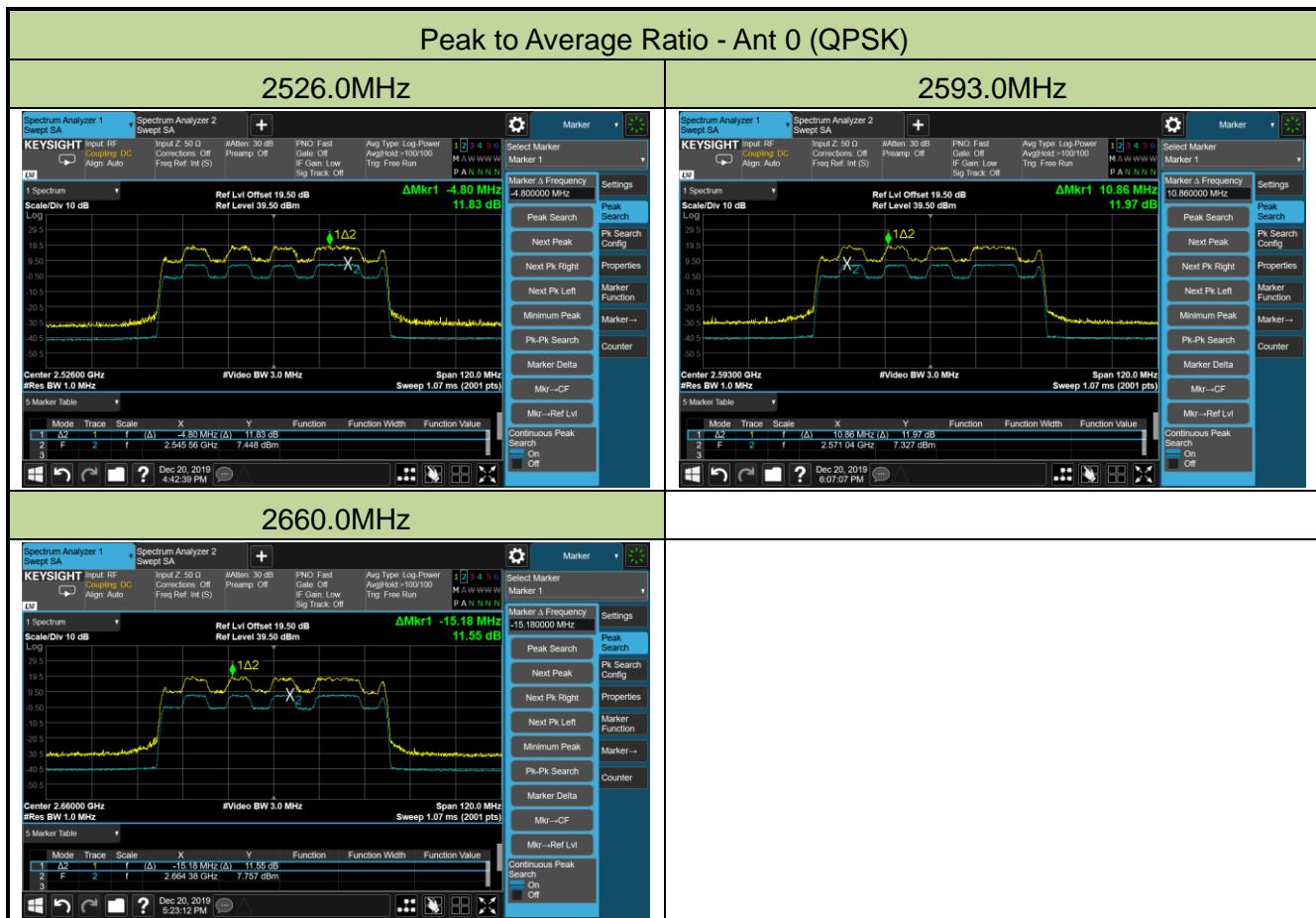
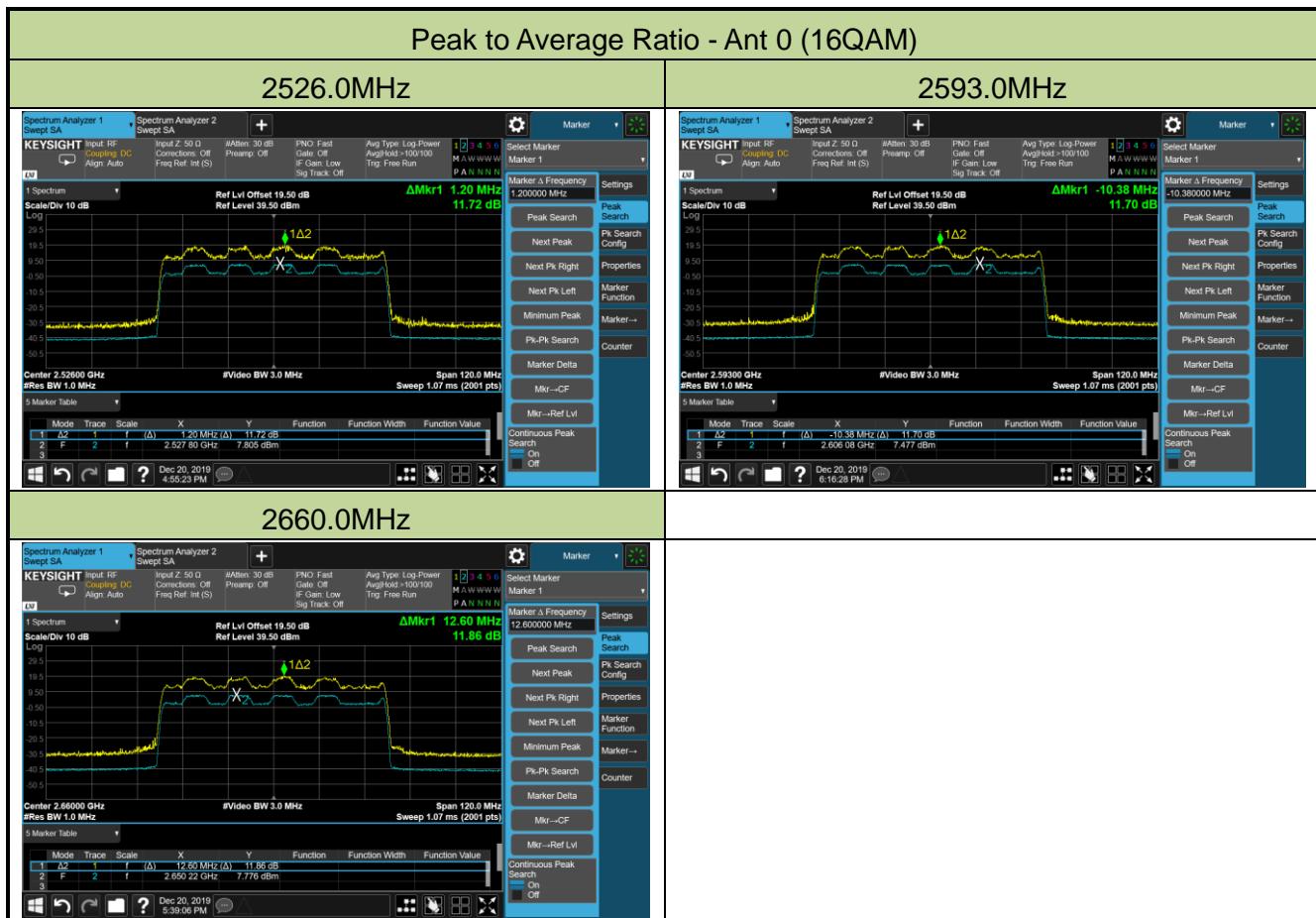
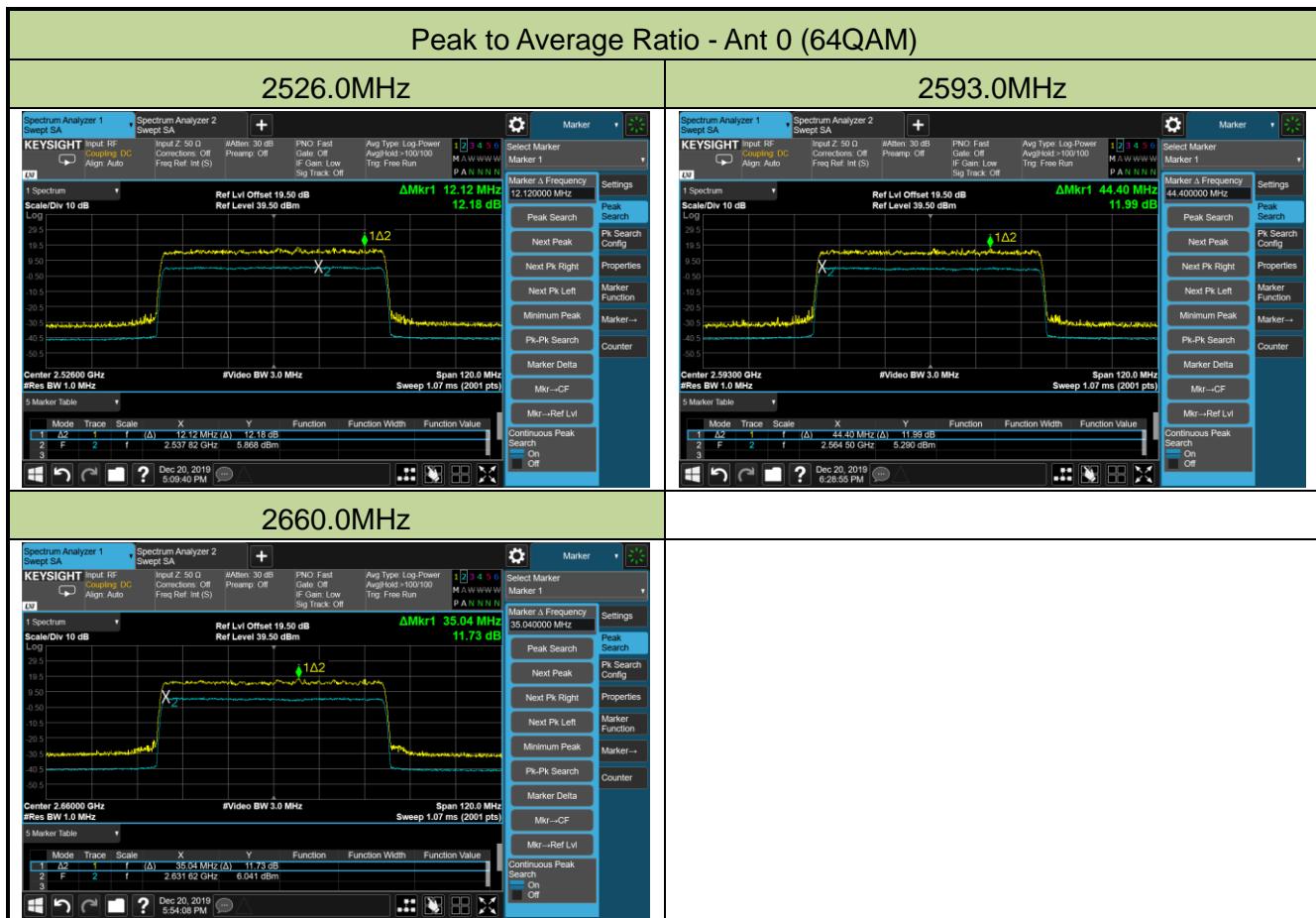


