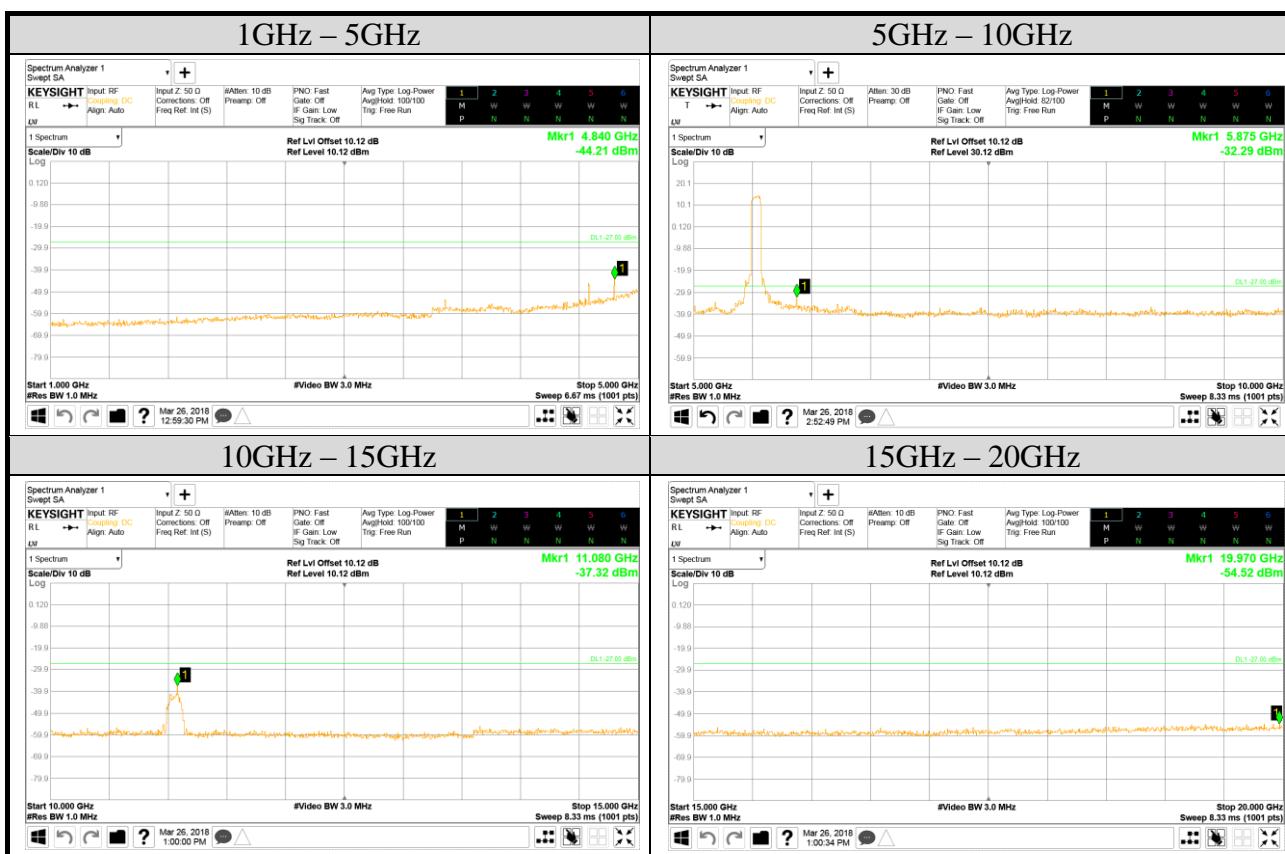


Test Date	2018/03/26	Temp./Hum.	25°C/54%
Mode	802.11ac-VHT80	UNII Band	II-2A
Cable Loss	1.74dB	Frequency	TX 5290MHz
Simultaneous Factor 10 log(n) (Note: "n" is antenna number)	Test Voltage AC 120V, 60Hz (via AC/DC Adapter)		
			6.02





Test Date	2018/03/26	Temp./Hum.	25°C/54%
Mode	802.11ac-VHT80	UNII Band	II-2C
Cable Loss	1.74dB	Frequency	TX 5530MHz
Simultaneous Factor 10 log(n) (Note: "n" is antenna number)	Test Voltage AC 120V, 60Hz (via AC/DC Adapter)		
			6.02



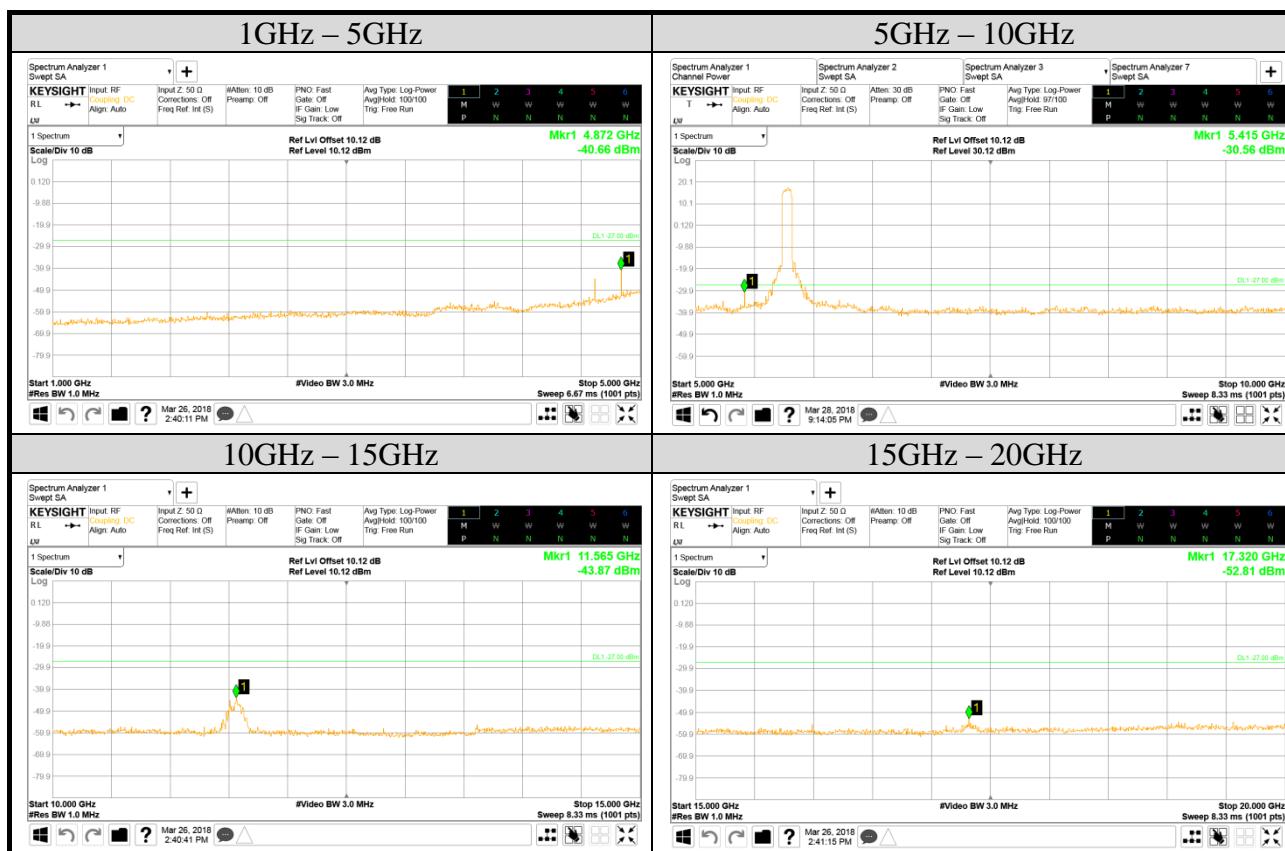


Test Date	2018/03/26	Temp./Hum.	25°C/54%
Mode	802.11ac-VHT80	UNII Band	II-2C
Cable Loss	1.74dB	Frequency	TX 5610MHz
Simultaneous Factor 10 log(n) (Note: "n" is antenna number)	Test Voltage AC 120V, 60Hz (via AC/DC Adapter)		
			6.02





