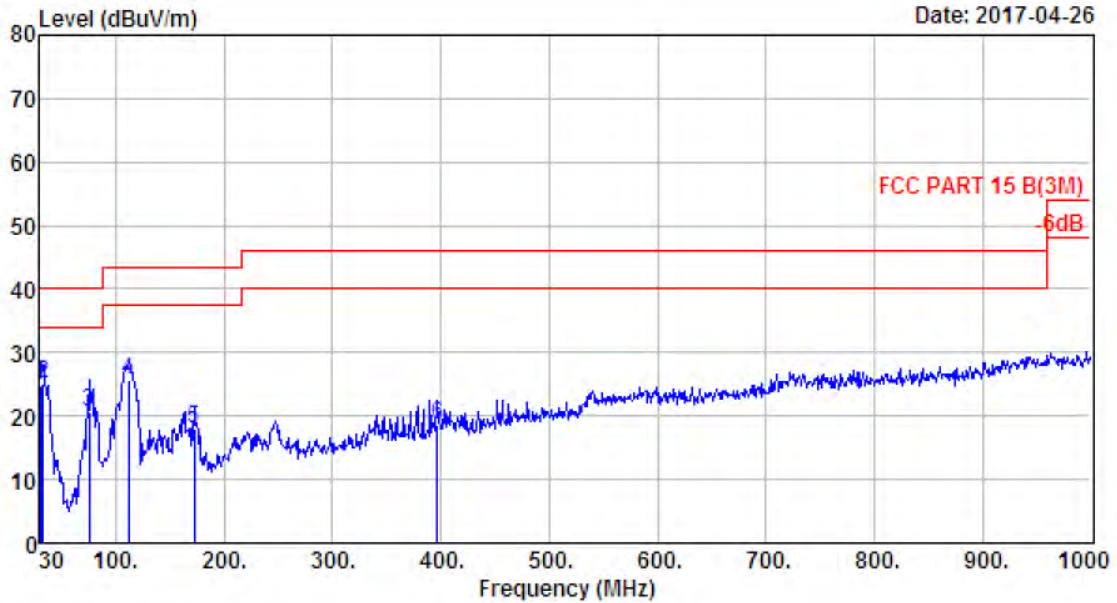
Site no. : 1# 966 Chamber Data no. : 175  
 Dis. / Ant. : 3m 27137 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15 B(3M)  
 Env. / Ins. : Temp:23.6%;Humi:56%;Press:101.52kPa  
 Engineer : Blake  
 EUT : Home Theater Sound Bar  
 Power : DC 19V From Adapter Input AC 120V/60Hz  
 M/N : MAGNIFI MAX SOUND BAR  
 Test Mode : GFSK TX 5792MHz  
 Antenna B

	Freq. (MHz)	ANT Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	78.50	6.89	1.22	10.77	18.88	40.00	21.12	QP
2	116.33	10.98	1.50	12.78	25.26	43.50	18.24	QP
3	133.79	11.36	1.56	7.01	19.93	43.50	23.57	QP
4	247.28	11.36	2.15	11.32	24.83	46.00	21.17	QP
5	365.62	14.68	2.67	3.58	20.93	46.00	25.07	QP
6	456.80	16.73	2.93	3.09	22.75	46.00	23.25	QP



Site no. : 1# 966 Chamber Data no. : 176  
 Dis. / Ant. : 3m 27137 Ant. pol. : VERTICAL  
 Limit : FCC PART 15 B(3M)  
 Env. / Ins. : Temp:23.6';Humi:56%;Press:101.52kPa  
 Engineer : Blake  
 EUT : Home Theater Sound Bar  
 Power : DC 19V From Adapter Input AC 120V/60Hz  
 M/N : MAGNIFI MAX SOUND BAR  
 Test Mode : GFSK TX 5792MHz  
 Antenna B

	Freq. (MHz)	ANT Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	32.91	16.62	0.69	7.96	25.27	40.00	14.73	QP
2	76.56	6.66	1.19	12.68	20.53	40.00	19.47	QP
3	112.45	10.68	1.43	13.98	26.09	43.50	17.41	QP
4	158.04	10.48	1.64	4.38	16.50	43.50	27.00	QP
5	248.25	11.52	2.13	2.13	15.78	46.00	30.22	QP
6	384.05	15.24	2.64	0.74	18.62	46.00	27.38	QP



Site no. : 1# 966 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 : Blake  
 EUT : Home Theater Sound Bar  
 Power : DC 19V From Adapter Input AC 120V/60Hz  
 M/N : MAGNIFI MAX SOUND BAR  
 Test Mode : GFSK TX 5840MHz  
 Antenna B

	Freq. (MHz)	ANT Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	30.00	18.51	0.65	5.60	24.76	40.00	15.24	QP
2	32.91	16.62	0.69	7.74	25.05	40.00	14.95	QP
3	75.59	6.51	1.19	12.88	20.58	40.00	19.42	QP
4	111.48	10.60	1.44	13.52	25.56	43.50	17.94	QP
5	172.59	9.07	1.68	7.38	18.13	43.50	25.37	QP
6	396.66	15.91	2.63	-0.03	18.51	46.00	27.49	QP





Above 1GHz

Site no. : 1# 966 Chamber Data no. : 21  
 Dis. / Ant. : 3m ANT 1-18G Ant. pol. : VERTICAL  
 Limit : FCC PART 15 PEAK 5.8  
 Env. / Ins. : Temp:23.6';Humi:56%;Press:101.52kPa  
 Engineer : Tony  
 EUT : Home Theater Sound Bar  
 Power : DC 19V From Adapter Input AC 120V/60Hz  
 M/N : MAGNIFI MAX SOUND BAR  
 Test Mode : GFSK TX 5743MHz  
 Antenna A

	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	5114.00	31.62	12.45	32.17	32.83	44.73	74.00	29.27	Peak
2	5743.00	32.27	12.05	32.54	74.03	85.81	94.00	8.19	Average
3	5743.00	32.27	12.05	32.54	86.43	98.21	114.00	15.79	Peak
4	11370.00	39.28	11.02	34.36	32.75	48.69	74.00	25.31	Peak
5	11486.00	39.21	10.93	34.55	31.66	47.25	74.00	26.75	Peak
6	17229.00	40.58	10.90	33.55	30.20	48.13	74.00	25.87	Peak
7	17847.00	44.95	11.20	32.12	27.75	51.78	74.00	22.22	Peak

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

Site no. : 1# 966 Chamber Data no. : 22  
 Dis. / Ant. : 3m ANT 1-18G Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15 PEAK 5.8  
 Env. / Ins. : Temp:23.6';Humi:56%;Press:101.52kPa  
 Engineer : Tony  
 EUT : Home Theater Sound Bar  
 Power : DC 19V From Adapter Input AC 120V/60Hz  
 M/N : MAGNIFI MAX SOUND BAR  
 Test Mode : GFSK TX 5743MHz  
 Antenna A

	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	5080.00	31.59	12.49	32.14	34.53	46.47	74.00	27.53	Peak
2	5743.00	32.27	12.05	32.54	71.03	82.81	94.00	11.19	Average
3	5743.00	32.27	12.05	32.54	81.42	93.20	114.00	20.80	Peak
4	11166.00	39.41	11.17	33.97	30.13	46.74	74.00	27.26	Peak
5	11486.00	39.21	10.93	34.55	31.59	47.18	74.00	26.82	Peak
6	17229.00	40.58	10.90	33.55	30.41	48.34	74.00	25.66	Peak
7	17915.00	45.62	11.28	30.22	24.41	51.09	74.00	22.91	Peak

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



Site no. : 1# 966 Chamber Data no. : 23  
 Dis. / Ant. : 3m ANT 1-18G Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15 PEAK 5.8  
 Env. / Ins. : Temp:23.6';Humi:56%;Press:101.52kPa  
 Engineer : Tony  
 EUT : Home Theater Sound Bar  
 Power : DC 19V From Adapter Input AC 120V/60Hz  
 M/N : MAGNIFI MAX SOUND BAR  
 Test Mode : GFSK TX 5792MHz  
 Antenna A

	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	5216.00	31.68	12.33	32.17	33.36	45.20	74.00	28.80	Peak
2	5792.00	32.36	12.07	32.47	69.71	81.67	94.00	12.33	Average
3	5792.00	32.36	12.07	32.47	80.35	92.31	114.00	21.69	Peak
4	10996.00	39.52	11.29	33.65	30.61	47.77	74.00	26.23	Peak
5	11584.00	39.10	11.01	34.74	30.45	45.82	74.00	28.18	Peak
6	17376.00	41.17	10.85	34.50	27.58	45.10	74.00	28.90	Peak
7	17966.00	46.12	11.34	28.80	21.09	49.75	74.00	24.25	Peak

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

Site no. : 1# 966 Chamber Data no. : 24  
 Dis. / Ant. : 3m ANT 1-18G Ant. pol. : VERTICAL  
 Limit : FCC PART 15 PEAK 5.8  
 Env. / Ins. : Temp:23.6';Humi:56%;Press:101.52kPa  
 Engineer : Tony  
 EUT : Home Theater Sound Bar  
 Power : DC 19V From Adapter Input AC 120V/60Hz  
 M/N : MAGNIFI MAX SOUND BAR  
 Test Mode : GFSK TX 5792MHz  
 Antenna A

	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	5046.00	31.57	12.53	32.08	32.81	44.83	74.00	29.17	Peak
2	5792.00	32.36	12.07	32.47	70.71	82.67	94.00	11.33	Average
3	5792.00	32.36	12.07	32.47	83.34	95.30	114.00	18.70	Peak
4	6440.00	34.08	12.22	31.95	31.40	45.75	74.00	28.25	Peak
5	11584.00	39.10	11.01	34.74	26.86	42.23	74.00	31.77	Peak
6	17376.00	41.17	10.85	34.50	28.60	46.12	74.00	27.88	Peak
7	17983.00	46.28	11.36	28.32	18.53	47.85	74.00	26.15	Peak

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

Site no. : 1# 966 Chamber Data no. : 25  
 Dis. / Ant. : 3m ANT 1-18G Ant. pol. : VERTICAL  
 Limit : FCC PART 15 PEAK 5.8  
 Env. / Ins. : Temp:23.6';Humi:56%;Press:101.52kPa  
 Engineer : Tony  
 EUT : Home Theater Sound Bar  
 Power : DC 19V From Adapter Input AC 120V/60Hz  
 M/N : MAGNIFI MAX SOUND BAR  
 Test Mode : GFSK TX 5840MHz  
 Antenna A

	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	4995.00	31.54	12.59	32.00	33.14	45.27	74.00	28.73	Peak
2	5840.00	32.46	12.08	32.40	68.87	81.01	94.00	12.99	Average
3	5840.00	32.46	12.08	32.40	79.16	91.30	114.00	22.70	Peak
4	9364.00	38.02	11.64	32.06	28.97	46.57	74.00	27.43	Peak
5	11680.00	38.98	11.09	34.93	26.30	41.44	74.00	32.56	Peak
6	17520.00	41.79	10.82	35.34	29.22	46.49	74.00	27.51	Peak
7	18000.00	46.45	11.38	27.85	20.27	50.25	74.00	23.75	Peak

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

Site no. : 1# 966 Chamber Data no. : 26  
 Dis. / Ant. : 3m ANT 1-18G Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15 PEAK 5.8  
 Env. / Ins. : Temp:23.6';Humi:56%;Press:101.52kPa  
 Engineer : Tony  
 EUT : Home Theater Sound Bar  
 Power : DC 19V From Adapter Input AC 120V/60Hz  
 M/N : MAGNIFI MAX SOUND BAR  
 Test Mode : GFSK TX 5840MHz  
 Antenna A

	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	5165.00	31.65	12.39	32.16	33.20	45.08	74.00	28.92	Peak
2	5840.00	32.46	12.08	32.40	68.77	80.91	94.00	13.09	Average
3	5840.00	32.46	12.08	32.40	77.62	89.76	114.00	24.24	Peak
4	6610.00	34.47	12.07	32.18	31.31	45.67	74.00	28.33	Peak
5	11680.00	38.98	11.09	34.93	28.42	43.56	74.00	30.44	Peak
6	17520.00	41.79	10.82	35.34	29.83	47.10	74.00	26.90	Peak
7	18000.00	46.45	11.38	27.85	19.20	49.18	74.00	24.82	Peak

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



Site no. : 1# 966 Chamber Data no. : 31  
 Dis. / Ant. : 3m ANT 1-18G Ant. pol. : VERTICAL  
 Limit : FCC PART 15 PEAK 5.8  
 Env. / Ins. : Temp:23.6';Humi:56%;Press:101.52kPa  
 Engineer : Tony  
 EUT : Home Theater Sound Bar  
 Power : DC 19V From Adapter Input AC 120V/60Hz  
 M/N : MAGNIFI MAX SOUND BAR  
 Test Mode : GFSK TX 5743MHz  
 Antenna B

	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	4944.00	31.47	12.37	31.96	33.99	45.87	74.00	28.13	Peak
2	5743.00	32.27	12.05	32.54	71.03	82.81	94.00	11.19	Average
3	5743.00	32.27	12.05	32.54	83.69	95.47	114.00	18.53	Peak
4	11013.00	39.51	11.28	33.68	31.30	48.41	74.00	25.59	Peak
5	11486.00	39.21	10.93	34.55	31.65	47.24	74.00	26.76	Peak
6	17229.00	40.58	10.90	33.55	30.97	48.90	74.00	25.10	Peak
7	17949.00	45.95	11.32	29.27	22.71	50.71	74.00	23.29	Peak

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

Site no. : 1# 966 Chamber Data no. : 32  
 Dis. / Ant. : 3m ANT 1-18G Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15 PEAK 5.8  
 Env. / Ins. : Temp:23.6';Humi:56%;Press:101.52kPa  
 Engineer : Tony  
 EUT : Home Theater Sound Bar  
 Power : DC 19V From Adapter Input AC 120V/60Hz  
 M/N : MAGNIFI MAX SOUND BAR  
 Test Mode : GFSK TX 5743MHz  
 Antenna B

