

# TEST REPORT

REPORT NUMBER: I20W00023-WWAN\_Rev1

ON

**Type of Equipment:** IoT Module  
**Model Name:** L710HG  
**Manufacturer:** Shanghai MobileTek Communication Ltd.

## ACCORDING TO

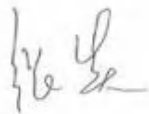
FCC CFR Part 2, FREQUENCY ALLOCATIONS AND RADIO TREATY MATTERS; GENERAL RULES AND REGULATIONS, e-CFR, 2019  
PART 22, PUBLIC MOBILE SERVICES, e-CFR, 2019  
PART 24, PERSONAL COMMUNICATIONS SERVICES, e-CFR, 2019  
PART 27, MISCELLANEOUS WIRELESS COMMUNICATIONS SERVICES, e-CFR, 2019  
PART 90, PRIVATE LAND MOBILE RADIO SERVICES, e-CFR, 2019  
ANSI C63.26-2015

Chongqing Academy of Information and Communications Technology

*Month date, year*

Jan, 19, 2021

Signature



**Zhang Yan**  
**Director**

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 Chongqing Academy of Information and Communications Technology.



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**Revision Version**

<b>Report Number</b>	<b>Revision</b>	<b>Date</b>	<b>Memo</b>
<b>I20W00023</b>	<b>V0.0</b>	<b>2021-01-12</b>	--
<b>I20W00023</b>	<b>V1.0</b>	<b>2021-01-19</b>	--

**Chongqing Academy of Information and Communication Technology**

Address: No. 8, Yuma Road, Chayuan New City, Nan'an District, Chongqing, P. R. China, 401336  
Tel: 0086-23-88069965 FAX: 0086-23-88608777



**Report No.: I20W00023-WWAN\_Rev1**

**FCC ID:** 2AK9D-L710HG

**Report Date:** 2021-01-19

**Test Firm Name:** Chongqing Academy of Information and Communications Technology

**FCC Registration Number:** CN1239

**Statement**

The measurements shown in this report were made in accordance with the procedures described on test pages. All reported tests were carried out on a sample equipment to demonstrate limited compliance with FCC CFR 47 Parts 2, 22, 24, 27,90,The sample tested was found to comply with the requirements defined in the applied rules.

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## **1 General Information**

### **1.1 Notes**

All reported tests were carried out on a sample equipment to demonstrate limited compliance with FCC CFR 47 Parts 2, 22, 24, 27,90.

The test results of this test report relate exclusively to the item(s) tested as specified in section 2.

The following deviation from, additions to, or exclusions from the test specifications have been made. See Annex B.

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**1.2 Testers**

Name: Zhang qinghao  
Position: Engineer  
Department: Department of RF test  
Date: 2020-12-16 to 2021-01-12

Signature: 

Editor of this test report:

Name: Chen Wen  
Position: Engineer  
Department: Department of RF test  
Date: 2021-01-19

Signature: 

Technical responsibility for area of testing:

Name: Zhang Yan  
Position: Manager  
Department: Director of the laboratory  
Date: 2021-01-19

Signature: 

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**1.3 Testing Laboratory information**

1.3.1 Location

Name: Chongqing Academy of Information and Communications Technology  
Address: No. 8, Yuma Road, Chayuan New City, Nan'an District, Chongqing, P. R. China  
4th Floor, Block B1-3, 19 East Road, XTB Valley, Yubeu District, Chongqing, P. R. China  
Postal Code: 401336  
Tel: +86-23-88069965  
Fax: +86-23-88608777  
Email: liqiao@caict.ac.cn

1.3.2 Test location, where different from section 1.3.1

Name: -----  
Street: -----  
City: -----  
Country: -----  
Telephone: -----  
Fax: -----  
Postcode: -----

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**1.4 Details of applicant or manufacturer**

1.4.1 Applicant

Name: Shanghai MobileTek Communication Ltd.  
Address: Free Trade Zone No.33, No.17 building 6H Xiya  
Road,shanghai  
Country: China  
Telephone: 18616835910  
Fax: +86-21-54451877  
Contact: bin yang  
Email: b.yang@mobiletek.cn

1.4.2 Manufacturer (if different from applicant in section 1.4.1)

Name: --  
Address: --  
Country: --  
Telephone: --  
Fax: --  
Contact: --  
Email: --



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## **2 Test Item**

### **2.1 General Information**

Manufacturer:	Shanghai MobileTek Communication Ltd.
Type of Equipment:	IoT Module
Model Name:	L710HG
Production Status:	Product
Hardware Version:	V4
Software Version:	L710v09.01b01HGN_FGP.01
Nominal Voltage:	3.8V
Extreme High Voltage:	4.2V
Extreme Low Voltage:	3.4V
Antenna type:	Single stage sub-antenna
Power class:	3
Modulation Type:	GMSK/8PSK/BPSK/QPSK/16QAM
Receipt date of test item:	2020-12-16

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**2.2 Outline of Equipment under Test**

The L710HG, referred to as “EUT” hereafter, is a multi-Band wireless module operating on the CAT-M1/NB-IoT networks. The table below shows the supported Bands for the EUT.

Technology	Band	UL Freq.(MHz)	DL Freq.(MHz)	Note
GSM	GSM850	824 – 849	869 – 894	--
	PCS1900	1850 – 1910	1930 – 1990	--
NB-IoT	Band2	1850 – 1910	1930 – 1990	--
	Band4	1710–1755	2110–2155	--
	Band5	824 – 849	869 – 894	Covered by Band26 (Band5 is a subset of Band26. Both Bands share the same hardware and have the same radio performance. Separate measurement in Band5 is not required.)
	Band12	699 – 716	729 – 746	--
	Band13	777 - 787	746 - 756	--
	Band26	814 – 849	859 – 894	--
	CAT-M	Band2	1850 – 1910	1930 – 1990
CAT-M	Band4	1710 – 1755	2110 – 2155	--
	Band5	824 – 849	869 – 894	Covered by Band26 (Band5 is a subset of Band26. Both Bands share the same hardware and have the same radio performance. Separate measurement in Band5 is not required.)
	Band12	699 – 716	729 – 746	--
	Band13	777 - 787	746 - 756	--
	Band26	814 – 849	859 – 894	--

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**2.3 Modifications Incorporated in EUT**

The EUT has not been modified from what is described by the brand name and unique type identification stated above.

**2.4 Equipment Configuration**

Equipment configuration list:

<b>Item</b>	<b>Generic Description</b>	<b>Manufacturer</b>	<b>Type</b>	<b>Serial No.</b>	<b>Remarks</b>
A	Modules	Shanghai MobileTek Communication Ltd.	L710HG	866884045632254	None
B	Adapter	Shenzhen Yiyitian Intelligent Technology Co., Ltd	YXT901-05020 00C1	--	None
C	Single-stage sub-antenna	--	5J002B	--	None

**2.5 Other Information**

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**3 Summary of Test Results**

A brief summary of the tests carried out is shown as following.

FCC Rules	Name of Test	Result
2.1046,22.913(a),24.232(c),27.50,90.635(b)	Conducted RF Power Output	Pass
24.232(b),27.50(d),27.50(h)(2),27.50(c),90.635(b)	ERP and EIRP	Pass
2.1049,22.917(b),24.238(b),90.209	Occupied Bandwidth	--
2.1051,2.1053,24.238,22.917,27.53,90.691	Conducted spurious emissions	Pass
2.1051,2.1053,24.238,22.917,27.53,90.691	Radiated Spurious Emission	Pass
2.1051,2.1053,24.238,22.917,27.53,90.691	Band Edge	Pass
2.1055,22.355,24.235,27.54,90.213	Frequency Stability over Temperature Variation	Pass
2.1055,22.355,24.235,27.54,90.213	Frequency Stability over Voltage Variation	Pass
24.232,27.50	Peak to Average Ratio	Pass
Note 1: No applicable performance criteria.		

#### 4 Test Equipments and Ancillaries Used For Tests

The test equipments and ancillaries used are as follows.

No.	Equipment	Model	SN	Manufacture	Cal. Due Date
1	EMI Test Receiver	ESU26	100367	R&S	2021-06-25
2	Loop antenna	6502	00143163	ETS	2022-01-23
3	Trilog super broadBand test antenna	VULB 9163	9163-544	R&S	2022-11-23
4	Double-Ridged Horn Antenna	HF907	100357	R&S	2021-02-22
5	Trilog super broadBand test antenna	VULB 9163	00995	R&S	2022-11-23
6	Double-Ridged Horn Antenna	HF907	100356	R&S	2021-02-22
7	Fully-Anechoic Chamber	11.8m×6.5m×6.3m	--	ETS	2022-06-25
8	Signal Generator	SMU200A	104517	R&S	2021-06-25
9	spectrum analyzer	FSQ 26	201137/026	R&S	2021-06-25
10	spectrum analyzer	N9020A	MY50200376	Agilent	2021-06-25
11	Universal Radio Communication Tester	CMU200	112012	R&S	2021-06-25
12	Climate chamber	SH-241	92010759	ESPEC	2021-06-25
13	DC Power Supply	N6705B	MY50000919	Agilent	2021-06-25
14	Universal Radio Communication Tester	CMW500	152395	R&S	2021-06-25
15	Universal Radio Communication Tester	SP8315	SP8315-1249	StarPoint	2021-06-25

## 5 Test Results

### 5.1 Conducted RF Power Output

<b>Specifications:</b>	FCC Part 2.1046, 22.913(a),24.232(c), 27.50,90.635(b)
<b>DUT Serial Number:</b>	866884045632254
<b>Test conditions:</b>	Ambient Temperature:15°C-35°C Relative Humidity:30%-60% Air pressure: 86-106kPa
<b>Test Results:</b>	Pass

#### Limit Level Construction:

**According to Part 22.913(a)**, the ERP of mobile transmitters and auxiliary test transmitters must not exceed 7 Watts.

**According to Part 24.232(c)**, mobile and portable stations are limited to 2 watts EIRP and the equipment must employ a means for limiting power to the minimum necessary for successful communications.

**According to Part 27.50(c)**, portable stations (hand-held devices) in the 600 MHz uplink Band and the 698-746 MHz Band, and fixed and mobile stations in the 600 MHz uplink Band are limited to 3 watts ERP;

**According to Part 27.50(d)**, fixed, mobile, and portable (hand-held) stations operating in the 1710-1755 MHz Band and mobile and portable stations operating in the 1695-1710 MHz and 1755-1780 MHz Bands are limited to 1 watt EIRP.

**According to Part 90.635 (b)**,The maximum output power of the transmitter for mobile stations is 100 watts (20 dBw).

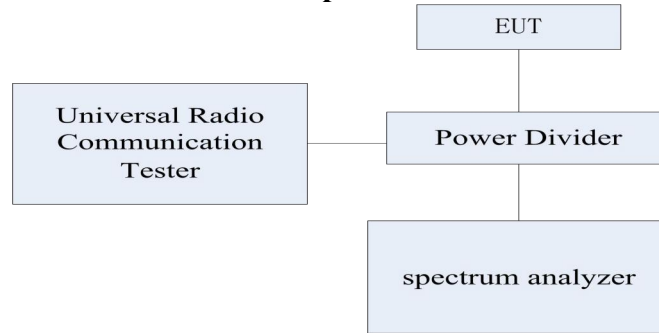
#### Measurement Uncertainty:

Item	Uncertainty
Expanded Uncertainty	0.52 dB (k=2)

#### Test Setup:

During the test, the EUT was controlled via the Wireless Telecommunications Test Set to ensure max power transmission and proper modulation and measured by spectrum analyzer.

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**Test Method:**

- 1) The EUT was coupled to the spectrum analyzer and the Wireless Telecommunications Test Set through a power divider. The loss of the RF cables of the test system is calibrated to correct the readings.
- 2) For RMS power test, the spectrum analyzer was set to RMS Detector function and Maximum hold mode.
- 3) For Peak power test, the spectrum analyzer was set to Maxpeak Detector function and Maximum hold mode.
- 4) The resolution Bandwidth of the spectrum analyzer was comparable to the emission Bandwidth.

**Note:** --.

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5.1.1 GSM850 Conducted RF Power Output Results

GPRS GMSK Mode:

Channel	Maximum output power(pk) [dBm]			
	1TS	2TS	3TS	4TS
128 (824.2MHz)	31.19	31.05	31.24	29.52
190 (836.6MHz)	30.58	30.72	29.89	28.59
251 (848.8MHz)	29.76	30.34	30.14	30.14

EGPRS GMSK Mode

Channel	Maximum output power(pk) [dBm]			
	1TS	2TS	3TS	4TS
128 (824.2MHz)	31.20	31.04	31.24	29.53
190 (836.6MHz)	30.58	30.72	29.90	28.58
251 (848.8MHz)	29.76	30.33	30.14	30.14



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**EGPRS 8PSK Mode**

Channel	Maximum output power(pk) [dBm]			
	1TS	2TS	3TS	4TS
<b>128</b> (824.2MHz)	27.5	26.4	26.1	25.7
<b>190</b> (836.6MHz)	27.2	26.4	25.7	25.1
<b>251</b> (848.8MHz)	27.0	26.1	25.2	24.9

**GPRS GMSK Mode:**

Channel No.	Maximum output power(avg) [dBm]			
	1TS	2TS	3TS	4TS
<b>128</b> (824.2MHz)	30.90	30.31	30.96	27.76
<b>190</b> (836.6MHz)	30.42	30.18	28.64	27.83
<b>251</b> (848.8MHz)	29.49	30.00	28.64	27.75

**EGPRS GMSK Mode**

Channel No.	Maximum output power(avg) [dBm]			
	1TS	2TS	3TS	4TS
<b>128</b> (824.2MHz)	30.92	30.31	30.97	27.76
<b>190</b> (836.6MHz)	30.38	30.21	28.62	27.84
<b>251</b> (848.8MHz)	29.48	30.01	28.63	27.73

**EGPRS 8PSK Mode**

Channel No.	Maximum output power(avg) [dBm]			
	1TS	2TS	3TS	4TS
<b>128</b> (824.2MHz)	24.2	23.2	22.7	22.2
<b>190</b> (836.6MHz)	23.8	22.8	22.1	21.8
<b>251</b> (848.8MHz)	23.7	22.6	21.9	21.6

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5.1.2 PCS1900 Conducted RF Power Output Results

GPRS GMSK Mode

Channel	Maximum output power(pk) [dBm]			
	1TS	2TS	3TS	4TS
512 (1850.2MHz)	30.82	30.15	30.40	30.31
661 (1880.0MHz)	30.37	30.07	30.22	30.12
810 (1909.8MHz)	29.99	30.41	30.20	29.80

EGPRS GMSK Mode

Channel	Maximum output power(pk) [dBm]			
	1TS	2TS	3TS	4TS
512 (1850.2MHz)	30.81	30.17	30.43	30.33
661 (1880.0MHz)	30.37	30.07	30.21	30.11
810 (1909.8MHz)	29.97	30.43	30.19	29.78

EGPRS 8PSK Mode

Channel	Maximum output power(pk) [dBm]			
	1TS	2TS	3TS	4TS
512 (1850.2MHz)	29.2	29.4	29.2	29.1
661 (1880.0MHz)	28.9	28.7	28.8	28.6
810 (1909.8MHz)	28.6	28.3	28.34	28.3

GPRS GMSK Mode

Channel	Maximum output power(avg) [dBm]			
	1TS	2TS	3TS	4TS
512 (1850.2MHz)	30.84	29.90	29.92	29.51
661 (1880.0MHz)	30.33	29.80	29.40	29.60
810 (1909.8MHz)	29.96	30.29	30.01	29.52

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**EGPRS GMSK Mode**

Channel	Maximum output power(avg [dBm])			
	1TS	2TS	3TS	4TS
512 (1850.2MHz)	30.87	29.90	29.90	29.50
661 (1880.0MHz)	30.31	29.81	29.37	29.60
810 (1909.8MHz)	29.95	30.29	30.00	29.51

**EGPRS 8PSK Mode**

Channel	Maximum output power(avg) [dBm]			
	1TS	2TS	3TS	4TS
512 (1850.2MHz)	26.0	26.1	26.1	25.9
661 (1880.0MHz)	25.6	25.6	25.5	25.3
810 (1909.8MHz)	25.3	25.4	25.3	25.1

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5.1.3 NB-IoT Band2 Conducted RF Power Output Results

NB-IoT Band 2

Maximum Average Conducted Power (dBm)					
Sub-carrier Spacing [kHz]	Modulation	N <sub>tones</sub>	Channel		
			Low	Mid	High
3.75	BPSK	1@0	22.84	22.70	23.02
		1@47	22.98	22.68	22.96
	QPSK	1@0	22.82	22.79	22.93
		1@47	22.74	22.81	22.84
15	BPSK	1@0	23.48	22.93	23.28
		1@11	23.41	22.95	23.24
	QPSK	1@0	23.44	23.0	23.24
		1@11	23.37	23.14	23.17
		12@0	21.78	21.61	21.71

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5.1.4 NB-IoT Band4 Conducted RF Power Output Results

NB-IoT Band 4

Maximum Average Conducted Power (dBm)					
Sub-carrier Spacing [kHz]	Modulation	N <sub>tones</sub>	Channel		
			Low	Mid	High
3.75	BPSK	1@0	23.80	23.78	22.61
		1@47	23.84	23.77	22.66
	QPSK	1@0	23.94	23.62	22.84
		1@47	23.87	23.67	22.71
15	BPSK	1@0	23.15	22.99	22.85
		1@11	23.25	22.97	22.82
	QPSK	1@0	23.10	23.05	22.94
		1@11	23.07	22.94	22.87
		12@0	21.97	21.98	21.99

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5.1.5 NB-IoT Band12 Conducted RF Power Output Results

NB-IoT Band12

Maximum Average Conducted Power (dBm)					
Sub-carrier Spacing [kHz]	Modulation	N <sub>tones</sub>	Channel		
			Low	Mid	High
3.75	BPSK	1@0	22.81	23.21	-15.79
		1@47	22.78	23.23	-15.86
	QPSK	1@0	22.77	23.30	-15.80
		1@47	22.74	23.24	-15.82
15	BPSK	1@0	22.83	22.95	-15.93
		1@11	22.83	22.95	-16.01
	QPSK	1@0	22.84	23.15	-15.92
		1@11	22.82	22.93	-15.95
		12@0	21.02	21.32	-18.02

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5.1.6 NB-IoT Band13 Conducted RF Power Output Results

NB-IoT Band13

Maximum Average Conducted Power (dBm)					
Sub-carrier Spacing [kHz]	Modulation	N <sub>tones</sub>	Channel		
			Low	Mid	High
3.75	BPSK	1@0	22.97	23.31	23.16
		1@47	22.99	23.30	23.20
	QPSK	1@0	23.01	23.35	23.36
		1@47	22.92	23.30	23.21
15	BPSK	1@0	23.32	23.48	23.42
		1@11	23.28	23.40	23.40
	QPSK	1@0	23.34	23.59	23.46
		1@11	23.27	23.49	23.36
		12@0	21.68	21.87	21.76

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5.1.7 NB-IoT Band 26 Conducted RF Power Output Results

(824MHz-849MHz)

Maximum Average Conducted Power (dBm)					
Sub-carrier Spacing [kHz]	Modulation	N <sub>tones</sub>	Channel		
			Low	Mid	High
3.75	BPSK	1@0	22.76	22.46	22.51
		1@47	22.77	22.37	22.52
	QPSK	1@0	22.77	22.43	22.56
		1@47	22.74	22.34	22.49
15	BPSK	1@0	22.90	22.74	22.78
		1@11	22.84	22.58	22.74
	QPSK	1@0	22.89	22.82	22.85
		1@11	22.82	22.75	22.73
		12@0	21.05	21.05	20.92

(814MHz-824MHz)

Maximum Average Conducted Power (dBm)					
Sub-carrier Spacing [kHz]	Modulation	N <sub>tones</sub>	Channel		
			Low	Mid	High
3.75	BPSK	1@0	22.51	22.56	22.42
		1@47	22.49	22.61	22.35
	QPSK	1@0	22.48	22.51	22.46
		1@47	22.60	22.59	22.51
15	BPSK	1@0	22.82	22.59	22.67
		1@11	22.66	22.71	22.62
	QPSK	1@0	22.57	22.65	22.73
		1@11	22.69	22.75	22.67
		12@0	21.12	21.09	21.03

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5.1.8 CAT-M B2 Conducted RF Power Output Results

Mode	Bandwidth	Channel	RB	Index	Conducted Power	
					QPSK	16QAM
Band2	1.4MHz	18607	1#0	0	24.43	22.79
			6#0	0	22.74	22.79
		18900	1#0	0	24.55	22.75
			6#0	0	22.78	22.76
		19195	1#5	0	24.11	22.77
			6#0	0	22.75	22.81
	3MHz	18615	1#0	0	24.51	22.76
			6#0	0	22.79	22.77
		18900	1#0	0	24.46	22.75
			6#0	0	22.78	22.75
		19185	1#5	1	24.36	22.76
			6#0	1	22.75	22.77
	5MHz	18620	1#0	0	24.52	23.61
			6#0	0	23.39	22.78
		18900	1#0	0	24.30	23.41
			6#0	0	23.13	22.79
		19180	1#5	3	24.23	23.19
			6#0	3	23.25	22.79
	10MHz	18640	1#0	0	24.50	23.55

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			<b>4#0</b>	<b>0</b>	23.36	23.70	
		<b>18900</b>	<b>1#0</b>	<b>0</b>	24.35	23.33	
			<b>4#0</b>	<b>0</b>	23.17	23.61	
		<b>19160</b>	<b>1#5</b>	<b>7</b>	24.02	23.13	
			<b>4#2</b>	<b>7</b>	24.16	22.86	
		<b>15MHz</b>	<b>18660</b>	<b>1#0</b>	<b>0</b>	24.54	23.66
				<b>6#0</b>	<b>0</b>	24.31	24.74
			<b>18900</b>	<b>1#0</b>	<b>0</b>	24.21	23.37
	<b>6#0</b>			<b>0</b>	24.12	24.54	
	<b>19140</b>		<b>1#5</b>	<b>0</b>	24.11	23.17	
			<b>6#0</b>	<b>0</b>	24.16	24.47	
	<b>20MHz</b>		<b>18680</b>	<b>1#0</b>	<b>0</b>	24.32	24.37
				<b>6#0</b>	<b>0</b>	24.21	23.44
		<b>18900</b>	<b>1#0</b>	<b>0</b>	24.15	24.55	
			<b>6#0</b>	<b>0</b>	24.38	23.27	
		<b>19120</b>	<b>1#5</b>	<b>0</b>	24.19	24.37	
			<b>6#0</b>	<b>0</b>	24.41	23.34	

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5.1.9 CAT-M B4 Conducted RF Power Output Results

Mode	Bandwidth	Channel	RB	Index	Conducted Power	
					QPSK	16QAM
Band4	1.4MHz	19957	1#0	0	24.41	22.88
			6#0	0	22.77	22.79
		20175	1#0	0	24.58	22.75
			6#0	0	22.77	22.79
		20393	1#5	0	24.15	22.78
			6#0	0	22.80	22.79
	3MHz	19965	1#0	0	24.48	22.79
			6#0	0	22.75	22.82
		20175	1#0	0	24.32	22.74
			6#0	0	22.78	22.76
		20385	1#5	1	24.38	22.75
			6#0	1	22.78	22.79
	5MHz	19975	1#0	0	24.23	23.19
			6#0	0	23.25	22.89
		20175	1#0	0	24.31	23.48
			6#0	0	23.16	22.76
		20375	1#5	3	24.55	23.67
			6#0	3	23.35	22.77
	10MHz	20000	1#0	0	24.32	24.37

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			<b>4#0</b>	<b>0</b>	24.21	23.44	
			<b>1#0</b>	<b>0</b>	24.15	24.55	
		<b>20175</b>	<b>4#0</b>	<b>0</b>	24.38	23.27	
			<b>1#5</b>	<b>7</b>	24.02	23.13	
		<b>20350</b>	<b>4#2</b>	<b>7</b>	24.16	22.86	
			<b>1#0</b>	<b>0</b>	24.54	23.66	
		<b>15MHz</b>	<b>20025</b>	<b>6#0</b>	<b>0</b>	24.31	24.74
				<b>1#0</b>	<b>0</b>	24.21	23.37
	<b>20175</b>		<b>6#0</b>	<b>0</b>	24.12	24.54	
			<b>1#5</b>	<b>0</b>	24.11	23.17	
	<b>20325</b>		<b>6#0</b>	<b>0</b>	24.16	24.47	
			<b>1#0</b>	<b>0</b>	24.35	23.33	
	<b>20MHz</b>		<b>20050</b>	<b>6#0</b>	<b>0</b>	23.17	23.61
				<b>1#0</b>	<b>0</b>	24.02	23.13
		<b>20175</b>	<b>6#0</b>	<b>0</b>	24.16	22.86	
			<b>1#5</b>	<b>0</b>	24.21	24.41	
		<b>20300</b>	<b>6#0</b>	<b>0</b>	24.56	23.45	

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5.1.10 CAT-M B12 Conducted RF Power Output Results

Mode	Bandwidth	Channel	RB	Index	Conducted Power	
					QPSK	16QAM
Band12	1.4MHz	20315	1#0	0	24.45	22.71
			6#0	0	22.62	22.77
		23095	1#0	0	24.57	22.55
			6#0	0	22.72	22.69
		23175	1#5	0	24.15	22.78
			6#0	0	22.58	22.85
	3MHz	20320	1#0	0	24.52	23.61
			6#0	0	23.39	22.68
		23095	1#0	0	24.30	23.41
			6#0	0	23.15	22.41
		23170	1#5	1	24.25	23.21
			6#0	1	23.25	22.39
	5MHz	20330	1#0	0	24.51	22.64
			6#0	0	22.59	22.77
		23095	1#0	0	24.47	22.53
			6#0	0	22.71	22.55
		23160	1#5	3	24.36	22.26
			6#0	3	22.65	22.47
	10MHz	20345	1#0	0	24.50	23.55
			4#0	0	23.36	23.70
		23095	1#0	0	24.35	23.33
			4#0	0	23.17	23.61
		23145	1#5	7	24.08	23.24
			4#2	7	24.22	22.71

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5.1.11 CAT-M B13 Conducted RF Power Output Results

Mode	Bandwidth	Channel	RB	Index	Conducted Power	
					QPSK	16QAM
Band13	5MHz	23200	1#0	0	25.12	23.91
			6#0	0	23.77	23.01
		23230	1#0	0	25.07	23.74
			6#0	3	23.70	22.95
		23254	1#5	3	25.02	23.79
			6#0	3	23.64	22.89
	10MHz	23225	1#0	0	25.19	23.99
			6#0	0	23.80	24.12
		23230	1#0	0	25.19	23.99
			6#0	0	23.80	24.12
		23235	1#5	7	24.13	24.05
			4#2	7	24.27	24.11

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5.1.12 CAT-M B26 Conducted RF Power Output Results

(824MHz-849MHz)

Mode	Bandwidth	Channel	RB	Index	Conducted Power	
					QPSK	16QAM
Band26	1.4MHz	26797	1#0	0	24.43	22.69
			6#0	0	22.61	22.79
		26915	1#0	0	24.55	22.51
			6#0	0	22.58	22.65
		27033	1#5	0	24.11	22.73
			6#0	0	22.55	22.81
	3MHz	26805	1#0	0	24.51	22.64
			6#0	0	22.59	22.77
		26915	1#0	0	24.46	22.52
			6#0	0	22.70	22.54
		27025	1#5	1	24.36	22.26
			6#0	1	22.65	22.47
	5MHz	26815	1#0	0	24.52	23.61
			6#0	0	23.39	22.68
		26915	1#0	0	24.30	23.41
			6#0	0	23.13	22.40
		27015	1#5	3	24.23	23.19
			6#0	3	23.25	22.39
	10MHz	26840	1#0	0	24.50	23.55
			4#0	0	23.36	23.70
		26915	1#0	0	24.35	23.33
			4#0	0	23.17	23.61
		26990	1#5	7	24.02	23.13
			4#2	7	24.16	22.86

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(814MHz-824MHz)

Mode	Bandwidth	Channel	RB	Index	Conducted Power	
					QPSK	16QAM
Band26	1.4MHz	26697	1#0	0	24.13	22.54
			6#0	0	22.46	22.51
		26740	1#0	0	24.39	22.44
			6#0	0	22.42	22.45
		26783	1#5	0	24.14	22.62
			6#0	0	22.49	22.74
	3MHz	26705	1#0	0	24.29	22.37
			6#0	0	22.66	22.81
		26740	1#0	0	24.39	22.40
			6#0	0	22.51	22.51
		26775	1#5	1	24.27	22.17
			6#0	1	22.39	22.57
	5MHz	26715	1#0	0	24.22	22.85
			6#0	0	23.19	22.57
		26740	1#0	0	24.25	22.89
			6#0	0	23.56	22.24
		26765	1#5	3	24.19	22.86
			6#0	3	23.19	22.42
	10MHz	26740	1#0	0	24.36	23.35
			4#0	0	23.17	23.58

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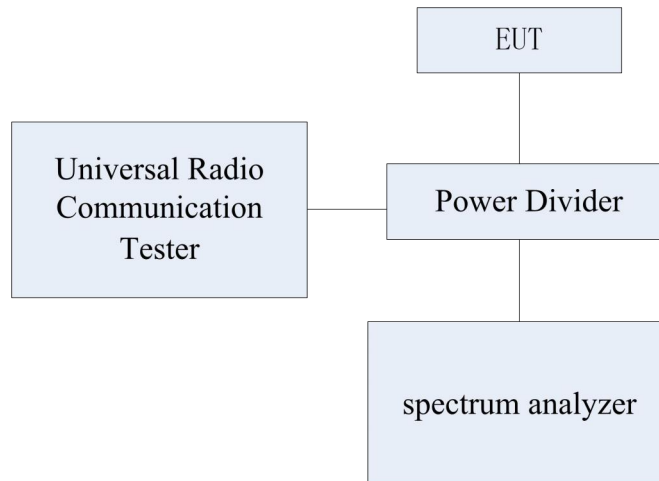
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**5.2 Occupied Bandwidth**

<b>Specifications:</b>	FCC Part 2.1049, 22.917(b), 24.238(b),90.209
<b>DUT Serial Number:</b>	866884045632254
<b>Test conditions:</b>	Ambient Temperature:15°C -35°C Relative Humidity:30%-60% Air pressure: 86-106kPa
<b>Test Results:</b>	--

**Test Setup**

During the test, the EUT was controlled via the Wireless Communications Test Set to ensure max power transmission and proper modulation and measured by spectrum analyzer.



**Measurement Uncertainty:**

Item	Uncertainty
Expanded Uncertainty	69 kHz (k=2)

**Test Method**

The occupied Bandwidth was calculated from the spectrum analyzer. Markers in the spectrum analyzer were then placed between the calculated frequencies to show the calculated 99% power Band. The 26dB Bandwidth was also measured and recorded.

**Note:** Only worst case result is given below.

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5.2.1 GSM Mode Occupied Bandwidth Results

Band	Channel	Mode	Occupied Bandwidth 99% (kHz)	Occupied Bandwidth 26dB (kHz)
GSM850	128	GMSK	289.20	360.80
		8PSK	245.56	319.20
	190	GMSK	288.68	396.40
		8PSK	246.51	315.10
	251	GMSK	294.28	394.20
		8PSK	245.40	316.00
PCS1900	512	GMSK	244.74	310.90
		8PSK	252.65	304.70
	661	GMSK	243.57	320.30
		8PSK	241.43	305.20
	810	GMSK	243.14	311.10
		8PSK	243.14	308.40

5.2.2 NB-IoT B2 Mode Occupied Bandwidth Results

Frequency ID	N <sub>UL</sub>	N <sub>tones</sub>	Sub-carrier Spacing [kHz]	Occupied Bandwidth (99%) (kHz)		Occupied Bandwidth(26dB) (kHz)	
				QPSK	BPSK	QPSK	BPSK
Low Range	18601	12@0	15	187.50	133.01	256.41	472.75
Mid Range	18900			187.50	131.41	269.23	599.29
High Range	19199			197.11	133.01	264.42	469.55

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5.2.3 NB-IoT B4 Mode Occupied Bandwidth Results

Frequency ID	N <sub>UL</sub>	N <sub>tones</sub>	Sub-carrier Spacing [kHz]	Occupied Bandwidth (99%) (kHz)		Occupied Bandwidth(26dB) (kHz)	
				QPSK	BPSK	QPSK	BPSK
Low Range	19951	12@0	15	187.50	133.01	254.80	384.61
Mid Range	20175			245.19	158.65	336.53	235.57
High Range	20399			157.11	131.41	256.41	690.70

5.2.4 NB-IoT B12 Mode Occupied Bandwidth Results

Frequency ID	N <sub>UL</sub>	N <sub>tones</sub>	Sub-carrier Spacing [kHz]	Occupied Bandwidth (99%) (kHz)		Occupied Bandwidth(26dB) (kHz)	
				QPSK	BPSK	QPSK	BPSK
Low Range	23011	12@0	15	187.50	133.01	246.79	483.97
Mid Range	23095			245.19	158.65	312.50	394.23
High Range	23179			189.10	134.61	245.19	439.10

5.2.5 NB-IoT B13 Mode Occupied Bandwidth Results

Frequency ID	N <sub>UL</sub>	N <sub>tones</sub>	Sub-carrier Spacing [kHz]	Occupied Bandwidth (99%) (kHz)		Occupied Bandwidth(26dB) (kHz)	
				QPSK	BPSK	QPSK	BPSK
Low Range	23181	12@0	15	189.10	134.61	245.19	399.03
Mid Range	23230			250.00	163.46	317.30	399.03
High Range	23279			189.10	133.01	248.39	607.37

5.2.6 NB-IoT B26 Mode Occupied Bandwidth Results

(814 MHz ~824MHz)

Mode	Channel/Ferquency (MHz)	Occupied Bandwidth 99% (kHz)	Occupied Bandwidth 26dB (kHz)
BPSK	26691/814.1	134.61	509.61
QPSK	26691/814.1	189.10	253.20

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BPSK	26740/819.0	158.65	394.23
QPSK	26740/819.0	245.19	312.50
BPSK	26789/823.9	134.61	477.56
QPSK	26789/823.9	190.70	246.79

**(824 MHz ~849MHz)**

Mode	Channel/Ferquency (MHz)	Occupied Bandwidth 99% (kHz)	Occupied Bandwidth 26dB (kHz)
BPSK	26791/824.1	133.01	674.67
QPSK	26791/824.1	189.10	243.58
BPSK	26915/836.5	158.65	394.23
QPSK	26915/836.5	240.38	317.30
BPSK	27039/848.9	134.61	750.00
QPSK	27039/848.9	189.10	243.58

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**5.2.7 CAT-M B2 Mode Occupied Bandwidth Results**

<b>Bandwidth</b>	<b>Modulation</b>	<b>Channel/Ferquency (MHz)</b>	<b>RB</b>	<b>Index</b>	<b>Occupied Bandwidth 99% (MHz)</b>	<b>Occupied Bandwidth 26dB (MHz)</b>
1.4MHz	QPSK	18900/1880	6#0	0	1.20	1.41
	16QAM	18900/1880			1.01	1.26
3MHz	QPSK	18900/1880	6#0	0	1.19	1.43
	16QAM	18900/1880			1.19	1.48
5MHz	QPSK	18900/1880	6#0	0	1.65	2.29
	16QAM	18900/1880			1.25	1.68
10MHz	QPSK	18900/1880	6#0	0	1.22	1.68
	16QAM	18900/1880			1.00	1.44
15MHz	QPSK	18900/1880	6#0	0	1.25	1.47
	16QAM	18900/1880			1.02	1.47
20MHz	QPSK	18900/1880	6#0	0	1.25	1.87
	16QAM	18900/1880			1.00	1.49

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**5.2.8 CAT-M B4 Mode Occupied Bandwidth Results**

<b>Bandwidth</b>	<b>Modulation</b>	<b>Channel/Ferquency (MHz)</b>	<b>RB</b>	<b>Index</b>	<b>Occupied Bandwidth 99% (MHz)</b>	<b>Occupied Bandwidth 26dB (MHz)</b>
1.4MHz	QPSK	20175/1732.5	6#0	0	1.20	1.42
	16QAM	20175/1732.5			1.01	1.28
3MHz	QPSK	20175/1732.5	6#0	0	1.18	1.41
	16QAM	20175/1732.5			1.19	1.50
5MHz	QPSK	20175/1732.5	6#0	0	1.20	1.45
	16QAM	20175/1732.5			1.00	1.34
10MHz	QPSK	20175/1732.5	6#0	0	1.22	1.41
	16QAM	20175/1732.5			1.20	1.39
15MHz	QPSK	20175/1732.5	6#0	0	1.21	1.57
	16QAM	20175/1732.5			1.05	1.73
20MHz	QPSK	20175/1732.5	6#0	0	1.25	1.25
	16QAM	20175/1732.5			1.20	1.49

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**5.2.9 CAT-M B12 Mode Occupied Bandwidth Results**

Bandwidth	Modulation	Channel/Ferquency (MHz)	RB	Index	Occupied Bandwidth 99% (MHz)	Occupied Bandwidth 26dB (MHz)
1.4MHz	QPSK	23095/707.5	6#0	0	1.17	1.41
	16QAM	23095/707.5			1.01	1.30
3MHz	QPSK	23095/707.5	6#0	0	1.19	1.42
	16QAM	23095/707.5			1.17	1.40
5MHz	QPSK	23095/707.5	6#0	0	1.18	1.42
	16QAM	23095/707.5			1.00	1.28
10MHz	QPSK	23095/707.5	6#0	0	1.17	1.37
	16QAM	23095/707.5			1.20	1.41

**5.2.10 CAT-M B13 Mode Occupied Bandwidth Results**

Bandwidth	Modulation	Channel/Ferquency (MHz)	RB	Index	Occupied Bandwidth 99% (MHz)	Occupied Bandwidth 26dB (MHz)
5MHz	QPSK	23230/782	6#0	0	1.20	1.41
	16QAM	23230/782			1.00	1.27
10MHz	QPSK	23230/782	6#0	0	1.21	1.53
	16QAM	23230/782			1.21	1.47

**5.2.11 CAT-M B26 Mode Occupied Bandwidth Results**

(814 MHz ~824MHz)

Bandwidth	Modulation	Channel/Ferquency (MHz)	RB	Index	Occupied Bandwidth 99% (MHz)	Occupied Bandwidth 26dB (MHz)
1.4MHz	QPSK	26740/819	6#0	0	1.20	1.41
	16QAM	26740/819			0.99	1.25
3MHz	QPSK	26740/819	6#0	0	1.18	1.37
	16QAM	26740/819			1.37	1.34
5MHz	QPSK	26740/819	6#0	0	1.20	1.37
	16QAM	26740/819			1.00	1.29
10MHz	QPSK	26740/819	6#0	0	1.20	1.49
	16QAM	26740/819			1.20	1.65



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(824 MHz ~849MHz)

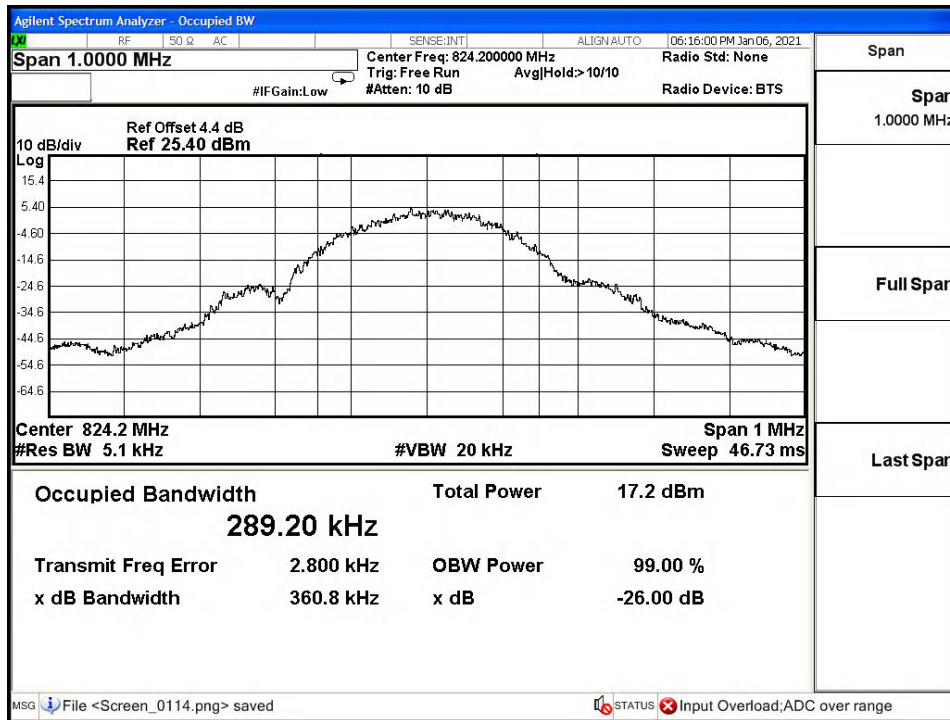
Bandwidth	Modulation	Channel/Ferquency (MHz)	RB	Index	Occupied Bandwidth 99% (MHz)	Occupied Bandwidth 26dB (MHz)
1.4MHz	QPSK	26915/836.5	6#0	0	1.18	1.36
	16QAM	26915/836.5			0.98	1.20
3MHz	QPSK	26915/836.5	6#0	0	1.16	1.38
	16QAM	26915/836.5			1.33	1.35
5MHz	QPSK	26915/836.5	6#0	0	1.18	1.39
	16QAM	26915/836.5			1.00	1.21
10MHz	QPSK	26915/836.5	6#0	0	1.20	1.44
	16QAM	26915/836.5			1.17	1.34
15MHz	QPSK	26915/836.5	6#0	0	1.15	1.37
	16QAM	26915/836.5			1.02	1.25

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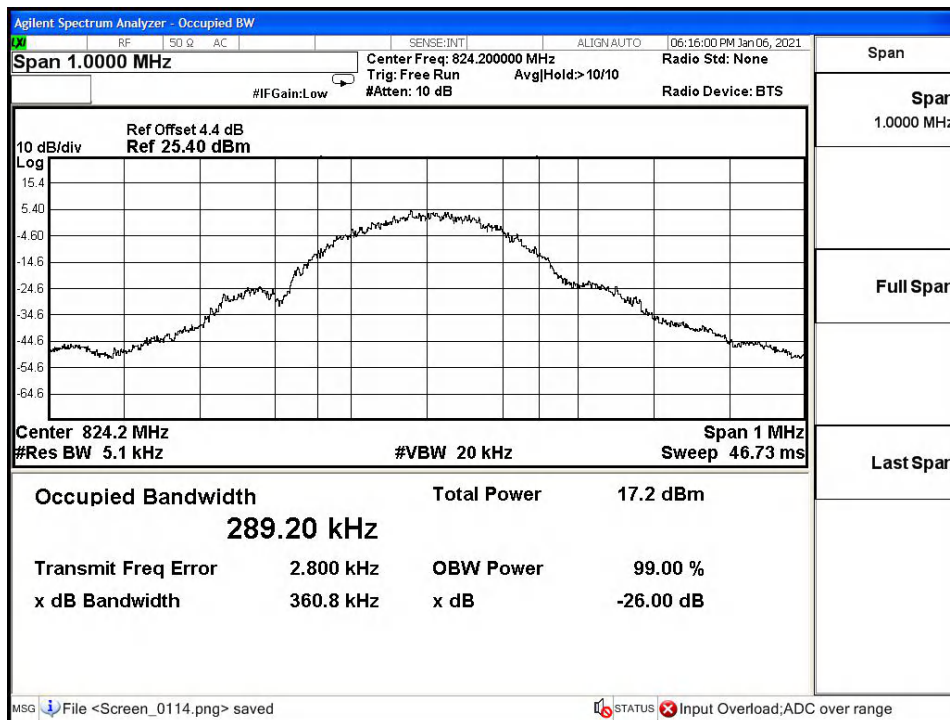
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Graphical results for GSM850:

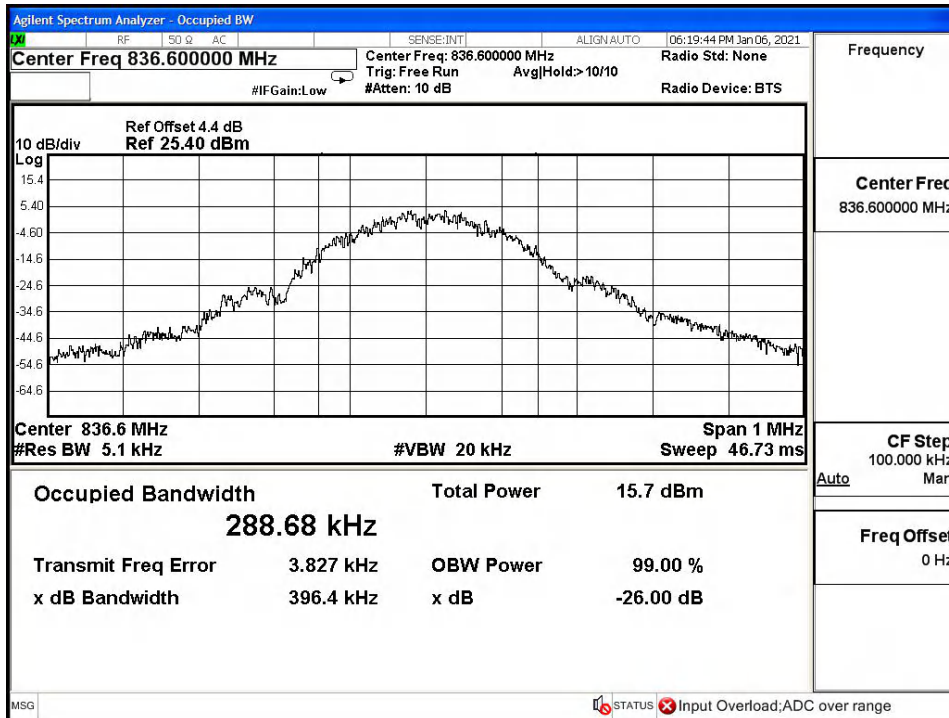


99% OBW-GMSK-Channel 128

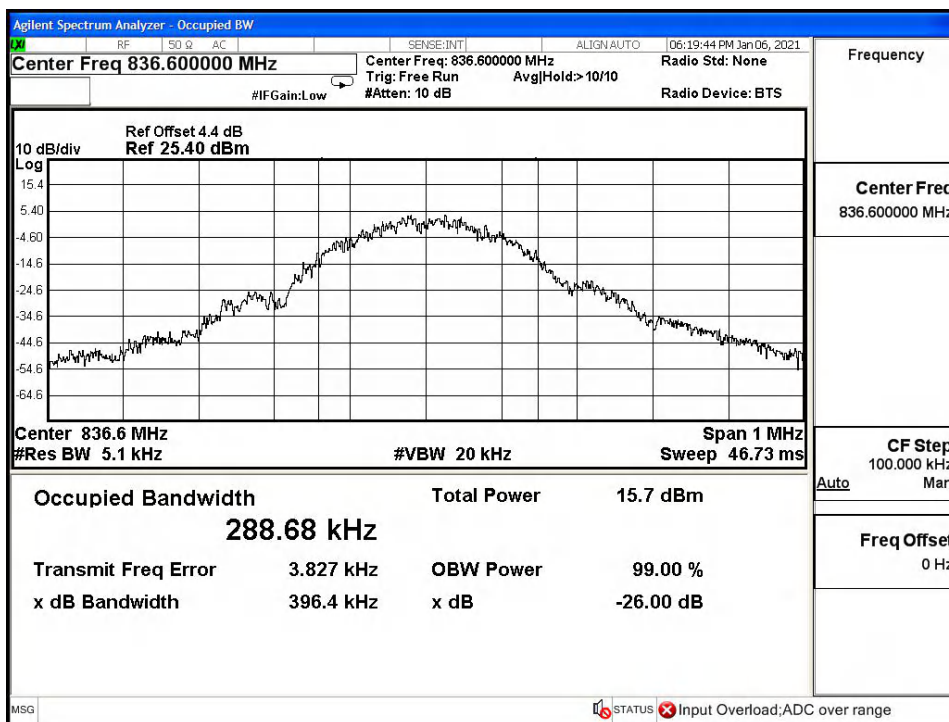


26dB OBW-GMSK-Channel 128

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99% OBW-GMSK-Channel 190



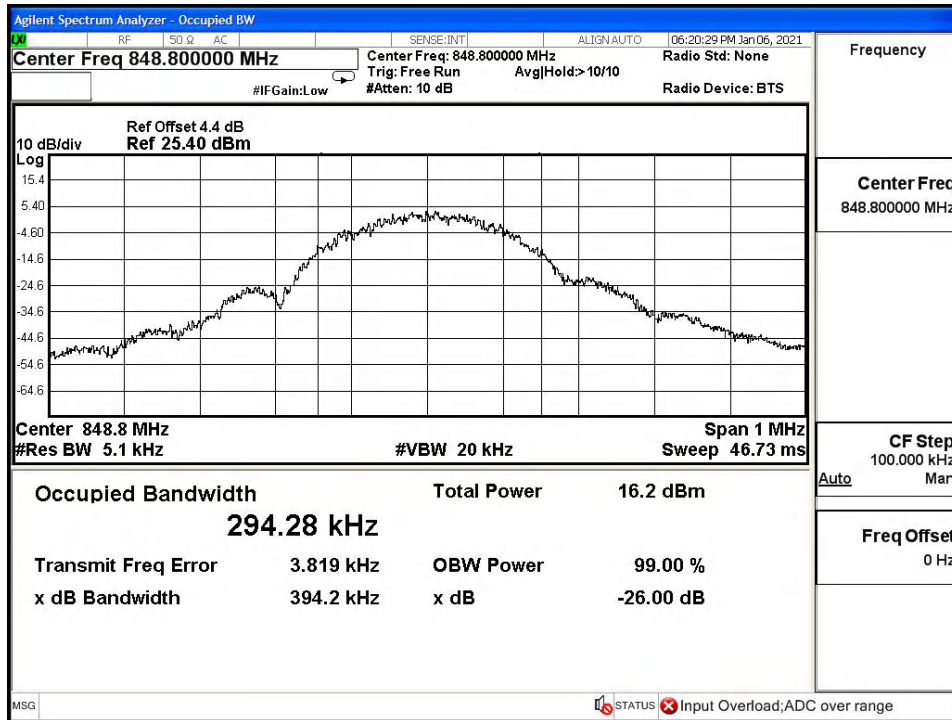
26dB OBW-GMSK-Channel-190

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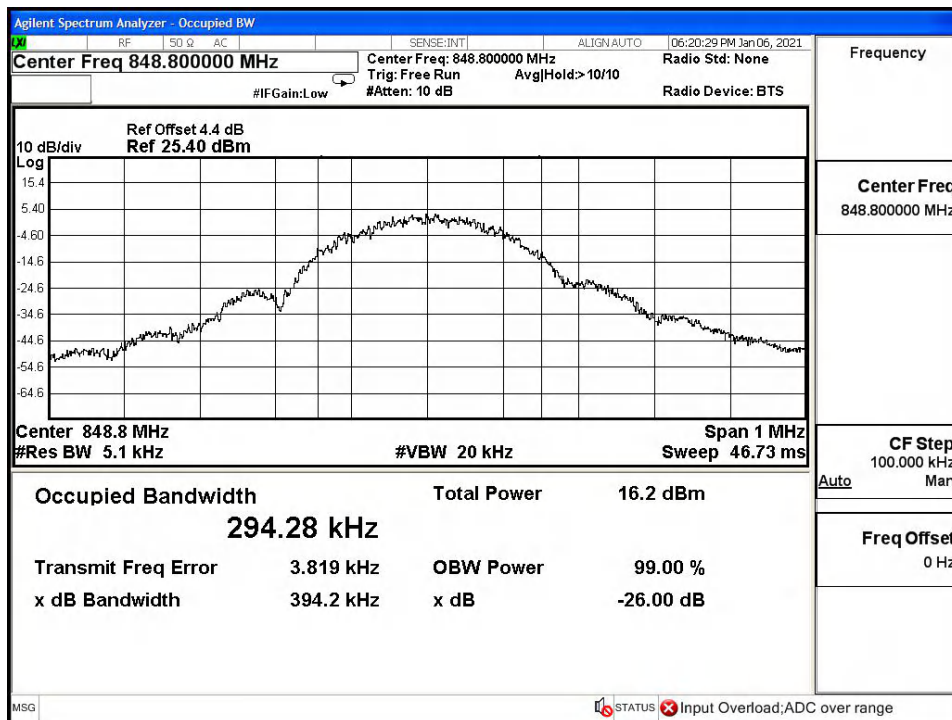
Address: No. 8, Yuma Road, Chayuan New City, Nan'an District, Chongqing, P. R. China, 401336  
 Tel: 0086-23-88069965

