FCC TEST REPORT FOR CERTIFICATION
On Behalf of

Planet Computers Limited

Gemini

Model No.: Gemini 4G

FCC ID: 2AO7Q-X600M1

Prepared for : Planet Computers Limited
Suite #9, 56 Sloane Square, London, SW1W 8AX, United Kingdom

Prepared By : Audix Technology (Shenzhen) Co., Ltd.
No. 6, Kefeng Road, Science & Technology Park,
Nanshan District , Shenzhen, Guangdong, China

Tel: (0755) 26639496

Report Number	:	ACS-F18080
Date of Test	:	Mar.14~19, 2018
Date of Report	:	Apr.12, 2018

TABLE OF CONTENTS

TEST REPORT CERTIFICATION

Applicant	:	Planet Computers Limited
Manufacture	:	Planet Computers Limited
Product	:	Gemini
FCC ID	:	2AO7Q-X600M1

(A) Model No. : Gemini 4G
(B) Serial No. : N/A
(C) Test Voltage : DC 5V From Adapter Input AC 120V/60Hz

Tested for comply with:
FCC part 2, 27

Test Method:
KDB971168 D01 v03

The device described above is tested by AUDIX TECHNOLOGY (SHENZHEN) CO., LTD. to confirm comply with all the FCC part 2, 27 requirements.

The test results are contained in this test report and AUDIX TECHNOLOGY (SHENZHEN) CO., LTD. is assumed full responsibility for the accuracy and completeness of these tests. This report contains data that are not covered by the NVLAP accreditation. Also, this report shows that the Equipment Under Test (EUT) is to be technically compliant with the FCC and IC requirements.

This Report is made under FCC part 2, 27. No modifications were required during testing to bring this product into compliance.

This report applies to above tested sample only. This report shall not be reproduced in part without written approval of AUDIX TECHNOLOGY (SHENZHEN) CO., LTD.

The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government.

Date of Test : Mar.14~19, 2018 Report of date: Apr.12, 2018

Prepared by : Monica Liu / Assistant

Reviewed by : Sunny Lu / Deputy Manager

信華科技（深圳）有限公司
Audix Technology (Shenzhen) Co., Ltd.
EMC 部門報告專用章
Stamp only for EMC Dept. Report

Approved & Authorized Signer : Signature: David Jin
David Jin / Manager

1. SUMMARY OF STANDARDS AND RESULTS

1.1.Description of Standards and Results

The EUT has been tested according to the applicable standards as referenced below.

EMISSION		
Description of Test Item	**Standard**	**Results**
RF Output Power	2.1046	PASS
99% & 26dB Occupied Bandwidth	2.1049	PASS
Out of Band Emissions at antenna Terminals and Band Edge	2.1051 27.53	PASS
Frequency Stability V.S. Temperature and Voltage	2.1055 27.54	PASS
Effective Isotropic Radiated Power	2.1046 27.50	PASS
Peak to Average Power Ratio	27.50	PASS
Field Strength of Spurious Emissions	2.1053 27.53	PASS

2. GENERAL INFORMATION

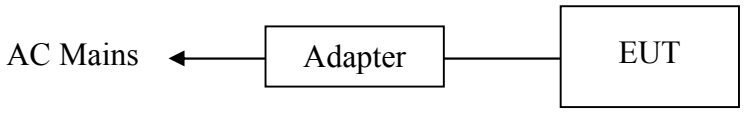
2.1.Description of Device (EUT)

Product	:	Gemini
Model No.	:	Gemini 4G
FCC ID	:	2AO7Q-X600M1
Operating Frequency	:	Band 41: 2496MHz-2690MHz
Antenna Type and Gain	:	PIFA Antenna, Band 41: -1.3dBi.
Applicant	:	Planet Computers Limited Suite #9, 56 Sloane Square, London, SW1W 8AX, United Kingdom
Manufacturer	:	Planet Computers Limited Suite #9, 56 Sloane Square, London, SW1W 8AX, United Kingdom
Factory	:	SHENZHEN YIXU ELECTRONICS CO., LTD. Building B, Area E, Yuwei, Qingxiang Rd, Longhua, Shenzhen
Power Adapter	:	Manufacturer: Planet, M/N: TPA-10120125UUA-MTK; Cable: Unshielded, Detachable, 1.0m
Date of Test	:	Mar.14~19, 2018
Date of Receipt	:	Dec.26, 2017
Sample Type	:	Prototype production

2.2.Tested Supporting System Details

[None]

2.3.Block diagram of connection between the EUT and simulators



(EUT: Gemini)

2.4.Test Information

Band	Bandwidth (MHz)	CH	Frequency (MHz)
Band 41	5	40265	2557.5
		40740	2605.0
		41215	2652.5
	10	40290	2560.0
		40740	2605.0
		41190	2650.0
	15	40315	2562.5
		40740	2605.0
		41165	2647.5
	20	40340	2565.0
		40740	2605.0
		41140	2645.0

