

TEST REPORT



CTK Co., Ltd.
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Report No.:
CTK-2017-01618
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1. Client

- Name : Samsung Electronics Co., Ltd.
- Address : 416, Maetan 3-Dong, Yeongtong-Gu, Suwon-Si, Gyeonggi-Do, 16677, Korea
- Date of Receipt : 2017-07-27

2. Manufacturer

- Name : Samsung Electronics Co., Ltd.
- Address : 416, Maetan 3-Dong, Yeongtong-Gu, Suwon-Si, Gyeonggi-Do, 16677, Korea

3. Use of Report : For FCC Certification

4. Test Sample / Model: RFV01U-D1A

5. Date of Test : 2017-07-28 to 2017-08-25

6. Test Standard(method) used : FCC 47 CFR Part 2, 24, 27

7. Testing Environment: Temp.: (23 ± 1) °C, Humidity: (45 ± 1) % R.H.

8. Test Results : Compliance

The results shown in this test report refer only to the sample(s) tested unless otherwise stated. This Test Report cannot be reproduced, except in full.

Affirmation	Tested by	Technical Manager
	Bong-jun, Jang: (Signature)	Young-taek, Lee: (Signature)

2017-08-28

Republic of KOREA **CTK Co., Ltd.**



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REPORT REVISION HISTORY

Date	Revision	Page No
2017-08-28	Issued (CTK-2017-01618)	all

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1. General Information

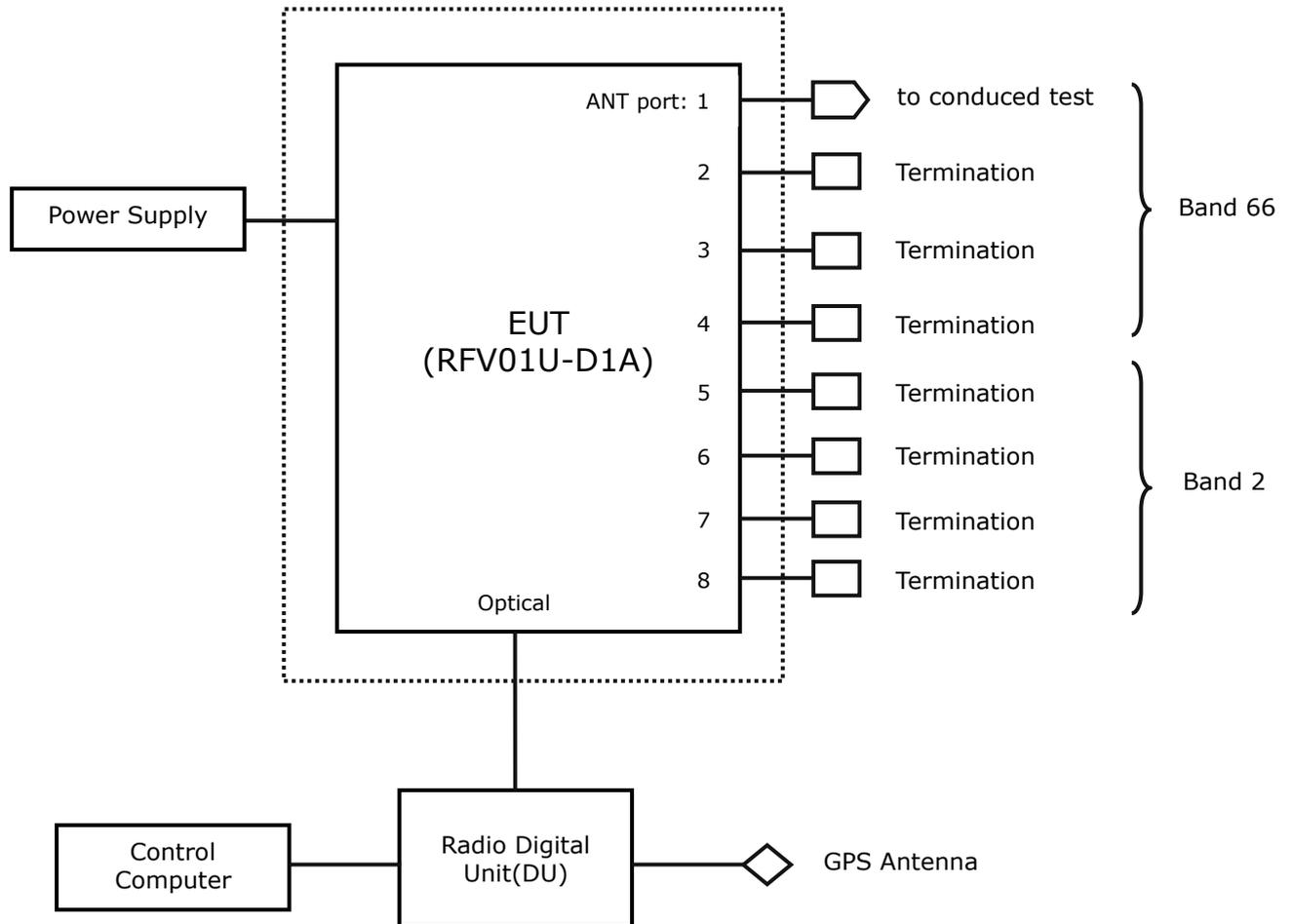
1.1 Client Information

Company	Samsung Electronics Co., Ltd.
Contact Point	129, Samsung-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, 16677, Rep. of Korea
Contact Person	Name : Kim, Jong-in E-mail : jered.kim@samsung.com Tel : +82-31-279-3096

1.2 Product Information

FCC ID	A3LRFV01U-D1A
Product Description	RRU (RFV01U)
Model name	RFV01U-D1A
Power Supply	-48 Vdc
Operating Frequency	- Band 66 DL : 2110 MHz- 2180 MHz, UL 1710 MHz - 1780 MHz - Band 2 DL : 1930 MHz- 1990 MHz, UL 1850 MHz - 1910 MHz
RF Output Power	- Band 66 2T(Single)_BW 5 MHz : 40 W / path(Total 80 W) 2T(Single)_BW 15 MHz : 90 W / path(Total 180 W) 4T(Single)_BW 5 MHz : 20 W / path(Total 80 W) 4T(Single)_BW 15 MHz : 60 W / path(Total 240 W) 2T(Multi_Contiguous)_BW 5 MHz+5 MHz : 60 W / path(Total 120 W) 2T(Multi_Contiguous)_BW 5 MHz+15 MHz: 88 W / path(Total 176 W) 4T(Multi_Contiguous)_BW 5 MHz+5 MHz: 40 W / path(Total 160 W) 4T(Multi_Contiguous)_BW 5MHz+15 MHz : 60 W / path(Total 240 W) 2T(Multi_Non-Contiguous)_BW 5 MHz+5 MHz : 60 W / path(Total 120 W) 2T(Multi_Non-Contiguous)_BW 15 MHz+5 MHz: 88 W / path(Total 176 W) 4T(Multi_Non-Contiguous)_BW 5 MHz+5 MHz: 40 W / path(Total 160 W) 4T(Multi_Non-Contiguous)_BW 15MHz+5 MHz : 60 W / path(Total 240 W) - Band 2 2T(Single)_BW 5 MHz : 40 W / path(Total 80 W) 2T(Single)_BW 15 MHz : 60 W / path(Total 120 W) 4T(Single)_BW 5 MHz : 20 W / path(Total 80 W) 4T(Single)_BW 15 MHz : 40 W / path(Total 160 W) 2T(Multi_Contiguous)_BW 5 MHz+5 MHz : 60 W / path(Total 120 W) 2T(Multi_Contiguous)_BW 5 MHz+15 MHz: 60 W / path(Total 120 W) 4T(Multi_Contiguous)_BW 5 MHz+5 MHz: 40 W / path(Total 160 W) 4T(Multi_Contiguous)_BW 5MHz+15 MHz : 40 W / path(Total 160 W) 2T(Multi_Non-Contiguous)_BW 5 MHz+5 MHz : 60 W / path(Total 120 W) 2T(Multi_Non-Contiguous)_BW 15 MHz+5 MHz: 60 W / path(Total 120 W) 4T(Multi_Non-Contiguous)_BW 5 MHz+5 MHz: 40 W / path(Total 160 W) 4T(Multi_Non-Contiguous)_BW 15MHz+5 MHz : 40 W / path(Total 160 W)
Channel Bandwidth	5 MHz, 10 MHz, 15 MHz, 20 MHz
Modulation Type	QPSK, 16QAM, 64QAM, 256QAM
Antenna Specification	Antenna type : Sector Maximum Peak Gain : below 19.7 dBi
FCC Rule	Part 2 : FREQUENCY ALLOCATIONS AND RADIO TREATY MATTERS; GENERAL RULES AND REGULATIONS Part 24 : PERSONAL COMMUNICATIONS SERVICES Part 27 : MISCELLANEOUS WIRELESS COMMUNICATIONS SERVICES KDB Publication 662911 D01 Multiple Transmitter Output v02r01

1.3 Configurations



2. Facility and Accreditations

2.1 Test Facility

The measurement facility is located at (Ho-dong), 113, Yejik-ro, Cheoin-gu, Yong-in-si, Gyeonggi-do, Korea.

2.2 Laboratory Accreditations and Listings

Country	Agency	Scope of Accreditation	Registration Number	Logo
USA	FCC	Part 15 & 18 Part 22 & 24 & 25 & 27 Part 90, 95, 97, 101 EMI (Electromagnetic Interference / Emission)	805871 Designation No.: KR0025	
CANADA	IC	IC EMI (3/10m test site)	8737A-2	
JAPAN	VCCI	VCCI V-3 EMI (Electromagnetic Interference / Emission)	C-986 T-1843 R-3627 G-387	
KOREA	MSIP	EMI (Electromagnetic Interference / Emission) EMS (Electromagnetic Susceptibility / Immunity)	KR0025	

2.3 Calibration Details of Equipment Used for Measurement

Test equipment and test accessories are calibrated on regular basis. The maximum time between calibrations is one year or what is recommended by the manufacturer, whichever is less. All test equipment calibrations are traceable to the Korea Research Institute of Standards and Science (KRISS), therefore, all test data recorded in this report is traceable to KRISS.



3. Test Specifications

3.1 Standards

The following tests were conducted on a sample of the equipment for the purpose of demonstrating compliance with FCC Part 2, Part 24, part 27.

Section	Test Items	Results
§2.1046, §24.232(a)(2), §27.50(d)(2)	RF output power	Compliant
§2.1049	Occupied bandwidth	Compliant
§2.1051, §24.238, §27.53(h)	Spurious Emissions at Antenna Terminals	Compliant
§2.1051, §24.238, §27.53(h)	Band edge	Compliant
§2.1051, §24.238, §27.53(h)	Spurious Radiated Emissions	Compliant
§2.1055(a)(1), §24.235, §27.54	Frequency Stability over Temperature variation	Compliant
§2.1055(d), §24.235, §27.54	Frequency Stability over Voltage variation	Compliant

3.2 Mode of operation during the test

The EUT is operated in a manner representative of the typical of the equipments. During at testing, system components were manipulated within the confines of typical usage to maximize each emission. All modulation(QPSK, 16QAM, 64QAM, 256QAM) modes were tests. The results are only attached worst cases.



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Operating band and Frequency range

Band 2	Transmit	1 930 MHz to 1 990 MHz
	Receive	1 850 MHz to 1 910 MHz
Band 66	Transmit	2 110 MHz to 2 180 MHz
	Receive	1 710 MHz to 1 780 MHz

Operating Configurations

Supported configurations	Single carrier, Multi carrier
Spectrum Operation	Contiguous, Non-contiguous

Single carrier rated total output power as a sum of all carriers

Band type	Bandwidth	Positions	Frequency	Power	Output port	Total Power(sum)
Band 2	5 MHz	Bottom	1932.5 MHz	40 W	2TX(5, 6)	80 W
				20 W	4TX(5, 6, 7, 8)	80 W
		Middle	1960.0 MHz	40 W	2TX(5, 6)	80 W
				20 W	4TX(5, 6, 7, 8)	80 W
		Top	1987.5 MHz	40 W	2TX(5, 6)	80 W
				20 W	4TX(5, 6, 7, 8)	80 W
	15 MHz	Bottom	1937.5 MHz	60 W	2TX(5, 6)	120 W
				40 W	4TX(5, 6, 7, 8)	160 W
		Middle	1960.0 MHz	60 W	2TX(5, 6)	120 W
				40 W	4TX(5, 6, 7, 8)	160 W
		Top	1982.5 MHz	60 W	2TX(5, 6)	120 W
				40 W	4TX(5, 6, 7, 8)	160 W
Band 66	5 MHz	Bottom	2112.5 MHz	40 W	2TX(1, 2)	80 W
				20 W	4TX(1, 2, 3, 4)	80 W
		Middle	2145.0 MHz	40 W	2TX(1, 2)	80 W
				20 W	4TX(1, 2, 3, 4)	80 W
		Top	2177.5 MHz	40 W	2TX(1, 2)	80 W
				20 W	4TX(1, 2, 3, 4)	80 W
	15 MHz	Bottom	2117.5 MHz	90 W	2TX(1, 2)	180 W
				60 W	4TX(1, 2, 3, 4)	240 W
		Middle	2177.5 MHz	90 W	2TX(1, 2)	180 W
				60 W	4TX(1, 2, 3, 4)	240 W
		Top	2172.5 MHz	90 W	2TX(1, 2)	180 W
				60 W	4TX(1, 2, 3, 4)	240 W



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Multi carrier rated total output power as a sum of all carriers								
Type	Bandwidth positions		1 st FA	2 nd FA	Power Sum	Output port	Total (sum)	
Band 2	Contiguous	Bottom	Bandwidth	5 MHz	5 MHz			
			Frequency	1932.5 MHz	1937.5 MHz			
		Output Power	30 W	30 W	60 W	2TX(5, 6)	120 W	
			20 W	20 W	40 W	4TX(5, 6, 7, 8)	160 W	
		Top	Bandwidth	5 MHz	5 MHz			
			Frequency	1982.5 MHz	1987.5 MHz			
		Output Power	30 W	30 W	60 W	2TX(5, 6)	120 W	
			20 W	20 W	40 W	4TX(5, 6, 7, 8)	160 W	
	Bottom	Bandwidth	5 MHz	15 MHz				
		Frequency	1932.5 MHz	1942.5 MHz				
		Output Power	15 W	45 W	60 W	2TX(5, 6)	120 W	
			10 W	30 W	40 W	4TX(5, 6, 7, 8)	160 W	
	Top	Bandwidth	5 MHz	15 MHz				
		Frequency	1972.5 MHz	1982.5 MHz				
		Output Power	15 W	45 W	60 W	2TX(5, 6)	120 W	
			10 W	30 W	40 W	4TX(5, 6, 7, 8)	160 W	
Non-Contiguous	Bottom + Top	Bandwidth	5 MHz	5 MHz				
		Frequency	1932.5 MHz	1987.5 MHz				
	Output Power	30 W	30 W	60 W	2TX(5, 6)	120 W		
		20 W	20 W	40 W	4TX(5, 6, 7, 8)	160 W		
	Bottom + Top	Bandwidth	15 MHz	5 MHz				
		Frequency	1937.5 MHz	1987.5 MHz				
		Output Power	45 W	15 W	60 W	2TX(5, 6)	120 W	
			30 W	10 W	40 W	4TX(5, 6, 7, 8)	160 W	

Multi carrier rated total output power as a sum of all carriers								
Type	Bandwidth positions		1 st FA	2 nd FA	Power Sum	Output port	Total (sum)	
Band 66	Contiguous	Bottom	Bandwidth	5 MHz	5 MHz			
			Frequency	2112.5 MHz	2117.5 MHz			
		Output Power	30 W	30 W	60 W	2TX(1, 2)	120 W	
			20 W	20 W	40 W	4TX(1, 2, 3, 4)	160 W	
		Top	Bandwidth	5 MHz	5 MHz			
			Frequency	2172.5 MHz	2177.5 MHz			
		Output Power	30 W	30 W	60 W	2TX(1, 2)	120 W	
			20 W	20 W	40 W	4TX(1, 2, 3, 4)	160 W	
	Bottom	Bandwidth	5 MHz	15 MHz				
		Frequency	2112.5 MHz	2122.5 MHz				
		Output Power	22 W	66 W	88 W	2TX(1, 2)	176 W	
			15 W	45 W	60 W	4TX(1, 2, 3, 4)	240 W	
	Top	Bandwidth	5 MHz	15 MHz				
		Frequency	2162.5 MHz	2172.5 MHz				
		Output Power	22 W	66 W	88 W	2TX(1, 2)	176 W	
			15 W	45 W	60 W	4TX(1, 2, 3, 4)	240 W	
Non-Contiguous	Bottom + Top	Bandwidth	5 MHz	5 MHz				
		Frequency	2112.5 MHz	2177.5 MHz				
	Output Power	30 W	30 W	60 W	2TX(1, 2)	120 W		
		20 W	20 W	40 W	4TX(1, 2, 3, 4)	160 W		
	Bottom + Top	Bandwidth	15 MHz	5 MHz				
		Frequency	2117.5 MHz	2177.5 MHz				
		Output Power	66 W	22 W	88 W	2TX(1, 2)	176 W	
			45 W	15 W	60 W	4TX(1, 2, 3, 4)	240 W	



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3.3 Maximum Measurement Uncertainty

The value of the measurement uncertainty for the measurement of each parameter.
Coverage factor $k = 2$, Confidence levels of 95 %

Description	Uncertainty
Conducted RF output power	1.5 dB
Occupied bandwidth	0.1 MHz
Spurious emission at antenna terminals	3.0 dB
Radiated spurious emissions ($f \leq 1$ GHz)	4.0 dB
Radiated spurious emissions ($f > 1$ GHz)	5.0 dB
Frequency stability	0.1 kHz

3.4 Standards Environmental Test conditions

Temperature	+ 15 °C to + 35 °C
Relative humidity	30 % to 60 %
Air pressure	860 mbar to 1 060 mbar



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4. RF output power

Test Requirements :

§ 2.1046 Measurements required : RF power output :

- (a) For transmitters other than single sideband, independent sideband and controlled carrier radiotelephone, power output shall be measured at the RF output terminals when the transmitter is adjusted in accordance with the tune-up procedure to give the values of current and voltage on the circuit elements specified in §2.1033(c)(8). The electrical characteristics of the radio frequency load attached to the output terminals when this test is made shall be stated.
- (b) For single sideband, independent sideband, and single channel, controlled carrier radiotelephone transmitters the procedure specified in paragraph (a) of this section shall be employed and, in addition, the transmitter shall be modulated during the test as follows. In all tests, the input level of the modulating signal shall be such as to develop rated peak envelope power or carrier power, as appropriate, for the transmitter.
- (c) For measurements conducted pursuant to paragraphs (a) and (b) of this section, all calculations and methods used by the applicant for determining carrier power or peak envelope power, as appropriate, on the basis of measured power in the radio frequency load attached to the transmitter output terminals shall be shown. Under the test conditions specified, no components of the emission spectrum shall exceed the limits specified in the applicable rule parts as necessary for meeting occupied bandwidth or emission limitations.

§ 24.232 Power and antenna height limits.

- (a)(2) Base stations with an emission bandwidth greater than 1 MHz are limited to 1640 watts/MHz equivalent isotropically radiated power (EIRP) with an antenna height up to 300 meters HAAT, except as described in paragraph (b) below.
- (b)(1) Base stations that are located in counties with population densities of 100 persons or fewer per square mile, based upon the most recently available population statistics from the Bureau of the Census, with an emission bandwidth of 1 MHz or less are limited to 3280 watts equivalent isotropically radiated power (EIRP) with an antenna height up to 300 meters HAAT.
- (d) Power measurements for transmissions by stations authorized under this section may be made either in accordance with a Commission-approved average power technique or in compliance with paragraph (e) of this section. In both instances, equipment employed must be authorized in accordance with the provisions of §24.51. In measuring transmissions in this band using an average power technique, the peak-to-average ratio (PAR) of the transmission may not exceed 13 dB.

§ 27.50 Power limits and duty cycle.

- (d) (1) The power of each fixed or base station transmitting in the 1995-2000 MHz, 2110-2155 MHz, 2155-2180 MHz or 2180-2200 MHz band and located in any 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, is limited to:
- (ii) An EIRP of 3280 watts/MHz when transmitting with an emission bandwidth greater than 1 MHz.
- (2) The power of each fixed or base station transmitting in the 1995-2000 MHz, the 2110-2155 MHz 2155-2180 MHz band, or 2180-2200 MHz band and situated in any geographic location other than that described in paragraph (d)(1) of this section is limited to:
- (ii) An EIRP of 1640 watts/MHz when transmitting with an emission bandwidth greater than 1 MHz.
- (5) Equipment employed must be authorized in accordance with the provisions of §24.51. Power measurements for transmissions by stations authorized under this section may be made either in accordance with a Commission-approved average power technique or in compliance with paragraph (d)(6) of this section. In measuring transmissions in this band using an average power technique, the peak-to-average ratio (PAR) of the transmission may not exceed 13 dB.



Test Procedures :

According to FCC §2.1046 (a), for transmitters other than single sideband, independent sideband and controlled carrier radiotelephone, power output shall be measured at the RF output terminals when the transmitter is adjusted in accordance with the tune-up procedure to give the values of current and voltage on the circuit elements specified in §2.1033(c). The electrical characteristics of the radio frequency load attached to the output terminals when this is made shall be stated.

- 1) The radio frequency load attached to the EUT antenna terminal was 50 Ohm. The loss of the cables the test system is calibrated to correct the reading.
- 2) The spectrum analyzer was set to RMS Detector function and Average mode.
- 3) The resolution bandwidth of the spectrum analyzer was comparable to the emission bandwidth.
- 4) The conducted emission level is measured at each antenna port and then summed mathematically to determine the total emission level from the device.

Note 1 : If applicable, the EIRP[W/MHz] = $10^{((\text{PSD}[\text{dBm}/\text{MHz}] + \text{Antenna Gain}[\text{dBi}])/10)} / 10^{-3}$

Note 2: EIRP does not exceed the reference value even if the maximum antenna gain is applied according to Note 1.

Note 3 : PSD(Power Spectral Density) dBm/MHz = dBm/Hz + $10\log(10^6)$

Note 4 : Total Power = Test antenna port power * Number of antenna



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Test Results :

Test Data : Band 2, BW 5MHz, Single carrier, 2TX

Type	Carrier	Channel	Test Ant. port	Output port	Modulation	Output Power		Total Power	
						Channel Power (dBm)	PSD (dBm/MHz)	Channel Power (dBm)	PSD (dBm/MHz)
Band 2 BW 5MHz	Single	Bottom	3	2TX	QPSK	45.92	38.93	48.92	41.93
					16QAM	45.94	38.95	48.94	41.95
					64QAM	45.91	38.92	48.91	41.92
					256QAM	45.98	38.99	48.98	41.99
		Middle	3	2TX	QPSK	45.96	38.97	48.96	41.97
					16QAM	45.95	38.96	48.95	41.96
					64QAM	45.97	38.98	48.97	41.98
					256QAM	45.96	38.97	48.96	41.97
		Top	3	2TX	QPSK	45.94	38.95	48.94	41.95
					16QAM	45.97	38.98	48.97	41.98
					64QAM	45.93	38.94	48.93	41.94
					256QAM	45.97	38.98	48.97	41.98

Test Data : Band 2, BW 5MHz, Single carrier, 4TX

Type	Carrier	Channel	Test Ant. port	Output port	Modulation	Output Power		Total Power	
						Channel Power (dBm)	PSD (dBm/MHz)	Channel Power (dBm)	PSD (dBm/MHz)
Band 2 BW 5MHz	Single	Bottom	7	4TX	QPSK	42.76	35.77	48.76	41.77
					16QAM	42.78	35.79	48.78	41.79
					64QAM	42.79	35.80	48.79	41.80
					256QAM	42.82	35.83	48.82	41.83
		Middle	7	4TX	QPSK	42.55	35.56	48.55	41.56
					16QAM	42.58	35.59	48.58	41.59
					64QAM	42.98	35.99	48.98	41.99
					256QAM	42.99	36.00	48.99	42.00
		Top	7	4TX	QPSK	42.62	35.63	48.62	41.63
					16QAM	42.73	35.74	48.73	41.74
					64QAM	42.73	35.74	48.73	41.74
					256QAM	42.77	35.78	48.77	41.78



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Test Data : Band 2, BW 15MHz, Single carrier, 2TX

Type	Carrier	Channel	Test Ant. port	Output port	Modulation	Output Power		Total Power	
						Channel Power (dBm)	PSD (dBm/MHz)	Channel Power (dBm)	PSD (dBm/MHz)
Band 2 BW 15MHz	Single	Bottom	5	2TX	QPSK	47.65	35.89	50.65	38.89
					16QAM	47.73	35.97	50.73	38.97
					64QAM	47.74	35.98	50.74	38.98
					256QAM	47.75	35.99	50.75	38.99
		Middle	5	2TX	QPSK	47.73	35.97	50.73	38.97
					16QAM	47.75	35.99	50.75	38.99
					64QAM	47.67	35.91	50.67	38.91
					256QAM	47.77	36.00	50.77	39.00
		Top	5	2TX	QPSK	47.75	35.98	50.75	38.98
					16QAM	47.81	36.05	50.81	39.05
					64QAM	47.78	36.02	50.78	39.02
					256QAM	47.81	36.04	50.81	39.04

Test Data : Band 2, BW 15MHz, Single carrier, 4TX

Type	Carrier	Channel	Test Ant. port	Output port	Modulation	Output Power		Total Power	
						Channel Power (dBm)	PSD (dBm/MHz)	Channel Power (dBm)	PSD (dBm/MHz)
Band 2 BW 15MHz	Single	Bottom	7	4TX	QPSK	45.86	34.10	51.86	40.10
					16QAM	45.99	34.23	51.99	40.23
					64QAM	45.96	34.20	51.96	40.20
					256QAM	45.99	34.23	51.99	40.23
		Middle	7	4TX	QPSK	45.92	34.16	51.92	40.16
					16QAM	45.97	34.21	51.97	40.21
					64QAM	45.92	34.16	51.92	40.16
					256QAM	45.93	34.16	51.93	40.16
		Top	7	4TX	QPSK	45.89	34.13	51.89	40.13
					16QAM	45.93	34.17	51.93	40.17
					64QAM	45.90	34.14	51.90	40.14
					256QAM	45.91	34.15	51.91	40.15



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Test Data : Band 2, BW 5MHz + BW 5MHz, Multi carrier(Contiguous), 2TX

Type	Carrier	Channel	Test Ant. port	Output port	Modulation	Output Power		Total Power	
						Channel Power (dBm)	PSD (dBm/MHz)	Channel Power (dBm)	PSD (dBm/MHz)
Band 2 BW 5MHz + BW 5MHz	Multi/ Contiguous	Bottom	5	2TX	QPSK	47.55	37.55	50.55	40.55
					16QAM	47.57	37.57	50.57	40.57
					64QAM	47.58	37.58	50.58	40.58
					256QAM	47.50	37.50	50.50	40.50
		Top	5	2TX	QPSK	47.51	37.51	50.51	40.51
					16QAM	47.47	37.47	50.47	40.47
					64QAM	47.49	37.49	50.49	40.49
					256QAM	47.51	37.51	50.51	40.51

Test Data : Band 2, BW 5MHz + BW 5MHz, Multi carrier(Contiguous), 4TX

Type	Carrier	Channel	Test Ant. port	Output port	Modulation	Output Power		Total Power	
						Channel Power (dBm)	PSD (dBm/MHz)	Channel Power (dBm)	PSD (dBm/MHz)
Band 2 BW 5MHz + BW 5MHz	Multi/ Contiguous	Bottom	7	4TX	QPSK	45.81	35.81	51.81	41.81
					16QAM	45.64	35.64	51.64	41.64
					64QAM	45.56	35.56	51.56	41.56
					256QAM	45.64	35.64	51.64	41.64
		Top	7	4TX	QPSK	45.74	35.74	51.74	41.74
					16QAM	45.86	35.86	51.86	41.86
					64QAM	45.88	35.88	51.88	41.88
					256QAM	45.57	35.57	51.57	41.57

Test Data : Band 2, BW 5MHz + BW 15MHz, Multi carrier(Contiguous), 2TX

Type	Carrier	Channel	Test Ant. port	Output port	Modulation	Output Power		Total Power	
						Channel Power (dBm)	PSD (dBm/MHz)	Channel Power (dBm)	PSD (dBm/MHz)
Band 2 BW 5MHz + BW 15MHz	Multi/ Contiguous	Bottom	5	2TX	QPSK	47.98	34.97	50.98	37.97
					16QAM	47.98	34.97	50.98	37.97
					64QAM	48.02	35.01	51.02	38.01
					256QAM	48.04	35.03	51.04	38.03
		Top	5	2TX	QPSK	48.19	35.18	51.19	38.18
					16QAM	48.09	35.08	51.09	38.08
					64QAM	48.15	35.14	51.15	38.14
					256QAM	48.13	35.12	51.13	38.12

Test Data : Band 2, BW 5MHz + BW 15MHz, Multi carrier(Contiguous), 4TX

Type	Carrier	Channel	Test Ant. port	Output port	Modulation	Output Power		Total Power	
						Channel Power (dBm)	PSD (dBm/MHz)	Channel Power (dBm)	PSD (dBm/MHz)
Band 2 BW 5MHz + BW 15MHz	Multi/ Contiguous	Bottom	7	4TX	QPSK	46.16	33.15	52.16	39.15
					16QAM	45.81	32.80	51.81	38.80
					64QAM	45.70	32.69	51.70	38.69
					256QAM	45.85	32.84	51.85	38.84
		Top	7	4TX	QPSK	45.82	32.81	51.82	38.81
					16QAM	45.85	32.84	51.85	38.84
					64QAM	45.95	32.94	51.95	38.94
					256QAM	45.91	32.90	51.91	38.90



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Test Data : Band 2, BW 5MHz + BW 5MHz, Multi carrier(Non-contiguous), 2TX

Type	Carrier	Channel	Test Ant. port	Output port	Modulation	Output Power		Total Power	
						Channel Power (dBm)	PSD (dBm/MHz)	Channel Power (dBm)	PSD (dBm/MHz)
Band 2 BW 5MHz + BW 5MHz	Multi/ Non- Contiguous	Bottom	5	2TX	QPSK	44.48	37.49	47.48	40.49
					16QAM	44.45	37.46	47.45	40.46
					64QAM	44.45	37.46	47.45	40.46
					256QAM	44.44	37.45	47.44	40.45
		Top	5	2TX	QPSK	44.53	37.55	47.53	40.55
					16QAM	44.53	37.54	47.53	40.54
					64QAM	44.48	37.49	47.48	40.49
					256QAM	44.48	37.49	47.48	40.49

Test Data : Band 2, BW 5MHz + BW 5MHz, Multi carrier(Non-contiguous), 4TX

Type	Carrier	Channel	Test Ant. port	Output port	Modulation	Output Power		Total Power	
						Channel Power (dBm)	PSD (dBm/MHz)	Channel Power (dBm)	PSD (dBm/MHz)
Band 2 BW 5MHz + BW 5MHz	Multi/ Non- Contiguous	Bottom	7	4TX	QPSK	42.90	35.91	48.90	41.91
					16QAM	42.89	35.90	48.89	41.90
					64QAM	42.94	35.95	48.94	41.95
					256QAM	42.84	35.85	48.84	41.85
		Top	7	4TX	QPSK	42.89	35.90	48.89	41.90
					16QAM	42.93	35.94	48.93	41.94
					64QAM	42.96	35.97	48.96	41.97
					256QAM	42.95	35.96	48.95	41.96

Test Data : Band 2, BW 15MHz + BW 5MHz, Multi carrier(Non-contiguous), 2TX

Type	Carrier	Channel	Test Ant. port	Output port	Modulation	Output Power		Total Power	
						Channel Power (dBm)	PSD (dBm/MHz)	Channel Power (dBm)	PSD (dBm/MHz)
Band 2 BW 15MHz + BW 5MHz	Multi/ Non- Contiguous	Bottom	5	2TX	QPSK	46.21	34.45	49.21	37.45
					16QAM	46.09	34.33	49.09	37.33
					64QAM	46.19	34.43	49.19	37.43
					256QAM	46.19	34.43	49.19	37.43
		Top	5	2TX	QPSK	42.52	35.53	45.52	38.53
					16QAM	42.54	35.55	45.54	38.55
					64QAM	42.56	35.57	45.56	38.57
					256QAM	42.55	35.56	45.55	38.56

Test Data : Band 2, BW 15MHz + BW 5MHz, Multi carrier(Non-contiguous), 4TX

Type	Carrier	Channel	Test Ant. port	Output port	Modulation	Output Power		Total Power	
						Channel Power (dBm)	PSD (dBm/MHz)	Channel Power (dBm)	PSD (dBm/MHz)
Band 2 BW 15MHz + BW 5MHz	Multi/ Non- Contiguous	Bottom	7	4TX	QPSK	44.73	32.97	50.73	38.97
					16QAM	44.59	32.83	50.59	38.83
					64QAM	44.68	32.92	50.68	38.92
					256QAM	44.67	32.91	50.67	38.91
		Top	7	4TX	QPSK	41.07	34.08	47.07	40.08
					16QAM	41.04	34.05	47.04	40.05
					64QAM	40.86	33.87	46.86	39.87
					256QAM	40.86	33.80	46.86	39.80



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Test Data : Band 66, BW 5MHz, Single carrier, 2TX

Type	Carrier	Channel	Test Ant. port	Output port	Modulation	Output Power		Total Power	
						Channel Power (dBm)	PSD (dBm/MHz)	Channel Power (dBm)	PSD (dBm/MHz)
Band 66 BW 5MHz	Single	Bottom	1	2TX	QPSK	46.32	39.33	49.32	42.33
					16QAM	46.40	39.41	49.40	42.41
					64QAM	46.39	39.40	49.39	42.40
					256QAM	46.39	39.40	49.39	42.40
		Middle	1	2TX	QPSK	46.16	39.17	49.16	42.17
					16QAM	46.18	39.19	49.18	42.19
					64QAM	46.16	39.17	49.16	42.17
					256QAM	46.19	39.20	49.19	42.20
	Top	1	2TX	QPSK	46.27	39.28	49.27	42.28	
				16QAM	46.29	39.30	49.29	42.30	
				64QAM	46.37	39.38	49.37	42.38	
				256QAM	46.36	39.37	49.36	42.37	

Test Data : Band 66, BW 5MHz, Single carrier, 4TX

Type	Carrier	Channel	Test Ant. port	Output port	Modulation	Output Power		Total Power	
						Channel Power (dBm)	PSD (dBm/MHz)	Channel Power (dBm)	PSD (dBm/MHz)
Band 66 BW 5MHz	Single	Bottom	3	4TX	QPSK	43.25	36.26	49.25	42.26
					16QAM	43.21	36.22	49.21	42.22
					64QAM	43.10	36.11	49.10	42.11
					256QAM	43.16	36.17	49.16	42.17
		Middle	3	4TX	QPSK	43.07	36.08	49.07	42.08
					16QAM	43.22	36.23	49.22	42.23
					64QAM	43.01	36.02	49.01	42.02
					256QAM	43.24	36.25	49.24	42.25
		Top	3	4TX	QPSK	43.24	36.25	49.24	42.25
					16QAM	43.37	36.38	49.37	42.38
					64QAM	43.42	36.43	49.42	42.43
					256QAM	43.44	36.45	49.44	42.45



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Test Data : Band 66, BW 15MHz, Single carrier, 2TX

Type	Carrier	Channel	Test Ant. port	Output port	Modulation	Output Power		Total Power	
						Channel Power (dBm)	PSD (dBm/MHz)	Channel Power (dBm)	PSD (dBm/MHz)
Band 66 BW 15MHz	Single	Bottom	1	2TX	QPSK	49.43	37.67	52.43	40.67
					16QAM	49.80	38.04	52.80	41.04
					64QAM	49.98	38.22	52.98	41.22
					256QAM	50.09	38.33	53.09	41.33
		Middle	1	2TX	QPSK	49.51	37.75	52.51	40.75
					16QAM	49.64	37.88	52.64	40.88
					64QAM	49.81	38.05	52.81	41.05
					256QAM	49.87	38.11	52.87	41.11
		Top	1	2TX	QPSK	49.93	38.17	52.93	41.17
					16QAM	50.03	38.27	53.03	41.27
					64QAM	50.07	38.31	53.07	41.31
					256QAM	50.10	38.34	53.10	41.34

Test Data : Band 66, BW 15MHz, Single carrier, 4TX

Type	Carrier	Channel	Test Ant. port	Output port	Modulation	Output Power		Total Power	
						Channel Power (dBm)	PSD (dBm/MHz)	Channel Power (dBm)	PSD (dBm/MHz)
Band 66 BW 15MHz	Single	Bottom	3	4TX	QPSK	47.81	36.05	53.81	42.05
					16QAM	47.92	36.15	53.92	42.15
					64QAM	48.05	36.29	54.05	42.29
					256QAM	48.06	36.30	54.06	42.30
		Middle	3	4TX	QPSK	48.05	36.29	54.05	42.29
					16QAM	48.12	36.36	54.12	42.36
					64QAM	48.04	36.28	54.04	42.28
					256QAM	48.15	36.38	54.15	42.38
		Top	3	4TX	QPSK	48.07	36.31	54.07	42.31
					16QAM	48.13	36.37	54.13	42.37
					64QAM	47.75	35.99	53.75	41.99
					256QAM	47.75	35.99	53.75	41.99



