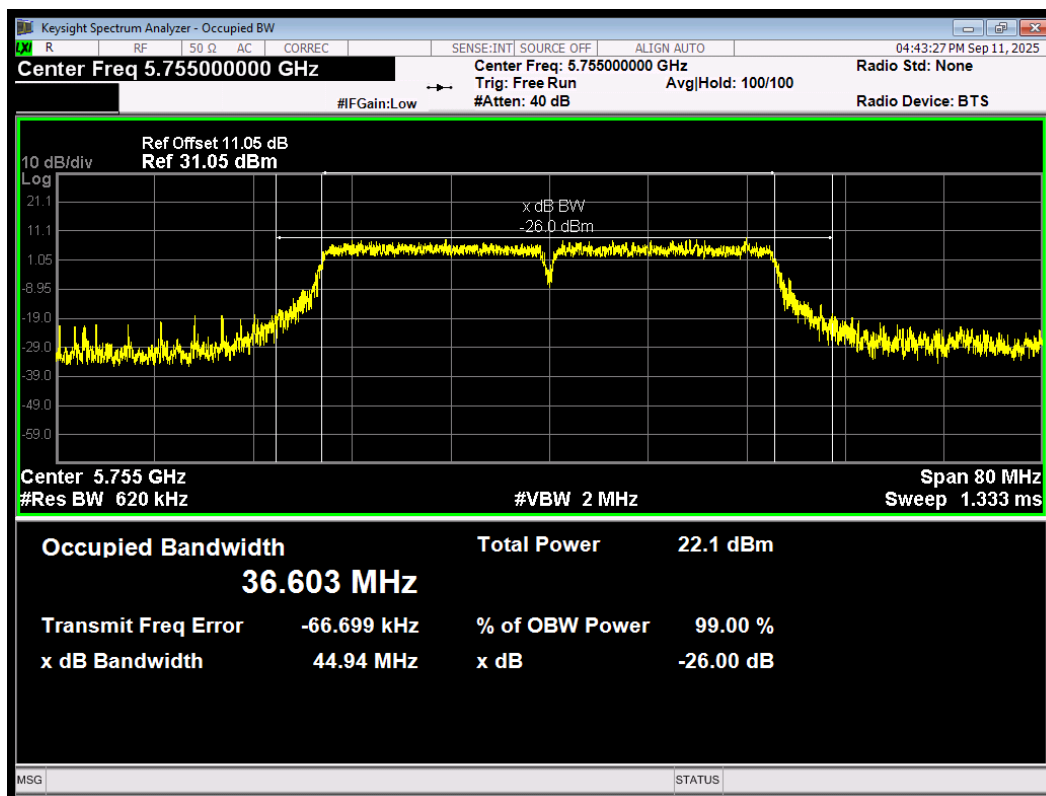
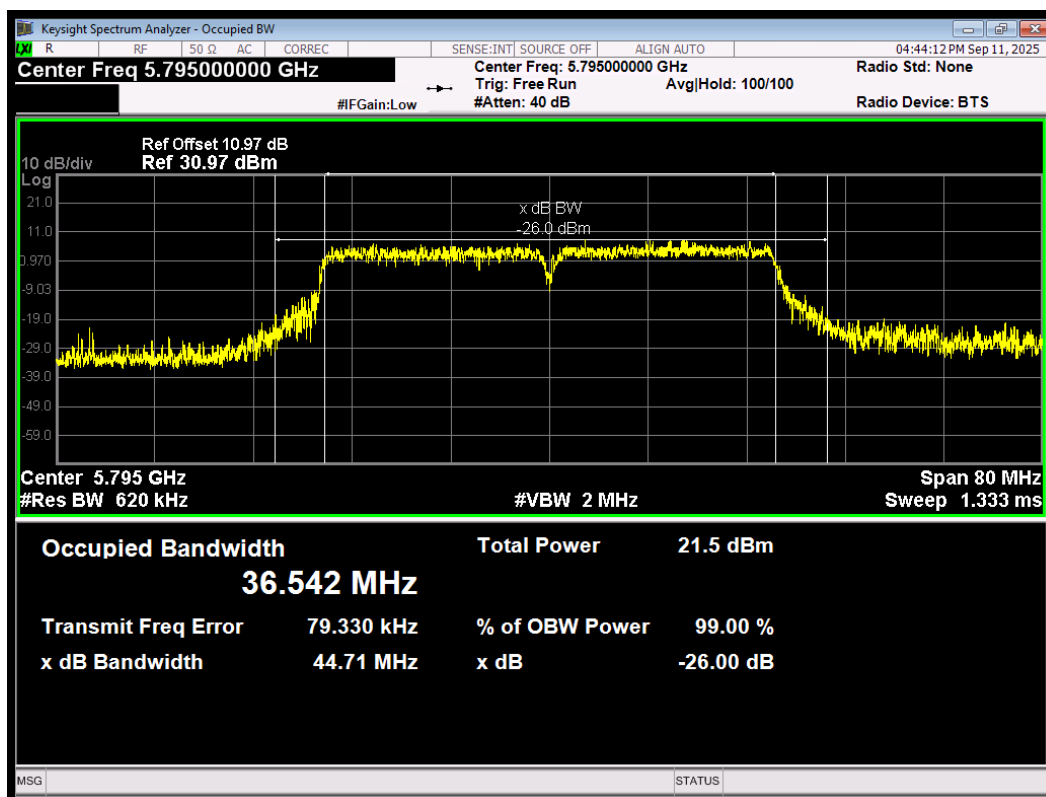


