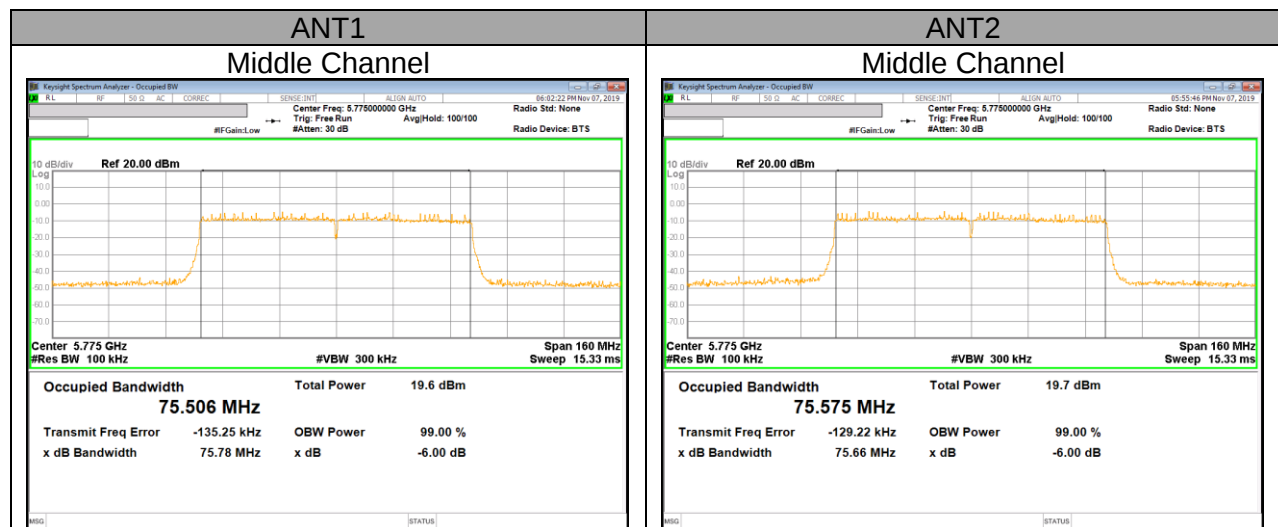


IEEE 802.11n HT40 mode



IEEE 802.11ac VHT80 mode



10.2. OUTPUT POWER AND PPSD

LIMITS

FCC §15.407 (a) (1) (2) (3)

FCC

For the band 5.15–5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed the lesser of 250 mW or $11 \text{ dBm} + 10 \log B$, where B is the 26dB emission bandwidth in MHz. In addition, the peak power spectral density shall not exceed 11 dBm in any 1 MHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the peak power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or $11 \text{ dBm} + 10 \log B$, where B is the 26 dB emission bandwidth in megahertz. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band.

TEST PROCEDURE

KDB 789033 Method PM is used for output power.

KDB 789033 Method SA-2 is used for only power of straddle Ch. and PPSD. RBW set to 1MHz(500kHz for the band 5.725-5.85 GHz, the VBW $\geq 3 \times$ RBW, RMS detector and trace averaging). Band power function used for power and peak marker value of the spectrum is used for PSD.

DIRECTIONAL ANTENNA GAIN

For OUTPUT POWER and PSD: The TX chains are correlated and the antenna gains are unequal among the chains. The directional gain is:

Frequency Band [MHz]	ANT1 Gain [dBi]	ANT2 Gain [dBi]	Correlated Chains Directional Gain [dBi]
UNII 1 5150 - 5250	-8.80	-8.10	-5.43
UNII 2A 5250 - 5350	-7.10	-8.10	-4.58
UNII 2C 5470 - 5725	-5.80	-6.20	-2.99
UNII 3 5725 - 5850	-7.70	-8.20	-4.94

RESULTS

10.2.1. 1Tx MODE IN THE 5.2 GHz BAND

Bandwidth and Antenna Gain, Limits

Band	Mode	Channel	Center Freq. [MHz]	Min 26 dB BW [MHz]	Directional Gain [dBi]	Power Limit [dBm]	PPSD Limit [dBm/MHz]
UNII-1	802.11a	Low	5180	21.15	-5.43	24.00	11.00
		Mid	5200	20.96			
		High	5240	21.23			
	802.11n HT20	Low	5180	21.37			
		Mid	5200	21.27			
		High	5240	21.30			
	802.11n HT40	Low	5190	39.66			
		High	5230	39.54			
	802.11ac VHT80	Mid	5210	81.20			
Included in Calculations of Corr'd Power & PPSD							
Duty Cycle CF [dB]			802.11a			0.00	dB
			802.11n20			0.00	dB
			802.11n40			0.00	dB
			802.11ac VHT80			0.00	dB

Output Power Results

Band	Mode	Channel	Center Freq. [MHz]	Meas Power [dBm]		Corr'd Power [dBm]		Power Limit [dBm]
				ANT1	ANT2	ANT1	ANT2	
UNII-1	802.11a	Low	5180	16.09	16.30	16.09	16.30	24.00
		Mid	5200	15.96	16.25	15.96	16.25	
		High	5240	15.90	16.06	15.90	16.06	
	802.11n HT20	Low	5180	16.10	16.31	16.10	16.31	
		Mid	5200	16.01	16.26	16.01	16.26	
		High	5240	15.87	16.06	15.87	16.06	
	802.11n HT40	Low	5190	14.14	14.48	14.14	14.48	
		High	5230	14.04	14.26	14.04	14.26	
	802.11ac VHT80	Mid	5210	13.14	13.31	13.14	13.31	

* Calculation of Output Power : Corr'd Power = Meas Power + Duty CF [dB]

PPSD Results

Band	Mode	Channel	Center Freq. [MHz]	Meas PPSD [dBm/MHz]		Corr'd PPSD [dBm/MHz]		PPSD Limit [dBm/1MHz]
				ANT1	ANT2	ANT1	ANT2	
UNII-1	802.11a	Low	5180	3.28	5.00	3.28	5.00	11.00
		Mid	5200	3.50	4.73	3.50	4.73	
		High	5240	3.23	5.03	3.23	5.03	
	802.11n HT20	Low	5180	3.72	4.63	3.72	4.63	
		Mid	5200	3.62	4.42	3.62	4.42	
		High	5240	3.41	4.57	3.41	4.57	
	802.11n HT40	Low	5190	-1.28	-0.07	-1.28	-0.07	
		High	5230	-1.04	-0.16	-1.04	-0.16	
	802.11ac VHT80	Mid	5210	-5.48	-4.33	-5.48	-4.33	

* Calculation of PPSS result : Corr'd PPSS = Meas PPSS + Duty CF + Corr'd factor [dB]

10.2.2. 1Tx MODE IN THE 5.3 GHz BAND

Bandwidth and Antenna Gain, Limits

Band	Mode	Channel	Center Freq. [MHz]	Min 26 dB BW [MHz]	Directional Gain [dBi]	Power Limit [dBm]	PPSD Limit [dBm/MHz]
UNII-2A	802.11a	Low	5260	21.29	-4.58	24.00	11.00
		Mid	5300	21.18			
		High	5320	21.10			
	802.11n HT20	Low	5260	21.31			
		Mid	5300	21.40			
		High	5320	21.61			
	802.11n HT40	Low	5270	39.75			
		High	5310	39.76			
	802.11ac VHT80	Mid	5290	81.47			
	Included in Calculations of Corr'd Power & PPSD						
Duty Cycle CF [dB]			802.11a			0.00	dB
			802.11n20			0.00	dB
			802.11n40			0.00	dB
			802.11ac VHT80			0.00	dB

Output Power Results

Band	Mode	Channel	Center Freq. [MHz]	Meas Power [dBm]		Corr'd Power [dBm]		Power Limit [dBm]
				ANT1	ANT2	ANT1	ANT2	
UNII-2A	802.11a	Low	5260	16.71	16.15	16.71	16.15	24.00
		Mid	5300	16.67	16.41	16.67	16.41	
		High	5320	16.64	16.33	16.64	16.33	
	802.11n HT20	Low	5260	16.67	16.21	16.67	16.21	
		Mid	5300	16.65	16.40	16.65	16.40	
		High	5320	16.60	16.31	16.60	16.31	
	802.11n HT40	Low	5270	13.90	14.22	13.90	14.22	
		High	5310	13.86	14.38	13.86	14.38	
	802.11ac VHT80	Mid	5290	13.70	13.35	13.70	13.35	

* Calculation of Output Power : Corr'd Power = Meas Power + Duty CF [dB]

PPSD Results

Band	Mode	Channel	Center Freq. [MHz]	Meas PPSP [dBm/MHz]		Corr'd PPSP [dBm/MHz]		PPSP Limit [dBm/1MHz]
				ANT1	ANT2	ANT1	ANT2	
UNII-2A	802.11a	Low	5260	4.40	4.98	4.40	4.98	11.00
		Mid	5300	4.50	4.94	4.50	4.94	
		High	5320	4.83	4.86	4.83	4.86	
	802.11n HT20	Low	5260	4.73	5.01	4.73	5.01	
		Mid	5300	4.33	5.15	4.33	5.15	
		High	5320	4.38	4.71	4.38	4.71	
	802.11n HT40	Low	5270	-1.30	-0.07	-1.30	-0.07	
		High	5310	-1.39	0.01	-1.39	0.01	
	802.11ac VHT80	Mid	5290	-4.36	-4.02	-4.36	-4.02	

* Calculation of PPSP result : Corr'd PPSP = Meas PPSP + Duty CF + Corr'd factor [dB]

10.2.3. 1Tx MODE IN THE 5.5 GHz BAND

Bandwidth and Antenna Gain, Limits

Band	Mode	Channel	Center Freq. [MHz]	Min 26 dB BW [MHz]	Directional Gain [dBi]	Power Limit [dBm]	PPSD Limit [dBm/MHz]
UNII-2C	802.11a	Low	5500	21.34	-2.99	24.00	11.00
		Mid	5580	21.00			
		High	5700	21.53			
	802.11n HT20	Low	5500	21.38			
		Mid	5580	21.58			
		High	5700	21.46			
	802.11n HT40	Low	5510	39.21			
		Mid	5590	39.77			
		High	5670	39.81			
	802.11ac VHT80	Low	5530	81.73			
		High	5610	81.06			
Included in Calculations of Corr'd Power & PPSPD							
Duty Cycle CF [dB]			802.11a			0.00	dB
			802.11n20			0.00	dB
			802.11n40			0.00	dB
			802.11ac VHT80			0.00	dB

Output Power Results

Band	Mode	Channel	Center Freq. [MHz]	Meas Power [dBm]		Corr'd Power [dBm]		Power Limit [dBm]
				ANT1	ANT2	ANT1	ANT2	
UNII-2C	802.11a	Low	5500	13.50	13.60	13.50	13.60	24.00
		Mid	5580	13.71	13.70	13.71	13.70	
		High	5700	14.11	13.96	14.11	13.96	
	802.11n HT20	Low	5500	13.39	13.57	13.39	13.57	
		Mid	5580	13.63	13.80	13.63	13.80	
		High	5700	13.92	13.96	13.92	13.96	
	802.11n HT40	Low	5510	11.56	11.92	11.56	11.92	
		Mid	5590	11.63	11.89	11.63	11.89	
		High	5670	11.64	11.85	11.64	11.85	
	802.11ac VHT80	Low	5530	11.71	11.87	11.71	11.87	
		High	5610	11.82	11.96	11.82	11.96	

* Calculation of Output Power : Corr'd Power = Meas Power + Duty CF [dB]

PPSD Results

Band	Mode	Channel	Center Freq. [MHz]	Meas PPSD [dBm/MHz]		Corr'd PPSD [dBm/MHz]		PPSD Limit [dBm/1MHz]
				ANT1	ANT2	ANT1	ANT2	
UNII-2C	802.11a	Low	5500	2.48	2.35	2.48	2.35	11.00
		Mid	5580	3.03	2.61	3.03	2.61	
		High	5700	3.11	2.69	3.11	2.69	
	802.11n HT20	Low	5500	2.07	1.65	2.07	1.65	
		Mid	5580	2.19	1.98	2.19	1.98	
		High	5700	2.24	2.05	2.24	2.05	
	802.11n HT40	Low	5510	-2.03	-1.39	-2.03	-1.39	
		Mid	5590	-2.25	-1.34	-2.25	-1.34	
		High	5670	-2.53	-1.23	-2.53	-1.23	
	802.11ac VHT80	Low	5530	-6.50	-5.89	-6.50	-5.89	
		High	5610	-6.85	-5.88	-6.85	-5.88	

