



Shenzhen CTA Testing Technology Co., Ltd.

Room 106, Building 1, Yibaolai Industrial Park, Qiaotou Community, Fuhai Street, Bao'an District, Shenzhen, China

TEST REPORT

Ordinance Article 2 paragraph 1 item (19-3)

Report Reference No.....: CTA26030902104

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Date of issue.....: April 03, 2026

Testing Laboratory Name: Shenzhen CTA Testing Technology Co., Ltd.

Address: Room 106, Building 1, Yibaolai Industrial Park, Qiaotou Community, Fuhai Street, Bao'an District, Shenzhen, China

Applicant's name: StarBoard Solutions Co., Ltd.

Address: Daiwa Shinagawa North Bldg. 7F, 1-8-11 Kita-Shinagawa, Shinagawa-ku, Tokyo 140-0001, Japan

Test specification

Standard: Ordinance Article 2 paragraph 1 item (19-3)

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Test item description: Interactive Flat Panel Display

Trade Mark: iBoard/StarBoard

Manufacturer.....: Shenzhen iBoard Technology Co., Ltd.

Model/Type reference.....: TE-YL Series

Listed Models: TE-QS Series

Frequency.....: From 2412MHz-2472MHz

Modulation: DSSS, OFDM

Ratings: 100V~ 50/60Hz 3.1A(OPS/Type-C No load)
100V~ 50/60Hz 4.6A(OPS/Type-C Load)

Result.....: PASS

Shenzhen CTA Testing Technology Co., Ltd.

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TEST REPORT

Equipment under Test : Interactive Flat Panel Display

Model /Type : TE-YL Series

Listed Models : TE-QS Series

Model difference : The PCB board, circuit, structure and internal of these models are the same, Only model number and colour is different for these model.

Applicant : **StarBoard Solutions Co., Ltd.**

Address : Daiwa Shinagawa North Bldg. 7F, 1-8-11 Kita-Shinagawa, Shinagawa-ku, Tokyo 140-0001, Japan

Manufacturer : **Shenzhen iBoard Technology Co., Ltd.**

Address : 1001, Block A, Tanglangcheng Square (West Zone), Fuguang Community, Taoyuan Street, Nanshan District, Shenzhen, Guangdong, China

Test Result:	PASS
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The test report merely corresponds to the test sample.

It is not permitted to copy extracts of these test result without the written permission of the test laboratory.

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1 SUMMARY

1.1 Test Standards

The tests were performed according to following standards:

[ARIB STD-T71](#): 5 GHz band low-power data communication system (5.2GHz band)

[MIC Notice No.88 Appendix No.45](#): 5 GHz band wide-band low-power data communication system

1.2 Test Description

ARIB STD-T71 Version 7.0		
Clause	Description of Test	Result
3.1.2 (2) & 3.1.2 (3) & 3.1.2 (5)	Tolerances Of Antenna Power & E.I.R.P	PASS
3.1.2 (4)	Tolerance Of Frequency	PASS
3.1.2 (7)	Transmission Burst Length	PASS
3.1.2 (8) & 3.1.2 (10)	Tolerance Of Unwanted Emission Intensity & Tolerance Of Out-Of-Band Leakage Power	PASS
3.1.2 (9)	Tolerance Of Adjacent Channel Leakage Power	PASS
3.1.2 (11)	Tolerance Of Occupied Bandwidth	PASS
3.1.3 (1)	Secondary Radiated Emissions	PASS
3.1.4.1	Interference prevention function	PASS
3.1.5	Carrier Sensing function	PASS
/	Dynamic Frequency Selection	N/A
<i>Note: (1) N/A is an abbreviation for Not Applicable. (2) N/T means this test item is not tested. (3) Device is client only without radar detection function. (4) Device not support TPC mechanism</i>		

Note: 1: "N/A" denotes test is not applicable in this Test Report

2: MIC Public Notice 88:2004, annex 1 and annex 45

3: MIC Ordinance Regulating Radio Equipment Section 4.17 of Article 49.20

4: Referenced in the standard ARIB STD-T71

1.3 TEST ENVIRONMENT

1.3.1 Address of the test laboratory

Shenzhen CTA Testing Technology Co., Ltd.