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Test Data : Band 66, BW 5MHz + BW 5MHz, Multi carrier, 2TX

Type	Carrier	Channel	Test Ant. port	Output port	Modulation	Output Power		Total Power	
						Channel Power (dBm)	PSD (dBm/MHz)	Channel Power (dBm)	PSD (dBm/MHz)
Band 66 BW 5MHz + BW 5MHz	Multi/ Contiguous	Bottom	1	2TX	QPSK	47.53	37.53	50.53	40.53
					16QAM	47.64	37.64	50.64	40.64
					64QAM	47.57	37.57	50.57	40.57
					256QAM	47.64	37.64	50.64	40.64
		Top	1	2TX	QPSK	47.58	37.58	50.58	40.58
					16QAM	47.72	37.72	50.72	40.72
					64QAM	47.91	37.91	50.91	40.91
					256QAM	48.06	38.06	51.06	41.06

Test Data : Band 66, BW 5MHz + BW 5MHz, Multi carrier, 4TX

Type	Carrier	Channel	Test Ant. port	Output port	Modulation	Output Power		Total Power	
						Channel Power (dBm)	PSD (dBm/MHz)	Channel Power (dBm)	PSD (dBm/MHz)
Band 66 BW 5MHz + BW 5MHz	Multi/ Contiguous	Bottom	3	4TX	QPSK	45.91	35.91	51.91	41.91
					16QAM	45.96	35.96	51.96	41.96
					64QAM	45.90	35.90	51.90	41.90
					256QAM	45.96	35.96	51.96	41.96
		Top	3	4TX	QPSK	45.97	35.97	51.97	41.97
					16QAM	46.03	36.03	52.03	42.03
					64QAM	46.05	36.05	52.05	42.05
					256QAM	46.02	36.02	52.02	42.02

Test Data : Band 66, BW 5MHz + BW 15MHz, Multi carrier, 2TX

Type	Carrier	Channel	Test Ant. port	Output port	Modulation	Output Power		Total Power	
						Channel Power (dBm)	PSD (dBm/MHz)	Channel Power (dBm)	PSD (dBm/MHz)
Band 66 BW 5MHz + BW 15MHz	Multi/ Contiguous	Bottom	1	2TX	QPSK	49.61	36.60	52.61	39.60
					16QAM	49.82	36.81	52.82	39.81
					64QAM	49.73	36.71	52.73	39.71
					256QAM	49.92	36.91	52.92	39.91
		Top	1	2TX	QPSK	50.01	37.00	53.01	40.00
					16QAM	50.14	37.13	53.14	40.13
					64QAM	50.21	37.20	53.21	40.20
					256QAM	50.13	37.12	53.13	40.12

Test Data : Band 66, BW 5MHz + BW 15MHz, Multi carrier, 4TX

Type	Carrier	Channel	Test Ant. port	Output port	Modulation	Output Power		Total Power	
						Channel Power (dBm)	PSD (dBm/MHz)	Channel Power (dBm)	PSD (dBm/MHz)
Band 66 BW 5MHz + BW 15MHz	Multi/ Contiguous	Bottom	3	4TX	QPSK	47.83	34.82	53.83	40.82
					16QAM	47.91	34.90	53.91	40.90
					64QAM	47.89	34.88	53.89	40.88
					256QAM	47.79	34.78	53.79	40.78
		Top	3	4TX	QPSK	47.73	34.72	53.73	40.72
					16QAM	47.98	34.97	53.98	40.97
					64QAM	47.99	34.98	53.99	40.98
					256QAM	47.98	34.97	53.98	40.97



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Test Data : Band 66, BW 5MHz + BW 5MHz, Multi carrier, 2TX

Type	Carrier	Channel	Test Ant. port	Output port	Modulation	Output Power		Total Power	
						Channel Power (dBm)	PSD (dBm/MHz)	Channel Power (dBm)	PSD (dBm/MHz)
Band 66 BW 5MHz + BW 5MHz	Multi/ Non- Contiguous	Bottom	1	2TX	QPSK	44.89	37.90	47.89	40.90
					16QAM	44.99	38.00	47.99	41.00
					64QAM	45.01	38.02	48.01	41.02
					256QAM	45.09	38.10	48.09	41.10
		Top	1	2TX	QPSK	45.28	38.29	48.28	41.29
					16QAM	45.28	38.29	48.28	41.29
					64QAM	45.23	38.24	48.23	41.24
					256QAM	45.25	38.26	48.25	41.26

Test Data : Band 66, BW 5MHz + BW 5MHz, Multi carrier, 4TX

Type	Carrier	Channel	Test Ant. port	Output port	Modulation	Output Power		Total Power	
						Channel Power (dBm)	PSD (dBm/MHz)	Channel Power (dBm)	PSD (dBm/MHz)
Band 66 BW 5MHz + BW 5MHz	Multi/ Non- Contiguous	Bottom	3	4TX	QPSK	42.89	35.90	48.89	41.90
					16QAM	42.90	35.91	48.90	41.91
					64QAM	42.95	35.96	48.95	41.96
					256QAM	42.69	35.70	48.69	41.70
		Top	3	4TX	QPSK	43.06	36.08	49.06	42.08
					16QAM	43.03	36.04	49.03	42.04
					64QAM	42.99	36.00	48.99	42.00
					256QAM	43.02	36.03	49.02	42.03

Test Data : Band 66, BW 15MHz + BW 5MHz, Multi carrier, 2TX

Type	Carrier	Channel	Test Ant. port	Output port	Modulation	Output Power		Total Power	
						Channel Power (dBm)	PSD (dBm/MHz)	Channel Power (dBm)	PSD (dBm/MHz)
Band 66 BW 15MHz + BW 5MHz	Multi/ Non- Contiguous	Bottom	1	2TX	QPSK	48.73	36.97	51.73	39.97
					16QAM	48.80	37.04	51.80	40.04
					64QAM	48.77	37.01	51.77	40.01
					256QAM	48.87	37.10	51.87	40.10
		Top	1	2TX	QPSK	44.17	37.18	47.17	40.18
					16QAM	44.13	37.14	47.13	40.14
					64QAM	44.12	37.13	47.12	40.13
					256QAM	44.17	37.18	47.17	40.18

Test Data : Band 66, BW 15MHz + BW 5MHz, Multi carrier, 4TX

Type	Carrier	Channel	Test Ant. port	Output port	Modulation	Output Power		Total Power	
						Channel Power (dBm)	PSD (dBm/MHz)	Channel Power (dBm)	PSD (dBm/MHz)
Band 66 BW 15MHz + BW 5MHz	Multi/ Non- Contiguous	Bottom	3	4TX	QPSK	46.39	34.62	52.39	40.62
					16QAM	46.35	34.59	52.35	40.59
					64QAM	46.28	34.52	52.28	40.52
					256QAM	46.28	34.52	52.28	40.52
		Top	3	4TX	QPSK	41.62	34.63	47.62	40.63
					16QAM	41.64	34.65	47.64	40.65
					64QAM	41.56	34.57	47.56	40.57
					256QAM	41.56	34.57	47.56	40.57



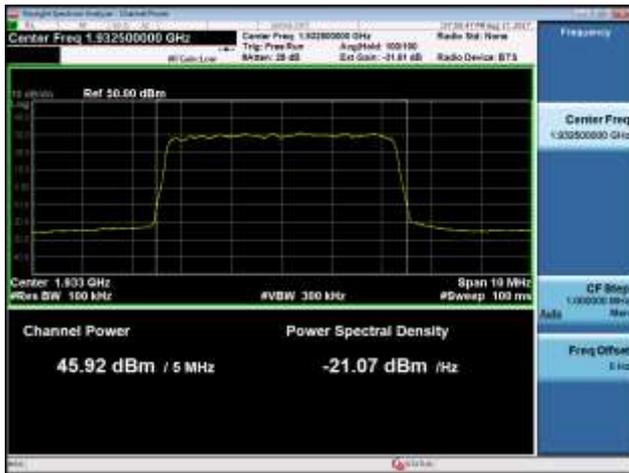
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Test Plot at Output Power

Band 2, BW 5MHz, Single carrier, 2TX, Bottom

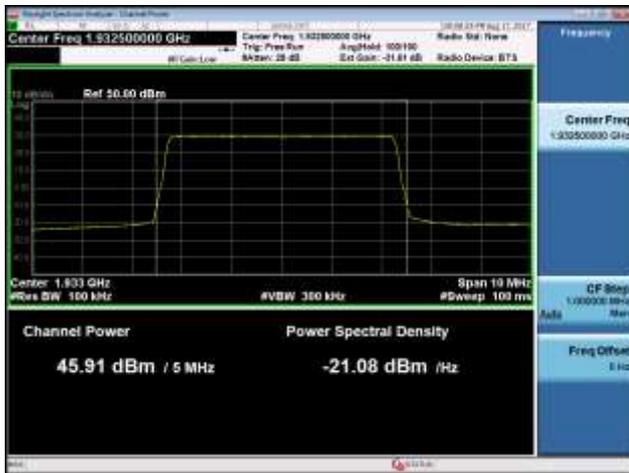
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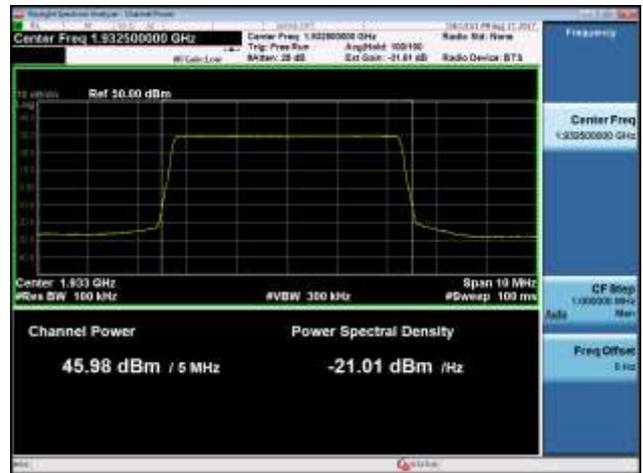
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64QAM

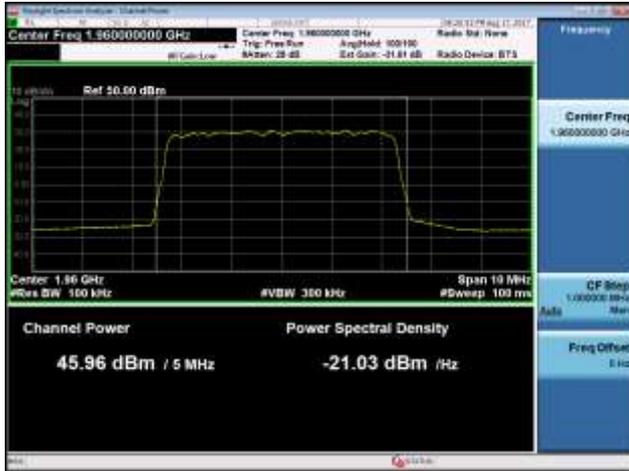


256QAM



Band 2, BW 5MHz, Single carrier, 2TX, Middle

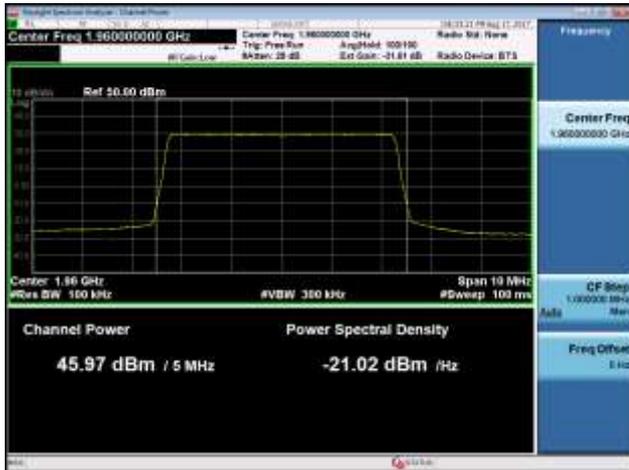
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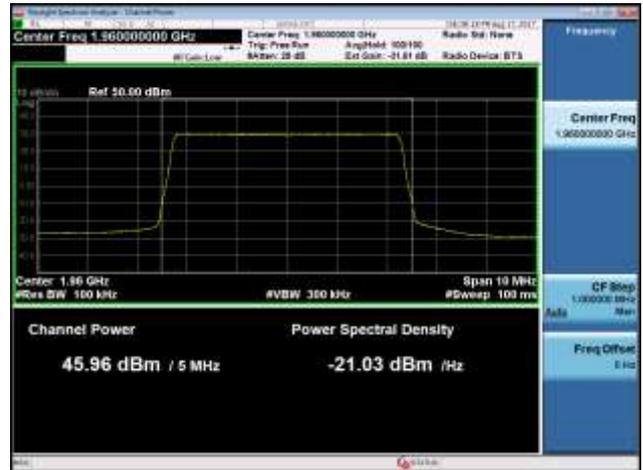
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64QAM



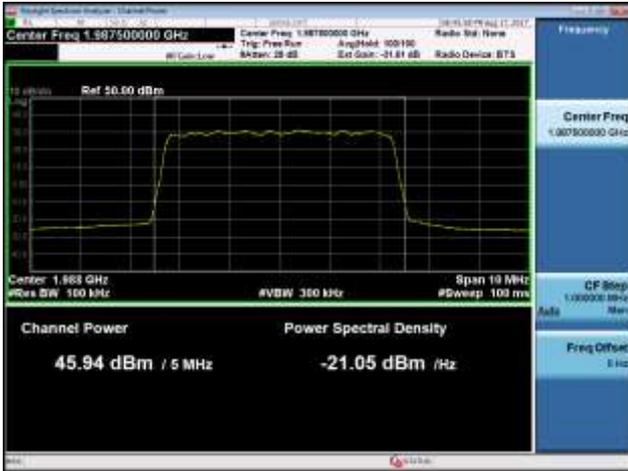
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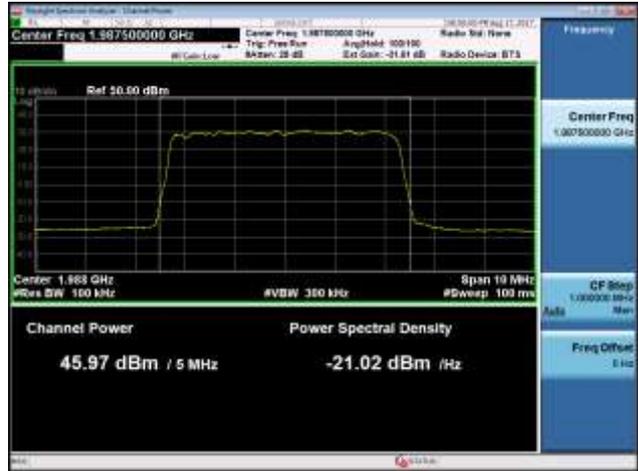


Band 2, BW 5MHz, Single carrier, 2TX, Top

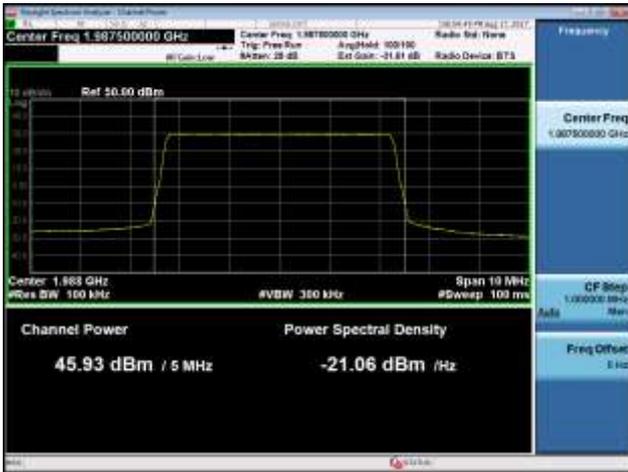
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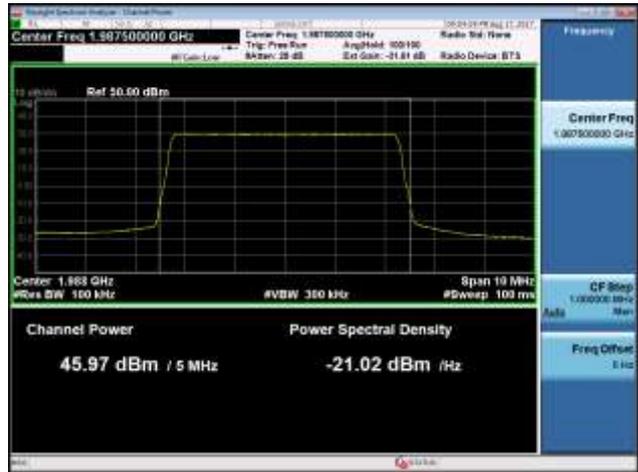
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64QAM



256QAM



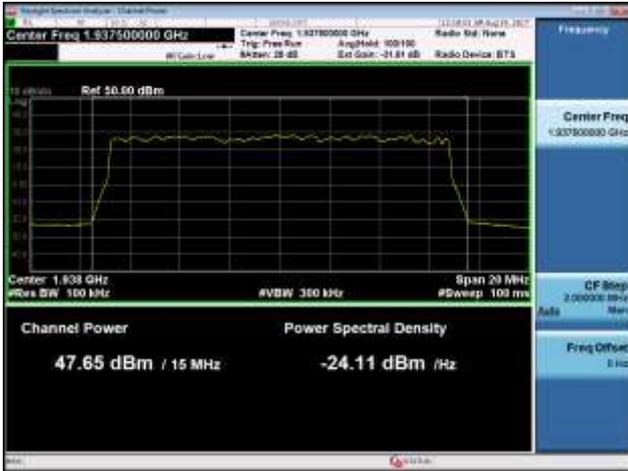


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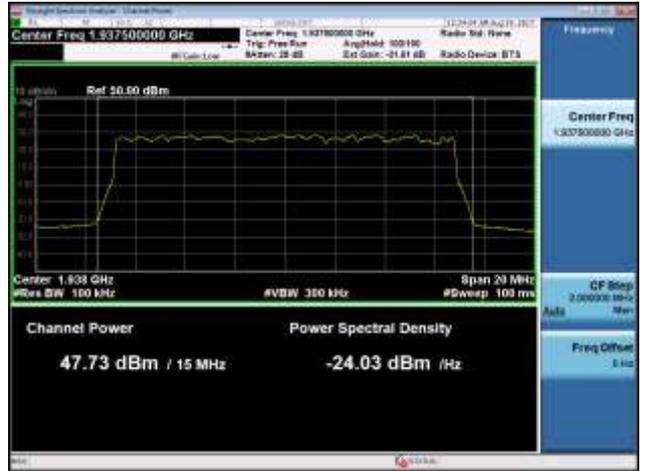
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Band 2, BW 15MHz, Single carrier, 2TX, Bottom

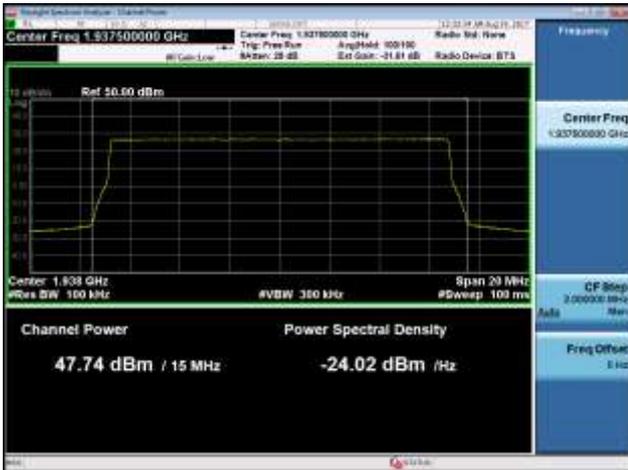
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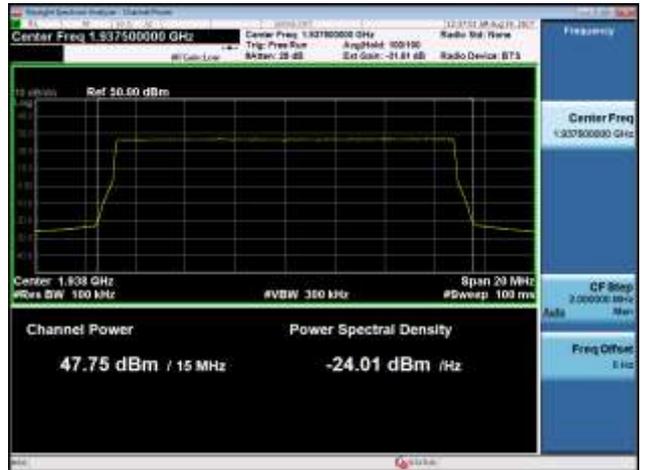
16QAM



64QAM



256QAM





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Band 2, BW 15MHz, Single carrier, 2TX, Middle

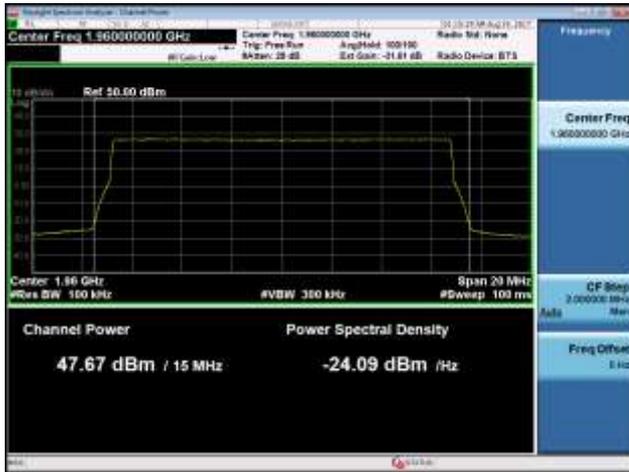
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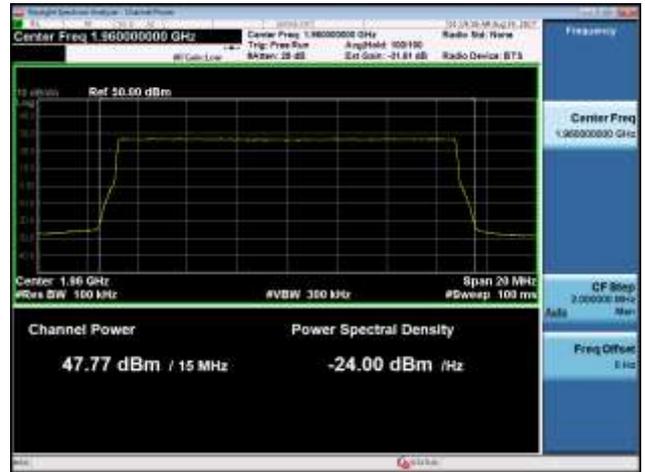
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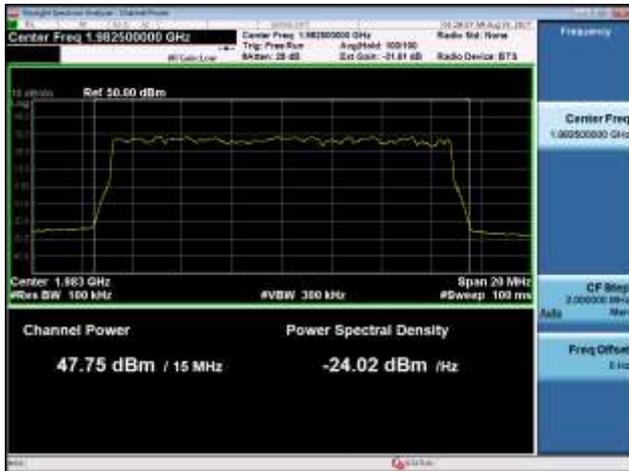


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Band 2, BW 15MHz, Single carrier, 2TX, Top

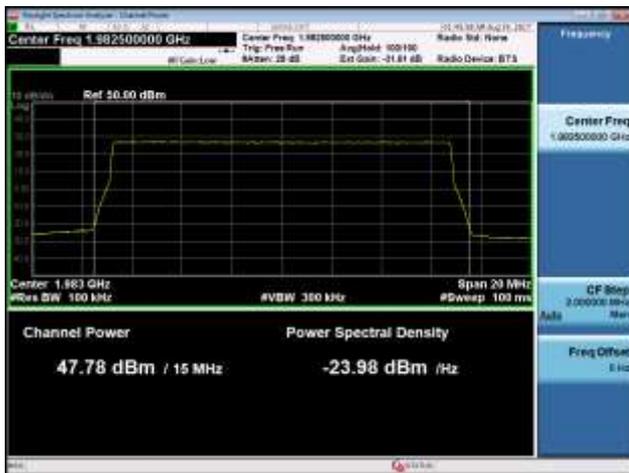
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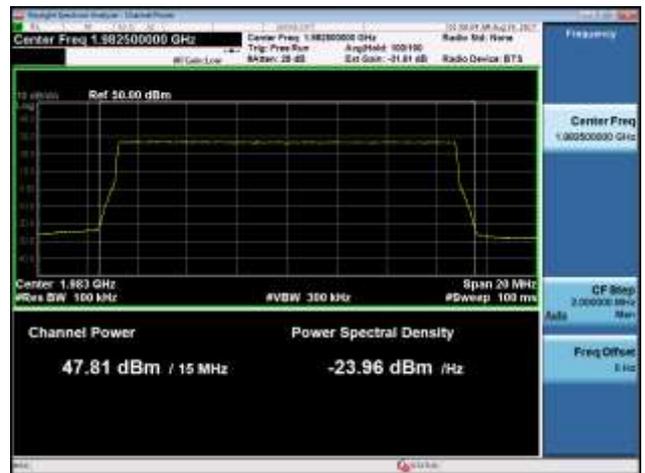
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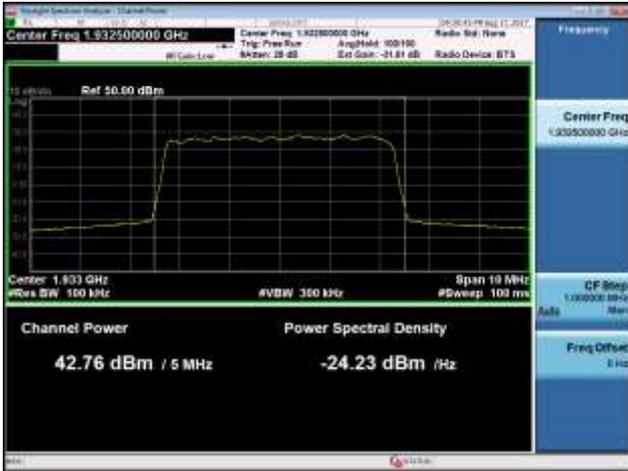
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Band 2, BW 5MHz, Single carrier, 4TX, Bottom

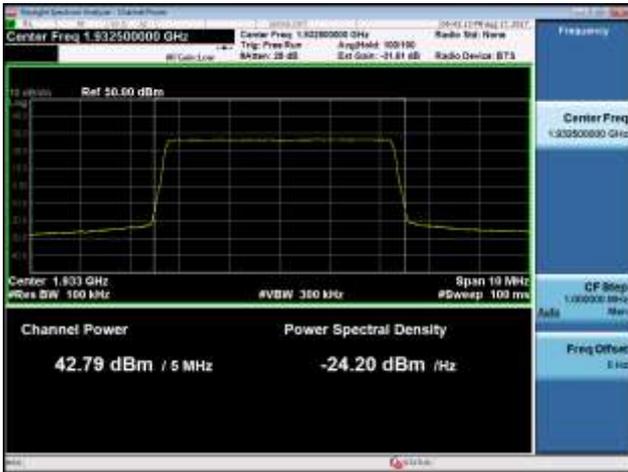
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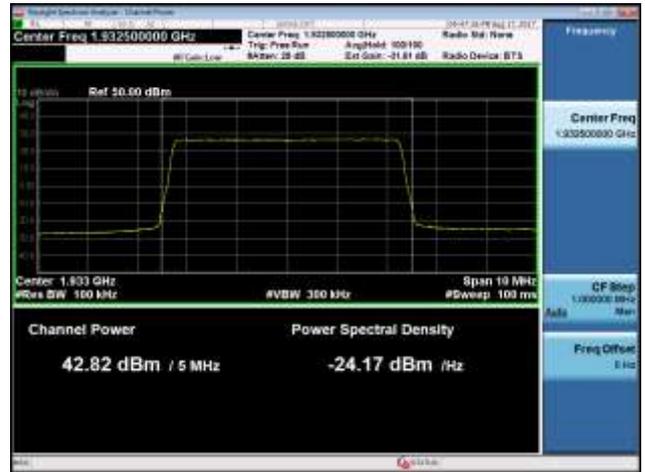
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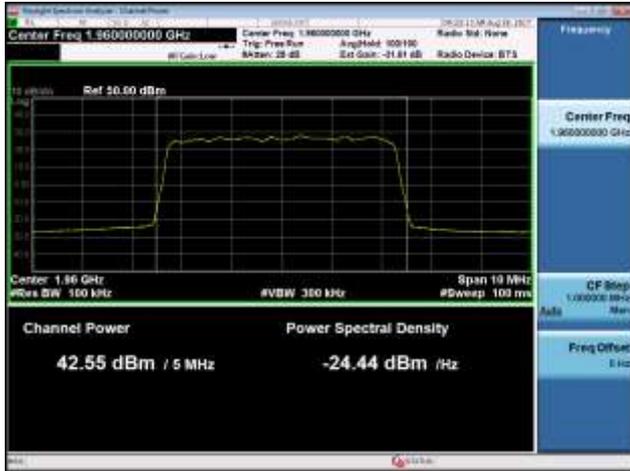
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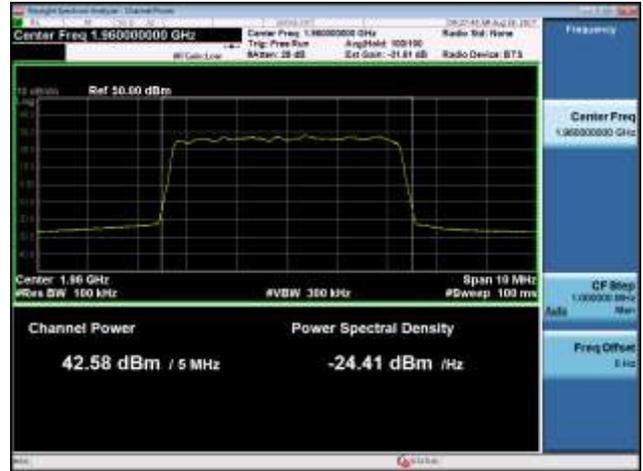


Band 2, BW 5MHz, Single carrier, 4TX, Middle

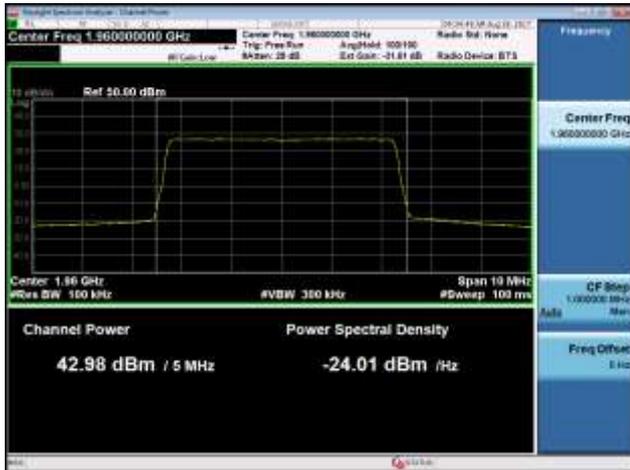
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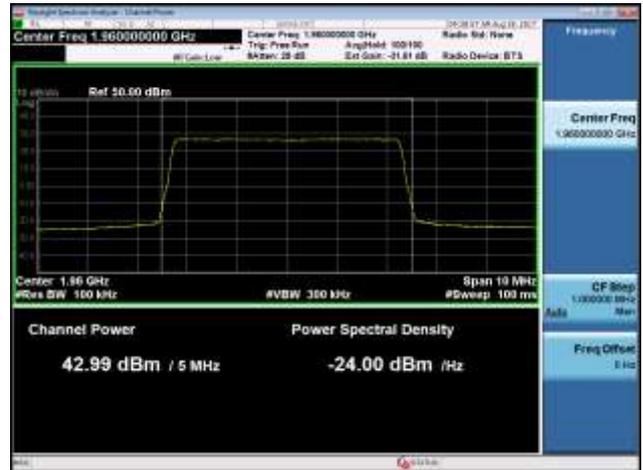
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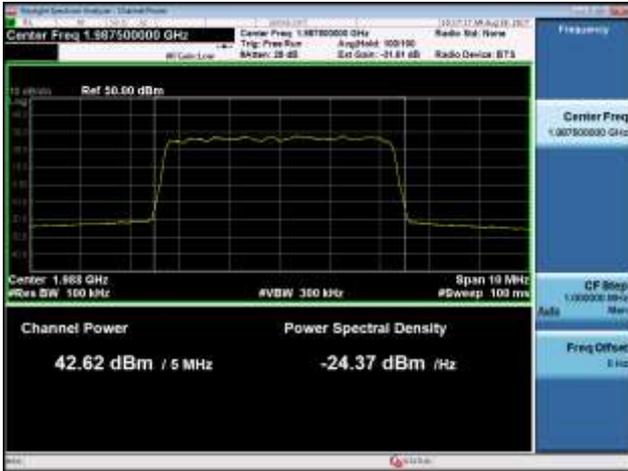
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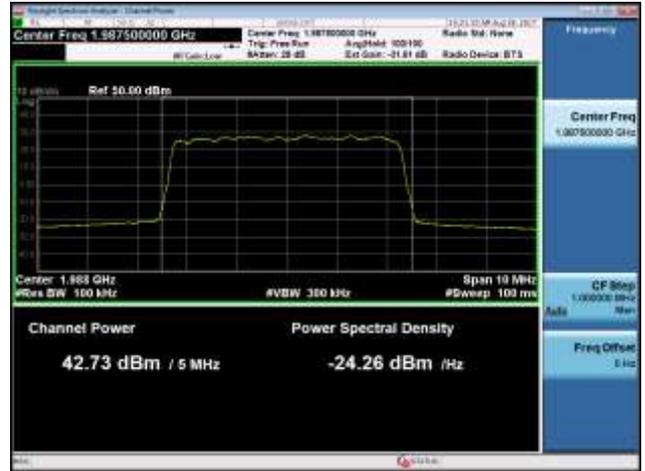


Band 2, BW 5MHz, Single carrier, 4TX Top

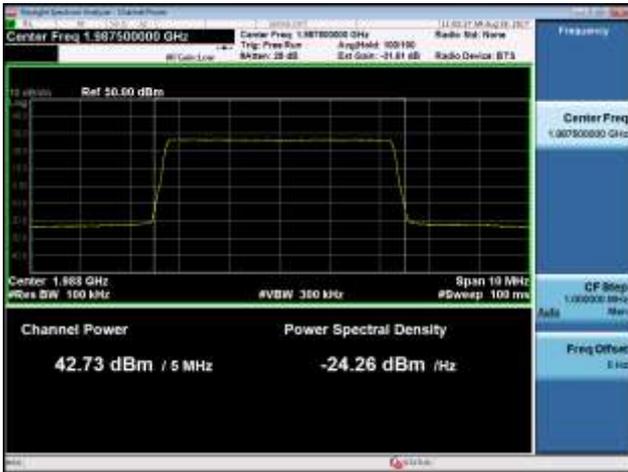
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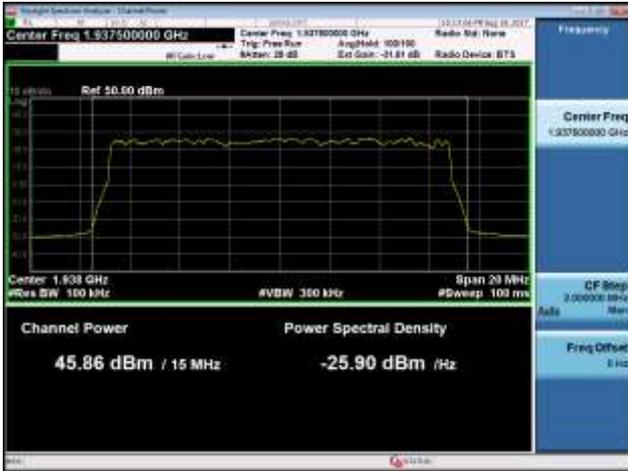


