

FCC PART 15C TEST REPORT FOR CERTIFICATION  
On Behalf of

DEI Sales, Inc., dba Polk Audio

Home Theater Sound Bar System

Model Number: MAGNIFI MINI SUBWOOFER

FCC ID : WLQAM9117RX

Prepared for : DEI Sales, Inc., dba Polk Audio  
1 Viper Way Vista, California 92801, USA

Prepared By : EST Technology Co., Ltd.  
San Tun Management Zone, Houjie Town, Dongguan,  
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Report Number: ESTE-R1608052  
Date of Test : July 07 ~ August 10, 2016  
Date of Report : August 17, 2016

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### Test Report Verification

<b>Applicant:</b>	DEI Sales, Inc., dba Polk Audio		
<b>Address:</b>	1 Viper Way Vista, California 92801, USA		
<b>Manufacturer</b>	Polk Audio LLC		
<b>Address:</b>	1 Viper Way Vista, California 92801, USA		
<b>E.U.T:</b>	Home Theater Sound Bar System		
<b>Model Number:</b>	MAGNIFI MINI SUBWOOFER		
<b>Power Supply:</b>	AC 100-240V~50/60Hz		
<b>Test Voltage:</b>	AC 120V/60Hz AC 240V/60Hz		
<b>Trade Name:</b>	Polk	<b>Serial No.:</b>	-----
<b>Date of Receipt:</b>	July 07, 2016	<b>Date of Test:</b>	July 07 ~ August 10, 2016
<b>Test Specification:</b>	FCC Rules and Regulations Part 15 Subpart C:2015 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 style="text-align: right;">This report applies to above tested sample only and shall not be reproduced in part without written approval of EST Technology Co., Ltd. Date: August 17, 2016</p>		
<b>Prepared by:</b>	<b>Tested by:</b>	<b>Approved by:</b>	
			
Ada / Assistant	Tony.Tang/ Engineer	IcemanHu / 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 System
FCC ID	:	WLQAM9117RX
Model Number	:	MAGNIFI MINI SUBWOOFER
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 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 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

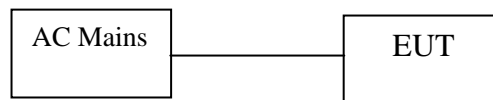
Note: This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

### 2.4. Assistant equipment used for test

2.4.1. N/A

### 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 System)

## 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	MY5014069 7	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	SCHWARZB ECK	BBHA 9120 D	BBHA9120D1 002	June 28,16	3 Year
Signal Amplifier	SCHWARZB ECK	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

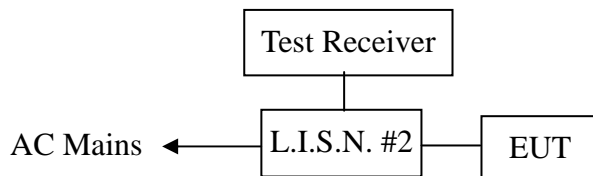
#### 3.1. Limit

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 C63.10 on Conducted Emission Test.

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

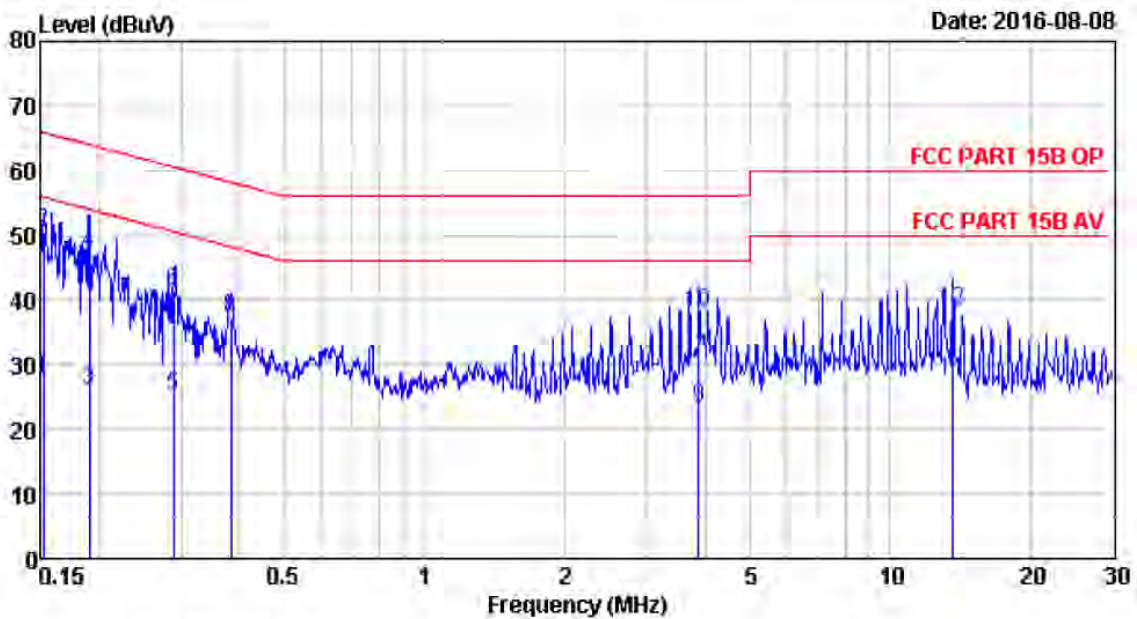
The frequency range from 150kHz to 30MHz is checked.

The test result are reported on Section 3.4.

#### 3.4. Test Result

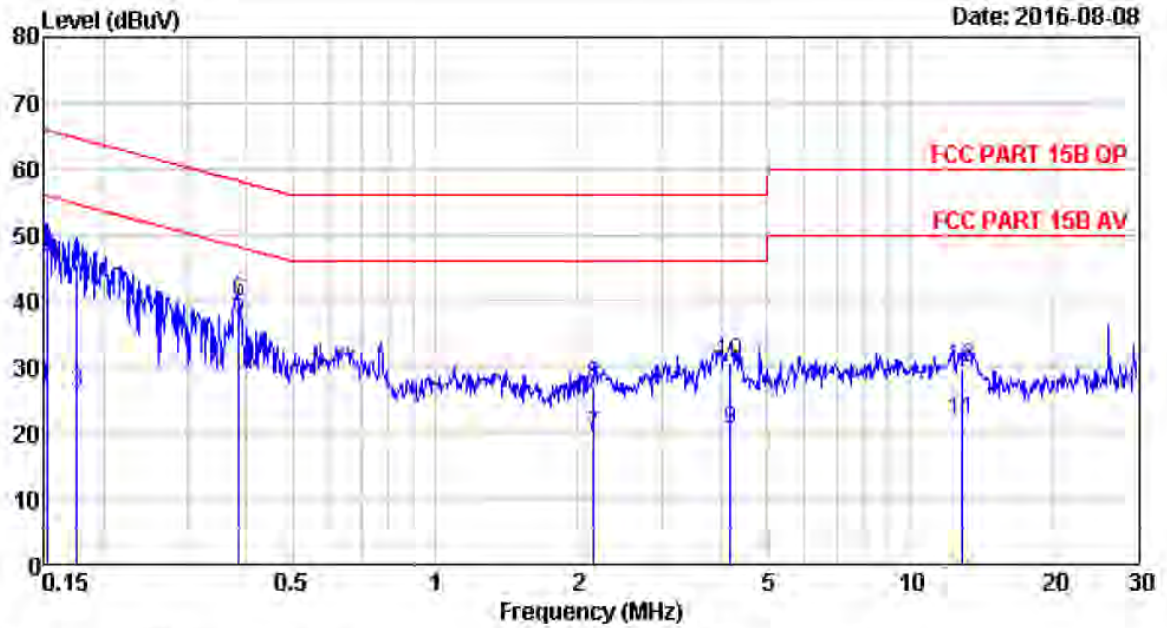
0.15MHz—30MHz Conducted emissison Test result	
EUT: Home Theater Sound Bar System	M/N: MAGNIFI MINI SUBWOOFER
Power: AC 120V/60Hz; AC 240V/60Hz	
Test date: 2016-08-08	Test site: 844 Chamber    Tested by: Tony.Tang
Test mode: Tx	
Pass	

### 3.5. Test Data



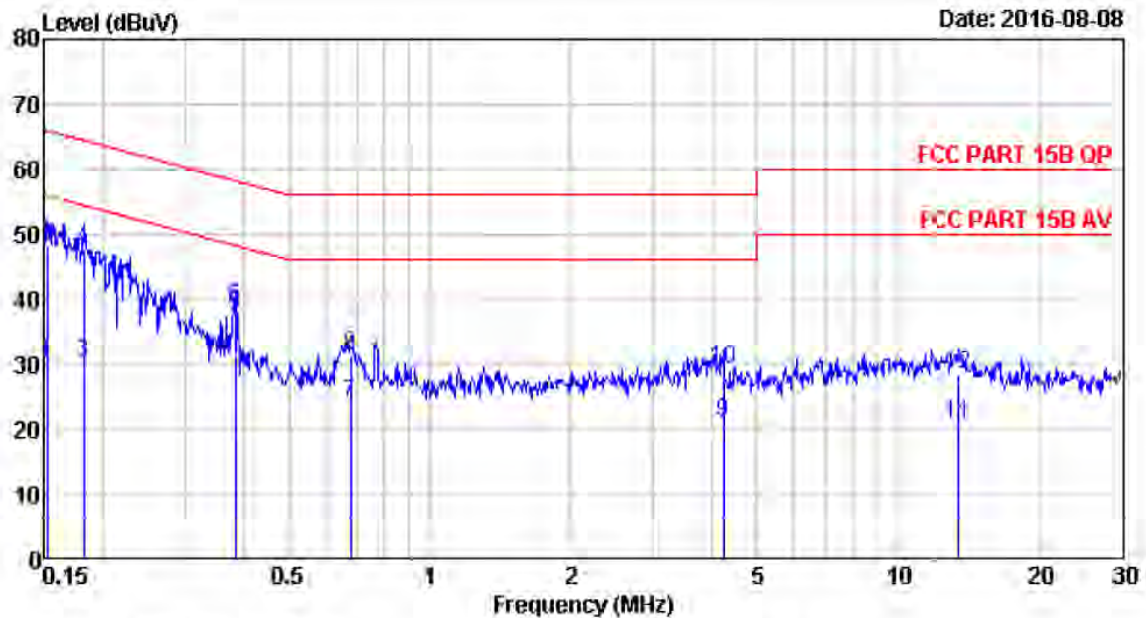
Site no : 844 Shield Room Data no. : 137  
 Env. / Ins. : Temp:25.3°C Humi:58% Press:101.50kPa LINE Phase : LINE  
 Limit : FCC PART 15B QP  
 Engineer : Tony  
 EUT : Home Theater Sound Bar System  
 Power : AC 240V/60Hz  
 M/N : MAGNIFI MINI SUBWOOFER  
 Test Mode : TX Mode

	Freq. (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.15	9.61	9.81	8.38	27.80	55.91	28.11	Average
2	0.15	9.61	9.81	31.04	50.46	65.91	15.45	QP
3	0.19	9.61	9.80	6.67	26.08	54.02	27.94	Average
4	0.19	9.61	9.80	27.74	47.15	64.02	16.87	QP
5	0.29	9.61	9.83	5.50	24.94	50.54	25.60	Average
6	0.29	9.61	9.83	21.83	41.27	60.54	19.27	QP
7	0.38	9.61	9.82	16.80	36.23	48.21	11.98	Average
8	0.38	9.61	9.82	17.65	37.08	58.21	21.13	QP
9	3.88	9.64	9.84	3.98	23.46	46.00	22.54	Average
10	3.88	9.64	9.84	18.72	38.20	56.00	17.80	QP
11	13.62	9.67	9.92	7.84	27.43	50.00	22.57	Average
12	13.62	9.67	9.92	18.73	38.32	60.00	21.68	QP



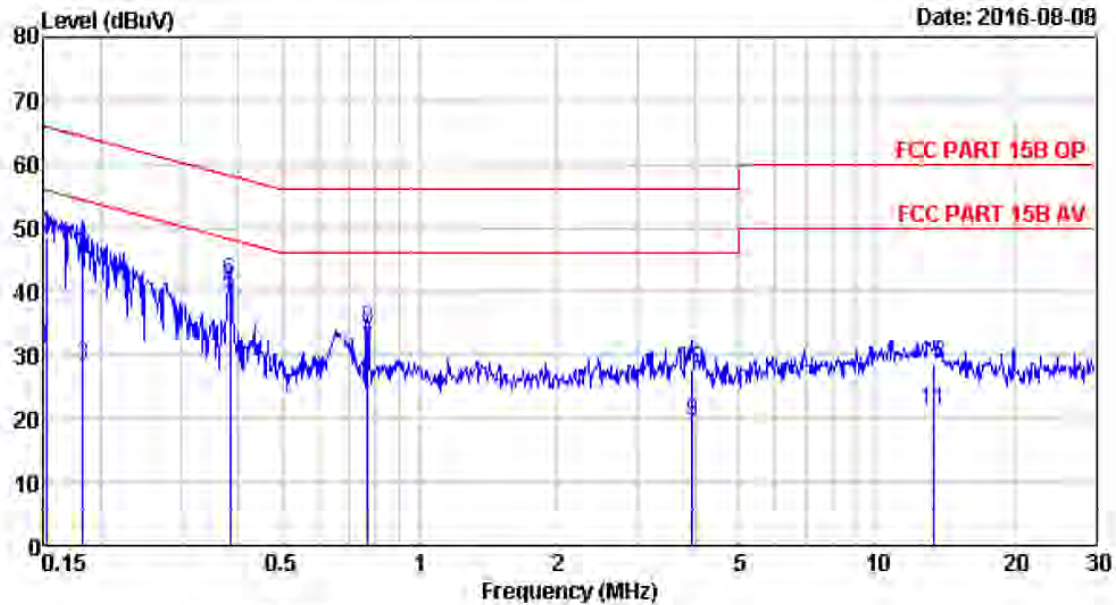
Site no : 844 Shield Room Data no. : 139  
 Env. / Ins. : Temp:25.3'C Humi:58% Press:101.50kPa LINE Phase : NEUTRAL  
 Limit : FCC PART 15B QP  
 Engineer : Tony  
 EUT : Home Theater Sound Bar System  
 Power : AC 240V/60Hz  
 M/N : MAGNIFI MINI SUBWOOFER  
 Test Mode : TX Mode

	Freq. (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBUV)	Emission Level (dBUV)	Limits (dBUV)	Margin (dB)	Remark
1	0.15	9.46	9.81	7.71	26.98	55.91	28.93	Average
2	0.15	9.46	9.81	27.41	46.68	65.91	19.23	QP
3	0.18	9.54	9.80	6.67	26.01	54.68	28.67	Average
4	0.18	9.54	9.80	26.25	45.59	64.68	19.09	QP
5	0.39	9.59	9.82	18.17	37.58	48.17	10.59	Average
6	0.39	9.59	9.82	20.47	39.88	58.17	18.29	QP
7	2.16	9.62	9.84	0.05	19.51	46.00	26.49	Average
8	2.16	9.62	9.84	7.80	27.26	56.00	28.74	QP
9	4.18	9.64	9.85	0.84	20.33	46.00	25.67	Average
10	4.18	9.64	9.85	11.14	30.63	56.00	25.37	QP
11	12.85	9.73	9.91	2.28	21.92	50.00	28.08	Average
12	12.85	9.73	9.91	10.06	29.70	60.00	30.30	QP



Site no : 844 Shield Room Data no. : 141  
 Env. / Ins. : Temp:25.3°C Humi:58% Press:101.50kPa LINE Phase : LINE  
 Limit : FCC PART 15B QP  
 Engineer : Tony  
 EUT : Home Theater Sound Bar System  
 Power : AC 120V/60Hz  
 M/N : MAGNIFI MINI SUBWOOFER  
 Test Mode : TX Mode

