FCC Part 15C Test Report

FCC ID: 2AF9RWETEK

Product Name:	**Android tv box**
Trademark:	**WETEK**
Model Name :	**Wetek Core, Wetek Core Light, Wetek Openelec, Wetek Core Openelec+, wetek play, wetek play plus, wetek play+, Wetek Pro, Wetek plus., Wetek**
Prepared For : Address :	**WeTek Electronics Limited** Level 10, Central Building, 1-3 Pedder Street, Central, Hong Kong
Prepared By : Address :	**Shenzhen BCTC Technology Co., Ltd.** No.101,Yousong Road,Longhua New District, Shenzhen,China
Test Date:	**Oct. 12 - Oct. 22, 2015**
Date of Report :	**Oct. 23, 2015**
Report No.:	**BCTC-151012601**

TEST RESULT CERTIFICATION

Applicant's name	:	WeTek Electronics Limited
Address	:	Level 10, Central Building, 1-3 Pedder Street, Central, Hong Kong
Manufacture's Name	:	Videostrong Technology Co., Ltd
Address	:	402A, Buliding B, Donglian Industrial 23rd District Bao'an, Shenzhen, China
Product description		
Product name	:	Android tv box
Model and/or type reference	:	Wetek Core, Wetek Core Light, Wetek Openelec, Wetek Core Openelec+, wetek play, wetek play plus, wetek play+, Wetek Pro, Wetek plus., Wetek
Standards	:	FCC Part15.247
Test procedure		ANSI C63.10-2013

This device described above has been tested by BCTC, and the test results show that the equipment under test (EUT) is in compliance with the FCC requirements. And it is applicable only to the tested sample identified in the report.

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Testing Engineer : Eric Yang

(Eric Yang)

Technical Manager : Sophie Lee

(Sophia Lee)

Authorized Signatory : Casey Wang

SHENZHEN BCTC TECHNOLOGY CO., LTD. APPROVED

(Casey Wang)

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1. SUMMARY OF TEST RESULTS

Test procedures according to the technical standards:

FCC Part15 (15.247) , Subpart C			
Standard Section	Test Item	Judgment	Remark
15.207	Conducted Emission	PASS	
15.247 (a)(2)	6dB Bandwidth	PASS	
15.247 (b)	Peak Output Power	PASS	
15.247 (c)	Radiated Spurious Emission	PASS	
15.247 (d)	Power Spectral Density	PASS	
15.205	Band Edge Emission	PASS	
15.203	Antenna Requirement	PASS	

NOTE:

(1)” N/A” denotes test is not applicable in this Test Report

1.1 TEST FACILITY

Shenzhen BCTC Technology Co., Ltd.
Add. : No.101,Yousong Road,Longhua New District, Shenzhen,China
FCC Registered No.: 187086

1.2 MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement **y** ± **U**，where expended uncertainty **U** is based on a standard uncertainty multiplied by a coverage factor of **k=2**，providing a level of confidence of approximately **95** %。

No.	Item	Uncertainty
1	Conducted Emission Test	±1.38dB
2	RF power,conducted	±0.16dB
3	Spurious emissions,conducted	±0.21dB
4	All emissions,radiated(<1G)	±4.68dB
5	All emissions,radiated(>1G)	±4.89dB
6	Temperature	±0.5°C
7	Humidity	±2%

2. GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF EUT

<table>
<tr><td>Equipment</td><td>Android tv box</td></tr>
<tr><td>Trade Name</td><td>WETEK</td></tr>
<tr><td>Model Name</td><td>Wetek Core, Wetek Core Light, Wetek Openelec, Wetek Core Openelec+, wetek play, wetek play plus, wetek play+, Wetek Pro, Wetek plus., Wetek</td></tr>
<tr><td>Model Difference</td><td>The product is different for model number and outlook color.</td></tr>
<tr><td>Product Description</td><td>The EUT is a Android tv box
<table>
<tr><td>Operation Frequency:</td><td>802.11b/g/n20MHz:2412~2462 MHz
802.11n40MHz:2422~2452 MHz
BT:2402~2480MHz</td></tr>
<tr><td>Modulation Type:</td><td>WIFI: OFDM/DSSS
BT:GFSK</td></tr>
<tr><td>BT Version:</td><td>4.0 BLE</td></tr>
<tr><td>Bit Rate of Transmitter</td><td>802.11b:11/5.5/2/1 Mbps
802.11g:54/48/36/24/18/12/9/6Mbps
802.11n Up to 150Mbps
BT:2Mbps</td></tr>
<tr><td>Number Of Channel</td><td>802.11b/g/n20MHz:11 CH
802.11n40MHz: 7 CH
BT:40CH</td></tr>
<tr><td>Antenna Designation:</td><td>Please see Note 3.</td></tr>
<tr><td>Antenna Gain (dBi)</td><td>2.1dbi</td></tr>
</table>
Based on the application, features, or specification exhibited in User's Manual, the EUT is considered as an ITE/Computing Device. More details of EUT technical specification, please refer to the User's Manual.</td></tr>
<tr><td>Channel List</td><td>Please refer to the Note 2.</td></tr>
<tr><td>Adapter</td><td>Model:JK120100-S04USA
I/P:AC 100-240V 50/60Hz
O/P:DC 12V/1A</td></tr>
<tr><td>Battery</td><td>N/A</td></tr>
<tr><td>Connecting I/O Port(s)</td><td>Please refer to the User's Manual</td></tr>
</table>

Note:

1. For a more detailed features description, please refer to the manufacturer’s specifications or the User's Manual.

2.

Channel List for 802.11b/g/n(20)							
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
01	2412	04	2427	07	2442	10	2457
02	2417	05	2432	08	2447	11	2462
03	2422	06	2437	09	2452		
Channel List for 802.11n(40)							
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
03	2422	05	2432	07	2442	09	2452
04	2427	06	2437	08	2447		
Channel List for BT							
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
00	2402	10	2422	20	2442	30	2462
01	2404	11	2424	21	2444	31	2464
02	2406	12	2426	22	2446	32	2466
03	2408	13	2428	23	2448	33	2468
04	2410	14	2430	24	2450	34	2470
05	2412	15	2432	25	2452	35	2472
06	2414	16	2434	26	2454	36	2474
07	2416	17	2436	27	2456	37	2476
08	2418	18	2438	28	2458	38	2478
09	2420	19	2440	29	2460	39	2480

3.

Table for Filed Antenna

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)	NOTE
A	N/A	N/A	Internal	N/A	2.1	Wifi & BT Antenna

2.2 DESCRIPTION OF TEST MODES

To investigate the maximum EMI emission characteristics generates from EUT, the test system was pre-scanning tested base on the consideration of following EUT operation mode or test configuration mode which possible have effect on EMI emission level. Each of these EUT operation mode(s) or test configuration mode(s) mentioned above was evaluated respectively.

Pretest Mode	Description
Mode 1	802.11b CH1/ CH6/ CH11
Mode 2	802.11g CH1/ CH6/ CH11
Mode 3	802.11n CH1/ CH6/ CH11
Mode 4	BT CH0/ CH19/ CH39
Mode 4	Link Mode

For Conducted Emission	
Final Test Mode	Description
Mode 5	Link Mode

For Radiated Emission	
Final Test Mode	Description
Mode 1	802.11b CH1/ CH6/ CH11
Mode 2	802.11g CH1/ CH6/ CH11
Mode 3	802.11n CH1/ CH6/ CH11
Mode 4	BT CH0/ CH19/ CH39

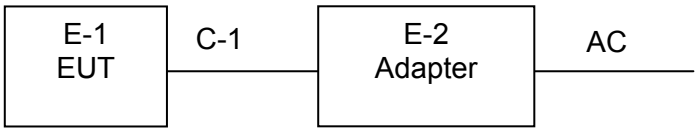
Note:

(1) The measurements are performed at the highest, middle, lowest available channels.

