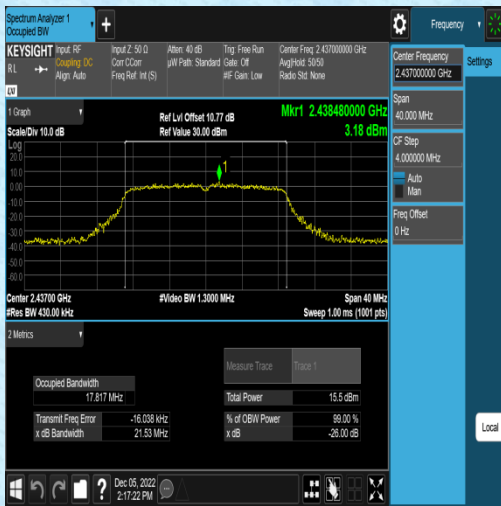


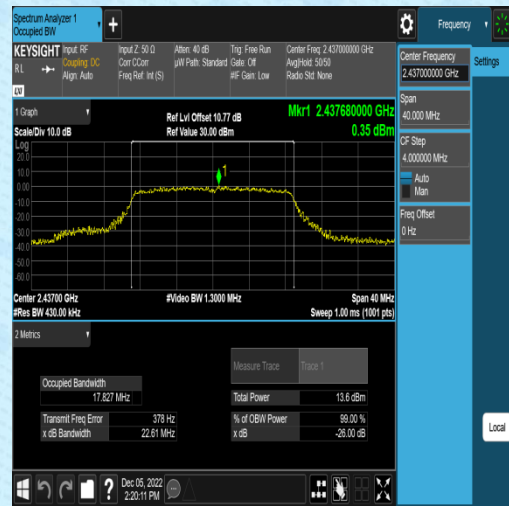
11N20MIMO-Ant1-2437



11N20MIMO-Ant2-2437



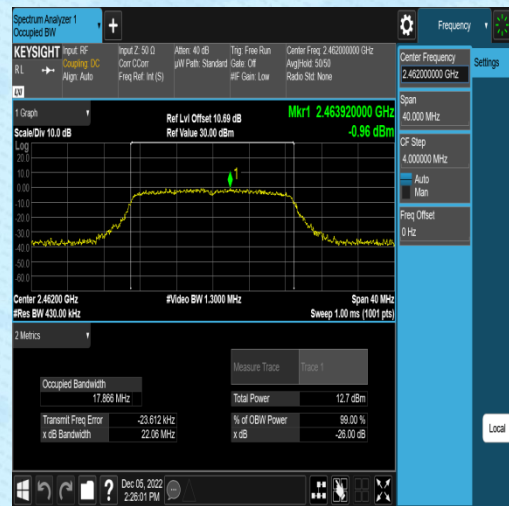
11N20MIMO-Ant1-2462



11N20MIMO-Ant2-2462



11N40MIMO-Ant1-2422



11N40MIMO-Ant2-2422



11N40MIMO-Ant1-2437



11N40MIMO-Ant2-2437



11N40MIMO-Ant1-2452



11N40MIMO-Ant2-2452



11N40MIMO-Ant1-2437



11N40MIMO-Ant2-2437

3. Maximum conducted output power

Test Result Peak

TestMode	Antenna	Fre.[MHz]	Rate	Result[dBm]	Limit[dBm]	EIRP(dBm)	EIRP Limit[dBm]	Verdict
11B	Ant1	2412	1Mbps	14.95	≤30.00	16.99	≤36.00	PASS
11B	Ant1	2437	1Mbps	15.50	≤30.00	17.54	≤36.00	PASS
11B	Ant1	2462	1Mbps	15.06	≤30.00	17.10	≤36.00	PASS
11G	Ant1	2412	6Mbps	17.13	≤30.00	19.17	≤36.00	PASS
11G	Ant1	2437	6Mbps	17.13	≤30.00	19.17	≤36.00	PASS
11G	Ant1	2462	6Mbps	16.08	≤30.00	18.12	≤36.00	PASS
11N20SISO	Ant1	2412	MCS0	17.37	≤30.00	19.41	≤36.00	PASS
11N20SISO	Ant1	2437	MCS0	16.41	≤30.00	18.45	≤36.00	PASS
11N20SISO	Ant1	2462	MCS0	15.83	≤30.00	17.87	≤36.00	PASS
11N40SISO	Ant1	2422	MCS0	17.29	≤30.00	19.33	≤36.00	PASS
11N40SISO	Ant1	2437	MCS0	17.16	≤30.00	19.20	≤36.00	PASS
11N40SISO	Ant1	2452	MCS0	16.49	≤30.00	18.53	≤36.00	PASS
11B	Ant2	2412	1Mbps	13.75	≤30.00	15.79	≤36.00	PASS
11B	Ant2	2437	1Mbps	13.14	≤30.00	15.18	≤36.00	PASS
11B	Ant2	2462	1Mbps	12.85	≤30.00	14.89	≤36.00	PASS
11G	Ant2	2412	6Mbps	15.40	≤30.00	17.44	≤36.00	PASS
11G	Ant2	2437	6Mbps	14.88	≤30.00	16.92	≤36.00	PASS
11G	Ant2	2462	6Mbps	14.44	≤30.00	16.48	≤36.00	PASS
11N20SISO	Ant2	2412	MCS0	14.84	≤30.00	16.88	≤36.00	PASS
11N20SISO	Ant2	2437	MCS0	14.85	≤30.00	16.89	≤36.00	PASS
11N20SISO	Ant2	2462	MCS0	14.32	≤30.00	16.36	≤36.00	PASS
11N40SISO	Ant2	2422	MCS0	15.04	≤30.00	17.08	≤36.00	PASS
11N40SISO	Ant2	2437	MCS0	14.88	≤30.00	16.92	≤36.00	PASS
11N40SISO	Ant2	2452	MCS0	14.34	≤30.00	16.38	≤36.00	PASS
11N20MIMO	Ant1	2412	MCS0	17.14	≤30.00	19.18	≤36.00	PASS
11N20MIMO	Ant2	2412	MCS0	15.31	≤30.00	17.35	≤36.00	PASS
11N20MIMO	total	2412	MCS0	19.33	≤30.00	21.37	≤36.00	PASS
11N20MIMO	Ant1	2437	MCS0	17.14	≤30.00	19.18	≤36.00	PASS
11N20MIMO	Ant2	2437	MCS0	15.33	≤30.00	17.37	≤36.00	PASS
11N20MIMO	total	2437	MCS0	19.34	≤30.00	21.38	≤36.00	PASS
11N20MIMO	Ant1	2462	MCS0	16.05	≤30.00	18.09	≤36.00	PASS
11N20MIMO	Ant2	2462	MCS0	14.25	≤30.00	16.29	≤36.00	PASS
11N20MIMO	total	2462	MCS0	18.25	≤30.00	20.29	≤36.00	PASS
11N40MIMO	Ant1	2422	MCS0	17.17	≤30.00	19.21	≤36.00	PASS
11N40MIMO	Ant2	2422	MCS0	15.30	≤30.00	17.34	≤36.00	PASS
11N40MIMO	total	2422	MCS0	19.35	≤30.00	21.39	≤36.00	PASS
11N40MIMO	Ant1	2437	MCS0	17.40	≤30.00	19.44	≤36.00	PASS
11N40MIMO	Ant2	2437	MCS0	15.17	≤30.00	17.21	≤36.00	PASS
11N40MIMO	total	2437	MCS0	19.44	≤30.00	21.48	≤36.00	PASS

