RED

Wi-Fi RF TEST REPORT

Prepared for :

Videostrong Technology Co., Ltd.

402A , Building B, Donglian Industrial 23rd District, Bao'an , Shenzhen, China

Product:	DIY TV BOX
Model Name:	VS-RK3399, VS-RK3288, VS-RK3368, VS-RK3188, VS-RK3128, VS-RK3399plus, VS-RK3288plus, VS-S905, VS-S912, VS-S962E, VS-S922, M8S PRO+, M8S PRO L, M8S PRO W, M8S PRO P, M8S PRO S, M8S PRO C, KI PRO
Date of Test:	Sep. 07, 2017 to Sep. 14, 2017
Date of Report:	Sep. 14, 2017
Report Number:	HUAK170911500-2ER

Prepared By :

Shenzhen HUAK Testing Technology Co., Ltd.

F1-008, Tai Yi Building, No.1, Haicheng West Road, Xixiang Street,

Bao'anDistrict,Shenzhen City, China

TEL: +86-755-2302 9901 FAX: +86-755-2302 9901

E-mail: service@cer-mark.comhttp://www.cer-mark.com

TEST REPORT VERIFICATION

Applicant	:	Videostrong Technology Co., Ltd.
Address	:	402A , Building B, Donglian Industrial 23rd District, Bao'an , Shenzhen, China
Manufacturer	:	Videostrong Technology Co., Ltd.
Address	:	402A , Building B, Donglian Industrial 23rd District, Bao'an , Shenzhen, China
Trade Mark		N/A
（A）EUT Description	:	DIY TV BOX
(B) Model No.	:	VS-RK3399
(C) FamilyModel number:	:	VS-RK3288, VS-RK3368, VS-RK3188, VS-RK3128, VS-RK3399plus, VS-RK3288plus, VS-S905, VS-S912, VS-S962E, VS-S922, M8S PRO+, M8S PRO L, M8S PRO W, M8S PRO P, M8S PRO S, M8S PRO C, KI PRO
Standards		ETSI EN 300 328 V2.1.1

This device described above has been tested by HUAK, and the test results show that the equipment under test (EUT) is in compliance with the 2014/53/EU requirements. And it is applicable only to the tested sample identified in the report. This report shall not be reproduced except in full, without the written approval of HUAK, this document may be altered or revised by HUAK, personal only, and shall be noted in the revision of the document.

Test Result : **Pass**

Date of Test: Sep. 07, 2017 to Sep. 14, 2017

Prepared by: Chris Yao

Project Engineer

Reviewed by: Judy Qiu

Project Supervisor

Approved by:

Technical Director

Contents

Test Summary

ETSI EN 300 328 V2.1.1:

Electromagnetic Compatibility and Radio Spectrum Matters; Wideband transmission systems; Data transmission equipment operation in the 2.4GHz ISM band and using wide band modulation techniques; Harmonized EN covering essential requirements under article 3.2 of the RED Directive.

No	Test Parameter	Clause	Condition	Results
1	RF Output Power	4.3.1.2 or 4.3.2.2	Apply all equipment	PASS
2	Power Special Density	4.3.2.3	Only for modulations other than FHSS	PASS
3	Duty Cycle ,Tx-Sequence, Tx-gap	4.3.1.3 or 4.3.2.4	Only for non-adaptive equipment	N/A
4	Dwell time, Minimum Frequency Occupation &Hopping Sequence	4.3.1.4	Only for FHSS	N/A
5	Hopping Frequency Separation	4.3.1.5	Only for FHSS	N/A
6	Medium Utilisation	4.3.1.6 or 4.3.2.5	Only for non-adaptive equipment	N/A
7	Adaptive	4.3.1.7 or 4.3.2.6	Only for adaptive equipment	PASS
8	Occupied Channel Bandwidth	4.3.1.8 or 4.3.2.7	Apply all equipment	PASS
9	Transmitter unwanted emissions in the OOB domain	4.3.1.9 or 4.3.2.8	Apply all equipment	PASS
10	Transmitter unwanted emissions in the spurious domain	4.3.1.10 or 4.3.2.9	Apply all equipment	PASS
11	Receiver spurious emissions	4.3.1.11 or 4.3.2.10	Apply all equipment	PASS
12	Receiver Blocking	4.3.1.12 or 4.3.2.11	Only for adaptive equipment	PASS

Note:

N/A is an abbreviation for Not Applicable and means this test item is not applicable for this device according to the technology characteristic of device.

1 General Information

1.1 Responsible Testing Laboratory

Shenzhen HUAK Testing Technology Co., Ltd.

Address: F1-008, Tai Yi Building, No.1, Haicheng West Road, Xixiang Street, Bao'anDistrict, Shenzhen City, China

1.2 General Description of EUT

Product Name	DIY TV BOX		
Model No.(EUT):	VS-RK3399		
Family Model No.:	VS-RK3288, VS-RK3368, VS-RK3188, VS-RK3128, VS-RK3399plus, VS-RK3288plus, VS-S905, VS-S912, VS-S962E, VS-S922, M8S PRO+, M8S PRO L, M8S PRO W, M8S PRO P, M8S PRO S, M8S PRO C, KI PRO		
Trade Mark:	N/A		
Hardware Version:	V2.0		
Software Version:	V2.0		
Antenna Type:	Internal Antenna for Wi-Fi; Max Gain: 2dBi.		
Device Operating Configurations :			
Modulation Mode:	**WIFI:IEEE for 802.11b: DSSS(CCK,DQPSK,DBPSK)** **IEEE for 802.11g: OFDM(64QAM, 16QAM, QPSK, BPSK)** **IEEEfor 802.11n(T20 and T40) : OFDM (64QAM, 16QAM, QPSK,BPSK)**		
Frequency Bands:	Band	Tx (MHz)	Rx (MHz)
	WIFI	**2412-2472**	**2412-2472**
	/	/	/
Adapter Information	Model: YZDZ15-050200 Input: AC100-240V, 50/60Hz, 0.5A Max. Output: DC5V, 2A		

1.3 Description of family model numbers

Between the present Model Number: VS-RK3399

and the other family Model Number: VS-RK3288, VS-RK3368, VS-RK3188, VS-RK3128, VS-RK3399plus, VS-RK3288plus, VS-S905, VS-S912, VS-S962E, VS-S922, M8S PRO+, M8S PRO L, M8S PRO W, M8S PRO P, M8S PRO S, M8S PRO C, KI PRO

There are identical as following:

Printed Circuit Board (PCB); Hardware;Software;Enclosure;Internal structure;

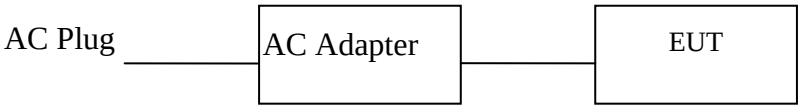
There is difference as following:

Model Number and Skin color

1.4 Accessories of EUT

Description	Manufacturer	Model number	Parameter	
AC Adapter	Shenzhen Keyu Power Supply Technology Co., Ltd.	YZDZ15-050200	Input: AC100-240V, 50/60Hz, 0.5A Max.	Output: DC5V, 2A

1.5 Block diagram of EUT configuration for test



The test software provided by manufacturer to control EUT work in ContinuousTX mode (>98% duty cycle), and select test channel, wireless mode and data rate.

Tested mode, channel, and data rate information			
Mode	Data rate (Mpbs)	Channel	Frequency(MHz)
IEEE 802.11b	11	Low :CH1	2412
	11	Middle: CH7	2442
	11	High: CH13	2472
IEEE 802.11g	6	Low :CH1	2412
	6	Middle: CH7	2442
	6	High: CH13	2472
IEEE 802.11n HT20	MCS 0	Low :CH1	2412
	MCS 0	Middle: CH7	2442
	MCS 0	High: CH13	2472
IEEE 802.11n HT40	MCS 0	Low :CH3	2422
	MCS 0	Middle: CH7	2442
	MCS 0	High: CH11	2462
Note: According exploratory test, EUT will have maximum output power in those data rate, so those data rate were used for all test.			

1.6 Test environment conditions

During the measurement the environmental conditions were within the listed ranges:

	Normal Conditions	Extreme Conditions
Temperature range	21-25℃	-20℃ and 55℃
Humidity range	40-75%	40-75%
Pressure range	86-106kPa	86-106kPa
Power supply	AC 230V/50Hz	207V and 253V (0.9 and 1.1 times of nominal voltage)
Note1: The Extreme temperature range and extreme voltages are declared by the manufacturer.		

