

5.8.4. 功率密度量測結果

待測物名稱	AX1800 Wi-Fi 6 訊號延伸器	溫度	23 ~ 25°C
測試工程師	Kevin Ker	濕度	46 ~ 54%
測試場地	SR1	測試日期	2020/07/08 ~ 2020/08/01
測試項目	Power Spectral Density	測試模式	CDD Mode

Test Mode	Data Rate/ MCS	Channel No.	Freq. (MHz)	Ant 0 PSD (dBm/10kHz)	Ant 1 PSD (dBm/10kHz)	Duty Cycle (%)	10*log(1/x)	Total PSD (dBm/3kHz)	Limit (dBm/3kHz)	Result
CDD Mode										
802.11b	1Mbps	01	2412	-3.70	-3.96	95.10	0.22	-0.60	≤ 8.00	Pass
802.11b	1Mbps	06	2437	-3.14	-3.90	95.10	0.22	-0.27	≤ 8.00	Pass
802.11b	1Mbps	11	2462	-3.54	-3.95	95.10	0.22	-0.51	≤ 8.00	Pass
802.11g	6Mbps	01	2412	-10.96	-10.33	94.01	0.27	-7.35	≤ 8.00	Pass
802.11g	6Mbps	06	2437	-6.72	-6.19	94.01	0.27	-3.17	≤ 8.00	Pass
802.11g	6Mbps	11	2462	-11.57	-11.30	94.01	0.27	-8.15	≤ 8.00	Pass
802.11n-HT20	MCS0	01	2412	-12.67	-12.36	94.04	0.27	-9.23	≤ 8.00	Pass
802.11n-HT20	MCS0	06	2437	-7.04	-6.86	94.04	0.27	-3.67	≤ 8.00	Pass
802.11n-HT20	MCS0	11	2462	-11.61	-11.13	94.04	0.27	-8.08	≤ 8.00	Pass
802.11n-HT40	MCS0	03	2422	-18.87	-18.54	89.61	0.48	-15.21	≤ 8.00	Pass
802.11n-HT40	MCS0	06	2437	-14.46	-14.38	89.61	0.48	-10.93	≤ 8.00	Pass
802.11n-HT40	MCS0	09	2452	-14.91	-15.46	89.61	0.48	-11.69	≤ 8.00	Pass
802.11ax-HE20	MCS0	01	2412	-15.04	-14.03	96.99	0.13	-11.37	≤ 8.00	Pass
802.11ax-HE20	MCS0	06	2437	-7.98	-7.76	96.99	0.13	-4.73	≤ 8.00	Pass
802.11ax-HE20	MCS0	11	2462	-13.09	-12.06	96.99	0.13	-9.40	≤ 8.00	Pass
802.11ax-HE40	MCS0	03	2422	-18.75	-17.36	95.98	0.18	-14.81	≤ 8.00	Pass
802.11ax-HE40	MCS0	06	2437	-15.26	-14.49	95.98	0.18	-11.67	≤ 8.00	Pass
802.11ax-HE40	MCS0	09	2452	-16.14	-15.64	95.98	0.18	-12.69	≤ 8.00	Pass

Note 1: For 802.11b/g/n/ax

When EUT duty cycle ≤ 98%, Total AVGPSPD = $10 \cdot \log \{10^{(\text{Ant 0 AVGPSPD}/10)} + 10^{(\text{Ant 1 AVGPSPD}/10)}\} + 10 \cdot \log(1/\text{Duty Cycle})$.

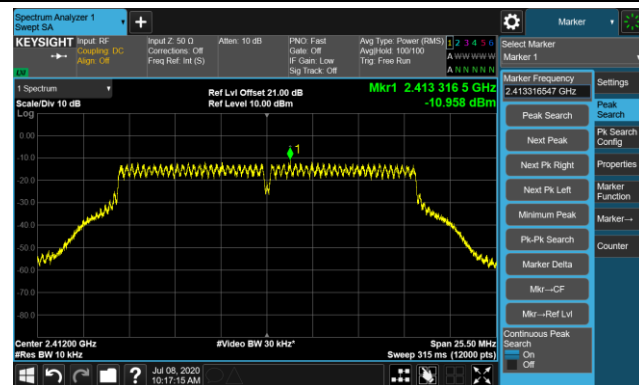
Note 2: The power setting of Beamforming mode is not greater than CDD mode, so only CDD mode result was shown in this section.