	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	5114.00	31.62	12.45	32.17	33.38	45.28	74.00	28.72	Peak
2	5743.00	32.27	12.05	32.54	68.03	79.81	94.00	14.19	Average
3	5743.00	32.27	12.05	32.54	76.39	88.17	114.00	25.83	Peak
4	11064.00	39.48	11.24	33.78	31.13	48.07	74.00	25.93	Peak
5	11486.00	39.21	10.93	34.55	31.53	47.12	74.00	26.88	Peak
6	17229.00	40.58	10.90	33.55	30.09	48.02	74.00	25.98	Peak
7	17966.00	46.12	11.34	28.80	21.25	49.91	74.00	24.09	Peak

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

Site no. : 1# 966 Chamber Data no. : 33  
 Dis. / Ant. : 3m ANT 1-18G Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15 PEAK 5.8  
 Env. / Ins. : Temp:23.6';Humi:56%;Press:101.52kPa  
 Engineer : Tony  
 EUT : Home Theater Sound Bar  
 Power : DC 19V From Adapter Input AC 120V/60Hz  
 M/N : MAGNIFI MAX SOUND BAR  
 Test Mode : GFSK TX 5792MHz  
 Antenna B

	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	4910.00	31.42	12.22	31.93	33.45	45.16	74.00	28.84	Peak
2	5792.00	32.36	12.07	32.47	67.27	79.23	94.00	14.77	Average
3	5792.00	32.36	12.07	32.47	76.28	88.24	114.00	25.76	Peak
4	10180.00	38.42	11.49	32.11	29.08	46.88	74.00	27.12	Peak
5	11584.00	39.10	11.01	34.74	27.84	43.21	74.00	30.79	Peak
6	17376.00	41.17	10.85	34.50	30.77	48.29	74.00	25.71	Peak
7	17983.00	46.28	11.36	28.32	21.02	50.34	74.00	23.66	Peak

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

Site no. : 1# 966 Chamber Data no. : 34  
 Dis. / Ant. : 3m ANT 1-18G Ant. pol. : VERTICAL  
 Limit : FCC PART 15 PEAK 5.8  
 Env. / Ins. : Temp:23.6';Humi:56%;Press:101.52kPa  
 Engineer : Tony  
 EUT : Home Theater Sound Bar  
 Power : DC 19V From Adapter Input AC 120V/60Hz  
 M/N : MAGNIFI MAX SOUND BAR  
 Test Mode : GFSK TX 5792MHz  
 Antenna B

	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	5080.00	31.59	12.49	32.14	33.18	45.12	74.00	28.88	Peak
2	5792.00	32.36	12.07	32.47	69.71	81.67	94.00	12.33	Average
3	5792.00	32.36	12.07	32.47	80.81	92.77	114.00	21.23	Peak
4	7426.00	36.56	11.60	31.95	32.25	48.46	74.00	25.54	Peak
5	11584.00	39.10	11.01	34.74	29.12	44.49	74.00	29.51	Peak
6	17376.00	41.17	10.85	34.50	27.60	45.12	74.00	28.88	Peak
7	17983.00	46.28	11.36	28.32	19.59	48.91	74.00	25.09	Peak

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



Site no. : 1# 966 Chamber Data no. : 35  
 Dis. / Ant. : 3m ANT 1-18G Ant. pol. : VERTICAL  
 Limit : FCC PART 15 PEAK 5.8  
 Env. / Ins. : Temp:23.6';Humi:56%;Press:101.52kPa  
 Engineer : Tony  
 EUT : Home Theater Sound Bar  
 Power : DC 19V From Adapter Input AC 120V/60Hz  
 M/N : MAGNIFI MAX SOUND BAR  
 Test Mode : GFSK TX 5840MHz  
 Antenna B

	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	5114.00	31.62	12.45	32.17	32.69	44.59	74.00	29.41	Peak
2	5840.00	32.46	12.08	32.40	70.57	82.71	94.00	11.29	Average
3	5840.00	32.46	12.08	32.40	83.72	95.86	114.00	18.14	Peak
4	8004.00	37.01	11.40	31.22	30.98	48.17	74.00	25.83	Peak
5	11680.00	38.98	11.09	34.93	31.25	46.39	74.00	27.61	Peak
6	17520.00	41.79	10.82	35.34	30.53	47.80	74.00	26.20	Peak
7	17898.00	45.45	11.26	30.70	24.16	50.17	74.00	23.83	Peak

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

Site no. : 1# 966 Chamber Data no. : 36  
 Dis. / Ant. : 3m ANT 1-18G Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15 PEAK 5.8  
 Env. / Ins. : Temp:23.6';Humi:56%;Press:101.52kPa  
 Engineer : Tony  
 EUT : Home Theater Sound Bar  
 Power : DC 19V From Adapter Input AC 120V/60Hz  
 M/N : MAGNIFI MAX SOUND BAR  
 Test Mode : GFSK TX 5840MHz  
 Antenna B

	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	5046.00	31.57	12.53	32.08	33.39	45.41	74.00	28.59	Peak
2	5840.00	32.46	12.08	32.40	69.57	81.71	94.00	12.29	Average
3	5840.00	32.46	12.08	32.40	77.71	89.85	114.00	24.15	Peak
4	6610.00	34.47	12.07	32.18	32.61	46.97	74.00	27.03	Peak
5	11680.00	38.98	11.09	34.93	32.64	47.78	74.00	26.22	Peak
6	17520.00	41.79	10.82	35.34	30.32	47.59	74.00	26.41	Peak
7	17898.00	45.45	11.26	30.70	23.06	49.07	74.00	24.93	Peak

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

**18000MHz – 25000MHz**

Pass

Note: The amplitude of spurious emission that is attenuated by more than 20dB below the permissible limit has no need to be reported.

## 5. 20 DB BANDWIDTH

### 5.1. Test Procedure

The transmitter output was coupled to a spectrum analyzer via a antenna. The bandwidth of the fundamental frequency was measured by spectrum analyzer with 100kHz RBW and 300kHz VBW. The 20dB bandwidth is defined as the total spectrum the power of which is higher than peak power minus 20dB.

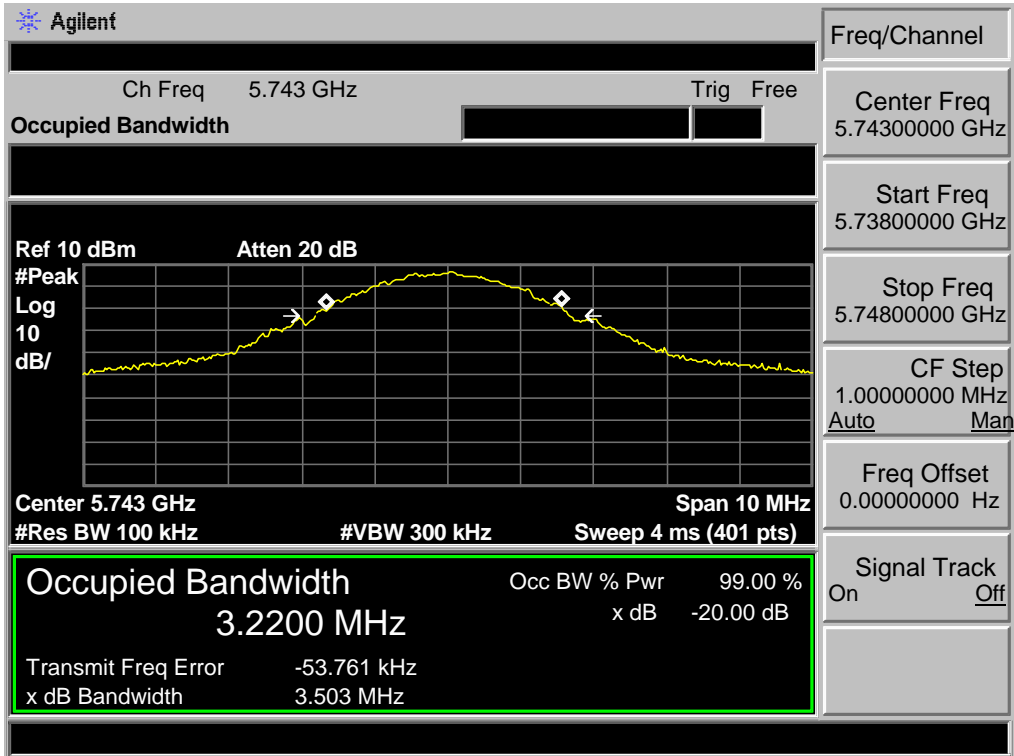
### 5.2. Test Result

EUT: Home Theater Sound Bar				
M/N: MAGNIFI MAX SOUND BAR				
Test date: 2017-04-20		Test site: RF site		Tested by: Tony Tang
Mode	Freq (MHz)	20dB Bandwidth (MHz)	Limit (kHz)	Conclusion
Antenna A				
TX	5743	3.503	/	PASS
	5792	3.549	/	PASS
	5840	3.750	/	PASS
Antenna B				
TX	5743	3.489	/	PASS
	5792	3.513	/	PASS
	5840	3.634	/	PASS

