

Plot data of PAPR - 3 MHz Bandwidth + 5 MHz Bandwidth / 2 Carriers

Port 0

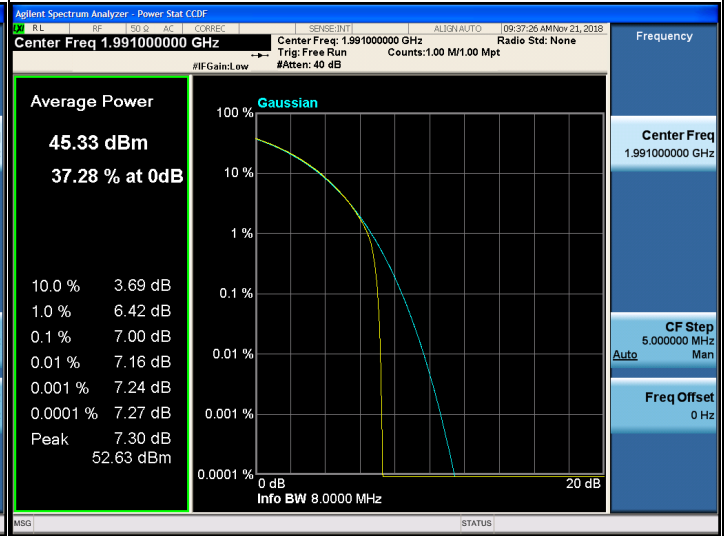
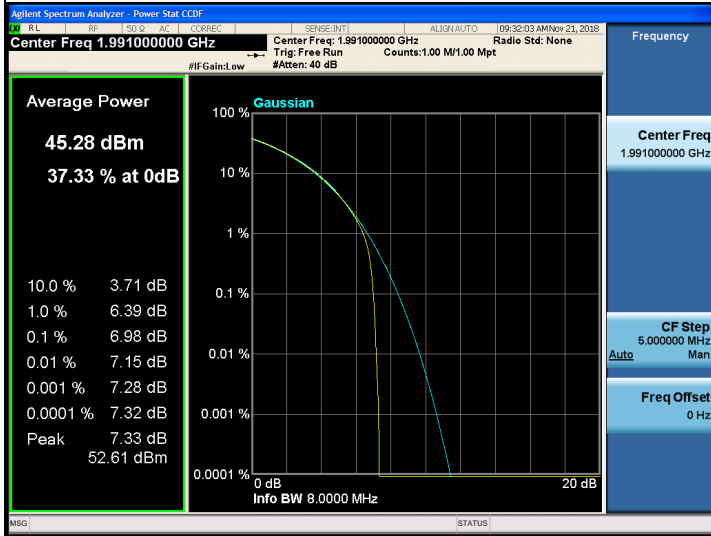
Modulation:		QPSK		Modulation:		16QAM	
Channel:		Low		Channel:		High	
Modulation:		64QAM		Modulation:		256QAM	
Channel:		High		Channel:		High	

Port 1

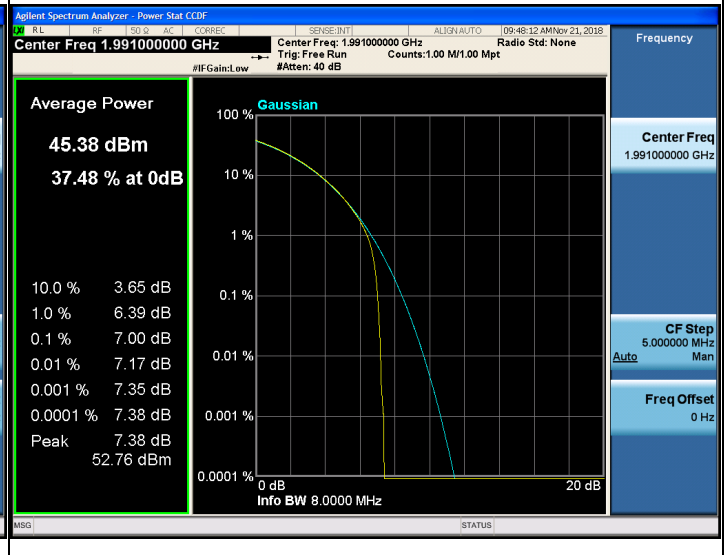
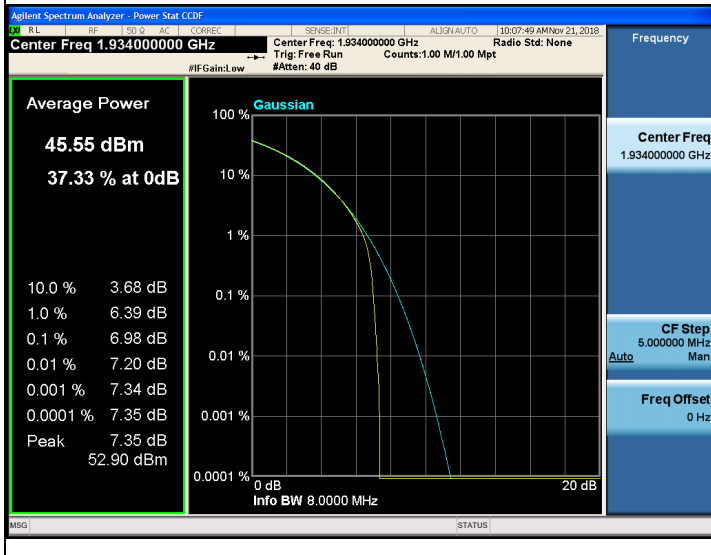
Modulation:		QPSK		Modulation:		16QAM	
Channel:		Low		Channel:		Low	
Modulation:		64QAM		Modulation:		256QAM	
Channel:		High		Channel:		High	

Port 2

Modulation:	QPSK	Modulation:	16QAM
Channel:	High	Channel:	High

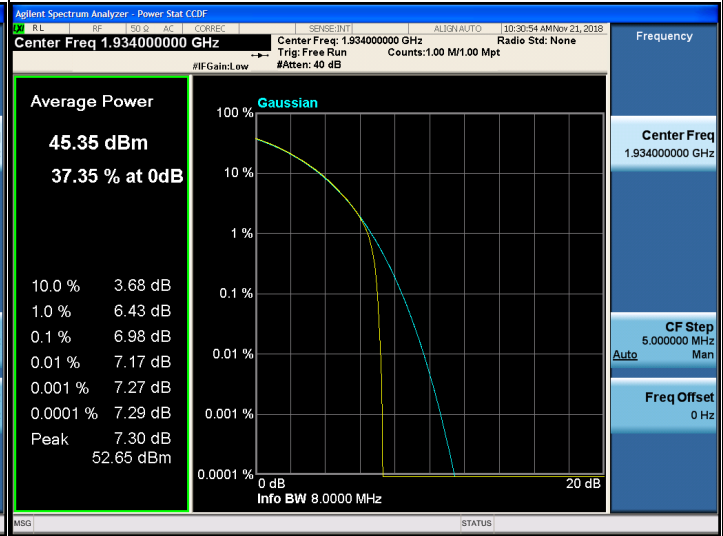
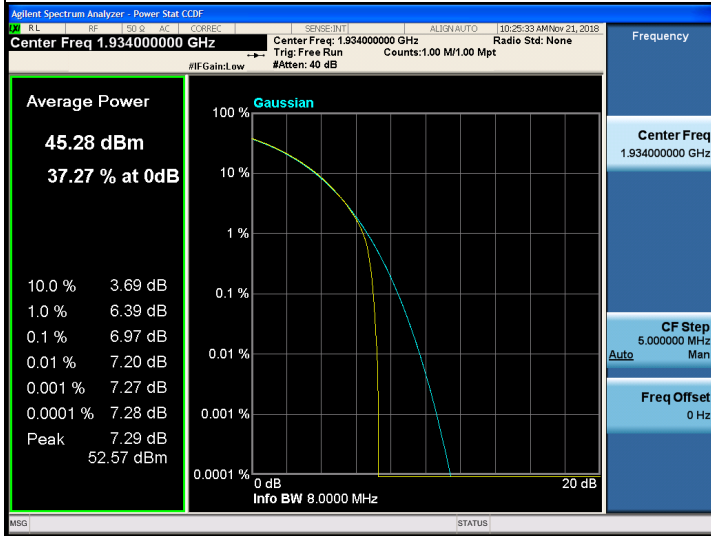


Modulation:	64QAM	Modulation:	256QAM
Channel:	Low	Channel:	High

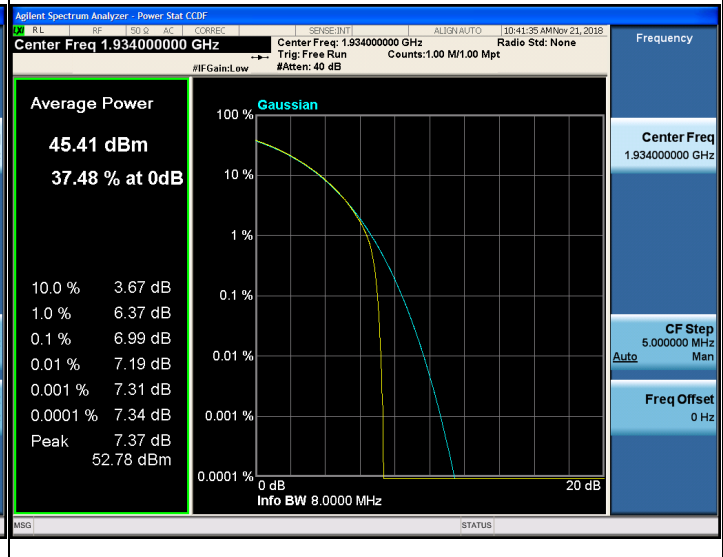
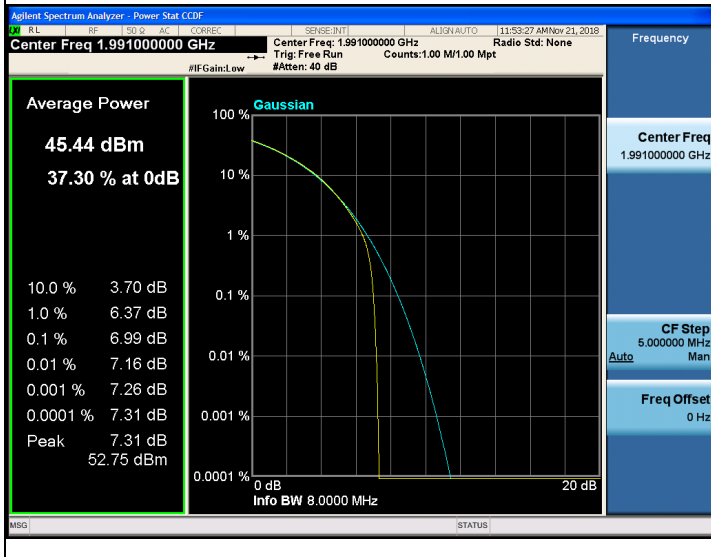


Port 3

Modulation:	QPSK	Modulation:	16QAM
Channel:	Low	Channel:	Low



Modulation:	64QAM	Modulation:	256QAM
Channel:	High	Channel:	Low



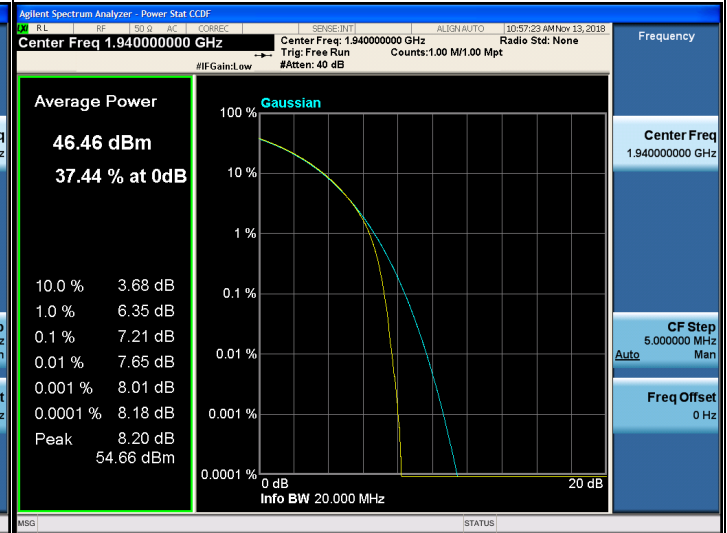
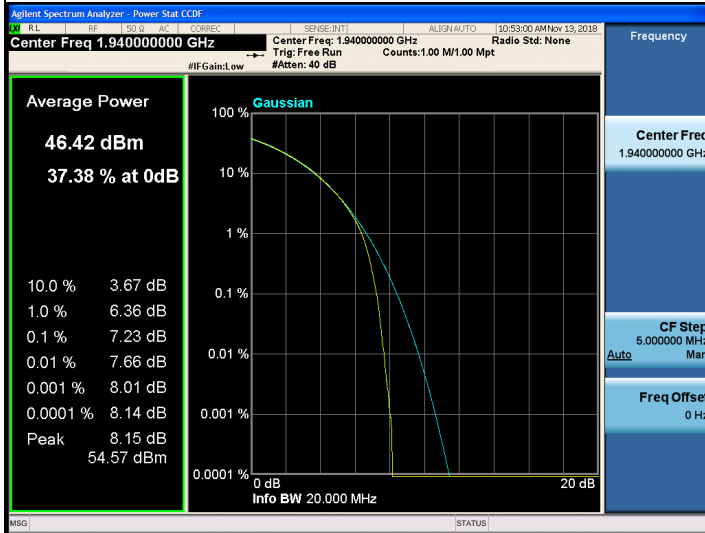
Plot data of PAPR - 20 MHz Bandwidth / 1 Carrier

