

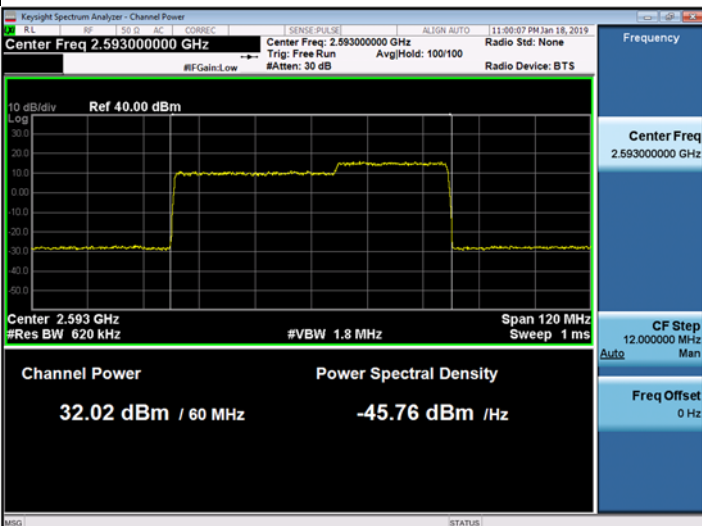
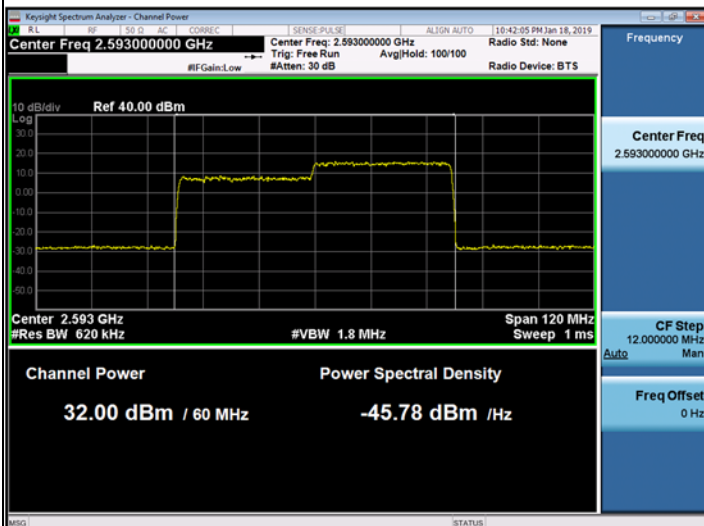
Port 28

Modulation: QPSK

Channel: Middle

Modulation: 16QAM

Channel: Middle

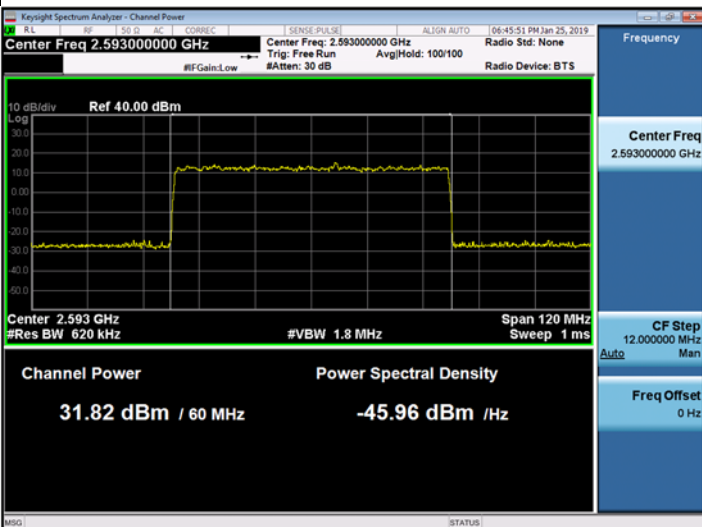
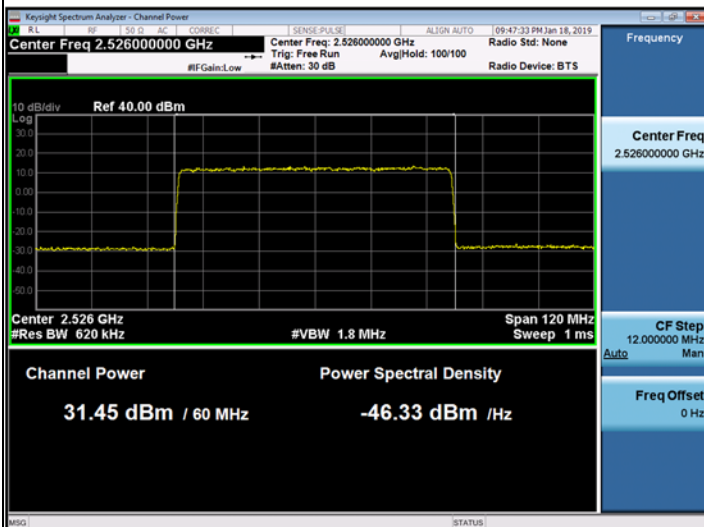


Modulation: 64QAM

Channel: Low

Modulation: 256QAM

Channel: Middle



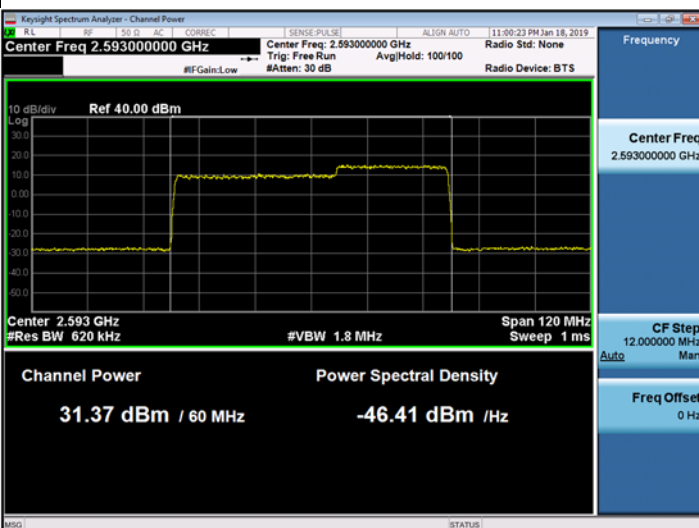
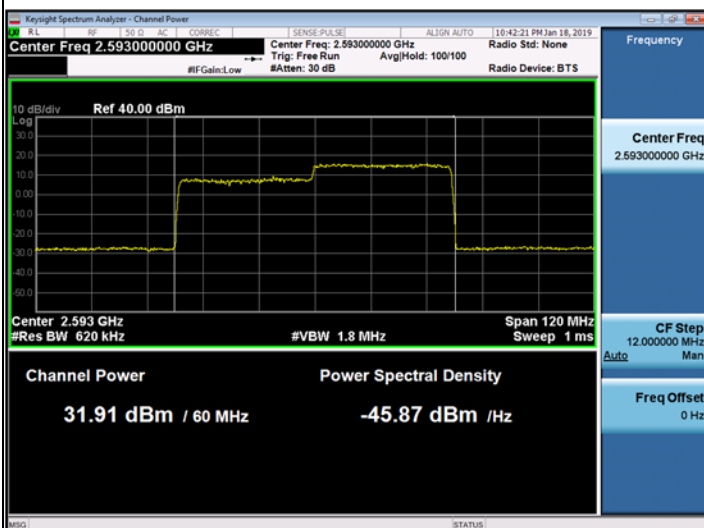
Port 29

Modulation: QPSK

Channel: Middle

Modulation: 16QAM

Channel: Middle

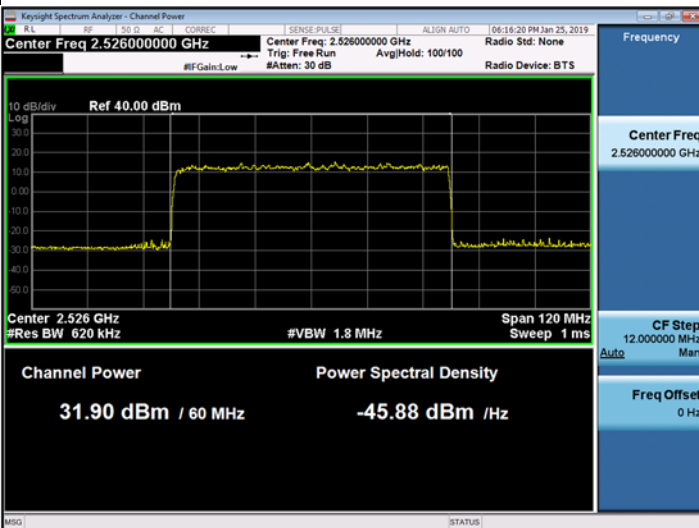
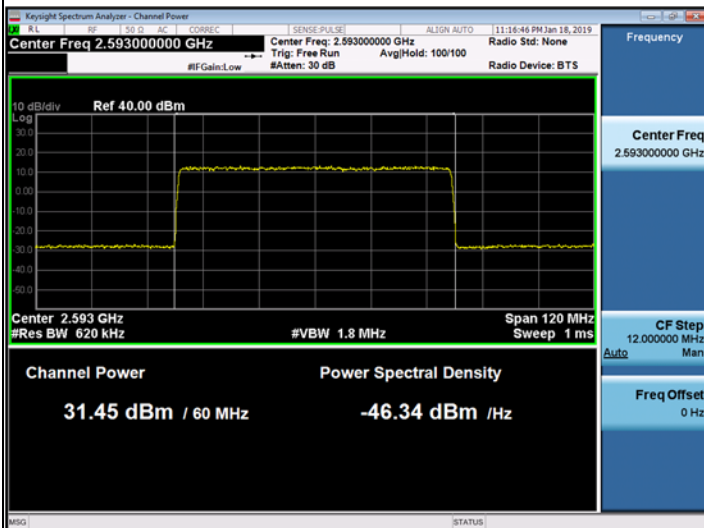


