



TEST REPORT

REPORT NUMBER: I21W00004-WWAN_Rev2

ON

Type of Equipment:

Tracker

Model Name:

AT Pro NG

Manufacturer:

Micron Electronics LLC.

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

ANSI C63.26-2015

Chongqing Academy of Information and Communications Technology

Month date, year

May, 08, 2021

Signature



Xiang Luoyong

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.



Report No.: I21W00004-WWAN_Rev2
Revision Version

Report Number	Revision	Date	Memo
I21W00004	V0.0	2021-04-09	--
I21W00004	V1.0	2021-04-28	--
I21W00004	V2.0	2021-05-08	--

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.: I21W00004-WWAN_Rev2

FCC ID: ZKQ-ATPNG

Report Date: 2021-05-08

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, The sample tested was found to comply with the requirements defined in the applied rules.

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.: I21W00004-WWAN_Rev2

CONTENTS

1.1 NOTES.....	4
1.2 TESTERS.....	5
1.3 TESTING LABORATORY INFORMATION.....	6
1.4 DETAILS OF APPLICANT OR MANUFACTURER.....	7
2 TEST ITEM.....	8
2.1 GENERAL INFORMATION.....	8
2.2 OUTLINE OF EQUIPMENT UNDER TEST.....	9
2.3 MODIFICATIONS INCORPORATED IN EUT.....	9
2.4 EQUIPMENT CONFIGURATION.....	9
2.5 OTHER INFORMATION.....	9
3 SUMMARY OF TEST RESULTS.....	10
4 TEST EQUIPMENTS AND ANCILLARIES USED FOR TESTS.....	11
5 TEST RESULTS.....	12
5.1 CONDUCTED RF POWER OUTPUT.....	12
5.2 OCCUPIED BANDWIDTH.....	24
5.3 CONDUCTED SPURIOUS EMISSION.....	86
5.4 RADIATED SPURIOUS EMISSION.....	192
5.5 BAND EDGE.....	243
5.6 FREQUENCY STABILITY OVER TEMPERATURE VARIATION.....	330
5.7 FREQUENCY STABILITY OVER VOLTAGE VARIATION.....	332
5.8 PEAK TO AVERAGE RATIO.....	334
5.9 ERP AND EIRP.....	361
ANNEX A EUT PHOTOS.....	373
ANNEX B DEVIATIONS FROM PRESCRIBED TEST METHODS.....	374

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.: I21W00004-WWAN_Rev2

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.

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.

Chongqing Academy of Information and Communications Technology authorizes the applicant or manufacturer (see section 1.4) to reproduce this report provided, and the test report may only be reproduced or published in full. Reproduction or publication of extracts from the report requires the prior written approval of Chongqing Academy of Information and Communications Technology. Mr. Zhang Yan.

Any use which a third party makes of this report, or any reliance on or decisions to be made based on it, are the responsibility of such third parties. Chongqing Academy of Information and Communications Technology accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions based on this report.

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.: I21W00004-WWAN_Rev2

1.2 Testers

Name: Zhang qinghao
Position: Engineer
Department: Department of RF test
Date: 2021-03-22 to 2021-04-08

Signature:

Editor of this test report:

Name: Chen Wen
Position: Engineer
Department: Department of RF test
Date: 2021-05-08

Signature:

Technical responsibility for area of testing:

Name: Xiang Luoyong
Position: Manager
Department: Director of the laboratory
Date: 2021-05-08

Signature:

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.: I21W00004-WWAN_Rev2

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, Yubei 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: -----

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.: I21W00004-WWAN_Rev2

1.4 Details of applicant or manufacturer

1.4.1 Applicant

Name: Micron Electronics LLC.
Address: 1001 Yamato Road, Suite 400, Boca Raton, FL 33431,
USA
Country: USA
Telephone: +18885383489
Fax: --
Contact: Ping Cheng
Email: pcheng@micron-electronics.com

1.4.2 Manufacturer (if different from applicant in section 1.4.1)

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

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.: I21W00004-WWAN_Rev2

2 Test Item

2.1 General Information

Manufacturer:	Micron Electronics LLC.
Type of Equipment:	Tracker
Model Name:	AT Pro NG
Production Status:	Product
Hardware Version:	F602_V1_PCB
Software Version:	L101_PTCRB
Nominal Voltage:	3.80 V
Extreme High Voltage:	4.20 V
Extreme Low Voltage:	3.45 V
Antenna type:	Built in FPC antenna
Power class:	3
Modulation Type:	GMSK/QPSK/16QAM
Receipt date of test item:	2021-03-22

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.: I21W00004-WWAN_Rev2

2.2 Outline of Equipment under Test

The AT Pro NG, referred to as “EUT” hereafter, is a multi-Band wireless module operating on the GSM/CAT-M1/Wi-Fi 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	--
CAT-M	Band2	1850 – 1910	1930 – 1990	--
	Band4	1710 – 1755	2110 – 2155	--
	Band5	824 – 849	869 – 894	--
	Band12	699 – 716	729 – 746	--
	Band13	777 - 787	746 - 756	--

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:

Item	Generic Description	Manufacturer	Type	Serial No.	Remarks
A	Modules	Micron Electronics LLC.	AT Pro NG	866884045634250	None
B	data line	--	--	--	None

2.5 Other Information

--

Report No.: I21W00004-WWAN_Rev2

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	Conducted RF Power Output	Pass
24.232(b),27.50(d),27.50(h)(2),27.50(c)	ERP and EIRP	Pass
2.1049,22.917(b),24.238(b)	Occupied Bandwidth	--
2.1051,2.1053,24.238,22.917,27.53	Conducted spurious emissions	Pass
2.1051,2.1053,24.238,22.917,27.53	Radiated Spurious Emission	Pass
2.1051,2.1053,24.238,22.917,27.53	Band Edge	Pass
2.1055,22.355,24.235,27.54	Frequency Stability over Temperature Variation	Pass
2.1055,22.355,24.235,27.54	Frequency Stability over Voltage Variation	Pass
24.232,27.50	Peak to Average Ratio	Pass
Note 1: No applicable performance criteria. Note 2: The EUT AT Pro NG manufactured by Micron Electronics LLC and L710HG manufactured by Shanghai MobileTek Communication Ltd have no electrical change, The difference between AT Pro NG and L710HG is the antenna type,so only radiated spurious emission is tested.For other test results, please refer to certification report B20W00023-WWAN_ Rev1 is the test report of L710HG.		

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.: I21W00004-WWAN_Rev2**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	2023-04-03
4	Double-Ridged Horn Antenna	HF907	100357	R&S	2021-08-20
5	Trilog super broadBand test antenna	VULB 9163	00995	R&S	2022-11-23
6	Double-Ridged Horn Antenna	HF907	100356	R&S	2021-08-20
7	Fully-Anechoic Chamber	11.8m×6.5 m×6.3m	--	ETS	2024-01-22
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

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

5 Test Results

5.1 Conducted RF Power Output

Specifications:	FCC Part 2.1046, 22.913(a),24.232(c), 27.50
DUT Serial Number:	866884045634250
Test conditions:	Ambient Temperature:15°C-35°C Relative Humidity:30%-60% Air pressure: 86-106kPa
Test Results:	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 Part24.232(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;

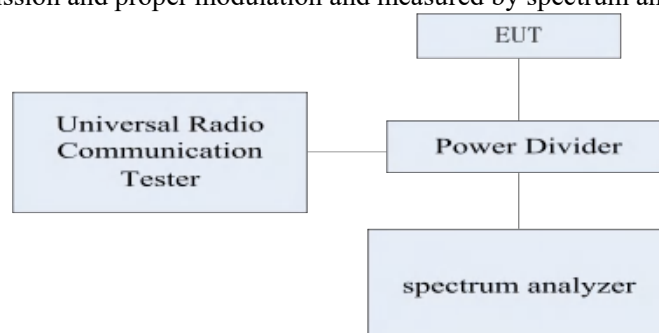
According to Part 27.50(d), fixed, mobile, and portable (hand-held) stations operating in the 1710-1755 MHz Band and mobile and portable stations operating in the 1695-1710 MHz and 1755-1780 MHz Bands are limited to 1 watt EIRP.

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.



Report No.: I21W00004-WWAN_Rev2

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: --.

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

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.: I21W00004-WWAN_Rev2

EGPRS 8PSK Mode

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

GPRS GMSK Mode:

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

EGPRS GMSK Mode

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

EGPRS 8PSK Mode

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

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.: I21W00004-WWAN_Rev2

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

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.: I21W00004-WWAN_Rev2

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

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.: I21W00004-WWAN_Rev2

5.1.3 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

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.: I21W00004-WWAN_Rev2

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

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.: I21W00004-WWAN_Rev2

5.1.4 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

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.: I21W00004-WWAN_Rev2

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

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.: I21W00004-WWAN_Rev2

5.1.5 CAT-M B5 Conducted RF Power Output Results

Mode	Bandwidth	Channel	RB	Index	Conducted Power	
					QPSK	16QAM
Band5	1.4MHz	20407	1#0	0	24.37	22.65
			6#0	0	22.67	22.67
		20525	1#0	0	24.58	22.46
			6#0	0	22.71	22.69
		20643	1#5	0	24.15	22.68
			6#0	0	22.65	22.86
	3MHz	20415	1#0	0	24.45	22.49
			6#0	0	22.63	22.62
		20525	1#0	0	24.33	22.48
			6#0	0	22.63	22.51
		20635	1#5	1	24.45	22.37
			6#0	1	22.75	22.41
	5MHz	20425	1#0	0	24.45	23.59
			6#0	0	23.25	22.58
		20525	1#0	0	24.33	23.15
			6#0	0	23.17	22.52
		20625	1#5	3	24.10	23.05
			6#0	3	23.36	22.48
	10MHz	20450	1#0	0	24.59	23.31
			4#0	0	24.13	23.44
		20525	1#0	0	24.39	23.25
			4#0	0	23.27	23.43
		20600	1#5	7	24.12	23.26
			4#2	7	24.23	22.92

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.: I21W00004-WWAN_Rev2

5.1.6 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

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.: I21W00004-WWAN_Rev2

5.1.7 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

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

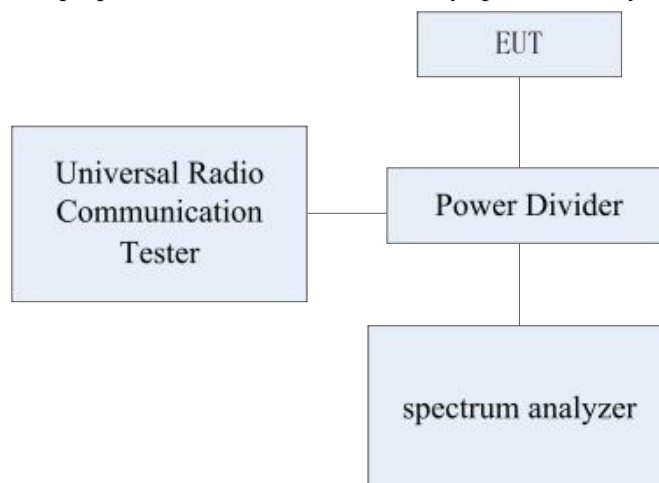
Report No.: I21W00004-WWAN_Rev2

5.2 Occupied Bandwidth

Specifications:	FCC Part 2.1049, 22.917(b), 24.238(b)
DUT Serial Number:	866884045634250
Test conditions:	Ambient Temperature:15℃-35℃ Relative Humidity:30%-60% Air pressure: 86-106kPa
Test Results:	--

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: --.

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.: I21W00004-WWAN_Rev2

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

Report No.: I21W00004-WWAN_Rev2

5.2.2 CAT-M B2 Mode Occupied Bandwidth Results

Bandwidth	Modulation	Channel/Ferquency (MHz)	RB	Index	Occupied Bandwidth 99% (MHz)	Occupied Bandwidth 26dB (MHz)
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

Report No.: I21W00004-WWAN_Rev2

5.2.3 CAT-M B4 Mode Occupied Bandwidth Results

Bandwidth	Modulation	Channel/Ferquency (MHz)	RB	Index	Occupied Bandwidth 99% (MHz)	Occupied Bandwidth 26dB (MHz)
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

Report No.: I21W00004-WWAN_Rev2

5.2.4 CAT-M B5 Mode Occupied Bandwidth Results

Bandwidth	Modulation	Channel/Ferquency (MHz)	RB	Index	Occupied Bandwidth 99% (MHz)	Occupied Bandwidth 26dB (MHz)
1.4MHz	QPSK	20525/836.5	6#0	0	1.16	1.36
	16QAM	20525/836.5			0.98	1.18
3MHz	QPSK	20525/836.5	6#0	0	1.17	1.37
	16QAM	20525/836.5			0.99	1.18
5MHz	QPSK	20525/836.5	6#0	0	1.17	1.37
	16QAM	20525/836.5			0.99	1.18
10MHz	QPSK	20525/836.5	6#0	0	1.17	1.38
	16QAM	20525/836.5			0.99	1.18

Report No.: I21W00004-WWAN_Rev2

5.2.5 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

5.2.6 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

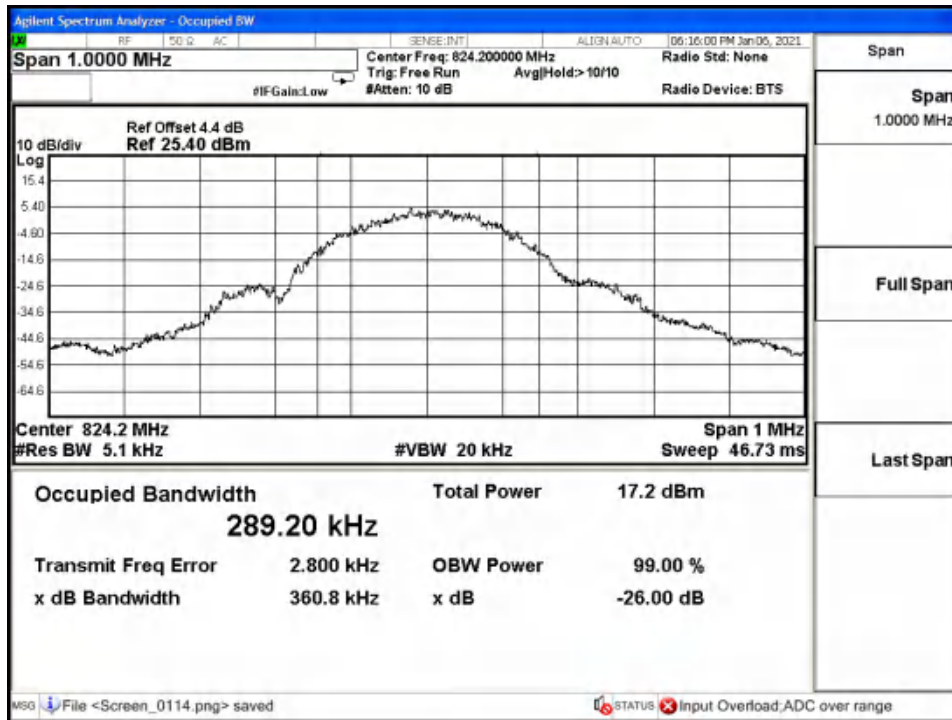
Chongqing Academy of Information and Communication Technology

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

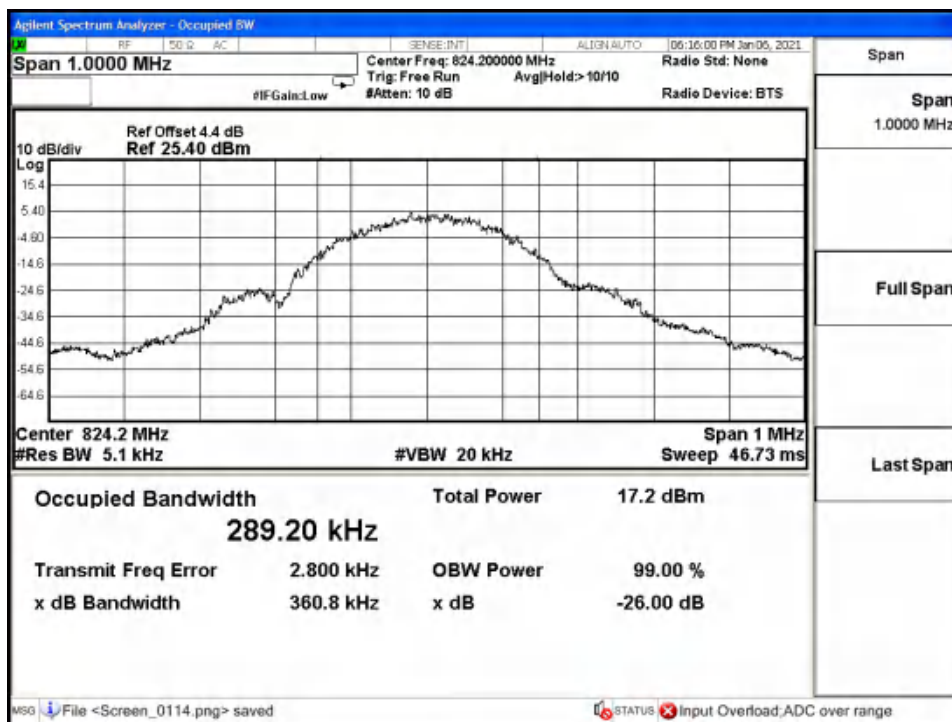


Report No.: I21W00004-WWAN_Rev2

Graphical results for GSM850:



99% OBW-GMSK-Channel 128



26dB OBW-GMSK-Channel 128

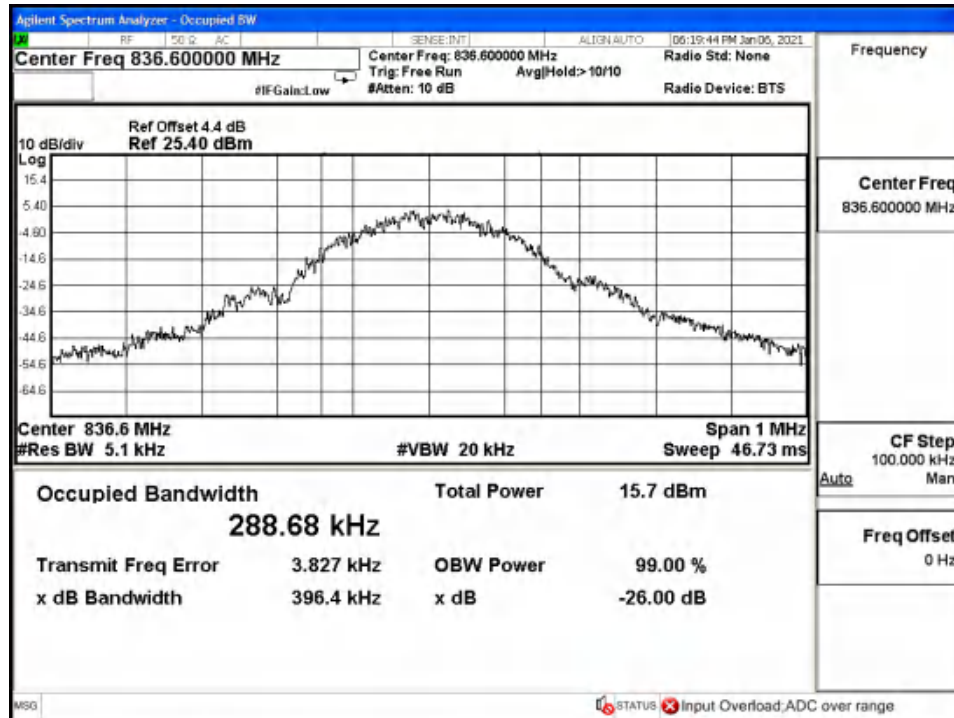
Chongqing Academy of Information and Communication Technology

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

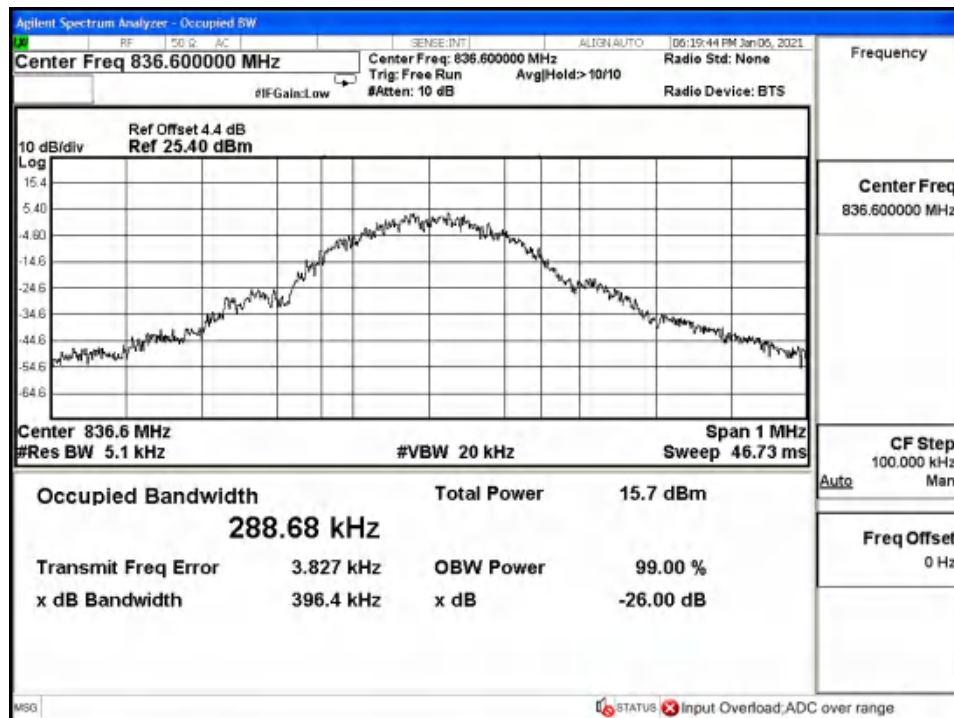
FAX: 0086-23-88608777



Report No.: I21W00004-WWAN_Rev2



99% OBW-GMSK-Channel 190



26dB OBW-GMSK-Channel-190

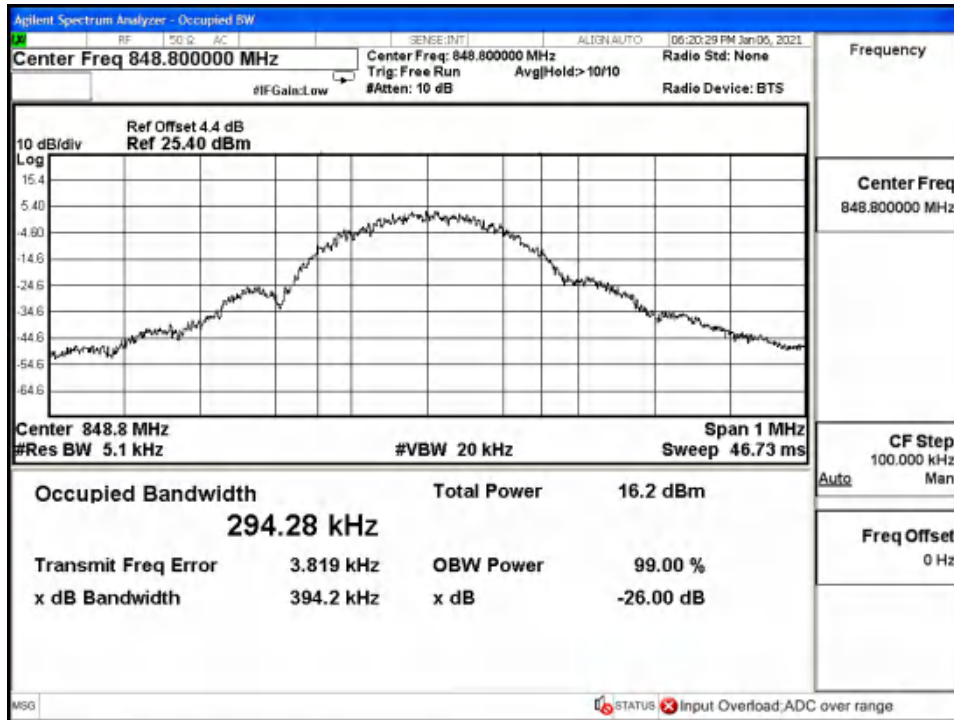
Chongqing Academy of Information and Communication Technology

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

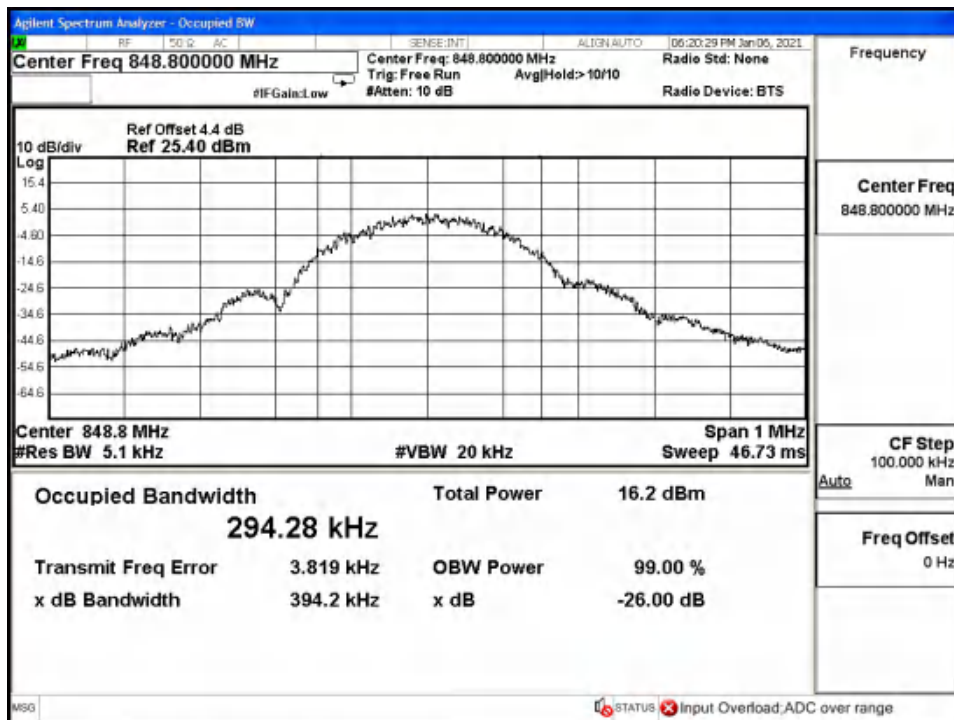
FAX:0086-23-88608777



Report No.: I21W00004-WWAN_Rev2



99% OBW-GMSK-Channel 251



26dB OBW-GMSK Channel 251

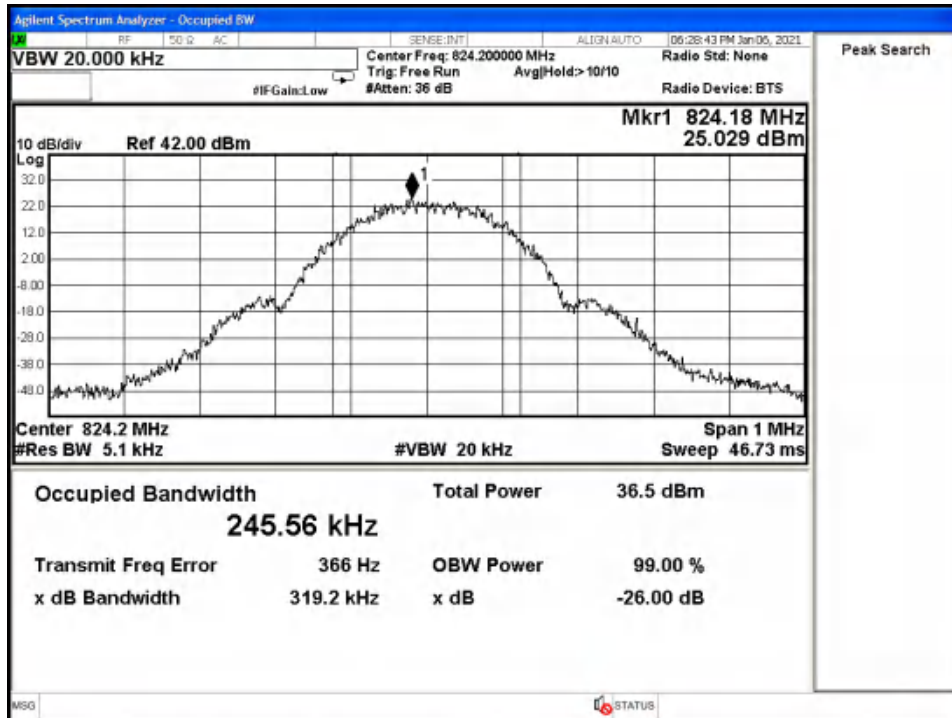
Chongqing Academy of Information and Communication Technology

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

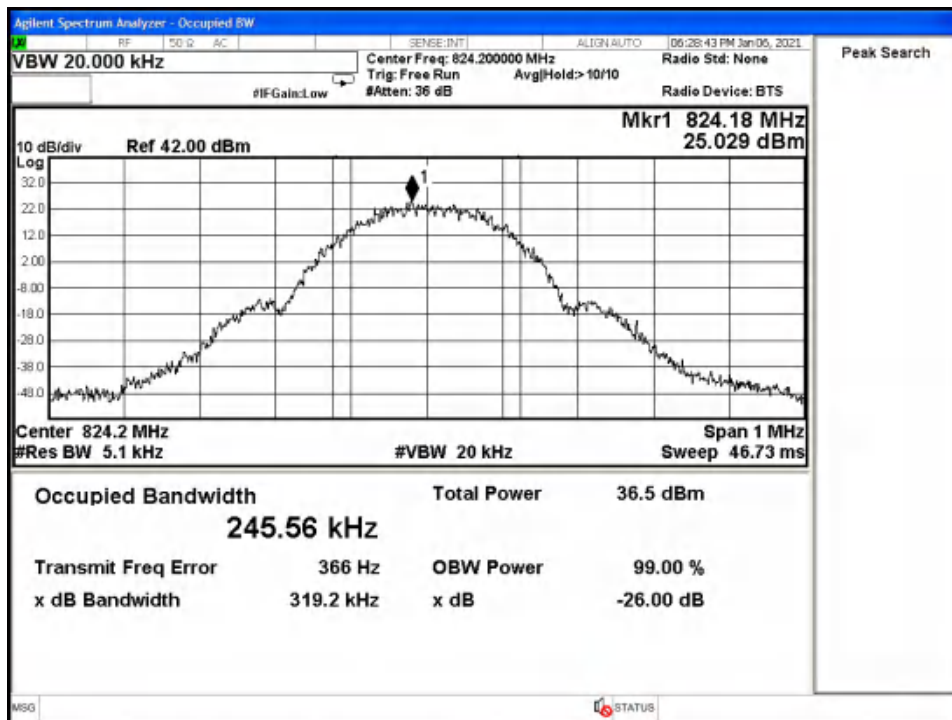
FAX:0086-23-88608777



Report No.: I21W00004-WWAN_Rev2



99% OBW-8PSK-Channel 128

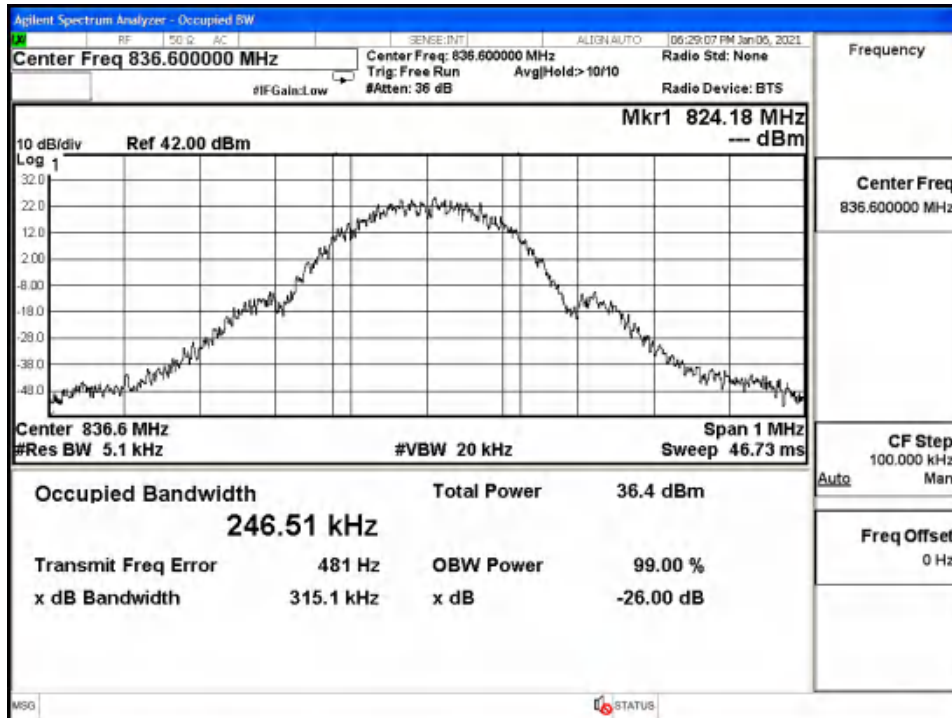


26dB OBW-8PSK-Channel 128

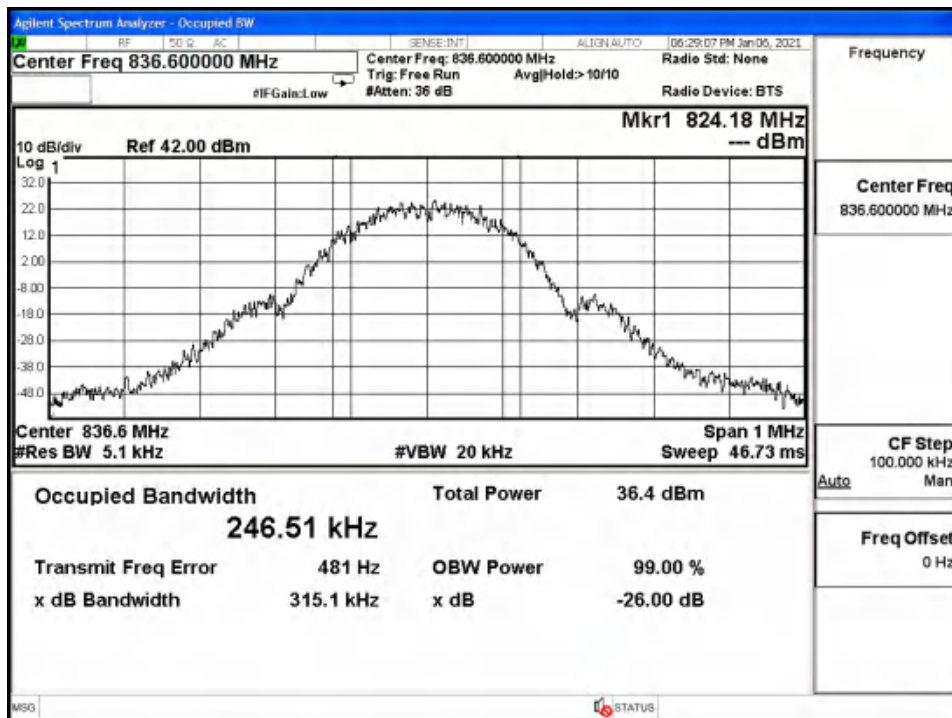
Chongqing Academy of Information and Communication Technology

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.: I21W00004-WWAN_Rev2



99% OBW-8PSK-Channel 190

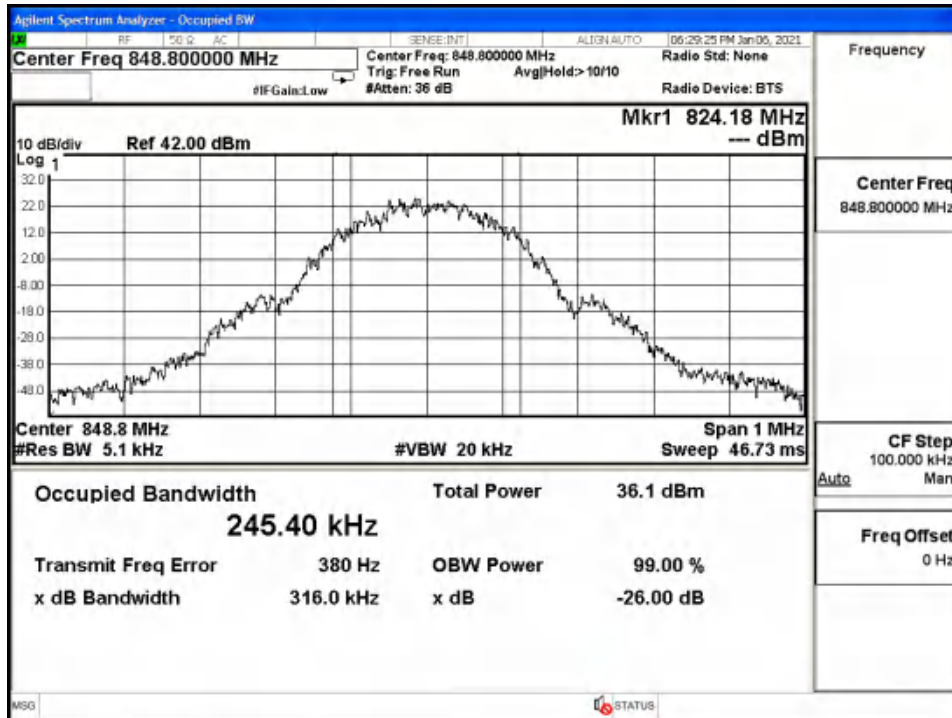


26dB OBW-8PSK-Channel 190

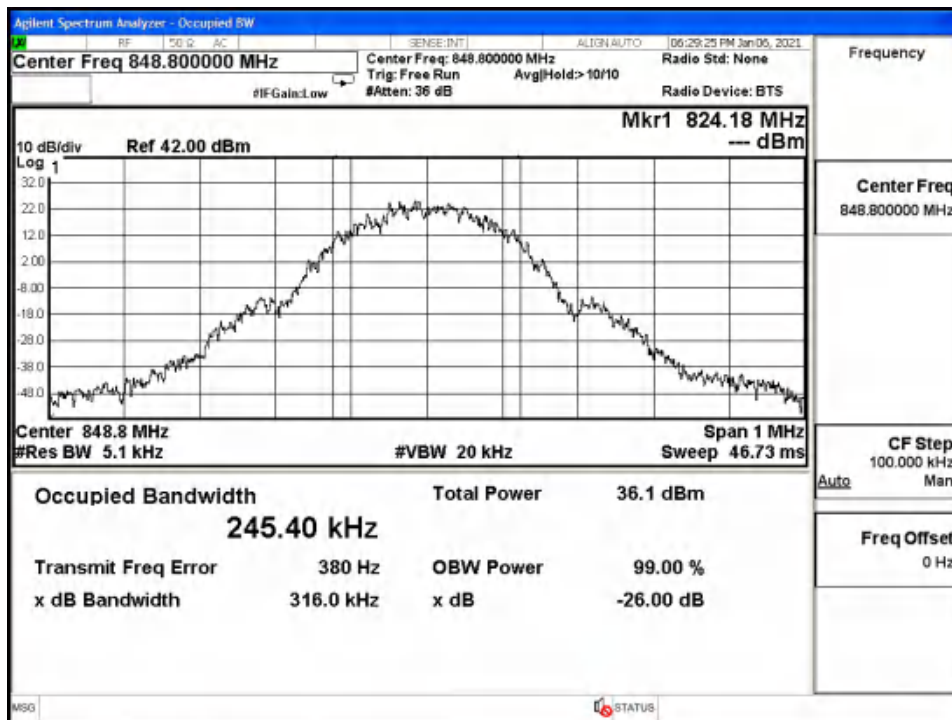
Chongqing Academy of Information and Communication Technology

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.: I21W00004-WWAN_Rev2



99% OBW-8PSK-Channel 251



26dB OBW-8PSK-Channel 251

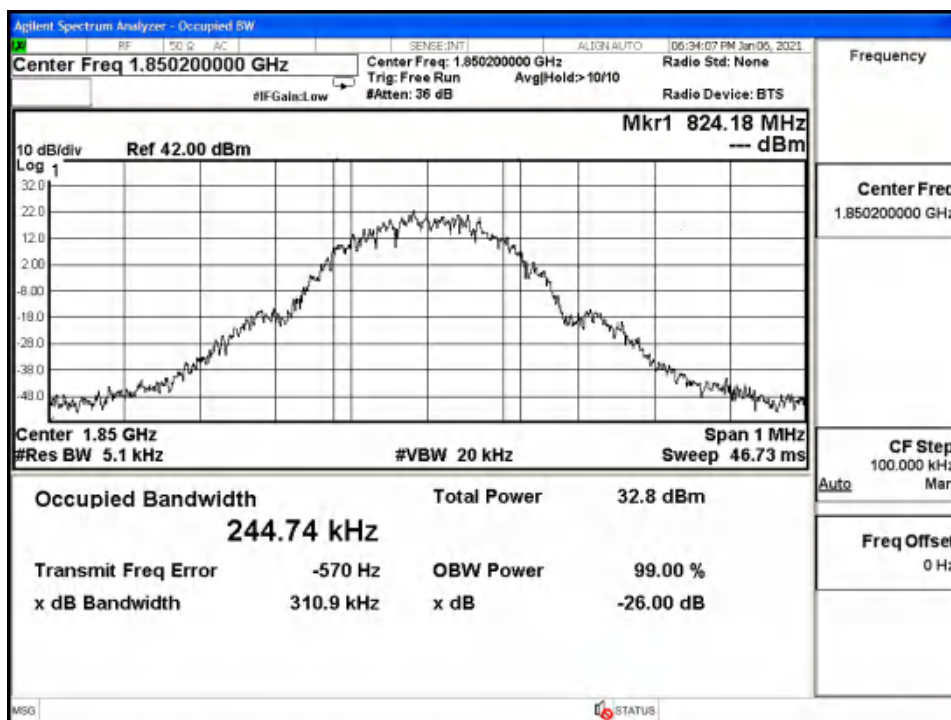
Chongqing Academy of Information and Communication Technology

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

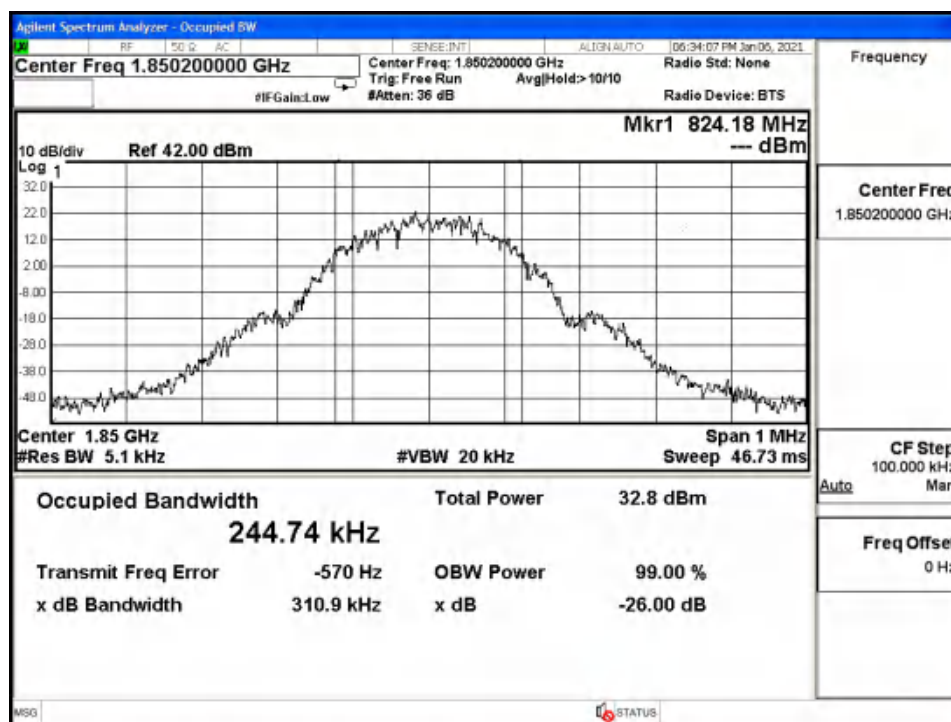
FAX: 0086-23-88608777

Report No.: I21W00004-WWAN_Rev2

Graphical results for PCS1900:



99% OBW-GMSK-Channel 512



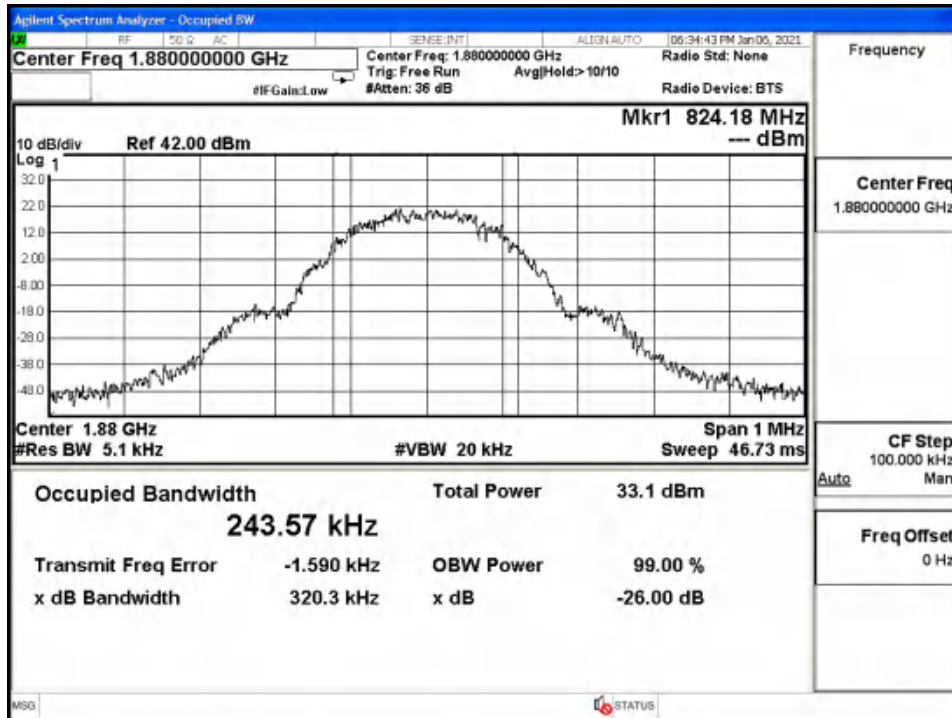
26dB OBW-GMSK-Channel 512

Chongqing Academy of Information and Communication Technology

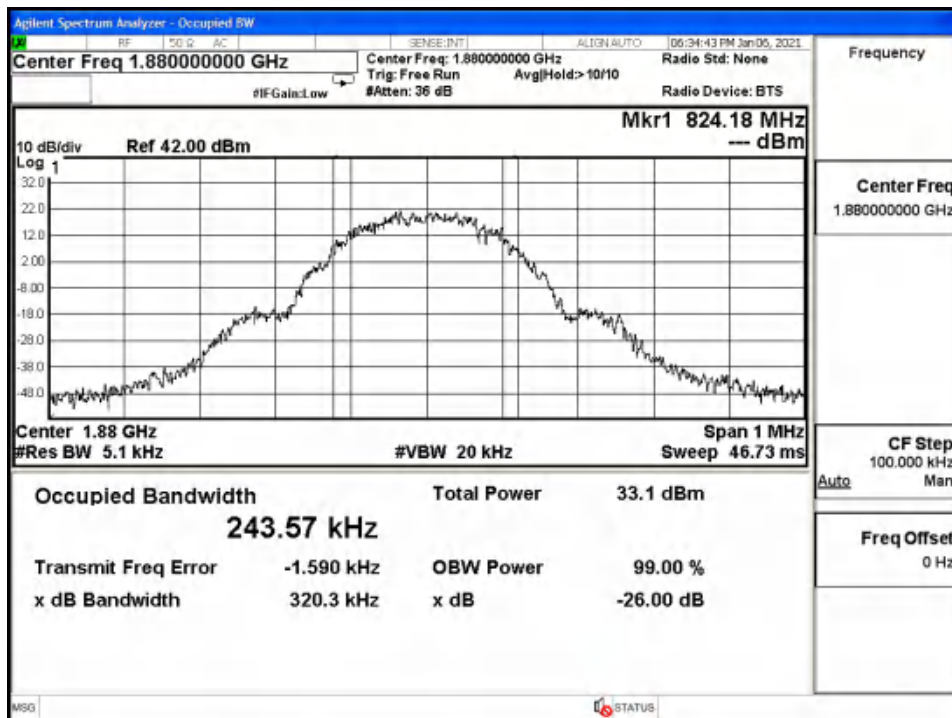
Address: No. 8,Yuma Road, Chayuan New City, Nan'an District, Chongqing, P. R. China,401336
Tel: 0086-23-88069965 FAX:0086-23-88608777