Test Date	2018/03/26~28	Temp./Hum.	25°C/54%
Mode	802.11ac-VHT80	UNII Band	III
Cable Loss	1.74dB	Frequency	TX 5775MHz
Simultaneous Factor 10 log(n) (Note: "n" is antenna number)			AC 120V, 60Hz (via AC/DC Adapter)
			6.02





## A.6 POWER SPECTRAL DENSITY

Test Date	2018/03/26~11/26	Temp./Hum.	24~25°C/54~55%
Test Voltage	AC 120V, 60Hz (via AC/DC Adapter)		

### A.6.1 Power Spectral Density Result

- CDD Mode

Mode	UNII Band	Centre Frequency (MHz)	Power Spectral Density (dBm)	Limit
802.11a	I	5180	7.816	8.62 dBm/MHz <sup>Note 2</sup>
		5200	8.056	
		5240	7.979	
	II-2A	5260	7.983	
		5300	7.841	
		5320	7.677	
	II-2C	5500	8.053	
		5580	8.091	
		5700	8.086	
	III <sup>Note 3</sup>	5745	15.943	27.62dBm/500 kHz <sup>Note 2</sup>
		5785	16.767	
		5825	16.414	

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

2. According to KDB 662911 D01, Directional gain=G<sub>ANT</sub>+ Array Gain ;

$$\text{Array Gain}=10\log(N_{\text{ANT}}/N_{\text{SS}})$$

$$\text{Directional gain}=2.36+10\log(4/1)=2.36+6.02=8.38\text{dBi} > 6 \text{ dBi}$$

Band I~II-2C: Limit=11-(8.38-6)=8.62dBm Band III: Limit=30-(8.38-6)=27.62dBm

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

Mode	UNII Band	Centre Frequency (MHz)	Power Spectral Density (dBm)	Limit
802.11n- HT20	I	5180	8.048	8.62 dBm/MHz <sup>Note 2</sup>
		5200	7.763	
		5240	8.087	
	II-2A	5260	8.052	
		5300	7.967	
		5320	7.887	
	II-2C	5500	8.038	
		5580	8.115	
		5700	8.114	
	III <sup>Note 3</sup>	5745	17.168	
		5785	17.183	
		5825	16.838	
802.11ac- VHT40	I	5190	8.118	8.62 dBm/MHz <sup>Note 2</sup>
		5230	8.020	
	II-2A	5270	8.098	
		5310	7.820	
	II-2C	5510	8.118	
		5550	8.102	
		5670	8.100	
	III <sup>Note 3</sup>	5755	12.974	
		5795	13.433	
802.11ac- VHT80	I	5210	6.285	8.62 dBm/MHz <sup>Note 2</sup>
	II-2A	5290	6.581	
	II-2C	5530	6.665	
		5610	6.487	
	III <sup>Note 3</sup>	5775	10.883	27.62dBm/500 kHz <sup>Note 2</sup>

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

2. According to KDB 662911 D01, Directional gain=G<sub>ANT</sub>+ Array Gain ;

$$\text{Array Gain}=10\log(N_{\text{ANT}}/N_{\text{SS}})$$

$$\text{Directional gain}=2.36+10\log(4/1)=2.36+6.02=8.38\text{dBi} > 6 \text{ dBi}$$

$$\text{Band I~II-2C: Limit}=11-(8.38-6)=8.62\text{dBm} \quad \text{Band III: Limit}=30-(8.38-6)=27.62\text{dBm}$$

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

- SDM Mode

Mode	UNII Band	Centre Frequency (MHz)	Power Spectral Density (dBm)	Limit
802.11n-HT20	I	5180	10.308	11 dBm/MHz
		5200	10.390	
		5240	10.461	
	II-2A	5260	10.464	
		5300	10.372	
		5320	10.302	
	II-2C	5500	10.455	
		5580	10.282	
		5700	10.467	
	III <sup>Note3</sup>	5745	17.168	30dBm/500 kHz
		5785	17.183	
		5825	16.838	
802.11ac-VHT40	I	5190	10.450	11 dBm/MHz
		5230	9.529	
	II-2A	5270	9.297	
		5310	8.960	
	II-2C	5510	8.962	
		5550	8.864	
		5670	8.176	
	III <sup>Note3</sup>	5755	12.974	30dBm/500 kHz
		5795	13.433	
802.11ac-VHT80	I	5210	5.418	11 dBm/MHz
	II-2A	5290	4.891	
	II-2C	5530	5.684	
		5610	5.291	
	III <sup>Note3</sup>	5775	10.883	30dBm/500 kHz

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

2. According to KDB 662911 D01, Directional gain=G<sub>ANT</sub>+ Array Gain ;

$$\text{Array Gain}=10\log(N_{\text{ANT}}/N_{\text{SS}})$$

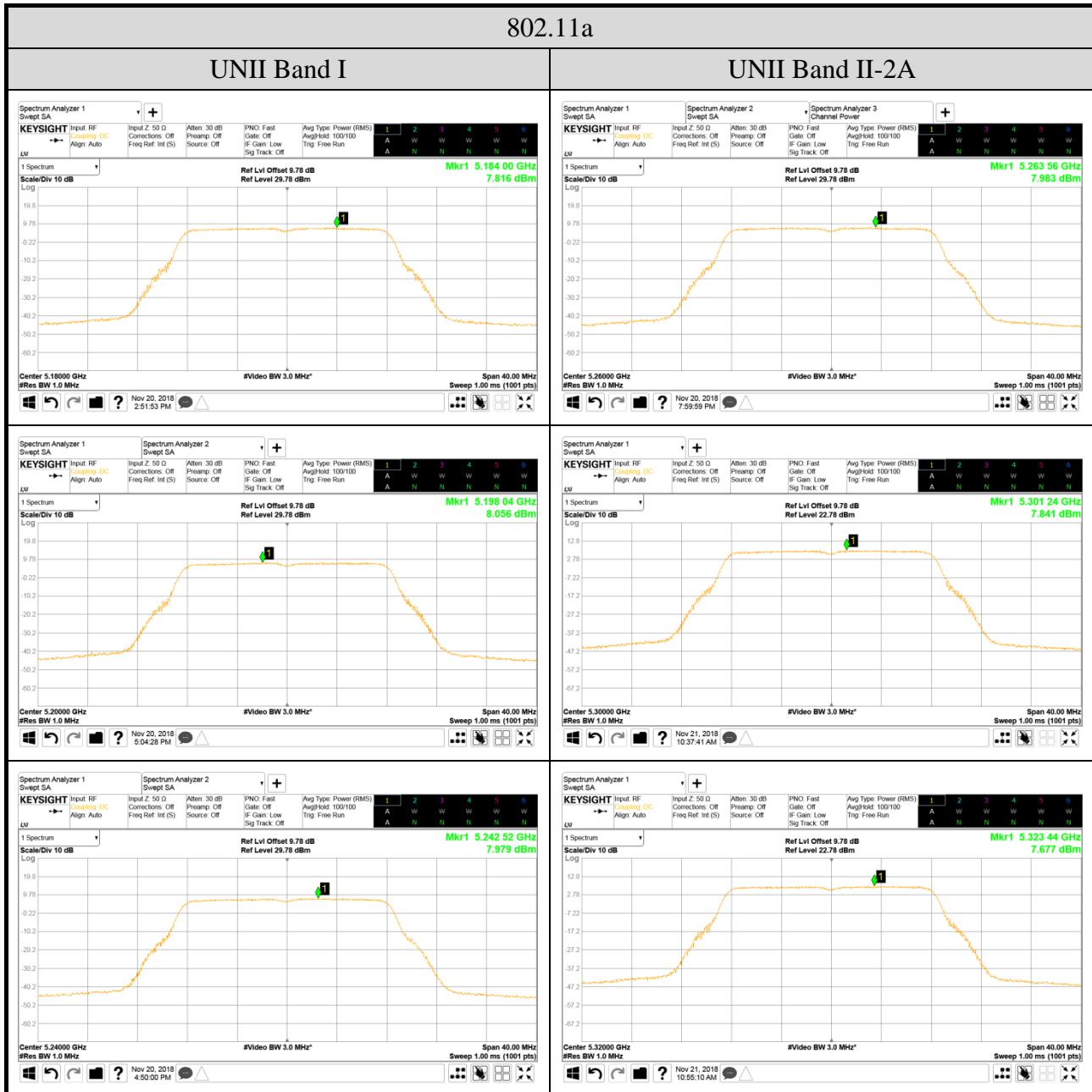
$$\text{Directional gain}=2.36+10\log(4/2)=2.36+3.01=5.37\text{dBi} < 6 \text{ dBi}$$

