

7.3. 6dB Bandwidth Measurement

7.3.1. Test Limit

The minimum 6dB bandwidth shall be at least 500 kHz.

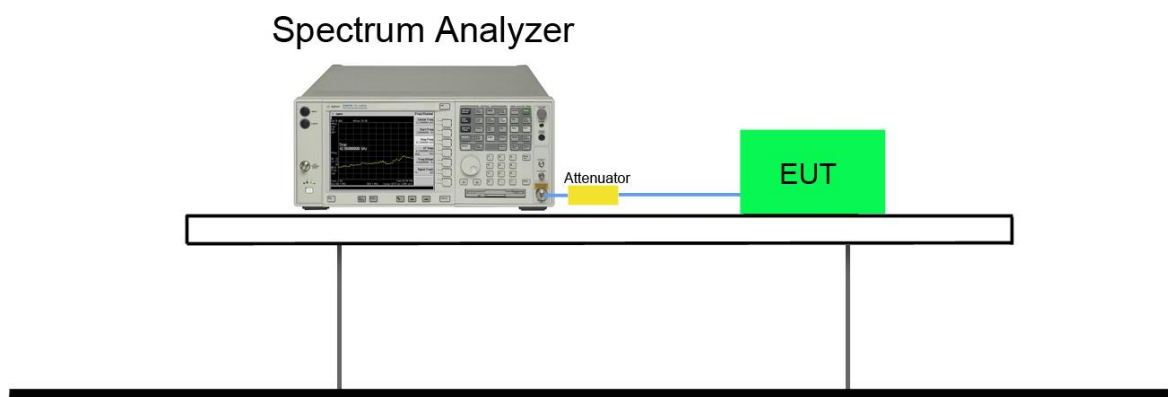
7.3.2. Test Procedure used

KDB 789033 D02v02r01 - Section C.2

7.3.3. Test Setting

1. Set center frequency to the nominal EUT channel center frequency.
2. RBW = 100 kHz.
3. VBW $\geq 3 \times$ RBW.
4. Detector = Peak.
5. Trace mode = max hold.
6. Sweep = auto couple.
7. Allow the trace to stabilize.
8. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

7.3.4. Test Setup



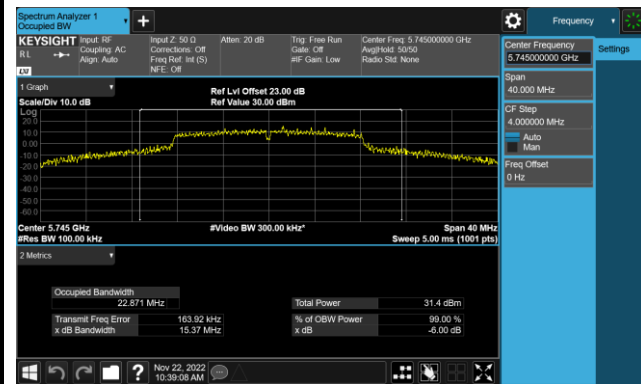
7.3.5. Test Result

Product	Dual Band ONT	Test Engineer	Marvin
Test Site	SR5	Test Date	2022/11/22
Test Item	6dB Bandwidth		

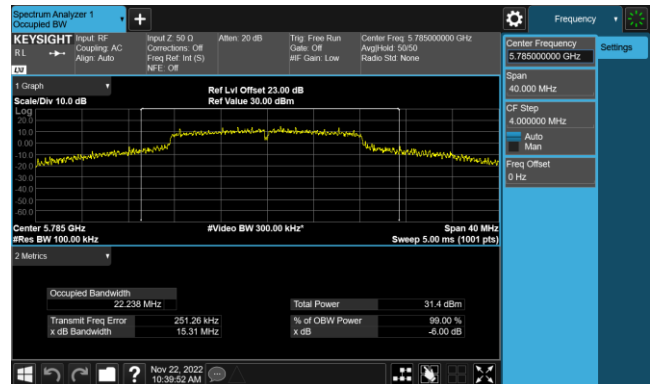
Test Mode	Channel No.	Frequency (MHz)	6dB Bandwidth (MHz)	Limit (MHz)	Result
Ant 1 / Ant 0+1					
802.11a	149	5745	15.37	≥ 0.5	Pass
802.11a	157	5785	15.31	≥ 0.5	Pass
802.11a	165	5825	15.08	≥ 0.5	Pass
802.11n-HT20	149	5745	15.05	≥ 0.5	Pass
802.11n-HT20	157	5785	17.25	≥ 0.5	Pass
802.11n-HT20	165	5825	16.89	≥ 0.5	Pass
802.11n-HT40	151	5755	32.62	≥ 0.5	Pass
802.11n-HT40	159	5795	33.83	≥ 0.5	Pass
802.11ac-VHT20	149	5745	15.68	≥ 0.5	Pass
802.11ac-VHT20	157	5785	16.92	≥ 0.5	Pass
802.11ac-VHT20	165	5825	16.63	≥ 0.5	Pass
802.11ac-VHT40	151	5755	34.99	≥ 0.5	Pass
802.11ac-VHT40	159	5795	34.98	≥ 0.5	Pass
802.11ac-VHT80	155	5775	75.17	≥ 0.5	Pass

802.11a 6dB Bandwidth - Ant 1

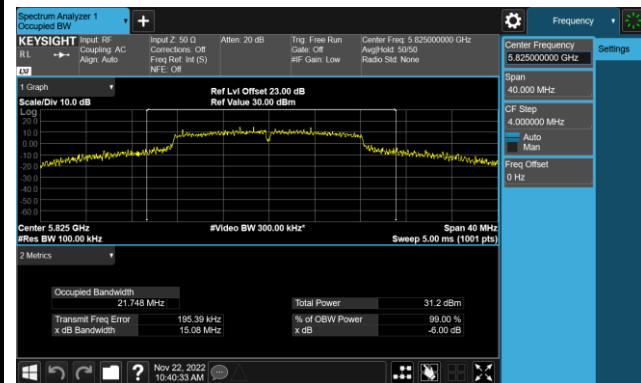
Channel 149 (5745MHz)



Channel 157 (5785MHz)



Channel 165 (5825MHz)

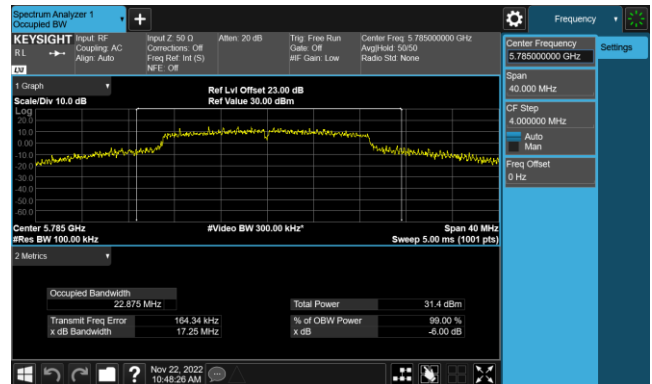


802.11n-HT20 6dB Bandwidth - Ant 1

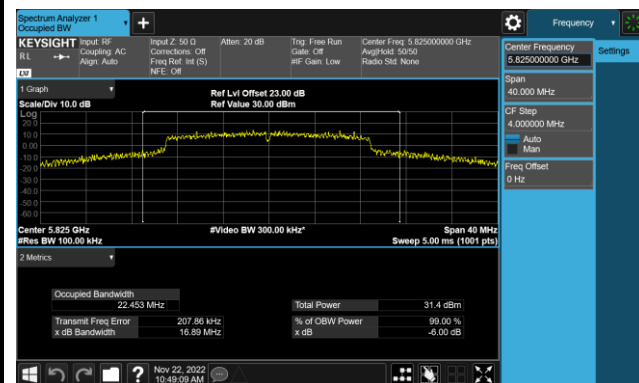
Channel 149 (5745MHz)



Channel 157 (5785MHz)



Channel 165 (5825MHz)

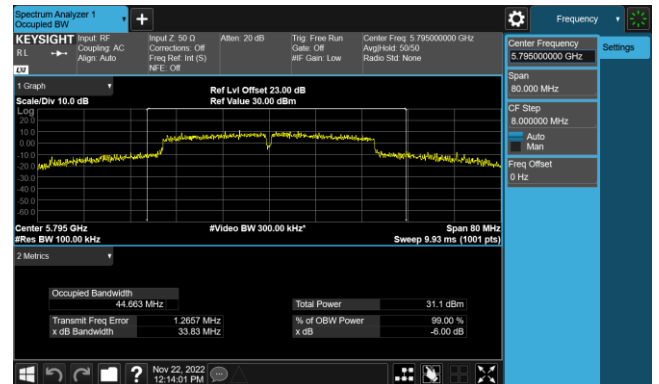


802.11n-HT40 6dB Bandwidth - Ant 1

Channel 151 (5755MHz)



Channel 159 (5795MHz)

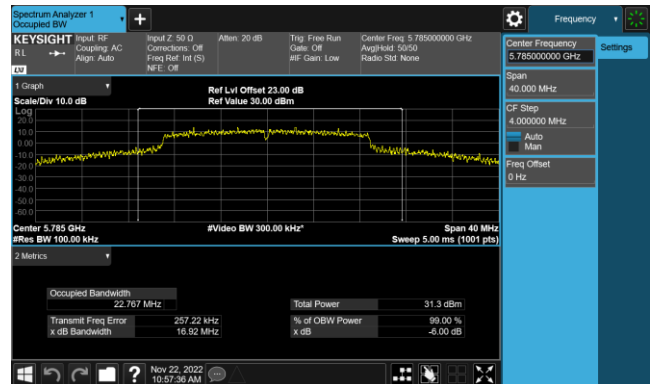


802.11ac-VHT20 6dB Bandwidth - Ant 1

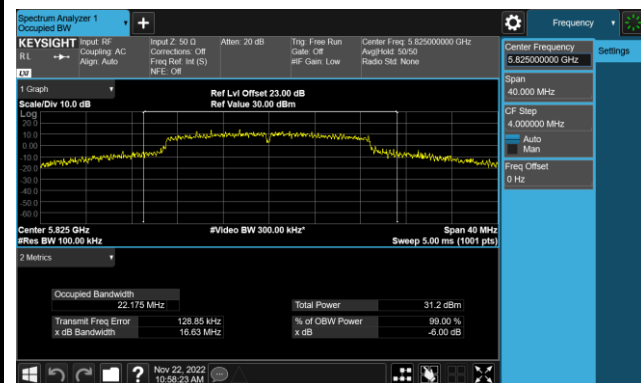
Channel 149 (5745MHz)