2.5.Test Facility

Site Description

Name of Firm	:	Audix Technology (Shenzhen) Co., Ltd. No. 6, Kefeng Road, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China
EMC Lab.	:	Certificated by Industry Canada Registration Number: IC 5183A-1 Valid Date: May.07, 2020
	:	Certificated by DAkkS, Germany Registration No: D-PL-12151-01-00 Valid Date: Dec.07, 2021
	:	Accredited by NVLAP, USA NVLAP Code: 200372-0 Valid Date: Mar.31, 2018
		Certificated by FCC, USA Designation Number: CN5022 Valid Date: Mar.31, 2018

2.6.Measurement Uncertainty (95% confidence levels, k=2)

Test Item	Uncertainty
Uncertainty for Radiated Spurious Emission test in RF chamber	3.6dB
Uncertainty for Conduction Spurious emission test	2.0dB
Uncertainty for Output power test	0.8dB
Uncertainty for Power density test	2.0dB
Uncertainty for Frequency range test	$7x10^{-8}$
Uncertainty for Bandwidth test	83 kHz
Uncertainty for DC power test	0.1 %
Uncertainty for test site temperature and humidity	0.6℃
	3%

3. RF POWER OUTPUT TEST

3.1.Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	PXA Signal Analyzer	Agilent	N9030A	MY53311015	Oct.15,17	1 Year
2.	Power meter	Anritsu	ML2487A	6K00002472	Apr.22,17	1Year
3.	Power sensor	Anritsu	MA2491A	0033005	Apr.22,17	1Year
4.	Attenuator (20dB)	Agilent	8491B	MY39262165	Apr.22,17	1 Year
5.	RF Cable	Marvelous Microwave Inc	SFL402105FLEX	NO.1	Oct.15,17	1 Year

3.2.Test Procedure

The transmitter output was connected to calibrated attenuator, the other end of which was connected to a power meter. Transmitter output was read off the power in dBm. The power output at the transmitter antenna port was determined by adding the value of attenuator to the power meter reading.

3.3.Test Result

Bandwidth	RB size/offset	Frequency(MHz)	Power(dBm)	
			QPSK	16QAM
5MHz	1RB high	2557.5	23.4	22.7
		2605	22.9	22.3
		2652.5	22.8	22.1
	1RB low	2557.5	23.5	22.8
		2605	22.9	22.4
		2652.5	22.8	22.1
	50% RB mid	2557.5	22.2	21.4
		2605	21.6	20.8
		2652.5	21.6	20.8
	100% RB	2557.5	22.2	21.3
		2605	21.6	20.7
		2652.5	21.6	20.7
10MHz	1RB high	2560	23.1	22.6
		2605	22.6	22.7
		2650	22.6	22.5
	1RB low	2560	23.3	22.7
		2605	22.7	22.8
		2650	22.6	22.5
	50% RB mid	2560	22.2	21.3
		2605	21.7	20.7
		2650	21.7	20.7
	100% RB	2560	22.3	21.3
		2605	21.7	20.7
		2650	21.7	20.7

15MHz	1RB high	2562.5	22.8	22.8
		2605	22.4	22.4
		2647.5	22.3	22.2
	1RB low	2562.5	23.0	22.9
		2605	22.5	22.5
		2647.5	22.3	22.2
	50% RB mid	2562.5	22.2	21.3
		2605	21.7	20.8
		2647.5	21.7	20.8
	100% RB	2562.5	22.2	21.2
		2605	21.6	20.7
		2647.5	21.6	20.7
20MHz	1RB high	2565	23.1	22.6
		2605	22.6	22.3
		2645	22.6	22.2
	1RB low	2565	23.5	22.9
		2605	23.0	22.5
		2645	22.8	22.3
	50% RB mid	2565	22.2	21.2
		2605	21.6	20.7
		2645	21.7	20.8
	100% RB	2565	22.2	21.3
		2605	21.6	20.7
		2645	21.7	20.8