11N40MIMO	Ant1	2452	MCS0	16.07	≤30.00	18.11	≤36.00	PASS
11N40MIMO	Ant2	2452	MCS0	14.80	≤30.00	16.84	≤36.00	PASS
11N40MIMO	total	2452	MCS0	18.49	≤30.00	20.53	≤36.00	PASS

Note: transmit signals are completely correlated,
 Directional gain= G_{ANT} + Array Gain=2.04dBi

4. Maximum power spectral density

Test Result

TestMode	Antenna	Frequency[MHz]	Rate	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	1Mbps	-9.74	≤8.00	PASS
11B	Ant1	2437	1Mbps	-10.53	≤8.00	PASS
11B	Ant1	2462	1Mbps	-10.65	≤8.00	PASS
11G	Ant1	2412	6Mbps	-14.94	≤8.00	PASS
11G	Ant1	2437	6Mbps	-14.56	≤8.00	PASS
11G	Ant1	2462	6Mbps	-15.63	≤8.00	PASS
11N20SISO	Ant1	2412	MCS0	-13.82	≤8.00	PASS
11N20SISO	Ant1	2437	MCS0	-15.45	≤8.00	PASS
11N20SISO	Ant1	2462	MCS0	-16.55	≤8.00	PASS
11N40SISO	Ant1	2422	MCS0	-16.97	≤8.00	PASS
11N40SISO	Ant1	2452	MCS0	-19.22	≤8.00	PASS
11N40SISO	Ant1	2437	MCS0	-18.28	≤8.00	PASS
11B	Ant2	2412	1Mbps	-12.33	≤8.00	PASS
11B	Ant2	2437	1Mbps	-12.01	≤8.00	PASS
11B	Ant2	2462	1Mbps	-12.63	≤8.00	PASS
11G	Ant2	2412	6Mbps	-16.44	≤8.00	PASS
11G	Ant2	2437	6Mbps	-16.95	≤8.00	PASS
11G	Ant2	2462	6Mbps	-16.96	≤8.00	PASS
11N20SISO	Ant2	2412	MCS0	-17.21	≤8.00	PASS
11N20SISO	Ant2	2437	MCS0	-16.43	≤8.00	PASS
11N20SISO	Ant2	2462	MCS0	-17.29	≤8.00	PASS
11N40SISO	Ant2	2422	MCS0	-20.09	≤8.00	PASS
11N40SISO	Ant2	2437	MCS0	-18.7	≤8.00	PASS
11N40SISO	Ant2	2452	MCS0	-20.71	≤8.00	PASS
11N20MIMO	Ant1	2412	MCS0	-14.92	≤8.00	PASS
11N20MIMO	Ant2	2412	MCS0	-16.99	≤8.00	PASS
11N20MIMO	total	2412	MCS0	-12.82	≤8.00	PASS
11N20MIMO	Ant1	2462	MCS0	-16.36	≤8.00	PASS
11N20MIMO	Ant2	2462	MCS0	-18.37	≤8.00	PASS
11N20MIMO	total	2462	MCS0	-14.24	≤8.00	PASS
11N20MIMO	Ant1	2437	MCS0	-15.15	≤8.00	PASS

11N20MIMO	Ant2	2437	MCS0	-17.07	≤8.00	PASS
11N20MIMO	total	2437	MCS0	-12.99	≤8.00	PASS
11N40MIMO	Ant1	2422	MCS0	-17.9	≤8.00	PASS
11N40MIMO	Ant2	2422	MCS0	-19.92	≤8.00	PASS
11N40MIMO	total	2422	MCS0	-15.78	≤8.00	PASS
11N40MIMO	Ant1	2437	MCS0	-18.46	≤8.00	PASS
11N40MIMO	Ant2	2437	MCS0	-20.58	≤8.00	PASS
11N40MIMO	total	2437	MCS0	-16.38	≤8.00	PASS
11N40MIMO	Ant1	2452	MCS0	-17.7	≤8.00	PASS
11N40MIMO	Ant2	2452	MCS0	-19.19	≤8.00	PASS
11N40MIMO	total	2452	MCS0	-15.37	≤8.00	PASS