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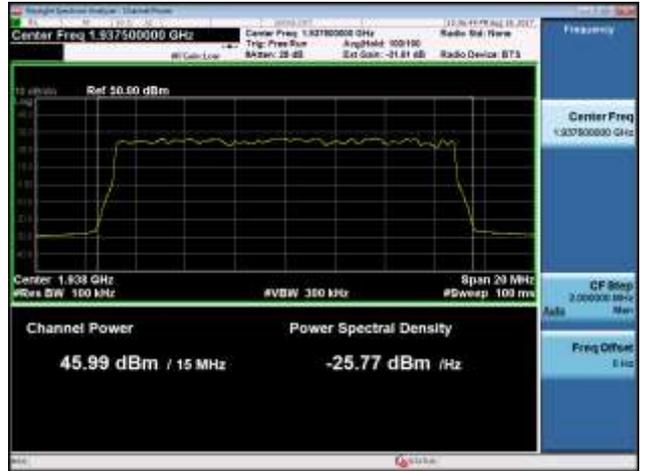
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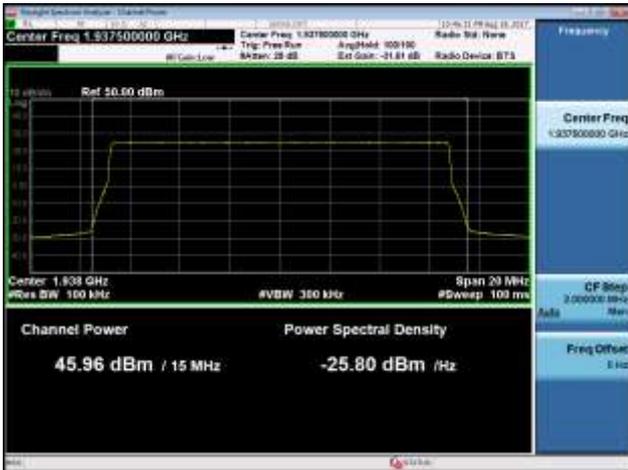
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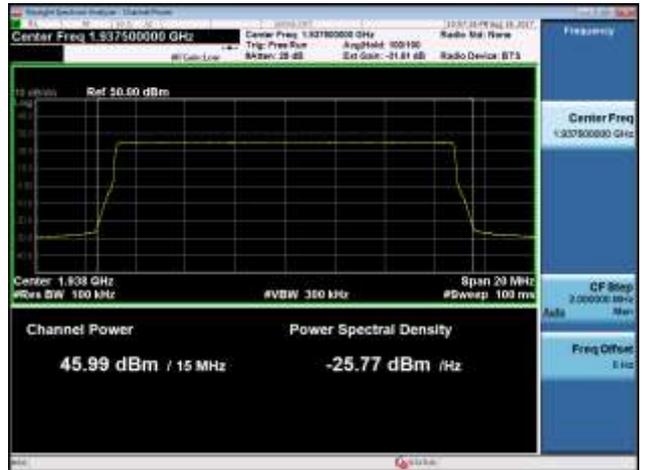
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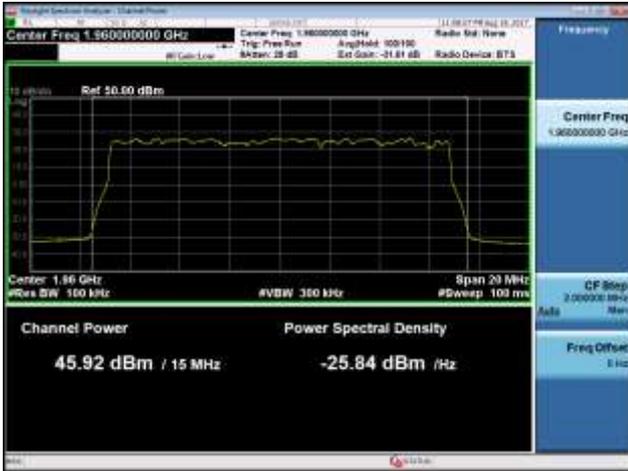


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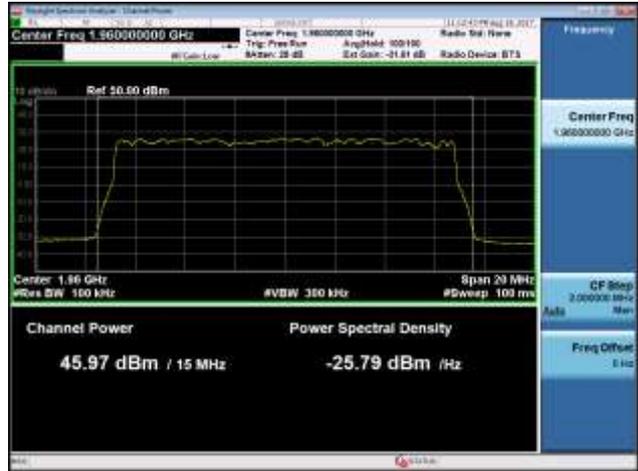
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Band 2, BW 15MHz, Single carrier, 4TX, Middle

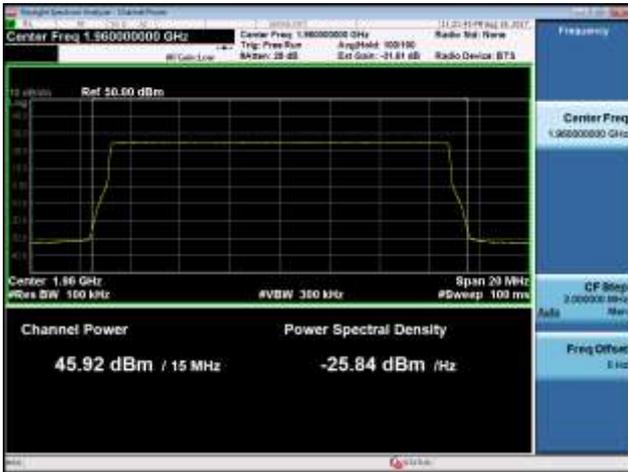
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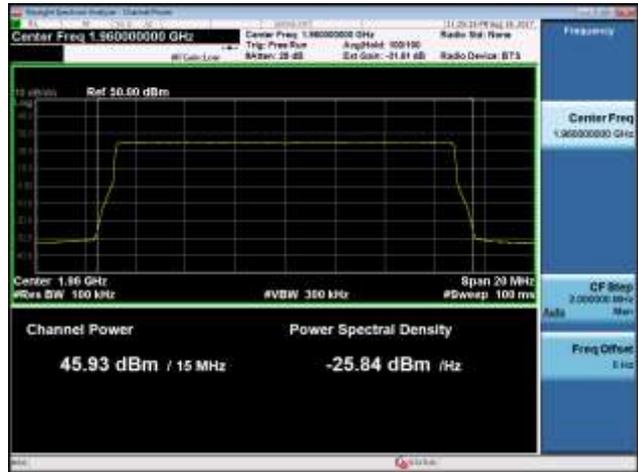
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64QAM



256QAM





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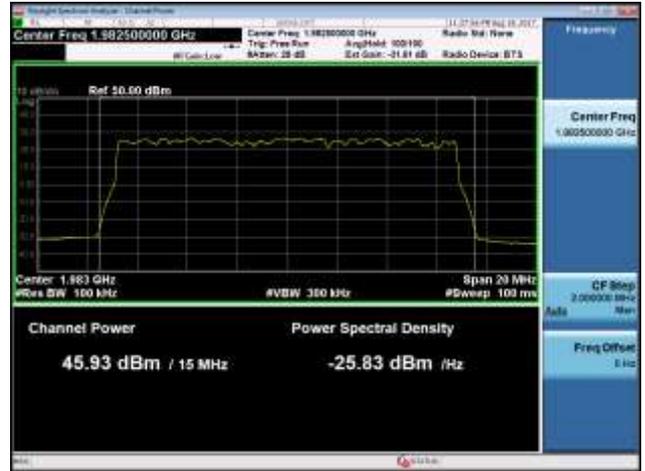
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Band 2, BW 15MHz, Single carrier, 4TX Top

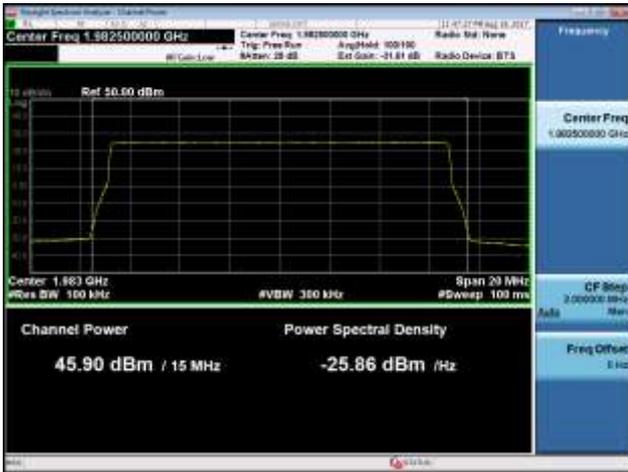
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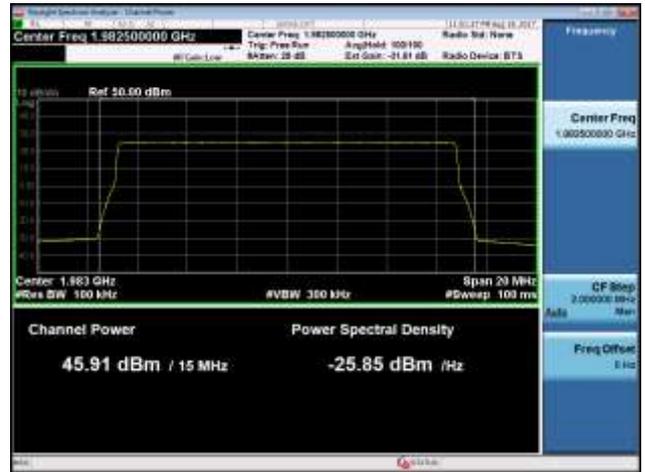
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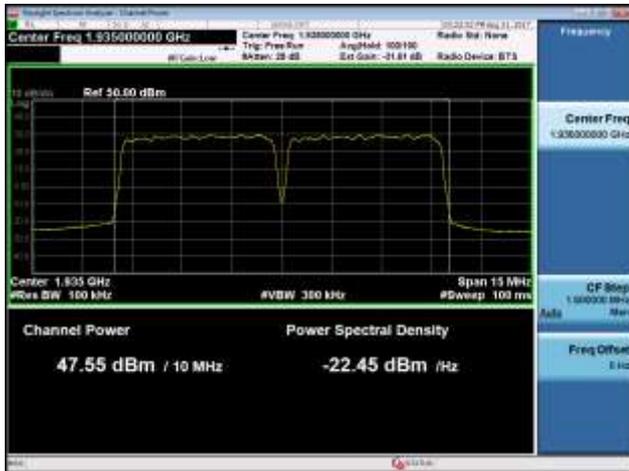


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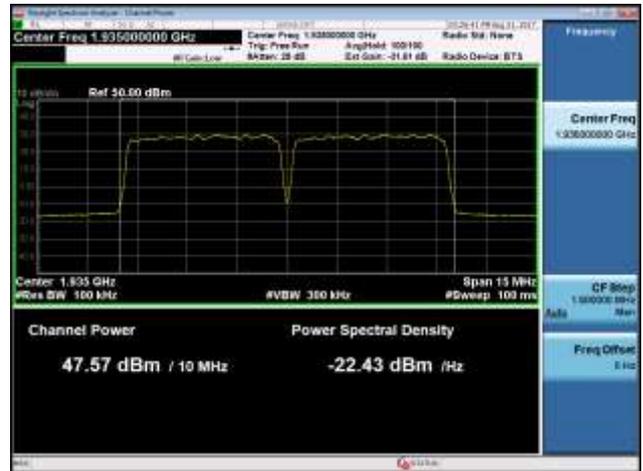


Band 2, BW 5MHz + BW 5MHz, Multi carrier(Contiguous), 2TX, Bottom

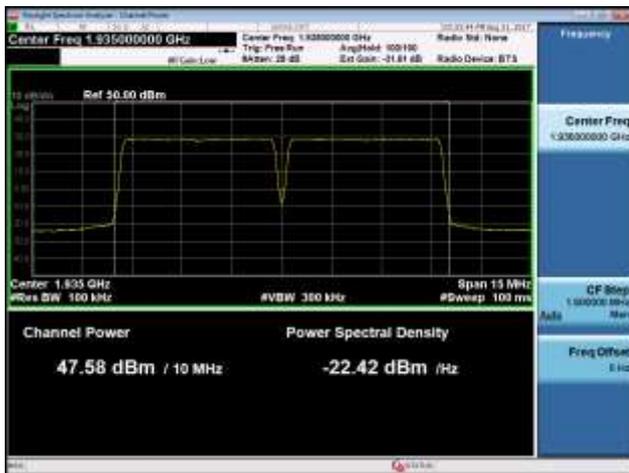
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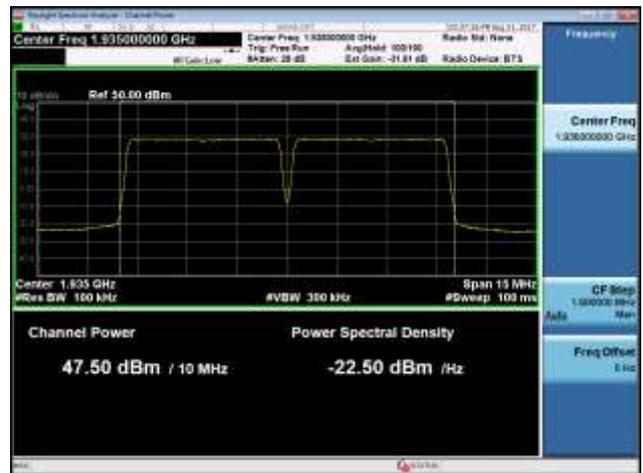
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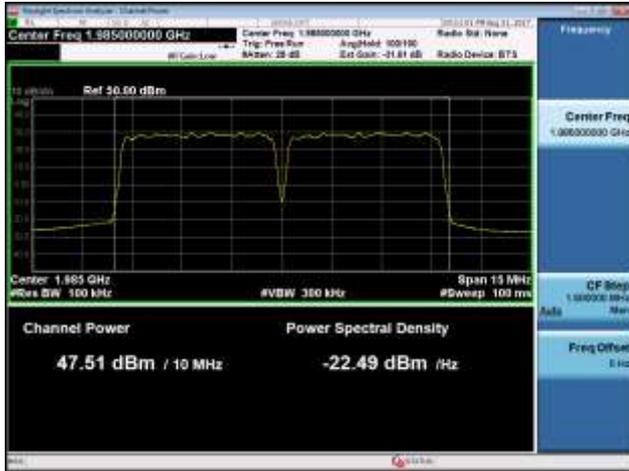


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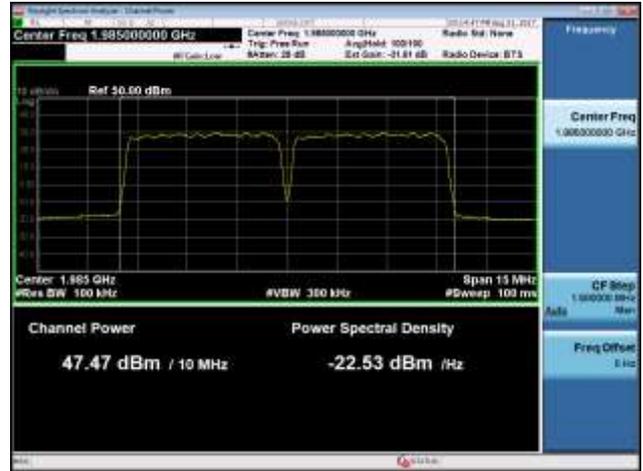
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Band 2, BW 5MHz + BW 5MHz, Multi carrier(Contiguous), 2TX, Top

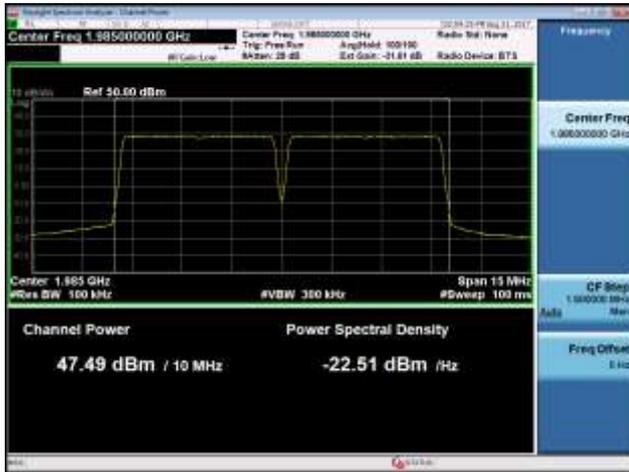
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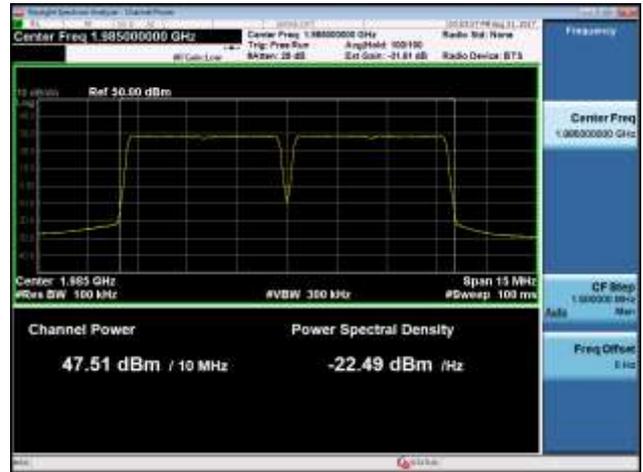
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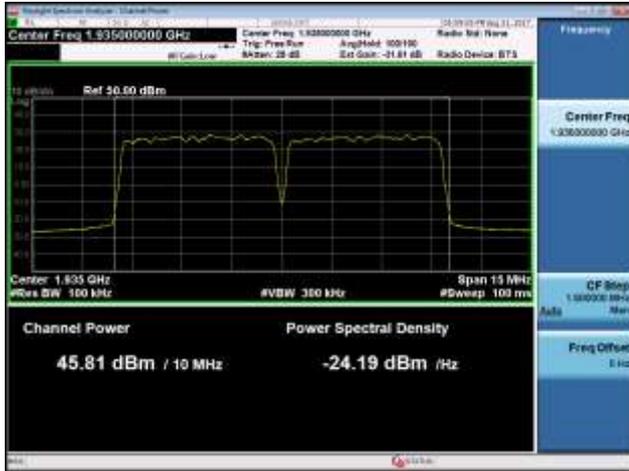


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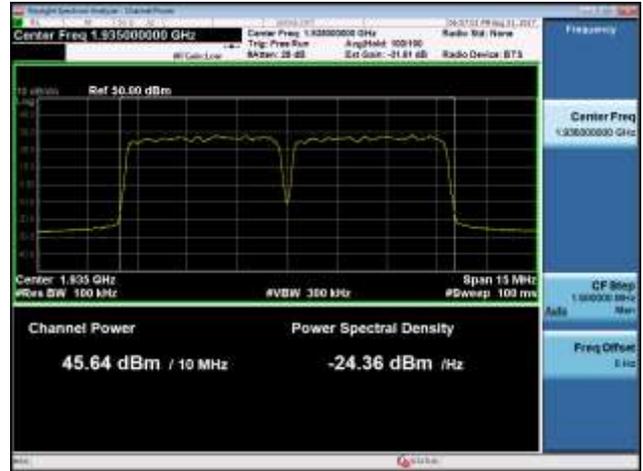
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Band 2, BW 5MHz + BW 5MHz, Multi carrier(Contiguous), 4TX, Bottom

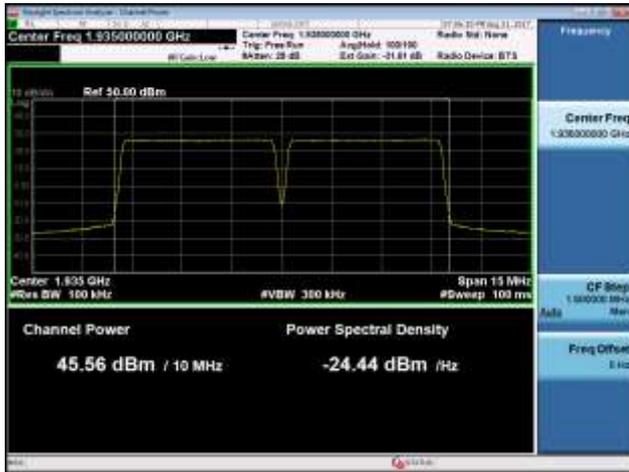
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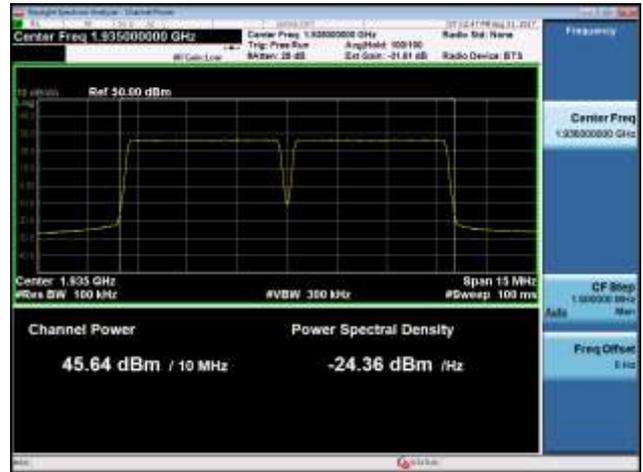
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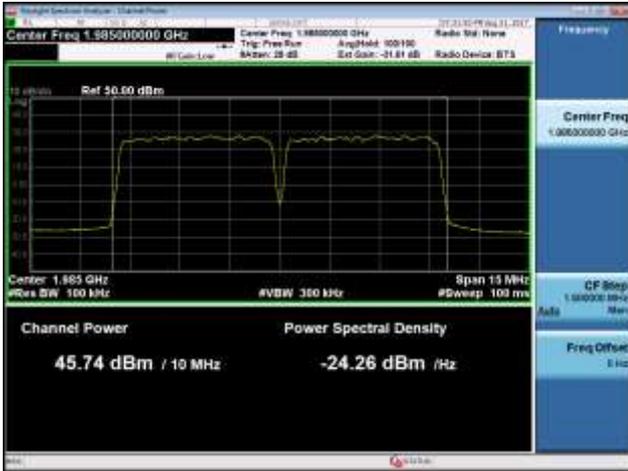


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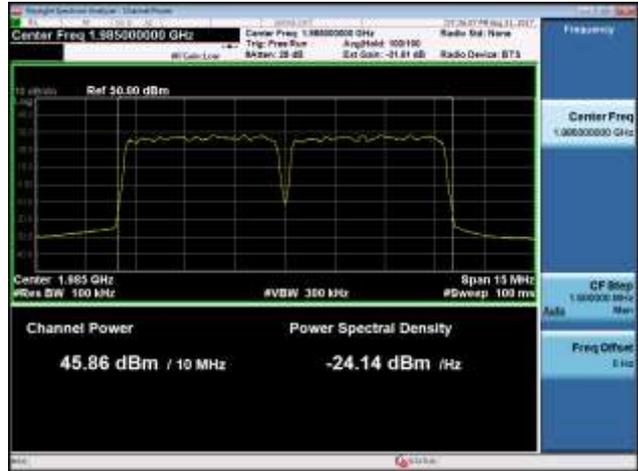


Band 2, BW 5MHz + BW 5MHz, Multi carrier(Contiguous), 4TX, Top

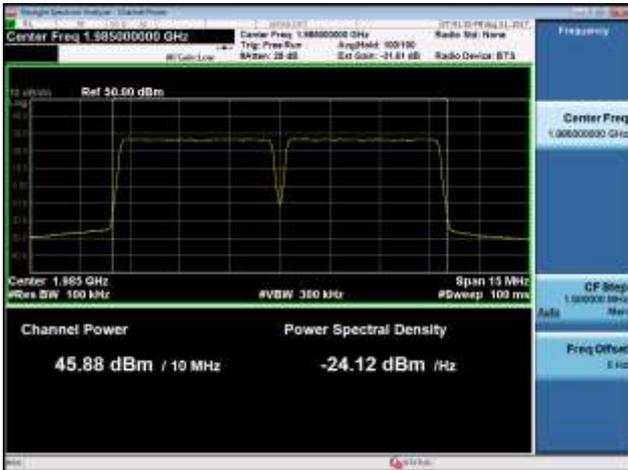
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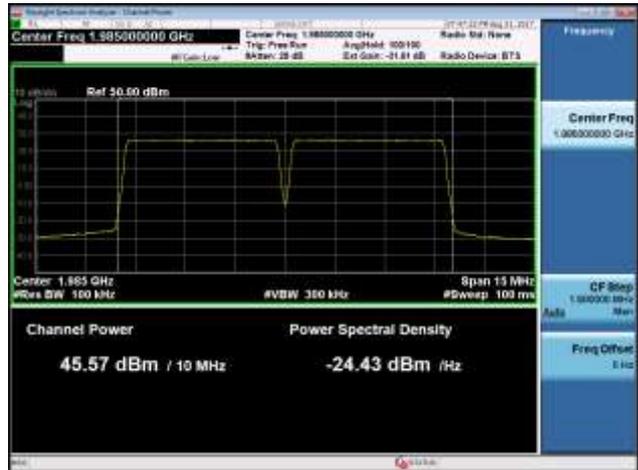
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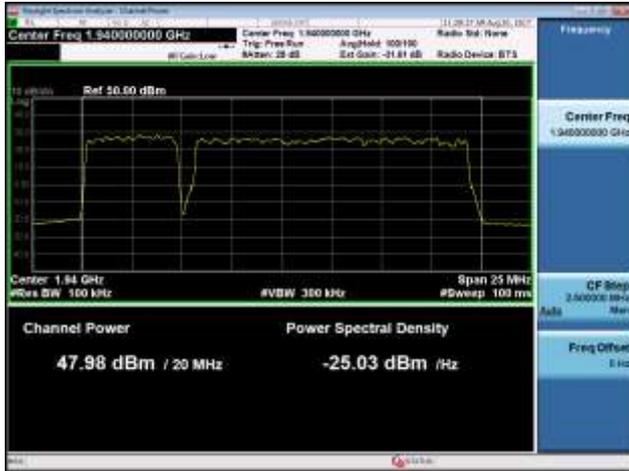
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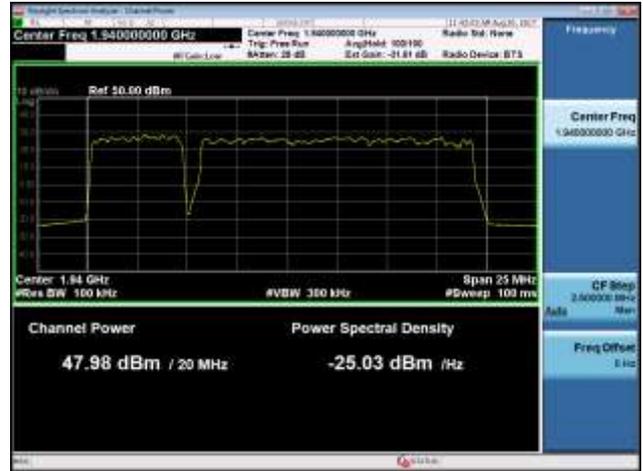


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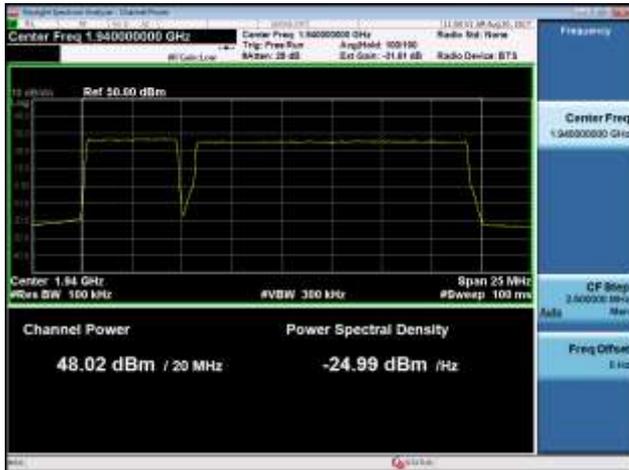
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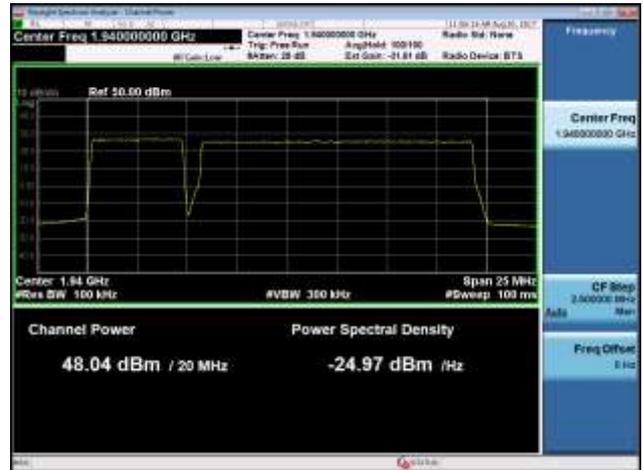
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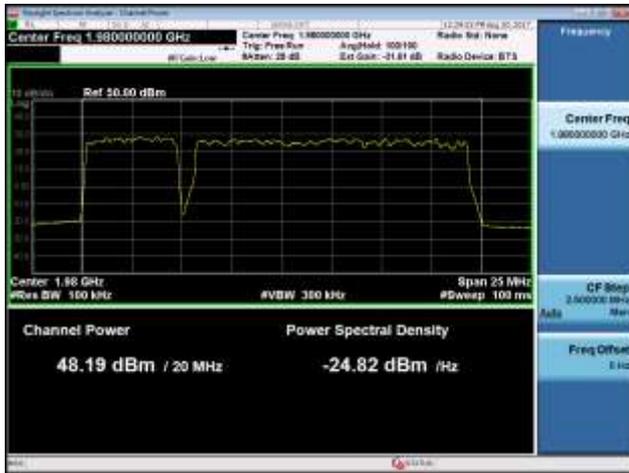


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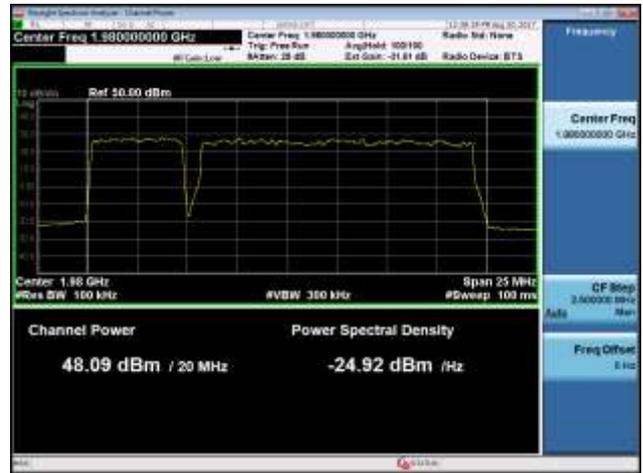


Band 2, BW 5MHz + BW 15MHz, Multi carrier(Contiguous), 2TX, Top

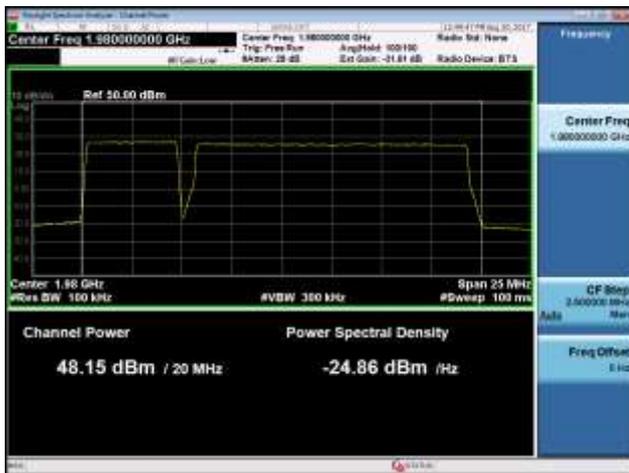
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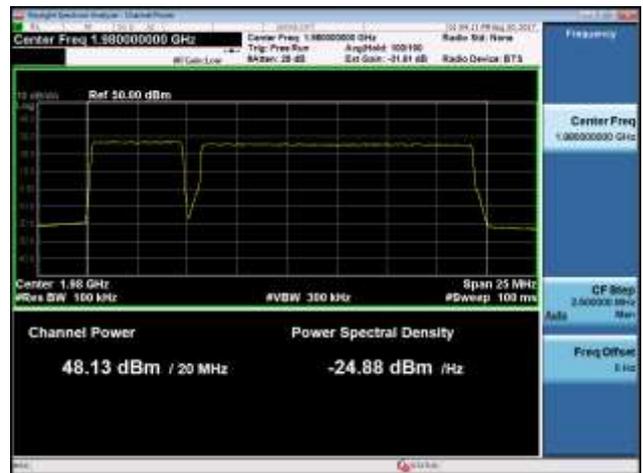
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Band 2, BW 5MHz + BW 15MHz, Multi carrier(Contiguous), 4TX, Bottom

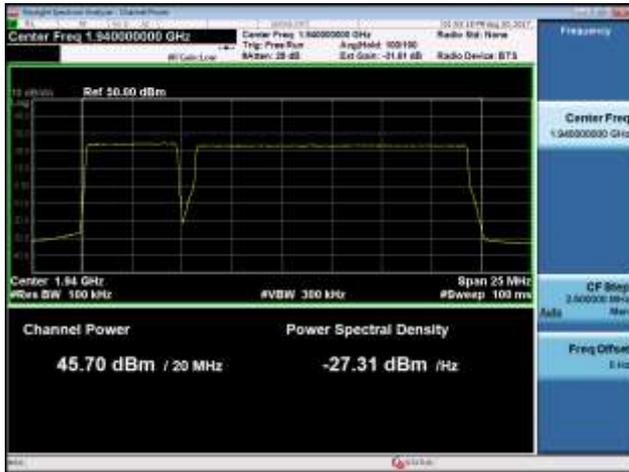
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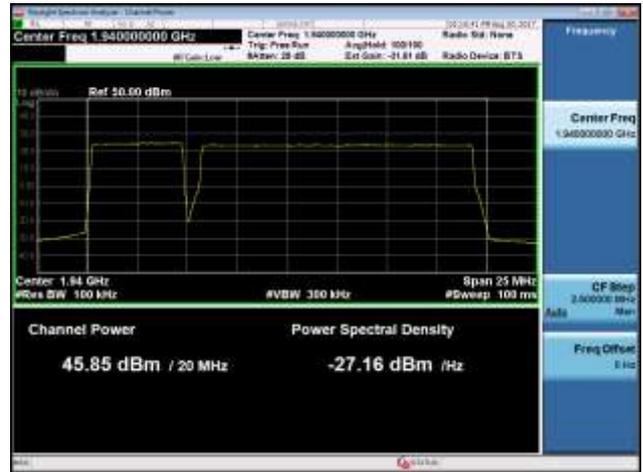
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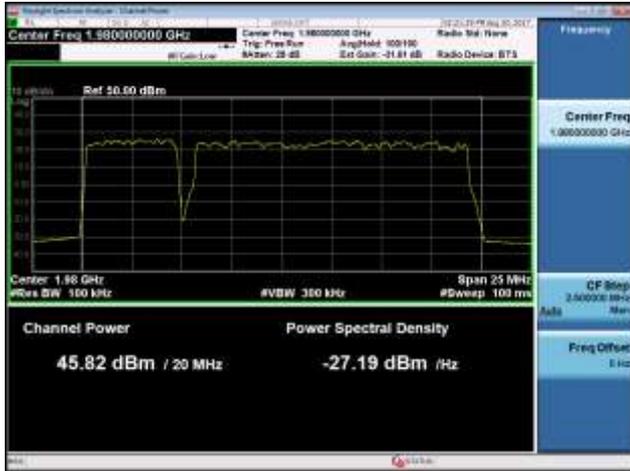


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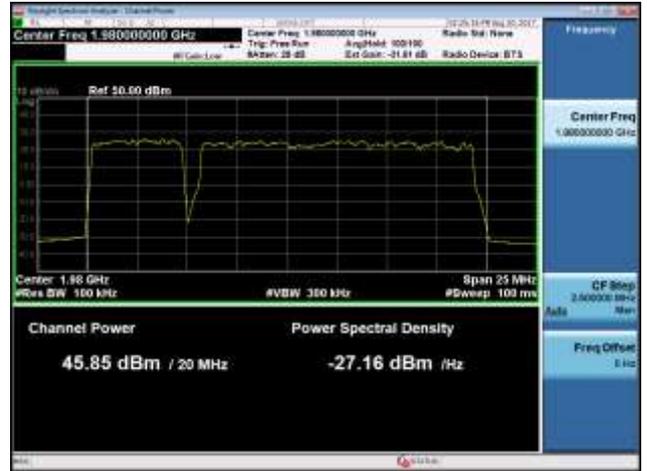


