

A.5 POWER SPECTRAL DENSITY

Test Date	2019/09/23~10/3	Temp./Hum.	24°C /47~53%
Cable Loss	1dB	Tested By	Martin Chen
Test Voltage	AC 120V 60Hz (Via AC Adapter)		
Simultaneous Factor 10 log(n) (Note: “n” is antenna number)		802.11a: 0 802.11n-HT20/40: 3 802.11ac-VHT80/160: 3 802.11ax-HE80/160: 3	

A.5.1 Power Spectral Density Result

Mode	Band	Centre Frequency (MHz)	Power Spectral Density (dBm)	Limit
802.11a	NII-I	5180	7.304	11 dBm/MHz
		5200	8.070	
		5240	8.864	
	NII-2A	5260	8.770	
		5300	7.407	
		5320	6.531	
	NII-2C	5500	6.744	
		5580	8.860	
		5700	6.507	
		5720	8.838	
	NII-III ^{Note2}	5745	6.604	30dBm/500 kHz
		5785	6.672	
		5825	6.616	

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

Note 2: BWCF 6.99dB (100kHz converted to 500kHz) has been included in the test result.

Audix Technology Corp.
No. 53-11, Dingfu, Linkou, Dist.,
New Taipei City244, Taiwan

Tel: +886 2 26099301
Fax: +886 2 26099303

Mode	Band	Centre Frequency (MHz)	Power Spectral Density (dBm)	Limit
802.11n-HT20	NII-I	5180	7.207	11 dBm/MHz
		5200	7.751	
		5240	8.948	
	NII-2A	5260	9.014	
		5300	7.552	
		5320	6.079	
	NII-2C	5500	6.477	
		5580	8.936	
		5700	6.287	
		5720	8.803	
	NII-III ^{Note2}	5745	6.562	30dBm/500 kHz
		5785	7.103	
		5825	6.825	
802.11n-HT40	NII-I	5190	4.124	11 dBm/MHz
		5230	5.601	
	NII-2A	5270	4.613	
		5310	2.175	
	NII-2C	5510	2.677	
		5550	3.714	
		5670	5.746	
		5710	6.437	
	NII-III ^{Note2}	5755	3.771	30dBm/500 kHz
		5795	3.783	
802.11ac-VHT80	NII-I	5210	1.109	11 dBm/MHz
	NII-2A	5290	-0.078	
	NII-2C	5530	1.630	
		5610	3.978	
		5690	1.682	
	NII-III ^{Note2}	5775	-0.372	30dBm/500 kHz
802.11ac-VHT160	NII-I/NII-2A	5250	-5.753	11 dBm/MHz
	NII-2C	5570	-5.638	

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

Note 2: BWCF 6.99dB (100kHz converted to 500kHz) has been included in the test result.

Mode	Band	Centre Frequency (MHz)	Power Spectral Density (dBm)	Limit
802.11ax-HE20	NII-I	5180	6.955	11 dBm/MHz
		5200	7.579	
		5240	8.661	
	NII-2A	5260	9.004	
		5300	6.932	
		5320	6.014	
	NII-2C	5500	6.177	
		5580	8.680	
		5700	6.106	
		5720	8.779	
	NII-III ^{Note2}	5745	5.230	30dBm/500 kHz
		5785	5.201	
		5825	5.344	
802.11ax-HE40	NII-I	5190	3.664	11 dBm/MHz
		5230	5.246	
	NII-2A	5270	4.226	
		5310	1.608	
	NII-2C	5510	2.252	
		5550	3.309	
		5670	5.314	
		5710	5.871	
	NII-III ^{Note2}	5755	2.431	30dBm/500 kHz
		5795	2.550	
802.11ax-HE80	NII-I	5210	0.831	11 dBm/MHz
	NII-2A	5290	-0.441	
	NII-2C	5530	1.185	
		5610	3.570	
		5690	3.682	
	NII-III ^{Note2}	5775	-1.398	30dBm/500 kHz
802.11ax-HE160	NII-I/NII-2A	5250	-6.145	11 dBm/MHz
	NII-2C	5570	-6.191	

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

Note 2: BWCF 6.99dB (100kHz converted to 500kHz) has been included in the test result.

Audix Technology Corp.
No. 53-11, Dingfu, Linkou, Dist.,
New Taipei City 244, Taiwan

Tel: +886 2 26099301
Fax: +886 2 26099303

Mode	Band	Centre Frequency (MHz)	RU Configuration	Power Spectral Density (dBm)	Limit
802.11ax-HE20	NII-I	5180	26/0	10.204	11 dBm/MHz
			52/37	10.844	
			106/53	9.840	
	NII-2A	5320	26/8	10.090	
			52/40	7.383	
			106/54	8.675	
	NII-2C	5500	26/0	10.522	
			52/37	10.852	
			106/53	9.587	
		5700	26/8	9.841	
			52/40	8.772	
			106/54	8.214	
	NII-III ^{Note2}	5745	26/0	7.675	30dBm/500 kHz
			52/37	7.773	
			106/53	7.986	
		5825	26/8	13.528	
			52/40	10.901	
			106/54	8.154	
802.11ax-HE40	NII-I	5190	242/61	6.586	11 dBm/MHz
	NII-2A	5310	242/62	4.462	
	NII-2C	5510	242/61	5.450	
		5670	242/62	6.834	
	NII-III ^{Note2}	5755	242/61	4.064	30dBm/500 kHz
		5795	242/62	4.563	
802.11ax-HE80	NII-I	5210	484/65	3.093	11 dBm/MHz
	NII-2A	5290	484/66	1.752	
	NII-2C	5530	484/65	2.010	
		5610	484/66	4.301	
	NII-III ^{Note2}	5775	484/65	0.411	30dBm/500 kHz
			484/66	0.620	
802.11ax-HE160	NII-I/NII-2A	5250	996/67	-3.198	11 dBm/MHz
			996/S67	-3.453	
	NII-2C	5570	996/67	-4.063	
			996/S67	-3.809	

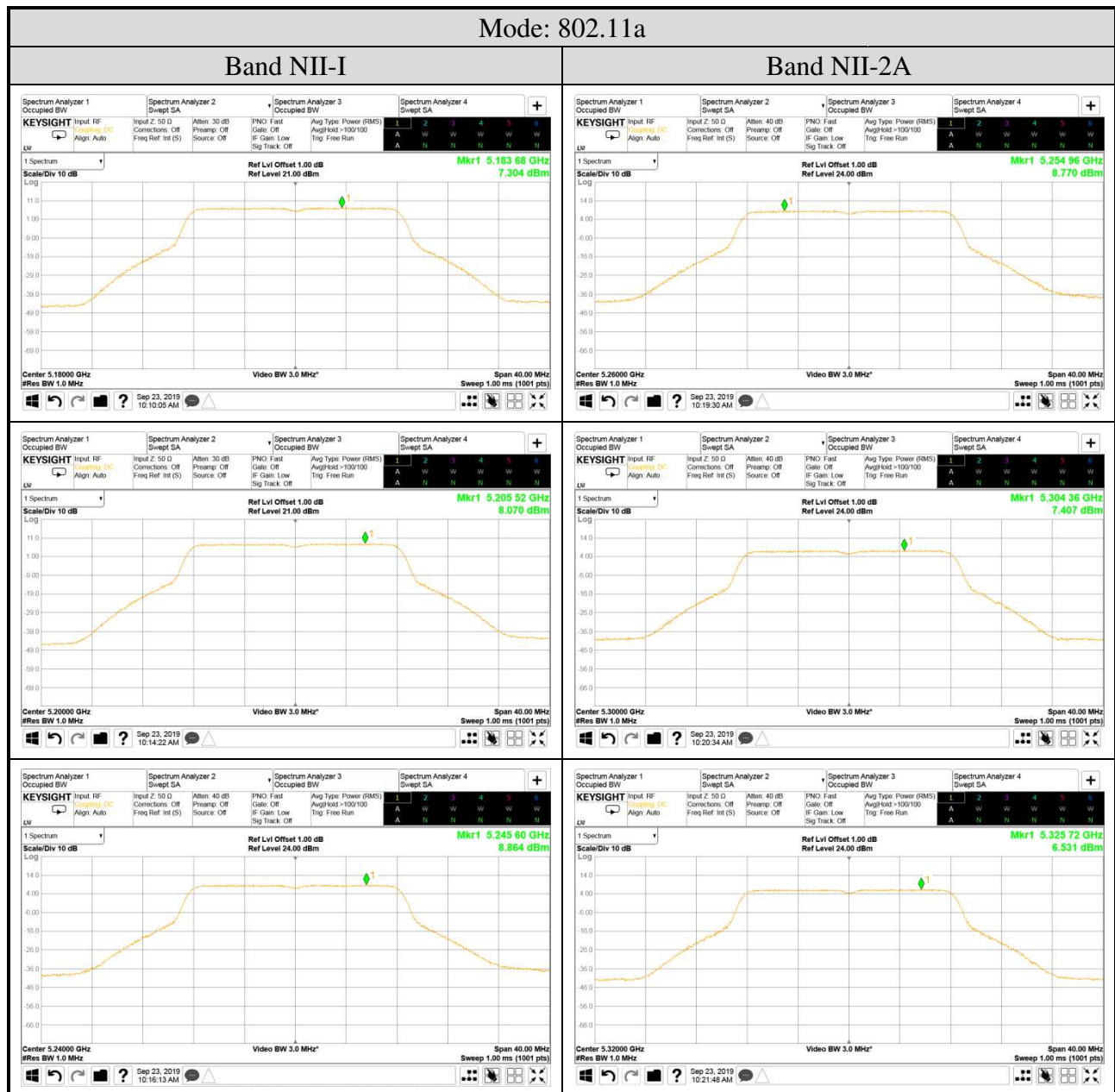
Note 1: All results have been included cable loss and Simultaneous Factor.