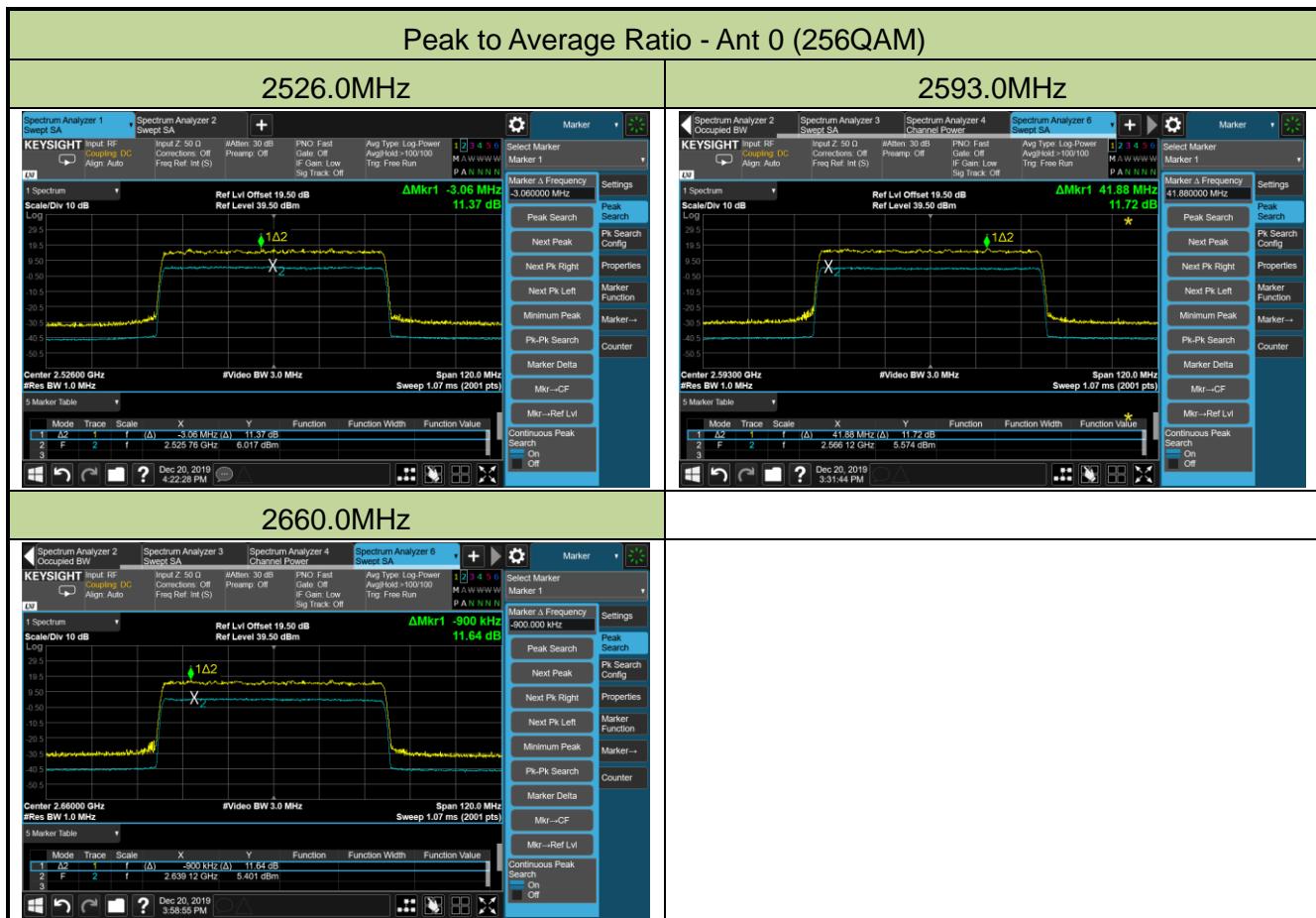
Product	AirScale Indoor Radio ASiR 5G-pRRH	Test Engineer	Larry Yan
Test Site	SR5	Test Date	2019/12/20
Test Item	Peak to Average Ratio, 60MHz Bandwidth		