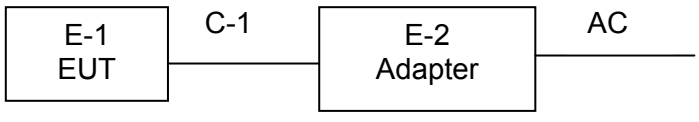
(2) The measurements are performed at all Bit Rate of Transmitter, the worst data was reported

2.3 BLOCK DIGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED

Conducted Emission Test



Radiated Spurious Emission Test



2.4 DESCRIPTION OF SUPPORT UNITS(CONDUCTED MODE)

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

Item	Equipment	Mfr/Brand	Model/Type No.	Series No.	Note
E-1	Android tv box	WETEK	Wetek Core	N/A	EUT
E-3	Adapter	WETEK	JK120100-S04USA	N/A	

Item	Shielded Type	Ferrite Core	Length	Note
C1	NO	NO	0.8M	

Note:

(1) The support equipment was authorized by Declaration of Confirmation.
(2) For detachable type I/O cable should be specified the length in cm in『Length』column.

2.5 EQUIPMENTS LIST FOR ALL TEST ITEMS

Radiation Test equipment

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until	Calibration period
1	Spectrum Analyzer	Agilent	E4407B	MY45109572	2015.08.25	2016.08.24	1 year
2	Test Receiver	R&S	ESPI	101396	2015.08.25	2016.08.24	1 year
3	Bilog Antenna	SCHWARZBECK	VULB9160	VULB9160-3369	2015.08.25	2016.08.24	1 year
4	50Ω Coaxial Switch	Anritsu	MP59B	6200264416	2015.07.06	2016.07.05	1 year
5	Spectrum Analyzer	Agilent	N9020A	MY5051041	2015.07.06	2016.07.05	1 year
6	Horn Antenna	SCHWARZBECK	9120D	9120D-1275	2015.08.25	2016.08.24	1 year
7	Horn Ant	Schwarzbeck	BBHA 9170	9170-181	2015.07.06	2016.07.05	1 year
8	Amplifier	SCHWARZBECK	BBV9718	9718-270	2015.08.25	2016.08.24	1 year
9	Amplifier	SCHWARZBECK	BBV9743	9743-119	2015.08.25	2016.08.24	1 year
10	Loop Antenna	ARA	PLA-1030/B	1029	2015.07.06	2016.07.05	1 year
11	Power Meter	R&S	NRVS	100696	2015.07.06	2016.07.05	1 year
12	Power Sensor	R&S	URV5-Z4	0395.1619.05	2015.07.06	2016.07.05	1 year
13	RF cables	R&S	N/A	N/A	2015.07.06	2016.07.05	1 year

Conduction Test equipment

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until	Calibration period
1	Test Receiver	R&S	ESCI	101421	2015.08.25	2016.08.24	1 year
2	LISN	SCHWARZBECK	NSLK8127	812779	2015.08.25	2016.08.24	1 year
3	LISN	EMCO	Feb-16	42990	2015.08.25	2016.08.24	1 year
4	50Ω Coaxial Switch	Anritsu	MP59B	6200264417	2015.07.06	2016.07.05	1 year
5	Passive Voltage Probe	R&S	ESH2-Z3	100196	2015.07.06	2016.07.05	1 year

3. EMC EMISSION TEST

3.1 CONDUCTED EMISSION MEASUREMENT

3.1.1 POWER LINE CONDUCTED EMISSION Limits (Frequency Range 150KHz-30MHz)

FREQUENCY (MHz)	Class A (dBuV)		Class B (dBuV)		Standard
	Quasi-peak	Average	Quasi-peak	Average	
0.15 -0.5	79.00	66.00	66 - 56 *	56 - 46 *	CISPR
0.50 -5.0	73.00	60.00	56.00	46.00	CISPR
5.0 -30.0	73.00	60.00	60.00	50.00	CISPR

0.15 -0.5	79.00	66.00	66 - 56 *	56 - 46 *	FCC
0.50 -5.0	73.00	60.00	56.00	46.00	FCC
5.0 -30.0	73.00	60.00	60.00	50.00	FCC

Note:

(1) The tighter limit applies at the band edges.

(2) The limit of " * " marked band means the limitation decreases linearly with the logarithm of the frequency in the range.

The following table is the setting of the receiver

Receiver Parameters	Setting
Attenuation	10 dB
Start Frequency	0.15 MHz
Stop Frequency	30 MHz
IF Bandwidth	9 kHz

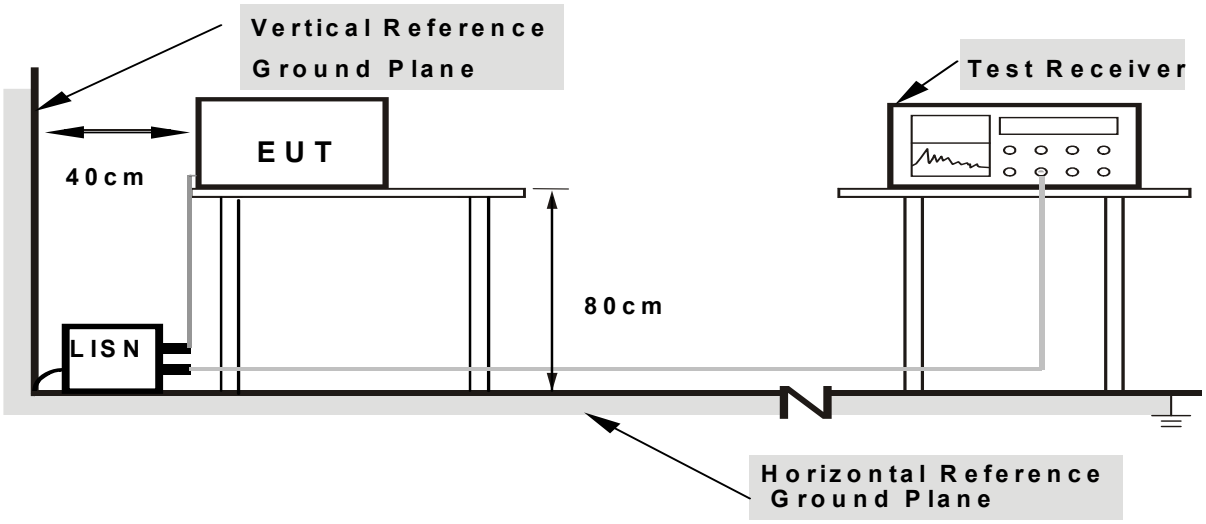
3.1.2 TEST PROCEDURE

a. The EUT was placed 0.8 meters from the horizontal ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipments powered from additional LISN(s). The LISN provide 50 Ohm/ 50uH of coupling impedance for the measuring instrument.
b. Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 to 40 cm long.
c. I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.
d. LISN at least 80 cm from nearest part of EUT chassis.
e. For the actual test configuration, please refer to the related Item –EUT Test Photos.

3.1.3 DEVIATION FROM TEST STANDARD

No deviation

3.1.4 TEST SETUP



Note: 1.Support units were connected to second LISN.
2.Both of LISNs (AMN) are 80 cm from EUT and at least 80 from other units and other metal planes

3.1.5 EUT OPERATING CONDITIONS

The EUT was configured for testing in a typical fashion (as a customer would normally use it). The EUT has been programmed to continuously transmit during test. This operating condition was tested and used to collect the included data.

