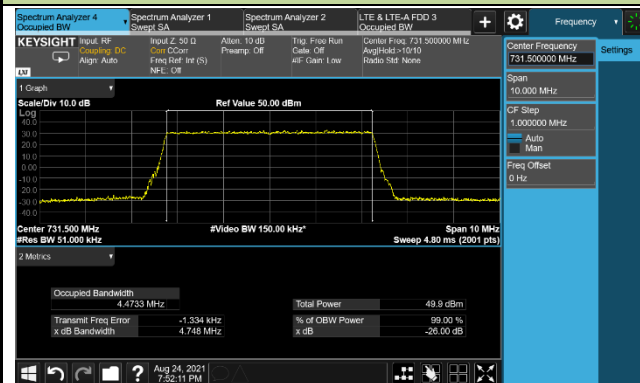


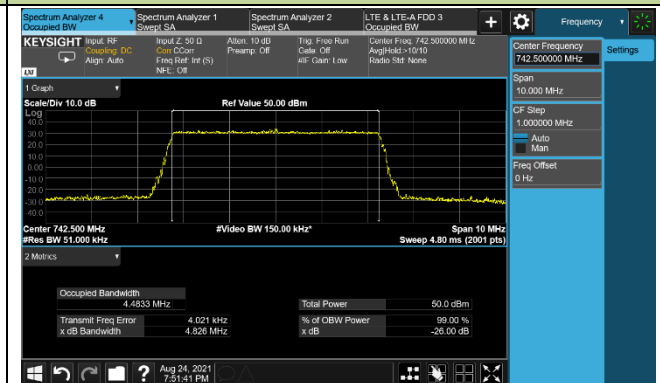
5 + GAP6 + 5MHz Channel Bandwidth - Middle Channel