Report No.: I21W00004-WWAN_Rev2



99% OBW-GMSK-Channel 661



26dB OBW-GMSK-Channel 661

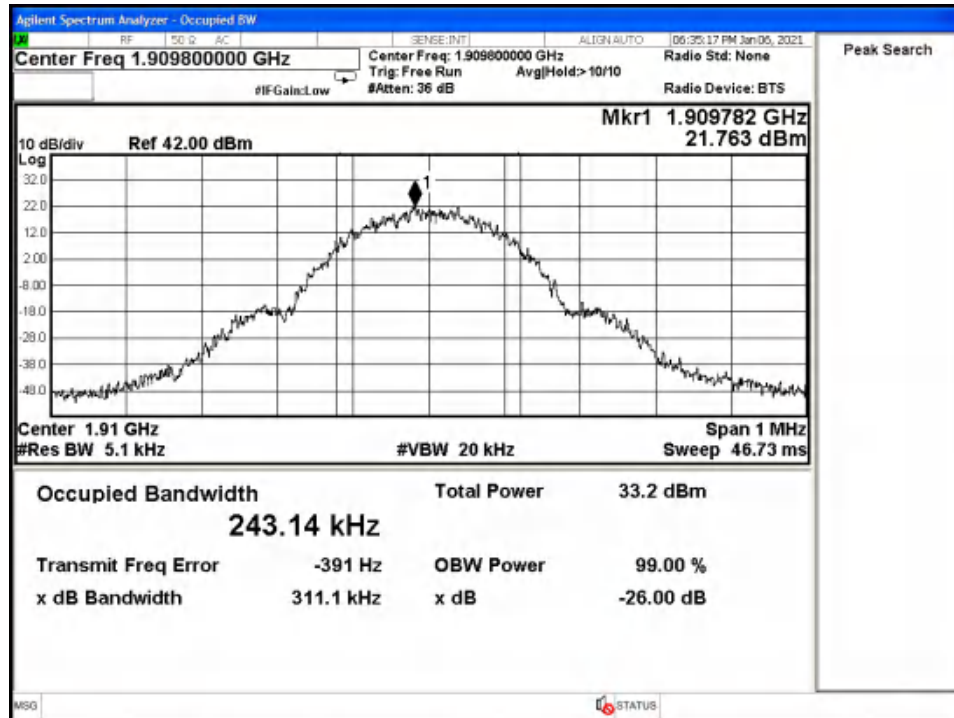
Chongqing Academy of Information and Communication Technology

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

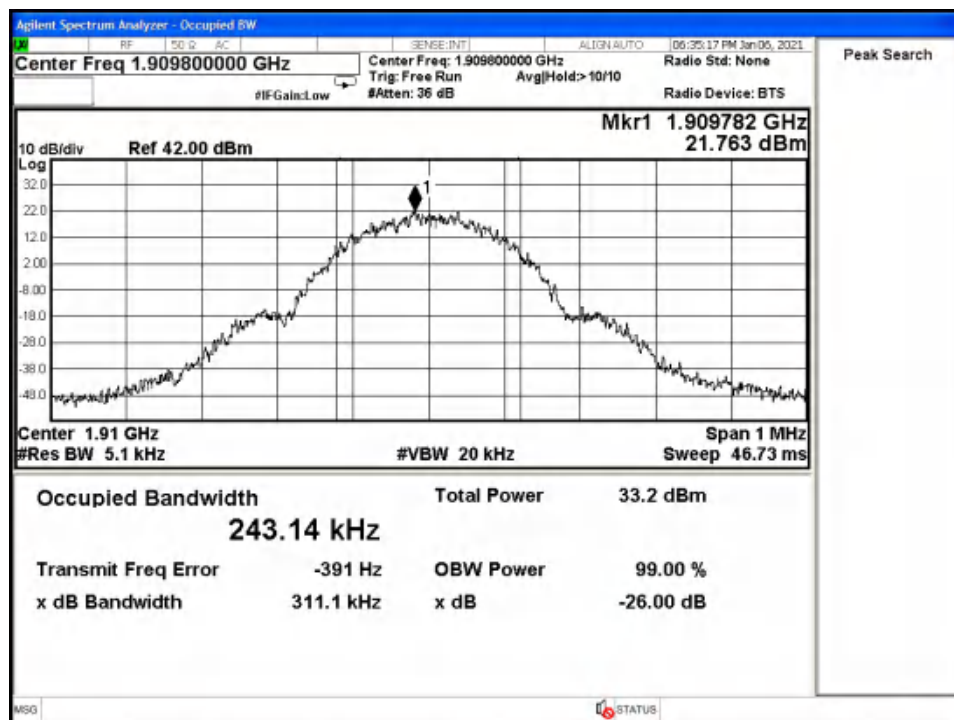
FAX:0086-23-88608777



Report No.: I21W00004-WWAN_Rev2



99% OBW-GMSK-Channel 810



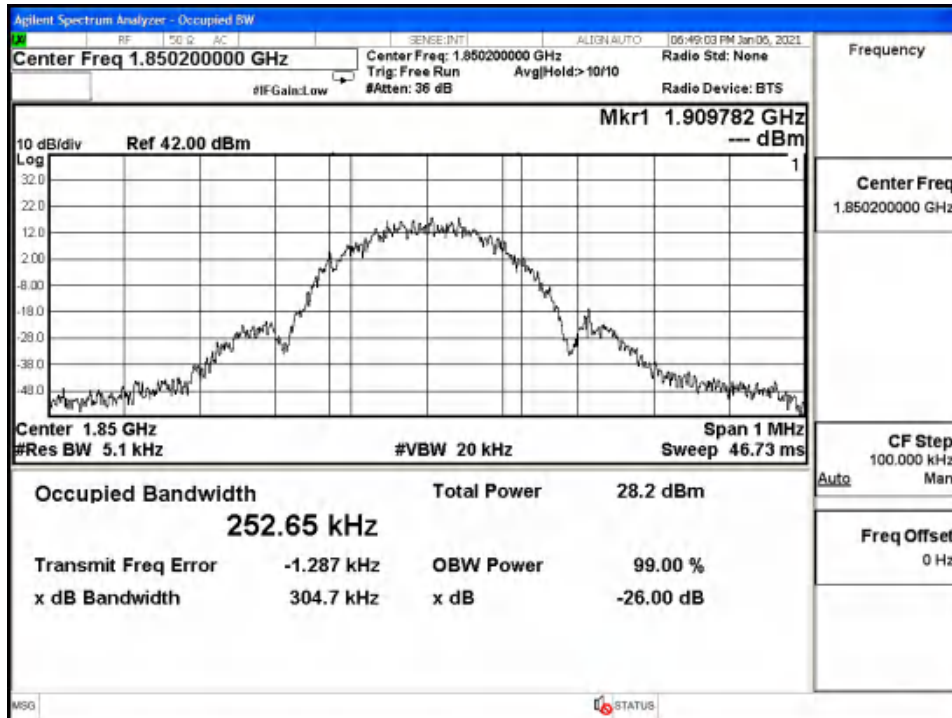
26dB OBW-GMSK-Channel 810

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.: I21W00004-WWAN_Rev2



99% OBW-8PSK-Channel 512



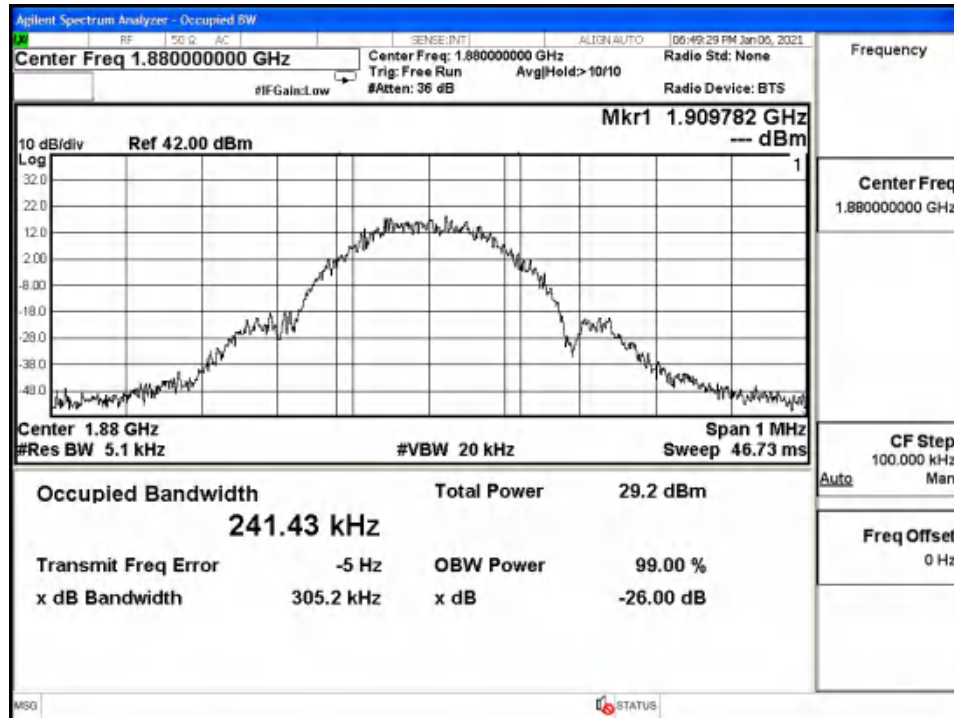
26dB OBW-8PSK-Channel 512

Chongqing Academy of Information and Communication Technology

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



Report No.: I21W00004-WWAN_Rev2



99% OBW-8PSK-Channel 661



26dB OBW-8PSK-Channel 661

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.: I21W00004-WWAN_Rev2



99% OBW-8PSK-Channel 810



26dB OBW-8PSK-Channel 810

Chongqing Academy of Information and Communication Technology

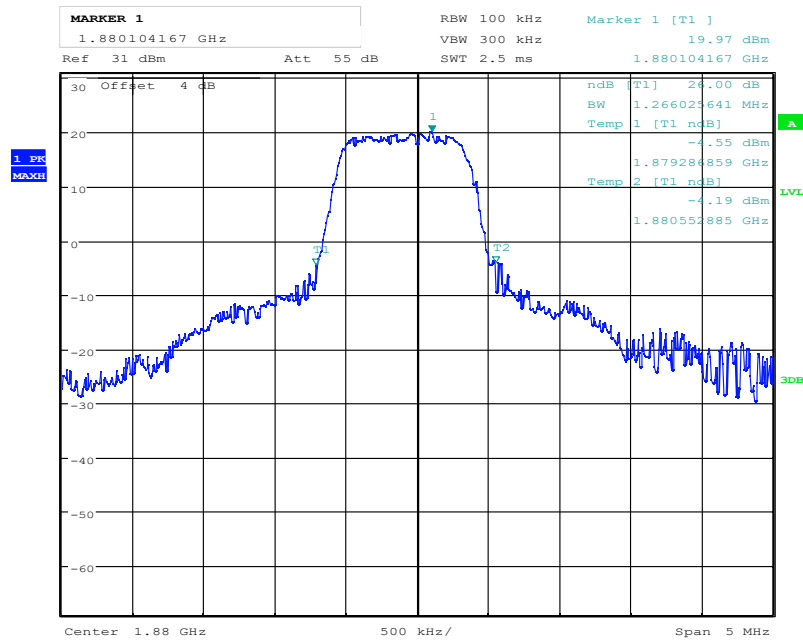
Address: No. 8, Yuma Road, Chayuan New City, Nan'an District, Chongqing, P. R. China, 401336
Tel: 0086-23-88069965

