RRUL 11 B12 – Remote Radio Unit 700MHz Radio Compliance
FCC CFR 47 Part 27 Test Report

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Approvals and Key Reviewers

Name	Function	Role	Status
David Bolzon	Regulatory Prime	Author / Approver	Approved
David Webster	Regulatory Prime	Reviewer	21 April 2010
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Revision History

Issue	Description of change	Changed by	Date
0.1	Draft	David Bolzon	15 April 2010
1.0	Approved	David Bolzon	3 May 2010

Reference Documents

1. FCC 47 CFR Part 27 “Wireless Communications Services”
2. FCC 47 CFR Part 15 “Unintentional Radiators”
3. ICES-003 “Digital Apparatus” EMC
4. EN 50385:2002—Product Standard to Demonstrate the Compliance of Radio Base Stations and Fixed Terminal Stations for Wireless Telecommunication Systems with the Basic Restrictions or the Reference Levels Related to Human Exposure to Radio-Frequency Electromagnetic Fields (110 MHz–40 GHz)—General Public
5. EN 55022, Limits and methods of measurement of radio disturbance characteristics of information technology equipment (CISPR22: 1997), 1998, European Committee for Electro-technical Standardization
6. SM.328: "Spectra and bandwidth of emissions".
7. CISPR 22: "Limits and methods of measurement of radio disturbance characteristics of information technology equipment".
8. CISPR 16-1-1: "Specification for radio disturbance and immunity measuring apparatus and methods - Measuring apparatus".
9. ETSI TS 136 141 V8.2.0 (2009-04) LTE; Evolved Universal Radio Access (E-UTRA); Base Station (BS) conformance testing (3GPP TS 36.141 version 8.2.0 Release 8)
10. ETSI TS 136 104 V8.5.0 (2009-04) LTE; Evolved Universal Terrestrial Radio Access (E-UTRA);Base Station (BS) radio transmission and reception (3GPP TS 36.104 version 8.5.0 Release 8)
11. ETSI TS 136 113 V8.1.0 (2009-01) LTE; Evolved Universal Terrestrial Radio Access (E-UTRA);Base Station (BS) and repeater Electro Magnetic Compatibility (EMC) (3GPP TS 36.113 version 8.1.0 Release 8)
12. 3GPP TS 36.141 V9.0.0 (2009-05): 3rd Generation Partnership Project; Technical Specification Group Radio Access Network; Evolved Universal Terrestrial Radio Access (E-UTRA) ; Base Station (BS) conformance testing (Release 9).
13. 3GPP TS 36.104 V9.0.0 (2009-05) 3rd Generation Partnership Project; Technical Specification Group Radio Access Network; Evolved Universal Terrestrial Radio Access (E-UTRA); Base Station (BS) radio transmission and reception (Release 9)
14. 3GPP TS 36.113 V9.0.0(2009-05) 3rd Generation Partnership Project; Technical Specification Group Radio Access Network; Evolved Universal Terrestrial Radio Access (E-UTRA); Base Station (BS) and repeater Electro Magnetic Compatibility (EMC) (Release 9)
15. 3GPP TS 36.211 V8.7.0 (2009-05) 3rd Generation Partnership Project; Technical Specification Group Radio Access Network; Evolved Universal Terrestrial Radio Access (E-UTRA); Physical Channels and Modulation (Release 8)
16. 3GPP TS 36.212 V8.7.0 (2009-05) 3rd Generation Partnership Project; Technical Specification Group Radio Access Network; Evolved Universal Terrestrial Radio Access (E-UTRA); Multiplexing and channel coding (Release 8)
17. 3GPP TS 36.213 V8.7.0 (2009-05) 3rd Generation Partnership Project; Technical Specification Group Radio Access Network; Evolved Universal Terrestrial Radio Access (E-UTRA); Physical layer procedures (Release 8)
18. 700MHz LTE Remote Radio Unit, System Design Specification (RRUL 11)

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Acronyms

RRU	Remote Radio Unit
RRUL	Remote Radio Unit LTE
UDM	Universal Digital Module
DDM	Dual Duplexer Module
BTS	Base Station Transceiver
EUT	Equipment Under Test
LTE	Long Term Evolution
ACP	Adjacent Channel Power
CPRI	Common Public Radio Interface
NIST	National Institute of Standards and Technology
NRTL	National Recognized Testing Laboratory
NVLAP	National Voluntary Laboratory Accreditation Program
LAP	Laboratory Accreditation Programs
IC	Industry Canada
FCC	Federal Communication Commission
CFR	Code of Federal Regulations (US)
CAB	Conformity assessment body
EMC	Electromagnetic Compatibility
EMI	Electromagnetic interference
RTTE	Radio and Telecommunications Terminal Equipment
TTE	Telecommunications equipment
TCB	Telecom Certification Body
CCB	Canadian Certification Body
IECEE	International Electro-technical Committee for Conformity Testing to Standards for Electrical Equipment
NCB	National Certification Bodies
CBTL	CB Test Laboratory
ITL	Independent Test Laboratory
ITE	Information Technology Equipment

1 Summary

Applicant:	Ericsson Canada 3500 Carling Ave. Ottawa, On Canada K2H 8E9
Apparatus:	KRC 131 142/1 (RRUL11 B12 700MHz Lower ABC)
Application:	Fixed Wireless Base Station Transceiver
FCC ID:	VZTAKRC131142-1
In Accordance With:	FCC CFR 47 Part 27 Miscellaneous Wireless Communications Services

This test report has been prepared for the purpose of demonstrating compliance with FCC CFR Title 47 Part 27. Conducted measurements have been performed in accordance with ANSI TIA-603-B-2002. Radiated tests have been conducted is accordance with ANSI C63.4-2003. Radiated emissions are assessed and measured at an accredited ITL in a 3 meter or 10 meter Semi-Anechoic chamber. Conducted Emissions have been assessed at Ericsson Carling facilities using calibrated equipment in accordance with Part 27 Requirements.

The assessment summary is as follows:

Apparatus Assessed:	KRC 131 142/1 (700MHz RRUL 11 B12 Remote Radio Unit)
Specification:	FCC CFR 47 Part 27 Miscellaneous Wireless Communications Services
Compliance Status:	Complies
Exclusions:	None
Non-compliances:	None
Report Release History:	Original Release

2 Introduction

This document supports the FCC test process and filing requirements for North American approvals. Measurements are conducted to satisfy and demonstrate compliance to the Essential parameters for Radio Compliance and Conformance to the following standards:

- FCC CFR 47 Part 27 Subpart C, Miscellaneous Wireless Communications Services.
- FCC CFR 47, Subpart 2, Subpart J, Equipment Authorization Procedures – Equipment Authorization.

The initial RRU deployment will support a 5MHz and 10MHz BW for Fixed Wireless Base Station (BTS) applications with a rated output power of 30W (44.8dBm) in a 2 x 2 MIMO configuration. Initial frequency band for authorization will address the US 700MHz ABC Block.

Hardware Description

The BTS equipment is comprised of the following:

1) KRC 131 142/1 RRUL 11 B12: LTE Remote Radio Unit [RRUL] **EUT**
2) CPRI Modem Emulator (RU-Master LPC 102 400/5 R1B S/N T01E684487)

RRU Details

Frequency: FCC 700MHz Band

Transmit / Downlink: 728MHz – 746MHz – ABC Block

- Modulation: OFDMA, QPSK, 16QAM, 64QAM
- BW: 5/10 MHz
- MIMO, 2 x 2 (Spatial Multiplexing)
- Diversity, 2 Way Transmit
- Throughput: Up to 60 Mbps
- Power: 44.8dBm (30W)
- PAPR: 7dB

Duplex: FDD (30MHz)

Frequency Stability: +/-0.05ppm

Channel Raster: 100 kHz

Receive / Uplink: 698 - 716MHz – ABC: Block

- Modulation: SC-FDMA, QPSK, 16QAM
- BW: 10 MHz
- MIMO, 2 x 2, Multi-User
- Throughput: Up to 20Mbps
- Diversity, 2 and (4 Branch Receive)

RRU Physical Details:

PWR: -48V (typical) DC 350W (max), Size: 17” x 11.3” x 8.7” (H x W x D), Weight: 53lbs

3 Equipment Under Test

3.1 Product Identification

The Equipment Under Test (UUT) is identified for Fixed Base Station operation as follows:
Ericsson Remote Radio Unit RRUL 11 B12, 700MHz (Lower ABC Blocks)

3.2 Technical Specifications of the EUT

Manufacturer:	Ericsson Canada
Operating Frequency:	Downlink …TX: 728.7 – 745.3MHz (10MHz) Downlink …TX: 729.0 – 745.0MHz (5MHz) Uplink …….RX: 698.7 – 715.3MHz (10MHz) Uplink …….RX: 699.0 – 715.0MHz (5MHz)
Emission Designator:	5MHz: 5M00 W7D 10MHz: 10M0 W7D
Modulation:	LTE OFDMA, QPSK, 16QAM, 64QAM (Two transmitters, 2 receivers per sector)
Antenna Data: (for reference only)	Andrew LNX-6513DS-T4M 12.7dBd, 14.8dBi (max) Beam-width – Horizontal 65°

3.3 Technical Description

The Ericsson LTE RRU (RRUL) is a single sector Transceiver (2 transmitter, 2 receivers per radio / sector) operating in FDD mode which will be introduced as part of Ericsson's next generation BTS product line. The initial RRU product offering addresses the LTE air interface, while the RRU radio architecture will be 4G agnostic to support OFDM based air interfaces including the long term evolution of GSM/UMTS (LTE), 802.16e OFDMA standards with Multiple Inputs Multiple Outputs (MIMO) operation. Transmitter outputs (TX1, TX2) are isolated and non-correlated for external interface to customer furnished antenna.

The Radio design will address outdoor installations for pole and building/wall mount deployment. RRU electronics are housed in a weather protected environmental enclosure intended for co-location in proximity to the customer furnished antenna. The RRU has an integrated active duplexer for enhanced up link performance and antenna interface. Compliance and performance testing will include a band / spectrum dependent DDM (duplexer) integrated with the RRU product offering.

The RRU operates over the North American 700MHz band employing a band specific duplexer designed to limit operations to specific customer requirements. The initial RRU product offering will operate over a Down Link (DL) transmit frequency band from 728MHz to 746MHz, for channel bandwidths of 5 and 10MHz. LTE modulation formats OFDMA QPSK, 16QAM and 64QAM will be assessed at a rated output of 30W per transmitter.

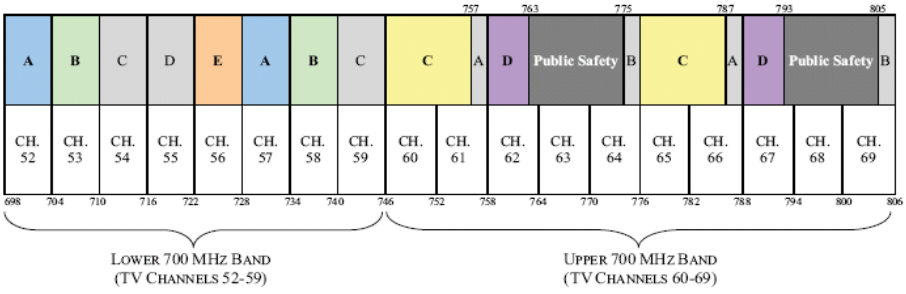
The recommended customer furnished antenna detail is as follows:
MFG: Andrew Antenna
Model: LNX-6513DS-T4M
Gain: 12.7dBd (14.8dBi)
Beam width: Horizontal 65°

The Ericsson RRU design consists of logical sections comprised of Digital, RF, Power Amplifiers, and a Power Supply and distribution housed in a single outdoor enclosure. Heat fins on the enclosure external surface provide convection cooling for thermal and environmental control. For protection against solar impact, a sun shield mounted on the unit provides additional thermal protection to limit direct solar exposure. The unit operates over an ambient temperature of -40°C to +55°C including sun loading.

The digital section provides processing resources to the RRU CPRI based optical link to the Modem and Soft Radio Core. This single sector Radio is targeted to support up to 20MHz base band data bandwidth. (Initial deployment will be limited to 10MHz) The digital section of the transceiver card provides the processing solution for the 4G Radio.

The PSU provides primary power conversion from a nominal input of -48VDC (350W) for the internal PCB circuit requirements. The PA board produces the RF output power for BTS transmission at a rated power up to 30W per transmitter port. The RRU consists of a Radio transceiver and integrated active Duplexer combination for applicable FCC compliance. All compliance measurements and ratings are referenced at the antenna ports / duplexer interface.

Revised 700 MHz Band Plan for Commercial Services



Block	Frequencies (MHz)	Bandwidth	Pairing	Area Type	Licenses
A	698-704, 728-734	12 MHz	2 x 6 MHz	EA	176
B	704-710, 734-740	12 MHz	2 x 6 MHz	CMA	734
C	710-716, 740-746	12 MHz	2 x 6 MHz	CMA	734
D	716-722	6 MHz	unpaired	EAG	6
E	722-728	6 MHz	unpaired	EA	176
C	746-757, 776-787	22 MHz	2 x 11 MHz	REAG	12
A	757-758, 787-788	2 MHz	2 x 1 MHz	MEA	52
D	758-763, 788-793	10 MHz	2 x 5 MHz	Nationwide	1 *
B	775-776, 805-806	2 MHz	2 x 1 MHz	MEA	52

* Subject to conditions respecting a public/private partnership.

The blocks shaded above in gray (Lower 700 MHz Band C and D Blocks and Upper 700 MHz Band A and B Blocks) were auctioned prior to Auction 73.

Figure 3-1: FCC Revised 700MHz Frequency Band

Radio Standard is LTE, OFDMA TX, (SC-FDMA RX) configured for a 2x2 MIMO operating mode with an output rated power of 30W (44.8dBm) at the antenna port. Transmit outputs 1 and 2 are isolated, non-correlated outputs connected to two isolated customer furnished antenna and are measured/verified independently.

The TX Modulation schemes of QPSK, 16QAM, and 64QAM will be supported along with an operational bandwidth of 5MHz and 10MHz for initial product release in the ABC Block spectrum. QPSK, 16QAM, and 64 QAM will employ 3/4 CTC data rate coding. The RRU employs a CPRI (Common Public Radio Interface) for interoperability and standardization of the radio protocol interface. To demonstrate compliance, appropriate LTE waveforms will be utilized to generate the RF output, rated power and bandwidth requirements with respect to the modulation variables. Bandwidths of 5MHz and 10MHz will be assessed for operation within the combined Lower 700MHz ABC blocks.

Table 3-1: Applicable FCC 700MHz Blocks

Block	*Bandwidth*	*Frequency*
A	**12MHz (2 x 6)**	698 - 704MHz and **728 - 734MHz**
B	**12MHz (2 x 6)**	704 - 710MHz and **734 - 740MHz**
C	**12MHz (2 x 6)**	710 - 716MHz and **740 - 746MHz**

Test Units Part 27: UUT KRC 131 142/1 RRUL 11 B12 700MHz, SN: CH5P1A0006
CPRI Modem interface with LTE Test Vectors and traffic (RUMA LPC 102 400/5)
Part 15: UUT KRC 131 142/1 RRUL 11 B12 700MHz, SN: CH5P1A0012
CPRI Modem interface with LTE Test Vectors and traffic (RUMA LPC 102 400/5)

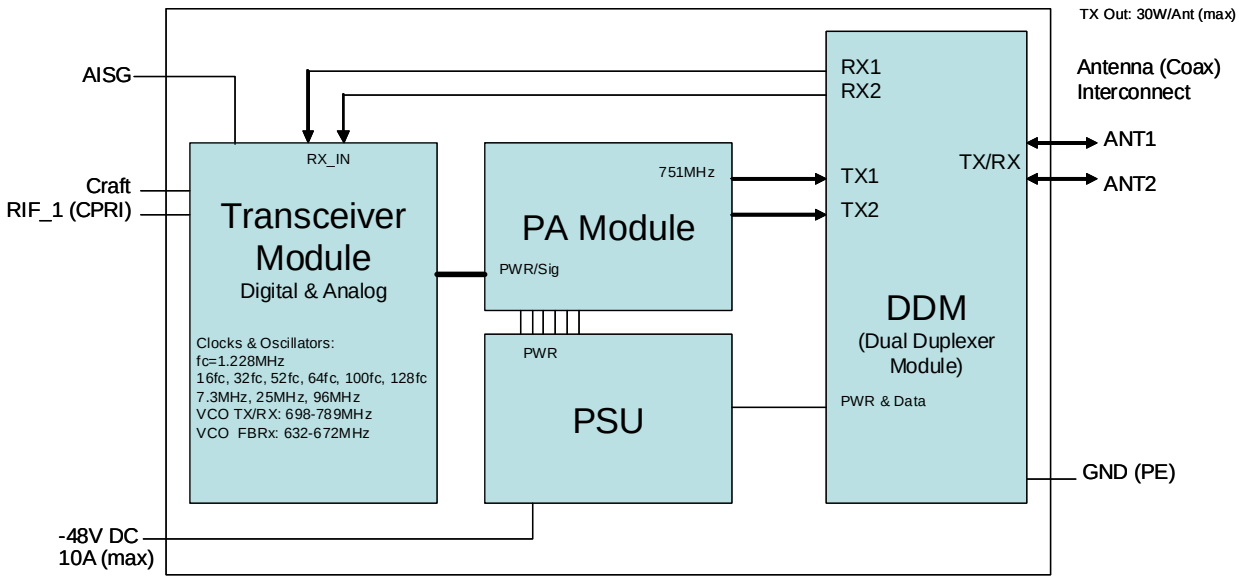


Figure 3-2: UUT – Block Diagram RRUL 700MHz

4 Test Conditions

4.1 Specifications

The apparatus has been assessed against the following specifications:
FCC CFR 47 Part 27 Miscellaneous Wireless Communications Services

4.2 Test Environment

All tests are performed under the following environmental conditions:

Temperature range	:	15 – 30 ^{o}C
Humidity range	:	20 - 75 %
Pressure range	:	86 - 106 kPa
Power supply range	:	+/- 5% of rated voltages

4.3 Test Equipment

Table 4-1: Conducted Emissions - List of Test Equipment

Equipment	Manufacturer	Model No.	Asset/Serial No.	Cal Due
Signal Analyzer	Agilent	MXA N9020A	1084944/MY48010211	15 Feb 2012
Signal Analyzer	Agilent	MXA N9020A	1081485/MY47380104	15 Feb 2012
Power Meter	HP	438A	L0544032	24 Nov 2010
Power Sensor	HP	8481A	US37290233	24 Nov 2010
Attenuator 30dB (Qty=2)	Narda	769-30	NA	NA
Attenuator 20dB (Qty=2)	Meca	650-20-1F4	NA	NA
Network Analyzer (Path Loss Calibration)	Agilent	N5230	MY45000798	16 Nov 2010
Climatic Chamber	Burnsco	RTC-37P-3-3	04-13	27 Oct 2010
Power Supply	Xantrex	XHR 60	T01E684487	NCR
Digital Volt Meter	Fluke			

Table 4-2 Radiated Emissions - List of Test Equipment

Equipment	Manufacturer	Model No.	Asset/Serial No.	Next Cal.
10 m EMI Test Chamber				
Bilog Antenna	ARA	LPB 2520	SSG012772	12/21/2010
Horn Antenna, Double ridged	EMCO	3115	SSG012298	02/19/2011
Receiver/Spectrum Analyzer	Hewlett Packard	8566B	SSG012521	03/02/2011
Spec. A, RF Pre-selector	Hewlett Packard	85685A	SSG012010	03/02/2011
Spectrum Analyzer Display	Hewlett Packard	85662A	SSG012433	03/02/2011
Quasi Peak Adaptor	Hewlett Packard	85650A	SSG012620	03/02/2011
RF Amplifier	Hewlett Packard	8447D	SSG013045	09/24/2010
Signal Generator	Anritsu	69369A	SSG012138	09/28/2010
50 Coax cable	HUBER + SUHNER	None		
50 Coax cable	HUBER + SUHNER	None		
Note: N/A = Not Applicable, NCR = No Cal Required, COU = CAL On Use				

5 Applicable Tests

This section contains the following:

FCC CFR 47 Part 27: Test Requirements

The column headed 'Required' indicates whether the associated clauses were invoked for the apparatus under test. The following abbreviations are used:

N No: Not Applicable / Not Relevant.

Y Yes: Mandatory i.e. the apparatus shall conform to these tests.

N/T Not Tested

The results compiled in this document are in accordance and representative of the operation of the apparatus as originally submitted.

5.1 FCC Part 27: Test Parameters

Table 5-1: Applicable Test Parameters / Results Summary

Clause	Test Method	Test description	Required	Result
27.50(c)	2.1046	RF Output Power	Y	Pass
------	2.1047	Modulation Characteristics	Y	Pass
------	2.1049	Occupied Bandwidth	Y	Pass
27.53(g)	2.1051	Band Edge Compliance	Y	Pass
27.53(g)	2.1051	Spurious Emissions at the Antenna Terminal	Y	Pass
27.53(g)	2.1053, 2.1057	Field Strength of Spurious Emissions	Y	Pass
27.54	2.1055	Frequency Stability	Y	Pass

6 Test Results

6.1 Effective Radiated Power and Antenna Heights

Clause 27.50(c) Limits: FCC CFR Part 2.1046 Fixed Base Station

(c) The following power and antenna height requirements apply to stations transmitting in the 698–746 MHz band:

(3) Fixed and base stations transmitting a signal with an emission bandwidth **greater than 1 MHz** must not exceed an ERP of 1000 watts/MHz and an antenna height of 305 m HAAT, except that antenna heights greater than 305 m HAAT are permitted if power levels are reduced below 1000 watts/MHz ERP in accordance with **Table 3** of this section;

(4) Fixed and base stations located in a county with population density of 100 or fewer persons per square mile, based upon the most recently available population statistics from the Bureau of the Census, and transmitting a signal with an emission bandwidth **greater than 1 MHz** must not exceed an ERP of 2000 watts/MHz and an antenna height of 305 m HAAT, except that antenna heights greater than 305 m HAAT are permitted if power levels are reduced below 2000 watts/MHz ERP in accordance with **Table 4** of this section;

(5) Licensees seeking to operate a fixed or base station located in a county with population density of 100 or fewer persons per square mile, based upon the most recently available population statistics from the Bureau of the Census, and transmitting a signal at an ERP greater than 1000 watts must:
(i) Coordinate in advance with all licensees authorized to operate in the 698–763 MHz, 775–793, and 805–806 MHz bands within 120 kilometers (75 miles) of the base or fixed station;
(ii) Coordinate in advance with all regional planning committees, as identified in §§ 90.527 of this chapter, with jurisdiction within 120 kilometers (75 miles) of the base or fixed station.

(6) Licensees of fixed or base stations transmitting a signal at an ERP greater than 1000 watts and greater than 1000 watts/MHz must comply with the provisions of paragraph (c)(8) of this section
and § 27.55(b), except that licensees of fixed or base stations located in a county with population density of 100 or fewer persons per square mile, based upon the most recently available population statistics from the Bureau of the Census, must comply with the provisions of paragraph (c)(8) of this section and § 27.55(b) only if transmitting a signal at an ERP greater than 2000 watts and greater than 2000 watts/MHz;

(7) A licensee authorized to operate in the 710–716, 716–722, or 740–746 MHz bands, or in any unpaired spectrum blocks within the 698–746 MHz band, may operate a fixed or base station at an ERP up to a total of 50 kW within its authorized, 6 MHz spectrum block if the licensee complies with the provisions of § 27.55(b). The antenna height for such stations is limited only to the extent required to satisfy the requirements of § 27.55(b).

(8) Licensees intending to operate a base or fixed station at a power level permitted under the provisions of paragraph (c)(6) of this section must provide advanced notice of such operation to the Commission and to licensees authorized in their area of operation. Licensees who must be notified are all licensees authorized under this part to operate on an adjacent spectrum block within 75 km of the base or fixed station. Notifications must provide the location and operating parameters of the base or fixed station, including the station's ERP, antenna coordinates, antenna height above ground, and vertical antenna pattern, and such notifications must be provided at least 90 days prior to the commencement of station operation.

Note: The following tables are inserted for reference only and apply to BTS antenna installations with respect to geography and rated output power. As these tables pertain to BTS deployment vs. ERP, antenna heights are site dependent and will not be referenced in the FCC Test Report for submission.

Table 3 27.50

Permissible Power and Antenna Heights for Base and Fixed Stations in the 698–757 MHz, 758–763 MHz, 776–787 MHz and 788–793 MHz Bands Transmitting a Signal With an Emission Bandwidth Greater than 1 MHz.

Antenna height (AAT) in meters (feet)	Effective radiated power (ERP) per MHz (watts/MHz)
Above 1372 (4500)	65
Above 1220 (4000) To 1372 (4500)	70
Above 1067 (3500) To 1220 (4000)	75
Above 915 (3000) To 1067 (3500)	100
Above 763 (2500) To 915 (3000)	140
Above 610 (2000) To 763 (2500)	200
Above 458 (1500) To 610 (2000)	350
Above 305 (1000) To 458 (1500)	600
Up to 305 (1000)	1000

Table 4 27.50

Permissible Power and Antenna Heights for Base and Fixed Stations in the 698–757 MHz, 758–763 MHz, 776–787 MHz and 788–793 MHz Bands Transmitting a Signal With an Emission Bandwidth Greater than 1 MHz

Antenna height (AAT) in meters (feet)	Effective radiated power (ERP) per MHz (watts/MHz)
Above 1372 (4500)	130
Above 1220 (4000) To 1372 (4500)	140
Above 1067 (3500) To 1220 (4000)	150
Above 915 (3000) To 1067 (3500)	200
Above 763 (2500) To 915 (3000)	280
Above 610 (2000) To 763 (2500)	400
Above 458 (1500) To 610 (2000)	700
Above 305 (1000) To 458 (1500)	1200
Up to 305 (1000)	2000

Antenna Height Limit: (see FCC Clause 27.50 tables 3 and 4 for antenna compliance reference heights)

Test Setup

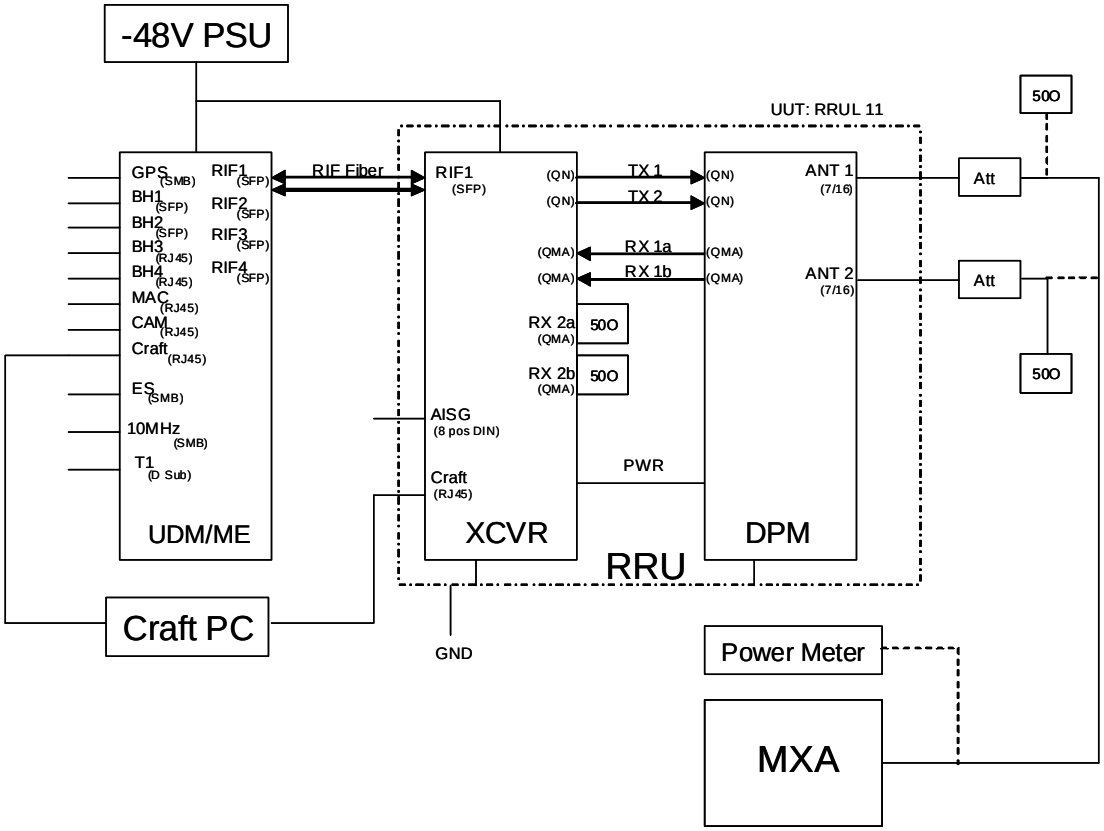


Figure 6-1 RRU Radio Compliance Set Up / Configuration

Test conditions:

All modulation (QPSK, 16QAM, and 64QAM) modes and different data rates are evaluated using representative waveforms of all modulation schemes. The test results shall include 5MHz and 10MHz bandwidths configurations for Lower, Middle and Upper band frequency offsets as applicable.

Physical Channels

A downlink physical channel corresponds to a set of resource elements carrying information originating from higher layers and is the interface defined between 36.212 and 36.211 [15]. The following downlink physical channels are defined:

- Physical Downlink Shared Channel, PDSCH – QPSK, 16QAM, 64QAM
- Physical Broadcast Channel, PBCH - QPSK
- Physical Downlink Control Channel, PDCCH - QPSK
- Physical Control Format Indicator Channel, PCFICH - QPSK
- Physical Hybrid ARQ Indicator Channel, PHICH - BPSK

LTE standard defines BPSK as an ARQ Indicator Channel, thus being embedded into the LTE signal and does not contain traffic data. As BPSK is embedded in each modulation scheme, waveforms tested represent the worst case conditions.

Procedure:

Channel Power measurements for each output shall be conducted for the applicable bandwidths and modulation schemes for the Lower, Middle and Upper frequency offsets as applicable. The following tables are used to summarize recorded results in addition to applicable captured plots.

Table 6-1: Setting / Measurement Results – 5MHz Channel Power

Setting		5MHz Channel Power Output (dBm)					
		QPSK		16 QAM		64 QAM	
		TX1	TX2	TX1	TX2	TX1	TX2
Frequency (A Block CH_5035)	731.5MHz	44.95	45.58	45.03	45.49	44.82	45.43
Frequency (Lower B CH_5085)	736.5MHz	45.20	45.56	45.13	45.68	45.22	45.49
Frequency (Middle B CH_5090)	737.0MHz	44.98	45.41	45.16	45.04	45.10	45.52
Frequency (Upper B CH_5095)	737.5MHz	45.23	45.91	45.40	45.43	45.28	45.46
Frequency (C Block CH_5145)	742.5MHz	45.08	45.34	45.07	45.32	44.92	45.49
RBW	180kHz						
VBW	1.8MHz						
CH BW	5MHz						
Span	20MHz						
Sweep	1ms						
Reference Level Offset	52.1dB						
Detector	RMS	Aggregate Power =10^(10*LOG(10^(TX1/10)+10^(TX2/10))/10)/1000					
Attenuation	10dB	72.34W (5MHz)		71.66W (5MHz)		69.37W (5MHz)	

Table 6-2: Setting / Measurement Results – 10MHz Channel Power

Setting		10MHz Channel Power Output (dBm)					
		QPSK		16 QAM		64 QAM	
		TX1	TX2	TX1	TX2	TX1	TX2
Frequency (Lower AB CH_5057)	733.7MHz	45.05	45.24	45.10	45.92	45.12	45.31
Frequency (Middle AB CH_5063)	734.3MHz	45.53	45.27	45.04	45.20	45.06	45.58
Frequency (Upper AB CH_5070)	735.0MHz	44.87	45.47	45.06	45.44	45.23	45.28
Frequency (Lower BC CH_5110)	739.0MHz	45.07	45.22	45.36	45.37	45.44	45.45
Frequency (Middle BC CH_5117)	739.7MHz	45.10	45.43	45.09	45.23	44.83	45.47
Frequency (Upper BC CH_5123)	740.3MHz	45.09	45.28	45.16	45.61	45.14	46.05
Frequency (Block ABC CH_5090)	737.0MHz	45.51	45.49	45.30	45.12	45.22	45.46
RBW	180kHz						
VBW	1.8MHz						
CH BW	10MHz						
Span	20MHz						
Sweep	1ms						
Reference Level Offset	51.1 dB						
Detector	RMS	Aggregate Power =10^(10*LOG(10^(TX1/10)+10^(TX2/10))/10)/1000					
Attenuation	10dB	60.40W (10MHz)		73.44W (10MHz)		75.27W (10MHz)	

5MHz Aggregate Power = TX1 + TX2 = 45.23 + 45.91 = 48.59dBm/5MHz = **72.34W/5MHz**
10MHz Aggregate Power = TX1 + TX2 = 45.44 + 46.05 = 48.77dBm/10MHz = **75.27W/10MHz**