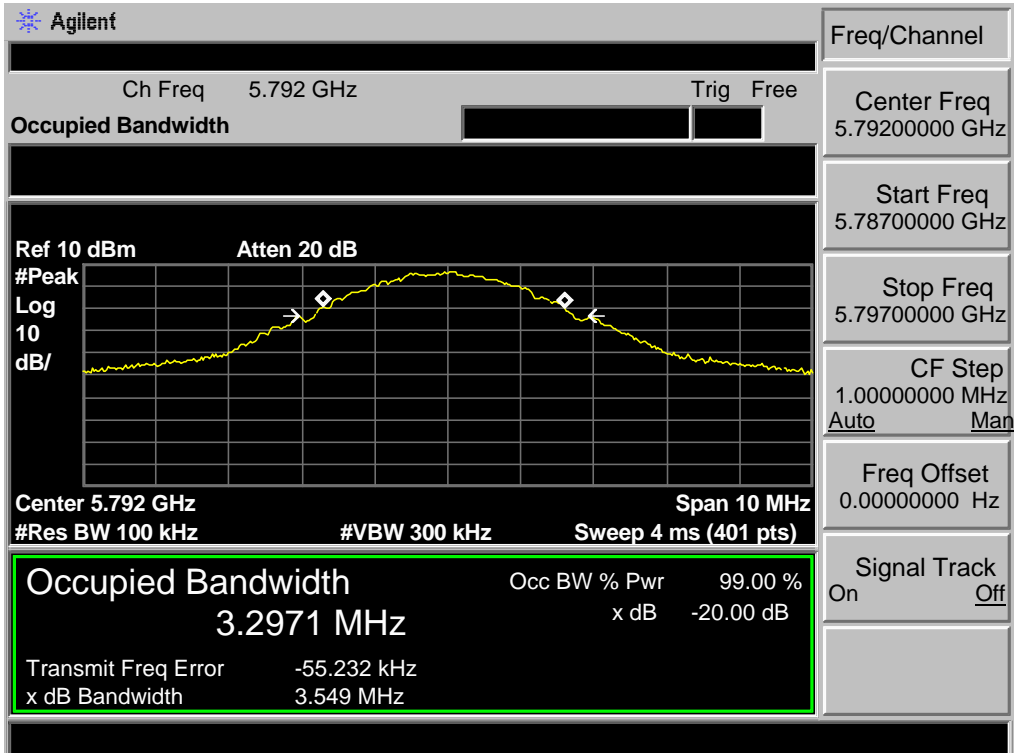
### 5.3. Test Data

Antenna A

#### TX 5743 MHz



#### TX 5792 MHz

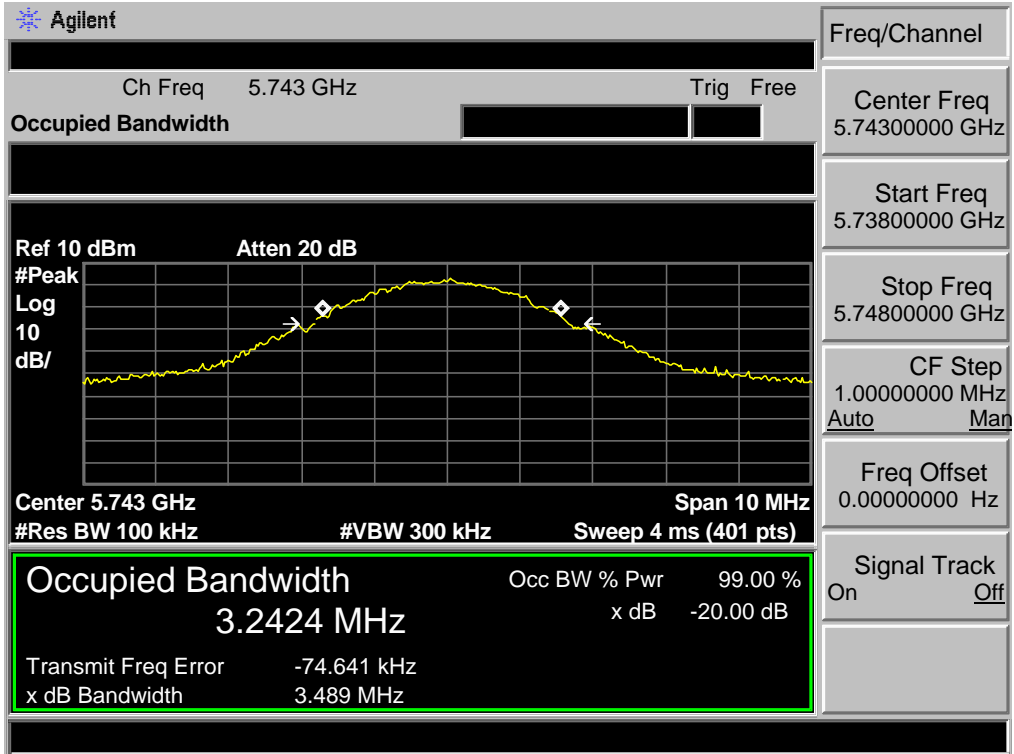


**TX 5840MHz**

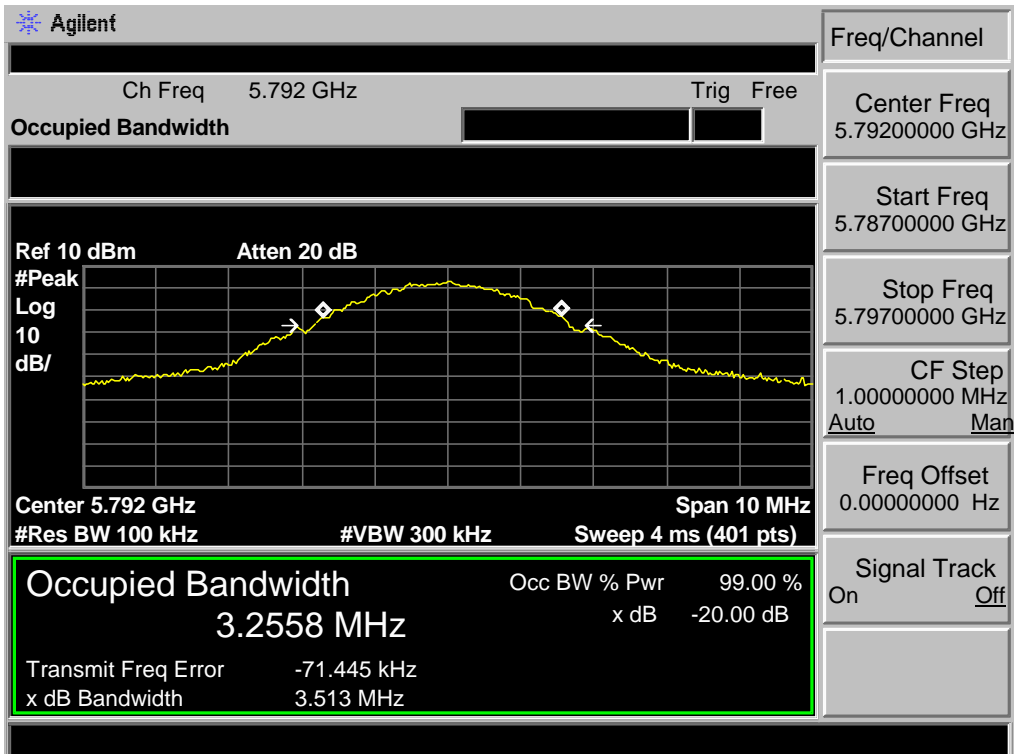
Agilent		Freq/Channel	
Ch Freq 5.84 GHz		Center Freq 5.84000000 GHz	
Occupied Bandwidth		Start Freq 5.83500000 GHz	
<p>Ref 10 dBm      Atten 20 dB</p>		Stop Freq 5.84500000 GHz	
Center 5.84 GHz		CF Step 1.00000000 MHz	
#Res BW 100 kHz		Auto Man	
#VBW 300 kHz		Freq Offset 0.00000000 Hz	
Sweep 4 ms (401 pts)		Signal Track On Off	
<p><b>Occupied Bandwidth</b></p> <p>3.3329 MHz</p> <p>Transmit Freq Error -60.131 kHz</p> <p>x dB Bandwidth 3.750 MHz</p>		<p>Occ BW % Pwr 99.00 %</p> <p>x dB -20.00 dB</p>	

Antenna B

**TX 5743 MHz**



**TX 5792 MHz**



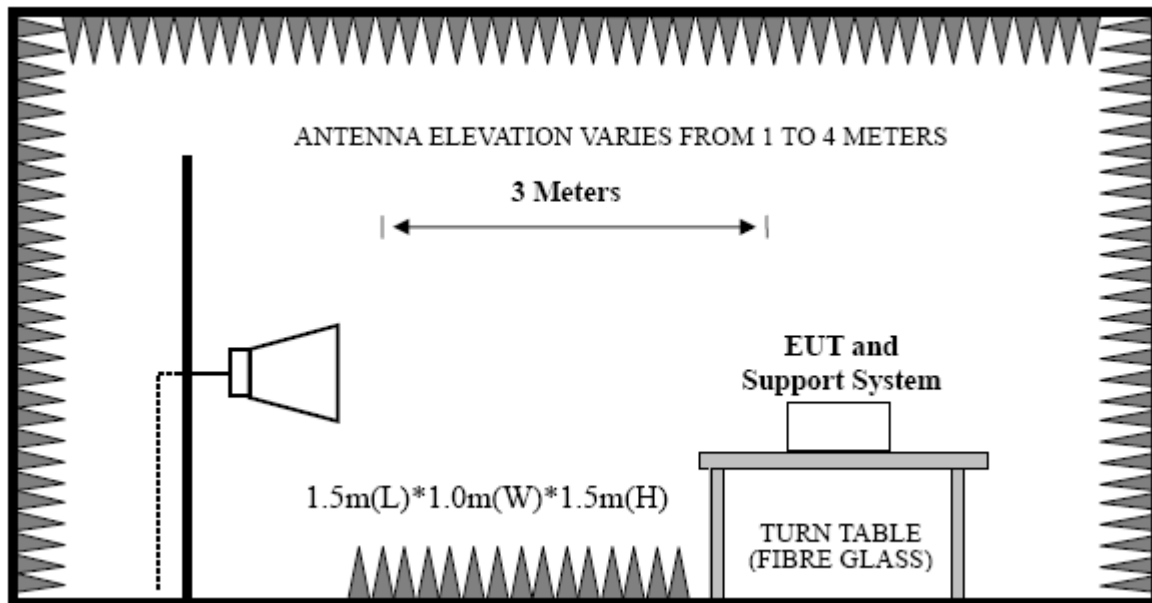


**TX 5840MHz**

Agilent		Freq/Channel	
Ch Freq 5.84 GHz		Center Freq 5.84000000 GHz	
Occupied Bandwidth		Start Freq 5.83500000 GHz	
<p>Ref 10 dBm      Atten 20 dB</p>		Stop Freq 5.84500000 GHz	
Center 5.84 GHz		CF Step 1.00000000 MHz	
#Res BW 100 kHz		Auto Man	
#VBW 300 kHz		Freq Offset 0.00000000 Hz	
Sweep 4 ms (401 pts)		Signal Track On Off	
<p><b>Occupied Bandwidth</b></p> <p><b>3.3346 MHz</b></p>		<p>Occ BW % Pwr 99.00 %</p> <p>x dB -20.00 dB</p>	
Transmit Freq Error -59.958 kHz			
x dB Bandwidth 3.634 MHz			

## 6. BAND EDGE COMPLIANCE

### 6.1. Block Diagram of Test setup



### 6.2. Test Procedure

EUT was 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. Both horizontal and vertical polarization of the antenna are set on test.

Set the spectrum analyzer in the following setting in order to capture the lower and upper band-edges of emissions

Peak : RBW = 1MHz, VBW = 1MHz, Detector=PEAK detector, Sweep time = auto.

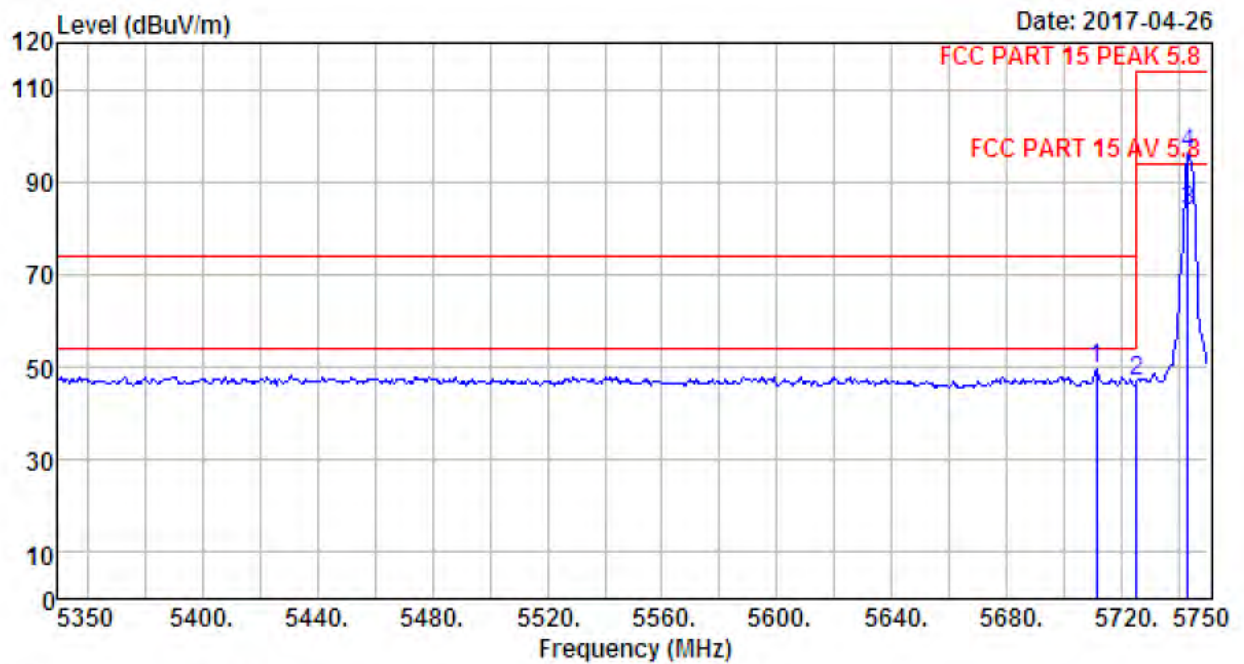
AV : RBW = 1MHz, VBW = 10Hz, Detector=PEAK detector, Sweep time = auto .

### 6.3. Test Result

Pass.

Note: If the PK measured levels comply with average limit, then the average level were deemed to comply with average limit.

### 6.4. Test Data

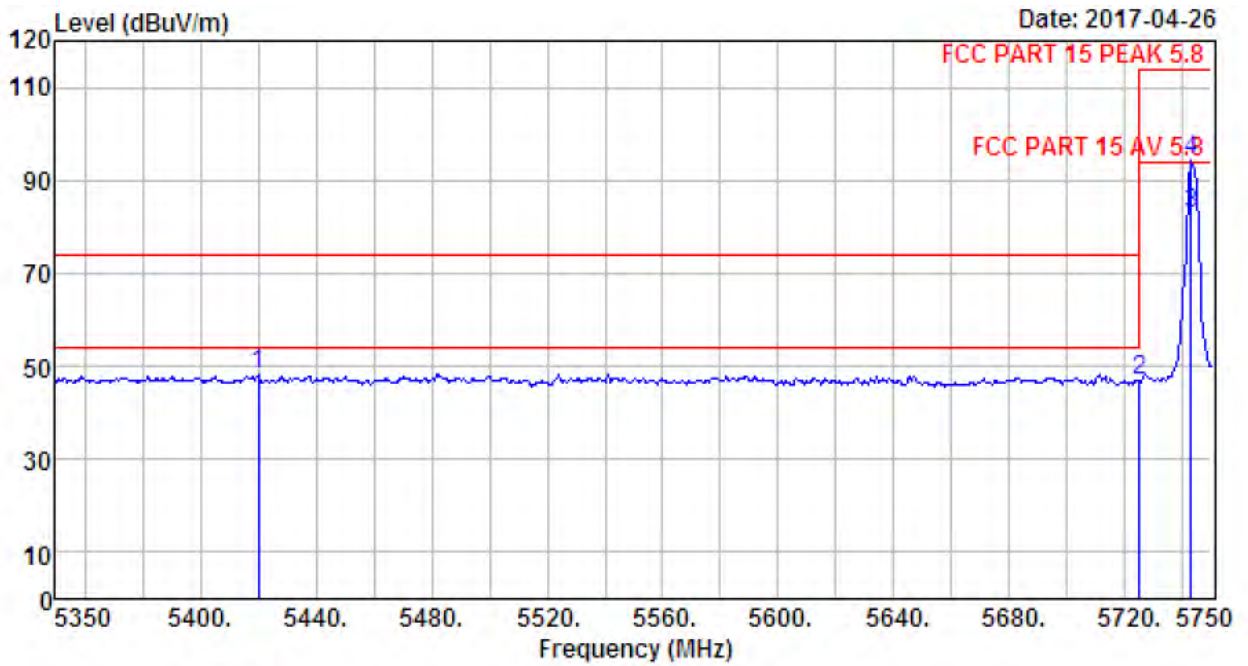


```

Site no.       : 1# 966 Chamber           Data no.   : 27
Dis. / Ant.   : 3m ANT 1-18G           Ant. pol.  : HORIZONTAL
Limit         : FCC PART 15 PEAK 5.8
Env. / Ins.   : Temp:23.6';Humi:56%;Press:101.52kPa
Engineer      : Tony
EUT           : Home Theater Sound Bar
Power         : DC 19V From Adapter Input AC 120V/60Hz
M/N           : MAGNIFI MAX SOUND BAR
Test Mode     : GFSK TX 5743MHz
                Antenna A
    
```

	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	5710.80	32.24	12.04	32.56	37.97	49.69	74.00	24.31	Peak
2	5725.00	32.24	12.05	32.56	35.21	46.94	74.00	27.06	Peak
3	5742.80	32.27	12.05	32.54	71.86	83.64	94.00	10.36	Average
4	5742.80	32.27	12.05	32.54	84.52	96.30	114.00	17.70	Peak

