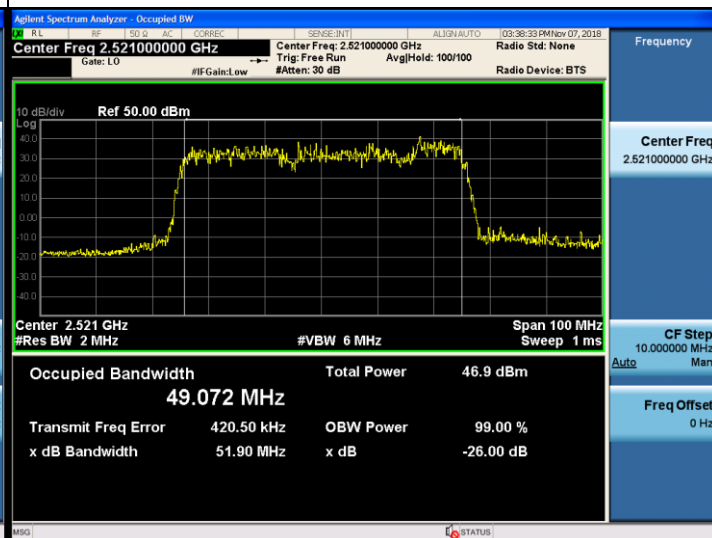
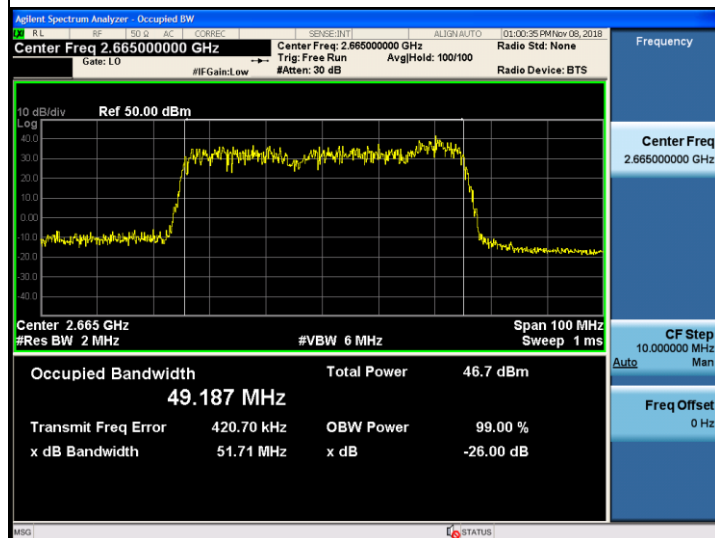
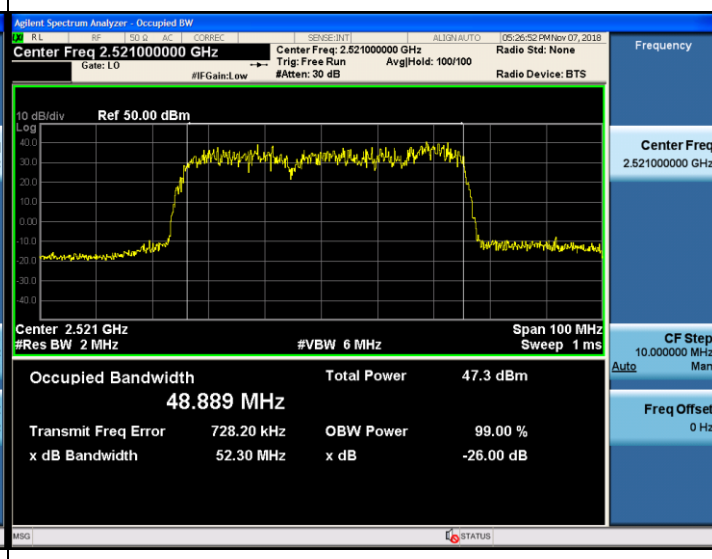
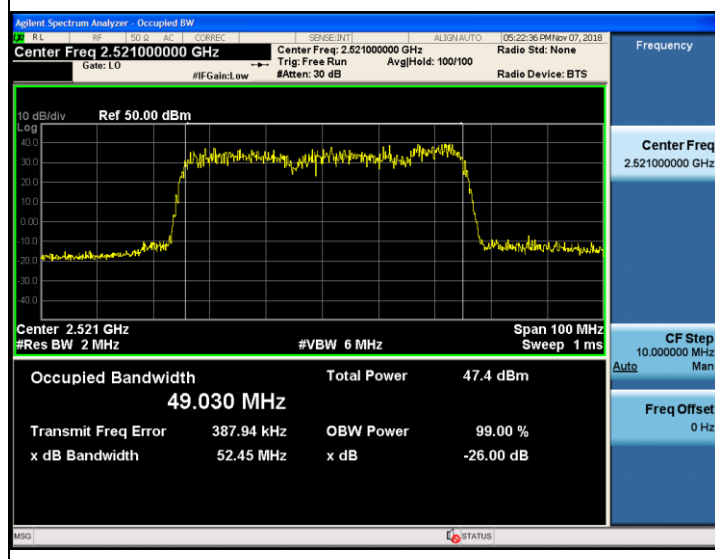


Port 1

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

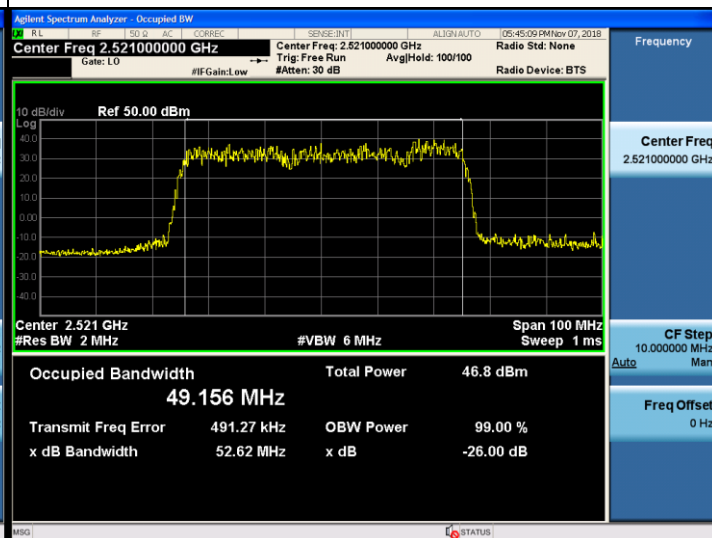
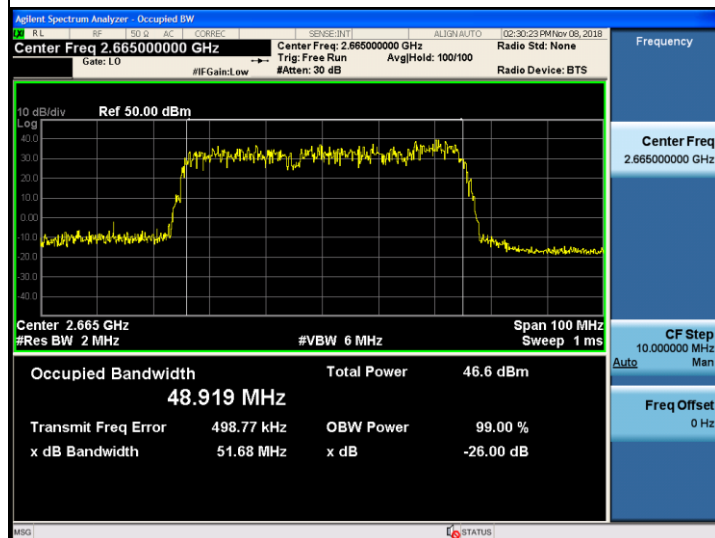


