

A.3 MAXIMUM POWER SPECTRAL DENSITY

Test Date	2021/12/21~ 2022/1/5	Temp./Hum.	17 ~ 20°C/70%
Cable Loss	1.9dB	Tested By	Sam Chang
Test Voltage	AC 120V 60Hz (Via AC Adapter)		
Simultaneous Factor $10 \log(n)$ (Note: "n" is antenna number)		802.11a: 0dB 802.11n/ac/ax: 3dB	

A.3.1 Power Spectral Density Result

- OFDM Modulation

SKU#1 (with INPAQ Antenna)

Mode	U-NII Band	Centre Frequency (MHz)	Power Spectral Density (dBm/MHz)	Antenna Gain (dBi)	e.i.r.p Density (dBm/MHz)	Limit (dBm/MHz)	
802.11ax-HE20	5	5955	-7.333	4.1	-3.233	-1	
		6175	-7.441		-3.341		
		6415	-7.288		-3.188		
	6	6435	-7.513		-3.413		
		6475	-7.124		-3.024		
		6515	-7.451		-3.351		
	7	6535	-10.798	4.1	-6.698		
		6695	-10.073		-5.973		
		6855	-8.933		-4.833		
	8	6875	-9.110		-5.010		
		6995	-9.557		-5.457		
		7115	-14.829		4.2		-10.629
802.11ax-HE40	5	5965	-6.949	4.1	-2.849	-1	
		6165	-6.868		-2.768		
		6405	-6.732		-2.632		
	6	6445	-6.719		-2.619		
		6485	-6.761		-2.661		
		6525	-6.863		-2.763		
	7	6685	-8.079	4.1	-3.979		
		6845	-7.848		-3.748		
		6885	-7.607		-3.507		
	8	7005	-7.920		-3.820		
		7085	-7.828		4.2		-3.628

Note: All results have been included cable loss and Simultaneous Factor.

Mode	U-NII Band	Centre Frequency (MHz)	Power Spectral Density (dBm/MHz)	Antenna Gain (dBi)	e.i.r.p Density (dBm/MHz)	Limit (dBm/MHz)
802.11ax-HE80	5	5985	-6.883	4.1	-2.783	-1
		6145	-7.083		-2.983	
		6385	-6.628		-2.528	
	6	6465	-6.693	4.1	-2.593	
		6545	-6.799		-2.699	
	7	6625	-7.928	4.1	-3.828	
		6705	-8.004		-3.904	
		6785	-7.897		-3.797	
	8	6865	-7.615	4.2	-3.515	
		6945	-7.554		-3.454	
		7025	-7.774		-3.574	
802.11ax-HE160	5	6025	-6.880	4.1	-2.780	-1
		6185	-6.760		-2.660	
		6345	-6.201		-2.101	
	6	6505	-6.696	4.1	-2.596	
		6665	-7.531		-3.431	
	7	6825	-7.836	4.2	-3.736	
		6985	-7.414		-3.214	

Note: All results have been included cable loss and Simultaneous Factor.

SKU#2 (with LUXSHARE-ICT Antenna)

Mode	U-NII Band	Centre Frequency (MHz)	Power Spectral Density (dBm/MHz)	Antenna Gain (dBi)	e.i.r.p Density (dBm/MHz)	Limit (dBm/MHz)
802.11ax-HE20	5	5955	-7.333	4.7	-2.633	-1
		6175	-7.441		-2.741	
		6415	-7.288		-2.588	
	6	6435	-7.513		-2.813	
		6475	-7.124		-2.424	
		6515	-7.451		-2.751	
	7	6535	-10.798	3.4	-7.398	
		6695	-10.073		-6.673	
		6855	-8.933		-5.533	
	8	6875	-9.110		-5.710	
		6995	-9.557		-6.157	
		7115	-14.829		-16.429	
802.11ax-HE40	5	5965	-6.949	4.7	-2.249	-1
		6165	-6.868		-2.168	
		6405	-6.732		-2.032	
	6	6445	-6.719		-2.019	
		6485	-6.761		-2.061	
		6525	-6.863		-3.463	
	7	6685	-8.079	3.4	-4.679	
		6845	-7.848		-4.448	
		6885	-7.607		-4.207	
	8	7005	-7.920		-4.520	
		7085	-7.828		-9.428	
					-1.6	
802.11ax-HE80	5	5985	-6.883	4.7	-2.183	-1
		6145	-7.083		-2.383	
		6385	-6.628		-1.928	
	6	6465	-6.693		-1.993	
		6545	-6.799		-3.399	
		6625	-7.928		-4.528	
	7	6705	-8.004	3.4	-4.604	
		6785	-7.897		-4.497	
		6865	-7.615		-4.215	
	8	6945	-7.554		-4.154	
		7025	-7.774		-9.374	
					-1.6	
802.11ax-HE160	5	6025	-6.880	4.7	-2.180	-1
		6185	-6.760		-2.060	
		6345	-6.201		-1.501	
	6	6505	-6.696		-1.996	
		6665	-7.531		-4.131	
		6825	-7.836		-4.436	
	8	6985	-7.414	-1.6	-9.014	

