

Test Result Average

Test Mode	Antenna	Channel	Result[dBm]	Limit[dBm]	EIRP [dBm]	EIRP Limit[dBm]	Verdict
11B	Ant0	2412	17.92	≤30.00	21.53	≤36.00	PASS
	Ant1	2412	14.88	≤30.00	18.85	≤36.00	PASS
	Ant0	2437	17.49	≤30.00	21.10	≤36.00	PASS
	Ant1	2437	14.29	≤30.00	18.26	≤36.00	PASS
	Ant0	2462	18.32	≤30.00	21.93	≤36.00	PASS
	Ant1	2462	15.24	≤30.00	19.21	≤36.00	PASS
11G	Ant0	2412	19.22	≤30.00	22.83	≤36.00	PASS
	Ant1	2412	20.40	≤30.00	24.37	≤36.00	PASS
	Ant0	2437	20.90	≤30.00	24.51	≤36.00	PASS
	Ant1	2437	22.36	≤30.00	26.33	≤36.00	PASS
	Ant0	2462	18.33	≤30.00	21.94	≤36.00	PASS
	Ant1	2462	19.32	≤30.00	23.29	≤36.00	PASS
11N20MIMO	Ant0	2412	17.92	≤29.03	24.89	≤36.00	PASS
	Ant1	2412	19.00	≤29.03	25.97	≤36.00	PASS
	total	2412	21.50	≤29.03	28.47	≤36.00	PASS
	Ant0	2437	18.39	≤29.03	25.36	≤36.00	PASS
	Ant1	2437	19.44	≤29.03	26.41	≤36.00	PASS
	total	2437	21.96	≤29.03	28.93	≤36.00	PASS
	Ant0	2462	18.35	≤29.03	25.32	≤36.00	PASS
	Ant1	2462	19.44	≤29.03	26.41	≤36.00	PASS
11N40MIMO	Ant0	2422	17.03	≤29.03	24.00	≤36.00	PASS
	Ant1	2422	17.89	≤29.03	24.86	≤36.00	PASS
	total	2422	20.49	≤29.03	27.46	≤36.00	PASS
	Ant0	2437	18.32	≤29.03	25.29	≤36.00	PASS
	Ant1	2437	19.37	≤29.03	26.34	≤36.00	PASS
	total	2437	21.89	≤29.03	28.86	≤36.00	PASS
	Ant0	2452	16.52	≤29.03	23.49	≤36.00	PASS
	Ant1	2452	17.30	≤29.03	24.27	≤36.00	PASS
11AX20MIMO	total	2452	19.94	≤29.03	26.91	≤36.00	PASS
	Ant0	2412	17.66	≤29.03	24.63	≤36.00	PASS
	Ant1	2412	18.70	≤29.03	25.67	≤36.00	PASS
	total	2412	21.22	≤29.03	28.19	≤36.00	PASS
	Ant0	2437	18.45	≤29.03	25.42	≤36.00	PASS
	Ant1	2437	19.45	≤29.03	26.42	≤36.00	PASS
	total	2437	21.99	≤29.03	28.96	≤36.00	PASS
	Ant0	2462	17.20	≤29.03	24.17	≤36.00	PASS
11AX40MIMO	Ant1	2462	18.04	≤29.03	25.01	≤36.00	PASS
	total	2462	20.65	≤29.03	27.62	≤36.00	PASS
	Ant0	2422	16.77	≤29.03	23.74	≤36.00	PASS
	Ant1	2422	17.61	≤29.03	24.58	≤36.00	PASS
	total	2422	20.22	≤29.03	27.19	≤36.00	PASS
	Ant0	2437	18.37	≤29.03	25.34	≤36.00	PASS
	Ant1	2437	19.42	≤29.03	26.39	≤36.00	PASS
	total	2437	21.94	≤29.03	28.91	≤36.00	PASS
11AX20MIMO	Ant0	2452	16.22	≤29.03	23.19	≤36.00	PASS
	Ant1	2452	16.97	≤29.03	23.94	≤36.00	PASS
	total	2452	19.62	≤29.03	26.59	≤36.00	PASS

Note: the device employ Beam-forming for the MIMO mode, according to KDB 662911 D01 Multiple Transmitter Output v02r01:

Directional gain = $G_{ANT} + 10 \log(N_{ANT})$

$G_{ANT0} = 3.61\text{dBi}$, $G_{ANT1} = 3.97\text{dBi}$, used the higher for calculate,

Directional gain = $3.97 + 10\log(2) = 6.97\text{dBi} > 6\text{dBi}$

So the limit need reduced 0.97dB

Appendix D: Maximum power spectral density**Test Result**

Test Mode	Antenna	Channel	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant0	2412	-3.13	≤8.00	PASS
	Ant1	2412	-6.21	≤8.00	PASS
	Ant0	2437	-3.44	≤8.00	PASS
	Ant1	2437	-8.37	≤8.00	PASS
	Ant0	2462	-2.14	≤8.00	PASS
	Ant1	2462	-6.93	≤8.00	PASS
11G	Ant0	2412	-4.16	≤8.00	PASS
	Ant1	2412	-3.16	≤8.00	PASS
	Ant0	2437	-2.18	≤8.00	PASS
	Ant1	2437	-2.28	≤8.00	PASS
	Ant0	2462	-4.36	≤8.00	PASS
	Ant1	2462	-5.46	≤8.00	PASS
11N20MIMO	Ant0	2412	-4.60	≤7.03	PASS
	Ant1	2412	-4.58	≤7.03	PASS
	total	2412	-1.58	≤7.03	PASS
	Ant0	2437	-5.08	≤7.03	PASS
	Ant1	2437	-4.81	≤7.03	PASS
	total	2437	-1.93	≤7.03	PASS
	Ant0	2462	-5.45	≤7.03	PASS
	Ant1	2462	-5.04	≤7.03	PASS
	total	2462	-2.23	≤7.03	PASS
11N40MIMO	Ant0	2422	-9.14	≤7.03	PASS
	Ant1	2422	-8.50	≤7.03	PASS
	total	2422	-5.80	≤7.03	PASS
	Ant0	2437	-8.81	≤7.03	PASS
	Ant1	2437	-8.16	≤7.03	PASS
	total	2437	-5.46	≤7.03	PASS
	Ant0	2452	-10.92	≤7.03	PASS
	Ant1	2452	-9.88	≤7.03	PASS
	total	2452	-7.36	≤7.03	PASS
11AX20MIMO	Ant0	2412	-7.12	≤7.03	PASS
	Ant1	2412	-6.56	≤7.03	PASS
	total	2412	-3.82	≤7.03	PASS
	Ant0	2437	-7.06	≤7.03	PASS
	Ant1	2437	-6.70	≤7.03	PASS
	total	2437	-3.87	≤7.03	PASS
	Ant0	2462	-6.93	≤7.03	PASS
	Ant1	2462	-7.46	≤7.03	PASS
	total	2462	-4.18	≤7.03	PASS
11AX40MIMO	Ant0	2422	-10.76	≤7.03	PASS
	Ant1	2422	-10.63	≤7.03	PASS
	total	2422	-7.68	≤7.03	PASS
	Ant0	2437	-8.92	≤7.03	PASS
	Ant1	2437	-9.43	≤7.03	PASS
	total	2437	-6.16	≤7.03	PASS
	Ant0	2452	-11.11	≤7.03	PASS
	Ant1	2452	-11.62	≤7.03	PASS
	total	2452	-8.35	≤7.03	PASS

Note: the device employ Beam-forming for the MIMO mode, according to KDB 662911 D01 Multiple Transmitter Output v02r01:

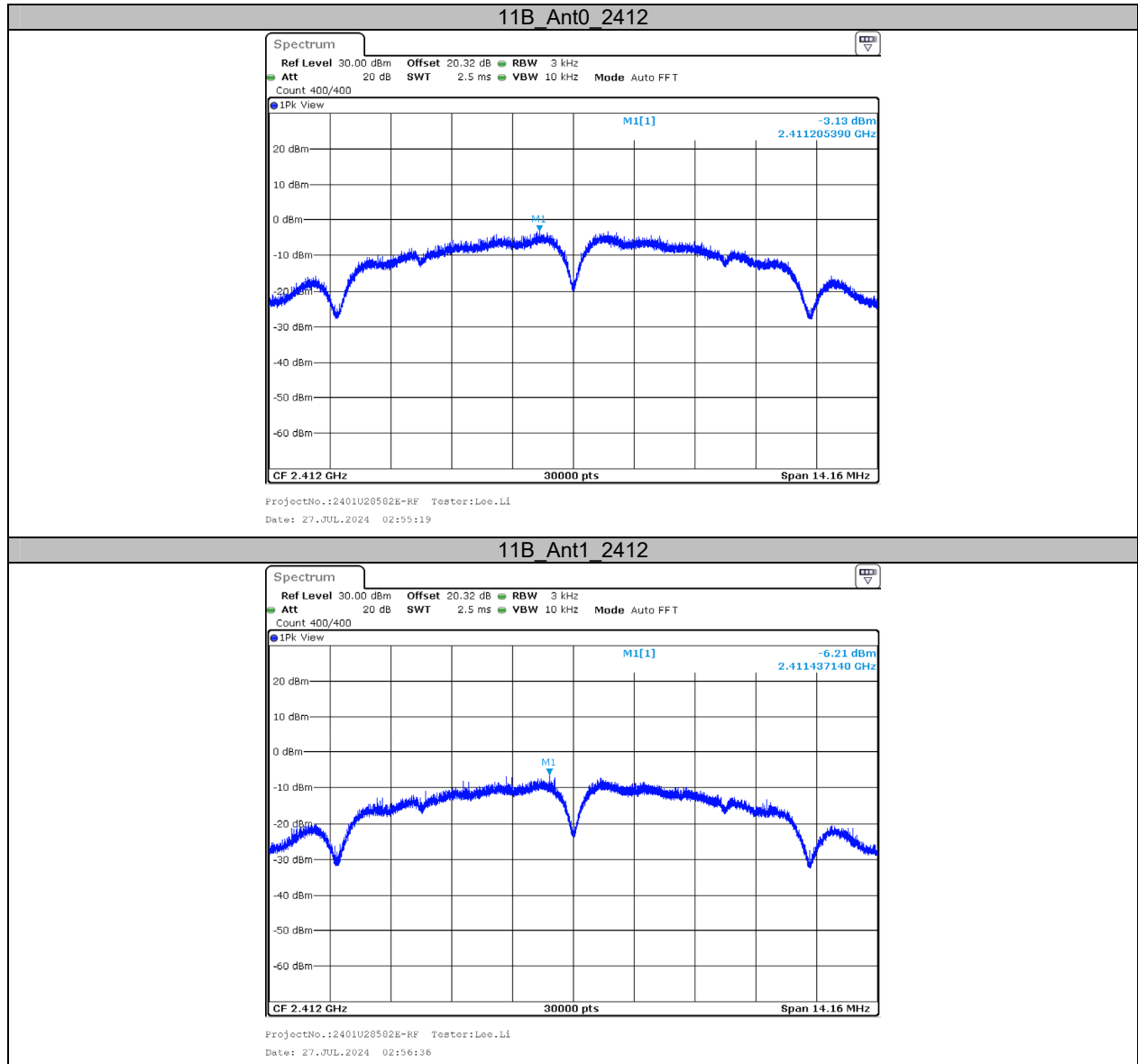
Directional gain = $G_{ANT} + 10 \log(N_{ANT})$

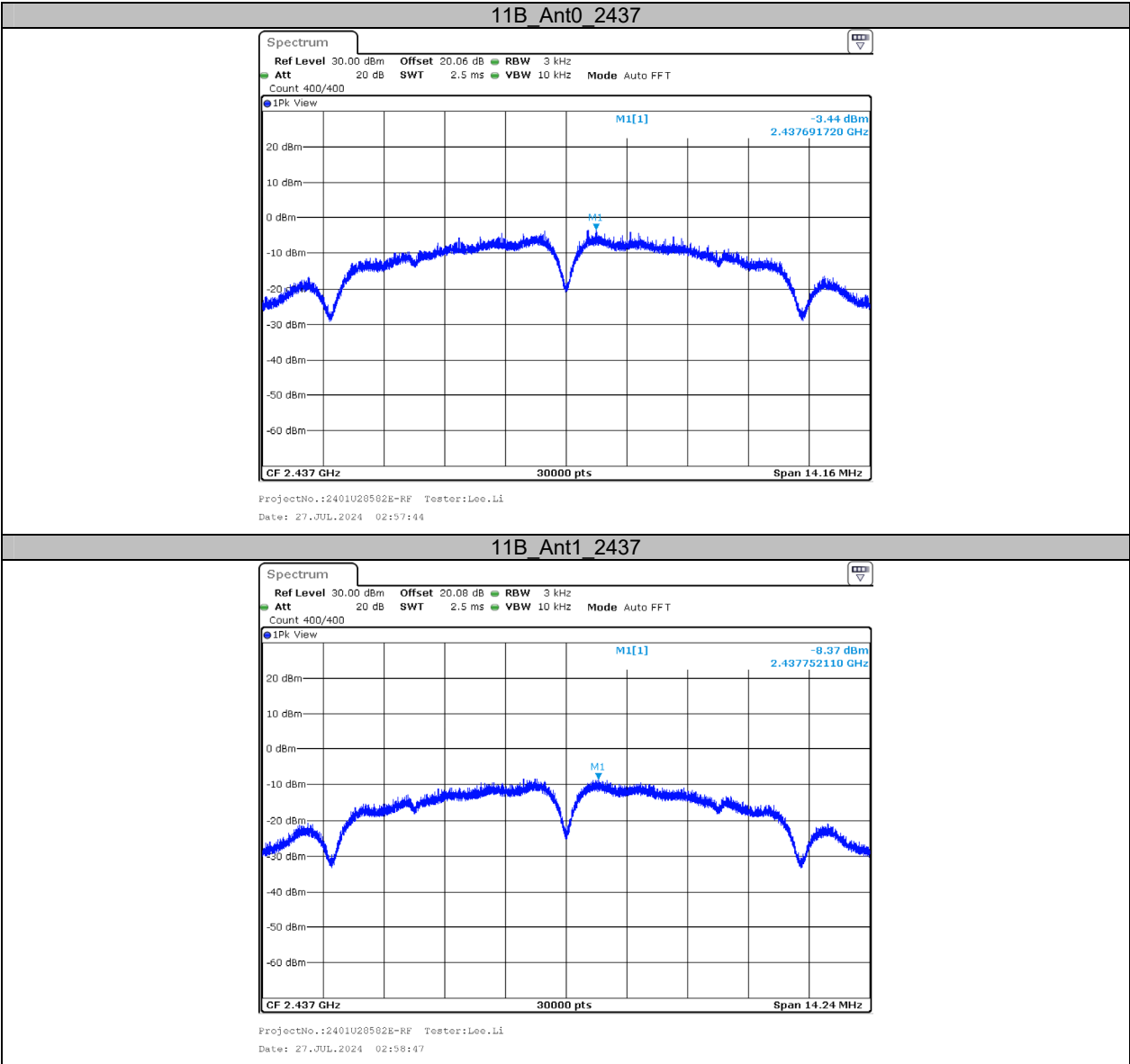
$G_{ANT0} = 3.61\text{dBi}$, $G_{ANT1} = 3.97\text{dBi}$, used the higher for calculate,