Note 2: BWCF 6.99dB (100kHz converted to 500kHz) has been included in the test result.

Audix Technology Corp.
No. 53-11, Dingfu, Linkou, Dist.,
New Taipei City 244, Taiwan

Tel: +886 2 26099301
Fax: +886 2 26099303

A.5.2 Measurement Plots

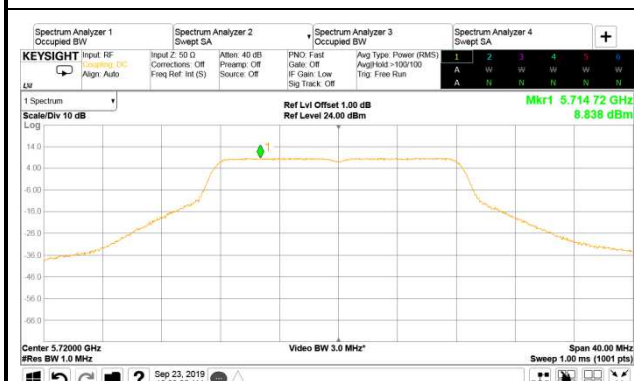
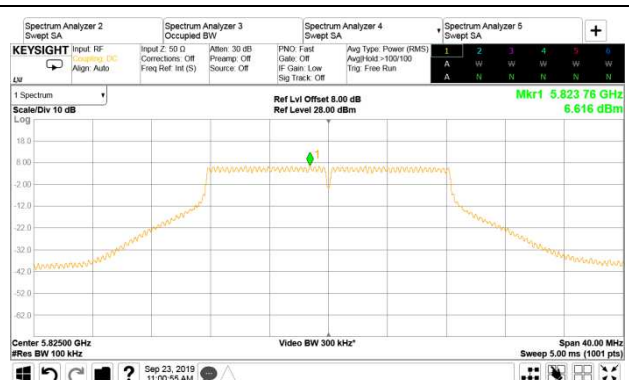
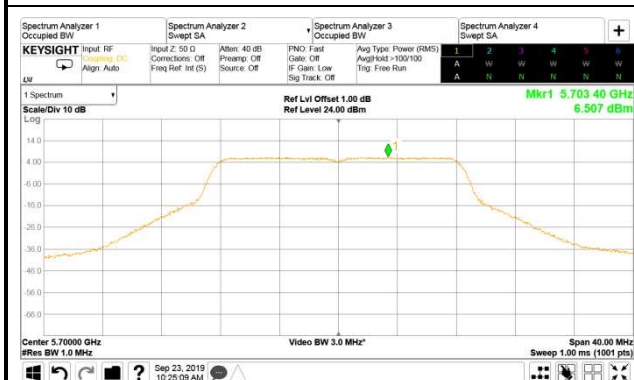
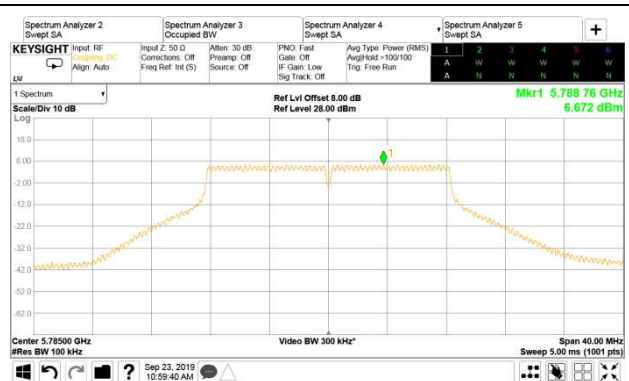
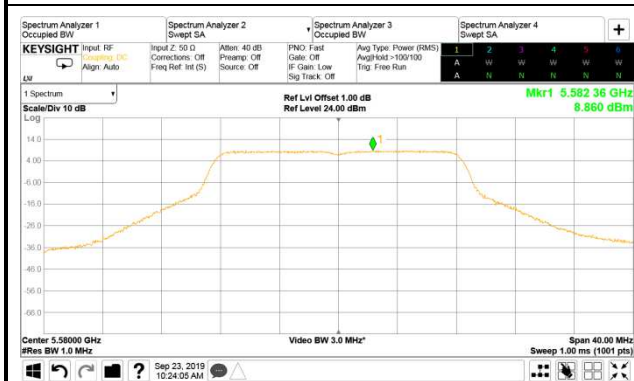
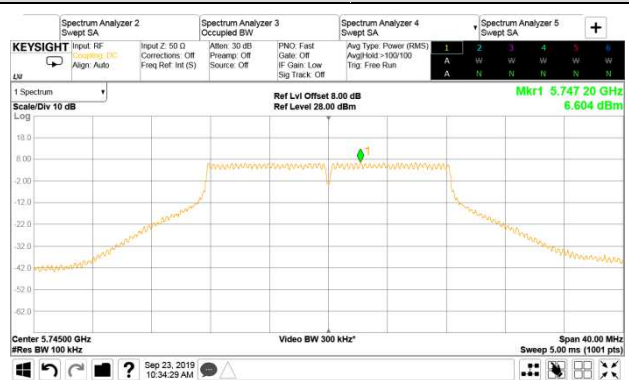