	Freq. (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.15	9.61	9.81	10.78	30.20	55.91	25.71	Average
2	0.15	9.61	9.81	28.60	48.02	65.91	17.89	QP
3	0.18	9.61	9.80	10.67	30.08	54.42	24.34	Average
4	0.18	9.61	9.80	28.14	47.55	64.42	16.87	QP
5	0.38	9.61	9.82	18.08	37.51	48.21	10.70	Average
6	0.38	9.61	9.82	19.21	38.64	58.21	19.57	QP
7	0.68	9.59	9.81	4.63	24.03	46.00	21.97	Average
8	0.68	9.59	9.81	11.88	31.28	56.00	24.72	QP
9	4.25	9.64	9.85	1.47	20.96	46.00	25.04	Average
10	4.25	9.64	9.85	9.60	29.09	56.00	26.91	QP
11	13.48	9.67	9.91	0.96	20.54	50.00	29.46	Average
12	13.48	9.67	9.91	8.71	28.29	60.00	31.71	QP



Site no : 844 Shield Room Data no. : 143  
 Env. / Ins. : Temp:25.3'C Humi:58% Press:101.50kPa LINE Phase : NEUTRAL  
 Limit : FCC PART 15B QP  
 Engineer : Tony  
 EUT : Home Theater Sound Bar System  
 Power : AC 120V/60Hz  
 M/N : MAGNIFI MINI SUBWOOFER  
 Test Mode : TX Mode

	Freq. (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.15	9.46	9.81	11.79	31.06	55.91	24.85	Average
2	0.15	9.46	9.81	29.25	48.52	65.91	17.39	QP
3	0.18	9.56	9.80	8.97	28.33	54.37	26.04	Average
4	0.18	9.56	9.80	27.75	47.11	64.37	17.26	QP
5	0.38	9.59	9.82	20.04	39.45	48.21	8.76	Average
6	0.38	9.59	9.82	22.29	41.70	58.21	16.51	QP
7	0.77	9.62	9.81	11.32	30.75	46.00	15.25	Average
8	0.77	9.62	9.81	14.60	34.03	56.00	21.97	QP
9	3.94	9.64	9.84	0.03	19.51	46.00	26.49	Average
10	3.94	9.64	9.84	8.18	27.66	56.00	28.34	QP
11	13.41	9.73	9.89	1.58	21.20	50.00	28.80	Average
12	13.41	9.73	9.89	8.92	28.54	60.00	31.46	QP

## 4. RADIATED EMISSIONS

### 4.1. Limit

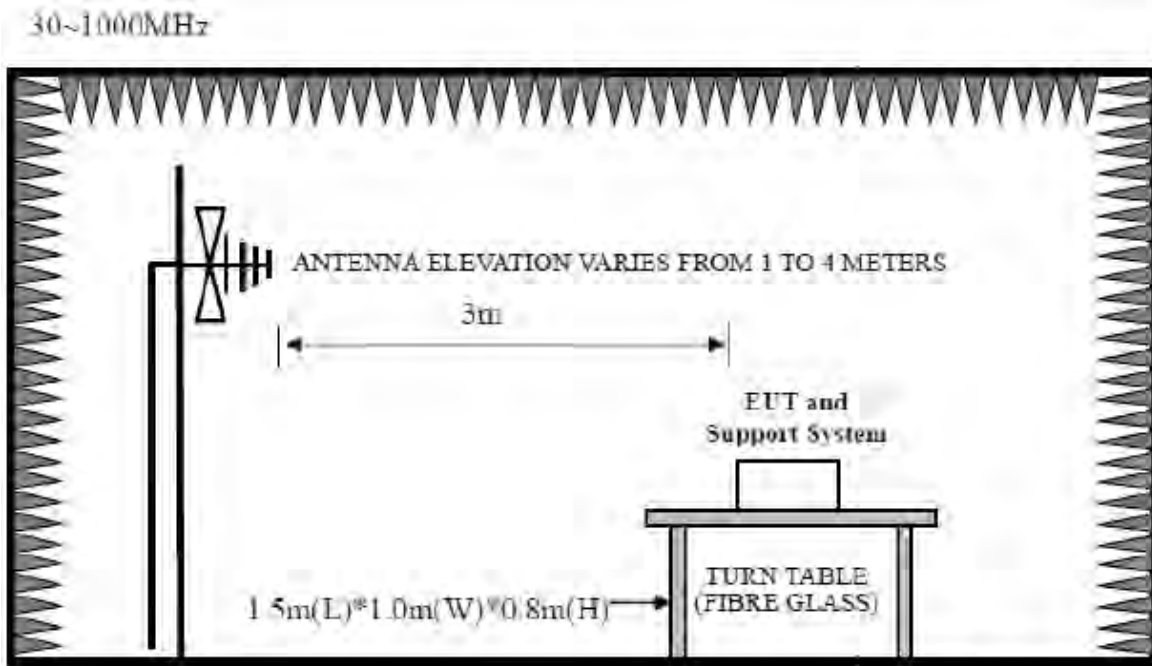
FREQUENCY MHz	DISTANCE Meters	FIELD STRENGTHS LIMIT	
		μV/m	dB(μV)/m
30 ~ 88	3	100	40.0
88 ~ 216	3	150	43.5
216 ~ 960	3	200	46.0
960 ~ 1000	3	500	54.0
Above 1000	3	74.0 dB(μV)/m (Peak) 54.0 dB(μV)/m (Average)	

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

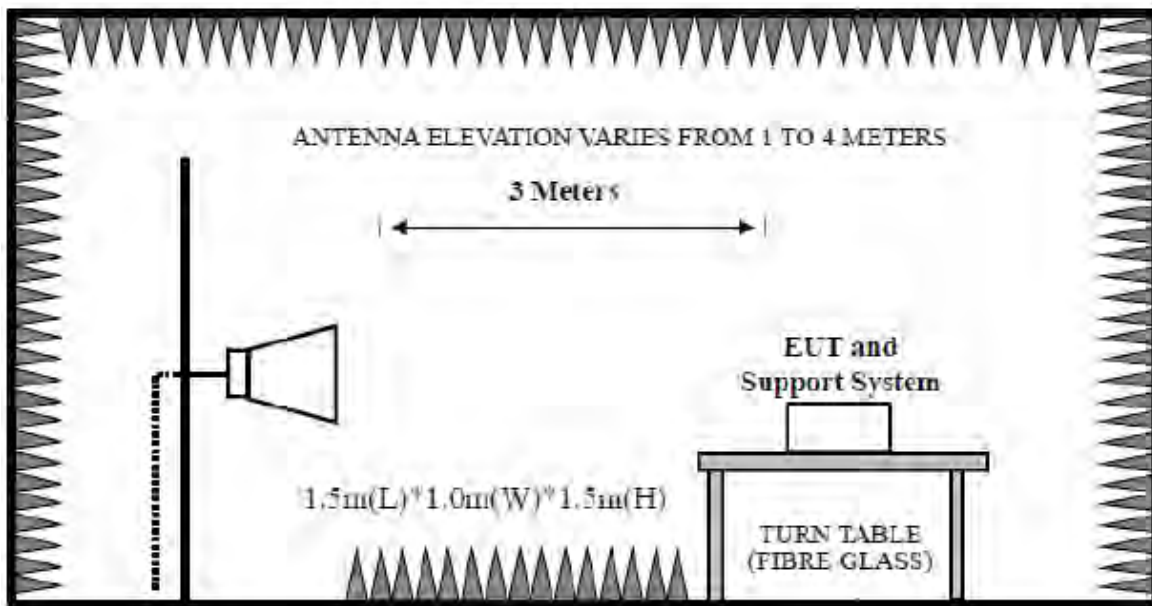
(2) The smaller limit shall apply at the cross point between two frequency bands.

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

## 4.2. Block Diagram of Test setup



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 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.

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 PAEK measurement,

PEAK detector, 1MHz/10Hz for Average measurement

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

### 4.4. Test Result

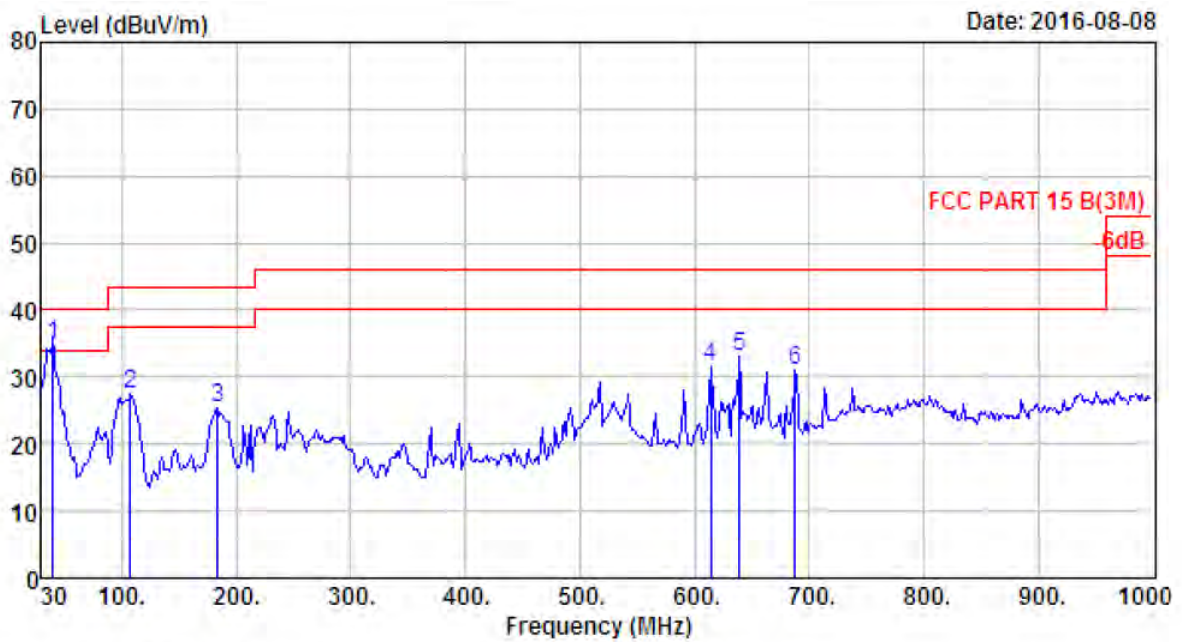
30MHz—25GHz Radiated emission Test result	
EUT: Home Theater Sound Bar System	M/N: MAGNIFI MINI SUBWOOFER
Power: AC 120V/60Hz	
Test date: 2016-08-08	Test site: 3m Chamber Tested by: Tony Tang
Test mode: Tx	
Pass	

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.

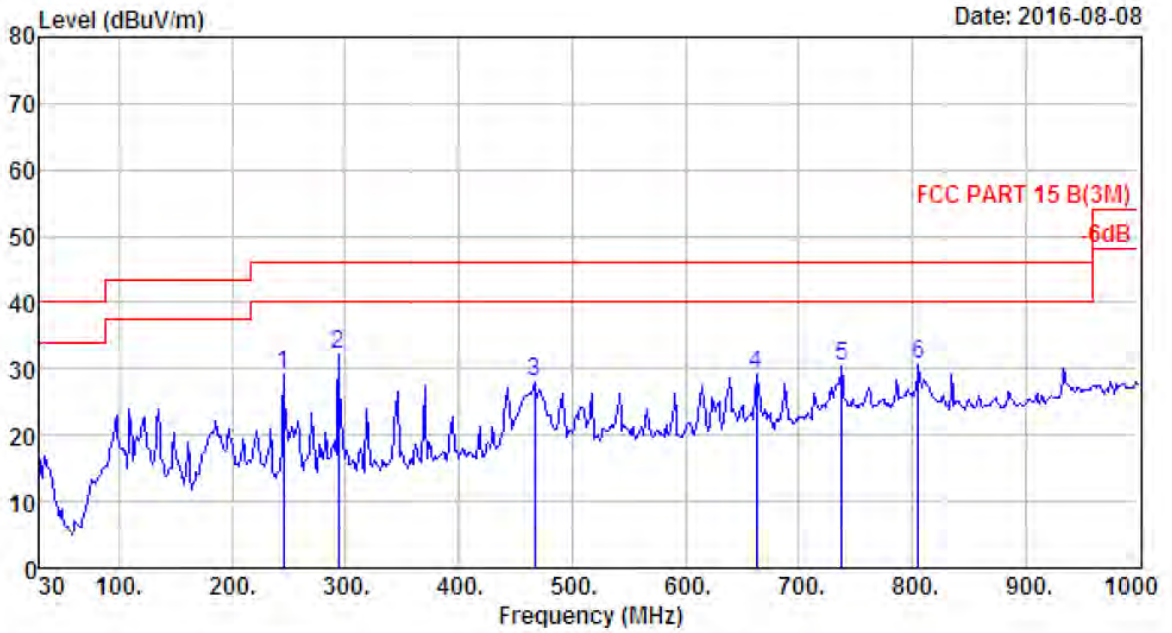
4.5. Test Data

30 MHz – 1000 MHz



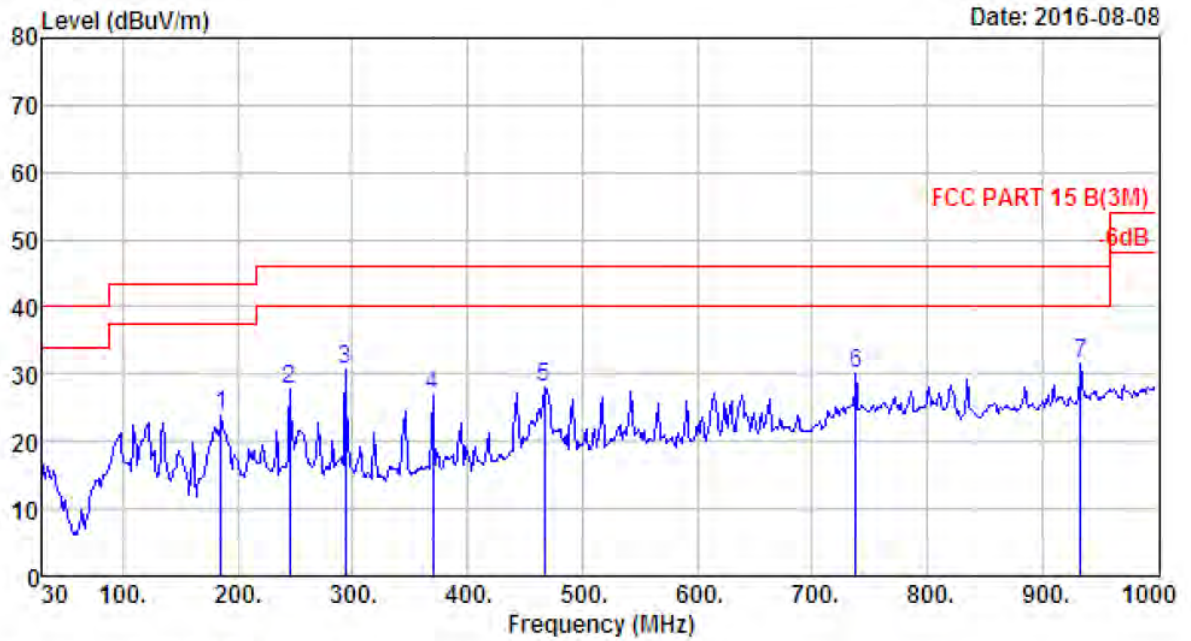
Site no. : 966 1# chamber Data no. : 563  
 Dis. / Ant. : 3m 27137 Ant. pol. : VERTICAL  
 Limit : FCC PART 15 B(3M)  
 Env. / Ins. : Temp:23.6°;Humi:56%;Press:101.52kPa  
 Engineer : Tony  
 EUT : Home Theater Sound Bar System  
 Power : AC 120V/60Hz  
 M/N : MAGNIFI MINI SUBWOOFER  
 Test Mode : GFSK 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	39.70	12.90	0.81	21.20	34.91	40.00	5.09	QP
2	107.60	10.24	1.39	15.68	27.31	43.50	16.19	QP
3	183.26	8.67	1.69	14.99	25.35	43.50	18.15	QP
4	613.94	19.94	3.39	8.35	31.68	46.00	14.32	QP
5	639.16	20.03	3.56	9.59	33.18	46.00	12.82	QP
6	687.66	20.35	3.63	7.16	31.14	46.00	14.86	QP