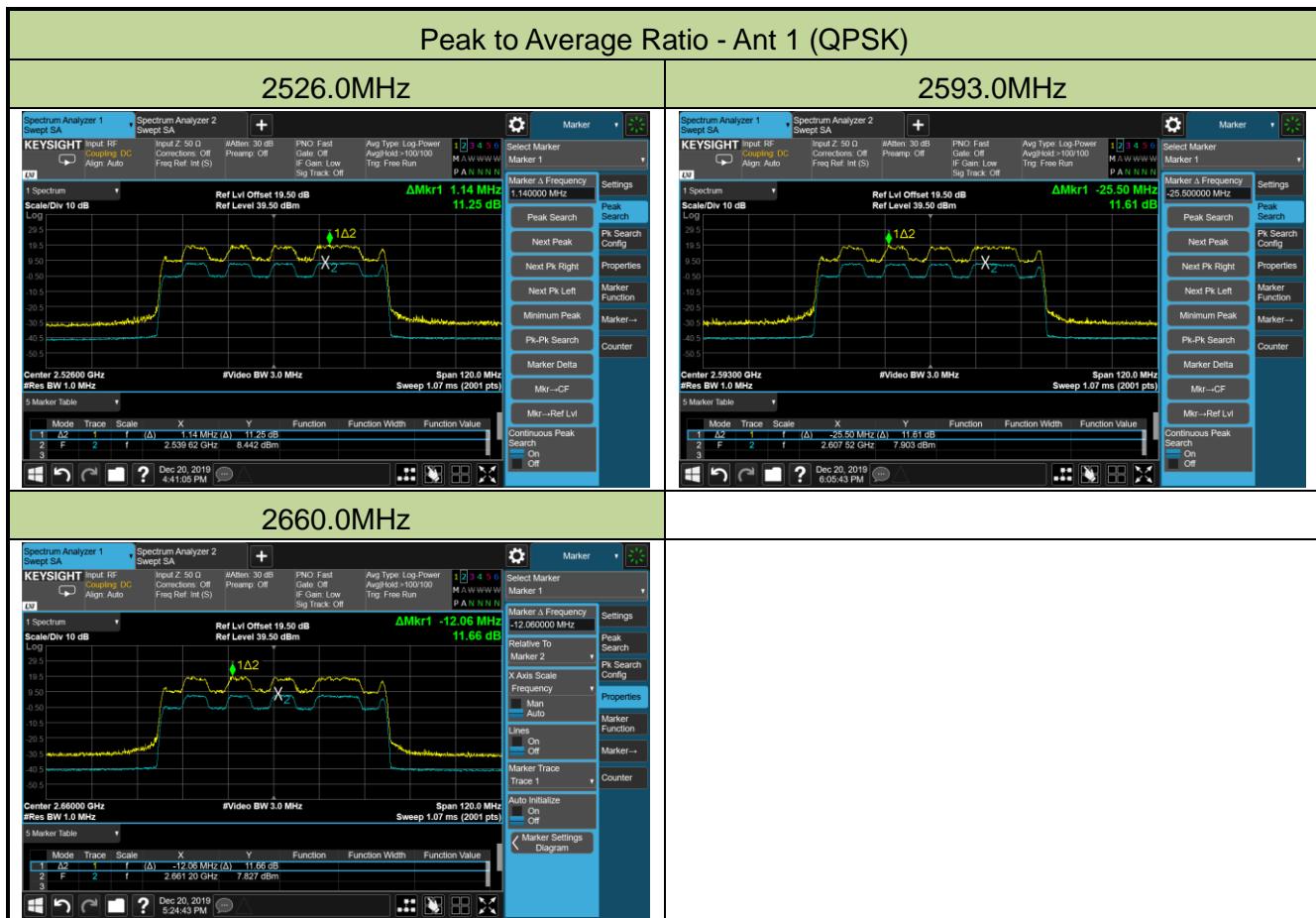
Frequency (MHz)	Channel Bandwidth (MHz)	Peak to Average Ratio (dB)				Limit (dBm)	Result
		Ant 0	Ant 1	Ant 2	Ant 3		
QPSK							
2526.0	60	11.83	11.25	11.73	11.27	≤ 13.00	Pass
2593.0	60	11.97	11.61	12.28	12.18	≤ 13.00	Pass
2660.0	60	11.55	11.66	11.05	11.78	≤ 13.00	Pass
16QAM							
2526.0	60	11.72	11.47	12.07	11.71	≤ 13.00	Pass
2593.0	60	11.70	11.54	11.23	12.01	≤ 13.00	Pass
2660.0	60	11.86	11.92	11.94	11.31	≤ 13.00	Pass
64QAM							
2526.0	60	12.18	12.21	12.21	12.16	≤ 13.00	Pass
2593.0	60	11.99	11.81	12.17	12.03	≤ 13.00	Pass
2660.0	60	11.73	12.18	12.10	11.80	≤ 13.00	Pass
256QAM							
2526.0	60	11.37	11.55	11.87	11.65	≤ 13.00	Pass
2593.0	60	11.72	11.51	11.72	11.36	≤ 13.00	Pass
2660.0	60	11.64	11.55	11.58	11.53	≤ 13.00	Pass