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測試項目	Power Spectral Density	測試模式	CDD Mode

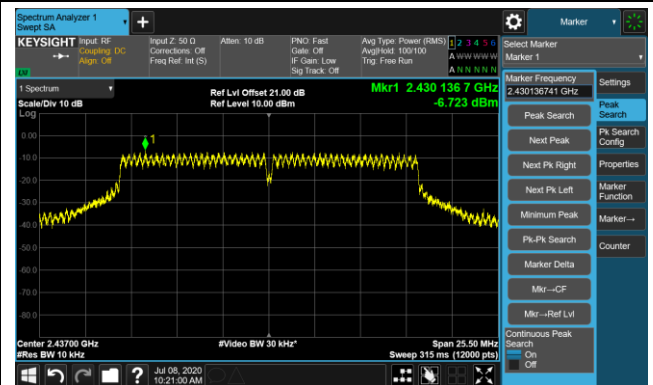


802.11g AVGPSD - Ant 0 / Ant 0 + 1 – CDD Mode

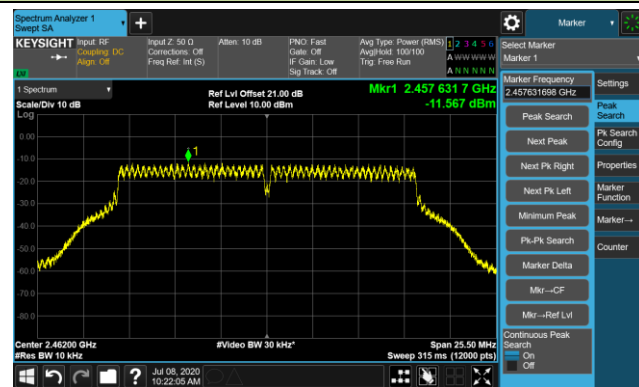
Channel 01 (2412MHz)



Channel 06 (2437MHz)

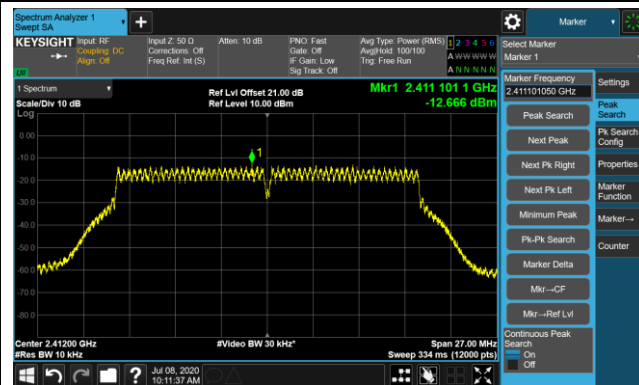


Channel 11 (2462MHz)

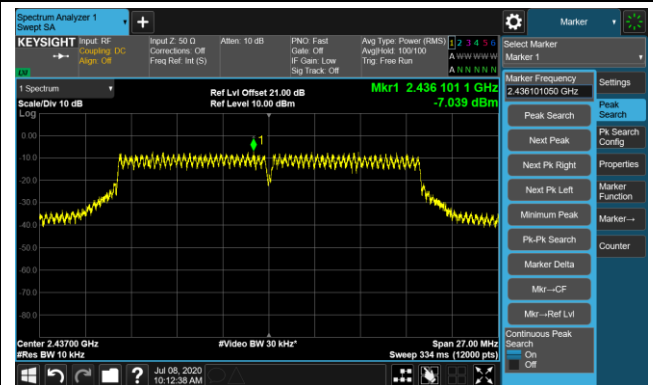


802.11n-HT20 AVGPDS - Ant 0 / Ant 0 + 1 – CDD Mode

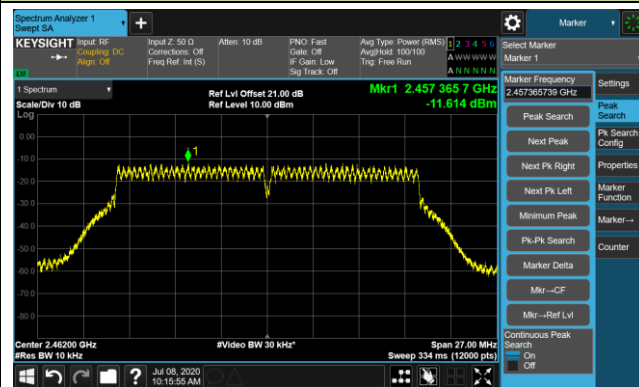
Channel 01 (2412MHz)