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99% OBW-GMSK-Channel 251

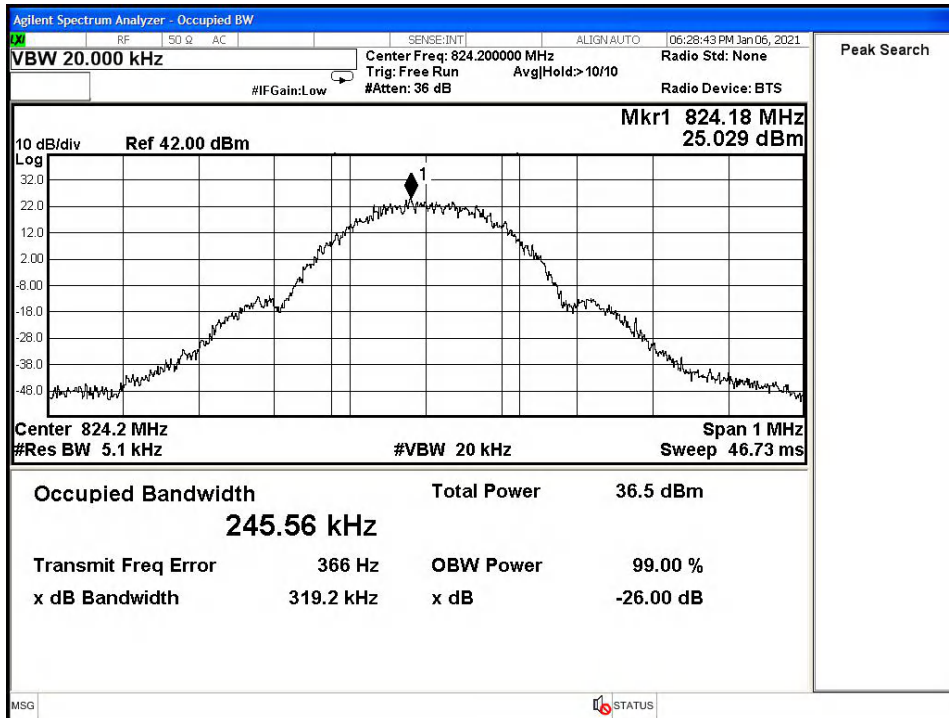


26dB OBW-GMSK Channel 251

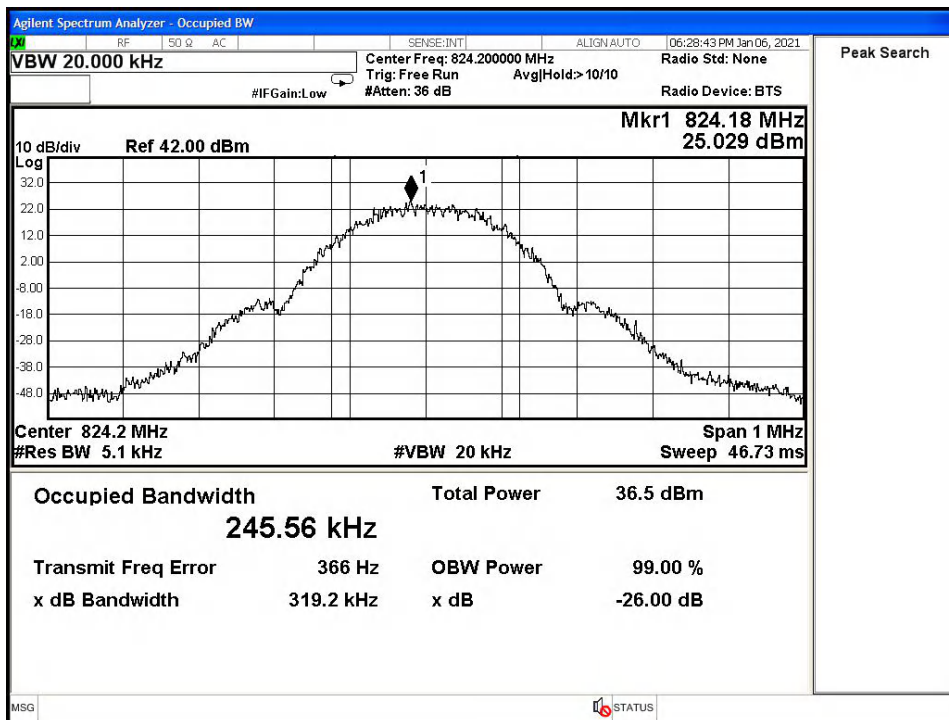
## Chongqing Academy of Information and Communication Technology

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 Tel: 0086-23-88069965    FAX:0086-23-88608777

### Report No.: I20W00023-WWAN\_Rev1

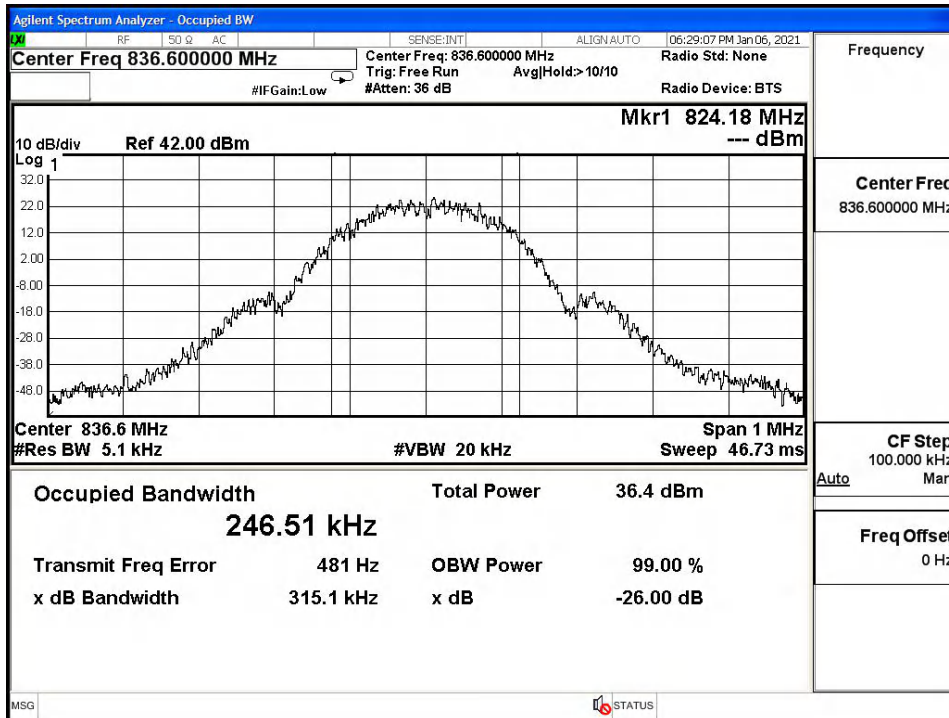


99% OBW-8PSK-Channel 128

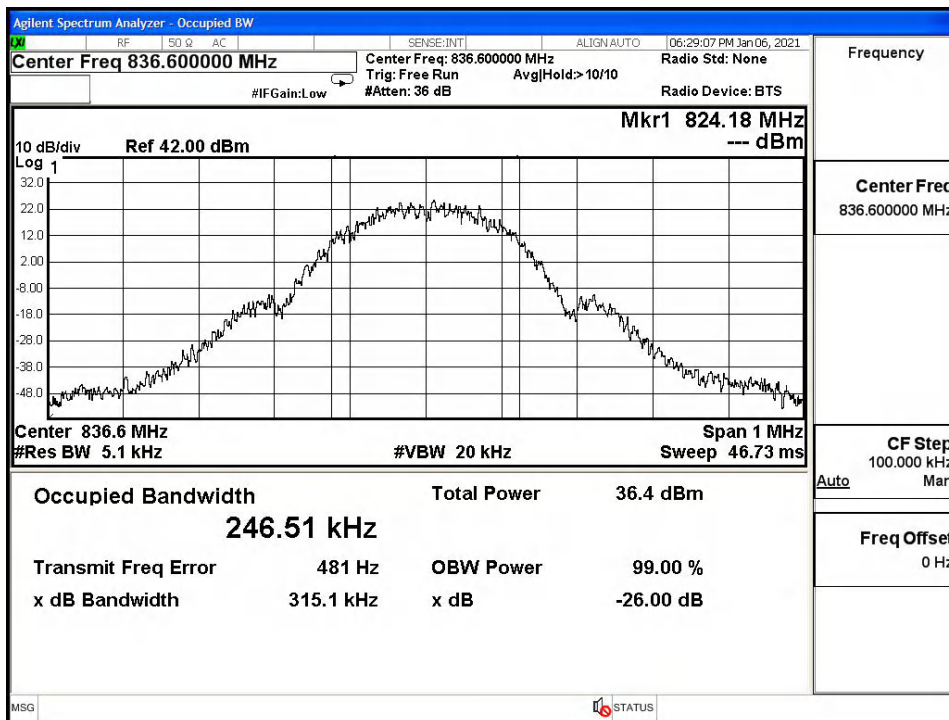


26dB OBW-8PSK-Channel 128

### Report No.: I20W00023-WWAN\_Rev1



99% OBW-8PSK-Channel 190



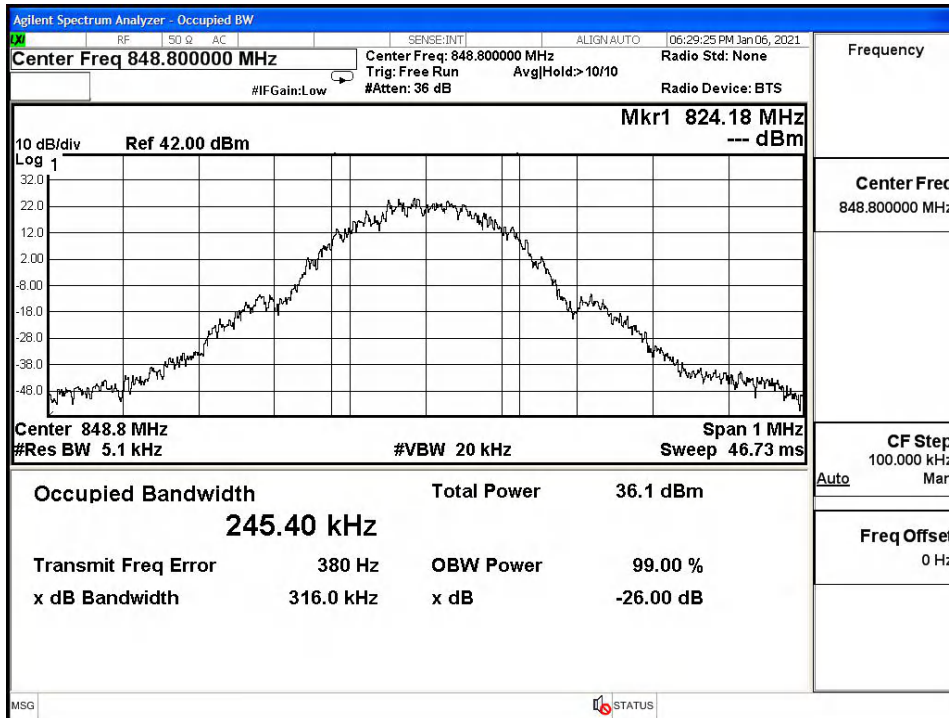
26dB OBW-8PSK-Channel 190

## Chongqing Academy of Information and Communication Technology

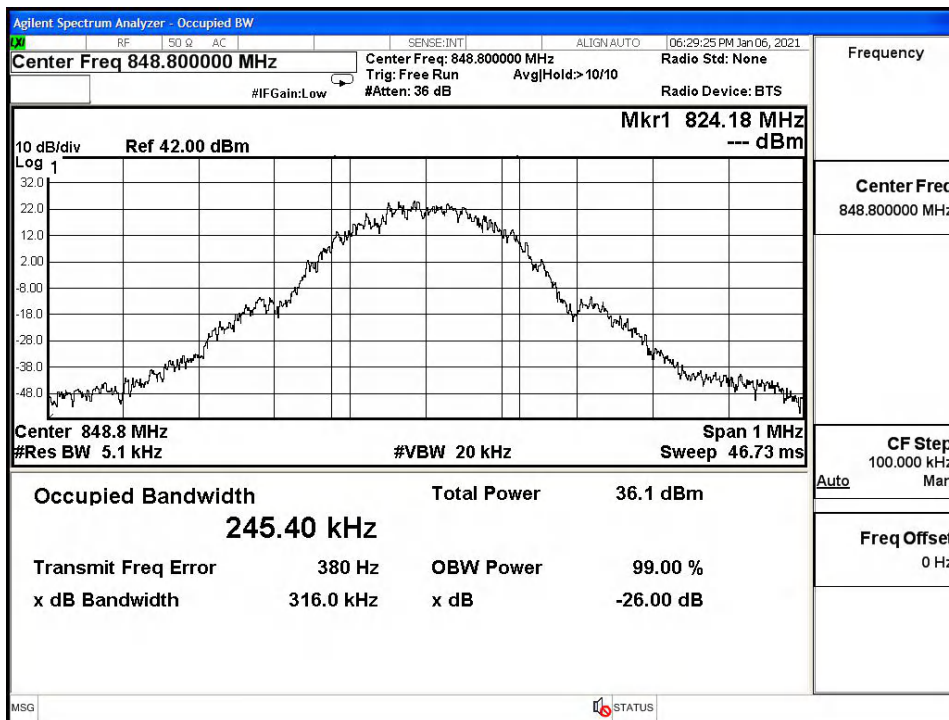
Address: No. 8, Yuma Road, Chayuan New City, Nan'an District, Chongqing, P. R. China, 401336  
 Tel: 0086-23-88069965

FAX: 0086-23-88608777

### Report No.: I20W00023-WWAN\_Rev1



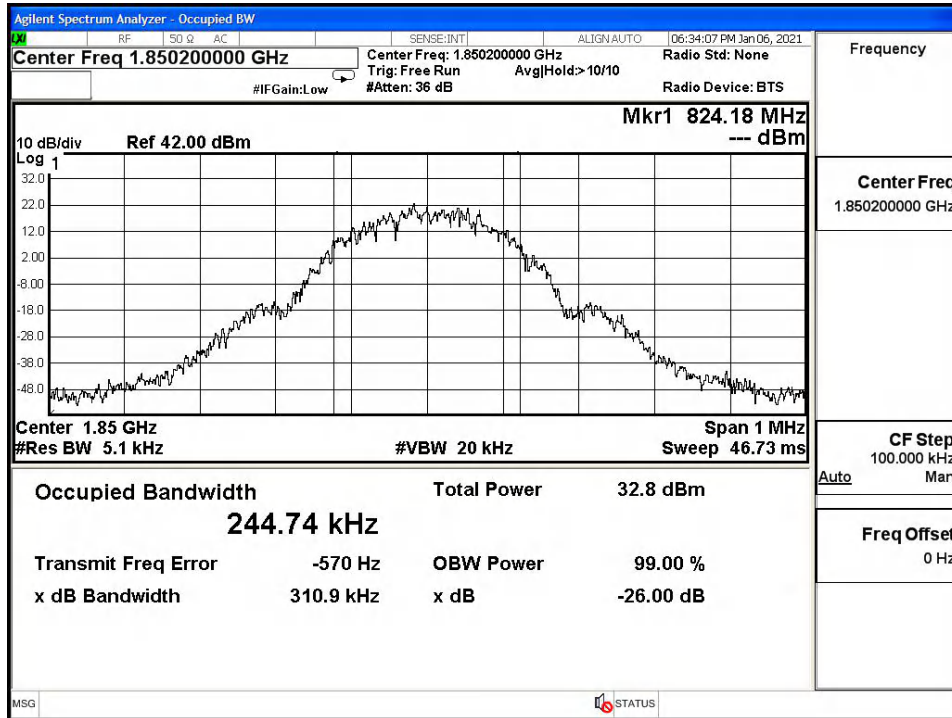
99% OBW-8PSK-Channel 251



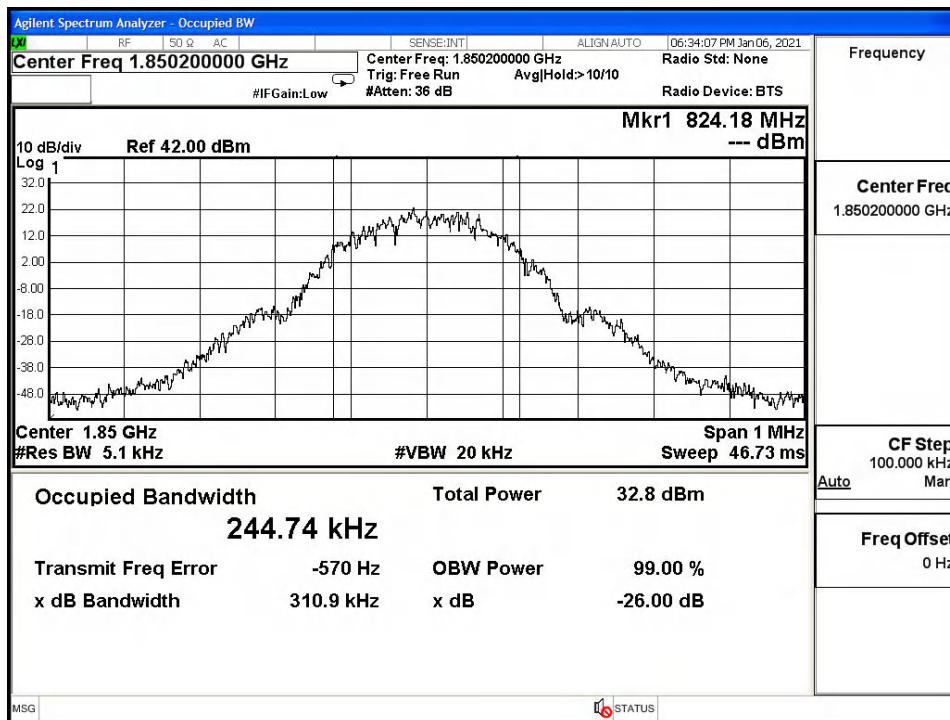
26dB OBW-8PSK-Channel 251

Report No.: I20W00023-WWAN\_Rev1

Graphical results for PCS1900:



99% OBW-GMSK-Channel 512



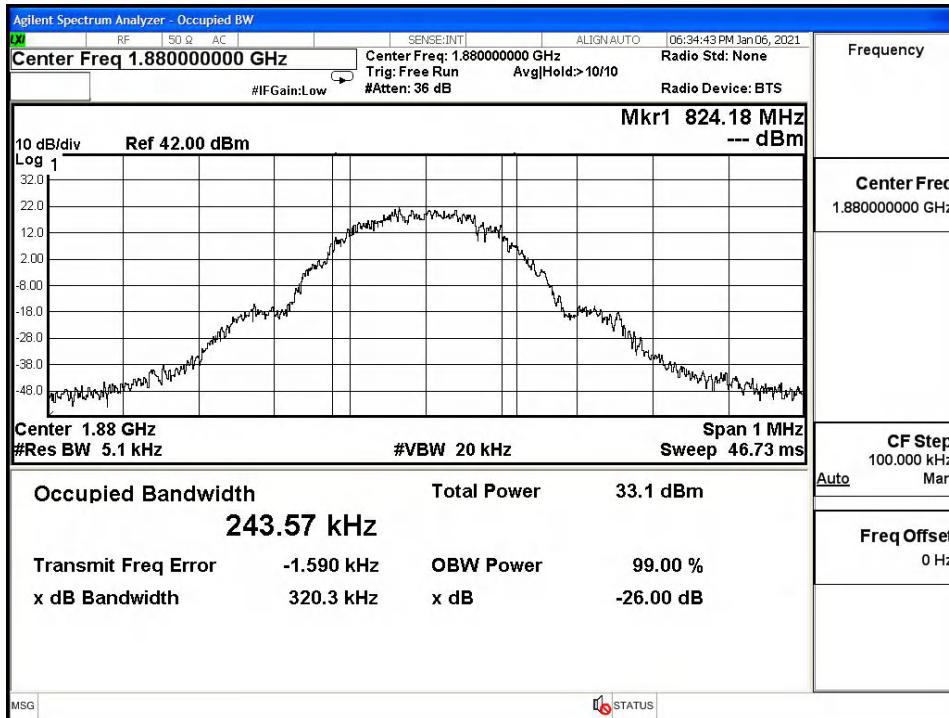
26dB OBW-GMSK-Channel 512

Chongqing Academy of Information and Communication Technology

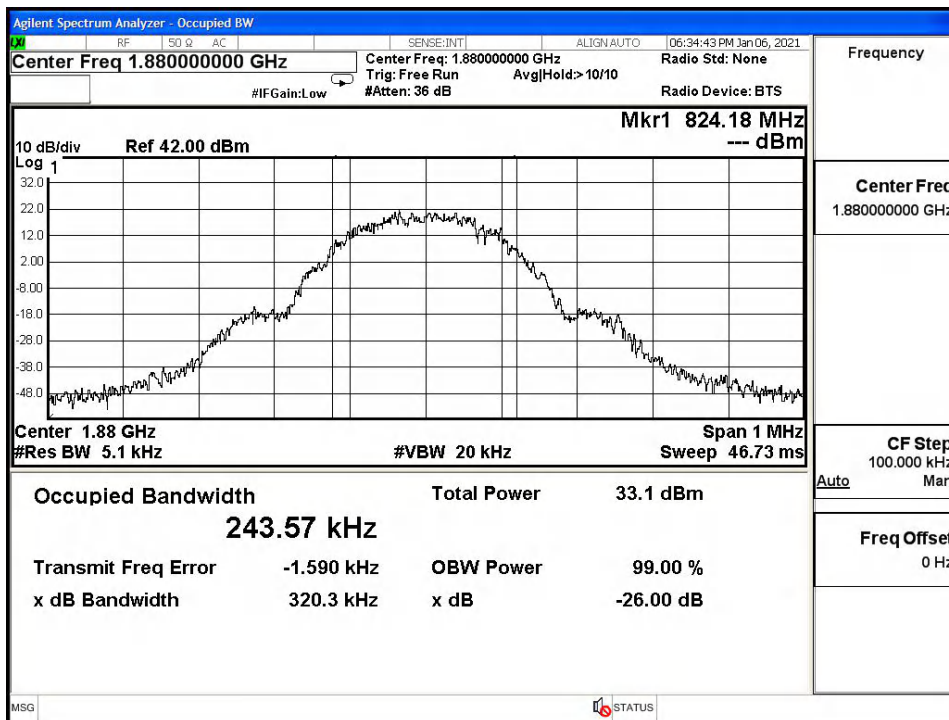
Address: No. 8, Yuma Road, Chayuan New City, Nan'an District, Chongqing, P. R. China, 401336  
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### Report No.: I20W00023-WWAN\_Rev1



99% OBW-GMSK-Channel 661

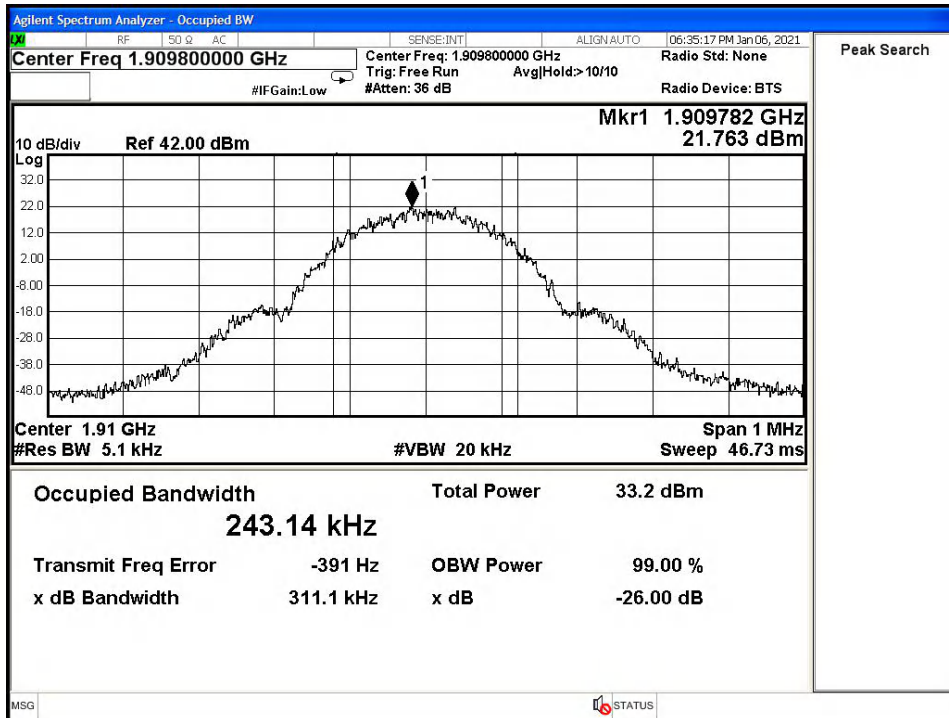


26dB OBW-GMSK-Channel 661

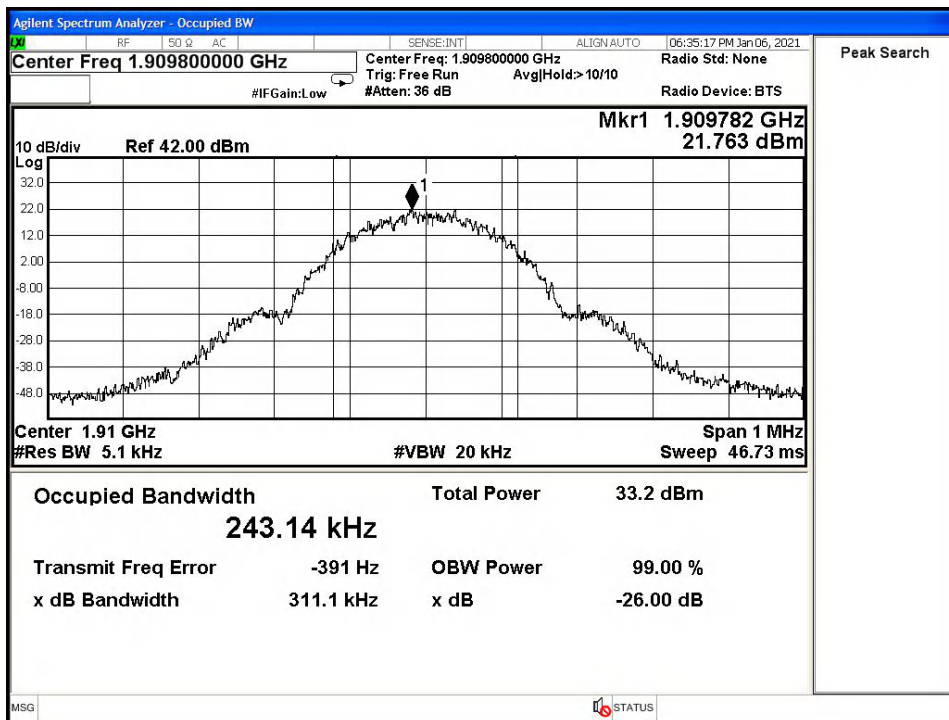
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99% OBW-GMSK-Channel 810

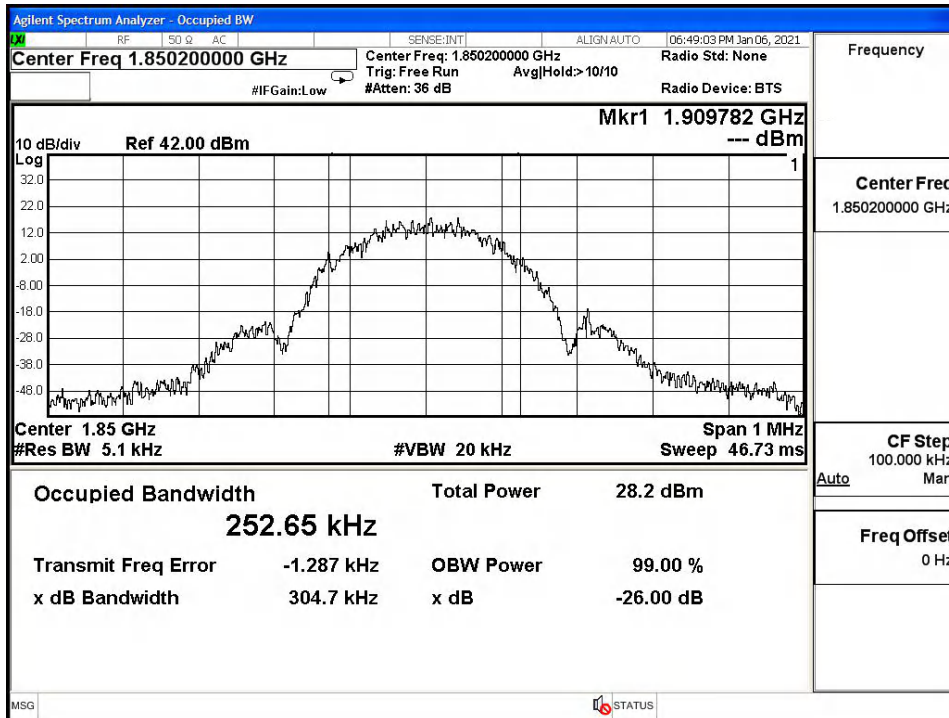


26dB OBW-GMSK-Channel 810

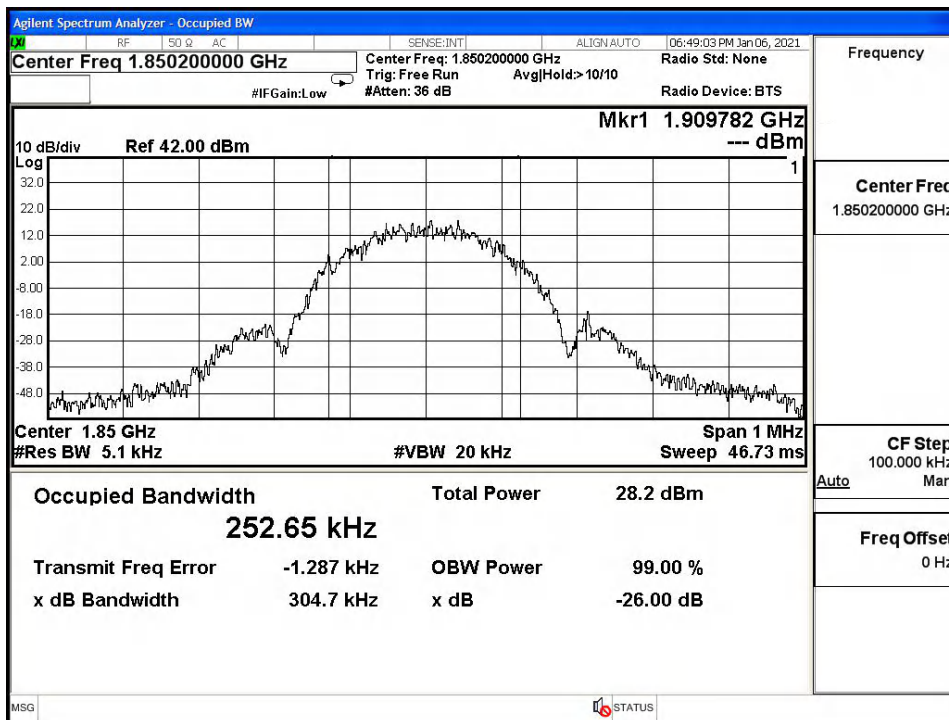
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 Tel: 0086-23-88069965 FAX: 0086-23-88608777

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99% OBW-8PSK-Channel 512

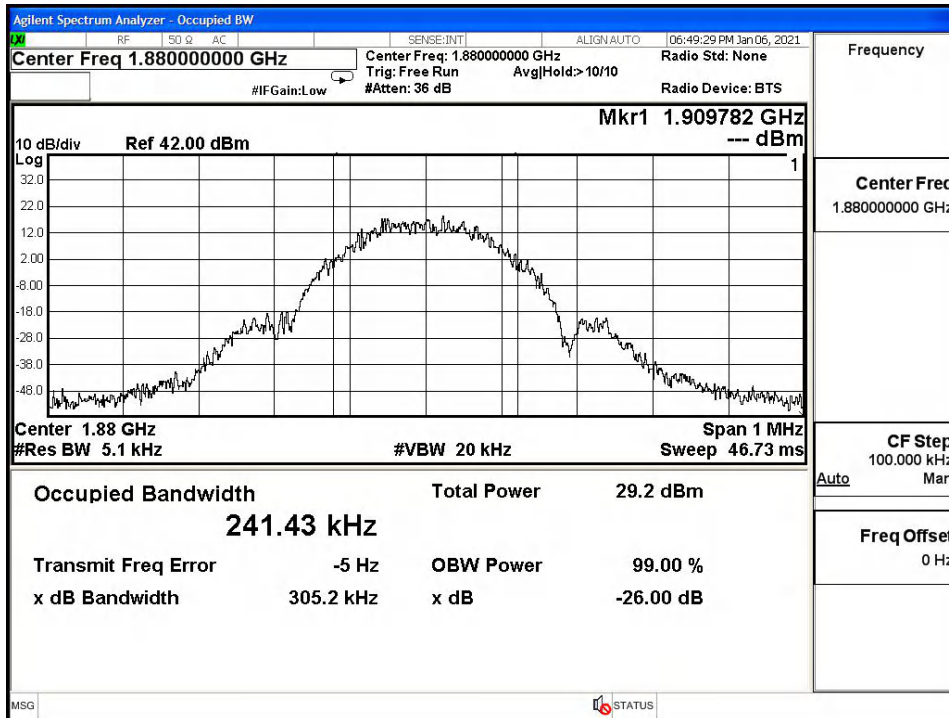


26dB OBW-8PSK-Channel 512

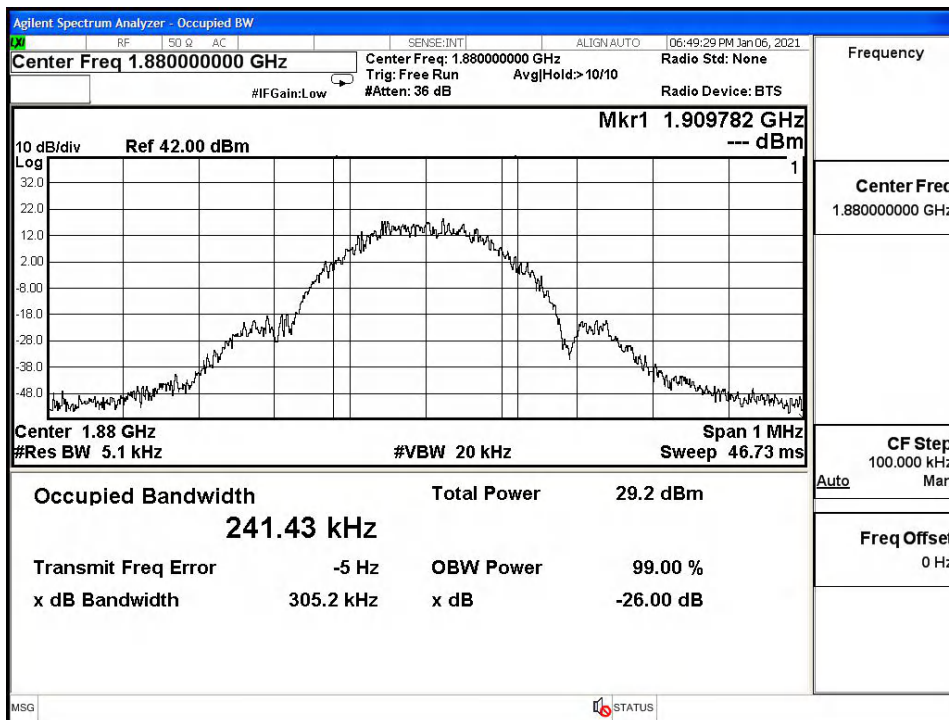
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99% OBW-8PSK-Channel 661

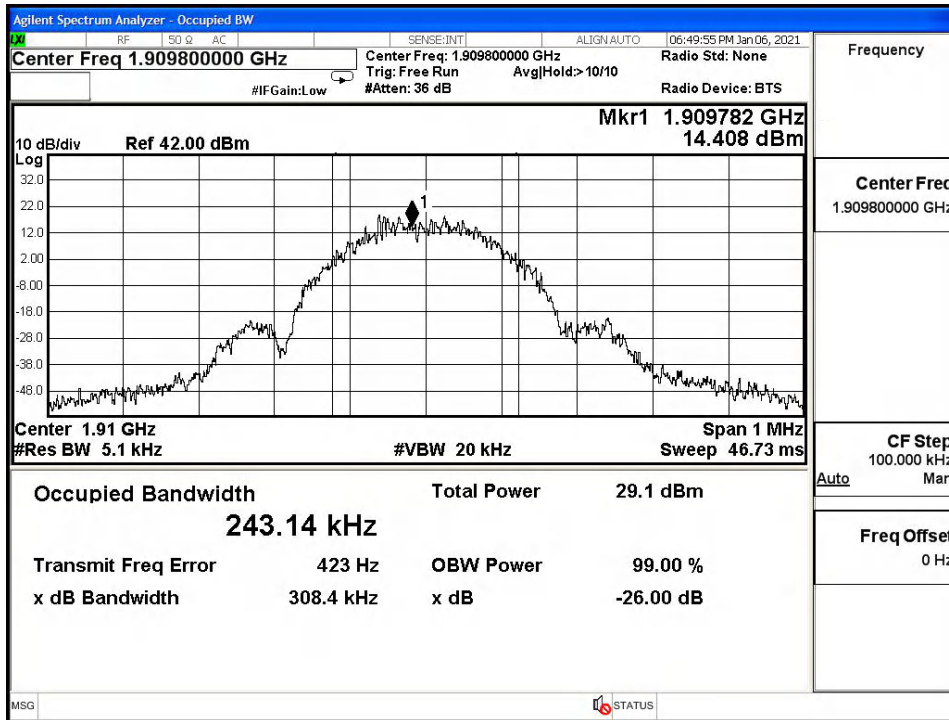


26dB OBW-8PSK-Channel 661

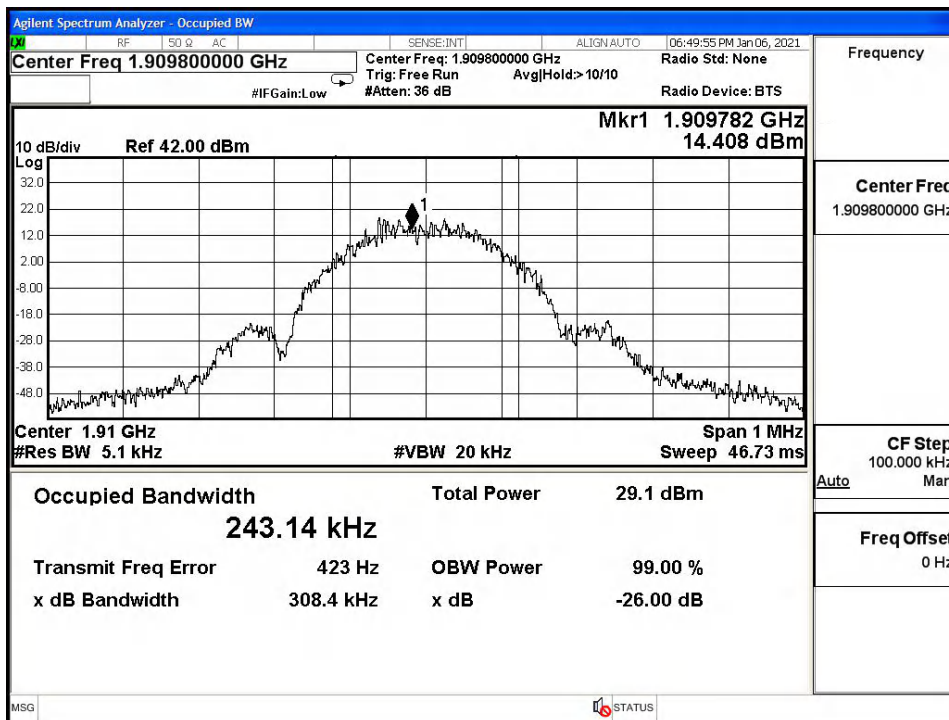
## Chongqing Academy of Information and Communication Technology

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### Report No.: I20W00023-WWAN\_Rev1



99% OBW-8PSK-Channel 810



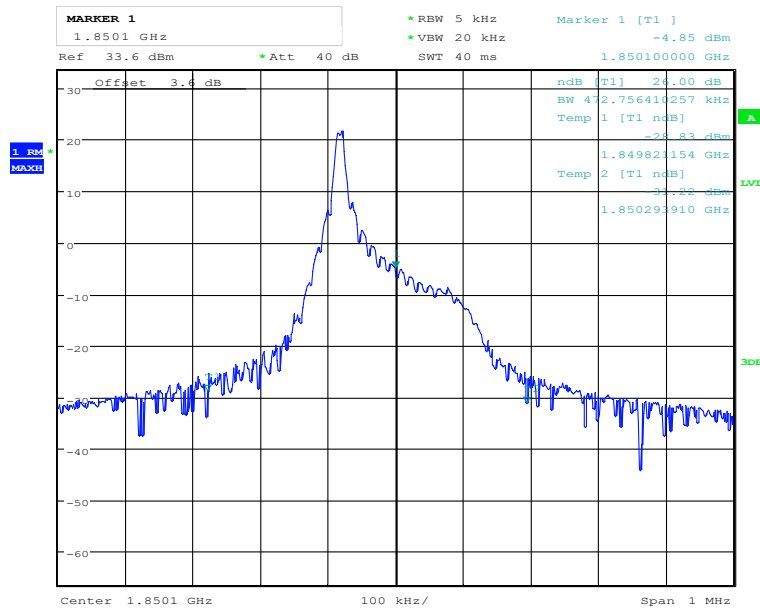
26dB OBW-8PSK-Channel 810

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 Tel: 0086-23-88069965 FAX:0086-23-88608777

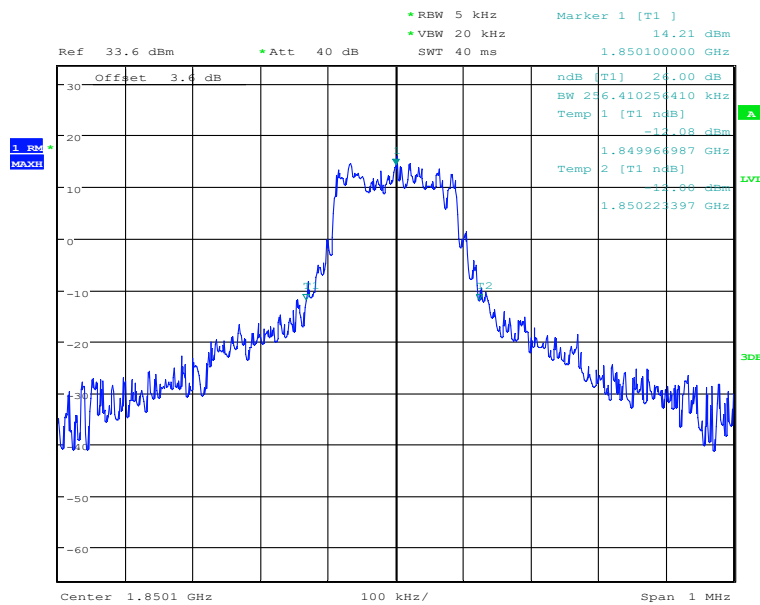
## Report No.: I20W00023-WWAN\_Rev1

### Graphical results for NB-IoT:



Date: 1.JAN.2021 19:53:07

### Band2-26dB OBW-18601 Channel-BPSK



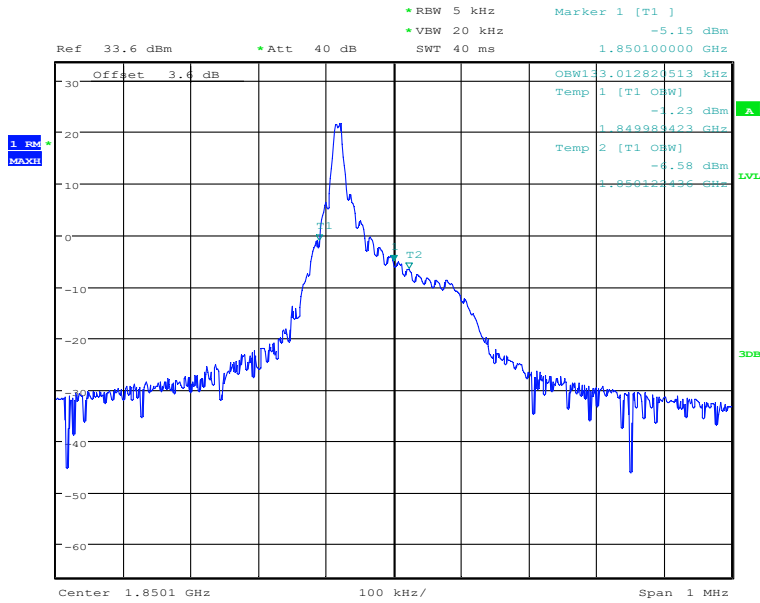
Date: 1.JAN.2021 19:53:36

### Band2-26dB OBW-18601 Channel-QPSK

**Chongqing Academy of Information and Communication Technology**

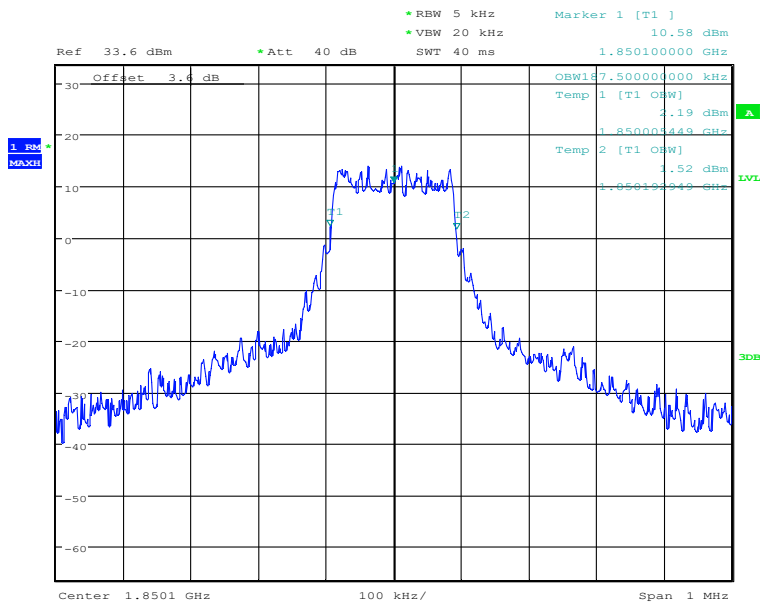
Address: No. 8,Yuma Road, Chayuan New City, Nan'an District, Chongqing, P. R. China,401336  
 Tel: 0086-23-88069965      FAX:0086-23-88608777

### Report No.: I20W00023-WWAN\_Rev1



Date: 1.JAN.2021 19:41:47

### Band2-99% OBW-18601 Channel-BPSK



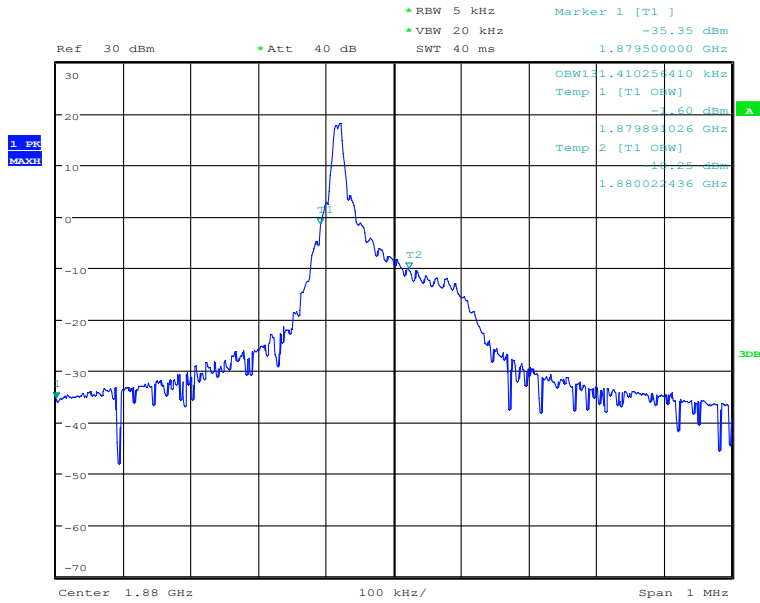
Date: 1.JAN.2021 19:38:50

### Band2-99% OBW-18601 Channel-QPSK

**Chongqing Academy of Information and Communication Technology**

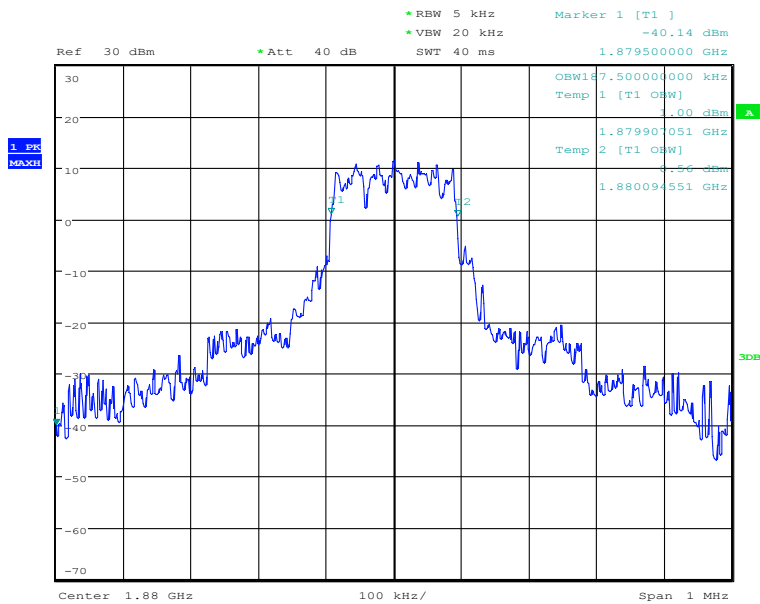
Address: No. 8,Yuma Road, Chayuan New City, Nan'an District, Chongqing, P. R. China,401336  
 Tel: 0086-23-88069965 FAX:0086-23-88608777

### Report No.: I20W00023-WWAN\_Rev1



Date: 27.DEC.2020 15:39:38

### Band2-26dB OBW-18900 Channel-BPSK



Date: 27.DEC.2020 15:40:51

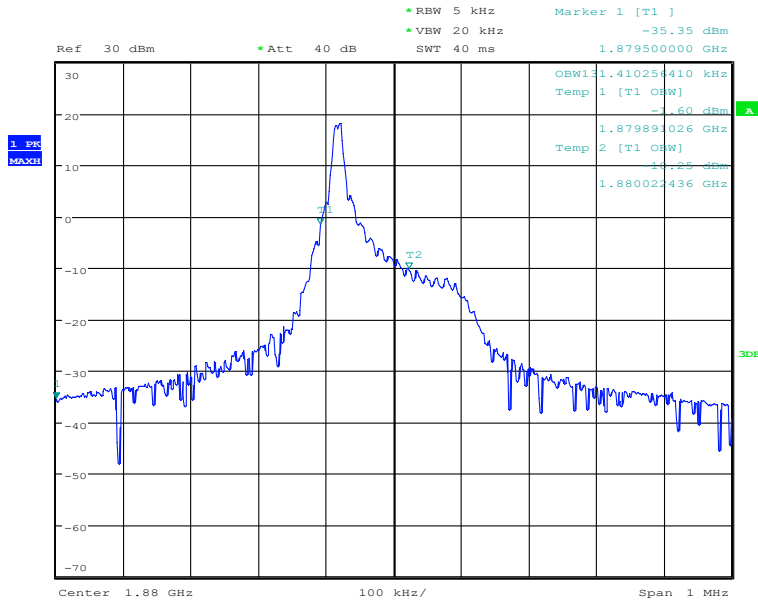
### Band2-26dB OBW-18900 Channel-QPSK

**Chongqing Academy of Information and Communication Technology**

Address: No. 8,Yuma Road, Chayuan New City, Nan'an District, Chongqing, P. R. China,401336  
 Tel: 0086-23-88069965      FAX:0086-23-88608777