Port 0

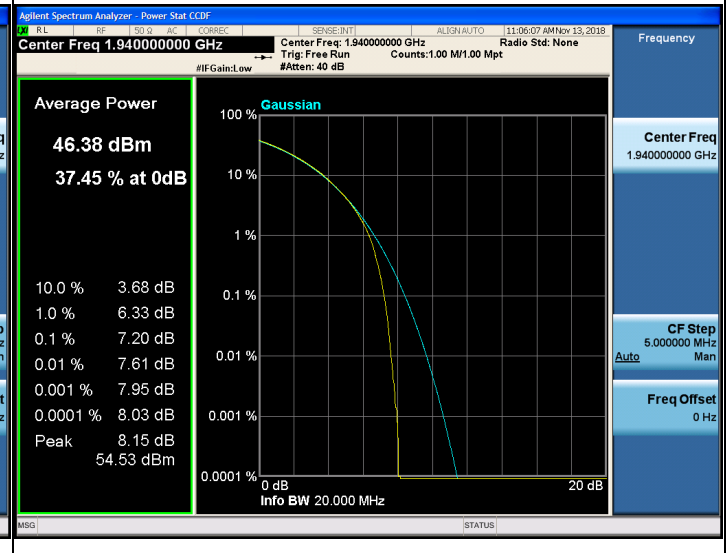
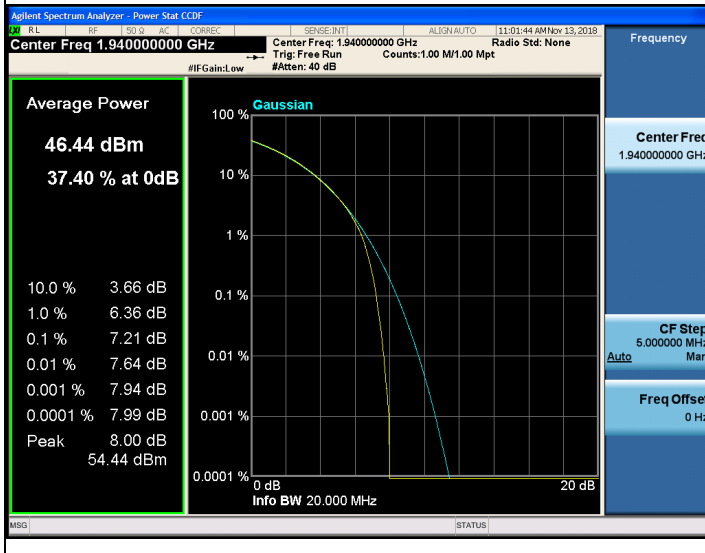
Modulation:		QPSK		Modulation:		16QAM																																	
Channel:		Low		Channel:		Low																																	
<table border="1"> <tr><td>10.0 %</td><td>3.67 dB</td></tr> <tr><td>1.0 %</td><td>6.35 dB</td></tr> <tr><td>0.1 %</td><td>7.19 dB</td></tr> <tr><td>0.01 %</td><td>7.62 dB</td></tr> <tr><td>0.001 %</td><td>7.89 dB</td></tr> <tr><td>0.0001 %</td><td>8.17 dB</td></tr> <tr><td>Peak</td><td>8.18 dB</td></tr> <tr><td></td><td>54.65 dBm</td></tr> </table>				10.0 %	3.67 dB	1.0 %	6.35 dB	0.1 %	7.19 dB	0.01 %	7.62 dB	0.001 %	7.89 dB	0.0001 %	8.17 dB	Peak	8.18 dB		54.65 dBm	<table border="1"> <tr><td>10.0 %</td><td>3.67 dB</td></tr> <tr><td>1.0 %</td><td>6.32 dB</td></tr> <tr><td>0.1 %</td><td>7.17 dB</td></tr> <tr><td>0.01 %</td><td>7.58 dB</td></tr> <tr><td>0.001 %</td><td>7.75 dB</td></tr> <tr><td>0.0001 %</td><td>8.13 dB</td></tr> <tr><td>Peak</td><td>8.14 dB</td></tr> <tr><td></td><td>54.55 dBm</td></tr> </table>				10.0 %	3.67 dB	1.0 %	6.32 dB	0.1 %	7.17 dB	0.01 %	7.58 dB	0.001 %	7.75 dB	0.0001 %	8.13 dB	Peak	8.14 dB		54.55 dBm
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	54.55 dBm																																						
Modulation:		64QAM		Modulation:		256QAM																																	
Channel:		Low		Channel:		Low																																	
<table border="1"> <tr><td>10.0 %</td><td>3.69 dB</td></tr> <tr><td>1.0 %</td><td>6.35 dB</td></tr> <tr><td>0.1 %</td><td>7.16 dB</td></tr> <tr><td>0.01 %</td><td>7.61 dB</td></tr> <tr><td>0.001 %</td><td>7.86 dB</td></tr> <tr><td>0.0001 %</td><td>8.09 dB</td></tr> <tr><td>Peak</td><td>8.10 dB</td></tr> <tr><td></td><td>54.53 dBm</td></tr> </table>				10.0 %	3.69 dB	1.0 %	6.35 dB	0.1 %	7.16 dB	0.01 %	7.61 dB	0.001 %	7.86 dB	0.0001 %	8.09 dB	Peak	8.10 dB		54.53 dBm	<table border="1"> <tr><td>10.0 %</td><td>3.68 dB</td></tr> <tr><td>1.0 %</td><td>6.34 dB</td></tr> <tr><td>0.1 %</td><td>7.16 dB</td></tr> <tr><td>0.01 %</td><td>7.58 dB</td></tr> <tr><td>0.001 %</td><td>7.86 dB</td></tr> <tr><td>0.0001 %</td><td>8.04 dB</td></tr> <tr><td>Peak</td><td>8.06 dB</td></tr> <tr><td></td><td>54.50 dBm</td></tr> </table>				10.0 %	3.68 dB	1.0 %	6.34 dB	0.1 %	7.16 dB	0.01 %	7.58 dB	0.001 %	7.86 dB	0.0001 %	8.04 dB	Peak	8.06 dB		54.50 dBm
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Peak	8.10 dB																																						
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0.001 %	7.86 dB																																						
0.0001 %	8.04 dB																																						
Peak	8.06 dB																																						
	54.50 dBm																																						

Port 1

Modulation:	QPSK	Modulation:	16QAM
Channel:	Low	Channel:	Low

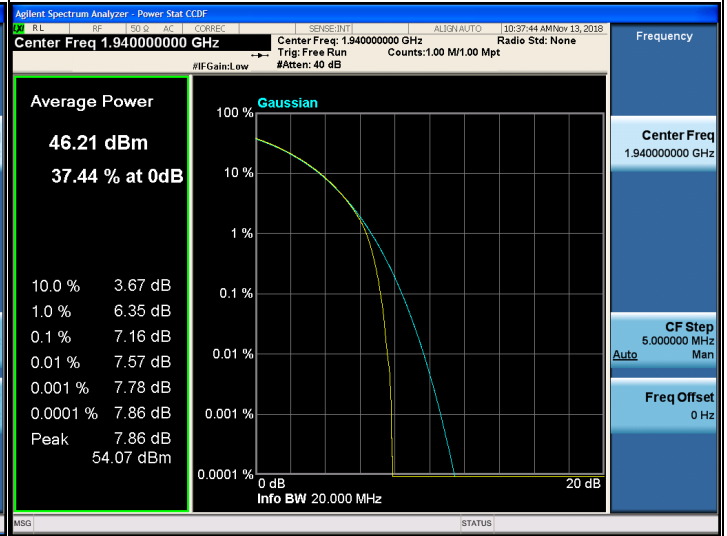
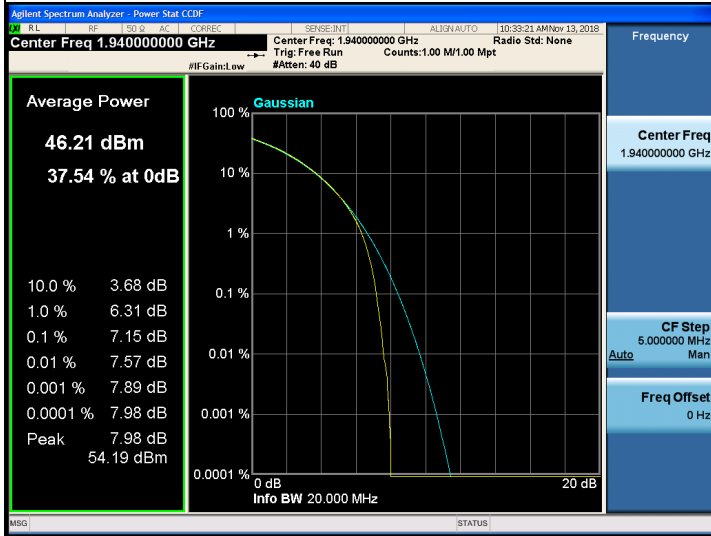


Modulation:	64QAM	Modulation:	256QAM
Channel:	Low	Channel:	Low



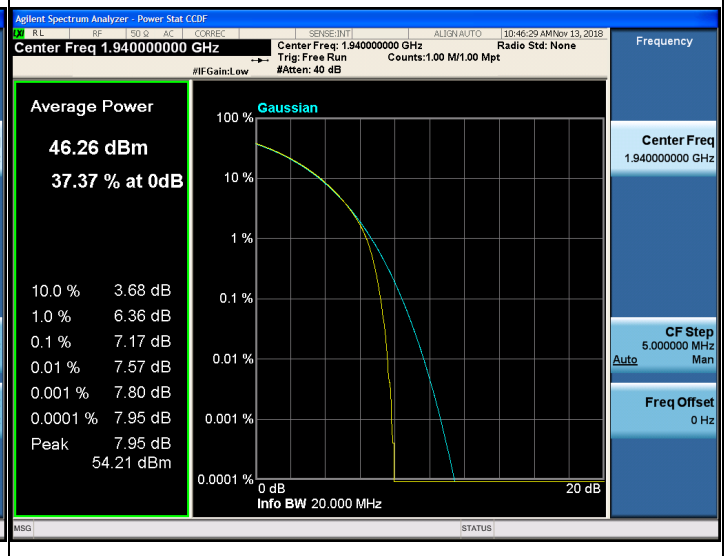
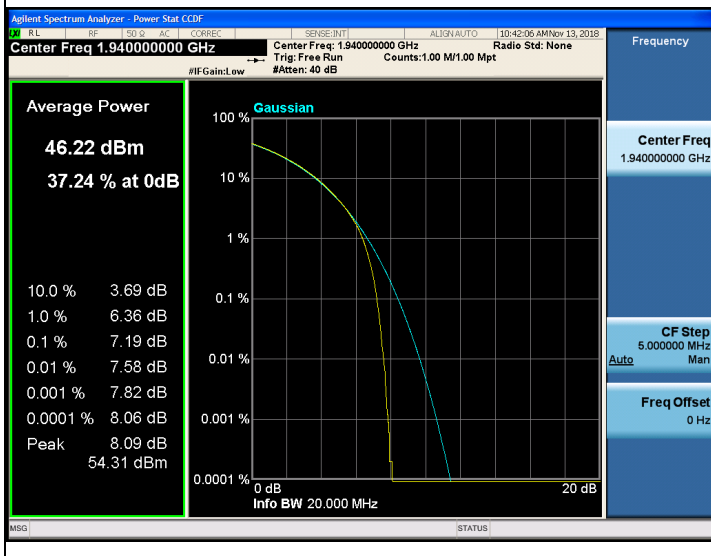
Port 2