2 Measurement uncertainty

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

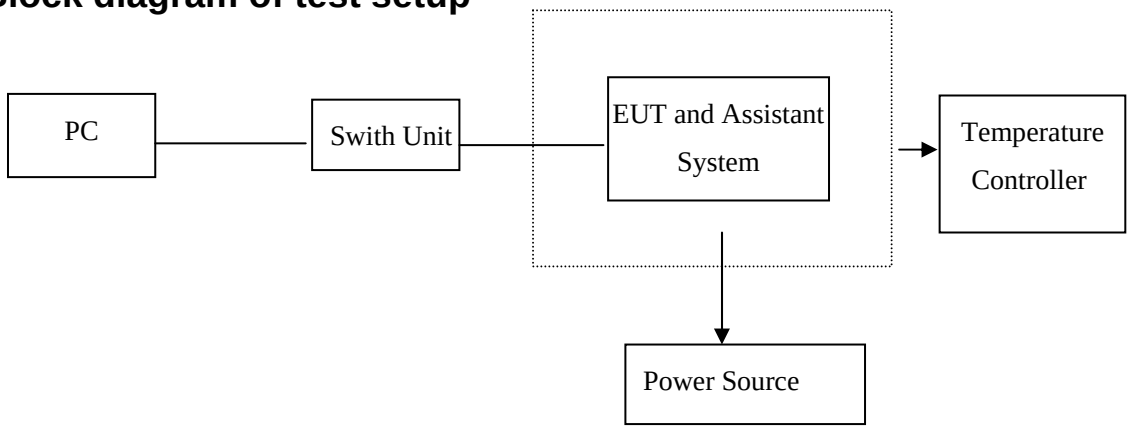
Test Item	Uncertainty
Occupied Channel Bandwidth	±1%
Uncertainty for radio frequency	1×10^{-9}
RF Output power, conducted	±0.6dB
Power Spectral Density, Conducted	±1.2dB
Unwanted Emissions, Conducted	±0.6dB
Temperature	±0.2℃
Humidity	±1%
DC and Low frequency voltage	±0.5%
Time	±1%
Duty Cycle	±1%
Uncertainty for Unwanted Emission, Radiated (30MHz-1GHz)	2.12 dB (Polarize: V)
	2.42 dB (Polarize: H)
Uncertainty for Unwanted Emission, Radiated (1GHz to 13GHz)	2.08dB(Polarize: V)
	2.16dB (Polarize: H)

3 RF Output Power

3.1 Test system and equipment

Item	Equipment/system	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1	RF testing system	JS Tonscend	JS1120-2	10.10.25	2016/10/25	1 Y
2	Attenuator	Mini-Circuits	BW-S10W2	101109	2016/10/25	1 Y
3	RF Cable	Micable	C10-01-01-1	100309	2016/10/25	1 Y
4	Temperature controller	Dongguan Bell	BE-TH-150M3	201208153364	2016/10/25	1Y
5	DC Power Source	ALLPower	ADC50-20	990406	2016/10/25	1Y
6	AC Power Source	High Power Corporetion	HPA-31105	20120825001	2016/10/25	1Y
7	Spectrum analyzer	R&S	FSU	1166.1660.26	2016/10/25	1Y
8	Switch Unit with OSP-B157	R&S	OSP120	101032.33.3	2016/10/25	1Y
9	Test software	R&S	EMC 32	9.10.90	/	/
10	Vertor Signal Generator	R&S	SMBV100A	1407.6004K02	2016/10/25	1Y
11	RF Signal Generator	R&S	SMR20	1104.0002.20	2016/10/25	1Y

3.2 Block diagram of test setup



3.3 Limits

The RF output power is defined as the mean equivalent isotropically radiated power (e.i.r.p.) of the equipment during a transmission burst.

For adaptive equipment using wide band modulations other than FHSS, the maximum RF output power shall be 20 dBm.

The maximum RF output power for non-adaptive equipment shall be declared by the supplier and shall not exceed 20 dBm. See clause 5.3.1 m). For non-adaptive equipment using wide band modulations other than FHSS, the maximum RF output power shall be equal to or less than the value declared by the supplier.

This limit shall apply for any combination of power level and intended antenna assembly.

3.4 Test Procedure

(1) Connect all the EUT's antenna output to RF test system which have build in power detector.

(2) Configure EUT work in maximum output power mode (100% ducty cycle).

(3) Follow ETSI EN 300 328 V2.1.1 clause 5.3.2.2.1.2 test procedure to measure out the maximum RF output power of each test mode with JS Tonscendtest software.

3.5 Test Result

Test Mode	Condition	CH	ANT1RF OutputPower(dBm)	The final/worst result RF OutputPower(dBm)
IEEE802.11b 11Mbps	Normal 25℃/230V	1	/	11.59
		7	/	11.64
		13	/	11.61
	-20℃/207V	1	/	11.76
		7	/	11.52
		13	/	11.65
	-20℃/253V	1	/	11.58
		7	/	11.45
		13	/	11.70
	55℃/253V	1	/	11.72
		7	/	11.66
		13	/	11.53
	55℃/207V	1	/	11.64
		7	/	11.50
		13	/	11.53
IEEE802.11g 6Mbps	Normal 25℃/230V	1	/	11.31
		7	/	11.35

		13	/	11.47
	-20℃/207V	1	/	11.32
		7	/	11.24
		13	/	11.35
	-20℃/253V	1	/	11.41
		7	/	11.27
		13	/	11.62
	55℃/253V	1	/	11.41
		7	/	11.15
		13	/	11.18
	55℃/207V	1	/	11.23
		7	/	11.13
		13	/	11.14
Test Mode	Condition	CH	ANT1 RF OutputPower(dBm)	The final/worst result RF OutputPower(dBm)
IEEE802.11n HT20 6.5Mbps	Normal 25℃/230V	1	/	10.25
		7	/	10.30
		13	/	10.81
	-20℃/207V	1	/	10.28
		7	/	10.31
		13	/	10.79
	-20℃/253V	1	/	10.28
		7	/	10.34
		13	/	10.31
	55℃/253V	1	/	10.35
		7	/	10.32
		13	/	10.91
	55℃/207V	1	/	10.23
		7	/	10.34
		13	/	10.52

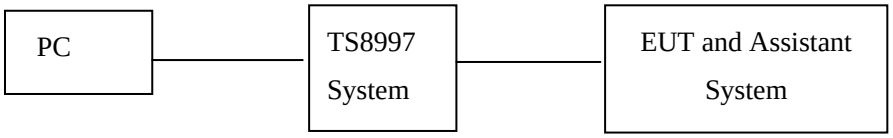
Test Mode	Condition	CH	ANT1 RF OutputPower (dBm)	The final/worst result RF OutputPower(dBm)
IEEE802.11n HT40 6.5Mbps	Normal 25℃/230V	3	/	9.71
		7	/	9.78
		11	/	9.56
	-20℃/207V	3	/	9.43
		7	/	9.28
		11	/	9.52
	-20℃/253V	3	/	9.41
		7	/	9.15
		11	/	9.36
	55℃/253V	3	/	9.18
		7	/	9.24
		11	/	9.13
	55℃/207V	3	/	9.16
		7	/	9.21
		11	/	9.08
RF Output power limit: 30dBm				

4 Power Special Density

4.1 Test system and equipment

Item	Equipment/system	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1	RF testing system	JS Tonscend	JS1120-2	10.10.25	2016/10/25	1 Y
2	Attenuator	Mini-Circuits	BW-S10W2	101109	2016/10/25	1 Y
3	RF Cable	Micable	C10-01-01-1	100309	2016/10/25	1 Y
4	DC Power Source	ALLPower	ADC50-20	990406	2016/10/25	1Y
5	AC Power Source	High Power Corporetion	HPA-31105	20120825001	2016/10/25	1Y
6	Spectrum analyzer	R&S	FSU	1166.1660.26	2016/10/25	1Y
7	Switch Unit with OSP-B157	R&S	OSP120	101032.33.3	2016/10/25	1Y
8	Test software	JS Tonscend	JS1120-2	10.10.25	/	/
9	Vertor Signal Generator	R&S	SMBV100A	1407.6004K02	2016/10/25	1Y
10	RF Signal Generator	R&S	SMR20	1104.0002.20	2016/10/25	1Y

4.2 Block diagram of test setup



4.3 Limits

The Power Spectral Density is the mean equivalent isotropically radiated power (e.i.r.p.) spectral density during atransmission burst.
For equipment using wide band modulations other than FHSS, the maximum Power Spectral Density is limited to10 dBm per MHz.

4.4 Test Procedure

(1) Connect all the EUT's antenna output to JS Tonscend test system which have build in power detector.

(2) Configure EUT work in maximum output power mode (100% ducty cycle).

(3) Follow ETSI EN 300 328 V2.1.1 clause 5.3.3 test procedure to measure out the maximum Power Spectral Density of each test mode with JS Tonscend test software.

4.5 Test Result

Mode:IEEE802.11b 11Mbps			
CH	ANT1 Power Density(dBm/MHz)	The final/worst result Power Density (dBm)	Limit (dBm/MHz)
CH1	/	1.47	10dBm
CH7	/	1.41	10dBm
CH13		1.35	10dBm
Mode: IEEE 802.11g 6Mbps			
CH	ANT1 Power Density(dBm/MHz)	The final/worst result Power Density (dBm)	Limit (dBm/MHz)
CH1	/	1.33	10dBm
CH7	/	1.29	10dBm
CH13	/	1.21	10dBm
Mode: IEEE802.11n HT20 6.5Mbps			
CH	ANT1 Power Density(dBm/MHz)	The final/worst result Power Density (dBm)	Limit (dBm/MHz)
CH1	/	1.22	10dBm
CH7	/	1.25	10dBm
CH13	/	1.20	10dBm
Mode: IEEE802.11n HT40 6.5Mbps			
CH	ANT1 Power Density(dBm/MHz)	The final/worst result Power Density (dBm)	Limit (dBm/MHz)
CH3	/	0.41	10dBm
CH7	/	0.44	10dBm
CH11	/	0.39	10dBm
Limit: 10dBm/MHz		Conclusion: PASS	

5 Duty Cycle ,Tx-Sequence, Tx-gap

N/A (Not Applicable)

Only apply to non-adaptive equipment or to adaptive equipment when operating in a non-adaptive mode.