OBW 802.11n(HT40) 5755MHz



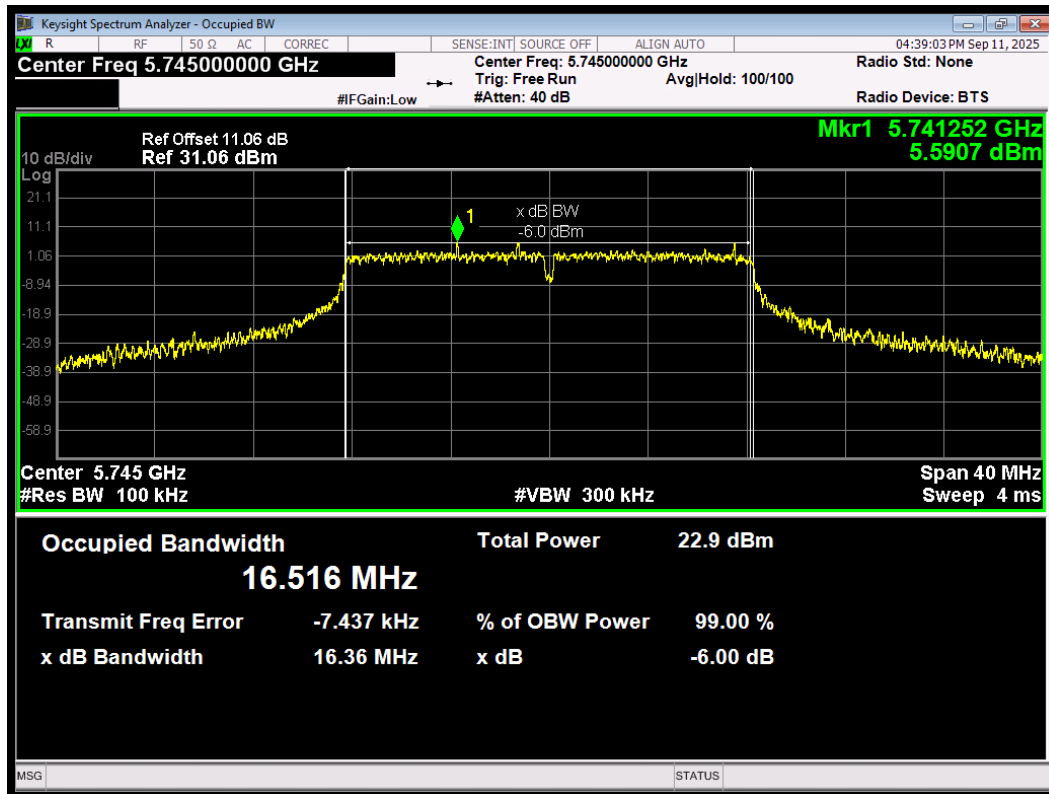
OBW 802.11n(HT40) 5795MHz



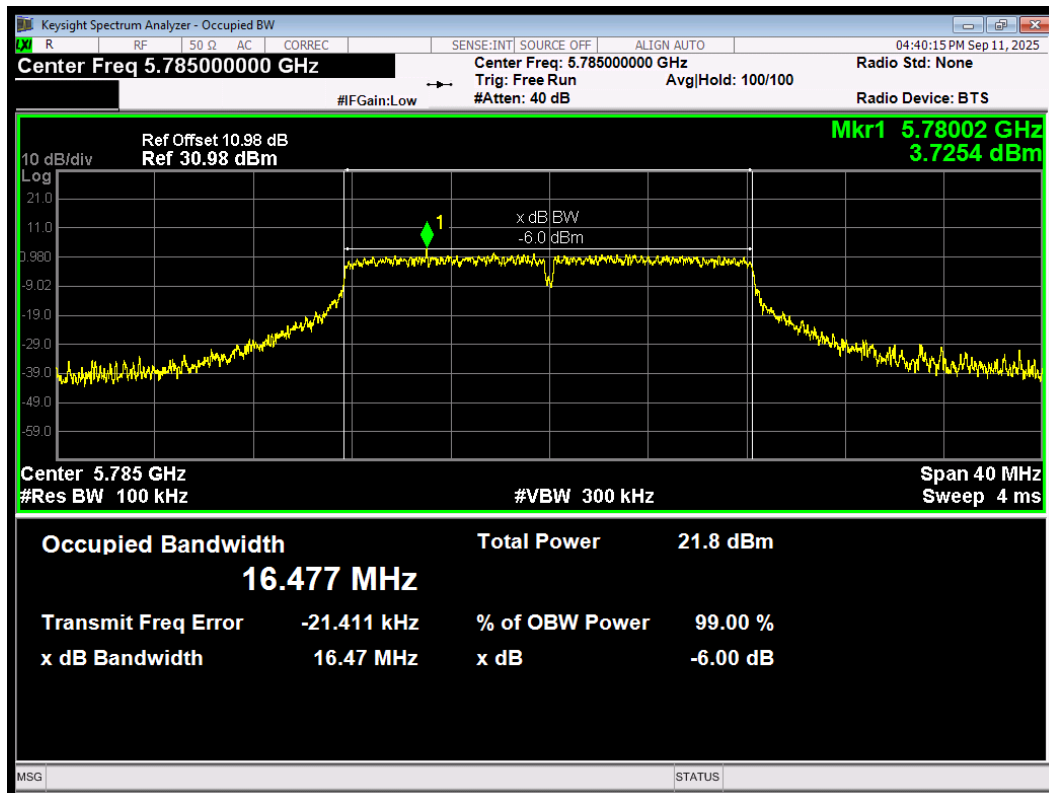
Minimum 6 dB bandwidth

U-NII-3

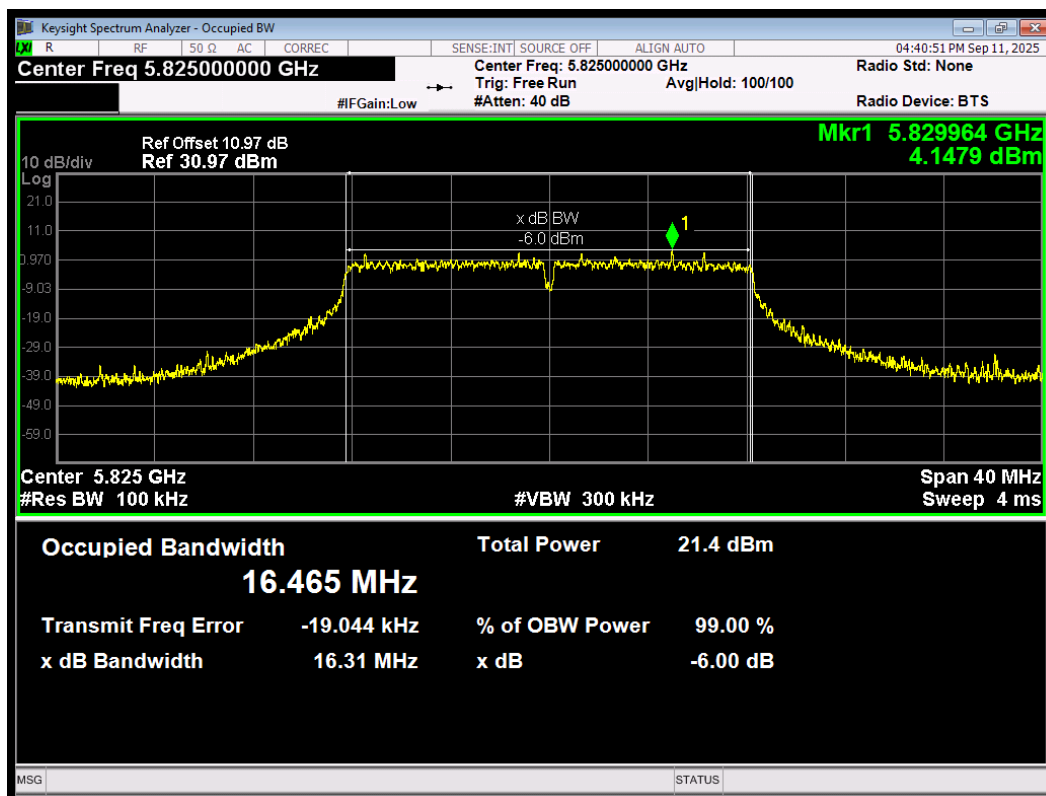
-6dB Bandwidth 802.11a 5745MHz



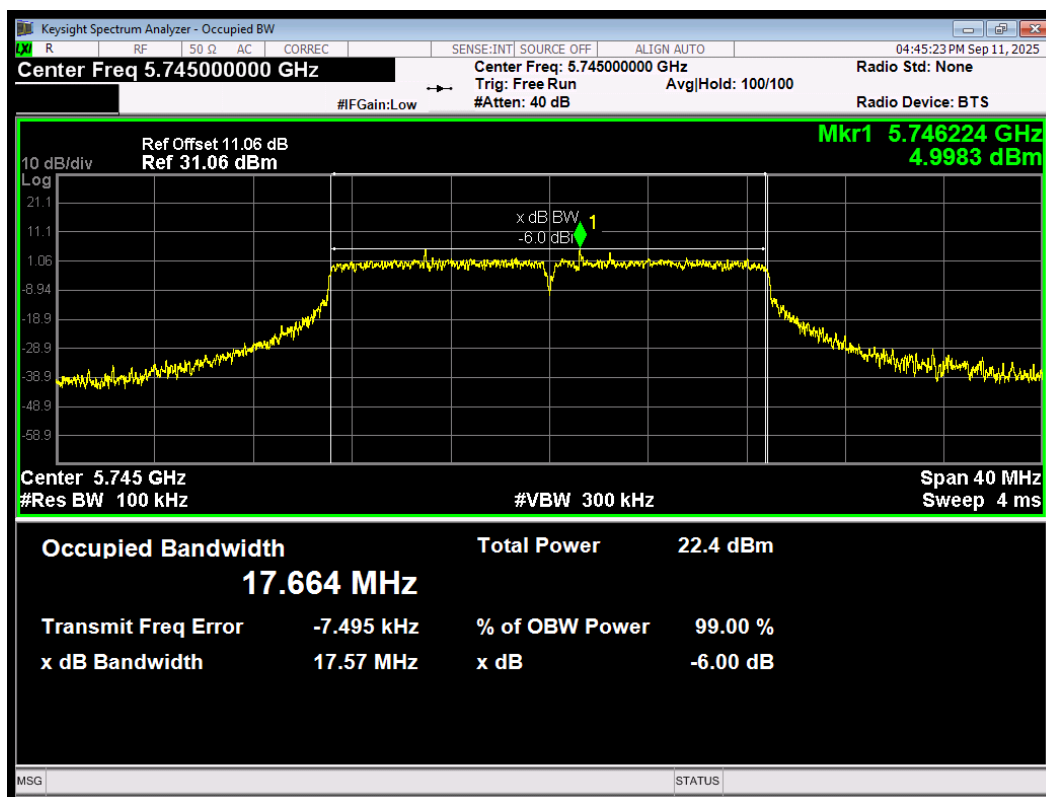
-6dB Bandwidth 802.11a 5785MHz



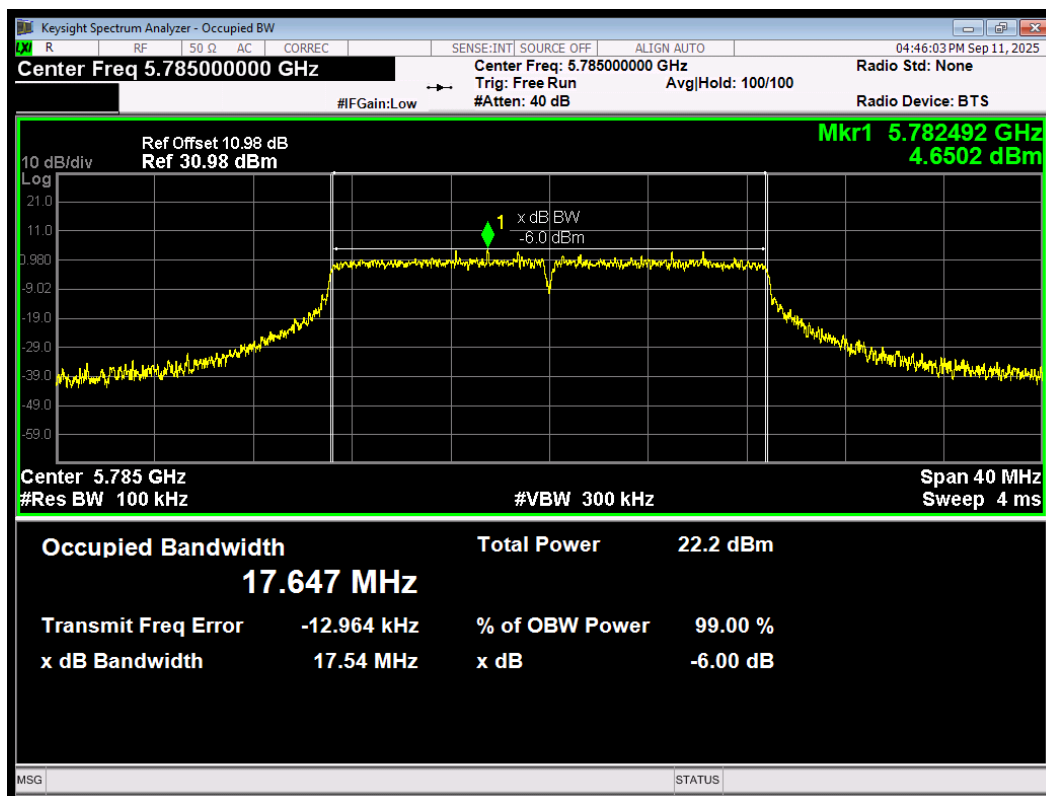
-6dB Bandwidth 802.11a 5825MHz



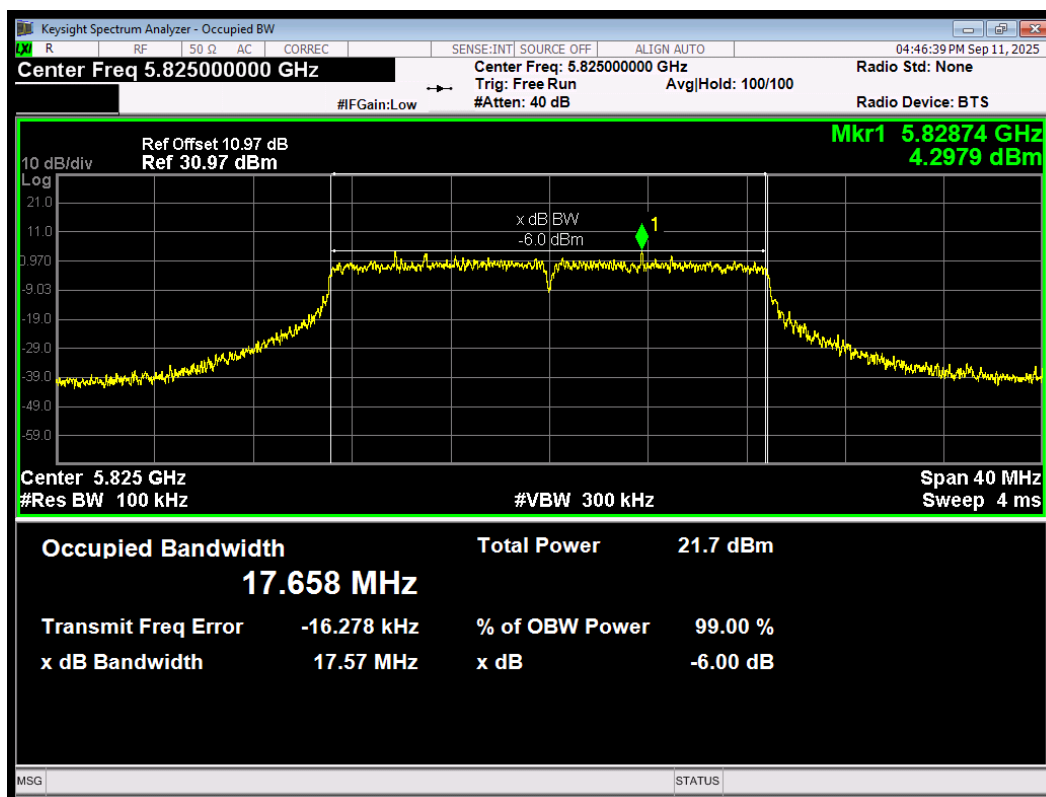
-6dB Bandwidth 802.11ac(VHT20) 5745MHz



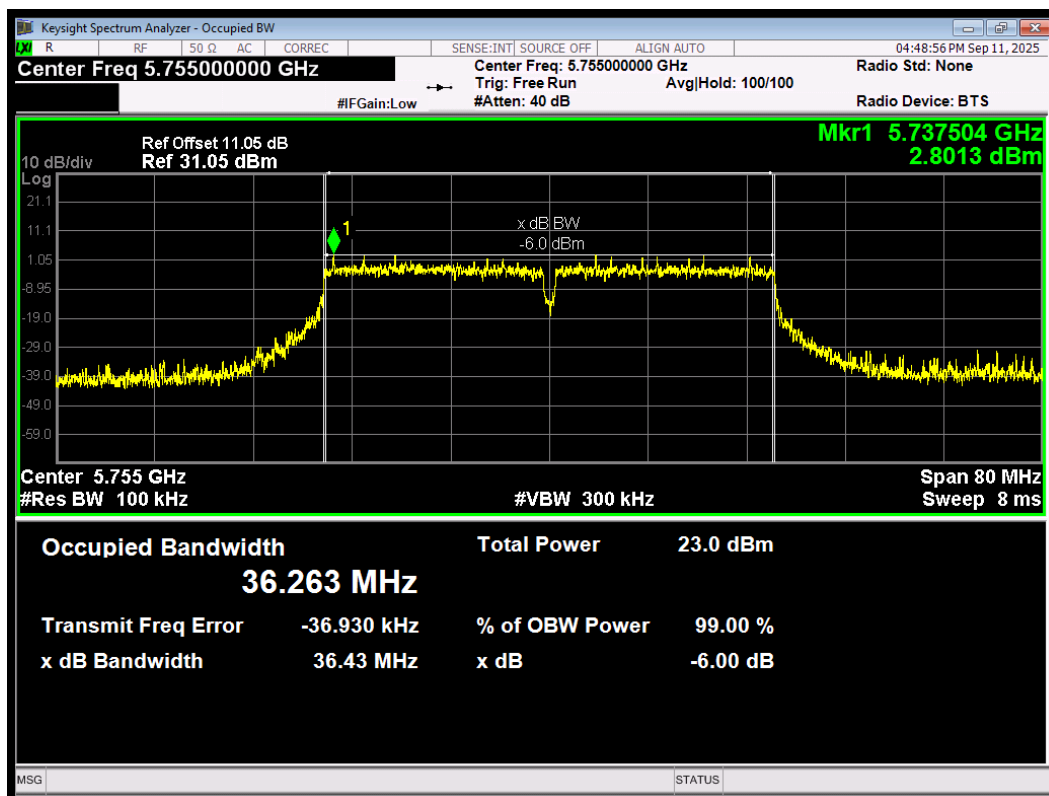
-6dB Bandwidth 802.11ac(VHT20) 5785MHz



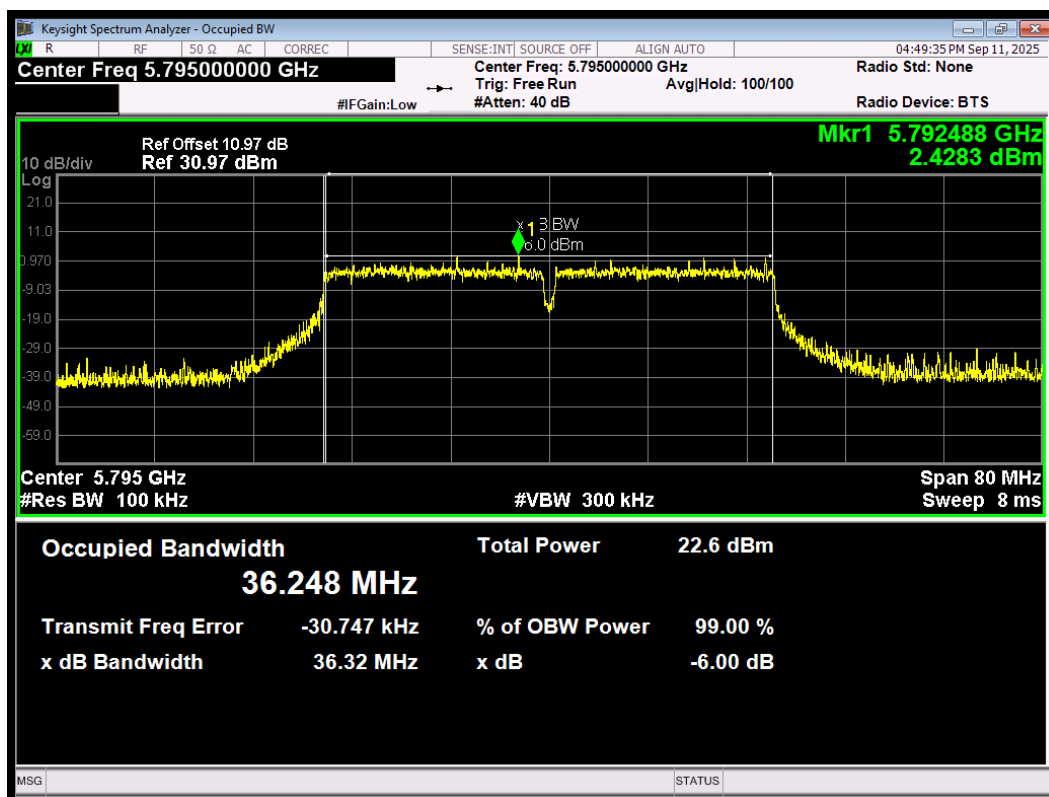
-6dB Bandwidth 802.11ac(VHT20) 5825MHz



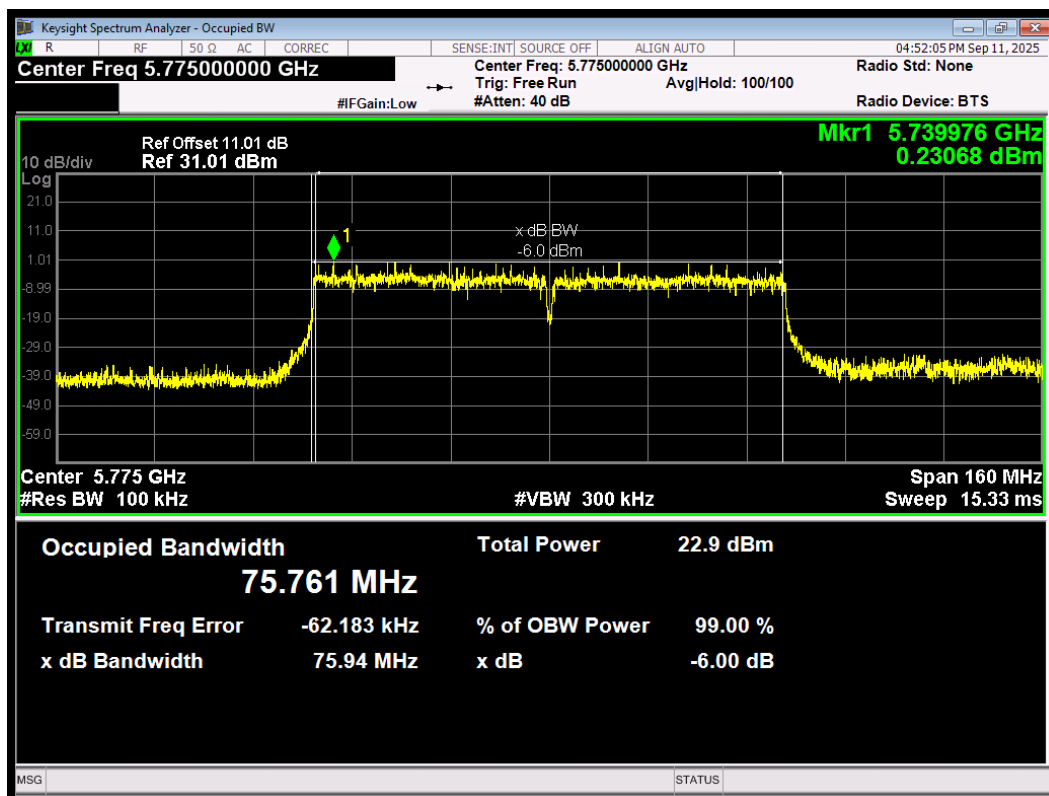
-6dB Bandwidth 802.11ac(VHT40) 5755MHz



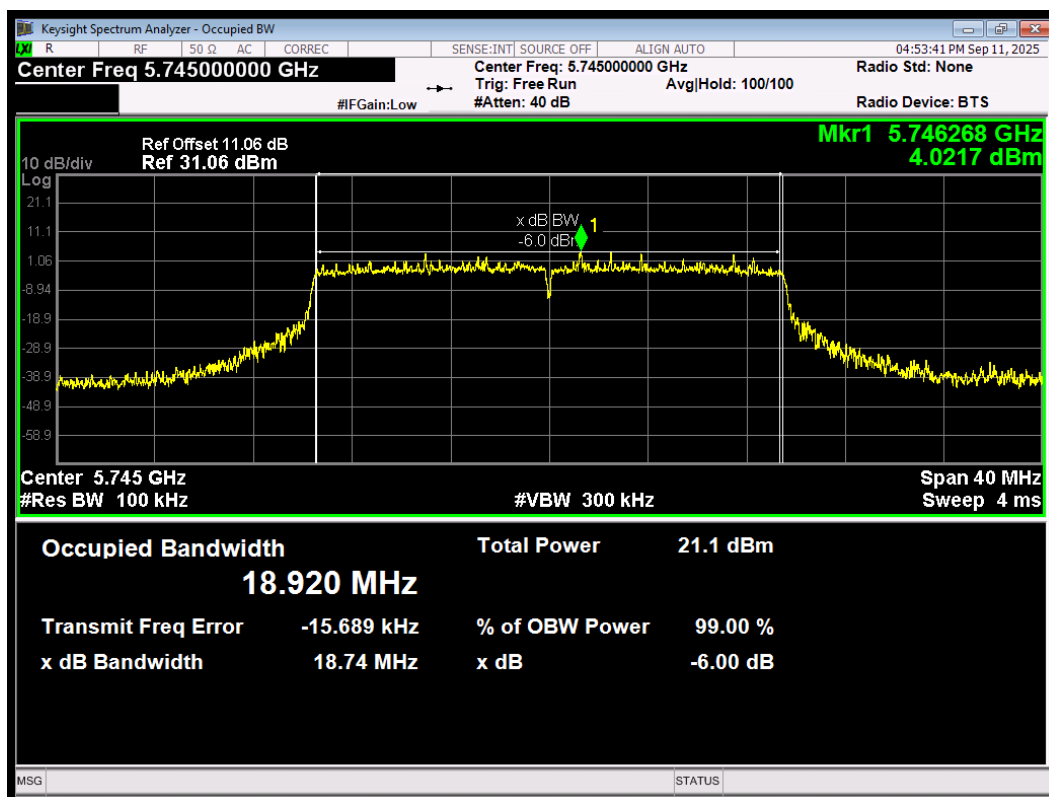
-6dB Bandwidth 802.11ac(VHT40) 5795MHz



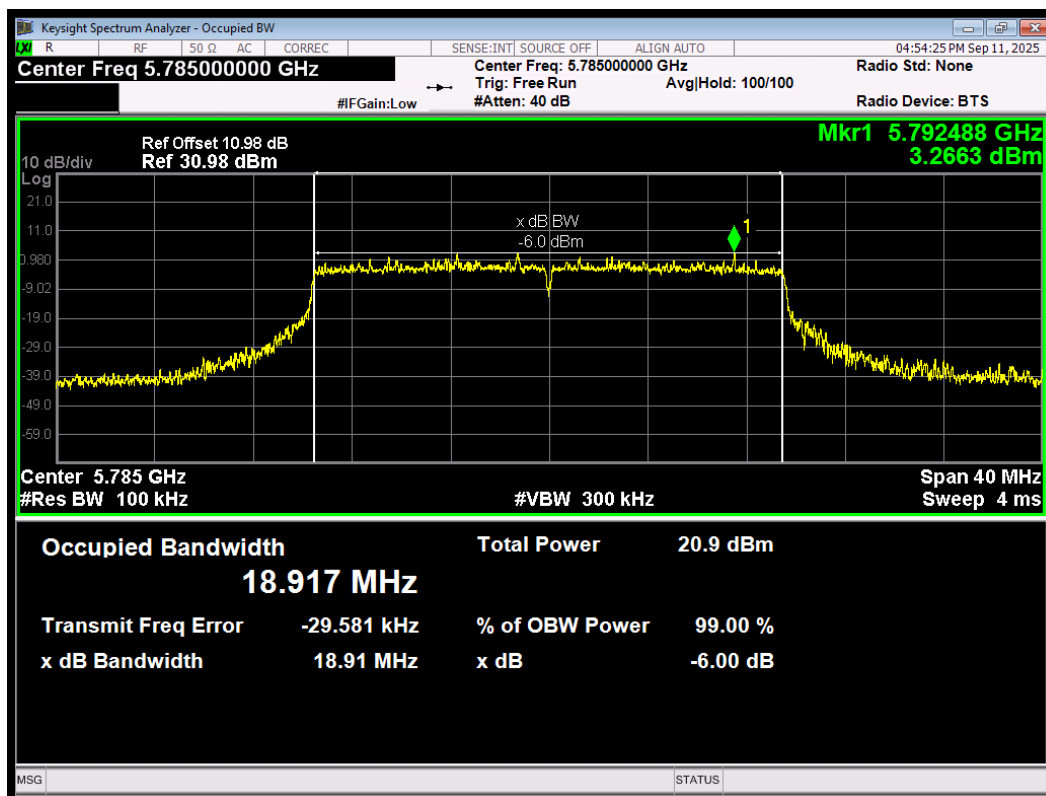
-6dB Bandwidth 802.11ac(VHT80) 5775MHz



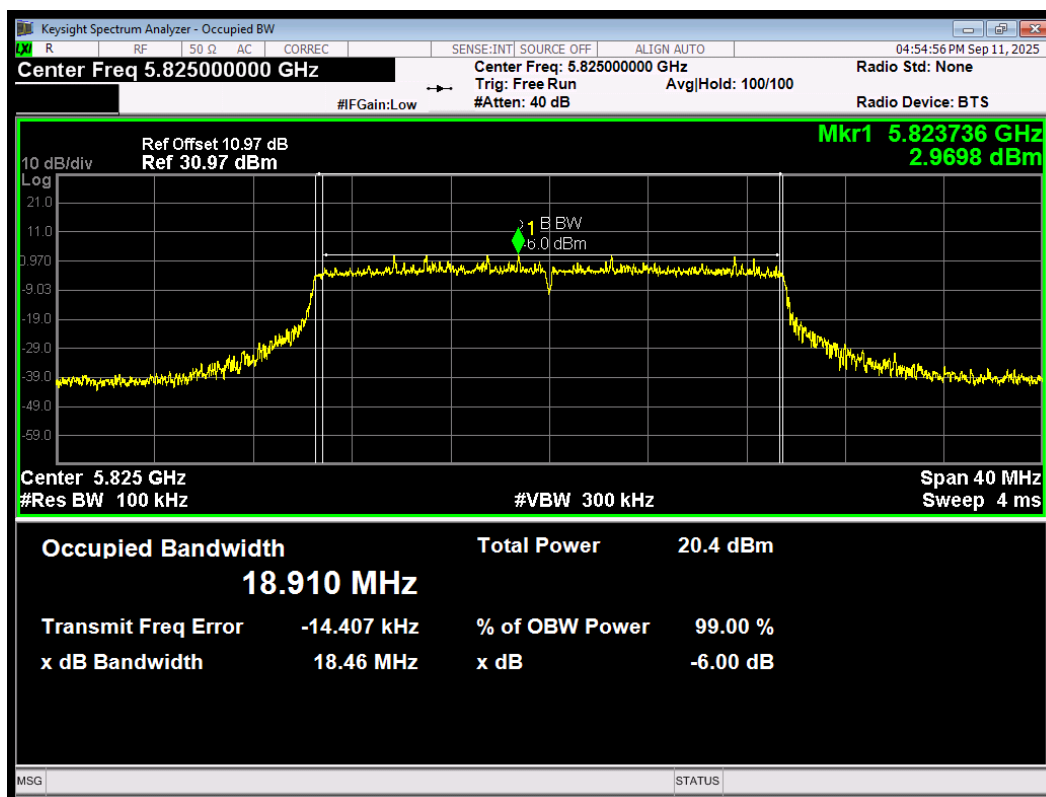
-6dB Bandwidth 802.11ax(HE20) 5745MHz



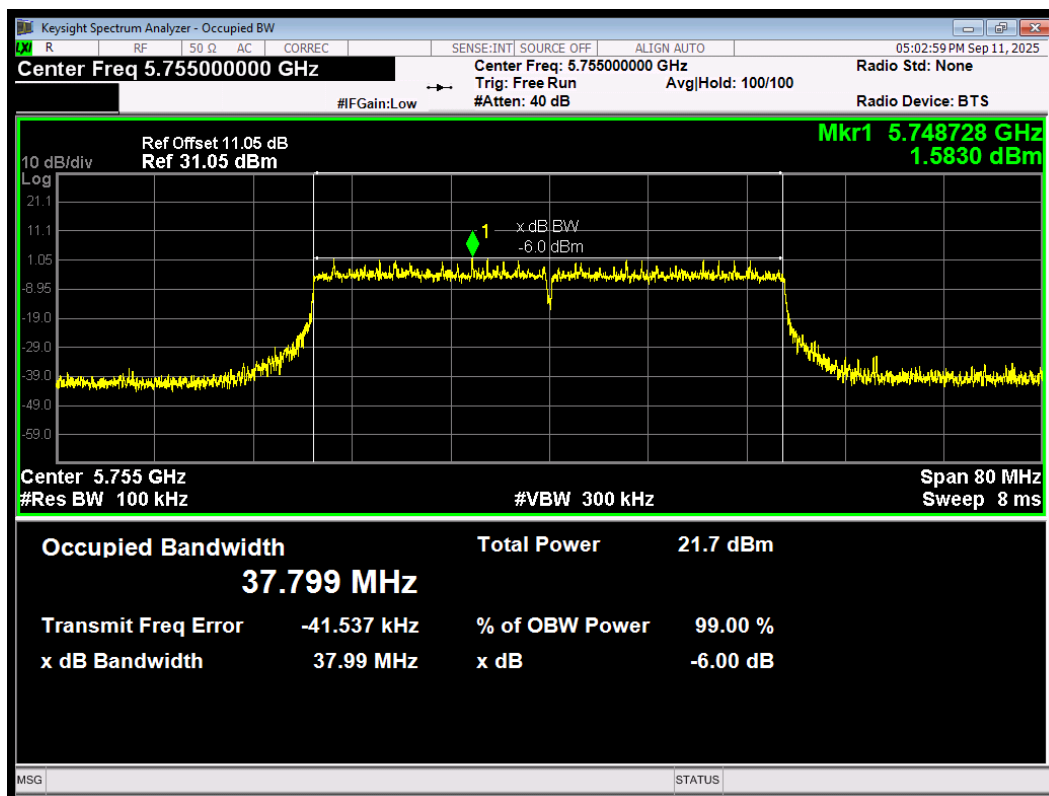
-6dB Bandwidth 802.11ax(HE20) 5785MHz



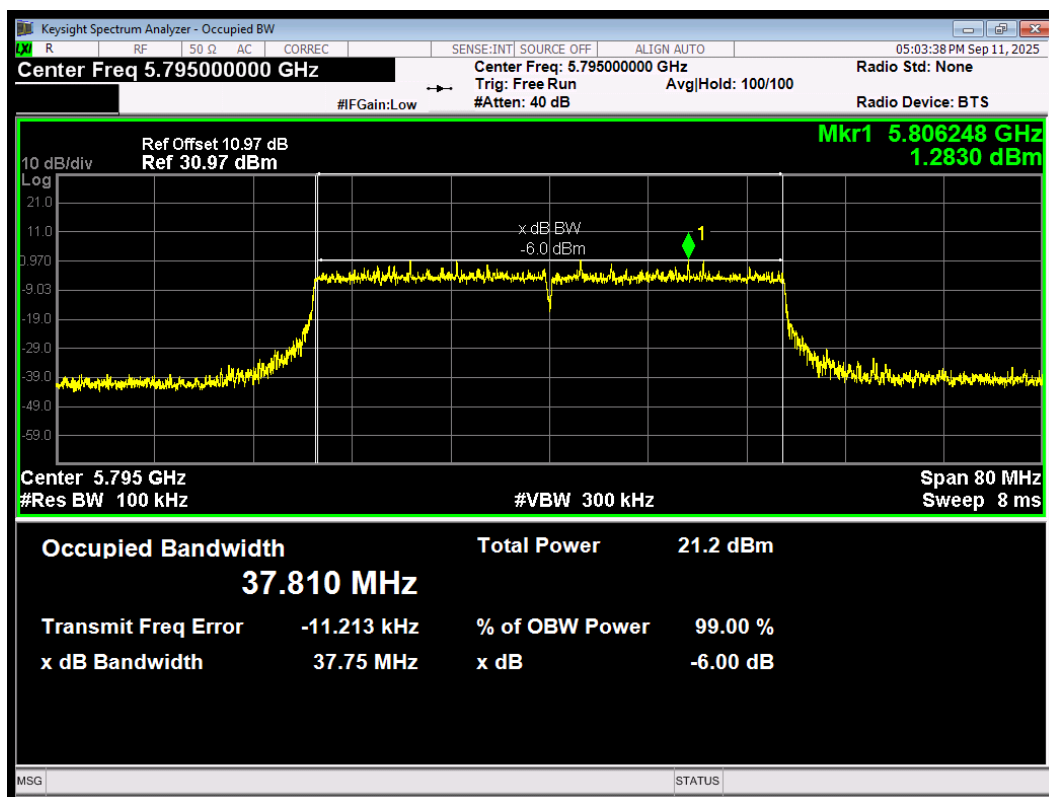
-6dB Bandwidth 802.11ax(HE20) 5825MHz



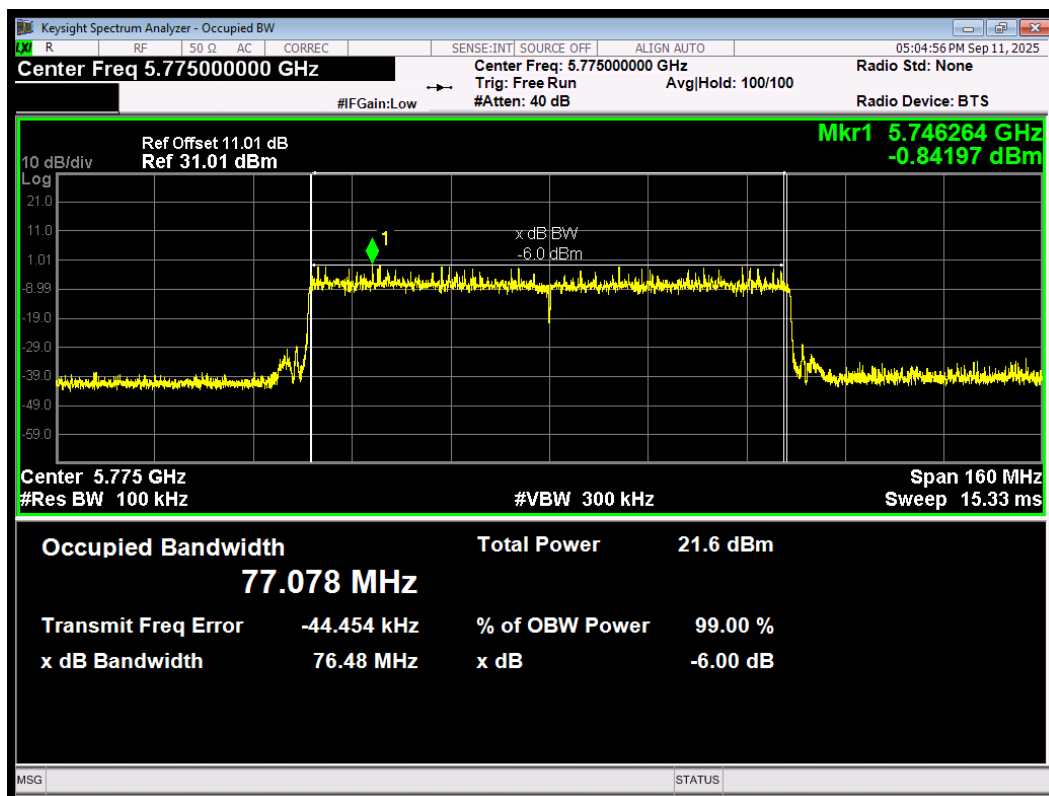
-6dB Bandwidth 802.11ax(HE40) 5755MHz



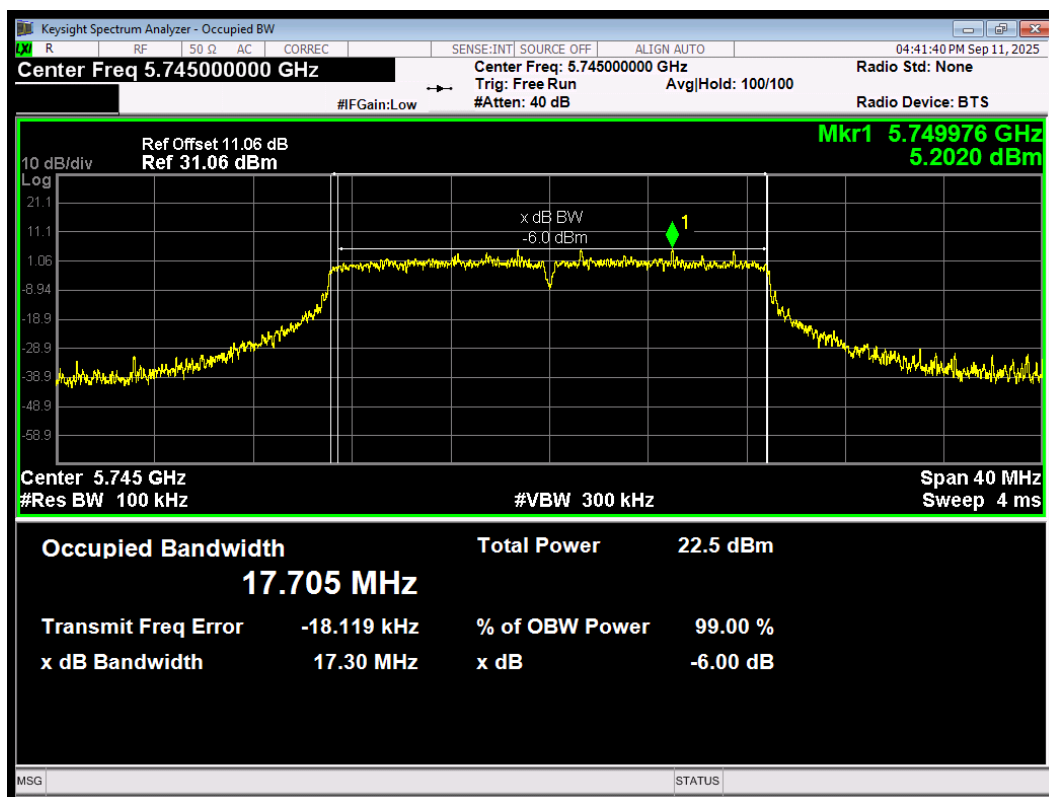
-6dB Bandwidth 802.11ax(HE40) 5795MHz



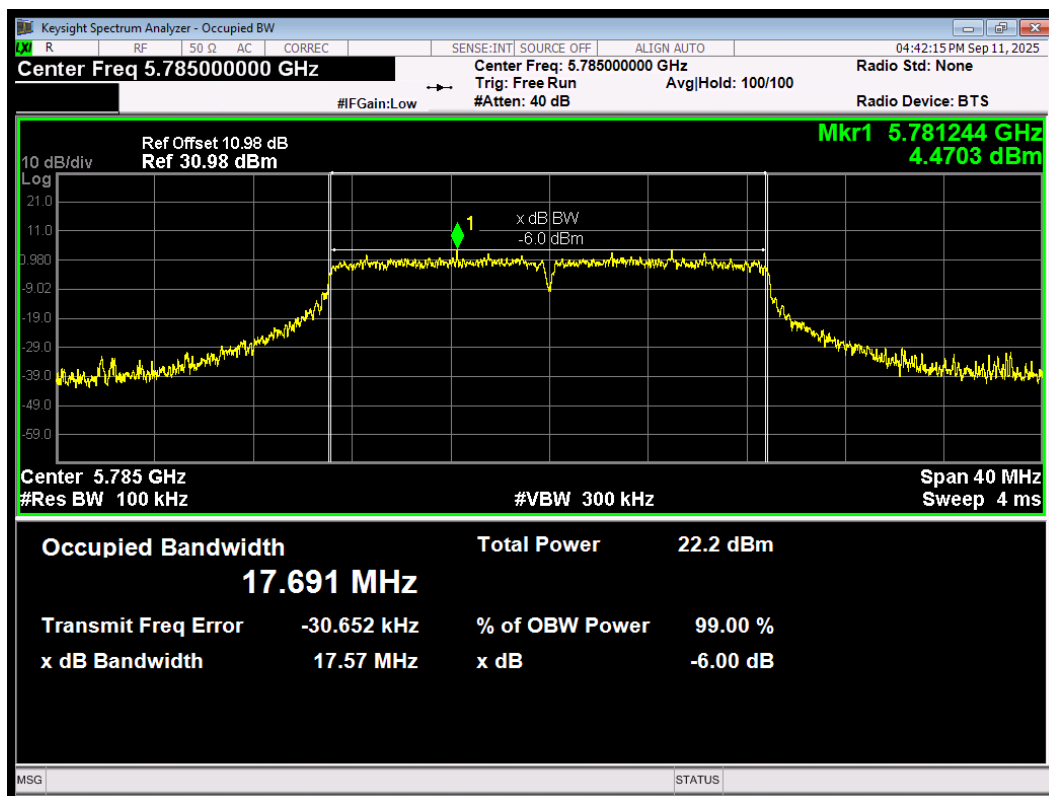
-6dB Bandwidth 802.11ax(HE80) 5775MHz



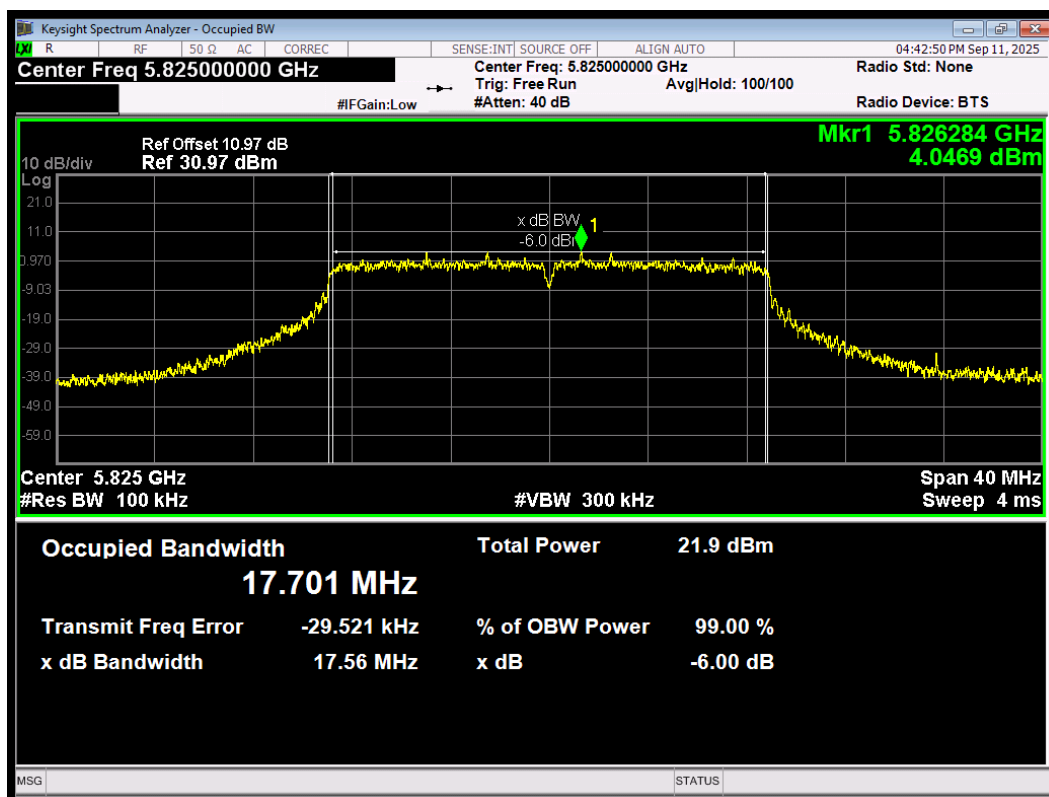
-6dB Bandwidth 802.11n(HT20) 5745MHz



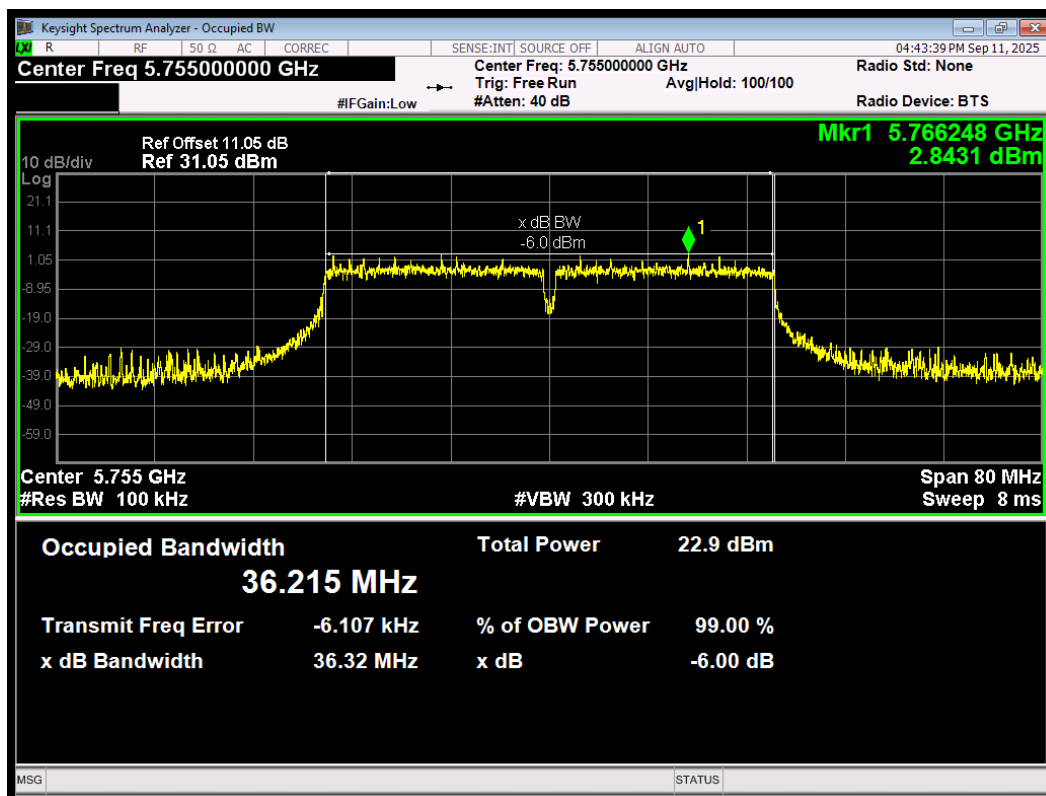
-6dB Bandwidth 802.11n(HT20) 5785MHz



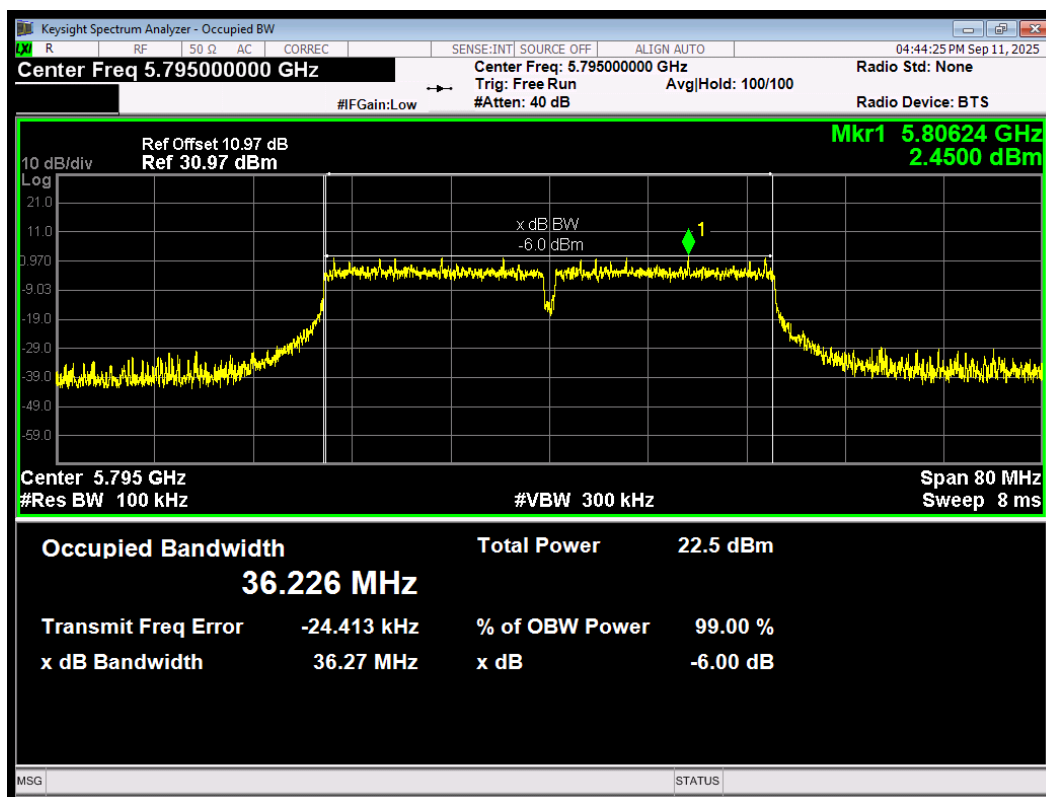
-6dB Bandwidth 802.11n(HT20) 5825MHz



-6dB Bandwidth 802.11n(HT40) 5755MHz



-6dB Bandwidth 802.11n(HT40) 5795MHz



6.2. Average Power Output

Mode	Duty cycle	Duty cycle correction Factor (dB)
802.11a	0.52	2.83
802.11n HT20	0.48	3.20
802.11n HT40	0.31	5.03
802.11ac VHT20	0.48	3.19
802.11ac VHT40	0.32	5.01
802.11ac VHT80	0.19	7.27
802.11ac VHT160	0.12	9.32
802.11ax HE20	0.44	3.55
802.11ax HE40	0.29	5.32
802.11ax HE80	0.18	7.38
802.11ax HE160	0.12	9.32
Note: when Duty cycle ≥ 0.98 , Duty cycle correction Factor not required.		

U-NII-1

Power Index		
Mode	Channel/ Frequency (MHz)	TP Set
802.11a	36/5180	17
	40/5200	17
	48/5240	17
802.11n HT20	36/5180	17
	40/5200	17
	48/5240	17
802.11n HT40	38/5190	17
	46/5230	19
802.11ac VHT20	36/5180	17
	40/5200	17
	48/5240	17
802.11ac VHT40	38/5190	18
	46/5230	17
802.11ac VHT80	42/5210	19
802.11ax HE20	36/5180	17
	40/5200	17
	48/5240	17
802.11ax HE40	38/5190	16
	46/5230	19
802.11ax HE80	42/5210	18

U-NII-2A

Power Index		
Mode	Channel/ Frequency (MHz)	TP Set
802.11a	52/5260	17
	60/5300	18
	64/5320	18
802.11n HT20	52/5260	17
	60/5300	18
	64/5320	18
802.11n HT40	54/5270	19
	62/5310	19
802.11ac VHT20	52/5260	17
	60/5300	18
	64/5320	18
802.11ac VHT40	54/5270	19
	62/5310	19
802.11ac VHT80	58/5290	17
802.11ac VHT160	50/5250	17
802.11ax HE20	52/5260	17
	60/5300	17
	64/5320	20
802.11ax HE40	54/5270	19
	62/5310	18
802.11ax HE80	58/5290	18
802.11ax HE160	50/5250	10

U-NII-2C

Power Index		
Mode	Channel/ Frequency (MHz)	TP Set
802.11a	100/5500	18
	120/5600	18
	140/5700	17
802.11n HT20	100/5500	18
	120/5600	18
	140/5700	18
802.11n HT40	102/5510	19
	118/5590	19
	134/5670	17
802.11ac VHT20	100/5500	18
	120/5600	18
	140/5700	17
802.11ac VHT40	102/5510	18
	118/5590	17
	134/5670	17
802.11ac VHT80	122/5610	17
802.11ac VHT160	114/5570	17
802.11ax HE20	100/5500	19
	120/5600	19
	140/5700	17
802.11ax HE40	102/5510	16
	118/5590	20
	134/5670	16
802.11ax HE80	122/5610	19
802.11ax HE160	114/5570	10

U-NII-3

Power Index		
Mode	Channel/ Frequency (MHz)	TP Set
802.11a	149/5745	22
	157/5785	23
	165/5825	23
802.11n HT20	149/5745	22
	157/5785	23
	165/5825	23
802.11n HT40	151/5755	20
	159/5795	21
802.11ac VHT20	149/5745	22
	157/5785	23
	165/5825	23
802.11ac VHT40	151/5755	20
	159/5795	21
802.11ac VHT80	155/5775	19
802.11ax HE20	149/5745	22
	157/5785	22
	165/5825	22
802.11ax HE40	151/5755	20
	159/5795	20
802.11ax HE80	155/5775	18

Test Mode		Channel/ Frequency (MHz)	B=26 dB bandwidth (MHz)	Limit 11 dBm + 10 log B (dBm)	Final Limit (dBm)
U-NII-2A	802.11a	52/5260	18.80	23.74	23.74
		60/5300	18.82	23.75	23.75
		64/5320	18.88	23.76	23.76
	802.11n HT20	52/5260	19.49	23.90	23.90
		60/5300	19.26	23.85	23.85
		64/5320	19.40	23.88	23.88
	802.11n HT40	54/5270	38.72	26.88	24.00
		62/5310	39.41	26.96	24.00
	802.11ac VHT20	52/5260	19.53	23.91	23.91
		60/5300	19.47	23.89	23.89
		64/5320	19.63	23.93	23.93
	802.11ac VHT40	54/5270	38.92	26.90	24.00
		62/5310	39.00	26.91	24.00
	802.11ac VHT80	58/5290	84.57	30.27	24.00
	802.11ac VHT160	50/5250	290.44	35.63	24.00
	802.11ax HE20	52/5260	20.13	24.04	24.00
		60/5300	20.37	24.09	24.00
		64/5320	20.35	24.09	24.00
	802.11ax HE40	54/5270	40.40	27.06	24.00
		62/5310	39.98	27.02	24.00
	802.11ax HE80	58/5290	80.80	30.07	24.00
	802.11ax HE160	50/5250	315.69	35.99	24.00
U-NII-2C	802.11a	100/5500	23.38	24.69	24.00
		120/5600	22.61	24.54	24.00
		140/5700	22.58	24.54	24.00
	802.11n HT20	100/5500	23.25	24.66	24.00
		120/5600	23.79	24.76	24.00
		140/5700	26.01	25.15	24.00
	802.11n HT40	102/5510	44.32	27.47	24.00
		118/5590	44.31	27.46	24.00
		134/5670	60.29	28.80	24.00
	802.11ac VHT20	100/5500	23.60	24.73	24.00
		120/5600	22.84	24.59	24.00
		140/5700	26.92	25.30	24.00
	802.11ac VHT40	102/5510	45.79	27.61	24.00
		118/5590	44.87	27.52	24.00

		134/5670	60.25	28.80	24.00
	802.11ac VHT80	122/5610	84.97	30.29	24.00
	802.11ac VHT160	114/5570	288.20	35.60	24.00
	802.11ax HE20	100/5500	23.31	24.68	24.00
		120/5600	22.98	24.61	24.00
		140/5700	27.10	25.33	24.00
	802.11ax HE40	102/5510	44.11	27.45	24.00
		118/5590	43.34	27.37	24.00
		134/5670	58.58	28.68	24.00
	802.11ax HE80	122/5610	80.83	30.08	24.00
	802.11ax HE160	114/5570	319.90	36.05	24.00
Note: 250mW=24dBm					

MIMO

U-NII-1

Mode	Channel/ Frequency (MHz)	Output Power					Limit (dBm)	Conclusion
		Antenna 1		Antenna 2		Total Power (dBm)		
		Average Power Measured (dBm)	Average Power with duty factor (dBm)	Average Power Measured (dBm)	Average Power with duty factor (dBm)			
802.11a	36/5180	12.50	15.33	12.48	15.31	18.33	24.00	PASS
	40/5200	11.68	14.51	12.52	15.35	17.96	24.00	PASS
	48/5240	11.01	13.84	11.74	14.57	17.23	24.00	PASS
802.11n HT20	36/5180	11.65	14.85	12.75	15.95	18.45	24.00	PASS
	40/5200	10.55	13.75	12.08	15.28	17.59	24.00	PASS
	48/5240	11.04	14.24	11.25	14.45	17.35	24.00	PASS
802.11n HT40	38/5190	12.34	17.37	10.95	15.98	19.74	24.00	PASS
	46/5230	11.74	16.77	11.69	16.72	19.76	24.00	PASS
802.11ac VHT20	36/5180	11.36	14.55	11.70	14.89	17.73	24.00	PASS
	40/5200	10.63	13.82	12.40	15.59	17.80	24.00	PASS
	48/5240	10.70	13.89	11.40	14.59	17.26	24.00	PASS
802.11ac VHT40	38/5190	12.61	17.62	11.48	16.49	20.10	24.00	PASS
	46/5230	13.00	18.01	12.21	17.22	20.64	24.00	PASS
802.11ac VHT80	42/5210	8.64	15.91	8.81	16.08	19.01	24.00	PASS
802.11ax HE20	36/5180	11.69	15.24	12.13	15.68	18.48	24.00	PASS
	40/5200	10.33	13.88	11.79	15.34	17.68	24.00	PASS
	48/5240	10.44	13.99	10.82	14.37	17.20	24.00	PASS
802.11ax HE40	38/5190	9.93	15.25	9.31	14.63	17.96	24.00	PASS
	46/5230	12.34	17.66	11.70	17.02	20.36	24.00	PASS
802.11ax HE80	42/5210	10.02	17.40	9.34	16.72	20.08	24.00	PASS

Note: 1.Average Power with duty factor = Average Power Measured +Duty cycle correction factor

2.For Total Power, according to KDB 662911 D01 Multiple Transmitter Output v02r01),

The Total Power = $10\log(10^{(\text{Power antenna1 in dBm}/10)}+10^{(\text{Power antenna2 in dBm}/10)})$.

