

FCC REPORT

(WIFI)

Applicant: HUNG WAI PRODUCTS LIMITED

Address of Applicant: Unit 11, 12/F., New Commerce Centre, 19 On Sum Street, Shatin, Hong Kong

Equipment Under Test (EUT)

Product Name: 17.3 inches Quad Core Media Player Slim Housing

Model No.: DT173-AC4-1080-SL, 502-1739ATATM-01

FCC ID: 2AB6Z-DT173-AC4-SL

Applicable standards: FCC CFR Title 47 Part 15 Subpart C Section 15.247

Date of sample receipt: 12 Jun., 2016

Date of Test: 12 Jun., to 23 Jun., 2016

Date of report issued: 23 Jun., 2016

Test Result: PASS*

* In the configuration tested, the EUT complied with the standards specified above.

Authorized Signature:



Bruce Zhang
Laboratory Manager

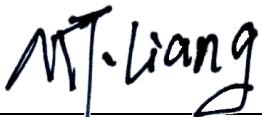
This report details the results of the testing carried out on one sample. The results contained in this test report do not relate to other samples of the same product and does not permit the use of the CCIS product certification mark. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report.

This report may only be reproduced and distributed in full. If the product in this report is used in any configuration other than that detailed in the report, the manufacturer must ensure the new system complies with all relevant standards.

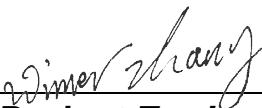
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2 Version

Version No.	Date	Description
00	23 Jun., 2016	<i>Android player Main board with wireless module (FCC ID: 2AB6Z-1859ATMBA-V2) and same antenna were used by the device, only conducted emission and Radiated emission were re-tested.</i>

Tested by:
Liang**Test Engineer****Date:**

23 Jun., 2016

Reviewed by:
Wang**Project Engineer****Date:**

23 Jun., 2016

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4 Test Summary

Test Item	Section in CFR 47	Result
Antenna requirement	15.203/15.247 (c)	Pass
AC Power Line Conducted Emission	15.207	Pass
Conducted Peak Output Power	15.247 (b)(3)	Pass*
6dB Emission Bandwidth 99% Occupied Bandwidth	15.247 (a)(2)	Pass*
Power Spectral Density	15.247 (e)	Pass*
Band Edge	15.247(d)	Pass*
Spurious Emission	15.205/15.209	Pass

Pass: The EUT complies with the essential requirements in the standard.

Pass*: The test data refer to FCC ID: 2AB6Z-1859ATMBA-V2.

5 General Information

5.1 Client Information

Applicant:	HUNG WAI PRODUCTS LIMITED
Address of Applicant:	Unit 11, 12/F., New Commerce Centre, 19 On Sum Street, Shatin, Hong Kong
Manufacturer/Factory:	HUNG WAI ELECTRONICS (HUIZHOU) LTD
Address of Manufacturer/Factory:	3rd floor, NO. 3, Minfeng Road, Huinan High and New Technology Industry Park, Huiaoj Avenue, Huizhou City, Guangdong

5.2 General Description of E.U.T.

Product Name:	17.3 inches Quad Core Media Player Slim Housing
Model No.:	DT173-AC4-1080-SL, 502-1739ATATM-01
Operation Frequency:	2412MHz~2462MHz (802.11b/802.11g/802.11n(H20)) 2422MHz~2452MHz (802.11n(H40))
Channel numbers:	11 for 802.11b/802.11g/802.11(H20) 7 for 802.11n(H40)
Channel separation:	5MHz
Modulation technology: (IEEE 802.11b)	Direct Sequence Spread Spectrum (DSSS)
Modulation technology: (IEEE 802.11g/802.11n)	Orthogonal Frequency Division Multiplexing(OFDM)
Data speed (IEEE 802.11b):	1Mbps, 2Mbps, 5.5Mbps, 11Mbps
Data speed (IEEE 802.11g):	6Mbps, 9Mbps, 12Mbps, 18Mbps, 24Mbps, 36Mbps, 48Mbps, 54Mbps
Data speed (IEEE 802.11n):	Up to 150Mbps
Antenna Type:	Omni-directional
Antenna gain:	2 dBi
AC Adapter:	Model: PS24A120K2000UD Input: 100-240V ac, 50/60Hz, 1A Output: 12V dc, 2A
Remark:	Model No.: DT173-AC4-1080-SL, 502-1739ATATM-01 were identical inside, the electrical circuit design, layout, components used and internal wiring, with only difference being different model number for customer and for HUNG WAI.

Operation Frequency each of channel For 802.11b/g/n(H20)

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
1	2412MHz	4	2427MHz	7	2442MHz	10	2457MHz
2	2417MHz	5	2432MHz	8	2447MHz	11	2462MHz
3	2422MHz	6	2437MHz	9	2452MHz		

Operation Frequency each of channel For 802.11n(H40)

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
		4	2427MHz	7	2442MHz		
		5	2432MHz	8	2447MHz		
3	2422MHz	6	2437MHz	9	2452MHz		

Note:

In section 15.31(m), regards to the operating frequency range over 10 MHz, the Lowest frequency, the middle frequency, and the highest frequency of channel were selected to perform the test, and the selected channel see below:

802.11b/802.11g/802.11n (H20)

Channel	Frequency
The lowest channel	2412MHz
The middle channel	2437MHz
The Highest channel	2462MHz

802.11n (H40)

Channel	Frequency
The lowest channel	2422MHz
The middle channel	2437MHz
The Highest channel	2452MHz

5.3 Test environment and mode

Operating Environment:	
Temperature:	24.0 °C
Humidity:	54 % RH
Atmospheric Pressure:	1010 mbar
Test mode:	
Operation mode	Keep the EUT in continuous transmitting with modulation
<p>The sample was placed 0.8m above the ground plane of 3m chamber. Measurements in both horizontal and vertical polarities were performed. During the test, each emission was maximized by: having the EUT continuously working, investigated all operating modes, rotated about all 3 axis (X, Y & Z) and considered typical configuration to obtain worst position, manipulating interconnecting cables, rotating the turntable, varying antenna height from 1m to 4m in both horizontal and vertical polarizations. The emissions worst-case are shown in Test Results of the following pages.</p>	

We have verified the construction and function in typical operation. All the test modes were carried out with the EUT in transmitting operation, which was shown in this test report and defined as follows:										
Per-scan all kind of data rate in lowest channel, and found the follow list which it was worst case.										
<table border="1"> <thead> <tr> <th>Mode</th><th>Data rate</th></tr> </thead> <tbody> <tr> <td>802.11b</td><td>1Mbps</td></tr> <tr> <td>802.11g</td><td>6Mbps</td></tr> <tr> <td>802.11n(H20)</td><td>6.5Mbps</td></tr> <tr> <td>802.11n(H40)</td><td>13.5Mbps</td></tr> </tbody> </table>	Mode	Data rate	802.11b	1Mbps	802.11g	6Mbps	802.11n(H20)	6.5Mbps	802.11n(H40)	13.5Mbps
Mode	Data rate									
802.11b	1Mbps									
802.11g	6Mbps									
802.11n(H20)	6.5Mbps									
802.11n(H40)	13.5Mbps									

5.4 Measurement Uncertainty

Items	Expanded Uncertainty (Confidence of 95%)
Conducted Emission (9kHz ~ 30MHz)	2.14 dB (k=2)
Radiated Emission (9kHz ~ 30MHz)	4.24 dB (k=2)
Radiated Emission (30MHz ~ 1000MHz)	4.35 dB (k=2)
Radiated Emission (1GHz ~ 18GHz)	4.44 dB (k=2)
Radiated Emission (18GHz ~ 26.5GHz)	4.56 dB (k=2)

5.5 Laboratory Facility

The test facility is recognized, certified, or accredited by the following organizations:

- **FCC - Registration No.: 817957**

Shenzhen Zhongjian Nanfang Testing Co., Ltd. EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in out files. Registration 817957, February 27, 2012.

- **IC - Registration No.: 10106A-1**

The 3m Semi-anechoic chamber of Shenzhen Zhongjian Nanfang Testing Co., Ltd. has been Registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 10106A-1.

- **CNAS - Registration No.: CNAS L6048**

Shenzhen Zhongjian Nanfang Testing Co., Ltd. is accredited to ISO/IEC 17025:2005 General Requirements for the Competence of Testing and Calibration laboratories for the competence of testing. The Registration No. is CNAS L6048.

5.6 Laboratory Location

Shenzhen Zhongjian Nanfang Testing Co., Ltd.

Address: No.B-C, 1/F., Building 2, Laodong No.2 Industrial Park, Xixiang Road,

Bao'an District, Shenzhen, Guangdong, China

Tel: +86-755-23118282

Fax: +86-755-23116366

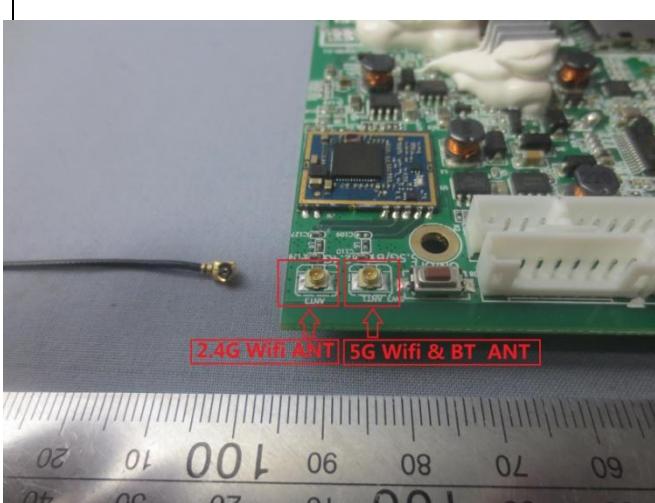
5.7 Test Instruments list

Radiated Emission:						
Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal. Date (mm-dd-yy)	Cal. Due date (mm-dd-yy)
1	3m SAC	SAEMC	9(L)*6(W)* 6(H)	CCIS0001	08-23-2014	08-22-2017
2	BiConiLog Antenna	SCHWARZBECK	VULB9163	CCIS0005	03-25-2016	03-25-2017
3	Horn Antenna	SCHWARZBECK	BBHA9120D	CCIS0006	03-25-2016	03-25-2017
4	Pre-amplifier (10kHz-1.3GHz)	HP	8447D	CCIS0003	04-01-2016	03-31-2017
5	Pre-amplifier (1GHz-18GHz)	Compliance Direction Systems Inc.	PAP-1G18	CCIS0011	04-01-2016	03-31-2017
6	Pre-amplifier (18-26GHz)	Rohde & Schwarz	AFS33-18002 650-30-8P-44	GTS218	04-01-2016	03-31-2017
7	Horn Antenna	ETS-LINDGREN	3160	GTS217	04-01-2016	03-31-2017
8	Spectrum analyzer 9k-30GHz	Rohde & Schwarz	FSP30	CCIS0023	03-28-2016	03-28-2017
9	EMI Test Receiver	Rohde & Schwarz	ESRP7	CCIS0167	03-28-2016	03-28-2017
10	Loop antenna	Laplace instrument	RF300	EMC0701	04-01-2016	03-31-2017
11	EMI Test Software	AUDIX	E3	N/A	N/A	N/A

Conducted Emission:						
Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal. Date (mm-dd-yy)	Cal. Due date (mm-dd-yy)
1	Shielding Room	ZhongShuo Electron	11.0(L)x4.0(W)x3.0(H)	CCIS0061	08-23-2014	08-22-2017
2	EMI Test Receiver	Rohde & Schwarz	ESCI	CCIS0002	03-24-2016	03-24-2017
3	LISN	CHASE	MN2050D	CCIS0074	03-26-2016	03-26-2017
4	Coaxial Cable	CCIS	N/A	CCIS0086	04-01-2016	03-31-2017
5	EMI Test Software	AUDIX	E3	N/A	N/A	N/A

6 Test results and Measurement Data

6.1 Antenna requirement:

Standard requirement:	FCC Part15 C Section 15.203 /247(c)
<p>15.203 requirement: <i>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. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.</i></p>	
<p>15.247(c) (1)(i) requirement: <i>(i) Systems operating in the 2400-2483.5 MHz band that is used exclusively for fixed. Point-to-point operations may employ transmitting antennas with directional gain greater than 6dB if provided the maximum conducted output power of the intentional radiator is reduced by 1 dB for every 3dB that the directional gain of the antenna exceeds 6dBi.</i></p>	
E.U.T Antenna:	
<p>The antenna of EUT is a reverse-SMA connector, which cannot be replaced by end-user. And the antenna gain is 2 dBi.</p>	
 A photograph showing a black cable with a reverse-SMA connector attached to a small, thin antenna. The cable is coiled and lies next to a metric ruler for scale.	 A photograph showing a coiled black cable with a gold-colored reverse-SMA connector. The cable is positioned next to a metric ruler.
 A photograph of a green printed circuit board (PCB) with various electronic components. Two specific connection points are highlighted with red boxes and labeled: '2.4G WiFi ANT' and '5G WiFi & BT ANT'. Red arrows point from these labels to the respective connection points on the PCB. The PCB is placed next to a metric ruler.	