Modulation:	64QAM	Modulation:	256QAM
Channel:	Low	Channel:	Low

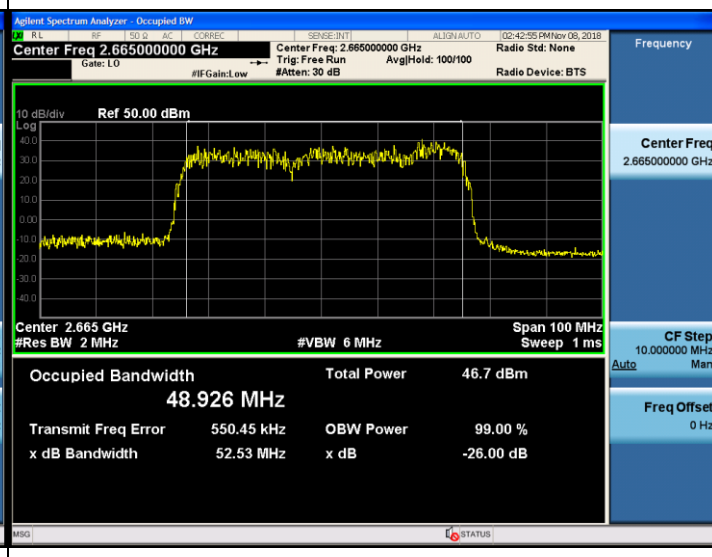
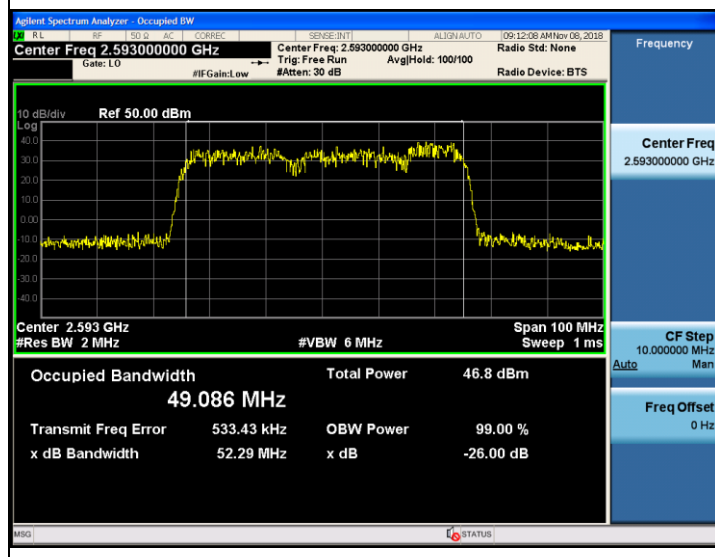


Port 2

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



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

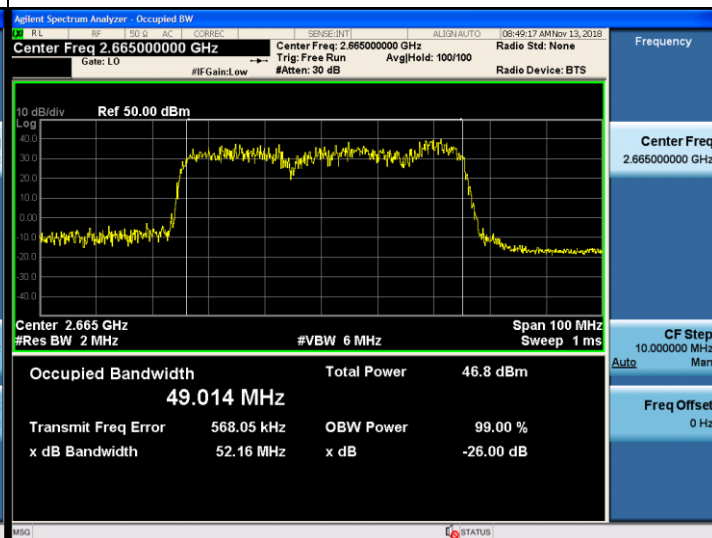
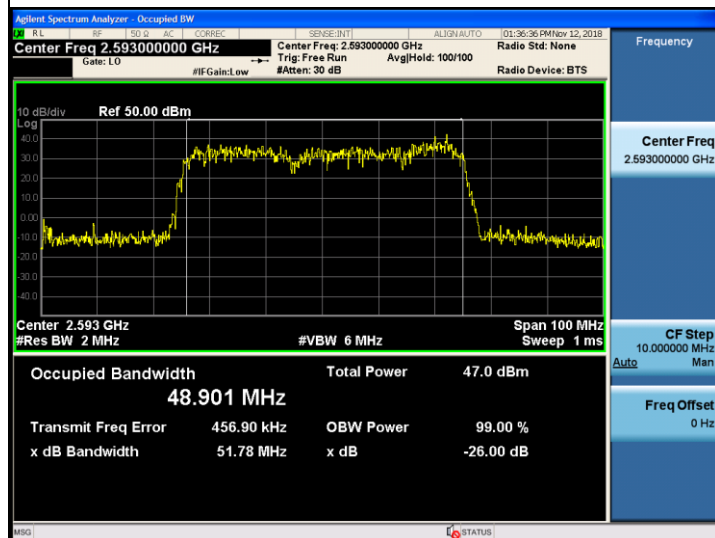


Port 3

Port 3							
Modulation:		QPSK		Modulation:		16QAM	
Channel:		Middle		Channel:		Middle	
Agilent Spectrum Analyzer - Occupied BW RL IF 50.0 AC CORRECT SENSE:INT ALIGN: AUTO 08:08:29 PM Nov 07, 2018 Center Freq 2.593000000 GHz Gate: LO #IF Gain: Low Trig: Free Run Avg/Hold: 100/100 Radio Std: None Radio Device: BTS 10 dB/div Ref 50.00 dBm Log 40.0 30.0 20.0 10.0 0.00 -10.0 -20.0 -30.0 -40.0 Center 2.593 GHz #Res BW 2 MHz #VBW 6 MHz Span 100 MHz Sweep 1 ms CF Step 10.000000 MHz Auto Man Frequency Center Freq 2.593000000 GHz CF Step 10.000000 MHz Auto Man Freq Offset 0 Hz Occupied Bandwidth 48.783 MHz Total Power 47.0 dBm Transmit Freq Error 595.50 kHz OBW Power 99.00 % x dB Bandwidth 52.02 MHz x dB -26.00 dB MSG STATUS				Agilent Spectrum Analyzer - Occupied BW RL IF 50.0 AC CORRECT SENSE:INT ALIGN: AUTO 08:15:14 PM Nov 07, 2018 Center Freq 2.593000000 GHz Gate: LO #IF Gain: Low Trig: Free Run Avg/Hold: 100/100 Radio Std: None Radio Device: BTS 10 dB/div Ref 50.00 dBm Log 40.0 30.0 20.0 10.0 0.00 -10.0 -20.0 -30.0 -40.0 Center 2.593 GHz #Res BW 2 MHz #VBW 6 MHz Span 100 MHz Sweep 1 ms CF Step 10.000000 MHz Auto Man Frequency Center Freq 2.593000000 GHz CF Step 10.000000 MHz Auto Man Freq Offset 0 Hz Occupied Bandwidth 49.182 MHz Total Power 46.7 dBm Transmit Freq Error 541.38 kHz OBW Power 99.00 % x dB Bandwidth 52.27 MHz x dB -26.00 dB MSG STATUS			
Modulation:		64QAM		Modulation:		256QAM	
Channel:		Middle		Channel:		Middle	
Agilent Spectrum Analyzer - Occupied BW RL IF 50.0 AC CORRECT SENSE:INT ALIGN: AUTO 08:20:27 PM Nov 07, 2018 Center Freq 2.593000000 GHz Gate: LO #IF Gain: Low Trig: Free Run Avg/Hold: 100/100 Radio Std: None Radio Device: BTS 10 dB/div Ref 50.00 dBm Log 40.0 30.0 20.0 10.0 0.00 -10.0 -20.0 -30.0 -40.0 Center 2.593 GHz #Res BW 2 MHz #VBW 6 MHz Span 100 MHz Sweep 1 ms CF Step 10.000000 MHz Auto Man Frequency Center Freq 2.593000000 GHz CF Step 10.000000 MHz Auto Man Freq Offset 0 Hz Occupied Bandwidth 48.932 MHz Total Power 46.8 dBm Transmit Freq Error 444.81 kHz OBW Power 99.00 % x dB Bandwidth 52.07 MHz x dB -26.00 dB MSG STATUS				Agilent Spectrum Analyzer - Occupied BW RL IF 50.0 AC CORRECT SENSE:INT ALIGN: AUTO 08:56:10 AM Nov 08, 2018 Center Freq 2.593000000 GHz Gate: LO #IF Gain: Low Trig: Free Run Avg/Hold: 100/100 Radio Std: None Radio Device: BTS 10 dB/div Ref 50.00 dBm Log 40.0 30.0 20.0 10.0 0.00 -10.0 -20.0 -30.0 -40.0 Center 2.593 GHz #Res BW 2 MHz #VBW 6 MHz Span 100 MHz Sweep 1 ms CF Step 10.000000 MHz Auto Man Frequency Center Freq 2.593000000 GHz CF Step 10.000000 MHz Auto Man Freq Offset 0 Hz Occupied Bandwidth 49.095 MHz Total Power 46.5 dBm Transmit Freq Error 489.10 kHz OBW Power 99.00 % x dB Bandwidth 52.24 MHz x dB -26.00 dB MSG STATUS			