3. The transmitter output signals is CDD mode. According to KDB 662911 D01 Multiple Transmitter Output v02r01

F)2)f(i): If all antennas have the same gain, Directional gain = $G_{\text{ANT}} + \text{Array Gain}$.

For power measurements on IEEE 802.11 devices,

Array Gain = 0 dB (i.e., no array gain) for $N_{\text{ANT}} \leq 4$

Array Gain = 0 dB (i.e., no array gain) for channel widths ≥ 40 MHz for any N_{ANT} ; Array Gain = $5 \log(N_{\text{ANT}}/N_{\text{SS}})$ dB or 3 dB, whichever is less, for 20-MHz channel widths with $N_{\text{ANT}} \geq 5$.

So, Directional gain = 5dBi<6dBi, the power limit is 24.00 dBm.

U-NII-2A

Mode	Channel/ Frequency (MHz)	Output Power					Limit (dBm)	Conclusion
		Antenna 1		Antenna 2		Total Power (dBm)		
		Average Power Measured (dBm)	Average Power with duty factor (dBm)	Average Power Measured (dBm)	Average Power with duty factor (dBm)			
802.11a	52/5260	12.10	14.93	12.09	14.92	17.93	23.74	PASS
	60/5300	10.74	13.57	12.28	15.11	17.42	23.75	PASS
	64/5320	10.31	13.14	11.75	14.58	16.93	23.76	PASS
802.11n HT20	52/5260	12.68	15.88	12.38	15.58	18.74	23.90	PASS
	60/5300	9.44	12.64	11.11	14.31	16.57	23.85	PASS
	64/5320	10.77	13.97	12.02	15.22	17.65	23.88	PASS
802.11n HT40	54/5270	12.74	17.77	13.36	18.39	21.10	24.00	PASS
	62/5310	12.64	17.67	12.03	17.06	20.38	24.00	PASS
802.11ac VHT20	52/5260	11.85	15.04	11.87	15.06	18.06	23.91	PASS
	60/5300	10.96	14.15	11.76	14.95	17.58	23.89	PASS
	64/5320	10.34	13.53	11.49	14.68	17.15	23.93	PASS
802.11ac VHT40	54/5270	11.61	16.62	14.36	19.37	21.22	24.00	PASS
	62/5310	11.86	16.87	12.02	17.03	19.96	24.00	PASS
802.11ac VHT80	58/5290	10.31	17.58	8.42	15.69	19.75	24.00	PASS
802.11ac VHT160	50/5250	6.01	15.33	4.97	14.29	17.85	24.00	PASS
802.11ax HE20	52/5260	11.54	15.09	11.28	14.83	17.97	24.00	PASS
	60/5300	10.25	13.80	12.12	15.67	17.84	24.00	PASS
	64/5320	11.43	14.98	12.40	15.95	18.50	24.00	PASS
802.11ax HE40	54/5270	12.22	17.54	12.59	17.91	20.74	24.00	PASS
	62/5310	9.78	15.10	11.49	16.81	19.05	24.00	PASS
802.11ax HE80	58/5290	11.72	19.10	9.68	17.06	21.21	24.00	PASS
802.11ax HE160	50/5250	-0.01	9.31	-1.88	7.44	11.49	24.00	PASS

Note: 1.Average Power with duty factor = Average Power Measured +Duty cycle correction factor
2.For Total Power, according to KDB 662911 D01 Multiple Transmitter Output v02r01),
The Total Power =10log(10^(Power antenna1 in dBm/10)+10^(Power antenna2 in dBm/10)).
3. The transmitter output signals is CDD mode. According to KDB 662911 D01 Multiple Transmitter Output v02r01
F)2)f(i): If all antennas have the same gain, Directional gain = G_{ANT} + Array Gain. For power measurements on IEEE
802.11 devices,
Array Gain = 0 dB (i.e., no array gain) for N_{ANT} ≤ 4
Array Gain = 0 dB (i.e., no array gain) for channel widths ≥ 40 MHz for any N_{ANT}; Array Gain = 5 log(N_{ANT}/N_{SS}) dB or 3
dB, whichever is less, for 20-MHz channel widths with N_{ANT} ≥ 5.So, Directional gain = 5dBi<6dBi, the power limit is
24.00 dBm..

U-NII-2C

Mode	Channel/ Frequency (MHz)	Output Power					Limit (dBm)	Conclusion
		Antenna 1		Antenna 2		Total Power (dBm)		
		Average Power Measured (dBm)	Average Power with duty factor (dBm)	Average Power Measured (dBm)	Average Power with duty factor (dBm)			
802.11a	100/5500	10.18	13.01	10.23	13.06	16.04	24.00	PASS
	120/5600	11.13	13.96	11.32	14.15	17.06	24.00	PASS
	140/5700	12.27	15.10	12.20	15.03	18.08	24.00	PASS
802.11n HT20	100/5500	9.56	12.76	10.30	13.50	16.16	24.00	PASS
	120/5600	10.46	13.66	10.87	14.07	16.88	24.00	PASS
	140/5700	13.60	16.80	13.26	16.46	19.64	24.00	PASS
802.11n HT40	102/5510	11.43	16.46	13.40	18.43	20.57	24.00	PASS
	118/5590	12.23	17.26	11.53	16.56	19.93	24.00	PASS
	134/5670	12.68	17.71	13.76	18.79	21.29	24.00	PASS
802.11ac VHT20	100/5500	9.36	12.55	10.31	13.50	16.06	24.00	PASS
	120/5600	10.24	13.43	11.20	14.39	16.95	24.00	PASS
	140/5700	12.80	15.99	12.51	15.70	18.86	24.00	PASS
802.11ac VHT40	102/5510	12.78	17.79	12.74	17.75	20.78	24.00	PASS
	118/5590	12.03	17.04	11.29	16.30	19.70	24.00	PASS
	134/5670	11.74	16.75	12.91	17.92	20.39	24.00	PASS
802.11ac VHT80	122/5610	9.69	16.96	8.40	15.67	19.37	24.00	PASS
802.11ac VHT160	114/5570	5.37	14.69	4.57	13.89	17.32	24.00	PASS
802.11ax HE20	100/5500	10.08	13.63	11.28	14.83	17.28	24.00	PASS
	120/5600	11.09	14.64	11.34	14.89	17.78	24.00	PASS
	140/5700	11.98	15.53	11.65	15.20	18.38	24.00	PASS
802.11ax HE40	102/5510	8.31	13.63	9.06	14.38	17.03	24.00	PASS
	118/5590	11.34	16.66	11.22	16.54	19.61	24.00	PASS
	134/5670	11.36	16.68	12.42	17.74	20.25	24.00	PASS
802.11ax HE80	122/5610	13.09	20.47	11.24	18.62	22.65	24.00	PASS
802.11ax HE160	114/5570	-1.31	8.01	-3.14	6.18	10.20	24.00	PASS

Note: 1.Average Power with duty factor = Average Power Measured +Duty cycle correction factor

2.For Total Power, according to KDB 662911 D01 Multiple Transmitter Output v02r01),

The Total Power = $10\log(10^{(\text{Power antenna1 in dBm}/10)}+10^{(\text{Power antenna2 in dBm}/10)})$.

3. The transmitter output signals is CDD mode. According to KDB 662911 D01 Multiple Transmitter Output v02r01

F)2)f(i): If all antennas have the same gain, Directional gain = $G_{\text{ANT}} + \text{Array Gain}$.

For power measurements on IEEE 802.11 devices,

Array Gain = 0 dB (i.e., no array gain) for $N_{\text{ANT}} \leq 4$

Array Gain = 0 dB (i.e., no array gain) for channel widths ≥ 40 MHz for any N_{ANT} ; Array Gain = $5 \log(N_{\text{ANT}}/N_{\text{SS}})$ dB or 3 dB, whichever is less, for 20-MHz channel widths with $N_{\text{ANT}} \geq 5$.

So, Directional gain = 5dBi<6dBi, the power limit is 24.00 dBm.

U-NII-3

Mode	Channel/ Frequency (MHz)	Output Power					Limit (dBm)	Conclusion
		Antenna 1		Antenna 2		Total Power (dBm)		
		Average Power Measured (dBm)	Average Power with duty factor (dBm)	Average Power Measured (dBm)	Average Power with duty factor (dBm)			
802.11a	149/5745	14.37	17.20	15.31	18.14	20.70	30.00	PASS
	157/5785	15.29	18.12	15.29	18.12	21.13	30.00	PASS
	165/5825	14.74	17.57	15.44	18.27	20.95	30.00	PASS
802.11n HT20	149/5745	14.78	17.98	14.28	17.48	20.74	30.00	PASS
	157/5785	15.37	18.57	15.43	18.63	21.61	30.00	PASS
	165/5825	14.73	17.93	15.01	18.21	21.08	30.00	PASS
802.11n HT40	151/5755	11.24	16.27	12.53	17.56	19.97	30.00	PASS
	159/5795	12.47	17.50	12.95	17.98	20.76	30.00	PASS
802.11ac VHT20	149/5745	15.19	18.38	13.97	17.16	20.82	30.00	PASS
	157/5785	15.68	18.87	15.29	18.48	21.69	30.00	PASS
	165/5825	14.59	17.78	15.14	18.33	21.08	30.00	PASS
802.11ac VHT40	151/5755	11.85	16.86	11.61	16.62	19.75	30.00	PASS
	159/5795	13.22	18.23	11.95	16.96	20.65	30.00	PASS
802.11ac VHT80	155/5775	9.40	16.67	8.26	15.53	19.15	30.00	PASS
802.11ax HE20	149/5745	14.87	18.42	14.07	17.62	21.05	30.00	PASS
	157/5785	14.09	17.64	14.22	17.77	20.71	30.00	PASS
	165/5825	13.73	17.28	13.61	17.16	20.23	30.00	PASS
802.11ax HE40	151/5755	11.38	16.70	12.37	17.69	20.23	30.00	PASS
	159/5795	11.14	16.46	11.22	16.54	19.51	30.00	PASS
802.11ax HE80	155/5775	8.60	15.98	7.22	14.60	18.35	30.00	PASS

Note: 1.Average Power with duty factor = Average Power Measured +Duty cycle correction factor

2.For Total Power, according to KDB 662911 D01 Multiple Transmitter Output v02r01),

The Total Power = $10\log(10^{(\text{Power antenna1 in dBm}/10)}+10^{(\text{Power antenna2 in dBm}/10)})$.

3. The transmitter output signals is CDD mode. According to KDB 662911 D01 Multiple Transmitter Output v02r01

F)2)f(i): If all antennas have the same gain, Directional gain = $G_{\text{ANT}} + \text{Array Gain}$. For power measurements on IEEE 802.11 devices,

Array Gain = 0 dB (i.e., no array gain) for $N_{\text{ANT}} \leq 4$

Array Gain = 0 dB (i.e., no array gain) for channel widths ≥ 40 MHz for any N_{ANT} ; Array Gain = $5 \log(N_{\text{ANT}}/N_{\text{SS}})$ dB or 3 dB, whichever is less, for 20-MHz channel widths with $N_{\text{ANT}} \geq 5$. So Directional gain = $5\text{dBi} < 6\text{dBi}$, the power limit is 30.00 dBm..

6.3. Frequency Stability

Voltage (V)	Temperature (°C)	U-NII-1 Test Results			
		5200MHz			
		1min	2min	5min	10min
5	-30	5200.005897	5200.004256	5200.004141	5199.999835
5	-20	5200.002846	5199.995174	5199.998896	5199.993831
5	-10	5200.002403	5199.986465	5199.989221	5199.984765
5	0	5199.996226	5199.985459	5199.994683	5199.988226
5	10	5199.986494	5199.981575	5199.992268	5199.981494
5	20	5199.982464	5199.977695	5199.989478	5199.972799
5	30	5199.976533	5199.968677	5199.980711	5199.963515
5	40	5199.967648	5199.967789	5199.974385	5199.963390
5	50	5199.959042	5199.963998	5199.973540	5199.960271
4.75	20	5199.959035	5199.960455	5199.969753	5199.956529
5.5	20	5199.953428	5199.960134	5199.962089	5199.952497
Max. ΔMHz		-0.046572	-0.039866	-0.037911	-0.047503
PPM		-8.956154	-7.666538	-7.290577	-9.135192

Voltage (V)	Temperature (°C)	U-NII-2A Test Results			
		5300MHz			
		1min	2min	5min	10min
5	-30	5300.004669	5300.000602	5299.994487	5299.991645
5	-20	5300.003642	5299.992976	5299.992952	5299.988514
5	-10	5299.994025	5299.982978	5299.987200	5299.980391
5	0	5300.003266	5299.991315	5299.992122	5299.982355
5	10	5299.993521	5299.986343	5299.985373	5299.975033
5	20	5299.988152	5299.982192	5299.978779	5299.973820
5	30	5299.984110	5299.982185	5299.974385	5299.973481
5	40	5299.975359	5299.981850	5299.971478	5299.968629
5	50	5299.975148	5299.980885	5299.968425	5299.960435
4.75	20	5299.973898	5299.975740	5299.960314	5299.956991
5.5	20	5299.971903	5299.969262	5299.951790	5299.955389
Max. ΔMHz		-0.028097	-0.030738	-0.048210	-0.044611
PPM		-5.301321	-5.799623	-9.096226	-8.417170

Voltage (V)	Temperature (°C)	U-NII-2C Test Results			
		5580MHz			
		1min	2min	5min	10min
5	-30	5579.990634	5579.986709	5579.980558	5579.977498
5	-20	5579.983948	5579.982417	5579.977335	5579.975523
5	-10	5579.983636	5579.973257	5579.974327	5579.968109
5	0	5579.983893	5579.981311	5579.970079	5579.974290
5	10	5579.976642	5579.980155	5579.967700	5579.971316
5	20	5579.968337	5579.974037	5579.959852	5579.961488
5	30	5579.965907	5579.970802	5579.958132	5579.953121
5	40	5579.957620	5579.965200	5579.953819	5579.944109
5	50	5579.948025	5579.961762	5579.951206	5579.939032
4.75	20	5579.940081	5579.953504	5579.949142	5579.936526
5.5	20	5579.935446	5579.946706	5579.947702	5579.935291
Max. ΔMHz		-0.064554	-0.053294	-0.052298	-0.064709
PPM		-11.568817	-9.550896	-9.372401	-11.596595

Voltage (V)	Temperature (°C)	U-NII-3 Test Results			
		5785MHz			
		1min	2min	5min	10min
5	-30	5784.997238	5784.994309	5784.991053	5784.984463
5	-20	5784.995696	5784.987629	5784.982777	5784.976590
5	-10	5784.988325	5784.982866	5784.978580	5784.969990
5	0	5784.987960	5784.985518	5784.976426	5784.972510
5	10	5784.977999	5784.980336	5784.971331	5784.966985
5	20	5784.975905	5784.977864	5784.970062	5784.957527
5	30	5784.969257	5784.974773	5784.969324	5784.955775
5	40	5784.966170	5784.964957	5784.960999	5784.953296
5	50	5784.960617	5784.960945	5784.960068	5784.952043
4.75	20	5784.959237	5784.959084	5784.959892	5784.951022
5.5	20	5784.952047	5784.950034	5784.956386	5784.947120
Max. ΔMHz		-0.047953	-0.049966	-0.043614	-0.052880
PPM		-8.289196	-8.637165	-7.539153	-9.140882

6.4. Power Spectral Density

MIMO

U-NII-1

Mode	Channel/ Frequency (MHz)	Power Spectral Density					Limit (dBm /MHz)	Conclusion
		Antenna 1		Antenna 2		Total PSD (dBm/MHz)		
		Read Value (dBm/MHz)	PSD (dBm/MHz)	Read Value (dBm/MHz)	PSD (dBm/MHz)			
802.11a	36/5180	1.47	4.30	2.96	5.79	8.12	8.99	PASS
	40/5200	0.53	3.36	2.48	5.31	7.45	8.99	PASS
	48/5240	0.82	3.65	1.64	4.47	7.09	8.99	PASS
802.11n HT20	36/5180	1.23	4.43	2.22	5.42	7.96	8.99	PASS
	40/5200	0.38	3.58	1.31	4.51	7.08	8.99	PASS
	48/5240	1.2	4.40	2.48	5.68	8.10	8.99	PASS
802.11n HT40	38/5190	1.51	6.54	-1.81	3.22	8.20	8.99	PASS
	46/5230	1.14	6.17	-0.49	4.54	8.44	8.99	PASS
802.11ac VHT20	36/5180	1.36	4.55	3.26	6.45	8.61	8.99	PASS
	40/5200	0.22	3.41	1.79	4.98	7.28	8.99	PASS
	48/5240	1.54	4.73	-0.72	2.47	6.76	8.99	PASS
802.11ac VHT40	38/5190	1.86	6.87	-1.14	3.87	8.63	8.99	PASS
	46/5230	-0.07	4.94	-1.19	3.82	7.43	8.99	PASS
802.11ac VHT80	42/5210	-4.08	3.19	-6.85	0.42	5.03	8.99	PASS
802.11ax HE20	36/5180	1.59	5.14	1.68	5.23	8.20	8.99	PASS
	40/5200	-0.07	3.48	1.69	5.24	7.46	8.99	PASS
	48/5240	0.26	3.81	0.81	4.36	7.10	8.99	PASS
802.11ax HE40	38/5190	-0.32	5.00	-3.06	2.26	6.85	8.99	PASS
	46/5230	0.28	5.60	-0.5	4.82	8.24	8.99	PASS
802.11ax HE80	42/5210	-3.37	4.01	-5.67	1.71	6.02	8.99	PASS

Note: 1. Power Spectral Density=Read Value+Duty cycle correction factor

2. For Total PSD, according to KDB 662911 D01 Multiple Transmitter Output v02r01 2)a), the power spectral density= $10\log(10^{(\text{PSD antenna1 in dBm/10})}+10^{(\text{PSD antenna2 in dBm/10})})$

3. The transmitter output signals is CDD mode. According to KDB 662911 D01 Multiple Transmitter Output v02r01 F)2)f)(i): If all antennas have the same gain, Directional gain = $G_{\text{ANT}} + \text{Array Gain}$. For PSD measurements on all devices, Array Gain= $10\log(\text{Nant}/\text{Nss})\text{dB}$, so directional gain= $G_{\text{ANT}} + \text{Array Gain} = 5 + 10\log(2/1) = 8.01 > 6\text{dBi}$. So the PSD limit is $8 + 6 - \text{MAX}(6, \text{directional gain}) \text{ dBm} = 8.99 \text{ dBm/MHz}$.

U-NII-2A

Mode	Channel /Frequency (MHz)	Power Spectral Density					Limit (dBm /MHz)	Conclusion
		Antenna 1		Antenna 2		Total PSD (dBm/MHz)		
		Read Value (dBm/MHz)	PSD (dBm/MHz)	Read Value (dBm/MHz)	PSD (dBm/MHz)			
802.11a	52/5260	1.92	4.75	2.36	5.19	7.99	8.99	PASS
	60/5300	1.19	4.02	2.67	5.50	7.83	8.99	PASS
	64/5320	1.03	3.86	3.28	6.11	8.14	8.99	PASS
802.11n HT20	52/5260	1.27	4.47	2.13	5.33	7.93	8.99	PASS
	60/5300	0.68	3.88	2.56	5.76	7.93	8.99	PASS
	64/5320	0.26	3.46	2.16	5.36	7.52	8.99	PASS
802.11n HT40	54/5270	-0.59	4.44	2.04	7.07	8.96	8.99	PASS
	62/5310	-1.16	3.87	-0.37	4.66	7.29	8.99	PASS
802.11ac VHT20	52/5260	1.73	4.92	3.02	6.21	8.62	8.99	PASS
	60/5300	0.22	3.41	0.68	3.87	6.66	8.99	PASS
	64/5320	1.64	4.83	2.25	5.44	8.16	8.99	PASS
802.11ac VHT40	54/5270	-0.65	4.36	2.05	7.06	8.93	8.99	PASS
	62/5310	-0.76	4.25	-0.37	4.64	7.46	8.99	PASS
802.11ac VHT80	58/5290	-1.53	5.74	-6.98	0.29	6.83	8.99	PASS
802.11ac VHT160	50/5250	-8.04	1.28	-13.93	-4.61	2.28	8.99	PASS
802.11ax HE20	52/5260	1.49	5.04	0.74	4.29	7.69	8.99	PASS
	60/5300	0.63	4.18	1.93	5.48	7.89	8.99	PASS
	64/5320	0.58	4.13	1.75	5.30	7.76	8.99	PASS
802.11ax HE40	54/5270	0.08	5.40	-0.48	4.84	8.14	8.99	PASS
	62/5310	-2.02	3.30	-1.14	4.18	6.77	8.99	PASS
802.11ax HE80	58/5290	-0.25	7.13	-5.69	1.69	8.22	8.99	PASS
802.11ax HE160	50/5250	-14.01	-4.69	-20.34	-11.02	-3.78	8.99	PASS

Note: 1.Power Spectral Density=Read Value+Duty cycle correction factor

2. For Total PSD, according to KDB 662911 D01 Multiple Transmitter Output v02r01 2)a),the power spectral density= $10\log(10^{(PSD \text{ antenna1 in dBm/10})}+10^{(PSD \text{ antenna2 in dBm/10})})$

3. The transmitter output signals is CDD mode. According to KDB 662911 D01 Multiple Transmitter Output v02r01 F)2)f)(i): If all antennas have the same gain, Directional gain = $G_{ANT} + \text{Array Gain}$. For PSD measurements on all devices, Array Gain= $10\log(N_{ant}/N_{ss})\text{dB}$, so directional gain= $G_{ANT} + \text{Array Gain} = 5 + 10\log(2/1) = 8.01\text{Bi} > 6\text{dBi}$. So the PSD limit is $8 + 6 - \text{MAX}(6, \text{directional gain}) \text{ dBm} = 8.99 \text{ dBm/MHz}$.

U-NII-2C

Mode	Channel /Frequency (MHz)	Power Spectral Density					Limit (dBm /MHz)	Conclusion
		Antenna 1		Antenna 2		Total PSD (dBm/MHz)		
		Read Value (dBm/MHz)	PSD (dBm/MHz)	Read Value (dBm/MHz)	PSD (dBm/MHz)			
802.11a	100/5500	0.33	3.16	0.65	3.48	6.33	8.99	PASS
	120/5600	1.43	4.26	1.5	4.33	7.31	8.99	PASS
	140/5700	2.6	5.43	1.96	4.79	8.13	8.99	PASS
802.11n HT20	100/5500	1.28	4.48	1.11	4.31	7.41	8.99	PASS
	120/5600	0.71	3.91	-0.12	3.08	6.53	8.99	PASS
	140/5700	3.28	6.48	1.57	4.77	8.72	8.99	PASS
802.11n HT40	102/5510	-0.66	4.37	-0.06	4.97	7.69	8.99	PASS
	118/5590	0.06	5.09	-1.7	3.33	7.31	8.99	PASS
	134/5670	-1.69	3.34	1.72	6.75	8.38	8.99	PASS
802.11ac VHT20	100/5500	-0.45	2.74	0.45	3.64	6.22	8.99	PASS
	120/5600	2.02	5.21	2.03	5.22	8.23	8.99	PASS
	140/5700	2.02	5.21	3.14	6.33	8.82	8.99	PASS
802.11ac VHT40	102/5510	-0.05	4.96	-0.15	4.86	7.92	8.99	PASS
	118/5590	0.7	5.71	-1.8	3.21	7.65	8.99	PASS
	134/5670	-1.55	3.46	1.67	6.68	8.37	8.99	PASS
802.11ac VHT80	122/5610	-4.12	3.15	-6.88	0.39	5.00	8.99	PASS
802.11ac VHT160	114/5570	-8.48	0.84	-12.75	-3.43	2.22	8.99	PASS
802.11ax HE20	100/5500	-0.54	3.01	0.99	4.54	6.85	8.99	PASS
	120/5600	1.23	4.78	1.72	5.27	8.04	8.99	PASS
	140/5700	1.28	4.83	1.1	4.65	7.75	8.99	PASS
802.11ax HE40	102/5510	-3.33	1.99	-4.42	0.90	4.49	8.99	PASS
	118/5590	0.26	5.58	-1.86	3.46	7.66	8.99	PASS
	134/5670	-2.89	2.43	1.33	6.65	8.04	8.99	PASS
802.11ax HE80	122/5610	-0.64	6.74	-3.19	4.19	8.66	8.99	PASS
802.11ax HE160	114/5570	-17.89	-8.57	-21.36	-12.04	-6.96	8.99	PASS

Note: 1.Power Spectral Density=Read Value+Duty cycle correction factor

2. For Total PSD, according to KDB 662911 D01 Multiple Transmitter Output v02r01 2)a),the power spectral density= $10\log(10^{(PSD \text{ antenna1 in dBm/10})} + 10^{(PSD \text{ antenna2 in dBm/10})})$

3. The transmitter output signals is CDD mode. According to KDB 662911 D01 Multiple Transmitter Output v02r01 F)2)f(i): If all antennas have the same gain, Directional gain = $G_{ANT} + \text{Array Gain}$. For PSD measurements on all devices, Array Gain= $10\log(Nant/Nss)\text{dB}$, so directional gain= $G_{ANT} + \text{Array Gain} = 5 + 10\log(2/1) = 8.01\text{Bi} > 6\text{dBi}$. So the PSD limit is $8 + 6 - \text{MAX}(6, \text{directional gain}) \text{ dBm} = 8.99 \text{ dBm/MHz}$.

U-NII-3

Mode	Channel /Frequency (MHz)	Power Spectral Density					Limit (dBm /500KH z)	Conclusion
		Antenna 1		Antenna 2		Total PSD (dBm/500K Hz)		
		Read Value (dBm/ 470kHz)	PSD (dBm/ 500kHz)	Read Value (dBm/ 470kHz)	PSD (dBm/ 500kHz)			
802.11a	149/5745	1.18	4.28	1.97	5.07	7.70	27.99	PASS
	157/5785	2.06	5.16	1.55	4.65	7.92	27.99	PASS
	165/5825	0.99	4.09	1.80	4.90	7.52	27.99	PASS
802.11n HT20	149/5745	0.94	4.41	0.52	3.99	7.22	27.99	PASS
	157/5785	1.39	4.86	1.27	4.74	7.81	27.99	PASS
	165/5825	0.87	4.34	1.13	4.60	7.48	27.99	PASS
802.11n HT40	151/5755	-4.29	1.01	-4.76	0.54	3.79	27.99	PASS
	159/5795	-4.45	0.85	-4.23	1.07	3.97	27.99	PASS
802.11ac VHT20	149/5745	1.33	4.79	0.86	4.32	7.57	27.99	PASS
	157/5785	0.88	4.34	1.87	5.33	7.87	27.99	PASS
	165/5825	1.18	4.64	1.19	4.65	7.66	27.99	PASS
802.11ac VHT40	151/5755	-3.96	1.32	-4.42	0.86	4.11	27.99	PASS
	159/5795	-4.18	1.10	-3.96	1.32	4.22	27.99	PASS
802.11ac VHT80	155/5775	-5.58	1.96	-11.00	-3.46	3.06	27.99	PASS
802.11ax HE20	149/5745	1.86	5.68	-0.06	3.76	7.84	27.99	PASS
	157/5785	-0.13	3.69	-0.04	3.78	6.75	27.99	PASS
	165/5825	0.92	4.74	0.08	3.90	7.35	27.99	PASS
802.11ax HE40	151/5755	-4.80	0.79	-2.82	2.77	4.90	27.99	PASS
	159/5795	-5.66	-0.07	-5.77	-0.18	2.89	27.99	PASS
802.11ax HE160	155/5775	-7.30	0.35	-11.99	-4.34	1.62	27.99	PASS

Note: 1.Power Spectral Density=Read Value+Duty cycle correction factor+10*LOG10(500 / 470)

2. For Total PSD, according to KDB 662911 D01 Multiple Transmitter Output v02r01 2)a),the power spectral density=10log(10^(PSD antenna1 in dBm/10)+10^(PSD antenna2 in dBm/10))

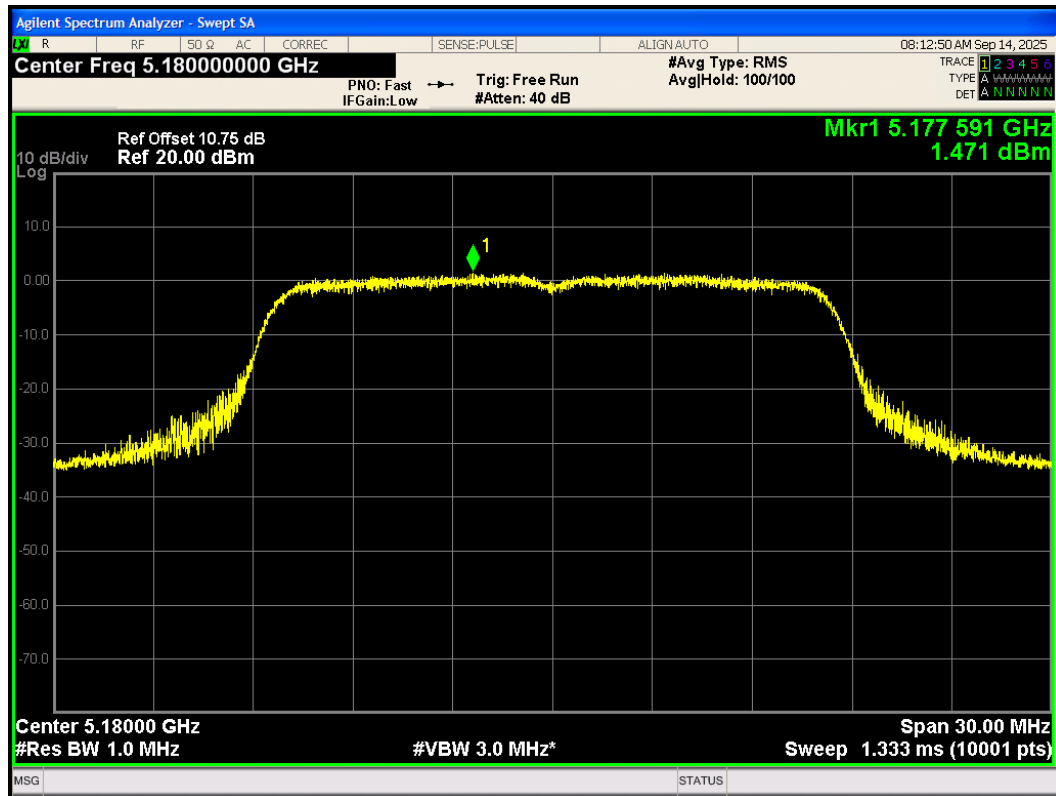
3. The transmitter output signals is CDD mode. According to KDB 662911 D01 Multiple Transmitter Output v02r01 F)2)f)(i): If all antennas have the same gain, Directional gain = G_{ANT} + Array Gain. For PSD measurements on all devices, Array Gain=10log(Nant/Nss)dB, so directional gain=G_{ANT}+Array Gain=5+10log(2/1)=8.01Bi >6dBi.

So the PSD limit is 8+6-MAX(6, directional gain) dBm=27.99 dBm/MHz.