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

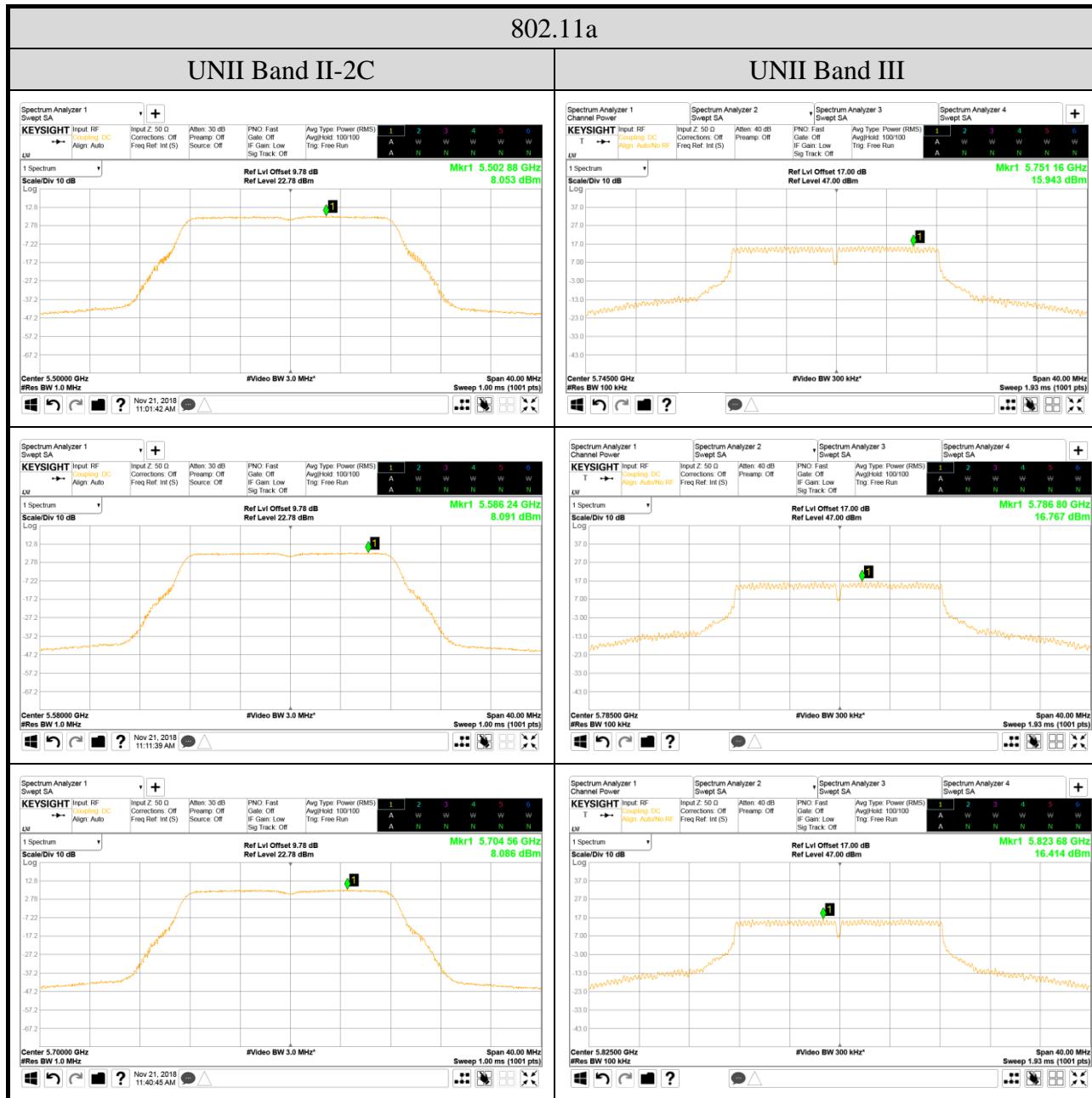
### A.6.3 Measurement Plots

- CDD Mode

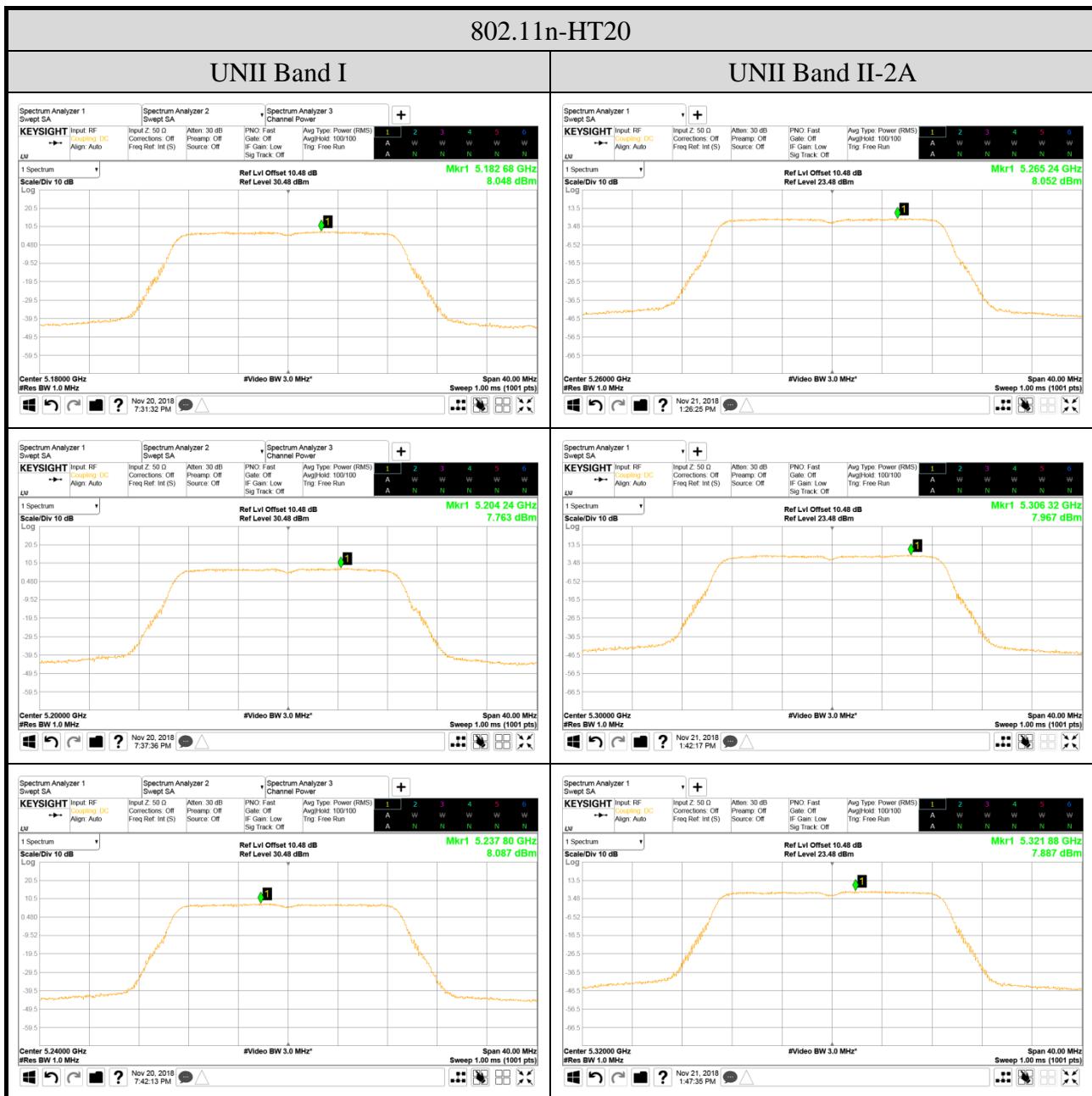
Cable Loss	Band I & II-2A: 3.48dB	Duty Cycle Factor	0.28dB
	Simultaneous Factor10 log(n) (Note: "n" is antenna number)		6.02