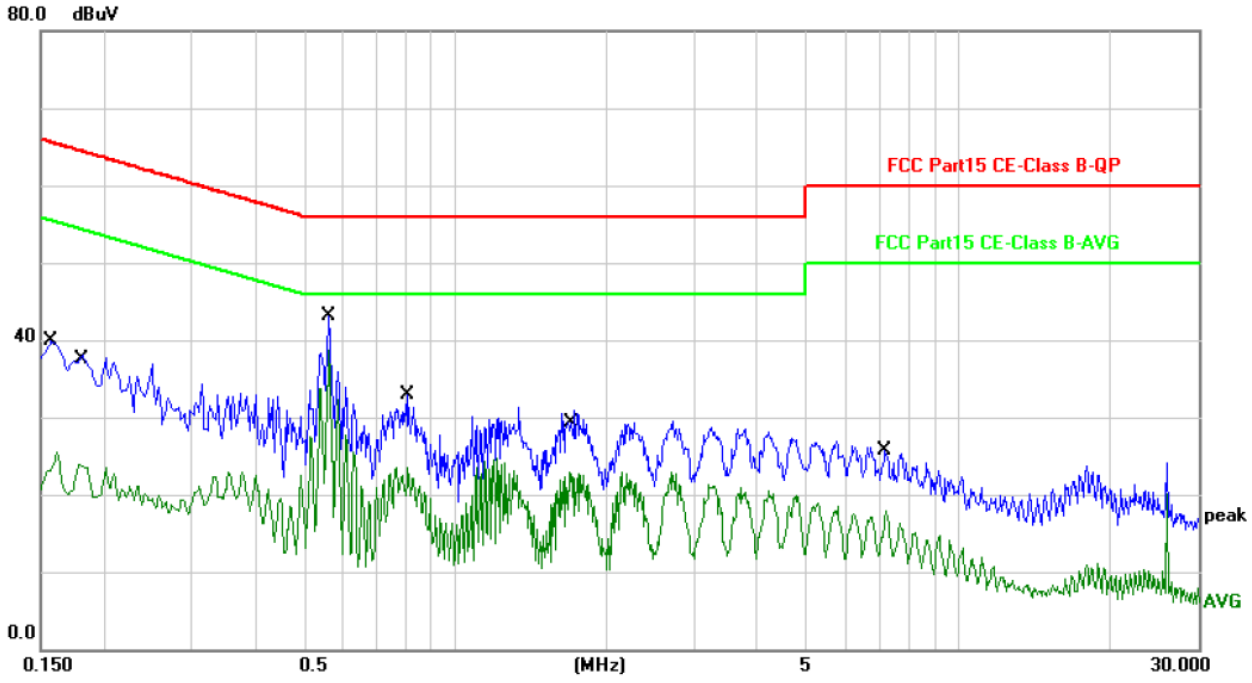
We pretest AC 120V and AC 240V, the worst voltage was AC 120V and the data recording in the report.

3.1.6 TEST RESULTS

EUT：	Android tv box	Model Name. ：	Wetek Core
Temperature：	26℃	Relative Humidity：	54%
Pressure：	1010hPa	Phase：	L
Test Voltage ：	AC120V/60Hz	Test Mode：	Mode 5 BT

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1580	29.81	10.05	39.86	65.56	-25.70	QP	
2		0.1580	15.43	10.05	25.48	55.56	-30.08	AVG	
3		0.1780	27.54	10.06	37.60	64.57	-26.97	QP	
4		0.1780	13.87	10.06	23.93	54.57	-30.64	AVG	
5		0.5620	32.95	10.12	43.07	56.00	-12.93	QP	
6	*	0.5620	28.55	10.12	38.67	46.00	-7.33	AVG	
7		0.8059	21.21	10.15	31.36	56.00	-24.64	QP	
8		0.8059	13.36	10.15	23.51	46.00	-22.49	AVG	
9		1.6860	20.62	10.18	30.80	56.00	-25.20	QP	
10		1.6860	12.82	10.18	23.00	46.00	-23.00	AVG	
11		7.1380	15.53	10.10	25.63	60.00	-34.37	QP	
12		7.1380	7.88	10.10	17.98	50.00	-32.02	AVG	

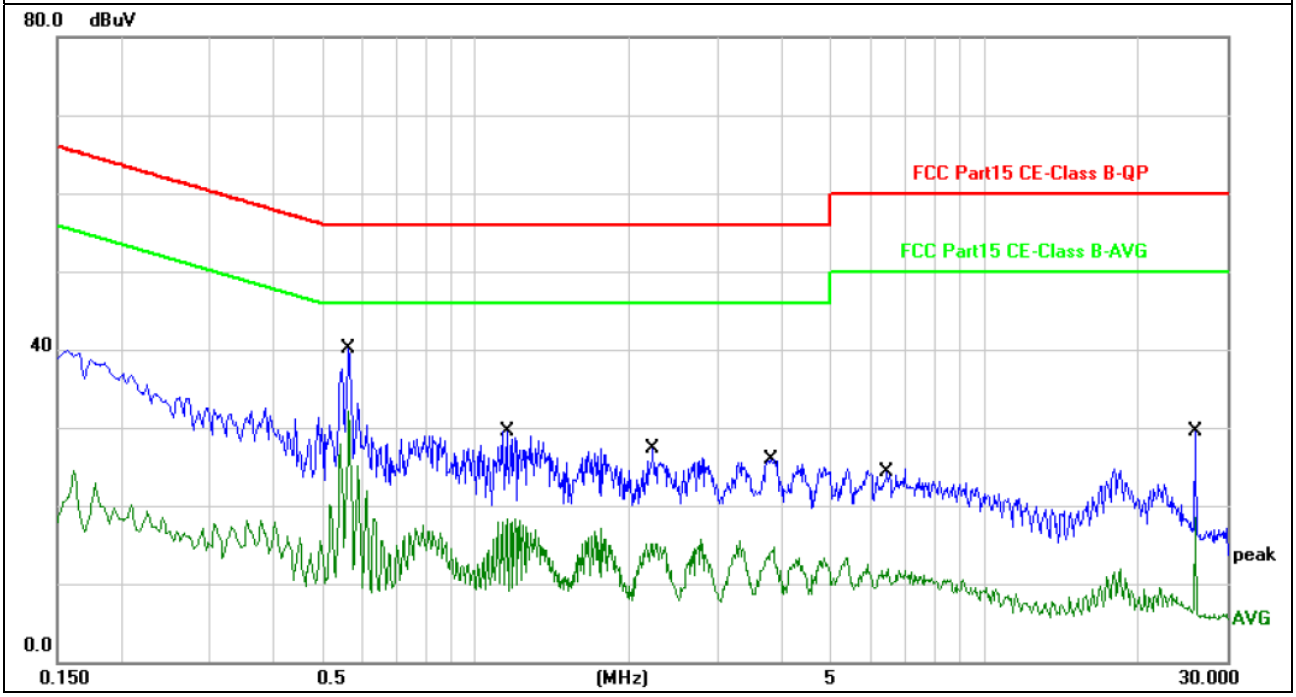
Remark:
1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.



EUT：	Android tv box	Model Name. ：	Wetek Core
Temperature：	26℃	Relative Humidity：	54%
Pressure：	1010hPa	Phase：	N
Test Voltage ：	AC120V/60Hz	Test Mode：	Mode 5 BT

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.5620	29.96	10.12	40.08	56.00	-15.92	QP	
2	*	0.5620	21.90	10.12	32.02	46.00	-13.98	AVG	
3		1.1500	19.34	10.17	29.51	56.00	-26.49	QP	
4		1.1500	8.17	10.17	18.34	46.00	-27.66	AVG	
5		2.2300	17.14	10.18	27.32	56.00	-28.68	QP	
6		2.2300	5.01	10.18	15.19	46.00	-30.81	AVG	
7		3.8060	15.76	10.17	25.93	56.00	-30.07	QP	
8		3.8060	4.45	10.17	14.62	46.00	-31.38	AVG	
9		6.4860	13.03	10.09	23.12	60.00	-36.88	QP	
10		6.4860	1.82	10.09	11.91	50.00	-38.09	AVG	
11		25.9980	19.33	10.20	29.53	60.00	-30.47	QP	
12		25.9980	8.36	10.20	18.56	50.00	-31.44	AVG	