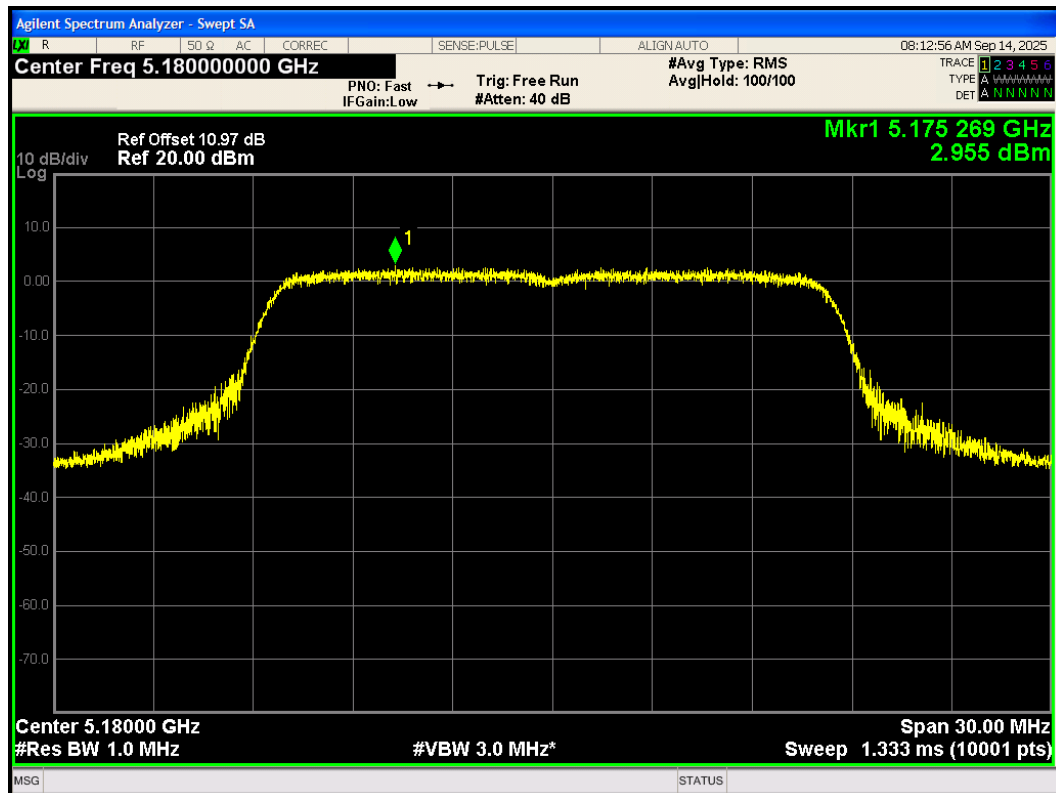
MIMO

U-NII-1

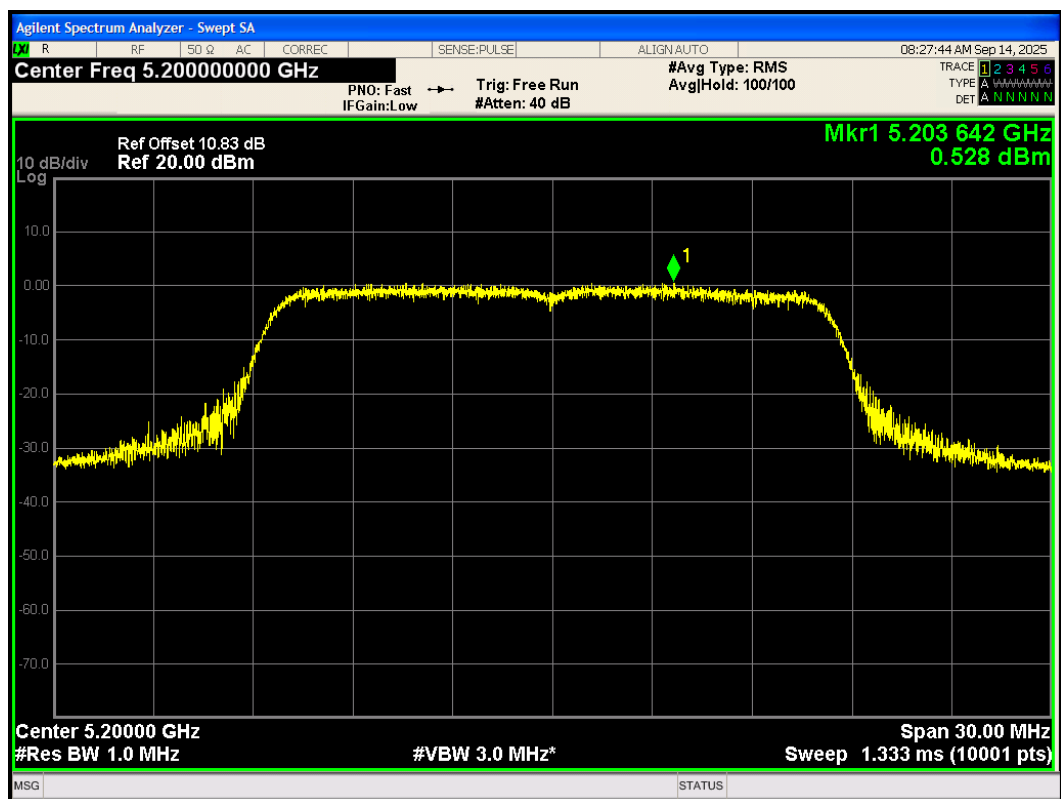
PSD 802.11a 5180MHz Ant1



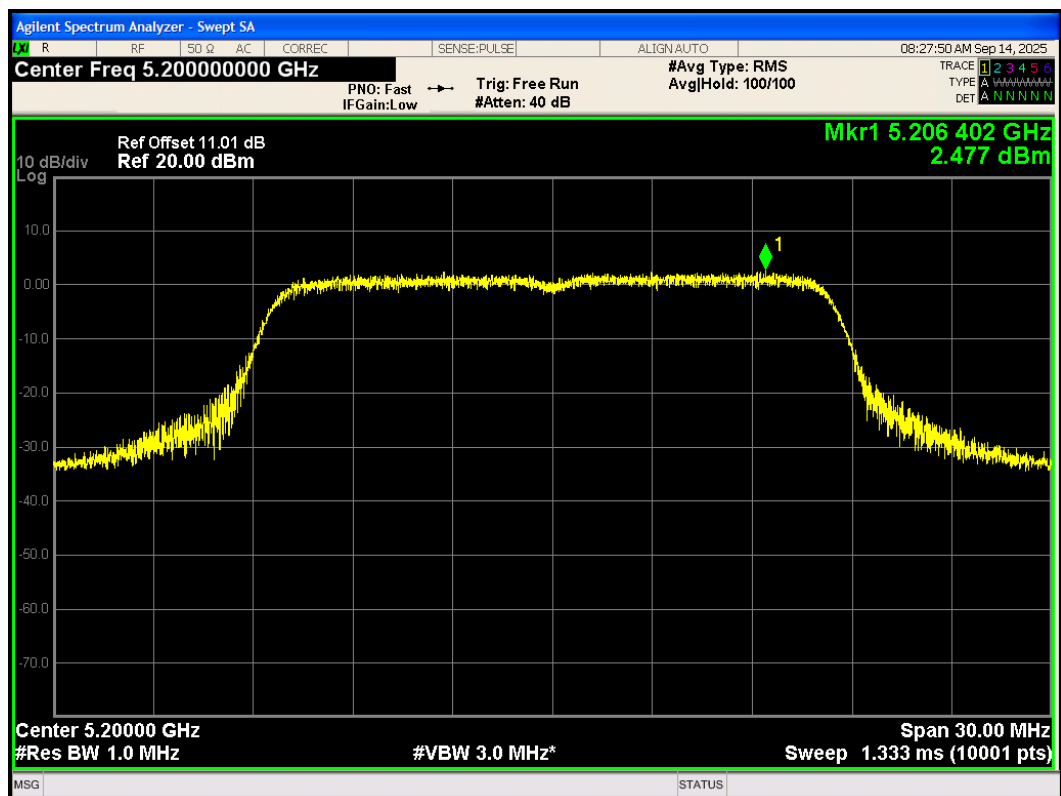
PSD 802.11a 5180MHz Ant2



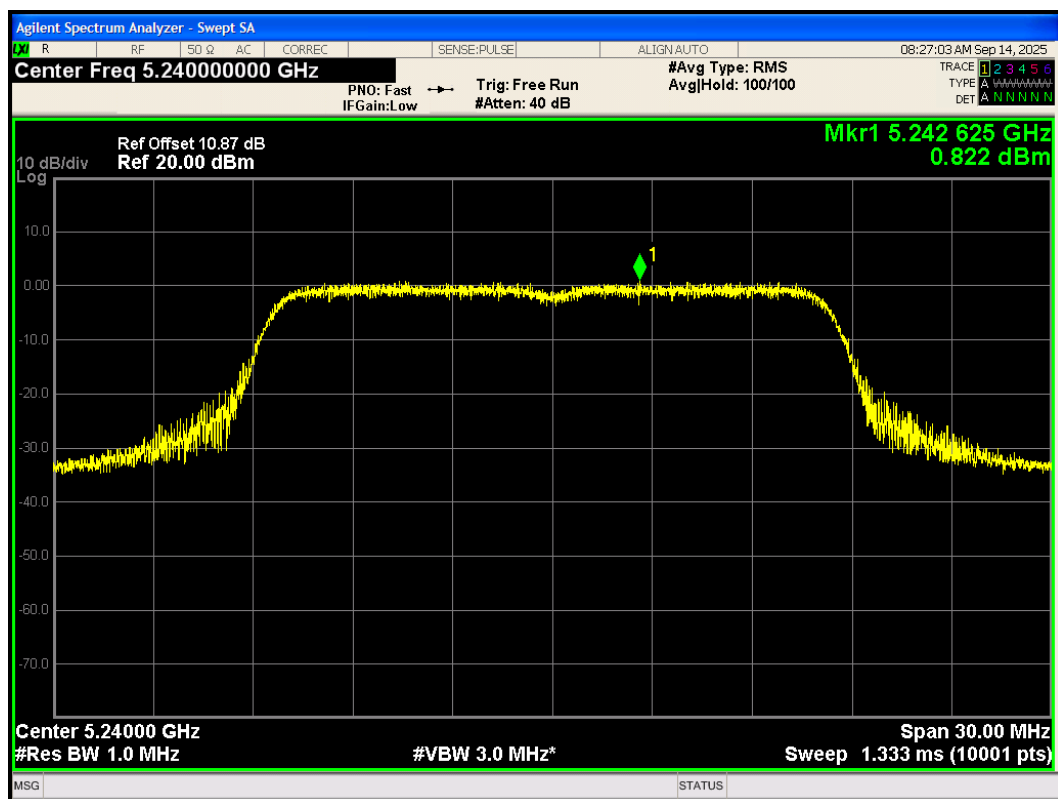
PSD 802.11a 5200MHz Ant1



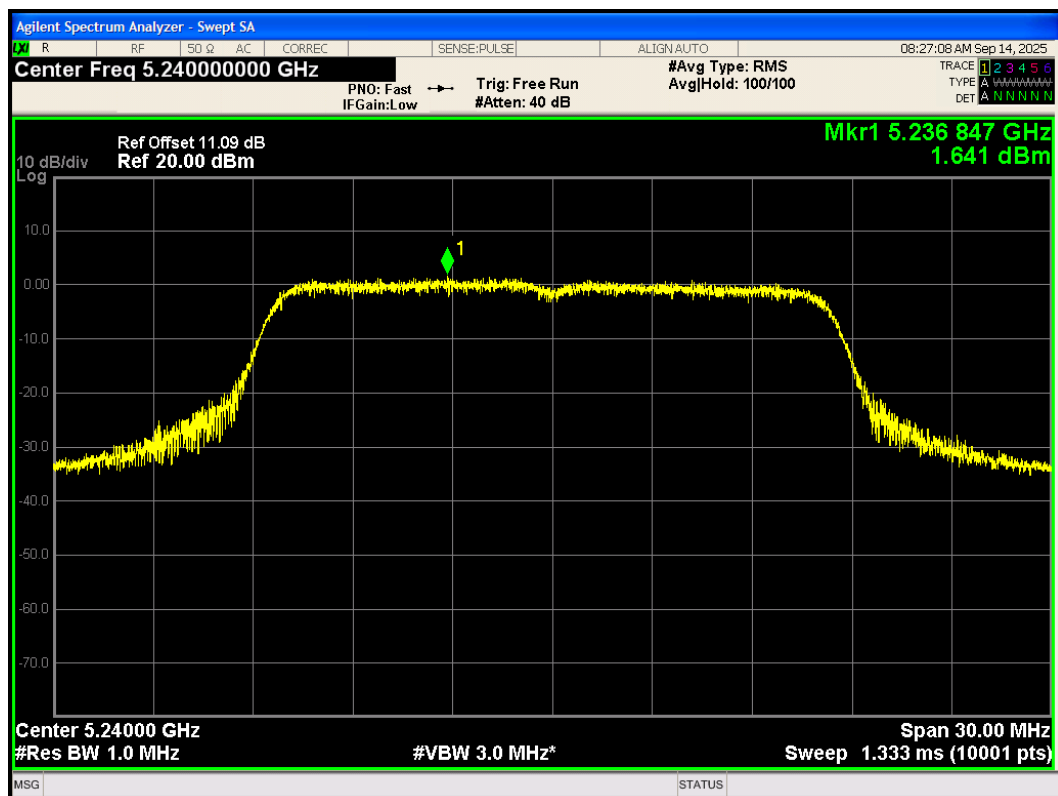
PSD 802.11a 5200MHz Ant2



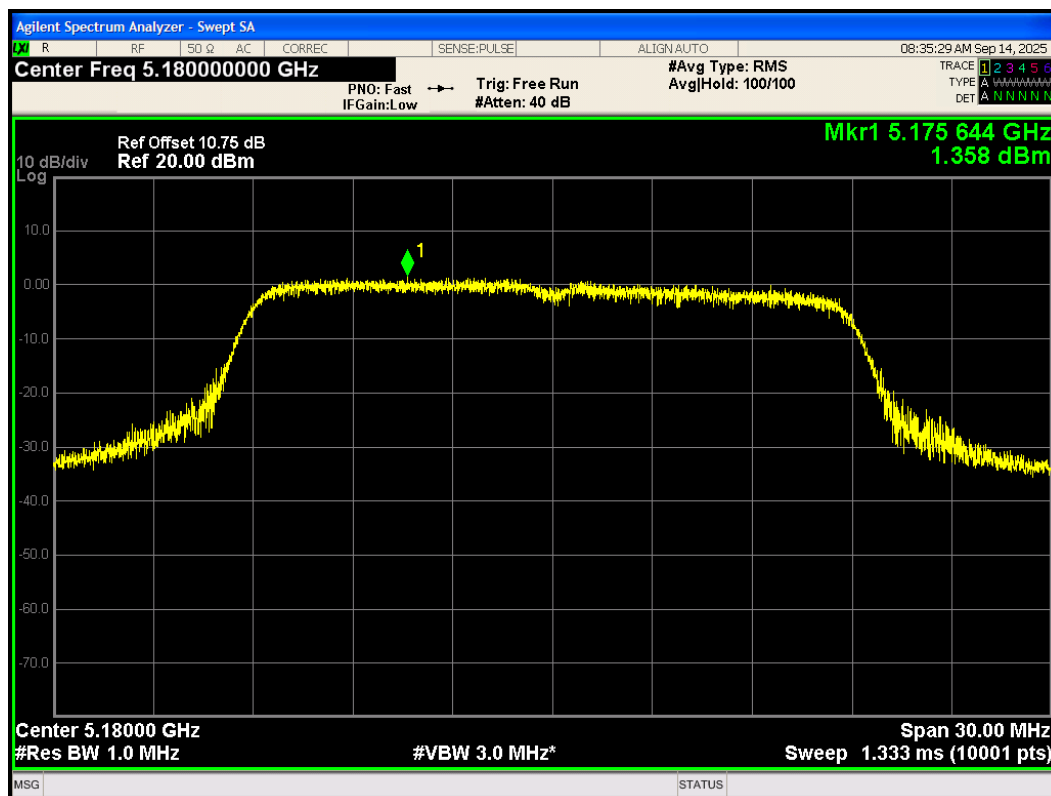
PSD 802.11a 5240MHz Ant1



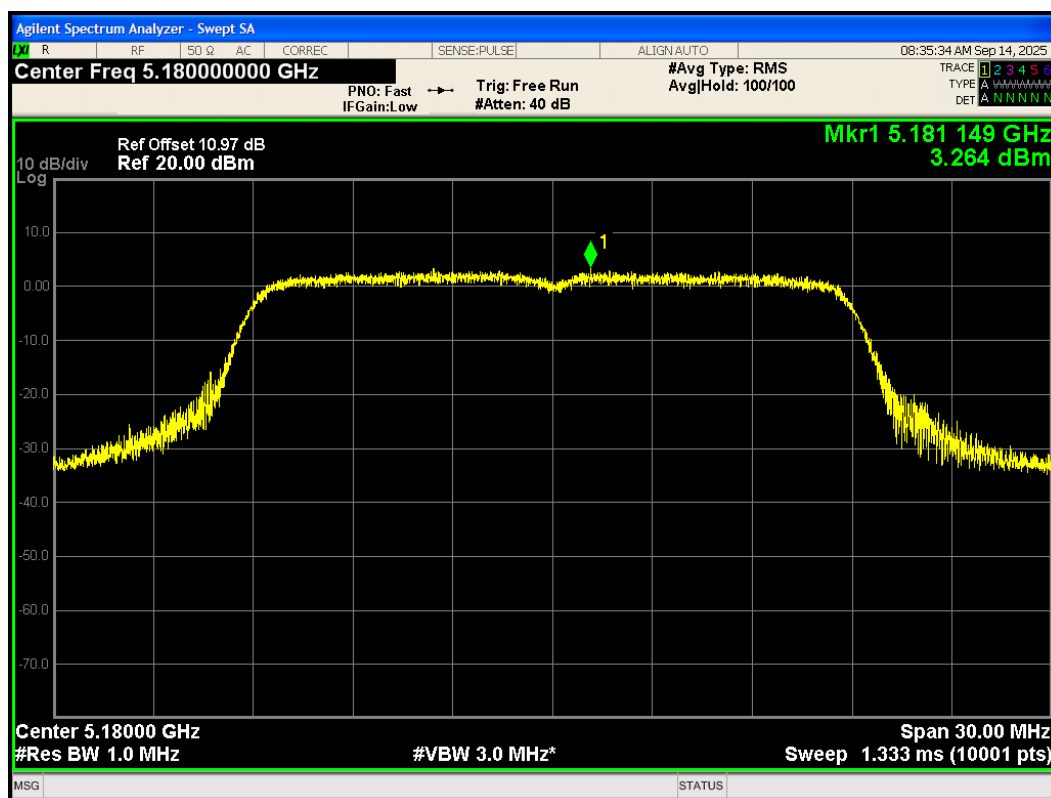
PSD 802.11a 5240MHz Ant2



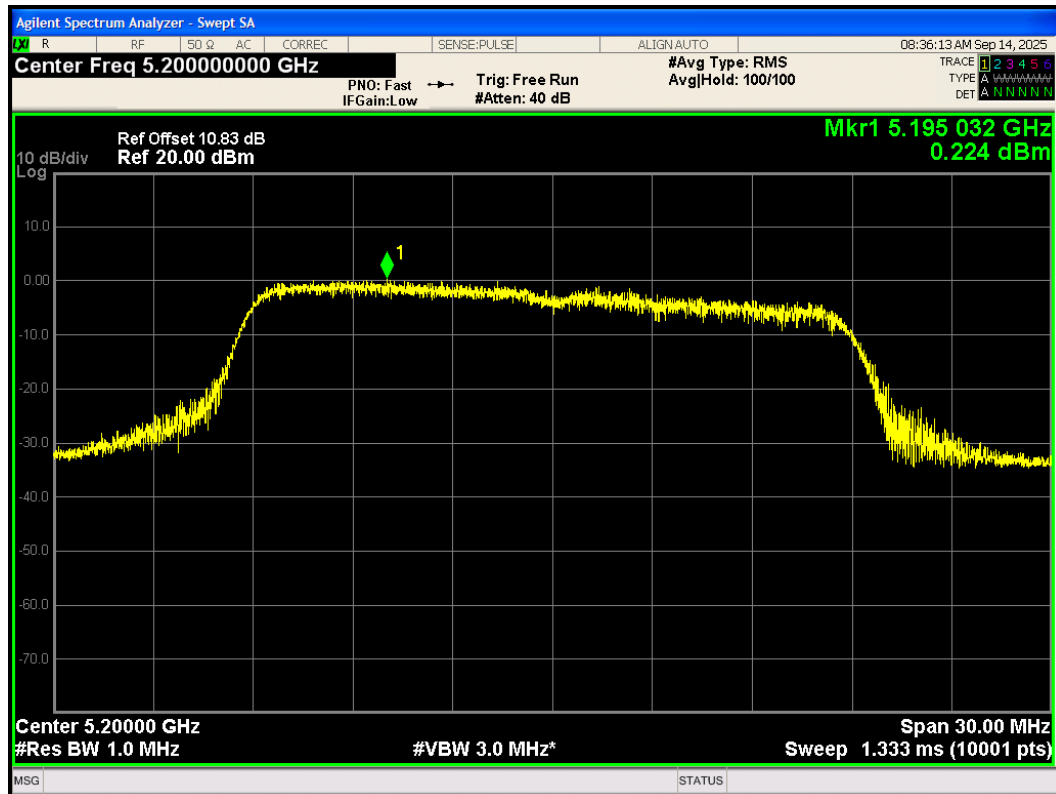
PSD 802.11ac(VHT20) 5180MHz Ant1



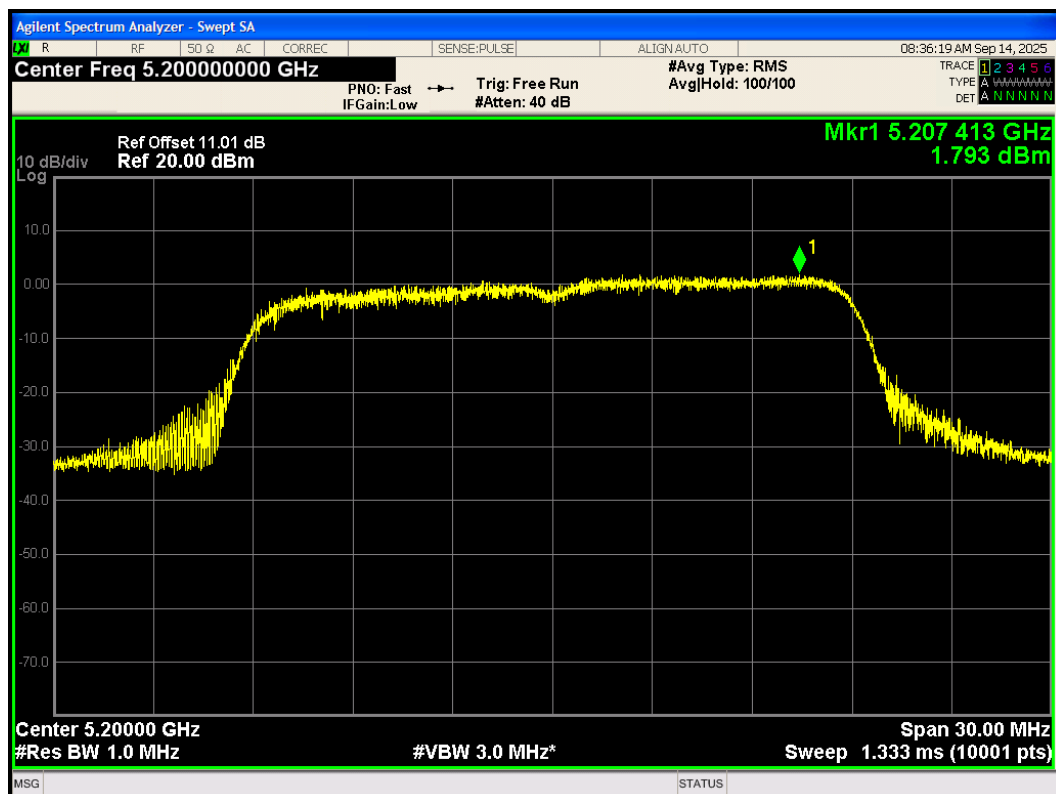
PSD 802.11ac(VHT20) 5180MHz Ant2



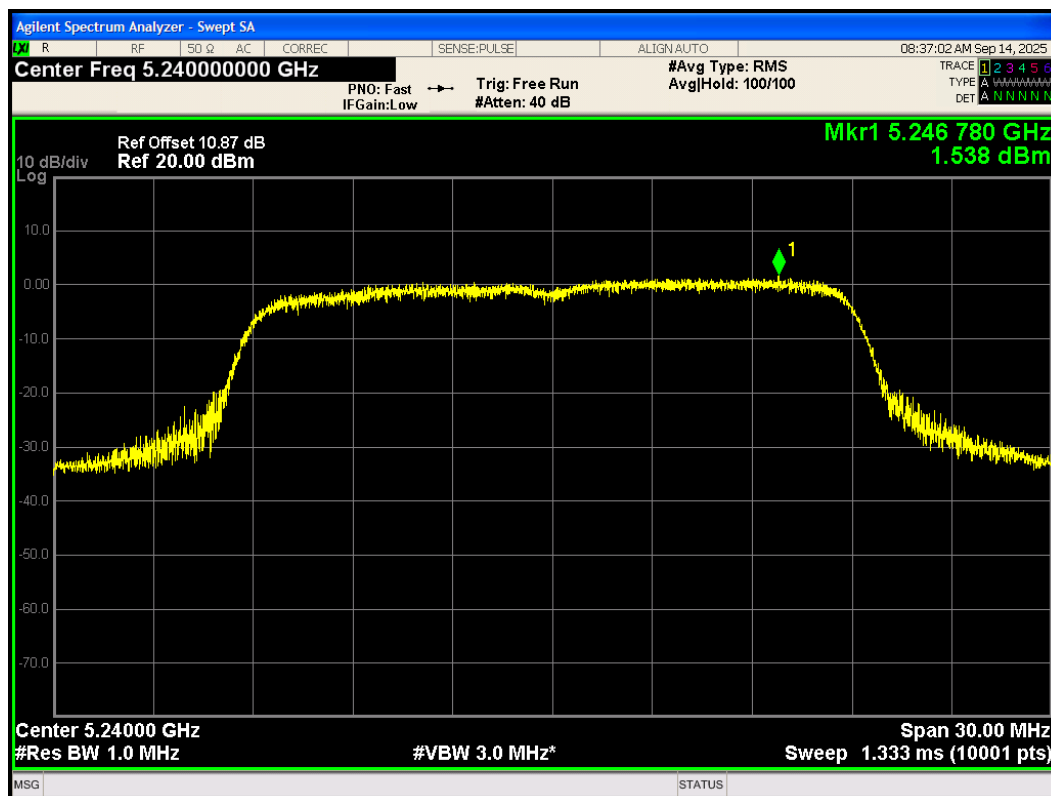
PSD 802.11ac(VHT20) 5200MHz Ant1



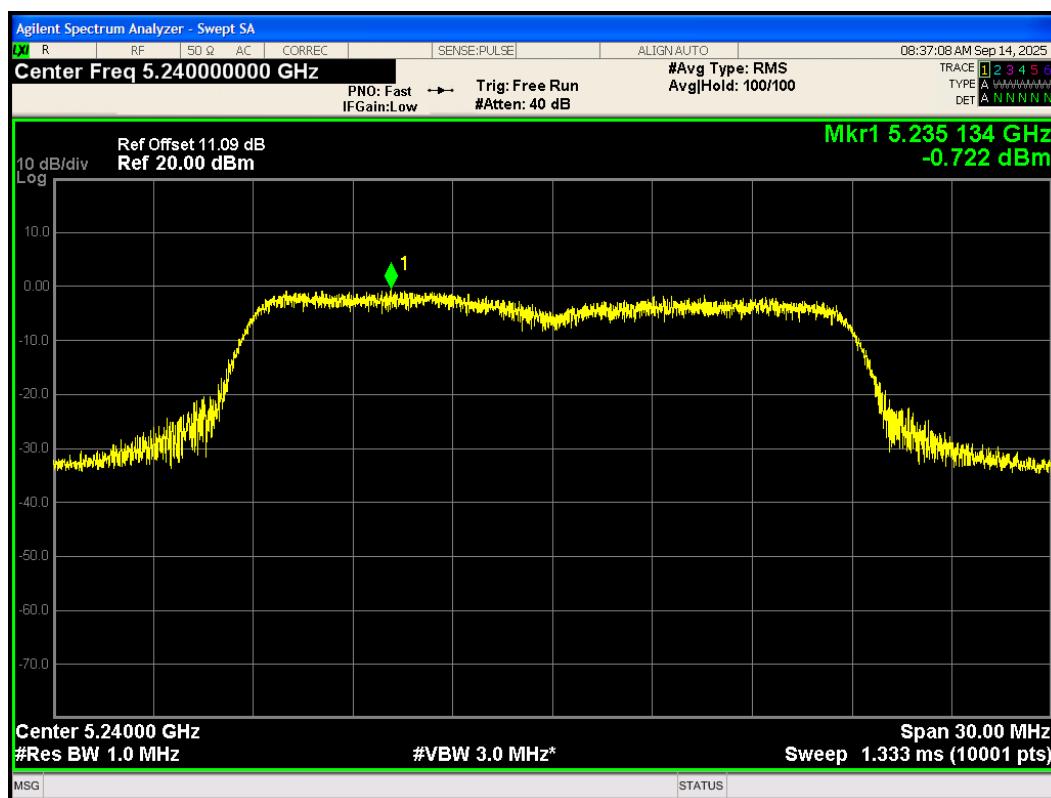
PSD 802.11ac(VHT20) 5200MHz Ant2



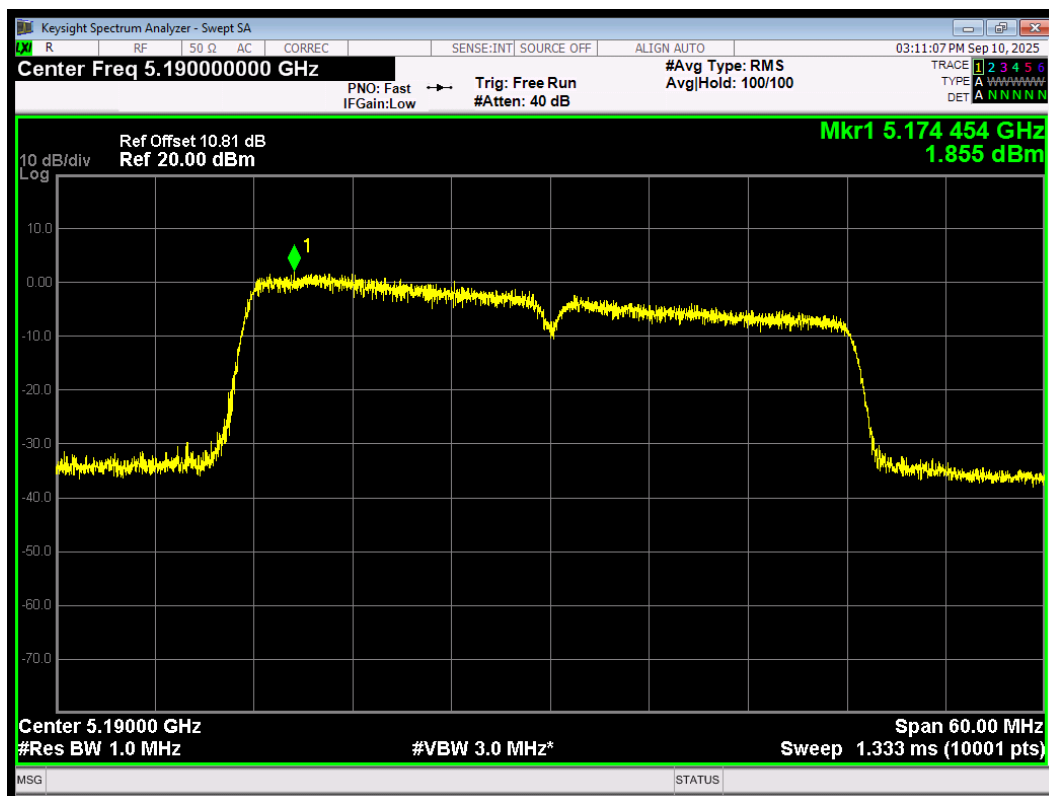
PSD 802.11ac(VHT20) 5240MHz Ant1



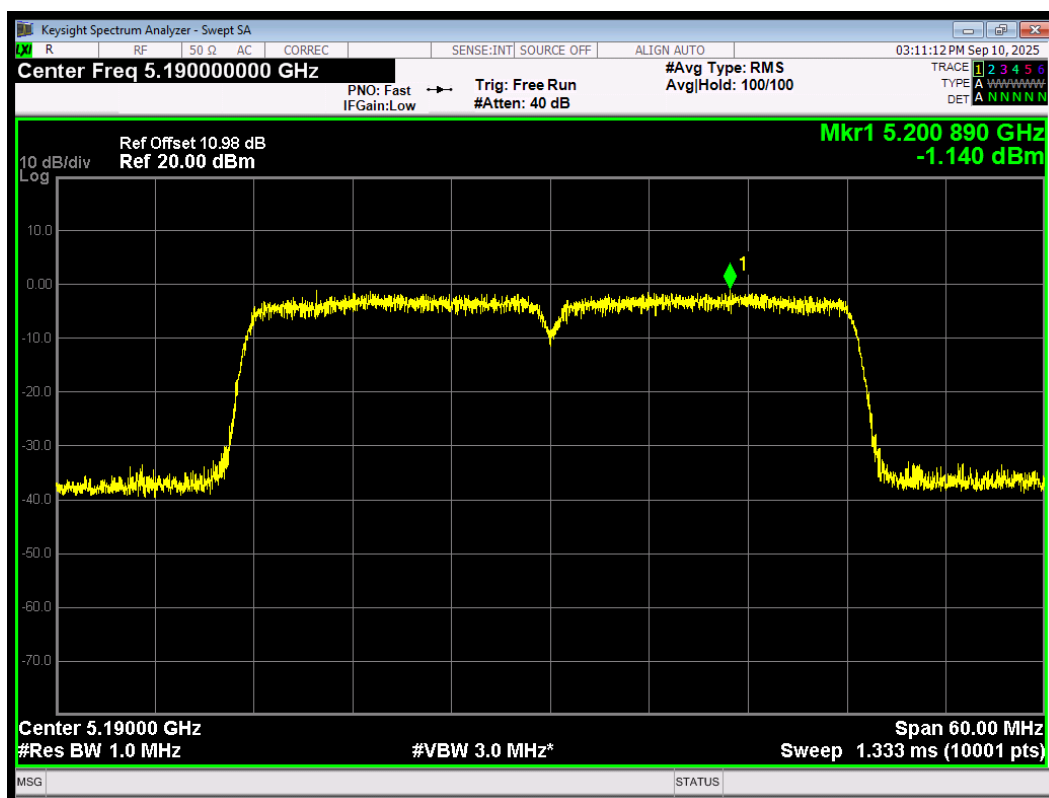
PSD 802.11ac(VHT20) 5240MHz Ant2



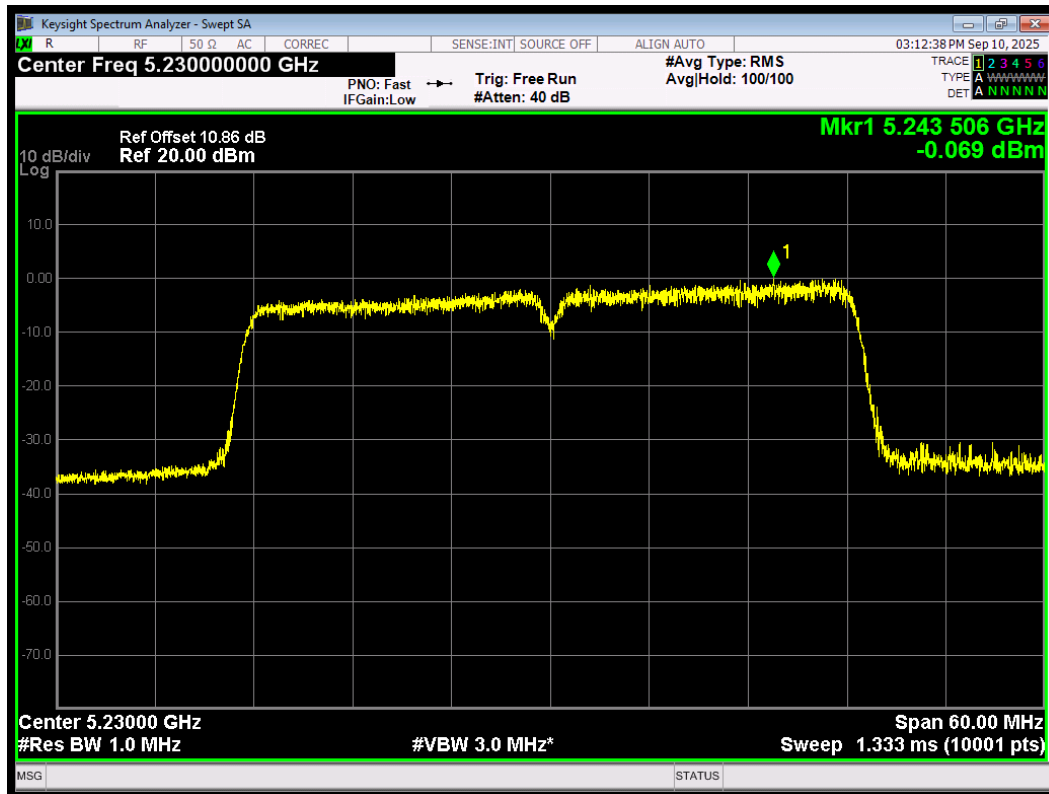