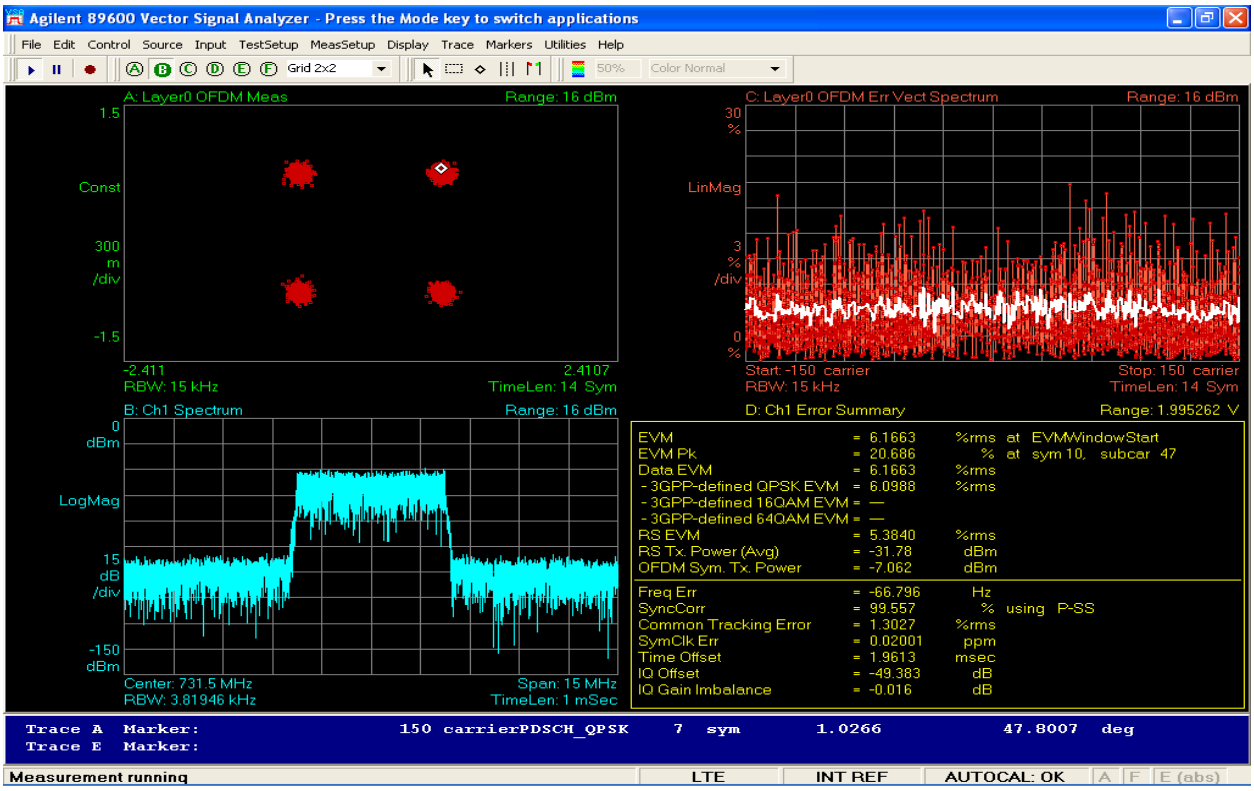


Figure 6-2: 5MHz BW Modulation TX1_QPSK at 731.5 MHz

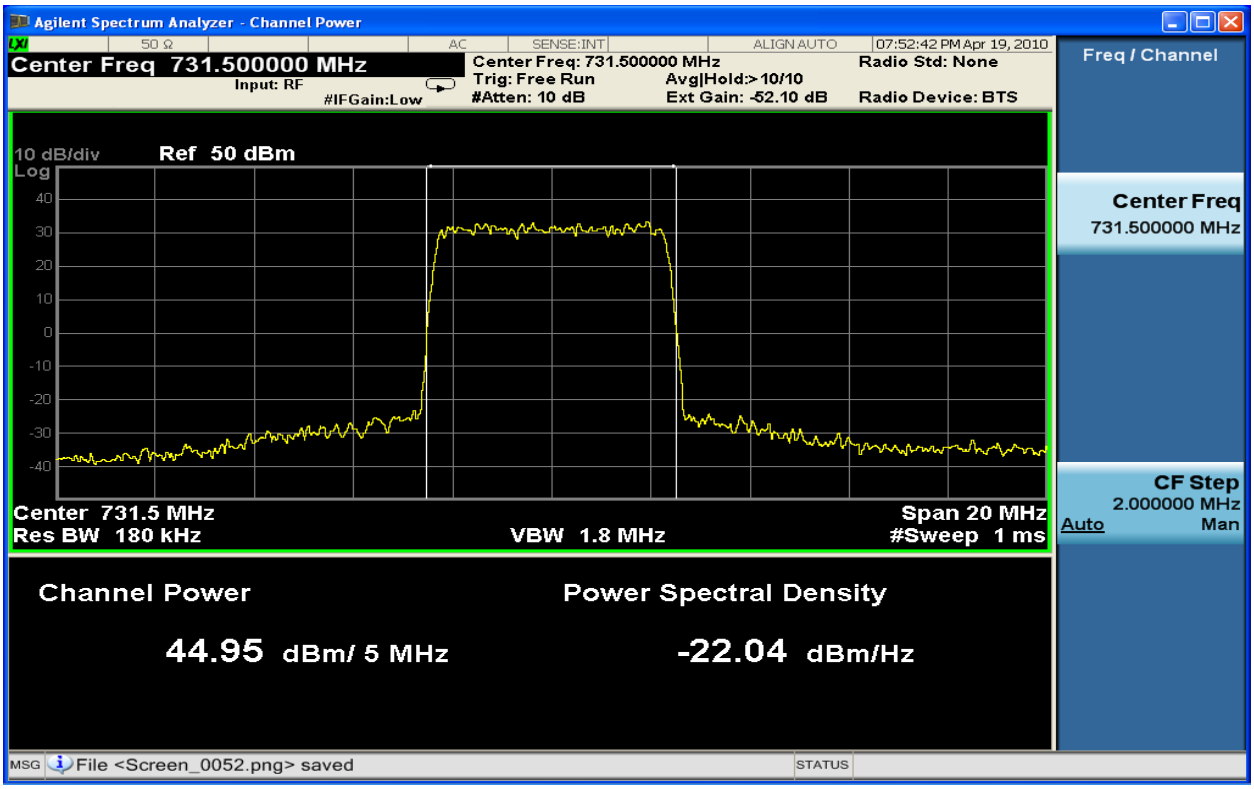


Figure 6-3: 5MHz BW Channel Power TX1_QPSK at 731.5 MHz

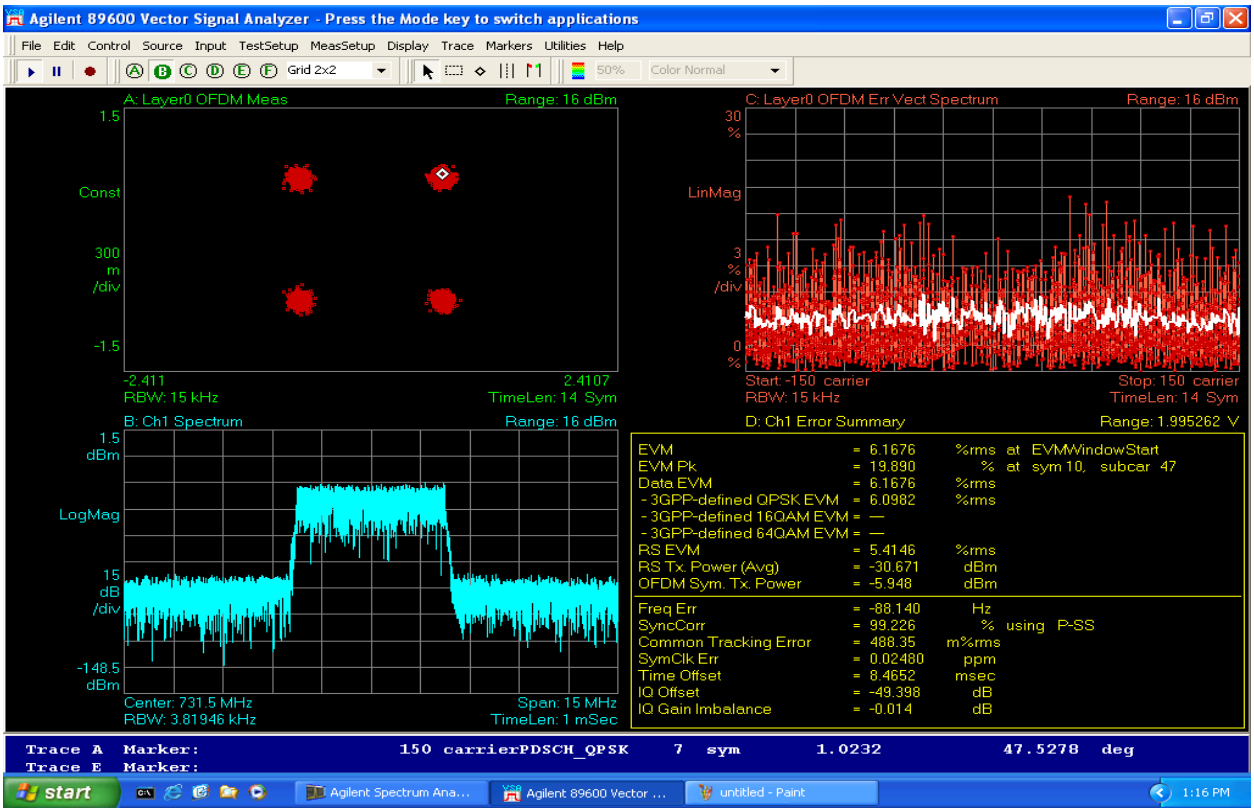


Figure 6-4: 5MHz BW Modulation TX2_QPSK at 731.5 MHz

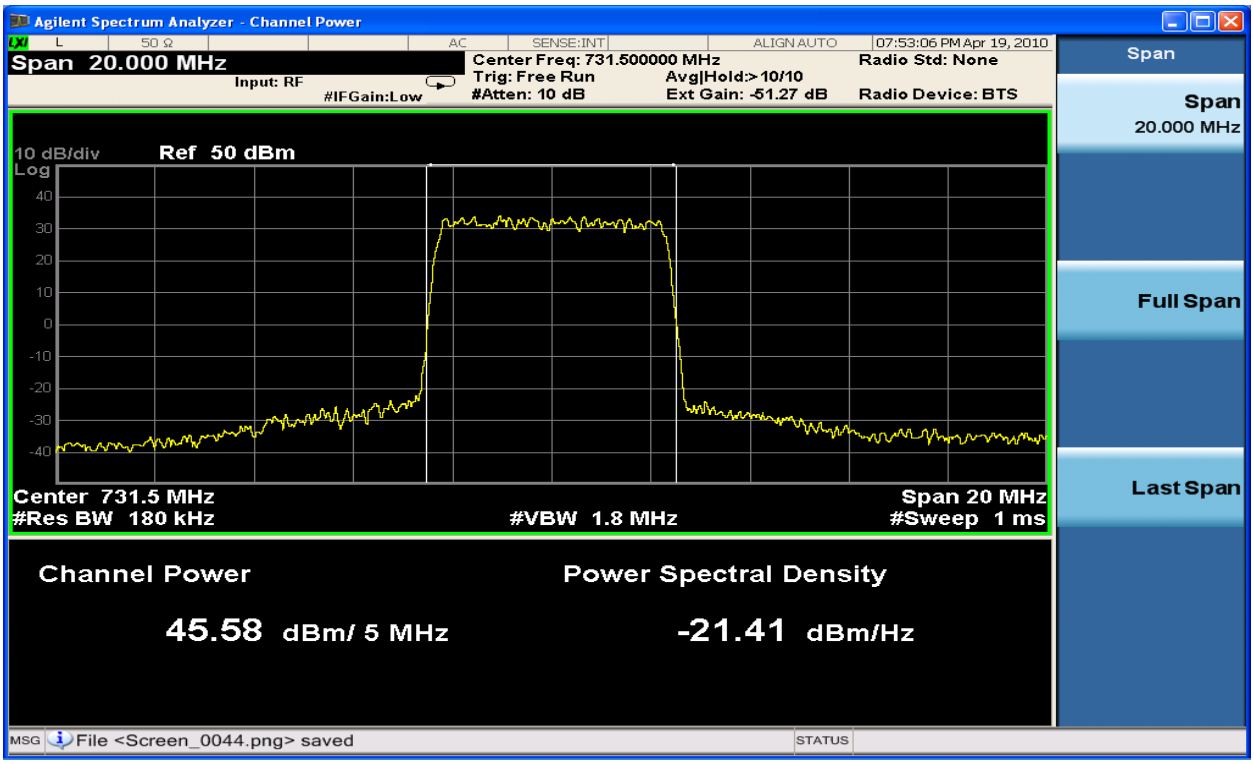


Figure 6-5: 5MHz BW Channel Power TX2_QPSK at 731.5 MHz

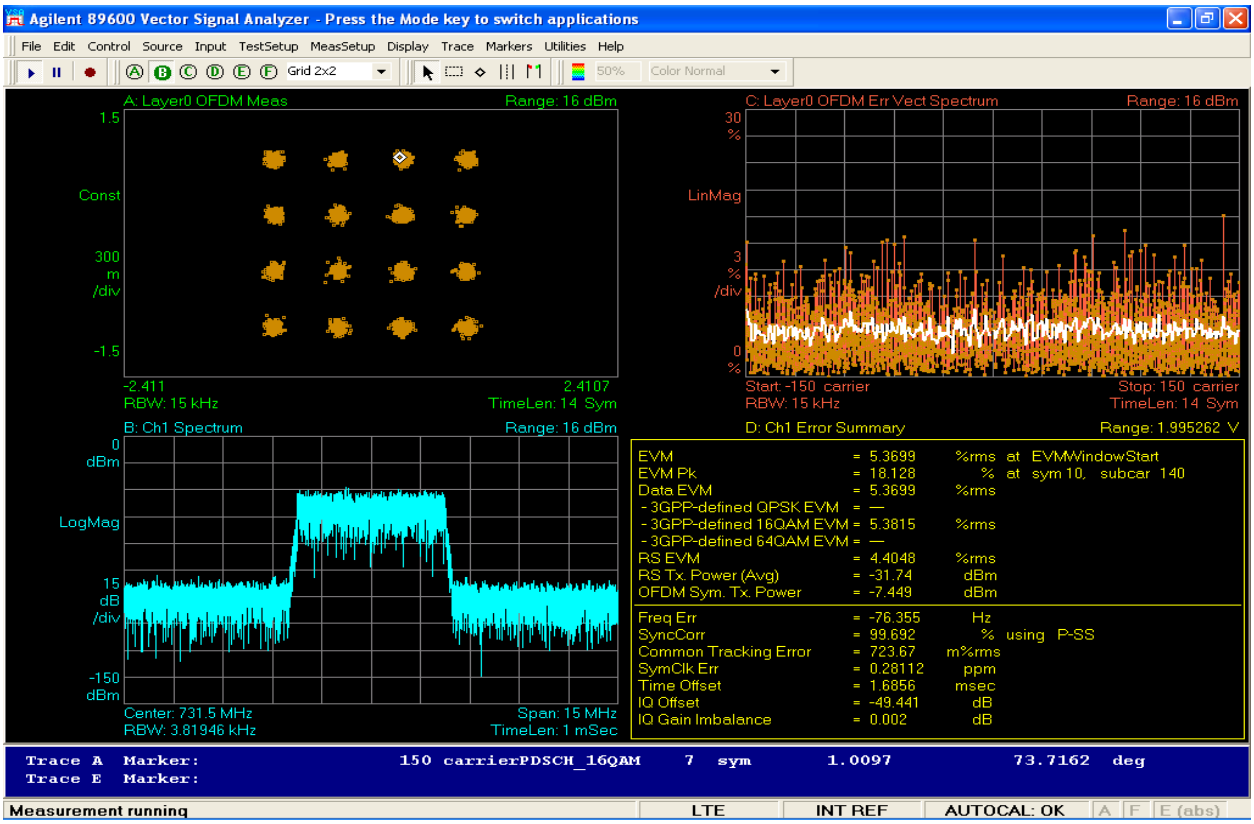


Figure 6-6: 5MHz BW Modulation TX1_16QAM at 731.5 MHz

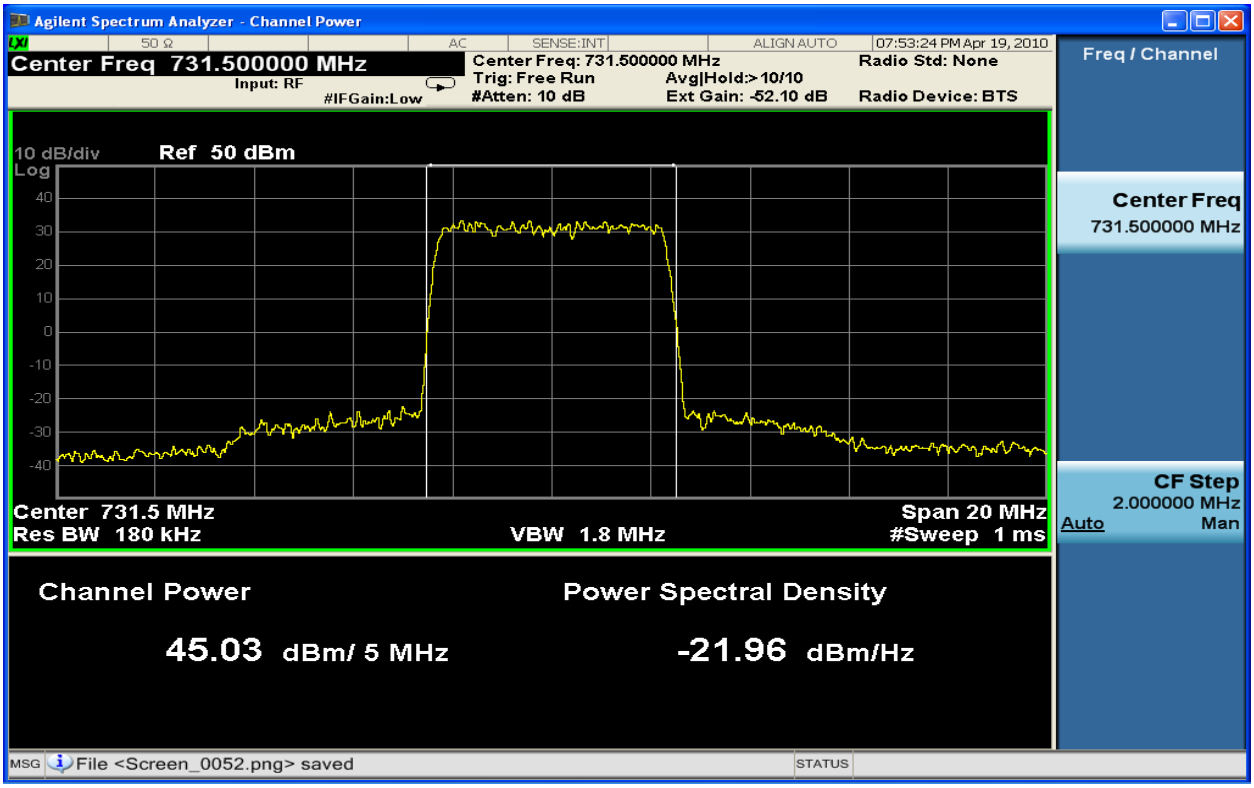


Figure 6-7: 5MHz BW Channel Power TX1_16QAM at 731.5 MHz

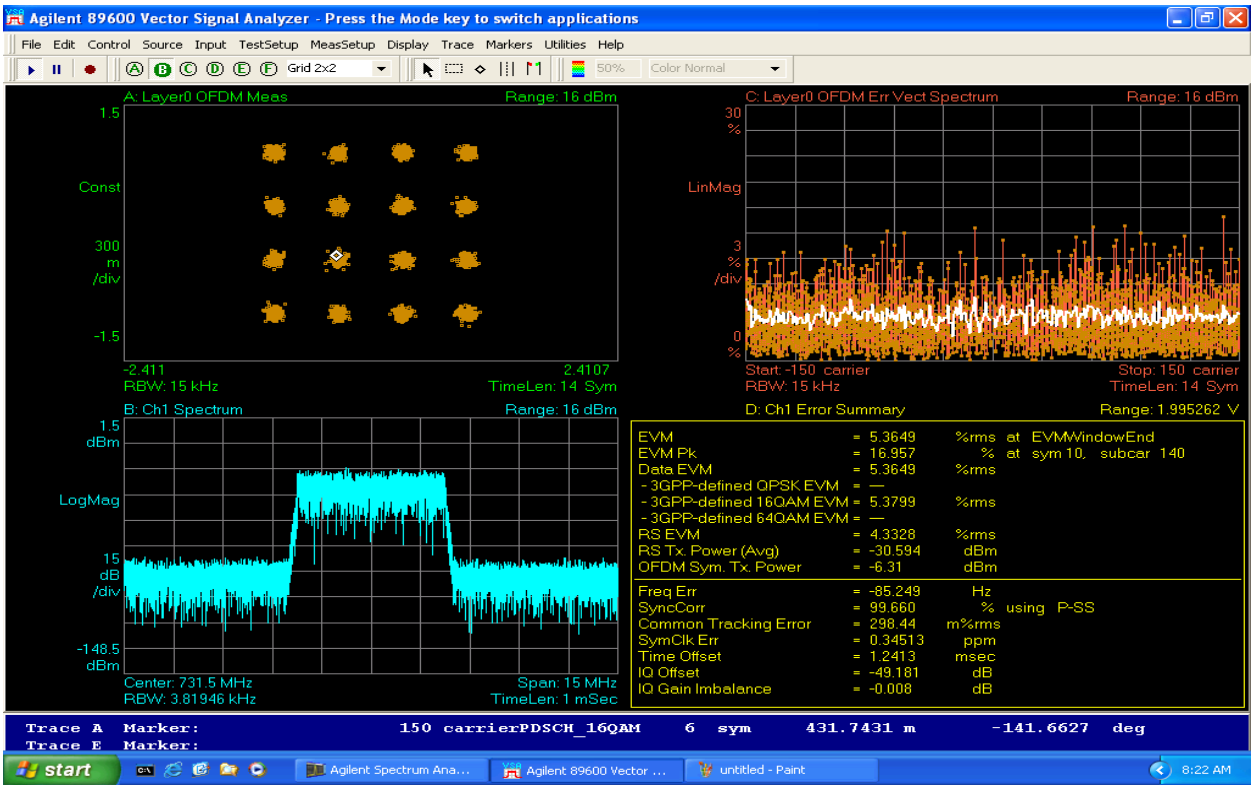


Figure 6-8: 5MHz BW Modulation TX2_16QAM at 731.5 MHz

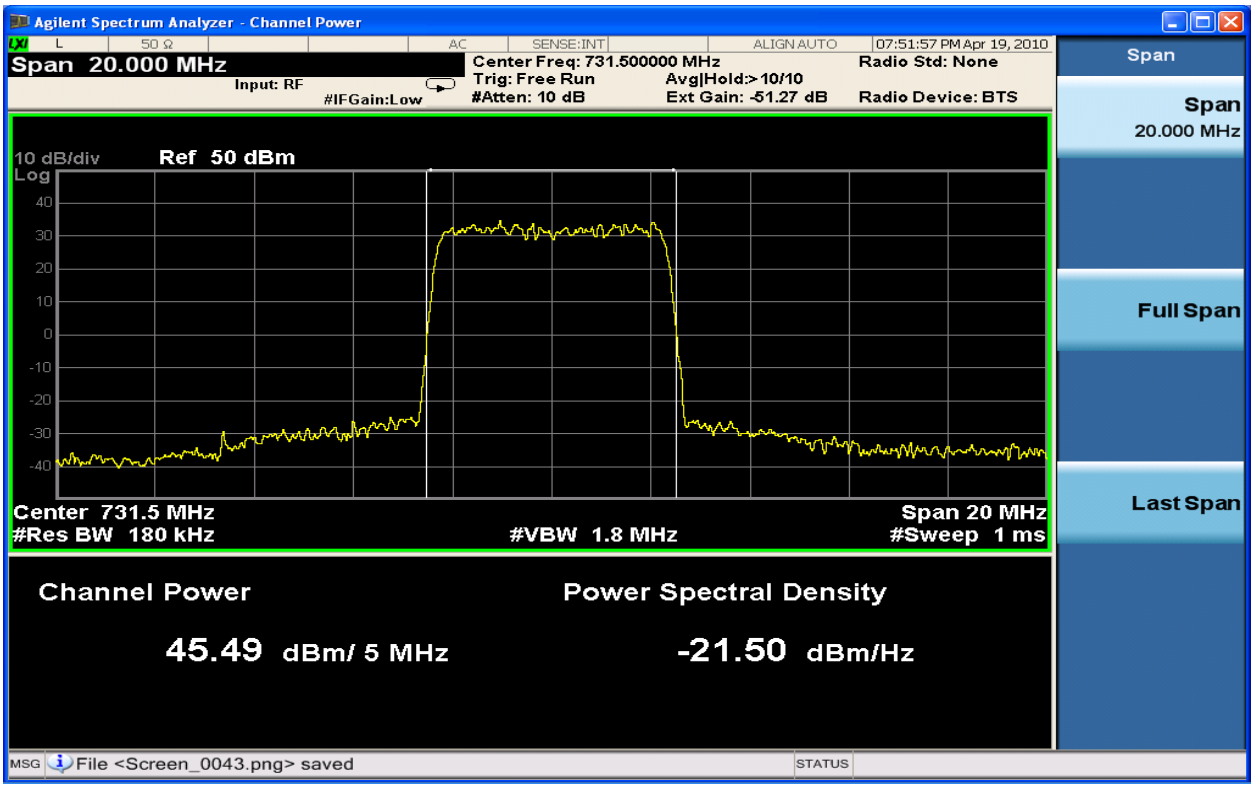


Figure 6-9: 5MHz BW Channel Power TX2_16QAM at 731.5 MHz

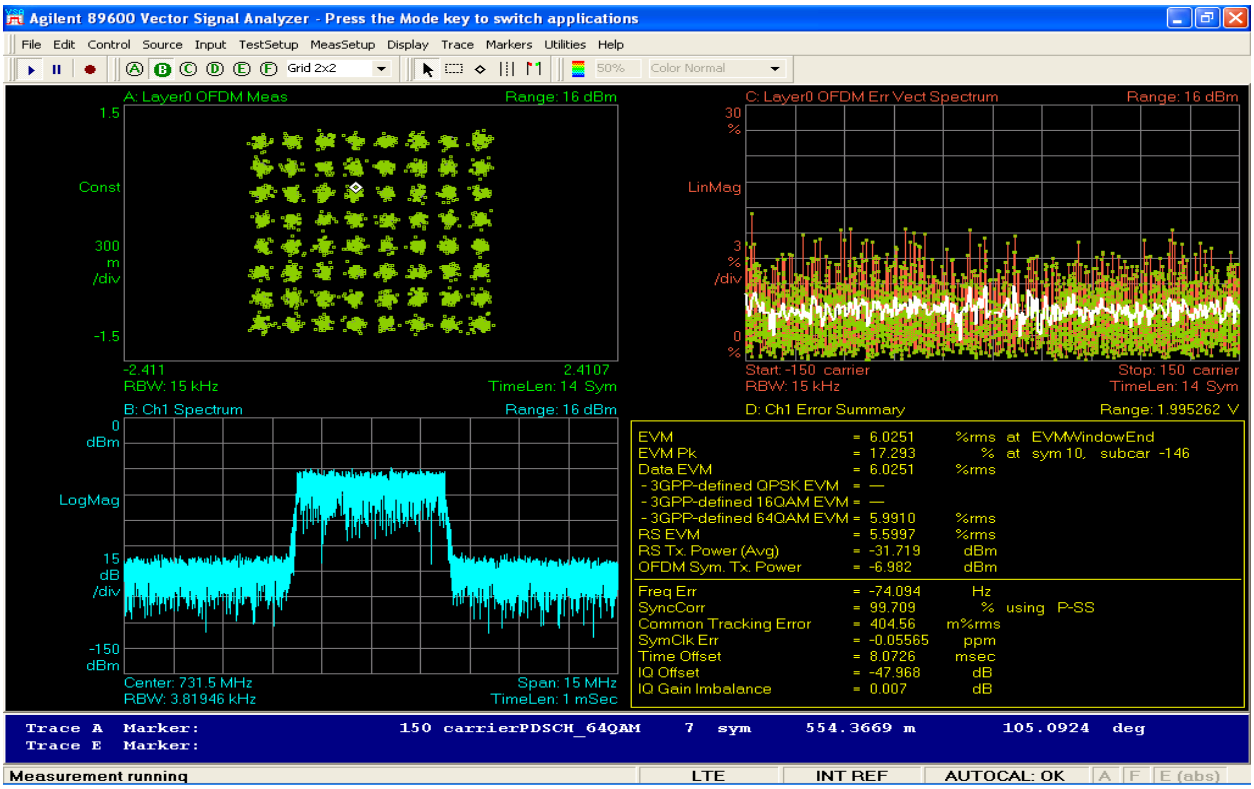


Figure 6-10: 5MHz BW Modulation TX1_64QAM at 731.5 MHz

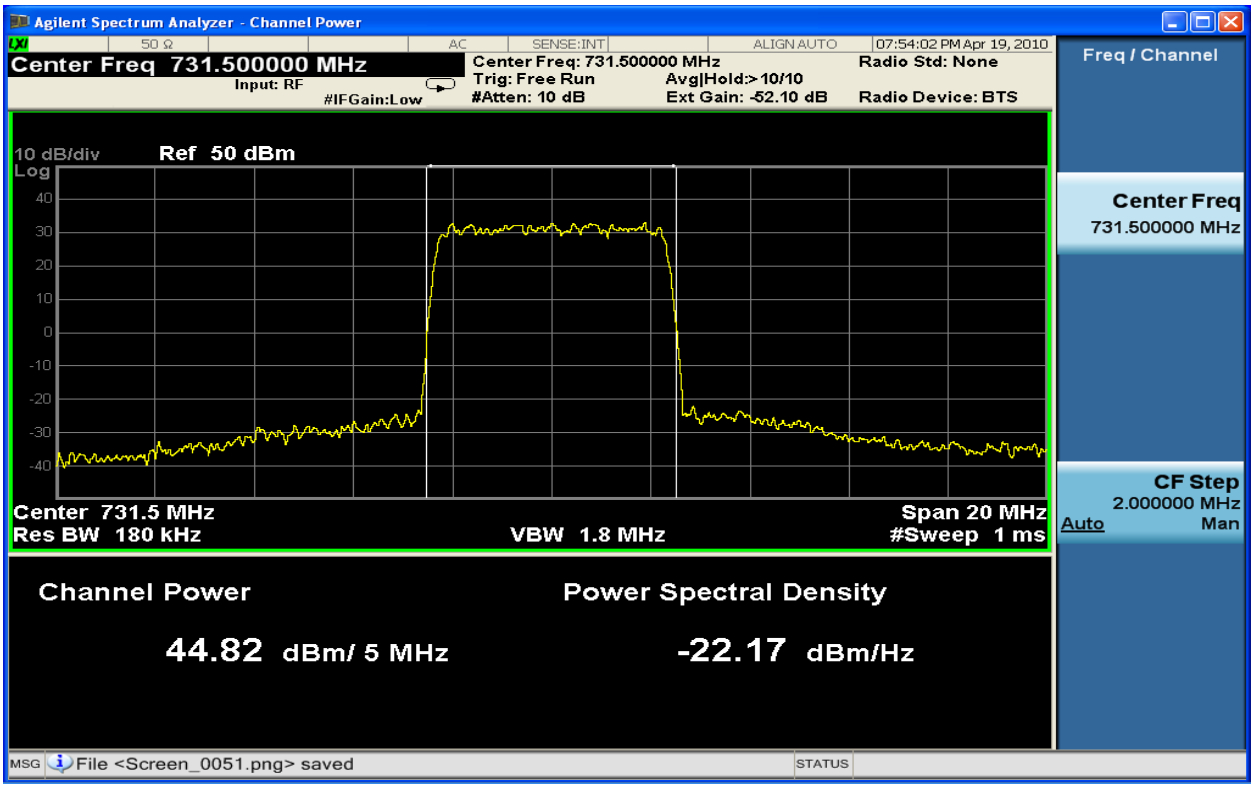


Figure 6-11: 5MHz BW Channel Power TX1_64QAM at 731.5 MHz

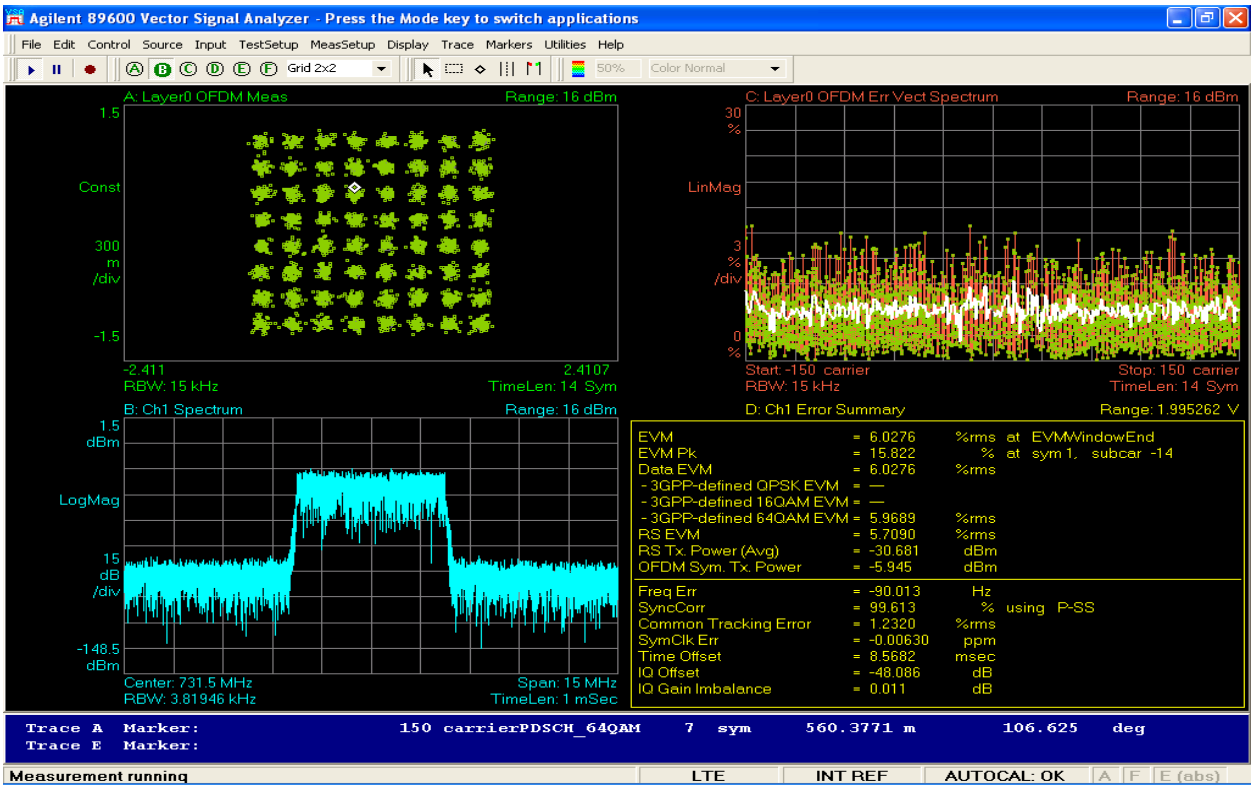


Figure 6-12: 5MHz BW Modulation TX2_64QAM at 731.5 MHz

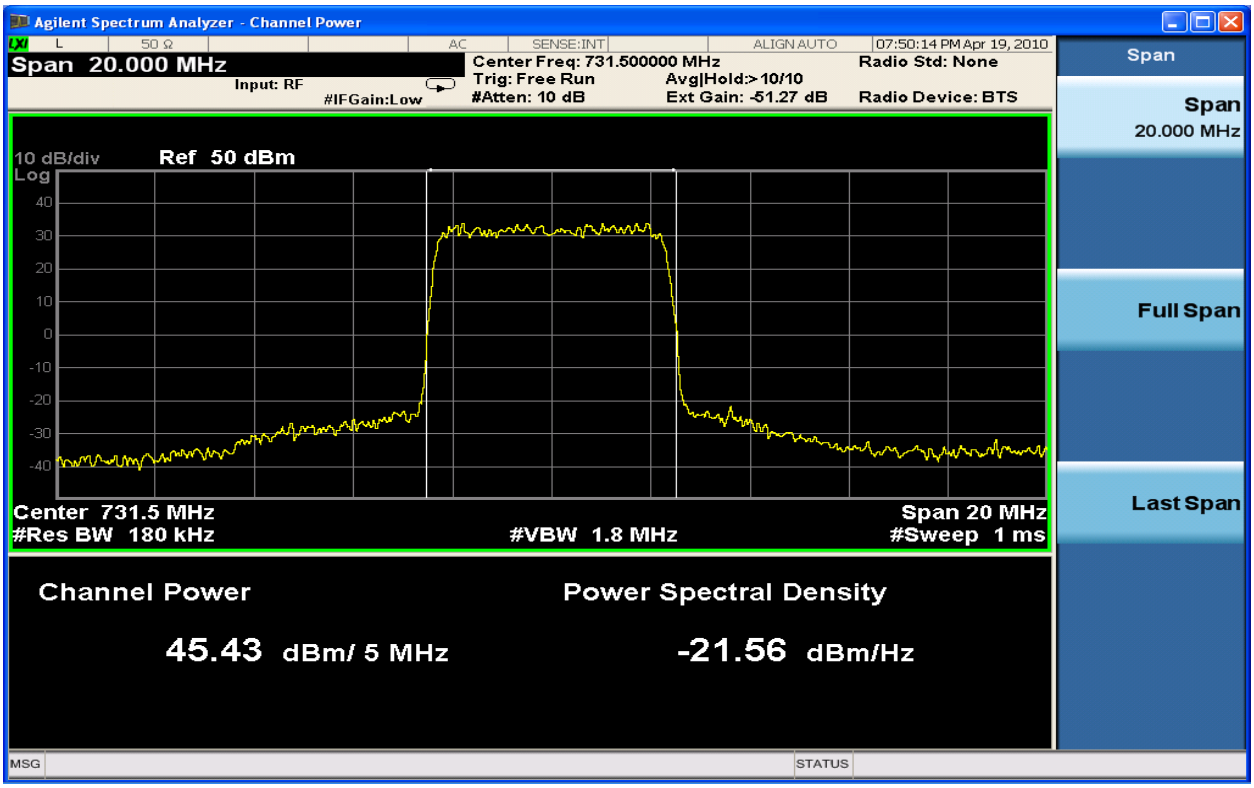


Figure 6-13: 5MHz BW Channel Power TX2_64QAM at 731.5 MHz

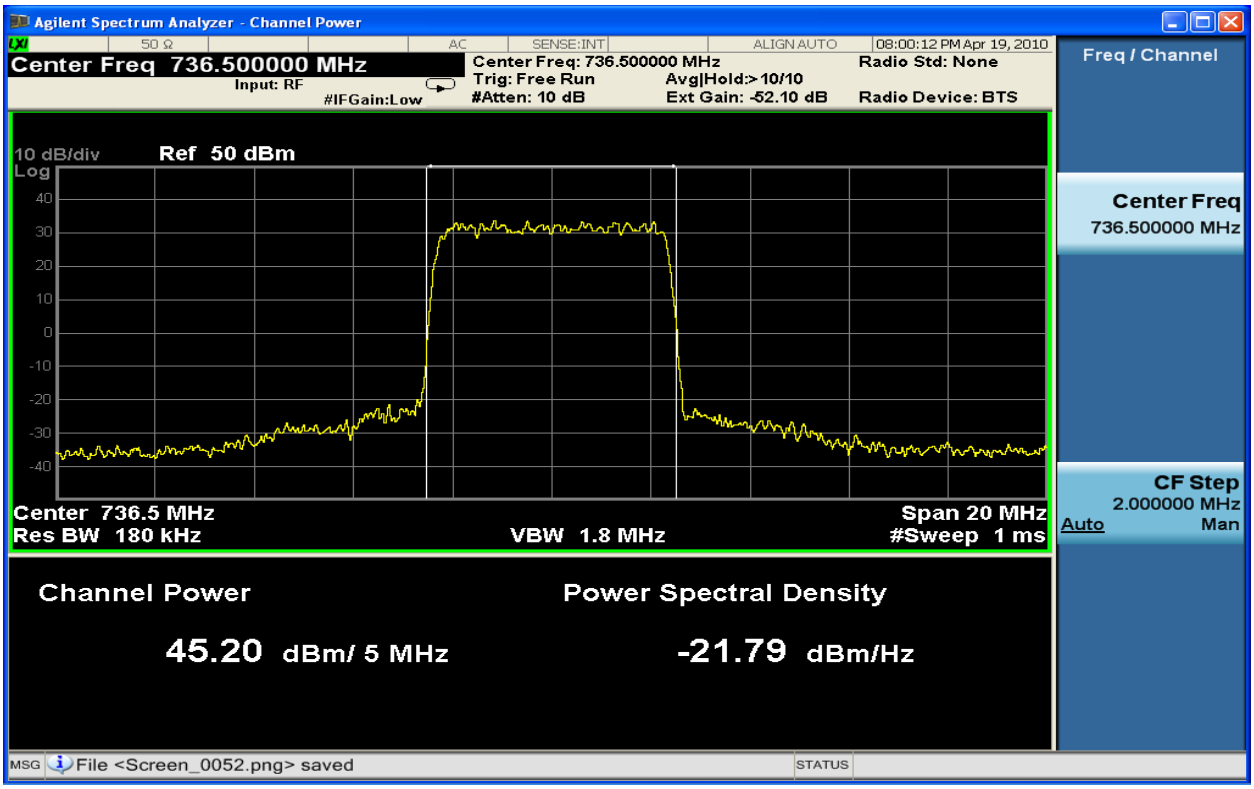


Figure 6-14 : 5MHz BW Channel Power TX1_QPSK at 736.5 MHz

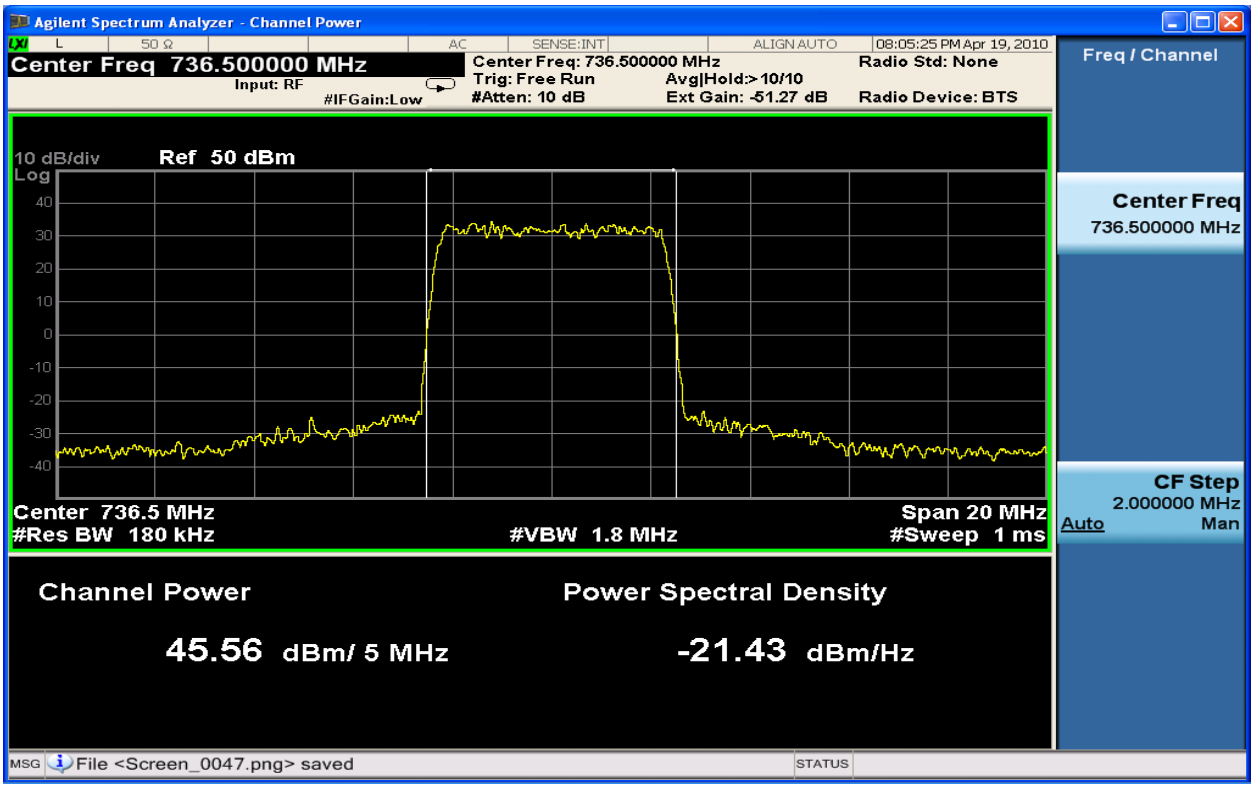


Figure 6-15 : 5MHz BW Channel Power TX2_QPSK at 736.5 MHz

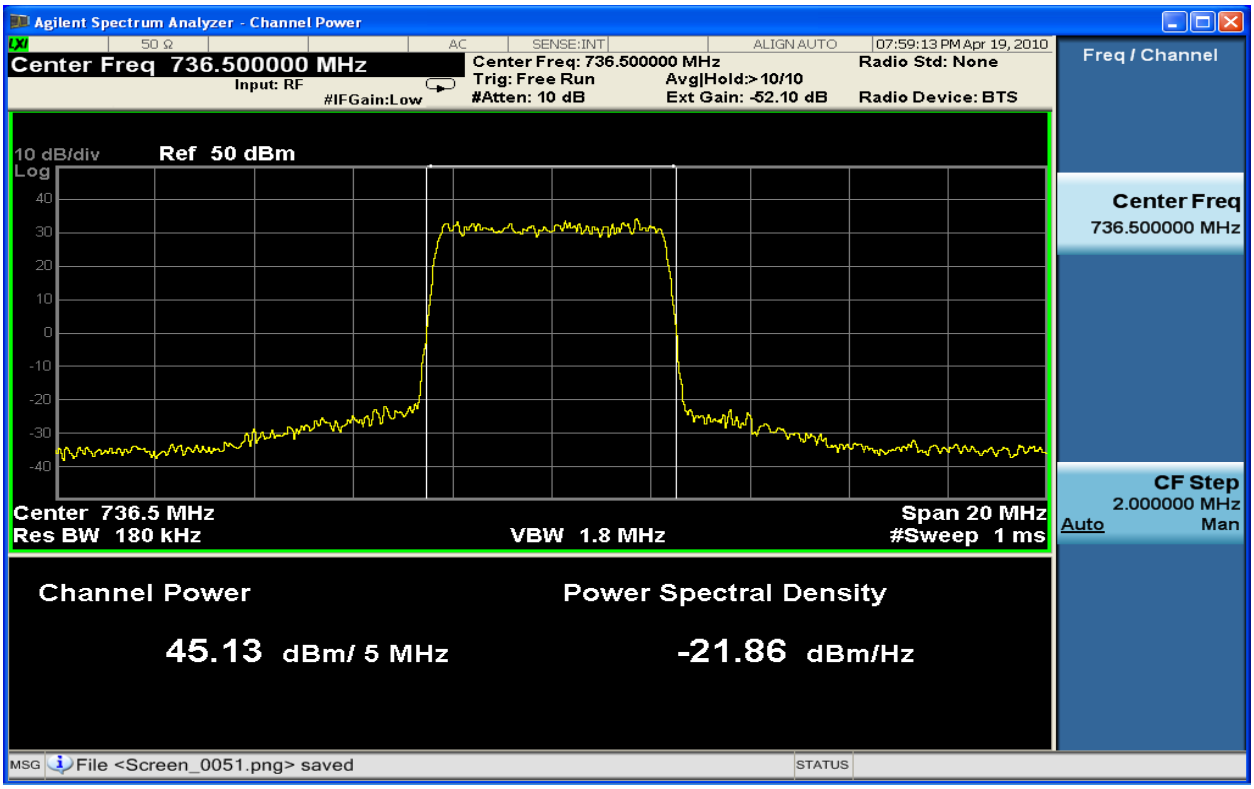


Figure 6-16 : 5MHz BW Channel Power TX1_16QAM at 736.5 MHz

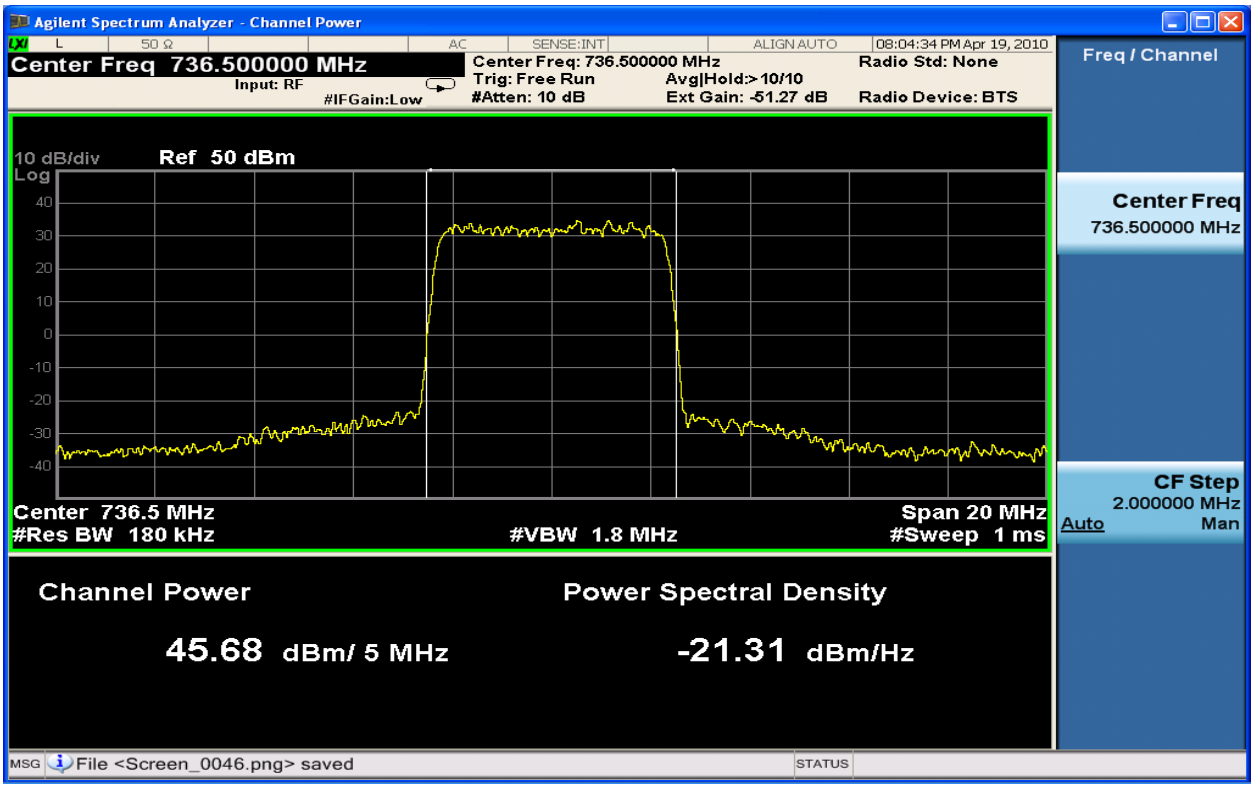


Figure 6-17 : 5MHz BW Channel Power TX2_16QAM at 736.5 MHz

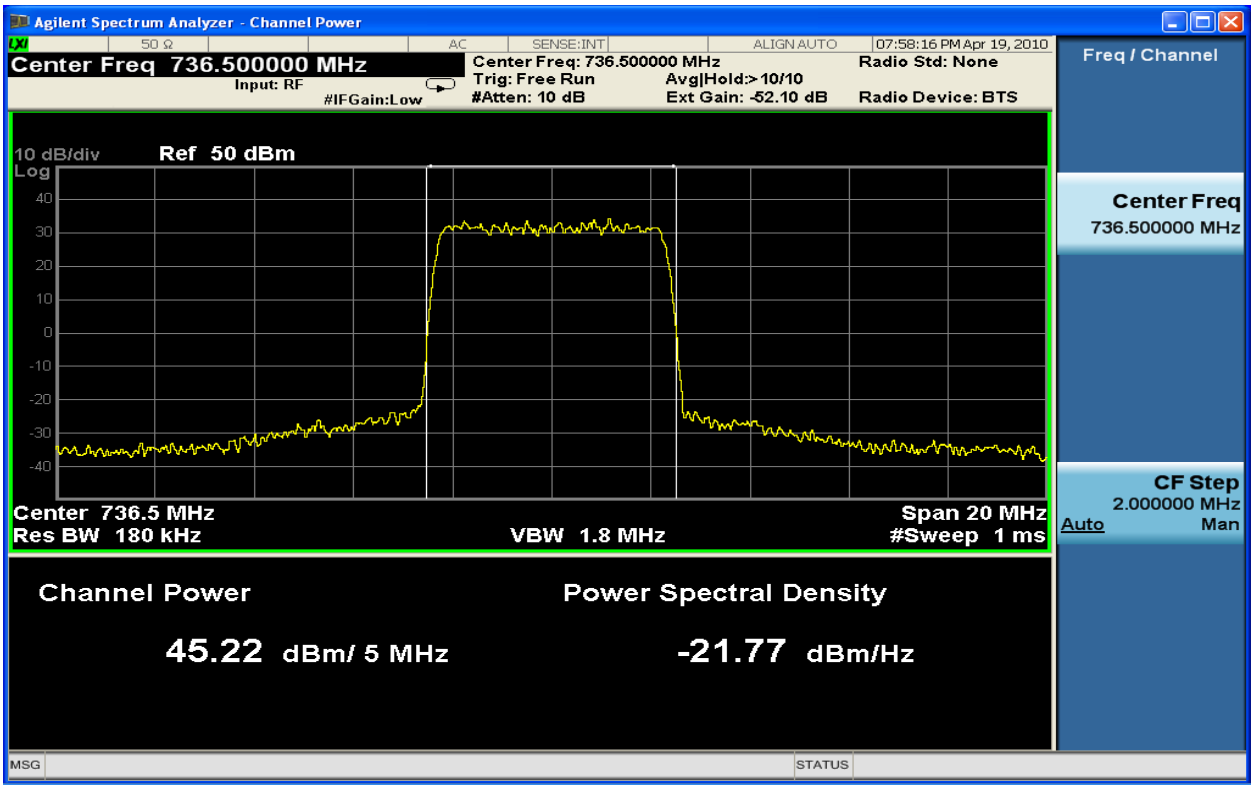


Figure 6-18 : 5MHz BW Channel Power TX1_64QAM at 736.5 MHz

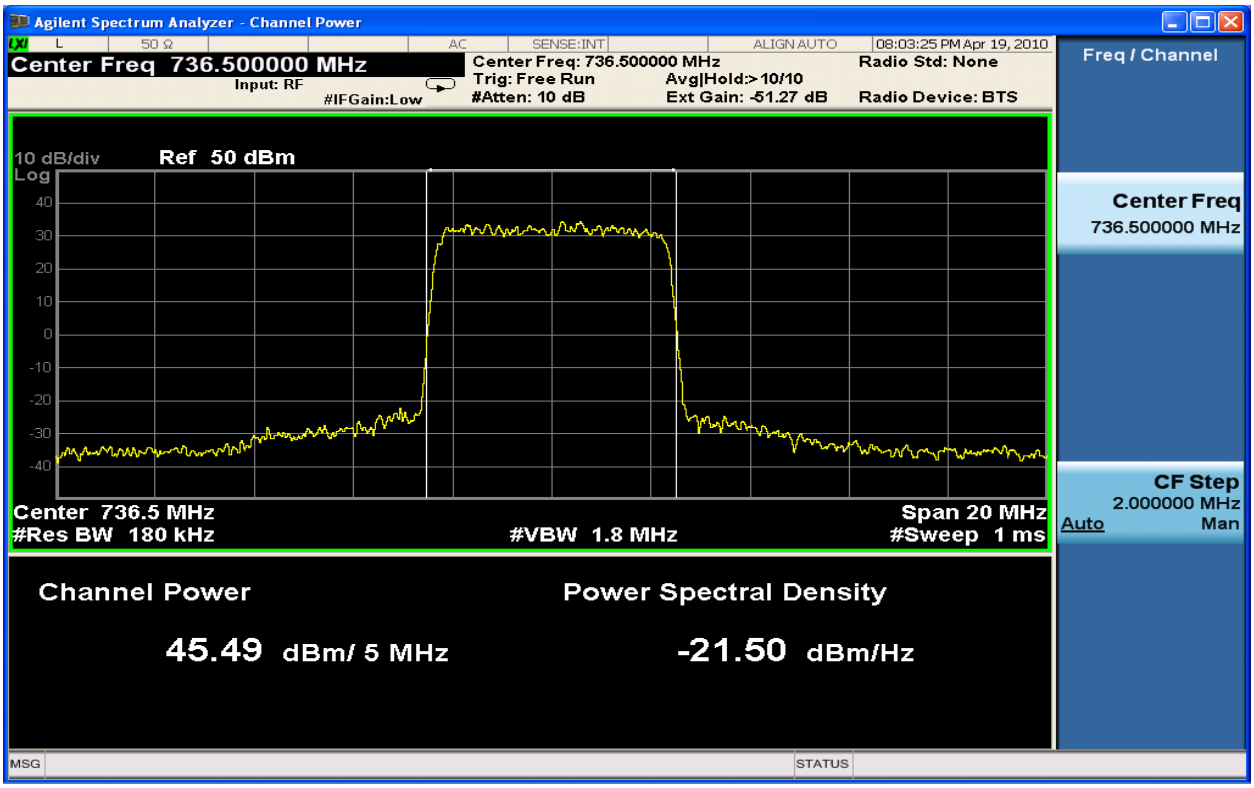


Figure 6-19 : 5MHz BW Channel Power TX2_64QAM at 736.5 MHz

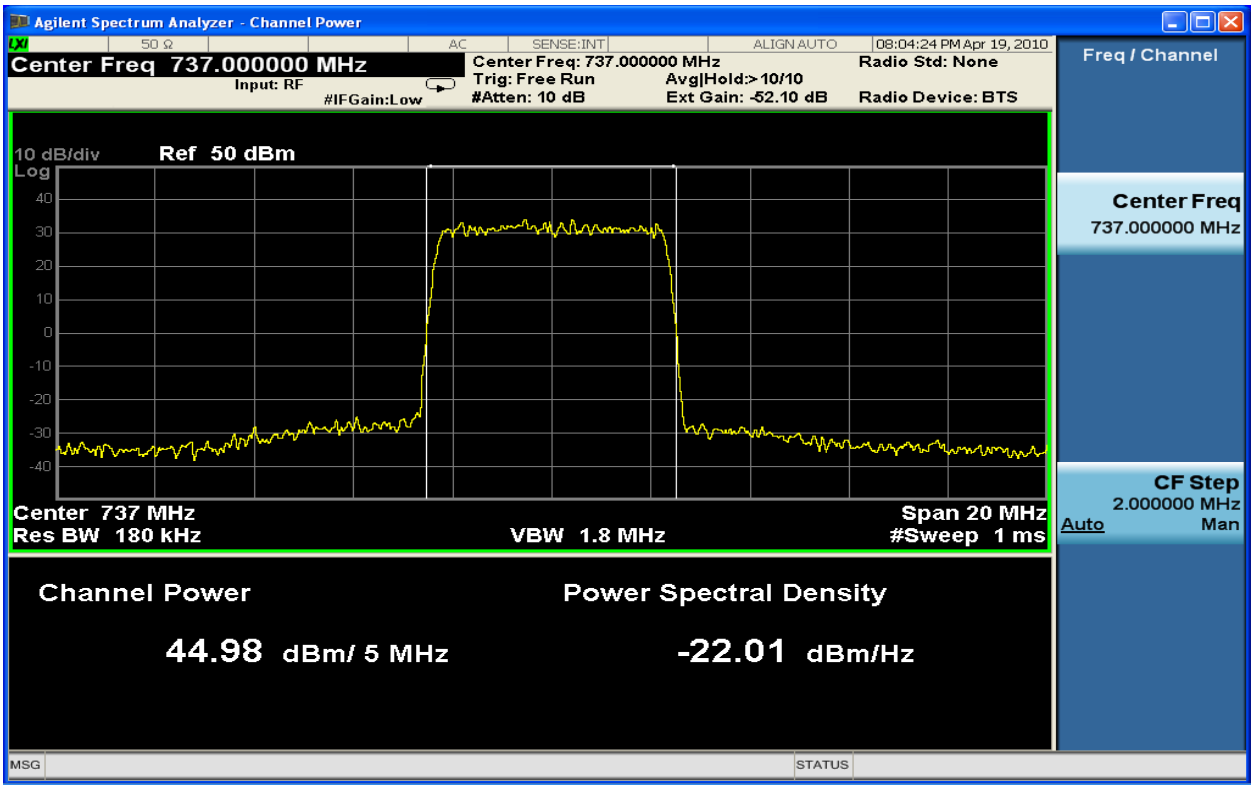


Figure 6-20 : 5MHz BW Channel Power TX1_QPSK at 737 MHz

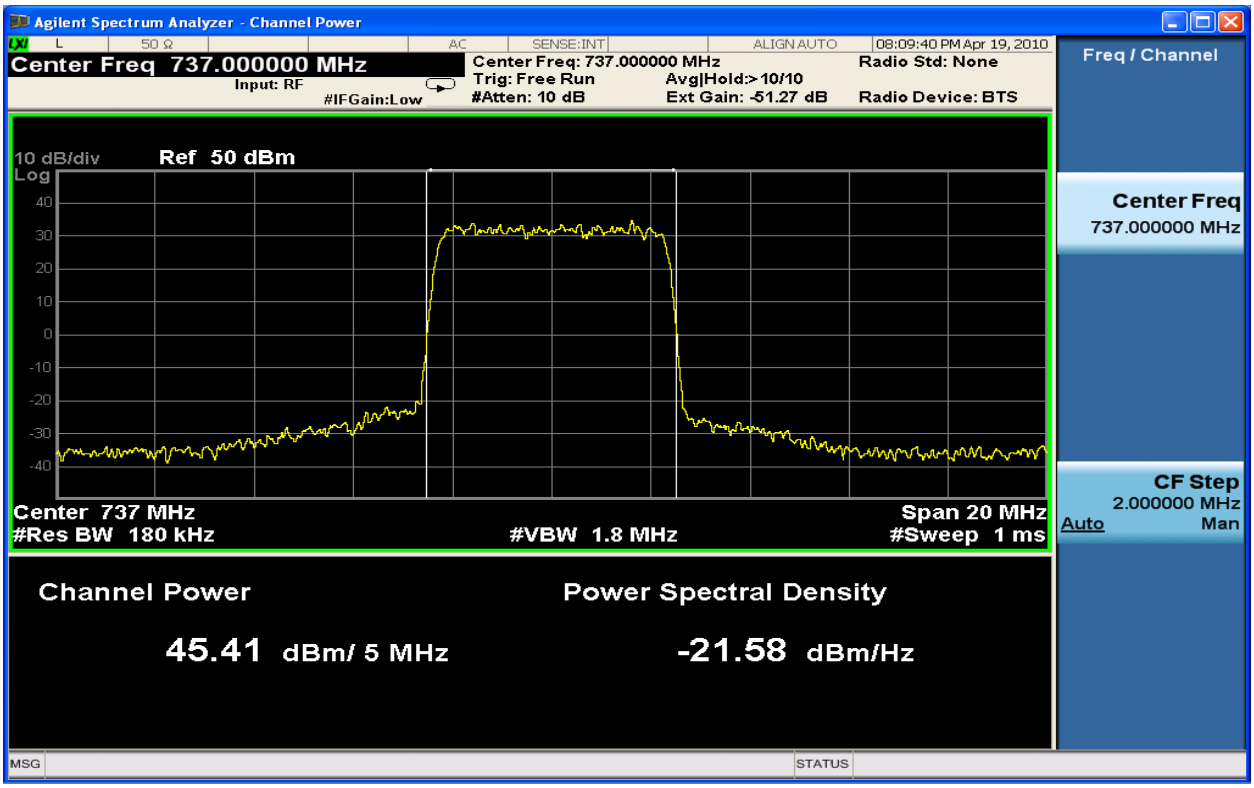


Figure 6-21 : 5MHz BW Channel Power TX2_QPSK at 737 MHz

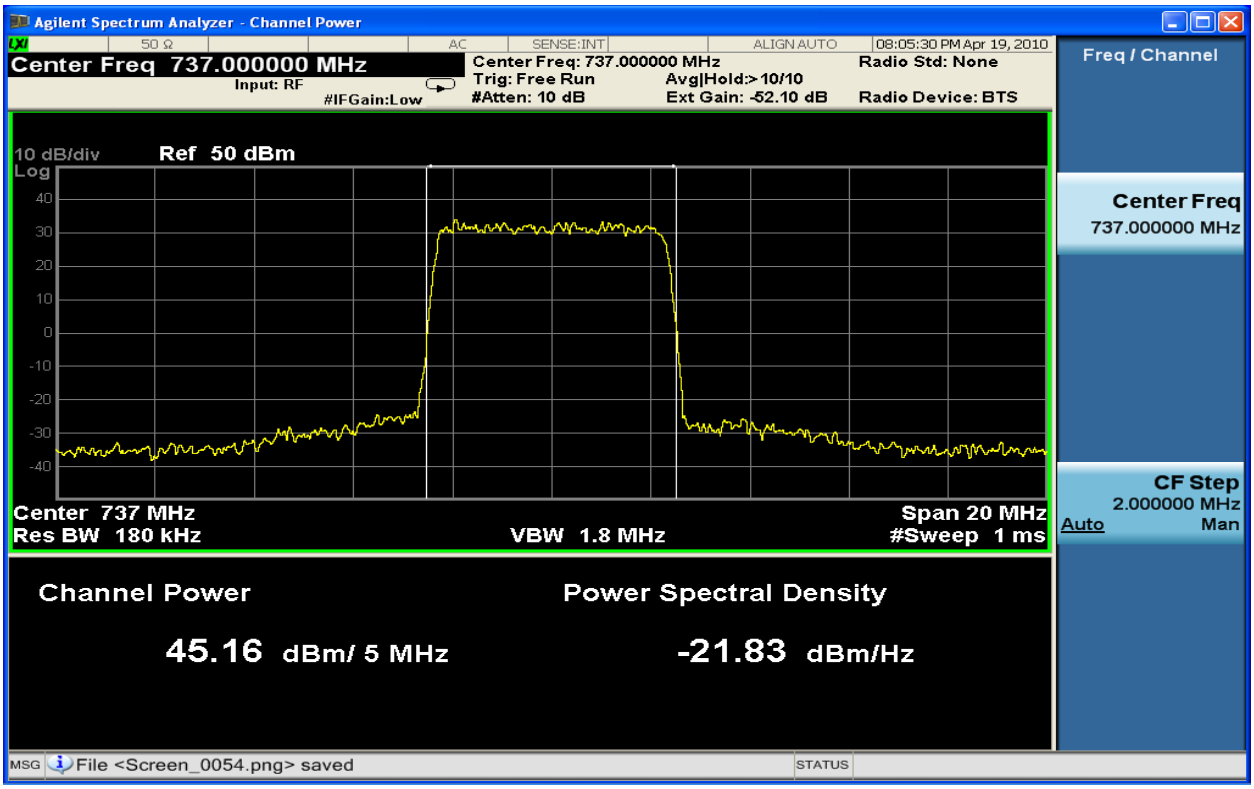


Figure 6-22 : 5MHz BW Channel Power TX1_16QAM at 737 MHz

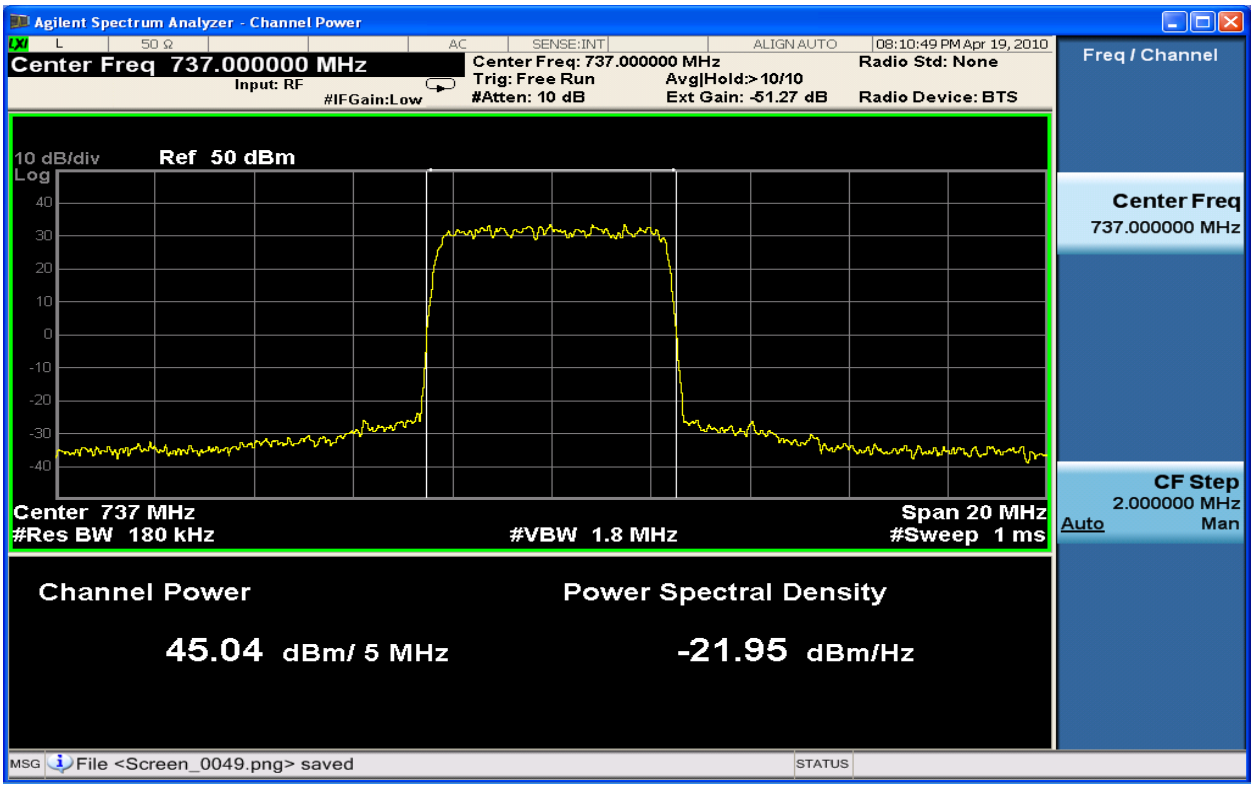


Figure 6-23 : 5MHz BW Channel Power TX2_16QAM at 737 MHz

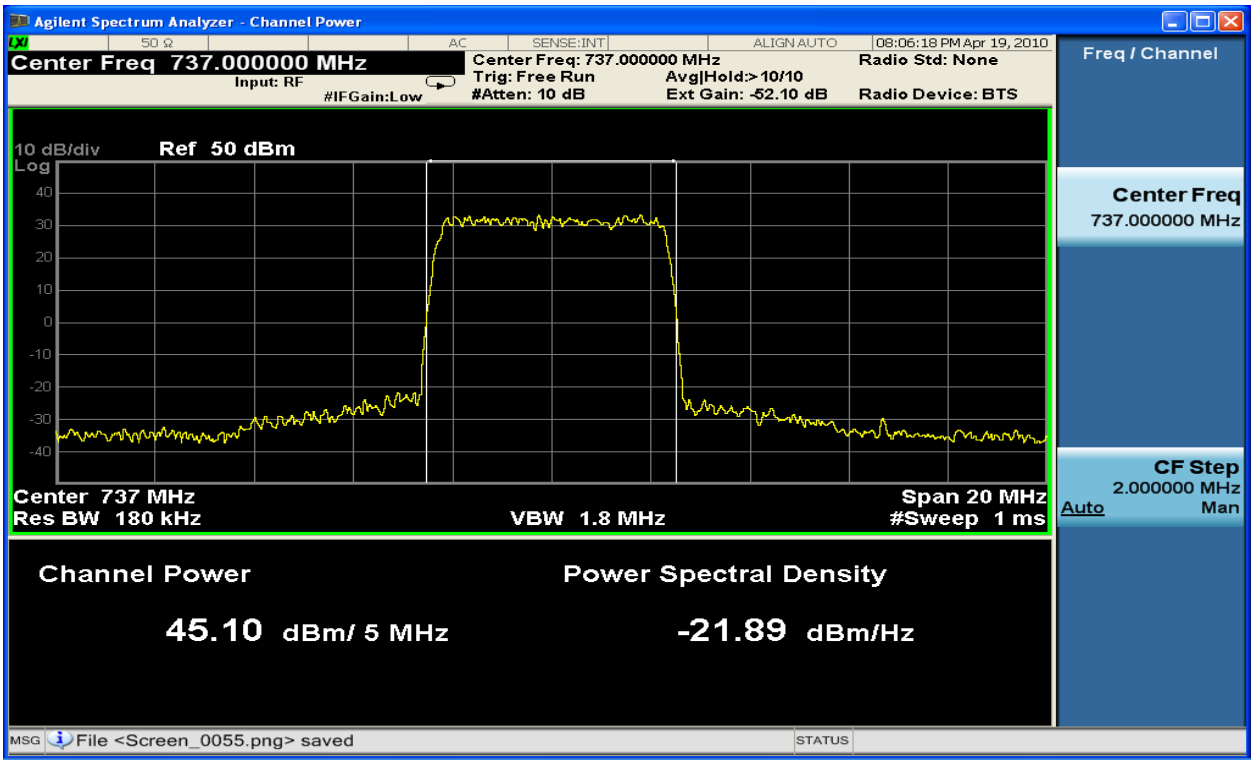


Figure 6-24 : 5MHz BW Channel Power TX1_64QAM at 737 MHz

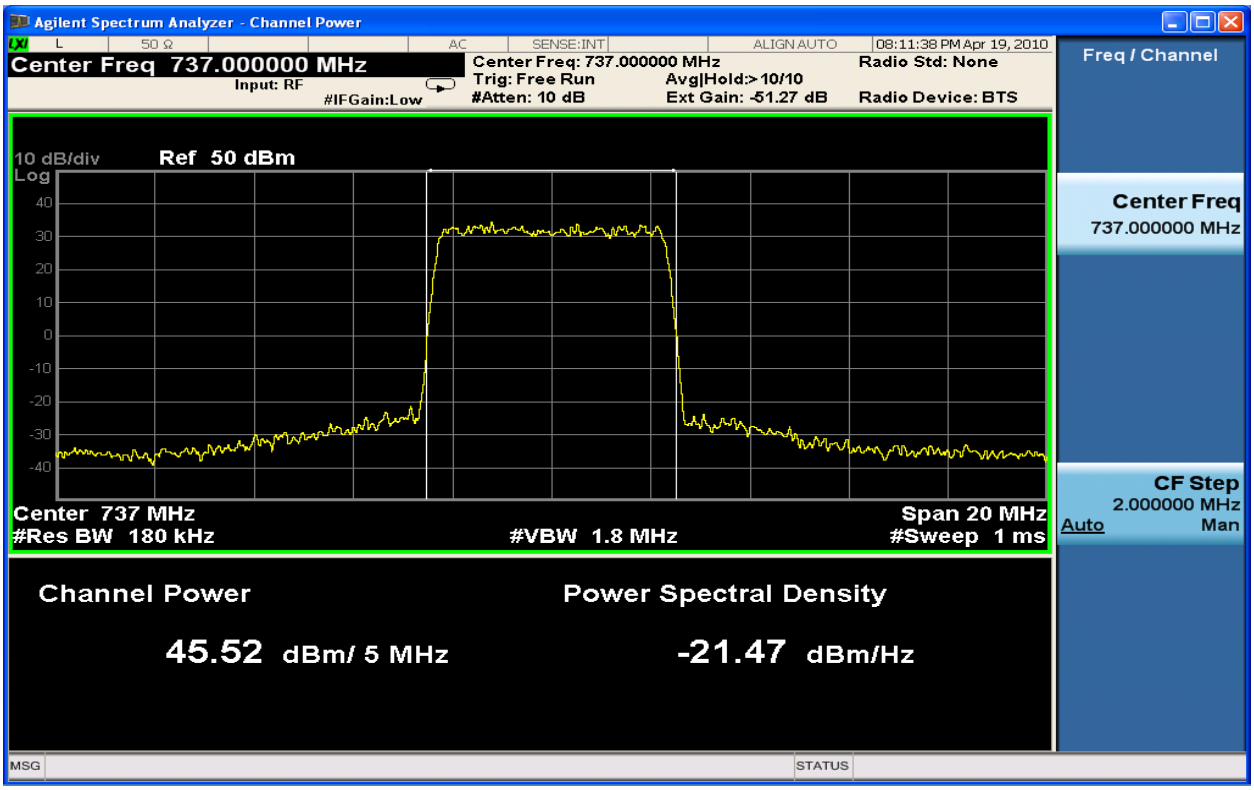


Figure 6-25 : 5MHz BW Channel Power TX2_64QAM at 737 MHz

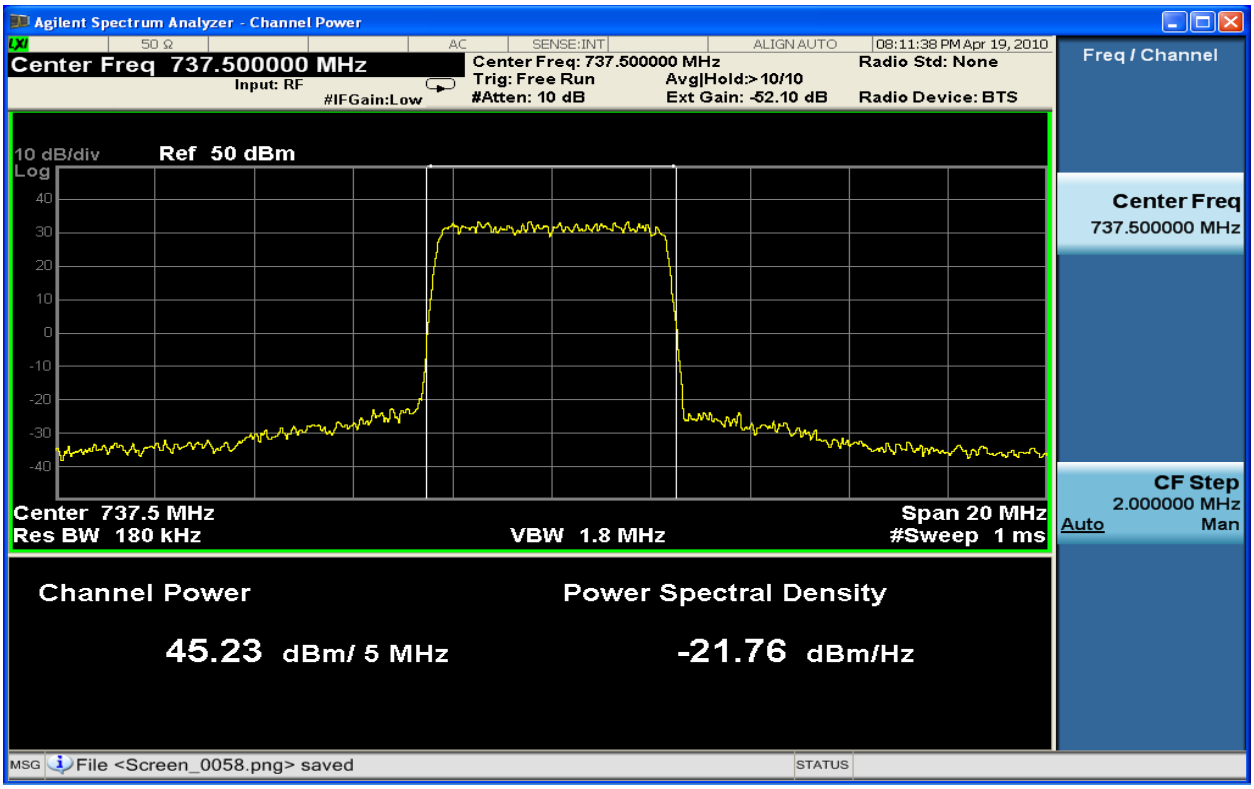


Figure 6-26 : 5MHz BW Channel Power TX1_QPSK at 737.5 MHz

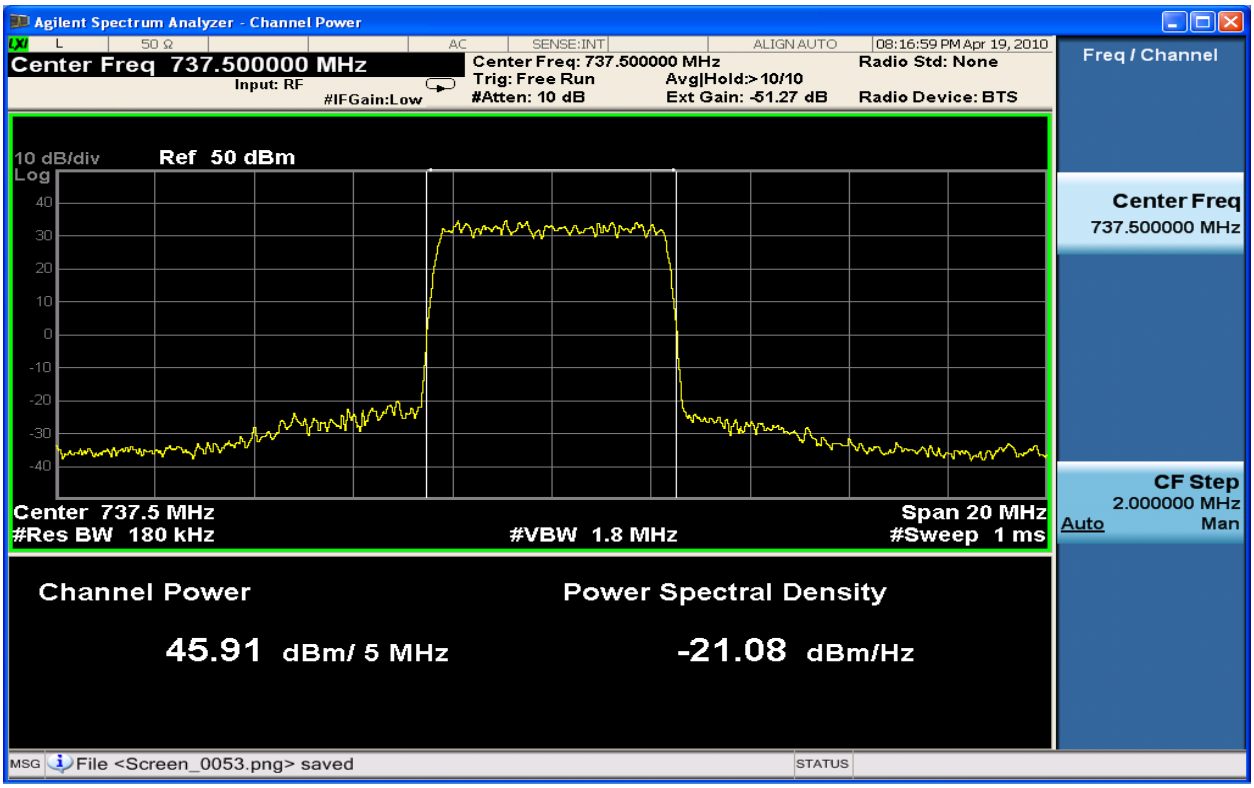


Figure 6-27 : 5MHz BW Channel Power TX2_QPSK at 737.5 MHz

