FCC
MEASUREMENT AND TEST REPORT
For
ZTE Corporation
ZTE Plaza, Hi-tech Park, Nanshan District, Shenzhen,
Guangdong, China 518057

FCC ID: Q78-R8882S2600
May 30, 2014

This Report Concerns: ☒ Original Report	Equipment Type: LTE Remote Radio Unit
Test Engineer:	Bloom
Report No.:	RF20140041RP
Test Date:	May 1 – May 30, 2014
Reviewed By:	Xie Yuming
Prepared By:	ZTETS Corporation
ZTE Plaza, Hi-tech Park, Nanshan District, Shenzhen, Guangdong, China 518057, P.R.China Tel: +86-755-26770000 Fax: +86-755-26771999	

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2 GENERAL INFORMATION

Product Description for Equipment Under Test (EUT)

The ZTE Corporation's product, model number: ZXSDR R8882 S2600 or the "EUT" as referred to in this report is a LTE Remote Radio Unit.

Technical specification:
Size: 472 mm x 320 mm x 152 mm (HxWxD)
Input voltage: -37V~-60V
Frequency range: 2620MHz~2690 MHz
(Bottom frequency is about 2622.5MHz, Middle frequency is about 2655MHz, Top frequency is about 2687.5MHz).
Max RF output power: 46dBm
Gain of the antenna: 17.4dBi
Appearance of EUT:

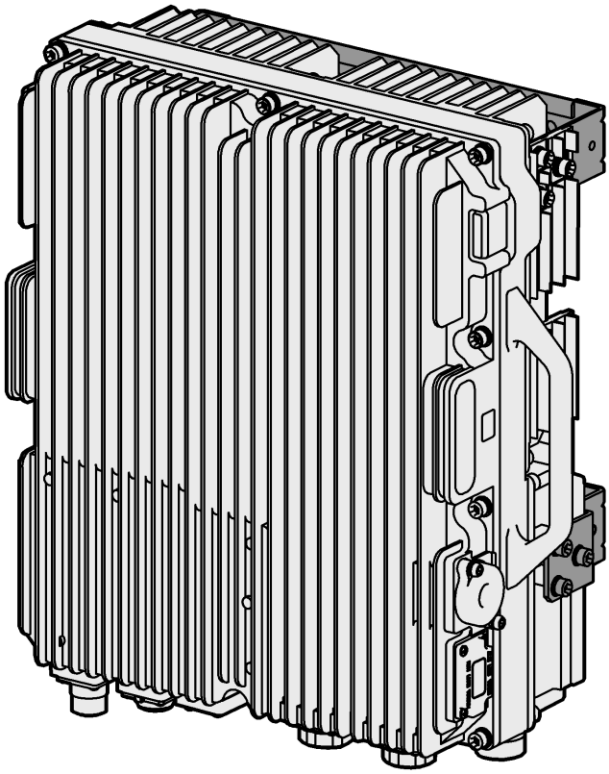


FIGURE 1 APPEARANCE OF ZXSDR R8882 S2600

Objective

This type approval report is prepared on behalf of ZTE Corporation in accordance with Part 2、Part 15、Part 27 of the Federal Communication Commissions rules.

Related Submittal(s)/Grant(s)

No related submittal(s).

Test Methodology

All tests and measurements indicated in this document were performed in accordance with the Code of federal Regulations Title 47 Part 2 as well as the following parts:
Part 27 MISCELLANEOUS WIRELESS COMMUNICATIONS SERVICES
Applicable Standards: TIA EIA 137-A, TIA EIA 97-D, TIA/EIA 603-C, Land Mobile FM or PM Communications Equipment Measurement and Performance Standards.
All radiated and conducted measurement was performed at ZTE Corporation Reliability Testing Center. The radiated testing was performed at an antenna-to-EUT distance of 3 meters.

Test Facility

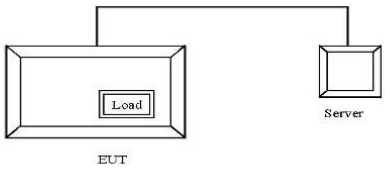
The Test site used by Shenzhen ZTE Technology Service Co., Ltd to collect test data is located in the ZTE Plaza, Hi-tech Park, Nanshan District, Shenzhen, Guangdong, 518057, P.R.China，Tel: +86-755-26770000，Fax: +86-755-26771999. Test site at ZTETS Corporation has been fully described in reports submitted to the Federal Communication Commission (FCC). The details of these reports have been found to be in compliance with the requirements of Section 2.948 of the FCC Rules on November 04, 2004. The facility also complies with the radiated and AC line conducted test site criteria set forth in ANSI C63.4-2003.
The Federal Communications Commission has the reports on file and is listed under FCC Registration No.: 0007895832. The test site has been approved by the FCC for public use and is listed in the FCC Public Access Link (PAL) database.

3 SYSTEM TEST CONFIGURATION

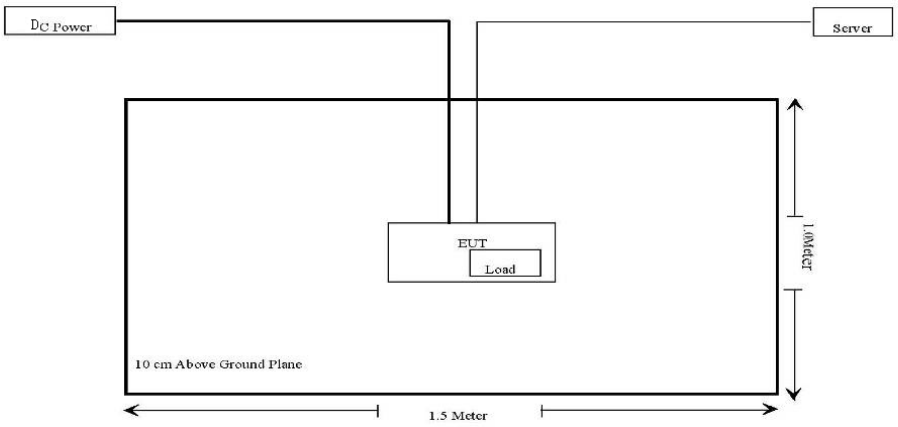
Description of Test Configuration

Justification
The EUT was configured for testing according to TIA/EIA-603C.
The final qualification test was performed with EUT operating at normal mode.
Equipment Modifications
ZTE Corporation has not done any modification on the EUT.

Configuration of Test Setup



Block Diagram of Test Setup



4 SUMMARY OF TEST RESULTS

FCC RULES	DESCRIPTION OF TEST	RESULT
§ 2.1046 , §27.50	Transmitter output Power	Compliant
§ 2.1091 , §1.1037	RF Exposure	Compliant
§ 2.1047	Modulation Characteristic	Compliant
§ 2.1053, §27.53	Spurious Radiated Emissions	Compliant
§ 2.1051, §27.53	Spurious Emissions AT Antenna Terminals	Compliant
§ 2.1049, §27.53	Occupied Bandwidth	Compliant
§ 2.1051, §27.53	Band Edge	Compliant
§ 2.1055	Frequency stability	Compliant

5 TRANSMITTER OUTPUT POWER

Applicable Standard： FCC §2.1046, §27.50

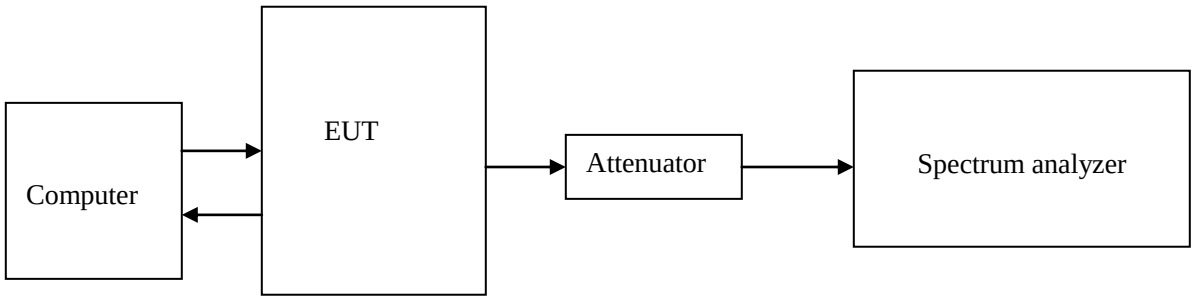
According to FCC §2.1046 &27.50, the ERP (equivalent radiated power) must not exceed 1000 Watts.

Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Agilent	MXA Series Spectrum Analyzer	N9030A	MY49431143	2013.06.18	2014.06.18
DTS	DTS 40dB Attenuator	DTS100-40-3-1	09112005	2013.07.19	2014.07.19
Silverline	Silverline RF Cable	SLA18-NMN1T	100311-04-0001	N/A	N/A

*__statement of traceability:__ ZTE Corporation Reliability Testing Center attests that all calibration has been performed per the NVLAP requirements, traceable to NIST.

Test Procedure



The RF output of the transmitter was connected to the input of the spectrum analyzer through sufficient attenuation. External attenuation Loss is 40dB, Cable Loss is about 1.5dB

Environmental Conditions

Temperature:	20 °C
Relative Humidity:	53 %
ATM Pressure:	1009 mbar

Test Result: Pass

Test Mode: Transmitting LTE

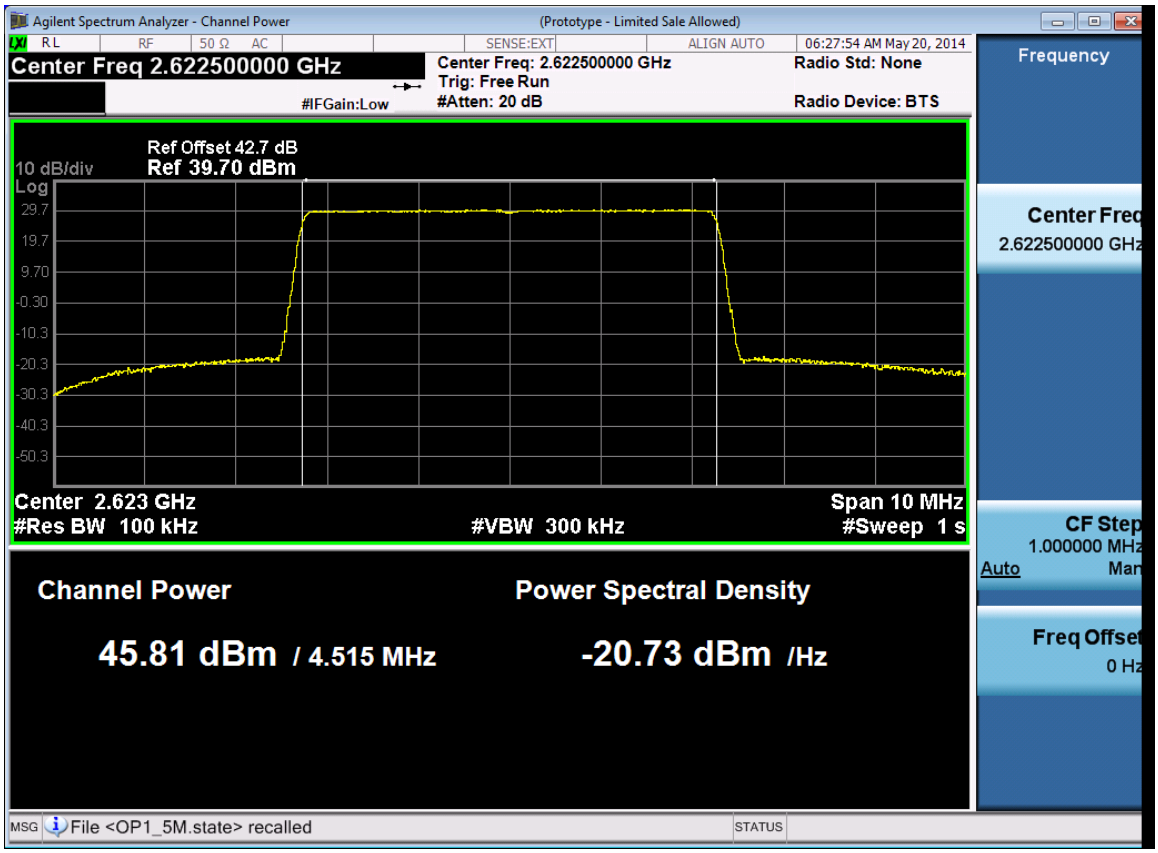
Test Data:

Single Carrier:

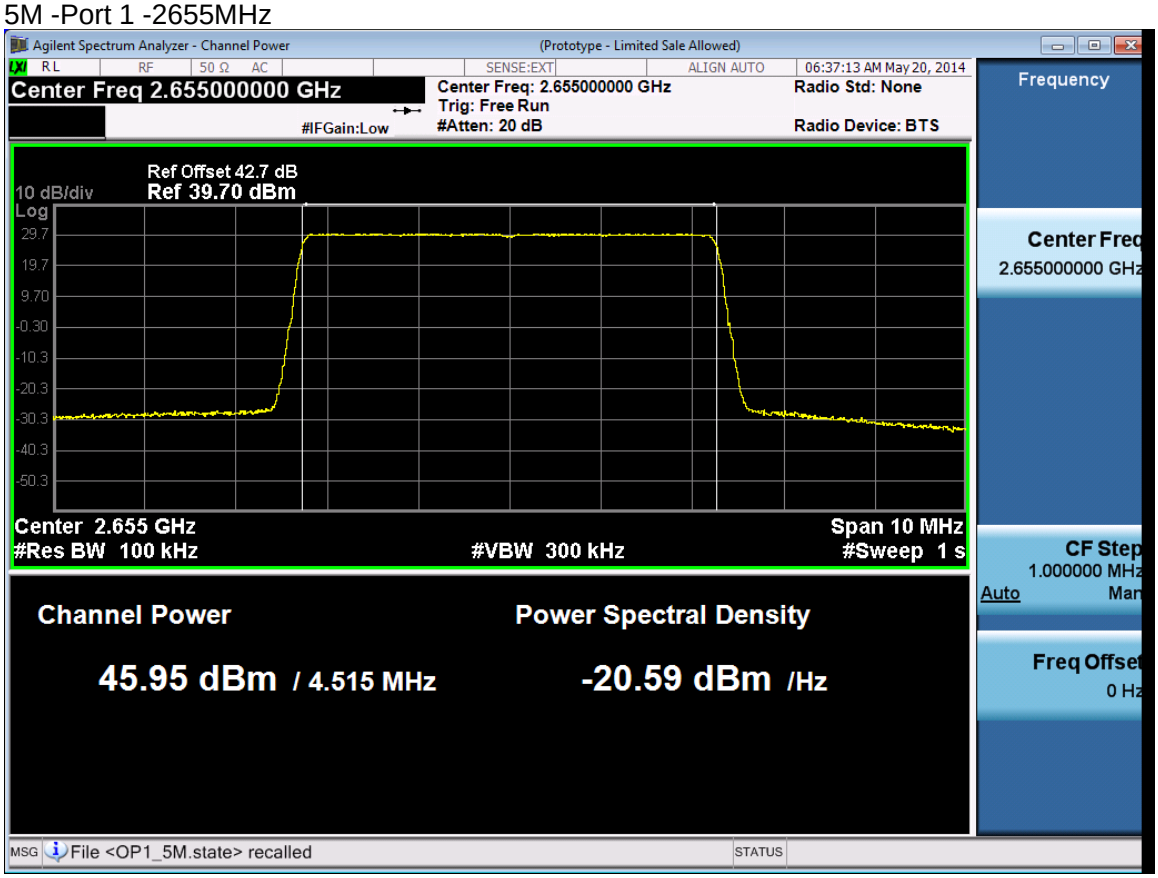
Channel Bandwidth :5M

Port	Center Freq. (MHz)	Max output Power in dBm
1	2622.5	45.81
	2655	45.95
	2687.5	45.82
2	2622.5	46.12
	2655	45.94
	2687.5	45.86