PSD 802.11ac(VHT40) 5190MHz Ant1



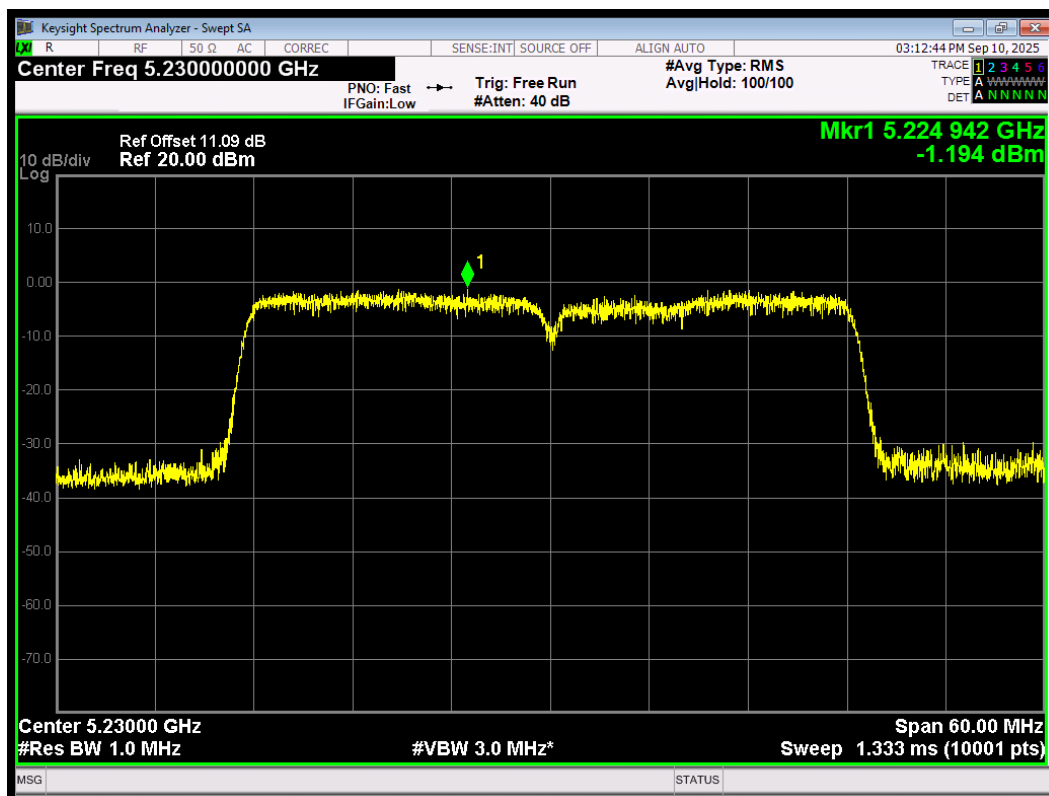
PSD 802.11ac(VHT40) 5190MHz Ant2



PSD 802.11ac(VHT40) 5230MHz Ant1



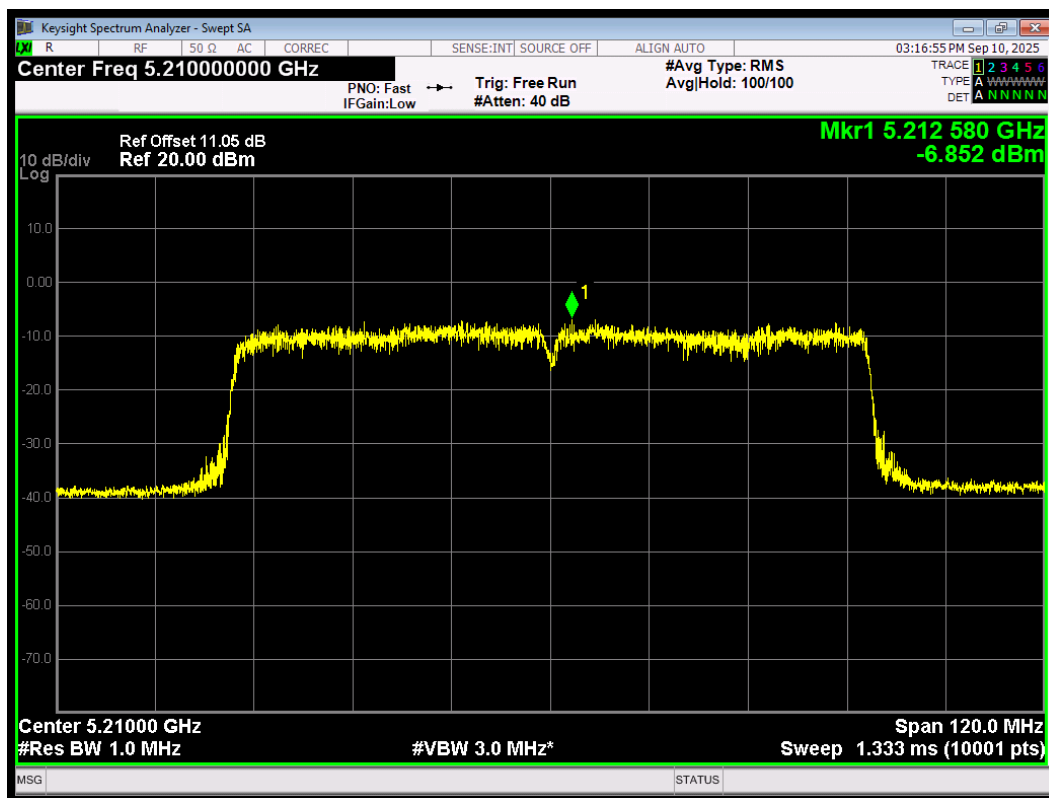
PSD 802.11ac(VHT40) 5230MHz Ant2



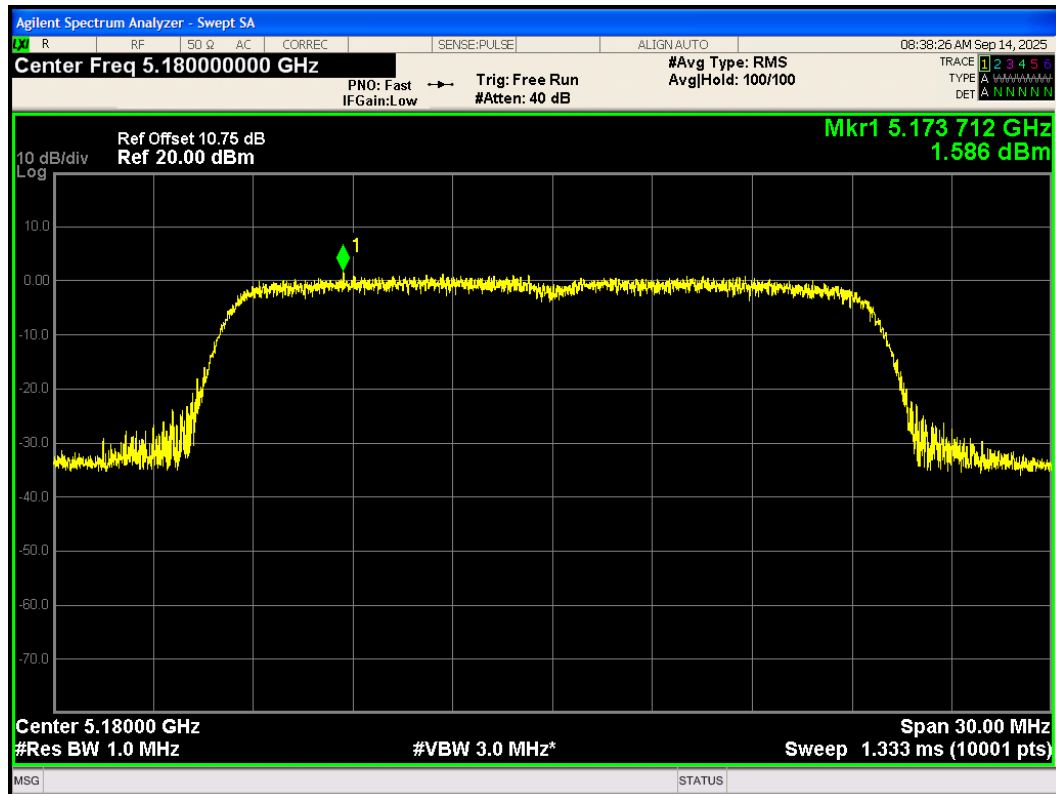
PSD 802.11ac(VHT80) 5210MHz Ant1



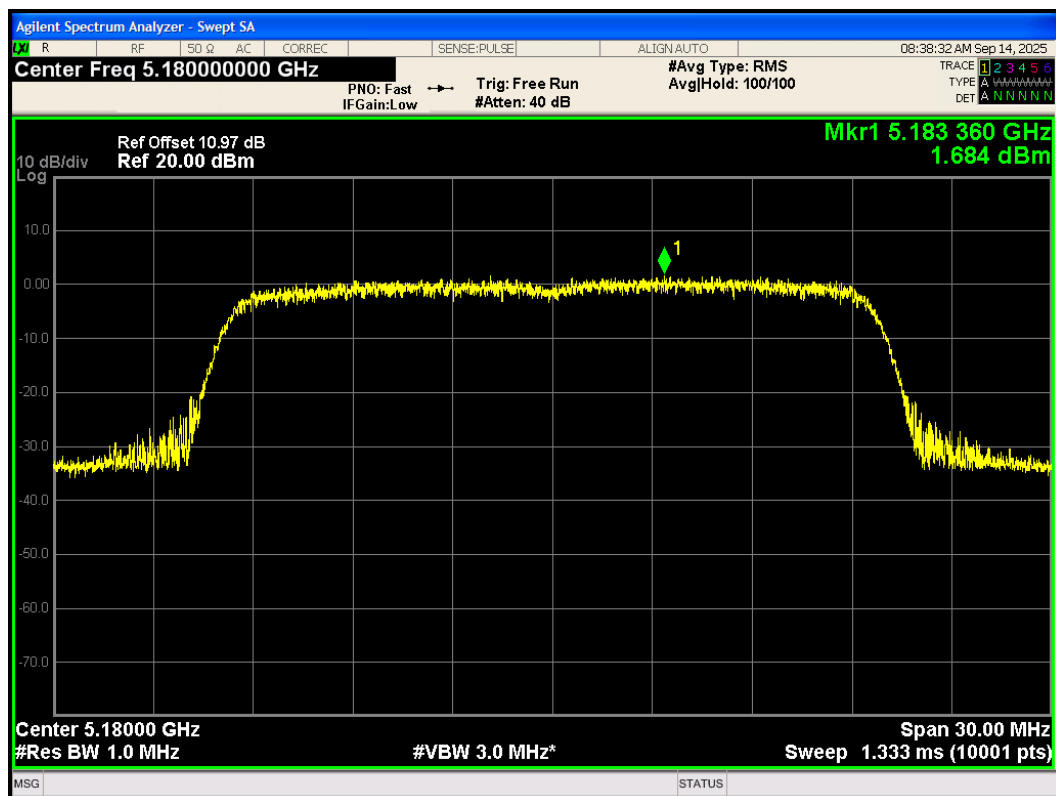
PSD 802.11ac(VHT80) 5210MHz Ant2



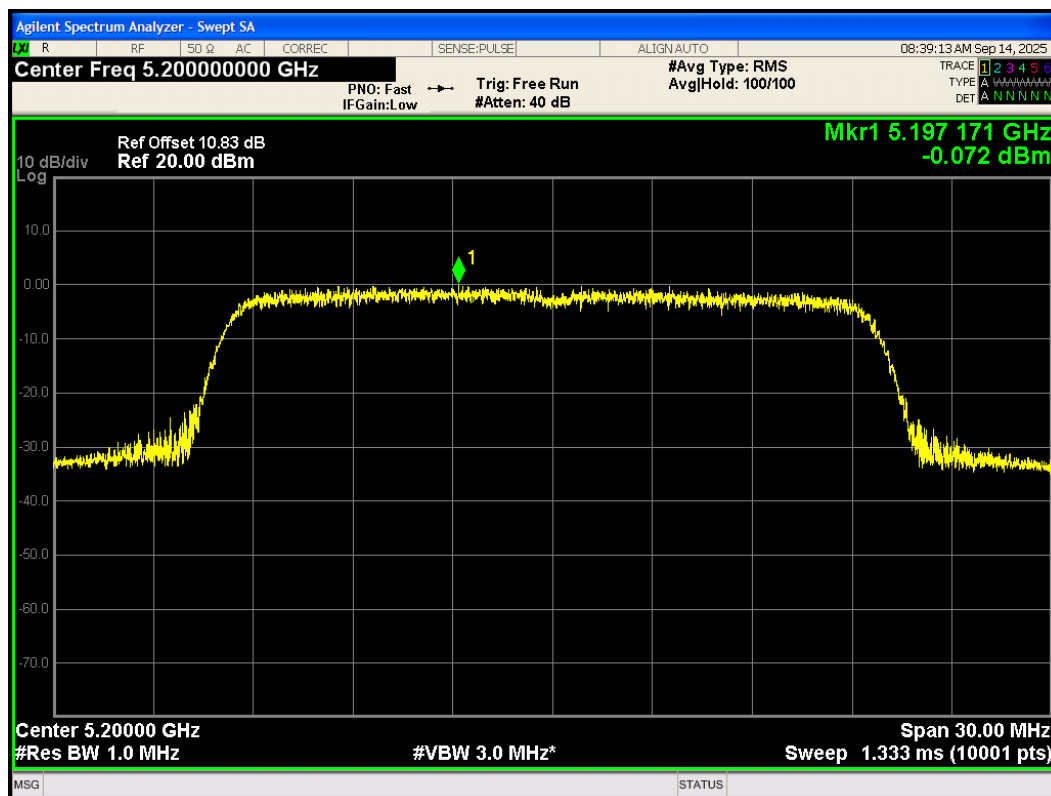
PSD 802.11ax(HE20) 5180MHz Ant1



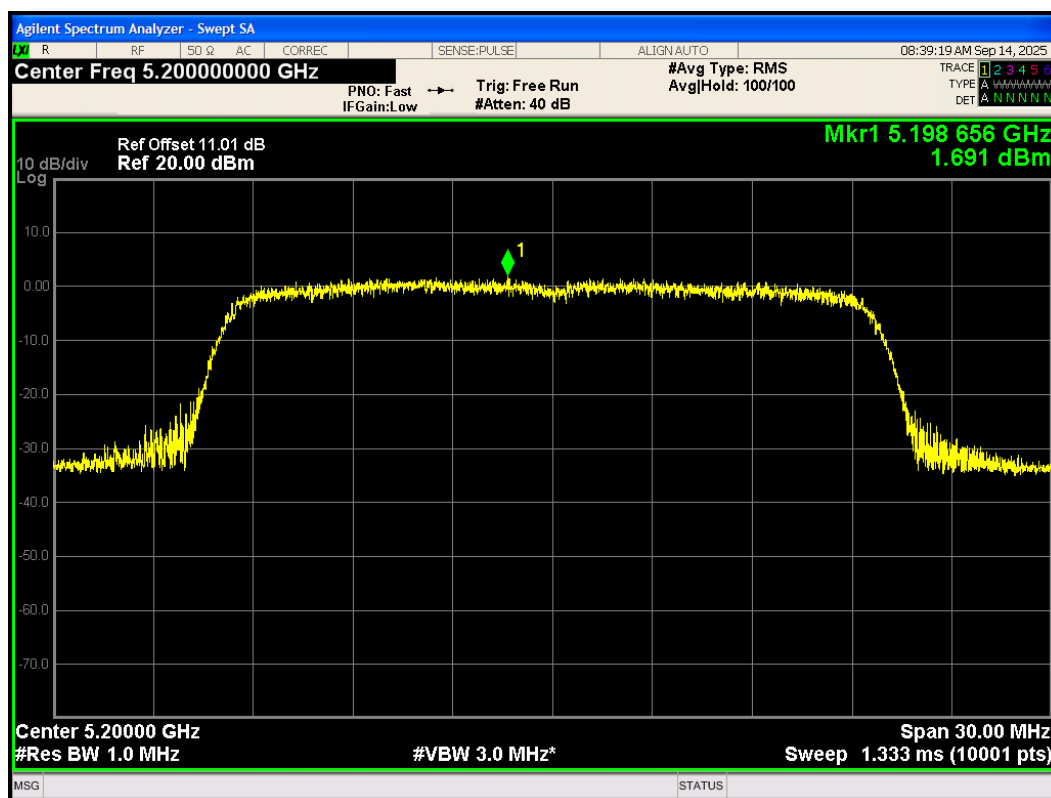
PSD 802.11ax(HE20) 5180MHz Ant2



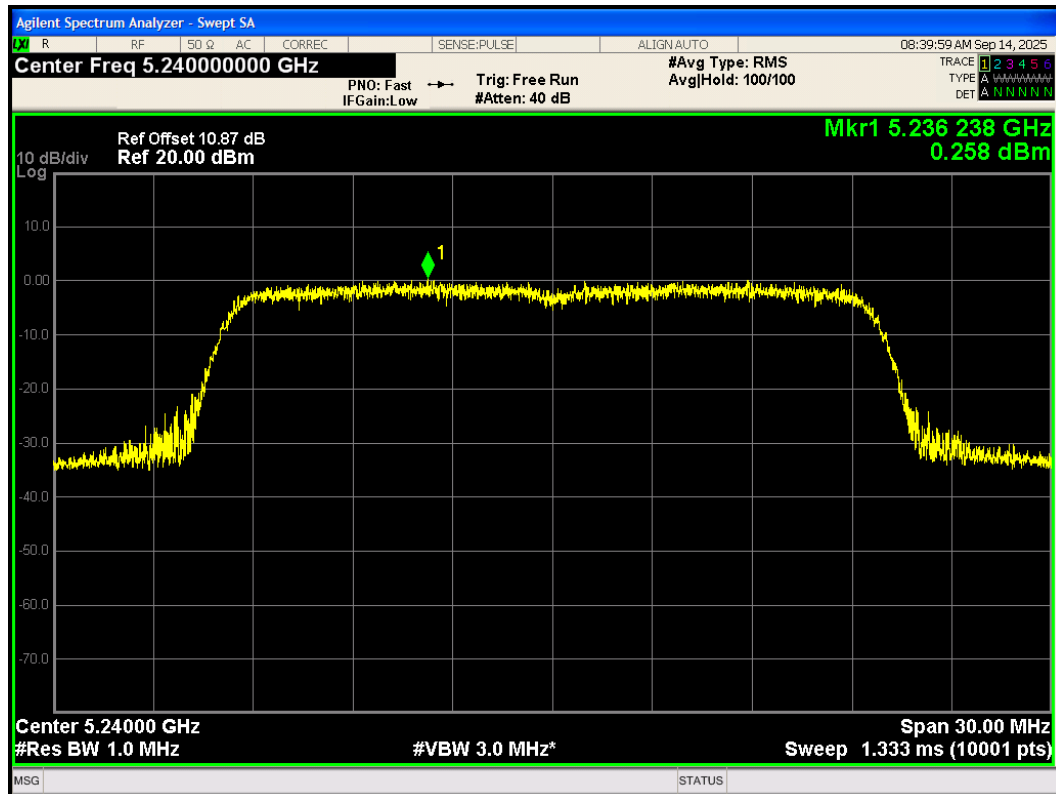
PSD 802.11ax(HE20) 5200MHz Ant1



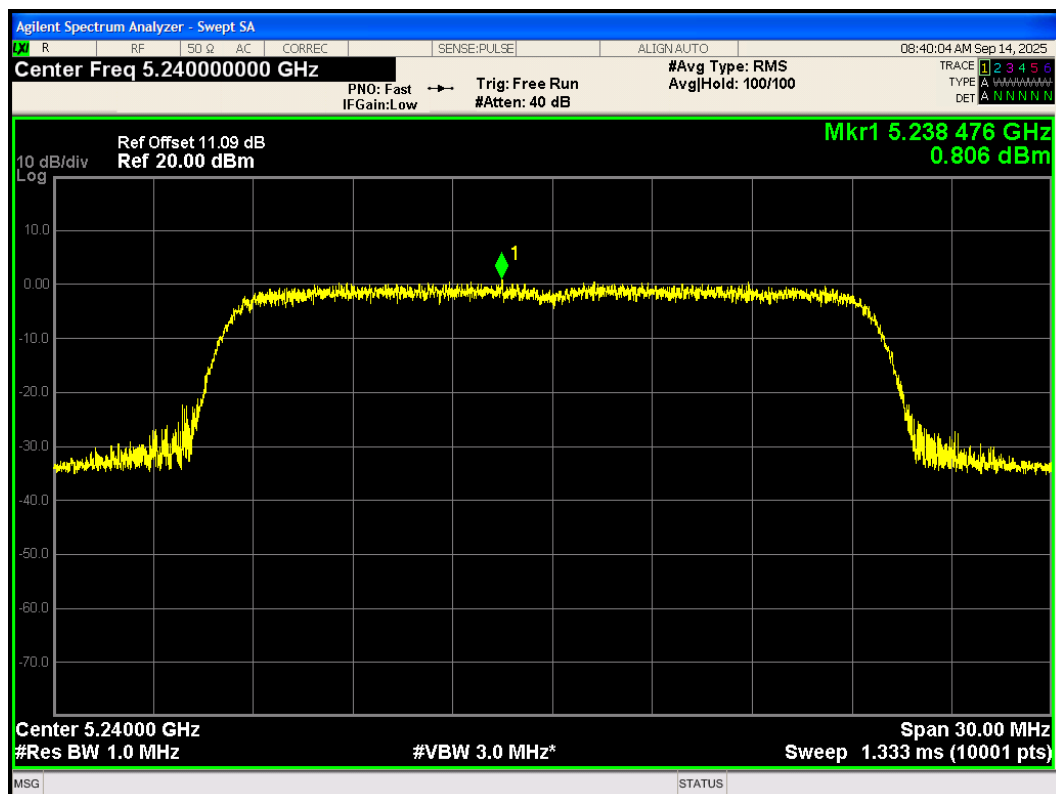
PSD 802.11ax(HE20) 5200MHz Ant2



PSD 802.11ax(HE20) 5240MHz Ant1



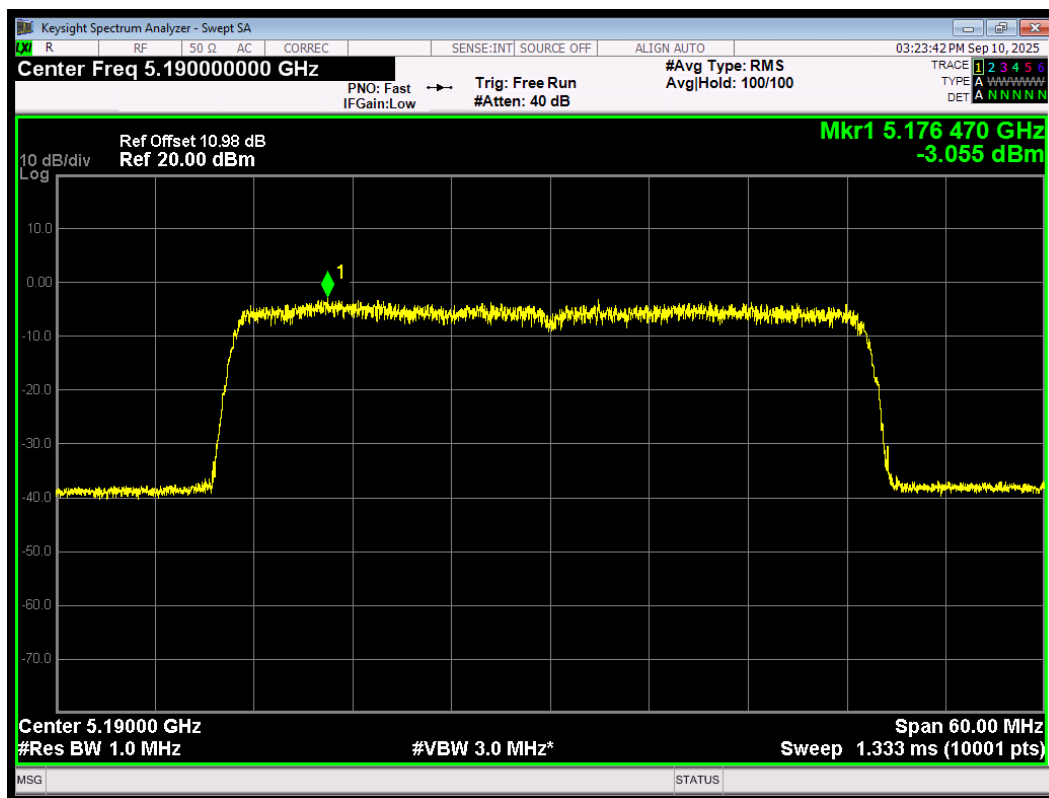
PSD 802.11ax(HE20) 5240MHz Ant2



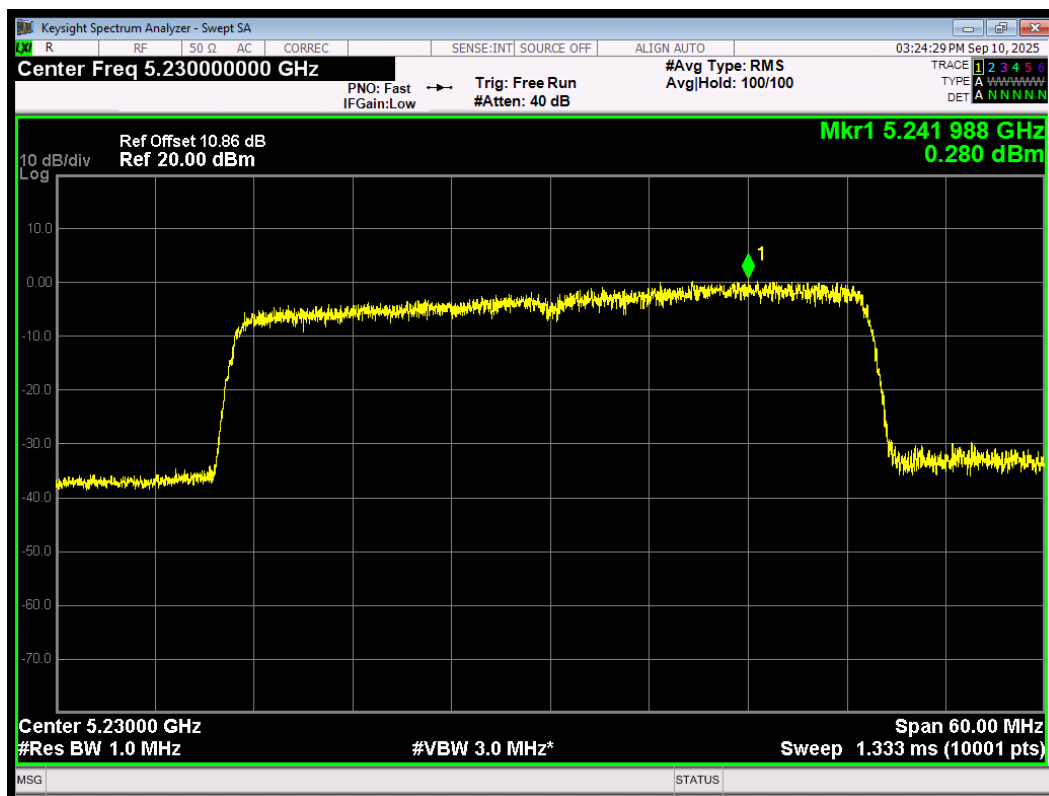
PSD 802.11ax(HE40) 5190MHz Ant1



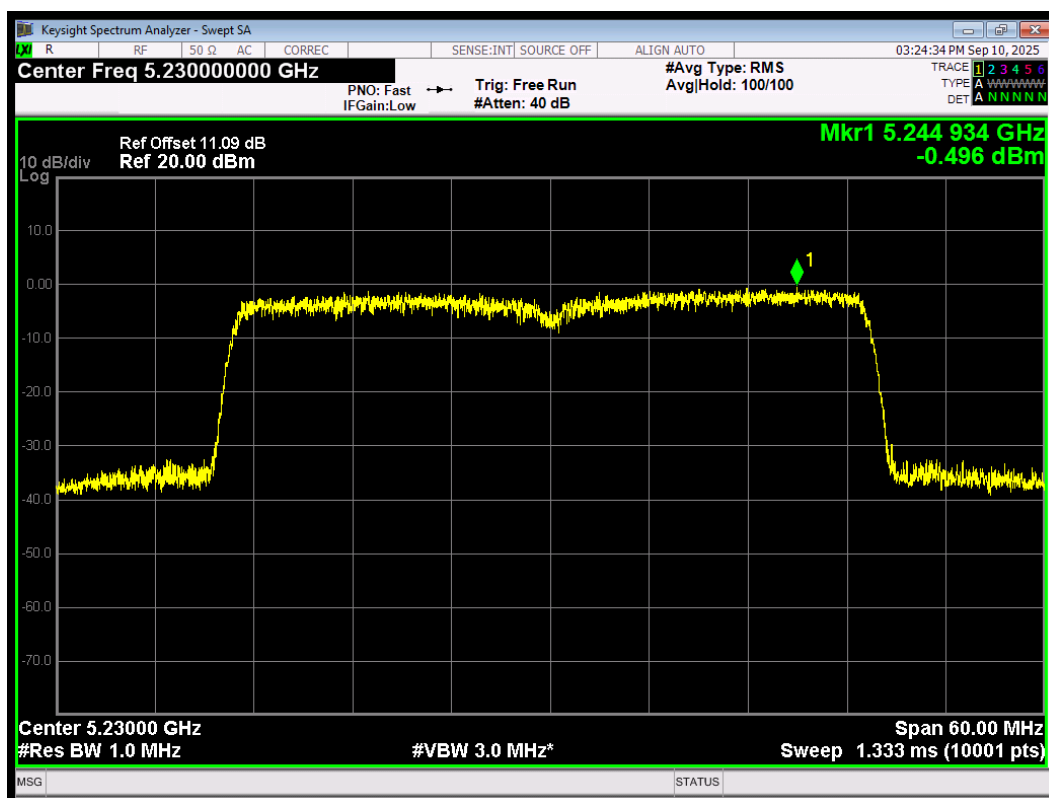
PSD 802.11ax(HE40) 5190MHz Ant2



PSD 802.11ax(HE40) 5230MHz Ant1



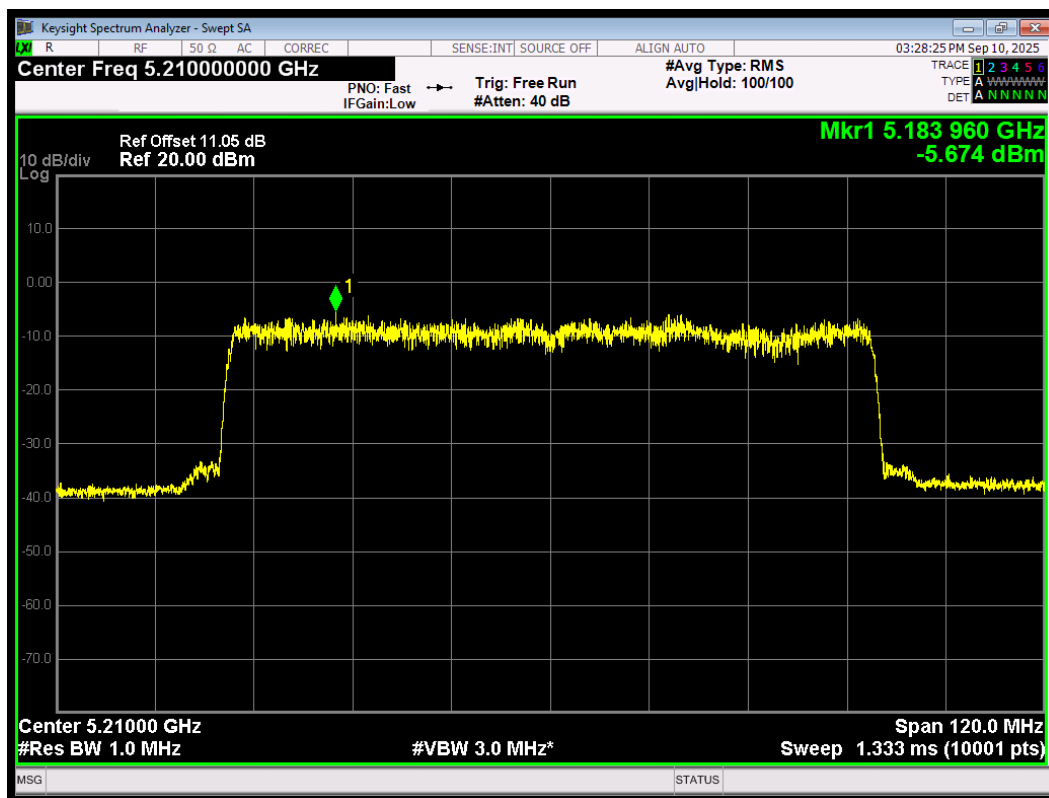
