

FCC PART 15 TEST REPORT

No.I17Z40067-SRD05

for

TCL Communication Ltd.

GSM Quad-band/HSPA-UMTS Six-band/LTE 13-band mobile phone

With

BBB100-2

FCC ID: 2ACCJN018

Hardware Version:05

Software Version: AAJ048

Issued Date: 2017-03-30



Note:

The test results in this test report relate only to the devices specified in this report. This report shall not be reproduced except in full without the written approval of CTTL.

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REPORT HISTORY

Report Number	Revision	Description	Issue Date
I17Z40067-SRD05	Rev.0	1st edition	2017-03-16
I17Z40067-SRD06	Rev.1	Add the power result 2017-03-30	
		of 11ac-20	
		MCS8,11ac-40	
		MCS9,11ac-80 MCS9	



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1. TEST LATORATORY

1.1. Testing Location

Location 1:CTTL(huayuan North Road)

Address: No. 52, Huayuan North Road, Haidian District, Beijing,

P. R. China100191

1.2. TestingEnvironment

Normal Temperature: $15-35^{\circ}$ C Extreme Temperature: $-10/+55^{\circ}$ C Relative Humidity: 20-75%

1.3. Project data

Testing Start Date: 2016-12-28
Testing End Date: 2017-03-30

1.4. Signature

Jiang Xue

(Preparedthis test report)

Zheng Wei

(Reviewed this test report)

Lv Songdong

(Approvedthis test report)



2. CLIENT INFORMATION

2.1. Applicant Information

Company Name: TCL Communication Ltd

Address: 5F, C building, No. 232, Liang Jing Road ZhangJiang High-Tech Park,

Pudong Area Shanghai, P.R. China. 201203

City: Shanghai

Postal Code:

Country: China

Telephone: 0086-21-31363544 Fax: 0086-21-61460602

2.2. Manufacturer Information

Company Name: TCL Communication Ltd

Address: 5F, C building, No. 232, Liang Jing Road ZhangJiang High-Tech Park,

Pudong Area Shanghai, P.R. China. 201203

City: Shanghai

Postal Code: /

Country: China

Telephone: 0086-21-31363544 Fax: 0086-21-61460602



3. EQUIPMENT UNDER TEST (EUT) AND

ANCILLARYEQUIPMENT(AE)

3.1. About EUT

Description GSM Quad-band/HSPA-UMTS Six-band/LTE 13-band

mobile phone

Model name BBB100-2 FCC ID 2ACCJN018

IC ID

WLAN Frequency Range ISM Bands:

-5150MHz~5350MHz -5470MHz~5725MHz -5725MHz~5850MHz

Type of modulation OFDM

Antenna Type Integral Antenna

Antenna Gain 0.44dBi

Voltage 3.8V DC by Battery

Note: Photographs of EUT are shown in ANNEX C of this test report. Components list, please refer to documents of the manufacturer.

3.2. Internal Identification of EUT used during the test

EUT ID*	SN or IMEI	HW Version	SW Version
EUT1	1	05	AAJ048
EUT2	1	05	AAJ048

^{*}EUT ID: is used to identify the test sample in the lab internally.

3.3. Internal Identification of AE used during the test

AE ID*	Description	Туре	SN	
AE1	battery	/		1
AE2	battery	1		1
AE3	Travel charger	1		16TCT-CH-1886
AE4	Travel charger	1		16TCT-CH-1872
AE5	Travel charger	1		16TCT-CH-0005
AE6	USB Cable	1		/
AE7	USB Cable	1		1
AE10	Travel charger	1		/



AE11 Travel charger / /
AE1

Model BAT-63108-003

SN CAC3440001C3

Manufacturer ATL

Capacitance 3440 mAh

Nominal voltage 3.85V

AE2

Model TLp034E1 SN CAC3440003C1

Manufacturer BYD
Capacitance 3440 mAh
Nominal voltage 3.85V

AE3

Name CBA0060AGHC1

Model QC10US
Manufacturer BYD
Length of cable /

AE4

Name CBA0060ACHC1

Model QC10AU
Manufacturer BYD
Length of cable /

AE5

Name CBA0060AJHC1

Model QC10IN
Manufacturer BYD
Length of cable /

AE6

Model CDA0000105CF
Manufacturer LUXSHARE
Length of cable 99cm

AE7

Model CDA0000108C2 Manufacturer SHENGHUA

Length of cable 99cm

AE10

Name CBA0060AAHC1

Model QC10EU
Manufacturer BYD
Length of cable /

AE11

Name CBA0060ABHC1



Model QC10UK
Manufacturer BYD
Length of cable /

3.4. General Description

The Equipment under Test (EUT) is a model of GSM Quad-band/HSPA-UMTS Six-band/LTE 13-band mobile phone with integrated antennaand inbuilt battery.

It has Bluetooth (EDR)function.

It consists of normal options: travel charger, USB cable and Phone.

Manual and specifications of the EUT were provided to fulfil the test.

Samples undergoing test were selected by the client.

3.5. Interpretation of the Test Environment

For the test methods, the test environment uncertainty figures correspond to an expansion factor k=2.

Measurement Uncertainty

Parameter	Uncertainty
temperature	0.48°C
humidity	2 %
DC voltages	0.003V

4. REFERENCE DOCUMENTS

4.1. Documents supplied by applicant

EUT feature information is supplied by the applicant or manufacturer, which is the basis of testing.