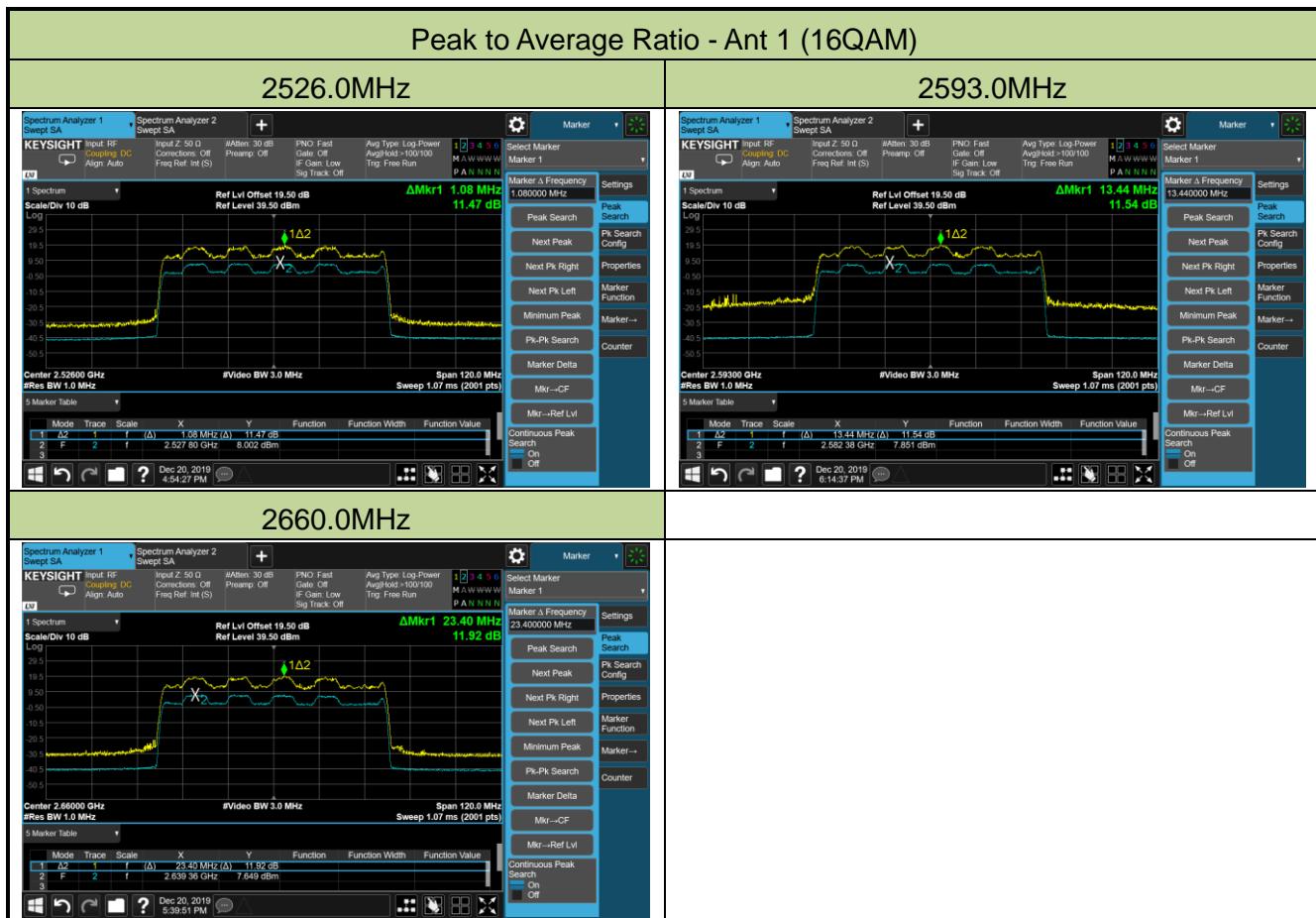


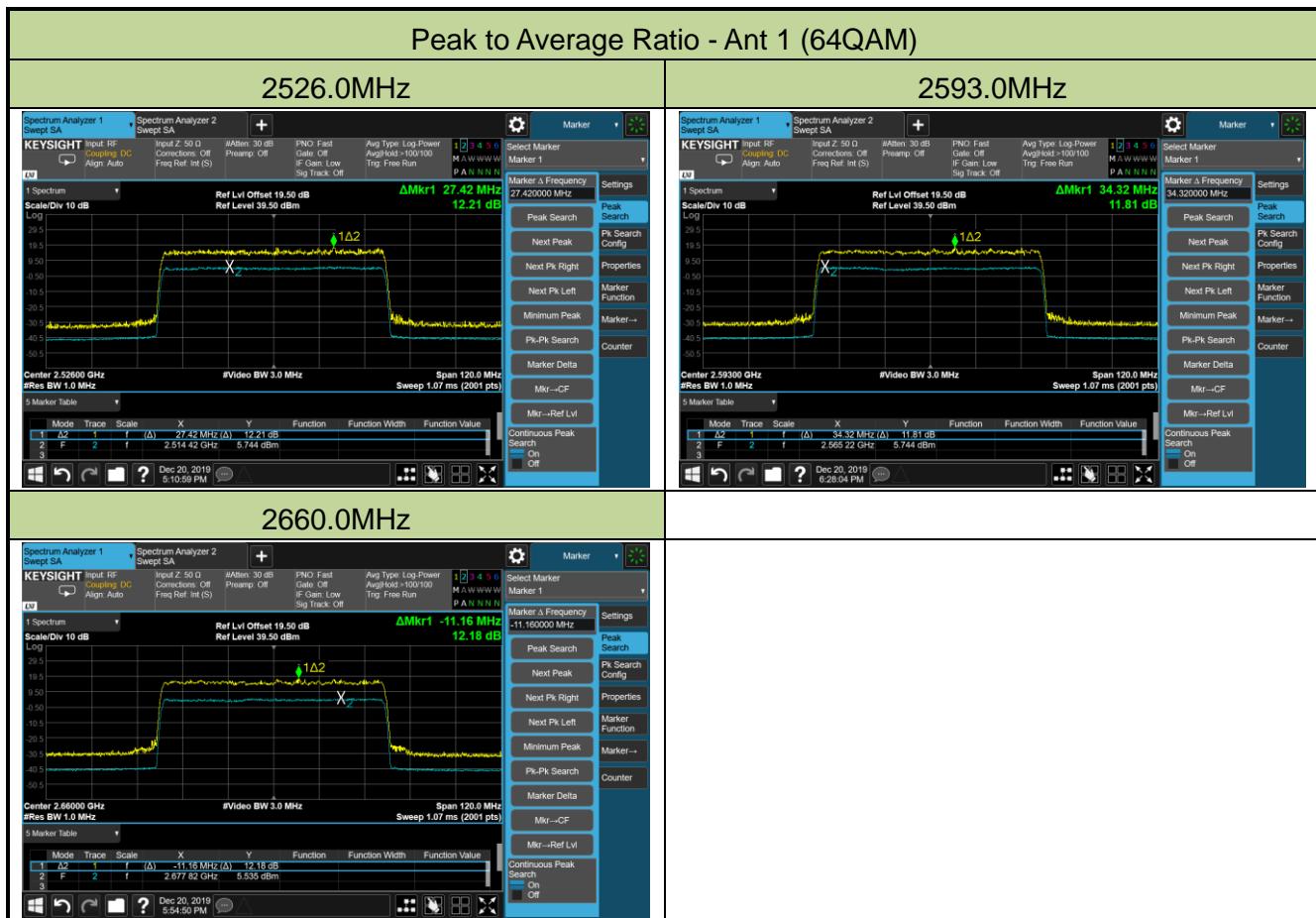


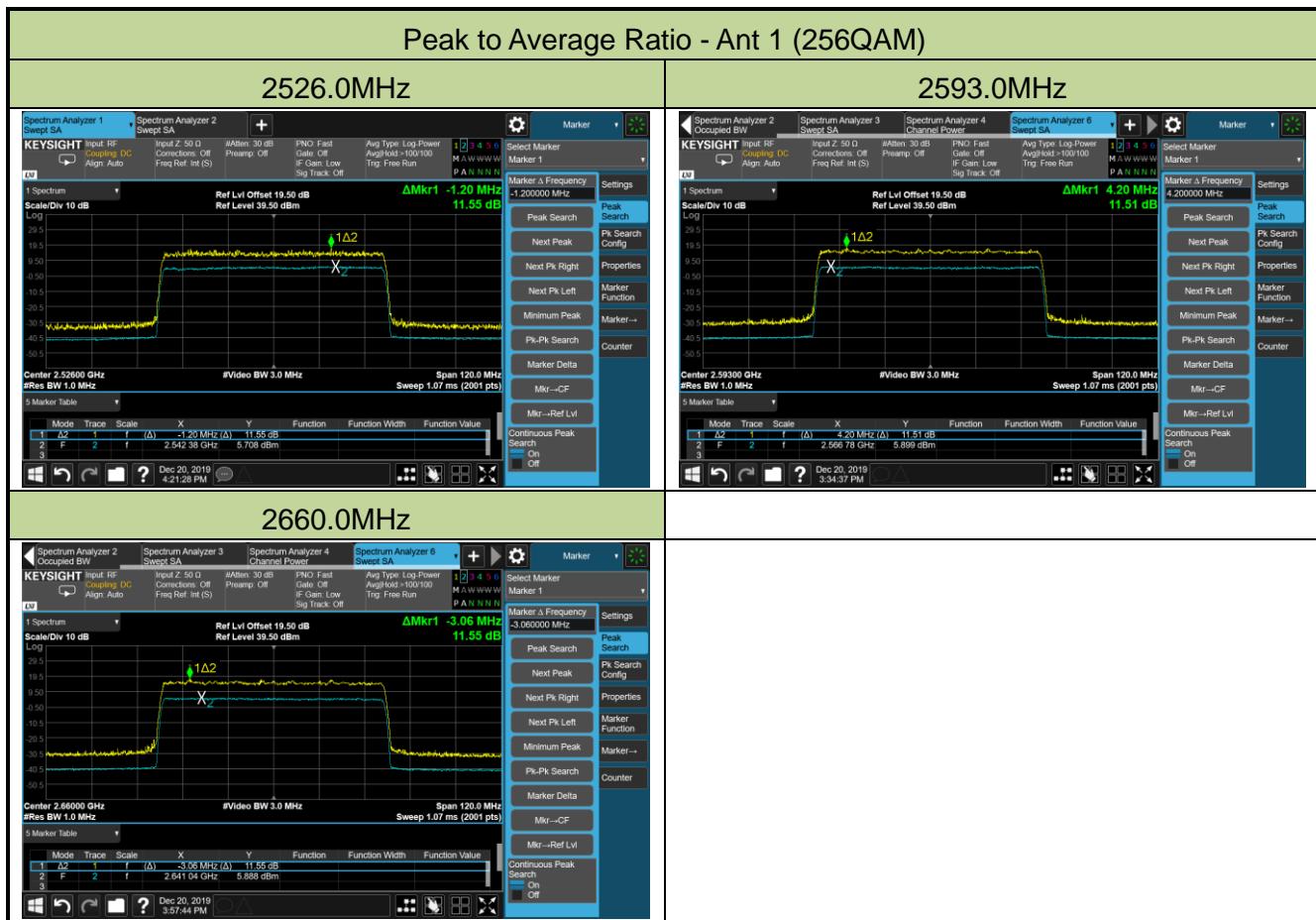


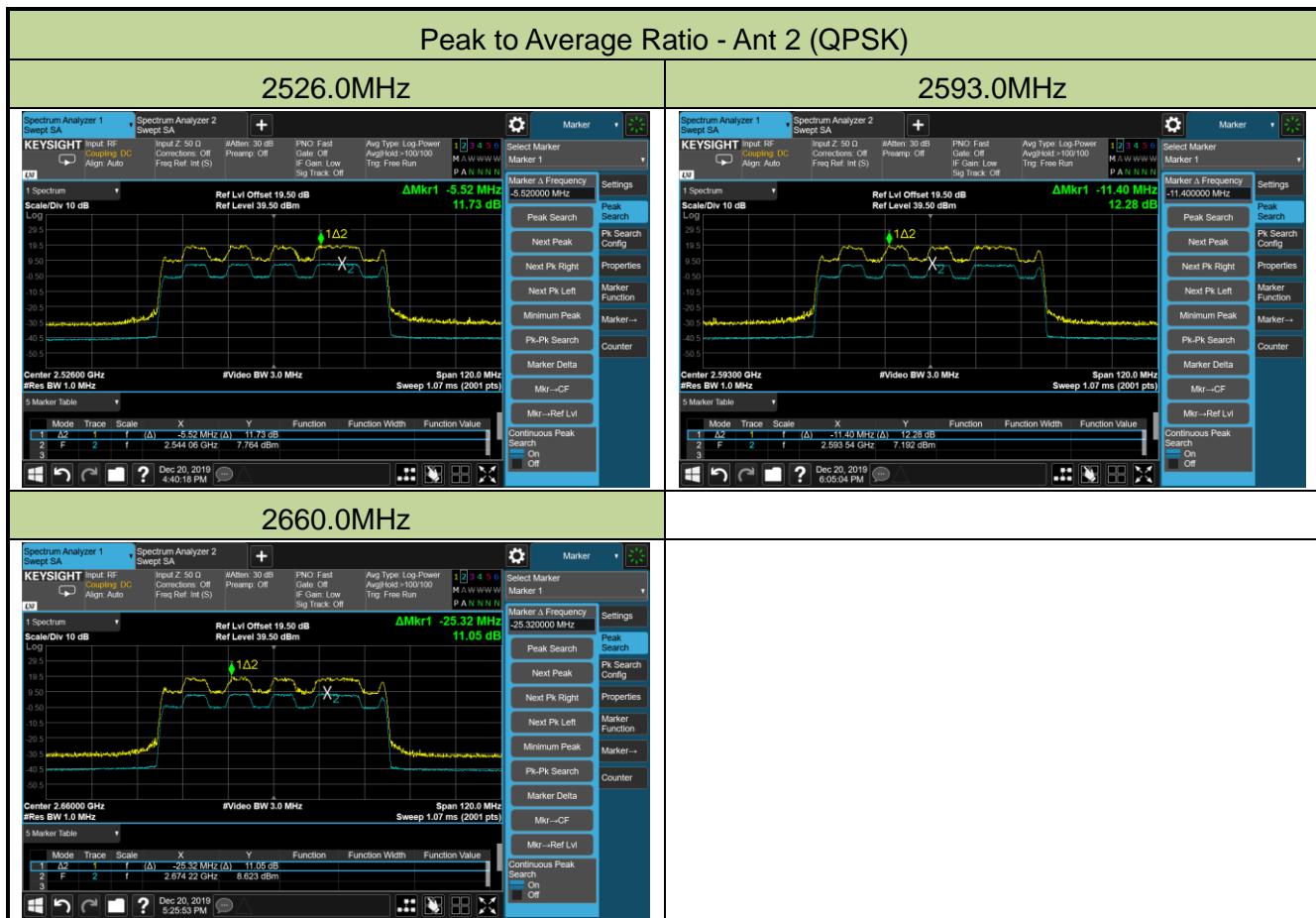


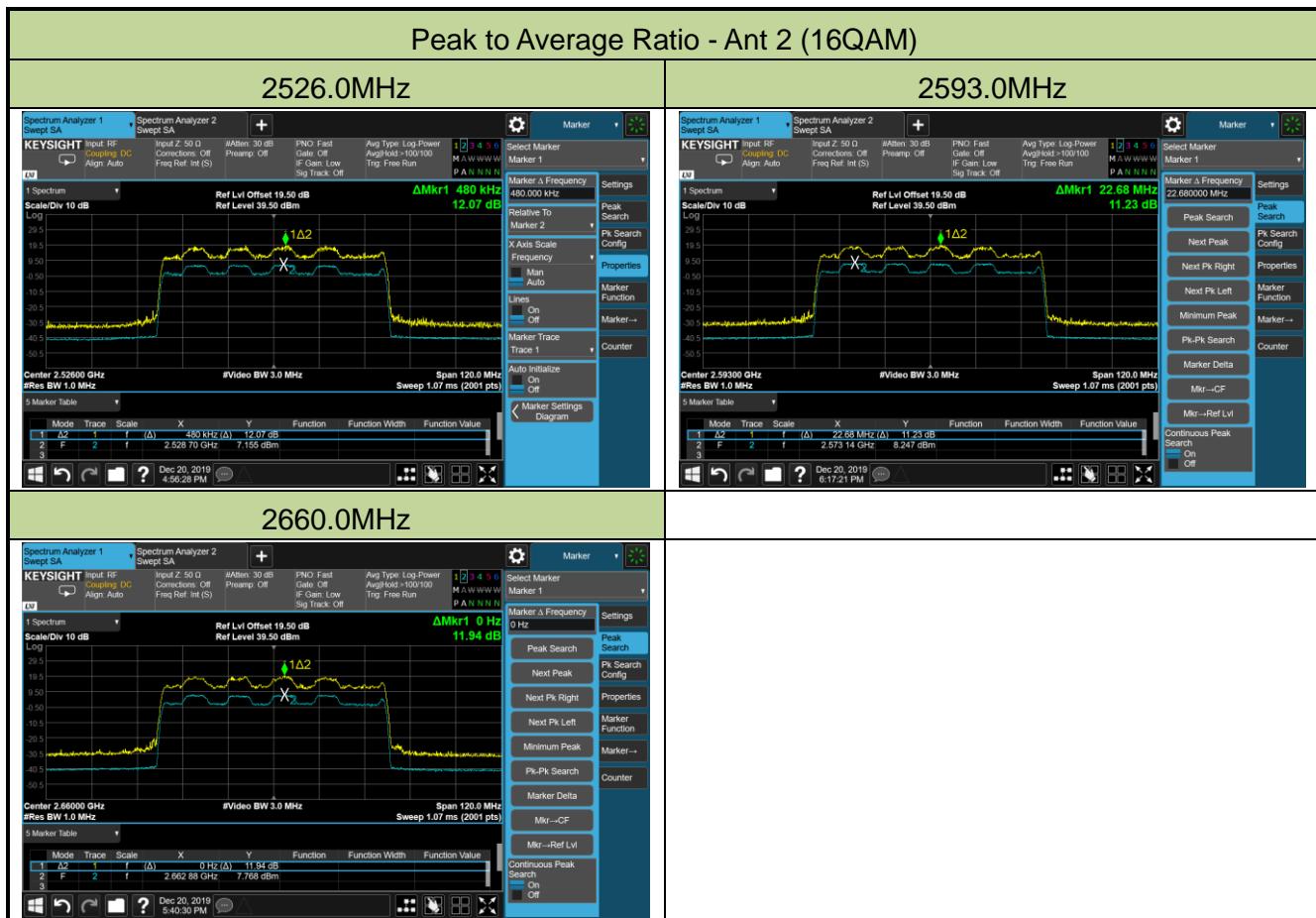


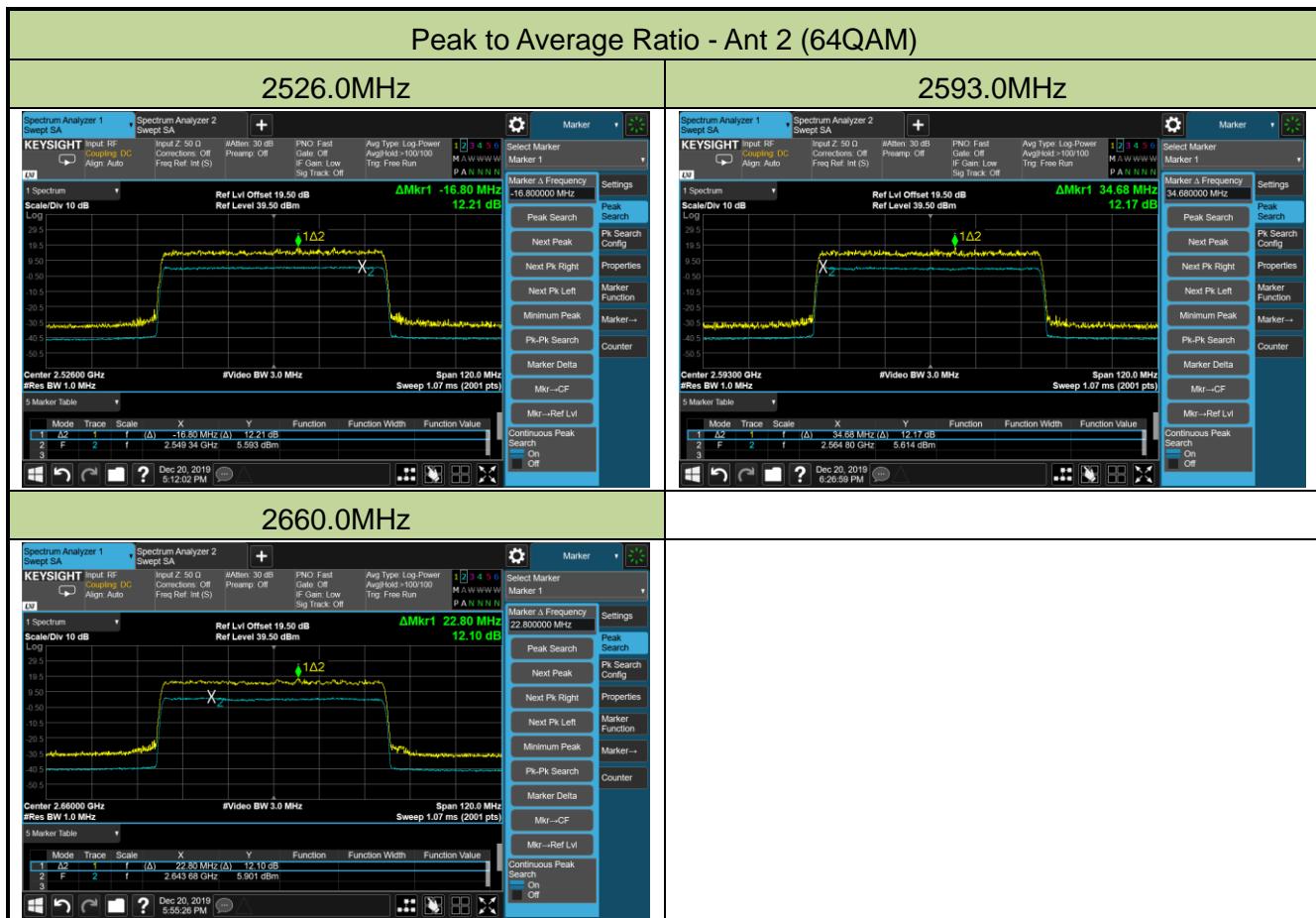


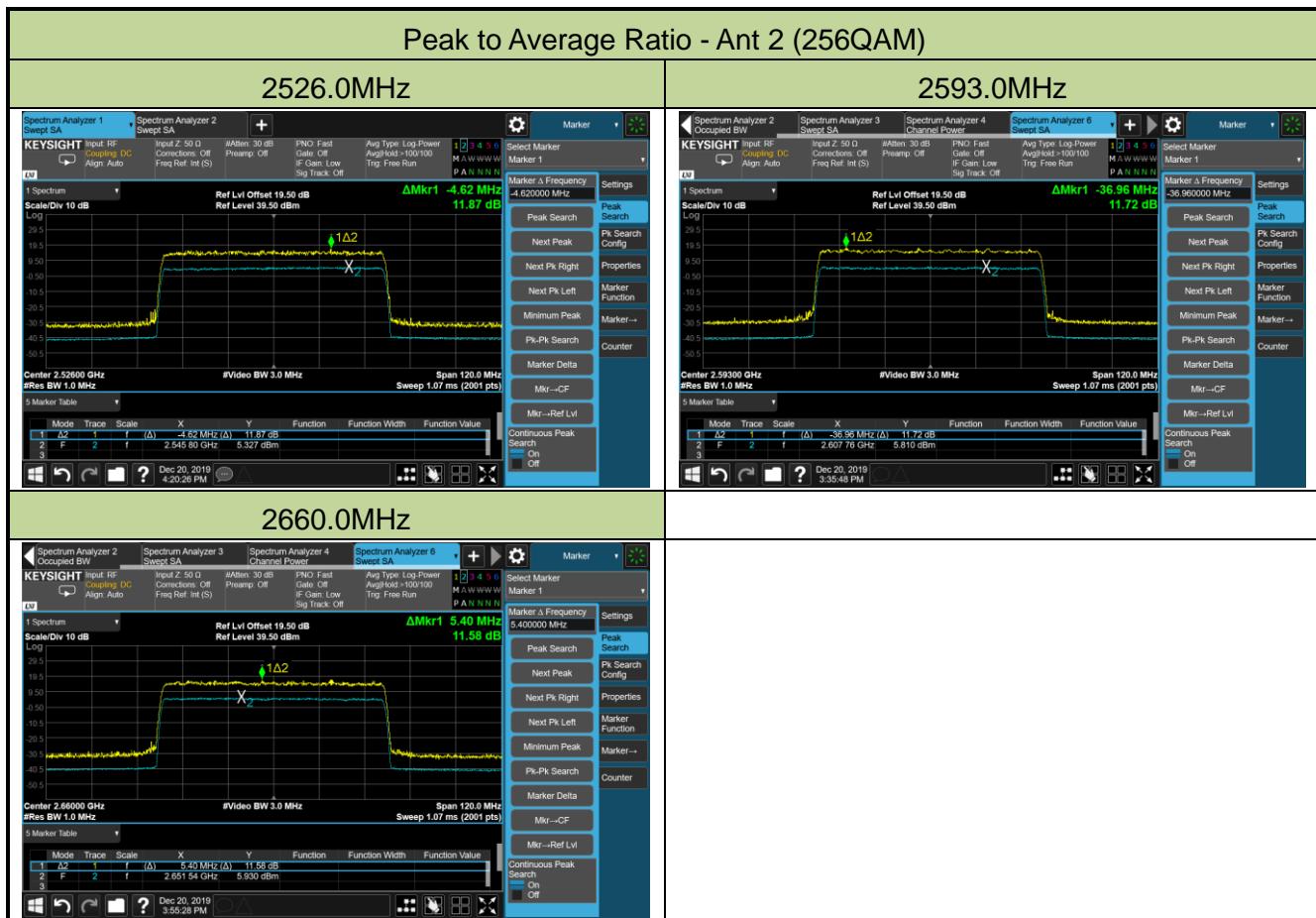


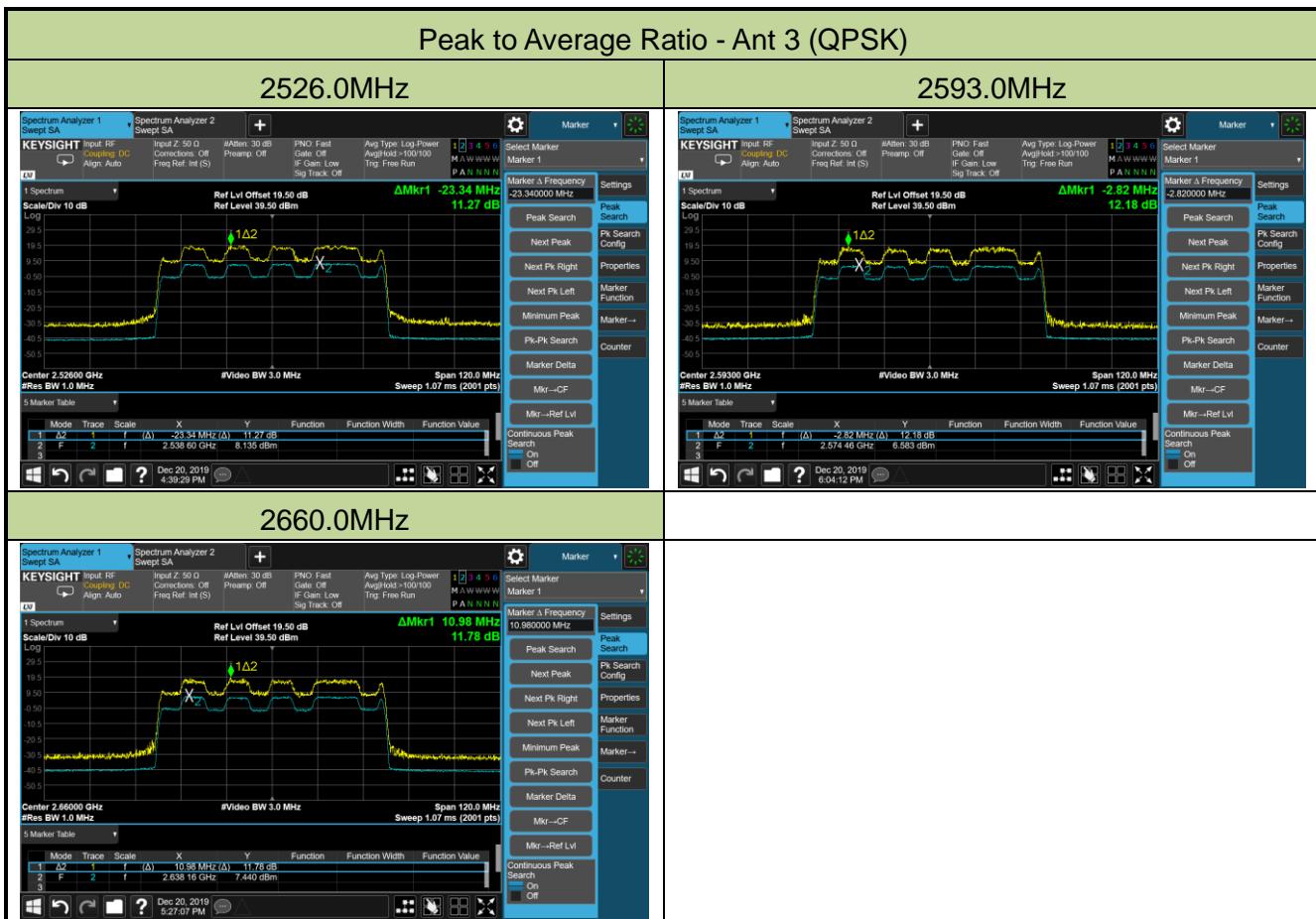


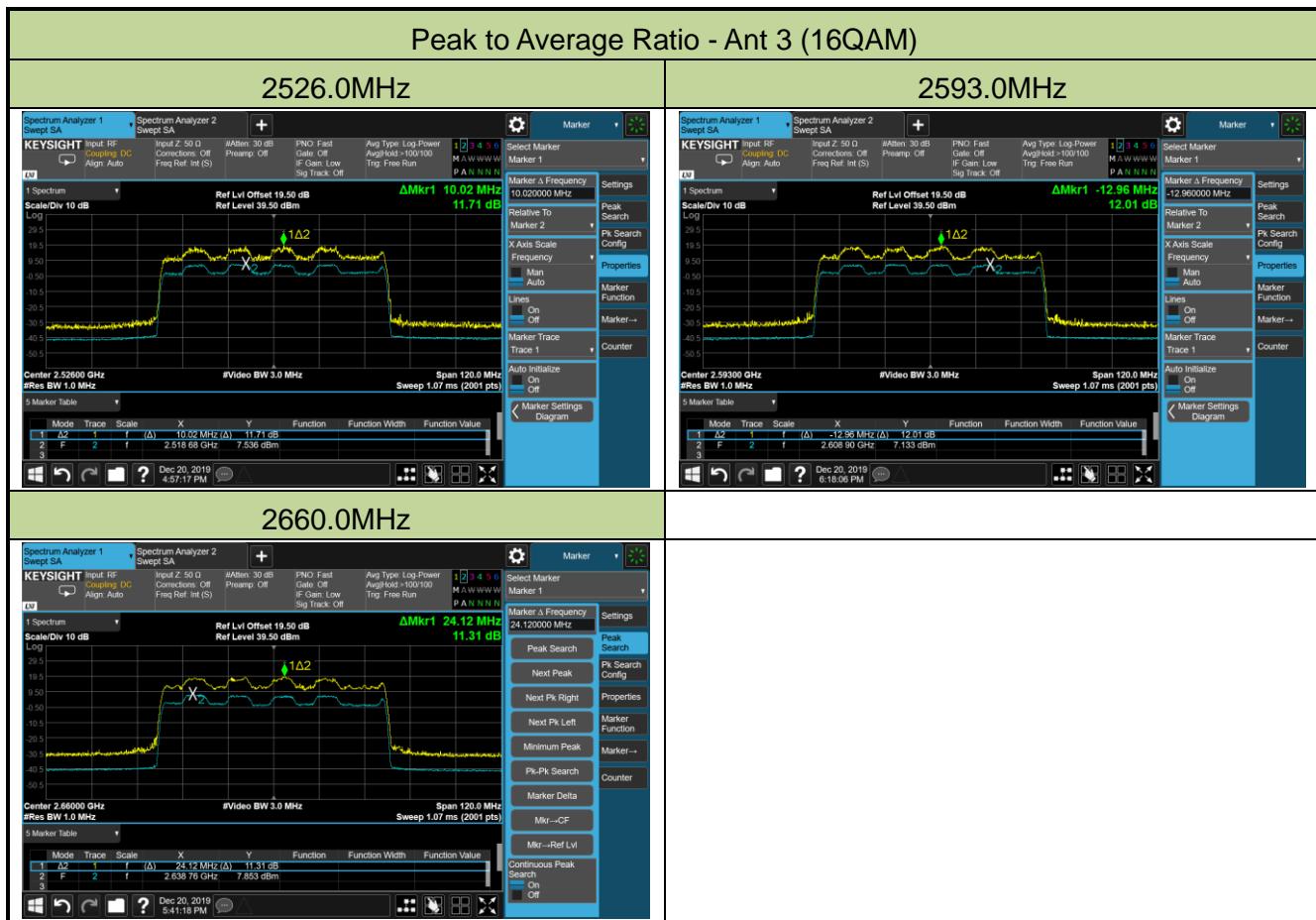


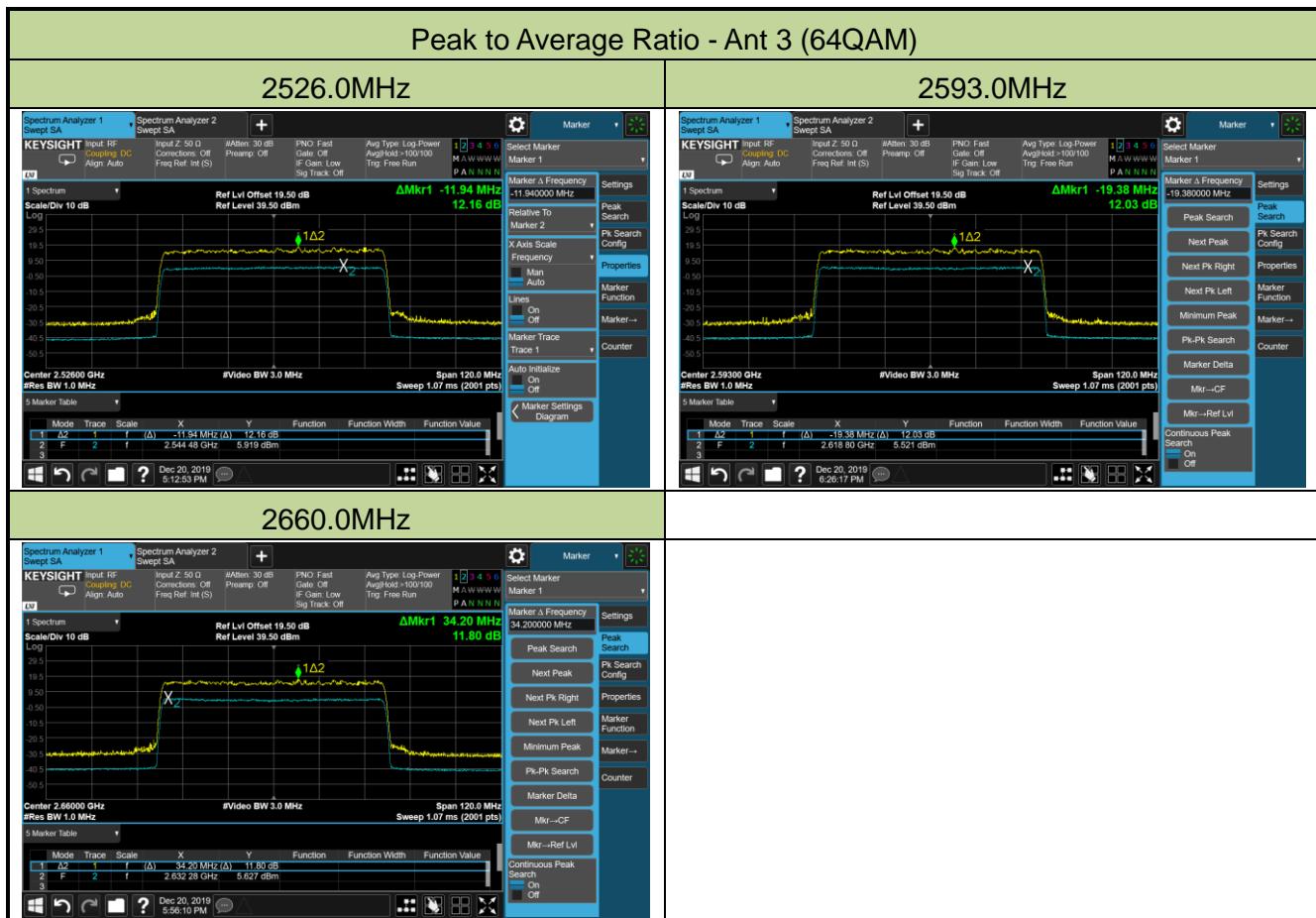


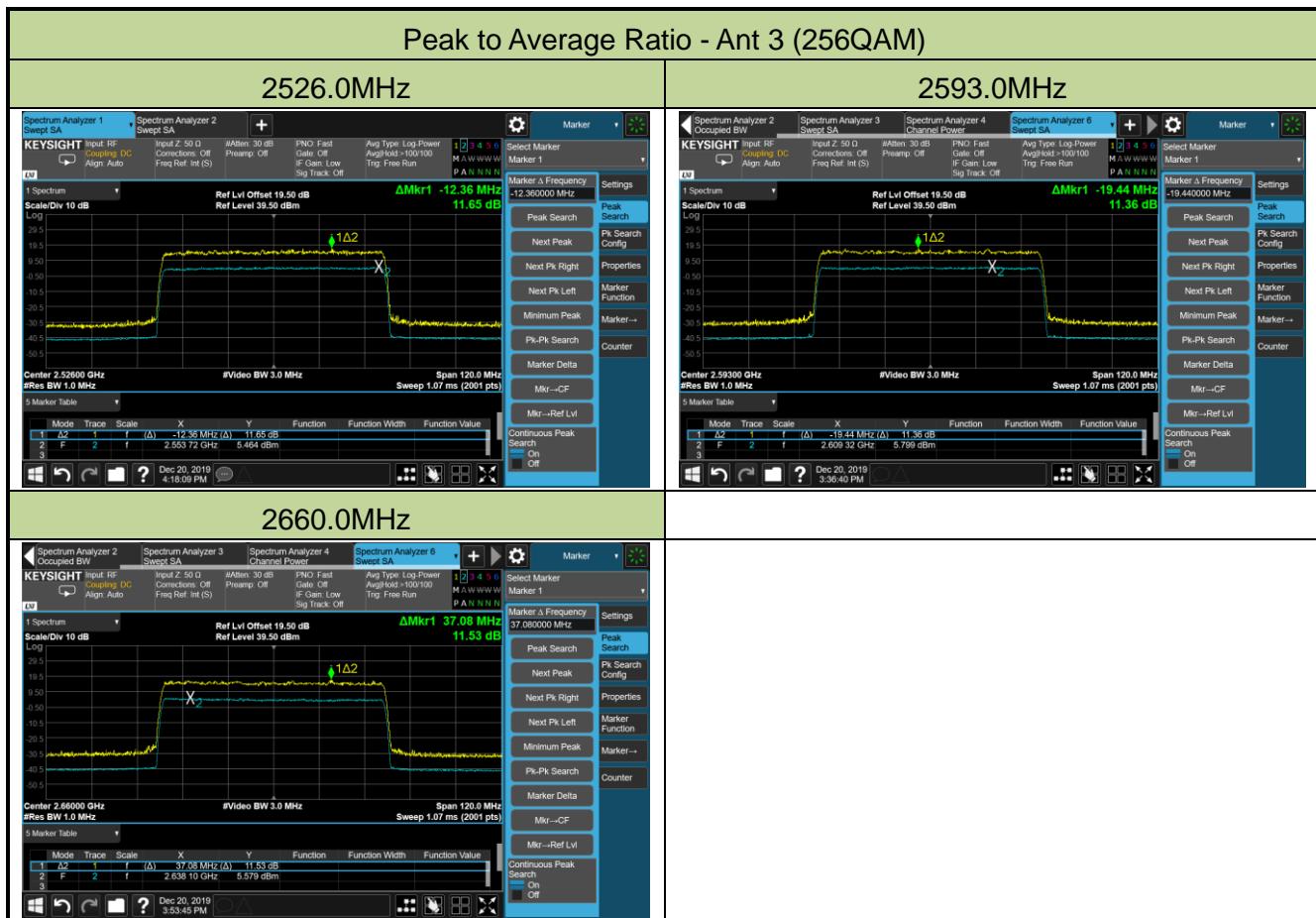












6.7. Conducted Spurious Emissions

6.7.1. Test Limit

For all fixed digital user stations, the attenuation factor shall be not less than $43 + 10 \log (P)$ dB at the channel edge.