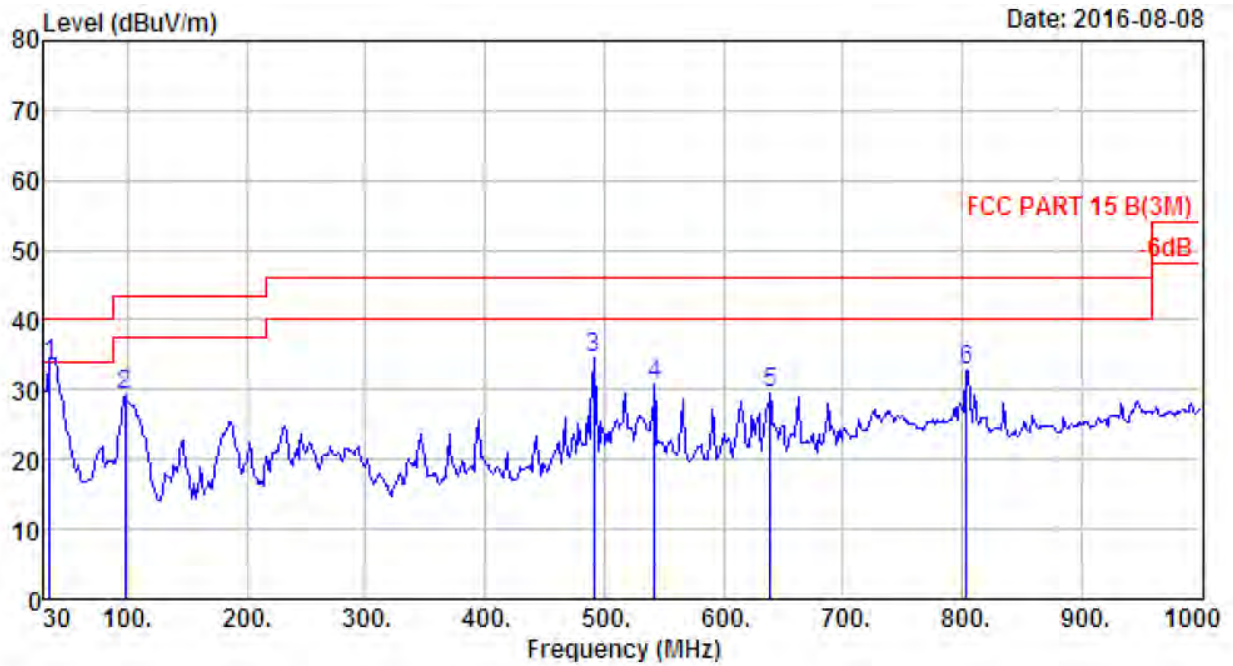
Site no. : 966 1# chamber                      Data no. : 564  
 Dis. / Ant. : 3m 27137                      Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15 B(3M)  
 Env. / Ins. : Temp:23.6';Humi:56%;Press:101.52kPa  
 Engineer : Tony  
 EUT : Home Theater Sound Bar System  
 Power : AC 120V/60Hz  
 M/N : MAGNIFI MINI SUBWOOFER  
 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	245.34	11.06	2.10	15.94	29.10	46.00	16.90	QP
2	293.84	12.92	2.33	16.89	32.14	46.00	13.86	QP
3	466.50	17.08	3.02	7.93	28.03	46.00	17.97	QP
4	662.44	20.10	3.55	5.47	29.12	46.00	16.88	QP
5	738.10	22.32	3.79	4.41	30.52	46.00	15.48	QP
6	806.00	22.24	3.84	4.74	30.82	46.00	15.18	QP



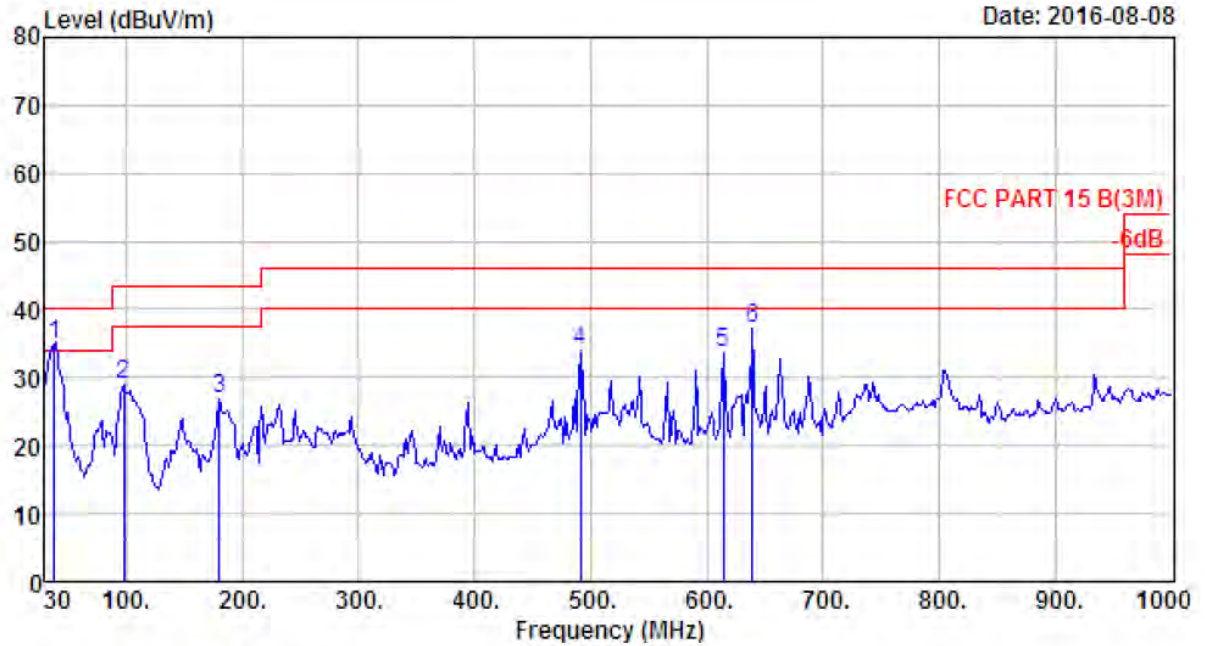
Site no. : 966 1# chamber                      Data no. : 565  
 Dis. / Ant. : 3m 27137                              Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15 B(3M)  
 Env. / Ins. : Temp:23.6';Humi:56%;Press:101.52kPa  
 Engineer : Tony  
 EUT : Home Theater Sound Bar System  
 Power : AC 120V/60Hz  
 M/N : MAGNIFI MINI SUBWOOFER  
 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	185.20	8.48	1.75	13.60	23.83	43.50	19.67	QP
2	245.34	11.06	2.10	14.69	27.85	46.00	18.15	QP
3	293.84	12.92	2.33	15.46	30.71	46.00	15.29	QP
4	369.50	14.84	2.65	9.32	26.81	46.00	19.19	QP
5	466.50	17.08	3.02	8.08	28.18	46.00	17.82	QP
6	738.10	22.32	3.79	3.95	30.06	46.00	15.94	QP
7	934.04	24.53	4.63	2.28	31.44	46.00	14.56	QP



Site no. : 966 1# chamber Data no. : 566  
 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 System  
 Power : AC 120V/60Hz  
 M/N : MAGNIFI MINI SUBWOOFER  
 Test Mode : GFSK TX 5792MHz  
 Antenna A

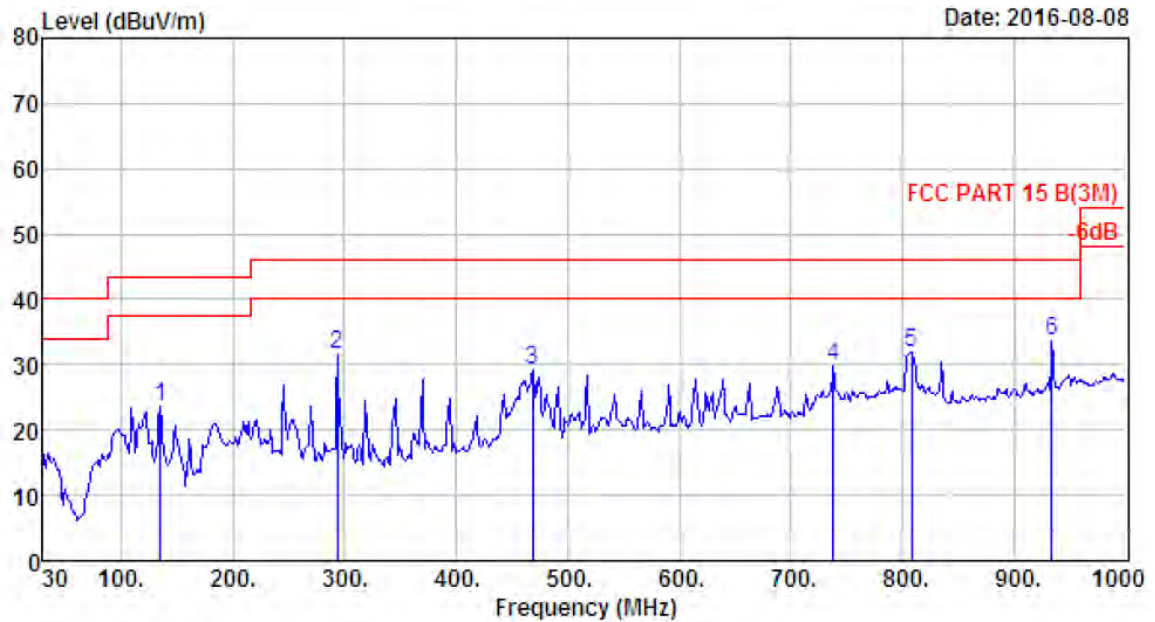
	Freq. (MHz)	ANT Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	34.85	15.55	0.72	17.36	33.63	40.00	6.37	QP
2	97.90	9.13	1.33	18.84	29.30	43.50	14.20	QP
3	490.75	17.82	3.09	13.61	34.52	46.00	11.48	QP
4	542.16	19.46	3.24	7.89	30.59	46.00	15.41	QP
5	639.16	20.03	3.56	5.84	29.43	46.00	16.57	QP
6	804.06	22.17	3.87	6.76	32.80	46.00	13.20	QP



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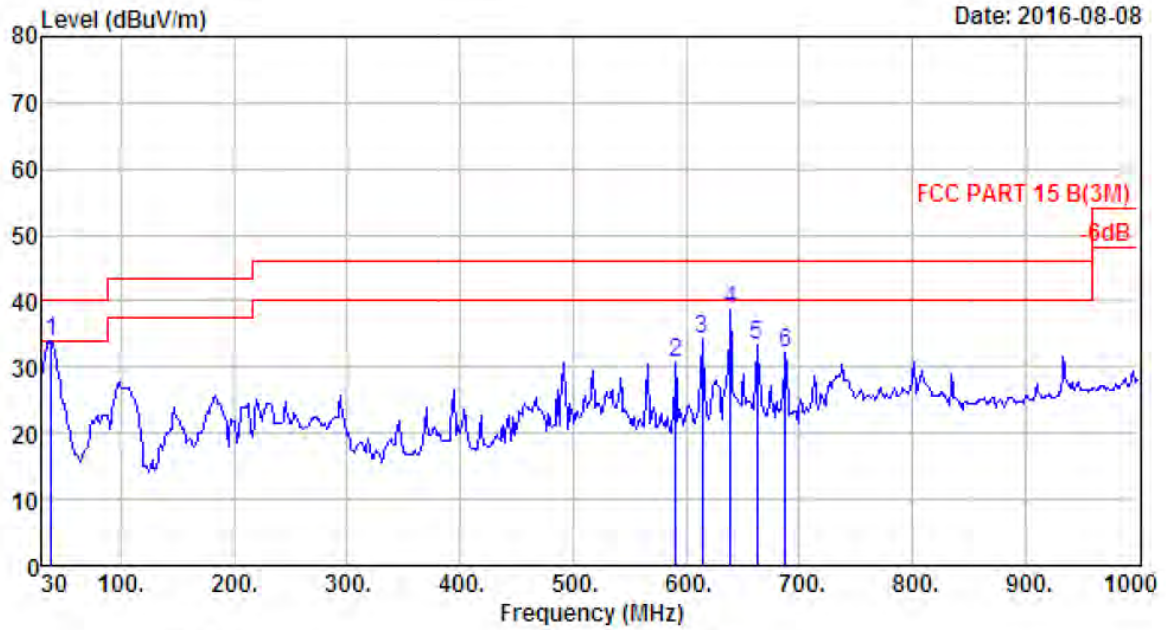
Site no.      : 966 1# chamber           Data no.   : 567
Dis. / Ant.   : 3m 27137                Ant. pol.  : VERTICAL
Limit        : FCC PART 15 B(3M)
Env. / Ins.   : Temp:23.6';Humi:56%;Press:101.52kPa
Engineer     : Tony
EUI         : Home Theater Sound Bar System
Power        : AC 120V/60Hz
M/N         : MAGNIFI MINI SUBWOOFER
Test Mode    : GFSK TX 5840MHz
               Antenna A
    
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	Freq. (MHz)	ANT Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	37.76	14.05	0.79	19.86	34.70	40.00	5.30	QP
2	97.90	9.13	1.33	18.37	28.83	43.50	14.67	QP
3	180.35	8.95	1.70	16.20	26.85	43.50	16.65	QP
4	490.75	17.82	3.09	13.00	33.91	46.00	12.09	QP
5	613.94	19.94	3.39	10.20	33.53	46.00	12.47	QP
6	639.16	20.03	3.56	13.51	37.10	46.00	8.90	QP



Site no. : 966 1# chamber                      Data no. : 568  
 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  
 EUI : Home Theater Sound Bar System  
 Power : AC 120V/60Hz  
 M/N : MAGNIFI MINI SUBWOOFER  
 Test Mode : GFSK TX 5840MHz  
 Antenna A

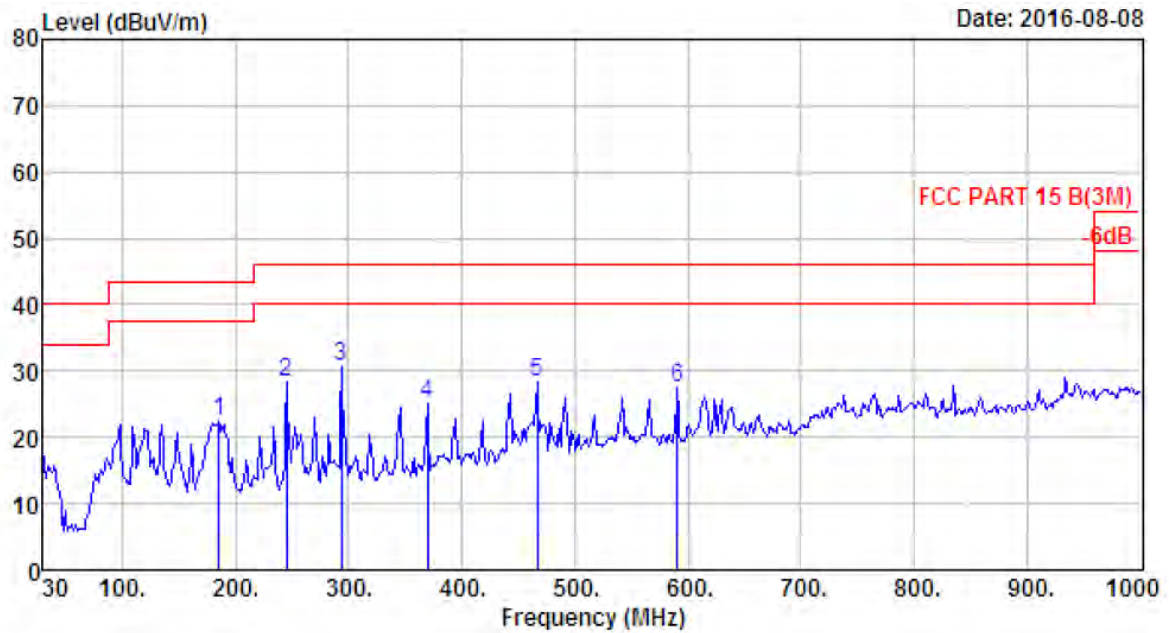
	Freq. (MHz)	ANT Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	134.76	11.37	1.57	10.60	23.54	43.50	19.96	QP
2	293.84	12.92	2.33	16.47	31.72	46.00	14.28	QP
3	468.44	17.14	3.09	8.93	29.16	46.00	16.84	QP
4	738.10	22.32	3.79	3.81	29.92	46.00	16.08	QP
5	807.94	22.31	3.80	5.71	31.82	46.00	14.18	QP
6	934.04	24.53	4.63	4.61	33.77	46.00	12.23	QP