4.2. Reference Documents for testing

The following documents listed in this section are referred for testing.

FCC Part15	Title 47 of the Code of Federal Regulations; Chapter I	2015
FCC Pail 15	Part 15 - Radio frequency devices	
	Methods of Measurement of Radio-Noise Emissions from	
ANSI C63.10	Low-Voltage Electrical and Electronic Equipment in the	2013
	Range of 9 kHz to 40 GHz	
	Guidelines for Compliance Testing of Unlicensed National	
UNII: KDB 789033	Information Infrastructure (U-NII) Devices - Part 15,	2014-06
	Subpart F	

5. LABORATORY ENVIRONMENT

Conducted RF performance testing is performed in shielding room.

EMC performance testing is performed in Semi-anechoic chamber.

^{*}AE ID: is used to identify the test sample in the lab internally.



6. SUMMARY OF TEST RESULTS

6.1. Summary of Test Results

SUMMARY OF MEASUREMENT RESULTS	Sub-clause of Part15E	Sub-clause of IC	Verdict
Maximum Output Power	15.407	/	Р
Power Spectral Density	15.407	/	Р
Occupied 26dB Bandwidth	15.403	/	Р
Band edge compliance	15.407	/	Р
Transmitter spurious emissions radiated	15.407	1	Р
Spurious emissions radiated < 30 MHz	15.407	1	Р
Spurious emissions conducted < 30 MHz	15.407	/	Р
Frequency Stability	15.407	/	NA
Transmit Power Control	15.407	1	NA

Please refer to **ANNEX A** for detail.

Terms used in Verdict column

Р	Pass, The EUT complies with the essential requirements in the standard.	
NM	Not measured, The test was not measured by CTTL	
NA	Not Applicable, The test was not applicable	
F	Fail, The EUT does not comply with the essential requirements in the	
	standard	

6.2. Statements

CTTL has evaluated the test cases requested by the client/manufacturer as listed in section 6.1 of this report for the EUT specified in section 3 according to the standards or reference documents listed in section 4.1.

This report only deals with the WLAN function among the features described in section 3.

This model is a variant product which model name is BBB100-1; all the test results have been derived from test report of BBB100-1.

6.3. Test Conditions

For this report, all the test cases are tested under normal temperature and normal voltage, and also under norm humidity, the specific condition is shown as follows:

Temperature	T nom	26℃
Voltage	V nom	3.8V (By battery)
Humidity	H nom	44%



7. TEST EQUIPMENTS UTILIZED

Conducted test system

No.	Equipment	Model	Serial Number	Manufacturer	Calibration date	Calibration Due date						
1	Vector Signal Analyzer	FSQ40	200089	Rohde & Schwarz	2016-06-07	2017-06-06						
2	Test Receiver	ESCI	100948	Rohde & Schwarz	1 year	2017-07-05						
3	LISN	ENV216	101200	Rohde & Schwarz	1 year	2017-07-10						
4	Shielding Room	S81	/	ETS-Lindgren	1	1						

Radiated emission test system

No.	Equipment	Model	Serial Number	Manufacturer	Calibration date	Calibratio n Due date
1	Test Receiver	ESU26	100235	Rohde & Schwarz	2016-03-03	2017-03-02
2	Loop antenna	HFH2-Z2	829324/007	Rohde & Schwarz	2014-12-17	2017-12-16
3	BiLog Antenna	VULB9163	301	Schwarzbeck	2014-12-17	2017-12-16
4	Dual-Ridge Waveguide Horn Antenna	3115	6914	EMCO	2014-12-16	2017-12-15
5	Dual-Ridge Waveguide Horn Antenna	3116	2661	ETS-Lindgren	2014-06-18	2017-06-17
6	Vector Signal Analyzer	FSV40	101047	Rohde & Schwarz	2016-06-29	2017-06-28
7	Semi-anechoic chamber	1	CT000332-1 074	Frankonia German	1	1

Test Item	Test Software and Version	Software Vendor
Radiated Continuous Emission	EMC32 V8.40.0	R&S
Conducted Continuous Emission	EMC32 V8.52.0	R&S



8. Measurement Uncertainty

8.1. <u>Transmitter Output Power</u>

Measurement Uncertainty: 0.339dB,k=1.96

8.2. Peak Power Spectral Density

Measurement Uncertainty: 0.705dBm/MHz,k=1.96

8.3. Occupied Channel Bandwidth

Measurement Uncertainty: 60.80Hz,k=1.96

8.4. Band Edges Compliance

Measurement Uncertainty: 0.62dBm,k=1.96

8.5. Spurious Emissions

Conducted(k=1.96)

FrequencyRange	Uncertainty(dBm)
30MHz ≤ f ≤ 2GHz	1.22
2GHz ≤ f ≤3.6GHz	1.22
3.6GHz ≤ f ≤8GHz	1.22
8GHz ≤ f ≤12.75GHz	1.51
12.75GHz ≤ f ≤26GHz	1.51
26GHz ≤ f ≤40GHz	1.59

Radiated(k=2)

FrequencyRange	Uncertainty(dBm)
9kHz-30MHz	3.94
30MHz ≤ f ≤ 1GHz	4.86
1GHz ≤ f ≤18GHz	5.26
18GHz ≤ f ≤40GHz	5.28