Note: All results have been included cable loss and Simultaneous Factor.

● OFDMA Modulation

SKU#1 (with INPAQ Antenna)

Tones	RU Index	Mode	U-NII Band	Centre Frequency (MHz)	Power Spectral Density (dBm/MHz)	Antenna Gain (dBi)	e.i.r.p Density (dBm/MHz)	Limit (dBm/MHz)
26T	18	802.11ax- HE40	5	6145	-9.590	4.1	-5.49	-1
52T	39	802.11ax- HE20	5	5955	-6.628	4.1	-2.528	
106T	54	802.11ax- HE20	5	5955	-6.709	4.1	-2.609	
242T	S61	802.11ax- HE160	8	6985	-7.162	4.2	-2.962	
484T	66	802.11ax- HE160	5	6345	-10.039	4.1	-5.939	
996T	67	802.11ax- HE160	5	6345	-5.979	4.1	-1.879	

SKU#2 (with LUXSHARE-ICT Antenna)

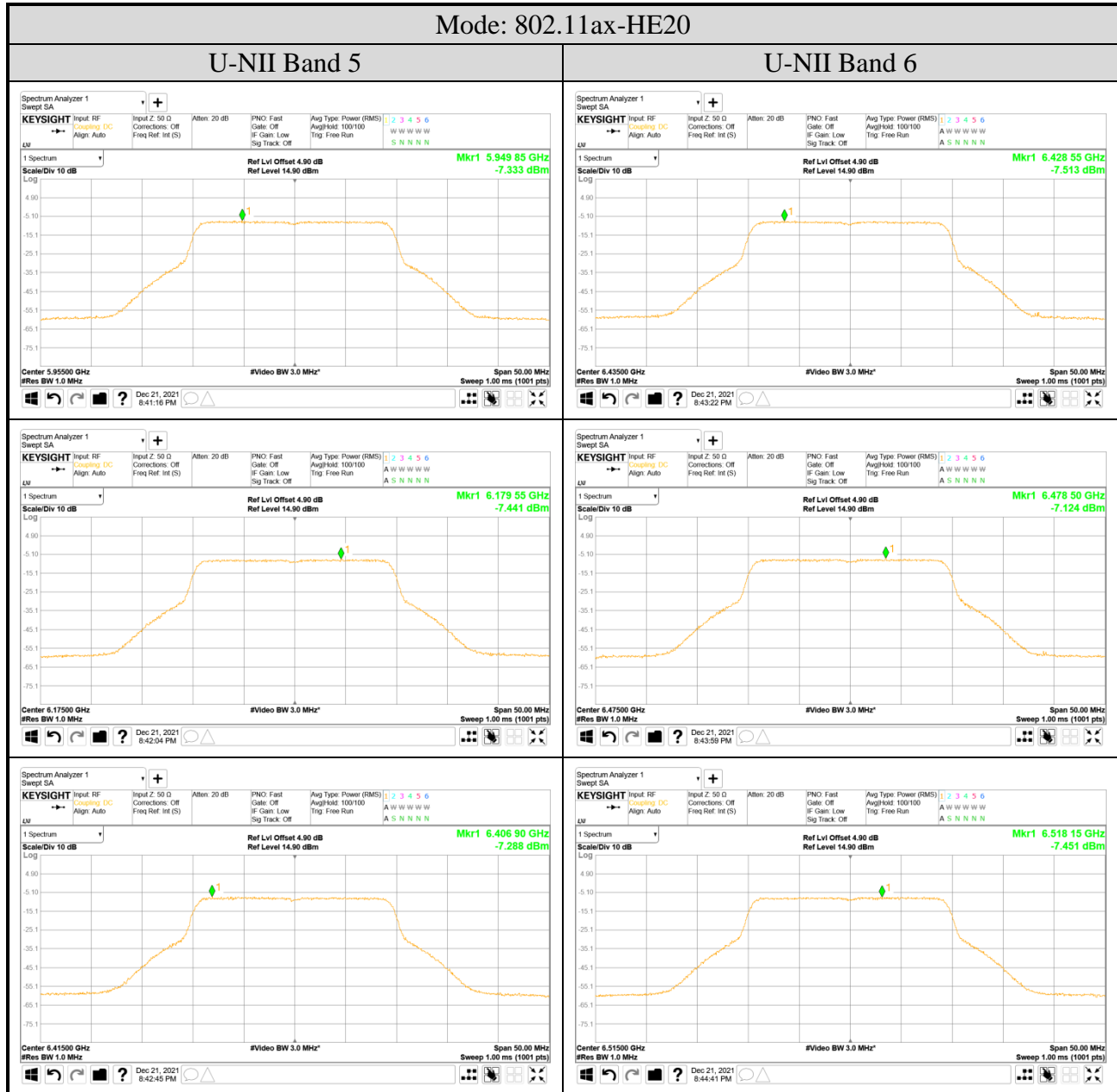
Tones	RU Index	Mode	U-NII Band	Centre Frequency (MHz)	Power Spectral Density (dBm/MHz)	Antenna Gain (dBi)	e.i.r.p Density (dBm/MHz)	Limit (dBm/MHz)
26T	18	802.11ax- HE40	5	6145	-9.590	4.7	-4.89	-1
52T	39	802.11ax- HE20	5	5955	-6.628	4.7	-1.928	
106T	54	802.11ax- HE20	5	5955	-6.709	4.7	-2.009	
242T	S61	802.11ax- HE160	8	6985	-7.162	-1.6	-8.762	
484T	66	802.11ax- HE160	5	6345	-10.039	4.7	-5.339	
996T	67	802.11ax- HE160	5	6345	-5.979	4.7	-1.279	