Band 2, BW 5MHz + BW 15MHz, Multi carrier(Contiguous), 4TX, Top

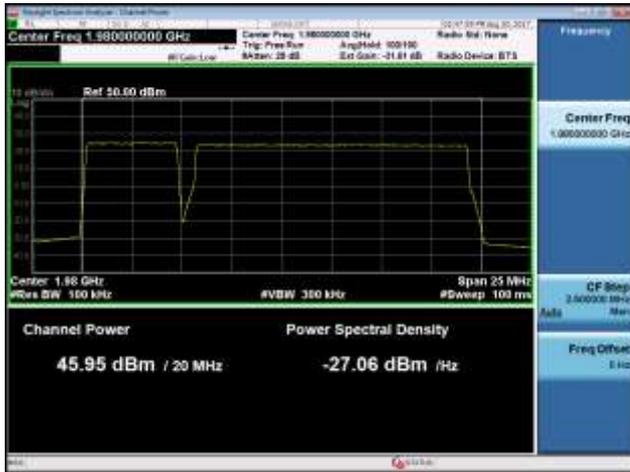
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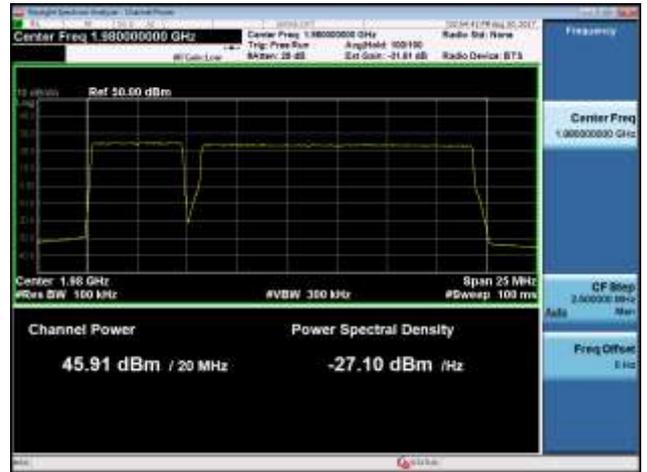
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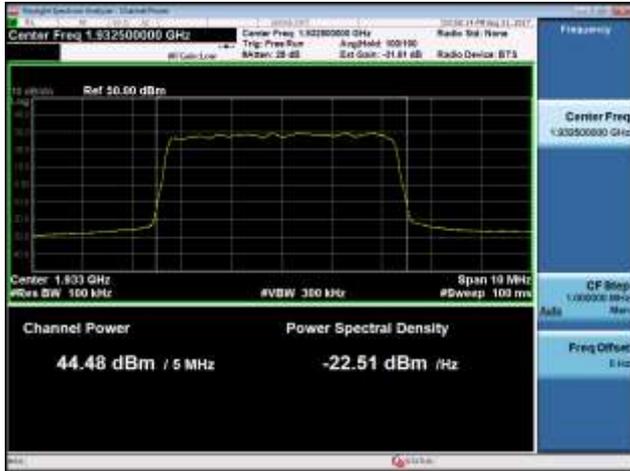
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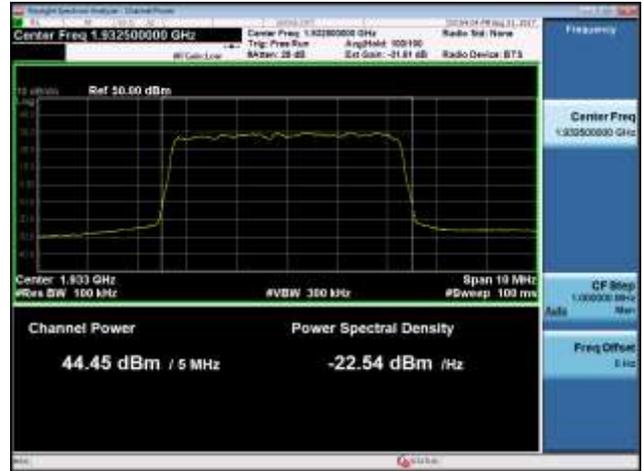


Band 2, BW 5MHz + BW 5MHz, Multi carrier(Non-Contiguous), 2TX, Bottom

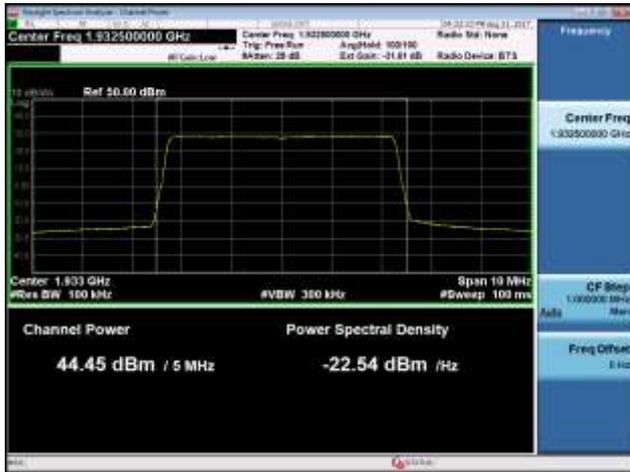
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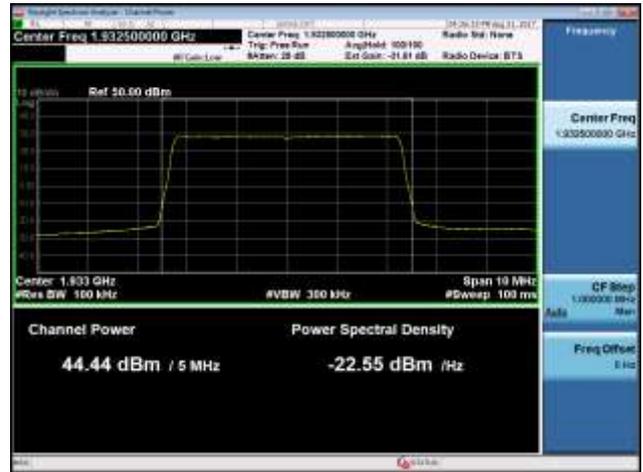
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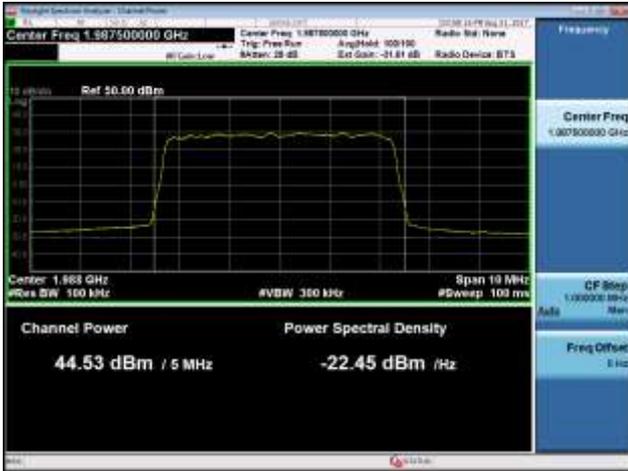
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Band 2, BW 5MHz + BW 5MHz, Multi carrier(Non-Contiguous), 2TX, Top

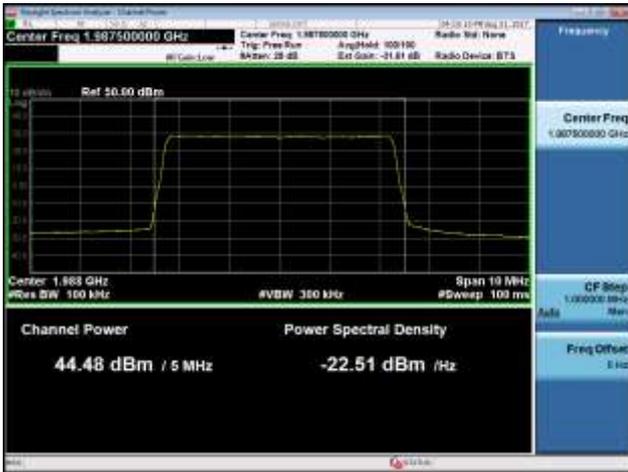
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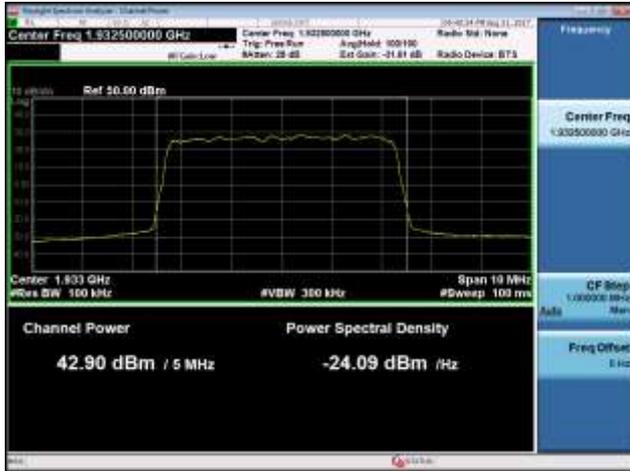
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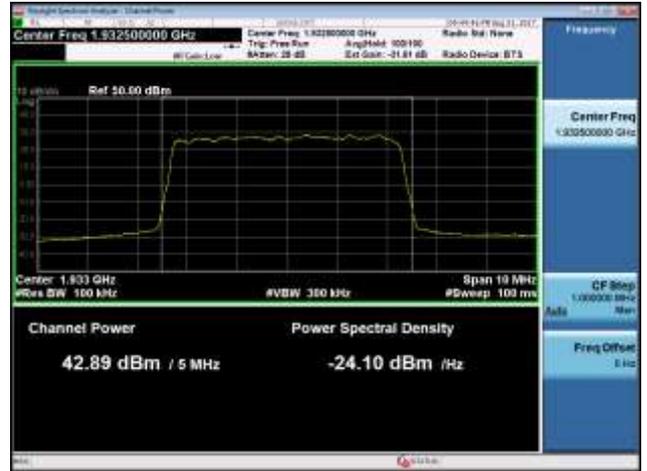


Band 2, BW 5MHz + BW 5MHz, Multi carrier(Non-Contiguous), 4TX, Bottom

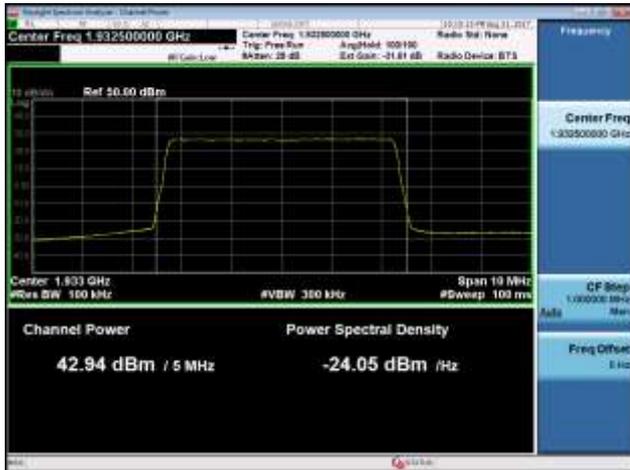
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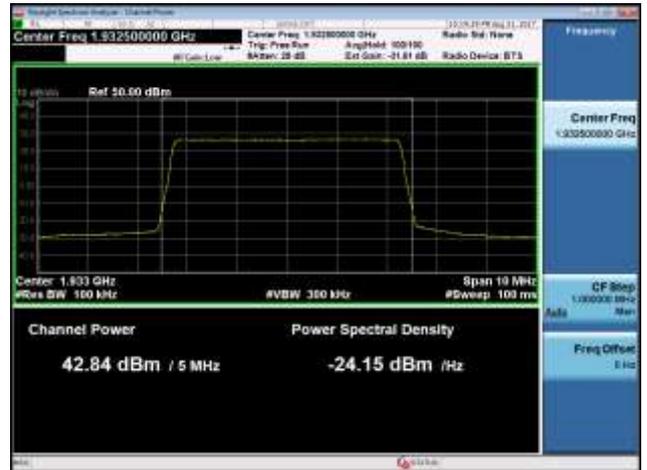
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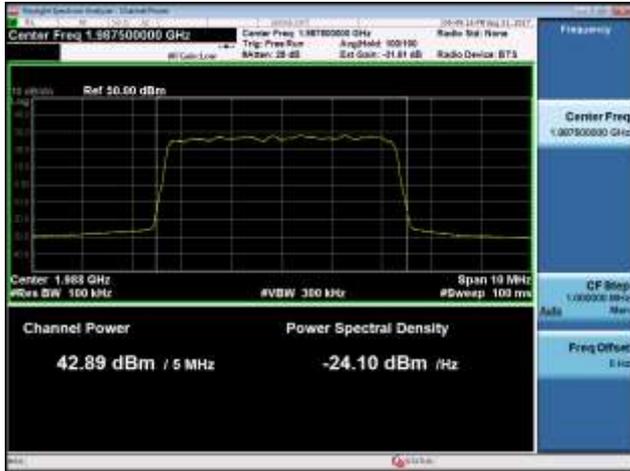
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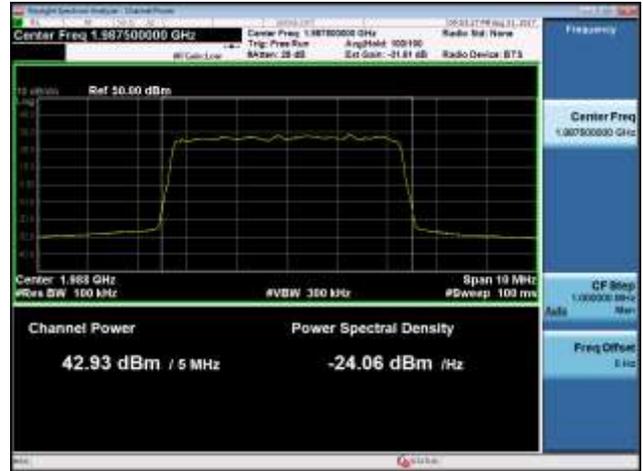


Band 2, BW 5MHz + BW 5MHz, Multi carrier(Non-Contiguous), 4TX, Top

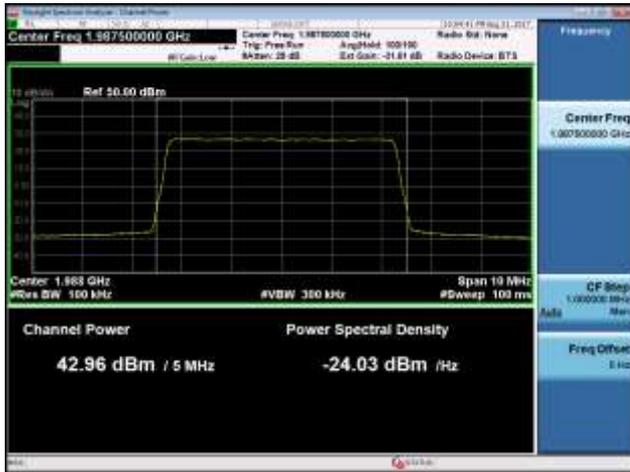
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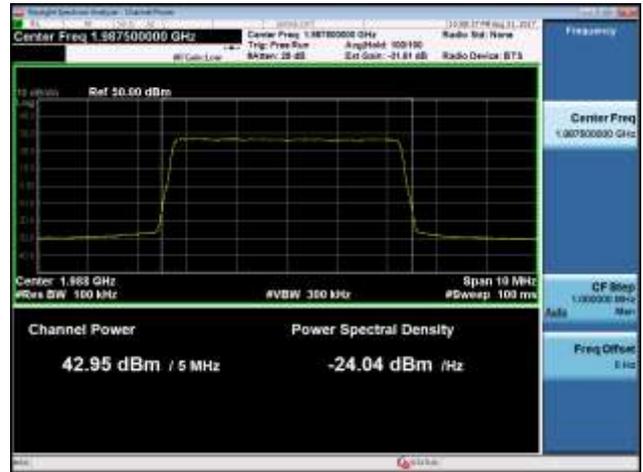
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64QAM



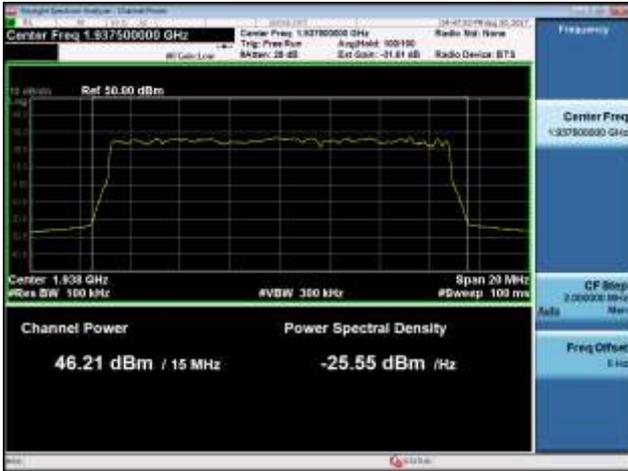
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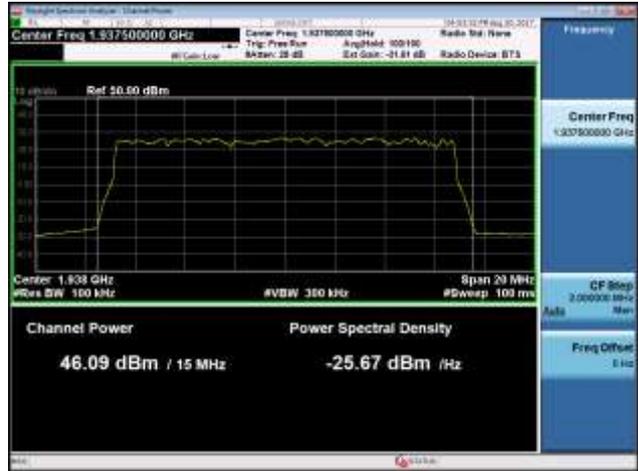


Band 2, BW 15MHz + BW 5MHz, Multi carrier(Non-Contiguous), 2TX, Bottom

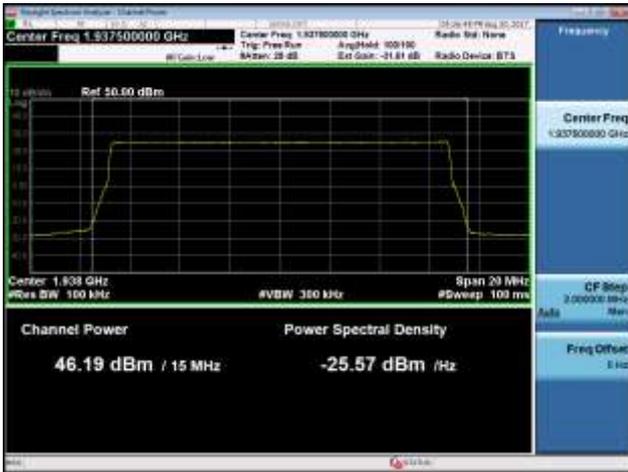
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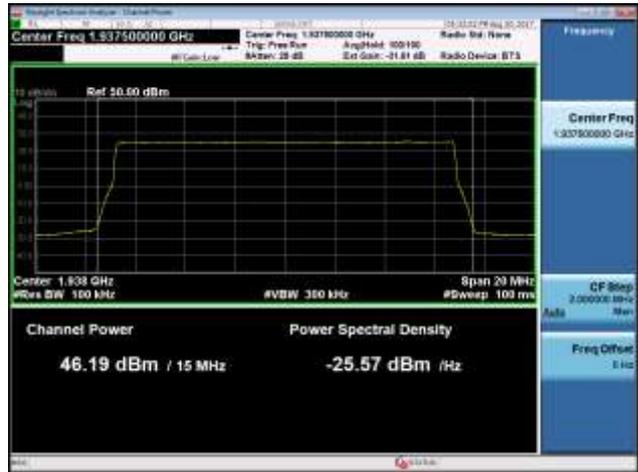
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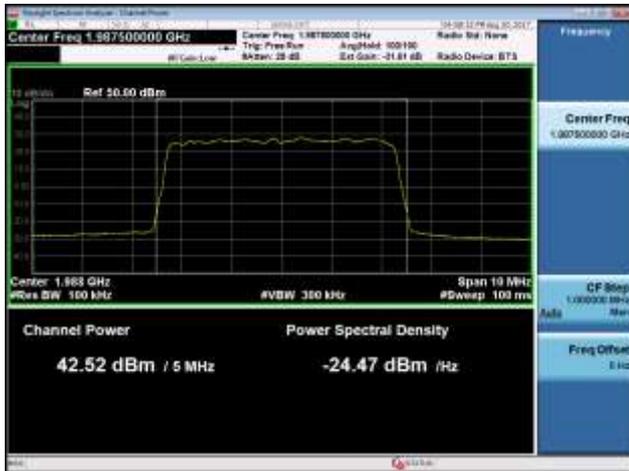


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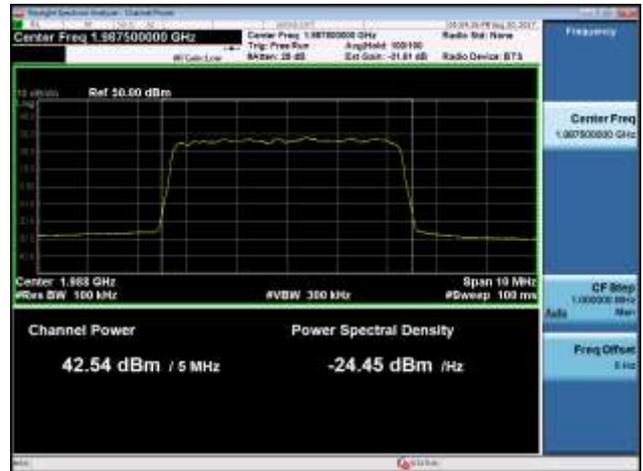


Band 2, BW 15MHz + BW 5MHz, Multi carrier(Non-Contiguous), 2TX, Top

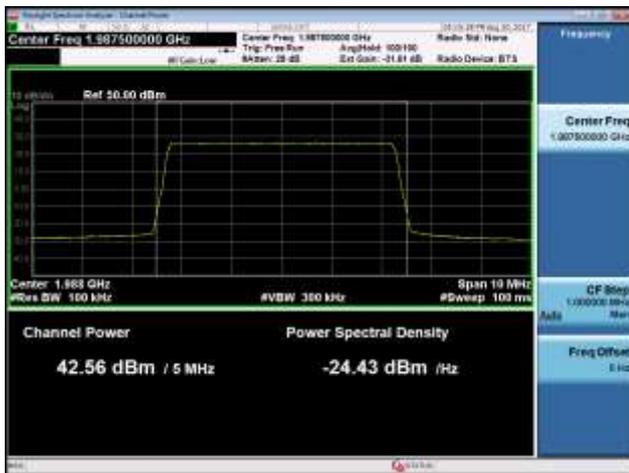
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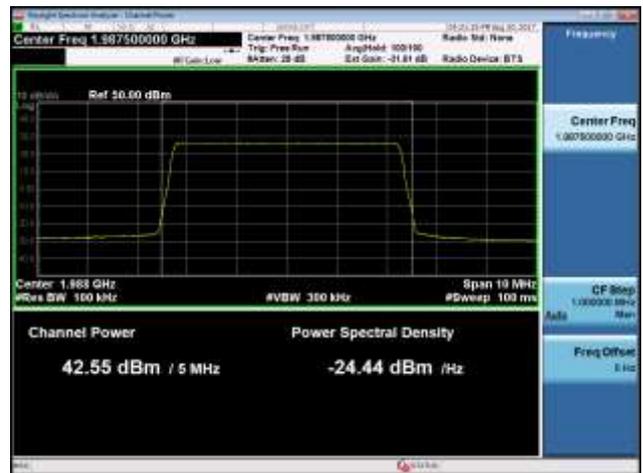
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64QAM



256QAM



Band 2, BW 15MHz + BW 5MHz, Multi carrier(Non-Contiguous), 4TX, Bottom

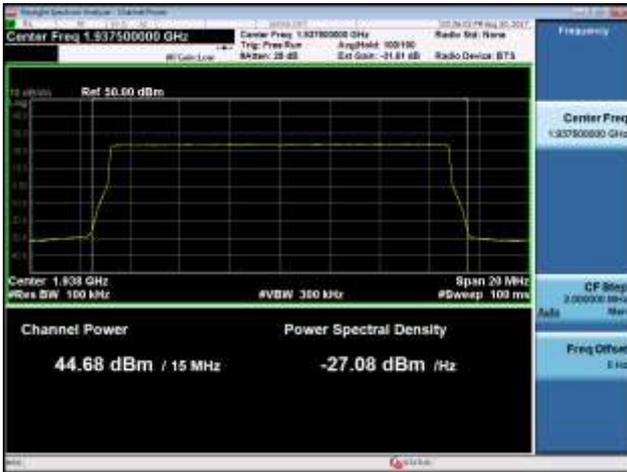
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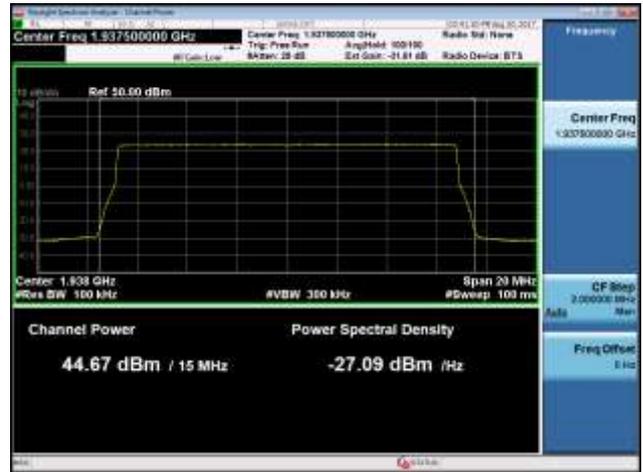
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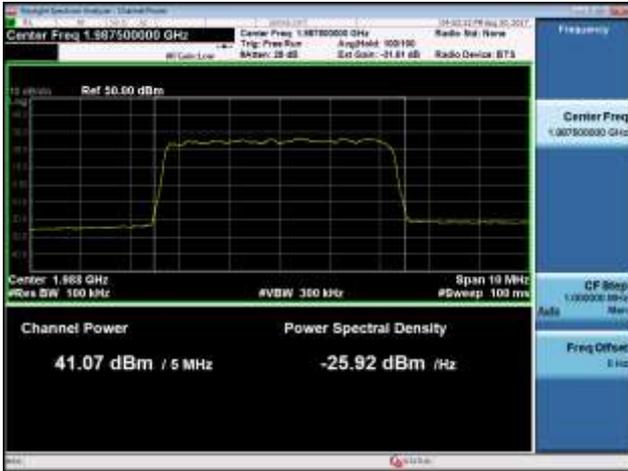


256QAM



Band 2, BW 15MHz + BW 5MHz, Multi carrier(Non-Contiguous), 4TX, Top

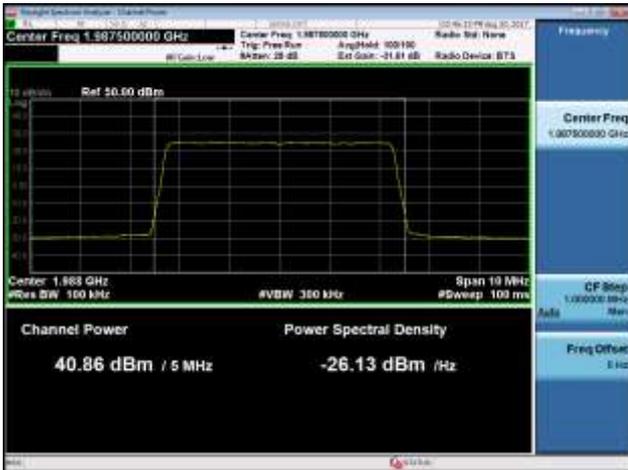
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16QAM



64QAM



256QAM





Band 66, BW 5MHz, Single carrier, 2TX, Bottom

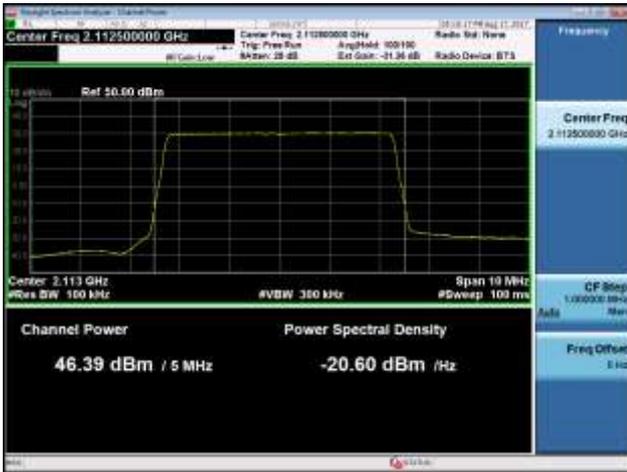
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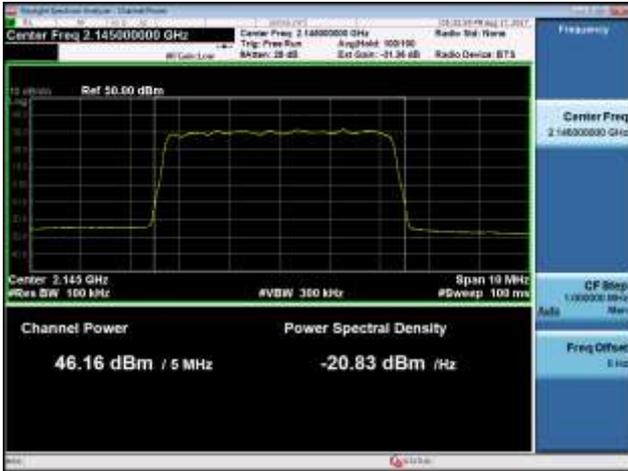


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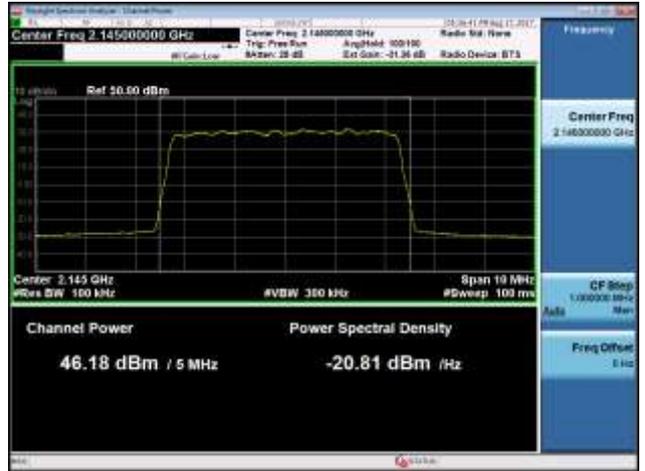


Band 66, BW 5MHz, Single carrier, 2TX, Middle

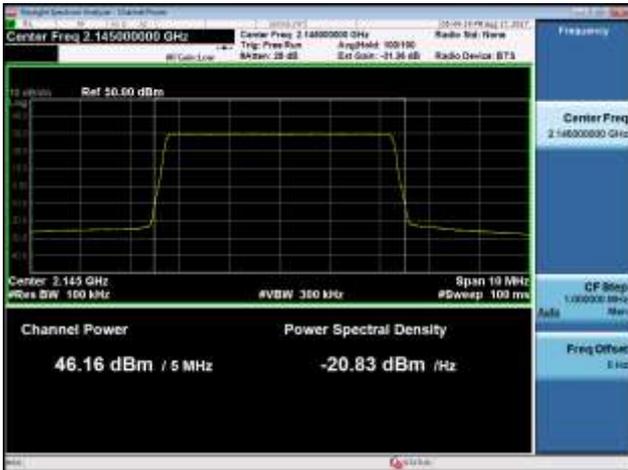
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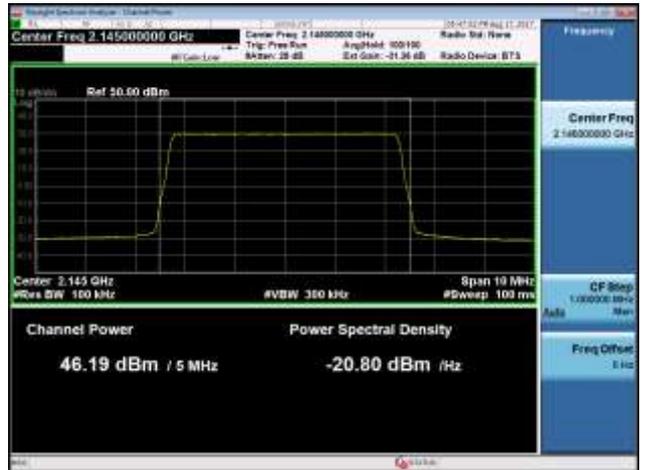
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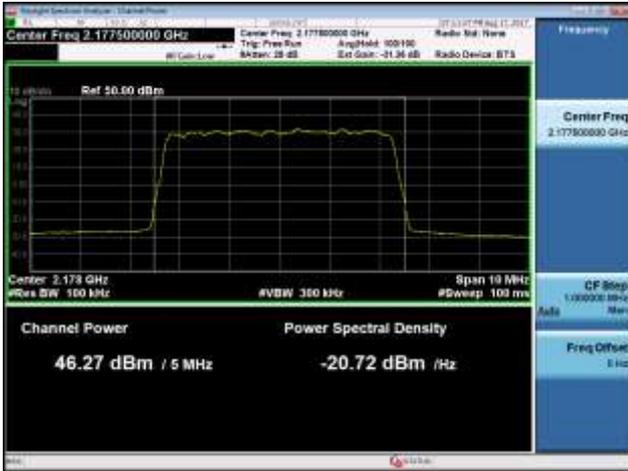
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Band 66, BW 5MHz, Single carrier, 2TX, Top

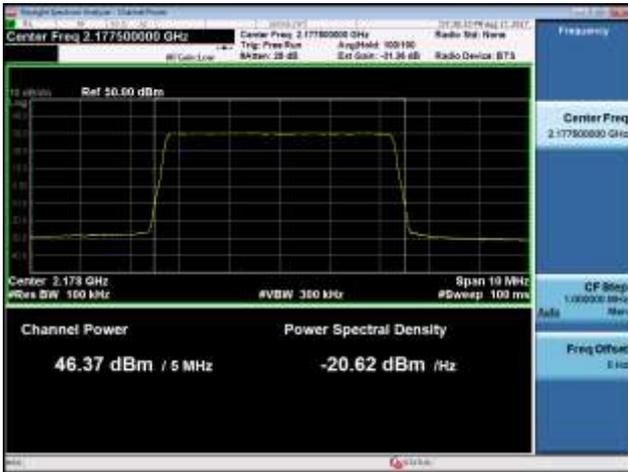
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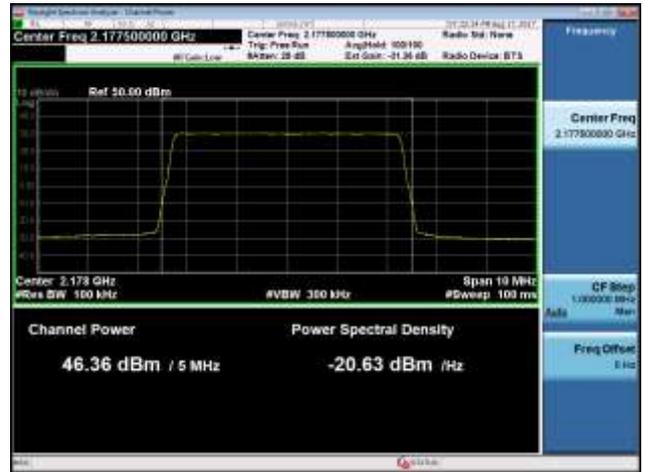
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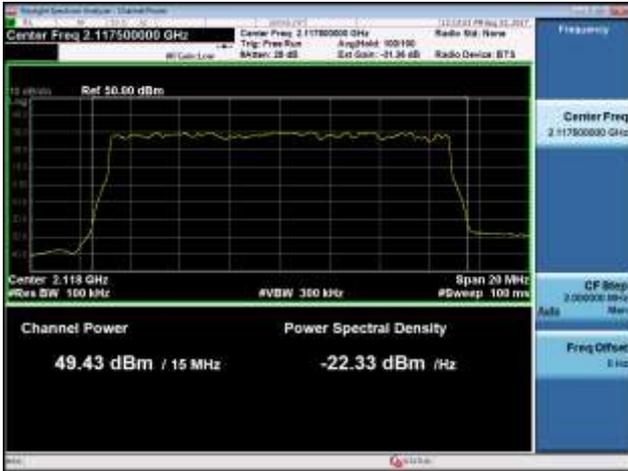
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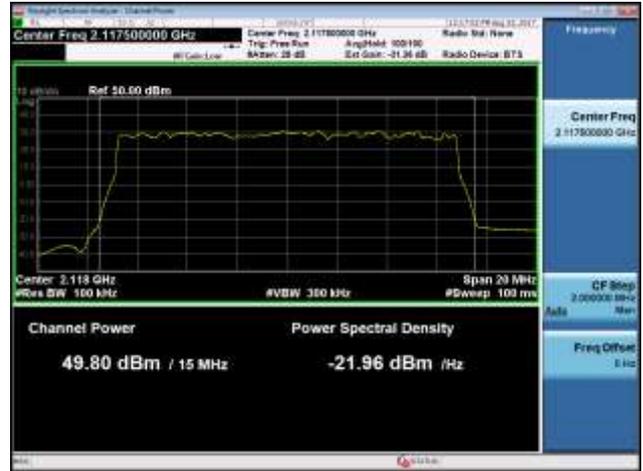