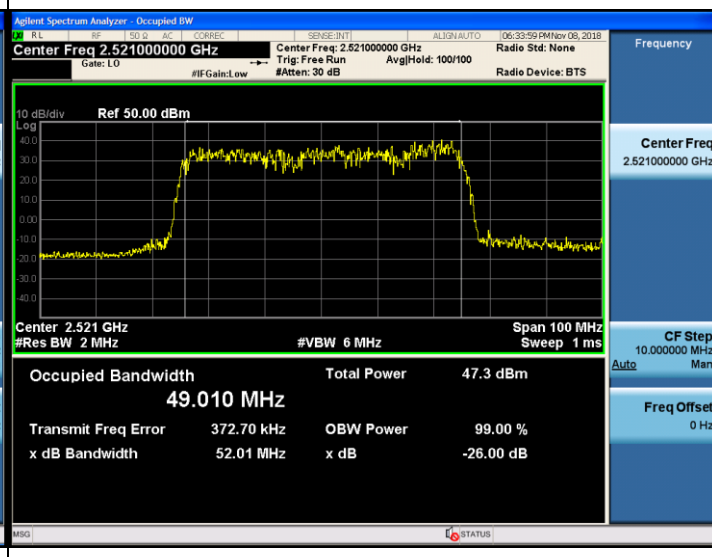
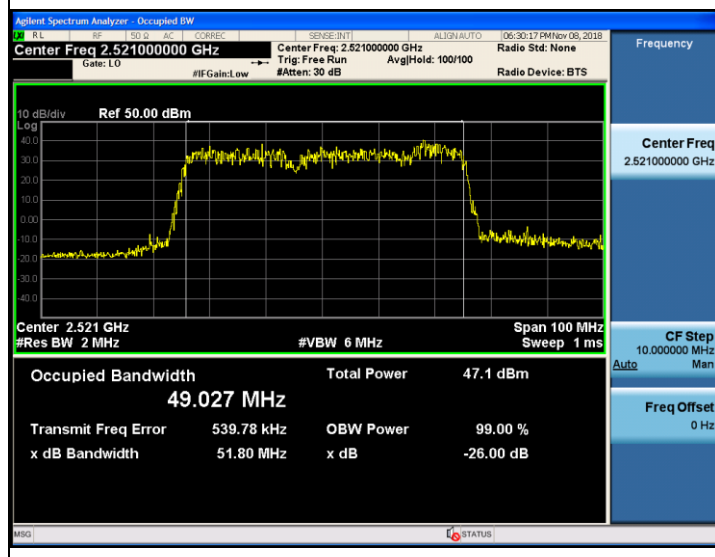
Port 4

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



Modulation:	64QAM
Channel:	Low

Modulation:	256QAM
Channel:	Low

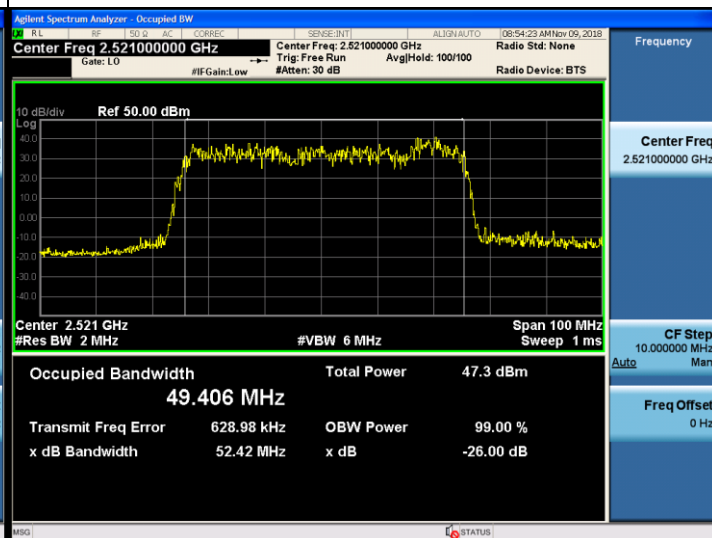
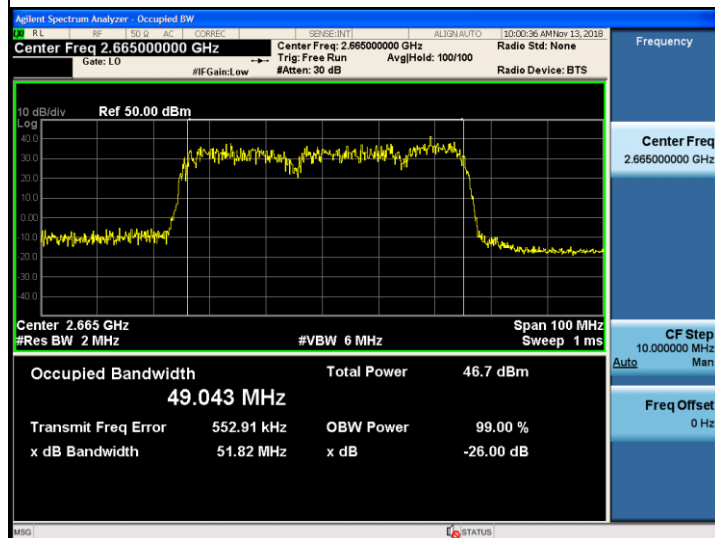