6 Dwell time and Minimum Frequency Occupation

N/A (Not Applicable)

Only apply to FHSS modulations equipment.

7 Hopping Sequence

N/A (Not Applicable)

Only apply to FHSS modulations equipment.

8 Hopping Frequency Separation

N/A (Not Applicable)

Only apply to FHSS modulations equipment.

9 Medium Utilisation

N/A (Not Applicable)

Only apply to non-adaptive equipment or to adaptive equipment when operating in a non-adaptive mode.

10Adaptivity

10.1 Test system and equipment

Item	Equipment/system	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1	RF testing system	JS Tonscend	JS1120-2	10.10.25	2016/10/25	1 Y
2	Attenuator	Mini-Circuits	BW-S10W2	101109	2016/10/25	1 Y
3	RF Cable	Micable	C10-01-01-1	100309	2016/10/25	1 Y
4	DC Power Source	ALLPower	ADC50-20	990406	2016/10/25	1Y
5	AC Power Source	High Power Corporetion	HPA-31105	20120825001	2016/10/25	1Y
6	Spectrum analyzer	R&S	FSU	1166.1660.26	2016/10/25	1Y
7	Switch Unit with OSP-B157	R&S	OSP120	101032.33.3	2016/10/25	1Y
8	Test software	JS Tonscend	JS1120-2	10.10.25	/	/
9	Vertor Signal Generator	R&S	SMBV100A	1407.6004K02	2016/10/25	1Y
10	RF Signal Generator	R&S	SMR20	1104.0002.20	2016/10/25	1Y

10.2 Block diagram of test setup

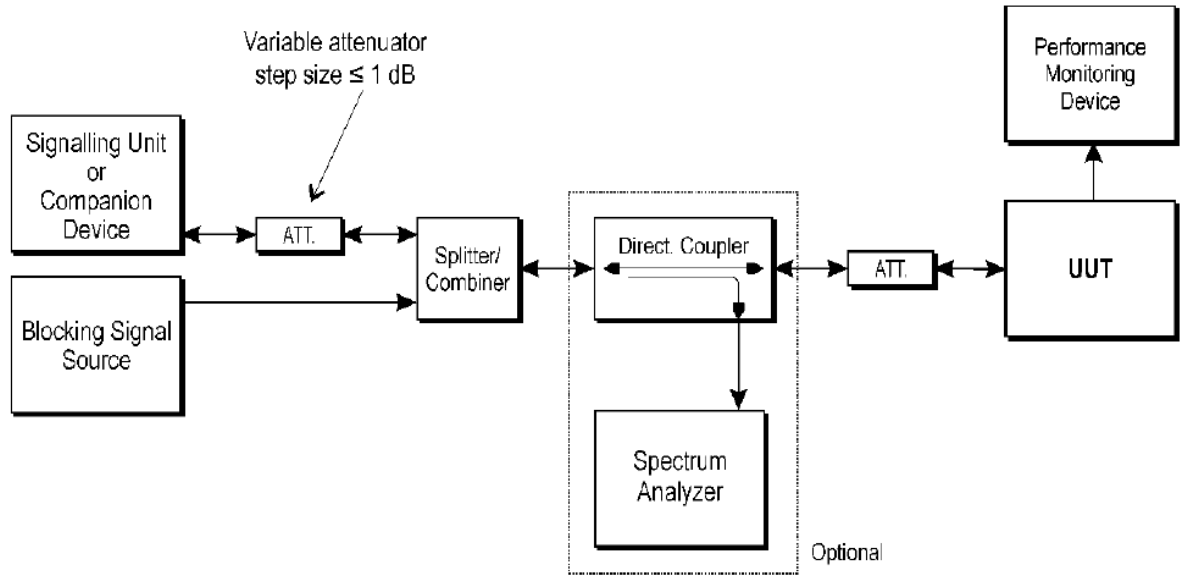


Figure 6: Test Set-up for receiver blocking

10.3 Requirement

Load Based Equipment may implement an LBT based spectrum sharing mechanism based on the Clear Channel Assessment (CCA) mode using energy detect, as described in IEEE Std. 802.11™-2007 [i.4] clauses 9, 15, 18 or 19, in IEEE Std. 802.11n™-2009 [i.4], clauses 9, 11 and 20 or in IEEE Std. 802.15.4™-2011 [i.5], clauses 4 and 5 providing they comply with the conformance requirements referred to in EN 300 328 V2.1.1 clause4.3.1.12.3.

Load Based Equipment not using any of the mechanisms referenced above shall comply with the following minimum set of requirements:

1. Before a transmission or a burst of transmissions, the equipment shall perform a Clear Channel Assessment (CCA) check using energy detect. The equipment shall observe the operating channel for the duration of the CCA observation time which shall be not less than 20 µs. The channel shall be considered occupied if the energy level in the channel exceeds the threshold given in step 5) below. If the equipment finds the channel to be clear, it may transmit immediately. The CCA time used by the equipment shall be declared by the supplier.

2. If the equipment finds the channel occupied, it shall not transmit on this channel (see note 1). The equipment shall perform an Extended CCA check in which the channel is observed for the duration of a random factor R multiplied by the CCA observation time. R defines the number of clear idle slots resulting in a total Idle Period that needs to be observed before initiation of the transmission. The value of R shall be randomly selected in the range 1.q every time an Extended CCA is required and the value stored in a counter. The value of q is selected by the manufacturer in the range 4..32. This selected value shall be declared by the manufacturer (see clause 5.3.1 d). The counter is decremented every time a CCA slot is considered to be 'unoccupied'. When the counter reaches zero, the equipment may transmit.

3. The total time that an equipment makes use of a RF channel is defined as the Channel Occupancy Time. This Channel Occupancy Time shall be less than (13/32) × q ms, with q as defined in 2) above, after which the device shall perform the Extended CCA described in 1) above.

4.The equipment, upon correct reception of a packet which was intended for this equipment can skip CCA and immediately (see note 2) proceed with the transmission of management and control frames (e.g. ACK and Block ACK frames are allowed but data frames are not allowed). A consecutive sequence of transmissions by the equipment without a new CCA shall not exceed the maximum channel occupancy time as defined in 3) above.

5. The energy detection threshold for the CCA shall be proportional to the transmit power of the transmitter: for a 20 dBme.i.r.p. transmitter the CCA threshold level (TL) shall be equal or lower than -70 dBm/MHz at the input to the receiver (assuming a 0 dBi receive antenna). For power levels below 20 dBme.i.r.p., the CCA threshold level may be relaxed to TL = -70 dBm/MHz + 20 - Pout e.i.r.p. (Pout in dBm).

6. If implemented, Short Control Signalling Transmissions of adaptive equipment using wide band modulations other than FHSS shall have a maximum duty cycle of 10 % within an observation period of 50 ms.

10.4 Test Procedure

(1) Follow ETSI EN 300 328 V2.1.1 clause 5.3.7 test procedure to measure out the adaptivity of each test mode.

10.5 Test Result

Mode	Channel	COT values(ms)	Idle values [ms]	Short Control (%)			Verdict
				Interferer values	CW values	Limit [%]	
11B	LCH	3.968	0.063	0	0	10	PASS
11B	HCH	11.475	0.410	0	0	10	PASS
11G	LCH	0.586	0.06	0.9	0	10	PASS
11G	HCH	3.347	0.026	0	0	10	PASS
11N20	LCH	3.106	0.083	1.68	0	10	PASS
11N20	HCH	11.253	0.354	0.86	0	10	PASS
11N40	LCH	4.125	0.073	2.82	0	10	PASS
11N40	HCH	4.118	0.035	0.64	0	10	PASS

11Occupied Channel Bandwidth

11.1 Test equipment

Same with 4.1

11.2 Block diagram of test setup

Same with 4.2

11.3 Limits

The Occupied Channel Bandwidth is the bandwidth that contains 99 % of the power of the signal.

The Occupied Channel Bandwidth shall fall completely within the band 2400MHz-2483.5MHz.

In addition, for non-adaptive systems using wide band modulations other than FHSS and with e.i.r.p greater than10 dBm, the occupied channel bandwidth shall be less than 20 MHz.

11.4 Test Procedure

(1) Connect EUT's antenna output to spectrum analyzer by RF cable and attenuator.

(2) Configure EUT work in test mode.

(3) Follow ETSI EN 300 328 V2.1.1 clause 5.3.8 test procedure to measure out the cccupied bandwidth of each test mode. Only chain 1 was performed test.

