

待測物名稱：Intel® Wi-Fi 6 AX201

待測物型號：AX201D2W

測試頻道：--

6 dB 頻寬：100kHz

量測天線：--

檢測器：峰值

測試日期：107 年 09 月 26 日

測試項目：佔用頻帶寬度

測試模式：Mode 1: SISO A: 發射器 802.11n-40BW

視頻頻寬：300kHz

測試距離：Conducted

環境溫度：20 °C

環境濕度：48 %

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
151	5755	36700	>500	Pass
159	5795	36700	>500	Pass

Figure Channel 151

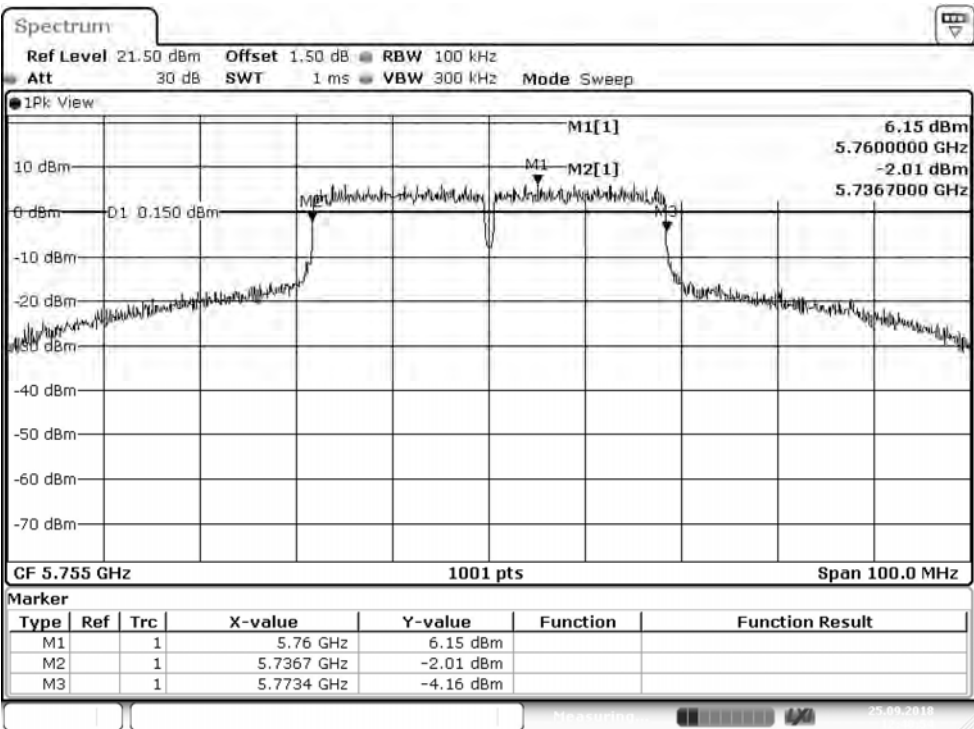
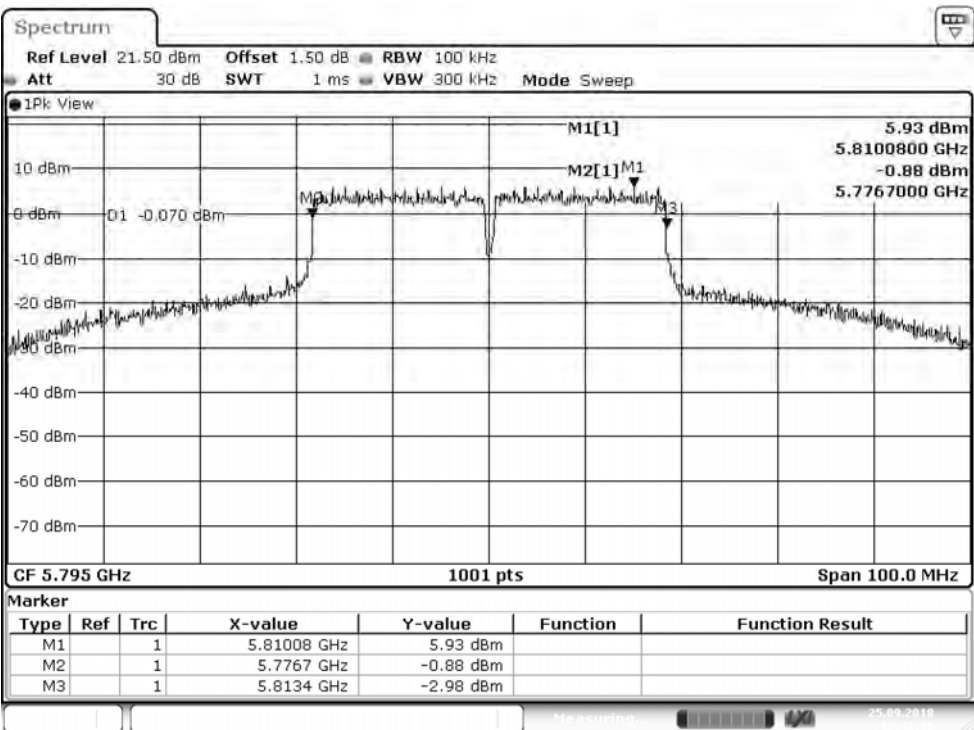