Modulation: 64QAM

Channel: Middle

Modulation: 256QAM

Channel: Low



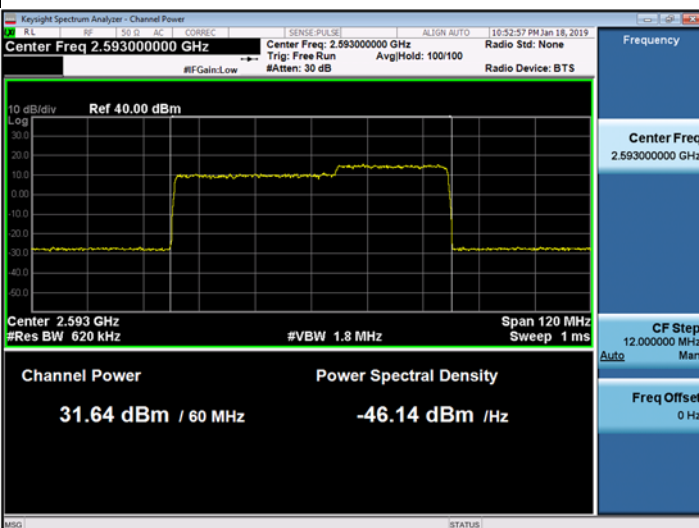
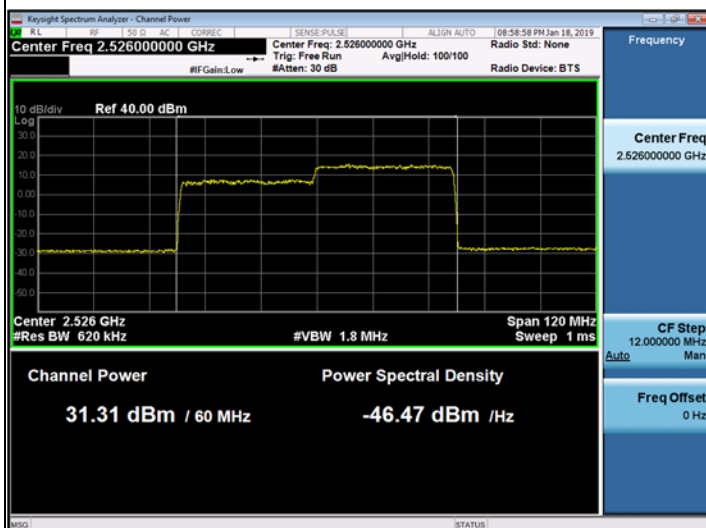
Port 30

Modulation: QPSK

Channel: Low

Modulation: 16QAM

Channel: Middle

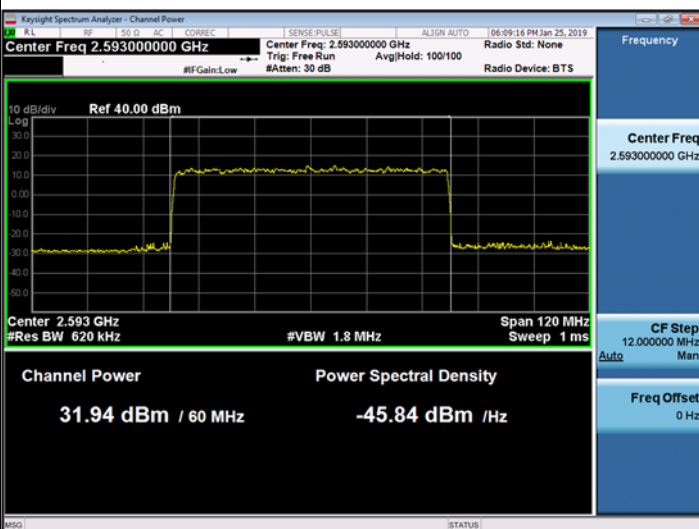
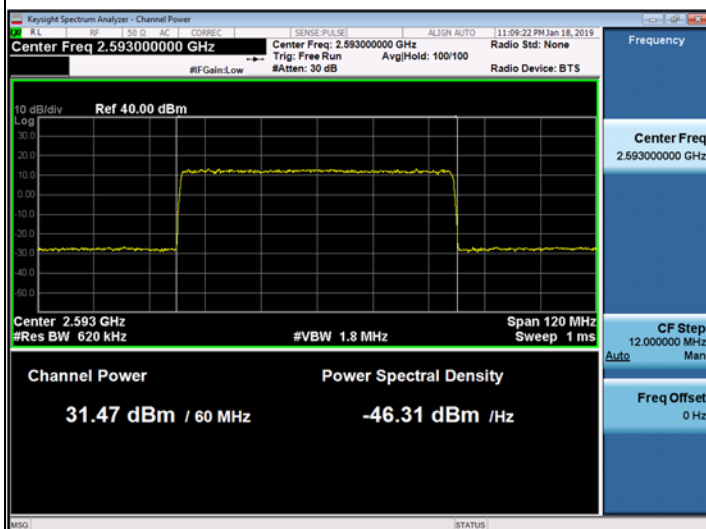


Modulation: 64QAM

Channel: Middle

Modulation: 256QAM

Channel: Middle



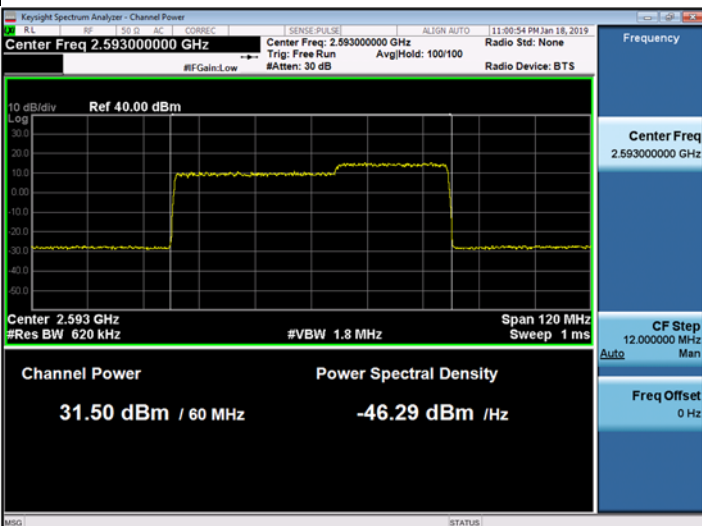
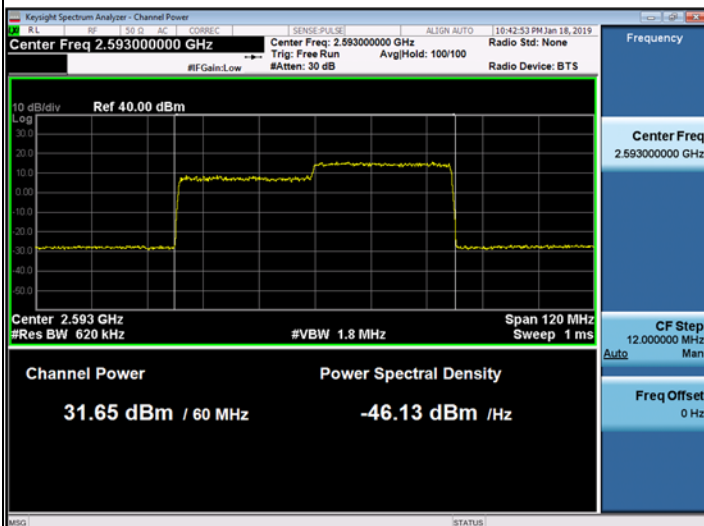
Port 31

Modulation: QPSK

Channel: Middle

Modulation: 16QAM

Channel: Middle

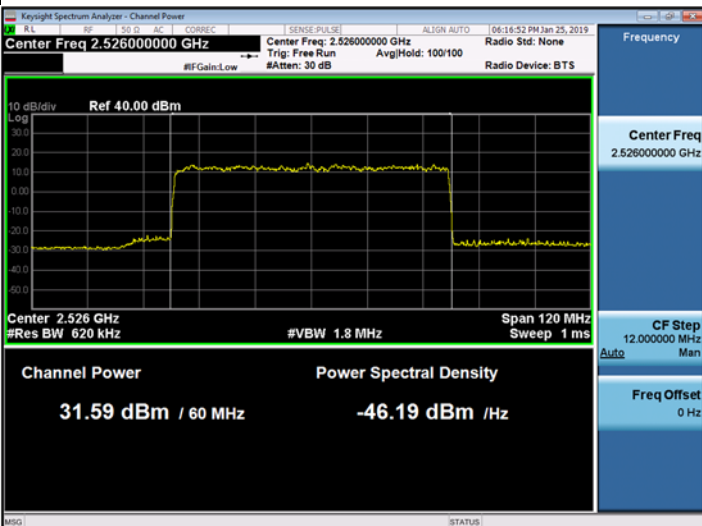
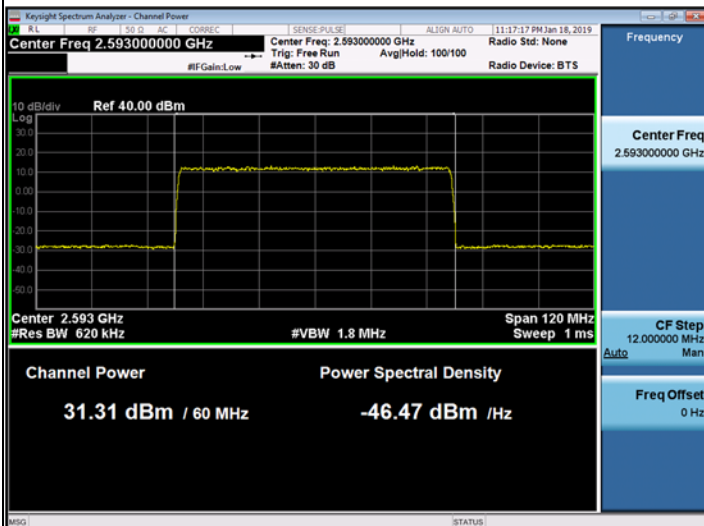