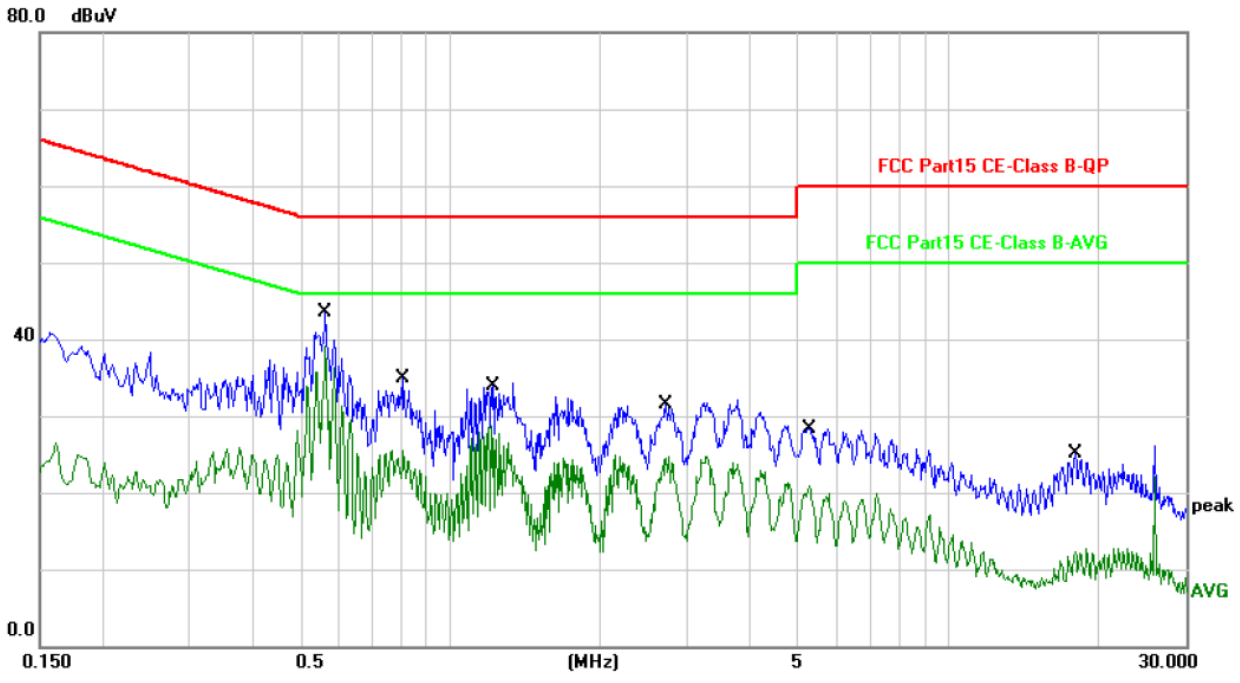
Remark:
1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.



EUT：	Android tv box	Model Name. ：	Wetek Core
Temperature：	26℃	Relative Humidity：	54%
Pressure：	1010hPa	Phase：	L
Test Voltage ：	AC120V/60Hz	Test Mode：	Mode 5 WIFI

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.5620	33.45	10.12	43.57	56.00	-12.43	QP	
2	*	0.5620	29.05	10.12	39.17	46.00	-6.83	AVG	
3		0.8059	24.80	10.15	34.95	56.00	-21.05	QP	
4		0.8059	15.36	10.15	25.51	46.00	-20.49	AVG	
5		1.2140	24.17	10.17	34.34	56.00	-21.66	QP	
6		1.2140	18.47	10.17	28.64	46.00	-17.36	AVG	
7		2.7139	21.27	10.19	31.46	56.00	-24.54	QP	
8		2.7139	14.54	10.19	24.73	46.00	-21.27	AVG	
9		5.2499	18.19	10.13	28.32	60.00	-31.68	QP	
10		5.2499	10.77	10.13	20.90	50.00	-29.10	AVG	
11		17.9859	15.02	10.16	25.18	60.00	-34.82	QP	
12		17.9859	2.58	10.16	12.74	50.00	-37.26	AVG	

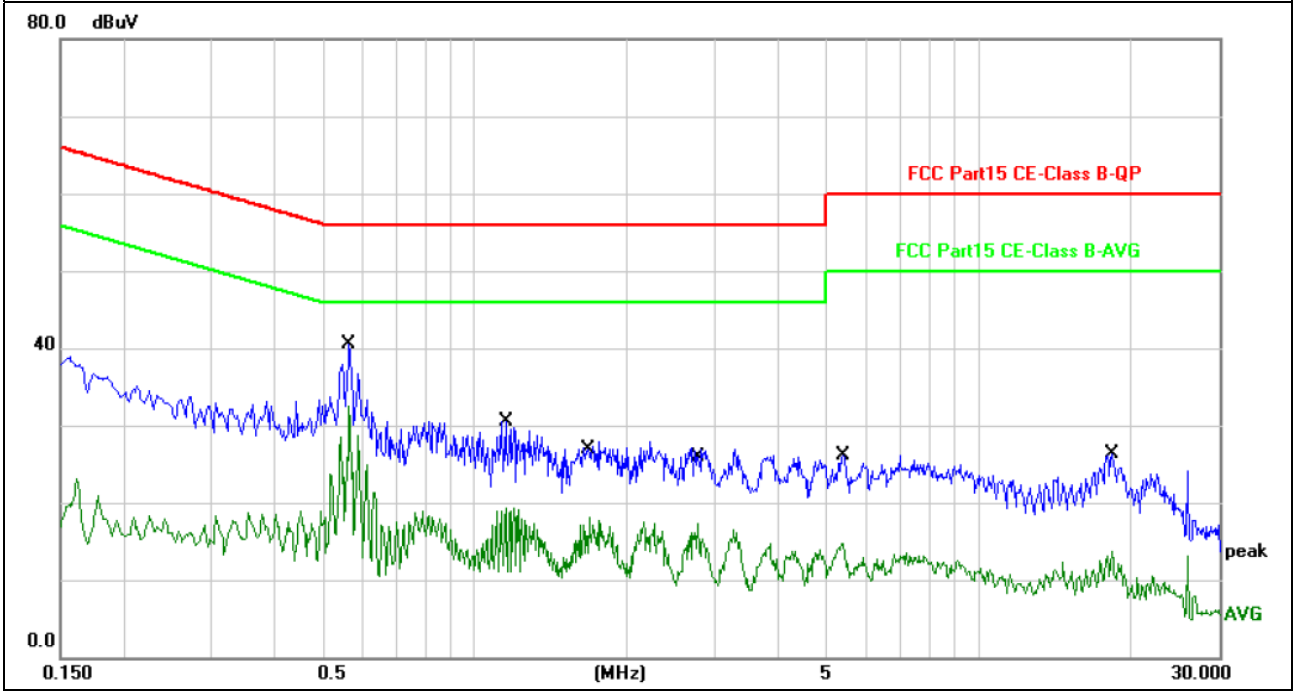
Remark:
1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.



EUT：	Android tv box	Model Name. ：	Wetek Core
Temperature：	26℃	Relative Humidity：	54%
Pressure：	1010hPa	Phase：	N
Test Voltage ：	AC120V/60Hz	Test Mode：	Mode 5 WIFI

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.5620	30.46	10.12	40.58	56.00	-15.42	QP	
2	*	0.5620	22.40	10.12	32.52	46.00	-13.48	AVG	
3		1.1500	20.34	10.17	30.51	56.00	-25.49	QP	
4		1.1500	9.17	10.17	19.34	46.00	-26.66	AVG	
5		1.6860	17.66	10.18	27.84	56.00	-28.16	QP	
6		1.6860	7.89	10.18	18.07	46.00	-27.93	AVG	
7		2.7700	16.79	10.19	26.98	56.00	-29.02	QP	
8		2.7700	7.11	10.19	17.30	46.00	-28.70	AVG	
9		5.3778	16.06	10.13	26.19	60.00	-33.81	QP	
10		5.3778	4.60	10.13	14.73	50.00	-35.27	AVG	
11		18.3699	16.21	10.16	26.37	60.00	-33.63	QP	
12		18.3699	3.45	10.16	13.61	50.00	-36.39	AVG	

Remark:
1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.



3.2 RADIATED EMISSION MEASUREMENT

3.2.1 RADIATED EMISSION LIMITS (Frequency Range 9kHz-1000MHz)

20dBc in any 100 kHz bandwidth outside the operating frequency band. In case the emission fall within the restricted band specified on 15.205(a), then the 15.209(a) limit in the table below has to be followed.

Frequencies (MHz)	Field Strength (micorvolts/meter)	Measurement Distance (meters)
0.009~0.490	2400/F(KHz)	300
0.490~1.705	24000/F(KHz)	30
1.705~30.0	30	30
30~88	100	3
88~216	150	3
216~960	200	3
Above 960	500	3

LIMITS OF RADIATED EMISSION MEASUREMENT (Above 1000MHz)

FREQUENCY (MHz)	Class B (dBuV/m) (at 3M)	
	PEAK	AVERAGE
Above 1000	74	54

Notes:

(1) The limit for radiated test was performed according to FCC PART 15C.

(2) The tighter limit applies at the band edges.

(3) Emission level (dBuV/m)=20log Emission level (uV/m).