Channel 06 (2437MHz)

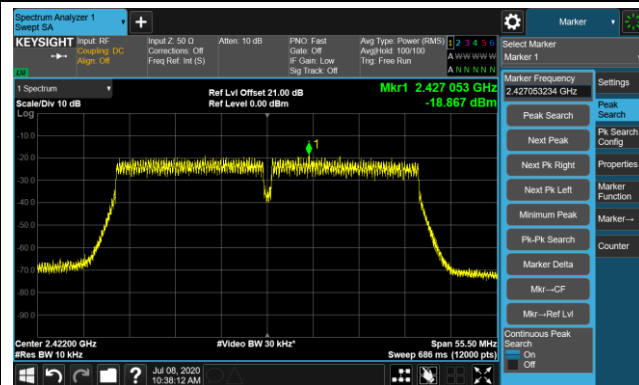


Channel 11 (2462MHz)

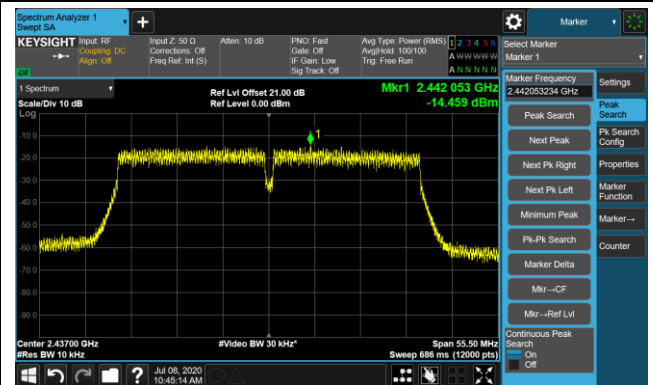


802.11n-HT40 AVGPDS - Ant 0 / Ant 0 + 1 – CDD Mode

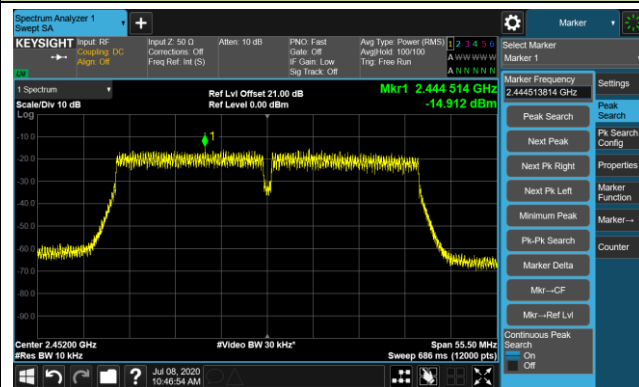
Channel 03 (2422MHz)



Channel 06 (2437MHz)

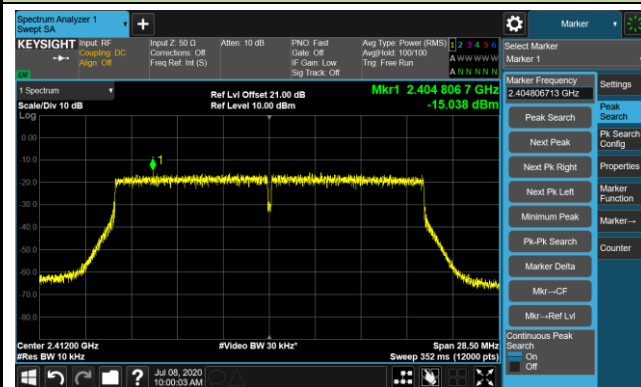


Channel 09 (2452MHz)