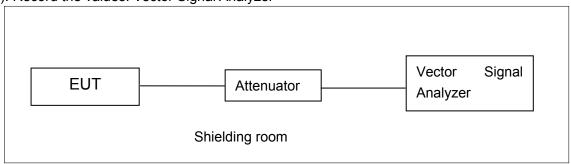


ANNEX A: MEASUREMENT RESULTS

A.1. Measurement Method

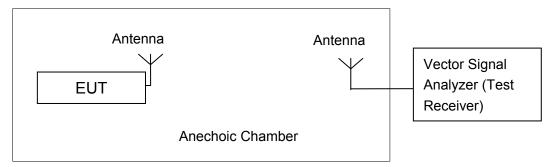
A.1.1. Conducted Measurements

- 1). Connect the EUT to the test system correctly.
- 2). Set the EUT to the required work mode.
- 3). Set the EUT to the required channel.
- 4). Set the spectrum analyzer to start measurement.
- 5). Record the values. Vector Signal Analyzer



A.1.2. Radiated Emission Measurements

In the case of radiated emission, the used settings are as follows, Sweep frequency from 30 MHz to 1GHz, RBW = 100 kHz, VBW = 300 kHz; Sweep frequency from 1 GHz to 26GHz, RBW = 1MHz, VBW = 10Hz;



The measurement is made according to KDB 789033

The radiated emission test is performed in semi-anechoic chamber. The distance from the EUT to the reference point of measurement antenna is 3m. The test is carried out on both vertical and horizontal polarization and only maximization result of both polarizations is kept. During the test, the turntable is rotated 360° and the measurement antenna is moved from 1m to 4m to get the maximization result.



A.2. Maximum output Power

Measurement Limit and Method:

Standard	Frequency (MHz)	Limit (dBm)		
	5150MHz~5250MHz	24dBm		
FCC CRF Part 15.407(a)	5250MHz~5350MHz	24dBm or 11+10logB		
	5470MHz~5725MHz	24dBm or 11+10logB		

Limit use the less value, and B is the 26dB bandwidth.

Method of Measurement: See ANSI C63.10-2013-clause 12.3.2.2.

- a) Set span to encompass the entire 26 dB EBW or 99% OBW of the signal.
- b) Set RBW = 1 MHz.
- c) Set VBW ≥3 MHz.
- d) Number of points in sweep \ge [2 \times span / RBW]. (This gives bin-to-bin spacing \le RBW / 2, so that narrowband signals are not lost between frequency bins.)
- e) Sweep time = auto.
- f) Detector = RMS (i.e., power averaging), if available. Otherwise, use sample detector mode.
- g) If transmit duty cycle < 98%, use a video trigger withthe trigger level set to enable triggering only on full power pulses. The transmitter shall operate at maximum power control level for the entire duration of every sweep. If the EUT transmits continuously (i.e., with no OFFintervals) or at duty cycle \geq 98%, and if each transmission is entirely at the maximum power control level, then the trigger shall be set to "free run."
- h) Trace average at least 100 traces in power averaging (rms) mode.
- i) Compute power by integrating the spectrum across the 26 dB EBW or 99% OBW of the signal using the instrument's band power measurement function, with band limits set equal to the EBW or OBW band edges. If the instrument does not have a band power function, then sum the spectrum levels (in power units) at 1 MHz intervals extending across the 26 dB EBW or 99% OBW of the spectrum.

Measurement Results:

802.11a mode

		Test Result (dBm)											
Mode	Channel	Data Rate (Mbps)											
		6	9	12	18	24	36	48	54				
	5180MHz (Ch36)	18.55	18.39	18.10	18.04	18.01	18.00	17.49	17.48				
	5200MHz (Ch40)	18.34	/	/	/	/	/	/	/				
	5240MHz(Ch48)	18.68	/	/	/	/	/	/	/				
	5260MHz(Ch52)	18.64	/	/	/	/	/	/	/				
802.11a	5280MHz(Ch56)	18.55	/	/	/	/	/	/	/				
	5320MHz(Ch64)	18.96	/	/	/	/	/	/	/				
	5500MHz(Ch100)	18.36	/	/	/	/	/	/	/				
	5580MHz(Ch116)	18.40	/	/	/	/	/	/	/				
	5700MHz(Ch140)	17.03	1	1	/	/	/	1	/				

The data rate 6Mbpsis selected as worse condition, and the following cases are performed with this condition.



802.11n-HT20 mode

		Test Result (dBm)										
Mode	Channel	Data Rate										
		MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7			
	5180MHz (Ch36)	18.56	18.54	18.52	17.60	17.55	17.52	16.53	16.44			
	5200MHz (Ch40)	18.47	/	/	/	/	/	/	/			
	5240MHz(Ch48)	18.67	/	/	/	/	/	/	/			
000 44 =	5260MHz(Ch52)	18.66	/	/	/	/	/	/	/			
802.11n (HT20)	5280MHz(Ch56)	18.65	/	/	/	/	/	/	/			
(1120)	5320MHz(Ch64)	18.94	/	/	/	/	/	/	/			
	5500MHz(Ch100)	18.44	/	/	/	/	/	/	/			
	5580MHz(Ch116)	18.45	/	/	/	/	/	/	/			
	5700MHz(Ch140)	17.08	/	1	/	/	1	/	/			

The data rate MCS0 is selected as worse condition, and the following cases are performed with this condition.