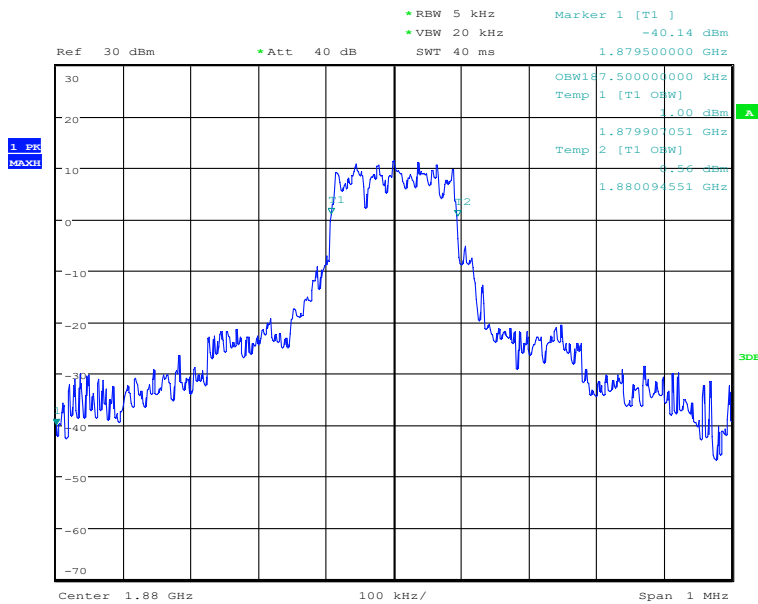


### Report No.: I20W00023-WWAN\_Rev1



Date: 27.DEC.2020 15:39:38

### Band2-99% OBW-18900 Channel-BPSK



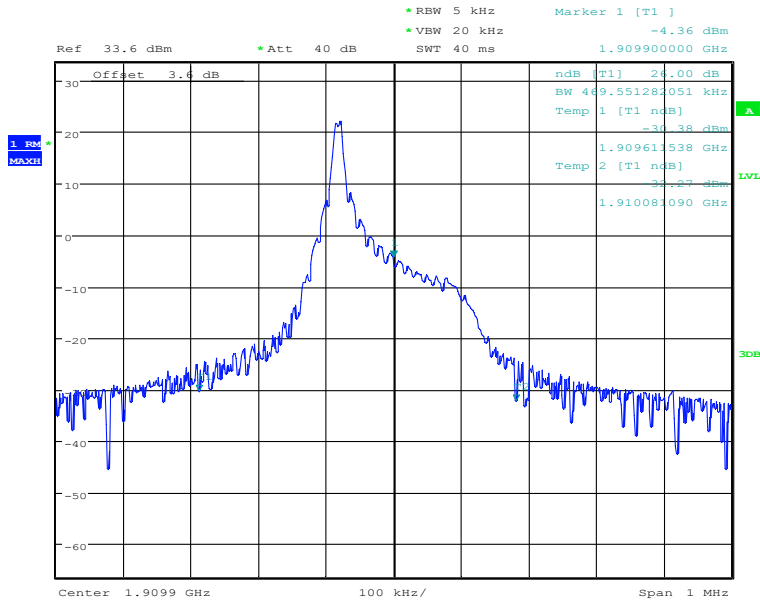
Date: 27.DEC.2020 15:40:51

### Band2-99% OBW-18900 Channel-QPSK

**Chongqing Academy of Information and Communication Technology**

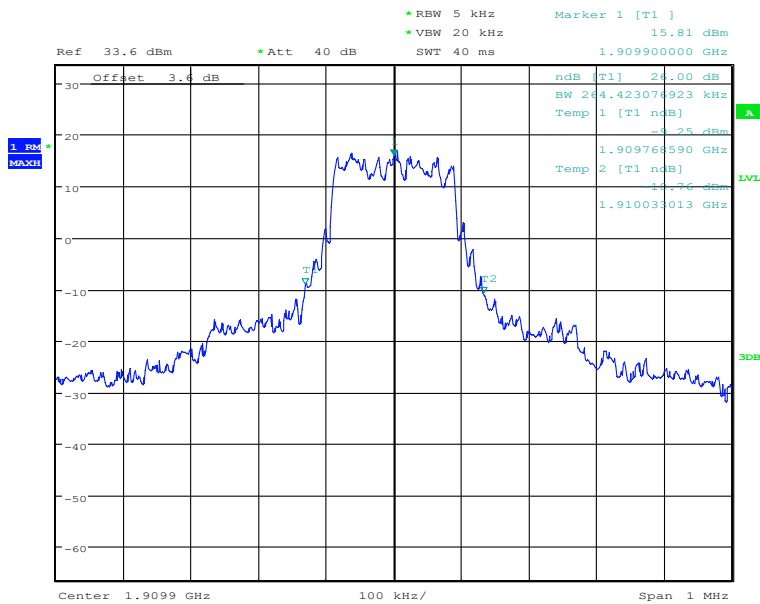
Address: No. 8,Yuma Road, Chayuan New City, Nan'an District, Chongqing, P. R. China,401336  
 Tel: 0086-23-88069965      FAX:0086-23-88608777

### Report No.: I20W00023-WWAN\_Rev1



Date: 1.JAN.2021 19:50:10

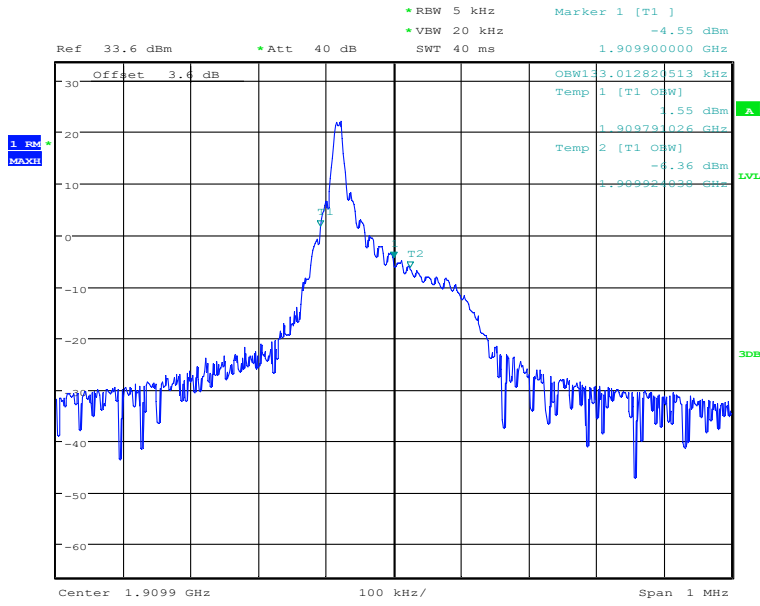
### Band2-26dB OBW-19199 Channel-BPSK



Date: 1.JAN.2021 19:49:20

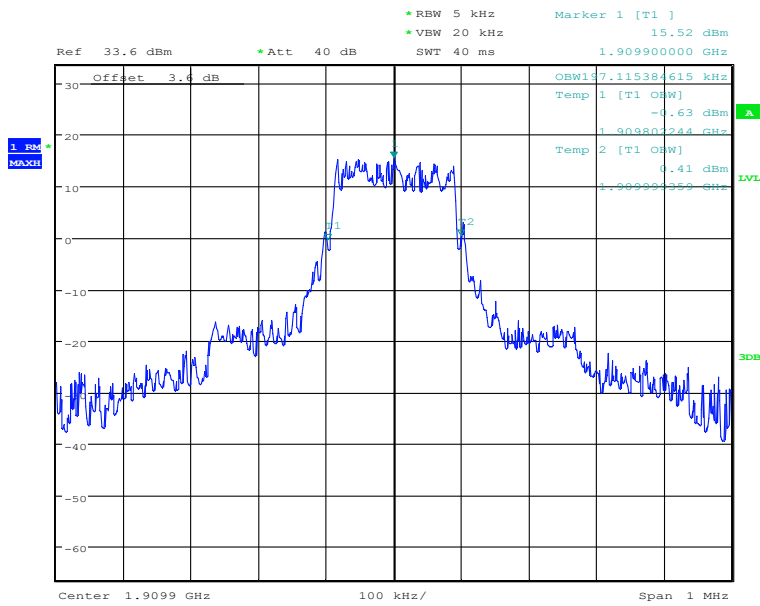
### Band2-26dB OBW-19199 Channel-QPSK

### Report No.: I20W00023-WWAN\_Rev1



Date: 1.JAN.2021 19:43:13

### Band2-99% OBW-19199 Channel-BPSK



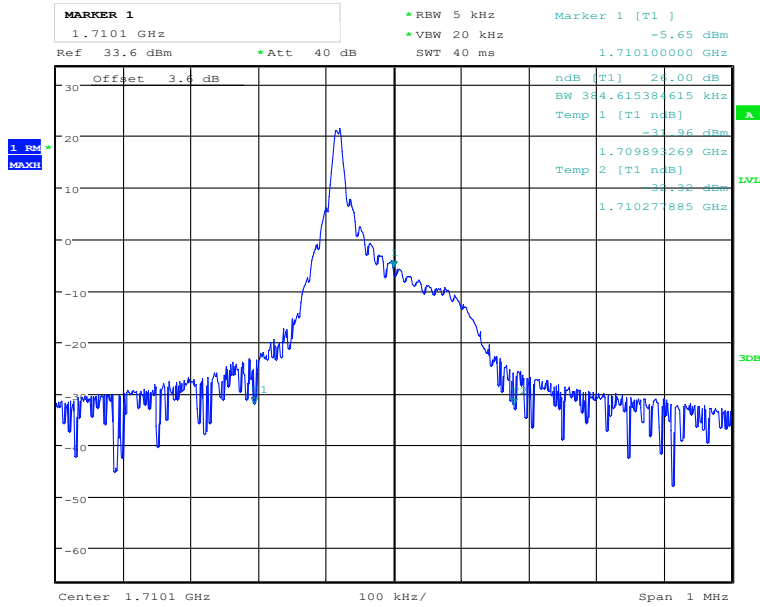
Date: 1.JAN.2021 19:46:29

### Band2-99% OBW-19199 Channel-QPSK

**Chongqing Academy of Information and Communication Technology**

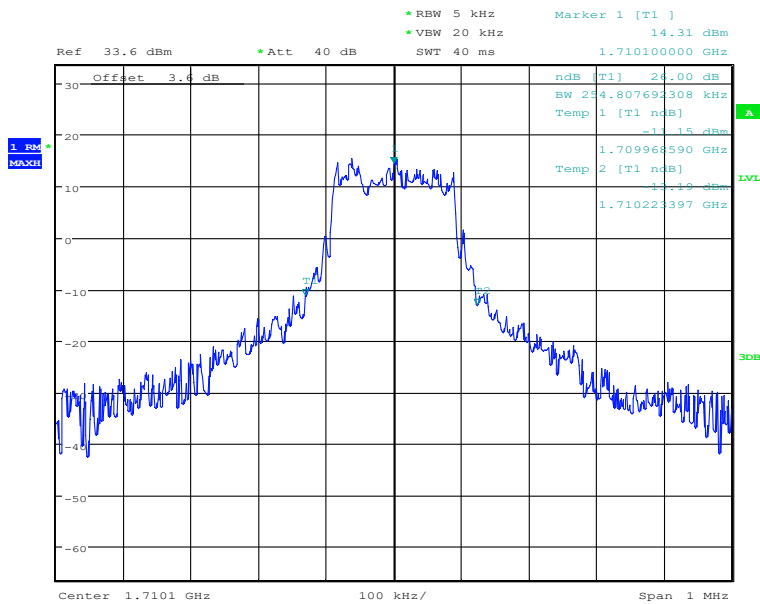
Address: No. 8,Yuma Road, Chayuan New City, Nan'an District, Chongqing, P. R. China,401336  
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### Report No.: I20W00023-WWAN\_Rev1



Date: 1.JAN.2021 19:58:42

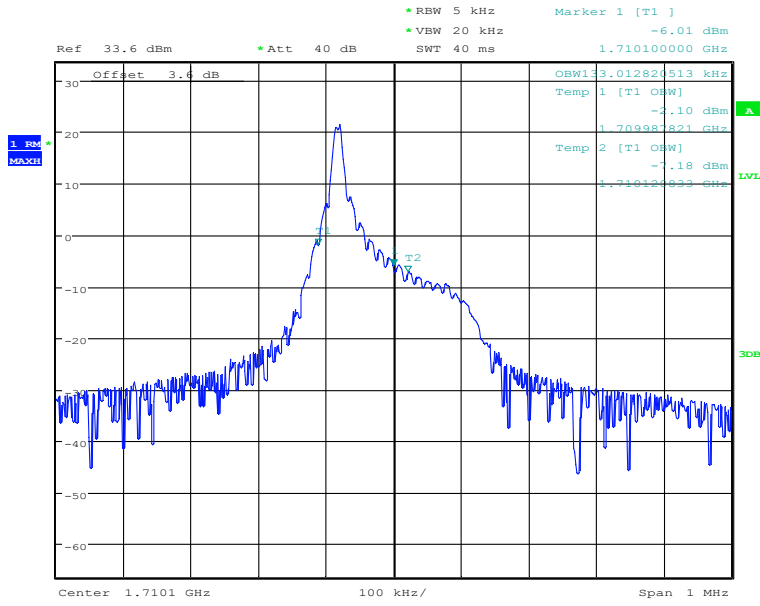
### Band4-26dB OBW-19951 Channel-BPSK



Date: 1.JAN.2021 19:57:25

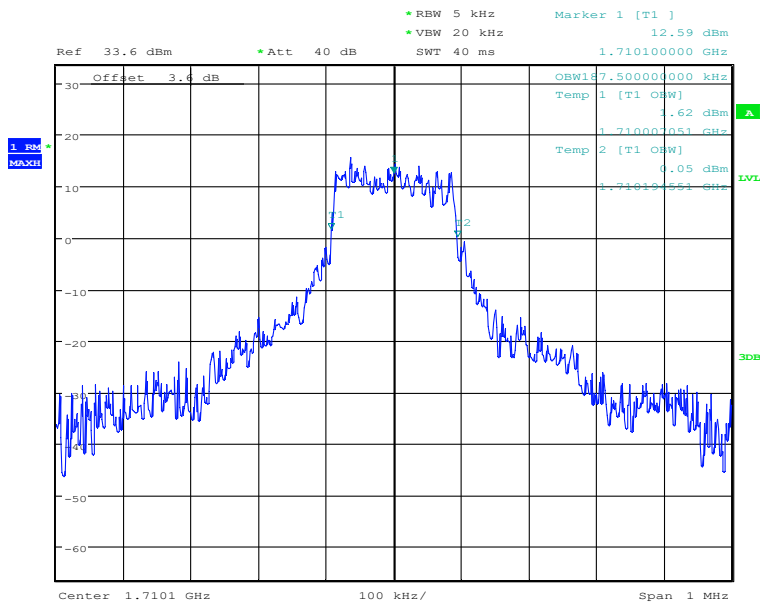
### Band4-26dB OBW-19951 Channel-QPSK

### Report No.: I20W00023-WWAN\_Rev1



Date: 1.JAN.2021 19:58:14

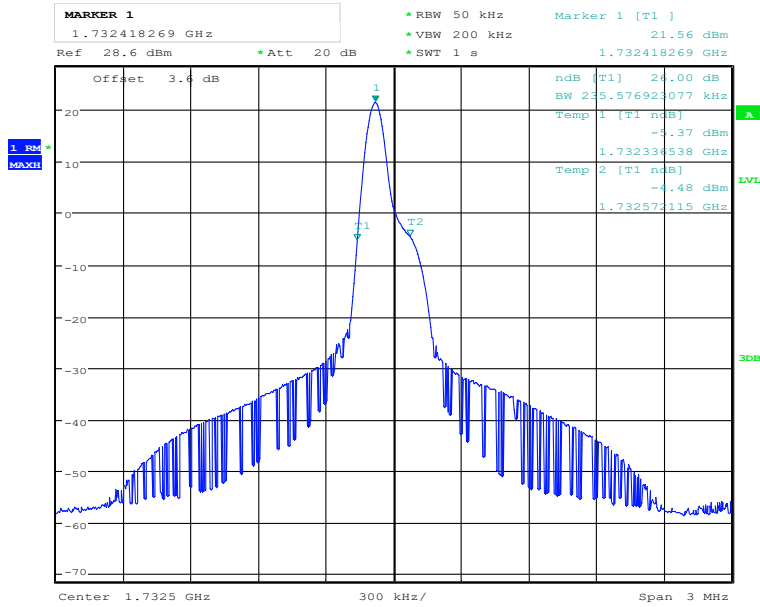
### Band4-99% OBW-19951 Channel-BPSK



Date: 1.JAN.2021 19:57:43

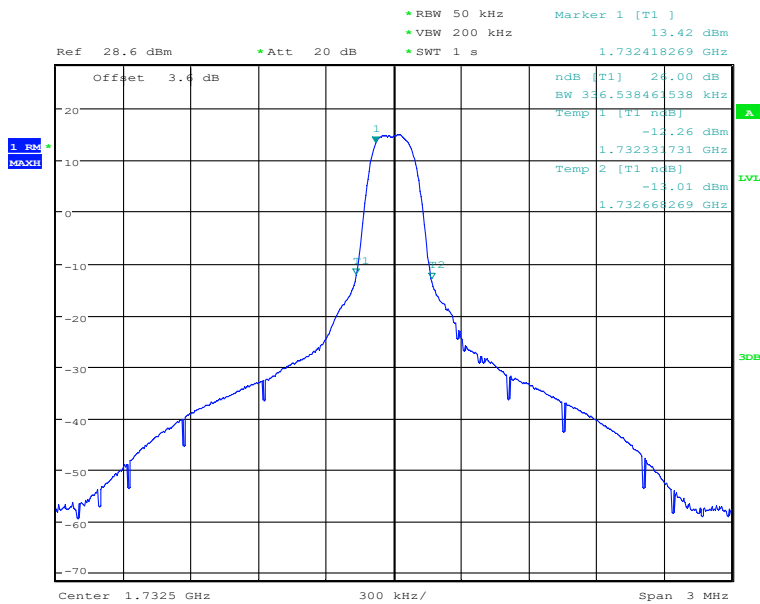
### Band4-99% OBW-19951 Channel-QPSK

### Report No.: I20W00023-WWAN\_Rev1



Date: 28.DEC.2020 10:39:39

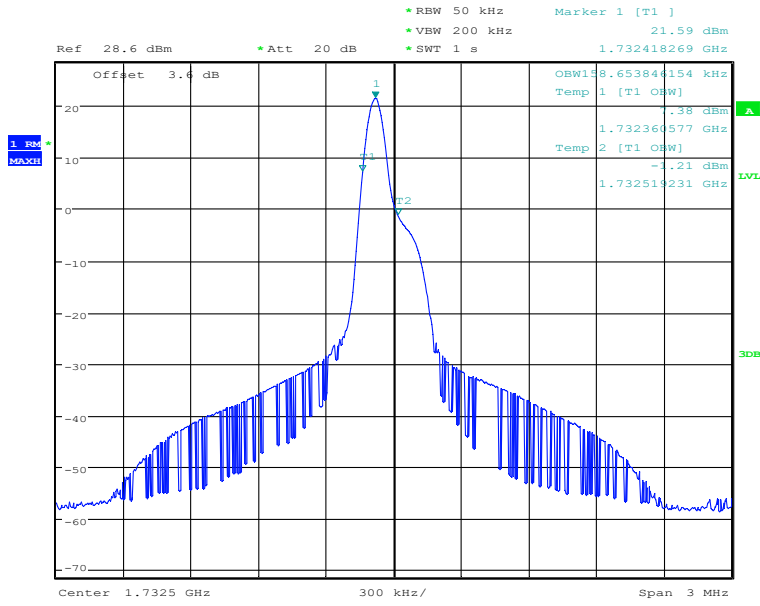
### Band4-26dB OBW-20175 Channel-BPSK



Date: 28.DEC.2020 10:43:08

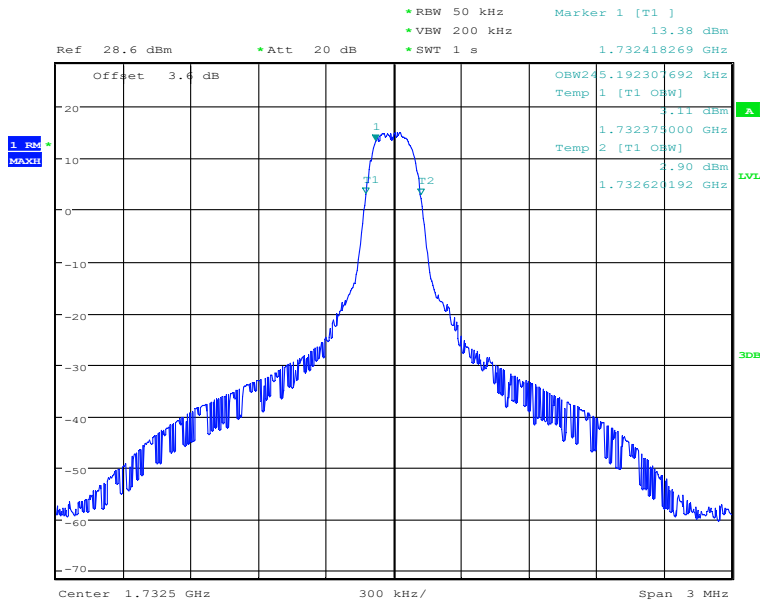
### Band4-26dB OBW-20175 Channel-QPSK

### Report No.: I20W00023-WWAN\_Rev1



Date: 28.DEC.2020 10:39:08

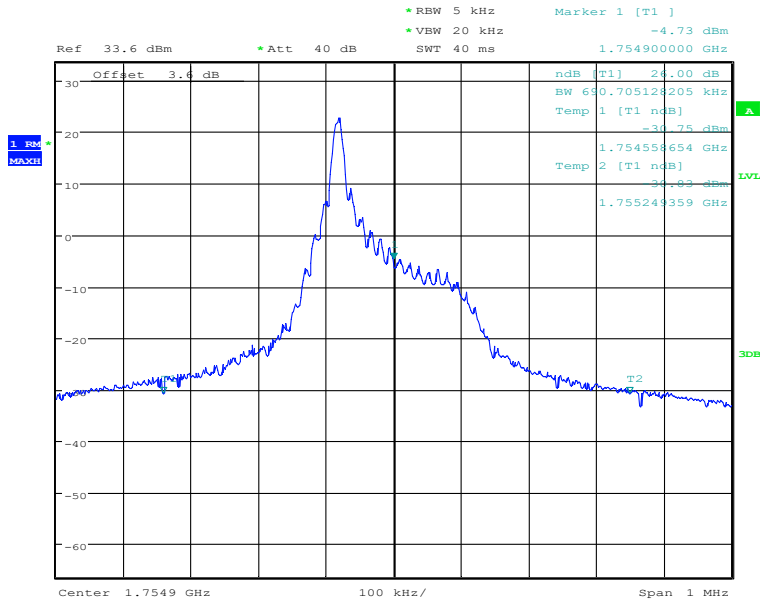
### Band4-99% OBW-20175 Channel-BPSK



Date: 28.DEC.2020 10:44:10

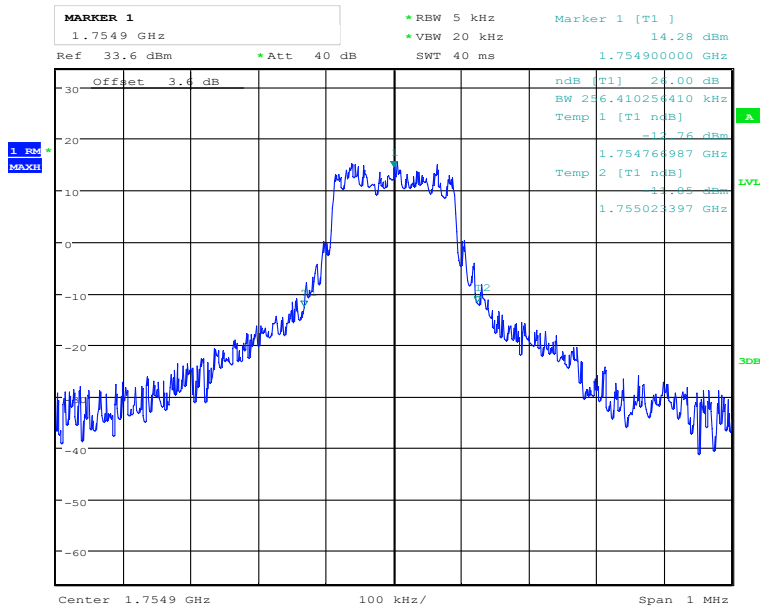
### Band4-99% OBW-20175 Channel-QPSK

### Report No.: I20W00023-WWAN\_Rev1



Date: 1.JAN.2021 20:01:23

### Band4-26dB OBW-20399 Channel-BPSK

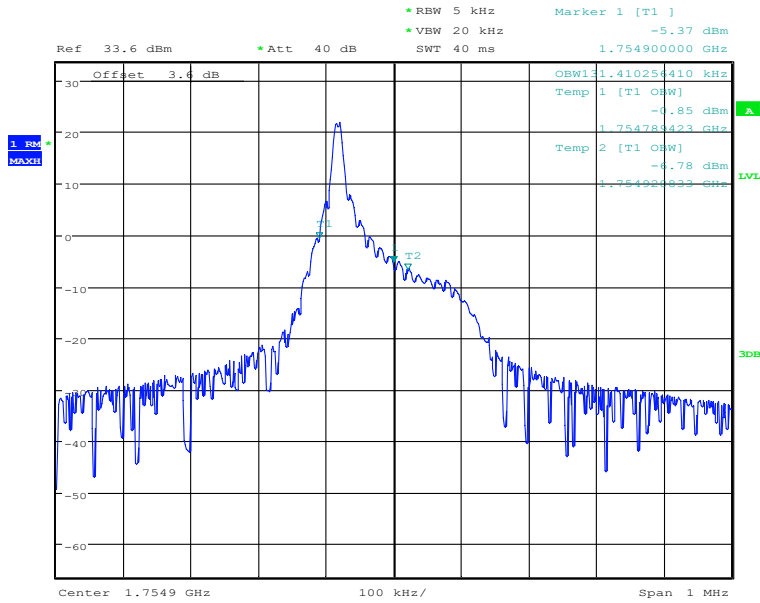


Date: 1.JAN.2021 20:02:46

### Band4-26dB OBW-20399 Channel-QPSK

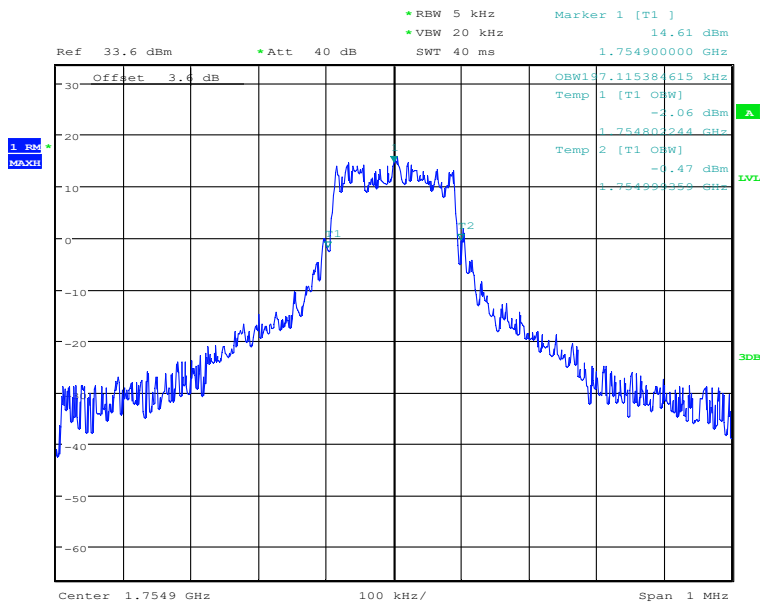


### Report No.: I20W00023-WWAN\_Rev1



Date: 1.JAN.2021 20:01:45

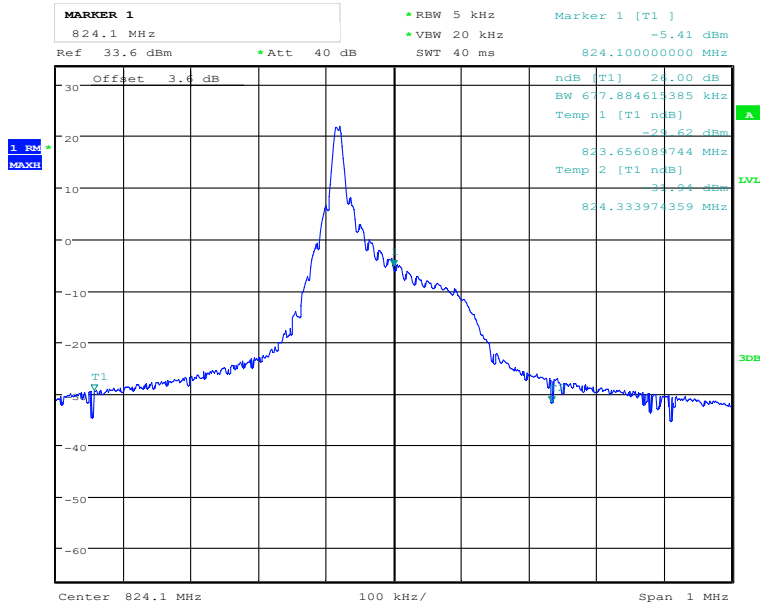
### Band4-99% OBW-20399 Channel-BPSK



Date: 1.JAN.2021 20:02:22

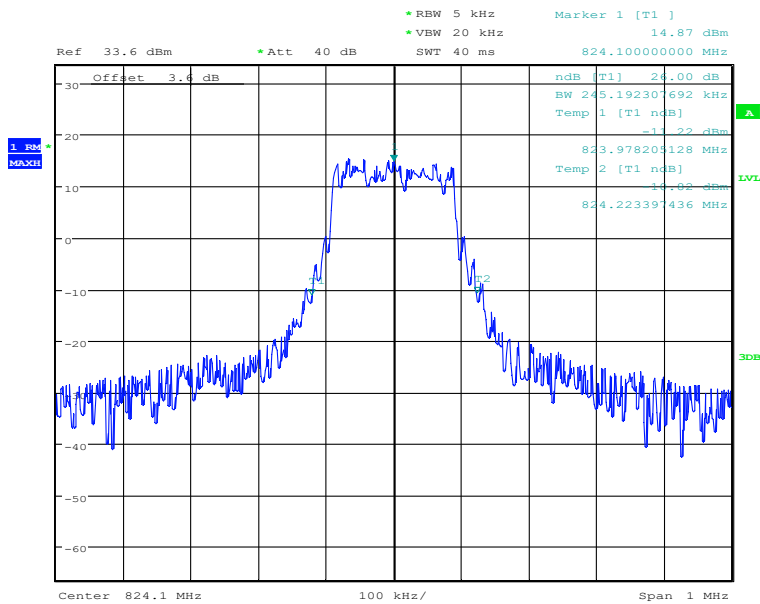
### Band4-99% OBW-20399 Channel-QPSK

### Report No.: I20W00023-WWAN\_Rev1



Date: 1.JAN.2021 20:10:37

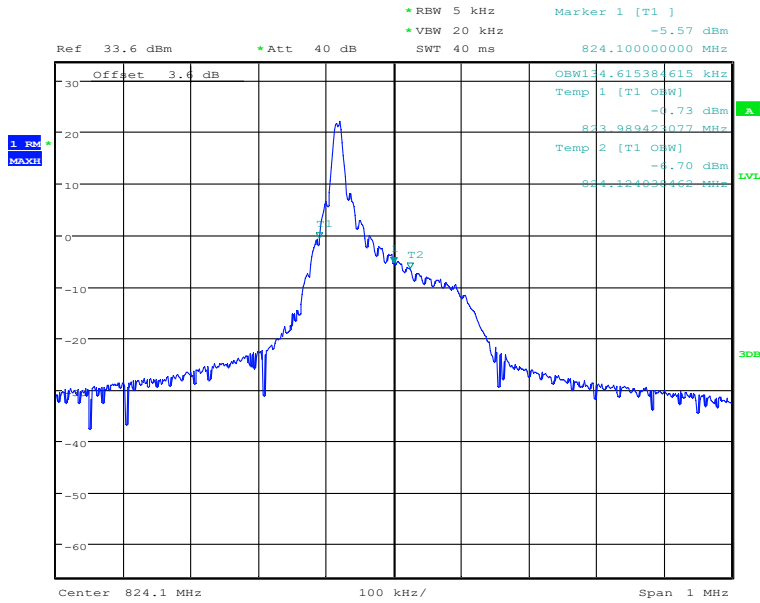
### Band5-26dB OBW-20401 Channel-BPSK



Date: 1.JAN.2021 20:08:30

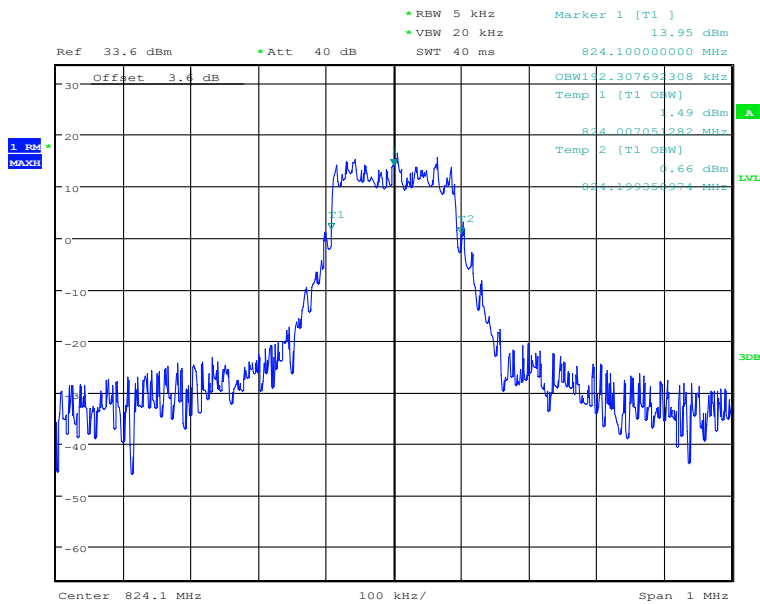
### Band5-26dB OBW-20401 Channel-QPSK

### Report No.: I20W00023-WWAN\_Rev1



Date: 1.JAN.2021 20:09:42

### Band5-99% OBW-20401 Channel-BPSK



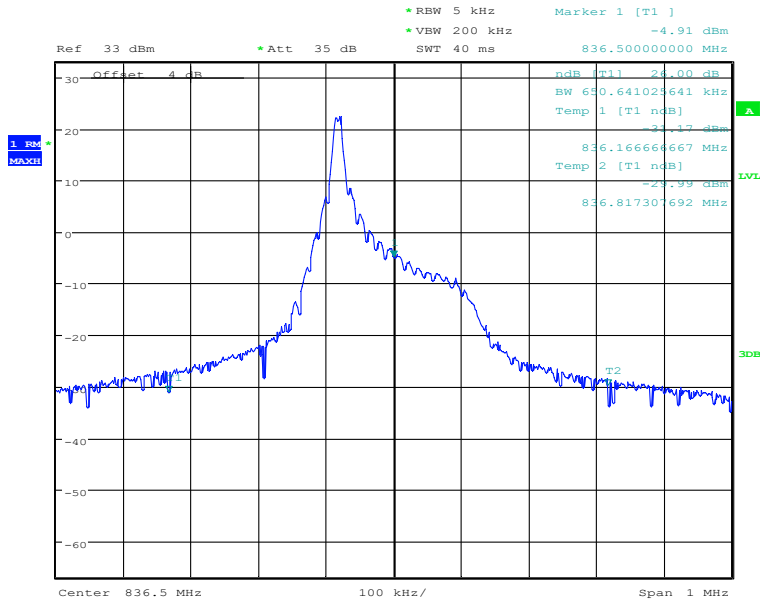
Date: 1.JAN.2021 20:08:50

### Band5-99% OBW-20401 Channel-QPSK

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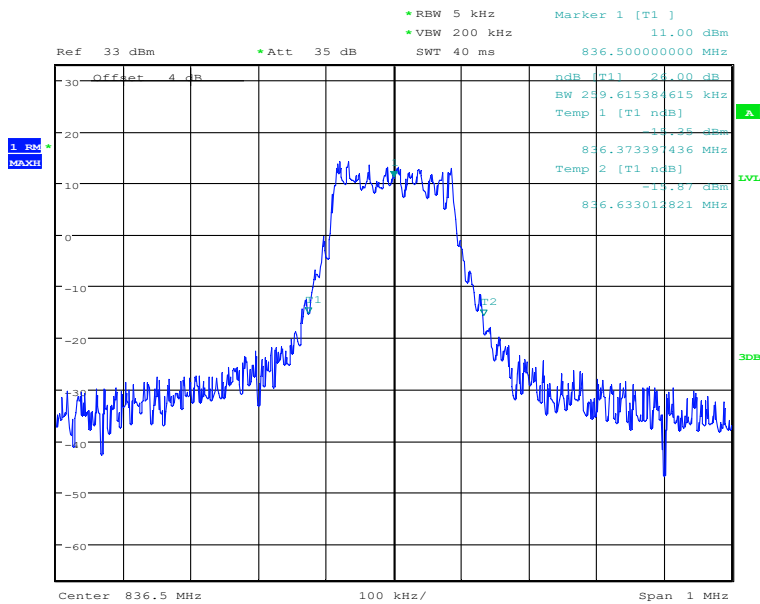
Address: No. 8,Yuma Road, Chayuan New City, Nan'an District, Chongqing, P. R. China,401336  
 Tel: 0086-23-88069965      FAX:0086-23-88608777

### Report No.: I20W00023-WWAN\_Rev1



Date: 29.DEC.2020 11:14:09

### Band5-26dB OBW-20525 Channel-BPSK



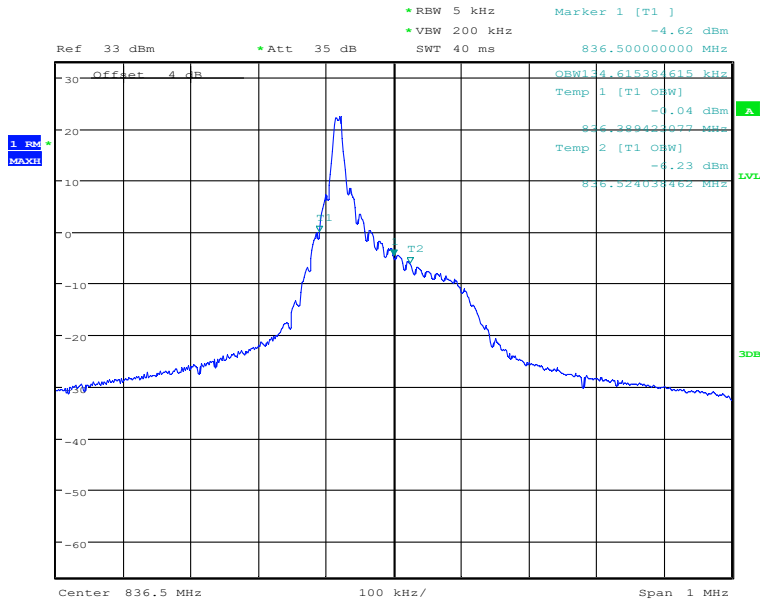
Date: 29.DEC.2020 11:14:40

### Band5-26dB OBW-20525 Channel-QPSK

**Chongqing Academy of Information and Communication Technology**

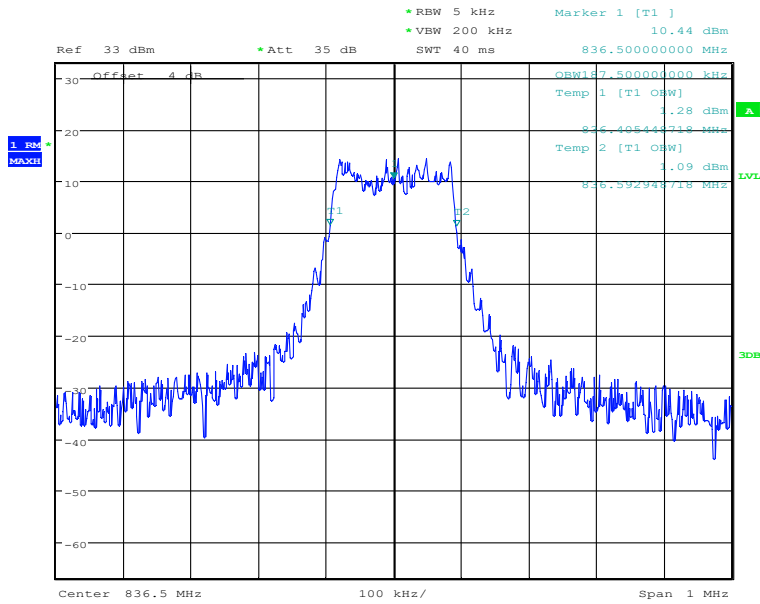
Address: No. 8,Yuma Road, Chayuan New City, Nan'an District, Chongqing, P. R. China,401336  
 Tel: 0086-23-88069965      FAX:0086-23-88608777

### Report No.: I20W00023-WWAN\_Rev1



Date: 29.DEC.2020 11:13:26

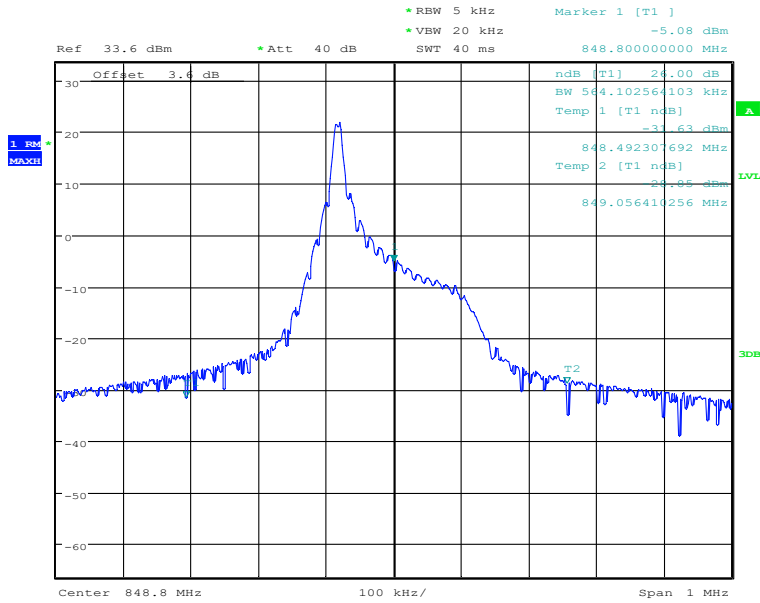
### Band5-99% OBW-20525 Channel-BPSK



Date: 29.DEC.2020 11:15:02

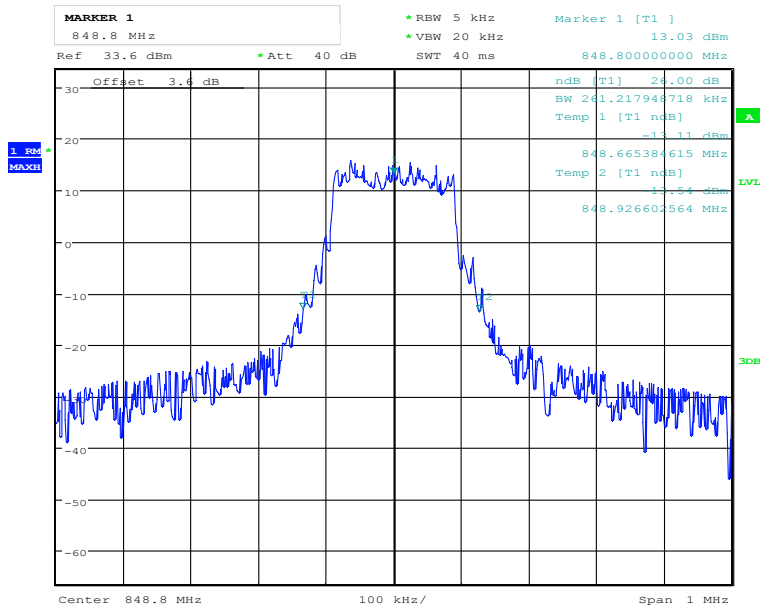
### Band5-99% OBW-20525 Channel-QPSK

### Report No.: I20W00023-WWAN\_Rev1



Date: 1.JAN.2021 20:14:13

### Band5-26dB OBW-20648 Channel-BPSK



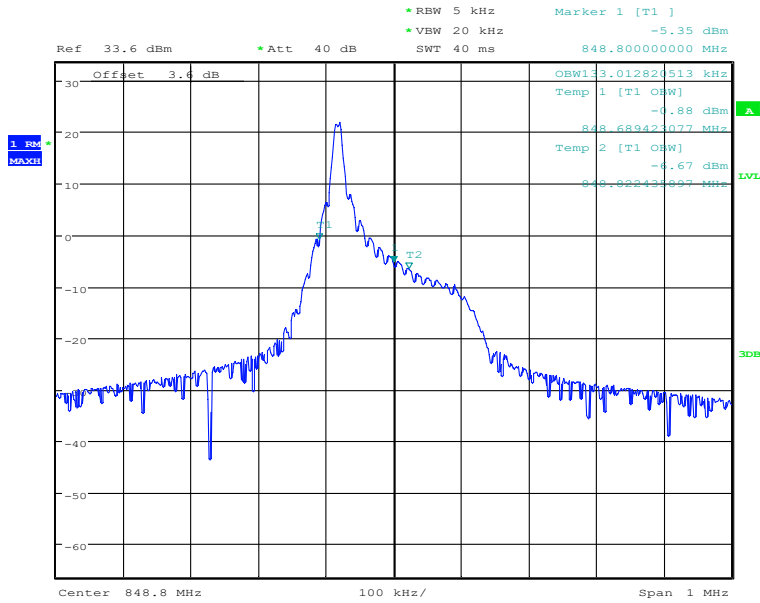
Date: 1.JAN.2021 20:16:09

### Band5-26dB OBW-20648 Channel-QPSK

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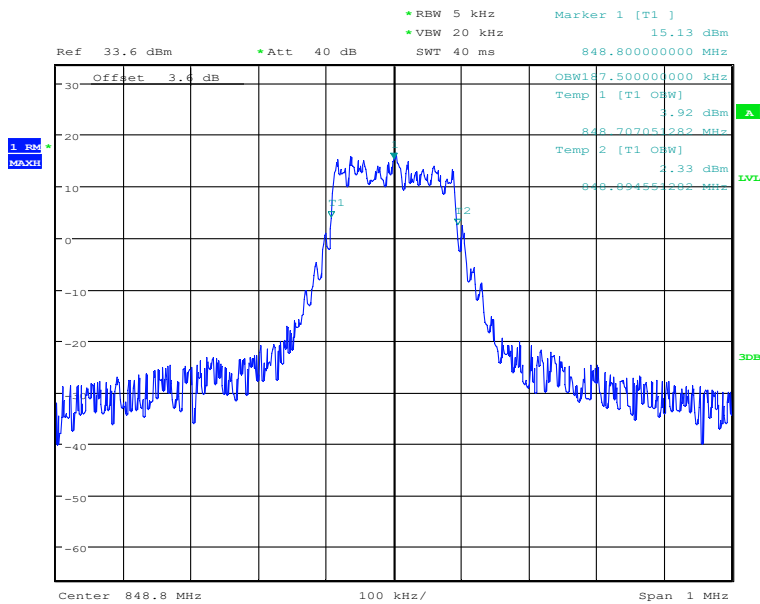
Address: No. 8,Yuma Road, Chayuan New City, Nan'an District, Chongqing, P. R. China,401336  
 Tel: 0086-23-88069965      FAX:0086-23-88608777

### Report No.: I20W00023-WWAN\_Rev1



Date: 1.JAN.2021 20:14:51

### Band5-99% OBW-20648 Channel-BPSK



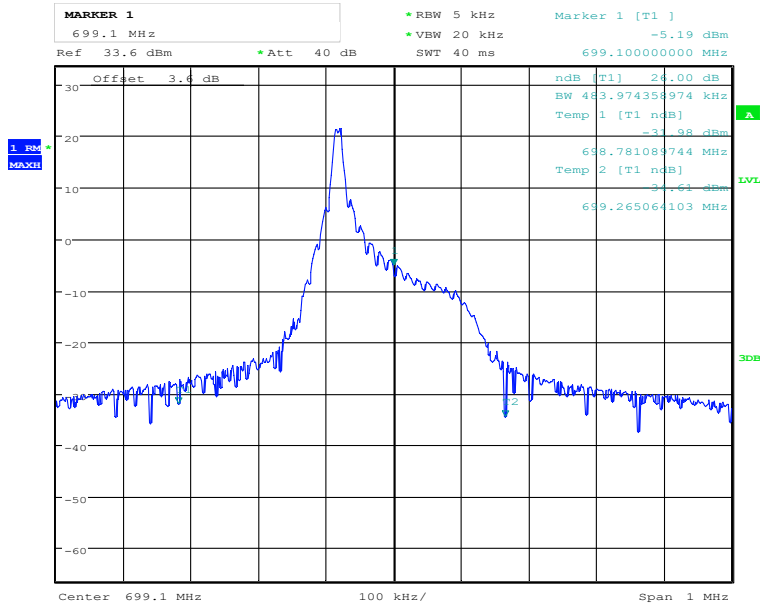
Date: 1.JAN.2021 20:15:35

### Band5-99% OBW-20648 Channel-QPSK

**Chongqing Academy of Information and Communication Technology**

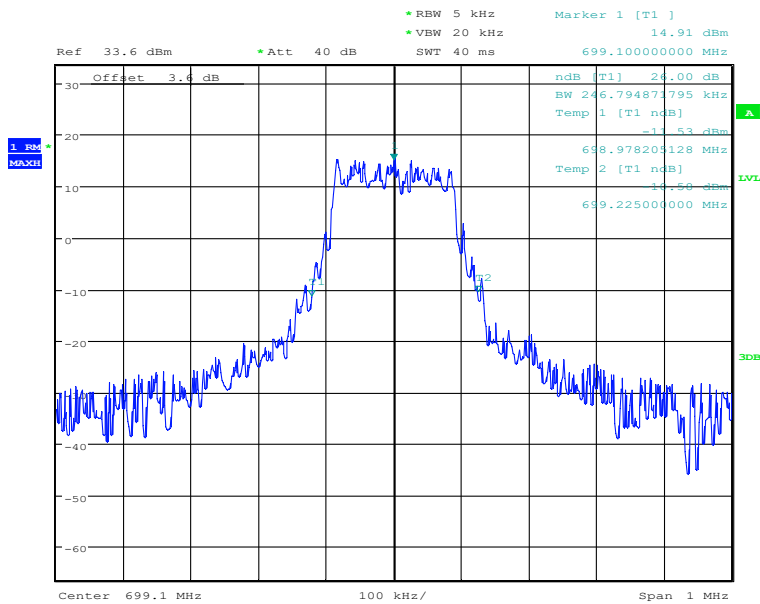
Address: No. 8,Yuma Road, Chayuan New City, Nan'an District, Chongqing, P. R. China,401336  
 Tel: 0086-23-88069965    FAX:0086-23-88608777

### Report No.: I20W00023-WWAN\_Rev1



Date: 1.JAN.2021 20:21:10

### Band12-26dB OBW-23011 Channel-BPSK



Date: 1.JAN.2021 20:19:43

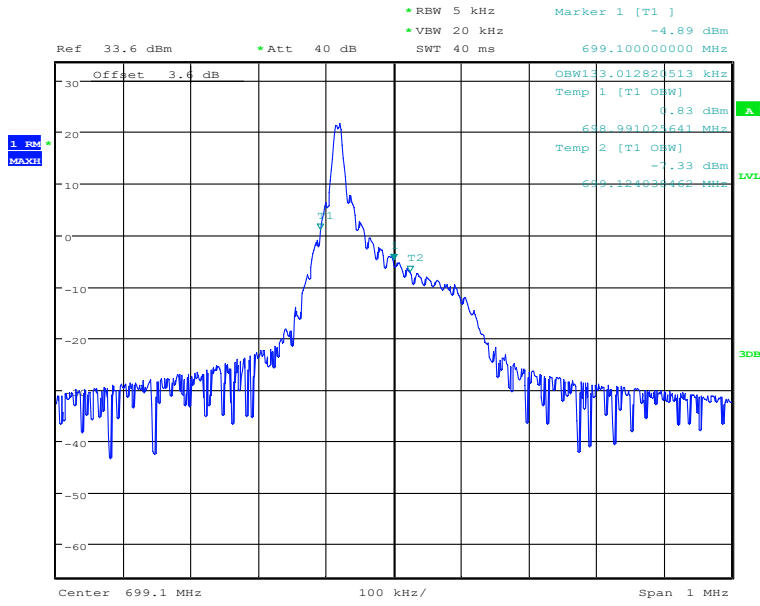
### Band12-26dB OBW-23011 Channel-QPSK

**Chongqing Academy of Information and Communication Technology**

Address: No. 8,Yuma Road, Chayuan New City, Nan'an District, Chongqing, P. R. China,401336  
 Tel: 0086-23-88069965      FAX:0086-23-88608777