Note: This device can be implement MIMO function, so the limit os spurious emissions needs to be reduced $10 \log(\text{Numbers}_{\text{Ant}})$ according to FCC KDB 662911 D01 guidance.

The UUT can operate in either 2*2 or 4*4 MIMO mode. The 4X4 MIMO limit is applied in this test report and is adjusted to $-13 \text{ dBm} - 10 \log (4) = -19.02 \text{ dBm}$, since it is more stringent than the 2*2 MIMO limit.

6.7.2. Test Procedure Used

KDB 971168 D01v03r01 - Section 6

ANSI C63.26-2015 - Section 6.4.4.2

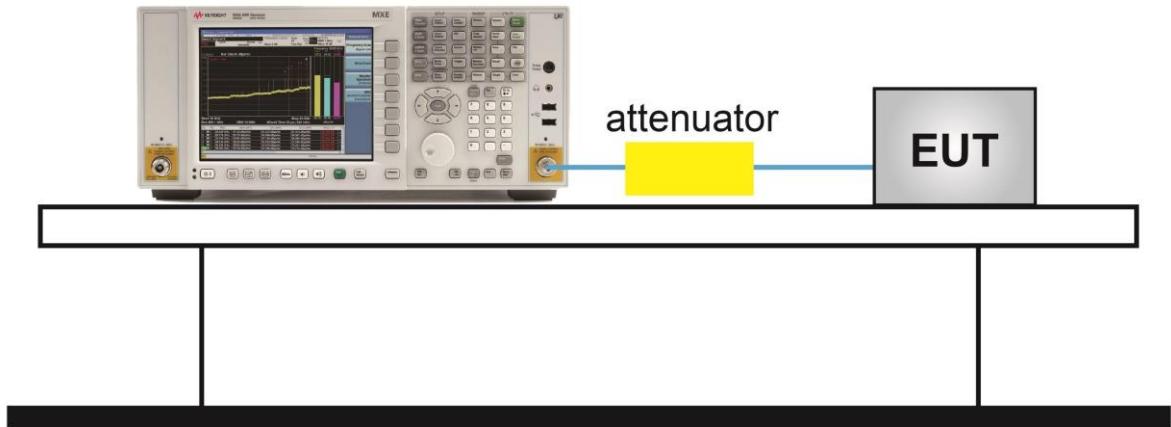
6.7.3. Test Setting

1. Set the analyzer frequency to low or high channel.
2. RBW = 100kHz or 1MHz
3. VBW $\geq 3 \times \text{RBW}$
4. Sweep time = auto
5. Detector = power averaging (rms)
6. Set sweep trigger to “free run.”