FAX: 0086-23-88608777



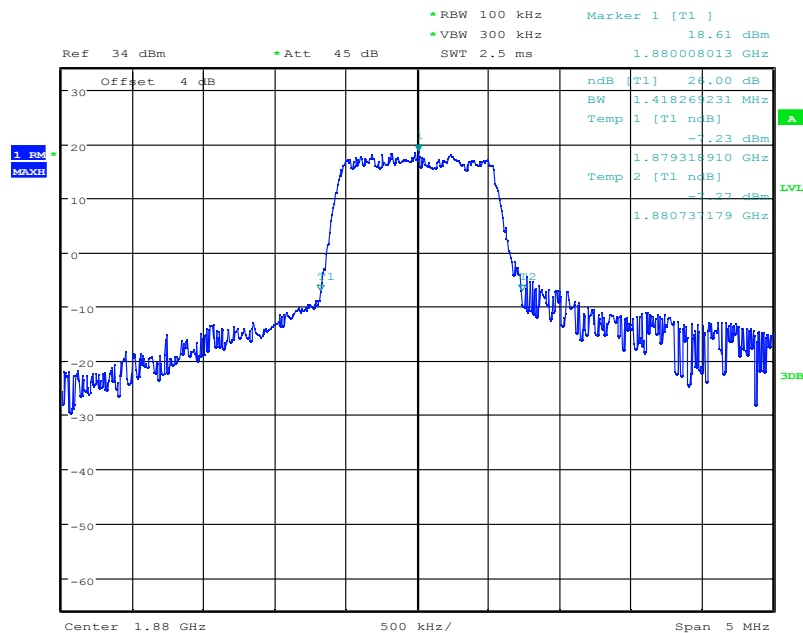
Report No.: I21W00004-WWAN_Rev2

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

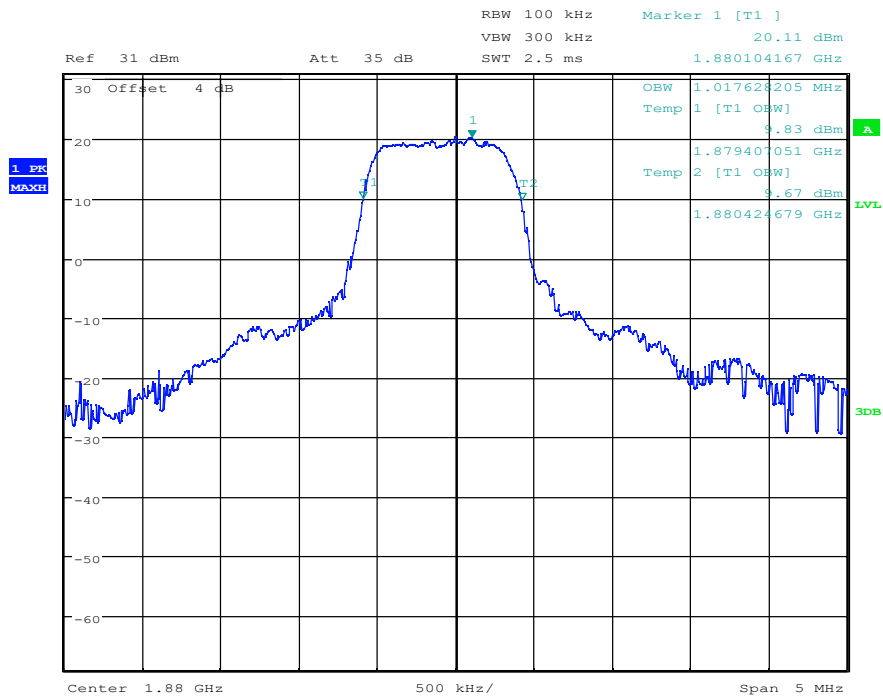
Band2-26dB OBW-1.4MHz Bandwidth-QPSK

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

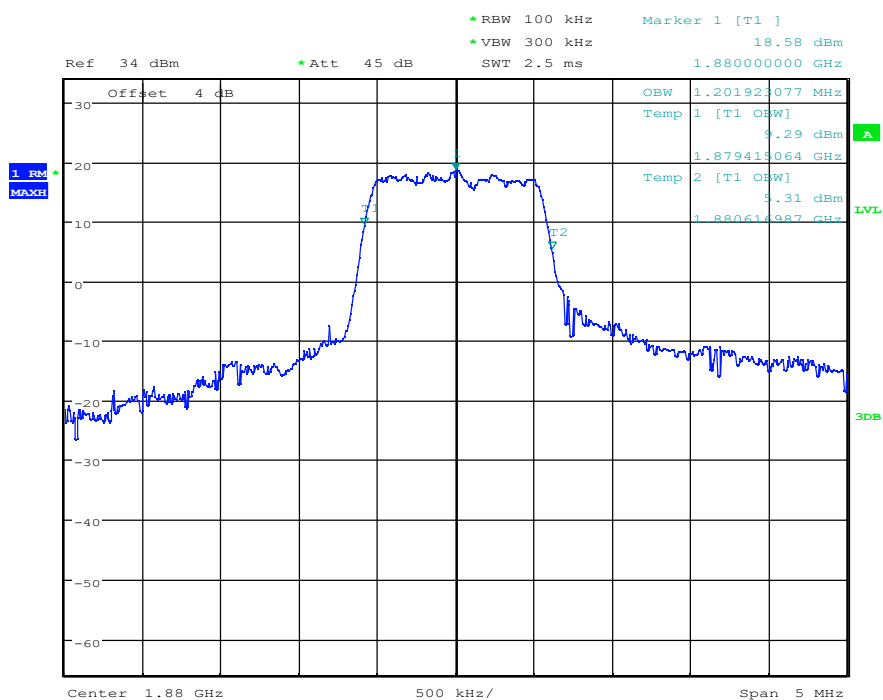


Report No.: I21W00004-WWAN_Rev2



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

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



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

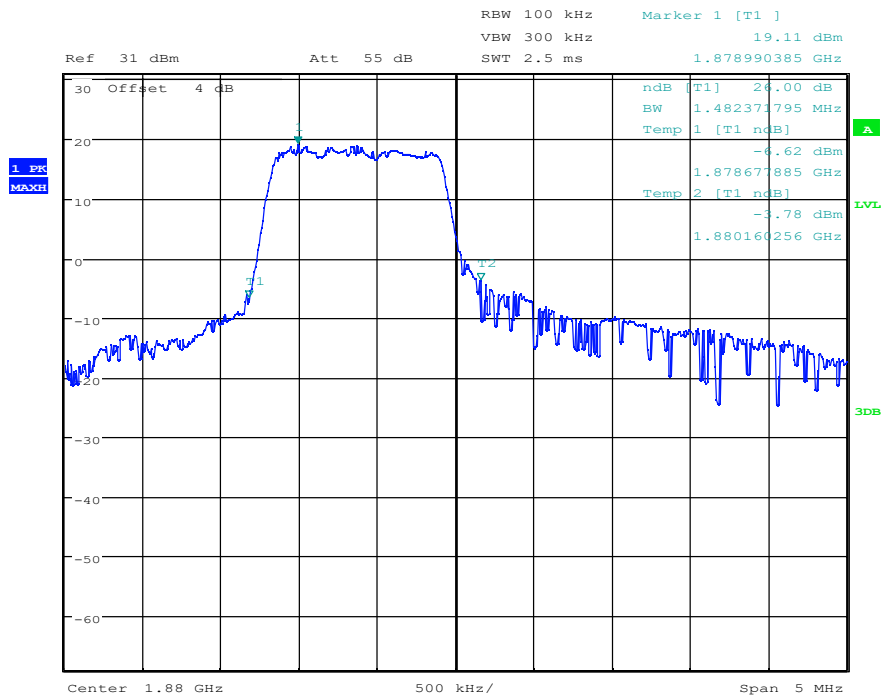
Band2-99% OBW-1.4MHz Bandwidth-QPSK

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

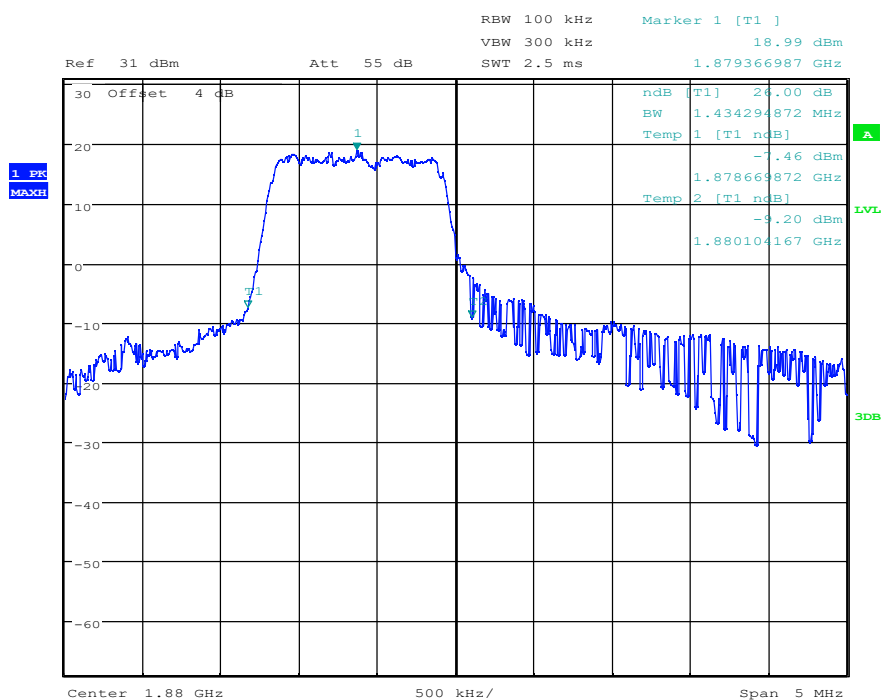


Report No.: I21W00004-WWAN_Rev2



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

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



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

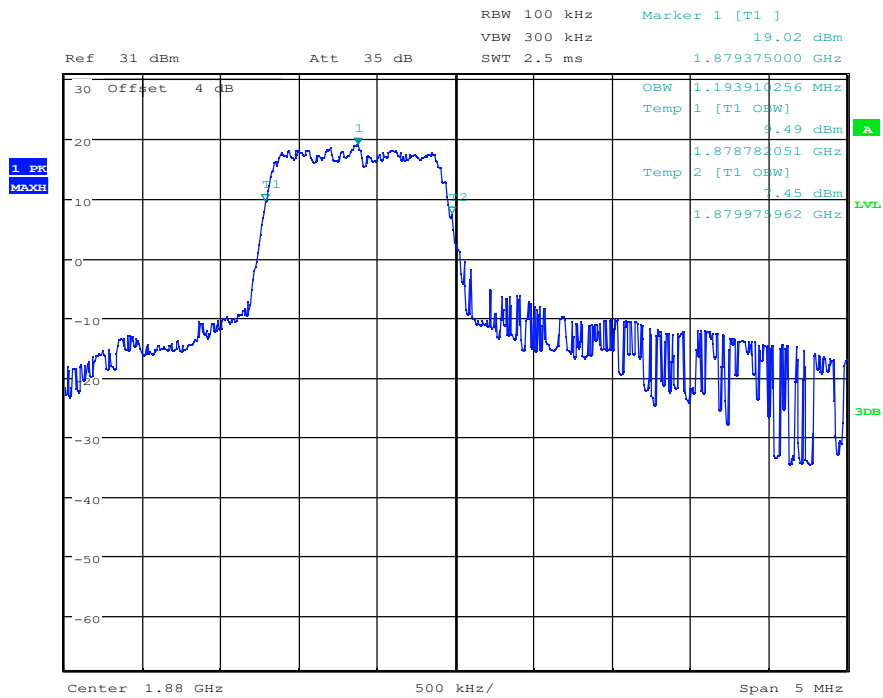
Band2-26dB OBW-3MHz Bandwidth-QPSK

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

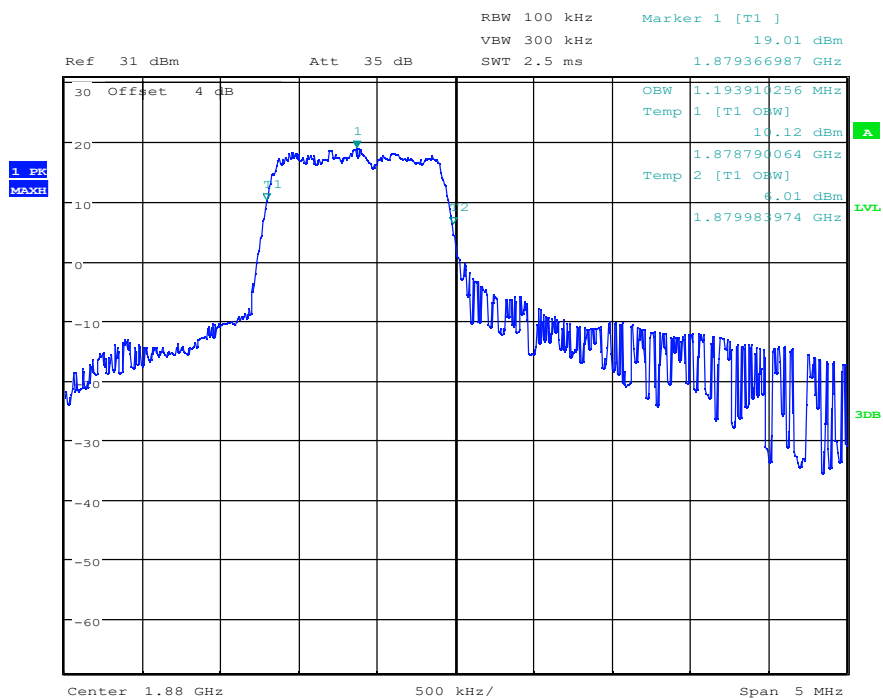


Report No.: I21W00004-WWAN_Rev2



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

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



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

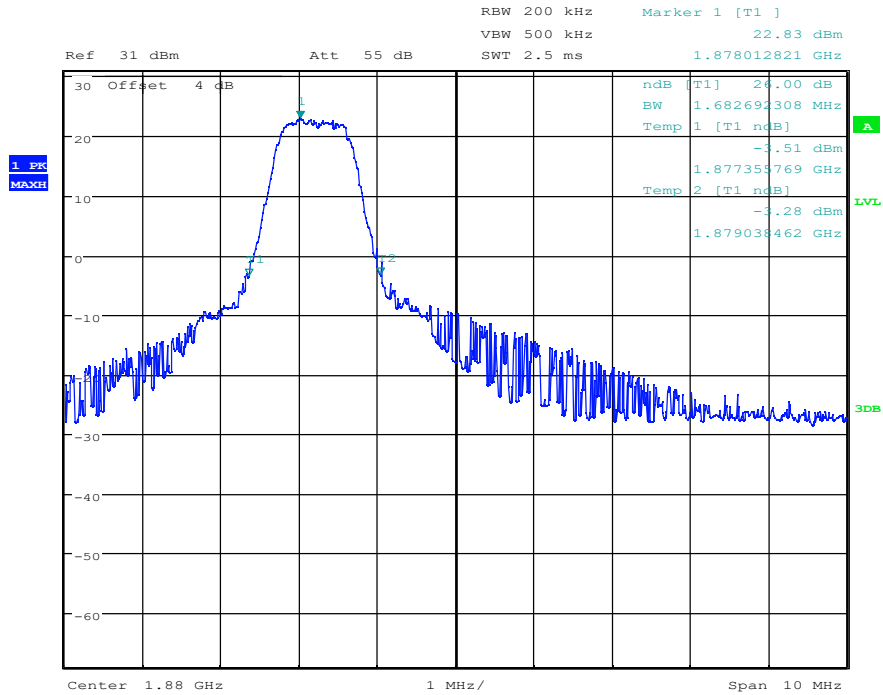
Band2-99% OBW-3MHz Bandwidth-QPSK

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

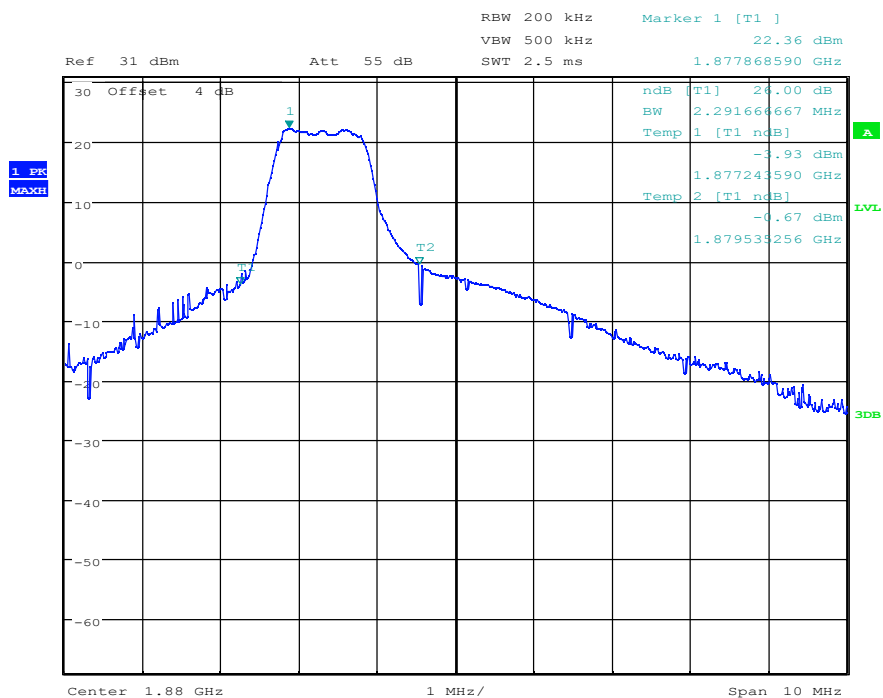


Report No.: I21W00004-WWAN_Rev2



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

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



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

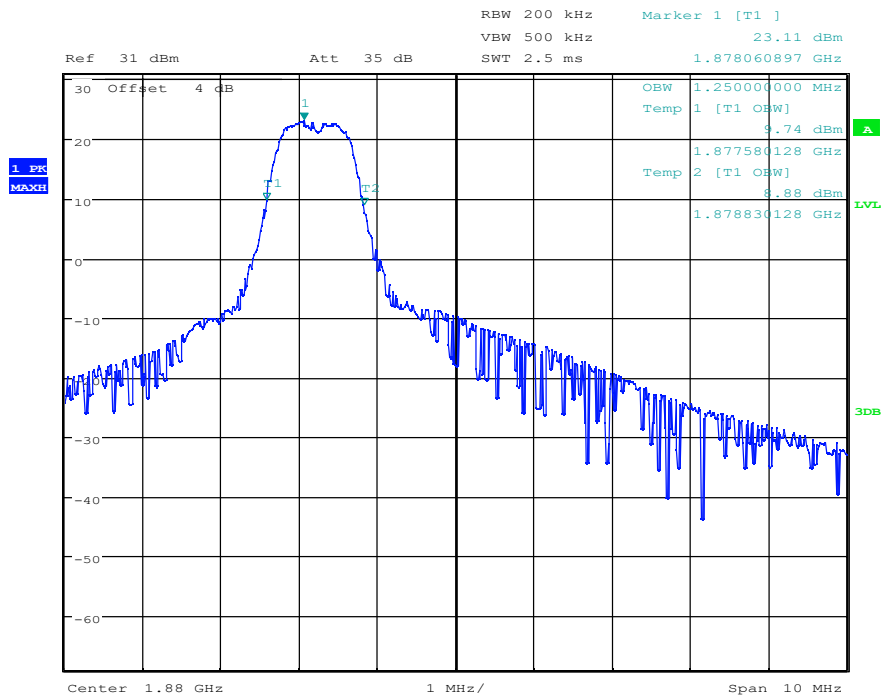
Band2-26dB OBW-5MHz Bandwidth-QPSK

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

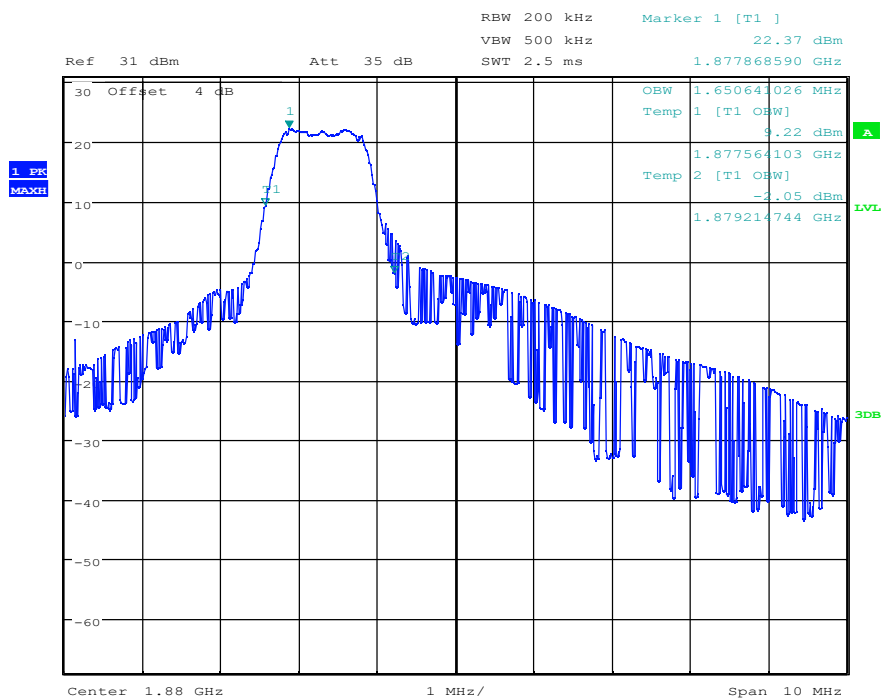


Report No.: I21W00004-WWAN_Rev2



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

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



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

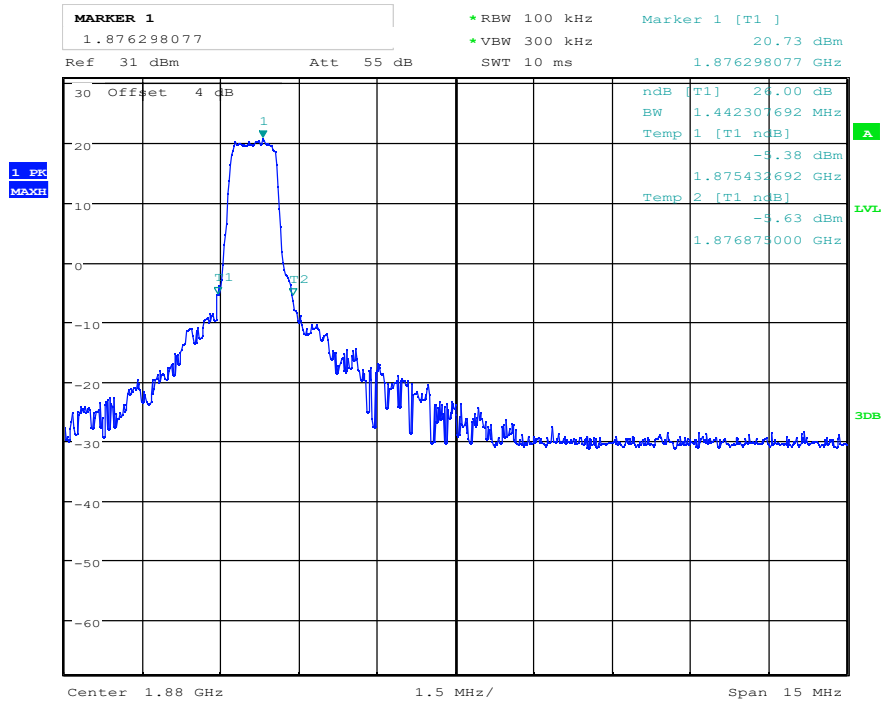
Band2-99% OBW-5MHz Bandwidth-QPSK

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

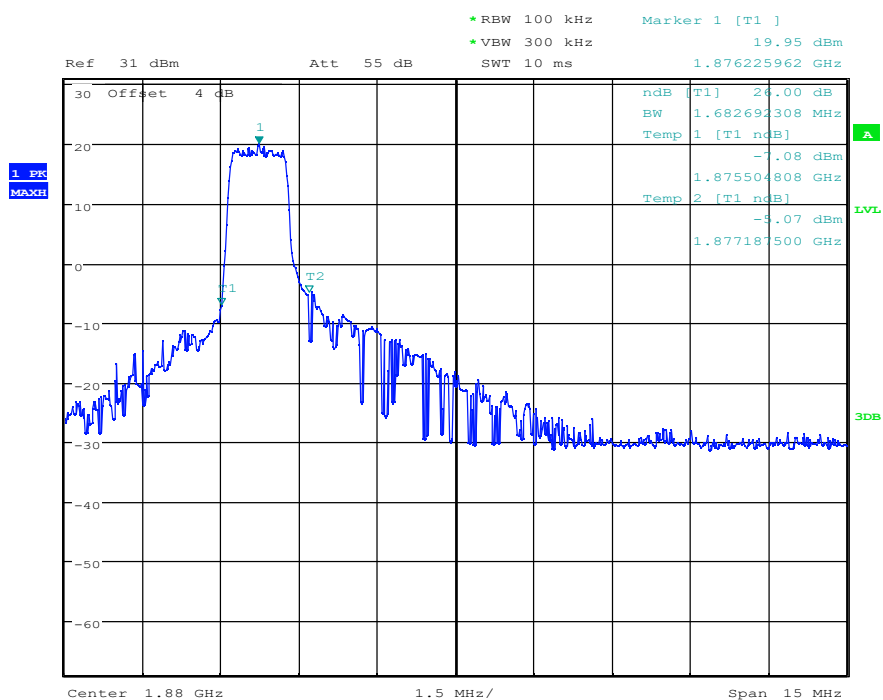


Report No.: I21W00004-WWAN_Rev2



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

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



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

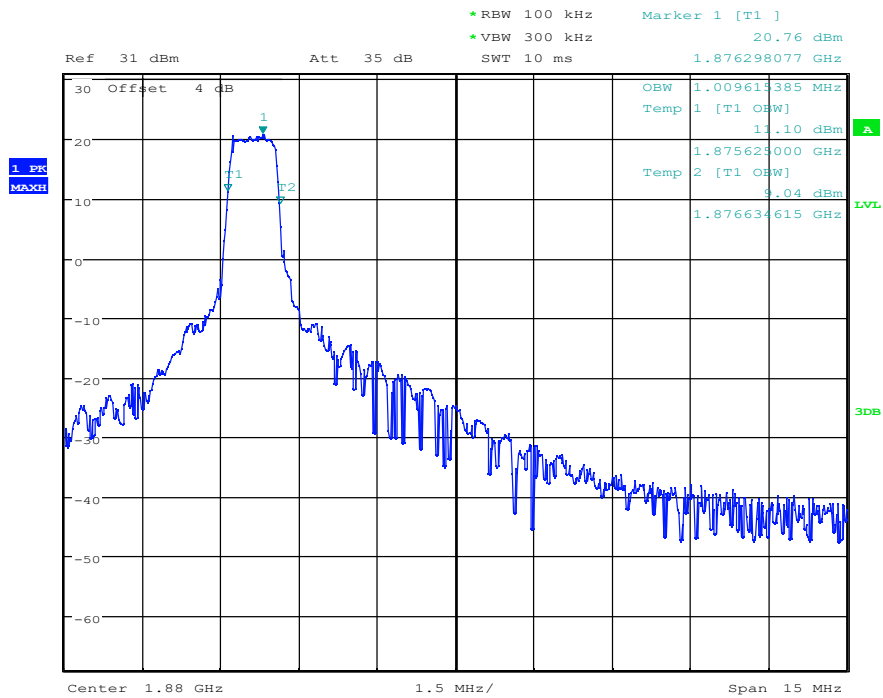
Band2-26dB OBW-10MHz Bandwidth-QPSK

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

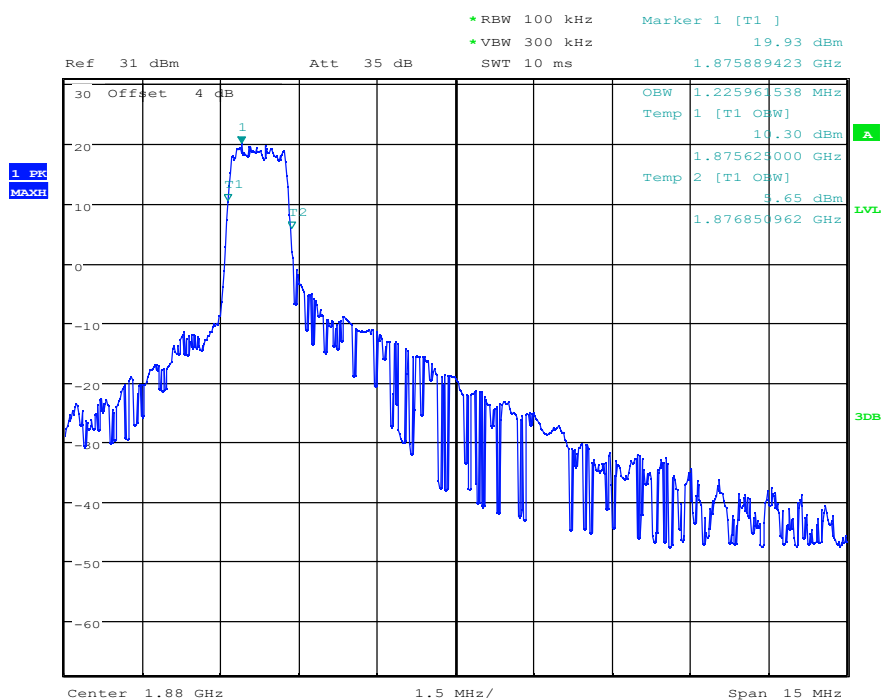


Report No.: I21W00004-WWAN_Rev2



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

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



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

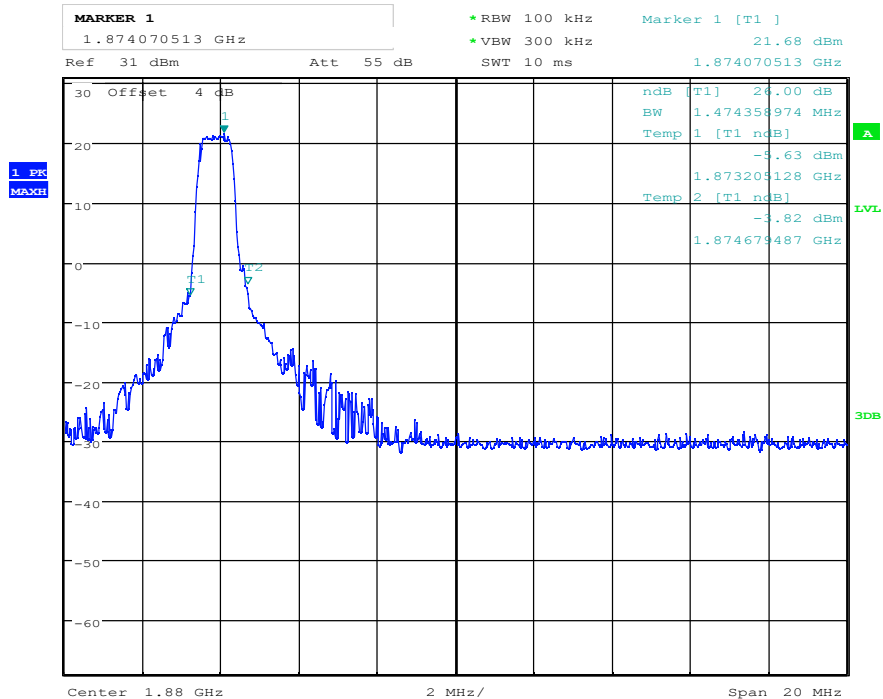
Band2-99% OBW-10MHz Bandwidth-QPSK

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

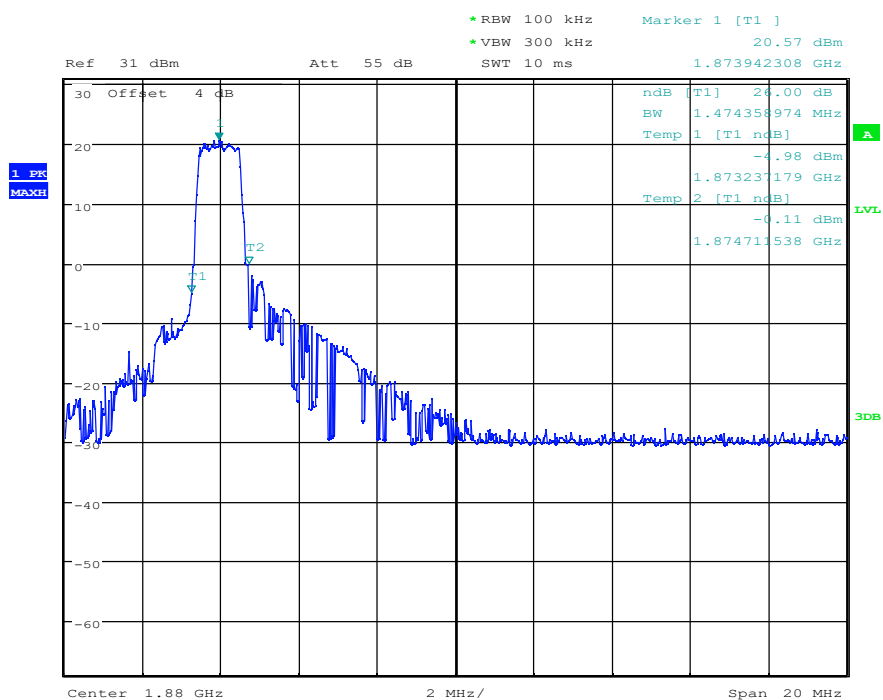


Report No.: I21W00004-WWAN_Rev2



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

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



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

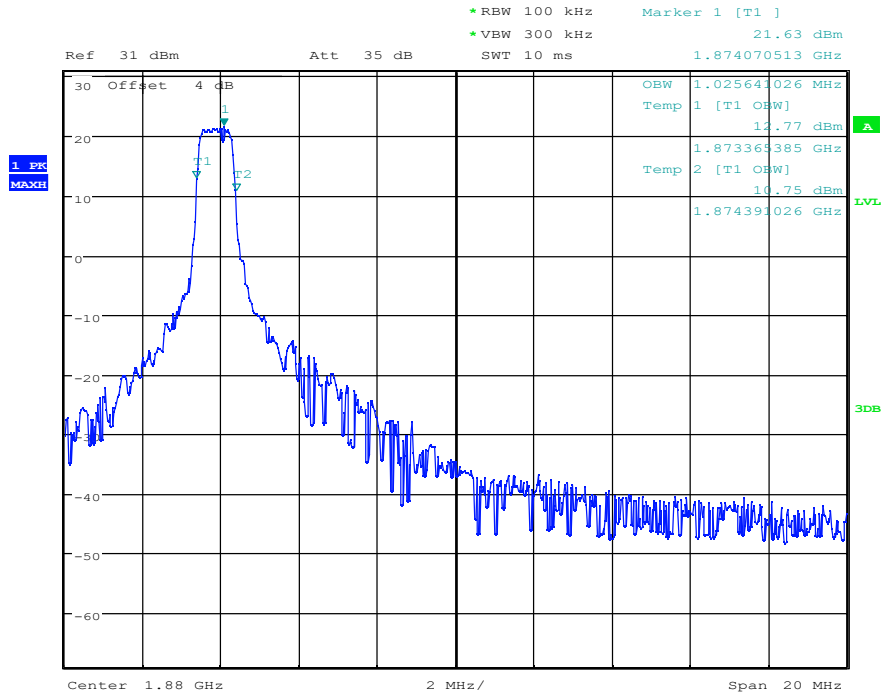
Band2-26dB OBW-15MHz Bandwidth-QPSK

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

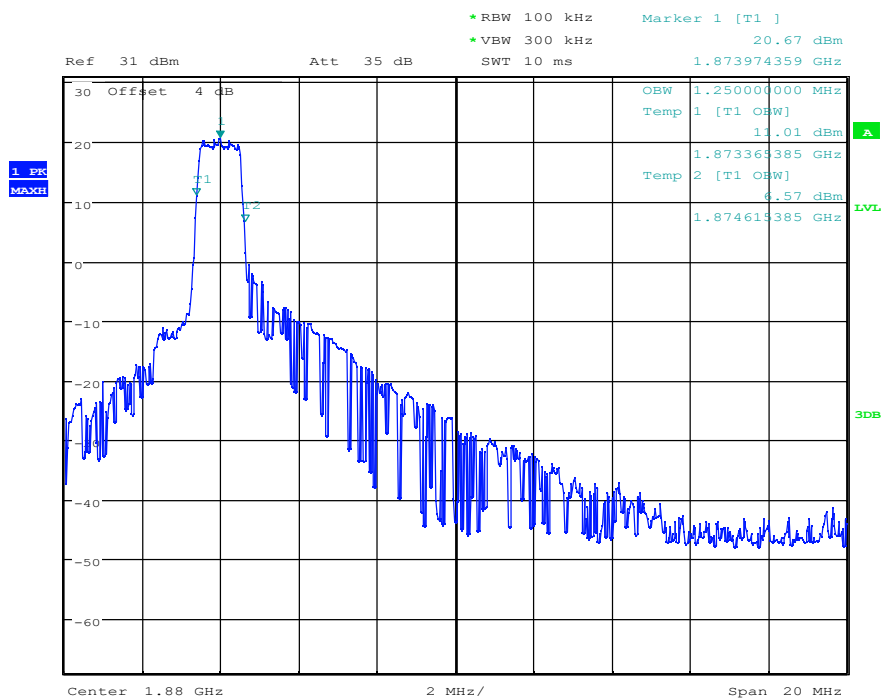


Report No.: I21W00004-WWAN_Rev2



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

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



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

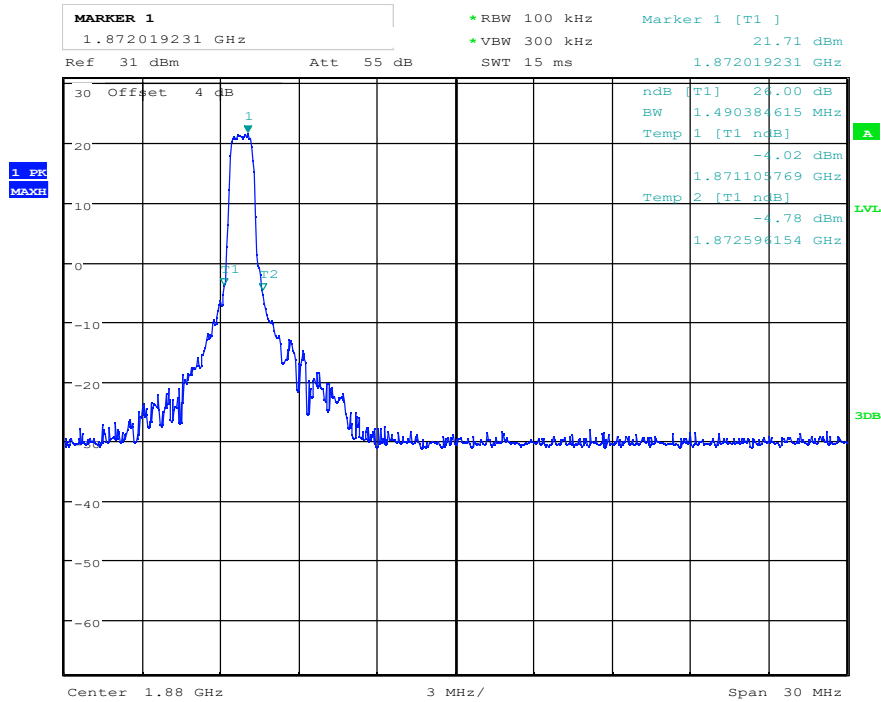
Band2-99% OBW-15MHz Bandwidth-QPSK

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

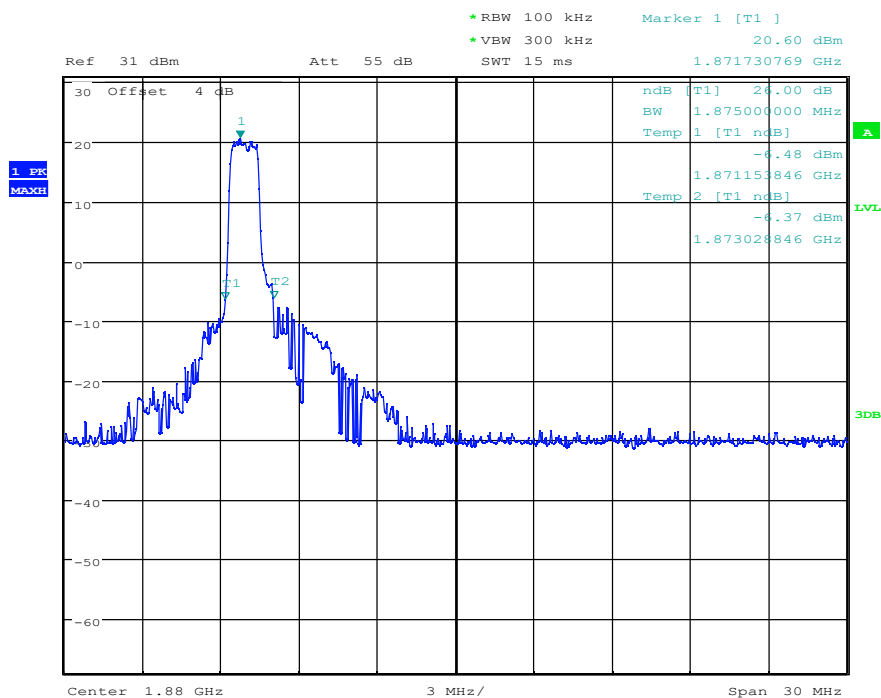


Report No.: I21W00004-WWAN_Rev2



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

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



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

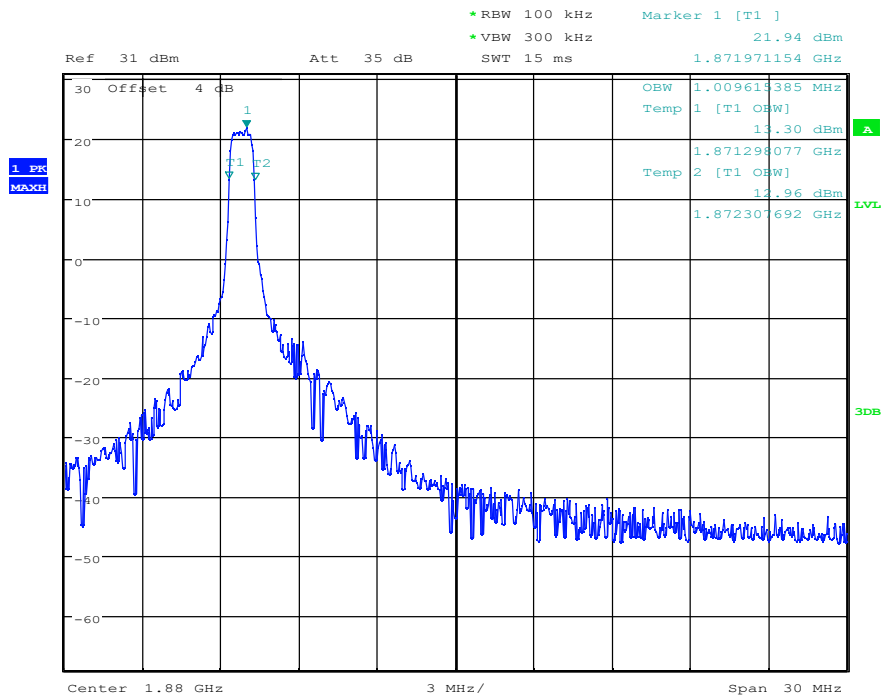
Band2-26dB OBW-20MHz Bandwidth-QPSK

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

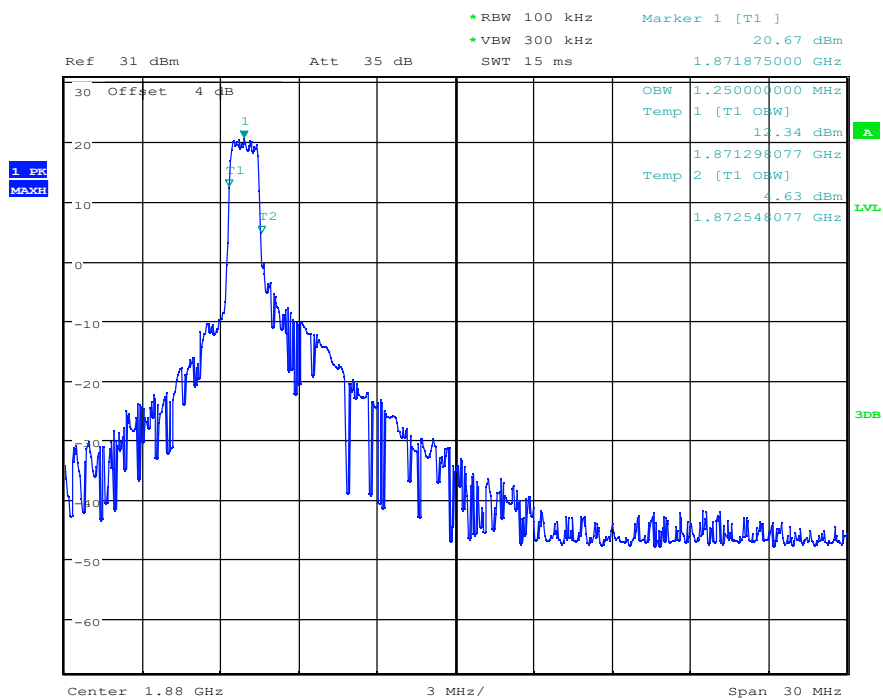


Report No.: I21W00004-WWAN_Rev2



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

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



Date: 26.DEC.2020 14:49:22

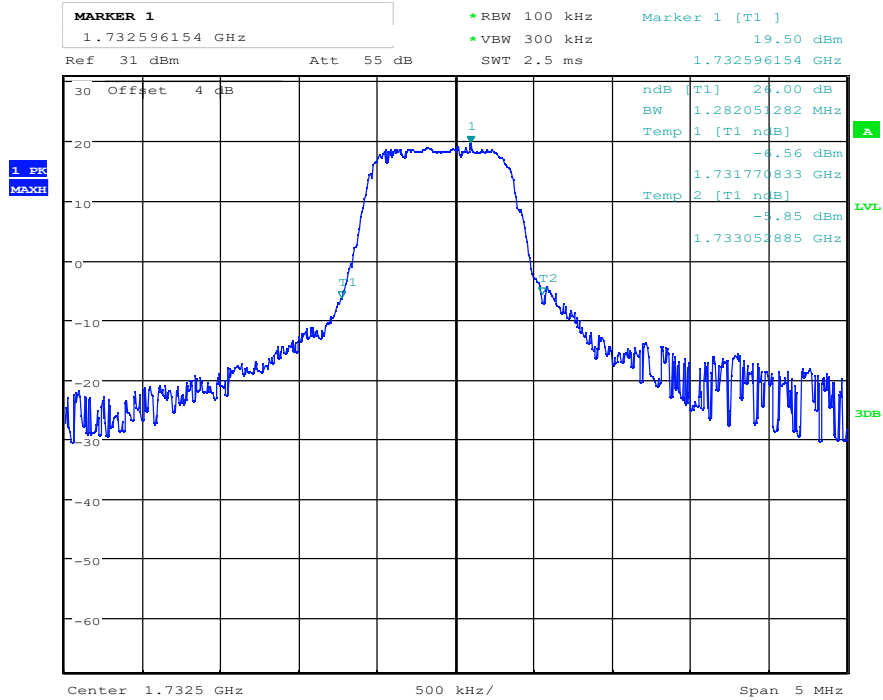
Band2-99% OBW-20MHz Bandwidth-QPSK

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

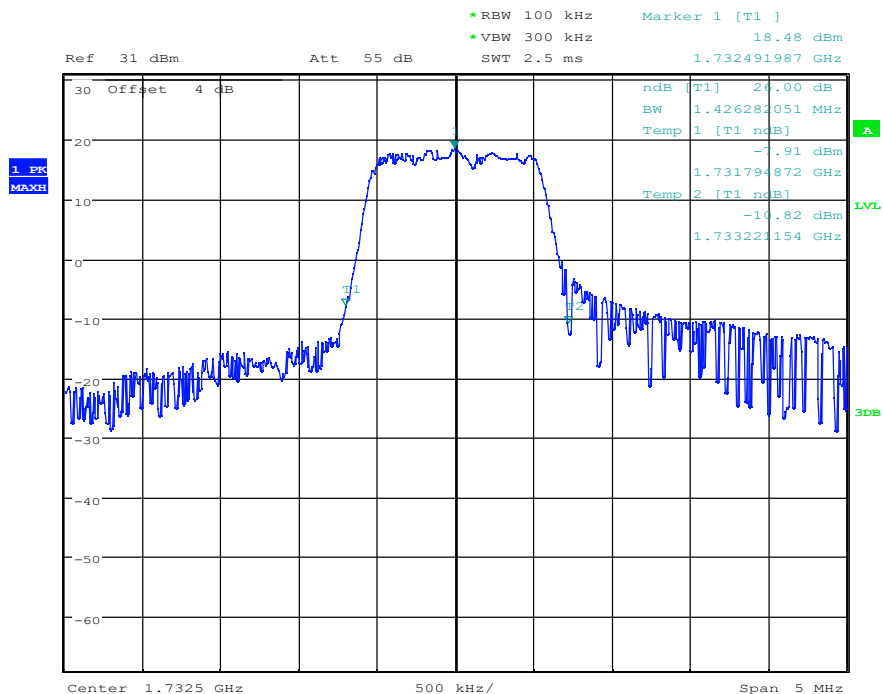


Report No.: I21W00004-WWAN_Rev2



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

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



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

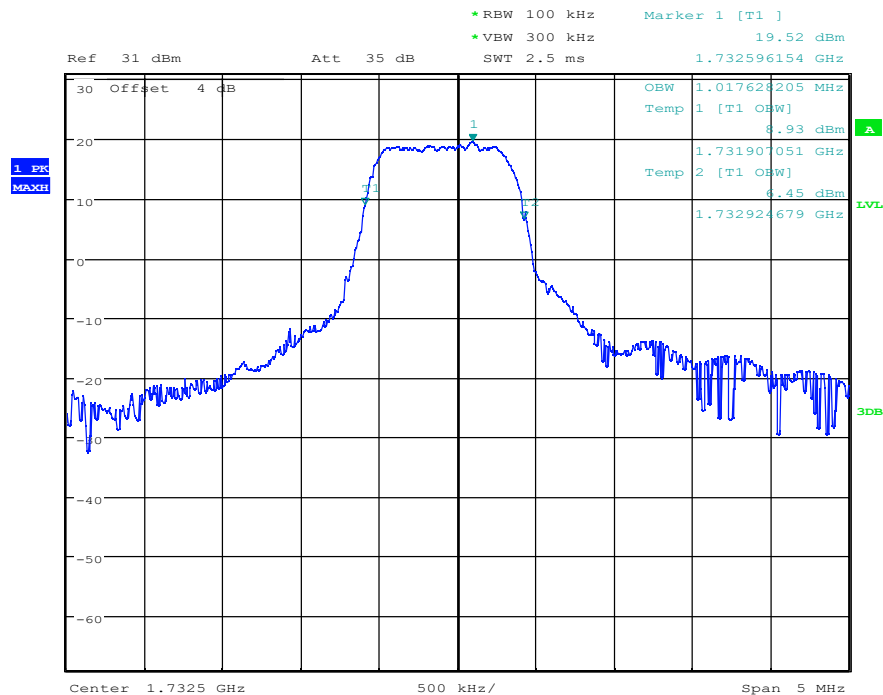
Band4-26dB OBW-1.4MHz Bandwidth-QPSK

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

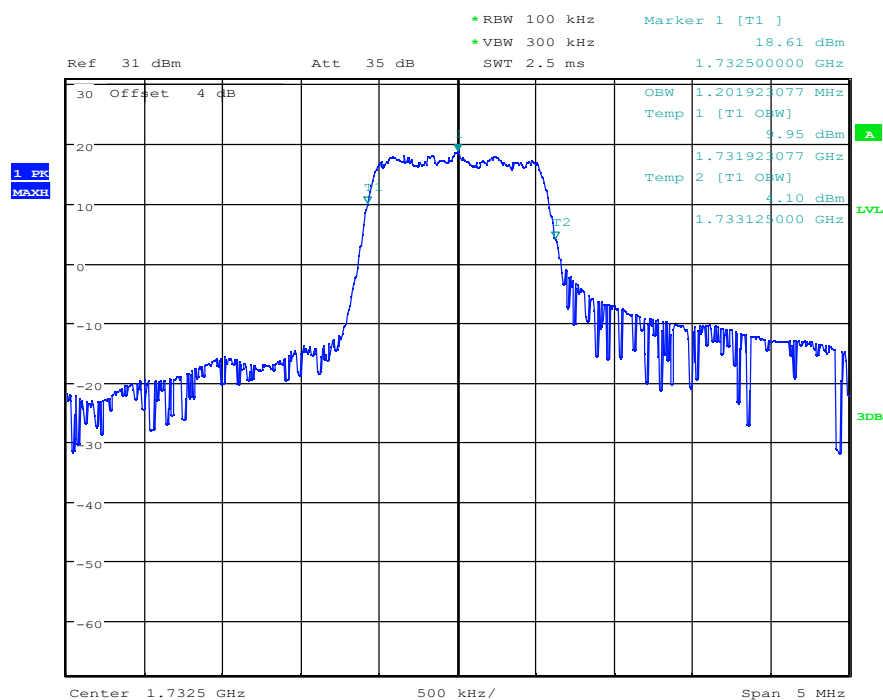


Report No.: I21W00004-WWAN_Rev2



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

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



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

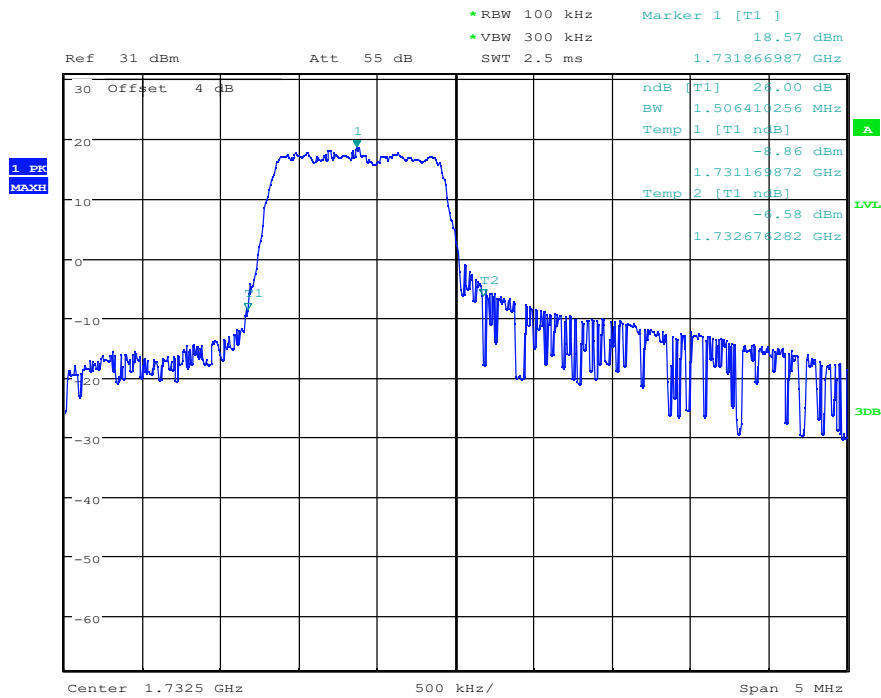
Band4-99% OBW-1.4MHz Bandwidth-QPSK

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

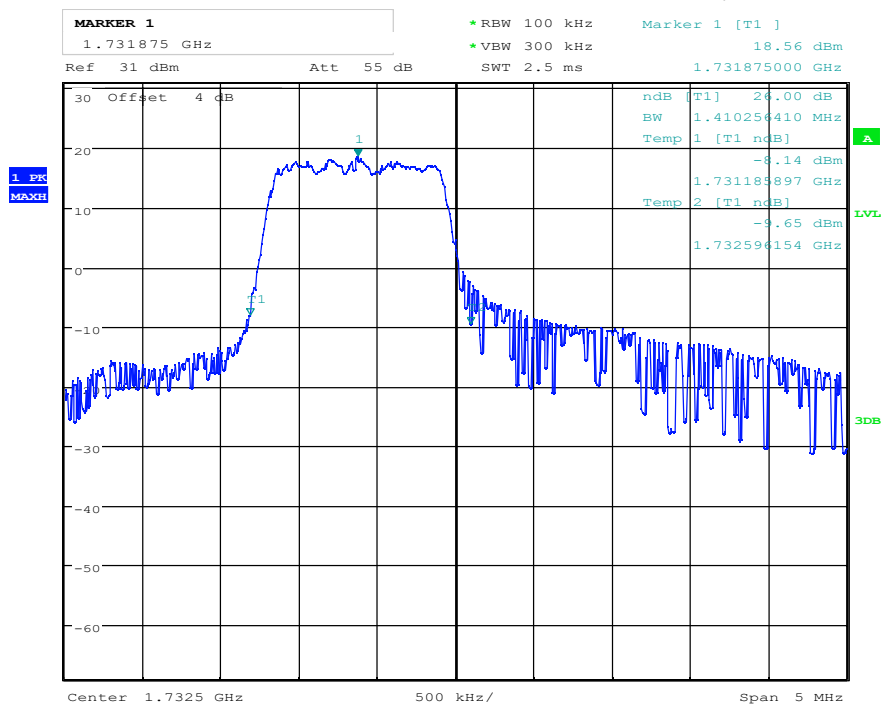


Report No.: I21W00004-WWAN_Rev2



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

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



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

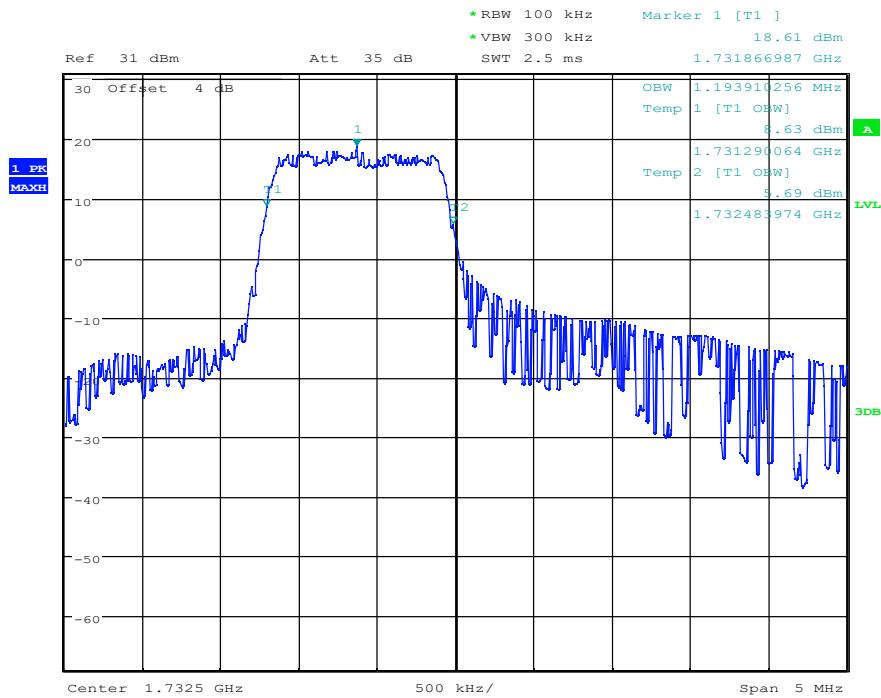
Band4-26dB OBW-3MHz Bandwidth-QPSK

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

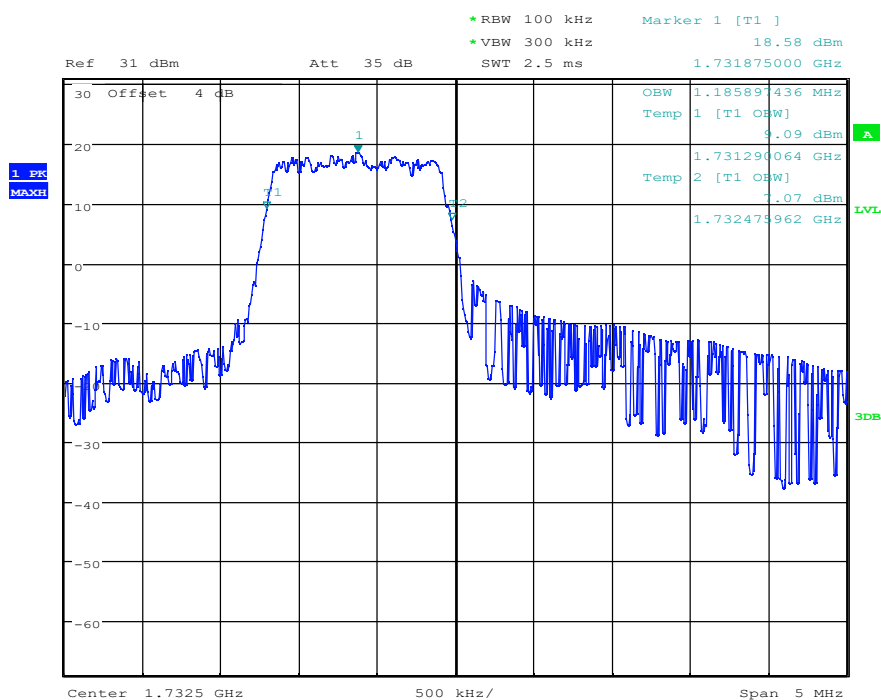


Report No.: I21W00004-WWAN_Rev2



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

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



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