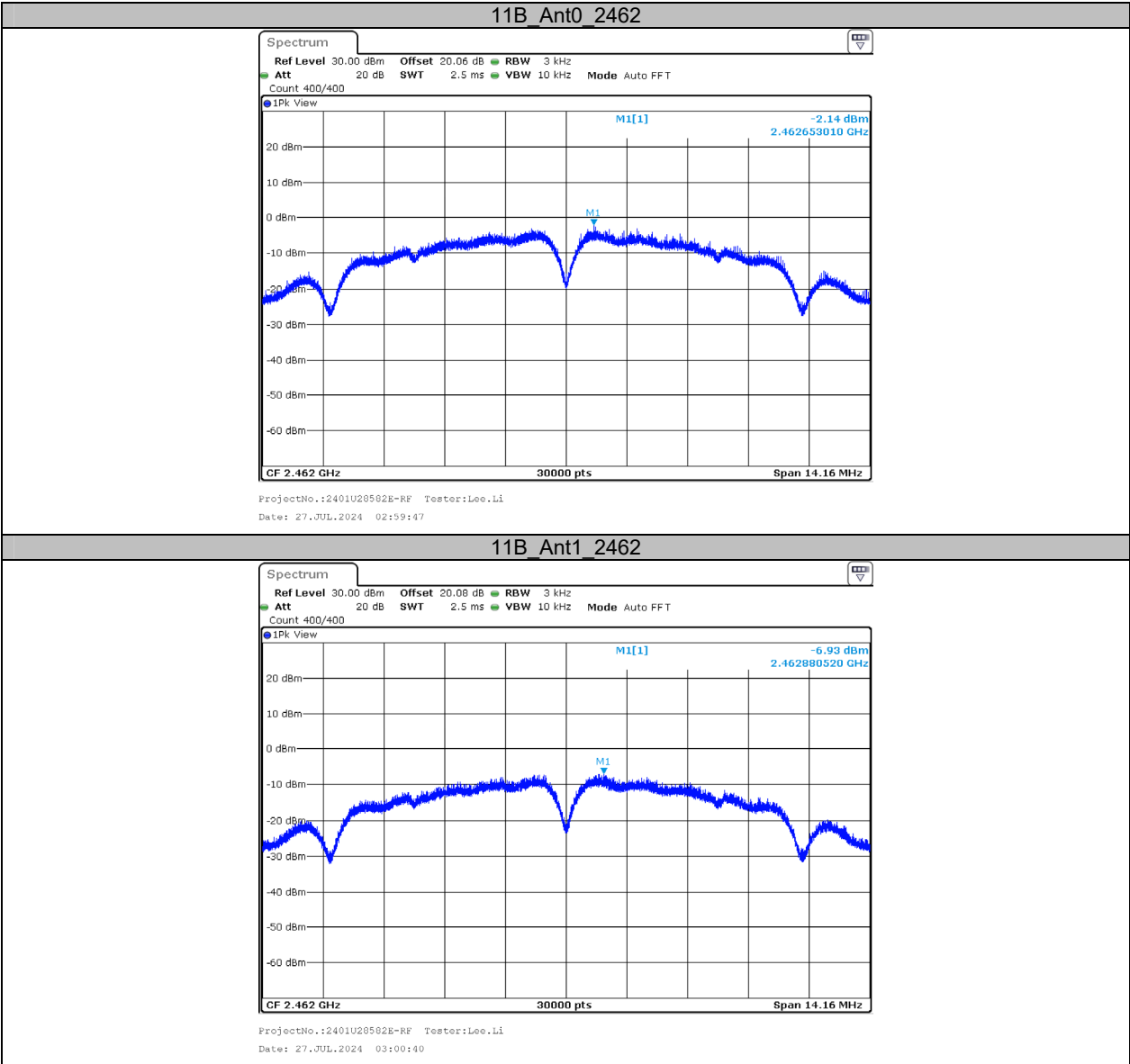
Directional gain = $3.97 + 10\log(2) = 6.97\text{dBi} > 6\text{dBi}$