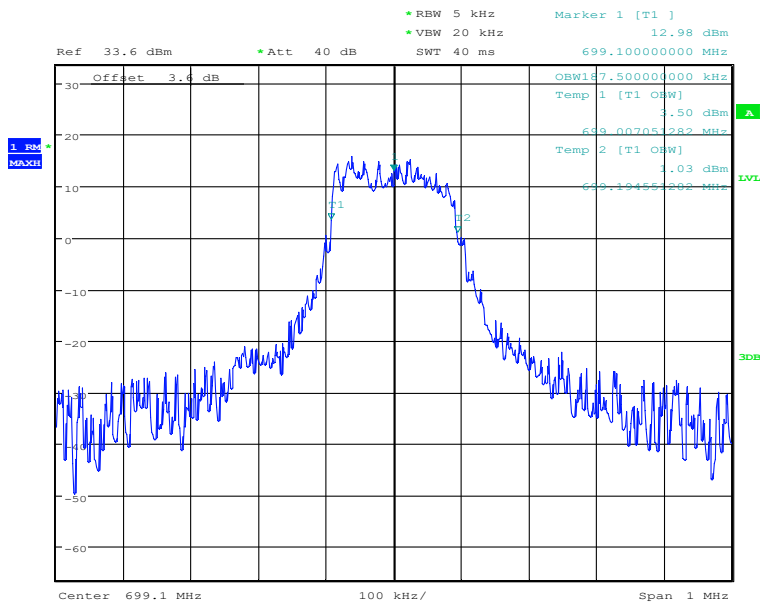


### Report No.: I20W00023-WWAN\_Rev1



Date: 1.JAN.2021 20:20:29

### Band12-99% OBW-23011 Channel-BPSK



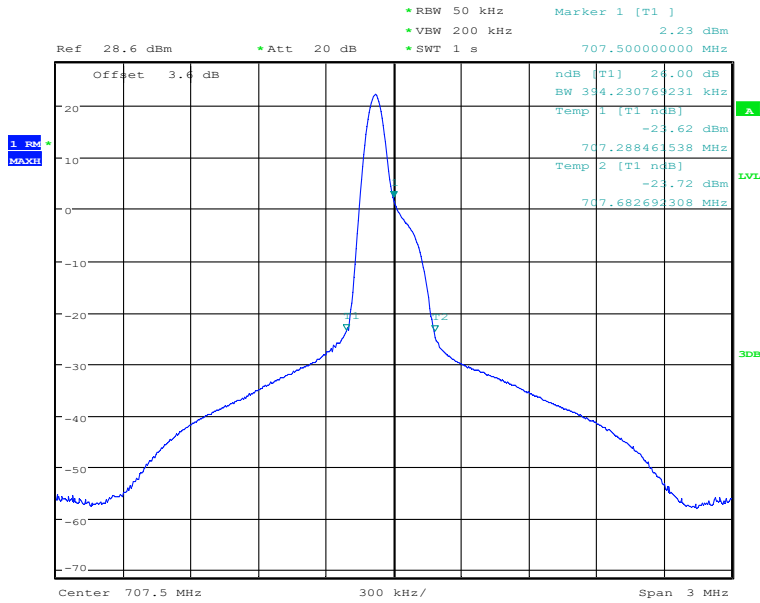
Date: 1.JAN.2021 20:19:58

### Band12-99% OBW-23011 Channel-QPSK

**Chongqing Academy of Information and Communication Technology**

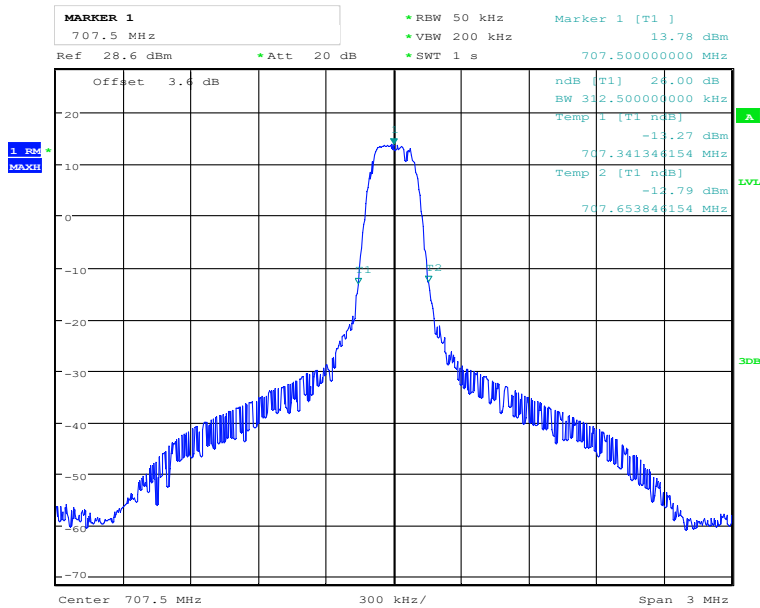
Address: No. 8,Yuma Road, Chayuan New City, Nan'an District, Chongqing, P. R. China,401336  
 Tel: 0086-23-88069965      FAX:0086-23-88608777

### Report No.: I20W00023-WWAN\_Rev1



Date: 28.DEC.2020 10:54:49

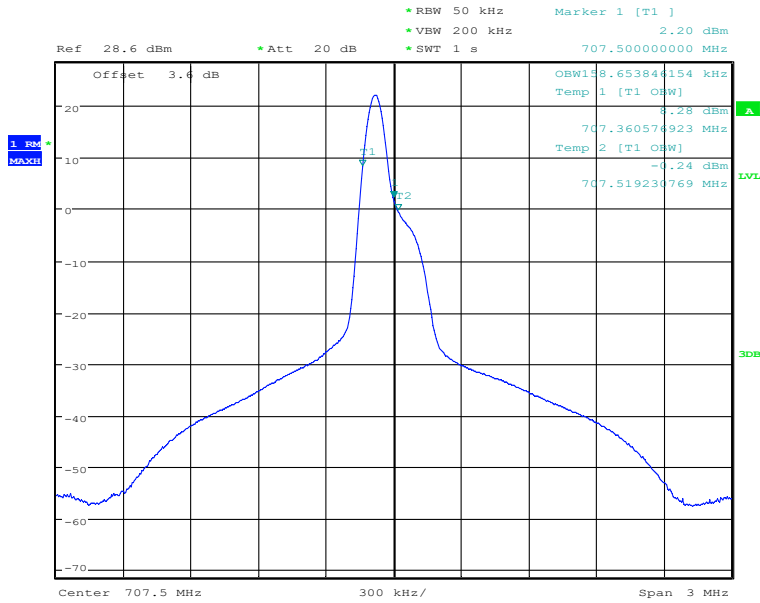
### Band12-26dB OBW-23095 Channel-BPSK



Date: 28.DEC.2020 10:53:11

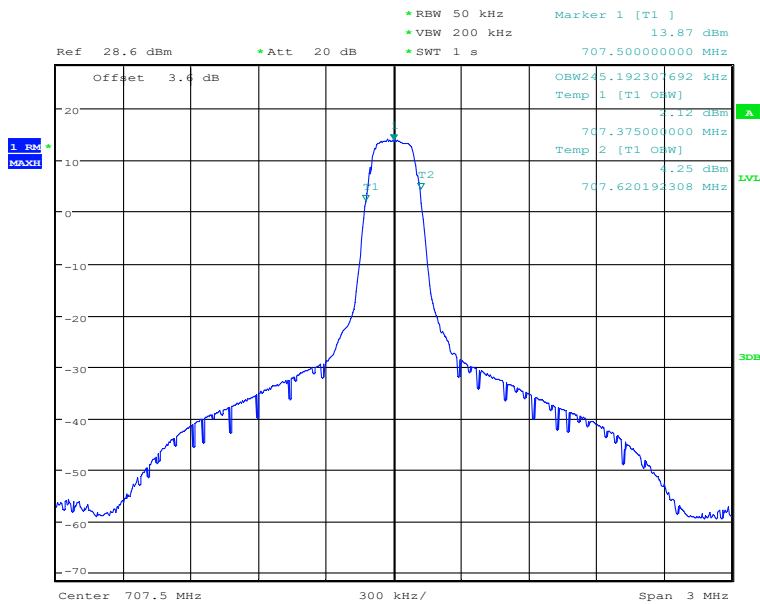
### Band12-26dB OBW-23095 Channel-QPSK

### Report No.: I20W00023-WWAN\_Rev1



Date: 28.DEC.2020 11:09:12

### Band12-99% OBW-23095 Channel-BPSK



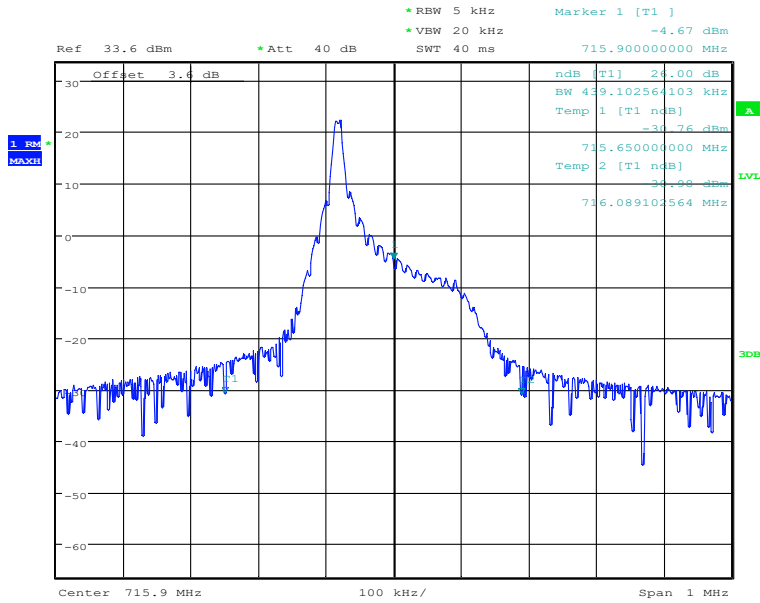
Date: 28.DEC.2020 10:52:18

### Band12-99% OBW-23095 Channel-QPSK

**Chongqing Academy of Information and Communication Technology**

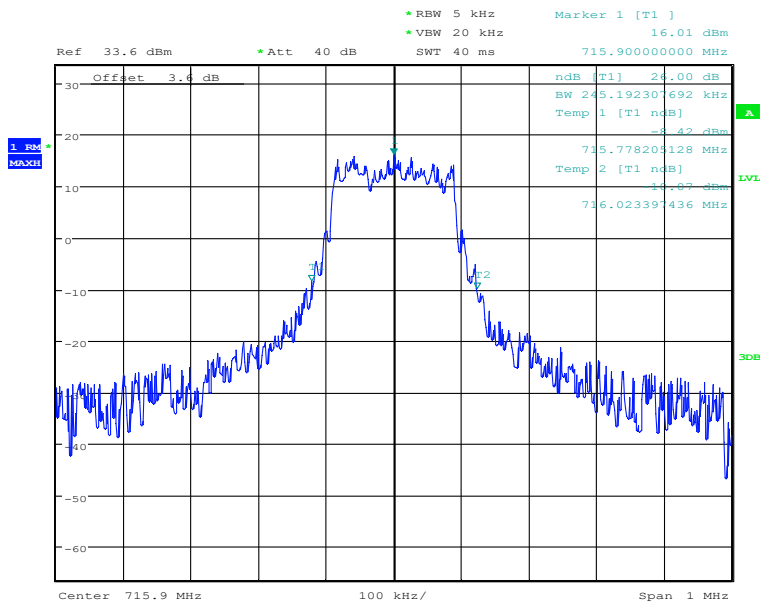
Address: No. 8,Yuma Road, Chayuan New City, Nan'an District, Chongqing, P. R. China,401336  
 Tel: 0086-23-88069965      FAX:0086-23-88608777

### Report No.: I20W00023-WWAN\_Rev1



Date: 1.JAN.2021 20:29:51

### Band12-26dB OBW-23179 Channel-BPSK



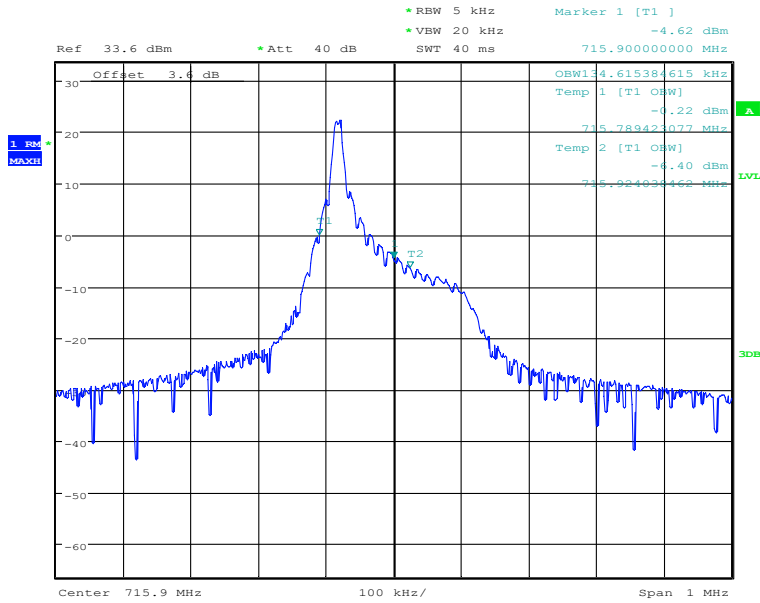
Date: 1.JAN.2021 20:31:42

### Band12-26dB OBW-23179 Channel-QPSK

**Chongqing Academy of Information and Communication Technology**

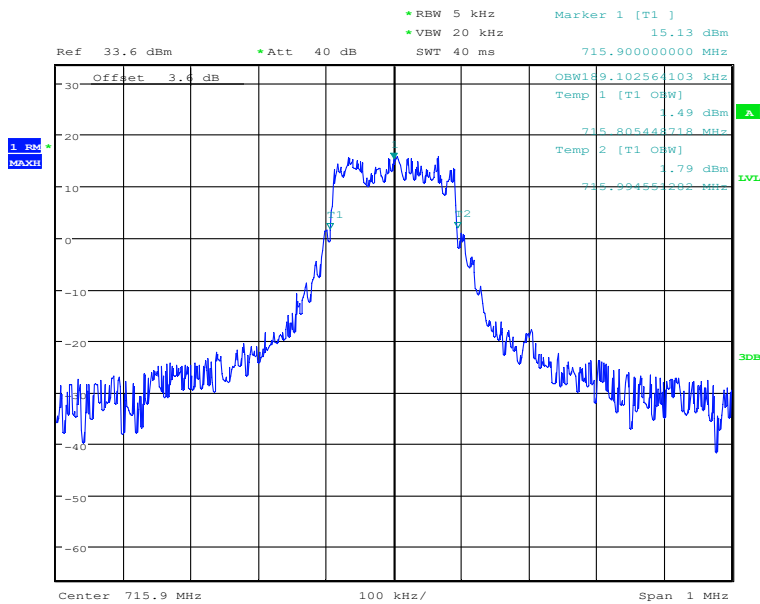
Address: No. 8,Yuma Road, Chayuan New City, Nan'an District, Chongqing, P. R. China,401336  
 Tel: 0086-23-88069965 FAX:0086-23-88608777

### Report No.: I20W00023-WWAN\_Rev1



Date: 1.JAN.2021 20:30:29

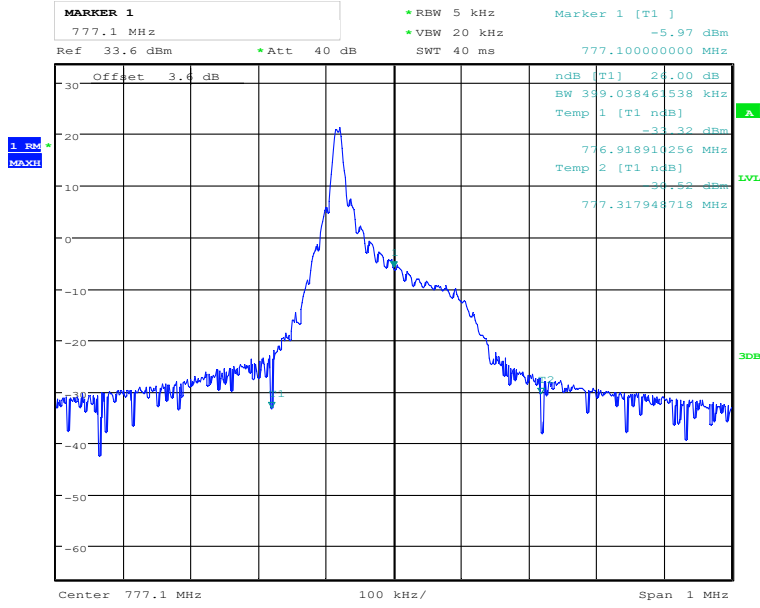
### Band12-99% OBW-23179 Channel-BPSK



Date: 1.JAN.2021 20:31:15

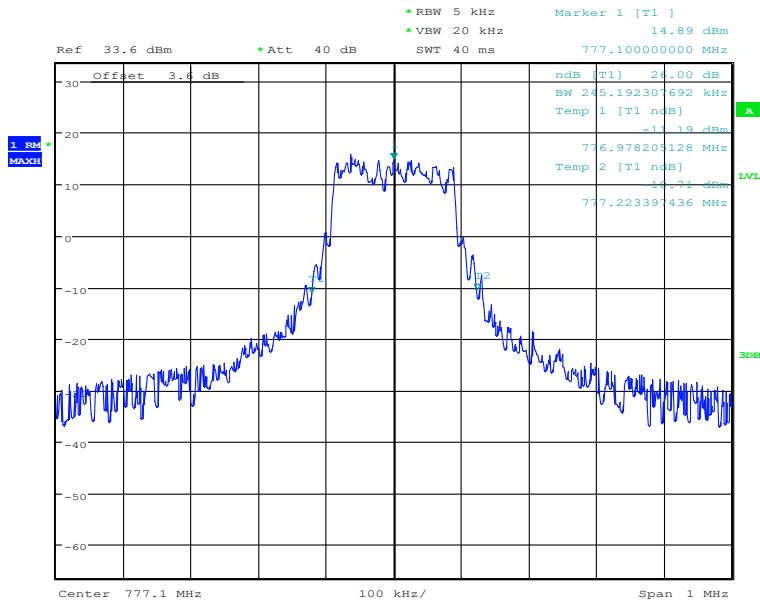
### Band12-99% OBW-23179 Channel-QPSK

### Report No.: I20W00023-WWAN\_Rev1



Date: 1.JAN.2021 20:36:12

### Band13-26dB OBW-23181 Channel-BPSK



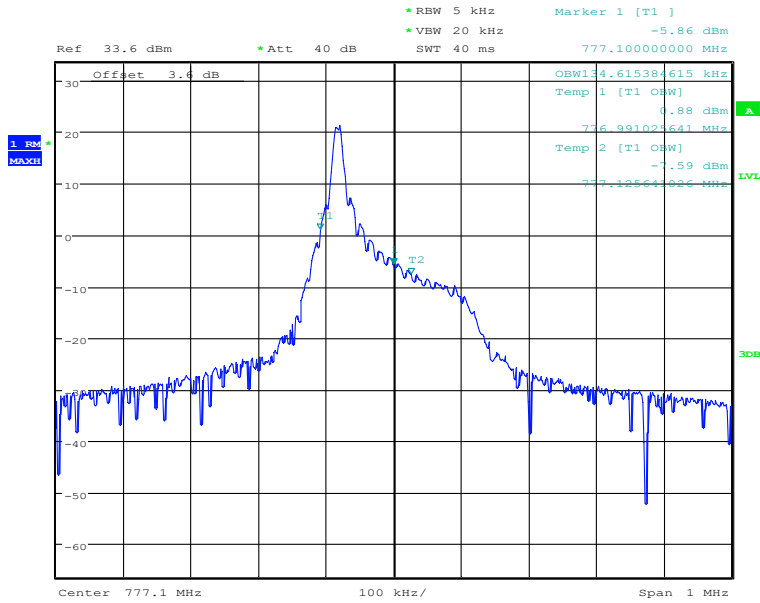
Date: 1.JAN.2021 20:34:28

### Band13-26dB OBW-23181 Channel-QPSK

**Chongqing Academy of Information and Communication Technology**

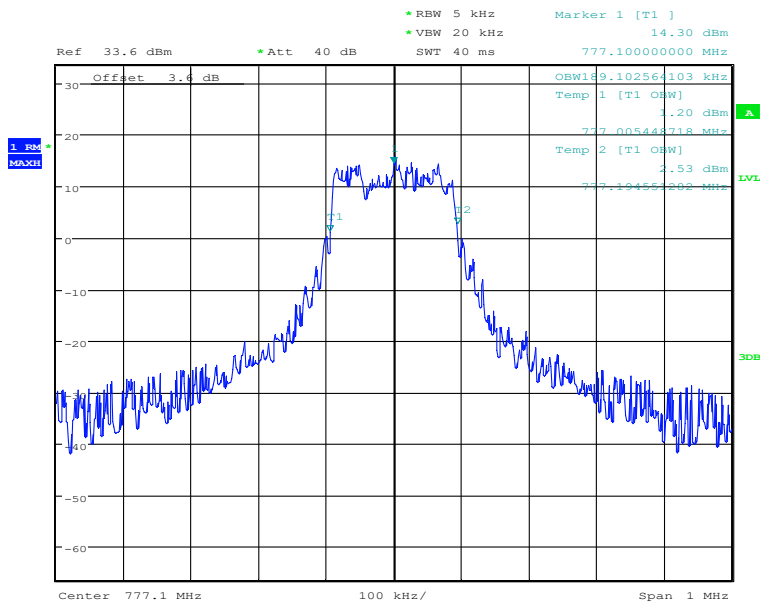
Address: No. 8,Yuma Road, Chayuan New City, Nan'an District, Chongqing, P. R. China,401336  
 Tel: 0086-23-88069965      FAX:0086-23-88608777

### Report No.: I20W00023-WWAN\_Rev1



Date: 1.JAN.2021 20:35:42

### Band13-99% OBW-23181 Channel-BPSK



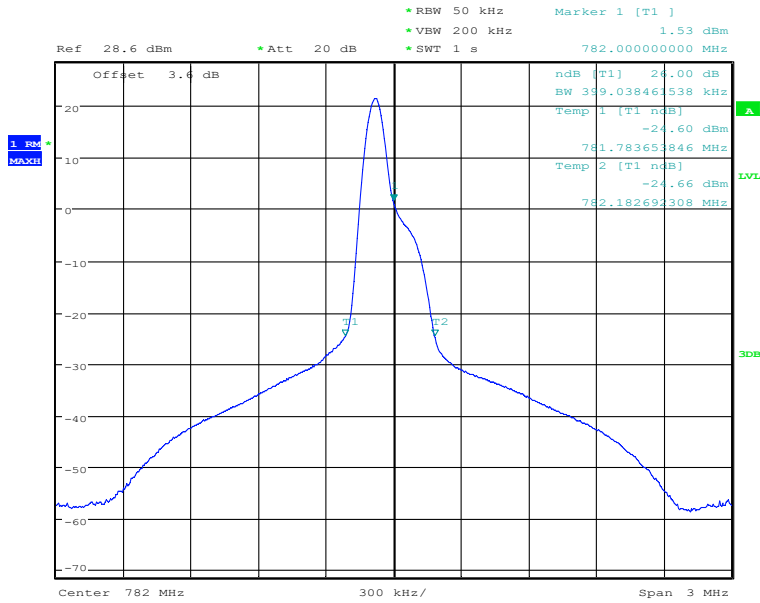
Date: 1.JAN.2021 20:34:50

### Band13-99% OBW-23181 Channel-QPSK

**Chongqing Academy of Information and Communication Technology**

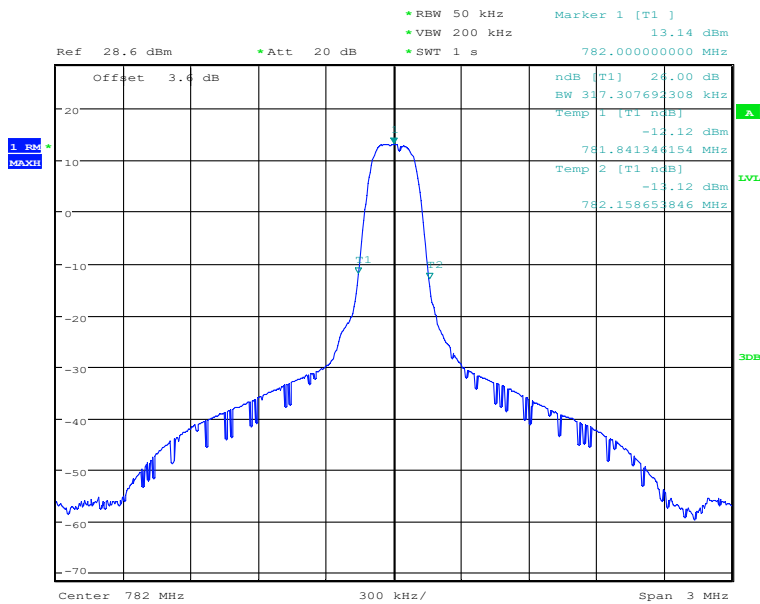
Address: No. 8,Yuma Road, Chayuan New City, Nan'an District, Chongqing, P. R. China,401336  
 Tel: 0086-23-88069965      FAX:0086-23-88608777

### Report No.: I20W00023-WWAN\_Rev1



Date: 28.DEC.2020 11:27:35

### Band13-26dB OBW-23230 Channel-BPSK



Date: 28.DEC.2020 11:11:42

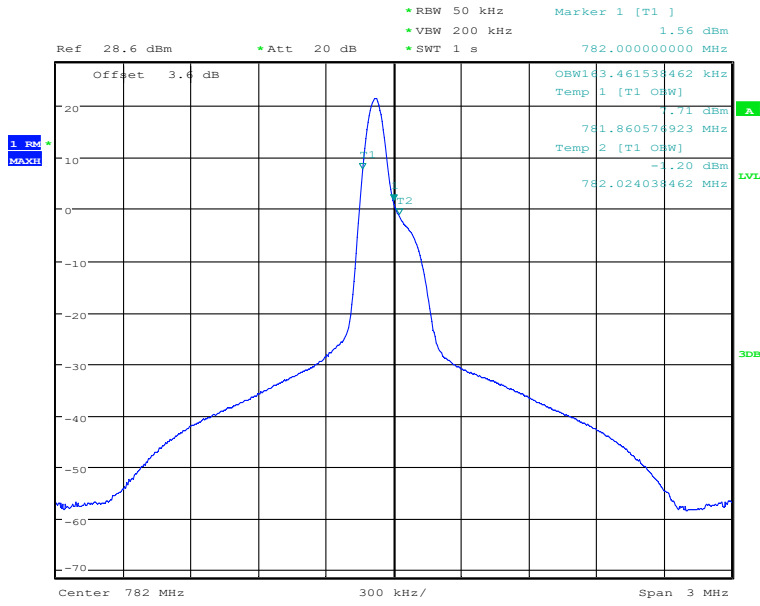
### Band13-26dB OBW-23230 Channel-QPSK

**Chongqing Academy of Information and Communication Technology**

Address: No. 8, Yuma Road, Chayuan New City, Nan'an District, Chongqing, P. R. China, 401336  
 Tel: 0086-23-88069965      FAX: 0086-23-88608777

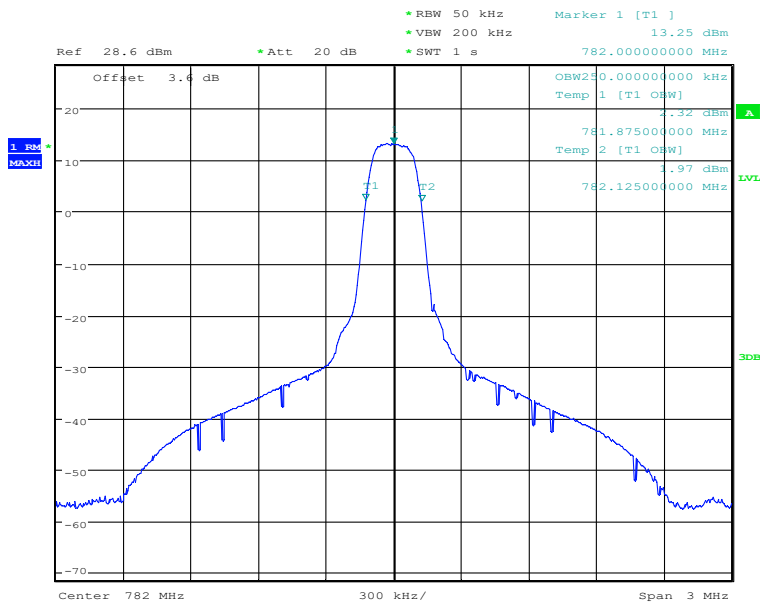


### Report No.: I20W00023-WWAN\_Rev1



Date: 28.DEC.2020 11:17:35

### Band13-99% OBW-23230 Channel-BPSK



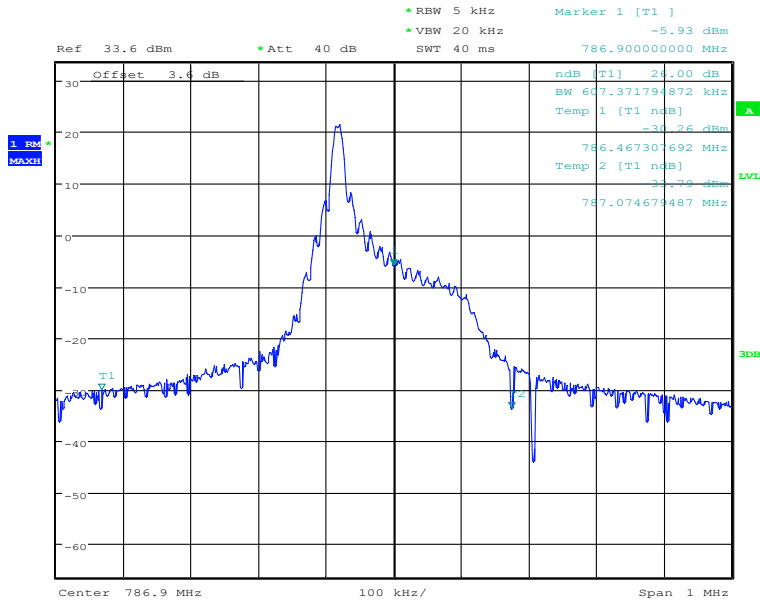
Date: 28.DEC.2020 11:14:58

### Band13-99% OBW-23230 Channel-QPSK

**Chongqing Academy of Information and Communication Technology**

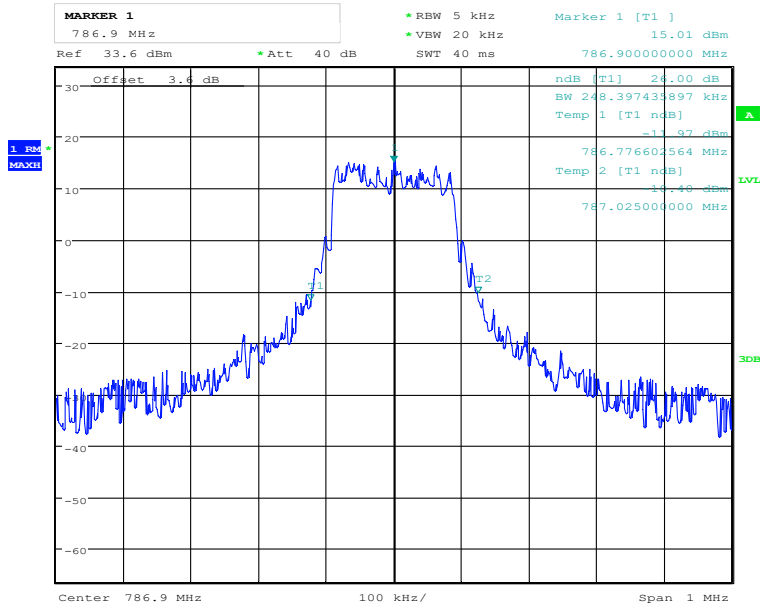
Address: No. 8,Yuma Road, Chayuan New City, Nan'an District, Chongqing, P. R. China,401336  
 Tel: 0086-23-88069965      FAX:0086-23-88608777

### Report No.: I20W00023-WWAN\_Rev1



Date: 1.JAN.2021 20:38:03

#### Band13-26dB OBW-23279 Channel-BPSK



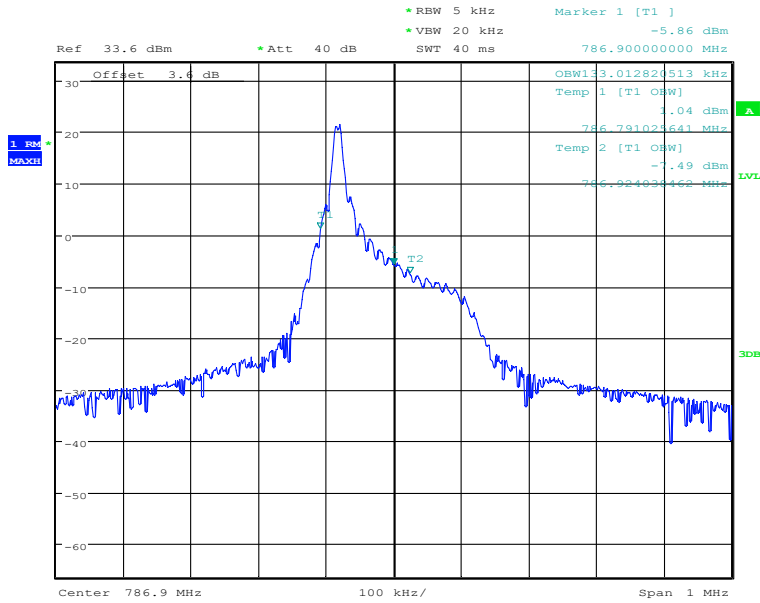
Date: 1.JAN.2021 20:39:38

#### Band13-26dB OBW-23279 Channel-QPSK

**Chongqing Academy of Information and Communication Technology**

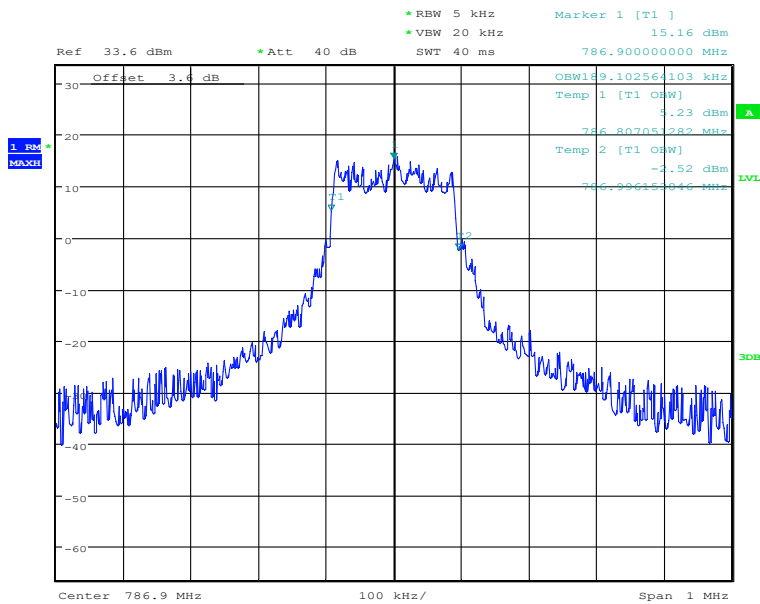
Address: No. 8,Yuma Road, Chayuan New City, Nan'an District, Chongqing, P. R. China,401336  
 Tel: 0086-23-88069965      FAX:0086-23-88608777

### Report No.: I20W00023-WWAN\_Rev1



Date: 1.JAN.2021 20:38:39

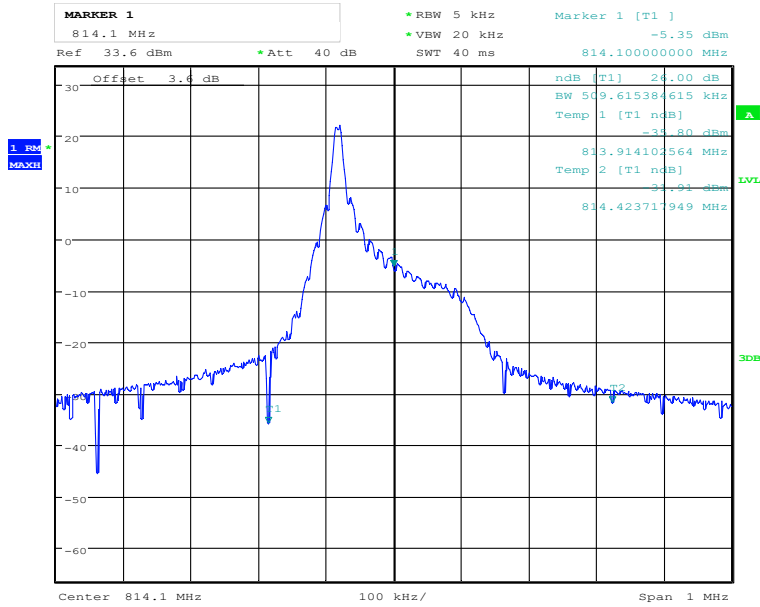
### Band13-99% OBW-23279 Channel-BPSK



Date: 1.JAN.2021 20:39:10

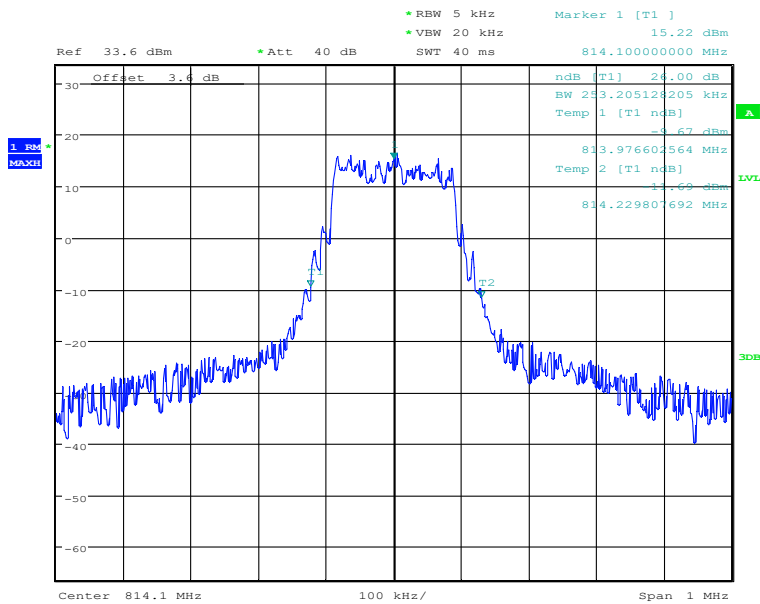
### Band13-99% OBW-23279 Channel-QPSK

### Report No.: I20W00023-WWAN\_Rev1



Date: 1.JAN.2021 20:44:44

### Band26-26dB OBW-26691 Channel-BPSK



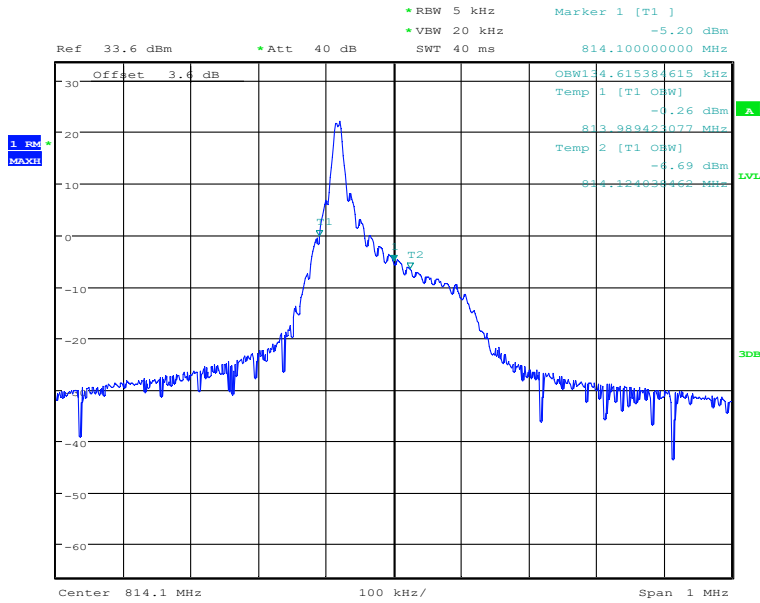
Date: 1.JAN.2021 20:43:00

### Band26-26dB OBW-26691 Channel-QPSK

**Chongqing Academy of Information and Communication Technology**

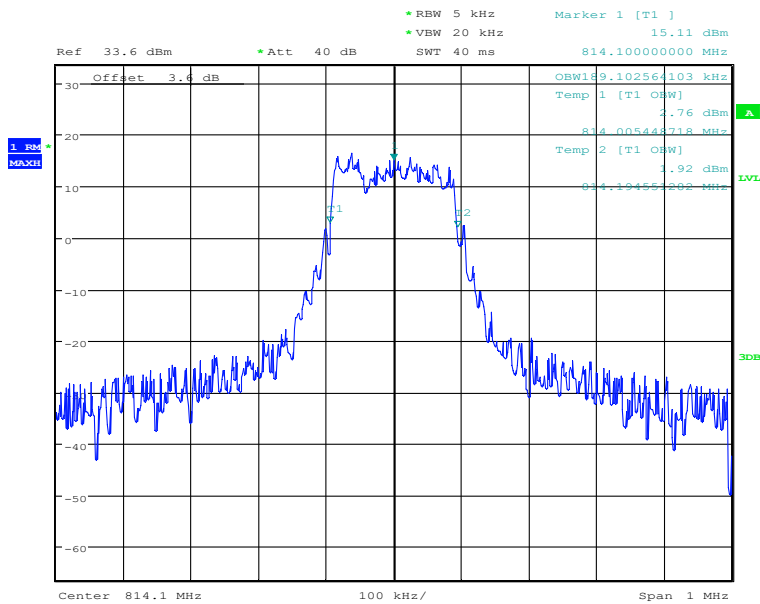
Address: No. 8,Yuma Road, Chayuan New City, Nan'an District, Chongqing, P. R. China,401336  
 Tel: 0086-23-88069965 FAX:0086-23-88608777

### Report No.: I20W00023-WWAN\_Rev1



Date: 1.JAN.2021 20:44:03

### Band26-99% OBW-26691 Channel-BPSK



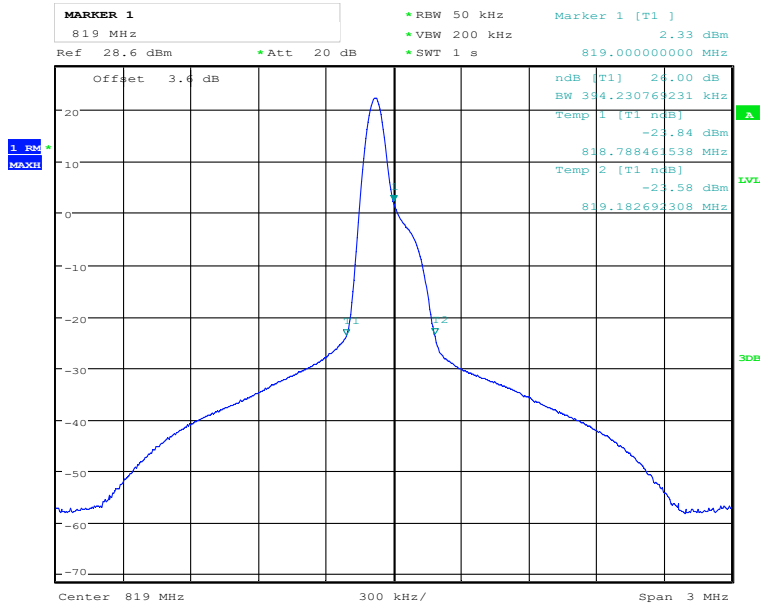
Date: 1.JAN.2021 20:43:22

### Band26-99% OBW-26691 Channel-QPSK

**Chongqing Academy of Information and Communication Technology**

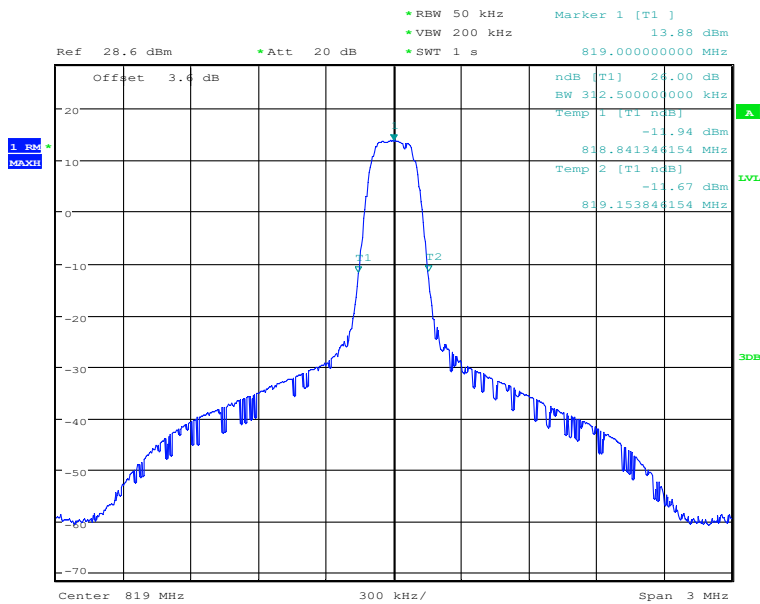
Address: No. 8,Yuma Road, Chayuan New City, Nan'an District, Chongqing, P. R. China,401336  
 Tel: 0086-23-88069965    FAX:0086-23-88608777

### Report No.: I20W00023-WWAN\_Rev1



Date: 28.DEC.2020 11:45:41

### Band26-26dB OBW-26740 Channel-BPSK



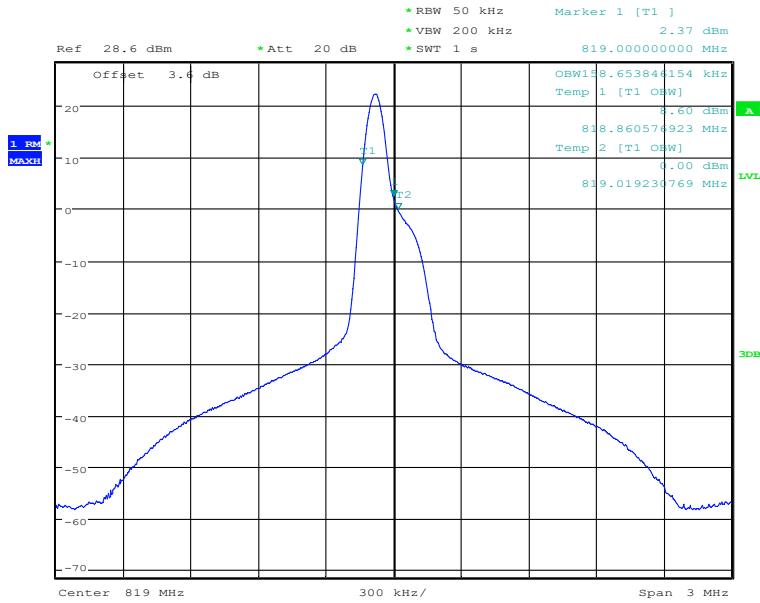
Date: 28.DEC.2020 11:39:23

### Band26-26dB OBW-26740 Channel-QPSK

**Chongqing Academy of Information and Communication Technology**

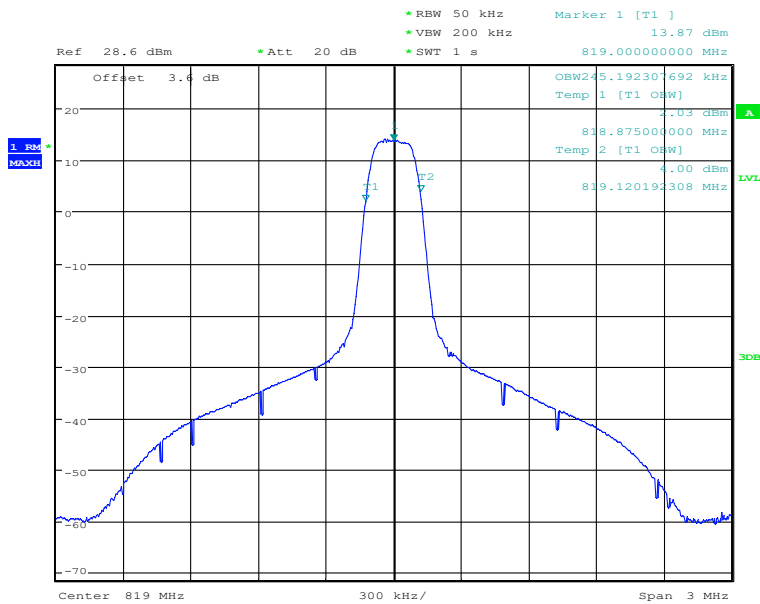
Address: No. 8,Yuma Road, Chayuan New City, Nan'an District, Chongqing, P. R. China,401336  
 Tel: 0086-23-88069965      FAX:0086-23-88608777

### Report No.: I20W00023-WWAN\_Rev1



Date: 28.DEC.2020 11:43:56

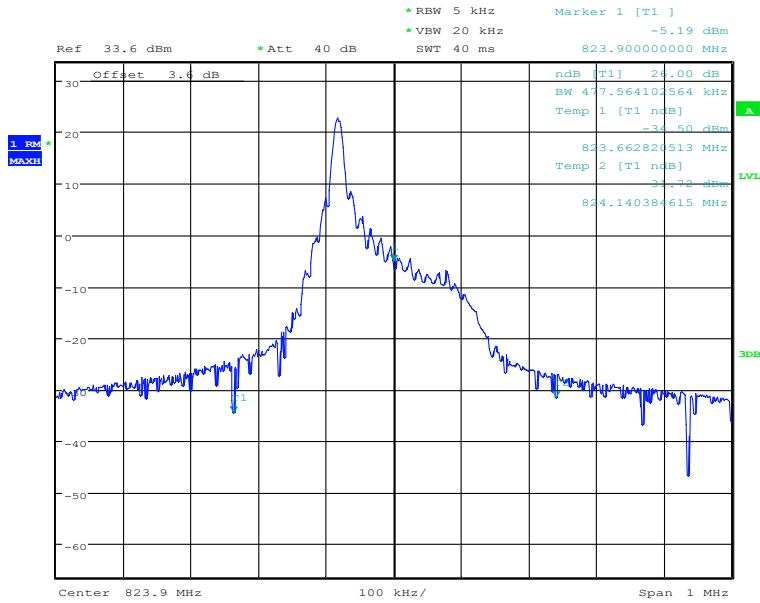
### Band26-99% OBW-26740 Channel-BPSK



Date: 28.DEC.2020 11:42:26

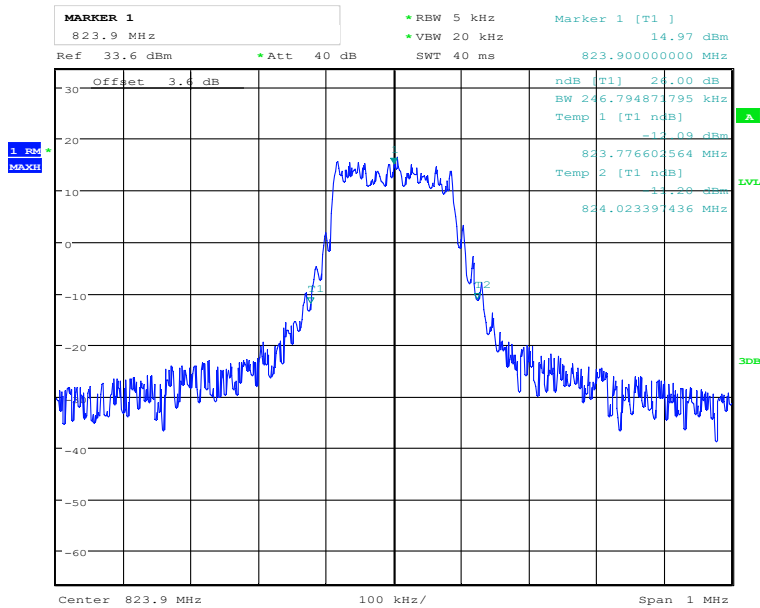
### Band26-99% OBW-26740 Channel-QPSK

### Report No.: I20W00023-WWAN\_Rev1



Date: 1.JAN.2021 20:48:25

### Band26-26dB OBW-26789 Channel-BPSK



Date: 1.JAN.2021 20:50:14

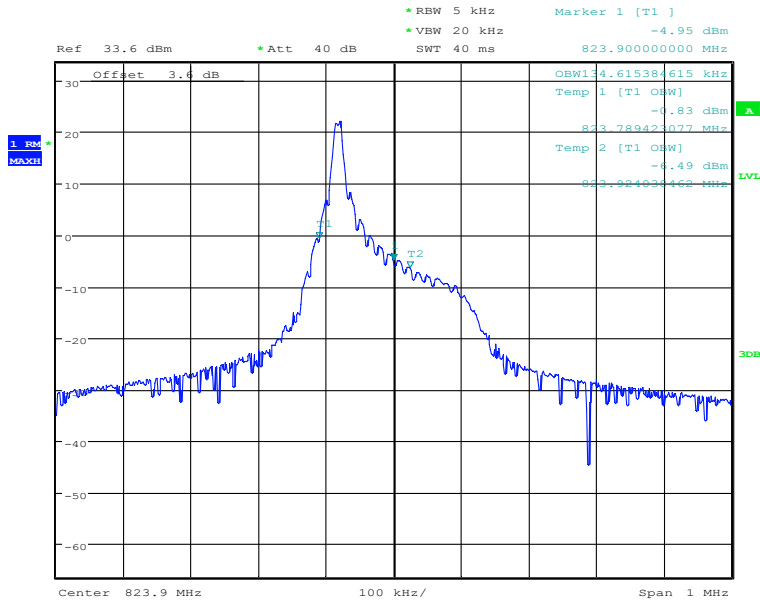
### Band26-26dB OBW-26789 Channel-QPSK

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 Tel: 0086-23-88069965      FAX:0086-23-88608777