Band 66, BW 15MHz, Single carrier, 2TX, Bottom

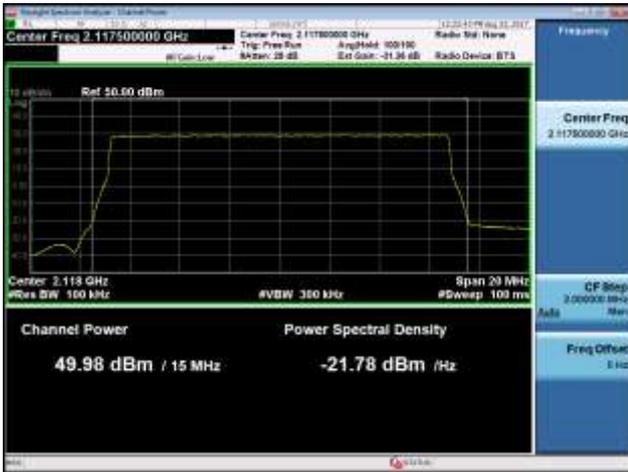
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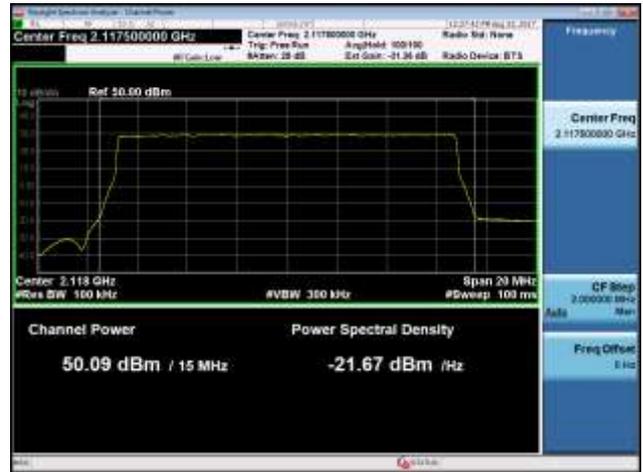
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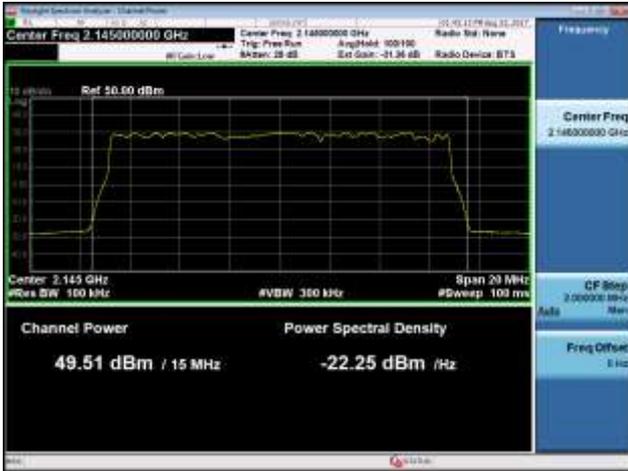
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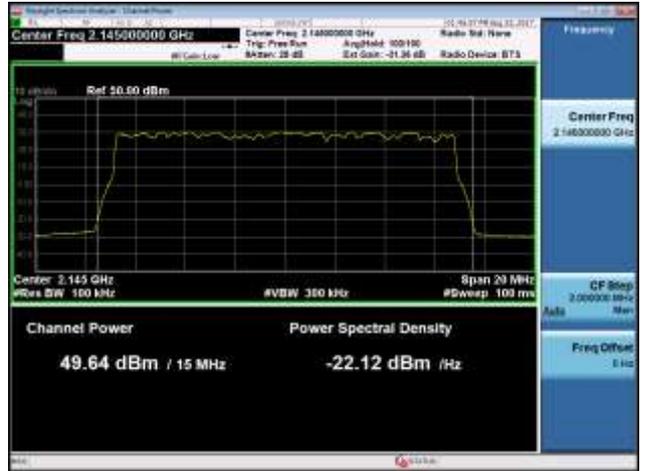


Band 66, BW 15MHz, Single carrier, 2TX, Middle

QPSK



16QAM



64QAM



256QAM





Band 66, BW 15MHz, Single carrier, 2TX, Top

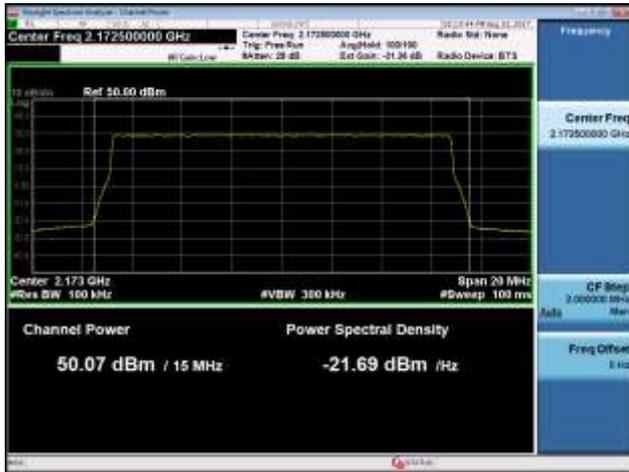
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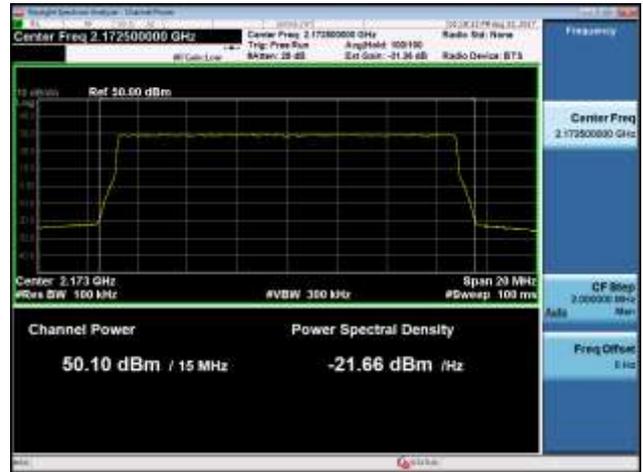
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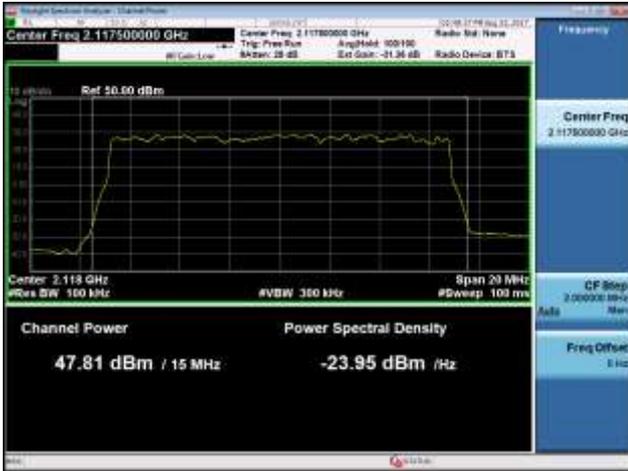
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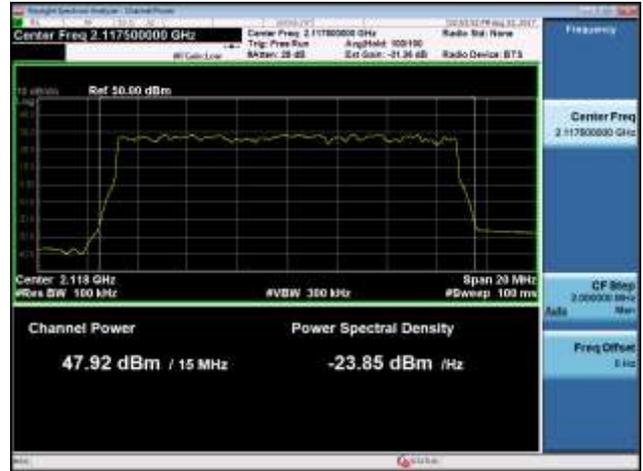


Band 66, BW 5MHz, Single carrier, 4TX, Bottom

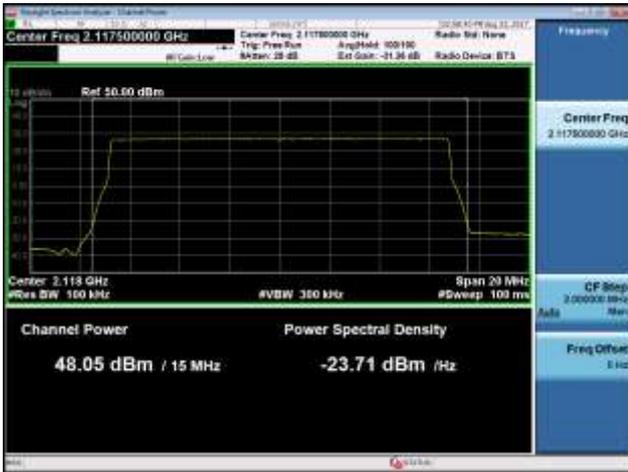
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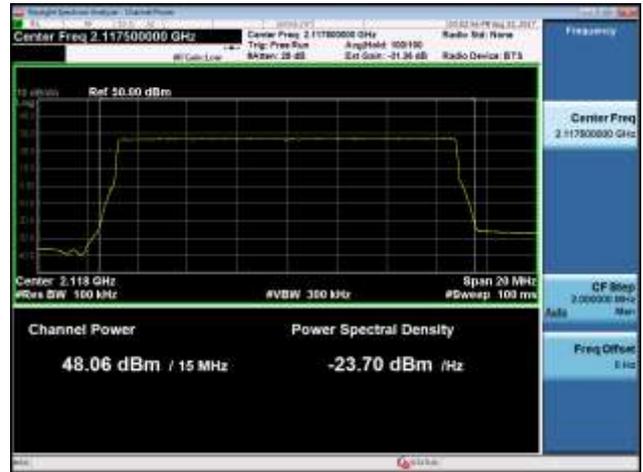
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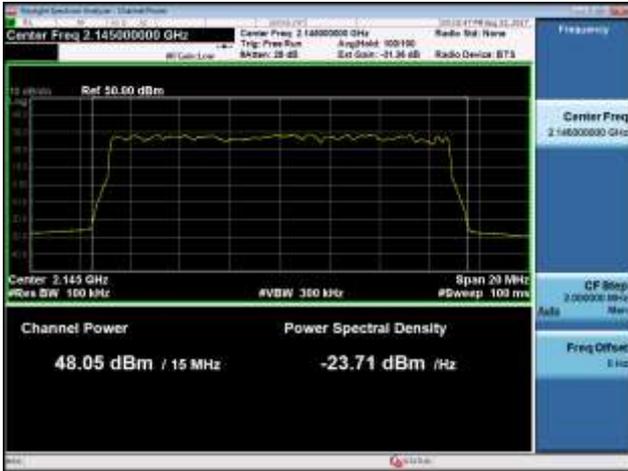


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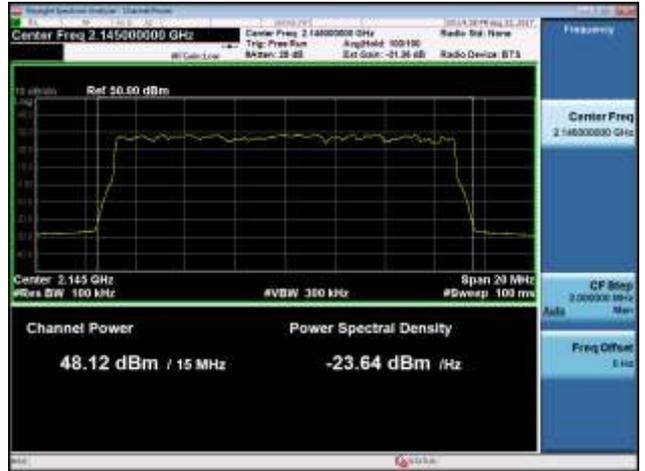
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Band 66, BW 5MHz, Single carrier, 4TX, Middle

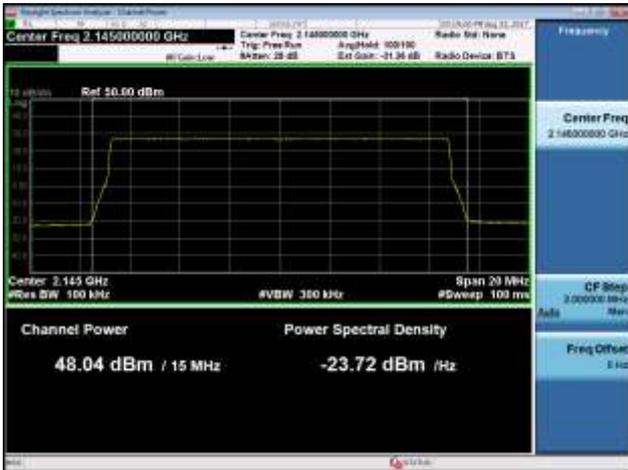
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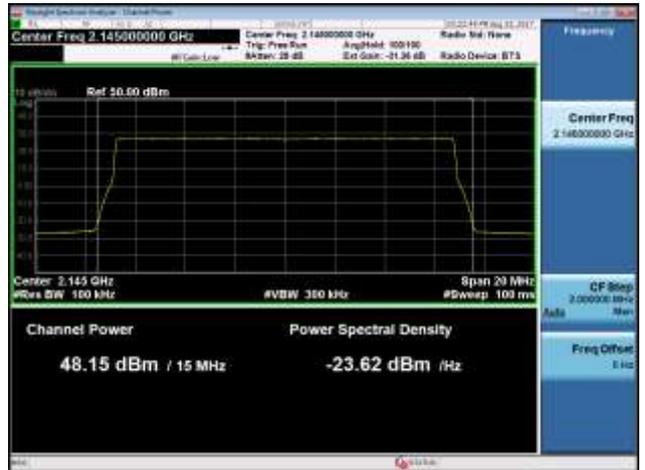
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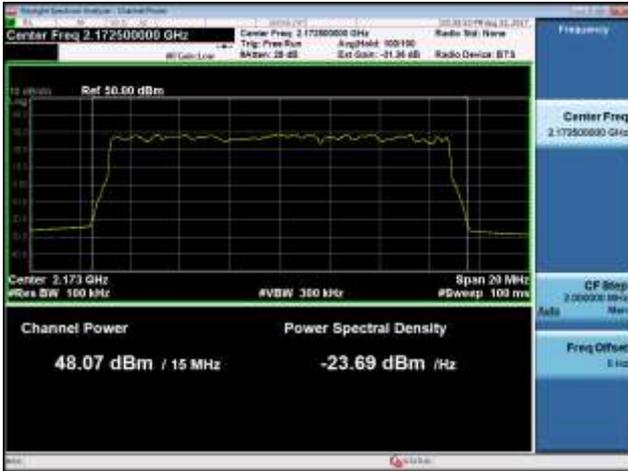
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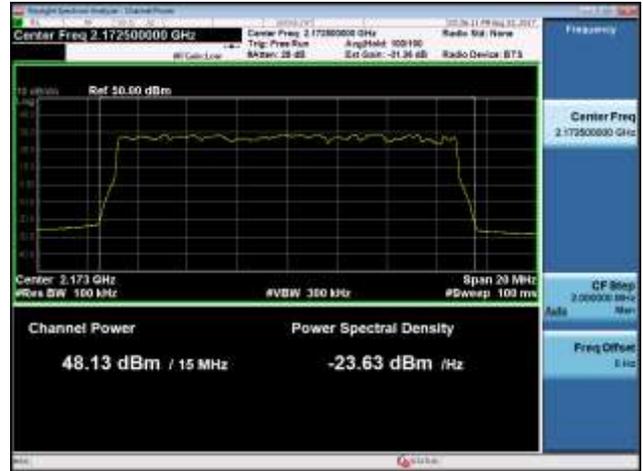


Band 66, BW 5MHz, Single carrier, 4TX Top

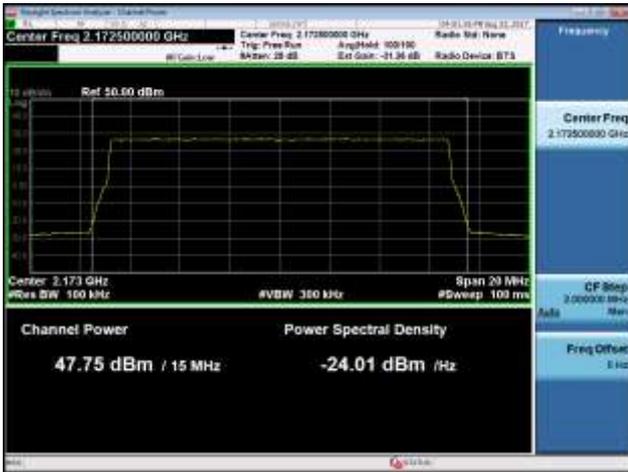
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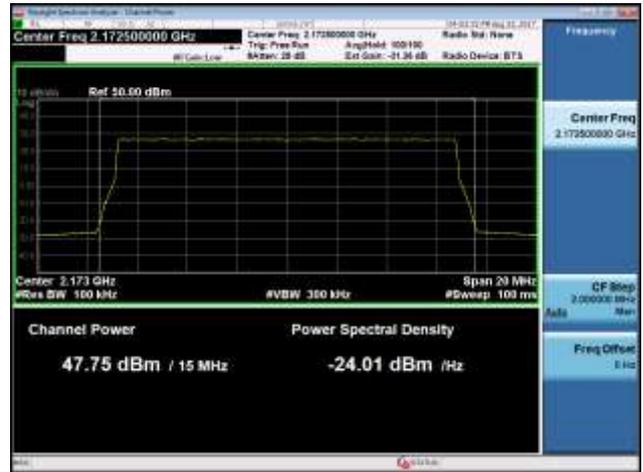
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64QAM



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Band 66, BW 15MHz, Single carrier, 4TX, Bottom

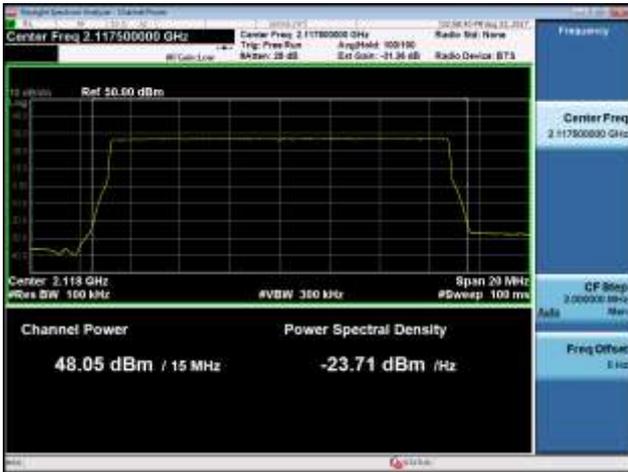
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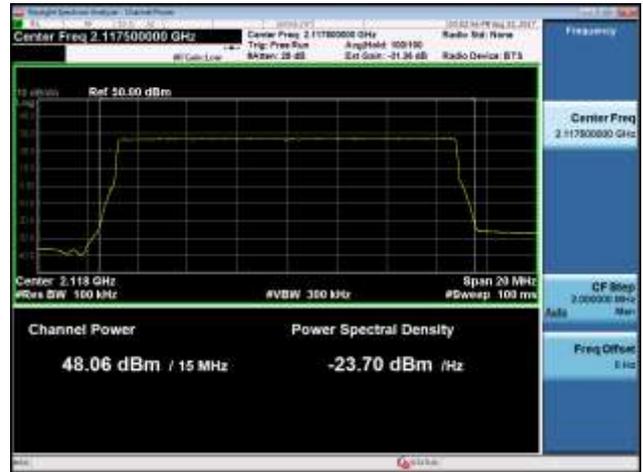
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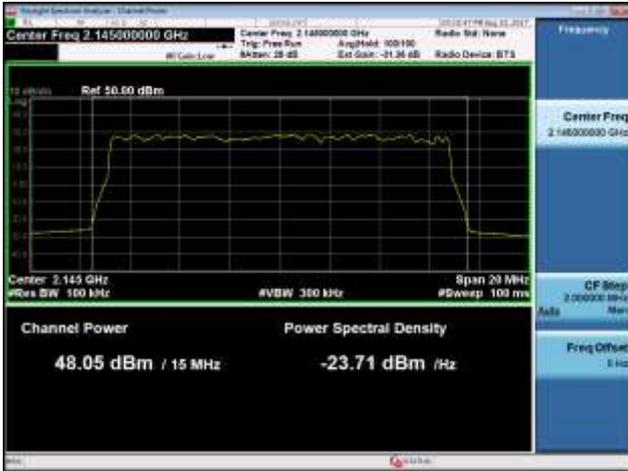
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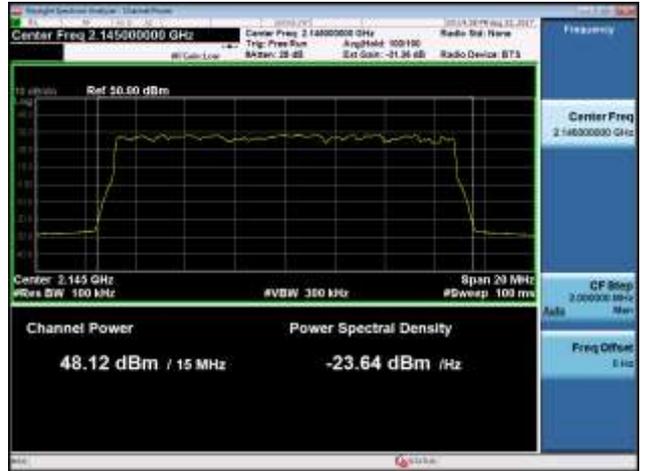


Band 66, BW 15MHz, Single carrier, 4TX, Middle

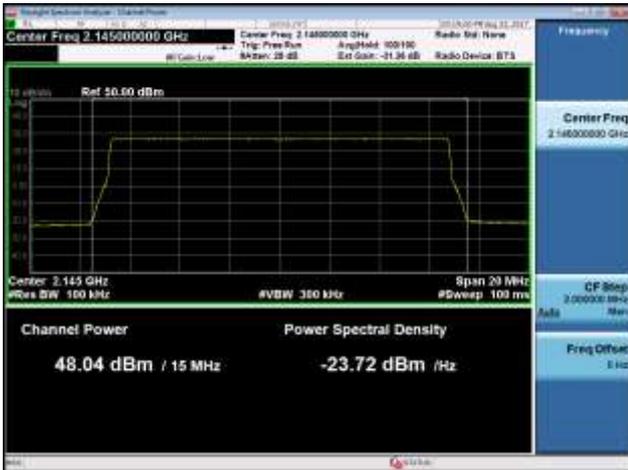
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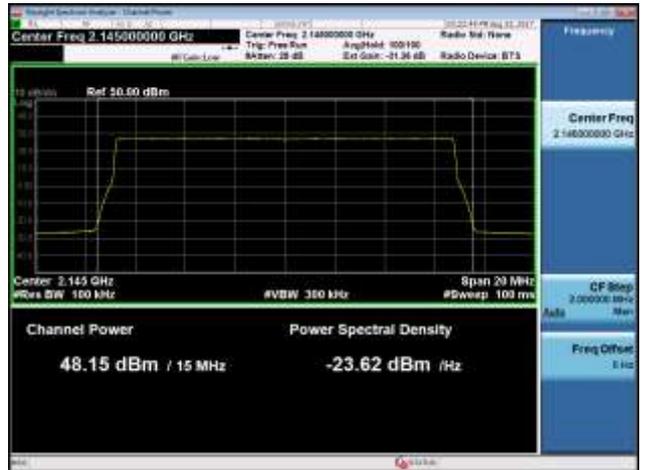
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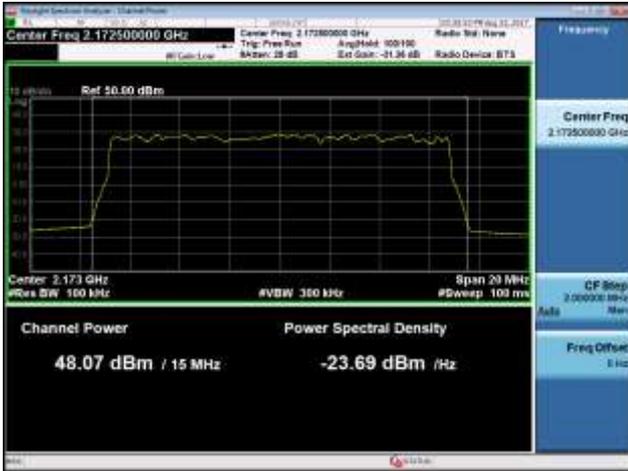
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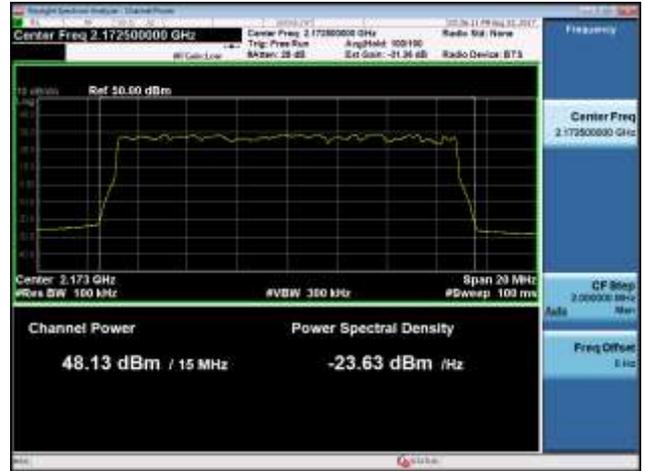


Band 66, BW 15MHz, Single carrier, 4TX Top

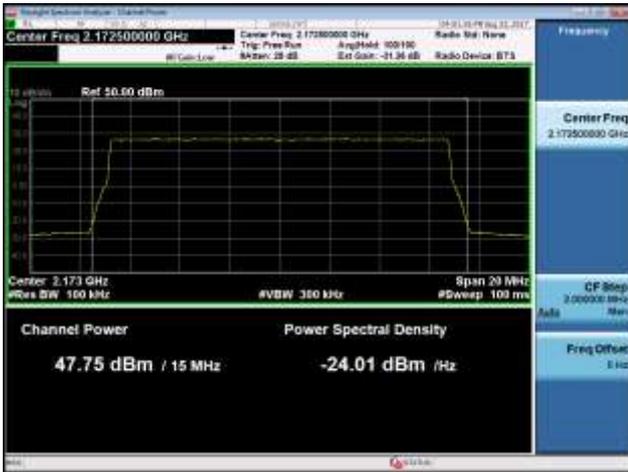
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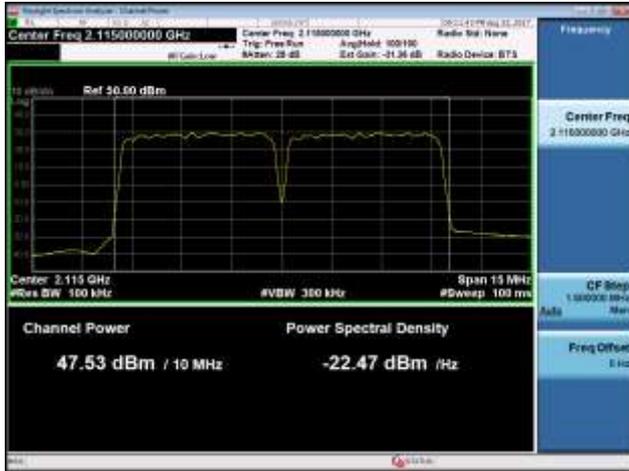


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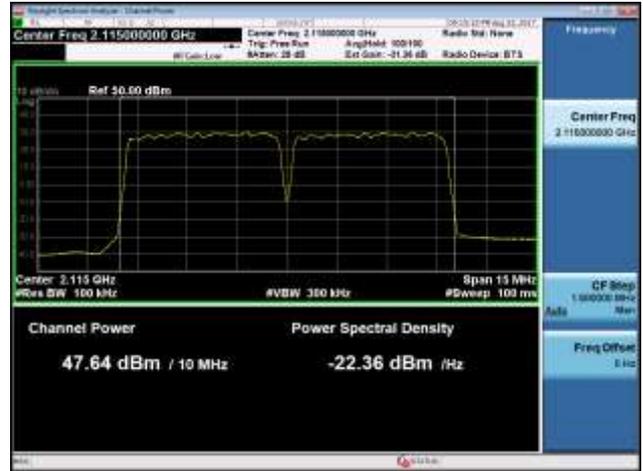


Band 66, BW 5MHz + BW 5MHz, Multi carrier(Contiguous), 2TX, Bottom

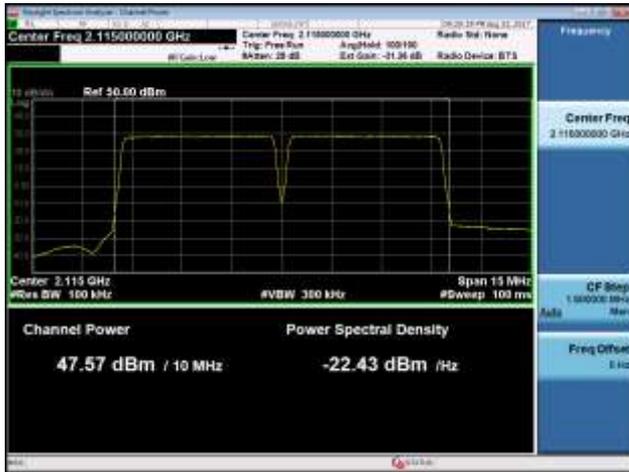
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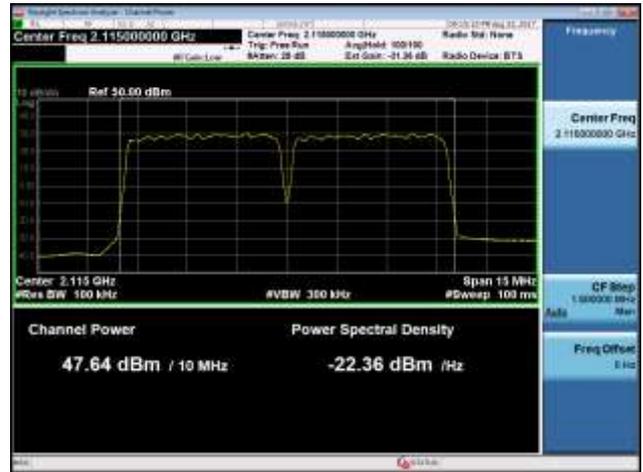
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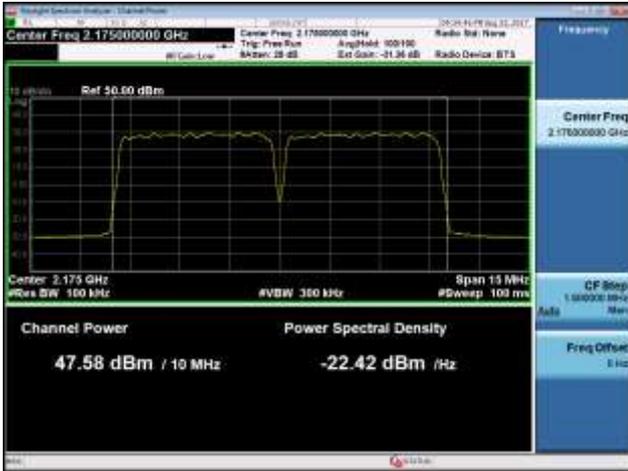


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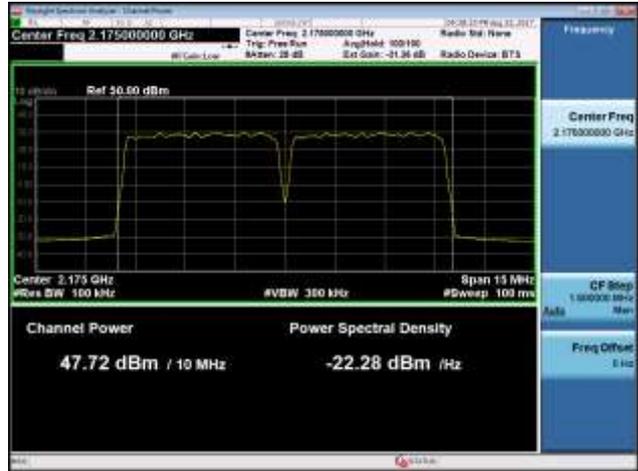
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Band 66, BW 5MHz + BW 5MHz, Multi carrier(Contiguous), 2TX, Top

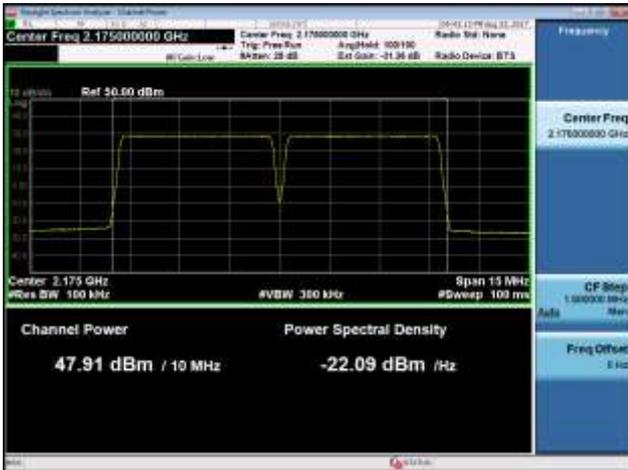
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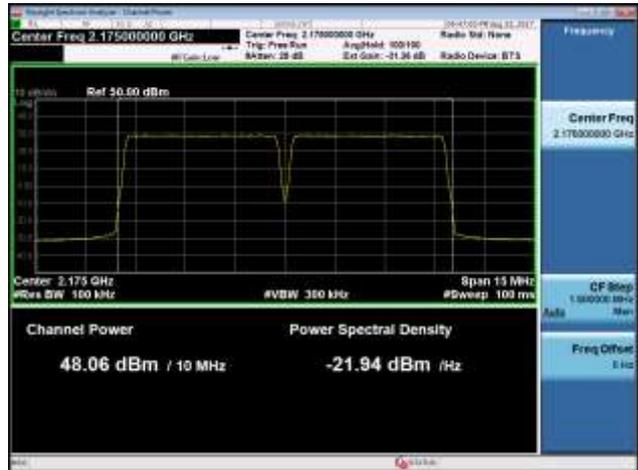
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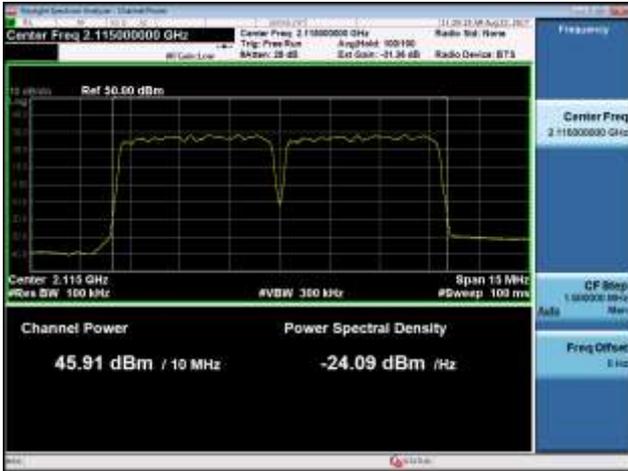
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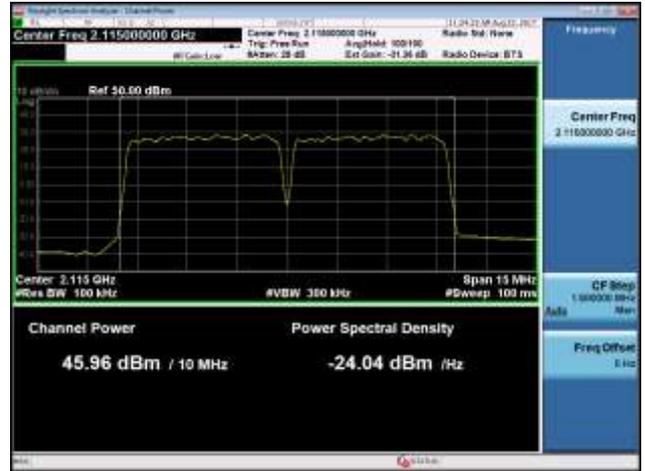