* Calculation of PPST result : Corr'd PPST = Meas PPST + Duty CF + Corr'd factor [dB]

10.2.4. 1Tx MODE IN THE 5.8 GHZ BAND

Bandwidth and Antenna Gain, Limits

Included in Calculations of Corr'd Power & PPSD			
Duty Cycle CF [dB]	802.11a	0.00	dB
	802.11n20	0.00	dB
	802.11n40	0.00	dB
	802.11ac VHT80	0.00	dB

Output Power Results

Band	Mode	Channel	Center Freq. [MHz]	Meas Power [dBm]		Corr'd Power [dBm]		Power Limit [dBm]
				ANT1	ANT2	ANT1	ANT2	
UNII-3	802.11a	Mid	5745	16.07	15.92	16.07	15.92	30.00
		High	5785	16.18	15.90	16.18	15.90	
		High	5825	16.13	16.02	16.13	16.02	
	802.11n HT20	Low	5745	16.05	15.95	16.05	15.95	
		Mid	5785	16.16	15.83	16.16	15.83	
		High	5825	16.11	15.97	16.11	15.97	
	802.11n HT40	Low	5755	14.51	14.24	14.51	14.24	
		High	5795	14.47	14.15	14.47	14.15	
	802.11ac VHT80	Middle	5775	13.28	12.74	13.28	12.74	

* Calculation of Output Power : Corr'd Power = Meas Power + Duty CF [dB]

PPSD Results

Band	Mode	Channel	Center Freq. [MHz]	Meas PPSD [dBm/MHz]		Corr'd PPSD [dBm/MHz]		PPSD Limit [dBm/500kHz]
				ANT1	ANT2	ANT1	ANT2	
UNII-3	802.11a	Low	5745	0.74	1.96	0.74	1.96	30.00
		Mid	5785	1.28	2.01	1.28	2.01	
		High	5825	1.18	1.88	1.18	1.88	
	802.11n HT20	Low	5745	0.62	1.80	0.62	1.80	
		Mid	5785	1.09	1.83	1.09	1.83	
		High	5825	0.84	1.58	0.84	1.58	
	802.11n HT40	Low	5755	-3.84	-3.03	-3.84	-3.03	
		High	5795	-3.55	-3.02	-3.55	-3.02	
	802.11ac VHT80	Middle	5775	-7.89	-7.31	-7.89	-7.31	

* Calculation of PPSD result : Corr'd PPSD = Meas PPSD + Duty CF + Corr'd factor [dB]

10.2.5. 1Tx Mode Straddle channel IN THE 5.5 GHz BAND

Bandwidth and Antenna Gain, Limits

Band	Mode	Channel	Center Freq. [MHz]	Min 26 dB BW [MHz]	Directional Gain [dBi]	Power Limit [dBm]	PPSD Limit [dBm/MHz]
UNII-2C	802.11a	Straddle	5720	15.67	-2.99	22.95	11.00
	802.11n HT20	Straddle	5720	15.64			
	802.11n HT40	Straddle	5710	34.76			
	802.11ac VHT80	Straddle	5690	75.67			
Included in Calculations of Corr'd Power & PPSP							
Duty Cycle CF [dB]			802.11a			0.00	dB
			802.11n20			0.00	dB
			802.11n40			0.00	dB
			802.11ac VHT80			0.00	dB

Output Power Results

Band	Mode	Channel	Center Freq. [MHz]	Meas Power [dBm]		Corr'd Power [dBm]		Power Limit [dBm]
				ANT1	ANT2	ANT1	ANT2	
UNII-2C	802.11a	Straddle	5720	13.21	12.47	13.21	12.47	24.00
	802.11n HT20	Straddle	5720	11.79	12.14	11.79	12.14	
	802.11n HT40	Straddle	5710	12.14	11.53	12.14	11.53	
	802.11ac VHT80	Straddle	5690	10.95	10.08	10.95	10.08	

* Calculation of Output Power : Corr'd Power = Meas Power + Duty CF [dB]

PPSD Results

Band	Mode	Channel	Center Freq. [MHz]	Meas PSD [dBm/MHz]		Corr'd PSD [dBm/MHz]		PPSD Limit [dBm/1MHz]
				ANT1	ANT2	ANT1	ANT2	
UNII-2C	802.11a	Straddle	5720	3.48	2.74	3.48	2.74	11.00
	802.11n HT20	Straddle	5720	2.12	2.13	2.12	2.13	
	802.11n HT40	Straddle	5710	-1.81	-1.70	-1.81	-1.70	
	802.11ac VHT80	Straddle	5690	-6.66	-6.57	-6.66	-6.57	

* Calculation of PSD result : Corr'd PSD = Meas PSD + Duty CF + Corr'd factor [dB]

10.2.6. 1Tx Mode Straddle channel IN THE 5.8 GHz BAND

Bandwidth and Antenna Gain, Limits

Band	Mode	Channel	Center Freq. [MHz]	Min 26 dB BW [MHz]	Directional Gain [dBi]	Power Limit [dBm]	PPSD Limit [dBm/500kHz]
UNII-3	802.11a	Straddle	5720	5.67	-4.94	30.00	30.00
	802.11n HT20	Straddle	5720	5.64			
	802.11n HT40	Straddle	5710	4.76			
	802.11ac VHT80	Straddle	5690	5.67			
Included in Calculations of Corr'd Power & PSD							
Duty Cycle CF [dB]			802.11a			0.00	dB
			802.11n20			0.00	dB
			802.11n40			0.00	dB
			802.11ac VHT80			0.00	dB

Output Power Results

Band	Mode	Channel	Center Freq. [MHz]	Meas Power [dBm]		Corr'd Power [dBm]		Power Limit [dBm]
				ANT1	ANT2	ANT1	ANT2	
UNII-3	802.11a	Straddle	5720	6.97	6.23	6.97	6.23	30.00
	802.11n HT20	Straddle	5720	6.11	6.32	6.11	6.32	
	802.11n HT40	Straddle	5710	1.40	0.91	1.40	0.91	
	802.11ac VHT80	Straddle	5690	-4.25	-4.95	-4.25	-4.95	

* Calculation of Output Power : Corr'd Power = Meas Power + Duty CF [dB]

PPSD Results

Band	Mode	Channel	Center Freq. [MHz]	Meas PSD [dBm/MHz]		Corr'd PSD [dBm/MHz]		PPSD Limit [dBm/500kHz]
				ANT1	ANT2	ANT1	ANT2	
UNII-3	802.11a	Straddle	5720	3.43	2.74	3.43	2.74	30.00
	802.11n HT20	Straddle	5720	1.77	2.26	1.77	2.26	
	802.11n HT40	Straddle	5710	-3.14	-2.57	-3.14	-2.57	
	802.11ac VHT80	Straddle	5690	-8.87	-8.34	-8.87	-8.34	

* Calculation of PSD result : Corr'd PSD = Meas PSD + Duty CF + Corr'd factor [dB]

10.2.7. 2Tx MODE IN THE 5.2 GHz BAND

Bandwidth and Antenna Gain, Limits

Band	Mode	Channel	Center Freq. [MHz]	Min 26 dB BW [MHz]	Directional Gain [dBi]	Power Limit [dBm]	PPSD Limit [dBm/MHz]
UNII-1	802.11a	Low	5180	21.15	-5.43	24.00	11.00
		Mid	5200	20.96			
		High	5240	21.23			
	802.11n HT20	Low	5180	21.37			
		Mid	5200	21.27			
		High	5240	21.30			
	802.11n HT40	Low	5190	39.66			
		High	5230	39.54			
	802.11ac VHT80	Mid	5210	81.20			
Included in Calculations of Corr'd Power & PPSD							
Duty Cycle CF [dB]			802.11a			0.00	dB
			802.11n20			0.00	dB
			802.11n40			0.00	dB
			802.11ac VHT80			0.00	dB

Output Power Results

Band	Mode	Channel	Center Freq. [MHz]	Meas Power [dBm]		Total Corr'd Power [dBm]	Power Limit [dBm]
				ANT1	ANT2		
UNII-1	802.11a	Low	5180	16.09	16.30	19.21	24.00
		Mid	5200	15.96	16.25	19.12	
		High	5240	15.90	16.06	18.99	
	802.11n HT20	Low	5180	16.10	16.31	19.22	
		Mid	5200	16.01	16.26	19.15	
		High	5240	15.87	16.06	18.98	
	802.11n HT40	Low	5190	14.14	14.48	17.32	
		High	5230	14.04	14.26	17.16	
	802.11ac VHT80	Mid	5210	13.14	13.31	16.24	

* Calculation of Output Power : Corr'd Power = Ant1 Power + Ant2 Power + Duty CF [dB]

PPSD Results

Band	Mode	Channel	Center Freq. [MHz]	Meas PPSPD [dBm/MHz]		Total Corr'd PPSPD [dBm/MHz]	PPSPD Limit [dBm/MHz]
				ANT1	ANT2		
UNII-1	802.11a	Low	5180	3.28	5.00	7.23	11.00
		Mid	5200	3.50	4.73	7.17	
		High	5240	3.23	5.03	7.23	
	802.11n HT20	Low	5180	3.72	4.63	7.21	
		Mid	5200	3.62	4.42	7.05	
		High	5240	3.41	4.57	7.04	
	802.11n HT40	Low	5190	-1.28	-0.07	2.38	
		High	5230	-1.04	-0.16	2.43	
	802.11ac VHT80	Mid	5210	-5.48	-4.33	-1.86	

* Calculation of PSD result : Corr'd PSD = Ant1 PSD + Ant2 PSD + Duty CF [dB] + Corr'd factor [dB]

10.2.8. 2Tx MODE IN THE 5.3 GHz BAND

Bandwidth and Antenna Gain, Limits

Band	Mode	Channel	Center Freq. [MHz]	Min 26 dB BW [MHz]	Directional Gain [dBi]	Power Limit [dBm]	PPSD Limit [dBm/MHz]
UNII-2A	802.11a	Low	5260	21.29	-4.58	24.00	11.00
		Mid	5300	21.18			
		High	5320	21.10			
	802.11n HT20	Low	5260	21.31			
		Mid	5300	21.40			
		High	5320	21.61			
	802.11n HT40	Low	5270	39.75			
		High	5310	39.76			
	802.11ac VHT80	Mid	5290	81.47			
	Included in Calculations of Corr'd Power & PSD						
Duty Cycle CF [dB]			802.11a			0.00	dB
			802.11n20			0.00	dB
			802.11n40			0.00	dB
			802.11ac VHT80			0.00	dB

Output Power Results

Band	Mode	Channel	Center Freq. [MHz]	Meas Power [dBm]		Total Corr'd Power [dBm]	Power Limit [dBm]
				ANT1	ANT2		
UNII-2A	802.11a	Low	5260	16.71	16.15	19.45	24.00
		Mid	5300	16.67	16.41	19.55	
		High	5320	16.64	16.33	19.50	
	802.11n HT20	Low	5260	16.67	16.21	19.46	
		Mid	5300	16.65	16.40	19.54	
		High	5320	16.60	16.31	19.47	
	802.11n HT40	Low	5270	13.90	14.22	17.07	
		High	5310	13.86	14.38	17.14	
	802.11ac VHT80	Mid	5290	13.70	13.35	16.54	

* Calculation of Output Power : Corr'd Power = Ant1 Power + Ant2 Power + Duty CF [dB]

PPSD Results

Band	Mode	Channel	Center Freq. [MHz]	Meas PPSP [dBm/MHz]		Total Corr'd PPSP [dBm/MHz]	PPSP Limit [dBm/MHz]
				ANT1	ANT2		
UNII-2A	802.11a	Low	5260	4.40	4.98	7.71	11.00
		Mid	5300	4.50	4.94	7.74	
		High	5320	4.83	4.86	7.85	
	802.11n HT20	Low	5260	4.73	5.01	7.88	
		Mid	5300	4.33	5.15	7.77	
		High	5320	4.38	4.71	7.56	
	802.11n HT40	Low	5270	-1.30	-0.07	2.37	
		High	5310	-1.39	0.01	2.37	
	802.11ac VHT80	Mid	5290	-4.36	-4.02	-1.17	