Directional gain= G_{ANT} + Array Gain=2.04+3.01=5.05dBi

Array Gain= $10\log(N_{ANT}/2)$ dB

Test Graphs

11B-Ant1-2412



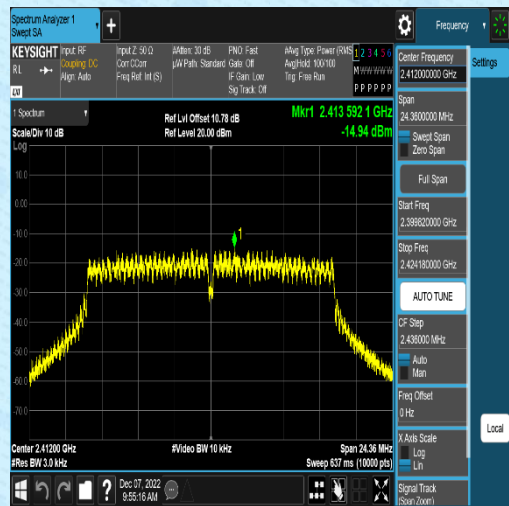
11B-Ant1-2437



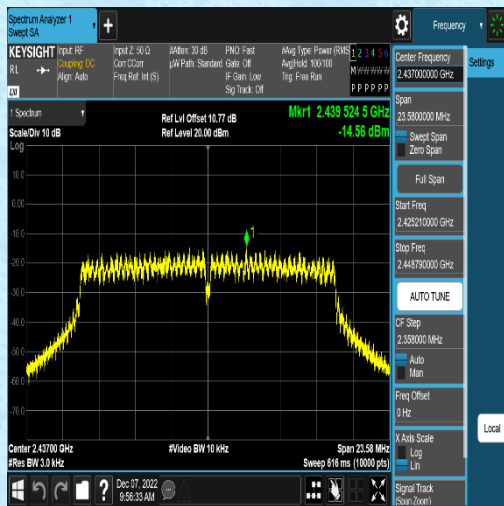
11B-Ant1-2462



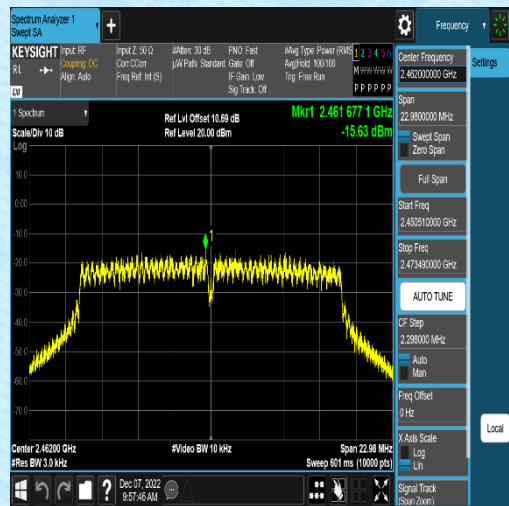
11G-Ant1-2412-



11G-Ant1-2437

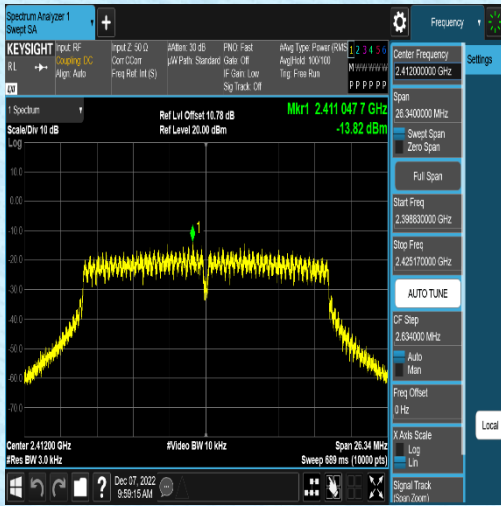


11G-Ant1-2462

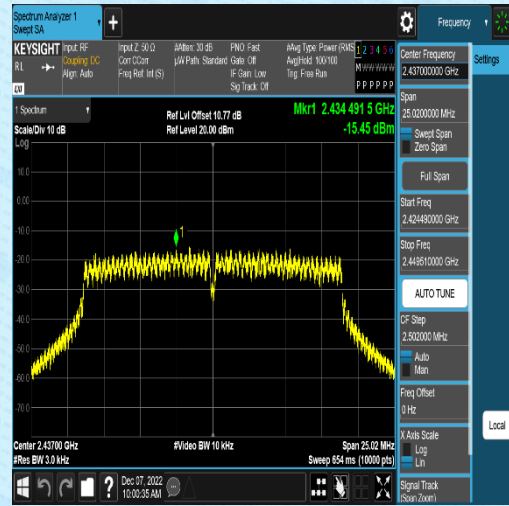


11N20SISO-Ant1-2412

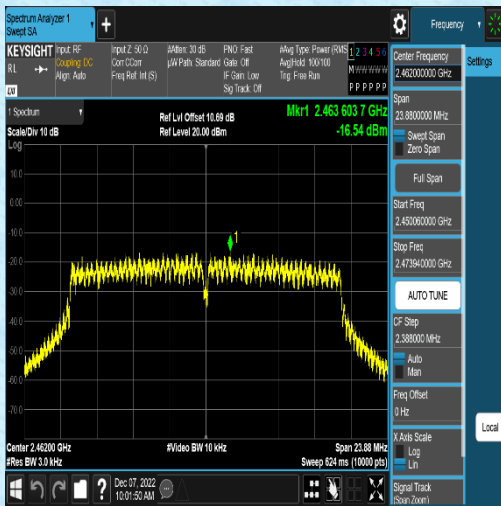
11N20SISO-Ant1-2437



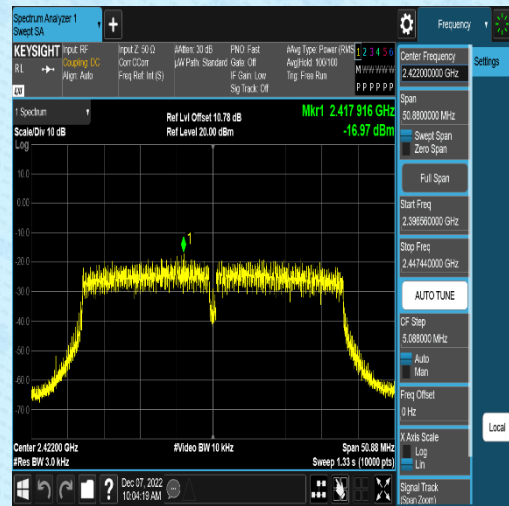
11N20SISO-Ant1-2462



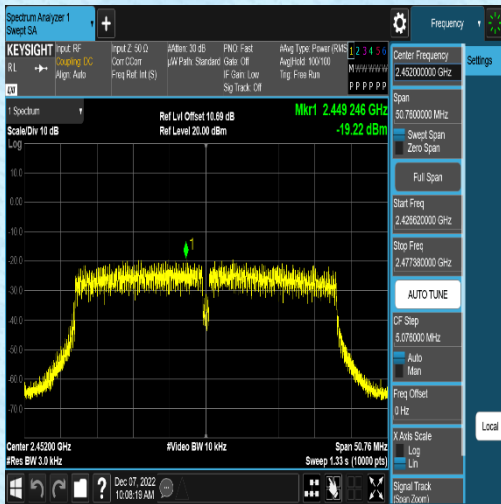
11N40SISO-Ant1-2422



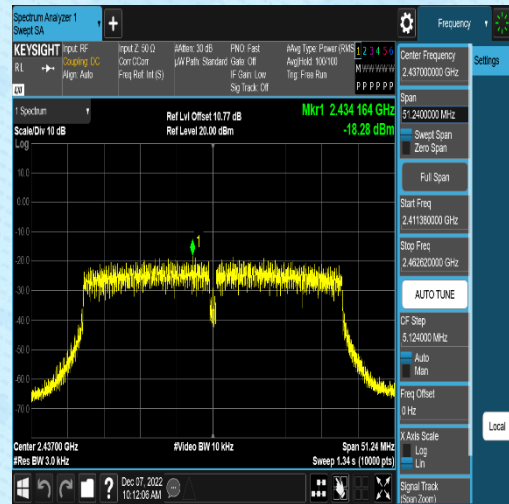
11N40SISO-Ant1-2452



11N40SISO-Ant1-2437



11B-Ant2-2412