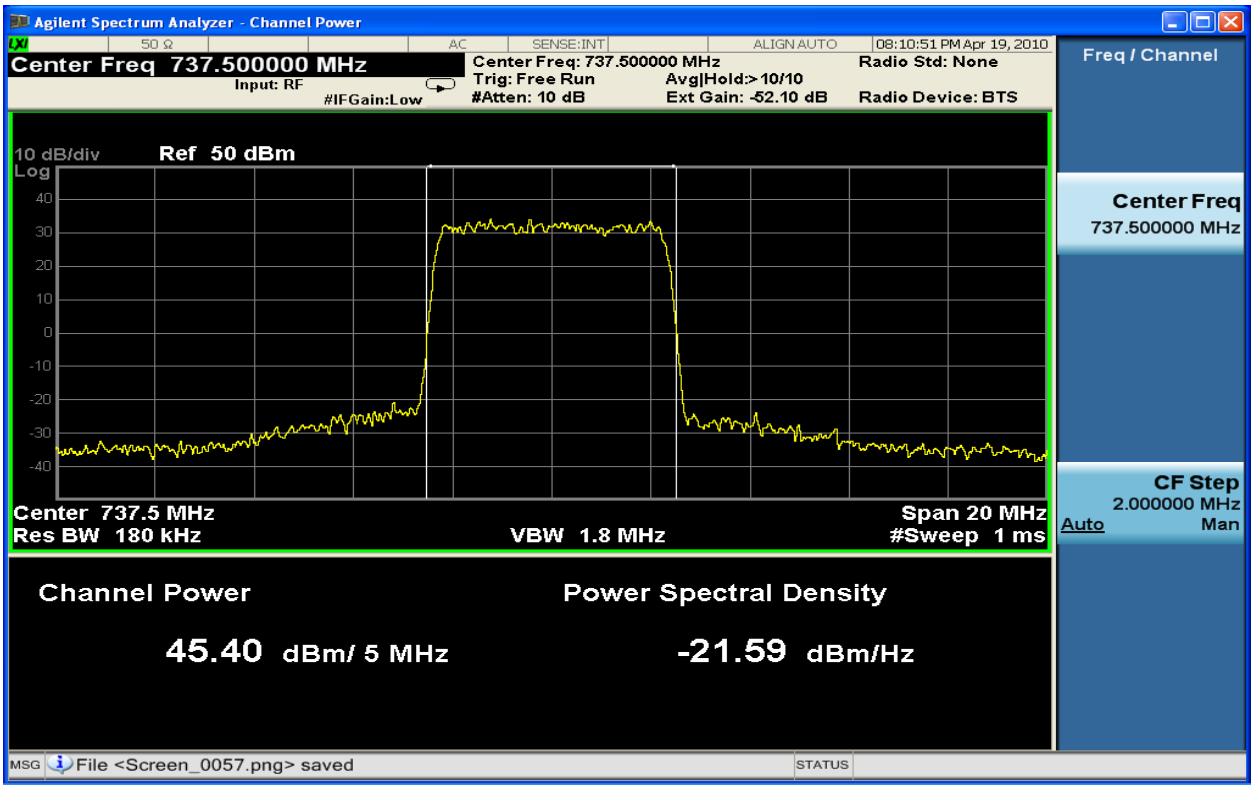


Figure 6-28 : 5MHz BW Channel Power TX1_16QAM at 737.5 MHz

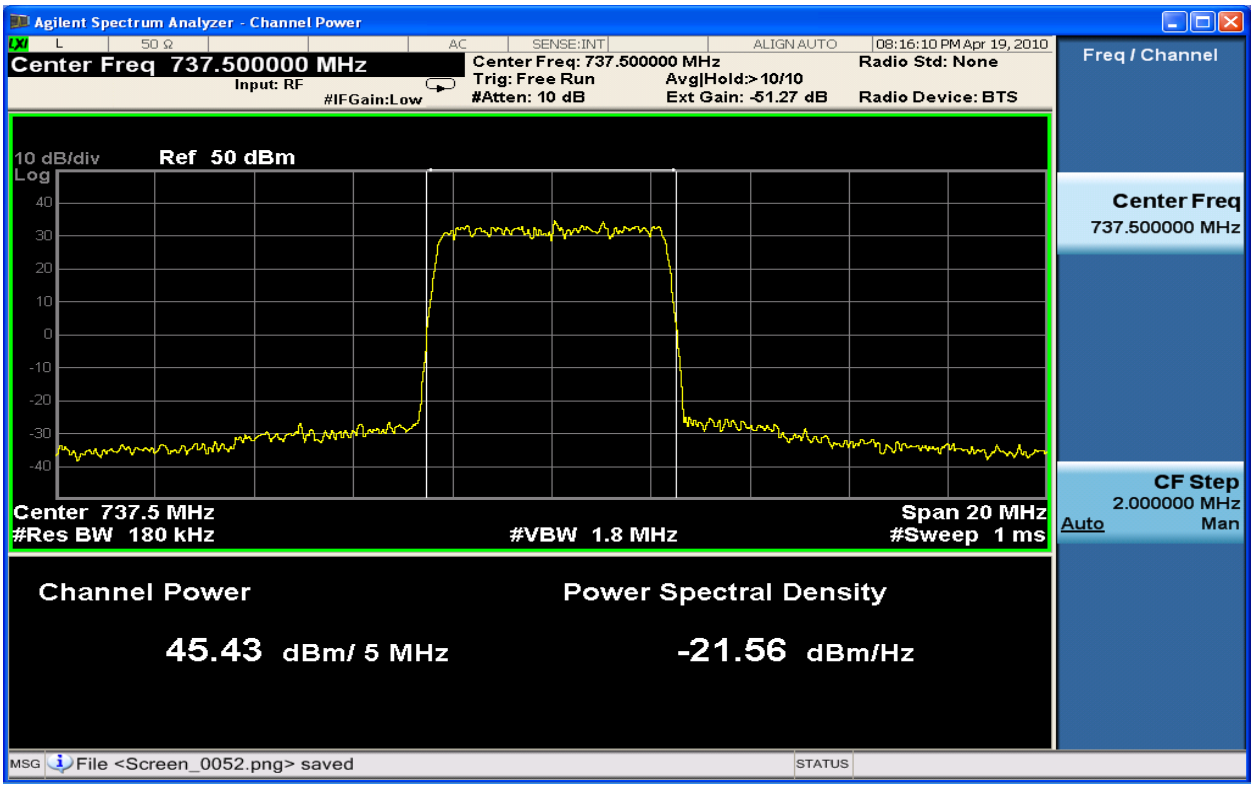


Figure 6-29 : 5MHz BW Channel Power TX2_16QAM at 737.5 MHz

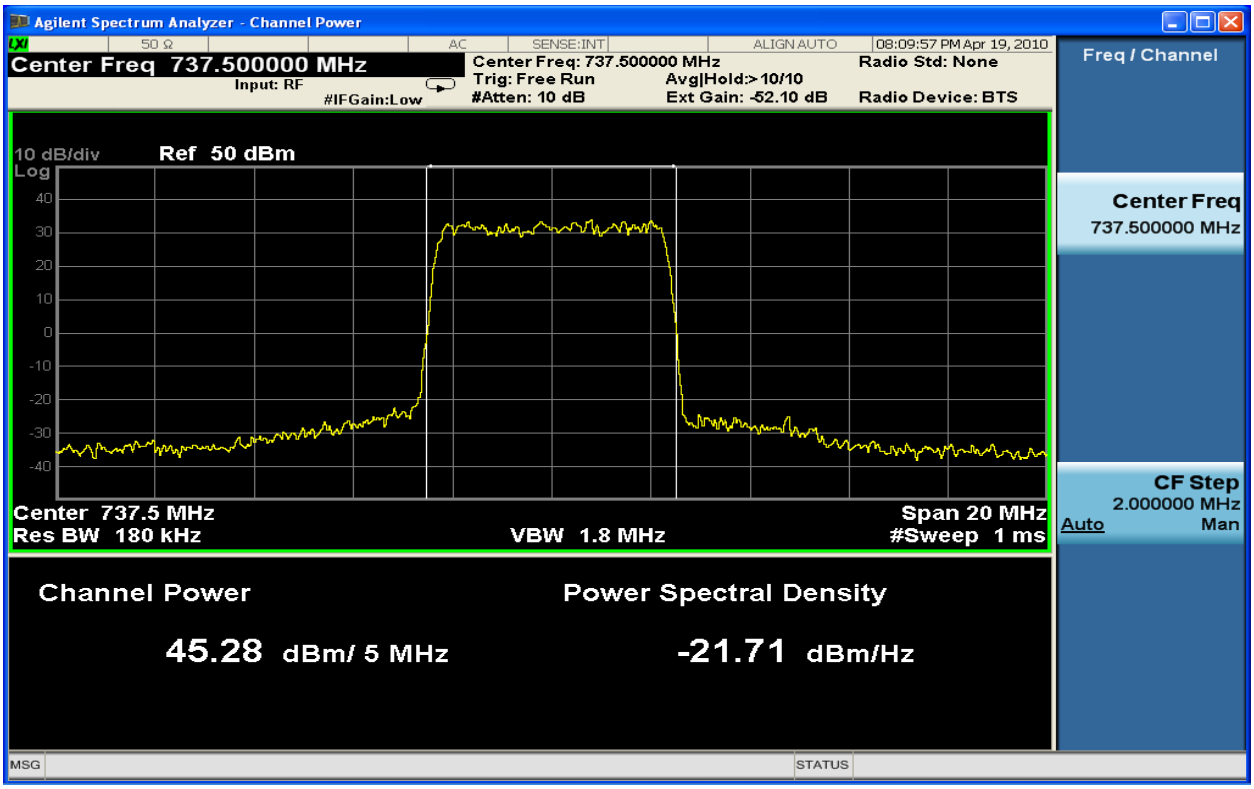


Figure 6-30 : 5MHz BW Channel Power TX1_64QAM at 737.5 MHz

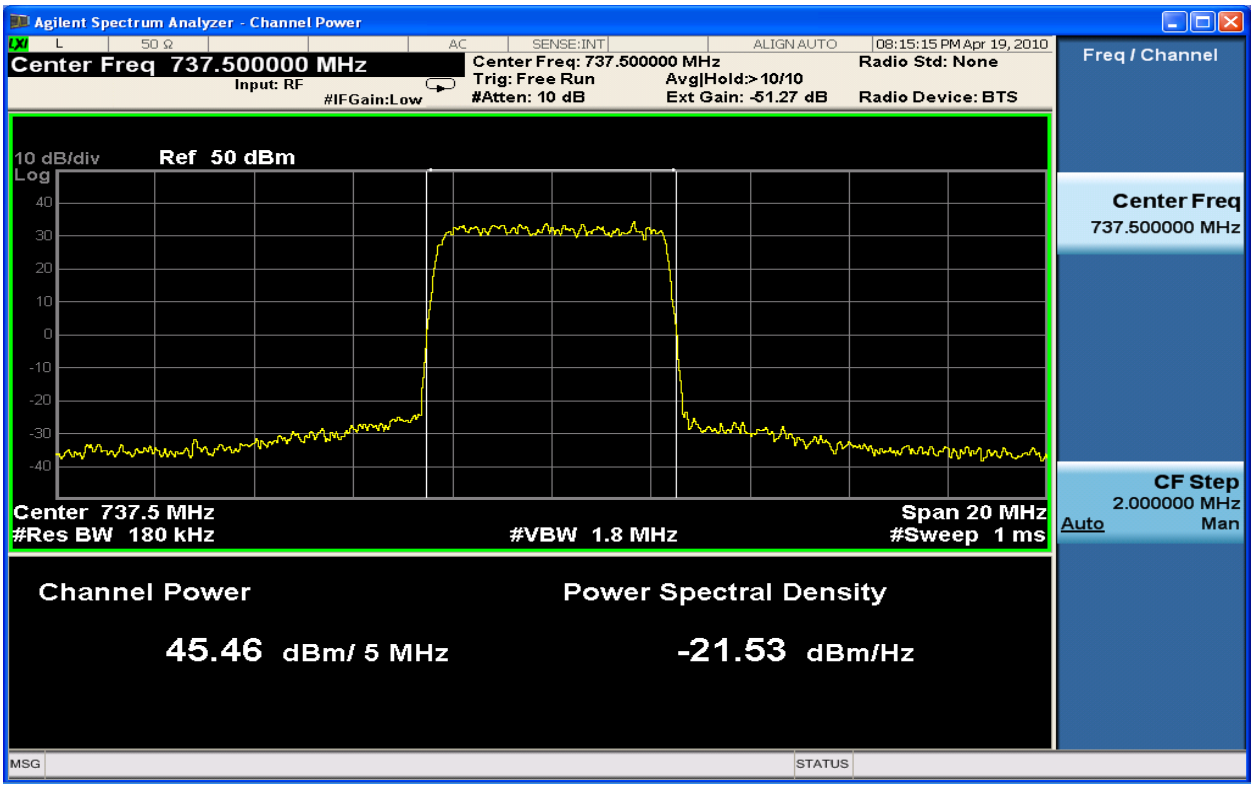


Figure 6-31 : 5MHz BW Channel Power TX2_64QAM at 737.5 MHz

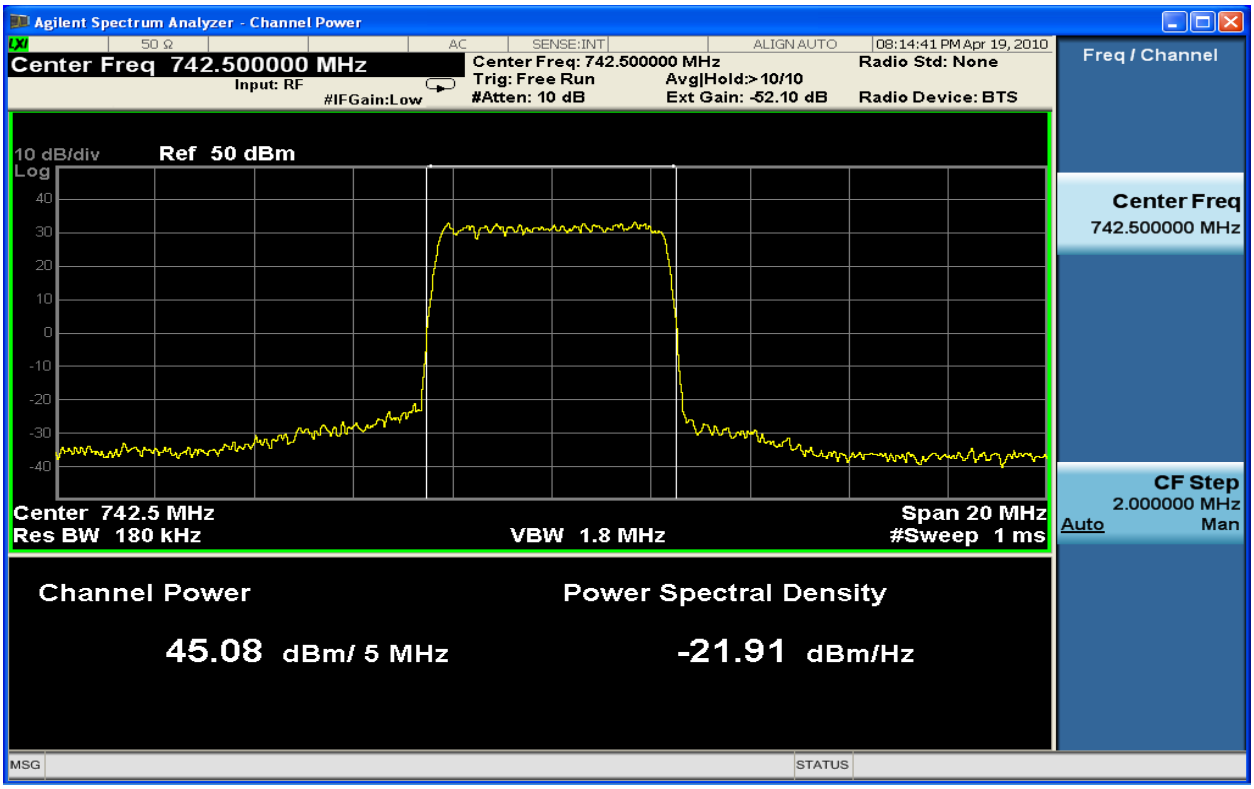


Figure 6-32 : 5MHz BW Channel Power TX1_QPSK at 742.5 MHz

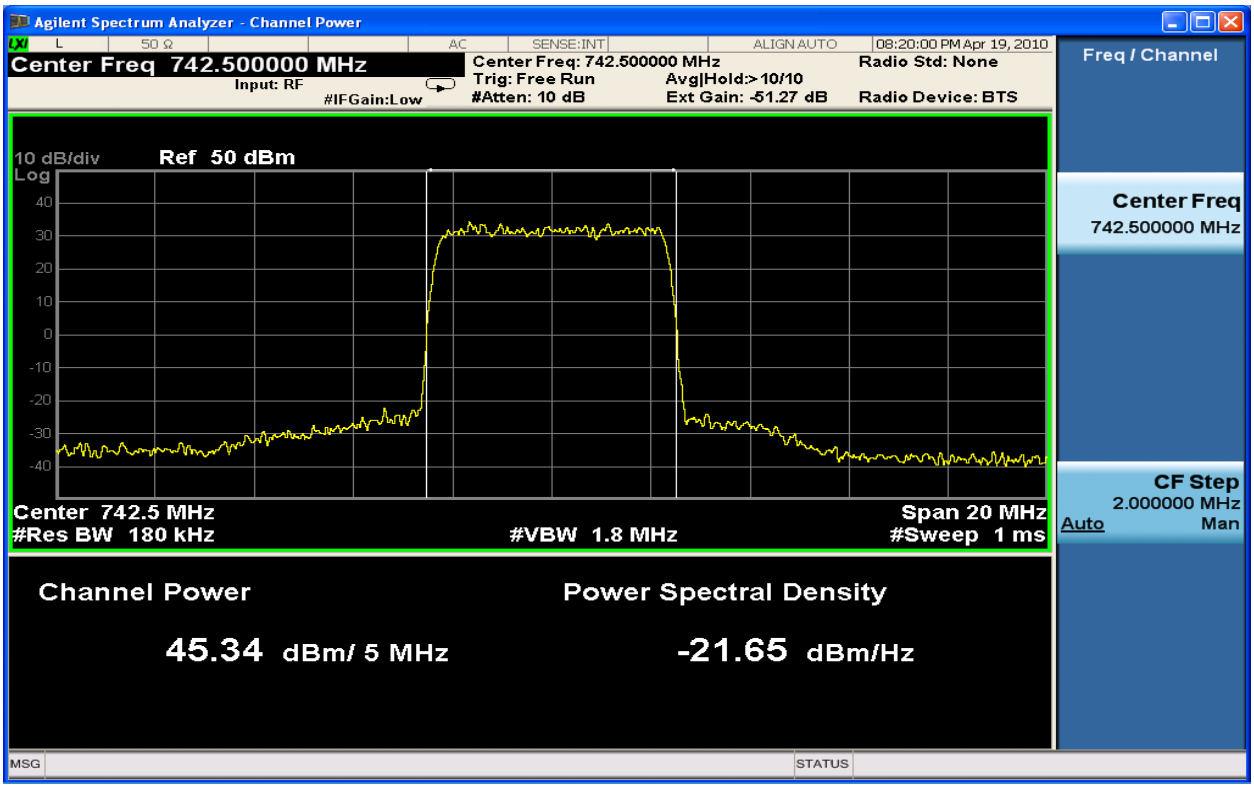


Figure 6-33 : 5MHz BW Channel Power TX2_QPSK at 742.5 MHz

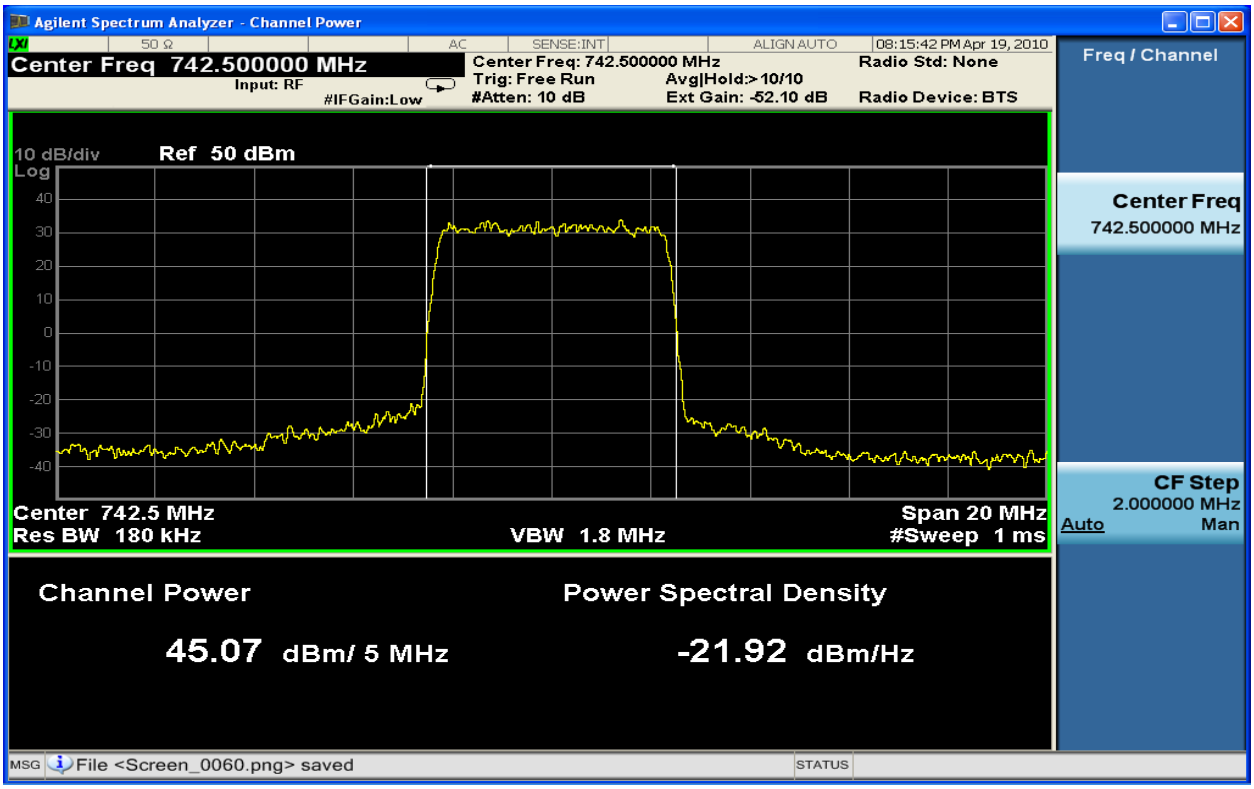


Figure 6-34 : 5MHz BW Channel Power TX1_16QAM at 742.5 MHz

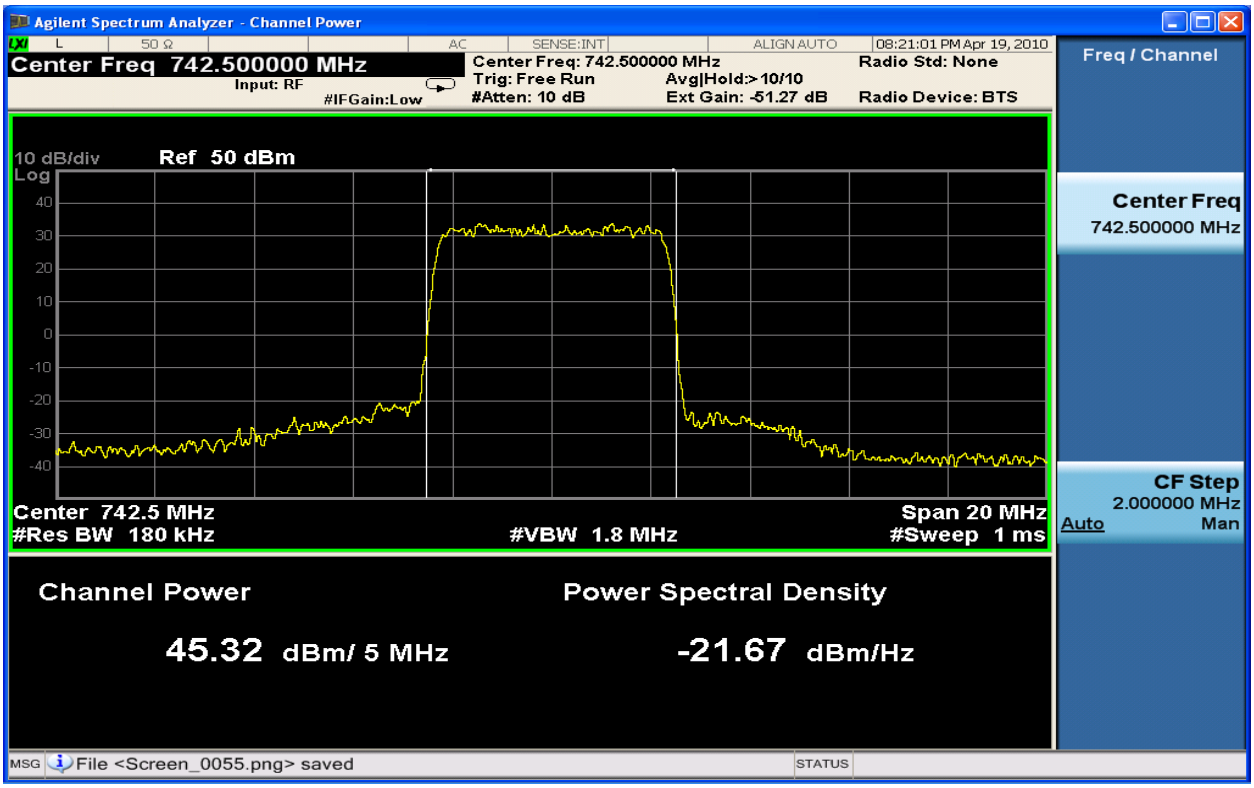


Figure 6-35 : 5MHz BW Channel Power TX2_16QAM at 742.5 MHz

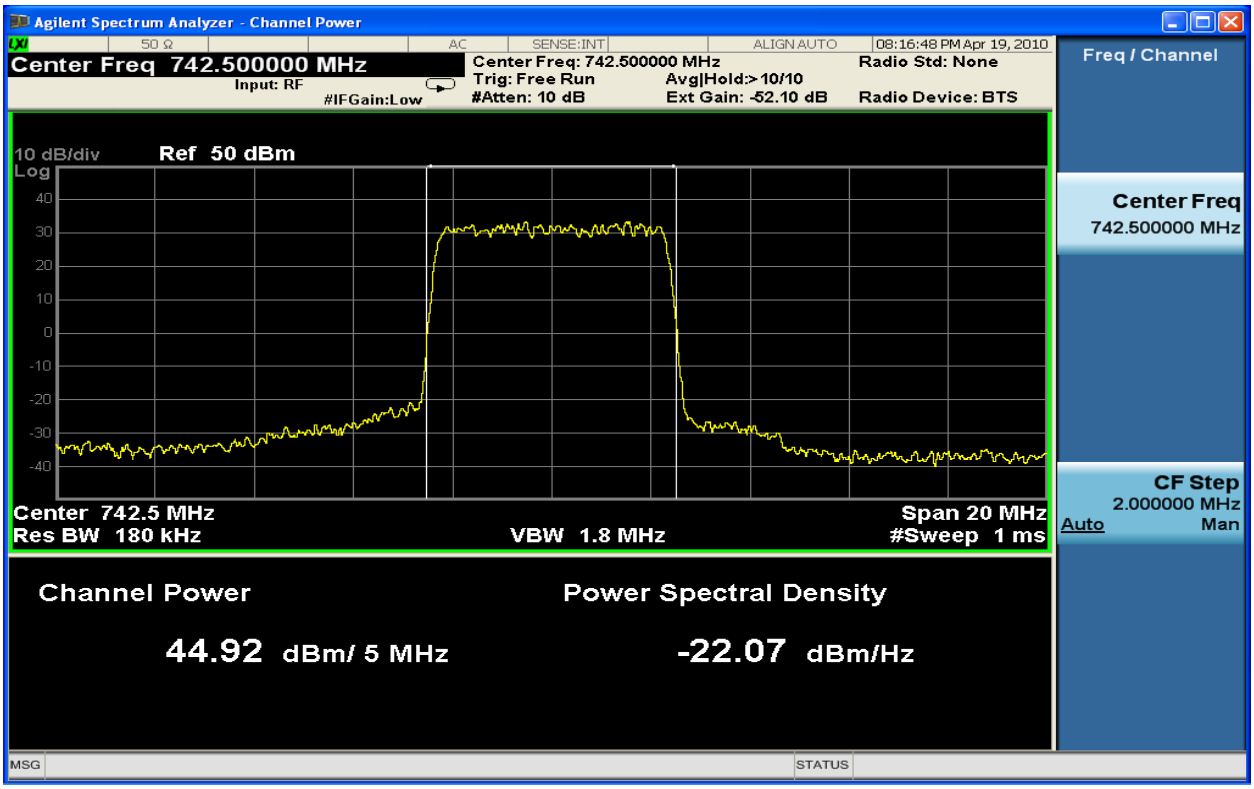


Figure 6-36 : 5MHz BW Channel Power TX1_64QAM at 742.5 MHz

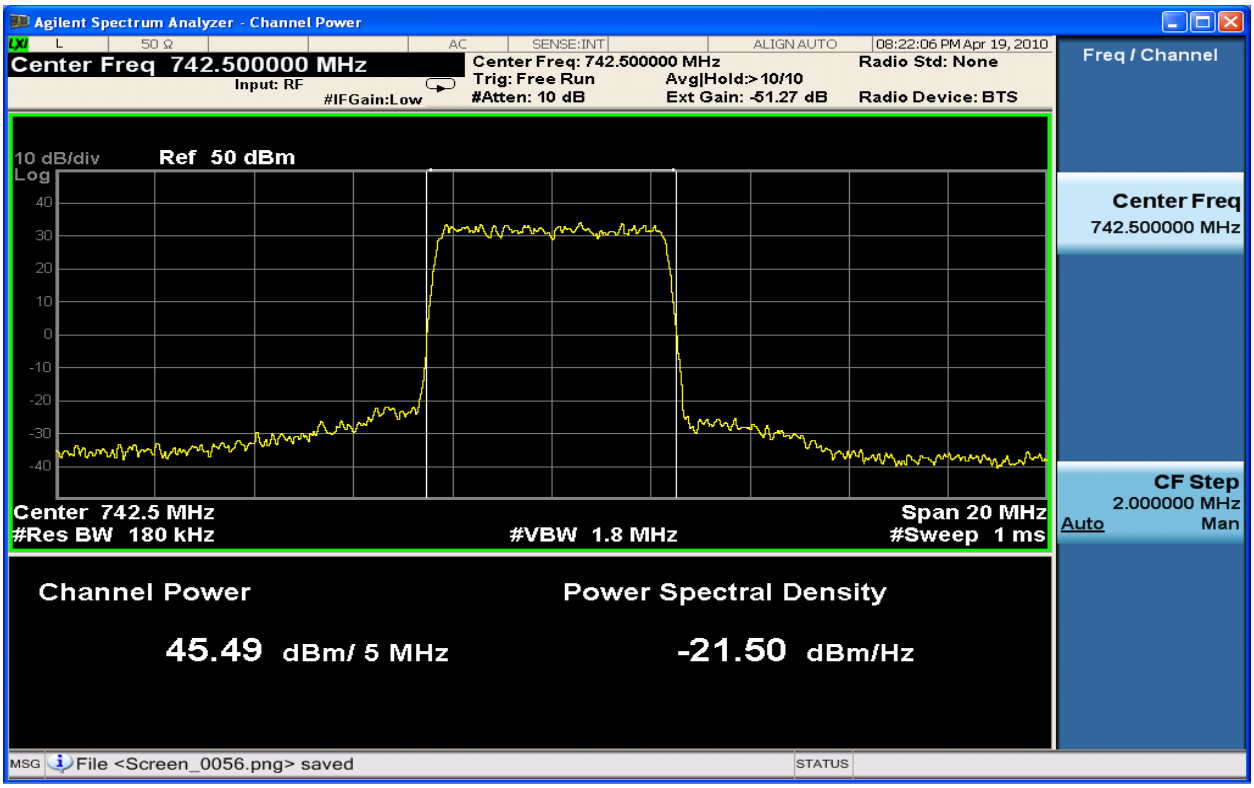


Figure 6-37 : 5MHz BW Channel Power TX2_64QAM at 742.5 MHz

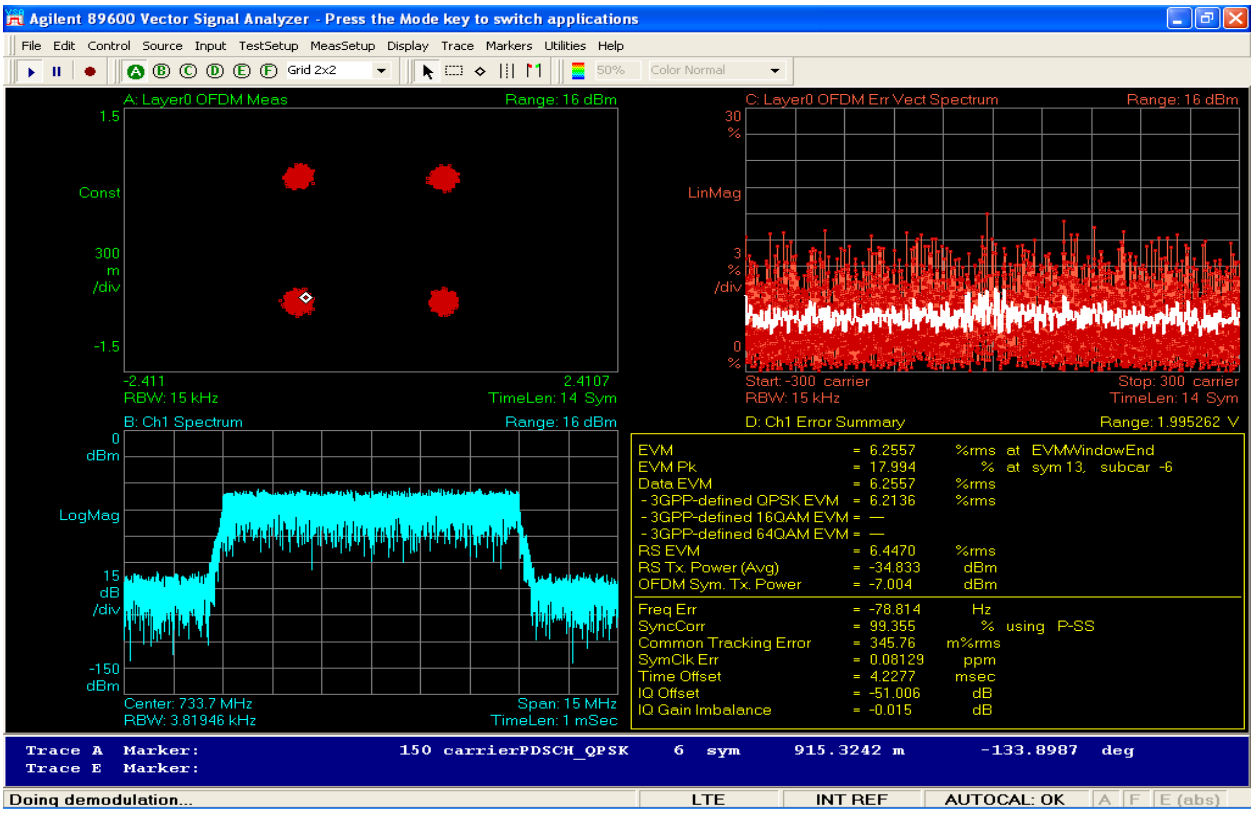


Figure 6-38 : 10MHz BW Modulation TX1_QPSK at 733.7 MHz

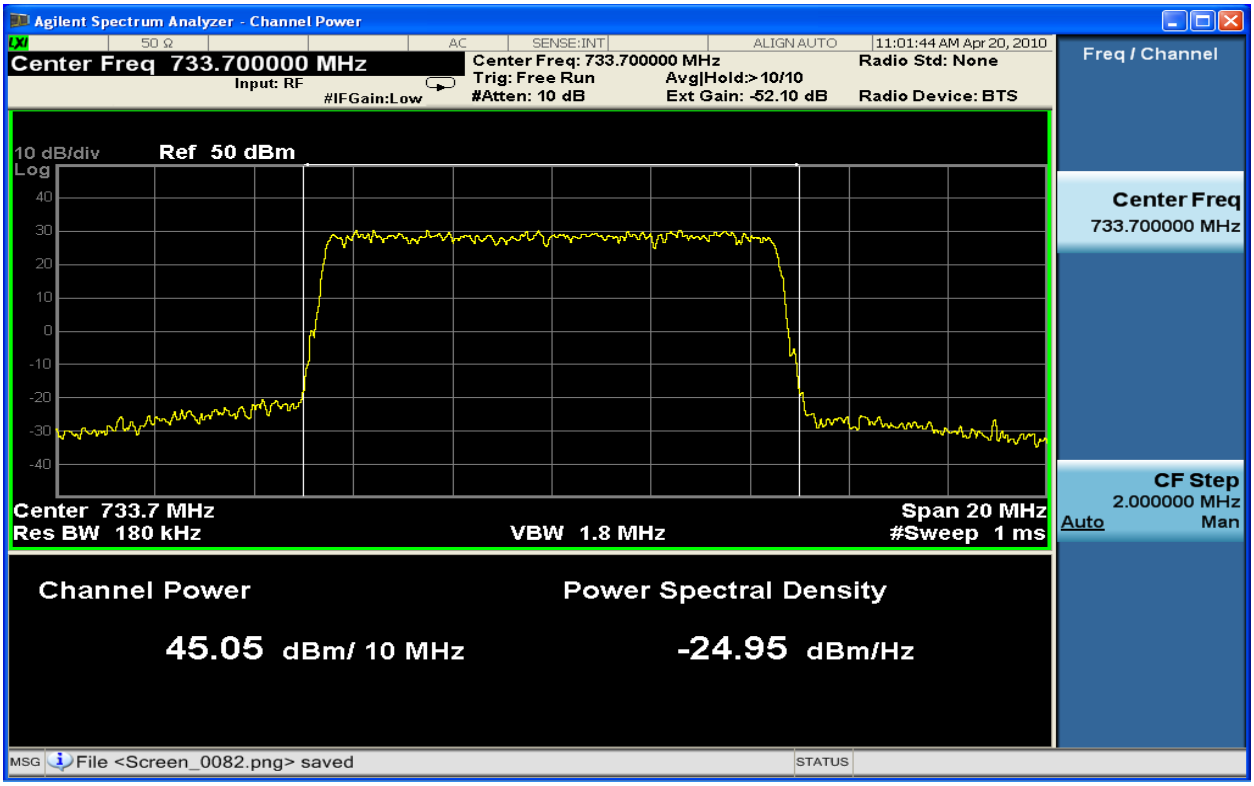


Figure 6-39 : 10MHz BW Channel Power TX1_QPSK at 733.7 MHz

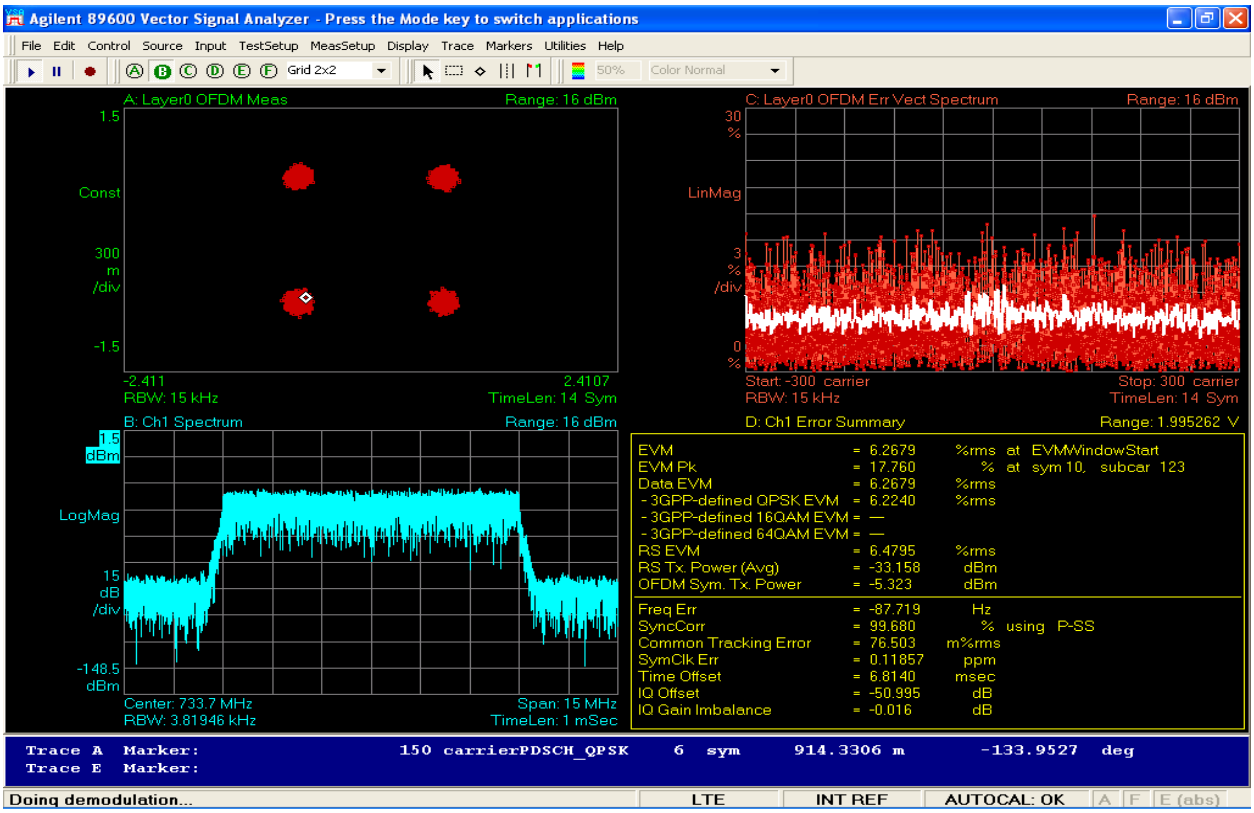


Figure 6-40 : 10MHz BW Modulation TX2_QPSK at 733.7 MHz

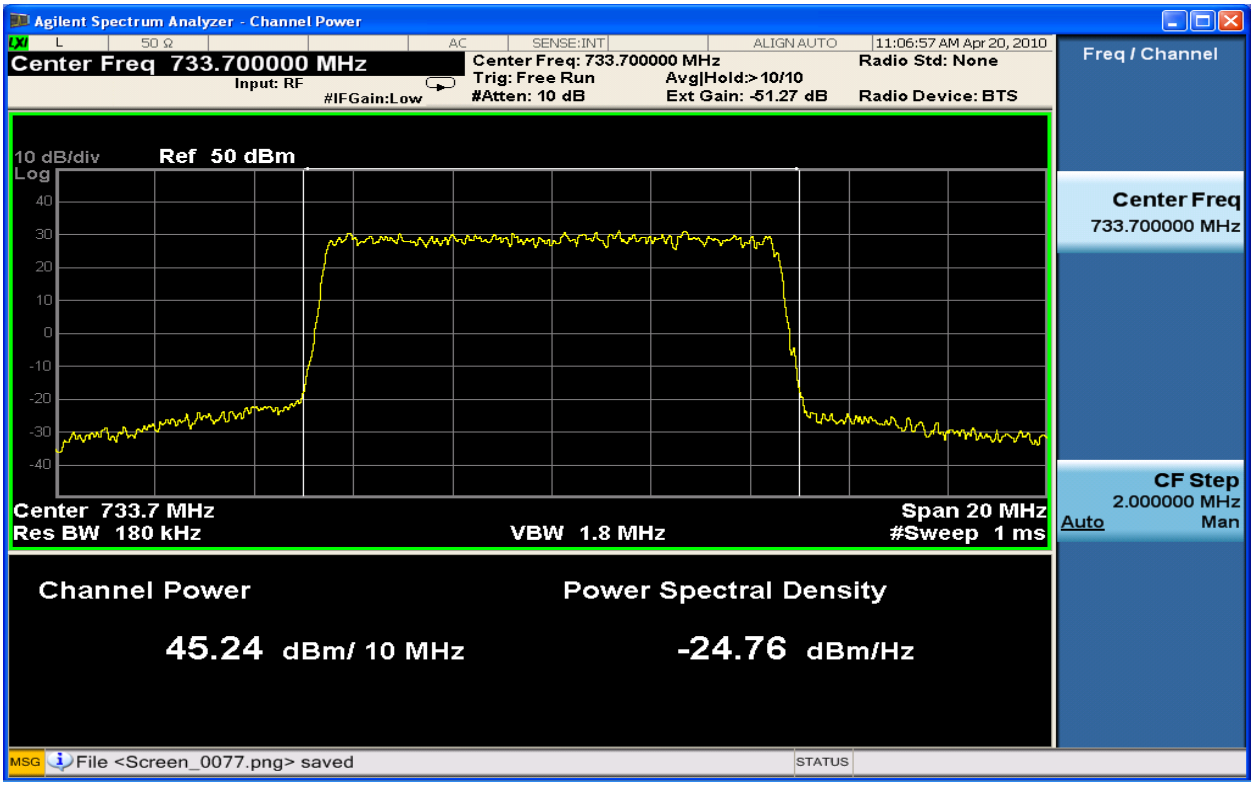


Figure 6-41 : 10MHz BW Channel Power TX2_QPSK at 733.7 MHz

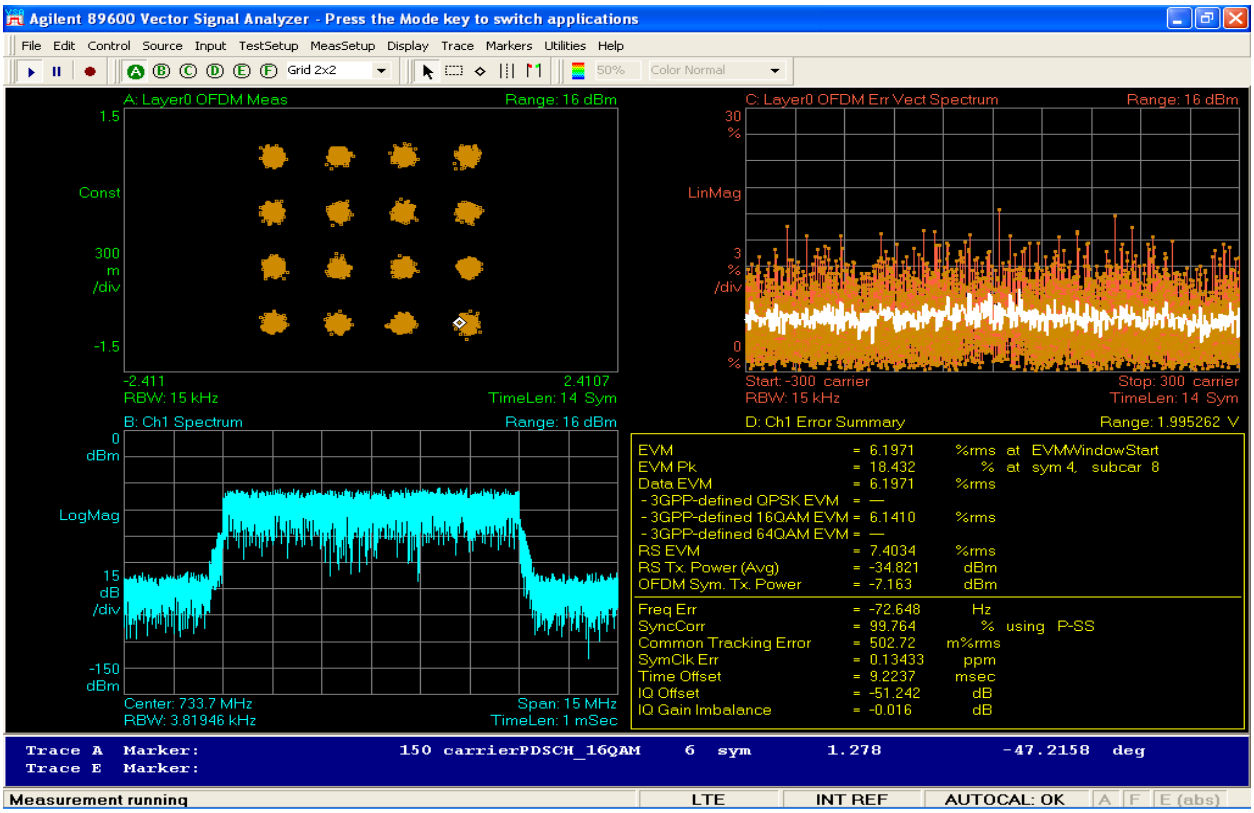


Figure 6-42 : 10MHz BW Modulation TX1_16QAM at 733.7 MHz

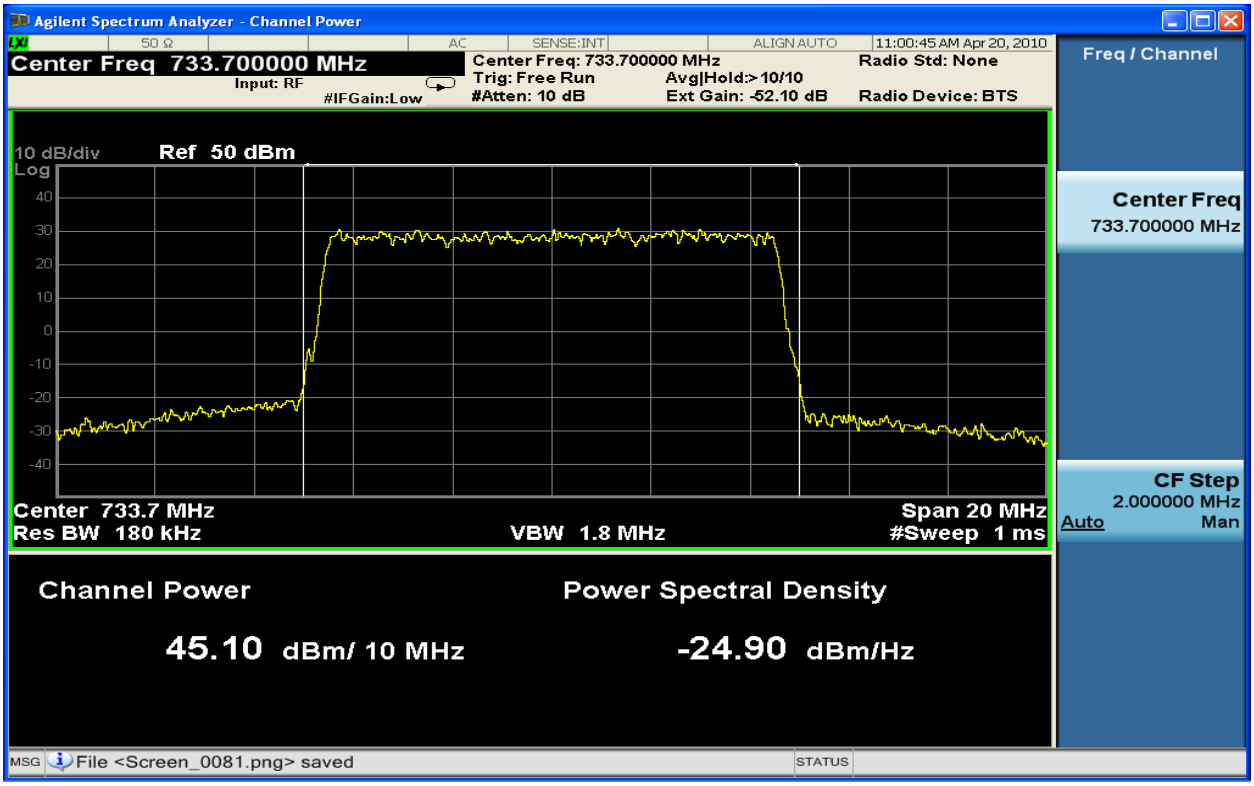


Figure 6-43 : 10MHz BW Channel Power TX1_16QAM at 733.7 MHz

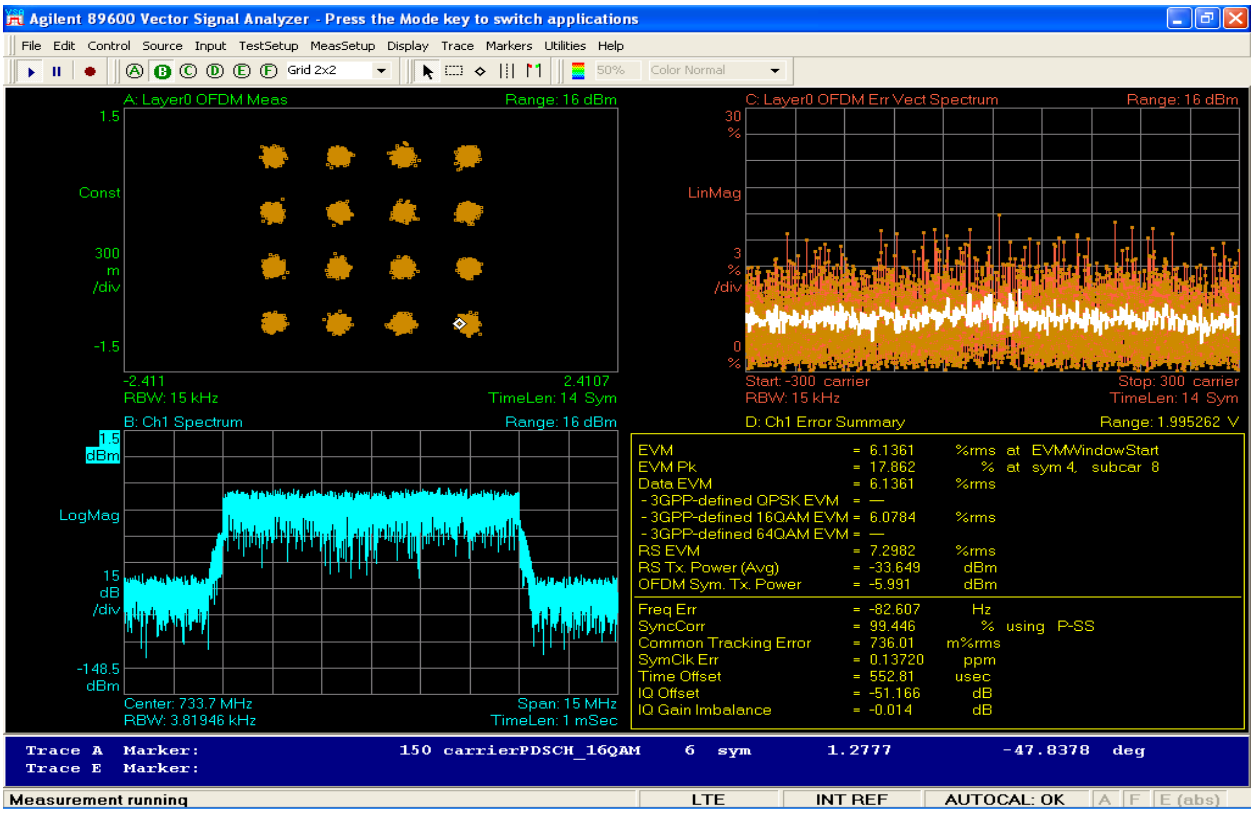


Figure 6-44 : 10MHz BW Modulation TX2_16QAM at 733.7 MHz

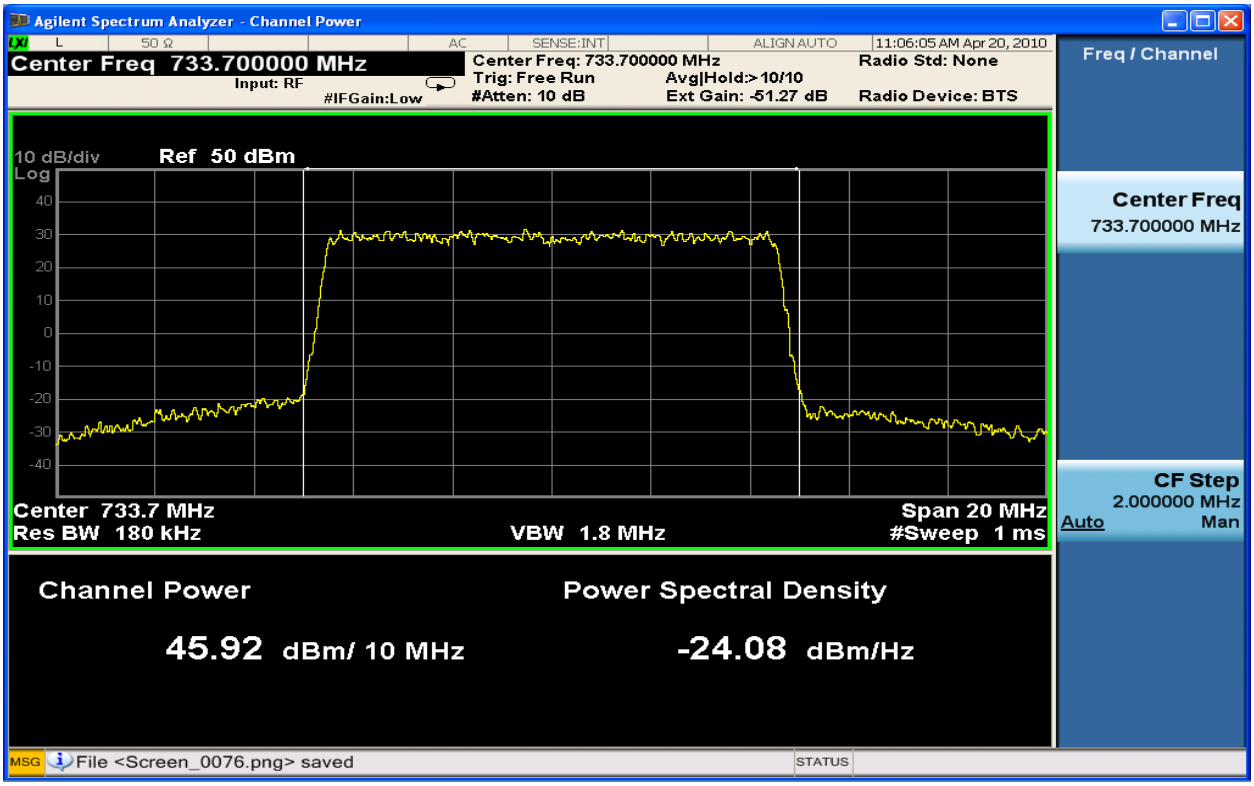


Figure 6-45 : 10MHz BW Channel Power TX2_16QAM at 733.7 MHz

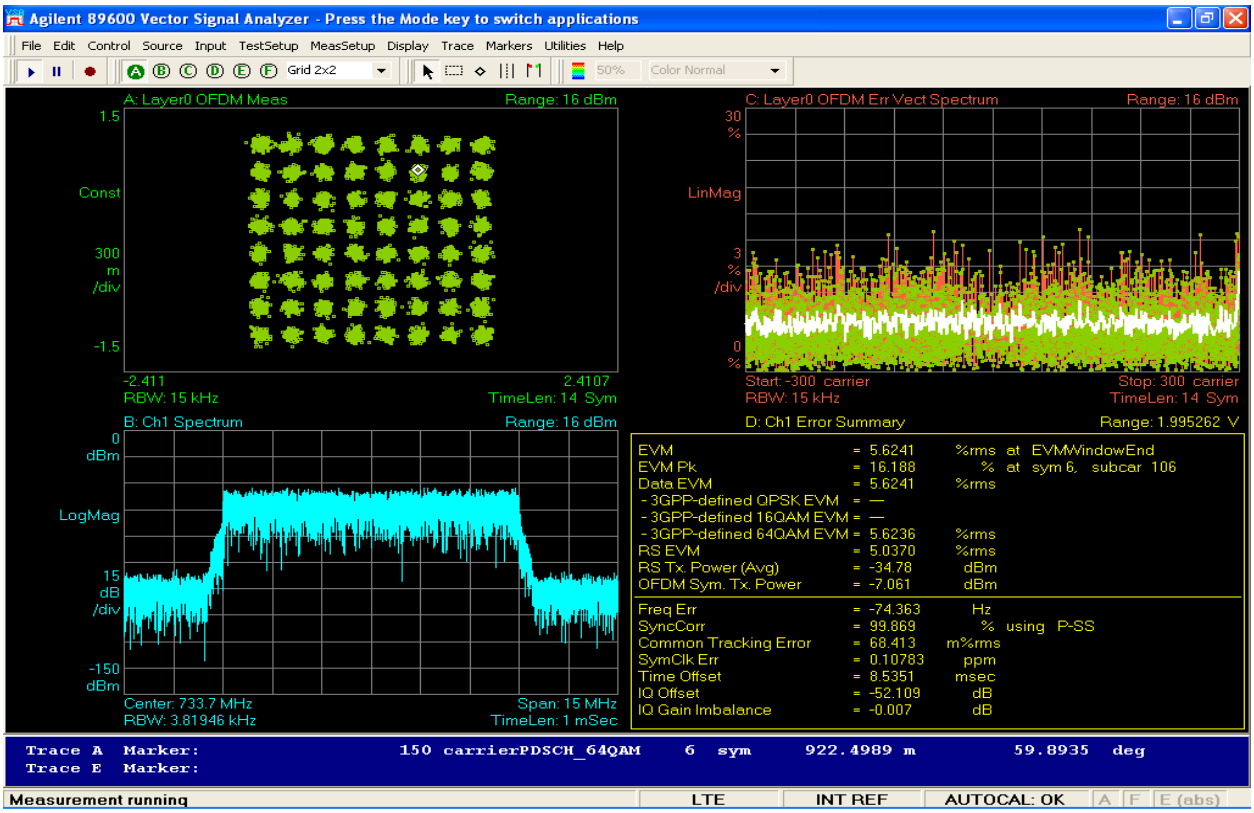


Figure 6-46 : 10MHz BW Modulation TX1_64QAM at 733.7 MHz

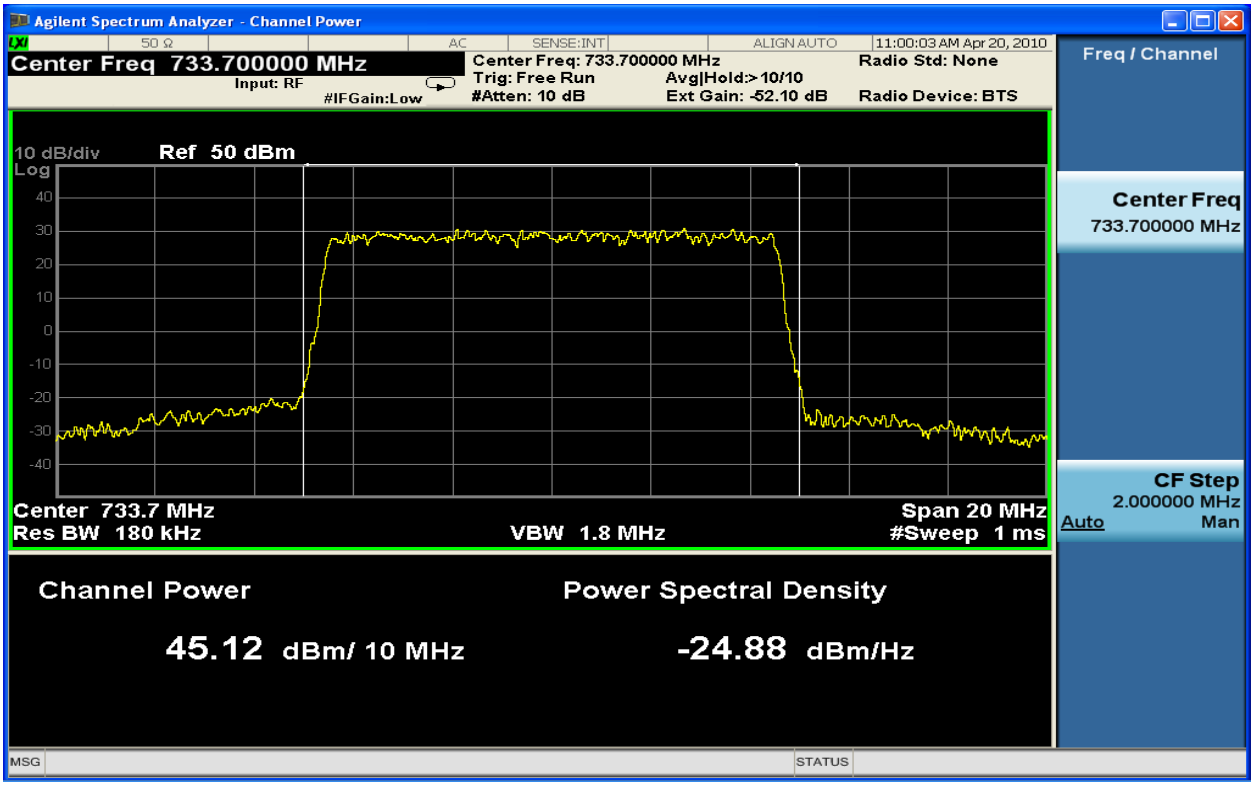


Figure 6-47 : 10MHz BW Channel Power TX1_64QAM at 733.7 MHz

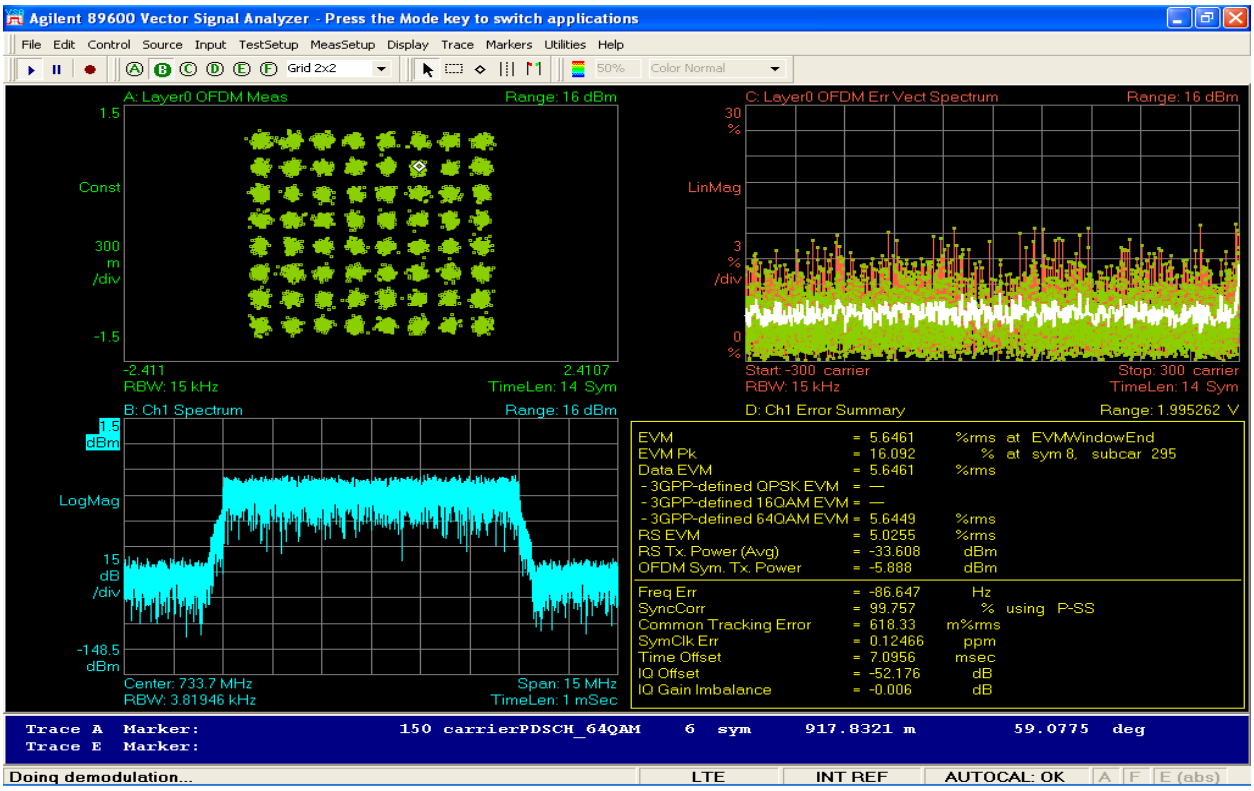


Figure 6-48 : 10MHz BW Modulation TX2_64QAM at 733.7 MHz

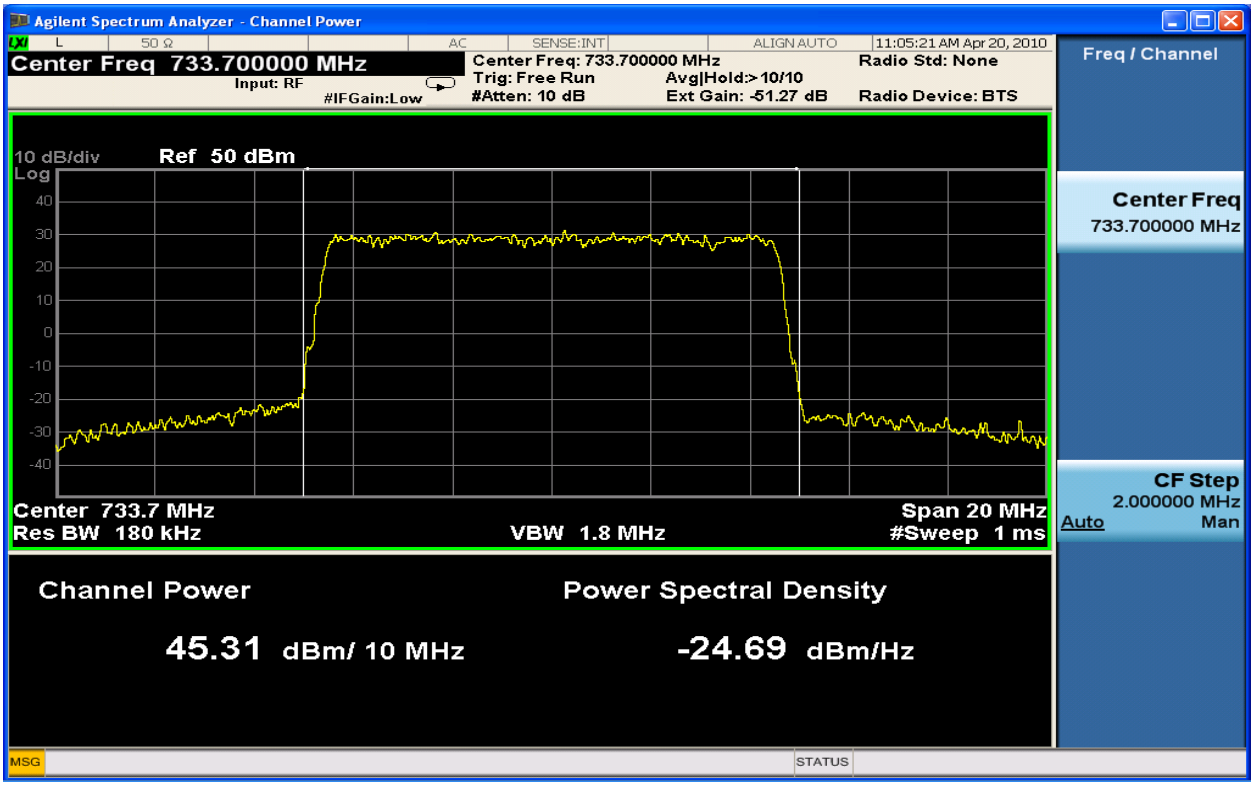


Figure 6-49 : 10MHz BW Channel Power TX2_64QAM at 733.7 MHz

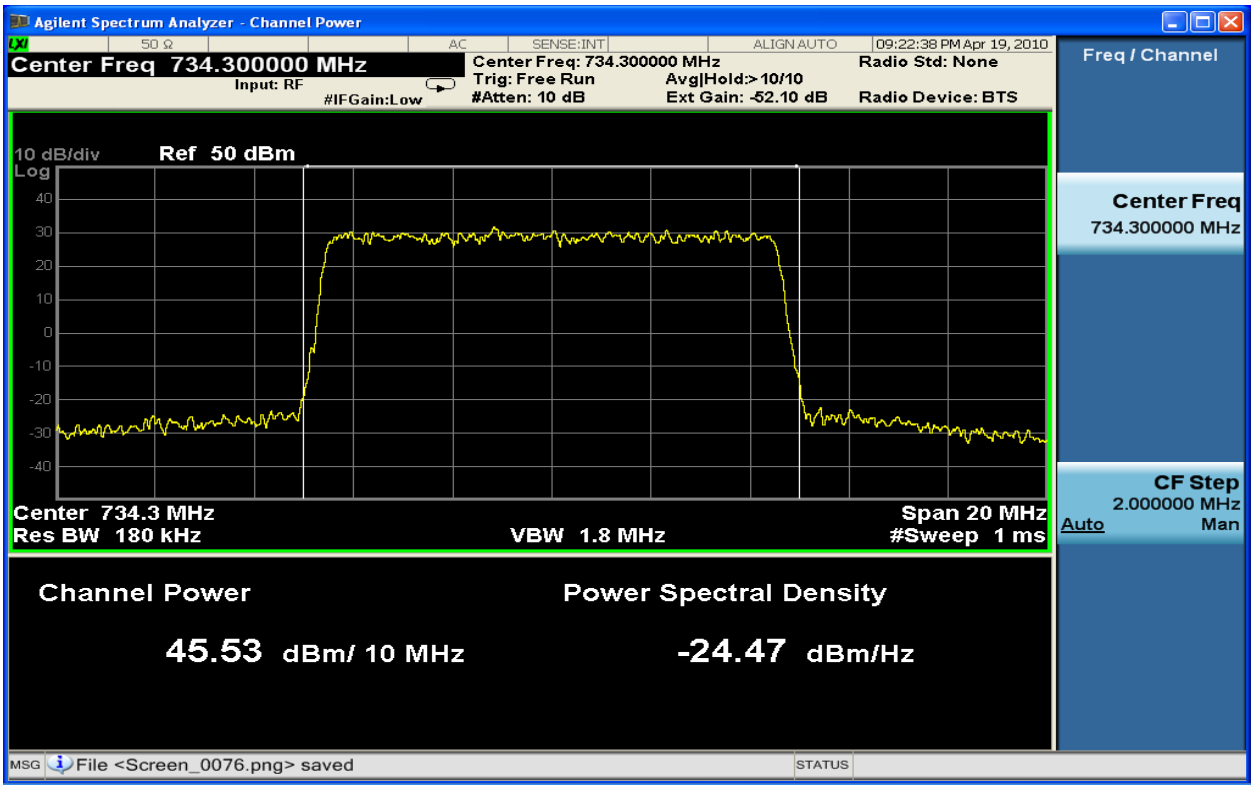


Figure 6-50 : 10MHz BW Channel Power TX1_QPSK at 734.3 MHz

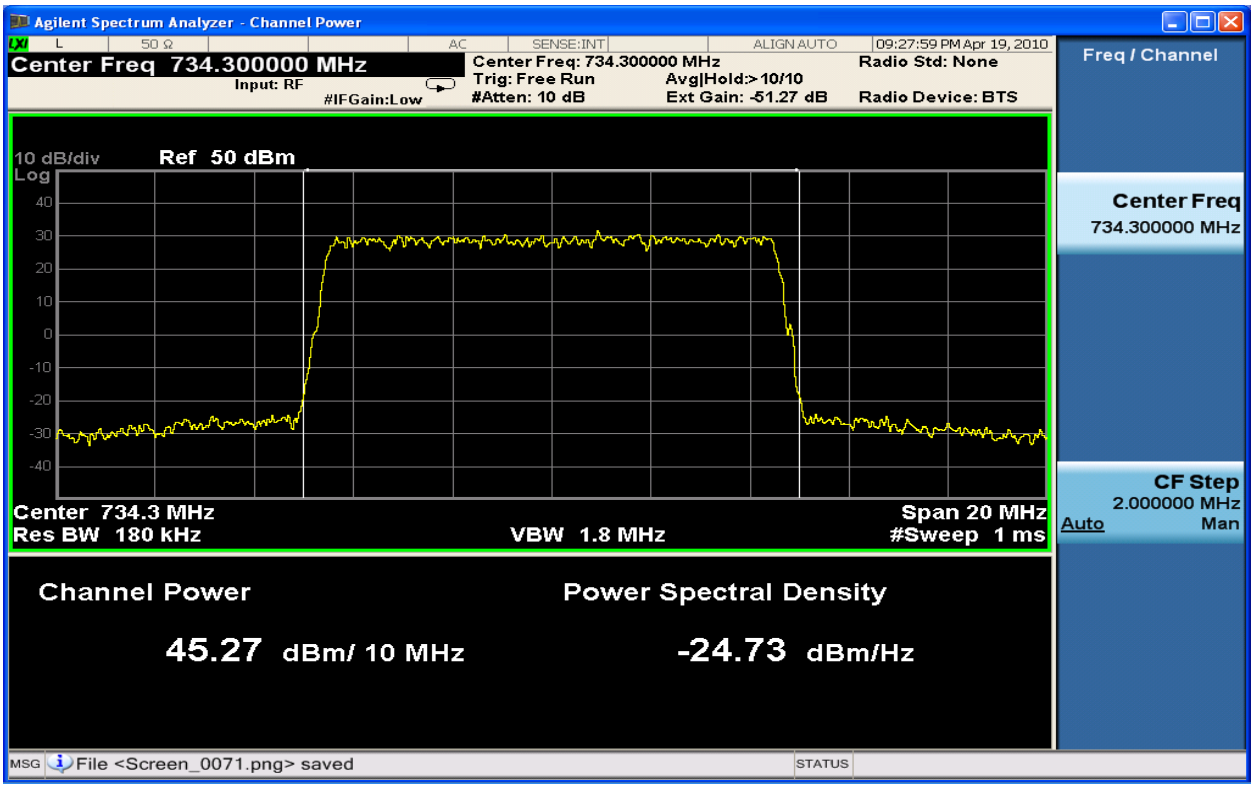


Figure 6-51 : 10MHz BW Channel Power TX2_QPSK at 734.3 MHz

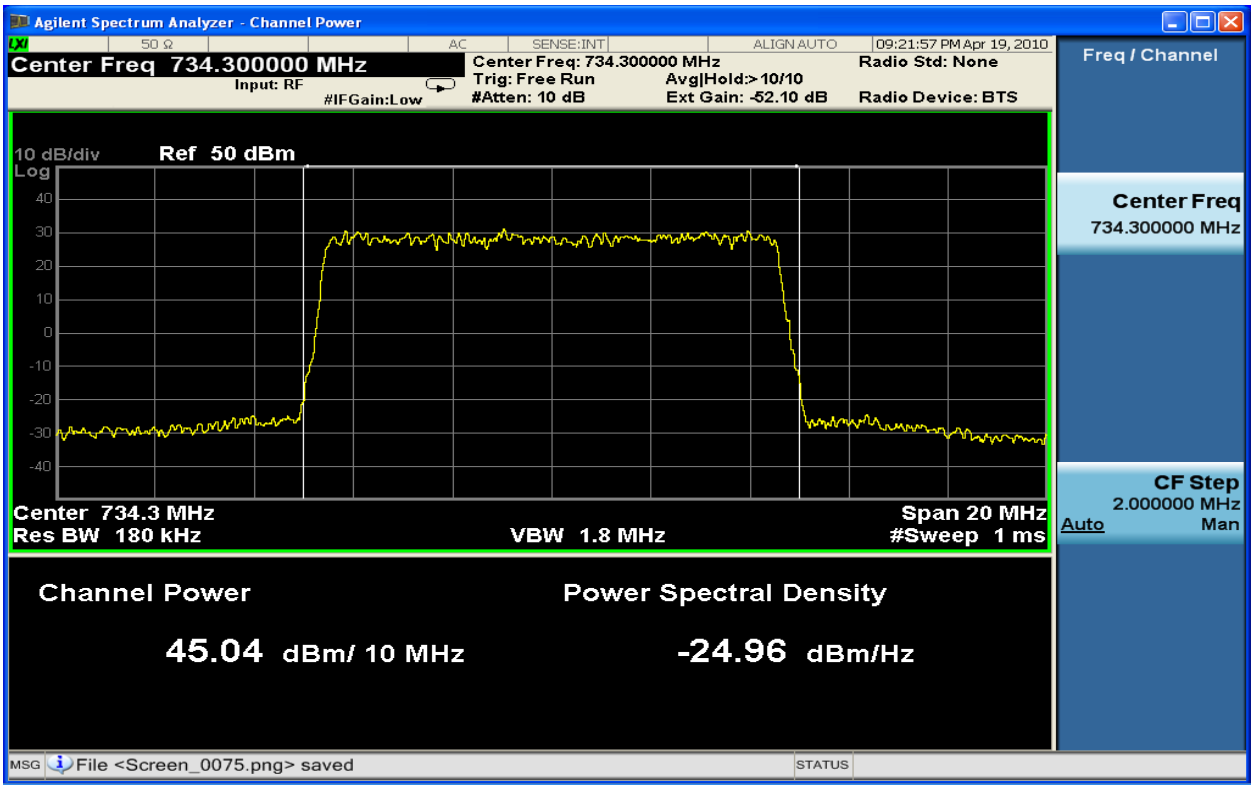


Figure 6-52 : 10MHz BW Channel Power TX1_16QAM at 734.3 MHz

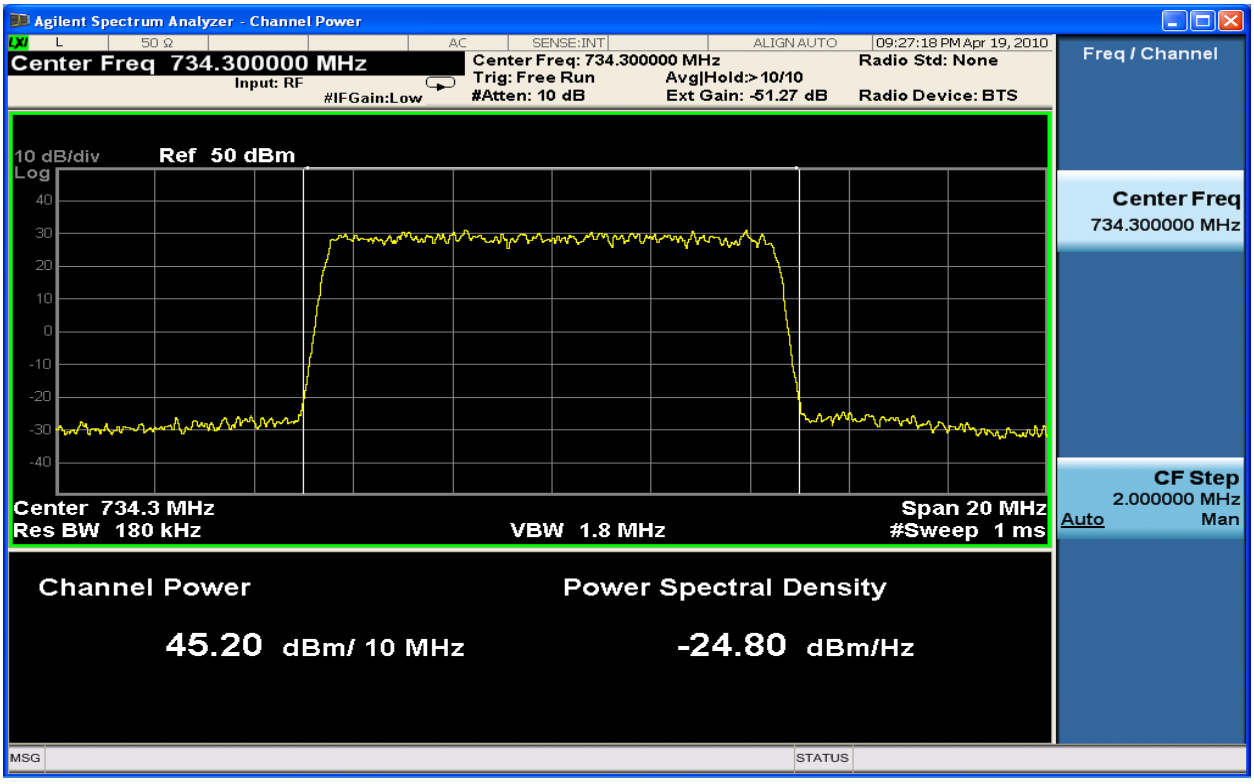


Figure 6-53 : 10MHz BW Channel Power TX2_16QAM at 734.3 MHz

