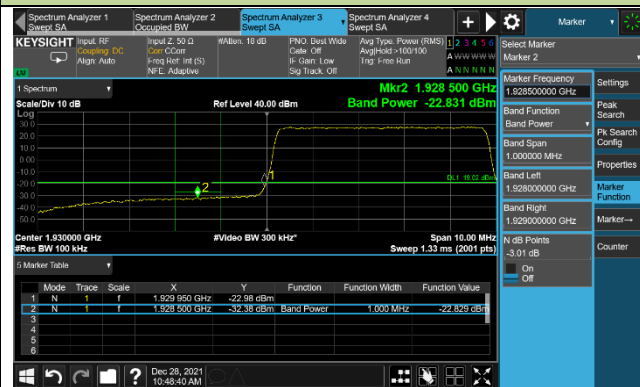


5 + GAP55 + 5 MHz Channel Bandwidth - Ant 1

Low Carrier

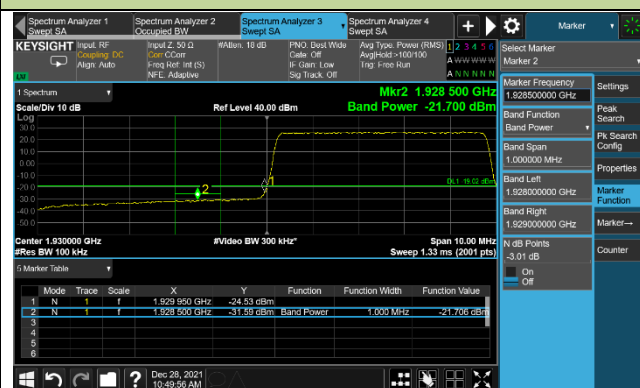


Top Carrier

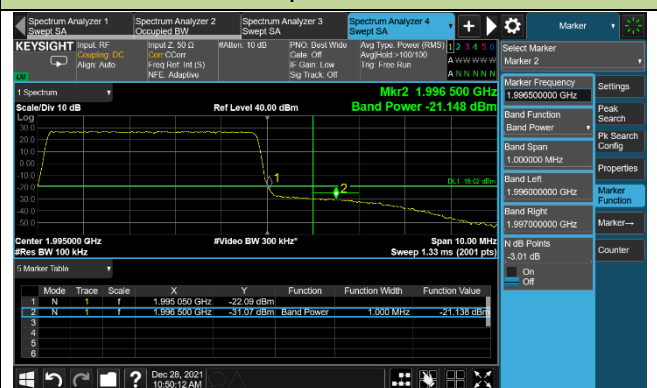


5 + GAP55 + 5 MHz Channel Bandwidth - Ant 2

Low Carrier

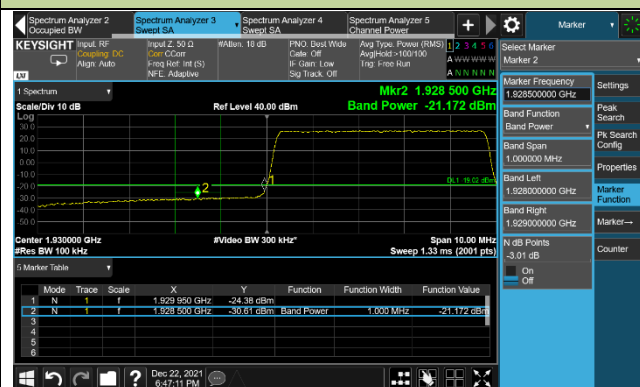


Top Carrier

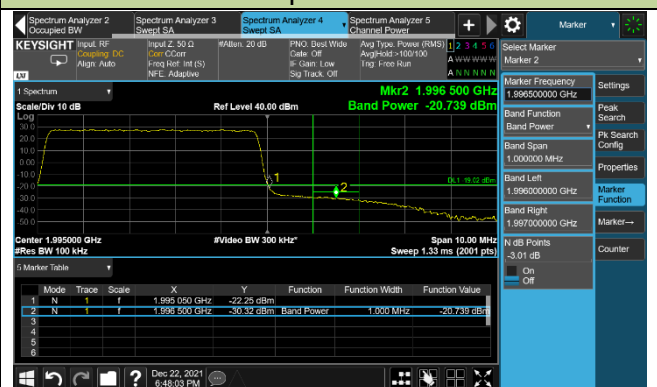


5 + GAP55 + 5 MHz Channel Bandwidth - Ant 3

Low Carrier

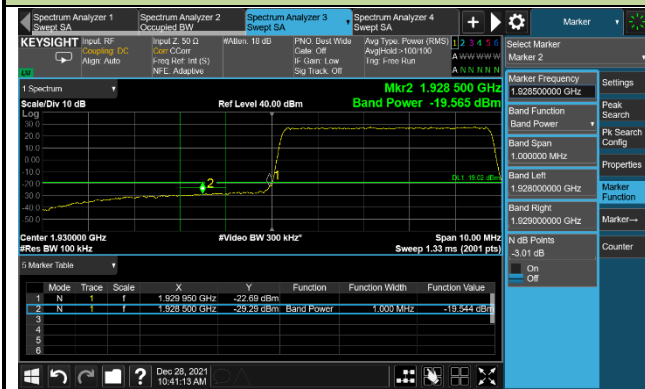


Top Carrier



5 + GAP55 + 5 MHz Channel Bandwidth - Ant 4

Low Carrier

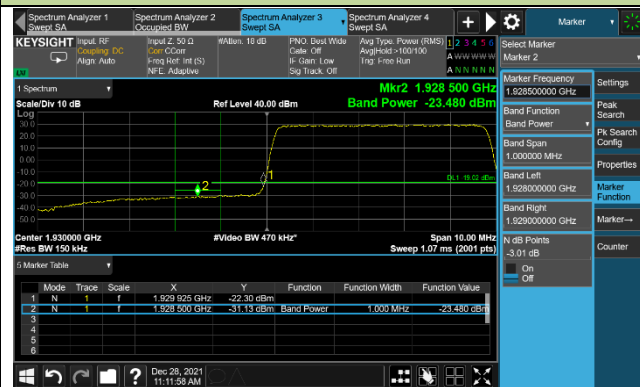


Top Carrier

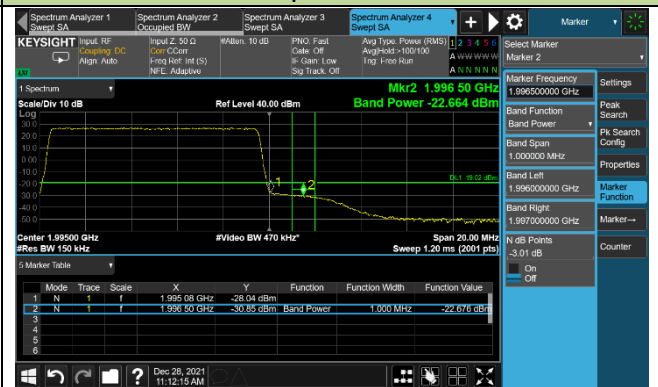