Figure Channel 159



待測物名稱：Intel® Wi-Fi 6 AX201

待測物型號：AX201D2W

測試頻道：--

6 dB 頻寬：100kHz

量測天線：--

檢測器：峰值

測試日期：107 年 10 月 08 日

測試項目：佔用頻帶寬度

測試模式：Mode 1: SISO A: 發射器 802.11ac-80BW

視頻頻寬：300kHz

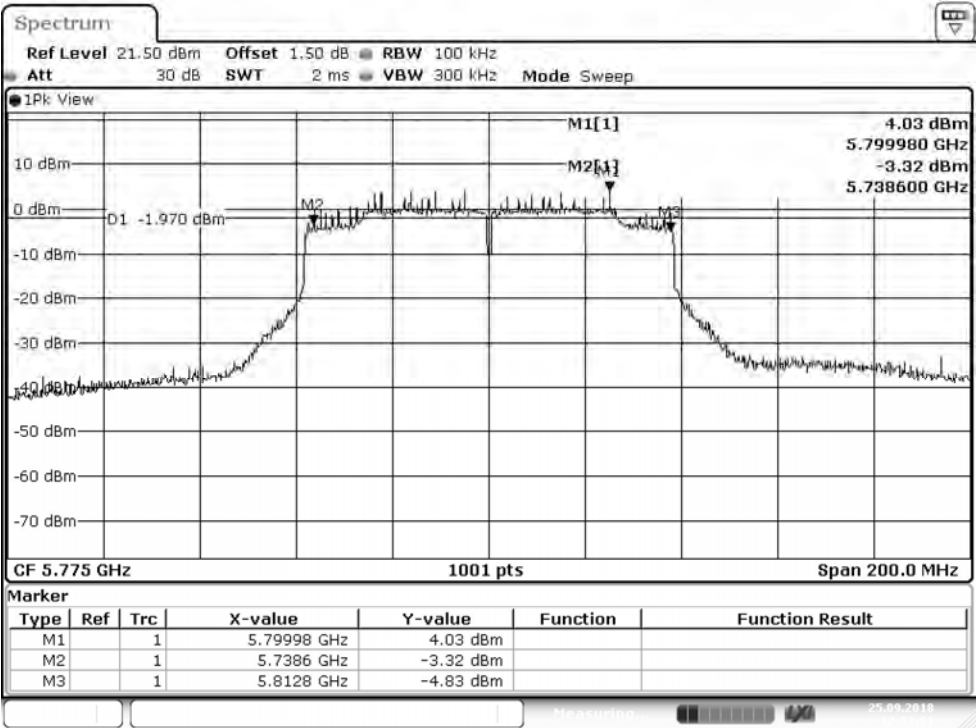
測試距離：Conducted

環境溫度：20 °C

環境濕度：48 %

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
155	5775	74200	>500	Pass

Figure Channel 155



待測物名稱：Intel® Wi-Fi 6 AX201

待測物型號：AX201D2W

測試頻道：--

6 dB 頻寬：100kHz

量測天線：--

檢測器：峰值

測試日期：107 年 09 月 25 日

測試項目：佔用頻帶寬度

測試模式：Mode 2: SISO B: 發射器 802.11a

視頻頻寬：300kHz

測試距離：Conducted

環境溫度：20 °C

環境濕度：48 %

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
149	5745	16550	>500	Pass
157	5785	16600	>500	Pass
165	5825	16550	>500	Pass