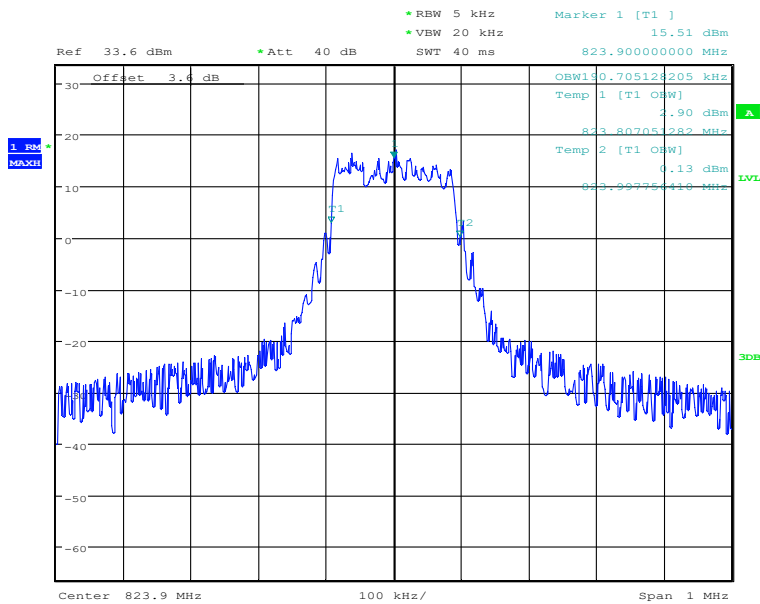


### Report No.: I20W00023-WWAN\_Rev1



Date: 1.JAN.2021 20:49:01

### Band26-99% OBW-26789 Channel-BPSK



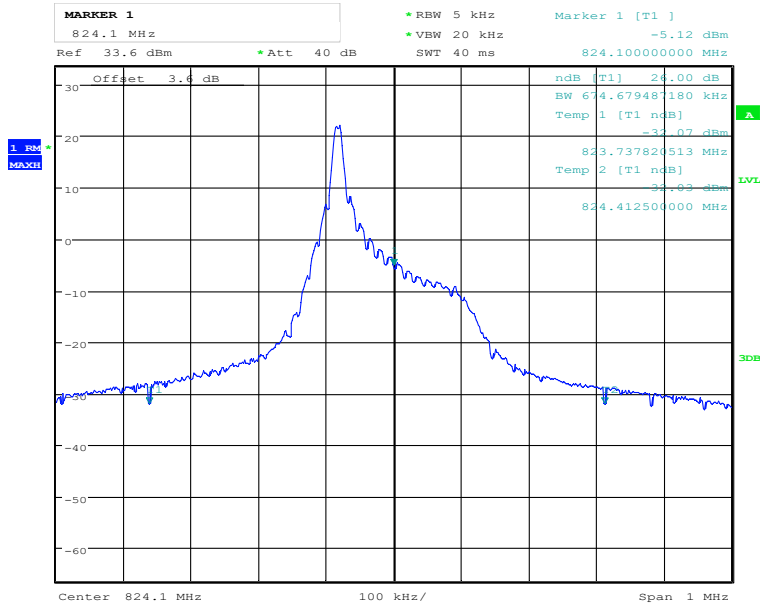
Date: 1.JAN.2021 20:49:39

### Band26-99% OBW-26789 Channel-QPSK

**Chongqing Academy of Information and Communication Technology**

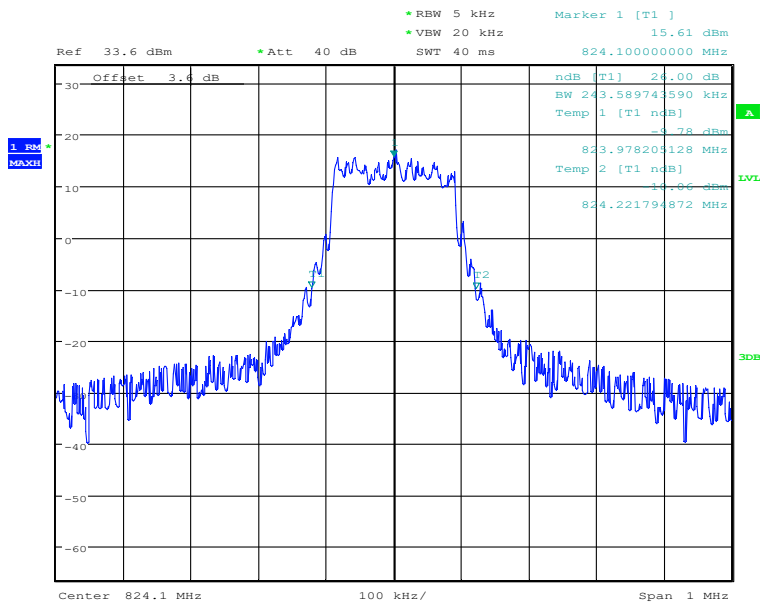
Address: No. 8,Yuma Road, Chayuan New City, Nan'an District, Chongqing, P. R. China,401336  
 Tel: 0086-23-88069965      FAX:0086-23-88608777

### Report No.: I20W00023-WWAN\_Rev1



Date: 1.JAN.2021 20:55:53

### Band26-26dB OBW-26791 Channel-BPSK



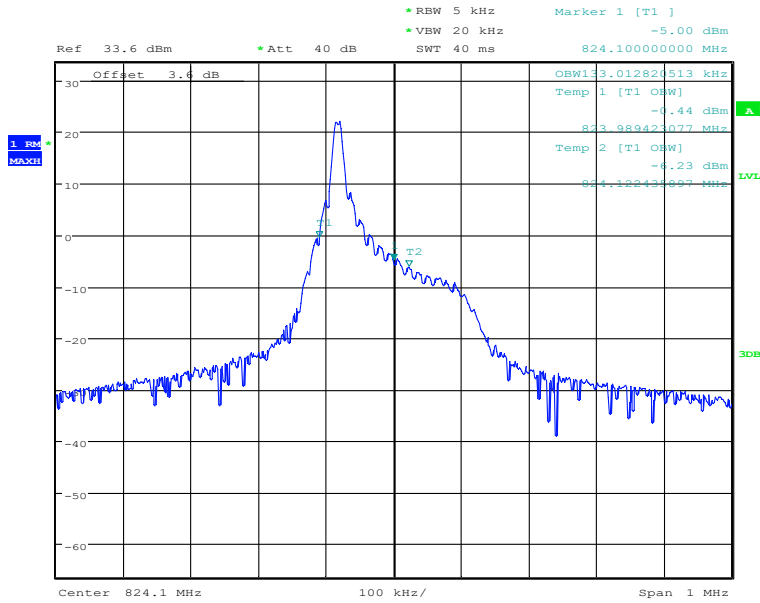
Date: 1.JAN.2021 20:53:13

### Band26-26dB OBW-26791 Channel-QPSK

**Chongqing Academy of Information and Communication Technology**

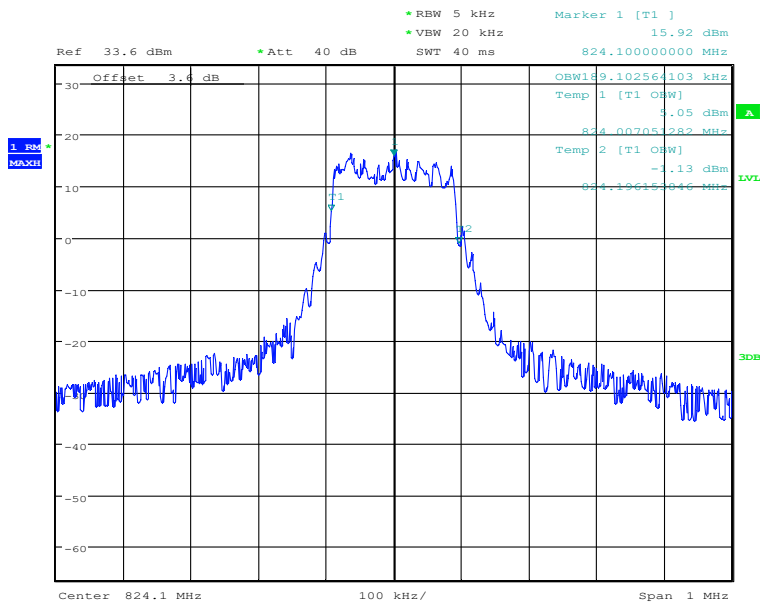
Address: No. 8,Yuma Road, Chayuan New City, Nan'an District, Chongqing, P. R. China,401336  
 Tel: 0086-23-88069965 FAX:0086-23-88608777

### Report No.: I20W00023-WWAN\_Rev1



Date: 1.JAN.2021 20:54:45

### Band26-99% OBW-26791 Channel-BPSK



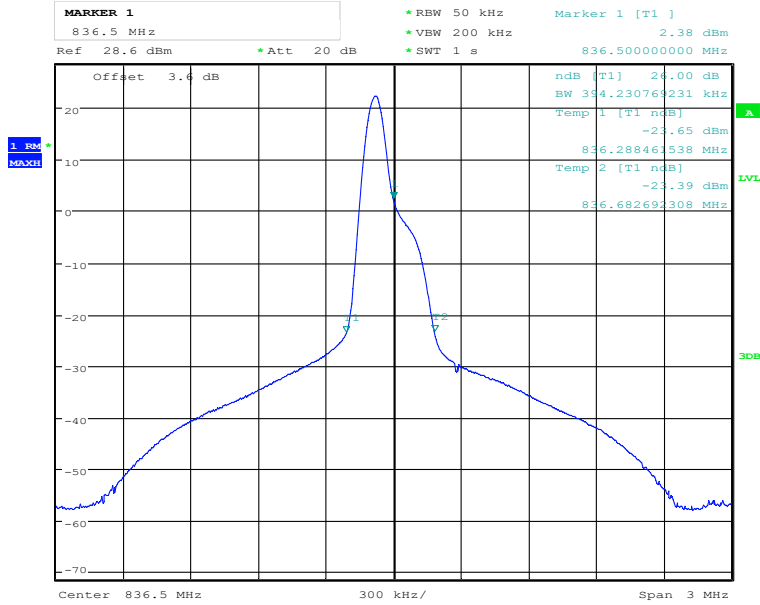
Date: 1.JAN.2021 20:54:03

### Band26-99% OBW-26791 Channel-QPSK

**Chongqing Academy of Information and Communication Technology**

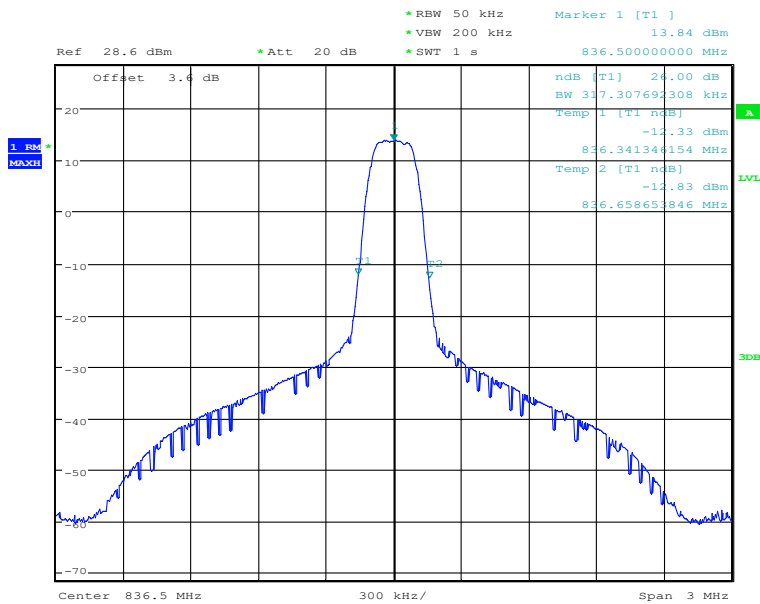
Address: No. 8,Yuma Road, Chayuan New City, Nan'an District, Chongqing, P. R. China,401336  
 Tel: 0086-23-88069965      FAX:0086-23-88608777

### Report No.: I20W00023-WWAN\_Rev1



Date: 28.DEC.2020 11:55:35

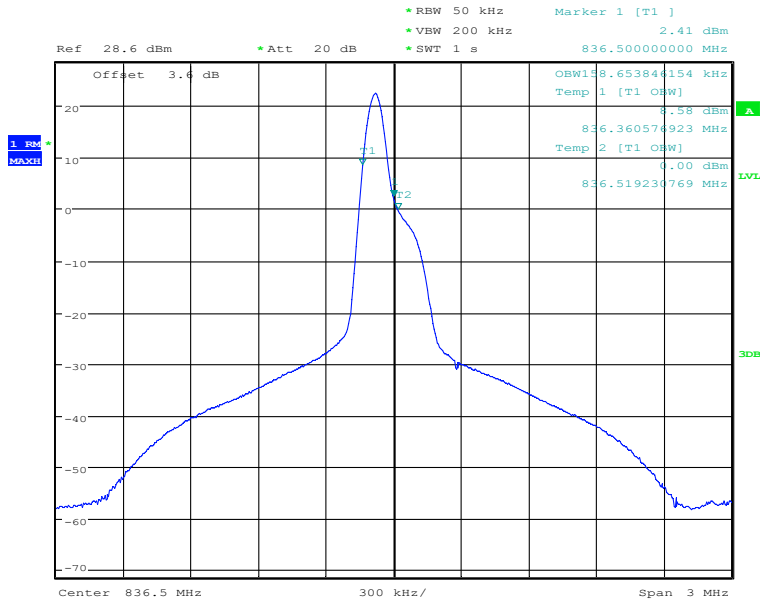
### Band26-26dB OBW-26915 Channel-BPSK



Date: 28.DEC.2020 11:49:07

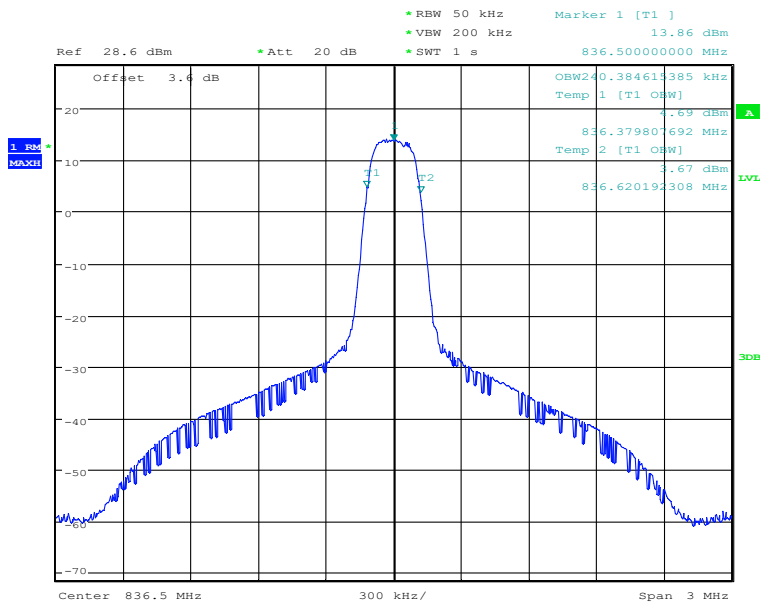
### Band26-26dB OBW-26915 Channel-QPSK

### Report No.: I20W00023-WWAN\_Rev1



Date: 28.DEC.2020 11:52:03

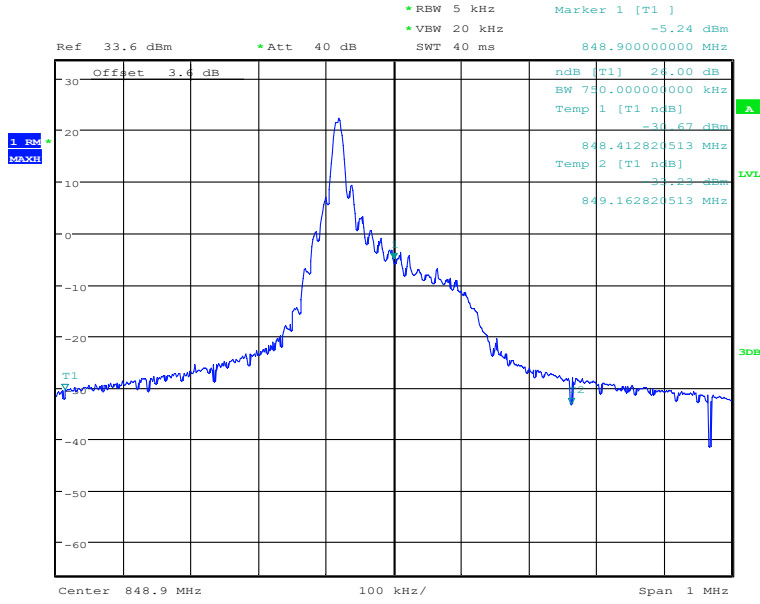
### Band26-99% OBW-26915 Channel-BPSK



Date: 28.DEC.2020 11:50:28

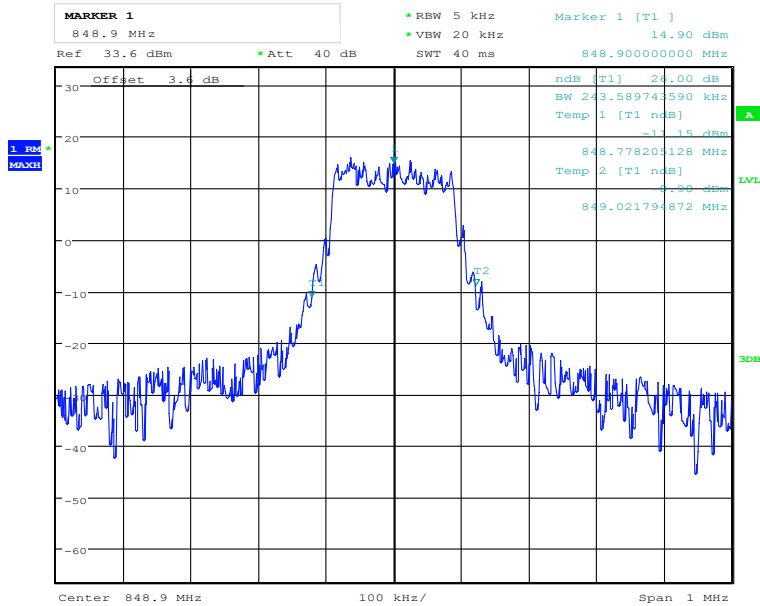
### Band26-99% OBW-26915 Channel-QPSK

### Report No.: I20W00023-WWAN\_Rev1



Date: 1.JAN.2021 20:59:23

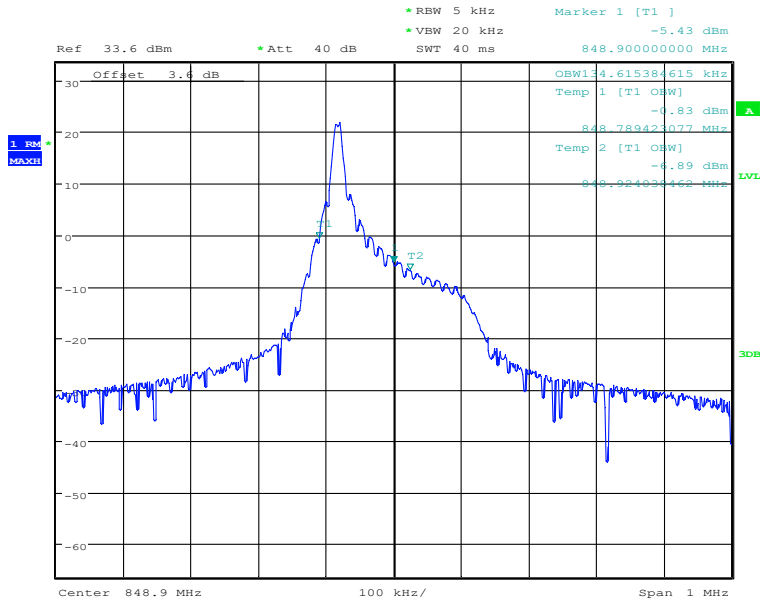
### Band26-26dB OBW-27039 Channel-BPSK



Date: 1.JAN.2021 21:01:22

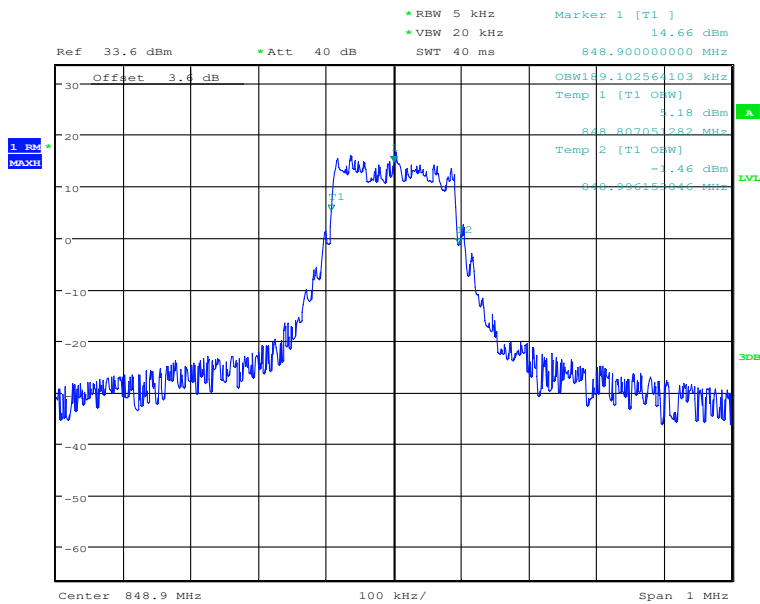
### Band26-26dB OBW-27039 Channel-QPSK

### Report No.: I20W00023-WWAN\_Rev1



Date: 1.JAN.2021 20:59:56

### Band26-99% OBW-27039 Channel-BPSK



Date: 1.JAN.2021 21:00:52

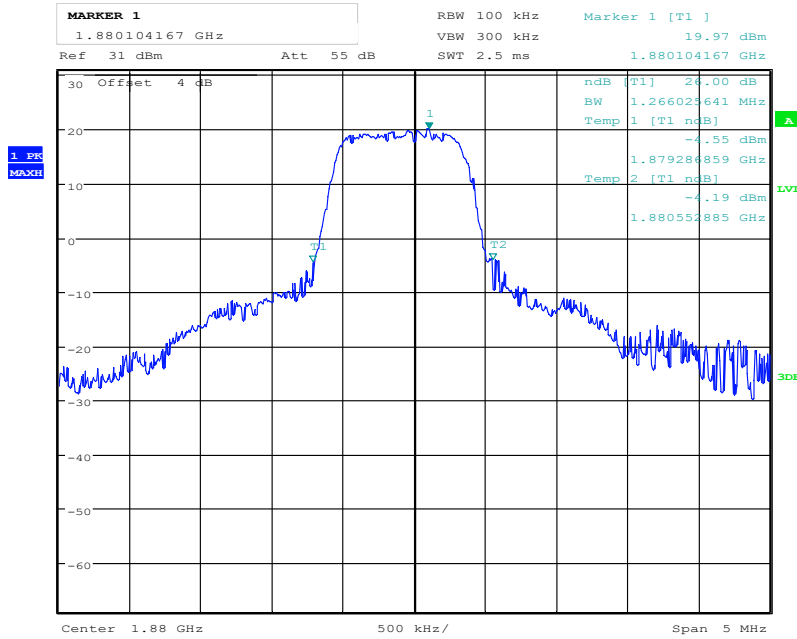
### Band26-99% OBW-27039 Channel-QPSK

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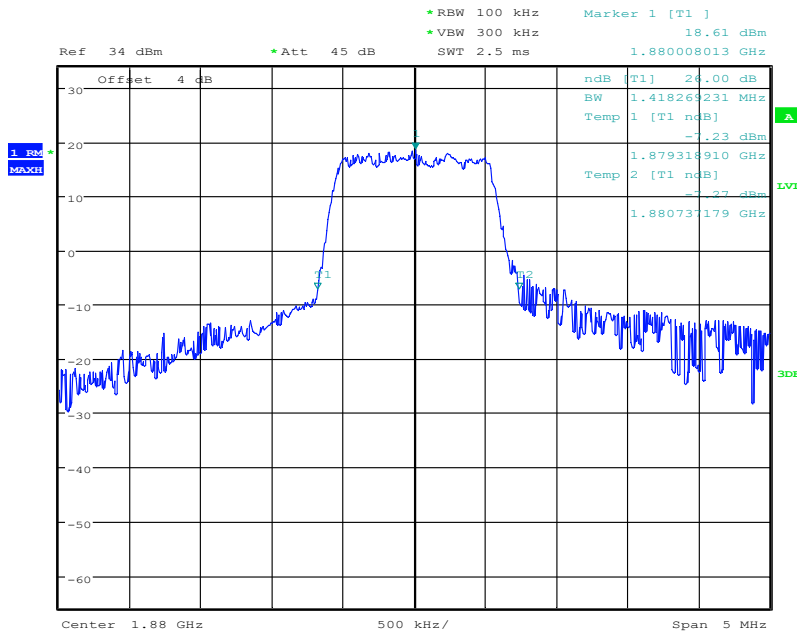
# Report No.: I20W00023-WWAN\_Rev1

## Graphical results for CAT-M:



Date: 26.DEC.2020 14:25:14

## Band2-26dB OBW-1.4MHz Bandwidth-16QAM



Date: 26.DEC.2020 10:58:15

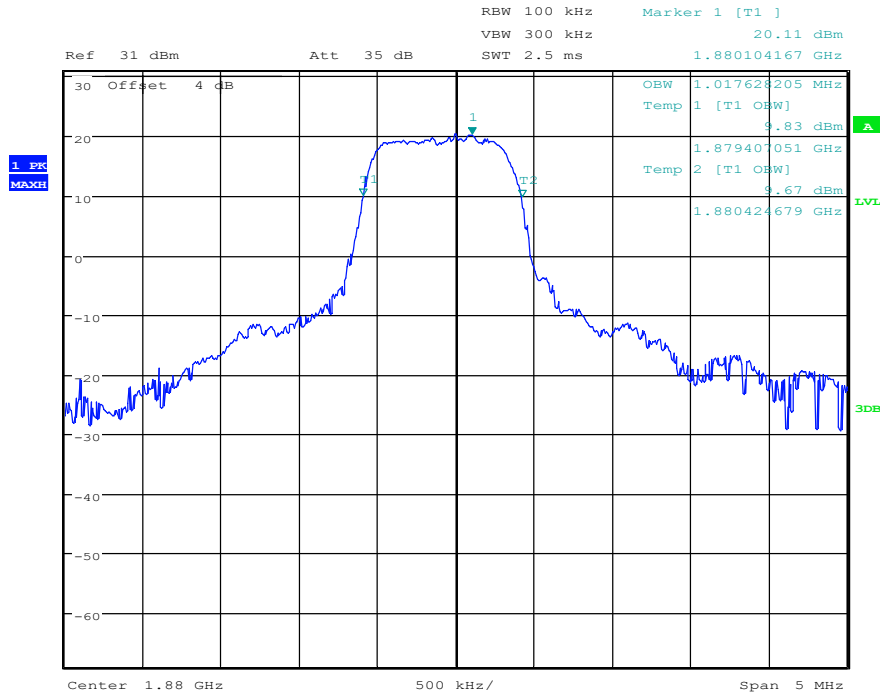
## Band2-26dB OBW-1.4MHz Bandwidth-QPSK

### Chongqing Academy of Information and Communication Technology

Address: No. 8,Yuma Road, Chayuan New City, Nan'an District, Chongqing, P. R. China,401336  
Tel: 0086-23-88069965 FAX:0086-23-88608777

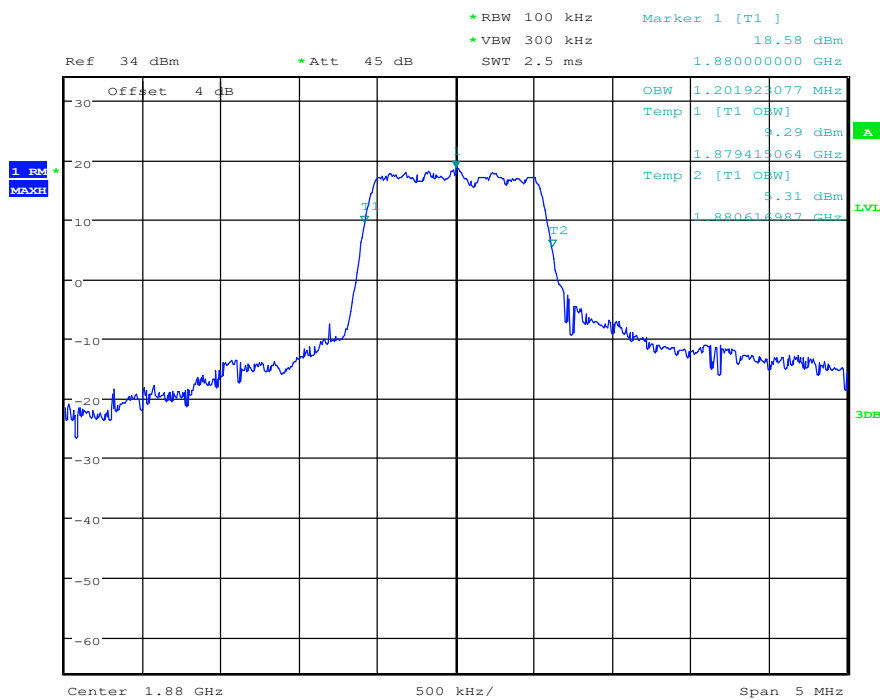


### Report No.: I20W00023-WWAN\_Rev1



Date: 26.DEC.2020 14:24:47

### Band2-99% OBW-1.4MHz Bandwidth-16QAM



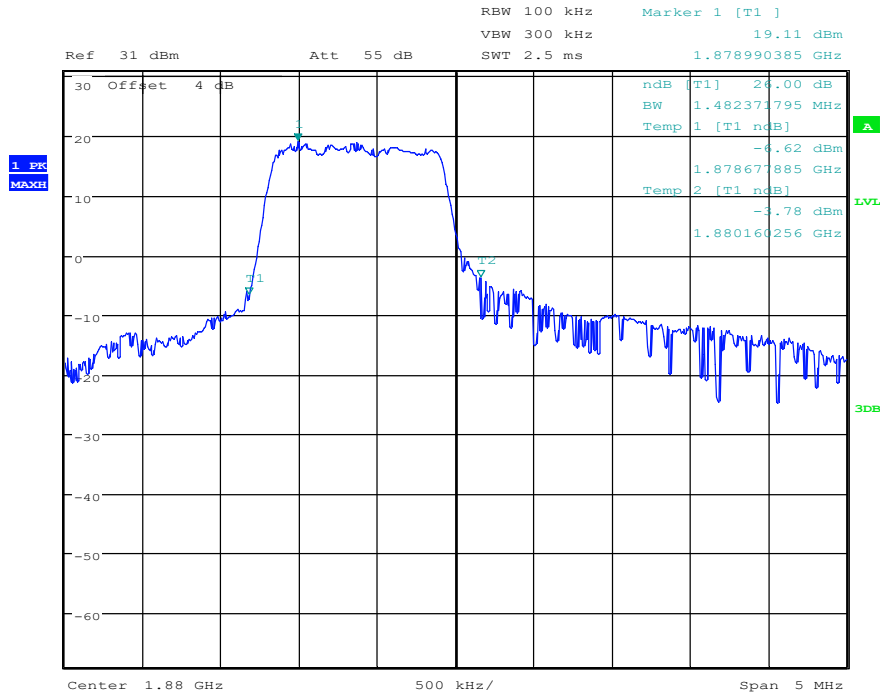
Date: 26.DEC.2020 10:56:48

### Band2-99% OBW-1.4MHz Bandwidth-QPSK

## Chongqing Academy of Information and Communication Technology

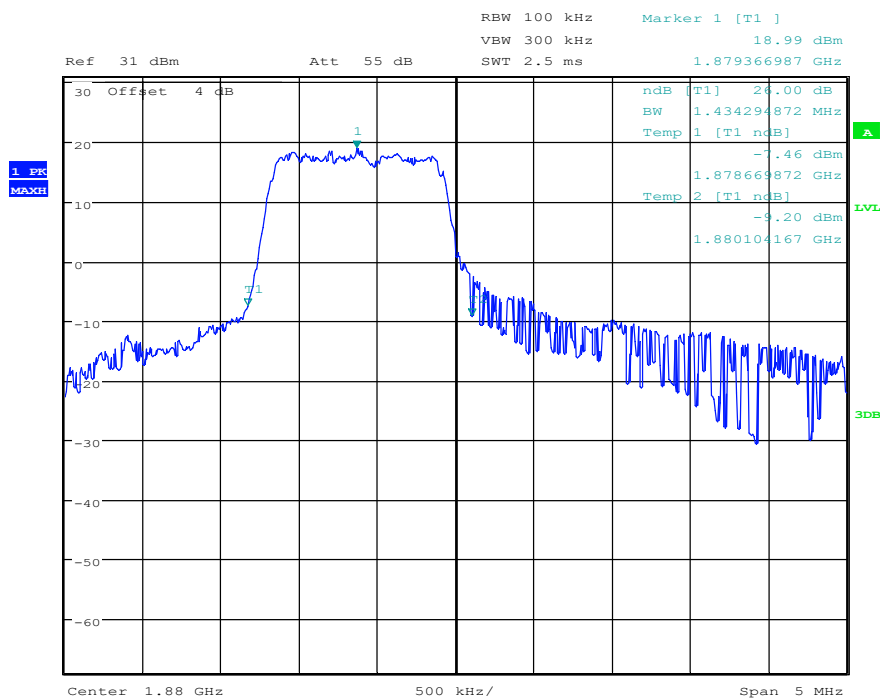
Address: No. 8,Yuma Road, Chayuan New City, Nan'an District, Chongqing, P. R. China,401336  
 Tel: 0086-23-88069965      FAX:0086-23-88608777

### Report No.: I20W00023-WWAN\_Rev1



Date: 26.DEC.2020 14:27:56

#### Band2-26dB OBW-3MHz Bandwidth-16QAM



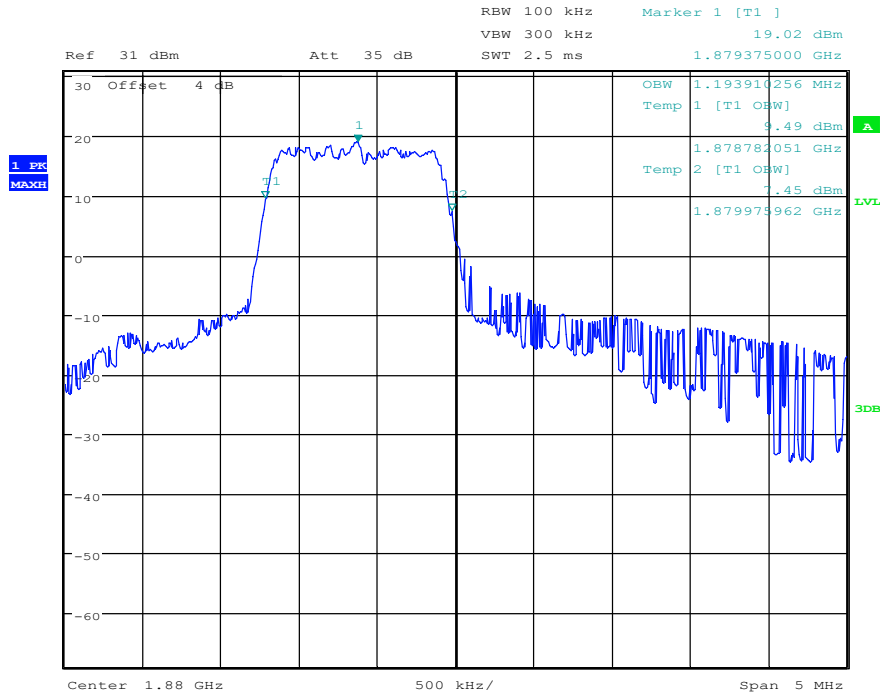
Date: 26.DEC.2020 14:29:37

#### Band2-26dB OBW-3MHz Bandwidth-QPSK

## Chongqing Academy of Information and Communication Technology

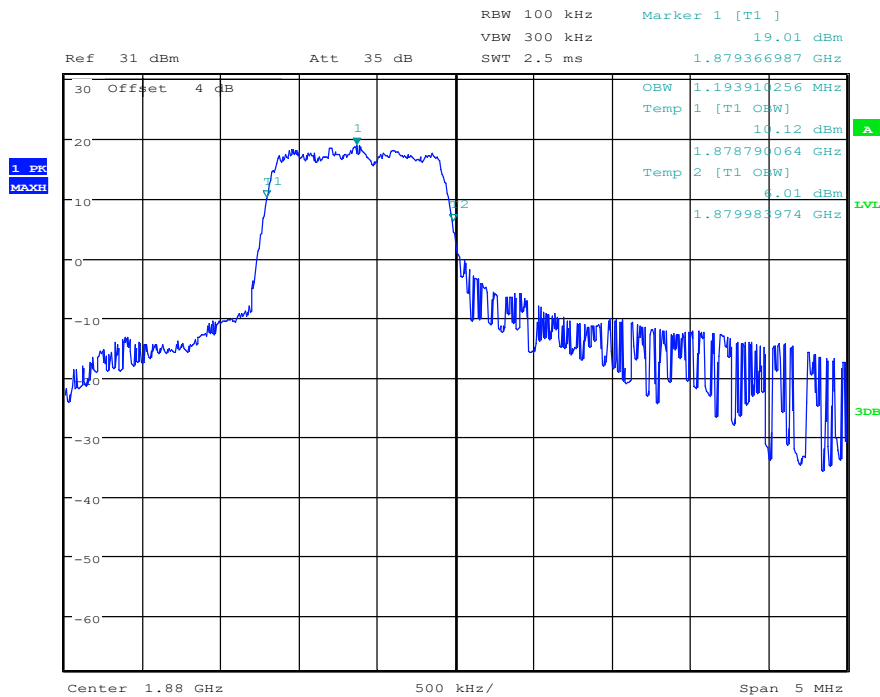
Address: No. 8,Yuma Road, Chayuan New City, Nan'an District, Chongqing, P. R. China,401336  
 Tel: 0086-23-88069965      FAX:0086-23-88608777

### Report No.: I20W00023-WWAN\_Rev1



Date: 26.DEC.2020 14:28:21

### Band2-99% OBW-3MHz Bandwidth-16QAM



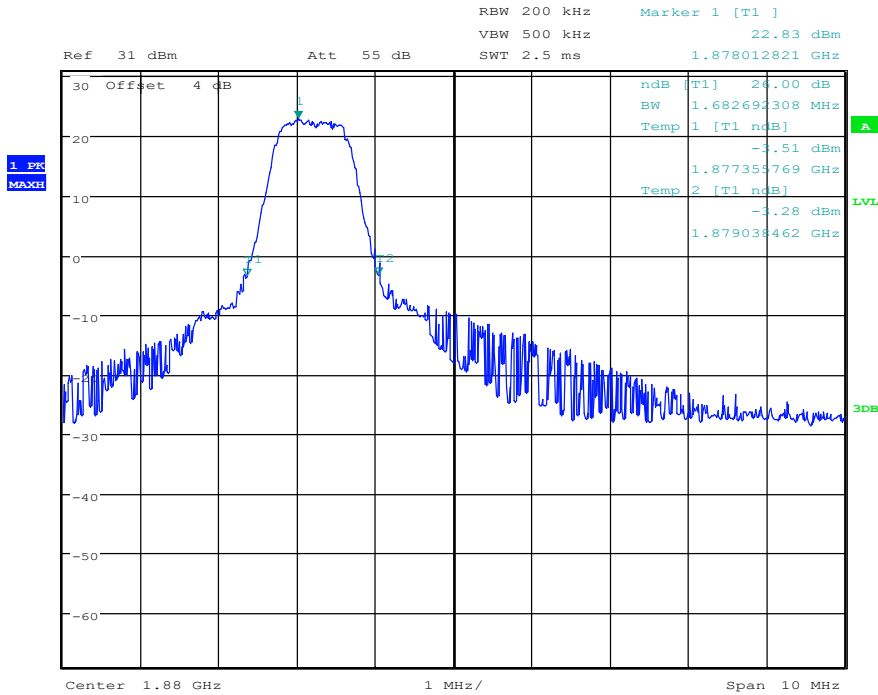
Date: 26.DEC.2020 14:29:04

### Band2-99% OBW-3MHz Bandwidth-QPSK

## Chongqing Academy of Information and Communication Technology

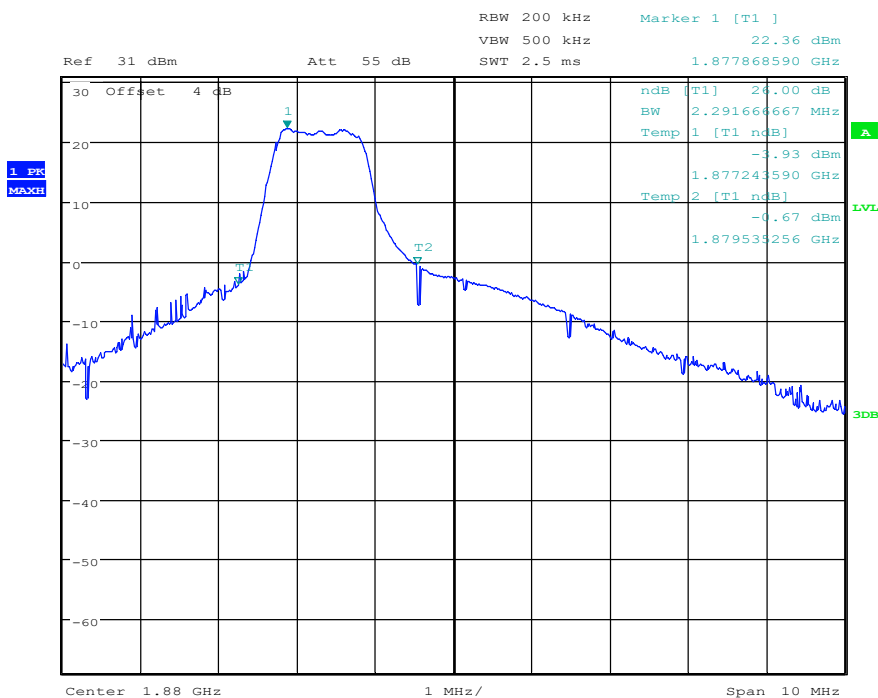
Address: No. 8,Yuma Road, Chayuan New City, Nan'an District, Chongqing, P. R. China,401336  
 Tel: 0086-23-88069965      FAX:0086-23-88608777

### Report No.: I20W00023-WWAN\_Rev1



Date: 26.DEC.2020 14:36:54

#### Band2-26dB OBW-5MHz Bandwidth-16QAM



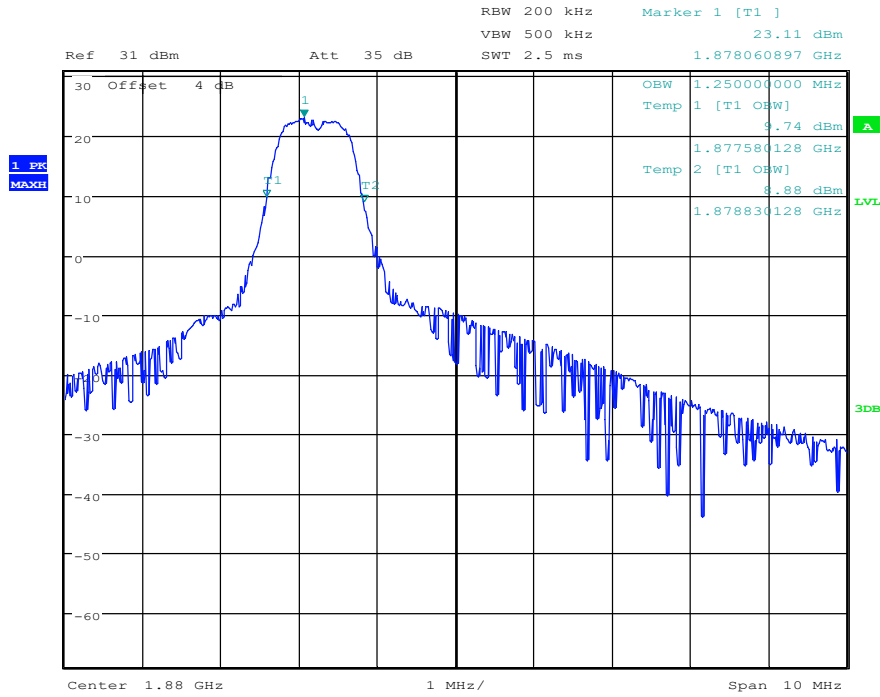
Date: 26.DEC.2020 14:34:31

#### Band2-26dB OBW-5MHz Bandwidth-QPSK

## Chongqing Academy of Information and Communication Technology

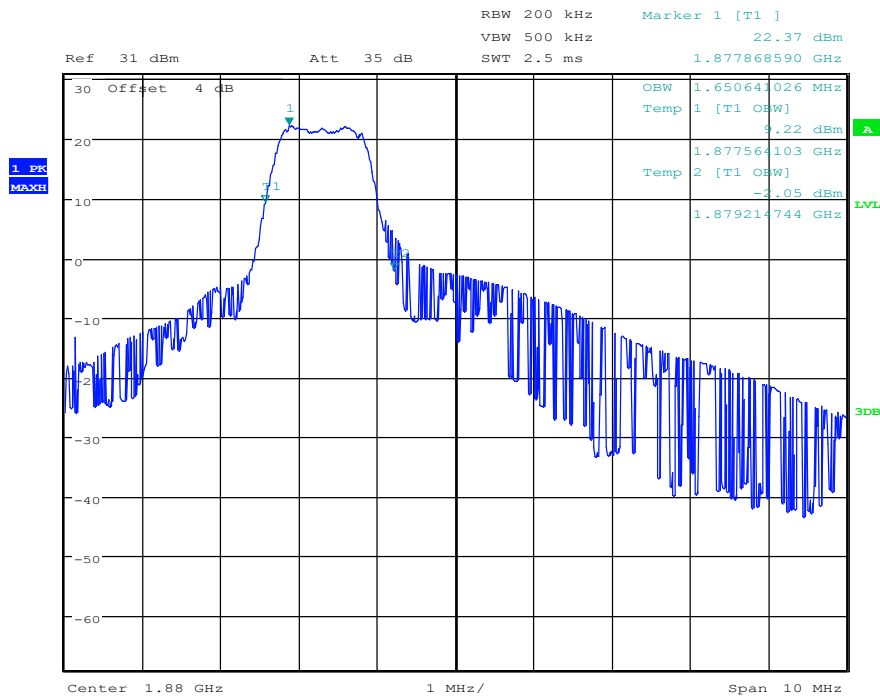
Address: No. 8,Yuma Road, Chayuan New City, Nan'an District, Chongqing, P. R. China,401336  
 Tel: 0086-23-88069965      FAX:0086-23-88608777

### Report No.: I20W00023-WWAN\_Rev1



Date: 26.DEC.2020 14:36:18

### Band2-99% OBW-5MHz Bandwidth-16QAM



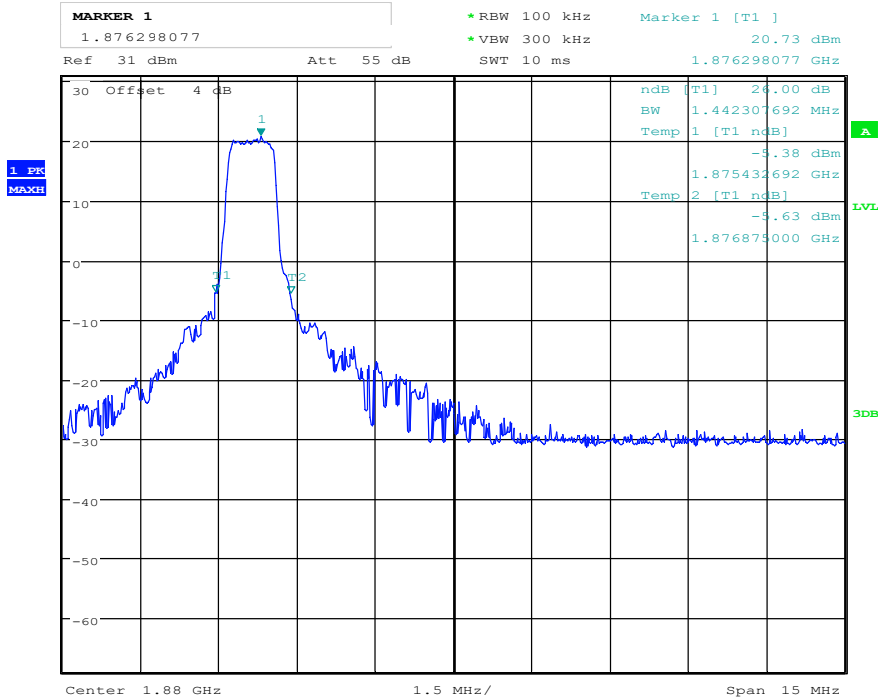
Date: 26.DEC.2020 14:35:12

### Band2-99% OBW-5MHz Bandwidth-QPSK

## Chongqing Academy of Information and Communication Technology

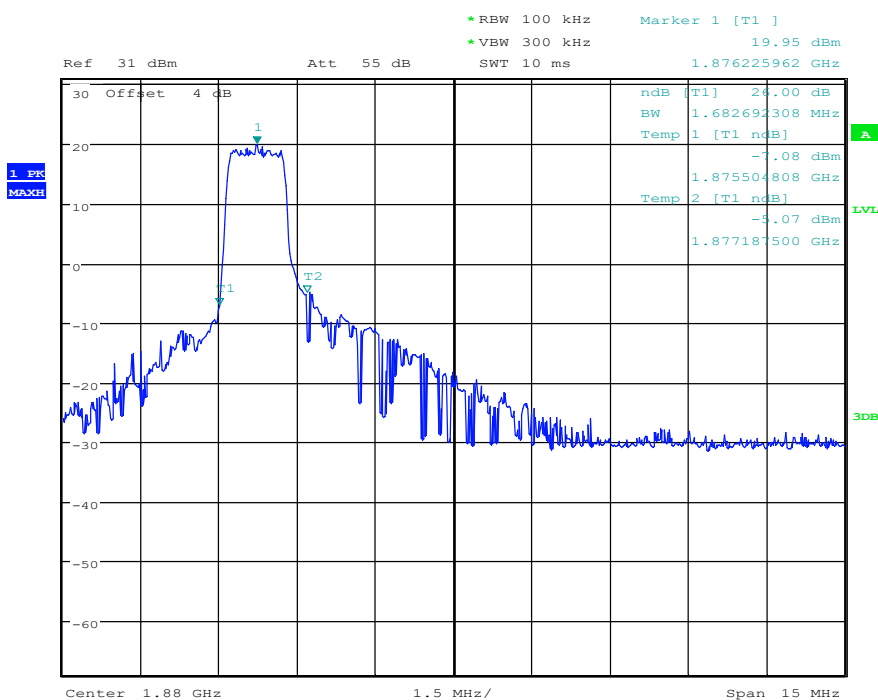
Address: No. 8,Yuma Road, Chayuan New City, Nan'an District, Chongqing, P. R. China,401336  
 Tel: 0086-23-88069965 FAX:0086-23-88608777