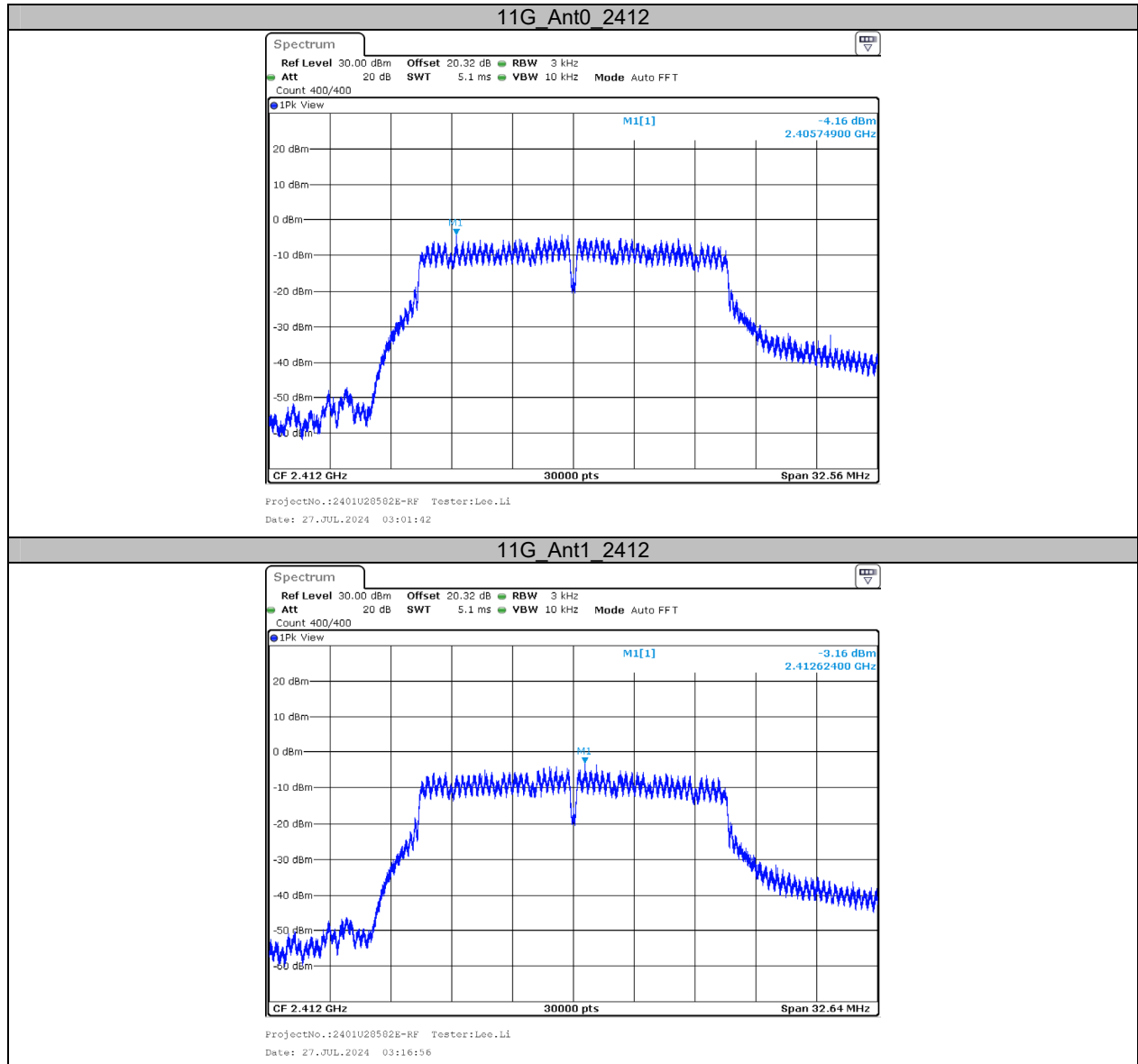
So the limit need reduced 0.97dB

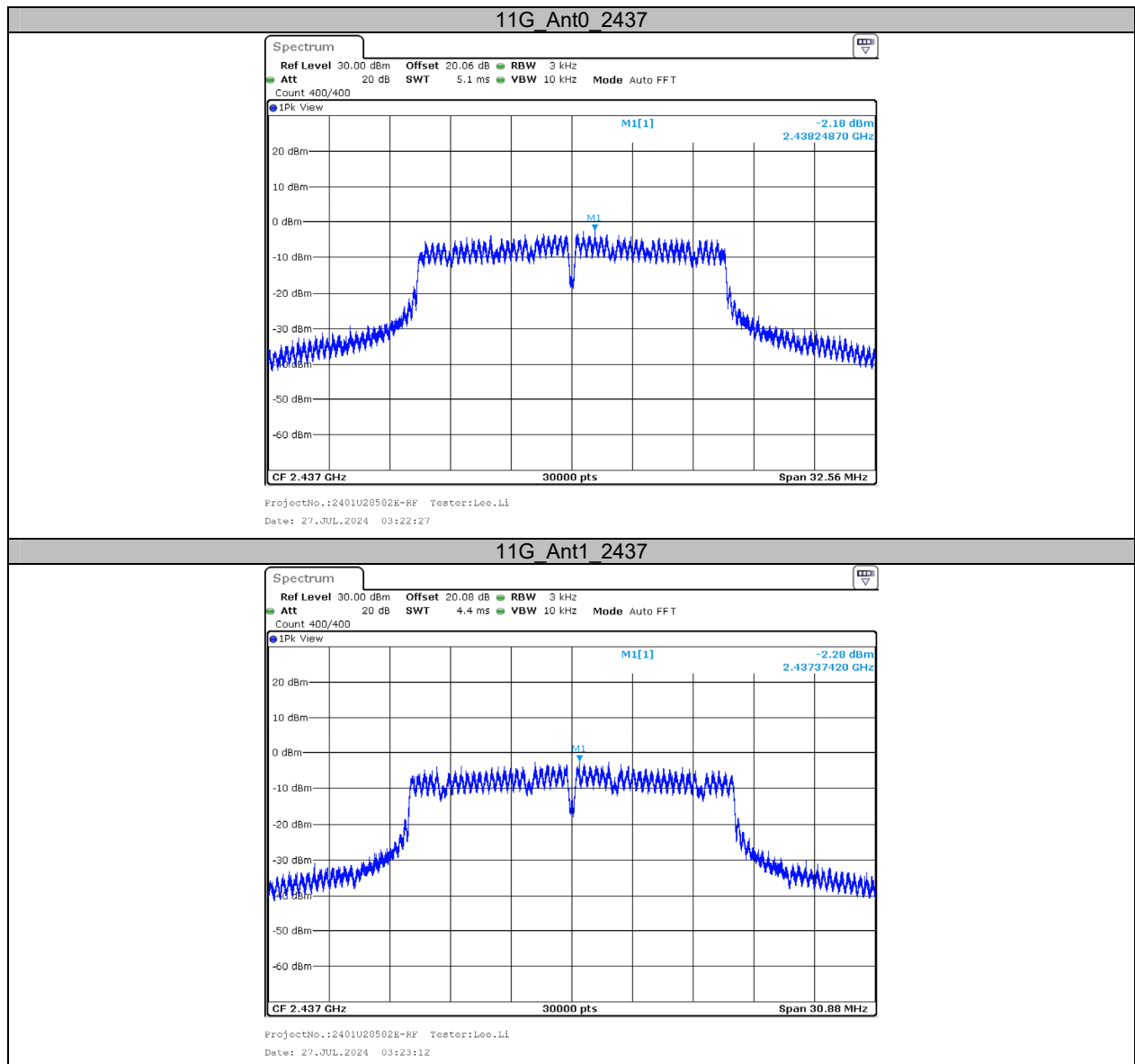
Test Graphs

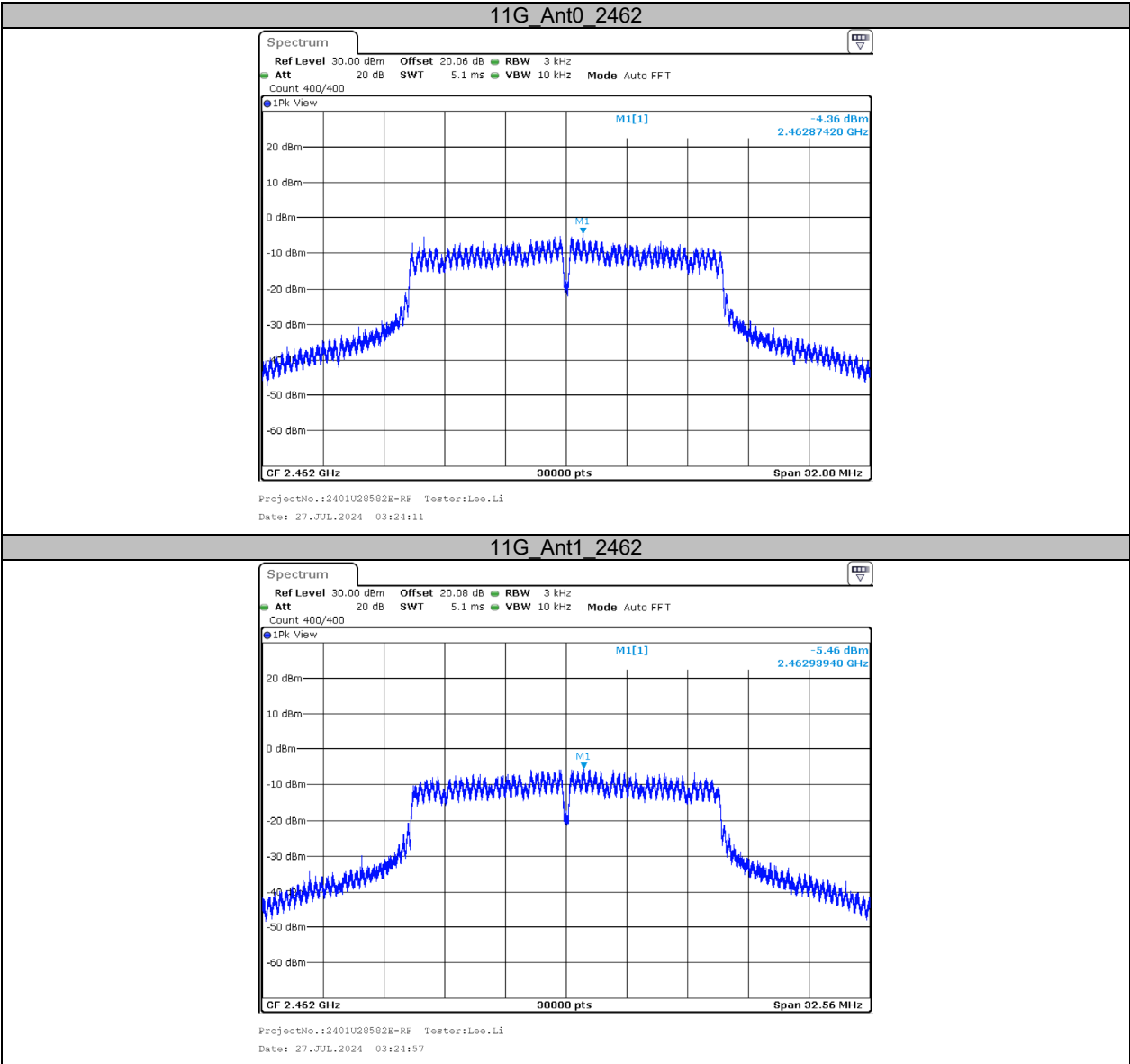


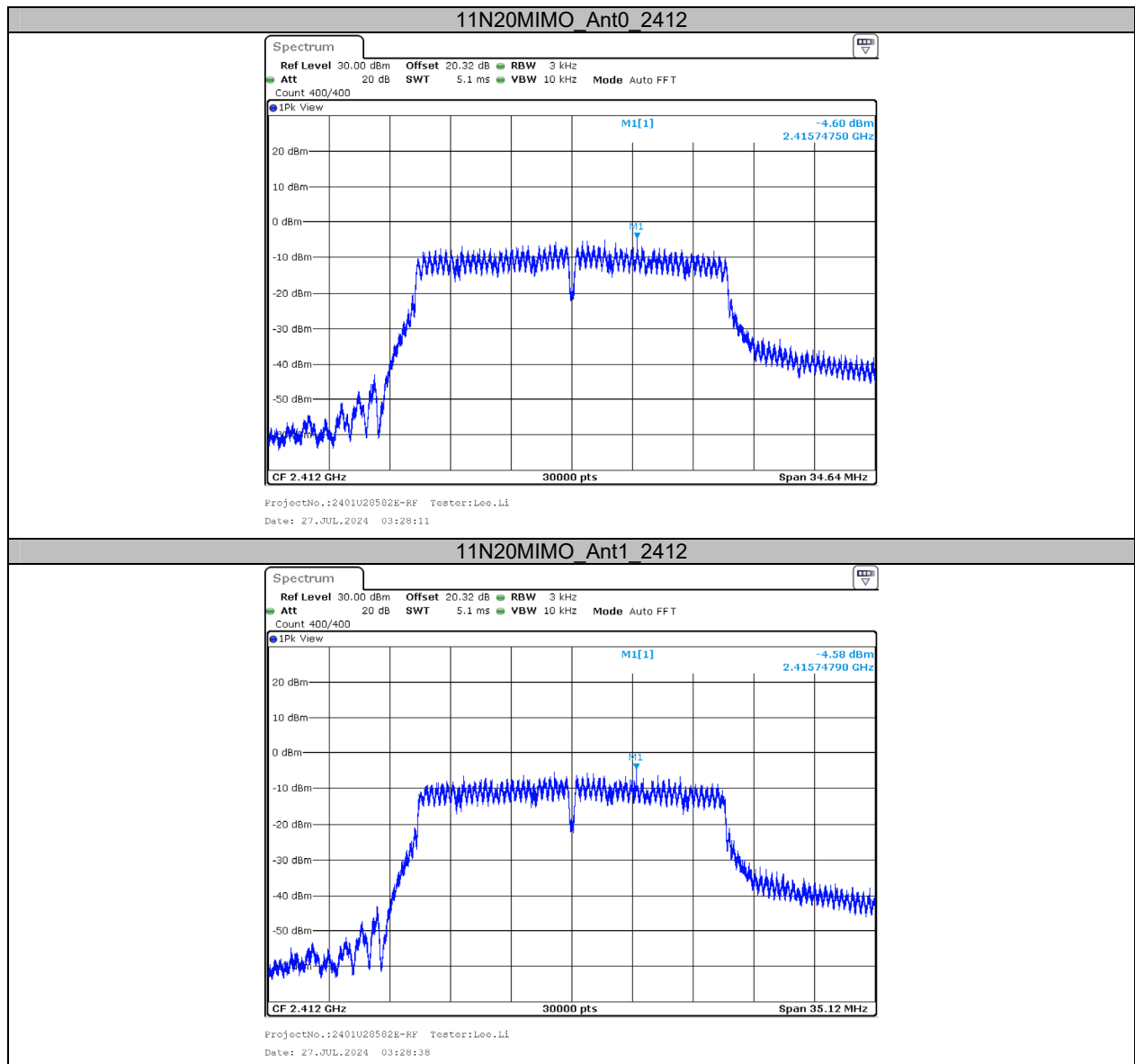


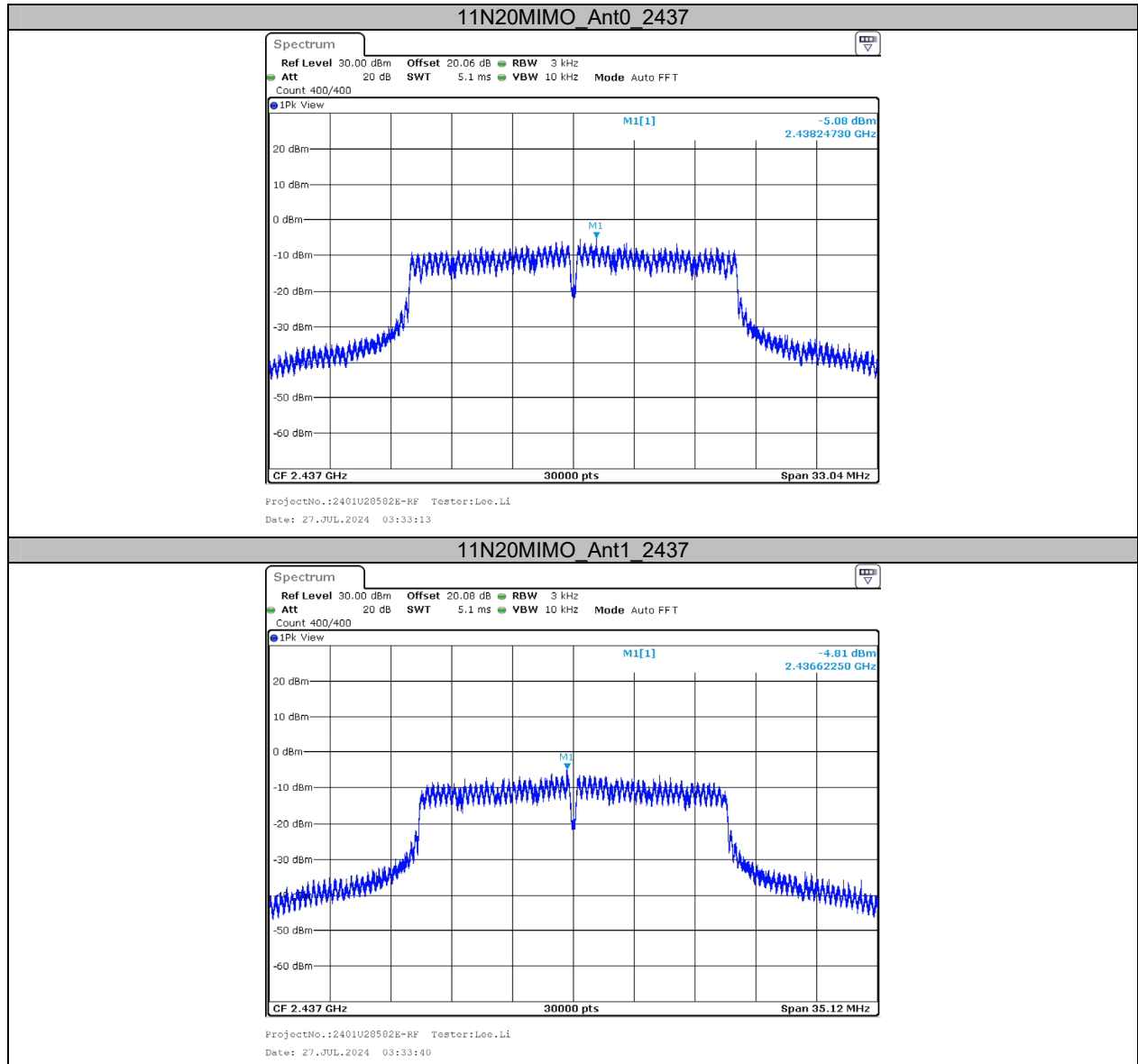


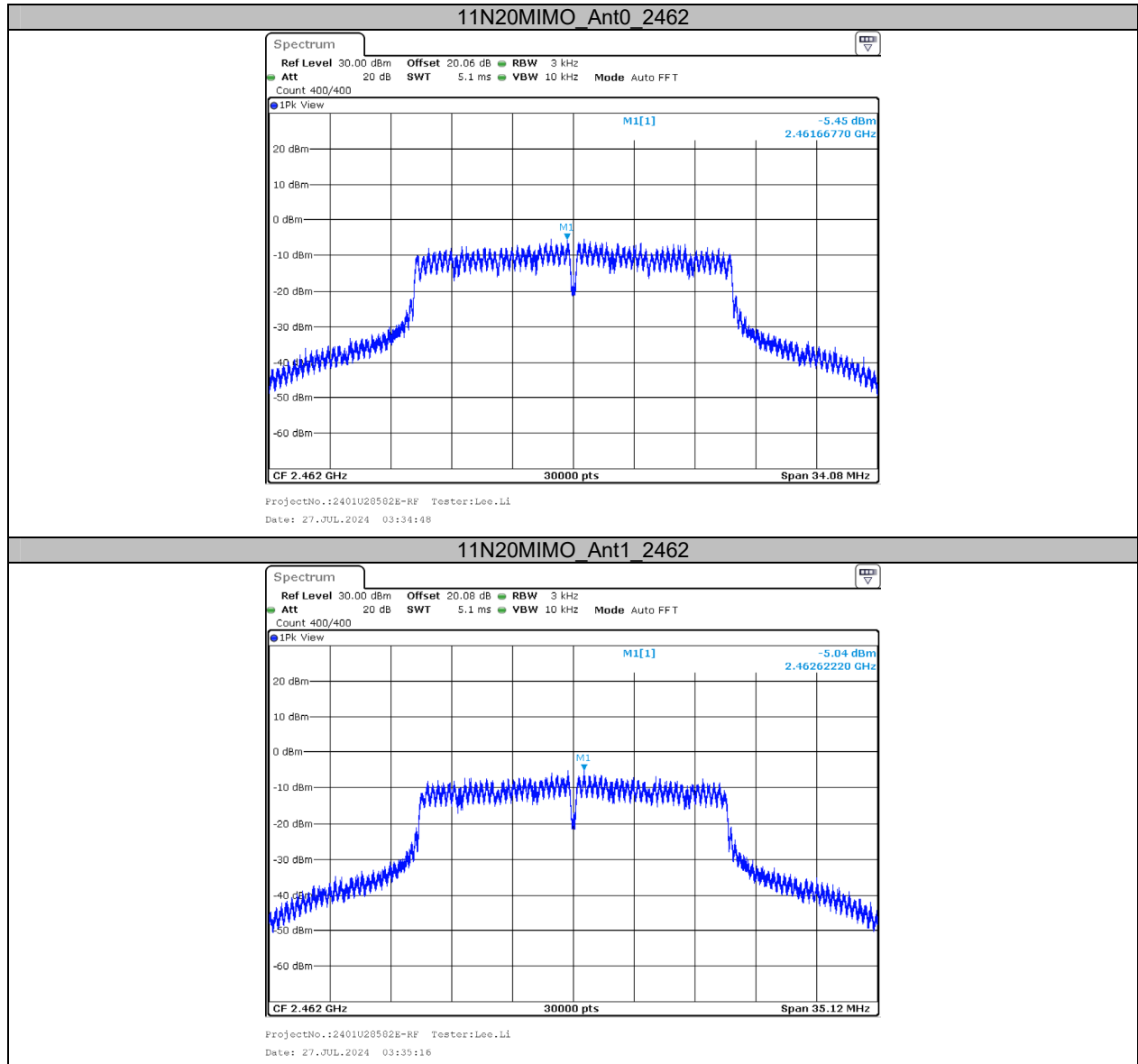