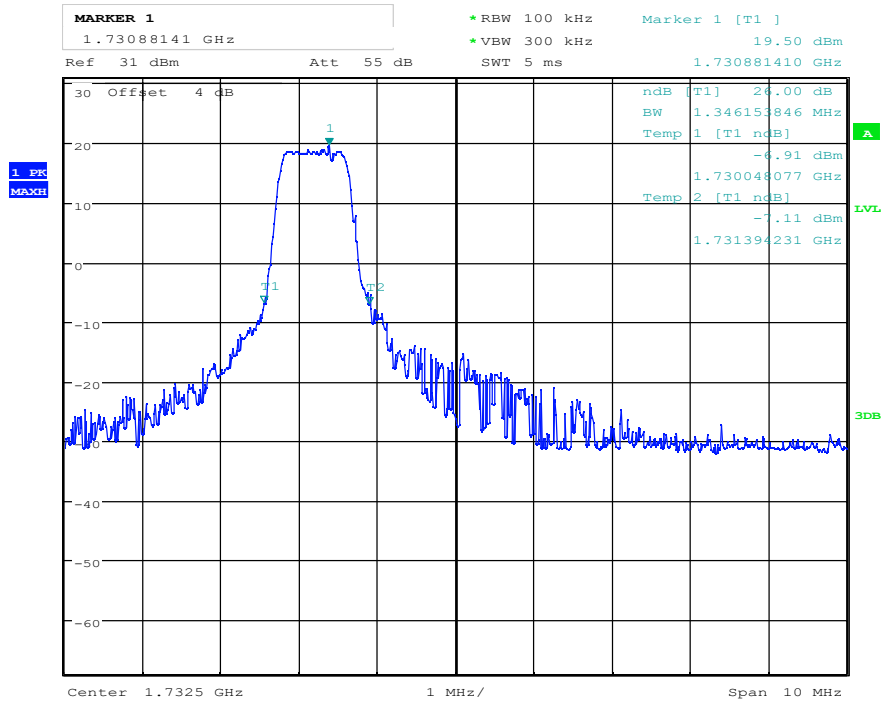
Band4-99% OBW-3MHz Bandwidth-QPSK

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

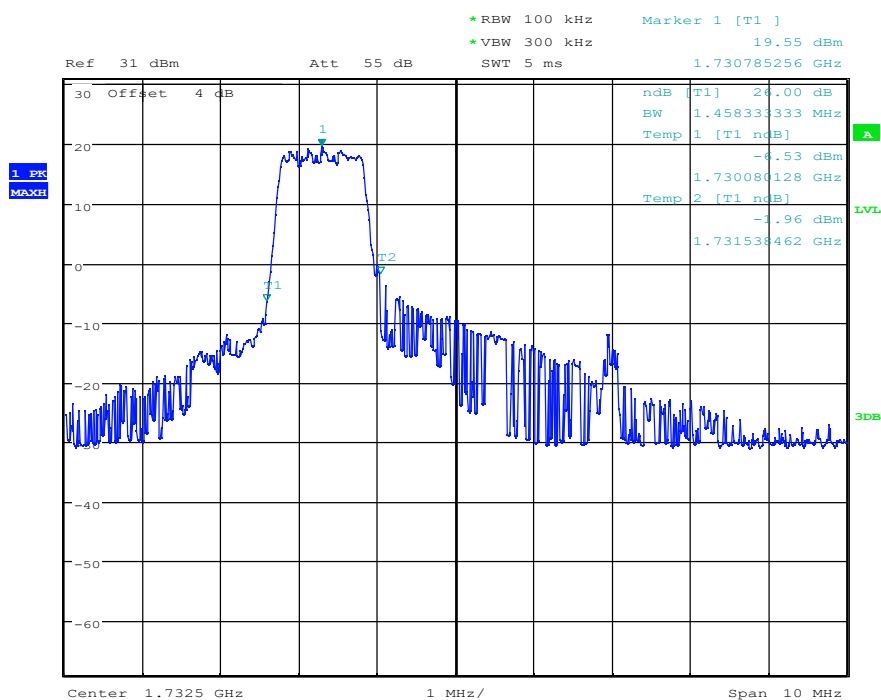


Report No.: I21W00004-WWAN_Rev2



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

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



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

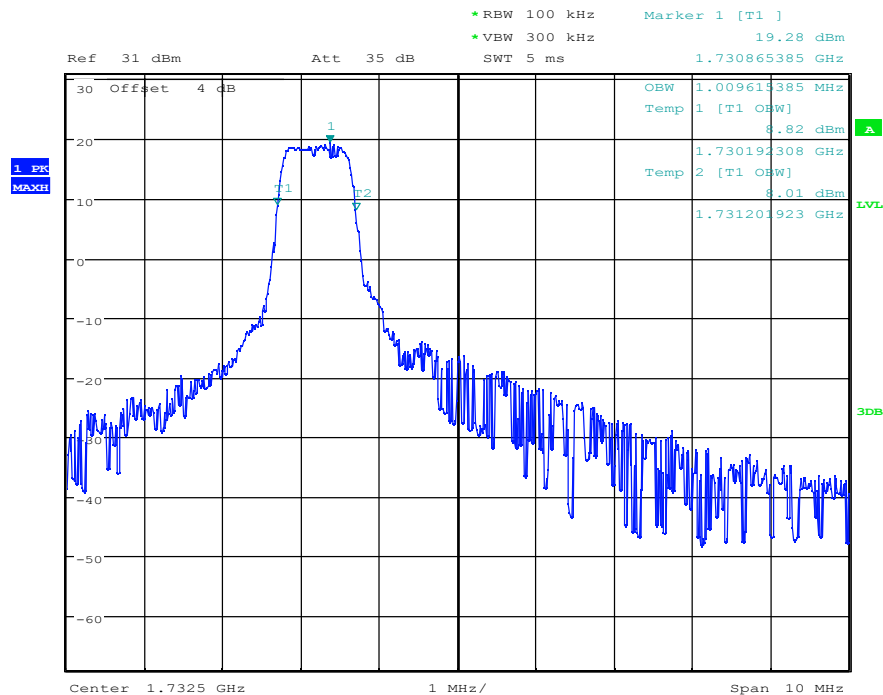
Band4-26dB OBW-5MHz Bandwidth-QPSK

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

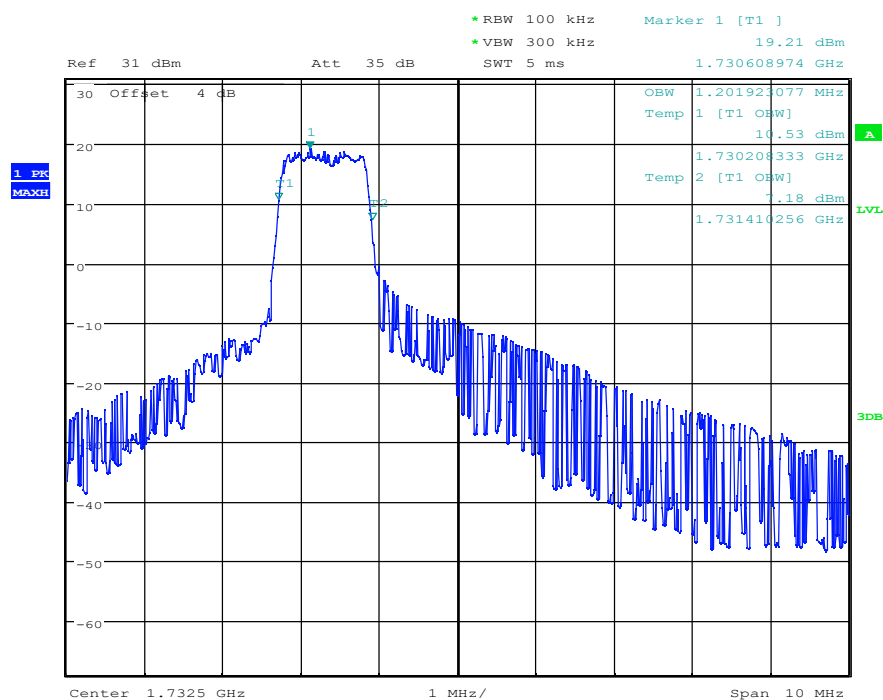


Report No.: I21W00004-WWAN_Rev2



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

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



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

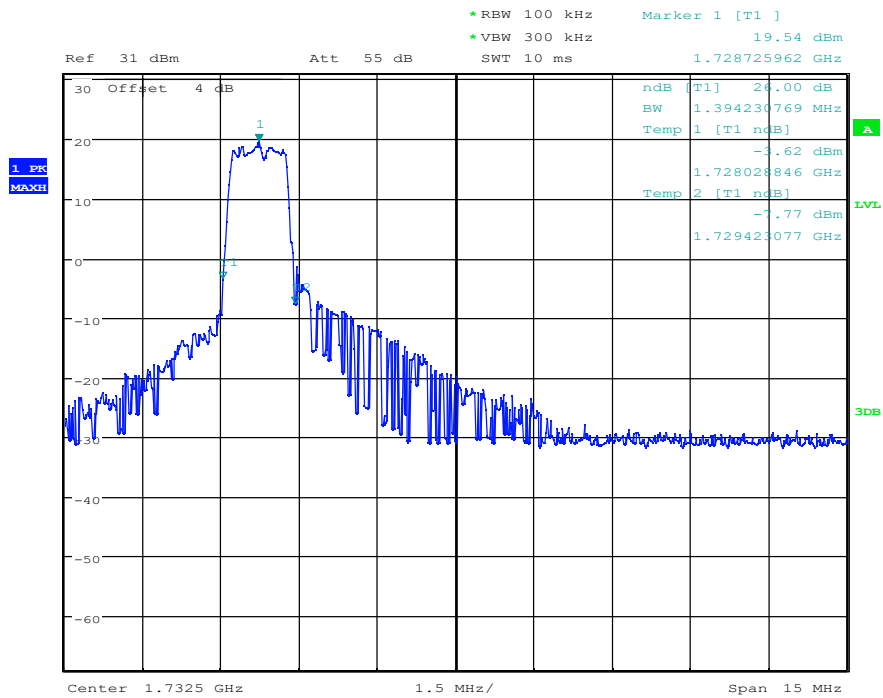
Band4-99% OBW-5MHz Bandwidth-QPSK

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

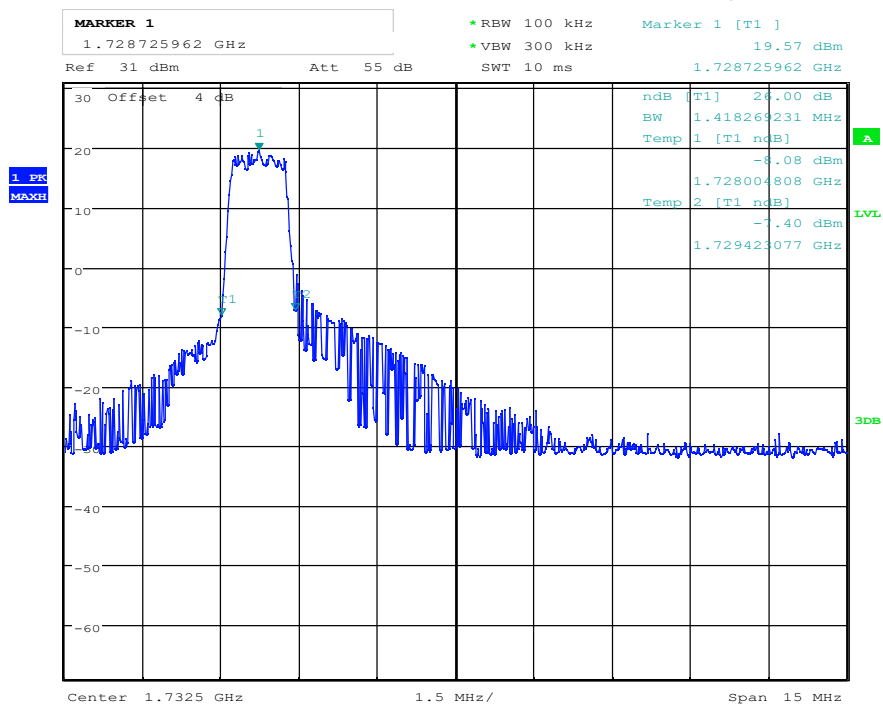


Report No.: I21W00004-WWAN_Rev2



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

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



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

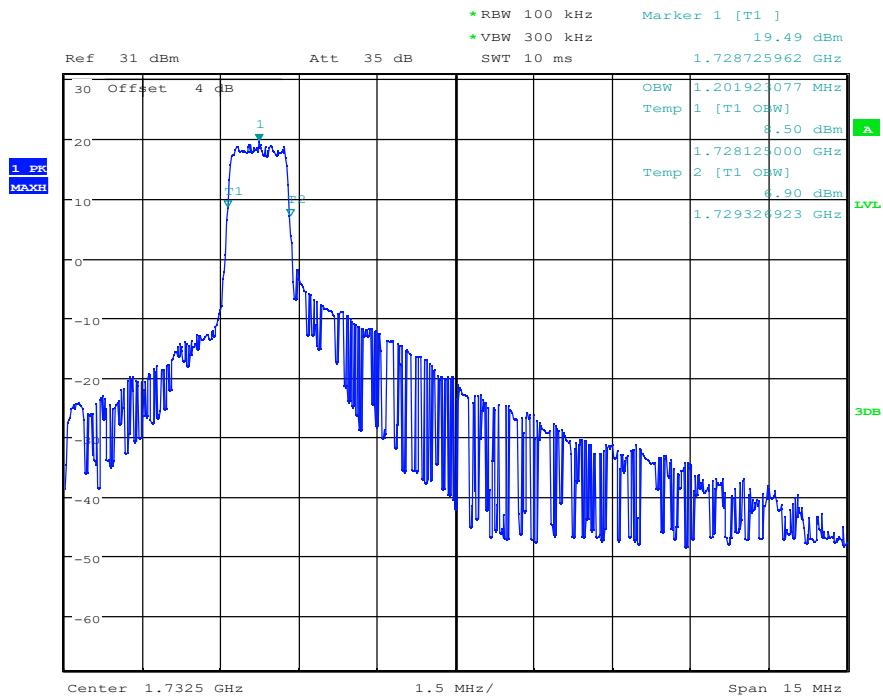
Band4-26dB OBW-10MHz Bandwidth-QPSK

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

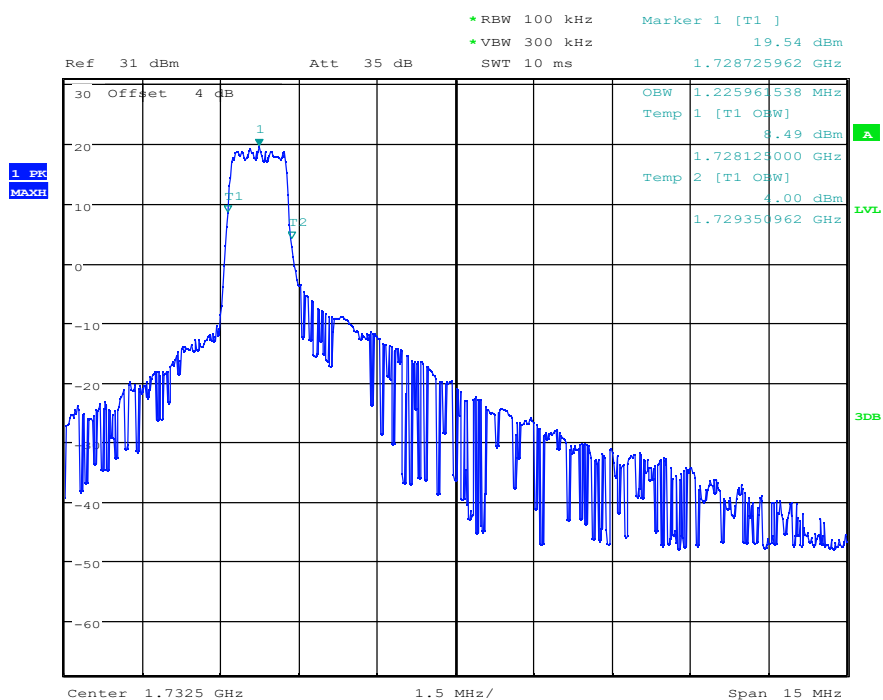


Report No.: I21W00004-WWAN_Rev2



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

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



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

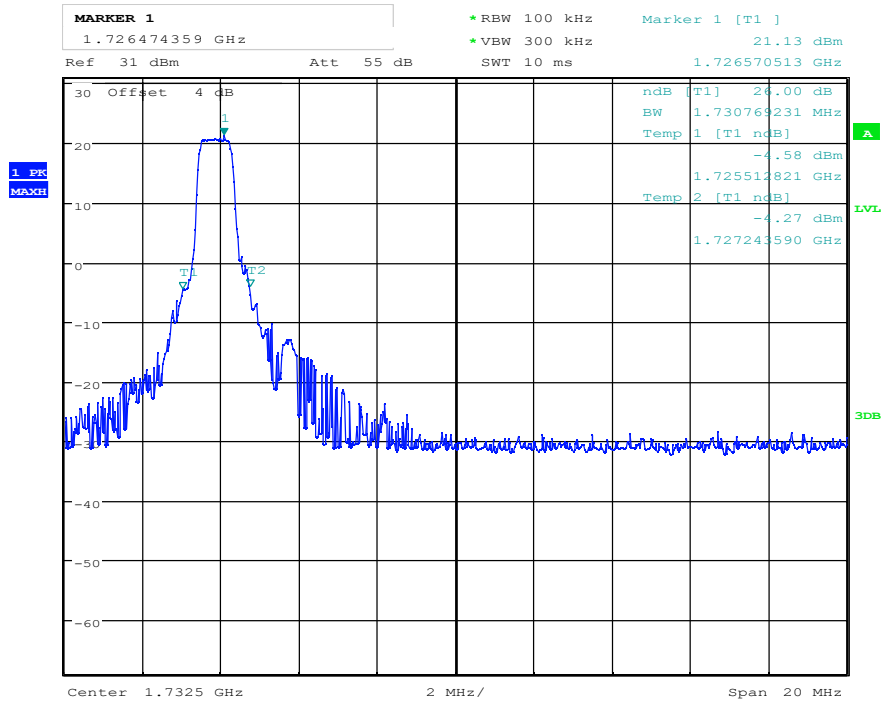
Band4-99% OBW-10MHz Bandwidth-QPSK

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

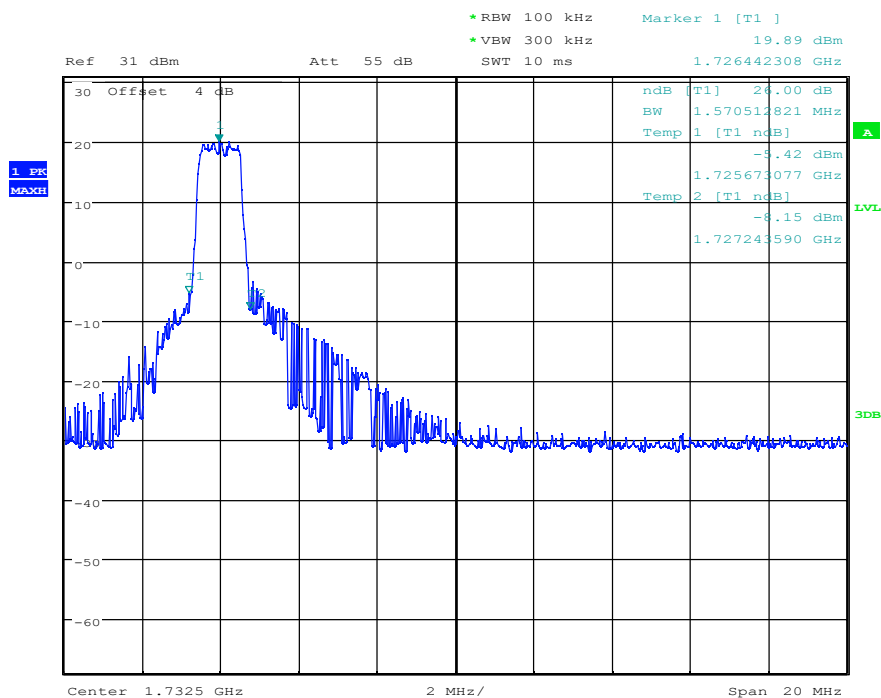


Report No.: I21W00004-WWAN_Rev2



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

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



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

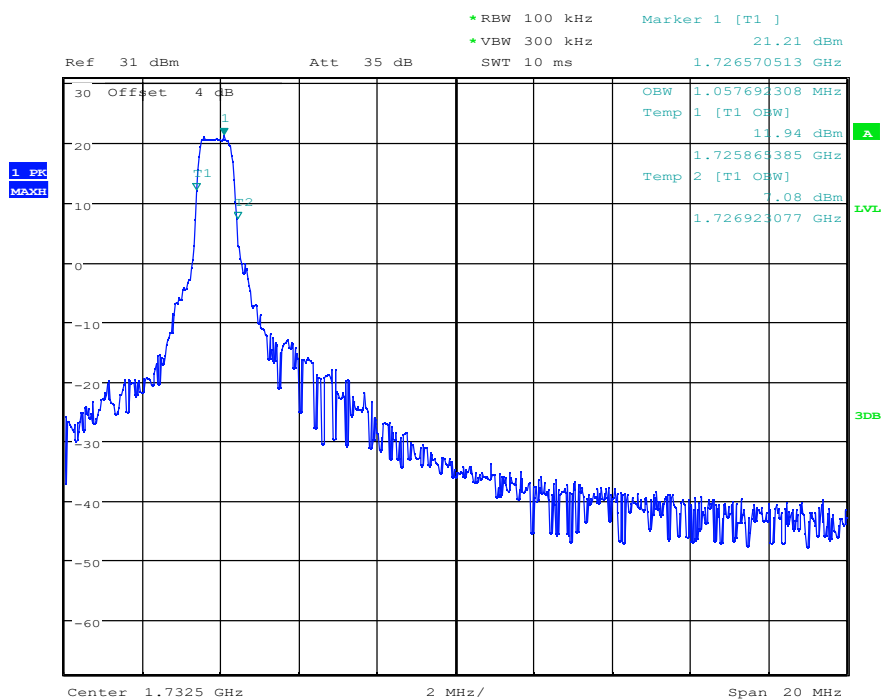
Band4-26dB OBW-15MHz Bandwidth-QPSK

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

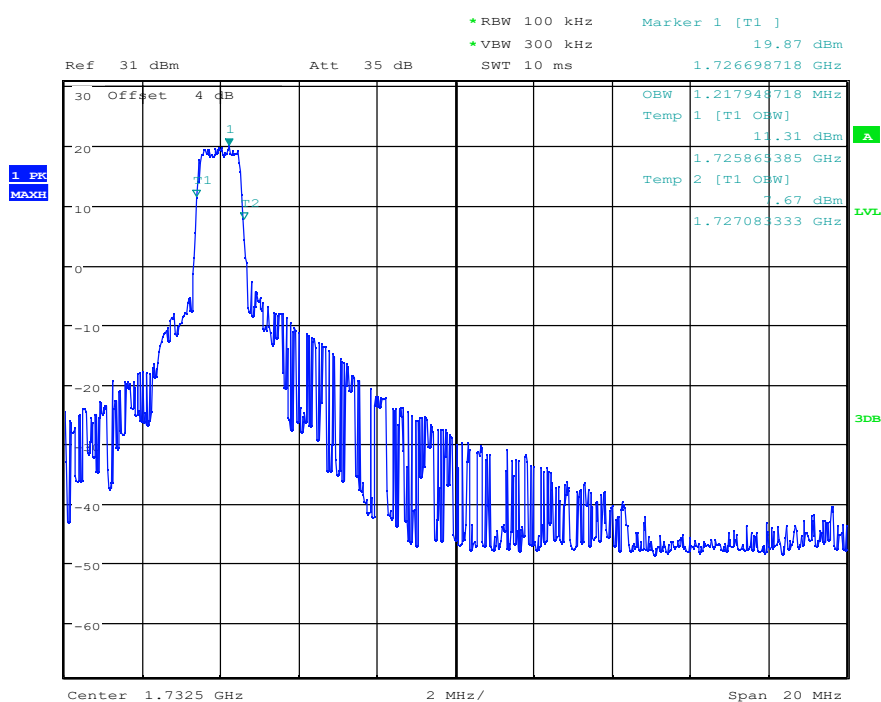


Report No.: I21W00004-WWAN_Rev2



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

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



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

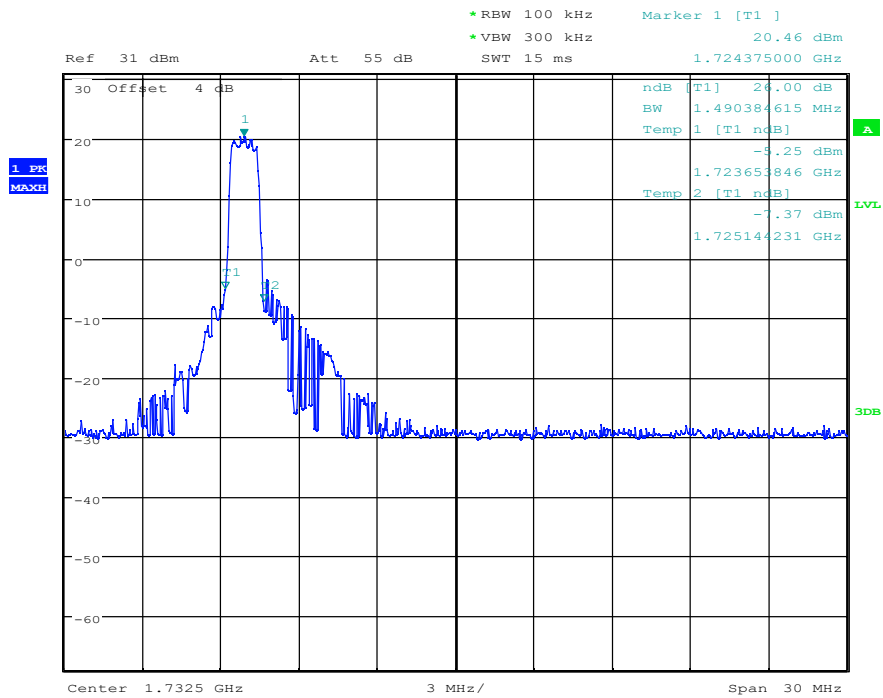
Band4-99% OBW-15MHz Bandwidth-QPSK

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

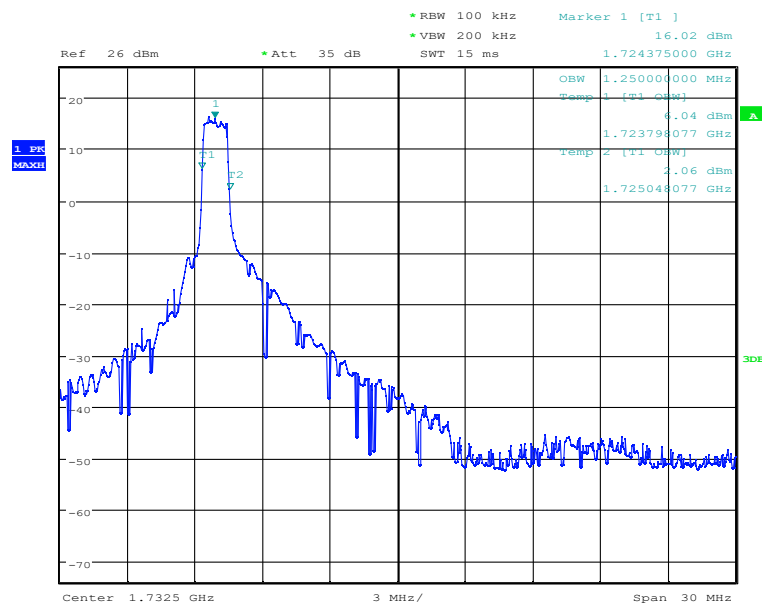


Report No.: I21W00004-WWAN_Rev2



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

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



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

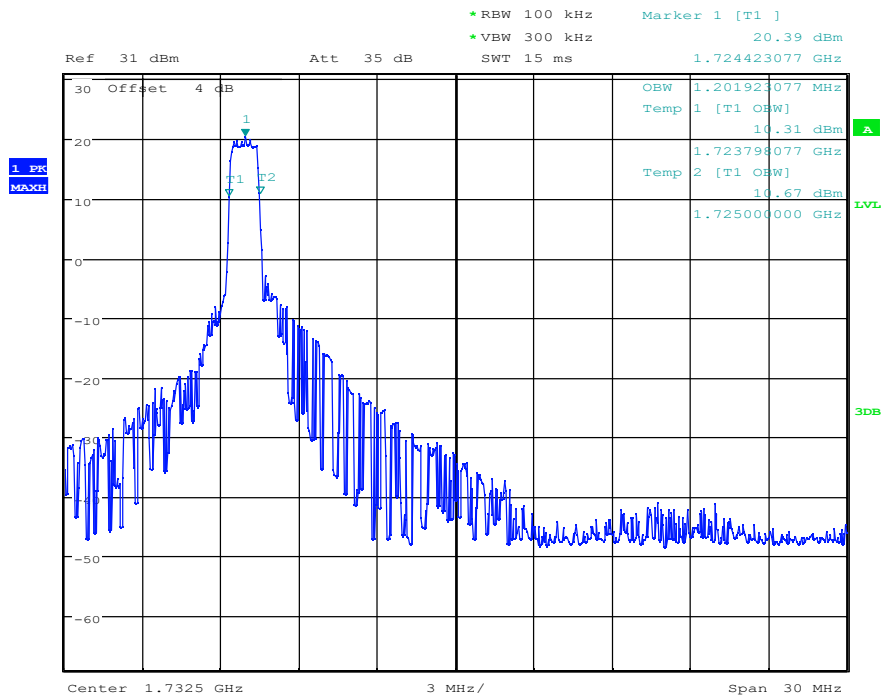
Band4-26dB OBW-20MHz Bandwidth-QPSK

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

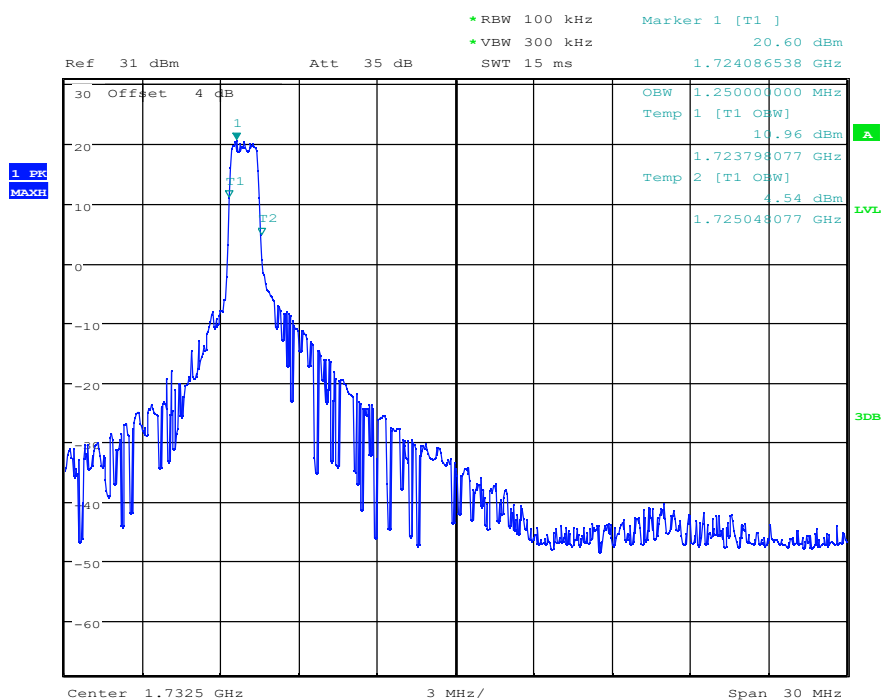


Report No.: I21W00004-WWAN_Rev2



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

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



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

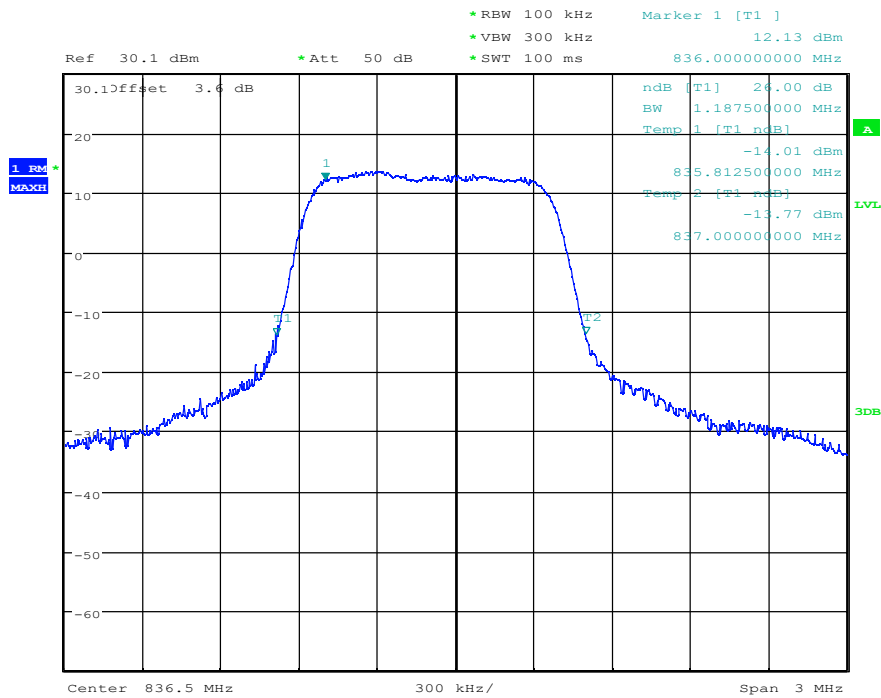
Band4-99% OBW-20MHz Bandwidth-QPSK

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

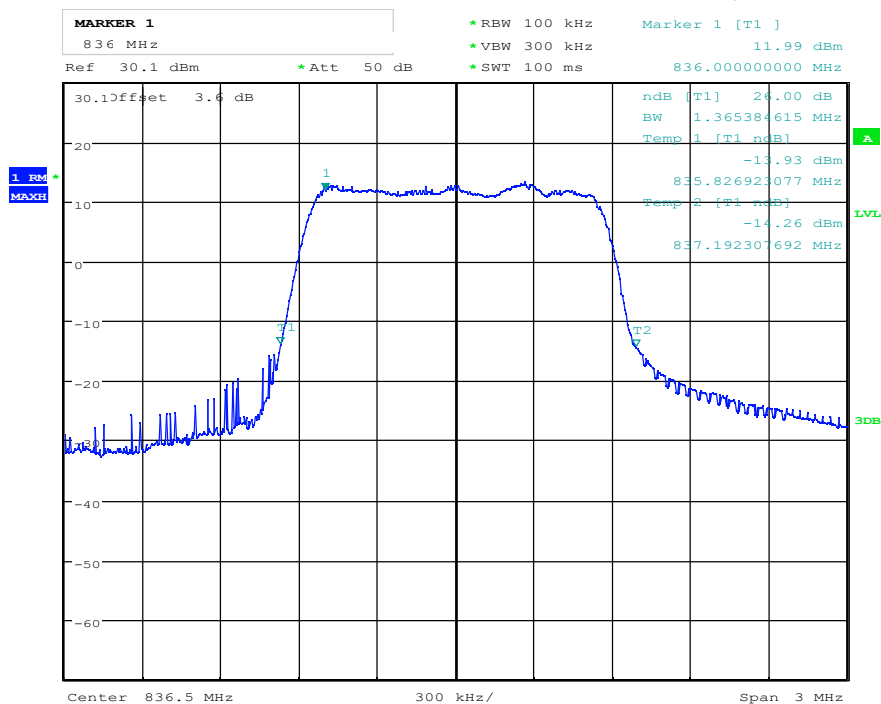


Report No.: I21W00004-WWAN_Rev2



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

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



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

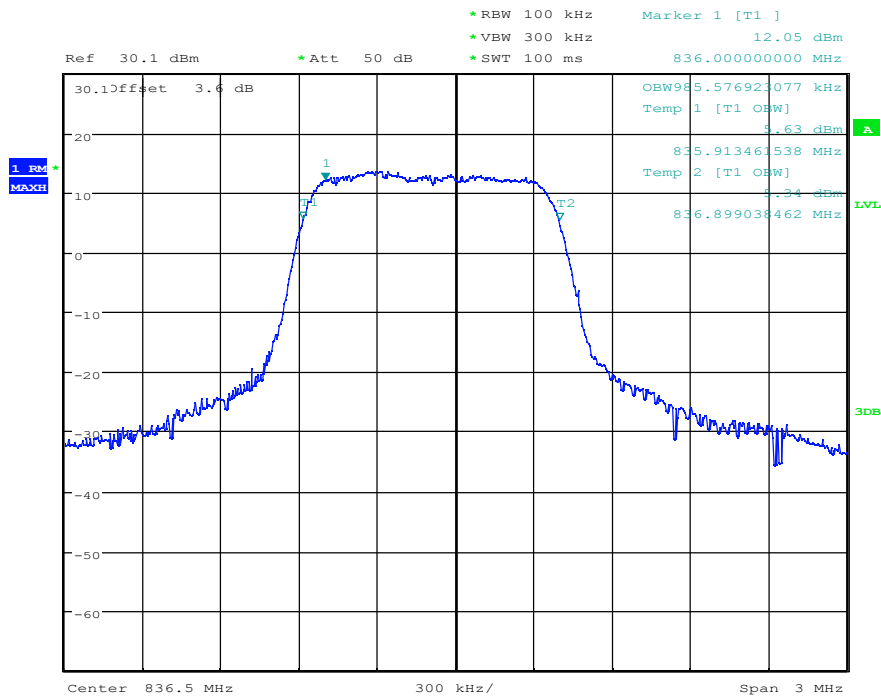
Band5-26dB OBW-1.4MHz Bandwidth-QPSK

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

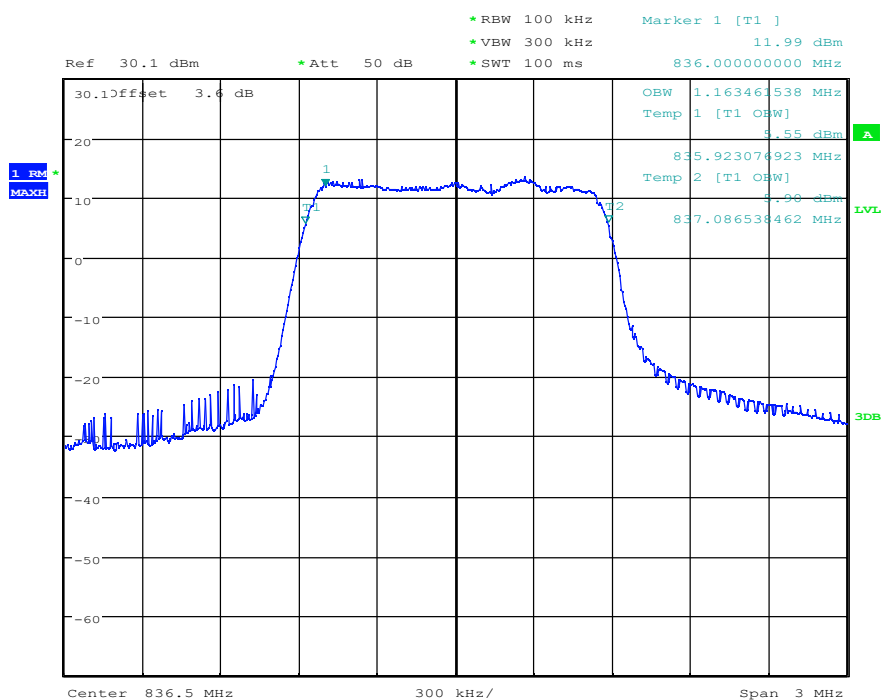


Report No.: I21W00004-WWAN_Rev2



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

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



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

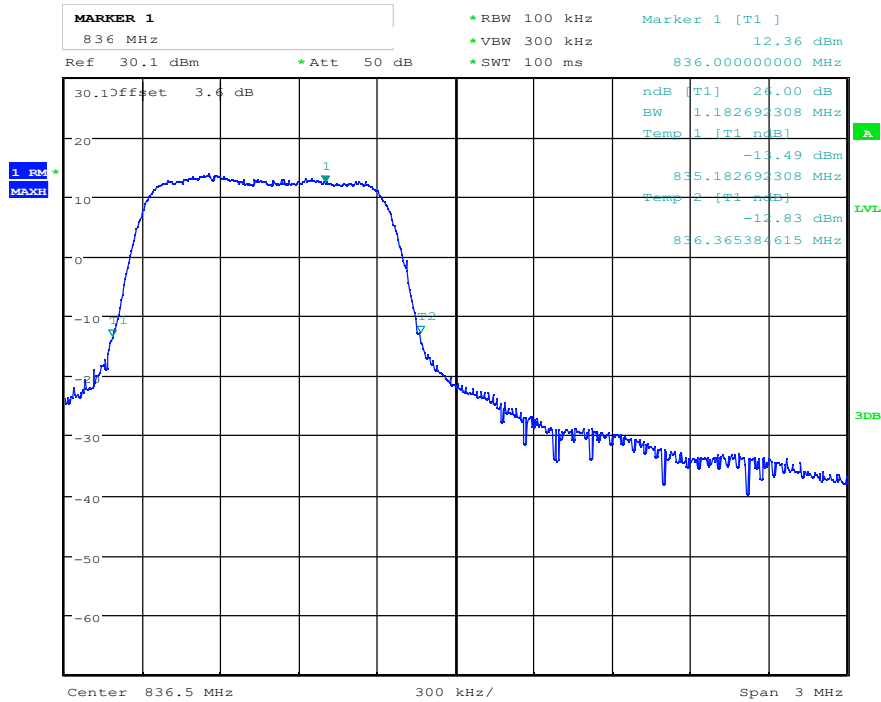
Band5-99% OBW-1.4MHz Bandwidth-QPSK

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

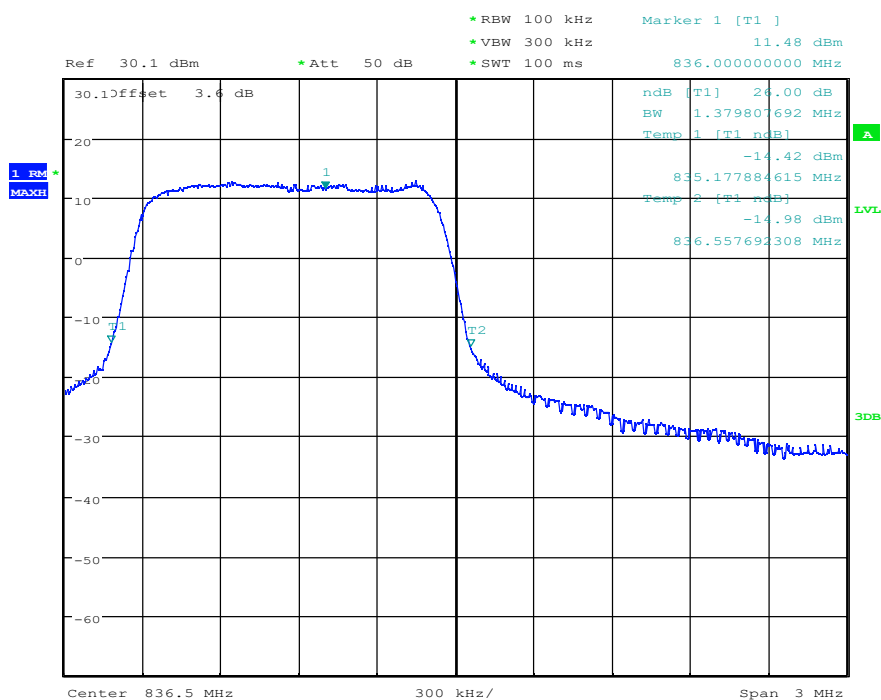


Report No.: I21W00004-WWAN_Rev2



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

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



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

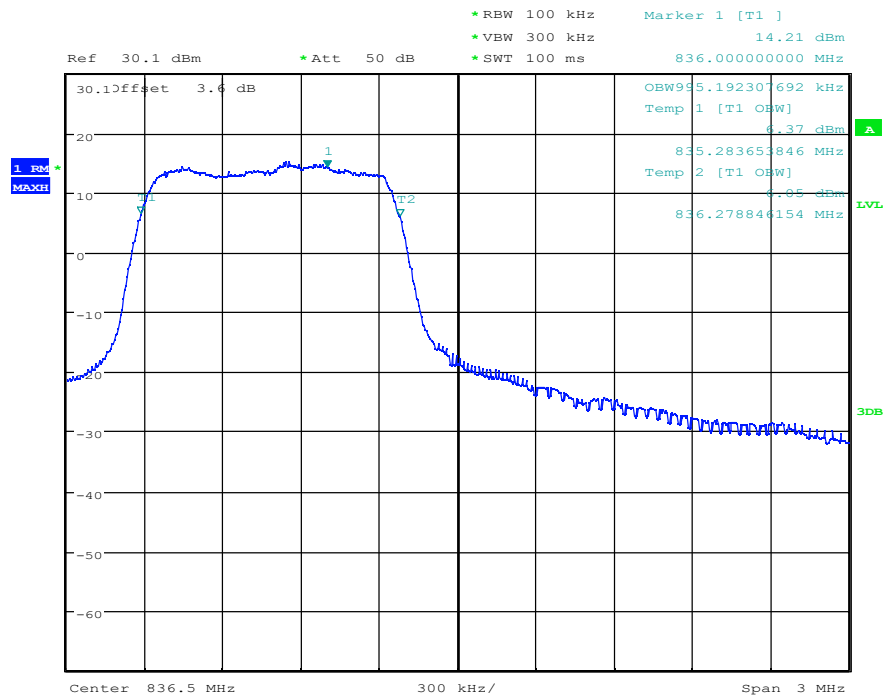
Band5-26dB OBW-3MHz Bandwidth-QPSK

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

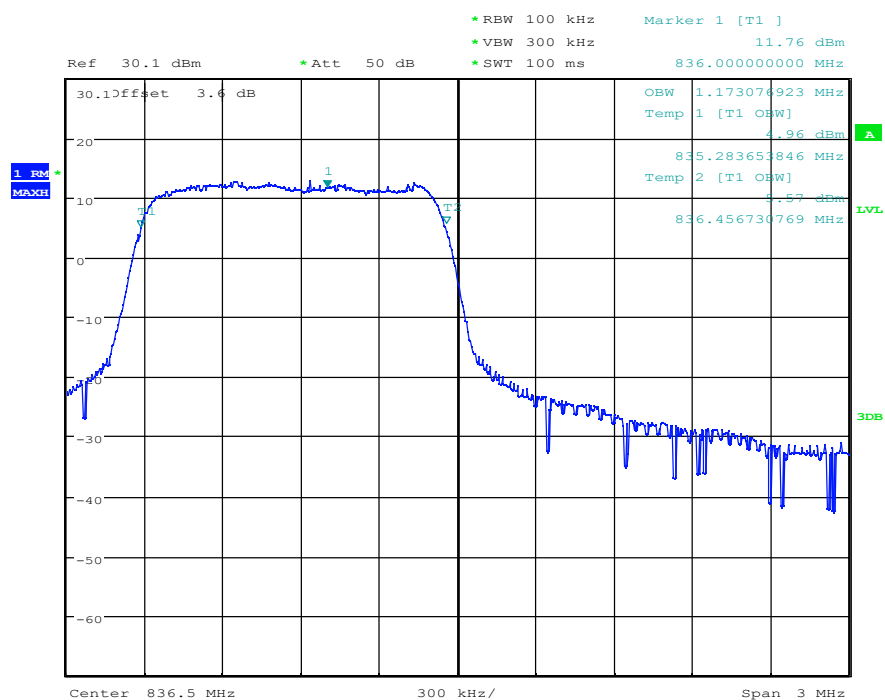


Report No.: I21W00004-WWAN_Rev2



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

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



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

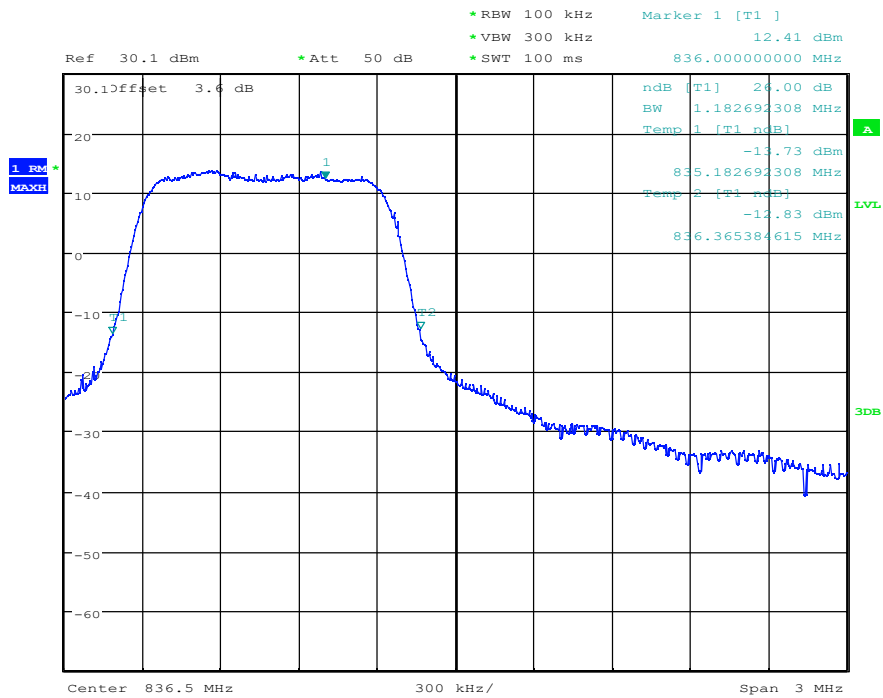
Band5-99% OBW-3MHz Bandwidth-QPSK

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

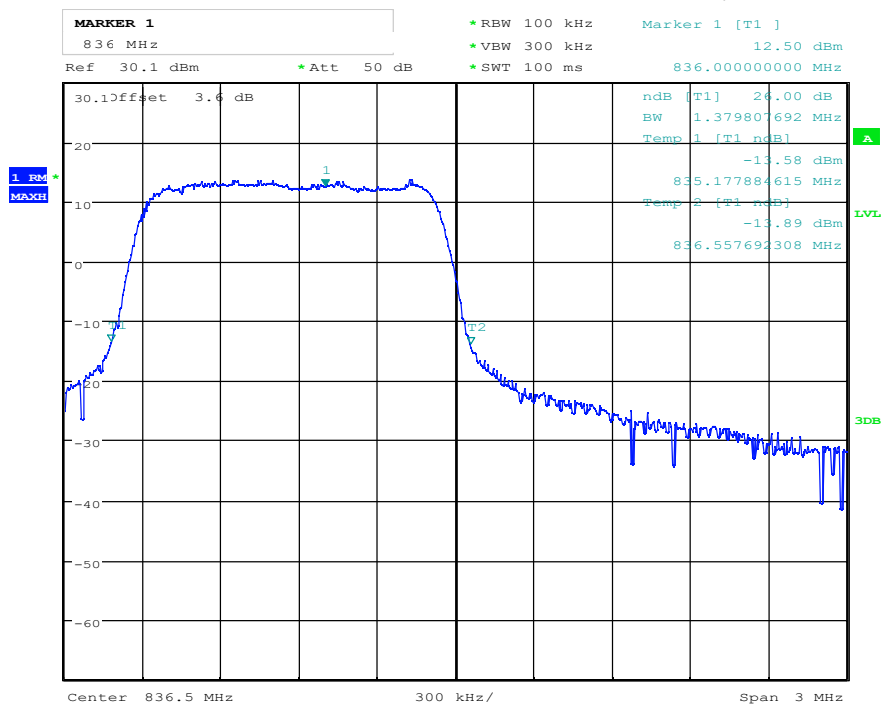


Report No.: I21W00004-WWAN_Rev2



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

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



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

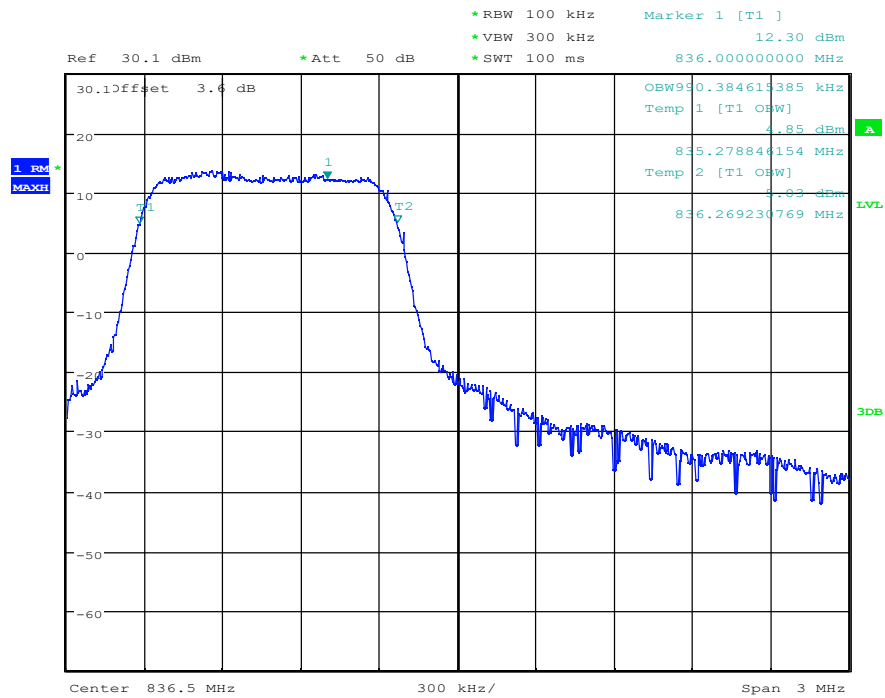
Band5-26dB OBW-5MHz Bandwidth-QPSK

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

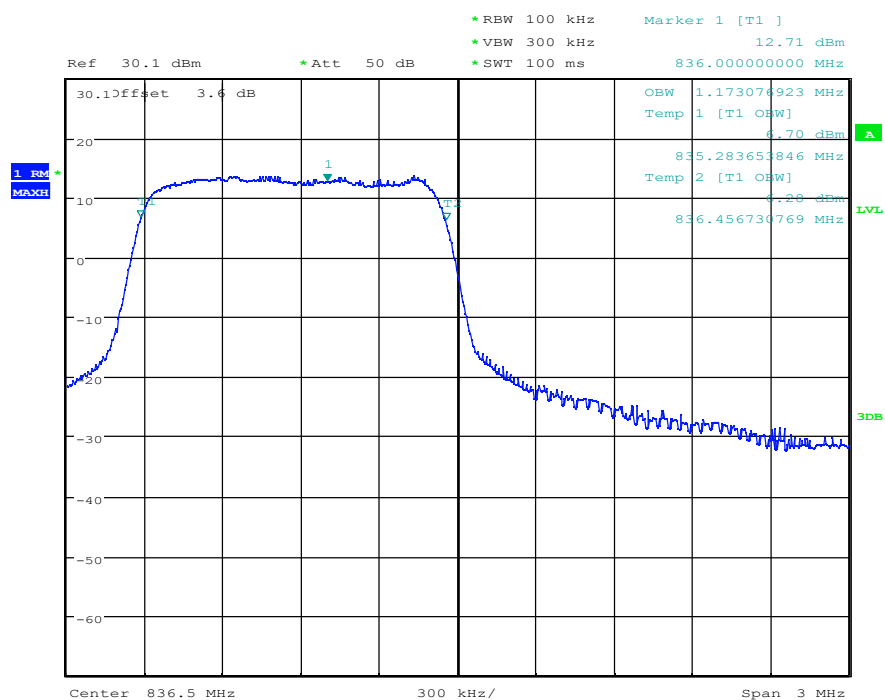


Report No.: I21W00004-WWAN_Rev2



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

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



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

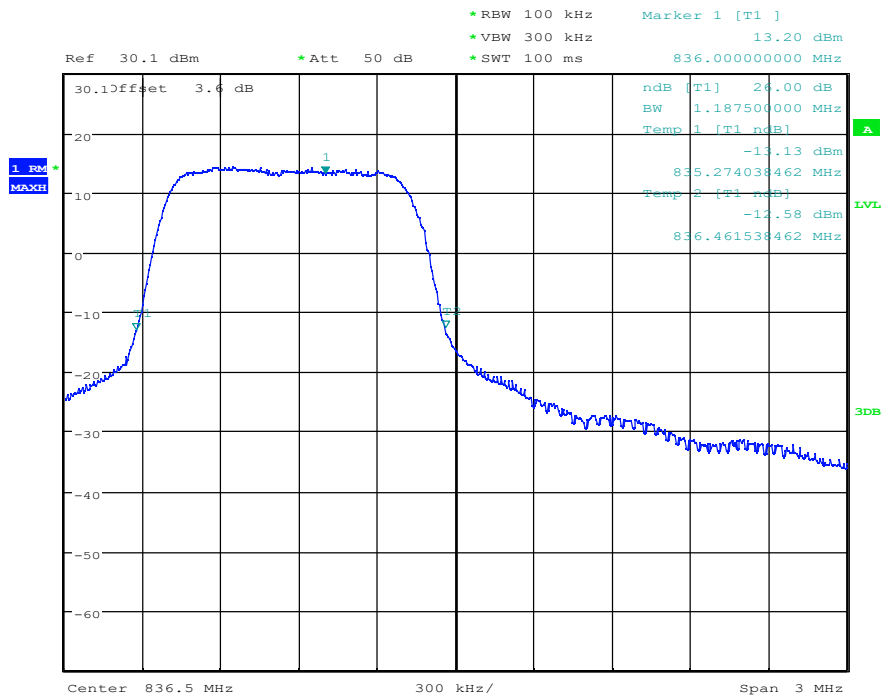
Band5-99% OBW-5MHz Bandwidth-QPSK

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

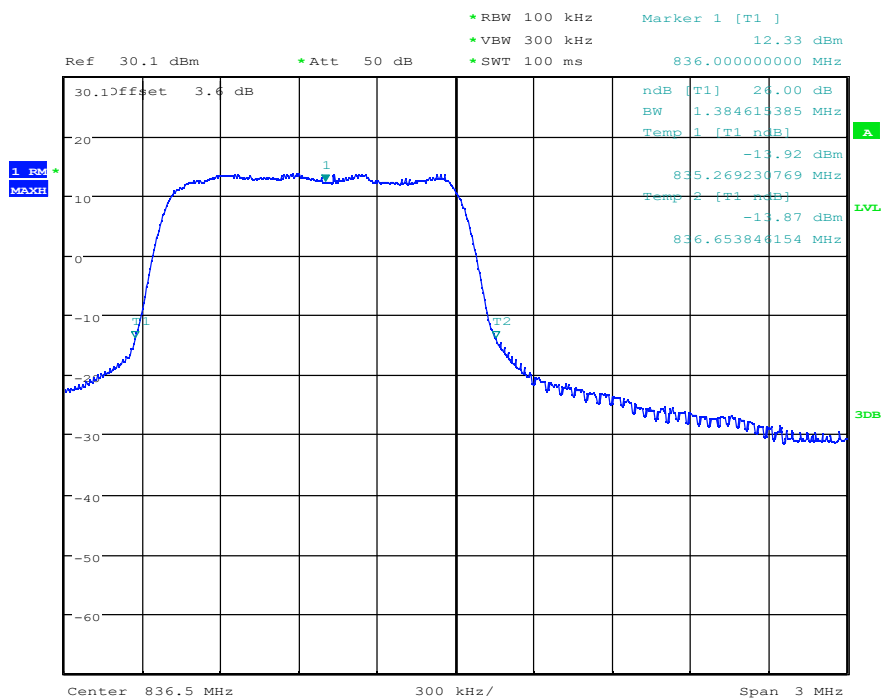


Report No.: I21W00004-WWAN_Rev2



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

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



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

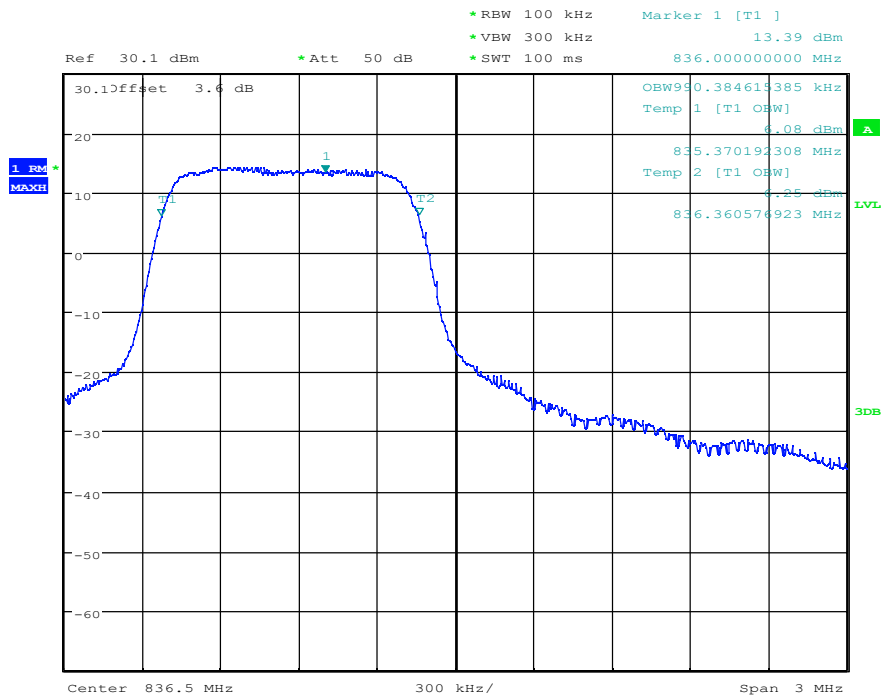
Band5-26dB OBW-10MHz Bandwidth-QPSK

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