QPSK

Low Carrier

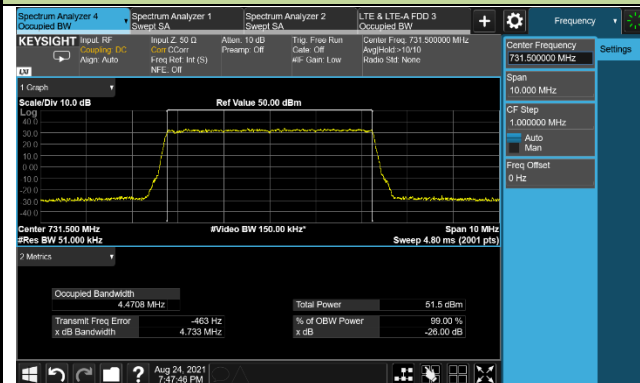


High Carrier

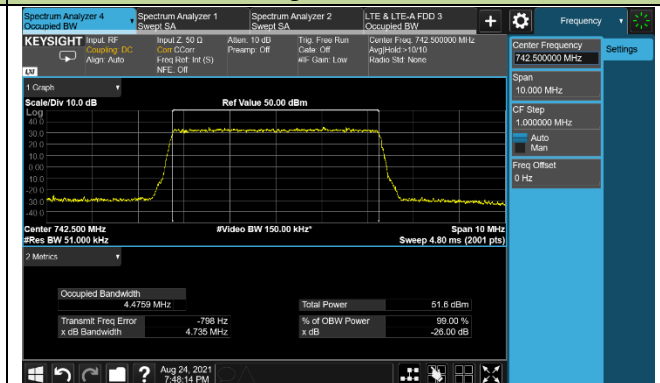


16QAM

Low Carrier

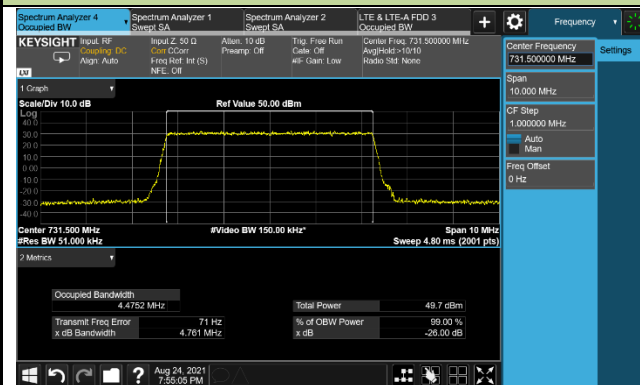


High Carrier

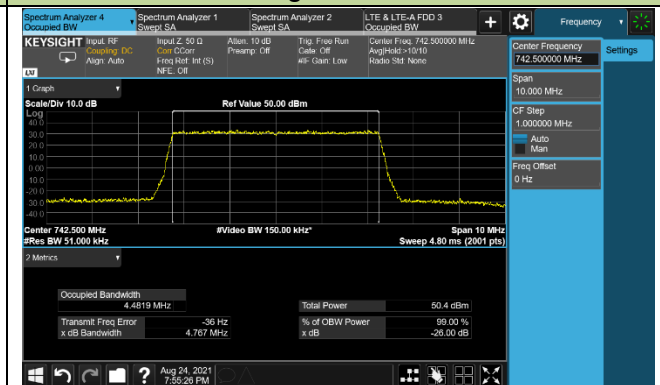


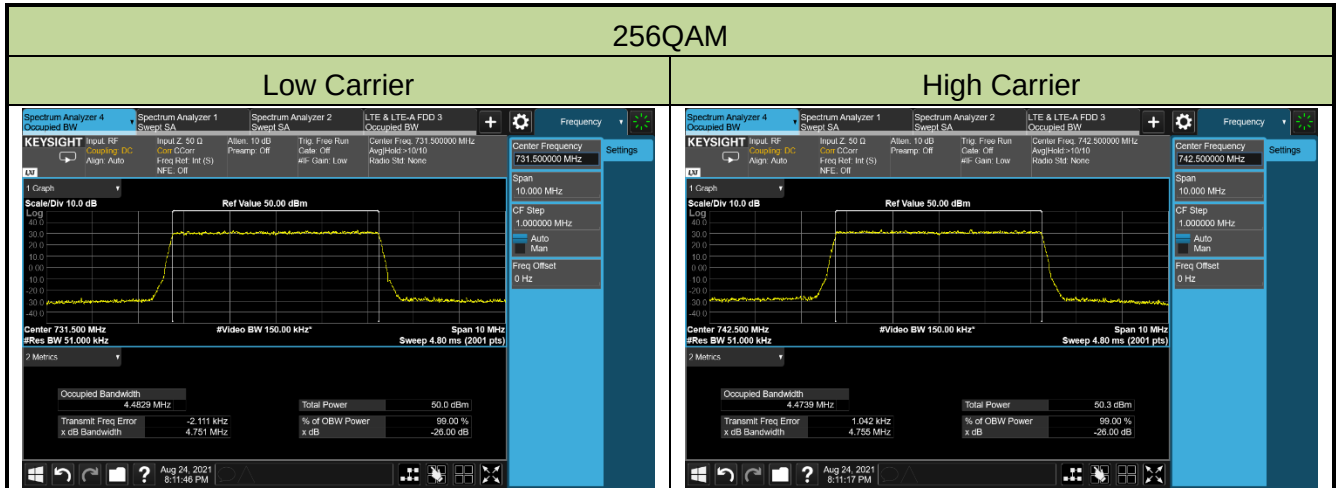
64QAM

Low Carrier



High Carrier

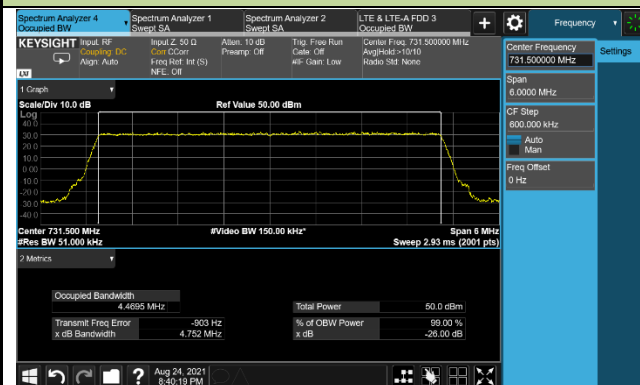




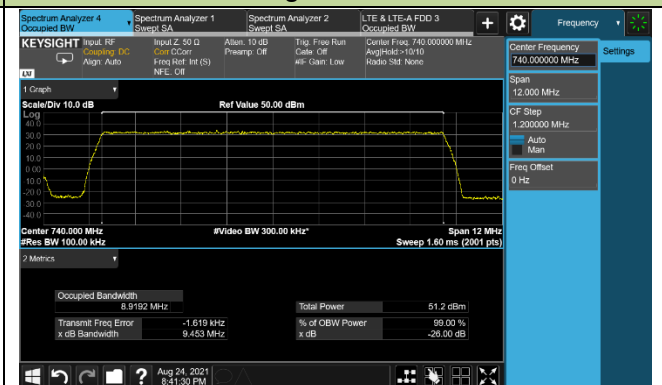
5 + GAP1 + 10MHz Channel Bandwidth - Middle Channel

QPSK

Low Carrier

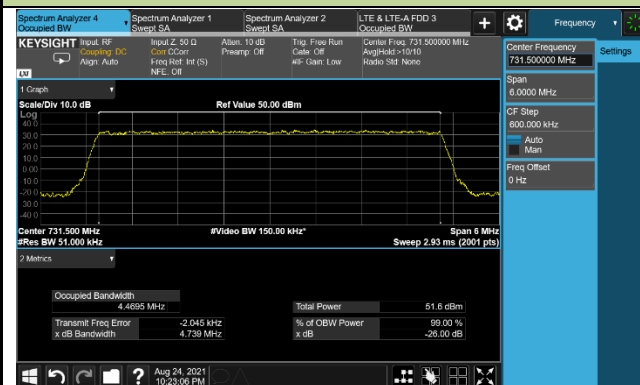


High Carrier

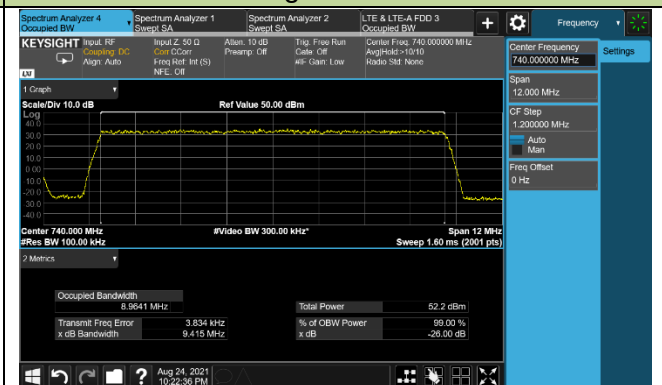


16QAM

Low Carrier

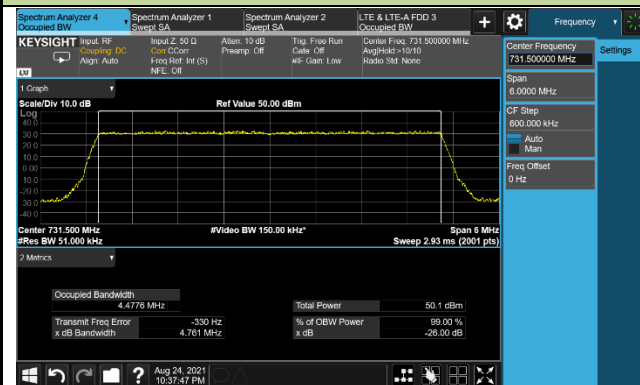


High Carrier

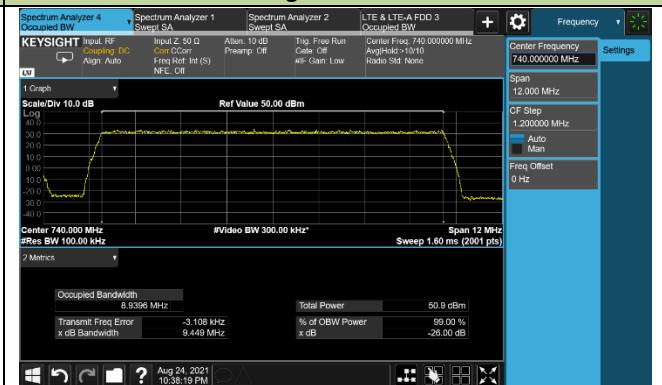


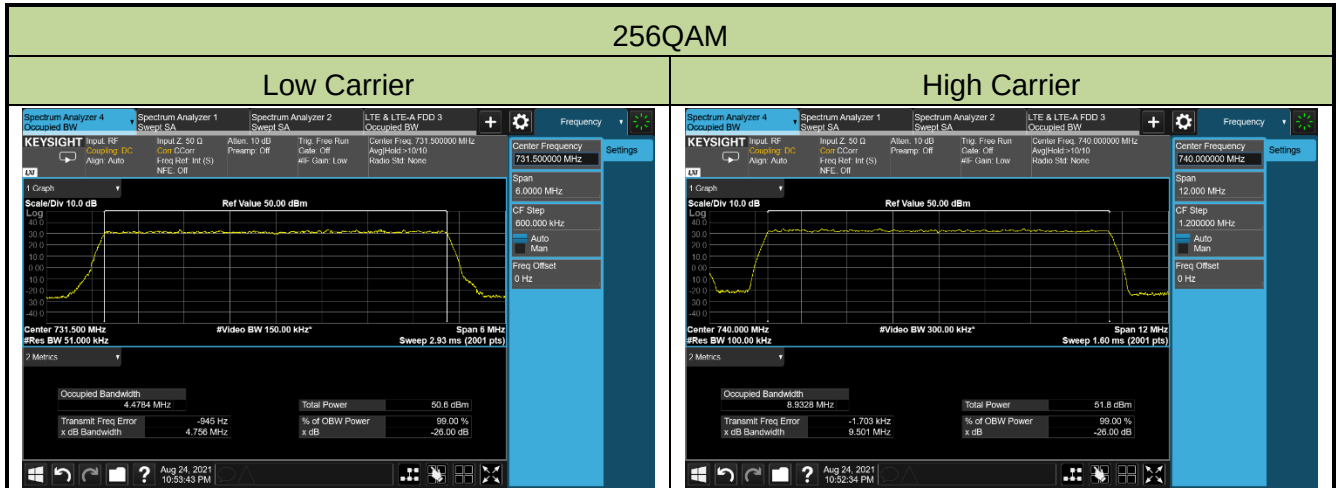
64QAM

Low Carrier



High Carrier





4.5. Band Edge Measurement

4.5.1. Test Limit

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log(P)$ dB. The emission limit equal to -13dBm.