11.5 Test Result

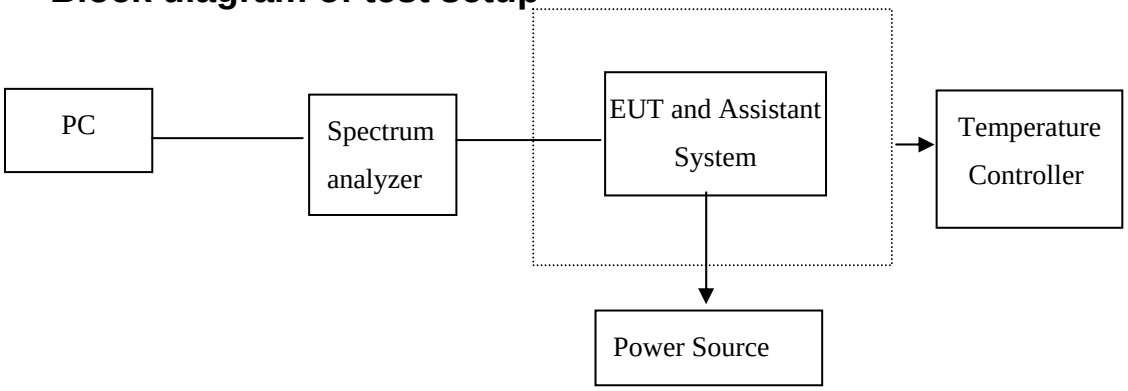
Test Mode	Condition	CH	Test Result		Limit	
			Lower or Upper frequency (MHz)	Occupied bandwidth (MHz)	Lower or Upper frequency (MHz)	Occupied bandwidth (MHz)
IEEE 802.11b 11Mbps	Normal	1	2404.84	11.354	>2400	N/A
		13	2479.22	12.845	<2483.5	N/A
IEEE 802.11g 6Mbps	Normal	1	2402.34	16.958	>2400	N/A
		13	2481.41	18.347	<2483.5	N/A
IEEE 802.11n HT20 6.5Mbps	Normal	1	2402.24	17.528	>2400	N/A
		13	2481.72	18.745	<2483.5	N/A
IEEE 802.11n HT40 6.5Mbps	Normal	3	2402.64	35.847	>2400	N/A
		11	2480.87	37.965	<2483.5	N/A
Conclusion: Pass						

12Transmitter unwanted emissions in the out-of-band domain

12.1 Test equipment

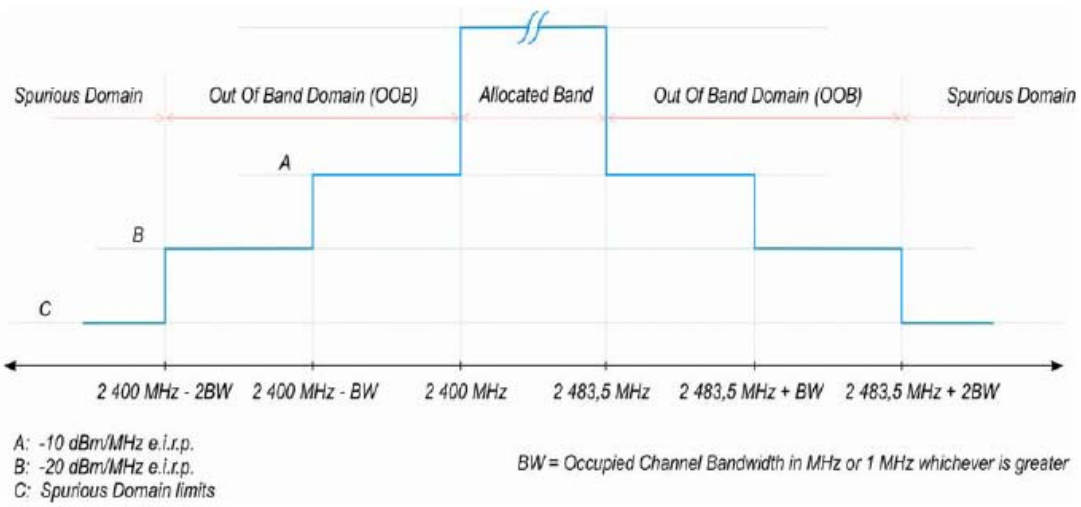
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
. 1	Spectrum analyzer	R&S	FSU	1166.1660.26	2016/10/25	1Y
. 2	Attenuator	Mini-Circuits	BW-S10W2	101109	2016/10/25	1 Y
. 3	RF Cable	Micable	C10-01-01-1	100309	2016/10/25	1 Y
4	Temperature controller	Dongguan Bell	BE-TH-150M3	201208153364	2016/10/25	1Y
5	DC Power Source	ALLPower	ADC50-20	990406	2016/10/25	1Y
6	AC Power Source	High Power Corporetion	HPA-31105	20120825001	2016/10/25	1Y
7	Switch Unit with OSP-B157	R&S	OSP120	101032.33.3	2016/10/25	1Y
8	Test software	JS Tonscend	JS1120-2	10.10.25	/	/
9	Vertor Signal Generator	R&S	SMBV100A	1407.6004K02	2016/10/25	1Y
10	RF Signal Generator	R&S	SMR20	1104.0002.20	2016/10/25	1Y

12.2 Block diagram of test setup



12.3 Limits

The transmitter unwanted emissions in the out-of-band domain but outside the allocated band, shall not exceed thevalues provided by the mask below:



12.4 Test Procedure

These measurements have to be performed at normal environmental conditions and shall be repeated at the extremes of the operating temperature range.

(1) Connect EUT's antenna output to spectrum analyzer by RF cable and attenuator.

(2) Configure EUT work in test mode.

(3) Follow the test procedure description in EN 300 328 V2.1.1, measure out each bands e.i.r.p emissions.

Note:The results of each of the transmit chains for the corresponding 1MHz segments was added.

12.5 Test Result

Test condition: Normal				
EUT Mode and basic information	Segment	Results Maximum Measured Level(dBm)	Limit (dBm)	Conclusion
IEEE802.11b 11Mbps CH 1	2400MHz-BW to 2400MHz	-45.8	-10	PASS
	2400-2BW to 2400-BW	-42.4	-20	PASS
	2483.5MHz to 2483.5MHz+BW	-48.1	-10	PASS
	2483.5MHz+BW to 2483.5MHz+2BW	-45.6	-20	PASS
IEEE802.11b 11Mbps CH 13	2400MHz-BW to 2400MHz	-44.4	-10	PASS
	2400-2BW to 2400-BW	-42.9	-20	PASS
	2483.5MHz to 2483.5MHz+BW	-46.7	-10	PASS
	2483.5MHz+BW to 2483.5MHz+2BW	-47.7	-20	PASS
IEEE802.11g 6Mbps CH 1	2400MHz-BW to 2400MHz	-46.2	-10	PASS
	2400-2BW to 2400-BW	-43.8	-20	PASS
	2483.5MHz to 2483.5MHz+BW	-47.9	-10	PASS
	2483.5MHz+BW to 2483.5MHz+2BW	-49.6	-20	PASS
IEEE802.11g 6Mbps CH 13	2400MHz-BW to 2400MHz	-46.4	-10	PASS
	2400-2BW to 2400-BW	-43.1	-20	PASS
	2483.5MHz to 2483.5MHz+BW	-47.5	-10	PASS
	2483.5MHz+BW to 2483.5MHz+2BW	-46.9	-20	PASS
IEEE802.11n HT20 6.5Mbps CH 1	2400MHz-BW to 2400MHz	-42.4	-10	PASS
	2400-2BW to 2400-BW	-42.2	-20	PASS
	2483.5MHz to 2483.5MHz+BW	-47.4	-10	PASS
	2483.5MHz+BW to 2483.5MHz+2BW	-48.9	-20	PASS
IEEE802.11n HT20 6.5Mbps CH 13	2400MHz-BW to 2400MHz	-45.1	-10	PASS
	2400-2BW to 2400-BW	-44.6	-20	PASS
	2483.5MHz to 2483.5MHz+BW	-43.2	-10	PASS
	2483.5MHz+BW to 2483.5MHz+2BW	-47.5	-20	PASS
IEEE802.11n HT40 6.5Mbps CH 3	2400MHz-BW to 2400MHz	-414	-10	PASS
	2400-2BW to 2400-BW	-42.7	-20	PASS
	2483.5MHz to 2483.5MHz+BW	-45.5	-10	PASS
	2483.5MHz+BW to 2483.5MHz+2BW	-46.2	-20	PASS
IEEE802.11n HT40	2400MHz-BW to 2400MHz	-44.3	-10	PASS
	2400-2BW to 2400-BW	-45.1	-20	PASS

6.5Mbps CH 11	2483.5MHz to 2483.5MHz+BW	-46.3	-10	PASS
	2483.5MHz+BW to 2483.5MHz+2BW	-44.1	-20	PASS
Test condition: 55℃				
EUT Mode and basic information	Segment	Results Maximum Measured Level(dBm)	Limit (dBm)	Conclusion
IEEE802.11b 11Mbps CH 1	2400MHz-BW to 2400MHz	-48.2	-10	PASS
	2400-2BW to 2400-BW	-43.6	-20	PASS
	2483.5MHz to 2483.5MHz+BW	-44.9	-10	PASS
	2483.5MHz+BW to 2483.5MHz+2BW	-45.1	-20	PASS
IEEE802.11b 11Mbps CH 13	2400MHz-BW to 2400MHz	-44.7	-10	PASS
	2400-2BW to 2400-BW	-44.1	-20	PASS
	2483.5MHz to 2483.5MHz+BW	-42.5	-10	PASS
	2483.5MHz+BW to 2483.5MHz+2BW	-47.6	-20	PASS
IEEE802.11g 6Mbps CH 1	2400MHz-BW to 2400MHz	-49.2	-10	PASS
	2400-2BW to 2400-BW	-43.5	-20	PASS
	2483.5MHz to 2483.5MHz+BW	-44.7	-10	PASS
	2483.5MHz+BW to 2483.5MHz+2BW	-45.8	-20	PASS
IEEE802.11g 6Mbps CH 13	2400MHz-BW to 2400MHz	-43.3	-10	PASS
	2400-2BW to 2400-BW	-44.1	-20	PASS
	2483.5MHz to 2483.5MHz+BW	-45.4	-10	PASS
	2483.5MHz+BW to 2483.5MHz+2BW	-46.9	-20	PASS
IEEE802.11n HT20 6.5Mbps CH 1	2400MHz-BW to 2400MHz	-44.3	-10	PASS
	2400-2BW to 2400-BW	-45.4	-20	PASS
	2483.5MHz to 2483.5MHz+BW	-47.6	-10	PASS
	2483.5MHz+BW to 2483.5MHz+2BW	-46.3	-20	PASS
IEEE802.11n HT20 6.5Mbps CH 13	2400MHz-BW to 2400MHz	-47.4	-10	PASS
	2400-2BW to 2400-BW	-46.5	-20	PASS
	2483.5MHz to 2483.5MHz+BW	-47.8	-10	PASS
	2483.5MHz+BW to 2483.5MHz+2BW	-46.9	-20	PASS
IEEE802.11n HT40 6.5Mbps CH 3	2400MHz-BW to 2400MHz	-47.7	-10	PASS
	2400-2BW to 2400-BW	-46.1	-20	PASS
	2483.5MHz to 2483.5MHz+BW	-42.2	-10	PASS
	2483.5MHz+BW to 2483.5MHz+2BW	-47.3	-20	PASS
IEEE802.11n	2400MHz-BW to 2400MHz	-44.8	-10	PASS