Channel 157 (5785MHz)



Channel 165 (5825MHz)

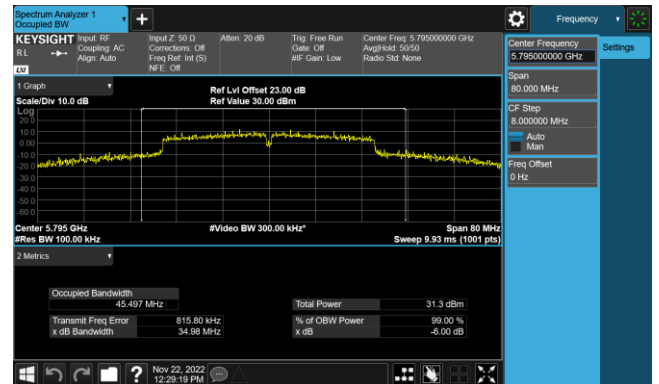


802.11ac-VHT40 6dB Bandwidth - Ant 1

Channel 151 (5755MHz)

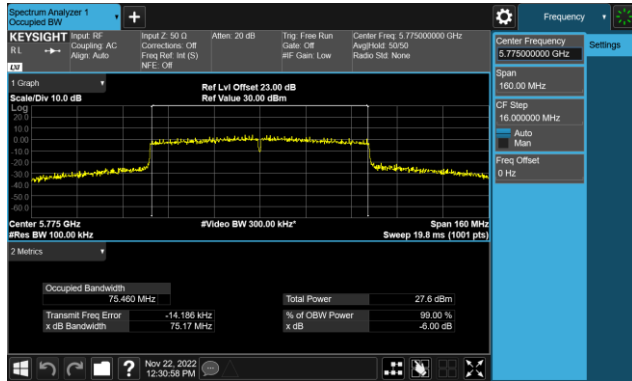


Channel 159 (5795MHz)



802.11ac-VHT80 6dB Bandwidth - Ant 1

Channel 155 (5775MHz)



7.4. Output Power Measurement

7.4.1. Test Limit

For client operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 250mW.

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 (23.98dBm) or 11dBm +10 log (26dB BW).

For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W (30dBm).

If transmitting antennas of directional gain greater than 6dBi are used, the maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

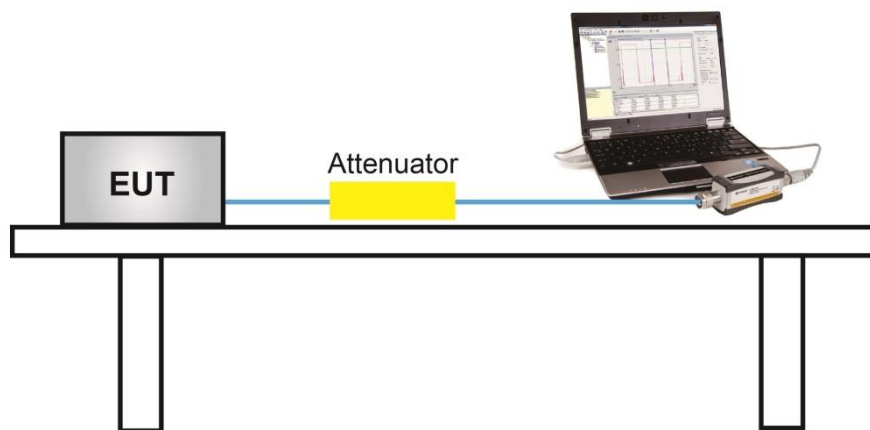
7.4.2. Test Procedure Used

KDB 789033 D02v02r01 - Section E) 3) b) Method PM-G

7.4.3. Test Setting

Average power measurements were performed only when the EUT was transmitting at its maximum power control level using a broadband power meter with a pulse sensor. The power meter implemented triggering and gating capabilities which were set up such that power measurements were recorded only during the ON time of the transmitter. The trace was averaged over 100 traces to obtain the final measured average power.

7.4.4. Test Setup



7.4.5. Test Result

Product	Dual Band ONT	Test Engineer	Marvin
Test Site	SR5	Test Date	2022/11/15
Test Item	CDD Mode		

Model	Rate	Ch.	Freq. (MHz)	Ant 0 Power (dBm)	Ant 1 Power (dBm)	Ant 0+1 Power (dBm)	Power Limit (dBm)
802.11a Band1	6M	36	5180	23.62	24.29	26.98	30.00
	6M	44	5220	24.67	25.17	27.94	30.00
	6M	48	5240	24.53	25.13	27.85	30.00
802.11a Band2	6M	52	5260	17.55	18.42	21.02	23.98
	6M	60	5300	17.59	18.45	21.05	23.98
	6M	64	5320	17.61	18.39	21.03	23.98
802.11a Band3	6M	100	5500	18.86	18.75	21.82	23.98
	6M	116	5580	18.47	18.14	21.32	23.98
	6M	140	5700	19.01	18.14	21.61	23.98
	6M	144	5720	18.85	18.08	21.49	22.66
802.11a Band4	6M	149	5745	26.37	27.34	29.89	30.00
	6M	157	5785	26.26	27.17	29.75	30.00
	6M	165	5825	26.12	26.83	29.50	30.00
n-HT20 Band1	MCS0	36	5180	23.86	24.76	27.34	30.00
	MCS0	44	5220	24.51	25.17	27.86	30.00
	MCS0	48	5240	24.53	25.12	27.85	30.00
n-HT20 Band2	MCS0	52	5260	17.63	18.57	21.14	23.98
	MCS0	60	5300	17.53	18.47	21.04	23.98
	MCS0	64	5320	17.38	18.45	20.96	23.98
n-HT20 Band3	MCS0	100	5500	18.36	18.43	21.41	23.98
	MCS0	116	5580	18.38	18.19	21.30	23.98
	MCS0	140	5700	18.89	17.75	21.37	23.98
	MCS0	144	5720	18.83	17.77	21.34	22.69
n-HT20 Band4	MCS0	149	5745	26.42	27.12	29.79	30.00
	MCS0	157	5785	26.31	27.07	29.72	30.00
	MCS0	165	5825	26.28	26.73	29.52	30.00

n-HT40 Band1	MCS0	38	5190	18.81	19.53	22.20	30.00
	MCS0	46	5230	26.25	26.32	29.30	30.00
n-HT40 Band2	MCS0	54	5270	20.23	20.95	23.62	23.98
	MCS0	62	5310	19.14	19.31	22.24	23.98
n-HT40 Band3	MCS0	102	5510	18.62	18.49	21.57	23.98
	MCS0	110	5550	21.01	20.49	23.77	23.98
	MCS0	134	5670	21.25	20.18	23.76	23.98
	MCS0	142	5710	21.09	20.03	23.60	23.98
n-HT40 Band4	MCS0	151	5755	25.87	26.31	29.11	30.00
	MCS0	159	5795	25.75	26.63	29.22	30.00
ac-VHT20 Band1	MCS0	36	5180	21.94	22.92	25.47	30.00
	MCS0	44	5220	24.79	25.33	28.08	30.00
	MCS0	48	5240	24.61	25.27	27.96	30.00
ac-VHT20 Band2	MCS0	52	5260	17.70	18.39	21.07	23.98
	MCS0	60	5300	17.67	18.32	21.02	23.98
	MCS0	64	5320	18.26	18.66	21.47	23.98
ac-VHT20 Band3	MCS0	100	5500	19.05	18.56	21.82	23.98
	MCS0	116	5580	19.03	18.38	21.73	23.98
	MCS0	140	5700	19.02	17.89	21.50	23.98
	MCS0	144	5720	18.97	17.85	21.46	22.74
ac-VHT20 Band4	MCS0	149	5745	26.45	27.22	29.86	30.00
	MCS0	157	5785	26.29	27.10	29.72	30.00
	MCS0	165	5825	26.30	26.73	29.53	30.00
ac-VHT40 Band1	MCS0	38	5190	18.93	20.38	22.73	30.00
	MCS0	46	5230	26.19	26.41	29.31	30.00
ac-VHT40 Band2	MCS0	54	5270	20.55	21.13	23.86	23.98
	MCS0	62	5310	19.18	19.87	22.55	23.98
ac-VHT40 Band3	MCS0	102	5510	17.64	17.78	20.72	23.98
	MCS0	110	5550	21.04	20.54	23.81	23.98
	MCS0	134	5670	21.18	19.74	23.53	23.98
	MCS0	142	5710	21.44	20.09	23.83	23.98
ac-VHT40 Band4	MCS0	151	5755	26.07	26.68	29.40	30.00
	MCS0	159	5795	25.79	26.65	29.25	30.00

Model	Rate	Ch.	Freq. (MHz)	Ant 0 Power (dBm)	Ant 1 Power (dBm)	Ant 0+1 Power (dBm)	Power Limit (dBm)
ac-VHT80 Band1	MCS0	42	5210	17.75	18.56	21.18	30.00
ac-VHT80 Band2	MCS0	58	5290	16.07	16.92	19.53	23.98
ac-VHT80 Band3	MCS0	106	5530	16.93	17.31	20.13	23.98
	MCS0	122	5610	20.98	20.46	23.74	23.98
	MCS0	138	5690	21.26	20.06	23.71	23.98
ac-VHT80 Band4	MCS0	155	5775	24.86	24.64	27.76	30.00

Note 1:

The Total Average Power (dBm) = $10 \cdot \log \{10^{(\text{Ant 0 Average Power} / 10)} + 10^{(\text{Ant 1 Average Power} / 10)}\}$.

Note 2:

For 5250- 5350MHz and 5470 - 5725MHz Band: Average Power Limit (dBm) = 23.98 dBm.

For 5150 - 5250MHz and 5725 - 5850MHz Bands: Average Power Limit (dBm) = 30 dBm.

For 802.11a_ch144 (5720MHz), Average Power Limit (dBm) = $11 + 10 \cdot \log(5\text{MHz} + \text{BW}_{26\text{dBc}}/2)$ = 22.66 dBm.

For 802.11n_ch144 (5720MHz), Average Power Limit (dBm) = $11 + 10 \cdot \log(5\text{MHz} + \text{BW}_{26\text{dBc}}/2)$ = 22.69 dBm.