6.2 Conducted Emission

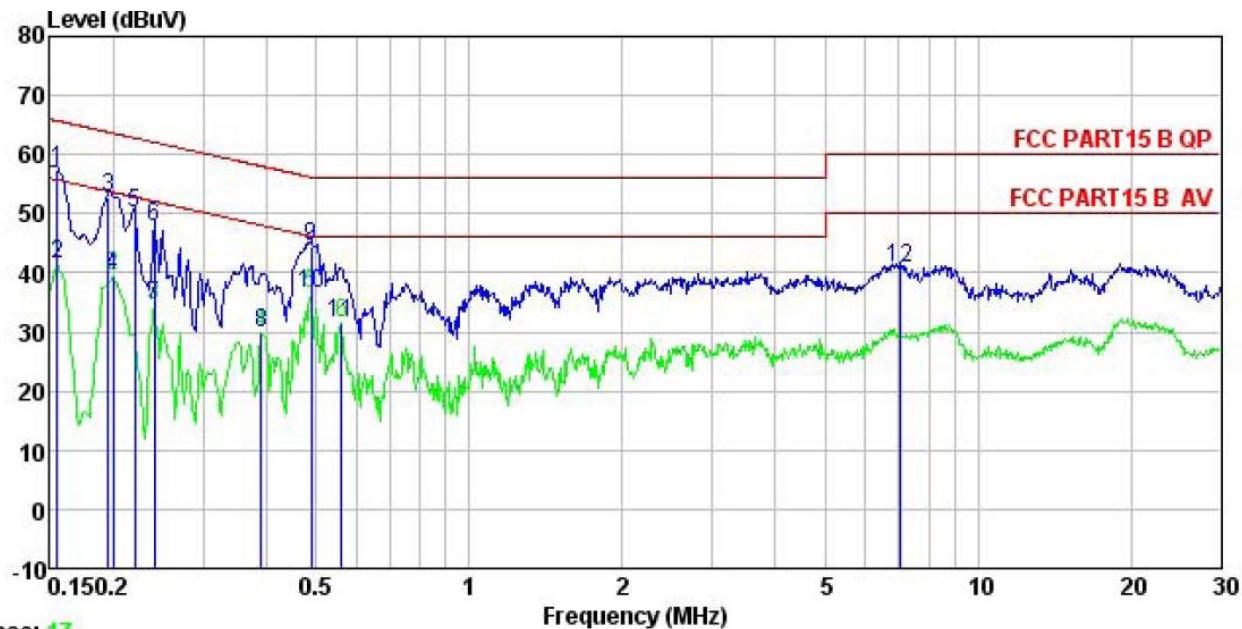
Test Requirement:	FCC Part15 C Section 15.207		
Test Method:	ANSI C63.4: 2014		
Test Frequency Range:	150kHz to 30MHz		
Class / Severity:	Class B		
Receiver setup:	RBW=9kHz, VBW=30kHz		
Limit:	Frequency range (MHz)	Limit (dBuV)	
		Quasi-peak	Average
	0.15-0.5	66 to 56*	56 to 46*
	0.5-5	56	46
	5-30	60	50

* Decreases with the logarithm of the frequency.

Test procedure	1. The E.U.T and simulators are connected to the main power through a line impedance stabilization network (L.I.S.N.), which provides a 50ohm/50uH coupling impedance for the measuring equipment. 2. The peripheral devices are also connected to the main power through a LISN that provides a 50ohm/50uH coupling impedance with 50ohm termination. (Please refer to the block diagram of the test setup and photographs). 3. Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.4: 2014 on conducted measurement.		
Test setup:	Reference Plane LISN AUX Equipment E.U.T EMI Receiver Filter AC power Test table/Insulation plane 40cm 80cm Remark: E.U.T: Equipment Under Test LISN: Line Impedance Stabilization Network Test table height=0.8m		
Test Instruments:	Refer to section 5.7 for details		
Test mode:	Refer to section 5.3 for details		
Test results:	Passed		

Measurement Data

Neutral:



Trace: 17

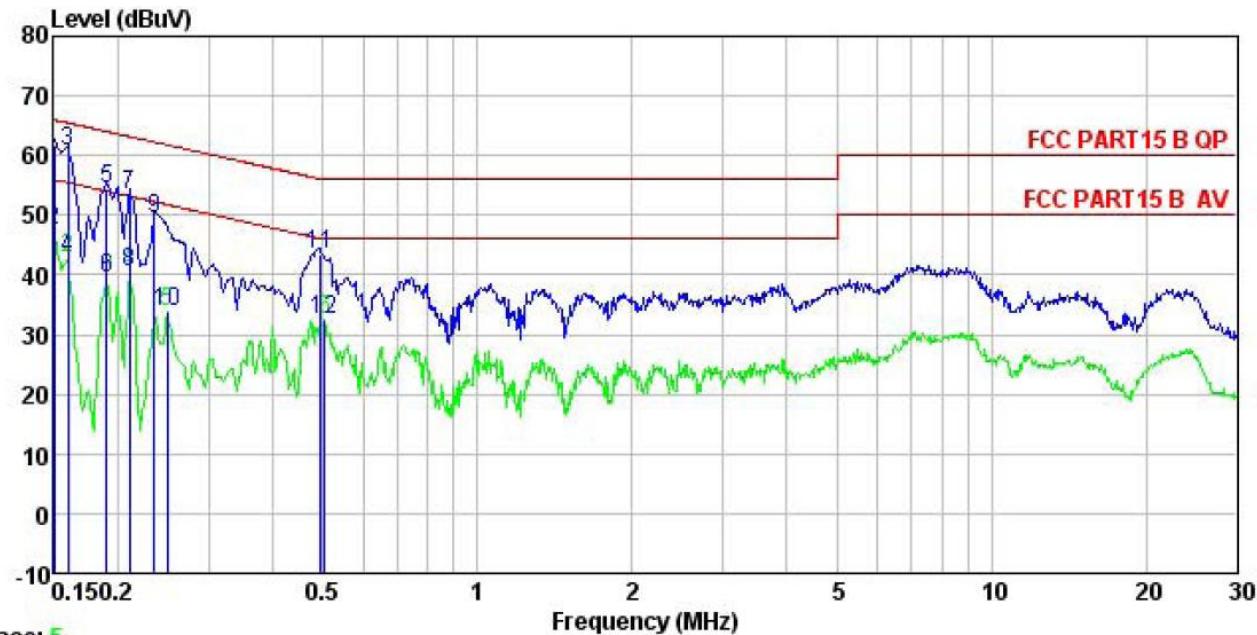
Site : CCIS Shielding Room
 Condition : FCC PART15 B QP LISN NEUTRAL
 EUT : 17.3"Quad Core Media Player Slim Housing
 Model : DT173-AC4-1080SL
 Test Mode : WIFI mode
 Power Rating : AC 120V/60Hz
 Environment : Temp: 23 °C Humi:56% Atmos:101KPa
 Test Engineer: Viki
 Remark :

Freq	Read	LISN	Cable	Limit	Line	Over	Remark
	Level	Factor	Loss				
MHz	dBuV	dB	dB	dBuV	dBuV	dB	
1	0.155	46.36	0.17	10.78	57.31	65.74	-8.43 QP
2	0.155	30.55	0.17	10.78	41.50	55.74	-14.24 Average
3	0.195	41.95	0.16	10.76	52.87	63.80	-10.93 QP
4	0.200	28.62	0.16	10.76	39.54	53.62	-14.08 Average
5	0.220	39.03	0.16	10.76	49.95	62.83	-12.88 QP
6	0.240	36.98	0.16	10.75	47.89	62.08	-14.19 QP
7	0.240	23.58	0.16	10.75	34.49	52.08	-17.59 Average
8	0.389	18.82	0.16	10.72	29.70	48.08	-18.38 Average
9	0.489	33.44	0.16	10.76	44.36	56.19	-11.83 QP
10	0.489	25.61	0.16	10.76	36.53	46.19	-9.66 Average
11	0.561	20.65	0.17	10.77	31.59	46.00	-14.41 Average
12	7.025	29.72	0.35	10.80	40.87	60.00	-19.13 QP

Notes:

1. An initial pre-scan was performed on the live and neutral lines with peak detector.
2. Quasi-Peak and Average measurement were performed at the frequencies with maximized peakemission.
3. Final Level =Receiver Read level + LISN Factor + Cable Loss.

Line:



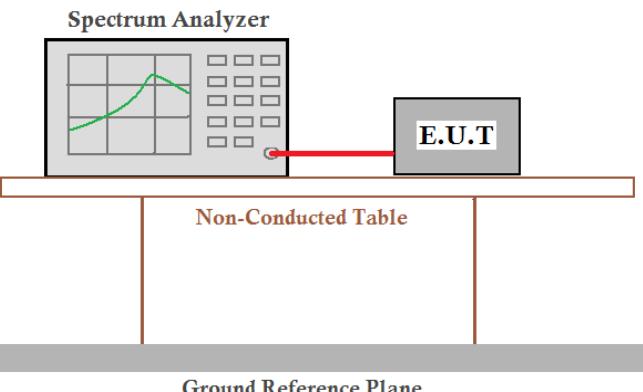
Site : CCIS Shielding Room
 Condition : FCC PART15 B QP LISN LINE
 EUT : 17.3"Quad Core Media Player Slim Housing
 Model : DT173-AC4-1080SL
 Test Mode : WIFI mode
 Power Rating : AC 120V/60Hz
 Environment : Temp: 23 °C Humi:56% Atmos:101KPa
 Test Engineer: Viki
 Remark :

Freq	Read	LISN	Cable	Limit	Over	Remark
	Level	Factor	Loss			
MHz	dBuV		dB	dBuV	dBuV	dB
1	0.150	50.70	0.26	10.78	61.74	66.00 -4.26 QP
2	0.150	36.46	0.26	10.78	47.50	56.00 -8.50 Average
3	0.160	49.75	0.26	10.78	60.79	65.47 -4.68 QP
4	0.160	31.62	0.26	10.78	42.66	55.47 -12.81 Average
5	0.190	43.54	0.26	10.76	54.56	64.02 -9.46 QP
6	0.190	28.40	0.26	10.76	39.42	54.02 -14.60 Average
7	0.211	42.44	0.26	10.76	53.46	63.18 -9.72 QP
8	0.211	29.51	0.26	10.76	40.53	53.18 -12.65 Average
9	0.235	38.56	0.26	10.75	49.57	62.26 -12.69 QP
10	0.249	22.89	0.26	10.75	33.90	51.78 -17.88 Average
11	0.494	32.45	0.27	10.76	43.48	56.10 -12.62 QP
12	0.505	21.42	0.27	10.76	32.45	46.00 -13.55 Average

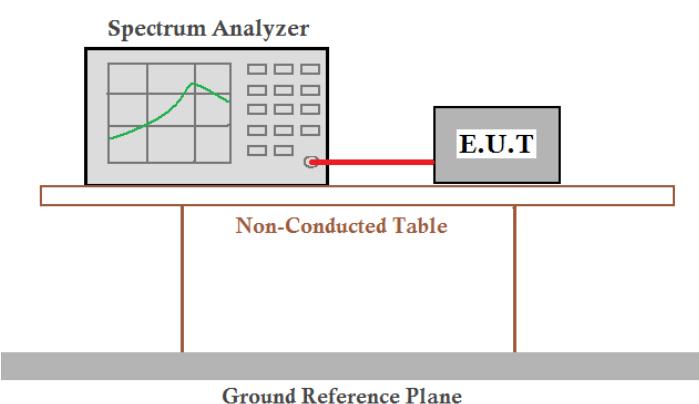
Notes:

1. An initial pre-scan was performed on the live and neutral lines with peak detector.
2. Quasi-Peak and Average measurement were performed at the frequencies with maximized peakemission.
3. Final Level =Receiver Read level + LISN Factor + Cable Loss.

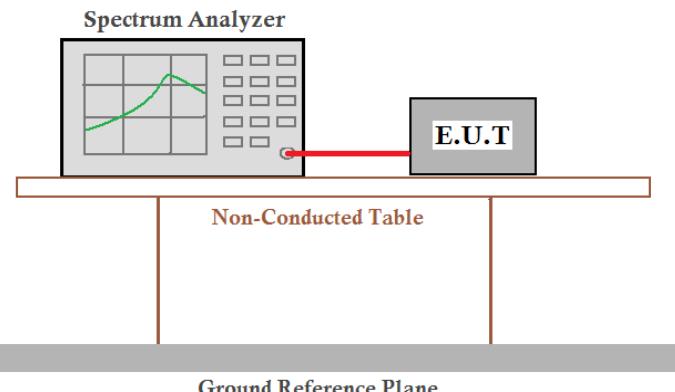
6.3 Conducted Output Power

Test Requirement:	FCC Part15 C Section 15.247 (b)(3)
Test Method:	ANSI C63.10:2013 and KDB558074v03r05 section 9.2.2.2
Limit:	30dBm
Test setup:	
Test Instruments:	Refer to section 5.7 for details
Test mode:	Refer to section 5.3 for details
Test results:	Refer to FCC ID: 2AB6Z-1859ATMBA-V2

6.4 Occupy Bandwidth

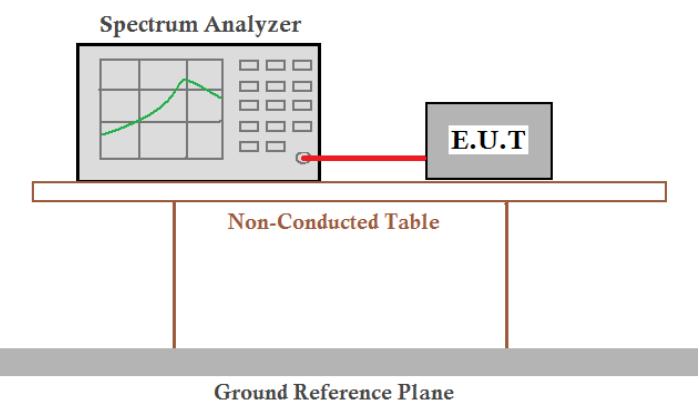
Test Requirement:	FCC Part15 C Section 15.247 (a)(2)
Test Method:	ANSI C63.10:2013 and KDB558074v03r05 section 8.1
Limit:	>500kHz
Test setup:	
Test Instruments:	Refer to section 5.7 for details
Test mode:	Refer to section 5.3 for details
Test results:	Refer to FCC ID: 2AB6Z-1859ATMBA-V2

