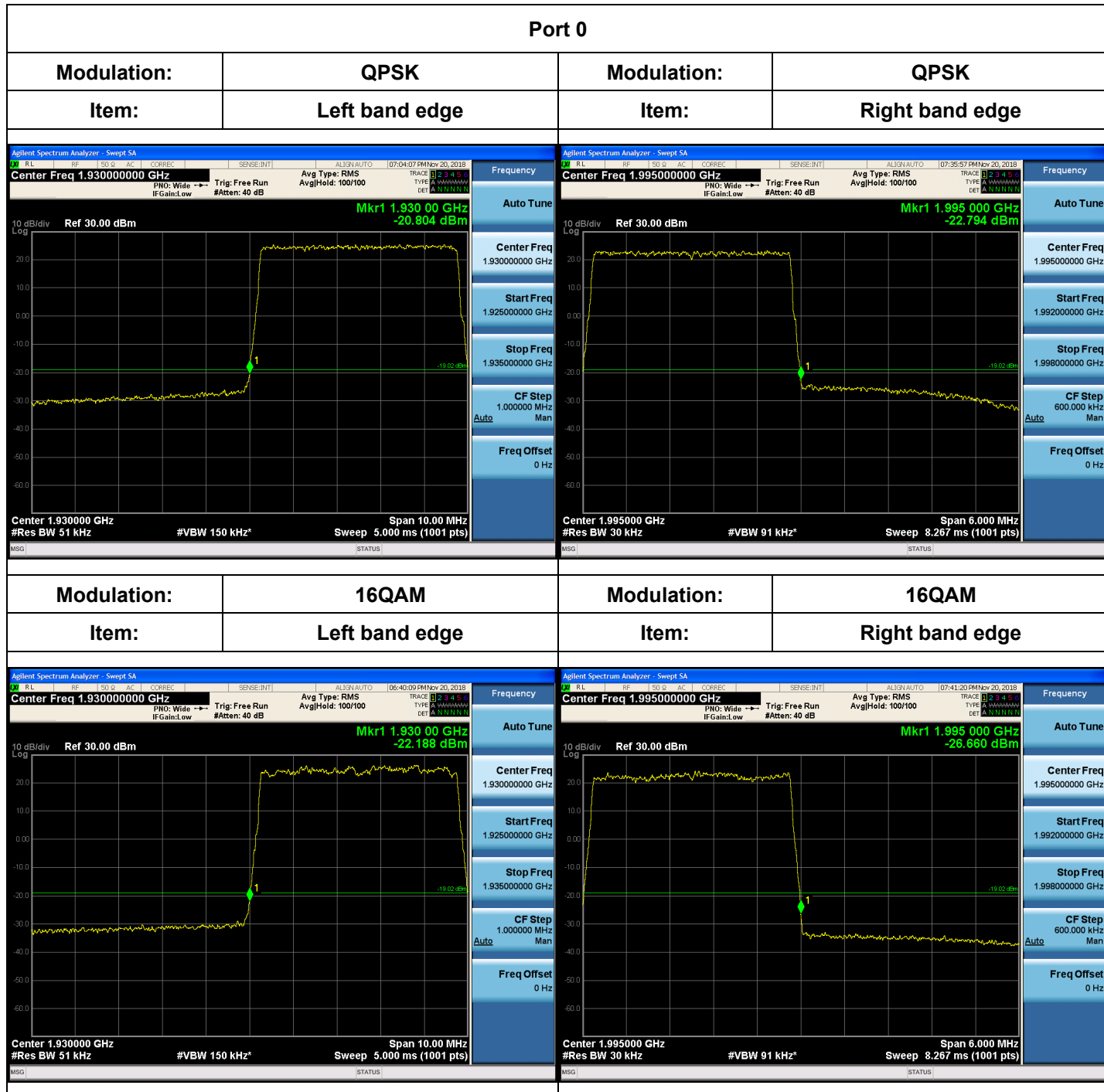
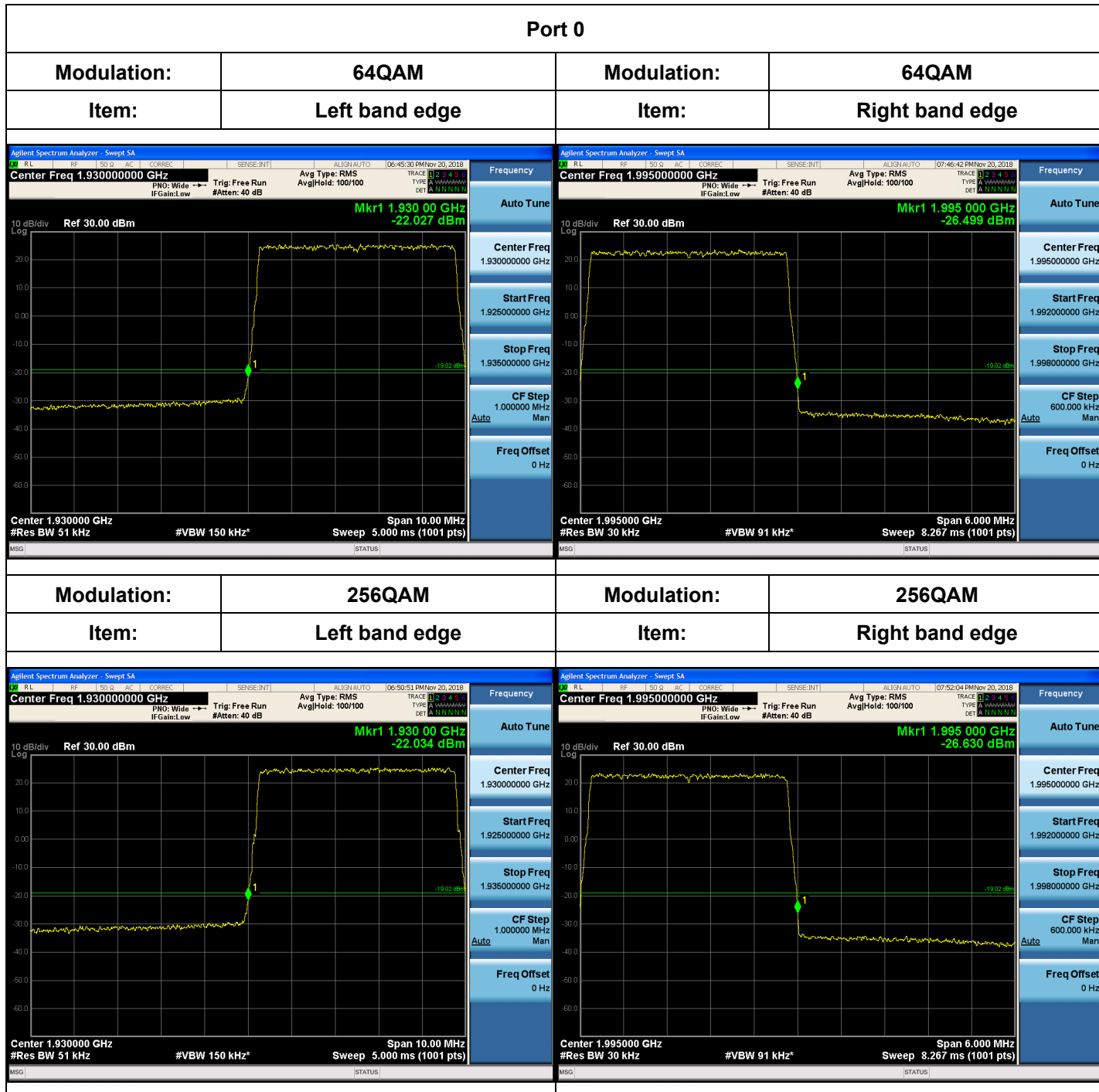


Plots of Band edge - 3 MHz Bandwidth + 5 MHz Bandwidth / 2 Carriers

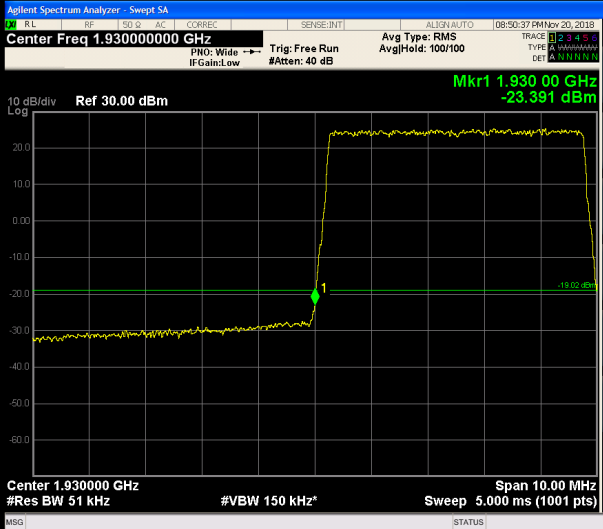
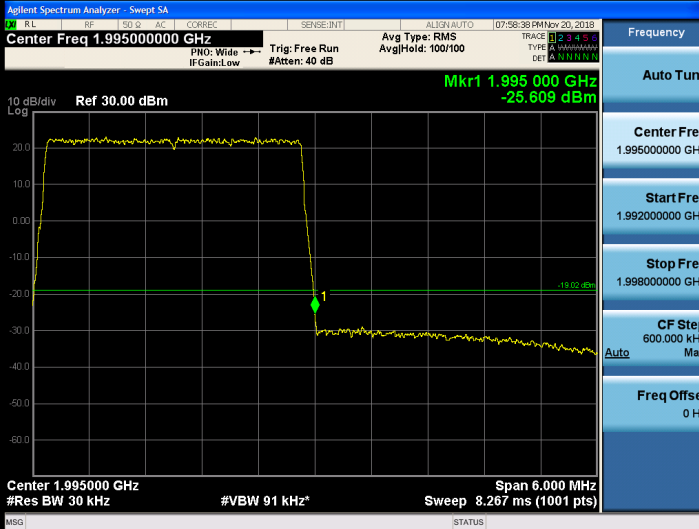
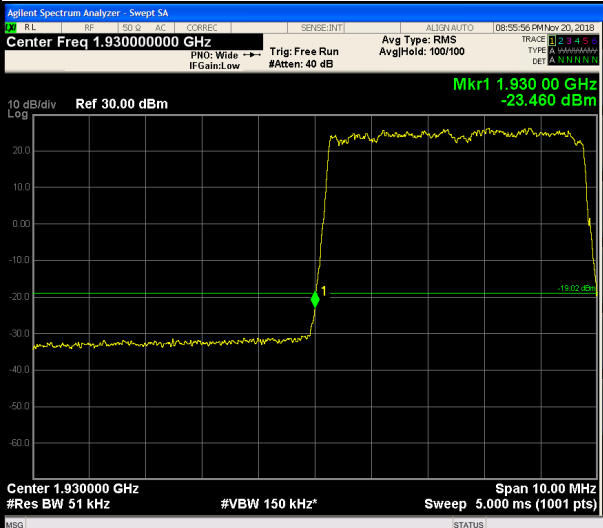
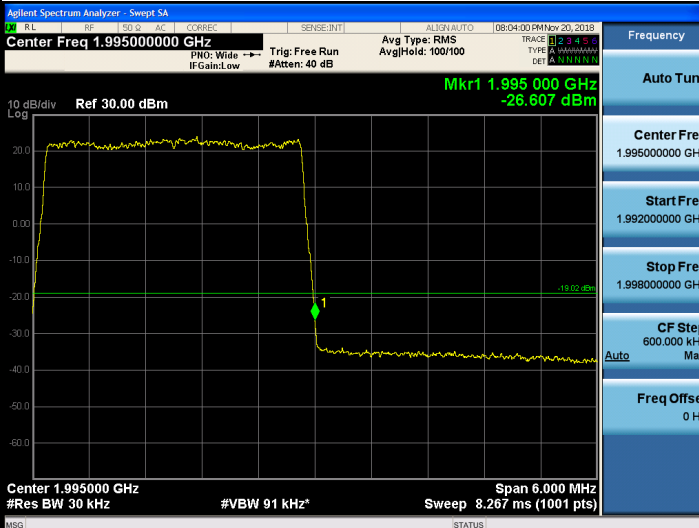
Port 0



Port 0



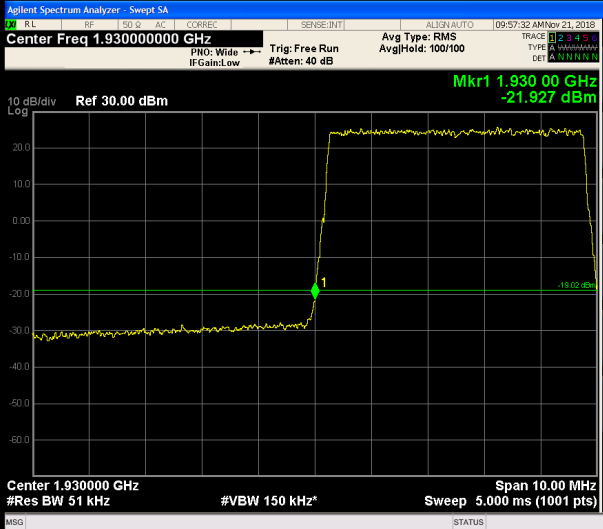
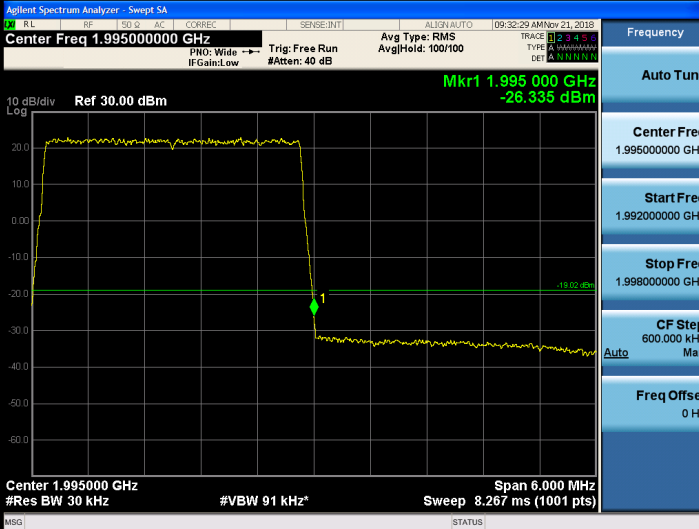
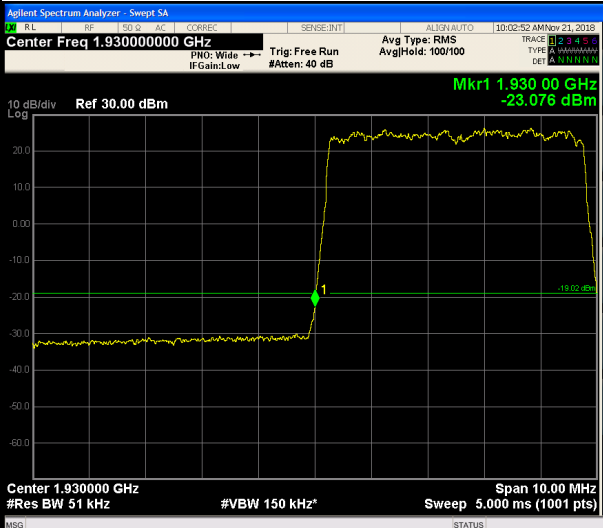
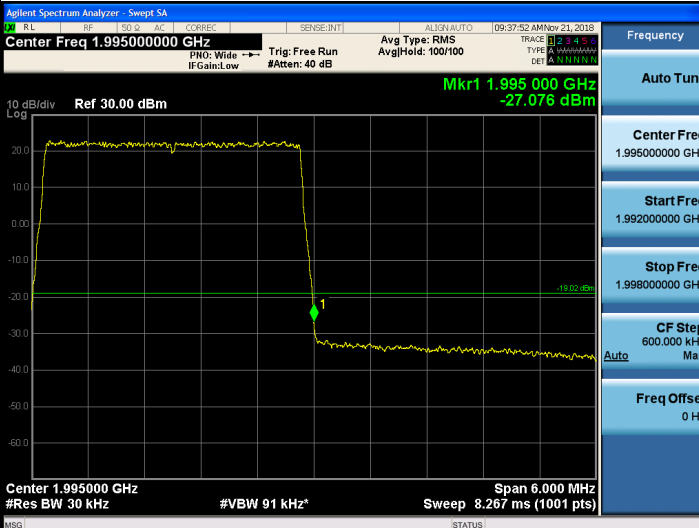
Port 1