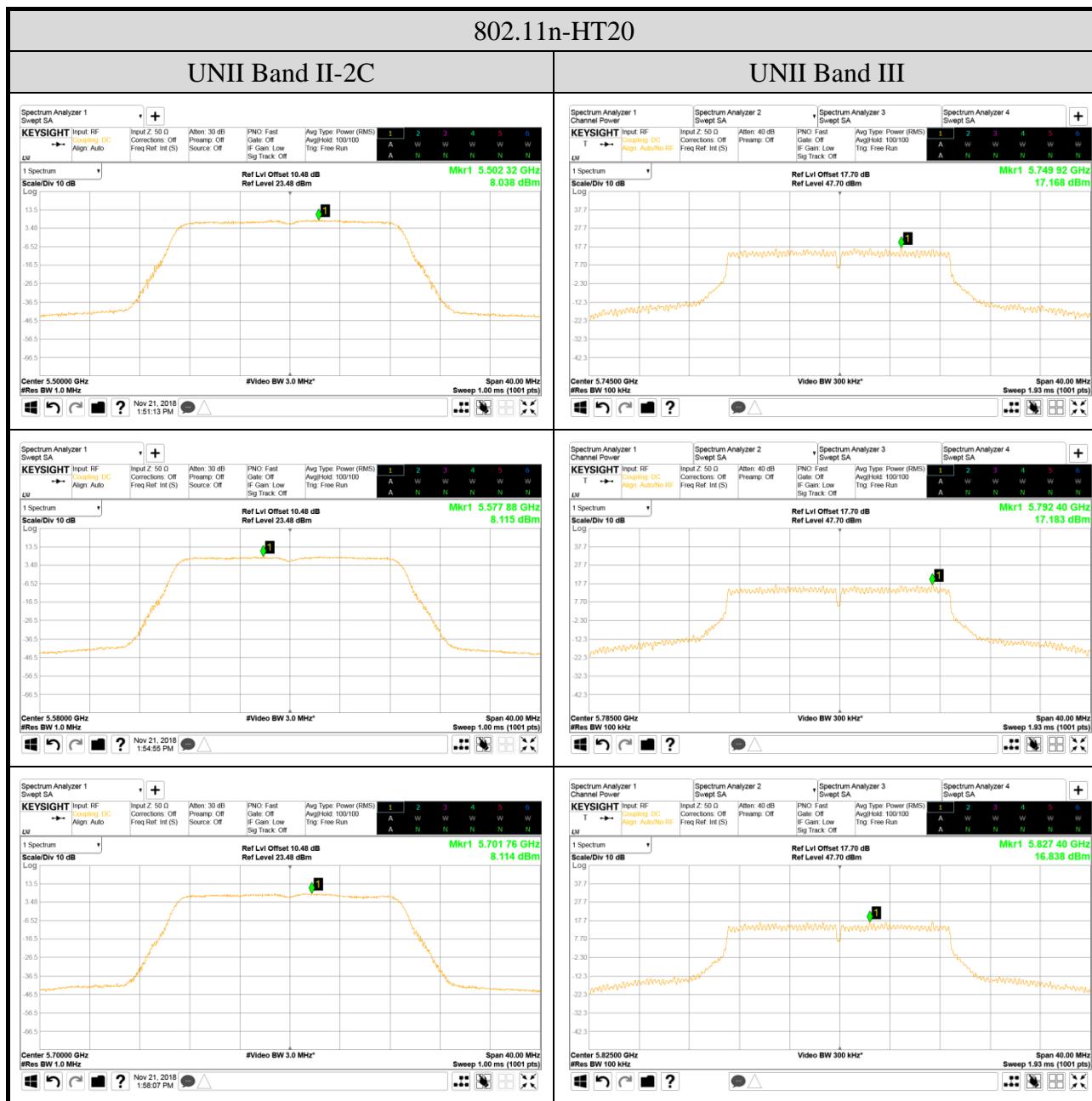
Cable Loss	Band II-2C: 3.48dB Band III: 3.7dB	Duty Cycle Factor	0.28dB
	Simultaneous Factor $10 \log(n)$ (Note: "n" is antenna number)		6.02



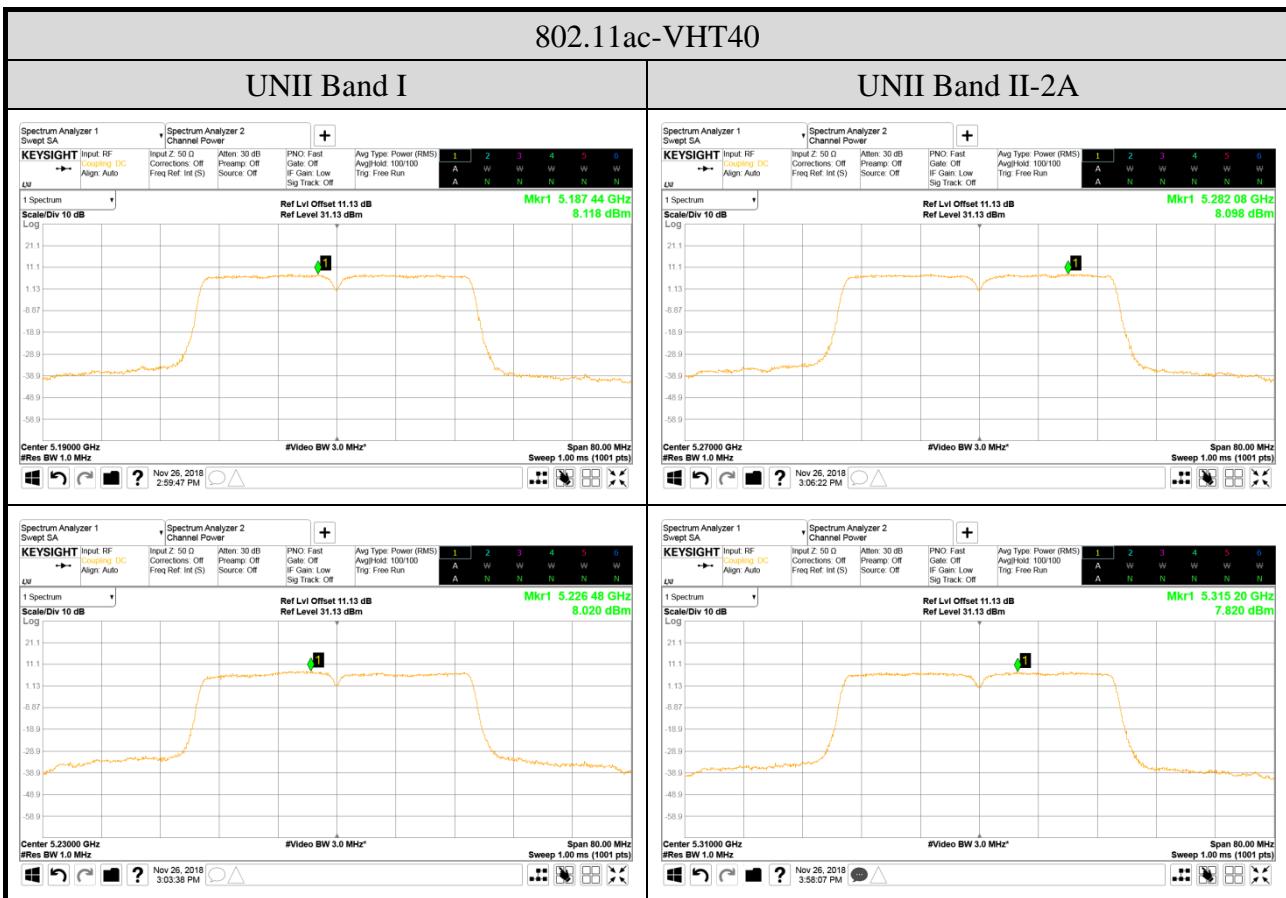
Cable Loss	Band I & II-2A: 3.48dB	Duty Cycle Factor	0.98dB
Simultaneous Factor10 log(n) (Note: "n" is antenna number)			6.02