Modulation: 64QAM

Channel: Middle

Modulation: 256QAM

Channel: Low



6. OCCUPIED BANDWIDTH

FCC Rules

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:
60 MHz Bandwidth

Port	Modulation	Channel	Frequency (MHz)	Measured Bandwidth (MHz)
Port 0	QPSK	Low	2426.00	57.526
		Middle	2593.00	57.647
		High	2660.00	57.699
	16QAM	Low	2426.00	57.600
		Middle	2593.00	57.644
		High	2660.00	57.685
	64QAM	Low	2426.00	57.614
		Middle	2593.00	57.645
		High	2660.00	57.592
	256QAM	Low	2426.00	57.979
		Middle	2593.00	57.929
		High	2660.00	57.785
Port 1	QPSK	Low	2426.00	57.581
		Middle	2593.00	57.460
		High	2660.00	57.725
	16QAM	Low	2426.00	57.593
		Middle	2593.00	57.746
		High	2660.00	57.622
	64QAM	Low	2426.00	57.635
		Middle	2593.00	57.616
		High	2660.00	57.617
	256QAM	Low	2426.00	57.920
		Middle	2593.00	57.956
		High	2660.00	57.794
Port 2	QPSK	Low	2426.00	57.570
		Middle	2593.00	57.590
		High	2660.00	57.508
	16QAM	Low	2426.00	57.640
		Middle	2593.00	57.635
		High	2660.00	57.637

Port	Modulation	Channel	Frequency (MHz)	Measured Bandwidth (MHz)
	64QAM	Low	2426.00	57.628
		Middle	2593.00	57.637
		High	2660.00	57.597
	256QAM	Low	2426.00	57.893
		Middle	2593.00	58.008
		High	2660.00	57.775
Port 3	QPSK	Low	2426.00	57.451
		Middle	2593.00	57.599
		High	2660.00	57.615
	16QAM	Low	2426.00	57.707
		Middle	2593.00	57.743
		High	2660.00	57.592
	64QAM	Low	2426.00	57.669
		Middle	2593.00	57.621
		High	2660.00	57.591
	256QAM	Low	2426.00	57.958
		Middle	2593.00	57.938
		High	2660.00	57.763
Port 4	QPSK	Low	2426.00	57.595
		Middle	2593.00	57.667
		High	2660.00	57.598
	16QAM	Low	2426.00	57.582
		Middle	2593.00	57.636
		High	2660.00	57.627
	64QAM	Low	2426.00	57.631
		Middle	2593.00	57.668
		High	2660.00	57.632
	256QAM	Low	2426.00	57.869
		Middle	2593.00	57.920
		High	2660.00	57.718
Port 5	QPSK	Low	2426.00	57.658
		Middle	2593.00	57.765

Port	Modulation	Channel	Frequency (MHz)	Measured Bandwidth (MHz)
	16QAM	High	2660.00	57.615
		Low	2426.00	57.646
		Middle	2593.00	57.679
		High	2660.00	57.658
	64QAM	Low	2426.00	57.627
		Middle	2593.00	57.662
		High	2660.00	57.600
	256QAM	Low	2426.00	57.914
		Middle	2593.00	57.973
		High	2660.00	57.766
Port 6	QPSK	Low	2426.00	57.594
		Middle	2593.00	57.504
		High	2660.00	57.660
	16QAM	Low	2426.00	57.588
		Middle	2593.00	57.633
		High	2660.00	57.591
	64QAM	Low	2426.00	57.636
		Middle	2593.00	57.635
		High	2660.00	57.631
	256QAM	Low	2426.00	57.863
		Middle	2593.00	57.943
		High	2660.00	57.727
Port 7	QPSK	Low	2426.00	57.548
		Middle	2593.00	57.642
		High	2660.00	57.736
	16QAM	Low	2426.00	57.531
		Middle	2593.00	57.641
		High	2660.00	57.678
	64QAM	Low	2426.00	57.578
		Middle	2593.00	57.652
		High	2660.00	57.584
	256QAM	Low	2426.00	57.854

Port	Modulation	Channel	Frequency (MHz)	Measured Bandwidth (MHz)
Port 8		Middle	2593.00	57.997
		High	2660.00	57.688
		Low	2426.00	57.567
	QPSK	Middle	2593.00	57.658
		High	2660.00	57.554
		Low	2426.00	57.595
	16QAM	Middle	2593.00	57.632
		High	2660.00	57.575
		Low	2426.00	57.625
	64QAM	Middle	2593.00	57.642
		High	2660.00	57.587
		Low	2426.00	57.893
	256QAM	Middle	2593.00	57.950
		High	2660.00	57.775
		Low	2426.00	57.585
Port 9	QPSK	Middle	2593.00	57.622
		High	2660.00	57.487
		Low	2426.00	57.618
	16QAM	Middle	2593.00	57.655
		High	2660.00	57.612
		Low	2426.00	57.611
	64QAM	Middle	2593.00	57.649
		High	2660.00	57.609
		Low	2426.00	57.956
	256QAM	Middle	2593.00	57.965
		High	2660.00	57.824
		Low	2426.00	57.560
Port 10	QPSK	Middle	2593.00	57.576
		High	2660.00	57.457
		Low	2426.00	57.508
	16QAM	Middle	2593.00	57.666
		High	2660.00	57.583
		Low	2426.00	57.560

Port	Modulation	Channel	Frequency (MHz)	Measured Bandwidth (MHz)
	64QAM	Low	2426.00	57.579
		Middle	2593.00	57.636
		High	2660.00	57.642
	256QAM	Low	2426.00	57.932
		Middle	2593.00	57.914
		High	2660.00	57.697
Port 11	QPSK	Low	2426.00	57.403
		Middle	2593.00	57.754
		High	2660.00	57.588
	16QAM	Low	2426.00	57.627
		Middle	2593.00	57.649
		High	2660.00	57.697
	64QAM	Low	2426.00	57.611
		Middle	2593.00	57.663
		High	2660.00	57.610
	256QAM	Low	2426.00	57.957
		Middle	2593.00	57.934
		High	2660.00	57.717
Port 12	QPSK	Low	2426.00	57.637
		Middle	2593.00	57.699
		High	2660.00	57.646
	16QAM	Low	2426.00	57.645
		Middle	2593.00	57.710
		High	2660.00	57.659
	64QAM	Low	2426.00	57.629
		Middle	2593.00	57.676
		High	2660.00	57.636
	256QAM	Low	2426.00	57.933
		Middle	2593.00	57.954
		High	2660.00	57.768
Port 13	QPSK	Low	2426.00	57.561
		Middle	2593.00	57.688

Port	Modulation	Channel	Frequency (MHz)	Measured Bandwidth (MHz)
	16QAM	High	2660.00	57.294
		Low	2426.00	57.575
		Middle	2593.00	57.785
		High	2660.00	57.659
	64QAM	Low	2426.00	57.592
		Middle	2593.00	57.659
		High	2660.00	57.595
	256QAM	Low	2426.00	57.905
		Middle	2593.00	57.911
		High	2660.00	57.779
Port 14	QPSK	Low	2426.00	57.515
		Middle	2593.00	57.580
		High	2660.00	57.547
	16QAM	Low	2426.00	57.555
		Middle	2593.00	57.745
		High	2660.00	57.660
	64QAM	Low	2426.00	57.597
		Middle	2593.00	57.561
		High	2660.00	57.620
	256QAM	Low	2426.00	57.920
		Middle	2593.00	57.981
		High	2660.00	57.769
Port 15	QPSK	Low	2426.00	57.660
		Middle	2593.00	57.608
		High	2660.00	57.586
	16QAM	Low	2426.00	57.649
		Middle	2593.00	57.653
		High	2660.00	57.586
	64QAM	Low	2426.00	57.644
		Middle	2593.00	57.623
		High	2660.00	57.577
	256QAM	Low	2426.00	57.963

Port	Modulation	Channel	Frequency (MHz)	Measured Bandwidth (MHz)
Port 16		Middle	2593.00	57.901
		High	2660.00	57.749
		Low	2426.00	57.598
	QPSK	Middle	2593.00	57.675
		High	2660.00	57.640
		Low	2426.00	57.570
	16QAM	Middle	2593.00	57.644
		High	2660.00	57.632
		Low	2426.00	57.628
	64QAM	Middle	2593.00	57.632
		High	2660.00	57.617
		Low	2426.00	57.936
	256QAM	Middle	2593.00	57.960
		High	2660.00	57.712
		Low	2426.00	57.519
Port 17	QPSK	Middle	2593.00	57.486
		High	2660.00	57.484
		Low	2426.00	57.615
	16QAM	Middle	2593.00	57.645
		High	2660.00	57.614
		Low	2426.00	57.641
	64QAM	Middle	2593.00	57.650
		High	2660.00	57.610
		Low	2426.00	57.928
	256QAM	Middle	2593.00	57.973
		High	2660.00	57.705
		Low	2426.00	57.503
Port 18	QPSK	Middle	2593.00	57.594
		High	2660.00	57.571
		Low	2426.00	57.528
	16QAM	Middle	2593.00	57.702
		High	2660.00	57.647
		Low	2426.00	57.503

Port	Modulation	Channel	Frequency (MHz)	Measured Bandwidth (MHz)
	64QAM	Low	2426.00	57.651
		Middle	2593.00	57.666
		High	2660.00	57.639
	256QAM	Low	2426.00	57.973
		Middle	2593.00	57.895
		High	2660.00	57.708
Port 19	QPSK	Low	2426.00	57.485
		Middle	2593.00	57.524
		High	2660.00	57.568
	16QAM	Low	2426.00	57.612
		Middle	2593.00	57.619
		High	2660.00	57.671
	64QAM	Low	2426.00	57.574
		Middle	2593.00	57.648
		High	2660.00	57.577
	256QAM	Low	2426.00	57.908
		Middle	2593.00	57.871
		High	2660.00	57.751
Port 20	QPSK	Low	2426.00	57.545
		Middle	2593.00	57.633
		High	2660.00	57.491
	16QAM	Low	2426.00	57.578
		Middle	2593.00	57.627
		High	2660.00	57.628
	64QAM	Low	2426.00	57.614
		Middle	2593.00	57.646
		High	2660.00	57.617
	256QAM	Low	2426.00	57.837
		Middle	2593.00	57.905
		High	2660.00	57.689
Port 21	QPSK	Low	2426.00	57.649
		Middle	2593.00	57.483