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

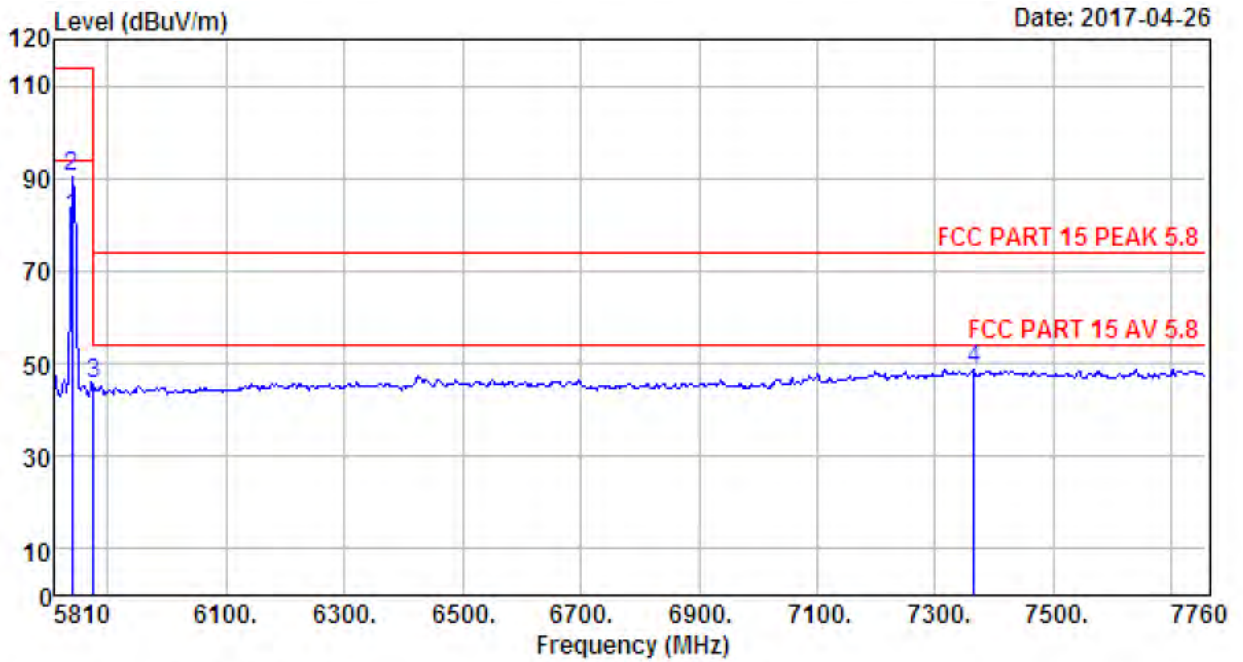


Site no. : 1# 966 Chamber                      Data no. : 28  
 Dis. / Ant. : 3m ANT 1-18G                      Ant. pol. : VERTICAL  
 Limit : FCC PART 15 PEAK 5.8  
 Env. / Ins. : Temp:23.6';Humi:56%;Press:101.52kPa  
 Engineer : Tony  
 EUT : Home Theater Sound Bar  
 Power : DC 19V From Adapter Input AC 120V/60Hz  
 M/N : MAGNIFI MAX SOUND BAR  
 Test Mode : GFSK TX 5743MHz  
                   Antenna A

	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	5420.00	31.78	12.09	32.48	37.01	48.40	74.00	25.60	Peak
2	5725.00	32.24	12.05	32.56	34.99	46.72	74.00	27.28	Peak
3	5742.80	32.27	12.05	32.54	70.86	82.64	94.00	11.36	Average
4	5742.80	32.27	12.05	32.54	82.32	94.10	114.00	19.90	Peak

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

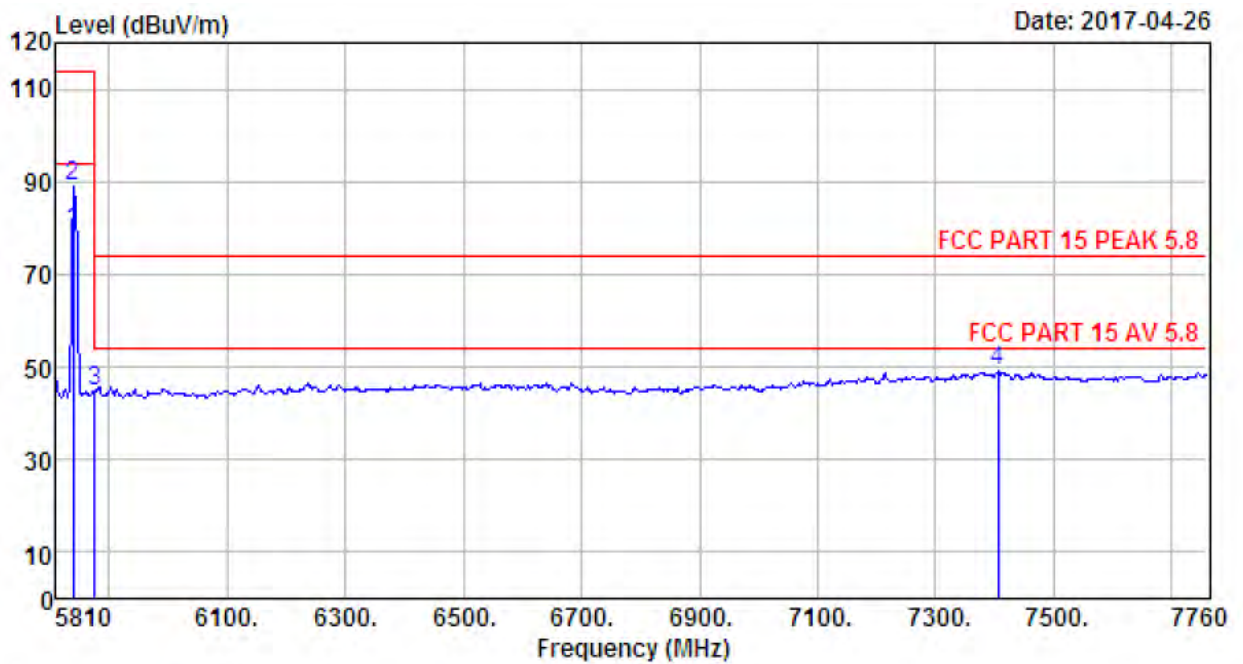




Site no. : 1# 966 Chamber Data no. : 29  
 Dis. / Ant. : 3m ANT 1-18G Ant. pol. : VERTICAL  
 Limit : FCC PART 15 PEAK 5.8  
 Env. / Ins. : Temp:23.6';Humi:56%;Press:101.52kPa  
 Engineer : Tony  
 EUT : Home Theater Sound Bar  
 Power : DC 19V From Adapter Input AC 120V/60Hz  
 M/N : MAGNIFI MAX SOUND BAR  
 Test Mode : GFSK TX 5840MHz  
 Antenna A

	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	5839.25	32.46	12.08	32.40	69.45	81.59	94.00	12.41	Average
2	5839.25	32.46	12.08	32.40	78.40	90.54	114.00	23.46	Peak
3	5875.00	32.53	12.09	32.36	33.24	45.50	74.00	28.50	Peak
4	7366.10	36.57	11.58	31.98	32.43	48.60	74.00	25.40	Peak

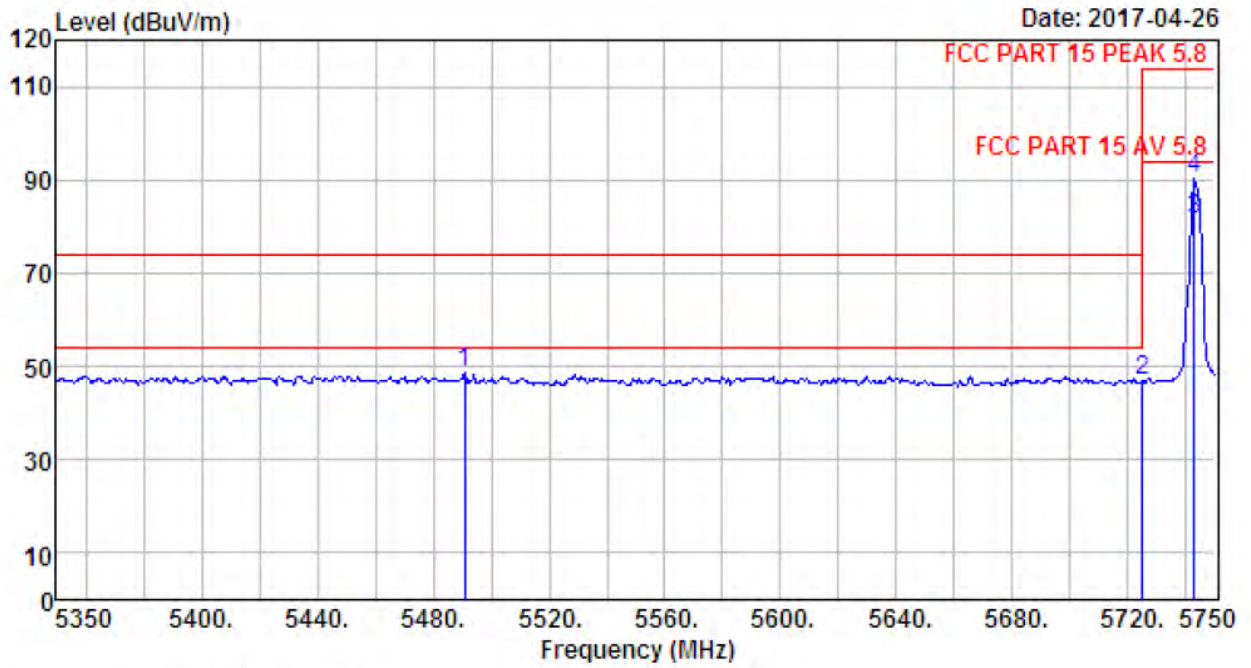
Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 1# 966 Chamber Data no. : 30  
 Dis. / Ant. : 3m ANT 1-18G Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15 PEAK 5.8  
 Env. / Ins. : Temp:23.6';Humi:56%;Press:101.52kPa  
 Engineer : Tony  
 EUT : Home Theater Sound Bar  
 Power : DC 19V From Adapter Input AC 120V/60Hz  
 M/N : MAGNIFI MAX SOUND BAR  
 Test Mode : GFSK TX 5840MHz  
 Antenna A

	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	5839.25	32.46	12.08	32.40	67.04	79.18	94.00	14.82	Average
2	5839.25	32.46	12.08	32.40	76.70	88.84	114.00	25.16	Peak
3	5875.00	32.53	12.09	32.36	32.47	44.73	74.00	29.27	Peak
4	7405.10	36.58	11.60	31.97	32.93	49.14	74.00	24.86	Peak

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

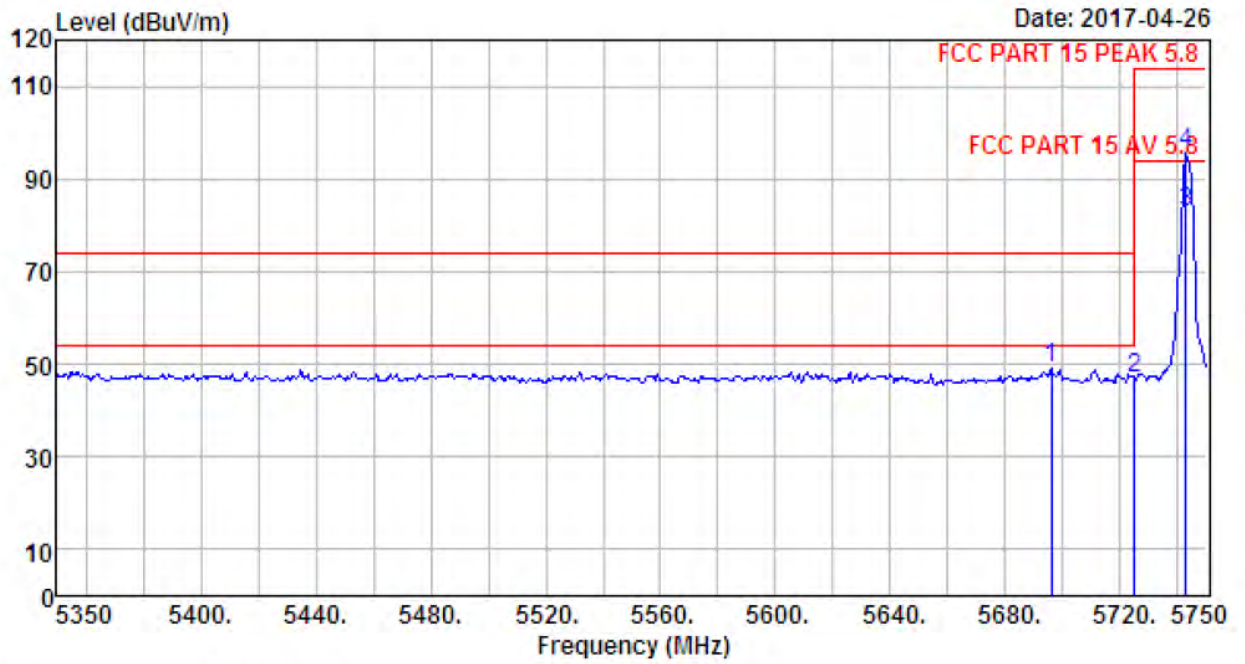


Site no. : 1# 966 Chamber                      Data no. : 37  
 Dis. / Ant. : 3m ANT 1-18G                      Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15 PEAK 5.8  
 Env. / Ins. : Temp:23.6';Humi:56%;Press:101.52kPa  
 Engineer : Tony  
 EUT : Home Theater Sound Bar  
 Power : DC 19V From Adapter Input AC 120V/60Hz  
 M/N : MAGNIFI MAX SOUND BAR  
 Test Mode : GFSK TX 5743MHz  
                     Antenna B