For 802.11ac_ch144 (5720MHz), Average Power Limit (dBm) = $11 + 10 \cdot \log(5\text{MHz} + \text{BW}_{26\text{dBc}}/2)$ = 22.74 dBm.

Product	Dual Band ONT	Test Engineer	Marvin
Test Site	SR5	Test Date	2022/11/15
Test Mode	Beamforming Mode		

Model	Rate	Ch.	Freq. (MHz)	Ant 0 Power (dBm)	Ant 1 Power (dBm)	Ant 0+1 Power (dBm)	Power Limit (dBm)
ac-VHT20 Band1	MCS0	36	5180	21.94	22.92	25.47	29.79
	MCS0	44	5220	24.79	25.33	28.08	29.79
	MCS0	48	5240	24.61	25.27	27.96	29.79
ac-VHT20 Band2	MCS0	52	5260	17.70	18.39	21.07	23.77
	MCS0	60	5300	17.67	18.32	21.02	23.77
	MCS0	64	5320	18.26	18.66	21.47	23.77
ac-VHT20 Band3	MCS0	100	5500	19.05	18.56	21.82	23.67
	MCS0	116	5580	19.03	18.38	21.73	23.67
	MCS0	140	5700	19.02	17.89	21.50	23.67
	MCS0	144	5720	18.97	17.85	21.46	22.43
ac-VHT20 Band4	MCS0	149	5745	26.40	26.75	29.59	29.79
	MCS0	157	5785	26.29	27.10	29.72	29.79
	MCS0	165	5825	26.30	26.73	29.53	29.79
ac-VHT40 Band1	MCS0	38	5190	18.93	20.38	22.73	29.79
	MCS0	46	5230	26.19	26.41	29.31	29.79
ac-VHT40 Band2	MCS0	54	5270	19.98	20.34	23.17	23.77
	MCS0	62	5310	19.18	19.87	22.55	23.77
ac-VHT40 Band3	MCS0	102	5510	17.64	17.78	20.72	23.67
	MCS0	110	5550	20.38	19.99	23.20	23.67
	MCS0	134	5670	21.18	19.74	23.53	23.67
	MCS0	142	5710	20.34	19.65	23.02	23.67
ac-VHT40 Band4	MCS0	151	5755	26.07	26.68	29.40	29.79
	MCS0	159	5795	25.79	26.65	29.25	29.79
ac-VHT80 Band1	MCS0	42	5210	17.75	18.56	21.18	29.79
ac-VHT80 Band2	MCS0	58	5290	16.07	16.92	19.53	23.77
ac-VHT80 Band3	MCS0	106	5530	16.93	17.31	20.13	23.67
	MCS0	122	5610	20.98	20.46	23.74	23.67
	MCS0	138	5690	21.26	20.06	23.71	23.67

ac-VHT80 Band4	MCS0	155	5775	24.86	24.64	27.76	29.79
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Note 1:

The Total Average Power (dBm) = $10 \cdot \log \{10^{(\text{Ant 0 Average Power} / 10)} + 10^{(\text{Ant 1 Average Power} / 10)}\}$.

Note 2:

For 5125 - 5250MHz Band: Average Power Limit (dBm) = 30 - (6.21- 6) = 29.79dBm

For 5250 - 5350MHz Band: Average Power Limit (dBm) = 23.98 - (6.21- 6) = 23.77dBm.

For 5470 - 5725MHz Band: Average Power Limit (dBm) = 23.98 - (6.31- 6) = 23.67dBm.

For 5725 - 5850MHz Band: Average Power Limit (dBm) = 30- (6.21- 6) = 29.79dBm.

For 802.11ac_ch144, Average Power Limit (dBm) = $11 + 10 \cdot \log(5\text{MHz} + \text{BW}_{26\text{dBc}}/2) - (6.31- 6) = 22.43 \text{ dBm}$

7.5. Transmit Power Control

7.5.1. Test Limit

The U-NII device is required to have the capability to operate at least 6 dB below the mean EIRP value of 30 dBm.

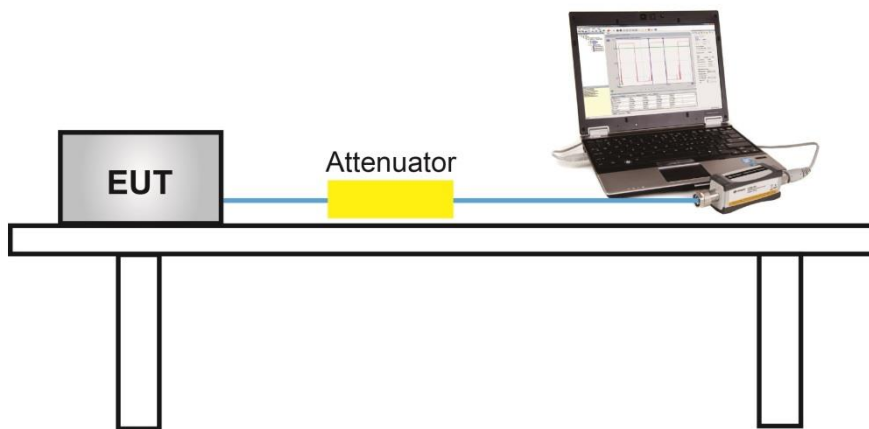
7.5.2. Test Procedure Used

KDB 789033 D02v02r01 - Section E) 3) b) Method PM-G

7.5.3. Test Setting

Average power measurements were performed only when the EUT was transmitting at its maximum power control level using a broadband power meter with a pulse sensor. The power meter implemented triggering and gating capabilities which were set up such that power measurements were recorded only during the ON time of the transmitter. The trace was averaged over 100 traces to obtain the final measured average power.

7.5.4. Test Setup



7.5.5. Test Result

Device supports TPC mechanism, details refer to the operational description.

7.6. Power Spectral Density Measurement

7.6.1. Test Limit

For the band 5.15-5.25 GHz, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band.

For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band.

For the band 5.725-5.85 GHz, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band.

If transmitting antennas of directional gain greater than 6dBi are used, the peak power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

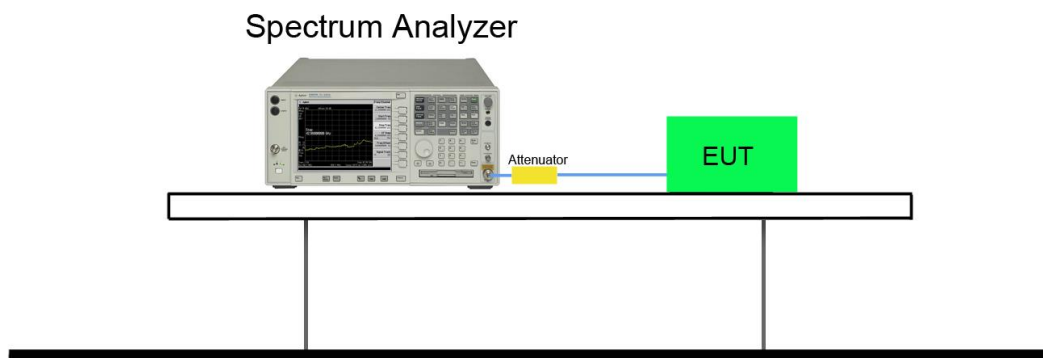
7.6.2. Test Procedure Used

KDB 789033 D02v02r01 - Section F

7.6.3. Test Setting

1. Analyzer was set to the center frequency of the UNII channel under investigation
2. Span was set to encompass the entire 26dB EBW of the signal.
3. RBW = 1MHz, if measurement bandwidth of Maximum PSD is specified in 500 kHz,
4. RBW = 510 kHz
5. VBW = 3MHz
6. Number of sweep points $\geq 2 \times (\text{span} / \text{RBW})$
7. Detector = power averaging (Average)
8. Sweep time = auto
9. Trigger = free run
10. Use the peak search function on the instrument to find the peak of the spectrum and record its value.
11. Add $10 \cdot \log(1/x)$, where x is the duty cycle, to the measured power in order to compute the average power during the actual transmission times (because the measurement represents an average over both the on and off times of the transmission). For example, add $10 \cdot \log(1/0.25) = 6$ dB if the duty cycle is 25 percent.
12. When the measurement bandwidth of Maximum PSD is specified in 500 kHz, add a constant factor $10 \cdot \log(500\text{kHz}/100\text{kHz}) = 7$ dB to the measured result.

7.6.4. Test Setup



7.6.5. Test Result

Product	Dual Band ONT	Test Engineer	Marvin
Test Site	SR5	Test Date	2022/11/11~2022/11/23
Test Item	Power Spectral Density (U-NII- 1/-2a / -2c) CDD Mode		

U-NII-1 & U-NII-2A & U-NII-2C

Test Mode	Data Rate (Mbps)	Channel No.	Freq. (MHz)	PSD (dBm/MHz) Ant0	PSD (dBm/MHz) Ant1	Duty Cycle (%)	Total PSD (dBm/MHz)	PSD Limit (dBm/MHz)	Result
11a	6	36	5180	12.906	14.139	96.22%	16.744	≤ 16.79	Pass
11a	6	44	5220	13.157	13.817	96.22%	16.677	≤ 16.79	Pass
11a	6	48	5240	13.263	13.746	96.22%	16.689	≤ 16.79	Pass
11a	6	52	5260	6.701	7.750	96.22%	10.435	≤ 10.79	Pass
11a	6	60	5300	6.572	7.816	96.22%	10.416	≤ 10.79	Pass
11a	6	64	5320	6.939	7.986	96.22%	10.672	≤ 10.79	Pass
11a	6	100	5500	7.282	7.456	96.22%	10.548	≤ 10.69	Pass
11a	6	116	5580	6.784	7.261	96.22%	10.207	≤ 10.69	Pass
11a	6	140	5700	7.391	6.631	96.22%	10.205	≤ 10.69	Pass
11a	6	144	5720	7.545	6.588	96.22%	10.270	≤ 10.69	Pass
11n-HT20	6.5	36	5180	12.579	13.196	95.77%	16.096	≤ 16.79	Pass
11n-HT20	6.5	44	5220	13.247	13.389	95.77%	16.517	≤ 16.79	Pass
11n-HT20	6.5	48	5240	13.366	13.588	95.77%	16.676	≤ 16.79	Pass
11n-HT20	6.5	52	5260	6.654	7.544	95.77%	10.320	≤ 10.79	Pass
11n-HT20	6.5	60	5300	6.636	7.551	95.77%	10.316	≤ 10.79	Pass
11n-HT20	6.5	64	5320	6.843	7.479	95.77%	10.371	≤ 10.79	Pass
11n-HT20	6.5	100	5500	7.042	7.345	95.77%	10.394	≤ 10.69	Pass
11n-HT20	6.5	116	5580	7.251	6.648	95.77%	10.158	≤ 10.69	Pass
11n-HT20	6.5	140	5700	7.553	6.333	95.77%	10.184	≤ 10.69	Pass
11n-HT20	6.5	144	5720	7.885	5.860	95.77%	10.187	≤ 10.69	Pass

Note: Total PSD (dBm/MHz) = $10 \cdot \log\{10^{\text{Ant 0 PSD} / 10} + 10^{\text{Ant 1 PSD} / 10}\}$ (dBm/MHz) + $10 \cdot \log(1/\text{duty cycle})$.