Room 106, Building 1, Yibaolai Industrial Park, Qiaotou Community, Fuhai Street, Bao'an District, Shenzhen, China

1.3.2 Test Facility

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

FCC-Registration No.:517586 Designation Number: CN1318

Shenzhen CTA Testing Technology Co., Ltd. Has been listed on the US Federal Communications Commission list of test facilities recognized to perform electromagnetic emissions measurements.

A2LA-Lab Cert. No.: 6534.01

Shenzhen CTA Testing Technology Co., Ltd. Has been listed by American Association for Laboratory Accreditation to perform electromagnetic emissions measurements.

The 3m-Semi anechoic test site fulfills CISPR 16-1-4 according to ANSI C63.10 and CISPR 16-1-4:2

1.4 Measurement Uncertainty

For the test methods, according to the present document, the measurement uncertainty figures shall be calculated in accordance with TR100028-1 [2] and shall correspond to an expansion factor (coverage factor) $K=1.96$ or $K=2$ (which provide confidence levels of respectively 95% and 95.5% in the case where the distributions characterizing the actual measurement uncertainties are normal).

Parameter	Uncertainty
Frequency error / 99%&90% bandwidth	$\pm 1.62 \cdot 10^{-6}$
Total RF power, conducted	$\pm 0.8\text{dB}$
Spurious emissions, conducted	$\pm 0.8\text{dB}$
DC and low frequency voltages	$\pm 0.05\%$
Humidity	$\pm 5\%$
Temperature	$\pm 1^{\circ}\text{C}$

2 GENERAL INFORMATION

2.1 General Remarks

Date of receipt of test sample	:	March 09, 2026
Testing commenced on	:	March 09, 2026
Testing concluded on	:	April 01, 2026

2.2 Environmental conditions

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

Voltage	Normal Voltage	AC 100V
	High Voltage	AC 110V
	Low Voltage	AC 90V
Other	Normal Temperature	25° C
	Relative Humidity	45 %
	Air Pressure	100.55KPa

Note: As the EUT was powered by AC 100V, and with the voltage stabilizing circuit used, the chip voltage received floating not exceed $\pm 1\%$ of nominal condition when working on extreme voltage, so all test performed at nominal voltage only.

2.3 General Description of EUT

Product Name:	Interactive Flat Panel Display
Model/Type reference:	TE-YL Series, TE-QS Series
Power supply:	100V~ 50/60Hz 3.1A(OPS/Type-C No load) 100V~ 50/60Hz 4.6A(OPS/Type-C Load)
WIFI	
Supported Type:	Supported IEEE 802.11 a/n/ac/ax
Modulation:	IEEE 802.11a: OFDM (64-QAM, 16-QAM, QPSK, BPSK) IEEE 802.11n HT20: OFDM (64-QAM, 16-QAM, QPSK, BPSK) IEEE 802.11n HT40: OFDM (64-QAM, 16-QAM, QPSK, BPSK) IEEE 802.11ac VHT20: OFDM (256-QAM) IEEE 802.11ac VHT40: OFDM (256-QAM) IEEE 802.11ax HE20: OFDMA (1024-QAM) IEEE 802.11ax HE40: OFDMA (1024-QAM)
Operation Frequency:	W52: 5150MHz ~ 5250MHz W53: 5250MHz ~ 5350MHz W56: 5500MHz ~ 5700MHz
Channel Number:	4 Channels for 20MHz bandwidth (5150-5250MHz) 2 Channels for 20MHz bandwidth (5150-5250MHz) 4 Channels for 20MHz bandwidth (5250-5350MHz) 2 Channels for 40MHz bandwidth (5250-5350MHz) 11 Channels for 20MHz bandwidth (5500-5700MHz) 5 Channels for 40MHz bandwidth (5500-5700MHz)
Rated Power: W52	IEEE 802.11a: 1.5 mW/MHz IEEE 802.11n HT20: 1.5 mW/MHz IEEE 802.11n HT40: 0.6 mW/MHz IEEE 802.11ac VHT20: 1.5 mW/MHz IEEE 802.11ac VHT40: 0.6 mW/MHz IEEE 802.11ax HE20: 1.5 mW/MHz IEEE 802.11ax HE40: 0.6 mW/MHz
Rated Power: W53	IEEE 802.11a: 0.6 mW/MHz IEEE 802.11n HT20: 0.6 mW/MHz IEEE 802.11n HT40: 0.3 mW/MHz IEEE 802.11ac VHT20: 0.6 mW/MHz IEEE 802.11ac VHT40: 0.3 mW/MHz IEEE 802.11ax HE20: 0.6 mW/MHz IEEE 802.11ax HE40: 0.3 mW/MHz