6.5 Power Spectral Density

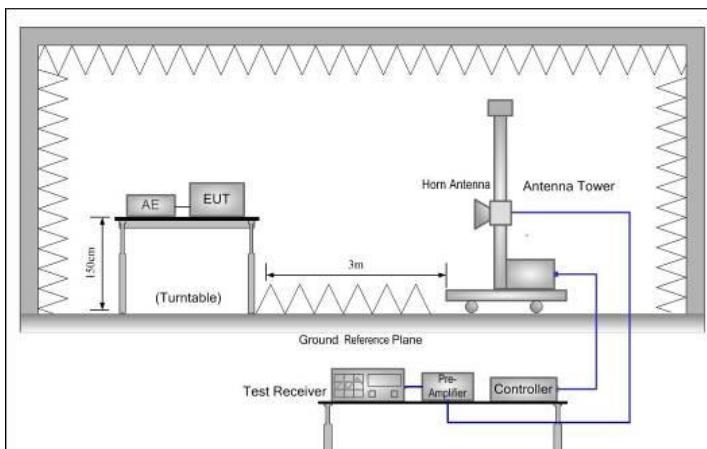
Test Requirement:	FCC Part15 C Section 15.247 (e)
Test Method:	ANSI C63.10:2013 and KDB558074v03r05 section 10.2
Limit:	8dBm
Test setup:	
Test Instruments:	Refer to section 5.7 for details
Test mode:	Refer to section 5.3 for details
Test results:	Refer to FCC ID: 2AB6Z-1859ATMBA-V2

6.6 Band Edge

6.6.1 Conducted Emission Method

Test Requirement:	FCC Part15 C Section 15.247 (d)
Test Method:	ANSI C63.10:2013 and KDB558074v03r05 section 13
Limit:	In any 100 kHz bandwidth outside the frequency band in which the spreadspectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 30 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement.
Test setup:	
Test Instruments:	Refer to section 5.7 for details
Test mode:	Refer to section 5.3 for details
Test results:	Refer to FCC ID: 2AB6Z-1859ATMBA-V2

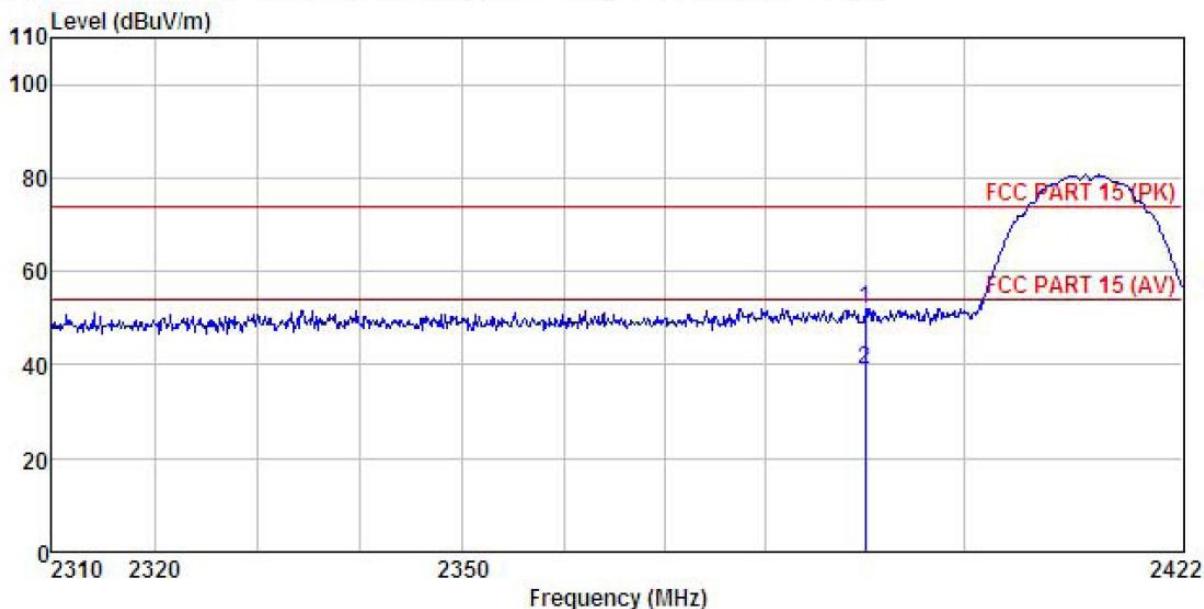
6.6.2 Radiated Emission Method

Test Requirement:	FCC Part15 C Section 15.209 and 15.205																			
Test Method:	ANSI C63.10: 2013 and KDB 558074v03r05 section 12.1																			
TestFrequencyRange:	2.3GHz to 2.5GHz																			
Test site:	Measurement Distance: 3m																			
Receiver setup:	<table border="1"> <thead> <tr> <th>Frequency</th> <th>Detector</th> <th>RBW</th> <th>VBW</th> <th>Remark</th> </tr> </thead> <tbody> <tr> <td>Above 1GHz</td> <td>Peak</td> <td>1MHz</td> <td>3MHz</td> <td>Peak Value</td> </tr> <tr> <td></td> <td>RMS</td> <td>1MHz</td> <td>3MHz</td> <td>Average Value</td> </tr> </tbody> </table>					Frequency	Detector	RBW	VBW	Remark	Above 1GHz	Peak	1MHz	3MHz	Peak Value		RMS	1MHz	3MHz	Average Value
Frequency	Detector	RBW	VBW	Remark																
Above 1GHz	Peak	1MHz	3MHz	Peak Value																
	RMS	1MHz	3MHz	Average Value																
Limit:	<table border="1"> <thead> <tr> <th>Frequency</th> <th>Limit (dBuV/m @3m)</th> <th>Remark</th> </tr> </thead> <tbody> <tr> <td>Above 1GHz</td> <td>54.00</td> <td>Average Value</td> </tr> <tr> <td></td> <td>74.00</td> <td>Peak Value</td> </tr> </tbody> </table>		Frequency	Limit (dBuV/m @3m)	Remark	Above 1GHz	54.00	Average Value		74.00	Peak Value									
Frequency	Limit (dBuV/m @3m)	Remark																		
Above 1GHz	54.00	Average Value																		
	74.00	Peak Value																		
Test Procedure:	<ol style="list-style-type: none"> 1. The EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter camber. The table was rotated 360 degrees to determine the position of the highest radiation. 2. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower. 3. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement. 4. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rota table was turned from 0 degrees to 360 degrees to find the maximum reading. 5. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode. 6. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet. 																			
Test setup:																				
Test Instruments:	Refer to section 5.7 for details																			
Test mode:	Refer to section 5.3 for details																			
Test results:	Passed																			

802.11b

Test channel:Lowest

Horizontal:



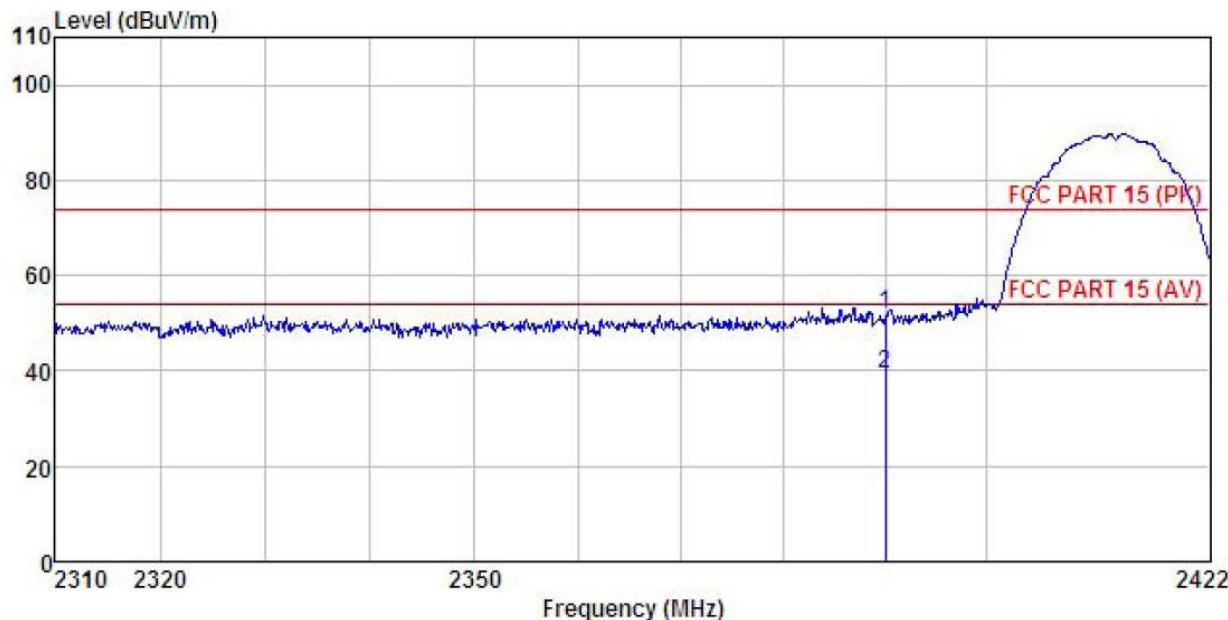
Site : 3m chamber
 Condition : FCC PART 15 (PK) 3m BBHA9120(1G18) HORIZONTAL
 EUT : 17.3"Quad Core Media Player Slim Housing
 Model : DT173-AC4-1080-SL
 Test mode : B-L Mode
 Power Rating : AC120V/60Hz
 Environment : Temp:25.5°C Huni:55%
 Test Engineer: MT
 REMARK :

Freq	Read	Antenna	Cable	Preamp	Limit	Over	Remark
	Level	Factor	Loss	Factor			
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB
1	2390.000	21.74	23.68	6.63	0.00	52.05	74.00 -21.95 Peak
2	2390.000	8.56	23.68	6.63	0.00	38.87	54.00 -15.13 Average

Remark:

1. Final Level =Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor
2. The emission levels of other frequencies are very lower than the limit and not show in test report.

Vertical:



Site : 3m chamber
 Condition : FCC PART 15 (PK) 3m BBHA9120(1G18) VERTICAL
 EUT : 17.3"Quad Core Media Player Slim Housing
 Model : DT173-AC4-1080-SL
 Test mode : B-L Mode
 Power Rating : AC120V/60Hz
 Environment : Temp:25.5°C Huni:55%
 Test Engineer: MT
 REMARK :

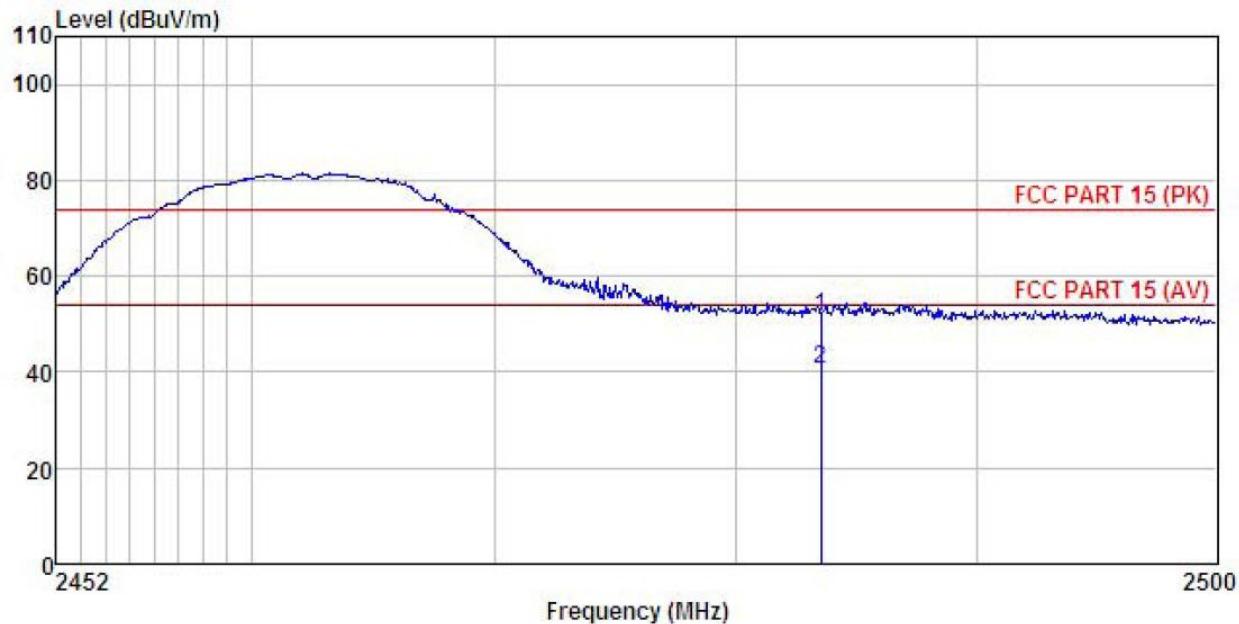
Freq	ReadAntenna		Cable		Preamp		Limit	Over	Remark
	Level	Factor	Loss	Factor	Level	Line			
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	2390.000	21.46	23.68	6.63	0.00	51.77	74.00	-22.23	Peak
2	2390.000	9.26	23.68	6.63	0.00	39.57	54.00	-14.43	Average

Remark:

1. Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor
2. The emission levels of other frequencies are very lower than the limit and not show in test report.