4. 99% & 26dB Occupied Bandwidth Test

4.1.Test Equipment

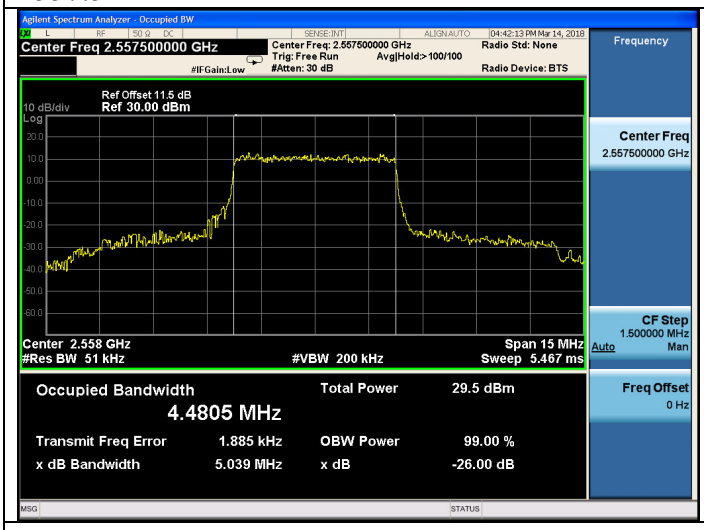
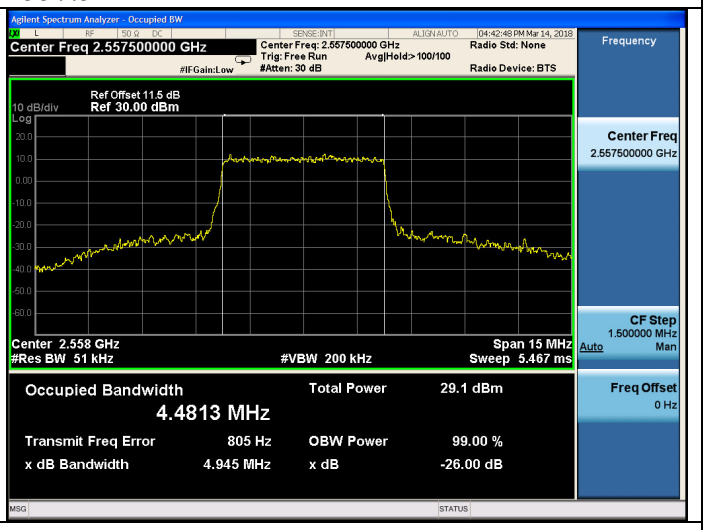
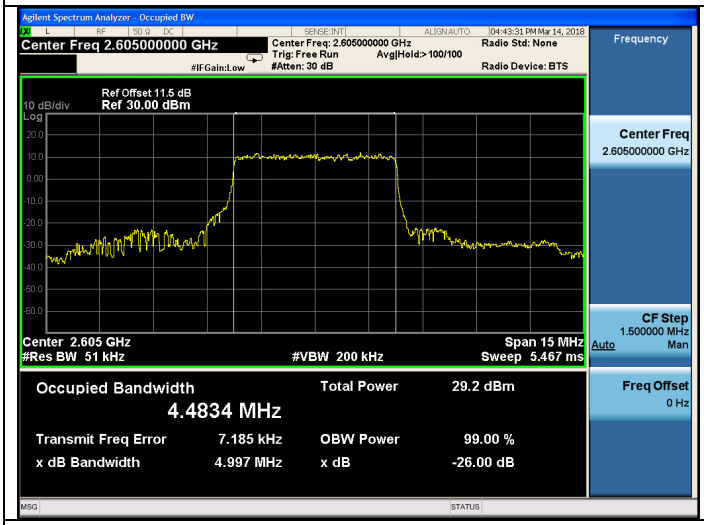
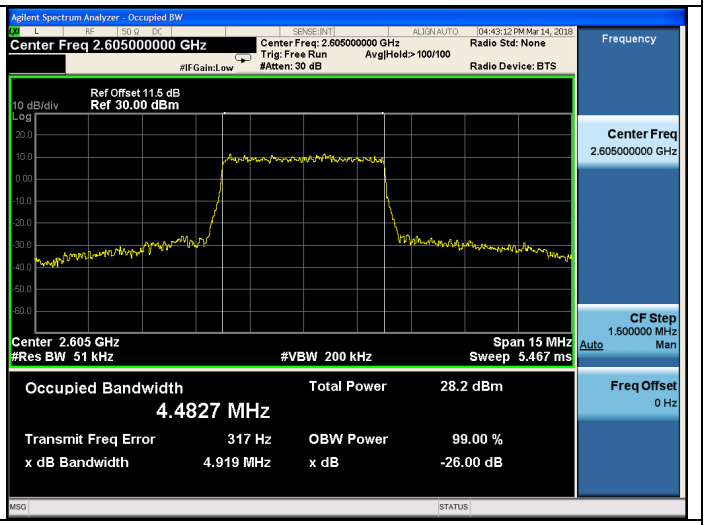
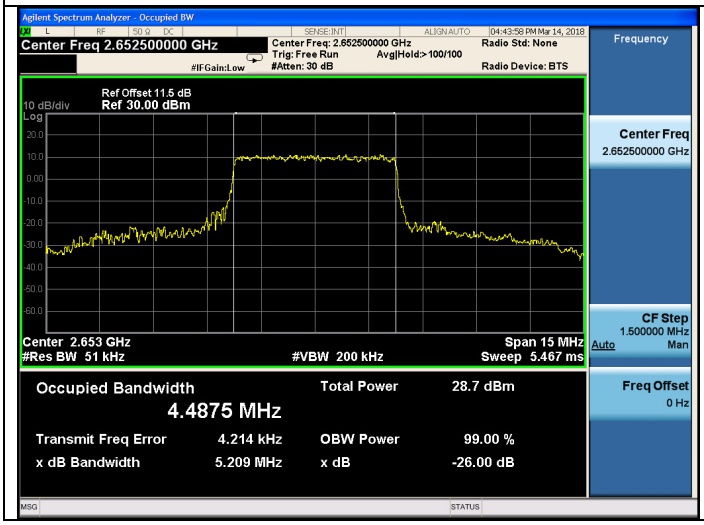