Rated Power: W56	IEEE 802.11a: 2.5 mW/MHz IEEE 802.11n HT20: 2.0 mW/MHz IEEE 802.11n HT40: 0.8 mW/MHz IEEE 802.11ac VHT20: 2.0 mW/MHz IEEE 802.11ac VHT40: 0.8 mW/MHz IEEE 802.11ax HE20: 2.0 mW/MHz IEEE 802.11ax HE40: 0.8 mW/MHz
Antenna Type:	PCB Antenna
Antenna Gain:	4.93dBi
Firmware Version:	N/A
Hardware Version:	KJD.A311D2.C-V1.2

Note: For more detailed features description, please refer to the manufacturer's specifications or the User's Manual.

2.4 Description of Test Modes

The EUT has been tested under typical operating condition. The Applicant provides communication tools software to control the EUT for staying in continuous transmitting and receiving mode for testing.

Operation Frequency List:

W52			
Channel	Frequency (MHz)	Channel	Frequency (MHz)
36	5180	38	5190
40	5200	46	5230
48	5240		

W53			
Channel	Frequency (MHz)	Channel	Frequency (MHz)
52	5260	54	5270
60	5300	62	5310
64	5320		

W56			
Channel	Frequency (MHz)	Channel	Frequency (MHz)
100	5500	102	5510
120	5600	118	5590
140	5700	134	5670

Note:

1. Test performed at the lowest/middle/highest frequencies selected in the list above for EUT supported while working on specified mode.

2.5 Measurement Instruments List

Item	Test Equipment	Manufacturer	Model No.	Equipment No.	Cal. Institution	Calibration Date	Calibration Due Date
1	Spectrum Analyzer	Agilent	N9020A	CTA-301	LISAI	2025/07/30	2026/07/29
2	Vector Signal generator	Agilent	N5182A	CTA-305	LISAI	2025/07/30	2026/07/29
3	Spectrum analyzer	R&S	FSV40-N	CTA-344	LISAI	2025/05/17	2026/05/16
4	Power Meter	R&S	NRVS	CTA-354	LISAI	2025/07/30	2026/07/29
5	DC Power Supply	LongWei	LW-K3010D	CTA-033	LISAI	2025/07/30	2026/07/29
6	Oscilloscope	Tektronix	TDS3052	CTA-010	LISAI	2025/07/30	2026/07/29
7	Automatic control unit	Tonscend	JS0806-2	CTA-351	LISAI	2025/07/30	2026/07/29

Cal. Institution: LiSai-Guangzhou LiSai Calibration and Testing Co.,LTD.

Calibration by the calibration agencies listed in the table correspond to paragraph 4 (ii) (c) of Article 24-2 in the Radio Law".

☐ (a) Calibration conducted by the National Institute of Information and Communications Technology (NICT) or a designated calibration agency under Article 102-18-1 of the Radio Act.

☐ (b) Calibration conducted based on the regulations of Article 135 or 144 of the Measurement Act.

☒ (c) Calibration conducted in foreign countries, which is equivalent to calibration conducted by the NICT or a designated calibration agency under Article 102-18-1 of the Radio Act.

☐ (d) Calibration, etc. conducted by using measuring instruments and other facilities listed at the bottom of appended table 3 of the Radio Act, which is to have been calibrated as described in (a) through (c) above.

2.6 Table for Parameters of Test Software Setting

During testing, Channel & Power Controlling Software provided by the customer was used to control the operating channel as well as the output power level. The RF output power selection is for the setting of RF output power expected by the customer and is going to be fixed on the firmware of the final end product.