Port 5

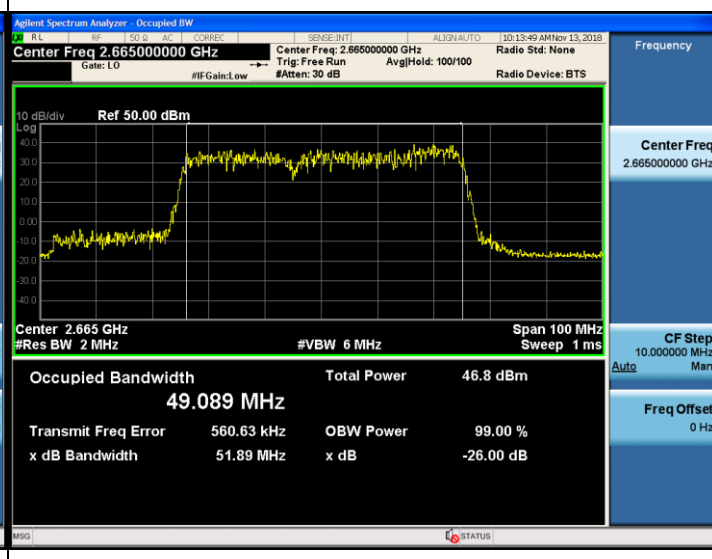
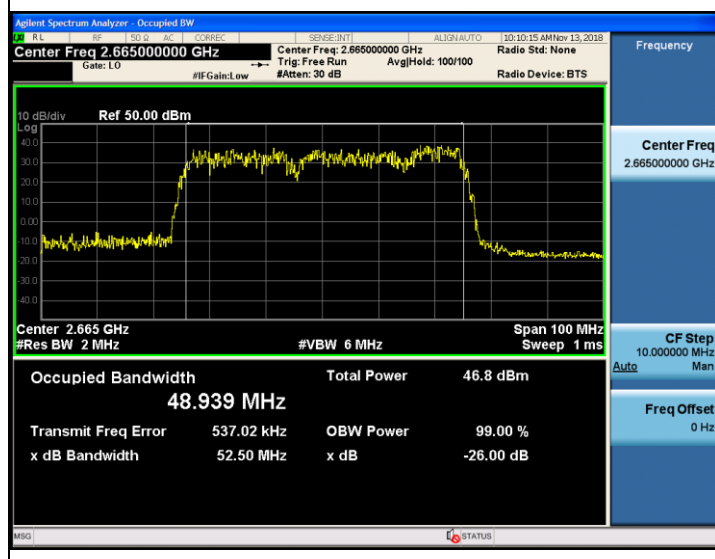
Port 5													
Modulation:		QPSK		Modulation:		16QAM							
Channel:		Middle		Channel:		High							
Agilent Spectrum Analyzer - Occupied BW Center Freq 2.593000000 GHz Gate: LO #IF Gain: Low Center Freq: 2.593000000 GHz Trig: Free Run Avg/Hold: 100/100 Radio Std: None Radio Device: BTS 10 dB/div Ref 50.00 dBm Log 40.0 30.0 20.0 10.0 0.00 -10.0 -20.0 -30.0 -40.0 Center 2.593 GHz #Res BW 2 MHz #VBW 6 MHz Span 100 MHz Sweep 1 ms Occupied Bandwidth 48.768 MHz Total Power 46.8 dBm Transmit Freq Error 647.47 kHz OBW Power 99.00 % x dB Bandwidth 52.39 MHz x dB -26.00 dB MSG STATUS				Frequency		Center Freq 2.593000000 GHz		CF Step 10.000000 MHz		Auto		Freq Offset 0 Hz	
Agilent Spectrum Analyzer - Occupied BW Center Freq 2.665000000 GHz Gate: LO #IF Gain: Low Center Freq: 2.665000000 GHz Trig: Free Run Avg/Hold: 100/100 Radio Std: None Radio Device: BTS 10 dB/div Ref 50.00 dBm Log 40.0 30.0 20.0 10.0 0.00 -10.0 -20.0 -30.0 -40.0 Center 2.665 GHz #Res BW 2 MHz #VBW 6 MHz Span 100 MHz Sweep 1 ms Occupied Bandwidth 49.001 MHz Total Power 46.9 dBm Transmit Freq Error 560.93 kHz OBW Power 99.00 % x dB Bandwidth 52.17 MHz x dB -26.00 dB MSG STATUS				Frequency		Center Freq 2.665000000 GHz		CF Step 10.000000 MHz		Auto		Freq Offset 0 Hz	
Modulation:		64QAM		Modulation:		256QAM							
Channel:		Low		Channel:		Low							
Agilent Spectrum Analyzer - Occupied BW Center Freq 2.521000000 GHz Gate: LO #IF Gain: Low Center Freq: 2.521000000 GHz Trig: Free Run Avg/Hold: 100/100 Radio Std: None Radio Device: BTS 10 dB/div Ref 50.00 dBm Log 40.0 30.0 20.0 10.0 0.00 -10.0 -20.0 -30.0 -40.0 Center 2.521 GHz #Res BW 2 MHz #VBW 6 MHz Span 100 MHz Sweep 1 ms Occupied Bandwidth 48.878 MHz Total Power 47.1 dBm Transmit Freq Error 711.99 kHz OBW Power 99.00 % x dB Bandwidth 51.85 MHz x dB -26.00 dB MSG STATUS				Frequency		Center Freq 2.521000000 GHz		CF Step 10.000000 MHz		Auto		Freq Offset 0 Hz	
Agilent Spectrum Analyzer - Occupied BW Center Freq 2.521000000 GHz Gate: LO #IF Gain: Low Center Freq: 2.521000000 GHz Trig: Free Run Avg/Hold: 100/100 Radio Std: None Radio Device: BTS 10 dB/div Ref 50.00 dBm Log 40.0 30.0 20.0 10.0 0.00 -10.0 -20.0 -30.0 -40.0 Center 2.521 GHz #Res BW 2 MHz #VBW 6 MHz Span 100 MHz Sweep 1 ms Occupied Bandwidth 48.887 MHz Total Power 47.0 dBm Transmit Freq Error 273.77 kHz OBW Power 99.00 % x dB Bandwidth 52.34 MHz x dB -26.00 dB MSG STATUS				Frequency		Center Freq 2.521000000 GHz		CF Step 10.000000 MHz		Auto		Freq Offset 0 Hz	

Port 6

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



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



Port 7

Port 7							
Modulation:		QPSK		Modulation:		16QAM	
Channel:		Low		Channel:		Low	
Agilent Spectrum Analyzer - Occupied BW Center Freq 2.521000000 GHz Gate: LO #IF Gain: Low Center Freq: 2.521000000 GHz Trig: Free Run Avg/Hold: 100/100 Radio Std: None Radio Device: BTS 10 dB/div Ref 50.00 dBm Log <							

5.3. UNWANTED CONDUCTED EMISSIONS

Test Requirements:

§ 2.1051 Measurements required: Spurious emissions at antenna terminals.

The radio frequency voltage or powers generated within the equipment and appearing on a spurious frequency shall be checked at the equipment output terminals when properly loaded with a suitable artificial antenna. Curves or equivalent data shall show the magnitude of each harmonic and other spurious emission that can be detected when the equipment is operated under the conditions specified in §2.1049 as appropriate. The magnitude of spurious emissions which are attenuated more than 20 dB below the permissible value need not be specified.

§ 27.53 Emission limits.

(m) For BRS and EBS stations, the power of any emissions outside the licensee's frequency bands of operation shall be attenuated below the transmitter power (P) measured in watts in accordance with the standards below. If a licensee has multiple contiguous channels, out-of-band emissions shall be measured from the upper and lower edges of the contiguous channels.

(2) For digital base stations, the attenuation shall be not less than $43 + 10 \log (P)$ dB, unless a documented interference complaint is received from an adjacent channel licensee with an overlapping Geographic Service Area. Mobile Satellite Service licensees operating on frequencies below 2495 MHz may also submit a documented interference complaint against BRS licensees operating on channel BRS No. 1 on the same terms and conditions as adjacent channel BRS or EBS licensees. Provided that a documented interference complaint cannot be mutually resolved between the parties prior to the applicable deadline, then the following additional attenuation requirements shall apply:

Test Procedures:

The measurement is performed in accordance with Section 5.7.3 and 5.7.4 of ANSI C63.26.