Figure Channel 149

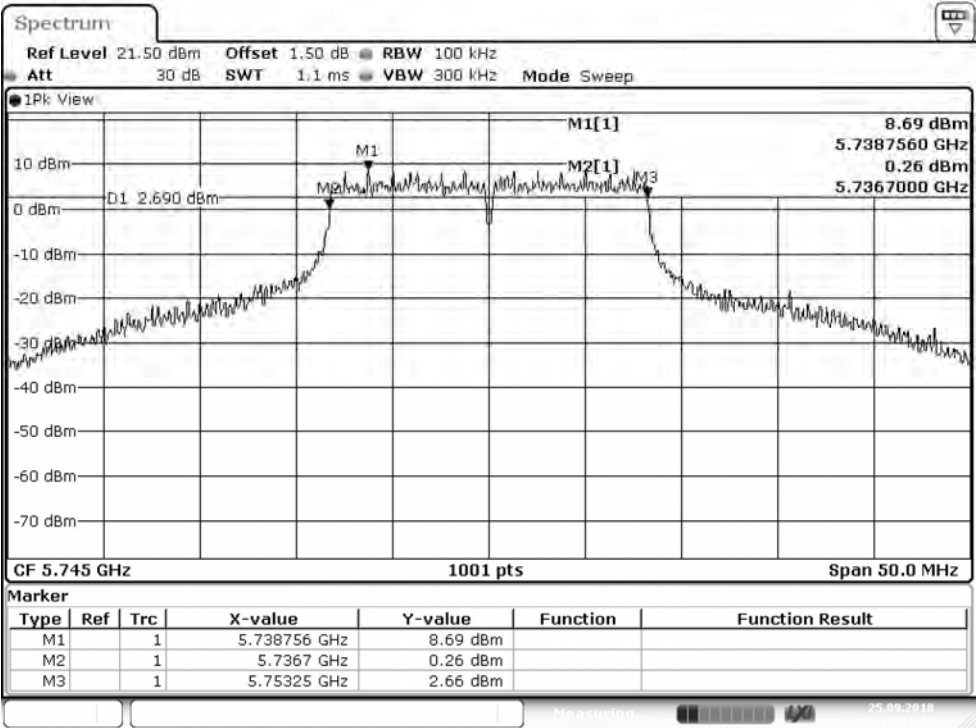


Figure Channel 157

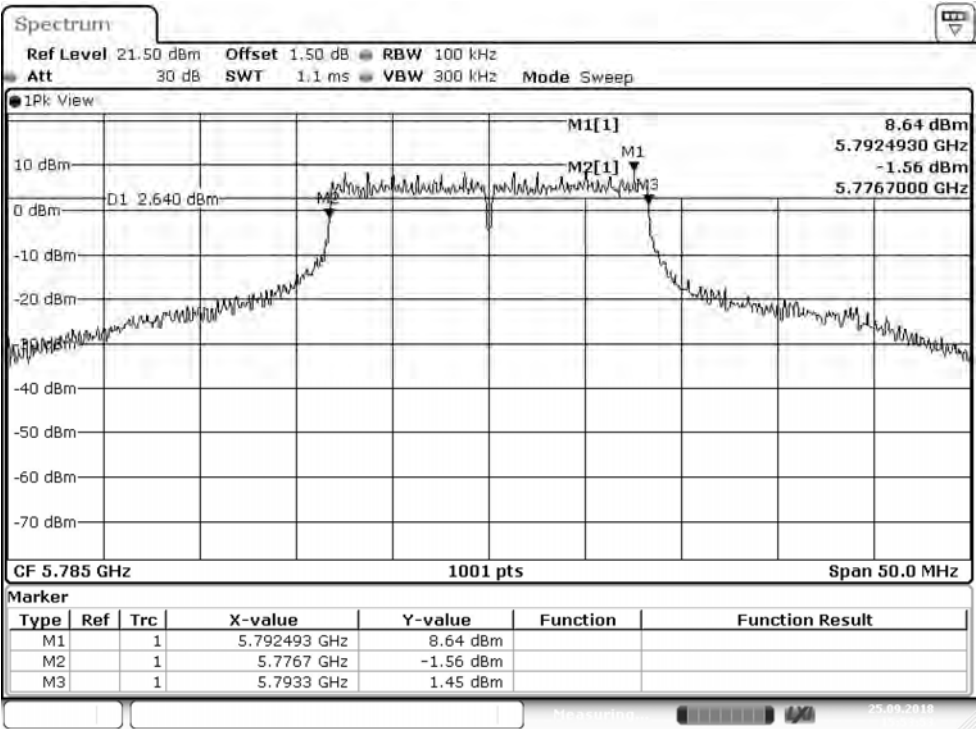
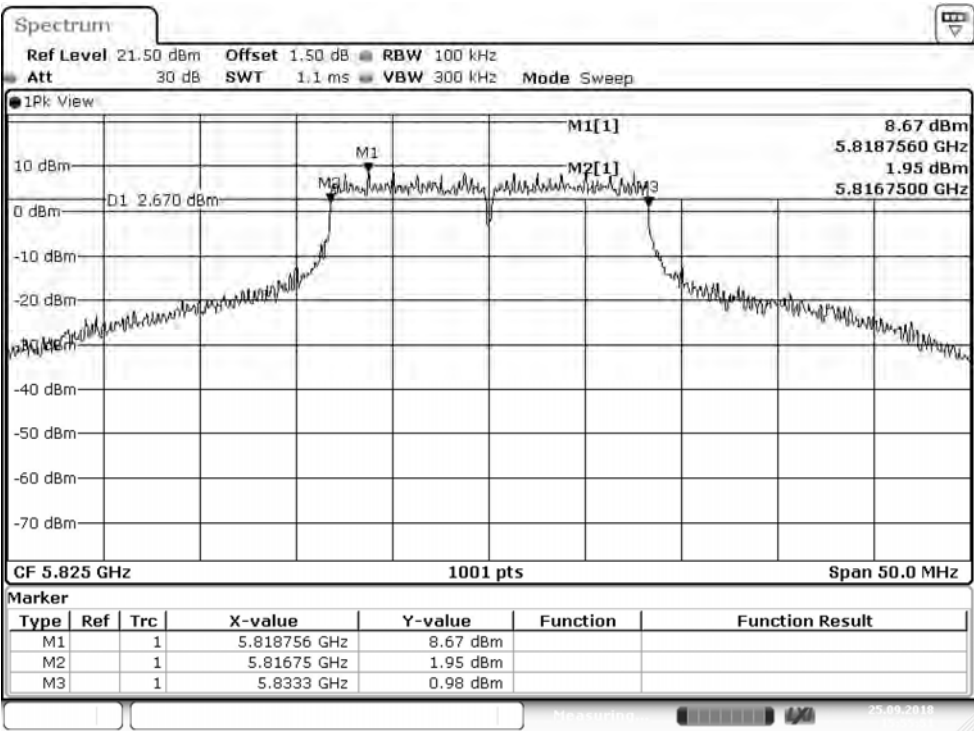


Figure Channel 165



待測物名稱：Intel® Wi-Fi 6 AX201

待測物型號：AX201D2W

測試頻道：--

6 dB 頻寬：100kHz

量測天線：--

檢測器：峰值

測試日期：107 年 09 月 25 日

測試項目：佔用頻帶寬度

測試模式：Mode 2: SISO B: 發射器 802.11n-20BW

視頻頻寬：300kHz

測試距離：Conducted

環境溫度：20 °C

環境濕度：48 %

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
149	5745	17800	>500	Pass
157	5785	17800	>500	Pass
165	5825	17850	>500	Pass