Power Parameters:

W52			
Test Software Version	IPOP		
Frequency (MHz)	5180	5200	5240
IEEE 802.11a	Default	Default	Default
IEEE 802.11n HT20	Default	Default	Default
IEEE 802.11ac VHT20	Default	Default	Default
IEEE 802.11ax HE20	Default	Default	Default
Frequency (MHz)	5190	5230	
IEEE 802.11n HT40	Default	Default	
IEEE 802.11ac VHT40	Default	Default	
IEEE 802.11ax HE40	Default	Default	

W53			
Test Software Version	IPOP		
Frequency (MHz)	5260	5300	5320
IEEE 802.11a	Default	Default	Default
IEEE 802.11n HT20	Default	Default	Default
IEEE 802.11ac VHT20	Default	Default	Default
IEEE 802.11ax HE20	Default	Default	Default
Frequency (MHz)	5270	5310	
IEEE 802.11n HT40	Default	Default	
IEEE 802.11ac VHT40	Default	Default	
IEEE 802.11ax HE40	Default	Default	

W56			
Test Software Version	IPOP		
Frequency (MHz)	5500	5600	5700
IEEE 802.11a	Default	Default	Default
IEEE 802.11n HT20	Default	Default	Default
IEEE 802.11ac VHT20	Default	Default	Default
IEEE 802.11ax HE20	Default	Default	Default
Frequency (MHz)	5510	5590	5670
IEEE 802.11n HT40	Default	Default	Default
IEEE 802.11ac VHT40	Default	Default	Default
IEEE 802.11ax HE40	Default	Default	Default

2.7 Test Voltage

POWER SUPPLY VOLTAGE FLUCTUATION TEST

Voltage Fluctuation Test	Normal Voltage	High Voltage +10% of Normal Voltage	Low Voltage -10% of Normal Voltage
Input To EUT	AC 100V	AC 110V	AC 90V
Output To RF Module	DC 3.30V	DC 3.30V	DC 3.30V
Voltage Variation (%)	--	--	--

Note:

Voltage Variation (%)

= (Output high or Low Voltage - Output Normal Voltage) / Output Normal Voltage * 100

During the input supply voltage to the EUT from the external power source is varied by +/- 10%, if output voltage had been confirmed that the fluctuation of power supply to the RF circuit of EUT (excluding power source) is equal to or less than +/-1%. Exempt extremely high and low supply voltage condition test, EUT only operated in normal voltage to test all regulations.

The sample power supply was confirmed that input voltage variation at the radio unit in the radio equipment to be tested is less than +1% against a variation of +10% at the input voltage from the external power supply to the radio equipment, and the radio equipment was designed so as to be operated in a specified voltage variation limit within +10%, Radio can only tested at rated voltage.

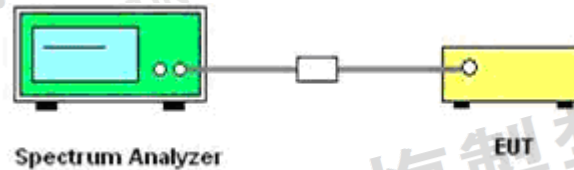
3 Test conditions and Results

3.1 Frequency Error

LIMIT

Tolerance of frequency shall be $\pm 20 \times 10^{-6}$.

TEST CONFIGURATION



TEST PROCEDURE

The EUT was directly connected to the spectrum analyser and antenna output port as show in the block diagram as TEST CONFIGURATION shows.

EUT Condition: non-modulation

Spectrum Condition:

Frequency: test frequency

Span: 1 MHz

RBW: 10 KHz

VBW: 10 KHz

Sweep time: Auto

Detector mode: Positive peak

Indication mode: max hold

TEST RESULTS

Please refer to the Appendix D.1.

Please refer to the Appendix E.1.

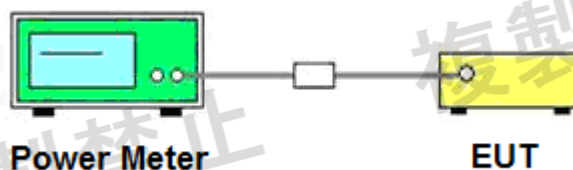
Please refer to the Appendix F.1.