5 + GAP50 + 10 MHz Channel Bandwidth - Ant 1

Low Carrier

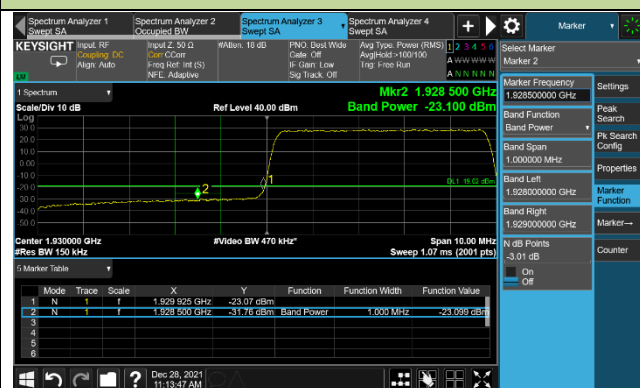


Top Carrier

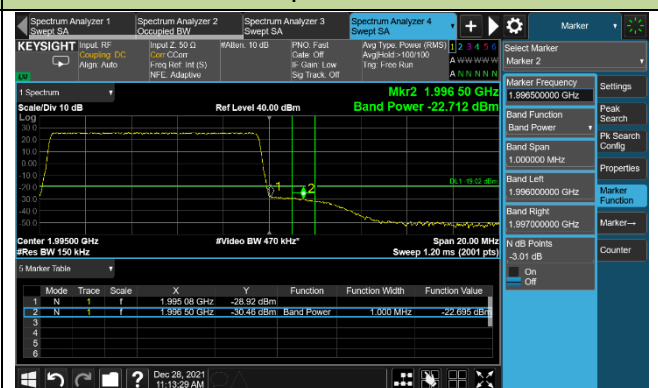


5 + GAP50 + 10 MHz Channel Bandwidth - Ant 2

Low Carrier

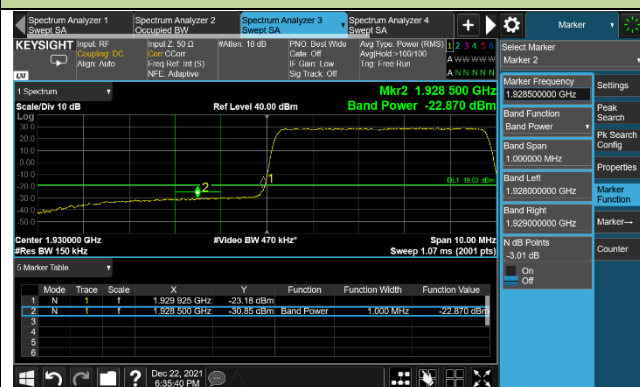


Top Carrier

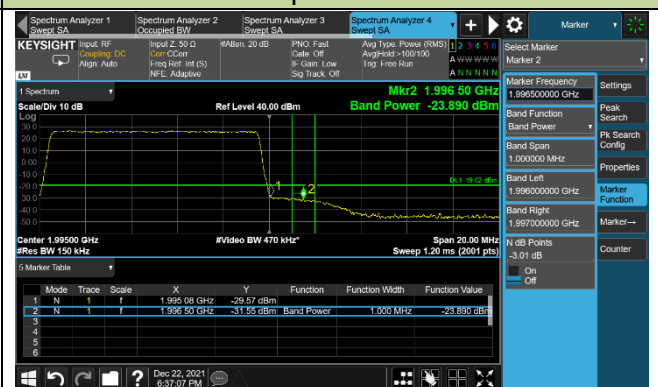


5 + GAP50 + 10 MHz Channel Bandwidth - Ant 3

Low Carrier

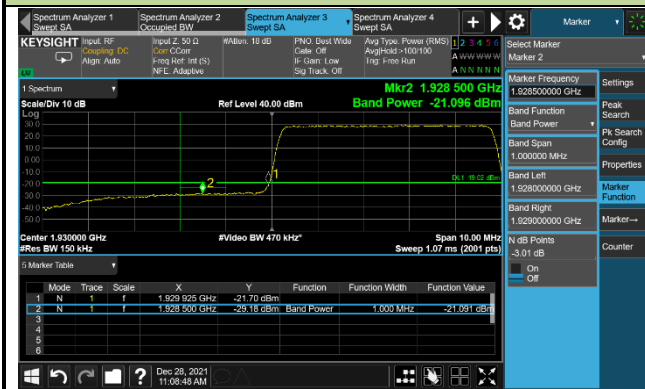


Top Carrier



5 + GAP50 + 10 MHz Channel Bandwidth - Ant 4

Low Carrier

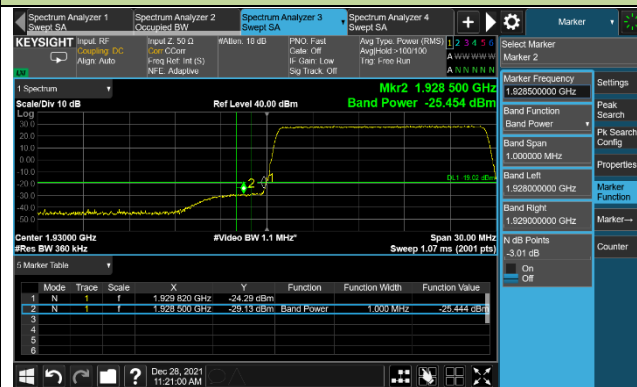


Top Carrier

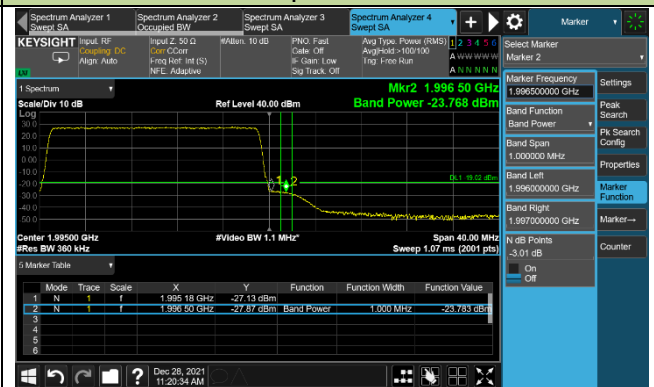


15 + GAP30 + 20 MHz Channel Bandwidth - Ant 1