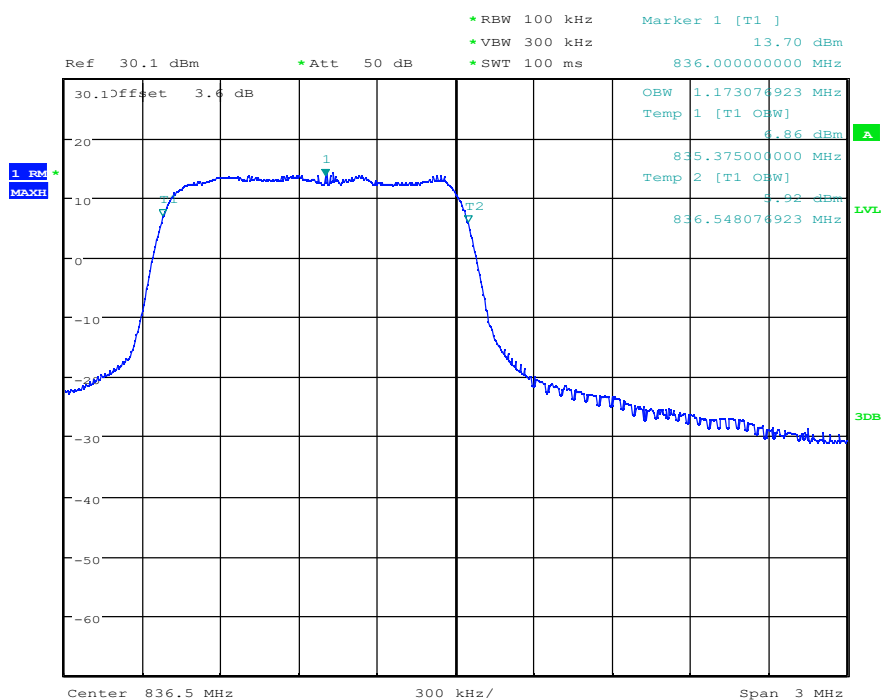


Report No.: I21W00004-WWAN_Rev2



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

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



Date: 28.DEC.2020 08:32:43

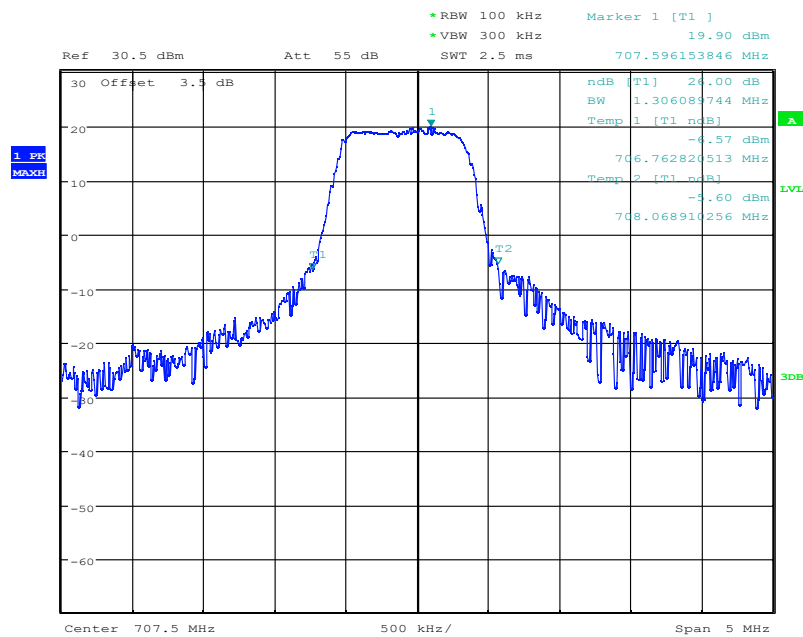
Band5-99% OBW-10MHz Bandwidth-QPSK

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

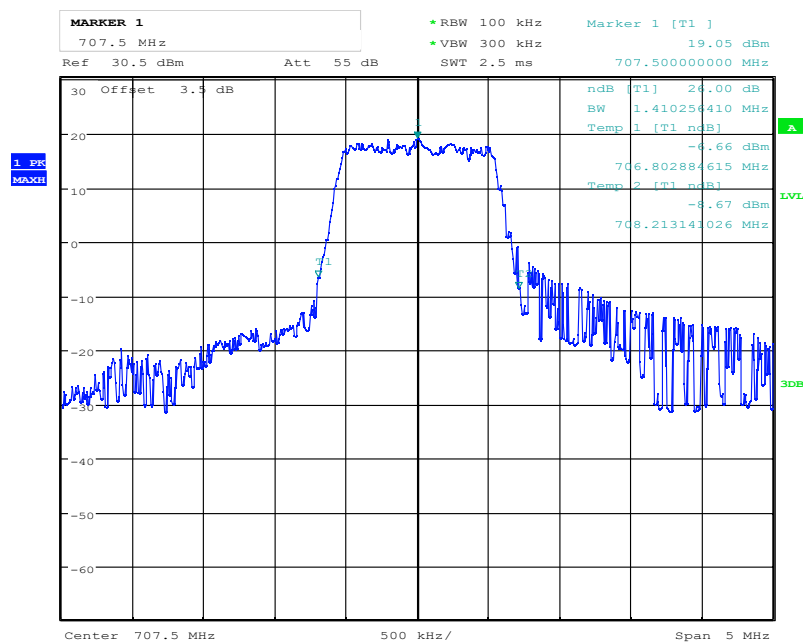


Report No.: I21W00004-WWAN_Rev2



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

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



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

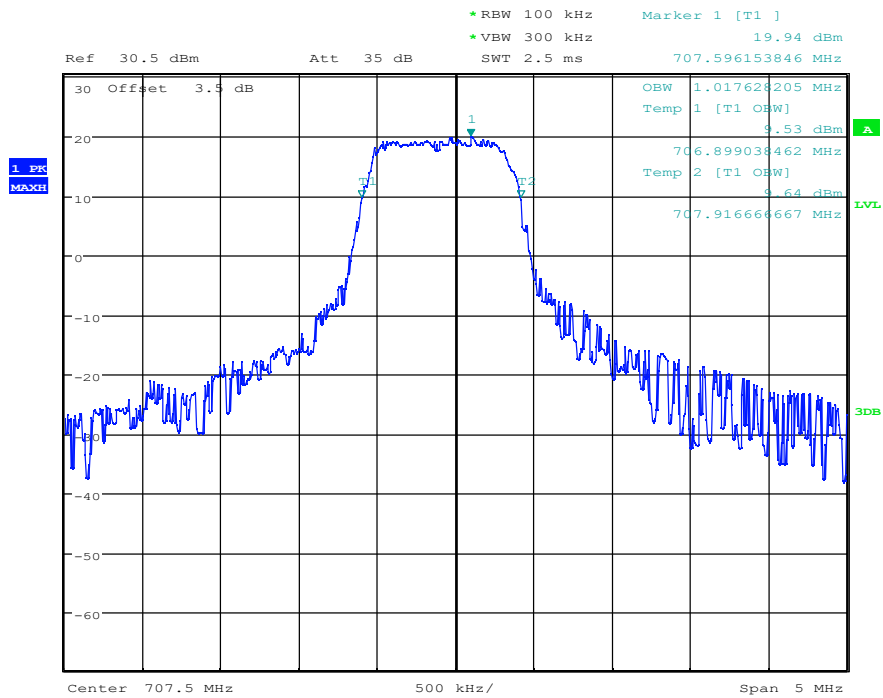
Band12-26dB OBW-1.4MHz Bandwidth-QPSK

Chongqing Academy of Information and Communication Technology

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

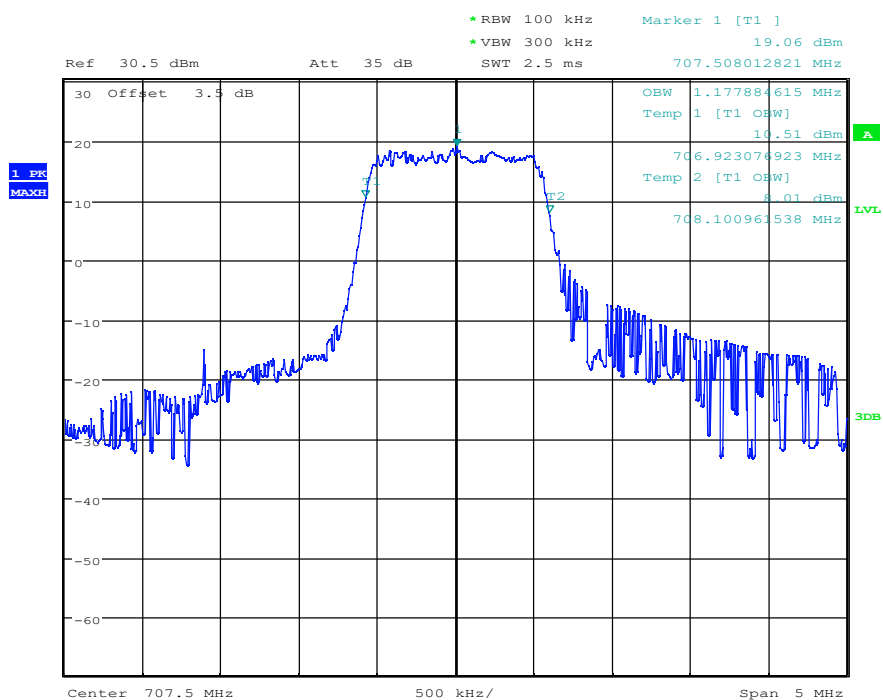


Report No.: I21W00004-WWAN_Rev2



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

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



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

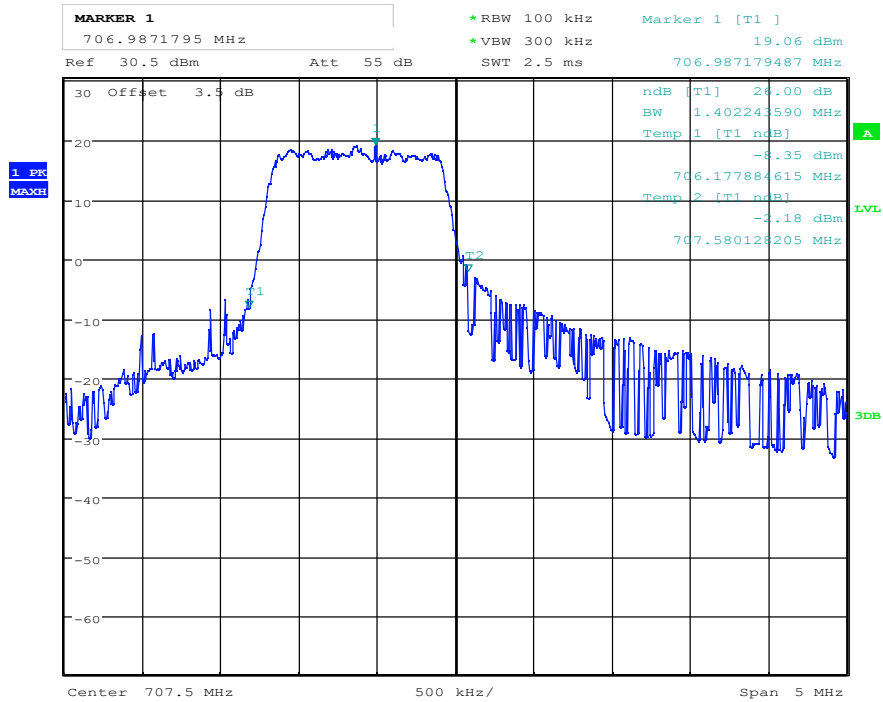
Band12-99% OBW-1.4MHz Bandwidth-QPSK

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

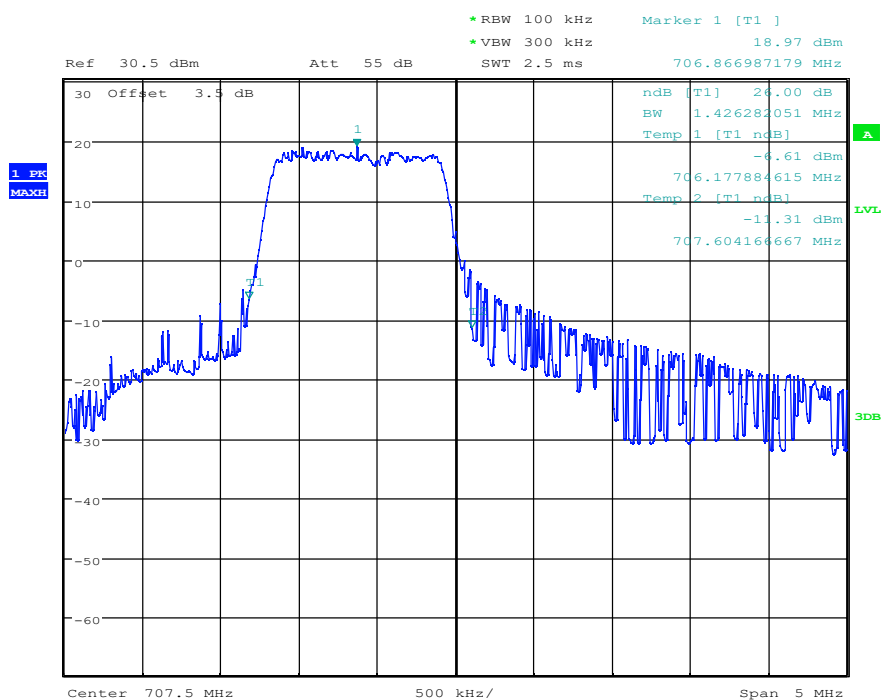


Report No.: I21W00004-WWAN_Rev2



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

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



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

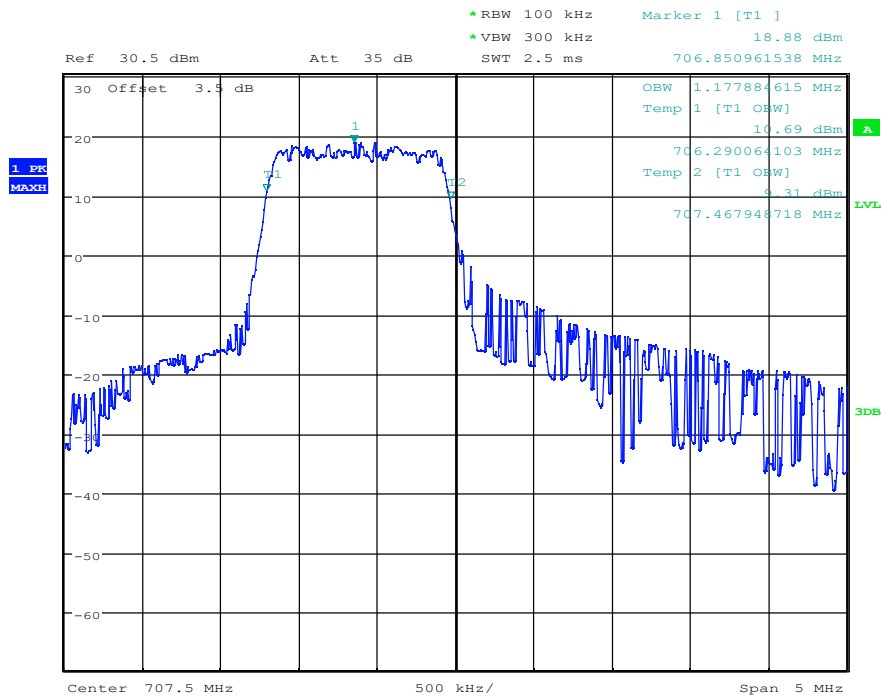
Band12-26dB OBW-3MHz Bandwidth-QPSK

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

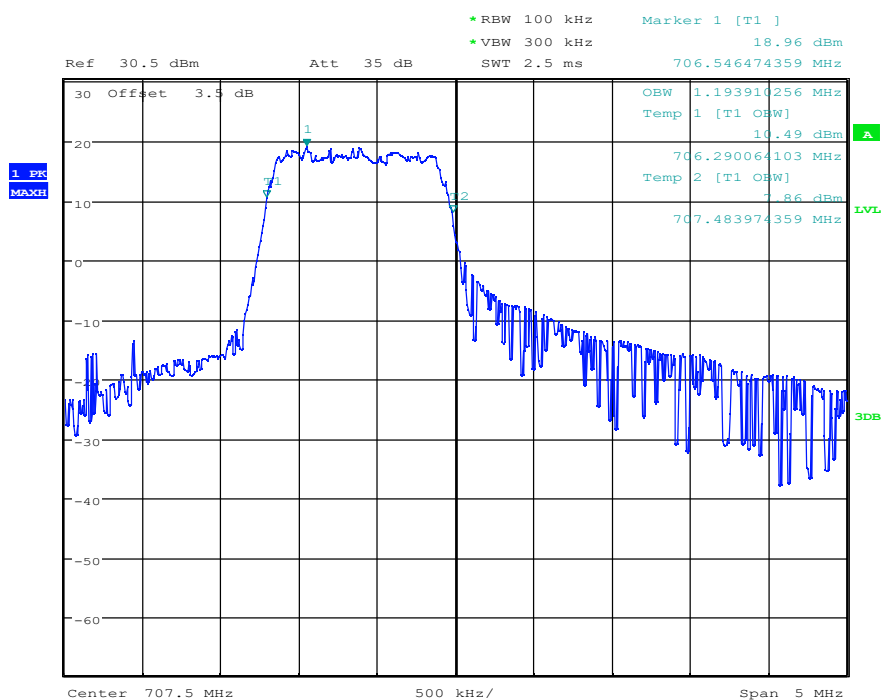


Report No.: I21W00004-WWAN_Rev2



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

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



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

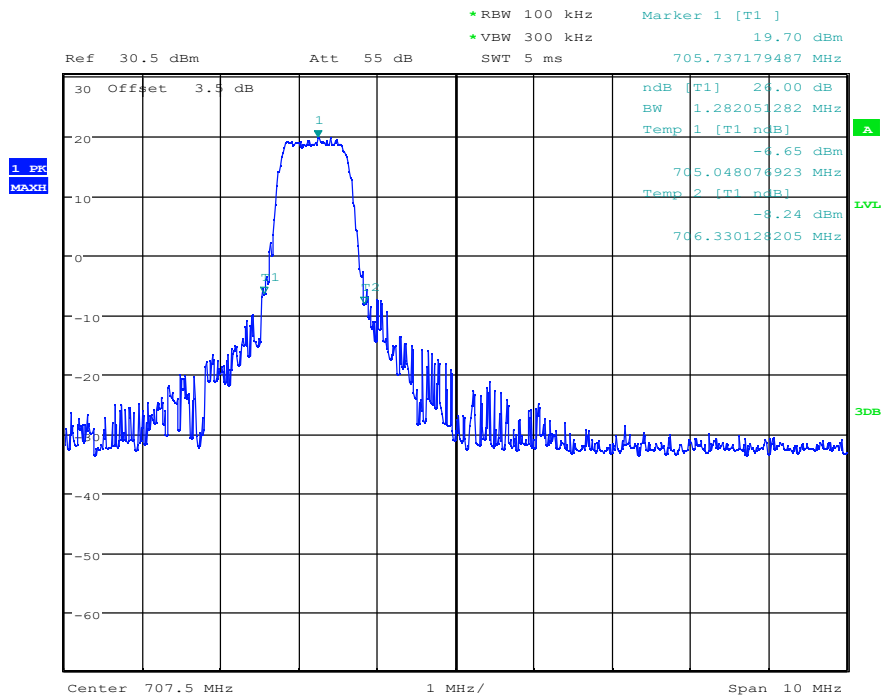
Band12-99% OBW-3MHz Bandwidth-QPSK

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

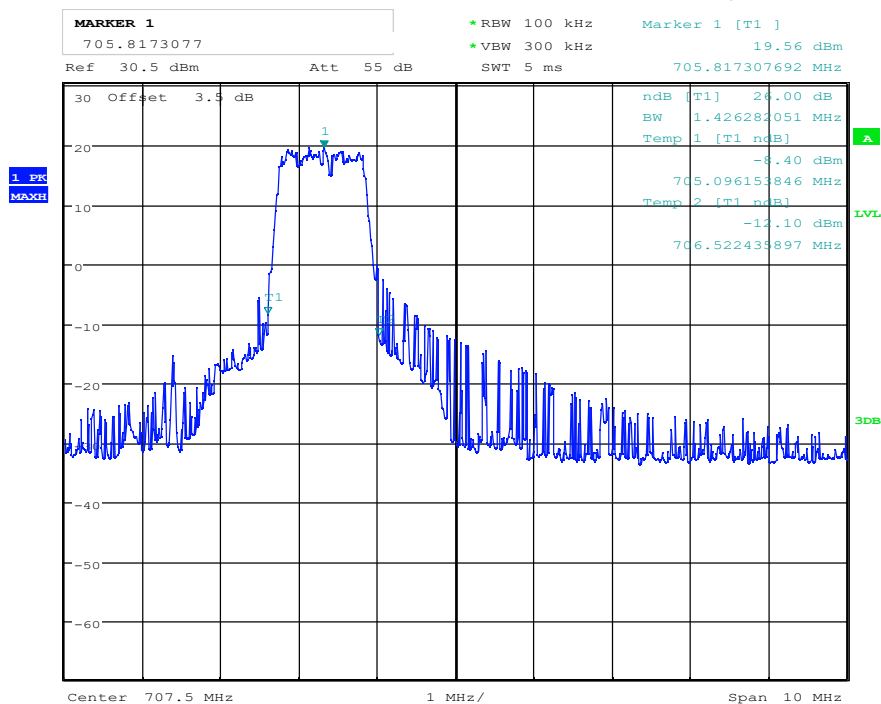


Report No.: I21W00004-WWAN_Rev2



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

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



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

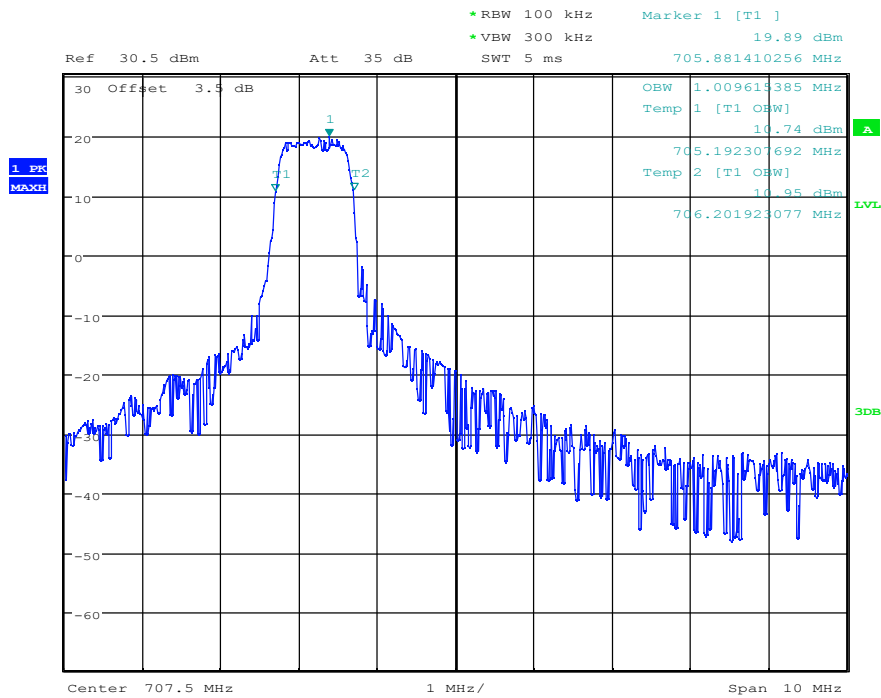
Band12-26dB OBW-5MHz Bandwidth-QPSK

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

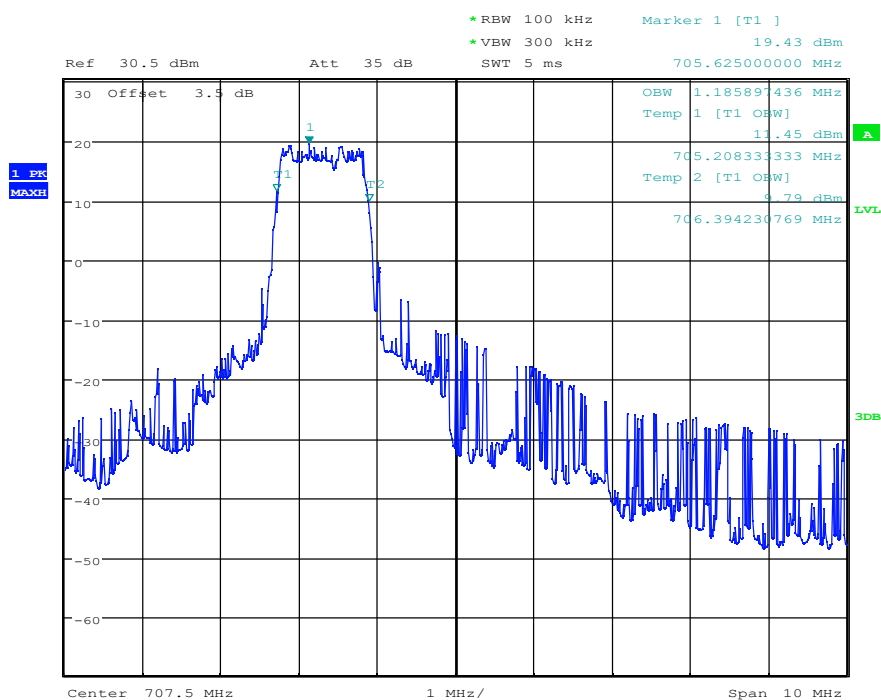


Report No.: I21W00004-WWAN_Rev2



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

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



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

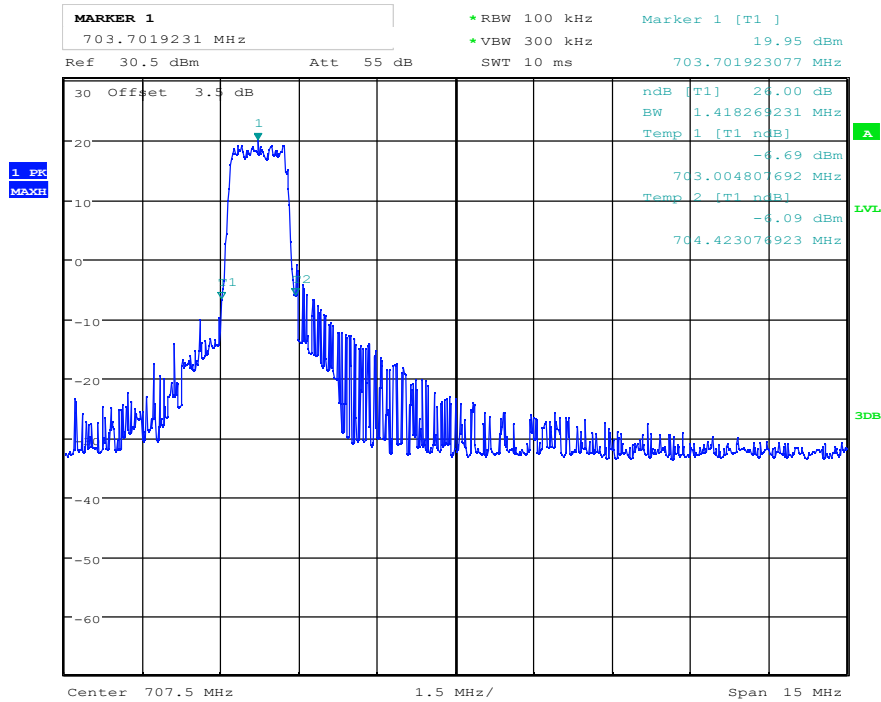
Band12-99% OBW-5MHz Bandwidth-QPSK

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

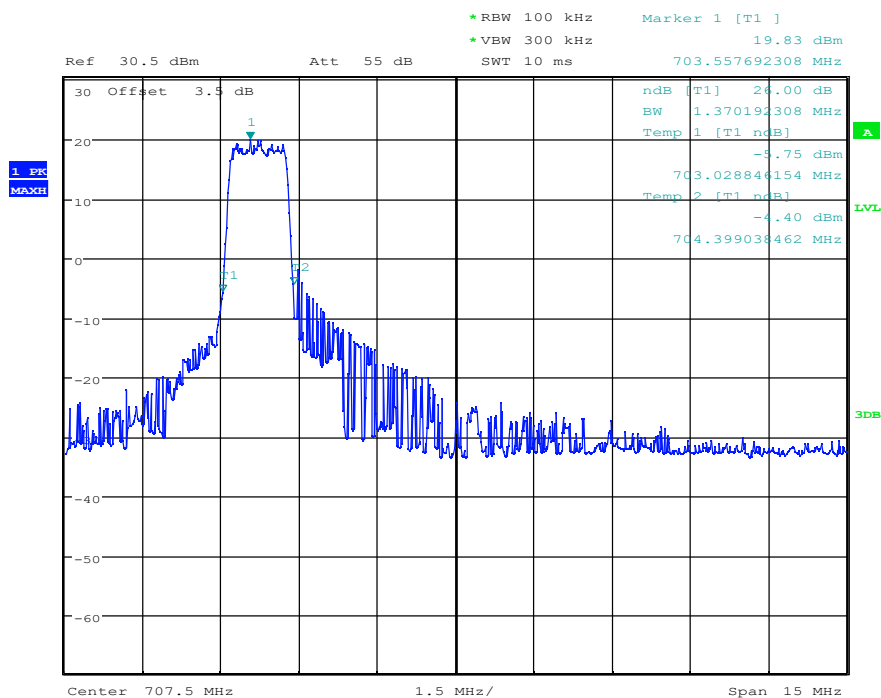


Report No.: I21W00004-WWAN_Rev2



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

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



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

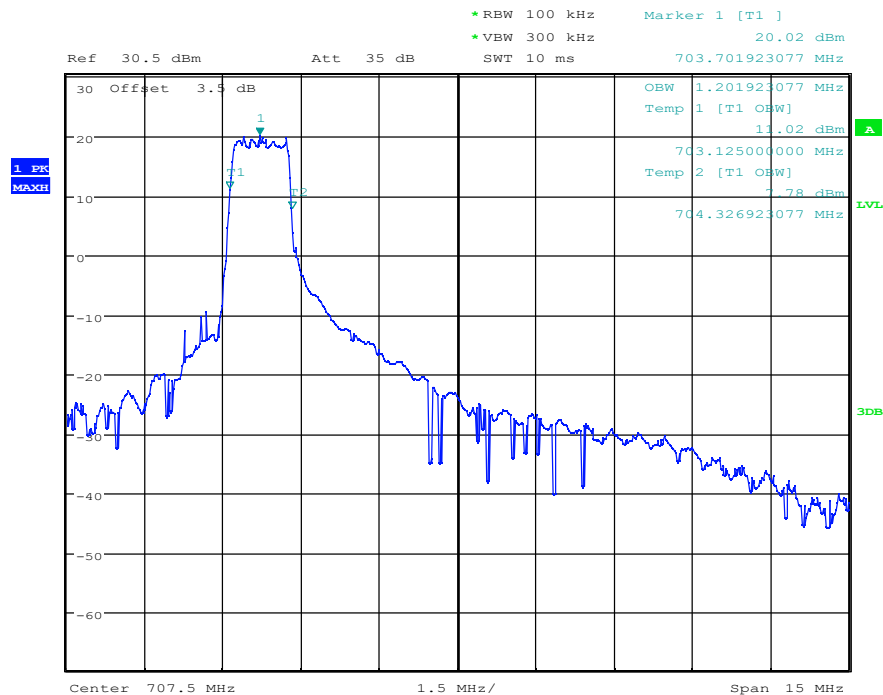
Band12-26dB OBW-10MHz Bandwidth-QPSK

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

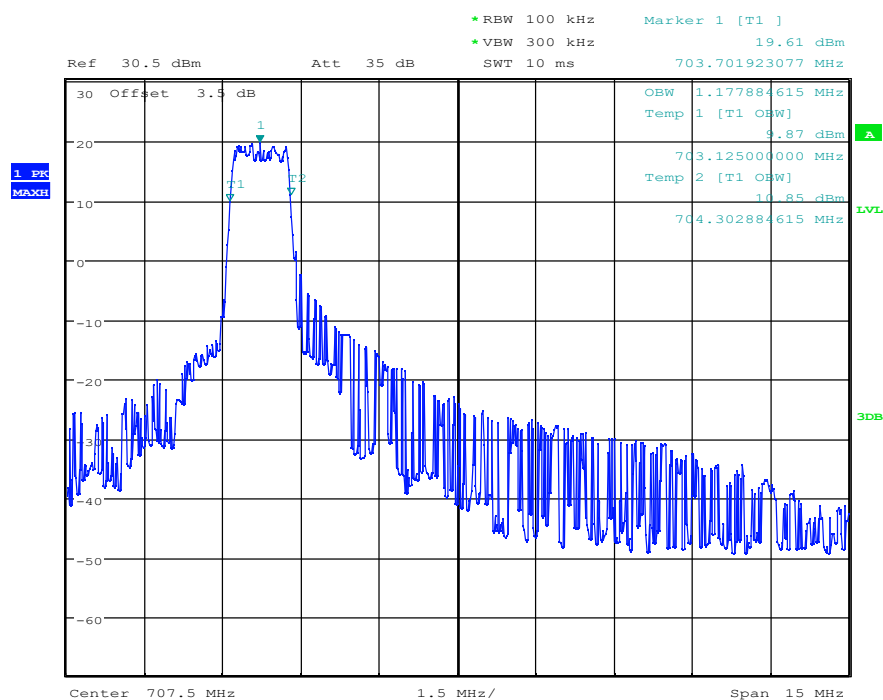


Report No.: I21W00004-WWAN_Rev2



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

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



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

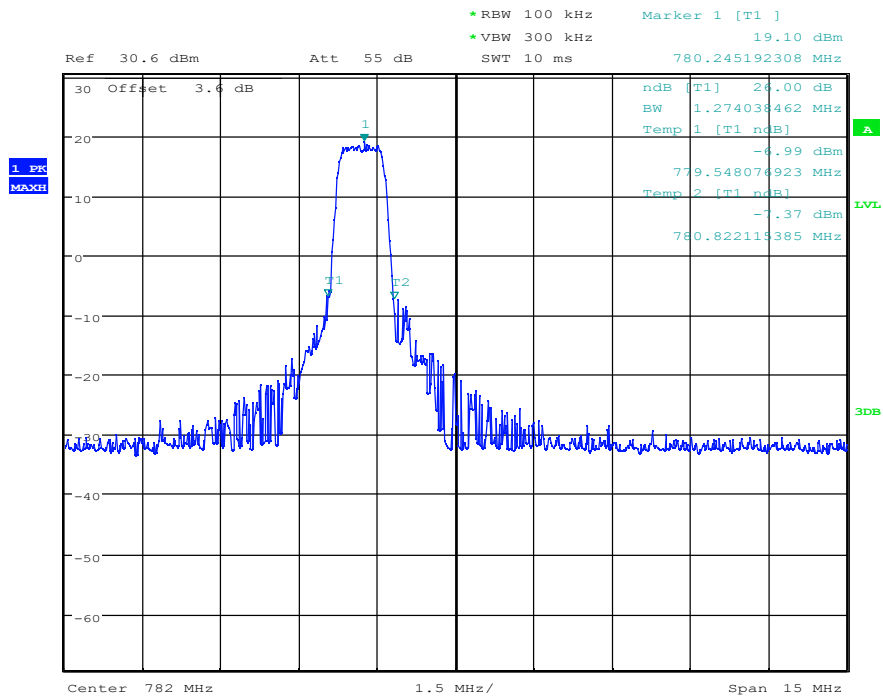
Band12-99% OBW-10MHz Bandwidth-QPSK

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

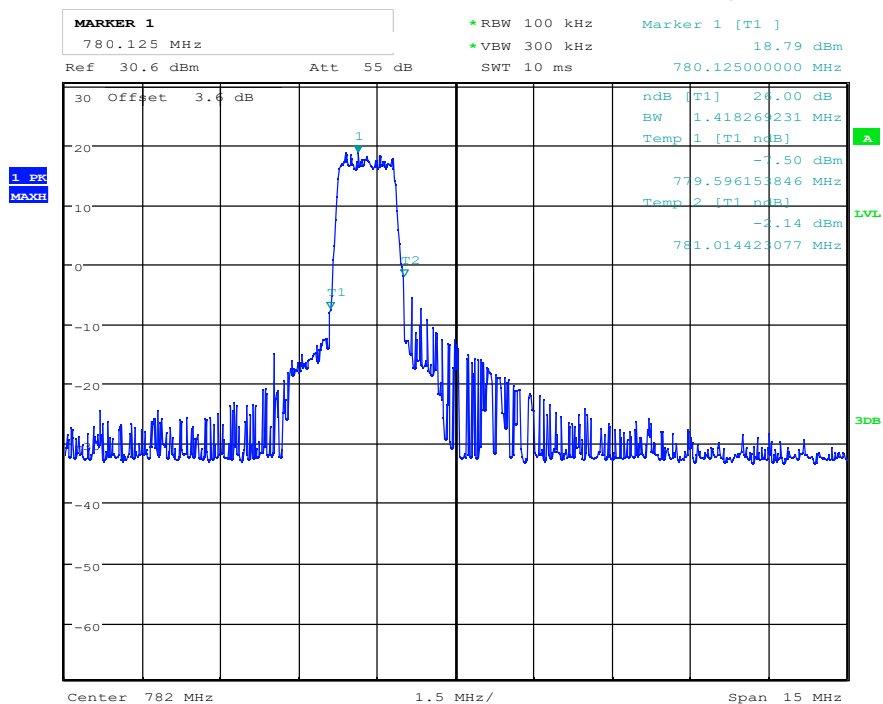


Report No.: I21W00004-WWAN_Rev2



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

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



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

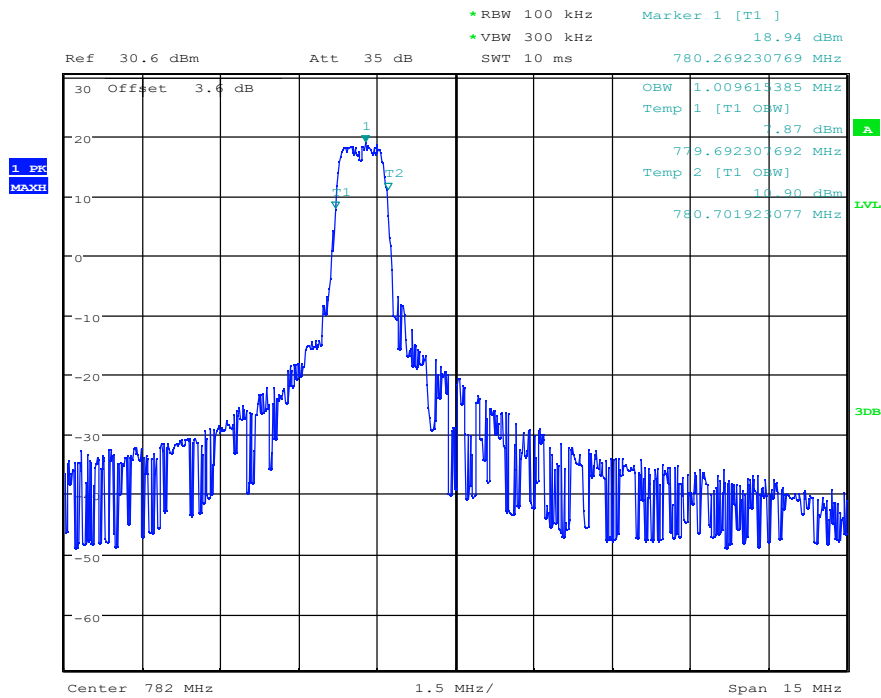
Band13-26dB OBW-5MHz Bandwidth-QPSK

Chongqing Academy of Information and Communication Technology

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

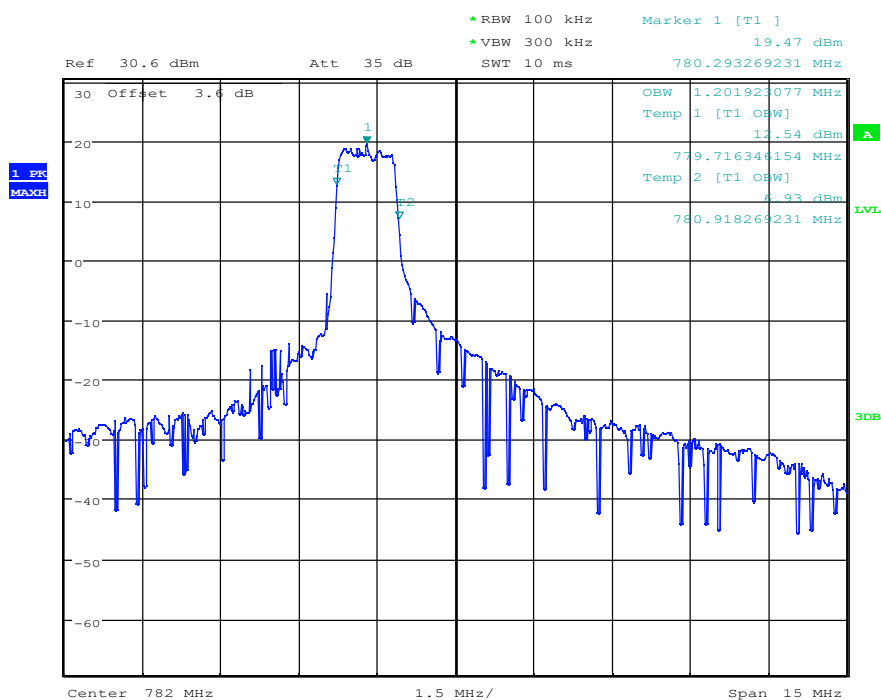


Report No.: I21W00004-WWAN_Rev2



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

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



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

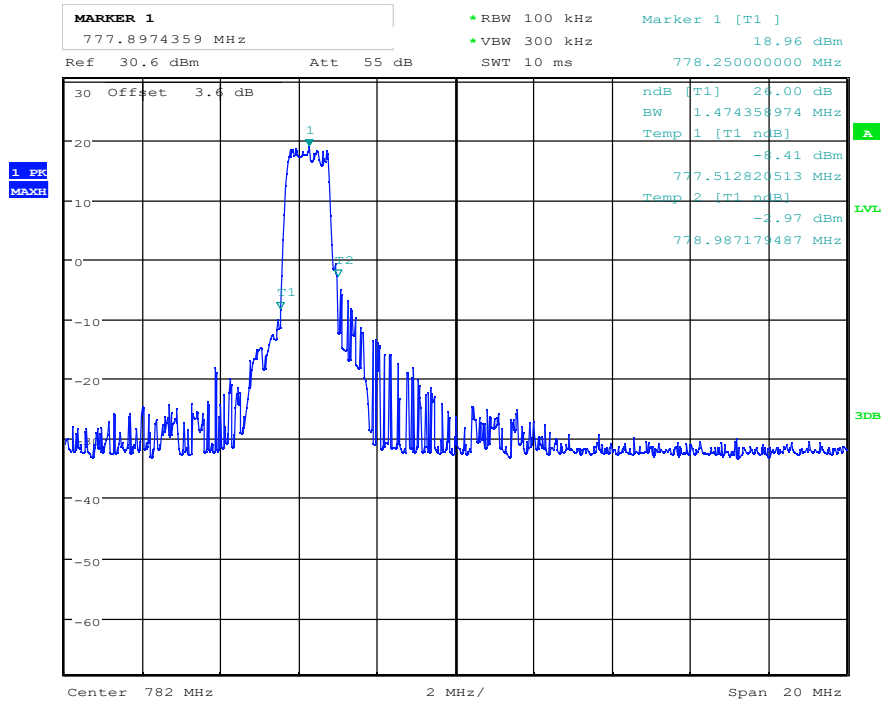
Band13-99% OBW-5MHz Bandwidth-QPSK

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

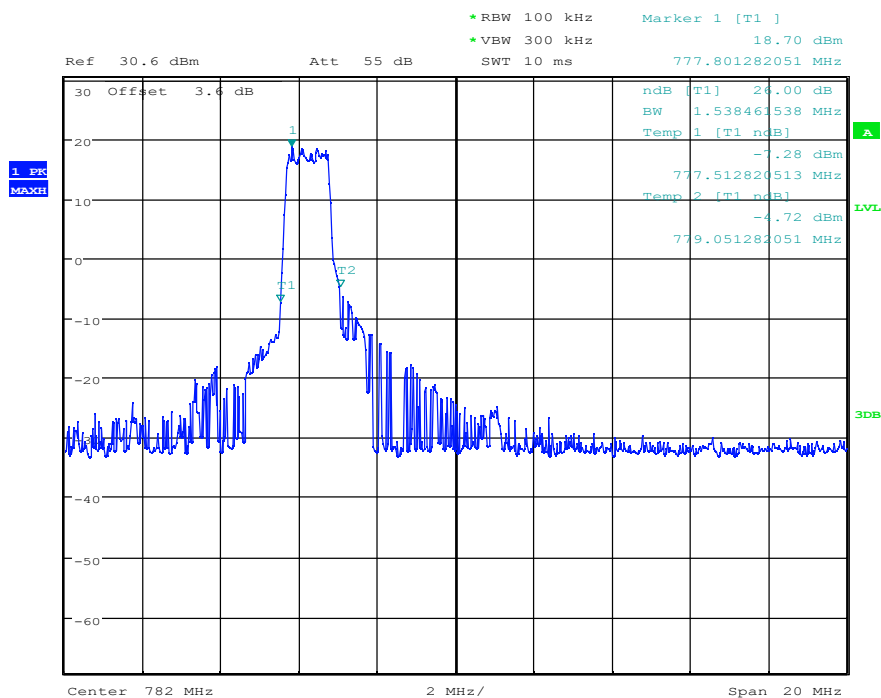


Report No.: I21W00004-WWAN_Rev2



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

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



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

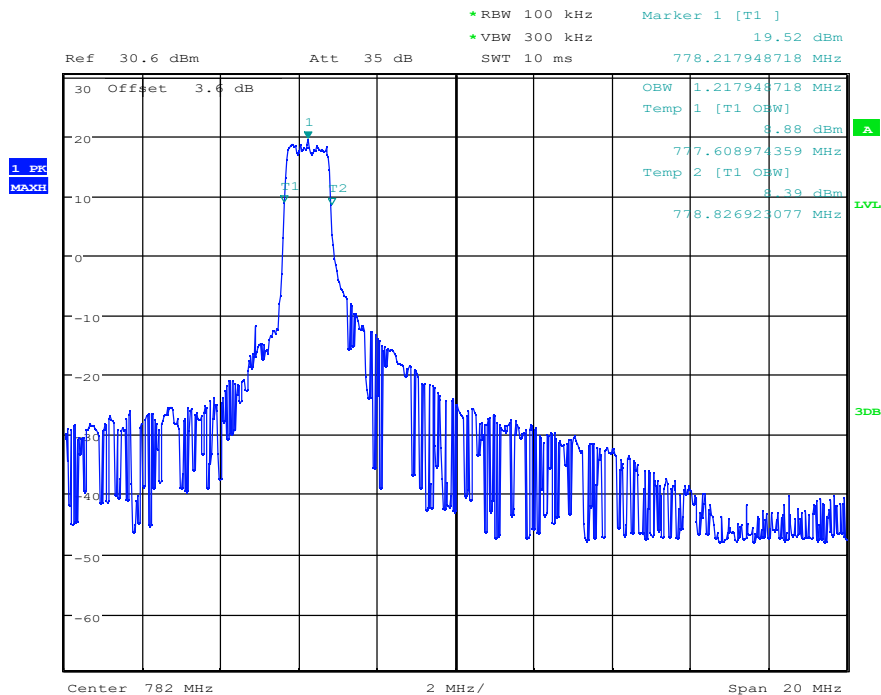
Band13-26dB OBW-10MHz Bandwidth-QPSK

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

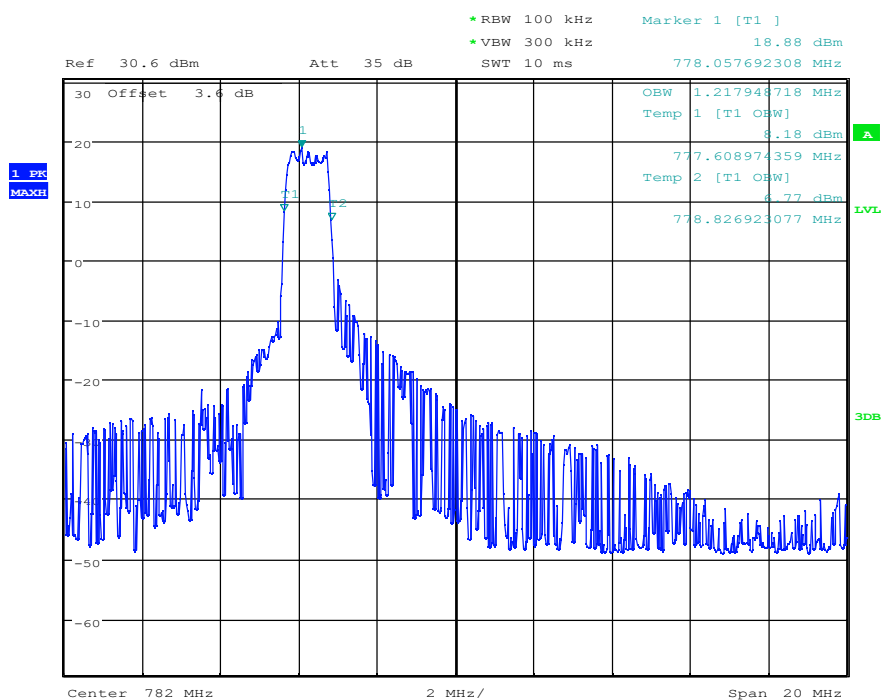


Report No.: I21W00004-WWAN_Rev2



Date: 26.DEC.2020 16:08:21

Band13-99% OBW-10MHz Bandwidth-16QAM



Date: 26.DEC.2020 16:09:45

Band13-99% 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.: I21W00004-WWAN_Rev2

5.3 Conducted Spurious Emission

Specifications:	FCC Part 2.1051, 2.1053, 24.238, 22.917, 27.53
DUT Serial Number:	866884045634250
Test conditions:	Ambient Temperature:15℃-35℃ Relative Humidity:30%-60% Air pressure: 86-106kPa
Test Results:	Pass

Limit Level Construction:

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log(P)$ dB, so the limit level is:

$$P(\text{dBm}) - (43 + 10 \log(P)) \text{ dB} = -13\text{dBm}$$

Measurement Uncertainty:

Item	Uncertainty	
Expanded Uncertainty	$9\text{kHz} < f \leq 4\text{GHz}$	0.71 dB (k=2)
	$4\text{GHz} \leq f < 12.75\text{GHz}$	0.74 dB (k=2)
	$12.75\text{GHz} \leq f < 26\text{GHz}$	2.70 dB (k=2)

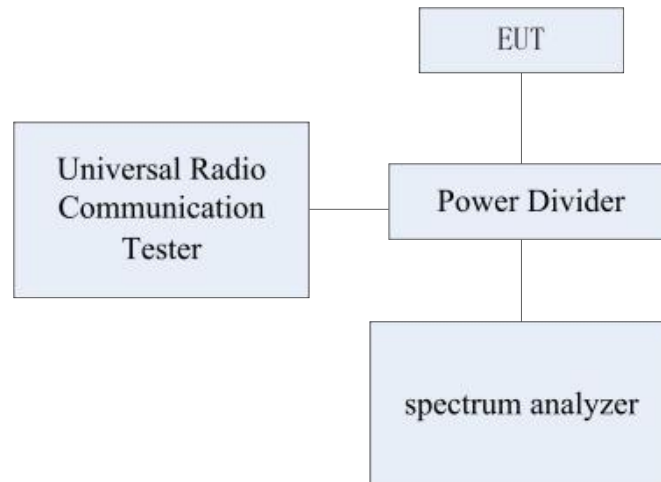
Chongqing Academy of Information and Communication Technology

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.: I21W00004-WWAN_Rev2

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.