### Report No.: I20W00023-WWAN\_Rev1



Date: 26.DEC.2020 14:42:39

### Band2-26dB OBW-10MHz Bandwidth-16QAM



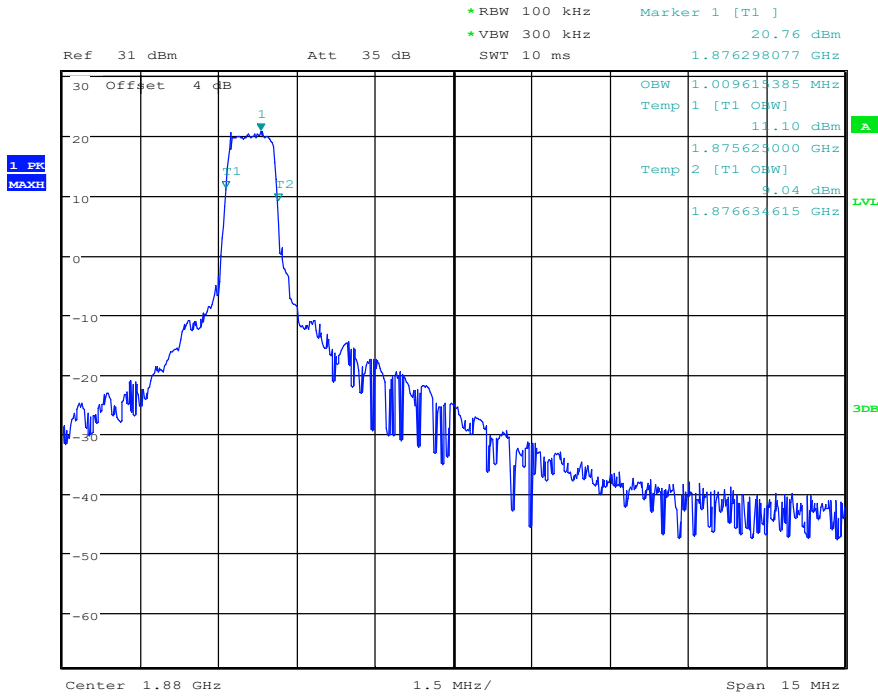
Date: 26.DEC.2020 14:41:00

### Band2-26dB OBW-10MHz Bandwidth-QPSK

## Chongqing Academy of Information and Communication Technology

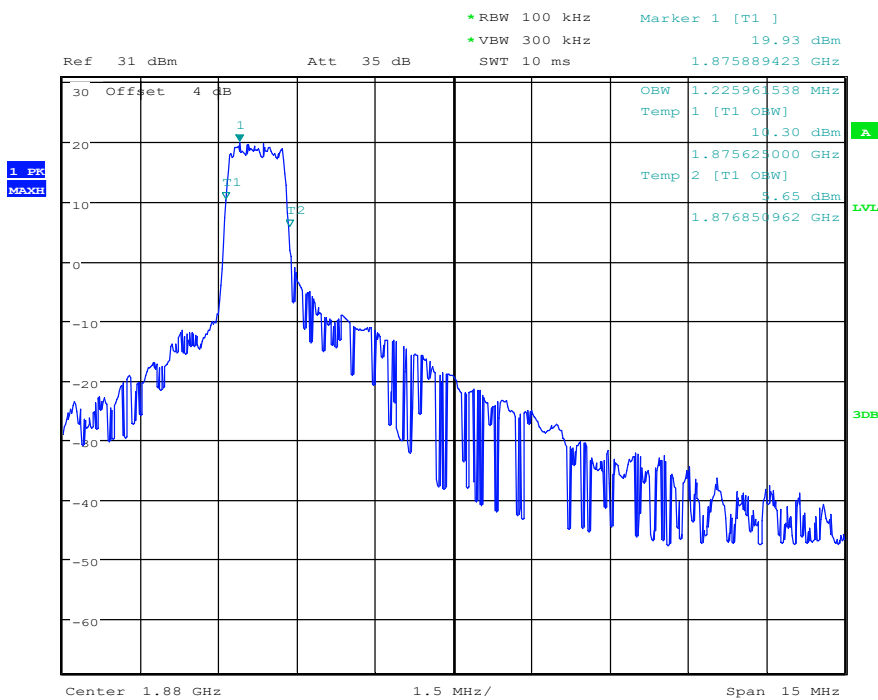
Address: No. 8,Yuma Road, Chayuan New City, Nan'an District, Chongqing, P. R. China,401336  
 Tel: 0086-23-88069965      FAX:0086-23-88608777

### Report No.: I20W00023-WWAN\_Rev1



Date: 26.DEC.2020 14:42:09

### Band2-99% OBW-10MHz Bandwidth-16QAM



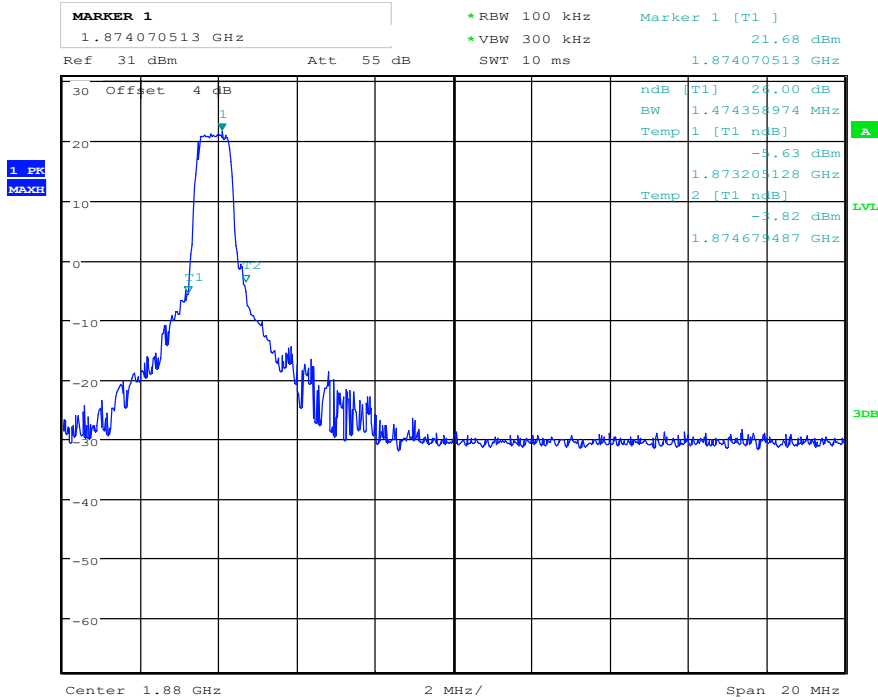
Date: 26.DEC.2020 14:41:25

### Band2-99% OBW-10MHz Bandwidth-QPSK

## Chongqing Academy of Information and Communication Technology

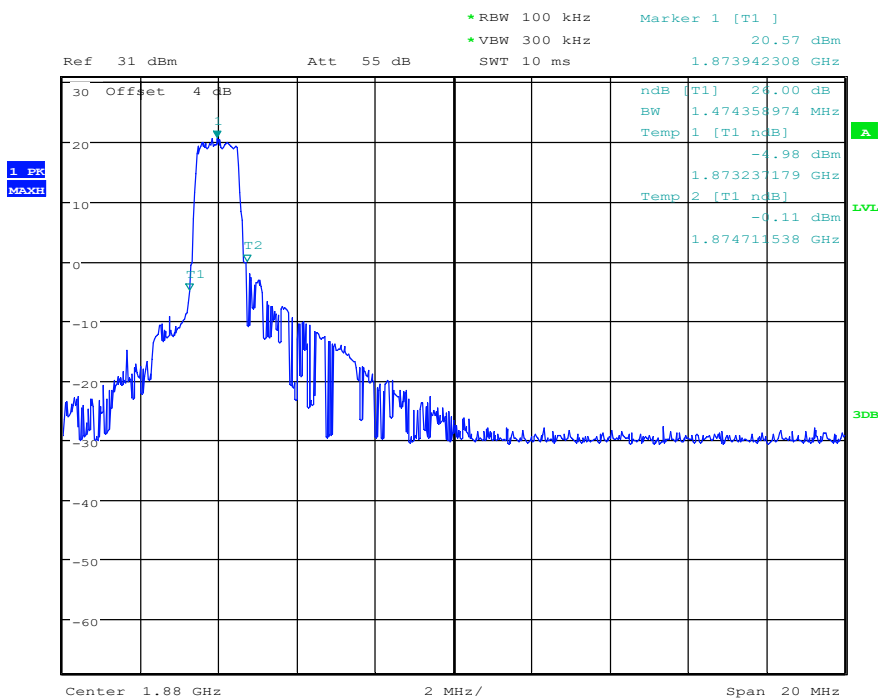
Address: No. 8,Yuma Road, Chayuan New City, Nan'an District, Chongqing, P. R. China,401336  
 Tel: 0086-23-88069965      FAX:0086-23-88608777

### Report No.: I20W00023-WWAN\_Rev1



Date: 26.DEC.2020 14:46:20

### Band2-26dB OBW-15MHz Bandwidth-16QAM



Date: 26.DEC.2020 14:44:38

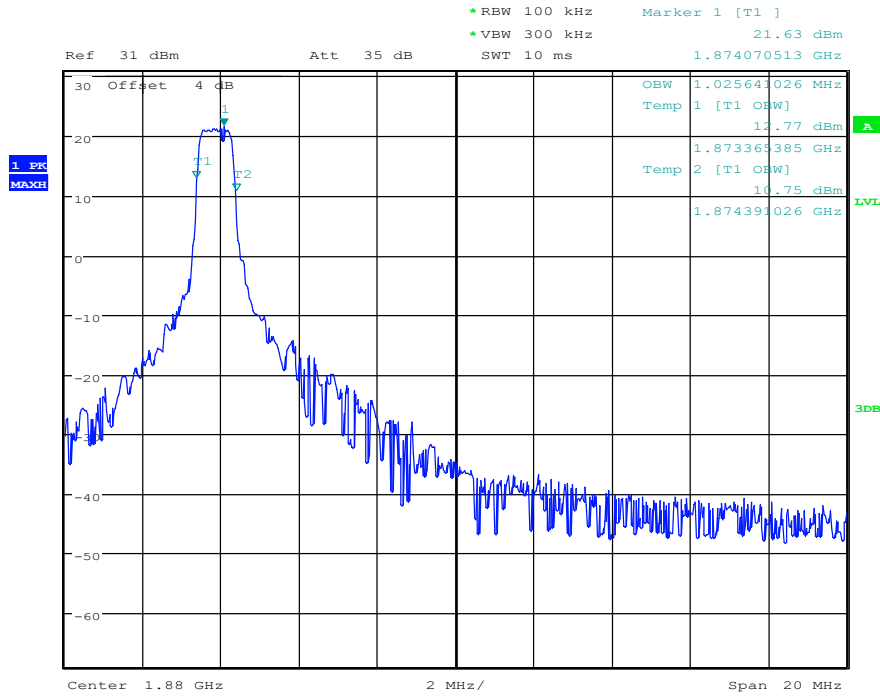
### Band2-26dB OBW-15MHz Bandwidth-QPSK

## Chongqing Academy of Information and Communication Technology

Address: No. 8,Yuma Road, Chayuan New City, Nan'an District, Chongqing, P. R. China,401336  
 Tel: 0086-23-88069965      FAX:0086-23-88608777

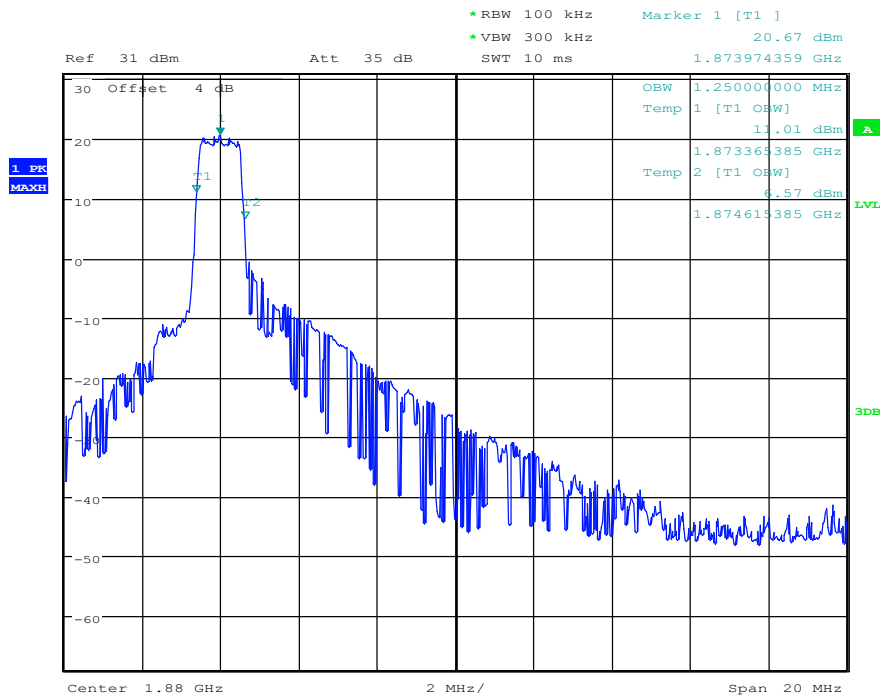


### Report No.: I20W00023-WWAN\_Rev1



Date: 26.DEC.2020 14:45:54

### Band2-99% OBW-15MHz Bandwidth-16QAM



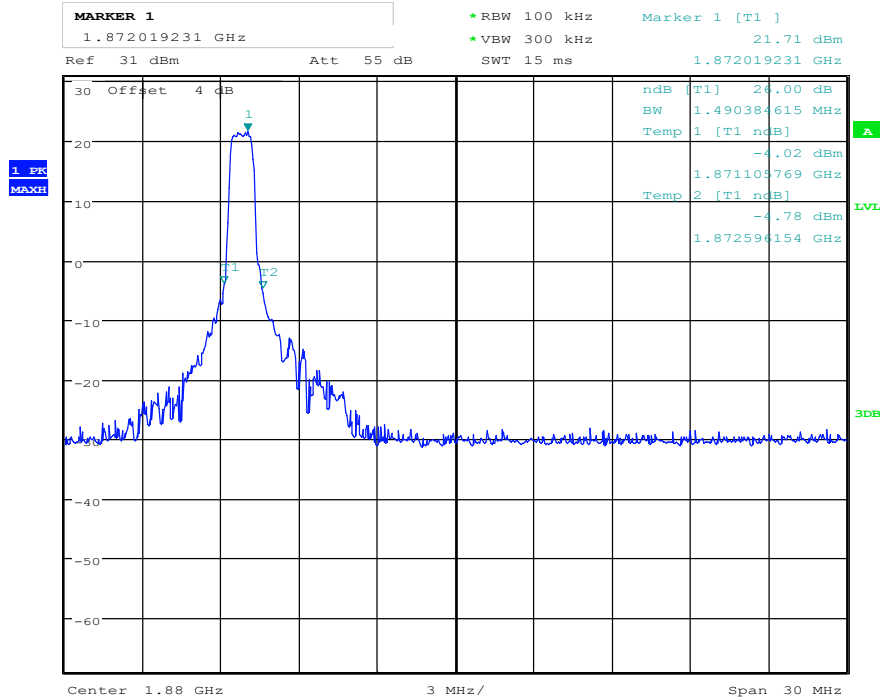
Date: 26.DEC.2020 14:45:10

### Band2-99% OBW-15MHz Bandwidth-QPSK

## Chongqing Academy of Information and Communication Technology

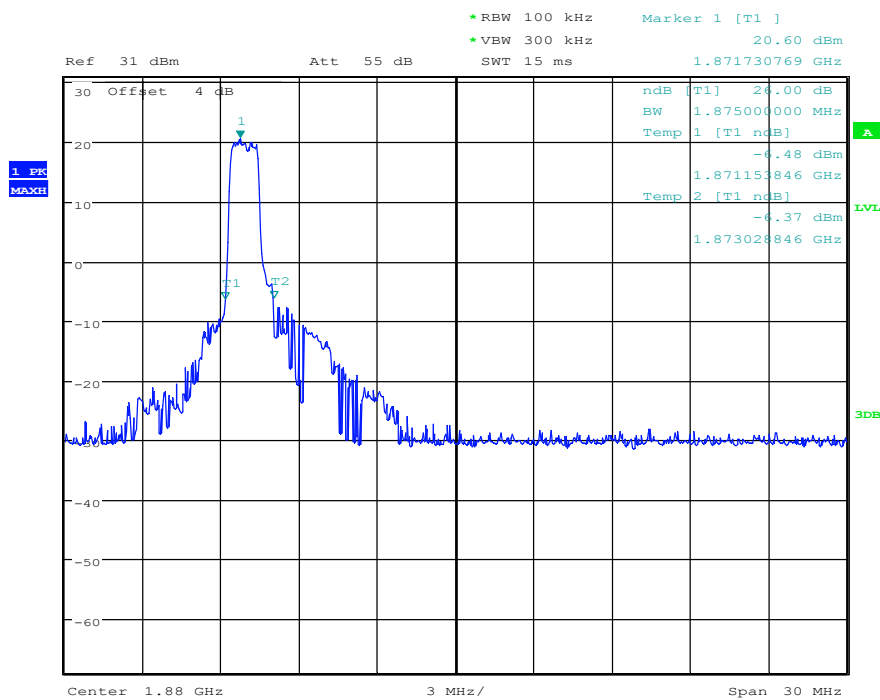
Address: No. 8,Yuma Road, Chayuan New City, Nan'an District, Chongqing, P. R. China,401336  
 Tel: 0086-23-88069965      FAX:0086-23-88608777

### Report No.: I20W00023-WWAN\_Rev1



Date: 26.DEC.2020 14:50:38

### Band2-26dB OBW-20MHz Bandwidth-16QAM



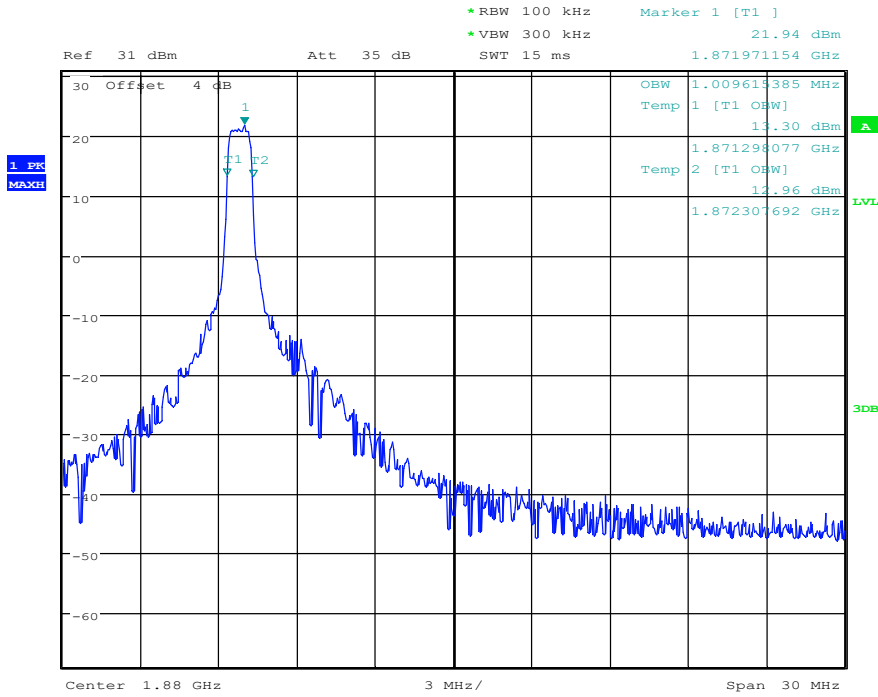
Date: 26.DEC.2020 14:48:55

### Band2-26dB OBW-20MHz Bandwidth-QPSK

## Chongqing Academy of Information and Communication Technology

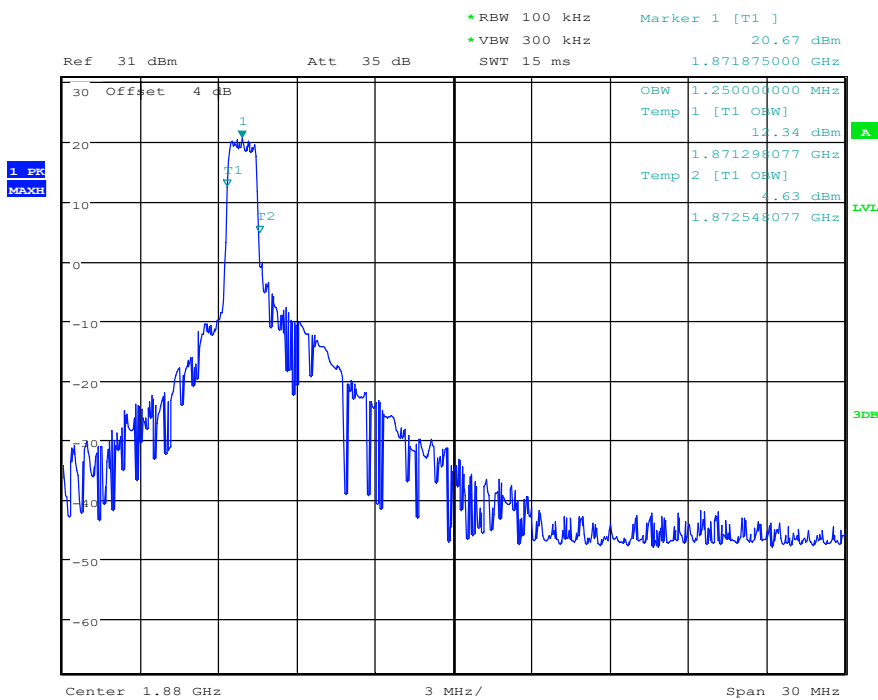
Address: No. 8,Yuma Road, Chayuan New City, Nan'an District, Chongqing, P. R. China,401336  
 Tel: 0086-23-88069965      FAX:0086-23-88608777

### Report No.: I20W00023-WWAN\_Rev1



Date: 26.DEC.2020 14:50:05

### Band2-99% OBW-20MHz Bandwidth-16QAM



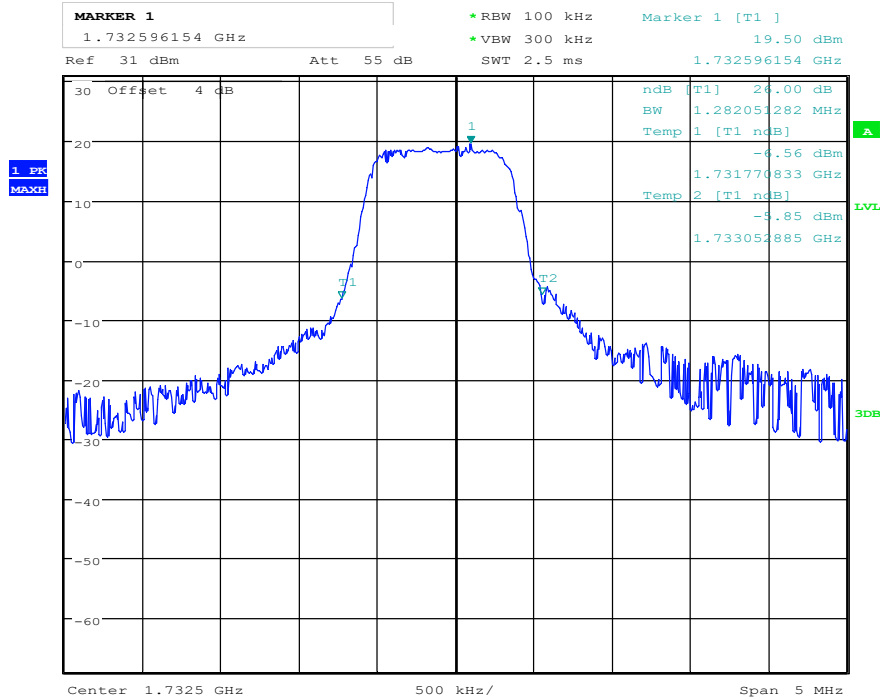
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### Band2-99% OBW-20MHz Bandwidth-QPSK

## Chongqing Academy of Information and Communication Technology

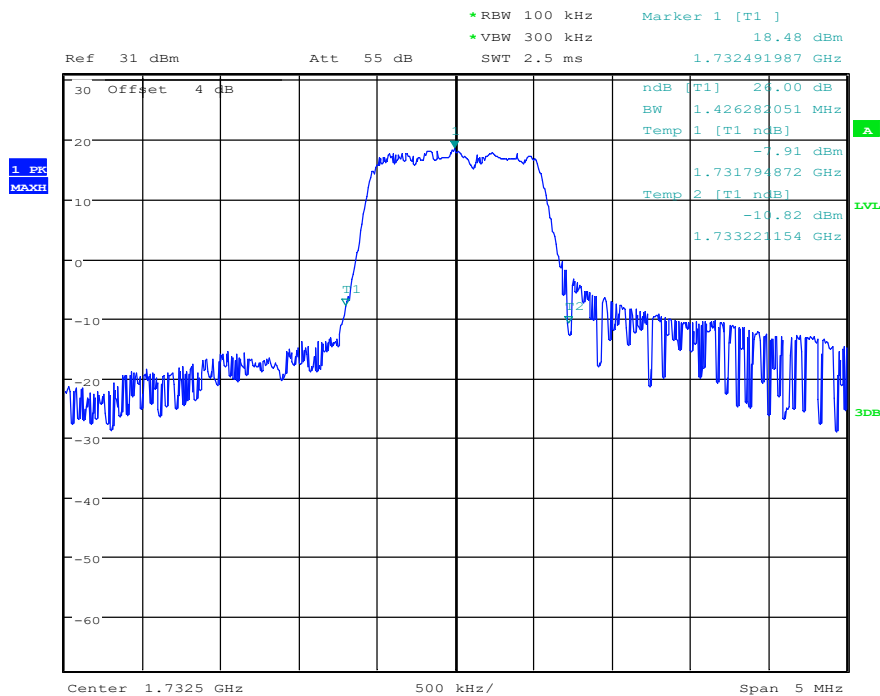
Address: No. 8, Yuma Road, Chayuan New City, Nan'an District, Chongqing, P. R. China, 401336  
 Tel: 0086-23-88069965      FAX: 0086-23-88608777

### Report No.: I20W00023-WWAN\_Rev1



Date: 26.DEC.2020 14:56:14

### Band4-26dB OBW-1.4MHz Bandwidth-16QAM



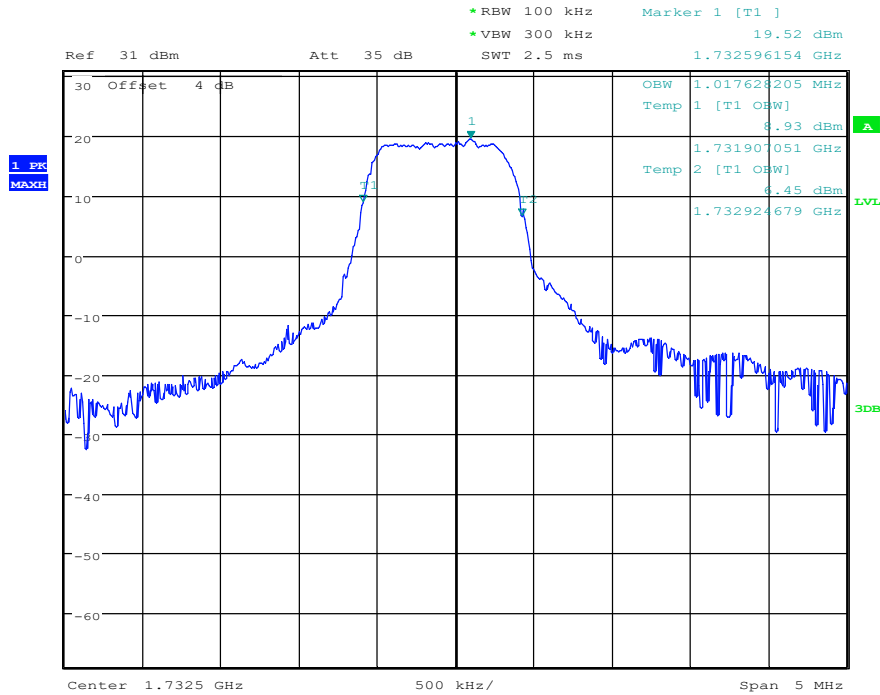
Date: 26.DEC.2020 14:53:43

### Band4-26dB OBW-1.4MHz Bandwidth-QPSK

## Chongqing Academy of Information and Communication Technology

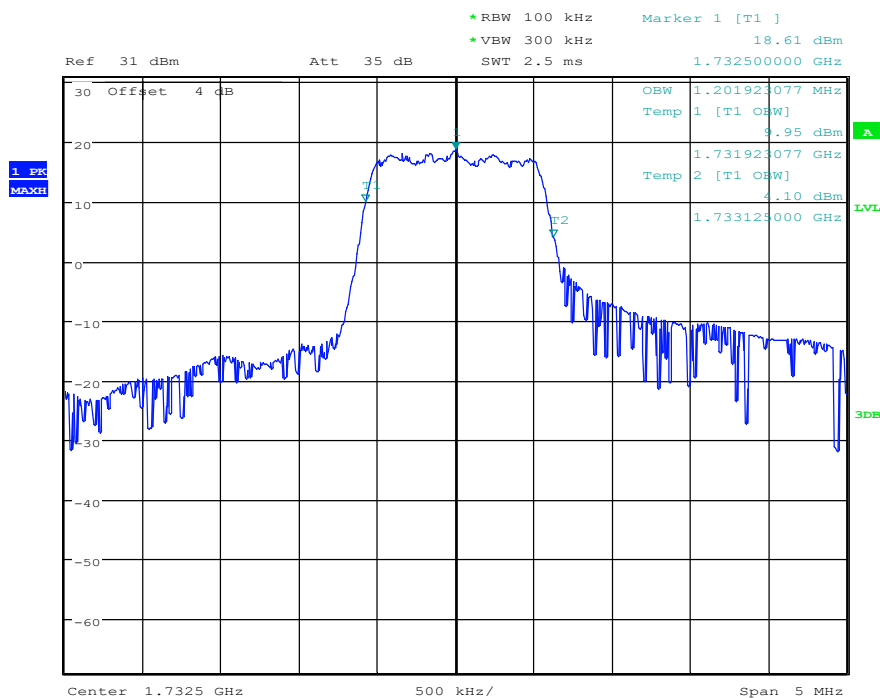
Address: No. 8,Yuma Road, Chayuan New City, Nan'an District, Chongqing, P. R. China,401336  
 Tel: 0086-23-88069965      FAX:0086-23-88608777

### Report No.: I20W00023-WWAN\_Rev1



Date: 26.DEC.2020 14:55:43

### Band4-99% OBW-1.4MHz Bandwidth-16QAM



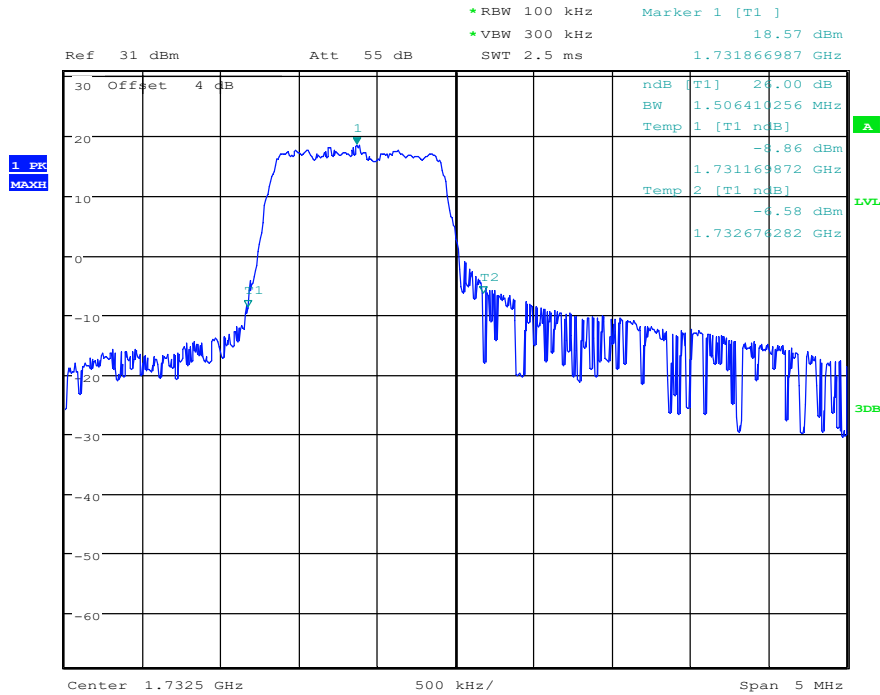
Date: 26.DEC.2020 14:54:34

### Band4-99% OBW-1.4MHz Bandwidth-QPSK

## Chongqing Academy of Information and Communication Technology

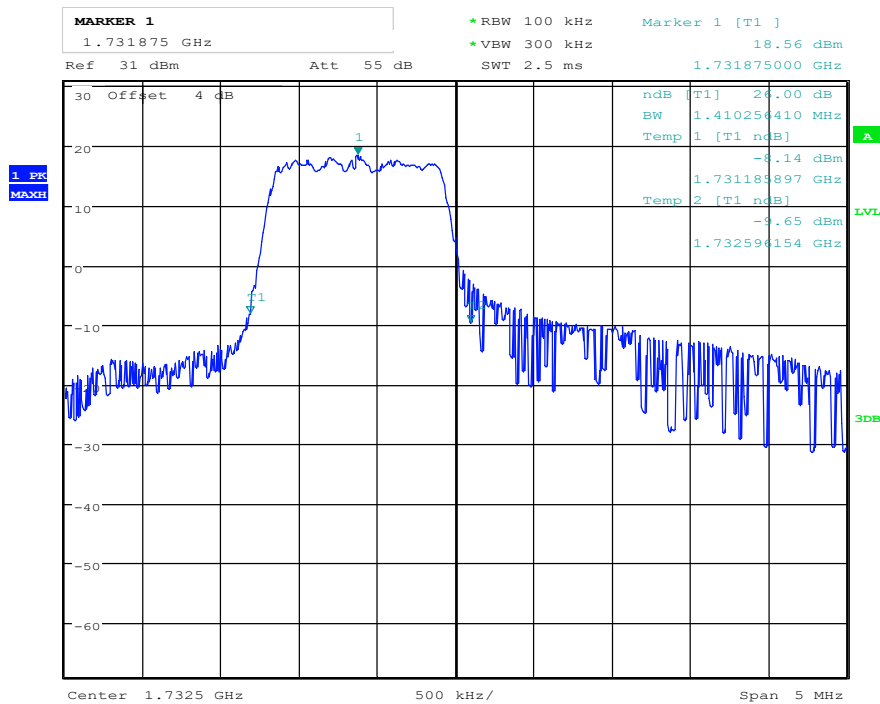
Address: No. 8, Yuma Road, Chayuan New City, Nan'an District, Chongqing, P. R. China, 401336  
 Tel: 0086-23-88069965      FAX: 0086-23-88608777

### Report No.: I20W00023-WWAN\_Rev1



Date: 26.DEC.2020 14:58:05

### Band4-26dB OBW-3MHz Bandwidth-16QAM



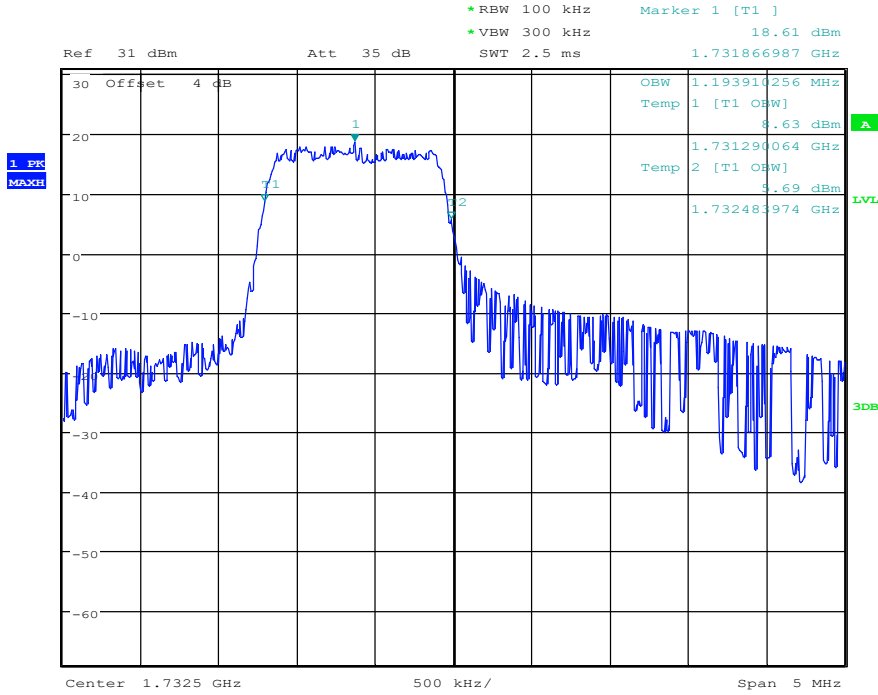
Date: 26.DEC.2020 14:59:26

### Band4-26dB OBW-3MHz Bandwidth-QPSK

## Chongqing Academy of Information and Communication Technology

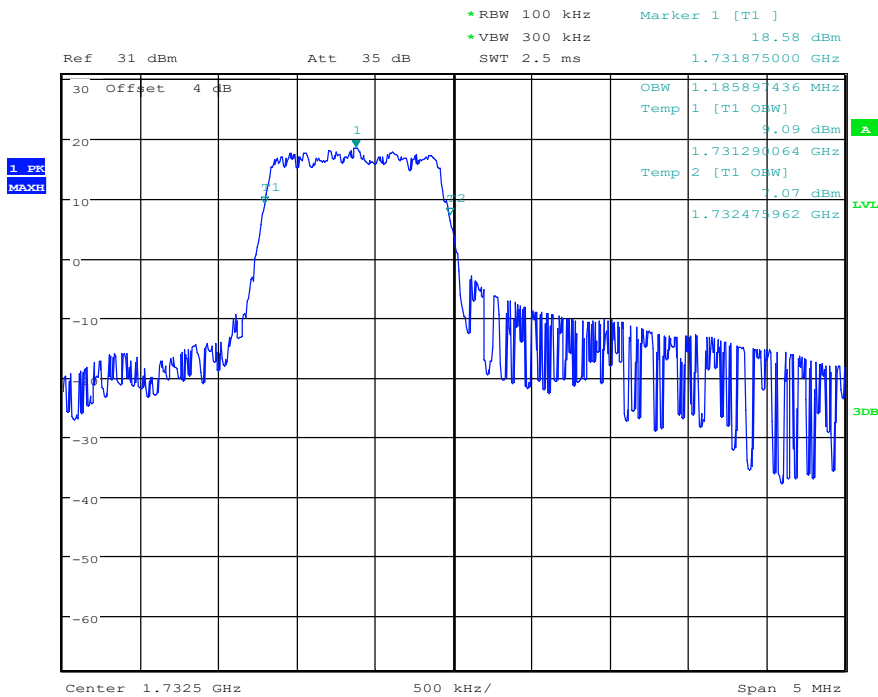
Address: No. 8, Yuma Road, Chayuan New City, Nan'an District, Chongqing, P. R. China, 401336  
 Tel: 0086-23-88069965      FAX: 0086-23-88608777

### Report No.: I20W00023-WWAN\_Rev1



Date: 26.DEC.2020 14:58:26

### Band4-99% OBW-3MHz Bandwidth-16QAM



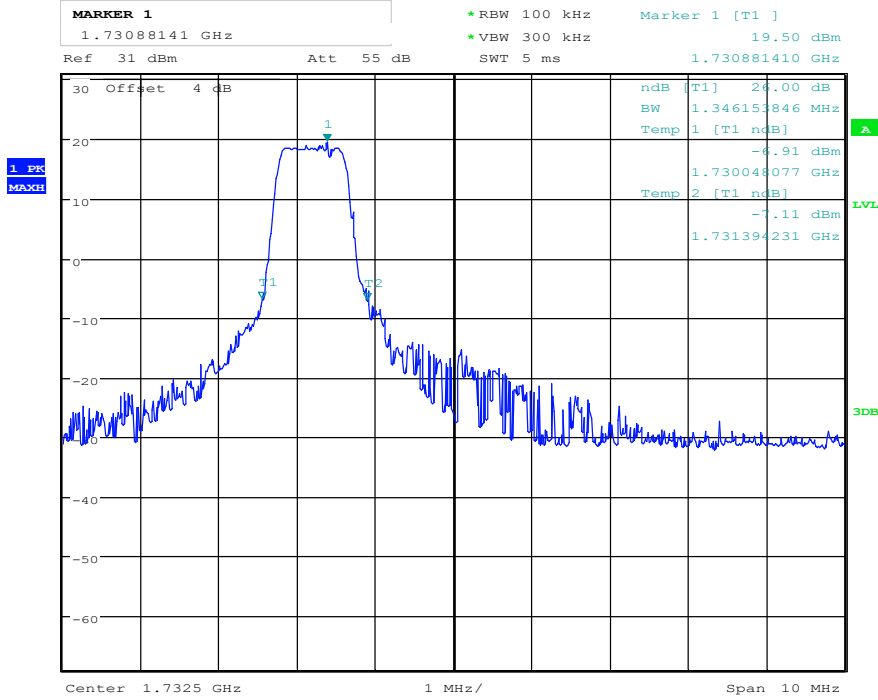
Date: 26.DEC.2020 14:58:56

### Band4-99% OBW-3MHz Bandwidth-QPSK

## Chongqing Academy of Information and Communication Technology

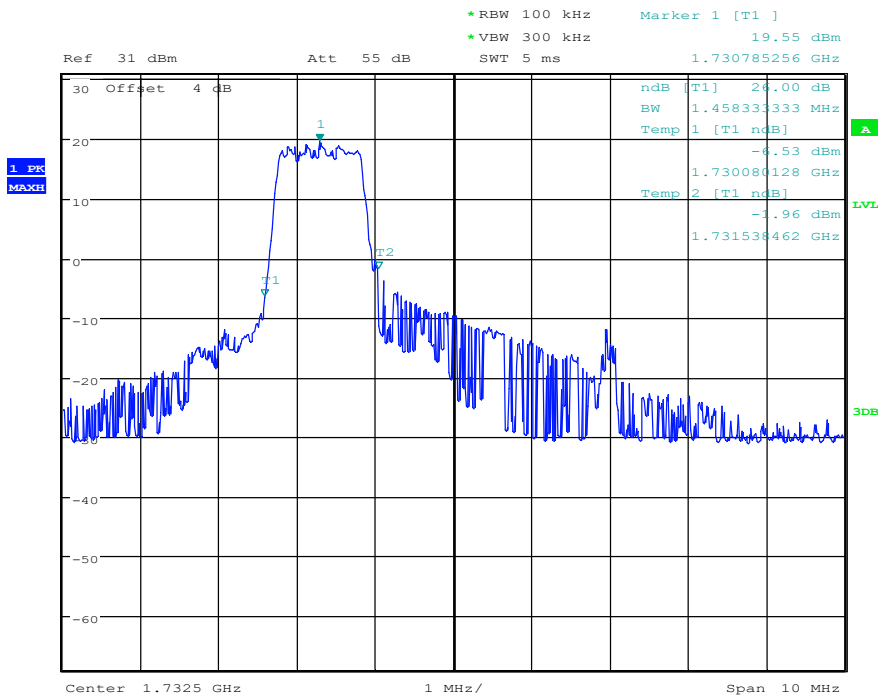
Address: No. 8, Yuma Road, Chayuan New City, Nan'an District, Chongqing, P. R. China, 401336  
 Tel: 0086-23-88069965      FAX: 0086-23-88608777

### Report No.: I20W00023-WWAN\_Rev1



Date: 26.DEC.2020 15:02:27

### Band4-26dB OBW-5MHz Bandwidth-16QAM



Date: 26.DEC.2020 15:01:12

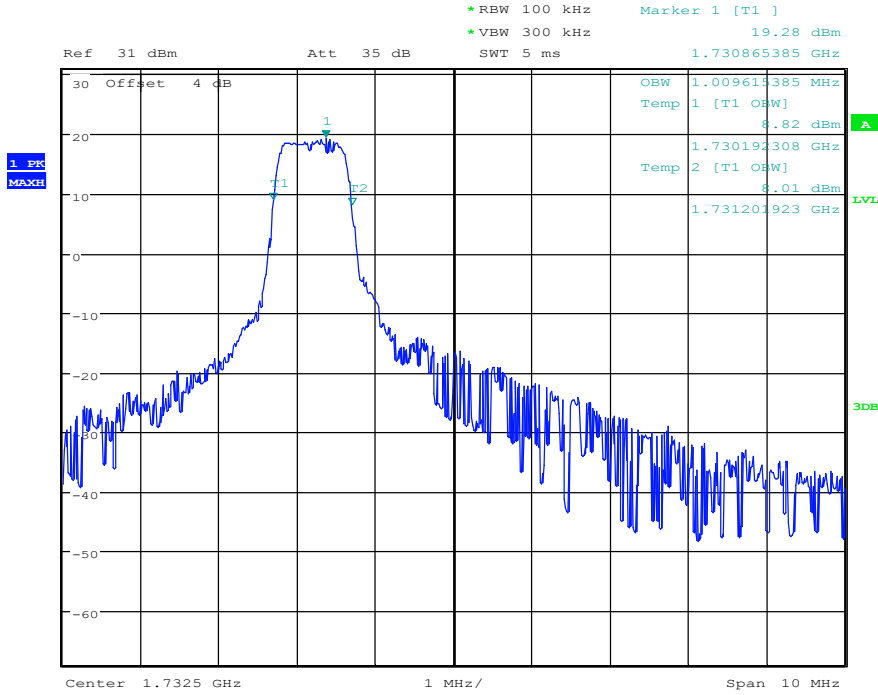
### Band4-26dB OBW-5MHz Bandwidth-QPSK

## Chongqing Academy of Information and Communication Technology

Address: No. 8,Yuma Road, Chayuan New City, Nan'an District, Chongqing, P. R. China,401336  
 Tel: 0086-23-88069965      FAX:0086-23-88608777

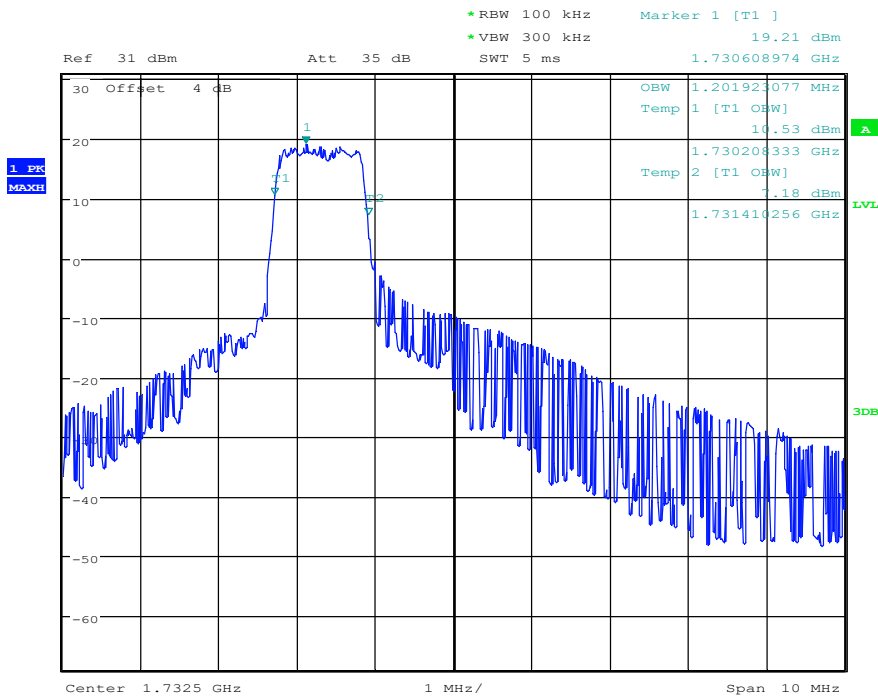


### Report No.: I20W00023-WWAN\_Rev1



Date: 26.DEC.2020 15:02:05

### Band4-99% OBW-5MHz Bandwidth-16QAM



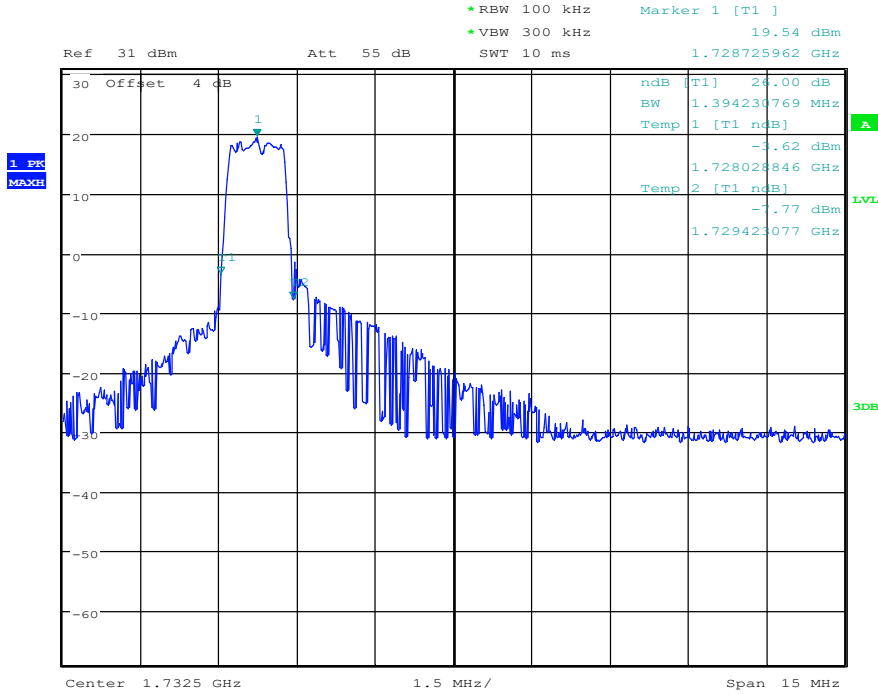
Date: 26.DEC.2020 15:01:30

### Band4-99% OBW-5MHz Bandwidth-QPSK

## Chongqing Academy of Information and Communication Technology

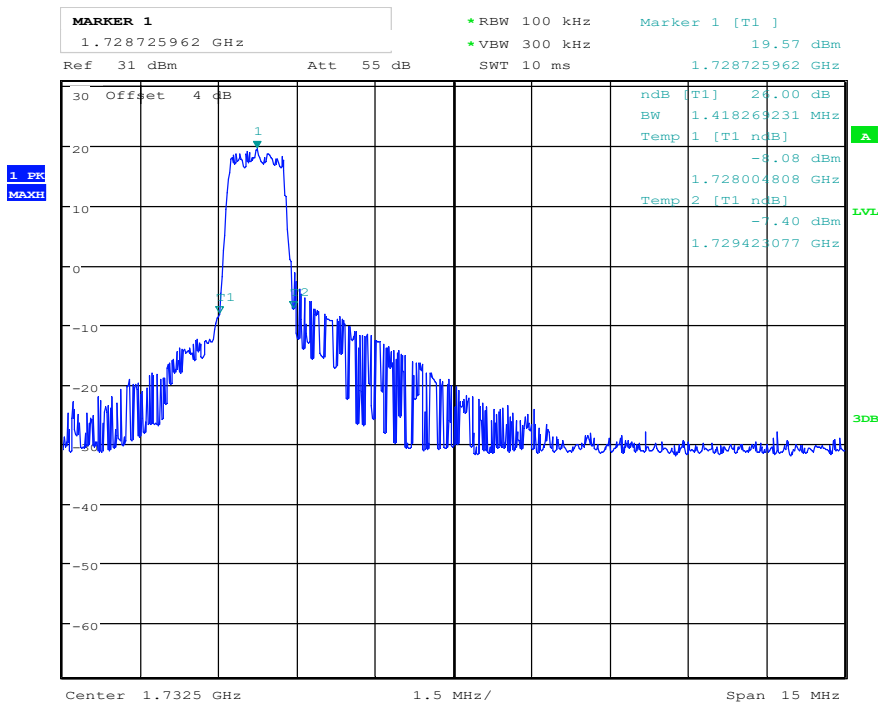
Address: No. 8, Yuma Road, Chayuan New City, Nan'an District, Chongqing, P. R. China, 401336  
 Tel: 0086-23-88069965      FAX: 0086-23-88608777