Low Carrier

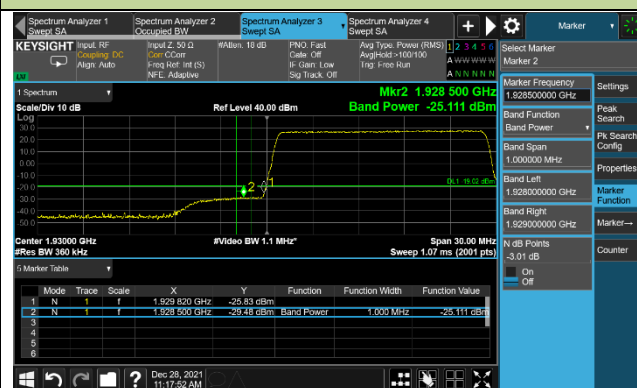


Top Carrier

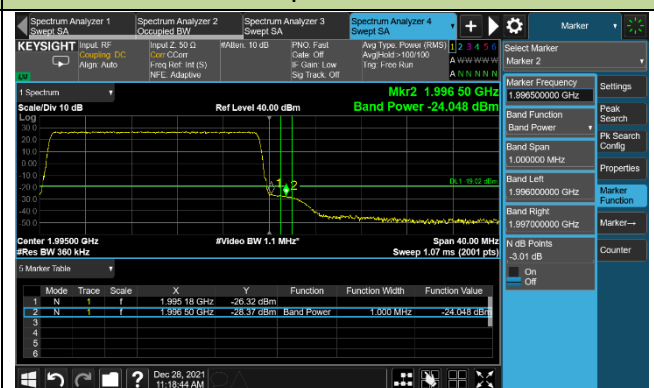


15 + GAP30 + 20 MHz Channel Bandwidth - Ant 2

Low Carrier

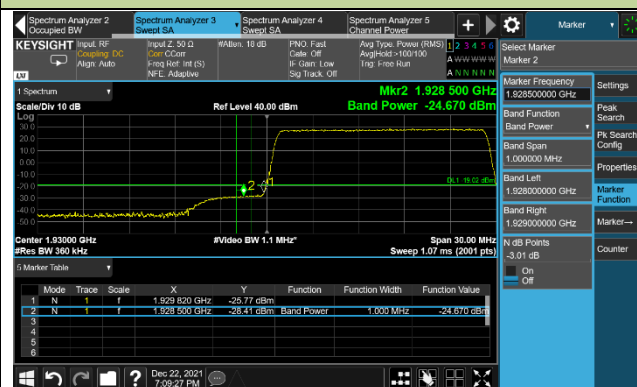


Top Carrier

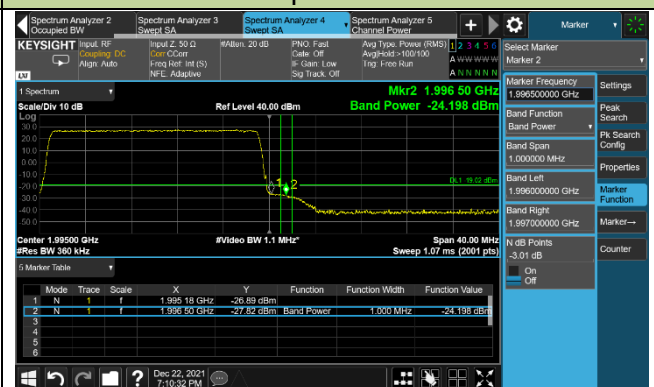


15 + GAP30 + 20 MHz Channel Bandwidth - Ant 3

Low Carrier

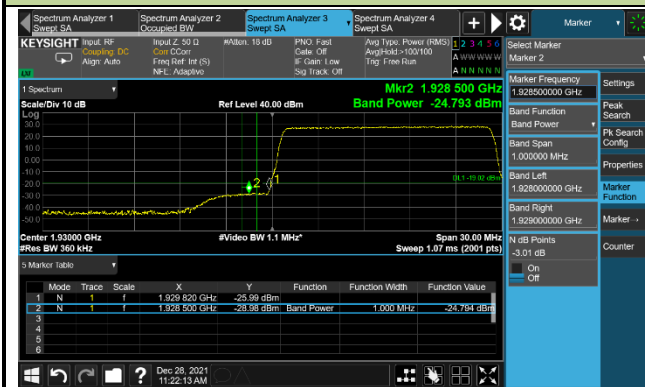


Top Carrier

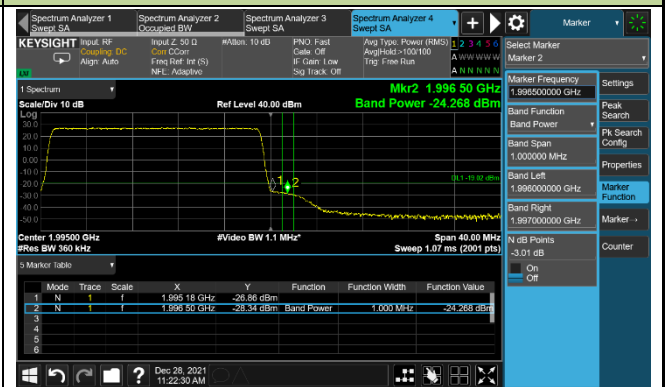


15 + GAP30 + 20 MHz Channel Bandwidth - Ant 4

Low Carrier

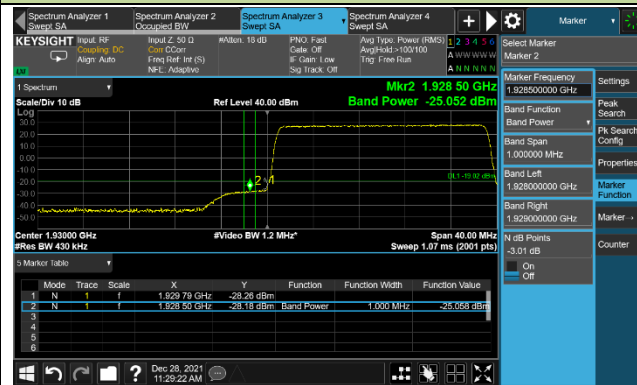


Top Carrier

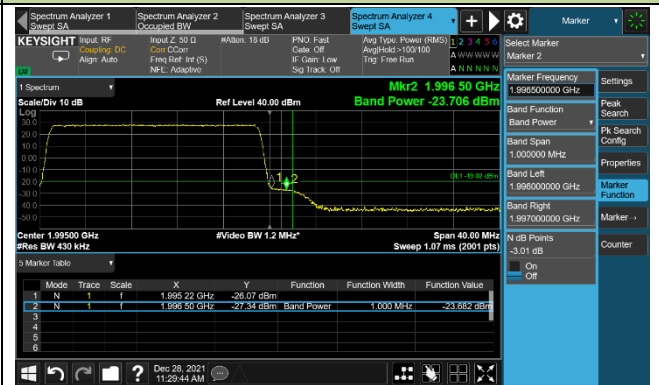


20 + GAP25 + 20 MHz Channel Bandwidth - Ant 1