Spectrum Parameter	Setting
Attenuation	Auto
Start Frequency	1000 MHz
Stop Frequency	25GHz
RB / VB (emission in restricted band)	1 MHz / 1 MHz for Peak, 1 MHz / *10Hz* for Average

Receiver Parameter	Setting
Attenuation	Auto
Start ~ Stop Frequency	9kHz~150kHz / RB 200Hz for QP
Start ~ Stop Frequency	150kHz~30MHz / RB 9kHz for QP
Start ~ Stop Frequency	30MHz~1000MHz / RB 120kHz for QP

3.2.2 TEST PROCEDURE

a. The measuring distance of at 3 m shall be used for measurements at frequency up to 1GHz. For frequencies above 1GHz, any suitable measuring distance may be used.
b. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter open area test site. The table was rotated 360 degrees to determine the position of the highest radiation.
c. The height of the equipment or of the substitution antenna shall be 0.8 m; the height of the test antenna shall vary between 1 m to 4 m. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
d. The initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
e. If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit, the EUT shall be deemed to meet QP Limits and then no additional QP Mode measurement performed.
f. For the actual test configuration, please refer to the related Item –EUT Test Photos.

Note:

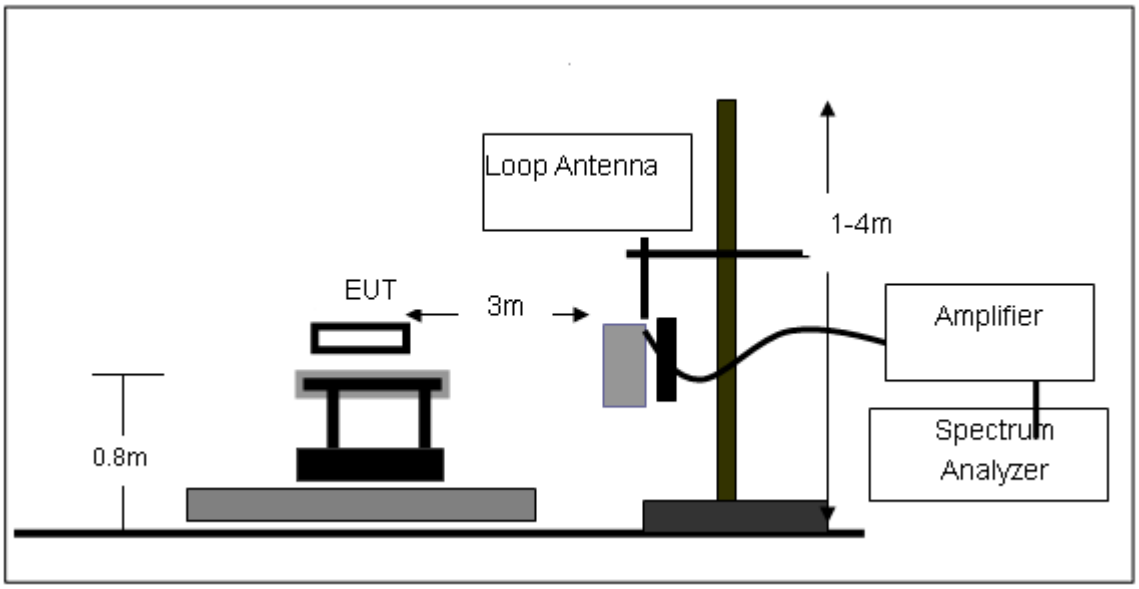
Both horizontal and vertical antenna polarities were tested
and performed pretest to three orthogonal axis. The worst case emissions were reported
We pretest AC 120V and AC 240V, the worst voltage was AC 120V and the data recording in t he report.

3.2.3 DEVIATION FROM TEST STANDARD

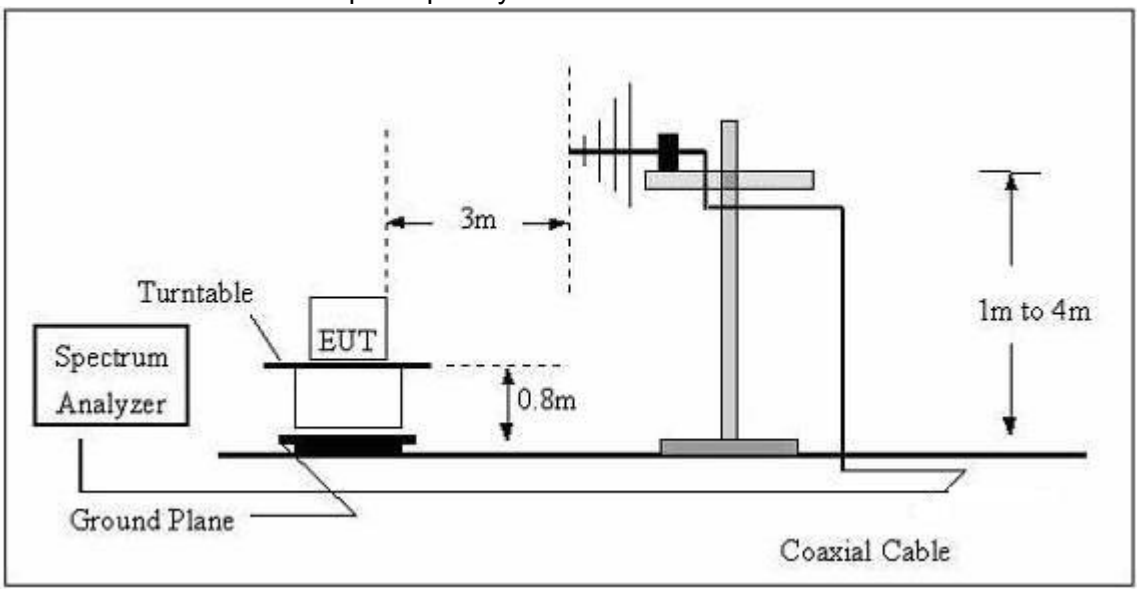
No deviation

3.2.4 TEST SETUP

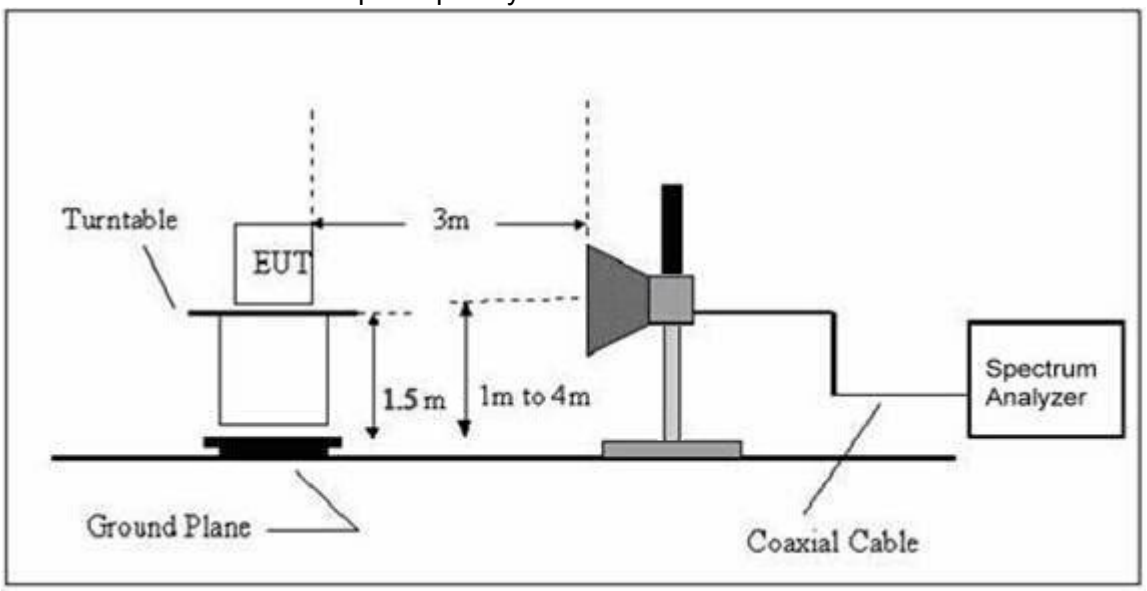
（A）Radiated Emission Test-Up Frequency Below 30MHz



（B）Radiated Emission Test-Up Frequency 30MHz~1GHz



（C）Radiated Emission Test-Up Frequency Above 1GHz



3.2.5 EUT OPERATING CONDITIONS

The EUT tested system was configured as the statements of 2.4 Unless otherwise a special operating condition is specified in the follows during the testing.