Modulation: QPSK		Modulation: QPSK	
Item: Left band edge		Item: Right band edge	
 Agilent Spectrum Analyzer - Swept SA Center Freq 1.930000000 GHz PNO: Wide IF Gain: Low Trig: Free Run #Atten: 40 dB Avg Type: RMS AvgHld: 100/100 Mkr1 1.930 00 GHz -23.391 dBm 10 dB/div Log Ref 30.00 dBm Center 1.930000 GHz #Res BW 51 kHz #VBW 150 kHz* Sweep 5.000 ms (1001 pts)		 Agilent Spectrum Analyzer - Swept SA Center Freq 1.995000000 GHz PNO: Wide IF Gain: Low Trig: Free Run #Atten: 40 dB Avg Type: RMS AvgHld: 100/100 Mkr1 1.995 000 GHz -25.609 dBm 10 dB/div Log Ref 30.00 dBm Center 1.995000 GHz #Res BW 30 kHz #VBW 91 kHz* Sweep 8.267 ms (1001 pts)	
Modulation: 16QAM		Modulation: 16QAM	
Item: Left band edge		Item: Right band edge	
 Agilent Spectrum Analyzer - Swept SA Center Freq 1.930000000 GHz PNO: Wide IF Gain: Low Trig: Free Run #Atten: 40 dB Avg Type: RMS AvgHld: 100/100 Mkr1 1.930 00 GHz -23.460 dBm 10 dB/div Log Ref 30.00 dBm Center 1.930000 GHz #Res BW 51 kHz #VBW 150 kHz* Sweep 5.000 ms (1001 pts)		 Agilent Spectrum Analyzer - Swept SA Center Freq 1.995000000 GHz PNO: Wide IF Gain: Low Trig: Free Run #Atten: 40 dB Avg Type: RMS AvgHld: 100/100 Mkr1 1.995 000 GHz -26.607 dBm 10 dB/div Log Ref 30.00 dBm Center 1.995000 GHz #Res BW 30 kHz #VBW 91 kHz* Sweep 8.267 ms (1001 pts)	

Port 1

Port 1			
Modulation:		64QAM	
Item:		Left band edge	
Agilent Spectrum Analyzer - Swept SA RL RF SD AC CORRECT SENSE:INT ALIGN:AUTO 09:01:16 PM Nov 20, 2018 TRACE B [2 3 4 5 6] TYPE A [RENDER] DET A [RENDER] Center Freq 1.930000000 GHz PRN: Wide → IF Gain: Low Trig: Free Run Avg Type: RMS Avg Hold: 100/100 Mkr1 1.930 00 GHz -22.916 dBm 10 dB/div Ref 30.00 dBm Log 20.0 10.0 0.00 -10.0 -20.0 -30.0 -40.0 -50.0 -60.0 Center 1.930000 GHz #Res BW 51 kHz #VBW 150 kHz* Span 10.00 MHz Sweep 5.000 ms (1001 pts) MSG STATUS Frequency Auto Tune Center Freq 1.930000000 GHz Start Freq 1.925000000 GHz Stop Freq 1.935000000 GHz CF Step 1.000000 MHz Man Auto Freq Offset 0 Hz			
Modulation:		64QAM	
Item:		Right band edge	
Agilent Spectrum Analyzer - Swept SA RL RF SD AC CORRECT SENSE:INT ALIGN:AUTO 08:09:22 PM Nov 20, 2018 TRACE B [2 3 4 5 6] TYPE A [RENDER] DET A [RENDER] Center Freq 1.995000000 GHz PRN: Wide → IF Gain: Low Trig: Free Run Avg Type: RMS Avg Hold: 100/100 Mkr1 1.995 000 GHz -27.065 dBm 10 dB/div Ref 30.00 dBm Log 20.0 10.0 0.00 -10.0 -20.0 -30.0 -40.0 -50.0 -60.0 Center 1.995000 GHz #Res BW 30 kHz #VBW 91 kHz* Span 6.000 MHz Sweep 8.267 ms (1001 pts) MSG STATUS Frequency Auto Tune Center Freq 1.995000000 GHz Start Freq 1.992000000 GHz Stop Freq 1.998000000 GHz CF Step 600.000 kHz Man Auto Freq Offset 0 Hz			
Modulation:		256QAM	
Item:		Left band edge	
Agilent Spectrum Analyzer - Swept SA RL RF SD AC CORRECT SENSE:INT ALIGN:AUTO 09:06:35 PM Nov 20, 2018 TRACE B [2 3 4 5 6] TYPE A [RENDER] DET A [RENDER] Center Freq 1.930000000 GHz PRN: Wide → IF Gain: Low Trig: Free Run Avg Type: RMS Avg Hold: 100/100 Mkr1 1.930 00 GHz -22.863 dBm 10 dB/div Ref 30.00 dBm Log 20.0 10.0 0.00 -10.0 -20.0 -30.0 -40.0 -50.0 -60.0 Center 1.930000 GHz #Res BW 51 kHz #VBW 150 kHz* Span 10.00 MHz Sweep 5.000 ms (1001 pts) MSG STATUS Frequency Auto Tune Center Freq 1.930000000 GHz Start Freq 1.925000000 GHz Stop Freq 1.935000000 GHz CF Step 1.000000 MHz Man Auto Freq Offset 0 Hz			
Modulation:		256QAM	
Item:		Right band edge	
Agilent Spectrum Analyzer - Swept SA RL RF SD AC CORRECT SENSE:INT ALIGN:AUTO 08:14:44 PM Nov 20, 2018 TRACE B [2 3 4 5 6] TYPE A [RENDER] DET A [RENDER] Center Freq 1.995000000 GHz PRN: Wide → IF Gain: Low Trig: Free Run Avg Type: RMS Avg Hold: 100/100 Mkr1 1.995 000 GHz -26.276 dBm 10 dB/div Ref 30.00 dBm Log 20.0 10.0 0.00 -10.0 -20.0 -30.0 -40.0 -50.0 -60.0 Center 1.995000 GHz #Res BW 30 kHz #VBW 91 kHz* Span 6.000 MHz Sweep 8.267 ms (1001 pts) MSG STATUS Frequency Auto Tune Center Freq 1.995000000 GHz Start Freq 1.992000000 GHz Stop Freq 1.998000000 GHz CF Step 600.000 kHz Man Auto Freq Offset 0 Hz			

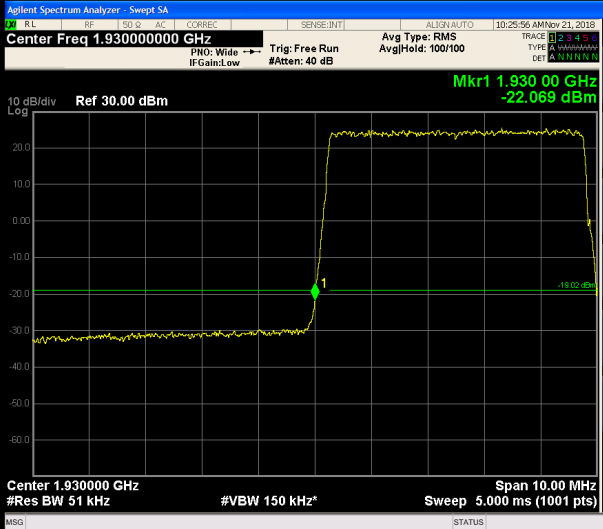
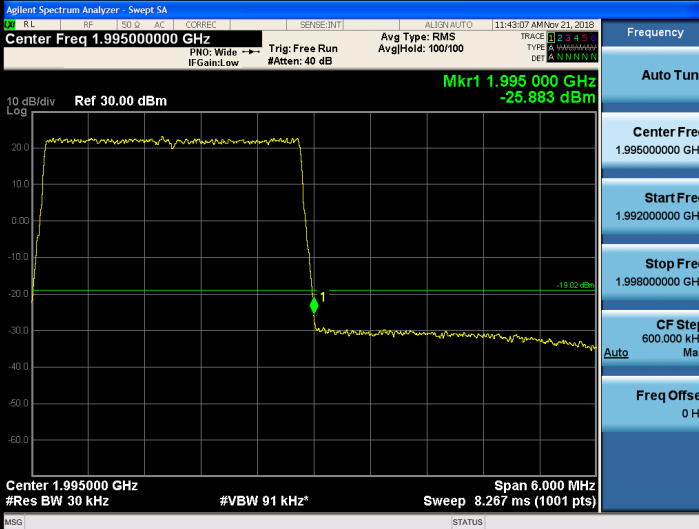
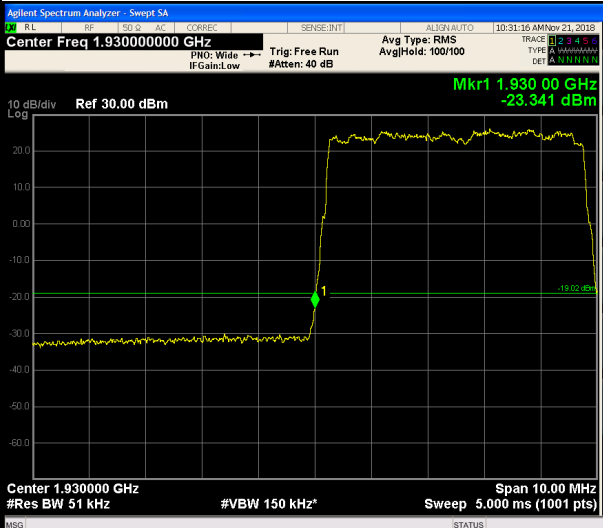
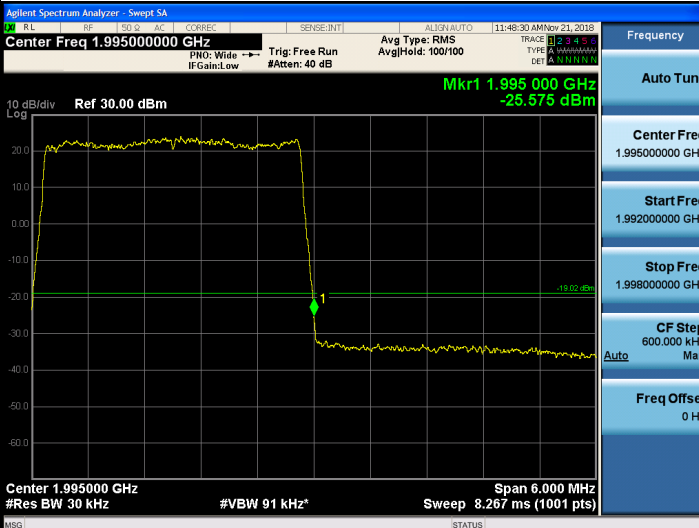
Port 2

Modulation: QPSK		Modulation: QPSK	
Item: Left band edge		Item: Right band edge	
			
Modulation: 16QAM		Modulation: 16QAM	
Item: Left band edge		Item: Right band edge	
			

Port 2

Port 2			
Modulation:		64QAM	
Item:		Left band edge	
Agilent Spectrum Analyzer - Swept SA RL RF SD AC CORRECT SENSE:INT ALIGN:AUTO 10:08:12 AM Nov 21, 2018 TRACE 1: 3 4 5 0 TYPE: A W W W W W W W DET: A R N N N N N Center Freq 1.930000000 GHz PRN: Wide → IF Gain: Low Trig: Free Run Avg Type: RMS Avg Hold: 100/100 Mkr1 1.930 00 GHz -22.590 dBm 10 dB/div Ref 30.00 dBm Log 20.0 10.0 0.00 -10.0 -20.0 -30.0 -40.0 -50.0 -60.0 Center 1.930000 GHz #Res BW 51 kHz #VBW 150 kHz* Span 10.00 MHz Sweep 5.000 ms (1001 pts) MSG STATUS Frequency Auto Tune Center Freq 1.930000000 GHz Start Freq 1.925000000 GHz Stop Freq 1.935000000 GHz CF Step 1.000000 MHz Auto Freq Offset 0 Hz			
Modulation:		64QAM	
Item:		Right band edge	
Agilent Spectrum Analyzer - Swept SA RL RF SD AC CORRECT SENSE:INT ALIGN:AUTO 09:43:15 AM Nov 21, 2018 TRACE 1: 3 4 5 0 TYPE: A W W W W W W DET: A R N N N N N Center Freq 1.995000000 GHz PRN: Wide → IF Gain: Low Trig: Free Run Avg Type: RMS Avg Hold: 100/100 Mkr1 1.995 000 GHz -25.947 dBm 10 dB/div Ref 30.00 dBm Log 20.0 10.0 0.00 -10.0 -20.0 -30.0 -40.0 -50.0 -60.0 Center 1.995000 GHz #Res BW 30 kHz #VBW 91 kHz* Span 6.000 MHz Sweep 8.267 ms (1001 pts) MSG STATUS Frequency Auto Tune Center Freq 1.995000000 GHz Start Freq 1.992000000 GHz Stop Freq 1.998000000 GHz CF Step 600.000 kHz Auto Freq Offset 0 Hz			
Modulation:		256QAM	
Item:		Left band edge	
Agilent Spectrum Analyzer - Swept SA RL RF SD AC CORRECT SENSE:INT ALIGN:AUTO 10:13:32 AM Nov 21, 2018 TRACE 1: 3 4 5 0 TYPE: A W W W W W W DET: A R N N N N N Center Freq 1.930000000 GHz PRN: Wide → IF Gain: Low Trig: Free Run Avg Type: RMS Avg Hold: 100/100 Mkr1 1.930 00 GHz -22.364 dBm 10 dB/div Ref 30.00 dBm Log 20.0 10.0 0.00 -10.0 -20.0 -30.0 -40.0 -50.0 -60.0 Center 1.930000 GHz #Res BW 51 kHz #VBW 150 kHz* Span 10.00 MHz Sweep 5.000 ms (1001 pts) MSG STATUS Frequency Auto Tune Center Freq 1.930000000 GHz Start Freq 1.925000000 GHz Stop Freq 1.935000000 GHz CF Step 1.000000 MHz Auto Freq Offset 0 Hz			
Modulation:		256QAM	
Item:		Right band edge	
Agilent Spectrum Analyzer - Swept SA RL RF SD AC CORRECT SENSE:INT ALIGN:AUTO 09:48:36 AM Nov 21, 2018 TRACE 1: 3 4 5 0 TYPE: A W W W W W W DET: A R N N N N N Center Freq 1.995000000 GHz PRN: Wide → IF Gain: Low Trig: Free Run Avg Type: RMS Avg Hold: 100/100 Mkr1 1.995 000 GHz -25.869 dBm 10 dB/div Ref 30.00 dBm Log 20.0 10.0 0.00 -10.0 -20.0 -30.0 -40.0 -50.0 -60.0 Center 1.995000 GHz #Res BW 30 kHz #VBW 91 kHz* Span 6.000 MHz Sweep 8.267 ms (1001 pts) MSG STATUS Frequency Auto Tune Center Freq 1.995000000 GHz Start Freq 1.992000000 GHz Stop Freq 1.998000000 GHz CF Step 600.000 kHz Auto Freq Offset 0 Hz			