* Calculation of PPSP result : Corr'd PPSP = Ant1 PPSP + Ant2 PPSP + Duty CF [dB] + Corr'd factor [dB]

10.2.9. 2Tx MODE IN THE 5.5 GHz BAND

Bandwidth and Antenna Gain, Limits

Band	Mode	Channel	Center Freq. [MHz]	Min 26 dB BW [MHz]	Directional Gain [dBi]	Power Limit [dBm]	PPSD Limit [dBm/MHz]
UNII-2C	802.11a	Low	5500	21.34	-2.99	24.00	11.00
		Mid	5580	21.00			
		High	5700	21.53			
	802.11n HT20	Low	5500	21.38			
		Mid	5580	21.58			
		High	5700	21.46			
	802.11n HT40	Low	5510	39.21			
		Mid	5590	39.77			
		High	5670	39.81			
	802.11ac VHT80	Low	5530	81.73			
High		5610	81.06				
Included in Calculations of Corr'd Power & PPSD							
Duty Cycle CF [dB]			802.11a			0.00	dB
			802.11n20			0.00	dB
			802.11n40			0.00	dB
			802.11ac VHT80			0.00	dB

Output Power Results

Band	Mode	Channel	Center Freq. [MHz]	Meas Power [dBm]		Total Corr'd Power [dBm]	Power Limit [dBm]
				ANT1	ANT2		
UNII-2C	802.11a	Low	5500	13.50	13.60	16.56	24.00
		Mid	5580	13.71	13.70	16.72	
		High	5700	14.11	13.96	17.05	
	802.11n HT20	Low	5500	13.39	13.57	16.49	
		Mid	5580	13.63	13.80	16.73	
		High	5700	13.92	13.96	16.95	
	802.11n HT40	Low	5510	11.56	11.92	14.75	
		Mid	5590	11.63	11.89	14.77	
		High	5670	11.64	11.85	14.76	
	802.11ac VHT80	Low	5530	11.71	11.87	14.80	
		High	5610	11.82	11.96	14.90	

* Calculation of Output Power : Corr'd Power = Ant1 Power + Ant2 Power + Duty CF [dB]

PPSD Results

Band	Mode	Channel	Center Freq. [MHz]	Meas PPSD [dBm/MHz]		Total Corr'd PPSD [dBm/MHz]	PPSD Limit [dBm/MHz]
				ANT1	ANT2		
UNII-2C	802.11a	Low	5500	2.48	2.35	5.43	11.00
		Mid	5580	3.03	2.61	5.83	
		High	5700	3.11	2.69	5.91	
	802.11n HT20	Low	5500	2.07	1.65	4.87	
		Mid	5580	2.19	1.98	5.10	
		High	5700	2.24	2.05	5.16	
	802.11n HT40	Low	5510	-2.03	-1.39	1.31	
		Mid	5590	-2.25	-1.34	1.24	
		High	5670	-2.53	-1.23	1.18	
	802.11ac VHT80	Low	5530	-6.50	-5.89	-3.17	
		High	5610	-6.85	-5.88	-3.33	

* Calculation of PPSS result : Corr'd PPSS = Ant1 PPSS + Ant2 PPSS + Duty CF [dB] + Corr'd factor [dB]

10.2.10. 2Tx MODE IN THE 5.8 GHz BAND

Bandwidth and Antenna Gain, Limits

Included in Calculations of Corr'd Power & PPSS			
Duty Cycle CF [dB]	802.11a		0.00 dB
	802.11n20		0.00 dB
	802.11n40		0.00 dB
	802.11ac VHT80		0.00 dB

Output Power Results

Band	Mode	Channel	Center Freq. [MHz]	Meas Power [dBm]		Total Corr'd Power [dBm]	Power Limit [dBm]
				ANT1	ANT2		
UNII-3	802.11a	Low	5745	16.07	15.92	19.01	30.00
		Mid	5785	16.18	15.90	19.05	
		High	5825	16.13	16.02	19.09	
	802.11n HT20	Low	5745	16.05	15.95	19.01	
		Mid	5785	16.16	15.83	19.01	
		High	5825	16.11	15.97	19.05	
	802.11n HT40	Low	5755	14.51	14.24	17.39	
		High	5795	14.47	14.15	17.32	
	802.11ac VHT80	Middle	5775	13.28	12.74	16.03	

* Calculation of Output Power : Corr'd Power = Ant1 Power + Ant2 Power + Duty CF [dB]

PPSD Results

Band	Mode	Channel	Center Freq. [MHz]	Meas PPSD [dBm/500kHz]		Total Corr'd PPSD [dBm/500kHz]	PPSD Limit [dBm/500kHz]
				ANT1	ANT2		
UNII-3	802.11a	Low	5745	0.74	1.96	4.40	30.00
		Mid	5785	1.28	2.01	4.67	
		High	5825	1.18	1.88	4.55	
	802.11n HT20	Low	5745	0.62	1.80	4.26	
		Mid	5785	1.09	1.83	4.48	
		High	5825	0.84	1.58	4.24	
	802.11n HT40	Low	5755	-3.84	-3.03	-0.40	
		High	5795	-3.55	-3.02	-0.26	
	802.11ac VHT80	Middle	5775	-7.89	-7.31	-4.58	

* Calculation of PPSS result : Corr'd PPSS = Ant1 PPSS + Ant2 PPSS + Duty CF [dB] + Corr'd factor [dB]

10.2.11. 2Tx Mode Straddle channel IN THE 5.5 GHz BAND

Bandwidth and Antenna Gain, Limits

Band	Mode	Channel	Center Freq. [MHz]	Min 26 dB BW [MHz]	Directional Gain [dBi]	Power Limit [dBm]	PPSD Limit [dBm/MHz]
UNII-2C	802.11a	Straddle	5720	15.67	-2.99	22.95	11.00
	802.11n HT20	Straddle	5720	15.64			
	802.11n HT40	Straddle	5710	34.76			
	802.11ac VHT80	Straddle	5690	75.67			
Included in Calculations of Corr'd Power & PPSD							
Duty Cycle CF [dB]			802.11a			0.00	dB
			802.11n20			0.00	dB
			802.11n40			0.00	dB
			802.11ac VHT80			0.00	dB

Output Power Results

Band	Mode	Channel	Center Freq. [MHz]	Meas Power [dBm]		Total Corr'd Power [dBm]	Power Limit [dBm]
				ANT1	ANT2		
UNII-2C	802.11a	Straddle	5720	13.21	12.47	15.86	24.00
	802.11n HT20	Straddle	5720	11.79	12.14	14.98	
	802.11n HT40	Straddle	5710	12.14	11.53	14.86	
	802.11ac VHT80	Straddle	5690	10.95	10.08	13.55	

* Calculation of Output Power : Corr'd Power = Meas Power + Duty CF [dB]

PPSD Results

Band	Mode	Channel	Center Freq. [MHz]	Meas PPSP [dBm/MHz]		Total Corr'd PPSP [dBm/MHz]	PPSP Limit [dBm/MHz]
				ANT1	ANT2		
UNII-2C	802.11a	Straddle	5720	3.48	2.74	6.14	11.00
	802.11n HT20	Straddle	5720	2.12	2.13	5.13	
	802.11n HT40	Straddle	5710	-1.81	-1.70	1.26	
	802.11ac VHT80	Straddle	5690	-6.66	-6.57	-3.60	

* Calculation of PPSP result : Corr'd PPSP = Meas PPSP + Duty CF + Corr'd factor [dB]

10.2.12. 2Tx Mode Straddle channel IN THE 5.8 GHZ BAND

Bandwidth and Antenna Gain, Limits

Band	Mode	Channel	Center Freq. [MHz]	Min 26 dB BW [MHz]	Directional Gain [dBi]	Power Limit [dBm]	PPSD Limit [dBm/500kHz]
UNII-3	802.11a	Straddle	5720	5.67	-4.94	30.00	30.00
	802.11n HT20	Straddle	5720	5.64			
	802.11n HT40	Straddle	5710	4.76			
	802.11ac VHT80	Straddle	5690	5.67			
Included in Calculations of Corr'd Power & PPSP							
Duty Cycle CF [dB]			802.11a			0.00	dB
			802.11n20			0.00	dB
			802.11n40			0.00	dB
			802.11ac VHT80			0.00	dB

Output Power Results

Band	Mode	Channel	Center Freq. [MHz]	Meas Power [dBm]		Total Corr'd Power [dBm]	Power Limit [dBm]
				ANT1	ANT2		
UNII-3	802.11a	Straddle	5720	6.97	6.23	9.63	30.00
	802.11n HT20	Straddle	5720	6.11	6.32	9.23	
	802.11n HT40	Straddle	5710	1.40	0.91	4.17	
	802.11ac VHT80	Straddle	5690	-4.25	-4.95	-1.58	

* Calculation of Output Power : Corr'd Power = Meas Power + Duty CF [dB]

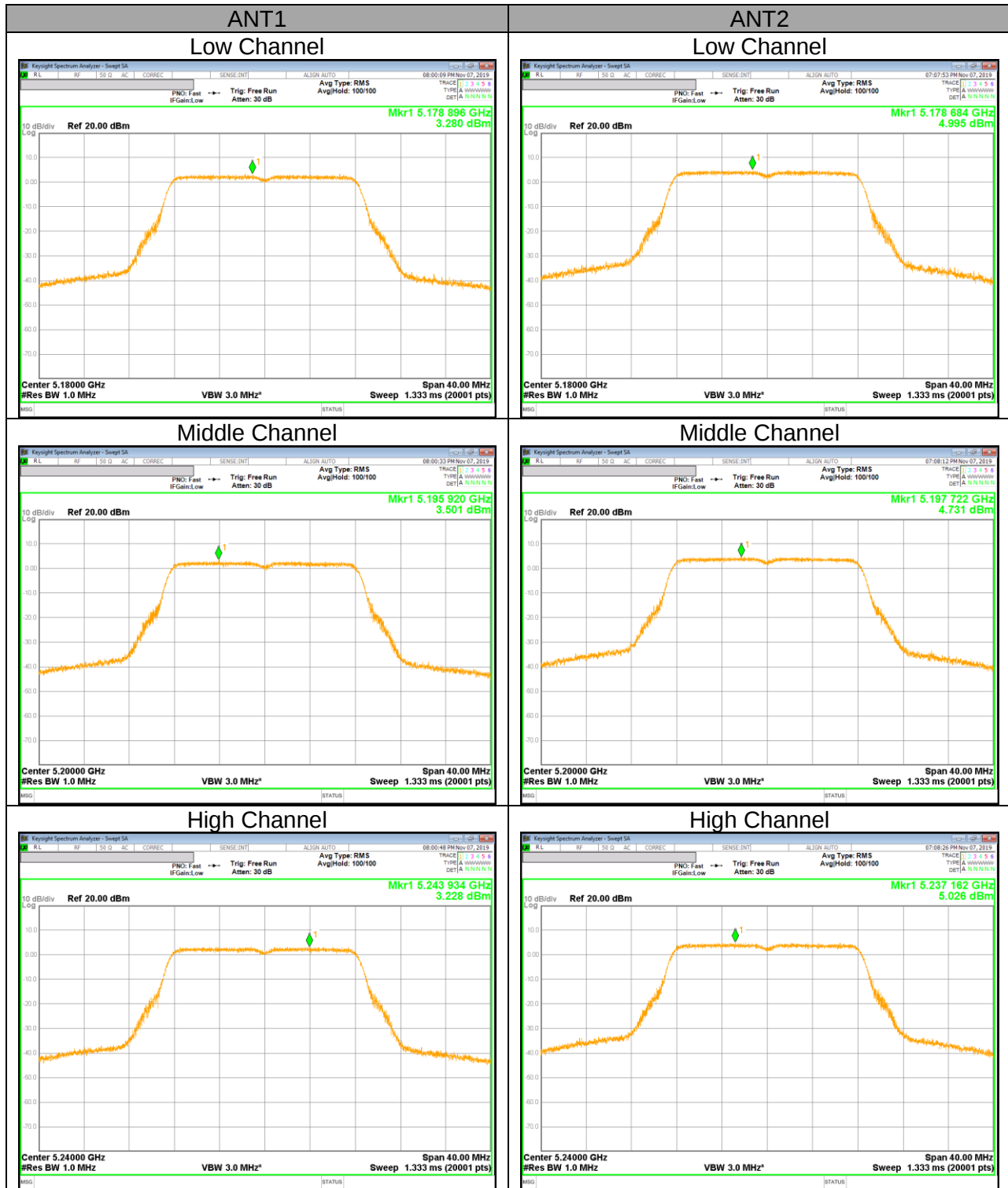
PPSD Results

Band	Mode	Channel	Center Freq. [MHz]	Meas PPSP [dBm/500kHz]		Total Corr'd PPSP [dBm/500kHz]	PPSP Limit [dBm/500kHz]
				ANT1	ANT2		
UNII-3	802.11a	Straddle	5720	3.43	2.74	6.11	30.00
	802.11n HT20	Straddle	5720	1.77	2.26	5.03	
	802.11n HT40	Straddle	5710	-3.14	-2.57	0.17	
	802.11ac VHT80	Straddle	5690	-8.87	-8.34	-5.59	