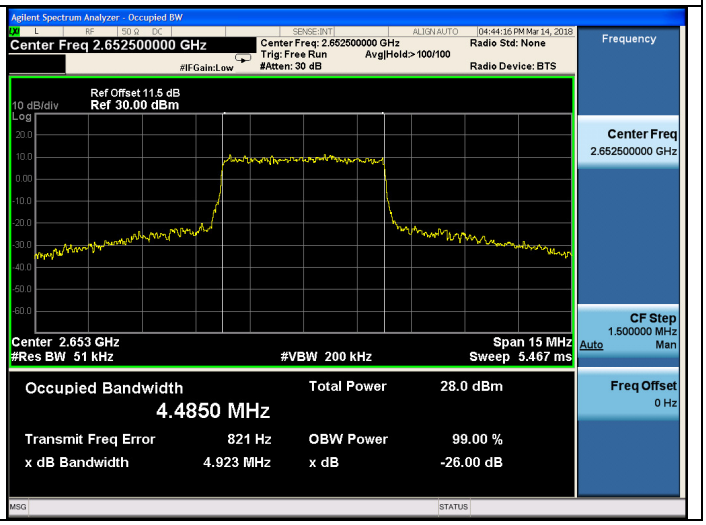
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	PXA Signal Analyzer	Agilent	N9030A	MY53311015	Oct.15,17	1 Year
2.	Attenuator (20dB)	Agilent	8491B	MY39262165	Apr.27,17	1 Year
3.	RF Cable	Marvelous Microwave Inc	SFL402105FLEX	NO.1	Oct.15,17	1 Year