Port 3

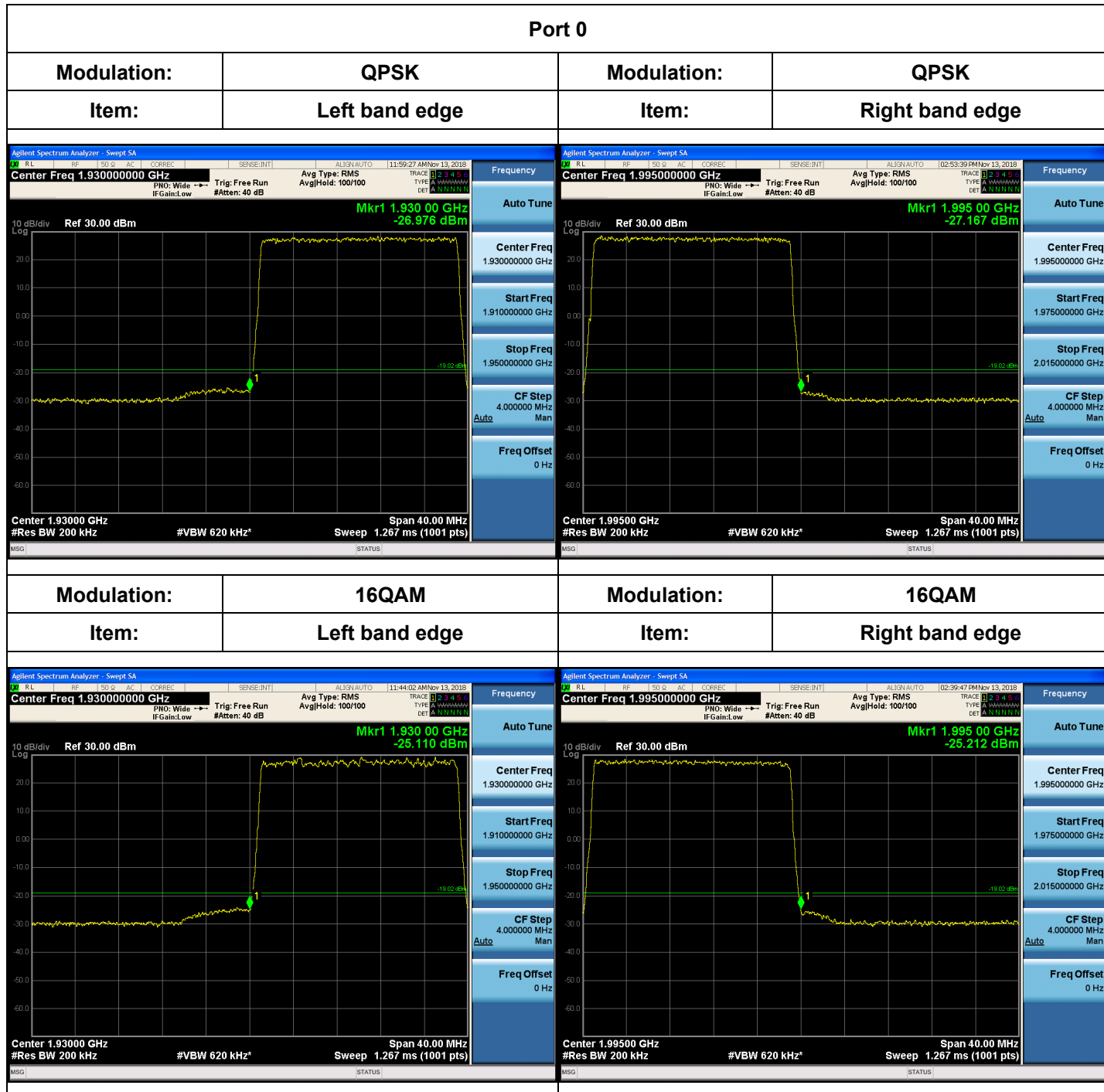
Modulation: QPSK		Modulation: QPSK	
Item: Left band edge		Item: Right band edge	
			
Modulation: 16QAM		Modulation: 16QAM	
Item: Left band edge		Item: Right band edge	
			

Port 3

Port 3			
Modulation:		64QAM	
Item:		Left band edge	
Agilent Spectrum Analyzer - Swept SA RL RF SD AC CORRECT SENSE:INT ALIGN:AUTO 10:36:36 AM Nov 21, 2018 TRACE B [3 4 5 0] TYPE A [W W W W W W] DET A [R N T N T N] Center Freq 1.930000000 GHz PRN: Wide → IF Gain: Low Trig: Free Run Avg Type: RMS Avg Hold: 100/100 Mkr1 1.930 00 GHz -23.711 dBm 10 dB/div Ref 30.00 dBm Log 20.0 10.0 0.00 -10.0 -20.0 -30.0 -40.0 -50.0 -60.0 Center 1.930000 GHz #Res BW 51 kHz #VBW 150 kHz* Span 10.00 MHz Sweep 5.000 ms (1001 pts) MSG STATUS Frequency Auto Tune Center Freq 1.930000000 GHz Start Freq 1.925000000 GHz Stop Freq 1.935000000 GHz CF Step 1.000000 MHz Auto Freq Offset 0 Hz			
Modulation:		64QAM	
Item:		Right band edge	
Agilent Spectrum Analyzer - Swept SA RL RF SD AC CORRECT SENSE:INT ALIGN:AUTO 11:53:53 AM Nov 21, 2018 TRACE B [3 4 5 0] TYPE A [W W W W W W] DET A [R N T N T N] Center Freq 1.995000000 GHz PRN: Wide → IF Gain: Low Trig: Free Run Avg Type: RMS Avg Hold: 100/100 Mkr1 1.995 000 GHz -25.786 dBm 10 dB/div Ref 30.00 dBm Log 20.0 10.0 0.00 -10.0 -20.0 -30.0 -40.0 -50.0 -60.0 Center 1.995000 GHz #Res BW 30 kHz #VBW 91 kHz* Span 6.000 MHz Sweep 8.267 ms (1001 pts) MSG STATUS Frequency Auto Tune Center Freq 1.995000000 GHz Start Freq 1.992000000 GHz Stop Freq 1.998000000 GHz CF Step 600.000 kHz Man Freq Offset 0 Hz			
Modulation:		256QAM	
Item:		Left band edge	
Agilent Spectrum Analyzer - Swept SA RL RF SD AC CORRECT SENSE:INT ALIGN:AUTO 10:41:57 AM Nov 21, 2018 TRACE B [3 4 5 0] TYPE A [W W W W W W] DET A [R N T N T N] Center Freq 1.930000000 GHz PRN: Wide → IF Gain: Low Trig: Free Run Avg Type: RMS Avg Hold: 100/100 Mkr1 1.930 00 GHz -23.413 dBm 10 dB/div Ref 30.00 dBm Log 20.0 10.0 0.00 -10.0 -20.0 -30.0 -40.0 -50.0 -60.0 Center 1.930000 GHz #Res BW 51 kHz #VBW 150 kHz* Span 10.00 MHz Sweep 5.000 ms (1001 pts) MSG STATUS Frequency Auto Tune Center Freq 1.930000000 GHz Start Freq 1.925000000 GHz Stop Freq 1.935000000 GHz CF Step 1.000000 MHz Auto Freq Offset 0 Hz			
Modulation:		256QAM	
Item:		Right band edge	
Agilent Spectrum Analyzer - Swept SA RL RF SD AC CORRECT SENSE:INT ALIGN:AUTO 11:59:17 AM Nov 21, 2018 TRACE B [3 4 5 0] TYPE A [W W W W W W] DET A [R N T N T N] Center Freq 1.995000000 GHz PRN: Wide → IF Gain: Low Trig: Free Run Avg Type: RMS Avg Hold: 100/100 Mkr1 1.995 000 GHz -26.288 dBm 10 dB/div Ref 30.00 dBm Log 20.0 10.0 0.00 -10.0 -20.0 -30.0 -40.0 -50.0 -60.0 Center 1.995000 GHz #Res BW 30 kHz #VBW 91 kHz* Span 6.000 MHz Sweep 8.267 ms (1001 pts) MSG STATUS Frequency Auto Tune Center Freq 1.995000000 GHz Start Freq 1.992000000 GHz Stop Freq 1.998000000 GHz CF Step 600.000 kHz Man Freq Offset 0 Hz			

Plots of Band edge - 20 MHz Bandwidth / 1 Carrier

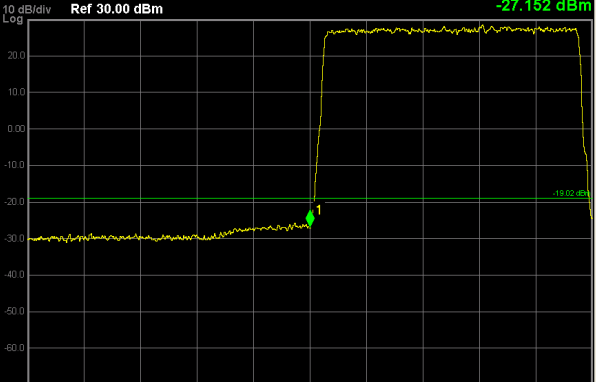
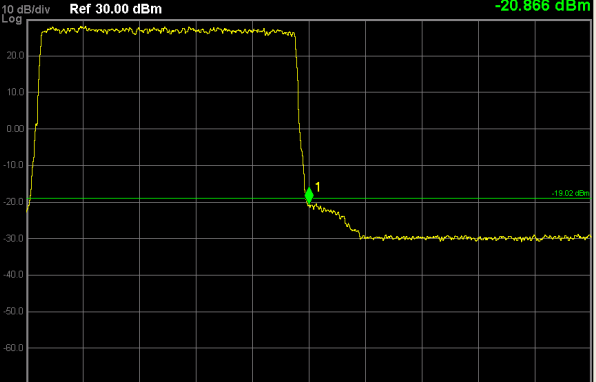
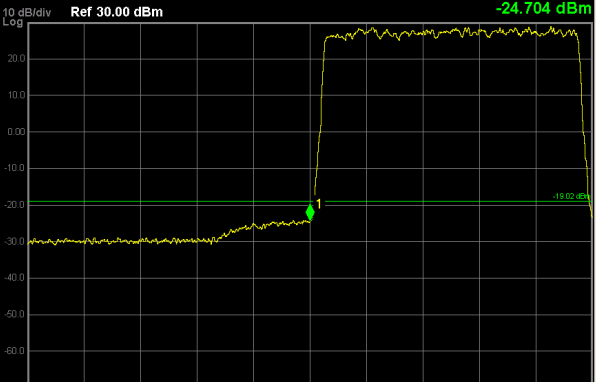
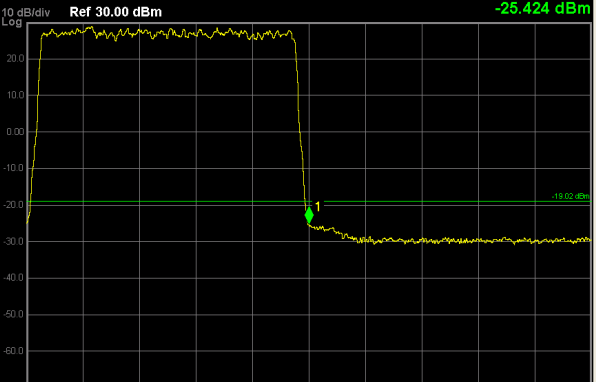
Port 0



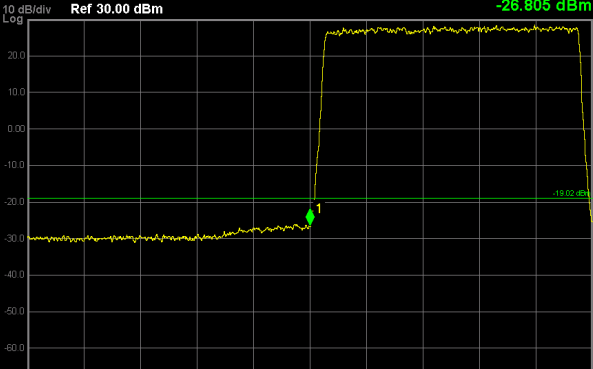
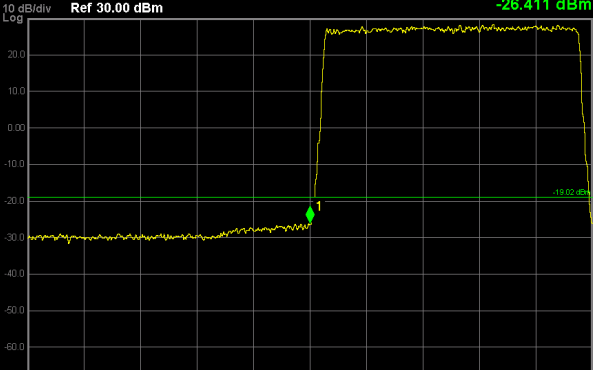
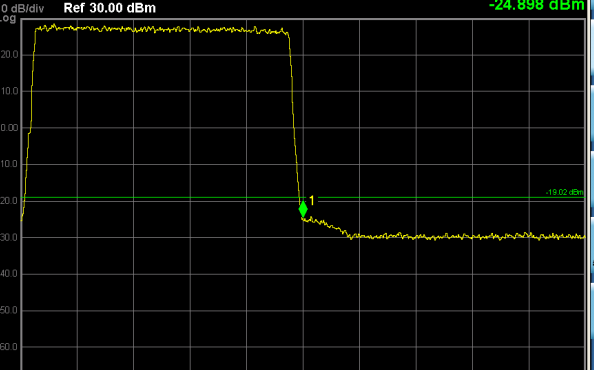
Port 0

Port 0			
Modulation:		64QAM	
Item:		Left band edge	
Agilent Spectrum Analyzer - Swept SA RL RF SD AC CORRECT SENSE:INT ALIGN:AUTO 11:48:24 AM Nov 13, 2018 Center Freq 1.930000000 GHz PRN: Wide IF Gain: Low Trig: Free Run #Atten: 40 dB Avg Type: RMS Avg Hold: 100/100 TRACE B [3 4 5 0] TYPE A [W W W W W W W W] DET A [R N T N T N T N] Frequency Auto Tune Center Freq 1.930000000 GHz Start Freq 1.910000000 GHz Stop Freq 1.950000000 GHz CF Step 4.000000 MHz Man Freq Offset 0 Hz 10 dB/div Ref 30.00 dBm Log Mkr1 1.930 00 GHz -25.851 dBm Center 1.93000 GHz #Res BW 200 kHz #VBW 620 kHz* Span 40.00 MHz Sweep 1.267 ms (1001 pts) MSG STATUS			
Modulation:		64QAM	
Item:		Right band edge	
Agilent Spectrum Analyzer - Swept SA RL RF SD AC CORRECT SENSE:INT ALIGN:AUTO 02:44:10 PM Nov 13, 2018 Center Freq 1.995000000 GHz PRN: Wide IF Gain: Low Trig: Free Run #Atten: 40 dB Avg Type: RMS Avg Hold: 100/100 TRACE B [3 4 5 0] TYPE A [W W W W W W W W] DET A [R N T N T N T N] Frequency Auto Tune Center Freq 1.995000000 GHz Start Freq 1.975000000 GHz Stop Freq 2.015000000 GHz CF Step 4.000000 MHz Man Freq Offset 0 Hz 10 dB/div Ref 30.00 dBm Log Mkr1 1.995 00 GHz -26.629 dBm Center 1.99500 GHz #Res BW 200 kHz #VBW 620 kHz* Span 40.00 MHz Sweep 1.267 ms (1001 pts) MSG STATUS			
Modulation:		256QAM	
Item:		Left band edge	
Agilent Spectrum Analyzer - Swept SA RL RF SD AC CORRECT SENSE:INT ALIGN:AUTO 11:52:46 AM Nov 13, 2018 Center Freq 1.930000000 GHz PRN: Wide IF Gain: Low Trig: Free Run #Atten: 40 dB Avg Type: RMS Avg Hold: 100/100 TRACE B [3 4 5 0] TYPE A [W W W W W W W W] DET A [R N T N T N T N] Frequency Auto Tune Center Freq 1.930000000 GHz Start Freq 1.910000000 GHz Stop Freq 1.950000000 GHz CF Step 4.000000 MHz Man Freq Offset 0 Hz 10 dB/div Ref 30.00 dBm Log Mkr1 1.930 00 GHz -28.179 dBm Center 1.93000 GHz #Res BW 200 kHz #VBW 620 kHz* Span 40.00 MHz Sweep 1.267 ms (1001 pts) MSG STATUS			
Modulation:		256QAM	
Item:		Right band edge	
Agilent Spectrum Analyzer - Swept SA RL RF SD AC CORRECT SENSE:INT ALIGN:AUTO 02:48:33 PM Nov 13, 2018 Center Freq 1.995000000 GHz PRN: Wide IF Gain: Low Trig: Free Run #Atten: 40 dB Avg Type: RMS Avg Hold: 100/100 TRACE B [3 4 5 0] TYPE A [W W W W W W W W] DET A [R N T N T N T N] Frequency Auto Tune Center Freq 1.995000000 GHz Start Freq 1.975000000 GHz Stop Freq 2.015000000 GHz CF Step 4.000000 MHz Man Freq Offset 0 Hz 10 dB/div Ref 30.00 dBm Log Mkr1 1.995 00 GHz -27.211 dBm Center 1.99500 GHz #Res BW 200 kHz #VBW 620 kHz* Span 40.00 MHz Sweep 1.267 ms (1001 pts) MSG STATUS			