PSD 802.11ax(HE40) 5230MHz Ant2



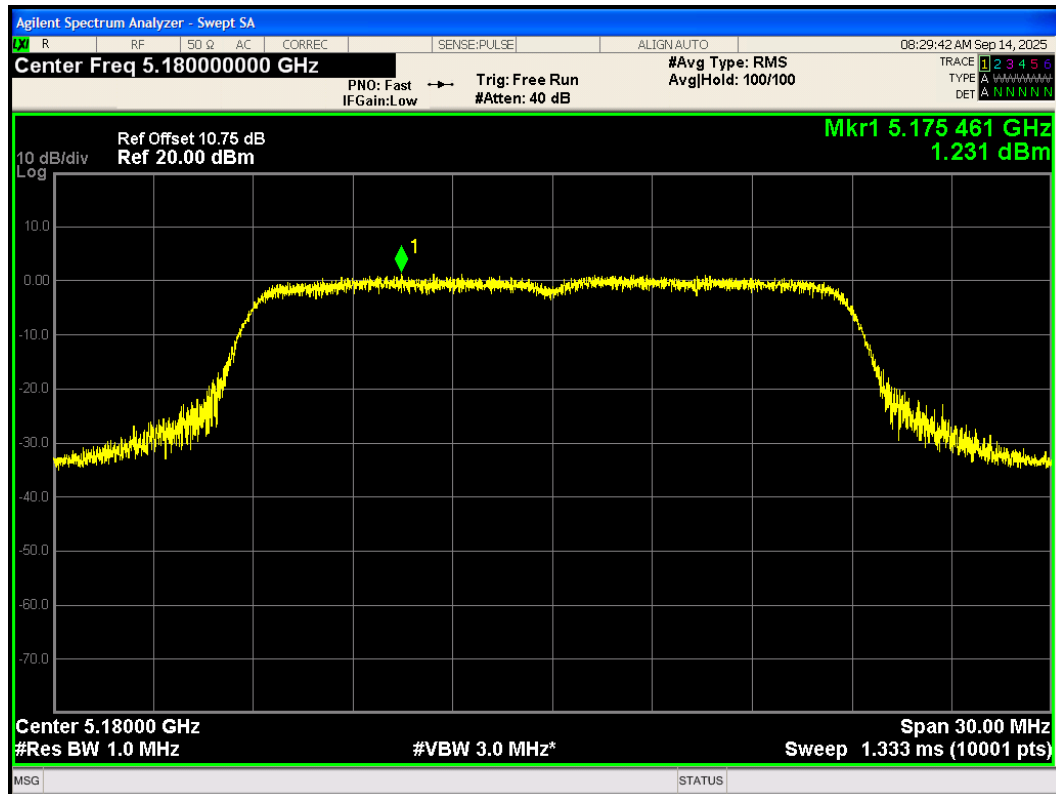
PSD 802.11ax(HE80) 5210MHz Ant1



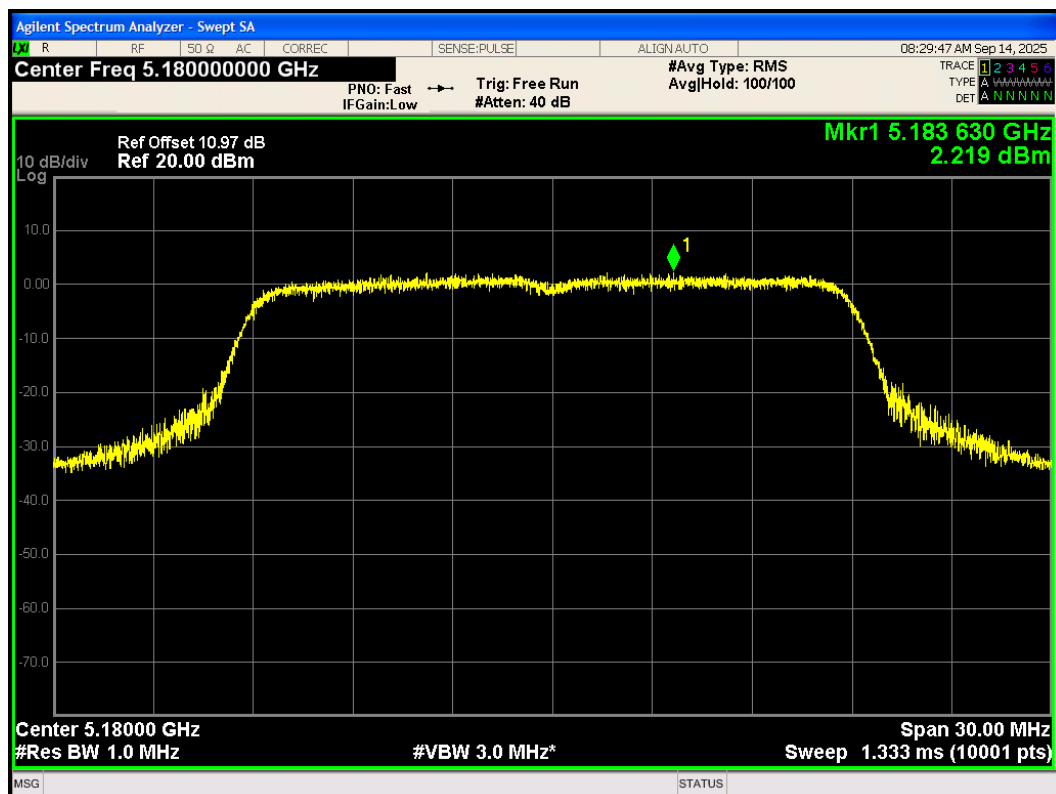
PSD 802.11ax(HE80) 5210MHz Ant2



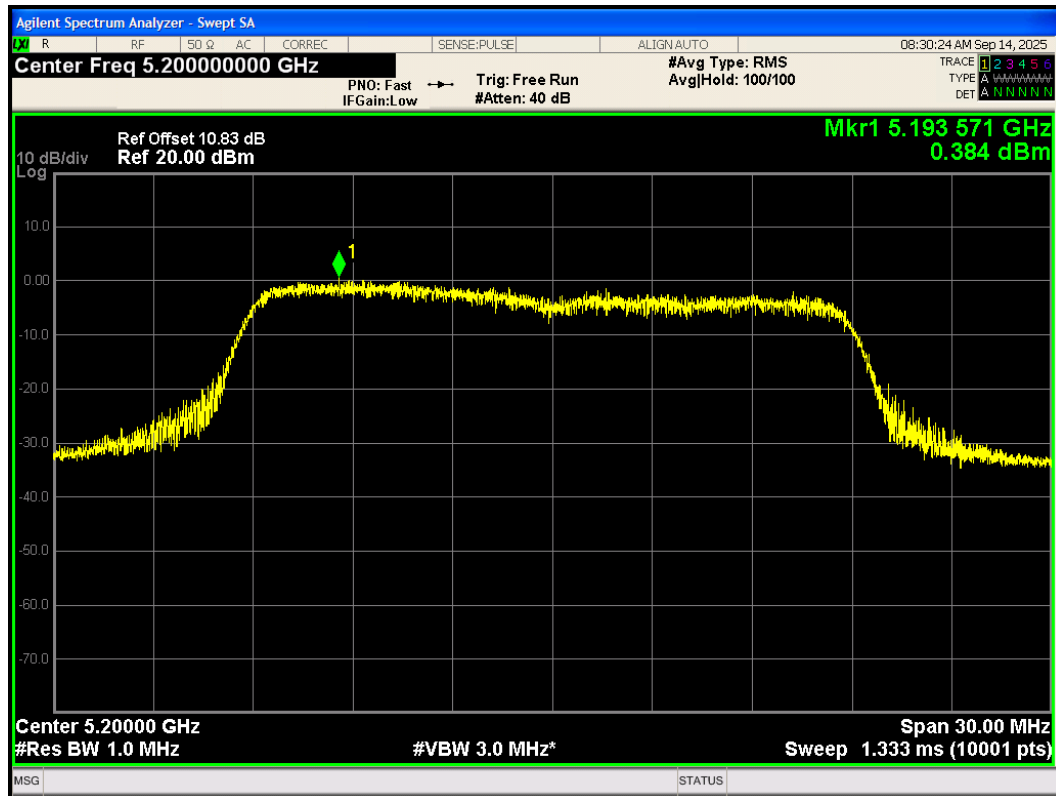
PSD 802.11n(HT20) 5180MHz Ant1



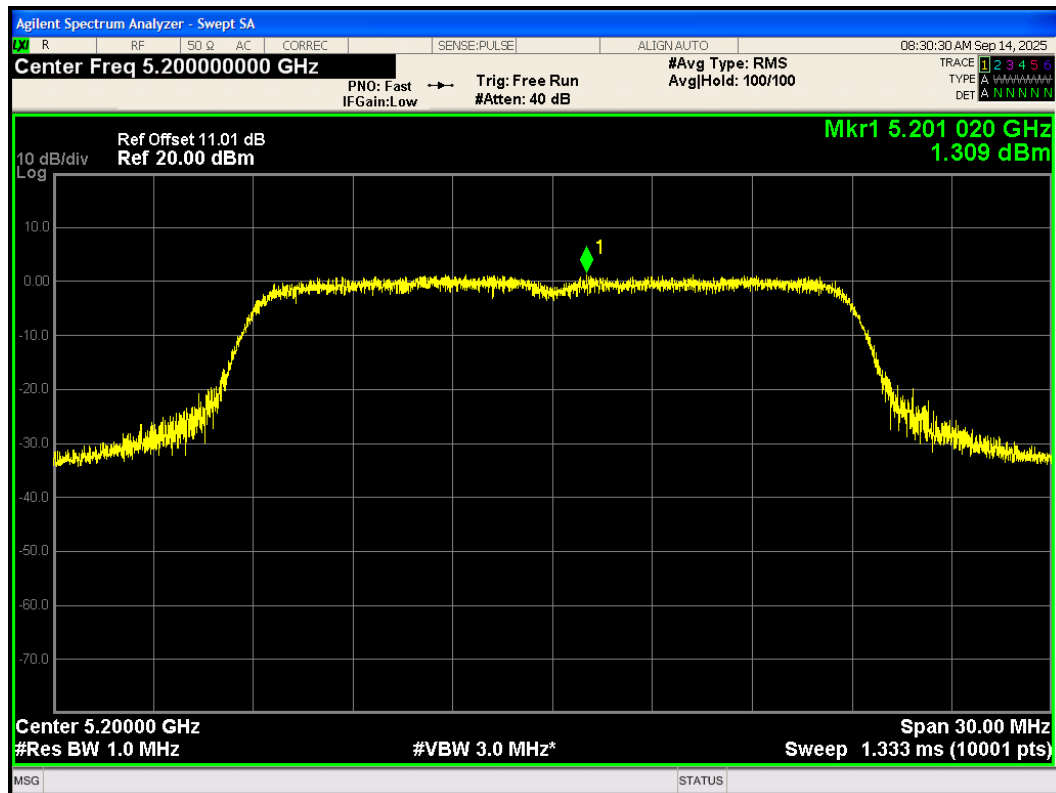
PSD 802.11n(HT20) 5180MHz Ant2



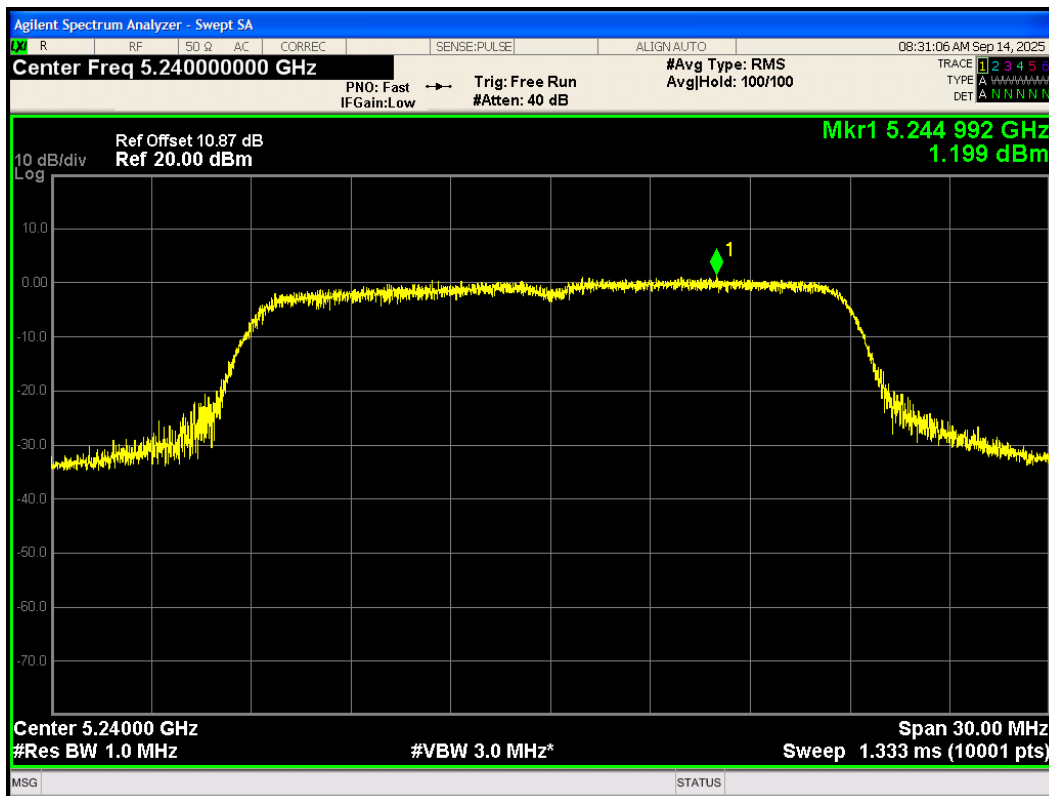
PSD 802.11n(HT20) 5200MHz Ant1



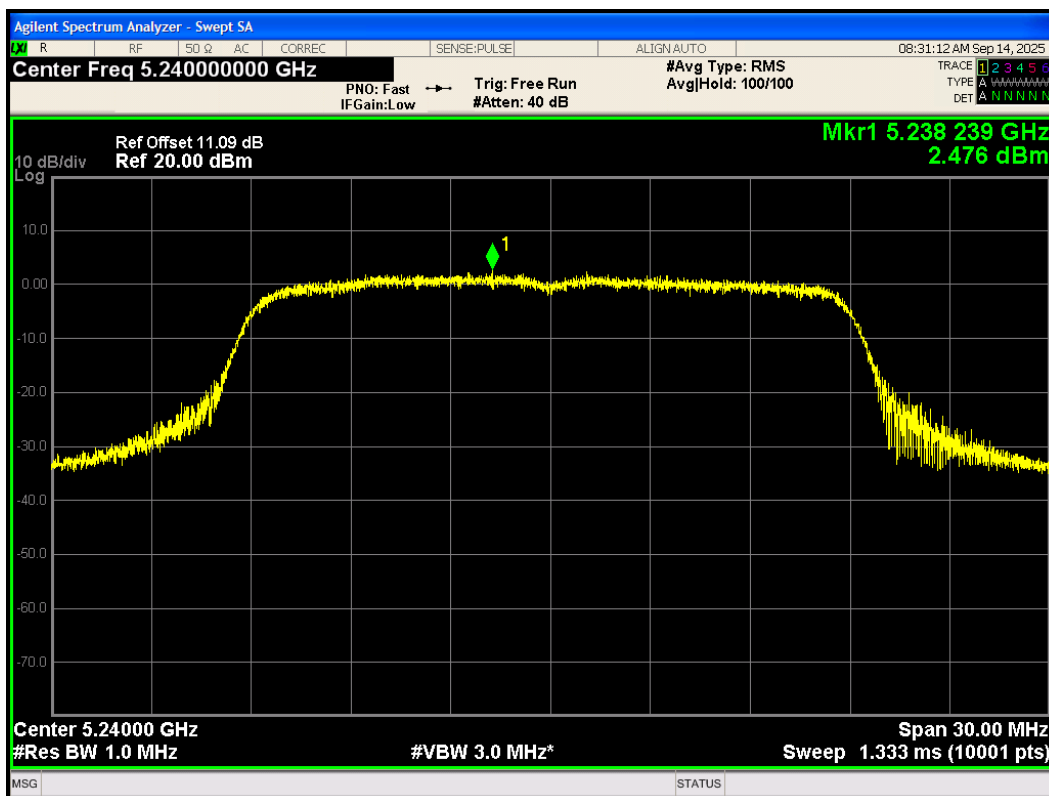
PSD 802.11n(HT20) 5200MHz Ant2



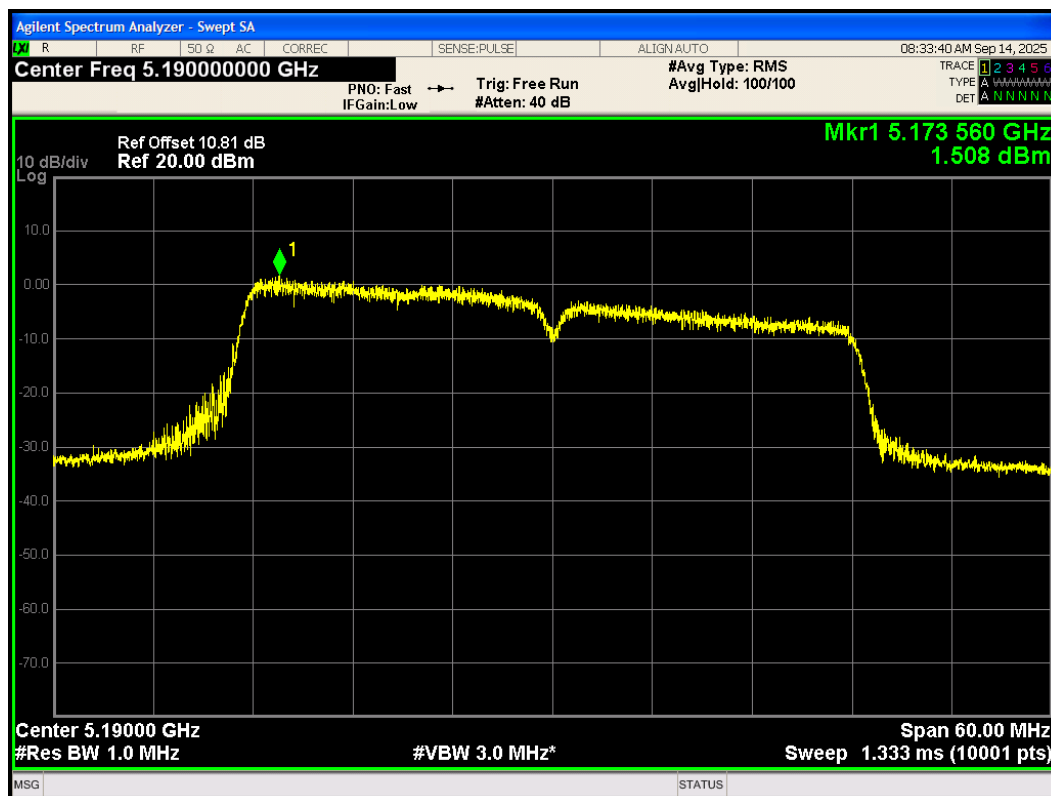
PSD 802.11n(HT20) 5240MHz Ant1



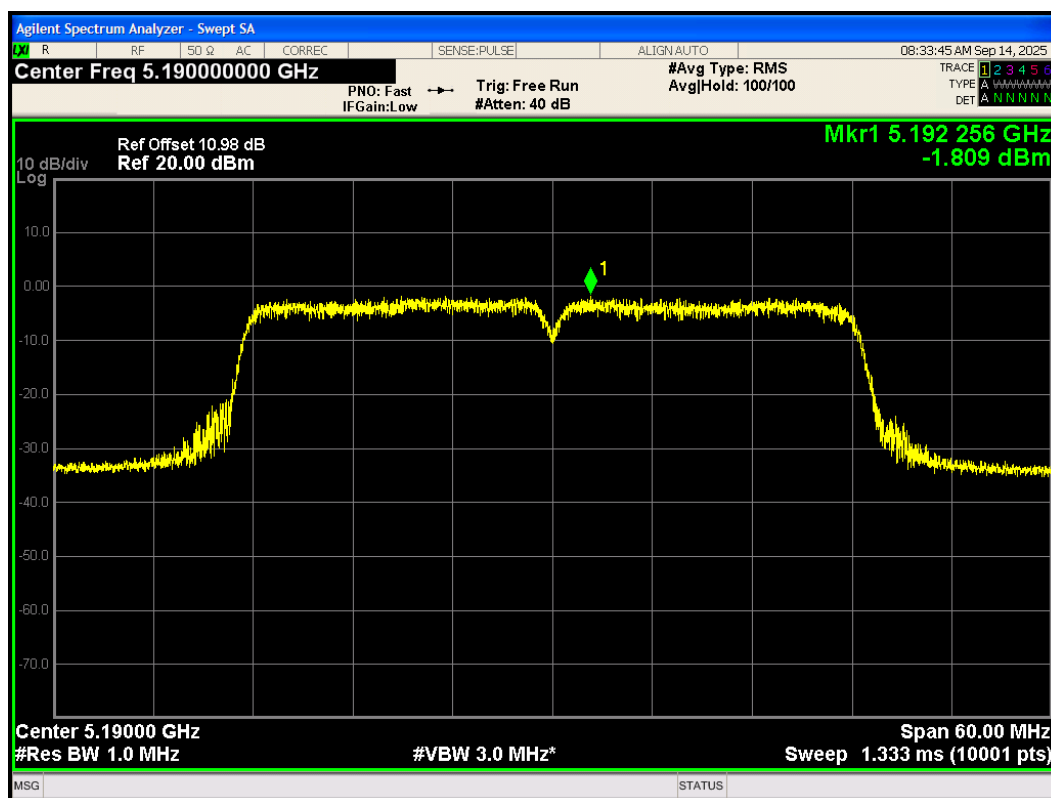
PSD 802.11n(HT20) 5240MHz Ant2



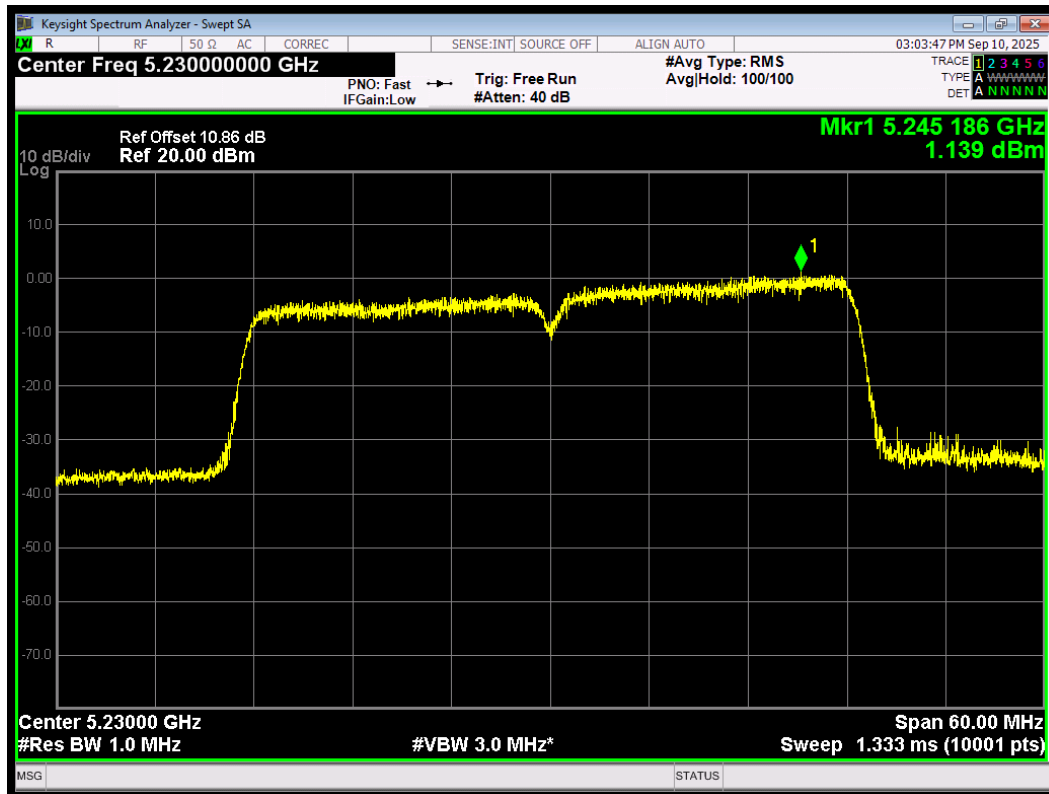
PSD 802.11n(HT40) 5190MHz Ant1



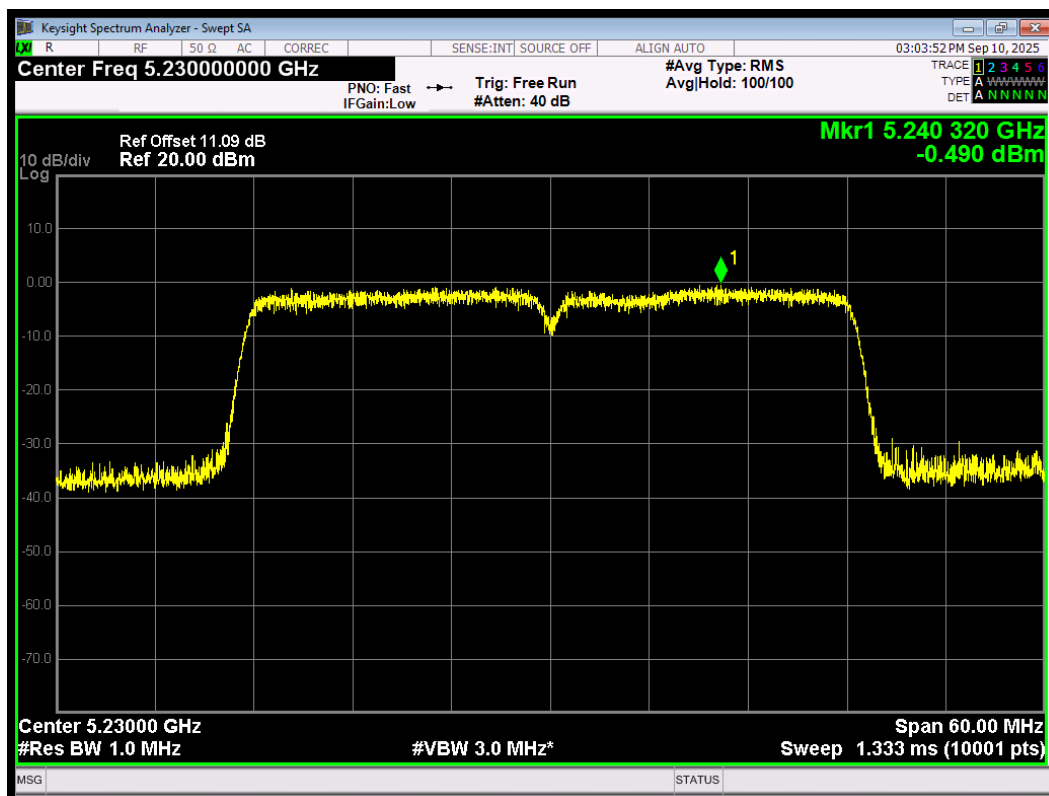
PSD 802.11n(HT40) 5190MHz Ant2



PSD 802.11n(HT40) 5230MHz Ant1

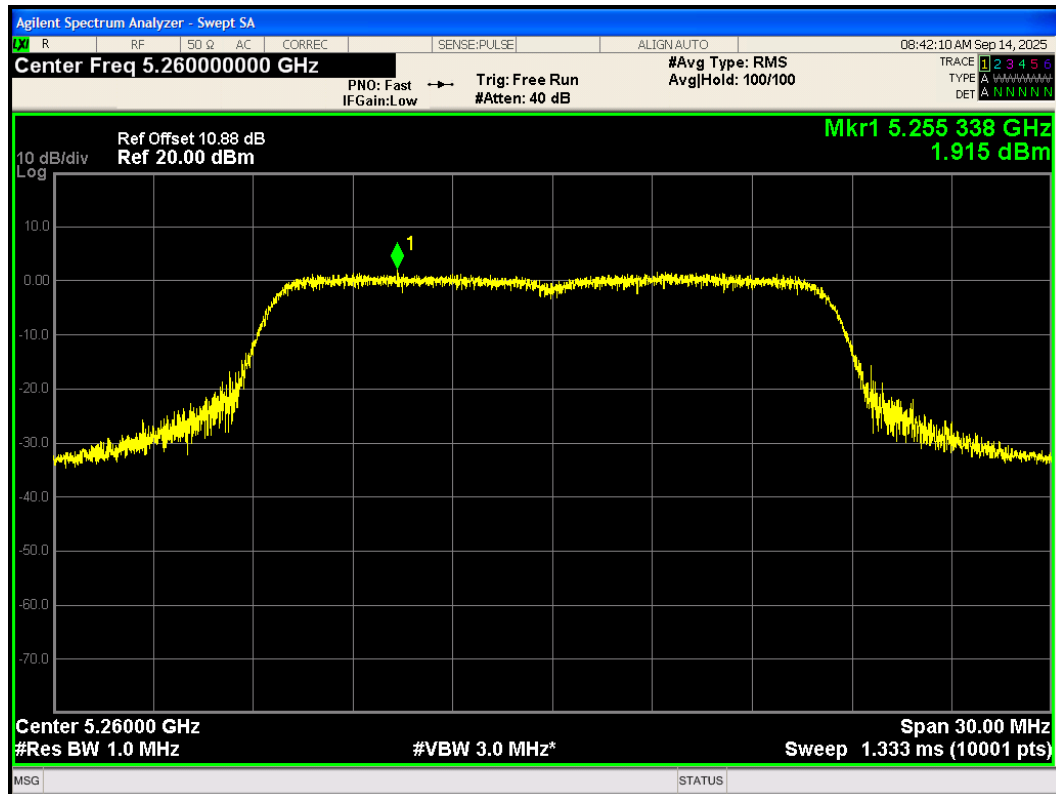


PSD 802.11n(HT40) 5230MHz Ant2

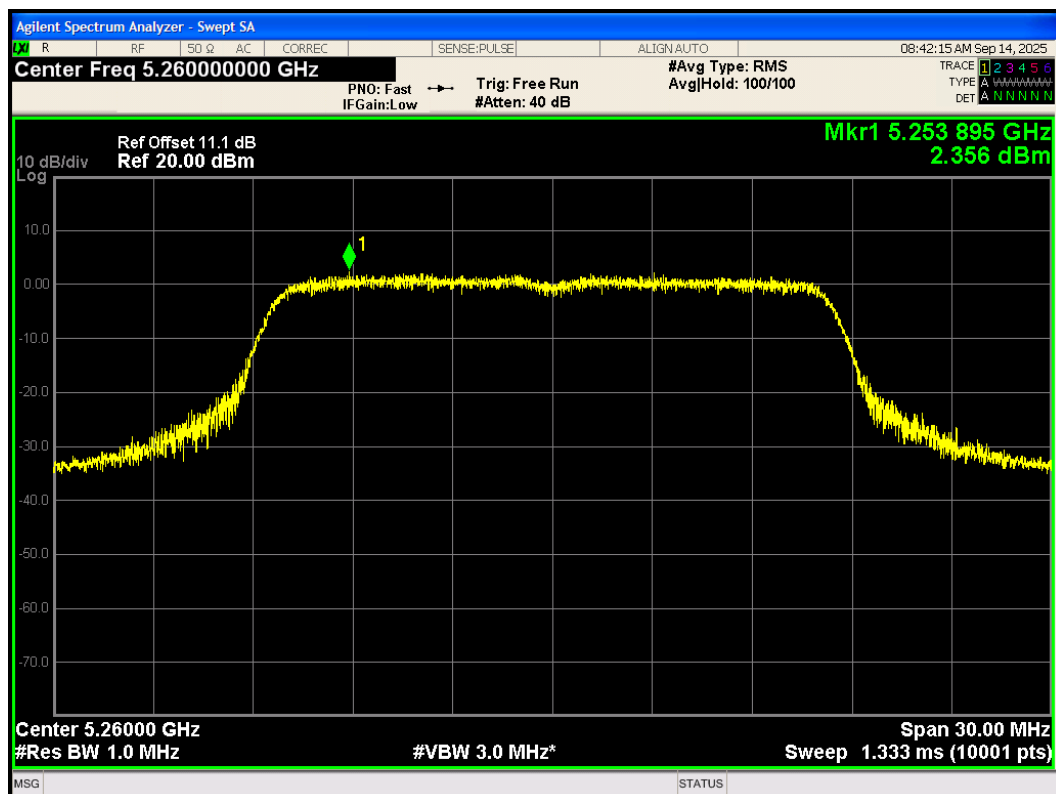


U-NII-2A

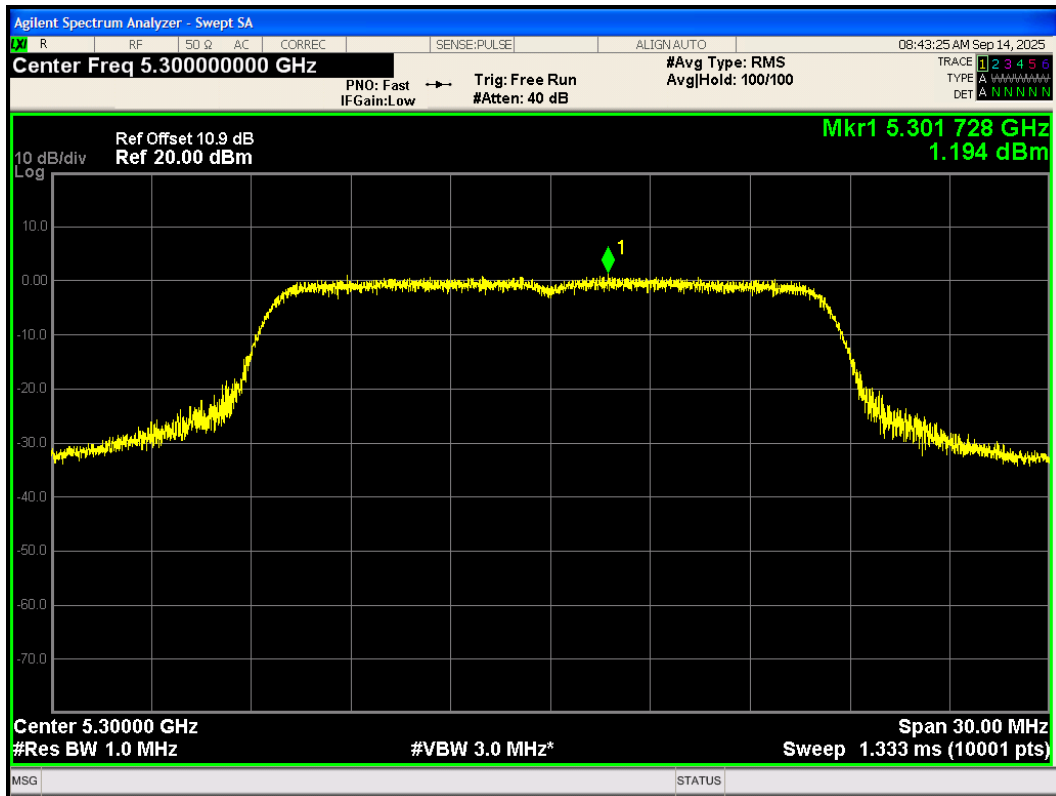