5.7.3 Out-of-band unwanted emissions measurements

- a) Set the spectrum analyzer center frequency to the block, band, or channel edge frequency.
- b) Set the span wide enough to capture the fundamental emission closest to the authorized block or band edge, and to include all modulation products that spill into the immediately adjacent frequency band. In some cases, it may be possible to set the center frequency and span so as to encompass the fundamental emission and the unwanted out-of-band (band-edge) emissions on either side of the authorized block, band, or channel. This can be accomplished with a single (slow) sweep, if adequate overload protection and sufficient dynamic range can be maintained.
- c) Set the number of points in sweep $\geq 2 \times \text{span} / \text{RBW}$.
- d) Sweep time should be auto for peak detection. For rms detection the sweep time should be set as follows:
 - 1) If the device can be configured to transmit continuously (duty cycle $\geq 98\%$), set the (sweep time) $> (\text{number of points in sweep}) \times (\text{symbol period})$ (e.g., by a factor of $10 \times \text{symbol period} \times \text{number of points}$).

Increasing the sweep time (i.e., slowing the sweep speed) will allow for averaging over multiple symbols

2) If the device cannot be configured to transmit continuously (duty cycle < 98%) and a freerunning sweep must be used, set the sweep time so that the averaging is performed over multiple on/off cycles by setting the sweep time > (number of points in sweep) × (transmitter period) (i.e., the transmit on-time + the off-time). The spectrum analyzer readings shall subsequently be corrected by $[10 \log (1/\text{duty cycle})]$. This assumes that the transmission period and duty cycle is relatively constant (duty cycle variation $\leq \pm 2\%$).

3) If the device cannot be configured to transmit continuously (duty cycle < 98%) and a freerunning sweep must be used, set the sweep time so that the averaging is performed over multiple on/off cycles by setting the sweep time > (number of points in sweep) × (transmitter period) (i.e., the transmit on-time + the off-time). The spectrum analyzer readings shall subsequently be corrected by $[10 \log (1/\text{duty cycle})]$. This assumes that the transmission period and duty cycle is relatively constant (duty cycle variation $\leq \pm 2\%$).

4) If the device cannot be configured to transmit continuously and a free-running sweep must be used, and if the transmissions exhibit a non-constant duty cycle (duty cycle variations > $\pm 2\%$), set the sweep time so that the averaging is performed over the on-period by setting the sweep time > (symbol period) × (number of points), while also maintaining the sweep time < (transmitter on-time). The trace mode shall be set to max hold, since not every display point will be averaged only over just the on-time. Thus, multiple sweeps (e.g., 100) in maximum hold are necessary to ensure that the maximum power is measured.

e) The test report shall include the plots of the measuring instrument display and the measured data.

f) See Annex I for example emission mask plots.

5.7.4 Spurious unwanted emission measurements

a) Set the spectrum analyzer start frequency to the lowest frequency generated by the EUT, without going below 9 kHz, and the stop frequency to the lower frequency covered by the measurements previously performed in 5.7.3. As an alternative, the stop frequency can be set to the value specified in 5.1.1, depending on the EUT operating range, if the resulting plot can clearly demonstrate compliance for all frequencies not addressed by the out-of-band emissions measurements performed as per 5.7.3.

b) When using an average power (rms) detector, ensure that the number of points in the sweep $\geq 2 \times (\text{span} / \text{RBW})$. This may require that the measurement range defined by the start and stop frequencies be subdivided, depending on the spectrum analyzer capabilities. This requirement does not apply to peak-detected power measurements. When average power is specified by the applicable regulation, a peak-detector can be utilized for preliminary measurements to accommodate wider frequency spans. Any emissions found in the preliminary measurement to exceed the applicable limit(s) shall be further examined using a power averaging (rms) detector with the minimum number of measurement points as defined above.

c) The sweep time should be set to auto-couple for performing peak-detector measurements. For measurements that use a power averaging (rms) detector, the sweep time shall be set as described for out-of-band emissions measurements in item d) of 5.7.3.

d) Identify and measure the highest spurious emission levels in each frequency range. It is not necessary to re-measure the out-of-band emissions as a part of this test. Record the frequencies and amplitudes

corresponding to the measured emissions and capture the data plots.

e) Repeat step b) through step d) for the upper spurious emission frequency range if not already captured by a wide span measurement performed as per the alternative provided in step a). The upper frequency for this measurement is defined in 5.1.1 as a function of the EUT operating range.

f) Compare the results with the corresponding limit in the applicable regulation.

g) The test report shall include the data plots of the measuring instrument display and the measured data.

Note:

- 1) In 9 kHz to 30 MHz band, RBW narrower than reference bandwidth is used. So following correction factor is applied.

- $10 \log [(reference\ bandwidth)/(resolution\ bandwidth)]$

- 9 kHz to 150 kHz applied 1 kHz RBW, $10 \log (1\ kHz / 1MHz) = 30\ dB$

- 150 kHz to 30 MHz applied 100 kHz RBW, $10 \log (10\ kHz / 1\ MHz) = 20\ dB$

- 2) Due to 8x8 MIMO operations, limit is -22.03 dBm (-13 dBm – $10 \times \log(8)$) per FCC KDB 662911 D01v02r01

Test Results:
Band edge of 20 MHz Bandwidth + 10 MHz Bandwidth / 2 Carriers

Port	Modulation	Point	Frequency (MHz)	Measured band edge (dBm)
Port 0	QPSK	Left	2498.50	-24.415
		Right	2687.50	-25.016
	16QAM	Left	2498.50	-23.022
		Right	2687.50	-25.876
	64QAM	Left	2498.50	-24.065
		Right	2687.50	-24.687
	256QAM	Left	2498.50	-24.454
		Right	2687.50	-27.094
Port 1	QPSK	Left	2498.50	-24.336
		Right	2687.50	-24.806
	16QAM	Left	2498.50	-25.233
		Right	2687.50	-27.835
	64QAM	Left	2498.50	-23.668
		Right	2687.50	-24.896
	256QAM	Left	2498.50	-23.702
		Right	2687.50	-23.197
Port 2	QPSK	Left	2498.50	-25.548
		Right	2687.50	-24.563
	16QAM	Left	2498.50	-26.691
		Right	2687.50	-25.710
	64QAM	Left	2498.50	-26.139
		Right	2687.50	-26.567
	256QAM	Left	2498.50	-25.245
		Right	2687.50	-24.982
Port 3	QPSK	Left	2498.50	-26.273
		Right	2687.50	-25.355

Port	Modulation	Point	Frequency (MHz)	Measured band edge (dBm)
	16QAM	Left	2498.50	-26.000
		Right	2687.50	-23.088
	64QAM	Left	2498.50	-24.883
		Right	2687.50	-25.890
	256QAM	Left	2498.50	-23.061
		Right	2687.50	-22.232
Port 4	QPSK	Left	2498.50	-26.734
		Right	2687.50	-26.986
	16QAM	Left	2498.50	-28.395
		Right	2687.50	-26.509
	64QAM	Left	2498.50	-27.010
		Right	2687.50	-24.260
	256QAM	Left	2498.50	-25.414
		Right	2687.50	-27.650
Port 5	QPSK	Left	2498.50	-27.945
		Right	2687.50	-29.928
	16QAM	Left	2498.50	-27.917
		Right	2687.50	-23.560
	64QAM	Left	2498.50	-25.357
		Right	2687.50	-24.922
	256QAM	Left	2498.50	-26.098
		Right	2687.50	-25.743
Port 6	QPSK	Left	2498.50	-24.569
		Right	2687.50	-28.401
	16QAM	Left	2498.50	-28.256
		Right	2687.50	-24.092
	64QAM	Left	2498.50	-28.339