Test channel: Highest

Horizontal:



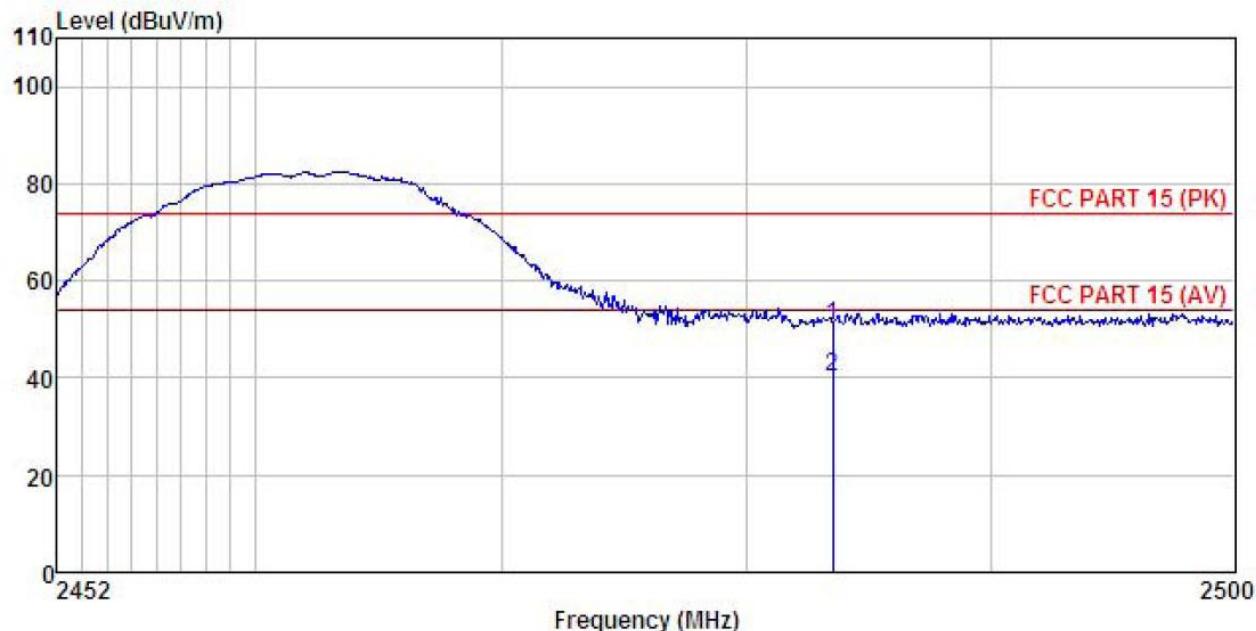
Site : 3m chamber
 Condition : FCC PART 15 (PK) 3m BBHA9120(1G18) HORIZONTAL
 EUT : 17.3"Quad Core Media Player Slim Housing
 Model : DT173-AC4-1080-SL
 Test mode : B-H Mode
 Power Rating : AC120V/60Hz
 Environment : Temp:25.5°C Humi:55%
 Test Engineer: MT
 REMARK :

	ReadAntenna Freq	Cable Level	Preamp Factor	Limit Loss	Over Level	Line dBuV/m	Over Line dBuV/m	Over Limit dB	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1	2483.500	21.04	23.70	6.85	0.00	51.59	74.00	-22.41	Peak
2	2483.500	10.23	23.70	6.85	0.00	40.78	54.00	-13.22	Average

Remark:

1. Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor
2. The emission levels of other frequencies are very lower than the limit and not show in test report.

Vertical:



Site : 3m chamber
 Condition : FCC PART 15 (PK) 3m BBHA9120(1G18) VERTICAL
 EUT : 17. 3"Quad Core Media Player Slim Housing
 Model : DT173-AC4-1080-SL
 Test mode : B-H Mode
 Power Rating : AC120V/60Hz
 Environment : Temp:25.5°C Huni:55%
 Test Engineer: MT
 REMARK :

	ReadAntenna	Cable	Preamp	Limit	Over		
Freq	Level	Factor	Loss	Level	Line	Limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB
1	2483.500	20.04	23.70	6.85	0.00	50.59	74.00 -23.41 Peak
2	2483.500	9.80	23.70	6.85	0.00	40.35	54.00 -13.65 Average

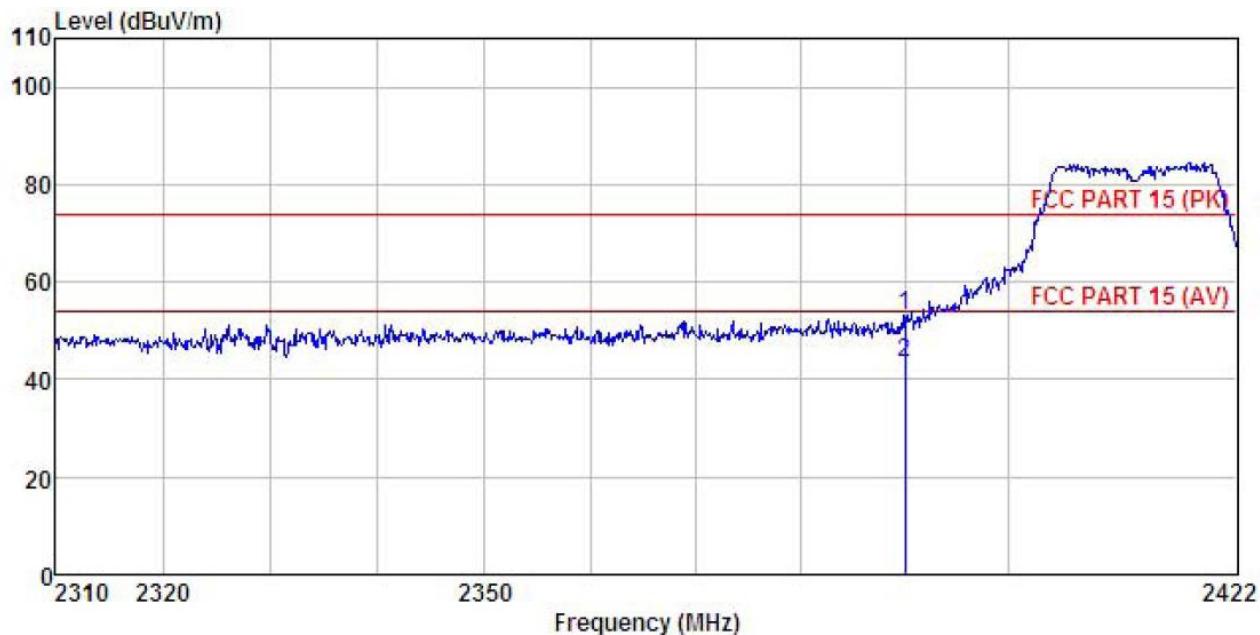
Remark:

1. Final Level =Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor
2. The emission levels of other frequencies are very lower than the limit and not show in test report.

802.11g

Test channel: Lowest

Horizontal:



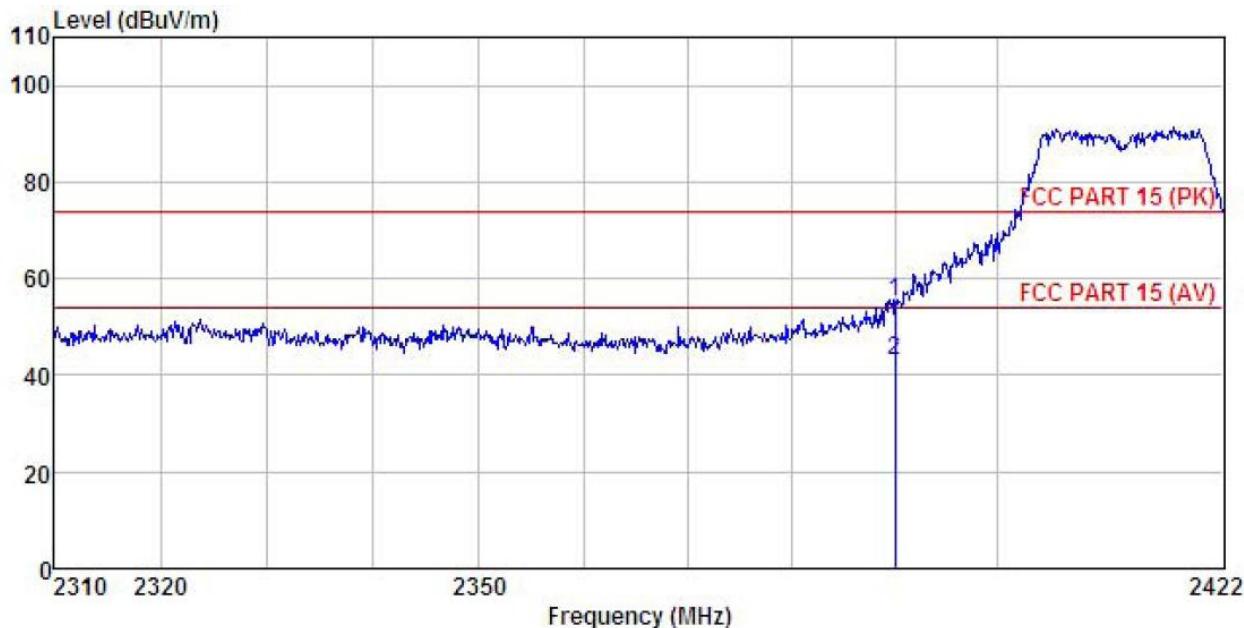
Site : 3m chamber
 Condition : FCC PART 15 (PK) 3m BBHA9120(1G18) HORIZONTAL
 EUT : 17.3" Quad Core Media Player Slim Housing
 Model : DT173-AC4-1080-SL
 Test mode : G-L Mode
 Power Rating : AC120V/60Hz
 Environment : Temp:25.5°C Humi:55%
 Test Engineer: MT
 REMARK :

Freq	Read	Antenna	Cable	Preamp	Limit	Over	Remark
	Level	Factor	Loss	Factor	Level	Line	
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB
1	2390.000	22.81	23.68	6.63	0.00	53.12	74.00 -20.88 Peak
2	2390.000	13.02	23.68	6.63	0.00	43.33	54.00 -10.67 Average

Remark:

1. Final Level = Receiver Read level + Antenna Factor + Cable Loss - Preamplifier Factor
2. The emission levels of other frequencies are very lower than the limit and not show in test report.

Vertical:



Site : 3m chamber
 Condition : FCC PART 15 (PK) 3m BBHA9120(1G18) VERTICAL
 EUT : 17. 3"Quad Core Media Player Slim Housing
 Model : DT173-AC4-1080-SL
 Test mode : G-L Mode
 Power Rating : AC120V/60Hz
 Environment : Temp:25.5°C Huni:55%
 Test Engineer: MT
 REMARK :

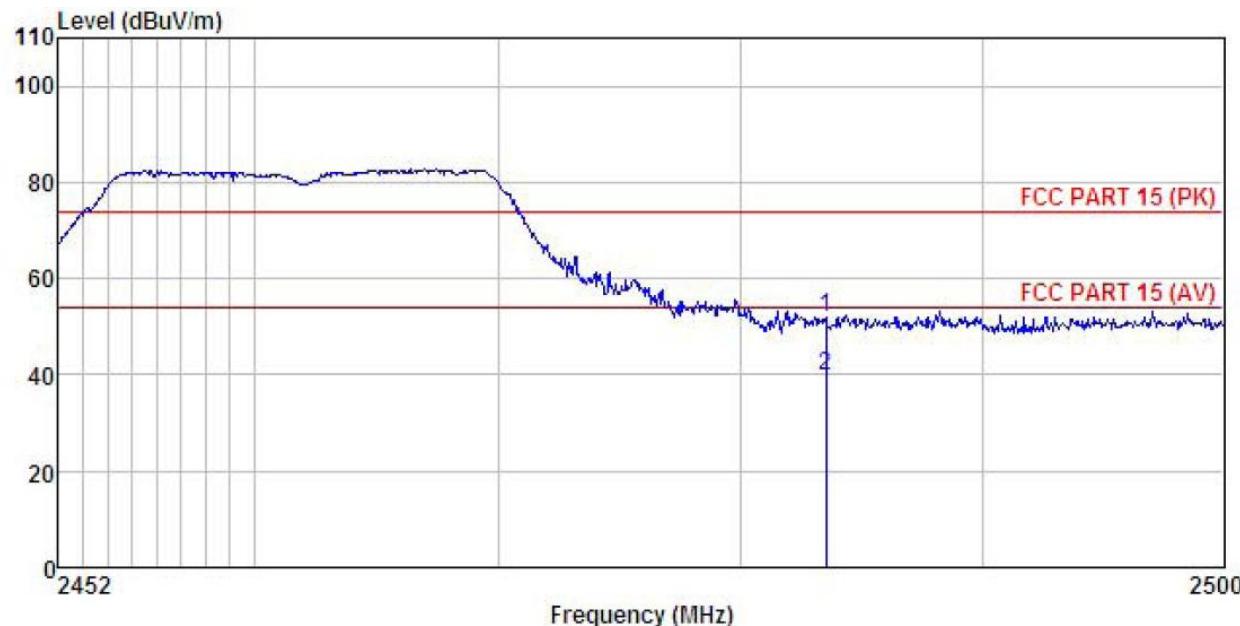
Freq	ReadAntenna		Cable		Preamp	Limit	Over	Remark
	Level	Factor	Loss	Factor				
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1	2390.000	24.86	23.68	6.63	0.00	55.17	74.00	-18.83 Peak
2	2390.000	12.74	23.68	6.63	0.00	43.05	54.00	-10.95 Average

Remark:

1. Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor
2. The emission levels of other frequencies are very lower than the limit and not show in test report.