PSD 802.11a 5260MHz Ant1



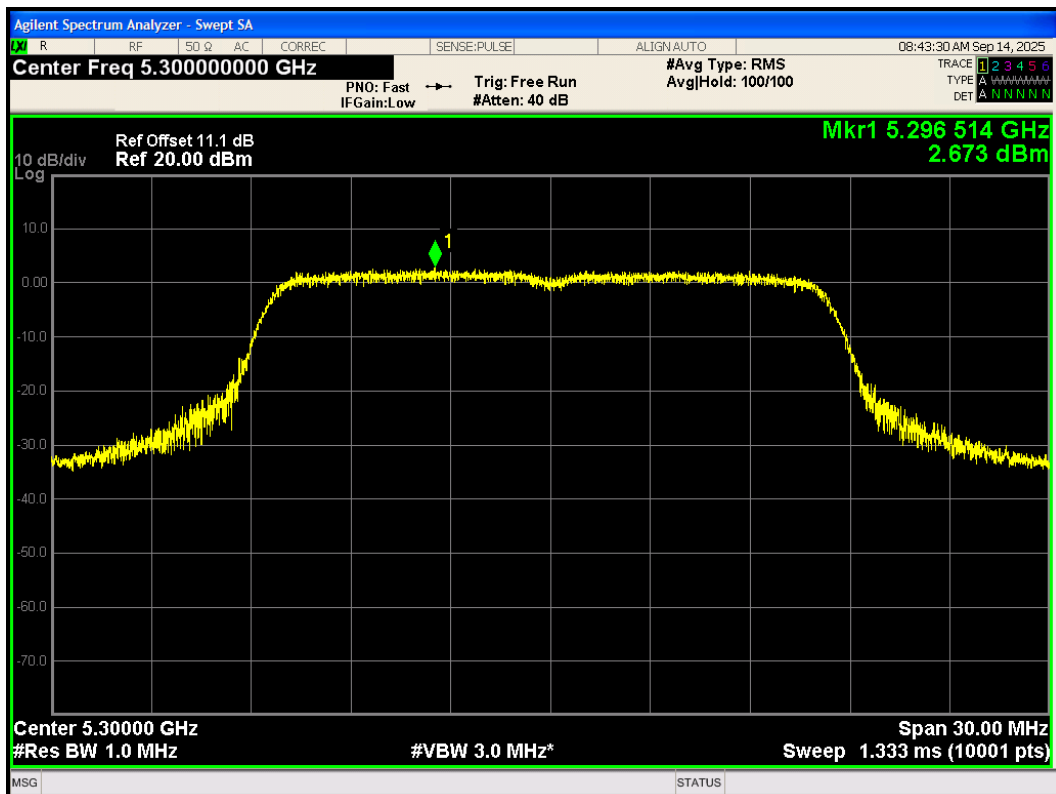
PSD 802.11a 5260MHz Ant2



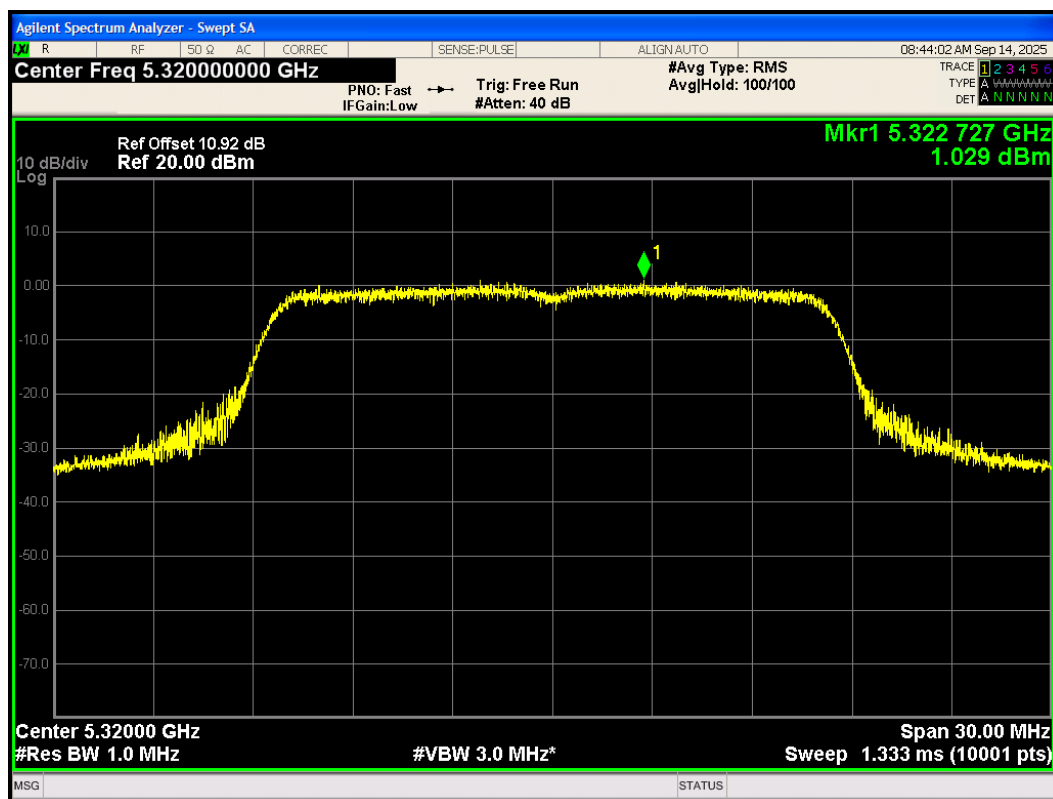
PSD 802.11a 5300MHz Ant1



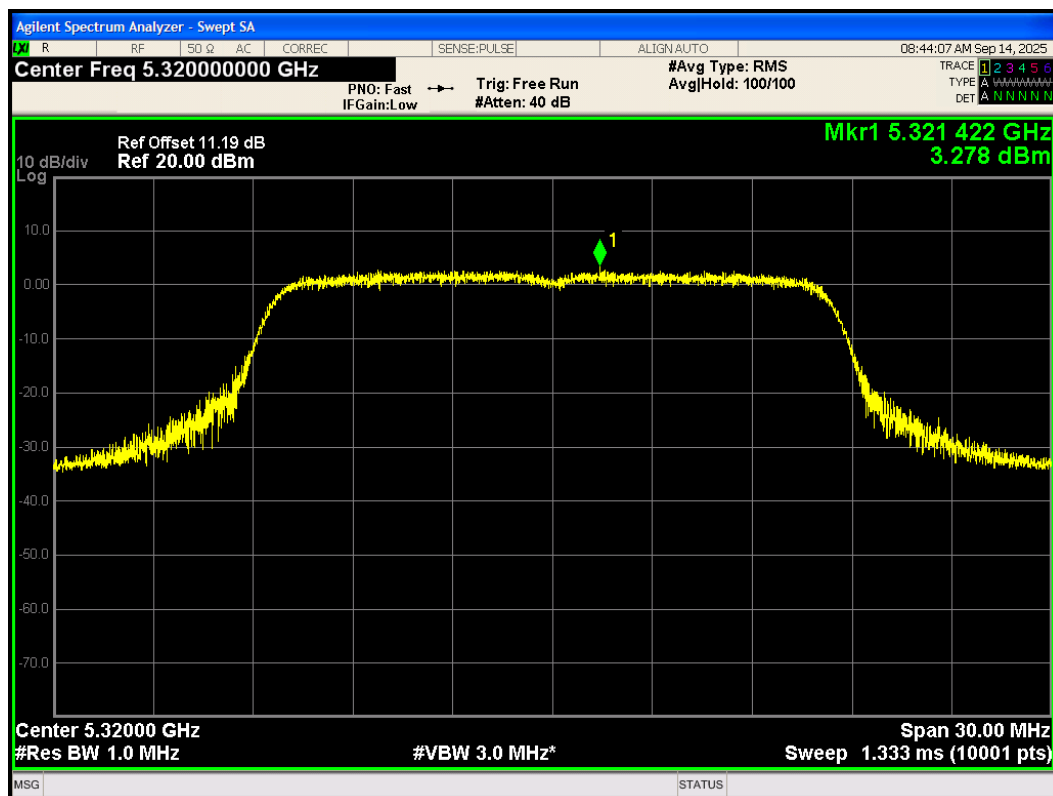
PSD 802.11a 5300MHz Ant2



PSD 802.11a 5320MHz Ant1



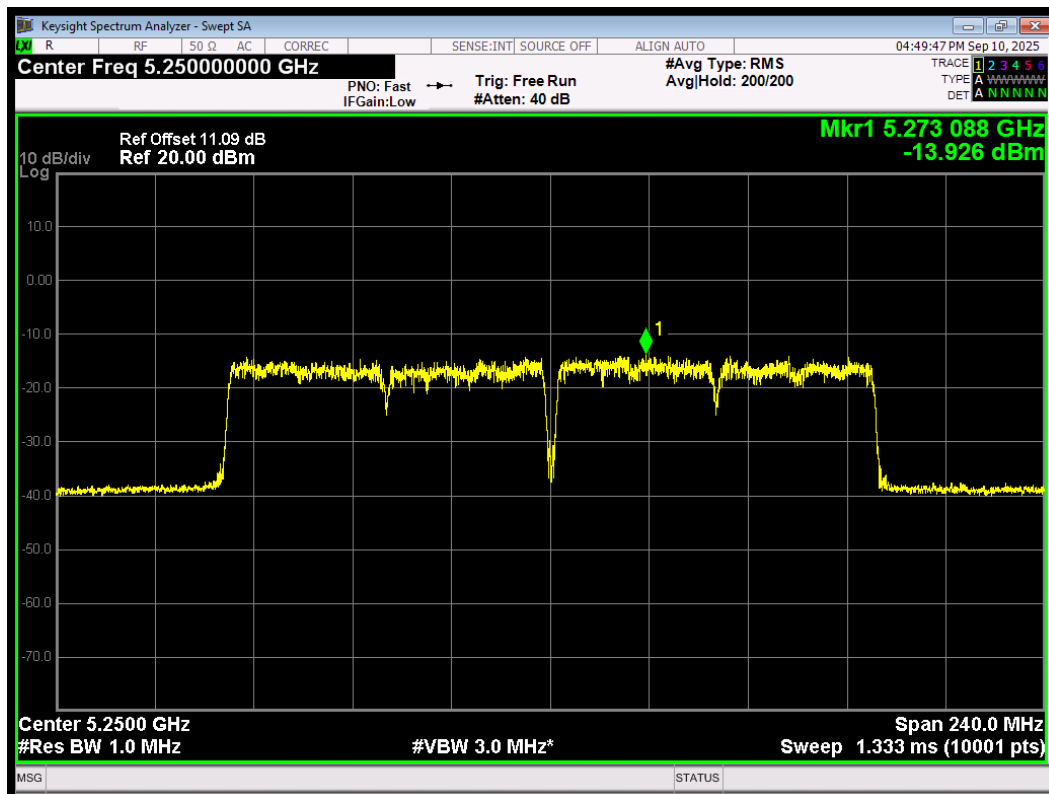
PSD 802.11a 5320MHz Ant2



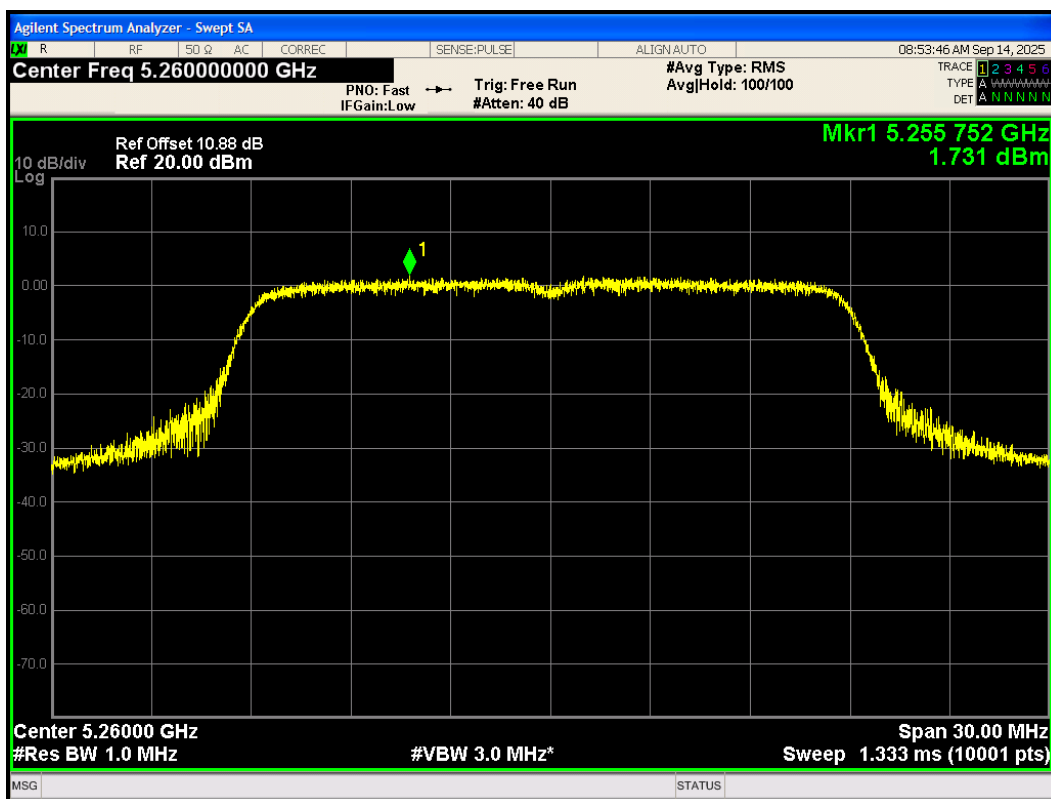
PSD 802.11ac(VHT160) 5250MHz Ant1



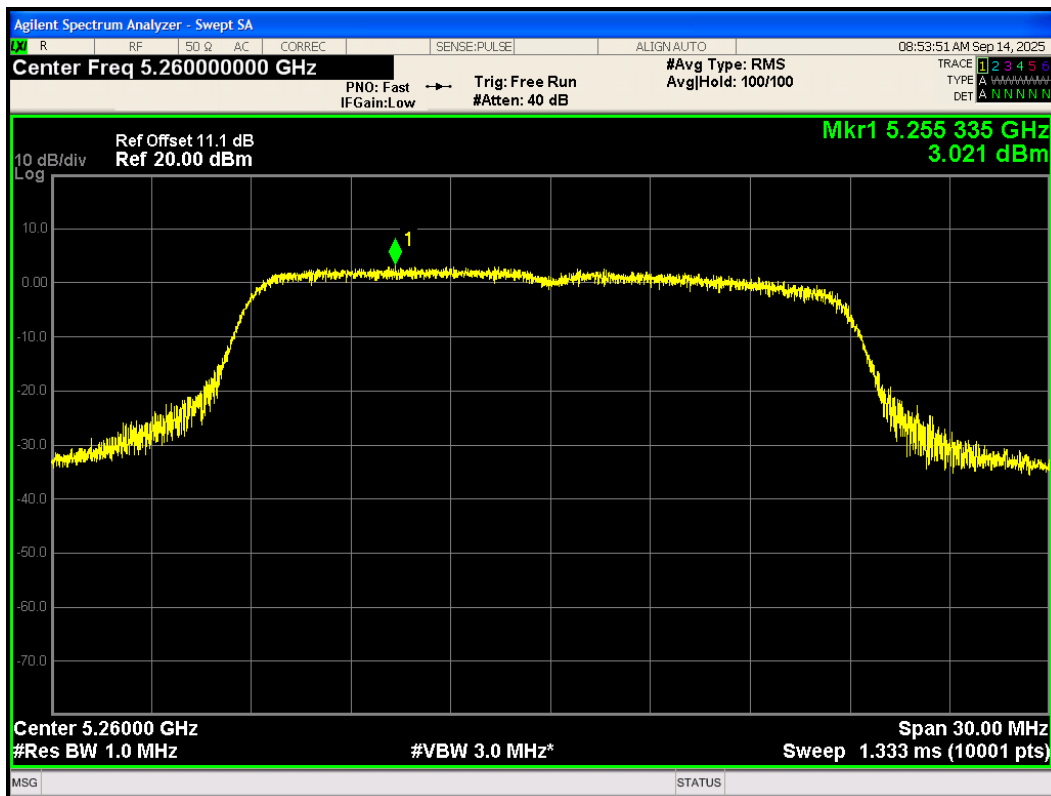
PSD 802.11ac(VHT160) 5250MHz Ant2



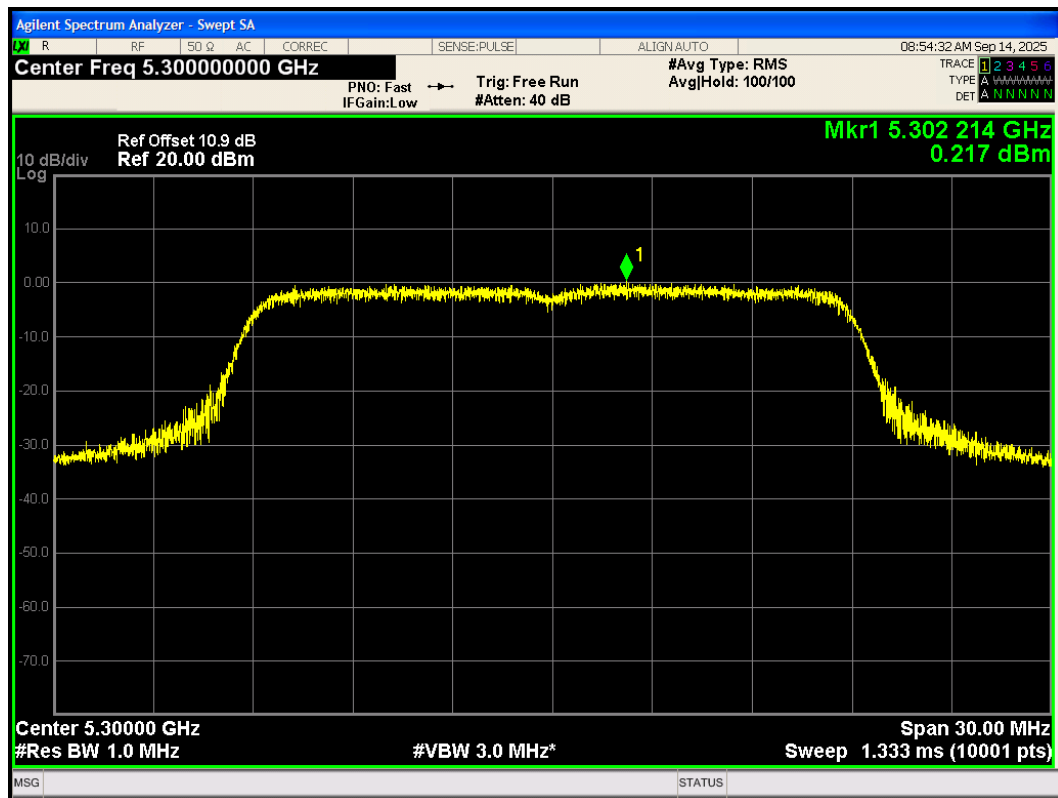
PSD 802.11ac(VHT20) 5260MHz Ant1



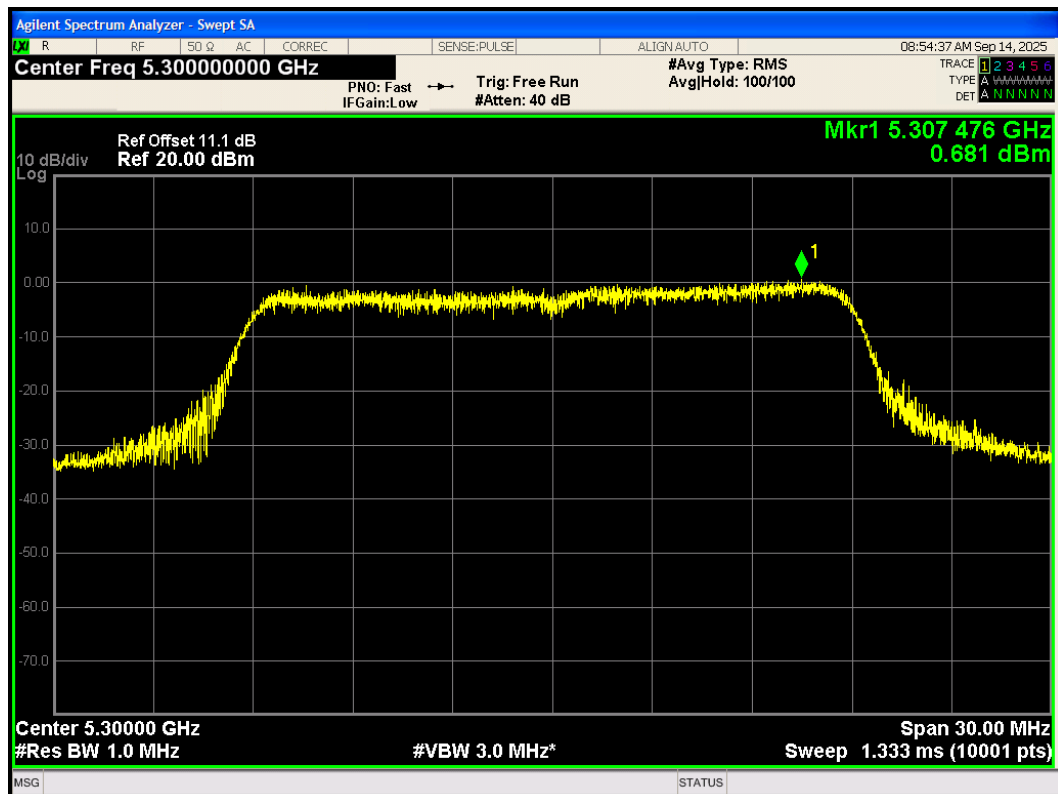
PSD 802.11ac(VHT20) 5260MHz Ant2



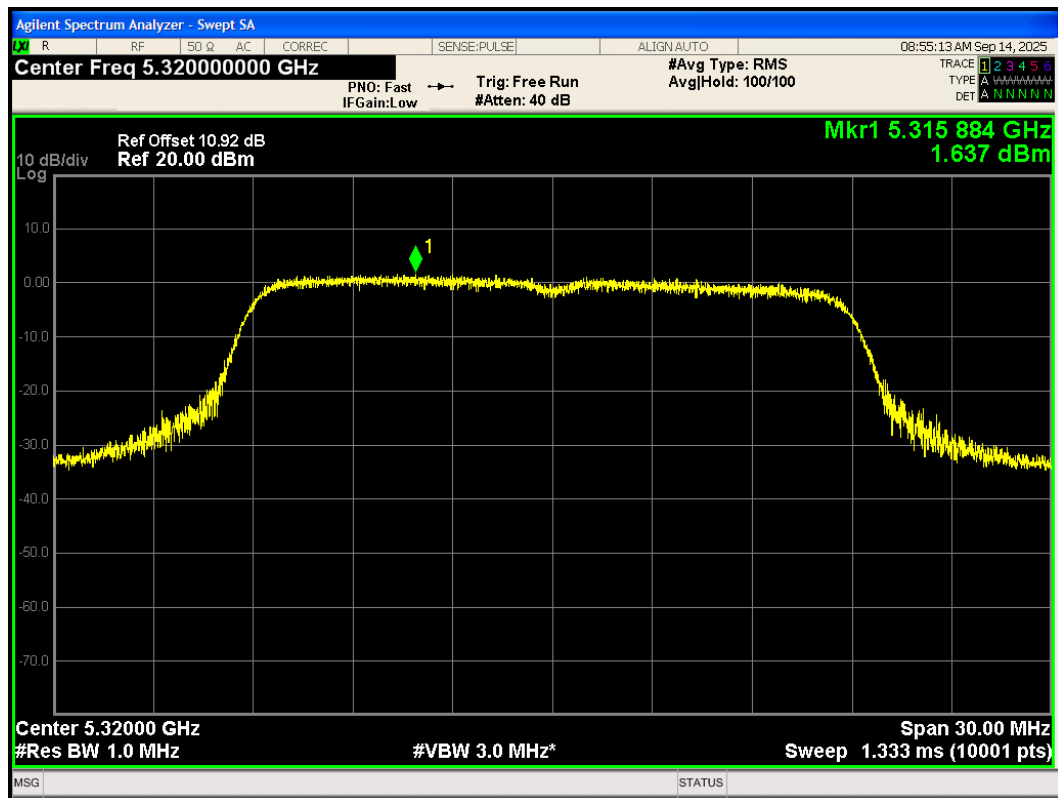
PSD 802.11ac(VHT20) 5300MHz Ant1



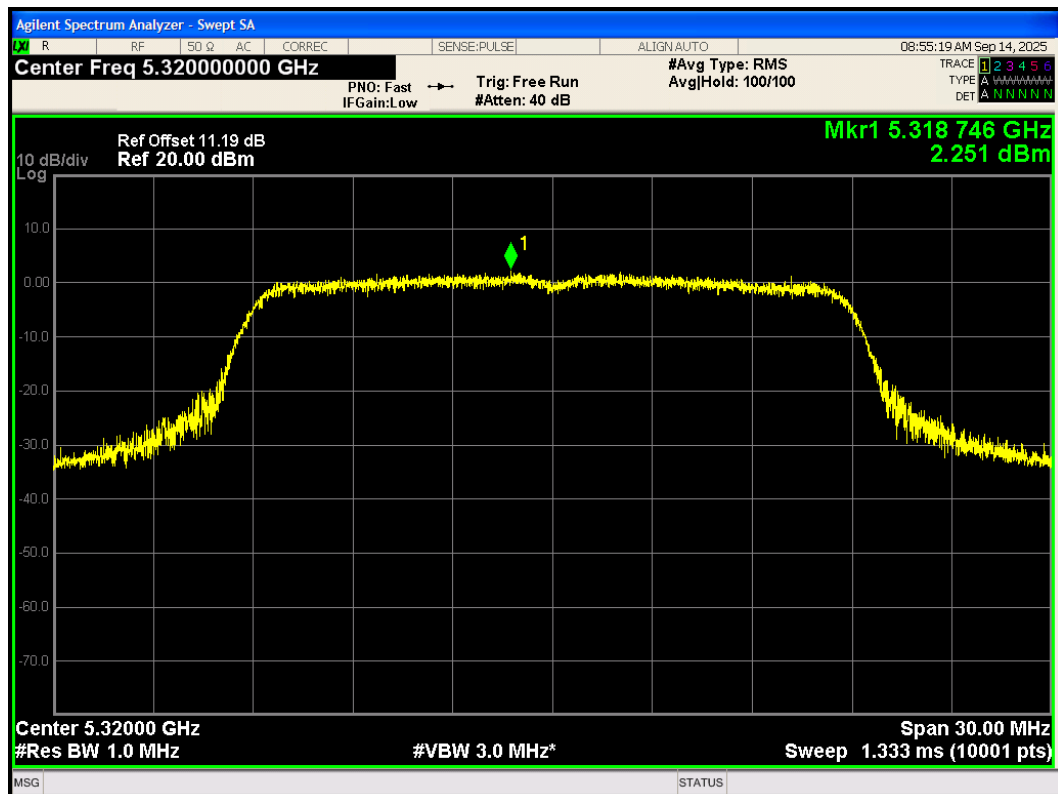
PSD 802.11ac(VHT20) 5300MHz Ant2



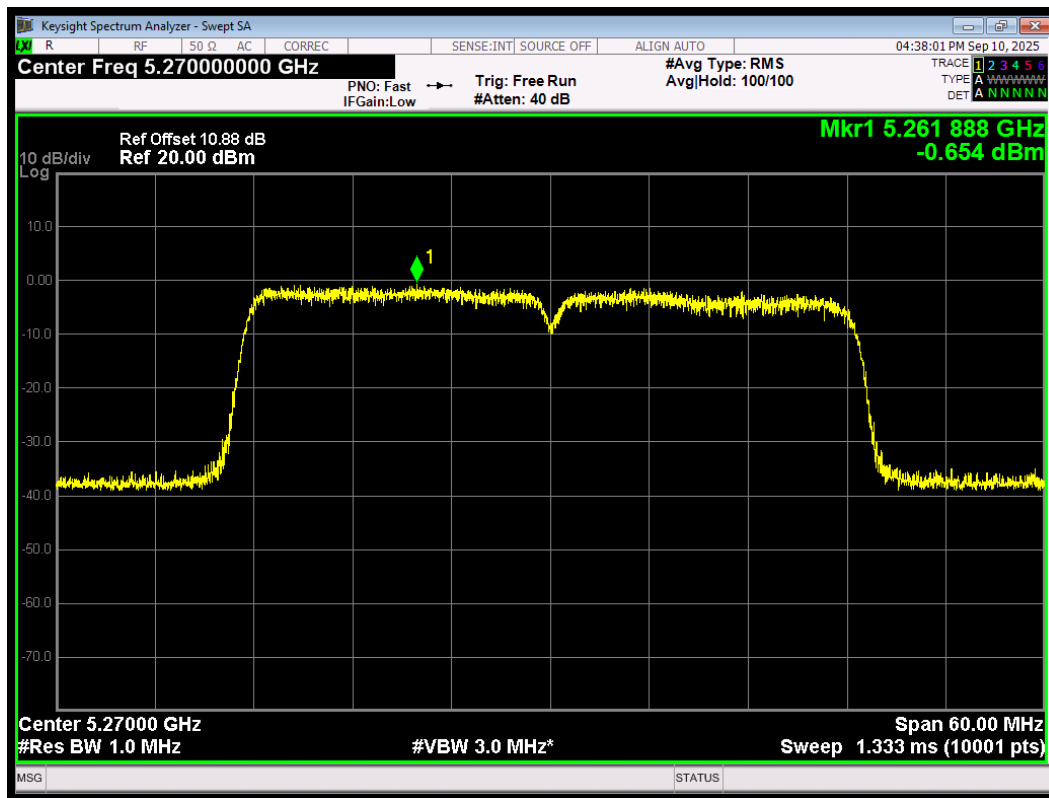
PSD 802.11ac(VHT20) 5320MHz Ant1



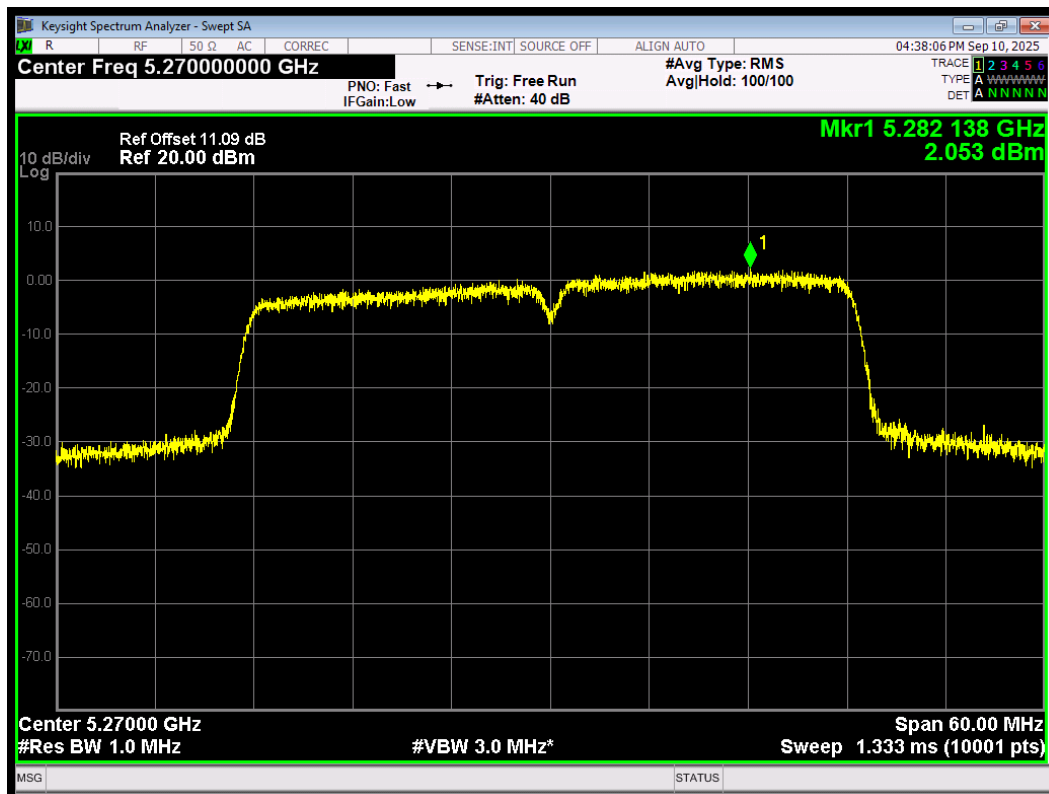
PSD 802.11ac(VHT20) 5320MHz Ant2



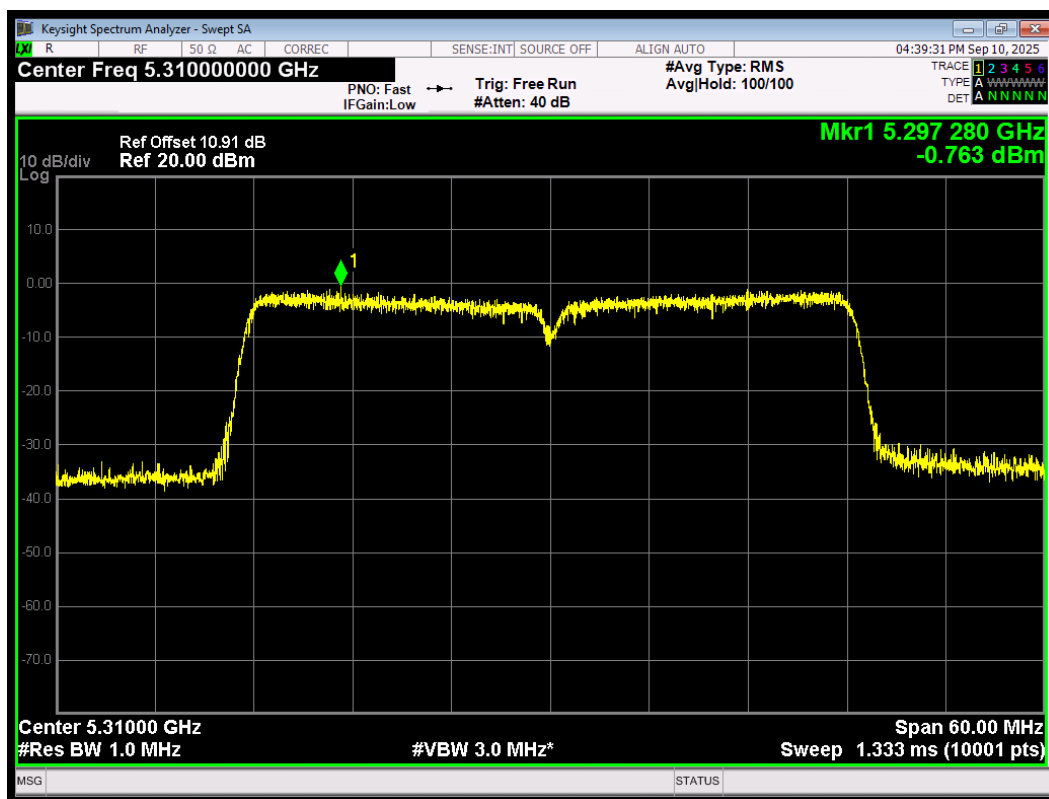
