

A.5 POWER SPECTRAL DENSITY

Test Date	2022/03/22	Temp./Hum.	22°C /62%
Cable Loss	1.20dB	Tested By	Martin Chen
Test Voltage	AC 120V 60Hz (Via AC Adapter)		
Simultaneous Factor $10 \log(n)$ (Note: “n” is antenna number)		802.11a: 0dB 802.11n-HT20/40: 3dB 802.11ac-VHT80/160: 3dB 802.11ax-HE20/40/80/160: 3dB	

A.5.1 Power Spectral Density Result

Mode	U-NII Band	Centre Frequency (MHz)	Power Spectral Density (dBm)	Limit
802.11a	1	5180	6.435	11 dBm/MHz
		5200	6.434	
		5240	6.138	
	2A	5260	6.180	
		5300	6.236	
		5320	5.775	
	2C	5500	5.683	
		5580	6.284	
		5700	6.084	
		5720	6.193	
	3 ^{Note2}	5745	4.374	30dBm/500 kHz
		5785	4.472	
5825		4.436		

Note 1: All results have been included cable loss and Simultaneous Factor and correct duty factor.

Note 2: BWCF 7.0dB (100kHz converted to 500kHz) has been included in the test result.

Mode	U-NII Band	Centre Frequency (MHz)	Power Spectral Density (dBm)	Limit	
802.11n-HT20	1	5180	8.951	11 dBm/MHz	
		5200	8.842		
		5240	8.463		
	2A	5260	8.456		
		5300	8.258		
		5320	8.545		
	2C	5500	8.090		
		5580	8.575		
		5700	3.614		
		5720	8.556		
3 ^{Note2}	5745	6.744	30dBm/500 kHz		
	5785	6.947			
	5825	7.060			
802.11n-HT40	1	5190	4.603	11 dBm/MHz	
		5230	6.436		
	2A	5270	6.075		
		5310	4.312		
	2C	5510	6.169		
		5550	6.389		
		5670	6.040		
		5710	6.264		
	3 ^{Note2}	5755	3.965		30dBm/500 kHz
		5795	4.205		
802.11ac-VHT80	1	5210	-0.883	11 dBm/MHz	
	2A	5290	0.128		
		5530	0.269		
	2C	5610	1.949		
		5690	1.878		
	3 ^{Note2}	5775	-0.129		30dBm/500 kHz
802.11ac-VHT160	1/2A	5250	-6.507	11 dBm/MHz	
	2C	5570	-3.357		

Note 1: All results have been included cable loss and Simultaneous Factor and correct duty factor.

Note 2: BWCF 7.0dB (100kHz converted to 500kHz) has been included in the test result.

Mode	U-NII Band	Centre Frequency (MHz)	Power Spectral Density (dBm)	Limit	
802.11ax-HE20	1	5180	8.228	11 dBm/MHz	
		5200	8.045		
		5240	7.571		
	2A	5260	7.990		
		5300	7.456		
		5320	7.477		
	2C	5500	7.326		
		5580	7.757		
		5700	6.849		
	3 ^{Note2}	5720	7.835		30dBm/500 kHz
5745		5.414			
5785		5.436			
802.11ax-HE40	1	5190	3.621	11 dBm/MHz	
		5230	5.212		
	2A	5270	4.995		
		5310	3.224		
	2C	5510	4.602		
		5550	5.303		
		5670	4.635		
	3 ^{Note2}	5710	4.922		30dBm/500 kHz
		5755	2.284		
	802.11ax-HE80	1	5210		-1.121
5290			-0.212		
2C		5530	0.151		
		5610	1.749		
		5690	1.396		
3 ^{Note2}		5775	-0.820	30dBm/500 kHz	
802.11ax-HE160		1/2A	5250	-6.991	11 dBm/MHz
	2C	5570	-3.646		

Note 1: All results have been included cable loss and Simultaneous Factor and correct duty factor.

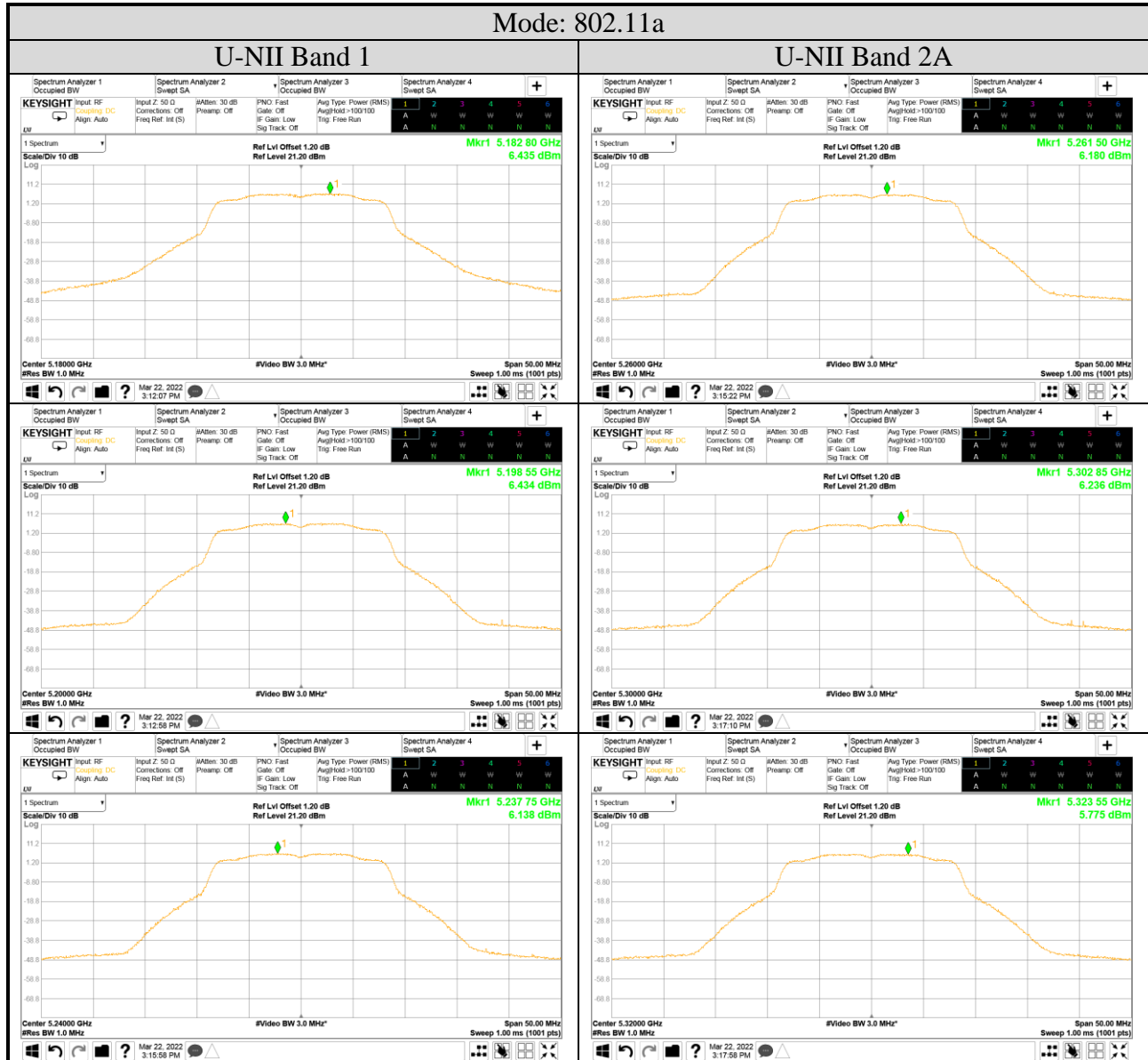
Note 2: BWCF 7.0dB (100kHz converted to 500kHz) has been included in the test result.