Cable Loss	Band II-2C: 3.48dB Band III: 3.7dB	Duty Cycle Factor	0.98dB
	Simultaneous Factor $10 \log(n)$ (Note: "n" is antenna number)		6.02



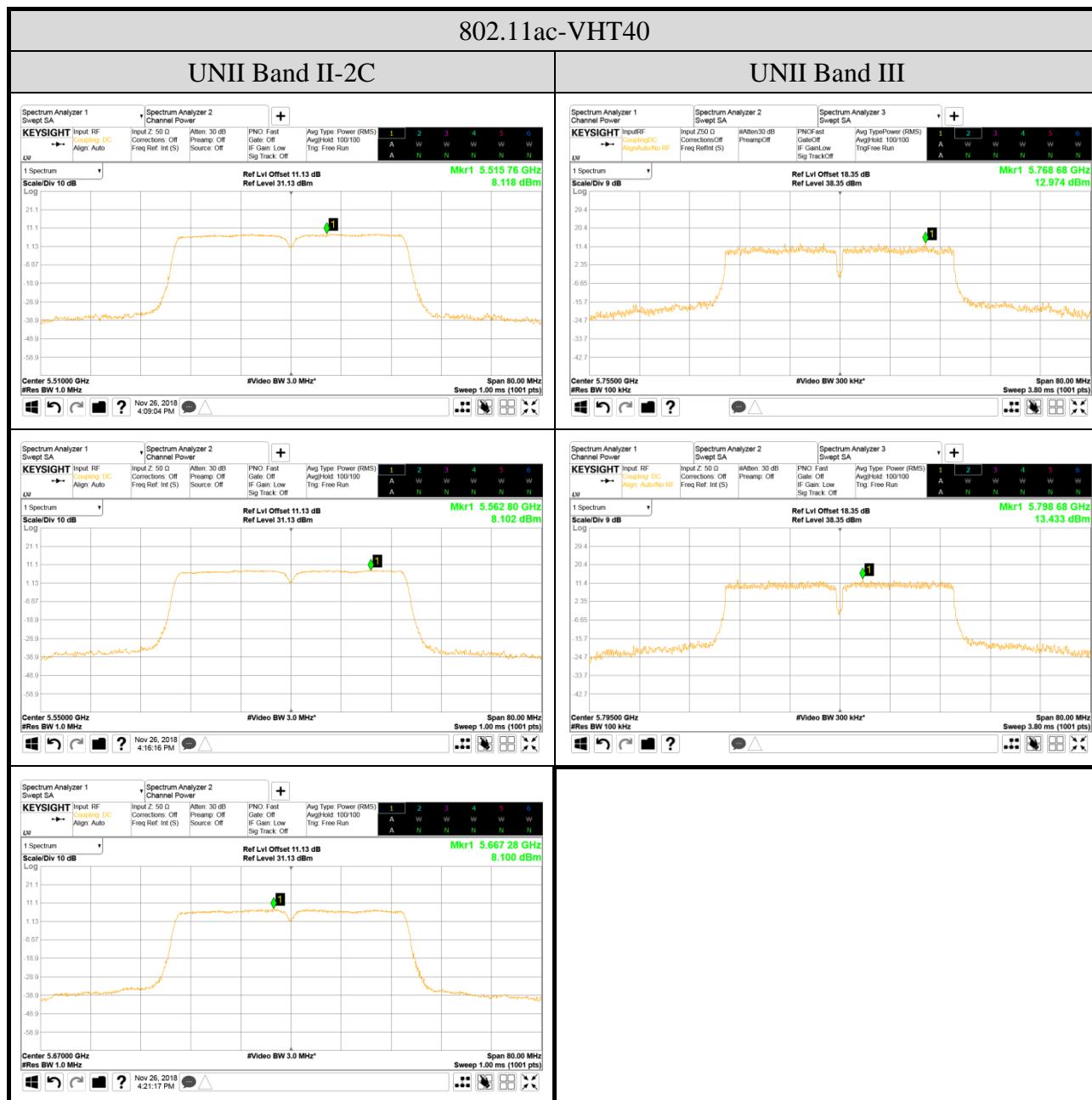
Cable Loss	Band I & II-2A: 3.48dB	Duty Cycle Factor	1.63dB
Simultaneous Factor10 log(n) (Note: "n" is antenna number)			6.02



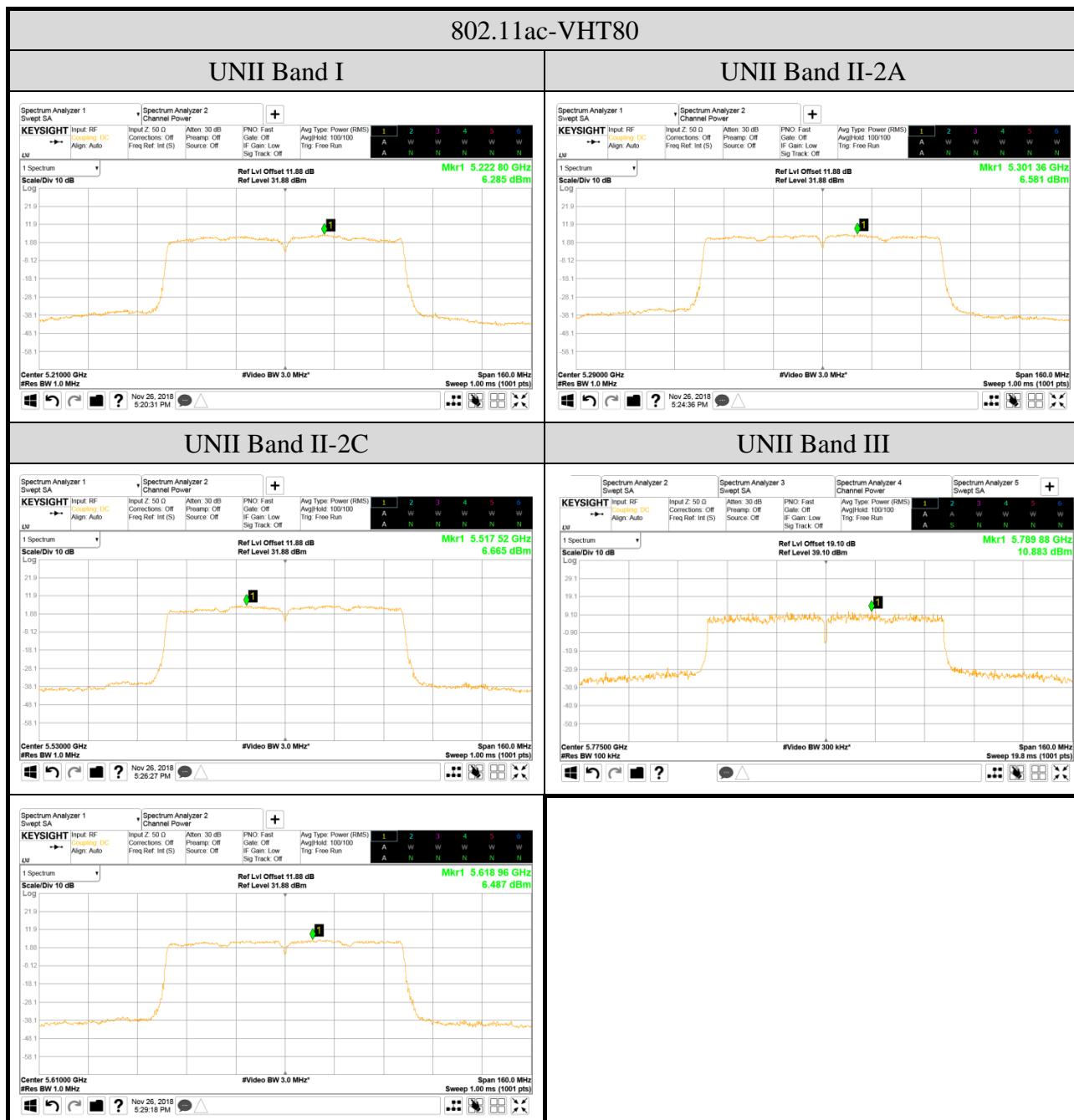
**Audix Technology Corp.**  
No. 53-11, Dingfu, Linkou, Dist.,  
New Taipei City244, Taiwan