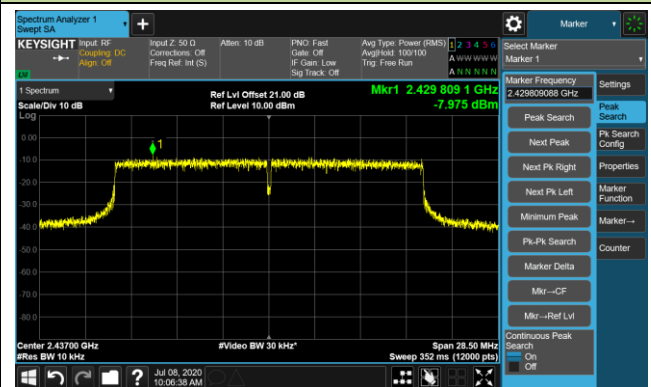


802.11ax-HE20 AVGPDS - Ant 0 / Ant 0 + 1 – CDD Mode

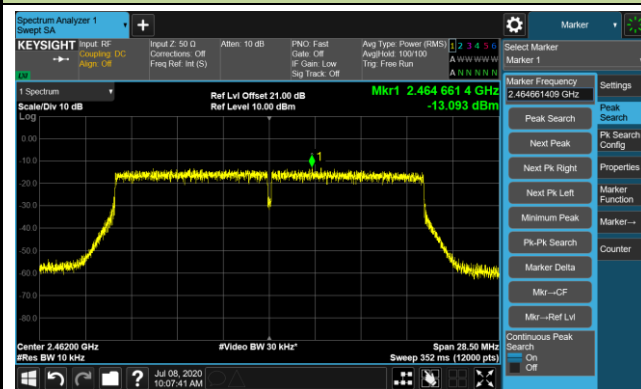
Channel 01 (2412MHz)



Channel 06 (2437MHz)

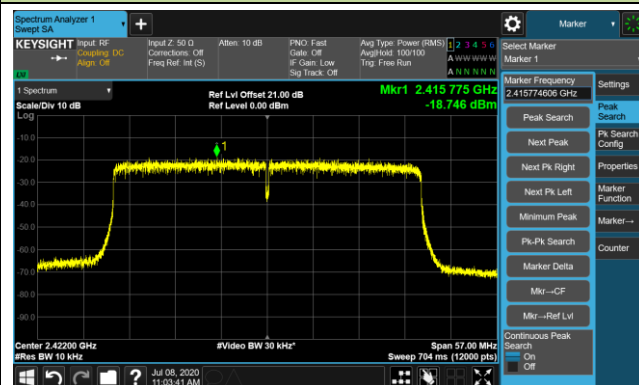


Channel 11 (2462MHz)

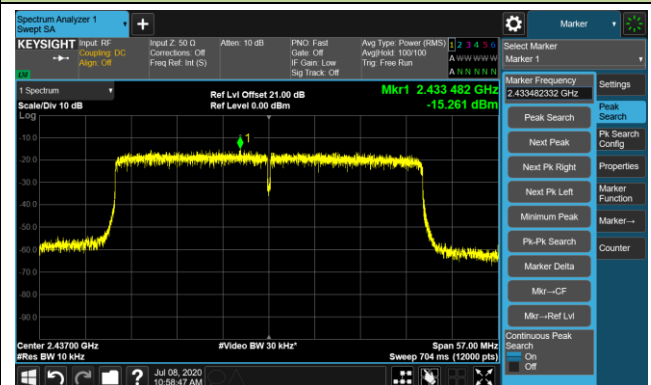


802.11ax-HE40 AVGPSD - Ant 0 / Ant 0 + 1 – CDD Mode

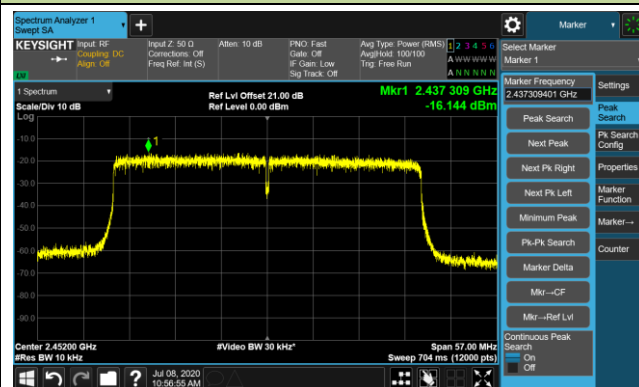
Channel 03 (2422MHz)



Channel 06 (2437MHz)