Figure Channel 149

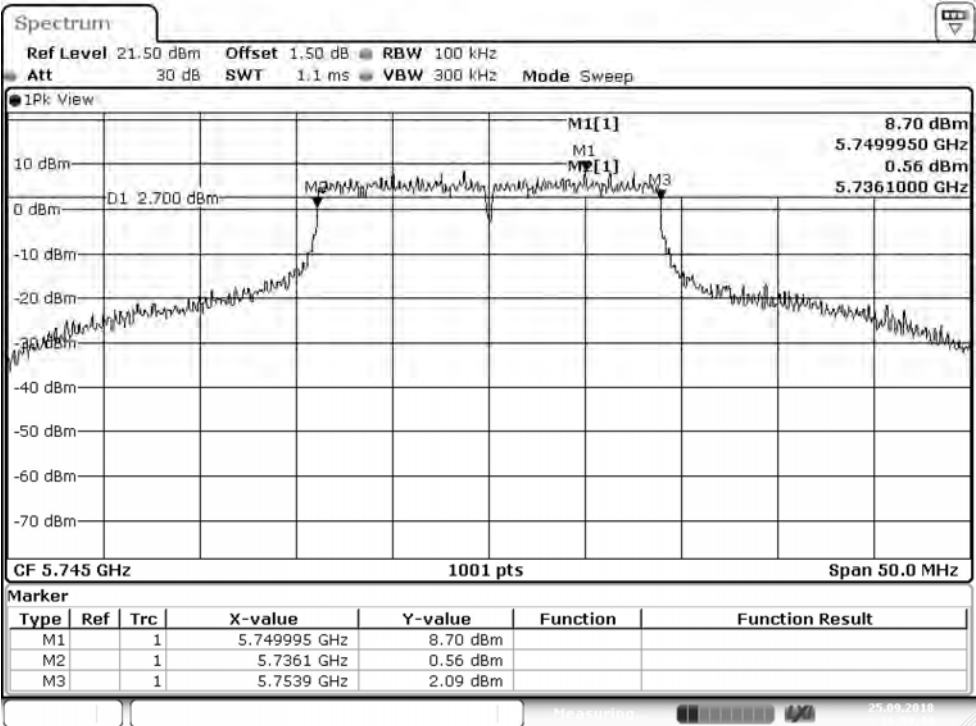


Figure Channel 157

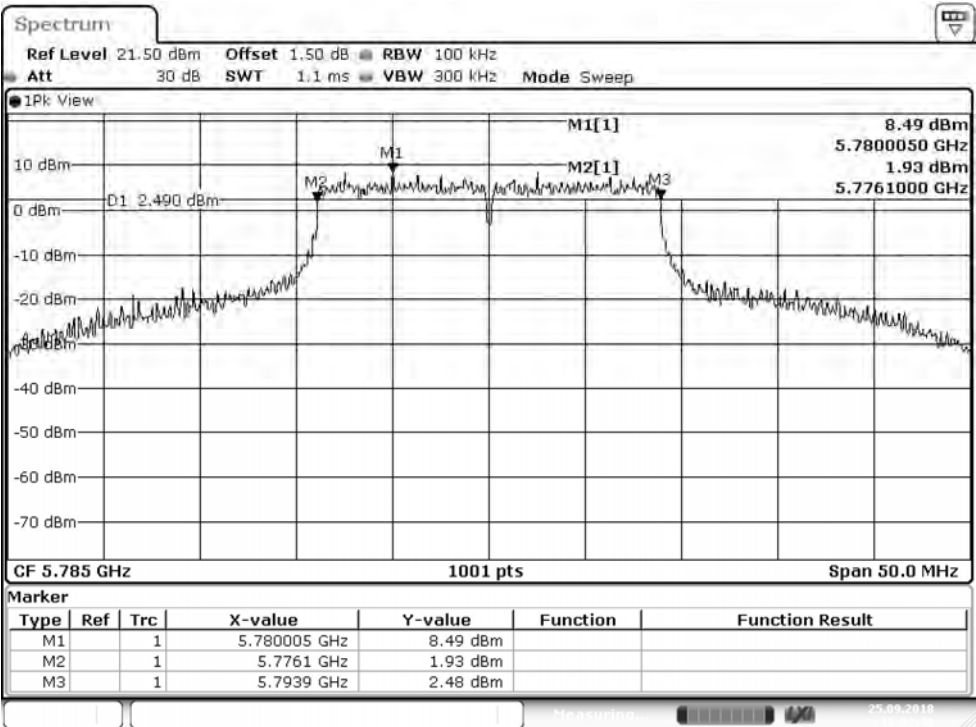
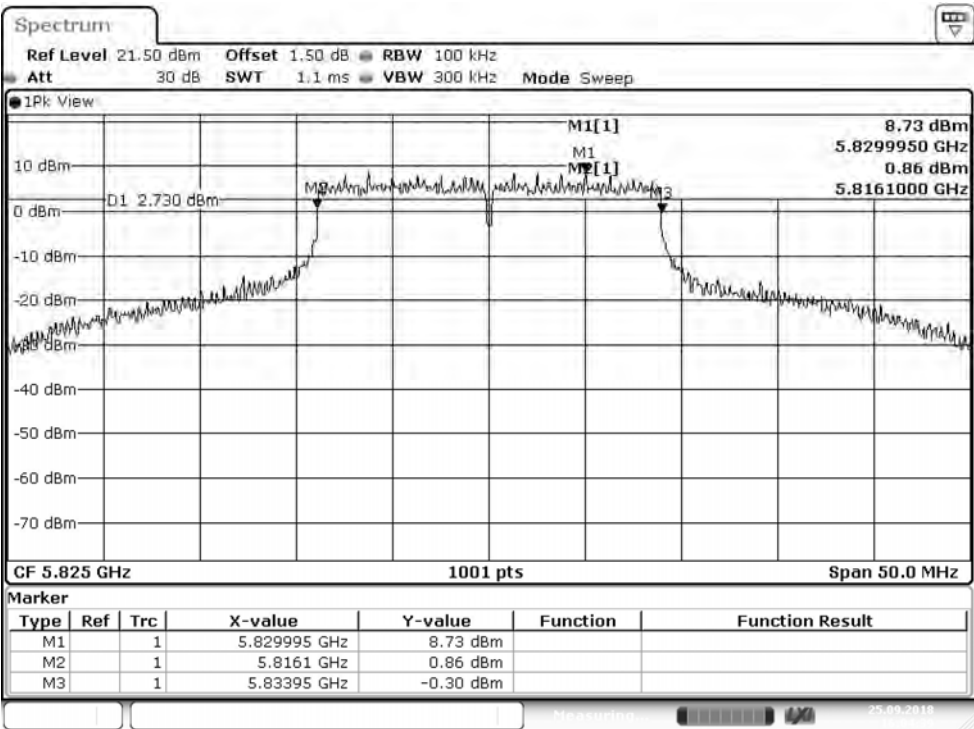


Figure Channel 165



待測物名稱：Intel® Wi-Fi 6 AX201

待測物型號：AX201D2W

測試頻道：--

6 dB 頻寬：100kHz

量測天線：--

檢測器：峰值

測試日期：107 年 09 月 25 日

測試項目：佔用頻帶寬度

測試模式：Mode 2: SISO B: 發射器 802.11n-40BW

視頻頻寬：300kHz

測試距離：Conducted

環境溫度：20 °C

環境濕度：48 %

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
151	5755	36700	>500	Pass
159	5795	36600	>500	Pass