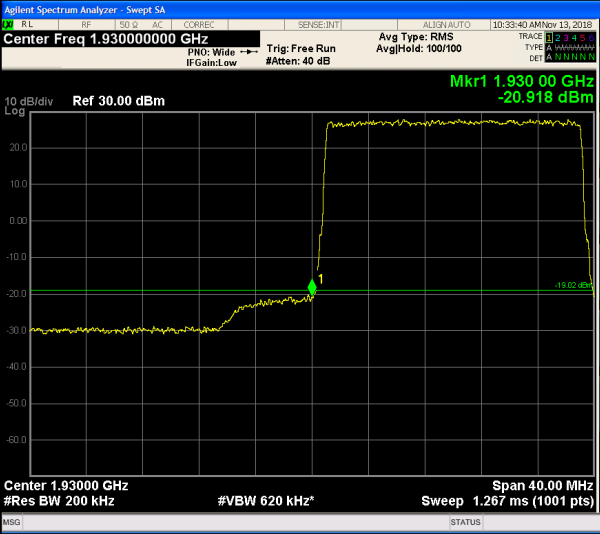
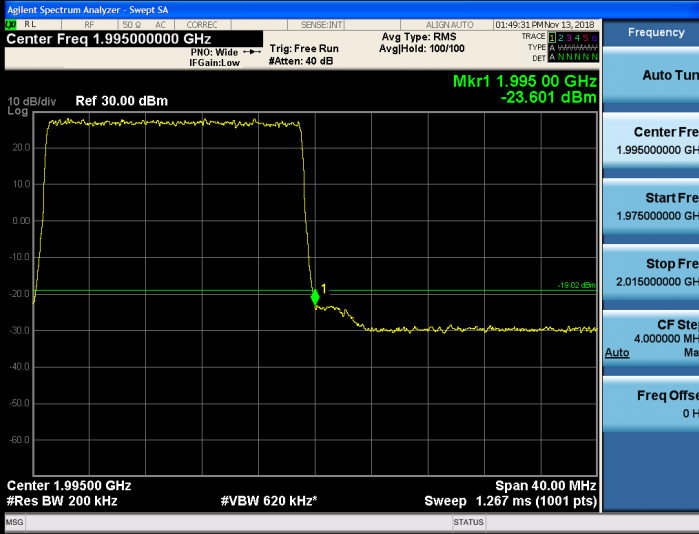
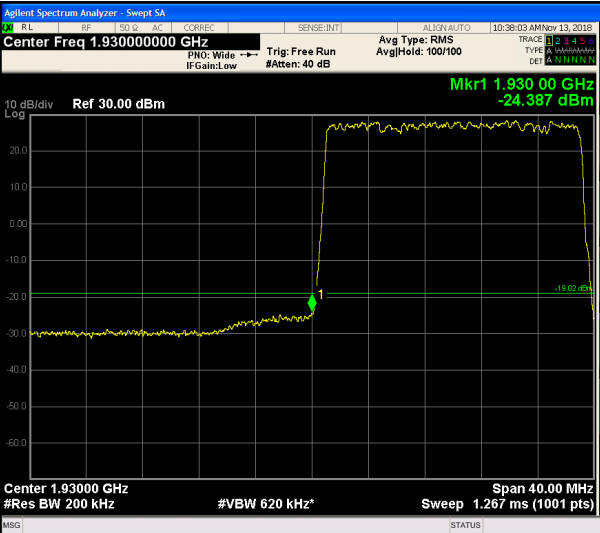
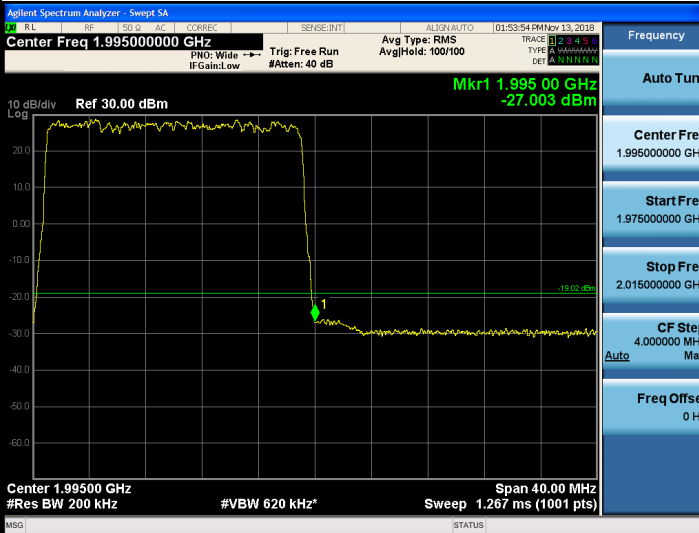
Port 1

Port 1			
Modulation:		QPSK	
Item:		Left band edge	
Agilent Spectrum Analyzer - Swept SA RL RF SD AC CORRECT SENSE:INT ALIGN:AUTO 10:53:19 AM Nov 13, 2018 Center Freq 1.930000000 GHz PNO: Wide IF Gain:Low Trig: Free Run #Atten: 40 dB Avg Type: RMS Avg Hold: 100/100 TRACE B [3 4 5 0] TYPE A [W W W W W W] DET A [R N T N T N] 10 dB/div Ref 30.00 dBm  Center Freq 1.93000 GHz #Res BW 200 kHz #VBW 620 kHz* Sweep 1.267 ms (1001 pts) Frequency Auto Tune Center Freq 1.930000000 GHz Start Freq 1.910000000 GHz Stop Freq 1.950000000 GHz CF Step 4.000000 MHz Freq Offset 0 Hz			
Modulation:		QPSK	
Item:		Right band edge	
Agilent Spectrum Analyzer - Swept SA RL RF SD AC CORRECT SENSE:INT ALIGN:AUTO 02:08:55 PM Nov 13, 2018 Center Freq 1.995000000 GHz PNO: Wide IF Gain:Low Trig: Free Run #Atten: 40 dB Avg Type: RMS Avg Hold: 100/100 TRACE B [3 4 5 0] TYPE A [W W W W W W] DET A [R N T N T N] 10 dB/div Ref 30.00 dBm  Center Freq 1.99500 GHz #Res BW 200 kHz #VBW 620 kHz* Sweep 1.267 ms (1001 pts) Frequency Auto Tune Center Freq 1.995000000 GHz Start Freq 1.975000000 GHz Stop Freq 2.015000000 GHz CF Step 4.000000 MHz Freq Offset 0 Hz			
Modulation:		16QAM	
Item:		Left band edge	
Agilent Spectrum Analyzer - Swept SA RL RF SD AC CORRECT SENSE:INT ALIGN:AUTO 10:57:42 AM Nov 13, 2018 Center Freq 1.930000000 GHz PNO: Wide IF Gain:Low Trig: Free Run #Atten: 40 dB Avg Type: RMS Avg Hold: 100/100 TRACE B [3 4 5 0] TYPE A [W W W W W W] DET A [R N T N T N] 10 dB/div Ref 30.00 dBm  Center Freq 1.93000 GHz #Res BW 200 kHz #VBW 620 kHz* Sweep 1.267 ms (1001 pts) Frequency Auto Tune Center Freq 1.930000000 GHz Start Freq 1.910000000 GHz Stop Freq 1.950000000 GHz CF Step 4.000000 MHz Freq Offset 0 Hz			
Modulation:		16QAM	
Item:		Right band edge	
Agilent Spectrum Analyzer - Swept SA RL RF SD AC CORRECT SENSE:INT ALIGN:AUTO 02:13:23 PM Nov 13, 2018 Center Freq 1.995000000 GHz PNO: Wide IF Gain:Low Trig: Free Run #Atten: 40 dB Avg Type: RMS Avg Hold: 100/100 TRACE B [3 4 5 0] TYPE A [W W W W W W] DET A [R N T N T N] 10 dB/div Ref 30.00 dBm  Center Freq 1.99500 GHz #Res BW 200 kHz #VBW 620 kHz* Sweep 1.267 ms (1001 pts) Frequency Auto Tune Center Freq 1.995000000 GHz Start Freq 1.975000000 GHz Stop Freq 2.015000000 GHz CF Step 4.000000 MHz Freq Offset 0 Hz			

Port 1

Port 1			
Modulation: 64QAM		Modulation: 64QAM	
Item: Left band edge		Item: Right band edge	
Agilent Spectrum Analyzer - Swept SA RL RF SD AC CORRECT SENSE:INT ALIGN:AUTO 11:02:03 AM Nov 13, 2019 Center Freq 1.930000000 GHz PNO: Wide IF Gain: Low Trig: Free Run #Atten: 40 dB Avg Type: RMS AvgHld: 100/100 TRACE 1: 2 3 4 5 TYPE A WWWWMM DEF 1.930000000 10 dB/div Log Ref 30.00 dBm Mkr1 1.930 00 GHz -26.805 dBm  Center 1.93000 GHz #Res BW 200 kHz #VBW 620 kHz* Sweep 1.267 ms (1001 pts) MSG STATUS Frequency Auto Tune Center Freq 1.930000000 GHz Start Freq 1.910000000 GHz Stop Freq 1.950000000 GHz CF Step 4.000000 MHz Auto Freq Offset 0 Hz		Agilent Spectrum Analyzer - Swept SA RL RF SD AC CORRECT SENSE:INT ALIGN:AUTO 02:17:46 PM Nov 13, 2019 Center Freq 1.995000000 GHz PNO: Wide IF Gain: Low Trig: Free Run #Atten: 40 dB Avg Type: RMS AvgHld: 100/100 TRACE 1: 2 3 4 5 TYPE A WWWWMM DEF 1.995000000 10 dB/div Log Ref 30.00 dBm Mkr1 1.995 00 GHz -27.222 dBm  Center 1.99500 GHz #Res BW 200 kHz #VBW 620 kHz* Sweep 1.267 ms (1001 pts) MSG STATUS Frequency Auto Tune Center Freq 1.995000000 GHz Start Freq 1.975000000 GHz Stop Freq 2.015000000 GHz CF Step 4.000000 MHz Auto Freq Offset 0 Hz	
Modulation: 256QAM		Modulation: 256QAM	
Item: Left band edge		Item: Right band edge	
Agilent Spectrum Analyzer - Swept SA RL RF SD AC CORRECT SENSE:INT ALIGN:AUTO 11:06:25 AM Nov 13, 2019 Center Freq 1.930000000 GHz PNO: Wide IF Gain: Low Trig: Free Run #Atten: 40 dB Avg Type: RMS AvgHld: 100/100 TRACE 1: 2 3 4 5 TYPE A WWWWMM DEF 1.930000000 10 dB/div Log Ref 30.00 dBm Mkr1 1.930 00 GHz -26.411 dBm  Center 1.93000 GHz #Res BW 200 kHz #VBW 620 kHz* Sweep 1.267 ms (1001 pts) MSG STATUS Frequency Auto Tune Center Freq 1.930000000 GHz Start Freq 1.910000000 GHz Stop Freq 1.950000000 GHz CF Step 4.000000 MHz Auto Freq Offset 0 Hz		Agilent Spectrum Analyzer - Swept SA RL RF SD AC CORRECT SENSE:INT ALIGN:AUTO 02:22:07 PM Nov 13, 2019 Center Freq 1.995000000 GHz PNO: Wide IF Gain: Low Trig: Free Run #Atten: 40 dB Avg Type: RMS AvgHld: 100/100 TRACE 1: 2 3 4 5 TYPE A WWWWMM DEF 1.995000000 10 dB/div Log Ref 30.00 dBm Mkr1 1.995 00 GHz -24.898 dBm  Center 1.99500 GHz #Res BW 200 kHz #VBW 620 kHz* Sweep 1.267 ms (1001 pts) MSG STATUS Frequency Auto Tune Center Freq 1.995000000 GHz Start Freq 1.975000000 GHz Stop Freq 2.015000000 GHz CF Step 4.000000 MHz Auto Freq Offset 0 Hz	

Port 2

Modulation: QPSK		Modulation: QPSK	
Item: Left band edge		Item: Right band edge	
			
Modulation: 16QAM		Modulation: 16QAM	
Item: Left band edge		Item: Right band edge	
			