802.11ac-HT20 mode

					Test Res	ult (dBm)			
Mode Channel Data Rate										
		MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8
	5180MHz (Ch36)	18.52	18.46	18.47	17.54	17.53	17.49	16.34	16.31	15.09
	5200MHz (Ch40)	18.40	/	/	/	/	/	/	/	/
	5240MHz(Ch48)	18.58	/	/	/	/	/	/	/	/
802.11a	5260MHz(Ch52)	18.64	/	/	/	/	/	/	/	/
С	5280MHz(Ch56)	18.62	/	/	/	/	/	/	/	/
(HT20)	5320MHz(Ch64)	18.95	/	/	/	/	/	/	/	/
	5500MHz(Ch100)	18.41	/	/	/	/	/	/	/	/
	5580MHz(Ch116)	18.51	/	/	/	/	/	/	/	/
	5700MHz(Ch140)	17.10	1	1	/	/	/	/	/	/

The data rate MCS0 is selected as worse condition, and the following cases are performed with this condition.

802.11n-HT40 mode

		Test Result (dBm)										
Mode	Channel	Data Rate										
		MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7			
	5190MHz (Ch38)	19.16	19.04	19.02	18.19	18.06	18.04	17.01	16.97			
	5230MHz(Ch46)	19.15	/	/	/	/	/	/	/			
000 115	5270MHz(Ch54)	19.39	/	/	/	/	/	/	/			
802.11n	5310MHz(Ch62)	19.71	/	/	/	/	/	/	/			
(HT40)	5510MHz(Ch102)	19.30	/	/	/	/	/	/	/			
	5550MHz(Ch110)	19.35	/	/	/	/	/	/	/			
	5670MHz(Ch134)	18.12	1	/	/	/	/	/	1			



The data rate MCS0 is selected as worse condition, and the following cases are performed with this condition.

802.11ac-HT40 mode

			Test Result (dBm)												
Мо	Channel	Data Rate													
de	Chamer	MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS				
		MCSU	IVICST	IVICSZ	IVICOO	IVICOT	IVICOO	WCGO			9				
	5190MHz (Ch38)	19.07	19.01	18.99	18.89	18.11	18.05	17.12	16.99	14.81	12.61				
802	5230MHz(Ch46)	19.25	/	/	/	/	/	/	/	/	/				
.11	5270MHz(Ch54)	19.37	/	/	/	/	/	/	/	/	/				
ac	5310MHz(Ch62)	19.64	/	/	/	/	/	/	/	/	/				
(HT	5510MHz(Ch102)	19.35	/	/	/	/	/	/	/	/	/				
40)	5550MHz(Ch110)	19.38	/	/	/	/	/	/	/	/	/				
	5670MHz(Ch134)	18.10	1	1	1	1	1	1	1	1	1				

The data rate MCS0 is selected as worse condition, and the following cases are performed with this condition.

802.11ac-HT80 mode

					Te	st Res	ult (dBı	m)						
Mode	Channel		Data Rate											
Wode	Chamie	MC	MC	MC	MC	MC	MC	MC	MC	MC	MC			
		S0	S1	S2	S3	S4	S5	S6	S7	S8	S9			
	5210MHz(Ch	18.5	18.4	18.3	17.4	17.3	17.2	16.3	16.2	16.2	15.1			
	42)	2	7	6	5	0	6	1	9	1	5			
802.	5290MHz(Ch	18.7	/	/	/	/	/	/	/	/	/			
11ac	58)	9												
(HT8	5530MHz(Ch	18.6	/	/	/	/	/	/	/	/	/			
0)	106)	0												
	5610MHz(Ch	18.3	/	/	/	/	/	/	/	/	/			
	122)	4												

The data rate MCS0 is selected as worse condition, and the following cases are performed with this condition.



A.3. Peak Power Spectral Density (conducted)

Measurement Limit:

Standard	Frequency (MHz)	Limit (dBm/MHz)
FCC CRF Part 15.407(a)	5150MHz~5250MHz	11
	5250MHz~5350MHz	11
	5470MHz~5725MHz	11

Method of Measurement: See ANSI C63.10-2013-clause 12.5.

- a) Create an average power spectrumfor the EUT operating mode being tested by following the instructions in 12.3.2 for measuring maximum conducted output power using a spectrum analyzer or EMI receiver; that is, select the appropriate test method (SA-1, SA-2, SA-3, or their respective alternatives) and apply it up to, but not including, the step labeled, "Computepower...." (This procedure is required evenif the maximum conducted output power measurement was performed using the power meter method PM.)
- b) Use the peak search function on the instrument to find the peak of the spectrum.
- c) Make the following adjustments to the peak value of the spectrum.
- d) The result is the PPSD.
- e) The procedure in item a)through item c) requires the use of 1 MHz resolution bandwidth to satisfy the 1 MHz measurement bandwidth specified by some regulatory authorities. This requirement also permits use of resolution bandwidths less than 1 MHz "provided that the measured power is integrated to show the total power over the measurement bandwidth" (i.e., 1 MHz).