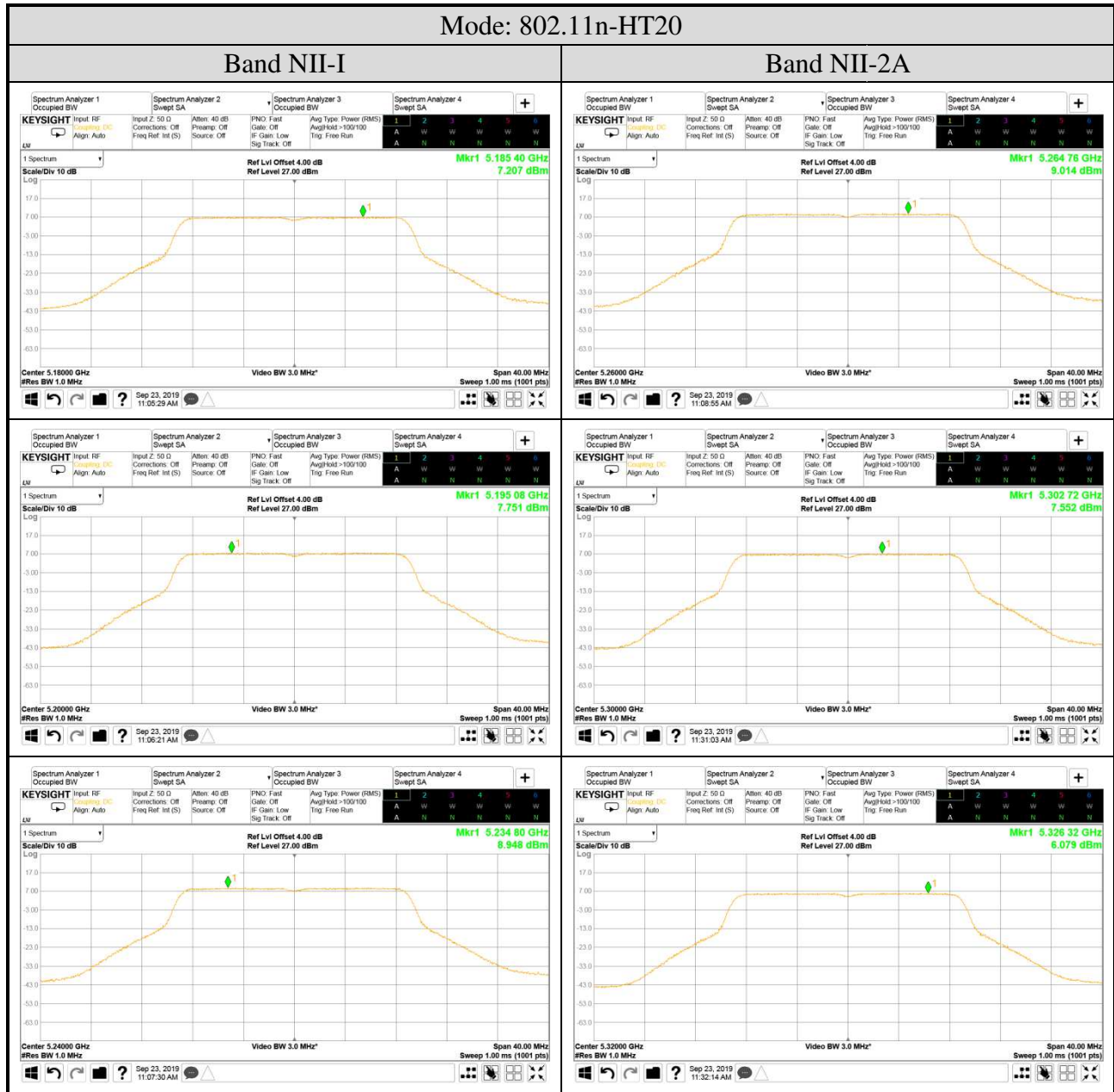
Mode: 802.11a

Band NII-2C



Band NII-III



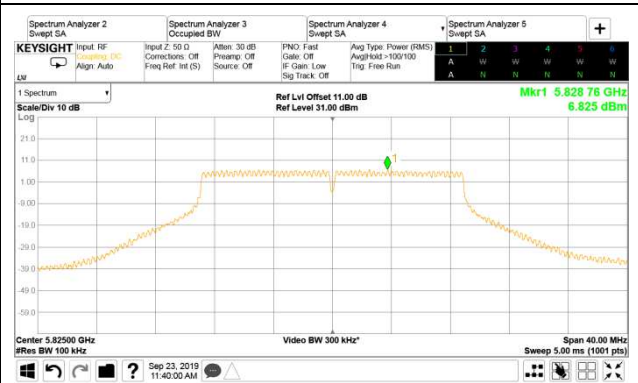
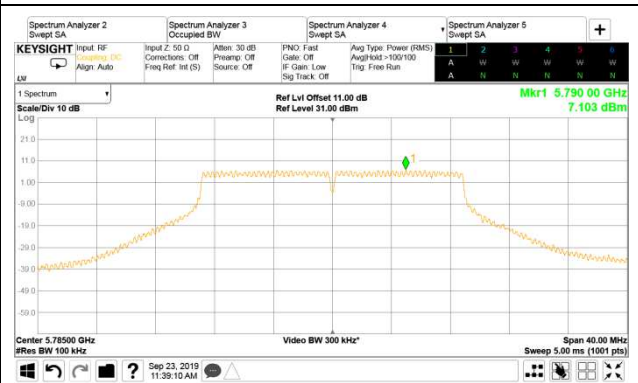
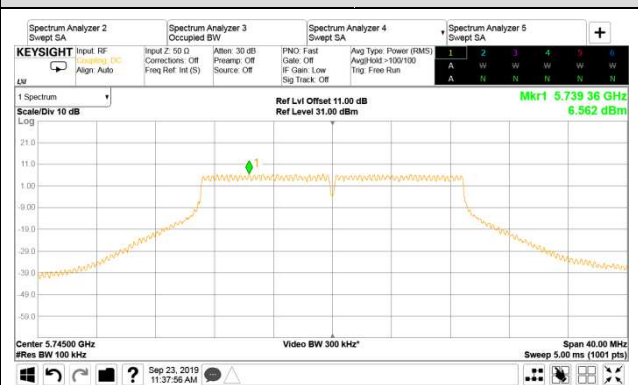