3.2.6 TEST RESULTS (BETWEEN 9KHZ – 30 MHZ)

EUT：	Android tv box	Model Name. ：	Wetek Core
Temperature：	20℃	Relative Humidtity：	48%
Pressure：	1010 hPa	Test Voltage ：	DC 12V from adapter
Test Mode ：	Mode 5	Polarization :	--

Freq.	Reading	Limit	Margin	State
(MHz)	(dBuV/m)	(dBuV/m)	(dB)	P/F
--	--	--	--	PASS
--	--	--	--	PASS

NOTE:

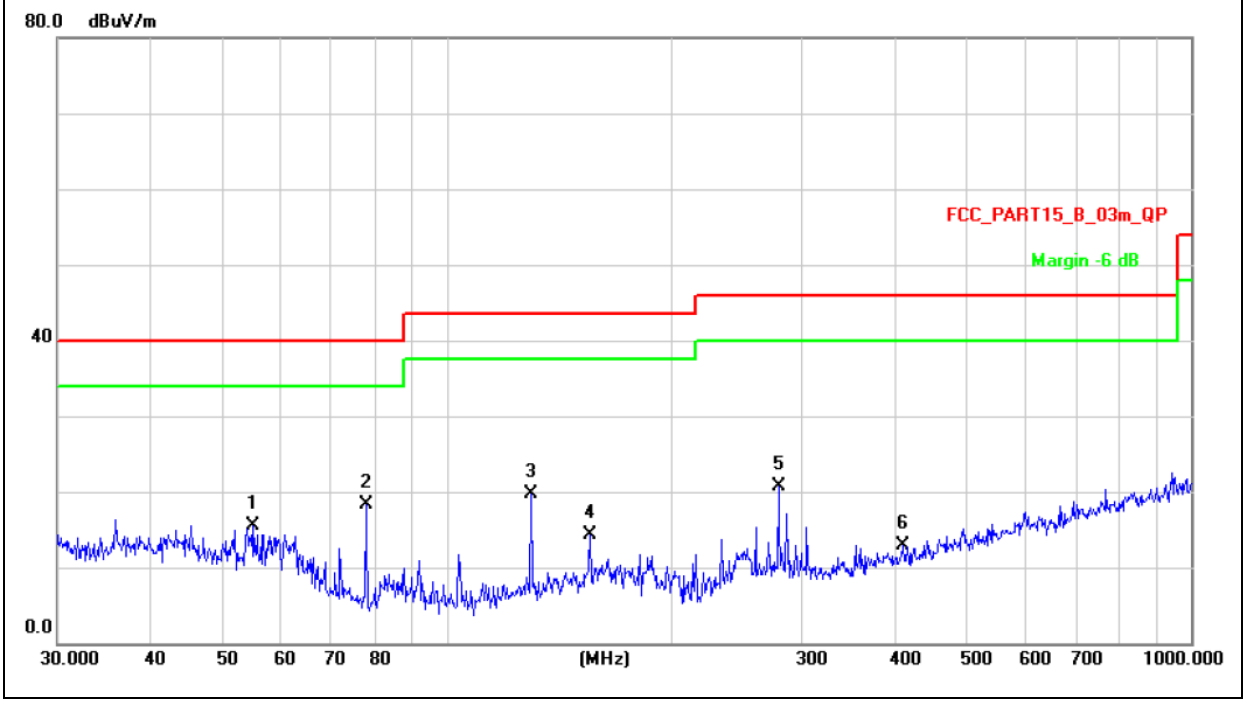
The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.
Distance extrapolation factor =40 log (specific distance/test distance)(dB);
Limit line = specific limits(dBuv) + distance extrapolation factor.

3.2.7 TEST RESULTS (BETWEEN 30MHZ – 1GHZ)

EUT：	Android tv box	Model Name ：	Wetek Core
Temperature：	26℃	Relative Humidity：	54%
Pressure：	1010 hPa	Polarization：	Horizontal
Test Voltage ：	DC 12V from adapter		
Test Mode ：	Mode 5 BT		

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		55.0274	26.66	-11.13	15.53	40.00	-24.47	QP			
2	*	77.8654	35.61	-17.33	18.28	40.00	-21.72	QP			
3		129.9226	33.81	-14.11	19.70	43.50	-23.80	QP			
4		155.9101	27.16	-12.87	14.29	43.50	-29.21	QP			
5		279.0436	33.85	-13.13	20.72	46.00	-25.28	QP			
6		410.3825	22.84	-9.96	12.88	46.00	-33.12	QP			

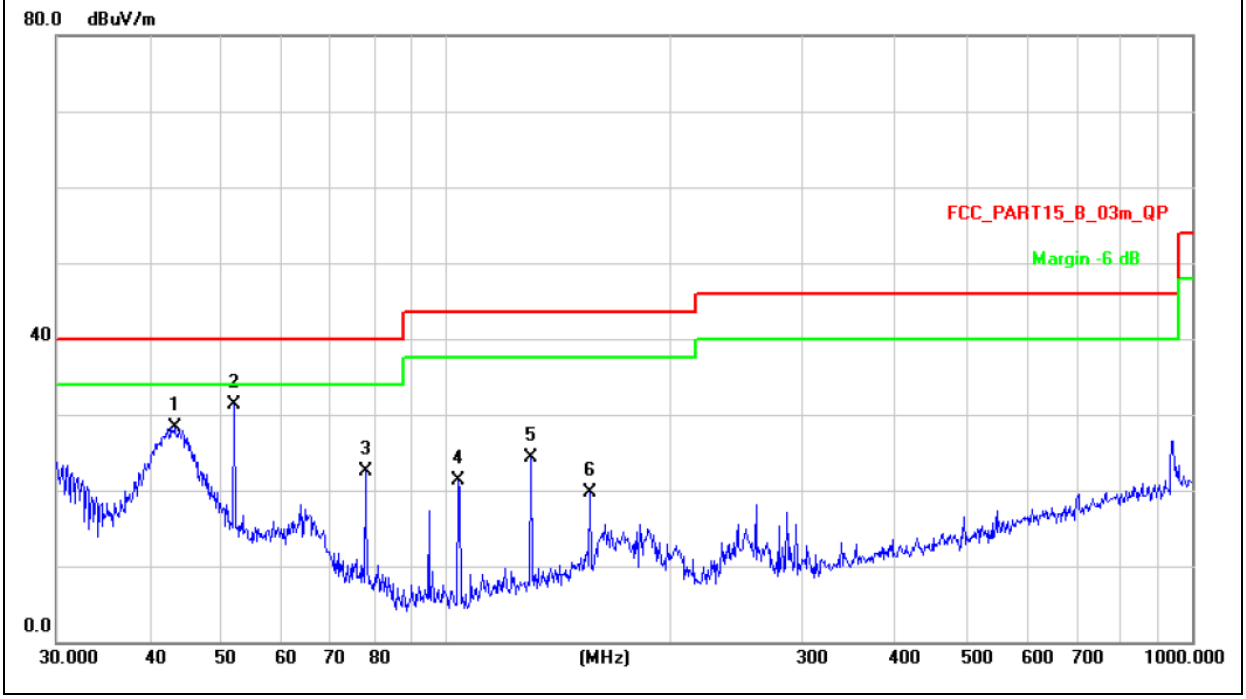
Remark:
Factor = Antenna Factor + Cable Loss – Pre-amplifier.
All interfaces was connected, and BT TX mode was link.