HT40 6.5Mbps CH 11	2400-2BW to 2400-BW	-43.5	-20	PASS
	2483.5MHz to 2483.5MHz+BW	-44.9	-10	PASS
	2483.5MHz+BW to 2483.5MHz+2BW	-46.4	-20	PASS
Test condition: -20℃				
EUT Mode and basic information	Segment	Results Maximum Measured Level(dBm)	Limit (dBm)	Conclusion
IEEE802.11b 11Mbps CH 1	2400MHz-BW to 2400MHz	-45.1	-10	PASS
	2400-2BW to 2400-BW	-45.5	-20	PASS
	2483.5MHz to 2483.5MHz+BW	-44.3	-10	PASS
	2483.5MHz+BW to 2483.5MHz+2BW	-46.2	-20	PASS
IEEE802.11b 11Mbps CH 13	2400MHz-BW to 2400MHz	-44.4	-10	PASS
	2400-2BW to 2400-BW	-45.1	-20	PASS
	2483.5MHz to 2483.5MHz+BW	-47.5	-10	PASS
	2483.5MHz+BW to 2483.5MHz+2BW	-44.6	-20	PASS
IEEE802.11g 6Mbps CH 1	2400MHz-BW to 2400MHz	-41.3	-10	PASS
	2400-2BW to 2400-BW	-42.5	-20	PASS
	2483.5MHz to 2483.5MHz+BW	-48.6	-10	PASS
	2483.5MHz+BW to 2483.5MHz+2BW	-46.4	-20	PASS
IEEE802.11g 6Mbps CH 13	2400MHz-BW to 2400MHz	-45.1	-10	PASS
	2400-2BW to 2400-BW	-42.3	-20	PASS
	2483.5MHz to 2483.5MHz+BW	-46.7	-10	PASS
	2483.5MHz+BW to 2483.5MHz+2BW	-48.9	-20	PASS
IEEE802.11n HT20 6.5Mbps CH 1	2400MHz-BW to 2400MHz	-43.2	-10	PASS
	2400-2BW to 2400-BW	-47.4	-20	PASS
	2483.5MHz to 2483.5MHz+BW	-43.8	-10	PASS
	2483.5MHz+BW to 2483.5MHz+2BW	-42.5	-20	PASS
IEEE802.11n HT20 6.5Mbps CH 13	2400MHz-BW to 2400MHz	-44.6	-10	PASS
	2400-2BW to 2400-BW	-44.9	-20	PASS
	2483.5MHz to 2483.5MHz+BW	-47.7	-10	PASS
	2483.5MHz+BW to 2483.5MHz+2BW	-45.1	-20	PASS
IEEE802.11n HT40 6.5Mbps CH 3	2400MHz-BW to 2400MHz	-42.5	-10	PASS
	2400-2BW to 2400-BW	-44.6	-20	PASS
	2483.5MHz to 2483.5MHz+BW	-48.7	-10	PASS
	2483.5MHz+BW to 2483.5MHz+2BW	-44.8	-20	PASS

IEEE802.11n HT40 6.5Mbps CH 11	2400MHz-BW to 2400MHz	-42.6	-10	PASS
	2400-2BW to 2400-BW	-43.9	-20	PASS
	2483.5MHz to 2483.5MHz+BW	-44.5	-10	PASS
	2483.5MHz+BW to 2483.5MHz+2BW	-47.2	-20	PASS

13Transmitter unwanted spurious emissions (Conducted)

N/A (Not Applicable)

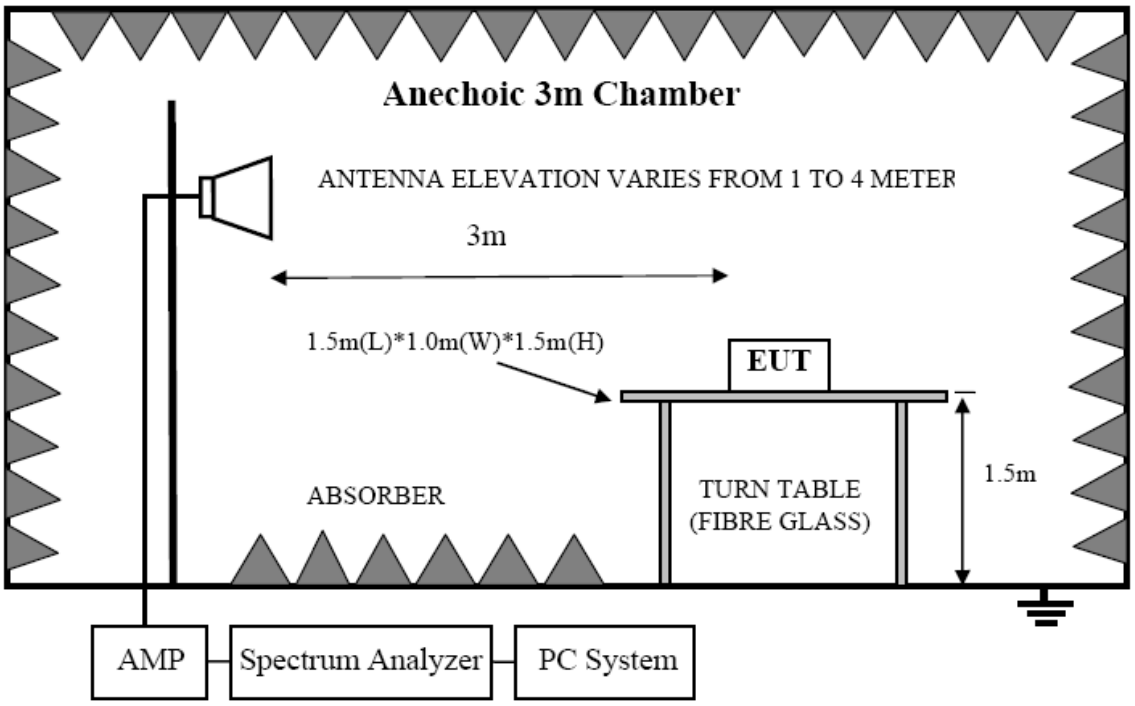
Only apply equipment with antenna connector.

14Transmitter unwanted spurious emissions (Radiated)

14.1 Test equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1	Spectrum analyzer	R&S	FSU26	1166.1660.26	2016/10/25	1Y
2	Trilog Broadband Antenna	Schwarzbeck	VULB9163	9163-462	2017/04/12	1 Y
3	Double Ridged Horn Antenna	R&S	HF907	100276	2017/04/12	1 Y
4	Pre-Amplifier	R&S	SCU-01	10049	2016/10/25	1Y
5	Pre-amplifier	A.H.	PAM0-0118	360	2016/10/25	1Y
6	RF Cable	R&S	R01	10403	2016/10/25	1Y
7	RF Cable	R&S	R02	10512	2016/10/25	1Y
8	RF Cable	R&S	R01	10454	2016/10/25	1Y
9	RF Cable	R&S	R02	10343	2016/10/25	1Y

14.2 Block diagram of test setup



14.3 Limits

FrequencyRange	Maximum power e.r.p (≤1GHz)；e.i.r.p（>1GHz）	Bandwidth
30MHz to 47MHz	-36 dBm	100KHz
47MHz to 74MHz	-54 dBm	100KHz
74MHz to 87.5MHz	-36 dBm	100KHz
87.5MHz to 118MHz	-54 dBm	100KHz
118MHz to 174MHz	-36 dBm	100KHz
174MHz to 230MHz	-54 dBm	100KHz
230MHz to 470MHz	-36 dBm	100KHz
470MHz to 862MHz	-54 dBm	100KHz
862MHz to 1GHz	-36 dBm	100KHz
1GHz to 12.75GHz	-30 dBm	1MHz

14.4 Test Procedure

(1) EUT was placed on a non-metallic table, 1.5m above the ground plane inside a semi-anechoic chamber.

(2) Test antenna was located 3m from the EUT on an adjustable mast, and the antenna used as below table.

Test frequency range	Test antenna used
30MHz-1GHz	Trilog Broadband Antenna
1GHz-12.75GHz	Double Ridged Horn Antenna

(3) Set EUT work in fixed channel transmitting mode.