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

The limit is adjusted to $-13 \text{ dBm} - 10 \cdot \log(4) = -19.02 \text{ dBm}$

4.5.2. Test Procedure Used

KDB 971168 D01v03r01 - Section 6.1

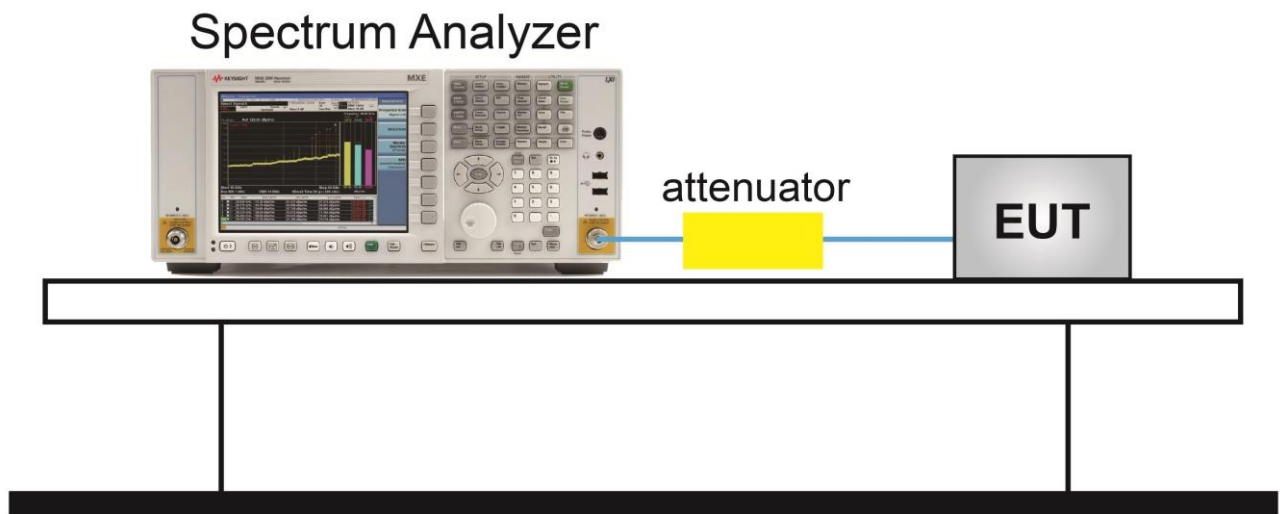
ANSI C63.26-2015 - Section 5.7.1

4.5.3. Test Setting

1. Set the analyzer frequency to Bottom or Top channel.
1. RBW = The nominal RBW shall be in the range of 1% to 5% of the anticipated OBW
2. VBW $\geq 3 \cdot \text{RBW}$
3. Sweep time = auto
4. Detector = power averaging (rms)
5. Set sweep trigger to "free run"
6. 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.

4.5.4. Test Setup



4.5.5. Test Result

Product	B12 4T4R 160W Radio Unit	Test Engineer	Larry Yan
Test Site	WZ-SR6	Test Date	2020/08/24
Test Configuration	LTE Band 12		

Adjacent 100kHz band to the licensee's frequency block

Frequency (MHz)	Channel Bandwidth (MHz)	Max Band Edge (dBm/30kHz)				Limit (dBm/ 100kHz)	Result
		Ant 1	Ant 2	Ant 3	Ant 4		
731.5	5	-27.52	-26.39	-27.02	-27.42	≤ -19.02	Pass
742.5	5	-27.18	-26.98	-27.33	-25.52	≤ -19.02	Pass
734.0	10	-38.90	-37.17	-37.98	-37.92	≤ -19.02	Pass
740.0	10	-38.81	-37.32	-37.84	-36.75	≤ -19.02	Pass
736.5	15	-36.77	-36.40	-36.75	-36.18	≤ -19.02	Pass
737.5	15	-36.82	-36.86	-37.49	-36.28	≤ -19.02	Pass
731.5+736.5	5 + 5	-27.81	-27.95	-29.76	-28.04	≤ -19.02	Pass
737.5+742.5	5 + 5	-27.56	-29.21	-29.98	-28.97	≤ -19.02	Pass
731.5+739.0	5 + 10	-28.36	-27.67	-27.30	-27.56	≤ -19.02	Pass
732.5+740.0	5 + 10	-40.52	-38.61	-40.12	-38.76	≤ -19.02	Pass
731.5+742.5	5 + GAP6 + 5	-26.40	-27.02	-27.75	-25.95	≤ -19.02	Pass
731.5+740.0	5 + GAP1 + 10	-26.77	-26.23	-27.94	-28.42	≤ -19.02	Pass

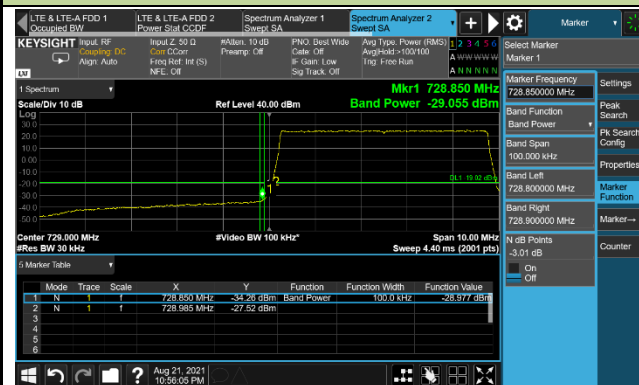
Note: Refer to KDB 971168 D01 Power Meas License Digital Systems v03r01 section 6.1, some FCC out-of-band emission rules permit the use of a narrower RBW (30kHz) for measuring the out-of-band emissions without a requirement to integrate the result over the full reference bandwidth.

Outside 100kHz band to the licensee's frequency block

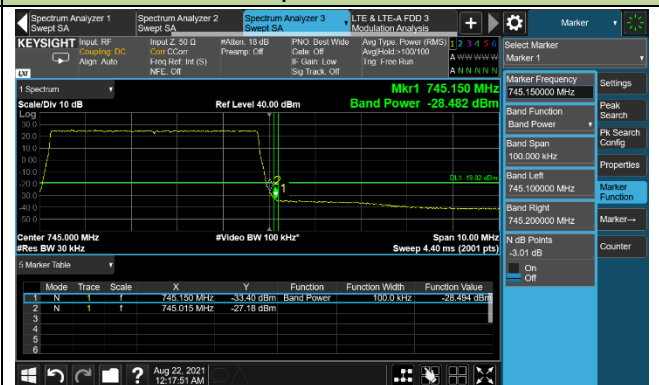
Frequency (MHz)	Channel Bandwidth (MHz)	Max Band Edge (dBm/100kHz)				Limit (dBm/ 100kHz)	Result
		Ant 1	Ant 2	Ant 3	Ant 4		
731.5	5	-28.98	-27.96	-29.76	-28.84	≤ -19.02	Pass
742.5	5	-28.49	-27.59	-28.23	-26.57	≤ -19.02	Pass
734.0	10	-34.16	-32.88	-33.43	-32.93	≤ -19.02	Pass
740.0	10	-34.21	-32.70	-32.93	-31.91	≤ -19.02	Pass
736.5	15	-35.16	-33.25	-35.50	-34.10	≤ -19.02	Pass
737.5	15	-34.69	-34.14	-34.66	-33.76	≤ -19.02	Pass
731.5+736.5	5 + 5	-31.39	-29.60	-32.04	-30.69	≤ -19.02	Pass
737.5+742.5	5 + 5	-31.13	-30.17	-31.12	-29.61	≤ -19.02	Pass
731.5+739.0	5 + 10	-30.86	-30.52	-31.24	-30.22	≤ -19.02	Pass
732.5+740.0	5 + 10	-35.84	-34.03	-35.62	-34.05	≤ -19.02	Pass
731.5+742.5	5 + GAP6 + 5	-29.63	-29.77	-30.86	-30.44	≤ -19.02	Pass
731.5+740.0	5 + GAP1 + 10	-30.74	-29.22	-31.64	-31.06	≤ -19.02	Pass