Test Mode	Data Rate (Mbps)	Channel No.	Freq. (MHz)	PSD (dBm/MHz) Ant0	PSD (dBm/MHz) Ant1	Duty Cycle (%)	Total PSD (dBm/MHz)	PSD Limit (dBm/MHz)	Result
11n-HT40	13.5	38	5190	4.448	5.384	91.65%	8.330	≤ 16.79	Pass
11n-HT40	13.5	46	5230	11.983	12.144	91.65%	15.453	≤ 16.79	Pass
11n-HT40	13.5	54	5270	6.359	7.600	91.65%	10.413	≤ 10.79	Pass
11n-HT40	13.5	62	5310	4.359	4.334	91.65%	7.735	≤ 10.79	Pass
11n-HT40	13.5	102	5510	3.429	3.280	91.65%	6.744	≤ 10.69	Pass
11n-HT40	13.5	110	5550	7.253	7.048	91.65%	10.541	≤ 10.69	Pass
11n-HT40	13.5	134	5670	7.660	6.342	91.65%	10.440	≤ 10.69	Pass
11n-HT40	13.5	142	5710	7.844	6.208	91.65%	10.492	≤ 10.69	Pass
11ac-VHT20	6.5	36	5180	10.449	11.598	95.92%	14.253	≤ 16.79	Pass
11ac-VHT20	6.5	44	5220	13.240	13.804	95.92%	16.722	≤ 16.79	Pass
11ac-VHT20	6.5	48	5240	13.148	13.751	95.92%	16.651	≤ 16.79	Pass
11ac-VHT20	6.5	52	5260	6.778	7.625	95.92%	10.413	≤ 10.79	Pass
11ac-VHT20	6.5	60	5300	6.675	7.444	95.92%	10.268	≤ 10.79	Pass
11ac-VHT20	6.5	64	5320	7.219	7.649	95.92%	10.631	≤ 10.79	Pass
11ac-VHT20	6.5	100	5500	7.280	7.056	95.92%	10.361	≤ 10.69	Pass
11ac-VHT20	6.5	116	5580	7.251	7.412	95.92%	10.523	≤ 10.69	Pass
11ac-VHT20	6.5	140	5700	7.718	6.242	95.92%	10.234	≤ 10.69	Pass
11ac-VHT20	6.5	144	5720	7.823	6.203	95.92%	10.279	≤ 10.69	Pass
11ac-VHT40	13.5	38	5190	4.432	5.983	91.89%	8.654	≤ 16.79	Pass
11ac-VHT40	13.5	46	5230	11.726	12.179	91.89%	15.336	≤ 16.79	Pass
11ac-VHT40	13.5	54	5270	6.764	7.450	91.89%	10.498	≤ 10.79	Pass
11ac-VHT40	13.5	62	5310	5.033	5.740	91.89%	8.778	≤ 10.79	Pass
11ac-VHT40	13.5	102	5510	2.798	2.655	91.89%	6.105	≤ 10.69	Pass
11ac-VHT40	13.5	110	5550	7.223	6.764	91.89%	10.377	≤ 10.69	Pass
11ac-VHT40	13.5	134	5670	7.416	6.028	91.89%	10.155	≤ 10.69	Pass
11ac-VHT40	13.5	142	5710	7.358	6.279	91.89%	10.230	≤ 10.69	Pass

Test Mode	Data Rate (Mbps)	Channel No.	Freq. (MHz)	PSD (dBm/MHz) Ant0	PSD (dBm/MHz) Ant1	Duty Cycle (%)	Total PSD (dBm/MHz)	PSD Limit (dBm/MHz)	Result
11ac-VHT80	29.3	42	5210	0.132	1.213	84.64%	4.441	≤ 16.79	Pass
11ac-VHT80	29.3	58	5290	-1.174	-0.256	84.64%	3.044	≤ 10.79	Pass
11ac-VHT80	29.3	106	5530	-0.031	-0.079	84.64%	3.680	≤ 10.69	Pass
11ac-VHT80	29.3	122	5610	4.427	3.582	84.64%	7.760	≤ 10.69	Pass
11ac-VHT80	29.3	138	5690	4.190	3.561	84.64%	7.621	≤ 10.69	Pass

Note 1: When EUT duty cycle ≥ 98%,

the total PSD (dBm/MHz) = $10 \cdot \log \{10^{(\text{Ant 0 PSD}/10)} + 10^{(\text{Ant 1 PSD}/10)}\}$ (dBm/MHz).

When EUT duty cycle < 98%,

the total PSD (dBm/MHz) = $10 \cdot \log \{10^{(\text{Ant 0 PSD}/10)} + 10^{(\text{Ant 1 PSD}/10)}\} + 10 \cdot \log (1/\text{Duty Cycle})$ (dBm/MHz).

Note 2:

For 5150 - 5250MHz Band: PSD Limit (dBm/MHz) = 17 - (6.21 - 6) = 16.79dBm/MHz.

For 5250 - 5350MHz Band: PSD Limit (dBm/MHz) = 11 - (6.21 - 6) = 10.79dBm/MHz.

For 5470 - 5725MHz Band: PSD Limit (dBm/MHz) = 11 - (6.31 - 6) = 10.69dBm/MHz.

Note 3: The power setting of Beamforming mode is not greater than CDD mode, so only CDD mode result was shown in this section.

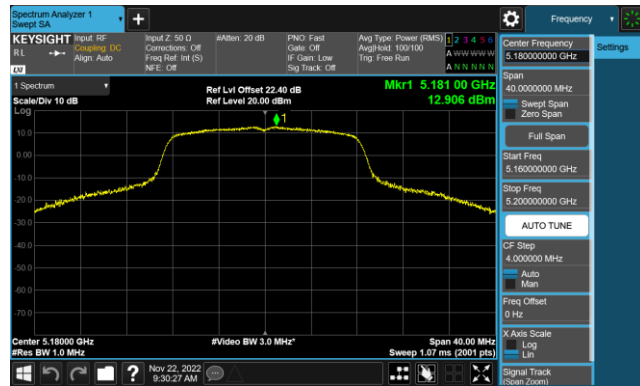
Product	Dual Band ONT	Test Engineer	Marvin
Test Site	SR5	Test Date	2022/11/11~2022/11/23
Test Item	Power Spectral Density (U-NII-3) CDD Mode		

Test Mode	Data Rate (Mbps)	Channel No.	Freq. (MHz)	PSD (dBm/500kHz) Ant0	PSD (dBm/500kHz) Ant1	Duty Cycle (%)	Total PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Result
11a	6	149	5745	12.262	12.782	96.22%	15.707	≤ 29.79	Pass
11a	6	157	5785	12.042	12.937	96.22%	15.690	≤ 29.79	Pass
11a	6	165	5825	12.101	12.866	96.22%	15.678	≤ 29.79	Pass
11n-HT20	6.5	149	5745	12.144	12.663	95.77%	15.609	≤ 29.79	Pass
11n-HT20	6.5	157	5785	11.657	12.677	95.77%	15.395	≤ 29.79	Pass
11n-HT20	6.5	165	5825	11.768	12.365	95.77%	15.275	≤ 29.79	Pass
11n-HT40	13.5	151	5755	8.694	9.403	91.65%	12.452	≤ 29.79	Pass
11n-HT40	13.5	159	5795	8.790	9.348	91.65%	12.467	≤ 29.79	Pass
11ac-VHT20	6.5	149	5745	12.441	12.744	95.92%	15.786	≤ 29.79	Pass
11ac-VHT20	6.5	157	5785	11.507	12.626	95.92%	15.294	≤ 29.79	Pass
11ac-VHT20	6.5	165	5825	11.915	12.662	95.92%	15.496	≤ 29.79	Pass
11ac-VHT40	13.5	151	5755	8.345	9.354	91.89%	12.256	≤ 29.79	Pass
11ac-VHT40	13.5	159	5795	8.667	9.159	91.89%	12.298	≤ 29.79	Pass
11ac-VHT80	29.3	155	5775	3.693	3.690	84.64%	7.426	≤ 29.79	Pass

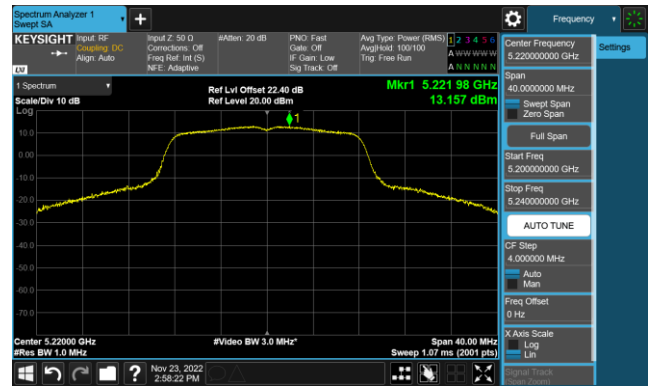
Note: Total PSD (dBm/500kHz) = $10 \cdot \log\{10^{\text{Ant 0 PSD}/10} + 10^{\text{Ant 1 PSD}/10}\}$ (dBm/500kHz) + $10 \cdot \log(1/\text{duty cycle})$.