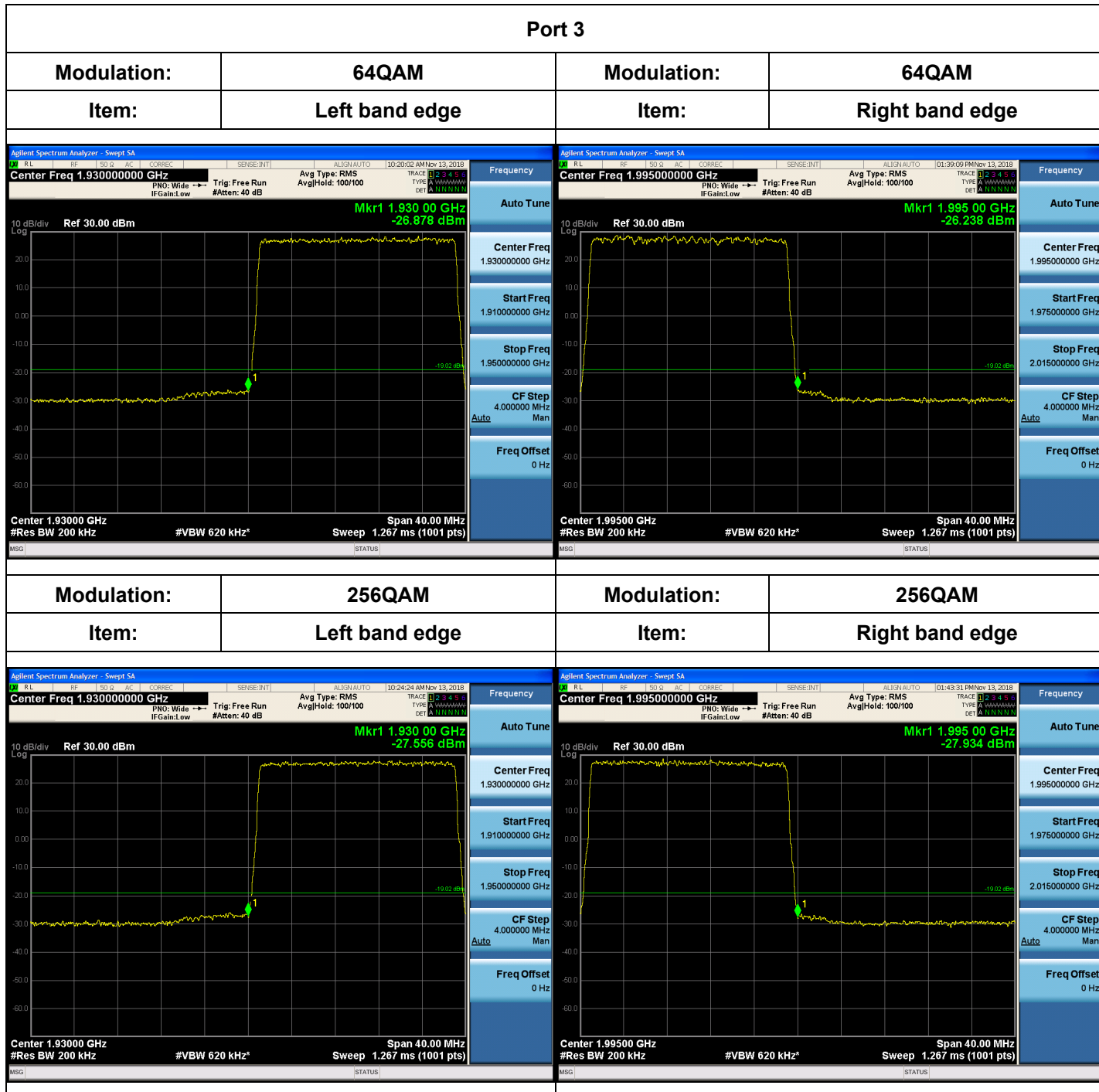
Port 2

Port 2			
Modulation:		64QAM	
Item:		Left band edge	
Agilent Spectrum Analyzer - Swept SA RL RF SD AC CORRECT SENSE:INT ALIGN:AUTO 10:42:25 AM Nov 13, 2018 Center Freq 1.930000000 GHz PRN: Wide IF Gain: Low Trig: Free Run Avg Type: RMS Avg Hold: 100/100 TRACE 1 2 3 4 5 6 TYPE A WAV WAV WAV WAV WAV WAV DET A RES 100 Frequency Auto Tune Center Freq 1.930000000 GHz Start Freq 1.910000000 GHz Stop Freq 1.950000000 GHz CF Step 4.000000 MHz Man Freq Offset 0 Hz 10 dB/div Ref 30.00 dBm Log Mkr1 1.930 00 GHz -25.928 dBm 20.0 10.0 0.00 -10.0 -20.0 -30.0 -40.0 -50.0 -60.0 Center 1.93000 GHz #Res BW 200 kHz #VBW 620 kHz* Span 40.00 MHz Sweep 1.267 ms (1001 pts) MSG STATUS Agilent Spectrum Analyzer - Swept SA RL RF SD AC CORRECT SENSE:INT ALIGN:AUTO 01:58:16 PM Nov 13, 2018 Center Freq 1.995000000 GHz PRN: Wide IF Gain: Low Trig: Free Run Avg Type: RMS Avg Hold: 100/100 TRACE 1 2 3 4 5 6 TYPE A WAV WAV WAV WAV WAV WAV DET A RES 100 Frequency Auto Tune Center Freq 1.995000000 GHz Start Freq 1.975000000 GHz Stop Freq 2.015000000 GHz CF Step 4.000000 MHz Man Freq Offset 0 Hz 10 dB/div Ref 30.00 dBm Log Mkr1 1.995 00 GHz -25.779 dBm 20.0 10.0 0.00 -10.0 -20.0 -30.0 -40.0 -50.0 -60.0 Center 1.99500 GHz #Res BW 200 kHz #VBW 620 kHz* Span 40.00 MHz Sweep 1.267 ms (1001 pts) MSG STATUS			
Modulation:		256QAM	
Item:		Left band edge	
Agilent Spectrum Analyzer - Swept SA RL RF SD AC CORRECT SENSE:INT ALIGN:AUTO 10:46:48 AM Nov 13, 2018 Center Freq 1.930000000 GHz PRN: Wide IF Gain: Low Trig: Free Run Avg Type: RMS Avg Hold: 100/100 TRACE 1 2 3 4 5 6 TYPE A WAV WAV WAV WAV WAV WAV DET A RES 100 Frequency Auto Tune Center Freq 1.930000000 GHz Start Freq 1.910000000 GHz Stop Freq 1.950000000 GHz CF Step 4.000000 MHz Man Freq Offset 0 Hz 10 dB/div Ref 30.00 dBm Log Mkr1 1.930 00 GHz -27.164 dBm 20.0 10.0 0.00 -10.0 -20.0 -30.0 -40.0 -50.0 -60.0 Center 1.93000 GHz #Res BW 200 kHz #VBW 620 kHz* Span 40.00 MHz Sweep 1.267 ms (1001 pts) MSG STATUS Agilent Spectrum Analyzer - Swept SA RL RF SD AC CORRECT SENSE:INT ALIGN:AUTO 02:02:39 PM Nov 13, 2018 Center Freq 1.995000000 GHz PRN: Wide IF Gain: Low Trig: Free Run Avg Type: RMS Avg Hold: 100/100 TRACE 1 2 3 4 5 6 TYPE A WAV WAV WAV WAV WAV WAV DET A RES 100 Frequency Auto Tune Center Freq 1.995000000 GHz Start Freq 1.975000000 GHz Stop Freq 2.015000000 GHz CF Step 4.000000 MHz Man Freq Offset 0 Hz 10 dB/div Ref 30.00 dBm Log Mkr1 1.995 00 GHz -27.281 dBm 20.0 10.0 0.00 -10.0 -20.0 -30.0 -40.0 -50.0 -60.0 Center 1.99500 GHz #Res BW 200 kHz #VBW 620 kHz* Span 40.00 MHz Sweep 1.267 ms (1001 pts) MSG STATUS			

Port 3

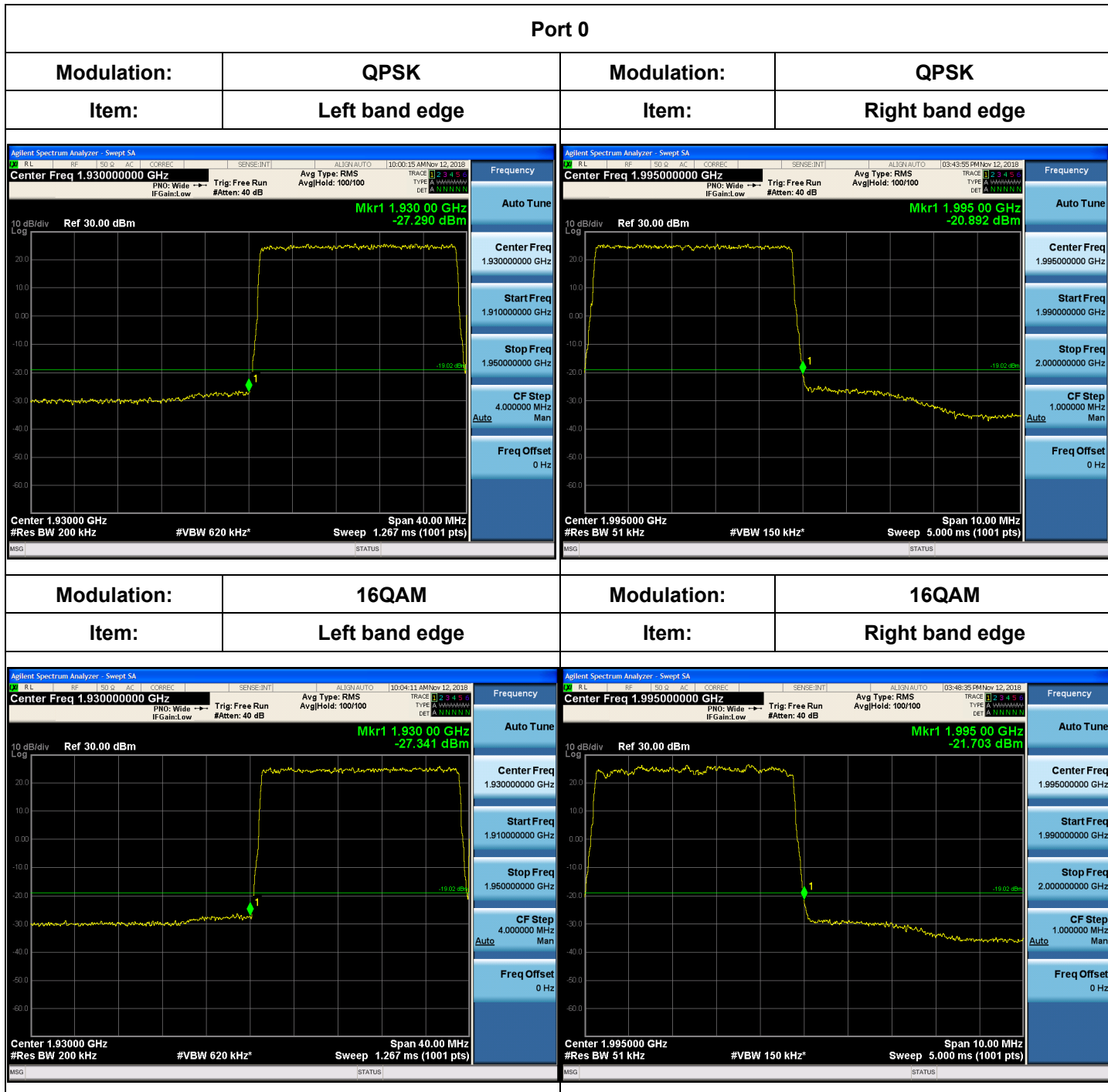
Modulation: QPSK		Modulation: QPSK	
Item: Left band edge		Item: Right band edge	
Agilent Spectrum Analyzer - Swept SA Center Freq 1.930000000 GHz PNO: Wide IF Gain: Low Trig: Free Run #Atten: 40 dB Avg Type: RMS AvgHld: 100/100 10 dB/div Ref 30.00 dBm Mkr1 1.930 00 GHz -26.608 dBm Center 1.93000 GHz #Res BW 200 kHz #VBW 620 kHz* Sweep 1.267 ms (1001 pts) MSG STATUS		Agilent Spectrum Analyzer - Swept SA Center Freq 1.995000000 GHz PNO: Wide IF Gain: Low Trig: Free Run #Atten: 40 dB Avg Type: RMS AvgHld: 100/100 10 dB/div Ref 30.00 dBm Mkr1 1.995 00 GHz -23.023 dBm Center 1.99500 GHz #Res BW 200 kHz #VBW 620 kHz* Sweep 1.267 ms (1001 pts) MSG STATUS	
Modulation: 16QAM		Modulation: 16QAM	
Item: Left band edge		Item: Right band edge	
Agilent Spectrum Analyzer - Swept SA Center Freq 1.930000000 GHz PNO: Wide IF Gain: Low Trig: Free Run #Atten: 40 dB Avg Type: RMS AvgHld: 100/100 10 dB/div Ref 30.00 dBm Mkr1 1.930 00 GHz -25.908 dBm Center 1.93000 GHz #Res BW 200 kHz #VBW 620 kHz* Sweep 1.267 ms (1001 pts) MSG STATUS		Agilent Spectrum Analyzer - Swept SA Center Freq 1.995000000 GHz PNO: Wide IF Gain: Low Trig: Free Run #Atten: 40 dB Avg Type: RMS AvgHld: 100/100 10 dB/div Ref 30.00 dBm Mkr1 1.995 00 GHz -26.462 dBm Center 1.99500 GHz #Res BW 200 kHz #VBW 620 kHz* Sweep 1.267 ms (1001 pts) MSG STATUS	