Modulation:	QPSK	Modulation:	16QAM
Channel:	Low	Channel:	Low



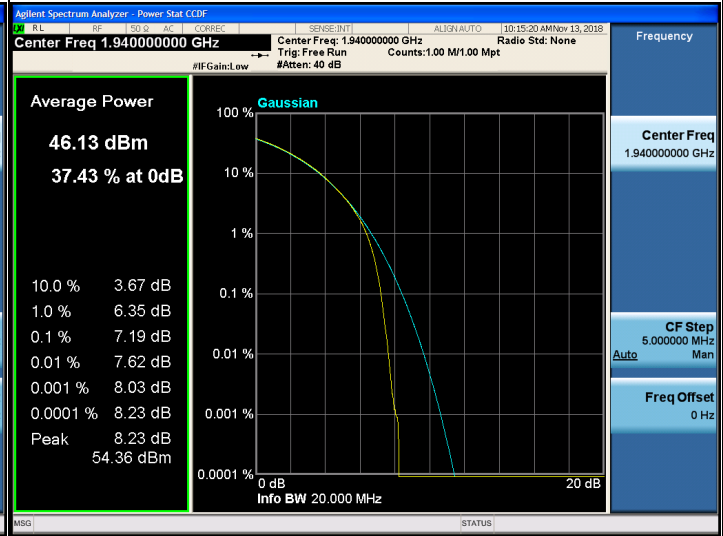
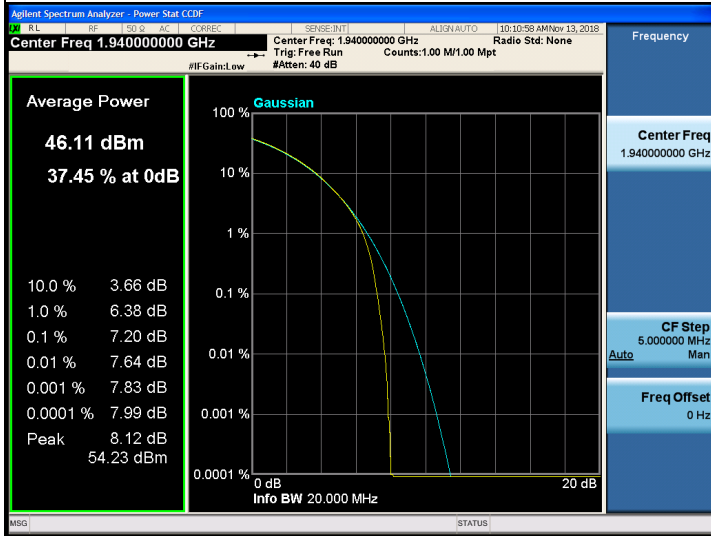
Modulation:	64QAM
Channel:	Low

Modulation:	256QAM
Channel:	Low

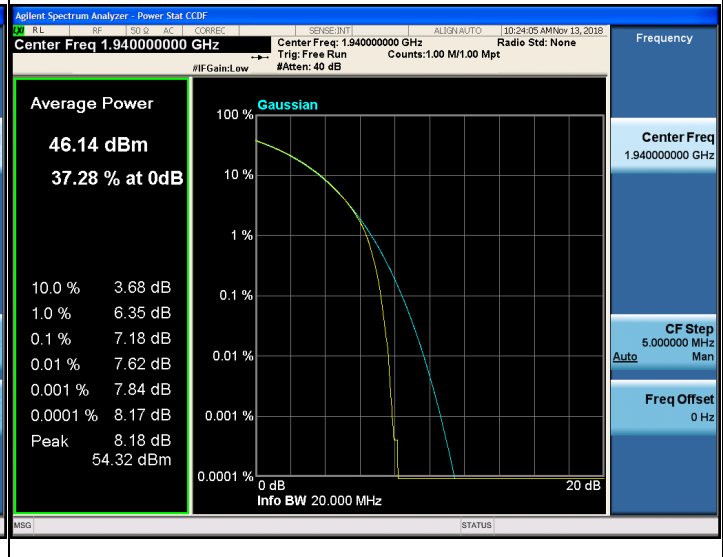
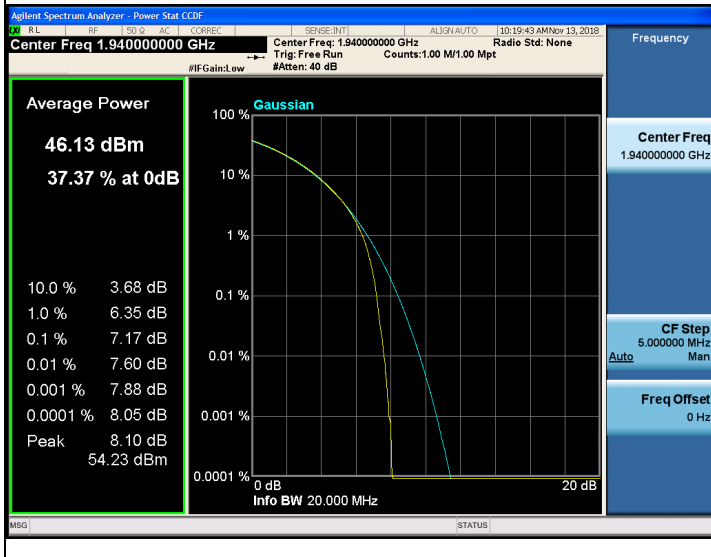


Port 3

Modulation:	QPSK	Modulation:	16QAM
Channel:	Low	Channel:	Low



Modulation:	64QAM	Modulation:	256QAM
Channel:	Low	Channel:	Low



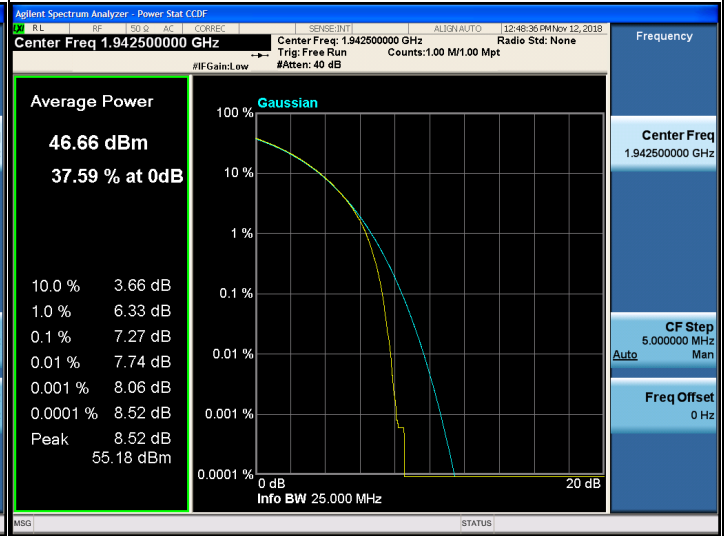
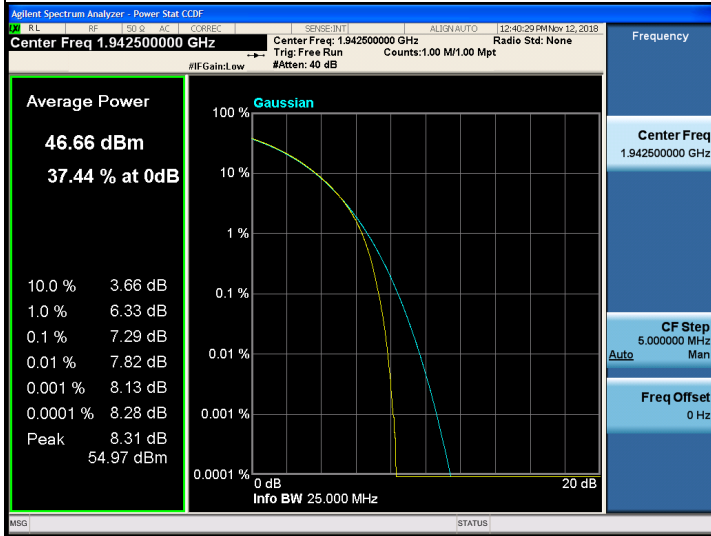
Plot data of PAPR - 20 MHz Bandwidth + 5 MHz Bandwidth / 2 Carriers

Port 0

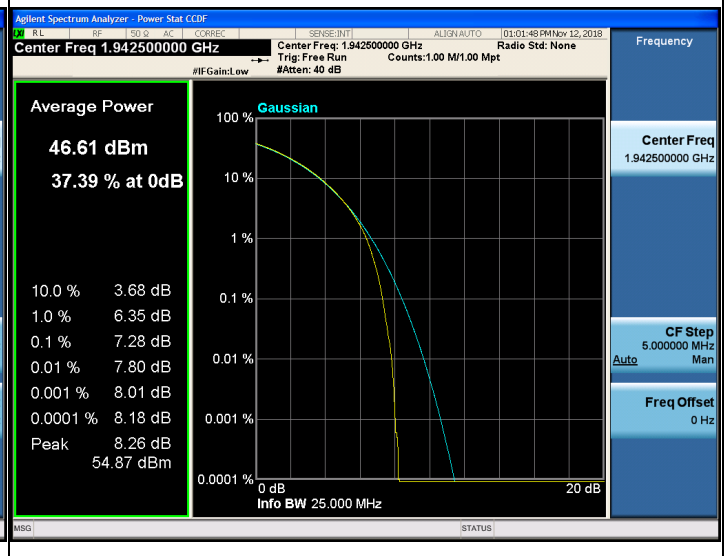
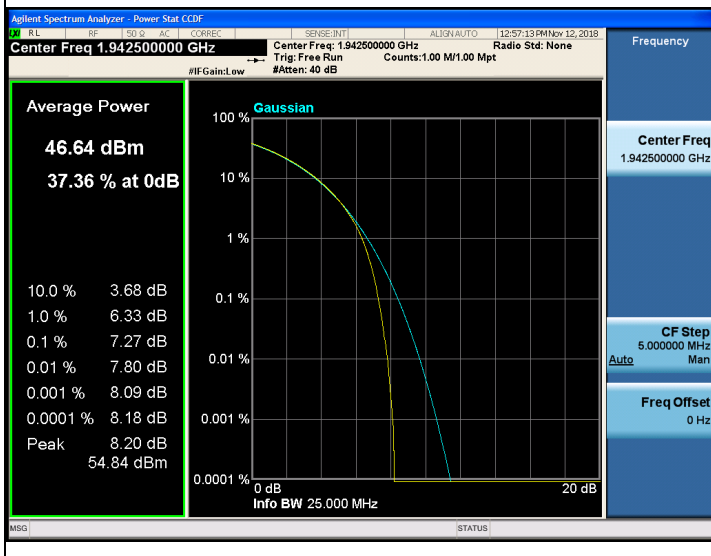
Modulation: QPSK		Modulation: 16QAM	
Channel: Low		Channel: Low	
Modulation: 64QAM		Modulation: 256QAM	
Channel: Low		Channel: Low	

Port 1

Modulation:	QPSK	Modulation:	16QAM
Channel:	Low	Channel:	Low



Modulation:	64QAM	Modulation:	256QAM
Channel:	Low	Channel:	Low

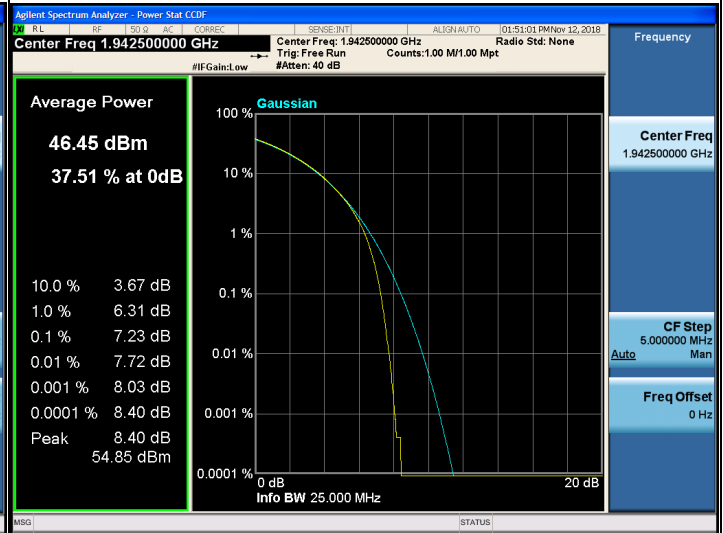
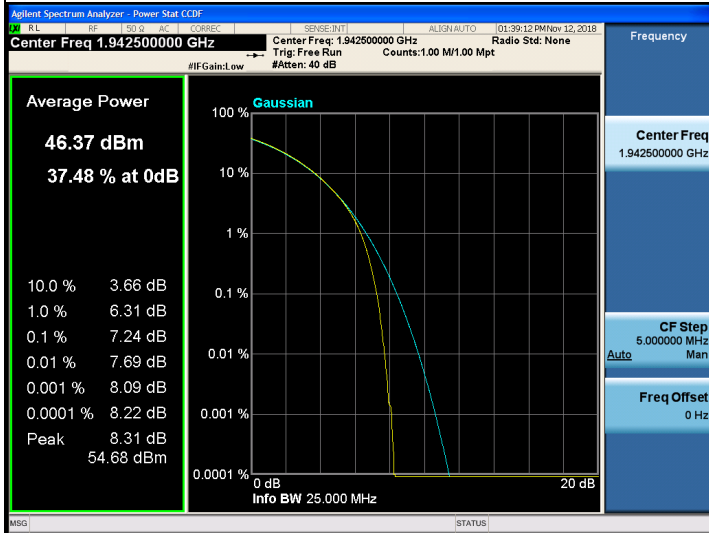