3.2 Antenna Output Power and Output Power Tolerance

LIMIT

Operation Band	Item		20MHz system		40MHz system	80MHz system	160MHz system
W52 & W53	Antenna Power		DSSS, etc	OFDM	OFDM	OFDM	OFDM
			10mW/MHz	10mW/MHz	5mW/MHz	2.5mW/MHz	1.25mW/MHz
	Antenna power Tolerance		+20%, -80%				
	EIRP	W52	10mW/MHz		5mW/MHz	2.5mW/MHz	1.25mW/MHz
W56	Antenna Power	W53	10mW/MHz: with TPC 5mW/MHz: without TPC		5mW/MHz: with TPC 2.5mW/MHz: without TPC	2.5mW/MHz: with TPC 1.25mW/MHz: without TPC	1.25mW/MHz: with TPC 0.625mW/MHz: without TPC
	Antenna power Tolerance		+50%, -50%				
	EIRP		50mW/MHz: with TPC 25mW/MHz: without TPC		25mW/MHz: with TPC 12.5mW/MHz: without TPC	12.5mW/MHz: with TPC 6.25mW/MHz: without TPC	6.25mW/MHz: with TPC 3.125mW/MHz: without TPC

TEST CONFIGURATION



TEST PROCEDURE

- EUT have transmitted continuous maximum power
- Antenna Power Error is definition that actual measure antenna power tolerance between +20% to -80% power range that base on manufacturer Marlare the conducted power density.

TEST RESULTS

Please refer to the Appendix D.2.

Please refer to the Appendix E.2.

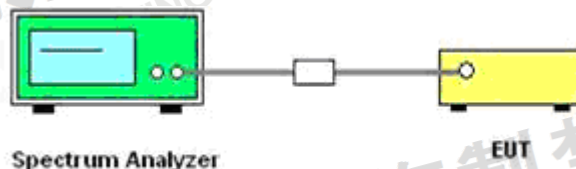
Please refer to the Appendix F.2.

3.3 Occupied Bandwidth

LIMIT

Operation Band	20MHz system		40MHz system	80MHz system	160MHz system
W52 & W53	DSSS, etc	OFDM	OFDM	OFDM	OFDM
	18MHz	19MHz	38MHz	78MHz	158MHz
W56	19.7MHz		38MHz	78MHz	158MHz

TEST CONFIGURATION



TEST PROCEDURE

The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram as TEST CONFIGURATION shows.

EUT Condition: modulation

Spectrum Condition:

1. Setting of SA is following as follow:

- RBW: under 3% of OBW
- VBW: = RBW
- Sweep time: Auto
- Sweep Mode: Continuous sweep
- Detect mode: Positive peak
- Trace mode: Max hold

2. EUT have transmitted the maximum modulation signal and fixed channelize.

3. SA set to 99% of occupied bandwidth to measure occupied bandwidth.

TEST RESULTS

Please refer to the Appendix D.3.

Please refer to the Appendix E.3.

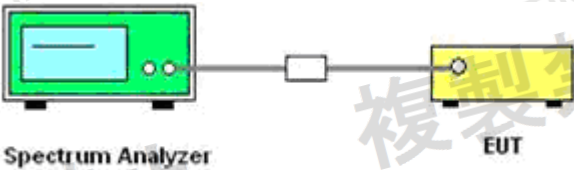
Please refer to the Appendix F.3.

3.4 Adjacent Channel Power

LIMIT

20MHz system		40MHz system	80MHz system	160MHz system
DSSS, etc	OFDM	OFDM	OFDM	OFDM
$F_c \pm 20\text{MHz}$ $\pm 9\text{MHz BW: -25dBc}$	$F_c \pm 20\text{MHz}$ $\pm 9.5\text{MHz BW: -25dBc}$	$F_c \pm 40\text{MHz}$ $\pm 19\text{MHz BW: -25dBc}$	$F_c \pm 80\text{MHz}$ $\pm 39\text{MHz BW: -20dBc}$	--
$F_c \pm 40\text{MHz}$ $\pm 9\text{MHz BW: -45dBc}$	$F_c \pm 40\text{MHz}$ $\pm 9.5\text{MHz BW: -40dBc}$	$F_c \pm 80\text{MHz}$ $\pm 19\text{MHz BW: -40dBc}$		

TEST CONFIGURATION



TEST PROCEDURE

The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram as TEST CONFIGURATION shows.

Use Spectrum’s ACP measurement function and set spectrum analyzer as follow:

Spectrum Condition:

- Frequency: test frequency
- Span: >4 times integrate bandwidth
- RBW: 300 KHz
- VBW: 300 KHz
- Sweep time: Auto
- Sweep mode: Continuous
- Detector mode: Sample
- Indication mode: max hold

TEST RESULTS

Please refer to the Appendix D.8.