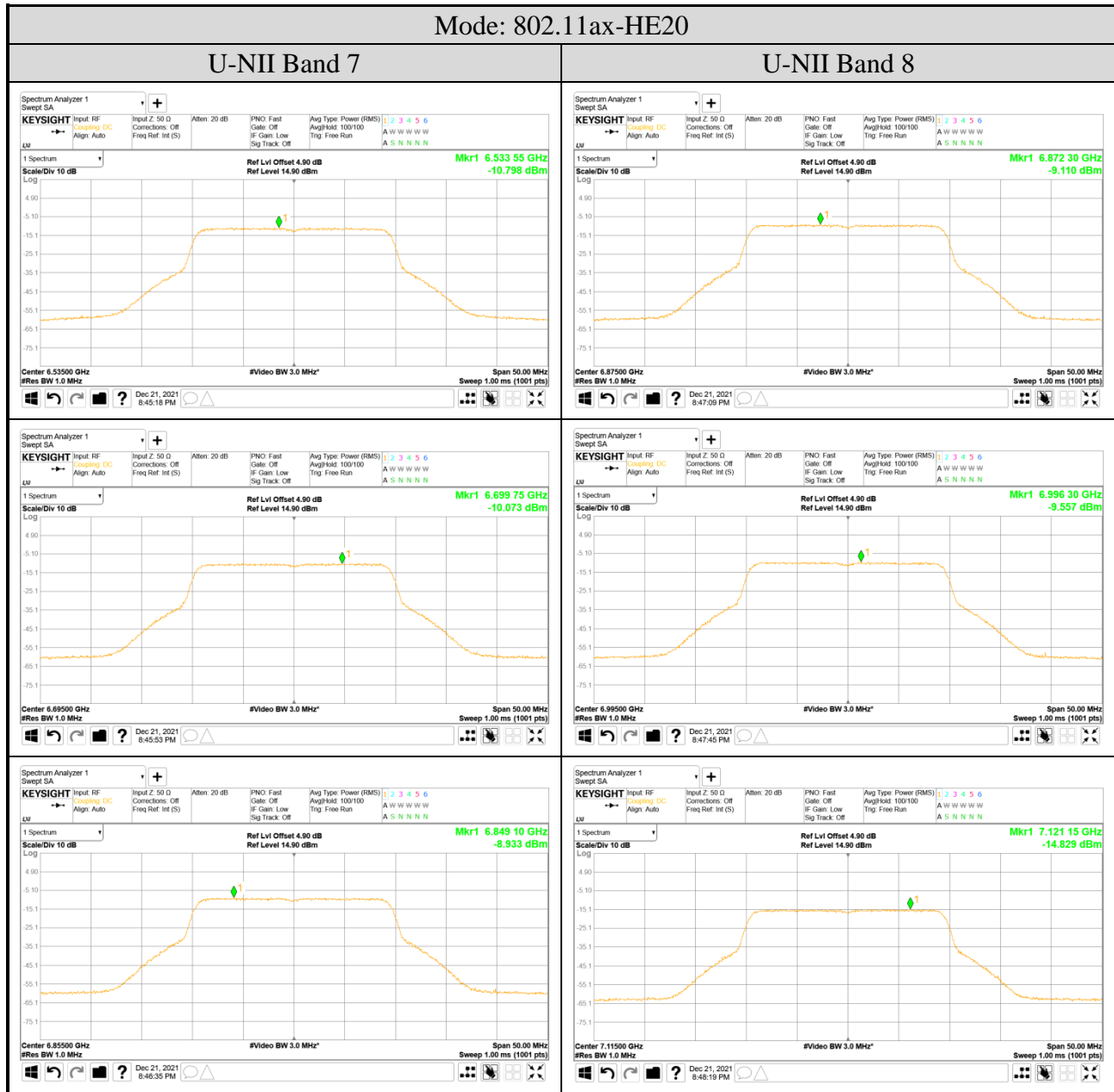
Note: 1. All results have been included cable loss and Simultaneous Factor.