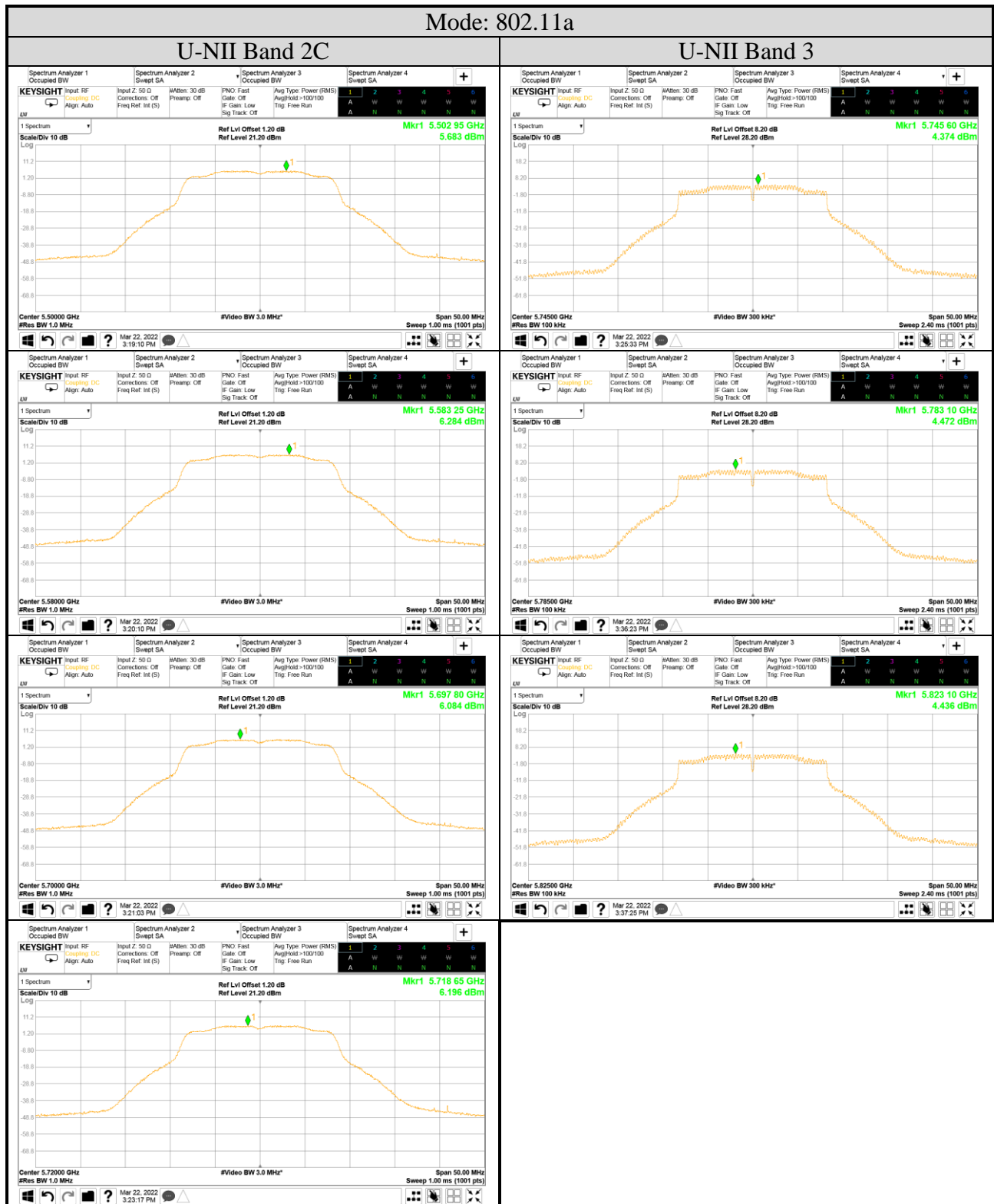
Mode	U-NII Band	Centre Frequency (MHz)	RU Configuration	Power Spectral Density (dBm)	Limit
802.11ax-HE20	1	5180	26/0	10.059	11 dBm/MHz
			52/37	10.411	
			106/53	10.225	
	2A	5320	26/8	9.640	
			52/40	10.200	
			106/54	9.554	
	2C	5500	26/0	10.208	
			52/37	10.595	
			106/53	9.704	
		5700	26/8	9.627	
			52/40	10.605	
			106/54	10.180	
3 ^{Note2}	5745	26/0	12.967	30dBm/500 kHz	
		52/37	7.614		
		106/53	9.122		
	5825	26/8	13.49		
		52/40	7.905		
		106/54	8.844		
802.11ax-HE40	1	5190	242/61	8.936	11 dBm/MHz
	2A	5310	242/62	7.260	
	2C	5510	242/61	8.654	
		5670	242/62	7.949	
	3 ^{Note2}	5755	242/61	5.304	30dBm/500 kHz
		5795	242/62	5.499	
802.11ax-HE80	1	5210	484/65	3.328	11 dBm/MHz
	2A	5290	484/66	-0.086	
	2C	5530	484/65	2.766	
		5610	484/66	5.152	
	3 ^{Note2}	5775	484/65	2.208	30dBm/500 kHz
			484/66	2.534	
802.11ax-HE160	1/2A	5250	996/67	-0.354	11 dBm/MHz
			996/S67	-2.565	
	2C	5570	996/67	-0.908	
			996/S67	2.207	

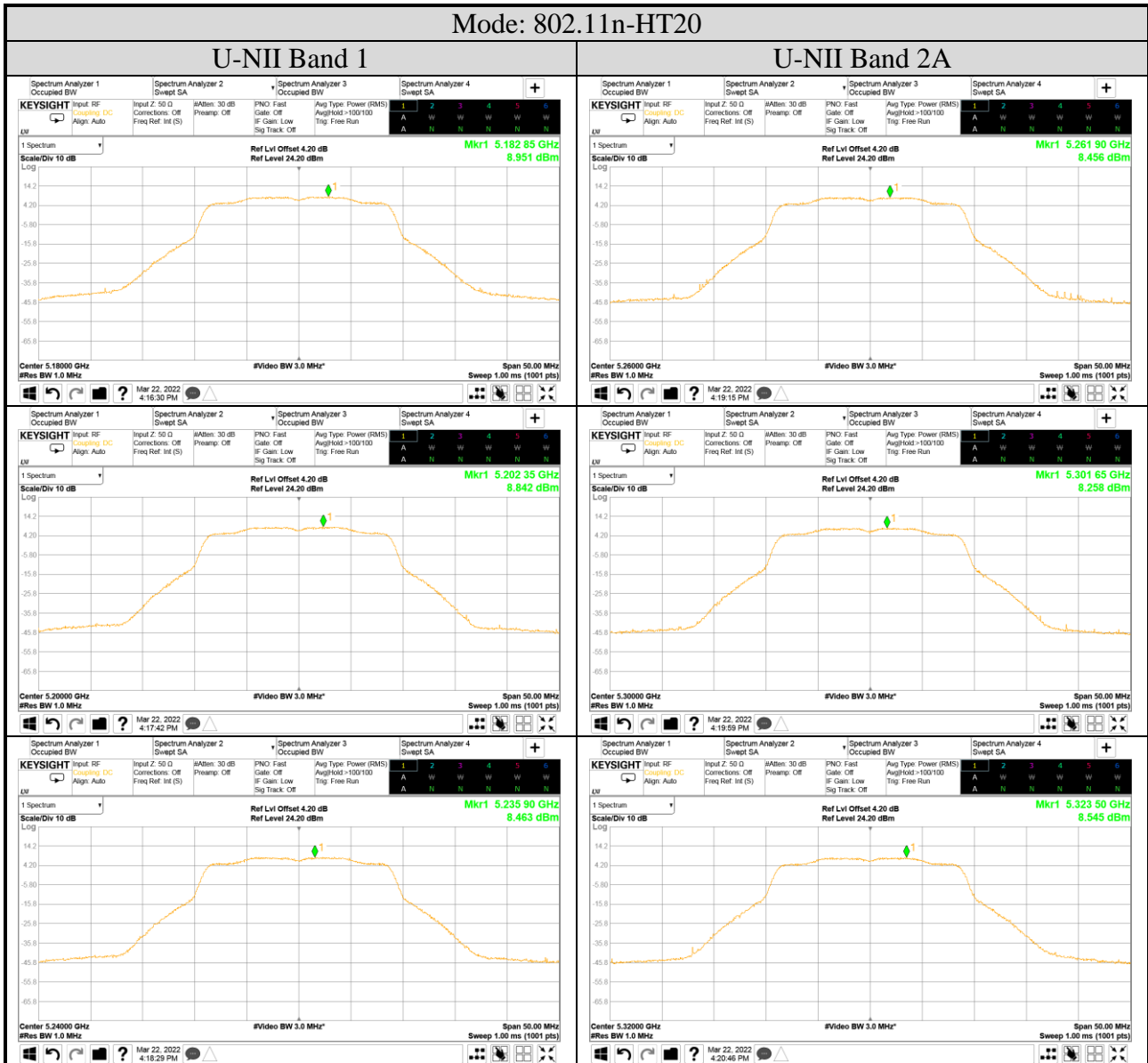
Note 1: All results have been included cable loss and Simultaneous Factor and correct duty factor.

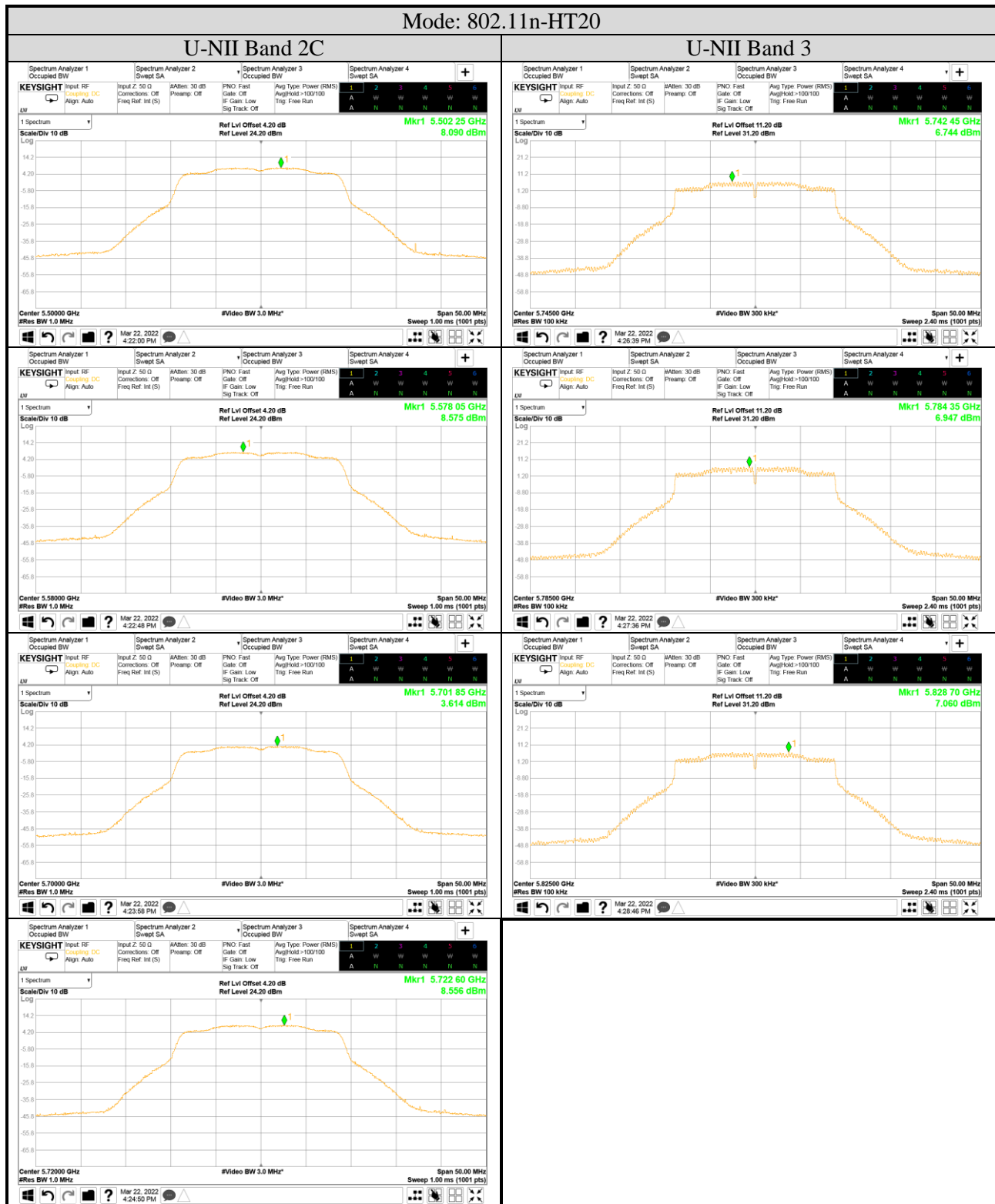
Note 2: BWCF 7.0dB (100kHz converted to 500kHz) has been included in the test result.