Site no. : 966 1# chamber Data no. : 569  
 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 System  
 Power : AC 120V/60Hz  
 M/N : MAGNIFI MINI SUBWOOFER  
 Test Mode : GFSK TX 5743MHz  
 Antenna B

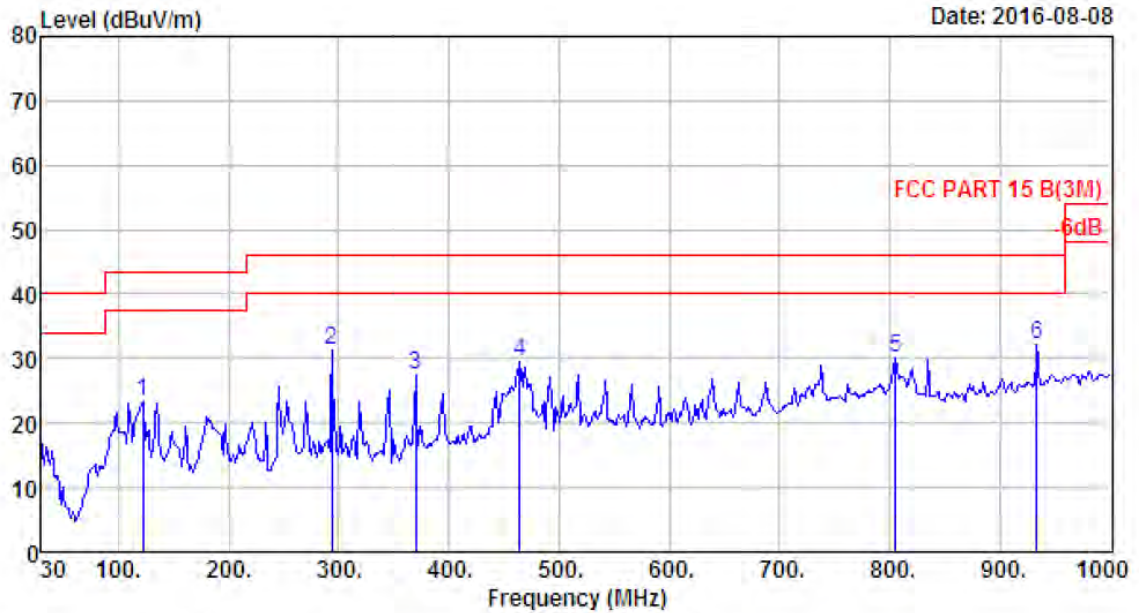
	Freq. (MHz)	ANT Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	37.76	14.05	0.79	19.17	34.01	40.00	5.99	QP
2	590.66	19.45	3.37	8.03	30.85	46.00	15.15	QP
3	613.94	19.94	3.39	10.97	34.30	46.00	11.70	QP
4	639.16	20.03	3.56	14.96	38.55	46.00	7.45	QP
5	662.44	20.10	3.55	9.63	33.28	46.00	12.72	QP
6	687.66	20.35	3.63	8.31	32.29	46.00	13.71	QP





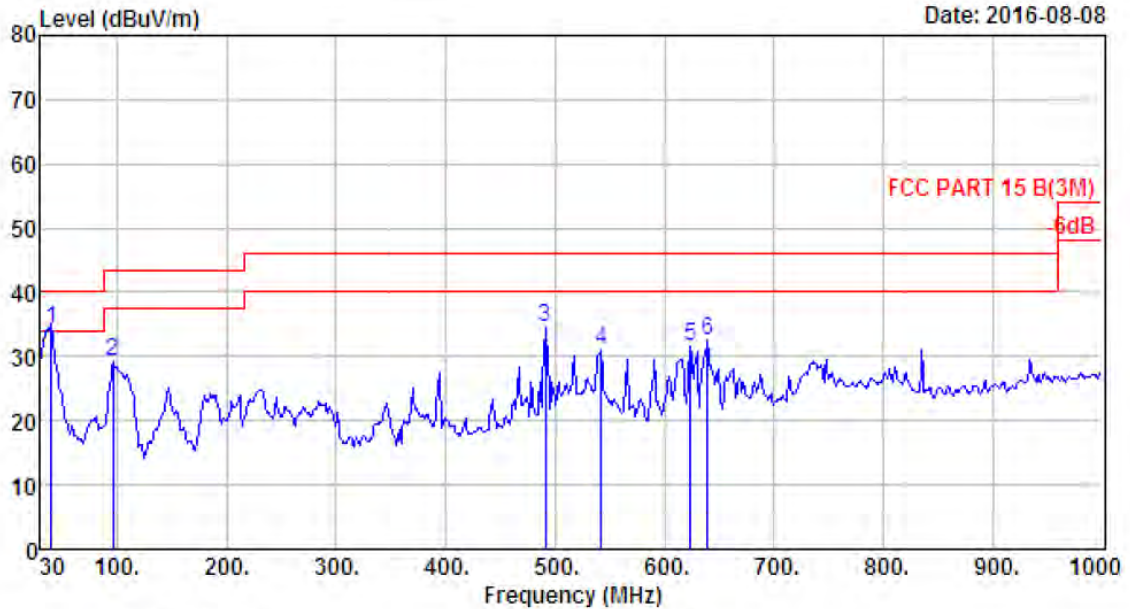
Site no. : 966 1# chamber Data no. : 570  
 Dis. / Ant. : 3m 27137 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15 B(3M)  
 Env. / Ins. : Temp:23.6';Humi:56%;Press:101.52kPa  
 Engineer : Tony  
 EUT : Home Theater Sound Bar System  
 Power : AC 120V/60Hz  
 M/N : MAGNIFI MINI SUBWOOFER  
 Test Mode : GFSK IX 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	185.20	8.48	1.75	12.21	22.44	43.50	21.06	QP
2	245.34	11.06	2.10	15.08	28.24	46.00	17.76	QP
3	293.84	12.92	2.33	15.50	30.75	46.00	15.25	QP
4	369.50	14.84	2.65	7.73	25.22	46.00	20.78	QP
5	466.50	17.08	3.02	8.17	28.27	46.00	17.73	QP
6	590.66	19.45	3.37	4.54	27.36	46.00	18.64	QP



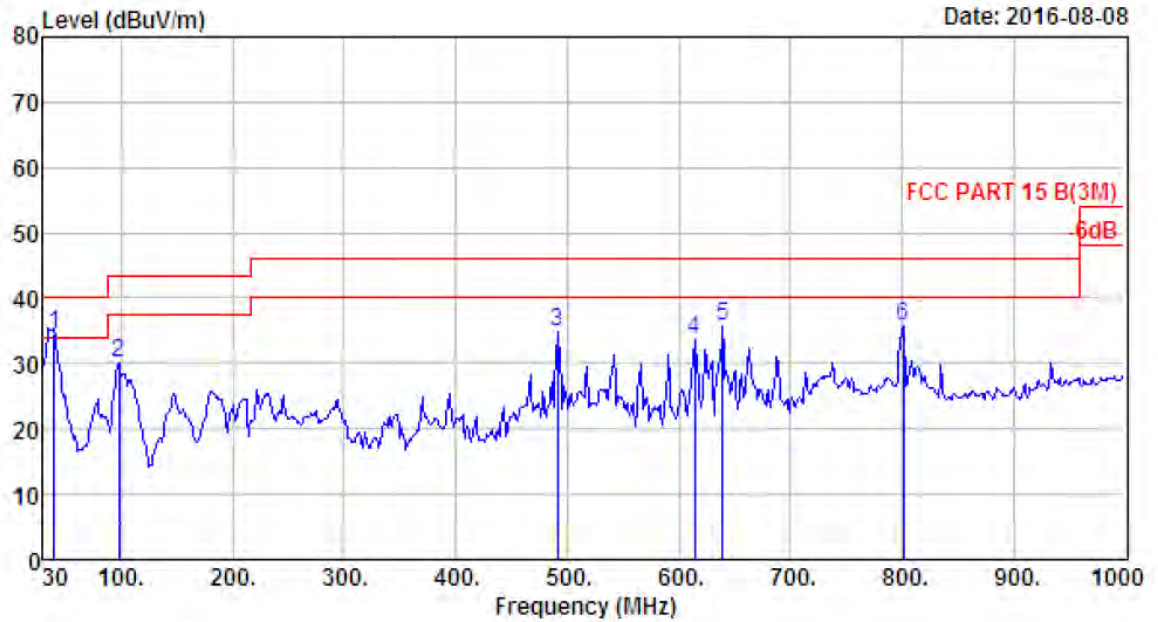
Site no. : 966 1# chamber Data no. : 571  
 Dis. / Ant. : 3m 27137 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15 B(3M)  
 Env. / Ins. : Temp:23.6';Humi:56%;Press:101.52kPa  
 Engineer : Tony  
 EUI : Home Theater Sound Bar System  
 Power : AC 120V/60Hz  
 M/N : MAGNIFI MINI SUBWOOFER  
 Test Mode : 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	122.15	11.24	1.45	10.49	23.18	43.50	20.32	QP
2	293.84	12.92	2.33	15.94	31.19	46.00	14.81	QP
3	369.50	14.84	2.65	9.88	27.37	46.00	18.63	QP
4	464.56	17.01	3.02	9.37	29.40	46.00	16.60	QP
5	806.00	22.24	3.84	4.16	30.24	46.00	15.76	QP
6	934.04	24.53	4.63	2.90	32.06	46.00	13.94	QP



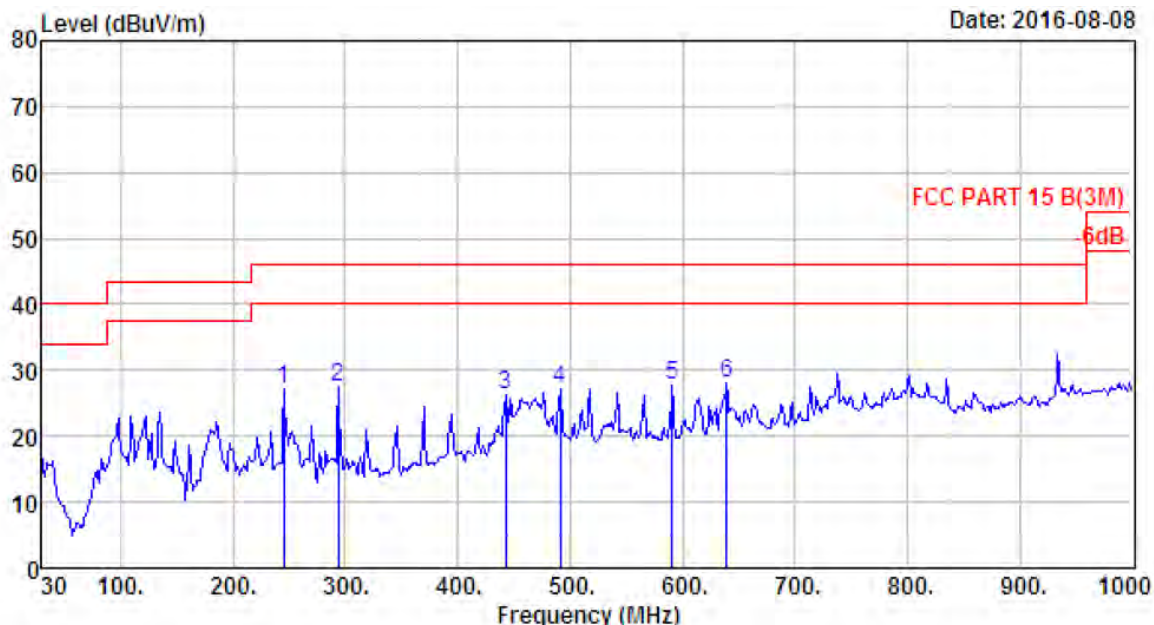
Site no. : 966 1# chamber                      Data no. : 572  
 Dis. / Ant. : 3m 27137                              Ant. pol. : VERTICAL  
 Limit : FCC PART 15 B(3M)  
 Env. / Ins. : Temp:23.6';Humi:56%;Press:101.52kPa  
 Engineer : Tony  
 EUI : Home Theater Sound Bar System  
 Power : AC 120V/60Hz  
 M/N : MAGNIFI MINI SUBWOOFER  
 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	39.70	12.90	0.81	20.48	34.19	40.00	5.81	QP
2	95.96	8.92	1.31	18.98	29.21	43.50	14.29	QP
3	490.75	17.82	3.09	13.66	34.57	46.00	11.43	QP
4	542.16	19.46	3.24	8.32	31.02	46.00	14.98	QP
5	623.64	20.08	3.37	8.18	31.63	46.00	14.37	QP
6	639.16	20.03	3.56	9.03	32.62	46.00	13.38	QP



Site no. : 966 1# chamber Data no. : 573  
 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 System  
 Power : AC 120V/60Hz  
 M/N : MAGNIFI MINI SUBWOOFER  
 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	39.70	12.90	0.81	20.71	34.42	40.00	5.58	QP
2	97.90	9.13	1.33	19.55	30.01	43.50	13.49	QP
3	490.75	17.82	3.09	13.84	34.75	46.00	11.25	QP
4	613.94	19.94	3.39	10.23	33.56	46.00	12.44	QP
5	639.16	20.03	3.56	12.05	35.64	46.00	10.36	QP
6	801.15	22.07	3.83	9.82	35.72	46.00	10.28	QP



Site no. : 966 1# chamber                      Data no. : 574  
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  
EUI : Home Theater Sound Bar System  
Power : AC 120V/60Hz  
M/N : MAGNIFI MINI SUBWOOFER  
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	245.34	11.06	2.10	13.88	27.04	46.00	18.96	QP
2	293.84	12.92	2.33	12.30	27.55	46.00	18.45	QP
3	442.25	16.29	2.88	7.23	26.40	46.00	19.60	QP
4	490.75	17.82	3.09	6.15	27.06	46.00	18.94	QP
5	590.66	19.45	3.37	4.81	27.63	46.00	18.37	QP
6	639.16	20.03	3.56	4.52	28.11	46.00	17.89	QP