Low Carrier

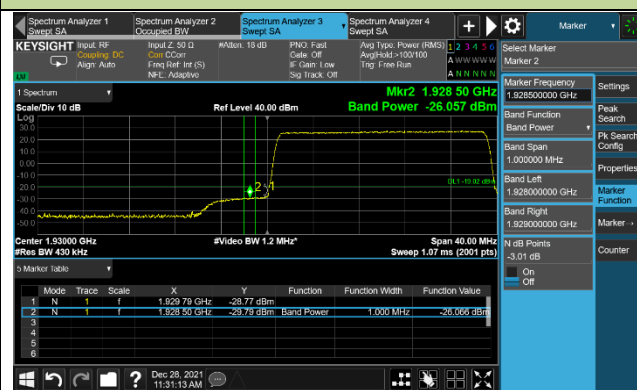


Top Carrier

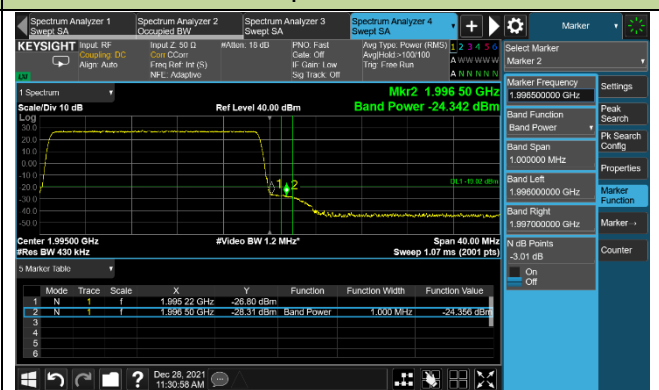


20 + GAP25 + 20 MHz Channel Bandwidth - Ant 2

Low Carrier

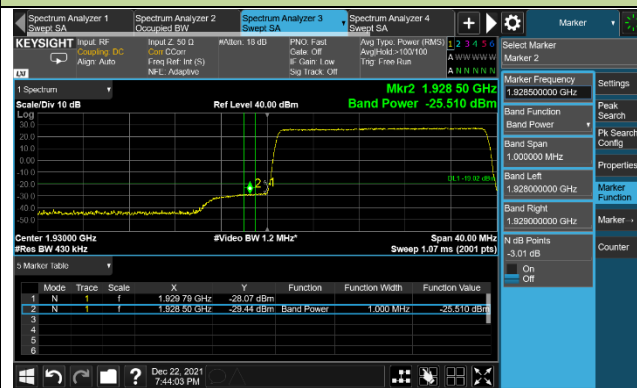


Top Carrier

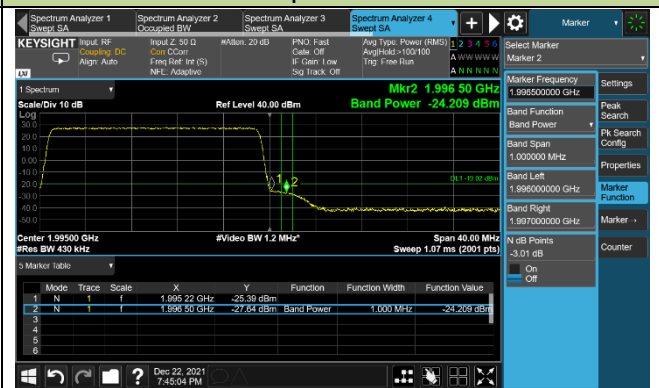


20 + GAP25 + 20 MHz Channel Bandwidth - Ant 3

Low Carrier

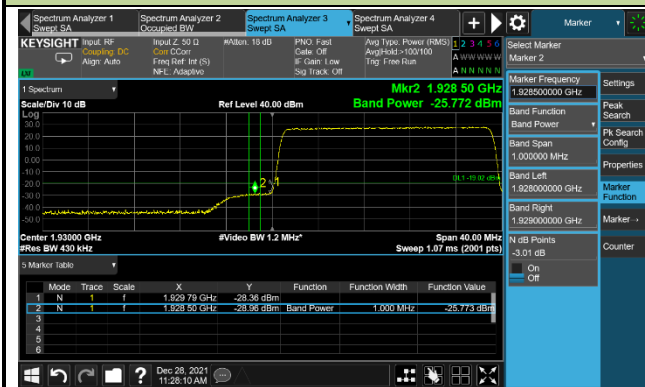


Top Carrier

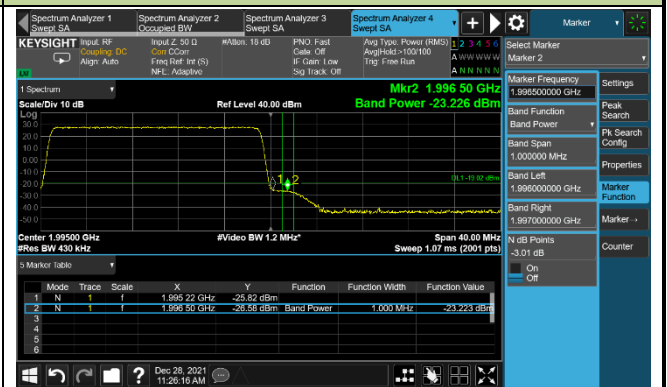


20 + GAP25 + 20 MHz Channel Bandwidth - Ant 4

Low Carrier



Top Carrier



4.5. Conducted Spurious Emissions

4.5.1. Test Limit