802.11a Power Spectral Density - Ant 0

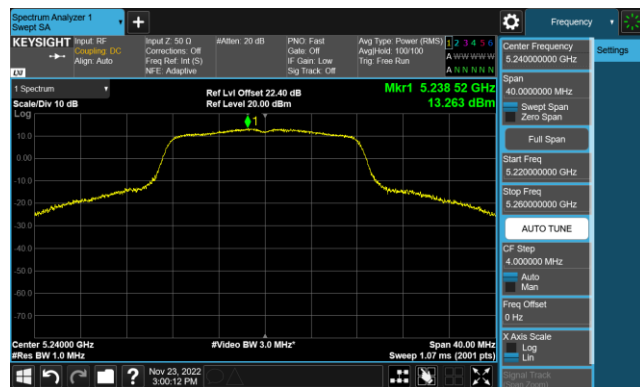
Channel 36 (5180MHz)



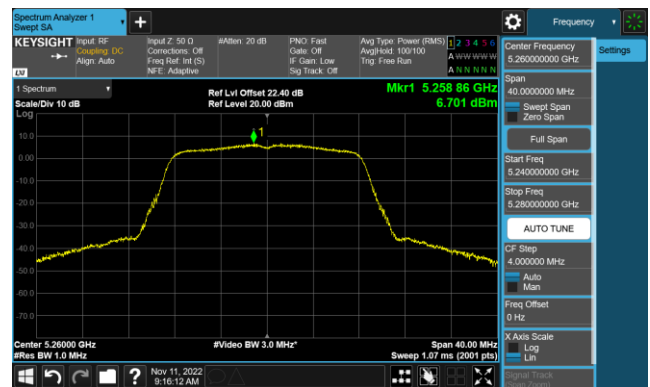
Channel 44 (5220MHz)



Channel 48 (5240MHz)



Channel 52 (5260MHz)



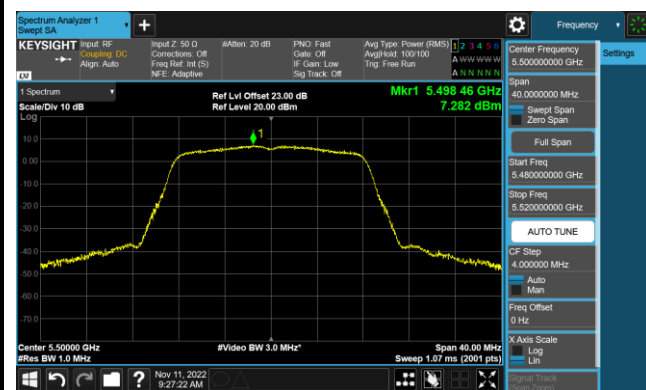
Channel 60 (5300MHz)



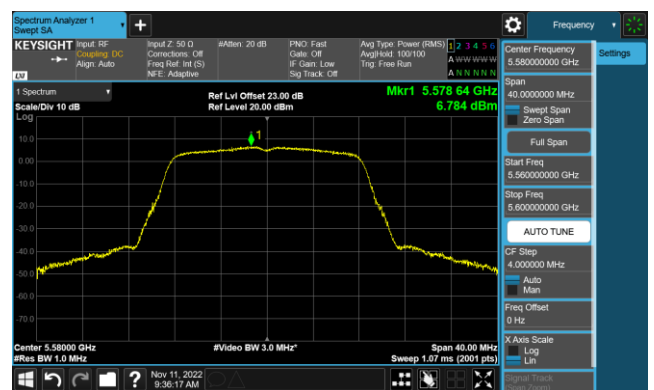
Channel 64 (5320MHz)



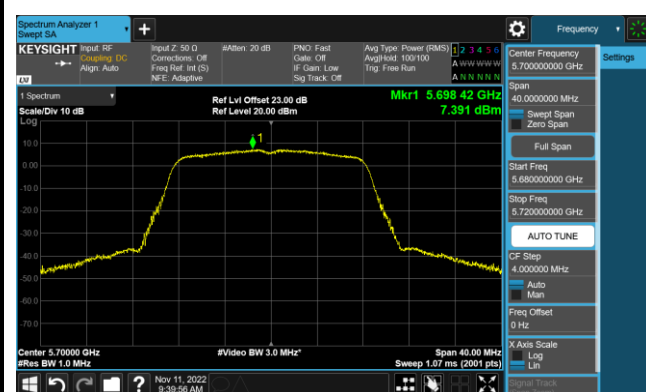
Channel 100 (5500MHz)



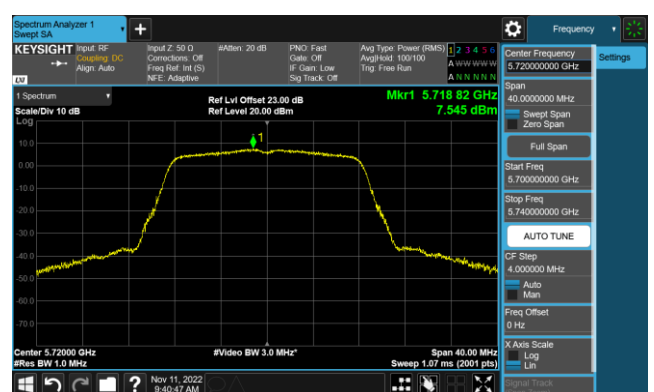
Channel 116 (5580MHz)



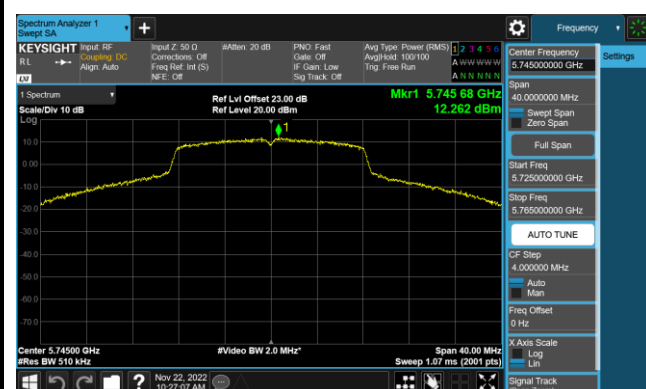
Channel 140 (5700MHz)



Channel 144 (5720MHz)



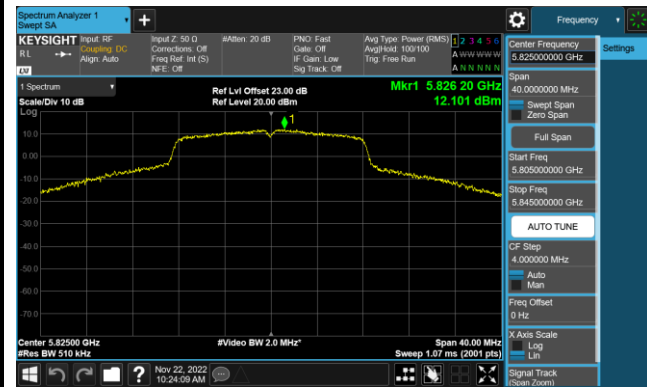
Channel 149 (5745MHz)



Channel 157 (5785MHz)

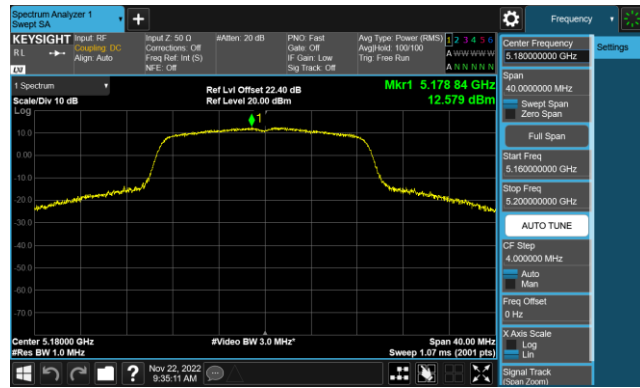


Channel 165 (5825MHz)

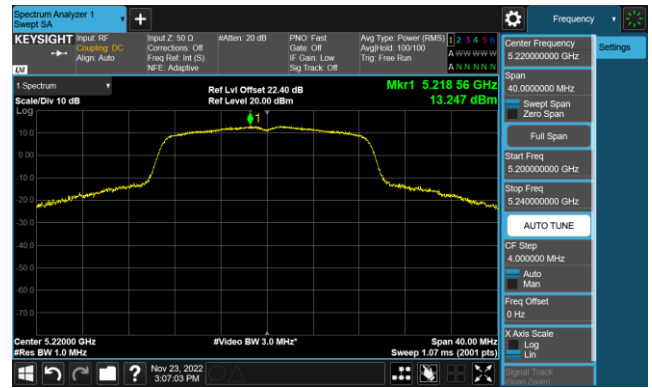


802.11n-HT20 Power Spectral Density - Ant 0

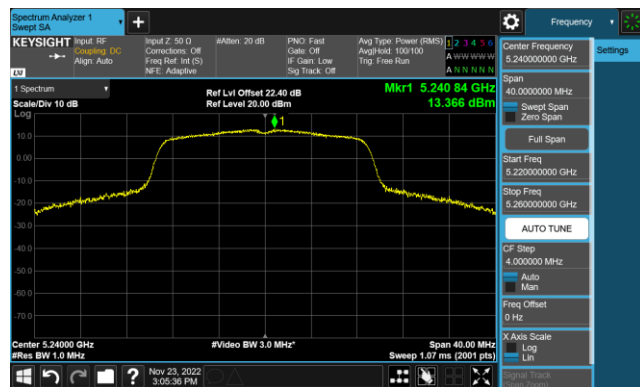
Channel 36 (5180MHz)



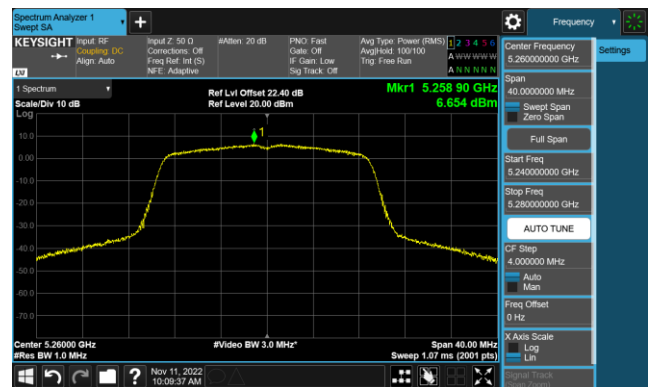
Channel 44 (5220MHz)