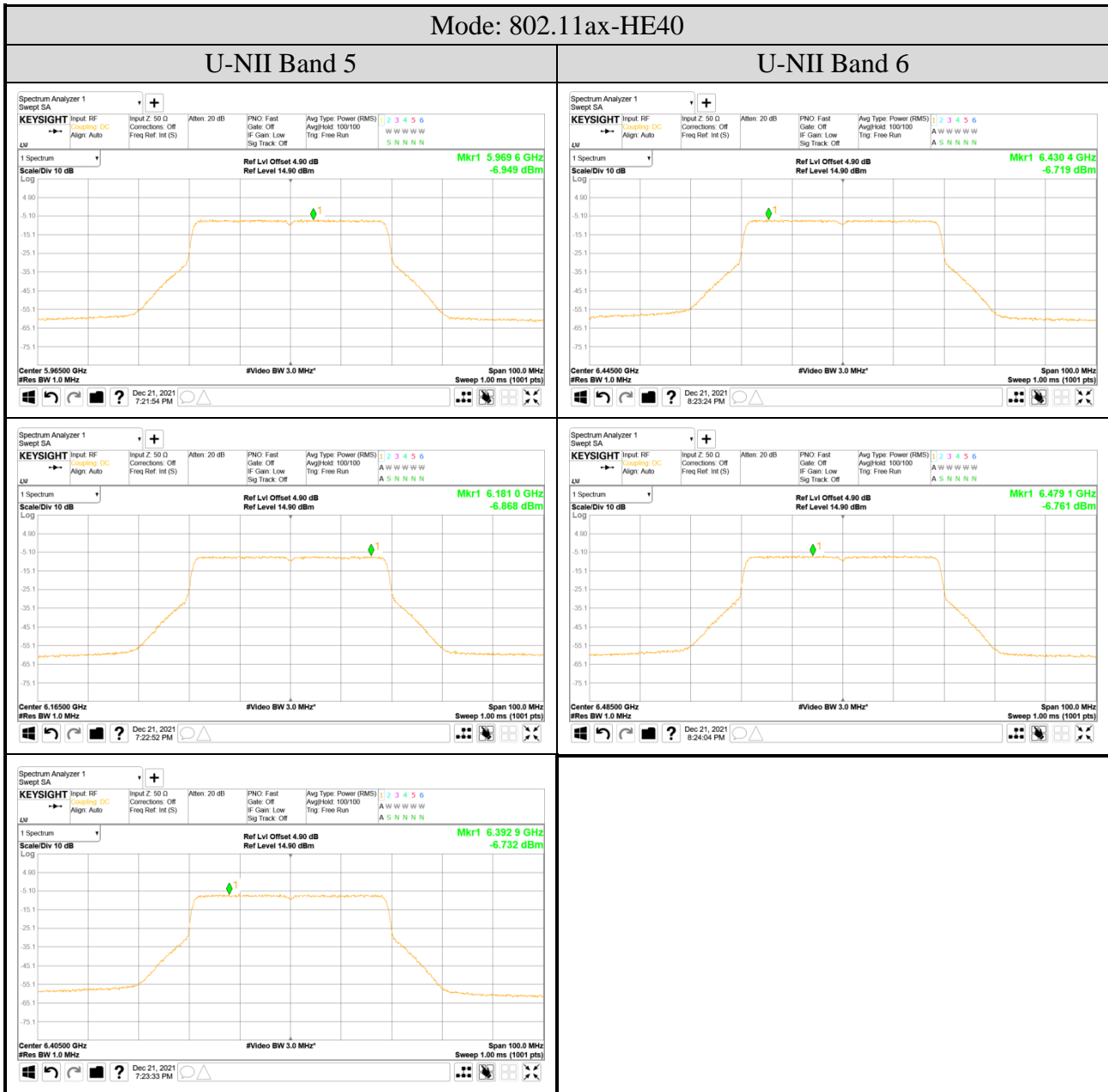
2. After preliminary test, we present worst case with maximum power of each RU type.