In the FCC 24.238, on any frequency outside a licensee's frequency block, the power of any emission shall be attenuated below the transmitter power (P) at least $43 + 10 \cdot \log(P)$ dB, the emission limit equal to -13dBm.

Note: This device can be implement MIMO function, so the limit os spurious emissions needs to be reduced $10 \cdot \log(\text{Numbers}_{\text{Ant}})$ 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

ANSI C63.26-2015 - Section 6.4.4.2

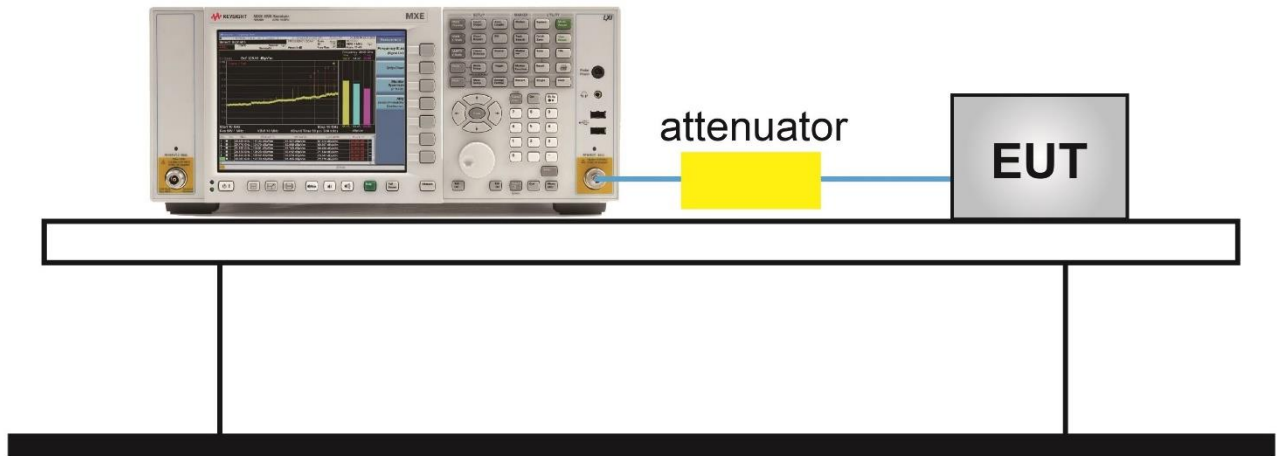
4.5.3. Test Setting

1. Set the analyzer frequency to low or high channel.
2. RBW = 100kHz or 1MHz
3. VBW $\geq 3 \cdot \text{RBW}$
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.