5MHz Channel Bandwidth - Ant 1

Bottom Channel

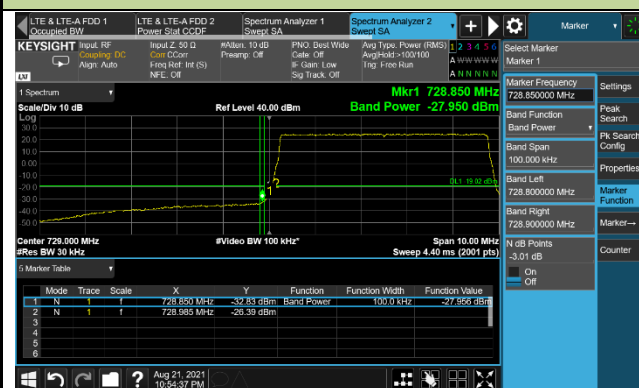


Top Channel

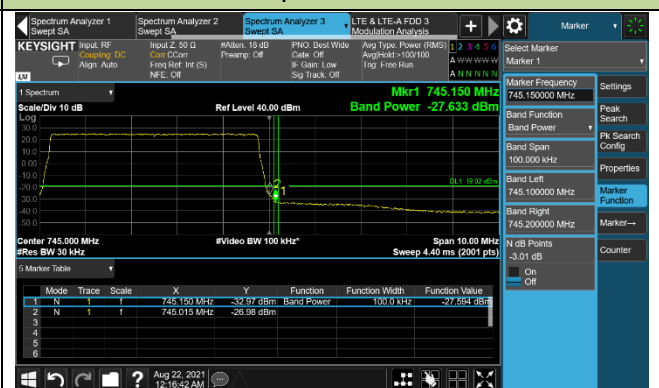


5MHz Channel Bandwidth - Ant 2

Bottom Channel

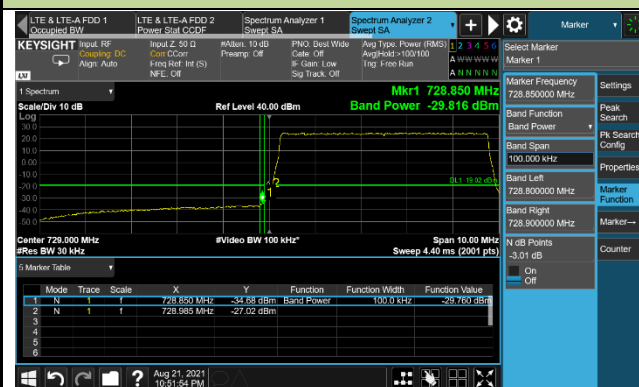


Top Channel

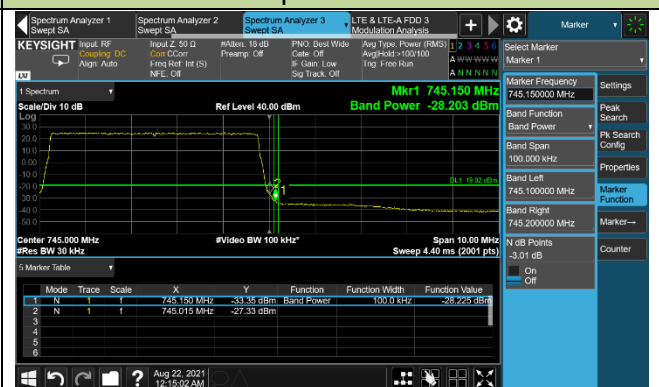


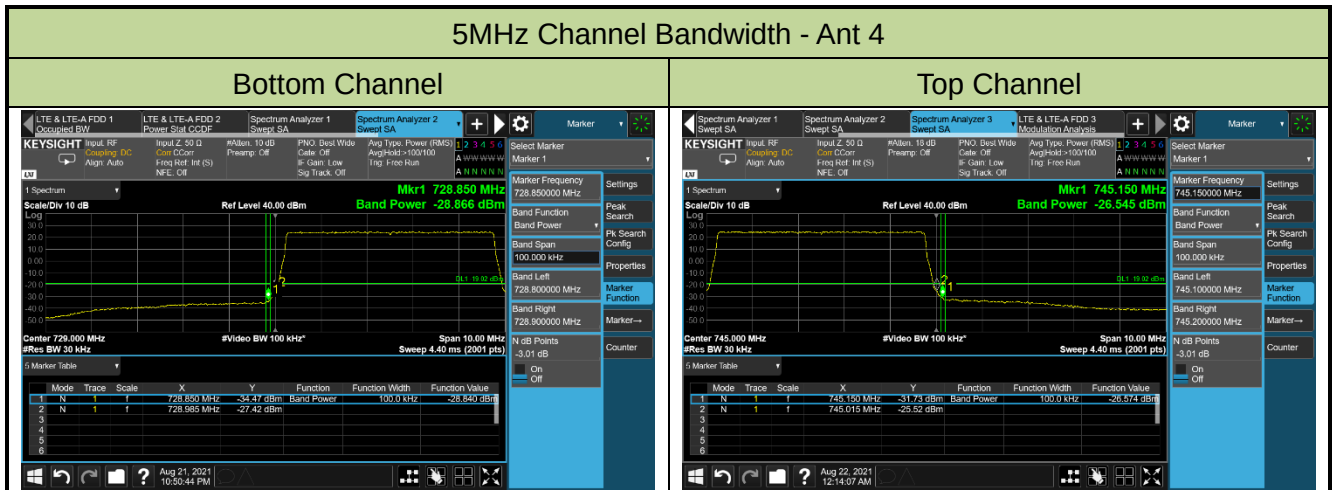
5MHz Channel Bandwidth - Ant 3

Bottom Channel