Port 3



Plots of Band edge - 20 MHz Bandwidth + 5 MHz Bandwidth / 2 Carriers

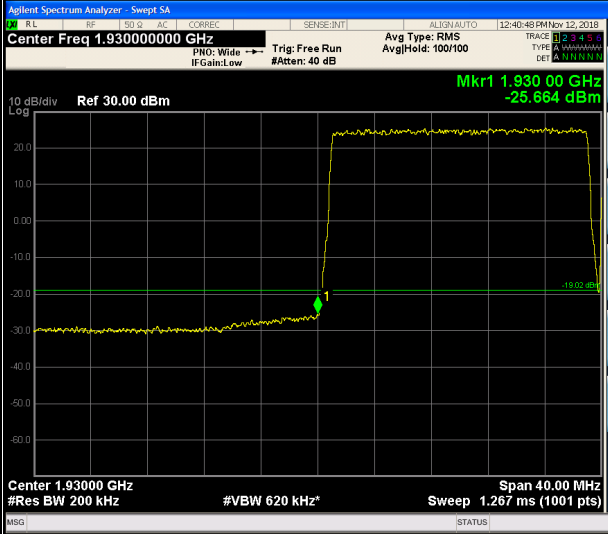
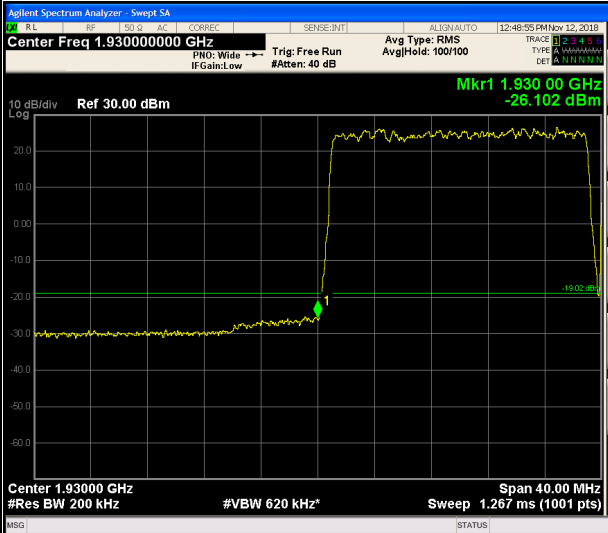
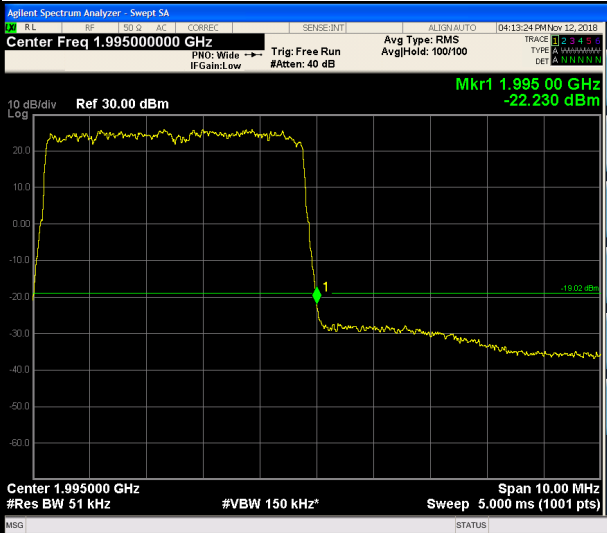
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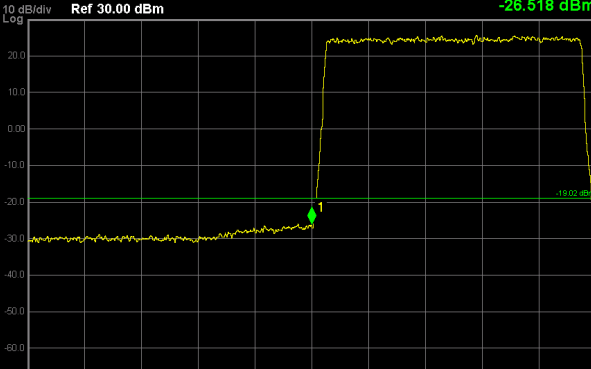
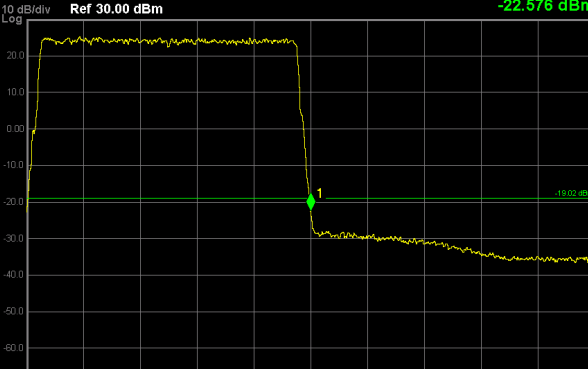
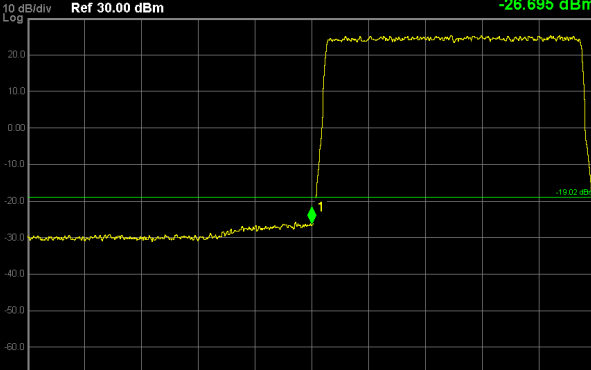
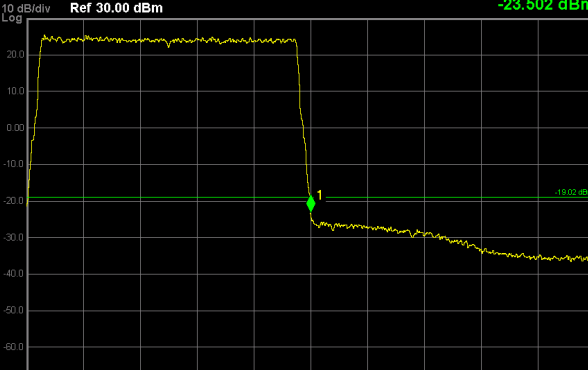
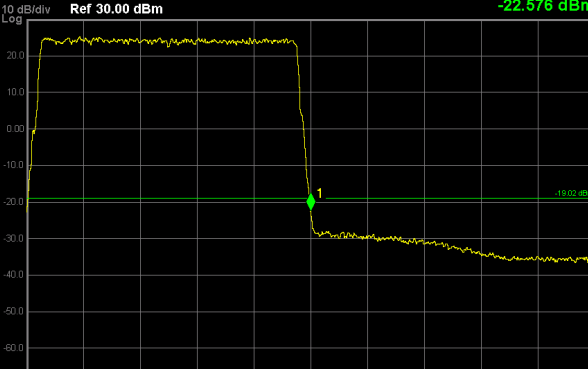
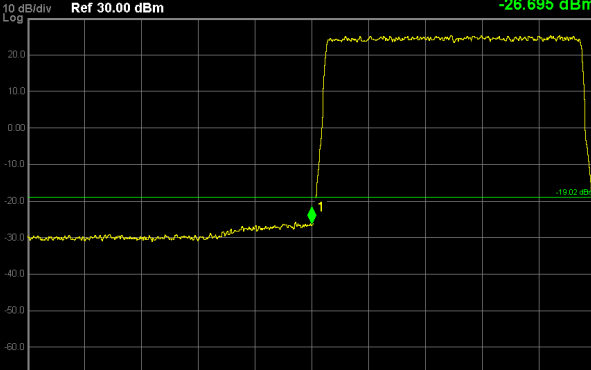
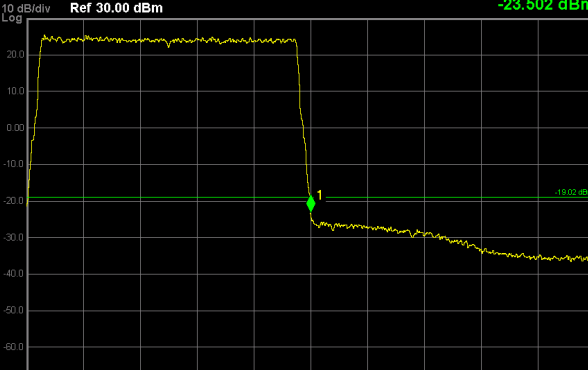
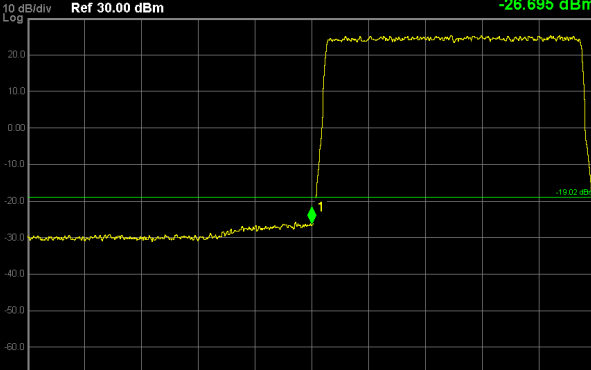
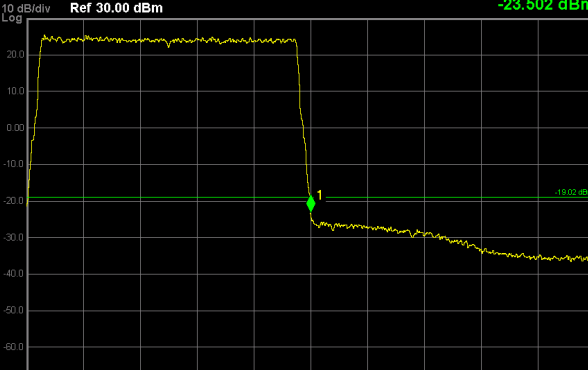
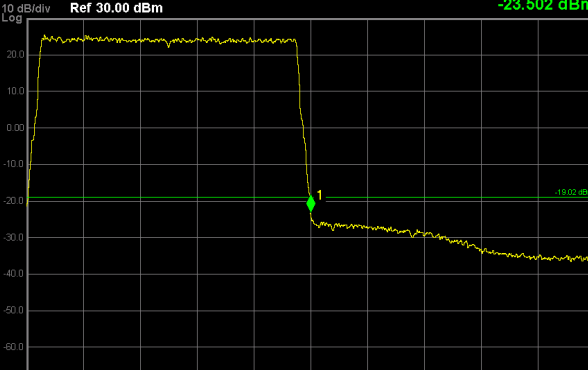
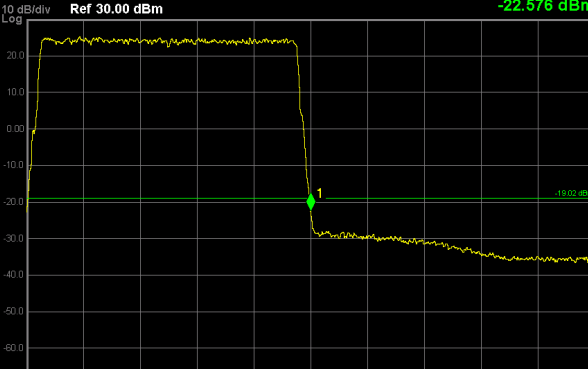
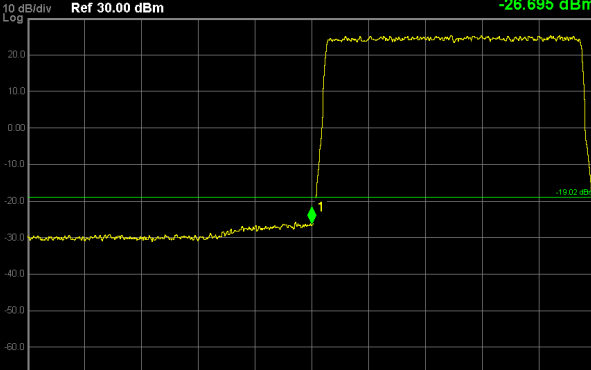
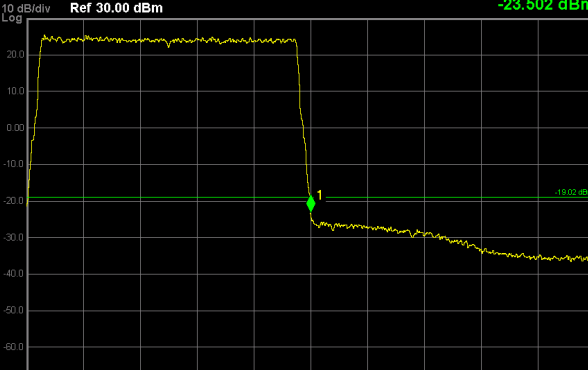
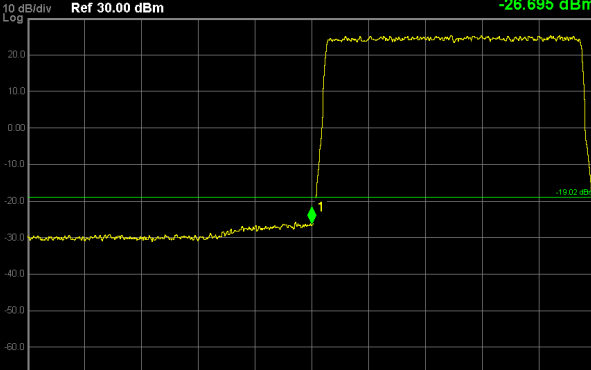
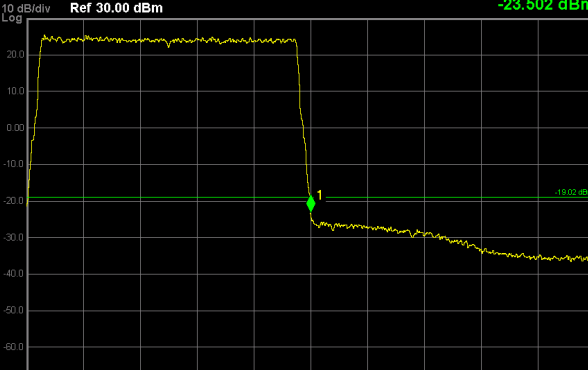
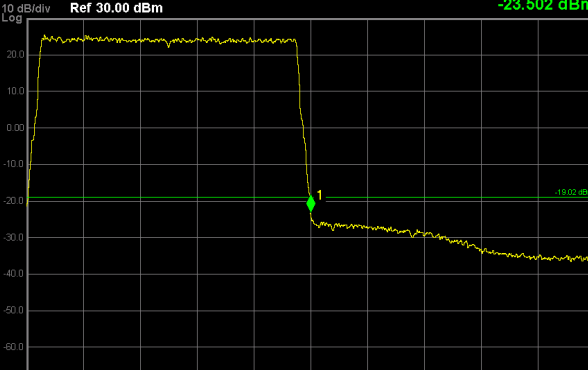
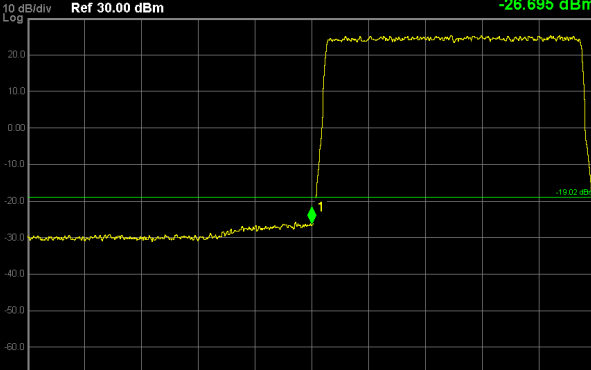
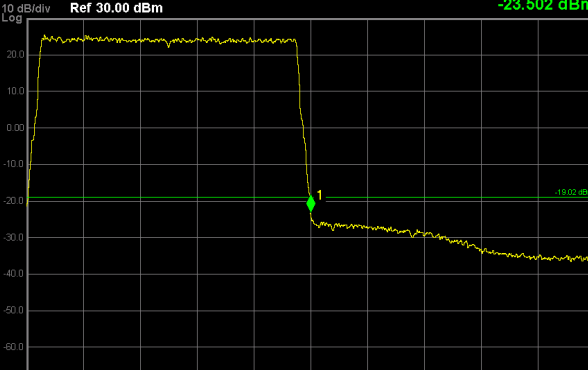
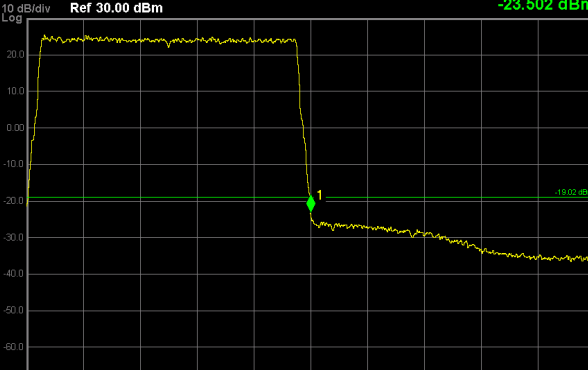
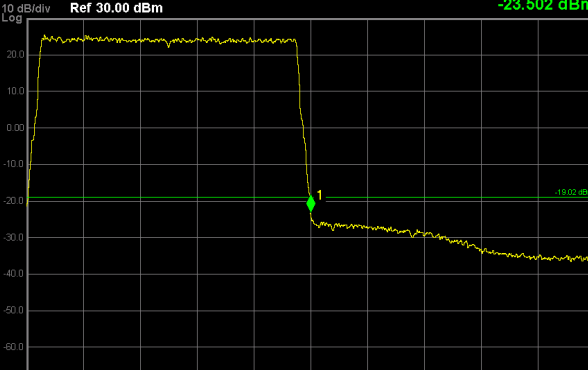
Port 0

Port 0			
Modulation:		64QAM	
Item:		Left band edge	
Agilent Spectrum Analyzer - Swept SA RL RF 50 Hz AC CORRECT SENSE:INT ALIGN:AUTO 10:08:07 AM Nov 12, 2018 Center Freq 1.930000000 GHz PRN: Wide IF Gain: Low Trig: Free Run Avg Type: RMS Avg Hold: 100/100 TRACE 1 TYPE A WAVES DET A RES N N N N N N Frequency Auto Tune Center Freq 1.930000000 GHz Start Freq 1.910000000 GHz Stop Freq 1.960000000 GHz CF Step 4.000000 MHz Man Auto Freq Offset 0 Hz 10 dB/div Ref 30.00 dBm Log Mkr1 1.930 00 GHz -27.398 dBm Center 1.930000 GHz #Res BW 200 kHz #VBW 620 kHz* Span 40.00 MHz Sweep 1.267 ms (1001 pts) MSG STATUS			
Modulation:		64QAM	
Item:		Right band edge	
Agilent Spectrum Analyzer - Swept SA RL RF 50 Hz AC CORRECT SENSE:INT ALIGN:AUTO 03:53:14 PM Nov 12, 2018 Center Freq 1.995000000 GHz PRN: Wide IF Gain: Low Trig: Free Run Avg Type: RMS Avg Hold: 100/100 TRACE 1 TYPE A WAVES DET A RES N N N N N N Frequency Auto Tune Center Freq 1.995000000 GHz Start Freq 1.990000000 GHz Stop Freq 2.000000000 GHz CF Step 1.000000 MHz Man Auto Freq Offset 0 Hz 10 dB/div Ref 30.00 dBm Log Mkr1 1.995 00 GHz -22.875 dBm Center 1.995000 GHz #Res BW 51 kHz #VBW 150 kHz* Span 10.00 MHz Sweep 5.000 ms (1001 pts) MSG STATUS			
Modulation:		256QAM	
Item:		Left band edge	
Agilent Spectrum Analyzer - Swept SA RL RF 50 Hz AC CORRECT SENSE:INT ALIGN:AUTO 10:12:03 AM Nov 12, 2018 Center Freq 1.930000000 GHz PRN: Wide IF Gain: Low Trig: Free Run Avg Type: RMS Avg Hold: 100/100 TRACE 1 TYPE A WAVES DET A RES N N N N N N Frequency Auto Tune Center Freq 1.930000000 GHz Start Freq 1.910000000 GHz Stop Freq 1.960000000 GHz CF Step 4.000000 MHz Man Auto Freq Offset 0 Hz 10 dB/div Ref 30.00 dBm Log Mkr1 1.930 00 GHz -27.767 dBm Center 1.930000 GHz #Res BW 200 kHz #VBW 620 kHz* Span 40.00 MHz Sweep 1.267 ms (1001 pts) MSG STATUS			
Modulation:		256QAM	
Item:		Right band edge	
Agilent Spectrum Analyzer - Swept SA RL RF 50 Hz AC CORRECT SENSE:INT ALIGN:AUTO 03:57:54 PM Nov 12, 2018 Center Freq 1.995000000 GHz PRN: Wide IF Gain: Low Trig: Free Run Avg Type: RMS Avg Hold: 100/100 TRACE 1 TYPE A WAVES DET A RES N N N N N N Frequency Auto Tune Center Freq 1.995000000 GHz Start Freq 1.990000000 GHz Stop Freq 2.000000000 GHz CF Step 1.000000 MHz Man Auto Freq Offset 0 Hz 10 dB/div Ref 30.00 dBm Log Mkr1 1.995 00 GHz -21.297 dBm Center 1.995000 GHz #Res BW 51 kHz #VBW 150 kHz* Span 10.00 MHz Sweep 5.000 ms (1001 pts) MSG STATUS			

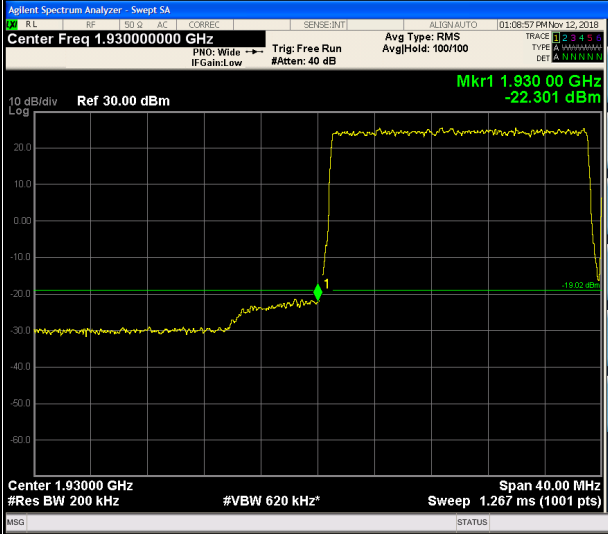
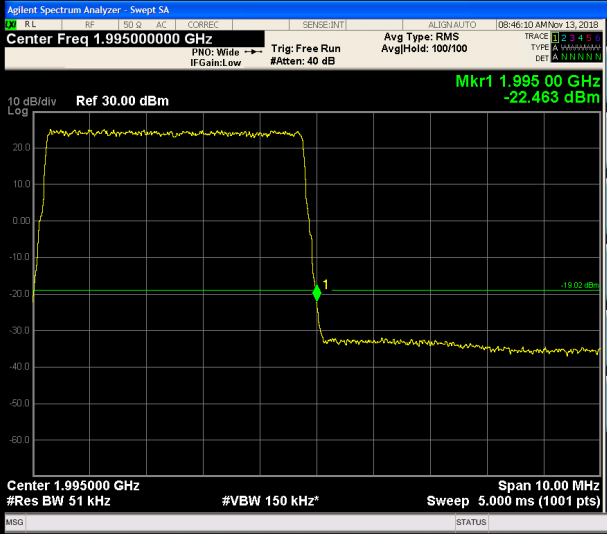
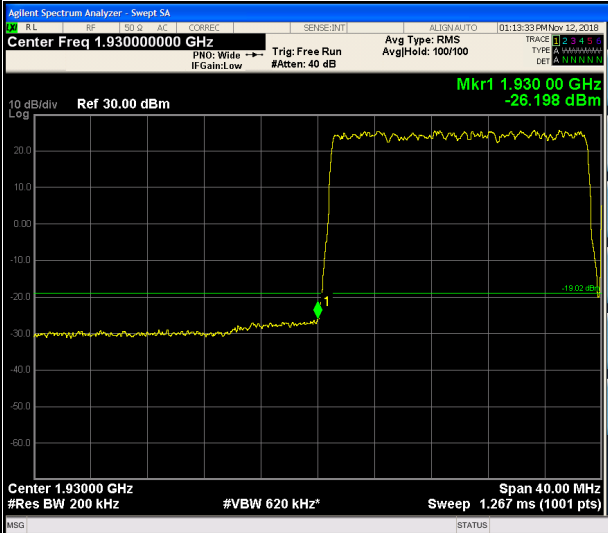
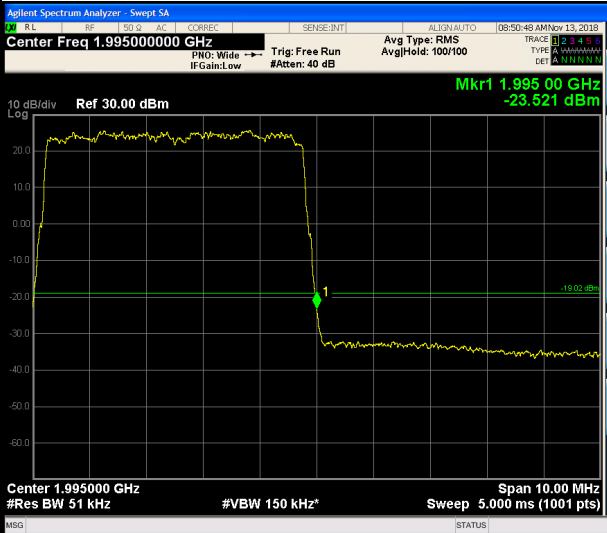
Port 1