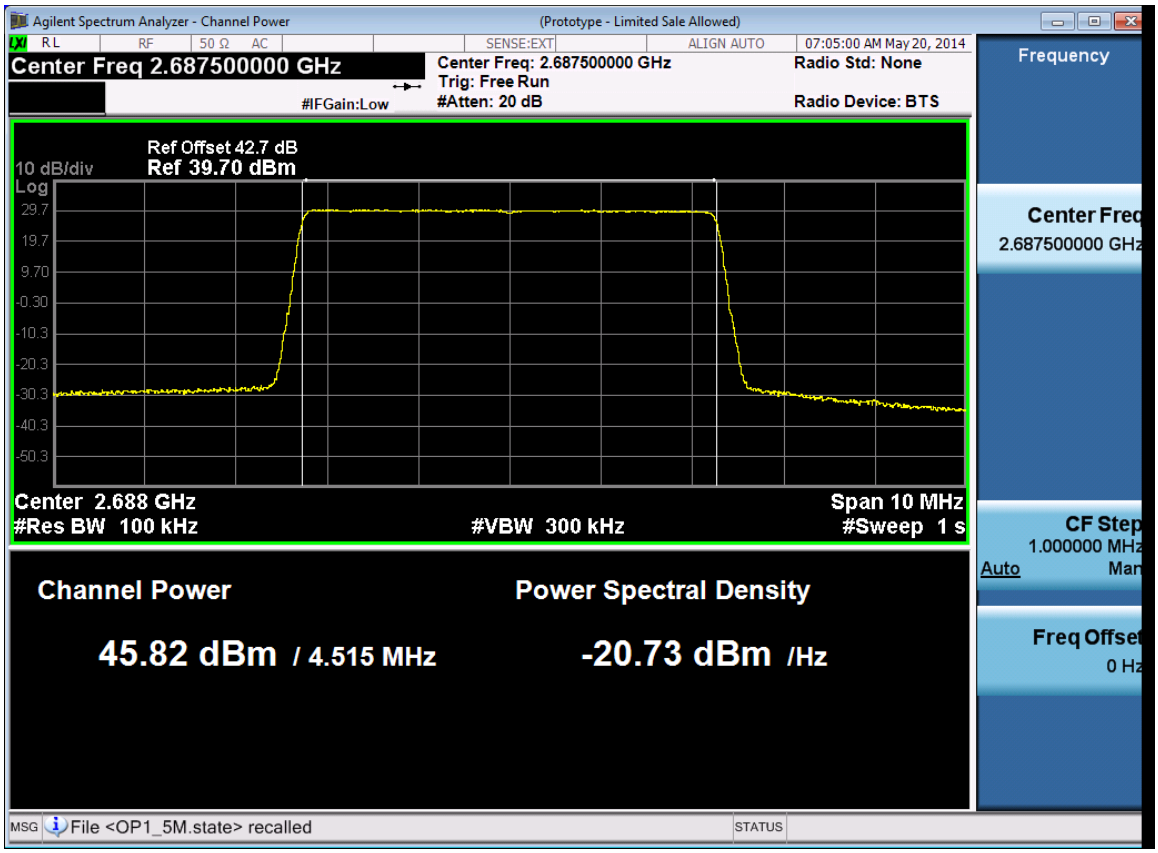
5M -Port 1 -2622.5MHz



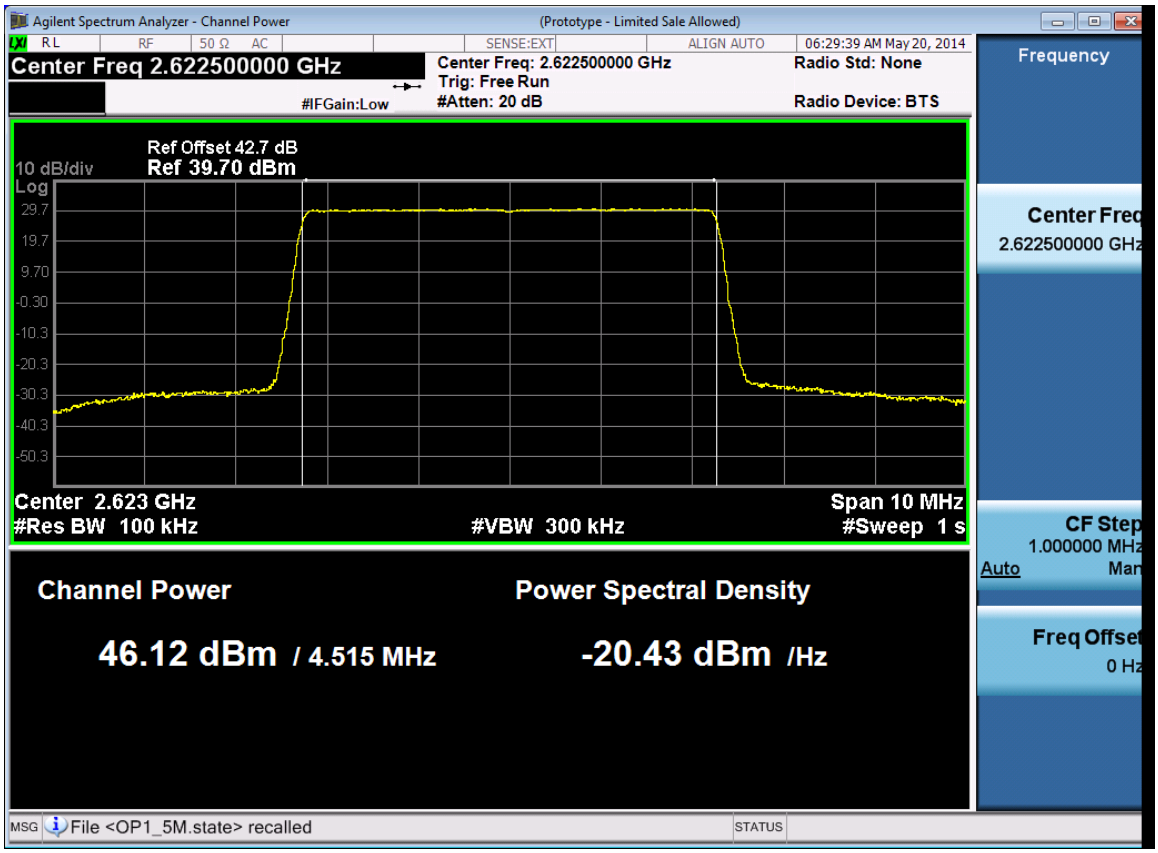
5M -Port 1 -2655MHz



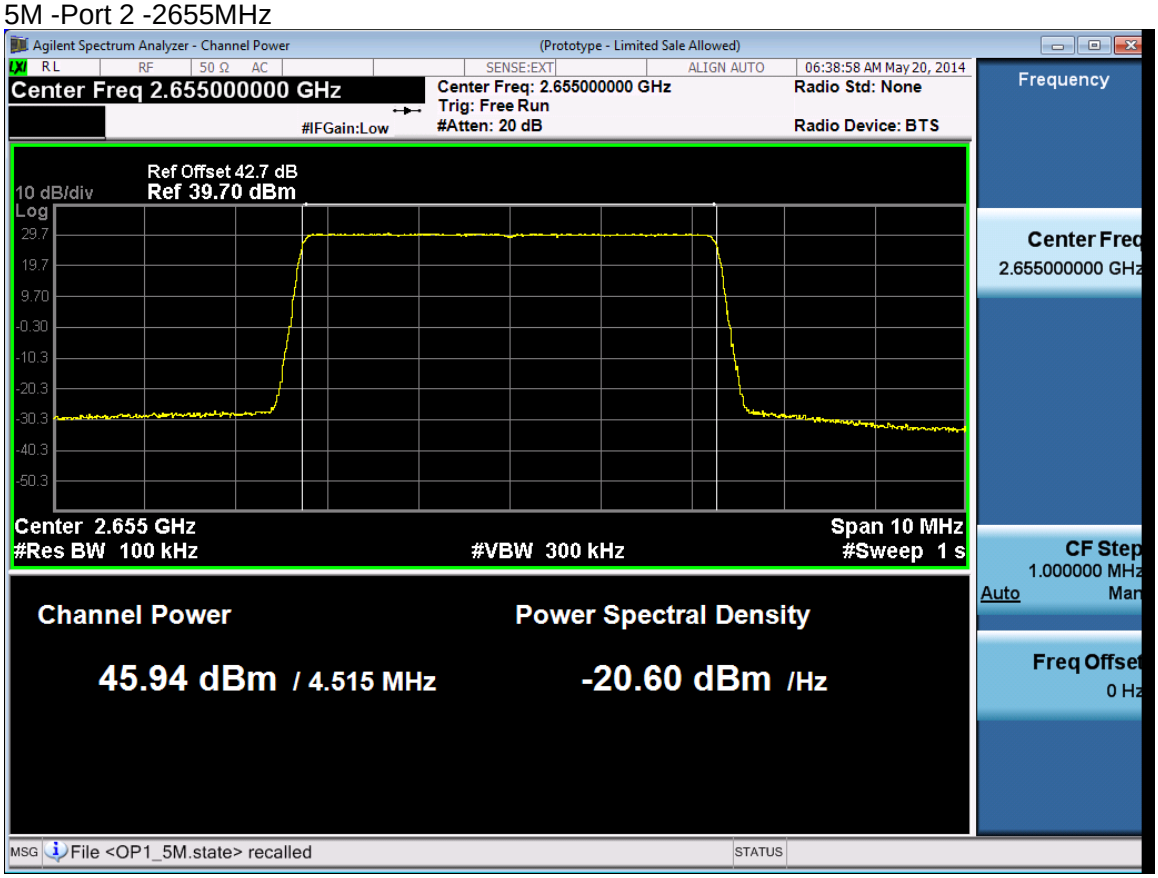
5M -Port 1 -2687.5MHz



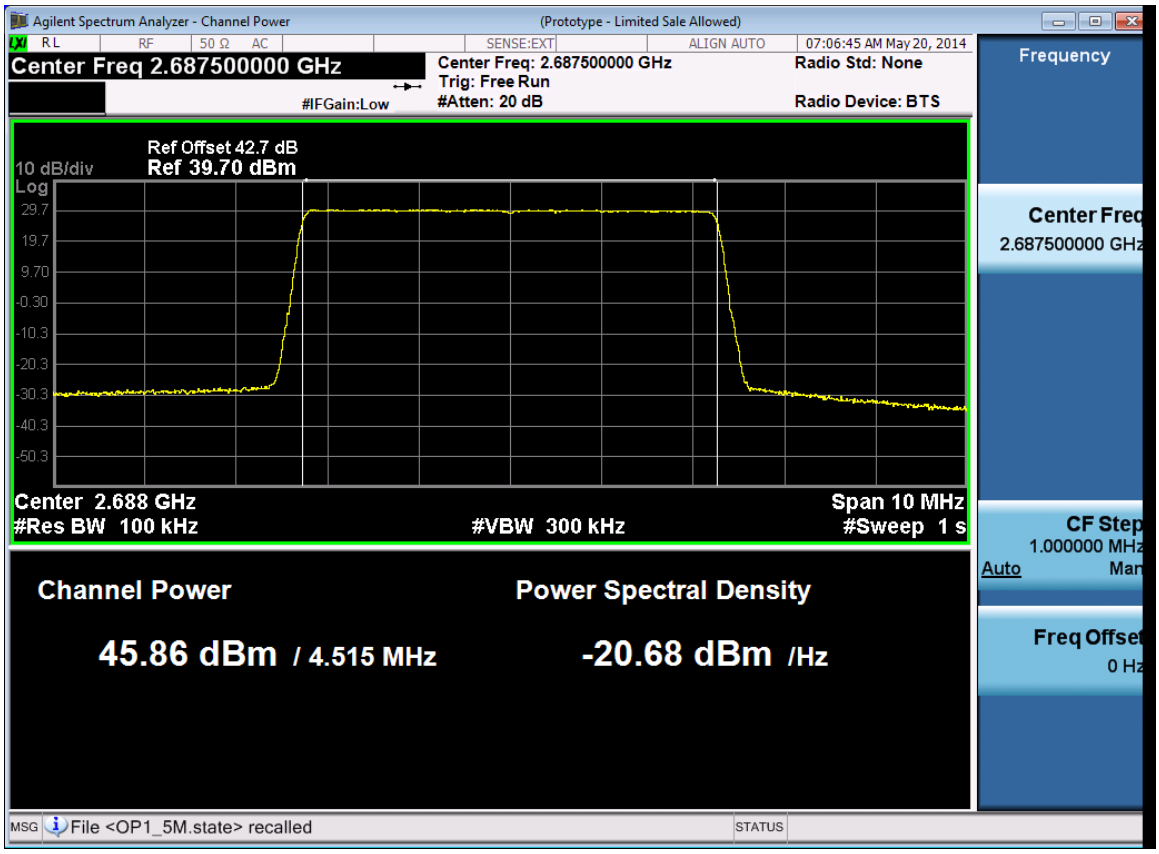
5M -Port 2 -2622.5MHz



5M -Port 2 -2655MHz



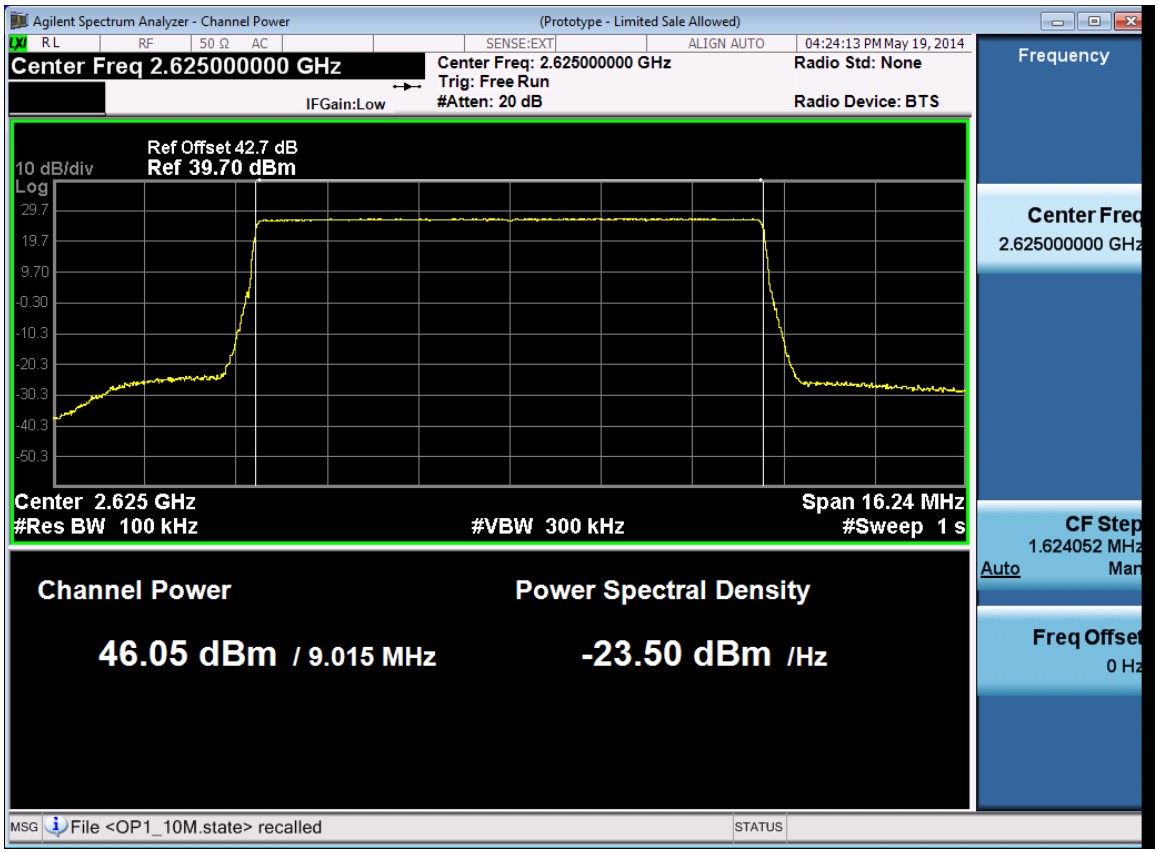
5M -Port 2 -2687.5MHz



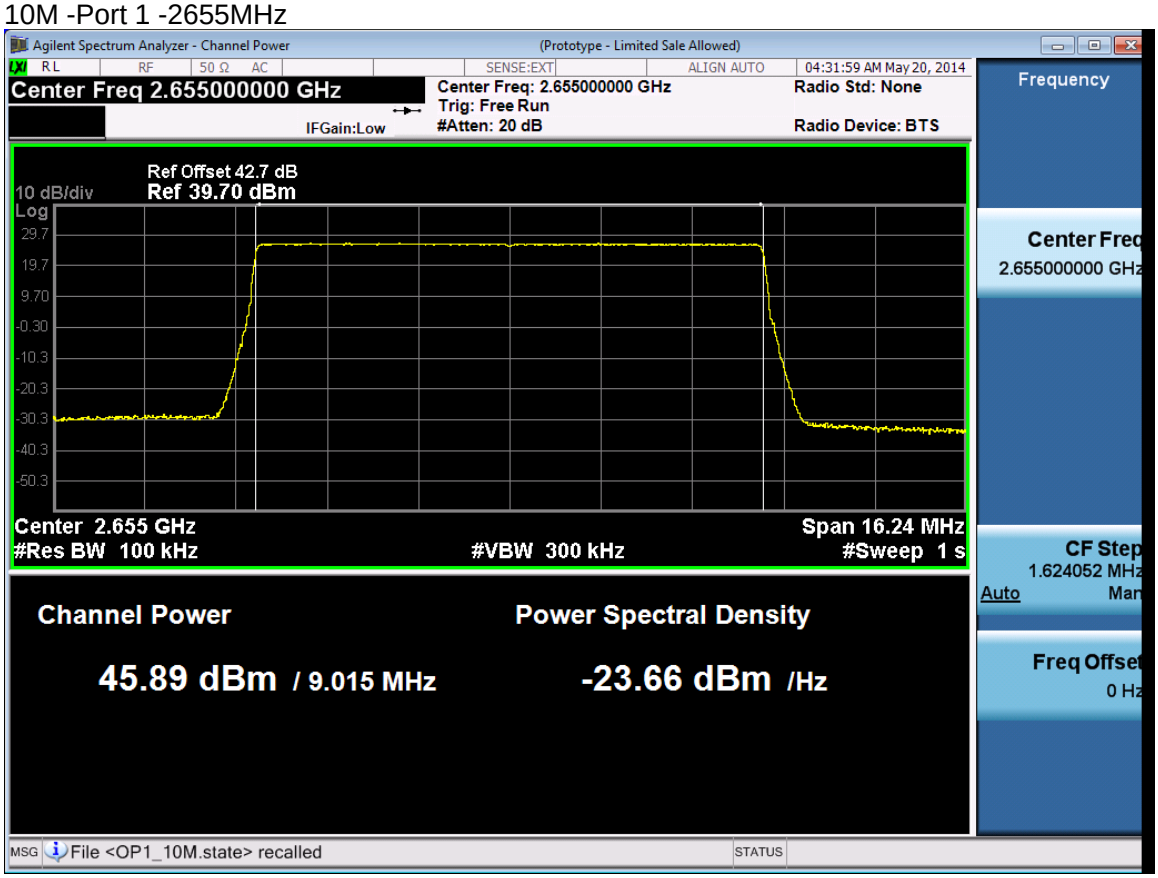
Channel Bandwidth :10M

Port	Center Freq. (MHz)	Max output Power in dBm
1	2625	46.05
	2655	45.89
	2685	45.81
2	2625	46.18
	2655	45.92
	2685	45.81