Figure Channel 151

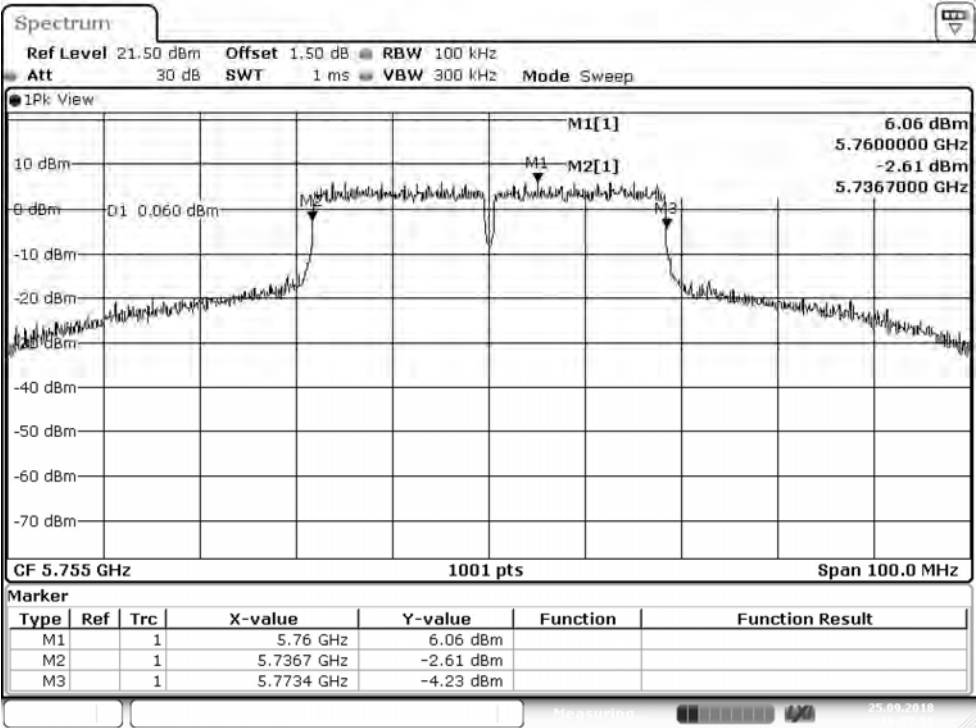
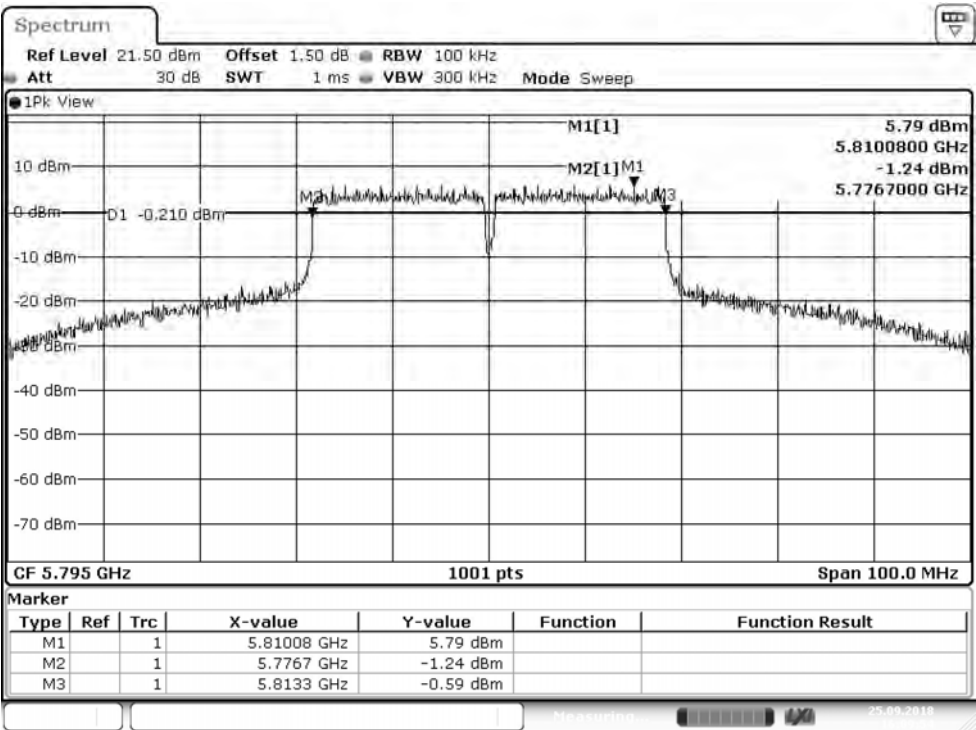