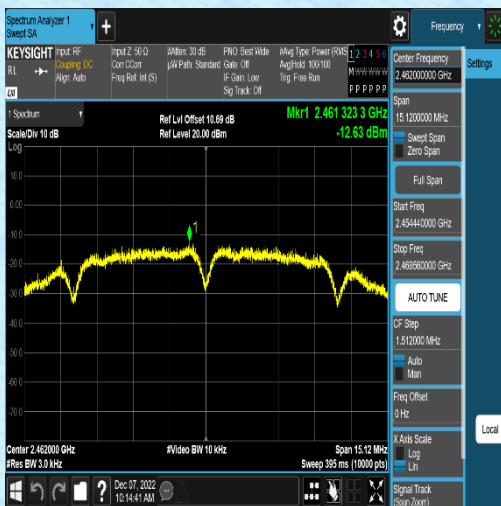
11B-Ant2-2437



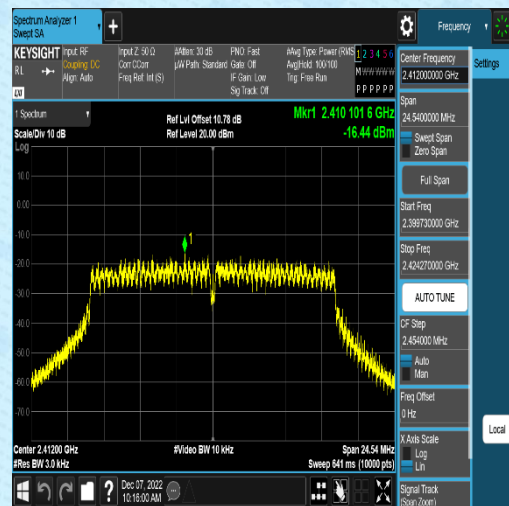
11B-Ant2-2462



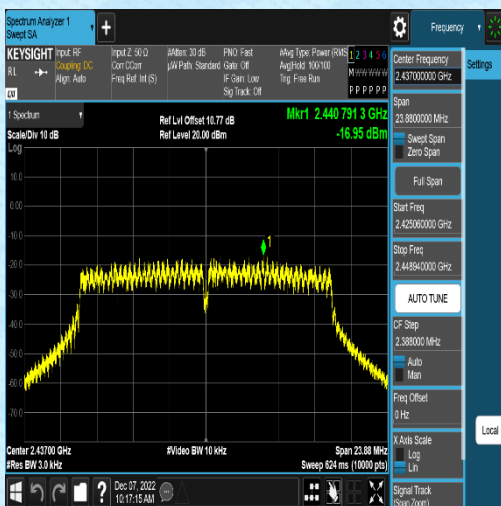
11G-Ant2-2412



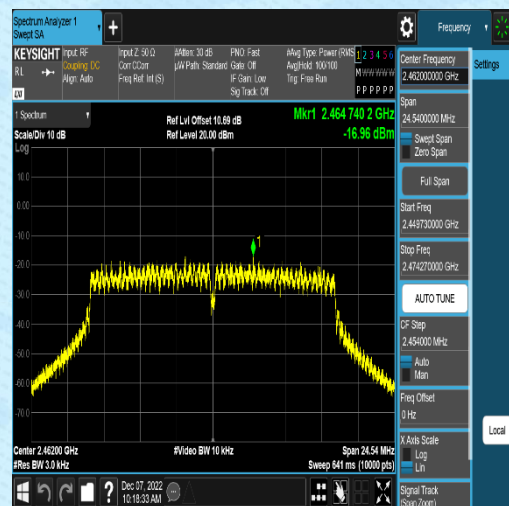
11G-Ant2-2437



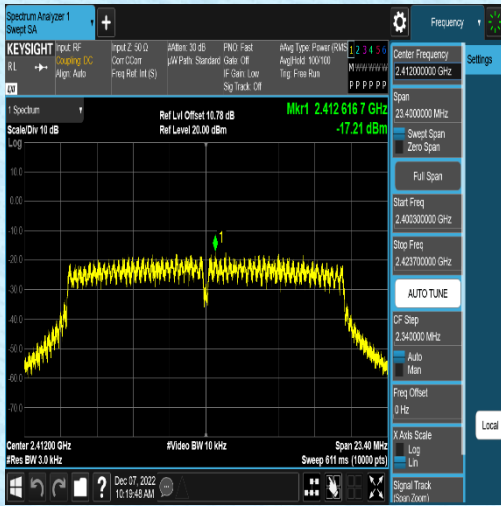
11G-Ant2-2462



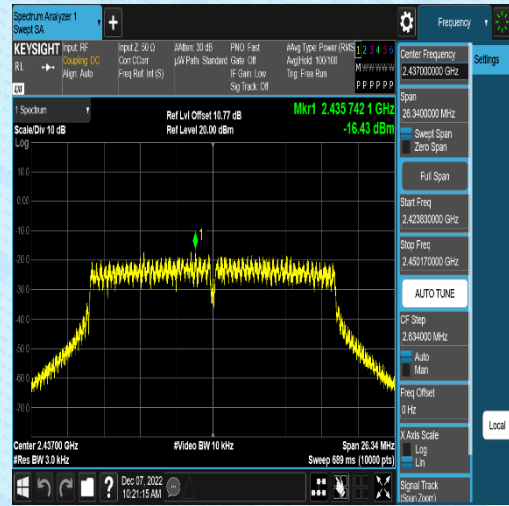
11N20SISO-Ant2-2412



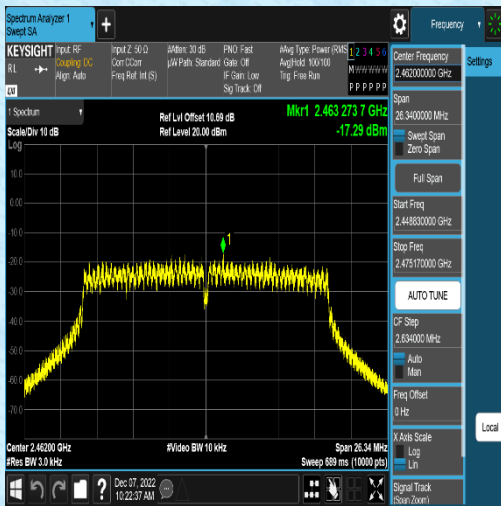
11N20SISO-Ant2-2437



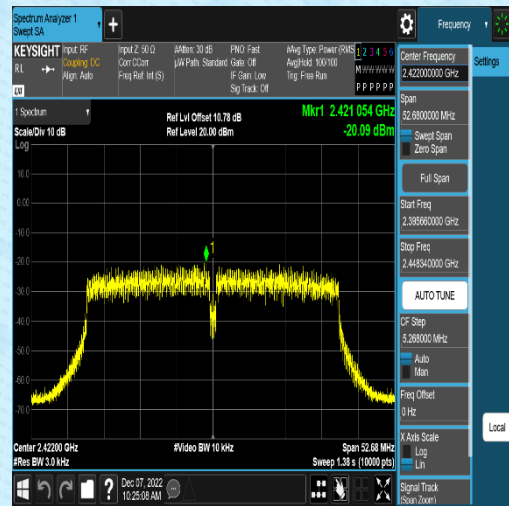
11N20SISO-Ant2-2462



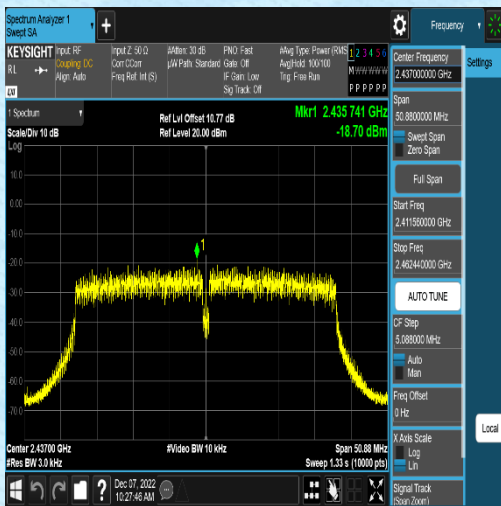
11N40SISO-Ant2-2422



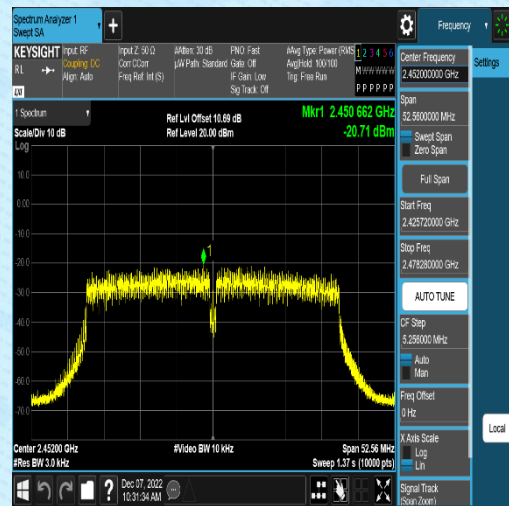
11N40SISO-Ant2-2437



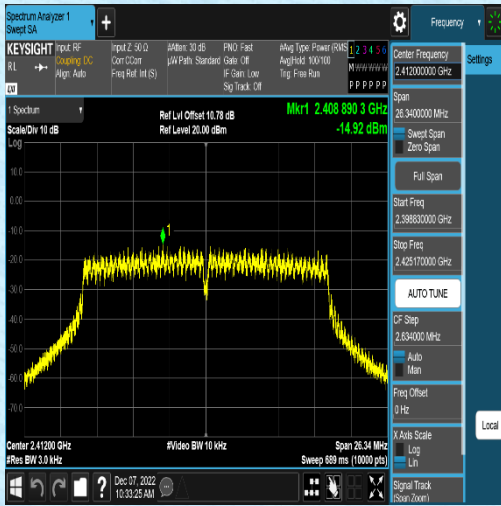
11N40SISO-Ant2-2452



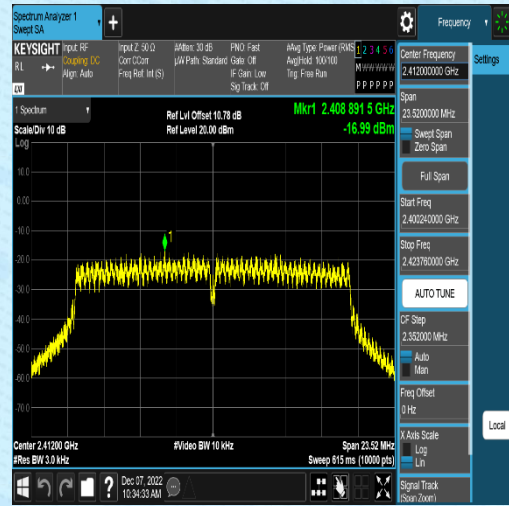
11N20MIMO-Ant1-2412