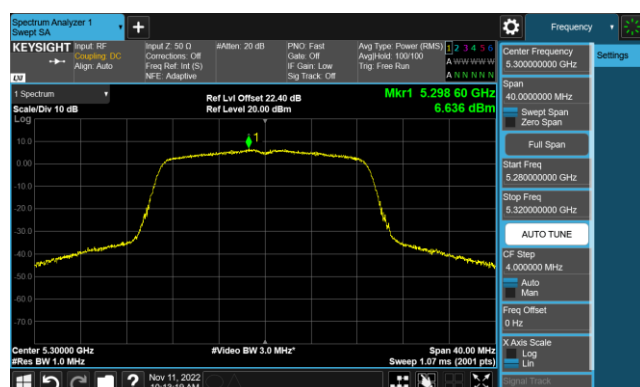
Channel 48 (5240MHz)



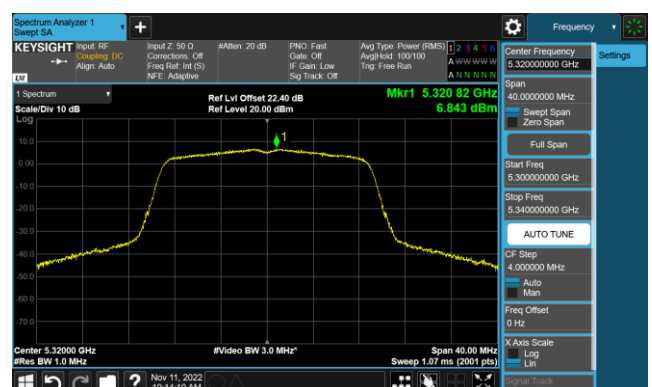
Channel 52 (5260MHz)



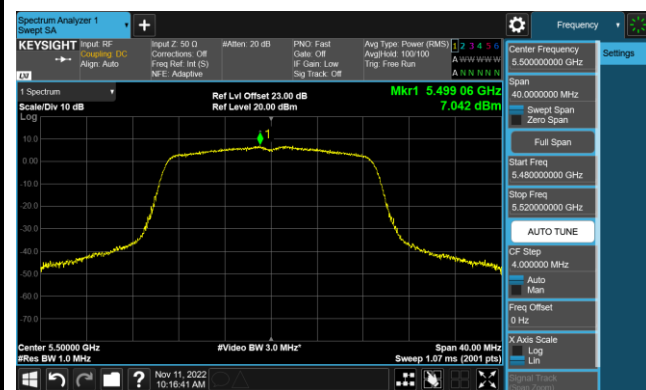
Channel 60 (5300MHz)



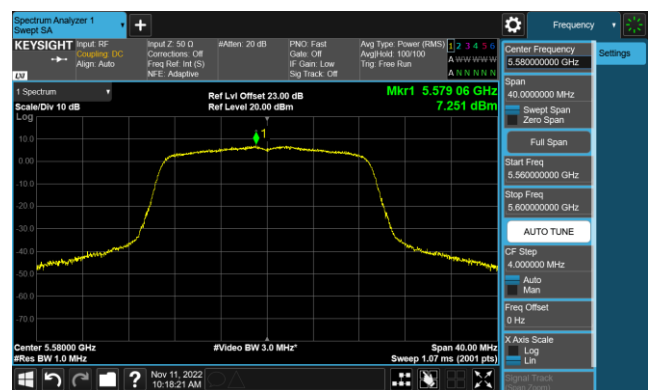
Channel 64 (5320MHz)



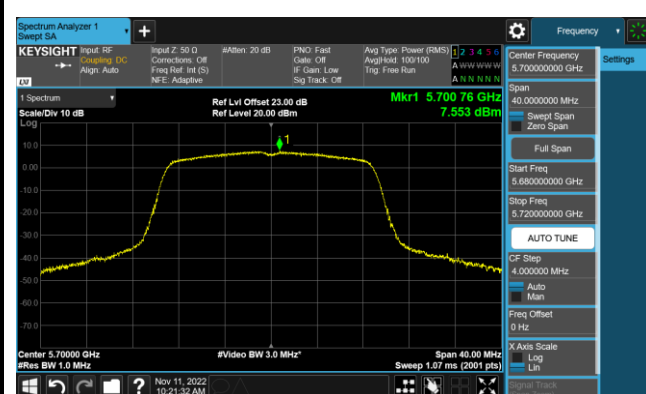
Channel 100 (5500MHz)



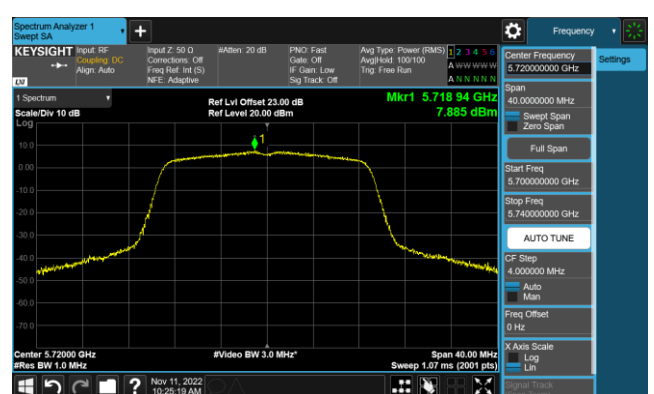
Channel 116 (5580MHz)



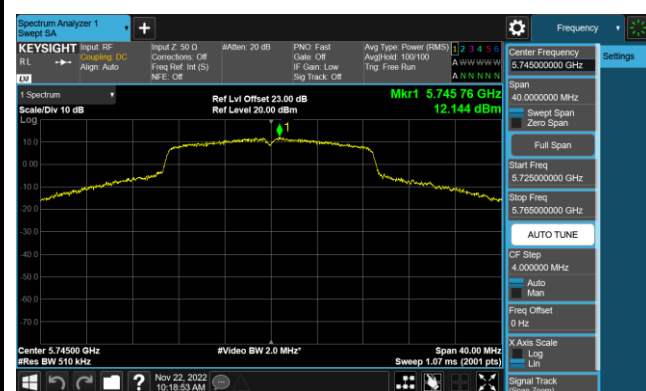
Channel 140 (5700MHz)



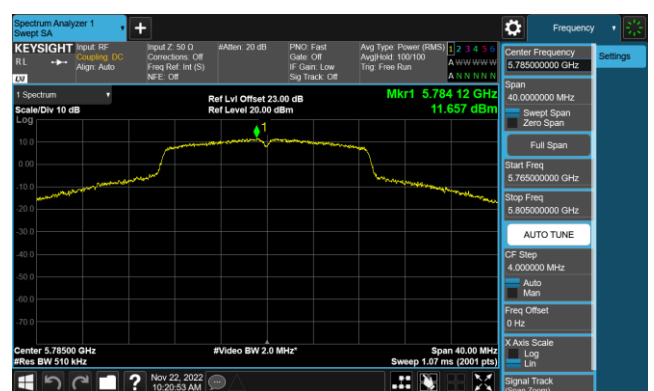
Channel 144 (5720MHz)



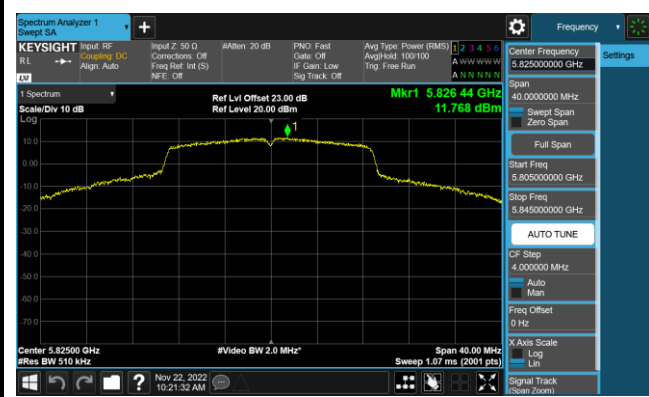
Channel 149 (5745MHz)



Channel 157 (5785MHz)

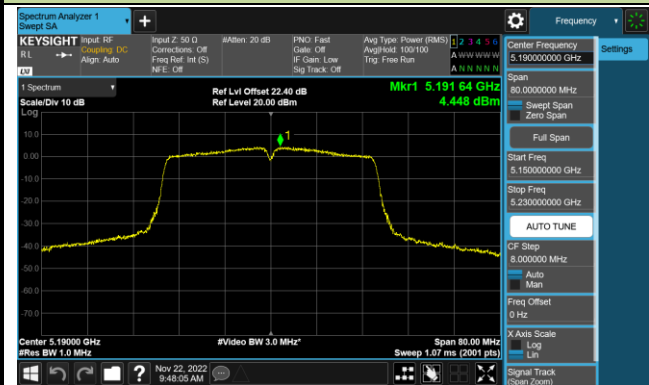


Channel 165 (5825MHz)

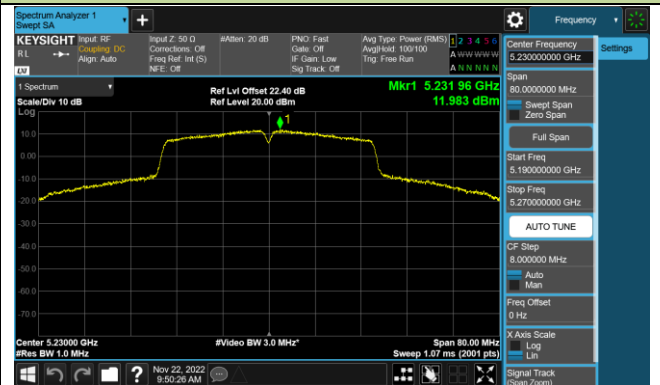


802.11n-HT40 Power Spectral Density - Ant 0

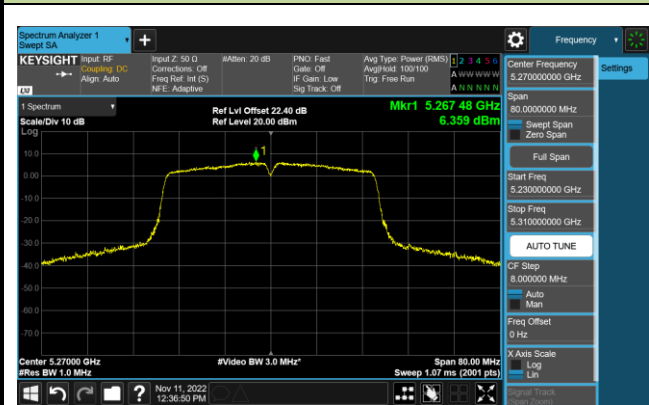
Channel 38 (5190MHz)