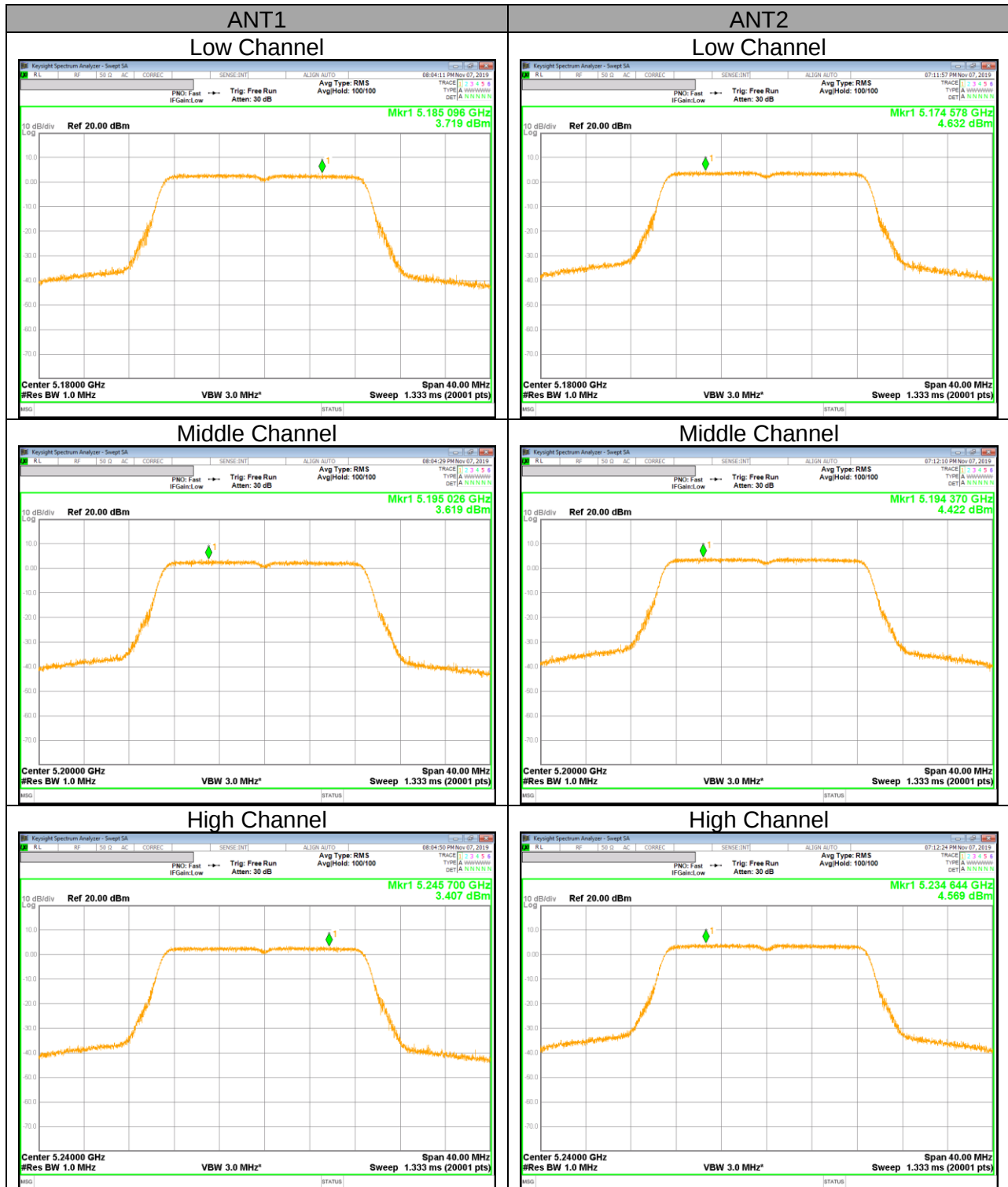
* Calculation of PPSP result : Corr'd PPSP = Meas PPSP + Duty CF + Corr'd factor [dB]