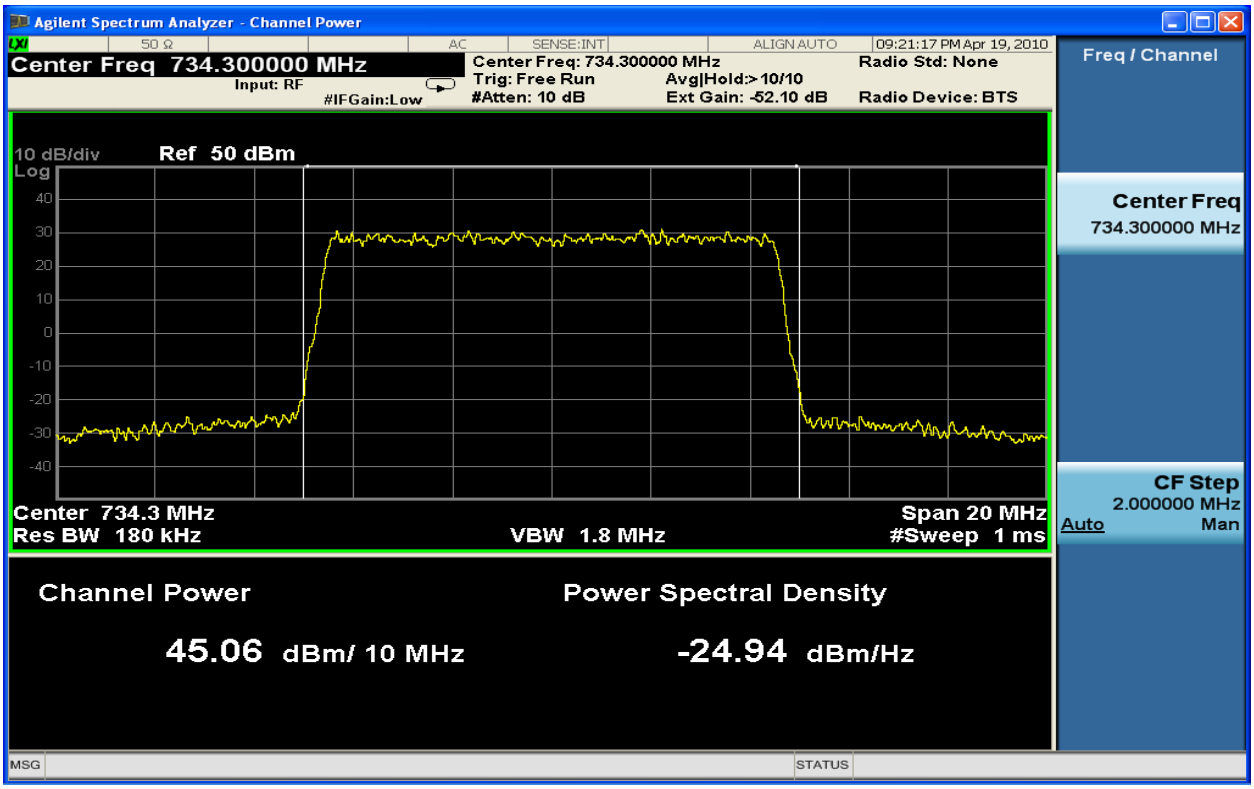


Figure 6-54 : 10MHz BW Channel Power TX1_64QAM at 734.3 MHz

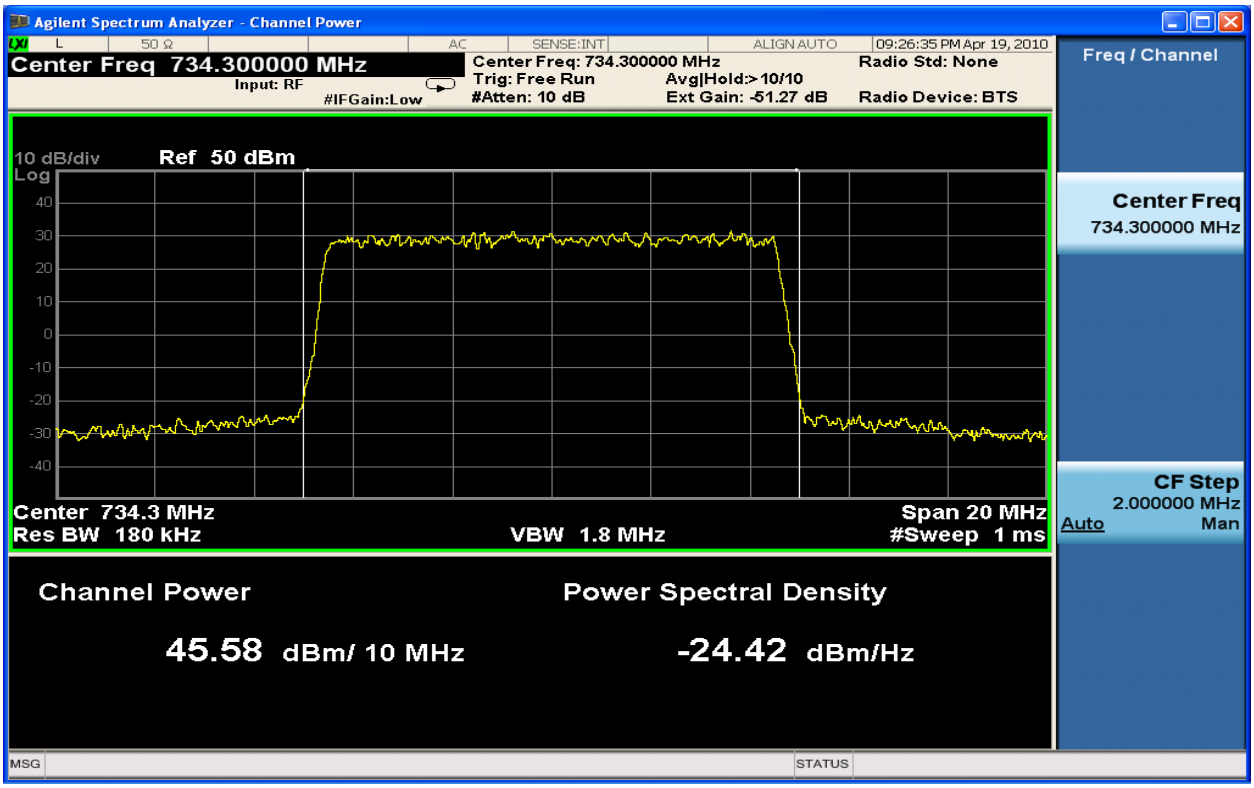


Figure 6-55 : 10MHz BW Channel Power TX2_64QAM at 734.3 MHz

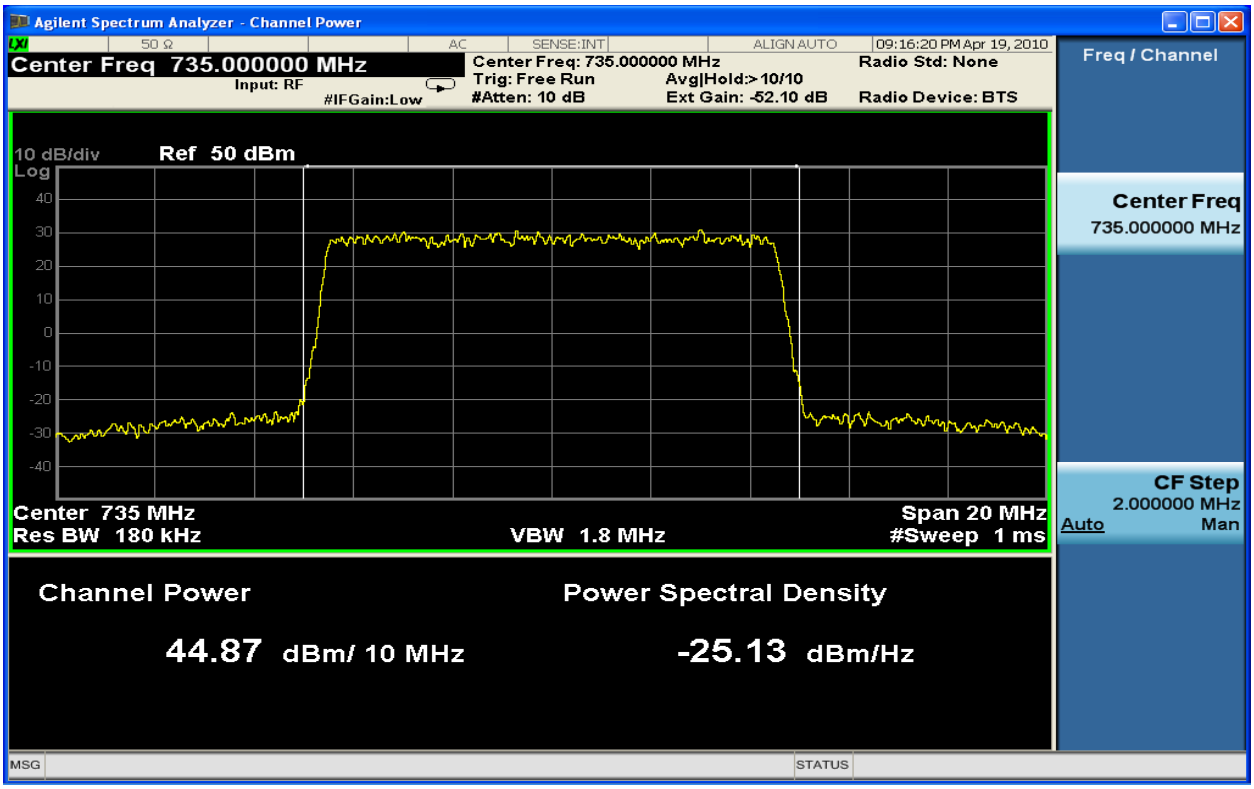


Figure 6-56 : 10MHz BW Channel Power TX1_QPSK at 735.0 MHz

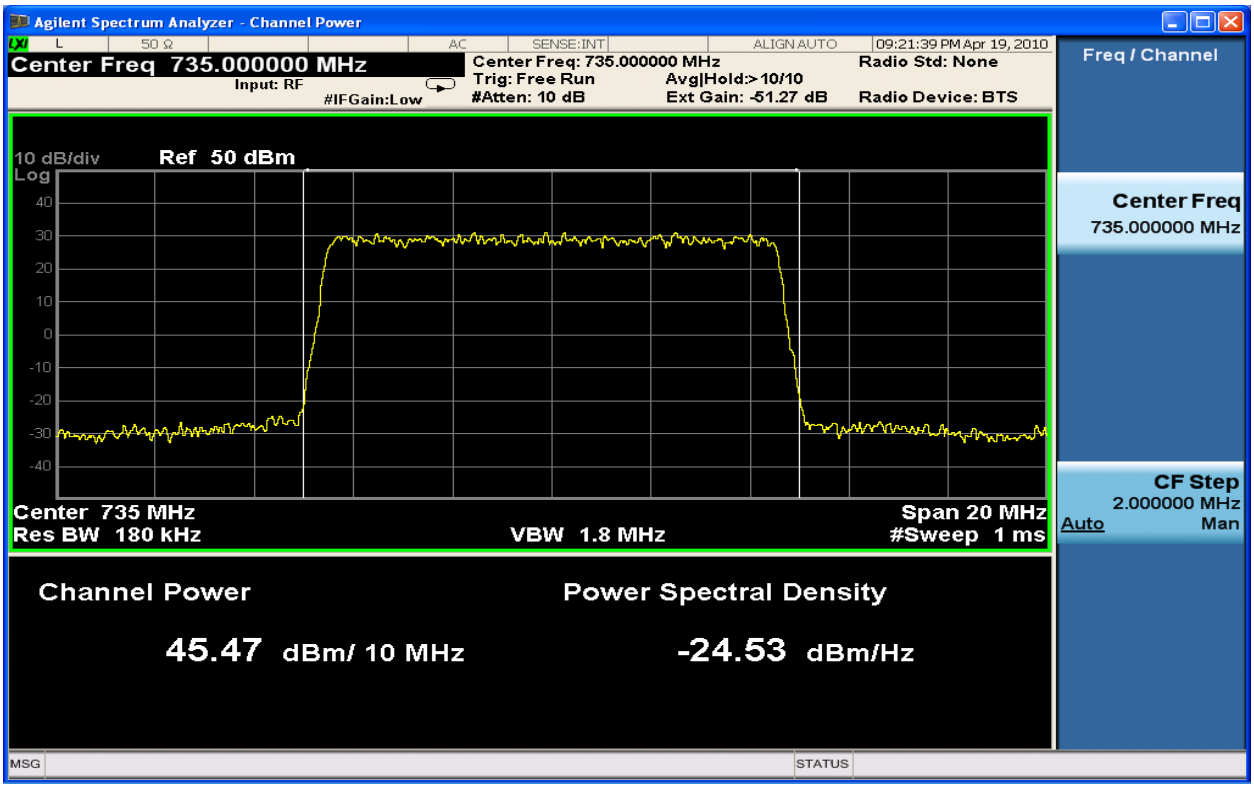


Figure 6-57 : 10MHz BW Channel Power TX2_QPSK at 735.0 MHz

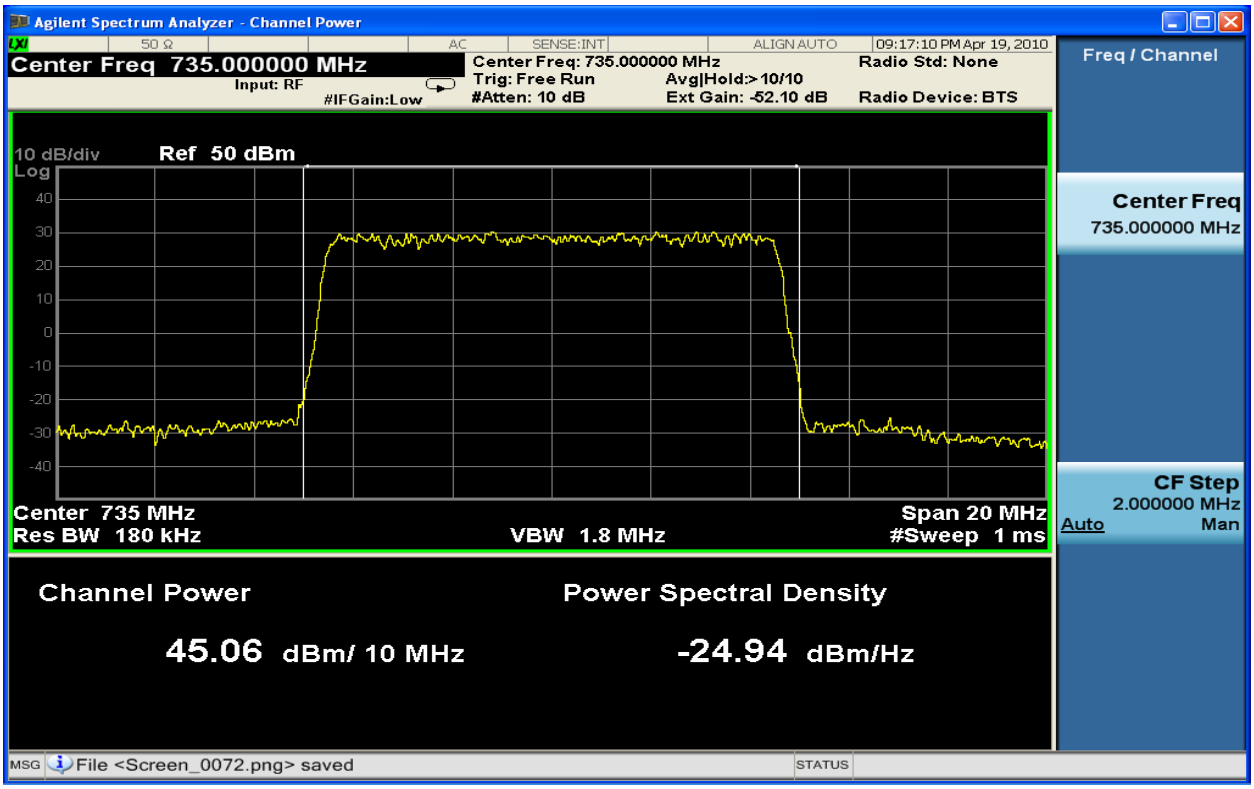


Figure 6-58 : 10MHz BW Channel Power TX1_16QAM at 735.0 MHz

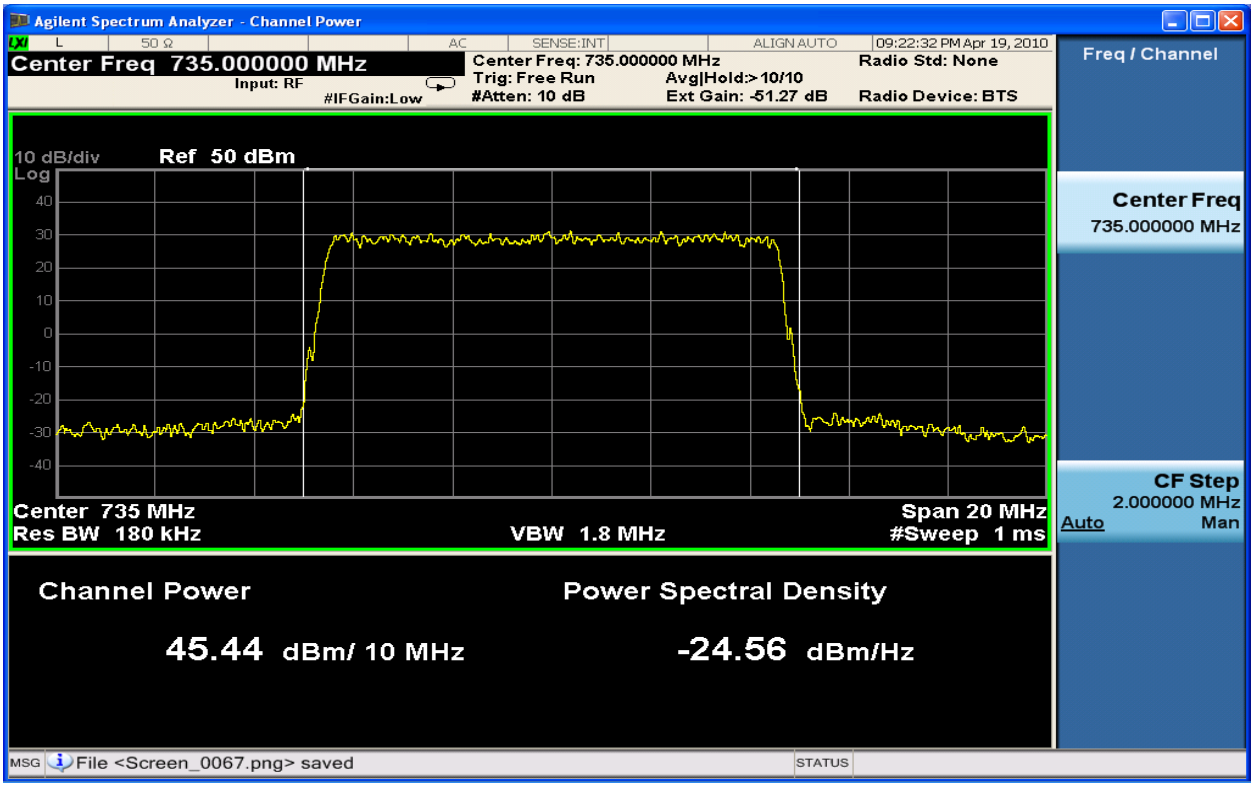


Figure 6-59 : 10MHz BW Channel Power TX2_16QAM at 735.0 MHz

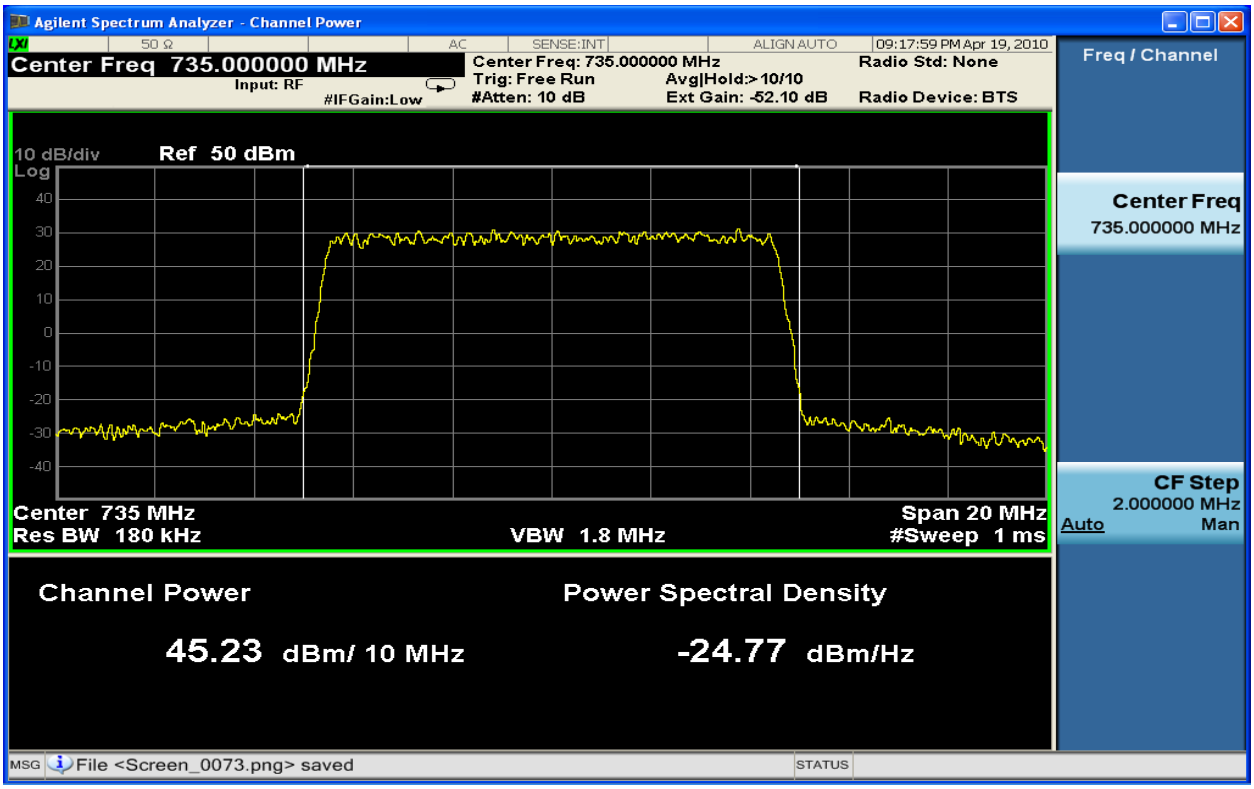


Figure 6-60 : 10MHz BW Channel Power TX1_64QAM at 735.0 MHz

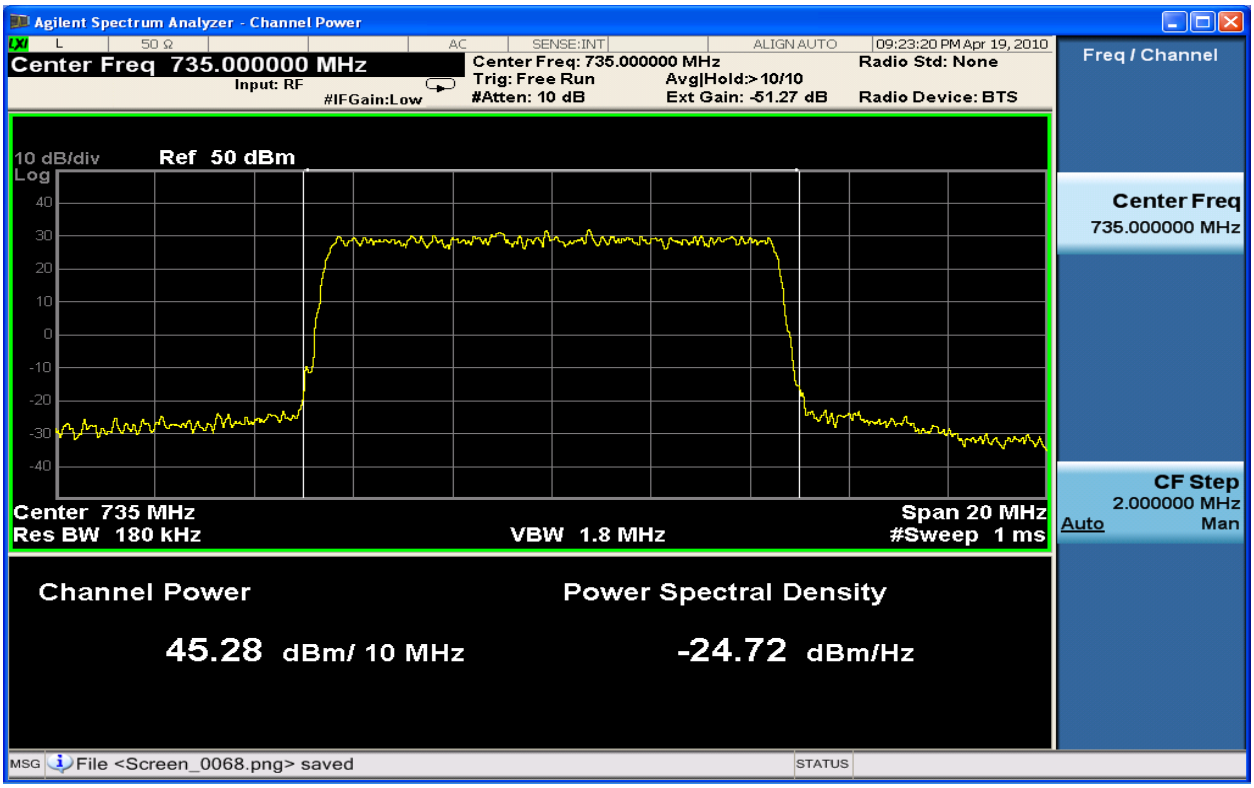


Figure 6-61 : 10MHz BW Channel Power TX2_64QAM at 735.0 MHz

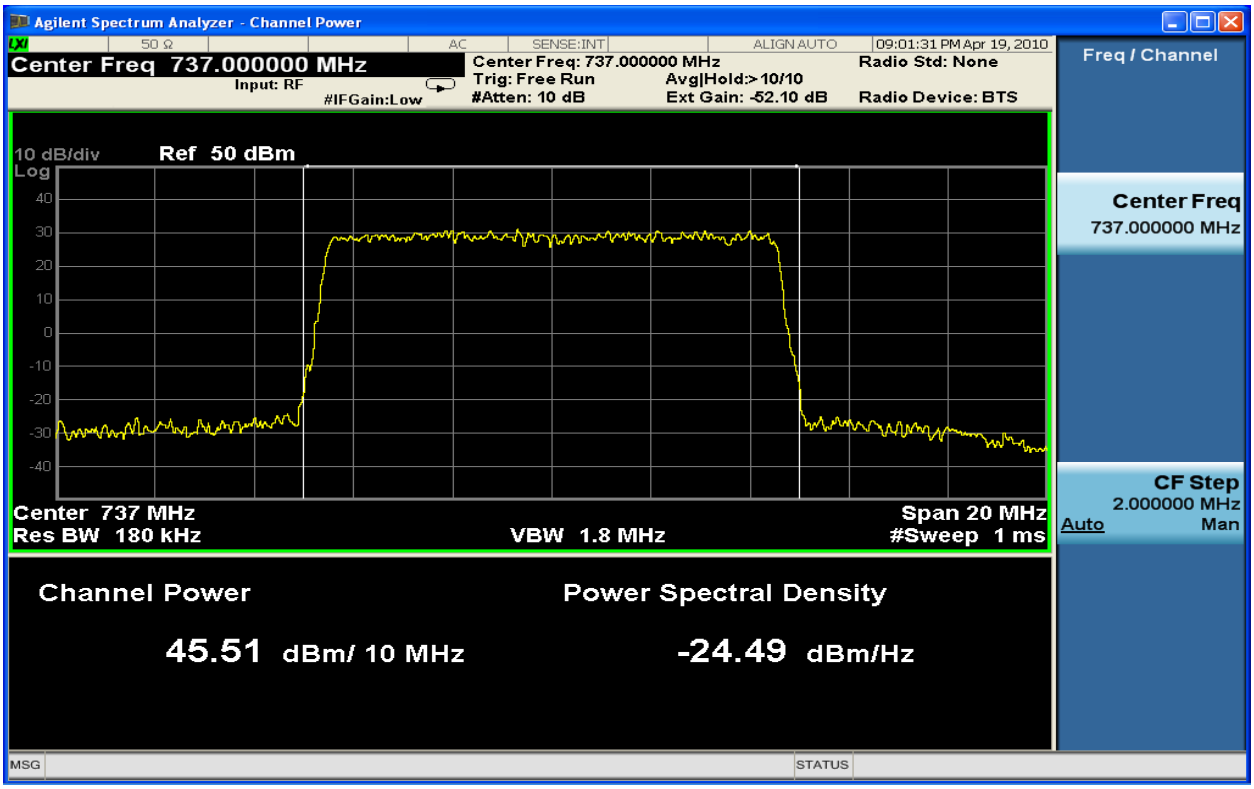


Figure 6-62 : 10MHz BW Channel Power TX1_QPSK at 737.0 MHz

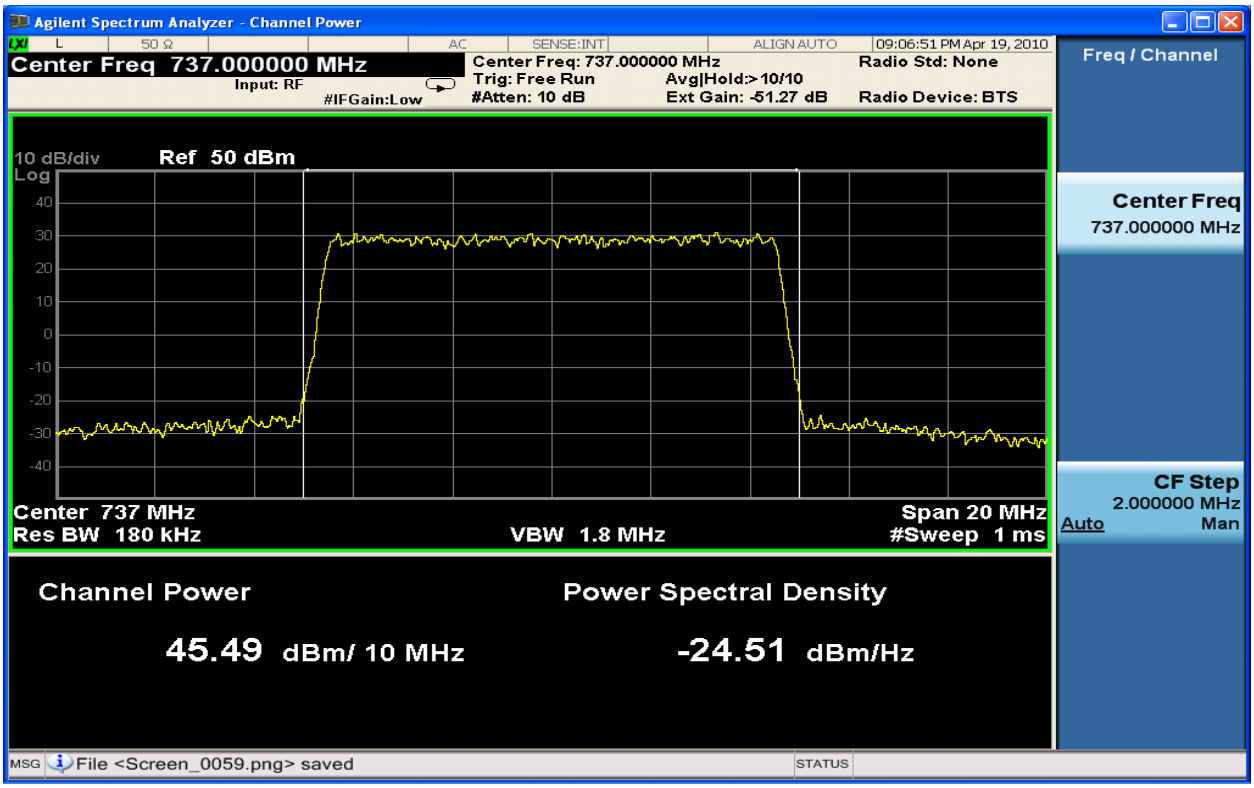


Figure 6-63 : 10MHz BW Channel Power TX2_QPSK at 737.0 MHz

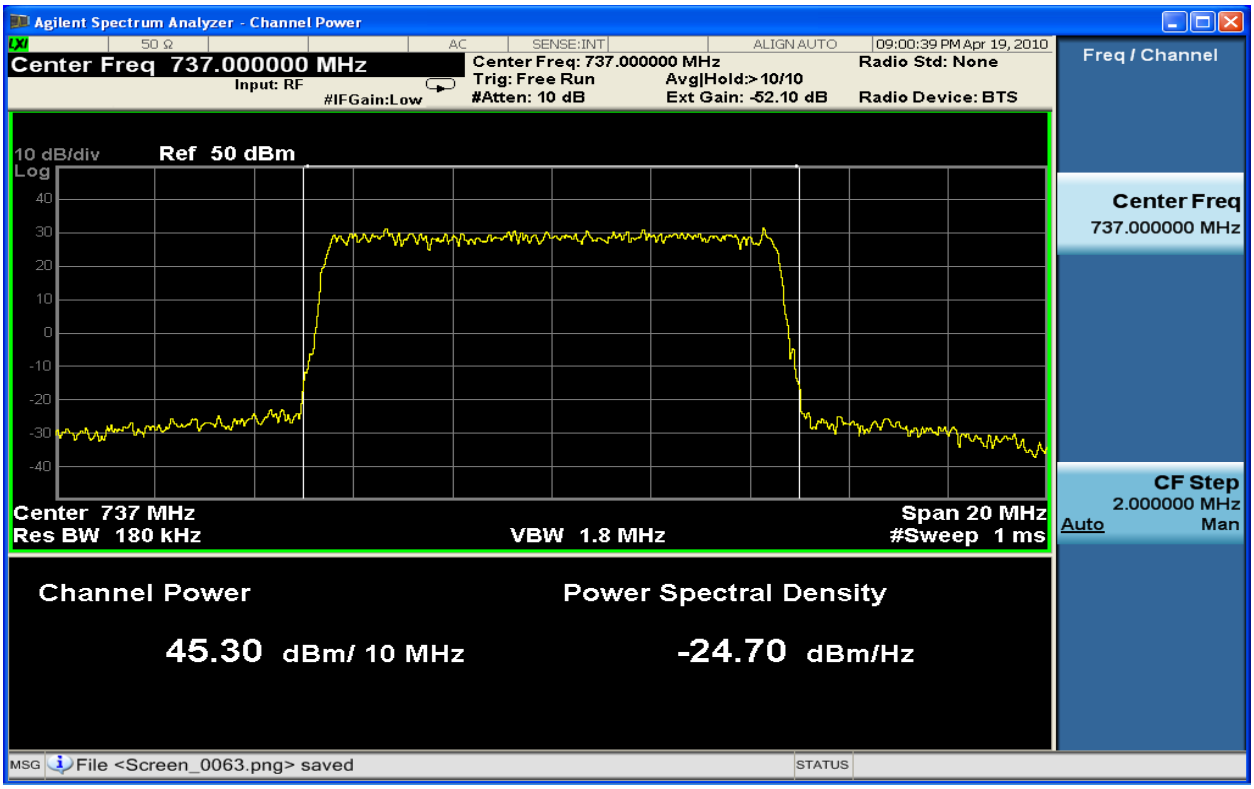


Figure 6-64 : 10MHz BW Channel Power TX1_16QAM at 737.0 MHz

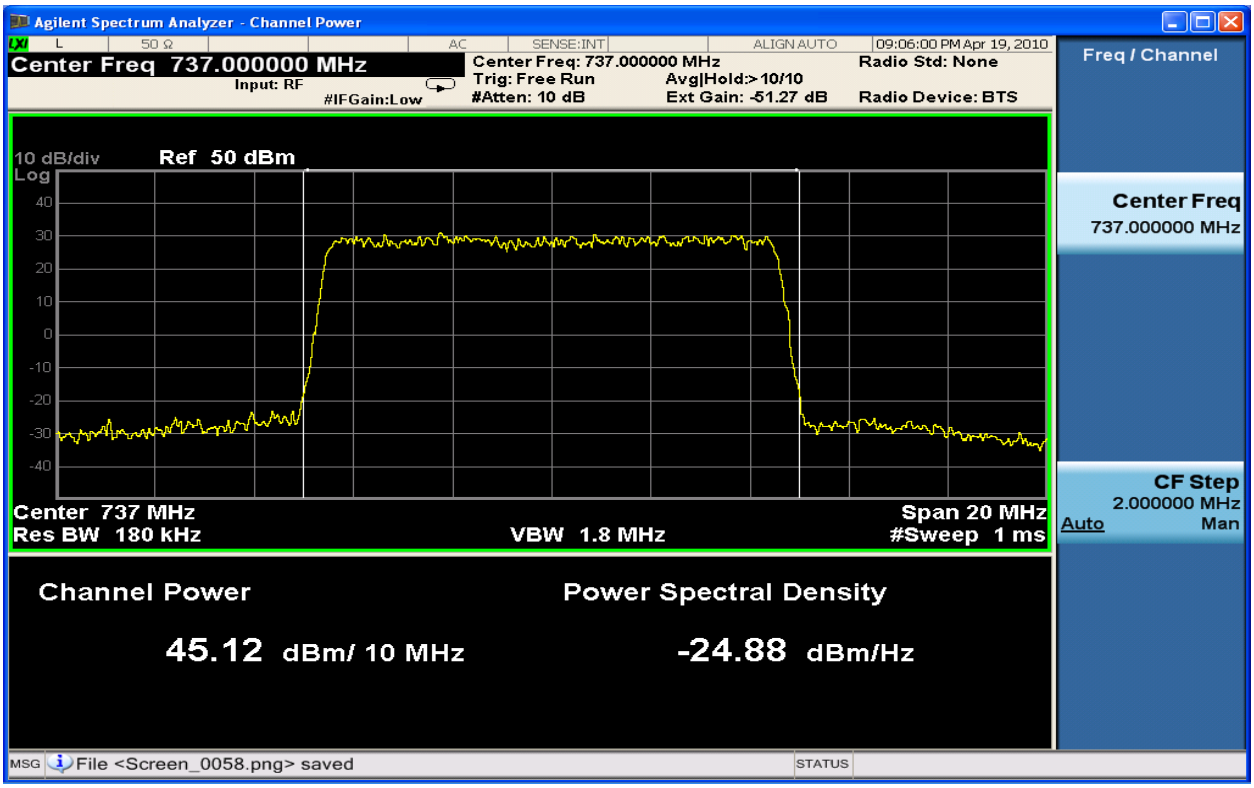


Figure 6-65 : 10MHz BW Channel Power TX2_16QAM at 737.0 MHz

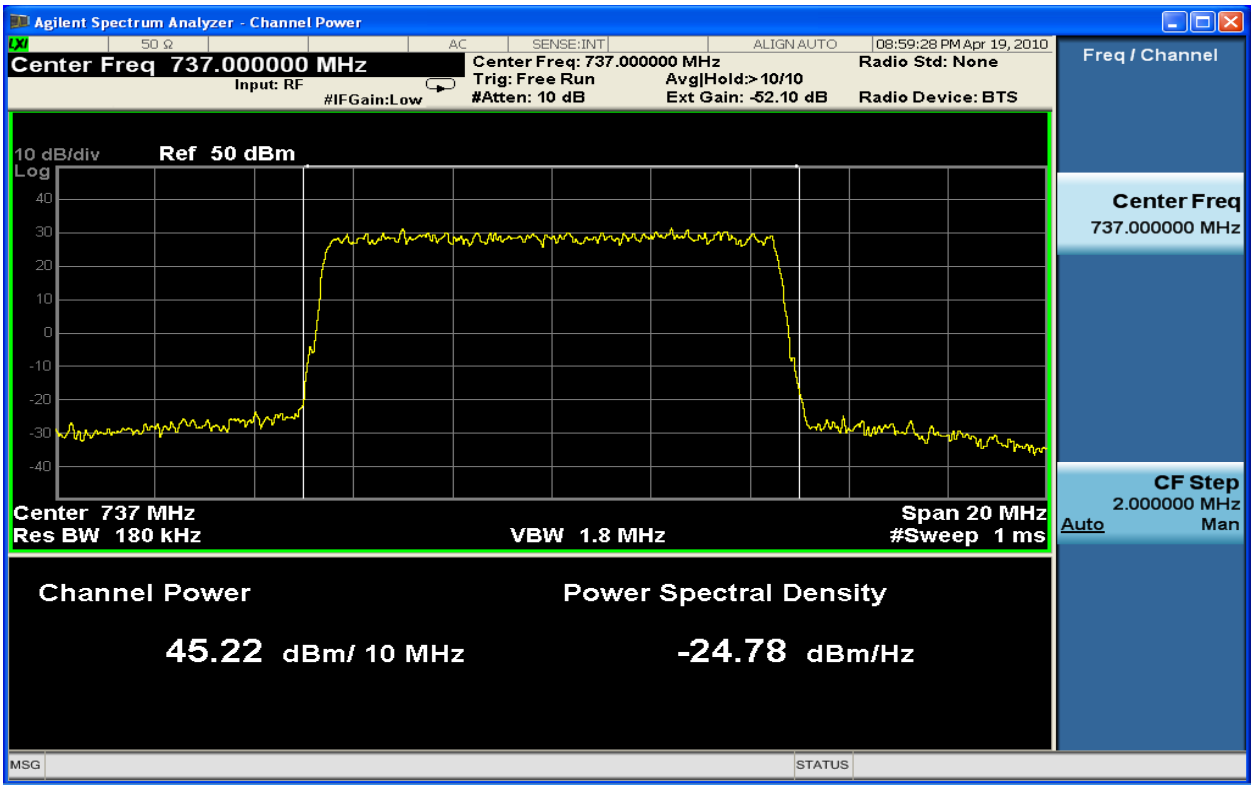


Figure 6-66 : 10MHz BW Channel Power TX1_64QAM at 737.0 MHz

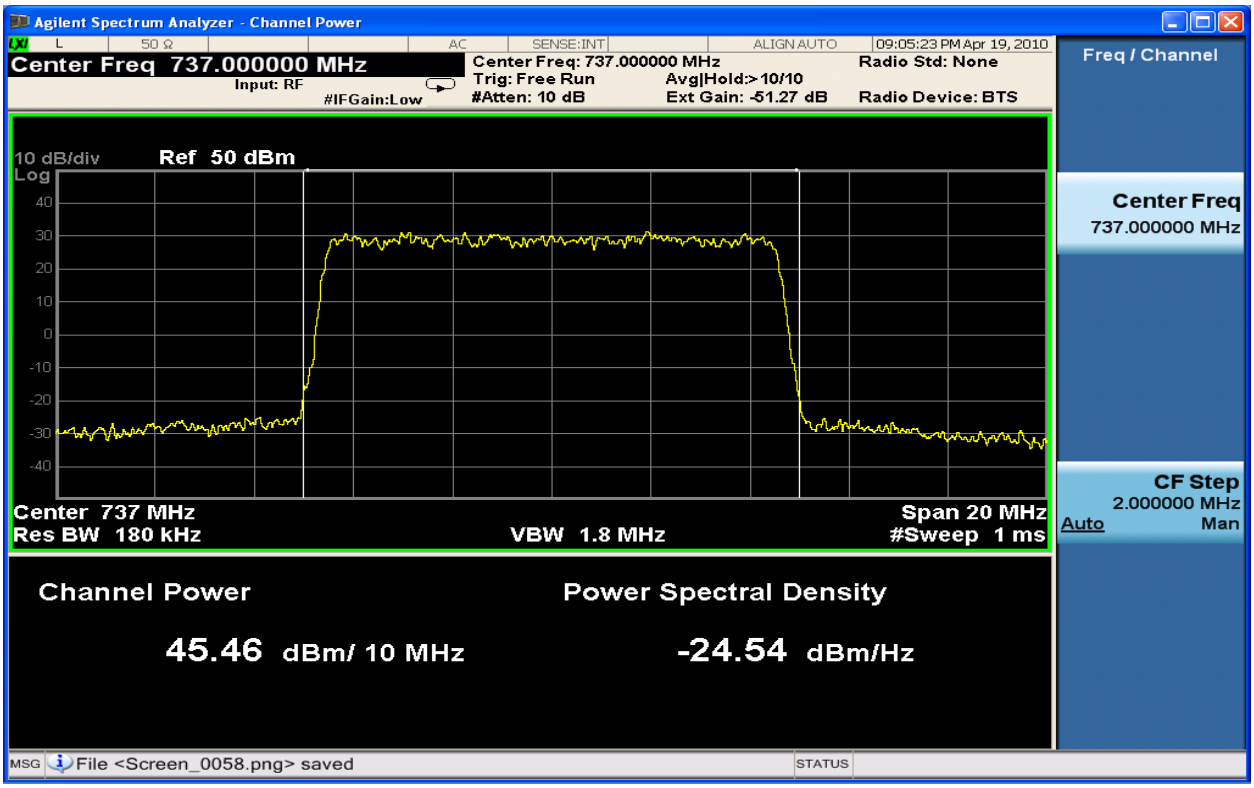


Figure 6-67 : 10MHz BW Channel Power TX2_64QAM at 737.0 MHz

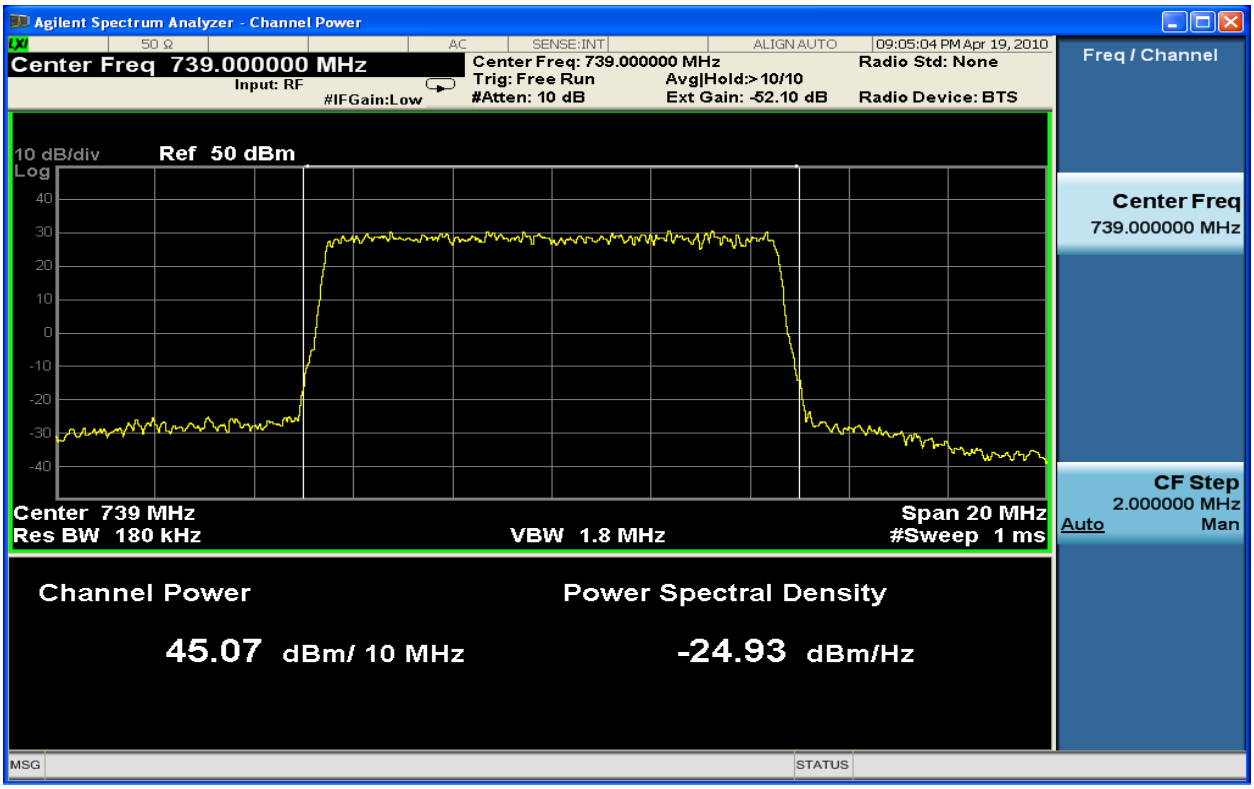


Figure 6-68 : 10MHz BW Channel Power TX1_QPSK at 739.0 MHz

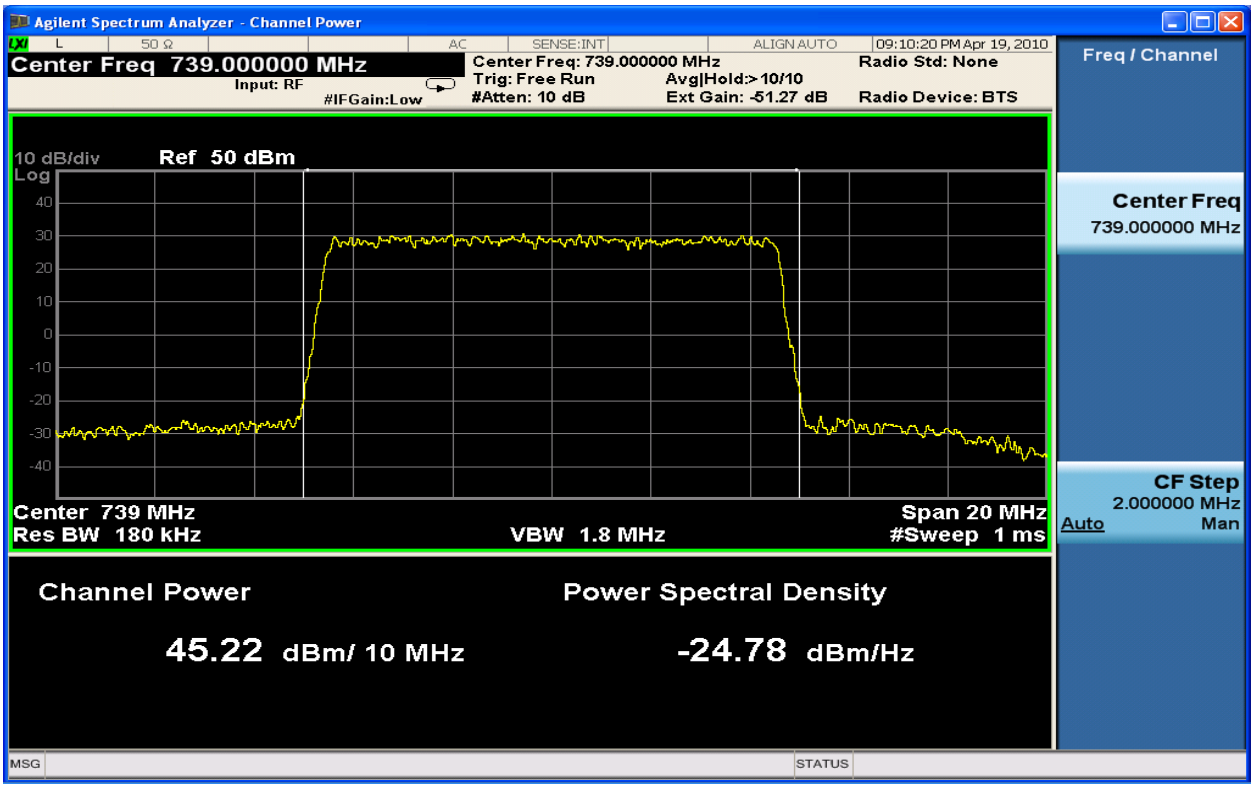


Figure 6-69 : 10MHz BW Channel Power TX2_QPSK at 739.0 MHz

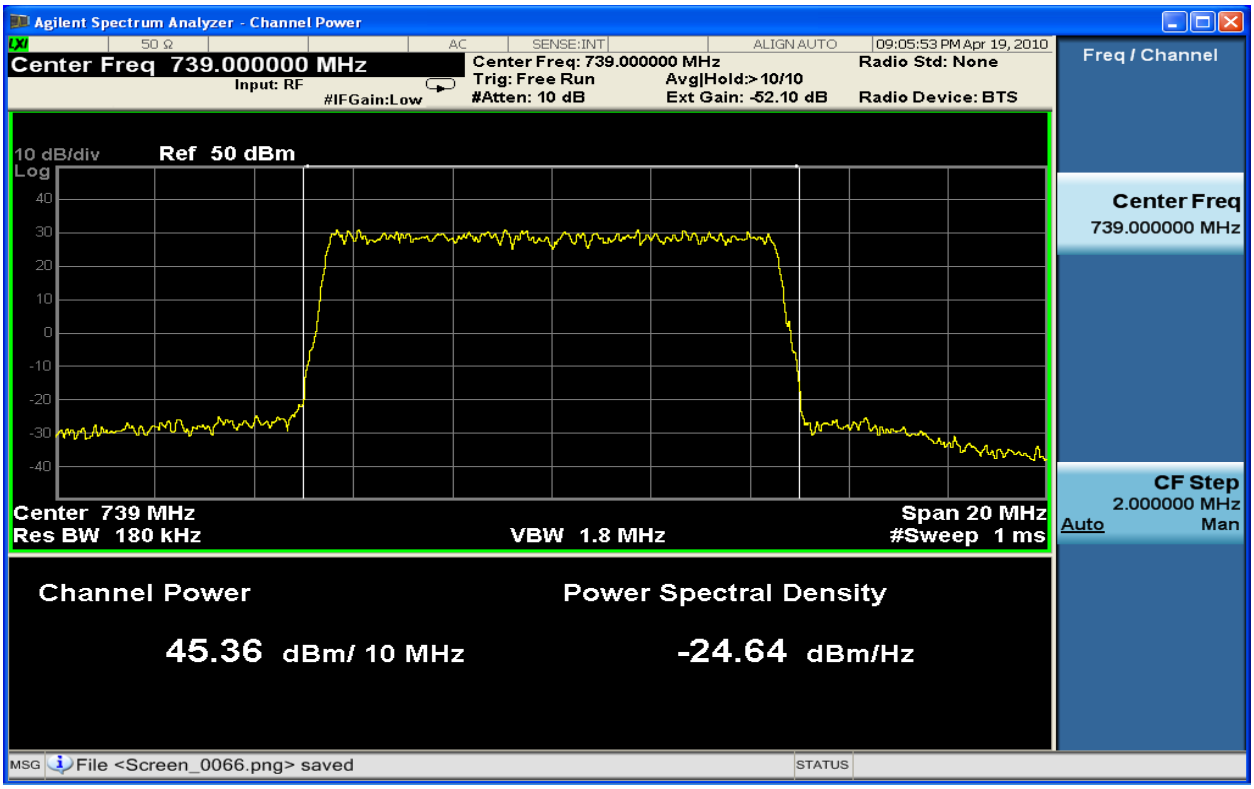


Figure 6-70 : 10MHz BW Channel Power TX1_16QAM at 739.0 MHz

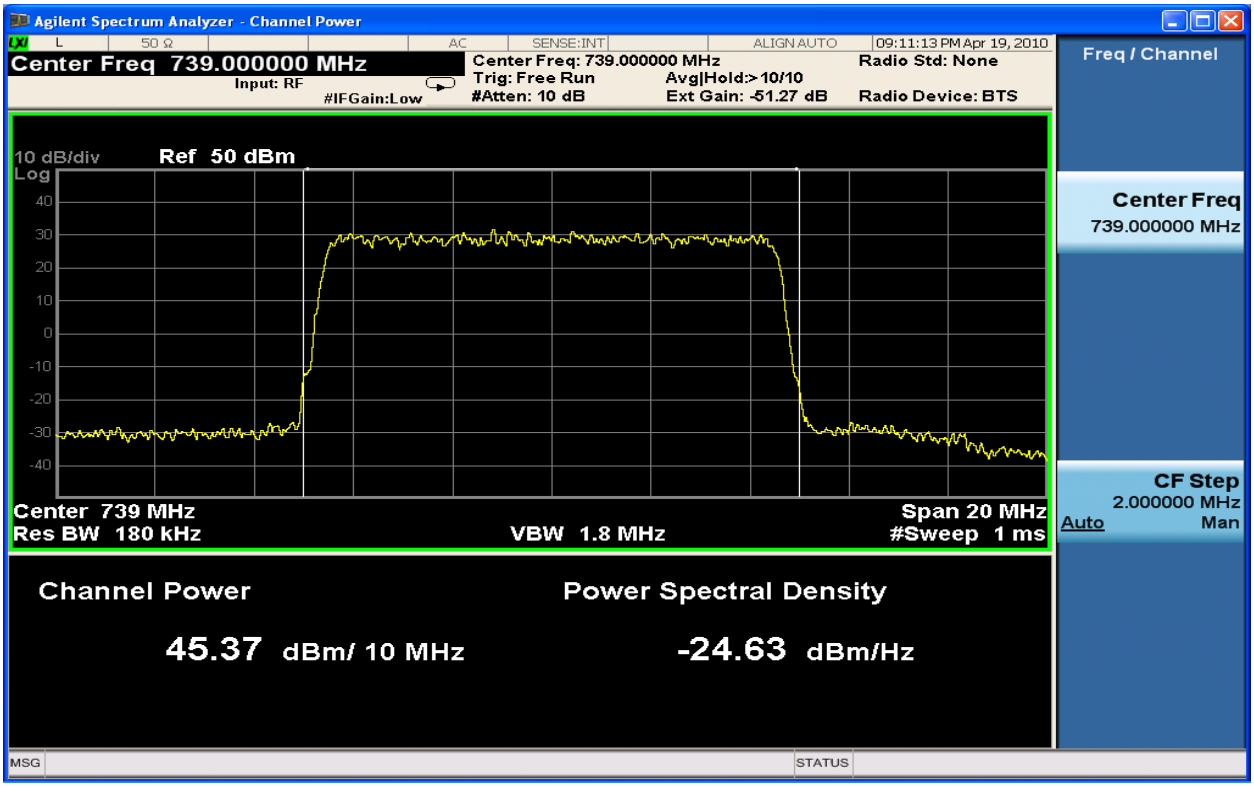


Figure 6-71 : 10MHz BW Channel Power TX2_16QAM at 739.0 MHz

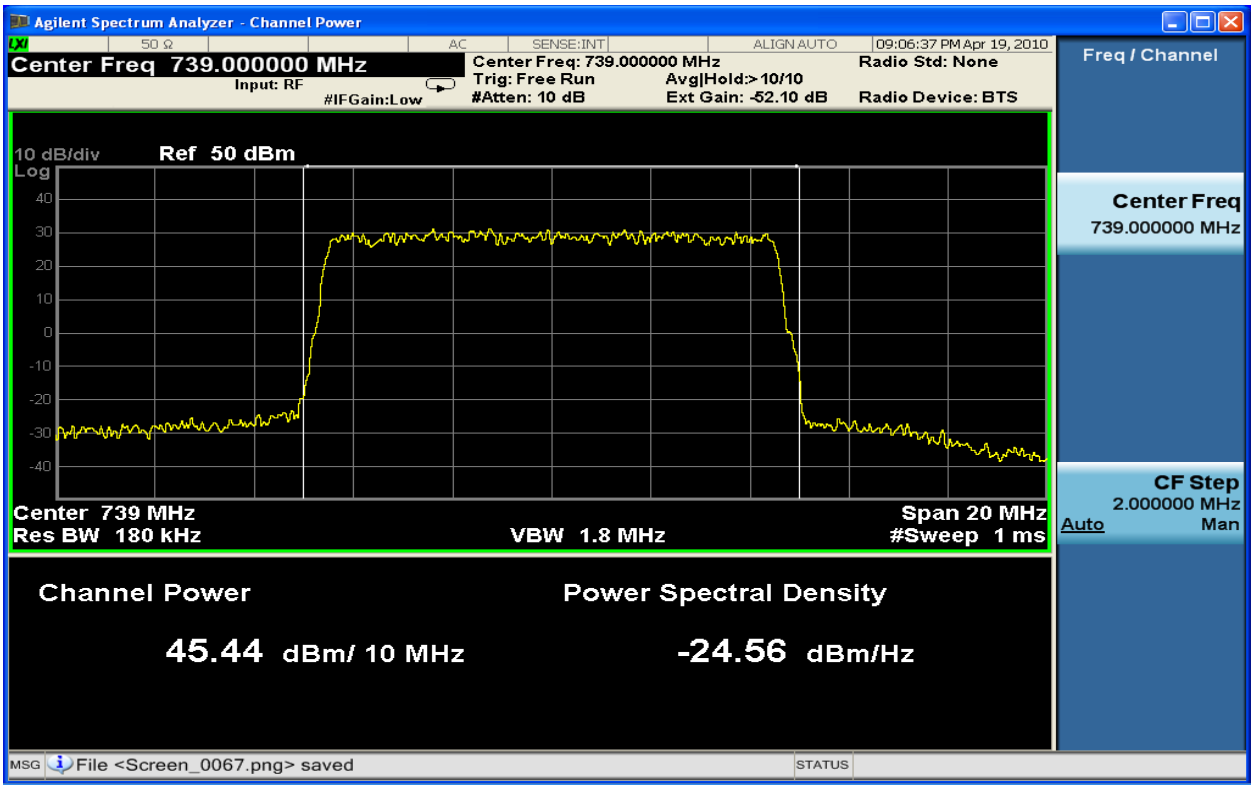


Figure 6-72 : 10MHz BW Channel Power TX1_64QAM at 739.0 MHz

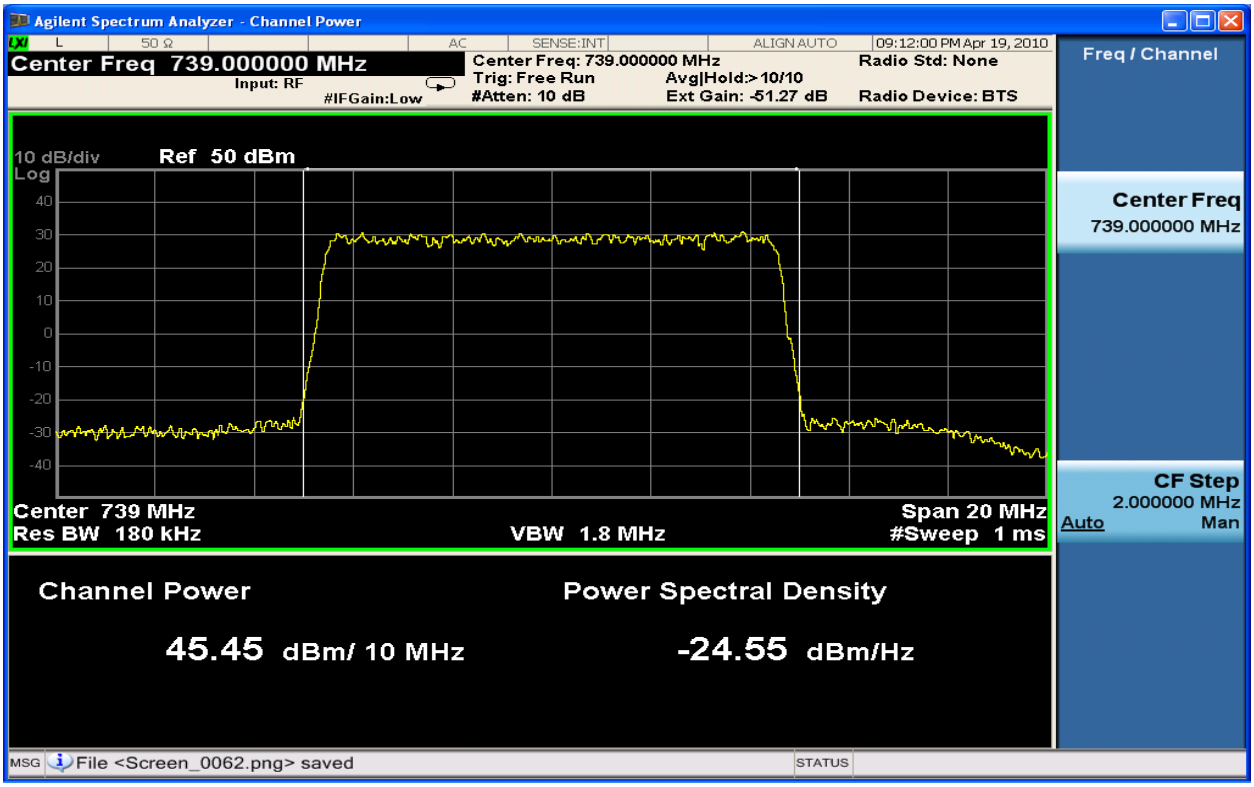


Figure 6-73 : 10MHz BW Channel Power TX2_64QAM at 739.0 MHz

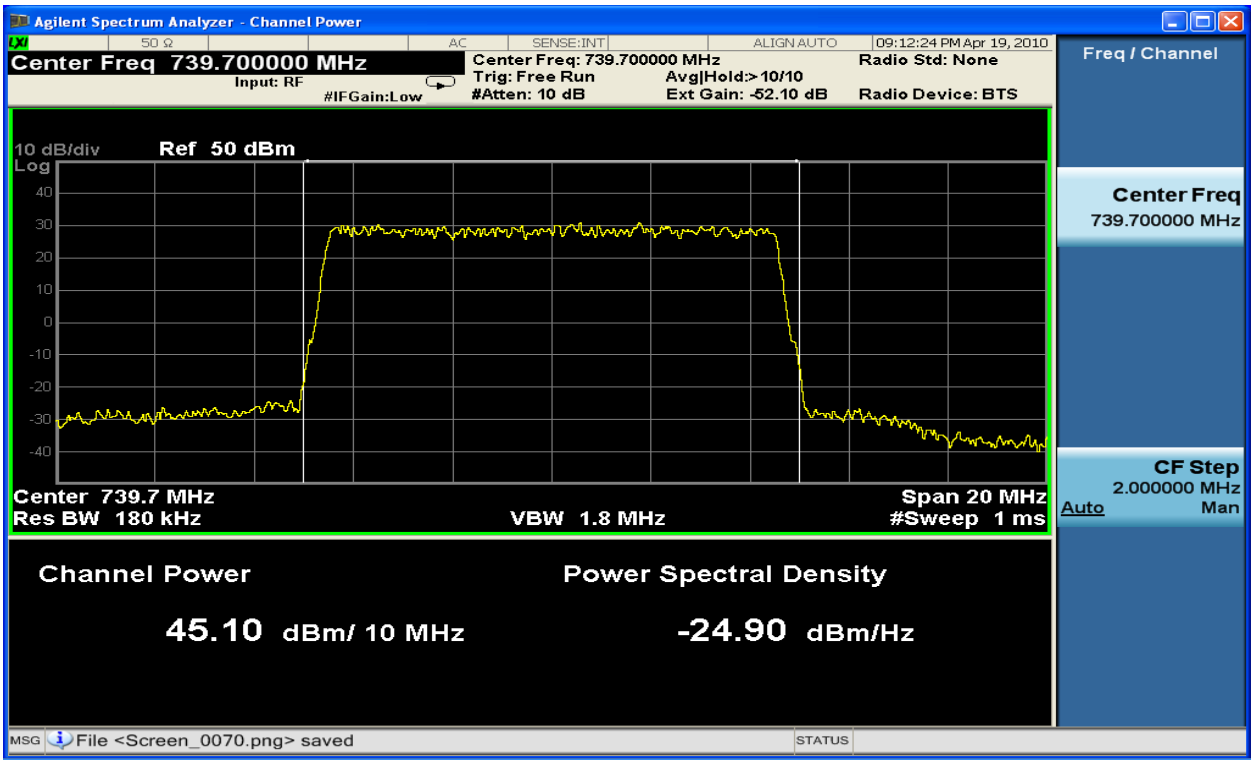


Figure 6-74 : 10MHz BW Channel Power TX1_QPSK at 739.7 MHz

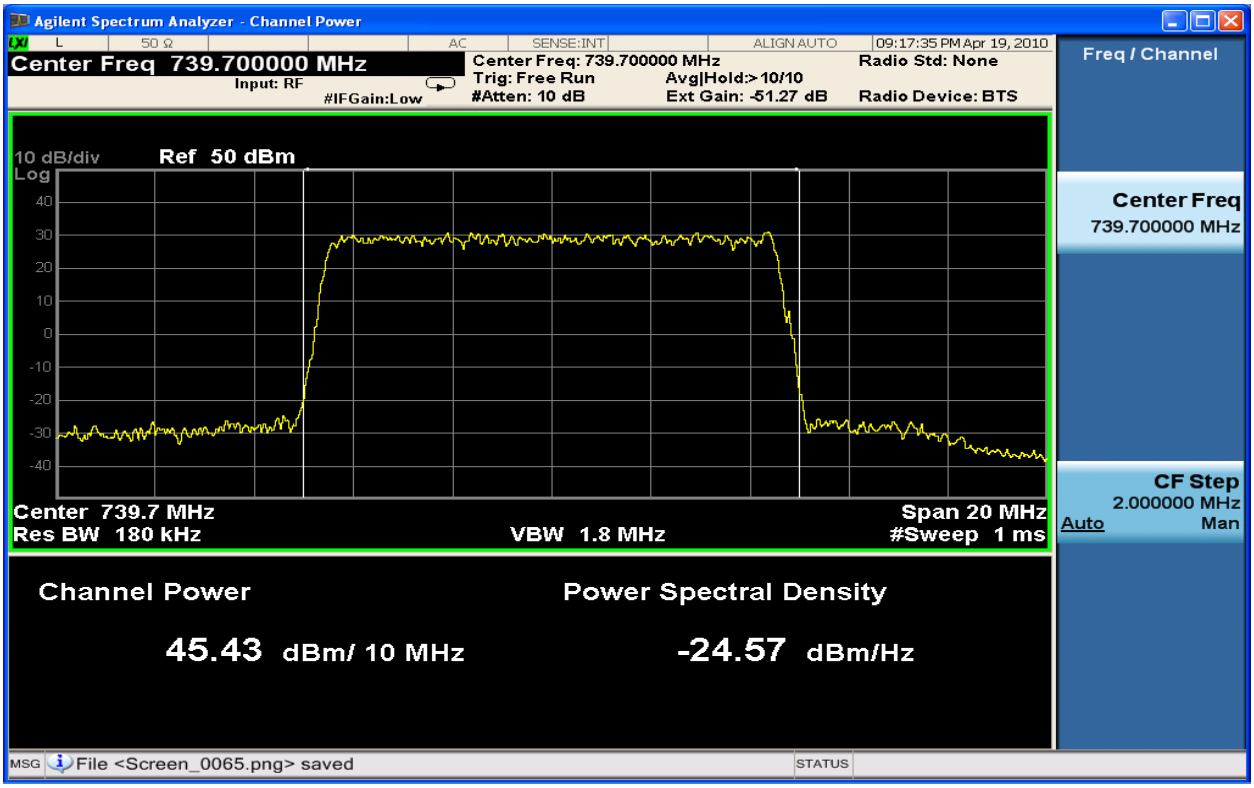


Figure 6-75 : 10MHz BW Channel Power TX2_QPSK at 739.7 MHz

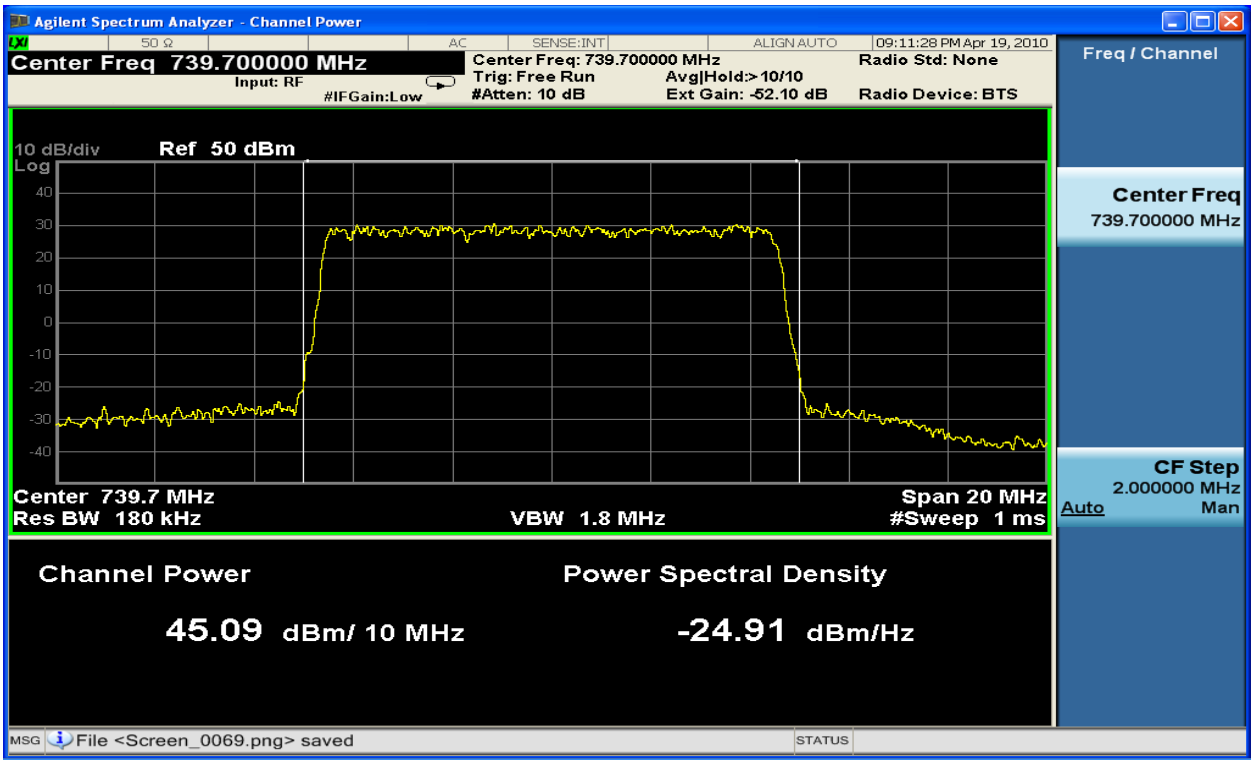


Figure 6-76 : 10MHz BW Channel Power TX1_16QAM at 739.7 MHz

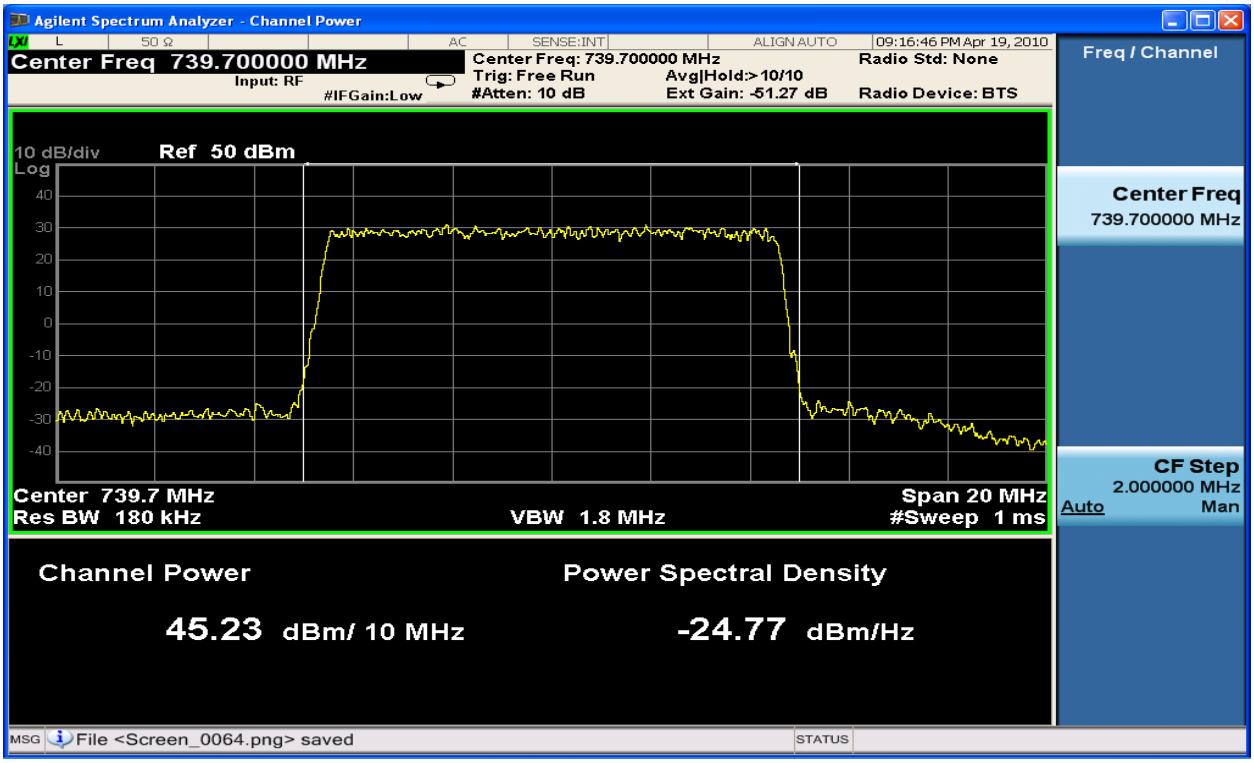


Figure 6-77 : 10MHz BW Channel Power TX2_16QAM at 739.7 MHz

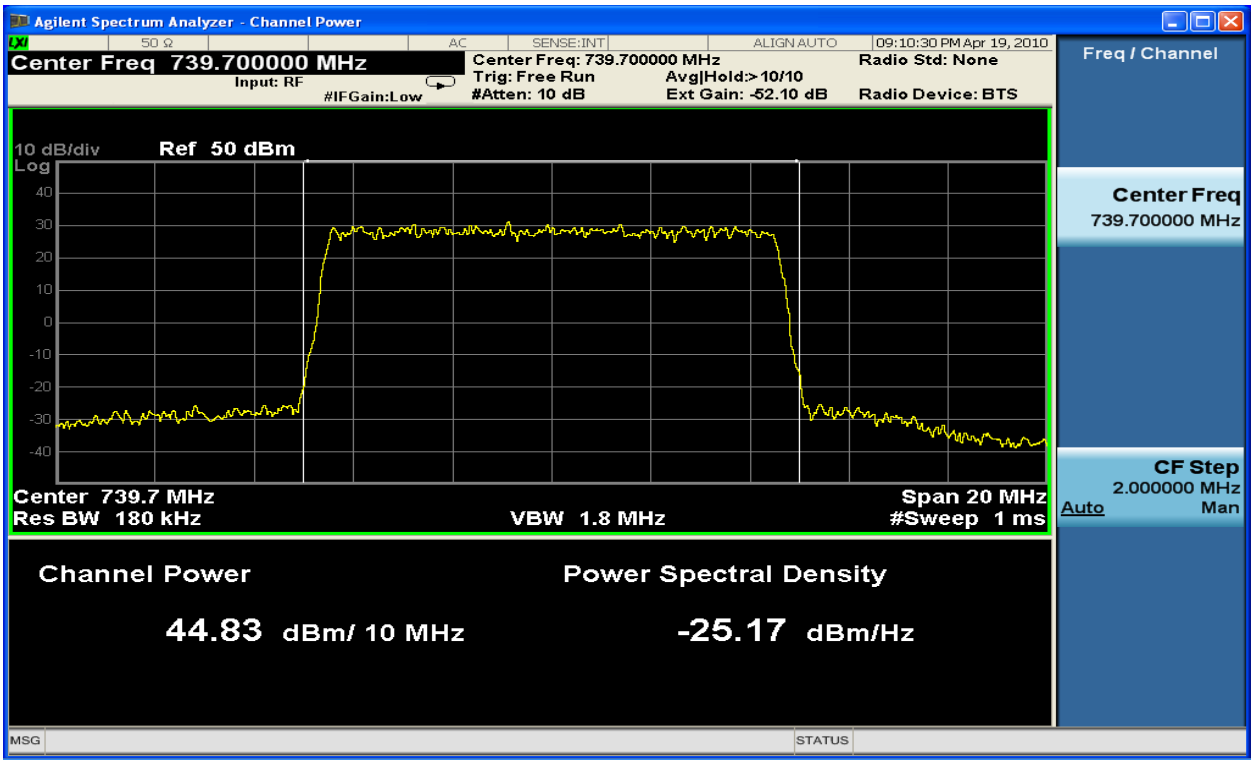


Figure 6-78 : 10MHz BW Channel Power TX1_64QAM at 739.7 MHz