Port	Modulation	Channel	Frequency (MHz)	Measured Bandwidth (MHz)
	16QAM	High	2660.00	57.521
		Low	2426.00	57.638
		Middle	2593.00	57.613
		High	2660.00	57.699
	64QAM	Low	2426.00	57.582
		Middle	2593.00	57.620
		High	2660.00	57.602
	256QAM	Low	2426.00	57.909
		Middle	2593.00	57.985
		High	2660.00	57.791
Port 22	QPSK	Low	2426.00	57.570
		Middle	2593.00	57.491
		High	2660.00	57.703
	16QAM	Low	2426.00	57.590
		Middle	2593.00	57.676
		High	2660.00	57.673
	64QAM	Low	2426.00	57.628
		Middle	2593.00	57.656
		High	2660.00	57.577
	256QAM	Low	2426.00	57.940
		Middle	2593.00	57.963
		High	2660.00	57.766
Port 23	QPSK	Low	2426.00	57.574
		Middle	2593.00	57.632
		High	2660.00	57.676
	16QAM	Low	2426.00	57.557
		Middle	2593.00	57.721
		High	2660.00	57.563
	64QAM	Low	2426.00	57.653
		Middle	2593.00	57.629
		High	2660.00	57.633
	256QAM	Low	2426.00	57.902

Port	Modulation	Channel	Frequency (MHz)	Measured Bandwidth (MHz)
Port 24		Middle	2593.00	57.967
		High	2660.00	57.748
		Low	2426.00	57.569
	QPSK	Middle	2593.00	57.699
		High	2660.00	57.667
		Low	2426.00	57.687
	16QAM	Middle	2593.00	57.607
		High	2660.00	57.631
		Low	2426.00	57.610
	64QAM	Middle	2593.00	57.648
		High	2660.00	57.645
		Low	2426.00	57.874
	256QAM	Middle	2593.00	57.930
		High	2660.00	57.788
		Low	2426.00	57.636
Port 25	QPSK	Middle	2593.00	57.501
		High	2660.00	57.618
		Low	2426.00	57.576
	16QAM	Middle	2593.00	57.656
		High	2660.00	57.638
		Low	2426.00	57.648
	64QAM	Middle	2593.00	57.672
		High	2660.00	57.601
		Low	2426.00	57.922
	256QAM	Middle	2593.00	57.925
		High	2660.00	57.781
		Low	2426.00	57.550
Port 26	QPSK	Middle	2593.00	57.596
		High	2660.00	57.438
		Low	2426.00	57.643
	16QAM	Middle	2593.00	57.688
		High	2660.00	57.554
		Low	2426.00	57.550

Port	Modulation	Channel	Frequency (MHz)	Measured Bandwidth (MHz)
	64QAM	Low	2426.00	57.651
		Middle	2593.00	57.690
		High	2660.00	57.588
	256QAM	Low	2426.00	57.896
		Middle	2593.00	57.909
		High	2660.00	57.826
Port 27	QPSK	Low	2426.00	57.412
		Middle	2593.00	57.700
		High	2660.00	57.620
	16QAM	Low	2426.00	57.625
		Middle	2593.00	57.685
		High	2660.00	57.618
	64QAM	Low	2426.00	57.635
		Middle	2593.00	57.648
		High	2660.00	57.628
	256QAM	Low	2426.00	57.992
		Middle	2593.00	57.914
		High	2660.00	57.705
Port 28	QPSK	Low	2426.00	57.577
		Middle	2593.00	57.558
		High	2660.00	57.567
	16QAM	Low	2426.00	57.614
		Middle	2593.00	57.700
		High	2660.00	57.751
	64QAM	Low	2426.00	57.614
		Middle	2593.00	57.664
		High	2660.00	57.644
	256QAM	Low	2426.00	57.956
		Middle	2593.00	57.922
		High	2660.00	57.752
Port 29	QPSK	Low	2426.00	57.590
		Middle	2593.00	57.774

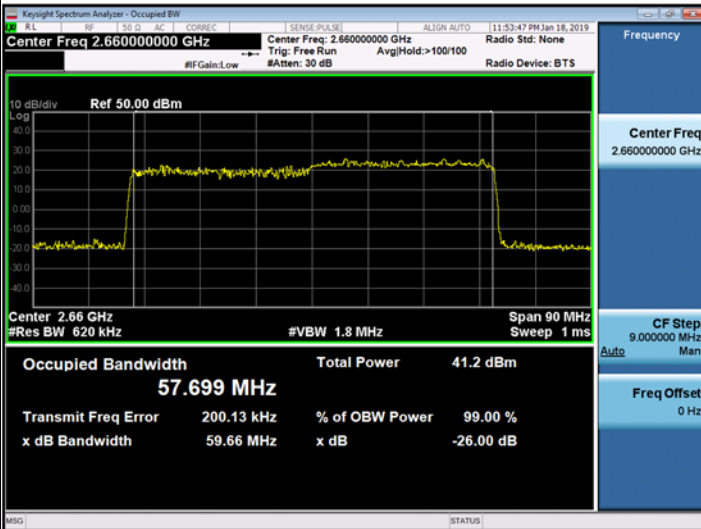
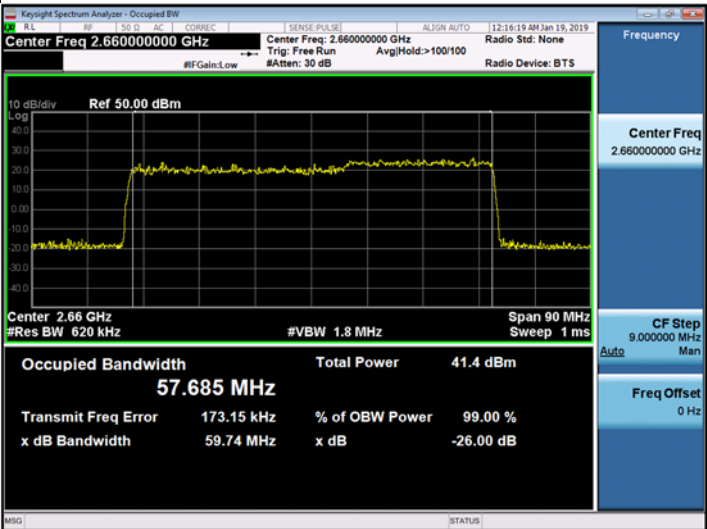
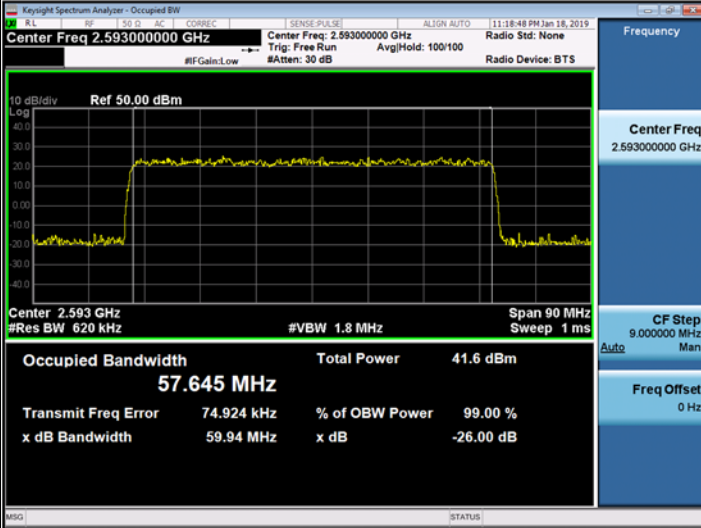
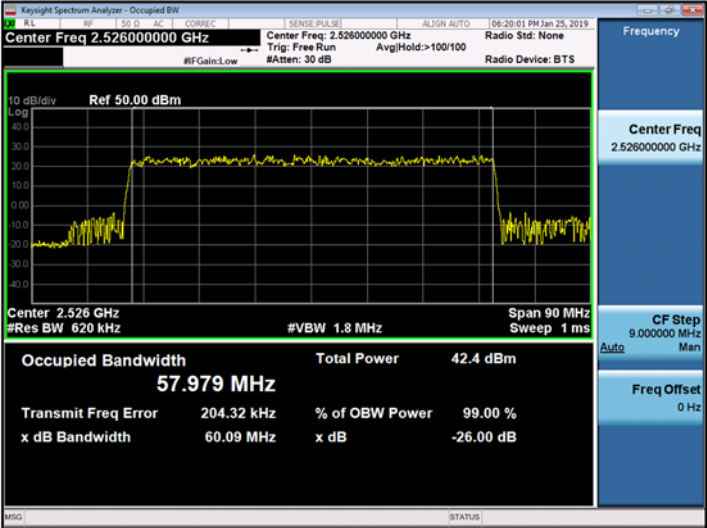
Port	Modulation	Channel	Frequency (MHz)	Measured Bandwidth (MHz)
	16QAM	High	2660.00	57.486
		Low	2426.00	57.588
		Middle	2593.00	57.718
		High	2660.00	57.605
	64QAM	Low	2426.00	57.662
		Middle	2593.00	57.650
		High	2660.00	57.624
	256QAM	Low	2426.00	57.873
		Middle	2593.00	57.947
		High	2660.00	57.775
Port 30	QPSK	Low	2426.00	57.511
		Middle	2593.00	57.546
		High	2660.00	57.619
	16QAM	Low	2426.00	57.659
		Middle	2593.00	57.662
		High	2660.00	57.628
	64QAM	Low	2426.00	57.627
		Middle	2593.00	57.688
		High	2660.00	57.630
	256QAM	Low	2426.00	57.893
		Middle	2593.00	57.980
		High	2660.00	57.776
Port 31	QPSK	Low	2426.00	57.539
		Middle	2593.00	57.674
		High	2660.00	57.645
	16QAM	Low	2426.00	57.667
		Middle	2593.00	57.653
		High	2660.00	57.663
	64QAM	Low	2426.00	57.623
		Middle	2593.00	57.624
		High	2660.00	57.608
	256QAM	Low	2426.00	57.912

Port	Modulation	Channel	Frequency (MHz)	Measured Bandwidth (MHz)
		Middle	2593.00	57.951
		High	2660.00	57.735