Band 66, BW 5MHz + BW 5MHz, Multi carrier(Contiguous), 4TX, Bottom

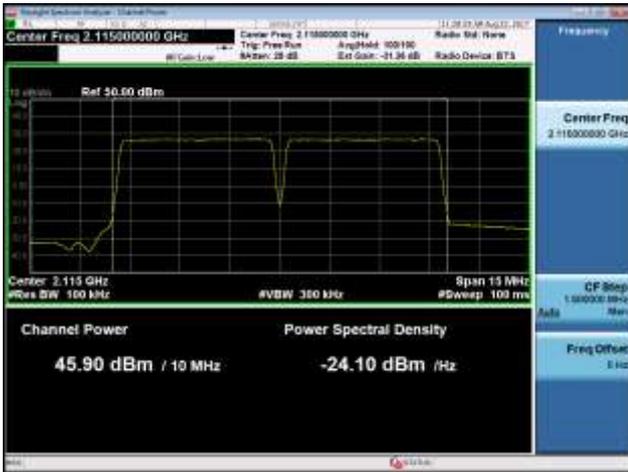
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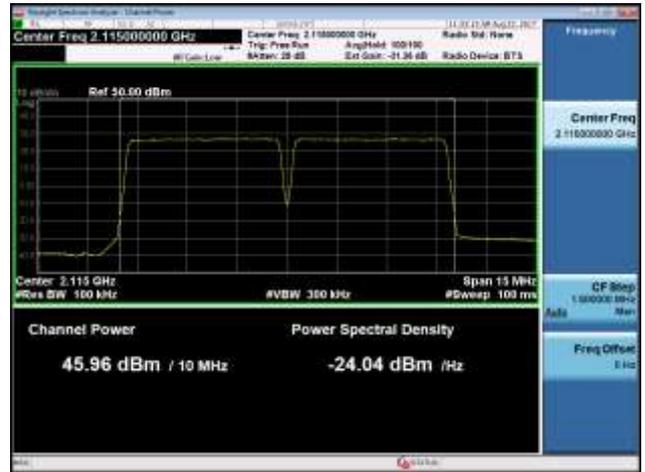
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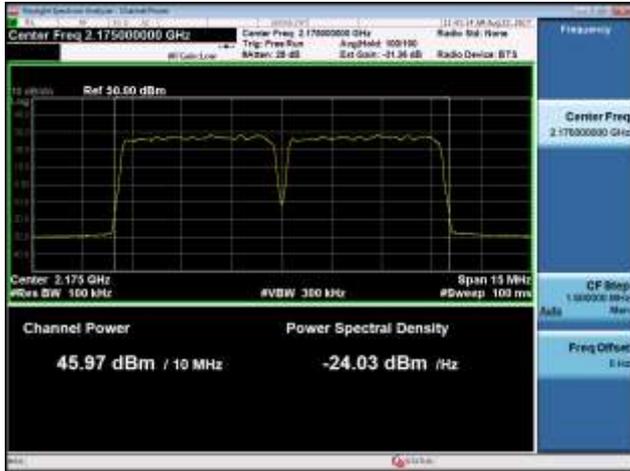


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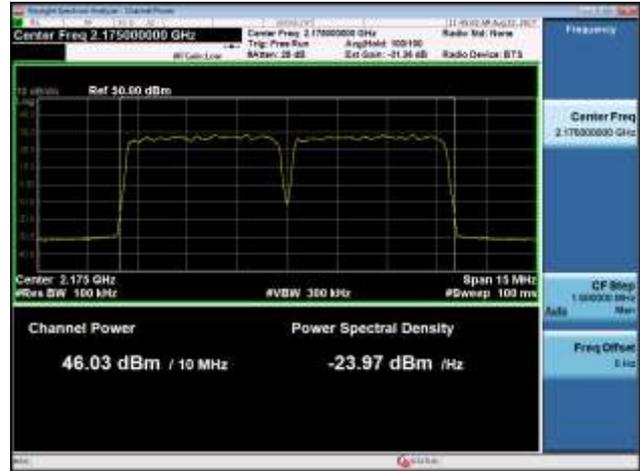
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Band 66, BW 5MHz + BW 5MHz, Multi carrier(Contiguous), 4TX, Top

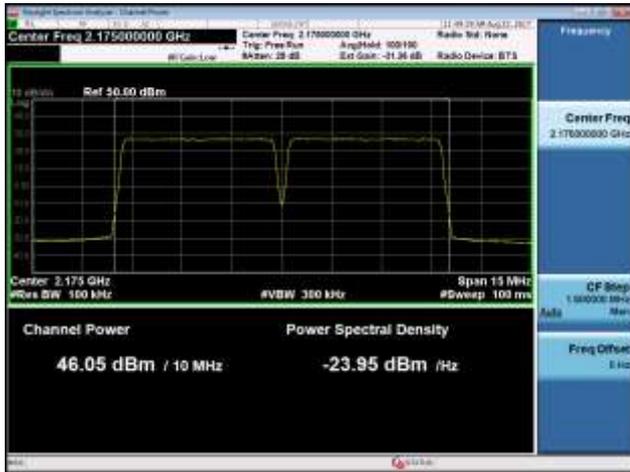
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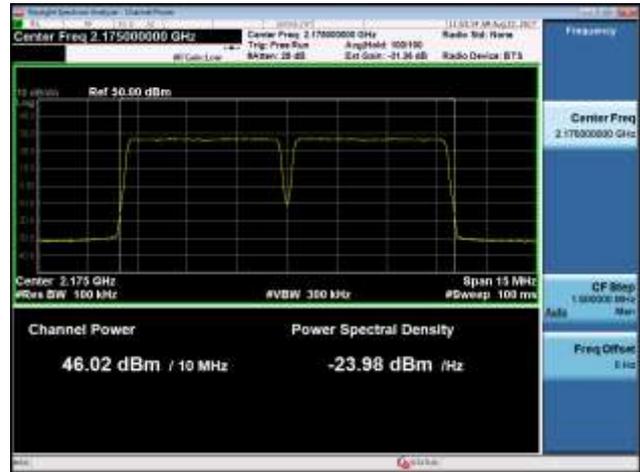
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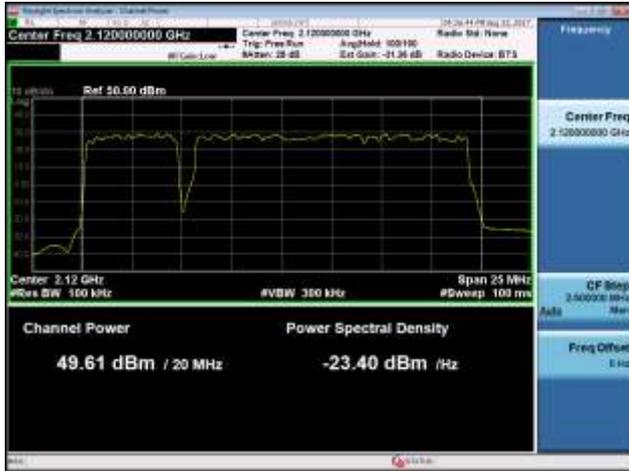
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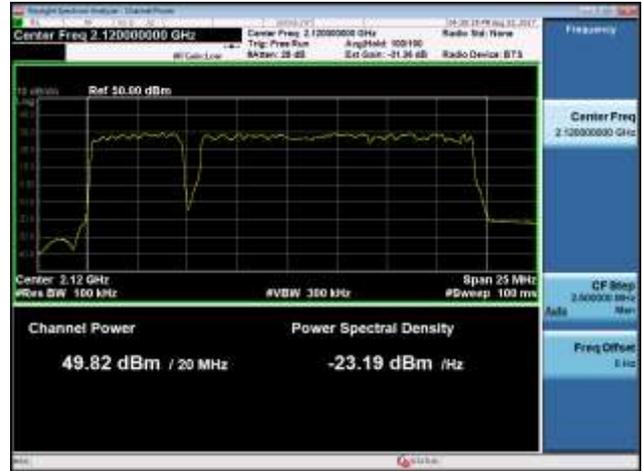


Band 66, BW 5MHz + BW 15MHz, Multi carrier(Contiguous), 2TX, Bottom

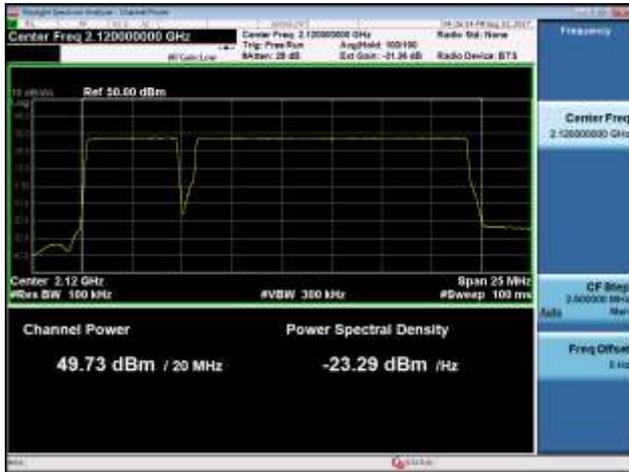
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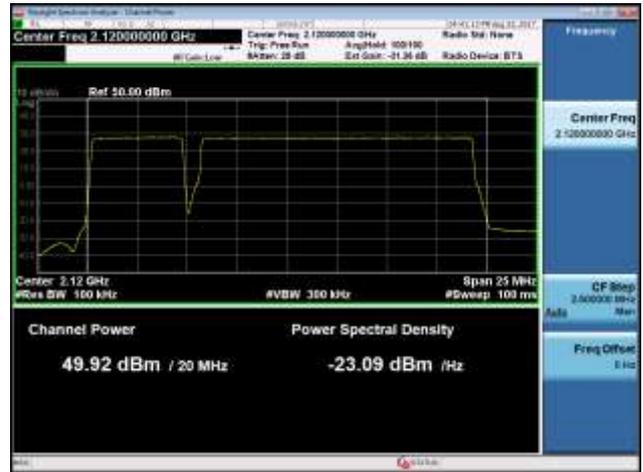
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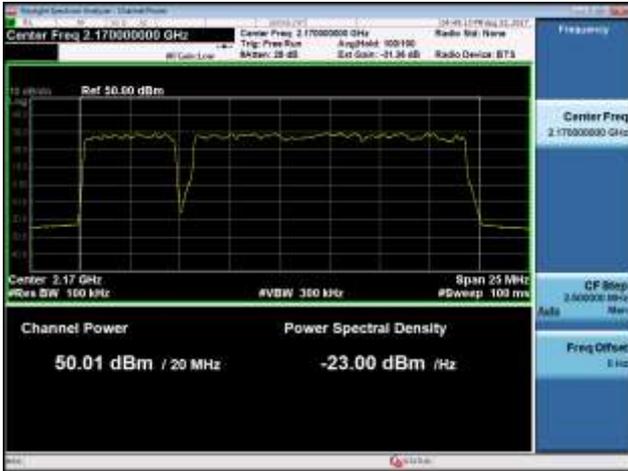
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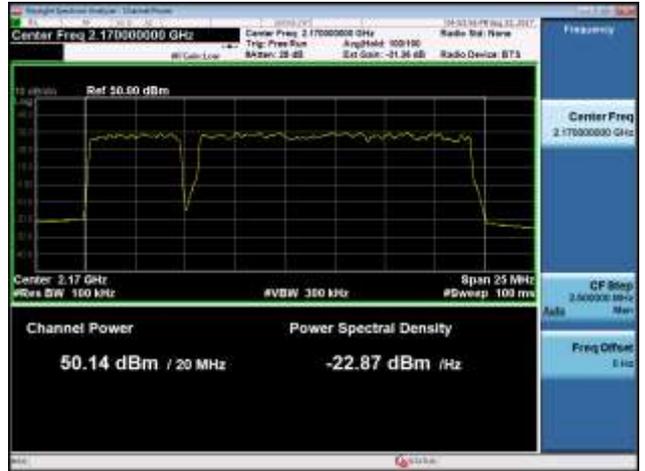


Band 66, BW 5MHz + BW 15MHz, Multi carrier(Contiguous), 2TX, Top

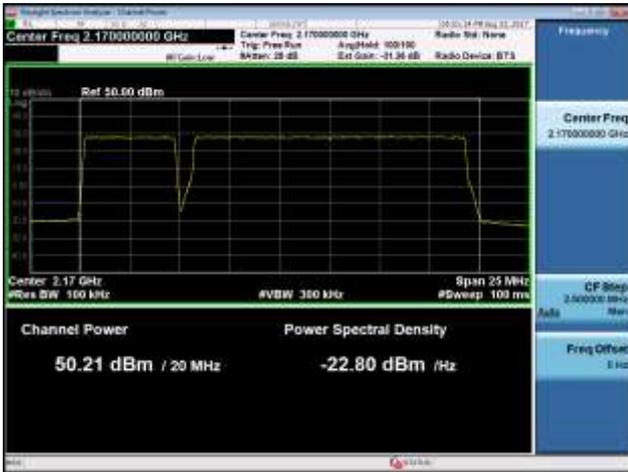
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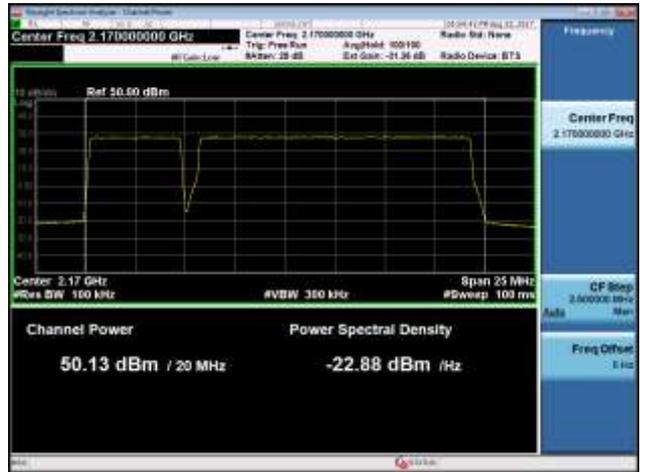
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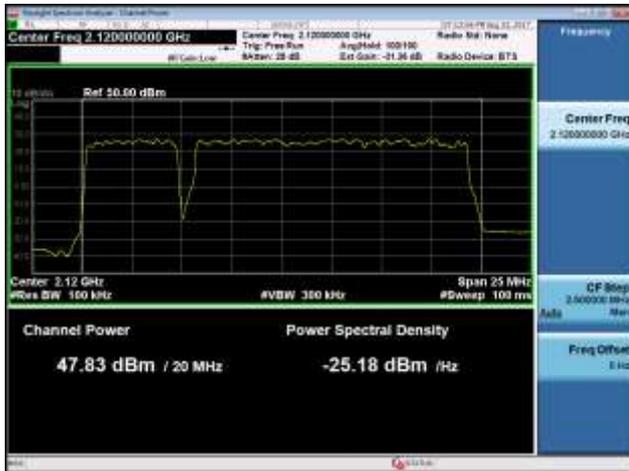
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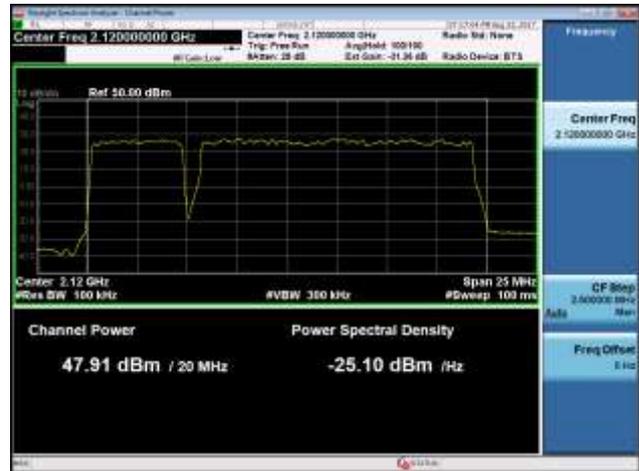


Band 66, BW 5MHz + BW 15MHz, Multi carrier(Contiguous), 4TX, Bottom

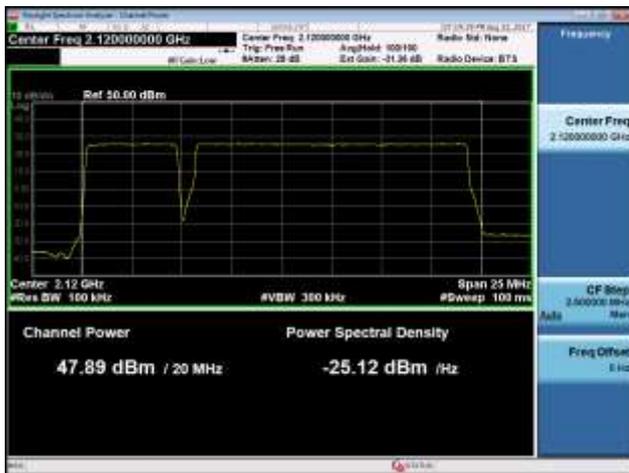
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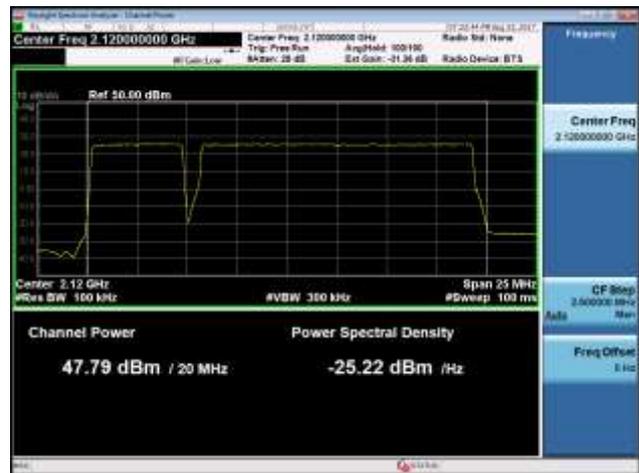
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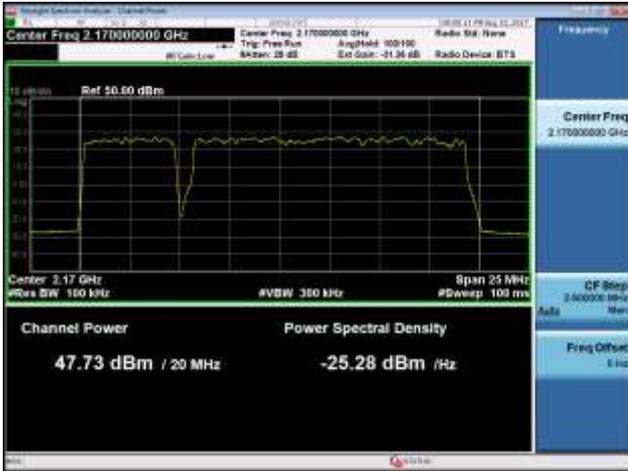
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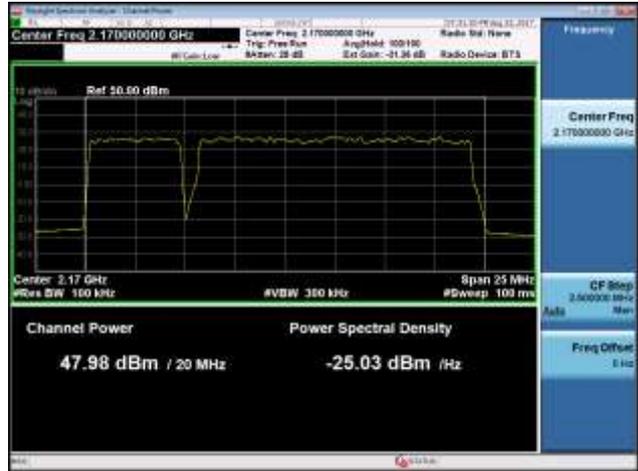


Band 66, BW 5MHz + BW 15MHz, Multi carrier(Contiguous), 4TX, Top

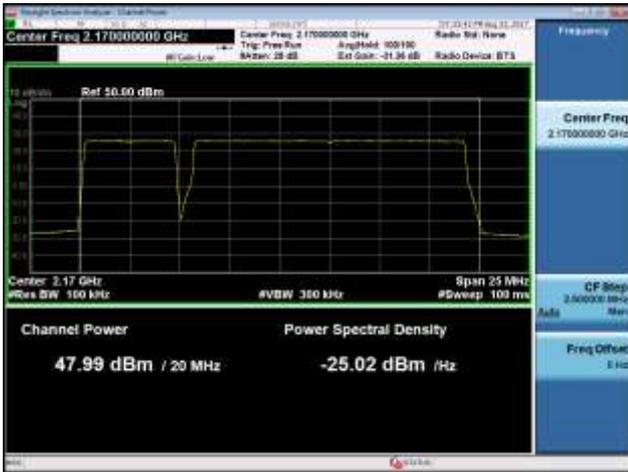
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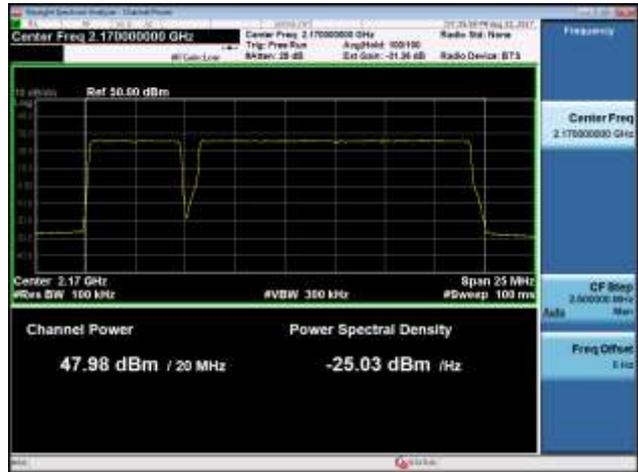
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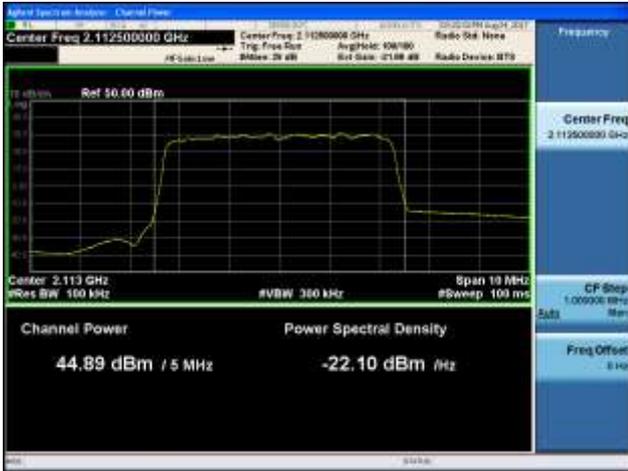
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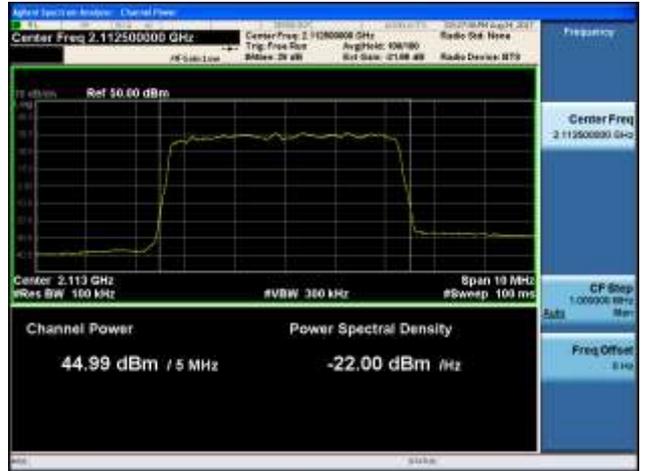


Band 66, BW 5MHz + BW 5MHz, Multi carrier(Non-Contiguous), 2TX, Bottom

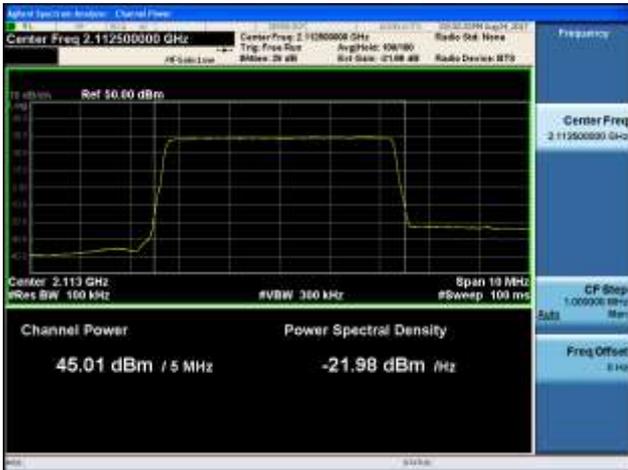
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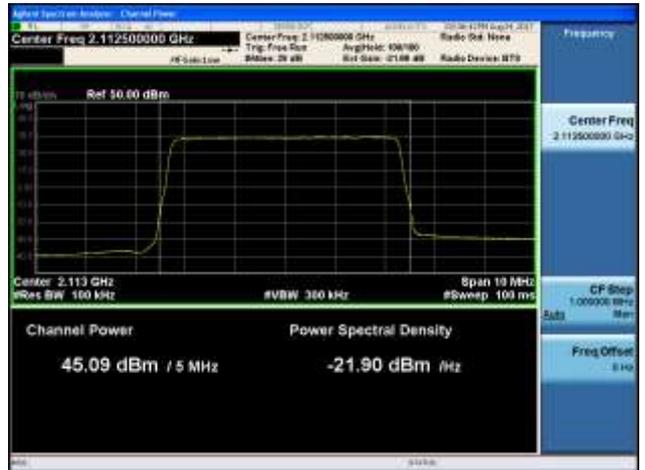
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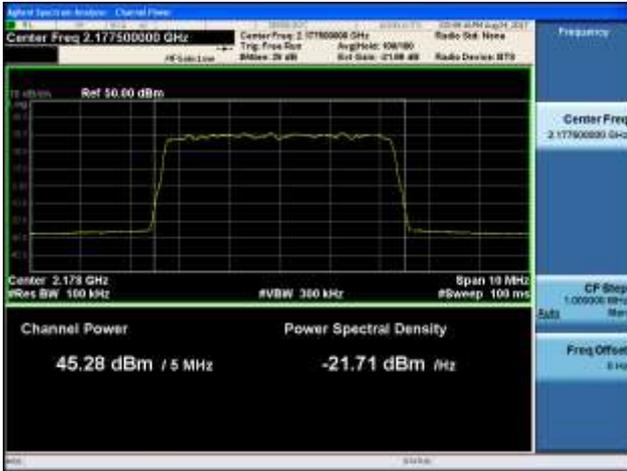
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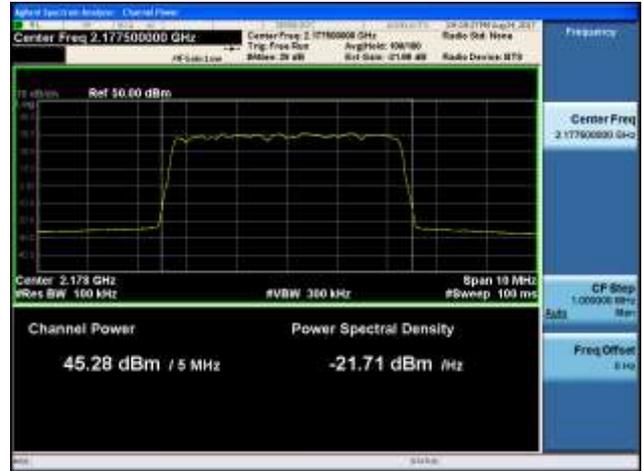


Band 66, BW 5MHz + BW 5MHz, Multi carrier(Non-Contiguous), 2TX, Top

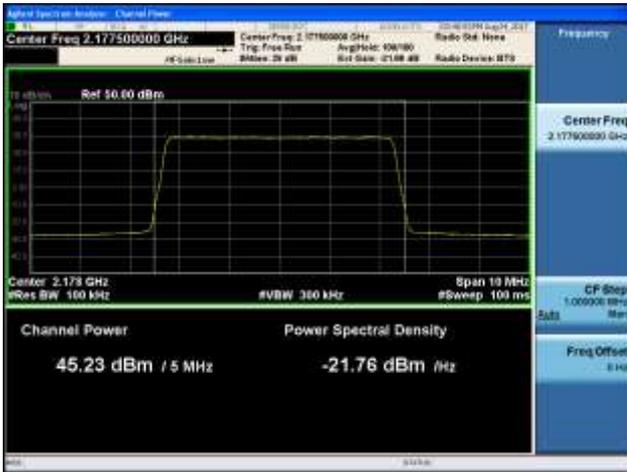
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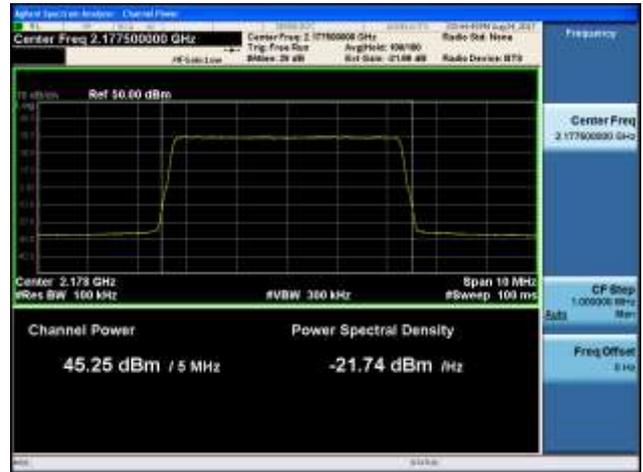
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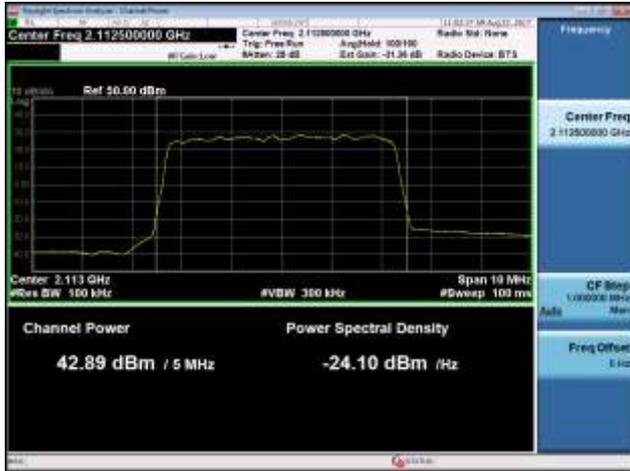
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Band 66, BW 5MHz + BW 5MHz, Multi carrier(Non-Contiguous), 4TX, Bottom

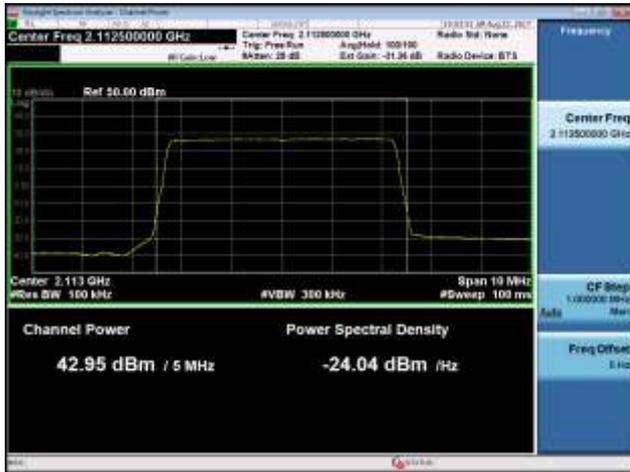
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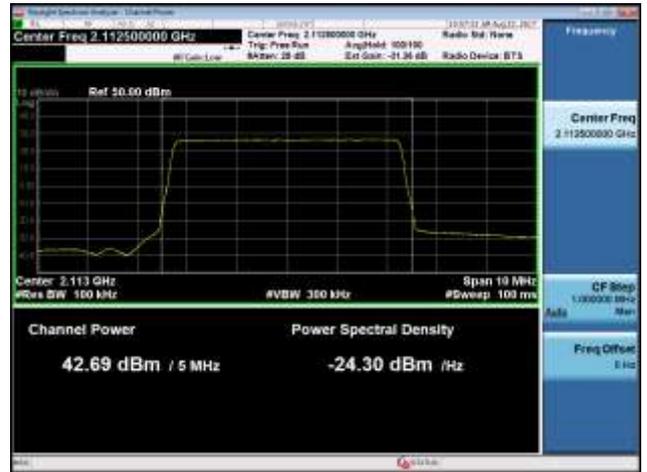
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256QAM



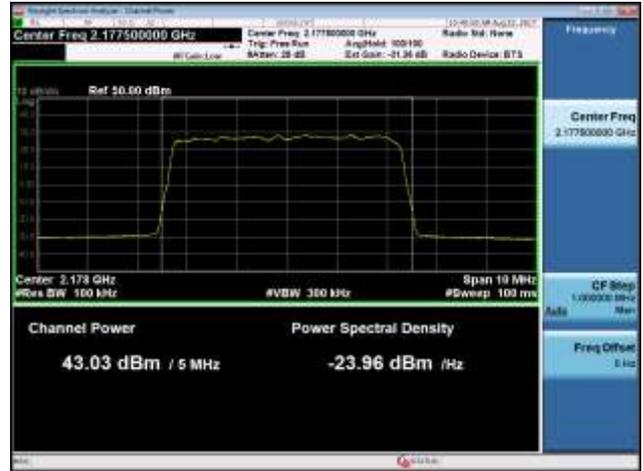


Band 66, BW 5MHz + BW 5MHz, Multi carrier(Non-Contiguous), 4TX, Top

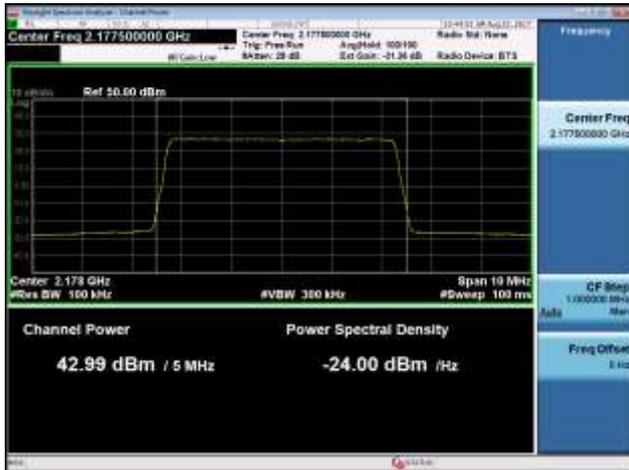
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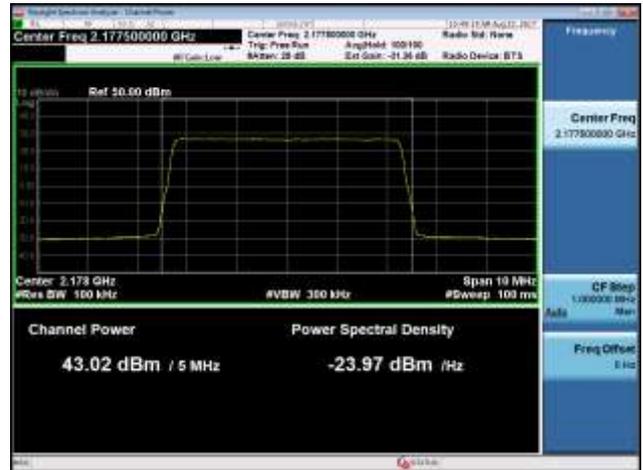
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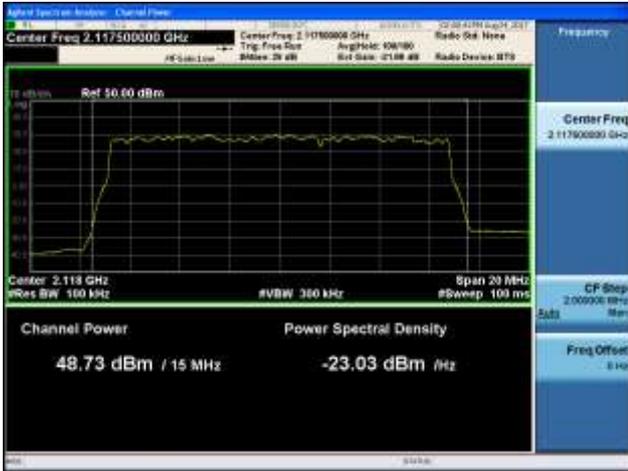