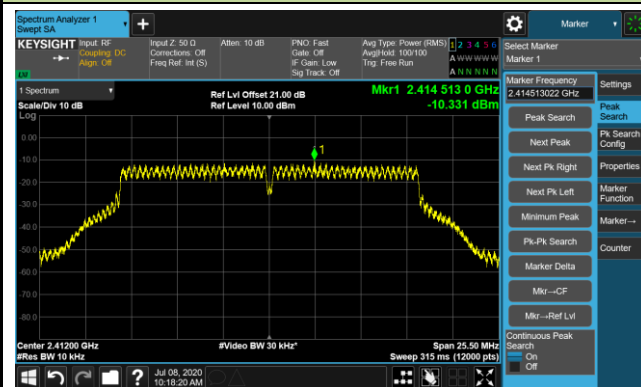


Channel 09 (2452MHz)

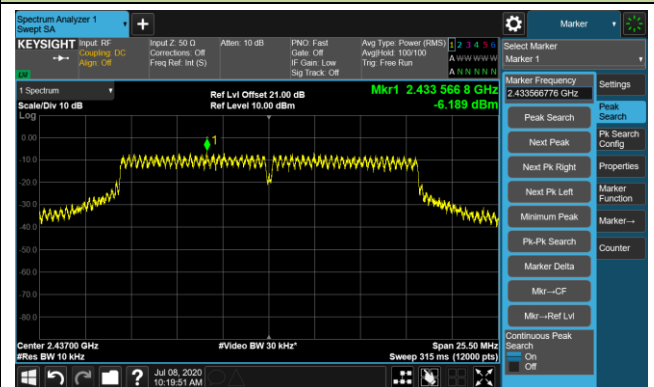


802.11g AVGPSD - Ant 1 / Ant 0 + 1 – CDD Mode

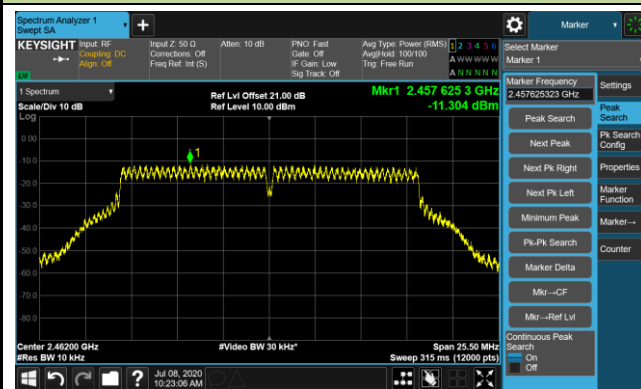
Channel 01 (2412MHz)



Channel 06 (2437MHz)

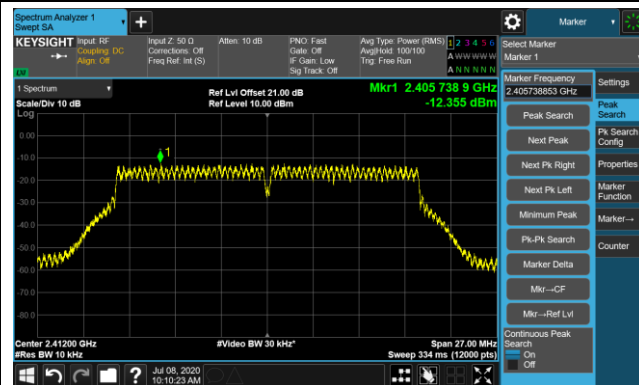


Channel 11 (2462MHz)

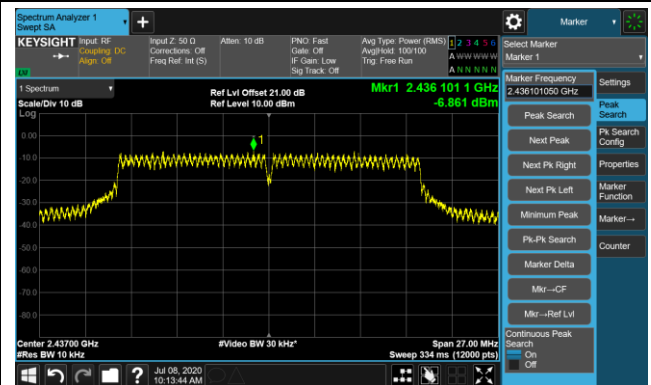


802.11n-HT20 AVGPDS - Ant 1 / Ant 0 + 1 – CDD Mode

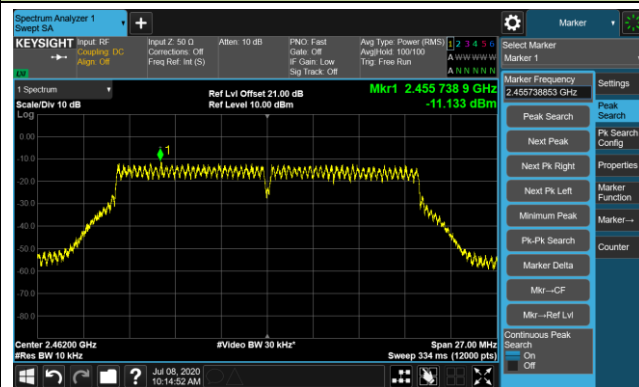
Channel 01 (2412MHz)