Above 1GHz

Site no. : 966 1# chamber Data no. : 495  
 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 System  
 Power : AC 120V/60Hz  
 M/N : MAGNIFI MINI SUBWOOFER  
 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	4995.00	31.54	12.59	32.00	28.19	40.32	74.00	33.68	Peak
2	5743.00	32.27	12.05	32.54	75.93	87.71	94.00	6.29	Average
3	5743.00	32.27	12.05	32.54	92.80	104.58	114.00	9.42	Peak
4	11486.00	39.21	10.93	34.55	29.01	44.60	74.00	29.40	Peak
5	15076.00	39.86	10.89	35.23	29.83	45.35	74.00	28.65	Peak
6	17229.00	40.58	10.90	33.55	28.14	46.07	74.00	27.93	Peak
7	17881.00	45.28	11.24	31.17	24.00	49.35	74.00	24.65	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. : 966 1# chamber Data no. : 496  
 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 System  
 Power : AC 120V/60Hz  
 M/N : MAGNIFI MINI SUBWOOFER  
 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	33.28	44.67	74.00	29.33	Peak
2	5743.00	32.27	12.05	32.54	74.98	86.76	94.00	7.24	Average
3	5743.00	32.27	12.05	32.54	91.81	103.59	114.00	10.41	Peak
4	11486.00	39.21	10.93	34.55	31.09	46.68	74.00	27.32	Peak
5	14396.00	41.79	10.92	32.83	25.20	45.08	74.00	28.92	Peak
6	17229.00	40.58	10.90	33.55	25.97	43.90	74.00	30.10	Peak
7	18000.00	46.45	11.38	27.85	19.44	49.42	74.00	24.58	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. : 966 1# chamber Data no. : 497  
 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 System  
 Power : AC 120V/60Hz  
 M/N : MAGNIFI MINI SUBWOOFER  
 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	5335.00	31.71	12.19	32.31	31.94	43.53	74.00	30.47	Peak
2	5792.00	32.36	12.07	32.47	75.74	87.70	94.00	6.30	Average
3	5792.00	32.36	12.07	32.47	92.50	104.46	114.00	9.54	Peak
4	11584.00	39.10	11.01	34.74	30.65	46.02	74.00	27.98	Peak
5	16300.00	37.77	10.58	33.85	32.24	46.74	74.00	27.26	Peak
6	17376.00	41.17	10.85	34.50	28.78	46.30	74.00	27.70	Peak
7	17966.00	46.12	11.34	28.80	19.93	48.59	74.00	25.41	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. : 966 1# chamber Data no. : 498  
 Dis. / Ant. : 3m ANI 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 System  
 Power : AC 120V/60Hz  
 M/N : MAGNIFI MINI SUBWOOFER  
 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	4995.00	31.54	12.59	32.00	33.64	45.77	74.00	28.23	Peak
2	5792.00	32.36	12.07	32.47	74.87	86.83	94.00	7.17	Average
3	5792.00	32.36	12.07	32.47	89.76	101.72	114.00	12.28	Peak
4	11584.00	39.10	11.01	34.74	28.34	43.71	74.00	30.29	Peak
5	16045.00	37.13	10.65	32.79	30.68	45.67	74.00	28.33	Peak
6	17376.00	41.17	10.85	34.50	27.27	44.79	74.00	29.21	Peak
7	18000.00	46.45	11.38	27.85	18.05	48.03	74.00	25.97	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. : 966 1# chamber Data no. : 499  
 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  
 EUI : Home Theater Sound Bar System  
 Power : AC 120V/60Hz  
 M/N : MAGNIFI MINI SUBWOOFER  
 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	5046.00	31.57	12.53	32.08	34.25	46.27	74.00	27.73	Peak
2	5840.00	32.46	12.08	32.40	76.20	88.34	94.00	5.66	Average
3	5840.00	32.46	12.08	32.40	93.69	105.83	114.00	8.17	Peak
4	11680.00	38.98	11.09	34.93	31.33	46.47	74.00	27.53	Peak
5	14770.00	41.01	10.89	34.03	31.58	49.45	74.00	24.55	Peak
6	17520.00	41.79	10.82	35.34	29.25	46.52	74.00	27.48	Peak
7	17881.00	45.28	11.24	31.17	23.34	48.69	74.00	25.31	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. : 966 1# chamber Data no. : 500  
 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 System  
 Power : AC 120V/60Hz  
 M/N : MAGNIFI MINI SUBWOOFER  
 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	5046.00	31.57	12.53	32.08	34.10	46.12	74.00	27.88	Peak
2	5840.00	32.46	12.08	32.40	74.65	86.79	94.00	7.21	Average
3	5840.00	32.46	12.08	32.40	89.43	101.57	114.00	12.43	Peak
4	11680.00	38.98	11.09	34.93	28.40	43.54	74.00	30.46	Peak
5	15110.00	39.70	10.91	35.41	32.01	47.21	74.00	26.79	Peak
6	17520.00	41.79	10.82	35.34	28.69	45.96	74.00	28.04	Peak
7	17966.00	46.12	11.34	28.80	21.69	50.35	74.00	23.65	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. : 966 1# chamber Data no. : 505  
 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 System  
 Power : AC 120V/60Hz  
 M/N : MAGNIFI MINI SUBWOOFER  
 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	4995.00	31.54	12.59	32.00	33.06	45.19	74.00	28.81	Peak
2	5743.00	32.27	12.05	32.54	75.63	87.41	94.00	6.59	Average
3	5743.00	32.27	12.05	32.54	91.62	103.40	114.00	10.60	Peak
4	11486.00	39.21	10.93	34.55	30.14	45.73	74.00	28.27	Peak
5	16096.00	37.26	10.64	33.00	31.41	46.31	74.00	27.69	Peak
6	17229.00	40.58	10.90	33.55	29.74	47.67	74.00	26.33	Peak
7	18000.00	46.45	11.38	27.85	21.09	51.07	74.00	22.93	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.

Site no. : 966 1# chamber                      Data no. : 506  
 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 System  
 Power : AC 120V/60Hz  
 M/N : MAGNIFI MINI SUBWOOFER  
 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	5046.00	31.57	12.53	32.08	34.39	46.41	74.00	27.59	Peak
2	5743.00	32.27	12.05	32.54	74.53	86.31	94.00	7.69	Average
3	5743.00	32.27	12.05	32.54	90.90	102.68	114.00	11.32	Peak
4	11486.00	39.21	10.93	34.55	27.13	42.72	74.00	31.28	Peak
5	14719.00	41.18	10.90	33.85	27.88	46.11	74.00	27.89	Peak
6	17229.00	40.58	10.90	33.55	29.25	47.18	74.00	26.82	Peak
7	17881.00	45.28	11.24	31.17	25.58	50.93	74.00	23.07	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. : 966 1# chamber Data no. : 507  
 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 System  
 Power : AC 120V/60Hz  
 M/N : MAGNIFI MINI SUBWOOFER  
 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	4995.00	31.54	12.59	32.00	32.92	45.05	74.00	28.95	Peak
2	5792.00	32.36	12.07	32.47	75.74	87.70	94.00	6.30	Average
3	5792.00	32.36	12.07	32.47	92.28	104.24	114.00	9.76	Peak
4	11584.00	39.10	11.01	34.74	30.38	45.75	74.00	28.25	Peak
5	15926.00	37.19	10.73	33.11	30.29	45.10	74.00	28.90	Peak
6	17376.00	41.17	10.85	34.50	28.22	45.74	74.00	28.26	Peak
7	17983.00	46.28	11.36	28.32	20.02	49.34	74.00	24.66	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. : 966 1# chamber                      Data no. : 508  
 Dis. / Ant. : 3m ANI 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 System  
 Power : AC 120V/60Hz  
 M/N : MAGNIFI MINI SUBWOOFER  
 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	4995.00	31.54	12.59	32.00	33.50	45.63	74.00	28.37	Peak
2	5792.00	32.36	12.07	32.47	74.11	86.07	94.00	7.93	Average
3	5792.00	32.36	12.07	32.47	92.06	104.02	114.00	9.98	Peak
4	11584.00	39.10	11.01	34.74	29.85	45.22	74.00	28.78	Peak
5	14804.00	40.89	10.89	34.15	29.13	46.76	74.00	27.24	Peak
6	17376.00	41.17	10.85	34.50	28.29	45.81	74.00	28.19	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. : 966 1# chamber Data no. : 509  
 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 System  
 Power : AC 120V/60Hz  
 M/N : MAGNIFI MINI SUBWOOFER  
 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	4944.00	31.47	12.37	31.96	33.45	45.33	74.00	28.67	Peak
2	5840.00	32.46	12.08	32.40	74.66	86.80	94.00	7.20	Average
3	5840.00	32.46	12.08	32.40	89.25	101.39	114.00	12.61	Peak
4	11680.00	38.98	11.09	34.93	27.68	42.82	74.00	31.18	Peak
5	14600.00	41.59	10.92	33.44	27.61	46.68	74.00	27.32	Peak
6	17520.00	41.79	10.82	35.34	28.20	45.47	74.00	28.53	Peak
7	18000.00	46.45	11.38	27.85	19.94	49.92	74.00	24.08	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. : 966 1# chamber Data no. : 510  
 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 System  
 Power : AC 120V/60Hz  
 M/N : MAGNIFI MINI SUBWOOFER  
 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	33.16	45.18	74.00	28.82	Peak
2	5840.00	32.46	12.08	32.40	75.65	87.79	94.00	6.21	Average
3	5840.00	32.46	12.08	32.40	90.80	102.94	114.00	11.06	Peak
4	11680.00	38.98	11.09	34.93	31.16	46.30	74.00	27.70	Peak
5	16980.00	39.69	10.97	33.32	29.75	47.09	74.00	26.91	Peak
6	17520.00	41.79	10.82	35.34	26.64	43.91	74.00	30.09	Peak
7	17983.00	46.28	11.36	28.32	19.83	49.15	74.00	24.85	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.

## 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.

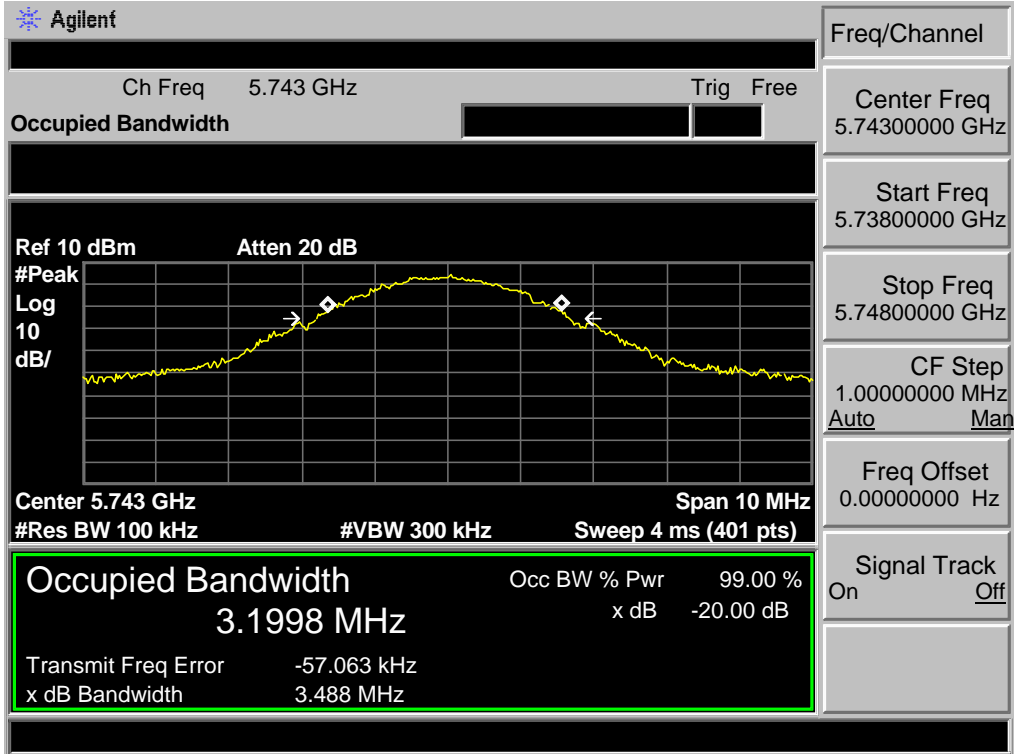
### 5.2. Test Result

EUT: Home Theater Sound Bar System				
M/N: MAGNIFI MINI SUBWOOFER				
Test date: 2016-08-03		Test site: RF site		Tested by: Tony Tang
Mode	Freq (MHz)	20dB Bandwidth (MHz)	Limit (kHz)	Conclusion
Antenna A				
TX	5743	3.488	/	PASS
	5792	3.521	/	PASS
	5840	3.524	/	PASS
Antenna B				
TX	5743	3.446	/	PASS
	5792	3.504	/	PASS
	5840	3.546	/	PASS