Test Method:

The measurement was performed accordance with section 2.2.13 of ANSI/TIA-603-E: Land Mobile FM or PM Communications Equipment Measurement and Performance Standards.

The measurement was performed accordance with section 2.2.13 of ANSI/TIA-603-E-2010: Land Mobile FM or PM Communications Equipment Measurement and Performance Standards.

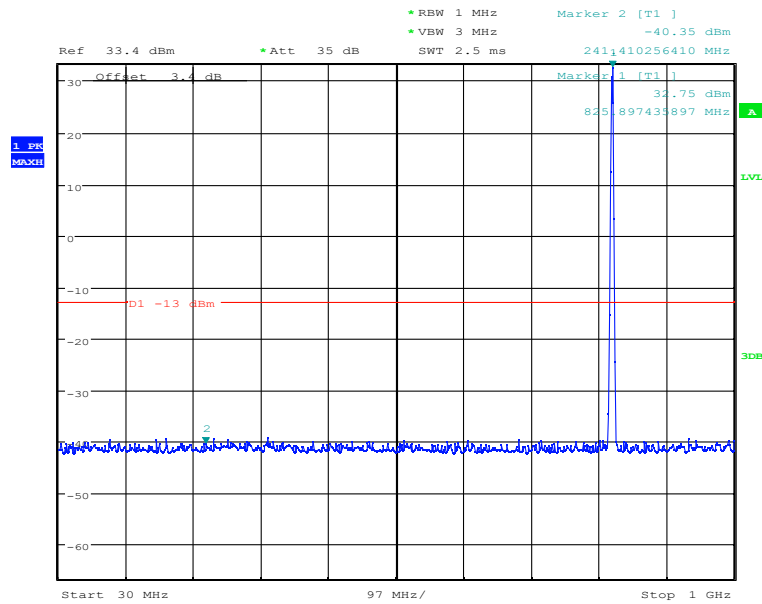
The RF output of the transmitter was connected to a spectrum analyzer through a calibrated coaxial cable. Sufficient scans were taken to show the out-of-Band emissions, if any, up to 10th harmonic. The EUT was scanned for spurious emissions from 30MHz to 20GHz with sufficient Bandwidth and video resolution. The spectrum analyzer was set to Maximum hold mode to ensure that the worst-case emissions were captured.

Note: --.



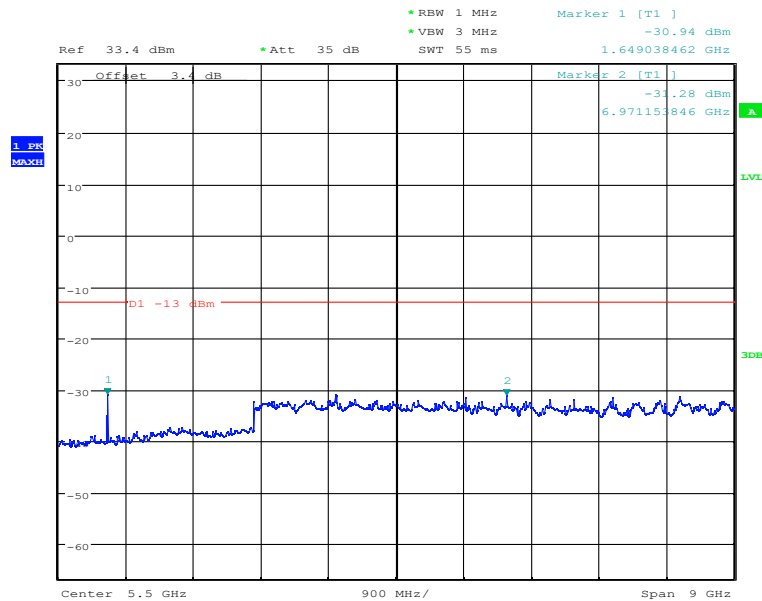
Report No.: I21W00004-WWAN_Rev2

5.3.1 GSM850 Conducted Spurious Emission Results



Date: 2.JAN.2021 04:35:49

GMSK-Low channel-824.200 MHz-30MHz to 1GHz



Date: 2.JAN.2021 04:36:31

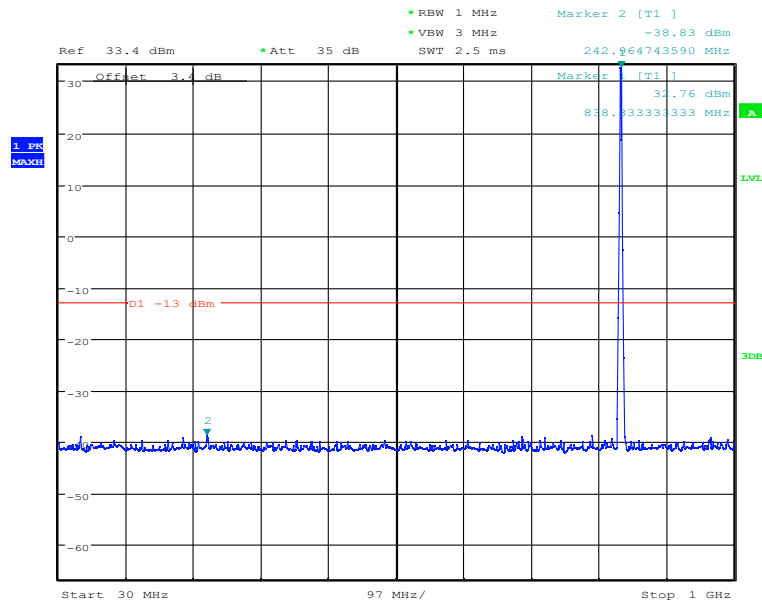
GMSK-Low channel-824.200 MHz, 1GHz to 10GHz

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

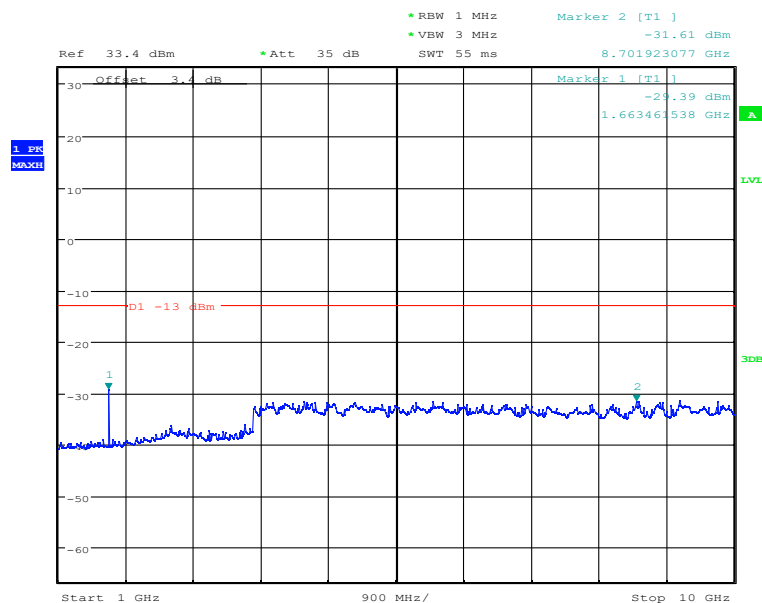


Report No.: I21W00004-WWAN_Rev2



Date: 2.JAN.2021 04:35:25

GMSK- Mid Channel-836.6 MHz- 30MHz to 1GHz



Date: 2.JAN.2021 04:34:51

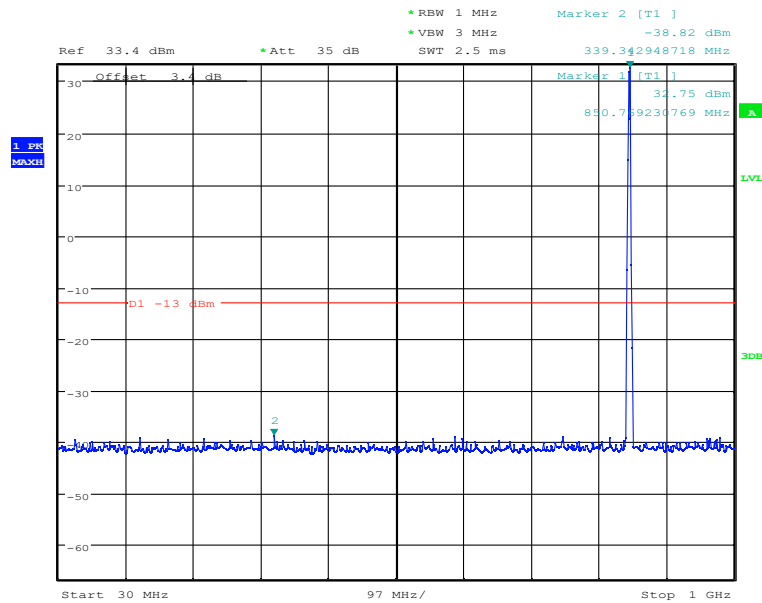
GMSK-Mid Channel-836.6 MHz-1GHz to 10GHz

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

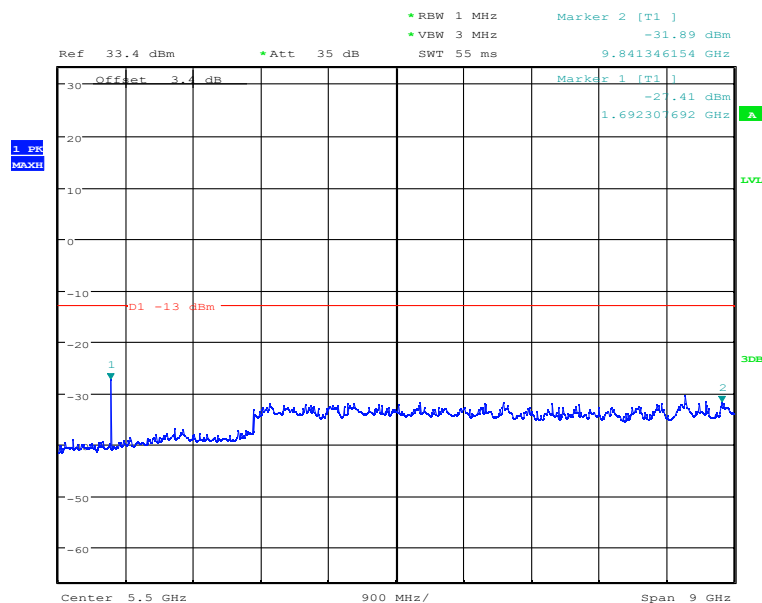


Report No.: I21W00004-WWAN_Rev2



Date: 2.JAN.2021 04:37:25

GMSK- High Channel-848.8 MHz-30MHz to 1GHz



Date: 2.JAN.2021 04:36:59

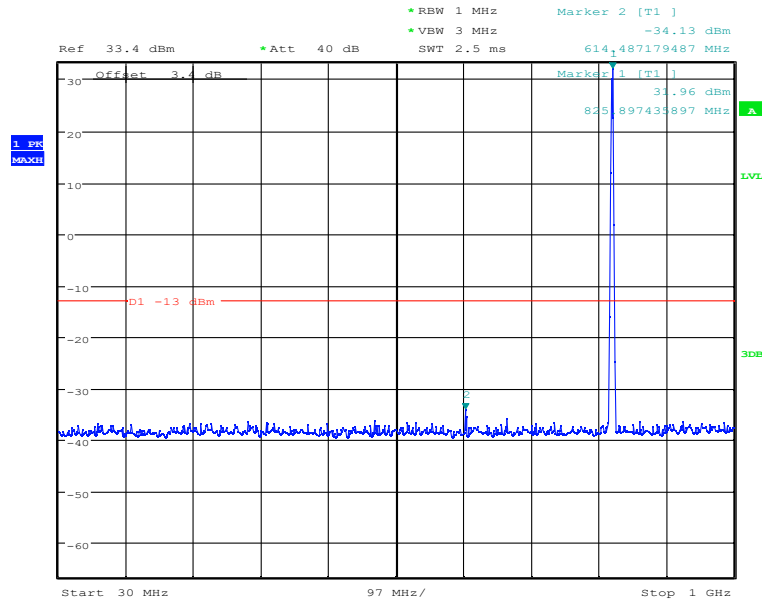
GMSK- High Channel-848.8 MHz-1GHz to 10GHz

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

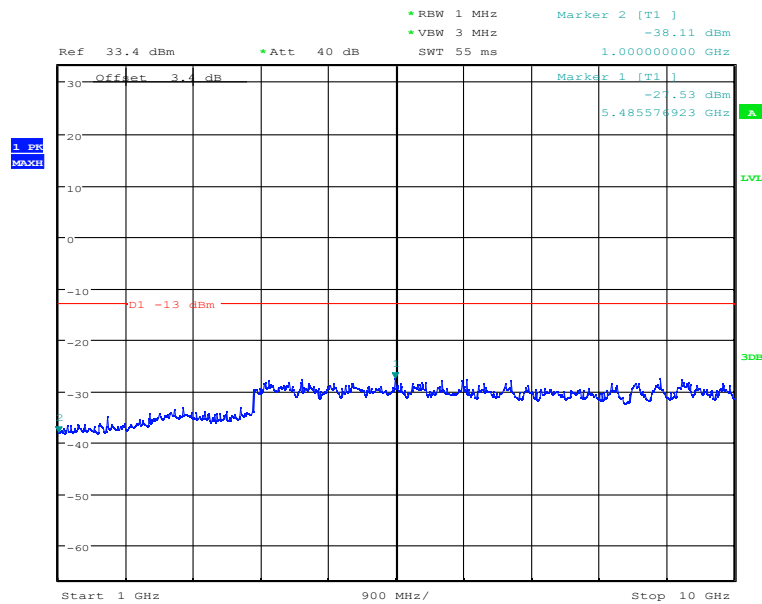


Report No.: I21W00004-WWAN_Rev2



Date: 2.JAN.2021 04:42:18

8PSK- Low channel-824.200 MHz-30MHz to 1GHz



Date: 2.JAN.2021 04:42:34

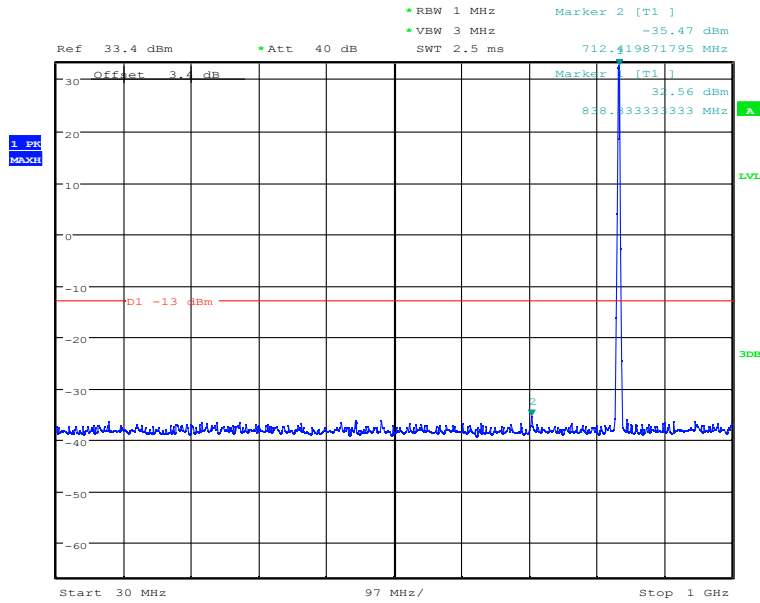
8PSK-Low channel-824.200 MHz-1GHz to 10GHz

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

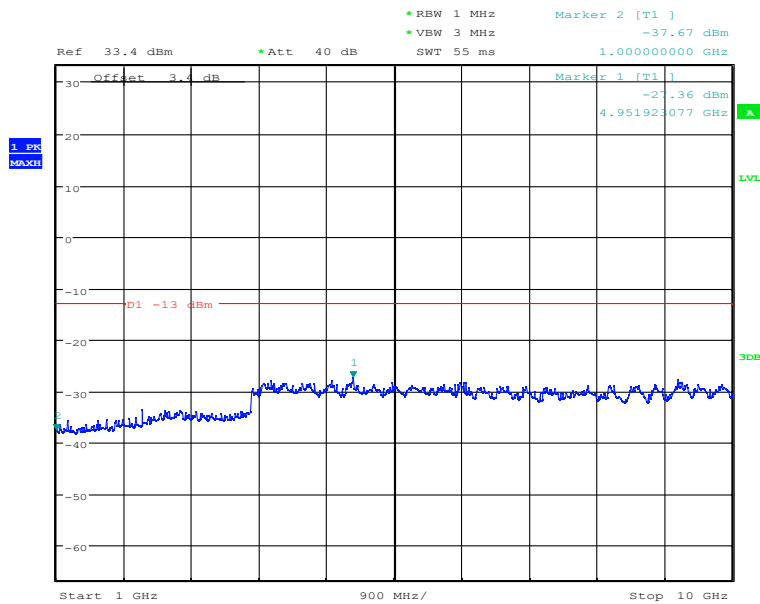


Report No.: I21W00004-WWAN_Rev2



Date: 2.JAN.2021 04:41:58

8PSK-Mid Channel-836.6 MHz-30MHz to 1GHz



Date: 2.JAN.2021 04:41:33

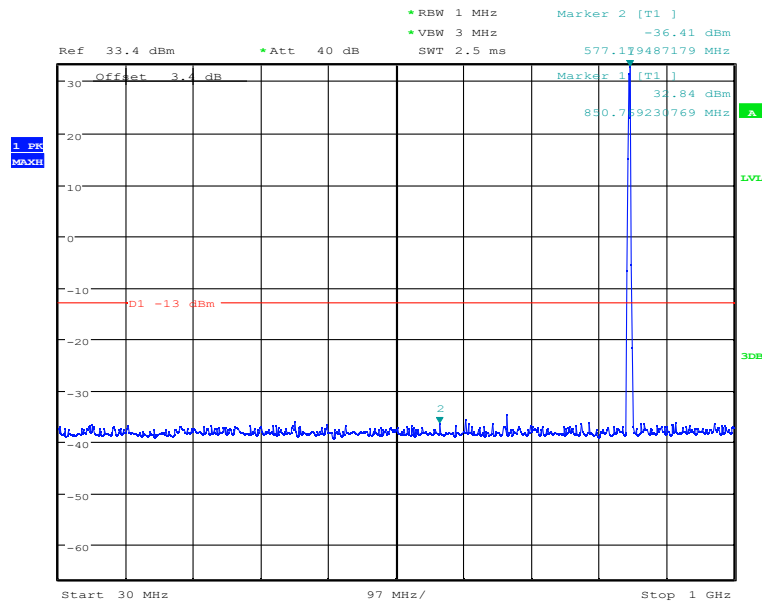
8PSK-Mid Channel-836.6 MHz-1GHz to 10GHz

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

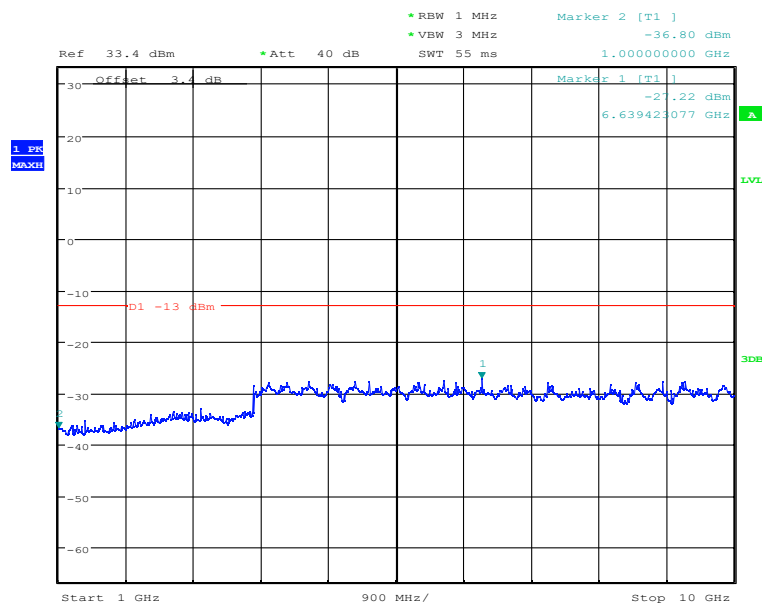


Report No.: I21W00004-WWAN_Rev2



Date: 2.JAN.2021 04:40:51

8PSK-High Channel-848.8 MHz-30MHz to 1GHz



Date: 2.JAN.2021 04:41:14

8PSK-High Channel-848.8 MHz-1GHz to 10GHz

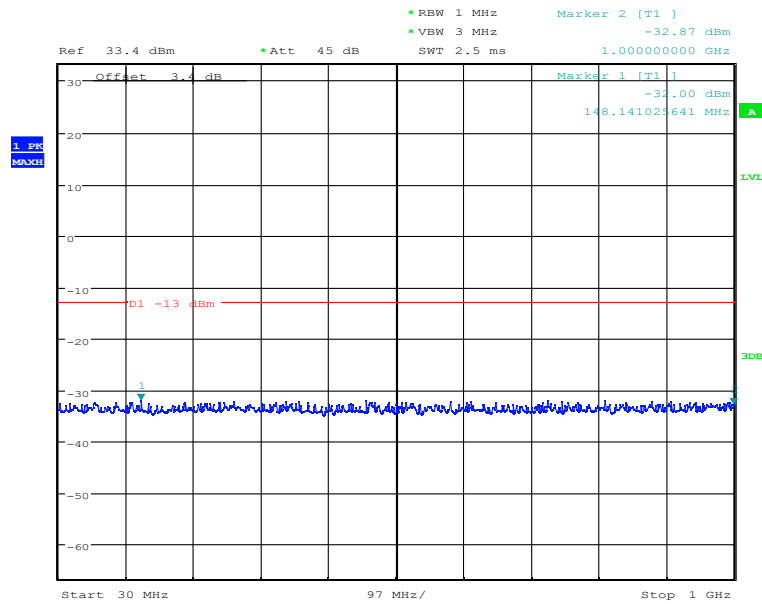
Chongqing Academy of Information and Communication Technology

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



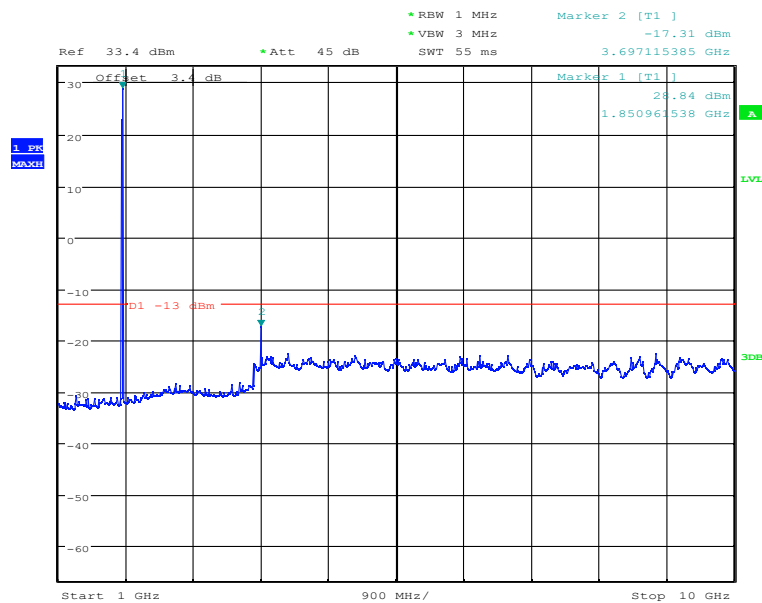
Report No.: I21W00004-WWAN_Rev2

5.3.2 PCS1900 Conducted Spurious Emission Results



Date: 2.JAN.2021 04:48:23

GMSK-Low channel-1850.2 MHz-30MHz to 1GHz



Date: 2.JAN.2021 04:48:05

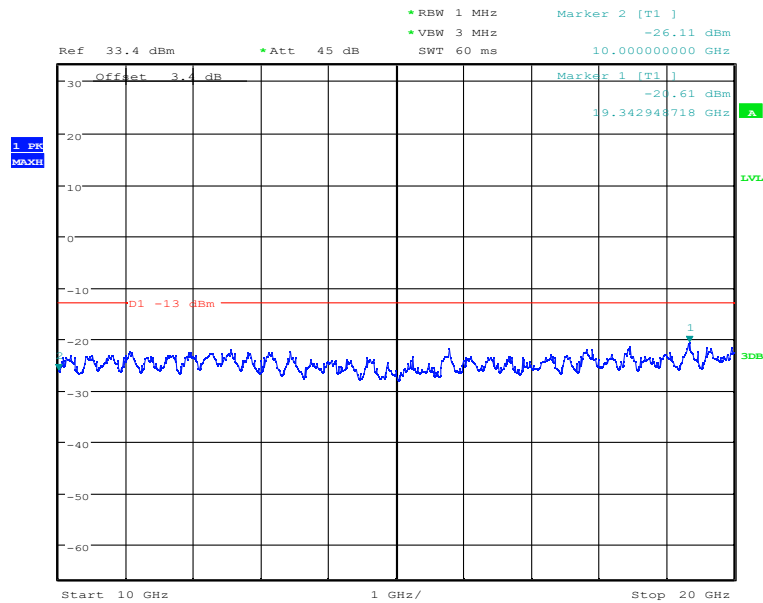
GMSK-Low channel-1850.2 MHz-1GHz to 10GHz

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

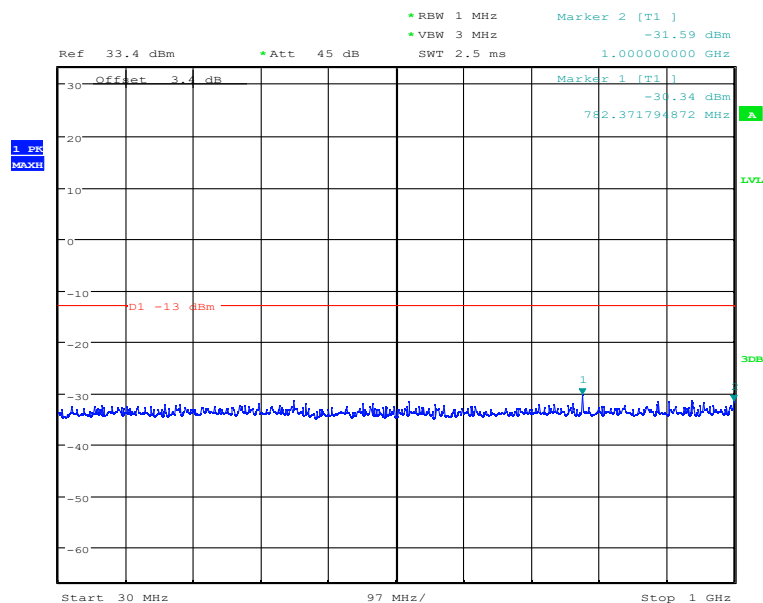


Report No.: I21W00004-WWAN_Rev2



Date: 2.JAN.2021 04:47:36

GMSK-Low channel-1850.2 MHz-10GHz to 20GHz



Date: 2.JAN.2021 04:46:49

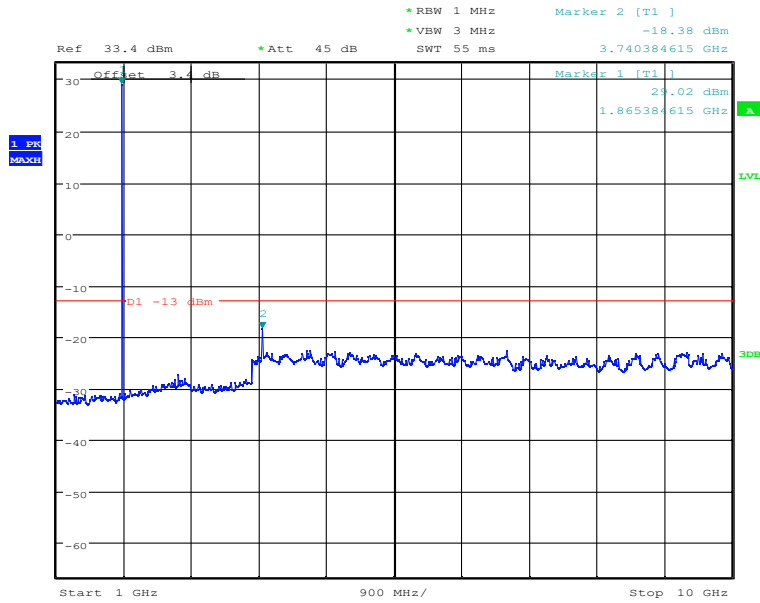
GMSK-Middle channel-1880.0 MHz-30MHz to 1GHz

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

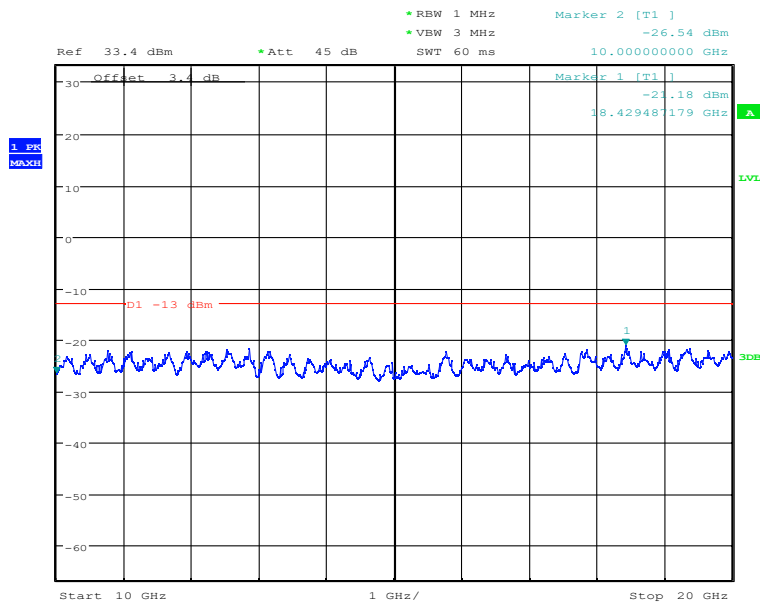


Report No.: I21W00004-WWAN_Rev2



Date: 2.JAN.2021 04:46:30

GMSK-Middle channel-1880.0 MHz-1GHz to 10GHz



Date: 2.JAN.2021 04:47:15

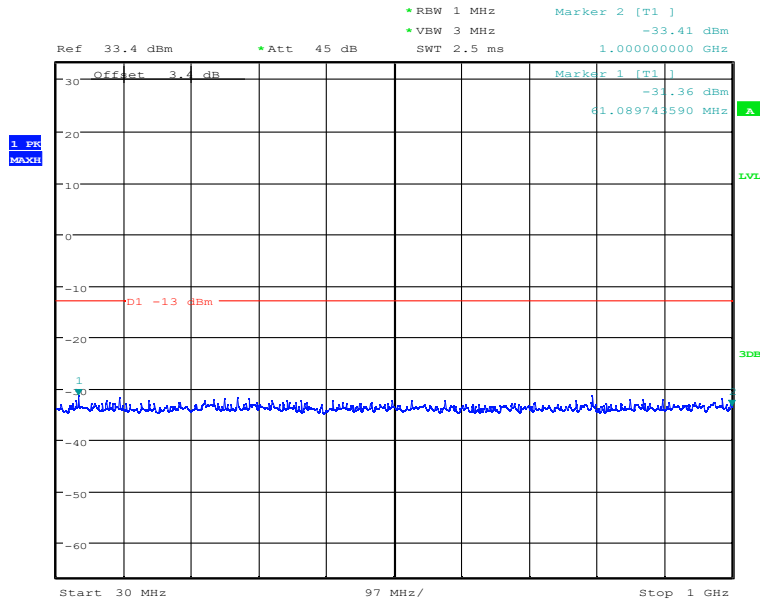
GMSK-Middle channel-1880.0 MHz-10GHz to 20GHz

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

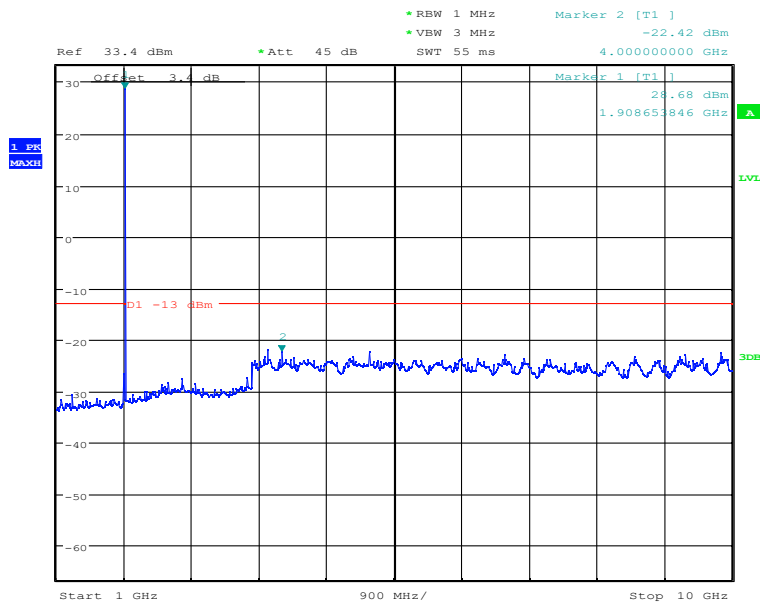


Report No.: I21W00004-WWAN_Rev2



Date: 2.JAN.2021 04:48:41

GMSK-High channel-1909.8 MHz-30MHz to 1GHz



Date: 2.JAN.2021 04:49:01

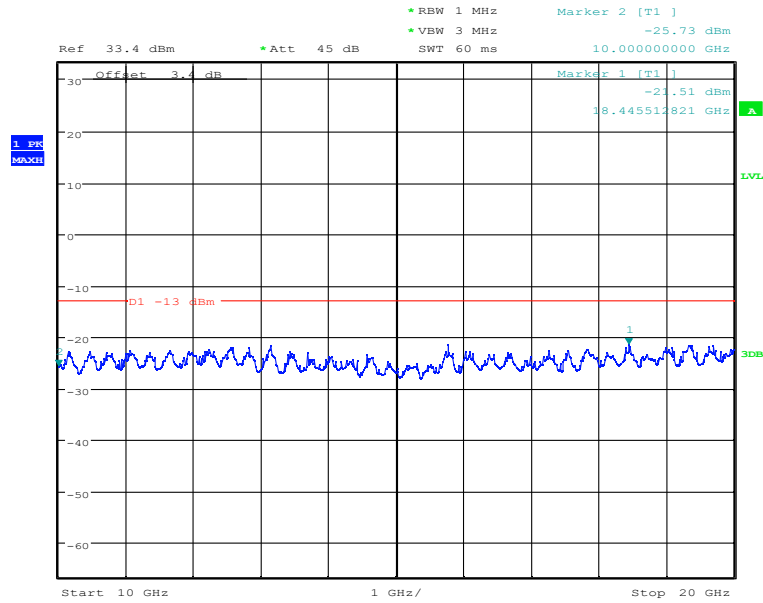
GMSK-High channel-1909.8 MHz-1GHz to 10GHz

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

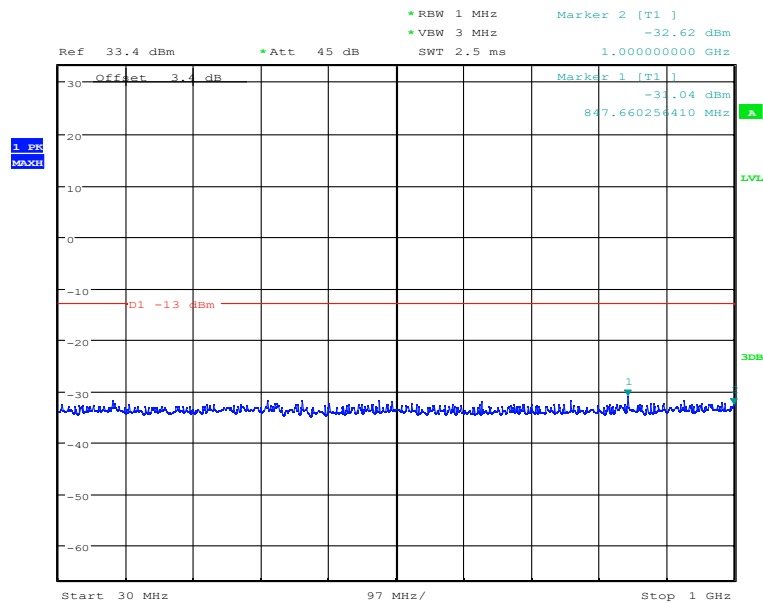


Report No.: I21W00004-WWAN_Rev2



Date: 2.JAN.2021 04:49:16

GMSK-High channel-1909.8 MHz-10GHz to 20GHz



Date: 2.JAN.2021 04:53:00

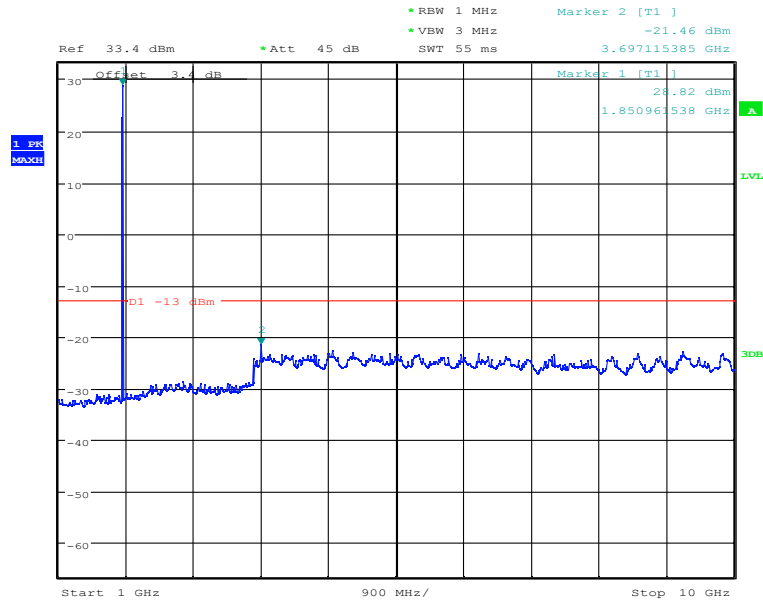
8PSK-Low channel-1850.2 MHz-30MHz to 1GHz

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

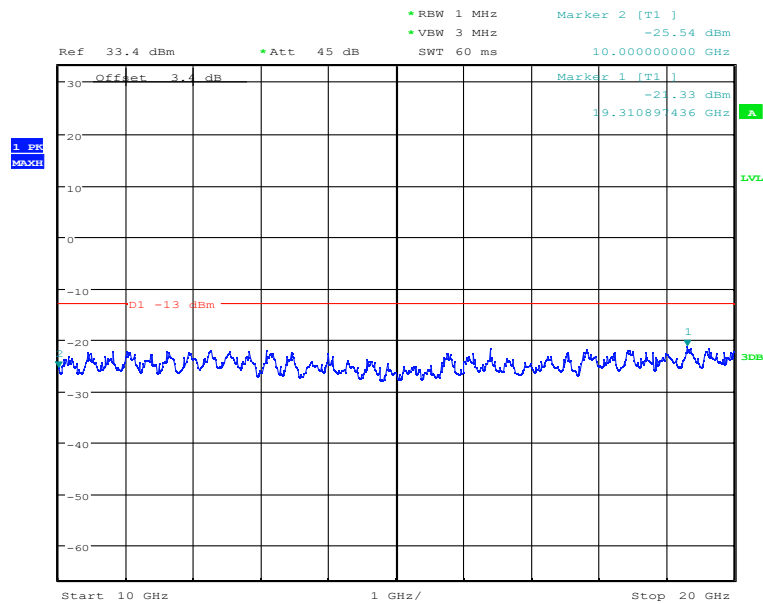


Report No.: I21W00004-WWAN_Rev2



Date: 2.JAN.2021 04:53:30

8PSK-Low channel-1850.2 MHz-1GHz to 10GHz



Date: 2.JAN.2021 04:53:46

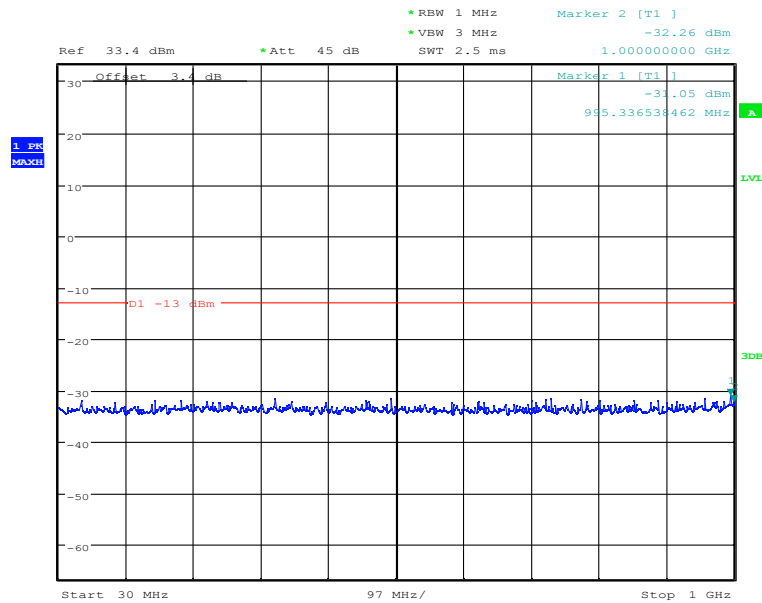
8PSK- Low channel-1850.2 MHz-10GHz to 20GHz

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

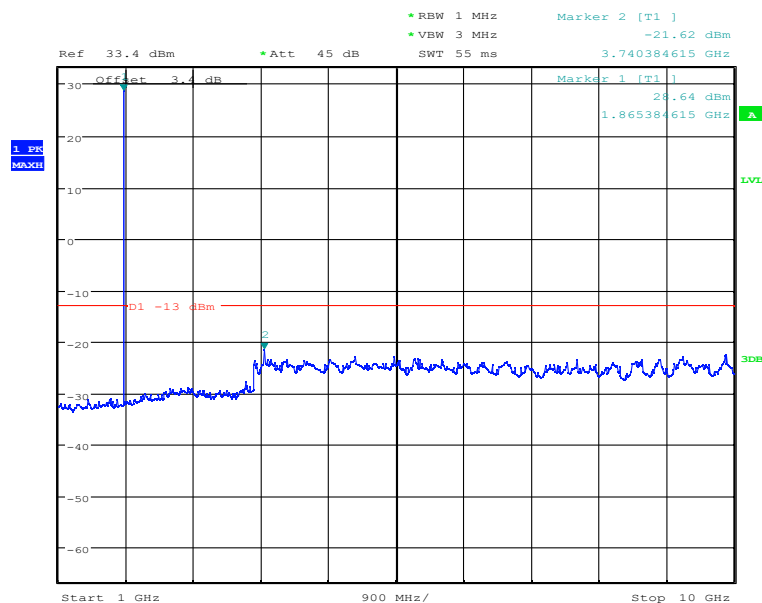


Report No.: I21W00004-WWAN_Rev2



Date: 2.JAN.2021 04:52:40

8PSK-Middle channel-1880.0 MHz-30MHz to 1GHz



Date: 2.JAN.2021 04:52:24

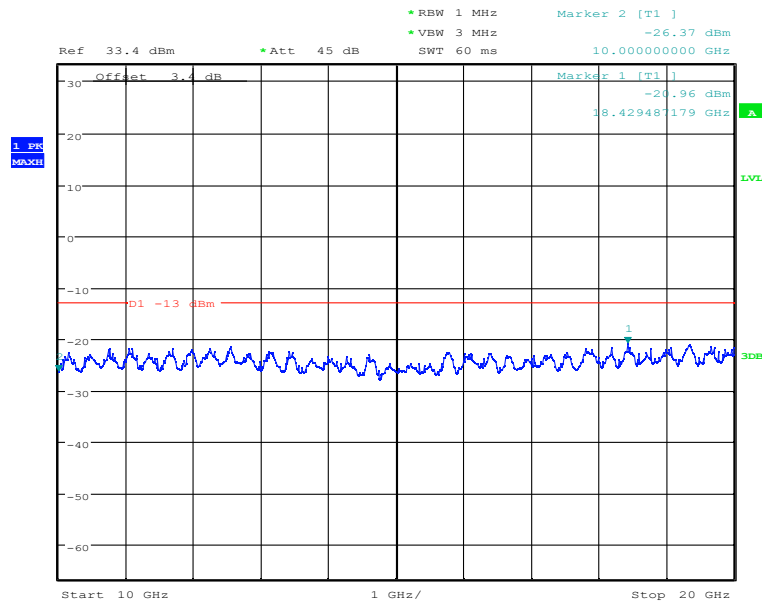
8PSK-Middle channel-1880.0 MHz-1GHz to 10GHz