	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	5490.80	31.87	12.01	32.57	37.32	48.63	74.00	25.37	Peak
2	5725.00	32.24	12.05	32.56	35.01	46.74	74.00	27.26	Peak
3	5742.80	32.27	12.05	32.54	69.73	81.51	94.00	12.49	Average
4	5742.80	32.27	12.05	32.54	78.33	90.11	114.00	23.89	Peak

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



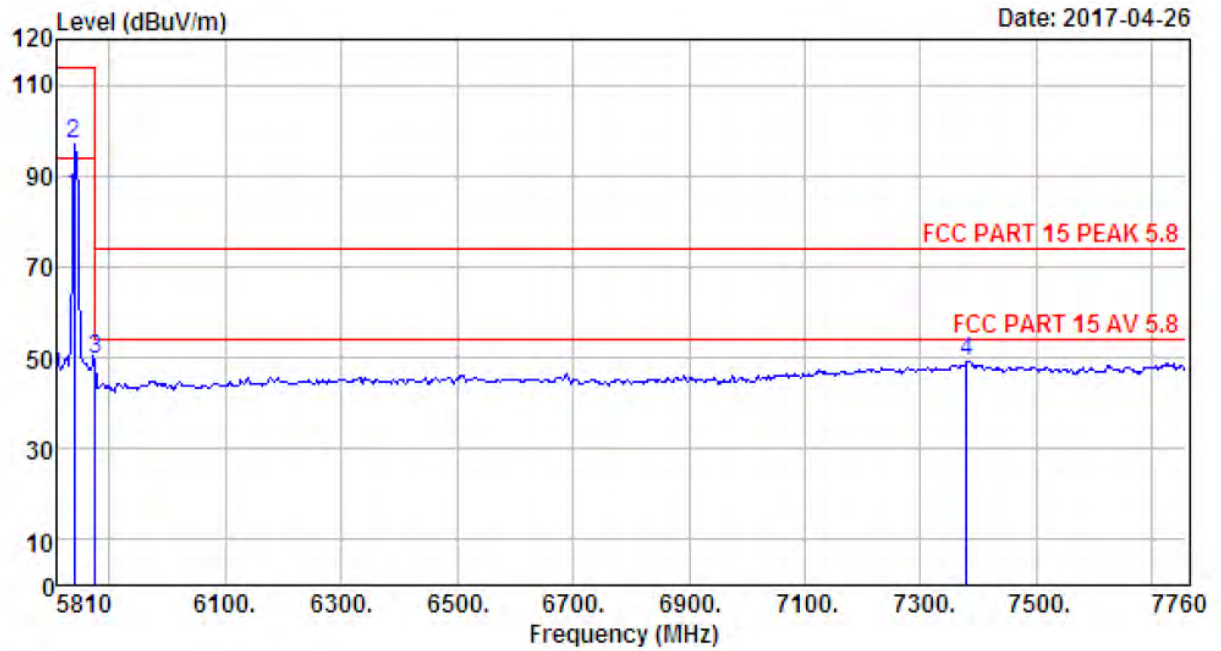


Site no. : 1# 966 Chamber Data no. : 38  
 Dis. / Ant. : 3m ANT 1-18G Ant. pol. : VERTICAL  
 Limit : FCC PART 15 PEAK 5.8  
 Env. / Ins. : Temp:23.6';Humi:56%;Press:101.52kPa  
 Engineer : Tony  
 EUT : Home Theater Sound Bar  
 Power : DC 19V From Adapter Input AC 120V/60Hz  
 M/N : MAGNIFI MAX SOUND BAR  
 Test Mode : GFSK TX 5743MHz  
 Antenna B

	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	5696.00	32.20	12.04	32.59	37.45	49.10	74.00	24.90	Peak
2	5725.00	32.24	12.05	32.56	35.26	46.99	74.00	27.01	Peak
3	5742.80	32.27	12.05	32.54	70.87	82.65	94.00	11.35	Average
4	5742.80	32.27	12.05	32.54	83.66	95.44	114.00	18.56	Peak

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

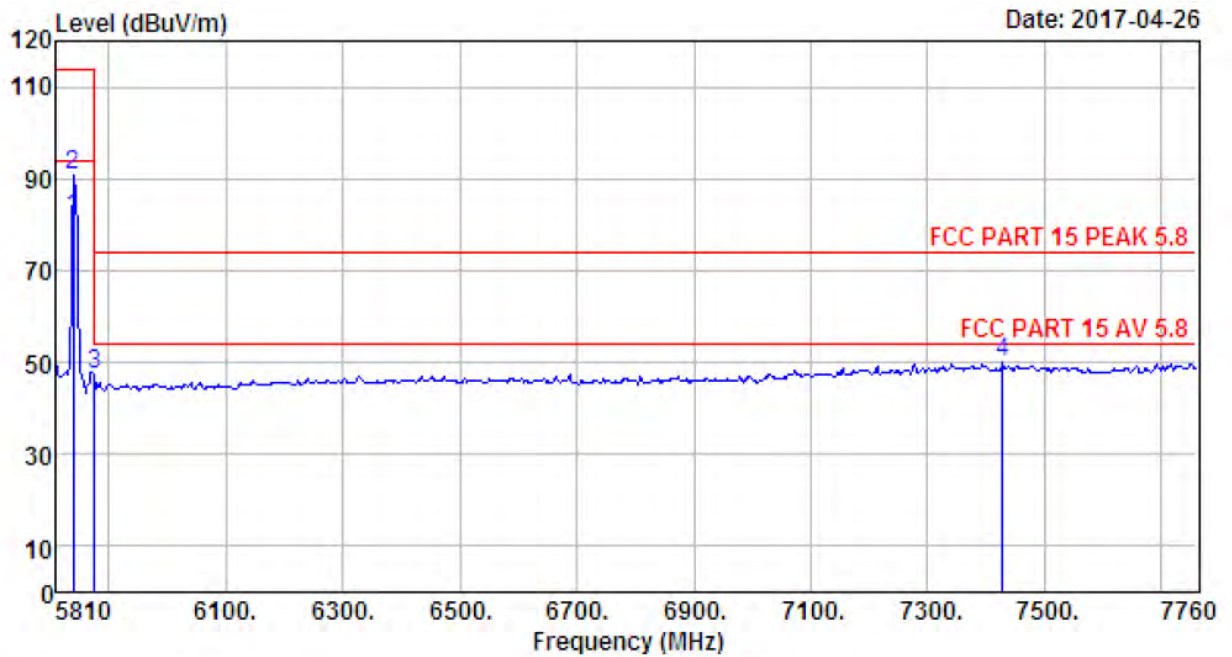




Site no. : 1# 966 Chamber Data no. : 39  
 Dis. / Ant. : 3m ANT 1-18G Ant. pol. : VERTICAL  
 Limit : FCC PART 15 PEAK 5.8  
 Env. / Ins. : Temp:23.6';Humi:56%;Press:101.52kPa  
 Engineer : Tony  
 EUT : Home Theater Sound Bar  
 Power : DC 19V From Adapter Input AC 120V/60Hz  
 M/N : MAGNIFI MAX SOUND BAR  
 Test Mode : GFSK TX 5840MHz  
 Antenna B

	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	5839.25	32.46	12.08	32.40	73.42	85.56	94.00	8.44	Average
2	5839.25	32.46	12.08	32.40	84.95	97.09	114.00	16.91	Peak
3	5875.00	32.53	12.09	32.36	37.19	49.45	74.00	24.55	Peak
4	7379.75	36.57	11.59	31.97	32.97	49.16	74.00	24.84	Peak

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



Site no. : 1# 966 Chamber Data no. : 40  
 Dis. / Ant. : 3m ANI 1-18G Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15 PEAK 5.8  
 Env. / Ins. : Temp:23.6';Humi:56%;Press:101.52kPa  
 Engineer : Tony  
 EUT : Home Theater Sound Bar  
 Power : DC 19V From Adapter Input AC 120V/60Hz  
 M/N : MAGNIFI MAX SOUND BAR  
 Test Mode : GFSK TX 5840MHz  
 Antenna B

	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	5839.25	32.46	12.08	32.40	69.43	81.57	94.00	12.43	Average
2	5839.25	32.46	12.08	32.40	78.60	90.74	114.00	23.26	Peak
3	5875.00	32.53	12.09	32.36	35.32	47.58	74.00	26.42	Peak
4	7428.50	36.56	11.60	31.95	33.64	49.85	74.00	24.15	Peak

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

## **7. ANTENNA REQUIREMENTS**

### **7.1. 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 15.249 (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.

### **7.2. Result**

The antennas used for this product are PCB 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 2.85dBi.

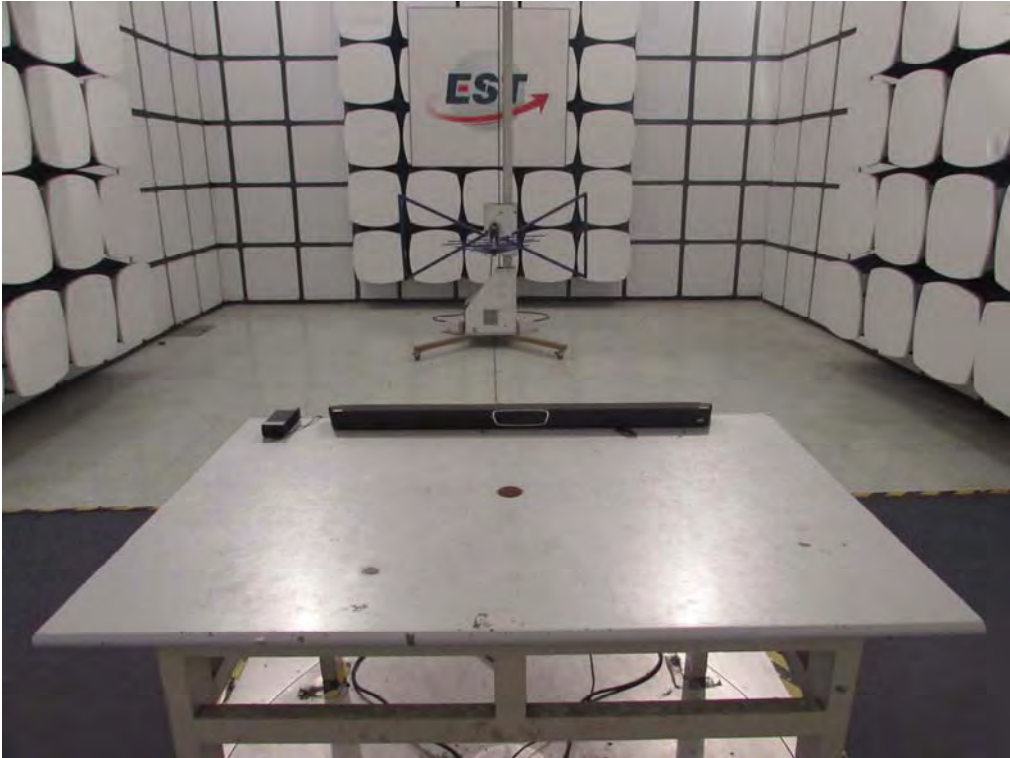
### 8. TESTSETUP PHOTO

Conducted Test

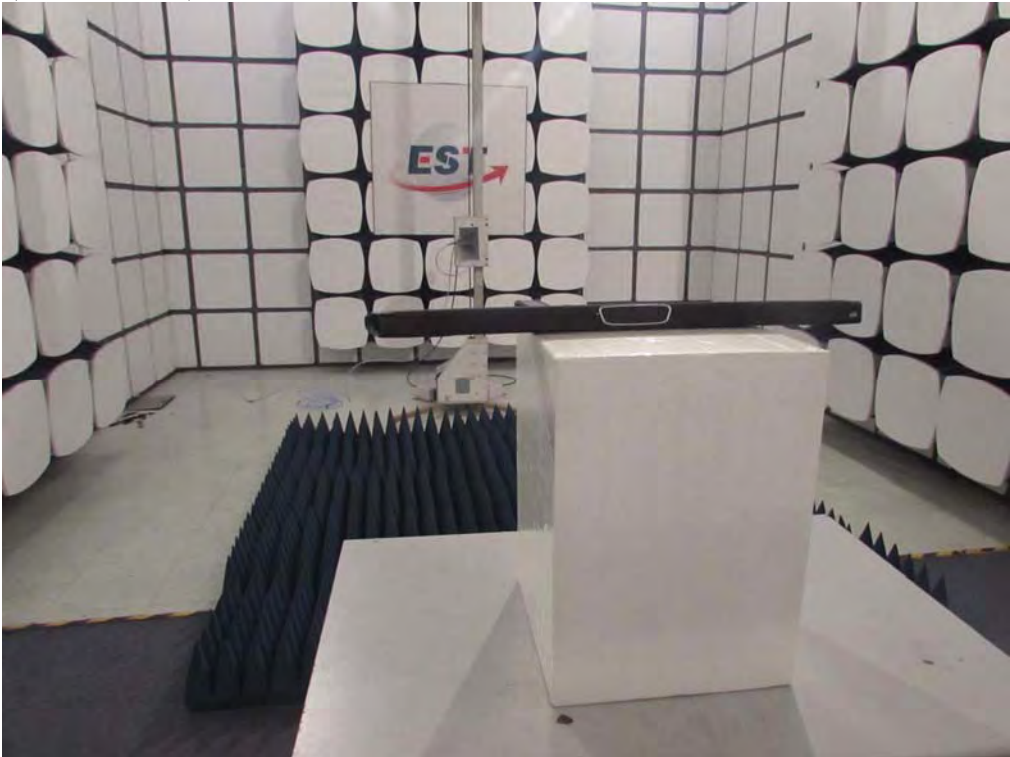




Radiated Test (30-1000 MHz)



Radiated Test (Above 1GHz)