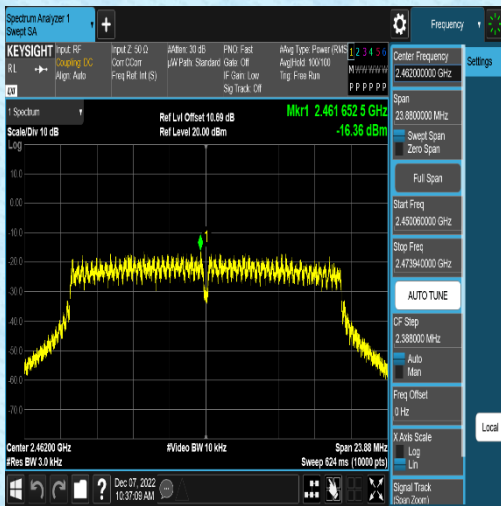
11N20MIMO-Ant2-2412



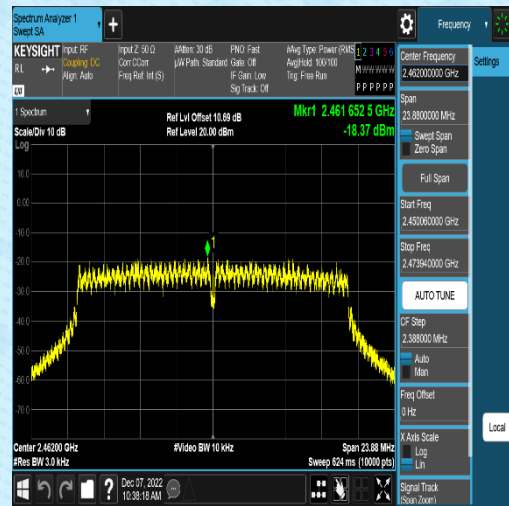
11N20MIMO-Ant1-2462



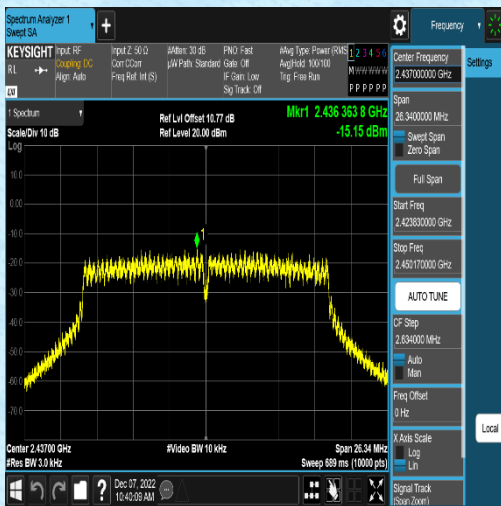
11N20MIMO-Ant2-2462



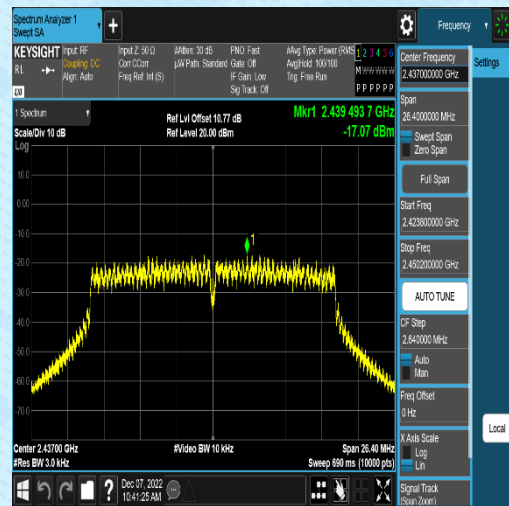
11N20MIMO-Ant1-2437



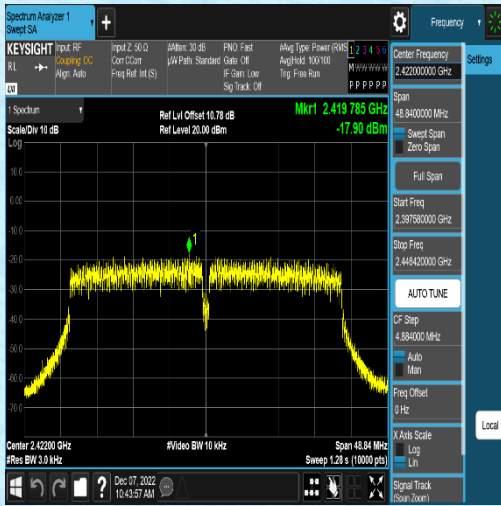
11N20MIMO-Ant2-2437



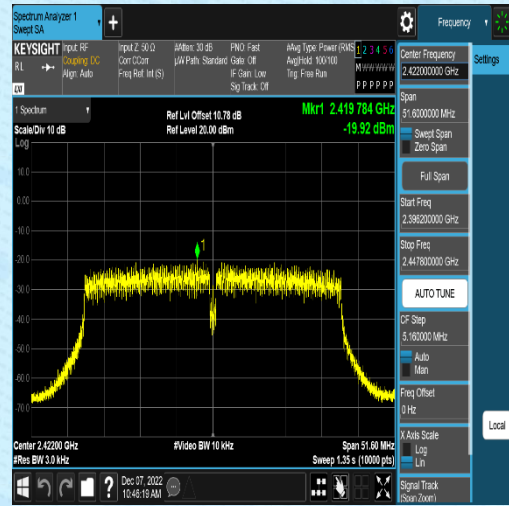
11N40MIMO-Ant1-2422



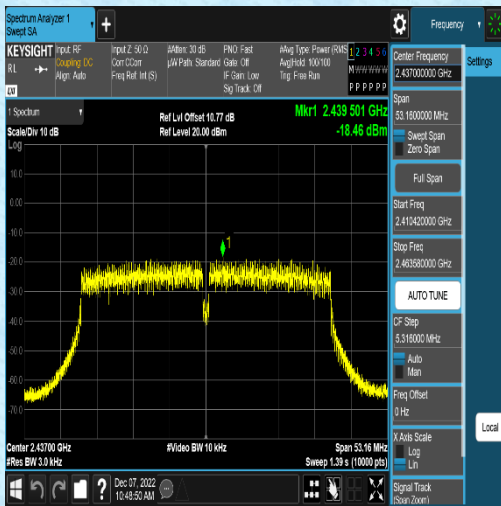
11N40MIMO-Ant2-2422



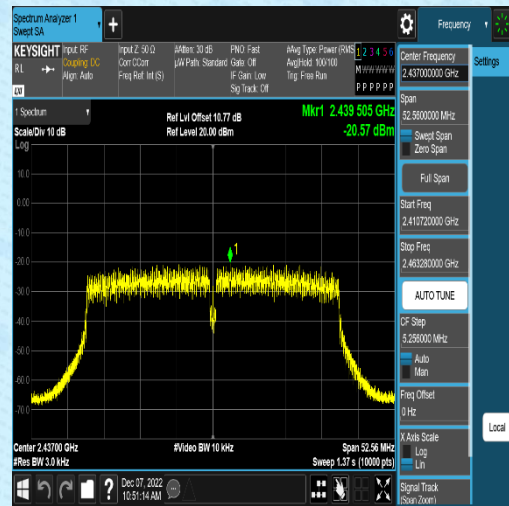
11N40MIMO-Ant1-2437



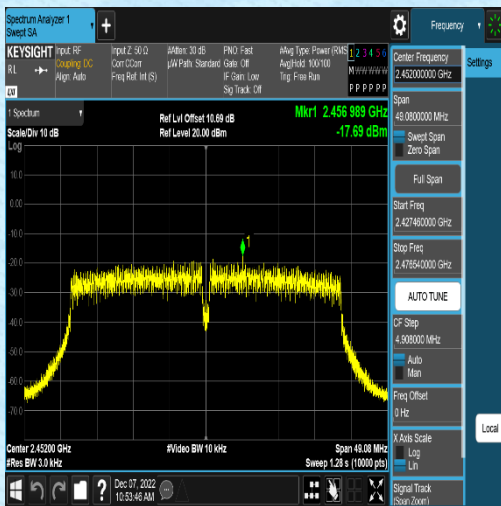
11N40MIMO-Ant2-2437



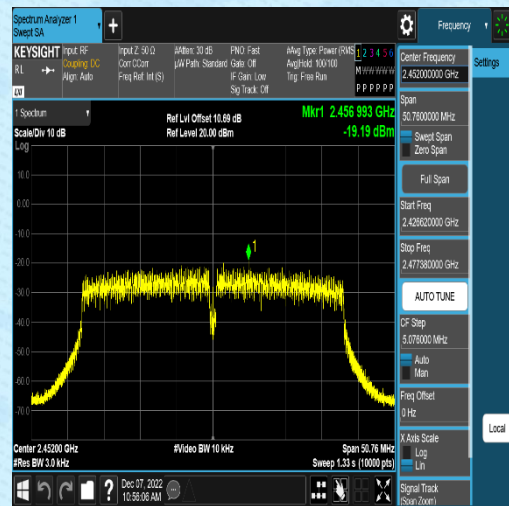
11N40MIMO-Ant1-2452



11N40MIMO-Ant2-2452



11N40MIMO-Ant1-2437



11N40MIMO-Ant2-2437