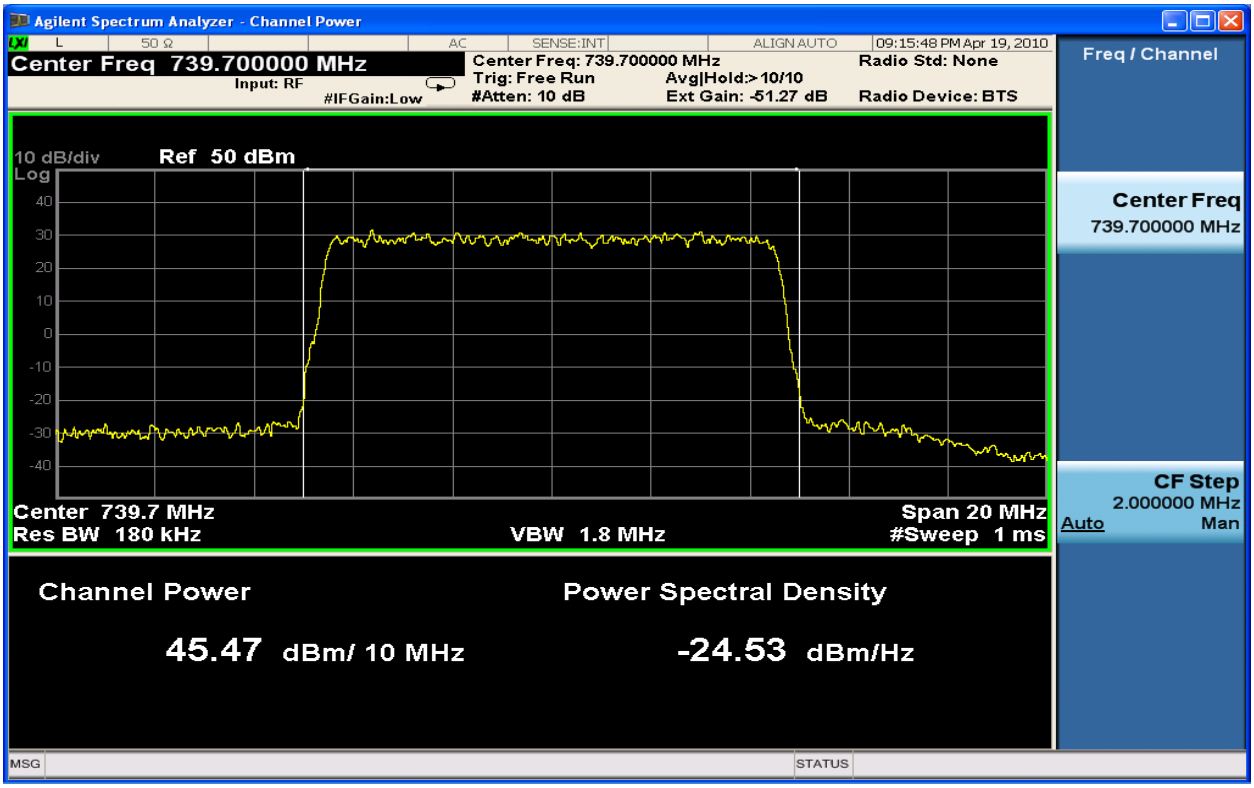


Figure 6-79 : 10MHz BW Channel Power TX2_64QAM at 739.7 MHz

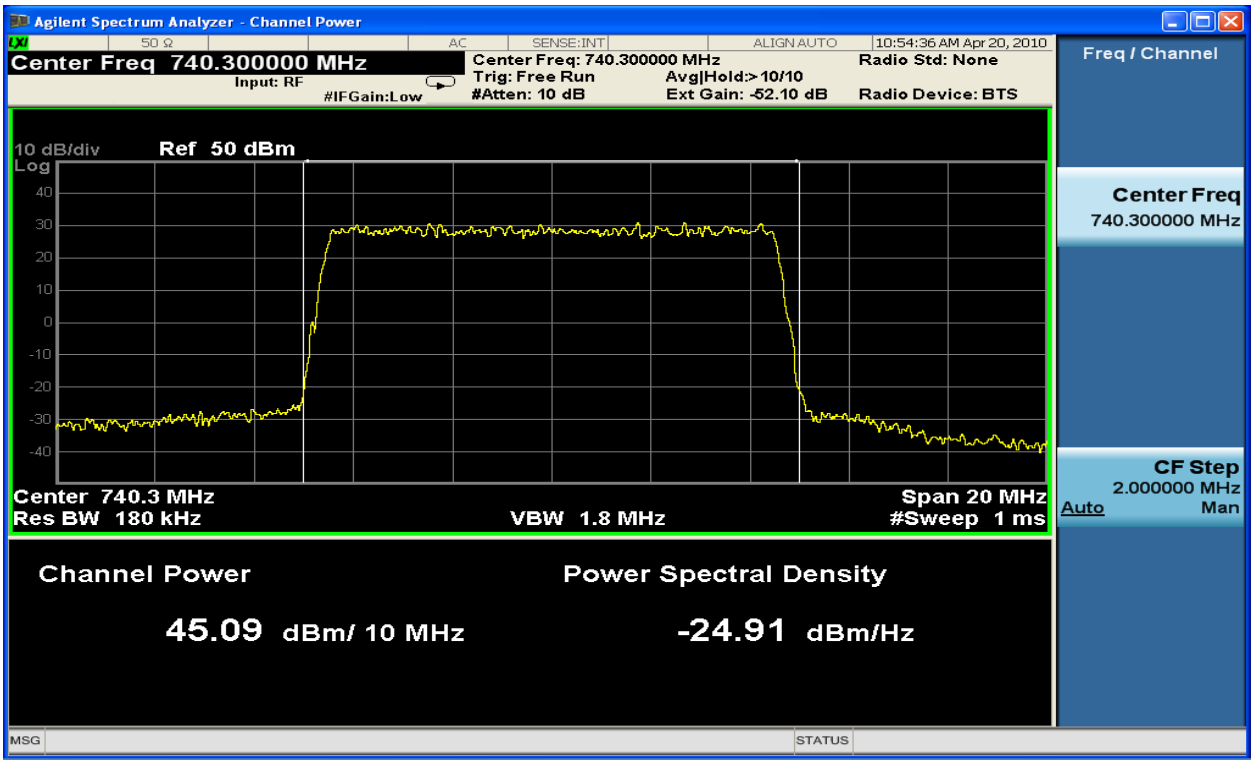


Figure 6-80 : 10MHz BW Channel Power TX1_QPSK at 740.3 MHz

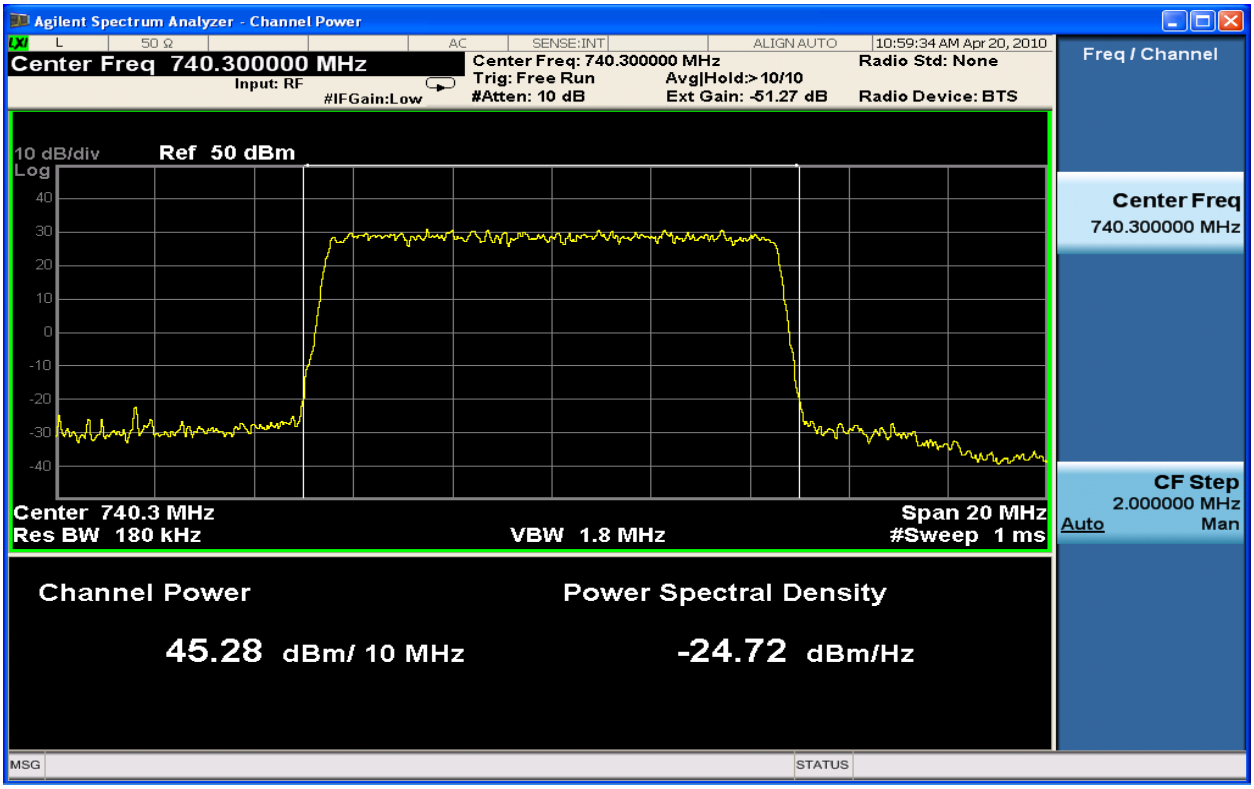


Figure 6-81 : 10MHz BW Channel Power TX2_QPSK at 740.3 MHz

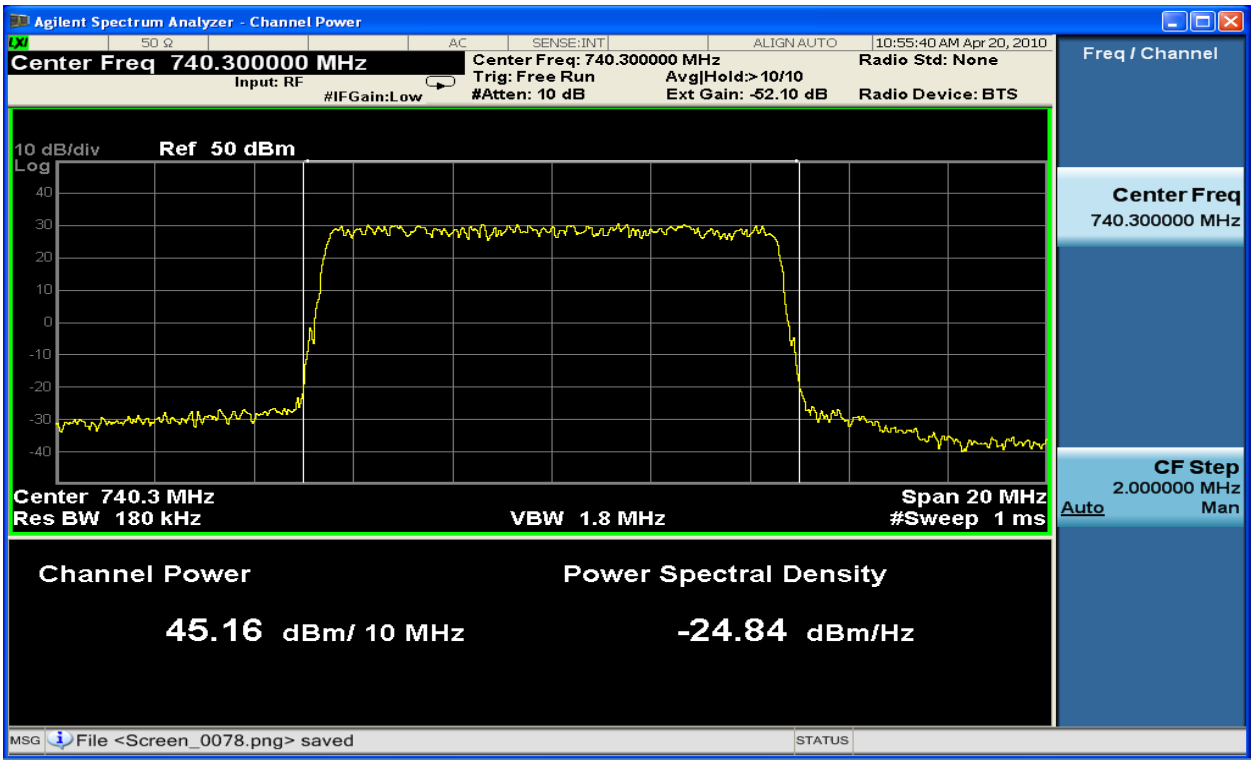


Figure 6-82 : 10MHz BW Channel Power TX1_16QAM at 740.3 MHz

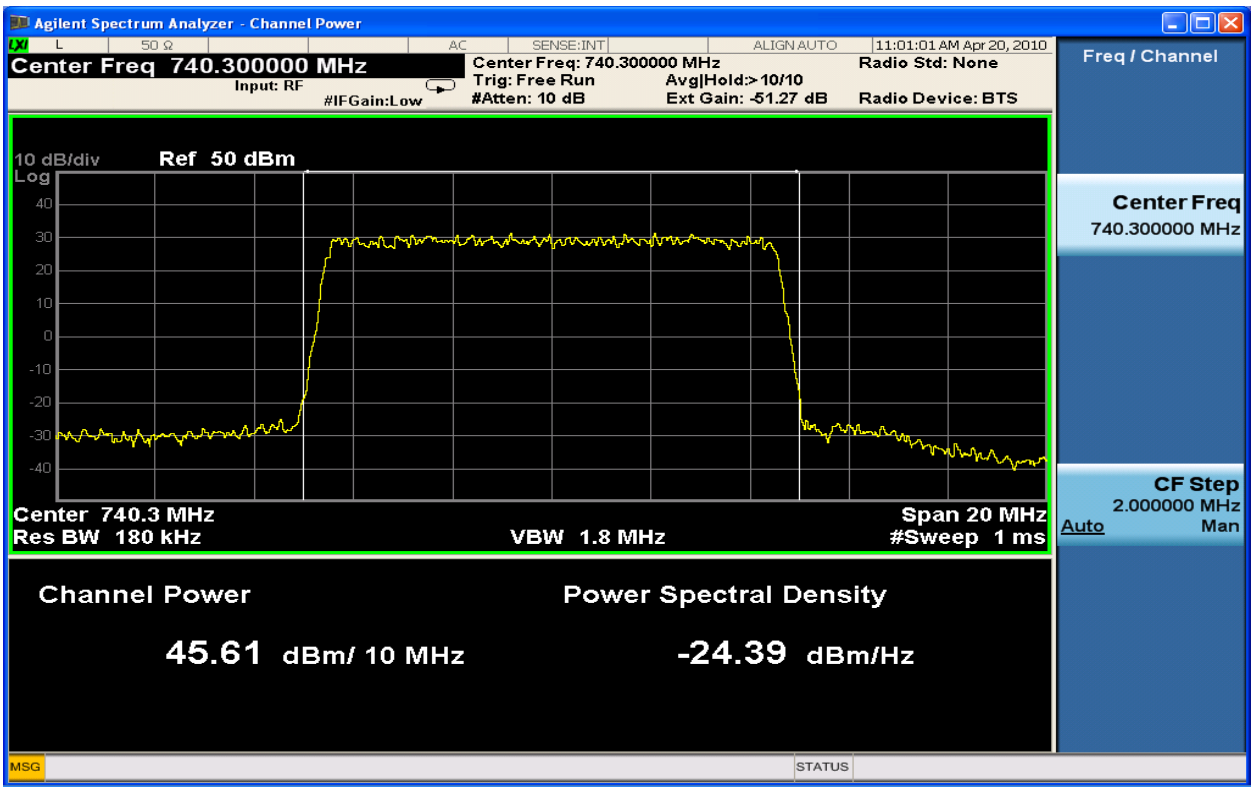


Figure 6-83 : 10MHz BW Channel Power TX2_16QAM at 740.3 MHz

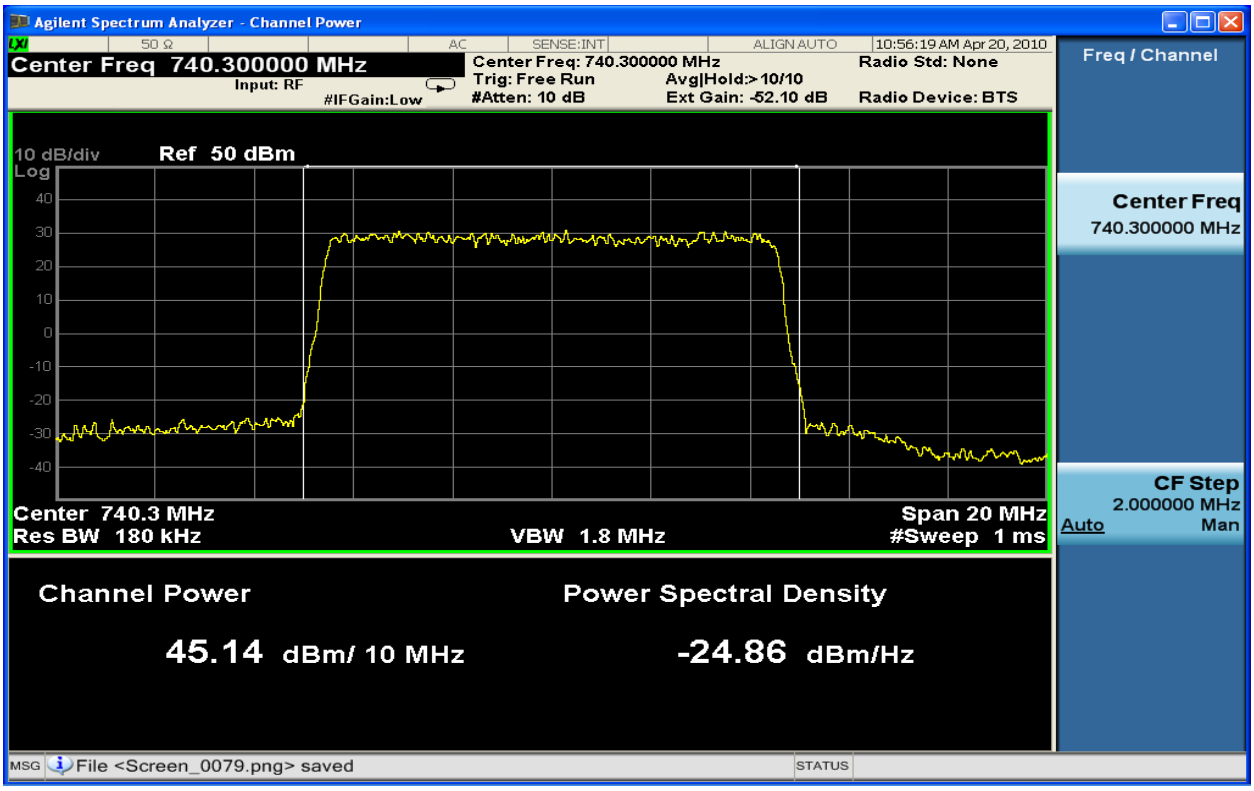


Figure 6-84 : 10MHz BW Channel Power TX1_64QAM at 740.3 MHz

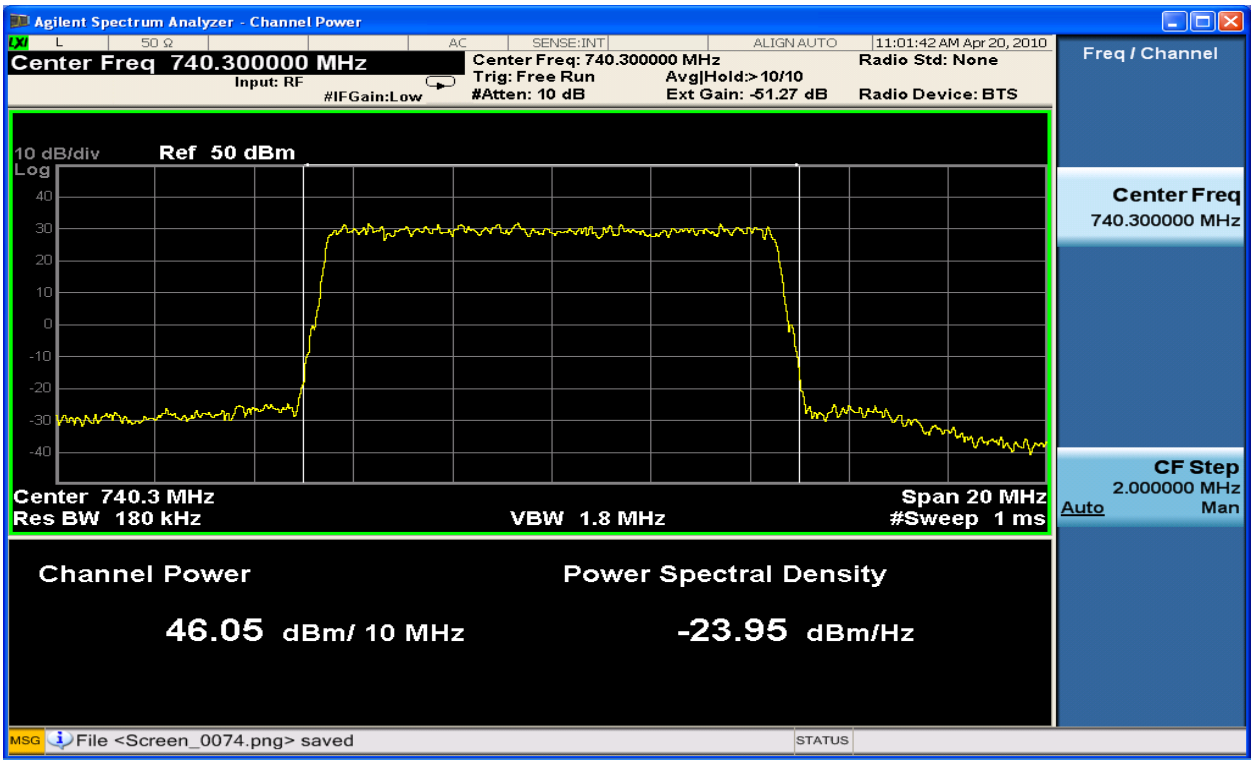


Figure 6-85 : 10MHz BW Channel Power TX2_64QAM at 740.3 MHz

6.2 RF Safety (Reference 27.52)

Licensees and manufacturers are subject to the radio frequency radiation exposure requirements specified in sections 1.1307(b), 2.1091, and 2.1093 of this chapter, as appropriate.

Technical information showing the basis for this statement must be submitted to the Commission upon request.

The following spread sheet shows an example of the required calculation for MPE (Maximum Permissible Exposure) for RF safety submissions. This calculation is required as a separate exhibit under the FCC submission.

RF Safety: Based on the rated output power and 14.8dB antenna gain, a minimum distance of 4.0 meters to the operating antenna must be maintained.

ERICSSON

Prediction of MPE limit at a given distance

Reference_1: Equation from page 51 of EN 50385: Basic standard for the calculation and measurement of electromagnetic field strength and SAR related to human exposure from radio base stations and fixed terminal stations for wireless telecommunication systems (110 MHz - 40 GHz)

Reference 2: Equation from page 18 of OET Bulletin 65, Edition 97-01: Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields.

RRUL 11: 700MHz (Block ABC)

$$S \angle \frac{PG}{4 \angle R^2}$$

where: S = power density
P = power input to the antenna
G = power gain of the antenna in the direction of interest relative to an isotropic radiator
R = distance to the center of radiation of the antenna

Maximum peak output power at antenna input terminal:	44.80	(dBm)
Maximum peak output power at antenna input terminal:	30199.5172	(mW)
Antenna gain(typical):	14.8	(dBi)
Maximum antenna gain:	30.1995172	(numeric)
Prediction distance:	400	(cm)
Prediction frequency:	737	(MHz)
MPE limit for uncontrolled exposure at prediction frequency:	0.5	(mW/cm^2)
Power density at prediction frequency:	0.453597	(mW/cm^2)
Maximum allowable antenna gain:	15.22299851	(dBi)
Margin of Compliance:	0.42299851	