Port 2

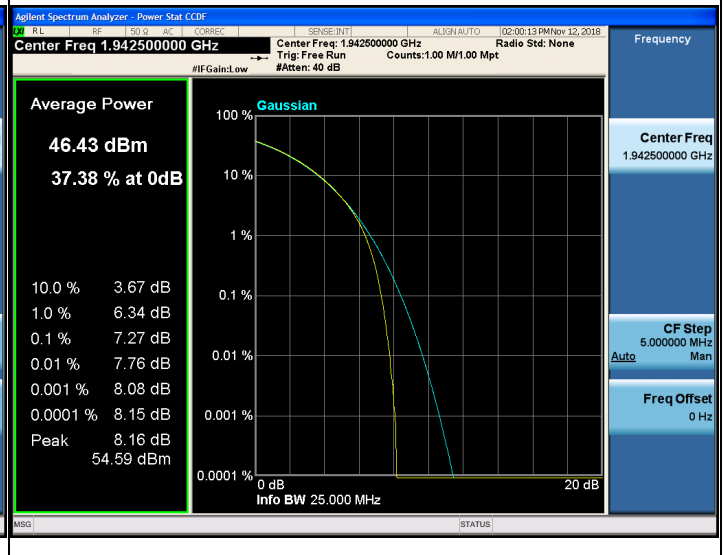
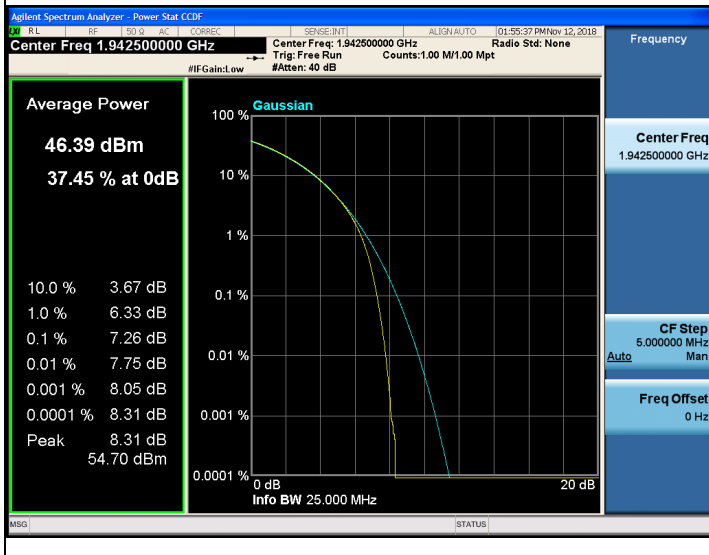
Modulation: QPSK		Modulation: 16QAM	
Channel: High		Channel: Low	
Modulation: 64QAM		Modulation: 256QAM	
Channel: Low		Channel: Low	

Port 3

Modulation:	QPSK	Modulation:	16QAM
Channel:	Low	Channel:	Low



Modulation:	64QAM	Modulation:	256QAM
Channel:	Low	Channel:	Low



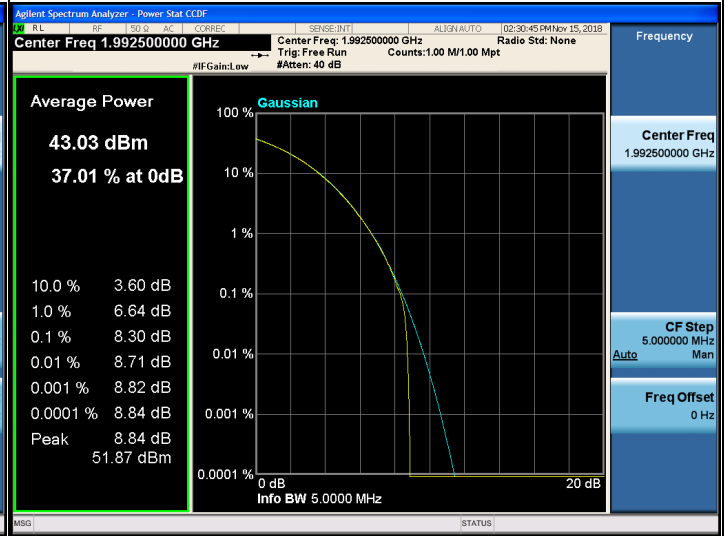
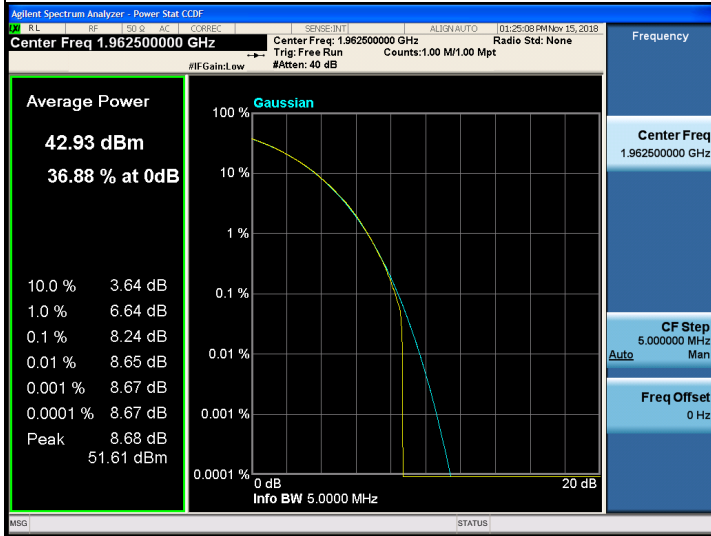
Plot data of PAPR - 5 MHz Bandwidth / 1 Carrier

Port 0

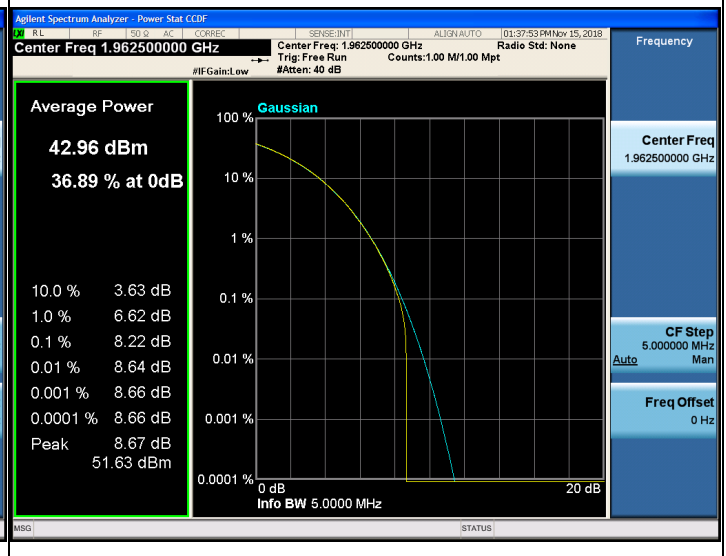
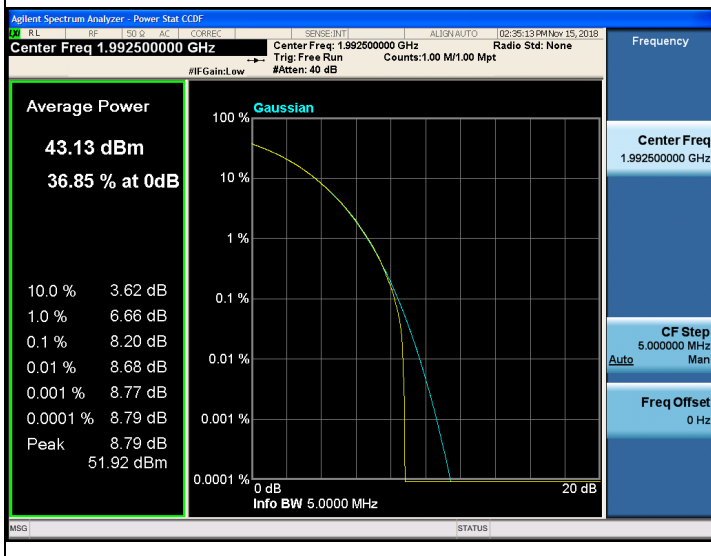
Modulation:		QPSK		Modulation:		16QAM	
Channel:		Middle		Channel:		Low	
Modulation:		64QAM		Modulation:		256QAM	
Channel:		Low		Channel:		High	

Port 1

Modulation:	QPSK	Modulation:	16QAM
Channel:	Middle	Channel:	High

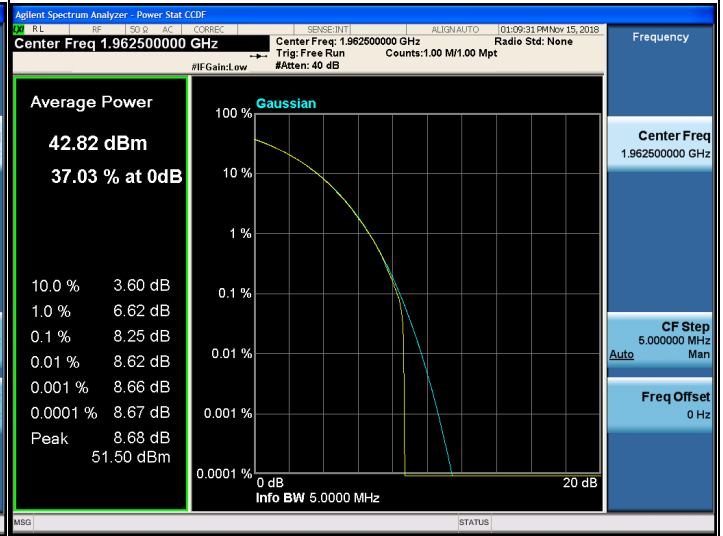
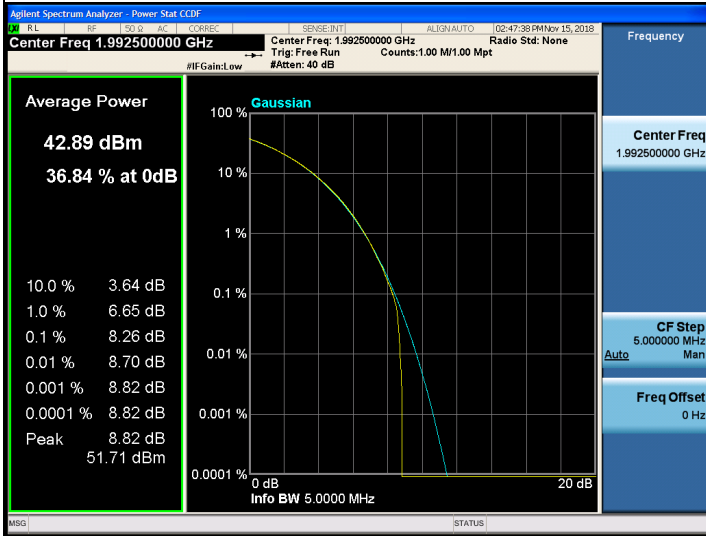


Modulation:	64QAM	Modulation:	256QAM
Channel:	High	Channel:	Middle

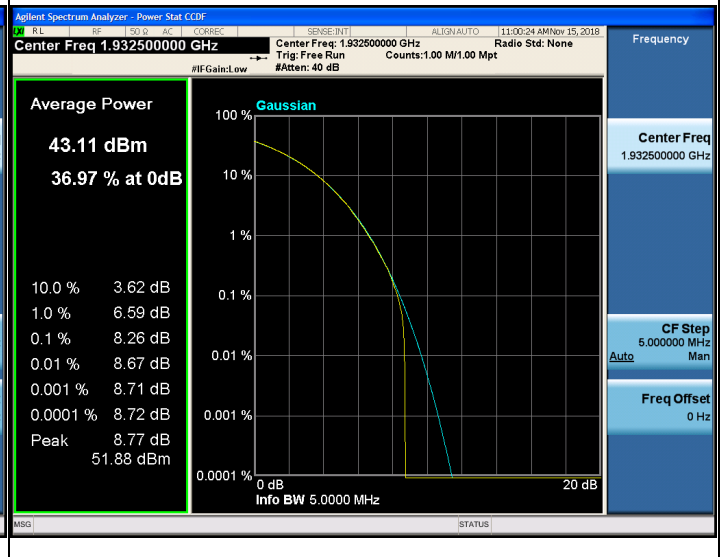
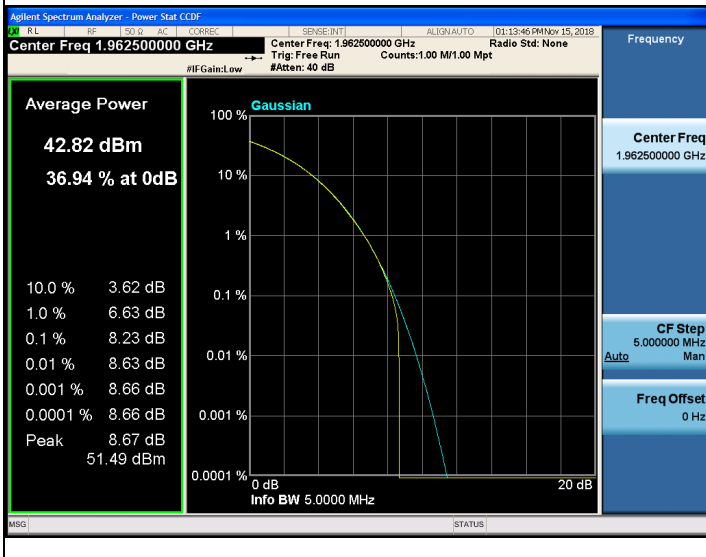