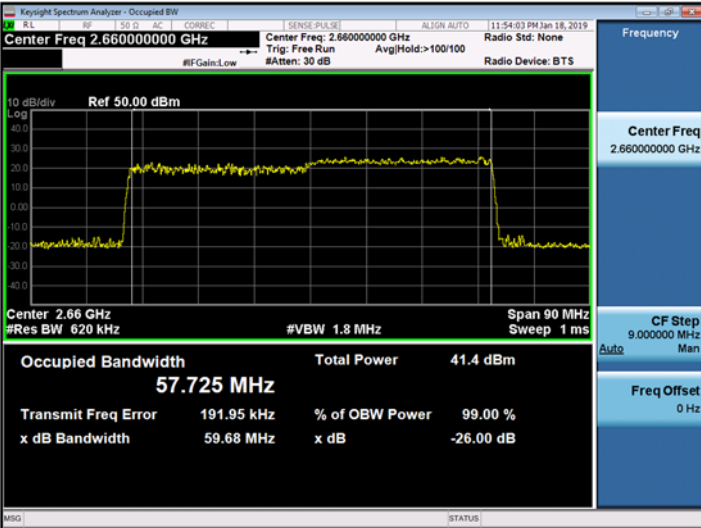
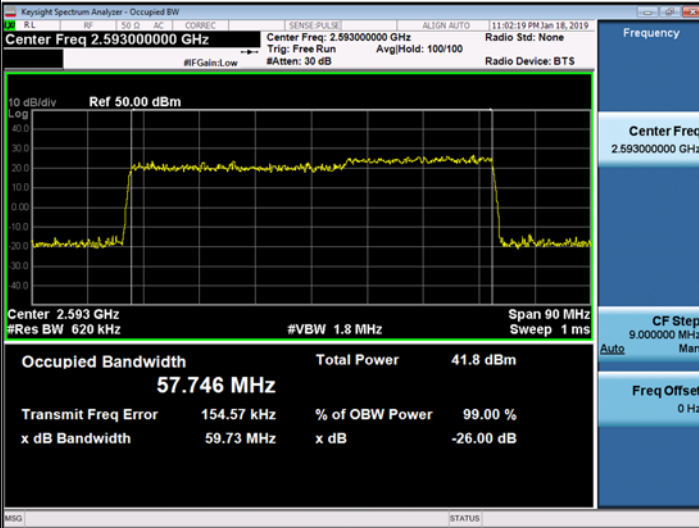
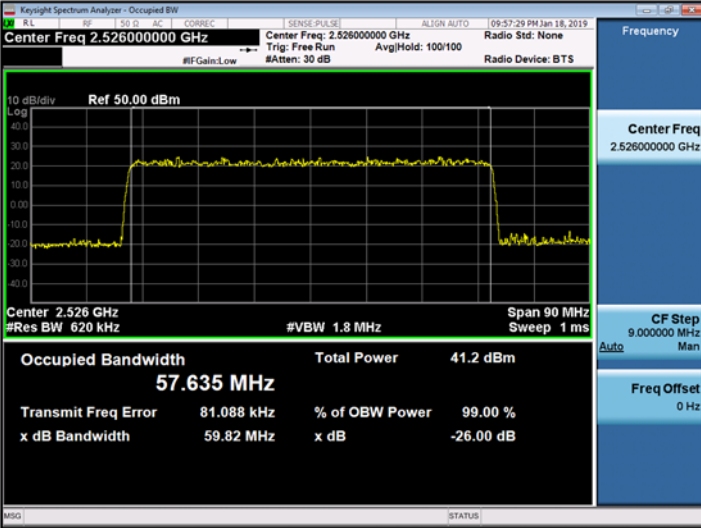
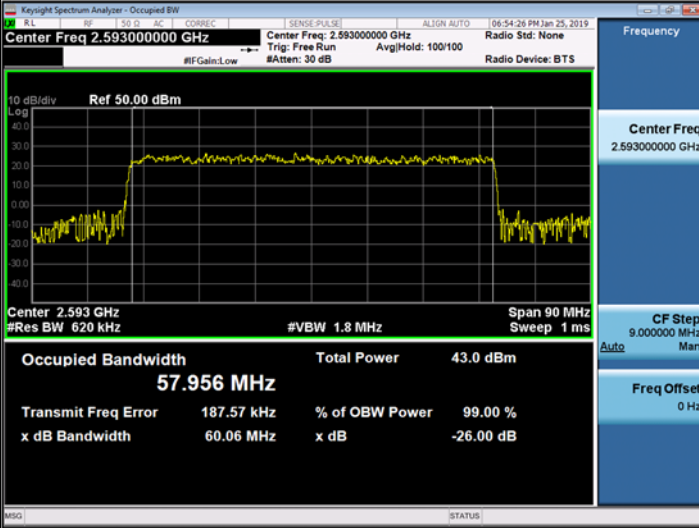
* This test report only contains the worst case plot data for each port and modulation.

Plots of Occupied Bandwidth - 60 MHz Bandwidth

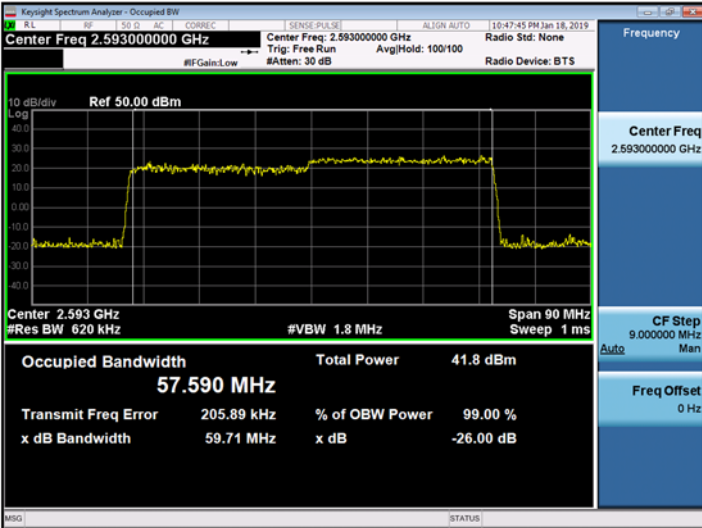
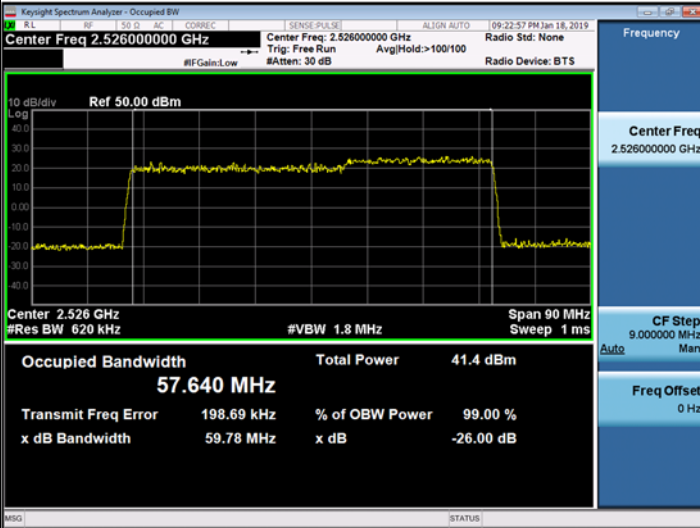
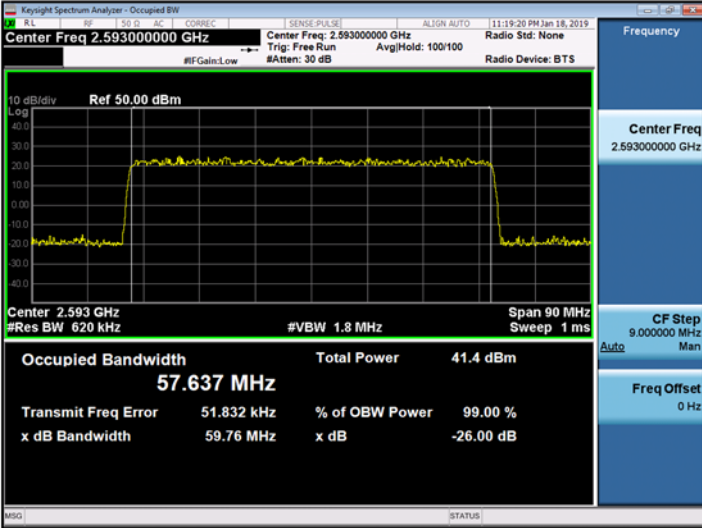
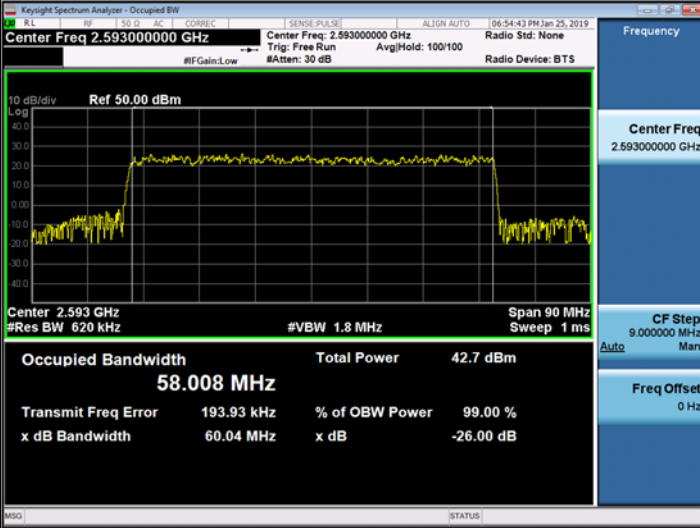
Port 0

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

Port 1

Modulation:	QPSK	Modulation:	16QAM
Channel:	High	Channel:	Middle
 KeySight Spectrum Analyzer - Occupied BW Center Freq 2.66000000 GHz #Res BW 620 kHz #VBW 1.8 MHz Span 90 MHz Sweep 1 ms Occupied Bandwidth 57.725 MHz Total Power 41.4 dBm Transmit Freq Error 191.95 kHz % of OBW Power 99.00 % x dB Bandwidth 59.68 MHz x dB -26.00 dB		 KeySight Spectrum Analyzer - Occupied BW Center Freq 2.59300000 GHz #Res BW 620 kHz #VBW 1.8 MHz Span 90 MHz Sweep 1 ms Occupied Bandwidth 57.746 MHz Total Power 41.8 dBm Transmit Freq Error 154.57 kHz % of OBW Power 99.00 % x dB Bandwidth 59.73 MHz x dB -26.00 dB	
Modulation:	64QAM	Modulation:	256QAM
Channel:	Low	Channel:	Middle
 KeySight Spectrum Analyzer - Occupied BW Center Freq 2.52600000 GHz #Res BW 620 kHz #VBW 1.8 MHz Span 90 MHz Sweep 1 ms Occupied Bandwidth 57.635 MHz Total Power 41.2 dBm Transmit Freq Error 81.088 kHz % of OBW Power 99.00 % x dB Bandwidth 59.82 MHz x dB -26.00 dB		 KeySight Spectrum Analyzer - Occupied BW Center Freq 2.59300000 GHz #Res BW 620 kHz #VBW 1.8 MHz Span 90 MHz Sweep 1 ms Occupied Bandwidth 57.956 MHz Total Power 43.0 dBm Transmit Freq Error 187.57 kHz % of OBW Power 99.00 % x dB Bandwidth 60.06 MHz x dB -26.00 dB	