10.2.13. OUTPUT POWER AND PPSD PLOTS

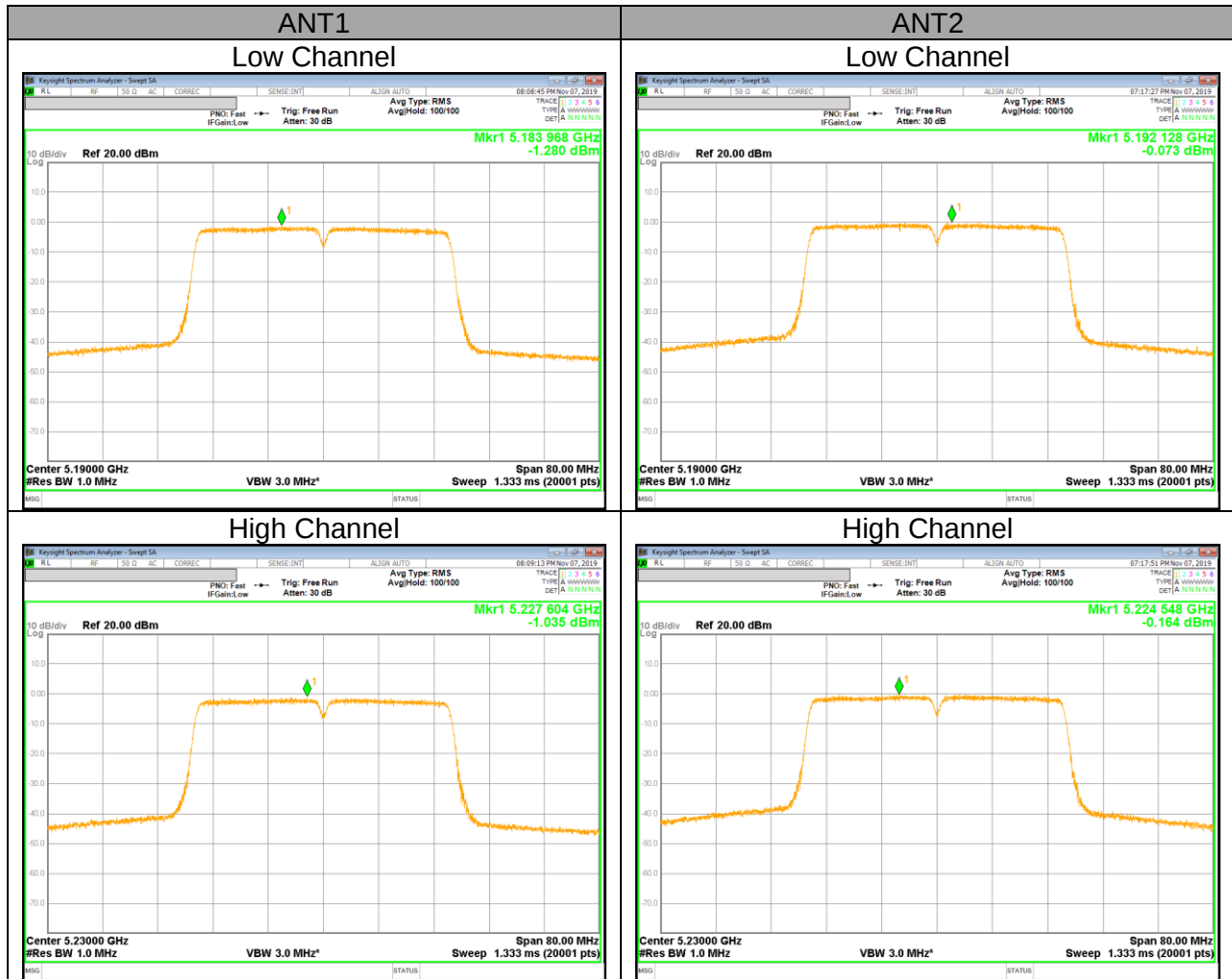
UNII 5.2 GHz IEEE 802.11a mode PSD



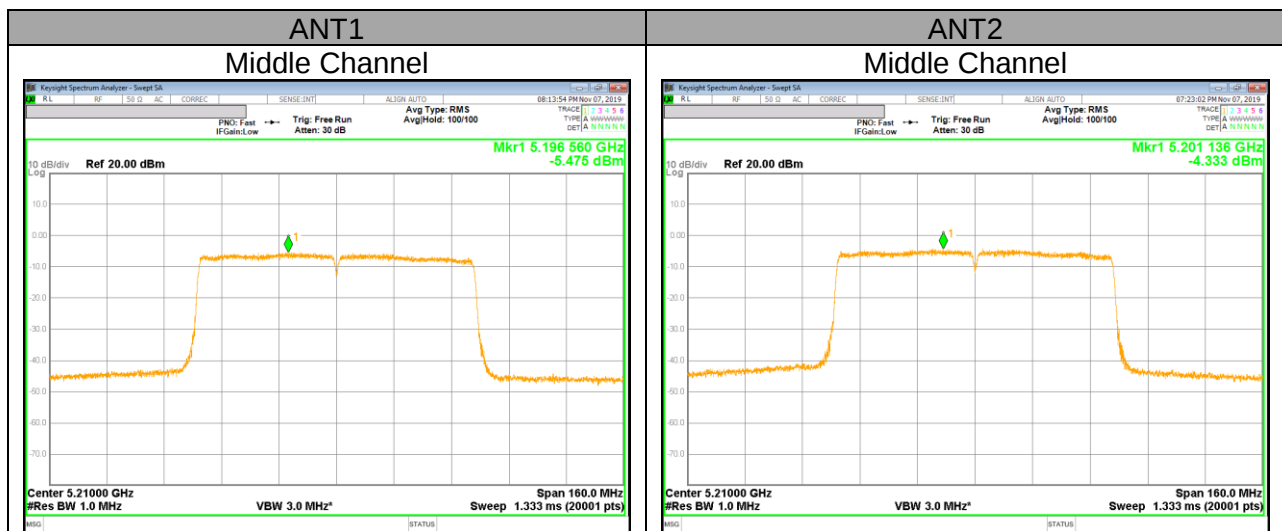
UNII 5.2 GHz IEEE 802.11n HT20 mode PSD



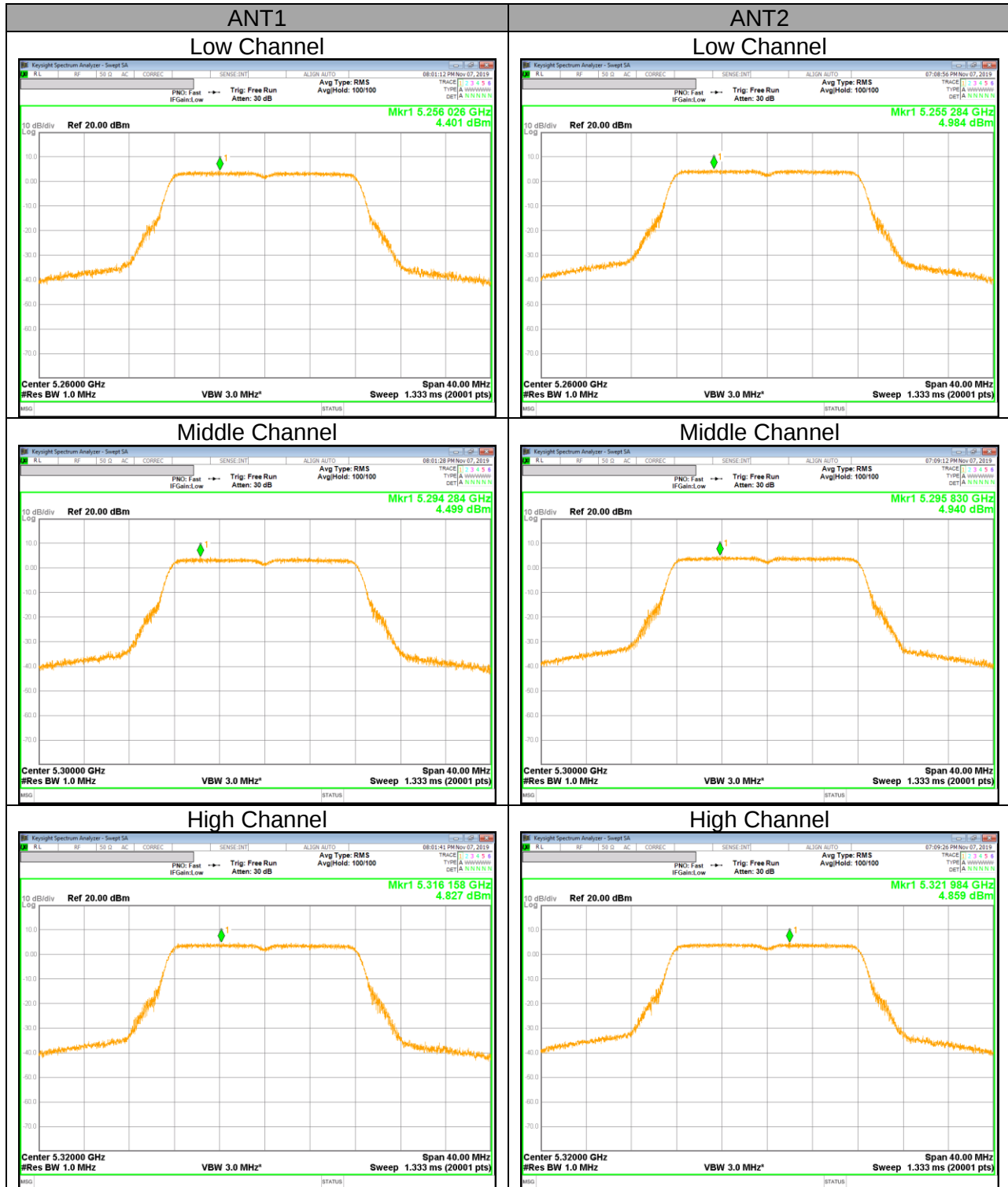
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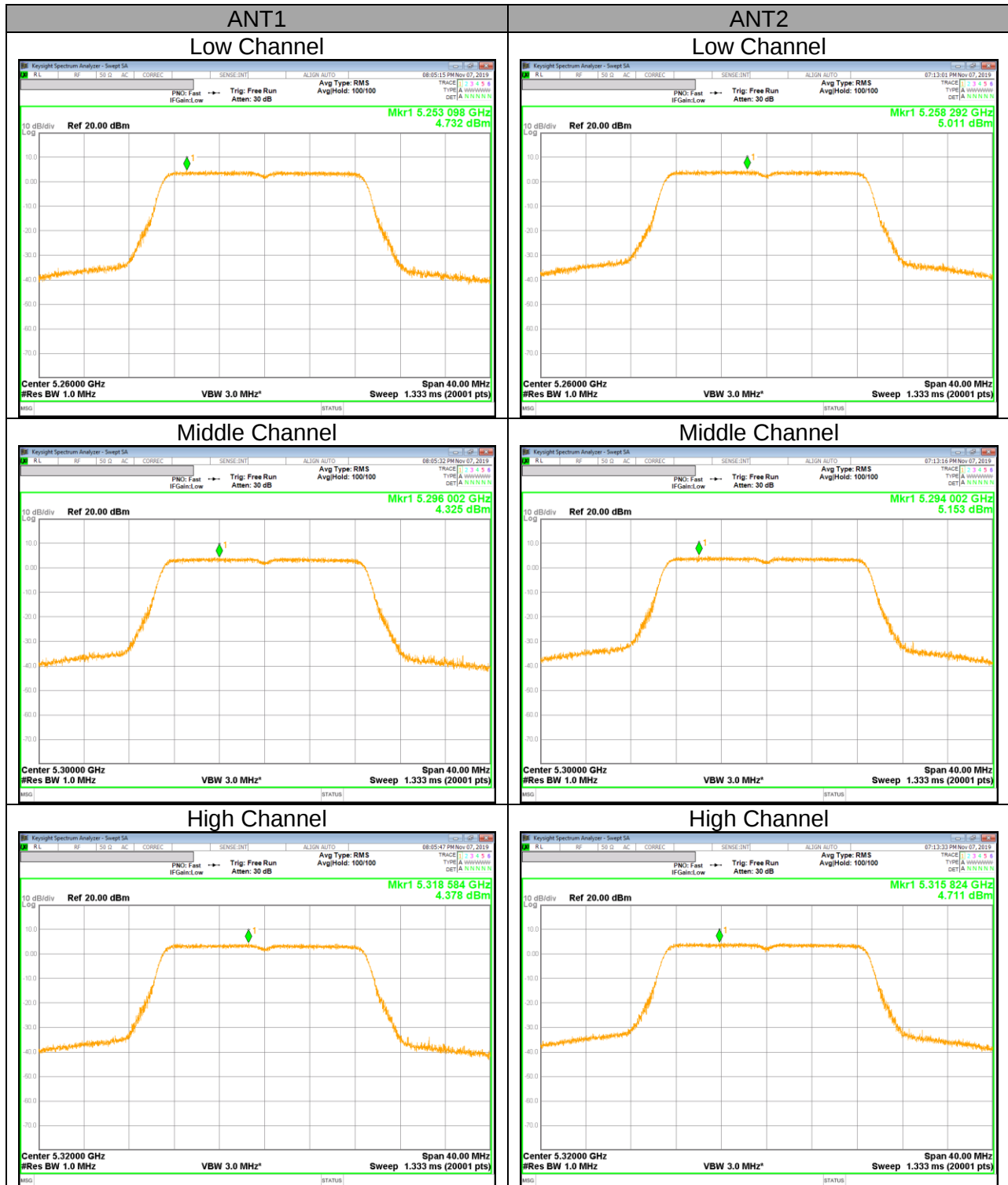
UNII 5.2 GHz IEEE 802.11ac VHT80 mode PSD