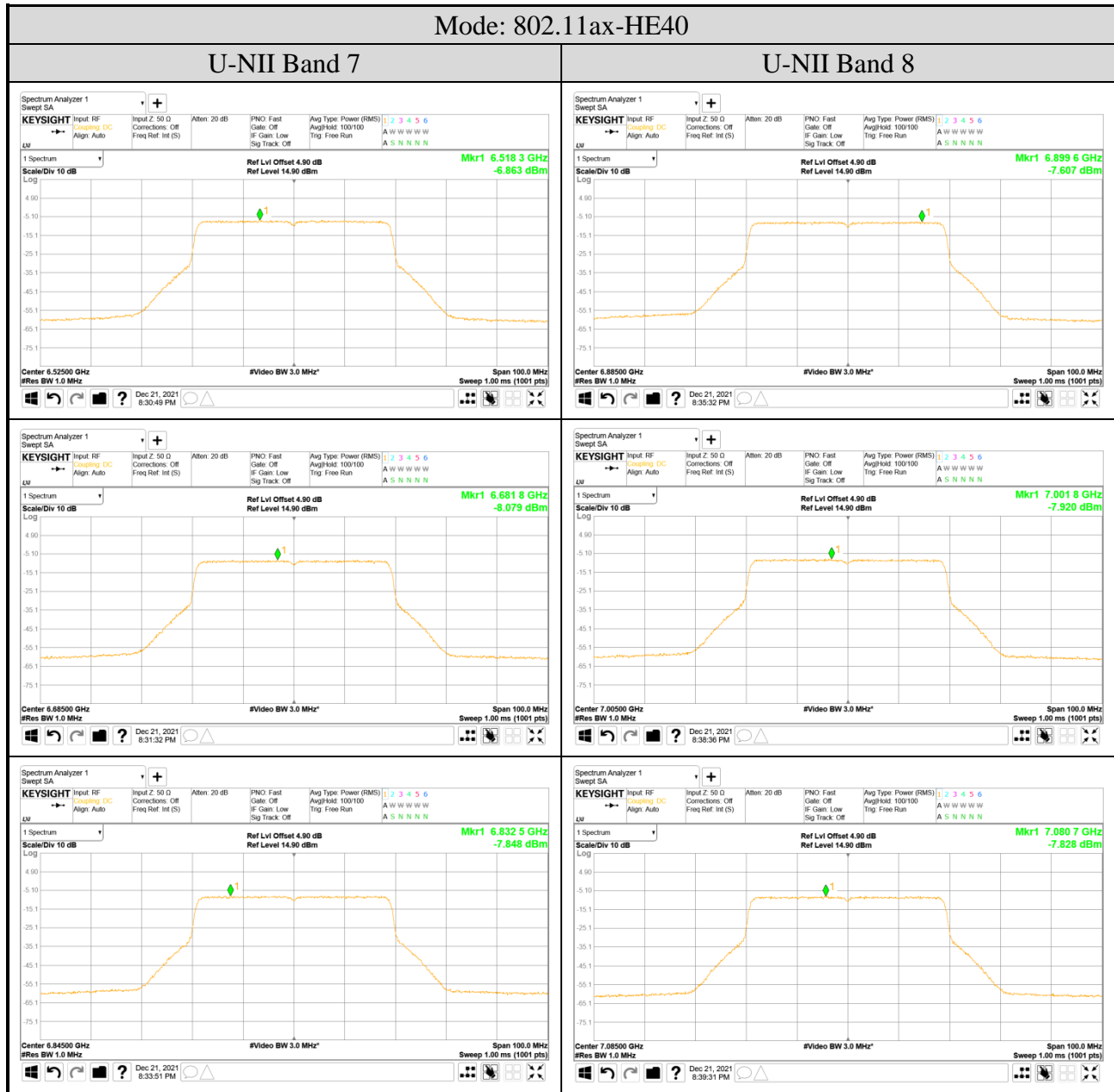
A.3.2 Measurement Plots