4.2.Test Procedure

The EUT output RF connector was connected with a short a cable to the spectrum analyzer, RBW was set to about 1 to 5 % of the anticipated OBW, VBW>=3 times RBW, 99% bandwidth were measured, the occupied bandwidth is the delta frequency between the two points where the display line intersects the signal trace.

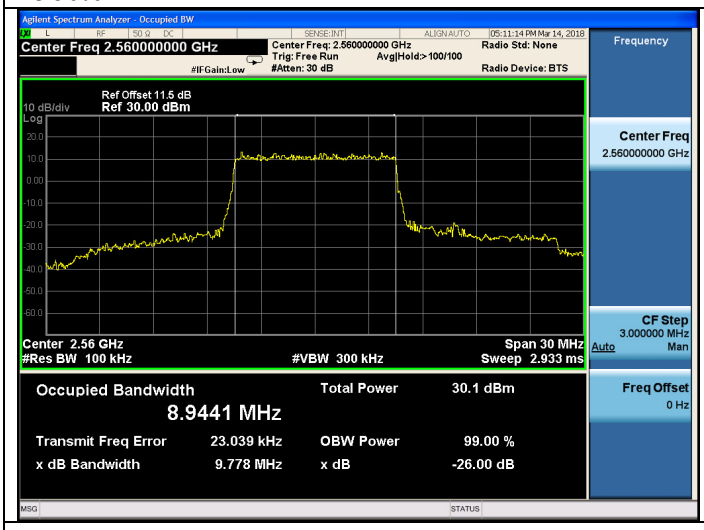
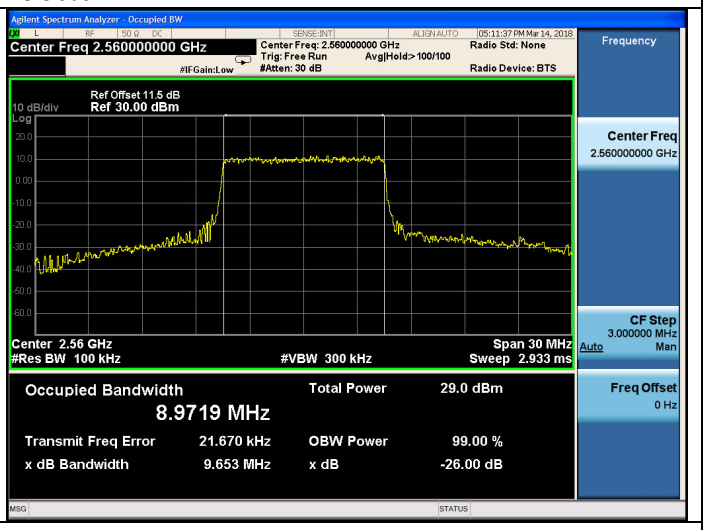
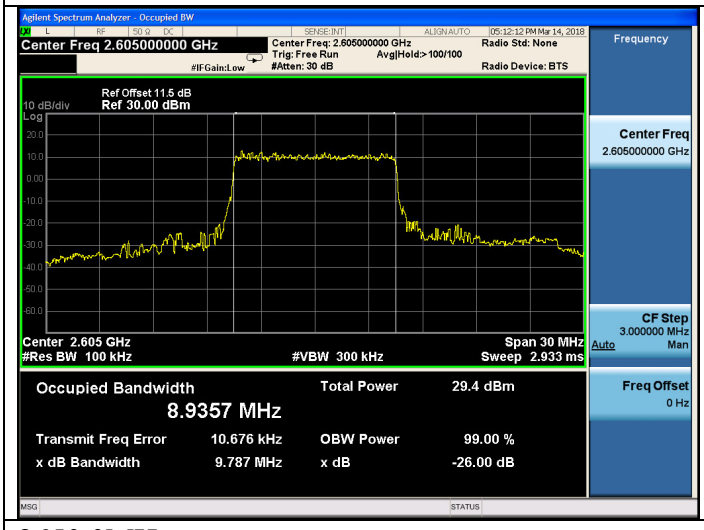
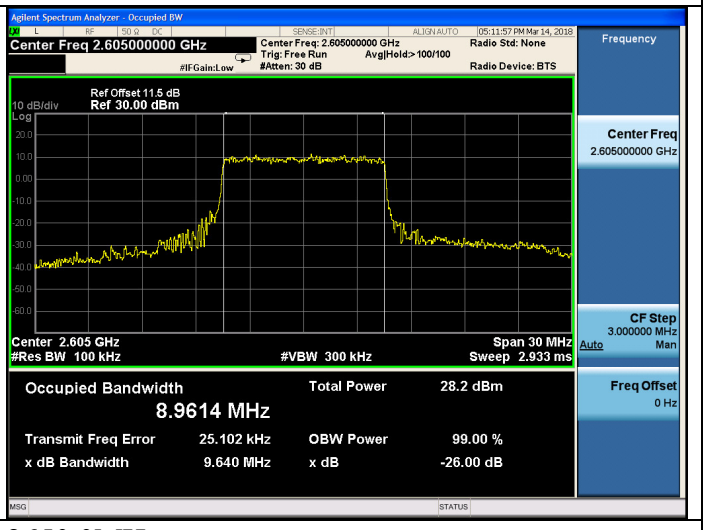
4.3.Test Result

Band	Bandwidth (MHz)	CH	Frequency (MHz)	99% bandwidth (MHz)		26dB bandwidth (MHz)	
				QPSK	16QAM	QPSK	16QAM
Band 41	5	40265	2557.5	4.4805	4.4813	5.039	4.945
		40740	2605.0	4.4834	4.4827	4.997	4.919
		41215	2652.5	4.4875	4.4850	5.209	4.923
	10	40290	2560.0	8.9441	8.9719	9.778	9.653
		40740	2605.0	8.9357	8.9614	9.787	9.640
		41190	2650.0	8.9697	8.9354	9.812	9.959
	15	40315	2562.5	13.404	13.396	14.38	14.71
		40740	2605.0	13.410	13.428	14.47	14.46
		41165	2647.5	13.416	13.419	14.53	14.76
	20	40340	2565.0	17.942	17.936	19.42	19.44
		40740	2605.0	17.940	17.912	19.26	19.27
		41140	2645.0	17.967	17.918	19.26	19.23

Band 41:	
5MHz Bandwidth	
QPSK	16QAM
2557.5MHz	2557.5MHz
	
2605.0MHz	2605.0MHz
	
2652.5MHz	2652.5MHz
	

Band 41:

10MHz Bandwidth

QPSK	16QAM
2560.0MHz	2560.0MHz
	
2605.0MHz	2605.0MHz
	
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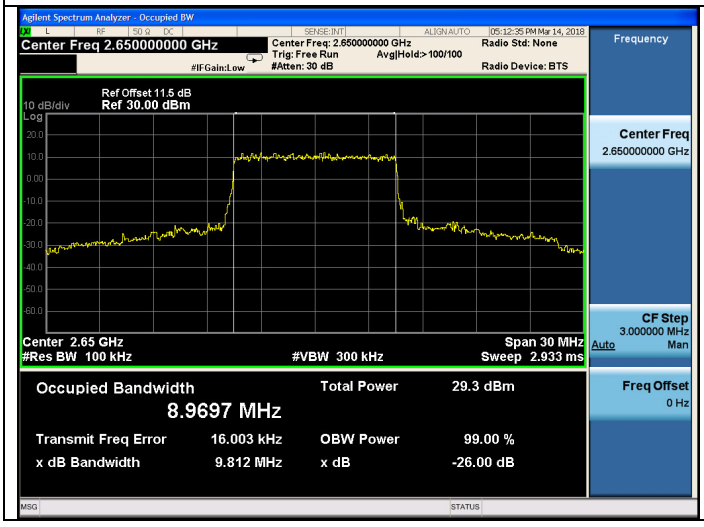
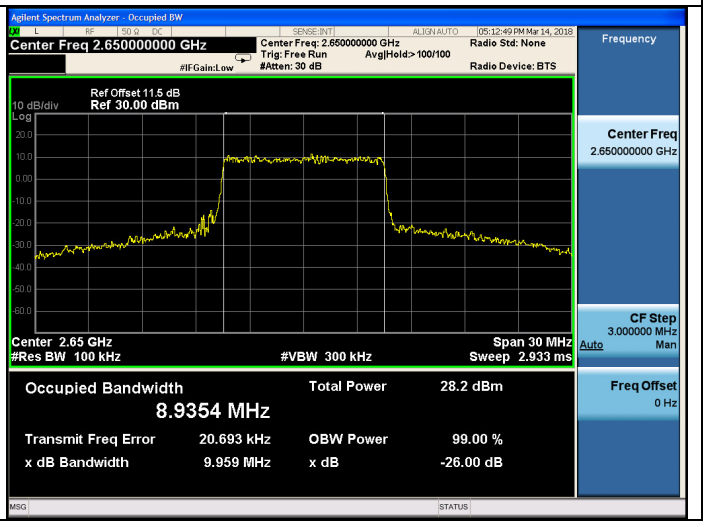
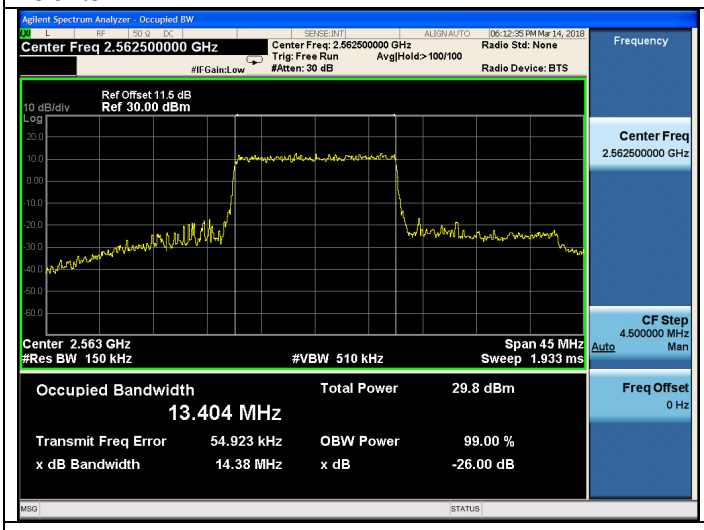
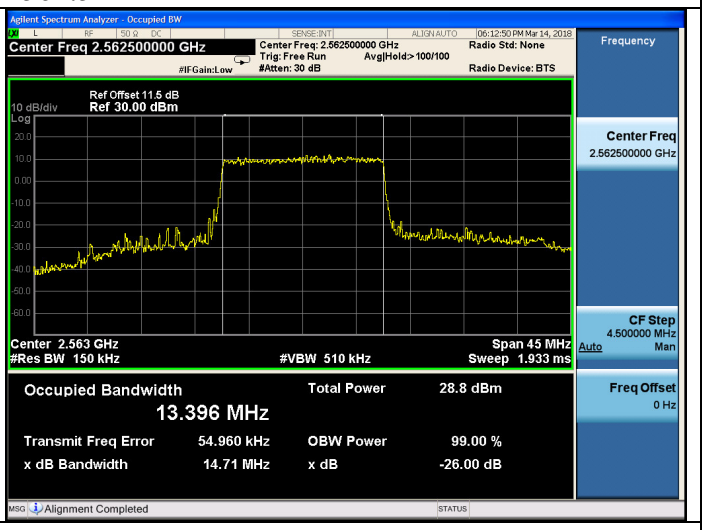
	

Band 41:

15MHz Bandwidth

QPSK	16QAM
2562.5MHz	2562.5MHz
	
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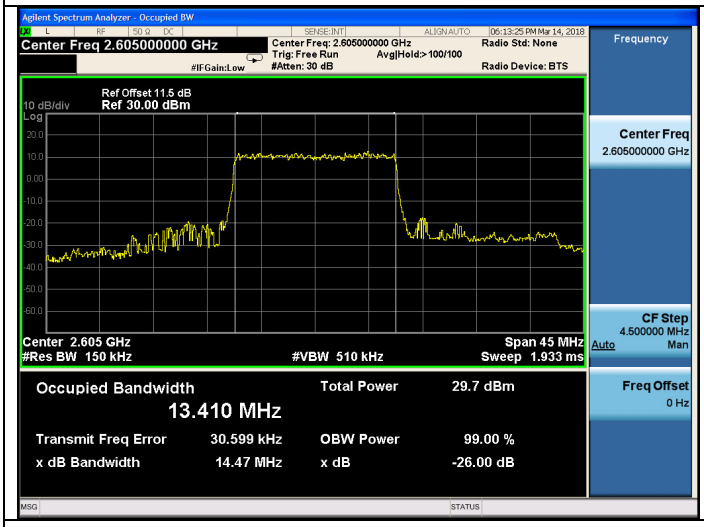	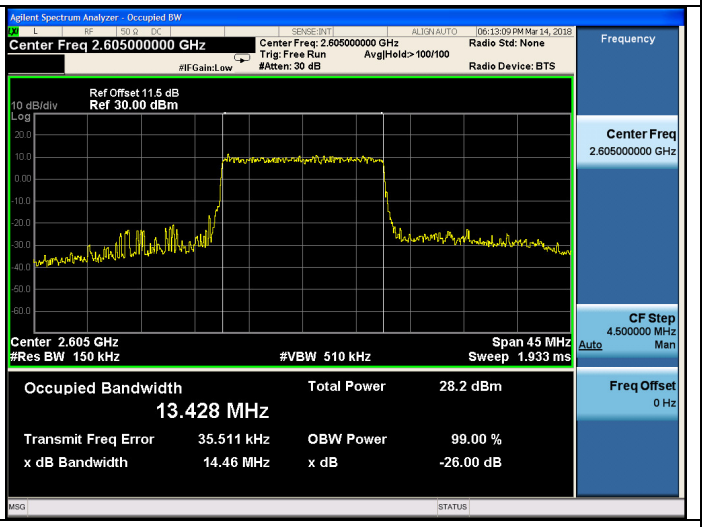
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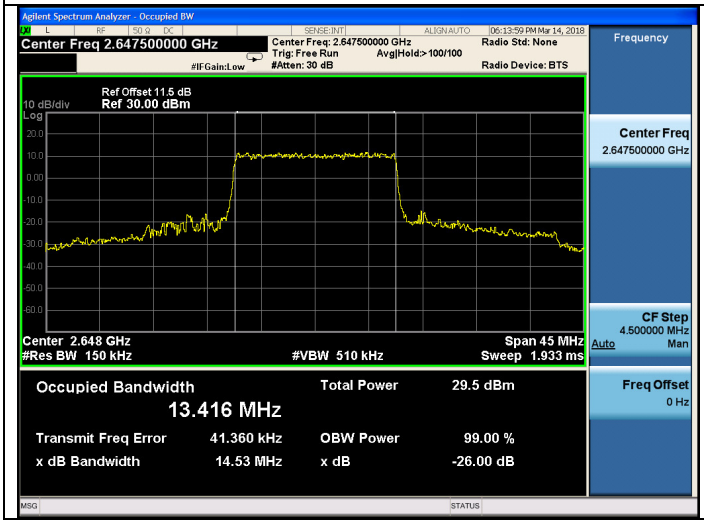
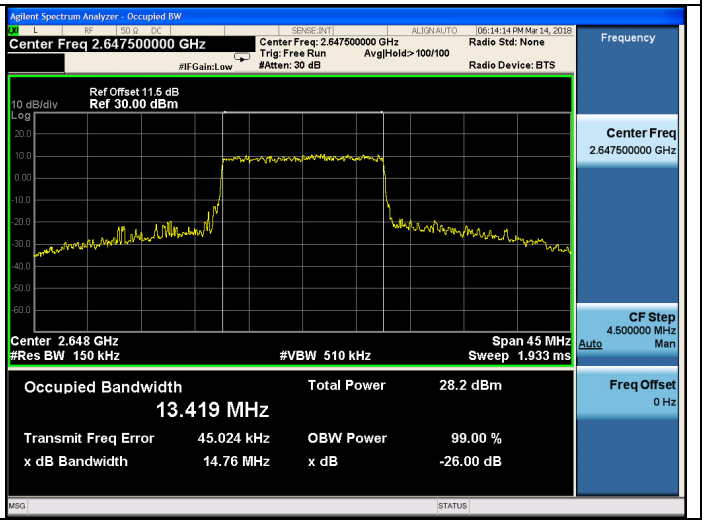
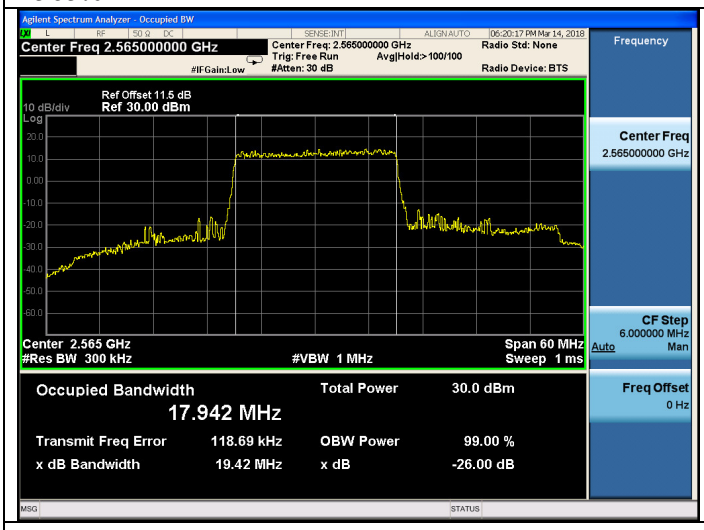
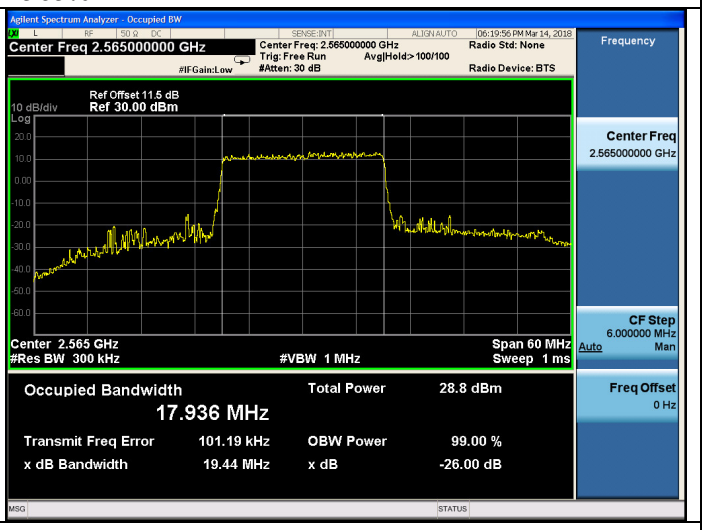
	