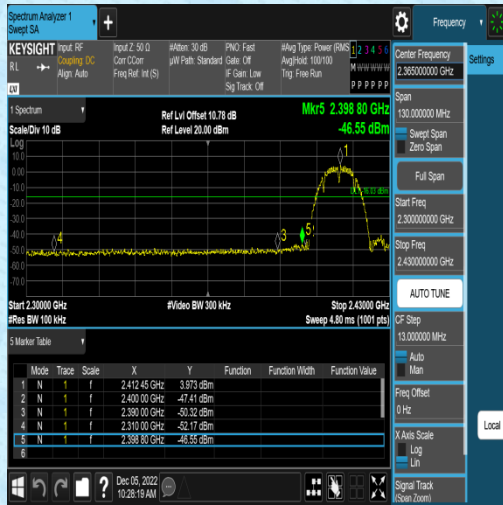
5.Band edge measurements

Test Result

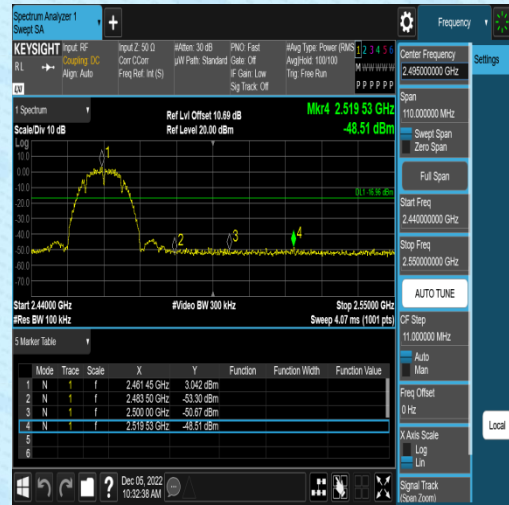
TestMode	Antenna	ChName	Frequency[MHz]	Rate	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	1Mbps	3.97	-46.55	≤-16.03	PASS
11B	Ant1	High	2462	1Mbps	3.04	-48.51	≤-16.96	PASS
11G	Ant1	Low	2412	6Mbps	2.26	-37.9	≤-17.74	PASS
11G	Ant1	High	2462	6Mbps	0.21	-48.53	≤-19.8	PASS
11N20SISO	Ant1	Low	2412	MCS0	-1.59	-38.67	≤-21.59	PASS
11N20SISO	Ant1	High	2462	MCS0	-3.02	-47.82	≤-23.02	PASS
11N40SISO	Ant1	Low	2422	MCS0	-3.75	-42.38	≤-23.75	PASS
11N40SISO	Ant1	High	2452	MCS0	-4.93	-49.01	≤-24.93	PASS
11B	Ant2	Low	2412	1Mbps	1.76	-35.56	≤-18.24	PASS
11B	Ant2	High	2462	1Mbps	0.58	-47.85	≤-19.42	PASS
11G	Ant2	Low	2412	6Mbps	-3.97	-36.9	≤-23.97	PASS