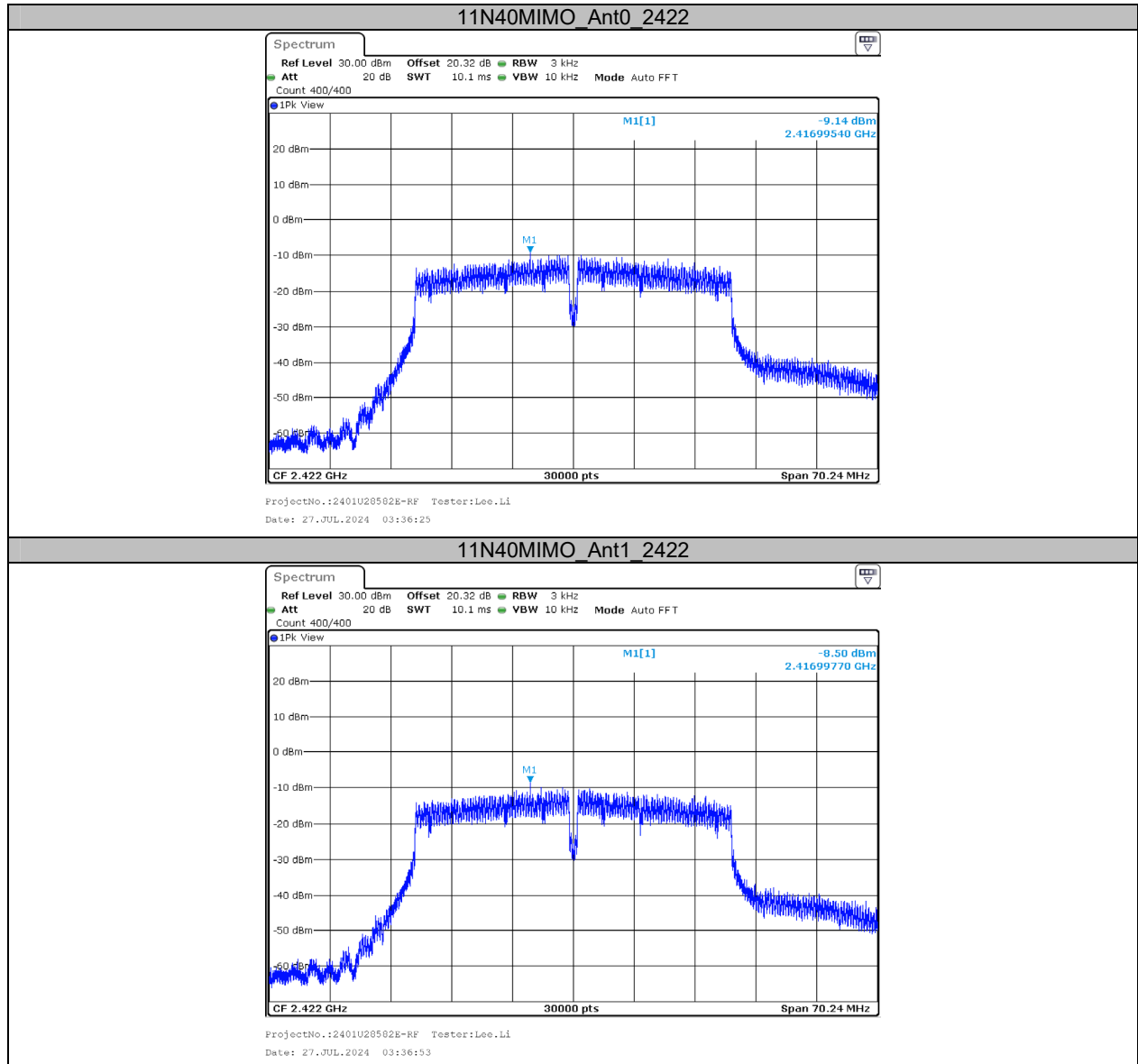


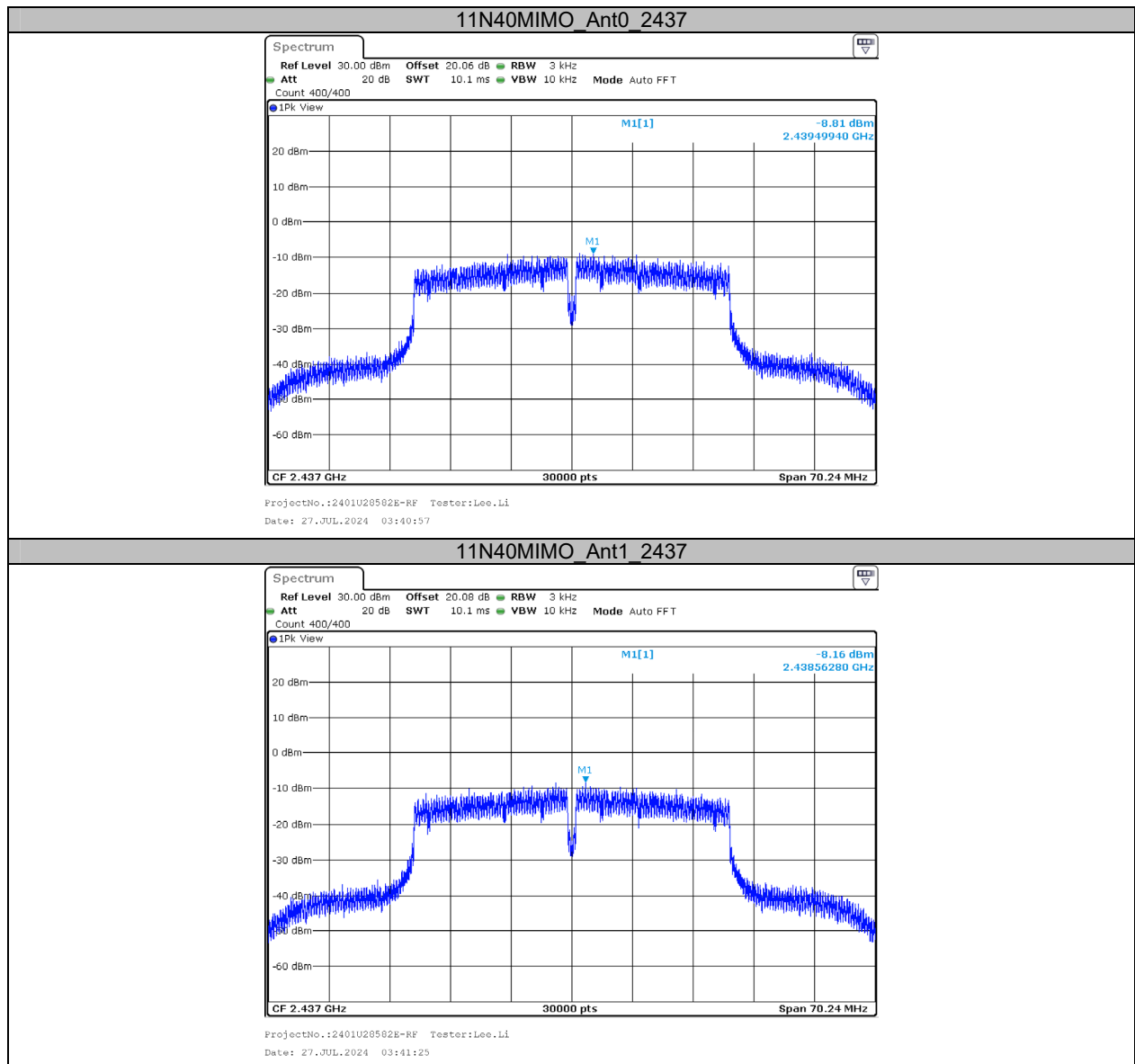


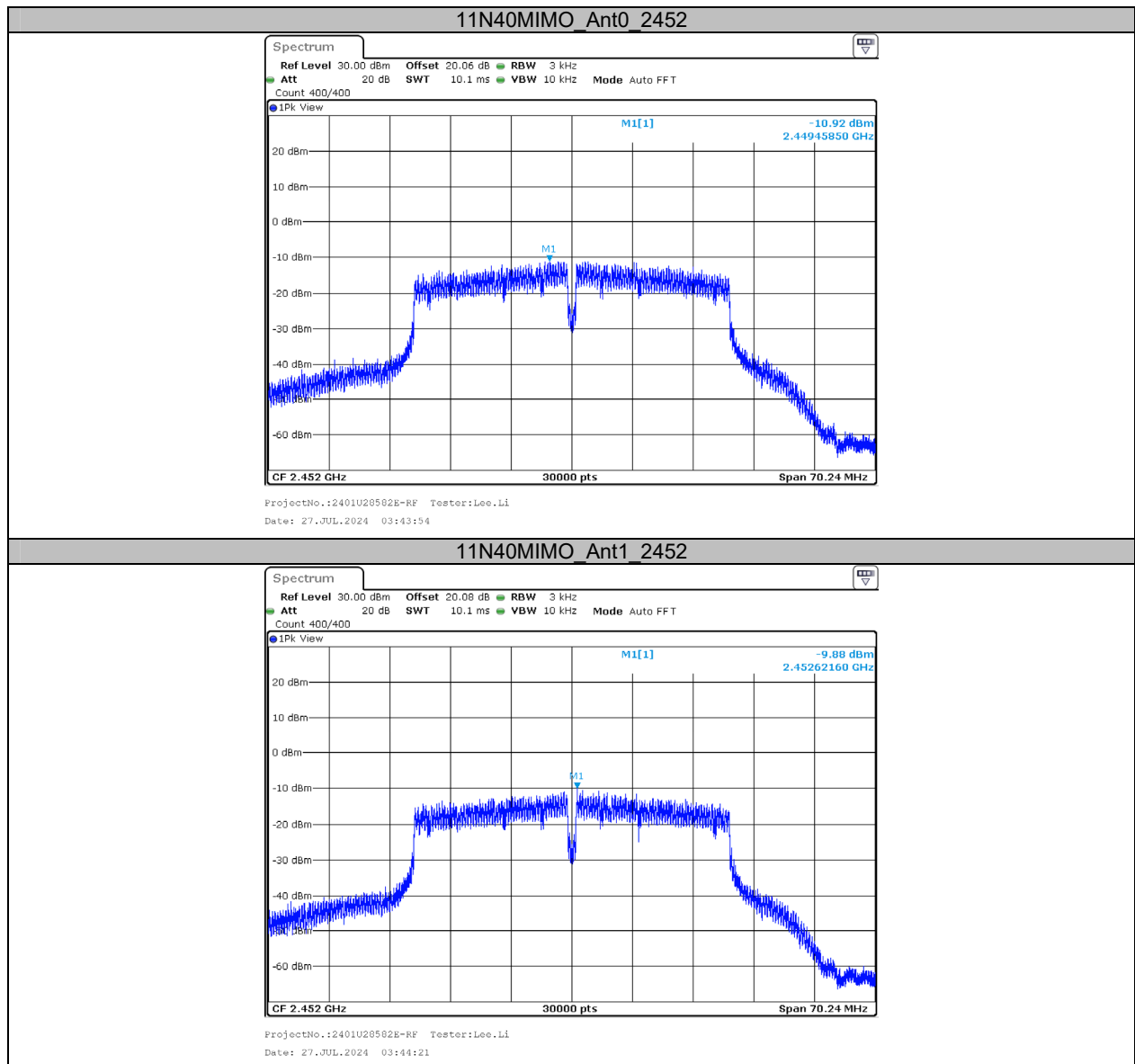


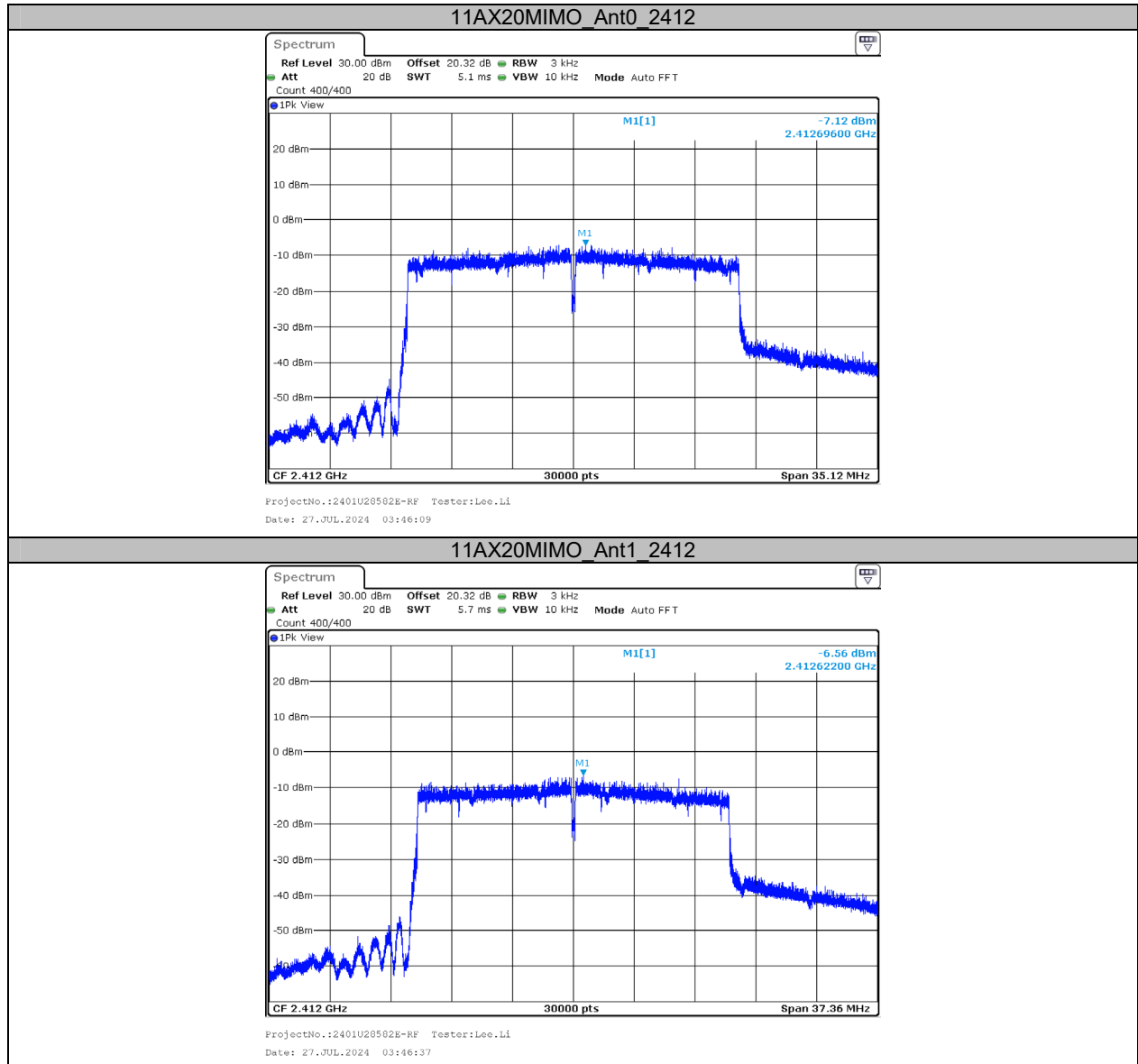


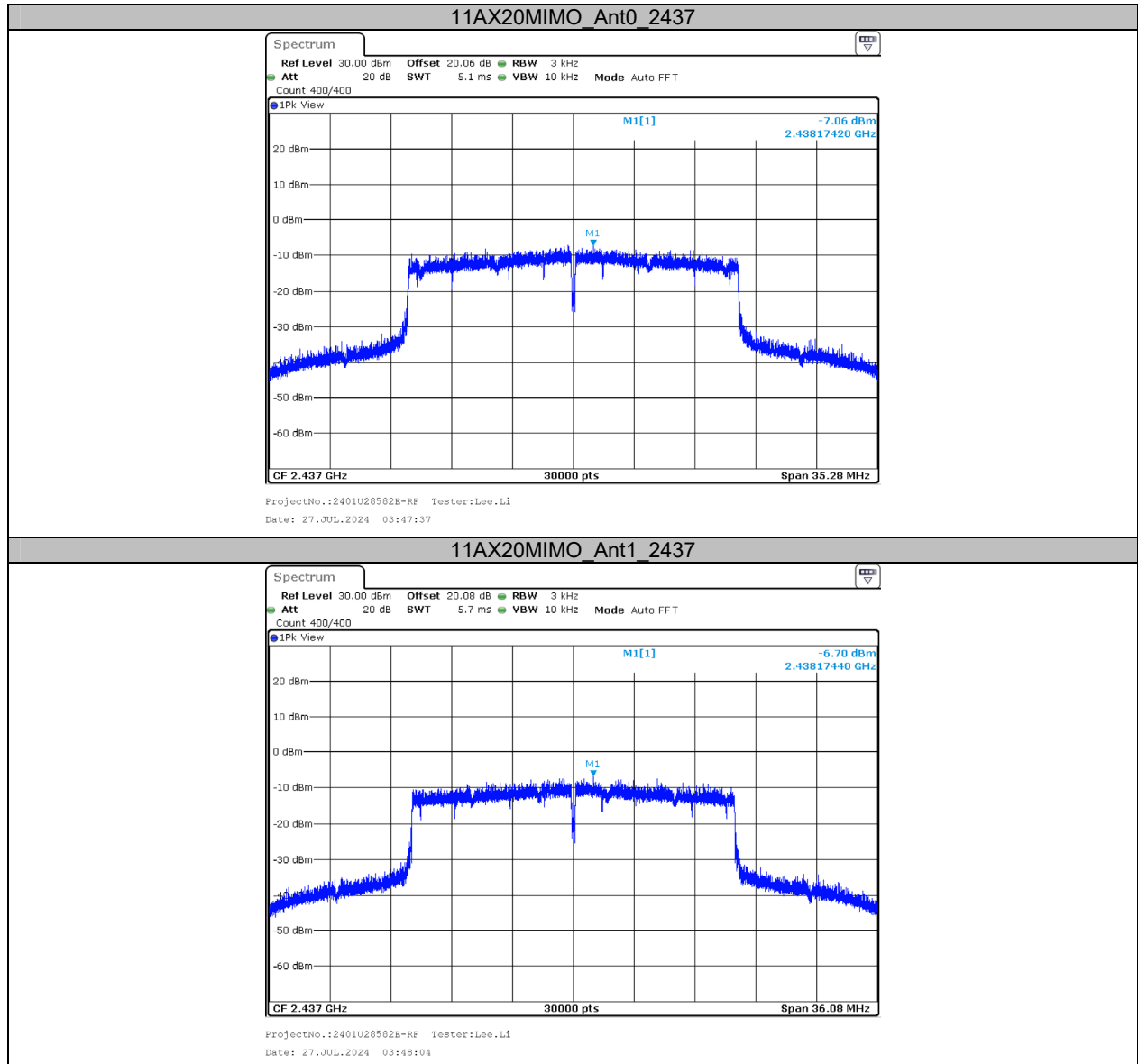


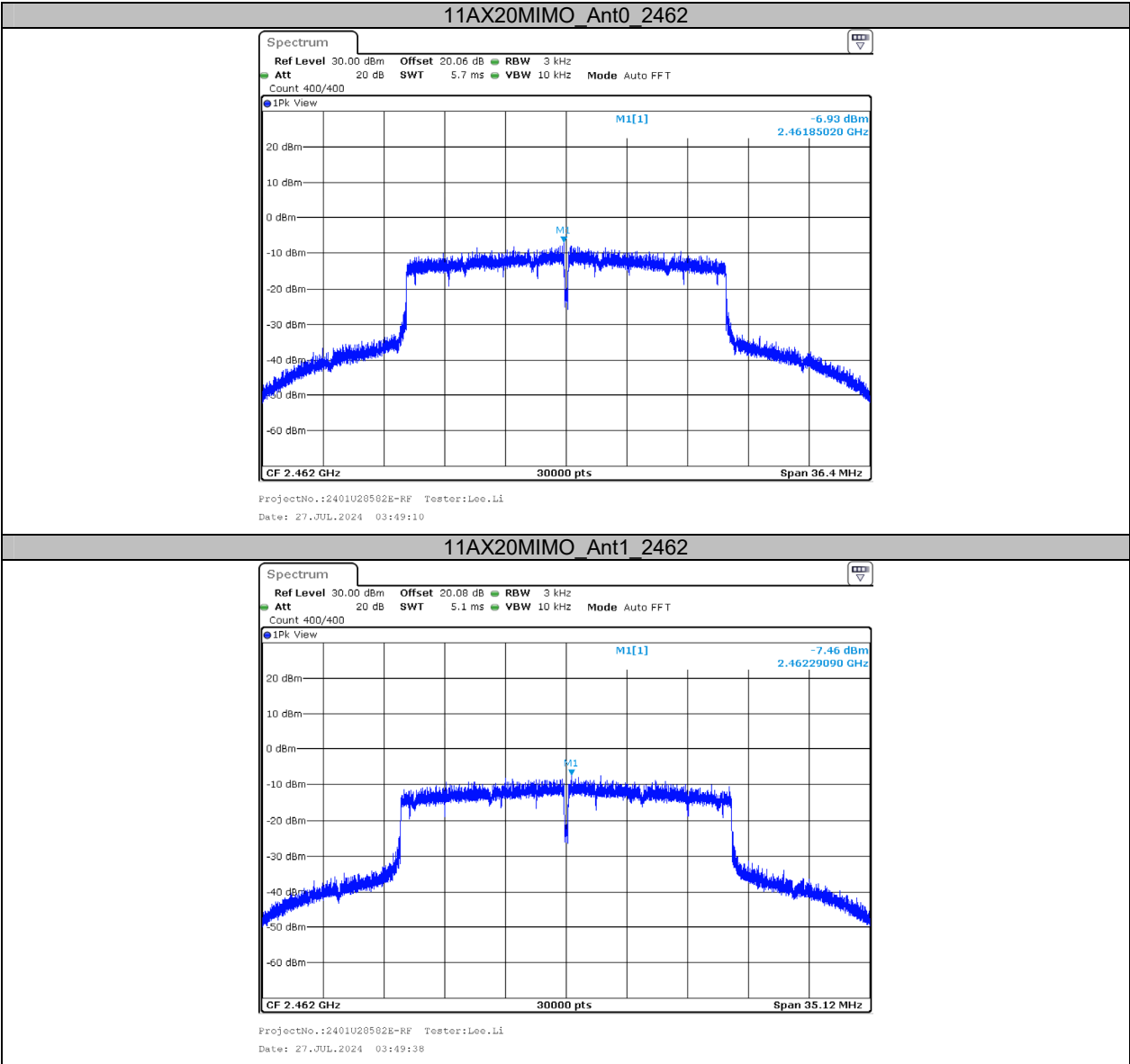


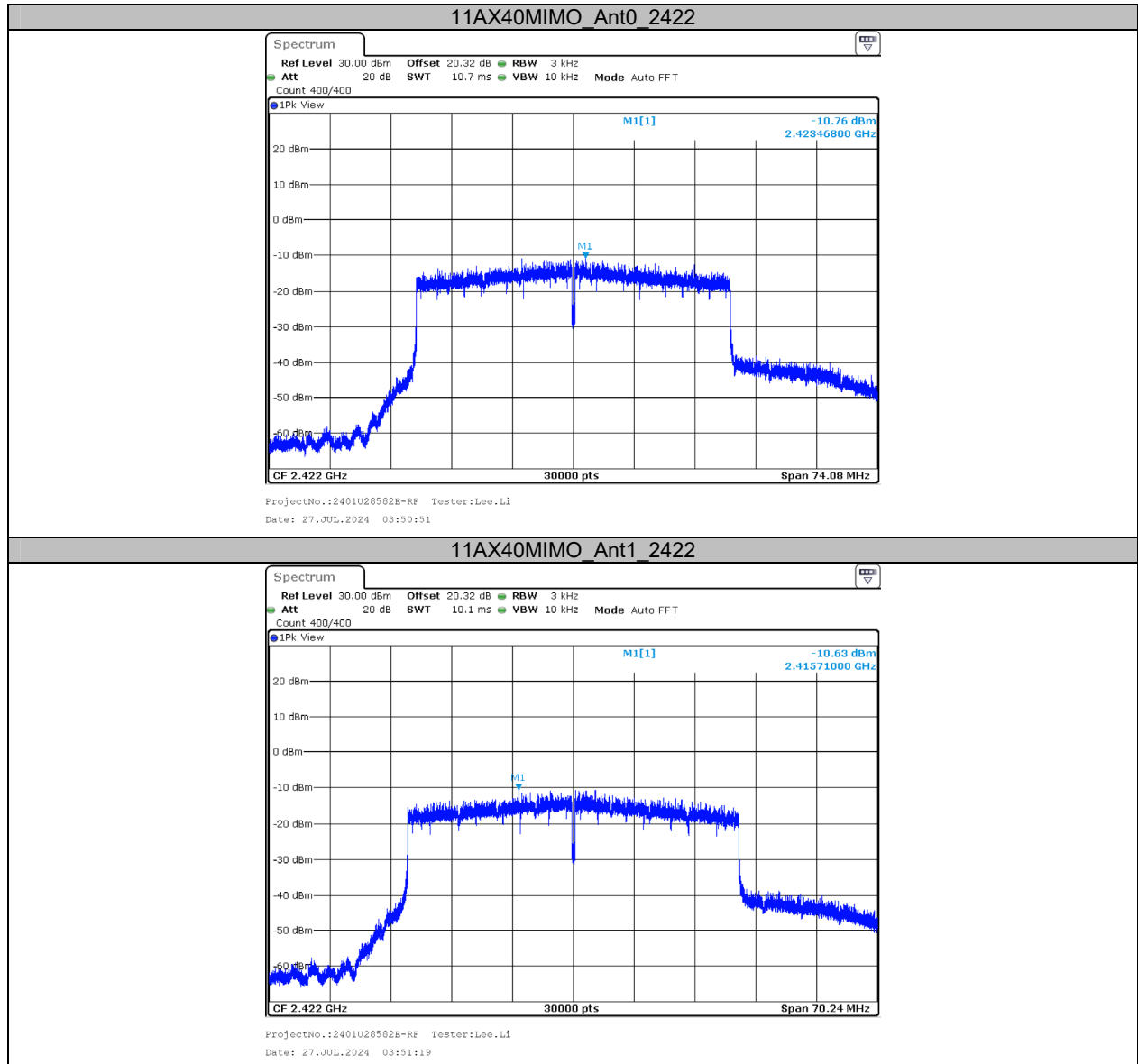


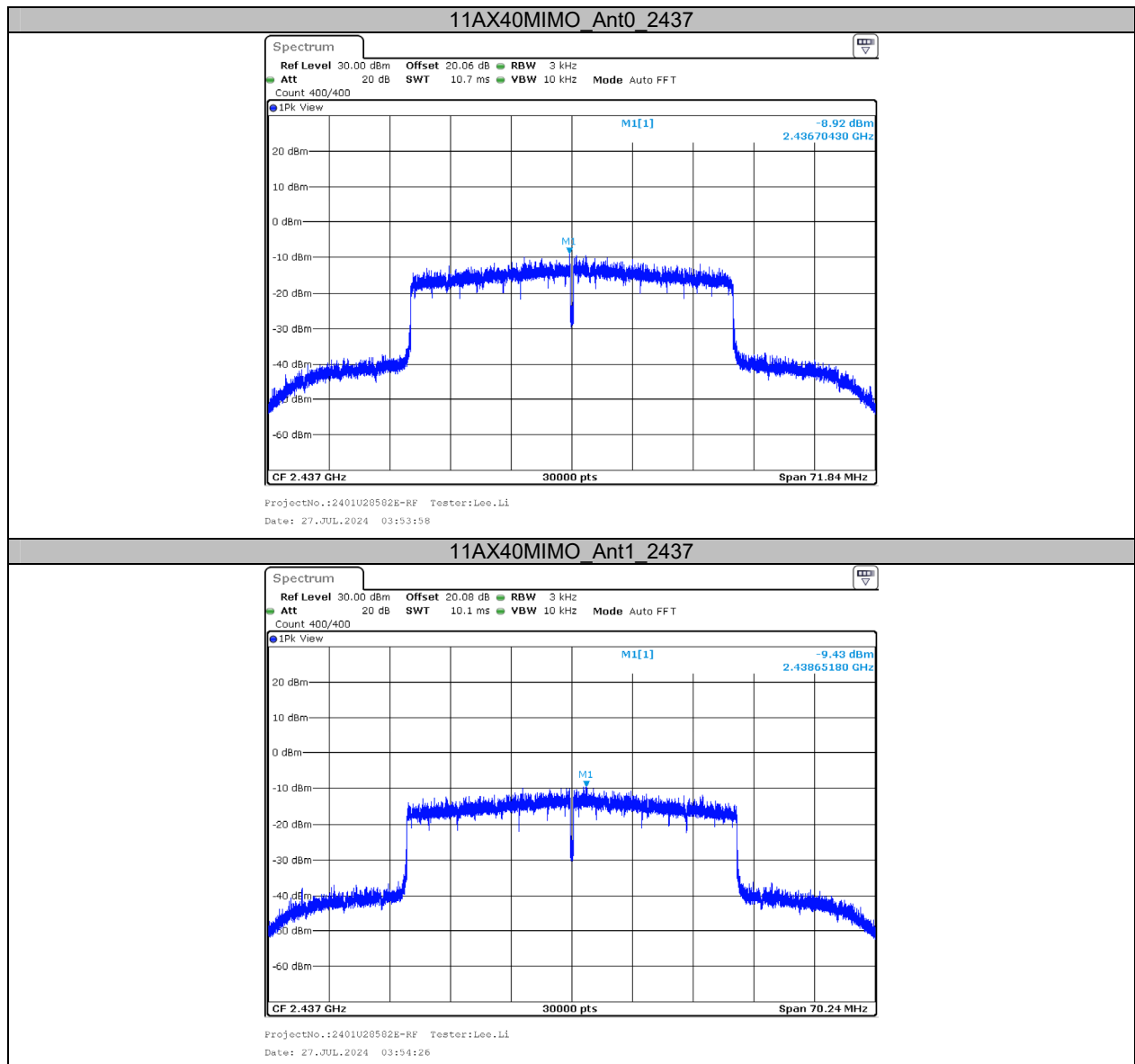