Please refer to the Appendix E.8.

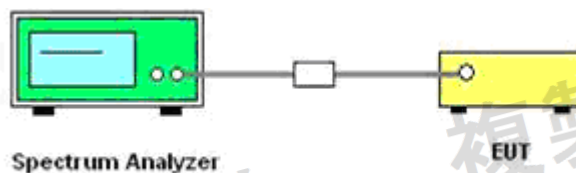
Please refer to the Appendix F.8.

3.5 Out of Band Leakage Power

LIMIT

W52	20MHz system	
	OBW: 18MHz or less	OBW:18-19MHz
	5140-5142MHz: 2.5μW/MHz 5142-5150MHz: 15μW/MHz 5250-5251MHz: $10^{1-(f-9)}\text{mW/MHz}$ 5251-5260MHz: $10^{-1-(8/90)(f-11)}\text{mW/MHz}$ 5260-5266.7MHz: $10^{-1.8-(6/50)(f-20)}\text{mW/MHz}$ 5266.7-5360MHz: 2.5μW/MHz f=MHz, Different from 5240(MHz)	5135-5142MHz: 2.5μW/MHz 5142-5150MHz: 15μW/MHz 5250-5251MHz: $10^{1-(f-9)}\text{mW/MHz}$ 5251-5260MHz: $10^{-1-(8/90)(f-11)}\text{mW/MHz}$ 5260-5266.7MHz: $10^{-1.8-(6/50)(f-20)}\text{mW/MHz}$ 5266.7-5365MHz: 2.5μW/MHz f=MHz, Different from 5240(MHz)
	40MHz system	80MHz system
	5100-5141.6MHz: 2.5μW/MHz 5141.6-5150MHz: 15μW/MHz 5250-5251MHz: $10^{-(f-20)+\log(1/2)}\text{mW/MHz}$ 5251-5270MHz: $10^{-(8/190)(f-21)-1+\log(1/2)}\text{mW/MHz}$ 5270-5278.4MHz: $10^{-(3/50)(f-40)-1.8+\log(1/2)}\text{mW/MHz}$ 5278.4-5400MHz: 2.5μW/MHz f=MHz, Different from 5230(MHz)	5020-5123.2MHz: 2.5μW/MHz 5123.2-5150MHz: 15μW/MHz 5250-5251MHz: $10^{-(f-40)+\log(1/4)}\text{mW/MHz}$ 5251-5290MHz: $10^{-(8/390)(f-41)-1+\log(1/4)}\text{mW/MHz}$ 5290-5296.7MHz: $10^{-(3/100)(f-80)-1.8+\log(1/4)}\text{mW/MHz}$ 5296.7-5480MHz: 2.5μW/MHz f=MHz, Different from 5210(MHz)

TEST CONFIGURATION



TEST PROCEDURE

Enable EUT under transmission mode and connected it to the spectrum analyzer through antenna output port as the block diagram show in TEST CONFIGURATION

Use Spectrum's ACP measurement function and set spectrum analyzer as follow:

Spectrum Condition:

Step 1:

- Frequency: include each specified frequency range
- RBW: 1 MHz
- VBW: 1 MHz
- Span: Wide enough to cover the complete power envelope of the signal of the UUT.
- Detector: Peak
- Trace Mode: Max Hold

Step 2:

When the trace is complete, find the peak value of the power envelope and record the frequency.

Step 3:

Make the following changes to the settings of the spectrum analyzer:

- Centre Frequency: Equal to the frequency recorded in step 2.
- Span: 0 Hz
- RBW: 1 MHz
- VBW: 1 MHz
- Detector: RMS
- Trace Mode: Clear Write

TEST RESULTS

Please refer to the Appendix D.9.

Please refer to the Appendix E.9.

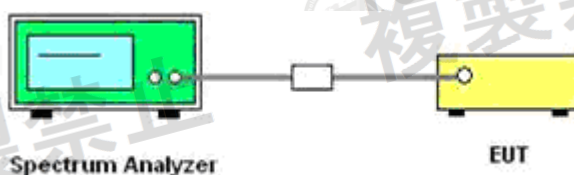
Please refer to the Appendix F.9.