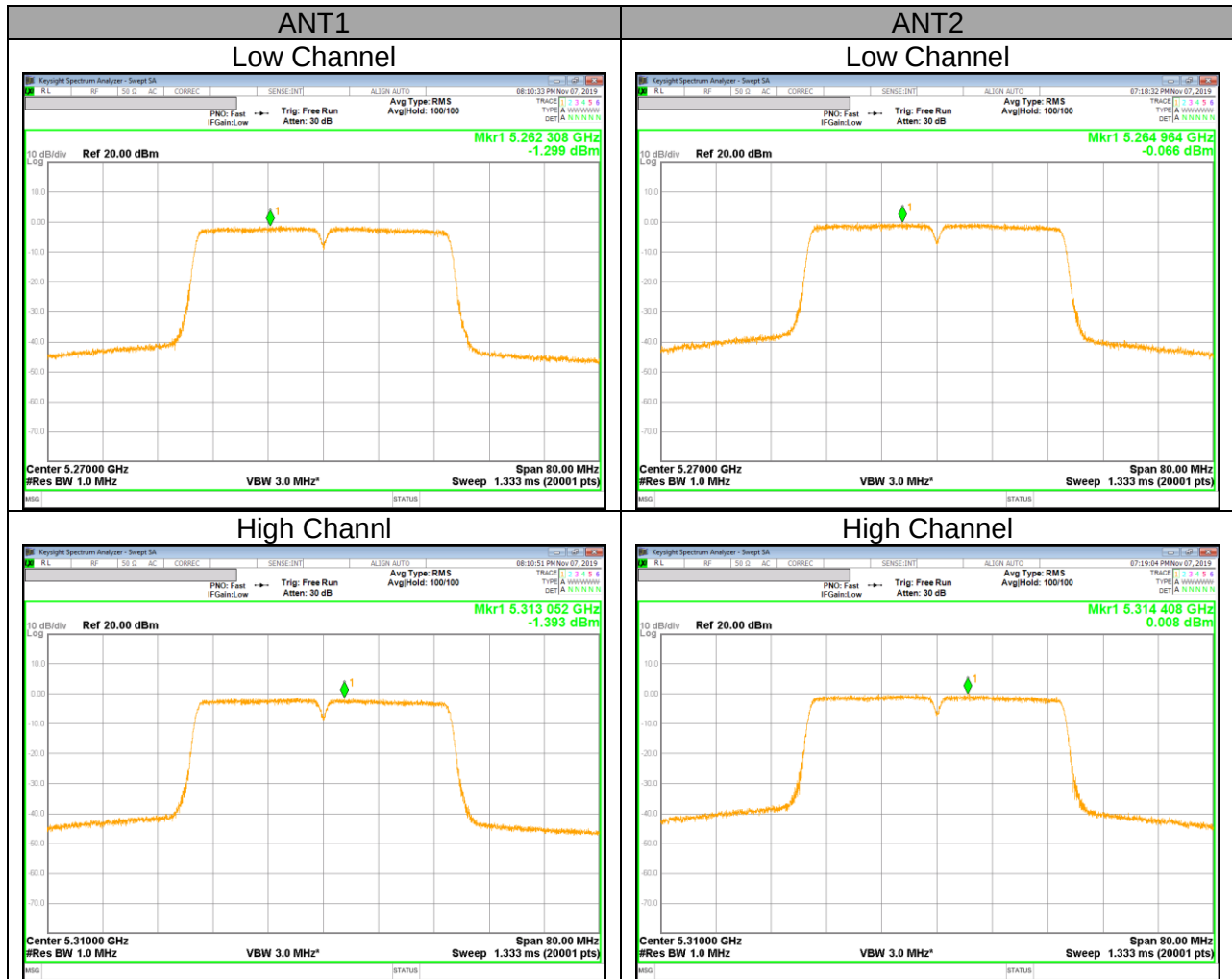
UNII 5.3 GHz IEEE 802.11a mode PSD



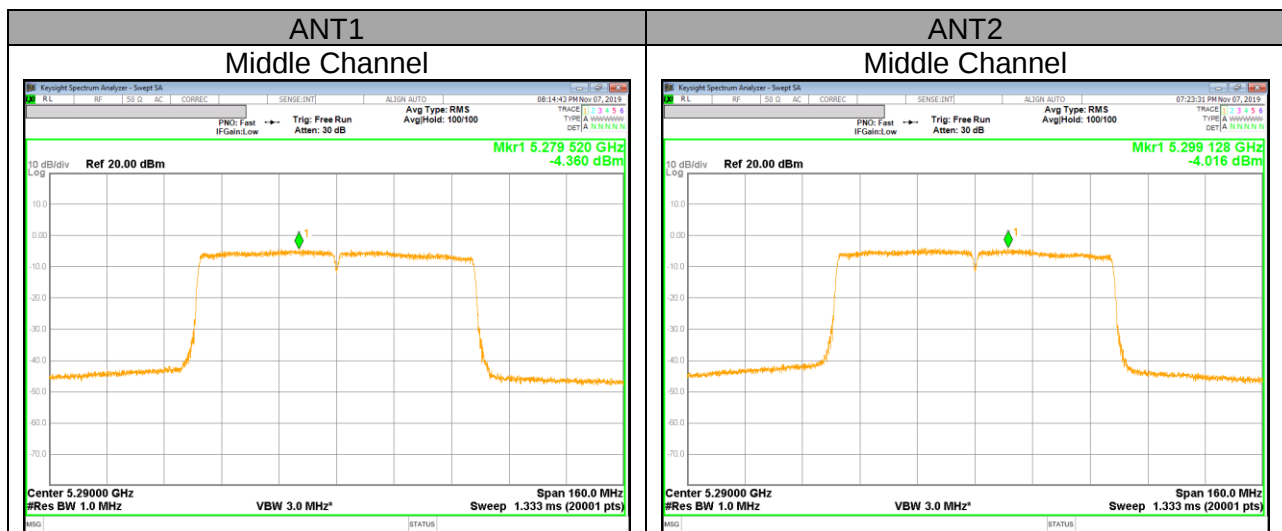
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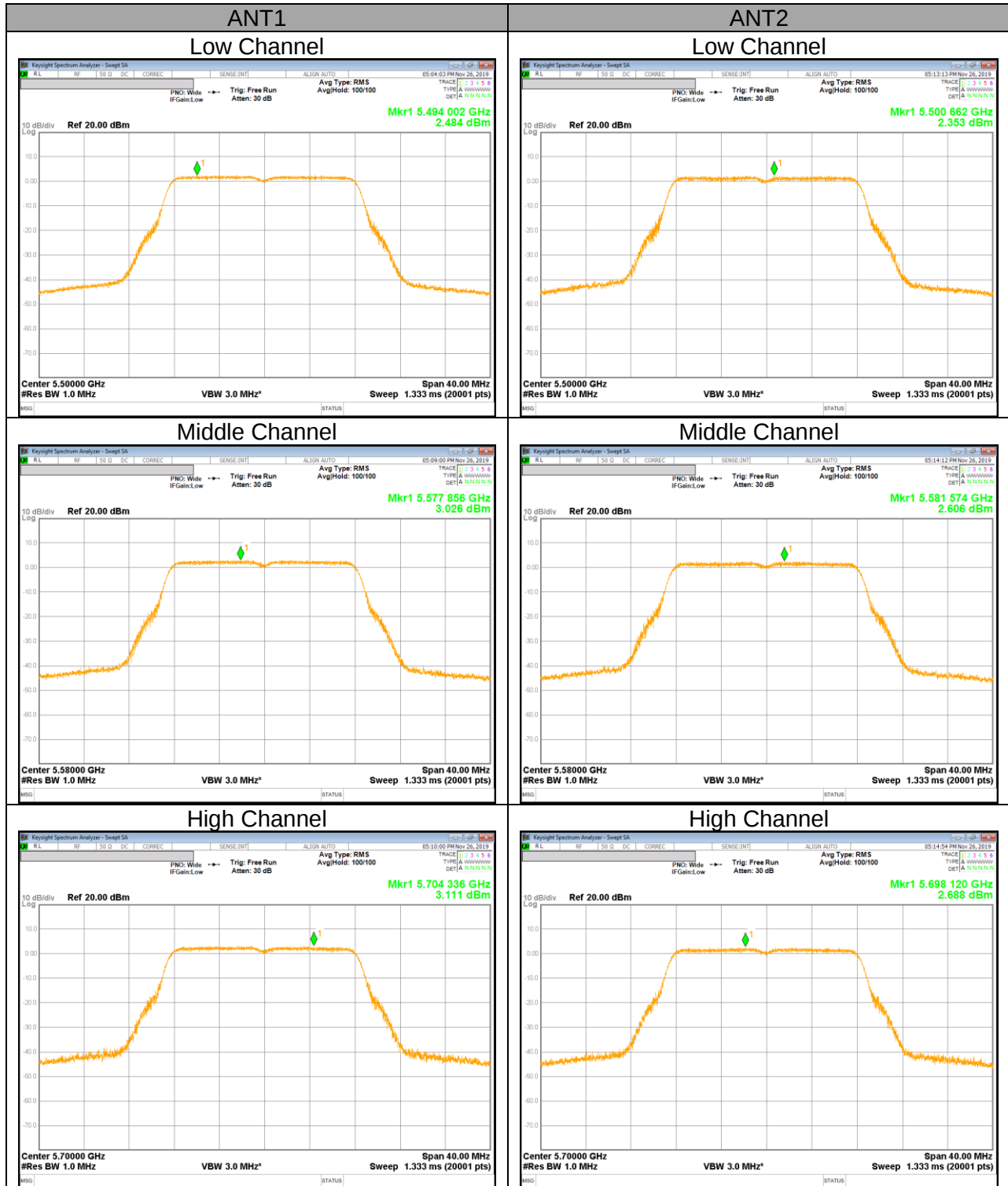
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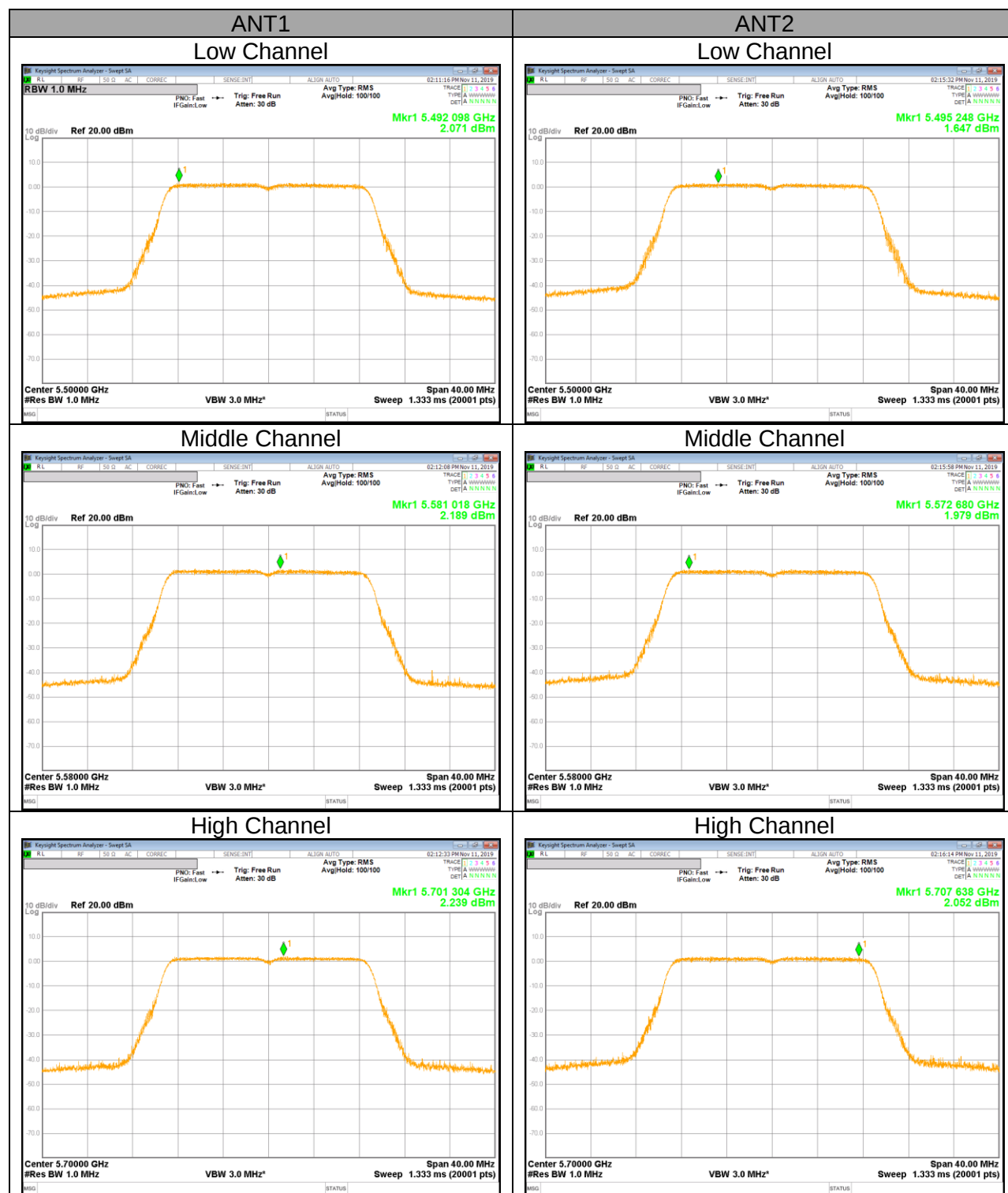
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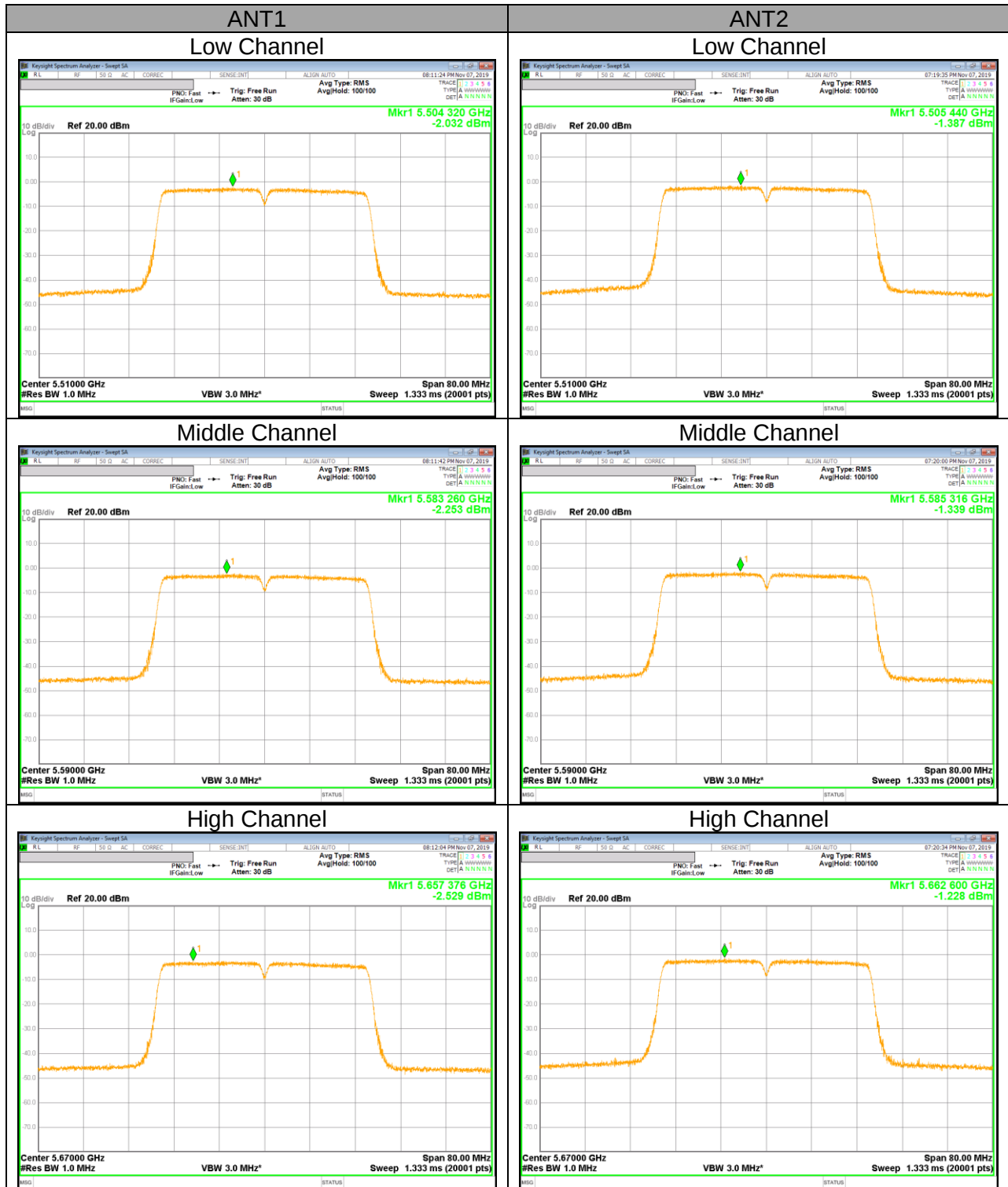
UNII 5.5 GHz IEEE 802.11a mode PSD