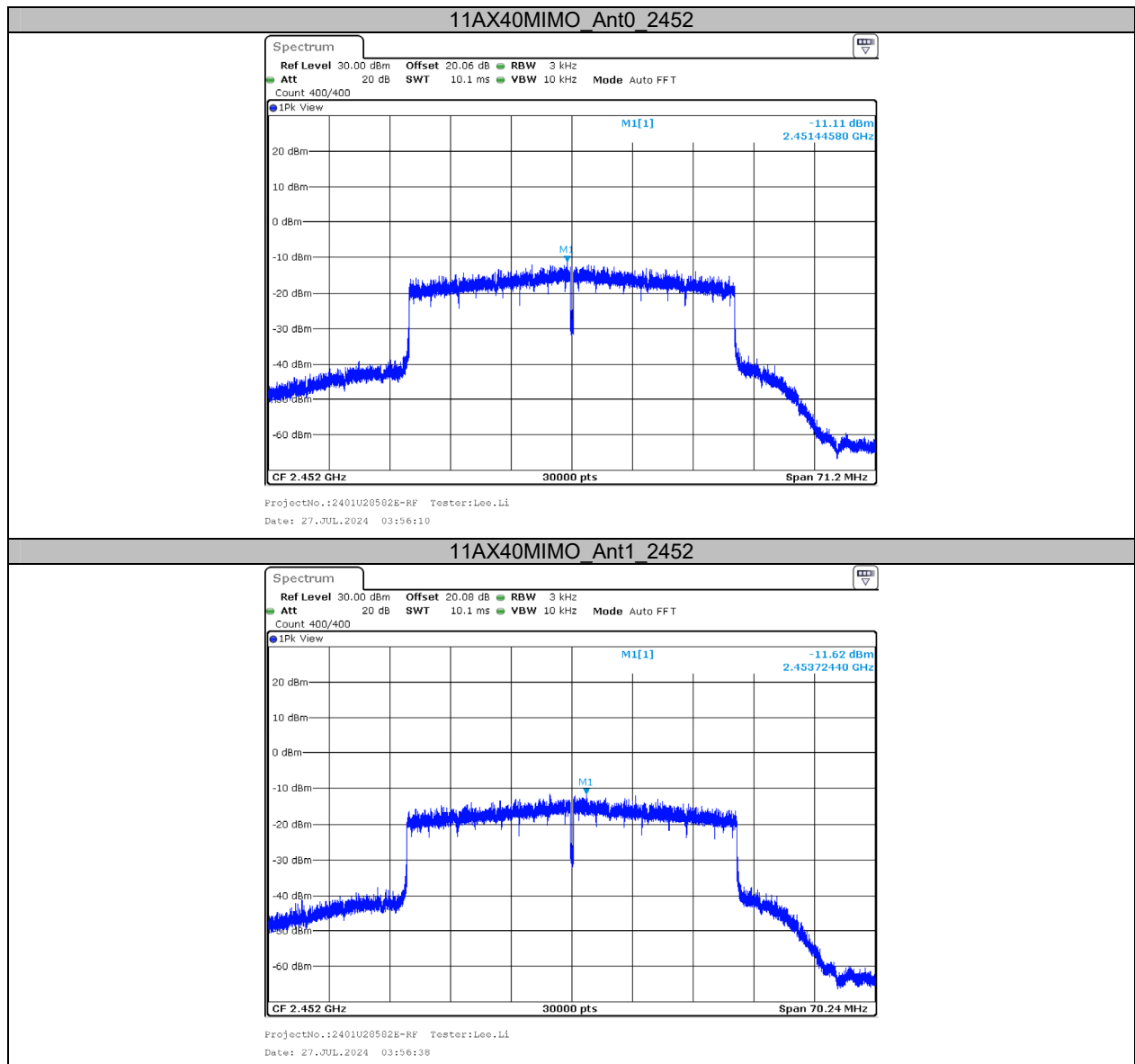






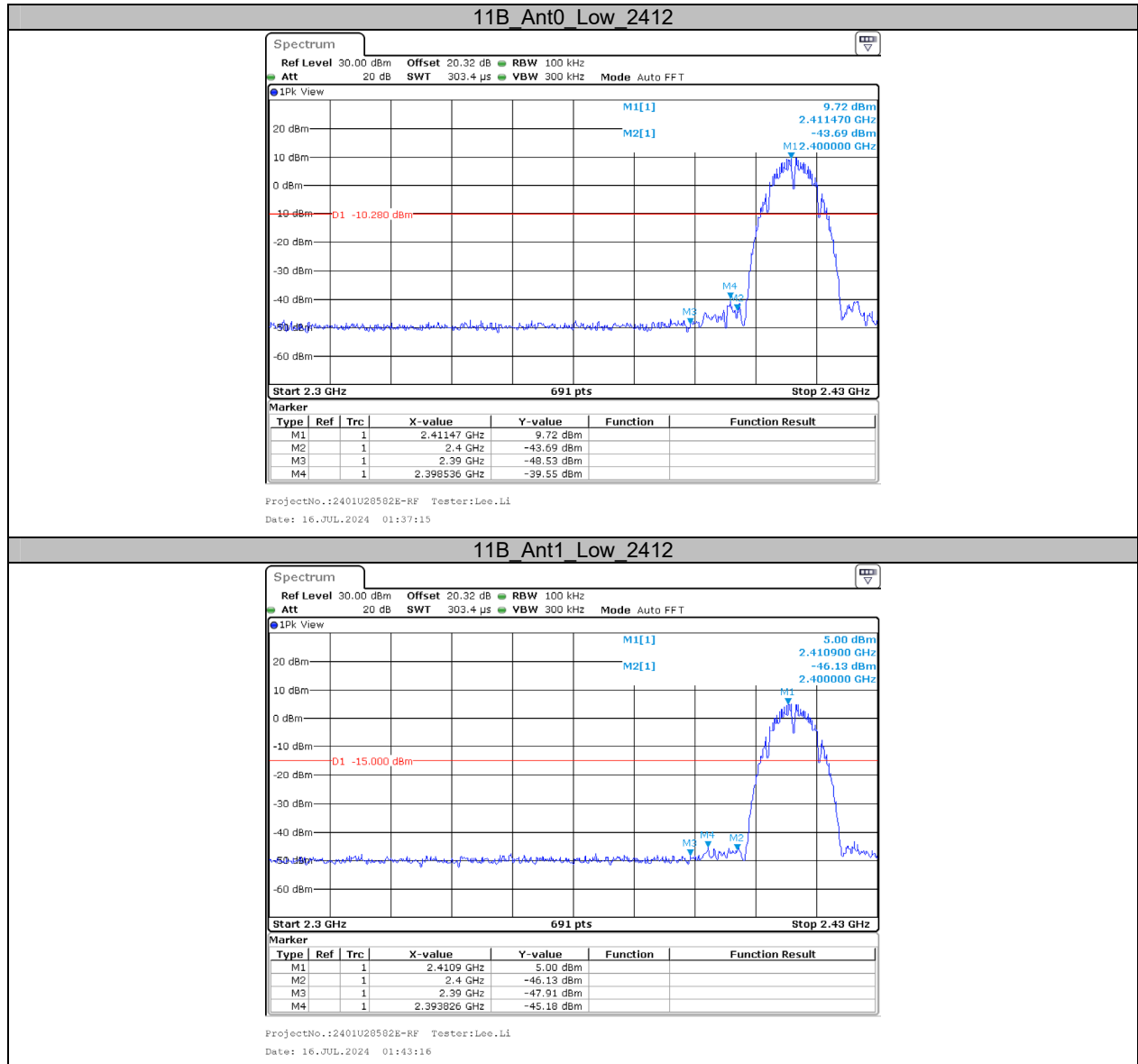


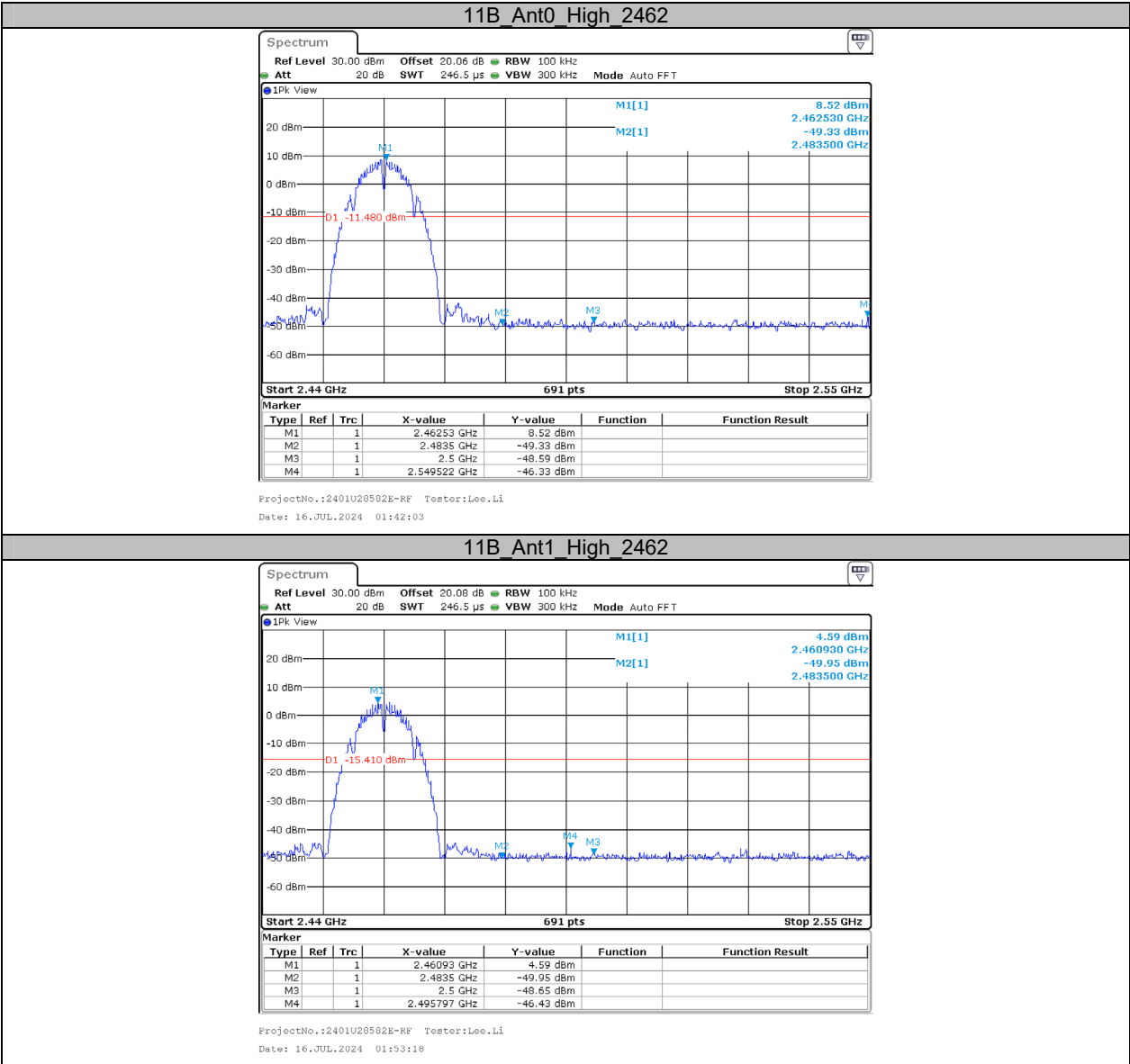


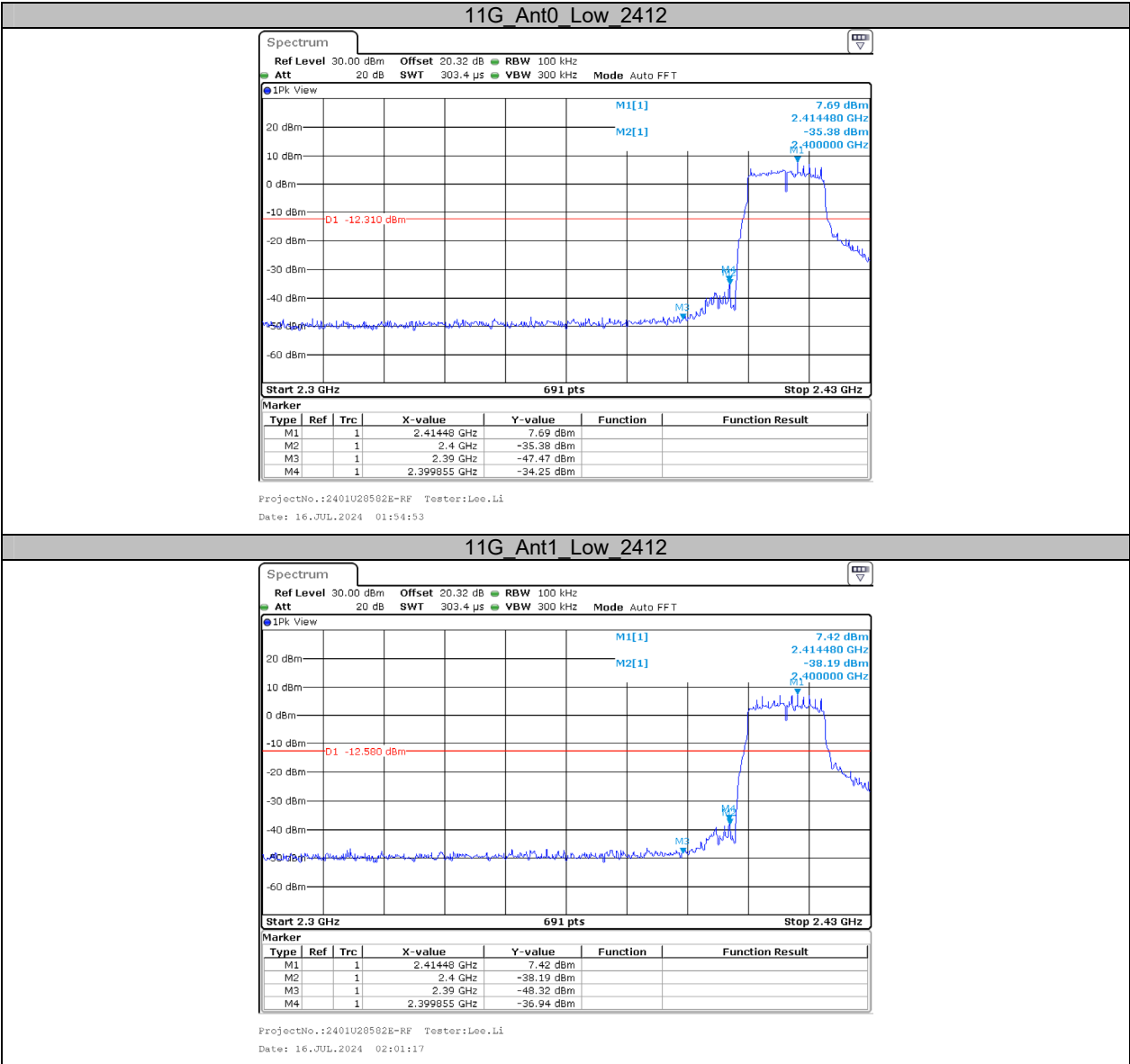


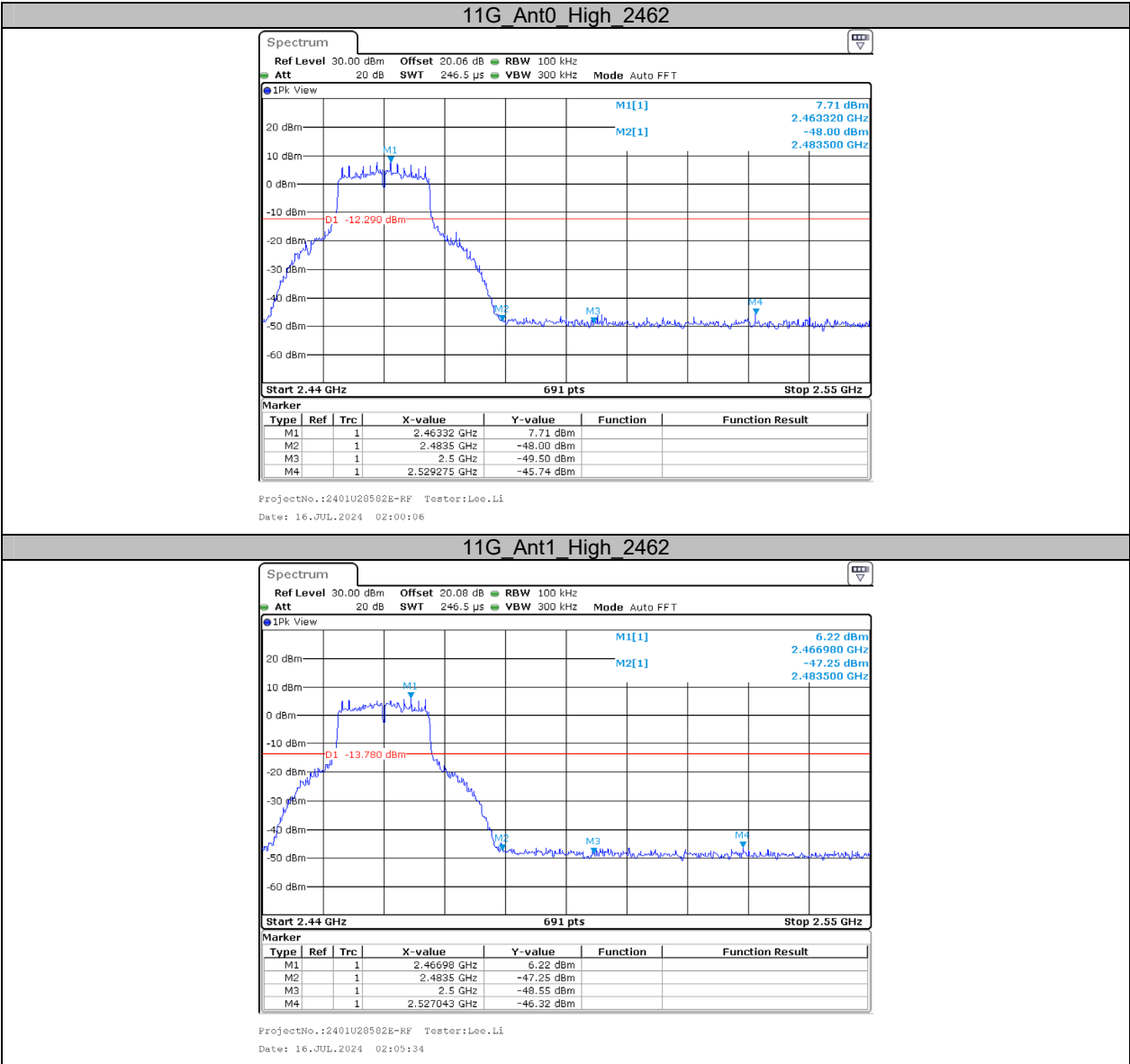
Appendix E: Band edge measurements

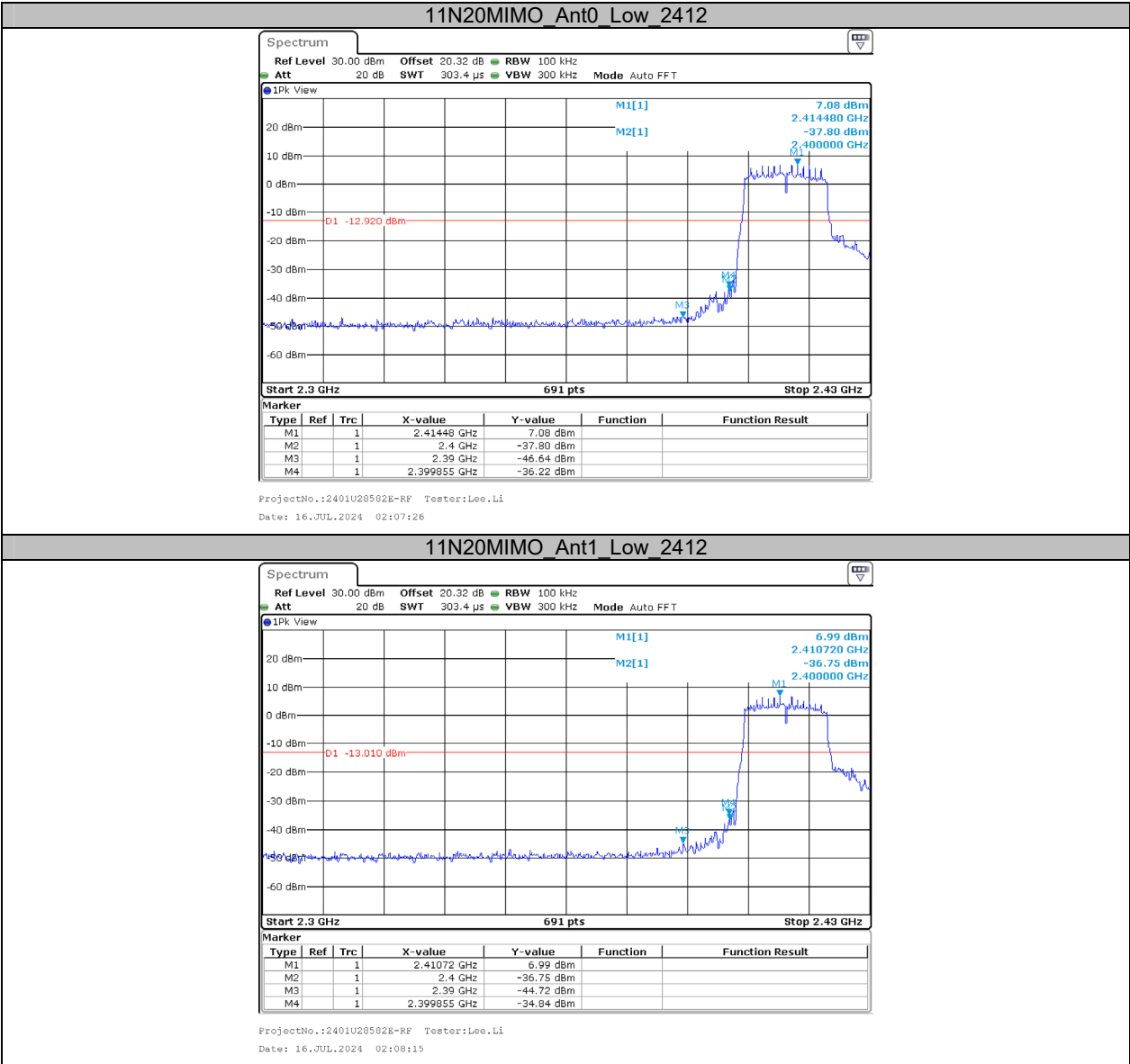
Test Graphs