Port 2

Modulation:	QPSK	Modulation:	16QAM
Channel:	High	Channel:	Middle

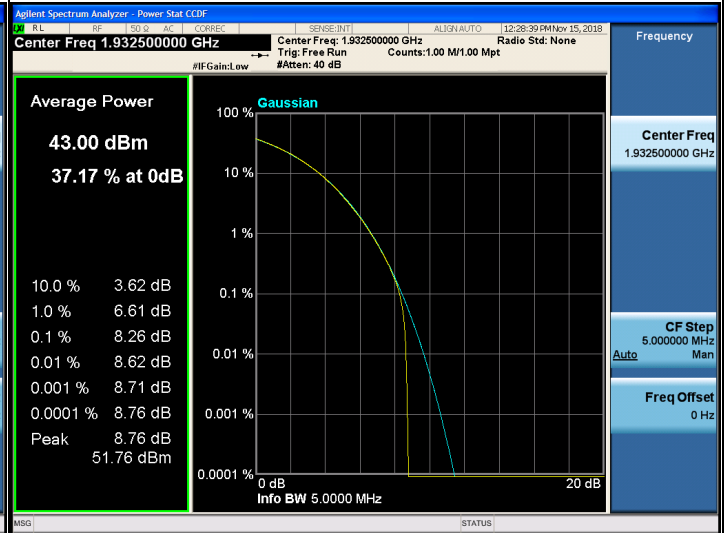
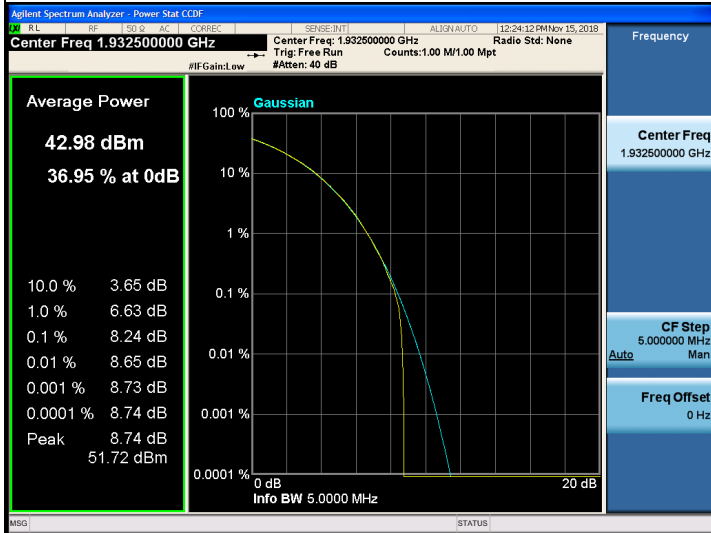


Modulation:	64QAM	Modulation:	256QAM
Channel:	Middle	Channel:	Low

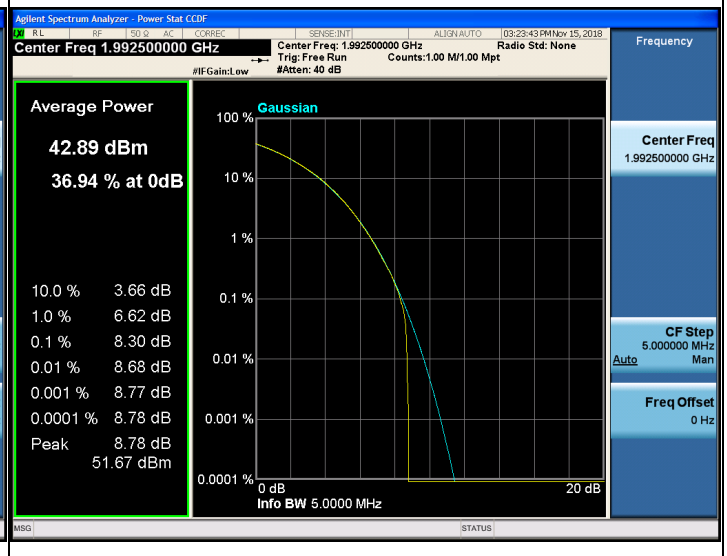
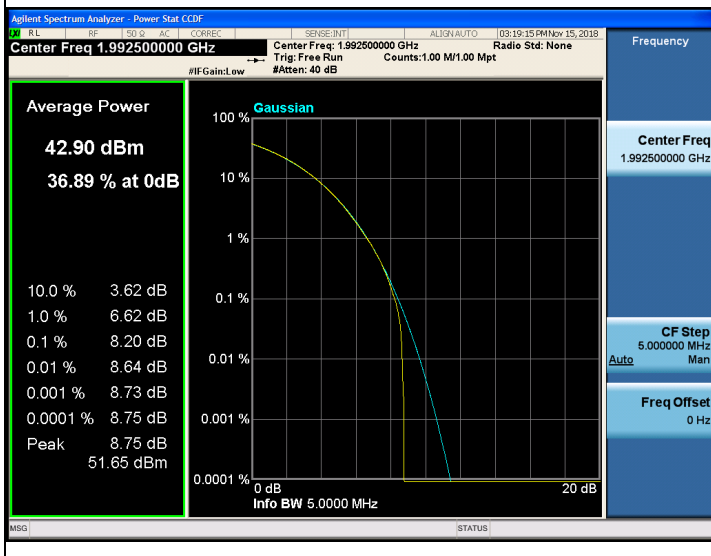


Port 3

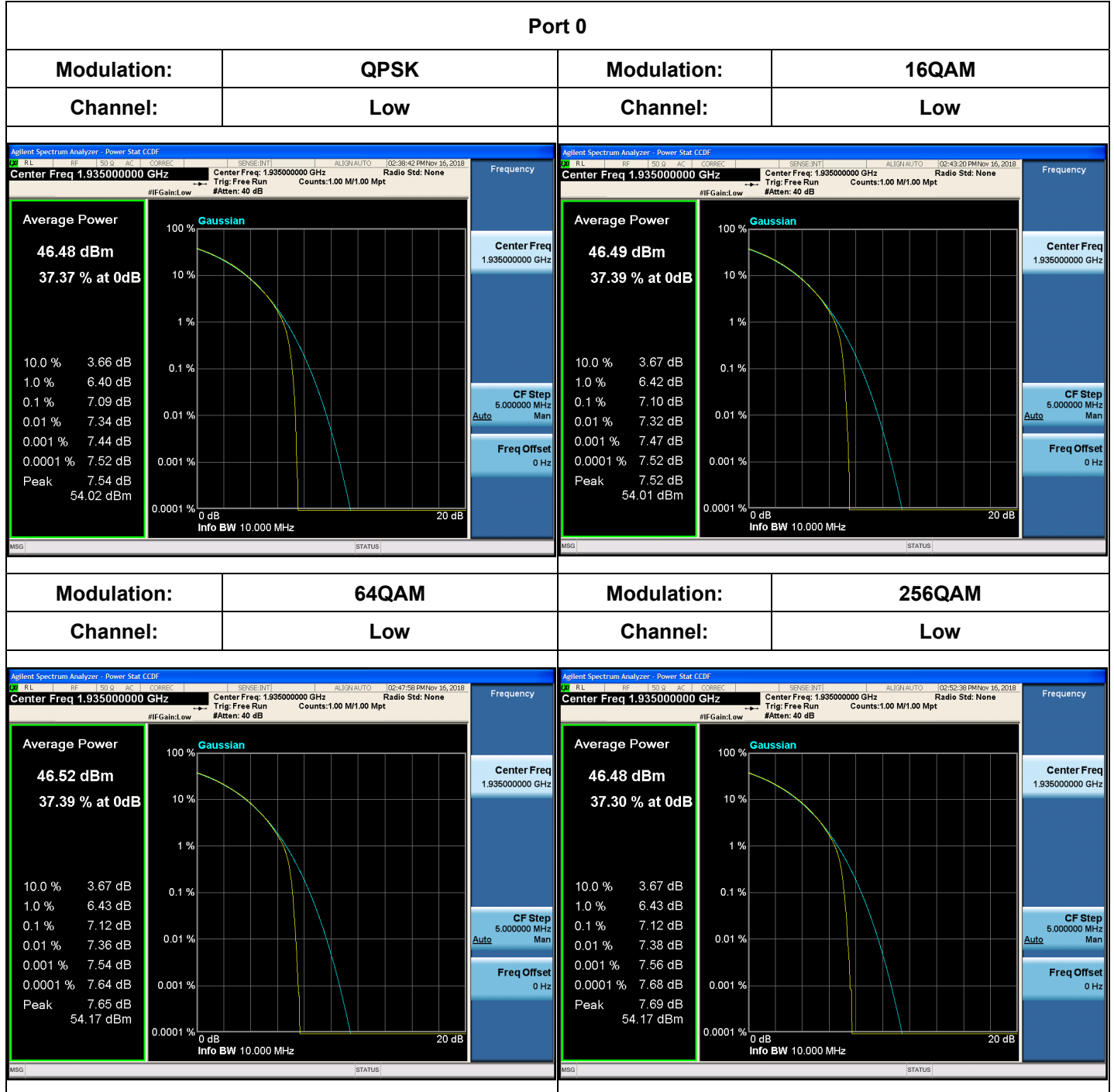
Modulation:	QPSK	Modulation:	16QAM
Channel:	Low	Channel:	Low



Modulation:	64QAM	Modulation:	256QAM
Channel:	High	Channel:	High



Plot data of PAPR - 5 MHz Bandwidth + 5 MHz Bandwidth / 2 Carriers

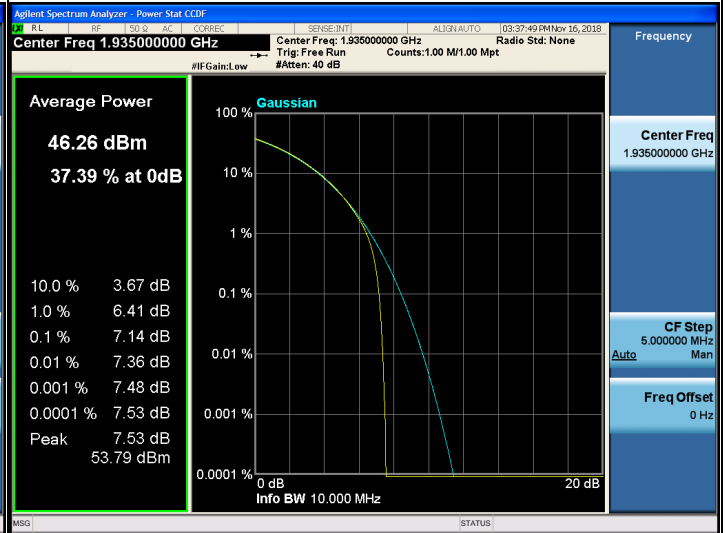
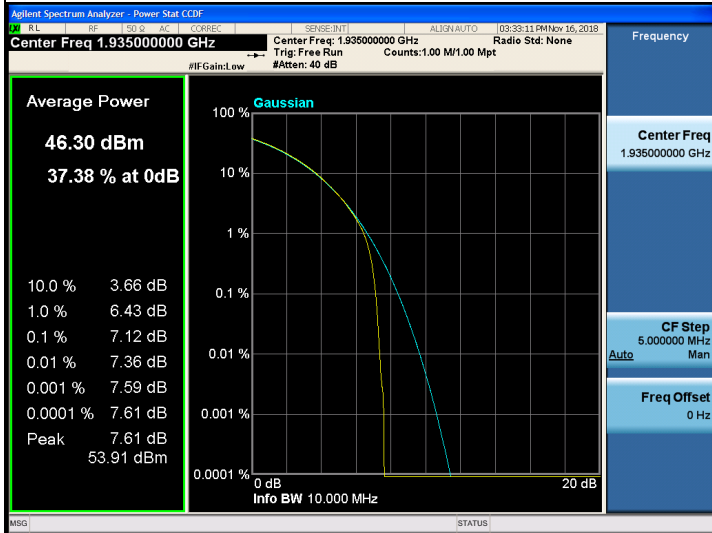