EUT：	Android tv box	Model Name ：	Wetek Core
Temperature：	26℃	Relative Humidity：	54%
Pressure：	1010 hPa	Polarization：	Vertical
Test Voltage ：	DC 12V from adapter		
Test Mode ：	Mode 5 BT		

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		43.2017	37.60	-9.25	28.35	40.00	-11.65	QP			
2	*	52.0251	42.02	-10.63	31.39	40.00	-8.61	QP			
3		77.8654	39.81	-17.33	22.48	40.00	-17.52	QP			
4		103.8055	37.39	-16.16	21.23	43.50	-22.27	QP			
5		129.9226	38.42	-14.11	24.31	43.50	-19.19	QP			
6		155.9101	32.61	-12.87	19.74	43.50	-23.76	QP			

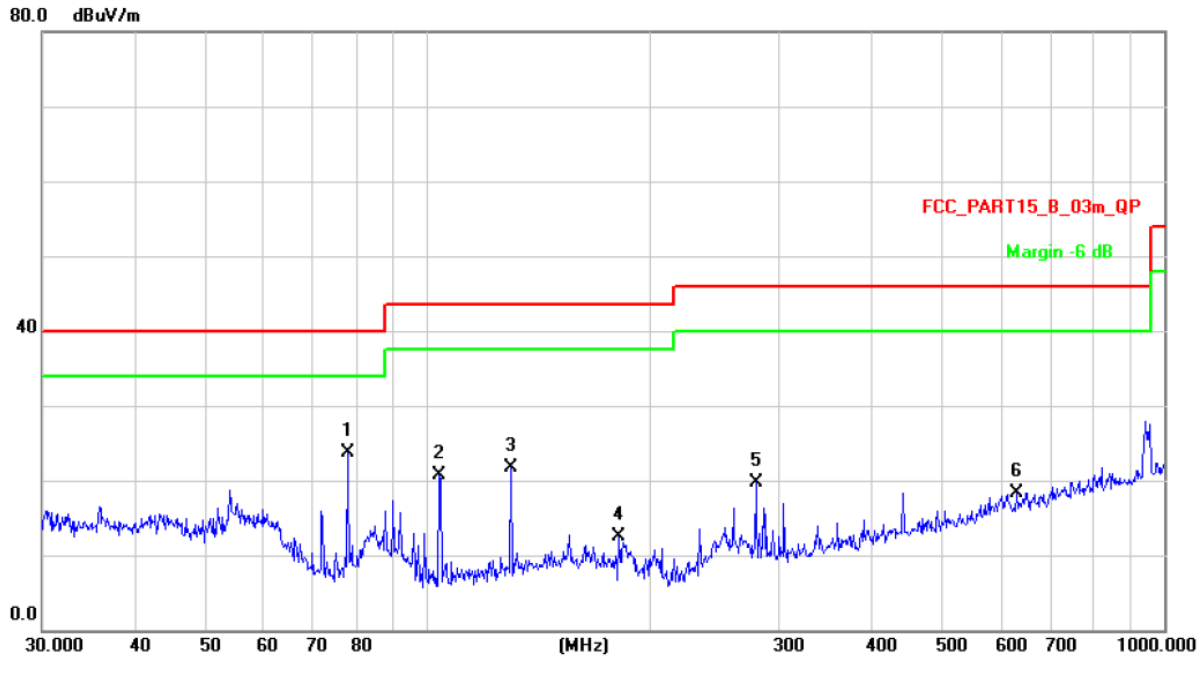
Remark:
Factor = Antenna Factor + Cable Loss – Pre-amplifier.
All interfaces was connected, and BT TX mode was link.



EUT：	Android tv box	Model Name ：	Wetek Core
Temperature：	26℃	Relative Humidity：	54%
Pressure：	1010 hPa	Polarization：	Horizontal
Test Voltage ：	DC 12V from adapter		
Test Mode ：	Mode 5 WIFI		

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1	*	77.8654	41.07	-17.33	23.74	40.00	-16.26	QP			
2		103.8055	36.89	-16.13	20.76	43.50	-22.74	QP			
3		129.9226	35.87	-14.11	21.76	43.50	-21.74	QP			
4		181.9202	27.15	-14.58	12.57	43.50	-30.93	QP			
5		279.0436	32.81	-13.13	19.68	46.00	-26.32	QP			
6		631.6884	23.67	-5.41	18.26	46.00	-27.74	QP			

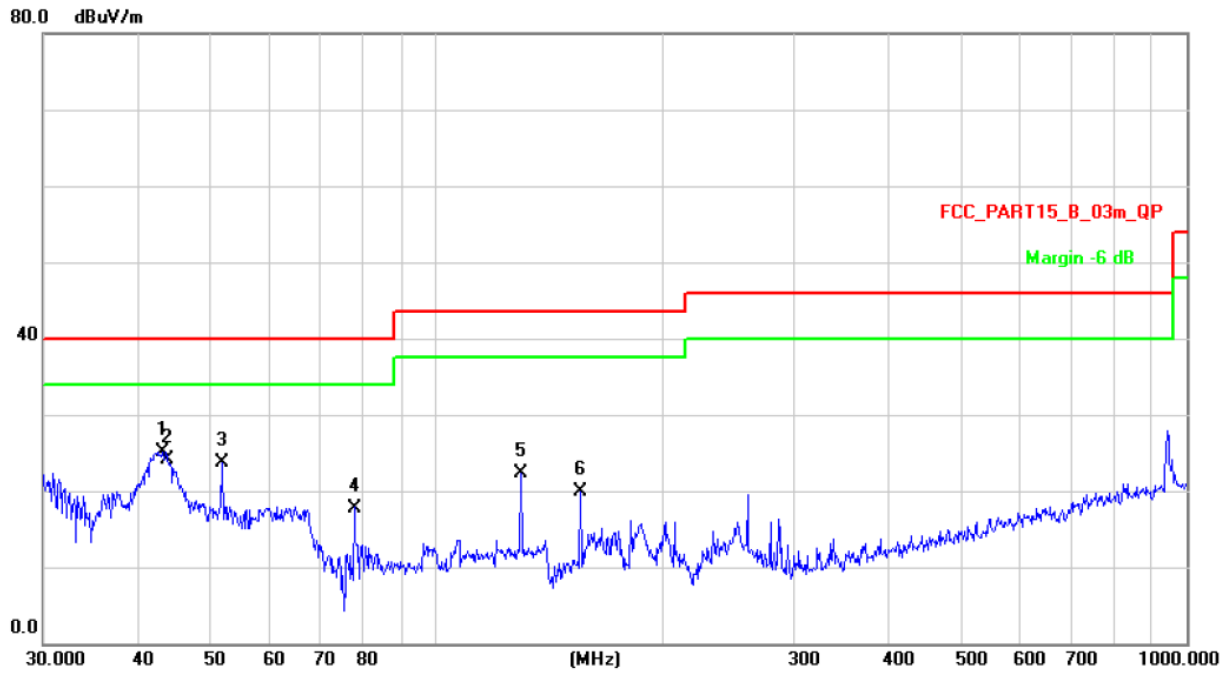
Remark:
Factor = Antenna Factor + Cable Loss – Pre-amplifier.
All interfaces was connected, and BT TX mode was link.



EUT：	Android tv box	Model Name ：	Wetek Core
Temperature：	26℃	Relative Humidity：	54%
Pressure：	1010 hPa	Polarization：	Vertical
Test Voltage ：	DC 12V from adapter		
Test Mode ：	Mode 5 WIFI		

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1	*	43.2017	34.39	-9.25	25.14	40.00	-14.86	QP			
2		43.9658	33.49	-9.35	24.14	40.00	-15.86	QP			
3		51.8430	34.21	-10.60	23.61	40.00	-16.39	QP			
4		77.8654	35.13	-17.33	17.80	40.00	-22.20	QP			
5		129.9226	36.44	-14.11	22.33	43.50	-21.17	QP			
6		155.9101	32.75	-12.87	19.88	43.50	-23.62	QP			

Remark:
Factor = Antenna Factor + Cable Loss – Pre-amplifier.
All interfaces was connected, and BT TX mode was link.