Test channel: Highest

Horizontal:



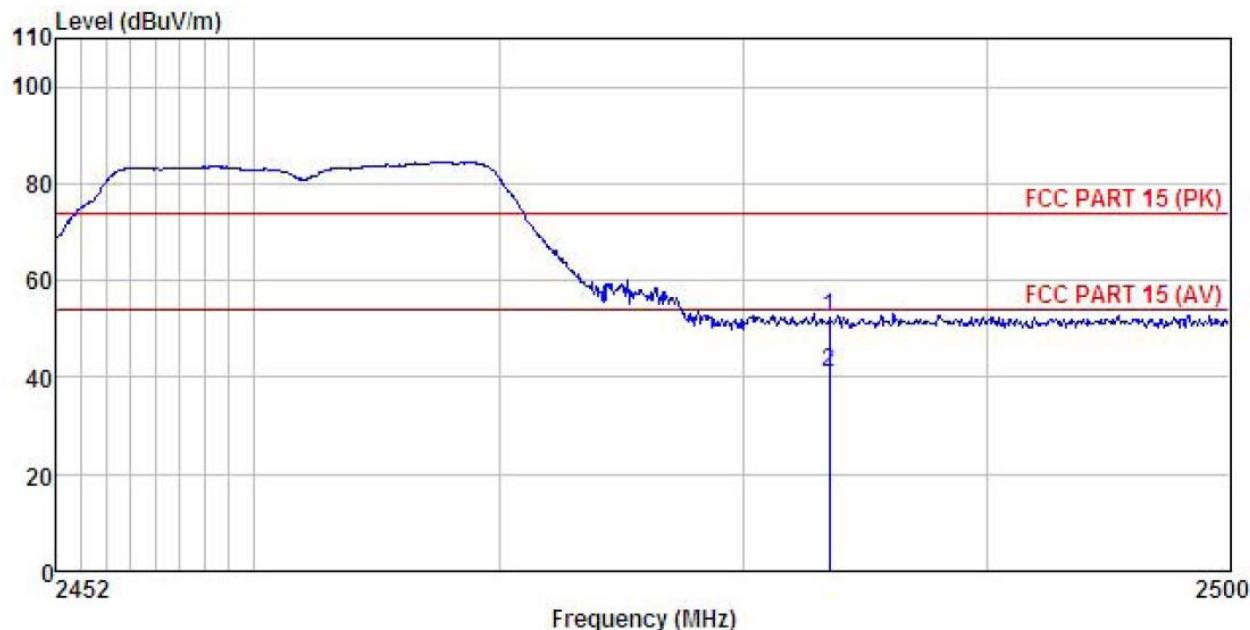
Site : 3m chamber
 Condition : FCC PART 15 (PK) 3m BBHA9120(1G18) HORIZONTAL
 EUT : 17.3"Quad Core Media Player Slim Housing
 Model : DT173-AC4-1080-SL
 Test mode : G-H Mode
 Power Rating : AC120V/60Hz
 Environment : Temp:25.5°C Huni:55%
 Test Engineer: MT
 REMARK :

Freq	Read	Antenna	Cable	Preamp	Limit	Over	Remark
	Level	Factor	Loss	Factor	Level	Line	
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB
1	2483.500	21.29	23.70	6.85	0.00	51.84	74.00 -22.16 Peak
2	2483.500	9.35	23.70	6.85	0.00	39.90	54.00 -14.10 Average

Remark:

1. Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor
2. The emission levels of other frequencies are very lower than the limit and not show in test report.

Vertical:



Site : 3m chamber
Condition : FCC PART 15 (PK) 3m BBHA9120(1G18) VERTICAL
EUT : 17.3"Quad Core Media Player Slim Housing
Model : DT173-AC4-1080-SL
Test mode : G-H Mode
Power Rating : AC120V/60Hz
Environment : Temp:25.5°C Humi:55%
Test Engineer: MT
REMARK :

	ReadAntenna	Cable	Preamp	Limit	Over	
Freq	Level	Factor	Loss	Level	Line	Limit
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m
1	2483.500	21.83	23.70	6.85	0.00	52.38
2	2483.500	10.47	23.70	6.85	0.00	41.02
					74.00	-21.62
					54.00	-12.98
						Peak
						Average

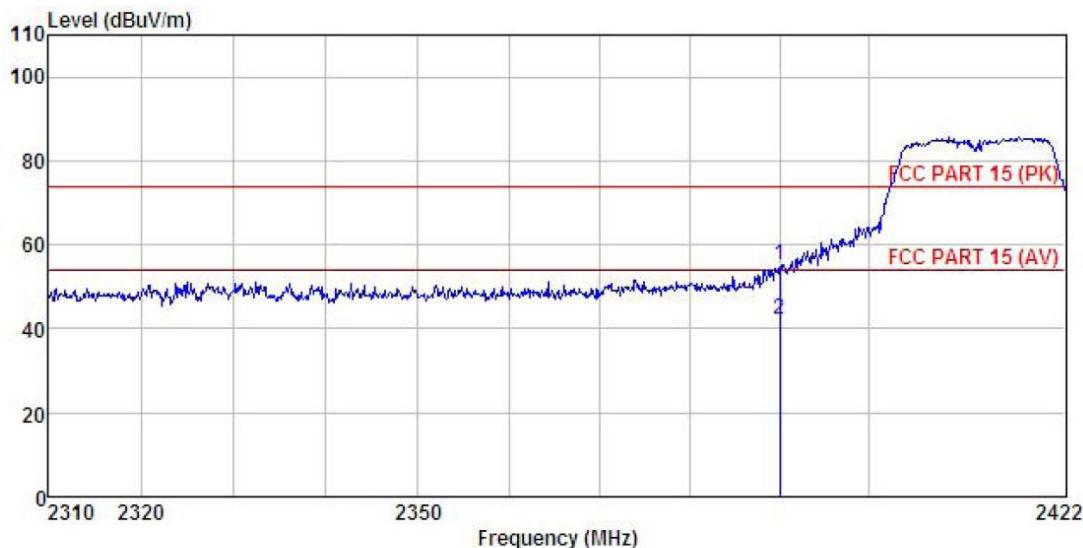
Remark:

1. Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor
2. The emission levels of other frequencies are very lower than the limit and not show in test report.

802.11n (H20)

Test channel: Lowest

Horizontal:



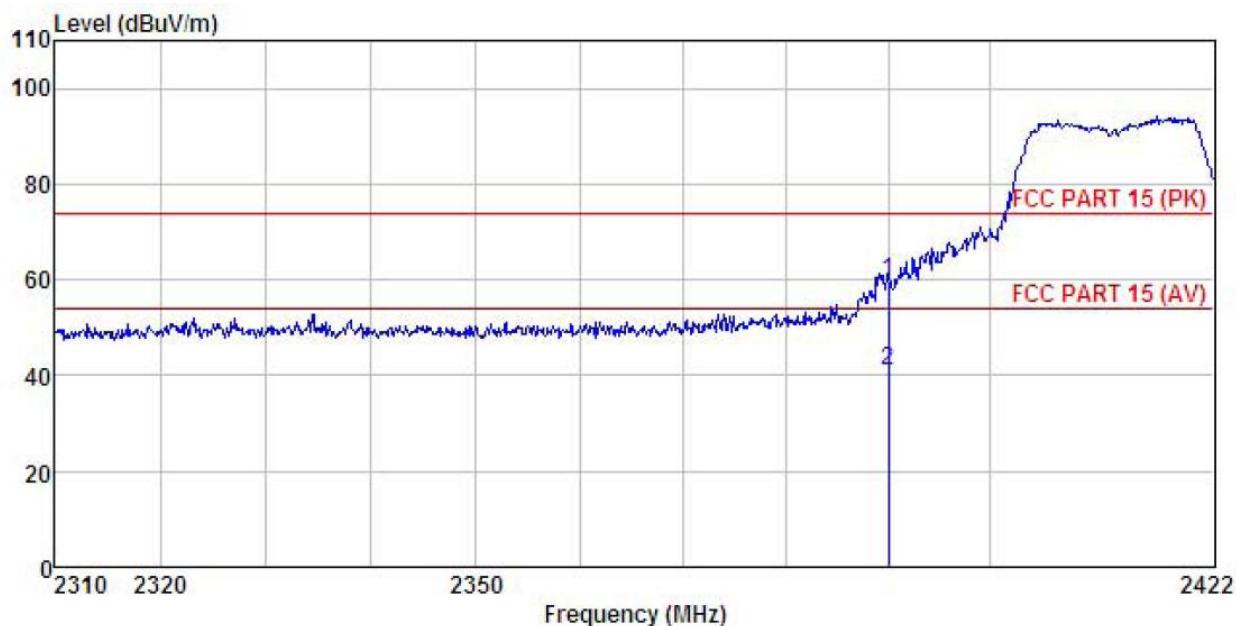
Site : 3m chamber
Condition : FCC PART 15 (PK) 3m BBHA9120(1G18) HORIZONTAL
EUT : 17.3"Quad Core Media Player Slim Housing
Model : DT173-AC4-1080-SL
Test mode : N20-L Mode
Power Rating : AC120V/60Hz
Environment : Temp:25.5°C Huni:55%
Test Engineer: MT
REMARK :

Freq	ReadAntenna Level	Cable Factor	Preamp Loss	Limit Factor	Limit Level	Over Line	Over Limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1	2390.000	24.78	23.68	6.63	0.00	55.09	74.00	-18.91 Peak
2	2390.000	11.81	23.68	6.63	0.00	42.12	54.00	-11.88 Average

Remark:

1. Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor
2. The emission levels of other frequencies are very lower than the limit and not show in test report.

Vertical:



Site : 3m chamber
 Condition : FCC PART 15 (PK) 3m BBHA9120(1G18) VERTICAL
 EUT : 17.3"Quad Core Media Player Slim Housing
 Model : DT173-AC4-1080-SL
 Test mode : N20-L Mode
 Power Rating : AC120V/60Hz
 Environment : Temp:25.5°C Huni:55%
 Test Engineer: MT
 REMARK :

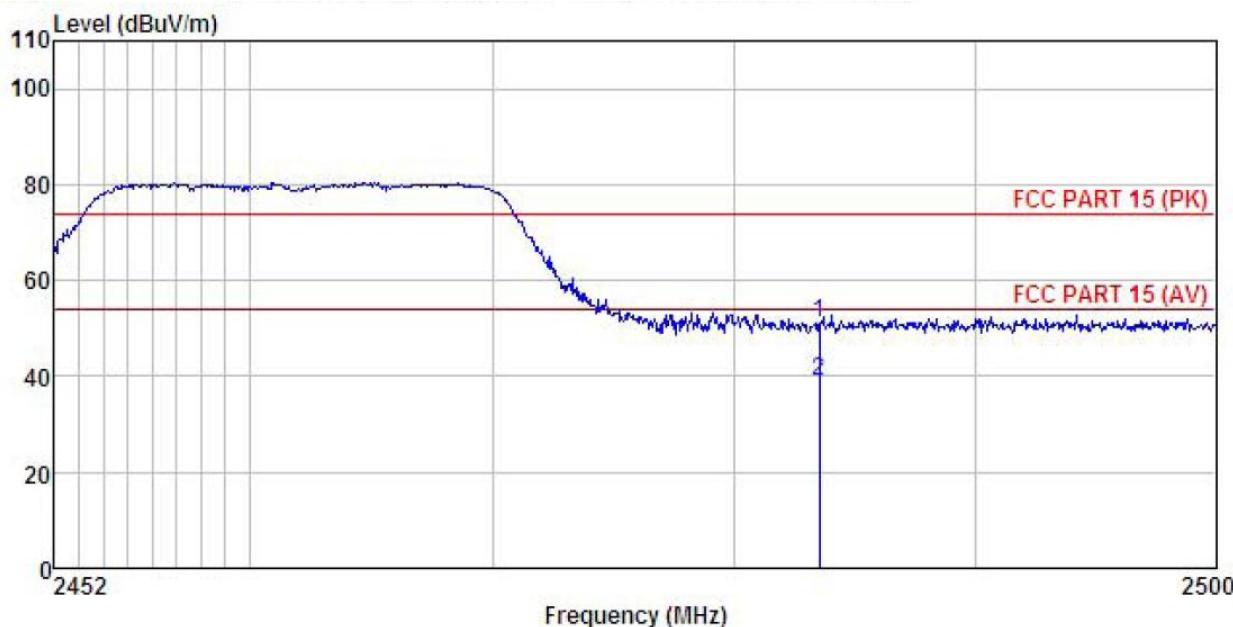
Freq	Read	Antenna	Cable	Preamp	Limit	Over	Remark
	MHz	Level	Factor	Loss	Factor	Level	
1	2390.000	29.18	23.68	6.63	0.00	59.49	74.00 -14.51 Peak
2	2390.000	10.53	23.68	6.63	0.00	40.84	54.00 -13.16 Average

Remark:

1. Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor
2. The emission levels of other frequencies are very lower than the limit and not show in test report.