Port	Modulation	Point	Frequency (MHz)	Measured band edge (dBm)
	256QAM	Right	2687.50	-25.200
		Left	2498.50	-26.508
		Right	2687.50	-23.795
Port 7	QPSK	Left	2498.50	-27.305
		Right	2687.50	-24.428
	16QAM	Left	2498.50	-25.536
		Right	2687.50	-22.853
	64QAM	Left	2498.50	-26.604
		Right	2687.50	-33.218
	256QAM	Left	2498.50	-26.902
		Right	2687.50	-23.373

Band edge of 20 MHz Bandwidth + 20 MHz Bandwidth + 10 MHz Bandwidth / 3 Carriers

Port	Modulation	Point	Frequency (MHz)	Measured band edge (dBm)
Port 0	QPSK	Left	2526.00	-26.718
		Right	2660.00	-25.180
	16QAM	Left	2526.00	-22.977
		Right	2660.00	-22.510
	64QAM	Left	2526.00	-24.539
		Right	2660.00	-23.042
	256QAM	Left	2526.00	-22.450
		Right	2660.00	-24.147
Port 1	QPSK	Left	2526.00	-27.157
		Right	2660.00	-27.408
	16QAM	Left	2526.00	-26.214
		Right	2660.00	-23.706
	64QAM	Left	2526.00	-26.588
		Right	2660.00	-25.242
	256QAM	Left	2526.00	-24.819
		Right	2660.00	-25.612
Port 2	QPSK	Left	2526.00	-27.053
		Right	2660.00	-24.036
	16QAM	Left	2526.00	-26.087
		Right	2660.00	-23.762
	64QAM	Left	2526.00	-25.745
		Right	2660.00	-24.150
	256QAM	Left	2526.00	-27.945
		Right	2660.00	-25.951
Port 3	QPSK	Left	2526.00	-27.863
		Right	2660.00	-22.873

Port	Modulation	Point	Frequency (MHz)	Measured band edge (dBm)
	16QAM	Left	2526.00	-27.861
		Right	2660.00	-23.198
	64QAM	Left	2526.00	-27.820
		Right	2660.00	-24.335
	256QAM	Left	2526.00	-26.543
		Right	2660.00	-26.580
Port 4	QPSK	Left	2526.00	-23.974
		Right	2660.00	-26.348
	16QAM	Left	2526.00	-23.936
		Right	2660.00	-24.842
	64QAM	Left	2526.00	-26.652
		Right	2660.00	-25.306
	256QAM	Left	2526.00	-24.623
		Right	2660.00	-24.973
Port 5	QPSK	Left	2526.00	-24.298
		Right	2660.00	-24.231
	16QAM	Left	2526.00	-25.807
		Right	2660.00	-26.428
	64QAM	Left	2526.00	-24.678
		Right	2660.00	-24.549
	256QAM	Left	2526.00	-24.445
		Right	2660.00	-25.252
Port 6	QPSK	Left	2526.00	-24.667
		Right	2660.00	-26.350
	16QAM	Left	2526.00	-24.277
		Right	2660.00	-24.651
	64QAM	Left	2526.00	-23.328

Port	Modulation	Point	Frequency (MHz)	Measured band edge (dBm)
	256QAM	Right	2660.00	-26.297
		Left	2526.00	-23.812
		Right	2660.00	-22.612
Port 7	QPSK	Left	2526.00	-24.619
		Right	2660.00	-23.625
	16QAM	Left	2526.00	-26.118
		Right	2660.00	-22.553
	64QAM	Left	2526.00	-26.178
		Right	2660.00	-23.154
	256QAM	Left	2526.00	-24.581
		Right	2660.00	-24.752

Spurious Emissions of 20 MHz Bandwidth + 10 MHz Bandwidth / 2 Carriers

Port	Modulation	Channel	Measured emission (dBm)					
			9 kHz ~ 150 kHz	150 kHz~ 30 MHz	30 MHz ~ 1 GHz	1 GHz ~ 2.491 GHz	2.695 GHz ~ 12.75 GHz	12.75 GHz ~ 26.5 GHz
Port 0	QPSK	Low	-23.906	-24.350	-52.364	-24.292	-36.522	-34.008
		Middle	-22.485	-25.732	-48.052	-29.418	-36.601	-33.912
		High	-23.205	-25.910	-49.847	-29.654	-25.136	-34.201
	16QAM	Low	-23.297	-24.710	-52.167	-28.375	-36.370	-33.620
		Middle	-23.638	-25.424	-46.699	-28.777	-36.460	-33.976
		High	-24.650	-25.211	-49.506	-29.342	-23.034	-34.048
	64QAM	Low	-23.261	-25.562	-52.584	-29.284	-36.037	-34.004
		Middle	-23.155	-24.307	-47.327	-29.392	-36.671	-34.084
		High	-22.681	-24.486	-49.926	-29.203	-23.829	-33.669
	256QAM	Low	-23.198	-24.850	-52.598	-26.834	-36.619	-33.611
		Middle	-22.939	-25.195	-46.639	-28.974	-36.543	-33.867
		High	-23.150	-25.245	-49.516	-28.811	-28.316	-34.231
Port 1	QPSK	Low	-22.640	-24.481	-52.228	-27.351	-35.648	-34.077
		Middle	-22.527	-25.468	-47.382	-28.237	-34.611	-34.089
		High	-22.979	-25.875	-52.656	-29.066	-24.747	-34.127
	16QAM	Low	-23.864	-24.949	-52.462	-29.001	-36.729	-33.763
		Middle	-23.045	-24.849	-48.301	-29.283	-35.632	-33.602
		High	-23.138	-24.831	-52.580	-29.099	-25.411	-33.803
	64QAM	Low	-23.501	-24.723	-52.330	-29.041	-36.099	-33.408
		Middle	-23.098	-24.762	-47.760	-29.145	-35.147	-33.992
		High	-23.621	-25.825	-52.621	-29.094	-26.566	-33.773
	256QAM	Low	-24.172	-25.048	-52.374	-26.861	-36.384	-33.670
		Middle	-23.435	-25.029	-48.731	-29.121	-35.667	-33.531
		High	-22.826	-24.311	-52.473	-29.387	-23.266	-33.521
Port 2	QPSK	Low	-22.966	-24.635	-52.413	-28.161	-36.510	-33.943
		Middle	-22.537	-25.653	-48.322	-29.284	-35.939	-33.496

Port	Modulation	Channel	Measured emission (dBm)					
			9 kHz ~ 150 kHz	150 kHz~ 30 MHz	30 MHz ~ 1 GHz	1 GHz ~ 2.491 GHz	2.695 GHz ~ 12.75 GHz	12.75 GHz ~ 26.5 GHz
	16QAM	High	-23.726	-25.325	-52.604	-29.120	-24.442	-34.023
		Low	-22.760	-25.492	-52.048	-29.110	-36.429	-33.715
		Middle	-22.708	-25.768	-47.446	-29.446	-35.009	-34.169
		High	-22.628	-25.048	-52.338	-29.210	-27.649	-33.751
	64QAM	Low	-22.882	-25.544	-52.259	-28.498	-35.665	-33.218
		Middle	-24.100	-25.160	-48.468	-28.892	-36.162	-34.031
		High	-22.889	-25.658	-52.387	-29.148	-28.180	-33.775
	256QAM	Low	-22.280	-25.034	-52.375	-28.897	-37.085	-33.699
		Middle	-22.235	-24.236	-48.513	-28.596	-35.661	-34.229
		High	-23.932	-24.360	-52.246	-28.686	-27.526	-34.070
Port 3	QPSK	Low	-22.759	-24.478	-52.170	-28.725	-35.082	-33.707
		Middle	-23.610	-25.066	-48.008	-29.697	-34.906	-33.983
		High	-23.353	-24.878	-52.504	-29.585	-28.658	-33.841
	16QAM	Low	-22.528	-25.605	-52.246	-29.005	-36.795	-33.644
		Middle	-23.655	-25.040	-48.156	-29.371	-34.607	-34.251
		High	-23.886	-25.098	-52.715	-29.302	-27.617	-33.700
	64QAM	Low	-23.245	-26.168	-52.349	-29.114	-36.423	-33.805
		Middle	-22.578	-25.216	-46.790	-29.517	-36.278	-33.946
		High	-23.131	-25.885	-52.597	-29.359	-26.283	-34.097
	256QAM	Low	-22.864	-24.488	-52.588	-28.439	-34.606	-34.001
		Middle	-22.433	-23.411	-47.750	-29.030	-33.854	-34.276
		High	-22.479	-24.832	-52.428	-29.217	-22.480	-33.689
Port 4	QPSK	Low	-22.497	-24.289	-51.899	-29.093	-36.207	-33.625
		Middle	-22.902	-25.912	-47.680	-29.237	-35.607	-33.672
		High	-22.587	-23.475	-50.168	-29.067	-25.174	-33.512
	16QAM	Low	-22.625	-24.136	-52.222	-28.850	-36.276	-33.944
		Middle	-23.007	-25.070	-48.213	-29.246	-36.141	-33.904