Port 2

Modulation:	QPSK	Modulation:	16QAM
Channel:	Middle	Channel:	Low
 Keylight Spectrum Analyzer - Occupied BW Center Freq 2.593000000 GHz #Res BW 620 kHz #VBW 1.8 MHz Span 90 MHz Sweep 1 ms Occupied Bandwidth 57.590 MHz Total Power 41.8 dBm Transmit Freq Error 205.89 kHz % of OBW Power 99.00 % x dB Bandwidth 59.71 MHz x dB -26.00 dB		 Keylight Spectrum Analyzer - Occupied BW Center Freq 2.526000000 GHz #Res BW 620 kHz #VBW 1.8 MHz Span 90 MHz Sweep 1 ms Occupied Bandwidth 57.640 MHz Total Power 41.4 dBm Transmit Freq Error 198.69 kHz % of OBW Power 99.00 % x dB Bandwidth 59.78 MHz x dB -26.00 dB	
Modulation:	64QAM	Modulation:	256QAM
Channel:	Middle	Channel:	Middle
 Keylight Spectrum Analyzer - Occupied BW Center Freq 2.593000000 GHz #Res BW 620 kHz #VBW 1.8 MHz Span 90 MHz Sweep 1 ms Occupied Bandwidth 57.637 MHz Total Power 41.4 dBm Transmit Freq Error 51.832 kHz % of OBW Power 99.00 % x dB Bandwidth 59.76 MHz x dB -26.00 dB		 Keylight Spectrum Analyzer - Occupied BW Center Freq 2.593000000 GHz #Res BW 620 kHz #VBW 1.8 MHz Span 90 MHz Sweep 1 ms Occupied Bandwidth 58.008 MHz Total Power 42.7 dBm Transmit Freq Error 193.93 kHz % of OBW Power 99.00 % x dB Bandwidth 60.04 MHz x dB -26.00 dB	

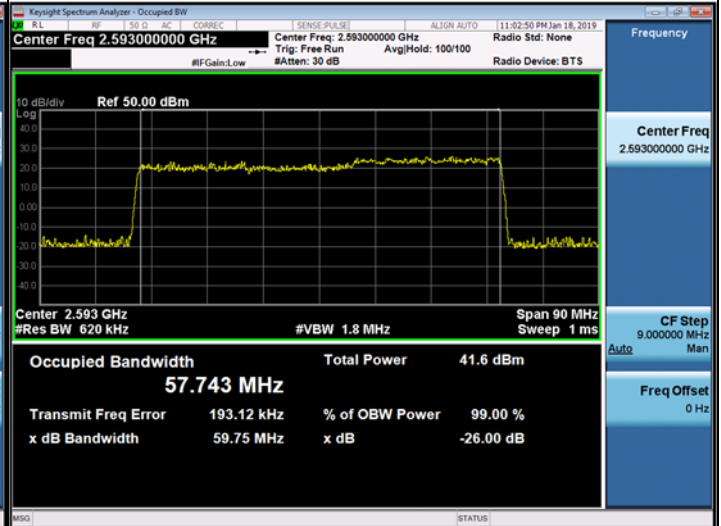
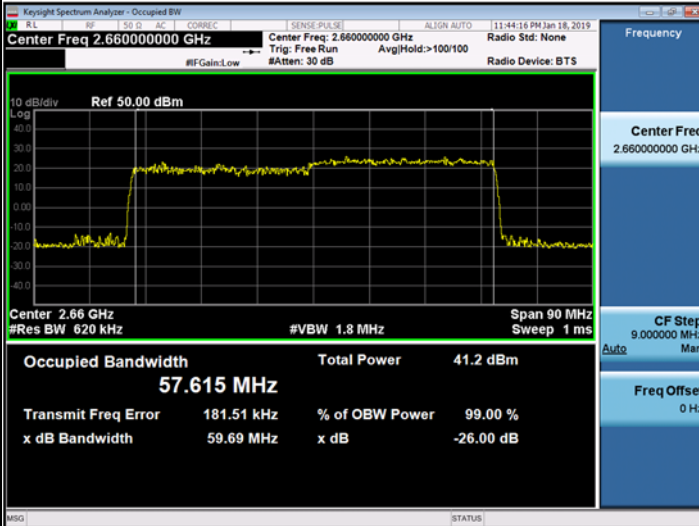
Port 3

Modulation: QPSK

Channel: High

Modulation: 16QAM

Channel: Middle

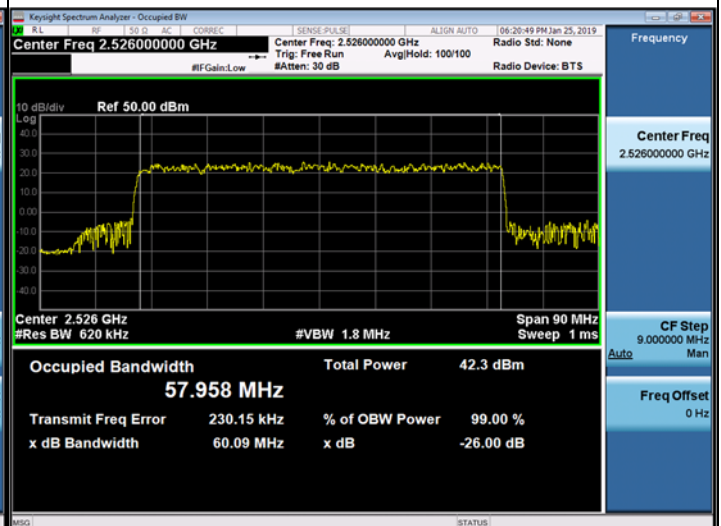
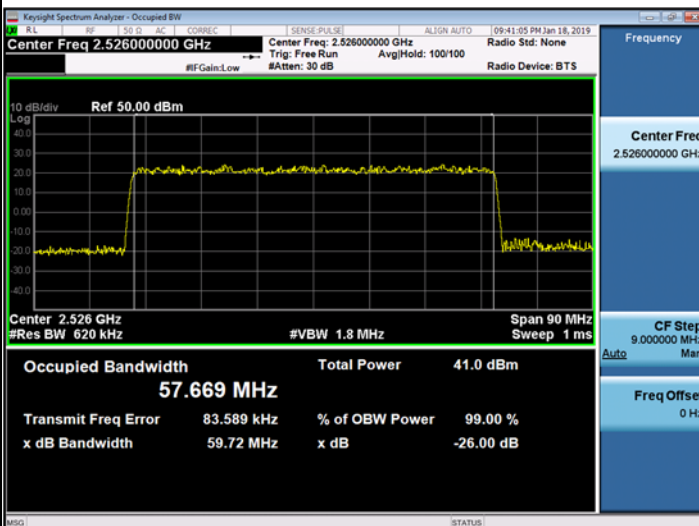


Modulation: 64QAM

Channel: Low

Modulation: 256QAM

Channel: Low



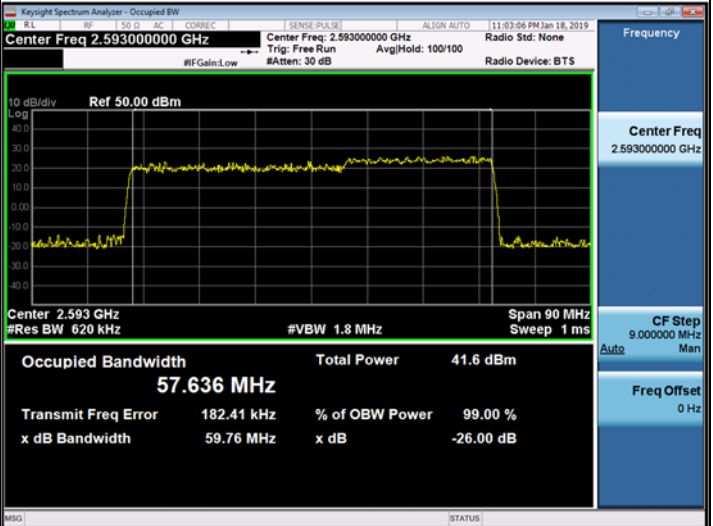
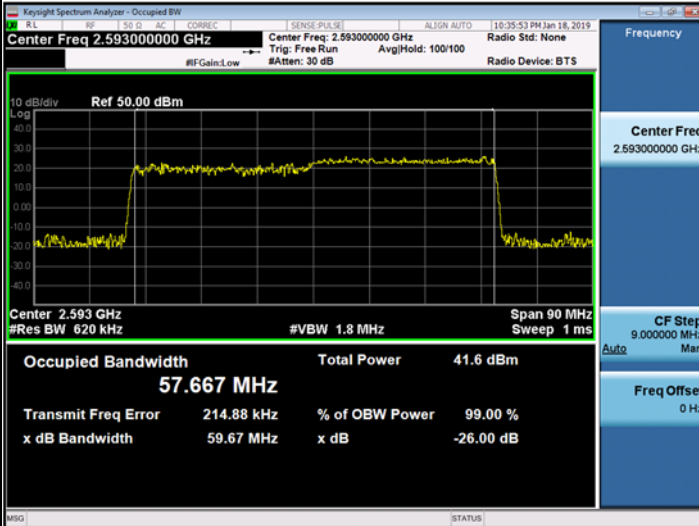
Port 4