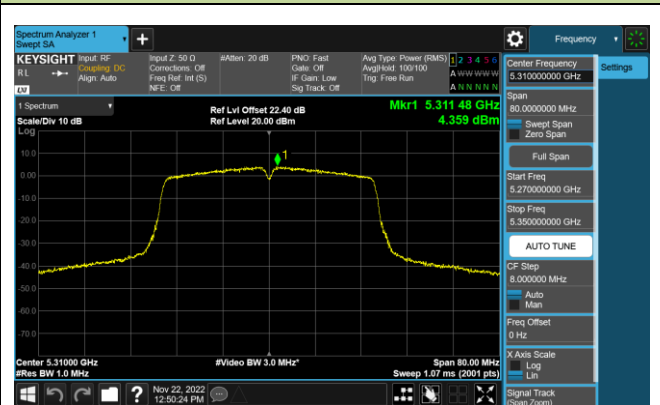
Channel 46 (5230MHz)



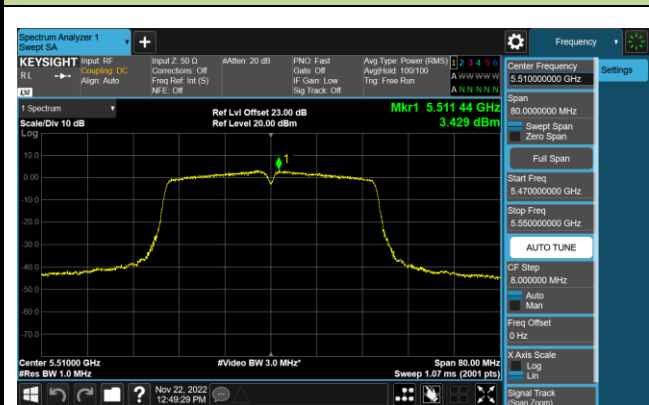
Channel 54 (5270MHz)



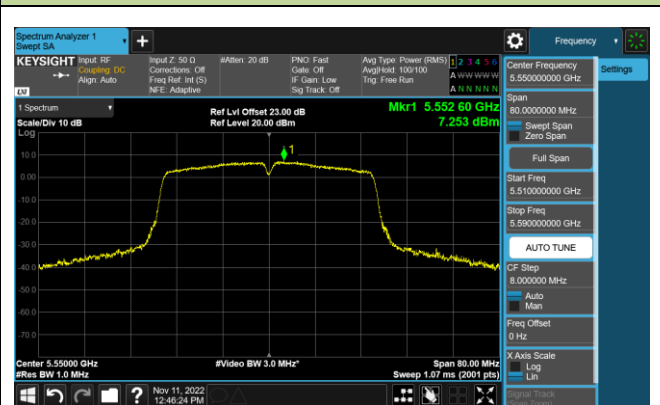
Channel 62 (5310MHz)



Channel 102 (5510MHz)



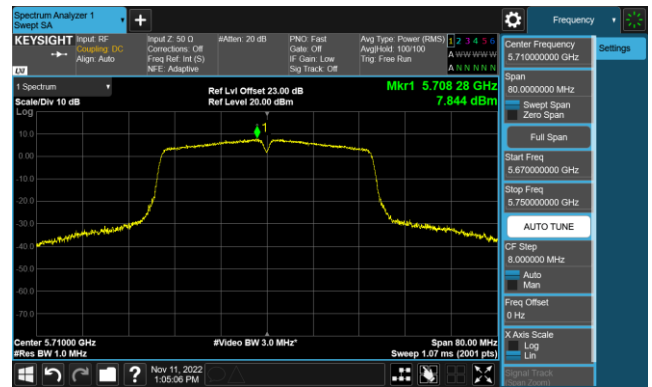
Channel 110 (5550MHz)



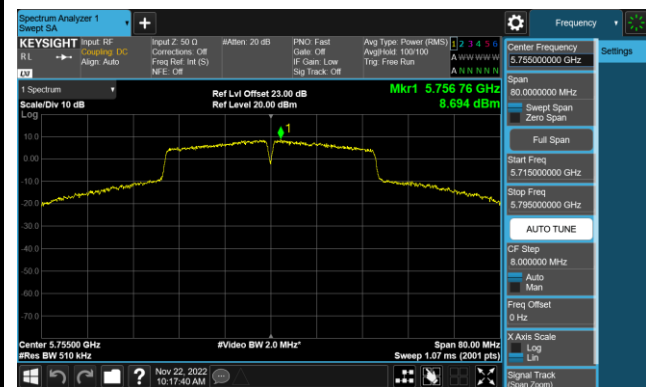
Channel 134 (5670MHz)



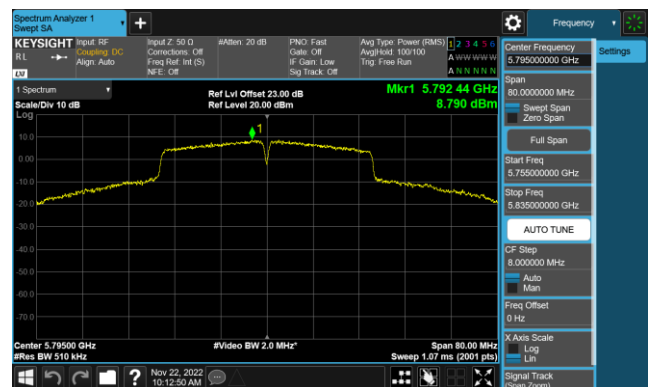
Channel 142 (5710MHz)



Channel 151 (5755MHz)

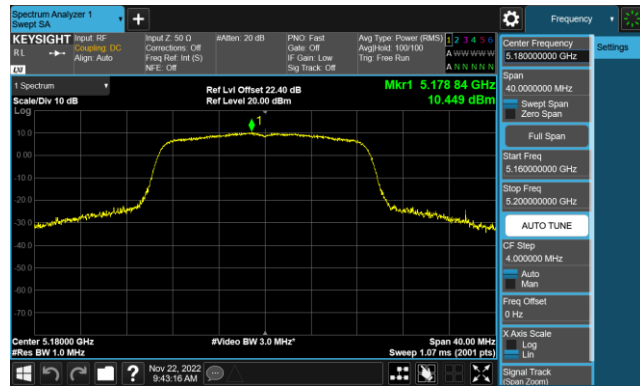


Channel 159 (5795MHz)

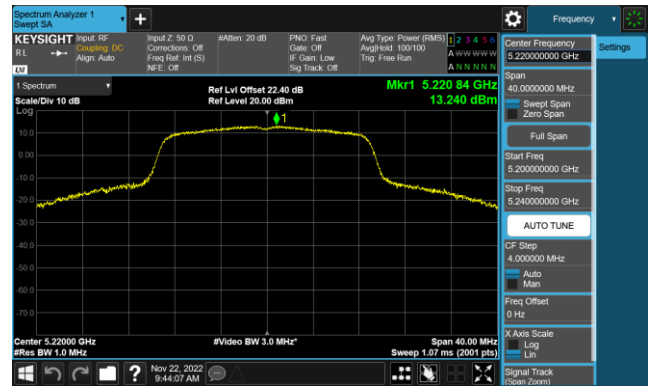


802.11ac-VHT20 Power Spectral Density - Ant 0

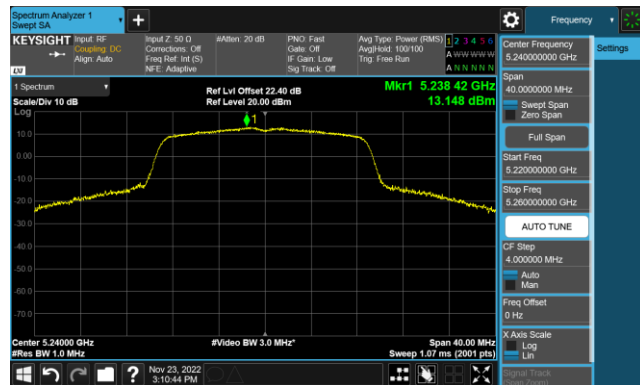
Channel 36 (5180MHz)



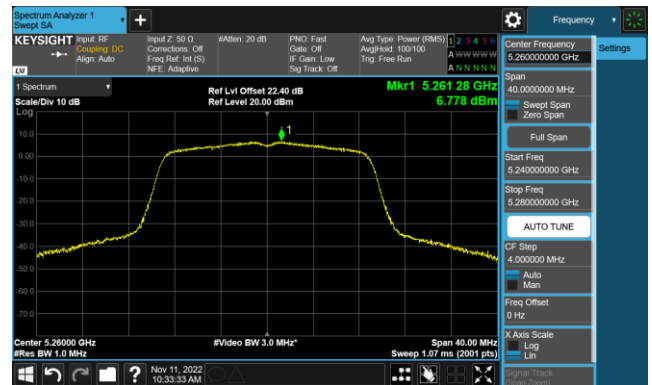
Channel 44 (5220MHz)



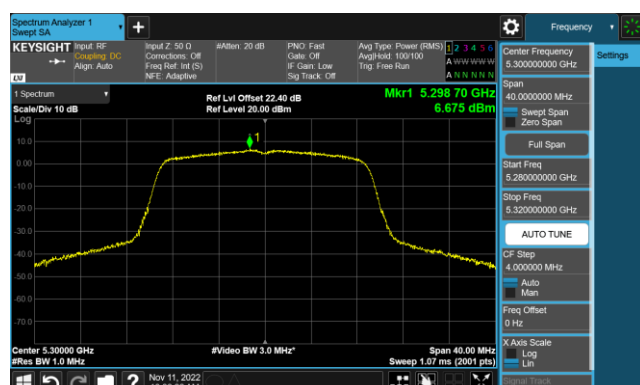
Channel 48 (5240MHz)



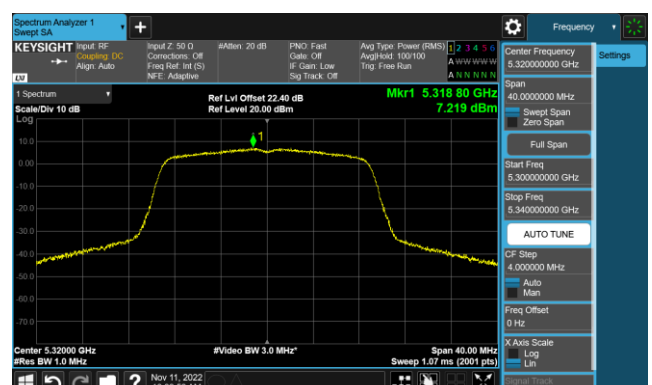
Channel 52 (5260MHz)