11G	Ant2	High	2462	6Mbps	-4.47	-42.85	≤-24.47	PASS
11N20SISO	Ant2	Low	2412	MCS0	-3.34	-40.2	≤-23.34	PASS
11N20SISO	Ant2	High	2462	MCS0	-4.81	-49	≤-24.81	PASS
11N40SISO	Ant2	Low	2422	MCS0	-5.90	-43.36	≤-25.9	PASS
11N40SISO	Ant2	High	2452	MCS0	-6.20	-43.21	≤-26.2	PASS
11N20MIMO	Ant1	Low	2412	MCS0	-1.78	-38.18	≤-21.78	PASS
11N20MIMO	Ant2	Low	2412	MCS0	-2.49	-40.62	≤-22.49	PASS
11N20MIMO	Ant1	High	2462	MCS0	-2.42	-48.98	≤-22.42	PASS
11N20MIMO	Ant2	High	2462	MCS0	-4.69	-49.36	≤-24.69	PASS
11N40MIMO	Ant1	Low	2422	MCS0	-3.94	-44.14	≤-23.94	PASS
11N40MIMO	Ant2	Low	2422	MCS0	-5.84	-45.61	≤-25.84	PASS
11N40MIMO	Ant1	High	2452	MCS0	-4.56	-47.97	≤-24.56	PASS
11N40MIMO	Ant2	High	2452	MCS0	-7.81	-49.21	≤-27.81	PASS