Modulation: QPSK

Channel: Middle

Modulation: 16QAM

Channel: Middle

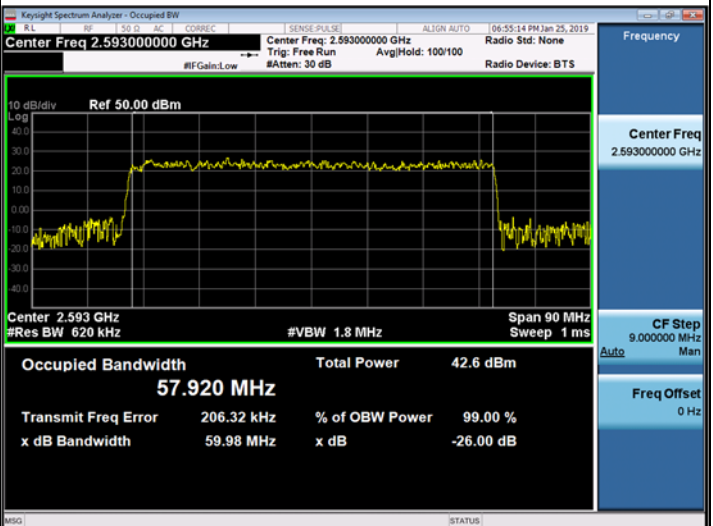
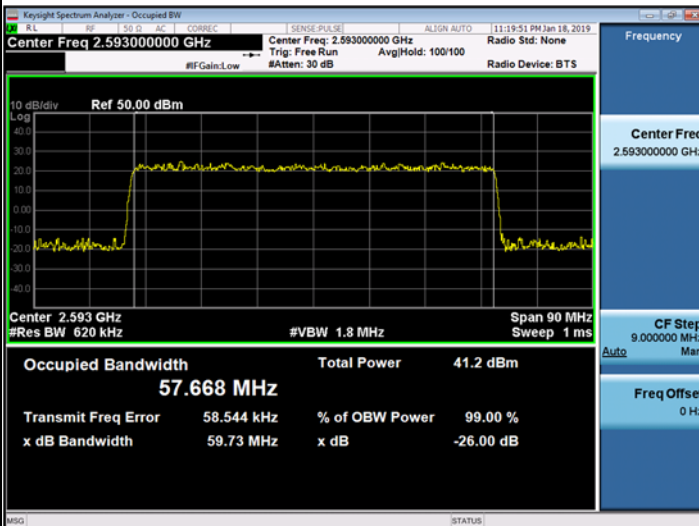


Modulation: 64QAM

Channel: Middle

Modulation: 256QAM

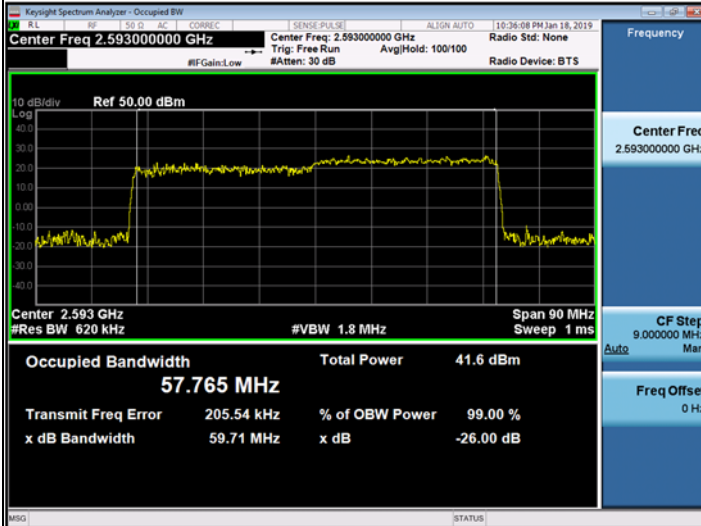
Channel: Middle



Port 5

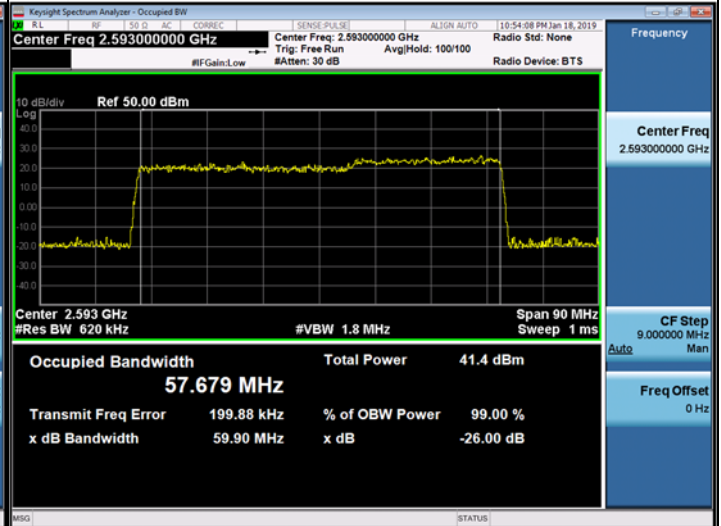
Modulation: QPSK

Channel: Middle



Modulation: 16QAM

Channel: Middle



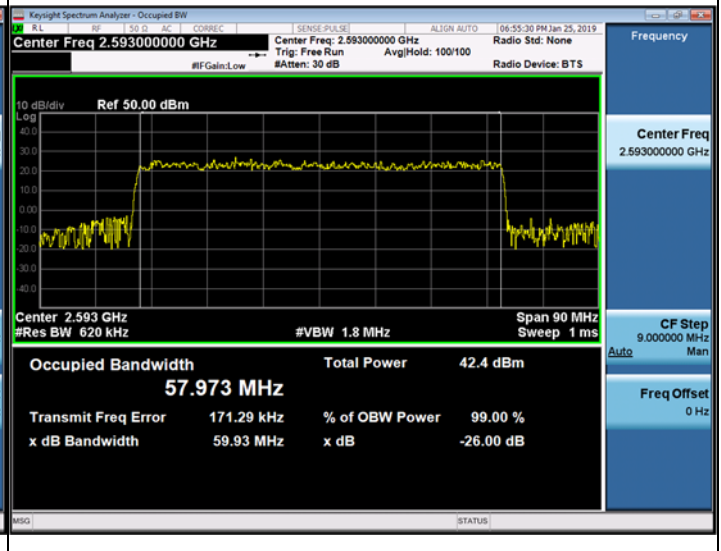
Modulation: 64QAM

Channel: Middle



Modulation: 256QAM

Channel: Middle



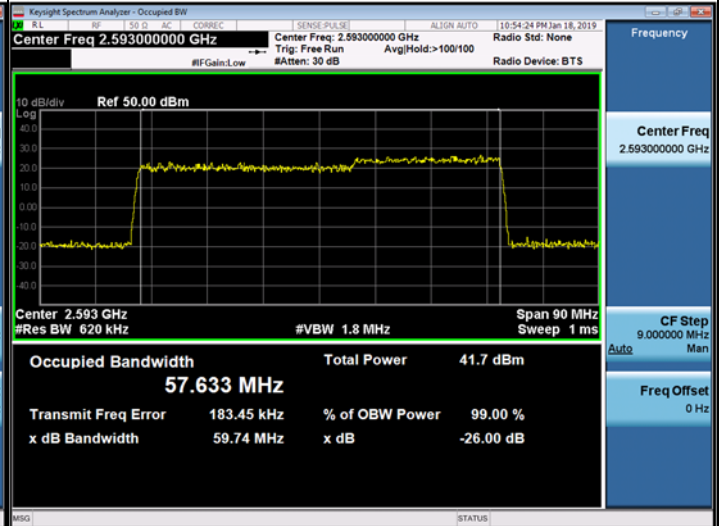
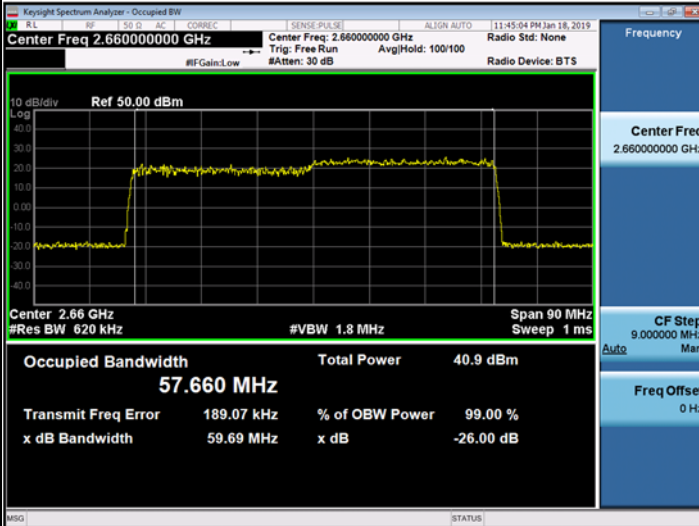
Port 6

Modulation: QPSK

Channel: High

Modulation: 16QAM

Channel: Middle

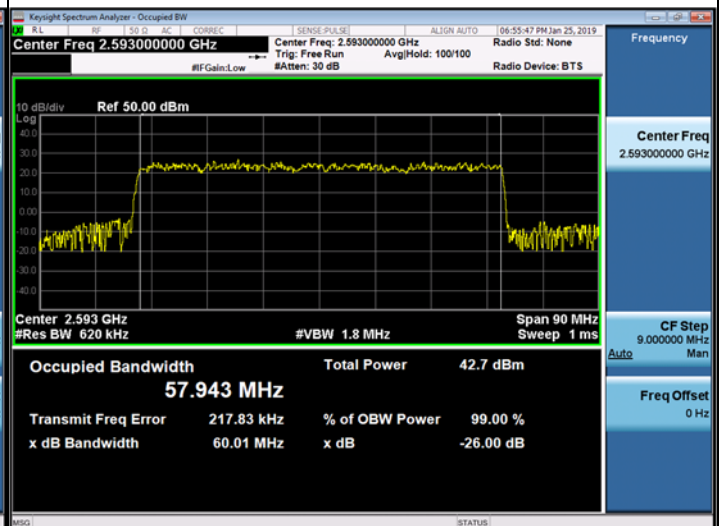
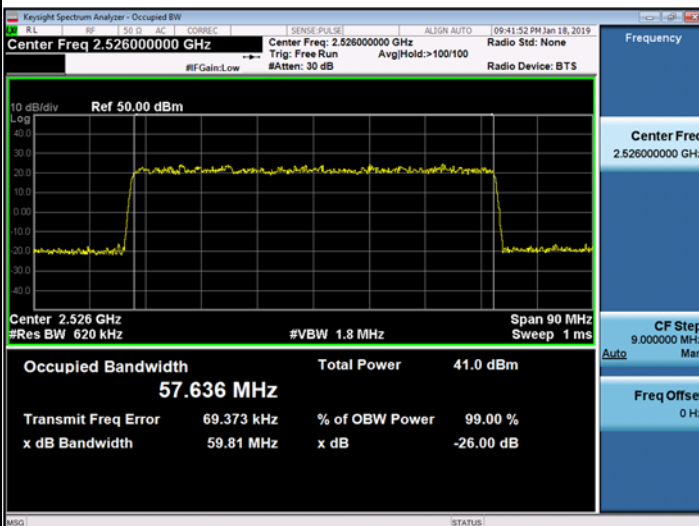