PSD 802.11ac(VHT40) 5270MHz Ant1



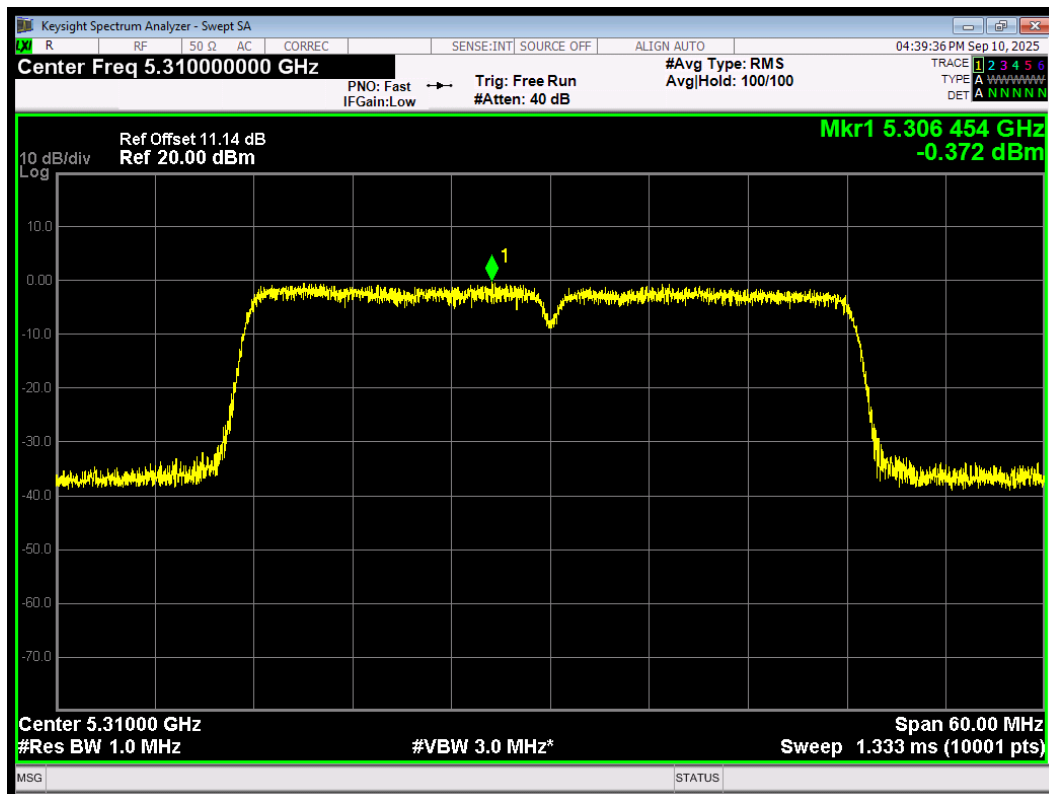
PSD 802.11ac(VHT40) 5270MHz Ant2



PSD 802.11ac(VHT40) 5310MHz Ant1



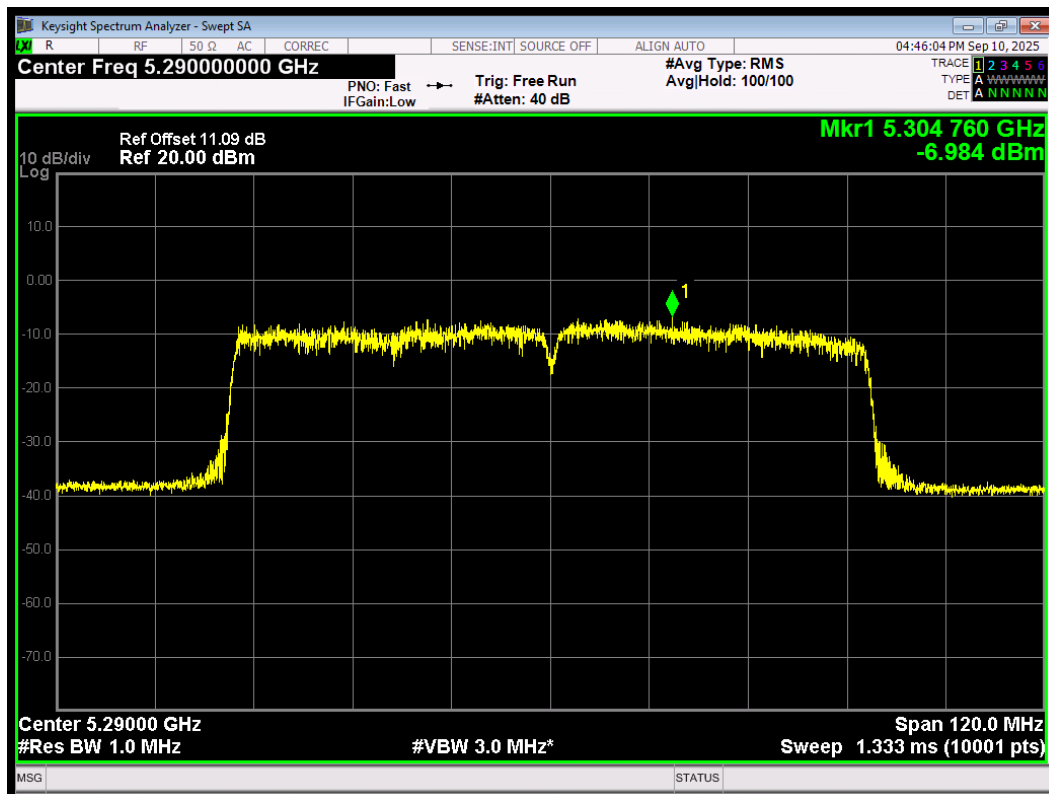
PSD 802.11ac(VHT40) 5310MHz Ant2



PSD 802.11ac(VHT80) 5290MHz Ant1



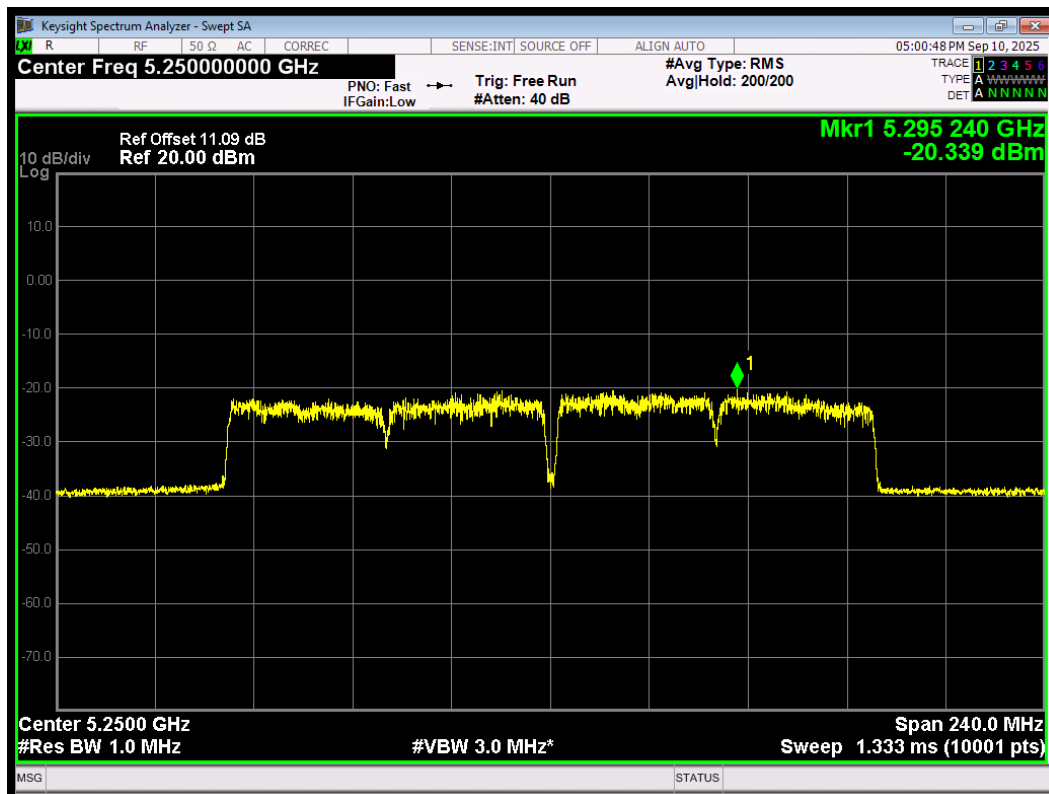
PSD 802.11ac(VHT80) 5290MHz Ant2



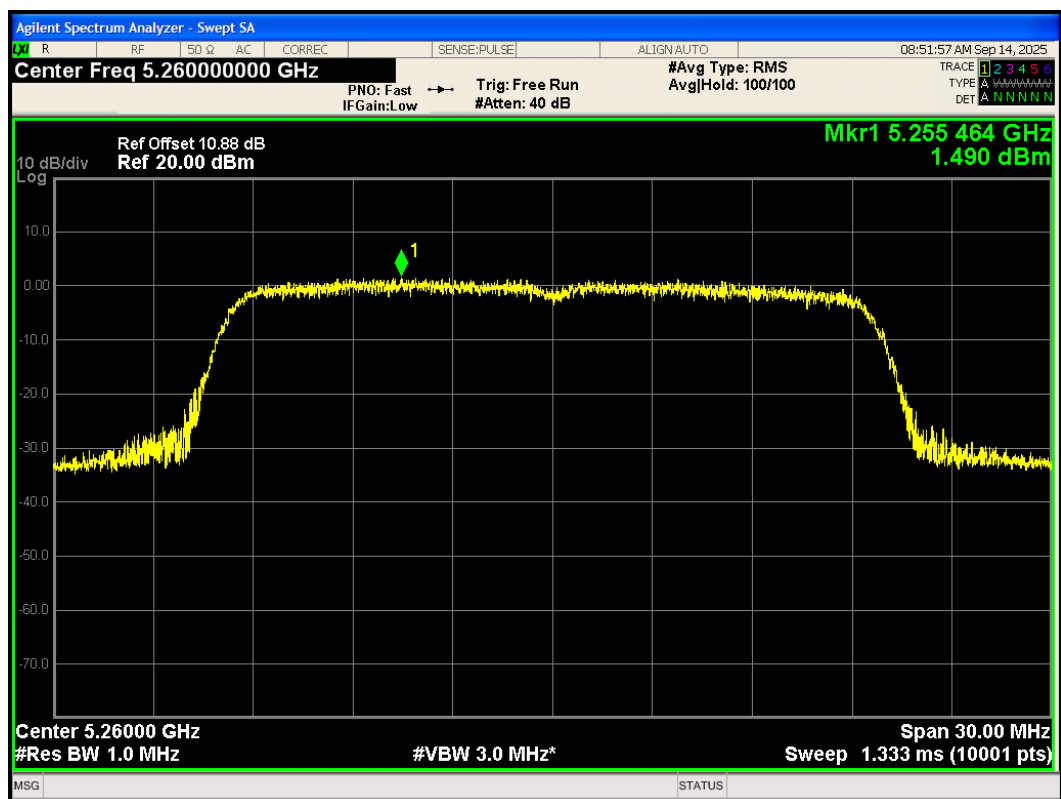
PSD 802.11ax(HE160) 5250MHz Ant1



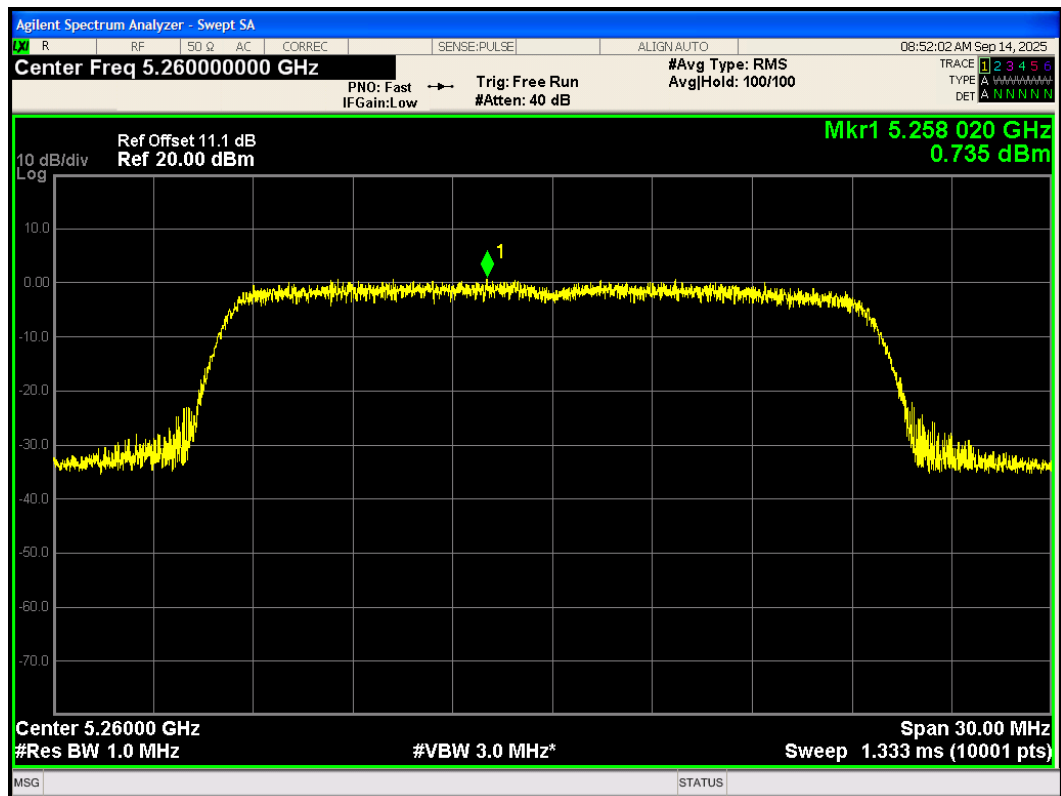
PSD 802.11ax(HE160) 5250MHz Ant2



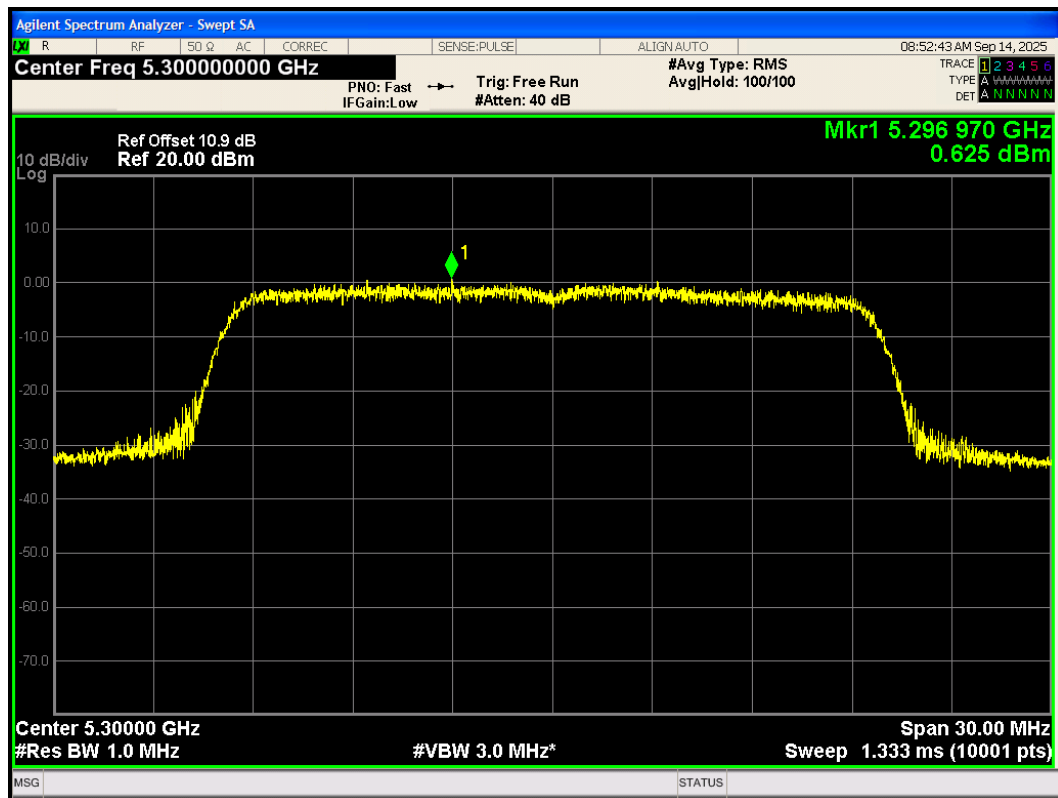
PSD 802.11ax(HE20) 5260MHz Ant1



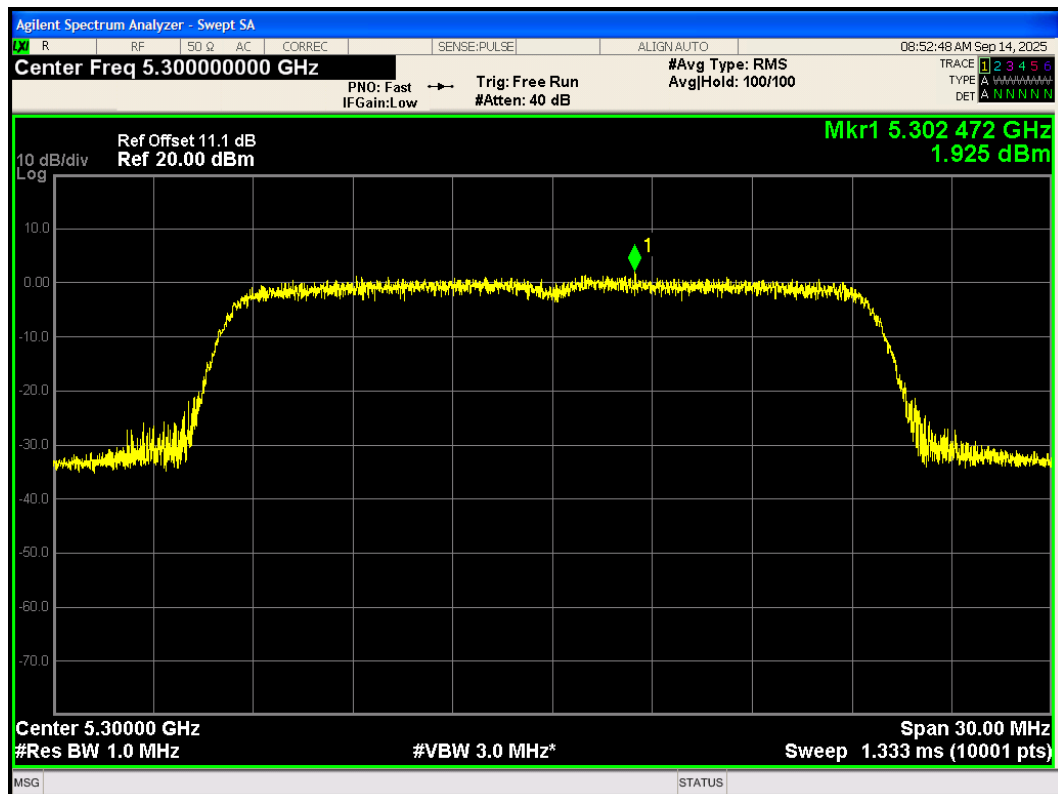
PSD 802.11ax(HE20) 5260MHz Ant2



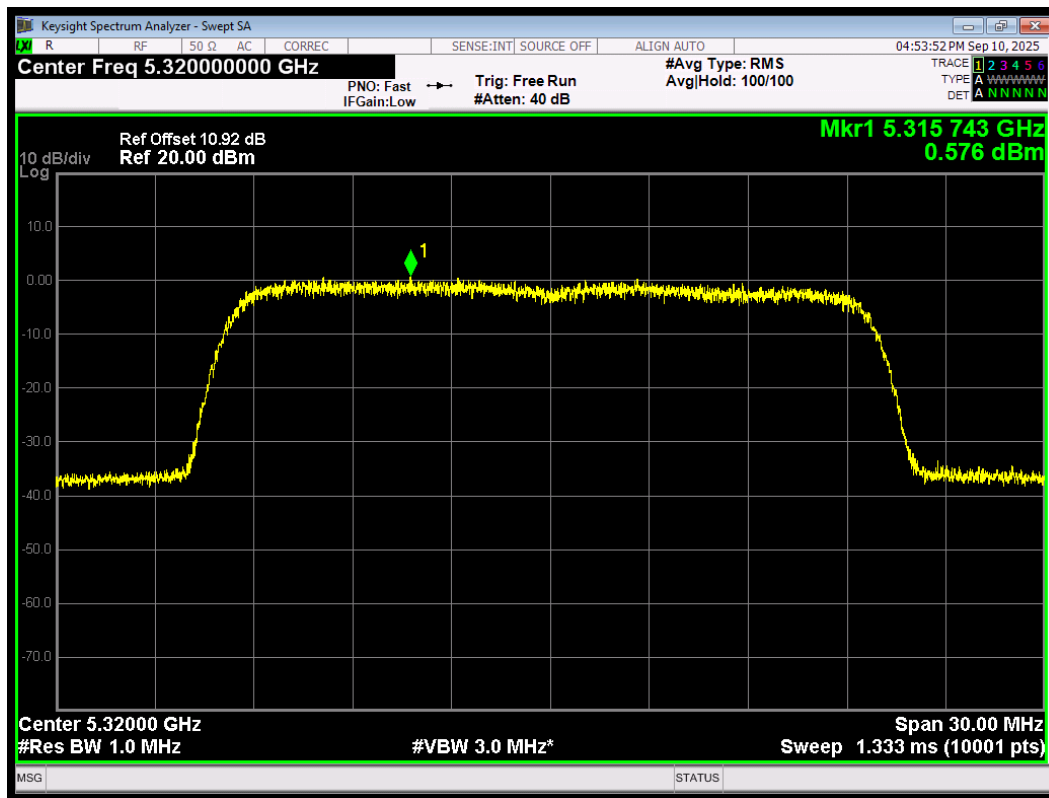
PSD 802.11ax(HE20) 5300MHz Ant1



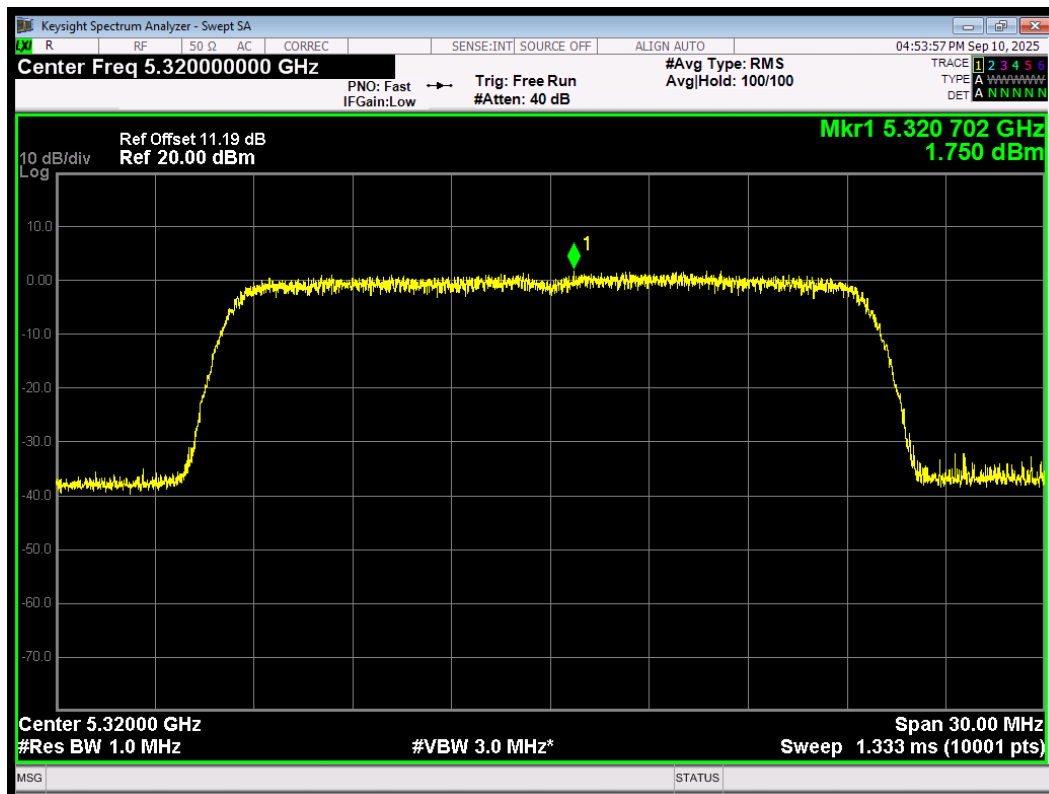
PSD 802.11ax(HE20) 5300MHz Ant2



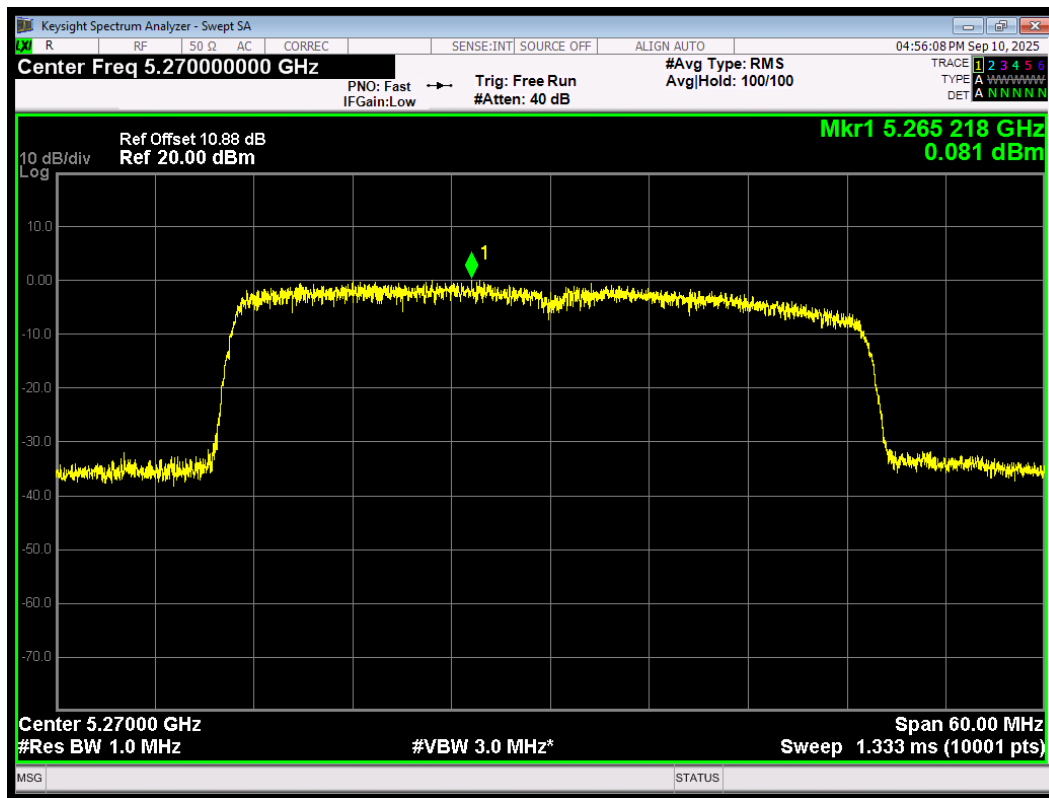
PSD 802.11ax(HE20) 5320MHz Ant1



PSD 802.11ax(HE20) 5320MHz Ant2



PSD 802.11ax(HE40) 5270MHz Ant1



PSD 802.11ax(HE40) 5270MHz Ant2