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

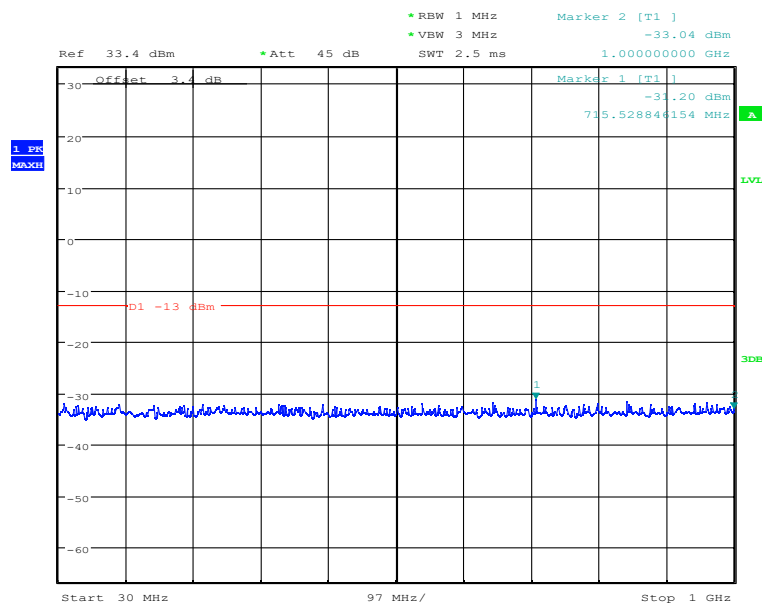


Report No.: I21W00004-WWAN_Rev2



Date: 2.JAN.2021 04:51:59

8PSK-Middle channel-1880.0 MHz-10GHz to 20GHz



Date: 2.JAN.2021 04:55:08

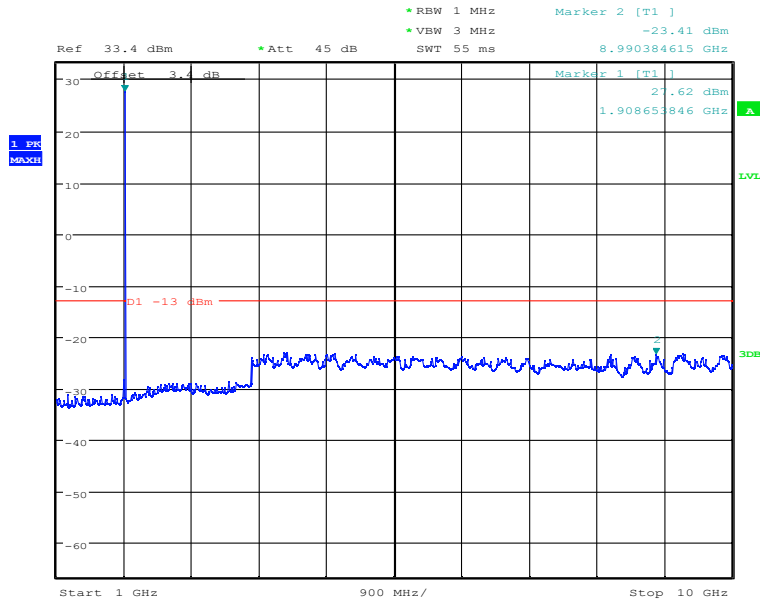
8PSK-High channel-1909.8 MHz-30MHz to 1GHz

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

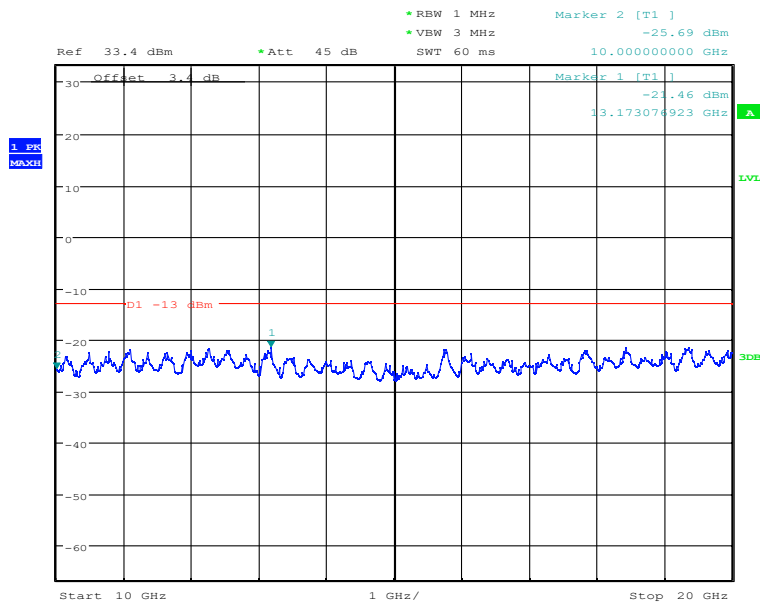


Report No.: I21W00004-WWAN_Rev2



Date: 2.JAN.2021 04:54:49

8PSK-High channel-1909.8 MHz-1GHz to 10GHz



Date: 2.JAN.2021 04:54:28

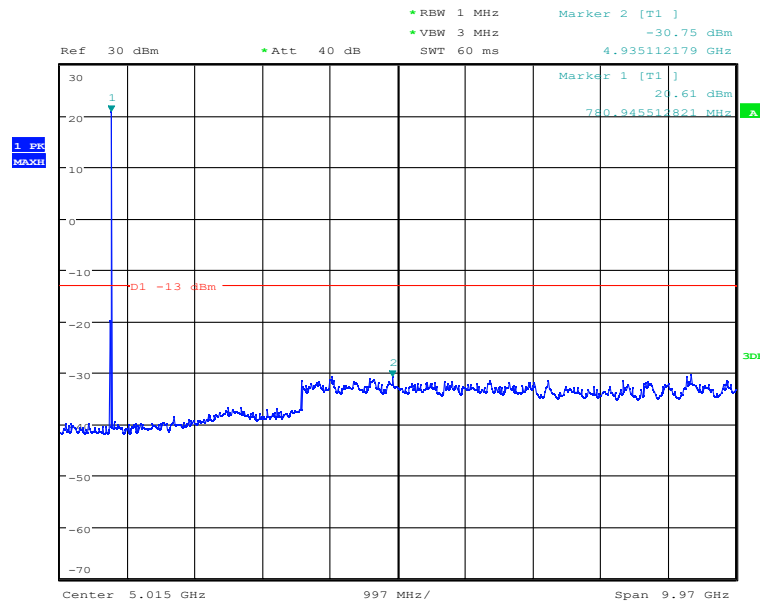
8PSK-High channel-1909.8 MHz-10GHz to 20GHz

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

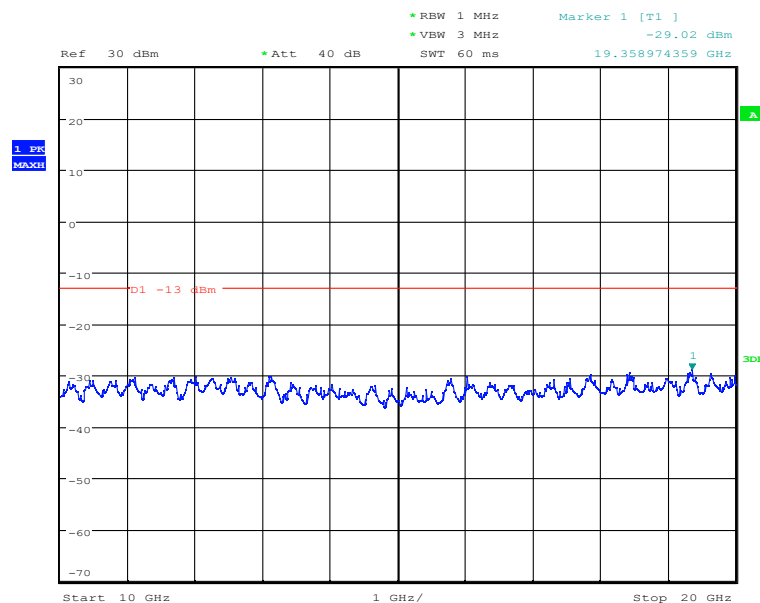


Report No.: I21W00004-WWAN_Rev2



Date: 27.DEC.2020 12:38:47

30MHz to 10GHz, Mid Channel, Subcarrier (15kHz), QPSK, 1@0



Date: 27.DEC.2020 12:39:06

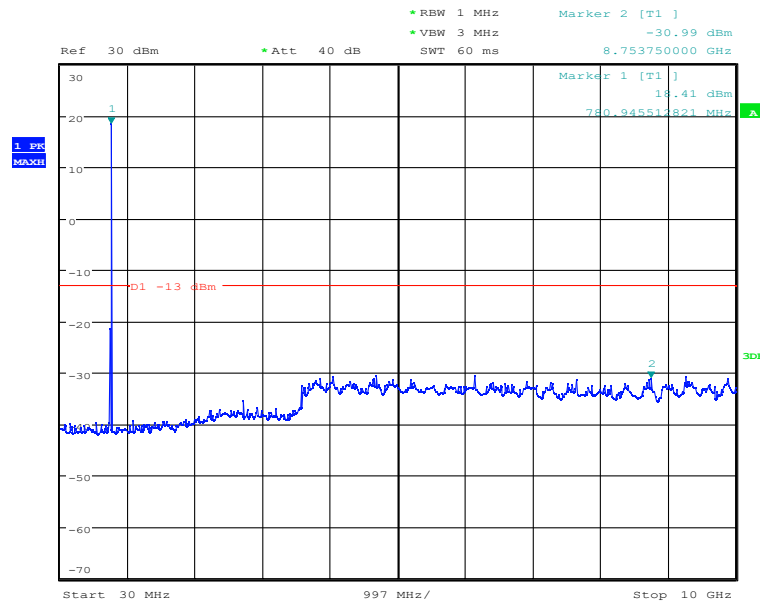
10GHz to 20GHz, Mid Channel, Subcarrier (15kHz), QPSK, 1@0

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

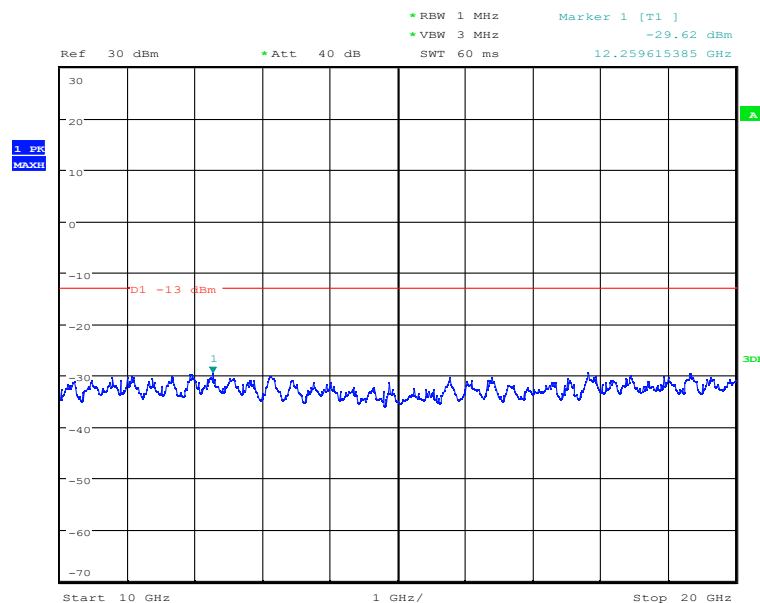


Report No.: I21W00004-WWAN_Rev2



Date: 27.DEC.2020 12:38:23

30MHz to 10GHz, Mid Channel, Subcarrier (15kHz), QPSK, 12@0



Date: 27.DEC.2020 12:37:59

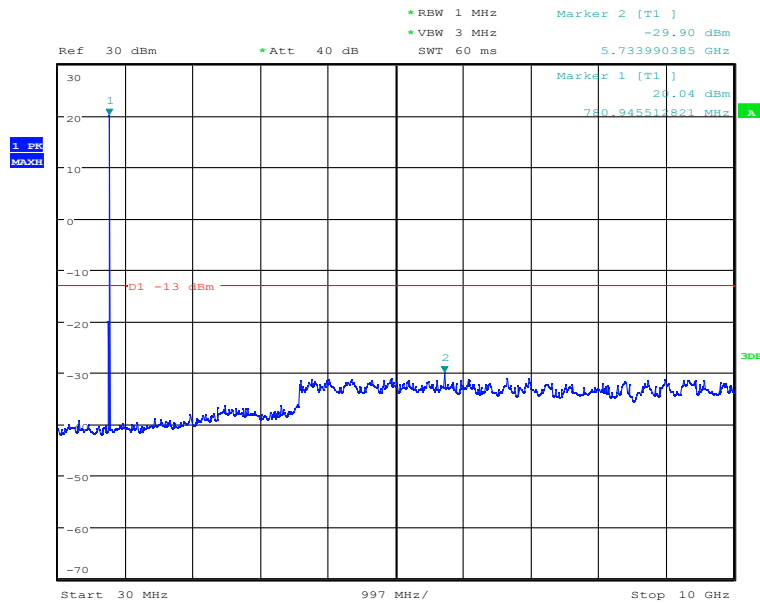
10GHz to 20GHz, Mid Channel, Subcarrier (15kHz), QPSK, 12@0

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

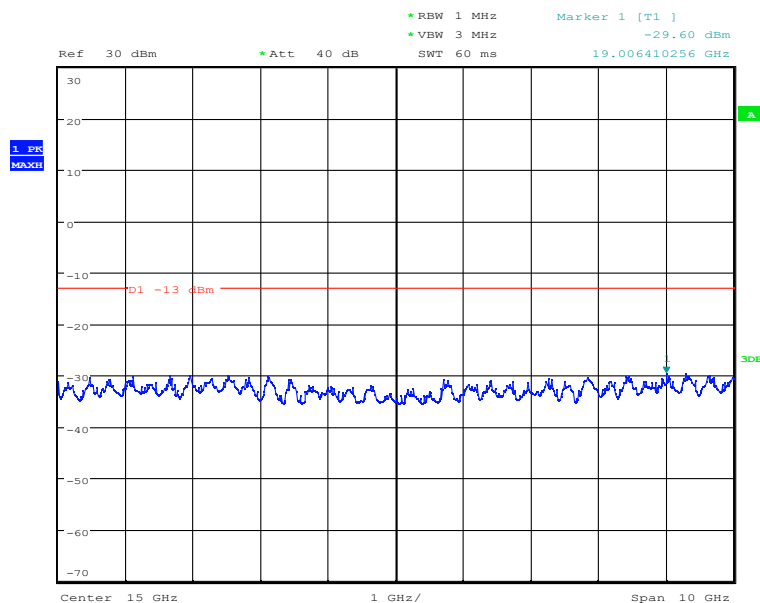


Report No.: I21W00004-WWAN_Rev2



Date: 27.DEC.2020 12:39:51

30MHz to 10GHz, Mid Channel, Subcarrier (15kHz), BPSK, 1@0



Date: 27.DEC.2020 12:39:27

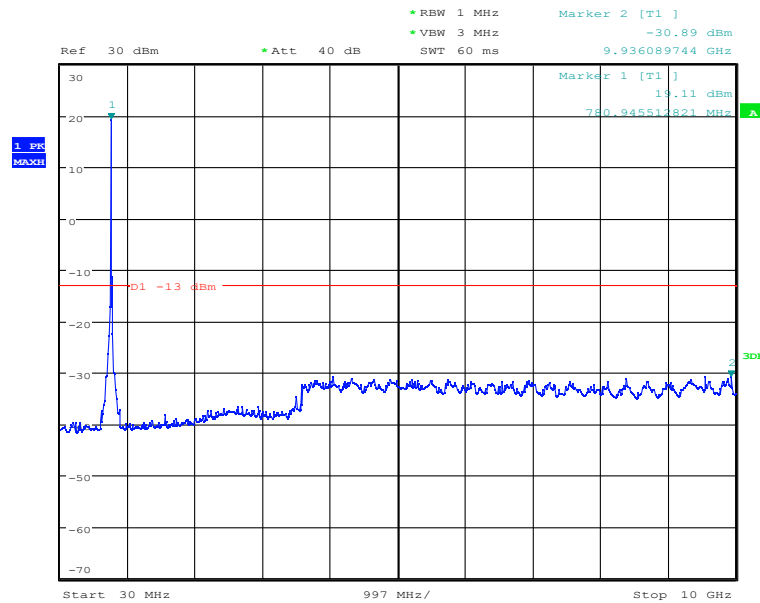
10GHz to 20GHz, Mid Channel, Subcarrier (15kHz), BPSK, 1@0

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

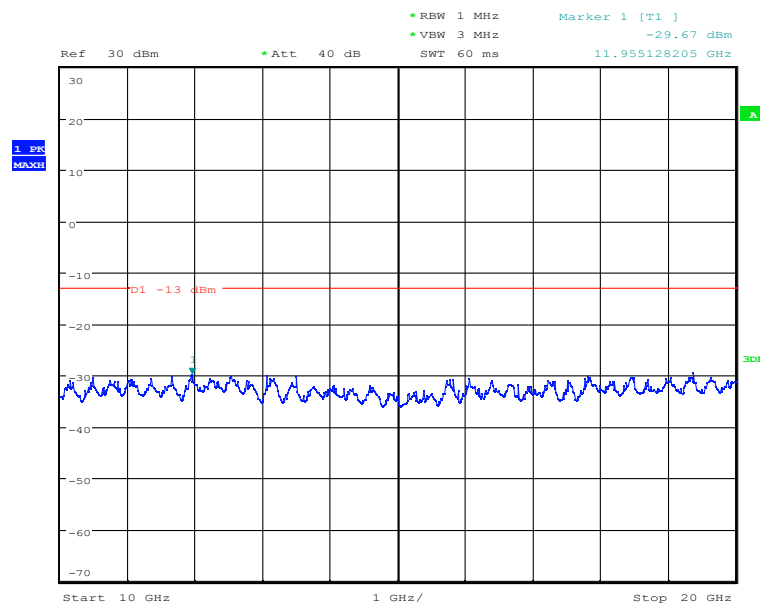


Report No.: I21W00004-WWAN_Rev2



Date: 27.DEC.2020 13:01:08

30MHz to 10GHz, High Channel, Subcarrier (3.75kHz), QPSK, 1@0



Date: 27.DEC.2020 13:01:25

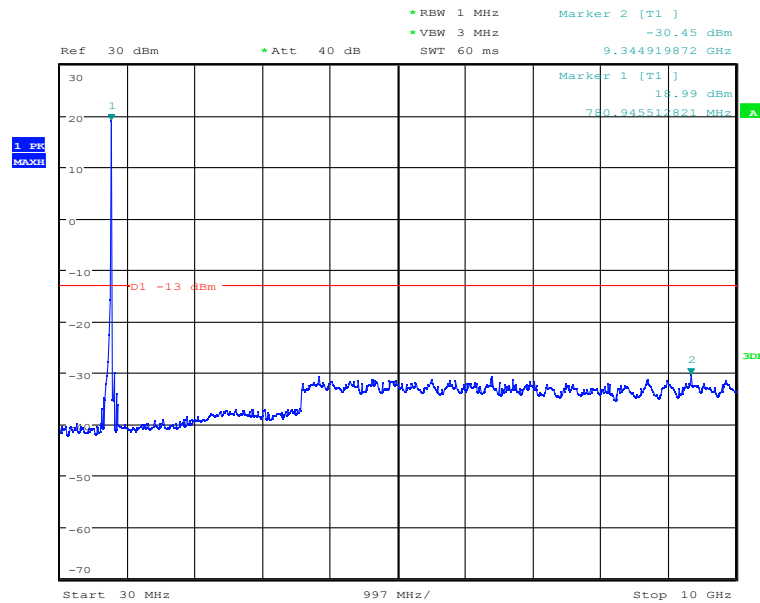
10GHz to 20GHz, High Channel, Subcarrier (3.75kHz), QPSK, 1@0

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

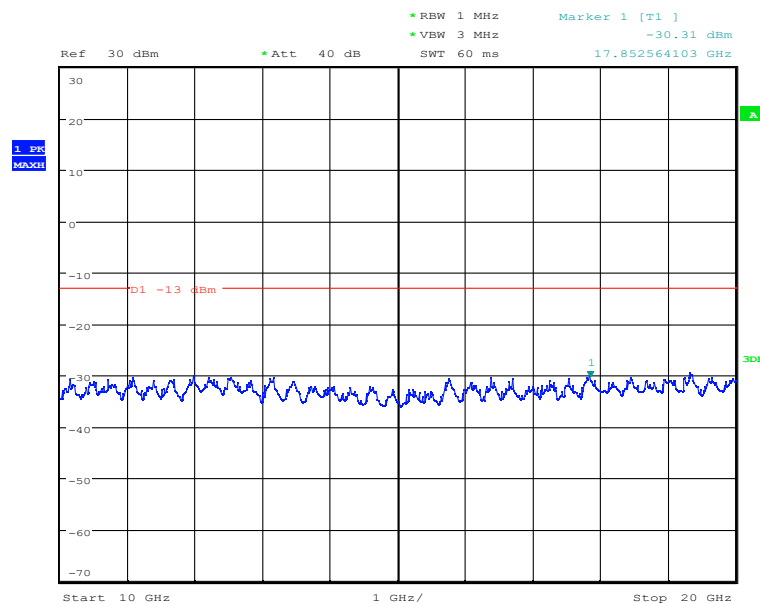


Report No.: I21W00004-WWAN_Rev2



Date: 27.DEC.2020 13:02:34

30MHz to 10GHz, High Channel, Subcarrier (3.75kHz), BPSK, 1@0



Date: 27.DEC.2020 13:02:08

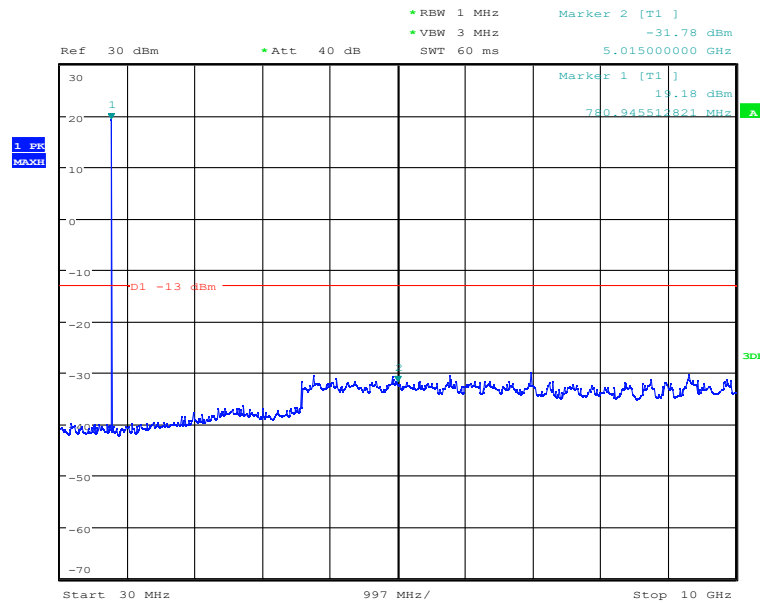
10GHz to 20GHz, High Channel, Subcarrier (3.75kHz), BPSK, 1@0

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

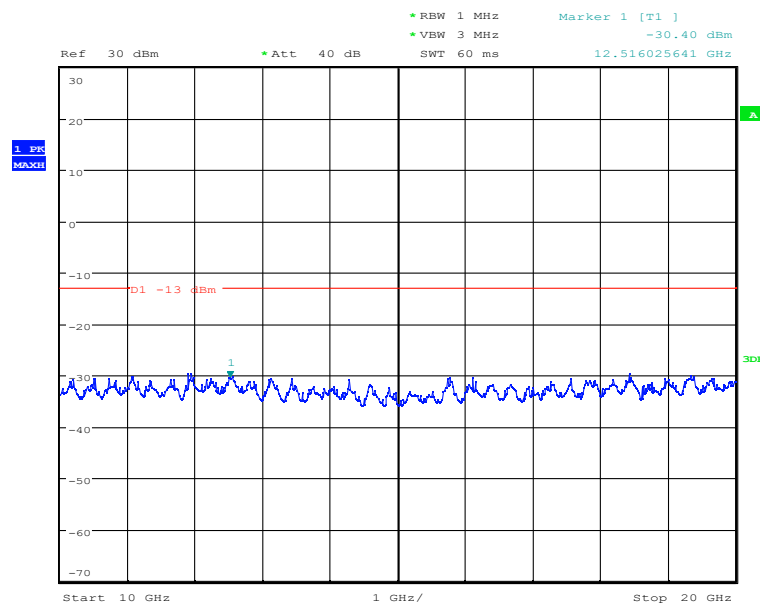


Report No.: I21W00004-WWAN_Rev2



Date: 27.DEC.2020 13:06:01

30MHz to 10GHz, High Channel, Subcarrier (15kHz), QPSK, 1@0



Date: 27.DEC.2020 13:05:37

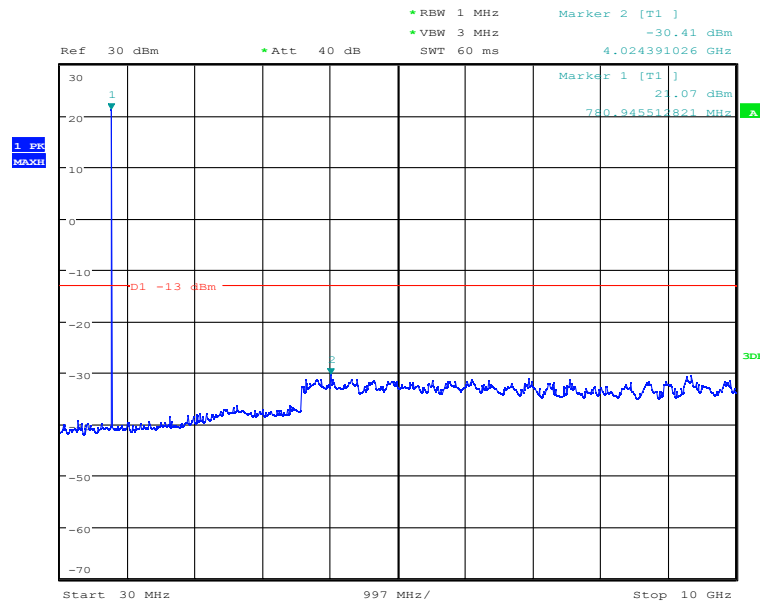
10GHz to 20GHz, High Channel, Subcarrier (15kHz), QPSK, 1@0

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

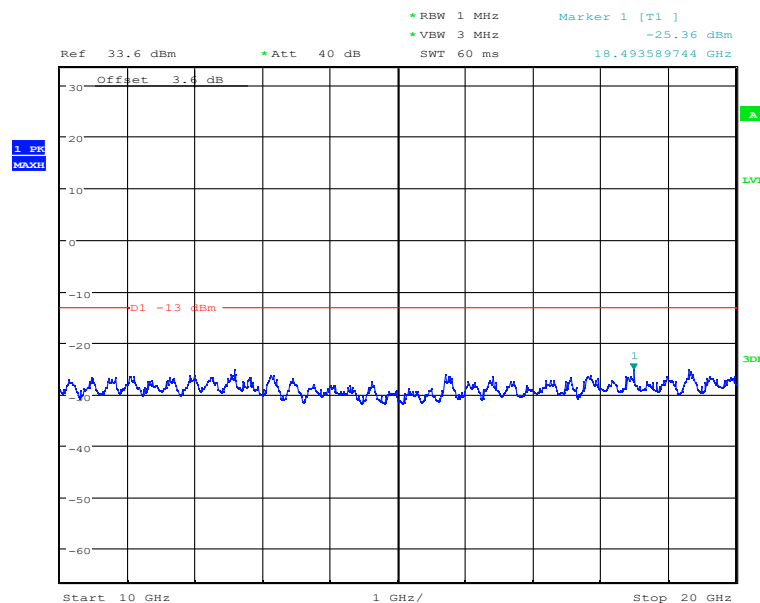


Report No.: I21W00004-WWAN_Rev2



Date: 27.DEC.2020 13:06:32

30MHz to 10GHz, High Channel, Subcarrier (15kHz), QPSK, 12@0



Date: 30.DEC.2020 04:55:15

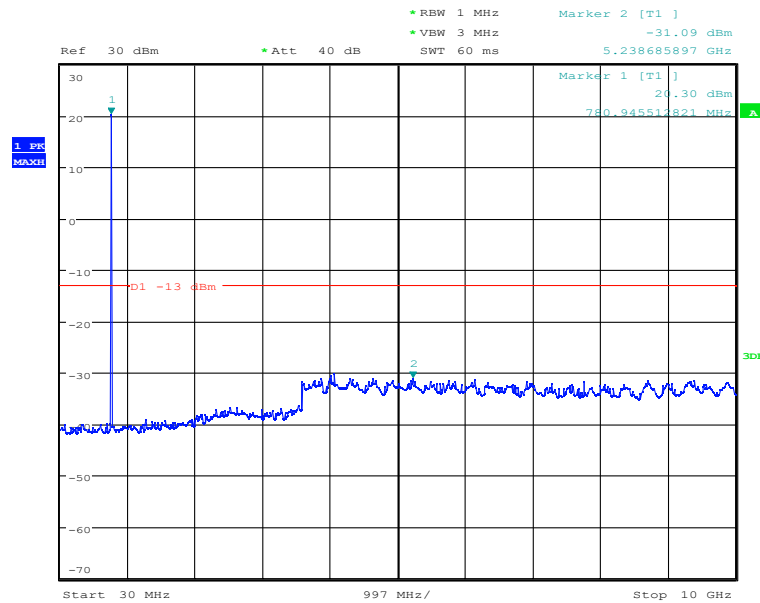
10GHz to 20GHz, High Channel, Subcarrier (15kHz), QPSK, 12@0

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

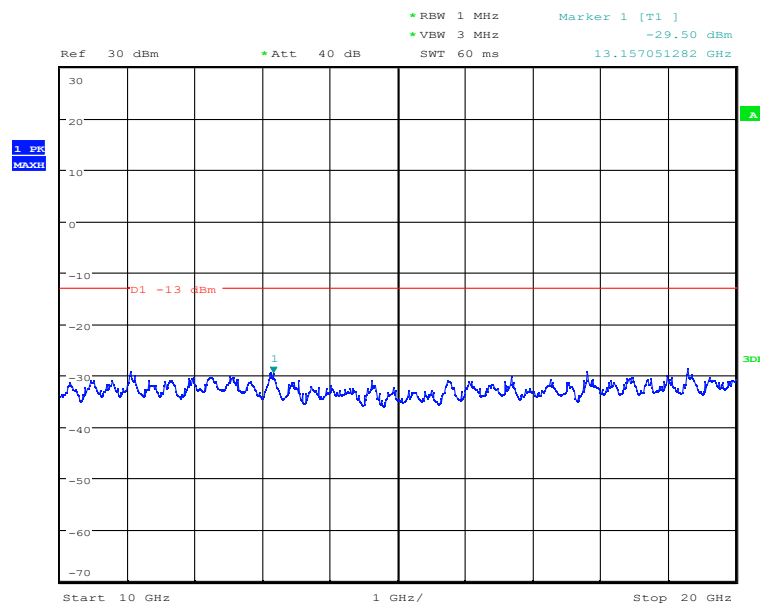


Report No.: I21W00004-WWAN_Rev2



Date: 27.DEC.2020 13:04:52

30MHz to 10GHz, High Channel, Subcarrier (15kHz), BPSK, 1@0



Date: 27.DEC.2020 13:05:13

10GHz to 20GHz, High Channel, Subcarrier (15kHz), BPSK, 1@0

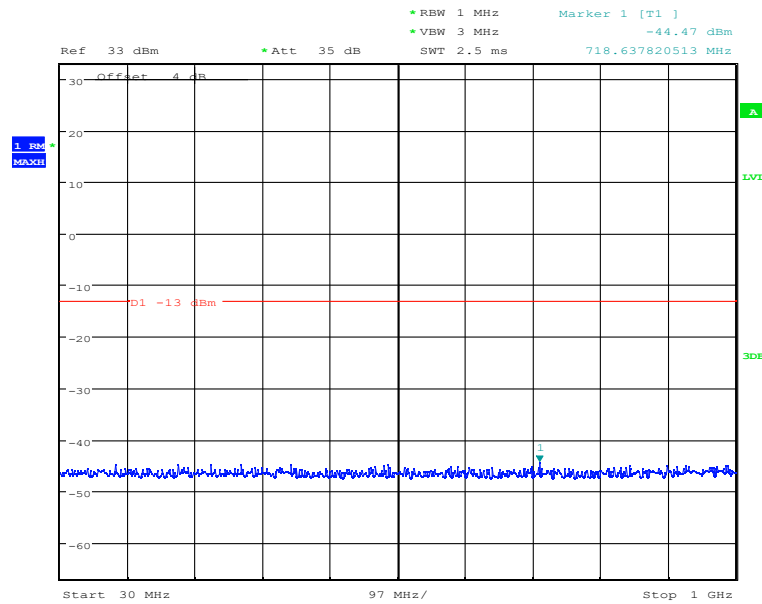
Chongqing Academy of Information and Communication Technology

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



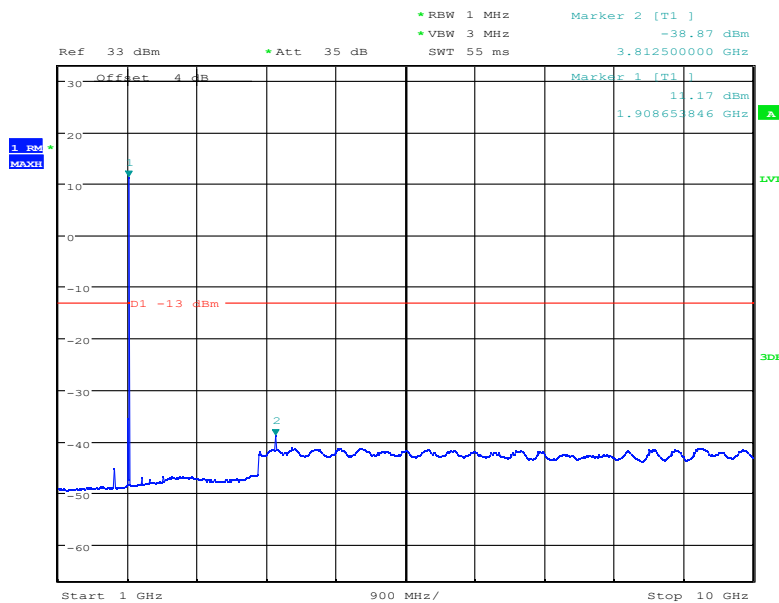
Report No.: I21W00004-WWAN_Rev2

5.3.8 CAT-M B2 Conducted Spurious Emission Results



Date: 29.DEC.2020 06:43:51

Band2-High Channel-1.4MHz Bandwidth-30MHz to 1GHz



Date: 29.DEC.2020 06:44:52

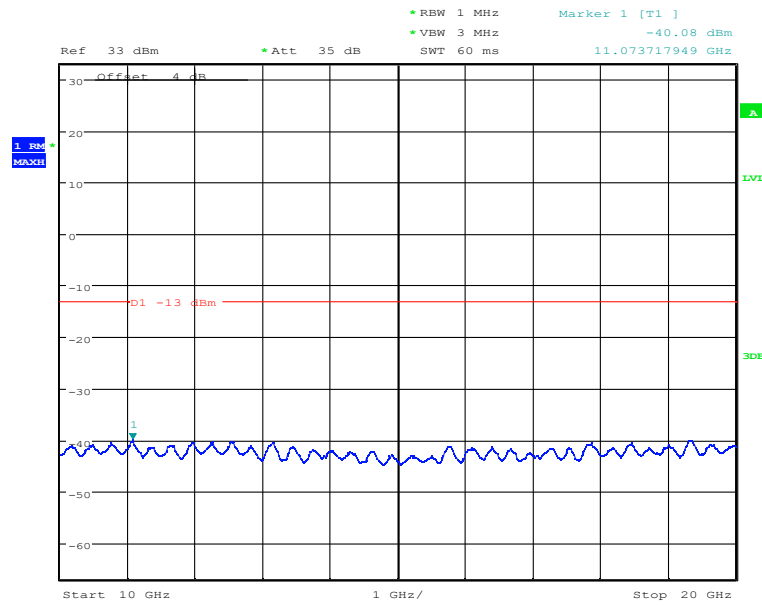
Band2-High Channel-1.4MHz Bandwidth-1GHz to 10GHz

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

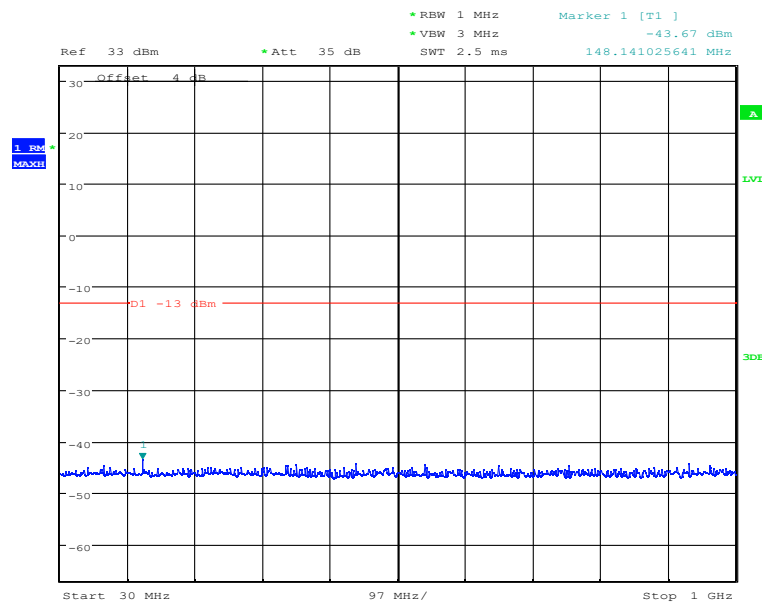


Report No.: I21W00004-WWAN_Rev2



Date: 29.DEC.2020 06:45:35

Band2-High Channel-1.4MHz Bandwidth-10GHz to 20GHz



Date: 29.DEC.2020 06:52:30

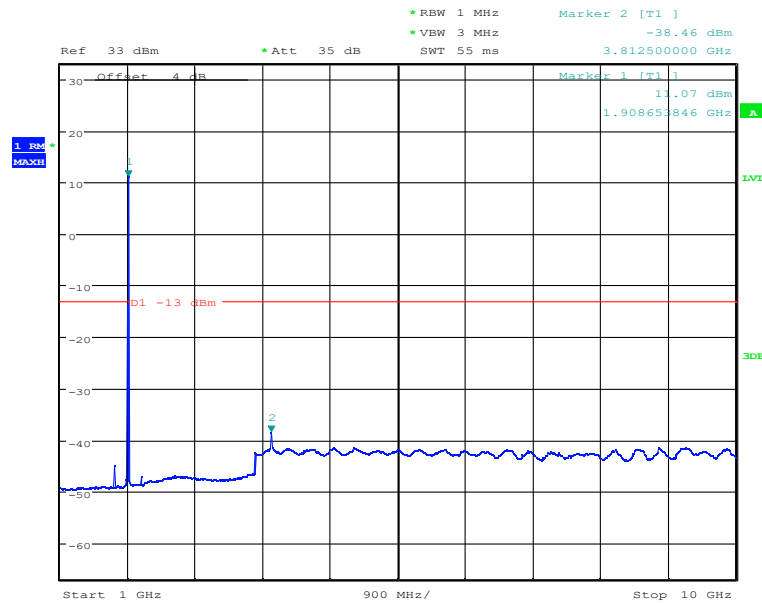
Band2-High Channel-3MHz Bandwidth-30MHz to 1GHz

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

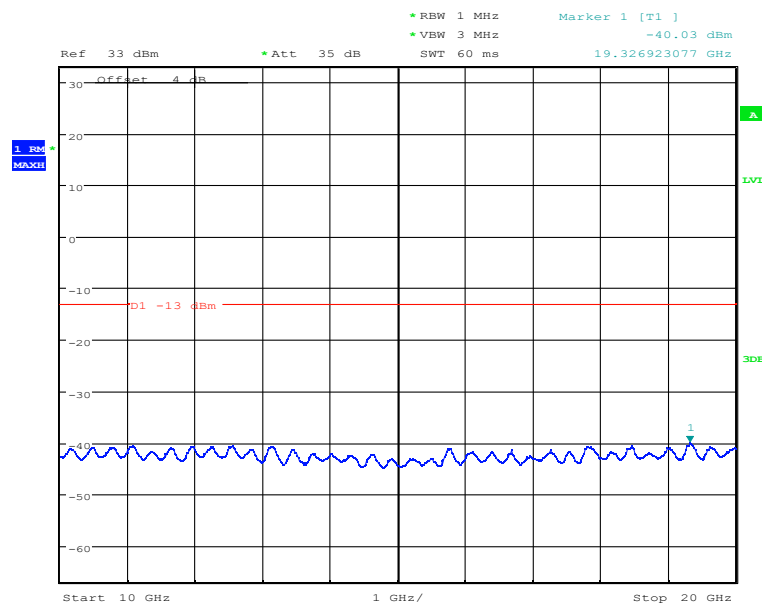


Report No.: I21W00004-WWAN_Rev2



Date: 29.DEC.2020 06:52:56

Band2-High Channel-3MHz Bandwidth-1GHz to 10GHz



Date: 29.DEC.2020 06:53:17

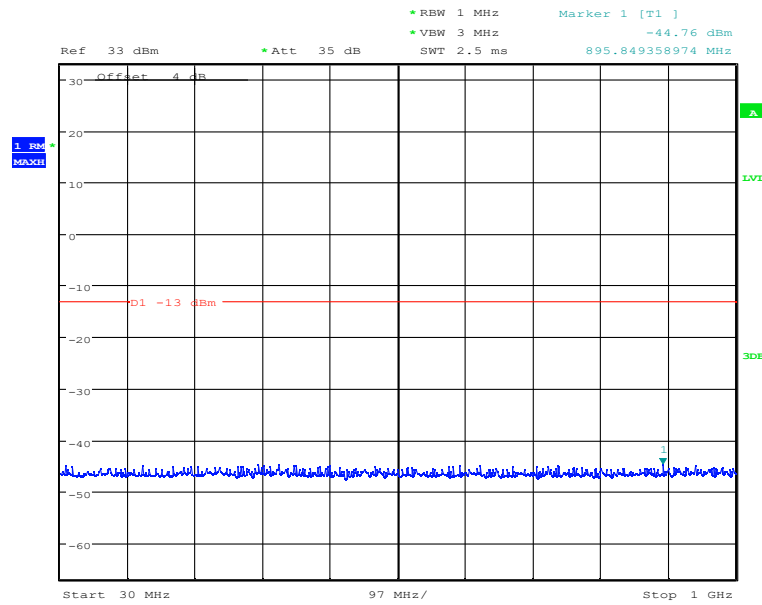
Band2-High Channel-3MHz Bandwidth-10GHz to 20GHz

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

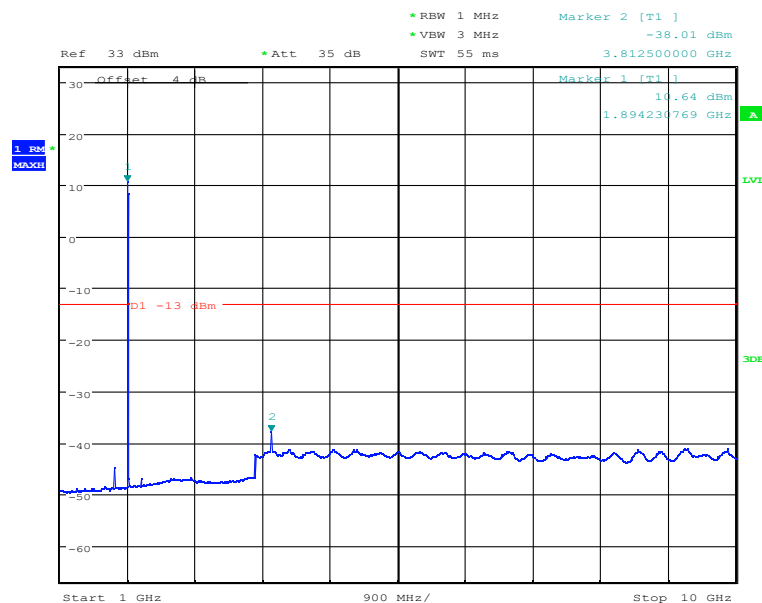


Report No.: I21W00004-WWAN_Rev2



Date: 29.DEC.2020 06:57:36

Band2-High Channel-5MHz Bandwidth-30MHz to 1GHz



Date: 29.DEC.2020 06:58:51

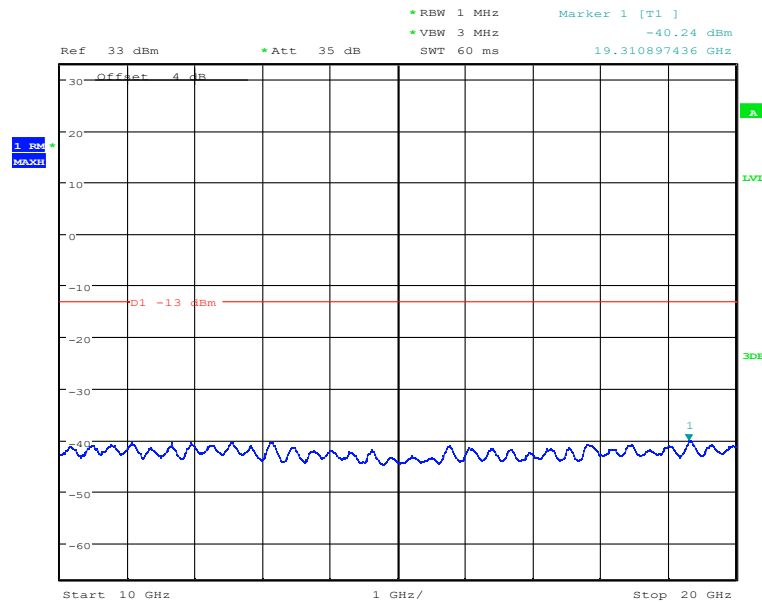
Band2-High Channel-5MHz Bandwidth-1GHz to 10GHz