Port 1

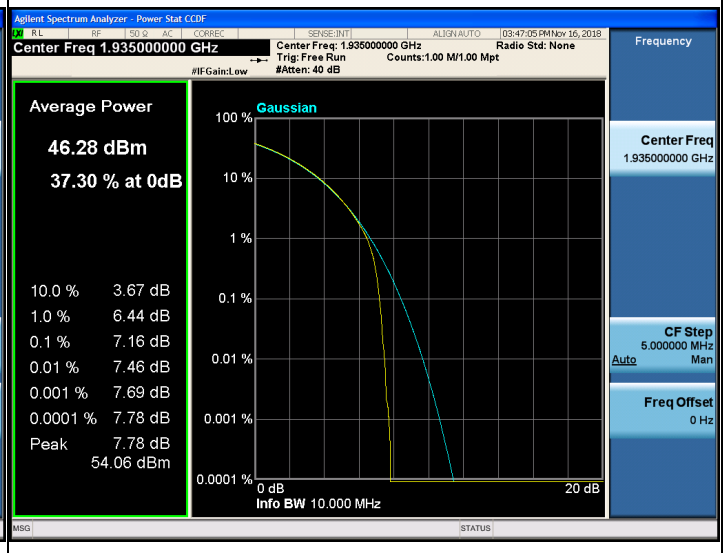
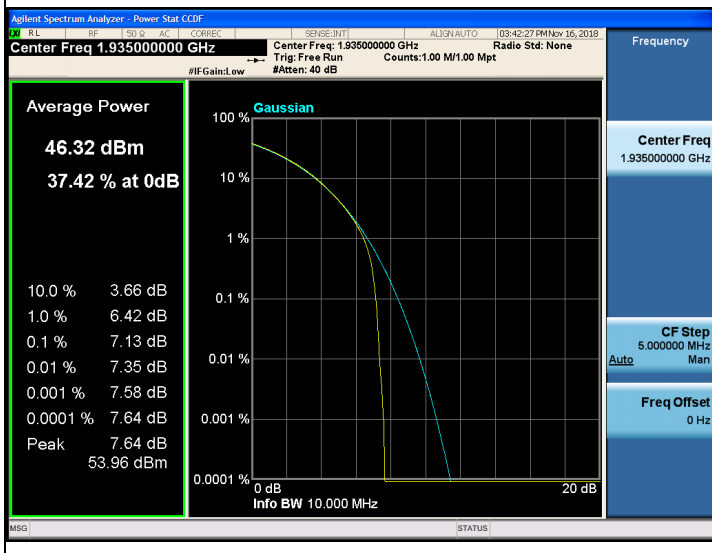
Modulation:		QPSK		Modulation:		16QAM	
Channel:		Low		Channel:		Low	
Modulation:		64QAM		Modulation:		256QAM	
Channel:		Low		Channel:		Low	

Port 2

Modulation:	QPSK	Modulation:	16QAM
Channel:	Low	Channel:	Low



Modulation:	64QAM	Modulation:	256QAM
Channel:	Low	Channel:	Low



Port 3

Modulation:		QPSK		Modulation:		16QAM	
Channel:		Low		Channel:		Low	
Modulation:		64QAM		Modulation:		256QAM	
Channel:		Low		Channel:		Low	

5.2. OCCUPIED BANDWIDTH

Test Requirements:

§ 2.1049 Measurements required: Occupied bandwidth.

The occupied bandwidth, that is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers radiated are each equal to 0.5 percent of the total mean power radiated by a given emission shall be measured under the specified conditions of § 2.1049 (a) through (i) as applicable.

Test Procedures:

The measurement is performed in accordance with Section 5.4.3 and 5.4.4 of ANSI C63.26.

5.4.3 Occupied bandwidth—Relative measurement procedure

- a) The spectrum analyzer center frequency is set to the nominal EUT channel center frequency. The span range for the spectrum analyzer shall be wide enough to see sufficient roll off of the signal to make the measurement.
- b) The nominal RBW shall be in the range of 1% to 5% of the anticipated OBW, and the VBW shall be set $\geq 3 \times \text{RBW}$.
- c) Set the reference level of the instrument as required to prevent the signal amplitude from exceeding the maximum spectrum analyzer input mixer level for linear operation. See guidance provided in 4.2.3.
NOTE—Step a), step b), and step c) may require iteration to adjust within the specified tolerances.
- d) The dynamic range of the spectrum analyzer at the selected RBW shall be more than 10 dB below the target “-X dB” requirement, i.e., if the requirement calls for measuring the -26 dB OBW, the spectrum analyzer noise floor at the selected RBW shall be at least 36 dB below the reference level.
- e) Set spectrum analyzer detection mode to peak, and the trace mode to max hold.
- f) Determine the reference value by either of the following:
 - 1) Set the EUT to transmit a modulated signal. Allow the trace to stabilize. Set the spectrum analyzer marker to the highest level of the displayed trace (this is the reference value).
 - 2) Set the EUT to transmit an unmodulated carrier. Set the spectrum analyzer marker to the level of the carrier.
- g) Determine the “-X dB amplitude” as equal to (Reference Value - X). Alternatively, this calculation can be performed on the spectrum analyzer using the delta-marker measurement function.
- h) If the reference value was determined using an unmodulated carrier, turn the EUT modulation on, then either clear the existing trace or start a new trace on the spectrum analyzer and allow the new trace to stabilize. Otherwise the trace from step f) shall be used for step i).
- i) Place two markers, one at the lowest and the other at the highest frequency of the envelope of the spectral display such that each marker is at or slightly below the “-X dB amplitude” determined in step f). If a marker is below this “-X dB amplitude” value it should be as close as possible to this value. The OBW is the positive frequency difference between the two markers. The spectral envelope can cross the “-X dB amplitude” at

multiple points. The lowest or highest frequency shall be selected as the frequencies that are the farthest away from the center frequency at which the spectral envelope crosses the “-X dB amplitude.”

j) The OBW shall be reported by providing plot(s) of the measuring instrument display, to include markers depicting the relevant frequency and amplitude information (e.g., marker table). The frequency and amplitude axis and scale shall be clearly labeled. Tabular data may be reported in addition to the plot(s).

5.4.4 Occupied bandwidth—Power bandwidth (99%) measurement procedure

a) The spectrum analyzer center frequency is set to the nominal EUT channel center frequency. The frequency span for the spectrum analyzer shall be set wide enough to capture all modulation products including the emission skirts (typically a span of $1.5 \times \text{OBW}$ is sufficient).

b) The nominal IF filter 3 dB bandwidth (RBW) shall be in the range of 1% to 5% of the anticipated OBW, and the VBW shall be set $\geq 3 \times \text{RBW}$.

c) Set the reference level of the instrument as required to prevent the signal amplitude from exceeding the maximum spectrum analyzer input mixer level for linear operation. See guidance provided in 4.2.3.

NOTE—Step a), step b), and step c) may require iteration to adjust within the specified tolerances.

d) Set the detection mode to peak, and the trace mode to max-hold.

e) If the instrument does not have a 99% OBW function, recover the trace data points and sum directly in linear power terms. Place the recovered amplitude data points, beginning at the lowest frequency, in a running sum until 0.5% of the total is reached. Record that frequency as the lower OBW frequency. Repeat the process until 99.5% of the total is reached and record that frequency as the upper OBW frequency. The 99% power OBW can be determined by computing the difference these two frequencies.

f) The OBW shall be reported and plot(s) of the measuring instrument display shall be provided with the test report. The frequency and amplitude axis and scale shall be clearly labeled. Tabular data can be reported in addition to the plot(s).

Test Results:

3 MHz Bandwidth / 1 Carrier

Port	Modulation	Channel	Frequency (MHz)	Measured Bandwidth (MHz)
Port 0	QPSK	Low	1 931.50	2.709 0
		Middle	1 962.50	2.709 1
		High	1 993.50	2.702 7
	16QAM	Low	1 931.50	2.705 1
		Middle	1 962.50	2.707 7
		High	1 993.50	2.706 5
	64QAM	Low	1 931.50	2.704 6
		Middle	1 962.50	2.706 3
		High	1 993.50	2.701 6
	256QAM	Low	1 931.50	2.703 1
		Middle	1 962.50	2.707 5
		High	1 993.50	2.708 9
Port 1	QPSK	Low	1 931.50	2.714 2
		Middle	1 962.50	2.709 4
		High	1 993.50	2.698 2
	16QAM	Low	1 931.50	2.705 5
		Middle	1 962.50	2.707 6
		High	1 993.50	2.713 4
	64QAM	Low	1 931.50	2.700 6
		Middle	1 962.50	2.708 7
		High	1 993.50	2.702 0
	256QAM	Low	1 931.50	2.704 3
		Middle	1 962.50	2.711 9
		High	1 993.50	2.705 0
Port 2	QPSK	Low	1 931.50	2.714 5
		Middle	1 962.50	2.703 5
		High	1 993.50	2.702 4
	16QAM	Low	1 931.50	2.718 0
		Middle	1 962.50	2.704 4
		High	1 993.50	2.709 3

Port	Modulation	Channel	Frequency (MHz)	Measured Bandwidth (MHz)
	64QAM	Low	1 931.50	2.709 0
		Middle	1 962.50	2.701 9
		High	1 993.50	2.704 2
	256QAM	Low	1 931.50	2.709 0
		Middle	1 962.50	2.706 3
		High	1 993.50	2.710 8
Port 3	QPSK	Low	1 931.50	2.710 2
		Middle	1 962.50	2.704 0
		High	1 993.50	2.704 8
	16QAM	Low	1 931.50	2.697 9
		Middle	1 962.50	2.710 3
		High	1 993.50	2.698 3
	64QAM	Low	1 931.50	2.705 7
		Middle	1 962.50	2.705 2
		High	1 993.50	2.705 8
	256QAM	Low	1 931.50	2.702 9
		Middle	1 962.50	2.705 7
		High	1 993.50	2.702 7

* This test report only contains the worst case plot data for each port and modulation.

3 MHz Bandwidth + 5 MHz Bandwidth / 2 Carriers

Port	Modulation	Channel	Frequency (MHz)	Measured Bandwidth (MHz)
Port 0	QPSK	Low	1 934.00	7.566 1
		Middle	1 962.50	7.558 4
		High	1 991.00	7.556 5
	16QAM	Low	1 934.00	7.575 1
		Middle	1 962.50	7.572 8
		High	1 991.00	7.575 8
	64QAM	Low	1 934.00	7.609 5
		Middle	1 962.50	7.583 8
		High	1 991.00	7.589 9
	256QAM	Low	1 934.00	7.589 4
		Middle	1 962.50	7.568 7
		High	1 991.00	7.584 6
Port 1	QPSK	Low	1 934.00	7.584 5
		Middle	1 962.50	7.560 8
		High	1 991.00	7.585 5
	16QAM	Low	1 934.00	7.581 4
		Middle	1 962.50	7.593 2
		High	1 991.00	7.567 5
	64QAM	Low	1 934.00	7.571 4
		Middle	1 962.50	7.585 1
		High	1 991.00	7.575 3
	256QAM	Low	1 934.00	7.590 0
		Middle	1 962.50	7.562 7
		High	1 991.00	7.581 1
Port 2	QPSK	Low	1 934.00	7.584 0
		Middle	1 962.50	7.590 1
		High	1 991.00	7.573 4
	16QAM	Low	1 934.00	7.587 5
		Middle	1 962.50	7.584 2
		High	1 991.00	7.593 3

Port	Modulation	Channel	Frequency (MHz)	Measured Bandwidth (MHz)
	64QAM	Low	1 934.00	7.584 8
		Middle	1 962.50	7.591 6
		High	1 991.00	7.582 9
	256QAM	Low	1 934.00	7.569 6
		Middle	1 962.50	7.572 0
		High	1 991.00	7.611 4
Port 3	QPSK	Low	1 934.00	7.569 1
		Middle	1 962.50	7.595 7
		High	1 991.00	7.565 7
	16QAM	Low	1 934.00	7.610 6
		Middle	1 962.50	7.609 9
		High	1 991.00	7.595 8
	64QAM	Low	1 934.00	7.571 6
		Middle	1 962.50	7.572 7
		High	1 991.00	7.579 5
	256QAM	Low	1 934.00	7.575 7
		Middle	1 962.50	7.584 5
		High	1 991.00	7.585 1

* This test report only contains the worst case plot data for each port and modulation.

20 MHz Bandwidth / 1 Carrier

Port	Modulation	Channel	Frequency (MHz)	Measured Bandwidth (MHz)
Port 0	QPSK	Low	1 940.00	17.912
		Middle	1 962.50	17.907
		High	1 985.00	17.878
	16QAM	Low	1 940.00	17.868
		Middle	1 962.50	17.918
		High	1 985.00	17.876
	64QAM	Low	1 940.00	17.902
		Middle	1 962.50	17.934
		High	1 985.00	17.928
	256QAM	Low	1 940.00	17.896
		Middle	1 962.50	17.933
		High	1 985.00	17.913
Port 1	QPSK	Low	1 940.00	17.917
		Middle	1 962.50	17.950
		High	1 985.00	17.922
	16QAM	Low	1 940.00	17.948
		Middle	1 962.50	17.965
		High	1 985.00	17.970
	64QAM	Low	1 940.00	17.919
		Middle	1 962.50	17.927
		High	1 985.00	17.894
	256QAM	Low	1 940.00	17.889
		Middle	1 962.50	17.890
		High	1 985.00	17.915
Port 2	QPSK	Low	1 940.00	17.948
		Middle	1 962.50	17.928
		High	1 985.00	17.916
	16QAM	Low	1 940.00	17.950
		Middle	1 962.50	17.967
		High	1 985.00	17.969

Port	Modulation	Channel	Frequency (MHz)	Measured Bandwidth (MHz)
	64QAM	Low	1 940.00	17.912
		Middle	1 962.50	17.964
		High	1 985.00	17.884
	256QAM	Low	1 940.00	17.909
		Middle	1 962.50	17.888
		High	1 985.00	17.911
Port 3	QPSK	Low	1 940.00	17.858
		Middle	1 962.50	17.894
		High	1 985.00	17.902
	16QAM	Low	1 940.00	17.894
		Middle	1 962.50	17.895
		High	1 985.00	17.915
	64QAM	Low	1 940.00	17.896
		Middle	1 962.50	17.938
		High	1 985.00	17.959
	256QAM	Low	1 940.00	17.891
		Middle	1 962.50	17.920
		High	1 985.00	17.884

* This test report only contains the worst case plot data for each port and modulation.