### Report No.: I20W00023-WWAN\_Rev1



Date: 26.DEC.2020 15:04:54

### Band4-26dB OBW-10MHz Bandwidth-16QAM



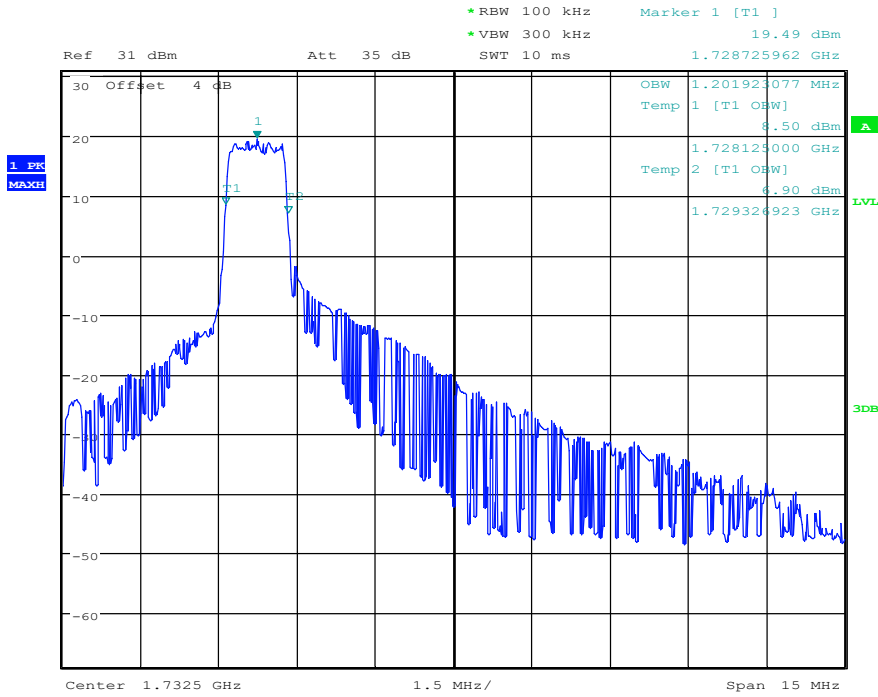
Date: 26.DEC.2020 15:06:00

### Band4-26dB OBW-10MHz Bandwidth-QPSK

## Chongqing Academy of Information and Communication Technology

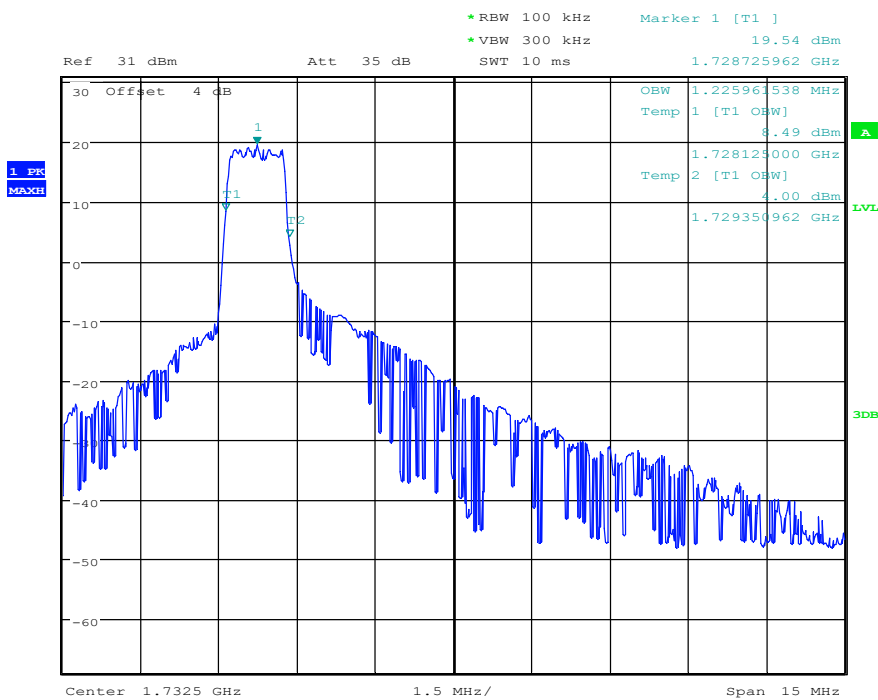
Address: No. 8,Yuma Road, Chayuan New City, Nan'an District, Chongqing, P. R. China,401336  
 Tel: 0086-23-88069965      FAX:0086-23-88608777

### Report No.: I20W00023-WWAN\_Rev1



Date: 26.DEC.2020 15:05:14

### Band4-99% OBW-10MHz Bandwidth-16QAM



Date: 26.DEC.2020 15:05:43

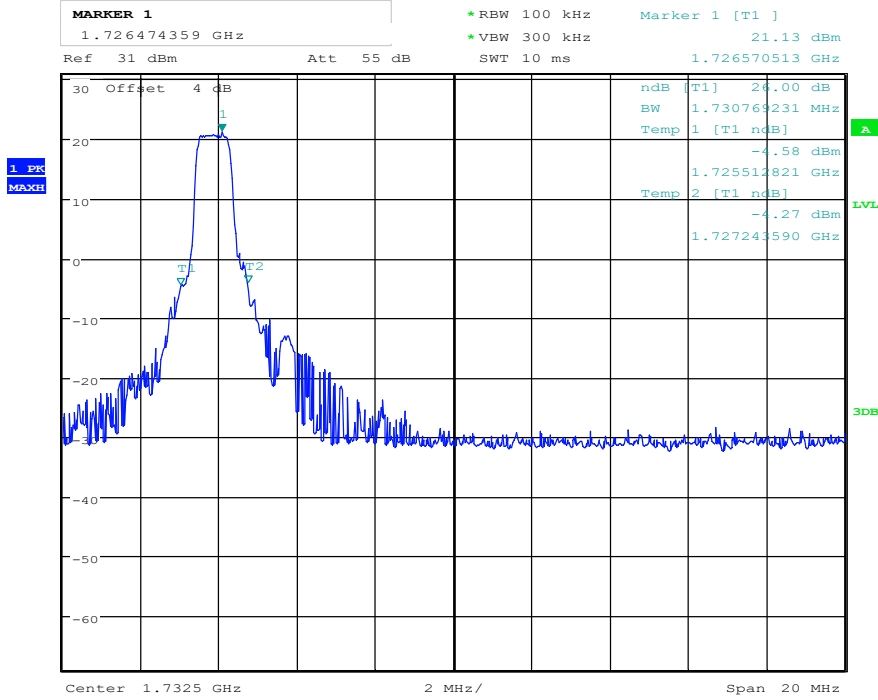
### Band4-99% OBW-10MHz Bandwidth-QPSK

## Chongqing Academy of Information and Communication Technology

Address: No. 8,Yuma Road, Chayuan New City, Nan'an District, Chongqing, P. R. China,401336  
 Tel: 0086-23-88069965      FAX:0086-23-88608777

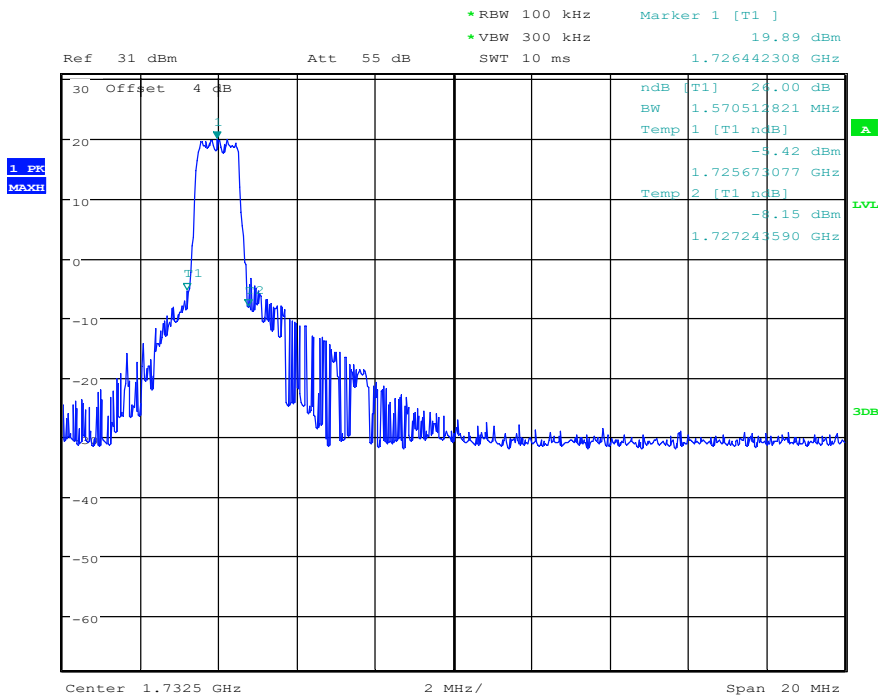


### Report No.: I20W00023-WWAN\_Rev1



Date: 26.DEC.2020 15:09:02

### Band4-26dB OBW-15MHz Bandwidth-16QAM



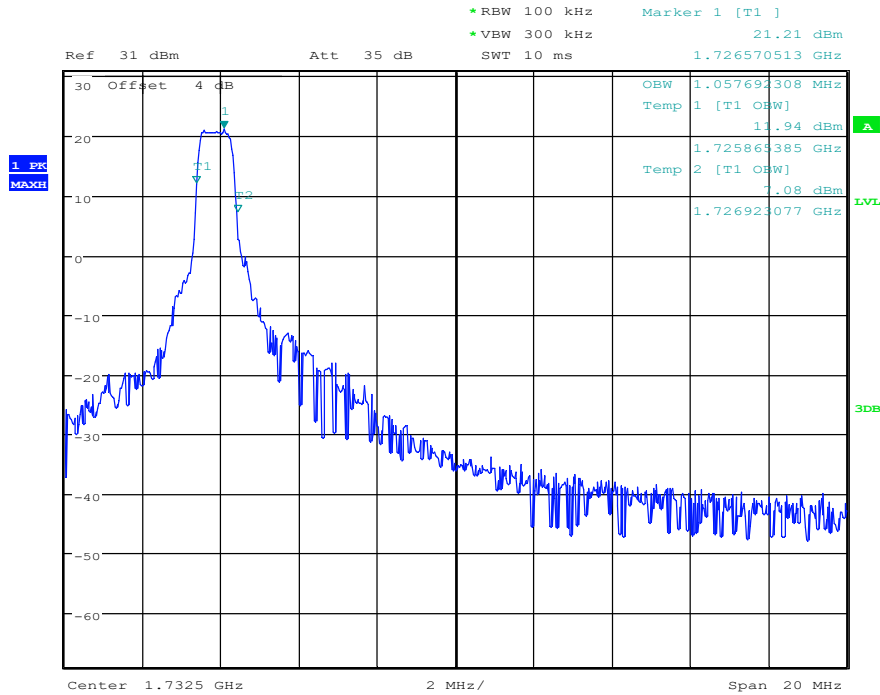
Date: 26.DEC.2020 15:07:40

### Band4-26dB OBW-15MHz Bandwidth-QPSK

## Chongqing Academy of Information and Communication Technology

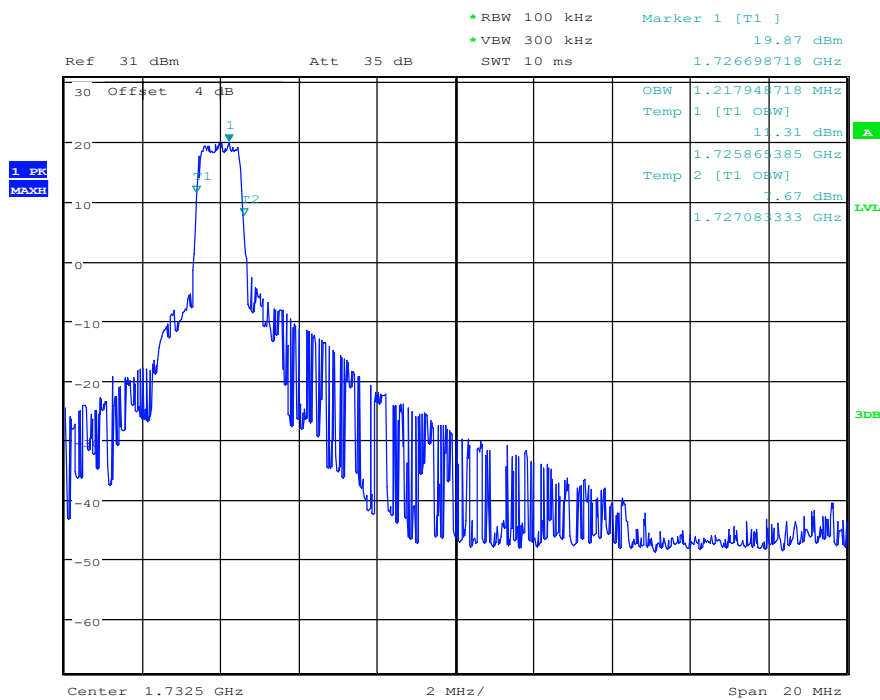
Address: No. 8,Yuma Road, Chayuan New City, Nan'an District, Chongqing, P. R. China,401336  
Tel: 0086-23-88069965      FAX:0086-23-88608777

### Report No.: I20W00023-WWAN\_Rev1



Date: 26.DEC.2020 15:08:42

### Band4-99% OBW-15MHz Bandwidth-16QAM



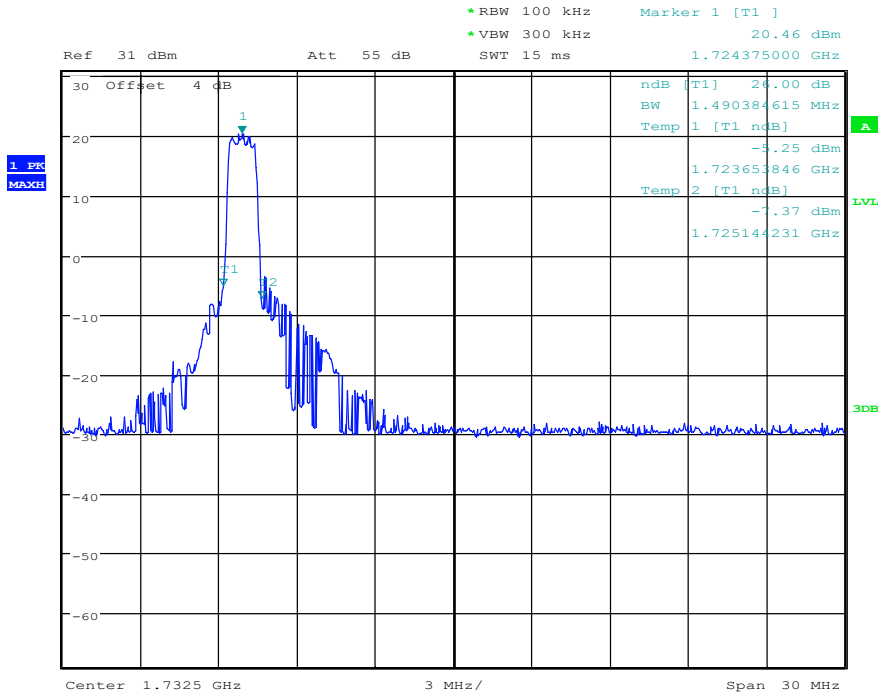
Date: 26.DEC.2020 15:07:56

### Band4-99% OBW-15MHz Bandwidth-QPSK

## Chongqing Academy of Information and Communication Technology

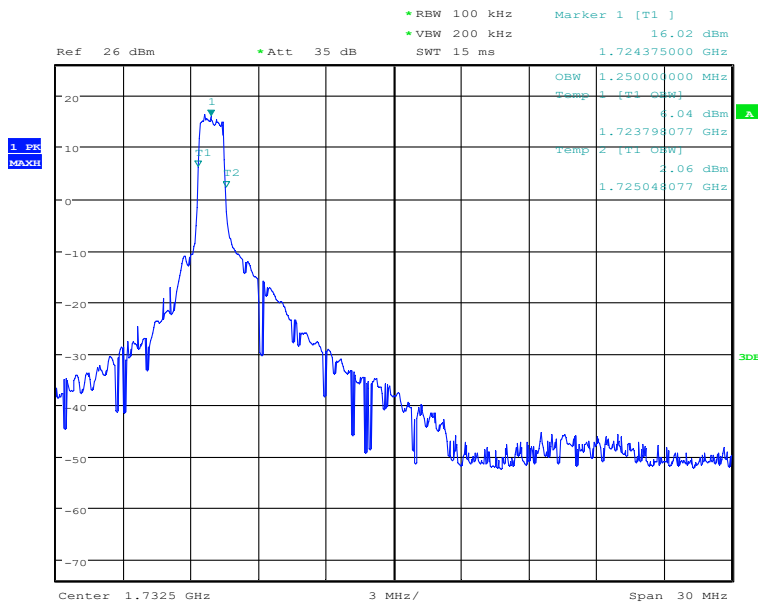
Address: No. 8,Yuma Road, Chayuan New City, Nan'an District, Chongqing, P. R. China,401336  
 Tel: 0086-23-88069965      FAX:0086-23-88608777

### Report No.: I20W00023-WWAN\_Rev1



Date: 26.DEC.2020 15:14:52

### Band4-26dB OBW-20MHz Bandwidth-16QAM



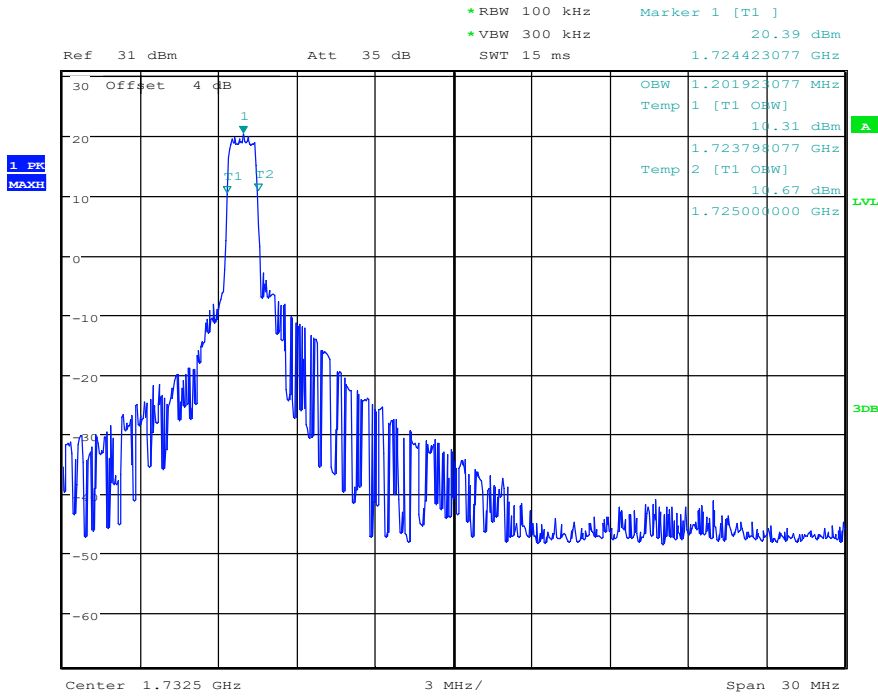
Date: 3.JAN.2021 01:39:02

### Band4-26dB OBW-20MHz Bandwidth-QPSK

**Chongqing Academy of Information and Communication Technology**

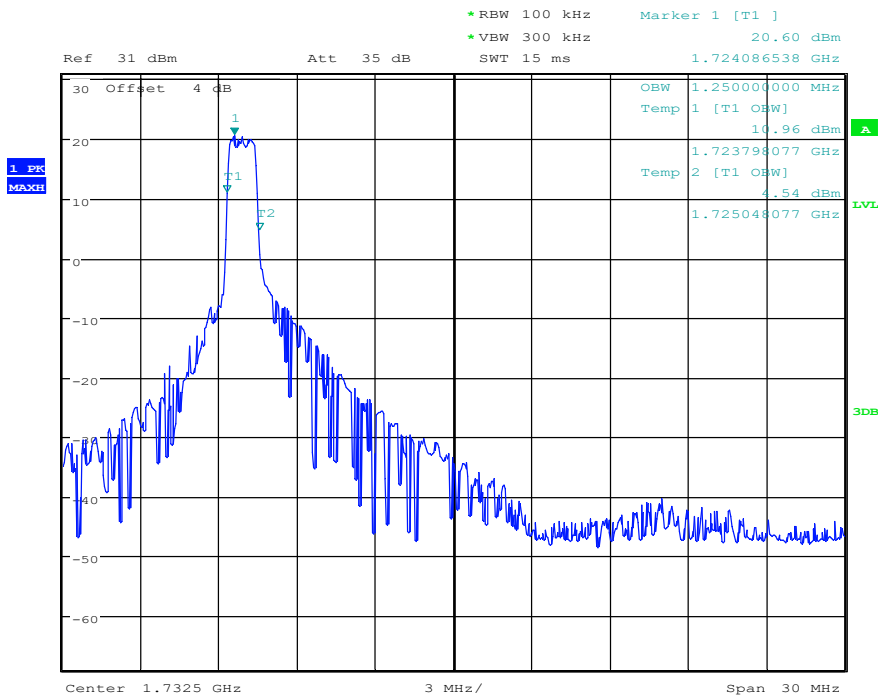
Address: No. 8,Yuma Road, Chayuan New City, Nan'an District, Chongqing, P. R. China,401336  
 Tel: 0086-23-88069965      FAX:0086-23-88608777

### Report No.: I20W00023-WWAN\_Rev1



Date: 26.DEC.2020 15:15:12

### Band4-99% OBW-20MHz Bandwidth-16QAM



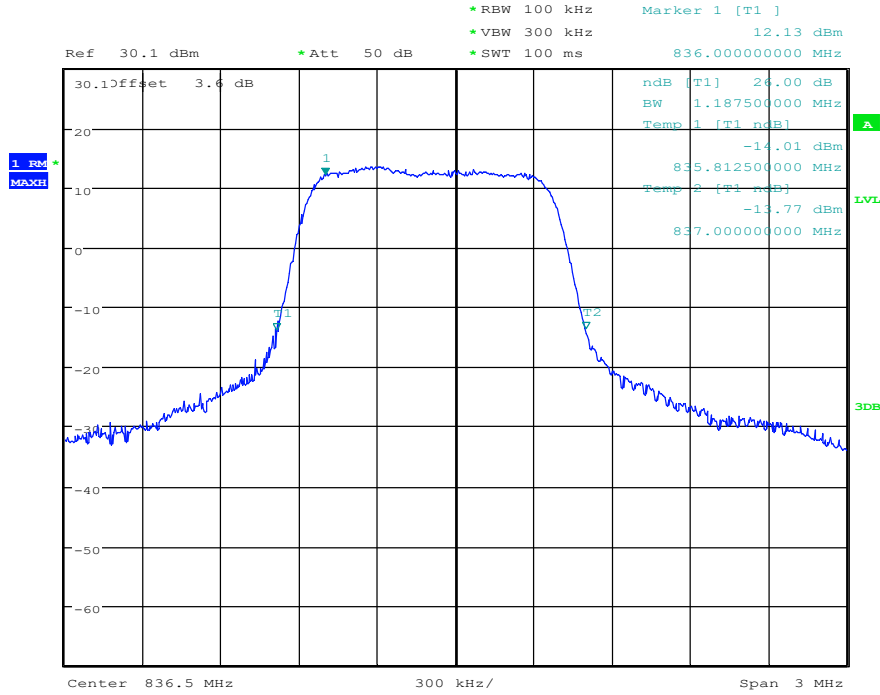
Date: 26.DEC.2020 15:15:50

### Band4-99% OBW-20MHz Bandwidth-QPSK

## Chongqing Academy of Information and Communication Technology

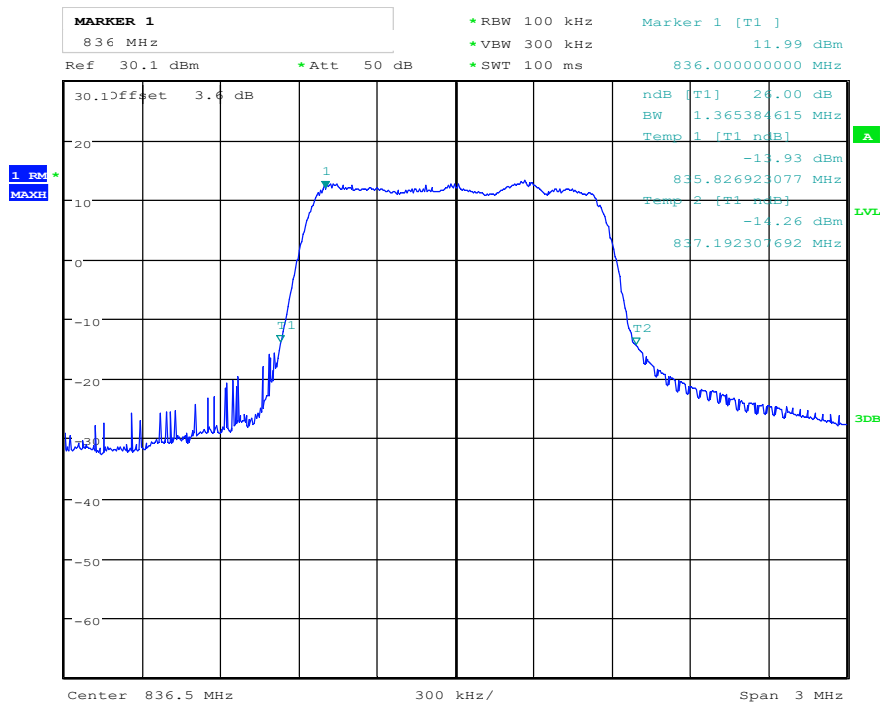
Address: No. 8,Yuma Road, Chayuan New City, Nan'an District, Chongqing, P. R. China,401336  
 Tel: 0086-23-88069965      FAX:0086-23-88608777

### Report No.: I20W00023-WWAN\_Rev1



Date: 28.DEC.2020 09:01:13

### Band5-26dB OBW-1.4MHz Bandwidth-16QAM



Date: 28.DEC.2020 09:00:15

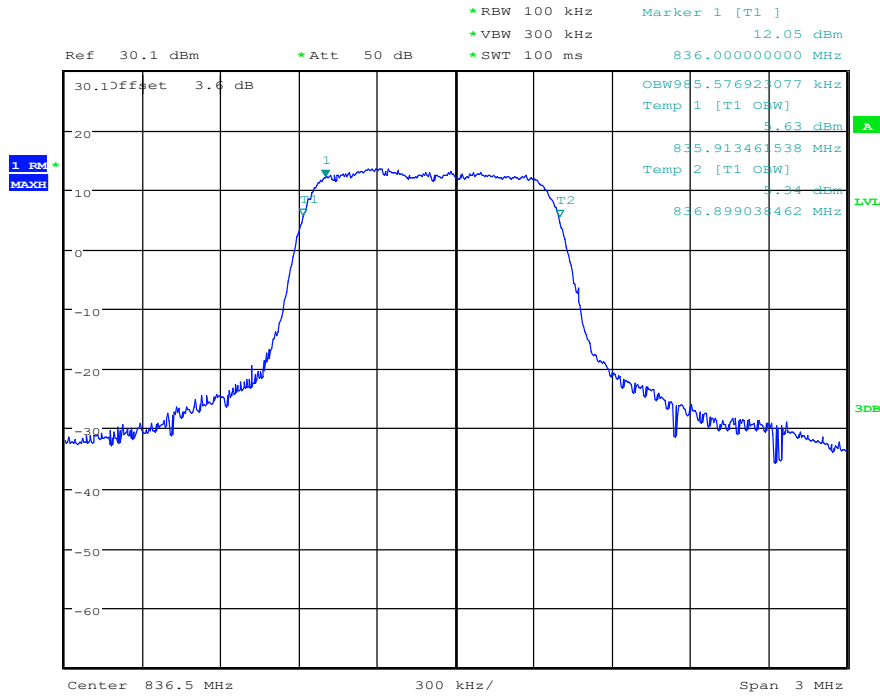
### Band5-26dB OBW-1.4MHz Bandwidth-QPSK

## Chongqing Academy of Information and Communication Technology

Address: No. 8,Yuma Road, Chayuan New City, Nan'an District, Chongqing, P. R. China,401336  
 Tel: 0086-23-88069965      FAX:0086-23-88608777

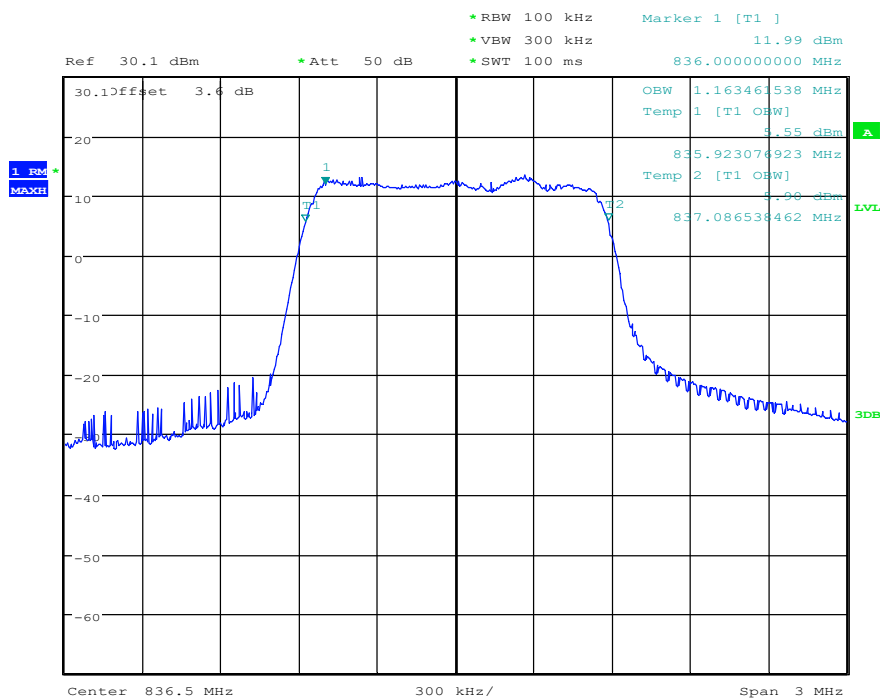


### Report No.: I20W00023-WWAN\_Rev1



Date: 28.DEC.2020 09:01:59

### Band5-99% OBW-1.4MHz Bandwidth-16QAM



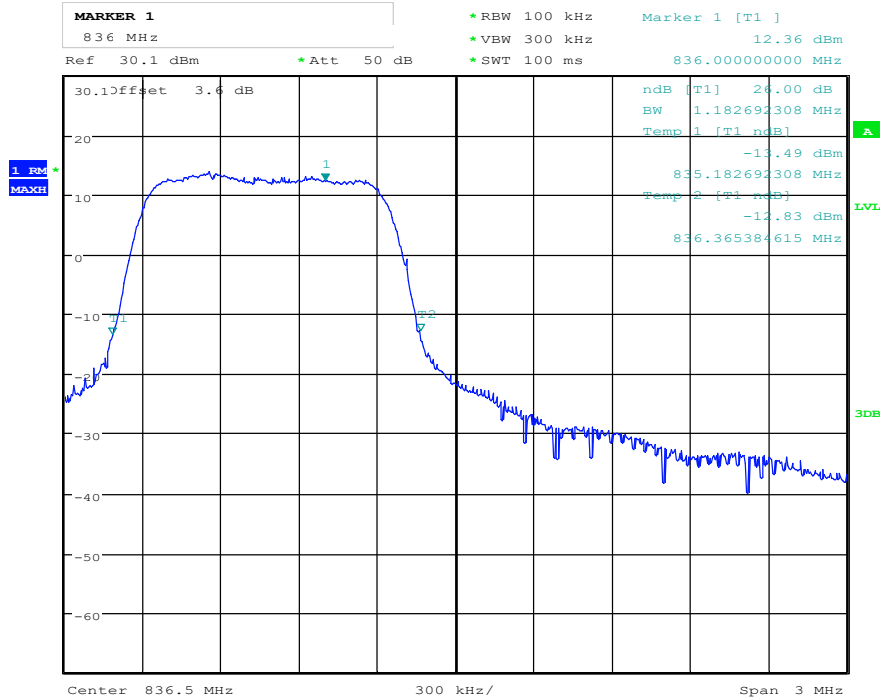
Date: 28.DEC.2020 08:59:06

### Band5-99% OBW-1.4MHz Bandwidth-QPSK

## Chongqing Academy of Information and Communication Technology

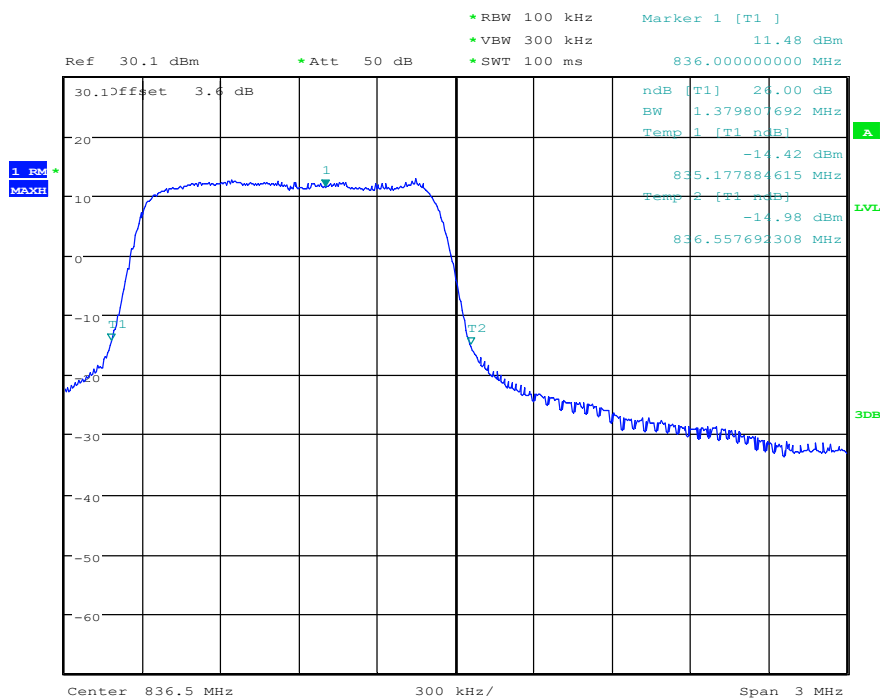
Address: No. 8,Yuma Road, Chayuan New City, Nan'an District, Chongqing, P. R. China,401336  
 Tel: 0086-23-88069965      FAX:0086-23-88608777

### Report No.: I20W00023-WWAN\_Rev1



Date: 28.DEC.2020 08:52:48

### Band5-26dB OBW-3MHz Bandwidth-16QAM



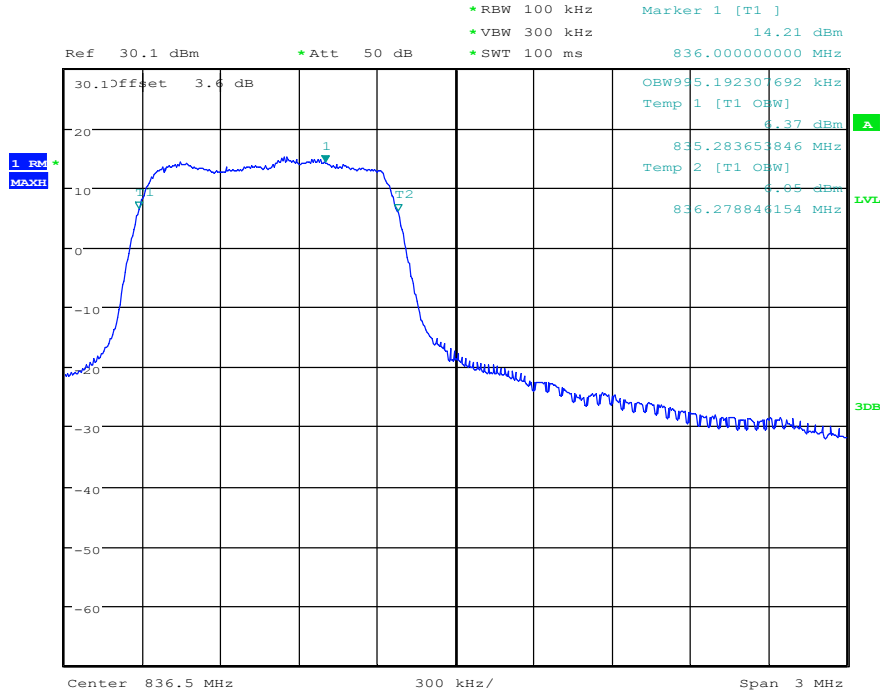
Date: 28.DEC.2020 08:53:48

### Band5-26dB OBW-3MHz Bandwidth-QPSK

## Chongqing Academy of Information and Communication Technology

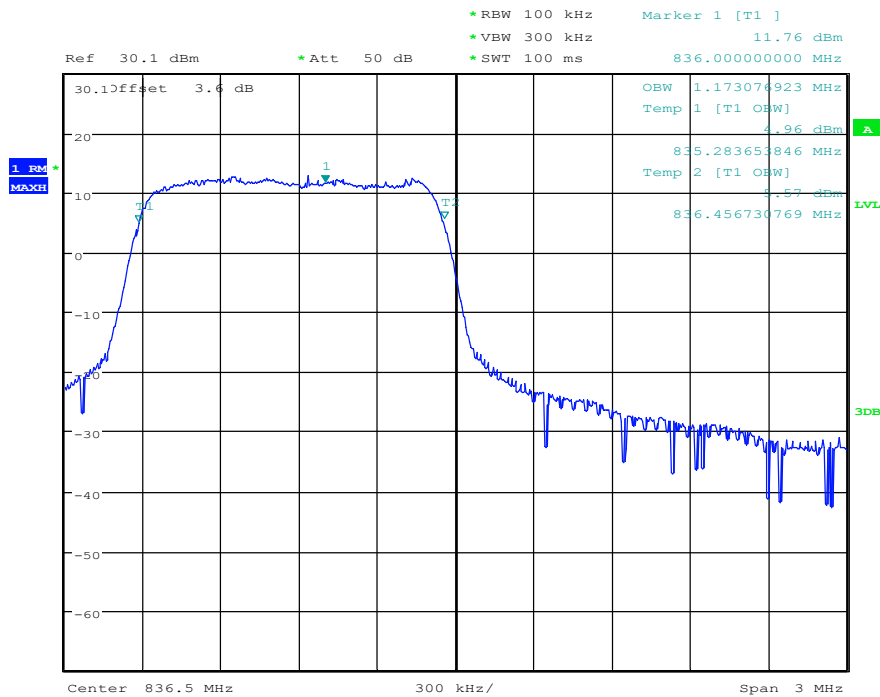
Address: No. 8,Yuma Road, Chayuan New City, Nan'an District, Chongqing, P. R. China,401336  
Tel: 0086-23-88069965 FAX:0086-23-88608777

### Report No.: I20W00023-WWAN\_Rev1



Date: 28.DEC.2020 08:51:31

### Band5-99% OBW-3MHz Bandwidth-16QAM



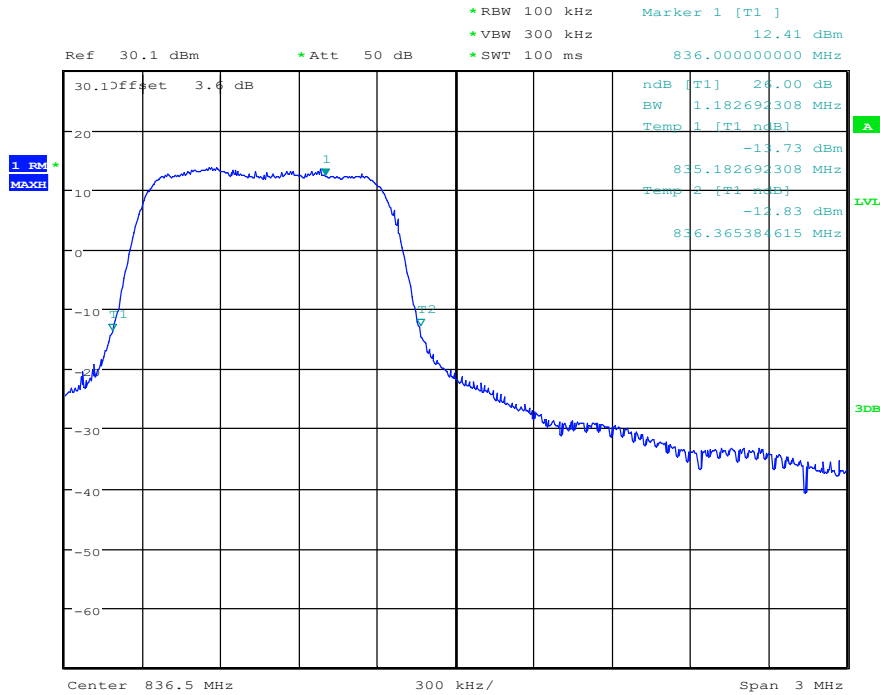
Date: 28.DEC.2020 08:54:23

### Band5-99% OBW-3MHz Bandwidth-QPSK

## Chongqing Academy of Information and Communication Technology

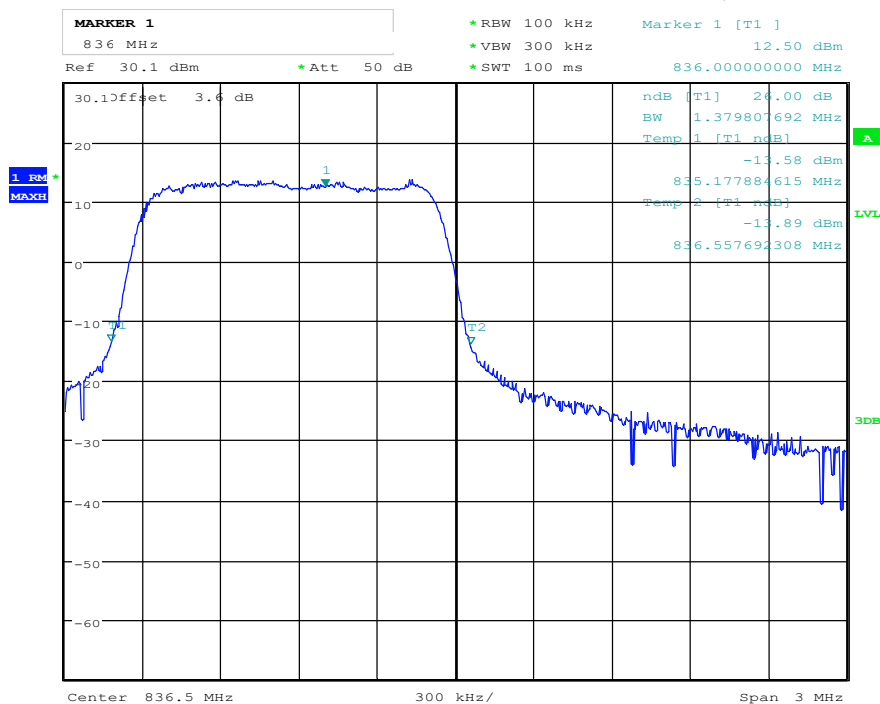
Address: No. 8,Yuma Road, Chayuan New City, Nan'an District, Chongqing, P. R. China,401336  
 Tel: 0086-23-88069965      FAX:0086-23-88608777

### Report No.: I20W00023-WWAN\_Rev1



Date: 28.DEC.2020 08:47:50

#### Band5-26dB OBW-5MHz Bandwidth-16QAM



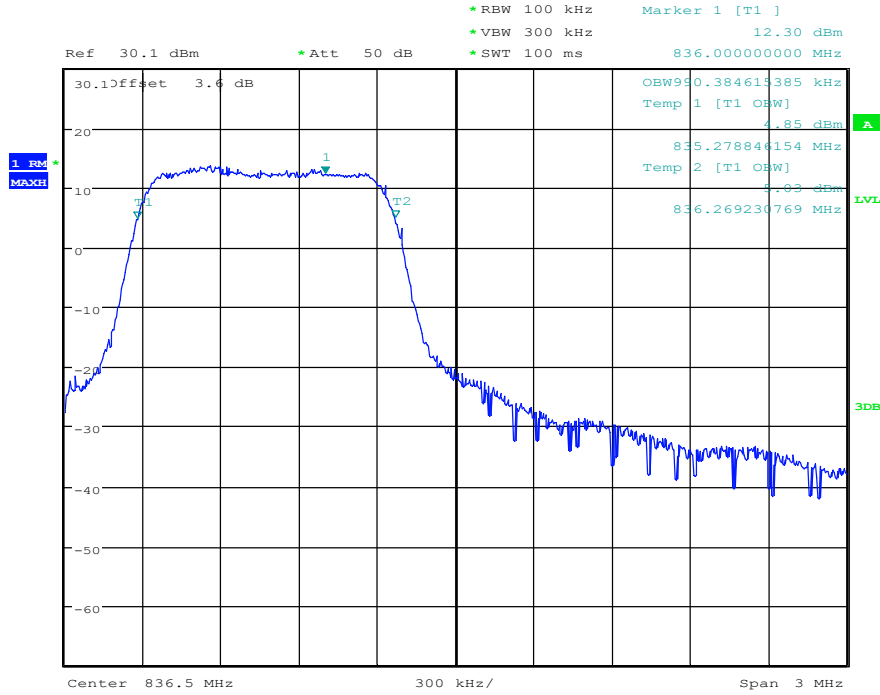
Date: 28.DEC.2020 08:46:22

#### Band5-26dB OBW-5MHz Bandwidth-QPSK

### Chongqing Academy of Information and Communication Technology

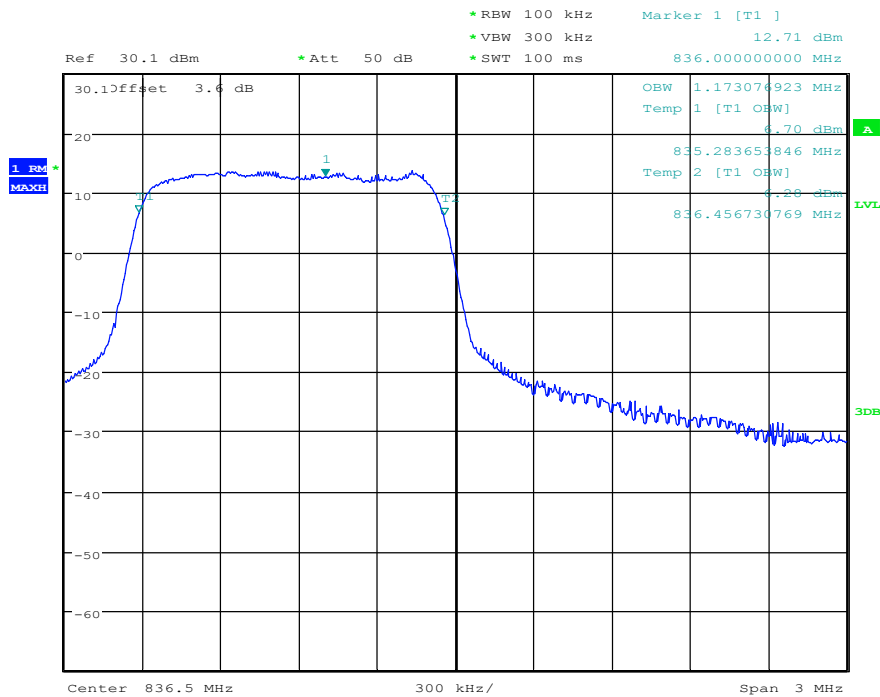
Address: No. 8,Yuma Road, Chayuan New City, Nan'an District, Chongqing, P. R. China,401336  
 Tel: 0086-23-88069965      FAX:0086-23-88608777

### Report No.: I20W00023-WWAN\_Rev1



Date: 28.DEC.2020 08:48:39

### Band5-99% OBW-5MHz Bandwidth-16QAM



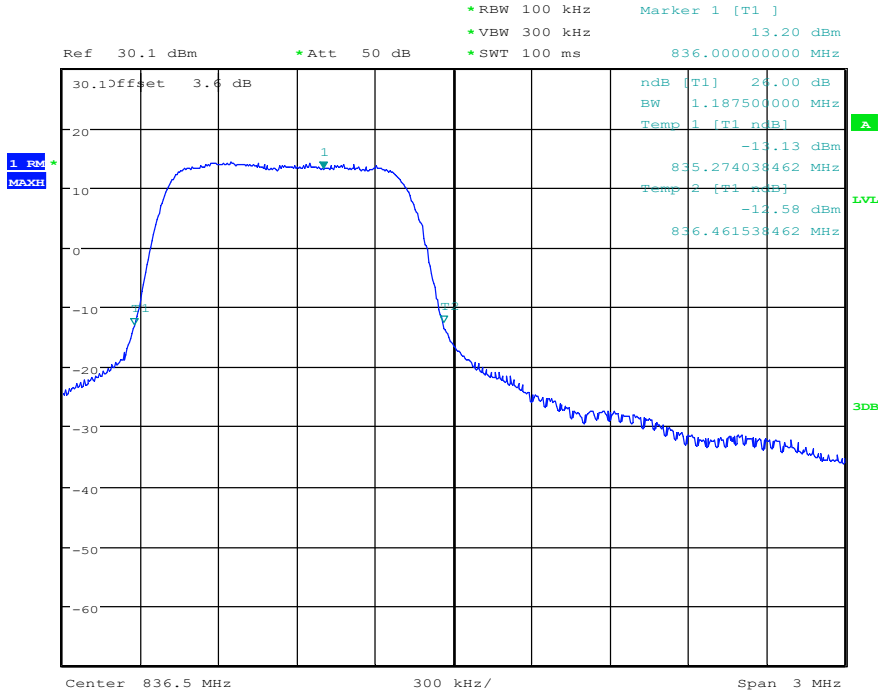
Date: 28.DEC.2020 08:45:36

### Band5-99% OBW-5MHz Bandwidth-QPSK

## Chongqing Academy of Information and Communication Technology

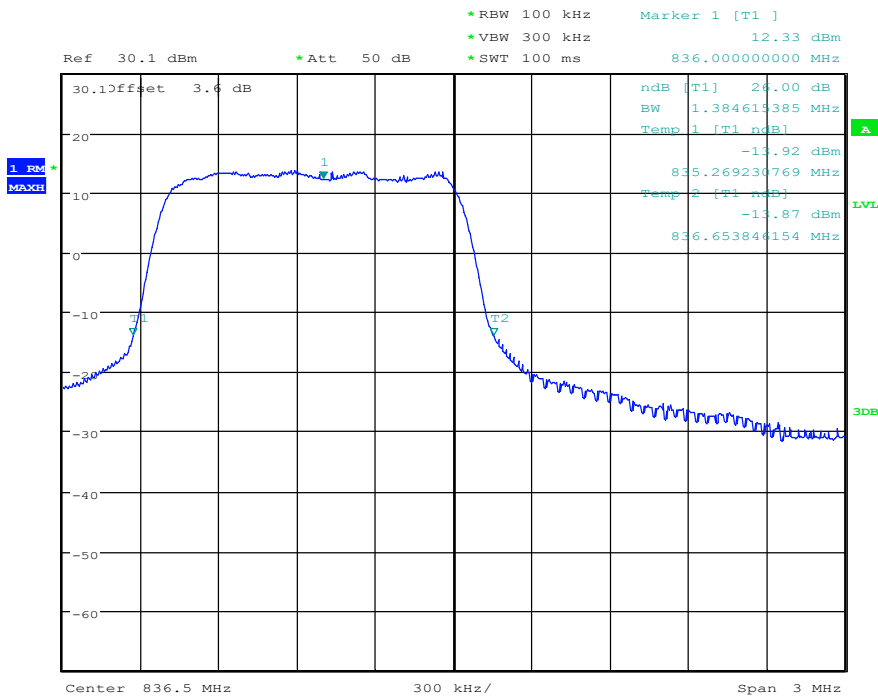
Address: No. 8,Yuma Road, Chayuan New City, Nan'an District, Chongqing, P. R. China,401336  
 Tel: 0086-23-88069965      FAX:0086-23-88608777