Modulation: QPSK		Modulation: QPSK	
Item: Left band edge		Item: Right band edge	
 Agilent Spectrum Analyzer - Swept SA Center Freq 1.930000000 GHz #Res BW 200 kHz #VBW 620 kHz* Sweep 1.267 ms (1001 pts) Mkr1 1.930 00 GHz -25.664 dBm		 Agilent Spectrum Analyzer - Swept SA Center Freq 1.995000000 GHz #Res BW 51 kHz #VBW 150 kHz* Sweep 5.000 ms (1001 pts) Mkr1 1.995 00 GHz -19.821 dBm	
Modulation: 16QAM		Modulation: 16QAM	
Item: Left band edge		Item: Right band edge	
 Agilent Spectrum Analyzer - Swept SA Center Freq 1.930000000 GHz #Res BW 200 kHz #VBW 620 kHz* Sweep 1.267 ms (1001 pts) Mkr1 1.930 00 GHz -26.102 dBm		 Agilent Spectrum Analyzer - Swept SA Center Freq 1.995000000 GHz #Res BW 51 kHz #VBW 150 kHz* Sweep 5.000 ms (1001 pts) Mkr1 1.995 00 GHz -22.230 dBm	

Port 1

Port 1																																							
Modulation:		64QAM																																					
Item:		Left band edge																																					
Agilent Spectrum Analyzer - Swept SA RL RF 50 Hz AC CORRECT SENSE:INT ALIGN:AUTO 12:57:32 PM Nov 12, 2018 Center Freq 1.930000000 GHz PRN: Wide IF Gain: Low Trig: Free Run Avg Type: RMS Avg Hold: 100/100 TYPE A RES 4.5 DET A RES 100 10 dB/div Ref 30.00 dBm Log Mkr1 1.930 00 GHz -26.518 dBm  Center 1.93000 GHz #Res BW 200 kHz #VBW 620 kHz* Span 40.00 MHz Sweep 1.267 ms (1001 pts) MSG STATUS Frequency Auto Tune Center Freq 1.930000000 GHz Start Freq 1.910000000 GHz Stop Freq 1.960000000 GHz CF Step 4.000000 MHz Auto Freq Offset 0 Hz <tr><td colspan="2">Modulation:</td><td colspan="2">64QAM</td></tr> <tr><td colspan="2">Item:</td><td colspan="2">Right band edge</td></tr> <tr><td colspan="4"> Agilent Spectrum Analyzer - Swept SA RL RF 50 Hz AC CORRECT SENSE:INT ALIGN:AUTO 04:18:04 PM Nov 12, 2018 Center Freq 1.995000000 GHz PRN: Wide IF Gain: Low Trig: Free Run Avg Type: RMS Avg Hold: 100/100 TYPE A RES 4.5 DET A RES 100 10 dB/div Ref 30.00 dBm Log Mkr1 1.995 00 GHz -22.576 dBm  Center 1.995000 GHz #Res BW 51 kHz #VBW 150 kHz* Span 10.00 MHz Sweep 5.000 ms (1001 pts) MSG STATUS Frequency Auto Tune Center Freq 1.995000000 GHz Start Freq 1.990000000 GHz Stop Freq 2.000000000 GHz CF Step 1.000000 MHz Auto Freq Offset 0 Hz <tr><td colspan="2">Modulation:</td><td colspan="2">256QAM</td></tr><tr><td colspan="2">Item:</td><td colspan="2">Left band edge</td></tr><tr><td colspan="4"> Agilent Spectrum Analyzer - Swept SA RL RF 50 Hz AC CORRECT SENSE:INT ALIGN:AUTO 01:02:07 PM Nov 12, 2018 Center Freq 1.930000000 GHz PRN: Wide IF Gain: Low Trig: Free Run Avg Type: RMS Avg Hold: 100/100 TYPE A RES 4.5 DET A RES 100 10 dB/div Ref 30.00 dBm Log Mkr1 1.930 00 GHz -26.695 dBm  Center 1.93000 GHz #Res BW 200 kHz #VBW 620 kHz* Span 40.00 MHz Sweep 1.267 ms (1001 pts) MSG STATUS Frequency Auto Tune Center Freq 1.930000000 GHz Start Freq 1.910000000 GHz Stop Freq 1.960000000 GHz CF Step 4.000000 MHz Auto Freq Offset 0 Hz <tr><td colspan="2">Modulation:</td><td colspan="2">256QAM</td></tr><tr><td colspan="2">Item:</td><td colspan="2">Right band edge</td></tr><tr><td colspan="4"> Agilent Spectrum Analyzer - Swept SA RL RF 50 Hz AC CORRECT SENSE:INT ALIGN:AUTO 04:22:42 PM Nov 12, 2018 Center Freq 1.995000000 GHz PRN: Wide IF Gain: Low Trig: Free Run Avg Type: RMS Avg Hold: 100/100 TYPE A RES 4.5 DET A RES 100 10 dB/div Ref 30.00 dBm Log Mkr1 1.995 00 GHz -23.502 dBm  Center 1.995000 GHz #Res BW 51 kHz #VBW 150 kHz* Span 10.00 MHz Sweep 5.000 ms (1001 pts) MSG STATUS Frequency Auto Tune Center Freq 1.995000000 GHz Start Freq 1.990000000 GHz Stop Freq 2.000000000 GHz CF Step 1.000000 MHz Auto Freq Offset 0 Hz </td></tr></td></tr></td></tr>				Modulation:		64QAM		Item:		Right band edge		Agilent Spectrum Analyzer - Swept SA RL RF 50 Hz AC CORRECT SENSE:INT ALIGN:AUTO 04:18:04 PM Nov 12, 2018 Center Freq 1.995000000 GHz PRN: Wide IF Gain: Low Trig: Free Run Avg Type: RMS Avg Hold: 100/100 TYPE A RES 4.5 DET A RES 100 10 dB/div Ref 30.00 dBm Log Mkr1 1.995 00 GHz -22.576 dBm  Center 1.995000 GHz #Res BW 51 kHz #VBW 150 kHz* Span 10.00 MHz Sweep 5.000 ms (1001 pts) MSG STATUS Frequency Auto Tune Center Freq 1.995000000 GHz Start Freq 1.990000000 GHz Stop Freq 2.000000000 GHz CF Step 1.000000 MHz Auto Freq Offset 0 Hz <tr><td colspan="2">Modulation:</td><td colspan="2">256QAM</td></tr> <tr><td colspan="2">Item:</td><td colspan="2">Left band edge</td></tr> <tr><td colspan="4"> Agilent Spectrum Analyzer - Swept SA RL RF 50 Hz AC CORRECT SENSE:INT ALIGN:AUTO 01:02:07 PM Nov 12, 2018 Center Freq 1.930000000 GHz PRN: Wide IF Gain: Low Trig: Free Run Avg Type: RMS Avg Hold: 100/100 TYPE A RES 4.5 DET A RES 100 10 dB/div Ref 30.00 dBm Log Mkr1 1.930 00 GHz -26.695 dBm  Center 1.93000 GHz #Res BW 200 kHz #VBW 620 kHz* Span 40.00 MHz Sweep 1.267 ms (1001 pts) MSG STATUS Frequency Auto Tune Center Freq 1.930000000 GHz Start Freq 1.910000000 GHz Stop Freq 1.960000000 GHz CF Step 4.000000 MHz Auto Freq Offset 0 Hz <tr><td colspan="2">Modulation:</td><td colspan="2">256QAM</td></tr><tr><td colspan="2">Item:</td><td colspan="2">Right band edge</td></tr><tr><td colspan="4"> Agilent Spectrum Analyzer - Swept SA RL RF 50 Hz AC CORRECT SENSE:INT ALIGN:AUTO 04:22:42 PM Nov 12, 2018 Center Freq 1.995000000 GHz PRN: Wide IF Gain: Low Trig: Free Run Avg Type: RMS Avg Hold: 100/100 TYPE A RES 4.5 DET A RES 100 10 dB/div Ref 30.00 dBm Log Mkr1 1.995 00 GHz -23.502 dBm  Center 1.995000 GHz #Res BW 51 kHz #VBW 150 kHz* Span 10.00 MHz Sweep 5.000 ms (1001 pts) MSG STATUS Frequency Auto Tune Center Freq 1.995000000 GHz Start Freq 1.990000000 GHz Stop Freq 2.000000000 GHz CF Step 1.000000 MHz Auto Freq Offset 0 Hz </td></tr></td></tr>				Modulation:		256QAM		Item:		Left band edge		Agilent Spectrum Analyzer - Swept SA RL RF 50 Hz AC CORRECT SENSE:INT ALIGN:AUTO 01:02:07 PM Nov 12, 2018 Center Freq 1.930000000 GHz PRN: Wide IF Gain: Low Trig: Free Run Avg Type: RMS Avg Hold: 100/100 TYPE A RES 4.5 DET A RES 100 10 dB/div Ref 30.00 dBm Log Mkr1 1.930 00 GHz -26.695 dBm  Center 1.93000 GHz #Res BW 200 kHz #VBW 620 kHz* Span 40.00 MHz Sweep 1.267 ms (1001 pts) MSG STATUS Frequency Auto Tune Center Freq 1.930000000 GHz Start Freq 1.910000000 GHz Stop Freq 1.960000000 GHz CF Step 4.000000 MHz Auto Freq Offset 0 Hz <tr><td colspan="2">Modulation:</td><td colspan="2">256QAM</td></tr> <tr><td colspan="2">Item:</td><td colspan="2">Right band edge</td></tr> <tr><td colspan="4"> Agilent Spectrum Analyzer - 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Item:		Left band edge																																					
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Item:		Right band edge																																					
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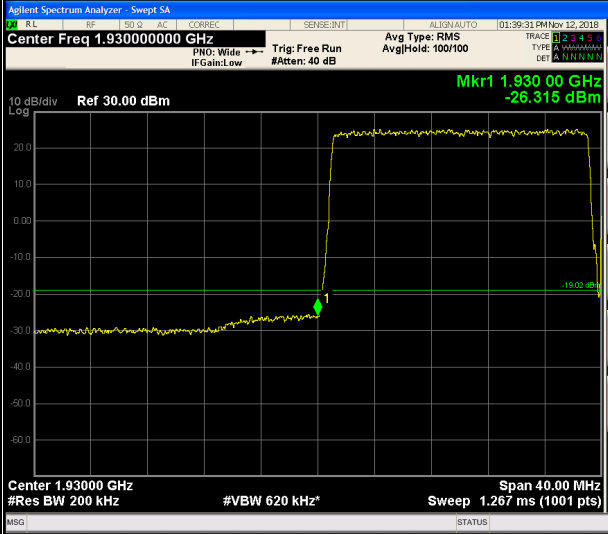
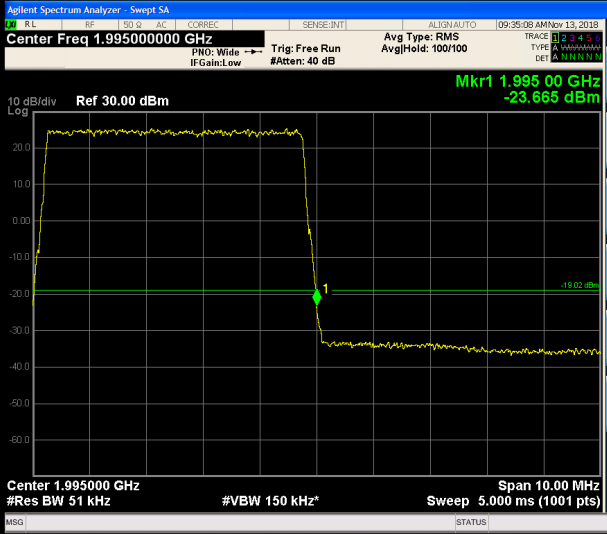
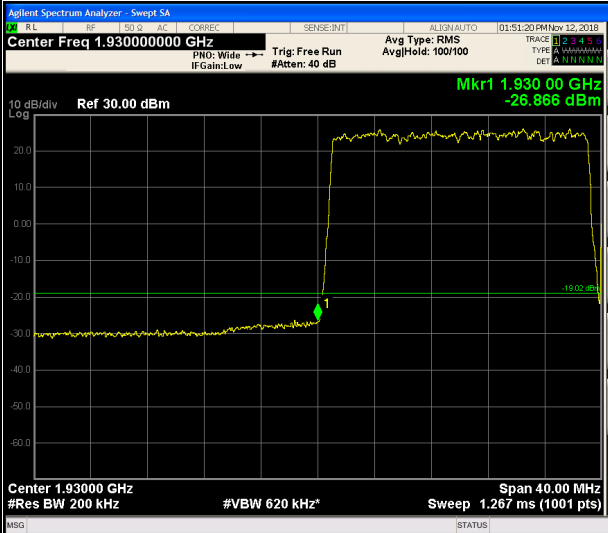
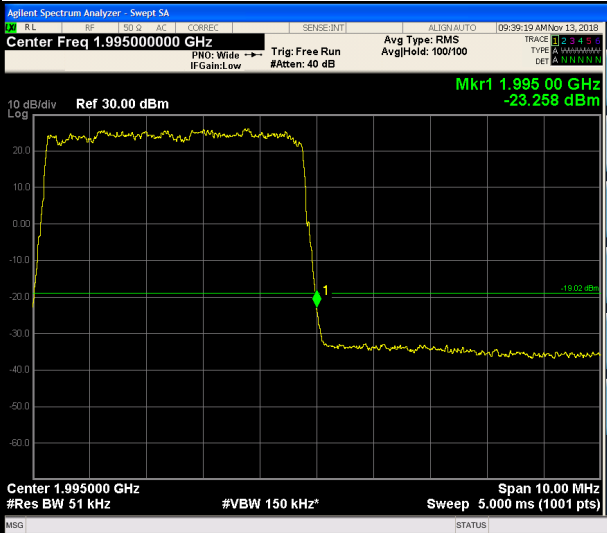
Port 2

Modulation: QPSK		Modulation: QPSK	
Item: Left band edge		Item: Right band edge	
			
Modulation: 16QAM		Modulation: 16QAM	
Item: Left band edge		Item: Right band edge	
			