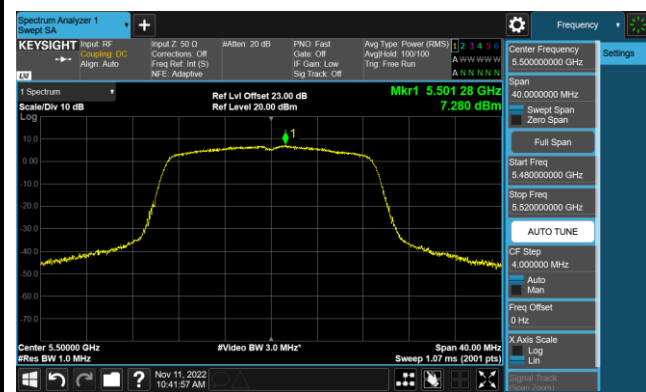
Channel 60 (5300MHz)



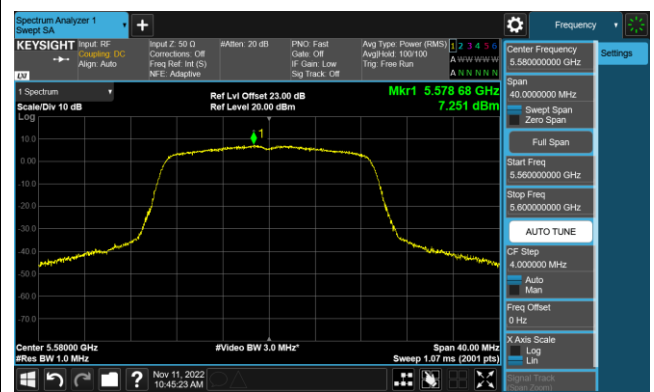
Channel 64 (5320MHz)



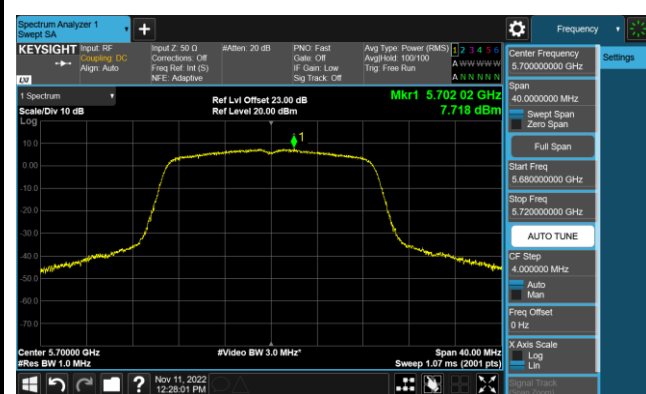
Channel 100 (5500MHz)



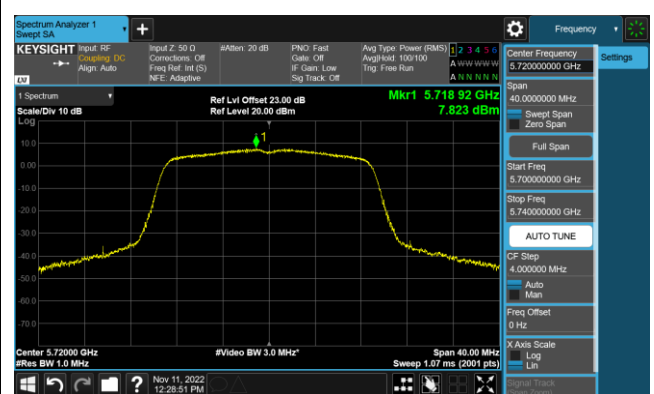
Channel 116 (5580MHz)



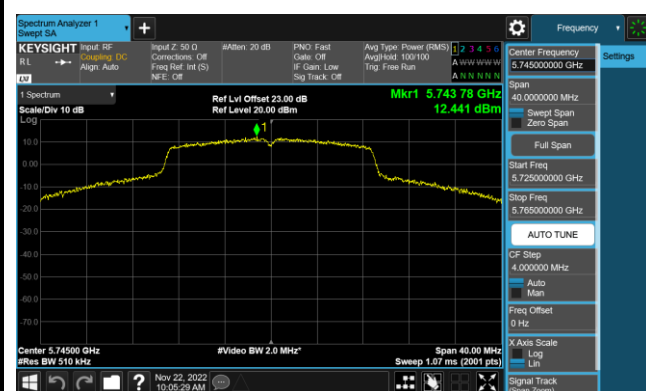
Channel 140 (5700MHz)



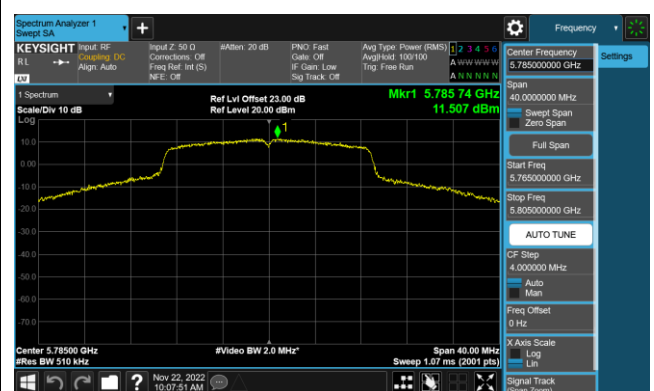
Channel 144 (5720MHz)



Channel 149 (5745MHz)



Channel 157 (5785MHz)

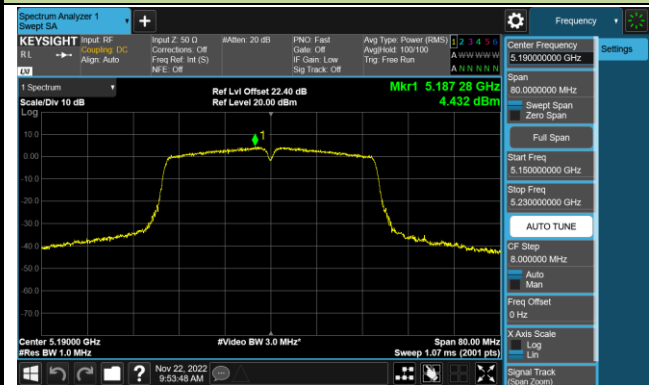


Channel 165 (5825MHz)

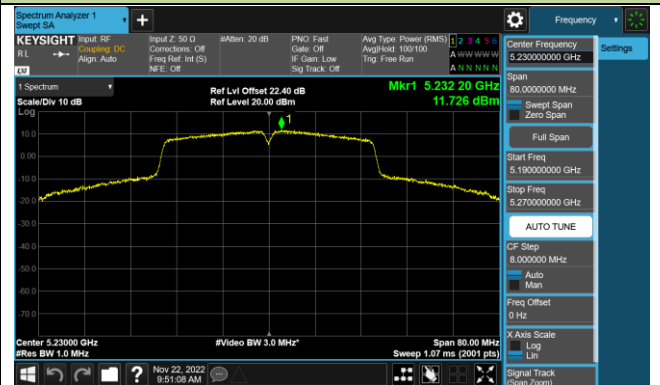


802.11ac-VHT40 Power Spectral Density - Ant 0

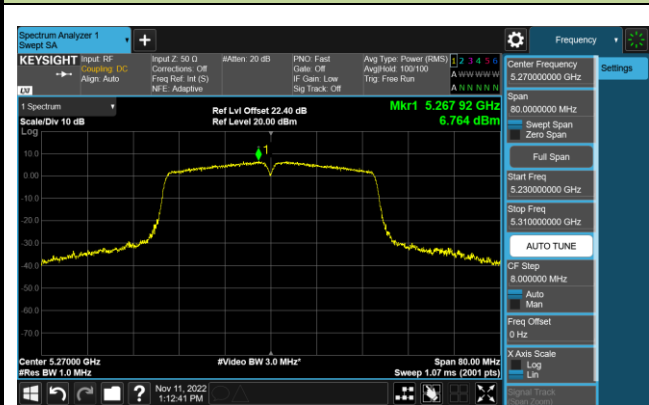
Channel 38 (5190MHz)



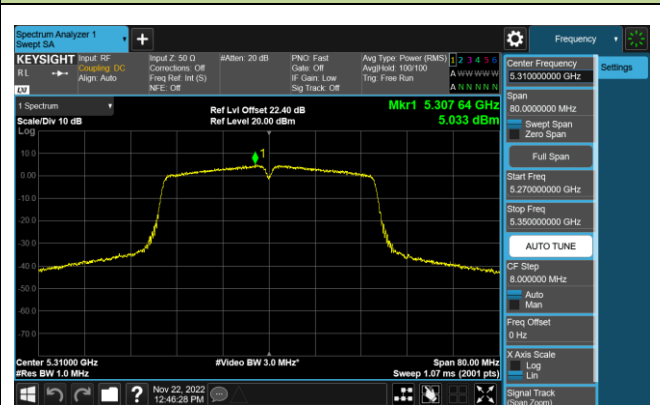
Channel 46 (5230MHz)



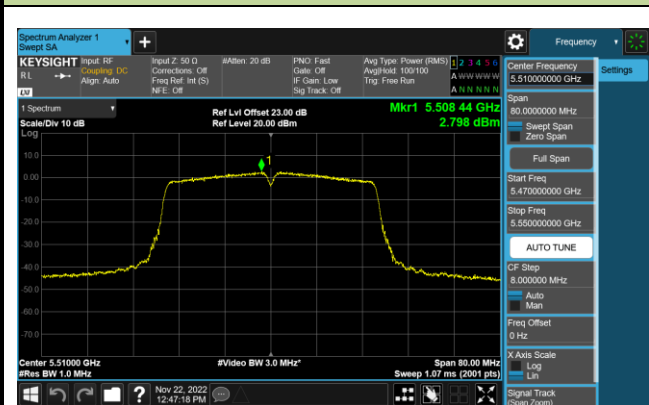
Channel 54 (5270MHz)



Channel 62 (5310MHz)



Channel 102 (5510MHz)



Channel 110 (5550MHz)