Measurement Results:

weasurement results.				
Mode	Channel	Power Spectral Density (dBm/MHz)	Conclusion	
	5180 MHz	1.70	Р	
	5200 MHz	1.90	Р	
	5240 MHz	3.91	Р	
	5260 MHz	4.28	Р	
802.11a	5280 MHz	5.27	Р	
	5320 MHz	6.16	Р	
	5500 MHz	4.89	Р	
	5580 MHz	4.41	Р	
	5700 MHz	5.46	Р	
	5180 MHz	1.45	Р	
802.11n	5200 MHz	1.43	Р	
HT20	5240 MHz	3.59	Р	
	5260 MHz	4.00	Р	



	5280 MHz	4.99	Р
	5320 MHz	5.96	Р
	5500 MHz	4.65	Р
	5580 MHz	4.34	Р
	5700 MHz	5.03	Р
	5180 MHz	1.36	Р
	5200 MHz	1.58	Р
	5240 MHz	3.69	Р
000.44	5260 MHz	4.00	Р
802.11ac	5280 MHz	5.14	Р
HT20	5320 MHz	5.91	Р
	5500 MHz	4.66	Р
	5580 MHz	4.36	Р
	5700 MHz	4.76	Р
	5190 MHz	-1.26	Р
	5230 MHz	0.37	Р
000.44	5270 MHz	1.83	Р
802.11n	5310 MHz	2.78	Р
HT40	5510 MHz	1.35	Р
	5550 MHz	0.92	Р
	5670 MHz	1.34	Р
	5190 MHz	-1.43	Р
	5230 MHz	0.36	Р
000.44	5270 MHz	1.79	Р
802.11ac	5310 MHz	2.79	Р
HT40	5510 MHz	1.31	Р
	5550 MHz	0.82	Р
	5670 MHz	1.56	Р
	5210MHz	-3.02	Р
802.11ac	5290MHz	0.09	Р
HT80	5530MHz	-0.39	Р
	5610MHz	-0.81	Р
		A	

Conclusion: PASS



A.4. 26dBc Bandwidth (conducted)

Measurement Limit:

Standard	Limit (kHz)
FCC 47 CFR Part 15.403 (i)	/

Method of Measurement: See ANSI C63.10-2013-clause 12.4.1.

Measurement Uncertainty:

Measurement Uncertainty	60.80Hz
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Measurement Result:

Mode	Channel	Occupied 260 (M	conclusion	
	5180 MHz	Fig.1	32.90	Р
	5200 MHz	Fig.2	33.75	Р
	5240 MHz	Fig.3	32.80	Р
	5260 MHz	Fig.4	37.75	Р
802.11a	5280 MHz	Fig.5	39.95	Р
	5320 MHz	Fig.6	37.05	Р
	5500 MHz	Fig.7	41.04	Р
	5580 MHz	Fig.8	32.30	Р
	5700 MHz	Fig.9	23.85	Р
	5180 MHz	Fig.10	31.00	Р
	5200 MHz	Fig.11	35.75	Р
	5240 MHz	Fig.12	37.15	Р
802.11n	5260 MHz	Fig.13	42.00	Р
HT20	5280 MHz	Fig.14	40.30	Р
H120	5320 MHz	Fig.15	39.10	Р
	5500 MHz	Fig.16	43.75	Р
	5580 MHz	Fig.17	30.05	Р
	5700 MHz	Fig.18	25.25	Р
	5180 MHz	Fig.19	30.30	Р
	5200 MHz	Fig.20	31.10	Р
802.11ac	5240 MHz	Fig.21	30.95	Р
802.11ac HT20	5260 MHz	Fig.22	33.40	Р
11120	5280 MHz	Fig.23	33.55	Р
	5320 MHz	Fig.24	32.95	Р
	5500 MHz	Fig.25	42.35	Р



	5580 MHz	Fig.26	30.55	Р
	5700 MHz	Fig.27	24.00	Р
	5190 MHz	Fig.28	62.96	Р
	5230 MHz	Fig.29	51.76	Р
802.11n	5270 MHz	Fig.30	70.32	Р
602.1111 HT40	5310 MHz	Fig.31	60.16	Р
П140	5510 MHz	Fig.32	77.44	Р
	5550 MHz	Fig.33	69.60	Р
	5670 MHz	Fig.34	45.92	Р
	5190 MHz	Fig.35	45.92	Р
	5230 MHz	Fig.36	49.44	Р
000 1100	5270 MHz	Fig.37	60.72	Р
802.11ac	5310 MHz	Fig.38	49.84	Р
HT40	5510 MHz	Fig.39	69.92	Р
	5550 MHz	Fig.40	57.52	Р
	5670 MHz	Fig.41	45.68	Р
	5210MHz	Fig.42	93.28	Р
802.11ac HT80	5290MHz	Fig.43	89.60	Р
	5530MHz	Fig.44	112.16	Р
	5610MHz	Fig.45	86.24	Р

Conclusion: PASS
Test graphs as below:

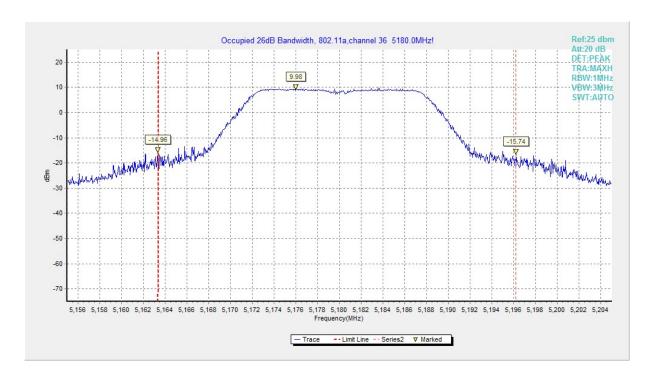


Fig. 1 Occupied 26dB Bandwidth (802.11a, 5180MHz)