(4) All the emissions from 30MHz to 12.75GHz at 3m distance was measured and recorded with receive antenna in both vertical and horizontal and varied from 1 m to 4 m. in height above the reference ground plane, and rotating the turntable obtain the maximum signal strength., the test spectrum analyser was set as below

Frequency band	RBW	VBW	Detector mode
30MHz-1GHz	100KHz	300KHz	Peak
1GHz-12.75GHz	1MHz	3MHz	Peak

Note: For harmonic emissions test a appropriate high pass filter was inserted in the input port of AMP.

(5) A correction values from a verified site calibration was used to calculate the spurious emissions of EUT.

14.5 Test Result

Test Mode：IEEE 802.11b Tx in CH1 2412MHz					
Frequency	Antennapolarizati	Result	Limit	Margin	Conclusion
33.46	H	-61.26	-36	-25.26	PASS
381.21	H	-63.45	-36	-27.45	PASS
820.53	H	-66.35	-54	-12.35	PASS
4843	H	-41.35	-30	-11.35	PASS
34.25	V	-62.17	-36	-26.17	PASS
450.65	V	-63.61	-36	-27.61	PASS
731.68	V	-64.27	-36	-28.27	PASS
4846	V	-41.25	-30	-11.25	PASS
Test Mode：IEEE 802.11b Tx in CH13 2472MHz					
34.34	H	-62.45	-36	-26.45	PASS
382.24	H	-64.23	-36	-28.23	PASS
821.62	H	-67.52	-54	-13.52	PASS
4952	H	-41.36	-30	-11.36	PASS
34.44	V	-61.57	-36	-25.57	PASS
450.72	V	-63.59	-36	-27.59	PASS
725.36	V	-65.26	-36	-29.26	PASS
4950	V	-43.11	-30	-13.11	PASS
Test Mode：IEEE 802.11gTx in CH1 2412MHz					
33.92	H	-60.54	-36	-24.54	PASS
381.35	H	-61.24	-36	-25.24	PASS
679.75	H	-64.32	-54	-10.32	PASS
4831	H	-42.58	-30	-12.58	PASS
34.24	V	-64.25	-36	-28.25	PASS
454.9	V	-63.56	-36	-27.56	PASS
726.73	V	-62.45	-36	-26.45	PASS
4832	V	-36.26	-30	-6.26	PASS

Test Mode：IEEE 802.11gTx in CH13 2472MHz					
34.32	H	-63.34	-36	-27.34	PASS
450.42	H	-60.25	-36	-24.25	PASS
725.74	H	-66.64	-54	-12.64	PASS
4945	H	-41.73	-30	-11.73	PASS
34.57	V	-63.81	-36	-27.81	PASS
453.46	V	-62.26	-36	-26.26	PASS
730.36	V	-63.47	-36	-29.47	PASS
4921	V	-40.14	-30	-10.14	PASS
Test Mode：IEEE 802.11n HT20 Tx in CH1 2412MHz					
34.46	H	-62.35	-36	-26.35	PASS
450.32	H	-64.16	-36	-28.16	PASS
728.87	H	-67.25	-54	-13.25	PASS
4835	H	-40.27	-30	-10.27	PASS
34.64	V	-63.56	-36	-27.56	PASS
450.83	V	-62.98	-36	-26.98	PASS
728.39	V	-60.85	-36	-24.85	PASS
4832	V	-40.95	-30	-10.95	PASS
Test Mode：IEEE 802.11n HT20 Tx in CH13 2472MHz					
34.56	H	-61.26	-36	-25.26	PASS
450.24	H	-64.42	-36	-28.42	PASS
725.31	H	-63.75	-54	-9.75	PASS
4945	H	-38.45	-30	-8.45	PASS
34.52	V	-63.26	-36	-27.26	PASS
450.74	V	-65.32	-36	-29.32	PASS
726.52	V	-61.24	-36	-25.24	PASS
4942	V	-41.98	-30	-11.98	PASS

Test Mode：IEEE 802.11n HT40 Tx in CH3 2422MHz					
34.24	H	-64.34	-36	-28.34	PASS
450.53	H	-62.65	-36	-26.65	PASS
725.88	H	-64.64	-54	-10.64	PASS
4844	H	-40.54	-30	-10.54	PASS
34.56	V	-62.87	-36	-26.87	PASS
450.42	V	-64.31	-36	-28.31	PASS
725.65	V	-62.52	-36	-26.52	PASS
4847	V	-39.31	-30	-9.31	PASS

Test Mode：IEEE 802.11n HT40 Tx in CH11 2462MHz					
34.51	H	-62.26	-36	-26.26	PASS
450.34	H	-63.45	-36	-27.45	PASS
725.85	H	-65.54	-54	-11.54	PASS
4930	H	-41.34	-30	-10.34	PASS
34.52	V	-62.16	-36	-26.16	PASS
450.88	V	-64.36	-36	-28.36	PASS
725.62	V	-63.13	-36	-27.13	PASS
4926	V	-40.24	-30	-10.24	PASS
Note: All the emissions are measured with PK detector.					

15Receiver Spurious emissions (Conducted)

N/A (Not Applicable)

Only apply equipment with antenna connector.

16Receiver Spurious emissions (Radiated)

16.1 Test equipment

Same with 14.1

16.2 Block diagram of test setup

Same with 14.2

16.3 Limits

The spurious emissions of the receiver shall not exceed the values given in below table.

FrequencyRange	Maximum power e.r.p (≤1GHz) e.i.r.p（>1GHz）	Bandwidth
30MHz to 1GHz	-57 dBm	100KHz
1GHz to 12.75GHz	-47 dBm	1MHz

16.4 Test Procedure

Same with 14.4 except set EUT work in only receive mode.

16.5 Test result

Test Mode：Rx CH1 2412MHz					
34.52	H	-64.32	-57	-7.32	PASS
450.34	H	-65.27	-57	-8.27	PASS
830.73	H	-65.98	-57	-8.98	PASS
34.62	V	-63.53	-57	-6.53	PASS
453.14	V	-67.35	-57	-10.35	PASS
832.74	V	-66.25	-57	-9.25	PASS
1527.15	H	-57.73	-47	-10.73	PASS
2386.65	H	-59.18	-47	-12.18	PASS
1527.33	V	-56.25	-47	-9.25	PASS
2382.24	V	-57.24	-47	-10.24	PASS
Test Mode：Rx CH13 2472MHz					
34.57	H	-66.32	-57	-10.32	PASS
452.23	H	-67.52	-57	-10.52	PASS
830.73	H	-65.34	-57	-8.34	PASS

34.72	V	-63.62	-57	-6.62	PASS
451.17	V	-64.25	-57	-7.25	PASS
832.74	V	-65.14	-57	-8.14	PASS
1527.26	H	-58.21	-47	-11.21	PASS
2387.35	H	-59.73	-47	-12.73	PASS
1526.42	V	-57.36	-47	-10.36	PASS
2387.63	V	-58.41	-47	-11.41	PASS
Note: All the emissions are measured with PK detector.					

17Receiver Blocking

17.1 Test equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
. 1	Spectrum analyzer	JS Tonscend	JS1120-2	10.10.25	2016/10/25	1Y
. 2	Attenuator	Mini-Circuits	BW-S10W2	101109	2016/10/25	1 Y
. 3	RF Cable	Micable	C10-01-01-1	100309	2016/10/25	1 Y
4	Temperature controller	Dongguan Bell	BE-TH-150M3	201208153364	2016/10/25	1Y
5	DC Power Source	ALLPower	ADC50-20	990406	2016/10/25	1Y
6	AC Power Source	High Power Corporetion	HPA-31105	20120825001	2016/10/25	1Y
7	Switch Unit with OSP-B157	R&S	OSP120	101032.33.3	2016/10/25	1Y
8	Test software	JS Tonscend	JS1120-2	10.10.25	/	/
9	Vertor Signal Generator	R&S	SMBV100A	1407.6004K02	2016/10/25	1Y
10	RF Signal Generator	R&S	SMR20	1104.0002.20	2016/10/25	1Y
11	Power combiner	MINI-Circuits	ZFRSC-183-S+	F095501134	2016/10/25	1 Y
12	Power combiner	MINI-Circuits	ZFRSC-183-S+	F6013901339	2016/10/25	1 Y
13	Direct Coupler	Agilent	87300B	MY153451	2016/10/25	1 Y
14	step attenuator	Agilent	8494B	MY42153594	2016/10/25	1 Y

17.2 Block diagram of test setup

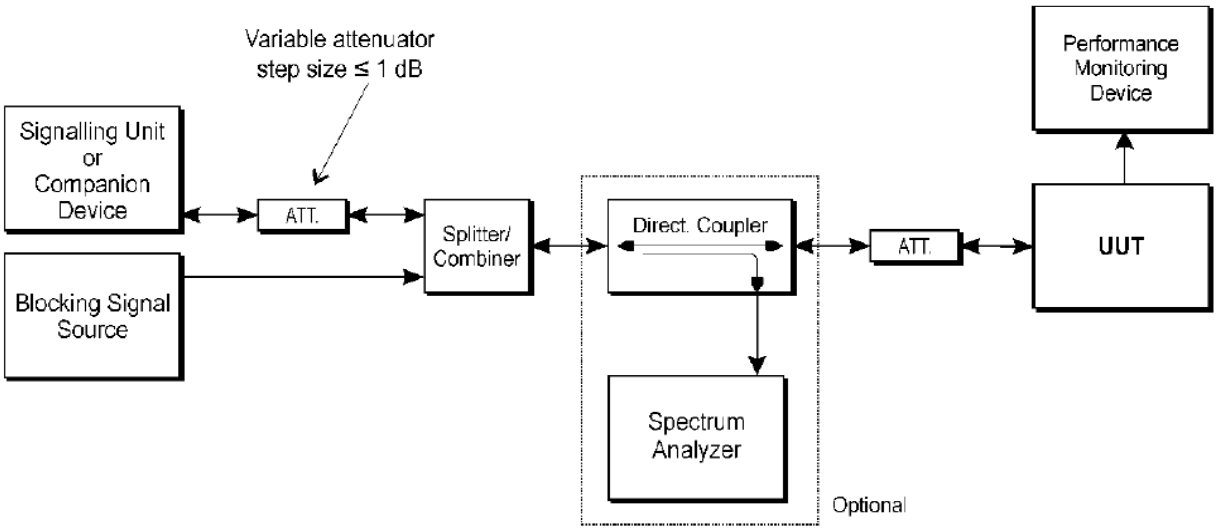


Figure 6: Test Set-up for receiver blocking

17.3 Requirement

Definition

Receiver blocking is a measure of the ability of the equipment to receive a wanted signal on its operating channel without exceeding a given degradation in the presence of an unwanted signal (blocking signal) on frequencies other than those of the operating band provided in table 1.