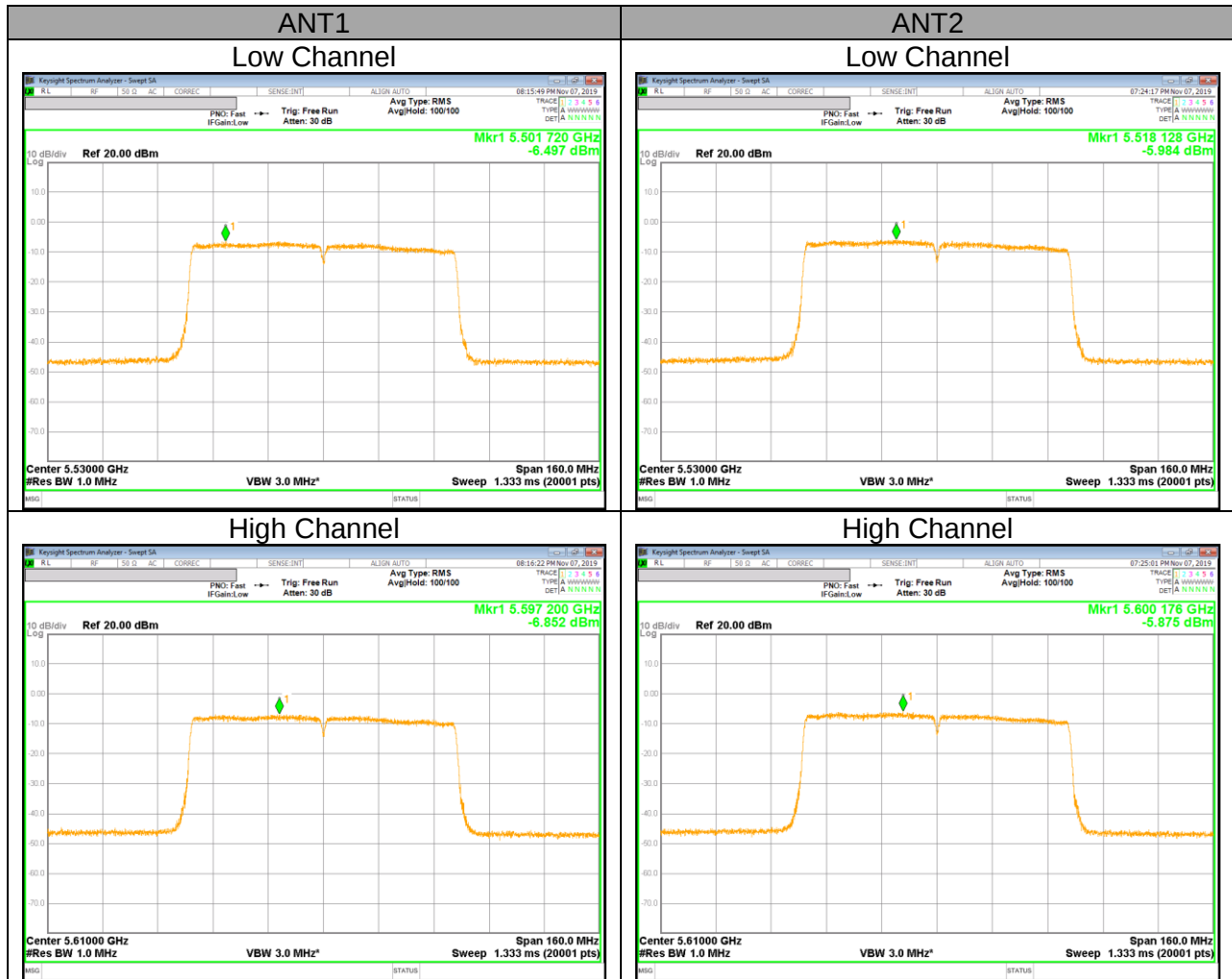
UNII 5.5 GHz IEEE 802.11n HT20 mode PSD



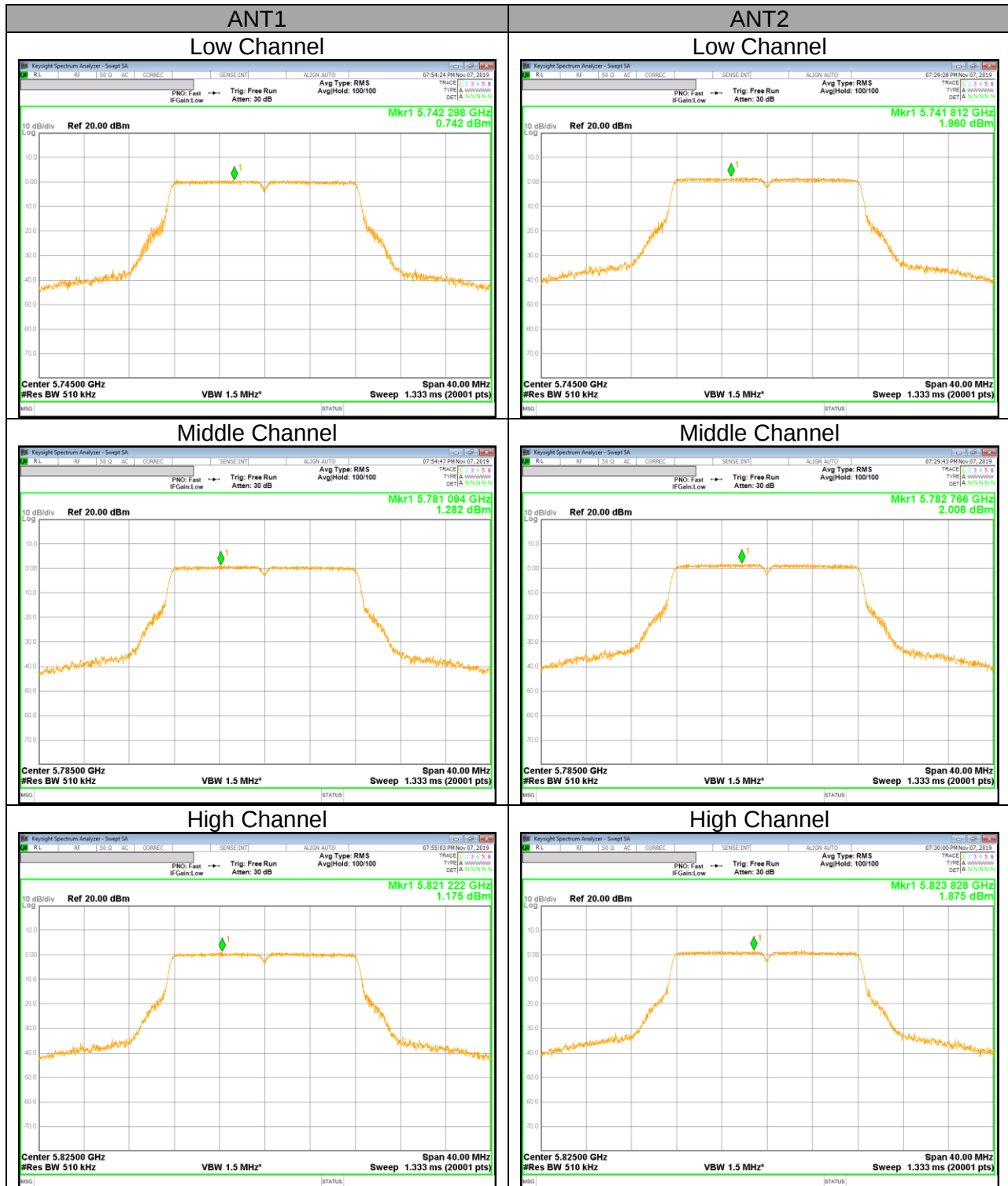
UNII 5.5 GHz IEEE 802.11n HT40 mode PSD



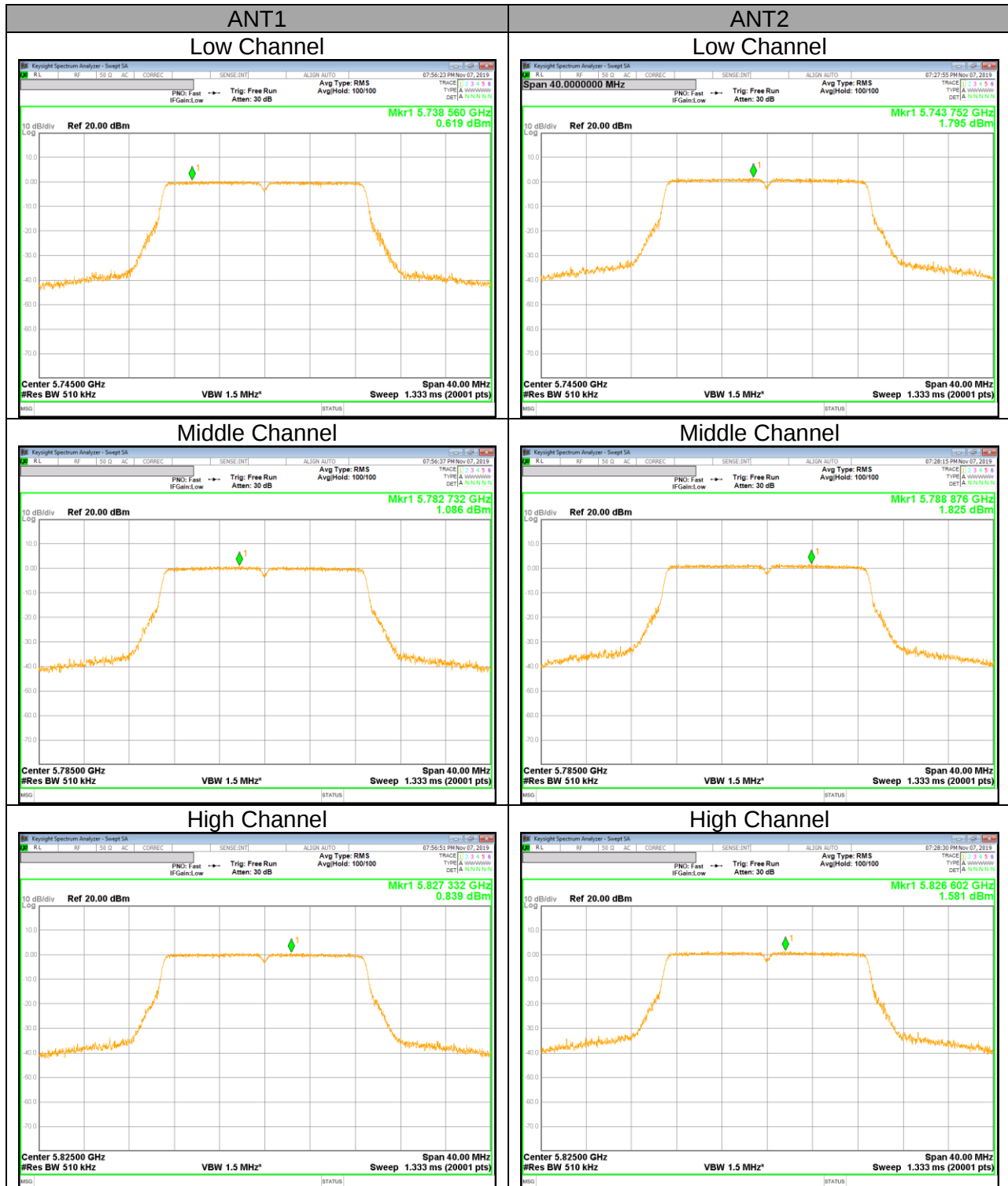
UNII 5.5 GHz IEEE 802.11ac VHT80 mode PSD