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

Cable Loss	Band II-2C: 3.48dB Band III: 3.7dB	Duty Cycle Factor	1.63dB
	Simultaneous Factor $10 \log(n)$ (Note: "n" is antenna number)		6.02



Cable Loss	Band I & II-2A & II-2C: 3.48dB Band III: 3.7dB	Duty Cycle Factor	2.38dB
Simultaneous Factor $10 \log(n)$ (Note: "n" is antenna number)			6.02

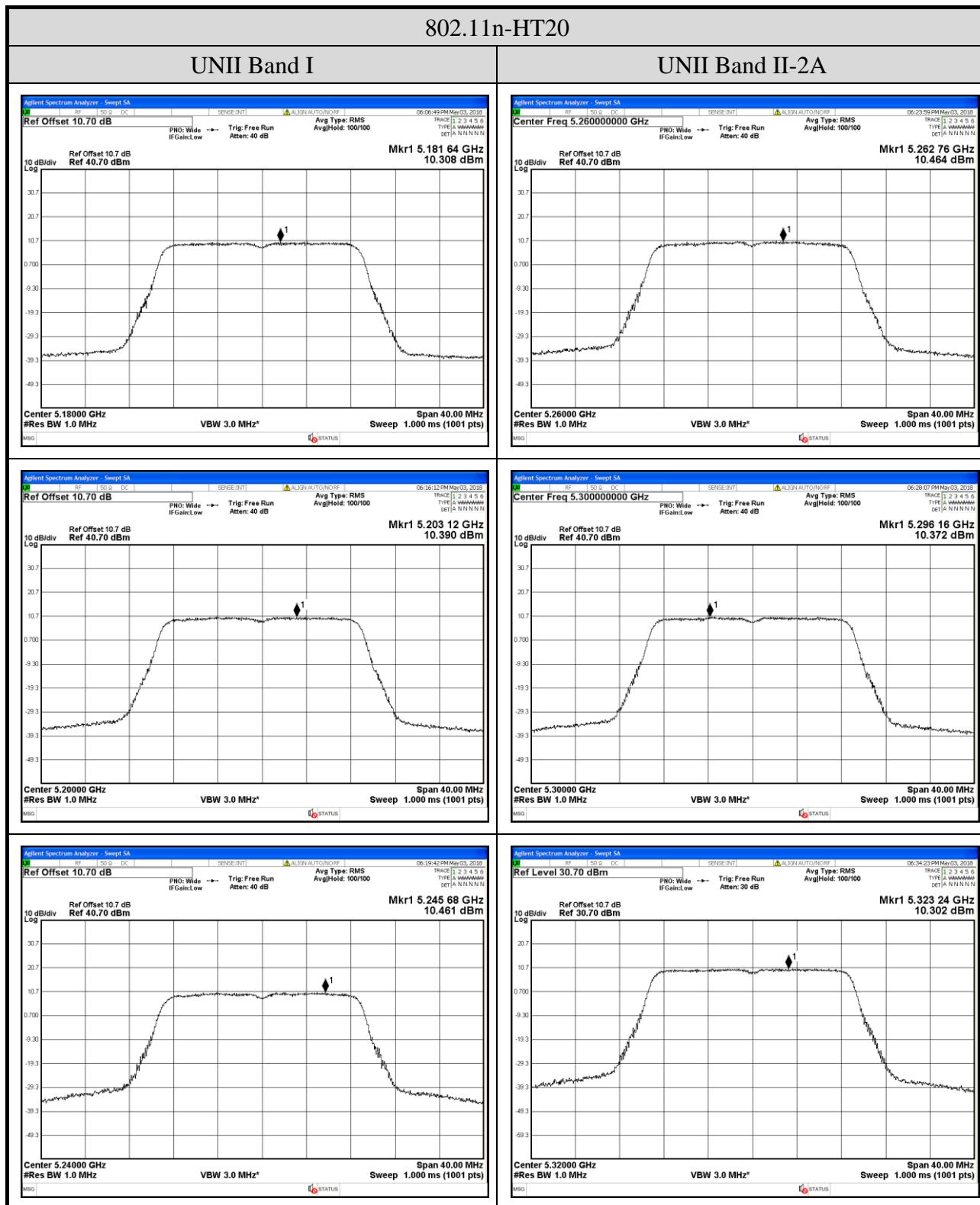