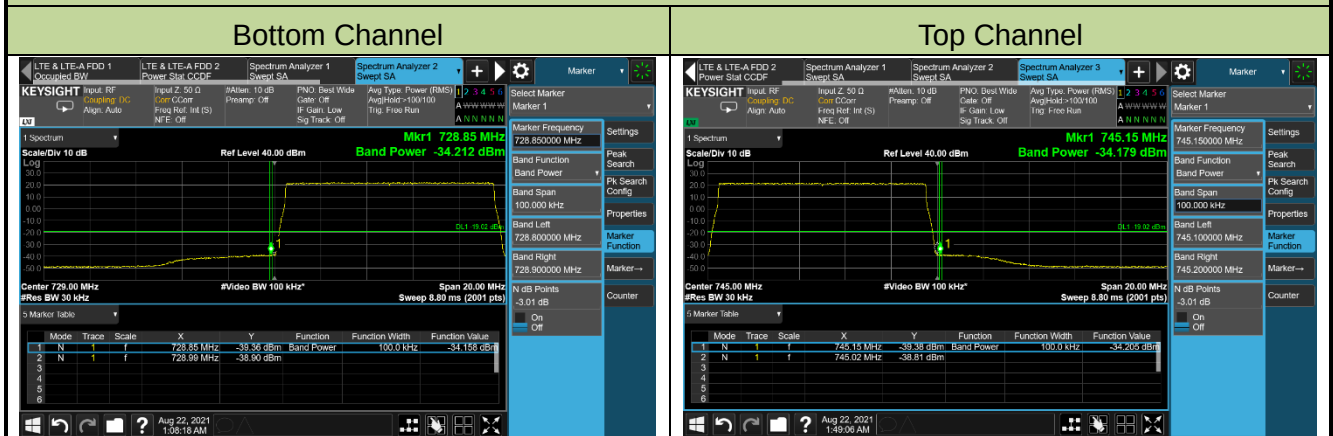


Top Channel

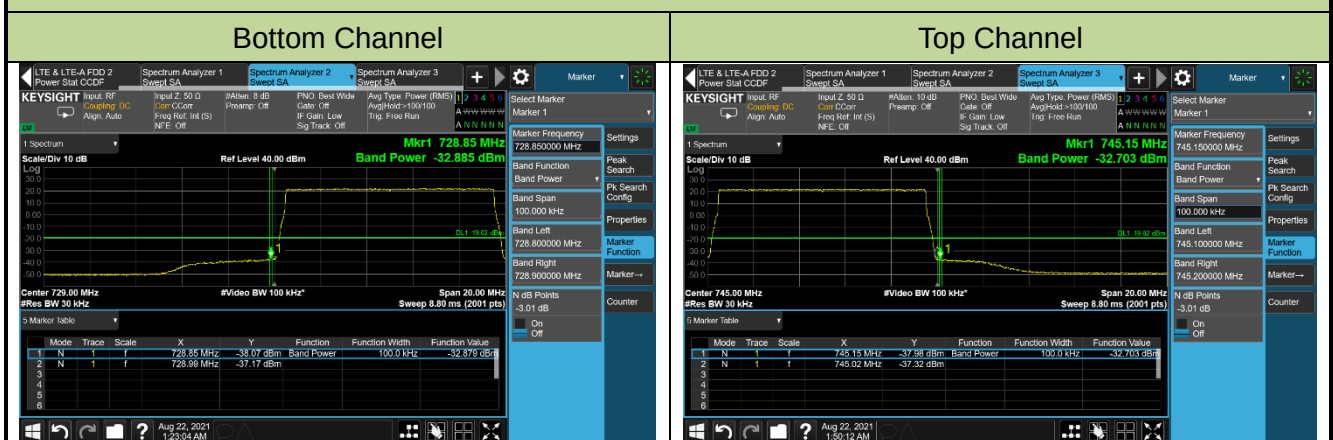




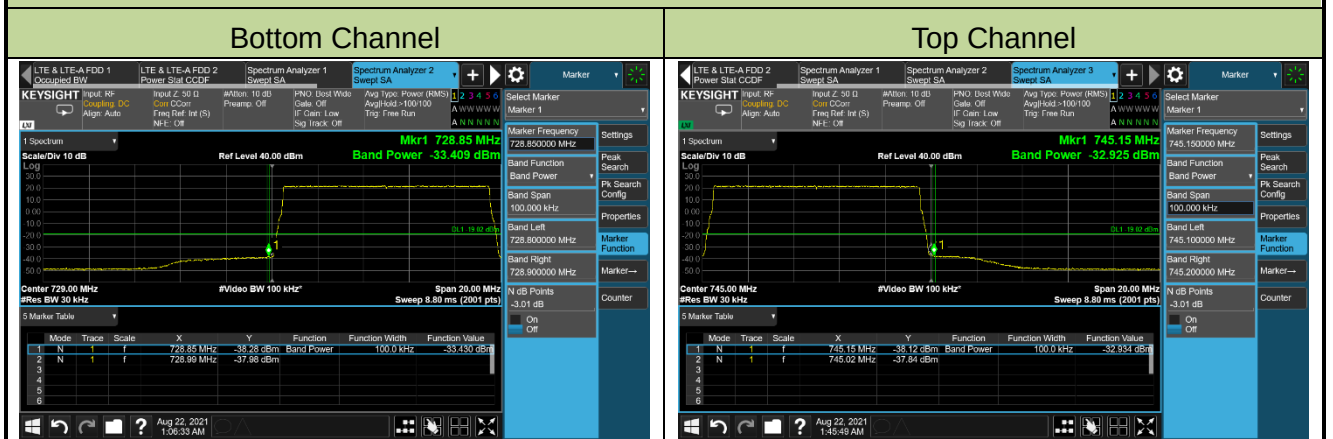
10MHz Channel Bandwidth - Ant 1



10MHz Channel Bandwidth - Ant 2

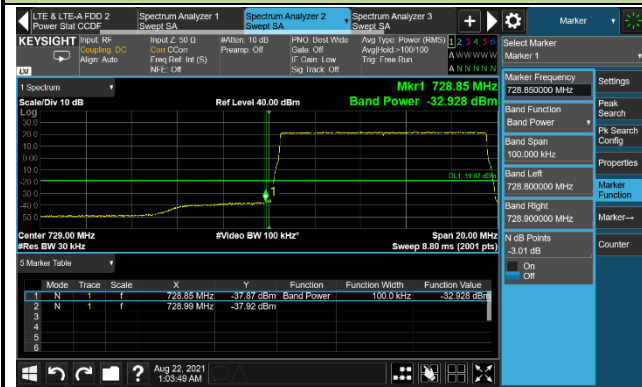


10MHz Channel Bandwidth - Ant 3

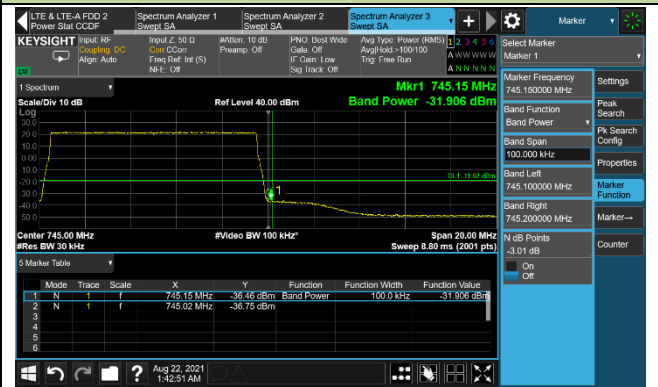


10MHz Channel Bandwidth - Ant 4