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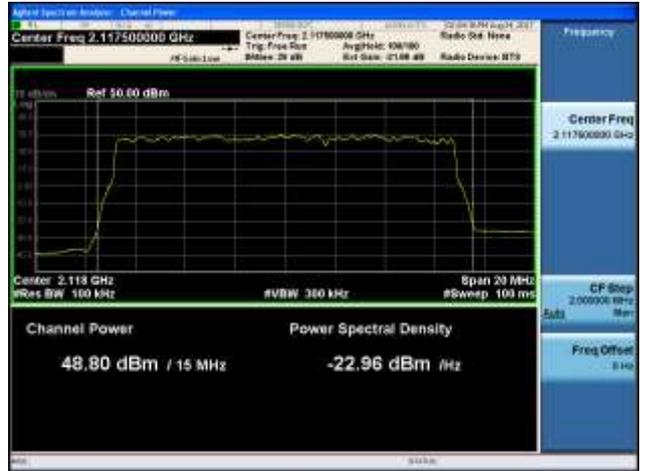
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Band 66, BW 15MHz + BW 5MHz, Multi carrier(Non-Contiguous), 2TX, Bottom

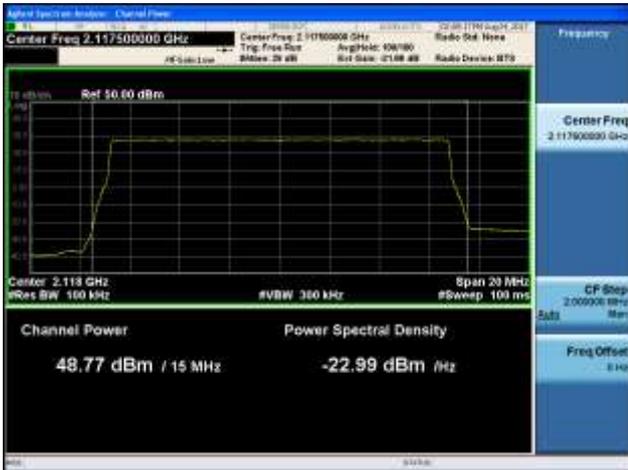
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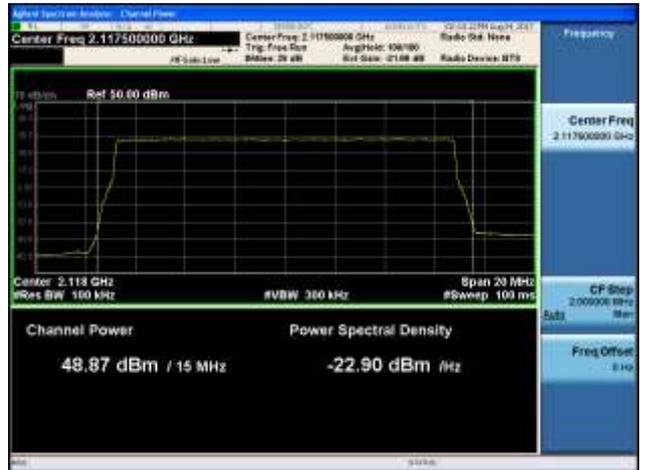
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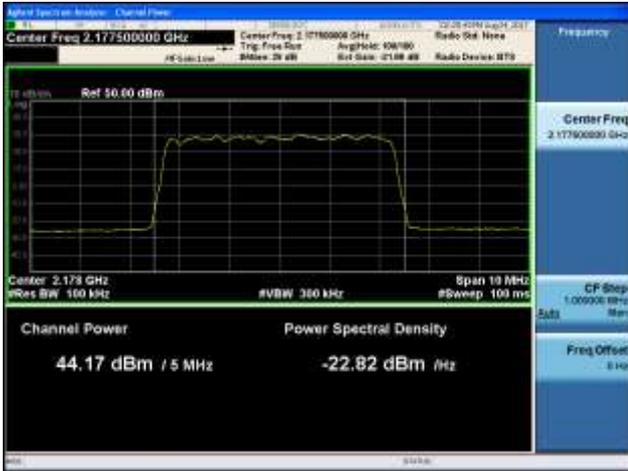
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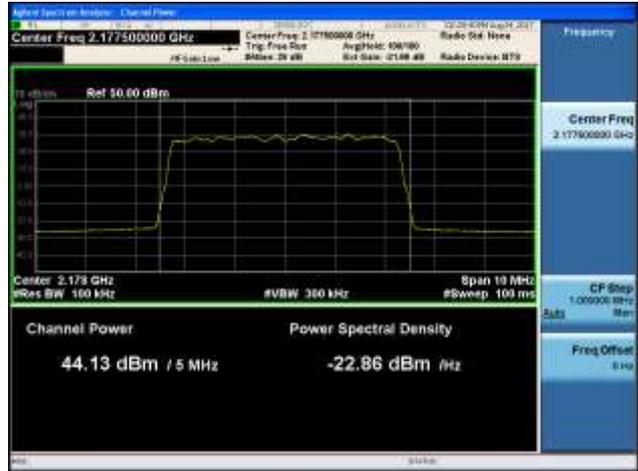


Band 66, BW 15MHz + BW 5MHz, Multi carrier(Non-Contiguous), 2TX, Top

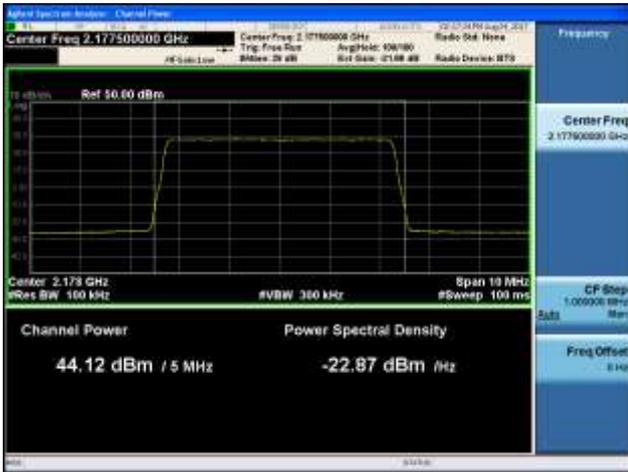
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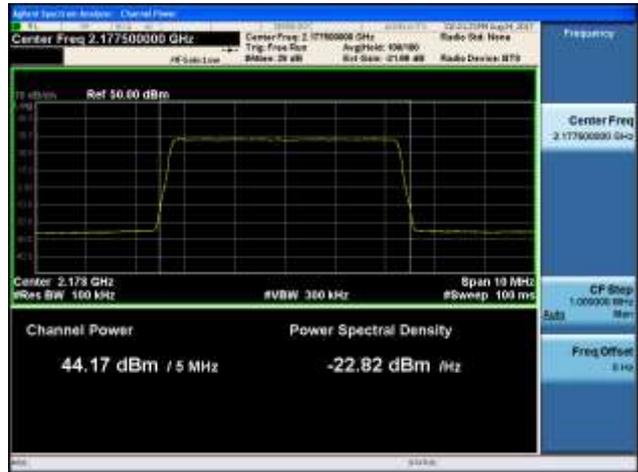
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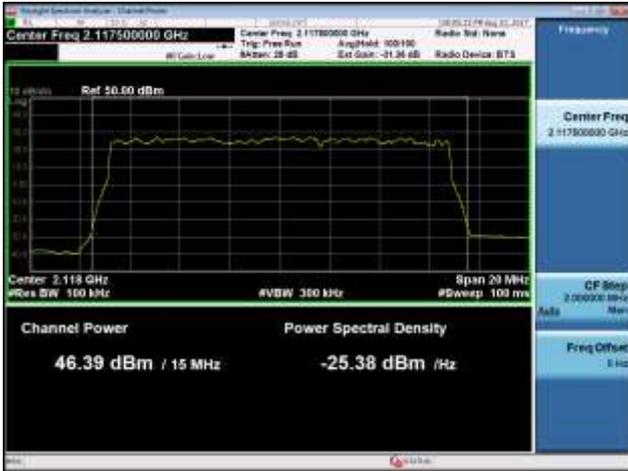


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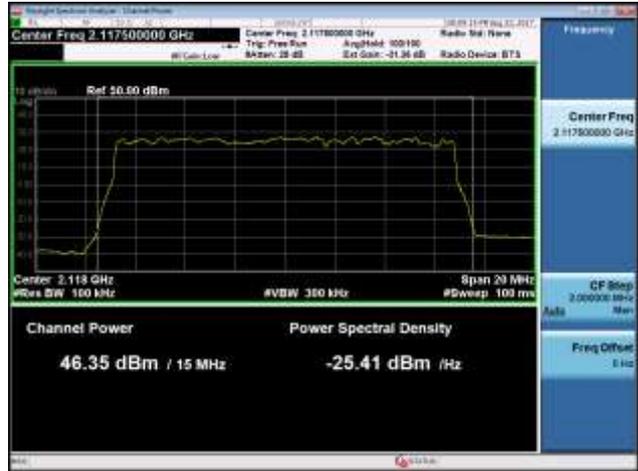
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Band 66, BW 15MHz + BW 5MHz, Multi carrier(Non-Contiguous), 4TX, Bottom

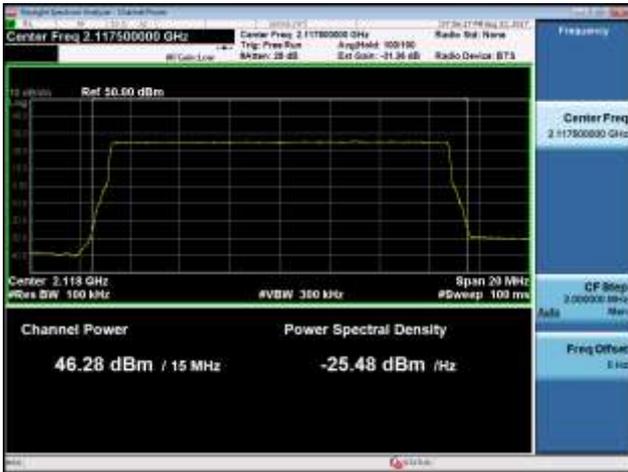
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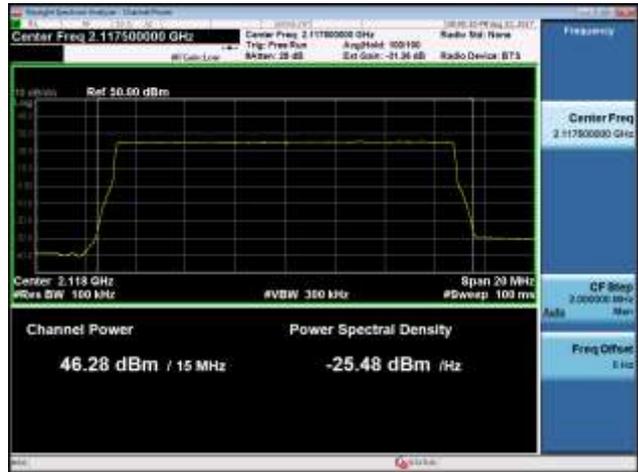
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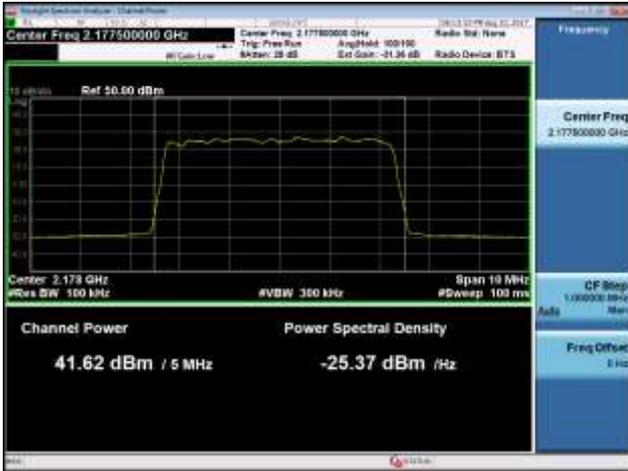


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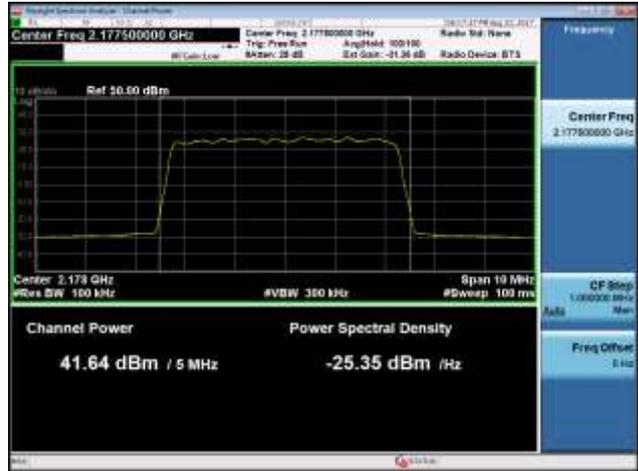
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Band 66, BW 15MHz + BW 5MHz, Multi carrier(Non-Contiguous), 4TX, Top

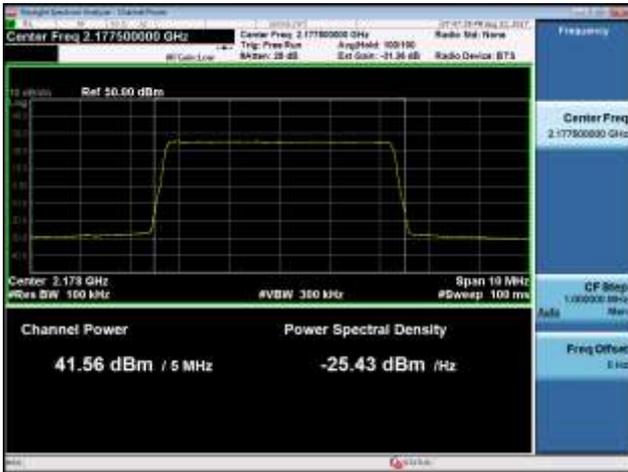
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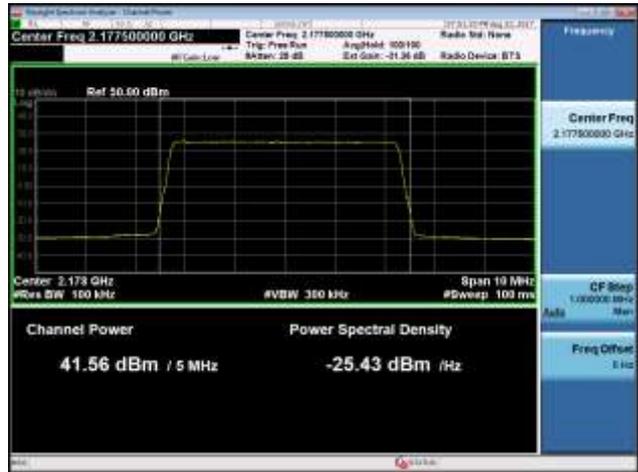
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64QAM



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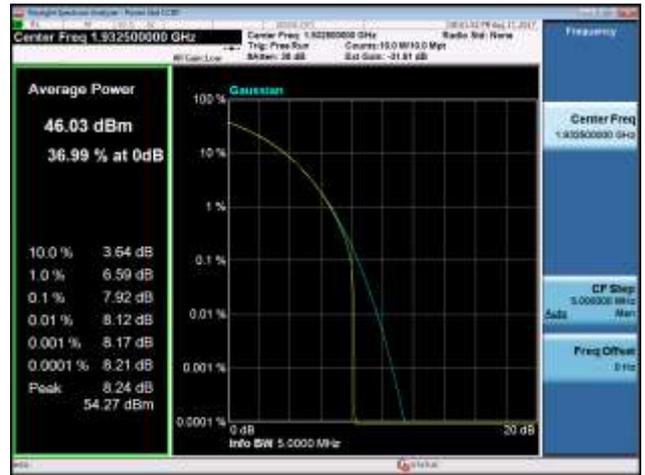
Test Plot at Peak-to-Average Ratio

Band 2, BW 5MHz, Single carrier, 2TX, Bottom

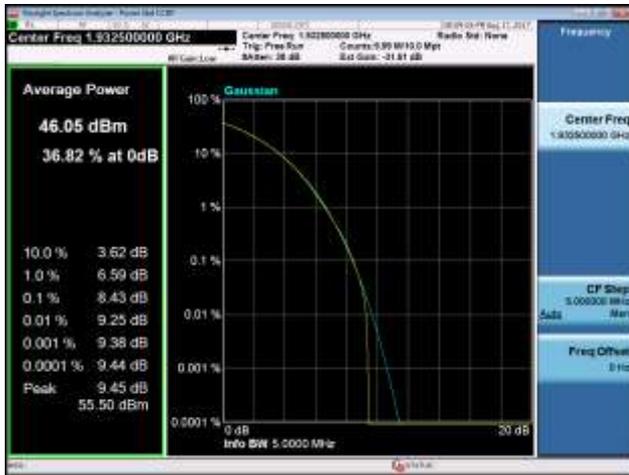
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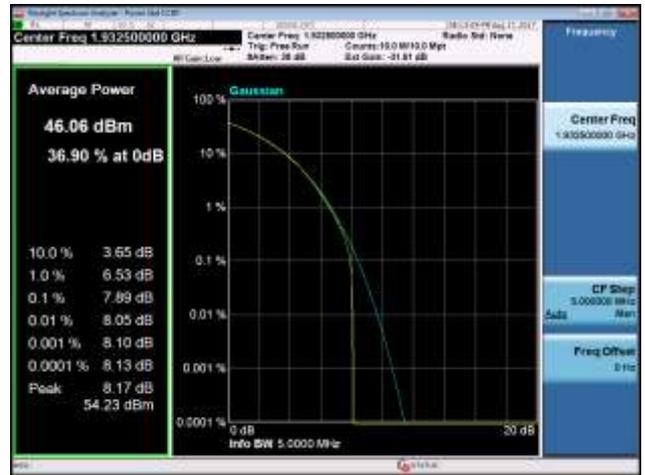
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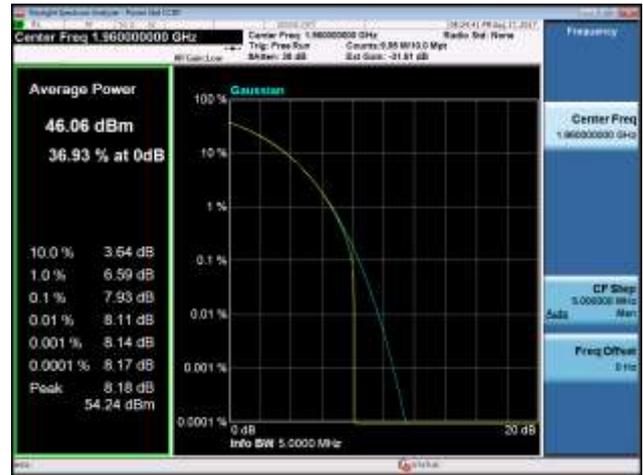


Band 2, BW 5MHz, Single carrier, 2TX, Middle

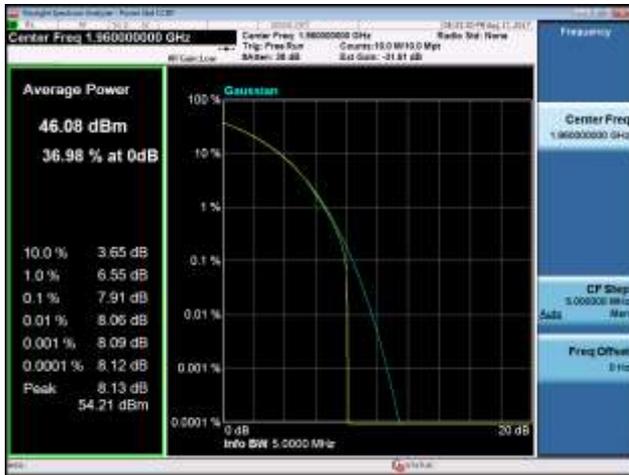
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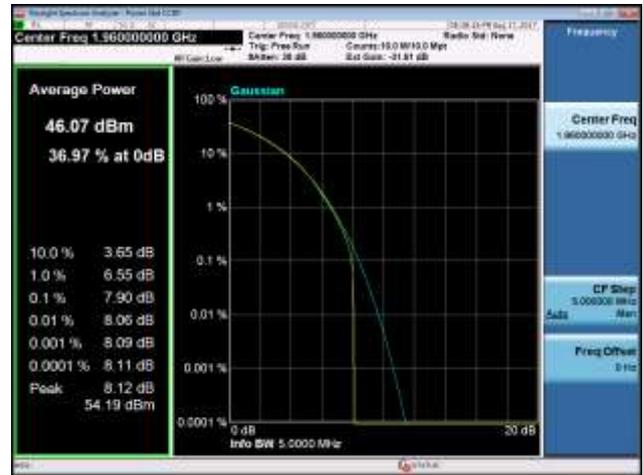
16QAM



64QAM



256QAM





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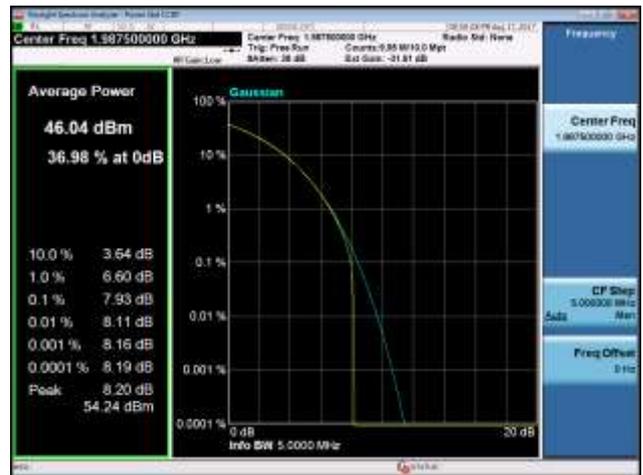
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Band 2, BW 5MHz, Single carrier, 2TX, Top

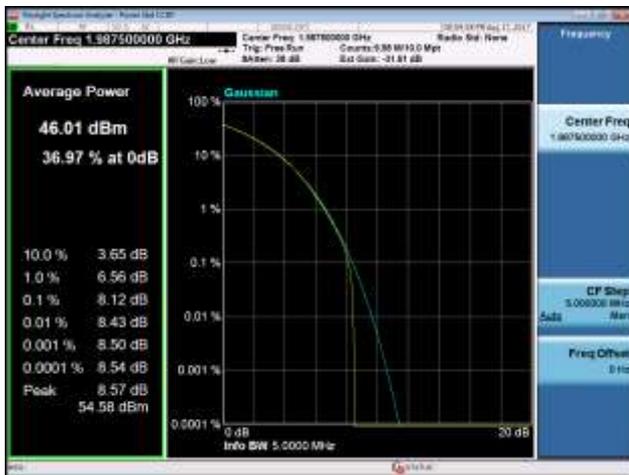
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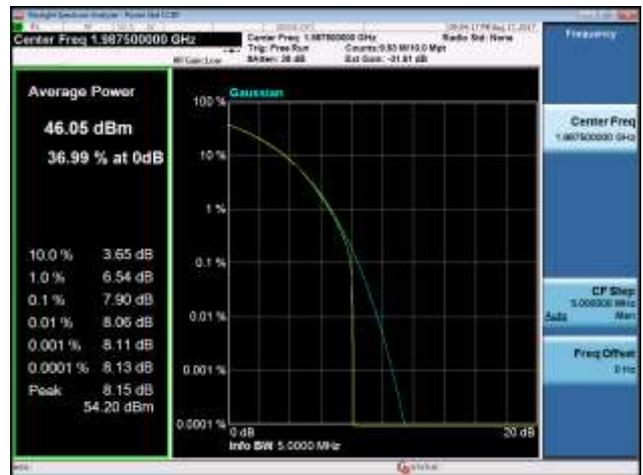
16QAM



64QAM



256QAM





Band 2, BW 15MHz, Single carrier, 2TX, Bottom

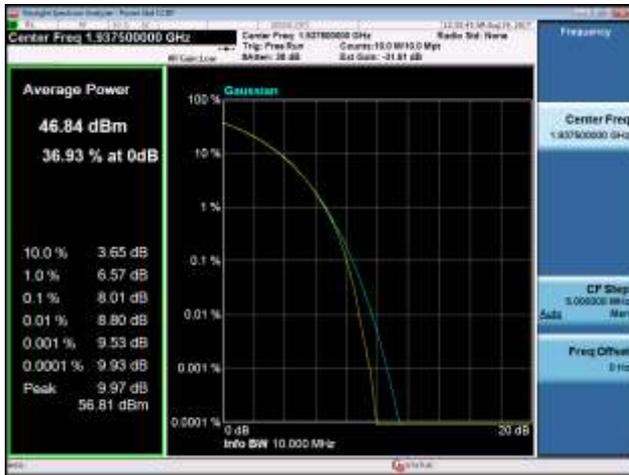
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16QAM



64QAM



256QAM





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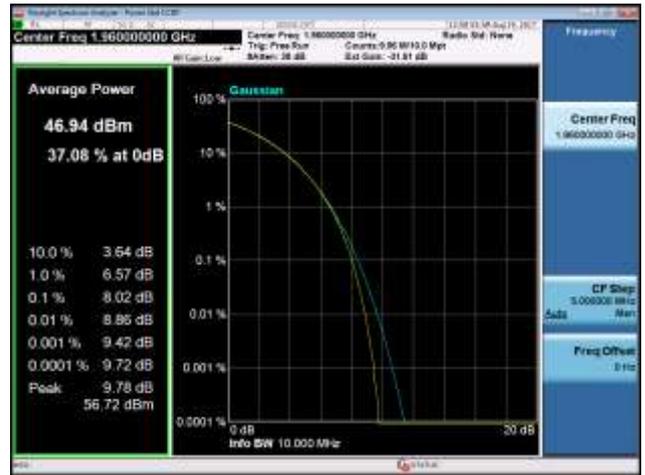
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Band 2, BW 15MHz, Single carrier, 2TX, Middle

QPSK



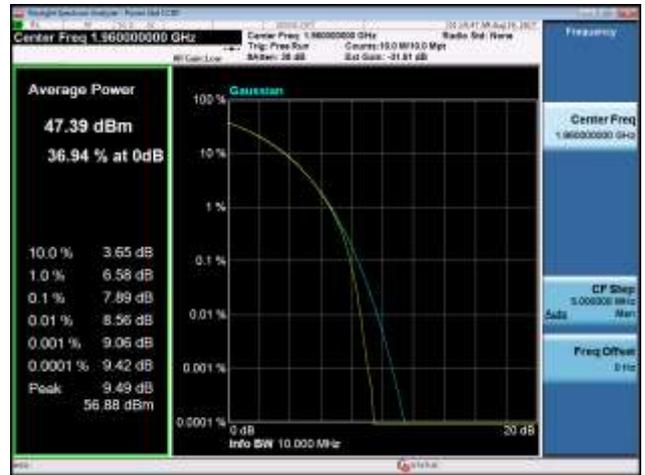
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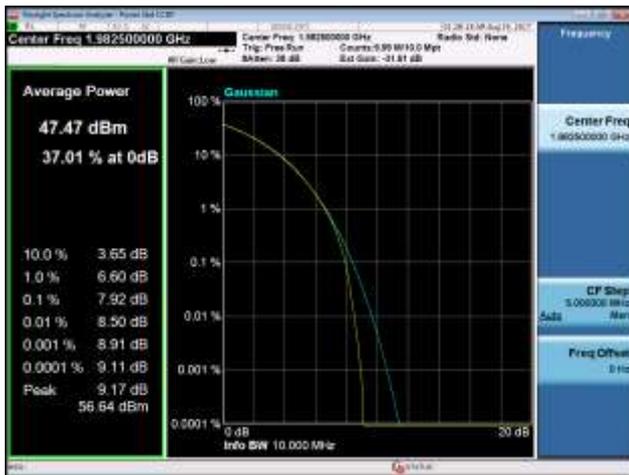
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Band 2, BW 15MHz, Single carrier, 2TX, Top

QPSK



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64QAM



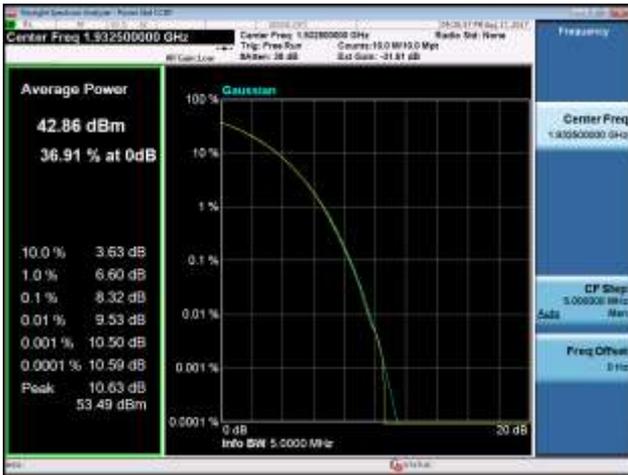
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Band 2, BW 5MHz, Single carrier, 4TX, Bottom

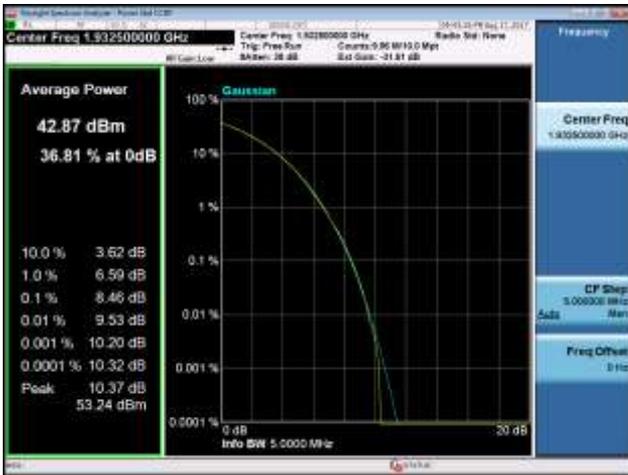
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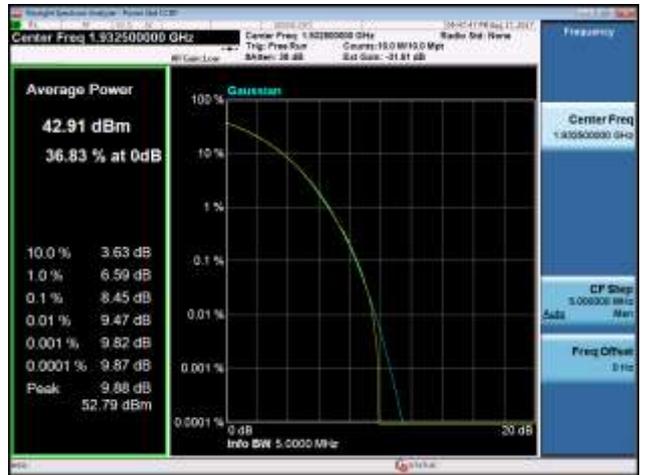
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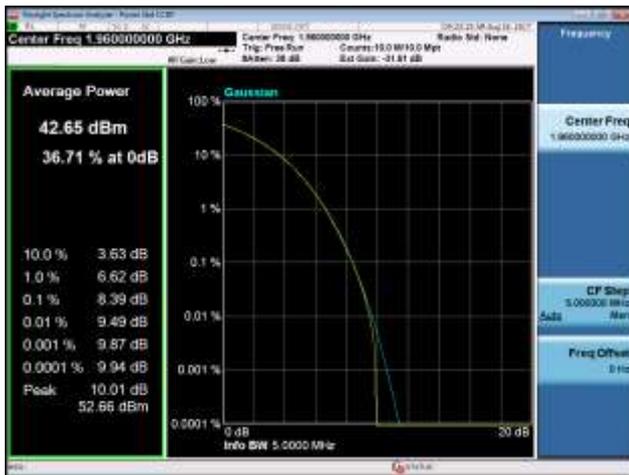
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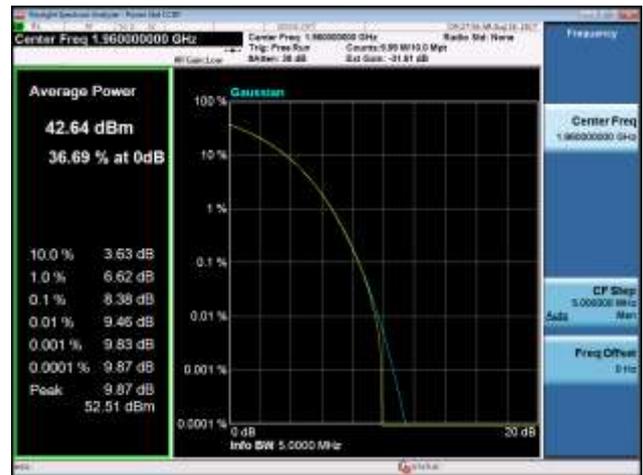


Band 2, BW 5MHz, Single carrier, 4TX, Middle

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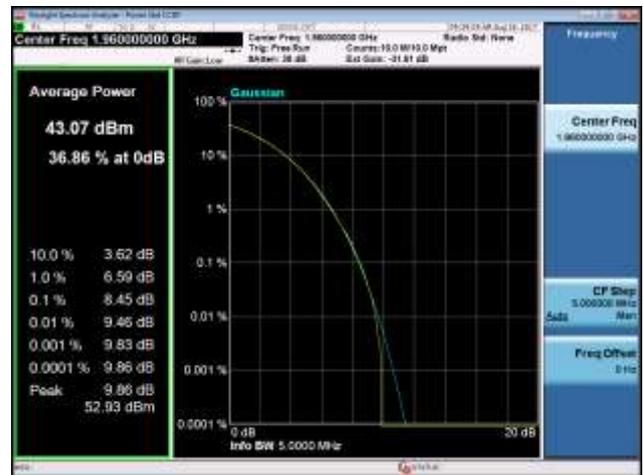
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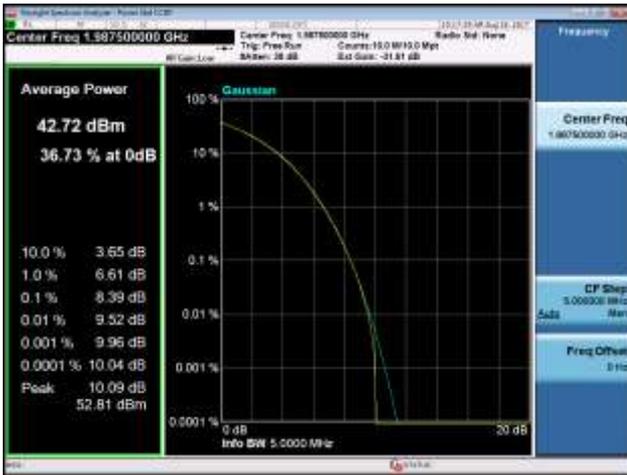
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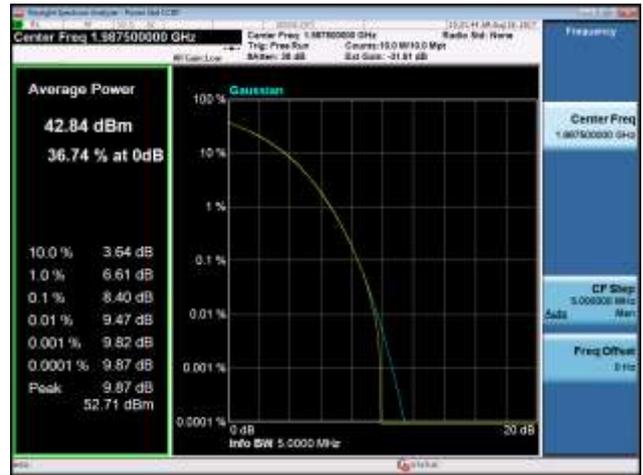


Band 2, BW 5MHz, Single carrier, 4TX Top

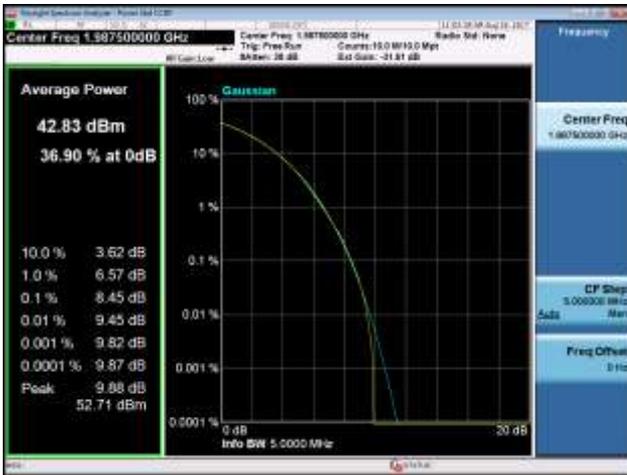
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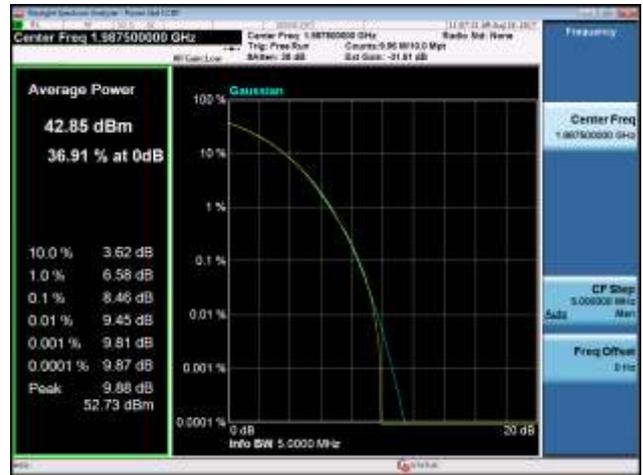
16QAM