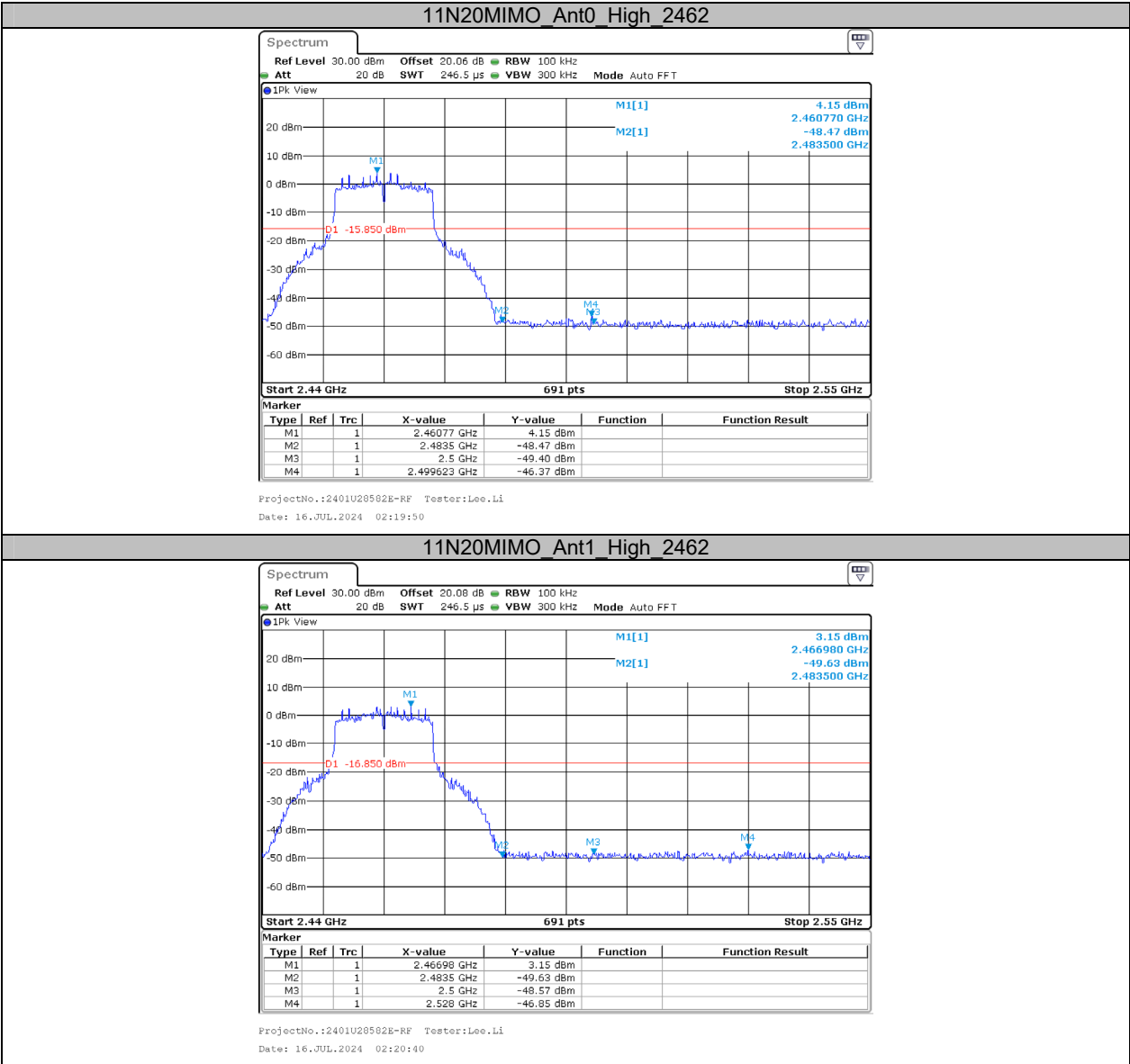


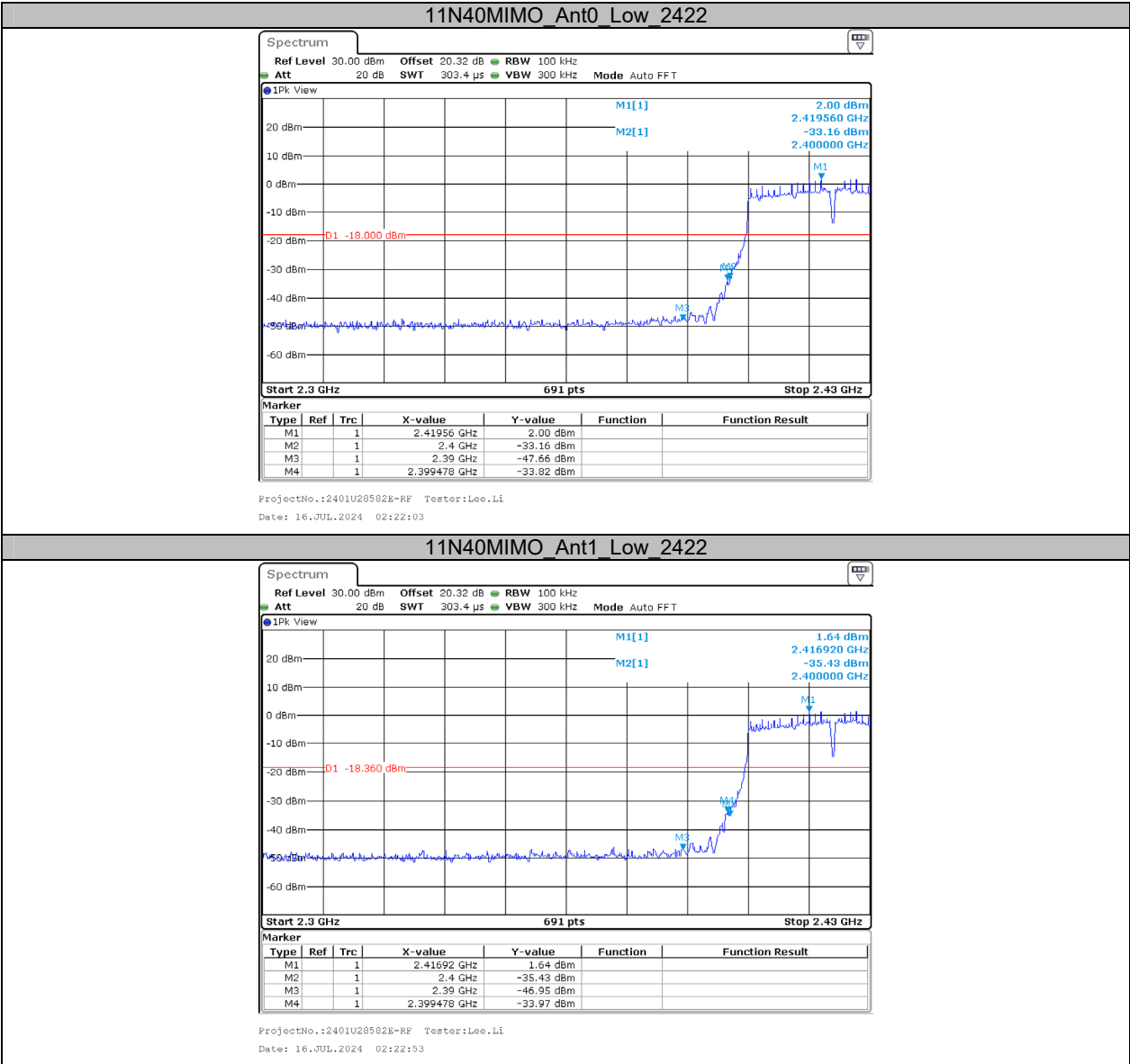


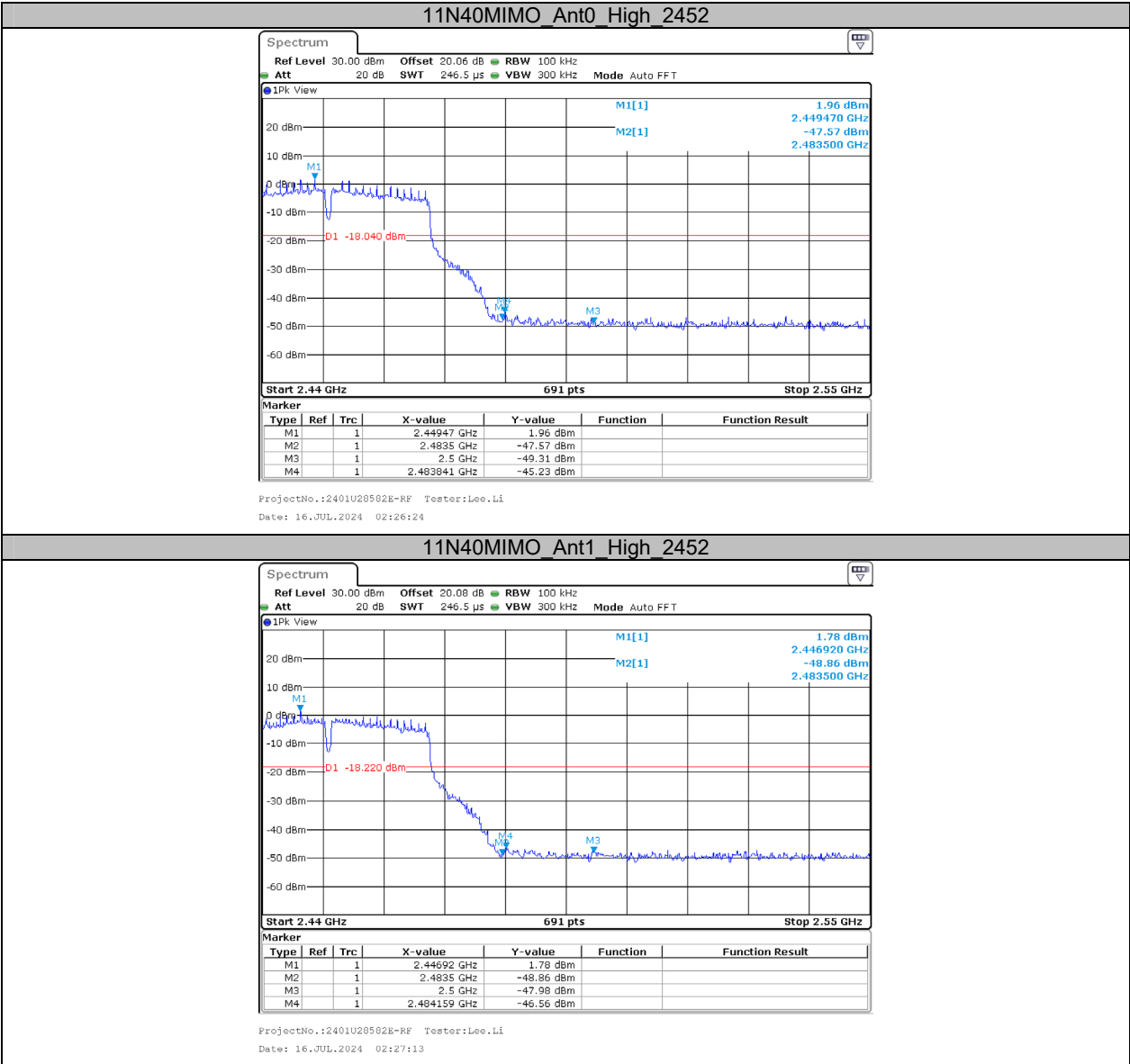


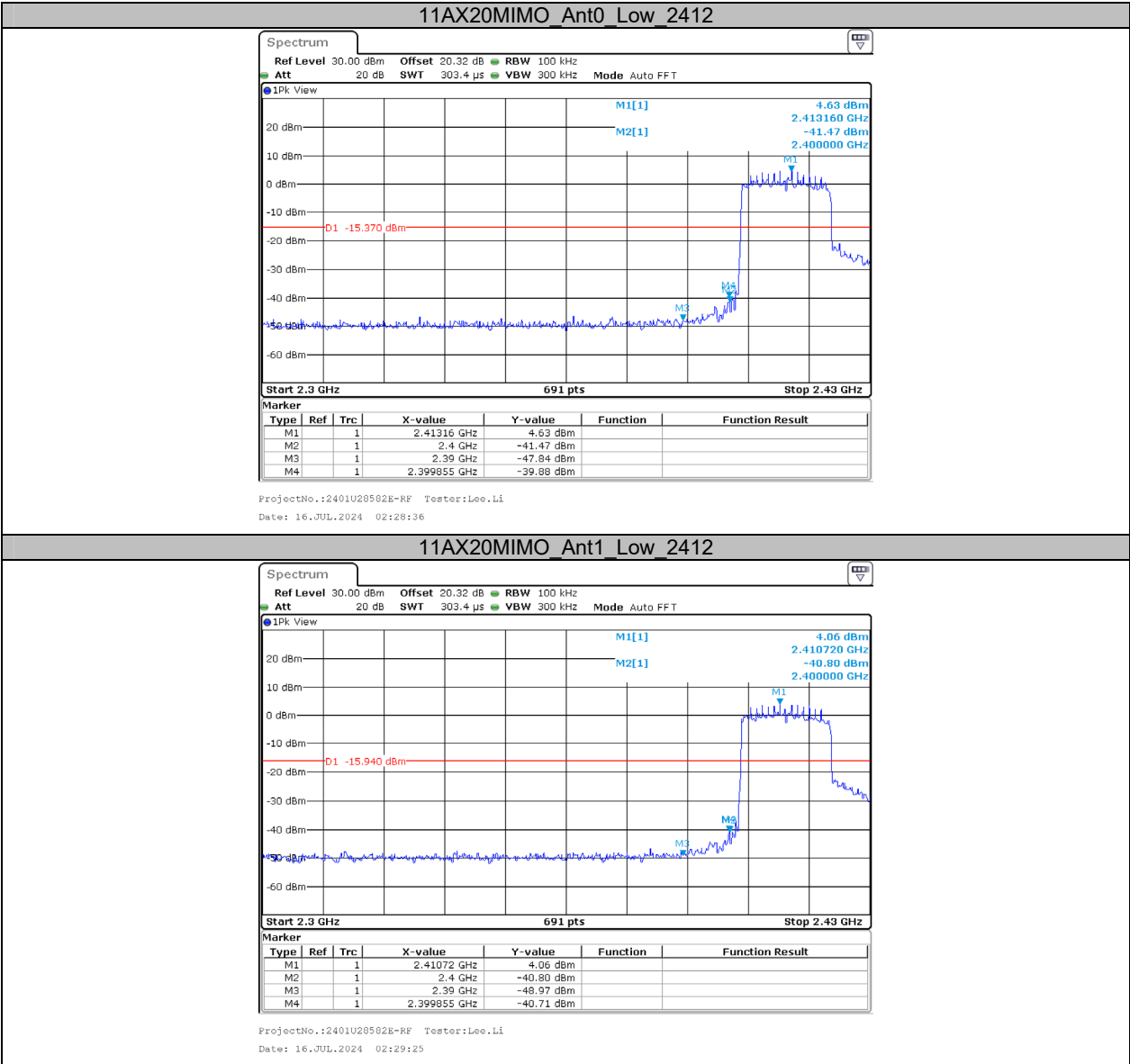


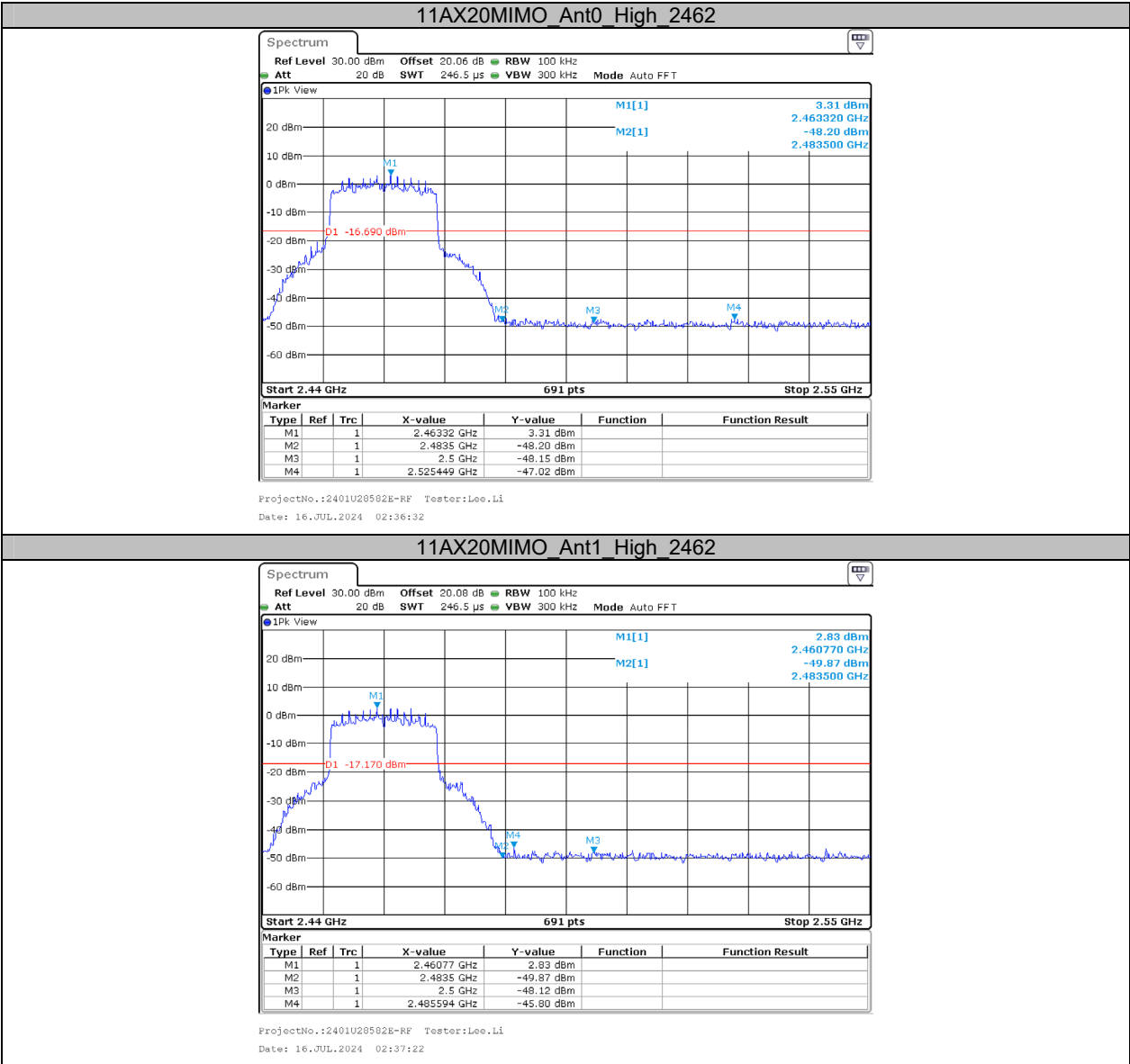


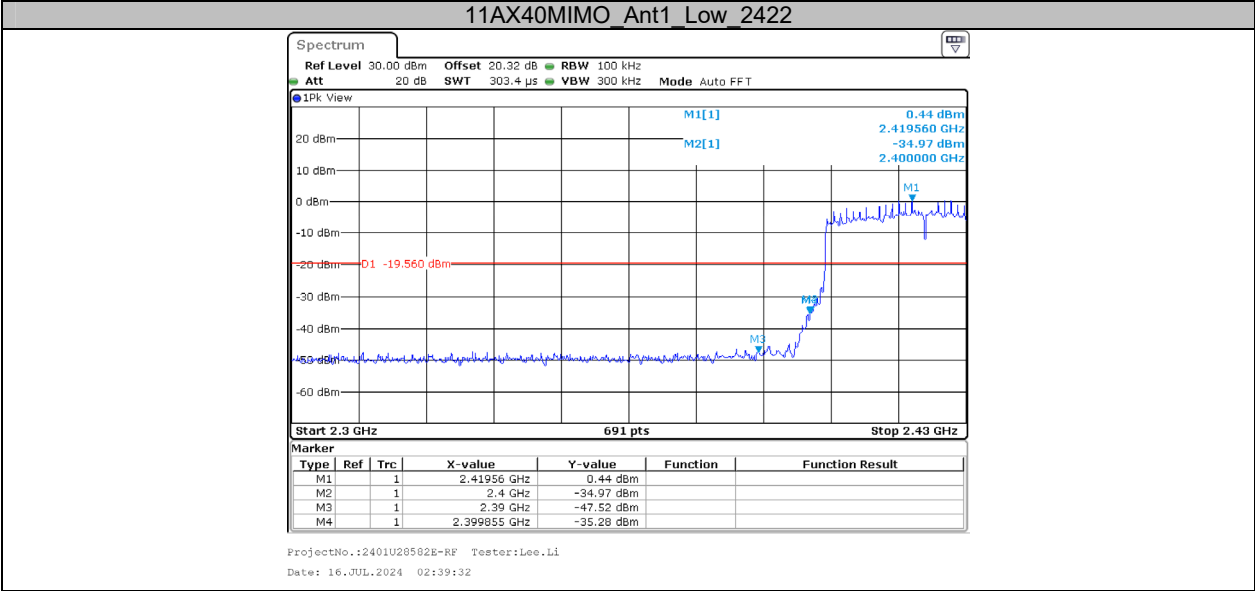
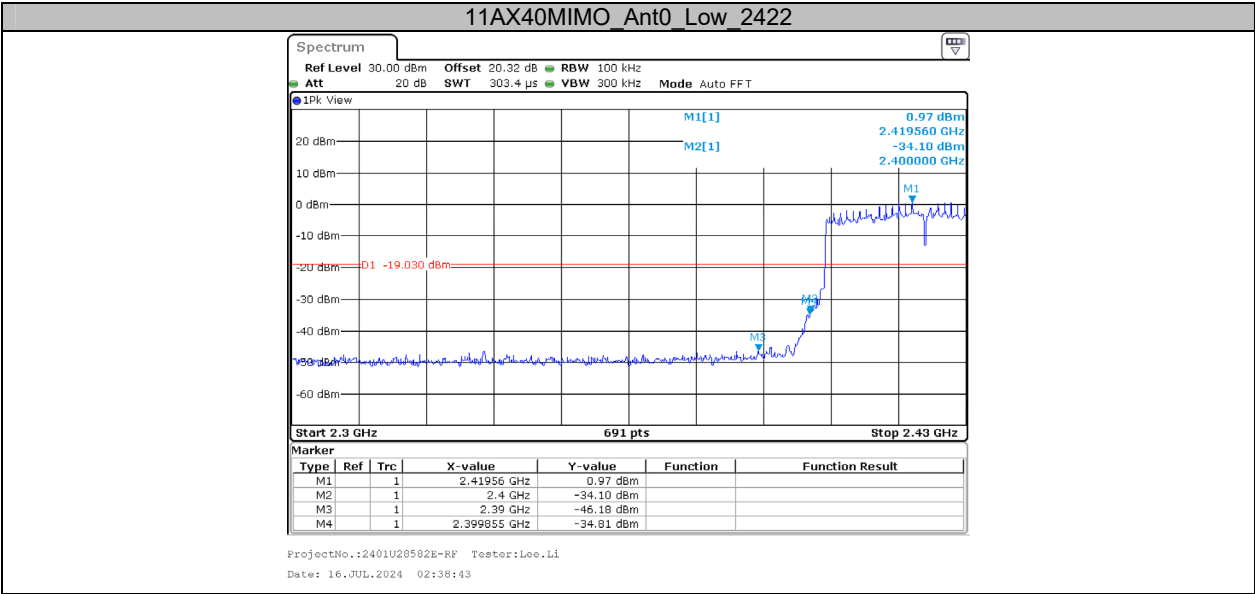


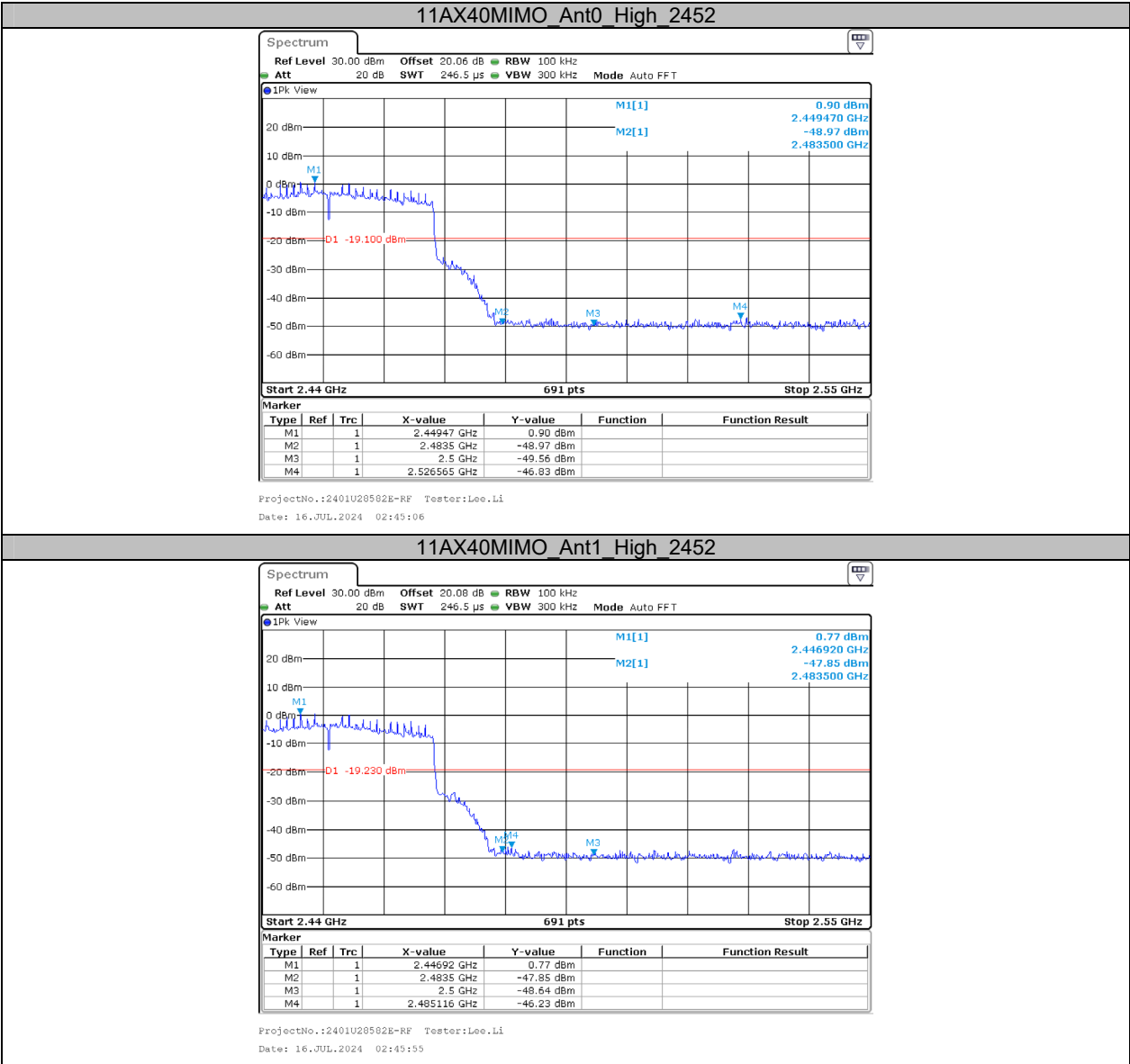












Appendix F: Duty Cycle**Test Result**

Test Mode	Antenna	Channel	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	1/T (Hz)	VBW Setting (Hz)
11B	Ant0	2437	8.41	8.47	99.29	/	/
	Ant1	2437	8.41	8.47	99.29	/	/
11G	Ant0	2437	1.39	1.45	95.86	719	1000
	Ant1	2437	1.39	1.45	95.86	719	1000
11N20MIMO	Ant0	2437	1.30	1.36	95.59	769	1000
	Ant1	2437	1.31	1.37	95.62	763	1000
11N40MIMO	Ant0	2437	0.65	0.71	91.55	1538	2000
	Ant1	2437	0.65	0.71	91.55	1538	2000
11AX20MIMO	Ant0	2437	0.32	0.37	86.49	3125	5000
	Ant1	2437	0.32	0.37	86.49	3125	5000
11AX40MIMO	Ant0	2437	0.31	0.37	83.78	3226	5000
	Ant1	2437	0.31	0.37	83.78	3226	5000

Test Graphs