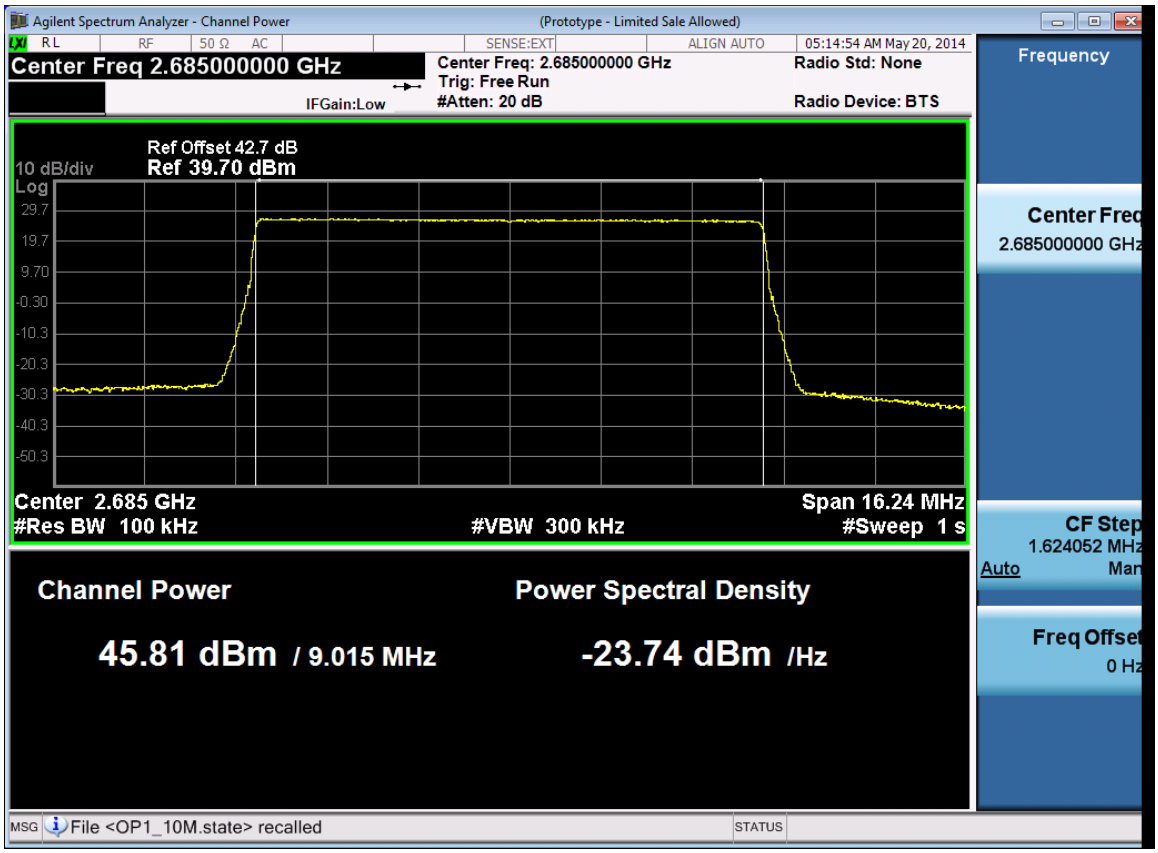
10M -Port 1 -2625MHz



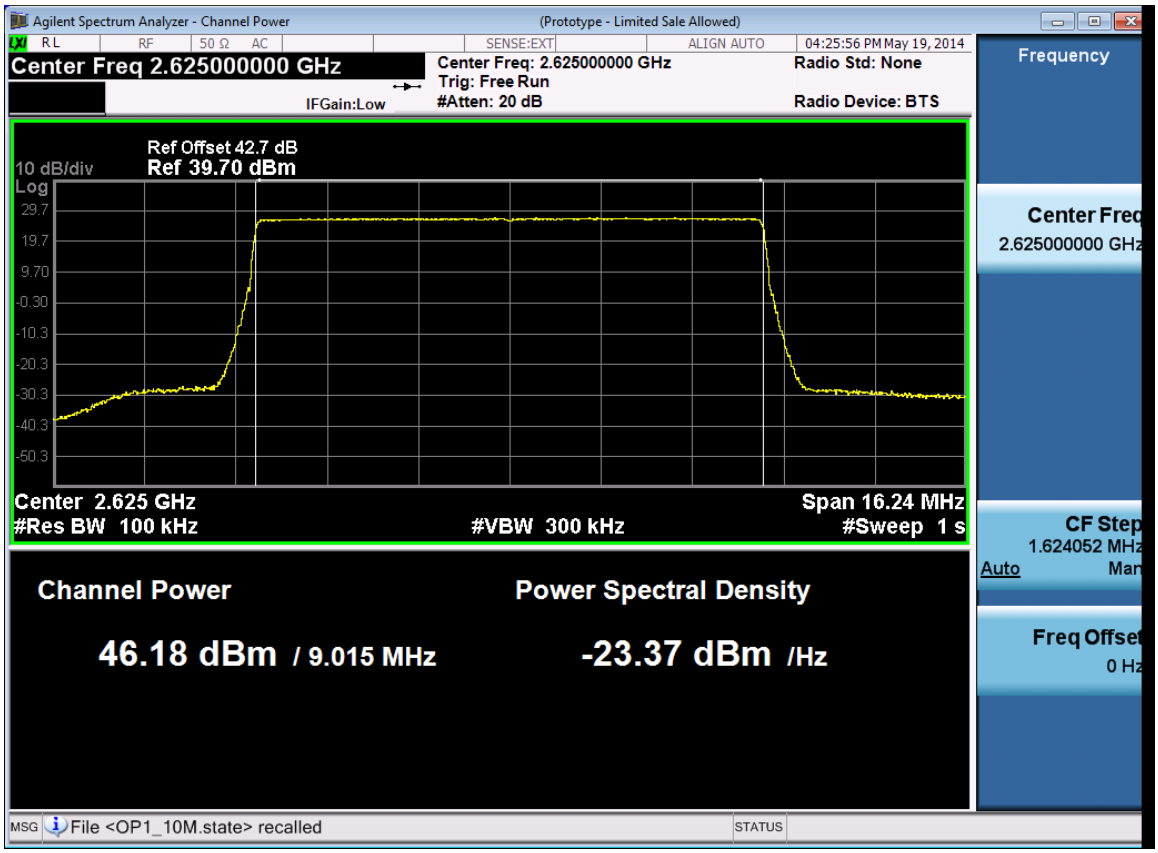
10M -Port 1 -2655MHz



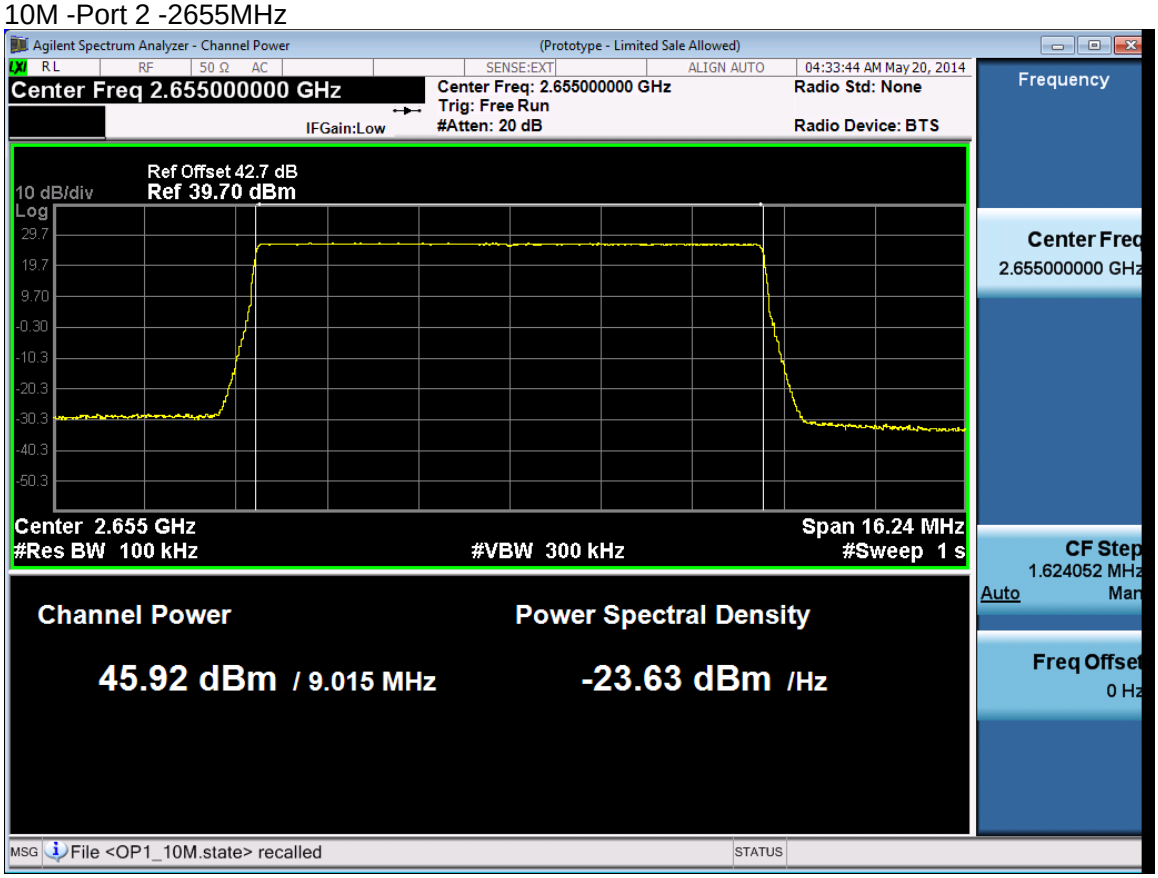
10M -Port 1 -2685MHz



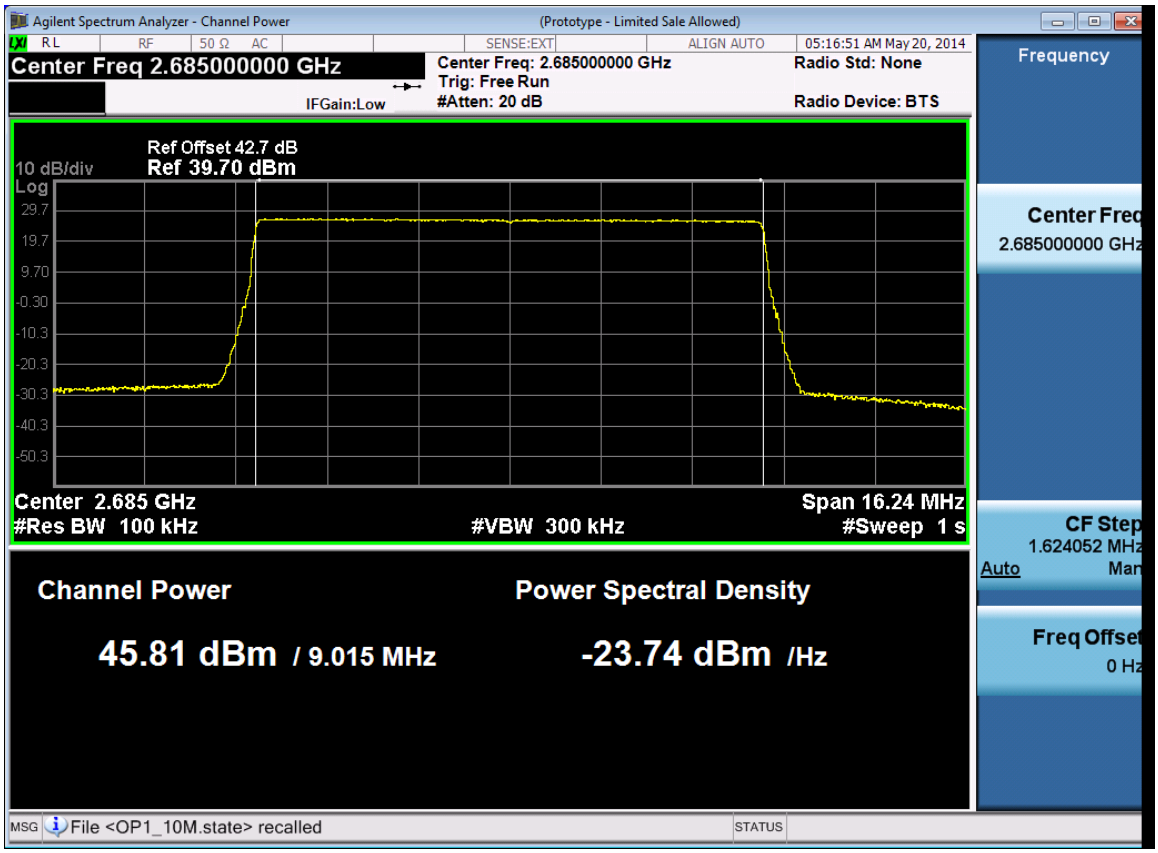
10M -Port 2 -2625MHz



10M -Port 2 -2655MHz



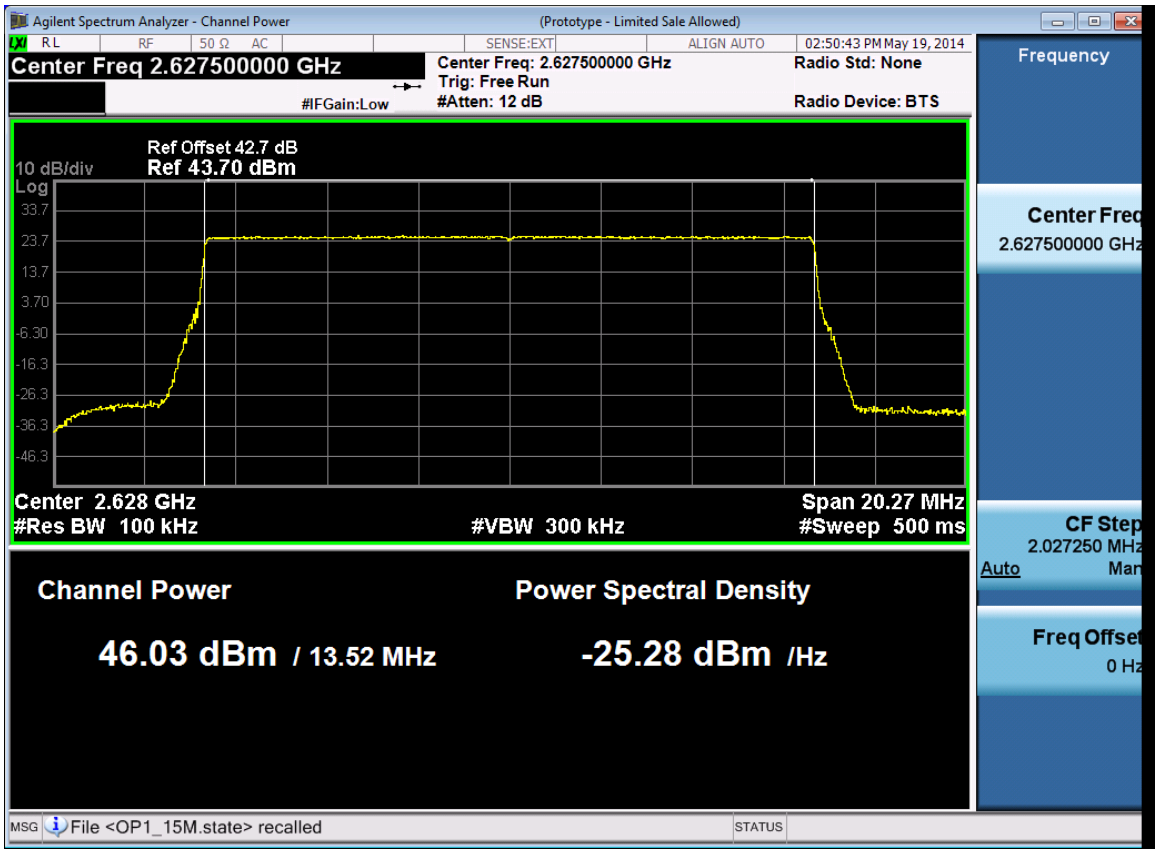
10M -Port 2 -2685MHz



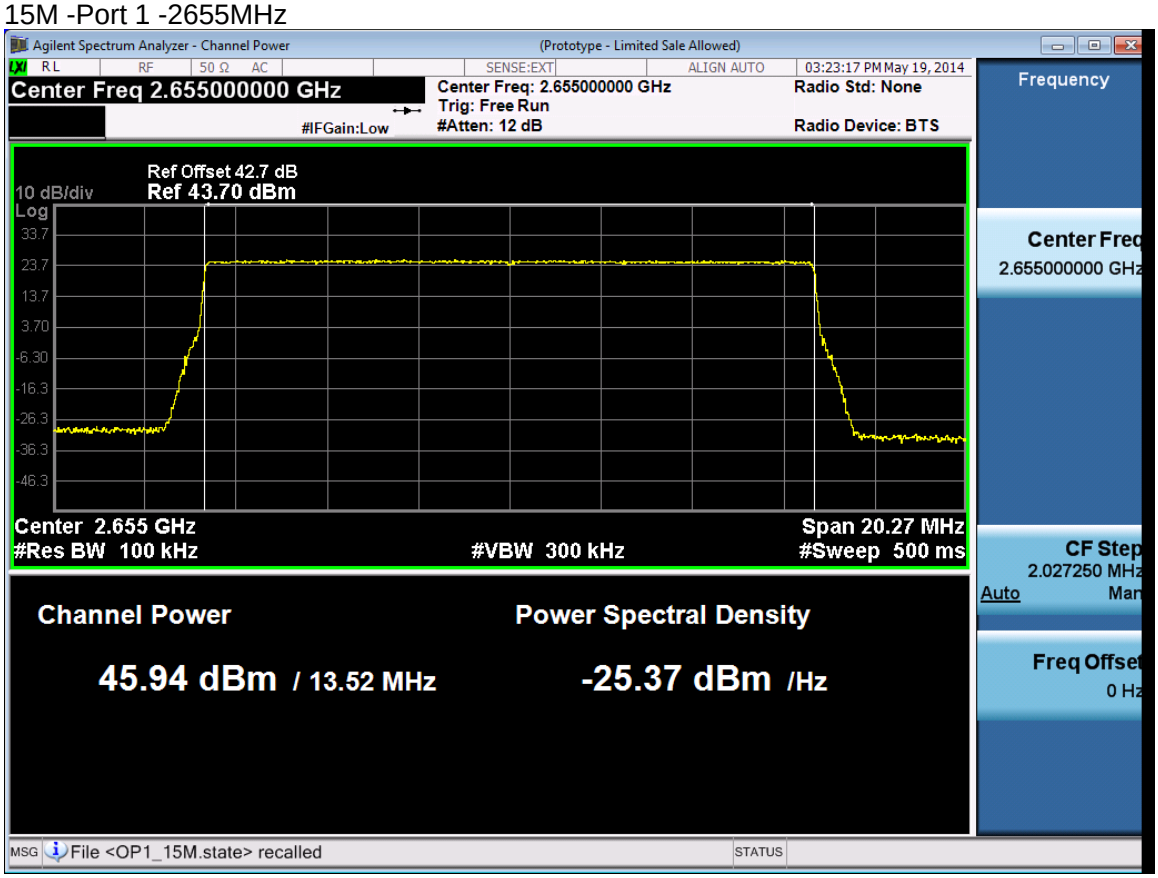
Channel Bandwidth :15M

Port	Center Freq. (MHz)	Max output Power in dBm
1	2627.5	46.03
	2655	45.94
	2682.5	45.87
2	2627.5	45.97
	2655	45.78
	2682.5	45.86