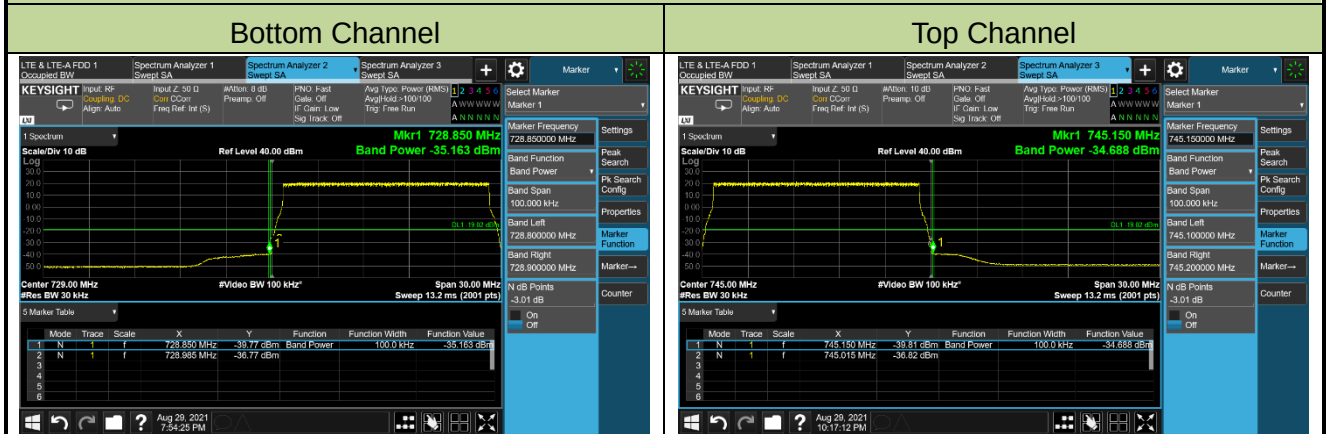
Bottom Channel



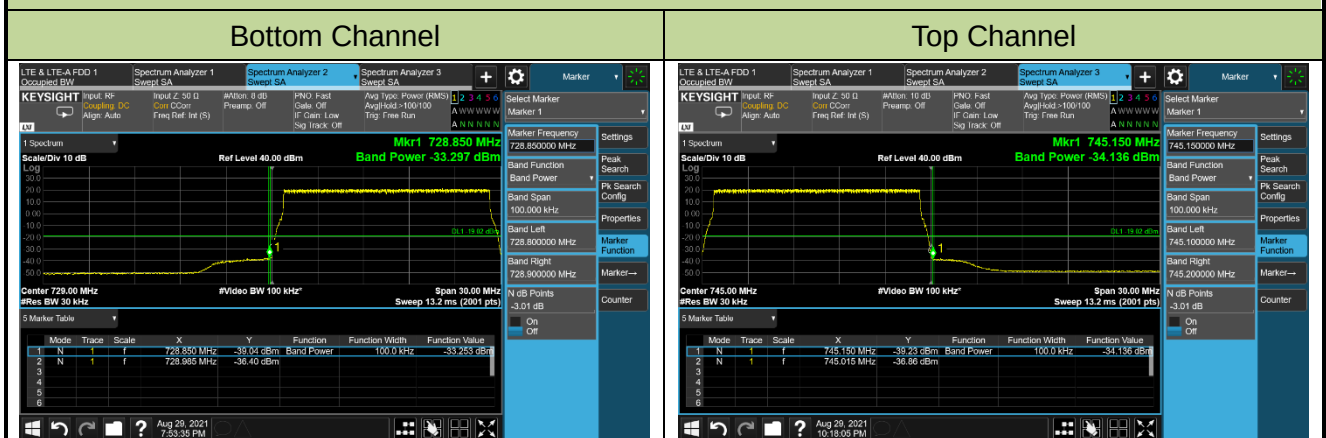
Top Channel



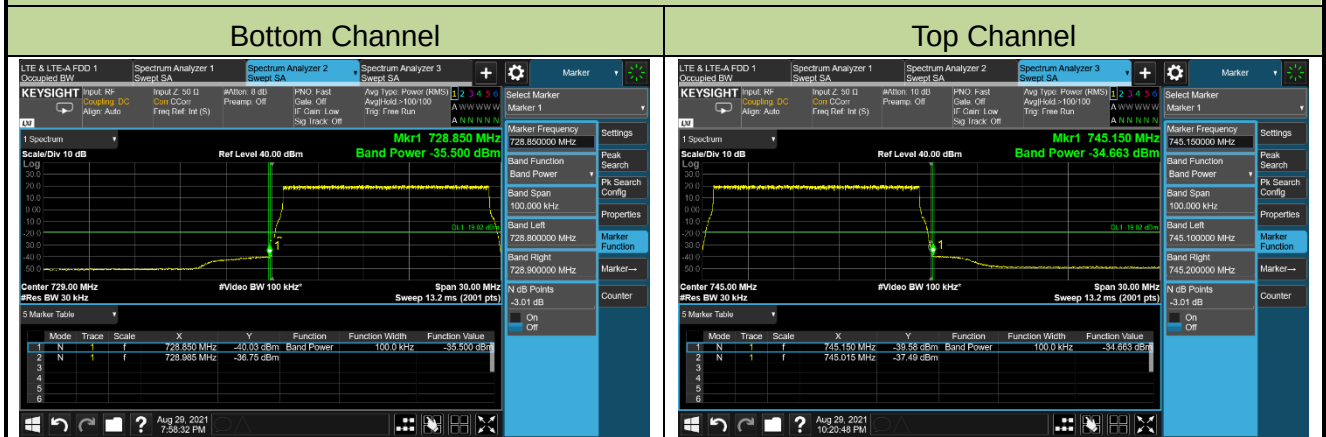
15MHz Channel Bandwidth - Ant 1



15MHz Channel Bandwidth - Ant 2

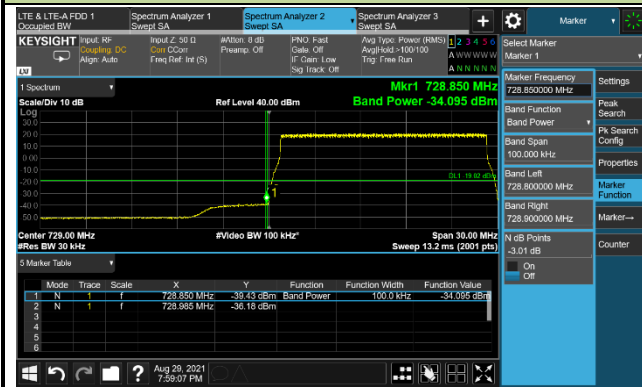


15MHz Channel Bandwidth - Ant 3

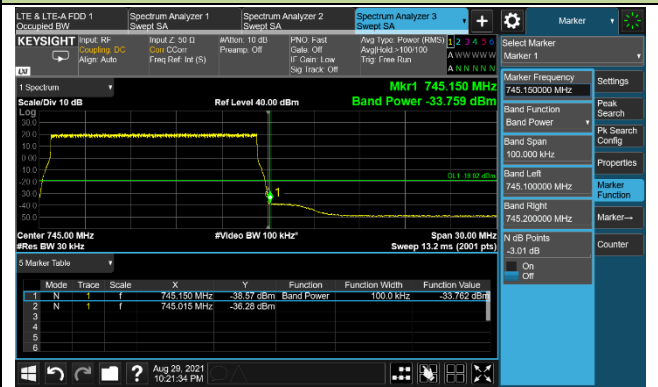


15MHz Channel Bandwidth - Ant 4