Performance Criteria

The minimum performance criterion shall be a PER less than or equal to 10 %. The manufacturer may declare alternative performance criteria as long as that is appropriate for the intended use of the equipment (see clause5.4.1.t)).

17.4 Limit

While maintaining the minimum performance criteria as defined in clause 4.3.1.12.3, the blocking levels at specified frequency offsets shall be equal to or greater than the limits defined for the applicable receiver category provided in table 6, table 7 or table 8.

Receiver Category 1

Table 6: Receiver Blocking parameters for Receiver Category 1 equipment

Wanted signal mean power from companion device (dBm)	Blocking signal frequency (MHz)	Blocking signal power (dBm) (see note 2)	Type of blocking signal
P_{min} + 6 dB	2 380 2 503,5	-53	CW
P_{min} + 6 dB	2 300 2 330 2 360	-47	CW
P_{min} + 6 dB	2 523,5 2 553,5 2 583,5 2 613,5 2 643,5 2 673,5	-47	CW
NOTE 1: P_{min} is the minimum level of wanted signal (in dBm) required to meet the minimum performance criteria as defined in clause 4.3.1.12.3 in the absence of any blocking signal. NOTE 2: The levels specified are levels in front of the UUT antenna. In case of conducted measurements, the levels have to be corrected by the actual antenna assembly gain.			

Receiver Category 2

Table 7: Receiver Blocking parameters receiver category 2 equipment

Wanted signal mean power from companion device (dBm)	Blocking signal frequency (MHz)	Blocking signal power (dBm) (see note 2)	Type of blocking signal
P_{min} + 6 dB	2 380 2 503,5	-57	CW
P_{min} + 6 dB	2 300 2 583,5	-47	CW
NOTE 1: P_{min} is the minimum level of the wanted signal (in dBm) required to meet the minimum performance criteria as defined in clause 4.3.1.12.3 in the absence of any blocking signal. NOTE 2: The levels specified are levels in front of the UUT antenna. In case of conducted measurements, the levels have to be corrected by the actual antenna assembly gain.			

Receiver Category 3

Table 8: Receiver Blocking parameters receiver category 3 equipment

Wanted signal mean power from companion device (dBm)	Blocking signal frequency (MHz)	Blocking signal power (dBm) (see note 2)	Type of blocking signal
P_{min} + 12 dB	2 380 2 503,5	-57	CW
P_{min} + 12 dB	2 300 2 583,5	-47	CW
NOTE 1: P_{min} is the minimum level of the wanted signal (in dBm) required to meet the minimum performance criteria as defined in clause 4.3.1.12.3 in the absence of any blocking signal. NOTE 2: The levels specified are levels in front of the UUT antenna. In case of conducted measurements, the levels have to be corrected by the actual antenna assembly gain.			

Test Method

For systems using multiple receive chains only one chain (antenna port) need to be tested. All other receiver inputs shall be terminated.

The procedure in step 1 to step 6 below shall be used to verify the receiver blocking requirement as described in clause 4.3.1.12 or clause 4.3.2.11.

Table 6, table 7 and table 8 in clause 4.3.1.12.4 contain the applicable blocking frequencies and blocking levels for each of the receiver categories for testing Receiver Blocking on frequency hopping equipment.

Table 14, table 15 and table 16 in clause 4.3.2.11.4 contain the applicable blocking frequencies and blocking levels for each of the receiver categories for testing Receiver Blocking on equipment using wide band modulations other than FHSS.

Step1:

• For non-frequency hopping equipment, the UUT shall be set to the lowest operating channel.

Step 2:
• The blocking signal generator is set to the first frequency as defined in the appropriate table corresponding to the receiver category and type of equipment.

Step 3:
• With the blocking signal generator switched off, a communication link is established between the UUT and the associated companion device using the test setup shown in figure 6. The attenuation of the variable attenuator shall be increased in 1 dB steps to a value at which the minimum performance criteria as specified in clause 4.3.1.12.3 or clause 4.3.2.11.3 is still met. The resulting level for the wanted signal at the input of the UUT is Pmin.
• This signal level (Pmin) is increased by the value provided in the table corresponding to the receiver category and type of equipment.
Step 4:
• The blocking signal at the UUT is set to the level provided in the table corresponding to the receiver category and type of equipment. It shall be verified and recorded in the test report that the performance criteria as specified in clause 4.3.1.12.3 or clause 4.3.2.11.3 is met.
Step 5:
• Repeat step 4 for each remaining combination of frequency and level for the blocking signal as provided in the table corresponding to the receiver category and type of equipment.
Step 6:
• For non-frequency hopping equipment, repeat step 2 to step 5 with the UUT operating at the highest operating channel.

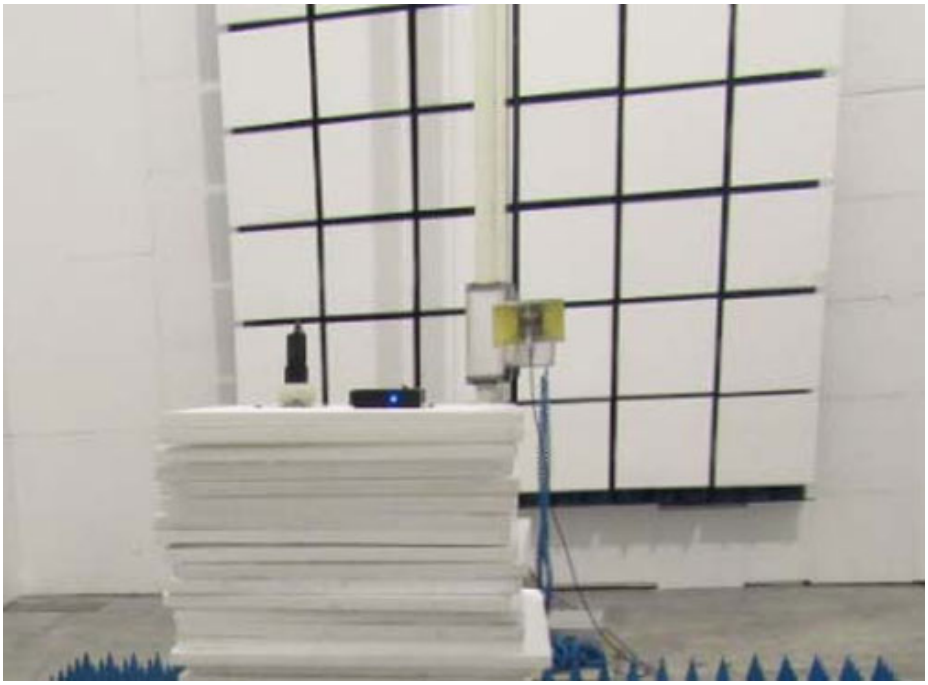
17.5 Test Result

The EUT is regarded as category 2 Receiver

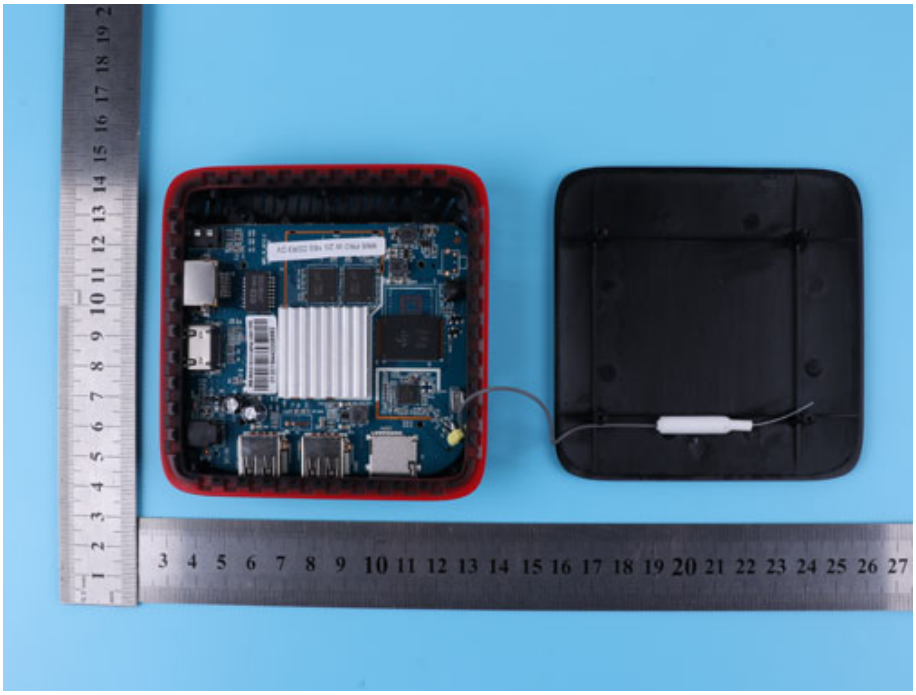
Wanted signal mean power from companion device(dBm)	Blocking signal frequency(MHz)	Blocking signal power(dBm)	PER	Result
-70.1dBm (Pmin) +6 dB	2380	-45.6	0.1%	Pass
-71.2dBm (Pmin) +6 dB	2503.5	-46.1	0.1%	Pass
-71.3dBm (Pmin) +6 dB	2300	-36.7	0.1%	Pass
-70.7dBm (Pmin) +6 dB	2583.5	-36.9	0.0%	Pass