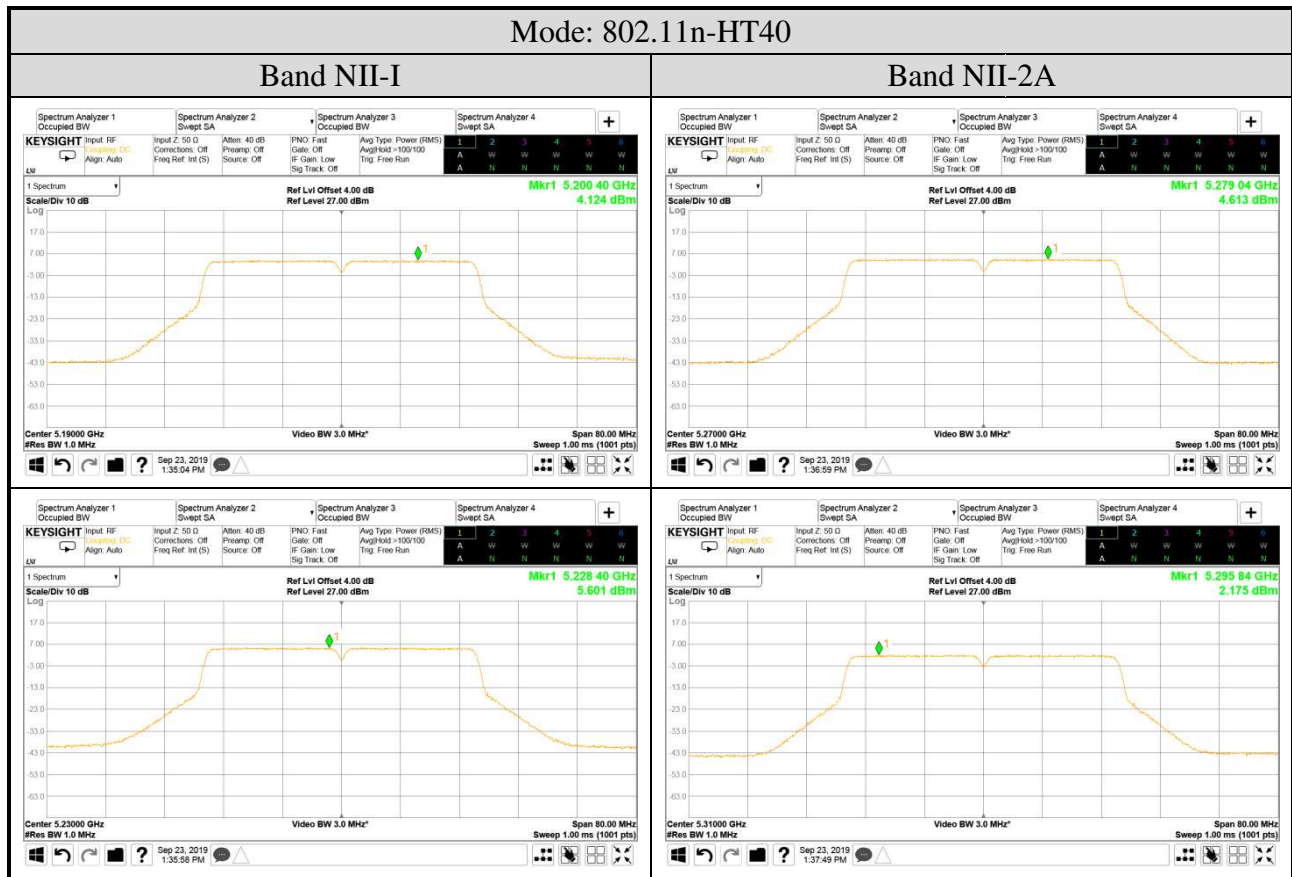
Mode: 802.11n-HT20

Band NII-2C



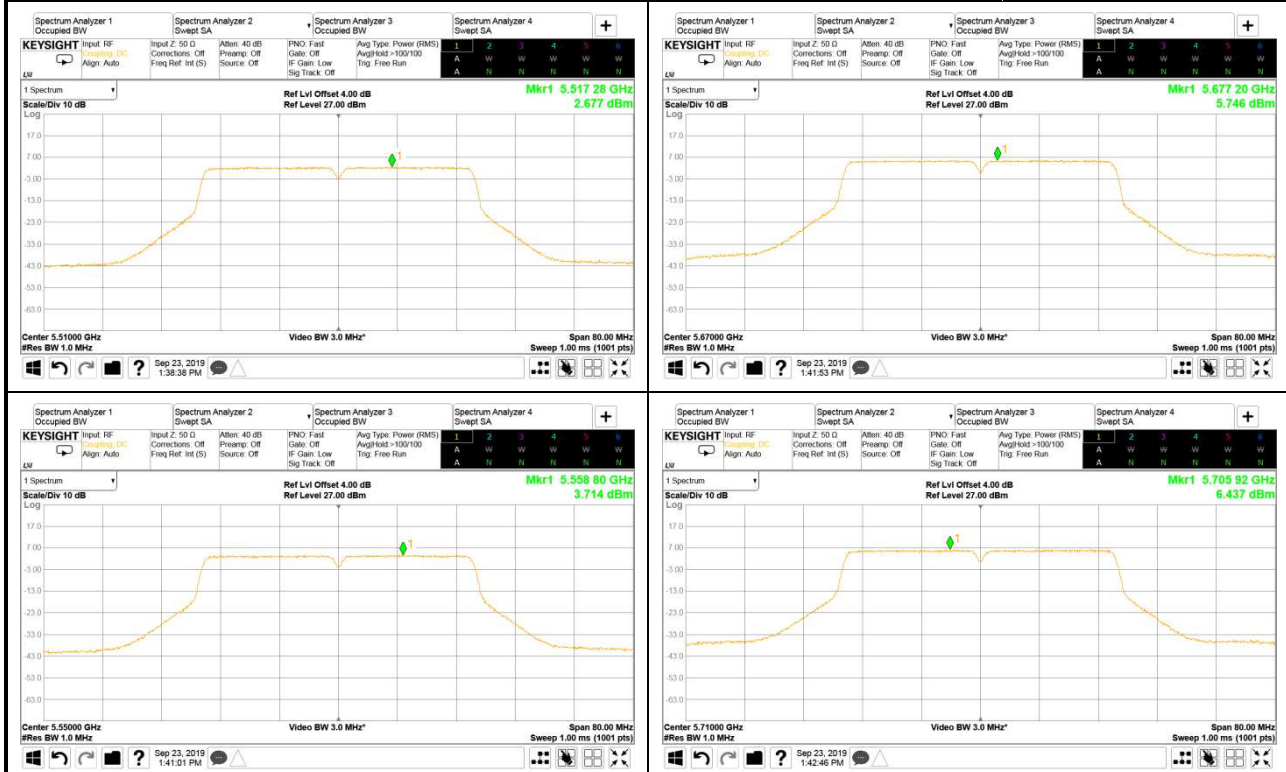
Band NII-III



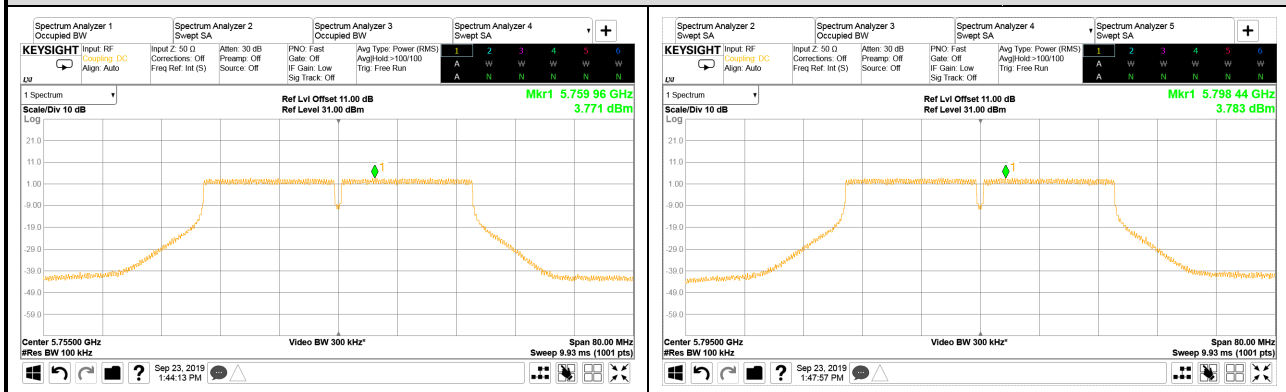


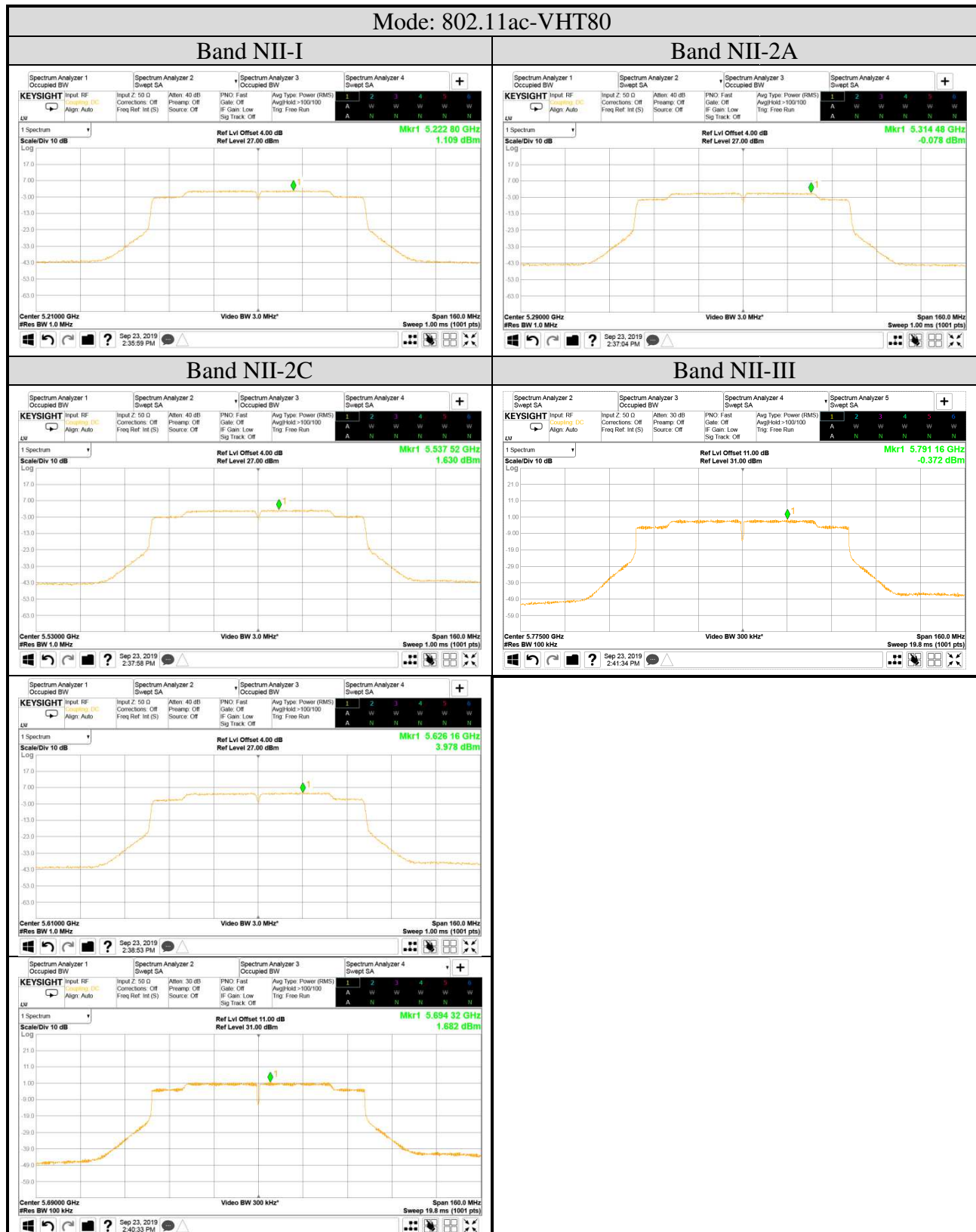
Mode: 802.11n-HT40

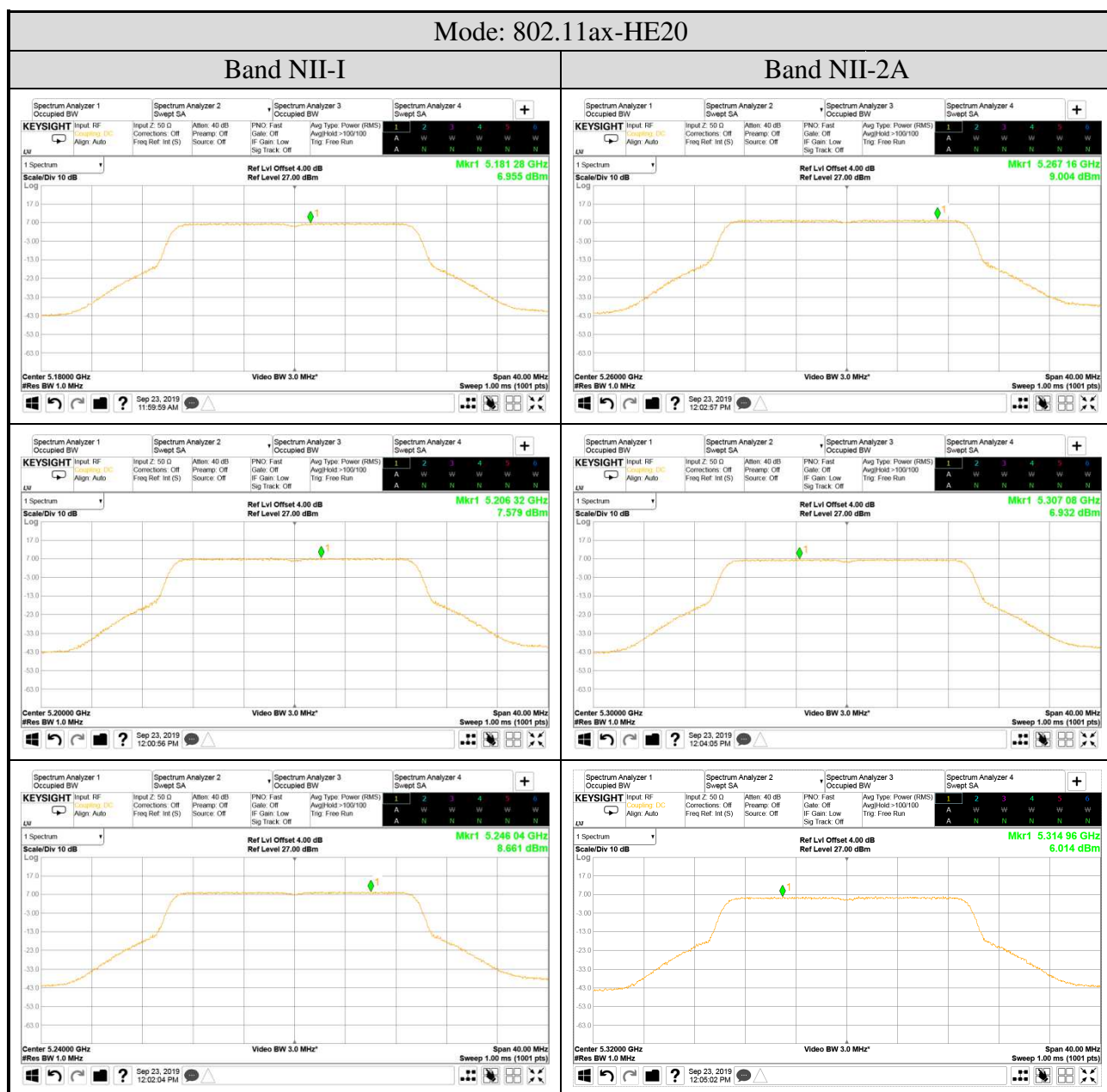
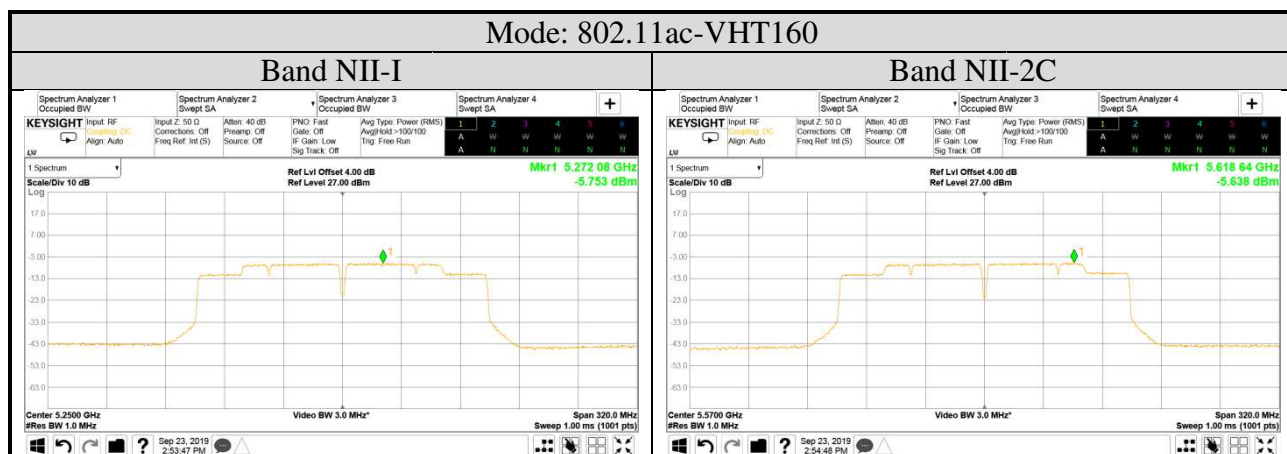
Band NII-2C