4.5.4. Test Setup

Spectrum Analyzer



4.5.5. Test Result

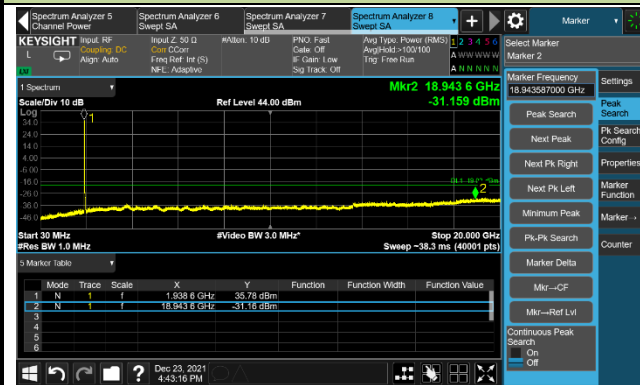
Product	B25 4T4R 160W Radio Unit	Test Engineer	Eric Xu
Test Site	WZ-TR3	Test Date	2021/12/23
Test Configuration	LTE Band 25 (Dual Carrier), QPSK		

Frequency (MHz)	Channel Bandwidth (MHz)	Frequency Range (MHz)	Max Spurious Emissions (dBm)	Limit (dBm)	Result
1932.5 + 1937.5	5 + 5	30 ~ 20000	-31.16	≤ -19.02	Pass
1960.0 + 1965.0	5 + 5	30 ~ 20000	-31.59	≤ -19.02	Pass
1987.5 + 1992.5	5 + 5	30 ~ 20000	-29.32	≤ -19.02	Pass
1932.5 + 1940.0	5 + 10	30 ~ 20000	-30.01	≤ -19.02	Pass
1957.5 + 1965.0	5 + 10	30 ~ 20000	-31.30	≤ -19.02	Pass
1982.5 + 1990.0	5 + 10	30 ~ 20000	-31.01	≤ -19.02	Pass
1937.5 + 1955.0	15 + 20	30 ~ 20000	-31.56	≤ -19.02	Pass
1952.5 + 1970.0	15 + 20	30 ~ 20000	-29.92	≤ -19.02	Pass
1967.5 + 1985.0	15 + 20	30 ~ 20000	-30.59	≤ -19.02	Pass
1940.0 + 1960.0	20 + 20	30 ~ 20000	-30.51	≤ -19.02	Pass
1952.5 + 1972.5	20 + 20	30 ~ 20000	-32.12	≤ -19.02	Pass
1965.0 + 1985.0	20 + 20	30 ~ 20000	-31.57	≤ -19.02	Pass
1932.5 + 1992.5	5 + GAP55 + 5	30 ~ 20000	-29.94	≤ -19.02	Pass
1932.5 + 1990.0	5 + GAP50 + 10	30 ~ 20000	-29.42	≤ -19.02	Pass
1937.5 + 1985.0	15 + GAP30 + 20	30 ~ 20000	-31.58	≤ -19.02	Pass
1940.0 + 1985.0	20 + GAP25 + 20	30 ~ 20000	-32.08	≤ -19.02	Pass

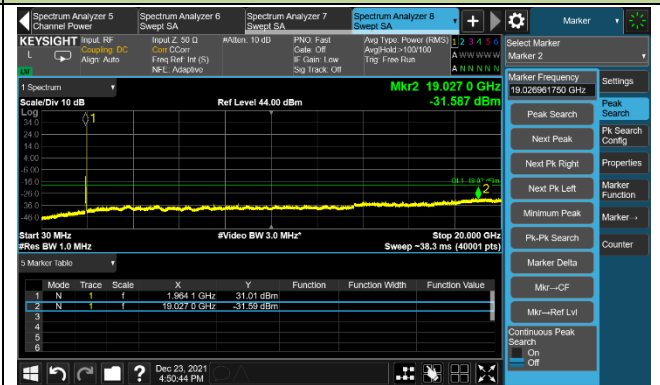
Note: The amplitude of spurious emissions which are attenuated more than 20 dB below the permissible value need not be reported.