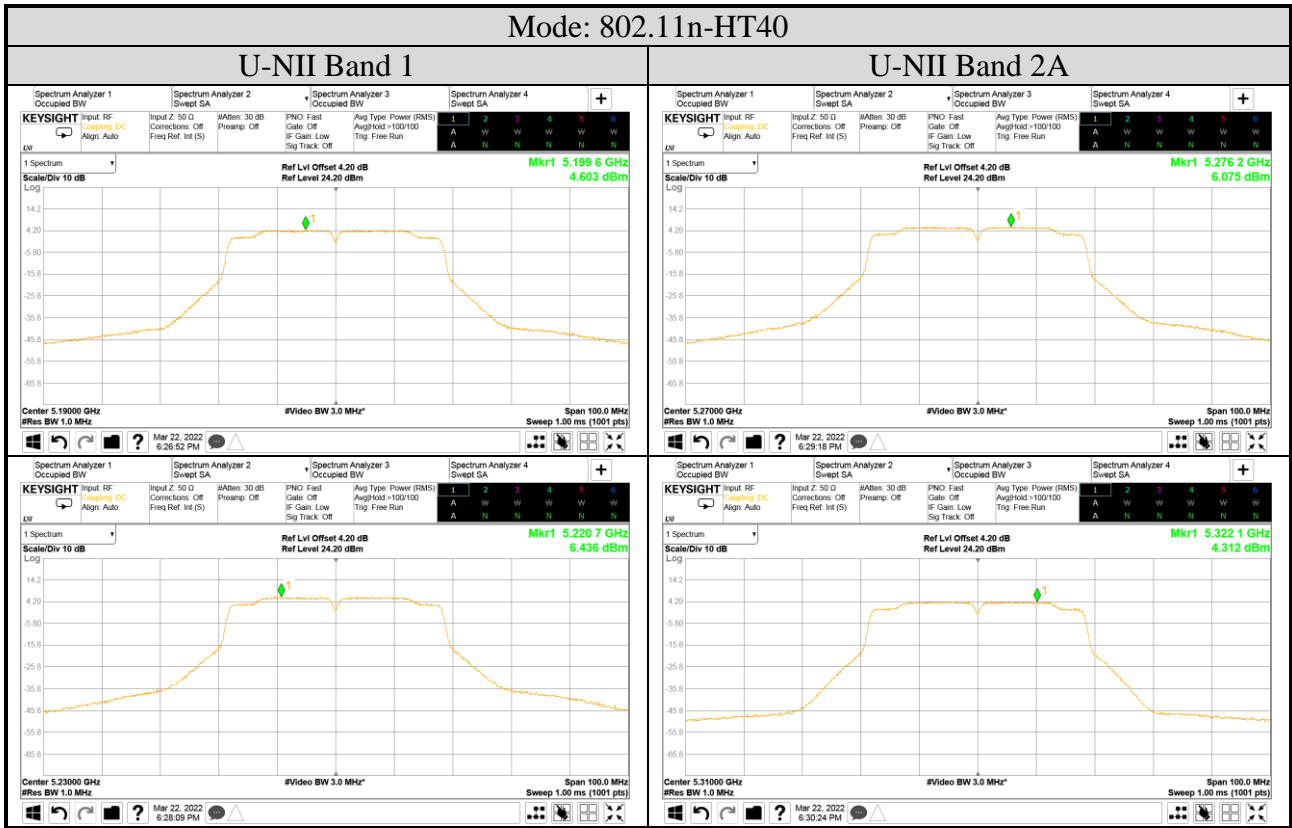
A.5.2 Measurement Plots

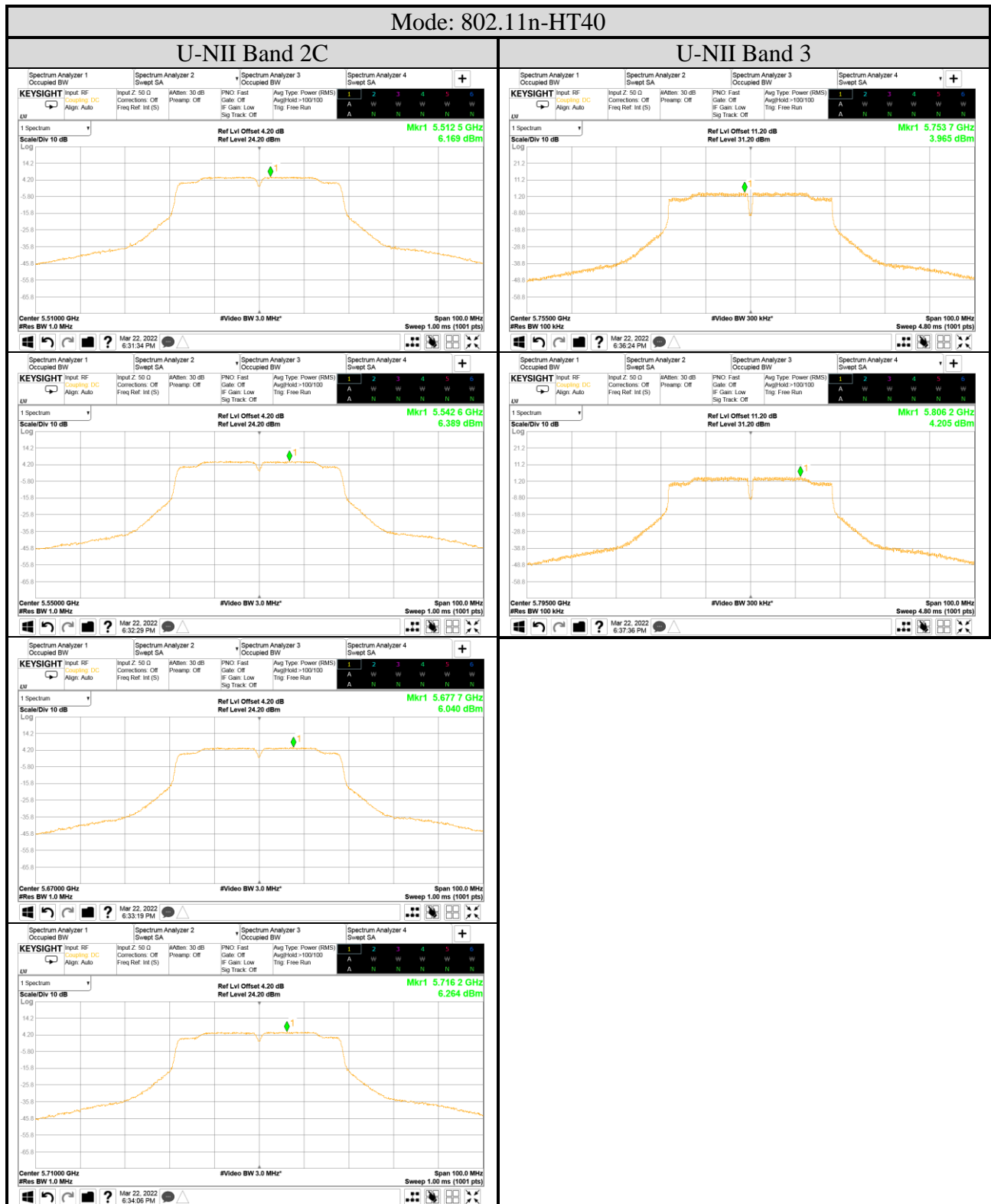


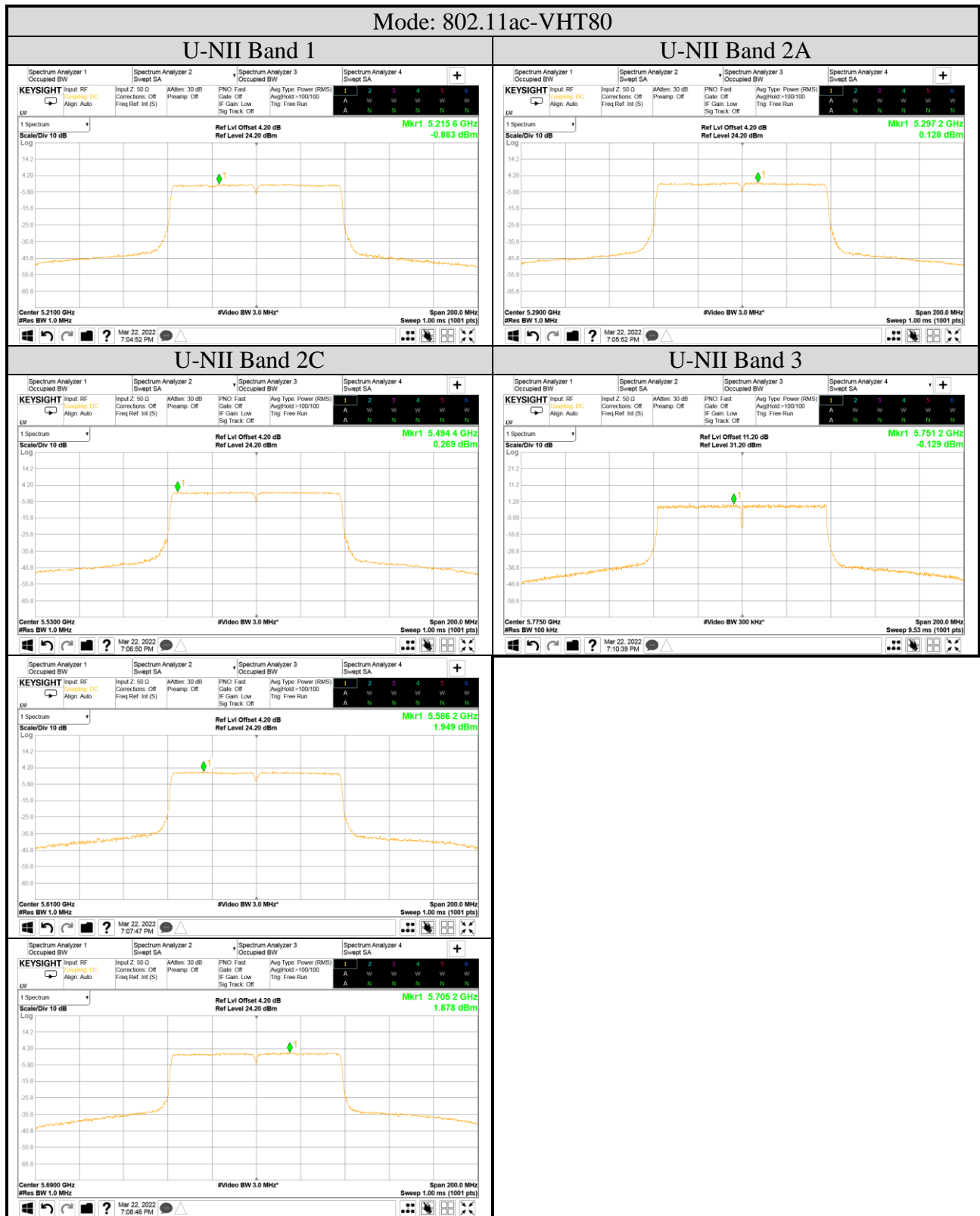


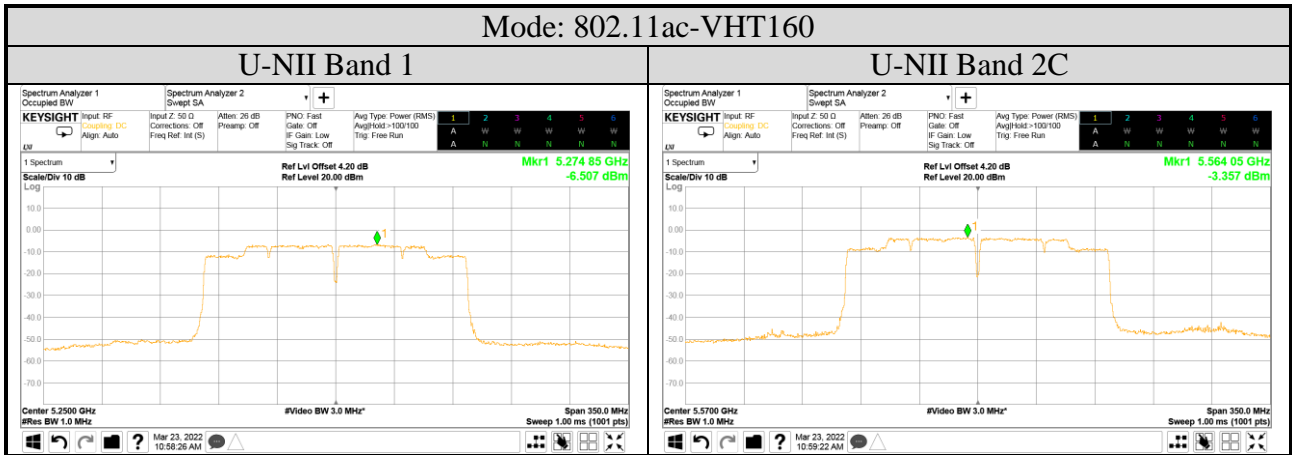


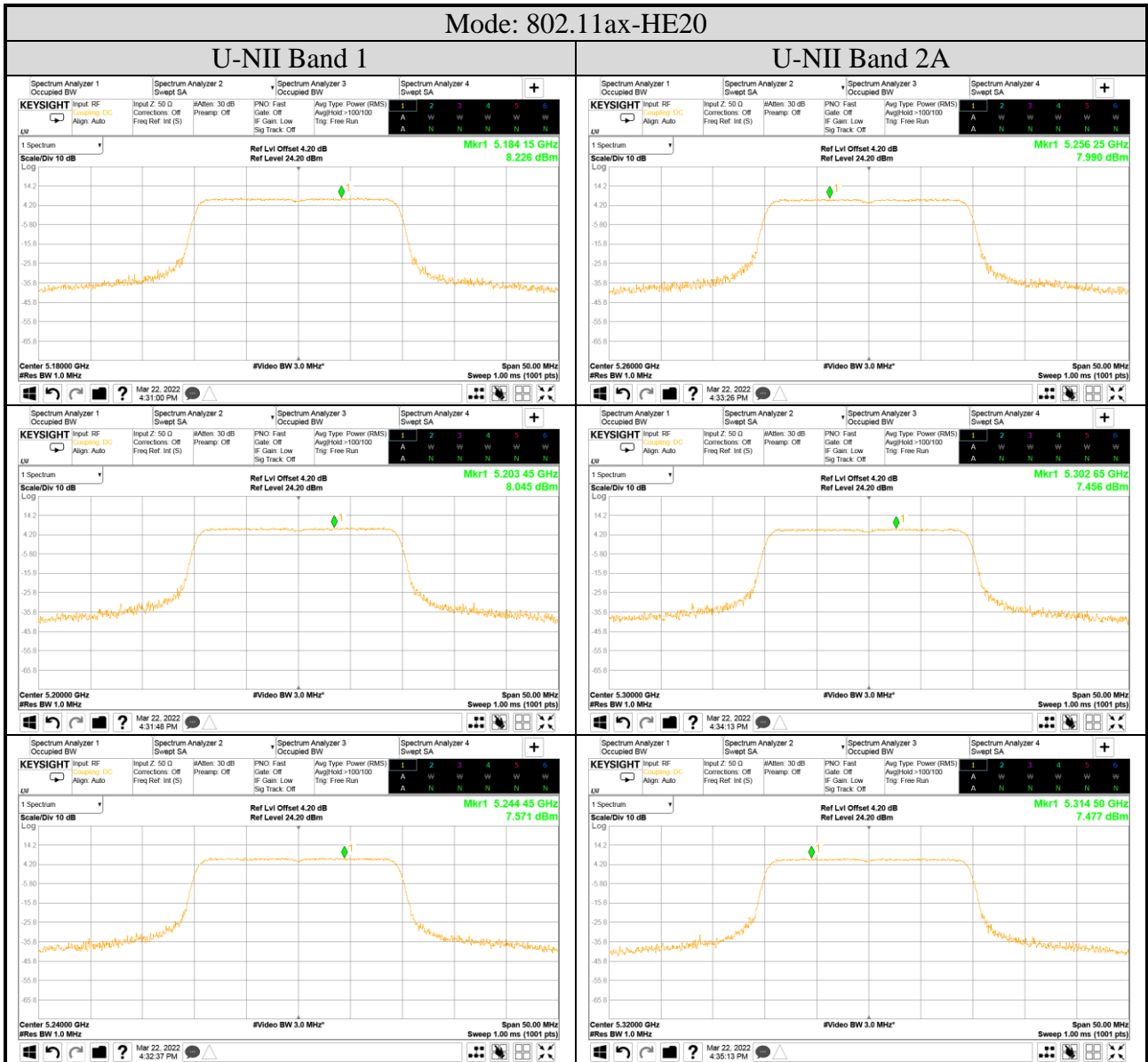