7. Trace average at least 100 traces in power averaging (rms) mode if sweep is set to auto-couple.

To accurately determine the average power over the on and off time of the transmitter, it can be necessary to increase the number of traces to be averaged above 100, or if using a manually configured sweep time, increase the sweep time.

6.7.4. Test Setup

Spectrum Analyzer



6.7.5. Test Result

Product	AirScale Indoor Radio ASiR 5G-pRRH		Test Engineer	Peter Xu	
Test Site	SR2		Test Date	2019/08/18 ~ 2019/08/19	
Test Item	Conducted Spurious Emissions, 100MHz Bandwidth				

Frequency (MHz)	Bandwidth (MHz)	Frequency Range (MHz)	Max Spurious Emissions (dBm)				Limit (dBm)	Result
			Ant 0	Ant 1	Ant 2	Ant 3		
QPSK								
2546.0	100	0.009 ~ 30	-57.24	-58.26	-55.40	-56.55	≤ -19.02	Pass
		30 ~ 27000	-31.40	-31.60	-32.97	-32.02	≤ -19.02	Pass
2593.0	100	0.009 ~ 30	-56.22	-57.99	-57.86	-56.67	≤ -19.02	Pass
		30 ~ 27000	-32.52	-31.43	-31.98	-31.93	≤ -19.02	Pass
2640.0	100	0.009 ~ 30	-56.06	-57.08	-56.78	-57.04	≤ -19.02	Pass
		30 ~ 27000	-32.91	-31.09	-32.17	-30.91	≤ -19.02	Pass
16QAM								
2546.0	100	0.009 ~ 30	-56.44	-55.69	-57.78	-56.98	≤ -19.02	Pass
		30 ~ 27000	-30.99	-32.99	-32.54	-32.01	≤ -19.02	Pass
2593.0	100	0.009 ~ 30	-57.08	-56.60	-57.61	-56.19	≤ -19.02	Pass
		30 ~ 27000	-32.50	-32.41	-33.17	-32.78	≤ -19.02	Pass
2640.0	100	0.009 ~ 30	-57.63	-56.58	-57.75	-57.95	≤ -19.02	Pass
		30 ~ 27000	-31.98	-31.76	-32.29	-32.80	≤ -19.02	Pass
64QAM								