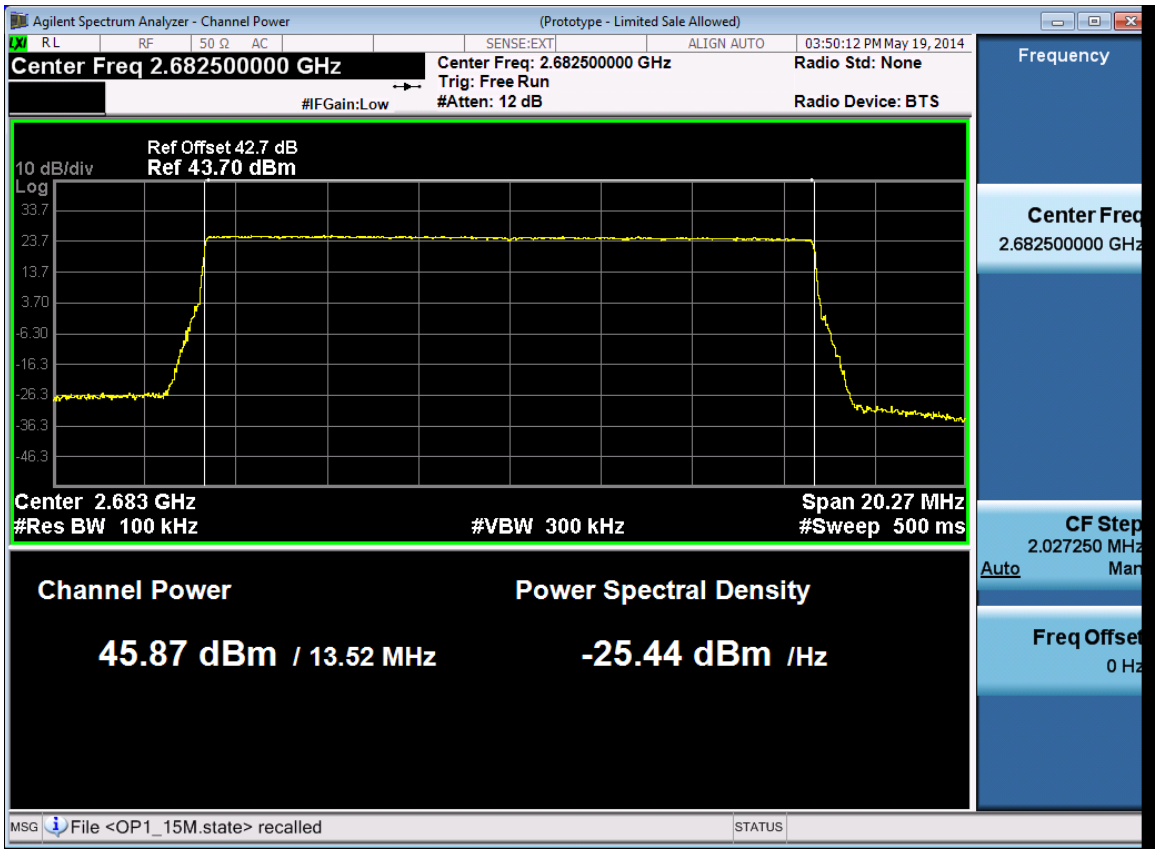
15M -Port 1 -2627.5MHz



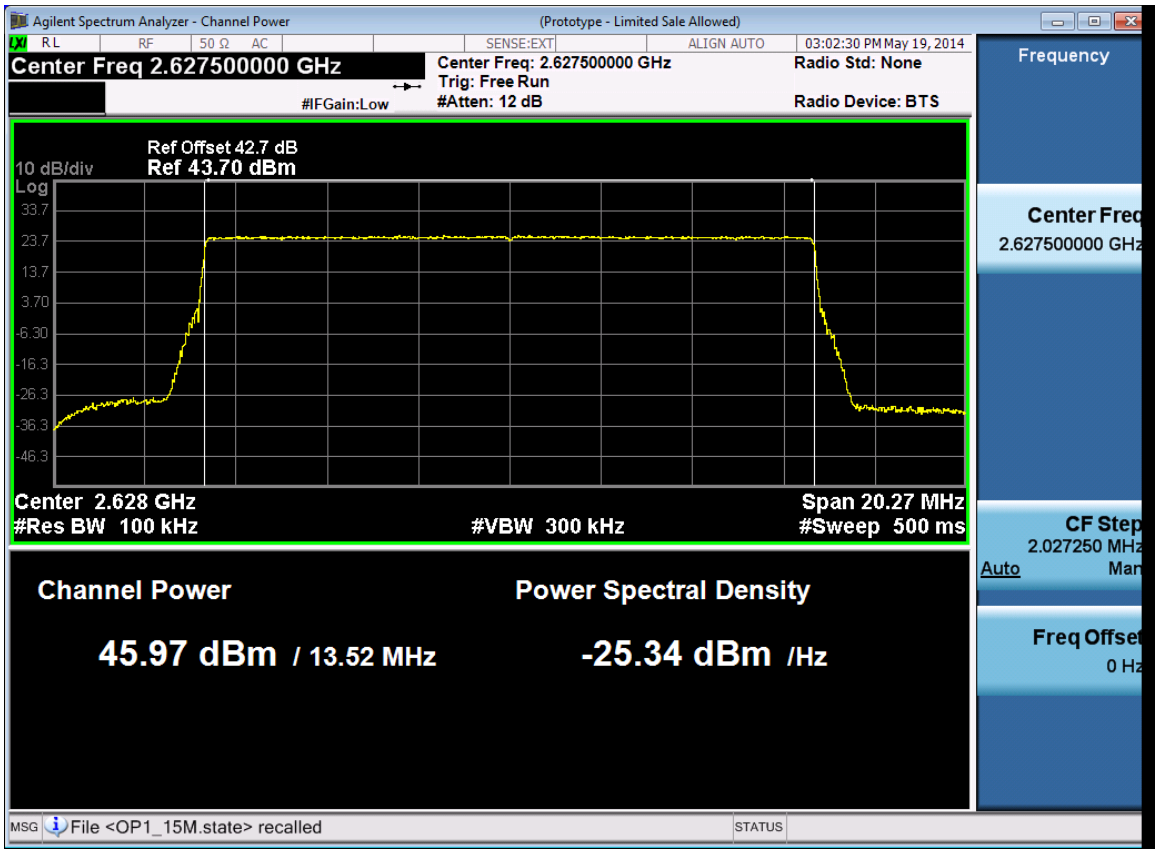
15M -Port 1 -2655MHz



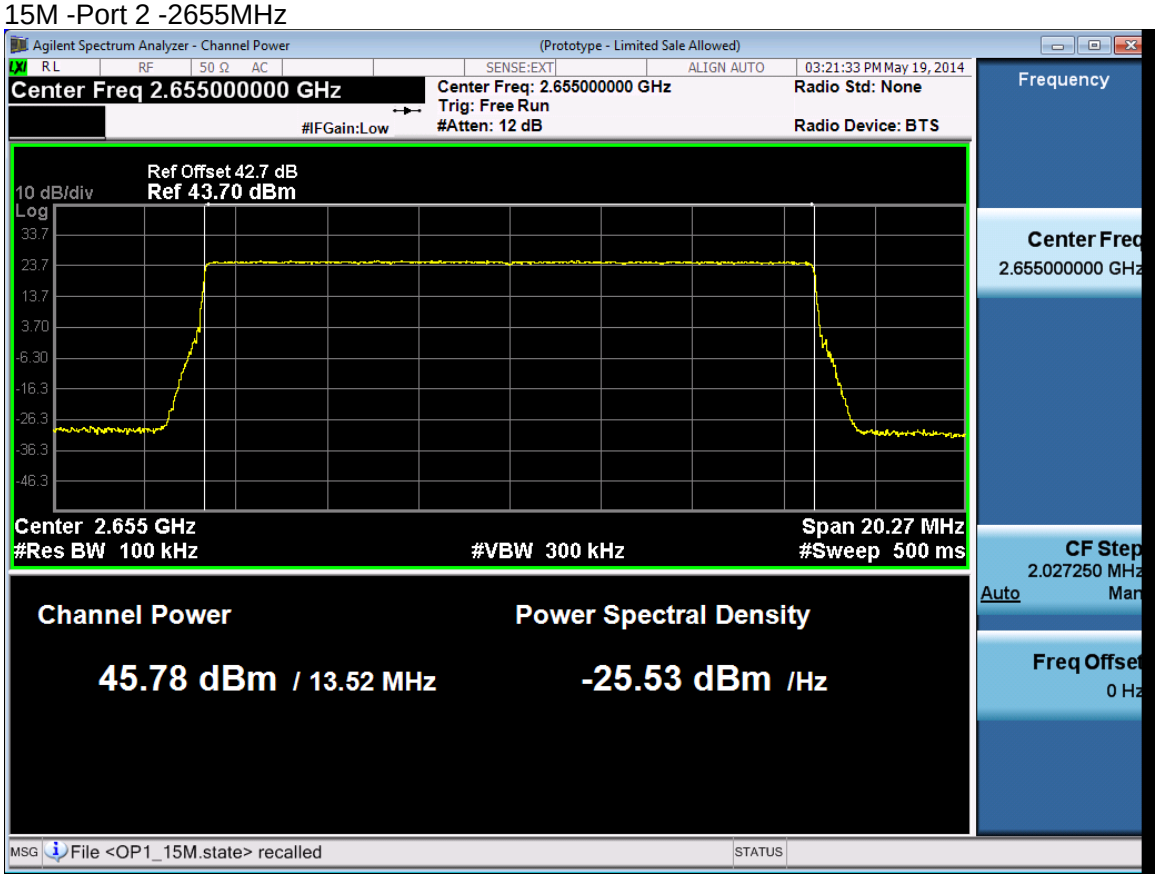
15M -Port 1 -2682.5MHz



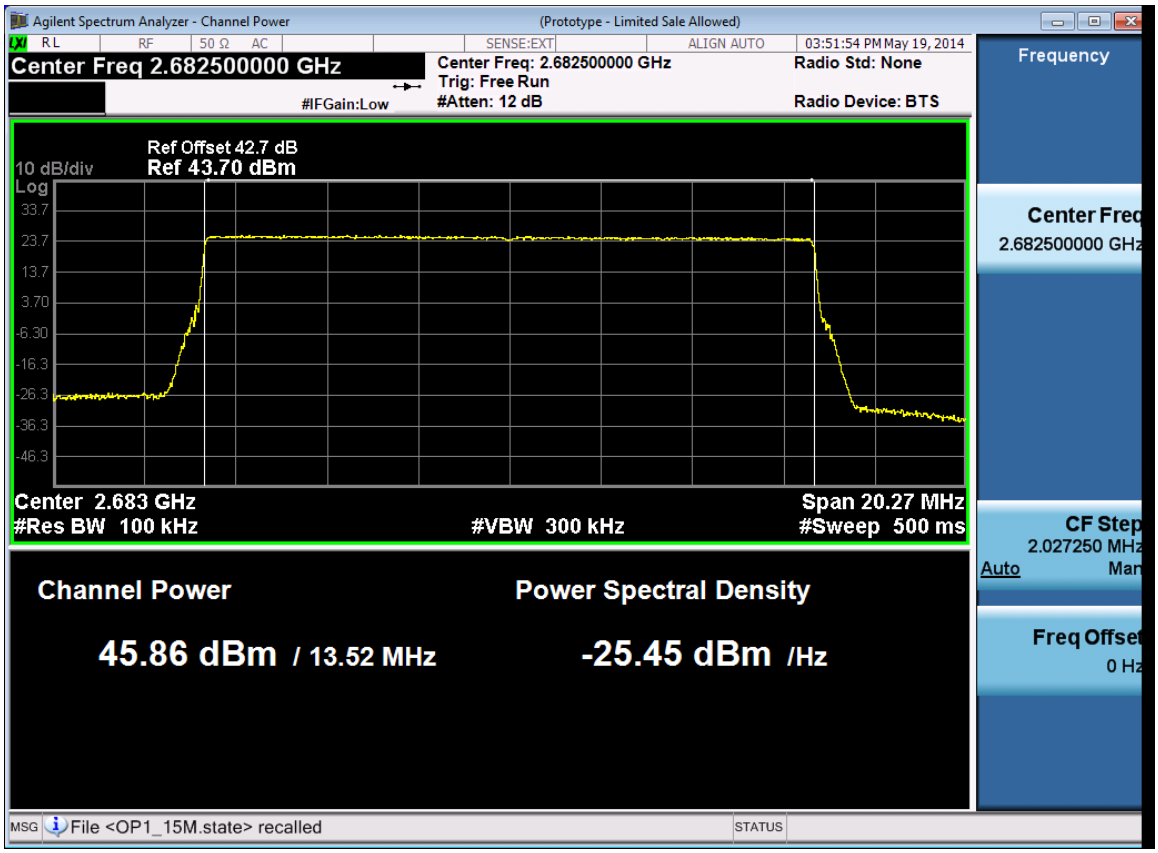
15M -Port 2 -2627.5MHz



15M -Port 2 -2655MHz



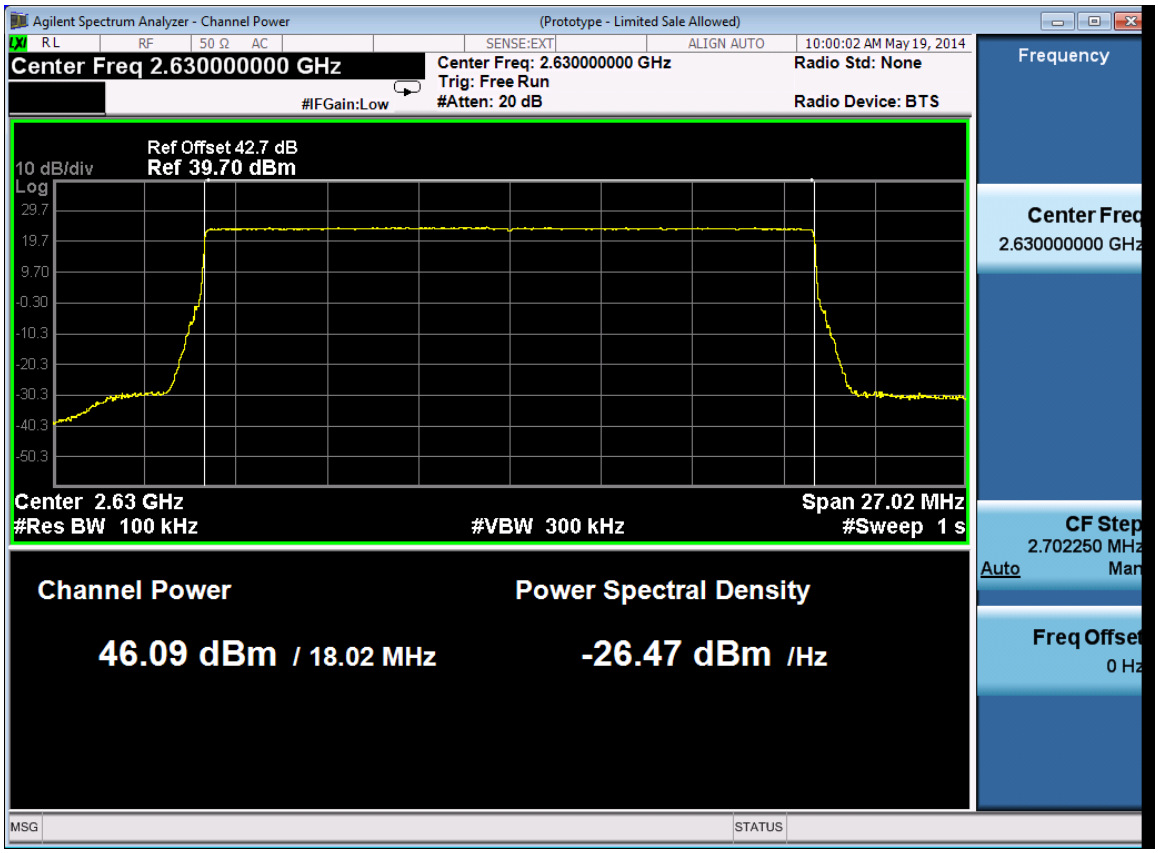
15M -Port 2 -2682.5MHz



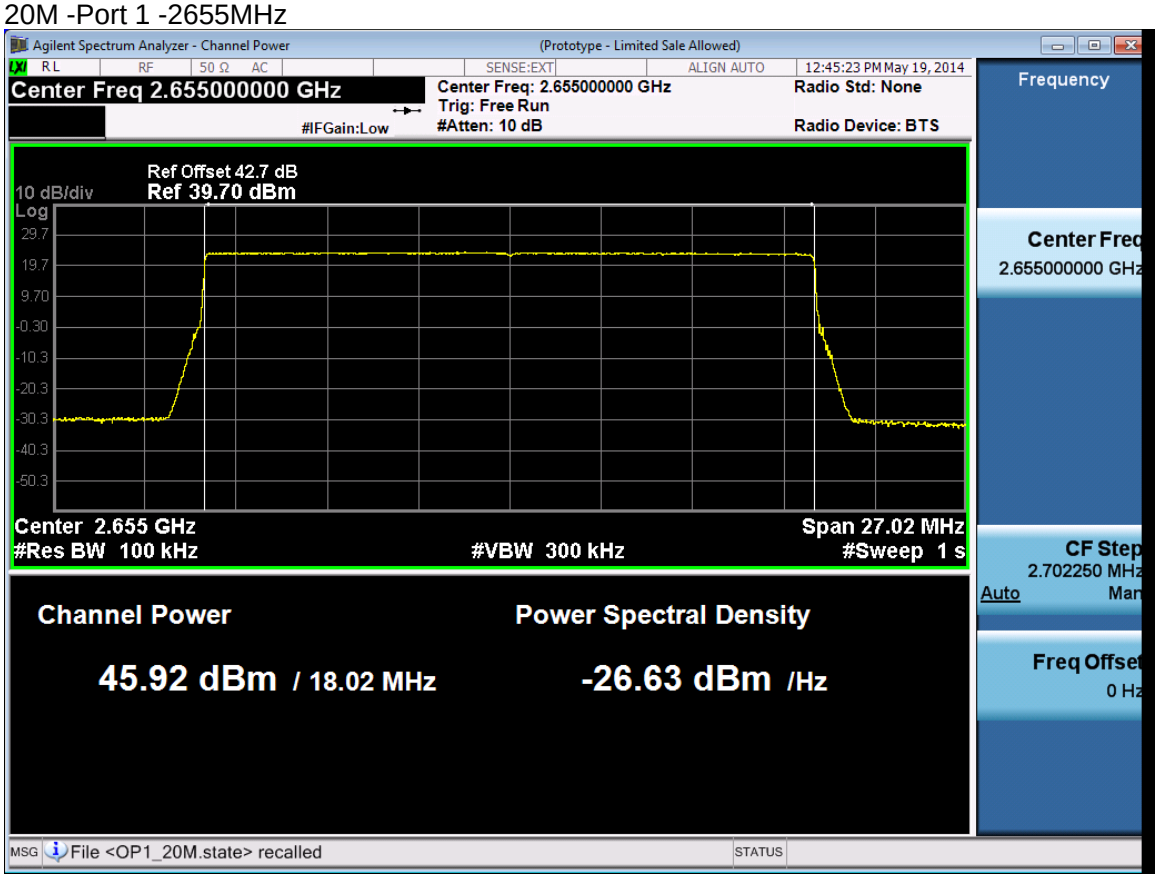
Channel Bandwidth :20M

Port	Center Freq. (MHz)	Max output Power in dBm
1	2630	46.09
	2655	45.92
	2680	46.01
2	2630	45.99
	2655	45.94
	2680	46.02