## 9. PHOTO OF EUT

**External Photos**  
M/N: MAGNIFI MAX SOUND BAR



**External Photos**  
M/N:MAGNIFI MAX SOUND BAR





**External Photos**  
M/N: MAGNIFI MAX SOUND BAR

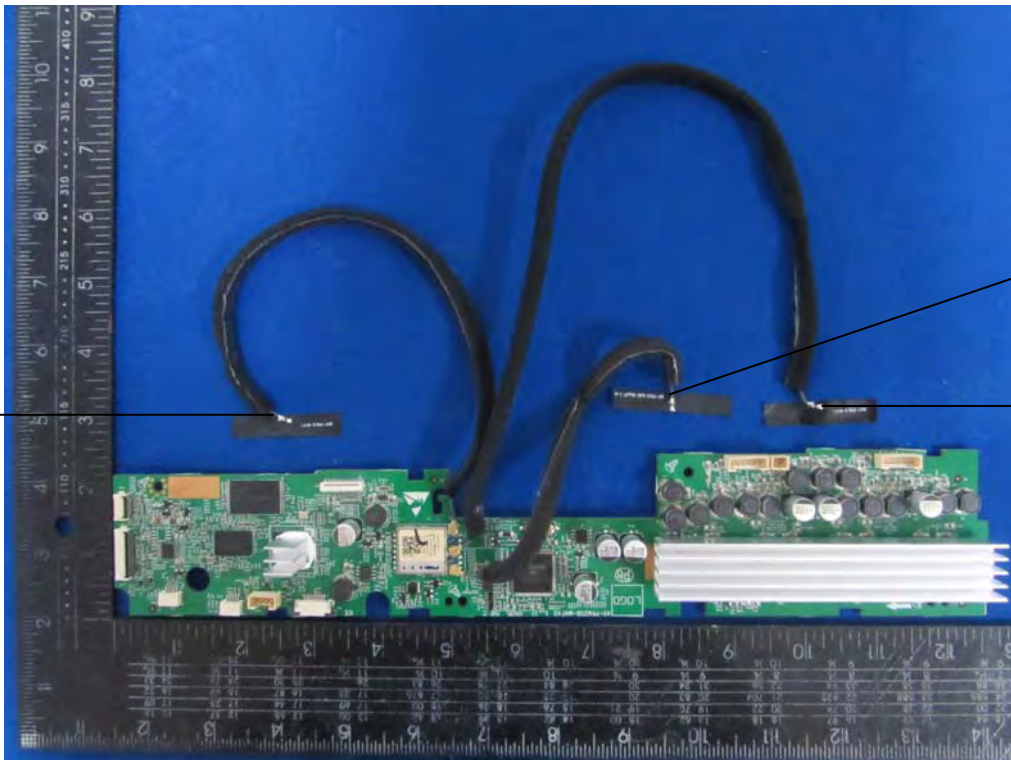
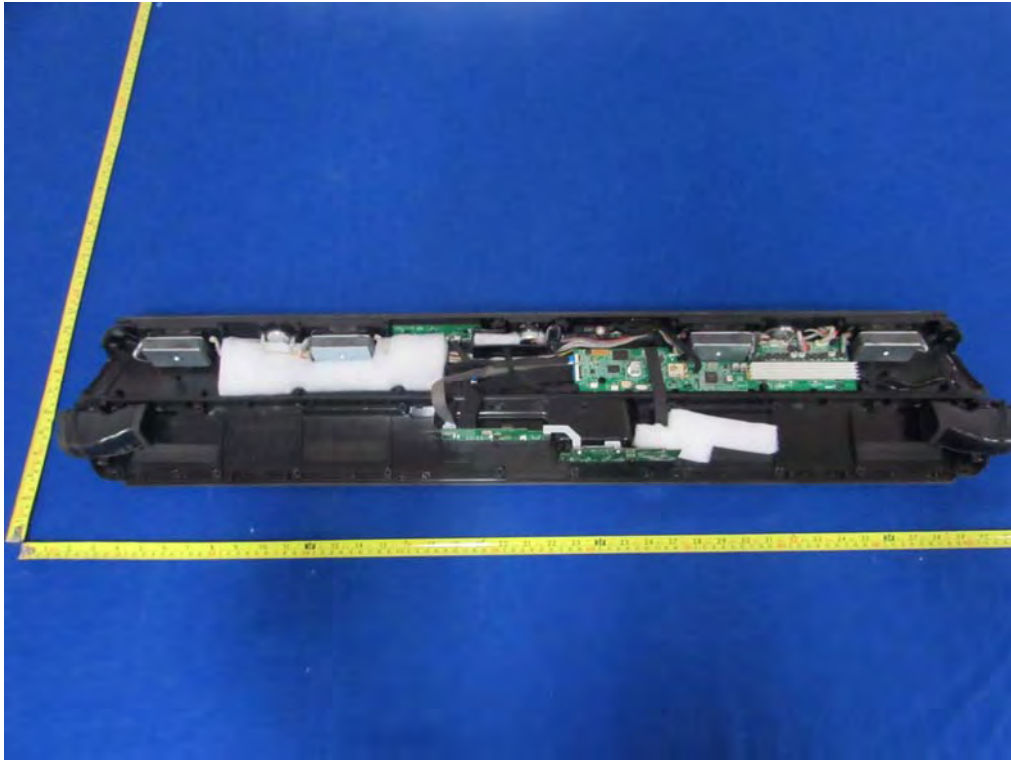




**External Photos**  
M/N: MAGNIFI MAX SOUND BAR



**Internal Photos**  
M/N: MAGNIFI MAX SOUND BAR

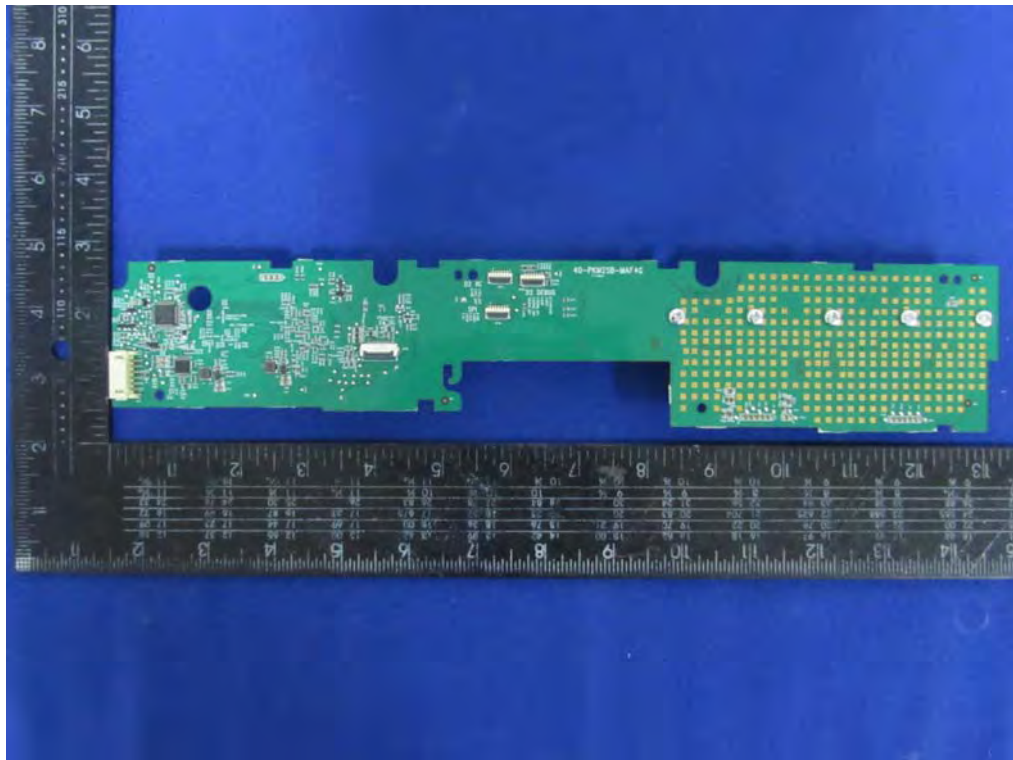
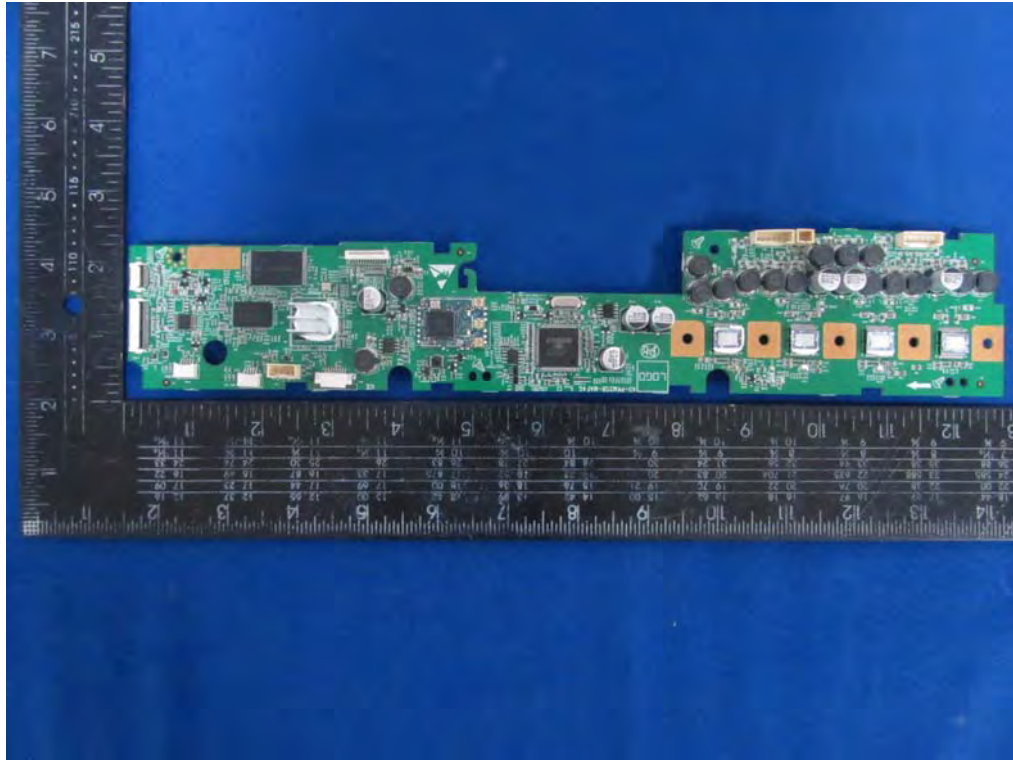


Wi-Fi  
Antenna 0

Bluetooth  
Antenna

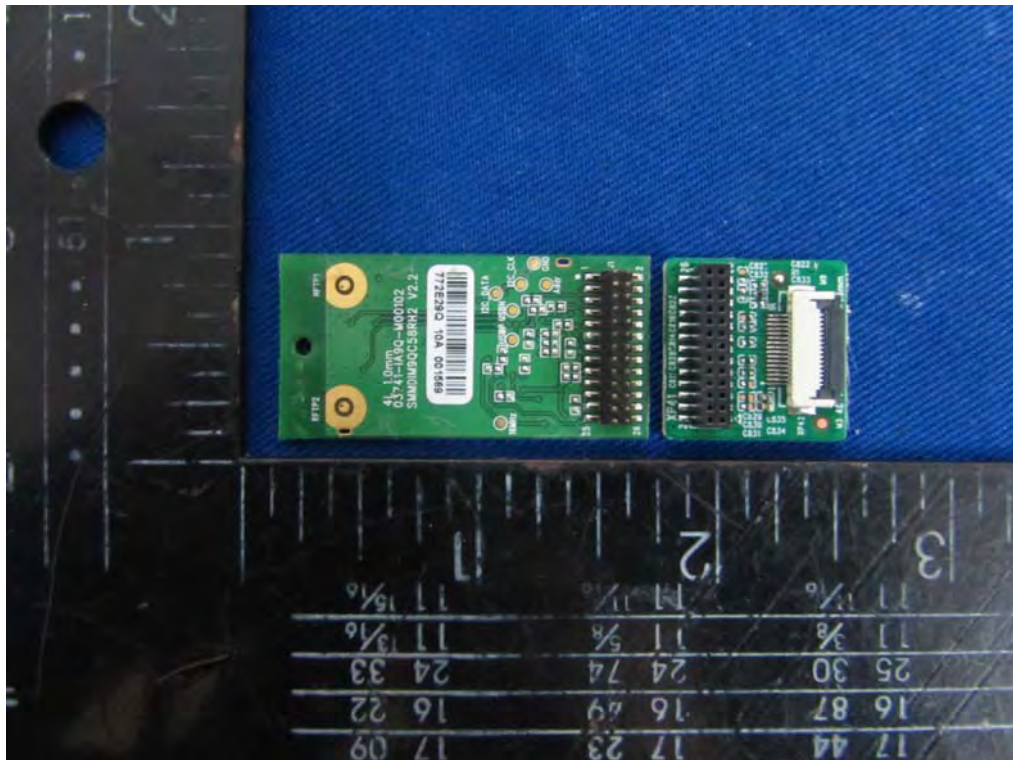
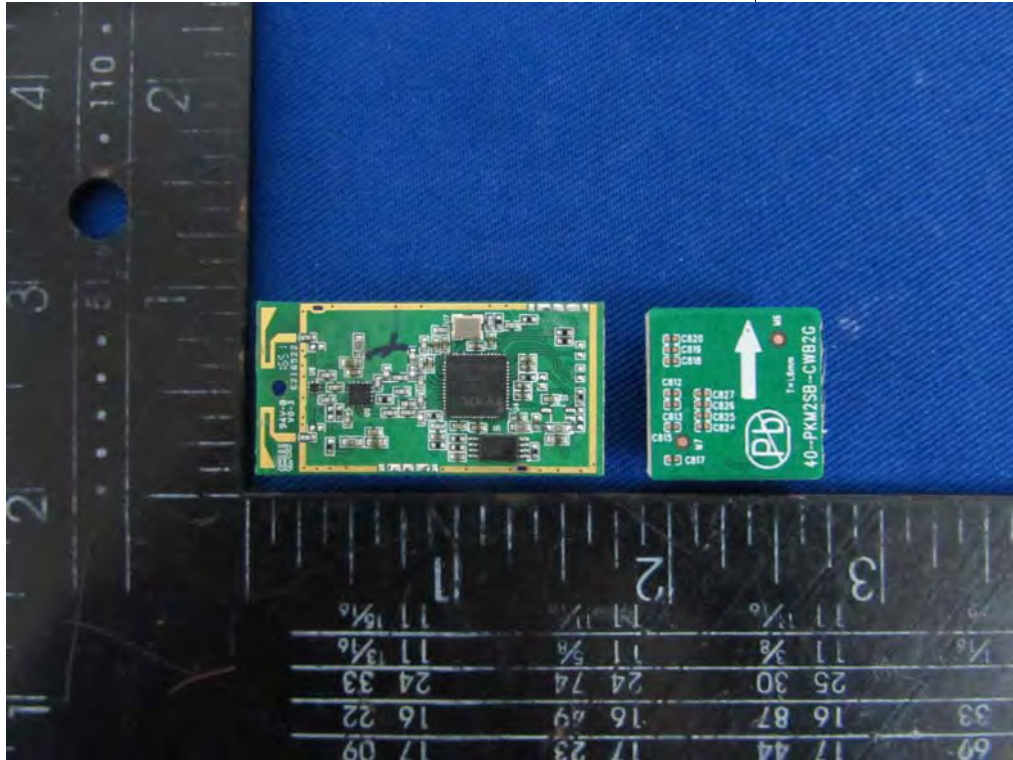
Wi-Fi  
Antenna 1