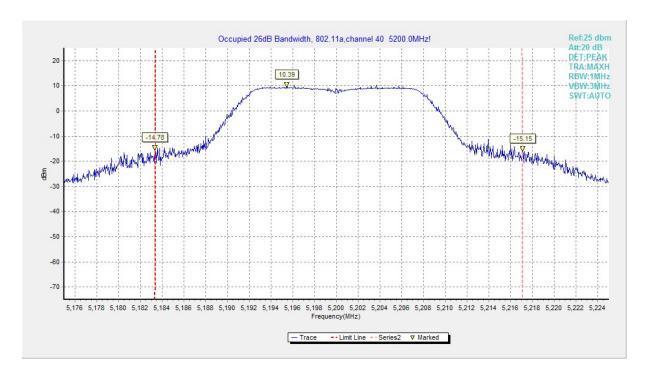


Fig. 2 Occupied 26dB Bandwidth (802.11a, 5200MHz)

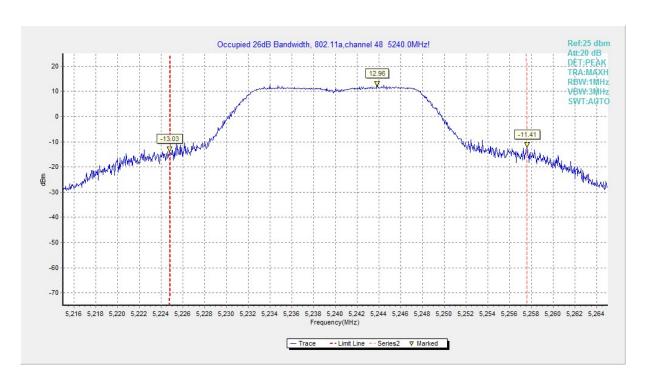


Fig. 3 Occupied 26dB Bandwidth (802.11a, 5240MHz)



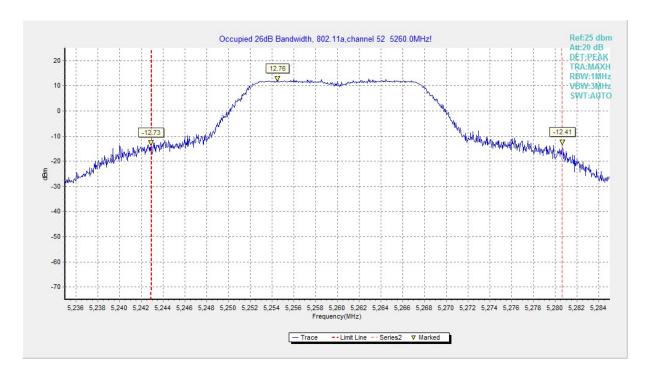


Fig. 4 Occupied 26dB Bandwidth (802.11a, 5260MHz)

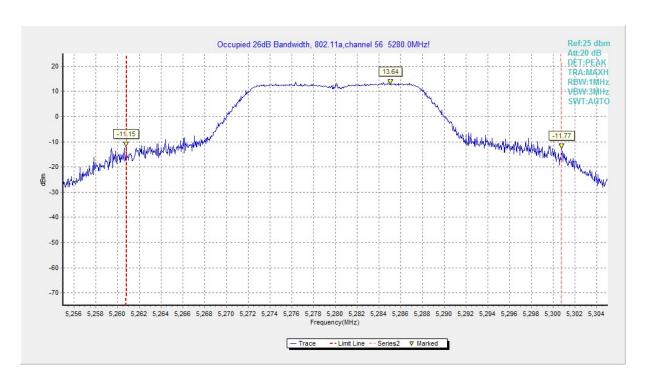


Fig. 5 Occupied 26dB Bandwidth (802.11a, 5280MHz)



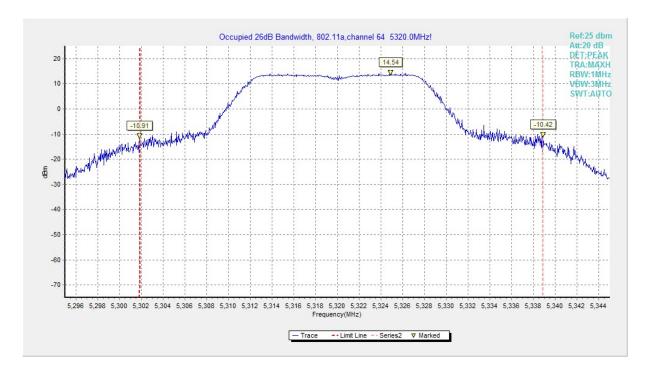


Fig. 6 Occupied 26dB Bandwidth (802.11a, 5320MHz)

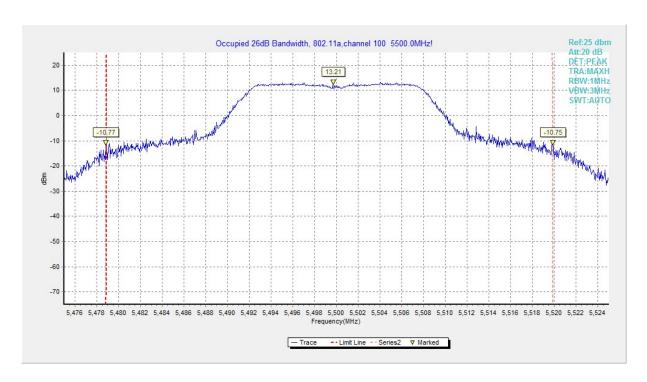


Fig. 7 Occupied 26dB Bandwidth (802.11a, 5500MHz)