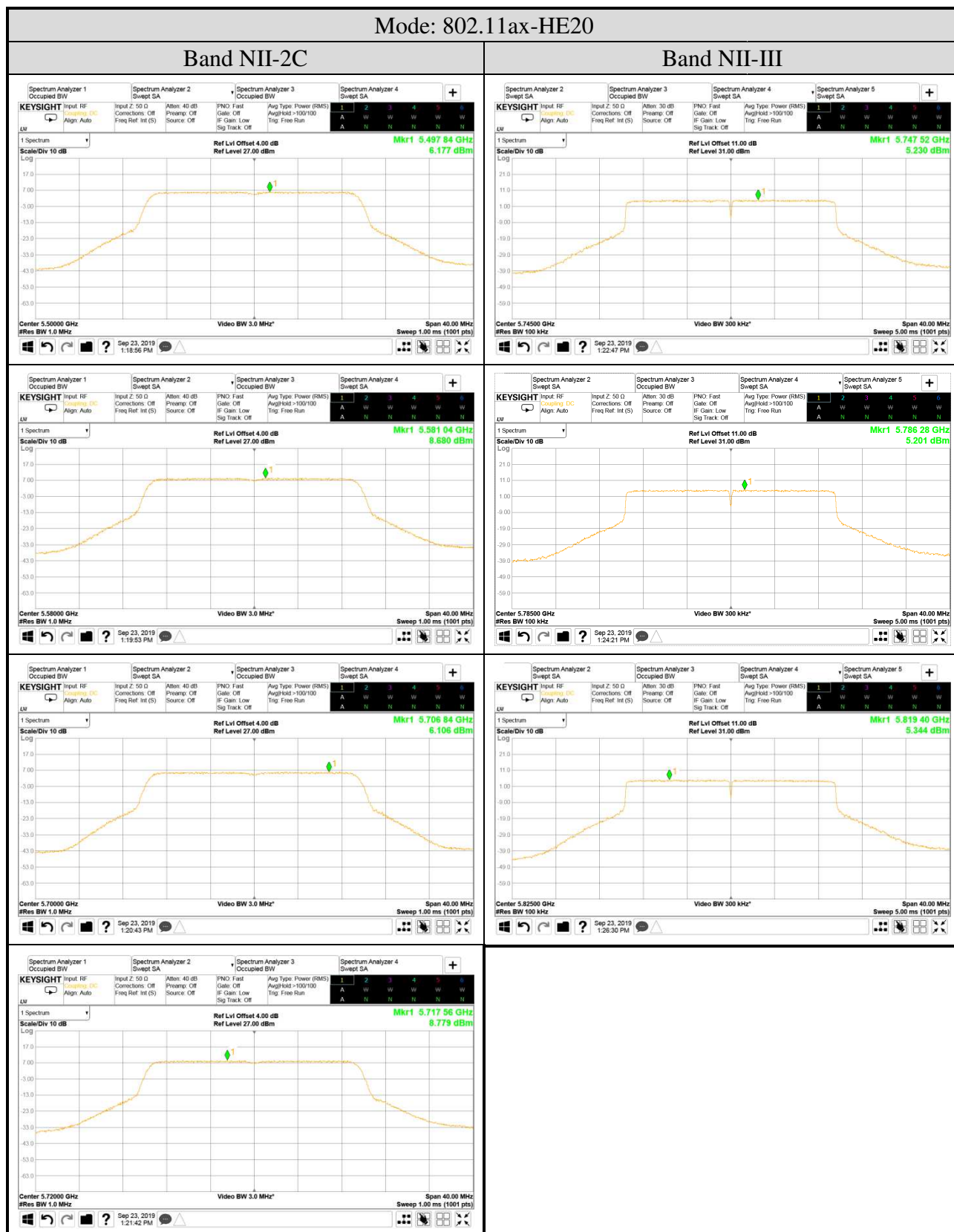


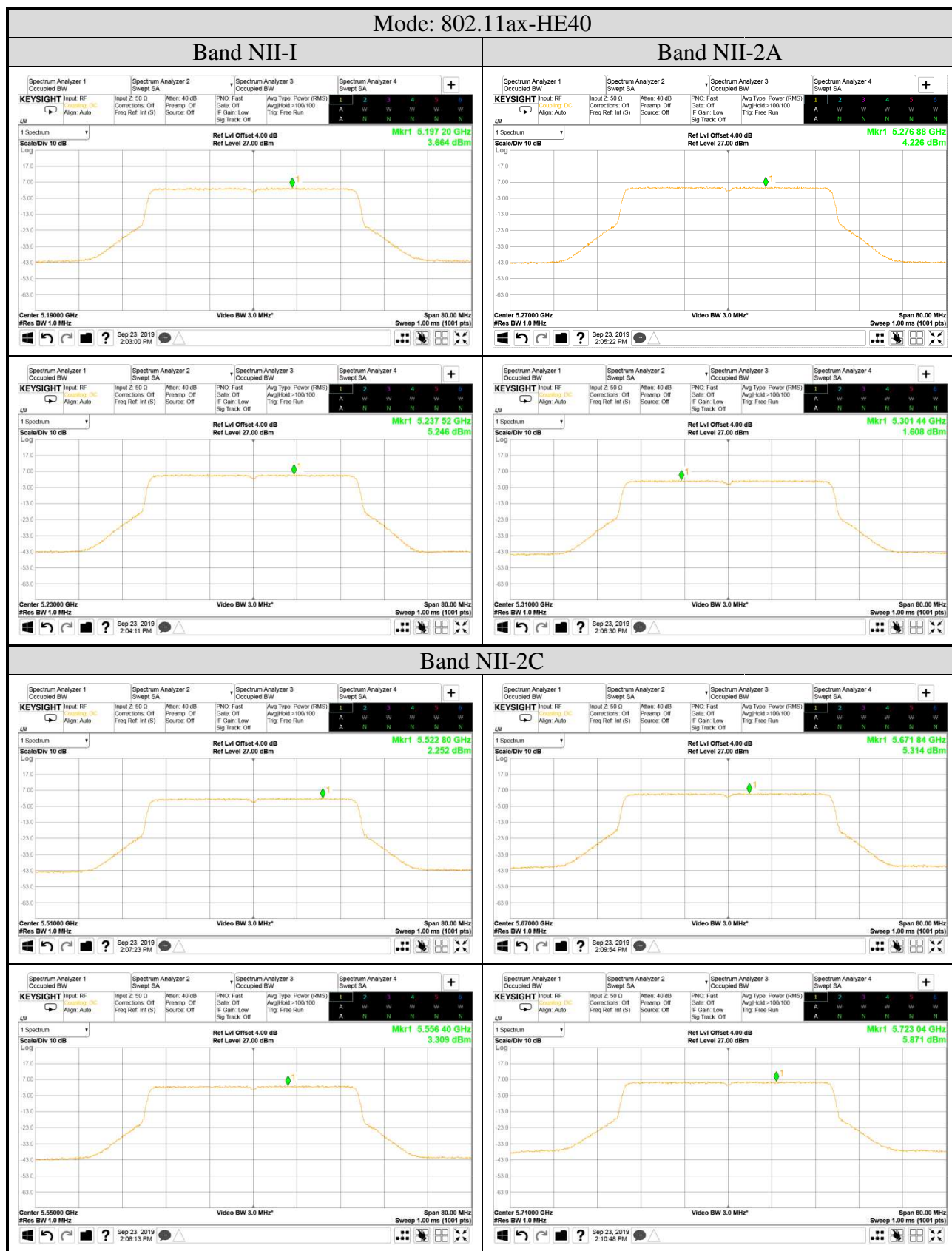
Band NII-III

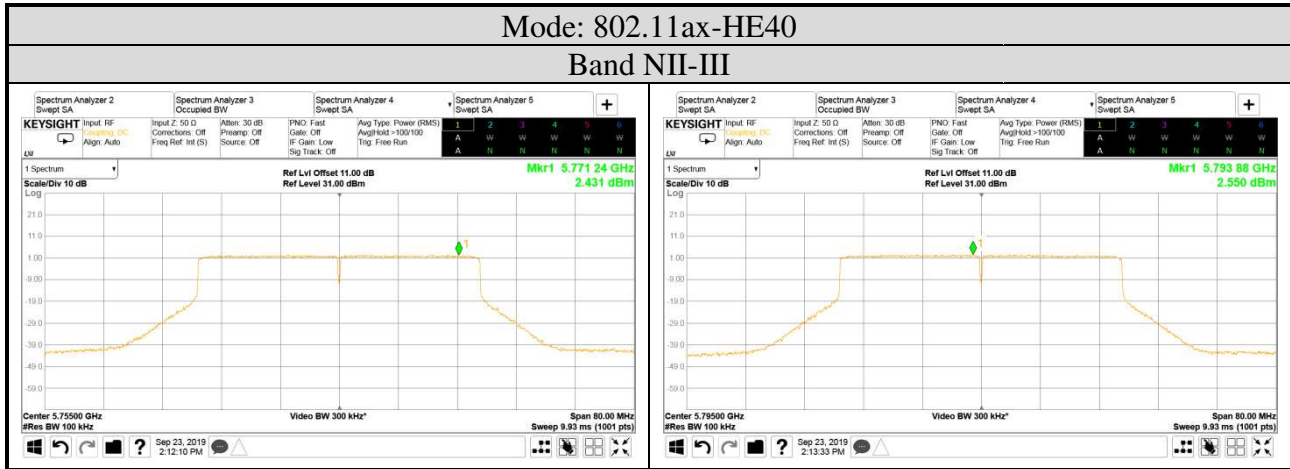


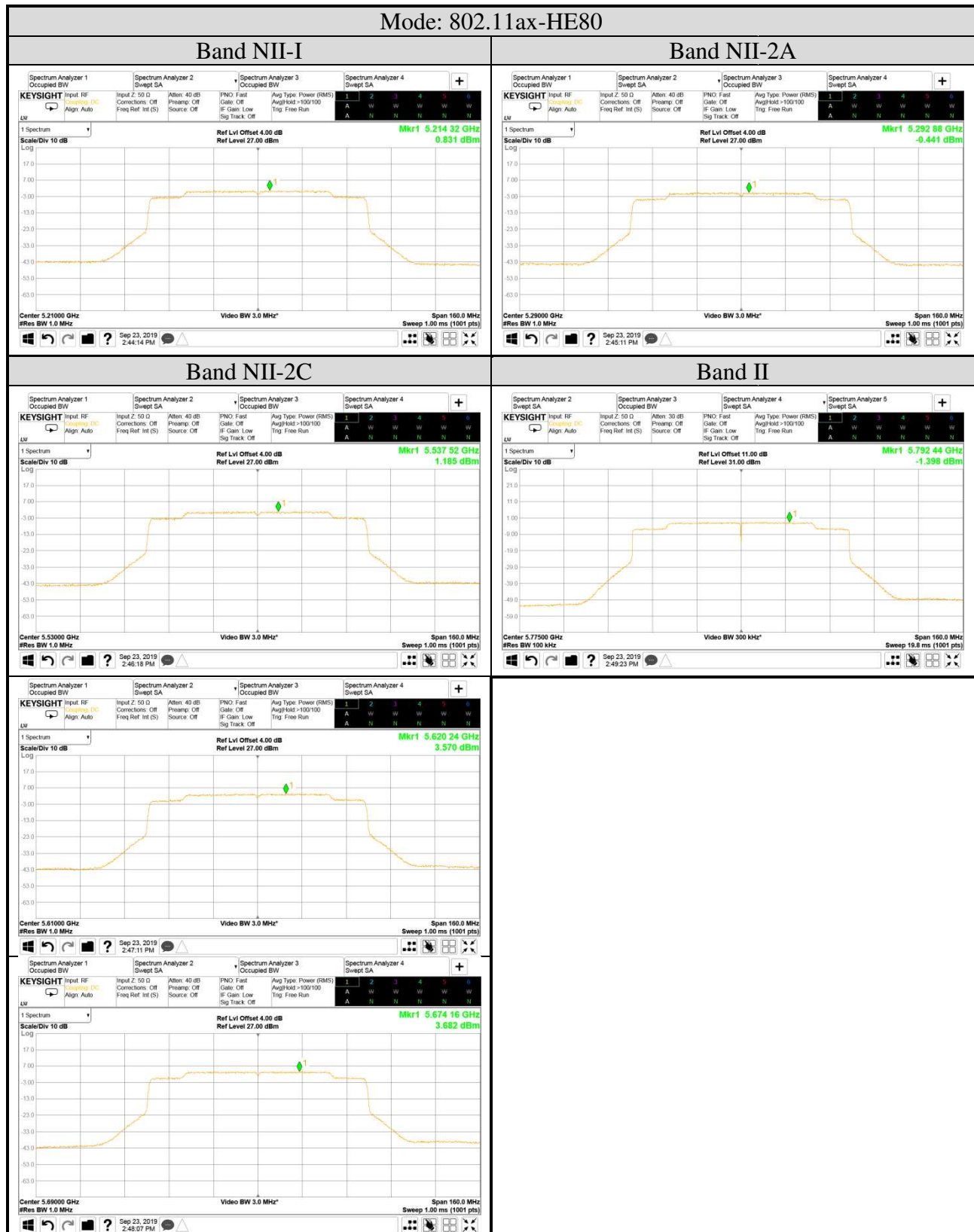


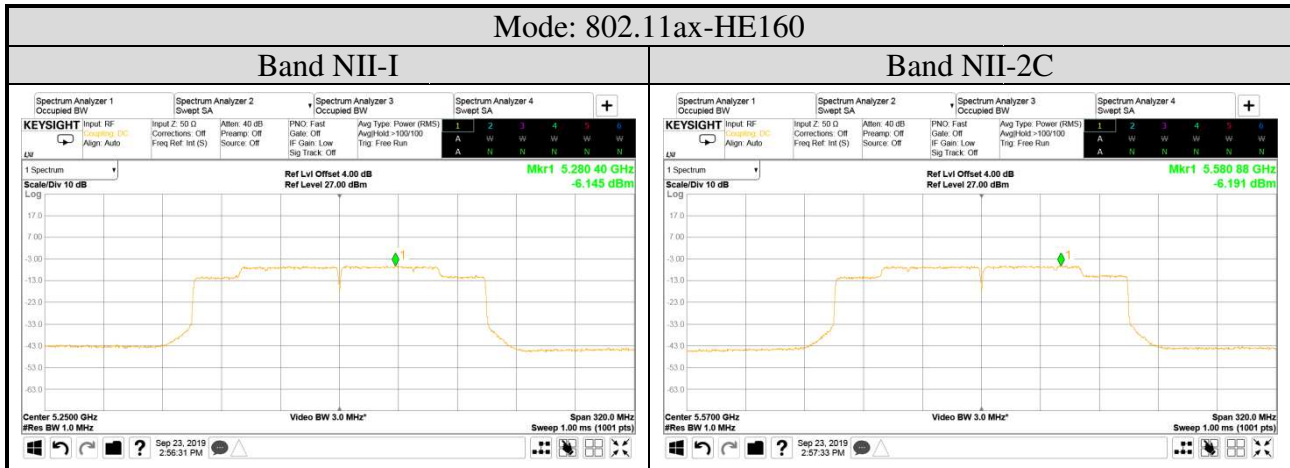


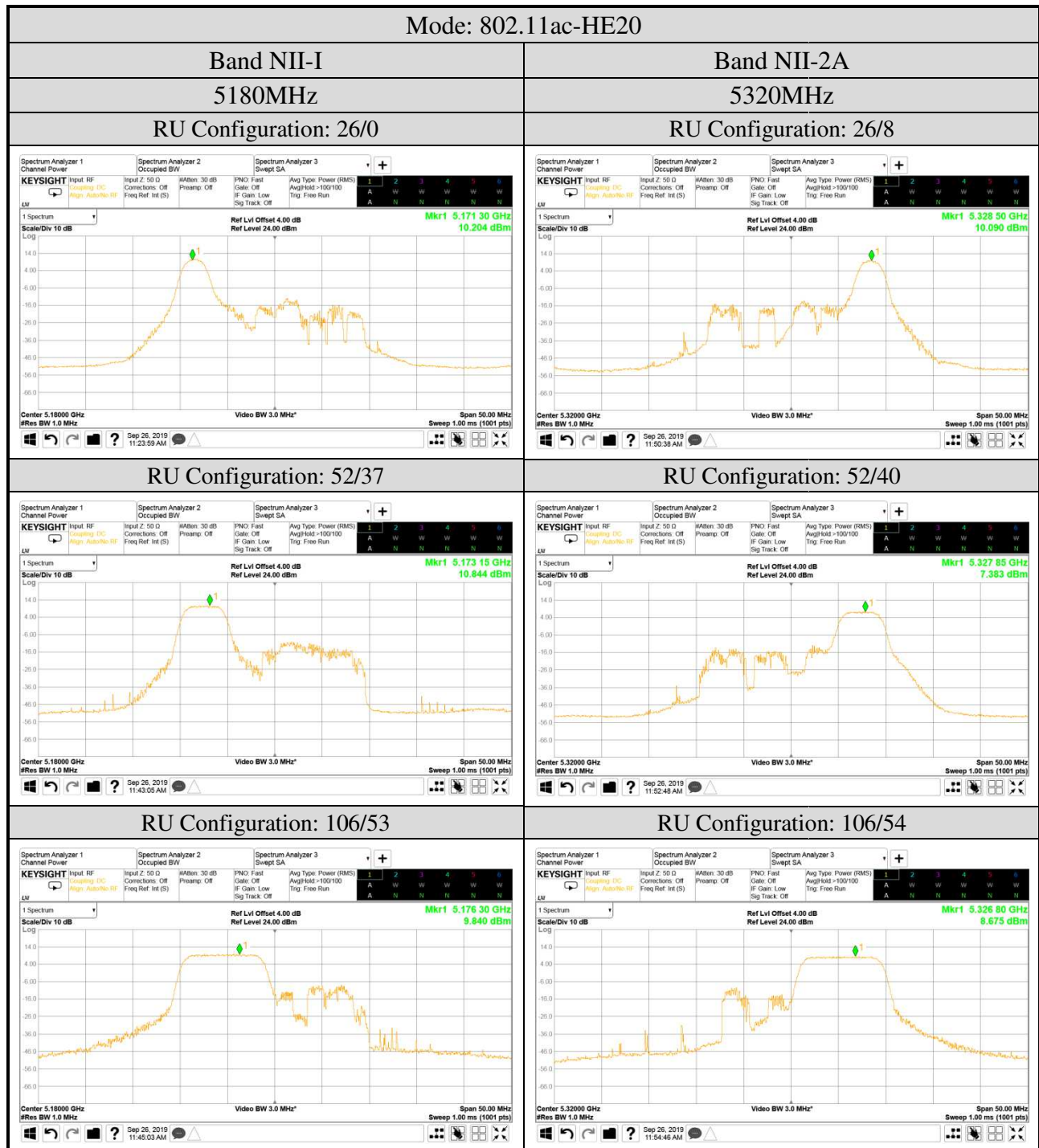


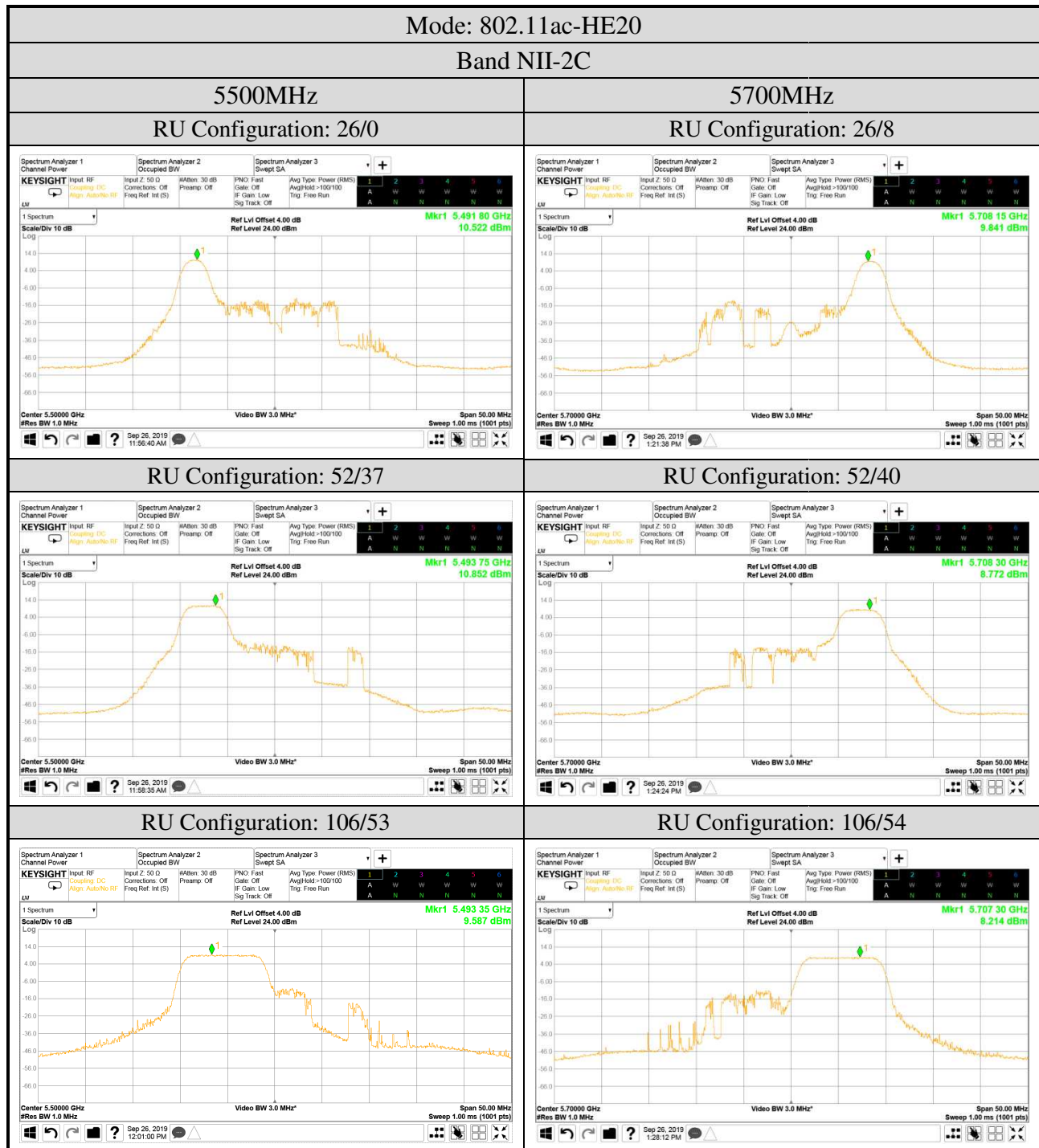