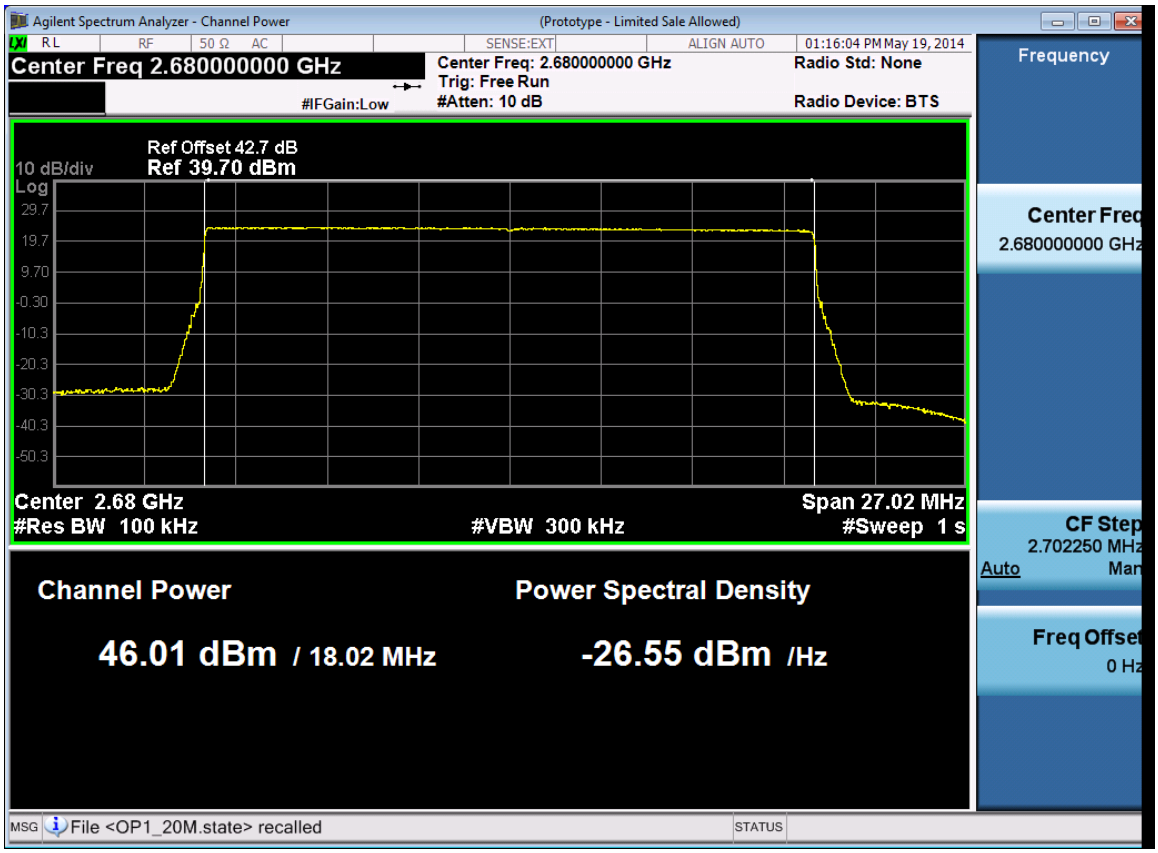
20M -Port 1 -2630MHz



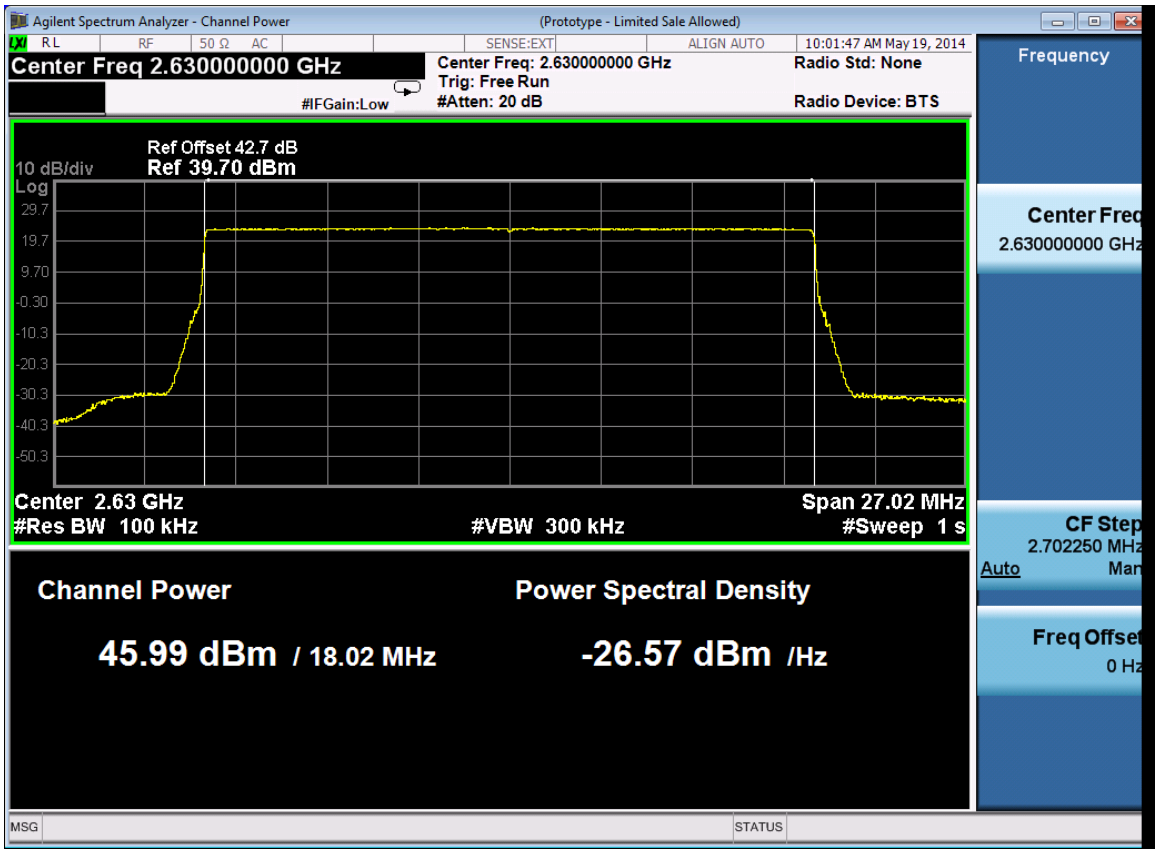
20M -Port 1 -2655MHz



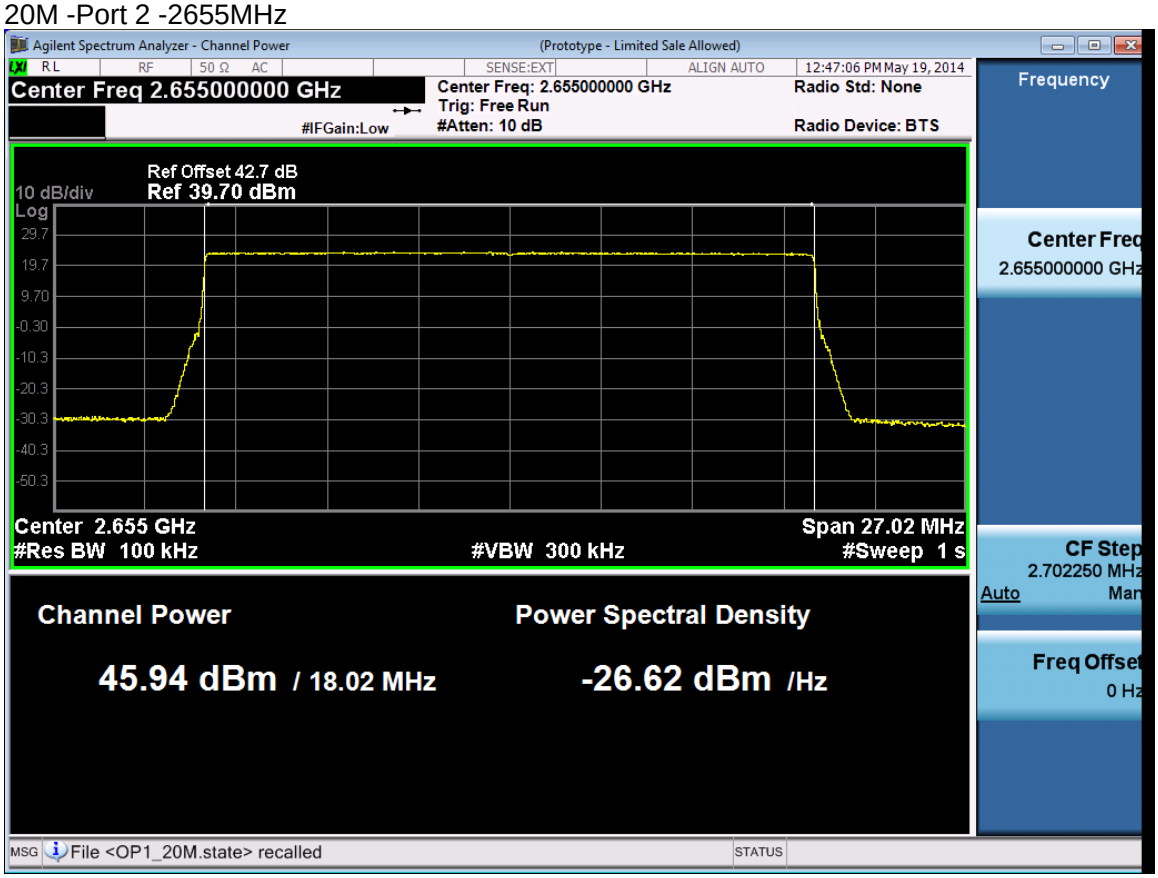
20M -Port 1 -2680MHz



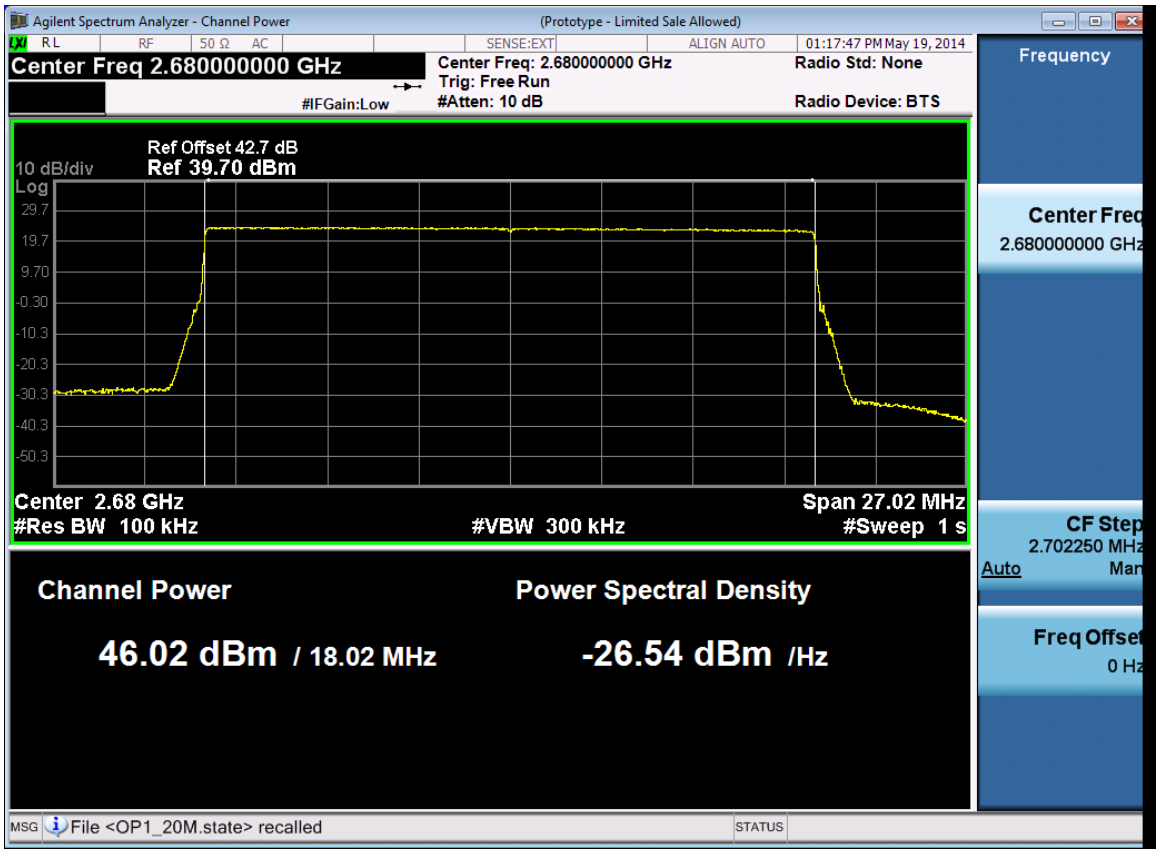
20M -Port 2 -2630MHz



20M -Port 2 -2655MHz



20M -Port 2 -2680MHz

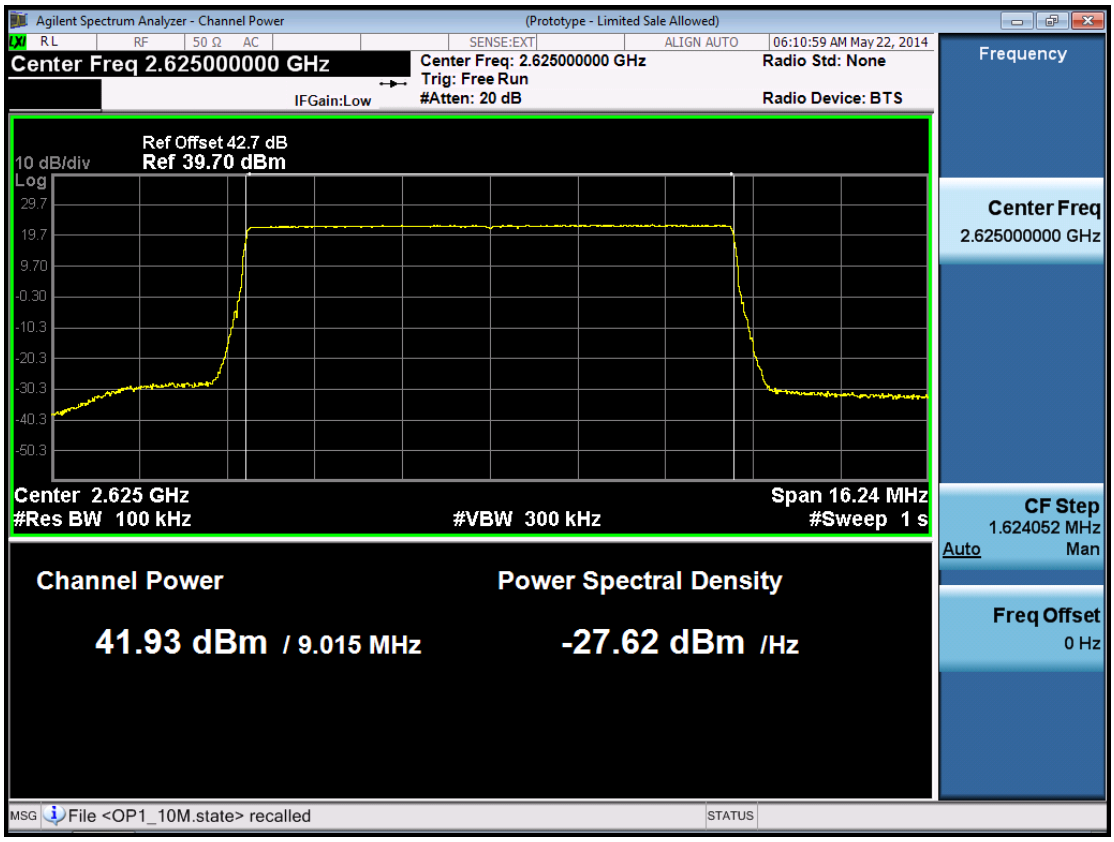


Double Carrier:

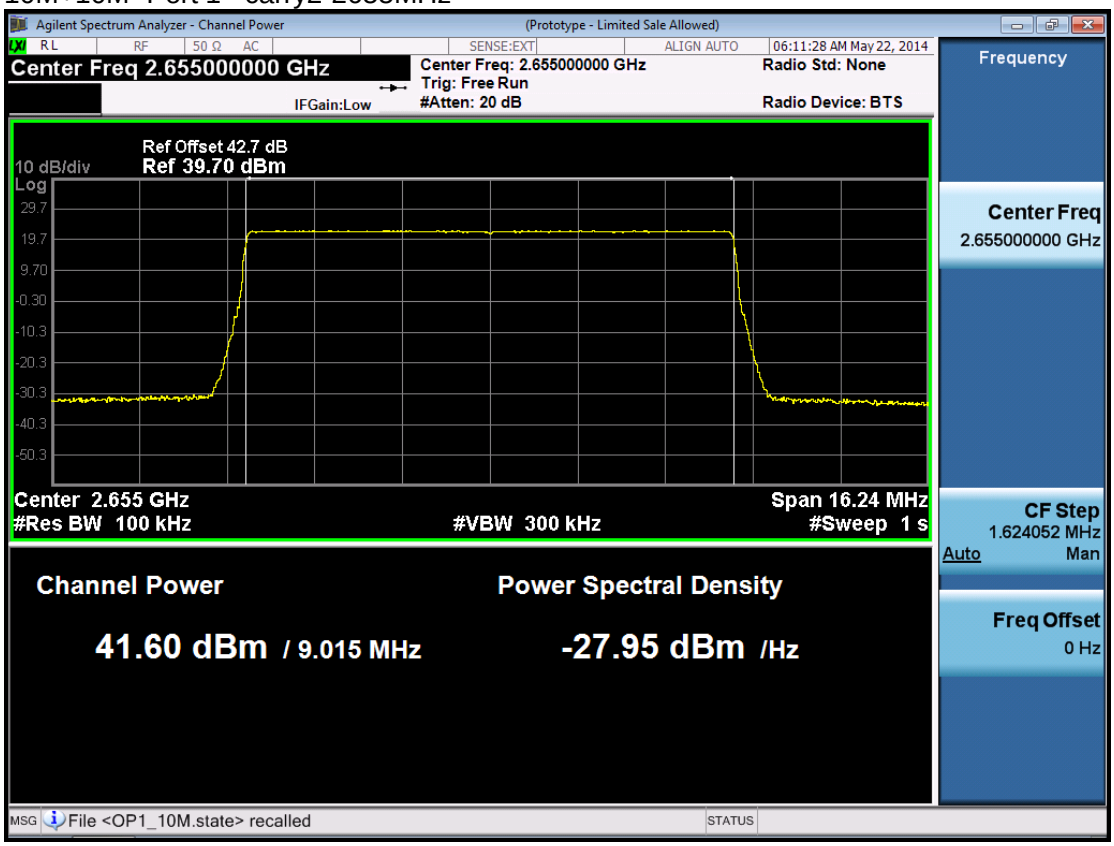
Channel Bandwidth :10M+10M

Port	Carry1 Center Freq. (MHz)	Carry1 Max output Power in dBm	Carry2 Center Freq. (MHz)	Carry2 Max output Power in dBm	Max output Power in dBm
1	2625	41.93	2655	41.60	44.79
	2640	41.95	2670	41.40	44.71
	2655	42.16	2685	41.68	44.70
2	2625	41.92	2655	41.59	44.77
	2640	41.93	2670	41.38	44.69
	2655	42.13	2685	41.66	44.70