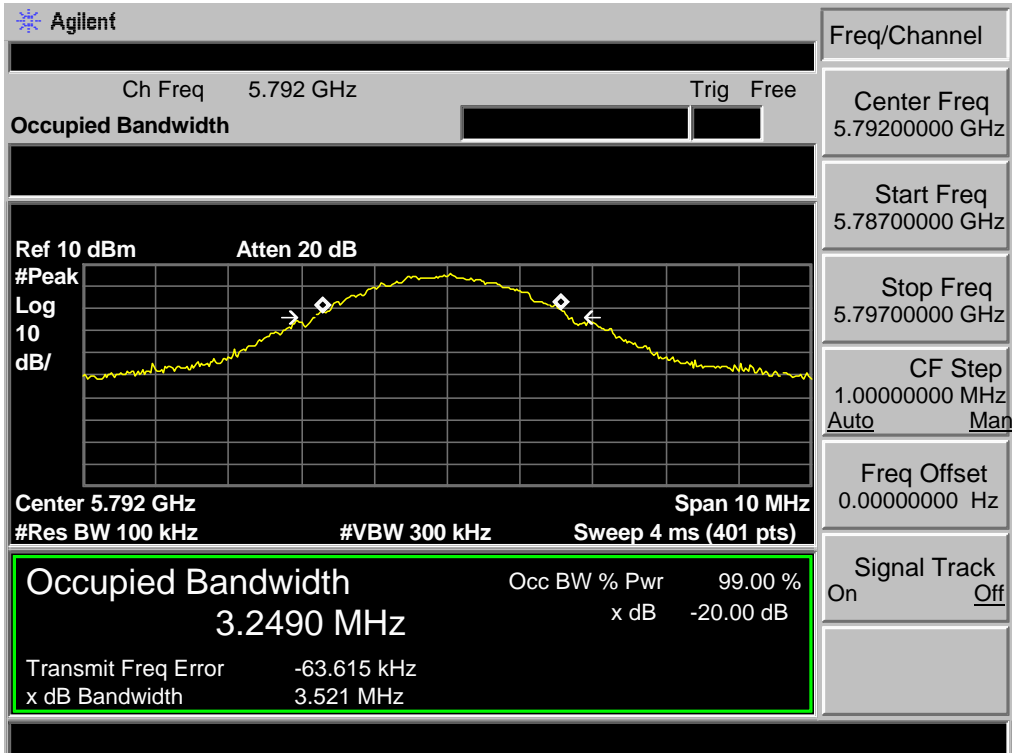
### 5.3. Test Data

Antenna A

#### TX 5743 MHz



#### TX 5792 MHz

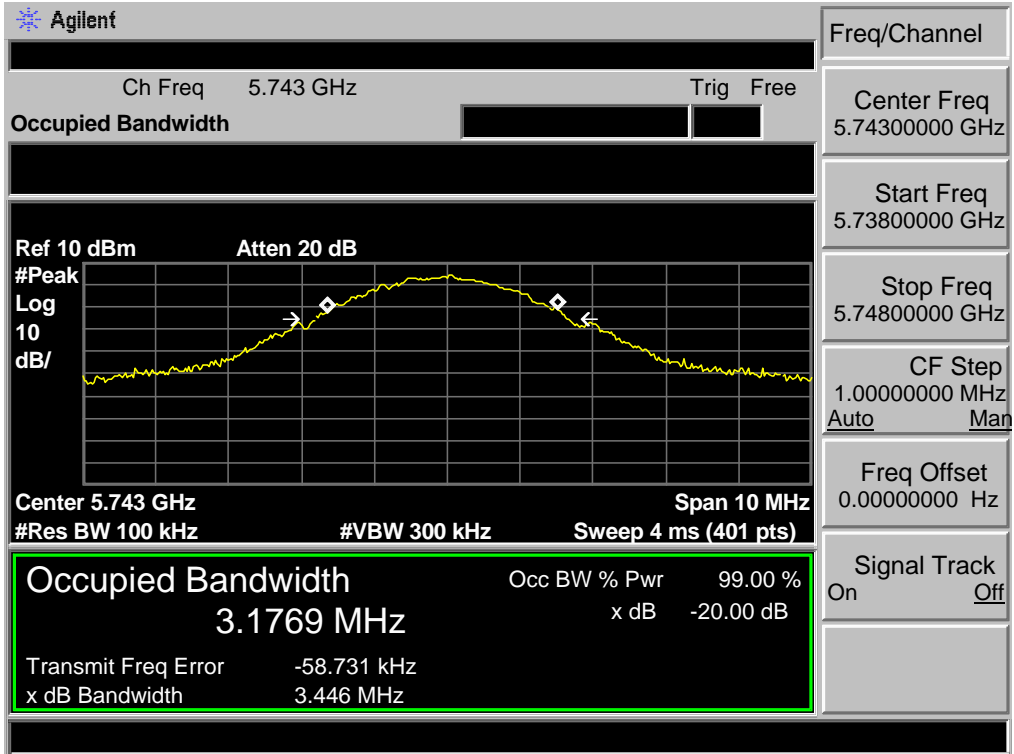


**TX 5840MHz**

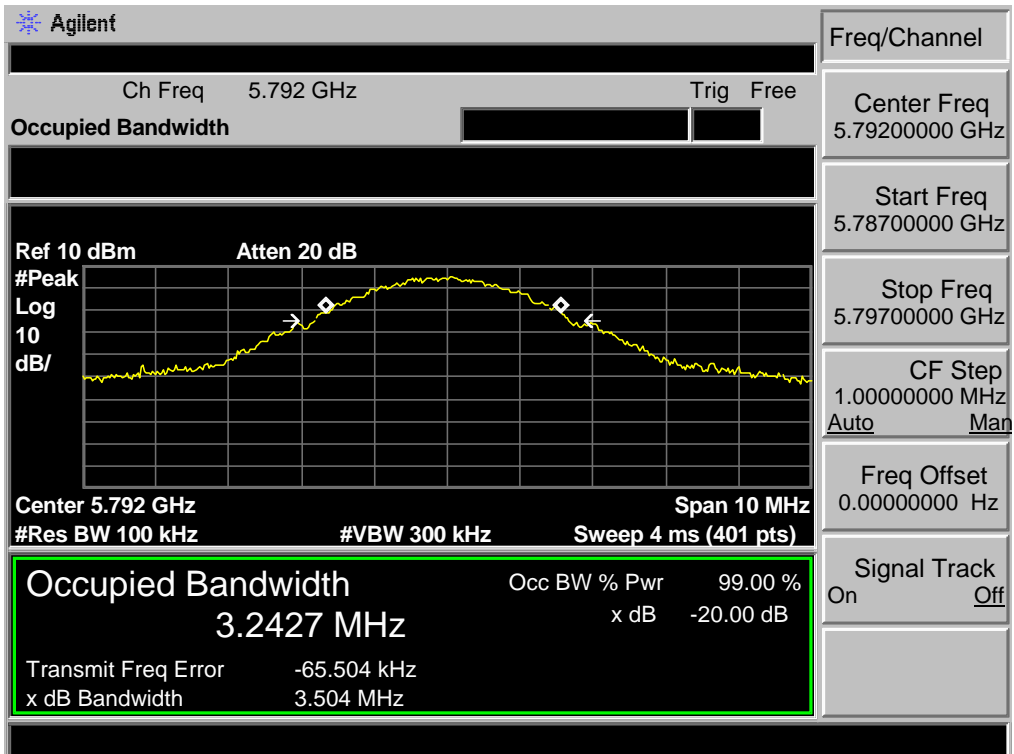
Agilent		Freq/Channel	
Ch Freq 5.84 GHz		Center Freq 5.84000000 GHz	
Occupied Bandwidth		Start Freq 5.83500000 GHz	
		Stop Freq 5.84500000 GHz	
Ref 10 dBm		CF Step 1.00000000 MHz	
Atten 20 dB		Auto Man	
Center 5.84 GHz		Freq Offset 0.00000000 Hz	
#Res BW 100 kHz		Signal Track On Off	
#VBW 300 kHz			
Sweep 4 ms (401 pts)			
<b>Occupied Bandwidth</b> <b>3.2825 MHz</b>		Occ BW % Pwr 99.00 % x dB -20.00 dB	
Transmit Freq Error -67.344 kHz			
x dB Bandwidth 3.524 MHz			

Antenna B

**TX 5743 MHz**



**TX 5792 MHz**

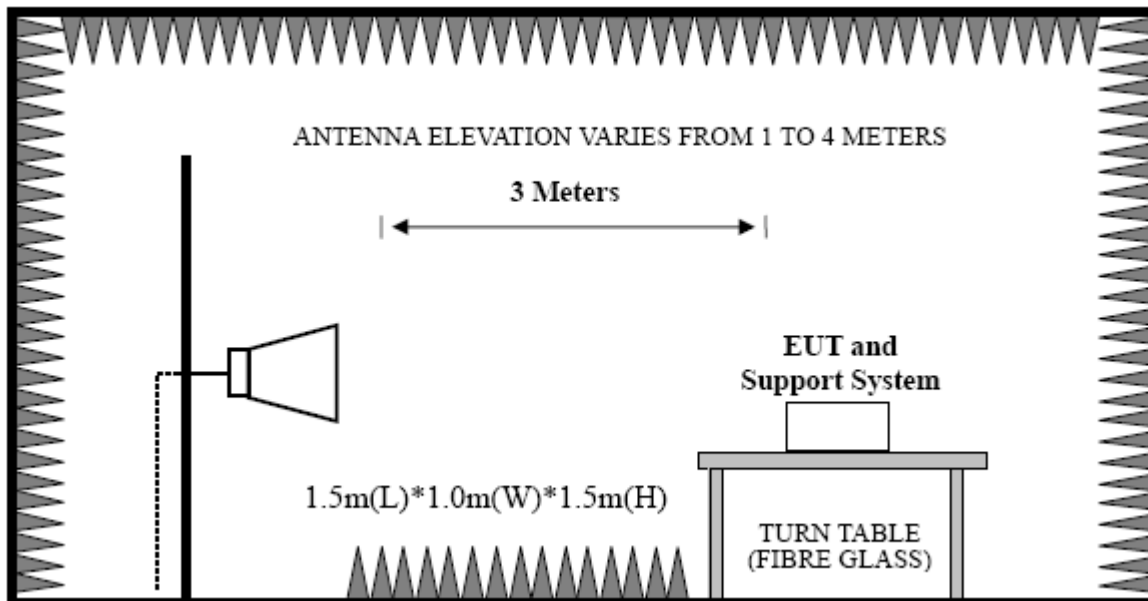


**TX 5840MHz**

Agilent		Freq/Channel	
Ch Freq 5.84 GHz		Center Freq 5.84000000 GHz	
Occupied Bandwidth		Start Freq 5.83500000 GHz	
		Stop Freq 5.84500000 GHz	
Ref 10 dBm      Atten 20 dB #Peak Log 10 dB/		CF Step 1.00000000 MHz Auto      Man	
Center 5.84 GHz		Freq Offset 0.00000000 Hz	
#Res BW 100 kHz		Span 10 MHz	
#VBW 300 kHz		Sweep 4 ms (401 pts)	
<b>Occupied Bandwidth</b> 3.2919 MHz		Occ BW % Pwr 99.00 % x dB -20.00 dB	
Transmit Freq Error -70.702 kHz		Signal Track On      Off	
x dB Bandwidth 3.546 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

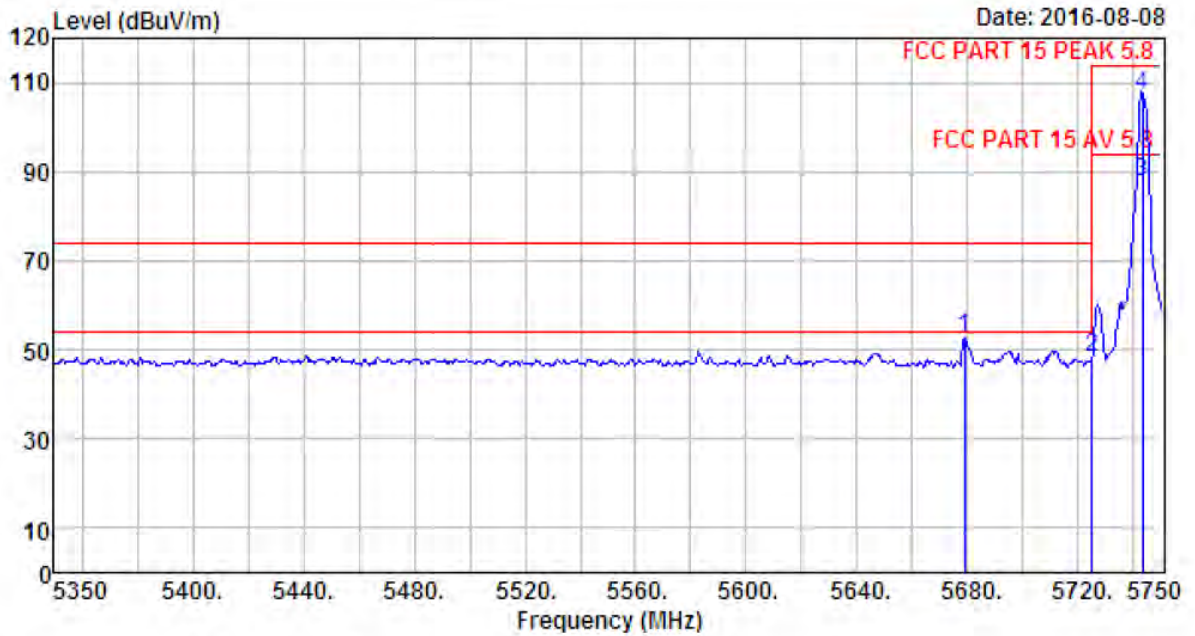
Peak : RBW = 1MHz, VBW = 1MHz, Detector=PEAK detector, Sweep time = auto.  
 AV : RBW = 1MHz, VBW = 10Hz, Detector=PEAK detector, Sweep time = auto .

### 6.3. Test Result

EUT: Home Theater Sound Bar System	M/N: MAGNIFI MINI SUBWOOFER
Power: AC 120V/60Hz	
Test date: 2016-08-08 Test site: 3m Chamber Tested by: Tony Tang	
Test mode: Tx Mode	
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

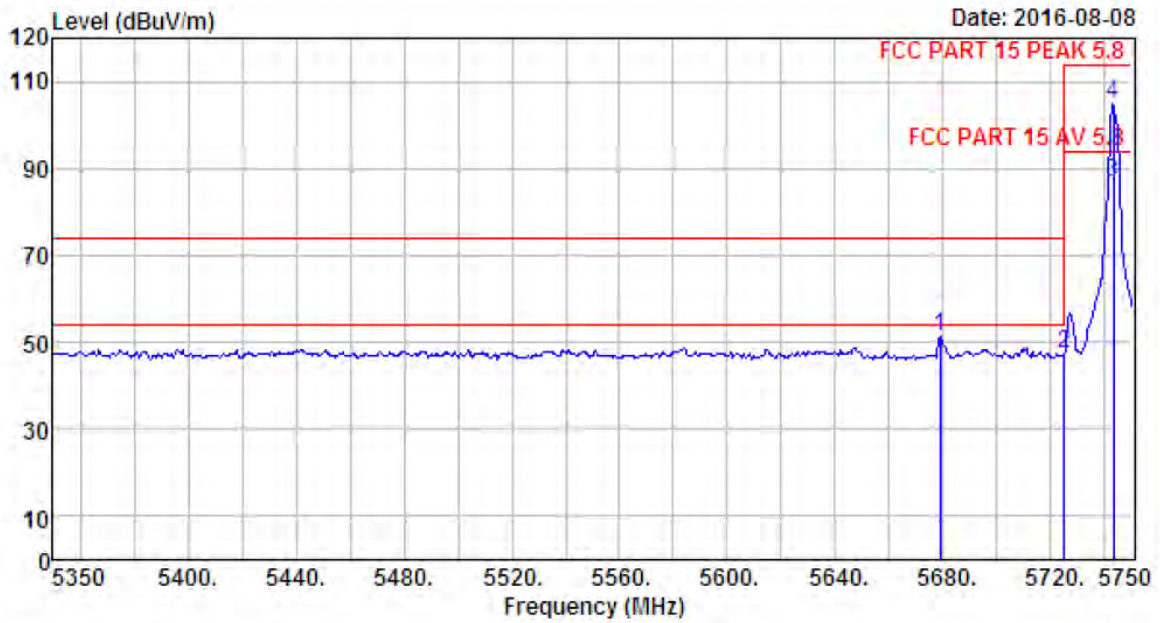


Site no. : 966 1# chamber Data no. : 501  
 Dis. / Ant. : 3m ANI 1-18G Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15 PEAK 5.8  
 Env. / Ins. : Temp:23.6';Humi:56%;Press:101.52kPa  
 Engineer : Tony  
 EUT : Home Theater Sound Bar System  
 Power : AC 120V/60Hz  
 M/N : MAGNIFI MINI SUBWOOFER  
 Test 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	5678.80	32.17	12.03	32.60	41.00	52.60	74.00	21.40	Peak
2	5725.00	32.24	12.05	32.56	36.46	48.19	74.00	25.81	Peak
3	5743.00	32.27	12.05	32.54	75.80	87.58	94.00	6.42	Average
4	5743.00	32.27	12.05	32.54	95.35	107.13	114.00	6.87	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.

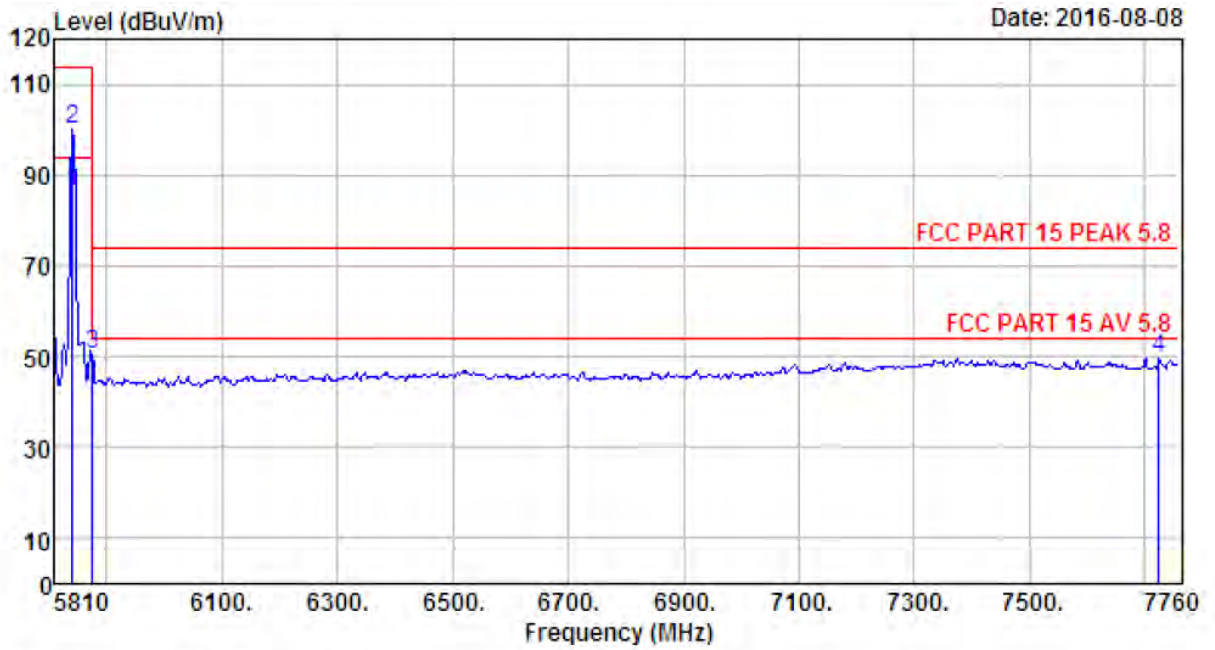




Site no. : 966 1# chamber                      Data no. : 502  
 Dis. / Ant. : 3m ANT 1-18G                      Ant. pol. : VERTICAL  
 Limit : FCC PART 15 PEAK 5.8  
 Env. / Ins. : Temp:23.6';Humi:56%;Press:101.52kPa  
 Engineer : Tony  
 EUI : Home Theater Sound Bar System  
 Power : AC 120V/60Hz  
 M/N : MAGNIFI MINI SUBWOOFER  
 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	5678.80	32.17	12.03	32.60	39.90	51.50	74.00	22.50	Peak
2	5725.00	32.24	12.05	32.56	35.64	47.37	74.00	26.63	Peak
3	5743.00	32.27	12.05	32.54	74.79	86.57	94.00	7.43	Average
4	5743.00	32.27	12.05	32.54	93.26	105.04	114.00	8.96	Peak