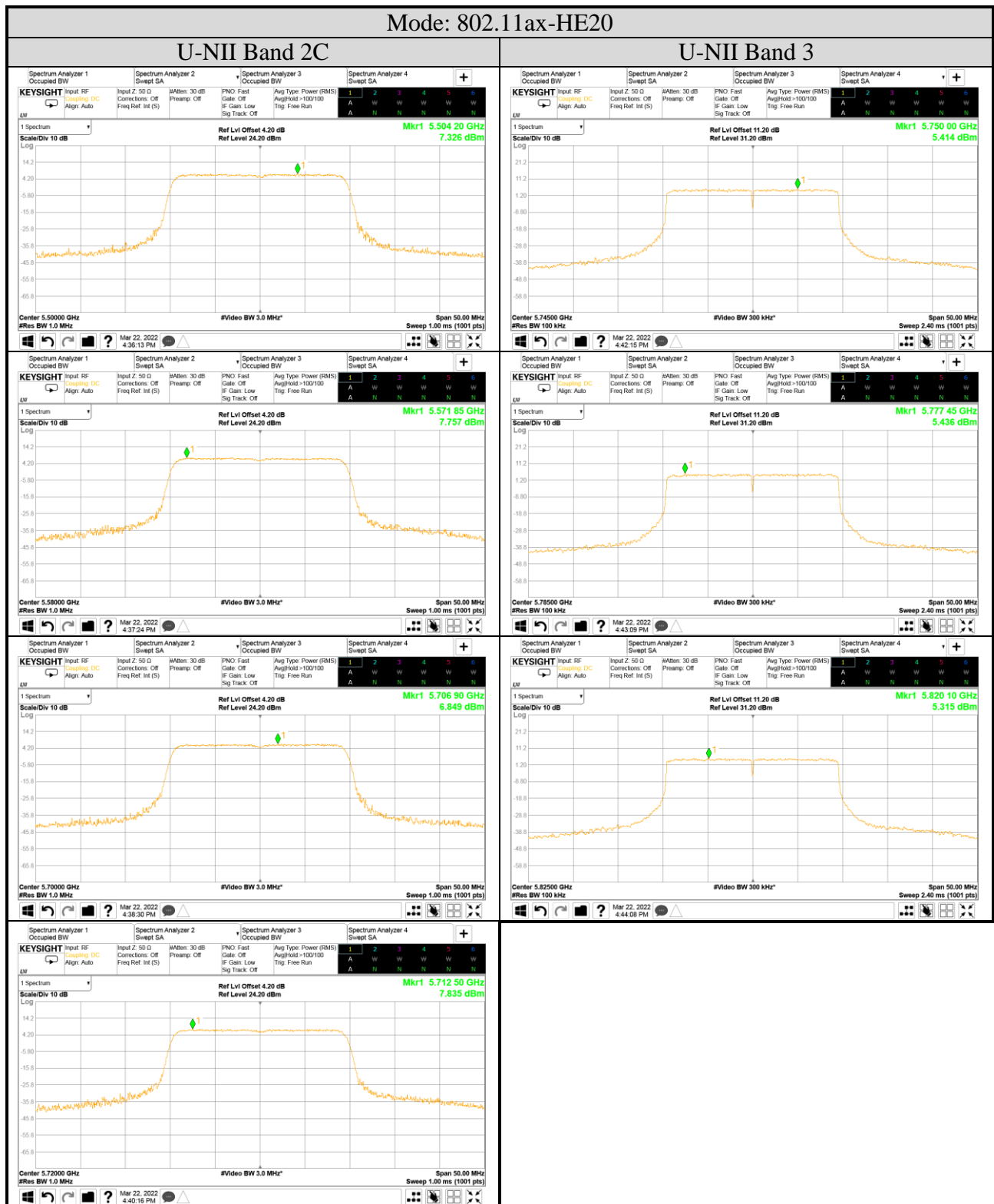


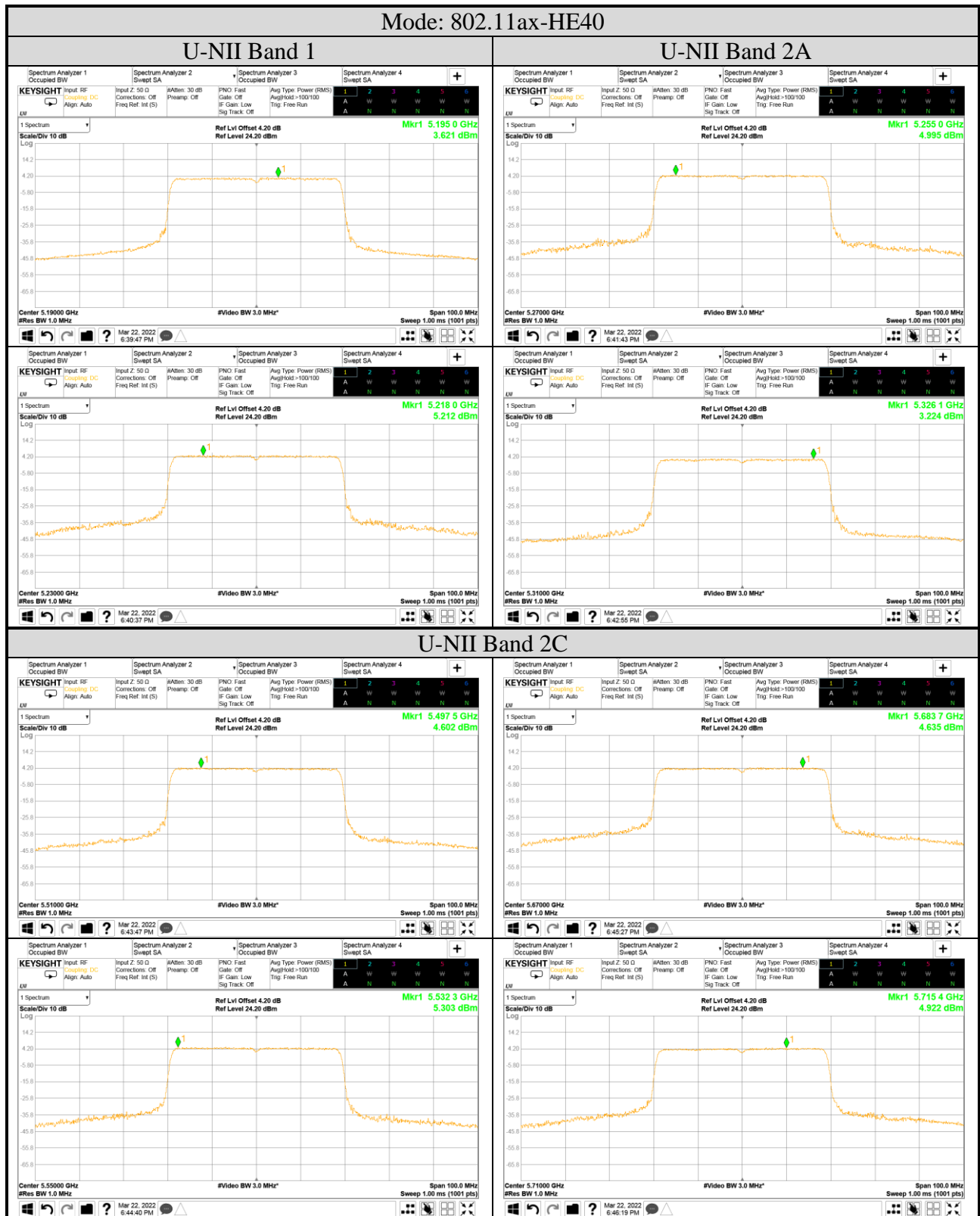


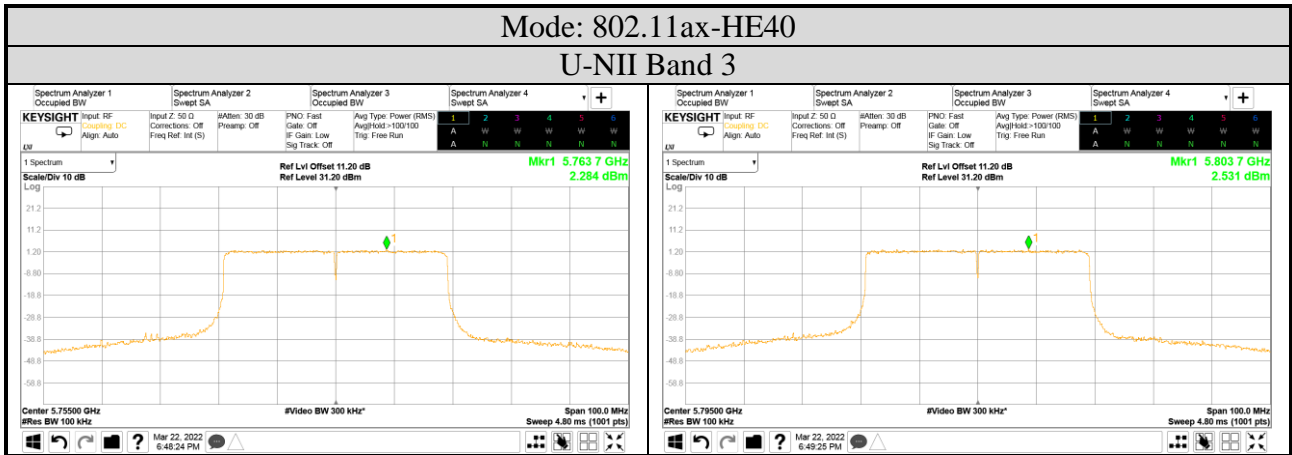


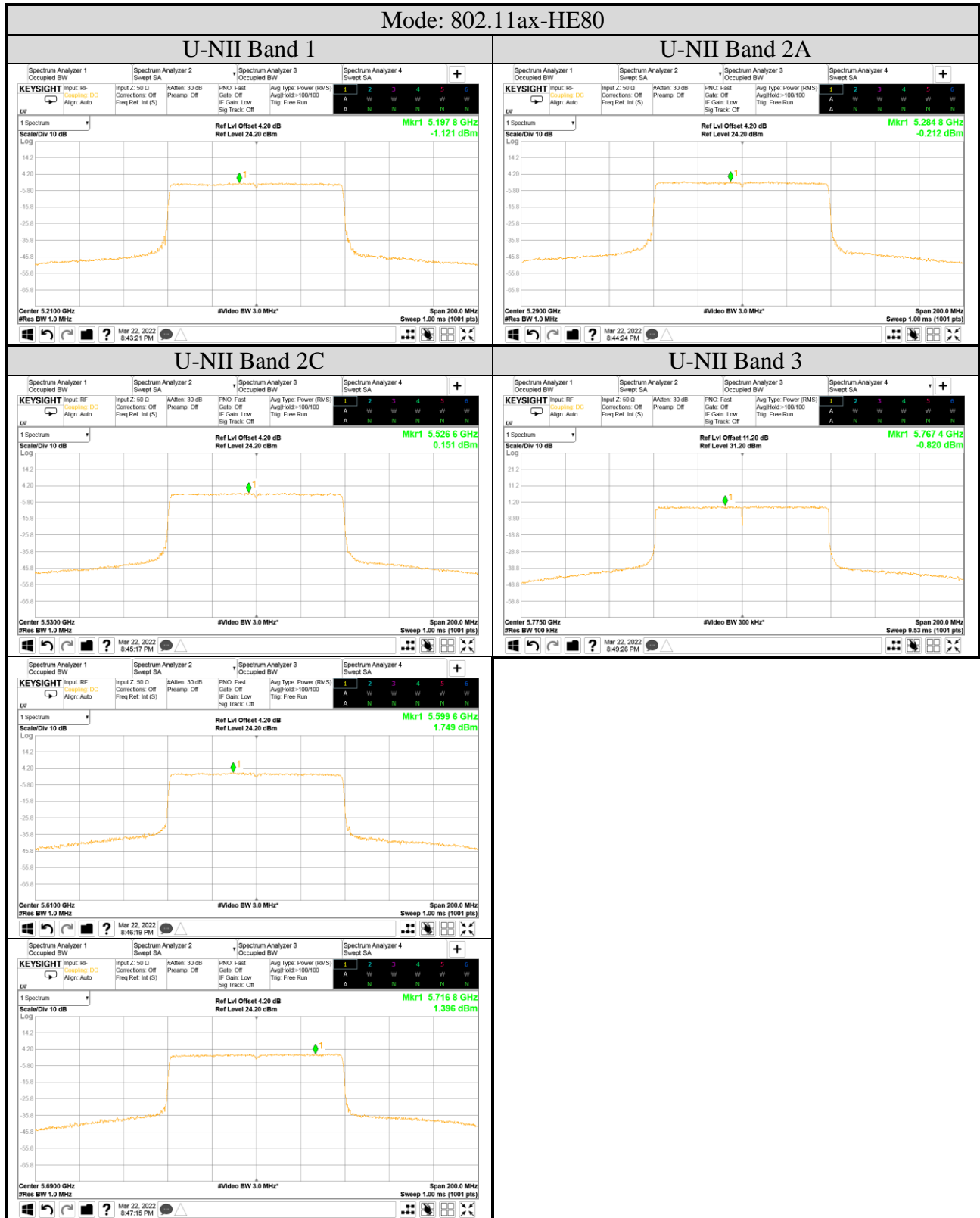


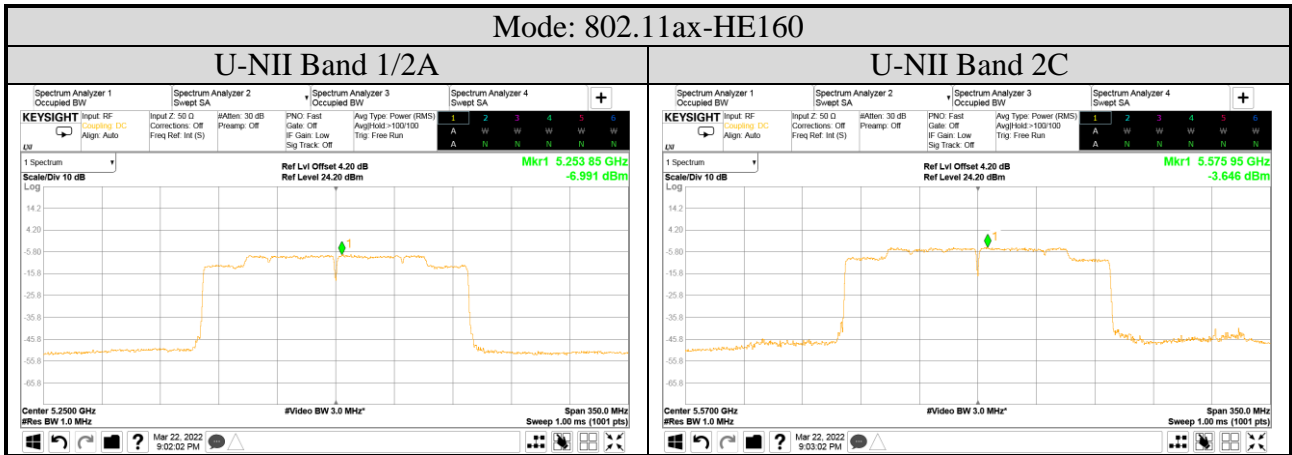


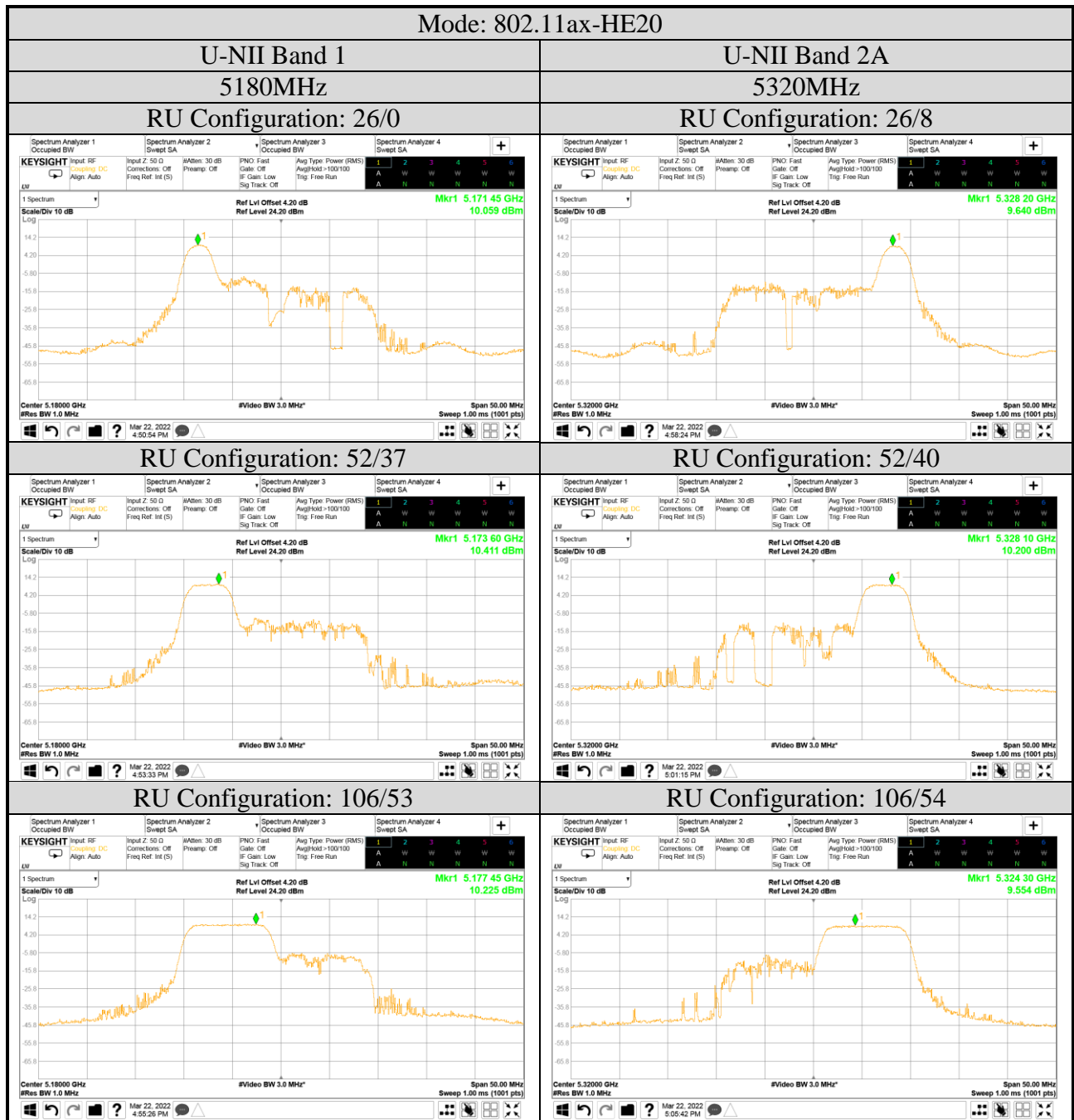