**Audix Technology Corp.**  
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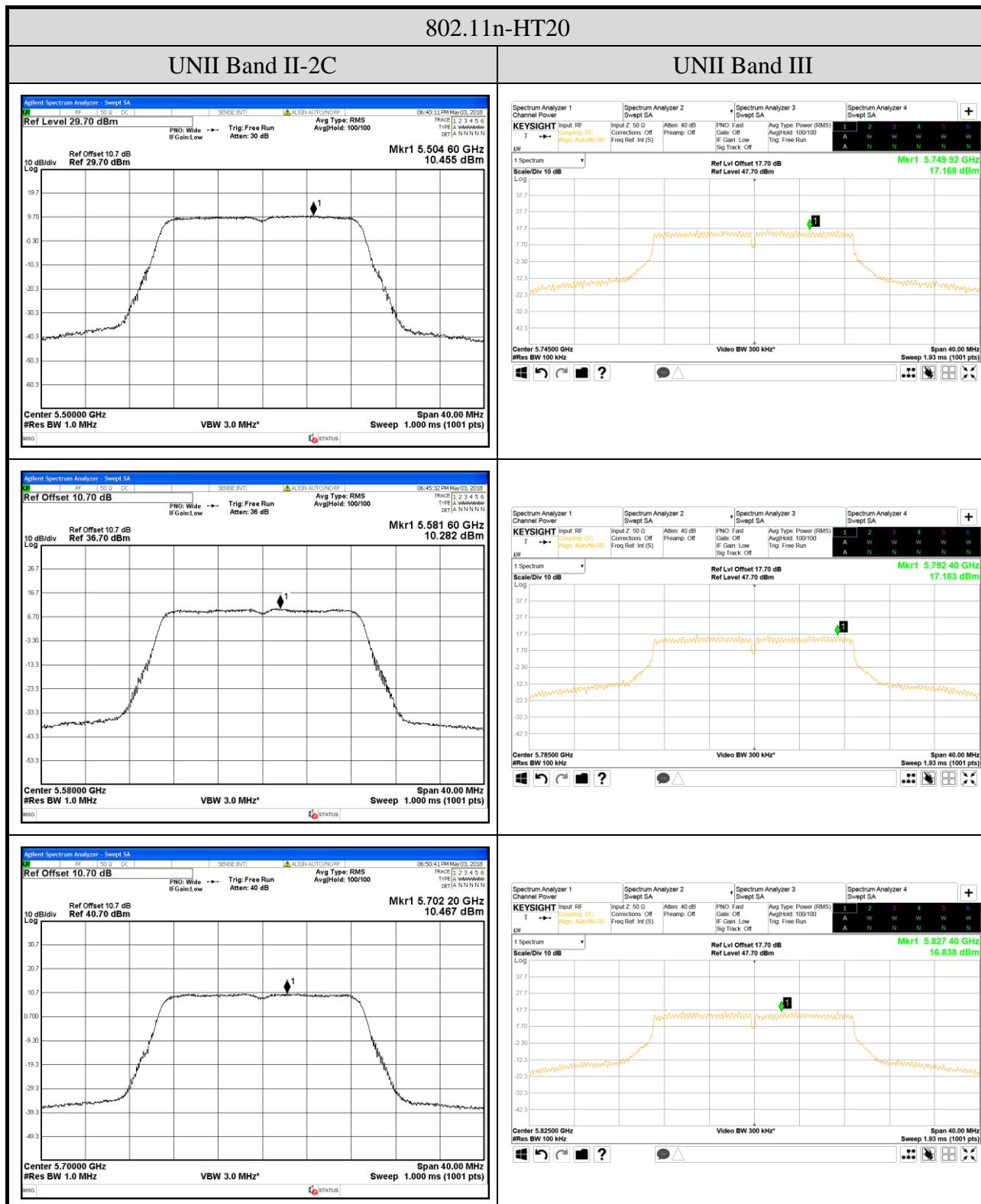
Tel: +886 2 26099301  
Fax: +886 2 26099303

• SDM Mode

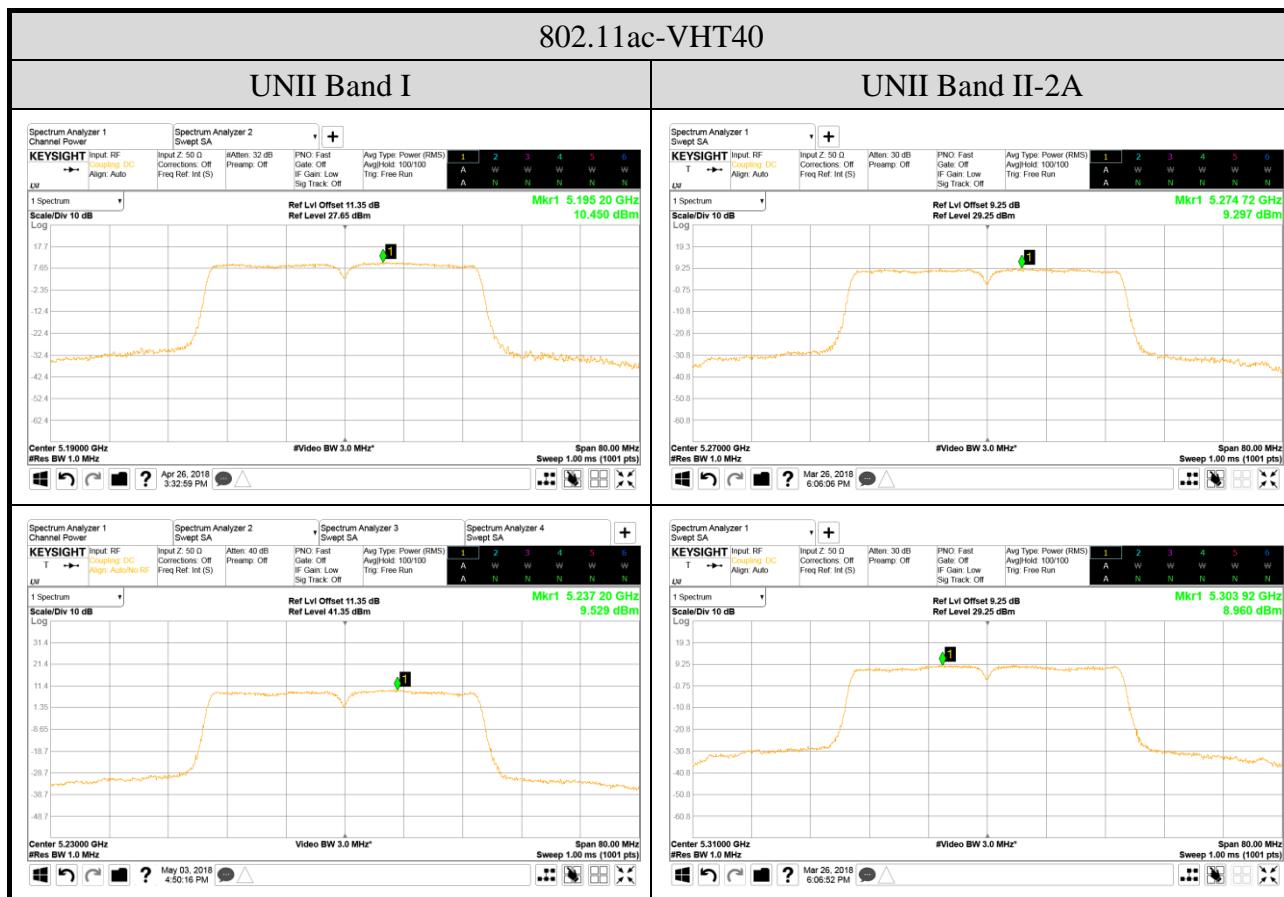
Cable Loss	Band I & II-2A: 3.7dB	Duty Cycle Factor	0.98dB
Simultaneous Factor	10 log(n) (Note: "n" is antenna number)		6.02



Cable Loss	Band II-2C & III: 3.7dB	Duty Cycle Factor	0.98dB
Simultaneous Factor $10 \log(n)$ (Note: "n" is antenna number)			6.02