64QAM



256QAM





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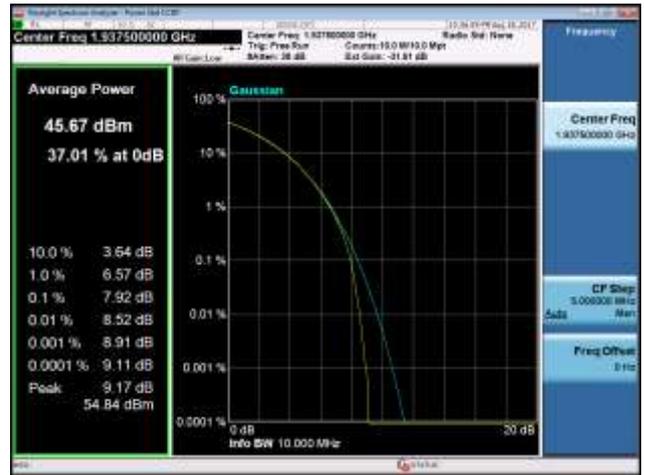
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Band 2, BW 15MHz, Single carrier, 4TX, Bottom

QPSK



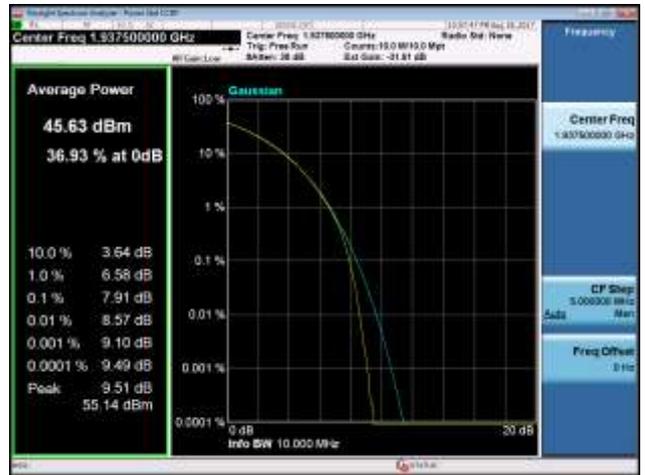
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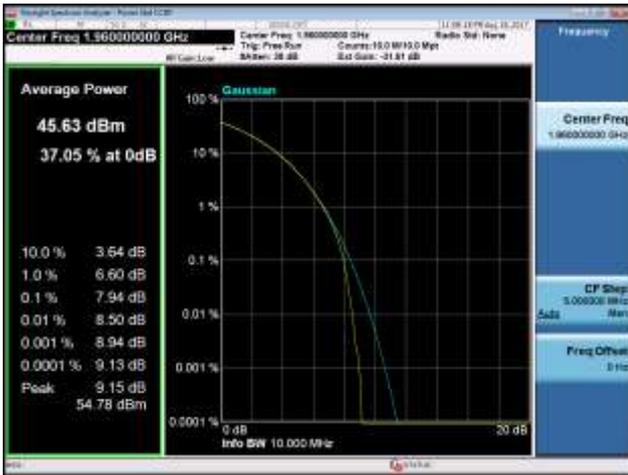


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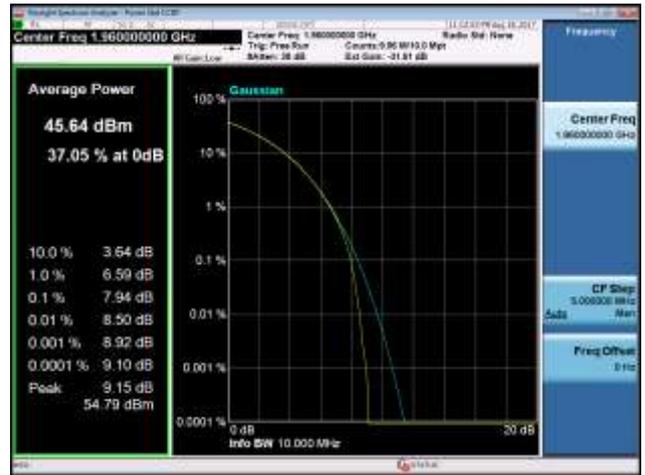
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Band 2, BW 15MHz, Single carrier, 4TX, Middle

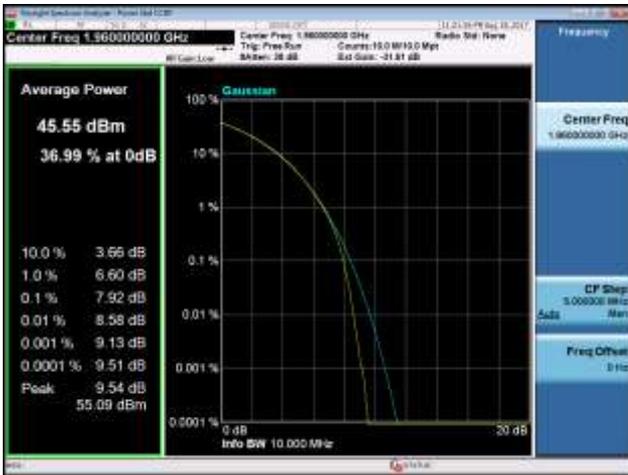
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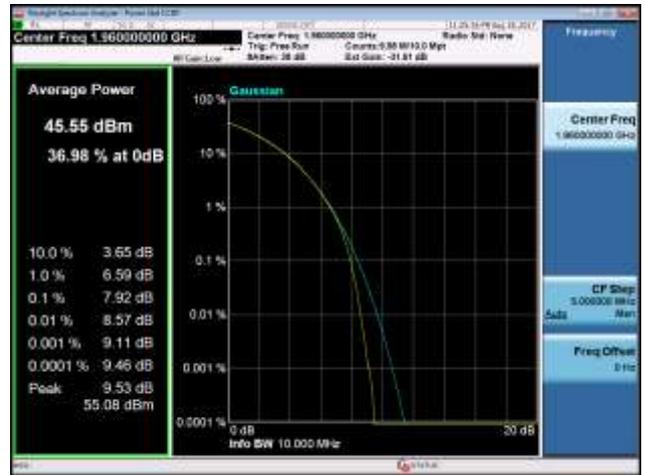
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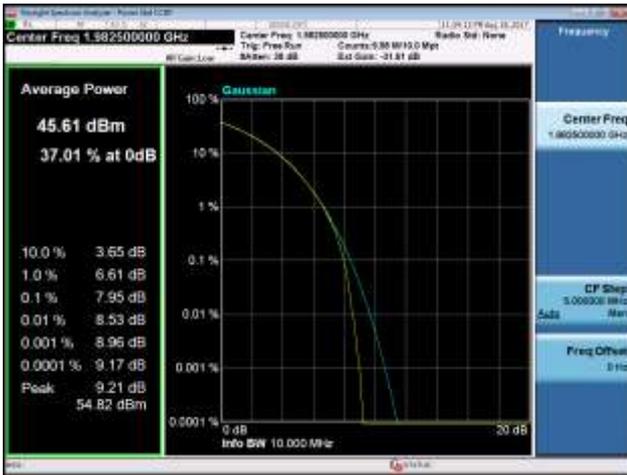


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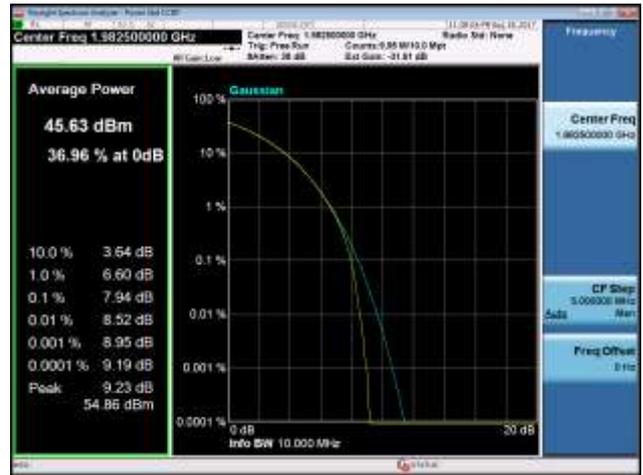
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Band 2, BW 15MHz, Single carrier, 4TX Top

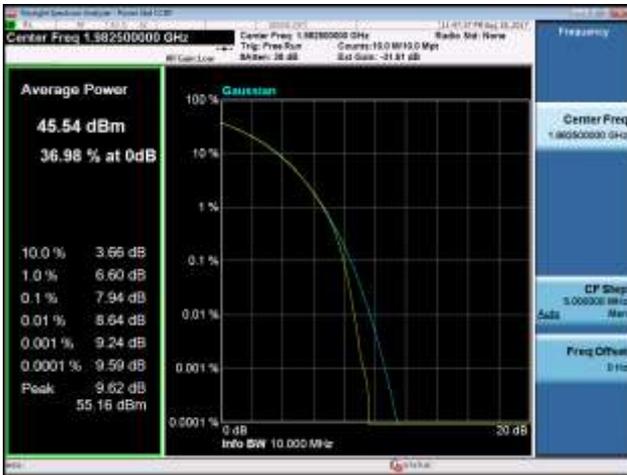
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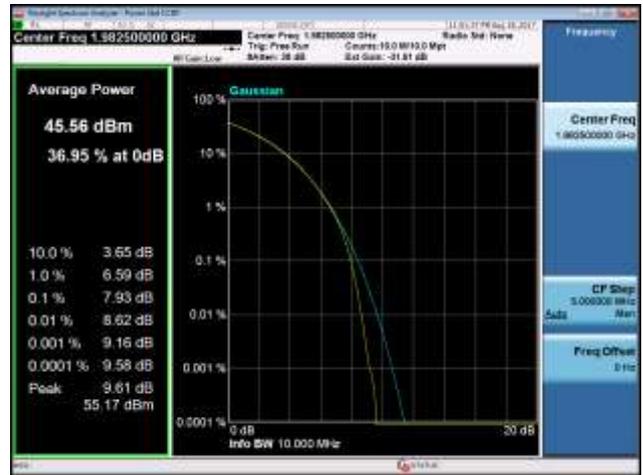
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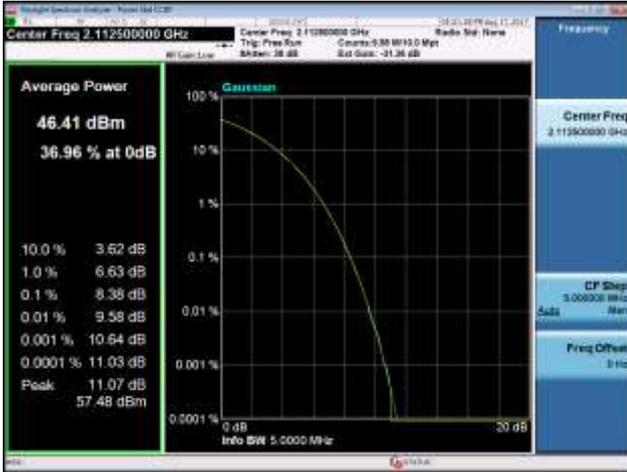


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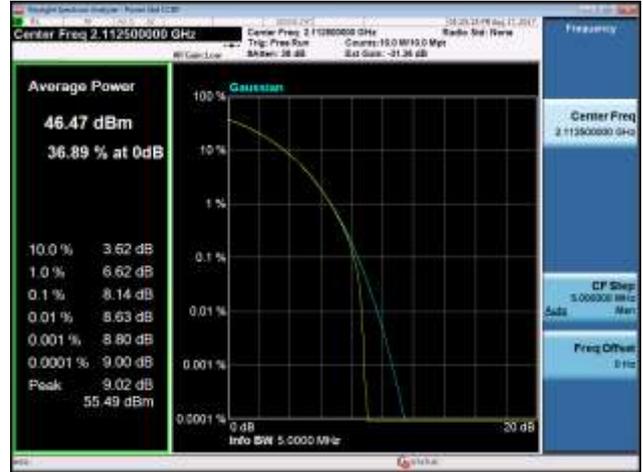
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Band 66, BW 5MHz, Single carrier, 2TX, Bottom

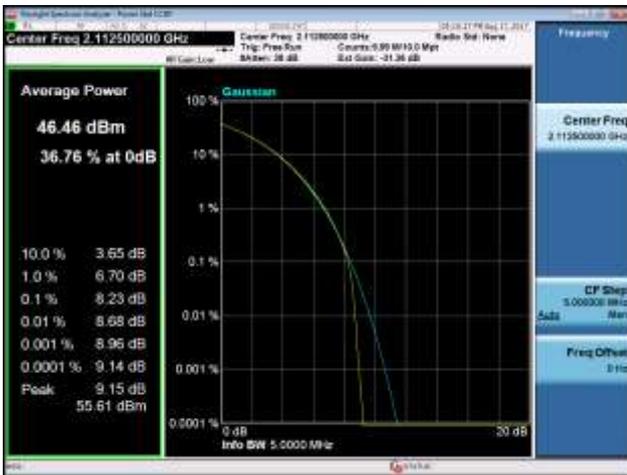
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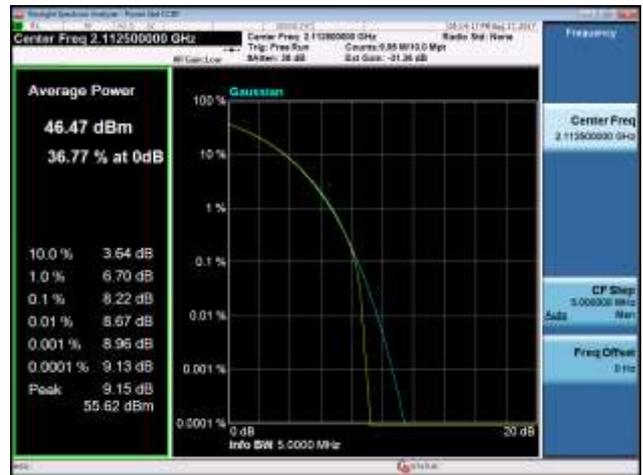
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64QAM



256QAM



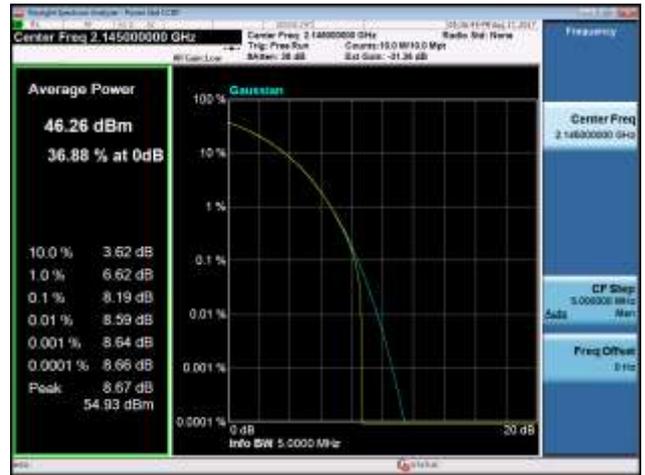


Band 66, BW 5MHz, Single carrier, 2TX, Middle

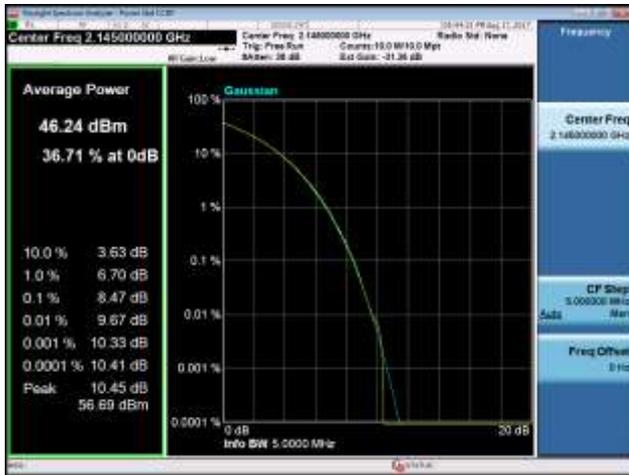
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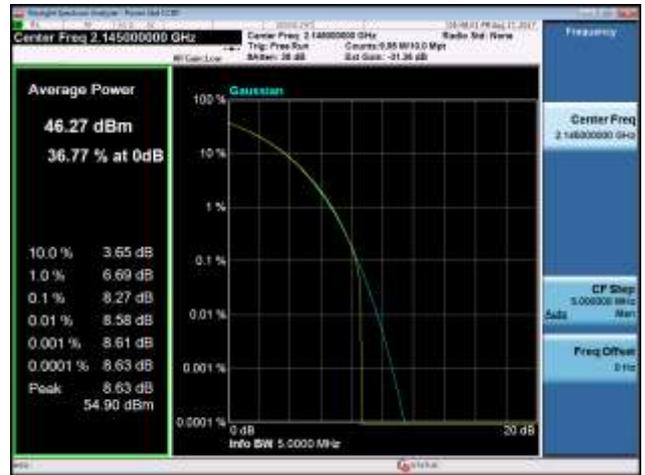
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256QAM





Band 66, BW 5MHz, Single carrier, 2TX, Top

QPSK



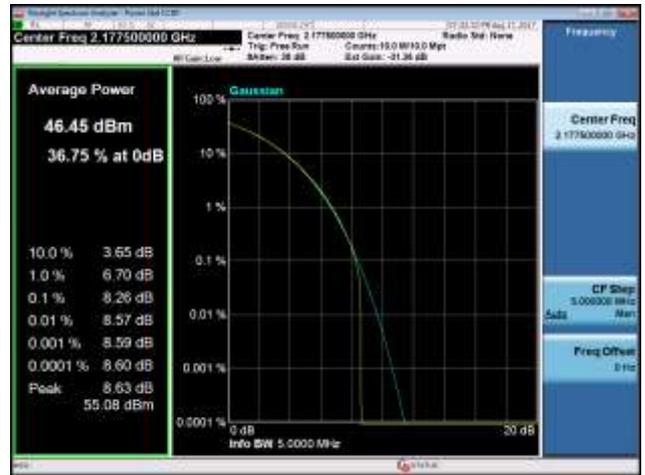
16QAM



64QAM



256QAM





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Band 66, BW 5MHz, Single carrier, 4TX, Bottom

QPSK



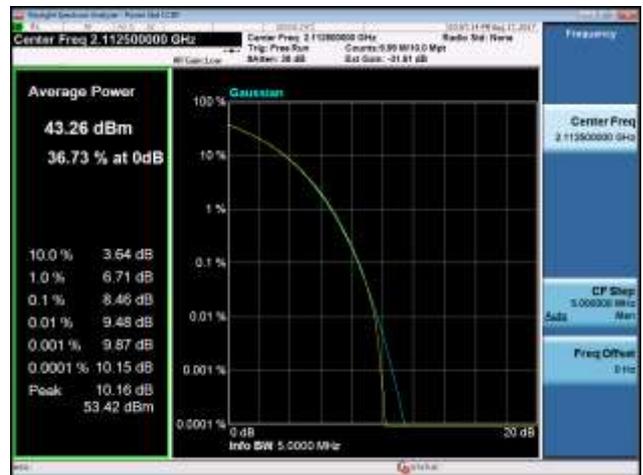
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Band 66, BW 5MHz, Single carrier, 4TX, Middle

QPSK



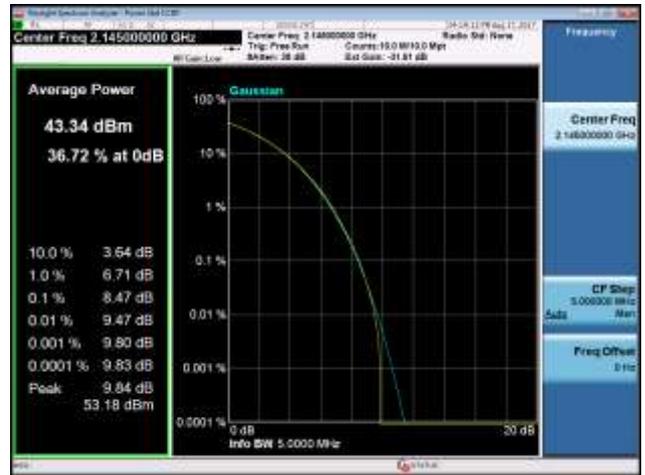
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Band 66, BW 5MHz, Single carrier, 4TX, Top

QPSK



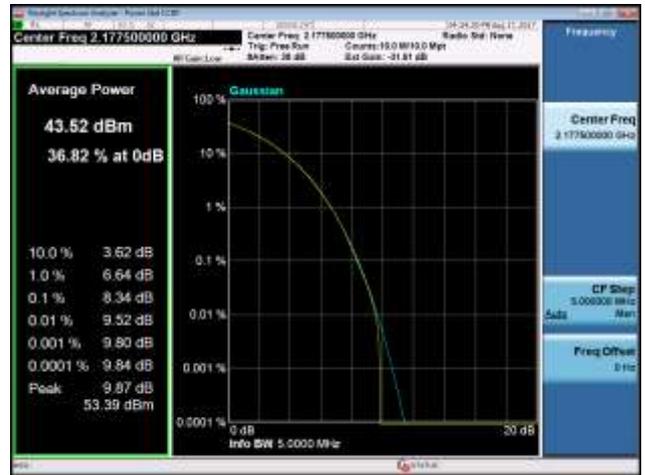
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Band 66, BW 15MHz, Single carrier, 2TX, Bottom

QPSK



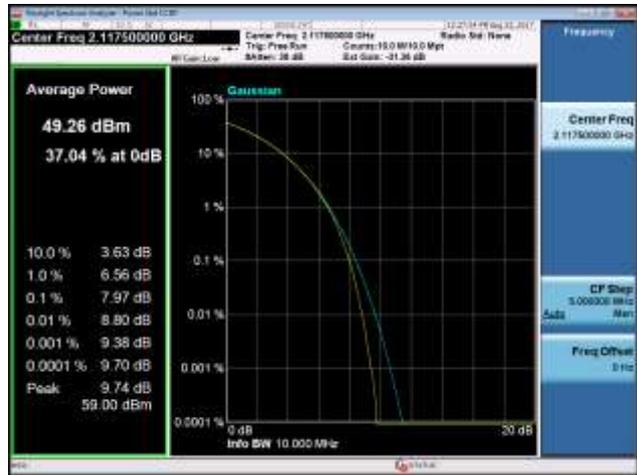
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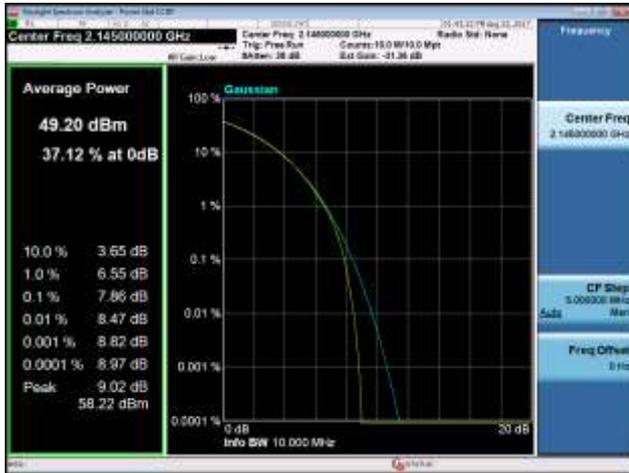


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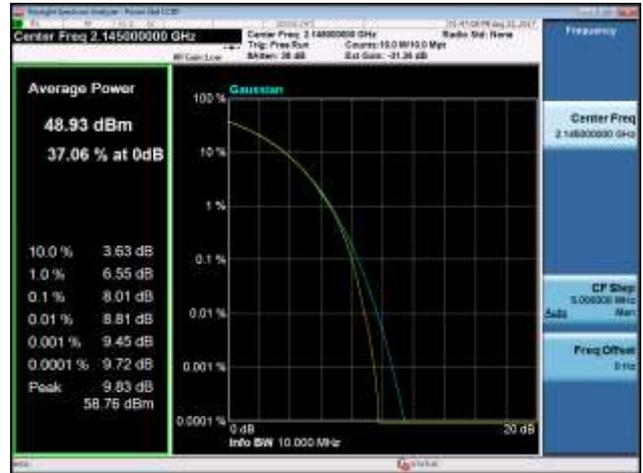


Band 66, BW 15MHz, Single carrier, 2TX, Middle

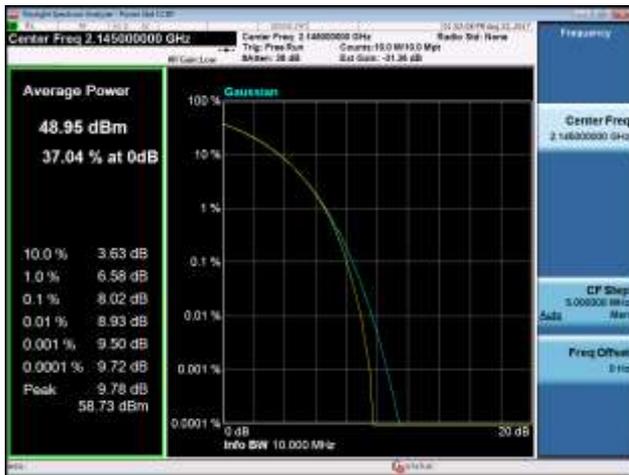
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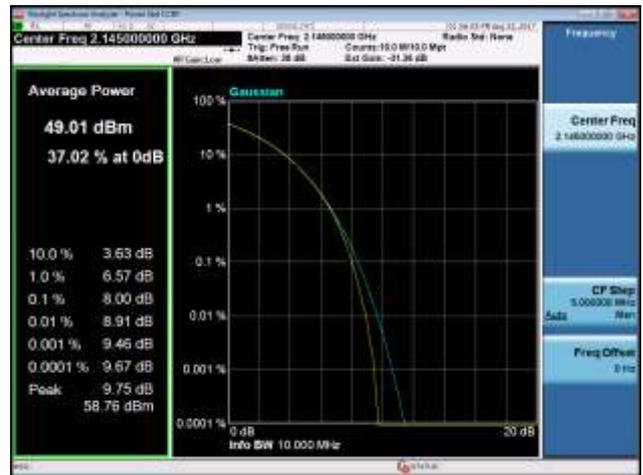
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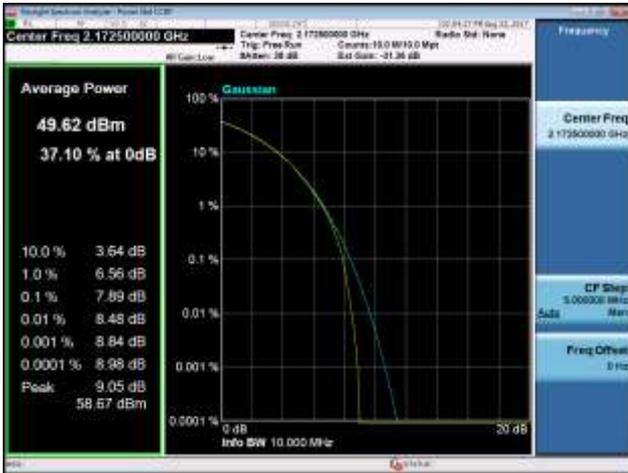


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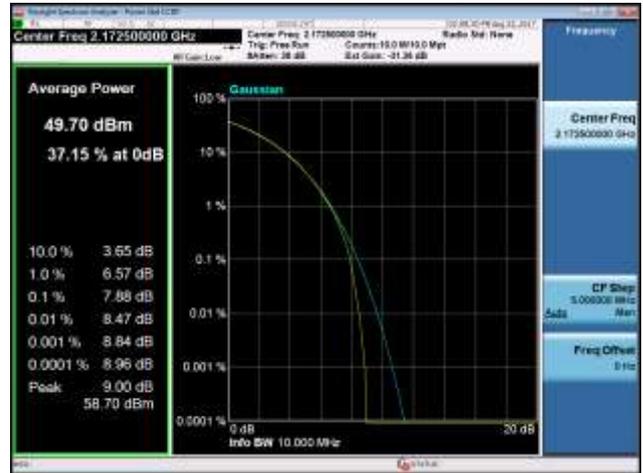


Band 66, BW 15MHz, Single carrier, 2TX, Top

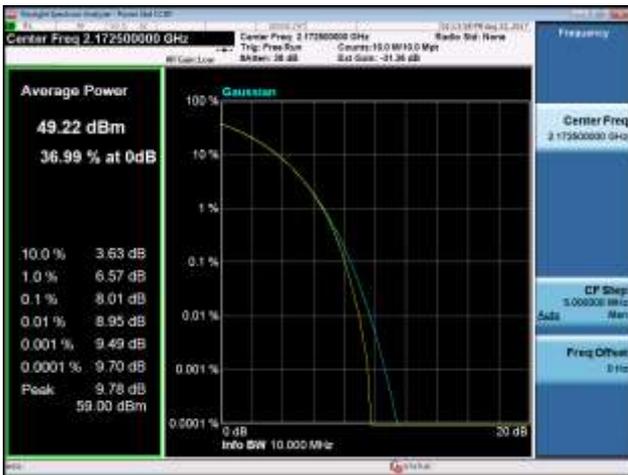
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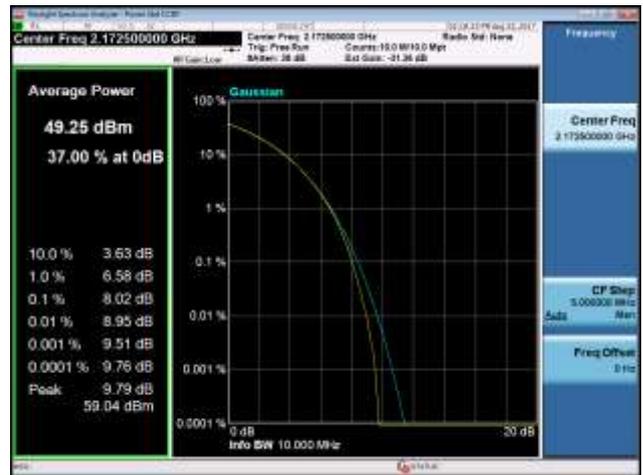
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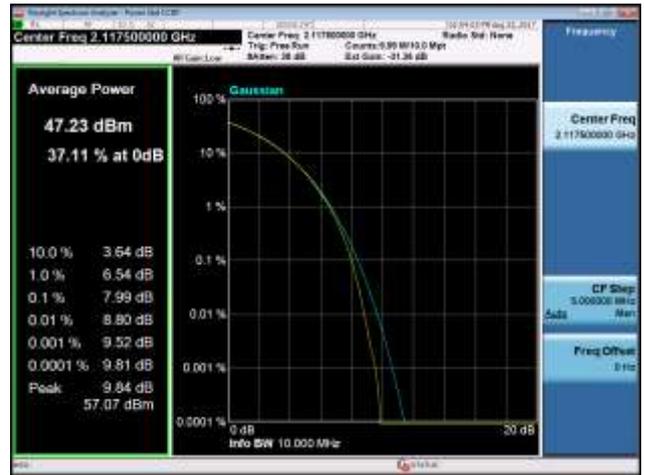


Band 66, BW 15MHz, Single carrier, 4TX, Bottom

QPSK



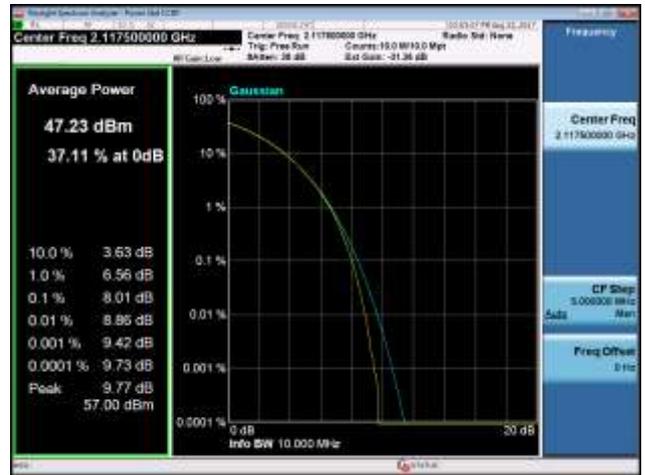
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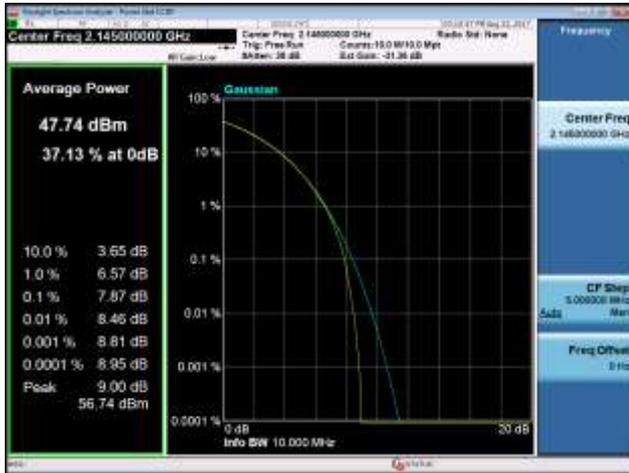


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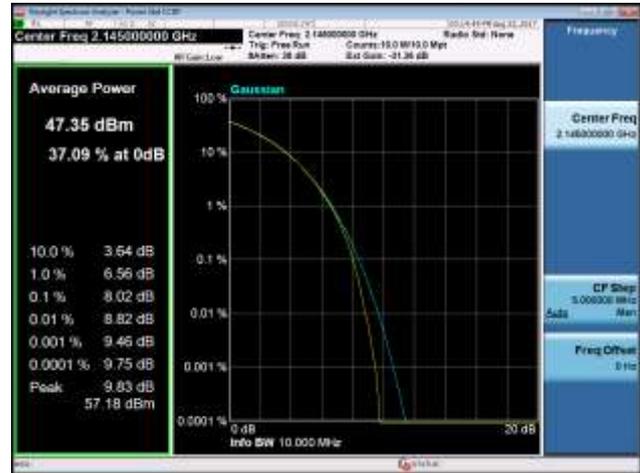


Band 66, BW 15MHz, Single carrier, 4TX, Middle

QPSK



16QAM



64QAM

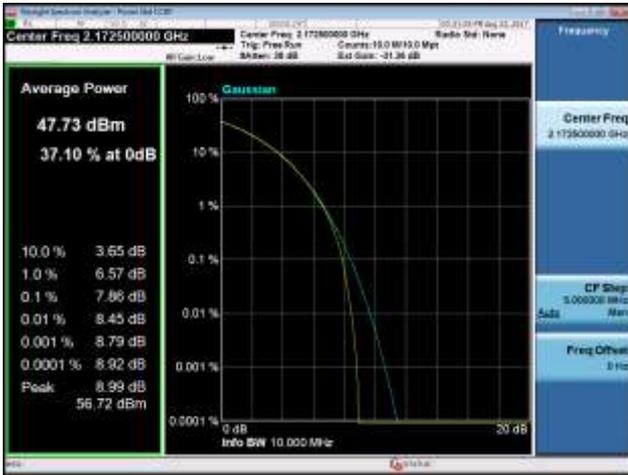


256QAM



Band 66, BW 15MHz, Single carrier, 4TX Top

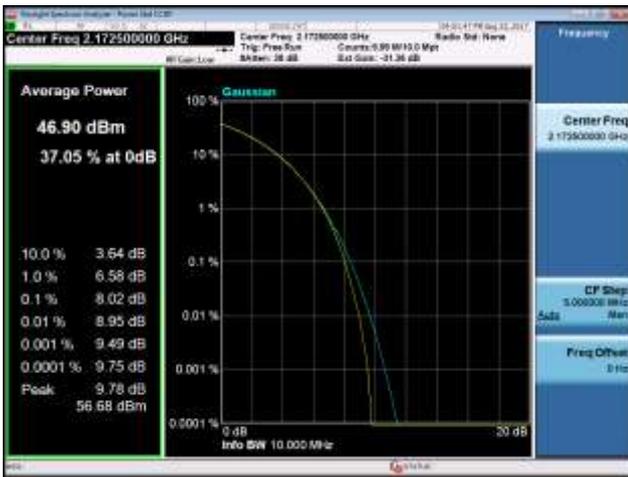
QPSK



16QAM



64QAM



256QAM