3.6 Unwanted Emission Strength

LIMIT

Operation Band	20MHz system		40MHz system	80MHz system
	DSSS, etc	OFDM	OFDM	OFDM
W52 & W53	30~5,140MHz: 2.5 μ W/MHz	30~5,135MHz: 2.5 μ W/MHz	30~5,100MHz: 2.5 μ W/MHz	30~5,020MHz: 2.5 μ W/MHz
	5,360MHz~26GHz: 2.5 μ W/MHz	5,365MHz~26GHz: 2.5 μ W/MHz	5,400MHz~26GHz: 2.5 μ W/MHz	5,480MHz~26GHz: 2.5 μ W/MHz

TEST CONFIGURATION



TEST PROCEDURE

The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram as TEST CONFIGURATION shows.

EUT Condition: modulation

Spectrum Condition:

- Frequency: 30MHz-26GHz
- RBW: 1 MHz (30MHz-1GHz), 3MHz (1GHz-26GHz)
- VBW: 1 MHz (30MHz-1GHz), 3MHz (1GHz-26GHz)
- Sweep time: Auto
- Detector mode: Positive peak
- Indication mode: max hold

TEST RESULTS

Please refer to the Appendix D.5.

Please refer to the Appendix E.5.

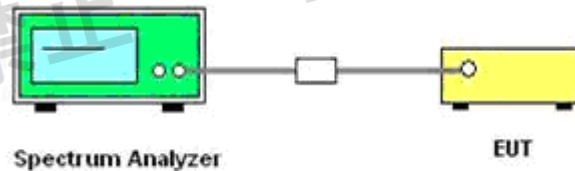
Please refer to the Appendix F.5.

3.7 Secondary Radiated Emission Strength

LIMIT

The limit on secondary emissions radiated from the receiving equipment within which the function of other radio equipment will not be impaired shall be, in terms of the power of a dummy antenna circuit that has the same electrical constant as the receiving antenna, 4nW or less at a frequency below 1 GHz and 20 nW or less at a frequency of 1 GHz or higher as measured using the circuit.

TEST CONFIGURATION



TEST PROCEDURE

The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram as TEST CONFIGURATION shows.

EUT Condition: modulation

Spectrum Condition:

- Frequency: 30MHz-26GHz
- RBW: 100 KHz (30MHz-1GHz), 1MHz (1GHz-26GHz)
- VBW: 300 KHz (30MHz-1GHz), 3MHz (1GHz-26GHz)
- Sweep time: Auto
- Detector mode: Positive peak
- Indication mode: max hold

TEST RESULTS

Please refer to the Appendix D.6.

Please refer to the Appendix E.6.

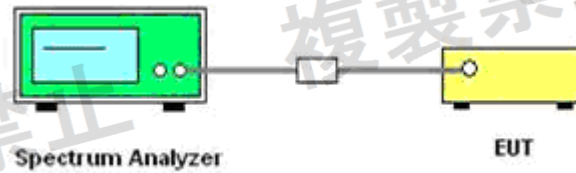
Please refer to the Appendix F.6.

3.8 Transmission Burst Length

LIMIT

Transmission Burst Length shall be 8ms or less.

TEST CONFIGURATION



TEST PROCEDURE

Enable EUT under transmission mode and connected it to the spectrum analyzer through antenna output port as the block diagram show in TEST CONFIGURATION

Use Spectrum's ACP measurement function and set spectrum analyzer as follow:

Spectrum Condition:

- Frequency: test frequency
- Span: 0Hz
- RBW: 10MHz
- VBW: =RBW
- Sweep time: Auto
- Sweep mode: single
- Detector mode: Peak
- Indication mode: max hold

TEST RESULTS

Please refer to the Appendix D.7.

Please refer to the Appendix E.7.

Please refer to the Appendix F.7.