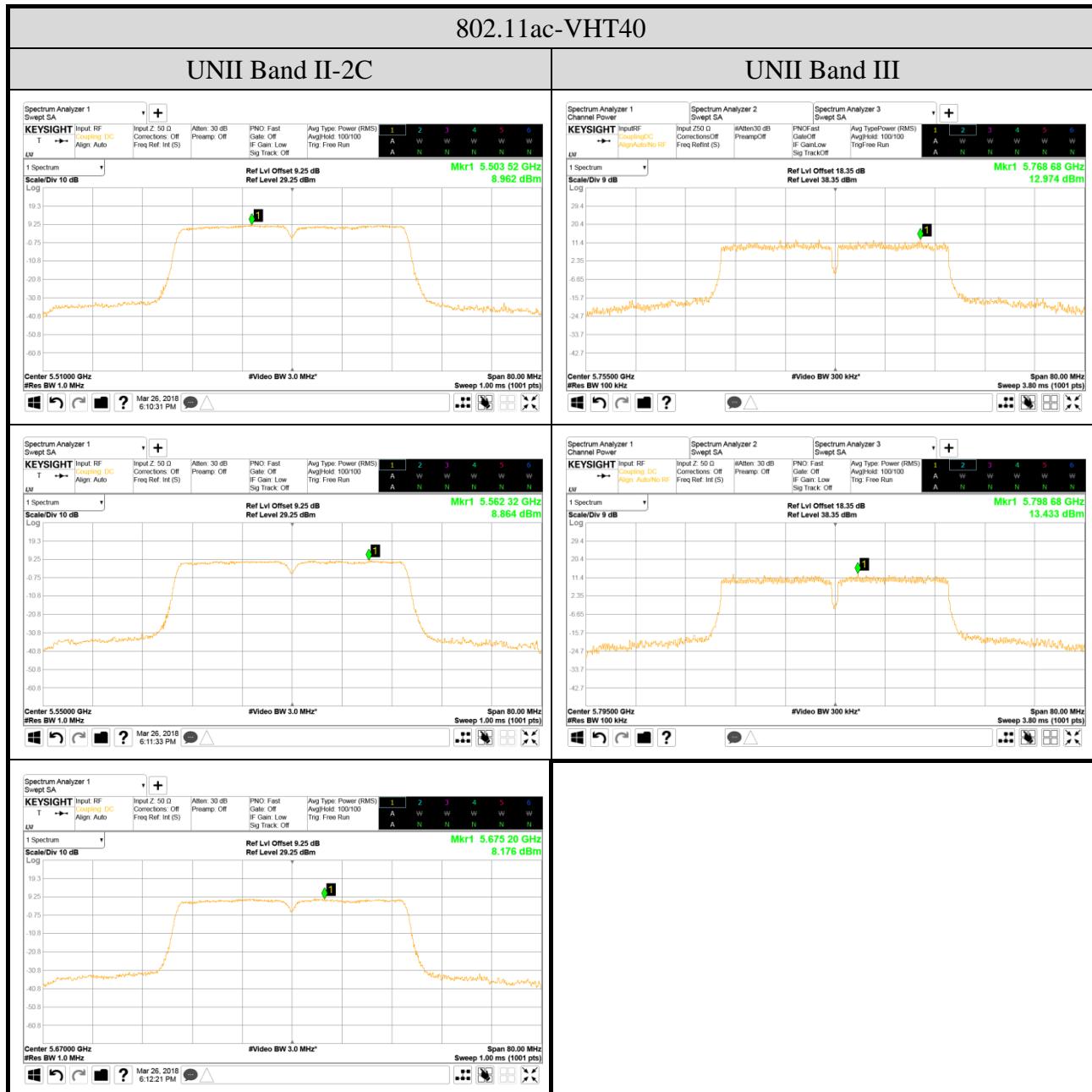
Cable Loss	Band I: 3.7dB Band II-2A: 1.6dB	Duty Cycle Factor	1.63dB
Simultaneous Factor $10 \log(n)$ (Note: "n" is antenna number)			6.02



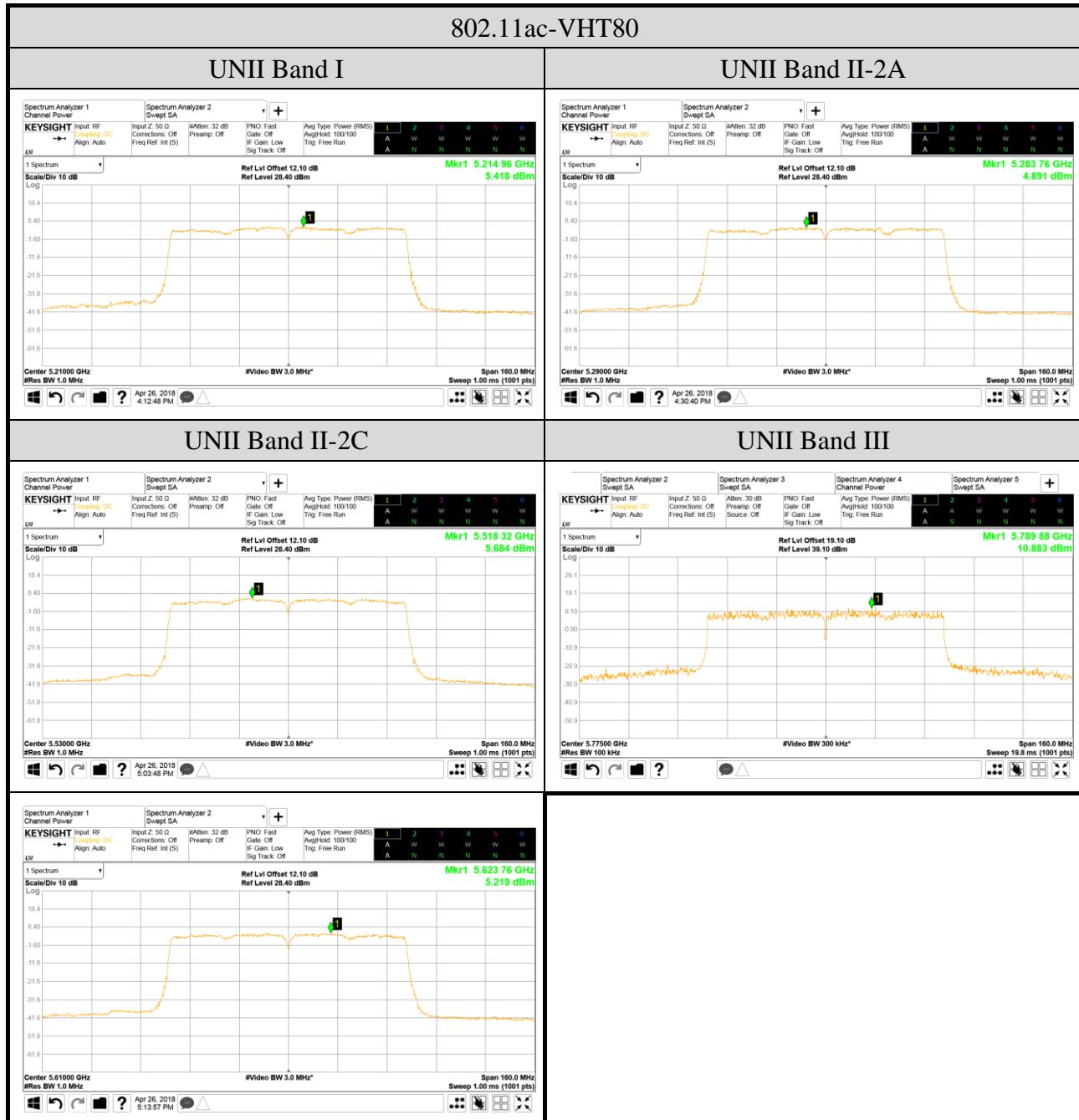
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Cable Loss	Band II-2C: 1.6dB Band III: 3.7dB	Duty Cycle Factor	1.63dB
Simultaneous Factor $10 \log(n)$ (Note: "n" is antenna number)			6.02



Cable Loss	Band I & II-2A & II-2C & III: 3.7dB	Duty Cycle Factor	2.38dB
Simultaneous Factor10 log(n) (Note: "n" is antenna number)			6.02



## A.7 FREQUENCY STABILITY

Test Date	2018/04/24	Temp./Hum.	24°C/55%
Cable Loss	---	Test Voltage	AC 120V, 60Hz (via AC/DC Adapter)

### A.7.1 Frequency stability Result

Temperature (°C)	Voltage (Vac)	Centre Frequency (MHz)	Measurement Value (MHz)	Frequency Stability (ppm)
25	120	5745	5745.011	1.915
-30	102		5744.994	-1.044
	138		5744.992	-1.393
-20	102		5745.020	3.481
	138		5744.983	-2.959
-10	102		5744.986	-2.437
	138		5745.014	2.437
0	102		5744.983	-2.959
	138		5744.995	-0.870
10	102		5744.991	-1.567
	138		5744.997	-0.522
20	102		5744.979	-3.655
	138		5745.006	1.044
30	102		5745.009	1.567
	138		5745.007	1.218
40	102		5745.019	3.307
	138		5745.016	2.785
50	102		5745.002	0.348
	138		5745.022	3.829