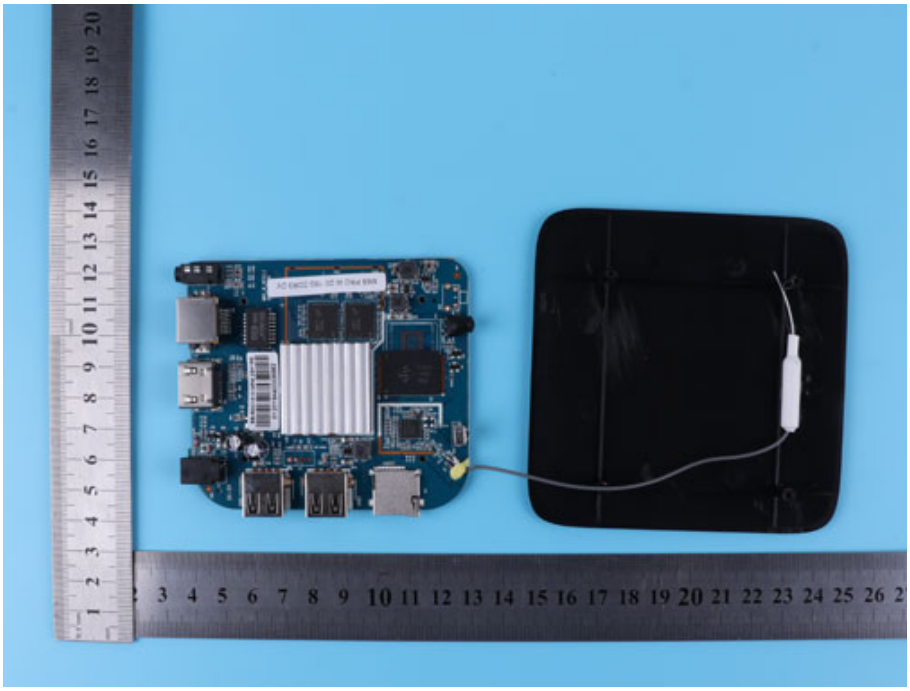
18Test setup photograph

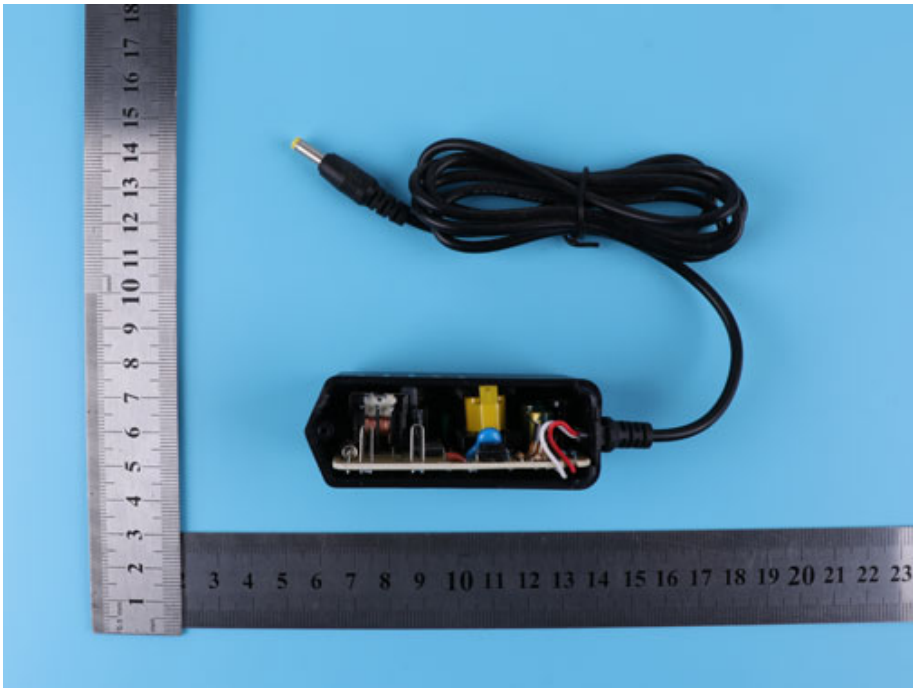
18.1 Radiated Spurious Emission test setup

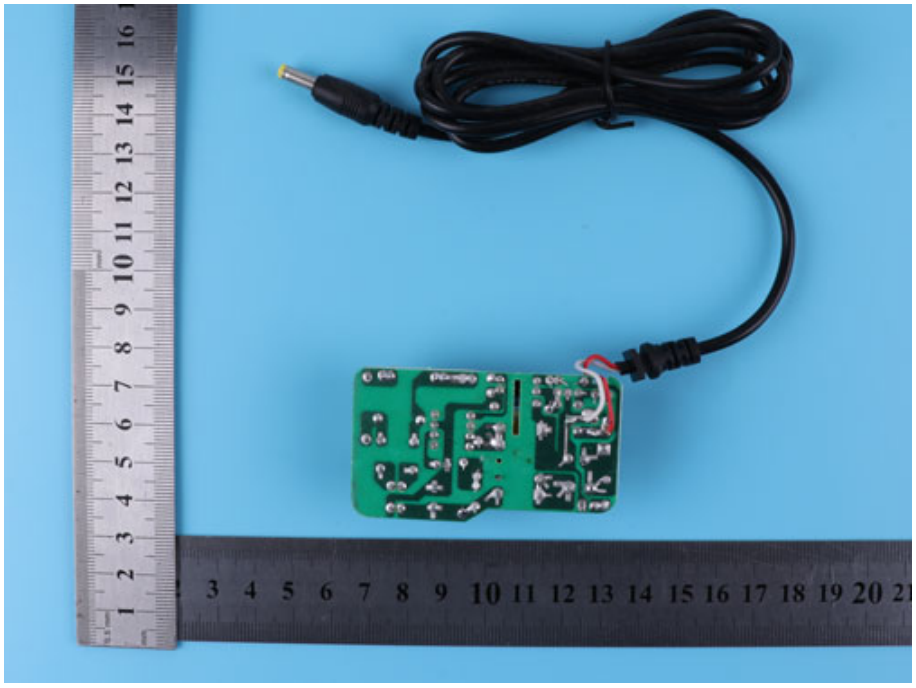


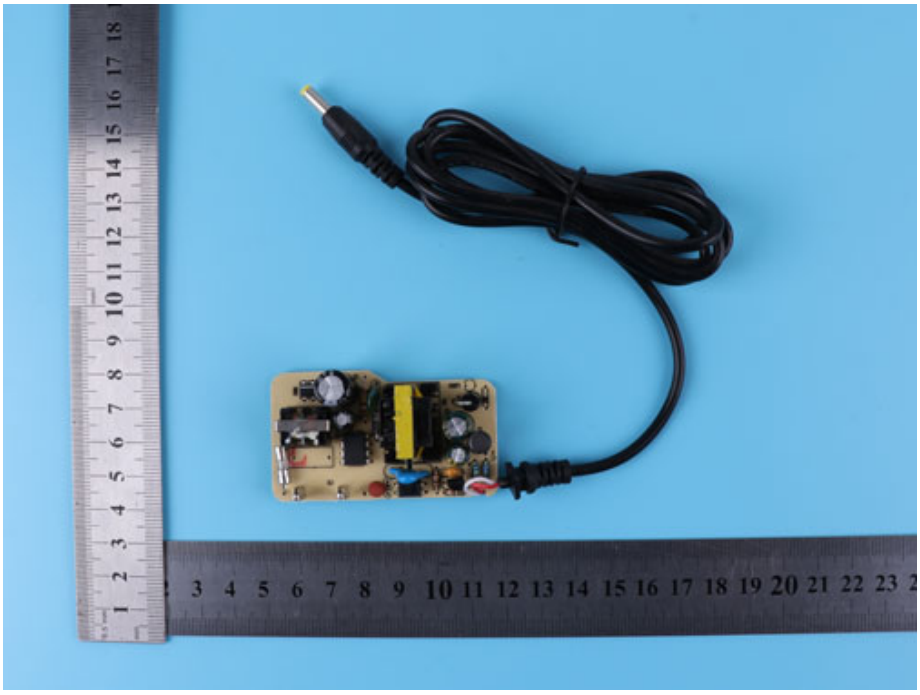
19Photos of the EUT











Report End