Channel 06 (2437MHz)

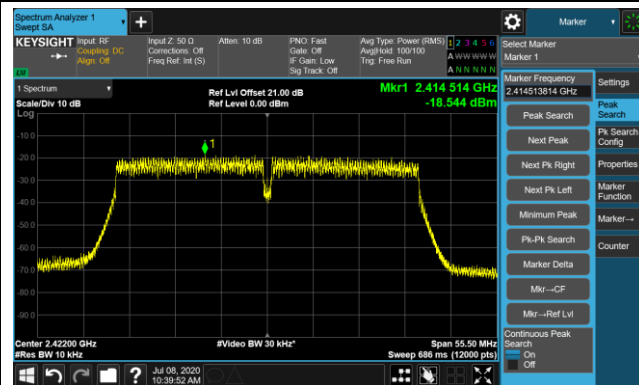


Channel 11 (2462MHz)

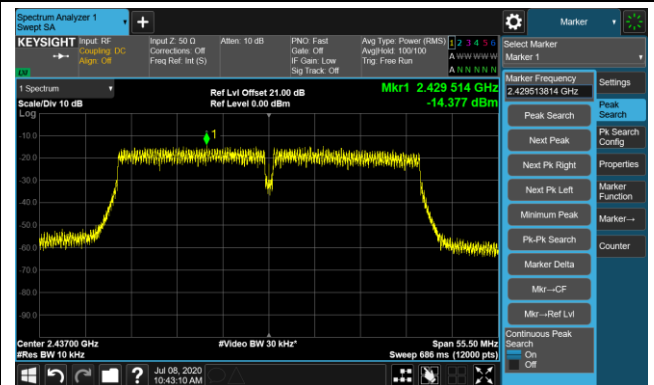


802.11n-HT40 AVGPSPD - Ant 1 / Ant 0 + 1 – CDD Mode

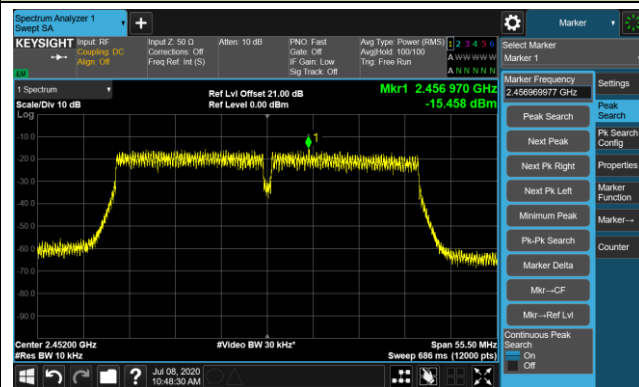
Channel 03 (2422MHz)



Channel 06 (2437MHz)

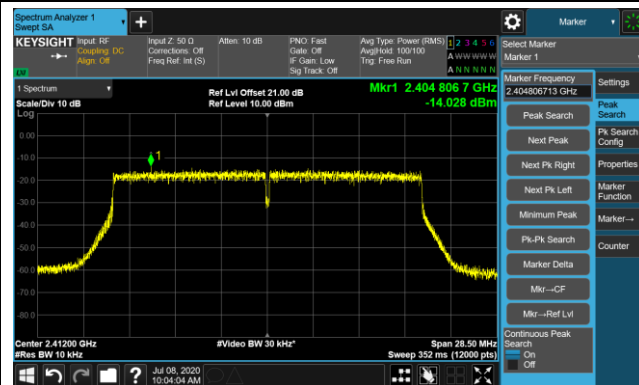


Channel 09 (2452MHz)