Test channel: Highest

Horizontal:



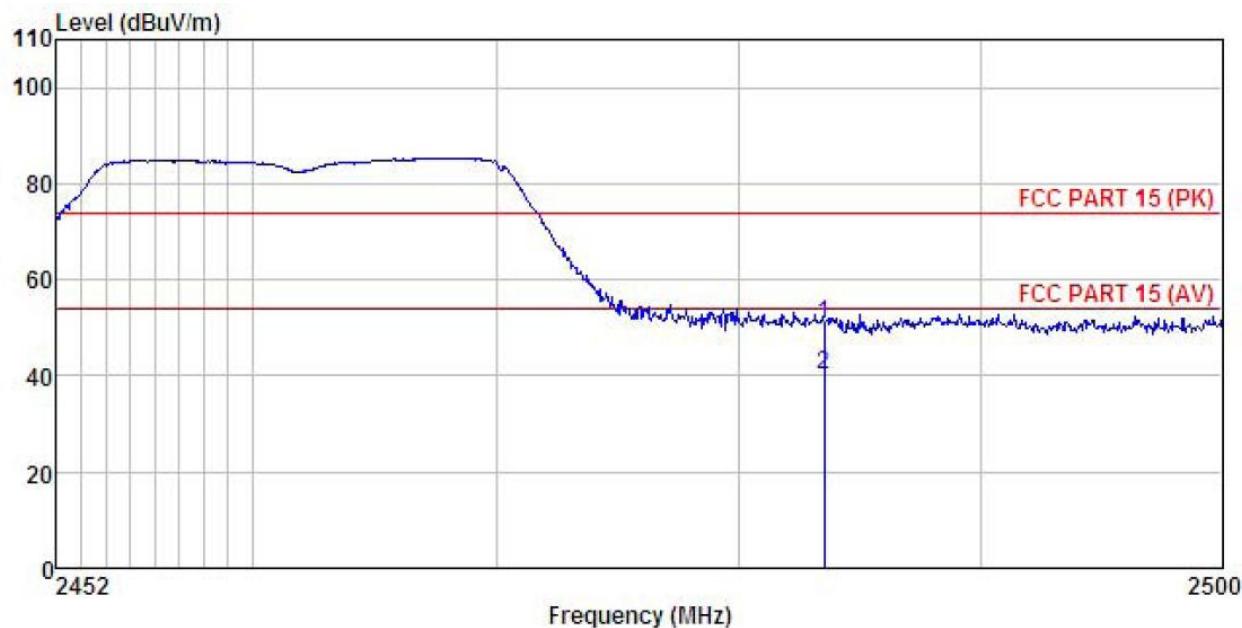
Site : 3m chamber
 Condition : FCC PART 15 (PK) 3m BBHA9120(1G18) HORIZONTAL
 EUT : 17.3"Quad Core Media Player Slim Housing
 Model : DT173-AC4-1080-SL
 Test mode : N20-H Mode
 Power Rating : AC120V/60Hz
 Environment : Temp:25.5°C Humi:55%
 Test Engineer: MT
 REMARK :

	Read	Antenna	Cable	Preamp	Limit	Over		
Freq	Level	Factor	Loss	Factor	Level	Line	Limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1 2483.500	20.75	23.70	6.85	0.00	51.30	74.00	-22.70	Peak
2 2483.500	8.35	23.70	6.85	0.00	38.90	54.00	-15.10	Average

Remark:

1. Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor
2. The emission levels of other frequencies are very lower than the limit and not show in test report.

Vertical:



Site : 3m chamber
Condition : FCC PART 15 (PK) 3m BBHA9120(1G18) VERTICAL
EUT : 17.3"Quad Core Media Player Slim Housing
Model : DT173-AC4-1080-SL
Test mode : N20-H Mode
Power Rating : AC120V/60Hz
Environment : Temp:25.5°C Humi:55%
Test Engineer: MT
REMARK :

	Read	Antenna	Cable	Preamp	Limit	Over	
Freq	Level	Factor	Loss	Factor	Level	Line	Limit
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB
1	2483.500	20.17	23.70	6.85	0.00	50.72	74.00 -23.28 Peak
2	2483.500	9.55	23.70	6.85	0.00	40.10	54.00 -13.90 Average

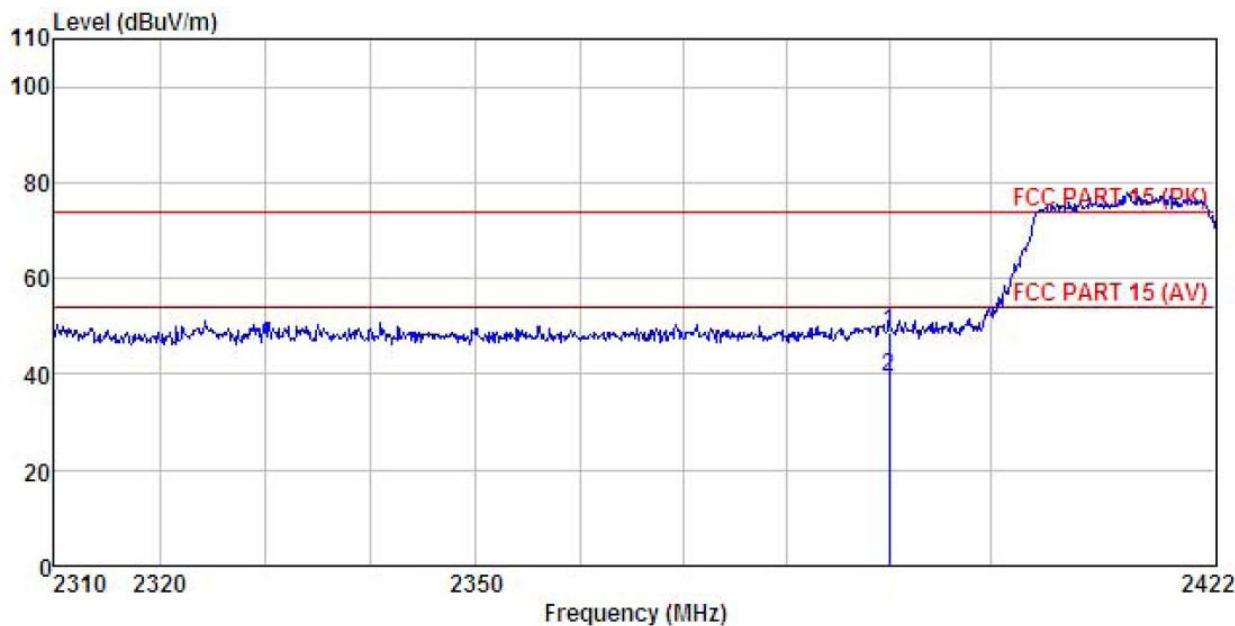
Remark:

1. Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor
2. The emission levels of other frequencies are very lower than the limit and not show in test report.

802.11n (H40)

Test channel: Lowest

Horizontal:



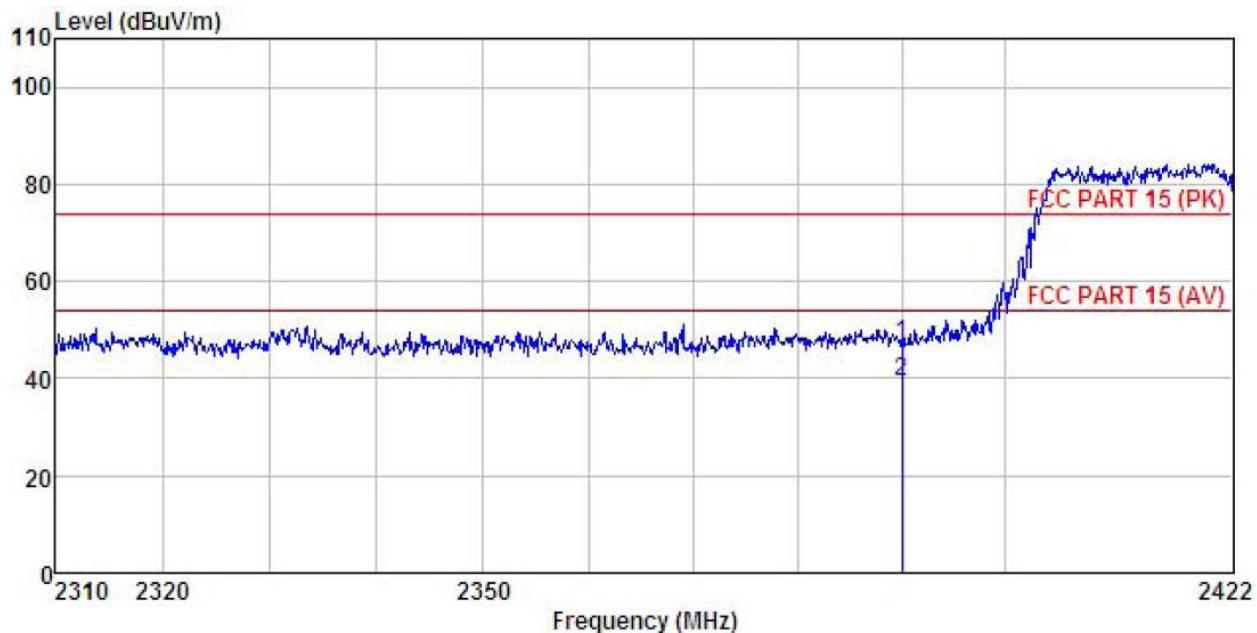
Site : 3m chamber
Condition : FCC PART 15 (PK) 3m BBHA9120(1G18) HORIZONTAL
EUT : 17.3"Quad Core Media Player Slim Housing
Model : DT173-AC4-1080-SL
Test mode : N40-L Mode
Power Rating : AC120V/60Hz
Environment : Temp:25.5°C Huni:55%
Test Engineer: MT
REMARK :

	ReadAntenna Freq	Level dBuV	Cable Loss dB	Preamp Level dB	Limit dBuV/m	Over Line dBuV/m	Over Limit dB	Remark
1	2390.000	18.44	23.68	6.63	0.00	48.75	74.00	-25.25 Peak
2	2390.000	9.12	23.68	6.63	0.00	39.43	54.00	-14.57 Average

Remark:

1. Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor
2. The emission levels of other frequencies are very lower than the limit and not show in test report.

Vertical:



Site : 3m chamber
 Condition : FCC PART 15 (PK) 3m BBHA9120(1G18) VERTICAL
 EUT : 17.3"Quad Core Media Player Slim Housing
 Model : DT173-AC4-1080-SL
 Test mode : N40-L Mode
 Power Rating : AC120V/60Hz
 Environment : Temp:25.5°C Humi:55%
 Test Engineer: MT
 REMARK :

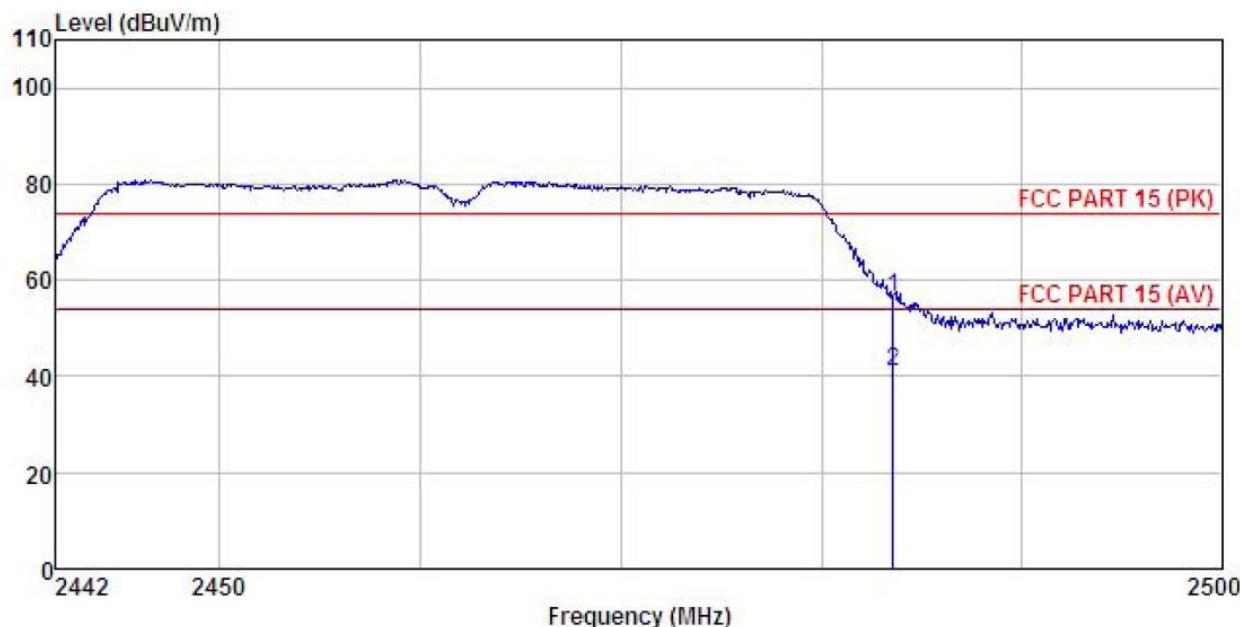
	ReadAntenna Freq	Cable Level	Preamp Factor	Limit Loss	Over Level	Line dBuV/m	Over Line dBuV/m	Over Limit dB	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1	2390.000	16.81	23.68	6.63	0.00	47.12	74.00	-26.88	Peak
2	2390.000	9.15	23.68	6.63	0.00	39.46	54.00	-14.54	Average

Remark:

1. Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor
2. The emission levels of other frequencies are very lower than the limit and not show in test report.