### Report No.: I20W00023-WWAN\_Rev1



Date: 28.DEC.2020 08:38:10

### Band5-26dB OBW-10MHz Bandwidth-16QAM



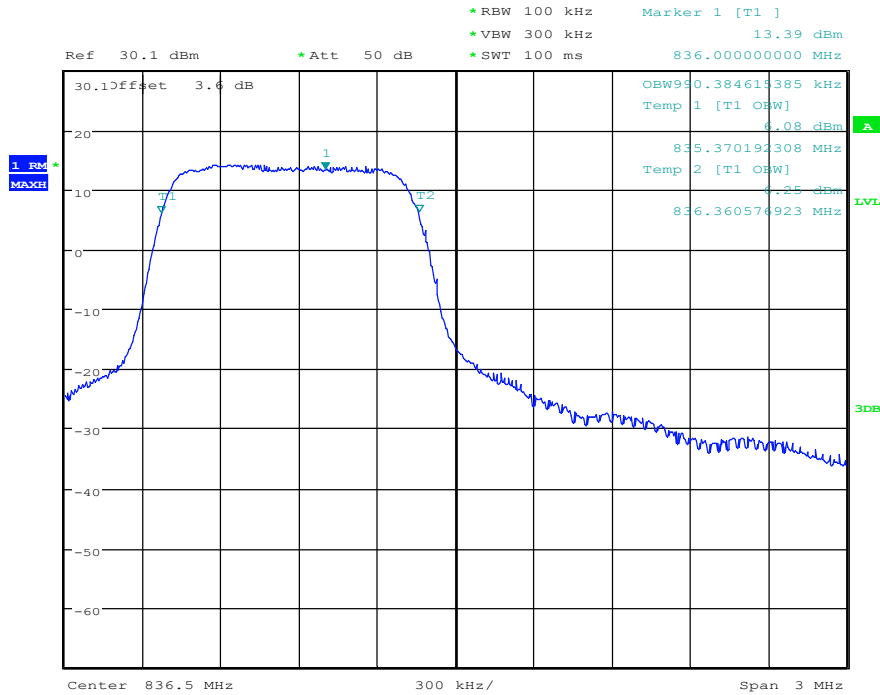
Date: 28.DEC.2020 08:34:49

### Band5-26dB OBW-10MHz Bandwidth-QPSK

## Chongqing Academy of Information and Communication Technology

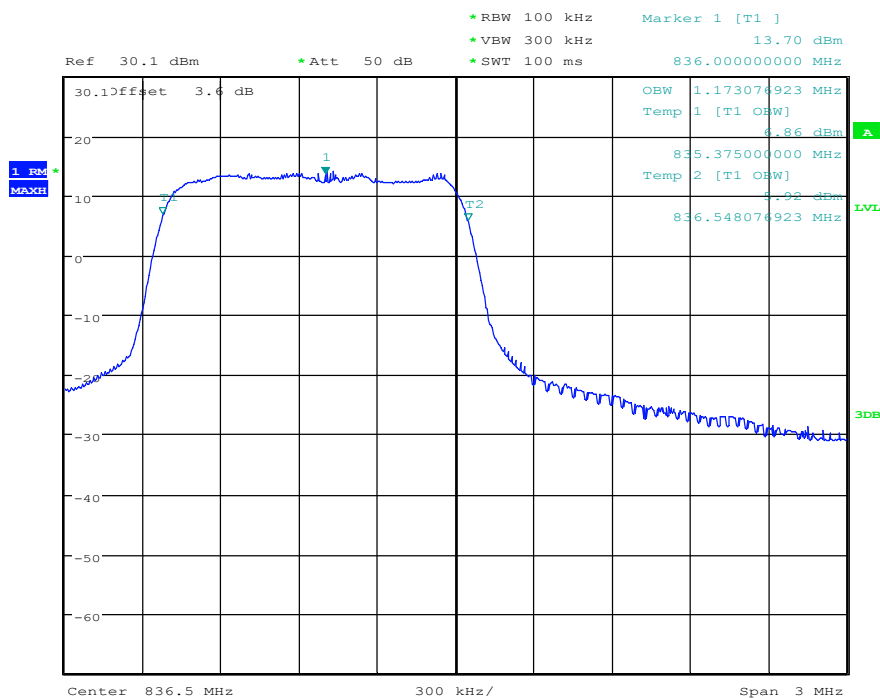
Address: No. 8,Yuma Road, Chayuan New City, Nan'an District, Chongqing, P. R. China,401336  
 Tel: 0086-23-88069965      FAX:0086-23-88608777

### Report No.: I20W00023-WWAN\_Rev1



Date: 28.DEC.2020 08:39:26

### Band5-99% OBW-10MHz Bandwidth-16QAM



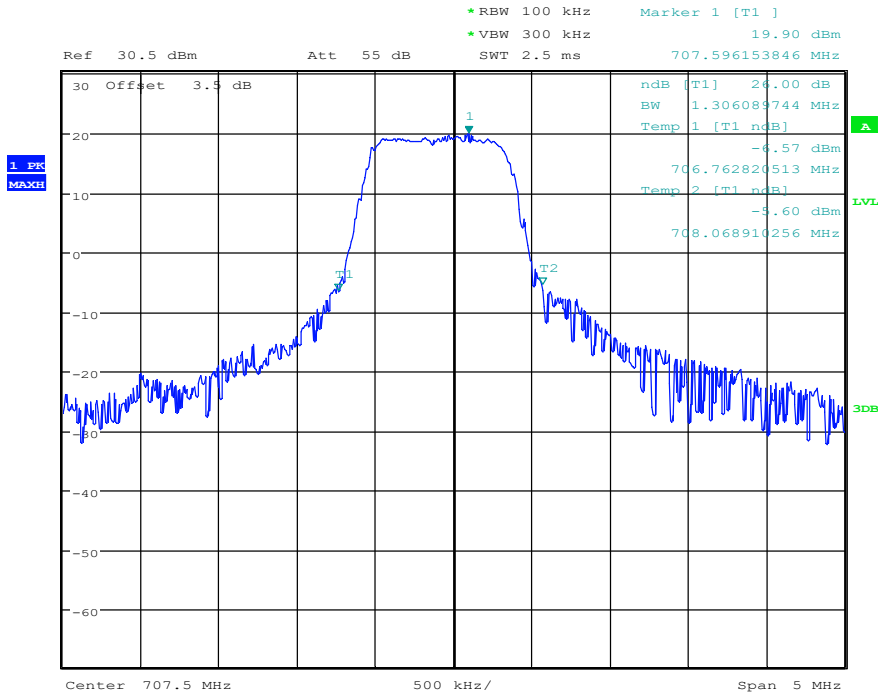
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### Band5-99% OBW-10MHz Bandwidth-QPSK

## Chongqing Academy of Information and Communication Technology

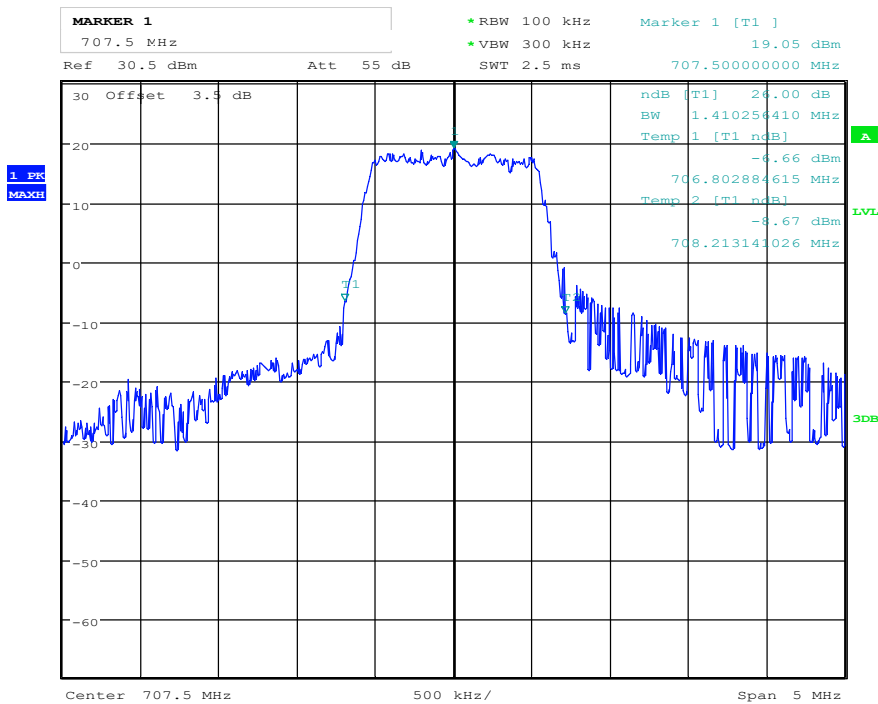
Address: No. 8,Yuma Road, Chayuan New City, Nan'an District, Chongqing, P. R. China,401336  
 Tel: 0086-23-88069965      FAX:0086-23-88608777

### Report No.: I20W00023-WWAN\_Rev1



Date: 26.DEC.2020 15:48:41

### Band12-26dB OBW-1.4MHz Bandwidth-16QAM



Date: 26.DEC.2020 15:47:38

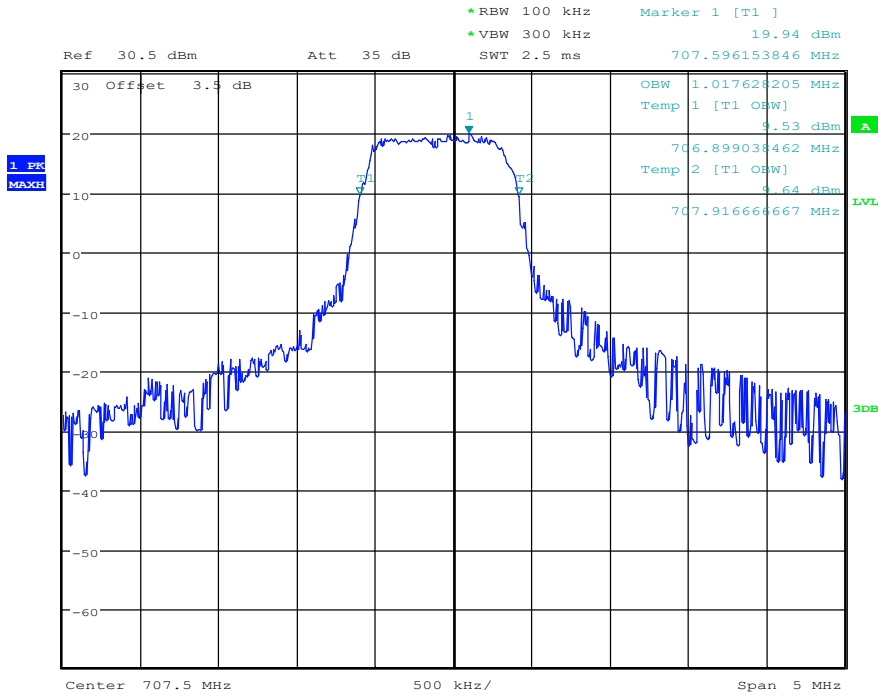
### Band12-26dB OBW-1.4MHz Bandwidth-QPSK

## Chongqing Academy of Information and Communication Technology

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 Tel: 0086-23-88069965      FAX: 0086-23-88608777

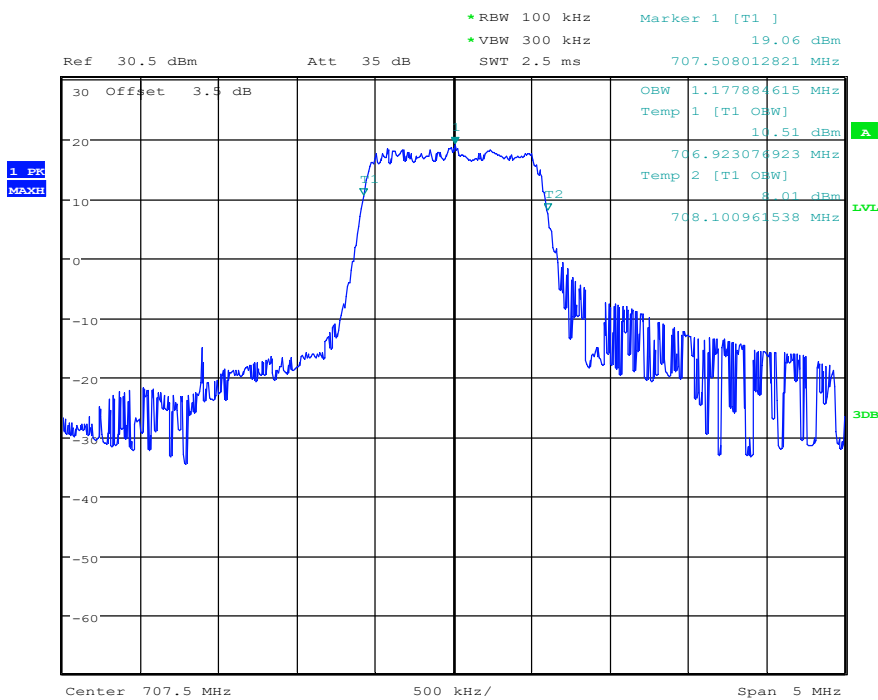


### Report No.: I20W00023-WWAN\_Rev1



Date: 26.DEC.2020 15:49:14

### Band12-99% OBW-1.4MHz Bandwidth-16QAM



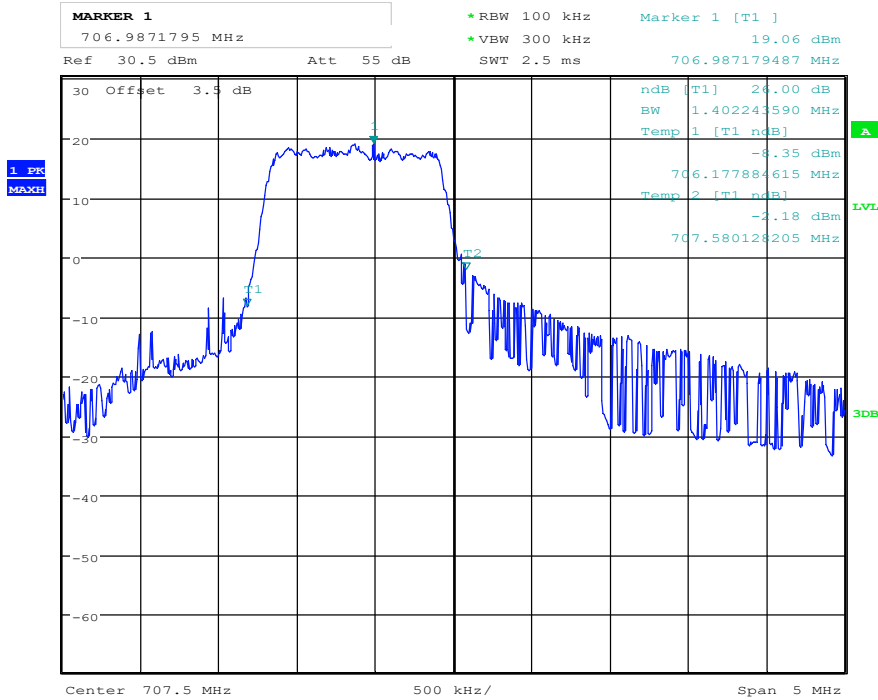
Date: 26.DEC.2020 15:47:06

### Band12-99% OBW-1.4MHz Bandwidth-QPSK

## Chongqing Academy of Information and Communication Technology

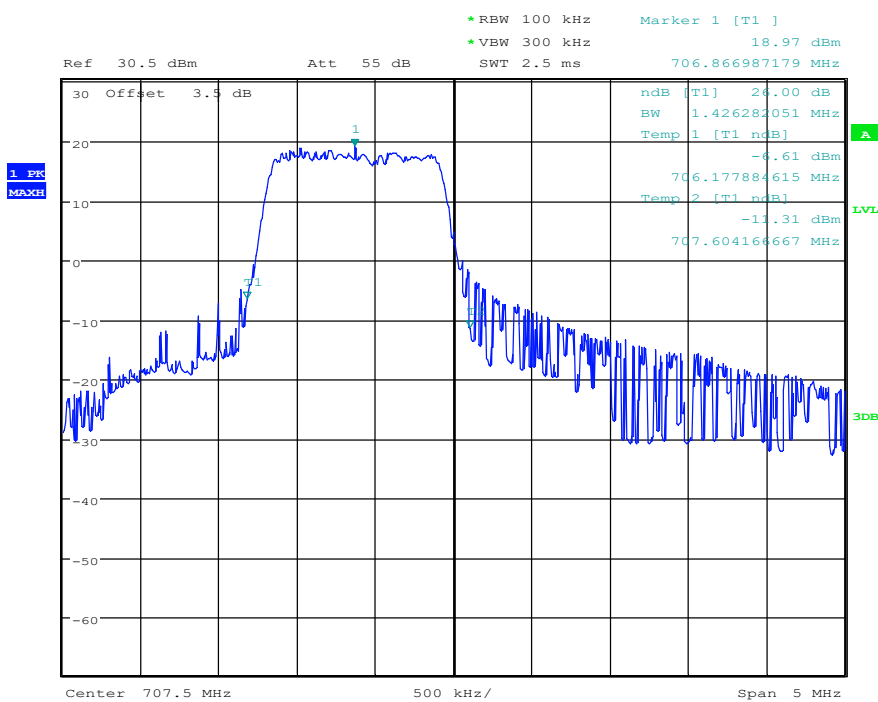
Address: No. 8,Yuma Road, Chayuan New City, Nan'an District, Chongqing, P. R. China,401336  
 Tel: 0086-23-88069965      FAX:0086-23-88608777

### Report No.: I20W00023-WWAN\_Rev1



Date: 26.DEC.2020 15:51:28

### Band12-26dB OBW-3MHz Bandwidth-16QAM



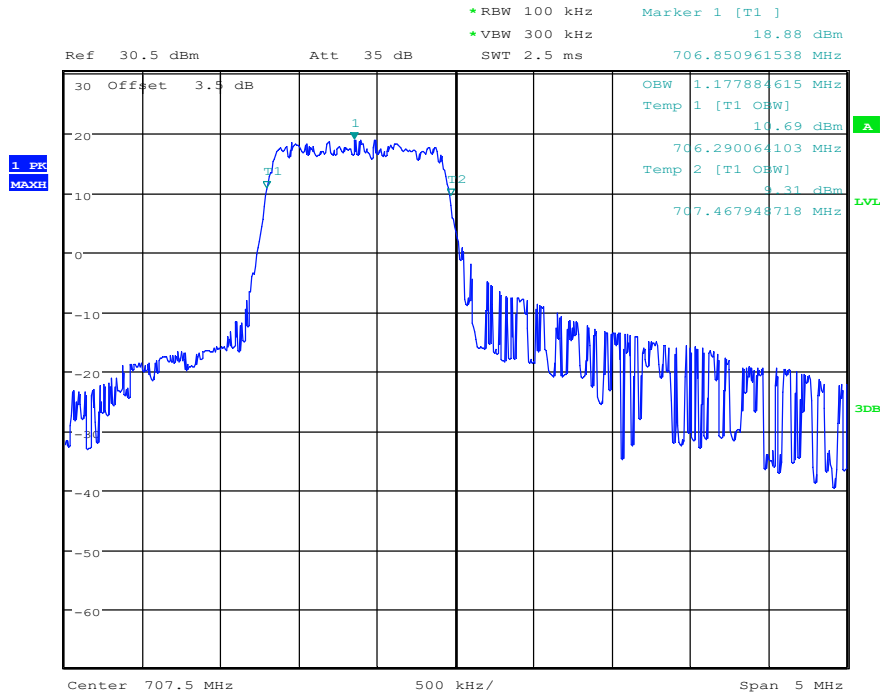
Date: 26.DEC.2020 15:52:23

### Band12-26dB OBW-3MHz Bandwidth-QPSK

## Chongqing Academy of Information and Communication Technology

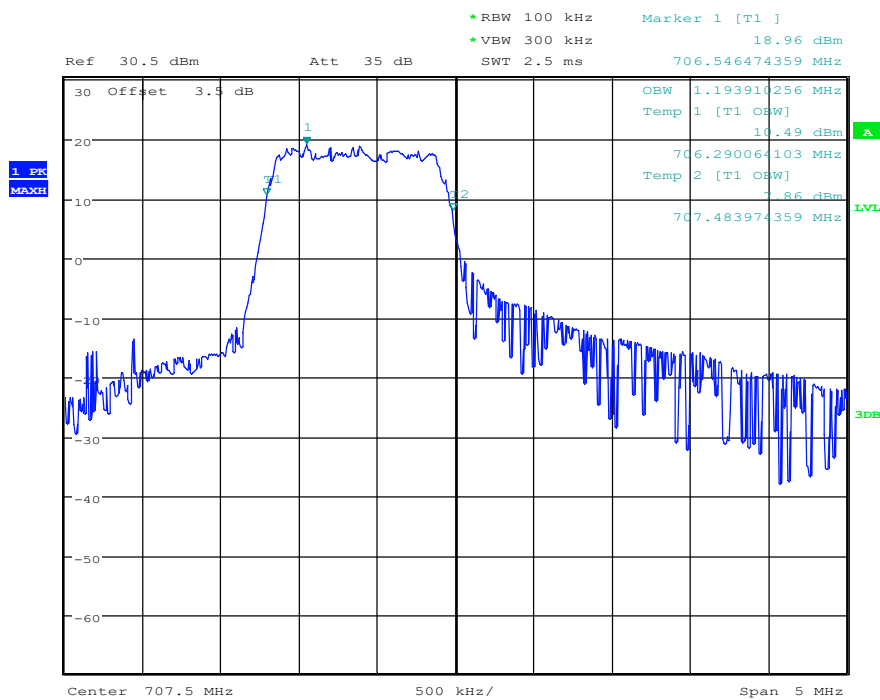
Address: No. 8,Yuma Road, Chayuan New City, Nan'an District, Chongqing, P. R. China,401336  
 Tel: 0086-23-88069965      FAX:0086-23-88608777

### Report No.: I20W00023-WWAN\_Rev1



Date: 26.DEC.2020 15:50:54

### Band12-99% OBW-3MHz Bandwidth-16QAM



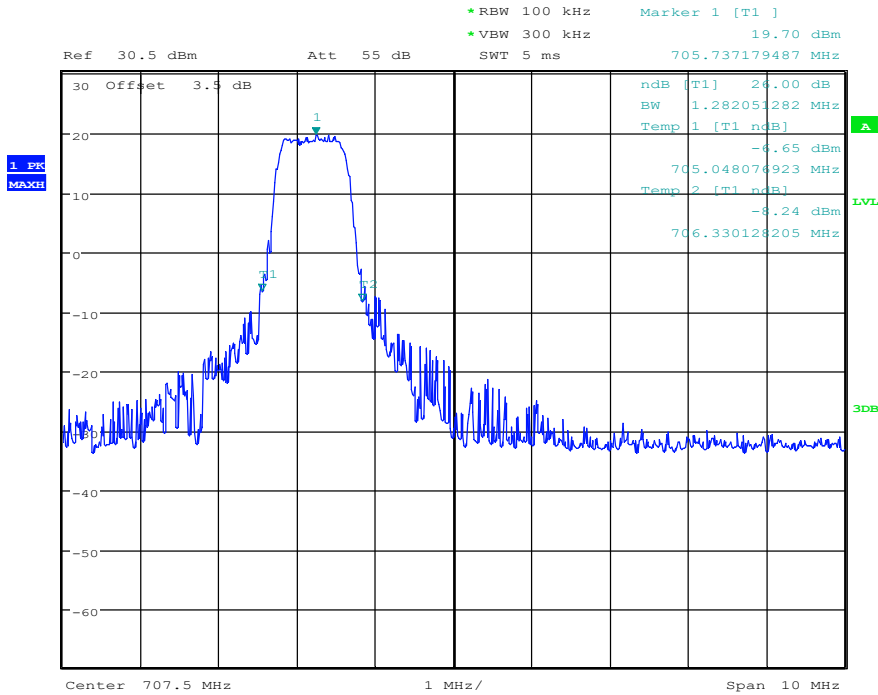
Date: 26.DEC.2020 15:53:05

### Band12-99% OBW-3MHz Bandwidth-QPSK

## Chongqing Academy of Information and Communication Technology

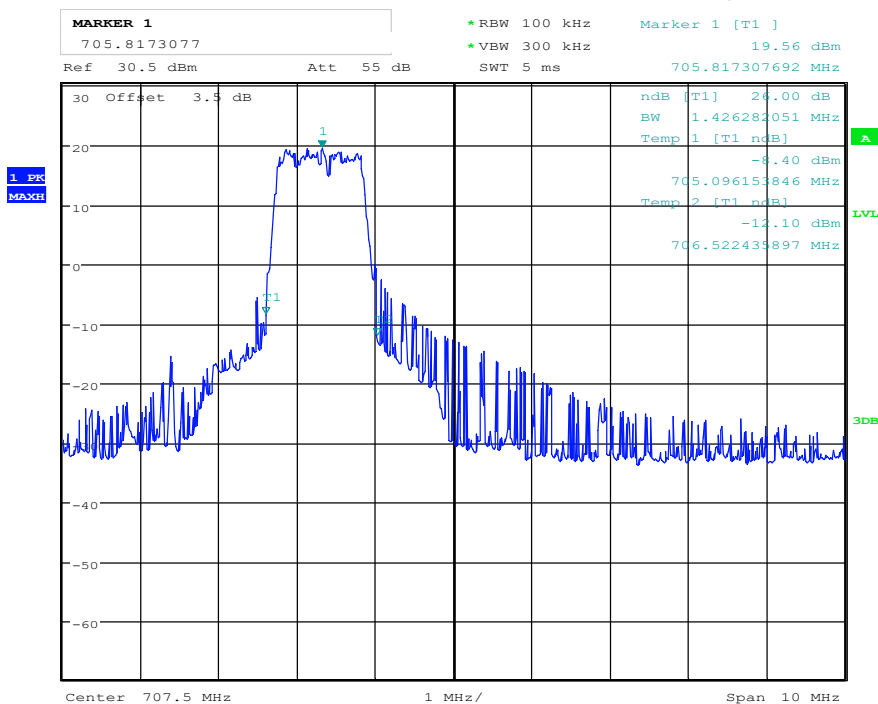
Address: No. 8, Yuma Road, Chayuan New City, Nan'an District, Chongqing, P. R. China, 401336  
 Tel: 0086-23-88069965      FAX: 0086-23-88608777

### Report No.: I20W00023-WWAN\_Rev1



Date: 26.DEC.2020 15:56:14

### Band12-26dB OBW-5MHz Bandwidth-16QAM



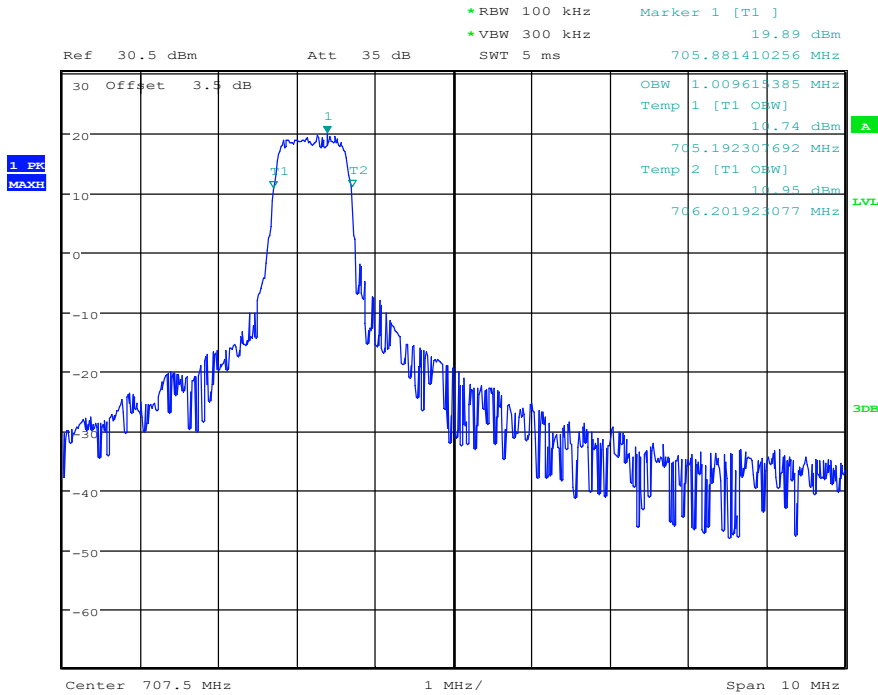
Date: 26.DEC.2020 15:55:35

### Band12-26dB OBW-5MHz Bandwidth-QPSK

**Chongqing Academy of Information and Communication Technology**

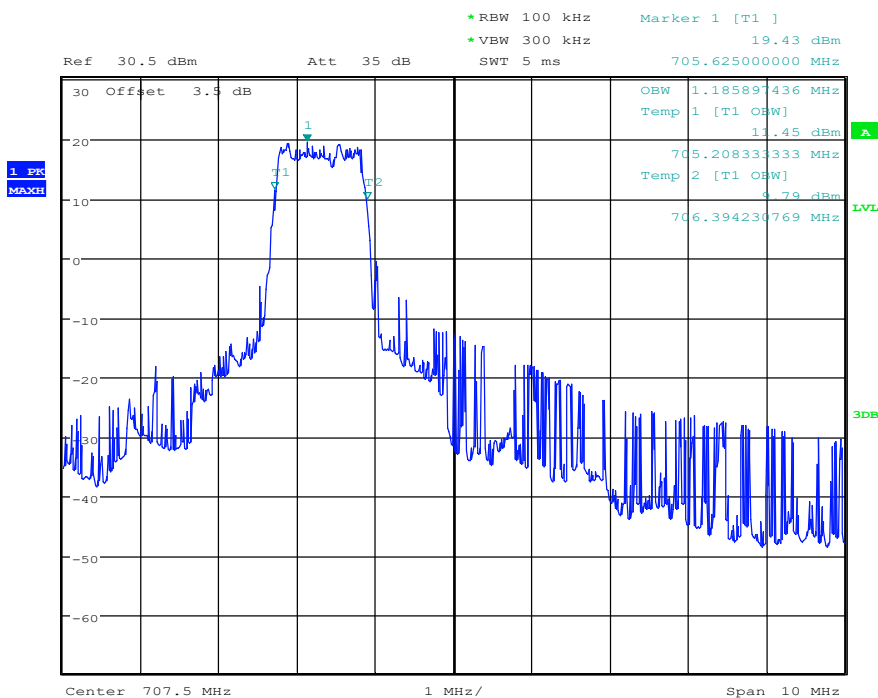
Address: No. 8,Yuma Road, Chayuan New City, Nan'an District, Chongqing, P. R. China,401336  
 Tel: 0086-23-88069965      FAX:0086-23-88608777

### Report No.: I20W00023-WWAN\_Rev1



Date: 26.DEC.2020 15:57:09

### Band12-99% OBW-5MHz Bandwidth-16QAM



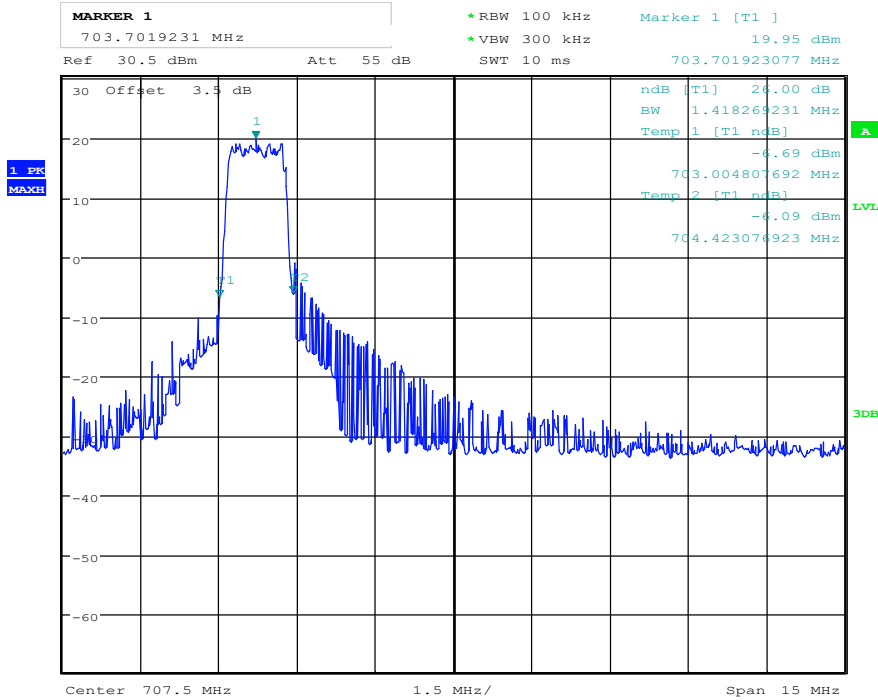
Date: 26.DEC.2020 15:55:13

### Band12-99% OBW-5MHz Bandwidth-QPSK

## Chongqing Academy of Information and Communication Technology

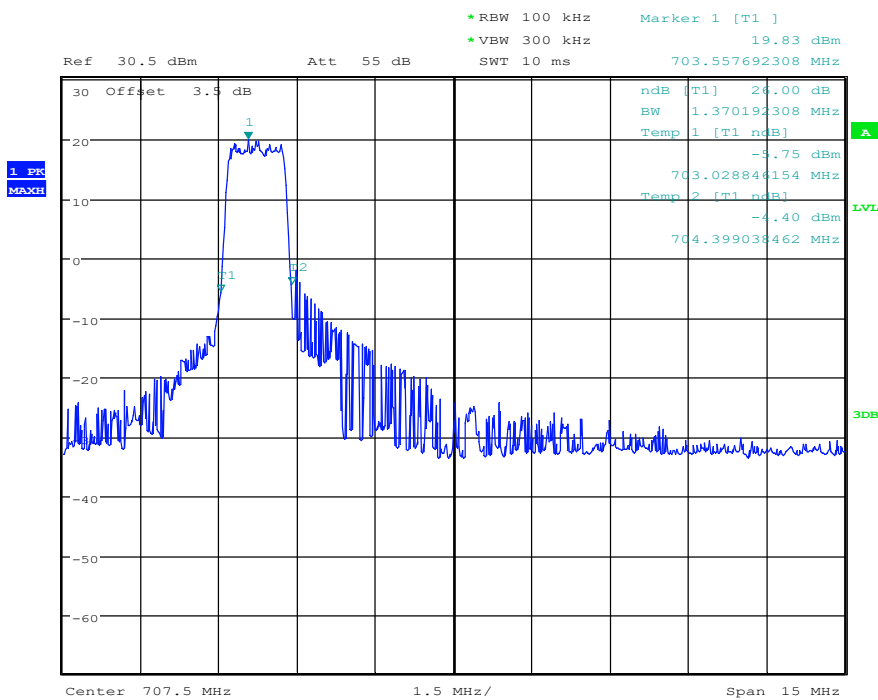
Address: No. 8,Yuma Road, Chayuan New City, Nan'an District, Chongqing, P. R. China,401336  
 Tel: 0086-23-88069965      FAX:0086-23-88608777

### Report No.: I20W00023-WWAN\_Rev1



Date: 26.DEC.2020 16:00:10

### Band12-26dB OBW-10MHz Bandwidth-16QAM



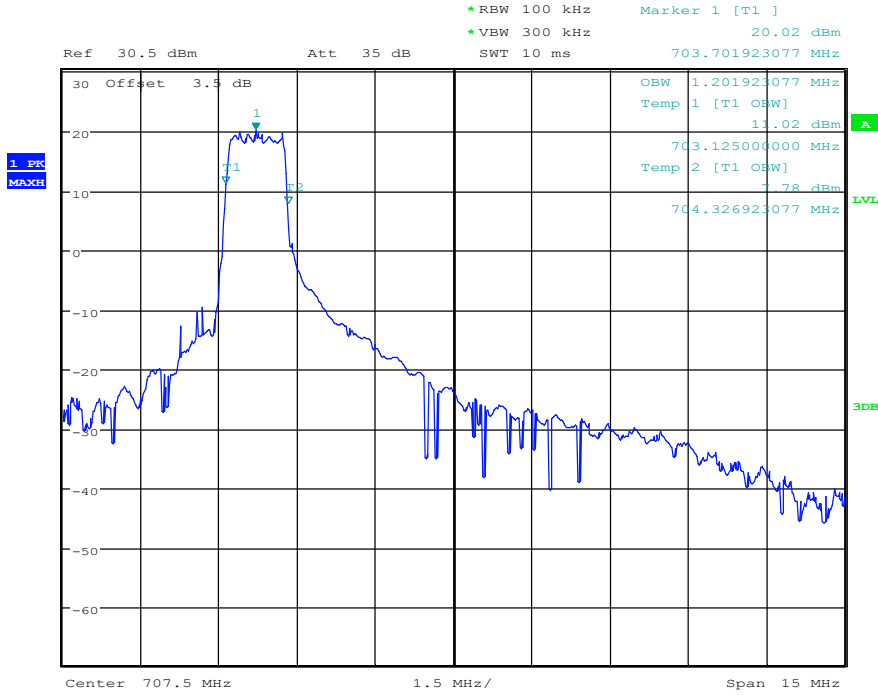
Date: 26.DEC.2020 16:00:46

### Band12-26dB OBW-10MHz Bandwidth-QPSK

## Chongqing Academy of Information and Communication Technology

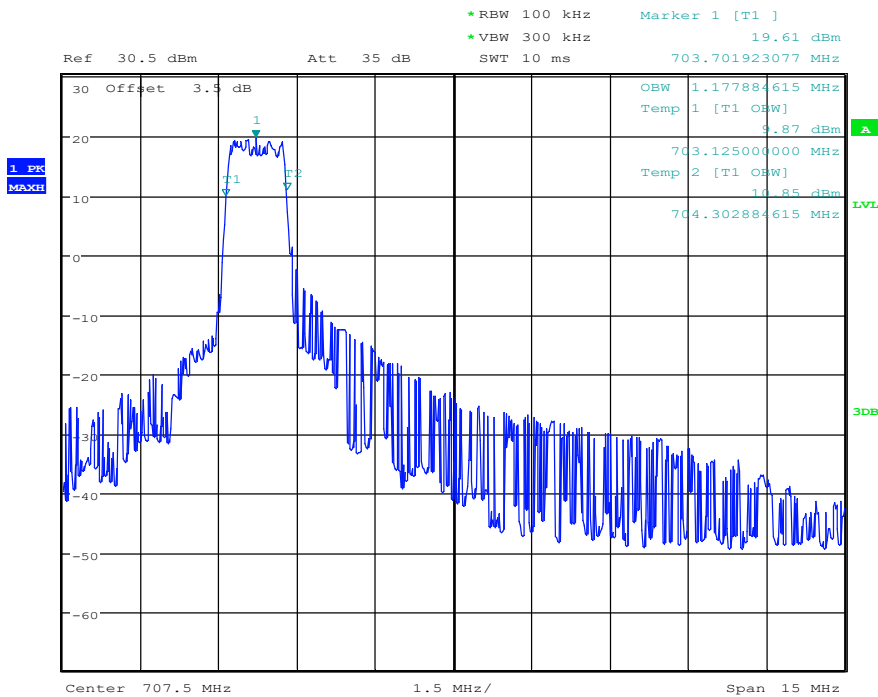
Address: No. 8,Yuma Road, Chayuan New City, Nan'an District, Chongqing, P. R. China,401336  
 Tel: 0086-23-88069965      FAX:0086-23-88608777

### Report No.: I20W00023-WWAN\_Rev1



Date: 26.DEC.2020 15:59:51

### Band12-99% OBW-10MHz Bandwidth-16QAM



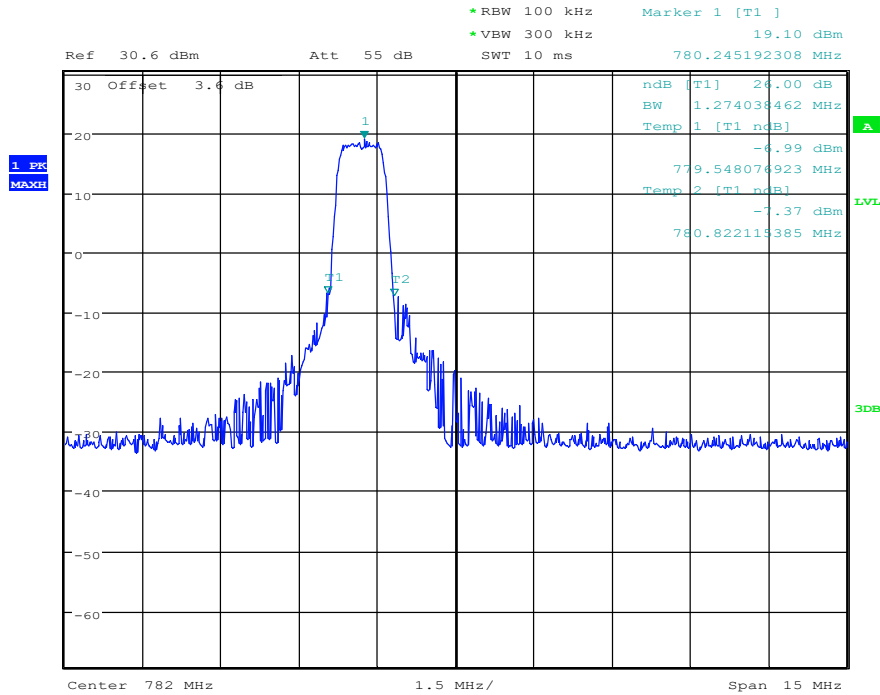
Date: 26.DEC.2020 16:01:07

### Band12-99% OBW-10MHz Bandwidth-QPSK

## Chongqing Academy of Information and Communication Technology

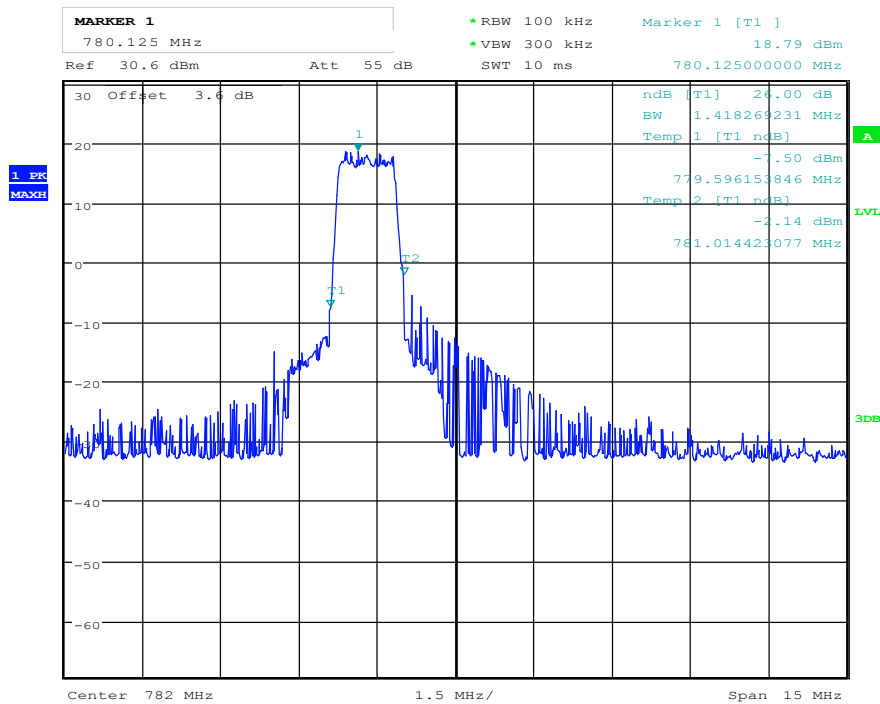
Address: No. 8,Yuma Road, Chayuan New City, Nan'an District, Chongqing, P. R. China,401336  
 Tel: 0086-23-88069965      FAX:0086-23-88608777

### Report No.: I20W00023-WWAN\_Rev1



Date: 26.DEC.2020 16:05:50

### Band13-26dB OBW-5MHz Bandwidth-16QAM



Date: 26.DEC.2020 16:05:18

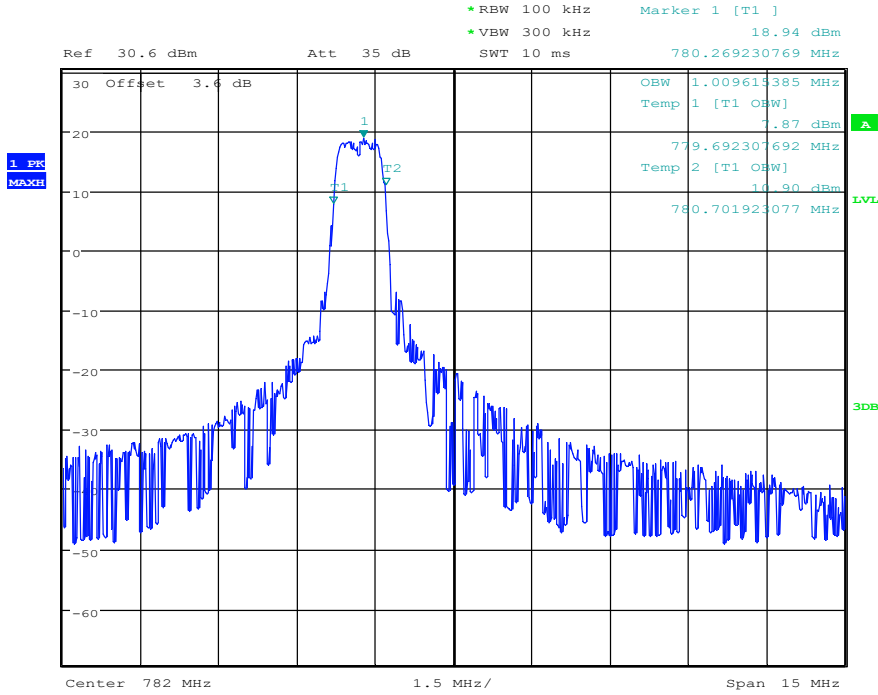
### Band13-26dB OBW-5MHz Bandwidth-QPSK

**Chongqing Academy of Information and Communication Technology**

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 Tel: 0086-23-88069965      FAX:0086-23-88608777

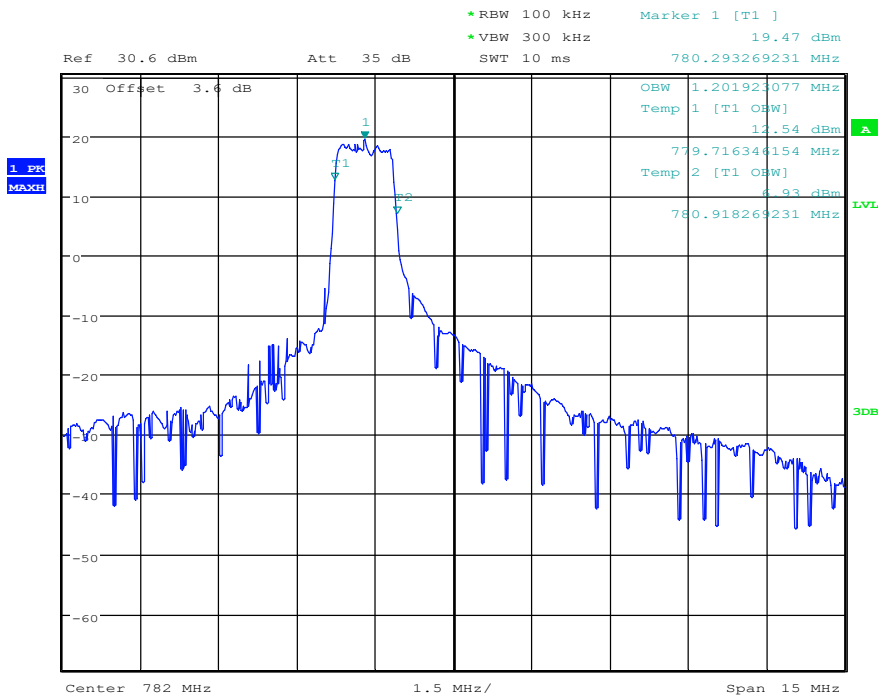


### Report No.: I20W00023-WWAN\_Rev1



Date: 26.DEC.2020 16:06:13

### Band13-99% OBW-5MHz Bandwidth-16QAM



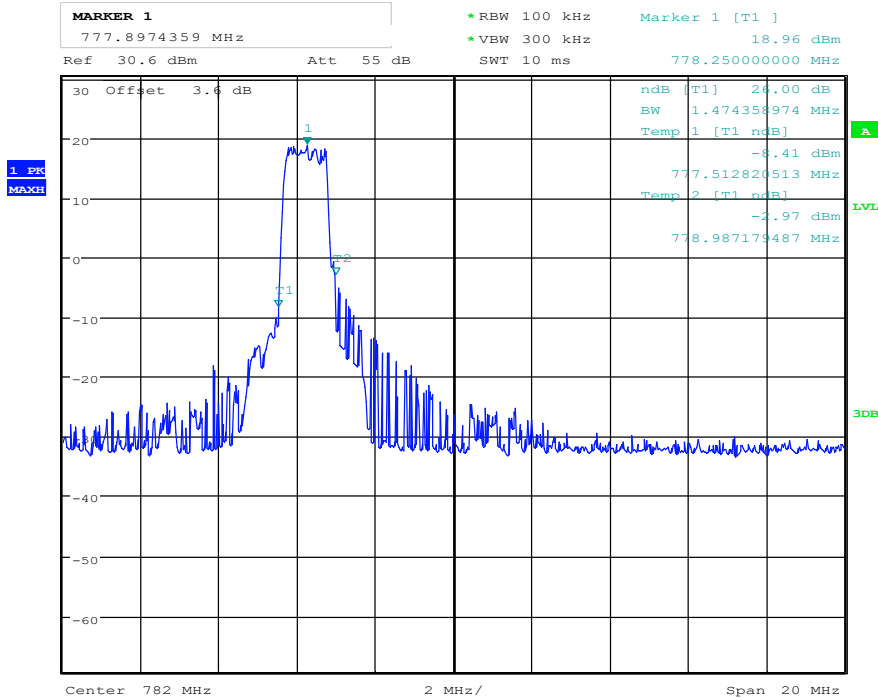
Date: 26.DEC.2020 16:05:00

### Band13-99% OBW-5MHz Bandwidth-QPSK

## Chongqing Academy of Information and Communication Technology

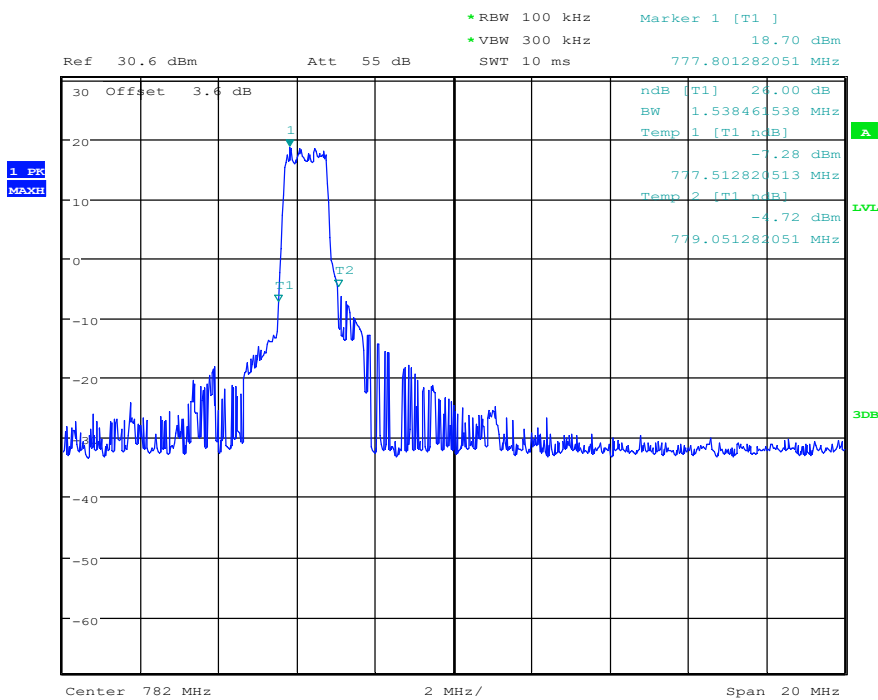
Address: No. 8,Yuma Road, Chayuan New City, Nan'an District, Chongqing, P. R. China,401336  
 Tel: 0086-23-88069965      FAX:0086-23-88608777

### Report No.: I20W00023-WWAN\_Rev1



Date: 26.DEC.2020 16:08:42

### Band13-26dB OBW-10MHz Bandwidth-16QAM



Date: 26.DEC.2020 16:09:23

### Band13-26dB OBW-10MHz Bandwidth-QPSK

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