20 MHz Bandwidth + 5 MHz Bandwidth / 2 Carriers

Port	Modulation	Channel	Frequency (MHz)	Measured Bandwidth (MHz)
Port 0	QPSK	Low	1 942.50	23.654
		Middle	1 962.50	23.740
		High	1 982.50	23.715
	16QAM	Low	1 942.50	23.689
		Middle	1 962.50	23.683
		High	1 982.50	23.720
	64QAM	Low	1 942.50	23.697
		Middle	1 962.50	23.703
		High	1 982.50	23.684
	256QAM	Low	1 942.50	23.667
		Middle	1 962.50	23.717
		High	1 982.50	23.676
Port 1	QPSK	Low	1 942.50	23.695
		Middle	1 962.50	23.712
		High	1 982.50	23.694
	16QAM	Low	1 942.50	23.622
		Middle	1 962.50	23.732
		High	1 982.50	23.677
	64QAM	Low	1 942.50	23.716
		Middle	1 962.50	23.724
		High	1 982.50	23.720
	256QAM	Low	1 942.50	23.671
		Middle	1 962.50	23.718
		High	1 982.50	23.734
Port 2	QPSK	Low	1 942.50	23.668
		Middle	1 962.50	23.687
		High	1 982.50	23.627
	16QAM	Low	1 942.50	23.688
		Middle	1 962.50	23.663
		High	1 982.50	23.712

Port	Modulation	Channel	Frequency (MHz)	Measured Bandwidth (MHz)
	64QAM	Low	1 942.50	23.644
		Middle	1 962.50	23.718
		High	1 982.50	23.737
	256QAM	Low	1 942.50	23.656
		Middle	1 962.50	23.746
		High	1 982.50	23.660
Port 3	QPSK	Low	1 942.50	23.679
		Middle	1 962.50	23.724
		High	1 982.50	23.722
	16QAM	Low	1 942.50	23.712
		Middle	1 962.50	23.743
		High	1 982.50	23.640
	64QAM	Low	1 942.50	23.699
		Middle	1 962.50	23.740
		High	1 982.50	23.702
	256QAM	Low	1 942.50	23.639
		Middle	1 962.50	23.691
		High	1 982.50	23.698

* This test report only contains the worst case plot data for each port and modulation.

5 MHz Bandwidth / 1 Carrier

Port	Modulation	Channel	Frequency (MHz)	Measured Bandwidth (MHz)
Port 0	QPSK	Low	1 932.50	4.487 7
		Middle	1 962.50	4.491 6
		High	1 992.50	4.491 9
	16QAM	Low	1 932.50	4.486 5
		Middle	1 962.50	4.491 1
		High	1 992.50	4.486 2
	64QAM	Low	1 932.50	4.486 2
		Middle	1 962.50	4.490 5
		High	1 992.50	4.502 4
	256QAM	Low	1 932.50	4.501 0
		Middle	1 962.50	4.497 9
		High	1 992.50	4.493 0
Port 1	QPSK	Low	1 932.50	4.499 3
		Middle	1 962.50	4.492 1
		High	1 992.50	4.496 0
	16QAM	Low	1 932.50	4.478 5
		Middle	1 962.50	4.490 0
		High	1 992.50	4.479 8
	64QAM	Low	1 932.50	4.504 5
		Middle	1 962.50	4.503 1
		High	1 992.50	4.498 3
	256QAM	Low	1 932.50	4.502 1
		Middle	1 962.50	4.497 3
		High	1 992.50	4.493 5
Port 2	QPSK	Low	1 932.50	4.494 0
		Middle	1 962.50	4.496 5
		High	1 992.50	4.487 8
	16QAM	Low	1 932.50	4.491 0
		Middle	1 962.50	4.488 3
		High	1 992.50	4.484 5

Port	Modulation	Channel	Frequency (MHz)	Measured Bandwidth (MHz)
	64QAM	Low	1 932.50	4.502 7
		Middle	1 962.50	4.504 7
		High	1 992.50	4.501 3
	256QAM	Low	1 932.50	4.506 3
		Middle	1 962.50	4.498 7
		High	1 992.50	4.506 7
Port 3	QPSK	Low	1 932.50	4.492 3
		Middle	1 962.50	4.500 8
		High	1 992.50	4.494 7
	16QAM	Low	1 932.50	4.479 1
		Middle	1 962.50	4.485 3
		High	1 992.50	4.459 7
	64QAM	Low	1 932.50	4.497 8
		Middle	1 962.50	4.499 8
		High	1 992.50	4.503 1
	256QAM	Low	1 932.50	4.497 7
		Middle	1 962.50	4.504 0
		High	1 992.50	4.498 2

* This test report only contains the worst case plot data for each port and modulation.

5 MHz Bandwidth + 5 MHz Bandwidth / 2 Carriers

Port	Modulation	Channel	Frequency (MHz)	Measured Bandwidth (MHz)
Port 0	QPSK	Low	1 935.00	9.467 2
		Middle	1 962.50	9.474 1
		High	1 990.00	9.470 3
	16QAM	Low	1 935.00	9.492 1
		Middle	1 962.50	9.450 2
		High	1 990.00	9.484 7
	64QAM	Low	1 935.00	9.482 0
		Middle	1 962.50	9.466 7
		High	1 990.00	9.475 5
	256QAM	Low	1 935.00	9.484 7
		Middle	1 962.50	9.483 4
		High	1 990.00	9.498 8
Port 1	QPSK	Low	1 935.00	9.487 7
		Middle	1 962.50	9.470 7
		High	1 990.00	9.456 6
	16QAM	Low	1 935.00	9.452 5
		Middle	1 962.50	9.419 7
		High	1 990.00	9.452 4
	64QAM	Low	1 935.00	9.481 3
		Middle	1 962.50	9.458 9
		High	1 990.00	9.454 6
	256QAM	Low	1 935.00	9.468 6
		Middle	1 962.50	9.455 5
		High	1 990.00	9.479 2
Port 2	QPSK	Low	1 935.00	9.466 2
		Middle	1 962.50	9.479 5
		High	1 990.00	9.487 0
	16QAM	Low	1 935.00	9.438 8
		Middle	1 962.50	9.451 7
		High	1 990.00	9.429 8

Port	Modulation	Channel	Frequency (MHz)	Measured Bandwidth (MHz)
	64QAM	Low	1 935.00	9.497 4
		Middle	1 962.50	9.479 6
		High	1 990.00	9.457 4
	256QAM	Low	1 935.00	9.474 8
		Middle	1 962.50	9.453 3
		High	1 990.00	9.486 8
Port 3	QPSK	Low	1 935.00	9.501 6
		Middle	1 962.50	9.444 0
		High	1 990.00	9.454 1
	16QAM	Low	1 935.00	9.461 0
		Middle	1 962.50	9.468 2
		High	1 990.00	9.446 5
	64QAM	Low	1 935.00	9.464 6
		Middle	1 962.50	9.471 5
		High	1 990.00	9.464 0
	256QAM	Low	1 935.00	9.518 7
		Middle	1 962.50	9.495 8
		High	1 990.00	9.494 3

* This test report only contains the worst case plot data for each port and modulation.

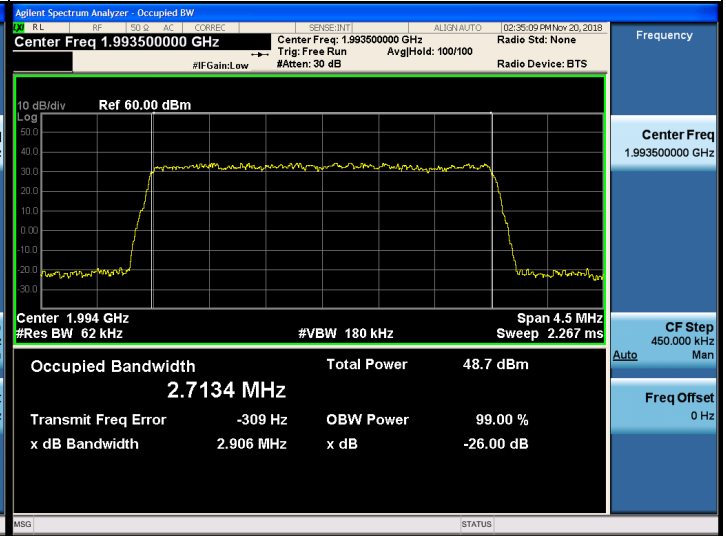
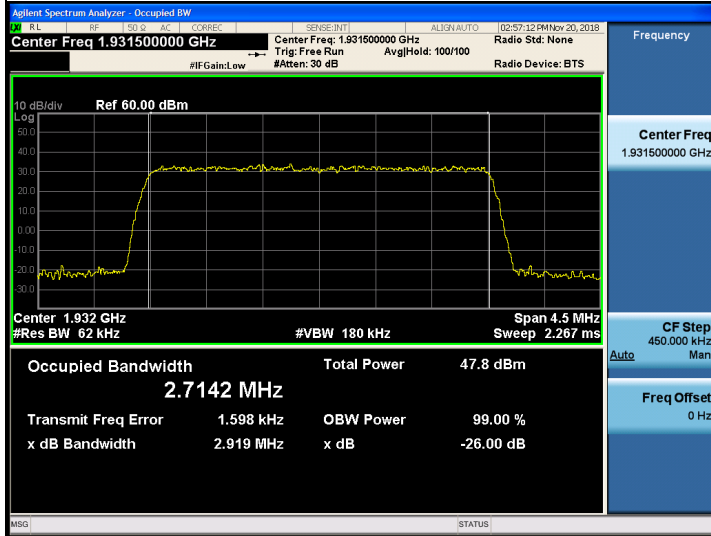
Plots of Occupied Bandwidth - 3 MHz Bandwidth / 1 Carrier

Port 0

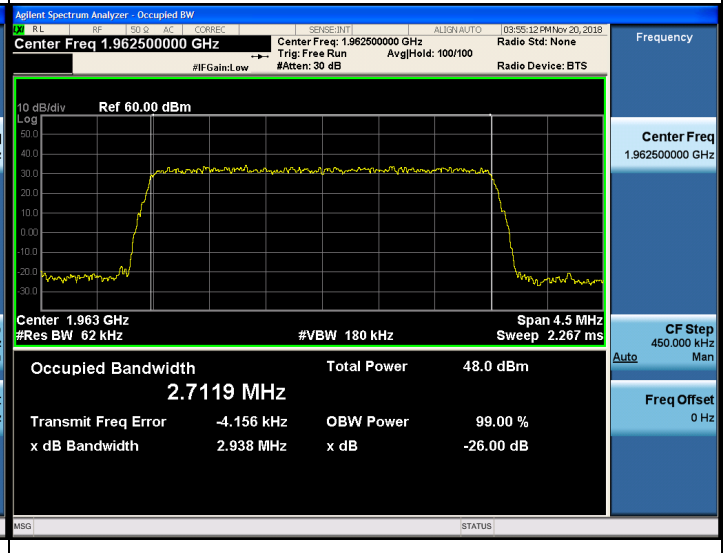
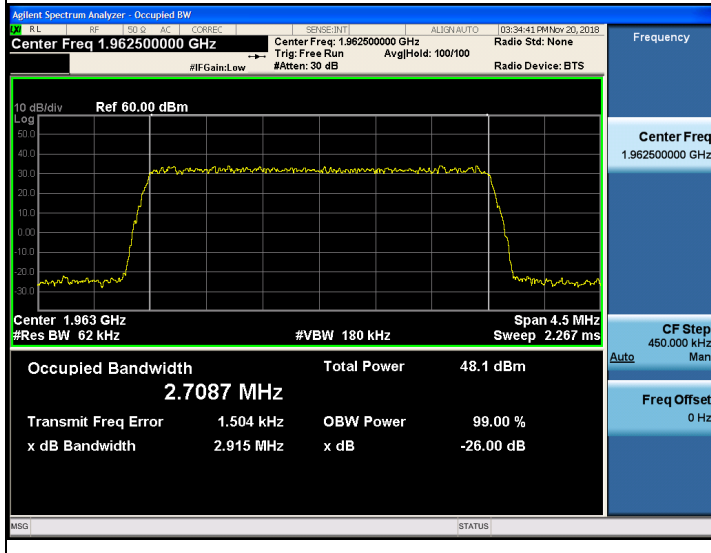
Modulation:		QPSK		Modulation:		16QAM	
Channel:		Middle		Channel:		Middle	
Modulation:		64QAM		Modulation:		256QAM	
Channel:		Middle		Channel:		High	