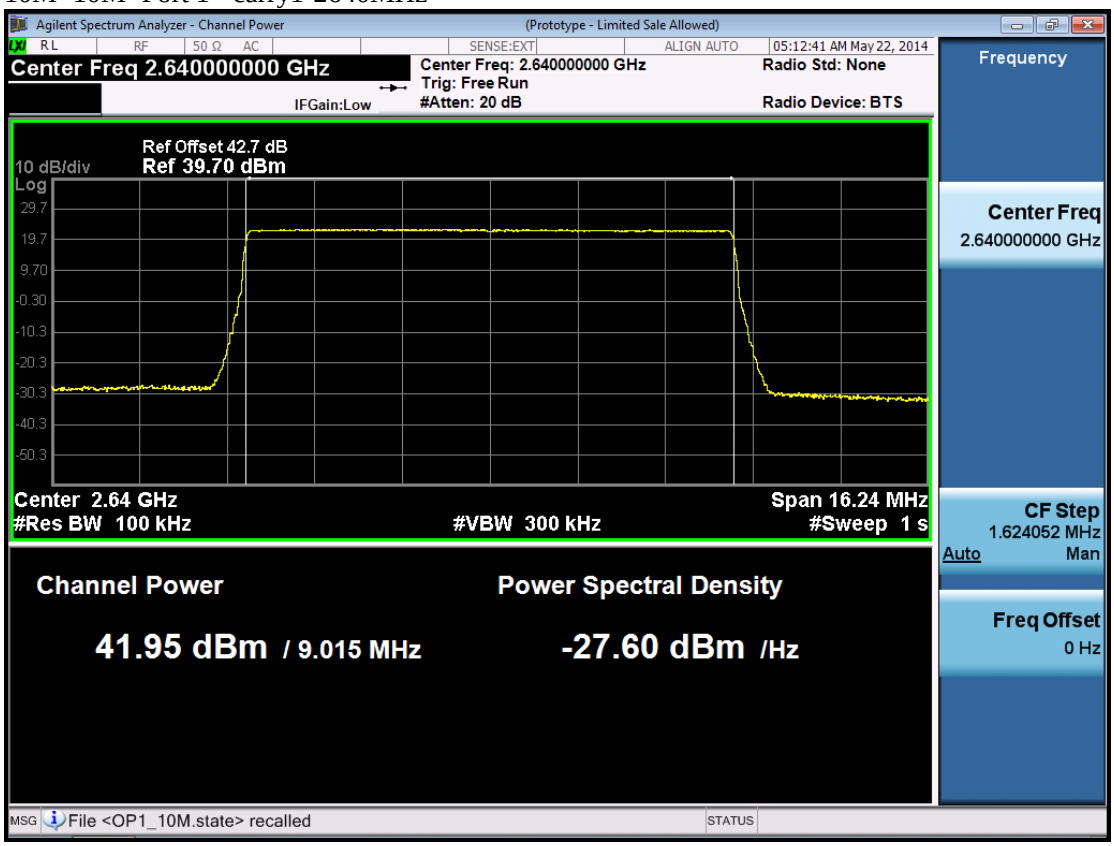
10M+10M -Port 1 –carry1-2625MHz



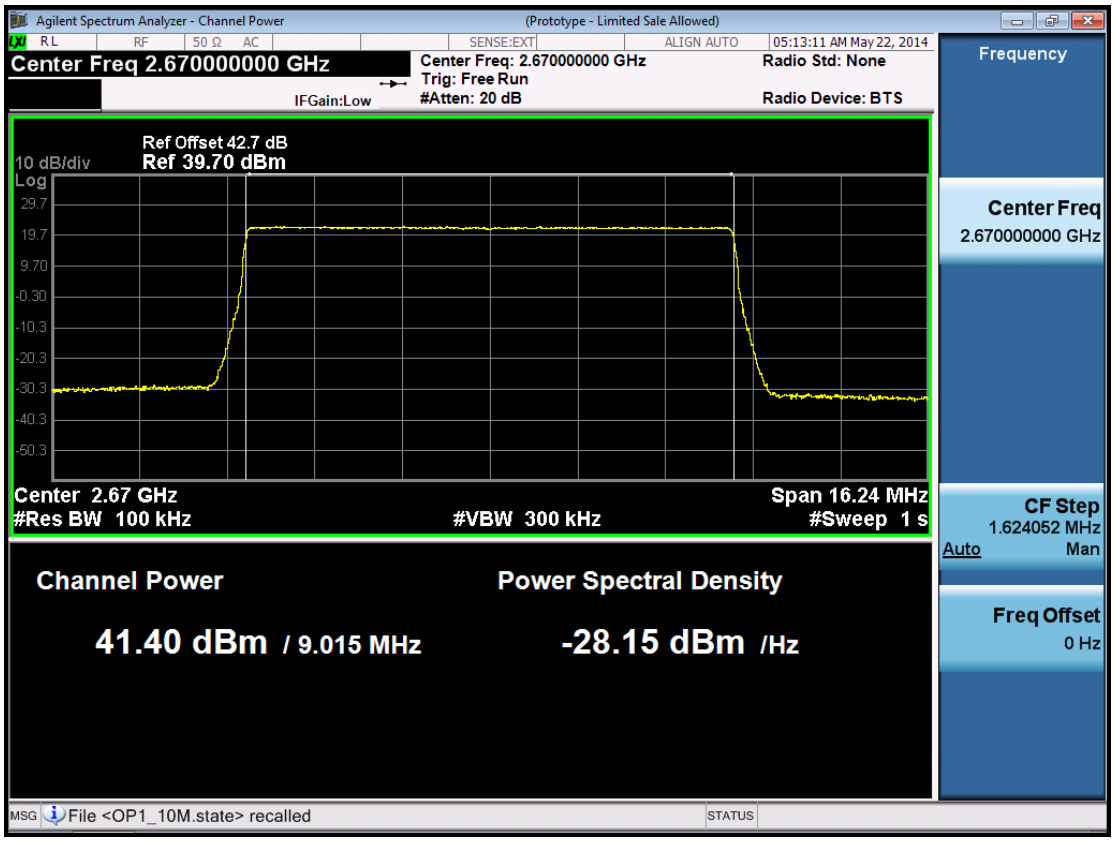
10M+10M -Port 1 –carry2-2655MHz



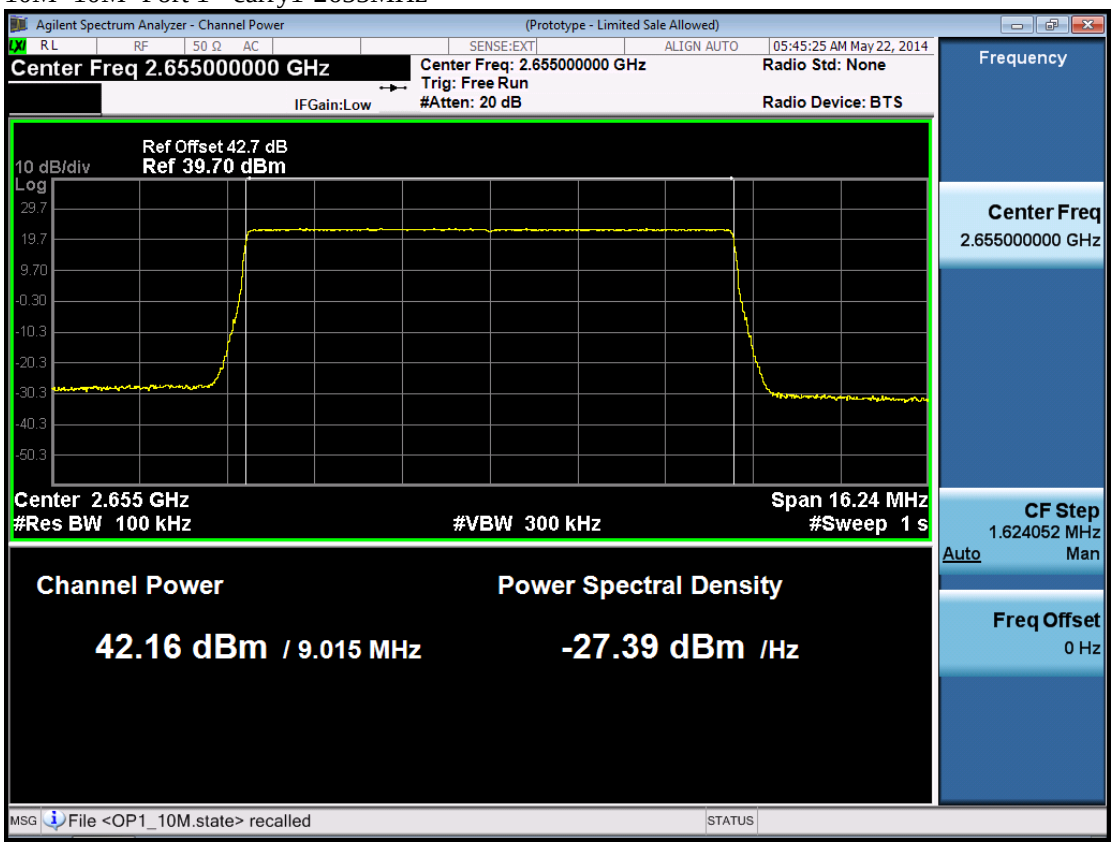
10M+10M -Port 1 - carry1-2640MHz



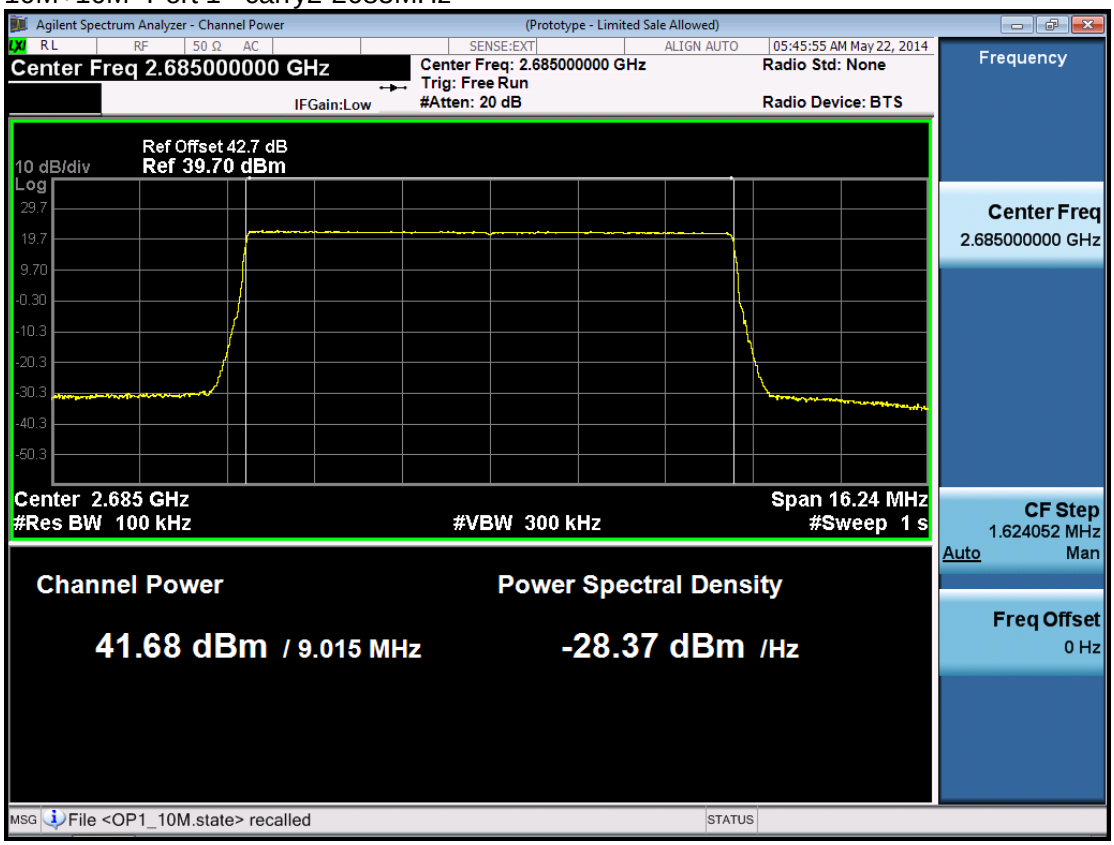
10M+10M -Port 1 –carry2-2670MHz



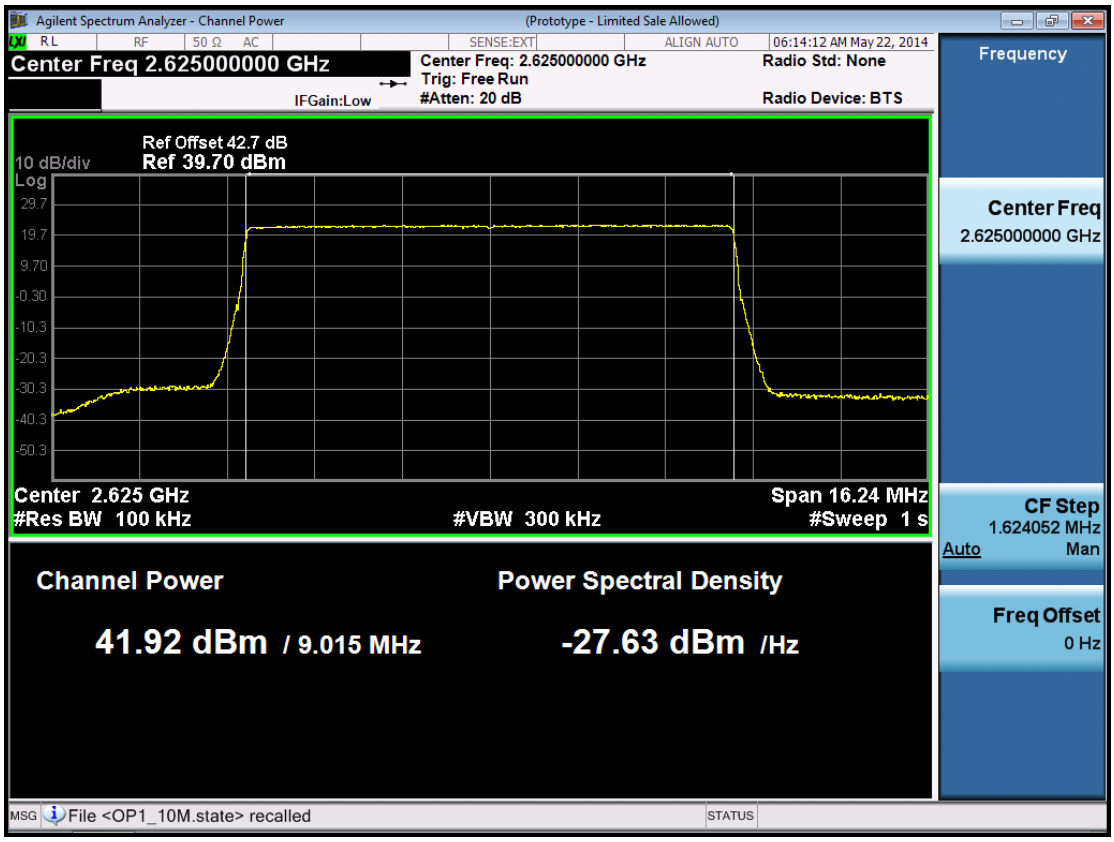
10M+10M -Port 1 - carry1-2655MHz



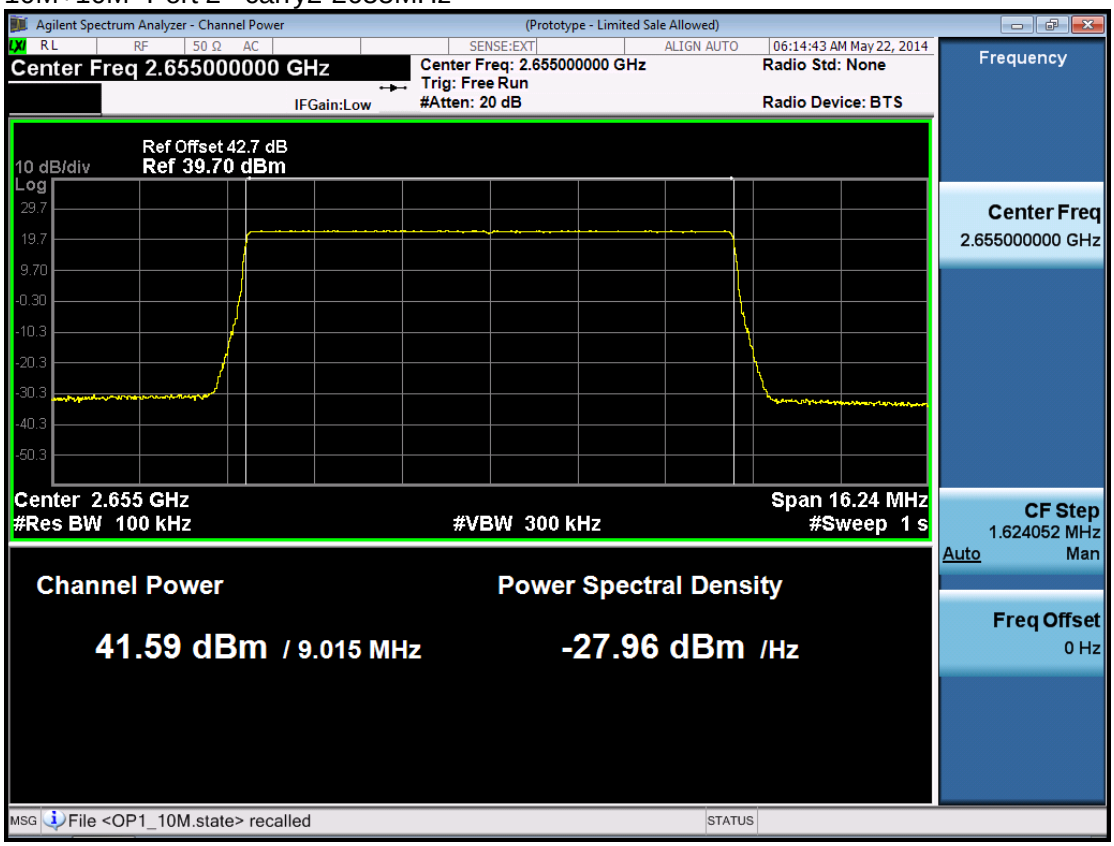
10M+10M -Port 1 –carry2-2685MHz



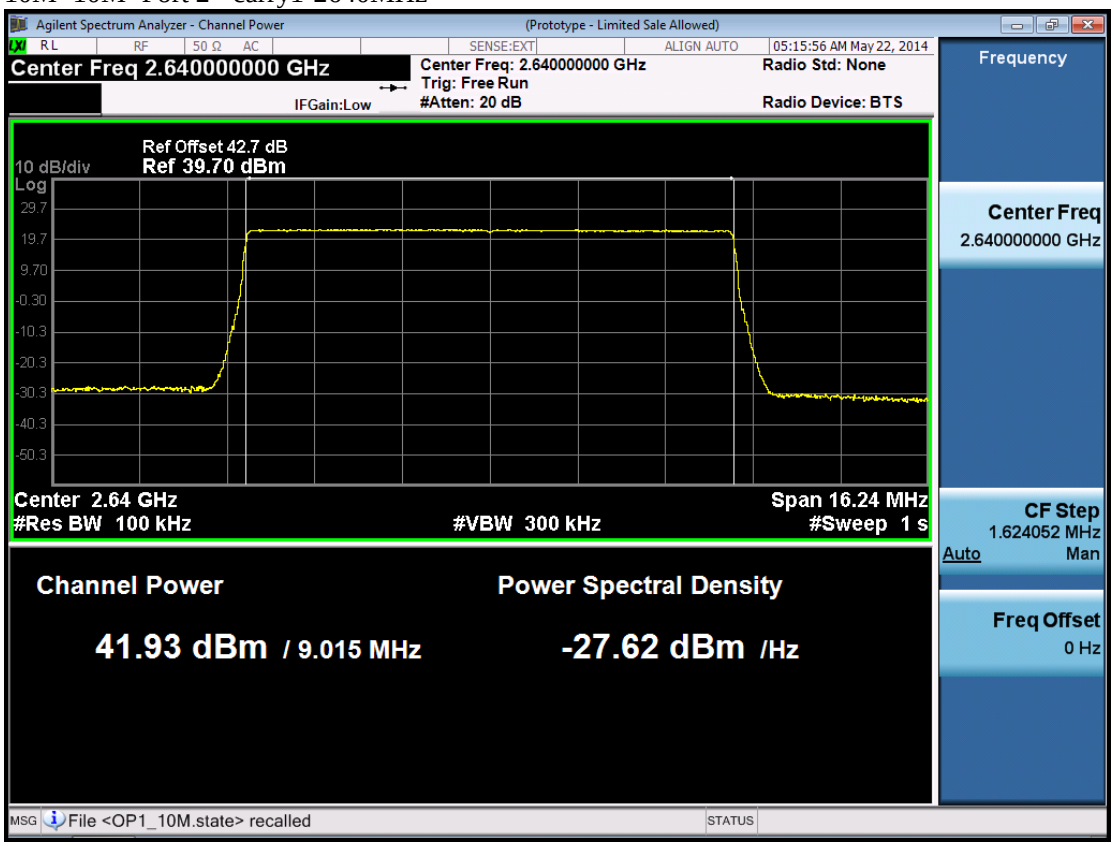
10M+10M -Port 2 –carry1-2625MHz



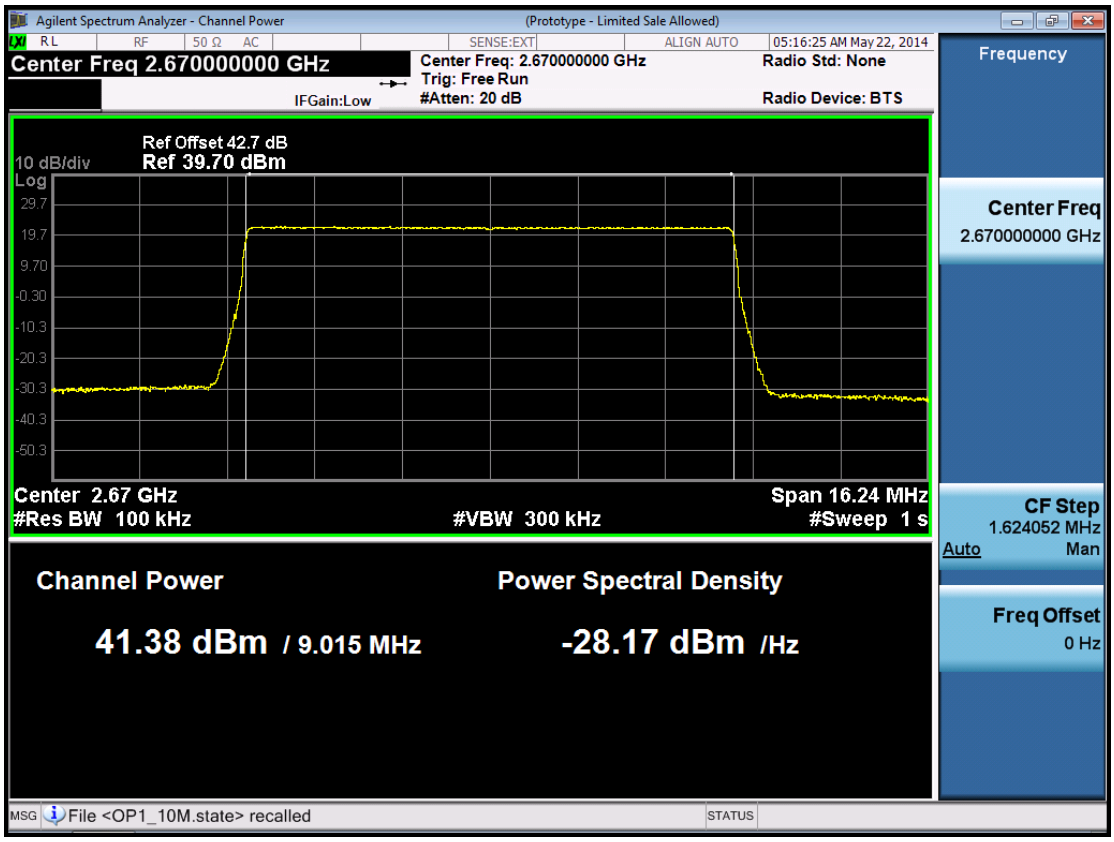
10M+10M -Port 2 –carry2-2655MHz



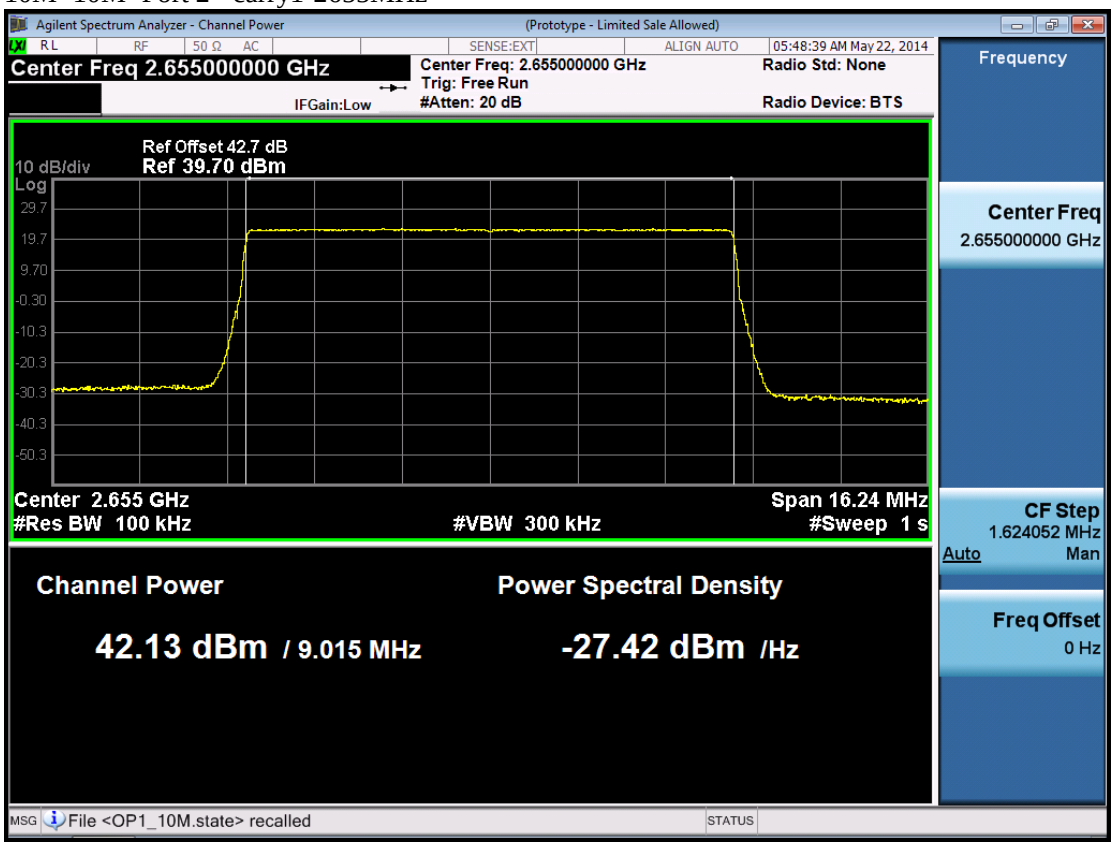