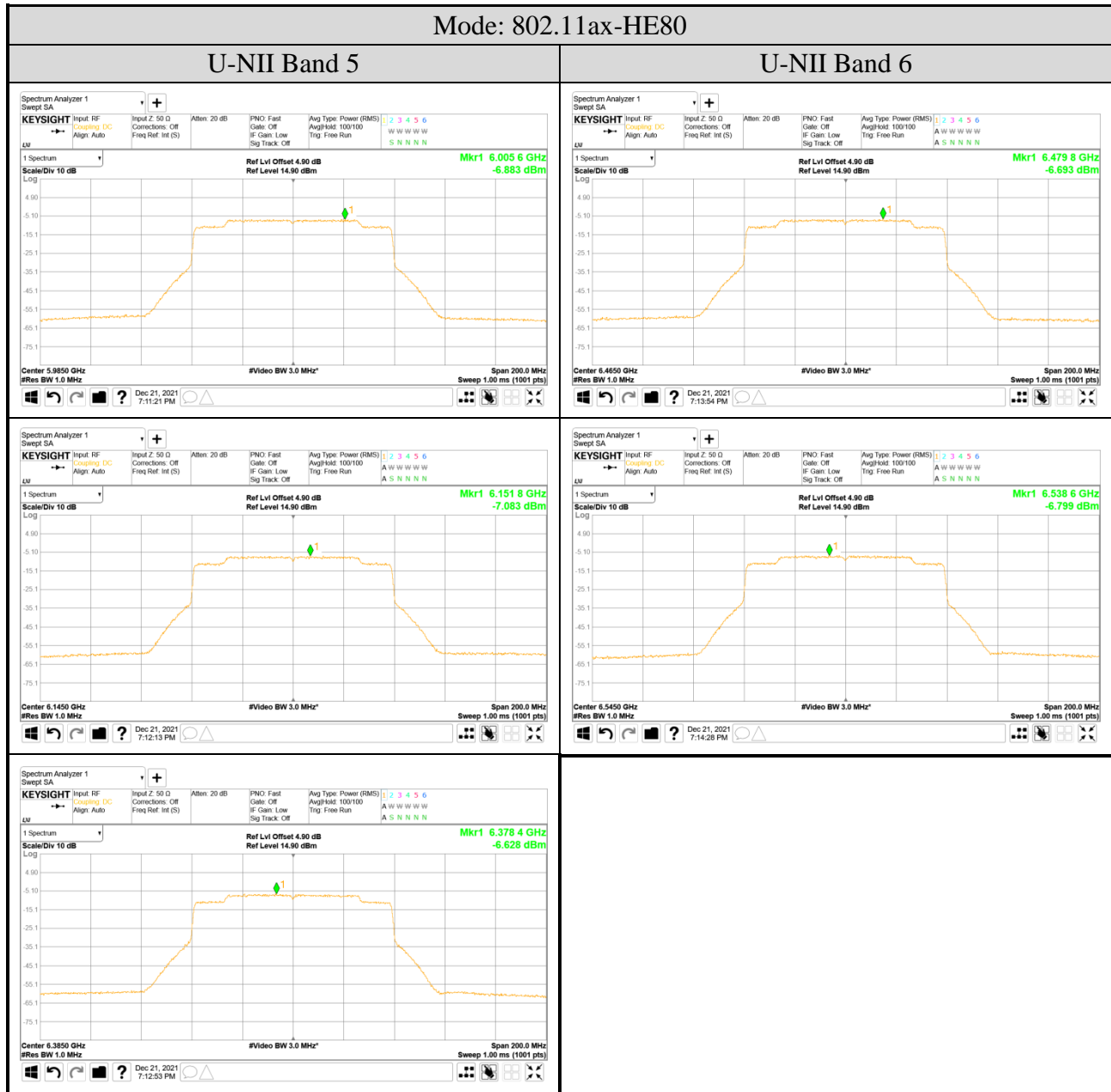
● OFDM Modulation