Port 1

Modulation:	QPSK	Modulation:	16QAM
Channel:	Low	Channel:	High

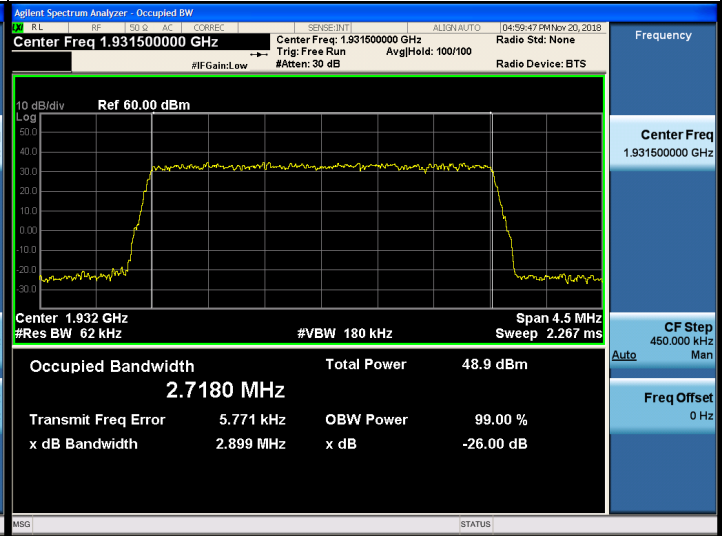
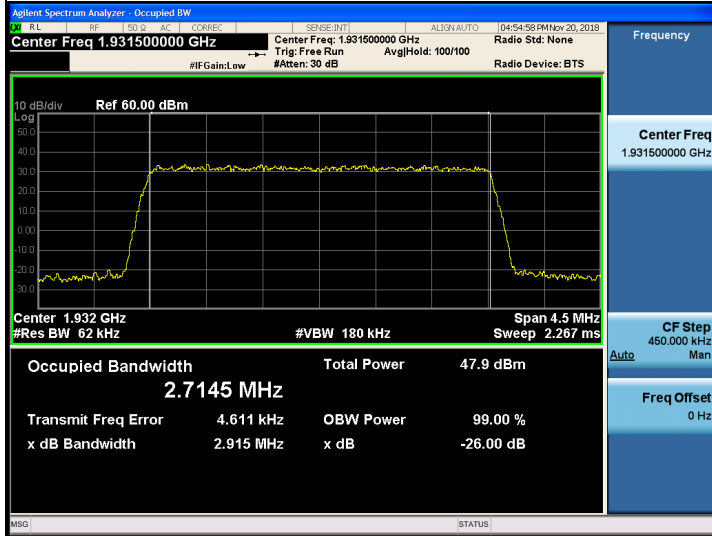


Modulation:	64QAM	Modulation:	256QAM
Channel:	Middle	Channel:	Middle



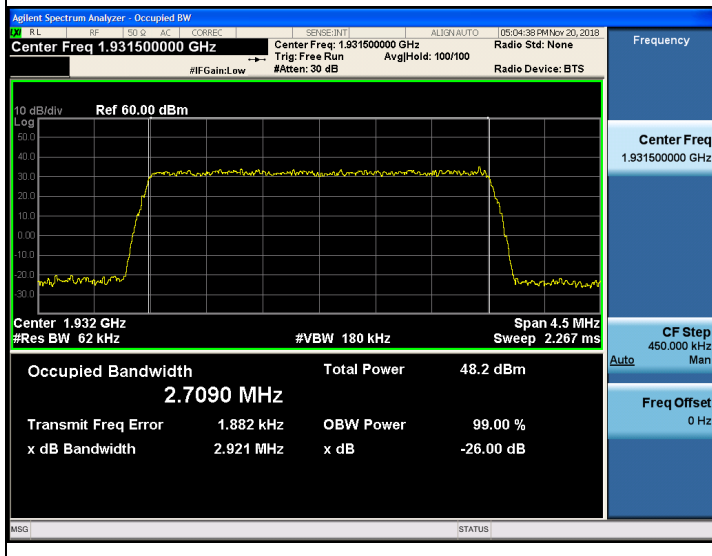
Port 2

Modulation:	QPSK	Modulation:	16QAM
Channel:	Low	Channel:	Low



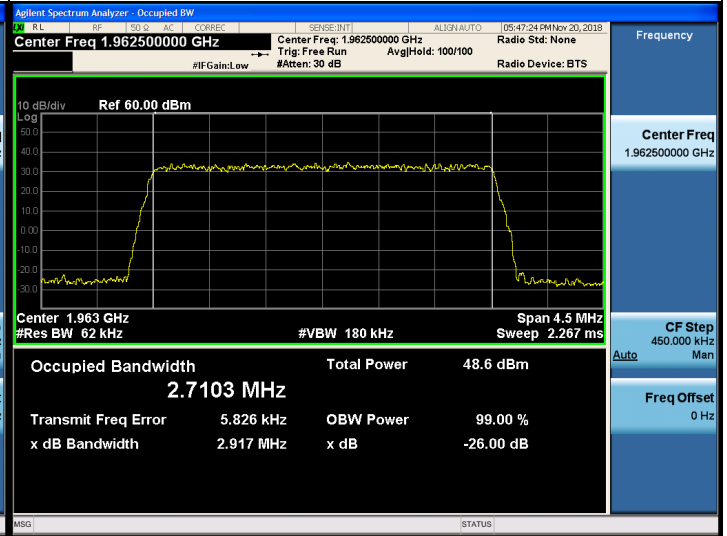
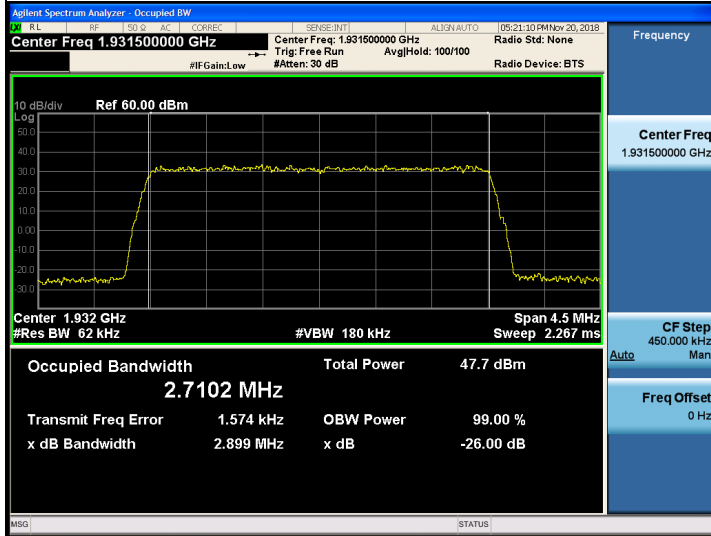
Modulation:	64QAM
Channel:	Low

Modulation:	256QAM
Channel:	High

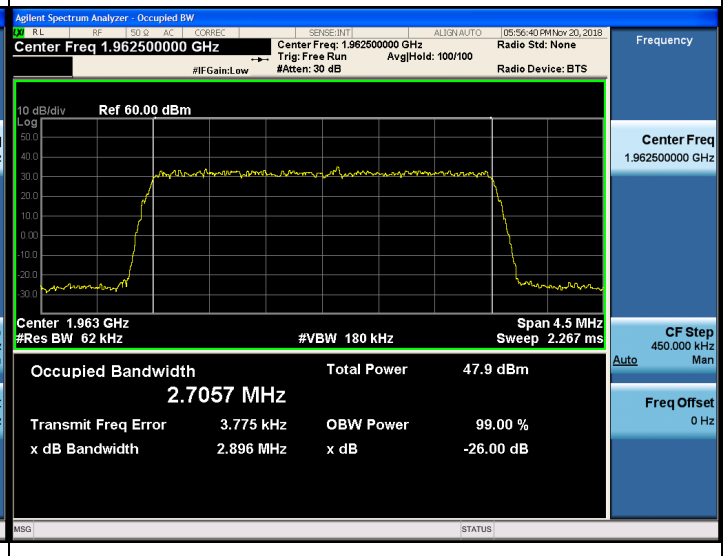
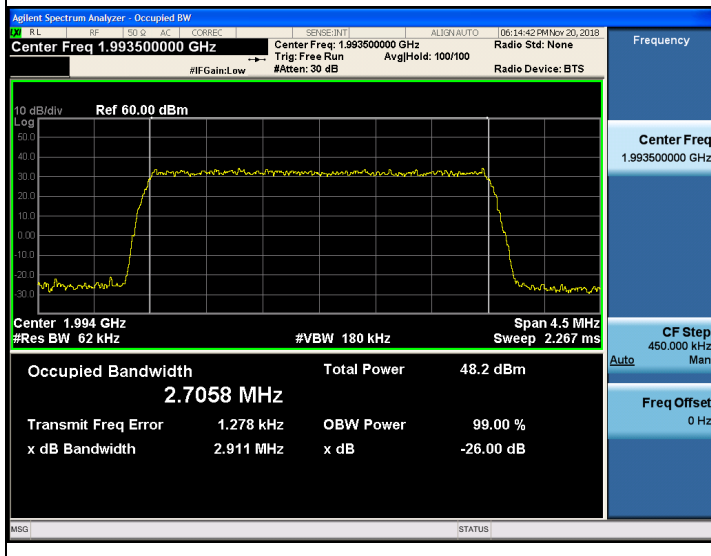


Port 3

Modulation:	QPSK	Modulation:	16QAM
Channel:	Low	Channel:	Middle



Modulation:	64QAM	Modulation:	256QAM
Channel:	High	Channel:	Middle



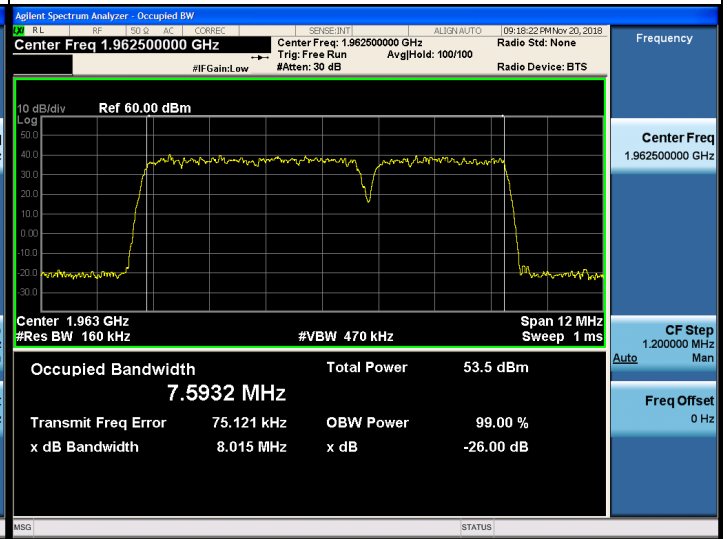
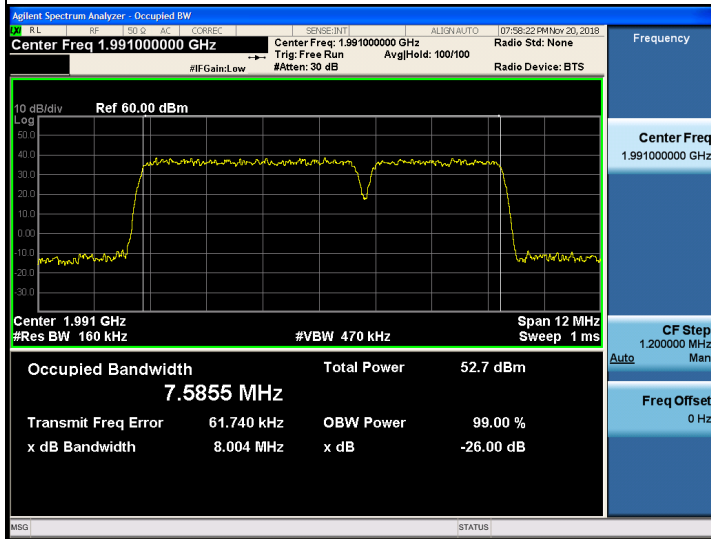
Plots of Occupied Bandwidth - 3 MHz Bandwidth + 5 MHz Bandwidth / 2 Carriers

Port 0

Modulation:		QPSK		Modulation:		16QAM	
Channel:		Low		Channel:		High	
Modulation:		64QAM		Modulation:		256QAM	
Channel:		Low		Channel:		Low	

Port 1

Modulation:	QPSK	Modulation:	16QAM
Channel:	High	Channel:	Middle



Modulation:	64QAM	Modulation:	256QAM
Channel:	Middle	Channel:	Low