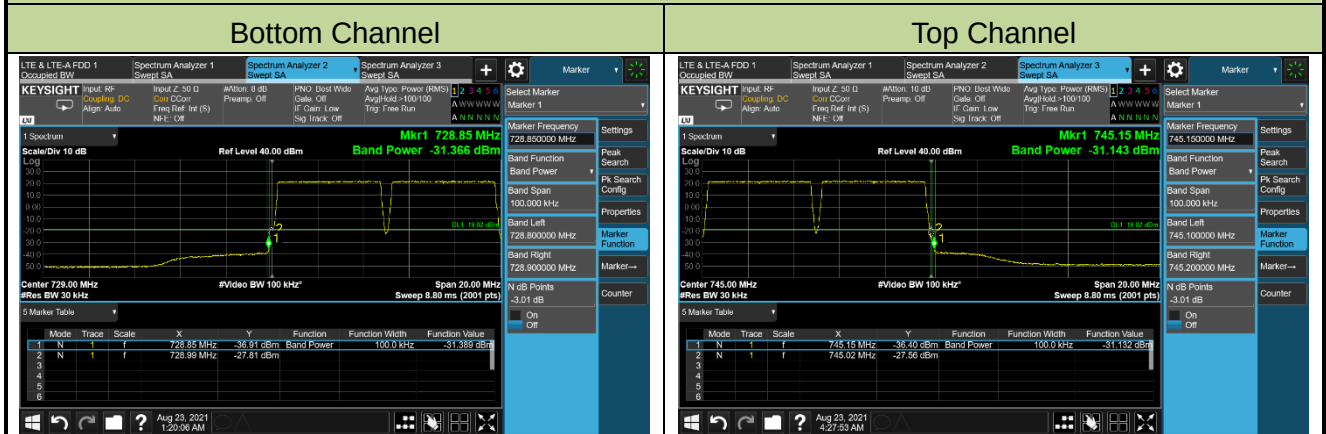
Bottom Channel



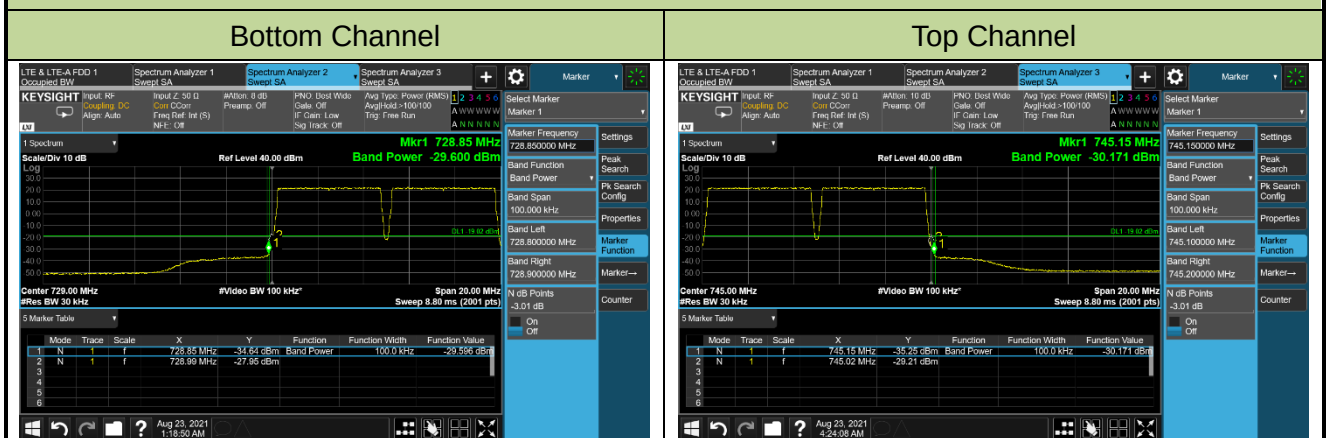
Top Channel



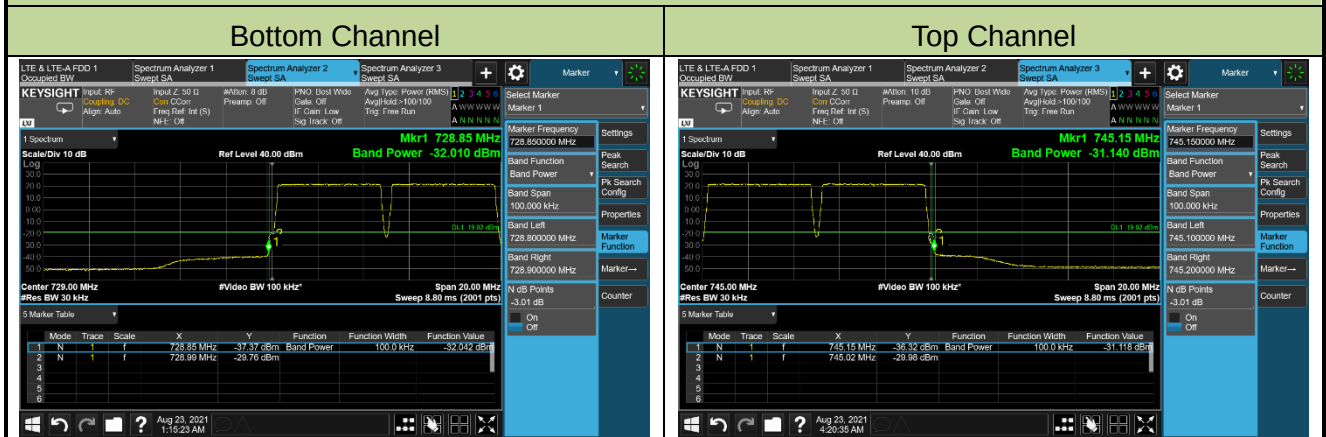
5 + 5MHz Channel Bandwidth - Ant 1



5 + 5MHz Channel Bandwidth - Ant 2

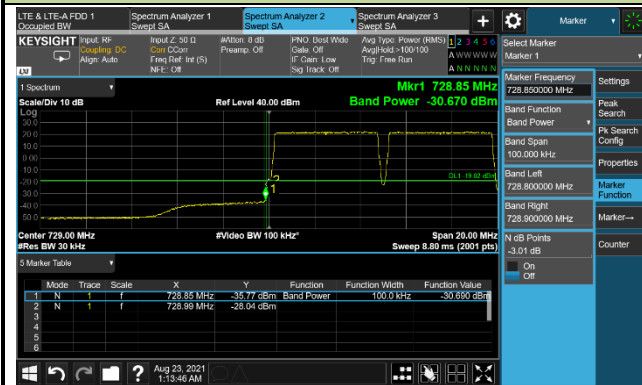


5 + 5MHz Channel Bandwidth - Ant 3

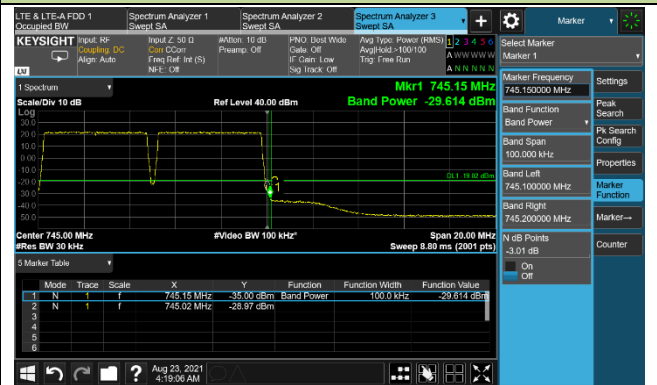


5 + 5MHz Channel Bandwidth - Ant 4