5 + 5 MHz Channel Bandwidth

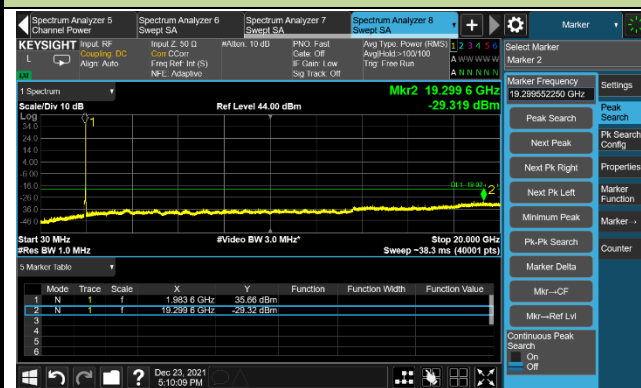
1932.5 + 1937.5 MHz



1960.0 + 1965.0 MHz

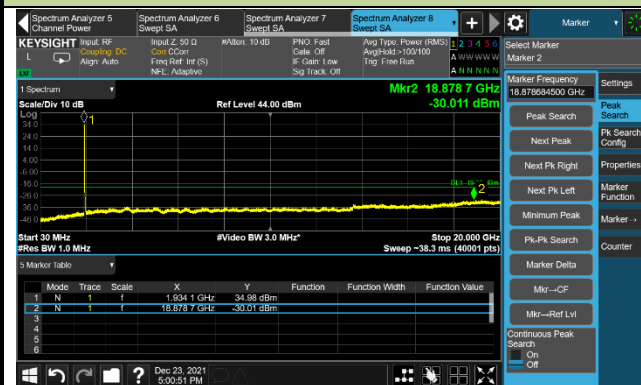


1987.5 + 1992.5 MHz

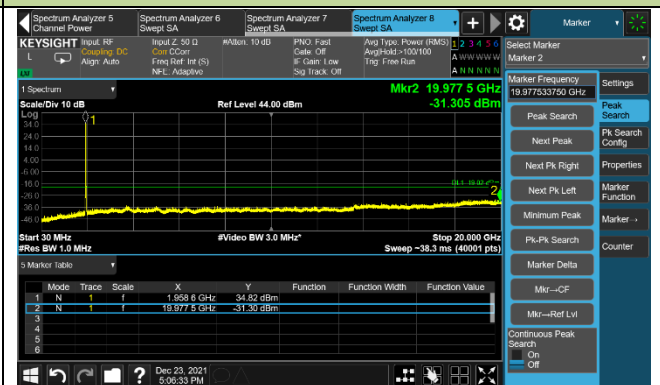


5 + 10 MHz Channel Bandwidth

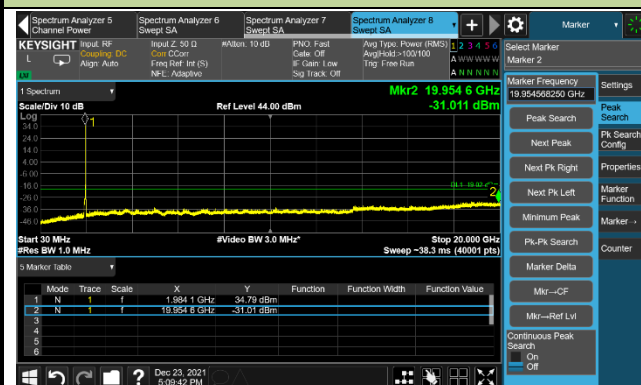
1932.5 + 1940.0 MHz



1957.5 + 1965.0 MHz

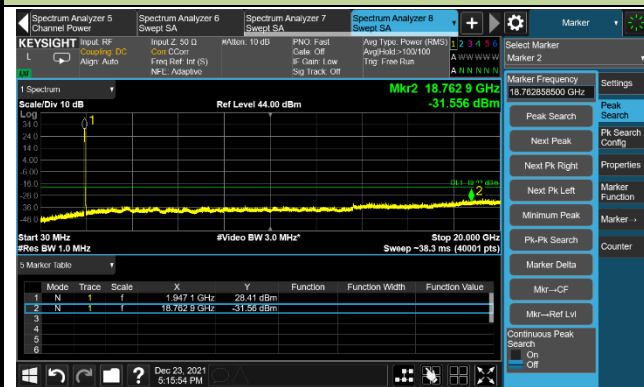


1982.5 + 1990.0 MHz

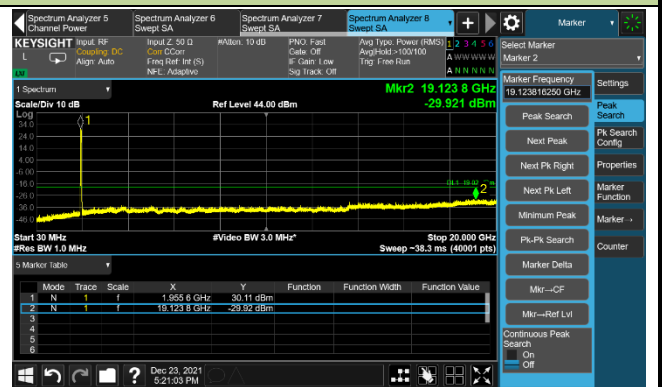


15 + 20 MHz Channel Bandwidth

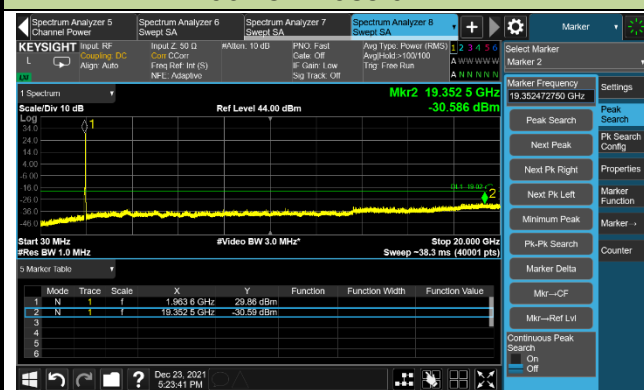
1937.5 + 1955.0 MHz



1952.5 + 1970.0 MHz

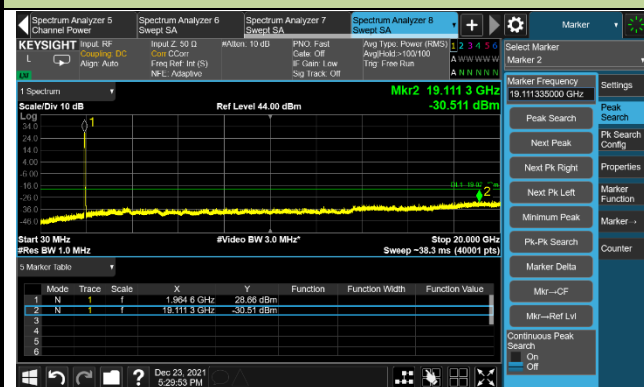


1967.5 + 1985.0 MHz

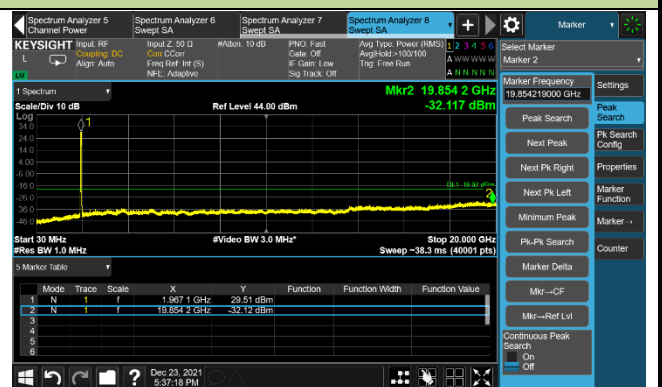