Modulation: 64QAM

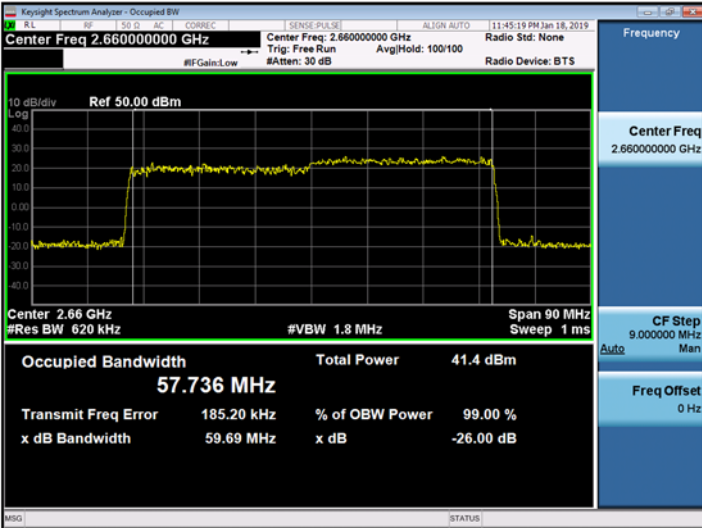
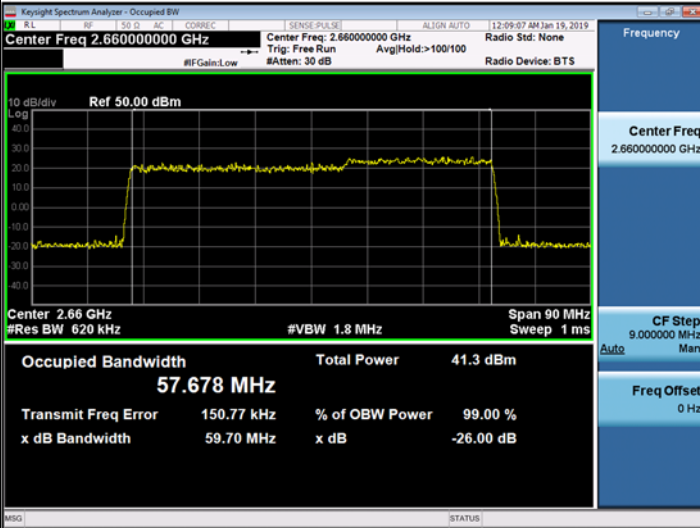
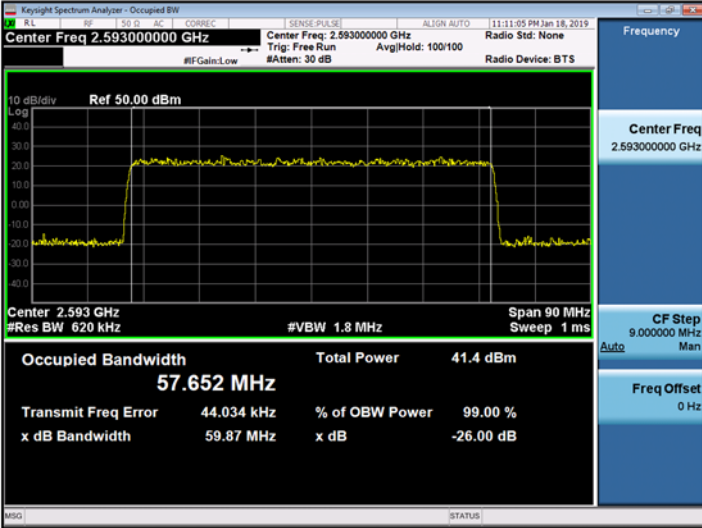
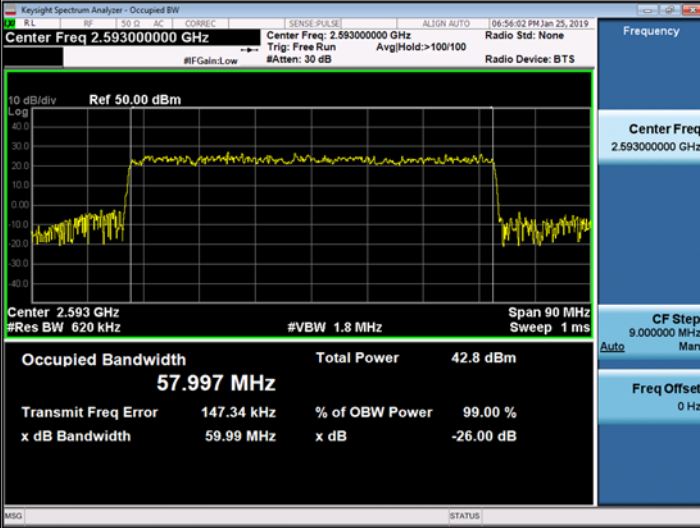
Channel: Low

Modulation: 256QAM

Channel: Middle



Port 7

Modulation:	QPSK	Modulation:	16QAM
Channel:	High	Channel:	High
 Keylight Spectrum Analyzer - Occupied BW Center Freq 2.66000000 GHz #Res BW 620 kHz #VBW 1.8 MHz Span 90 MHz Sweep 1 ms Occupied Bandwidth 57.736 MHz Total Power 41.4 dBm Transmit Freq Error 185.20 kHz % of OBW Power 99.00 % x dB Bandwidth 59.69 MHz x dB -26.00 dB		 Keylight Spectrum Analyzer - Occupied BW Center Freq 2.66000000 GHz #Res BW 620 kHz #VBW 1.8 MHz Span 90 MHz Sweep 1 ms Occupied Bandwidth 57.678 MHz Total Power 41.3 dBm Transmit Freq Error 150.77 kHz % of OBW Power 99.00 % x dB Bandwidth 59.70 MHz x dB -26.00 dB	
Modulation:	64QAM	Modulation:	256QAM
Channel:	Middle	Channel:	Middle
 Keylight Spectrum Analyzer - Occupied BW Center Freq 2.59300000 GHz #Res BW 620 kHz #VBW 1.8 MHz Span 90 MHz Sweep 1 ms Occupied Bandwidth 57.652 MHz Total Power 41.4 dBm Transmit Freq Error 44.034 kHz % of OBW Power 99.00 % x dB Bandwidth 59.87 MHz x dB -26.00 dB		 Keylight Spectrum Analyzer - Occupied BW Center Freq 2.59300000 GHz #Res BW 620 kHz #VBW 1.8 MHz Span 90 MHz Sweep 1 ms Occupied Bandwidth 57.997 MHz Total Power 42.8 dBm Transmit Freq Error 147.34 kHz % of OBW Power 99.00 % x dB Bandwidth 59.99 MHz x dB -26.00 dB	

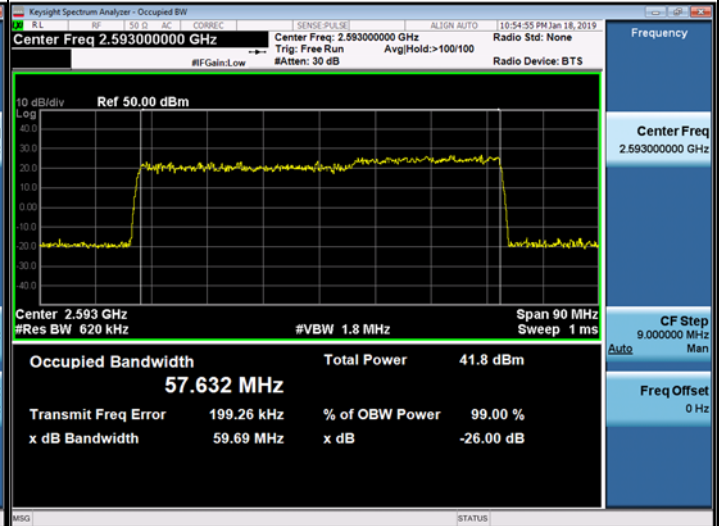
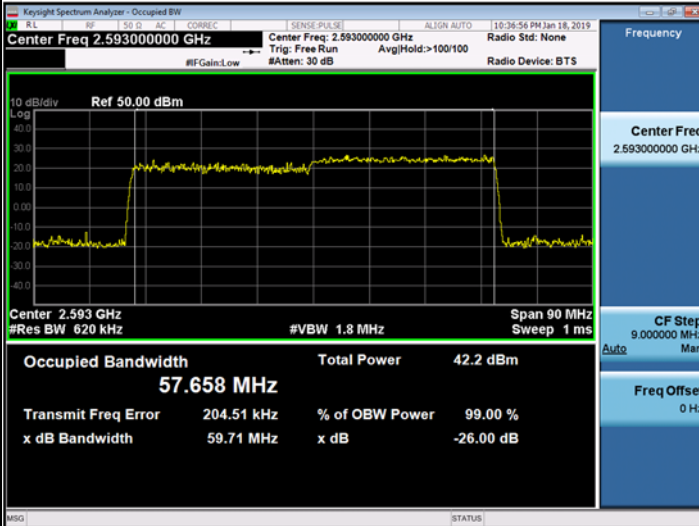
Port 8

Modulation: QPSK

Channel: Middle

Modulation: 16QAM

Channel: Middle



Modulation: 64QAM

Channel: Middle

Modulation: 256QAM

Channel: Middle