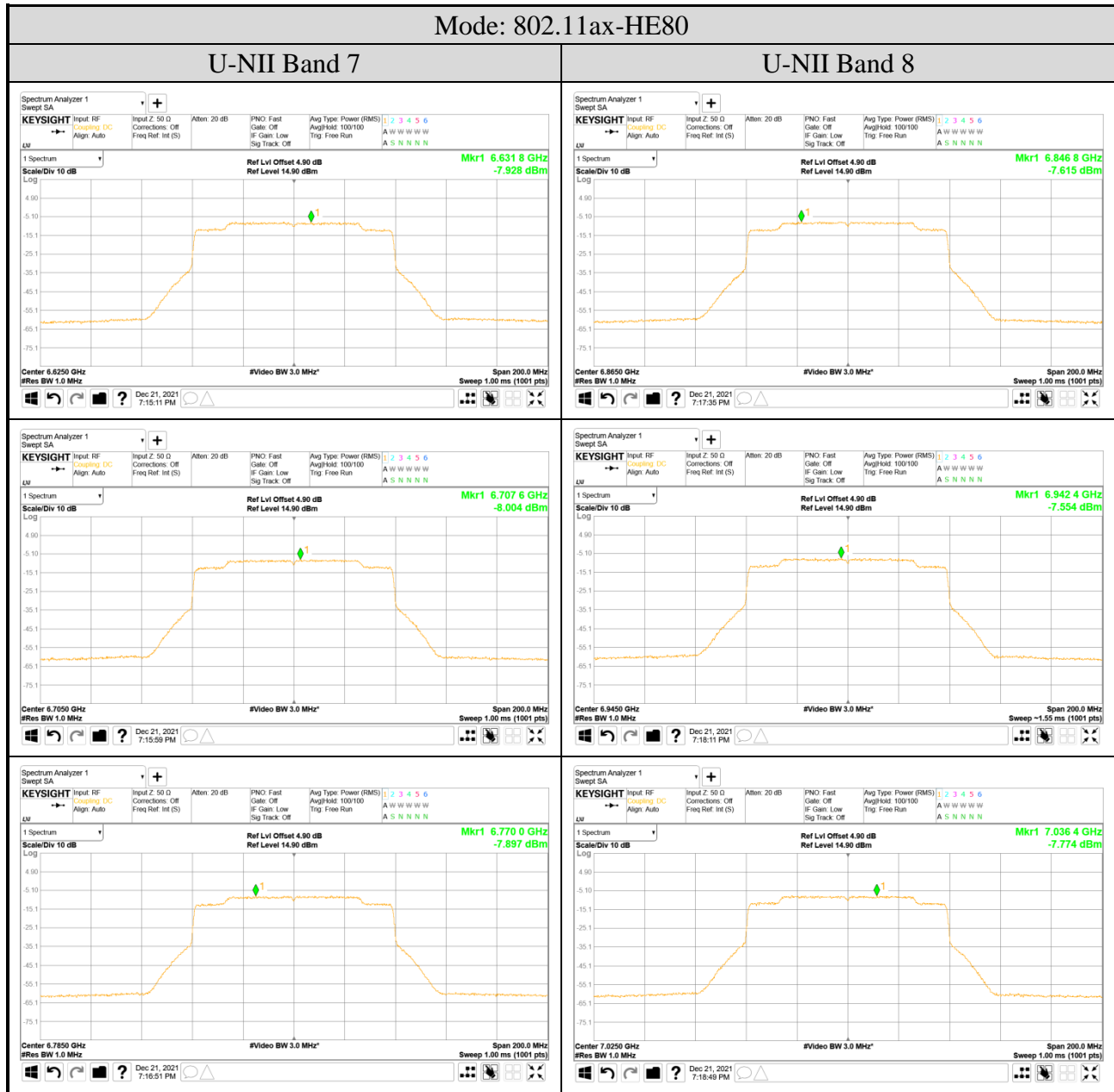