3.9 Carrier Sensing Function

LIMIT

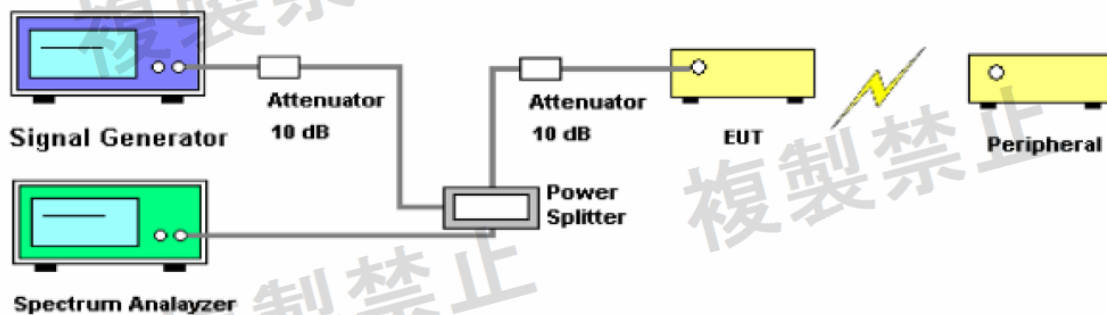
Item	Limits
Carrier Sense	Good – EUT stop RF transmission signal after carrier inject to EUT. (On $22.79 + Gr - 20 \log(f)$ [dBm] (Gr: dBi; f: MHz) or 100Mv/m)

INSTRUMENTS SETTING

The following table is the setting of spectrum analyser and receiver.

Spectrum Parameter	Setting
Attenuation	Auto
RB / VB	1 MHz
Span	0 MHz
Sweep	Continuous
Detector	Peak
Trigger mode	Video

TEST CONFIGURATION



TEST PROCEDURE

1. Set The EUT state in "normal mode link with wireless router".
2. SG adjusted the frequency as same as the EUT transmitted signal and emitted the absence of modulation from SG and power level is (on $22.79 + G - 20 \log(f)$ dBm) (G is the antenna gain is the test frequency).
3. Turn off the RF signal of the SG.
4. EUT have transmitted the maximum modulation signal and fixed channelize.
5. Setting the spectrum as follow:
RBW/VBW=1MHz/1MHz
Span=50MHz
Sweep time=auto
Sweep mode=continuous
Detect mode=positive peak
6. SG RF signal on.
7. EUT shall be stop the transmitted any signal and SG RF signal off, the EUT will be continuous transmitted signal.

TEST RESULTS

Remark: we test all modes; only worst cases were reported as below:

Test mode	Test frequency (MHz)	Interference signal level (dBm)	Test result
IEEE 802.11a	5180	-50.63	Good

3.10 Construction Protection Method

REQUIREMENT

The high-frequency section and modulation section of the radio equipment except for the antenna system shall not be capable of being opened easily.

CONFIRMATION METHOD

The RF module uses BGA encapsulation. RF and Modulation parts are mounted on PCB with surface mount technology, and there are no any adjustable parts on PCB or adjustable parts are not exposed.

3.11 Interference Prevention Function

REQUIREMENT

Clarify the one automatically to transmit and to receive identification code with the wireless equipment of the wireless station used in the same premises.

Item	Limits
Identification code	≥ 48 bits

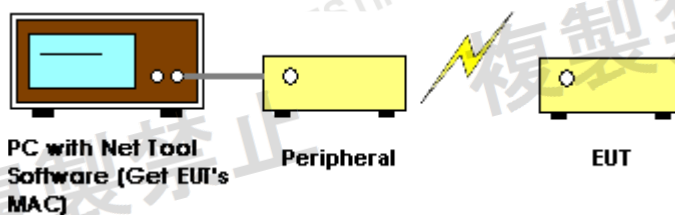
CONFIRMATION METHOD

A communication link was made where the ID code is correct (Identical).

TEST PROCEDURE

1. In the case that the EUT has the function of automatically transmitting the identification code: a. Transmit the predetermined identification codes from EUT. b. Check the transmitted identification codes with the demodulator.
2. In the case of receiving the identification code: a. Transmit the predetermined identification codes from the counterpart. b. Check if communication is normal. c. Transmit the other signals than predetermined ID codes from the counterpart. d. check if the EUT stops the transmission, or if it displays that identification codes are different from the predetermined ones.

TEST CONFIGURATION



TEST RESULTS

PASS

MAC: 40:D9:5A:A2:1B:CE

4 Test Setup Photos of the EUT

Reference to the Test Report: CTA26030902101.

5 Photos of the EUT

Reference to the Test Report: CTA26030902101.

***** End of Report *****