10M+10M -Port 2 - carry1-2640MHz



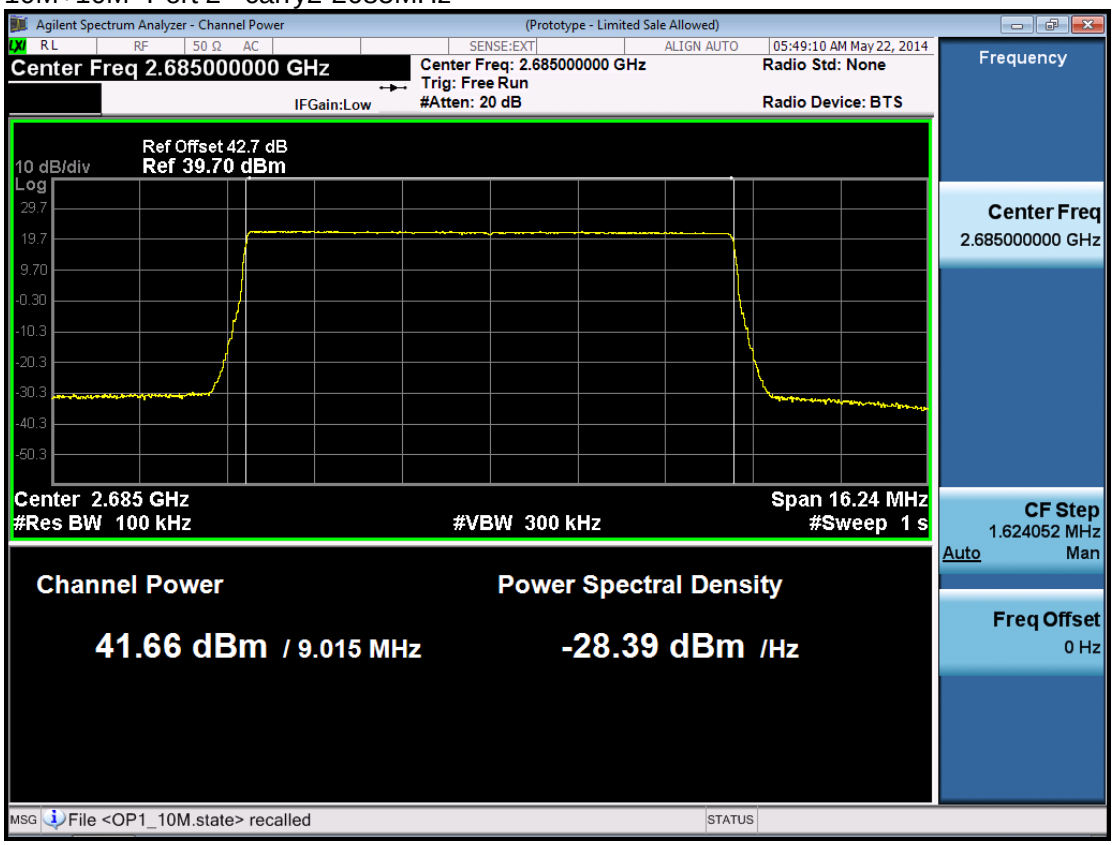
10M+10M -Port 2 –carry2-2670MHz



10M+10M -Port 2 - carry1-2655MHz



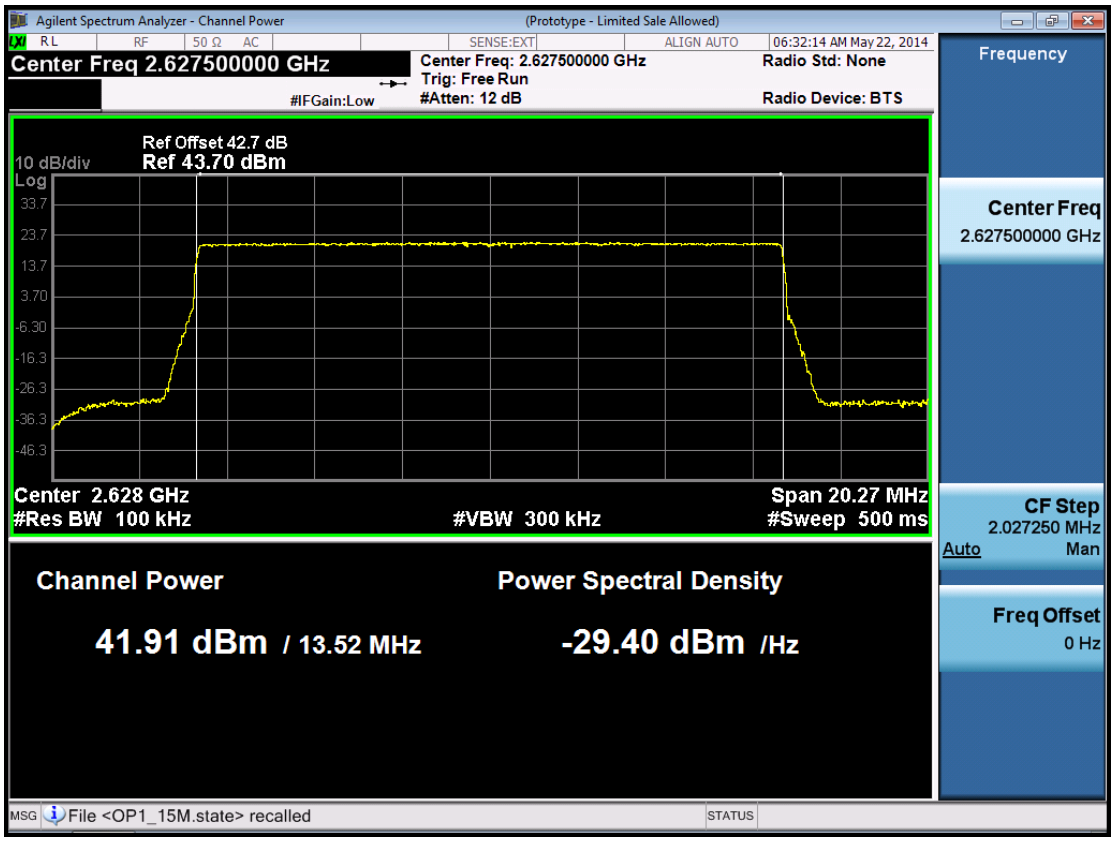
10M+10M -Port 2 –carry2-2685MHz



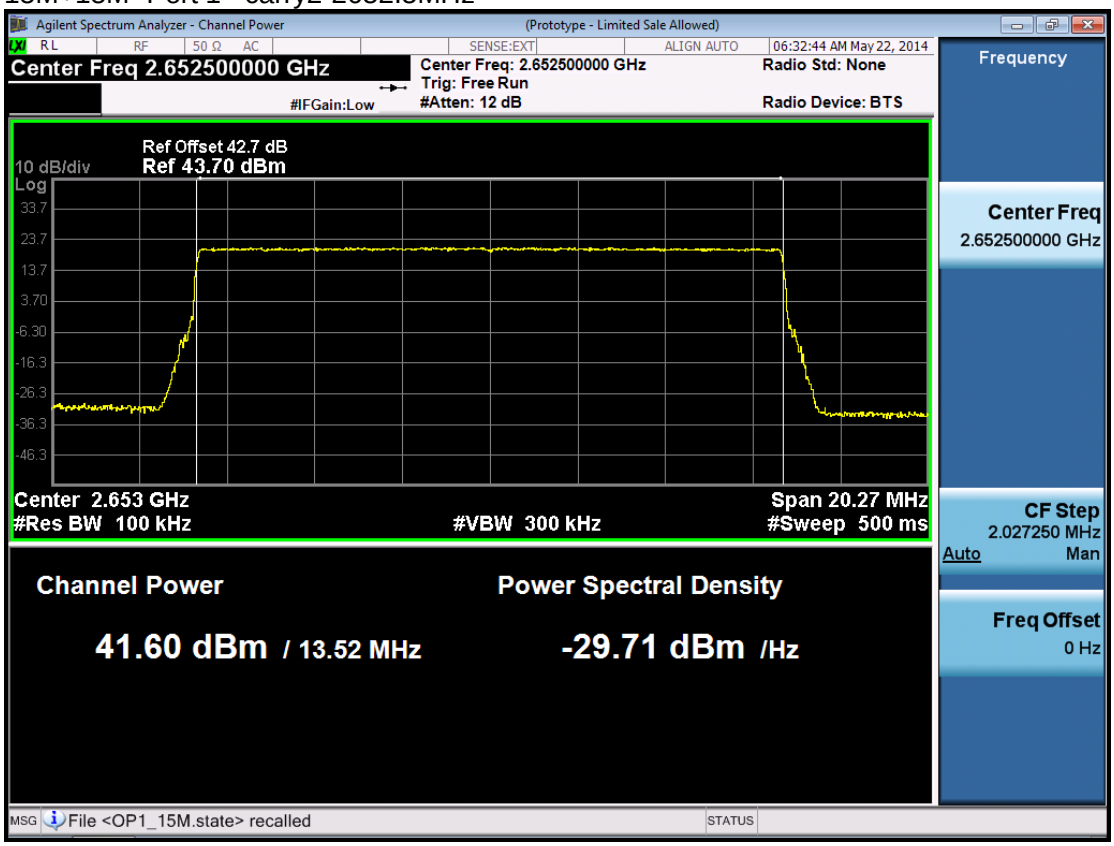
Channel Bandwidth :15M+15M

Port	Carry1 Center Freq. (MHz)	Carry1 Max output Power in dBm	Carry2 Center Freq. (MHz)	Carry2 Max output Power in dBm	Max output Power in dBm
1	2627.5	41.91	2652.5	41.60	44.77
	2642.5	41.94	2667.5	41.51	44.76
	2657.5	42.02	2682.5	41.47	44.68
2	2627.5	41.88	2652.5	41.58	44.75
	2642.5	41.91	2667.5	41.49	44.73
	2657.5	42.01	2682.5	41.51	44.65