3.2.8 TEST RESULTS (1GHZ~25GHZ)

802.11b

Normal Voltage

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
operation frequency:2412							
V	4825.166	65.60	-3.64	61.96	74	-12.04	Pk
V	4825.166	47.16	-3.64	43.52	54	-10.48	AV
H	4825.215	65.10	-3.64	61.46	74	-12.54	Pk
H	4825.215	45.86	-3.64	42.22	54	-11.78	AV
Remark: Absolute Level= ReadingLevel+ Factor, Margin= Limit- Absolute Level							

802.11b

Normal Voltage

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
operation frequency:2437							
V	4876.053	63.37	-3.63	59.74	74	-14.26	Pk
V	4876.053	45.17	-3.63	41.54	54	-12.46	AV
H	4876.211	64.31	-3.64	60.67	74	-13.33	Pk
H	4876.211	44.84	-3.64	41.20	54	-12.80	AV
Remark: Absolute Level= ReadingLevel+ Factor, Margin= Limit- Absolute Level							

802.11b

Normal Voltage

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
operation frequency:2462							
V	4913.115	66.01	-3.64	62.37	74	-11.63	pk
H	4912.732	64.78	-3.66	61.12	54	-12.88	pk
Remark: Absolute Level= ReadingLevel+ Factor, Margin= Limit- Absolute Level							

Note: The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

802.11g

Normal Voltage

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
operation frequency:2412							
V	4821.224	68.60	-3.6	65.00	74	-9.00	Pk
V	4821.224	46.74	-3.6	43.14	54	-30.86	AV
H	4821.527	66.75	-3.6	63.15	74	-10.85	Pk
H	4821.527	46.46	-3.6	42.86	54	-11.14	AV
Remark: Absolute Level= ReadingLevel+ Factor, Margin= Limit- Absolute Level							

802.11g

Normal Voltage

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
operation frequency:2437							
V	4874.354	66.11	-3.63	62.48	74	-11.52	Pk
V	4874.354	47.23	-3.63	43.60	54	-10.40	AV
H	4874.145	66.68	-3.64	63.04	74	-10.96	Pk
H	4874.145	46.34	-3.64	42.70	54	-11.30	AV
Remark: Absolute Level= ReadingLevel+ Factor, Margin= Limit- Absolute Level							

802.11g

Normal Voltage

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
operation frequency:2462							
V	4914.103	65.79	-3.62	62.17	74	-11.83	pk
H	4914.032	64.57	-3.62	60.95	74	-13.05	pk
Remark: Absolute Level= ReadingLevel+ Factor, Margin= Limit- Absolute Level							

Note: The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

802.11n(20MHz)

Normal Voltage

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
operation frequency:2412							
V	4822.217	65.40	-3.58	61.82	74	-12.18	Pk
V	4822.217	46.99	-3.58	43.41	54	-30.59	AV
H	4822.322	65.57	-3.6	61.97	74	-12.03	Pk
H	4822.322	46.24	-3.6	42.64	54	-11.36	AV
Remark: Absolute Level= ReadingLevel+ Factor, Margin= Limit- Absolute Level							

802.11n(20MHz)

Normal Voltage

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
operation frequency:2437							
V	4874.054	67.22	-3.63	63.59	74	-10.41	Pk
V	4874.054	46.68	-3.63	43.05	54	-10.95	AV
H	4874.312	65.78	-3.64	62.14	74	-11.86	Pk
H	4874.312	45.91	-3.64	42.27	54	-11.73	AV
Remark: Absolute Level= ReadingLevel+ Factor, Margin= Limit- Absolute Level							

802.11n(20MHz)

Normal Voltage

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
operation frequency:2462							
V	4922.213	64.55	-3.64	60.91	74	-13.09	pk
V	4922.213	43.88	-3.64	40.24	54	-13.76	AV
H	4923.144	59.61	-3.66	55.95	74	-18.05	pk
Remark: Absolute Level= ReadingLevel+ Factor, Margin= Limit- Absolute Level							

Note: The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

802.11n(40MHz)

Normal Voltage

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
operation frequency:2422							
V	4844.058	65.19	-3.58	61.61	74	-12.39	Pk
V	4844.058	46.84	-3.58	43.26	54	-10.74	AV
H	4844.174	65.36	-3.6	61.76	74	-12.24	Pk
H	4844.174	46.10	-3.6	42.50	54	-11.50	AV
Remark: Absolute Level= ReadingLevel+ Factor, Margin= Limit- Absolute Level							

802.11n(40MHz)

Normal Voltage

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
operation frequency:2437							
V	4874.314	67.01	-3.63	63.38	74	-10.62	Pk
V	4874.314	46.53	-3.63	42.90	54	-11.10	AV
H	4874.674	65.57	-3.64	61.93	74	-12.07	Pk
H	4874.674	45.77	-3.64	42.13	54	-11.87	AV
Remark: Absolute Level= ReadingLevel+ Factor, Margin= Limit- Absolute Level							

802.11n(40MHz)

Normal Voltage

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
operation frequency:2452							
V	4904.631	64.34	-3.64	60.70	74	-13.30	pk
V	4904.631	43.74	-3.64	40.10	54	-13.90	AV
H	4904.517	59.42	-3.66	55.76	74	-18.24	pk
Remark: Absolute Level= ReadingLevel+ Factor, Margin= Limit- Absolute Level							

Note: The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

BT

Normal Voltage

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
operation frequency:2402							
V	4804.000	55.24	-3.12	52.12	74	-21.88	Pk
V	4804.000	41.67	-3.12	38.55	54	-15.45	AV
H	4804.000	56.28	-3.12	53.16	74	-20.84	Pk
H	4804.000	40.97	-3.12	37.85	54	-16.15	AV
Remark: Absolute Level= ReadingLevel+ Factor, Margin= Limit- Absolute Level							

BT

Normal Voltage

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
operation frequency:2440							
V	4880.000	55.37	-3.78	51.59	74	-22.41	Pk
V	4880.000	40.96	-3.78	37.18	54	-16.82	AV
H	4880.000	56.84	-3.78	53.06	74	-20.94	Pk
H	4880.000	41.22	-3.78	37.44	54	-16.56	AV
Remark: Absolute Level= ReadingLevel+ Factor, Margin= Limit- Absolute Level							

BT

Normal Voltage

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
operation frequency:2480							
V	4960.000	55.84	-3.38	52.46	74	-21.54	pk
V	4960.000	40.08	-3.38	36.70	54	-17.30	AV
H	4960.000	54.97	-3.38	51.59	74	-22.41	pk
Remark: Absolute Level= ReadingLevel+ Factor, Margin= Limit- Absolute Level							

Note: The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

4. POWER SPECTRAL DENSITY TEST

4.1 APPLIED PROCEDURES / LIMIT

FCC Part15 (15.247) , Subpart C				
Section	Test Item	Limit	Frequency Range (MHz)	Result
15.247	Power Spectral Density	8 dBm (in any 3KHz)	2400-2483.5	PASS

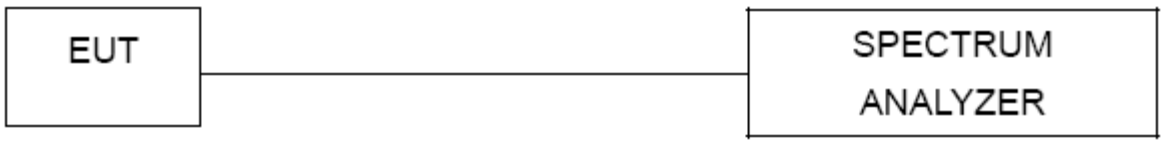
4.1.1 TEST PROCEDURE

1. Set analyzer center frequency to DTS channel center frequency.
2. Set the span to 1.5 times the DTS bandwidth.
3. Set the RBW to: 3 kHz ≤ RBW ≤ 100 kHz.
4. Set the VBW ≥ 3 x RBW.
5. Detector = peak.
6. Sweep time = auto couple.
7. Trace mode = max hold.
8. Allow trace to fully stabilize.
9. Use the peak marker function to determine the maximum amplitude level within the RBW.
10. If measured value exceeds limit, reduce RBW (no less than 3 kHz) and repeat.

4.1.2 DEVIATION FROM STANDARD

No deviation.

4.1.3 TEST SETUP



4.1.4 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 2.1 Unless otherwise a special operating condition is specified in the follows during the testing.

4.1.5 TEST RESULTS

EUT：	Android tv box	Model Name ：	Wetek Core
Temperature：	25℃	Relative Humidity：	60%
Pressure：	1015 hPa	Test Voltage ：	DC 12V from adapter
Test Mode ：	TX b Mode /CH01, CH06, CH11		

Frequency	Power Density (dBm)	Limit (dBm)	Result
2412 MHz	-22.943	8	PASS
2437 MHz	-22.507	8	PASS
2462 MHz	-22.046	8	PASS

TX CH01

TX CH06

TX CH11

EUT：	Android tv box	Model Name ：	Wetek Core
Temperature：	25℃	Relative Humidity：	60%
Pressure：	1015 hPa	Test Voltage ：	DC 12V from adapter
Test Mode ：	TX g Mode /CH01, CH06, CH11		

Frequency	Power Density (dBm)	Limit (dBm)	Result
2412 MHz	-22.756	8	PASS
2437 MHz	-22.495	8	PASS
2462 MHz	-22.166	8	PASS

TX CH01