Port	Modulation	Channel	Measured emission (dBm)						
			9 kHz ~ 150 kHz	150 kHz~ 30 MHz	30 MHz ~ 1 GHz	1 GHz ~ 2.491 GHz	2.695 GHz ~ 12.75 GHz	12.75 GHz ~ 26.5 GHz	
		High	-22.322	-24.719	-49.723	-29.112	-24.440	-33.660	
	64QAM	Low	-22.218	-23.826	-51.982	-28.458	-36.757	-33.973	
		Middle	-22.808	-24.124	-48.550	-29.397	-36.390	-34.102	
		High	-22.599	-25.079	-52.070	-29.209	-24.186	-34.026	
		256QAM	Low	-23.249	-25.081	-52.051	-28.480	-36.153	-33.830
	Middle		-22.814	-24.822	-48.550	-29.647	-36.837	-34.732	
	High		-22.802	-25.790	-50.348	-28.878	-23.453	-33.309	
	Port 5	QPSK	Low	-22.900	-23.029	-52.080	-28.303	-35.052	-34.377
			Middle	-22.213	-24.346	-48.316	-29.203	-34.971	-33.751
			High	-22.412	-25.842	-50.343	-28.848	-23.028	-33.921
16QAM		Low	-22.293	-22.639	-52.036	-28.864	-36.520	-33.726	
		Middle	-22.141	-26.524	-48.927	-28.531	-35.808	-34.263	
		High	-23.908	-24.605	-50.387	-29.155	-24.009	-32.785	
64QAM		Low	-23.021	-24.000	-52.269	-29.349	-36.164	-34.096	
		Middle	-23.858	-24.777	-49.019	-29.058	-34.299	-33.909	
		High	-22.720	-26.510	-52.138	-28.601	-23.646	-33.442	
256QAM		Low	-23.505	-25.300	-52.658	-28.711	-36.169	-33.949	
		Middle	-22.141	-23.946	-48.918	-29.233	-34.851	-33.915	
		High	-22.475	-25.144	-52.471	-28.853	-23.075	-33.403	
Port 6	QPSK	Low	-22.659	-24.186	-52.570	-28.472	-36.768	-33.729	
		Middle	-22.526	-24.660	-47.861	-29.378	-36.202	-33.490	
		High	-23.960	-23.619	-49.778	-29.005	-22.693	-33.310	
	16QAM	Low	-22.855	-24.044	-52.515	-27.930	-36.702	-33.989	
		Middle	-23.549	-24.096	-48.295	-29.090	-36.544	-33.438	
		High	-22.646	-26.398	-50.098	-29.131	-24.929	-33.349	
	64QAM	Low	-23.132	-25.680	-52.226	-27.141	-36.311	-34.126	
		Middle	-22.896	-25.304	-48.595	-29.300	-35.514	-33.416	

Port	Modulation	Channel	Measured emission (dBm)					
			9 kHz ~ 150 kHz	150 kHz~ 30 MHz	30 MHz ~ 1 GHz	1 GHz ~ 2.491 GHz	2.695 GHz ~ 12.75 GHz	12.75 GHz ~ 26.5 GHz
	256QAM	High	-22.289	-24.594	-52.372	-28.958	-23.976	-33.358
		Low	-23.379	-23.630	-52.098	-25.753	-36.264	-33.998
		Middle	-23.612	-25.148	-48.516	-28.695	-36.471	-33.371
		High	-22.860	-25.040	-52.663	-29.042	-25.049	-33.802
Port 7	QPSK	Low	-22.900	-25.916	-52.138	-27.496	-35.761	-33.702
		Middle	-22.923	-24.997	-48.357	-29.232	-34.744	-34.030
		High	-23.287	-26.209	-49.532	-28.917	-22.910	-33.866
	16QAM	Low	-22.566	-24.768	-52.267	-28.554	-36.501	-34.064
		Middle	-23.387	-22.735	-48.623	-29.308	-35.218	-33.911
		High	-22.889	-24.879	-52.497	-29.287	-23.343	-33.292
	64QAM	Low	-23.622	-25.490	-51.920	-27.929	-36.456	-33.493
		Middle	-22.778	-23.855	-49.112	-28.624	-35.350	-33.931
		High	-24.362	-24.915	-52.021	-28.422	-23.856	-33.798
	256QAM	Low	-22.771	-25.869	-51.966	-28.810	-36.631	-33.861
		Middle	-22.476	-24.887	-48.214	-29.107	-36.476	-33.476
		High	-22.486	-24.961	-52.494	-27.682	-32.910	-34.610

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

Spurious Emissions of 20 MHz Bandwidth + 20 MHz Bandwidth + 10 MHz Bandwidth / 3 Carrier

Port	Modulation	Channel	Measured emission (dBm)					
			9 kHz ~ 150 kHz	150 kHz~ 30 MHz	30 MHz ~ 1 GHz	1 GHz ~ 2.491 GHz	2.695 GHz ~ 12.75 GHz	12.75 GHz ~ 26.5 GHz
Port 0	QPSK	Low	-23.006	-25.778	-51.813	-26.680	-36.273	-33.755
		Middle	-23.164	-25.048	-48.084	-29.215	-32.722	-33.766
		High	-22.436	-24.975	-50.452	-28.933	-25.422	-33.889
	16QAM	Low	-23.243	-24.462	-51.762	-25.940	-35.156	-33.961
		Middle	-22.930	-26.332	-48.191	-29.151	-33.973	-33.639
		High	-23.085	-26.389	-49.733	-28.829	-26.461	-33.834
	64QAM	Low	-23.915	-25.230	-51.568	-29.201	-36.311	-33.635
		Middle	-22.729	-25.104	-48.169	-29.197	-33.854	-33.924
		High	-23.190	-25.941	-52.353	-29.047	-25.634	-33.903
	256QAM	Low	-22.634	-24.333	-52.161	-27.591	-36.269	-33.817
		Middle	-23.382	-26.136	-48.120	-28.892	-33.824	-33.666
		High	-23.234	-24.597	-49.595	-28.850	-23.526	-33.753
Port 1	QPSK	Low	-22.900	-24.721	-51.919	-28.056	-35.311	-33.684
		Middle	-22.662	-23.647	-49.346	-29.227	-33.805	-34.038
		High	-22.702	-24.986	-50.049	-29.084	-27.530	-33.645
	16QAM	Low	-23.296	-24.996	-52.050	-27.041	-34.920	-33.856
		Middle	-22.545	-25.308	-48.398	-29.123	-32.808	-33.700
		High	-22.816	-25.928	-51.793	-28.566	-22.604	-33.703
	64QAM	Low	-23.432	-24.895	-51.880	-27.269	-35.485	-33.221
		Middle	-22.295	-25.502	-48.854	-28.809	-34.019	-33.823
		High	-23.109	-25.044	-52.166	-29.043	-26.878	-33.740
	256QAM	Low	-22.821	-24.835	-51.902	-27.975	-35.442	-33.325
		Middle	-22.708	-24.331	-48.750	-29.302	-32.827	-33.941
		High	-23.169	-23.722	-50.386	-29.184	-23.601	-34.023
Port 2	QPSK	Low	-23.504	-25.204	-52.055	-28.869	-35.830	-33.684
		Middle	-22.927	-25.046	-48.450	-29.158	-33.915	-33.691