2546.0	100	0.009 ~ 30	-57.53	-58.46	-57.76	-56.71	≤ -19.02	Pass
		30 ~ 27000	-32.13	-31.72	-31.50	-32.17	≤ -19.02	Pass
2593.0	100	0.009 ~ 30	-55.96	-57.91	-57.85	-56.82	≤ -19.02	Pass
		30 ~ 27000	-32.38	-31.19	-32.31	-32.63	≤ -19.02	Pass
2640.0	100	0.009 ~ 30	-58.27	-58.29	-57.67	-57.76	≤ -19.02	Pass
		30 ~ 27000	-32.49	-32.55	-31.38	-31.62	≤ -19.02	Pass
256QAM								
2546.0	100	0.009 ~ 30	-55.41	-57.15	-55.11	-56.99	≤ -19.02	Pass
		30 ~ 27000	-32.10	-31.80	-33.22	-32.39	≤ -19.02	Pass
2593.0	100	0.009 ~ 30	-55.03	-57.44	-55.20	-58.09	≤ -19.02	Pass
		30 ~ 27000	-31.86	-31.86	-32.85	-32.00	≤ -19.02	Pass
2640.0	100	0.009 ~ 30	-59.54	-58.18	-57.52	-58.03	≤ -19.02	Pass
		30 ~ 27000	-33.47	-32.81	-32.21	-31.98	≤ -19.02	Pass