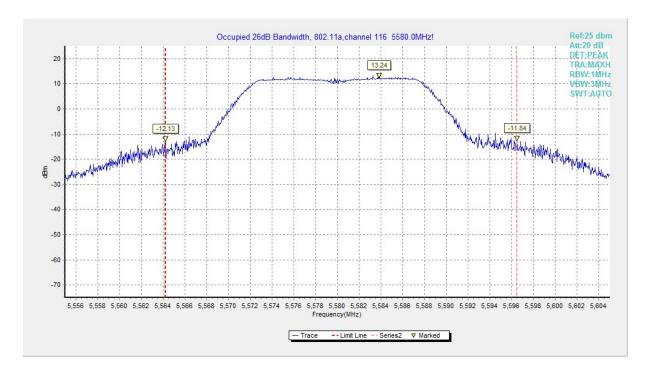


Fig. 8 Occupied 26dB Bandwidth (802.11a, 5580MHz)

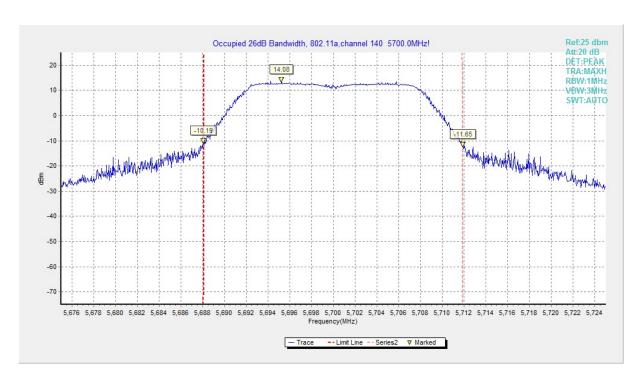


Fig. 9 Occupied 26dB Bandwidth (802.11a, 5700MHz)



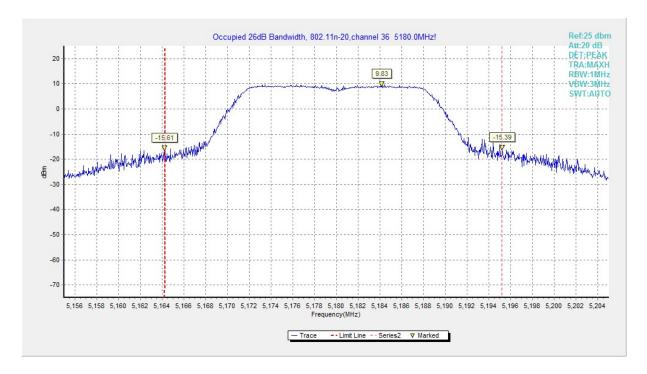


Fig. 10 Occupied 26dB Bandwidth (802.11n-HT20, 5180MHz)

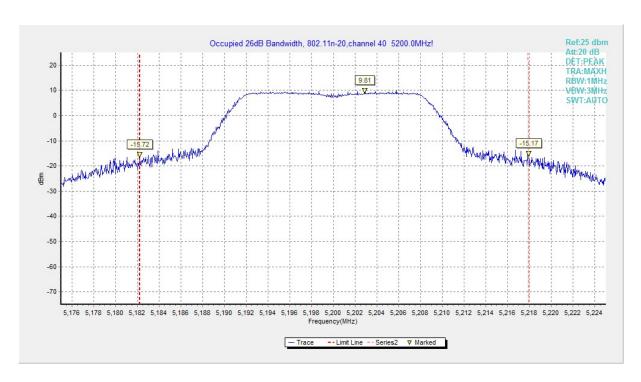


Fig. 11 Occupied 26dB Bandwidth (802.11n-HT20, 5200MHz)



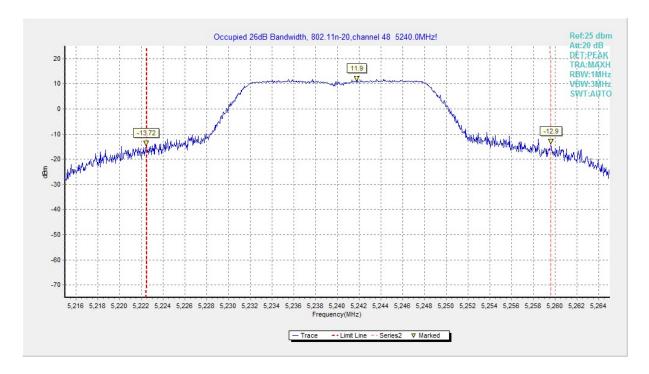


Fig. 12 Occupied 26dB Bandwidth (802.11n-HT20, 5240MHz)