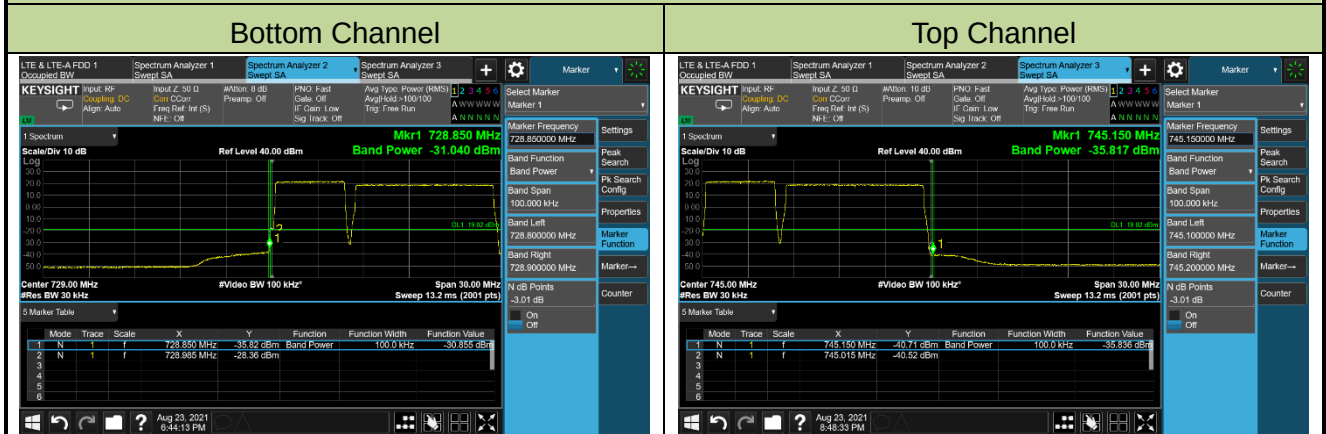
Bottom Channel



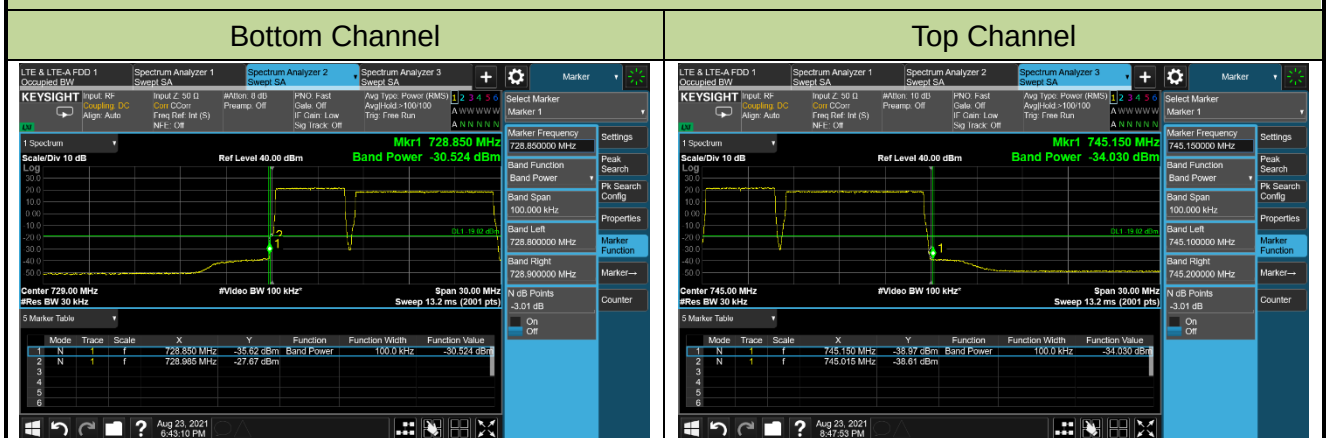
Top Channel



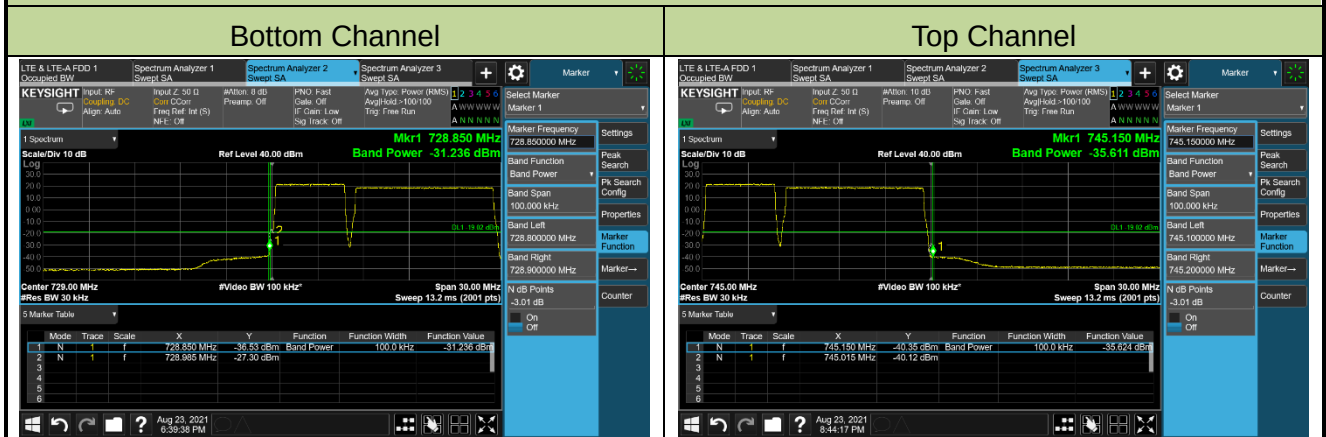
5 + 10MHz Channel Bandwidth - Ant 1



5 + 10MHz Channel Bandwidth - Ant 2

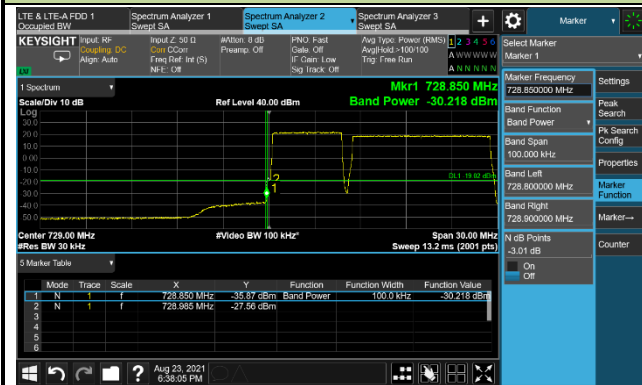


5 + 10MHz Channel Bandwidth - Ant 3



5 + 10MHz Channel Bandwidth - Ant 4

Bottom Channel



Top Channel