6.3 Occupied Bandwidth

Clause 27.50 2.1049

(a) *Occupied bandwidth.* The frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers radiated are each equal to 0.5 percent of the total mean power radiated by a given emission. Occupied BW is the portion of the spectrum which contains 99% of the emitted energy (.5% of the remaining is above and .5% is below the occupied BW). The occupied bandwidth may not exceed the authorized bandwidth in the radio service rules. The occupied bandwidth test should be performed for each type of emission listed on the grant.

Procedure:

The following procedure and conditions shall apply for Occupied Bandwidth measurements. As applicable, Lower, Middle and Upper frequency offsets, modulation, and bandwidths shall be assessed and recorded along with the relevant captured plots.

Test Setup

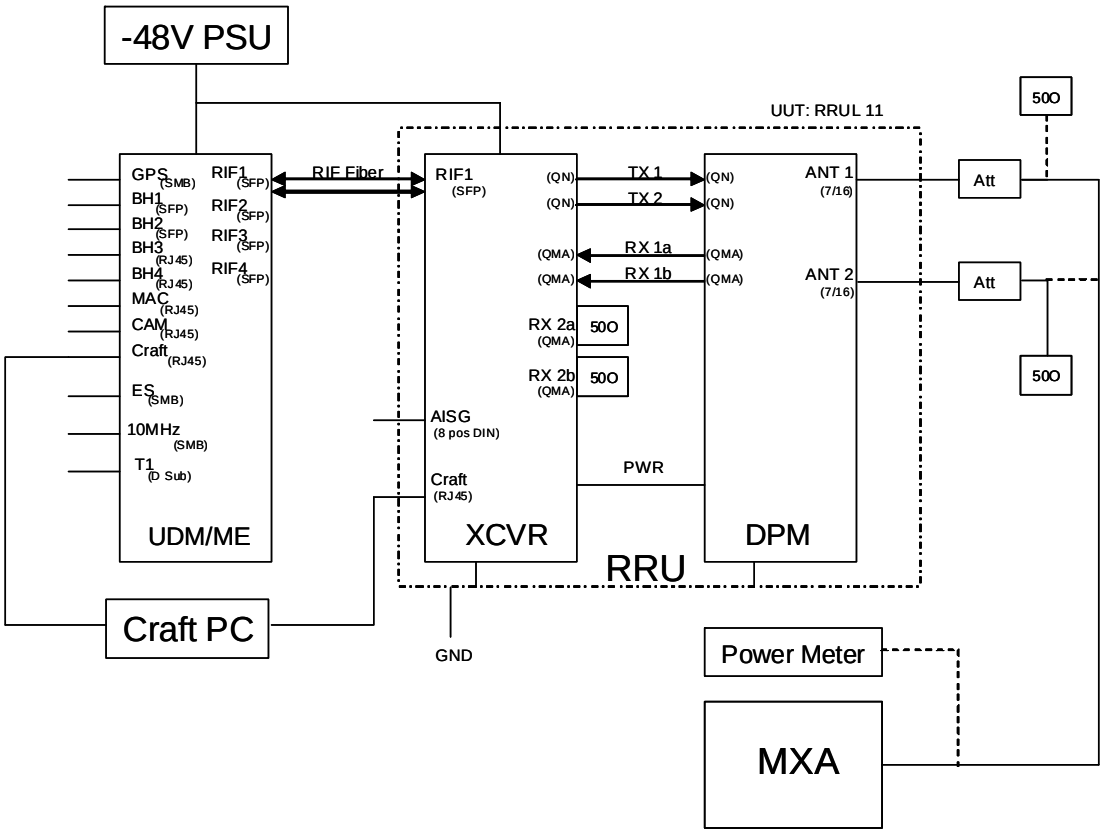


Figure 6-86 RRU Radio Compliance Set Up / Configuration

The following tables shall be used to summarize recorded results in addition to applicable captured plots.

Table 6-3: Setting / Measurement Results – Occupied Bandwidth 5MHz

Setting		Occupied Bandwidth (MHz)					
		QPSK		16 QAM		64 QAM	
		TX1	TX2	TX1	TX2	TX1	TX2
Frequency (A Block CH_5035)	731.5MHz	4.5383	4.5509	4.5540	4.5429	4.5811	4.5461
Frequency (Lower B CH_5085)	736.5MHz	4.5733	4.5653	4.5654	4.540	4.5615	4.5536
Frequency (Middle B CH_5090)	737.0MHz	4.5679	4.5548	4.5587	4.5237	4.5605	4.5542
Frequency (Upper B CH_5095)	737.5MHz	4.5608	4.5476	4.5554	4.5625	4.5490	4.5463
Frequency (C Block CH_5145)	742.5MHz	4.5606	4.5552	4.5784	4.5673	4.5461	4.5521
RBW	180kHz						
VBW	1.8MHz						
CH BW	5MHz						
Span	20MHz						
Sweep	1ms						
Reference Level Offset	52.1dB						
Detector	Peak						
Attenuation	10dB						

Table 6-4: Setting / Measurement Results – Occupied Bandwidth 10MHz

Setting		Occupied Bandwidth (MHz)					
		QPSK		16 QAM		64 QAM	
		TX1	TX2	TX1	TX2	TX1	TX2
Frequency (Lower AB CH_5057)	733.7MHz	8.9897	8.9668	8.9892	8.9743	9.0083	8.9639
Frequency (Middle AB CH_5063)	734.3MHz	8.9581	8.9782	8.9720	8.9796	8.9619	8.9926
Frequency (Upper AB CH_5070)	735.0MHz	8.9665	8.9788	8.9497	8.9580	8.9678	8.9416
Frequency (Lower BC CH_5110)	739.0MHz	8.9738	8.9500	8.9367	9.0053	8.9597	8.9939
Frequency (Middle BC CH_5117)	739.7MHz	8.9820	8.9701	8.9470	8.9748	8.9669	8.9447
Frequency (Upper BC CH_5123)	740.3MHz	8.9424	8.9473	8.9476	8.9526	8.9793	8.9899
Frequency (Block ABC CH_5090)	737.0MHz	8.9747	8.9566	8.9857	8.9750	8.9542	8.9535
RBW	180kHz						
VBW	1.8MHz						
CH BW	10MHz						
Span	20MHz						
Sweep	1ms						
Reference Level Offset	52.1dB						
Detector	Peak						
Attenuation	10dB						