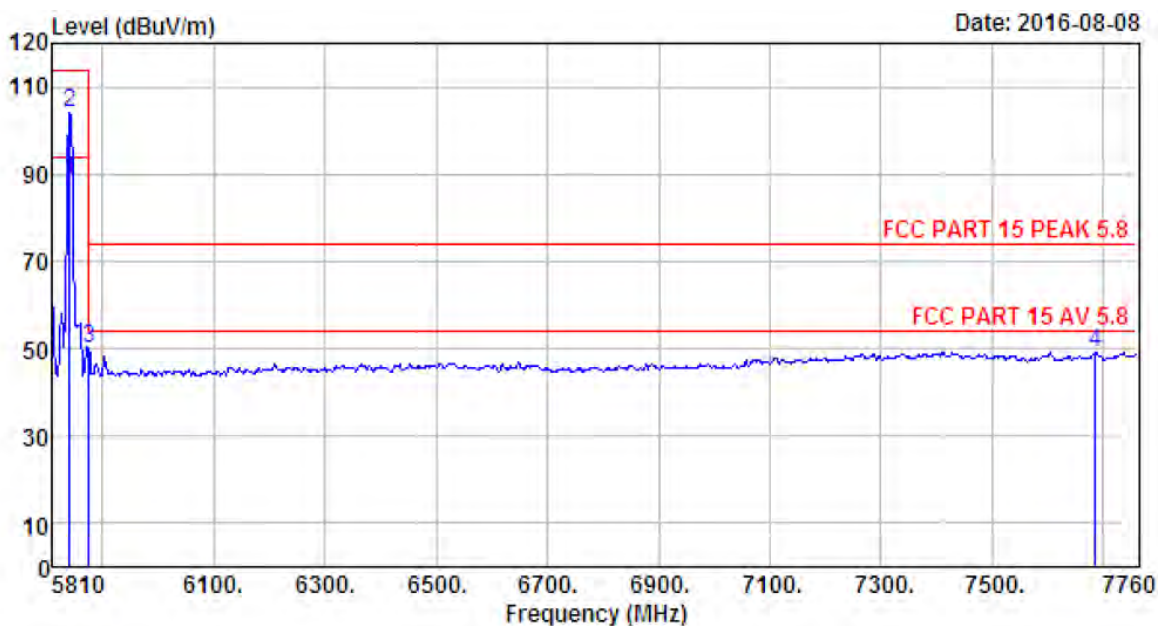
Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 966 1# chamber Data no. : 503  
 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 System  
 Power : AC 120V/60Hz  
 M/N : MAGNIFI MINI SUBWOOFER  
 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	5840.00	32.46	12.08	32.40	74.24	86.38	94.00	7.62	Average
2	5840.00	32.46	12.08	32.40	88.00	100.14	114.00	13.86	Peak
3	5875.00	32.53	12.09	32.36	38.18	50.44	74.00	23.56	Peak
4	7724.90	36.53	11.52	31.50	32.88	49.43	74.00	24.57	Peak

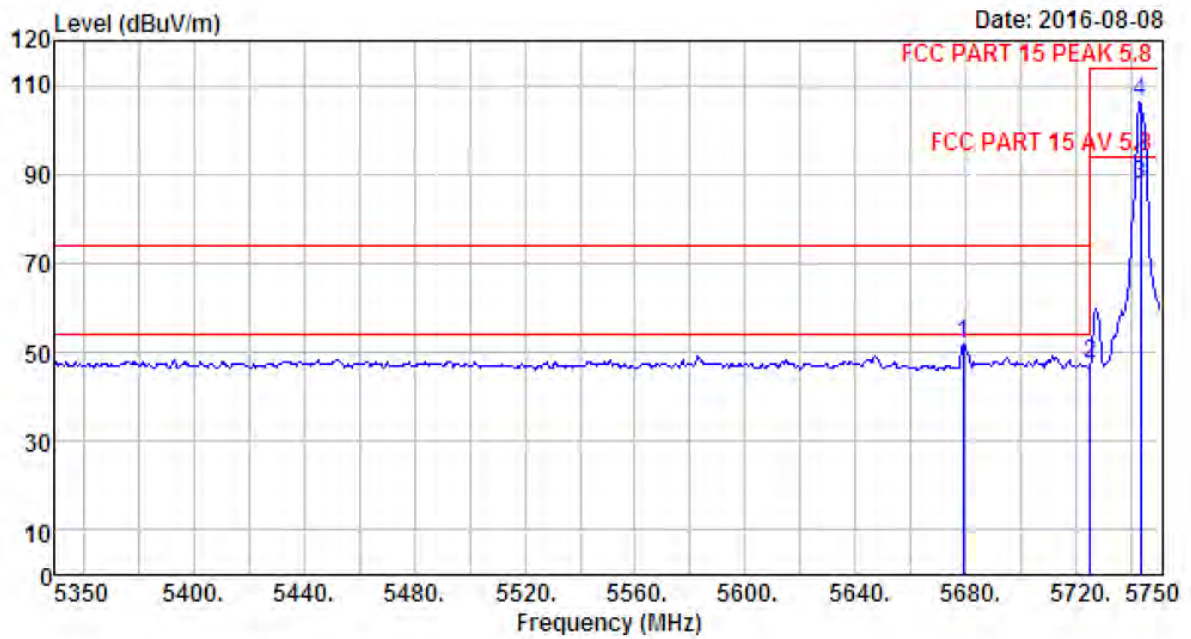
Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 966 1# chamber Data no. : 504  
 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 System  
 Power : AC 120V/60Hz  
 M/N : MAGNIFI MINI SUBWOOFER  
 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	5840.00	32.46	12.08	32.40	76.44	88.58	94.00	5.42	Average
2	5840.00	32.46	12.08	32.40	92.12	104.26	114.00	9.74	Peak
3	5875.00	32.53	12.09	32.36	37.79	50.05	74.00	23.95	Peak
4	7685.90	36.47	11.54	31.57	32.91	49.35	74.00	24.65	Peak

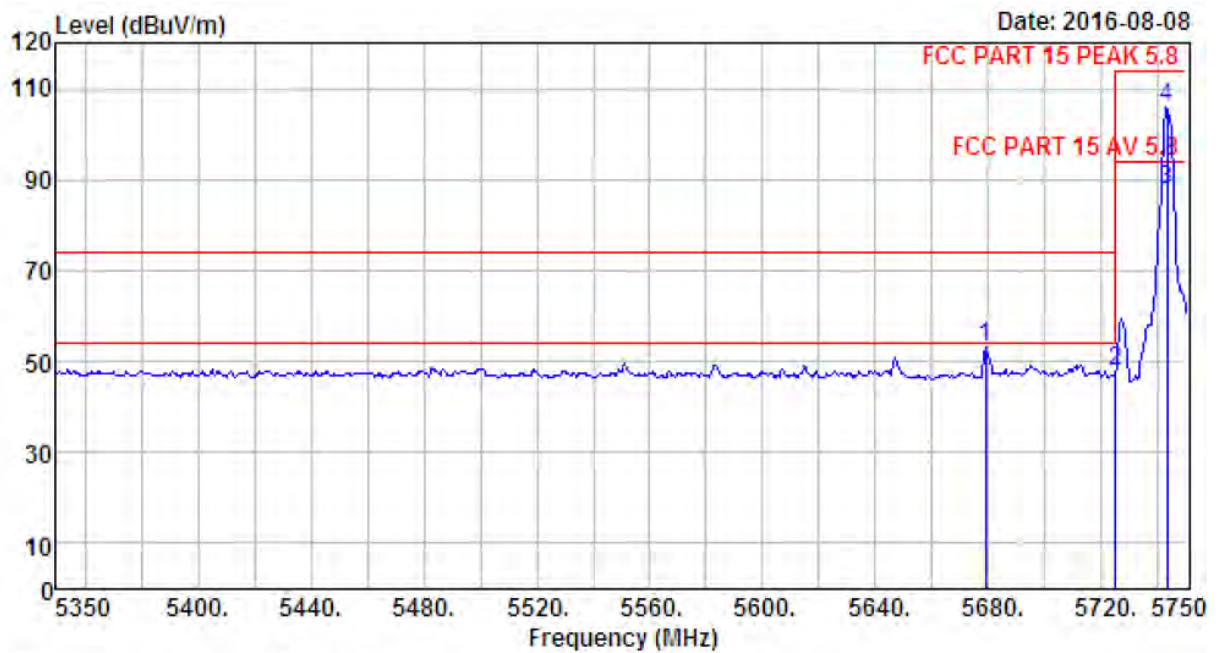
Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 966 1# chamber                      Data no. : 511  
 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 System  
 Power : AC 120V/60Hz  
 M/N : MAGNIFI MINI SUBWOOFER  
 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	5678.80	32.17	12.03	32.60	40.07	51.67	74.00	22.33	Peak
2	5725.00	32.24	12.05	32.56	35.85	47.58	74.00	26.42	Peak
3	5743.00	32.27	12.05	32.54	75.79	87.57	94.00	6.43	Average
4	5743.00	32.27	12.05	32.54	94.28	106.06	114.00	7.94	Peak

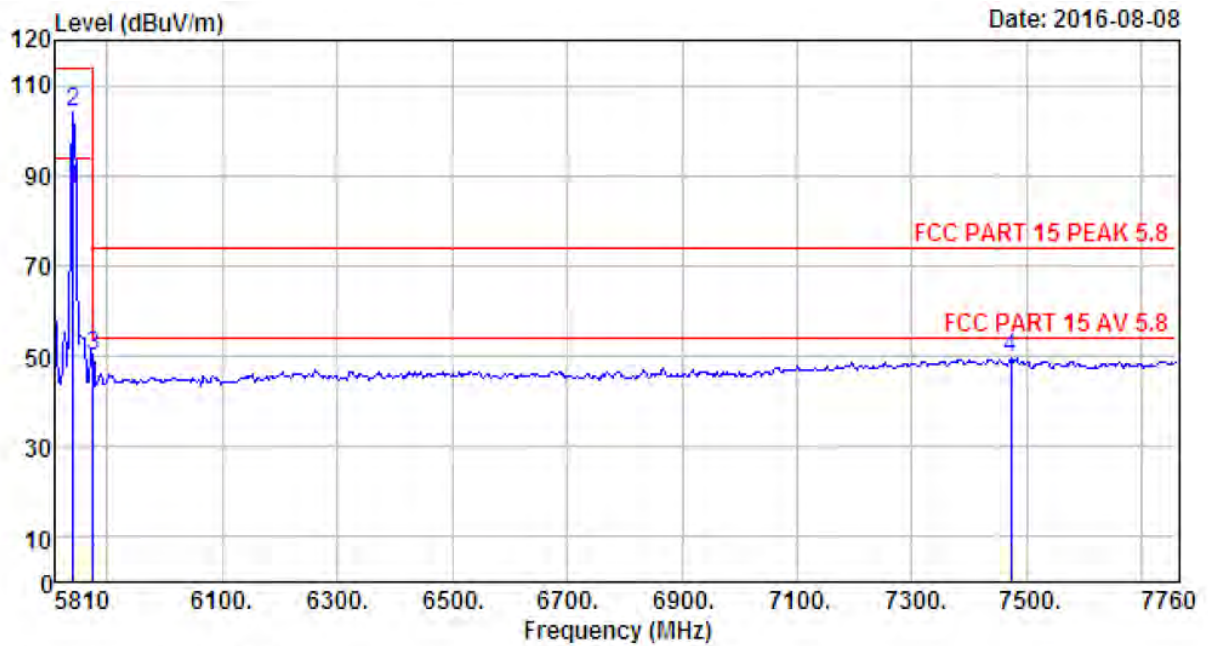
Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 966 1# chamber Data no. : 512  
 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  
 EUI : Home Theater Sound Bar System  
 Power : AC 120V/60Hz  
 M/N : MAGNIFI MINI SUBWOOFER  
 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	5678.80	32.17	12.03	32.60	41.36	52.96	74.00	21.04	Peak
2	5725.00	32.24	12.05	32.56	36.13	47.86	74.00	26.14	Peak
3	5743.00	32.27	12.05	32.54	75.78	87.56	94.00	6.44	Average
4	5743.00	32.27	12.05	32.54	93.92	105.70	114.00	8.30	Peak

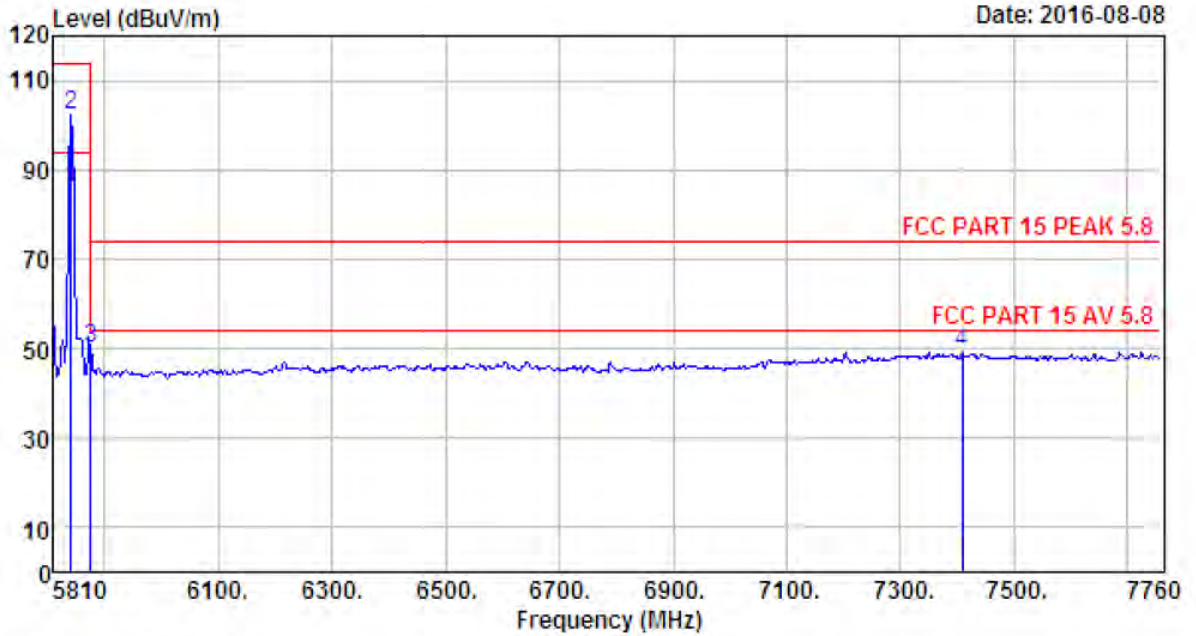
Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 966 1# chamber Data no. : 513  
 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 System  
 Power : AC 120V/60Hz  
 M/N : MAGNIFI MINI SUBWOOFER  
 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	5840.00	32.46	12.08	32.40	74.46	86.60	94.00	7.40	Average
2	5840.00	32.46	12.08	32.40	91.73	103.87	114.00	10.13	Peak
3	5875.00	32.53	12.09	32.36	37.88	50.14	74.00	23.86	Peak
4	7471.40	36.50	11.62	31.89	33.35	49.58	74.00	24.42	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.       : 966 1# chamber           Data no.   : 514
Dis. / Ant.   : 3m ANT 1-16G           Ant. pol.  : HORIZONTAL
Limit         : FCC PART 15 PEAK 5.8
Env. / Ins.   : Temp:23.6';Humi:56%;Press:101.52kPa
Engineer      : Tony
EUI           : Home Theater Sound Bar System
Power         : AC 120V/60Hz
M/N           : MAGNIFI MINI SUBWOOFER
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	5840.00	32.46	12.08	32.40	73.54	85.68	94.00	8.32	Average
2	5840.00	32.46	12.08	32.40	90.33	102.47	114.00	11.53	Peak
3	5875.00	32.53	12.09	32.36	37.83	50.09	74.00	23.91	Peak
4	7409.00	36.58	11.60	31.97	33.14	49.35	74.00	24.65	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.