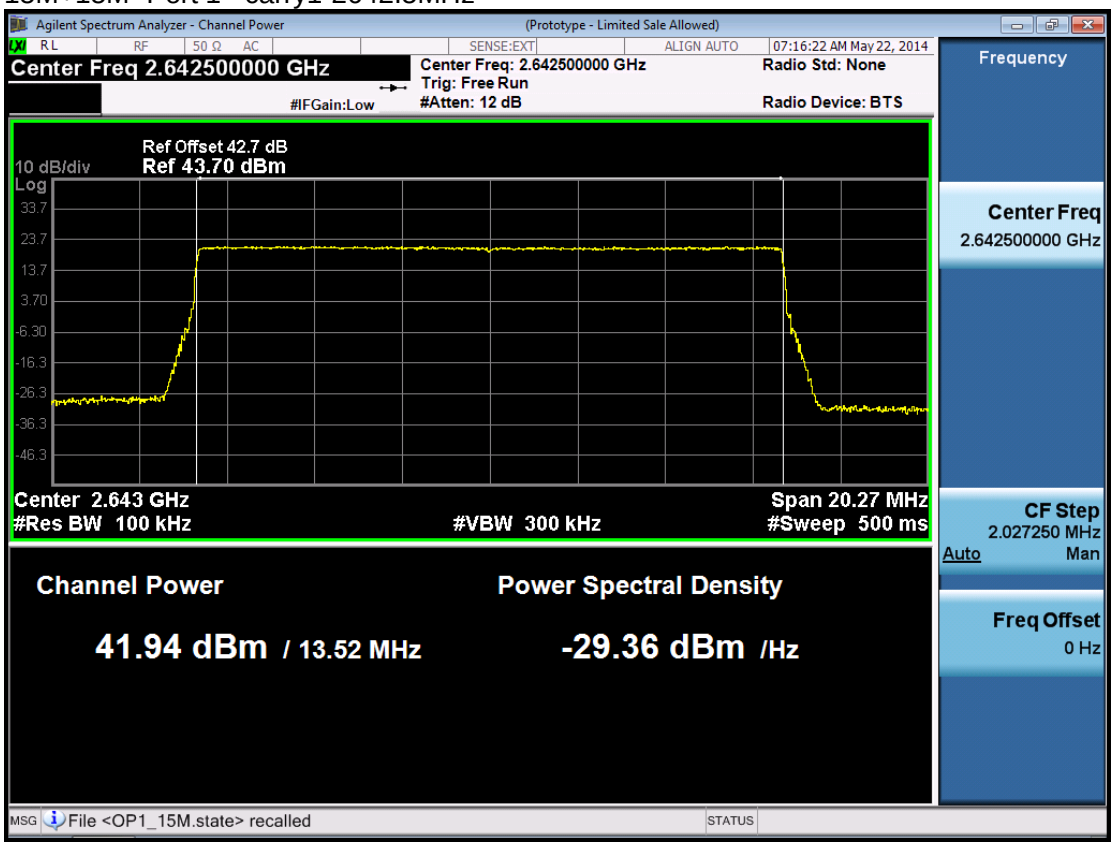
15M+15M -Port 1 –carry1-2627.5MHz



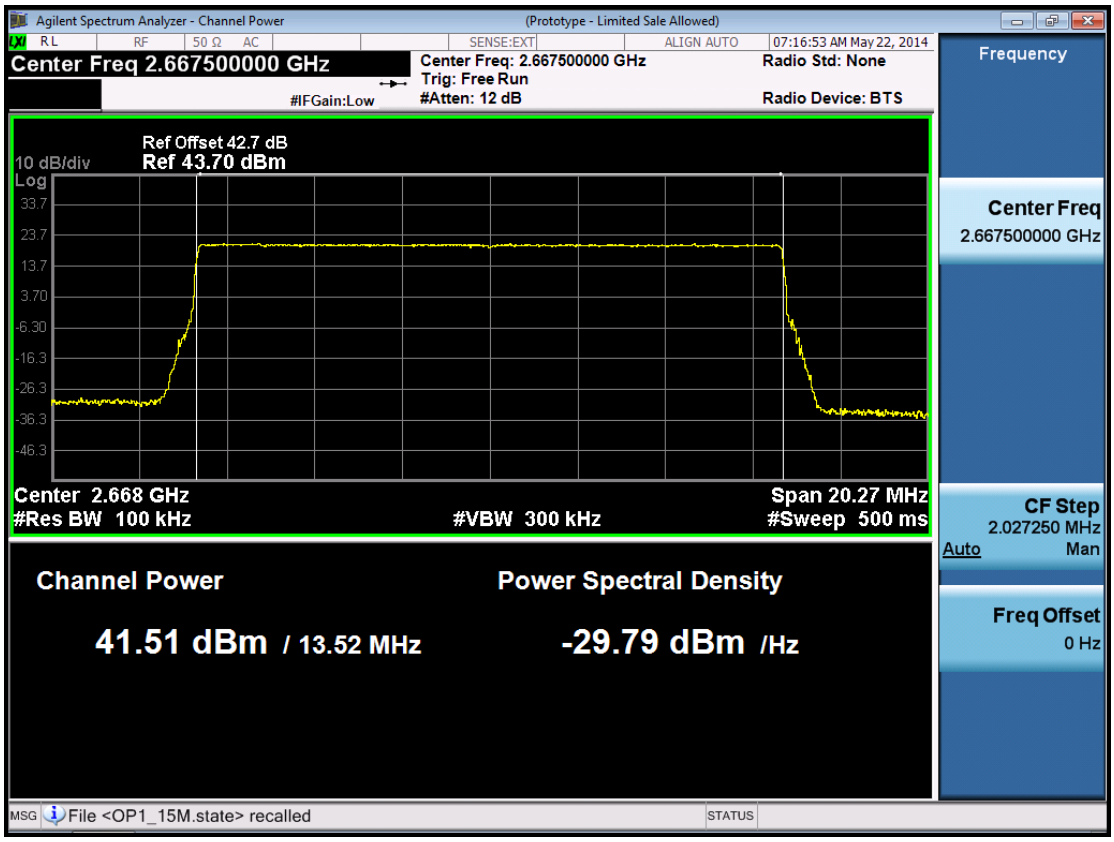
15M+15M -Port 1 –carry2-2652.5MHz



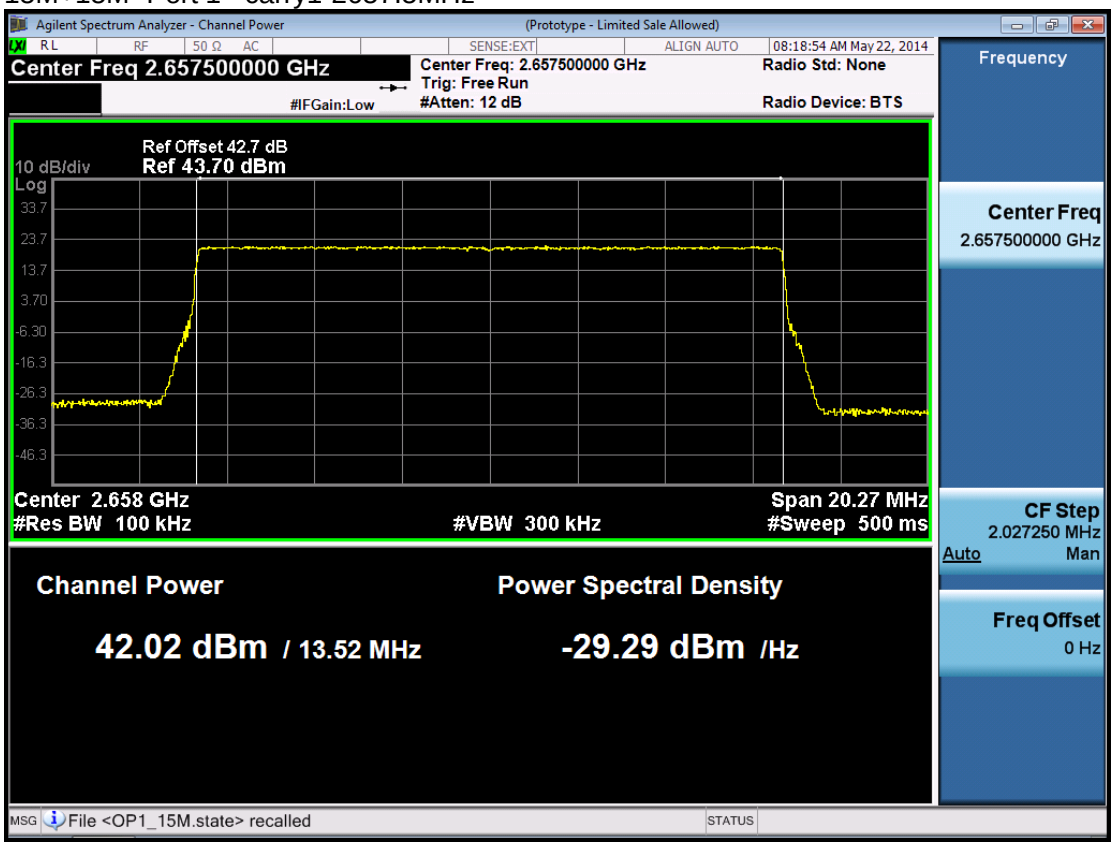
15M+15M -Port 1 –carry1-2642.5MHz



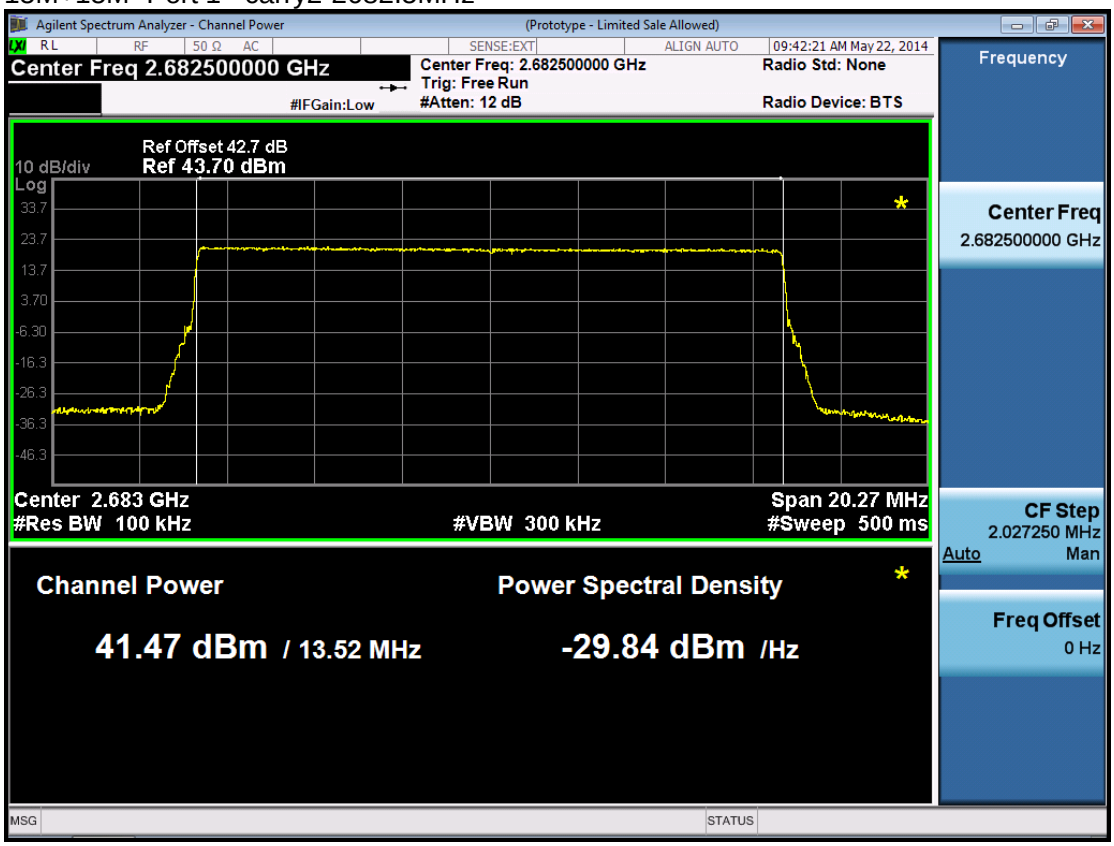
15M+15M -Port 1 –carry2-2667.5MHz



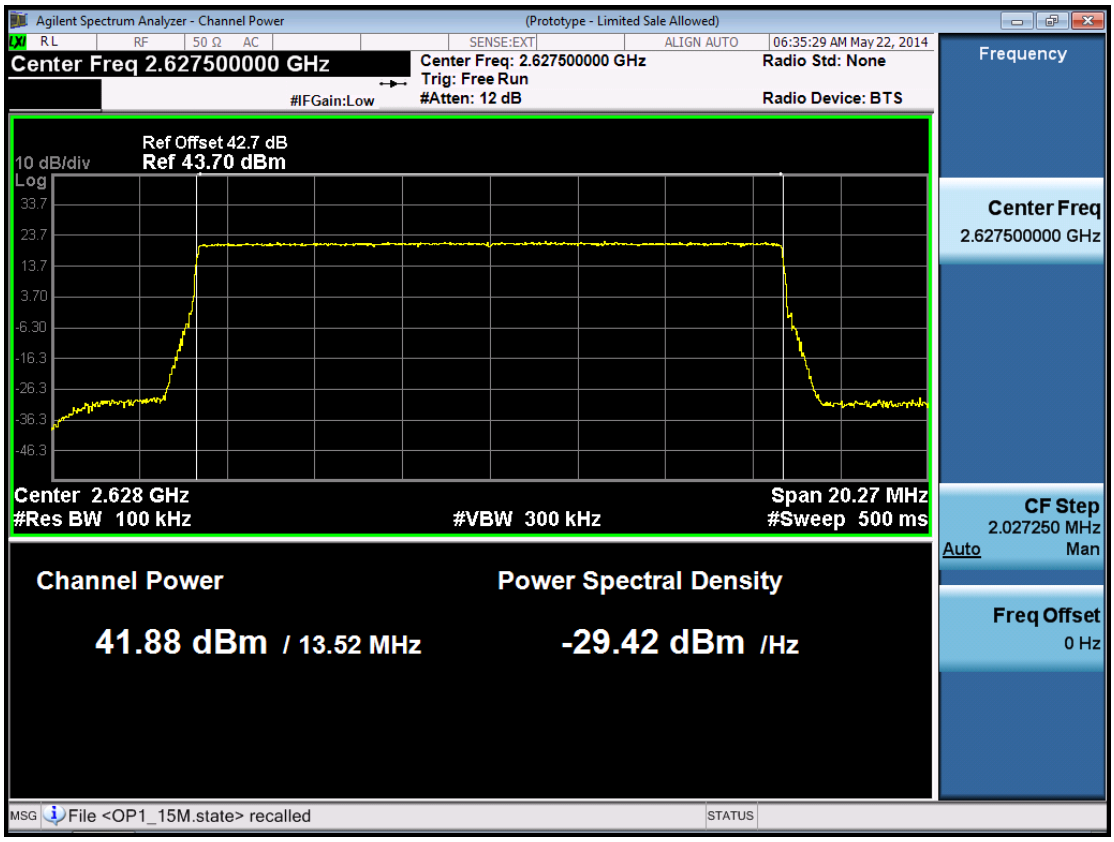
15M+15M -Port 1 –carry1-2657.5MHz



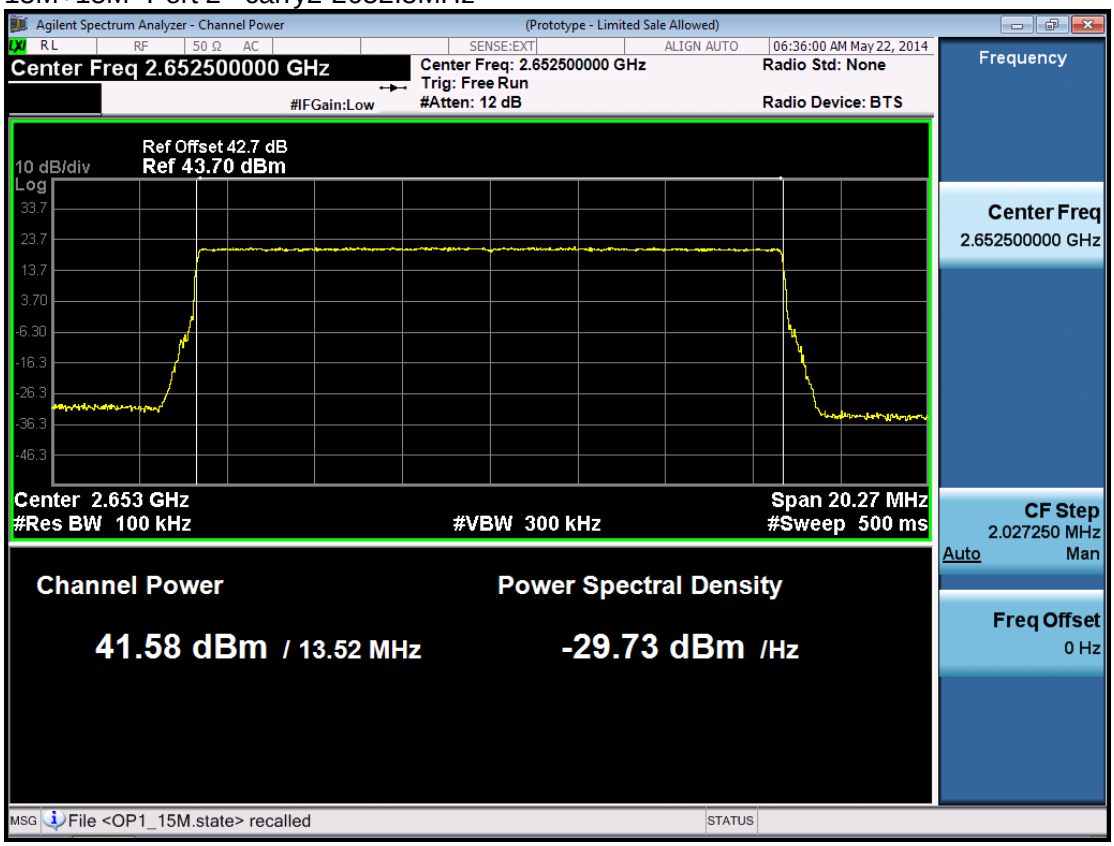
15M+15M -Port 1 –carry2-2682.5MHz



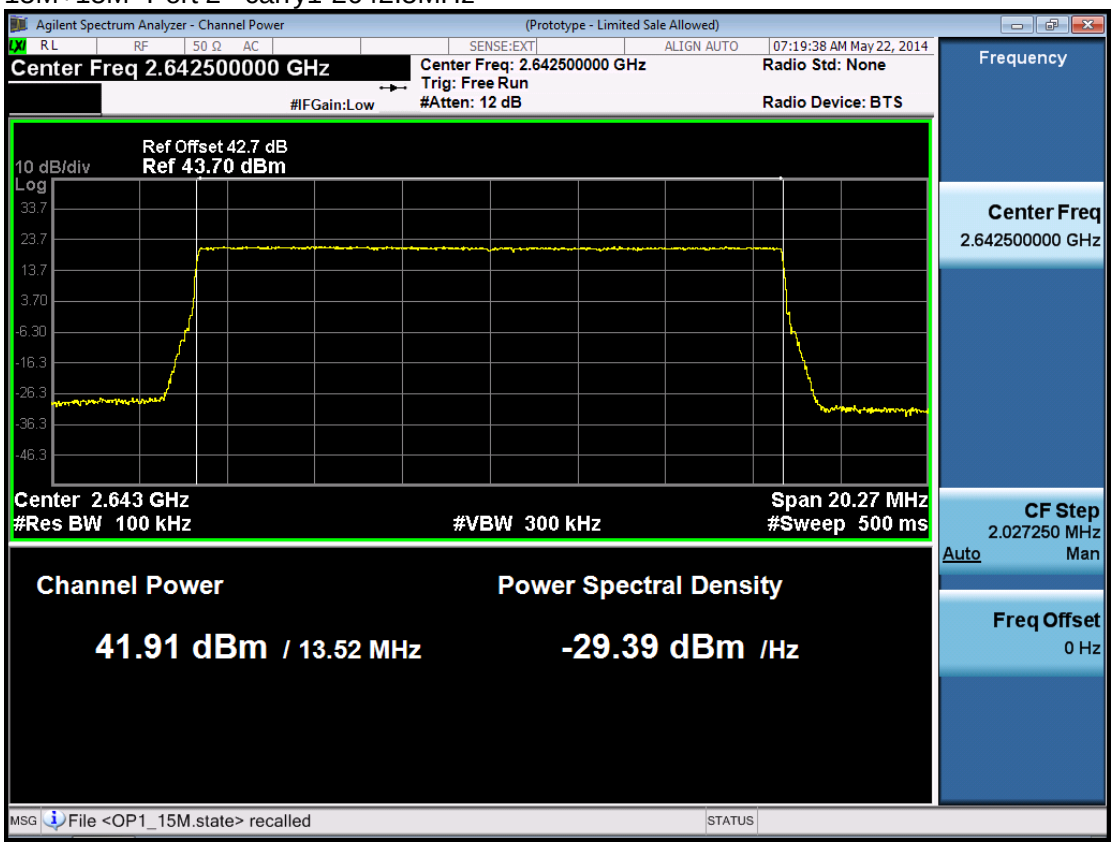
15M+15M -Port 2 –carry1-2627.5MHz



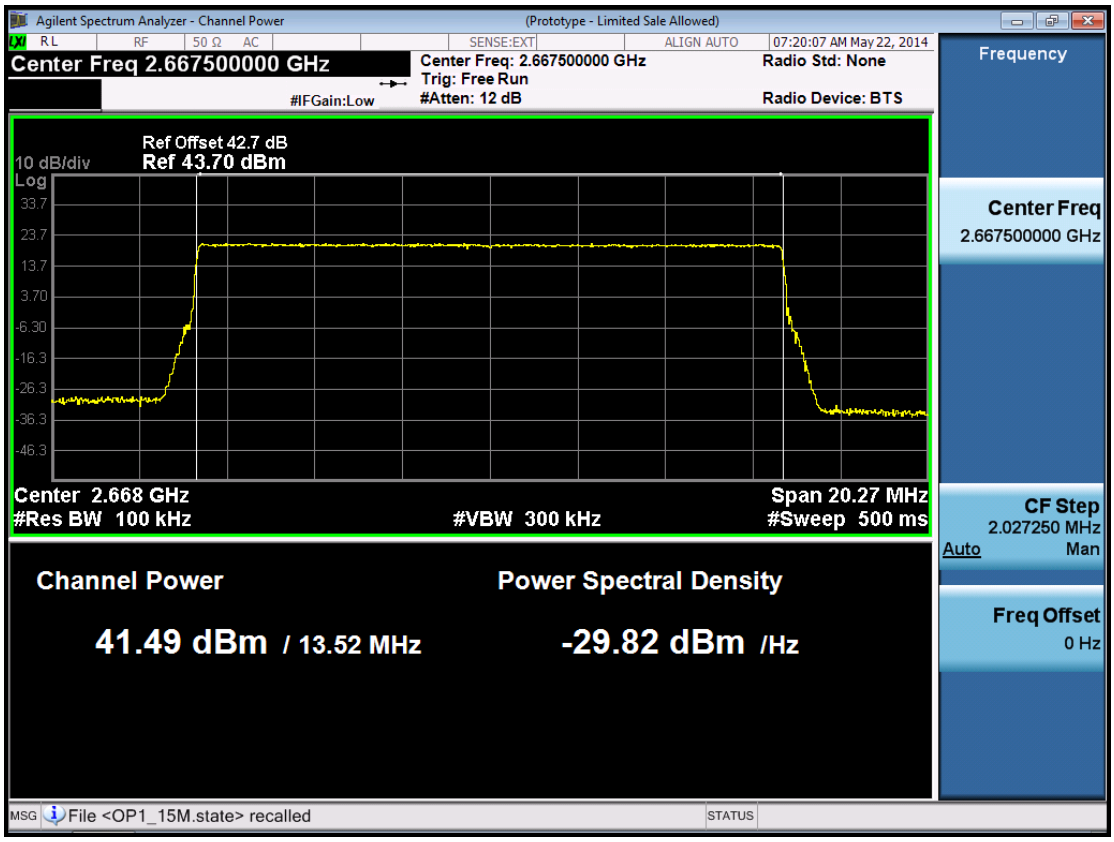
15M+15M -Port 2 –carry2-2652.5MHz



15M+15M -Port 2 –carry1-2642.5MHz



15M+15M -Port 2 –carry2-2667.5MHz



15M+15M -Port 2 –carry1-2657.5MHz