Test Graphs

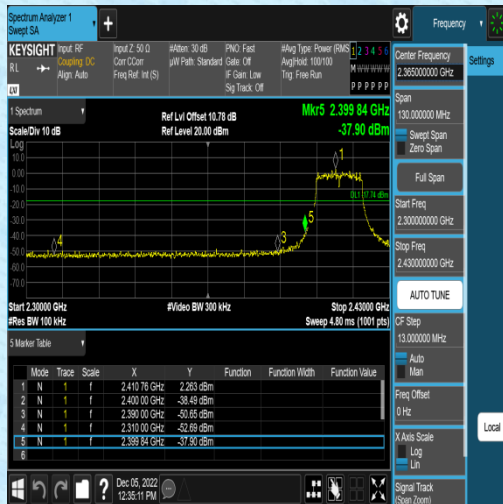
11B-Ant1-Low-2412-3.97



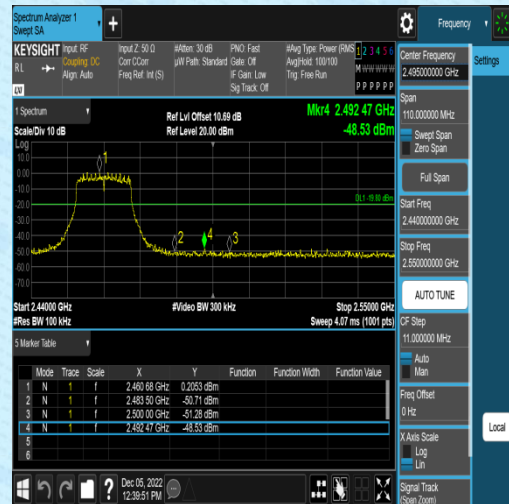
11B-Ant1-High-2462-3.04



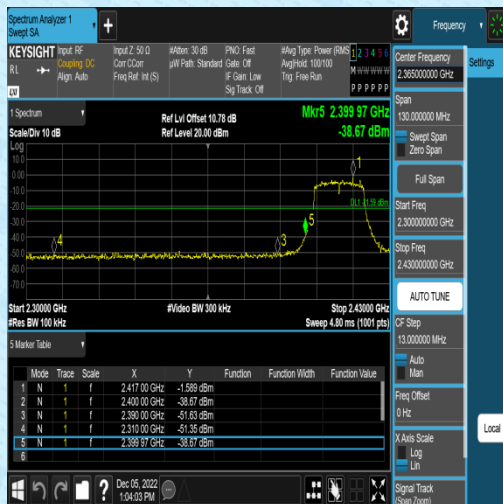
11G-Ant1-Low-2412-2.26



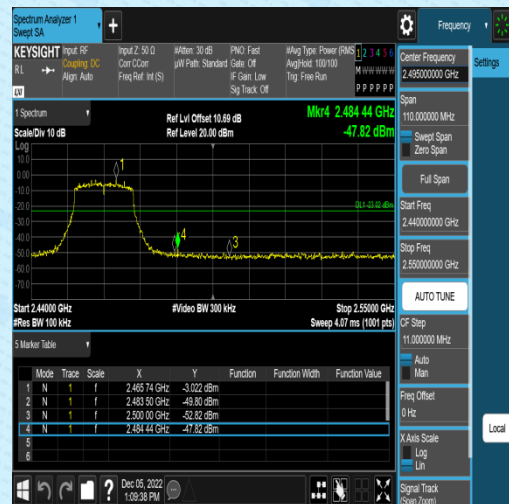
11G-Ant1-High-2462-0.21



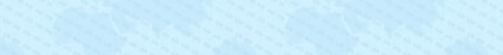
11N20SISO-Ant1-Low-2412--1.59



11N20SISO-Ant1-High-2462--3.02

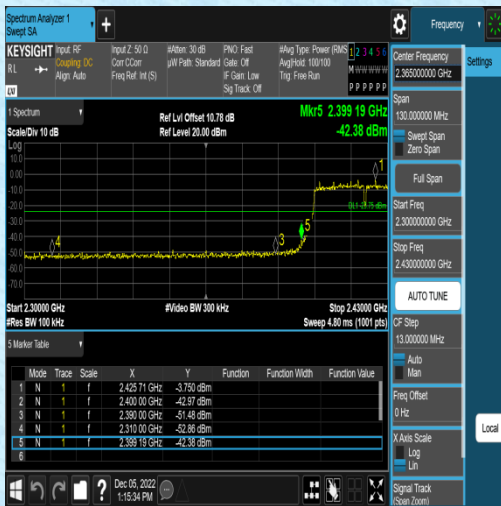


11N40SISO-Ant1-Low-2422--3.75



11N40SISO-Ant1-High-2452--4.93

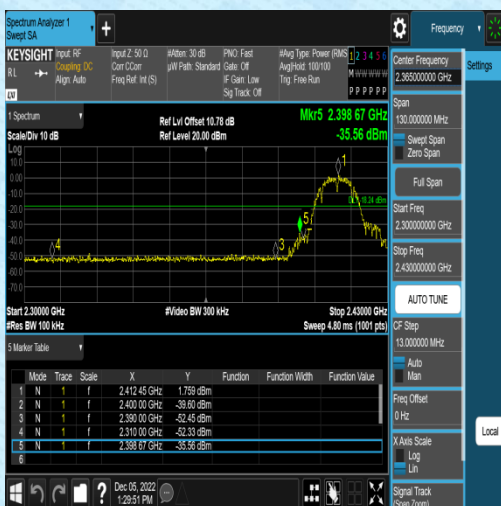




11B-Ant2-Low-2412-1.76



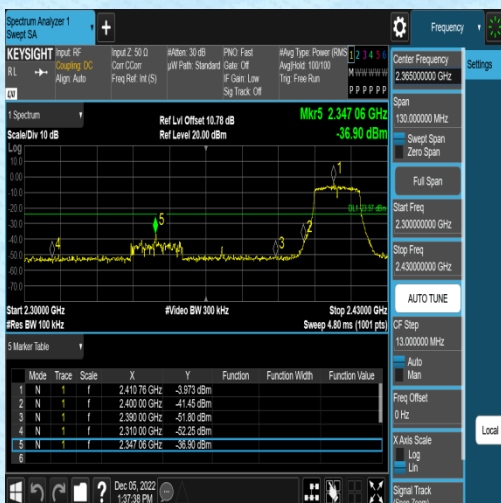
11B-Ant2-High-2462-0.58



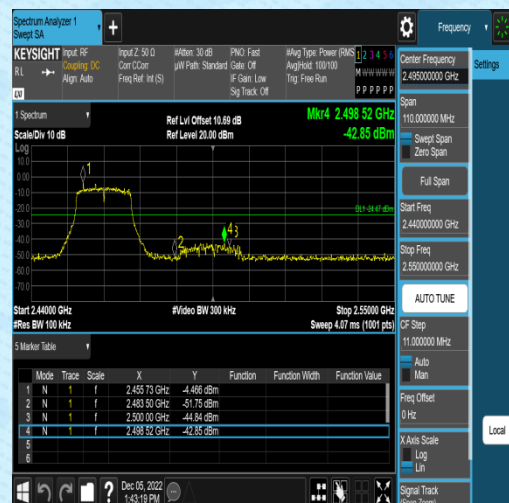
11G-Ant2-Low-2412--3.97



11G-Ant2-High-2462--4.47



11N20SISO-Ant2-Low-2412--3.34



11N20SISO-Ant2-High-2462--4.81