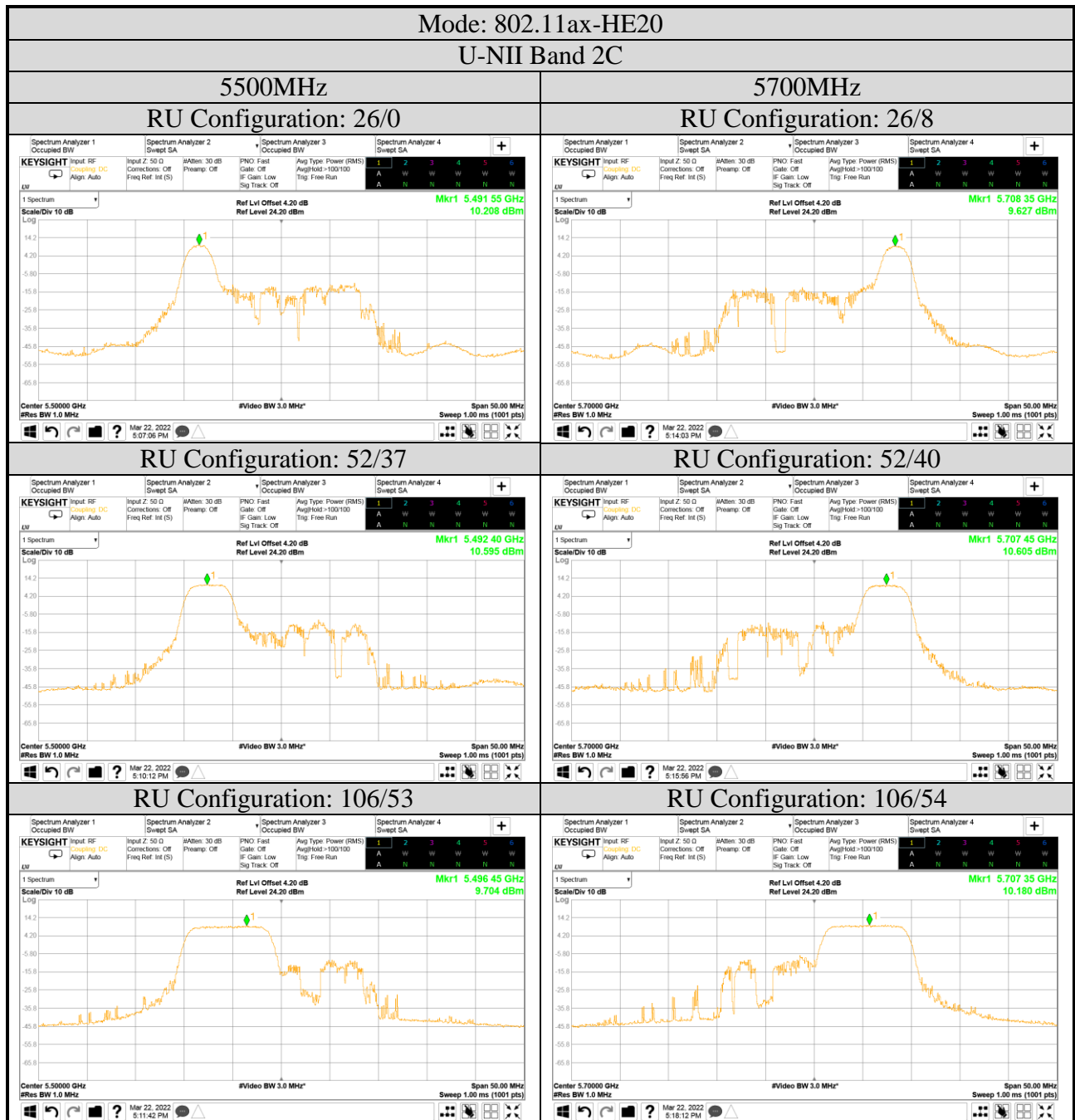


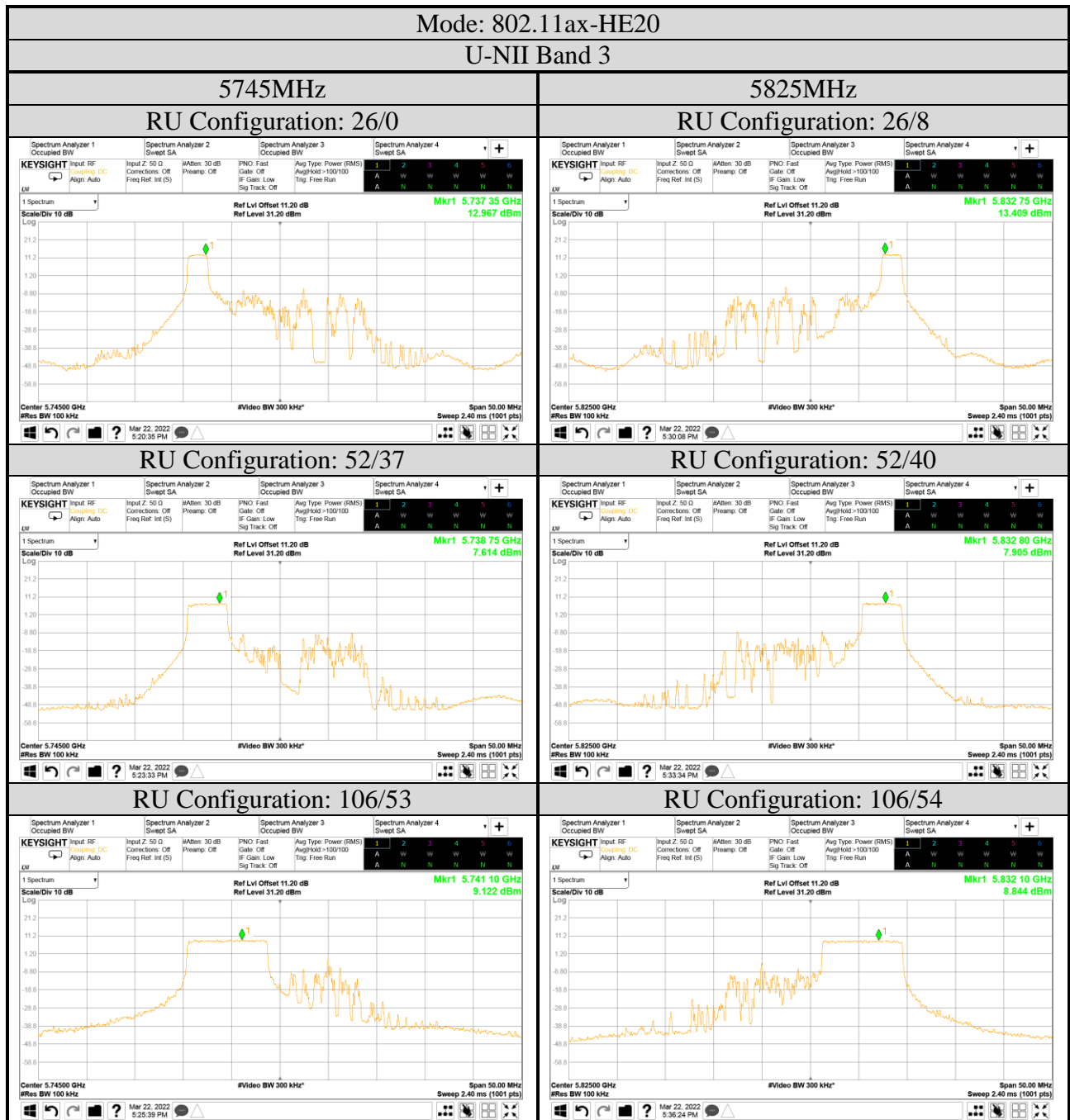


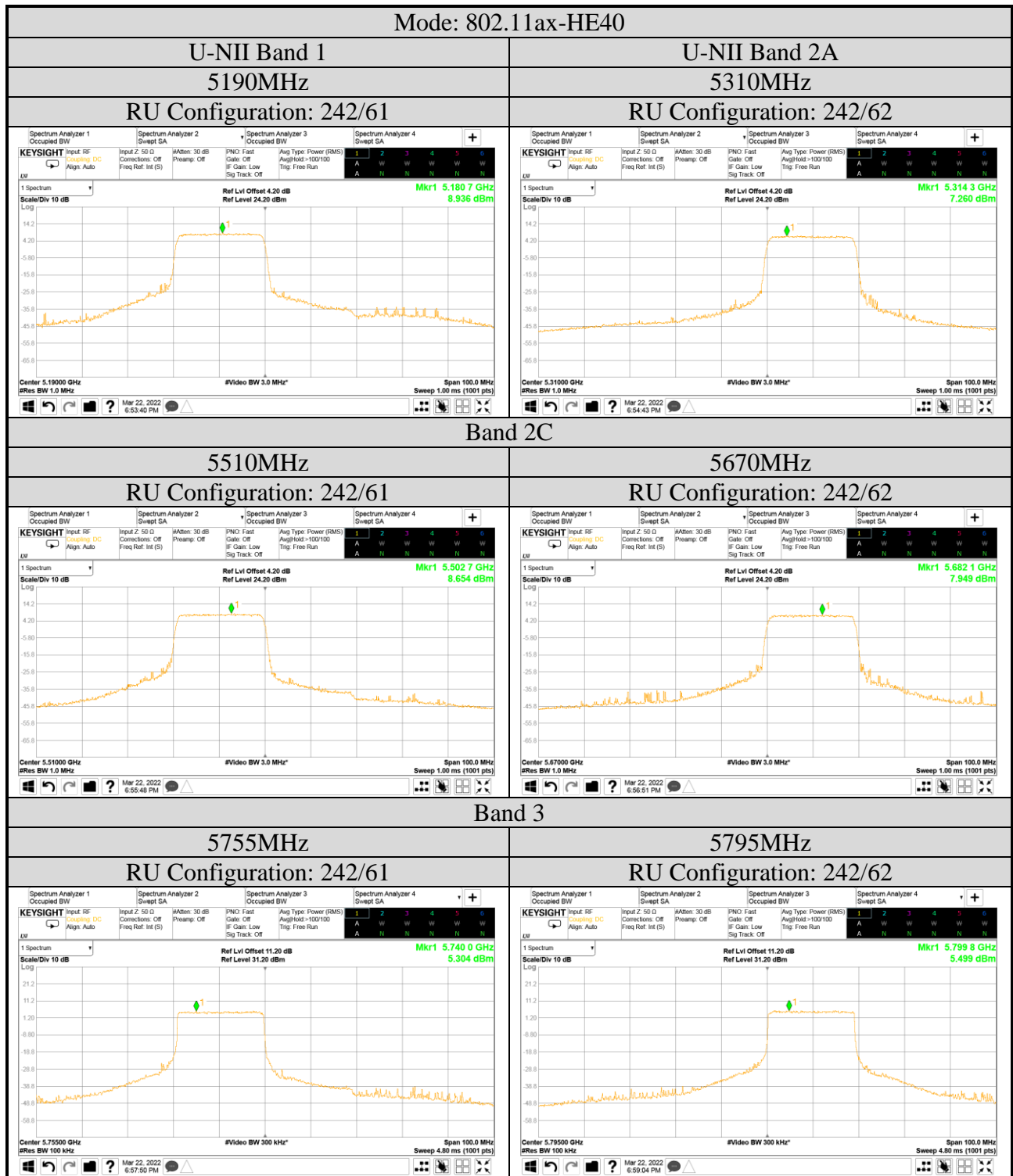


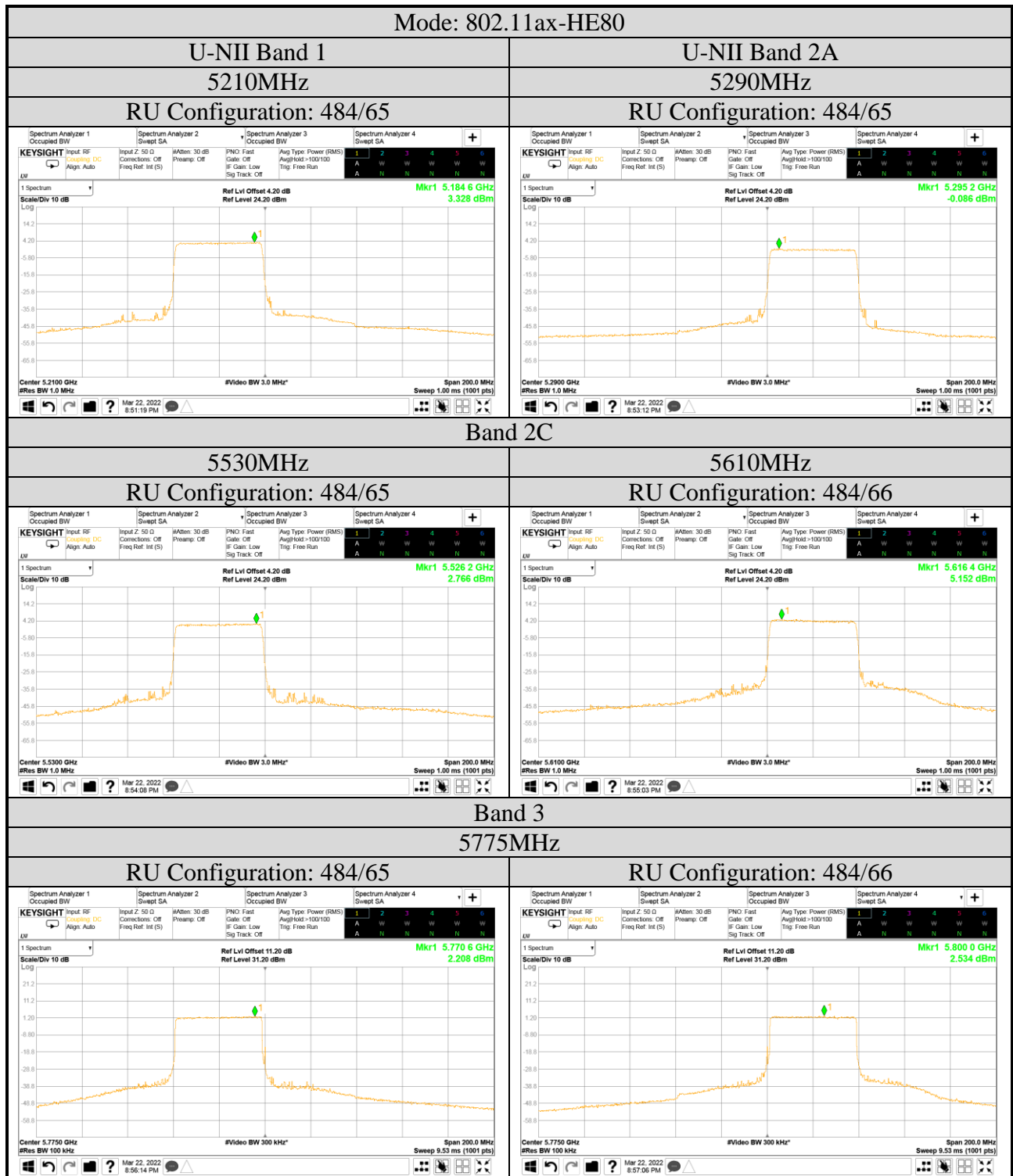


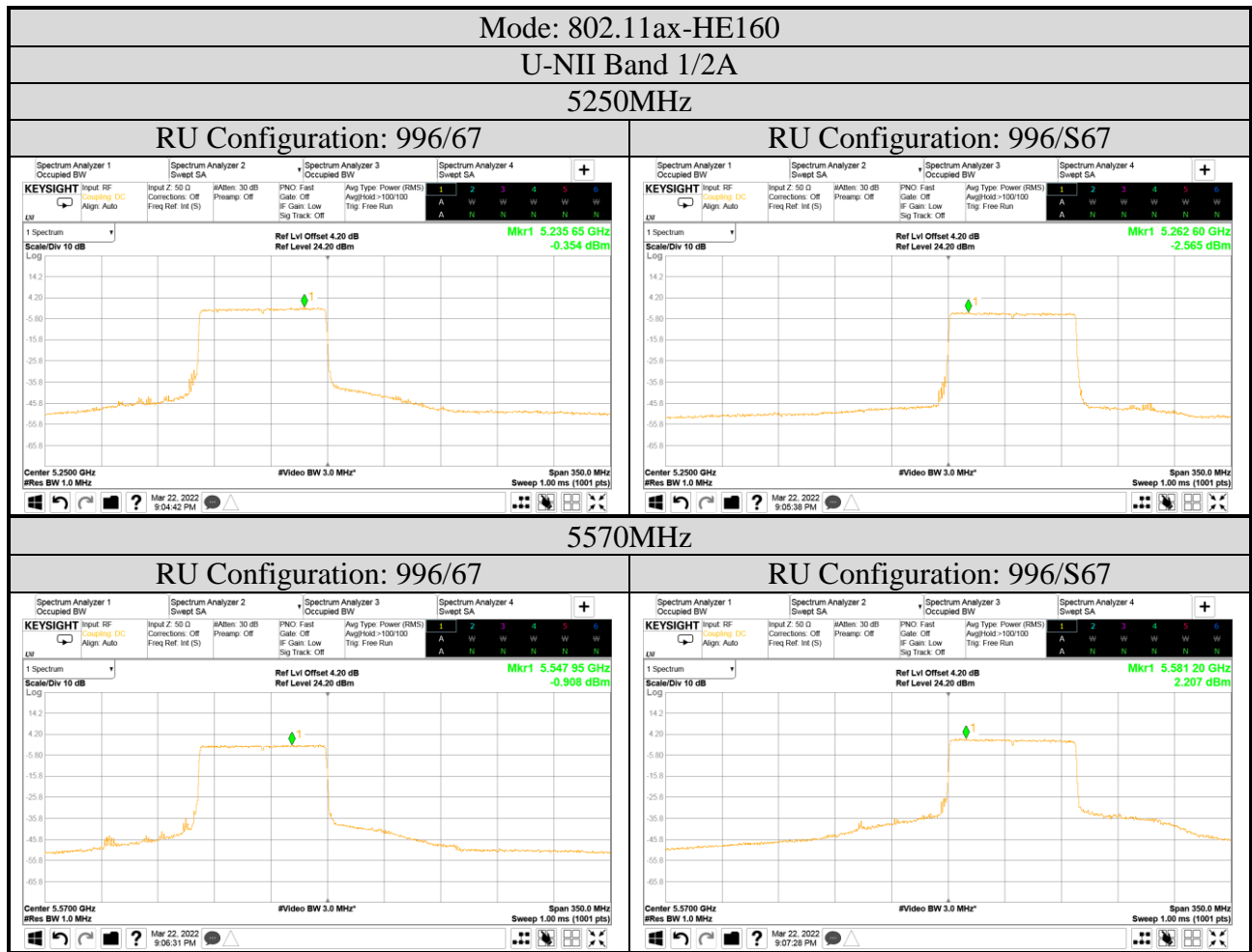












A.6 FREQUENCY STABILITY

Test Date	2022/03/22	Temp./Hum.	22°C/62%
Cable Loss	1.20dB	Tested By	Martin Chen
Test Voltage	AC 120V 60Hz (Via AC Adapter)		

A.6.1 Frequency stability Result

Temperature (°C)	Voltage (Vac)	Centre Frequency (MHz)	Measurement Value (MHz)	Frequency Stability (ppm)
25	120	5180	5179.994	-1.158
-30	102		5179.980	-3.861
	138		5179.986	-2.703
-20	102		5180.011	2.124
	138		5180.009	1.737
-10	102		5180.003	0.579
	138		5179.977	-4.440
0	102		5180.006	1.158
	138		5180.028	5.405
10	102		5179.998	-0.386
	138		5179.979	-4.054
20	102		5180.009	1.737
	138		5179.991	-1.737
30	102		5180.020	3.861
	138		5180.000	0.000
40	102		5179.974	-5.019
	138		5180.012	2.317
50	102		5180.009	1.737
	138		5179.998	-0.386