20 + 20 MHz Channel Bandwidth

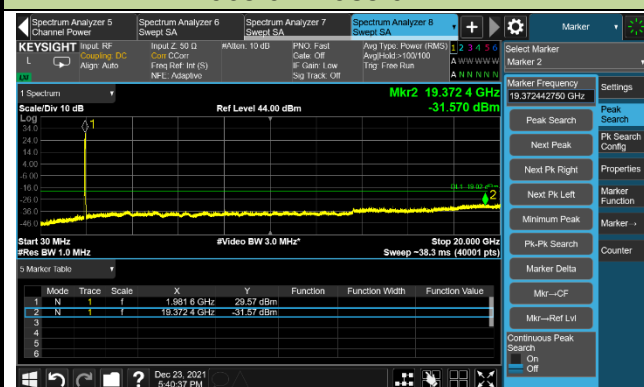
1940.0 + 1960.0 MHz



1952.5 + 1972.5 MHz

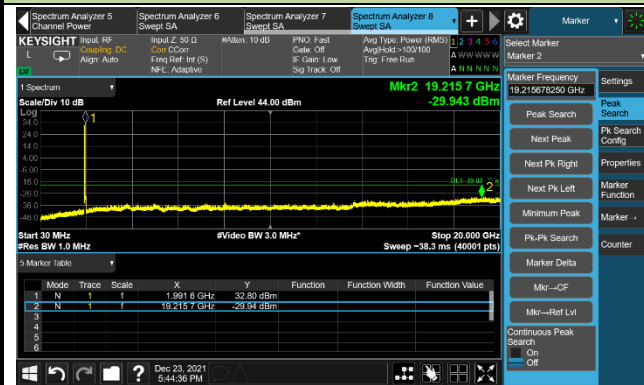


1965.0 + 1985.0 MHz



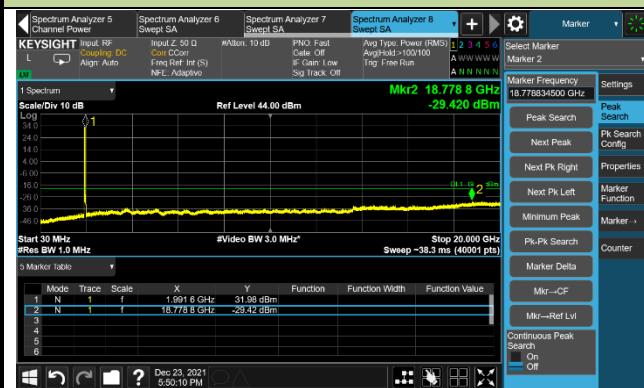
5 + GAP55 + 5 MHz Channel Bandwidth

1932.5 + 1992.5 MHz



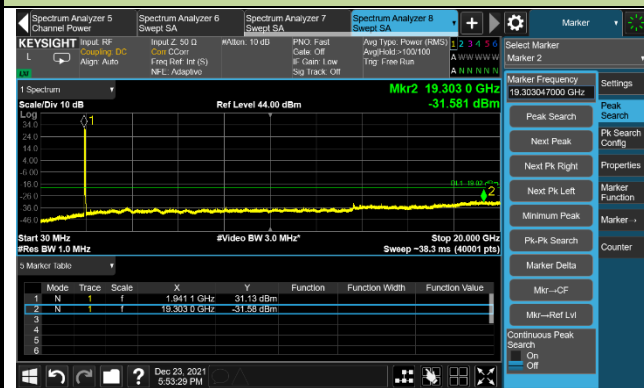
5 + GAP50 + 10 MHz Channel Bandwidth

1932.5 + 1990.0 MHz



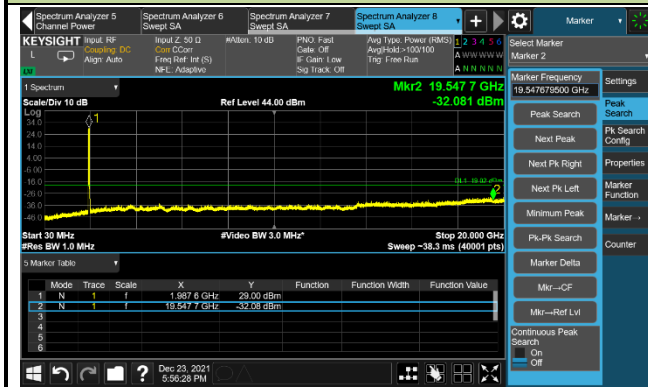
15 + GAP30 + 20 MHz Channel Bandwidth

1937.5 + 1985.0 MHz



20 + GAP25 + 20 MHz Channel Bandwidth

1940.0 + 1985.0 MHz



The End

Appendix A - Test Setup Photograph

Refer to “2112RSU035-UT” file.

Appendix B - EUT Photograph

Refer to “2112RSU035-UE” file.