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

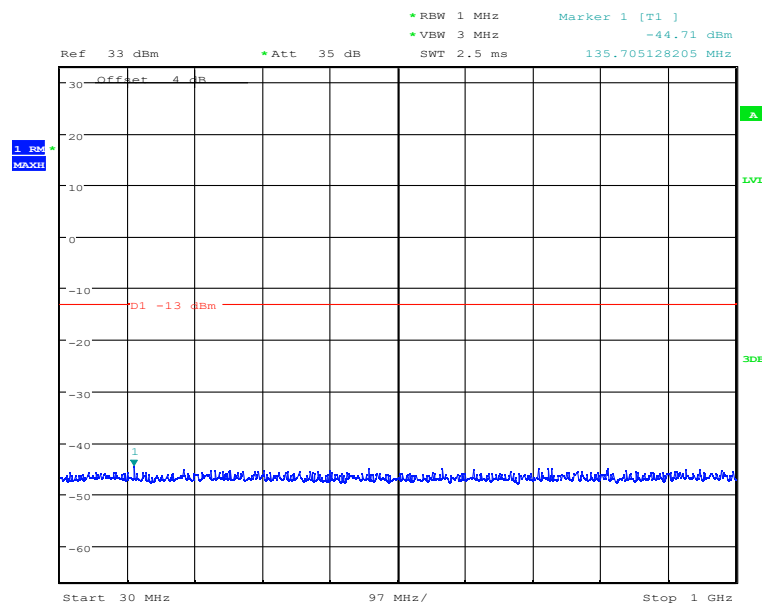


Report No.: I21W00004-WWAN_Rev2



Date: 29.DEC.2020 06:59:16

Band2-High Channel-5MHz Bandwidth-10GHz to 20GHz



Date: 29.DEC.2020 07:03:18

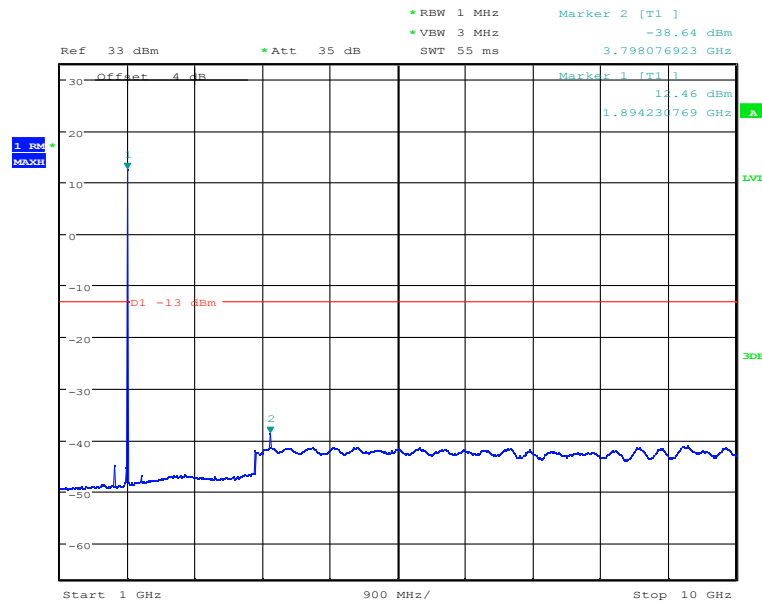
Band2-High Channel-10MHz Bandwidth-30MHz to 1GHz

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

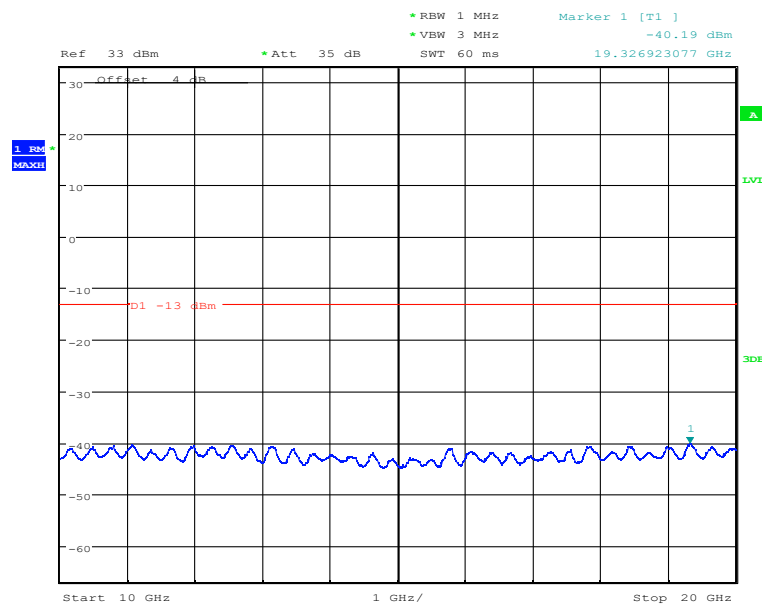


Report No.: I21W00004-WWAN_Rev2



Date: 29.DEC.2020 07:04:37

Band2-High Channel-10MHz Bandwidth-1GHz to 10GHz



Date: 29.DEC.2020 07:04:54

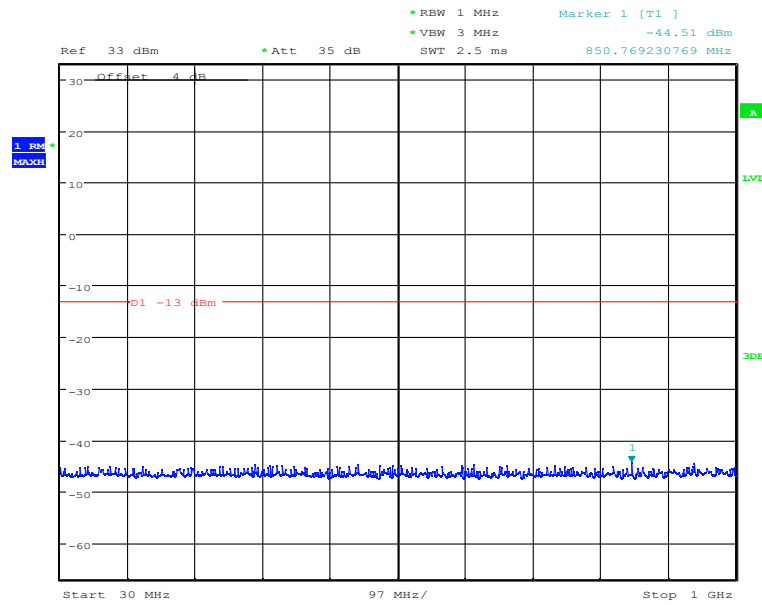
Band2-High Channel-10MHz Bandwidth-10GHz to 20GHz

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

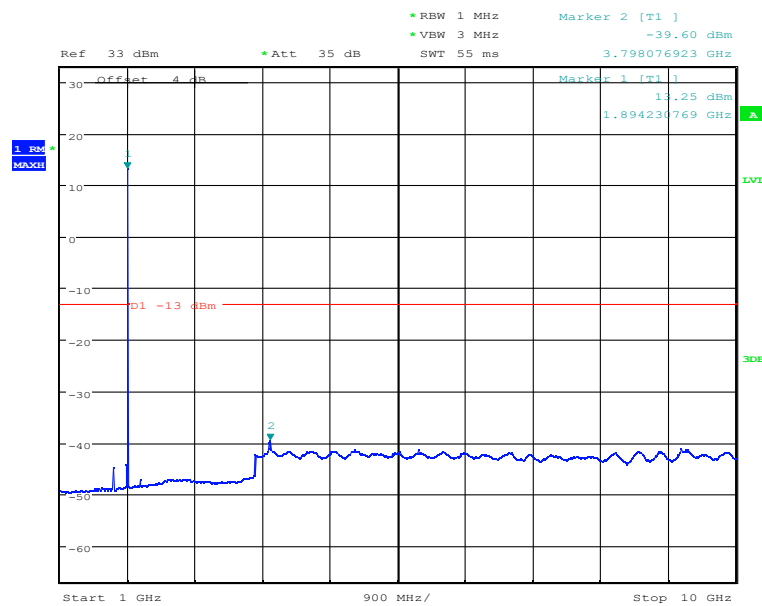


Report No.: I21W00004-WWAN_Rev2



Date: 29.DEC.2020 07:11:16

Band2-High Channel-15MHz Bandwidth-30MHz to 1GHz



Date: 29.DEC.2020 07:11:46

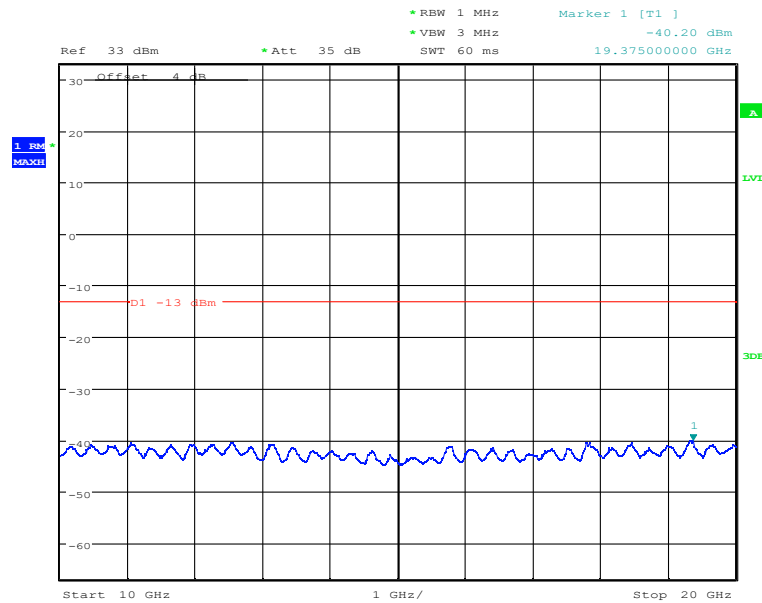
Band2-High Channel-15MHz Bandwidth-1GHz to 10GHz

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

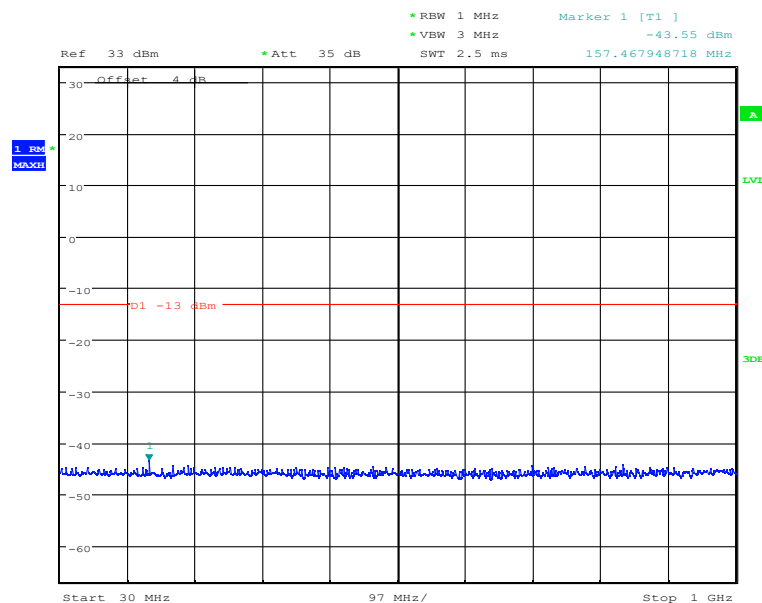


Report No.: I21W00004-WWAN_Rev2



Date: 29.DEC.2020 07:12:05

Band2-High Channel-15MHz Bandwidth-10GHz to 20GHz



Date: 29.DEC.2020 07:17:30

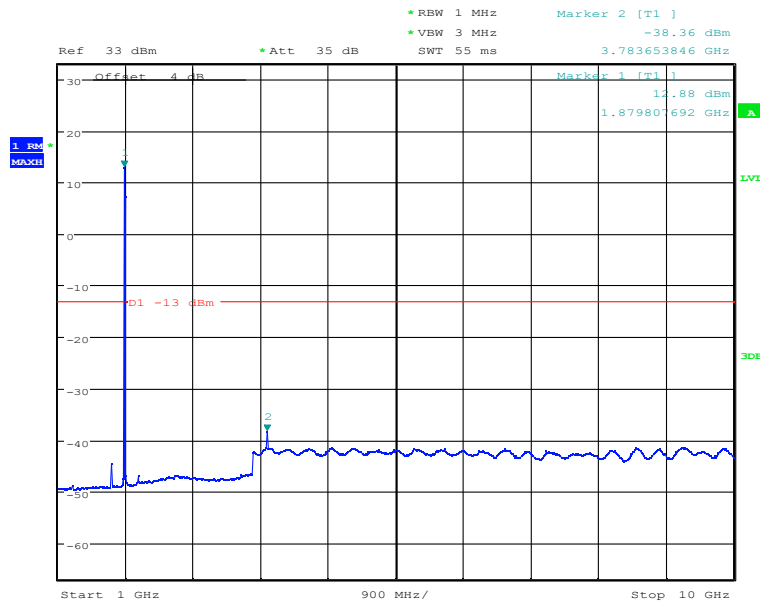
Band2-High Channel-20MHz Bandwidth-30MHz to 1GHz

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

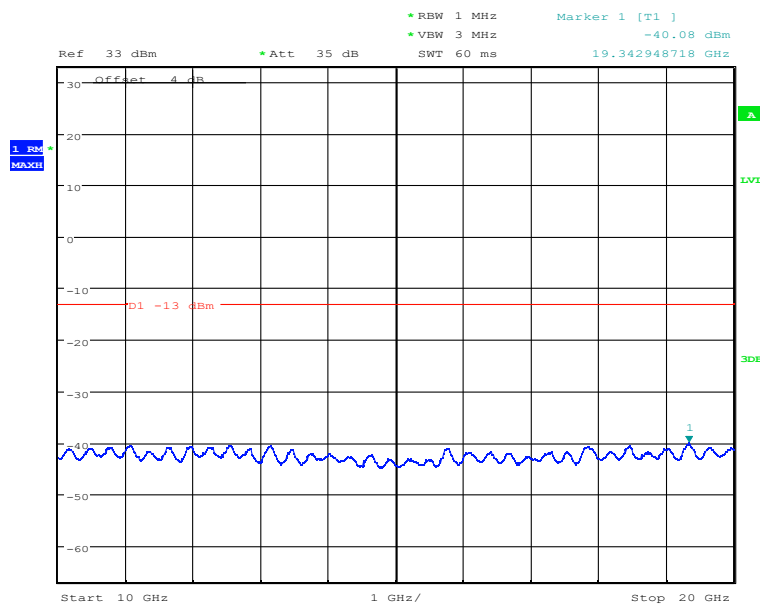


Report No.: I21W00004-WWAN_Rev2



Date: 29.DEC.2020 07:17:57

Band2-High Channel-20MHz Bandwidth-1GHz to 10GHz



Date: 29.DEC.2020 07:18:16

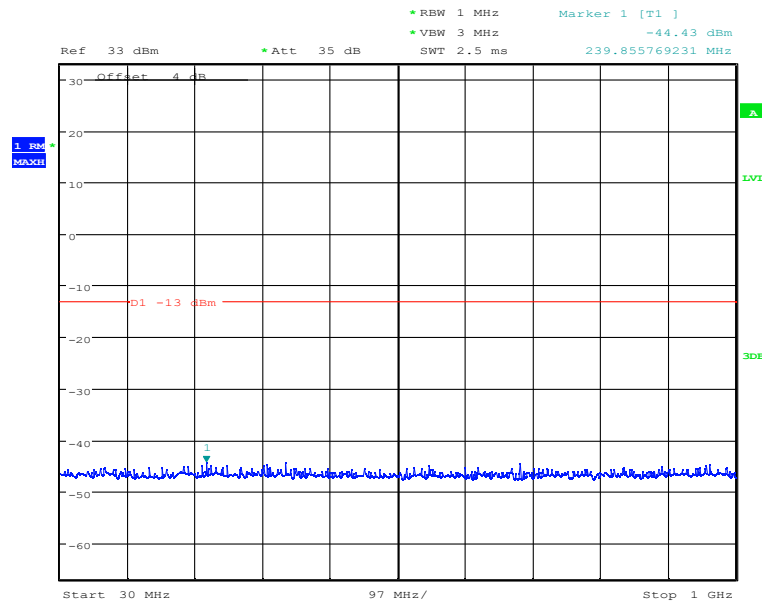
Band2-High Channel-20MHz Bandwidth-10GHz to 20GHz

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

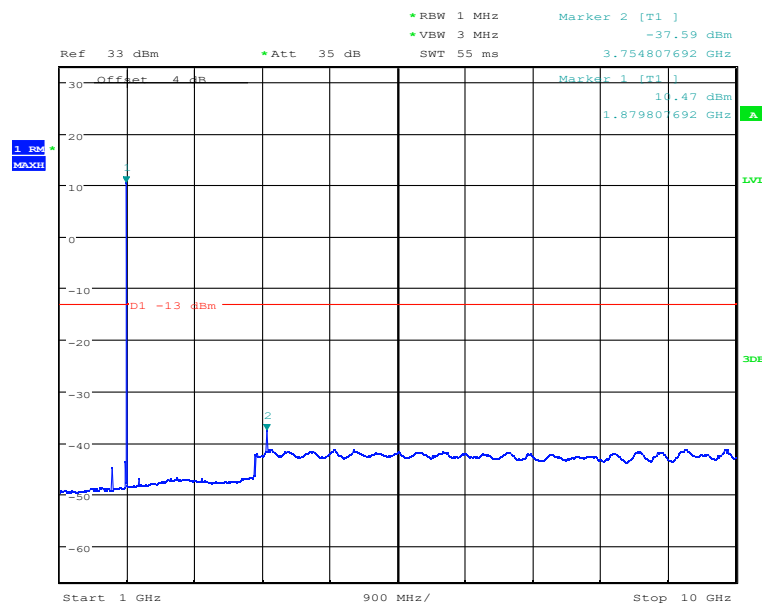


Report No.: I21W00004-WWAN_Rev2



Date: 29.DEC.2020 06:41:07

Band2-Middle Channel-1.4MHz Bandwidth-30MHz to 1GHz



Date: 29.DEC.2020 06:41:51

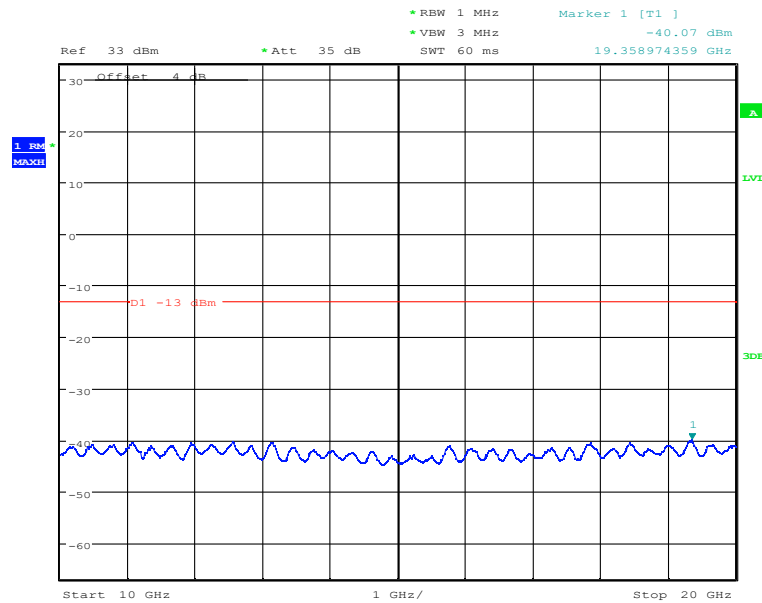
Band2-Middle Channel-1.4MHz Bandwidth-1GHz to 10GHz

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

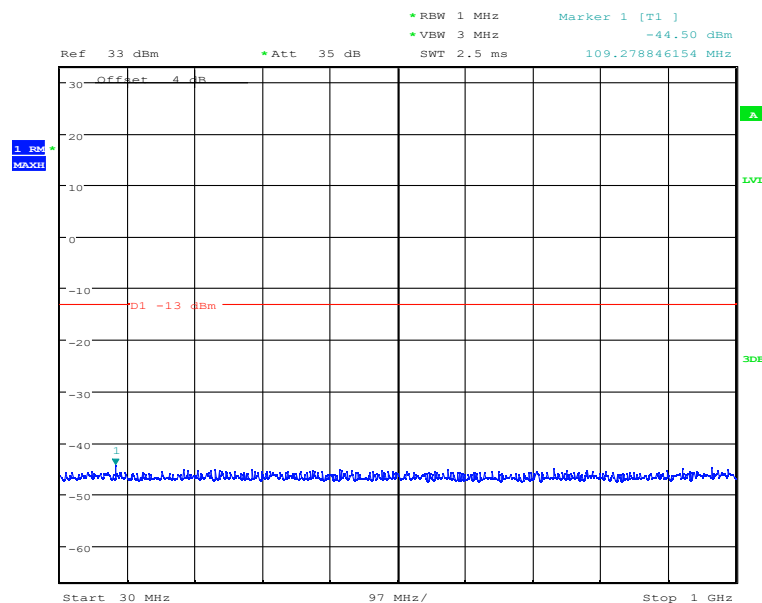


Report No.: I21W00004-WWAN_Rev2



Date: 29.DEC.2020 06:42:24

Band2-Middle Channel-1.4MHz Bandwidth-10GHz to 20GHz



Date: 29.DEC.2020 07:23:40

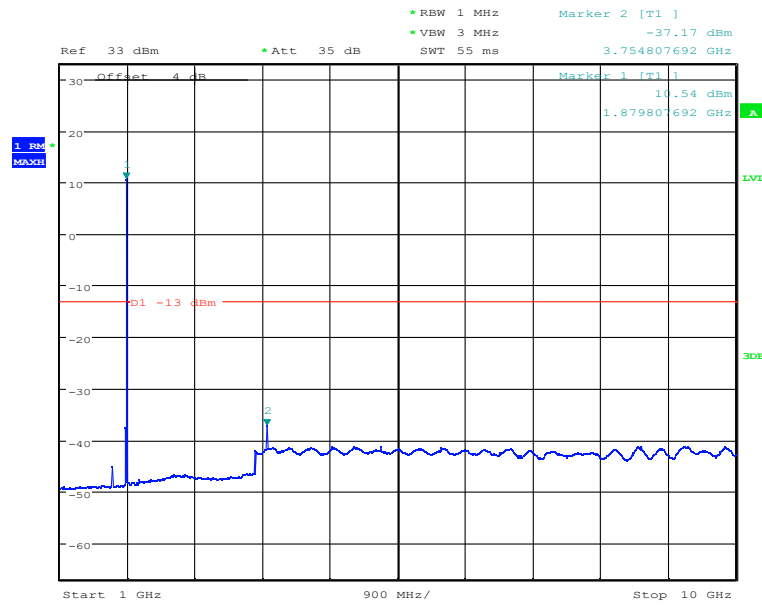
Band2-Middle Channel-3MHz Bandwidth-30MHz to 1GHz

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

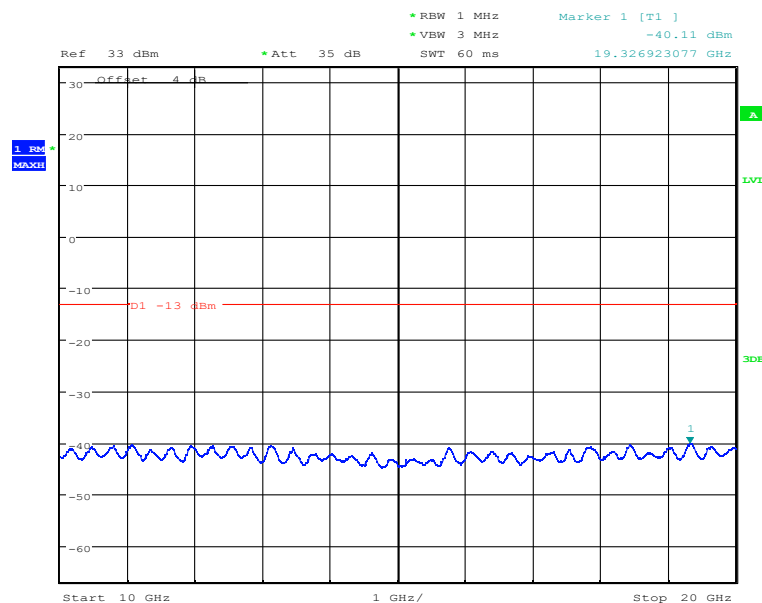


Report No.: I21W00004-WWAN_Rev2



Date: 29.DEC.2020 07:25:21

Band2-Middle Channel-3MHz Bandwidth-1GHz to 10GHz



Date: 29.DEC.2020 07:25:42

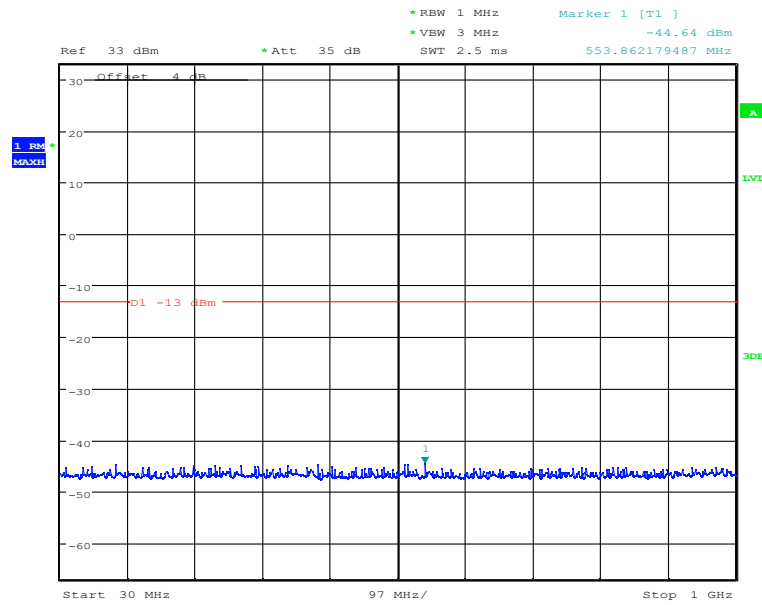
Band2-Middle Channel-3MHz Bandwidth-10GHz to 20GHz

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

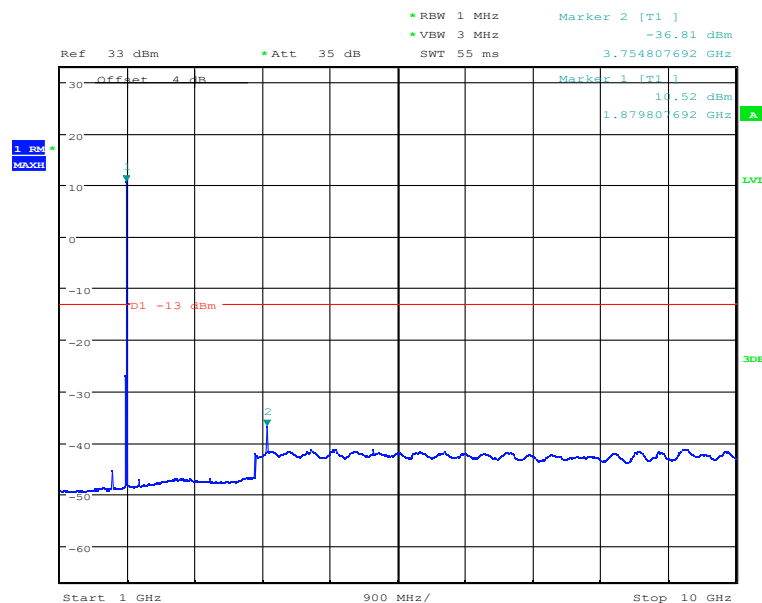


Report No.: I21W00004-WWAN_Rev2



Date: 29.DEC.2020 07:26:10

Band2-Middle Channel-5MHz Bandwidth-30MHz to 1GHz



Date: 29.DEC.2020 07:27:55

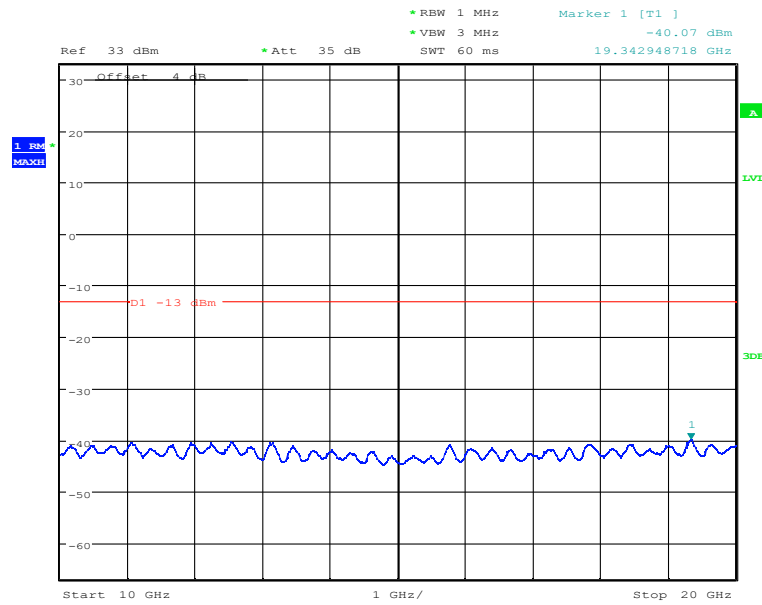
Band2-Middle Channel-5MHz Bandwidth-1GHz to 10GHz

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

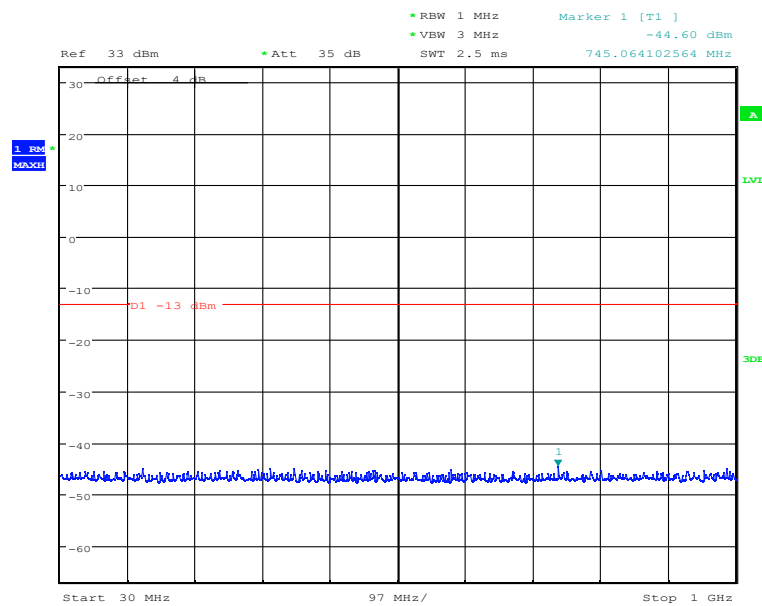


Report No.: I21W00004-WWAN_Rev2



Date: 29.DEC.2020 07:32:01

Band2-Middle Channel-5MHz Bandwidth-10GHz to 20GHz



Date: 29.DEC.2020 07:26:38

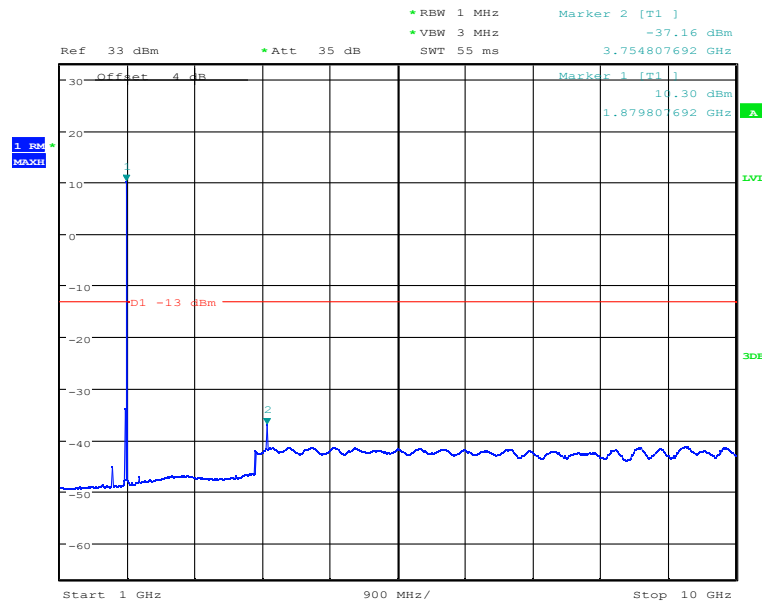
Band2-Middle Channel-10MHz Bandwidth-30MHz to 1GHz

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

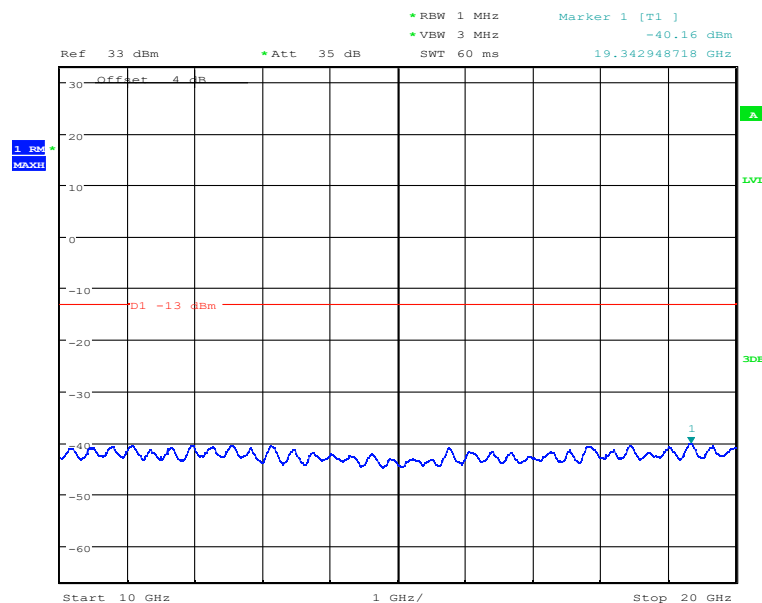


Report No.: I21W00004-WWAN_Rev2



Date: 29.DEC.2020 07:30:05

Band2-Middle Channel-10MHz Bandwidth-1GHz to 10GHz



Date: 29.DEC.2020 07:32:40

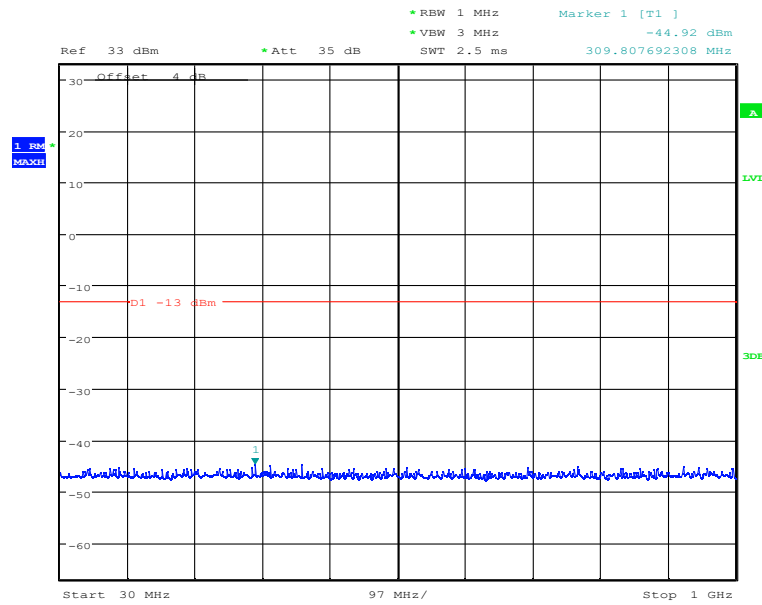
Band2-Middle Channel-10MHz Bandwidth-10GHz to 20GHz

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

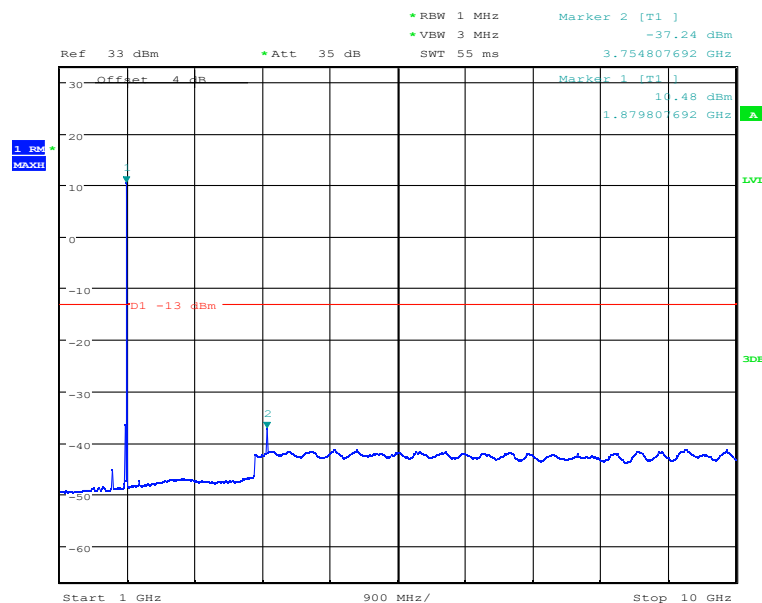


Report No.: I21W00004-WWAN_Rev2



Date: 29.DEC.2020 07:26:54

Band2-Middle Channel-15MHz Bandwidth-30MHz to 1GHz



Date: 29.DEC.2020 07:30:42

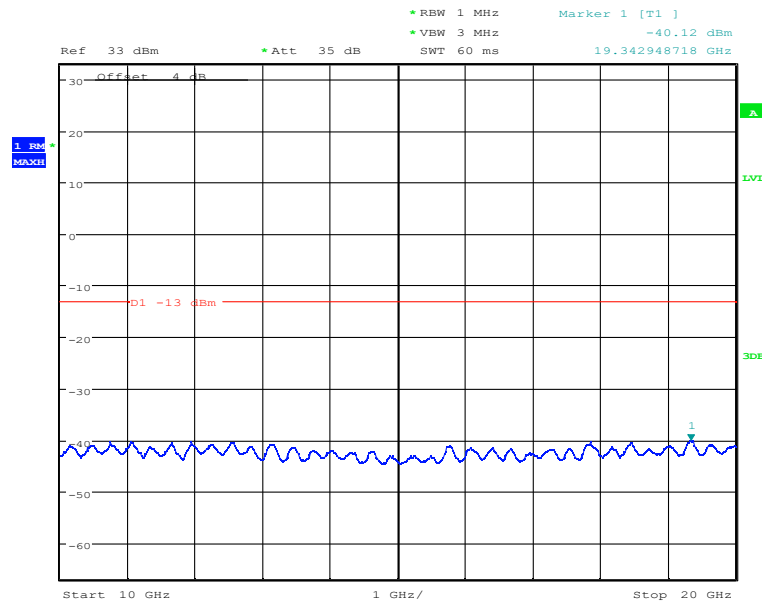
Band2-Middle Channel-15MHz Bandwidth-1GHz to 10GHz

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

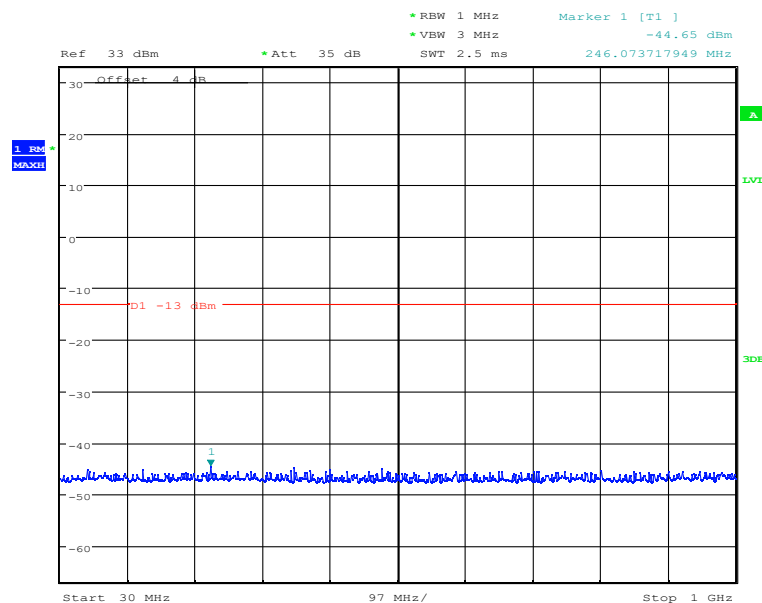


Report No.: I21W00004-WWAN_Rev2



Date: 29.DEC.2020 07:33:12

Band2-Middle Channel-15MHz Bandwidth-10GHz to 20GHz



Date: 29.DEC.2020 07:27:10

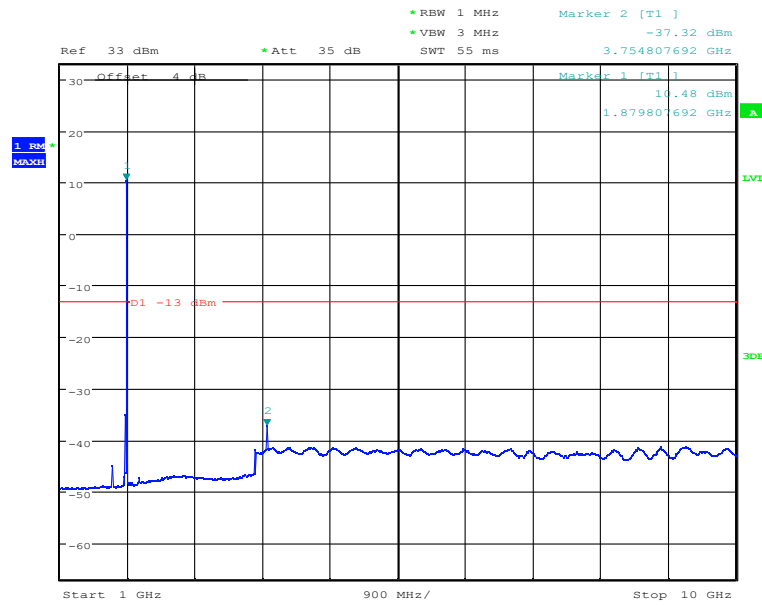
Band2-Middle Channel-20MHz Bandwidth-30MHz to 1GHz

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

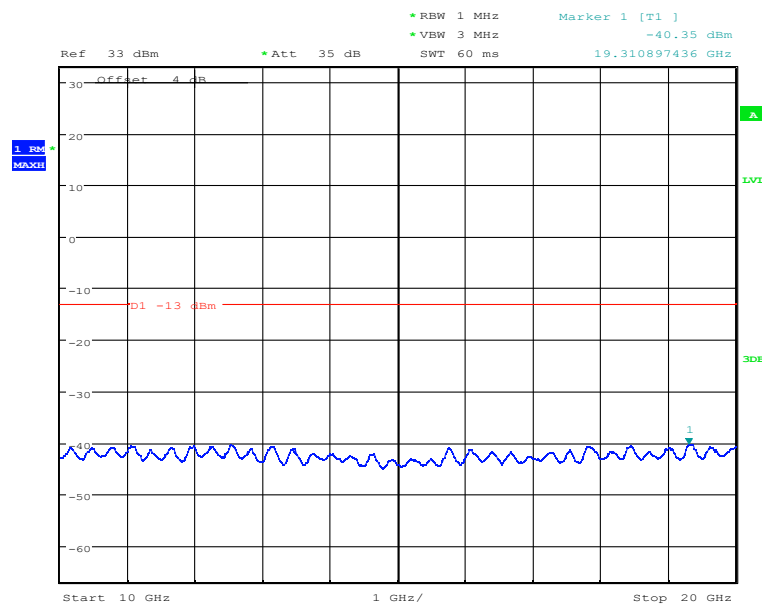


Report No.: I21W00004-WWAN_Rev2



Date: 29.DEC.2020 07:31:38

Band2-Middle Channel-20MHz Bandwidth-1GHz to 10GHz



Date: 29.DEC.2020 07:33:29

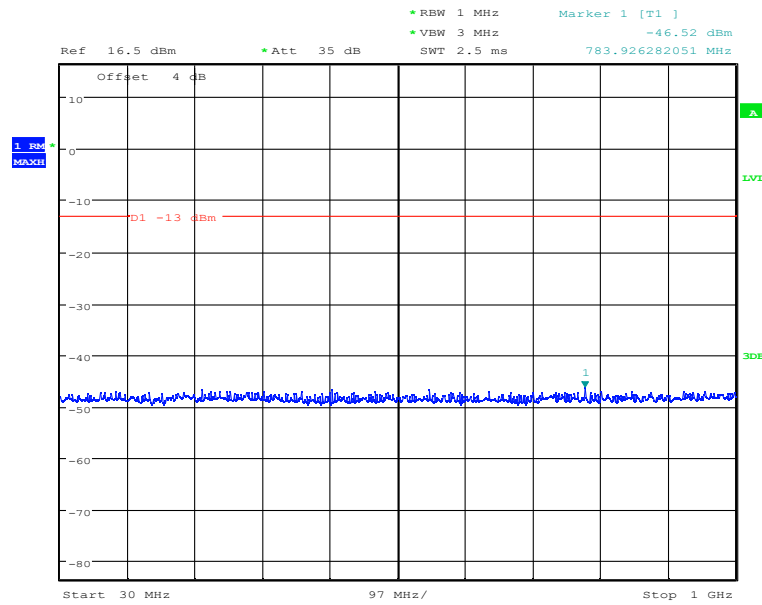
Band2-Middle Channel-20MHz Bandwidth-10GHz to 20GHz

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

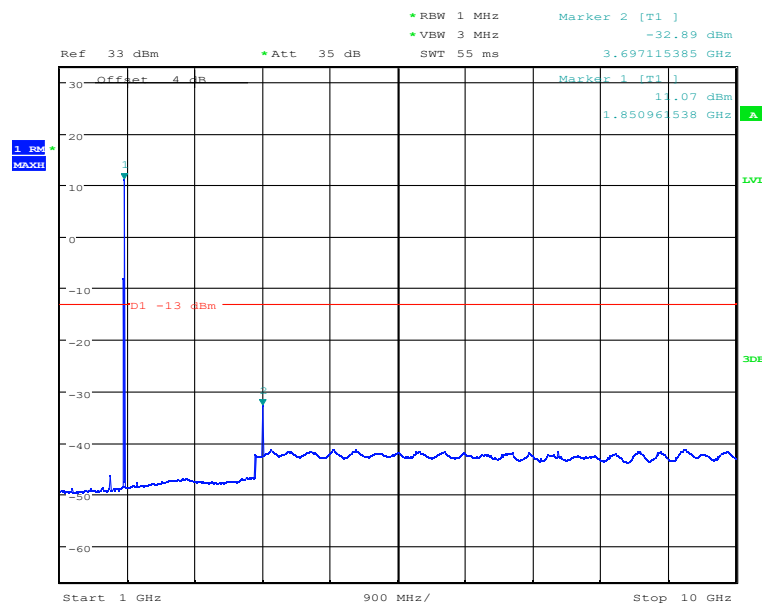


Report No.: I21W00004-WWAN_Rev2



Date: 29.DEC.2020 06:37:20

Band2-Low Channel-1.4MHz Bandwidth-30MHz to 1GHz



Date: 29.DEC.2020 06:38:05

Band2-Low Channel-1.4MHz Bandwidth-1GHz to 10GHz

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