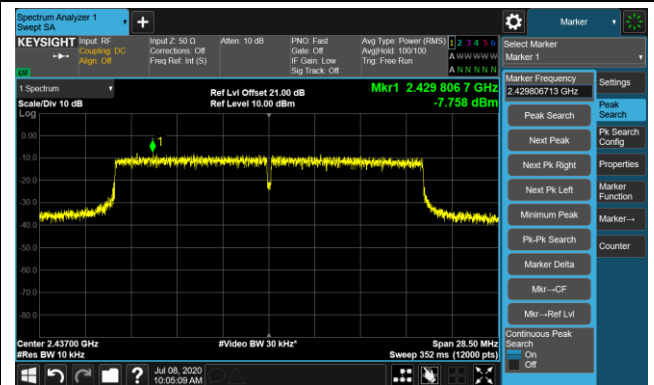


802.11ax-HE20 AVGPSPD - Ant 1 / Ant 0 + 1 – CDD Mode

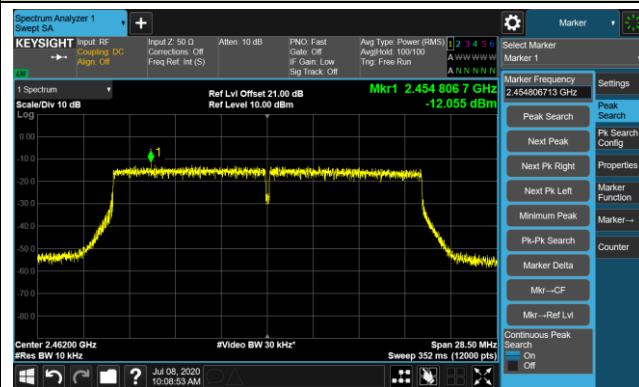
Channel 01 (2412MHz)



Channel 06 (2437MHz)

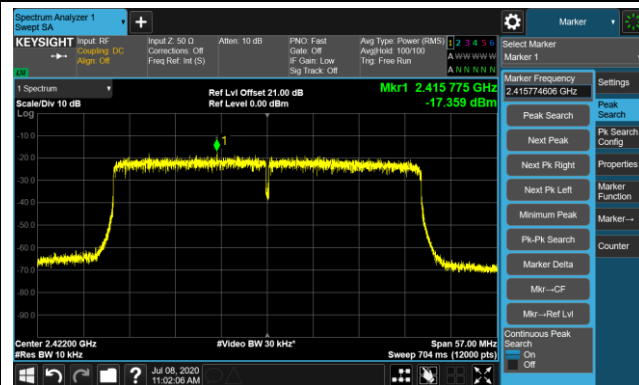


Channel 11 (2462MHz)

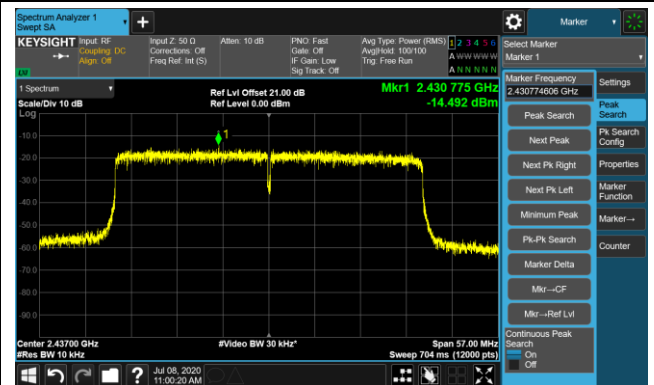


802.11ax-HE40 AVGPSD - Ant 1 / Ant 0 + 1 – CDD Mode

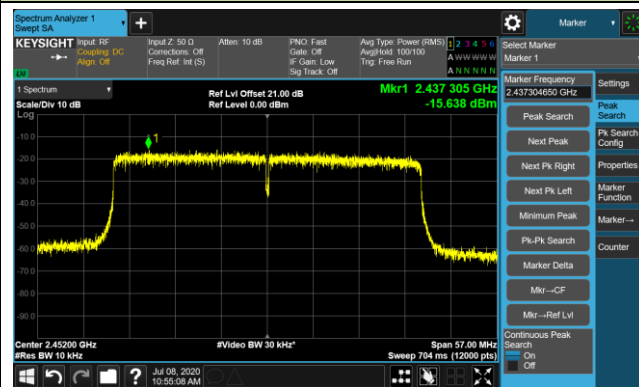
Channel 03 (2422MHz)



Channel 06 (2437MHz)



Channel 09 (2452MHz)



The End