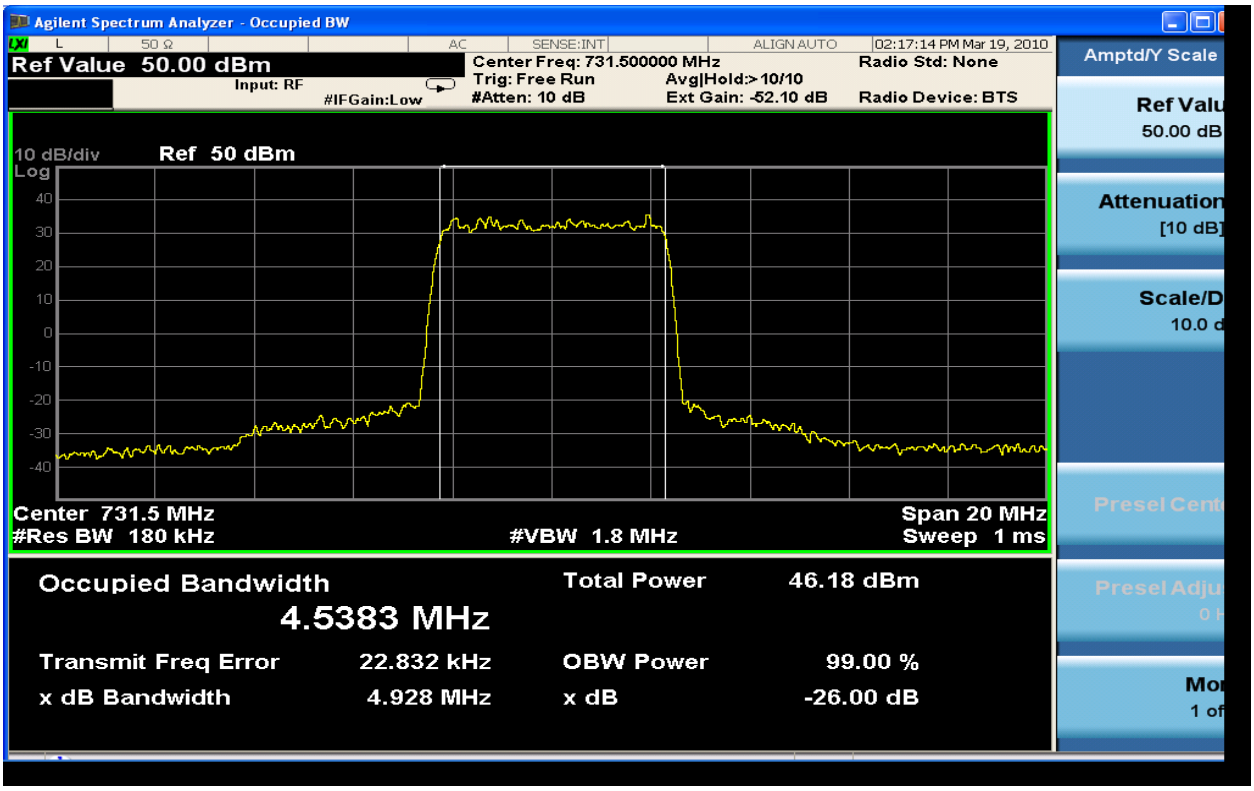


Figure 6-87: 5MHz Occupied Bandwidth TX1_QPSK at 731.5 MHz

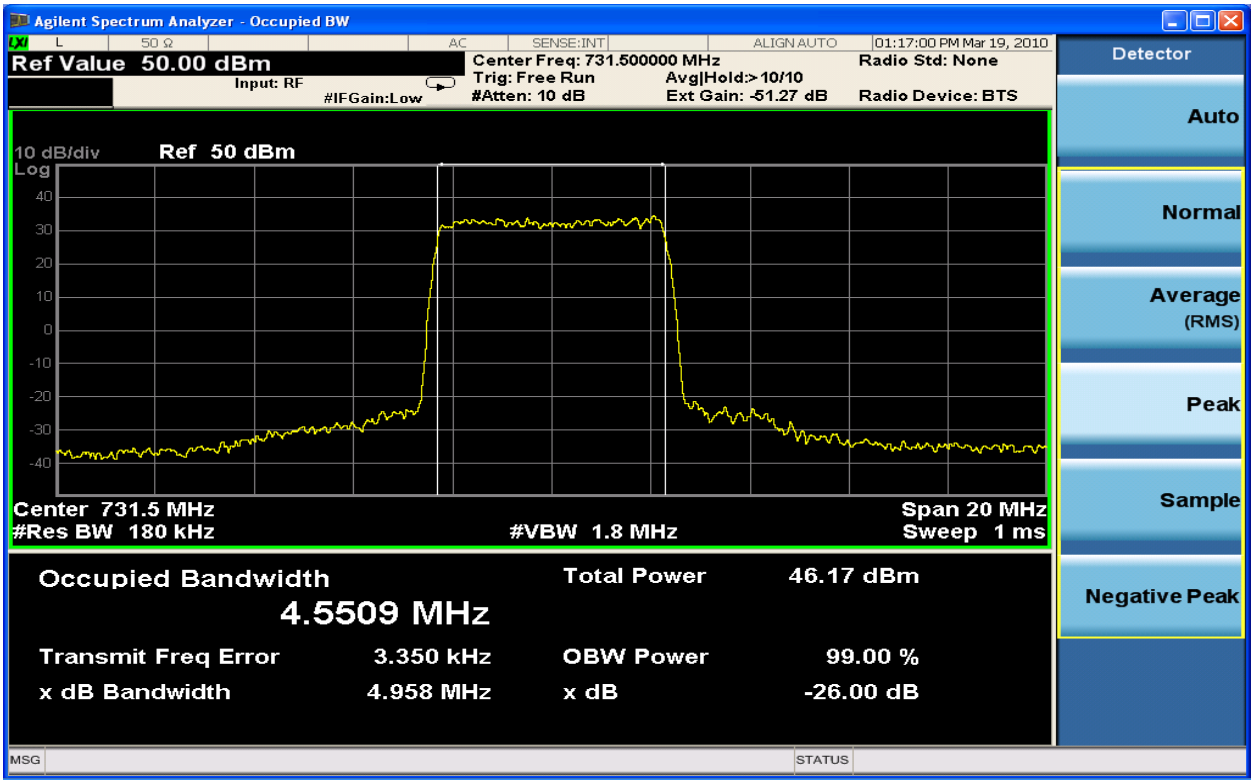


Figure 6-88: 5MHz Occupied Bandwidth TX2_QPSK at 731.5 MHz

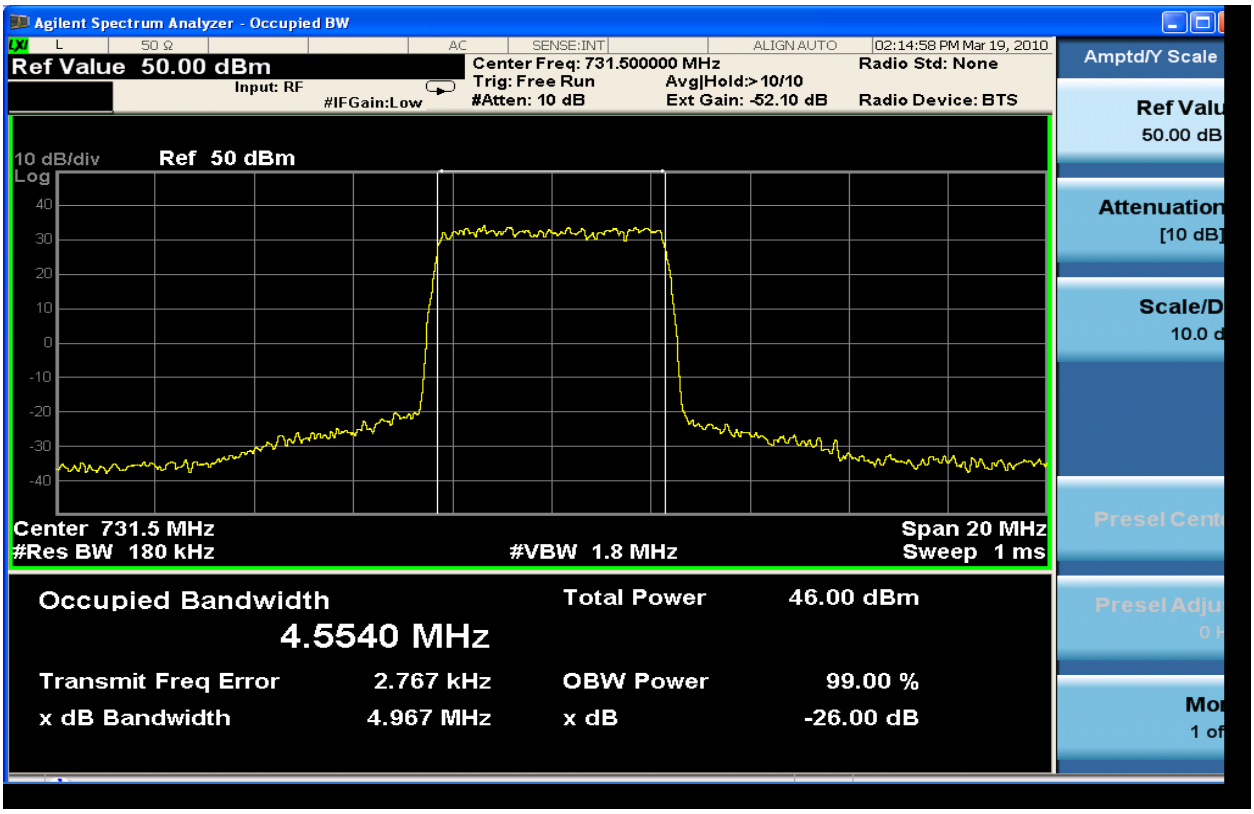


Figure 6-89: 5MHz Occupied Bandwidth TX1_16QAM at 731.5 MHz

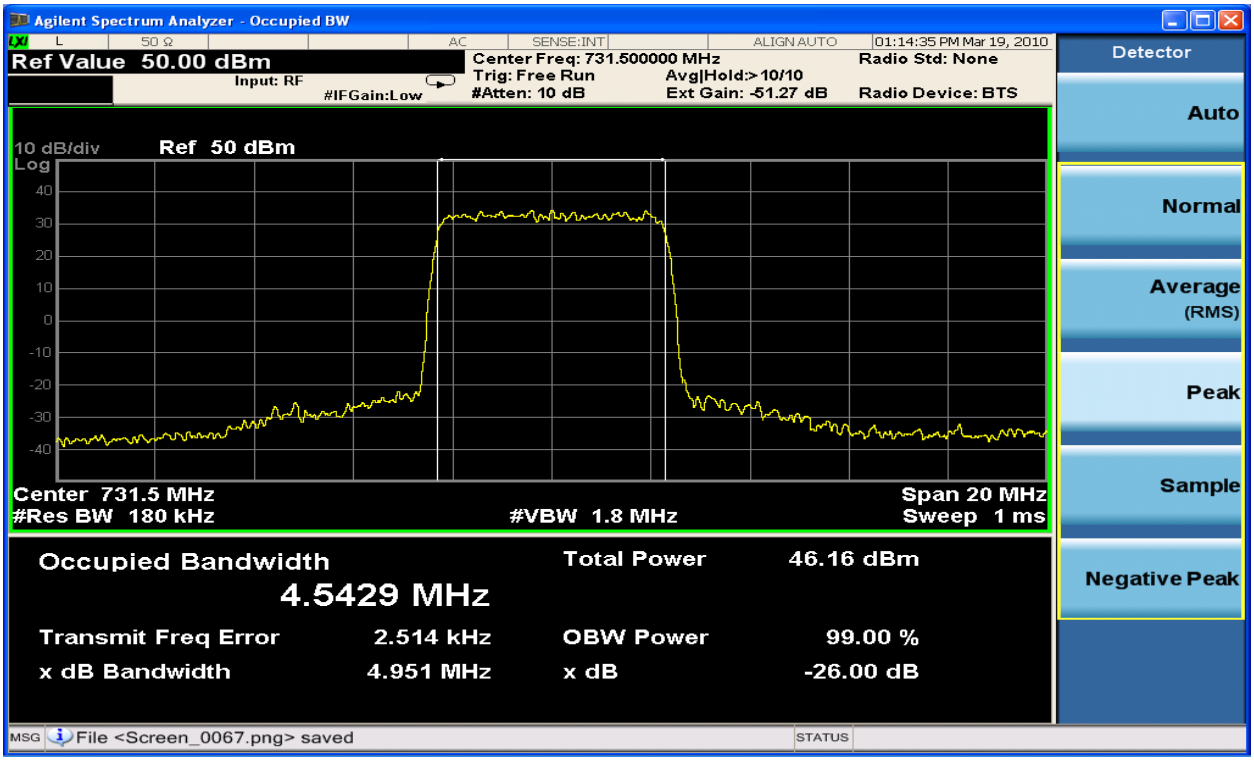


Figure 6-90: 5MHz Occupied Bandwidth TX2_16QAM at 731.5 MHz

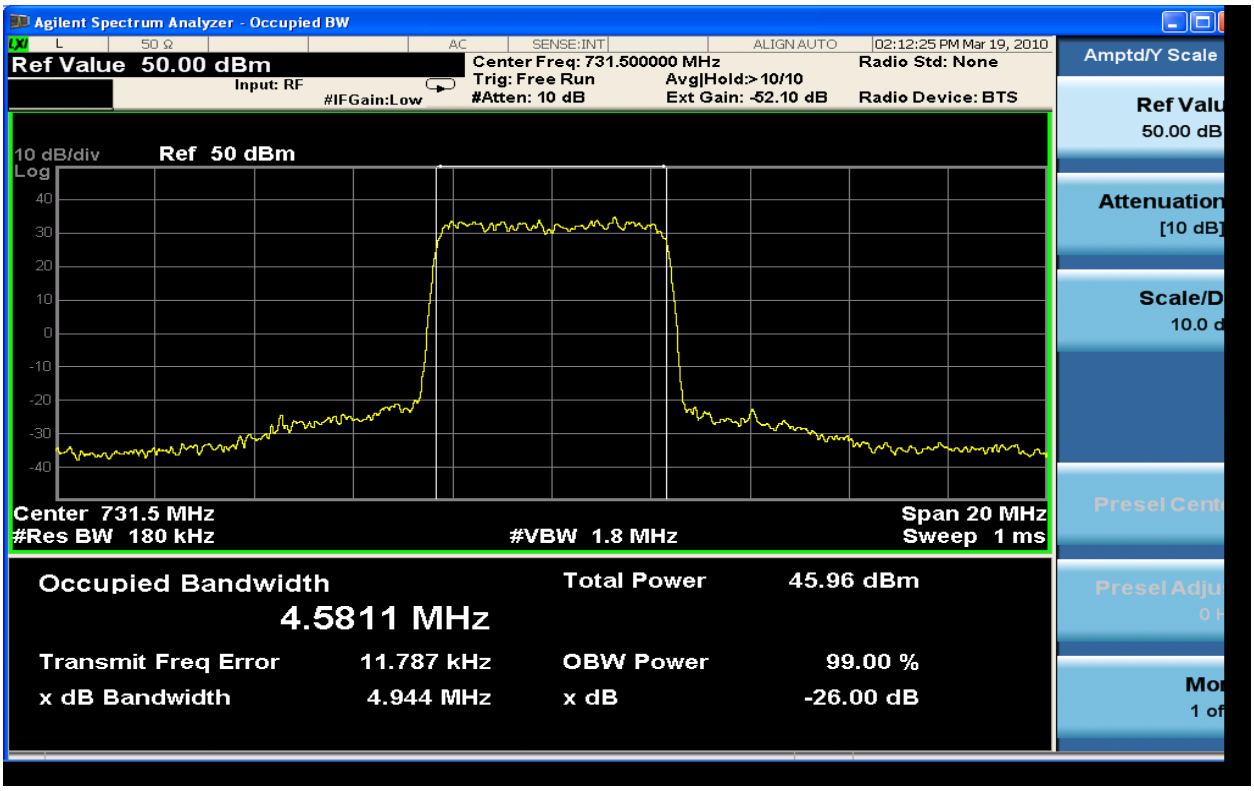


Figure 6-91: 5MHz Occupied Bandwidth TX1_64QAM at 731.5 MHz

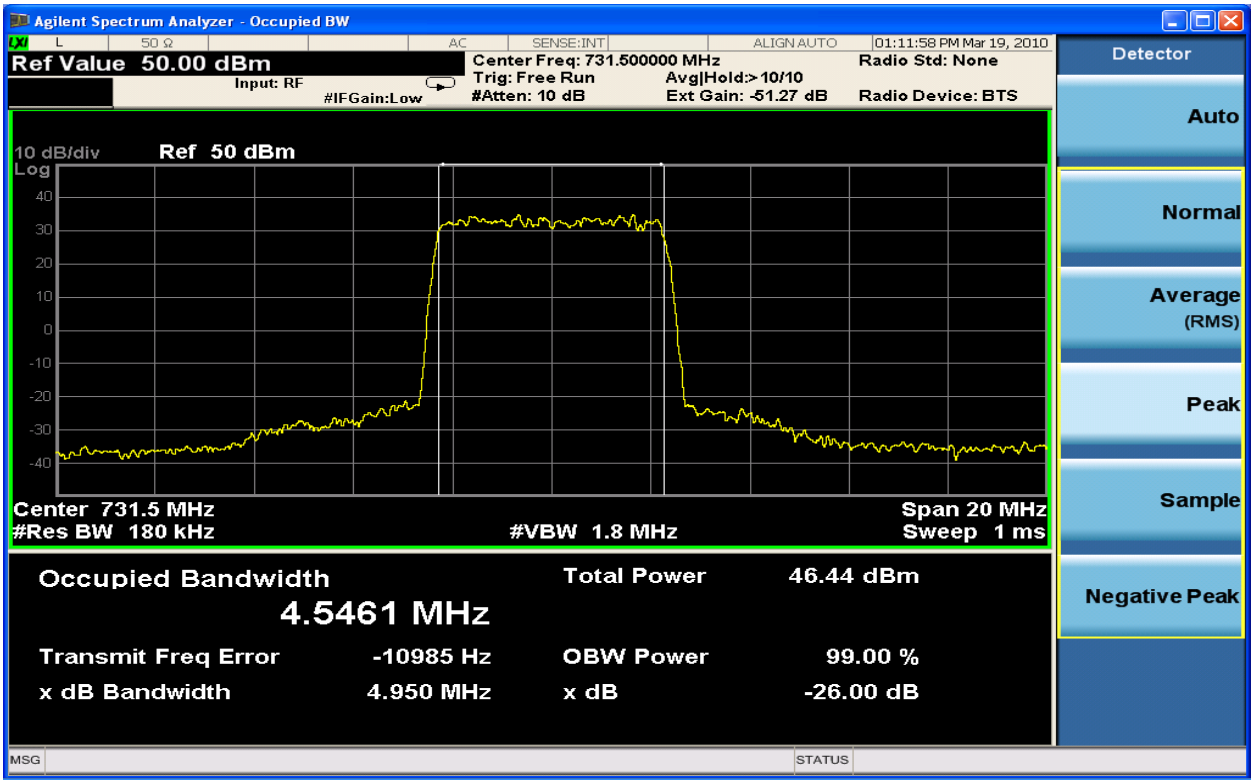


Figure 6-92: 5MHz Occupied Bandwidth TX2_64QAM at 731.5 MHz

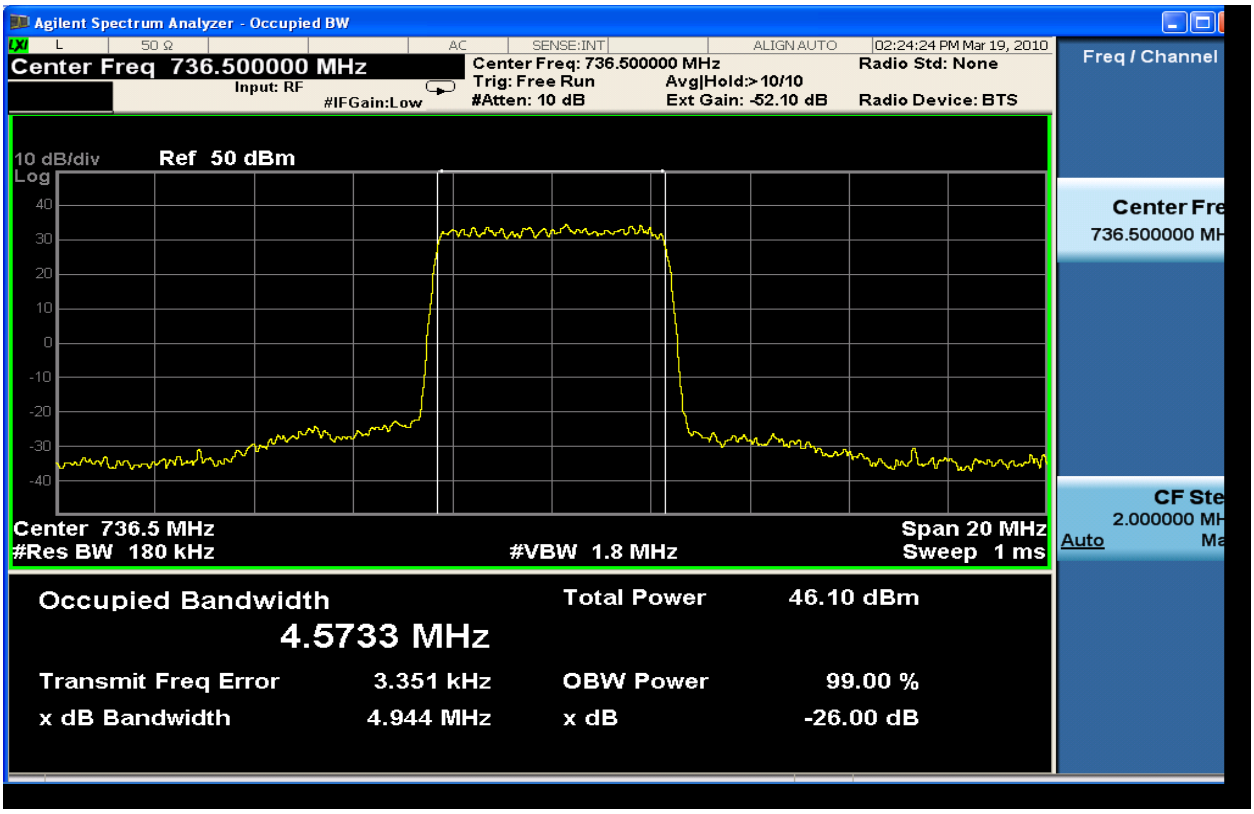


Figure 6-93: 5MHz Occupied Bandwidth TX1_QPSK at 736.5 MHz

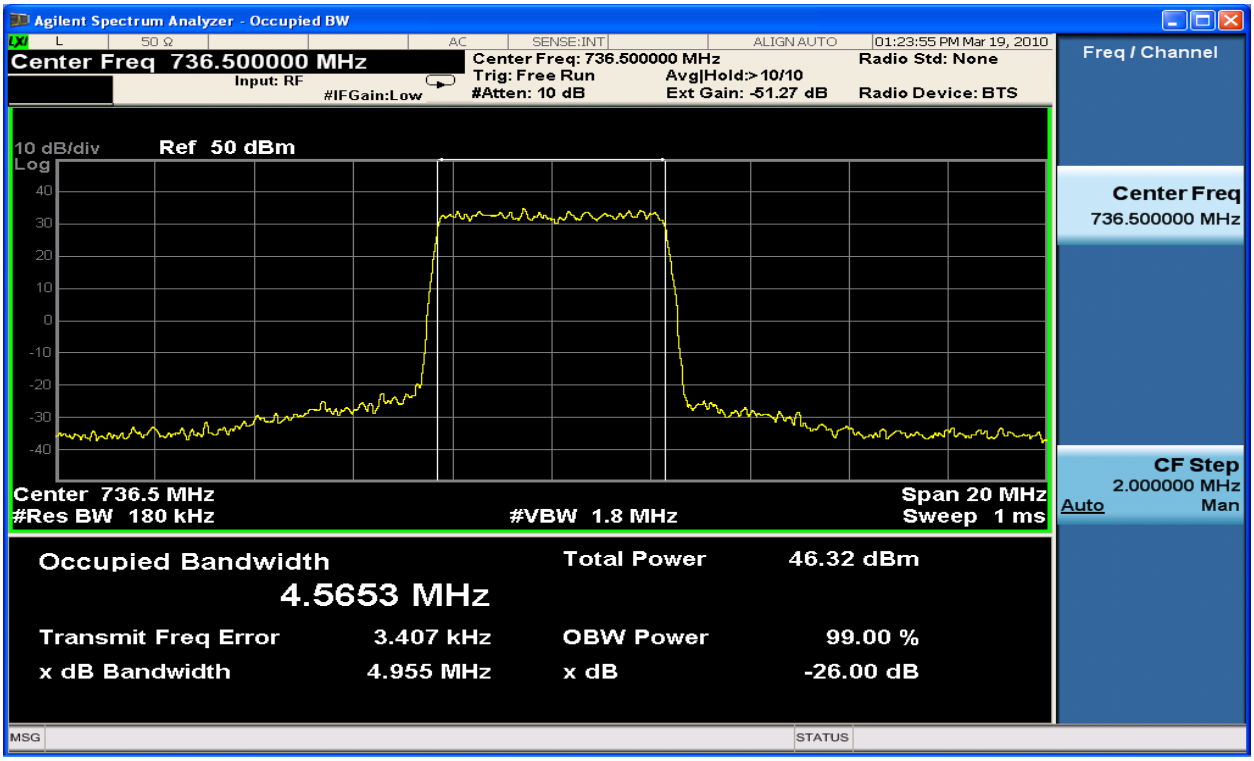


Figure 6-94: 5MHz Occupied Bandwidth TX2_QPSK at 736.5 MHz

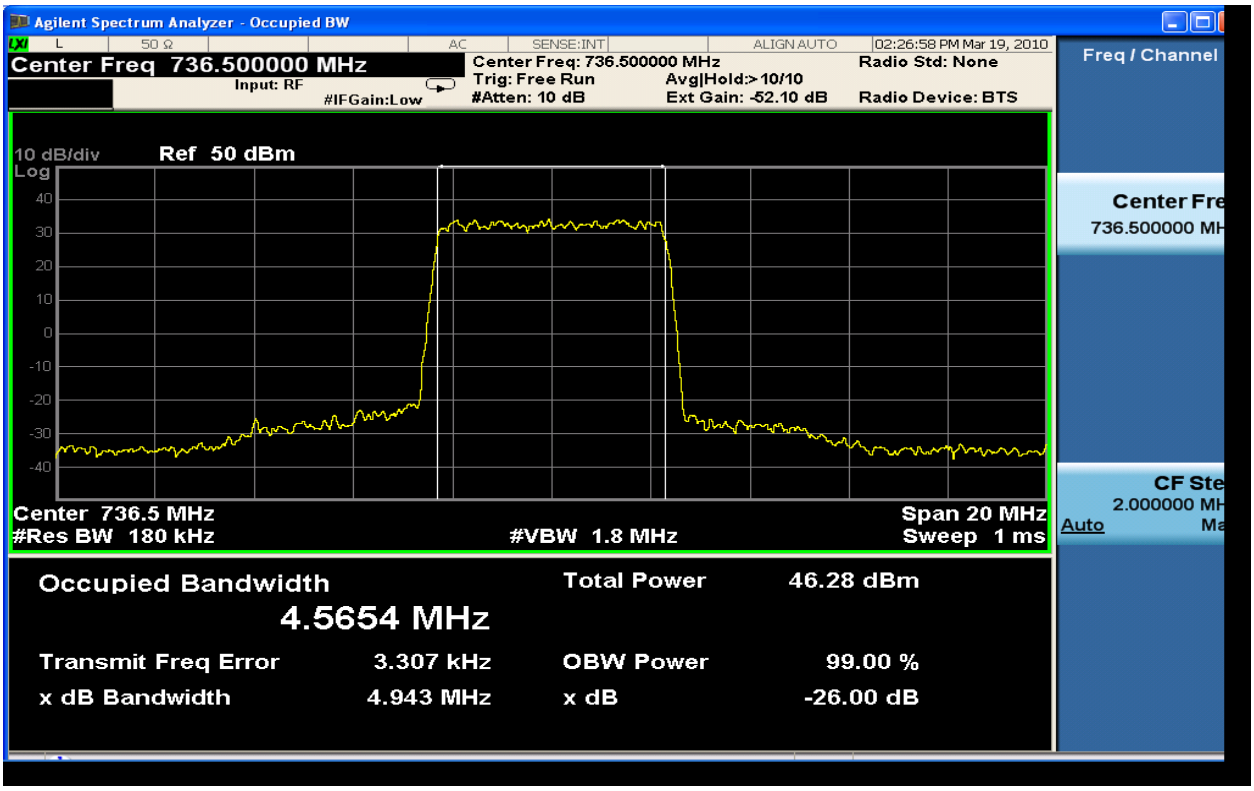


Figure 6-95: 5MHz Occupied Bandwidth TX1_16QAM at 736.5 MHz

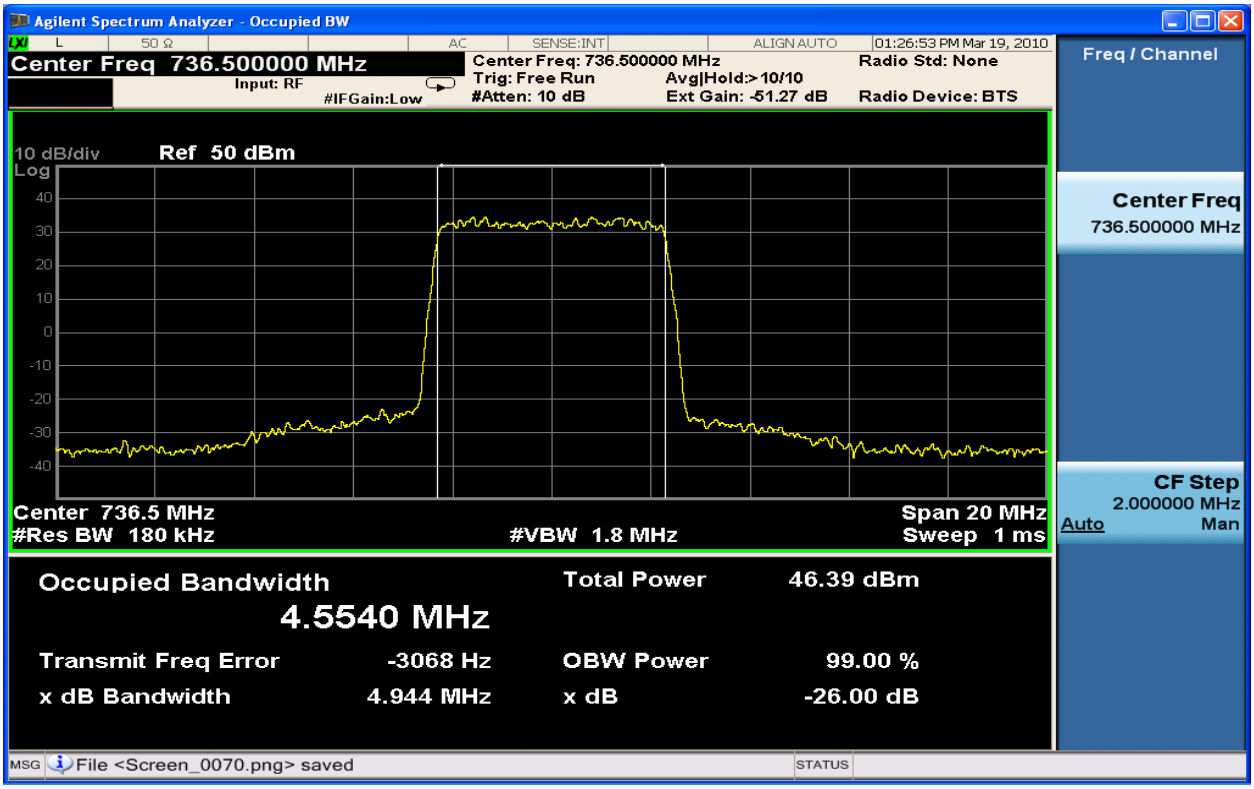


Figure 6-96: 5MHz Occupied Bandwidth TX2_16QAM at 736.5 MHz

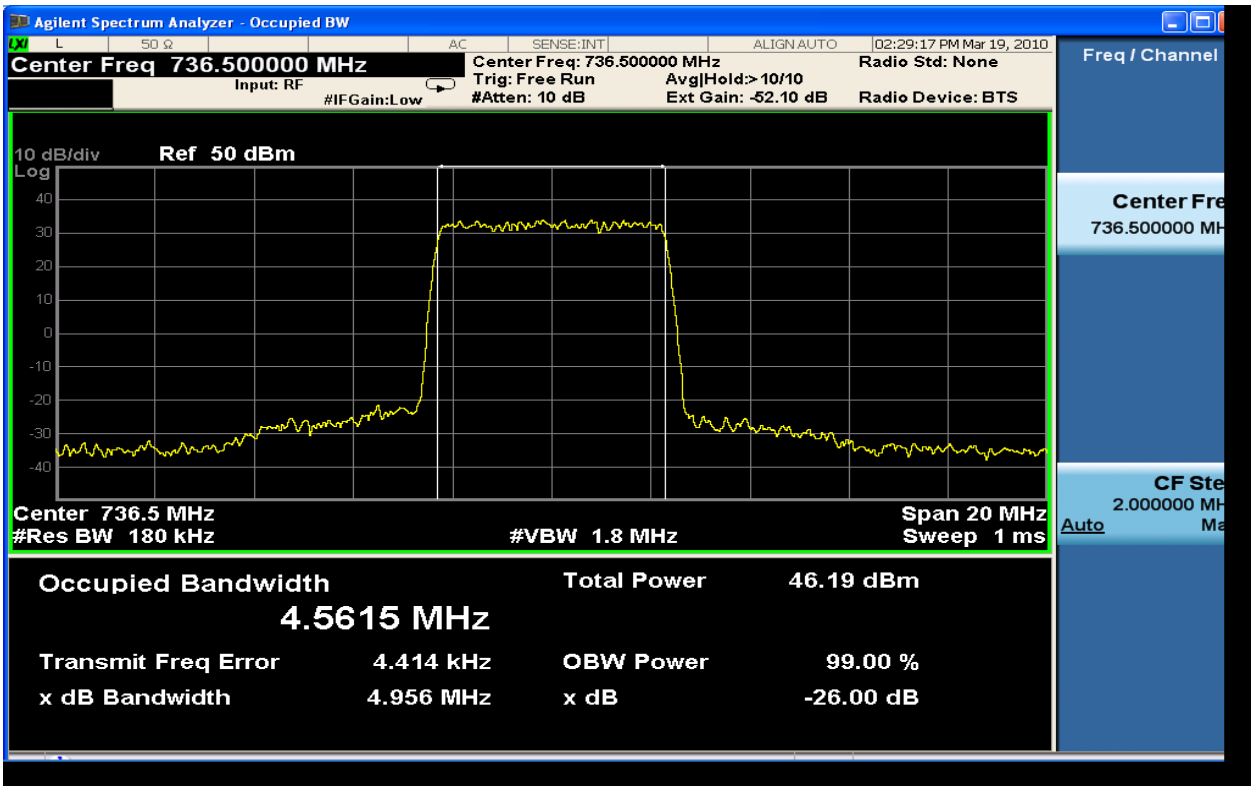


Figure 6-97: 5MHz Occupied Bandwidth TX1_64QAM at 736.5 MHz

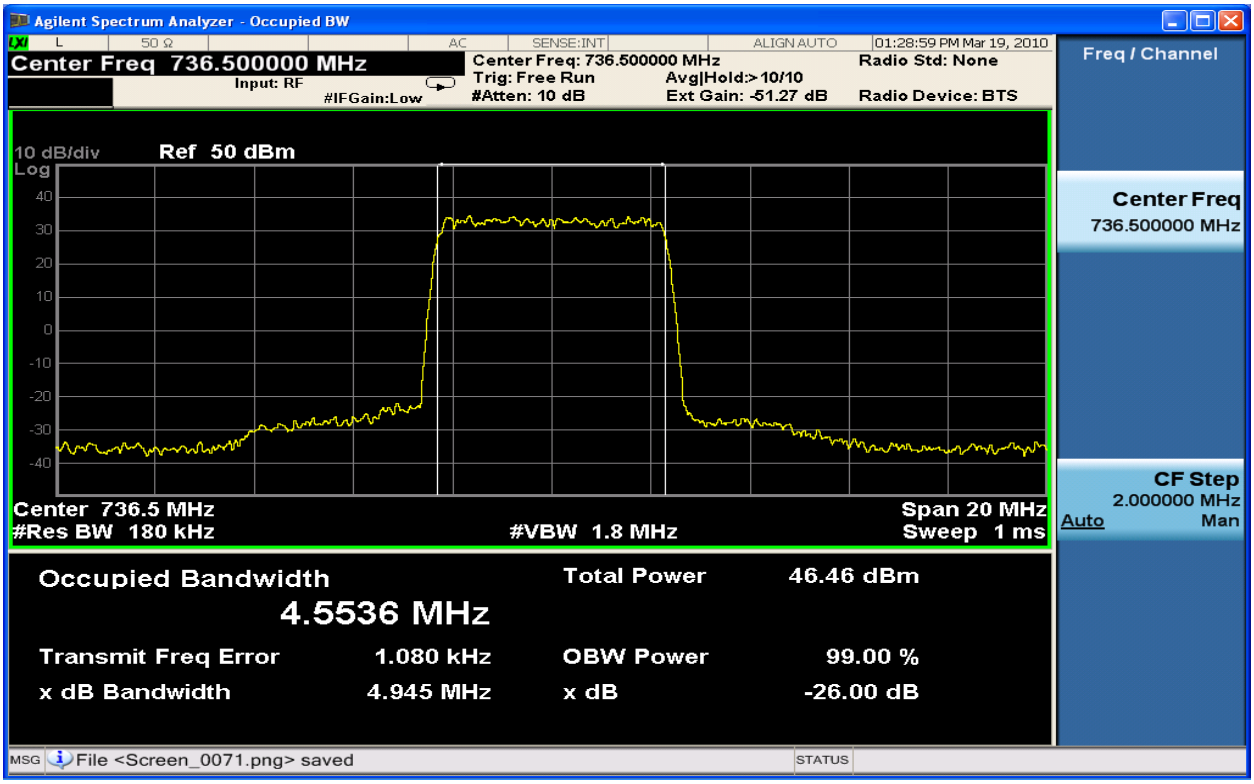


Figure 6-98: 5MHz Occupied Bandwidth TX2_64QAM at 736.5 MHz

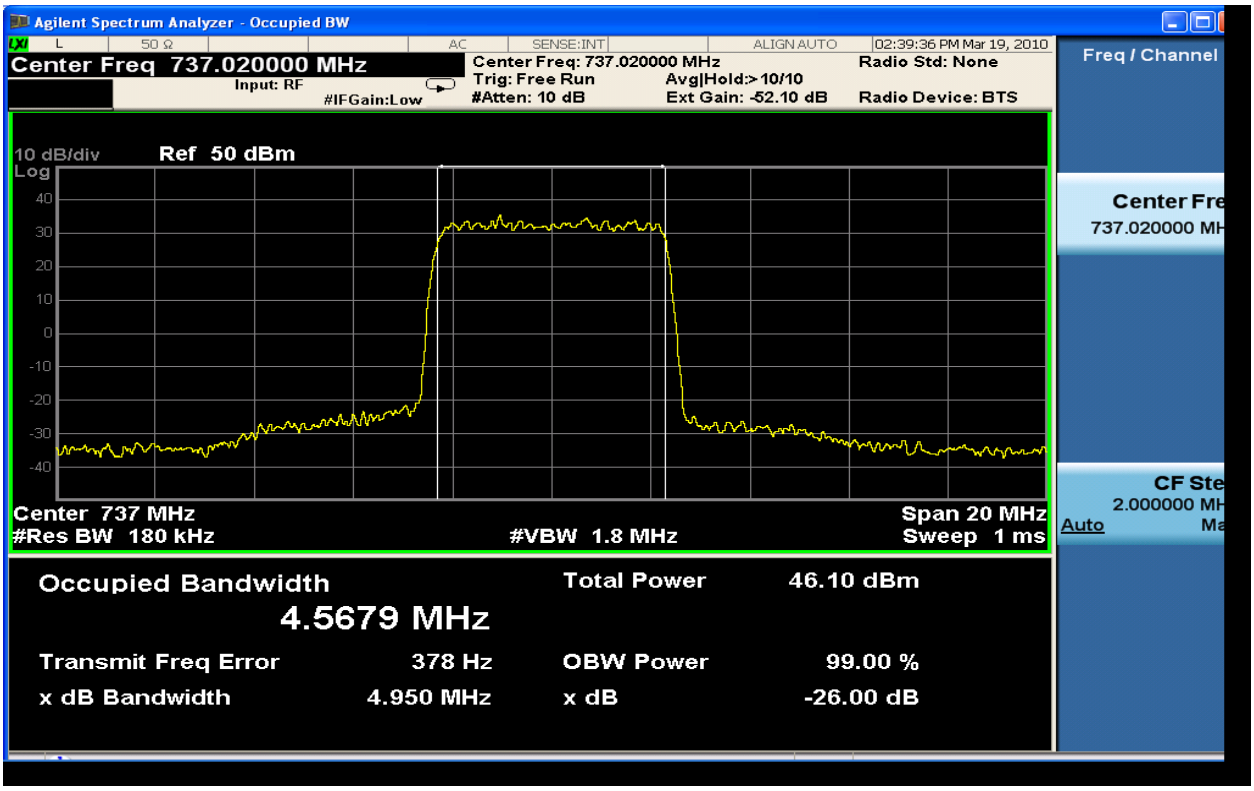


Figure 6-99: 5MHz Occupied Bandwidth TX1_QPSK at 737.0 MHz

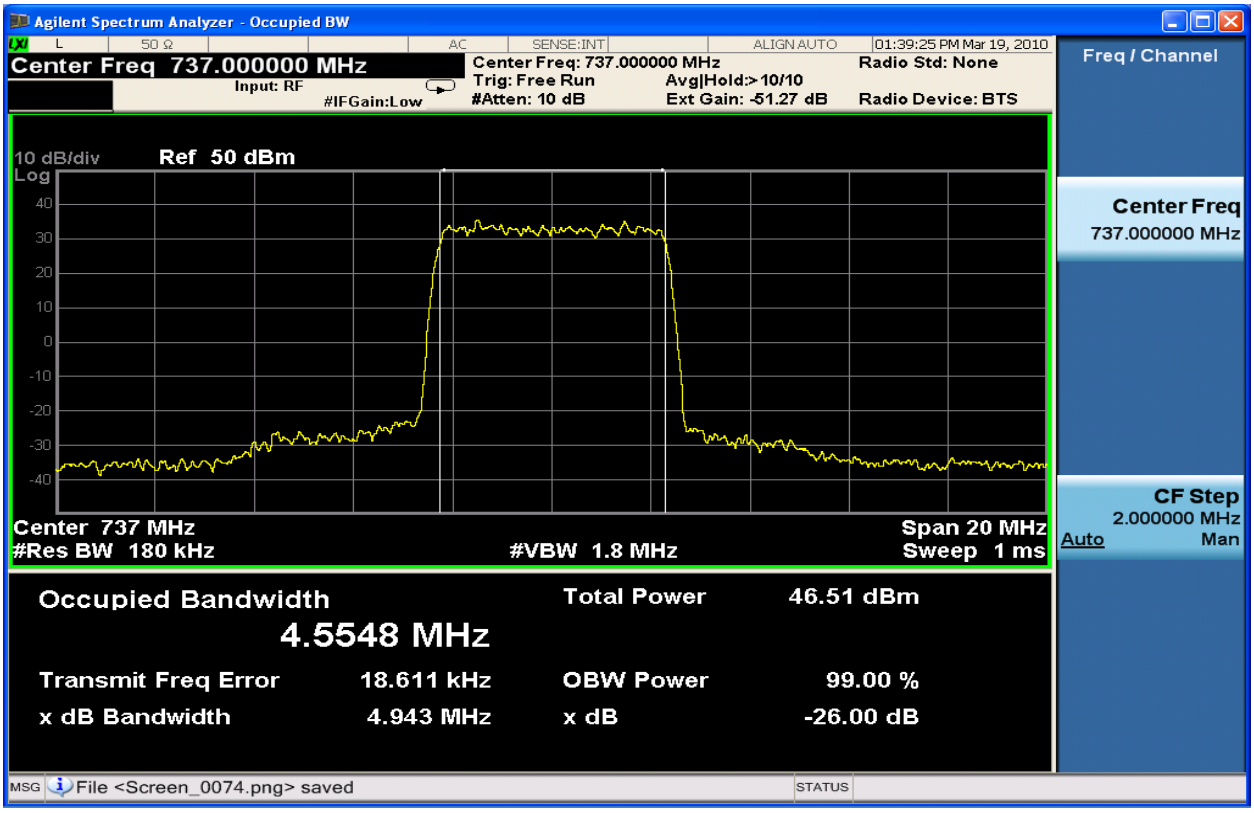


Figure 6-100: 5MHz Occupied Bandwidth TX2_QPSK at 737.0 MHz

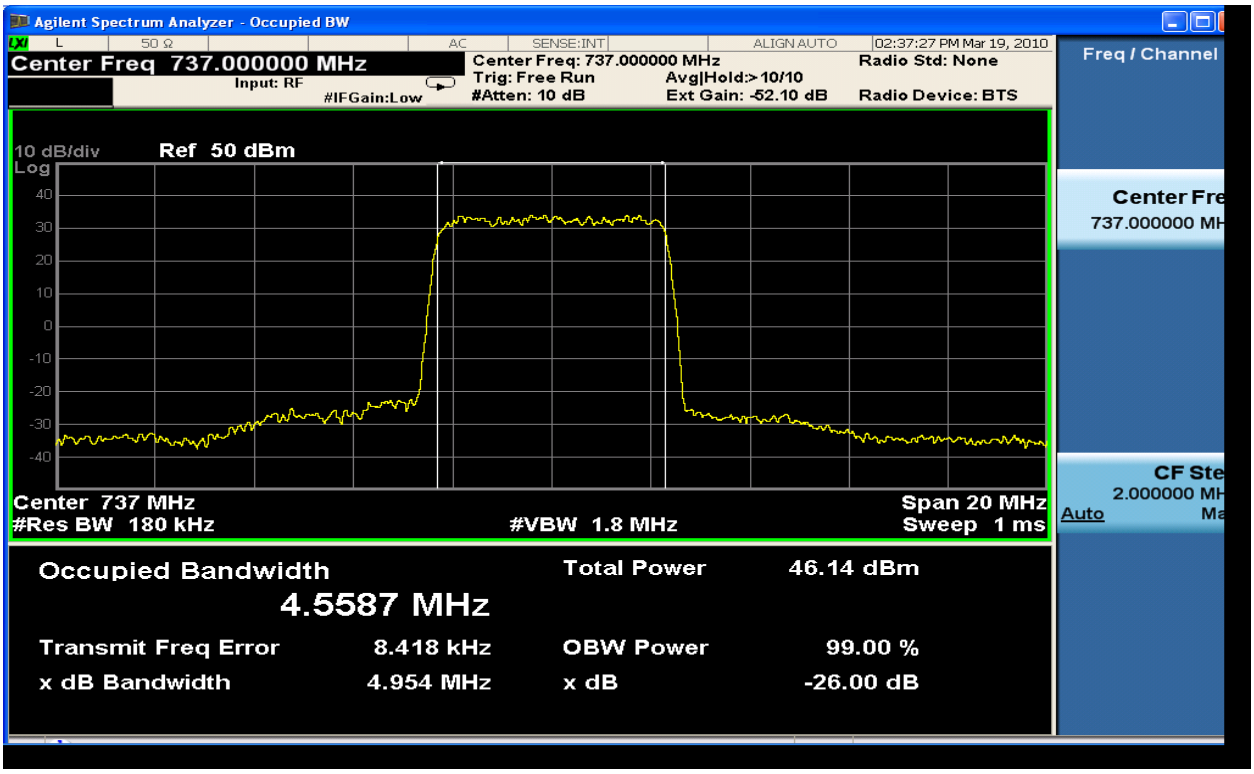


Figure 6-101: 5MHz Occupied Bandwidth TX1_16QAM at 737.0 MHz

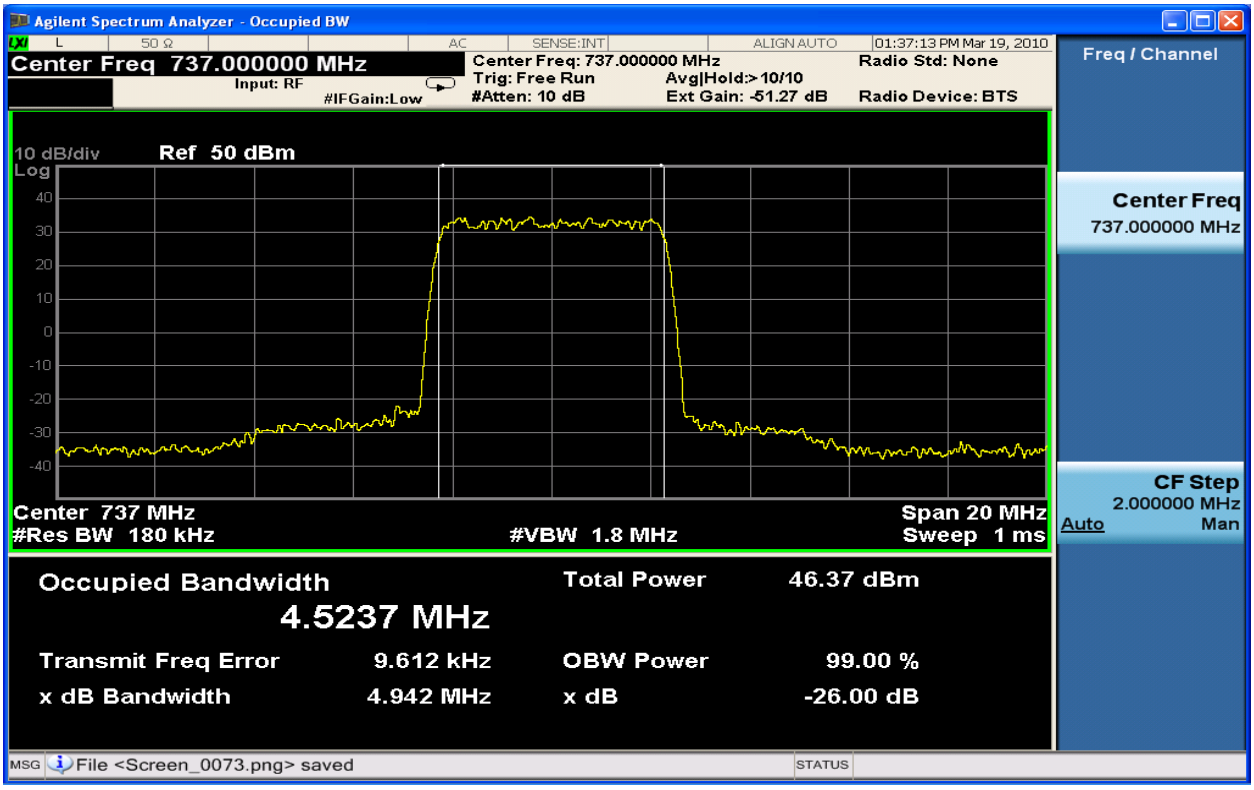


Figure 6-102: 5MHz Occupied Bandwidth TX2_16QAM at 737.0 MHz

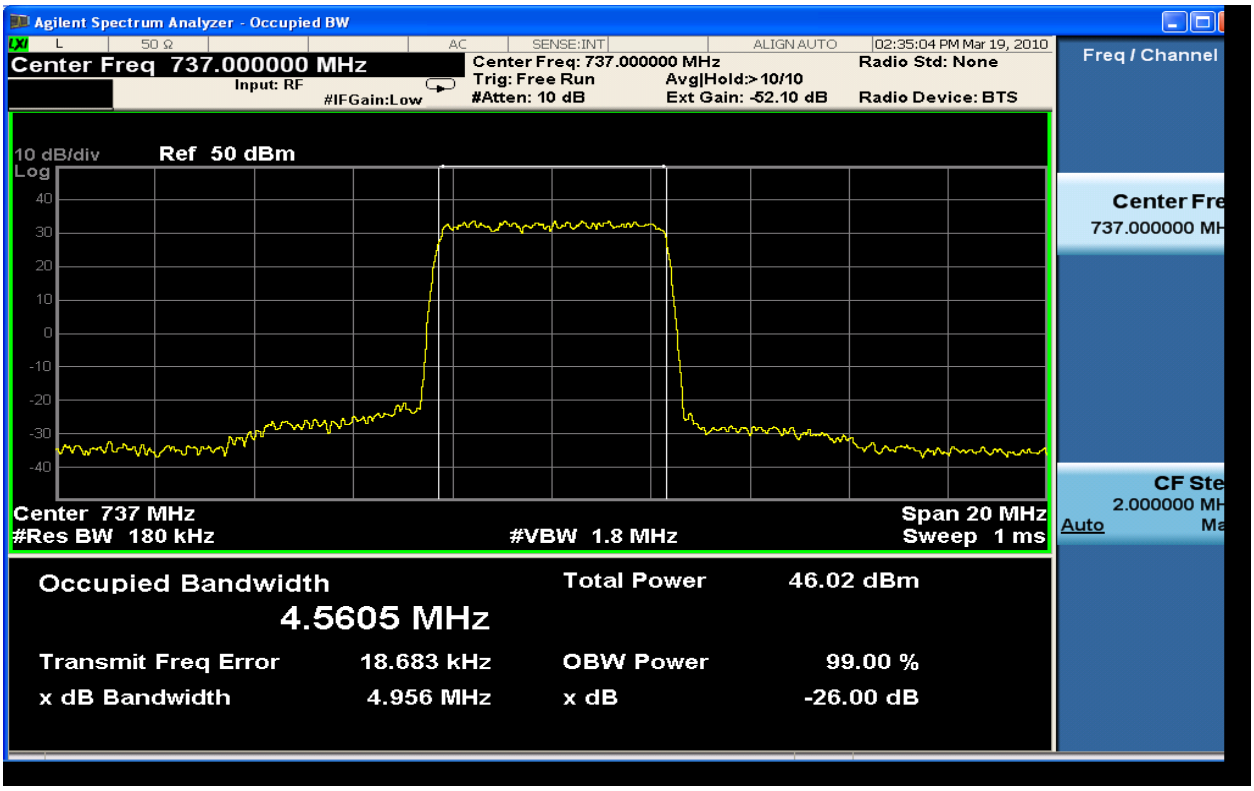


Figure 6-103: 5MHz Occupied Bandwidth TX1_64QAM at 737.0 MHz

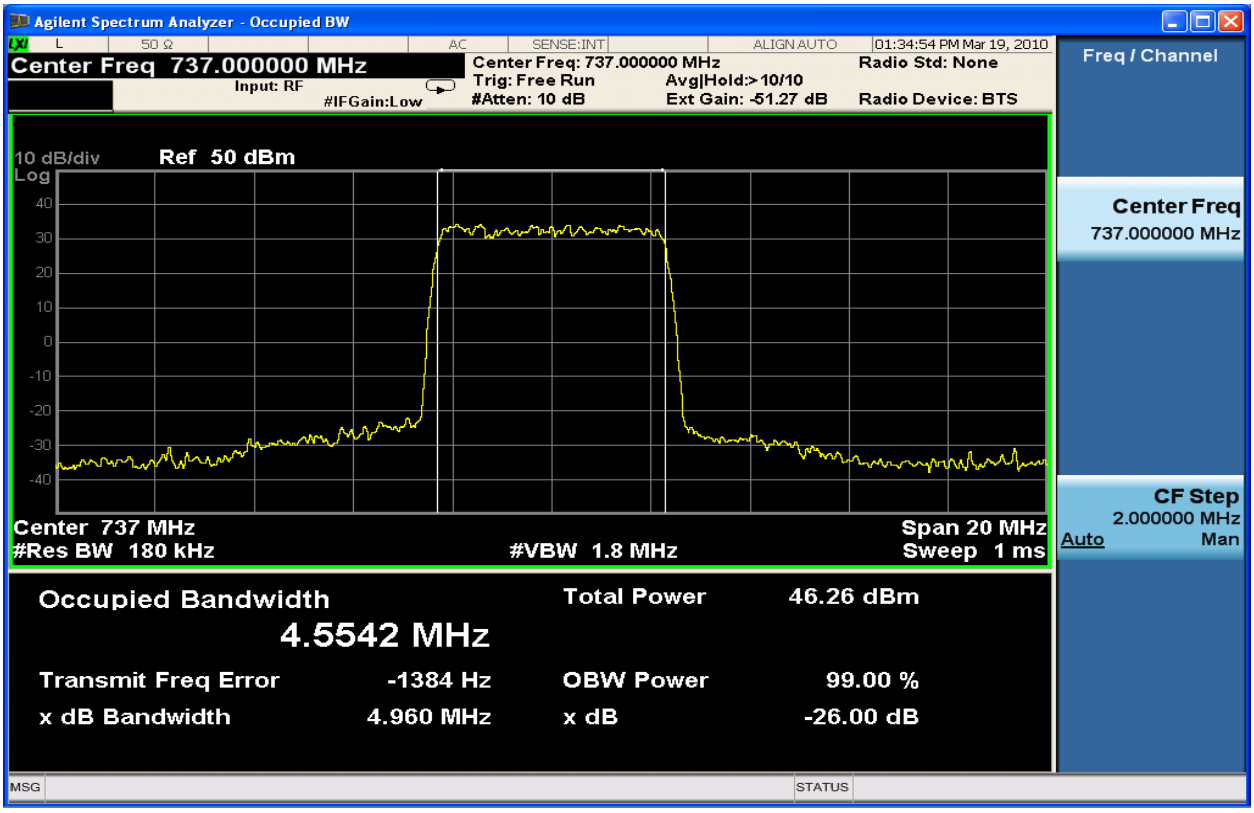


Figure 6-104: 5MHz Occupied Bandwidth TX2_64QAM at 737.0 MHz

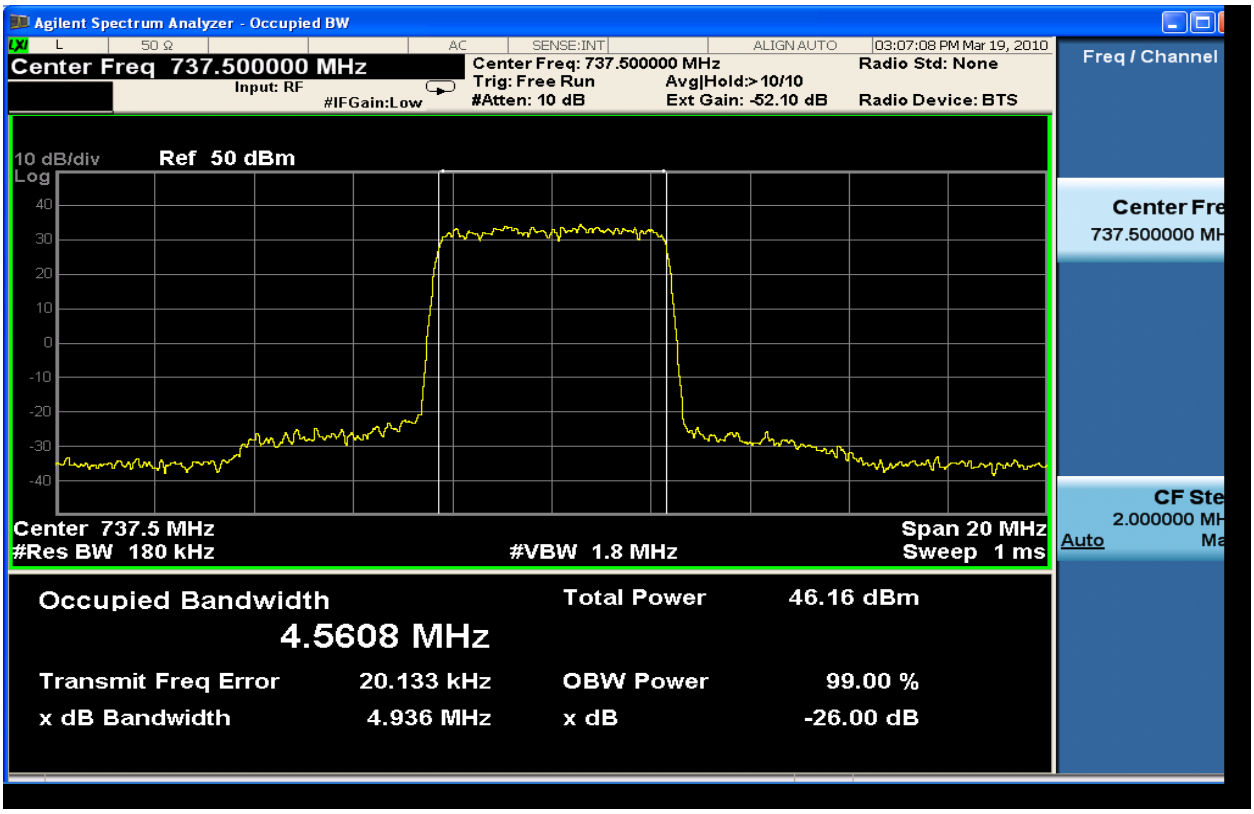


Figure 6-105: 5MHz Occupied Bandwidth TX1_QPSK at 737.5 MHz

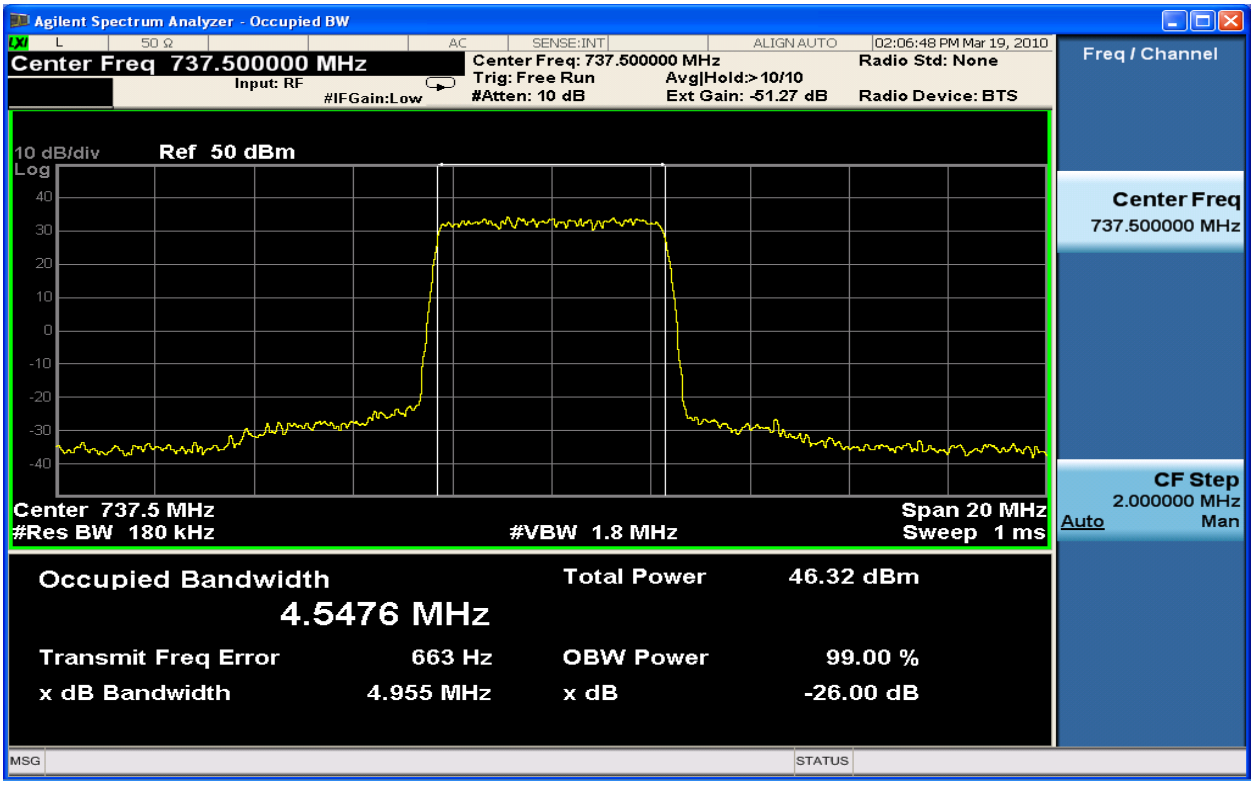


Figure 6-106: 5MHz Occupied Bandwidth TX2_QPSK at 737.5 MHz

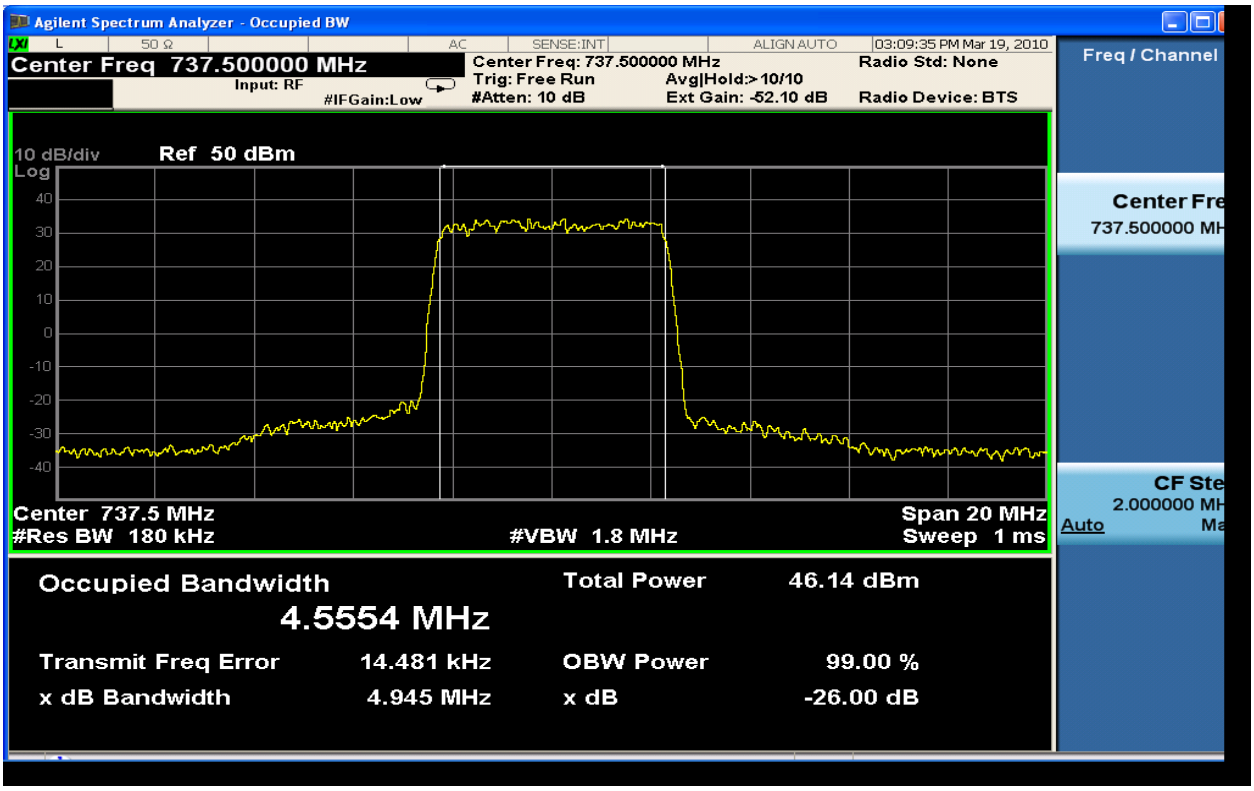


Figure 6-107: 5MHz Occupied Bandwidth TX1_16QAM at 737.5 MHz

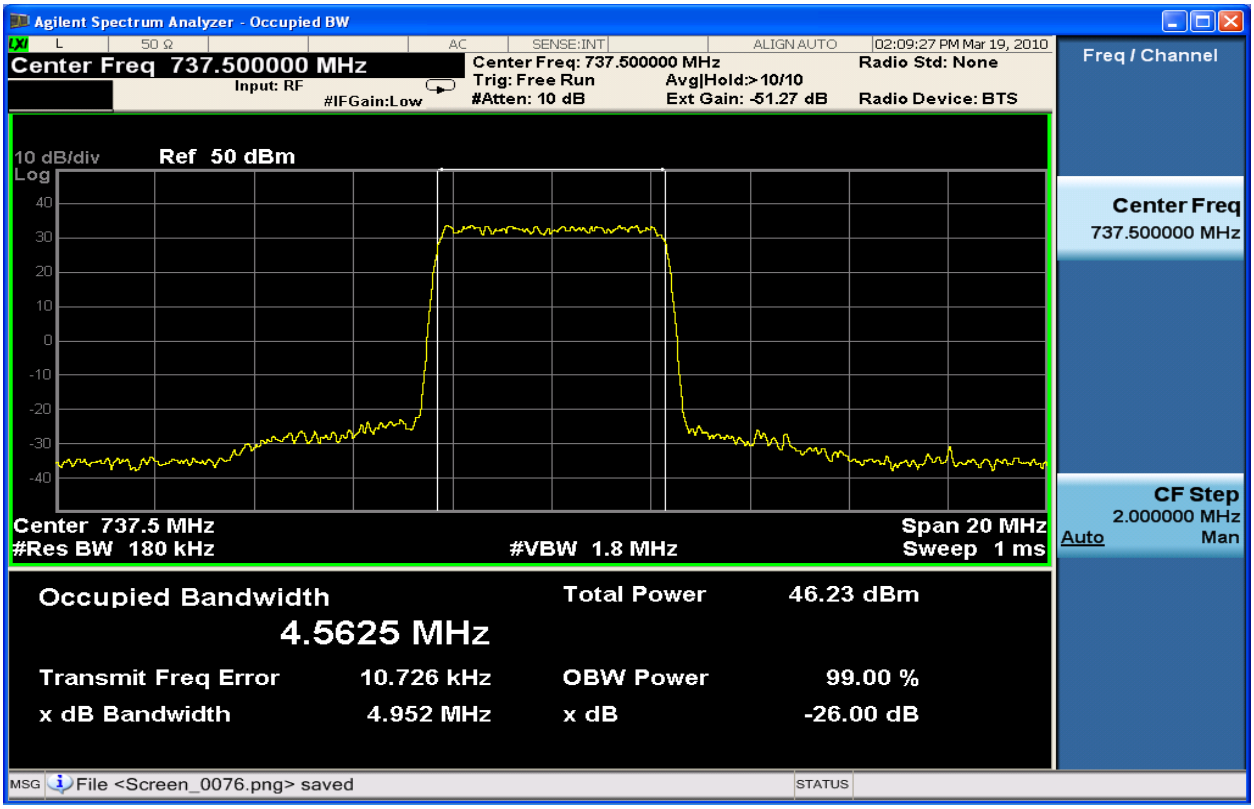


Figure 6-108: 5MHz Occupied Bandwidth TX2_16QAM at 737.5 MHz

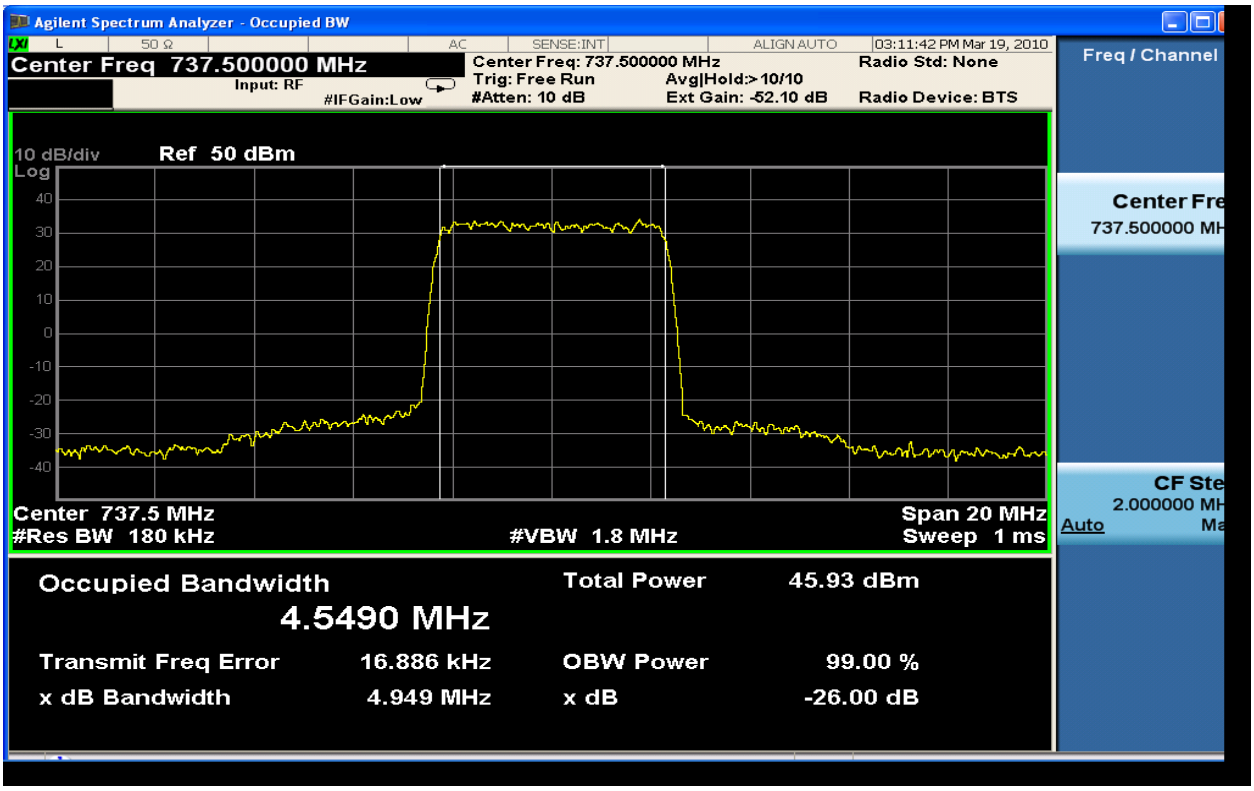


Figure 6-109: 5MHz Occupied Bandwidth TX1_64QAM at 737.5 MHz

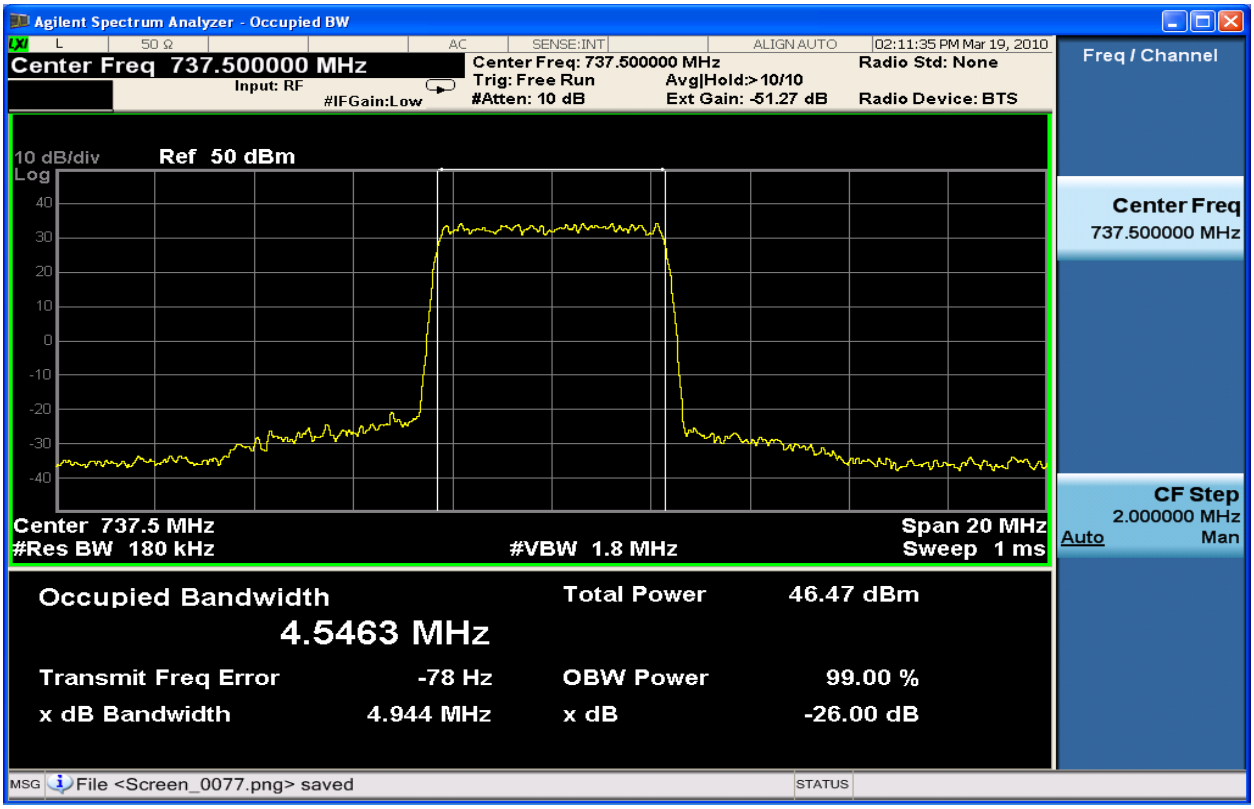


Figure 6-110: 5MHz Occupied Bandwidth TX2_64QAM at 737.5 MHz