Band 41:	
20MHz Bandwidth	
QPSK	16QAM
2565.0MHz	2565.0MHz
	
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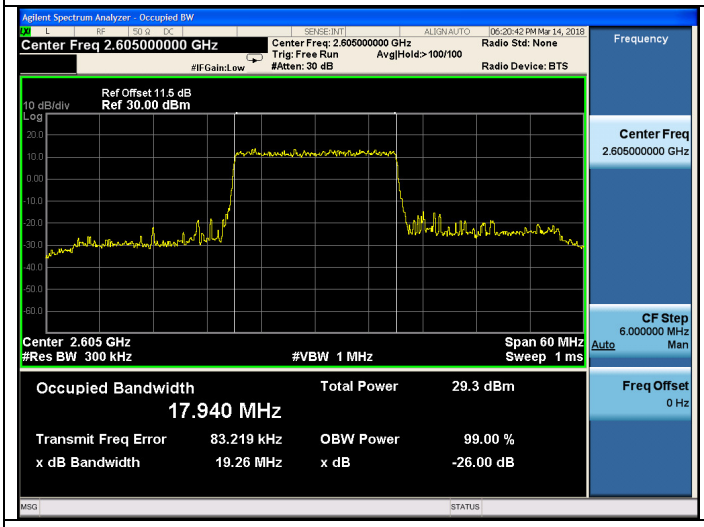	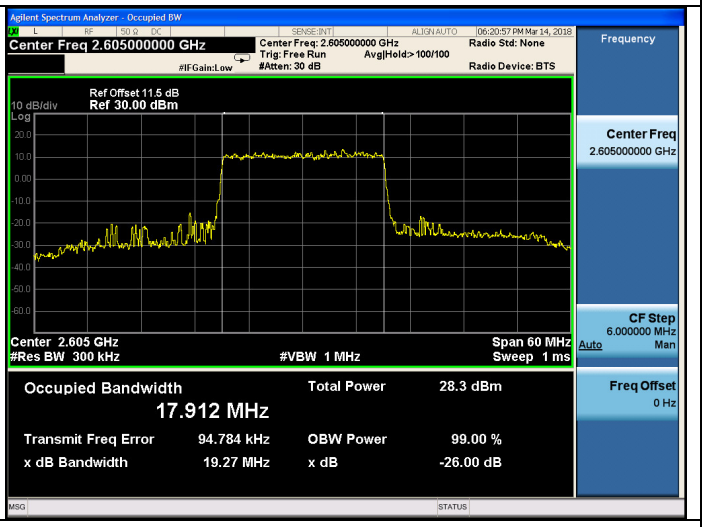
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