**Internal Photos**  
M/N: MAGNIFI MAX SOUND BAR



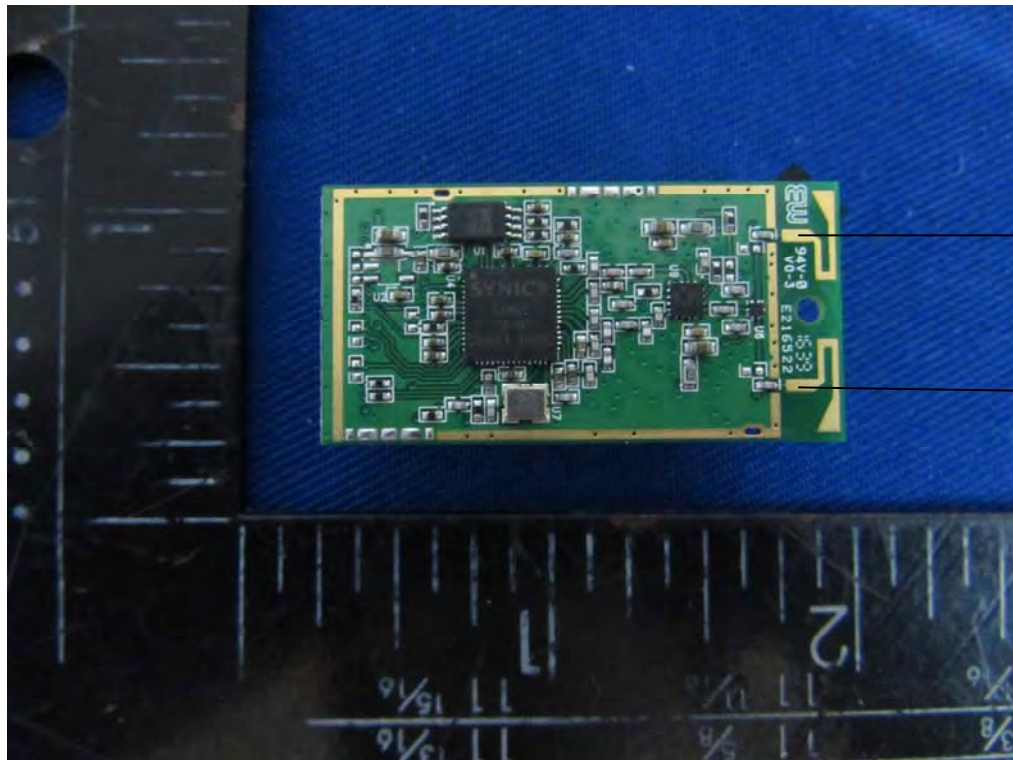
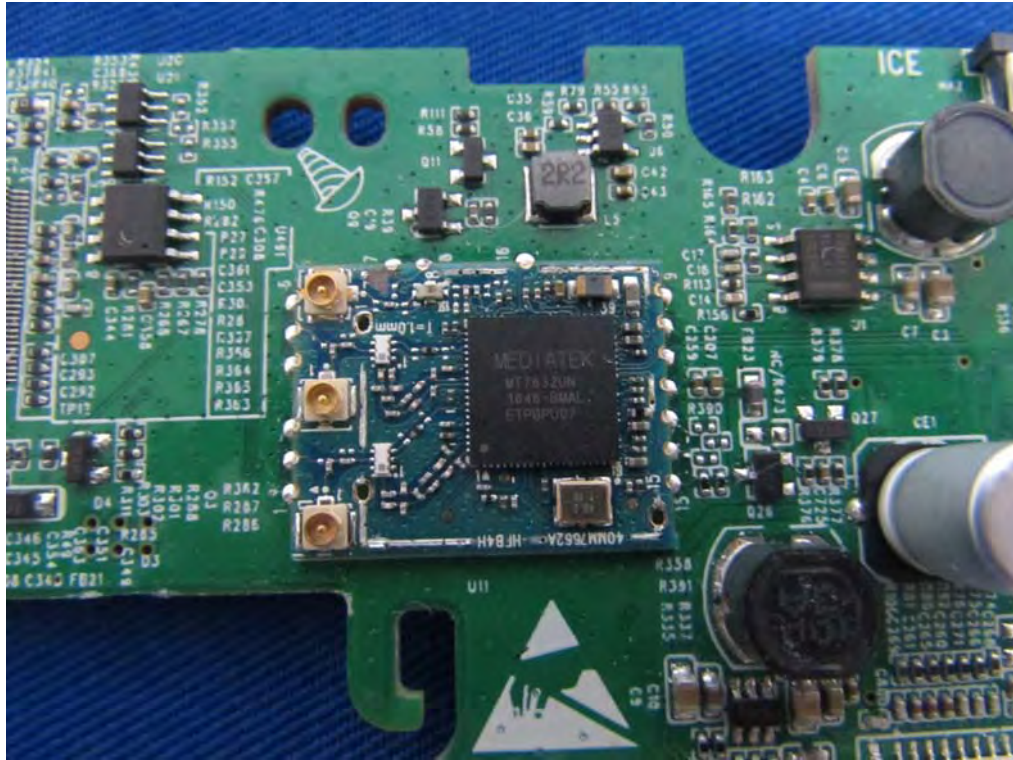


**Internal Photos**  
M/N: MAGNIFI MAX SOUND BAR





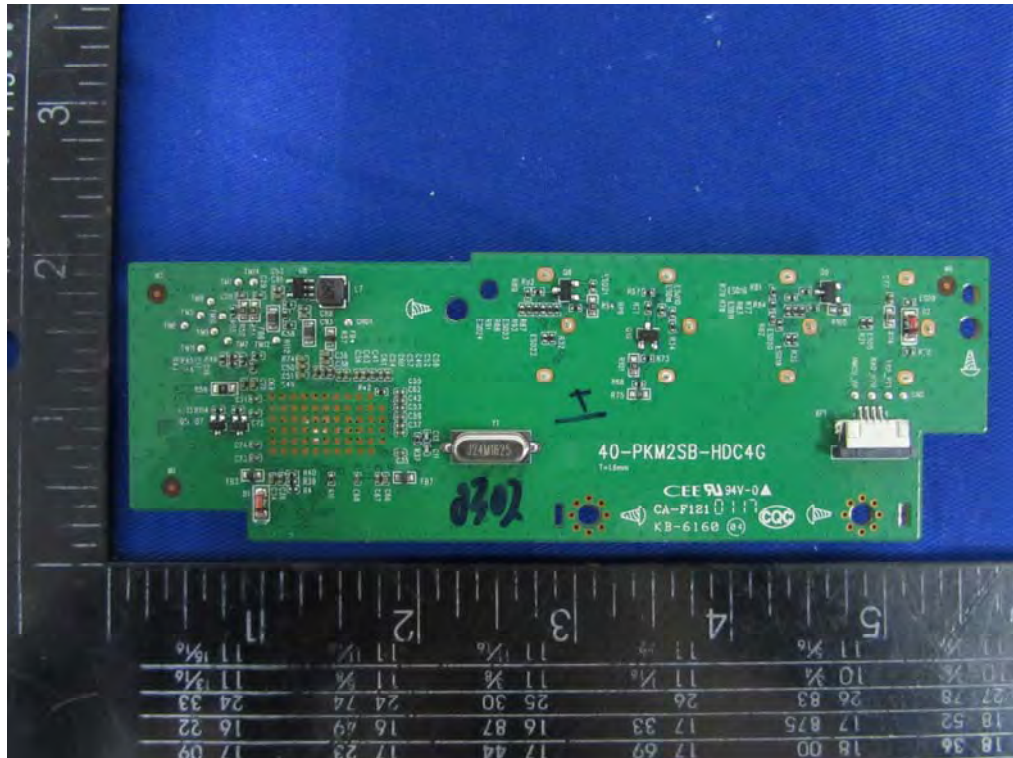
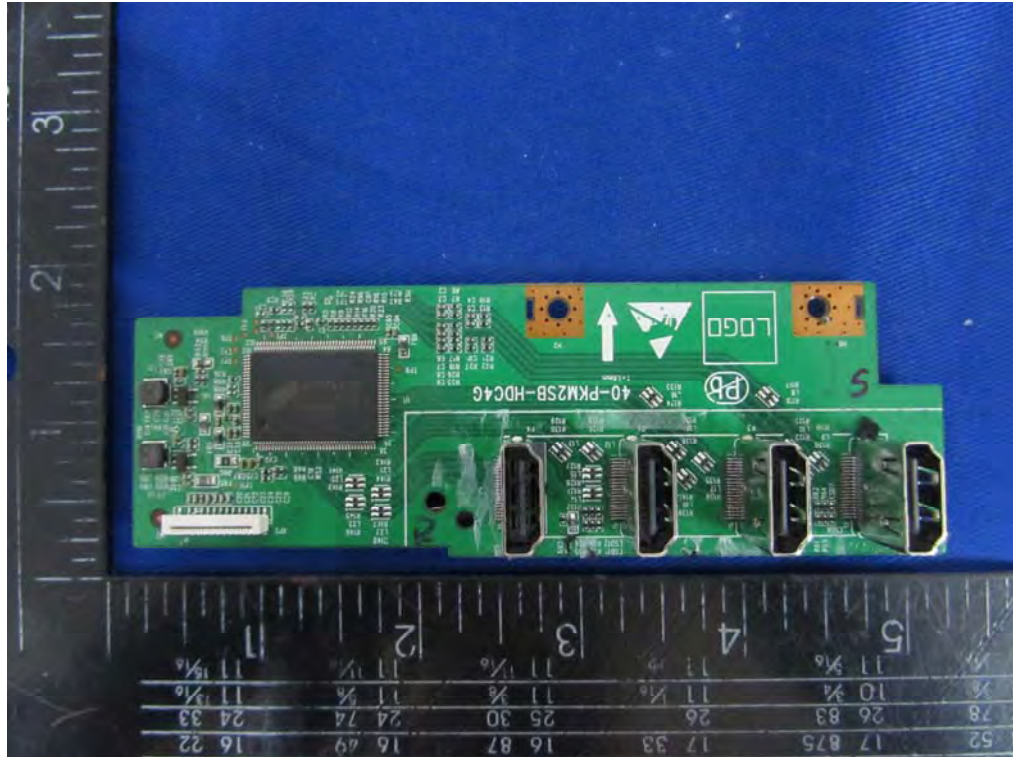
**Internal Photos**  
M/N: MAGNIFI MAX SOUND BAR