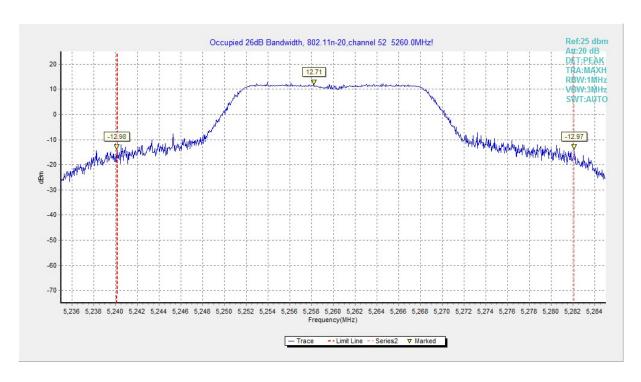


Fig. 13 Occupied 26dB Bandwidth (802.11n-HT20, 5260MHz)



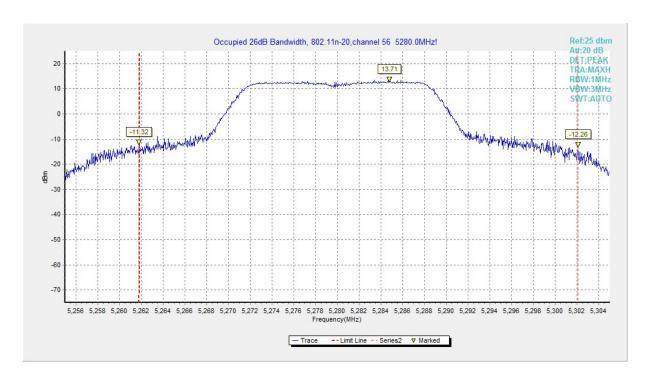


Fig. 14 Occupied 26dB Bandwidth (802.11n-HT20, 5280MHz)

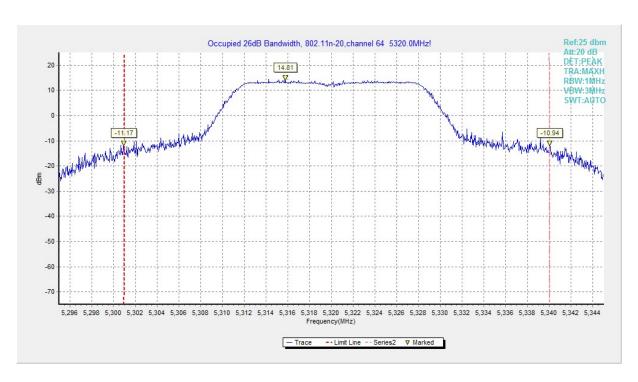


Fig. 15 Occupied 26dB Bandwidth (802.11n-HT20, 5320MHz)



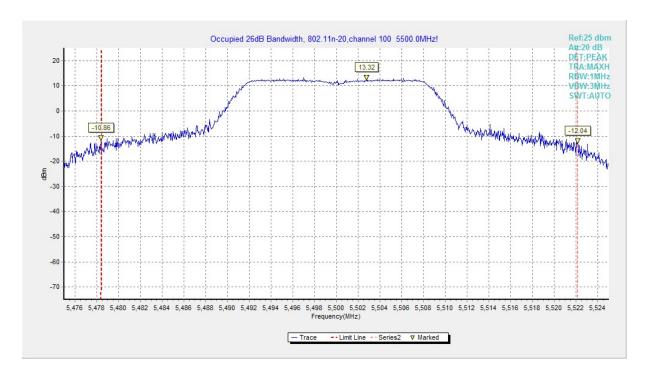


Fig. 16 Occupied 26dB Bandwidth (802. 11n-HT20, 5500MHz)

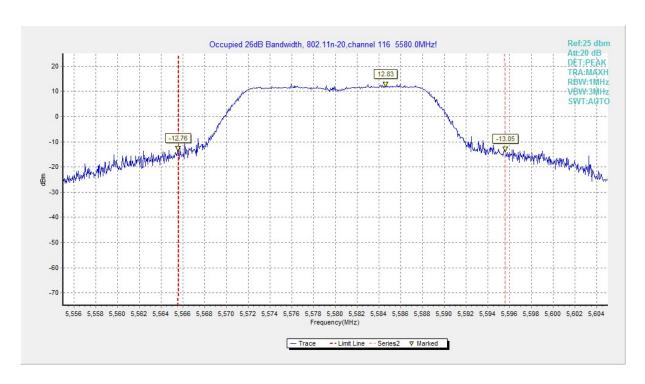


Fig. 17 Occupied 26dB Bandwidth (802. 11n-HT20, 5580MHz)



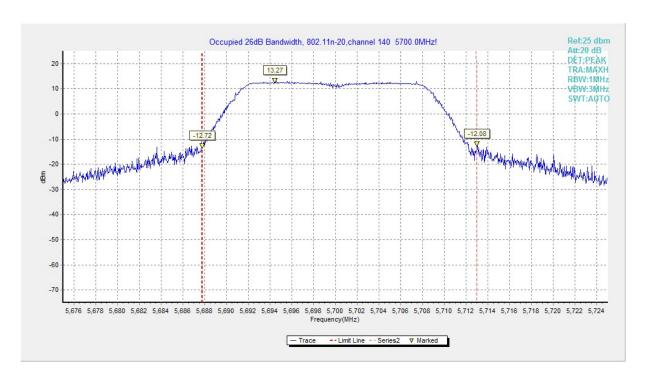


Fig. 18 Occupied 26dB Bandwidth (802. 11n-HT20, 5700MHz)



Fig. 19 Occupied 26dB Bandwidth (802.11ac-HT20, 5180MHz)