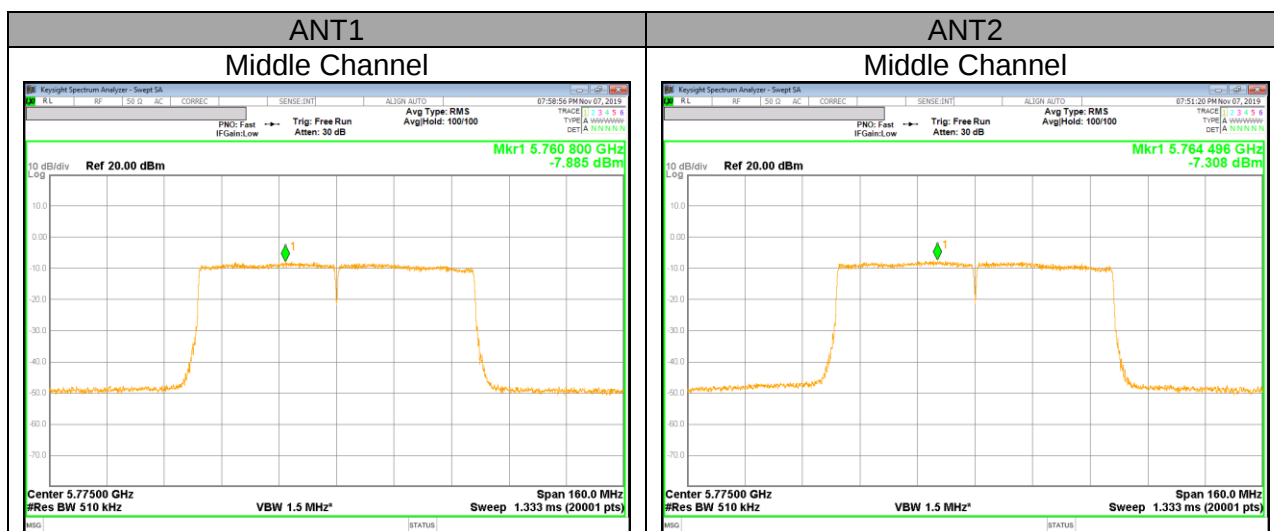
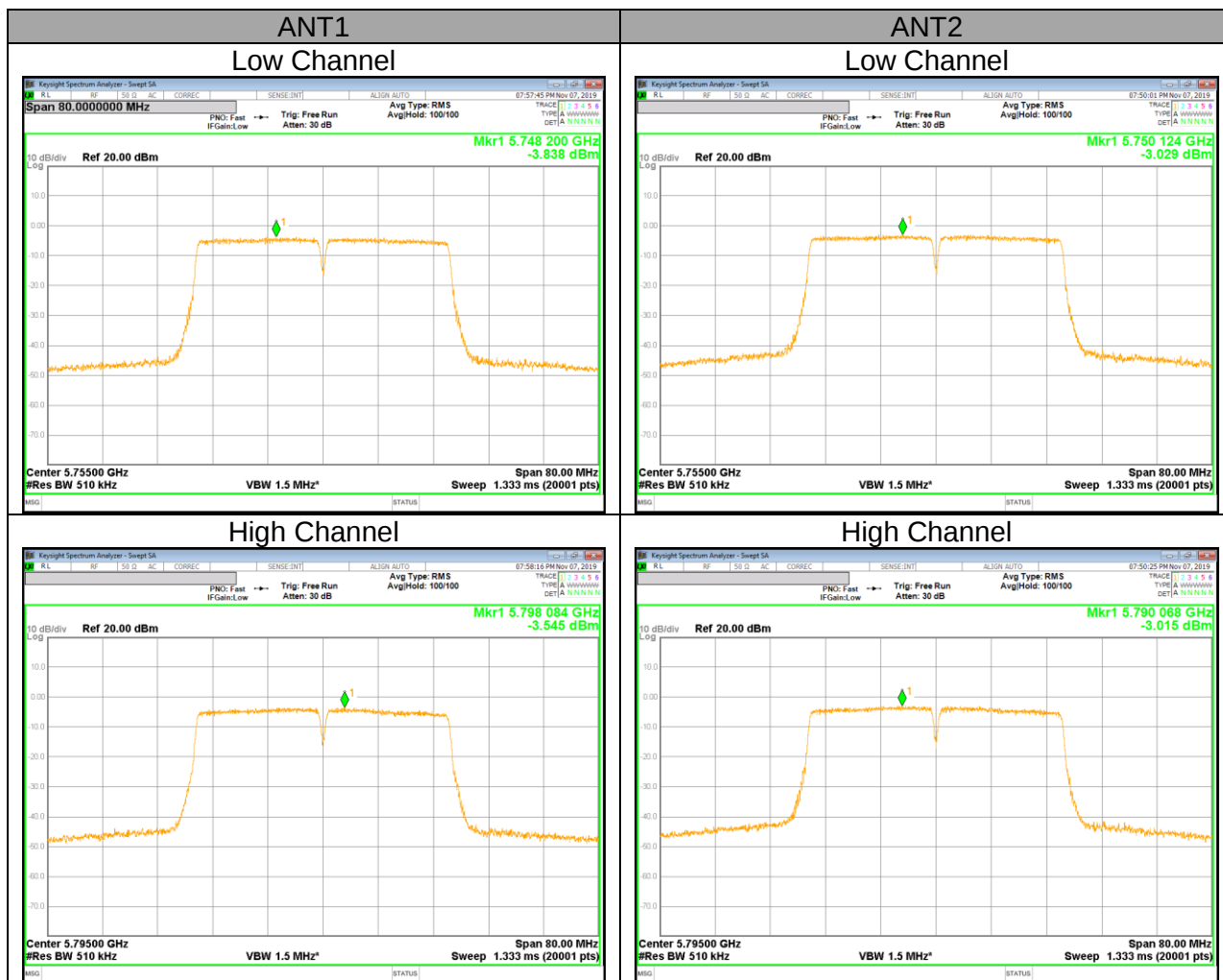


UNII 5.8 GHz IEEE 802.11a mode PSD

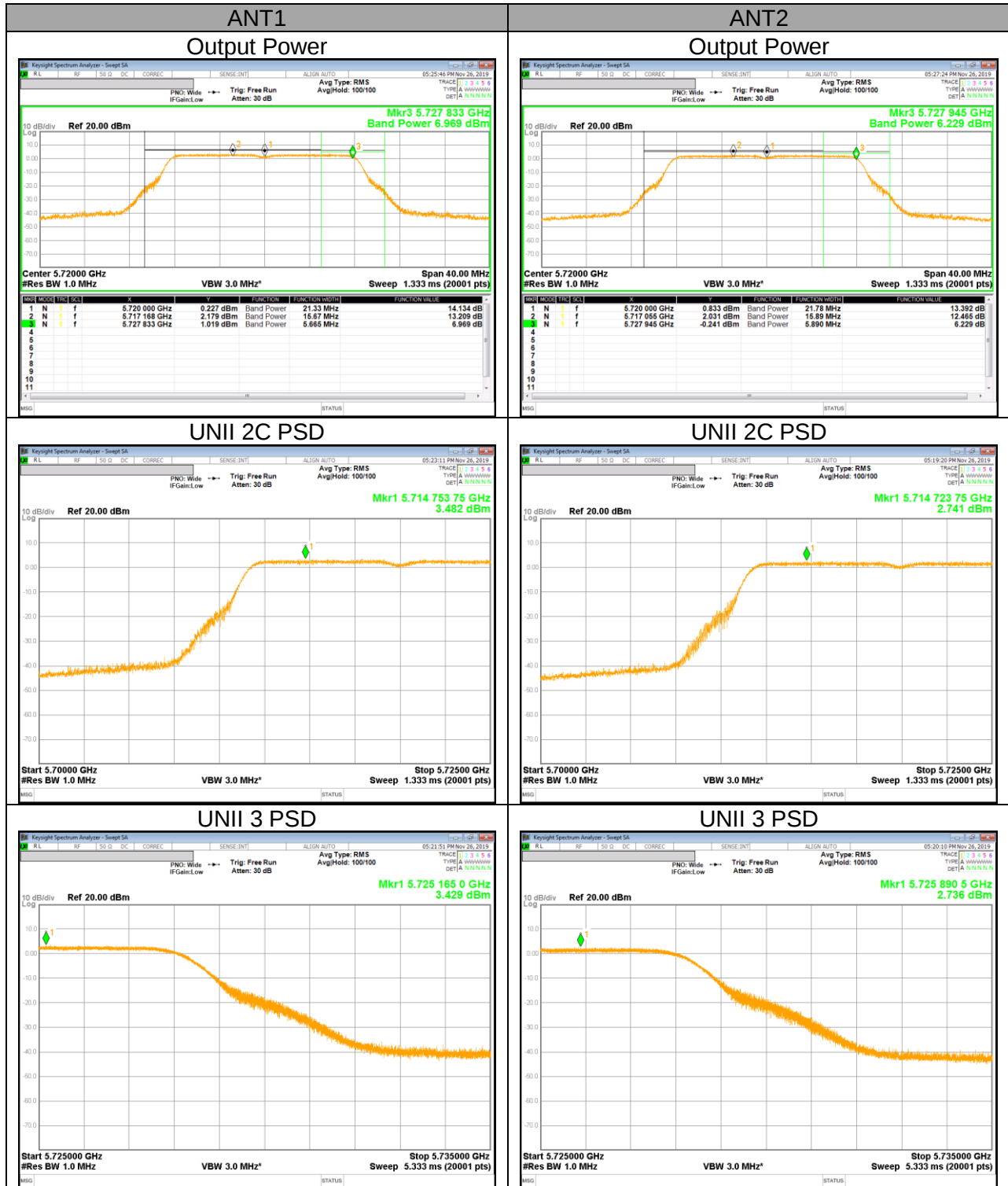


UNII 5.8 GHz IEEE 802.11n HT20 mode mode PSD

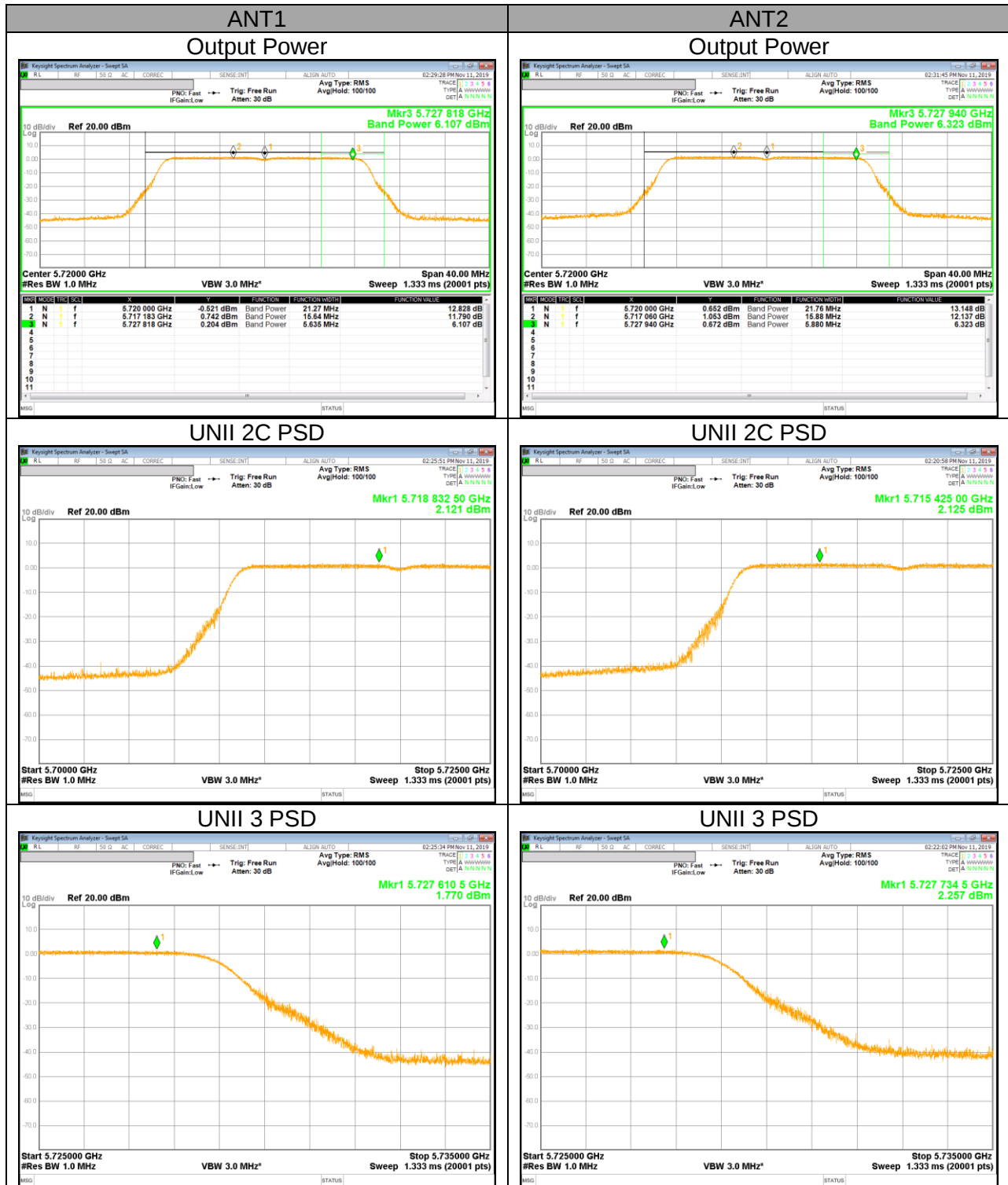




UNII Straddle Ch. IEEE 802.11a mode Ourput Power and PSD



UNII Straddle Ch. IEEE 802.11n HT20 mode Ourput Power and PSD



UNII Straddle Ch. IEEE 802.11n HT40 mode Ourput Power and PSD