Test channel: Highest

Horizontal:



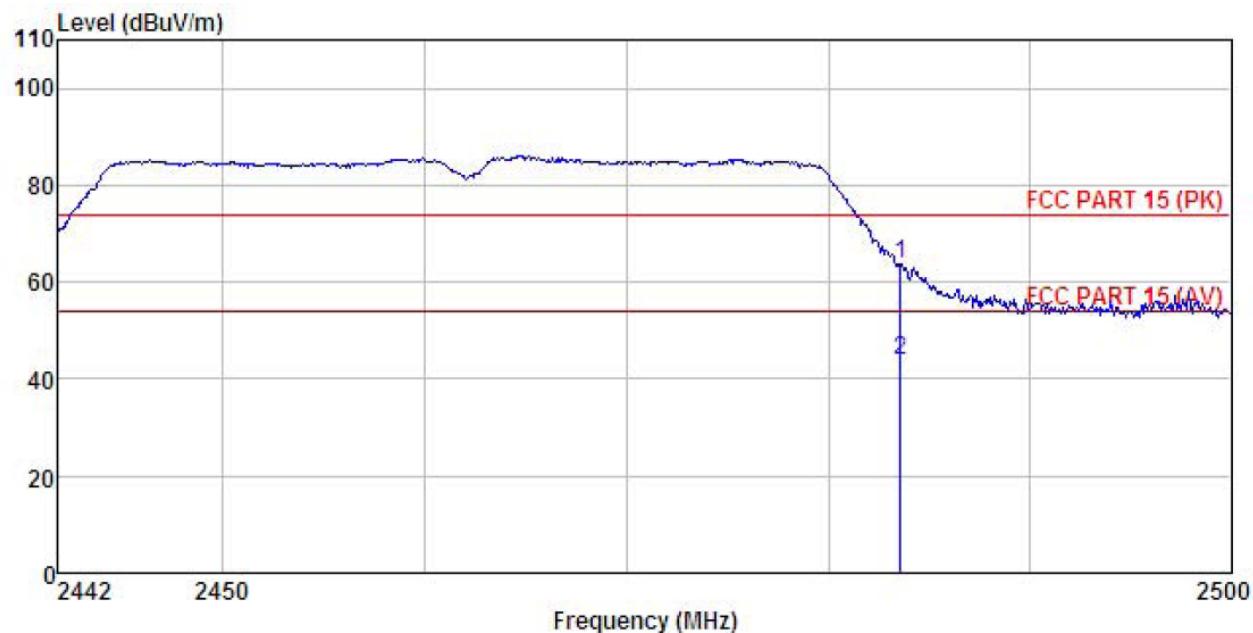
Site : 3m chamber
 Condition : FCC PART 15 (PK) 3m BBHA9120(1G18) HORIZONTAL
 EUT : 17.3"Quad Core Media Player Slim Housing
 Model : DT173-AC4-1080-SL
 Test mode : M40-H Mode
 Power Rating : AC120V/60Hz
 Environment : Temp:25.5°C Huni:55%
 Test Engineer: MT
 REMARK :

Freq	Read	Antenna	Cable	Preamp	Limit	Over	Remark
	Level	Factor	Loss	Factor	Level	Line	
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB
1	2483.500	26.04	23.70	6.85	0.00	56.59	74.00 -17.41 Peak
2	2483.500	10.55	23.70	6.85	0.00	41.10	54.00 -12.90 Average

Remark:

1. Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor
2. The emission levels of other frequencies are very lower than the limit and not show in test report.

Vertical:



Site : 3m chamber
 Condition : FCC PART 15 (PK) 3m BBHA9120(1G18) VERTICAL
 EUT : 17.3"Quad Core Media Player Slim Housing
 Model : DT173-AC4-1080-SL
 Test mode : N40-H Mode
 Power Rating : AC120V/60Hz
 Environment : Temp:25.5°C Humi:55%
 Test Engineer: MT
 REMARK :

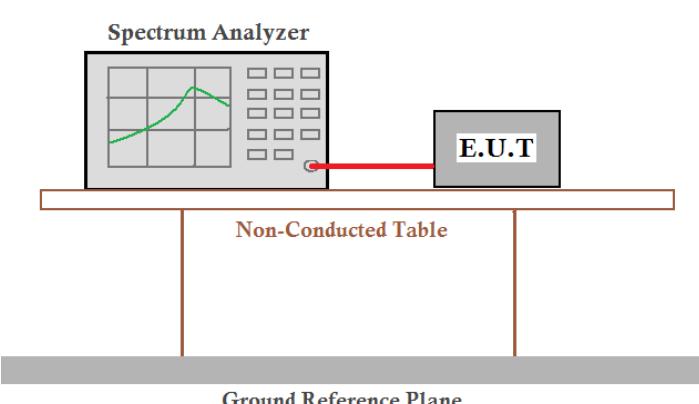
	ReadAntenna	Cable	Preamp	Limit	Over		
Freq	Level	Factor	Loss	Level	Line	Limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB
1	2483.500	33.15	23.70	6.85	0.00	63.70	74.00 -10.30 Peak
2	2483.500	13.23	23.70	6.85	0.00	43.78	54.00 -10.22 Average

Remark:

1. Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor
2. The emission levels of other frequencies are very lower than the limit and not show in test report.

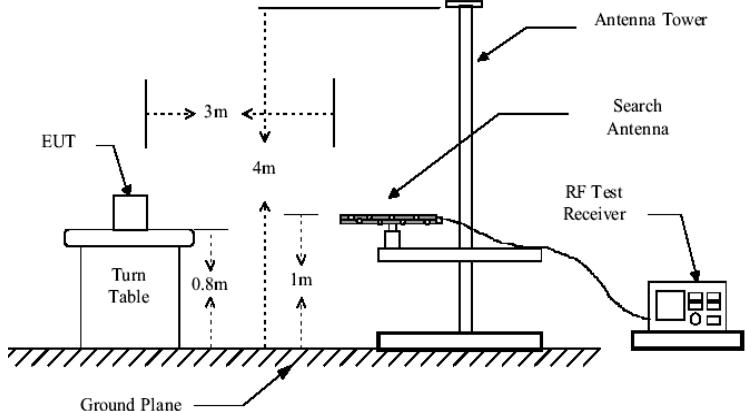
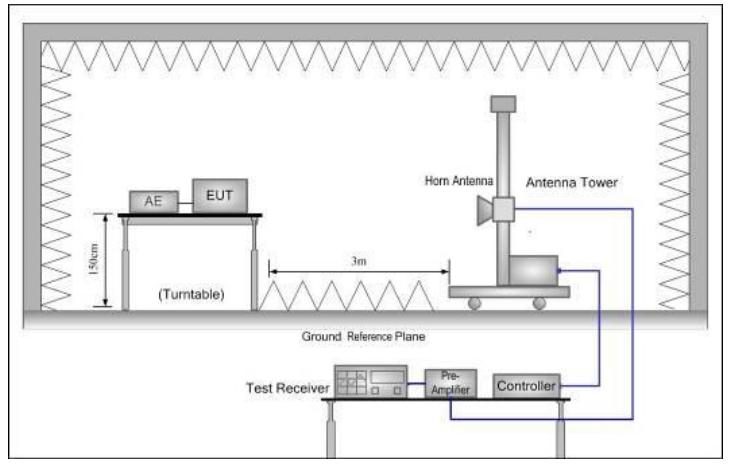
6.7 Spurious Emission

6.7.1 Conducted Emission Method

Test Requirement:	FCC Part15 C Section 15.247 (d)
Test Method:	ANSI C63.10:2013 and KDB558074v03r05 section 11
Limit:	In any 100 kHz bandwidth outside the frequency band in which the spreadspectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement.
Test setup:	 <p>The diagram illustrates the test setup for conducted emission. A Spectrum Analyzer is connected to the E.U.T (Equipment Under Test) via a coaxial cable. The E.U.T is placed on a Non-Conducted Table. The entire setup is positioned above a Ground Reference Plane.</p>
Test Instruments:	Refer to section 5.7 for details
Test mode:	Refer to section 5.3 for details
Test results:	Refer to FCC ID: 2AB6Z-1859ATMB

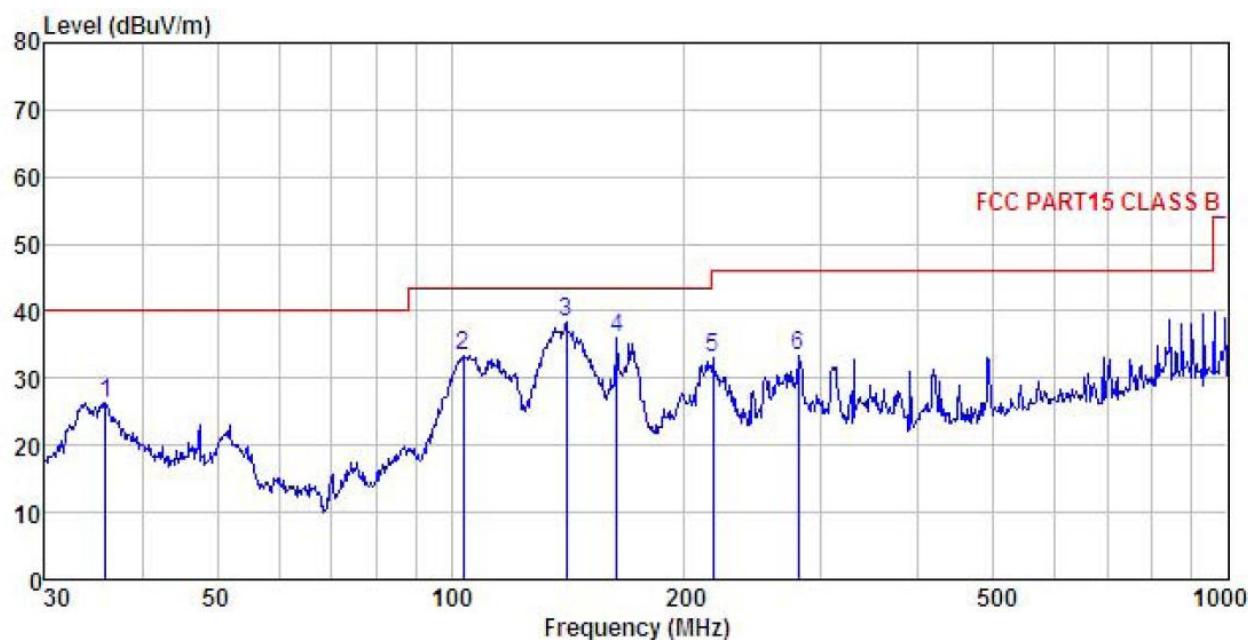
6.7.2 Radiated Emission Method

Test Requirement:	FCC Part15 C Section 15.209 and 15.205																									
Test Method:	ANSI C63.10:2013																									
TestFrequencyRange:	9KHz to 25GHz																									
Test site:	Measurement Distance: 3m																									
Receiver setup:	<table border="1"> <thead> <tr> <th>Frequency</th> <th>Detector</th> <th>RBW</th> <th>VBW</th> <th>Remark</th> </tr> </thead> <tbody> <tr> <td>30MHz-1GHz</td> <td>Quasi-peak</td> <td>120KHz</td> <td>300KHz</td> <td>Quasi-peak Value</td> </tr> <tr> <td>Above 1GHz</td> <td>Peak</td> <td>1MHz</td> <td>3MHz</td> <td>Peak Value</td> </tr> <tr> <td></td> <td>RMS</td> <td>1MHz</td> <td>3MHz</td> <td>Average Value</td> </tr> </tbody> </table>					Frequency	Detector	RBW	VBW	Remark	30MHz-1GHz	Quasi-peak	120KHz	300KHz	Quasi-peak Value	Above 1GHz	Peak	1MHz	3MHz	Peak Value		RMS	1MHz	3MHz	Average Value	
Frequency	Detector	RBW	VBW	Remark																						
30MHz-1GHz	Quasi-peak	120KHz	300KHz	Quasi-peak Value																						
Above 1GHz	Peak	1MHz	3MHz	Peak Value																						
	RMS	1MHz	3MHz	Average Value																						
Limit:	<table border="1"> <thead> <tr> <th>Frequency</th> <th>Limit (dBuV/m @3m)</th> <th>Remark</th> </tr> </thead> <tbody> <tr> <td>30MHz-88MHz</td> <td>40.0</td> <td>Quasi-peak Value</td> </tr> <tr> <td>88MHz-216MHz</td> <td>43.5</td> <td>Quasi-peak Value</td> </tr> <tr> <td>216MHz-960MHz</td> <td>46.0</td> <td>Quasi-peak Value</td> </tr> <tr> <td>960MHz-1GHz</td> <td>54.0</td> <td>Quasi-peak Value</td> </tr> <tr> <td>Above 1GHz</td> <td>54.0</td> <td>Average Value</td> </tr> <tr> <td></td> <td>74.0</td> <td>Peak Value</td> </tr> </tbody> </table>					Frequency	Limit (dBuV/m @3m)	Remark	30MHz-88MHz	40.0	Quasi-peak Value	88MHz-216MHz	43.5	Quasi-peak Value	216MHz-960MHz	46.0	Quasi-peak Value	960MHz-1GHz	54.0	Quasi-peak Value	Above 1GHz	54.0	Average Value		74.0	Peak Value
Frequency	Limit (dBuV/m @3m)	Remark																								
30MHz-88MHz	40.0	Quasi-peak Value																								
88MHz-216MHz	43.5	Quasi-peak Value																								
216MHz-960MHz	46.0	Quasi-peak Value																								
960MHz-1GHz	54.0	Quasi-peak Value																								
Above 1GHz	54.0	Average Value																								
	74.0	Peak Value																								
Test Procedure:	<ol style="list-style-type: none"> 1. The EUT was placed on the top of a rotating table 0.8m(below 1GHz)/1.5m(above 1GHz) above the ground at a 3 meter camber. The table was rotated 360 degrees to determine the position of the highest radiation. 2. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower. 3. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement. 4. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rota table was turned from 0 degrees to 360 degrees to find the maximum reading. 5. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode. 6. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet. 																									