Port	Modulation	Channel	Measured emission (dBm)					
			9 kHz ~ 150 kHz	150 kHz~ 30 MHz	30 MHz ~ 1 GHz	1 GHz ~ 2.491 GHz	2.695 GHz ~ 12.75 GHz	12.75 GHz ~ 26.5 GHz
	16QAM	High	-22.513	-23.398	-50.838	-29.110	-24.909	-33.883
		Low	-22.411	-25.687	-51.876	-27.496	-36.372	-33.320
		Middle	-23.488	-25.154	-48.991	-29.280	-34.123	-34.059
		High	-22.610	-24.987	-51.404	-28.712	-26.717	-33.815
	64QAM	Low	-22.480	-23.859	-52.273	-28.721	-35.539	-33.819
		Middle	-22.508	-25.420	-48.665	-29.069	-33.070	-33.677
		High	-23.628	-26.011	-51.437	-29.355	-24.294	-33.561
	256QAM	Low	-22.515	-25.068	-51.971	-27.575	-36.350	-33.706
		Middle	-22.400	-23.237	-49.573	-29.154	-32.323	-34.151
		High	-23.493	-24.890	-50.504	-28.829	-25.097	-34.065
Port 3	QPSK	Low	-22.530	-25.007	-52.325	-28.936	-36.051	-33.732
		Middle	-23.056	-24.554	-48.689	-29.222	-33.004	-34.009
		High	-23.129	-25.123	-51.202	-29.337	-25.647	-33.832
	16QAM	Low	-23.637	-22.988	-52.089	-28.769	-35.811	-33.672
		Middle	-23.339	-23.521	-48.995	-29.514	-33.895	-34.537
		High	-23.142	-23.340	-51.085	-29.004	-23.108	-34.202
	64QAM	Low	-22.601	-24.696	-51.868	-25.500	-35.721	-33.760
		Middle	-22.373	-24.841	-49.797	-29.524	-32.656	-34.400
		High	-23.770	-25.955	-51.091	-29.265	-24.714	-33.803
	256QAM	Low	-22.663	-24.867	-51.908	-28.131	-36.055	-33.737
		Middle	-22.851	-22.911	-48.568	-29.258	-32.326	-34.155
		High	-22.898	-23.590	-50.933	-29.271	-23.477	-33.691
Port 4	QPSK	Low	-22.620	-25.537	-52.041	-28.784	-36.676	-34.381
		Middle	-22.660	-24.070	-48.183	-28.675	-34.385	-33.455
		High	-24.226	-25.682	-50.587	-29.073	-25.082	-34.129
	16QAM	Low	-22.630	-25.507	-51.815	-27.972	-36.246	-34.428
		Middle	-23.446	-25.855	-47.998	-28.809	-35.315	-33.693

Port	Modulation	Channel	Measured emission (dBm)						
			9 kHz ~ 150 kHz	150 kHz~ 30 MHz	30 MHz ~ 1 GHz	1 GHz ~ 2.491 GHz	2.695 GHz ~ 12.75 GHz	12.75 GHz ~ 26.5 GHz	
		High	-24.368	-23.368	-50.180	-28.710	-24.994	-33.660	
	64QAM	Low	-23.804	-24.541	-52.472	-28.635	-35.927	-34.200	
		Middle	-22.663	-25.534	-48.947	-28.692	-34.502	-33.983	
		High	-22.994	-25.464	-52.295	-28.384	-24.365	-33.581	
		256QAM	Low	-23.801	-24.160	-52.347	-29.585	-36.770	-34.306
	Middle		-22.987	-24.932	-48.721	-29.339	-34.155	-33.643	
	High		-22.750	-25.596	-52.167	-29.203	-23.420	-33.627	
	Port 5	QPSK	Low	-22.701	-24.162	-51.805	-28.620	-35.500	-33.751
			Middle	-22.636	-24.345	-48.594	-29.279	-30.527	-34.044
			High	-22.312	-24.991	-51.052	-29.285	-25.757	-33.902
16QAM		Low	-22.360	-23.087	-51.802	-28.865	-35.950	-33.740	
		Middle	-22.914	-25.920	-49.034	-29.238	-33.124	-33.887	
		High	-22.837	-24.006	-52.597	-28.890	-26.181	-33.190	
64QAM		Low	-23.567	-24.869	-51.676	-26.996	-36.056	-33.745	
		Middle	-22.744	-25.542	-49.065	-29.161	-31.400	-33.760	
		High	-23.024	-24.165	-50.255	-29.585	-23.805	-33.904	
256QAM		Low	-23.509	-25.484	-52.038	-27.592	-36.266	-33.822	
		Middle	-23.953	-24.109	-48.638	-29.198	-34.354	-33.576	
		High	-22.602	-24.492	-52.603	-29.496	-28.435	-33.752	
Port 6	QPSK	Low	-23.630	-23.066	-52.099	-28.283	-36.406	-33.725	
		Middle	-23.523	-25.487	-48.941	-29.586	-34.313	-33.876	
		High	-22.610	-23.943	-51.064	-29.068	-24.944	-33.431	
	16QAM	Low	-22.315	-25.229	-52.177	-27.692	-36.726	-33.019	
		Middle	-23.829	-24.306	-48.908	-29.308	-33.426	-33.924	
		High	-22.623	-24.627	-52.522	-29.213	-23.184	-33.993	
	64QAM	Low	-20.274	-23.365	-51.936	-27.114	-35.817	-33.588	
		Middle	-23.681	-23.184	-47.838	-28.970	-31.650	-33.825	

Port	Modulation	Channel	Measured emission (dBm)					
			9 kHz ~ 150 kHz	150 kHz~ 30 MHz	30 MHz ~ 1 GHz	1 GHz ~ 2.491 GHz	2.695 GHz ~ 12.75 GHz	12.75 GHz ~ 26.5 GHz
	256QAM	High	-23.038	-25.025	-50.331	-28.872	-24.169	-33.811
		Low	-22.913	-25.692	-52.052	-27.780	-35.879	-33.570
		Middle	-22.932	-25.459	-47.848	-29.021	-32.908	-34.121
		High	-22.885	-25.675	-50.471	-28.687	-24.616	-33.608
Port 7	QPSK	Low	-23.861	-24.747	-52.288	-27.656	-36.188	-34.001
		Middle	-22.428	-24.475	-49.430	-28.981	-32.270	-33.684
		High	-22.380	-25.695	-50.939	-28.096	-24.522	-33.103
	16QAM	Low	-23.285	-25.984	-52.147	-27.169	-36.090	-34.094
		Middle	-23.248	-23.285	-49.130	-28.803	-33.234	-33.820
		High	-22.486	-24.841	-52.414	-29.174	-25.888	-33.199
	64QAM	Low	-23.700	-25.684	-52.160	-28.671	-36.628	-33.279
		Middle	-23.404	-24.960	-48.837	-29.328	-32.625	-33.820
		High	-22.235	-23.868	-52.477	-28.496	-26.494	-33.431
	256QAM	Low	-23.226	-22.992	-52.078	-27.471	-35.850	-33.514
		Middle	-22.757	-25.406	-48.222	-28.345	-32.911	-33.868
		High	-23.046	-25.495	-49.698	-29.469	-24.518	-33.355

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