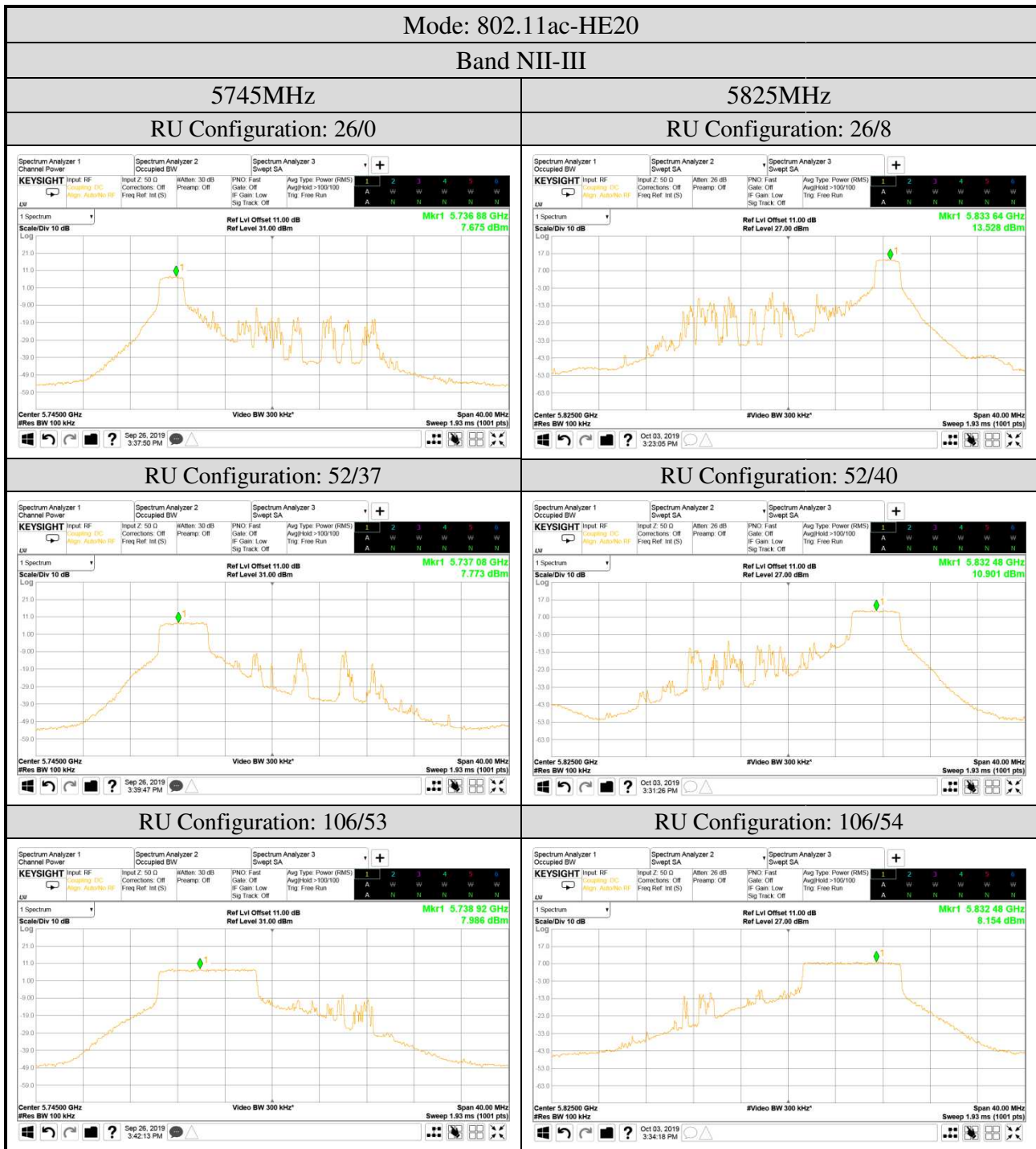






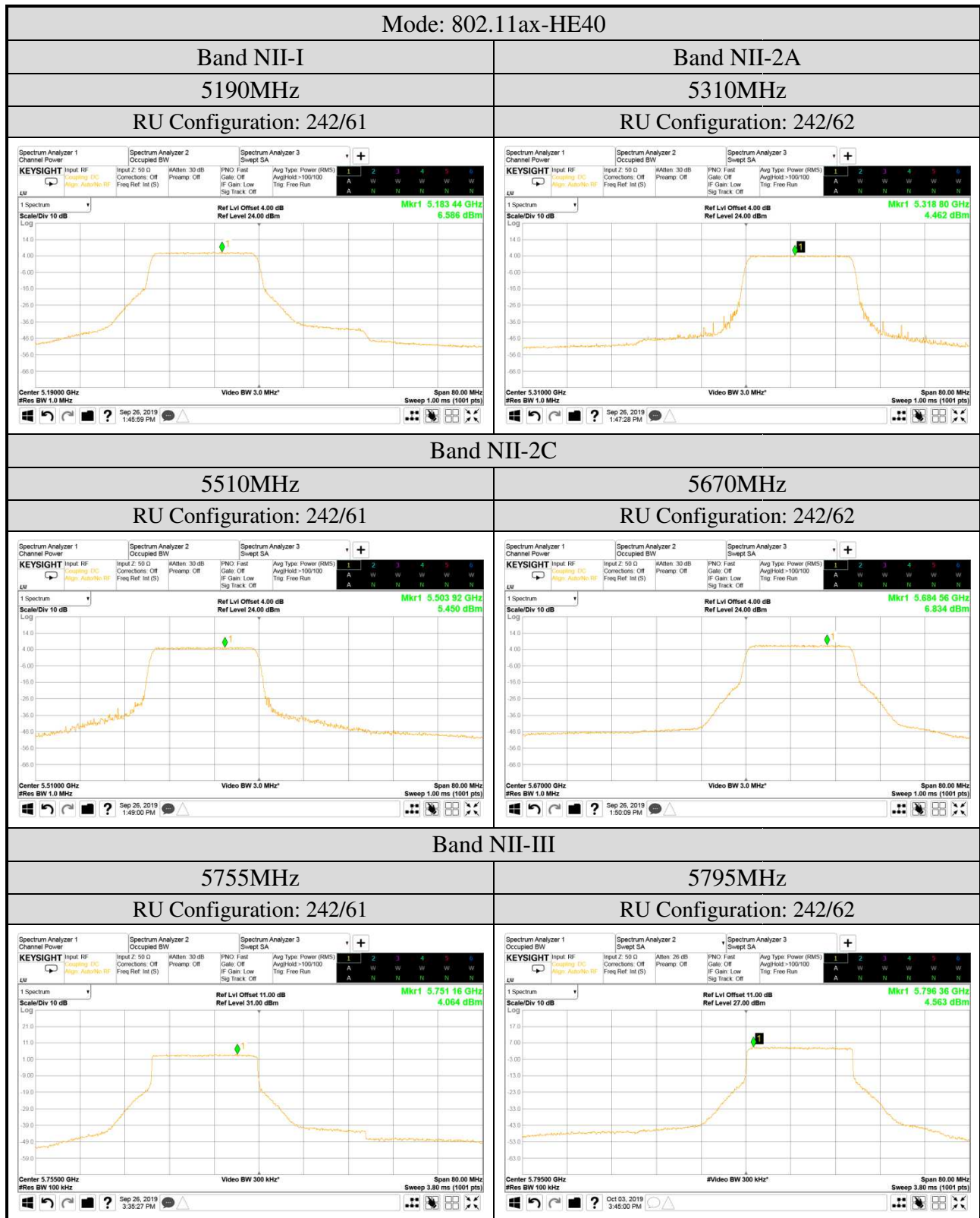


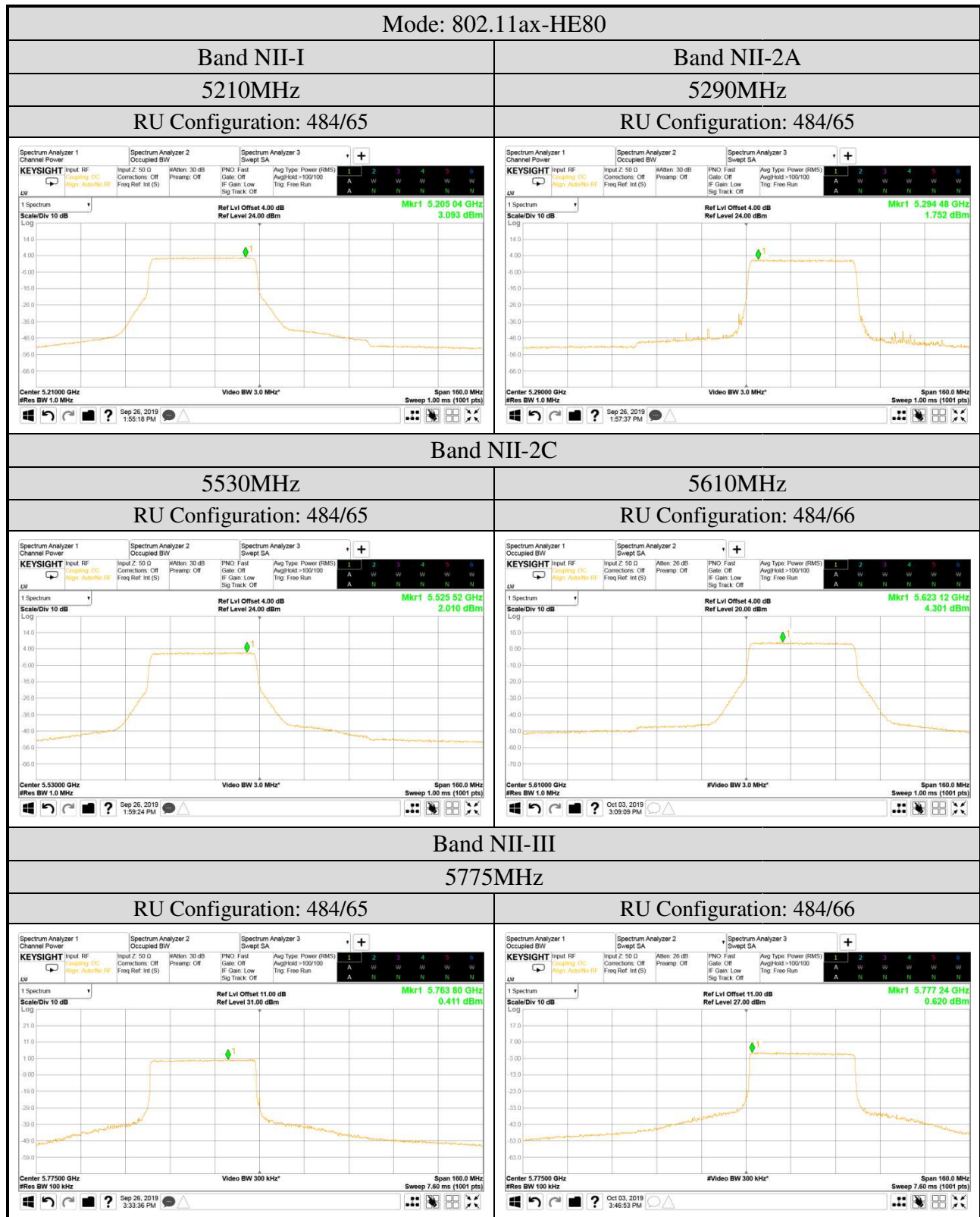




Audix Technology Corp.
No. 53-11, Dingfu, Linkou, Dist.,
New Taipei City 244, Taiwan

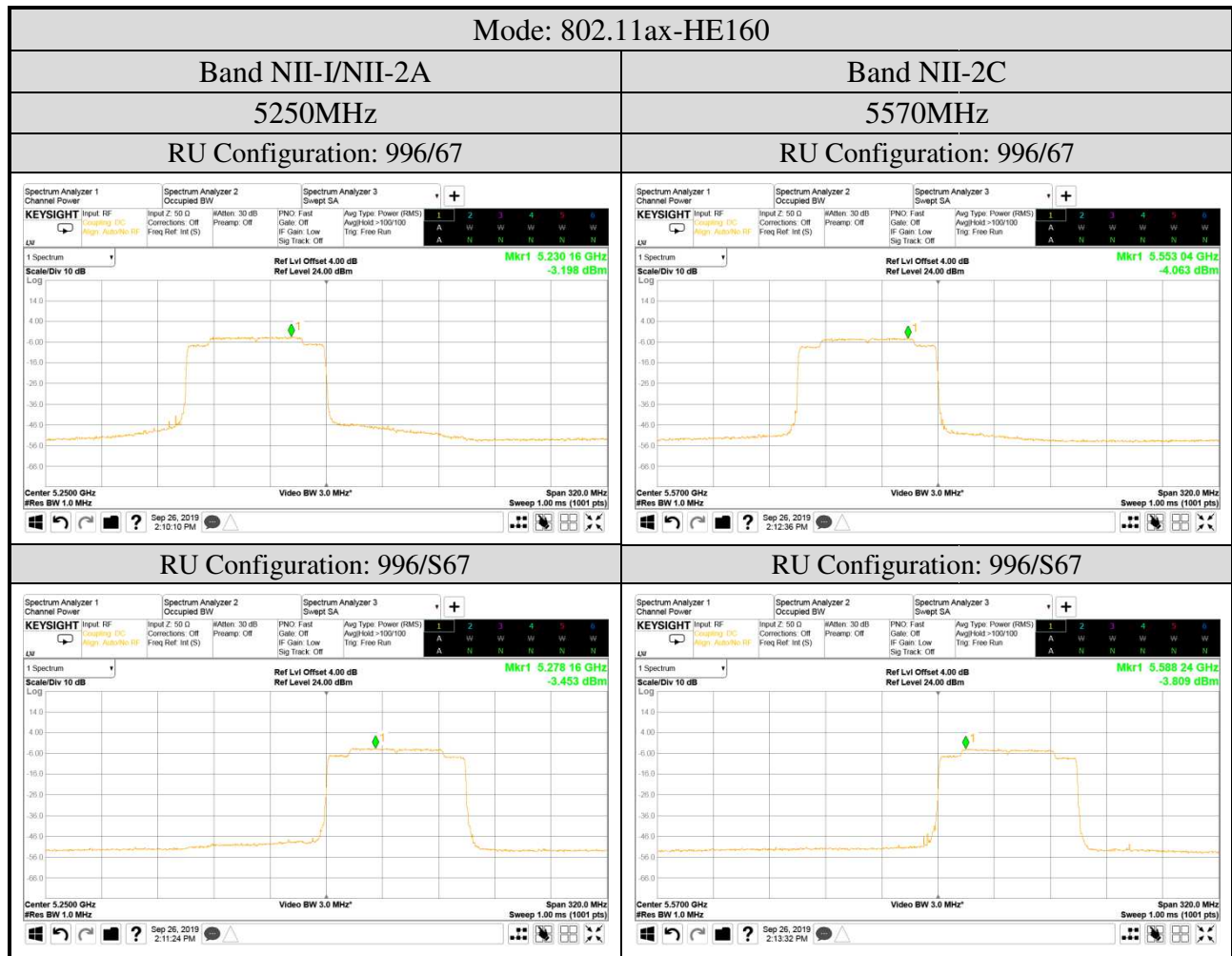
Tel: +886 2 26099301
Fax: +886 2 26099303





Audix Technology Corp.
No. 53-11, Dingfu, Linkou, Dist.,
New Taipei City 244, Taiwan

Tel: +886 2 26099301
Fax: +886 2 26099303



A.6 FREQUENCY STABILITY

Test Date	2019/10/14	Temp./Hum.	26°C/64%
Cable Loss	---	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	5180.002	0.386
-30	102		5179.952	-9.266
	138		5179.959	-7.915
-20	102		5179.967	-6.371
	138		5179.975	-4.826
-10	102		5179.974	-5.019
	138		5179.981	-3.668
0	102		5179.98	-3.861
	138		5179.985	-2.896
10	102		5179.989	-2.124
	138		5179.996	-0.772
20	102		5180.004	0.772
	138		5180.007	1.351
30	102		5180.011	2.124
	138		5180.018	3.475
40	102		5180.016	3.089
	138		5180.024	4.633
50	102		5180.025	4.826
	138		5180.032	6.178