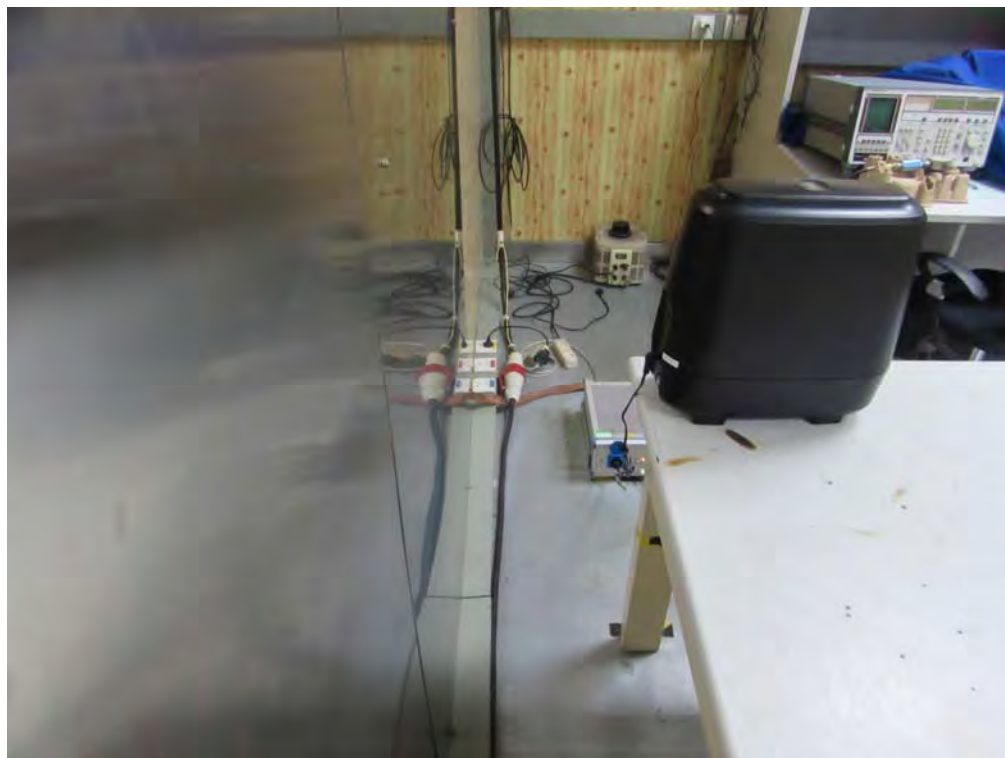
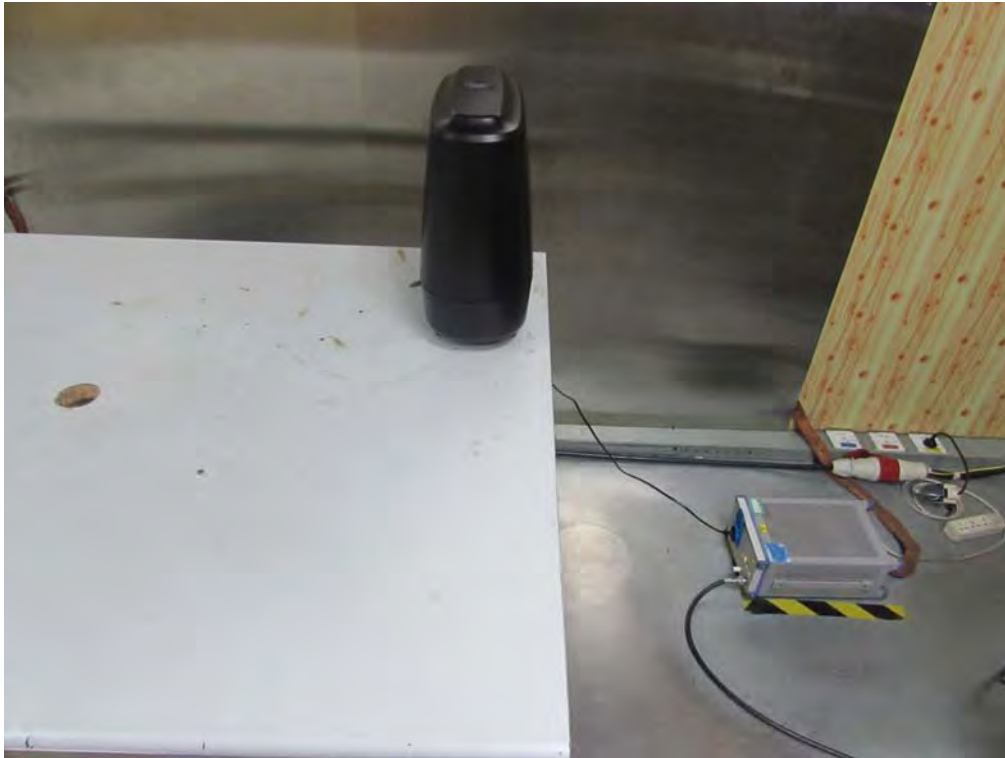
### 7.2. Result

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.

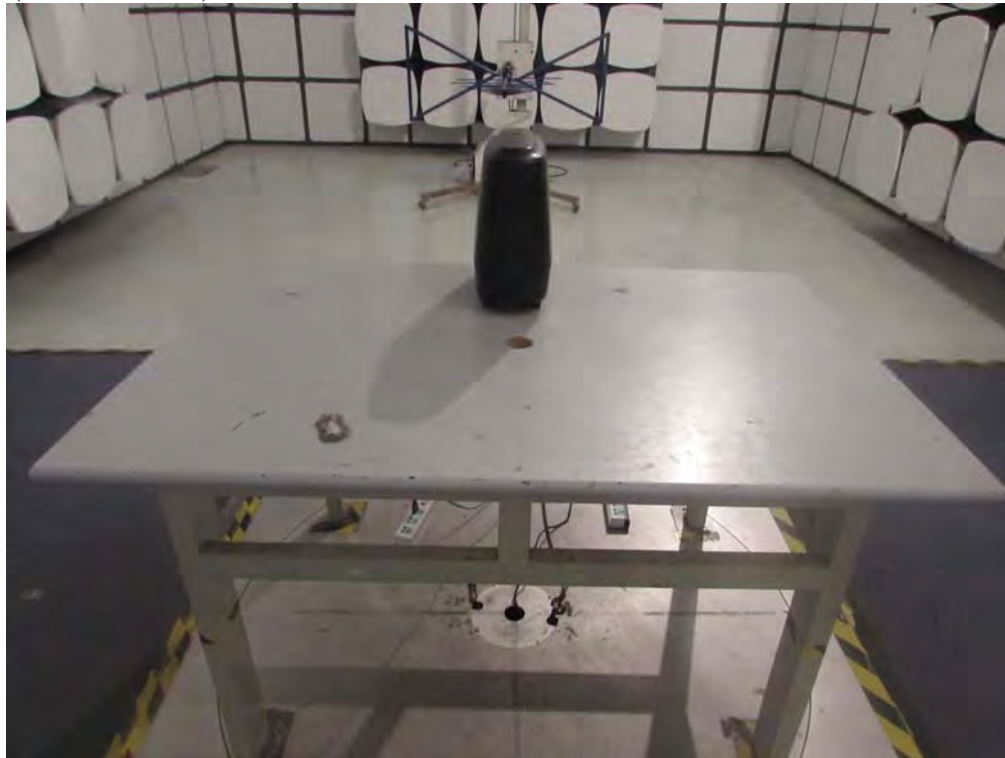


## 8. TESTSETUP PHOTO

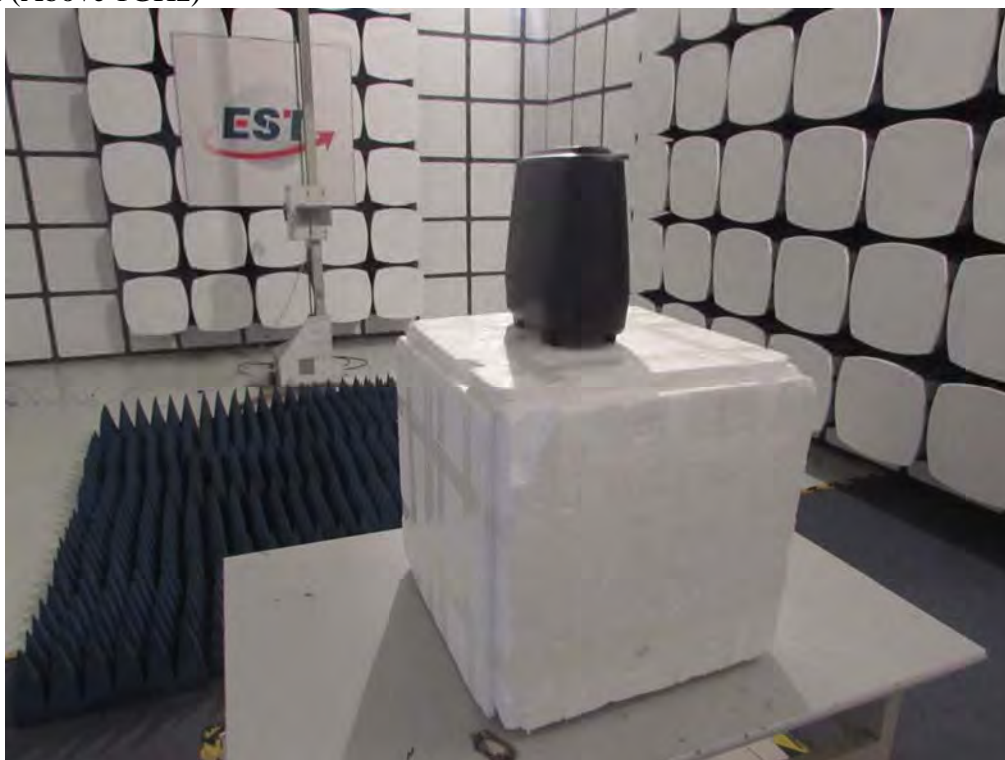
Conducted Test



Radiated Test (30-1000 MHz)



Radiated Test (Above 1GHz)



# 9. PHOTO OF EUT

**External Photos**  
M/N: MAGNIFI MINI SUBWOOFER



**External Photos**  
M/N:MAGNIFI MINI SUBWOOFER



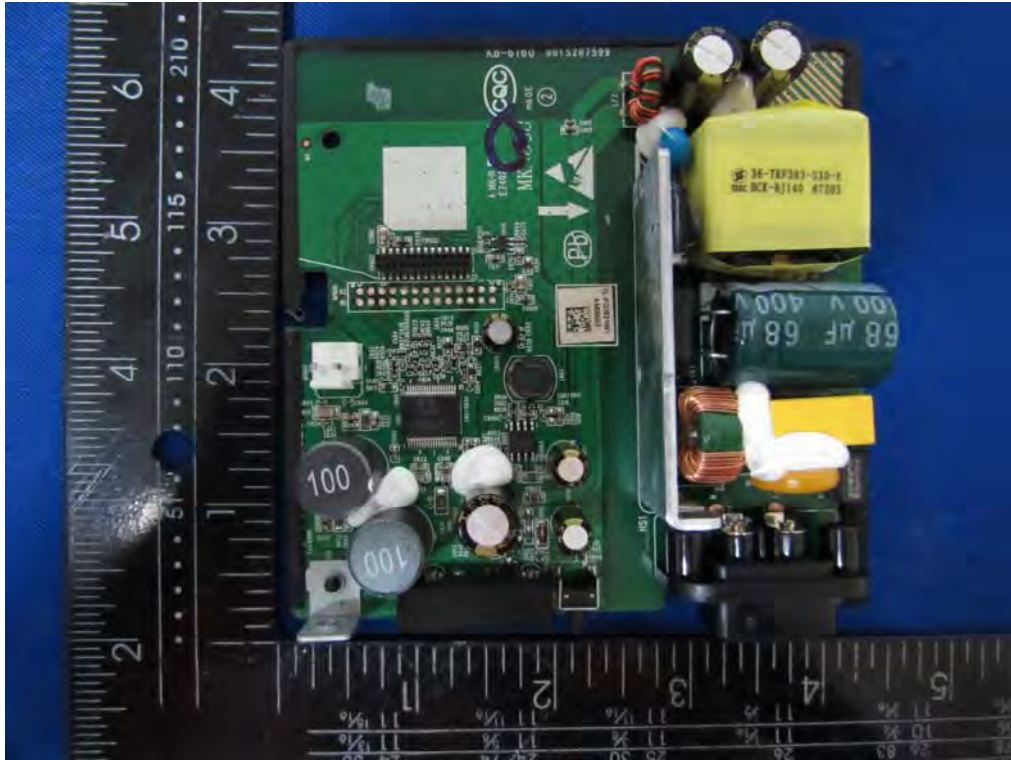
**External Photos**  
M/N: MAGNIFI MINI SUBWOOFER



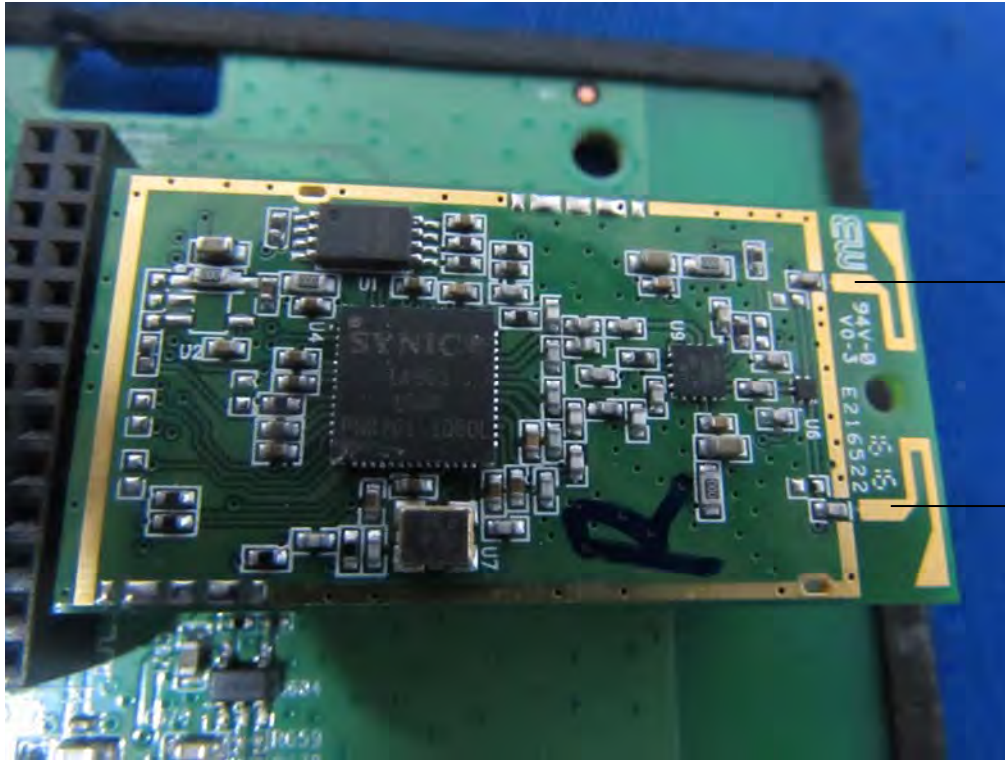
**Internal Photos**  
M/N: MAGNIFI MINI SUBWOOFER



**Internal Photos**  
M/N: MAGNIFI MINI SUBWOOFER



**Internal Photos**  
M/N: MAGNIFI MINI SUBWOOFER



5.8G  
Antenna A

5.8G  
Antenna B