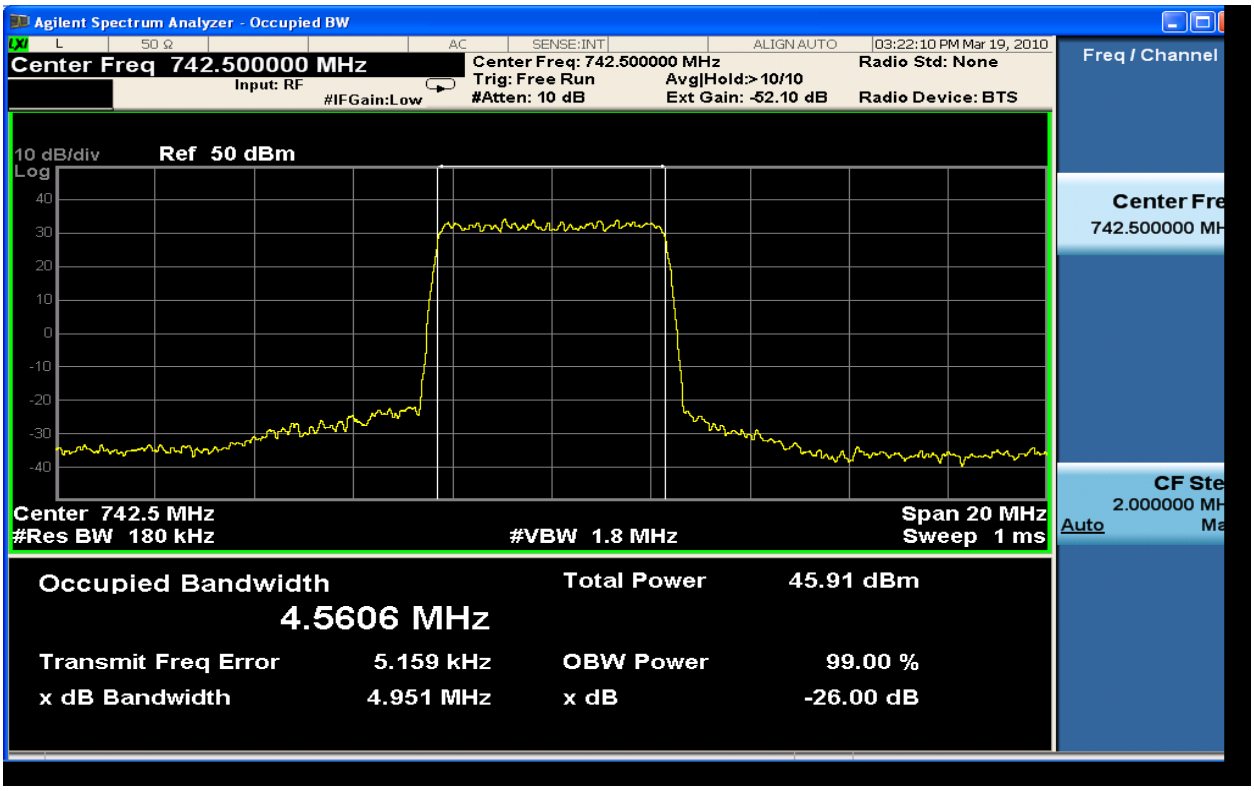


Figure 6-111: 5MHz Occupied Bandwidth TX1_QPSK at 742.5 MHz

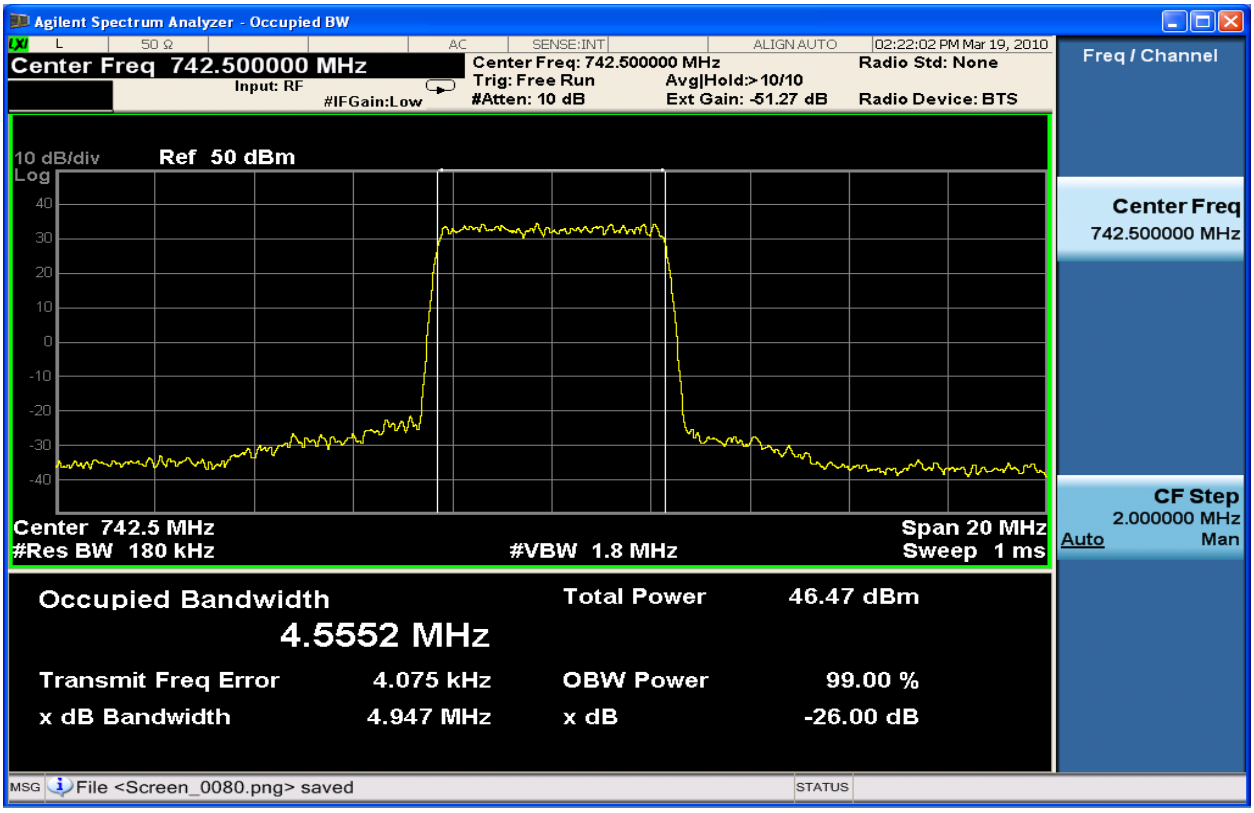


Figure 6-112: 5MHz Occupied Bandwidth TX2_QPSK at 742.5 MHz

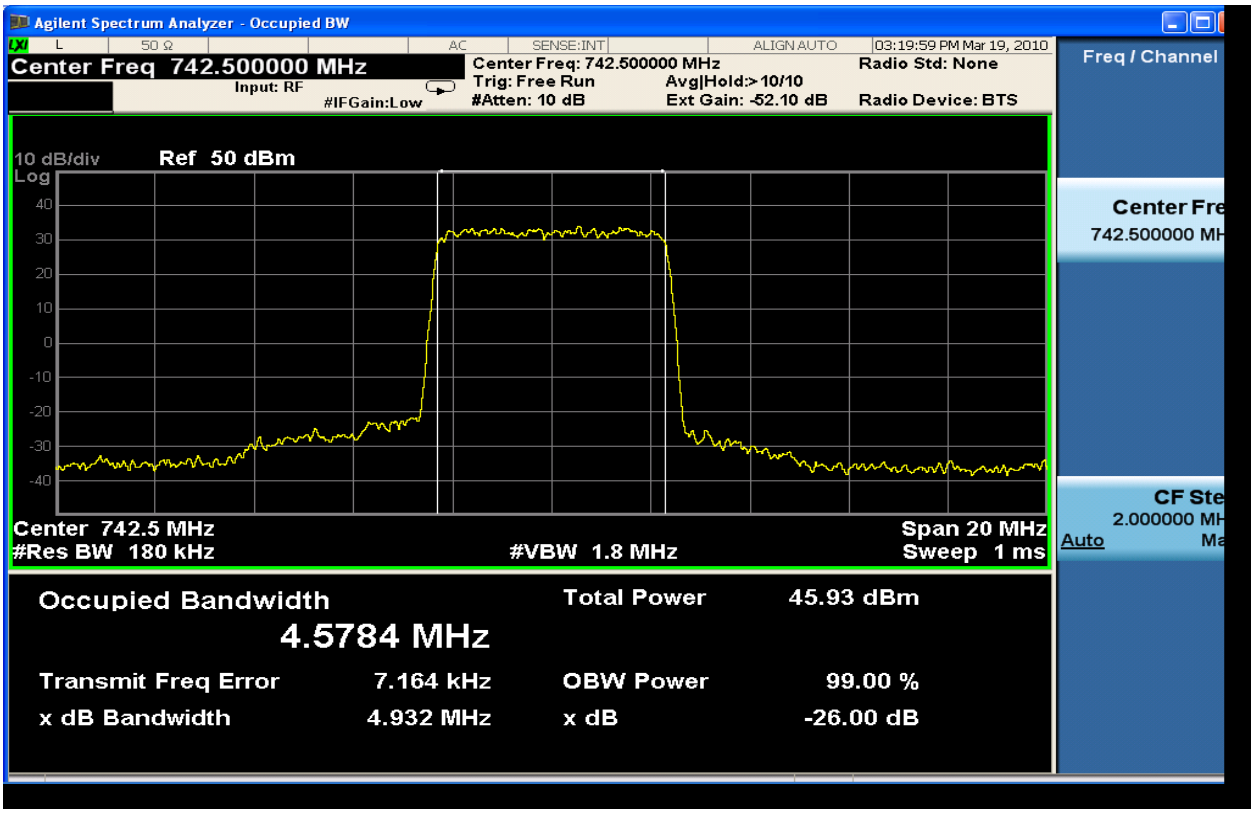


Figure 6-113: 5MHz Occupied Bandwidth TX1_16QAM at 742.5 MHz

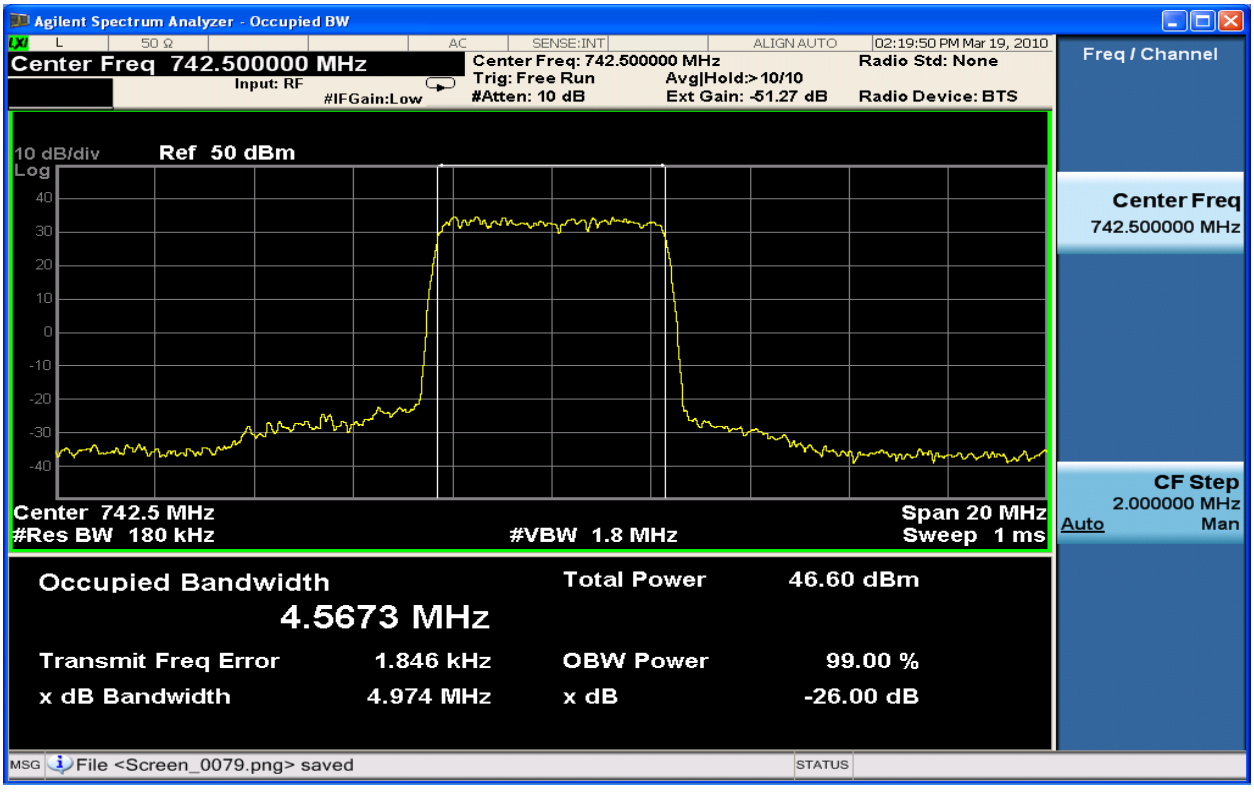


Figure 6-114: 5MHz Occupied Bandwidth TX2_16QAM at 742.5 MHz

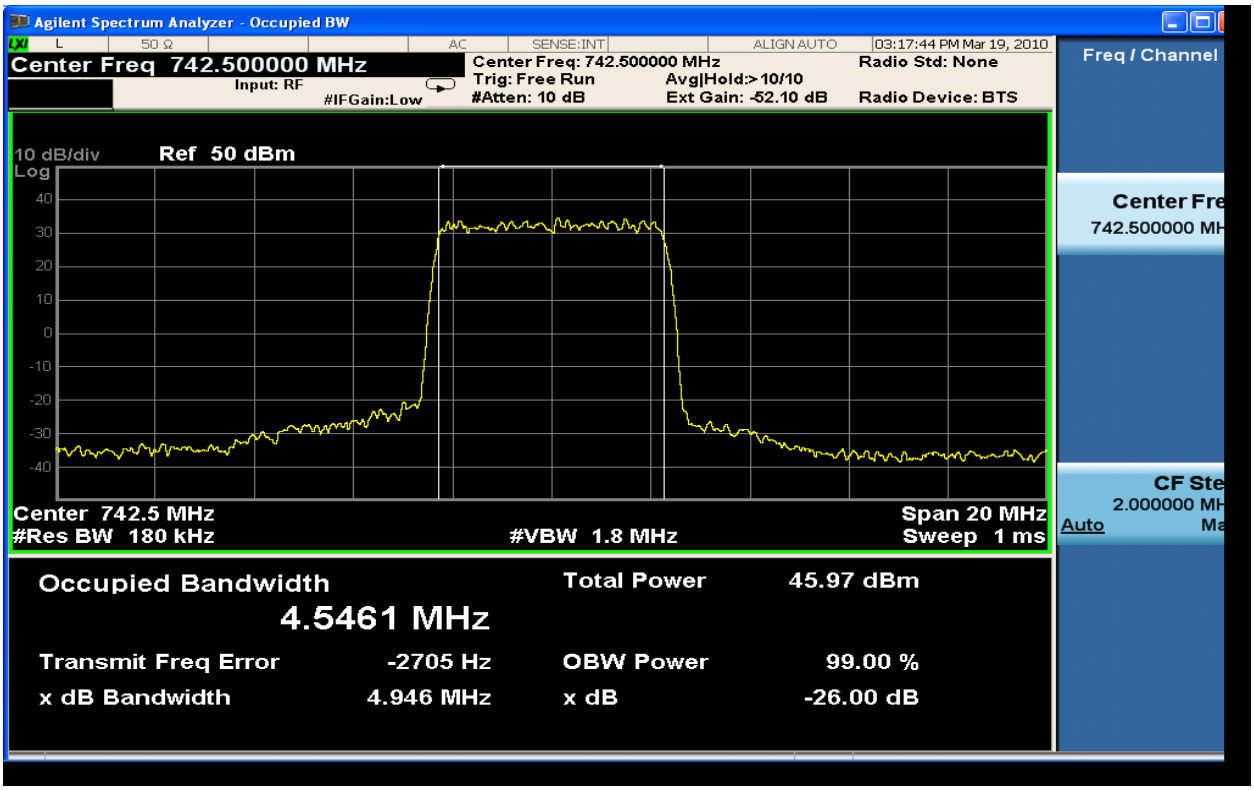


Figure 6-115: 5MHz Occupied Bandwidth TX1_64QAM at 742.5 MHz

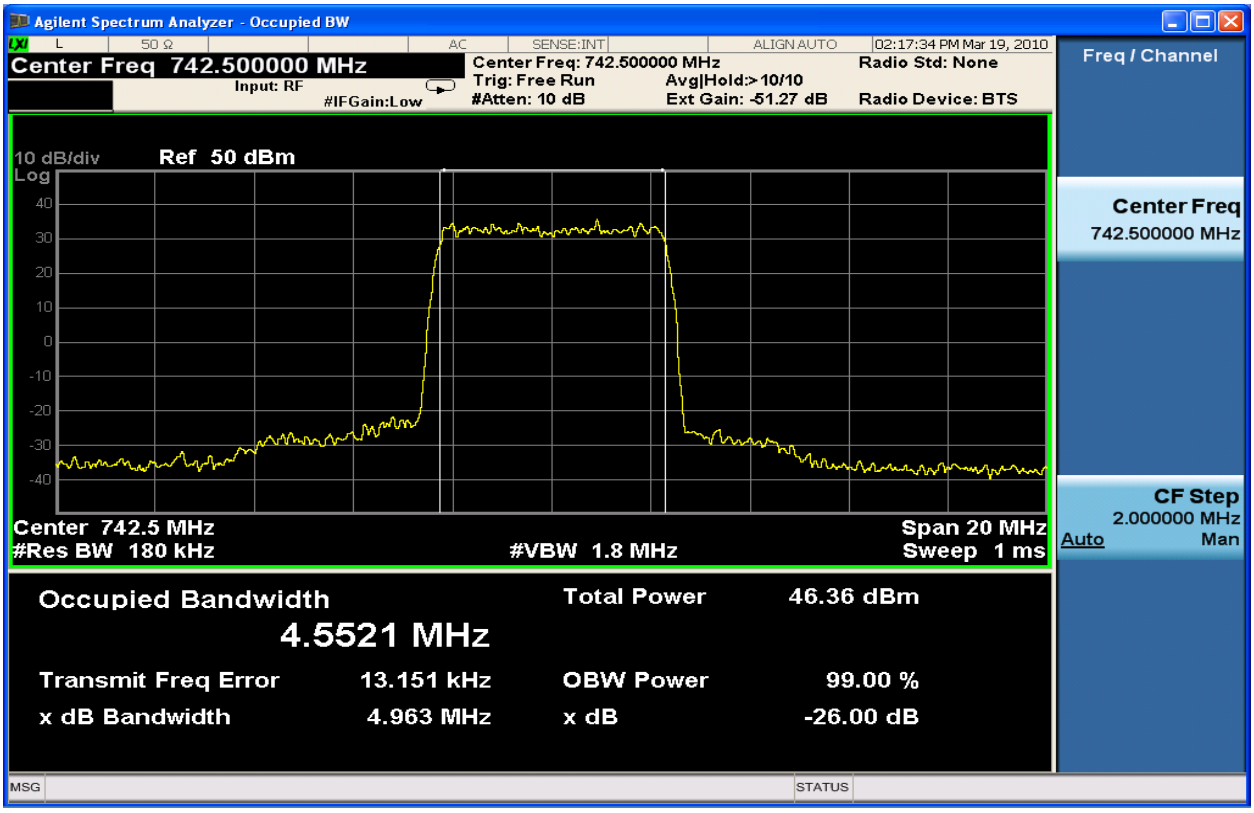


Figure 6-116: 5MHz Occupied Bandwidth TX2_64QAM at 742.5 MHz

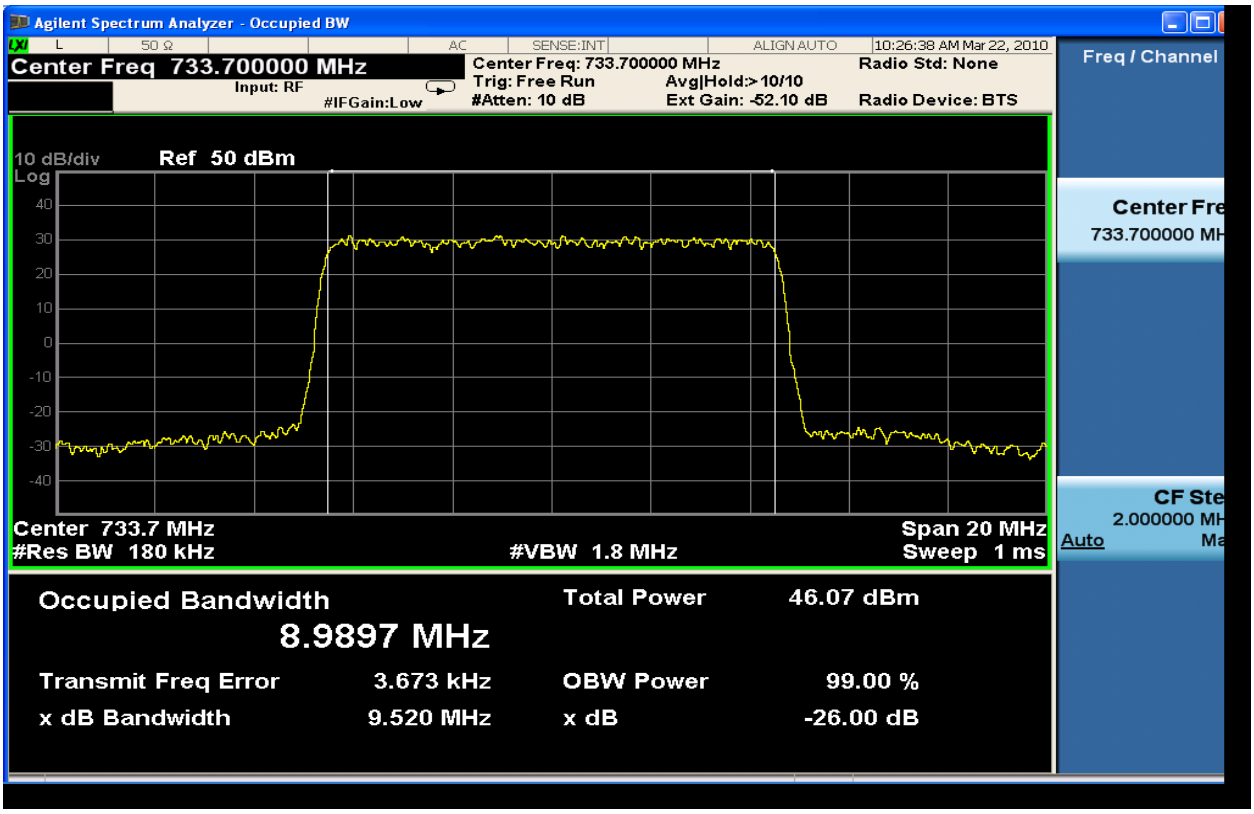


Figure 6-117: 10MHz Occupied Bandwidth TX1_QPSK at 733.7 MHz

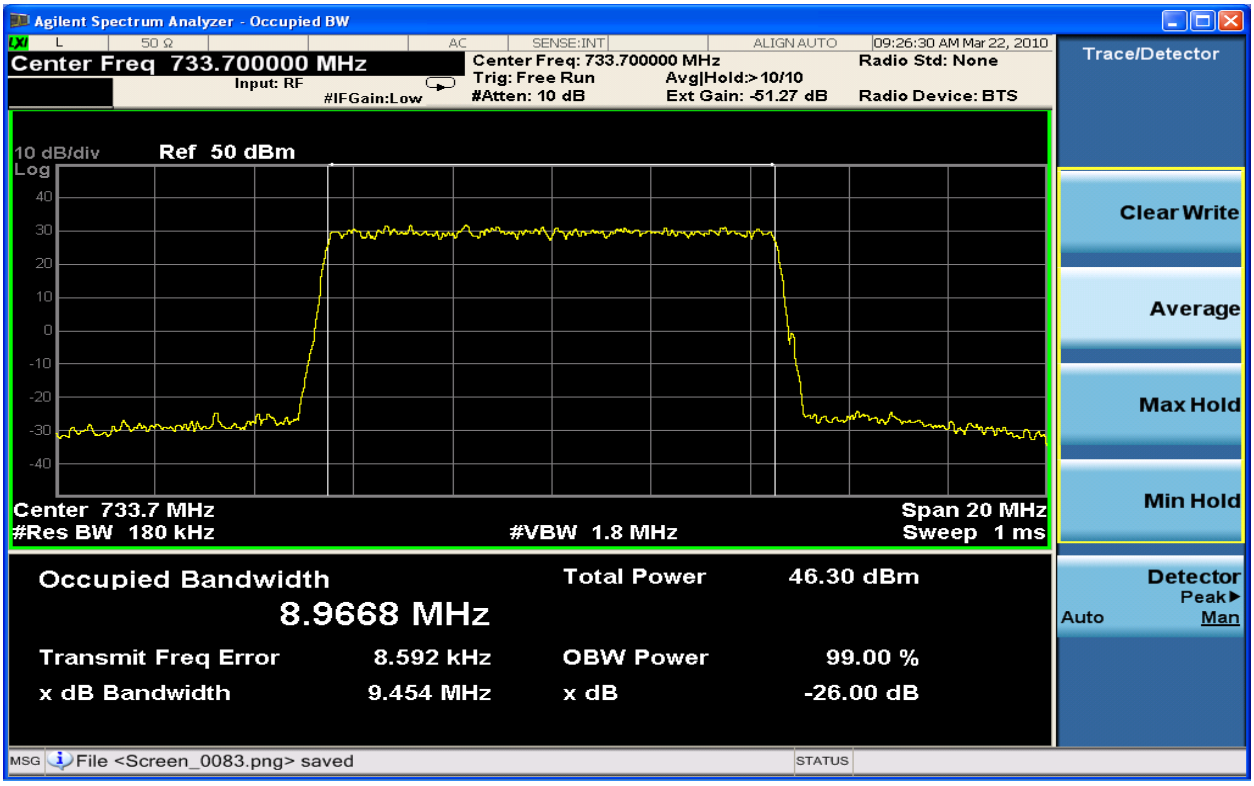


Figure 6-118: 10MHz Occupied Bandwidth TX2_QPSK at 733.7 MHz

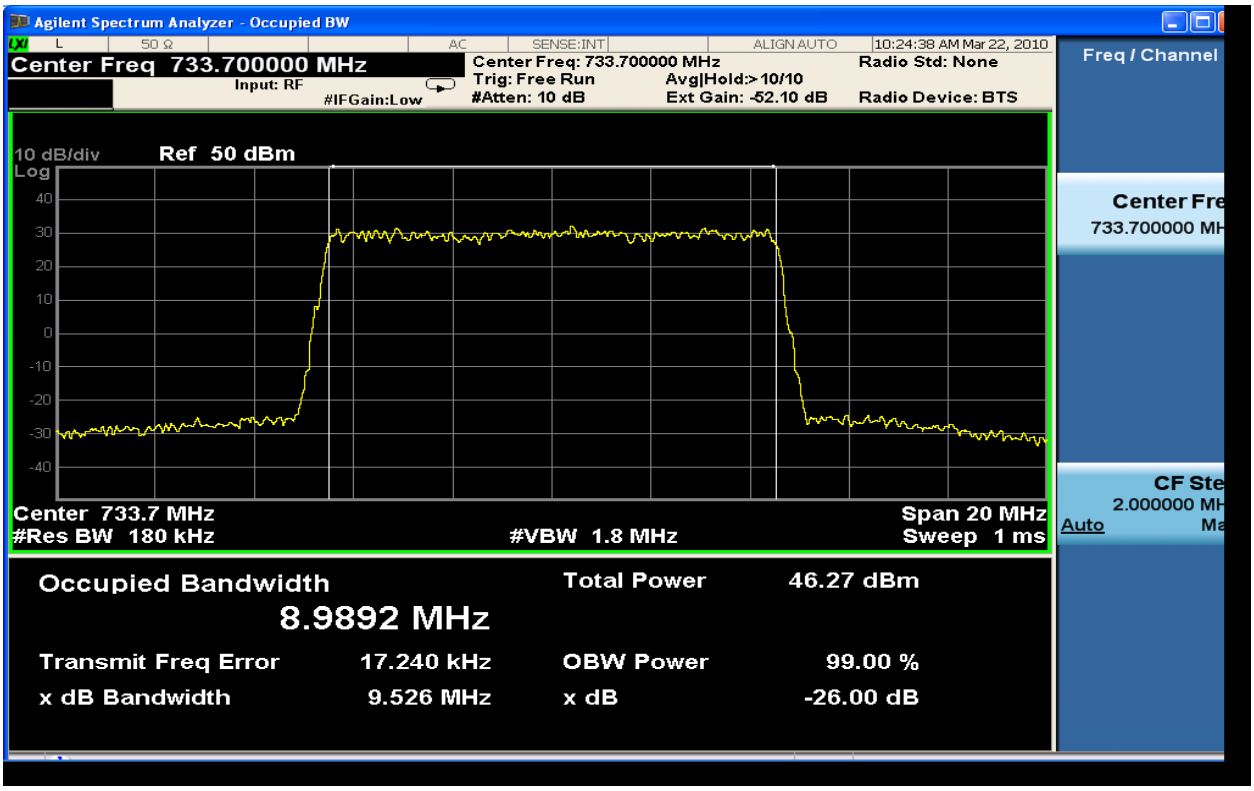


Figure 6-119: 10MHz Occupied Bandwidth TX1_16QAM at 733.7 MHz

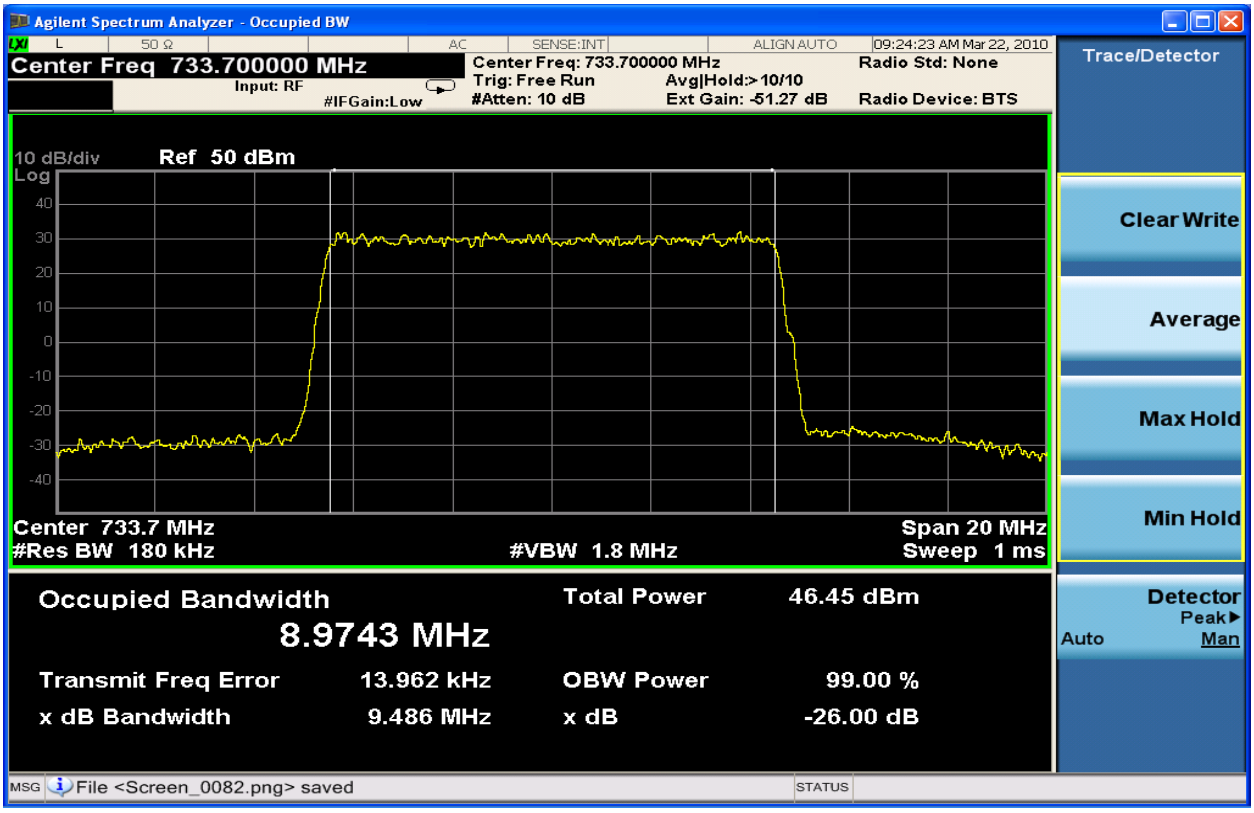


Figure 6-120: 10MHz Occupied Bandwidth TX2_16QAM at 733.7 MHz

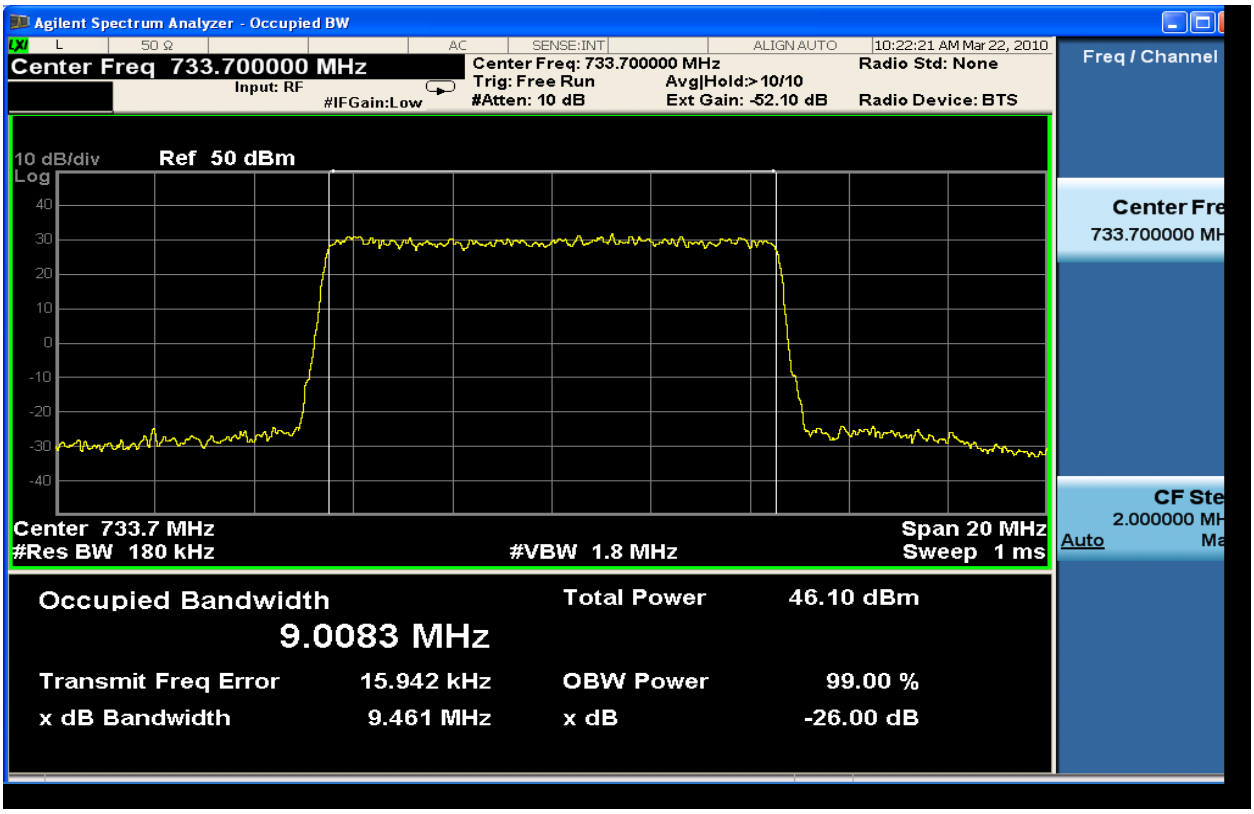


Figure 6-121: 10MHz Occupied Bandwidth TX1_64QAM at 733.7 MHz

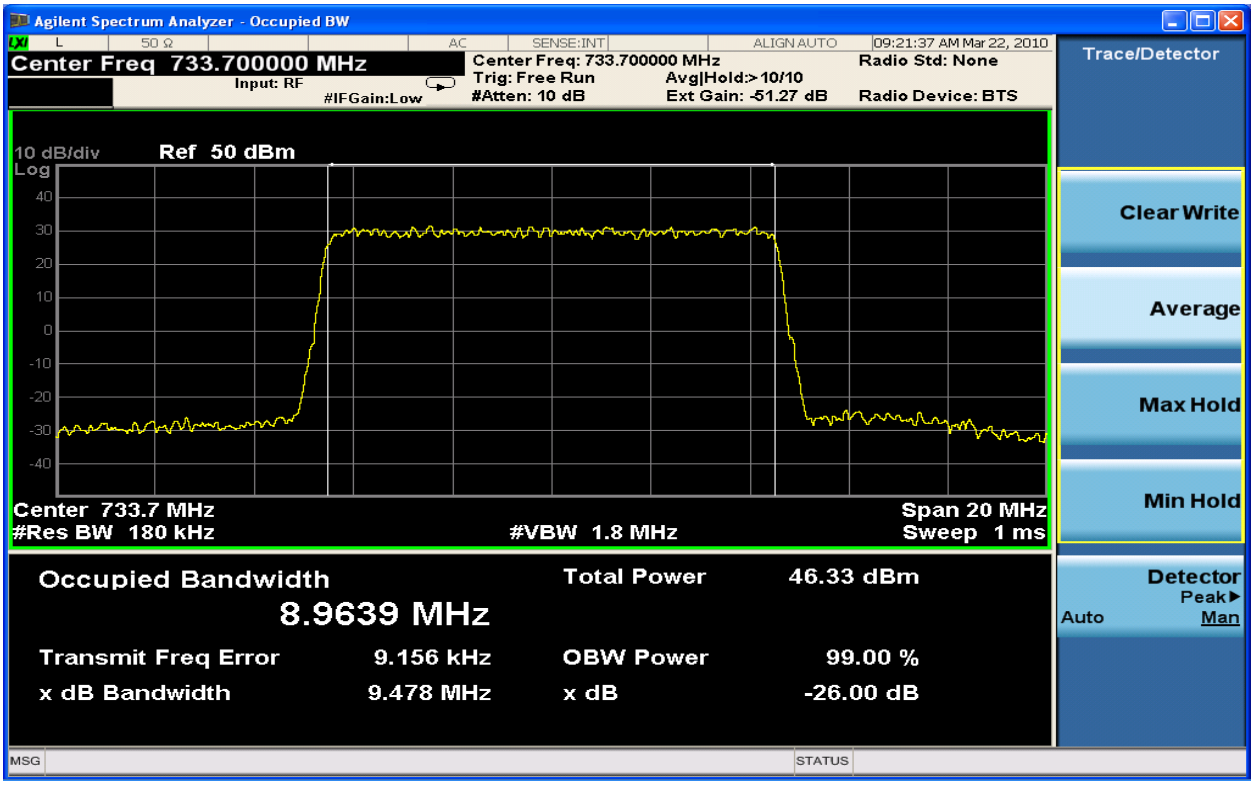


Figure 6-122: 10MHz Occupied Bandwidth TX2_64QAM at 733.7 MHz

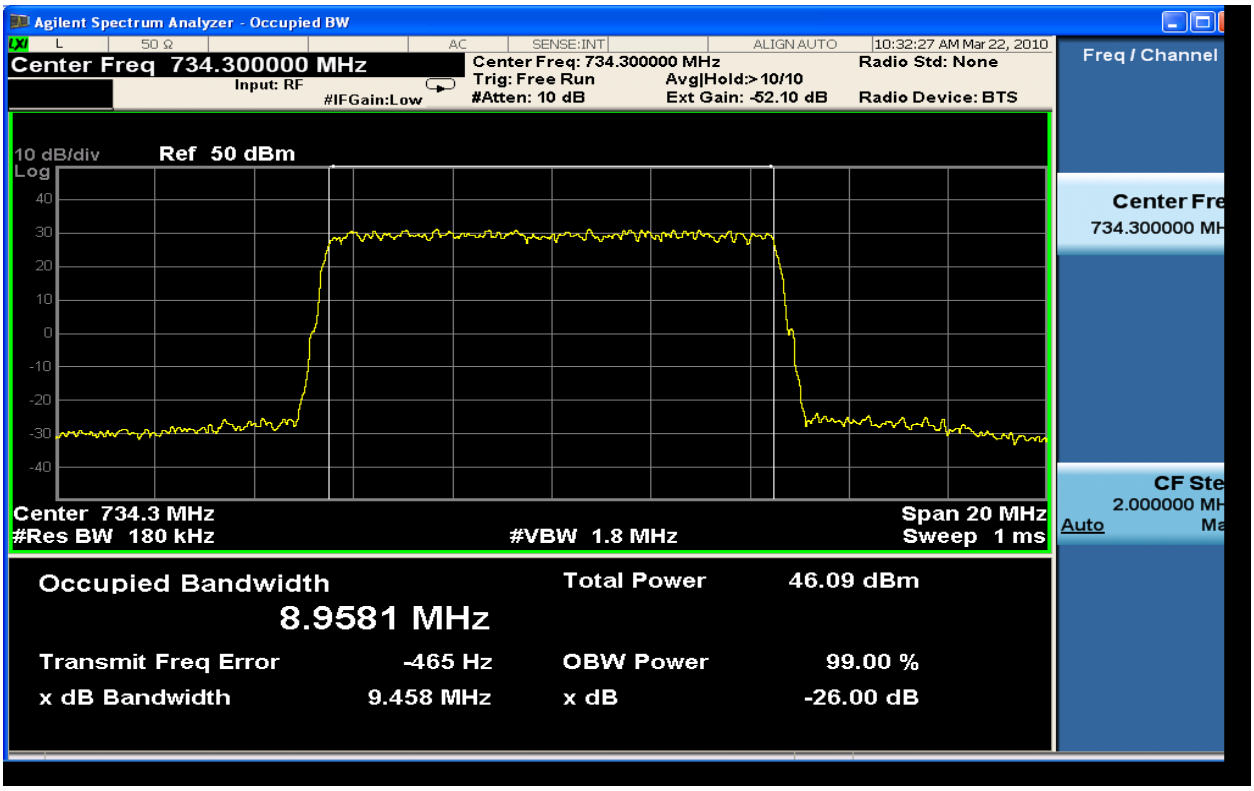


Figure 6-123: 10MHz Occupied Bandwidth TX1_QPSK at 734.3 MHz

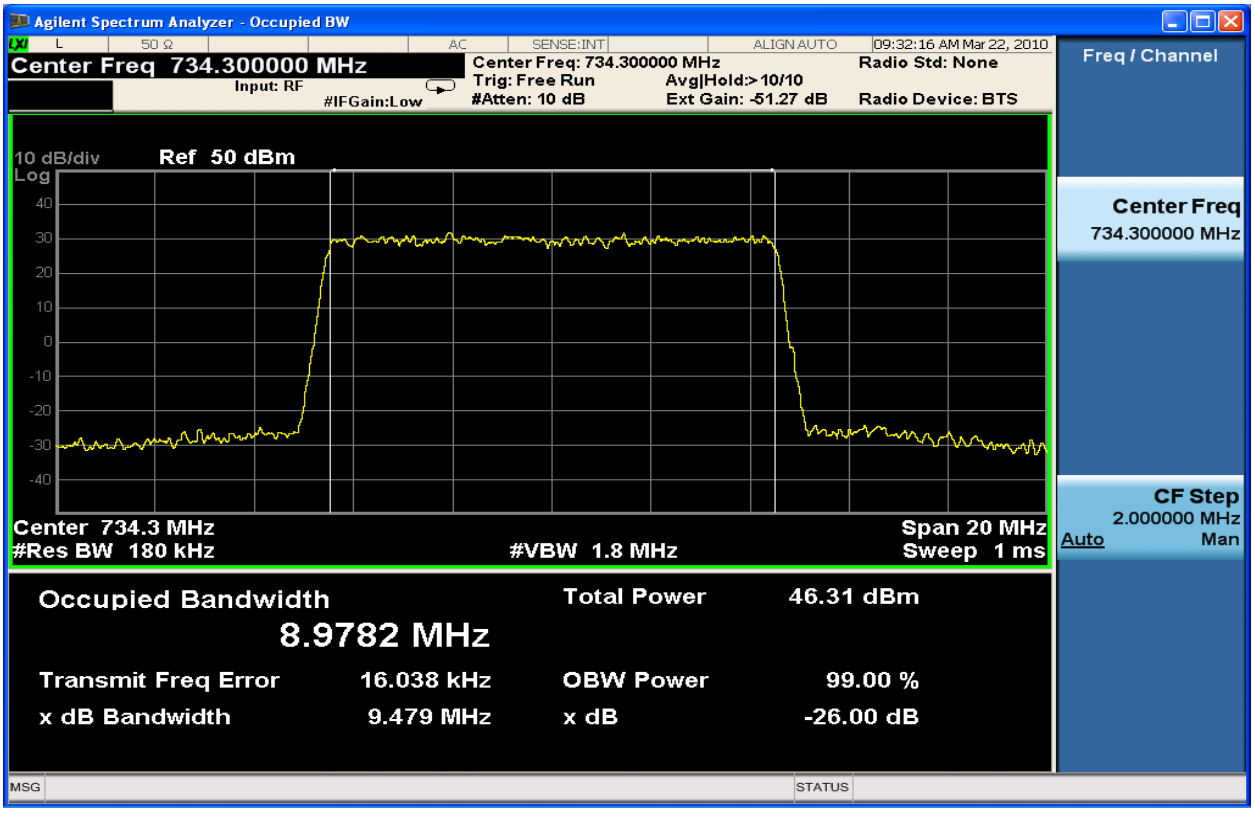


Figure 6-124: 10MHz Occupied Bandwidth TX2_QPSK at 734.3 MHz

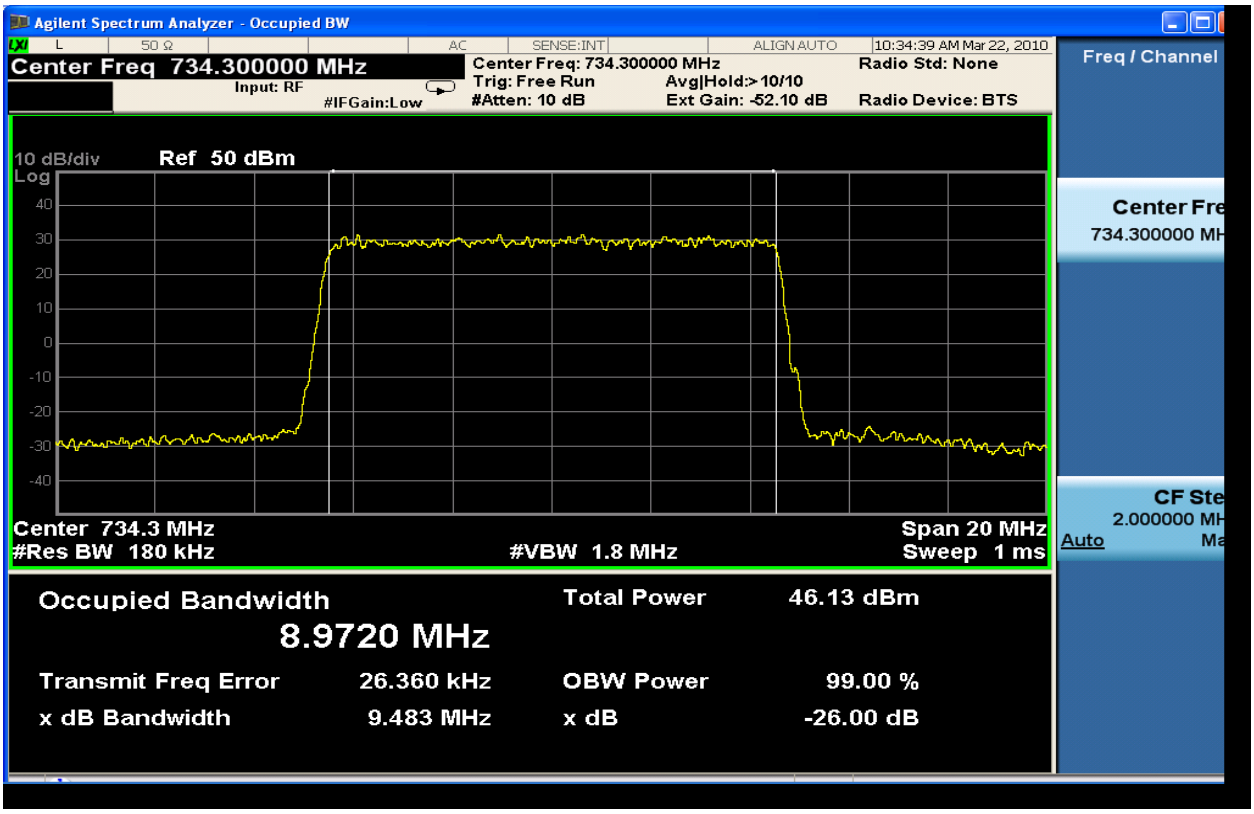


Figure 6-125: 10MHz Occupied Bandwidth TX1_16QAM at 734.3 MHz

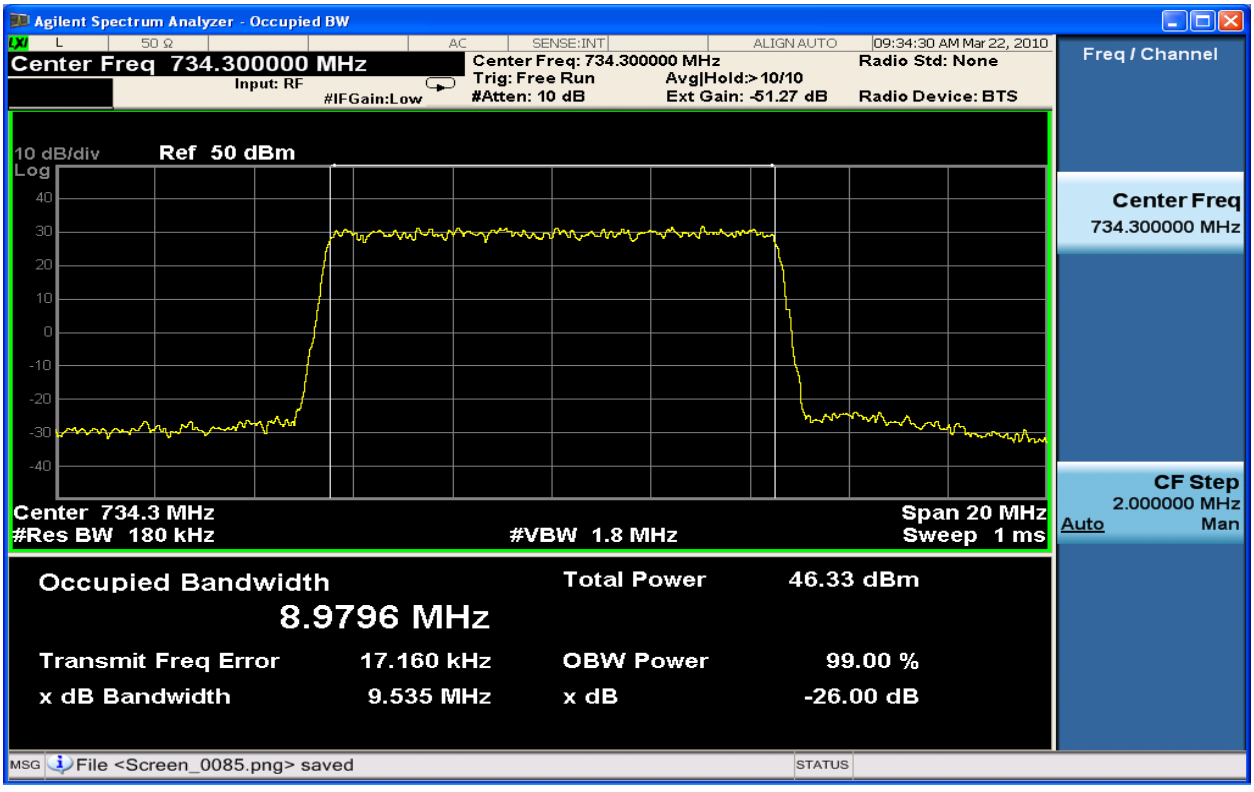


Figure 6-126: 10MHz Occupied Bandwidth TX2_16QAM at 734.3 MHz

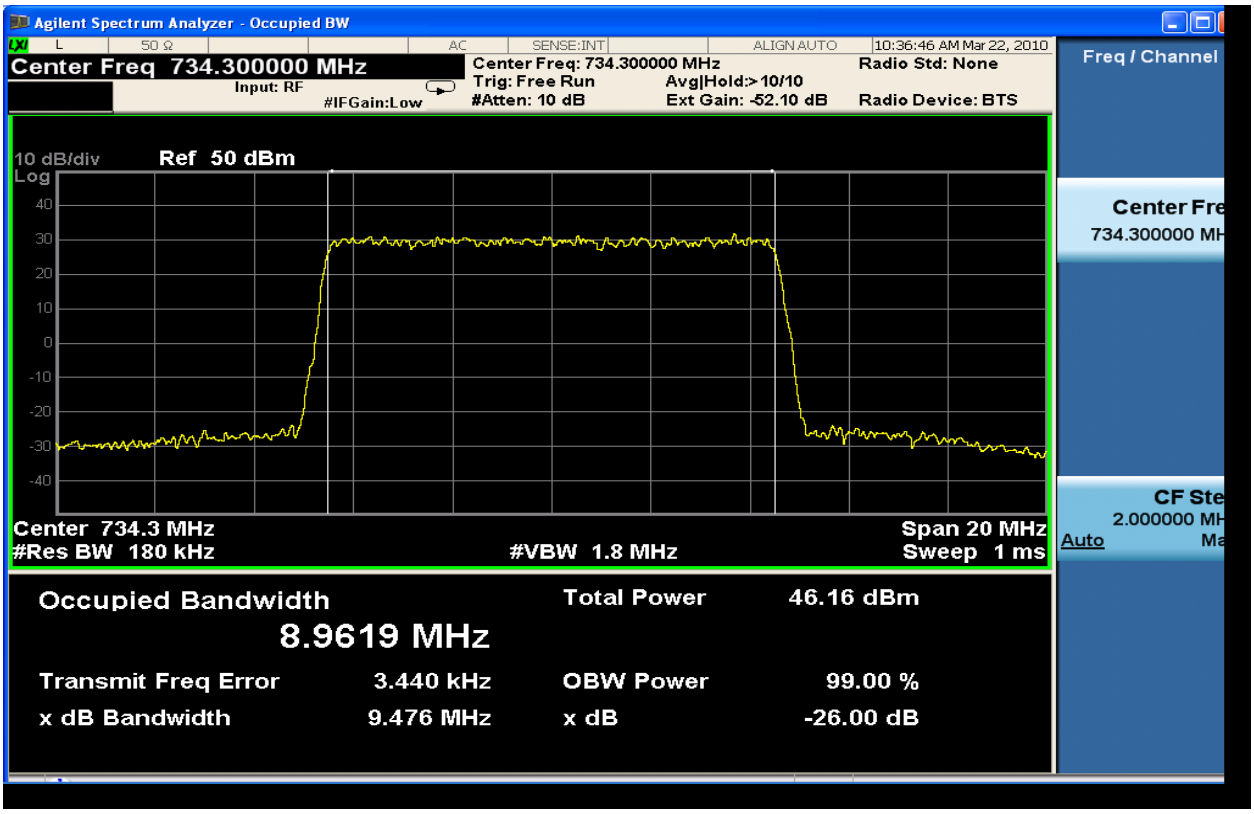


Figure 6-127: 10MHz Occupied Bandwidth TX1_64QAM at 734.3 MHz

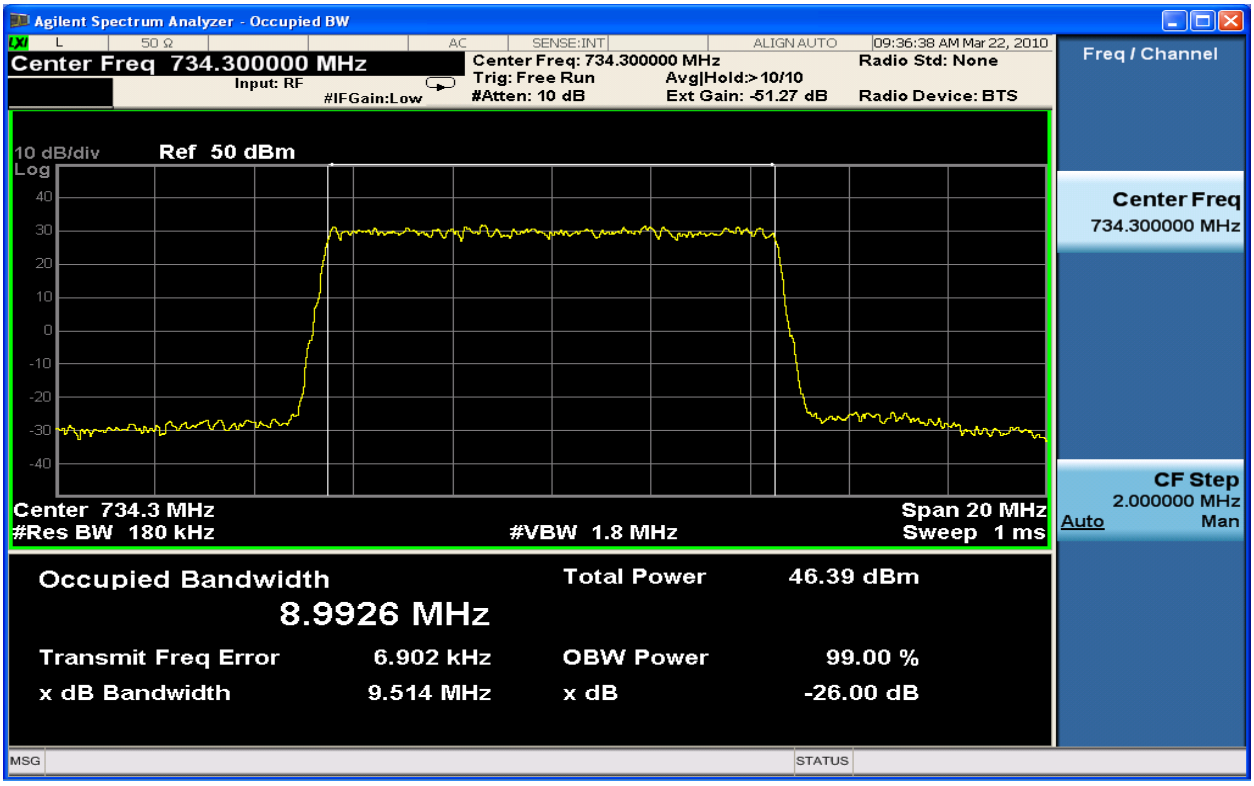


Figure 6-128: 10MHz Occupied Bandwidth TX2_64QAM at 734.3 MHz

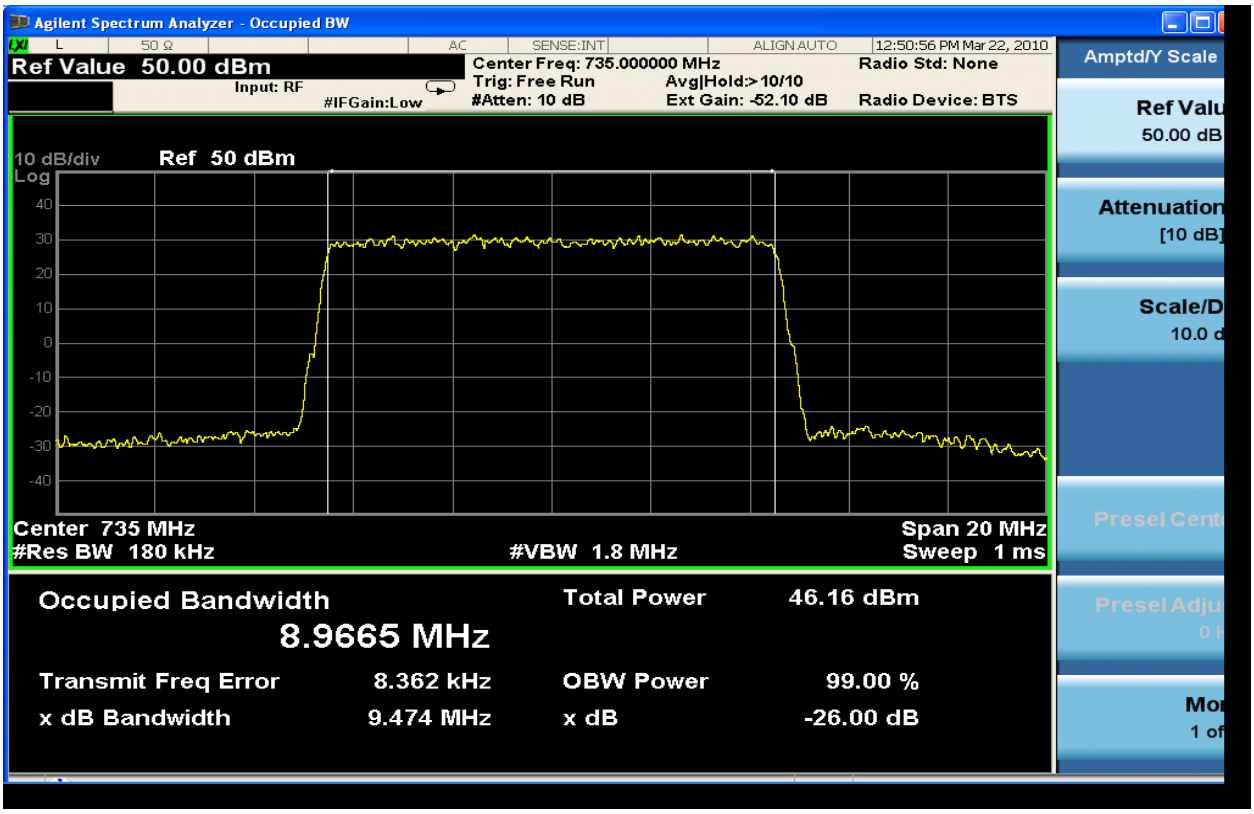


Figure 6-129: 10MHz Occupied Bandwidth TX1_QPSK at 735.0 MHz

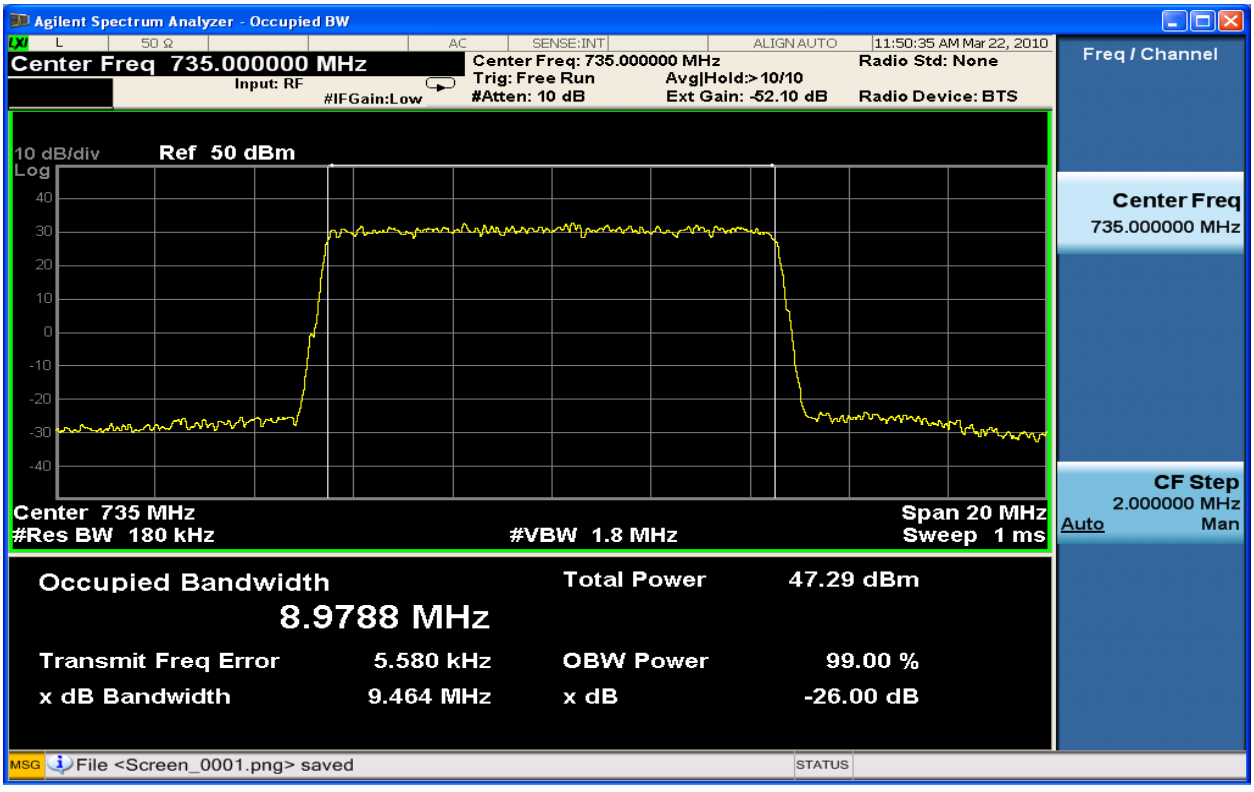


Figure 6-130: 10MHz Occupied Bandwidth TX2_QPSK at 735.0 MHz

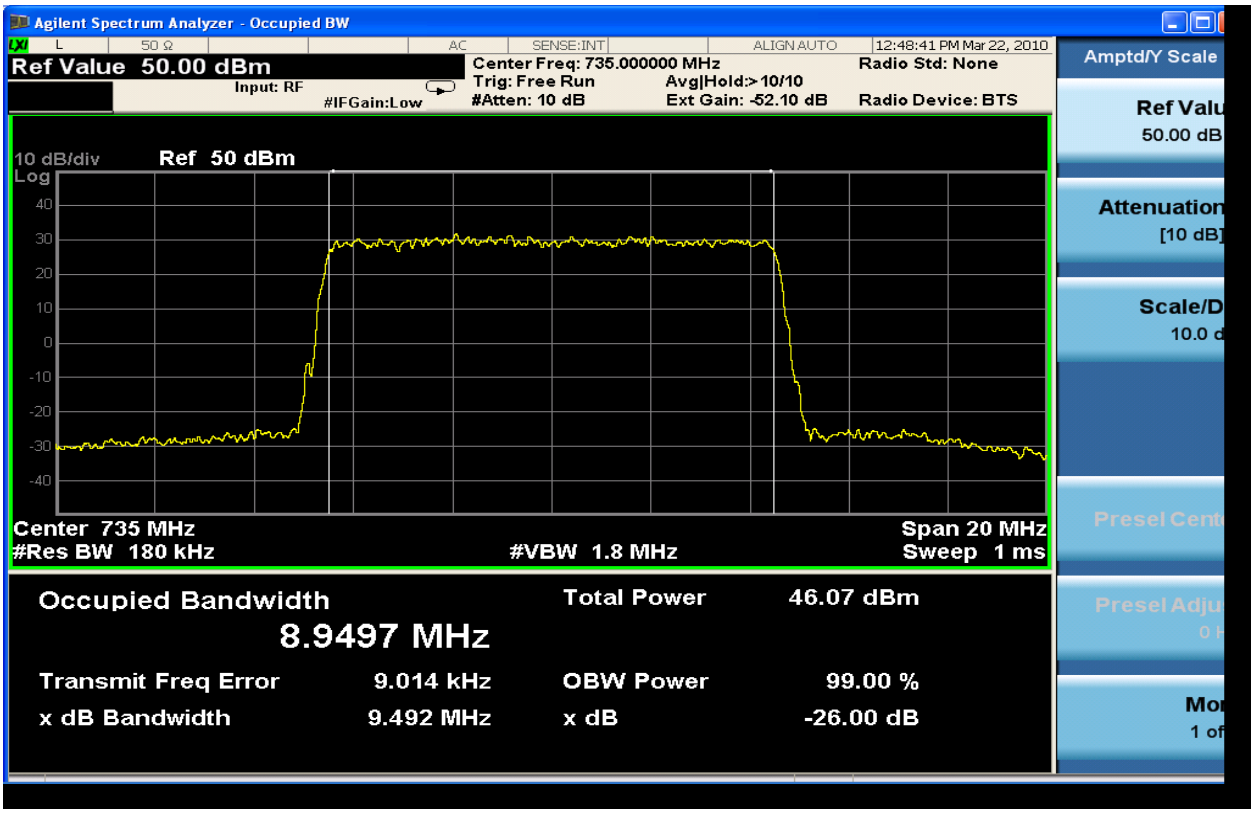


Figure 6-131: 10MHz Occupied Bandwidth TX1_16QAM at 735.0 MHz

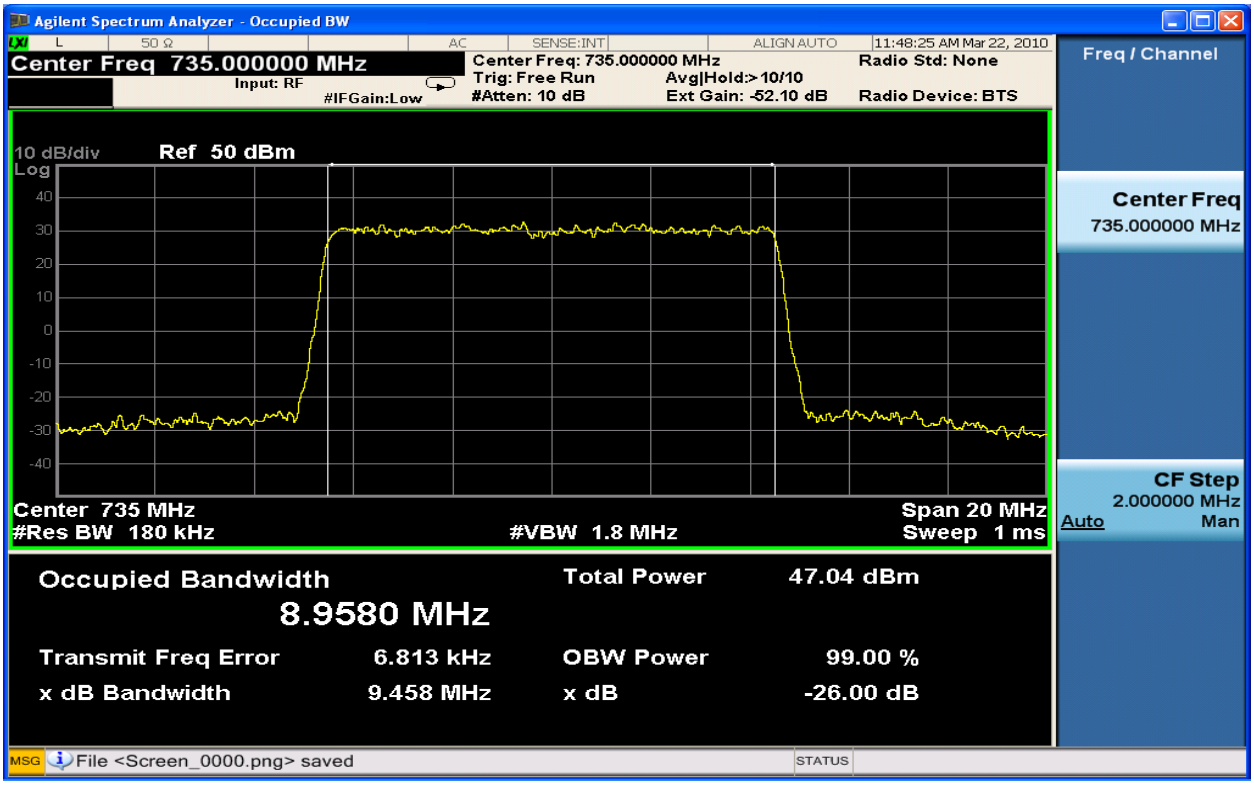


Figure 6-132: 10MHz Occupied Bandwidth TX2_16QAM at 735.0 MHz

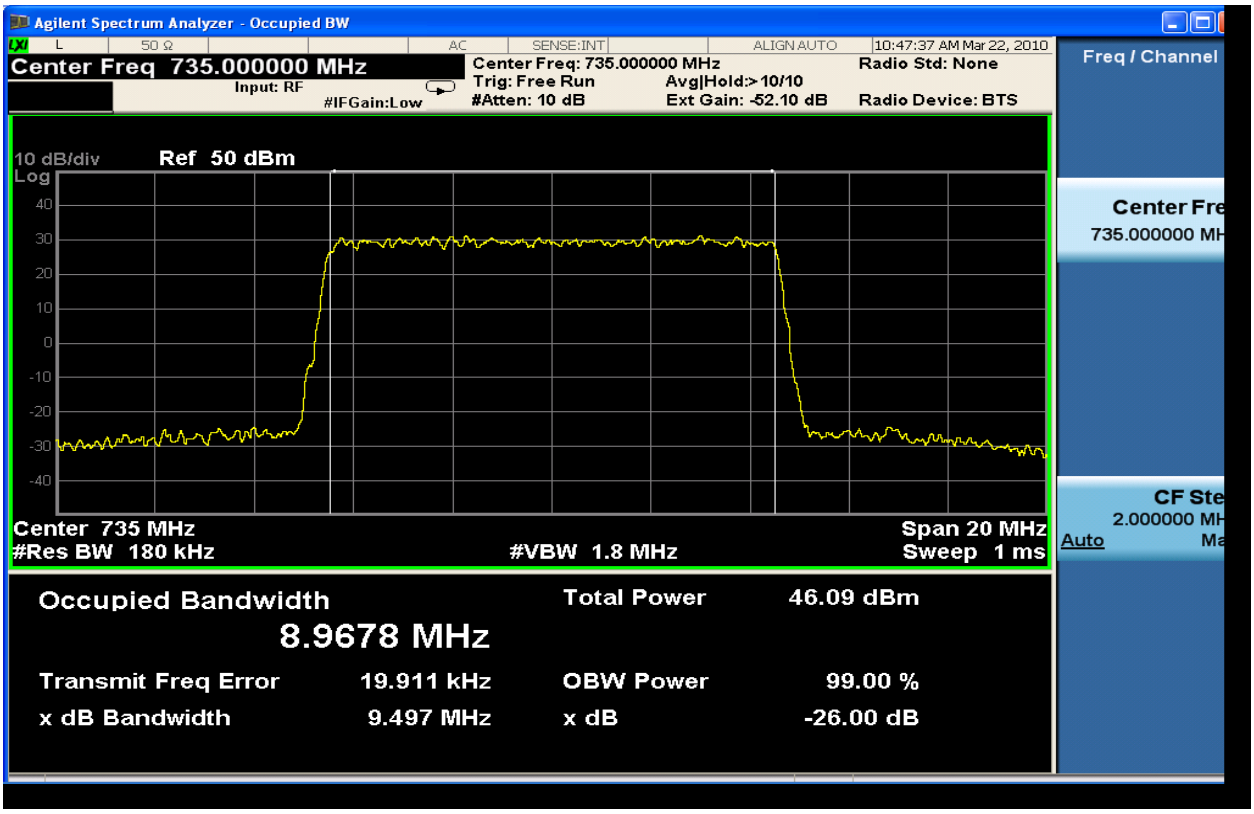


Figure 6-133: 10MHz Occupied Bandwidth TX1_64QAM at 735.0 MHz

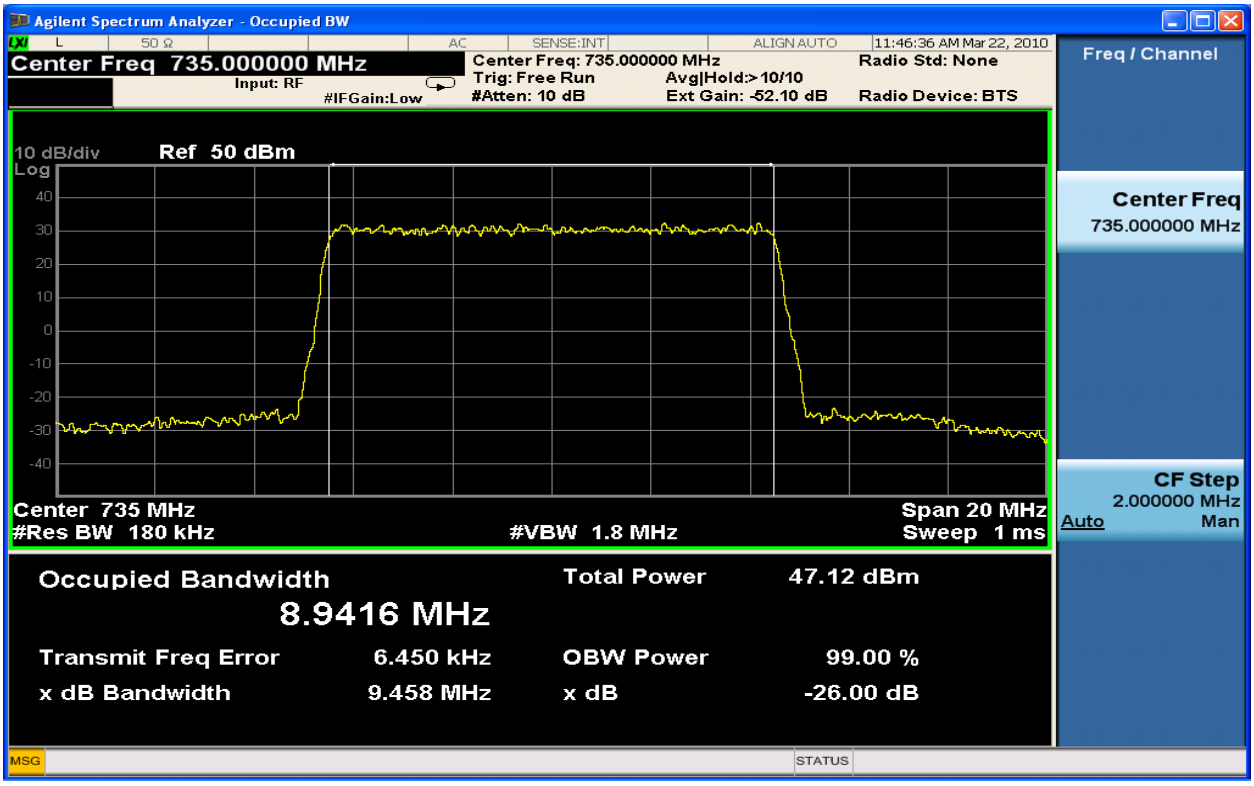


Figure 6-134: 10MHz Occupied Bandwidth TX2_64QAM at 735.0 MHz