Port 2

Port 2			
Modulation:		64QAM	
Item:		Left band edge	
Agilent Spectrum Analyzer - Swept SA RL RF 50 Hz AC CORRECT SENSE:INT ALIGN:AUTO 01:25:02 PM Nov 12, 2018 Center Freq 1.930000000 GHz PRN: Wide IF Gain: Low Trig: Free Run Avg Type: RMS Avg Hold: 100/100 TYPE A RES 4.5 DET A RES 10 10 dB/div Ref 30.00 dBm Log Mkr1 1.930 00 GHz -26.702 dBm 20.0 10.0 0.00 -10.0 -20.0 -30.0 -40.0 -50.0 -60.0 Center 1.93000 GHz #Res BW 200 kHz #VBW 620 kHz* Span 40.00 MHz Sweep 1.267 ms (1001 pts) Frequency Auto Tune Center Freq 1.930000000 GHz Start Freq 1.910000000 GHz Stop Freq 1.960000000 GHz CF Step 4.000000 MHz Man Auto Freq Offset 0 Hz MSG STATUS			
Modulation:		64QAM	
Item:		Right band edge	
Agilent Spectrum Analyzer - Swept SA RL RF 50 Hz AC CORRECT SENSE:INT ALIGN:AUTO 08:59:44 AM Nov 13, 2018 Center Freq 1.995000000 GHz PRN: Wide IF Gain: Low Trig: Free Run Avg Type: RMS Avg Hold: 100/100 TYPE A RES 4.5 DET A RES 10 10 dB/div Ref 30.00 dBm Log Mkr1 1.995 00 GHz -22.647 dBm 20.0 10.0 0.00 -10.0 -20.0 -30.0 -40.0 -50.0 -60.0 Center 1.995000 GHz #Res BW 51 kHz #VBW 150 kHz* Span 10.00 MHz Sweep 5.000 ms (1001 pts) Frequency Auto Tune Center Freq 1.995000000 GHz Start Freq 1.990000000 GHz Stop Freq 2.000000000 GHz CF Step 1.000000 MHz Man Auto Freq Offset 0 Hz MSG STATUS			
Modulation:		256QAM	
Item:		Left band edge	
Agilent Spectrum Analyzer - Swept SA RL RF 50 Hz AC CORRECT SENSE:INT ALIGN:AUTO 01:32:05 PM Nov 12, 2018 Center Freq 1.930000000 GHz PRN: Wide IF Gain: Low Trig: Free Run Avg Type: RMS Avg Hold: 100/100 TYPE A RES 4.5 DET A RES 10 10 dB/div Ref 30.00 dBm Log Mkr1 1.930 00 GHz -27.114 dBm 20.0 10.0 0.00 -10.0 -20.0 -30.0 -40.0 -50.0 -60.0 Center 1.93000 GHz #Res BW 200 kHz #VBW 620 kHz* Span 40.00 MHz Sweep 1.267 ms (1001 pts) Frequency Auto Tune Center Freq 1.930000000 GHz Start Freq 1.910000000 GHz Stop Freq 1.960000000 GHz CF Step 4.000000 MHz Man Auto Freq Offset 0 Hz MSG STATUS			
Modulation:		256QAM	
Item:		Right band edge	
Agilent Spectrum Analyzer - Swept SA RL RF 50 Hz AC CORRECT SENSE:INT ALIGN:AUTO 09:04:24 AM Nov 13, 2018 Center Freq 1.995000000 GHz PRN: Wide IF Gain: Low Trig: Free Run Avg Type: RMS Avg Hold: 100/100 TYPE A RES 4.5 DET A RES 10 10 dB/div Ref 30.00 dBm Log Mkr1 1.995 00 GHz -22.570 dBm 20.0 10.0 0.00 -10.0 -20.0 -30.0 -40.0 -50.0 -60.0 Center 1.995000 GHz #Res BW 51 kHz #VBW 150 kHz* Span 10.00 MHz Sweep 5.000 ms (1001 pts) Frequency Auto Tune Center Freq 1.995000000 GHz Start Freq 1.990000000 GHz Stop Freq 2.000000000 GHz CF Step 1.000000 MHz Man Auto Freq Offset 0 Hz MSG STATUS			

Port 3

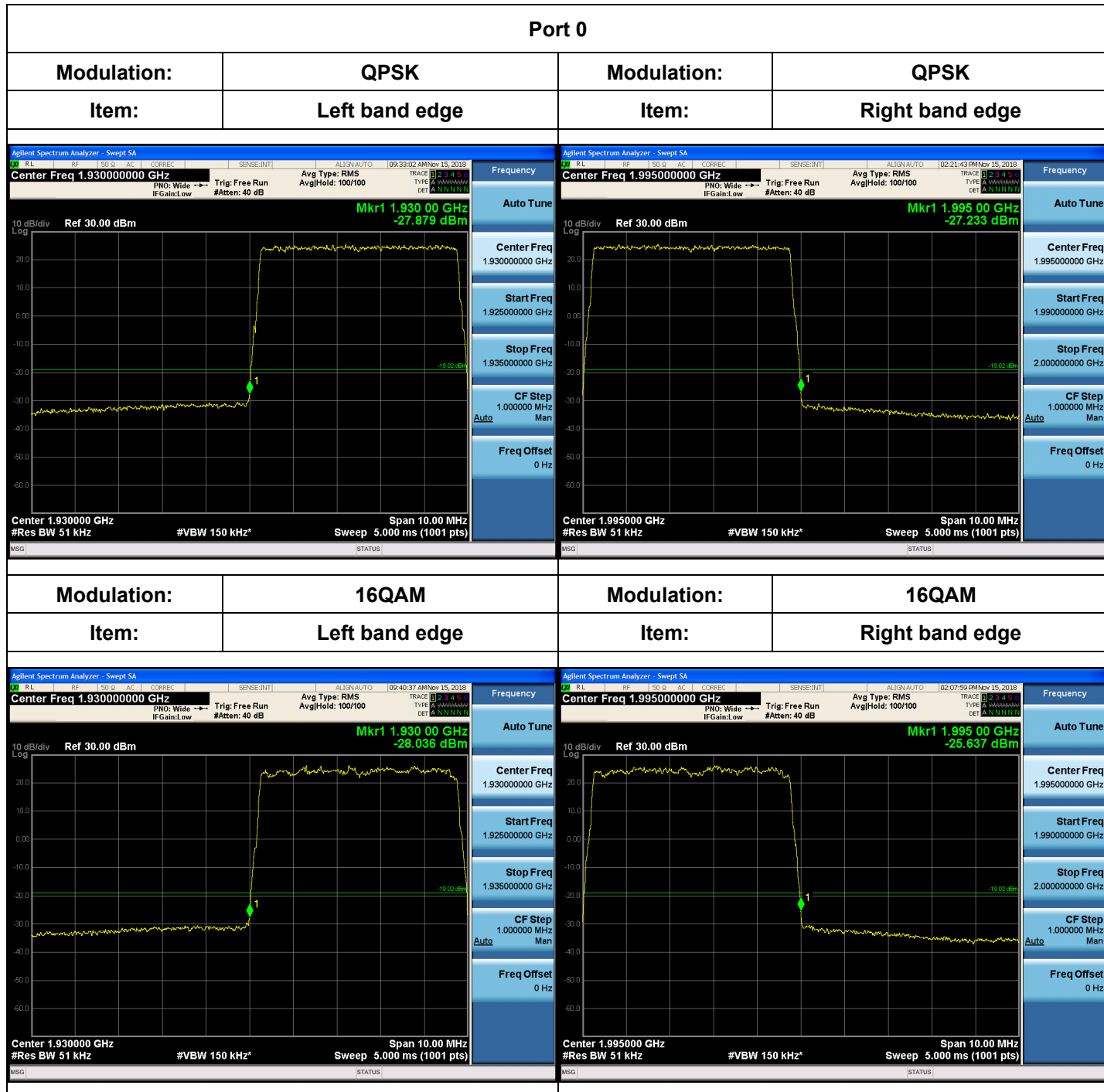
Modulation: QPSK		Modulation: QPSK	
Item: Left band edge		Item: Right band edge	
 Agilent Spectrum Analyzer - Swept SA Center Freq 1.930000000 GHz #Res BW 200 kHz #VBW 620 kHz* Sweep 1.267 ms (1001 pts) Mkr1 1.930 00 GHz -26.315 dBm		 Agilent Spectrum Analyzer - Swept SA Center Freq 1.995000000 GHz #Res BW 51 kHz #VBW 150 kHz* Sweep 5.000 ms (1001 pts) Mkr1 1.995 00 GHz -23.665 dBm	
Modulation: 16QAM		Modulation: 16QAM	
Item: Left band edge		Item: Right band edge	
 Agilent Spectrum Analyzer - Swept SA Center Freq 1.930000000 GHz #Res BW 200 kHz #VBW 620 kHz* Sweep 1.267 ms (1001 pts) Mkr1 1.930 00 GHz -26.866 dBm		 Agilent Spectrum Analyzer - Swept SA Center Freq 1.995000000 GHz #Res BW 51 kHz #VBW 150 kHz* Sweep 5.000 ms (1001 pts) Mkr1 1.995 00 GHz -23.258 dBm	

Port 3

Port 3			
Modulation:		64QAM	
Item:		Left band edge	
Agilent Spectrum Analyzer - Swept SA RL RF 50 Hz AC CORRECT SENSE:INT ALIGN:AUTO 01:59:56 PM Nov 12, 2018 Center Freq 1.930000000 GHz PRN: Wide IF Gain: Low Trig: Free Run Avg Type: RMS Avg Hold: 100/100 TRACE B [3 4 5 0] TYPE A [W W W W W W] DET A [R N N N N] Frequency Auto Tune Center Freq 1.930000000 GHz Start Freq 1.910000000 GHz Stop Freq 1.960000000 GHz CF Step 4.000000 MHz Auto Freq Offset 0 Hz 10 dB/div Ref 30.00 dBm Log Mkr1 1.930 00 GHz -27.278 dBm Center 1.93000 GHz #Res BW 200 kHz #VBW 620 kHz* Span 40.00 MHz Sweep 1.267 ms (1001 pts) MSG STATUS			
Modulation:		64QAM	
Item:		Right band edge	
Agilent Spectrum Analyzer - Swept SA RL RF 50 Hz AC CORRECT SENSE:INT ALIGN:AUTO 09:21:10 AM Nov 13, 2018 Center Freq 1.995000000 GHz PRN: Wide IF Gain: Low Trig: Free Run Avg Type: RMS Avg Hold: 100/100 TRACE B [3 4 5 0] TYPE A [W W W W W W] DET A [R N N N N] Frequency Auto Tune Center Freq 1.995000000 GHz Start Freq 1.990000000 GHz Stop Freq 2.000000000 GHz CF Step 1.000000 MHz Auto Freq Offset 0 Hz 10 dB/div Ref 30.00 dBm Log Mkr1 1.995 00 GHz -22.597 dBm Center 1.995000 GHz #Res BW 51 kHz #VBW 150 kHz* Span 10.00 MHz Sweep 5.000 ms (1001 pts) MSG STATUS			
Modulation:		256QAM	
Item:		Left band edge	
Agilent Spectrum Analyzer - Swept SA RL RF 50 Hz AC CORRECT SENSE:INT ALIGN:AUTO 02:00:32 PM Nov 12, 2018 Center Freq 1.930000000 GHz PRN: Wide IF Gain: Low Trig: Free Run Avg Type: RMS Avg Hold: 100/100 TRACE B [3 4 5 0] TYPE A [W W W W W W] DET A [R N N N N] Frequency Auto Tune Center Freq 1.930000000 GHz Start Freq 1.910000000 GHz Stop Freq 1.960000000 GHz CF Step 4.000000 MHz Auto Freq Offset 0 Hz 10 dB/div Ref 30.00 dBm Log Mkr1 1.930 00 GHz -27.539 dBm Center 1.93000 GHz #Res BW 200 kHz #VBW 620 kHz* Span 40.00 MHz Sweep 1.267 ms (1001 pts) MSG STATUS			
Modulation:		256QAM	
Item:		Right band edge	
Agilent Spectrum Analyzer - Swept SA RL RF 50 Hz AC CORRECT SENSE:INT ALIGN:AUTO 09:25:49 AM Nov 13, 2018 Center Freq 1.995000000 GHz PRN: Wide IF Gain: Low Trig: Free Run Avg Type: RMS Avg Hold: 100/100 TRACE B [3 4 5 0] TYPE A [W W W W W W] DET A [R N N N N] Frequency Auto Tune Center Freq 1.995000000 GHz Start Freq 1.990000000 GHz Stop Freq 2.000000000 GHz CF Step 1.000000 MHz Auto Freq Offset 0 Hz 10 dB/div Ref 30.00 dBm Log Mkr1 1.995 00 GHz -23.035 dBm Center 1.995000 GHz #Res BW 51 kHz #VBW 150 kHz* Span 10.00 MHz Sweep 5.000 ms (1001 pts) MSG STATUS			

Plots of Band edge - 5 MHz Bandwidth / 1 Carrier

Port 0



Port 0

Port 0			
Modulation:		64QAM	
Item:		Left band edge	
Agilent Spectrum Analyzer - Swept SA RL RF 50 Hz AC CORRECT SENSE:INT ALIGN:AUTO 09:45:04 AM Nov 15, 2018 Center Freq 1.930000000 GHz PRN: Wide IF Gain: Low Trig: Free Run #Atten: 40 dB Avg Type: RMS Avg Hold: 100/100 TRACE B [3 4 5 0] TYPE A [W W W W W W W W] DET A [R N N N N N] Frequency Auto Tune Mkr1 1.930 00 GHz -28.214 dBm Center Freq 1.930000000 GHz Start Freq 1.925000000 GHz Stop Freq 1.935000000 GHz CF Step 1.000000 MHz Man Auto Freq Offset 0 Hz 10 dB/div Ref 30.00 dBm Log Center 1.930000 GHz #Res BW 51 kHz #VBW 150 kHz* Span 10.00 MHz Sweep 5.000 ms (1001 pts) MSG STATUS Agilent Spectrum Analyzer - Swept SA RL RF 50 Hz AC CORRECT SENSE:INT ALIGN:AUTO 02:12:25 PM Nov 15, 2018 Center Freq 1.995000000 GHz PRN: Wide IF Gain: Low Trig: Free Run #Atten: 40 dB Avg Type: RMS Avg Hold: 100/100 TRACE B [3 4 5 0] TYPE A [W W W W W W W W] DET A [R N N N N N] Frequency Auto Tune Mkr1 1.995 00 GHz -27.502 dBm Center Freq 1.995000000 GHz Start Freq 1.990000000 GHz Stop Freq 2.000000000 GHz CF Step 1.000000 MHz Man Auto Freq Offset 0 Hz 10 dB/div Ref 30.00 dBm Log Center 1.995000 GHz #Res BW 51 kHz #VBW 150 kHz* Span 10.00 MHz Sweep 5.000 ms (1001 pts) MSG STATUS			
Modulation:		256QAM	
Item:		Left band edge	
Agilent Spectrum Analyzer - Swept SA RL RF 50 Hz AC CORRECT SENSE:INT ALIGN:AUTO 09:49:31 AM Nov 15, 2018 Center Freq 1.930000000 GHz PRN: Wide IF Gain: Low Trig: Free Run #Atten: 40 dB Avg Type: RMS Avg Hold: 100/100 TRACE B [3 4 5 0] TYPE A [W W W W W W W W] DET A [R N N N N N] Frequency Auto Tune Mkr1 1.930 00 GHz -27.992 dBm Center Freq 1.930000000 GHz Start Freq 1.925000000 GHz Stop Freq 1.935000000 GHz CF Step 1.000000 MHz Man Auto Freq Offset 0 Hz 10 dB/div Ref 30.00 dBm Log Center 1.930000 GHz #Res BW 51 kHz #VBW 150 kHz* Span 10.00 MHz Sweep 5.000 ms (1001 pts) MSG STATUS Agilent Spectrum Analyzer - Swept SA RL RF 50 Hz AC CORRECT SENSE:INT ALIGN:AUTO 02:16:53 PM Nov 15, 2018 Center Freq 1.995000000 GHz PRN: Wide IF Gain: Low Trig: Free Run #Atten: 40 dB Avg Type: RMS Avg Hold: 100/100 TRACE B [3 4 5 0] TYPE A [W W W W W W W W] DET A [R N N N N N] Frequency Auto Tune Mkr1 1.995 00 GHz -25.829 dBm Center Freq 1.995000000 GHz Start Freq 1.990000000 GHz Stop Freq 2.000000000 GHz CF Step 1.000000 MHz Man Auto Freq Offset 0 Hz 10 dB/div Ref 30.00 dBm Log Center 1.995000 GHz #Res BW 51 kHz #VBW 150 kHz* Span 10.00 MHz Sweep 5.000 ms (1001 pts) MSG STATUS			