<p>Test setup:</p>	<p>Below 1GHz</p>  <p>Above 1GHz</p> 
<p>Test Instruments:</p>	<p>Refer to section 5.7 for details</p>
<p>Test mode:</p>	<p>Refer to section 5.3 for details</p>
<p>Test results:</p>	<p>Passed</p>
<p>Remark:</p>	<ol style="list-style-type: none"> 1. Pre-scan all kind of the place mode (X-axis, Y-axis, Z-axis), and found the Y-axis is the worst case. 2. 9 kHz to 30MHz is too low, so only shows the data of above 30MHz in this report.

Below 1GHz

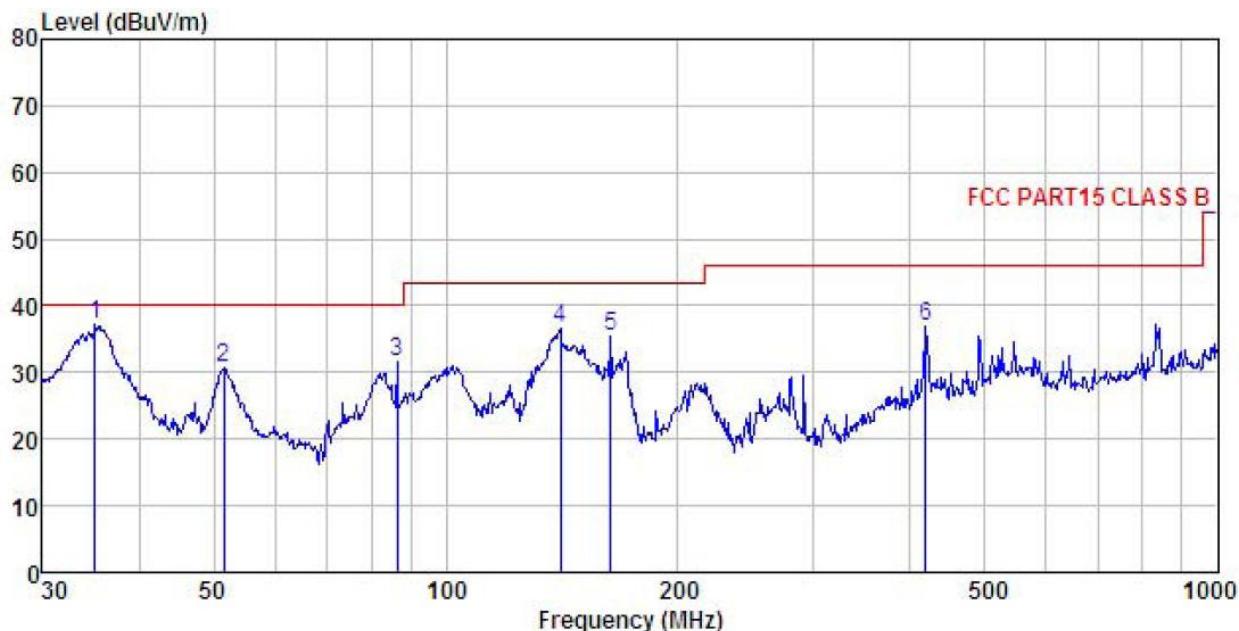
Horizontal:



Site : 3m chamber
 Condition : FCC PART15 CLASS B 3m VULB9163(30M3G) HORIZONTAL
 EUT : 17.3"Quad Core Media Player Slim Housing
 Model : DT173-AC4-1080-SL
 Test mode : Wifi Mode
 Power Rating : AC120V/60Hz
 Environment : Temp:25.5°C Humi:55%
 Test Engineer: MT
 REMARK :

Freq	ReadAntenna		Cable Preamp		Limit	Over	Remark
	Level	Factor	Loss	Factor			
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB
1	35.875	40.03	15.22	1.07	29.94	26.38	40.00 -13.62 QP
2	103.806	50.38	10.54	1.99	29.50	33.41	43.50 -10.09 QP
3	140.835	53.51	11.63	2.41	29.27	38.28	43.50 -5.22 QP
4	163.755	52.50	9.86	2.62	29.10	35.88	43.50 -7.62 QP
5	217.544	47.57	11.26	2.85	28.72	32.96	46.00 -13.04 QP
6	280.024	46.66	12.20	2.89	28.48	33.27	46.00 -12.73 QP

Vertical:



Site : 3m chamber
Condition : FCC PART15 CLASS B 3m VULB9163(30M3G) VERTICAL
EUT : 17.3"Quad Core Media Player Slim Housing
Model : DT173-AC4-1080-SL
Test mode : Wifi Mode
Power Rating : AC120V/60Hz
Environment : Temp:25.5°C Humi:55%
Test Engineer: MT
REMARK :

	ReadAntenna	Cable	Preamp	Limit	Over		
Freq	Level	Factor	Loss	Level	Line	Limit	
	MHz	dBuV	dB/m	dB	dBuV/m	dBuV/m	dB
1	35.128	51.18	14.79	1.04	29.95	37.06	40.00
2	51.481	45.37	13.85	1.27	29.81	30.68	40.00
3	86.503	51.49	7.72	1.91	29.59	31.53	40.00
4	140.835	51.75	11.63	2.41	29.27	36.52	43.50
5	163.755	52.10	9.86	2.62	29.10	35.48	43.50
6	419.108	46.59	16.03	3.12	28.82	36.92	46.00

Above 1GHz

Test mode: 802.11b			Test channel: Lowest			Remark: Peak		
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polar.
4824.00	45.36	36.12	10.60	40.22	51.86	74.00	-22.14	Vertical
4824.00	45.07	36.12	10.60	40.22	51.57	74.00	-22.43	Horizontal
Test mode: 802.11b			Test channel: Lowest			Remark: Average		
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polar.
4824.00	37.59	36.12	10.60	40.22	44.09	54.00	-9.91	Vertical
4824.00	36.38	36.12	10.60	40.22	42.88	54.00	-11.12	Horizontal

Test mode: 802.11b			Test channel: Middle			Remark: Peak		
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polar.
4874.00	46.25	36.32	10.64	40.15	53.06	74.00	-20.94	Vertical
4874.00	45.18	36.32	10.64	40.15	51.99	74.00	-22.01	Horizontal
Test mode: 802.11b			Test channel: Middle			Remark: Average		
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polar.
4874.00	36.61	36.32	10.64	40.15	43.42	54.00	-10.58	Vertical
4874.00	36.04	36.32	10.64	40.15	42.85	54.00	-11.15	Horizontal

Test mode: 802.11b			Test channel: Highest			Remark: Peak		
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polar.
4924.00	47.01	36.58	10.70	40.08	54.21	74.00	-19.79	Vertical
4924.00	46.26	36.58	10.70	40.08	53.46	74.00	-20.54	Horizontal
Test mode: 802.11b			Test channel: Highest			Remark: Average		
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polar.
4924.00	36.69	36.58	10.70	40.08	43.89	54.00	-10.11	Vertical
4924.00	37.12	36.58	10.70	40.08	44.32	54.00	-9.68	Horizontal

Remark:

1. Final Level =Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor
2. The emission levels of other frequencies are very lower than the limit and not show in test report.

Test mode: 802.11g			Test channel: Lowest			Remark: Peak		
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/)	Limit Line (dBuV/m)	Over Limit (dB)	Polar.
4824.00	47.02	36.12	10.60	40.22	53.52	74.00	-20.48	Vertical
4824.00	47.36	36.12	10.60	40.22	53.86	74.00	-20.14	Horizontal
Test mode: 802.11g			Test channel: Lowest			Remark: Average		
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/)	Limit Line (dBuV/m)	Over Limit (dB)	Polar.
4824.00	37.69	36.12	10.60	40.22	44.19	54.00	-9.81	Vertical
4824.00	37.30	36.12	10.60	40.22	43.80	54.00	-10.20	Horizontal

Test mode: 802.11g			Test channel: Middle			Remark: Peak		
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/)	Limit Line (dBuV/m)	Over Limit (dB)	Polar.
4874.00	45.88	36.32	10.64	40.15	52.69	74.00	-21.31	Vertical
4874.00	45.75	36.32	10.64	40.15	52.56	74.00	-21.44	Horizontal
Test mode: 802.11g			Test channel: Middle			Remark: Average		
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/)	Limit Line (dBuV/m)	Over Limit (dB)	Polar.
4874.00	36.56	36.32	10.64	40.15	43.37	54.00	-10.63	Vertical
4874.00	36.92	36.32	10.64	40.15	43.73	54.00	-10.27	Horizontal

Test mode: 802.11g			Test channel: Highest			Remark: Peak		
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polar.
4924.00	47.65	36.58	10.70	40.08	54.85	74.00	-19.15	Vertical
4924.00	44.96	36.58	10.70	40.08	52.16	74.00	-21.84	Horizontal
Test mode: 802.11g			Test channel: Highest			Remark: Average		
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polar.
4924.00	38.65	36.58	10.70	40.08	45.85	54.00	-8.15	Vertical
4924.00	35.98	36.58	10.70	40.08	43.18	54.00	-10.82	Horizontal

Remark:

- Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor
- The emission levels of other frequencies are very lower than the limit and not show in test report.

Test mode: 802.11n(H20)			Test channel: Lowest			Remark: Peak		
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polar.
4824.00	47.52	36.12	10.60	40.22	54.02	74.00	-19.98	Vertical
4824.00	47.62	36.12	10.60	40.22	54.12	74.00	-19.88	Horizontal
Test mode: 802.11n(H20)			Test channel: Lowest			Remark: Average		
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polar.
4824.00	38.01	36.12	10.60	40.22	44.51	54.00	-9.49	Vertical
4824.00	37.96	36.12	10.60	40.22	44.46	54.00	-9.54	Horizontal

Test mode: 802.11n(H20)			Test channel: Middle			Remark: Peak		
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polar.
4874.00	46.02	36.32	10.64	40.15	52.83	74.00	-21.17	Vertical
4874.00	45.95	36.32	10.64	40.15	52.76	74.00	-21.24	Horizontal
Test mode: 802.11n(H20)			Test channel: Middle			Remark: Average		
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polar.
4874.00	36.78	36.32	10.64	40.15	43.59	54.00	-10.41	Vertical
4874.00	36.65	36.32	10.64	40.15	43.46	54.00	-10.54	Horizontal

Test mode: 802.11n(H20)			Test channel: Highest			Remark: Peak		
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polar.
4924.00	47.52	36.58	10.70	40.08	54.72	74.00	-19.28	Vertical
4924.00	44.98	36.58	10.70	40.08	52.18	74.00	-21.82	Horizontal
Test mode: 802.11n(H20)			Test channel: Highest			Remark: Average		
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polar.
4924.00	38.95	36.58	10.70	40.08	46.15	54.00	-7.85	Vertical
4924.00	35.88	36.58	10.70	40.08	43.08	54.00	-10.92	Horizontal

Remark:

- Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor
- The emission levels of other frequencies are very lower than the limit and not show in test report.

Test mode: 802.11n(H40)			Test channel: Lowest			Remark: Peak		
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polar.
4844.00	47.25	36.19	10.61	40.19	53.86	74.00	-20.14	Vertical
4844.00	47.12	36.19	10.61	40.19	53.73	74.00	-20.27	Horizontal
Test mode: 802.11n(H40)			Test channel: Lowest			Remark: Average		
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polar.
4844.00	38.15	36.19	10.61	40.19	44.76	54.00	-9.24	Vertical
4844.00	37.65	36.19	10.61	40.19	44.26	54.00	-9.74	Horizontal

Test mode: 802.11n(H40)			Test channel: Middle			Remark: Peak		
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polar.
4874.00	46.52	36.25	10.64	40.17	53.24	74.00	-20.76	Vertical
4874.00	46.12	36.25	10.64	40.17	52.84	74.00	-21.16	Horizontal
Test mode: 802.11n(H40)			Test channel: Middle			Remark: Average		
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polar.
4874.00	36.77	36.25	10.64	40.17	43.49	54.00	-10.51	Vertical
4874.00	36.52	36.25	10.64	40.17	43.24	54.00	-10.76	Horizontal

Test mode: 802.11n(H40)			Test channel: Highest			Remark: Peak		
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polar.
4904.00	47.65	36.51	10.69	40.10	54.75	74.00	-19.25	Vertical
4904.00	44.91	36.51	10.69	40.10	52.01	74.00	-21.99	Horizontal
Test mode: 802.11n(H40)			Test channel: Highest			Remark: Average		
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polar.
4904.00	38.54	36.51	10.69	40.10	45.64	54.00	-8.36	Vertical
4904.00	35.96	36.51	10.69	40.10	43.06	54.00	-10.94	Horizontal

Remark:

- Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor
- The emission levels of other frequencies are very lower than the limit and not show in test report.