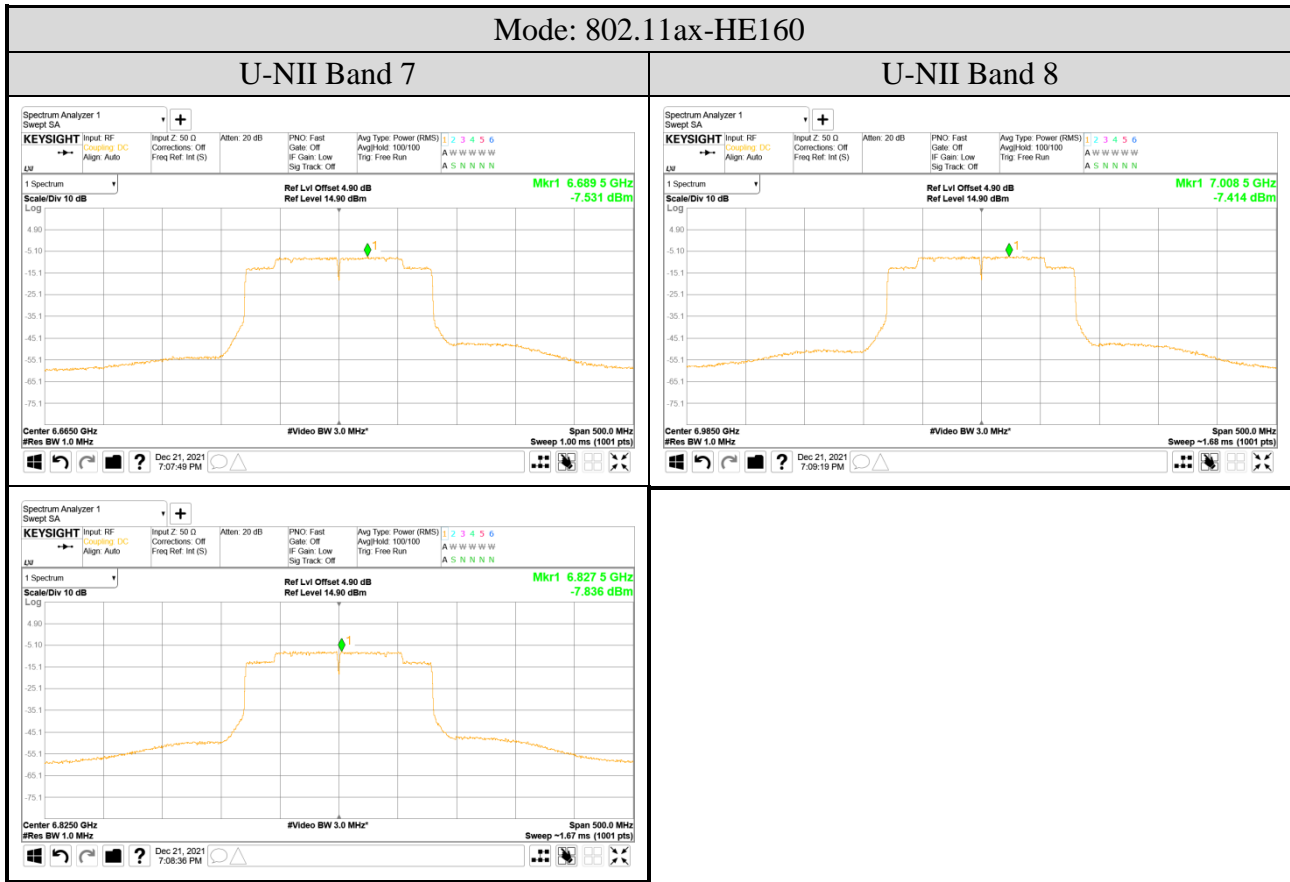












● OFDMA Modulation