5.8G  
Antenna A

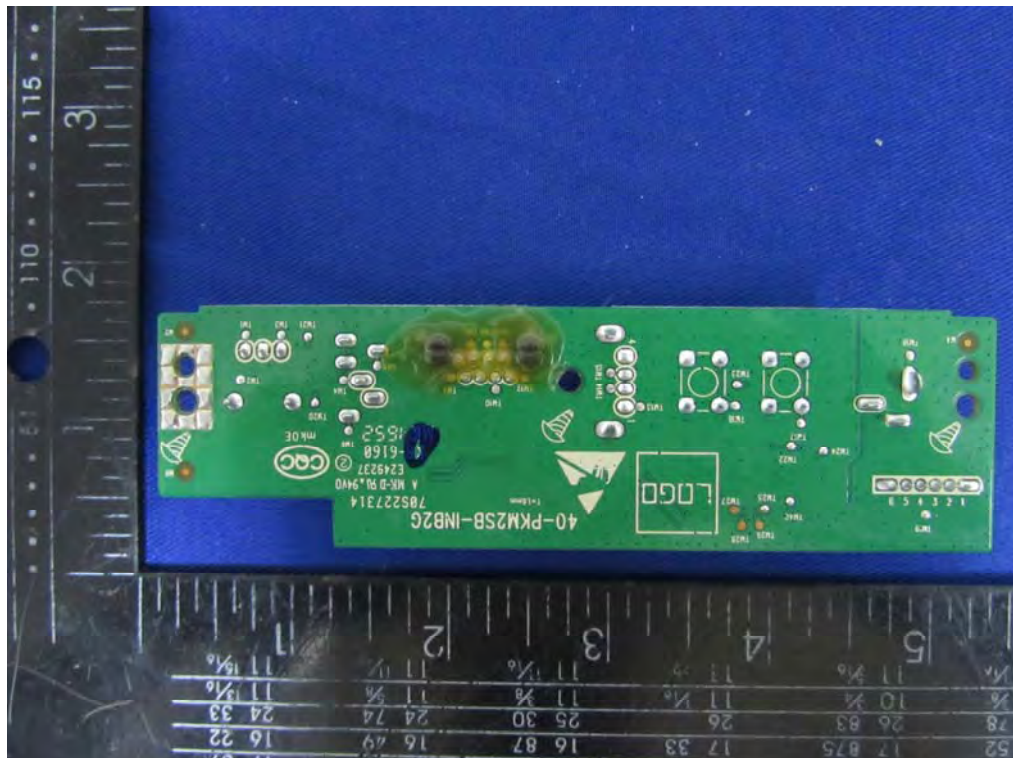
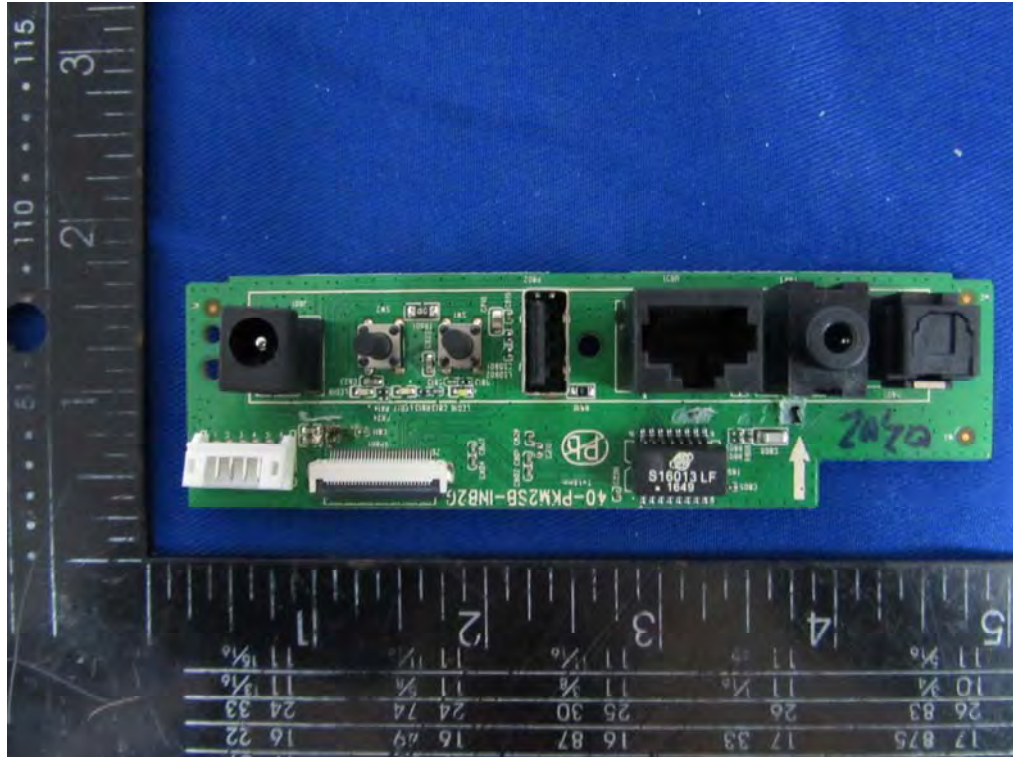
5.8G  
Antenna B

**Internal Photos**  
M/N: MAGNIFI MAX SOUND BAR

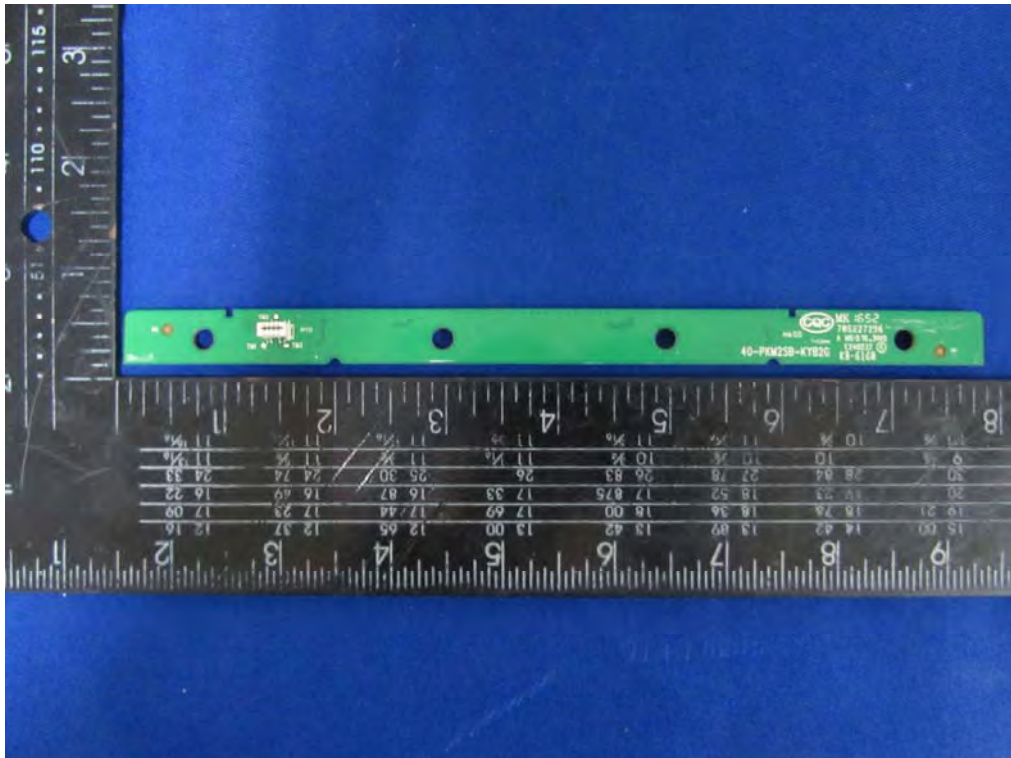
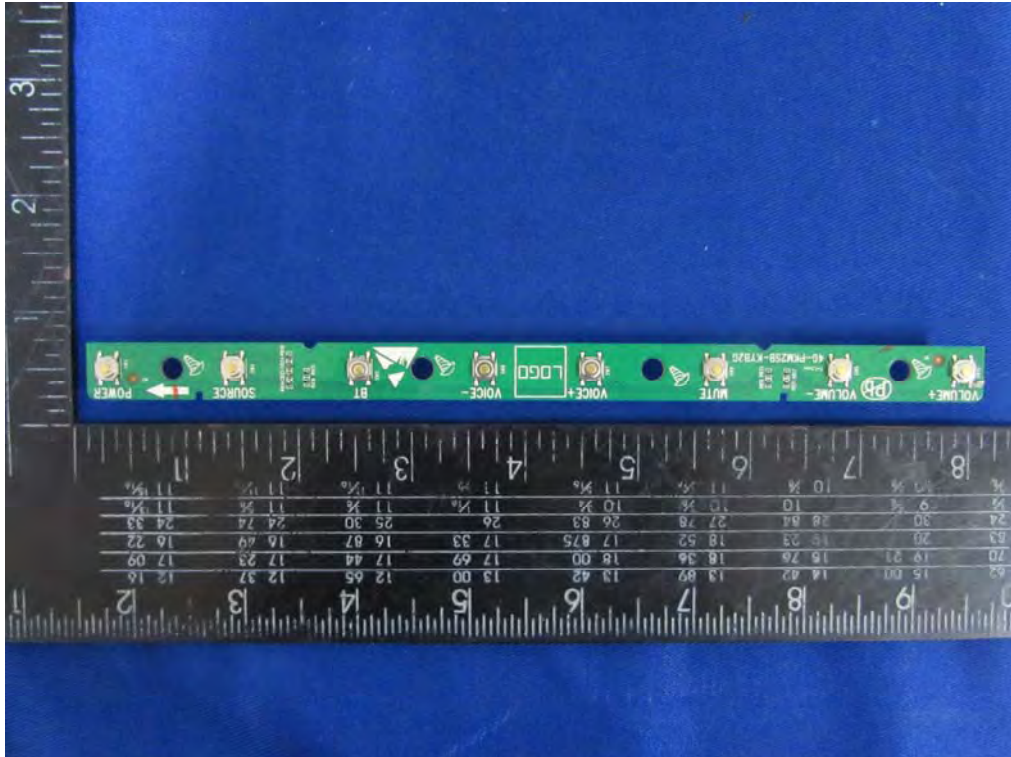




**Internal Photos**  
M/N: MAGNIFI MAX SOUND BAR

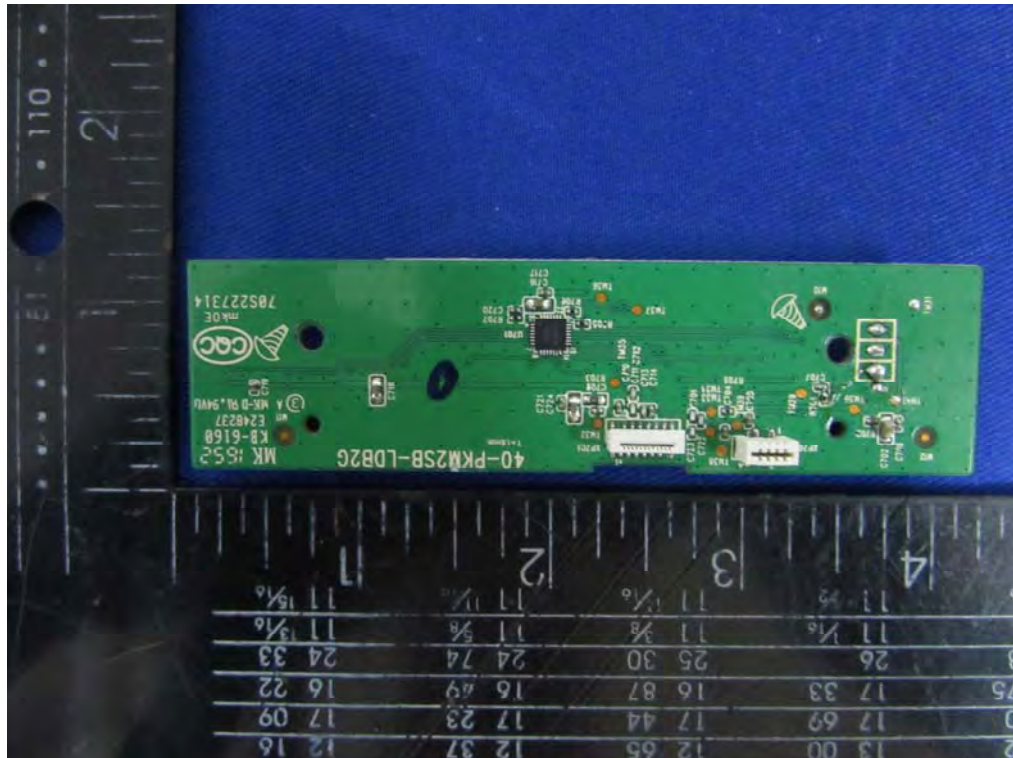
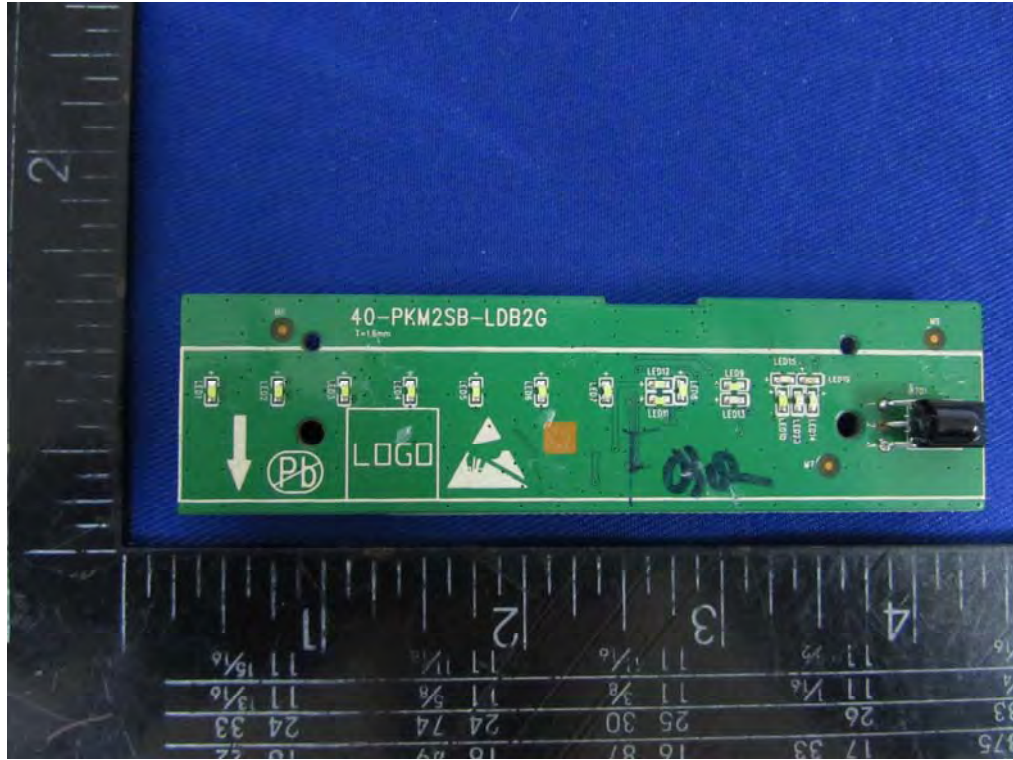


**Internal Photos**  
M/N: MAGNIFI MAX SOUND BAR





**Internal Photos**  
M/N: MAGNIFI MAX SOUND BAR



**Remote control Photos**  
M/N: MAGNIFI MAX SOUND BAR





### Adapter Photos