Figure Channel 159



待測物名稱：Intel® Wi-Fi 6 AX201

待測物型號：AX201D2W

測試頻道：--

6 dB 頻寬：100kHz

量測天線：--

檢測器：峰值

測試日期：107 年 09 月 25 日

測試項目：佔用頻帶寬度

測試模式：Mode 2: SISO B: 發射器 802.11ac-80BW

視頻頻寬：300kHz

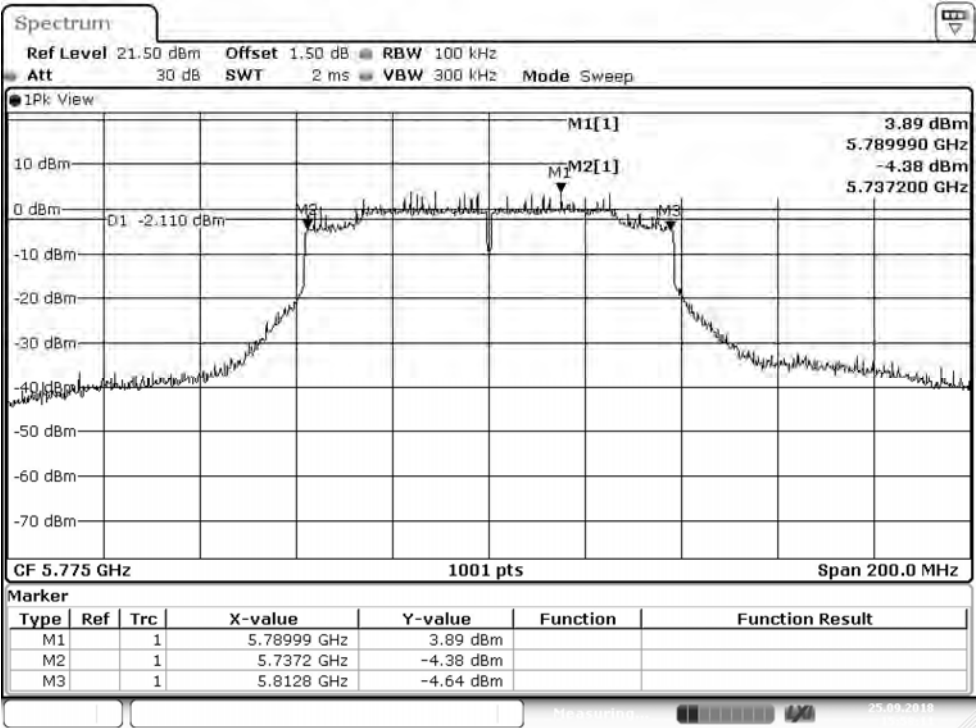
測試距離：Conducted

環境溫度：20 °C

環境濕度：48 %

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
155	5775	75600	>500	Pass

Figure Channel 155



待測物名稱：Intel® Wi-Fi 6 AX201

待測物型號：AX201D2W

測試頻道：--

6 dB 頻寬：100kHz

量測天線：--

檢測器：峰值

測試日期：107 年 09 月 25 日

測試項目：佔用頻帶寬度

測試模式：Mode 3: MIMO: 發射器 802.11n-20BW

視頻頻寬：300kHz

測試距離：Conducted

環境溫度：20 °C

環境濕度：48 %

Channel No.	Frequency (MHz)	Chain	Measurement Level (kHz)	Required Limit (kHz)	Result
149	5745	A	17850	>500	Pass
157	5785	A	17800	>500	Pass
165	5825	A	17850	>500	Pass
149	5745	B	17850	>500	Pass
157	5785	B	17800	>500	Pass
165	5825	B	17850	>500	Pass

Figure Channel 149 (Chain A)

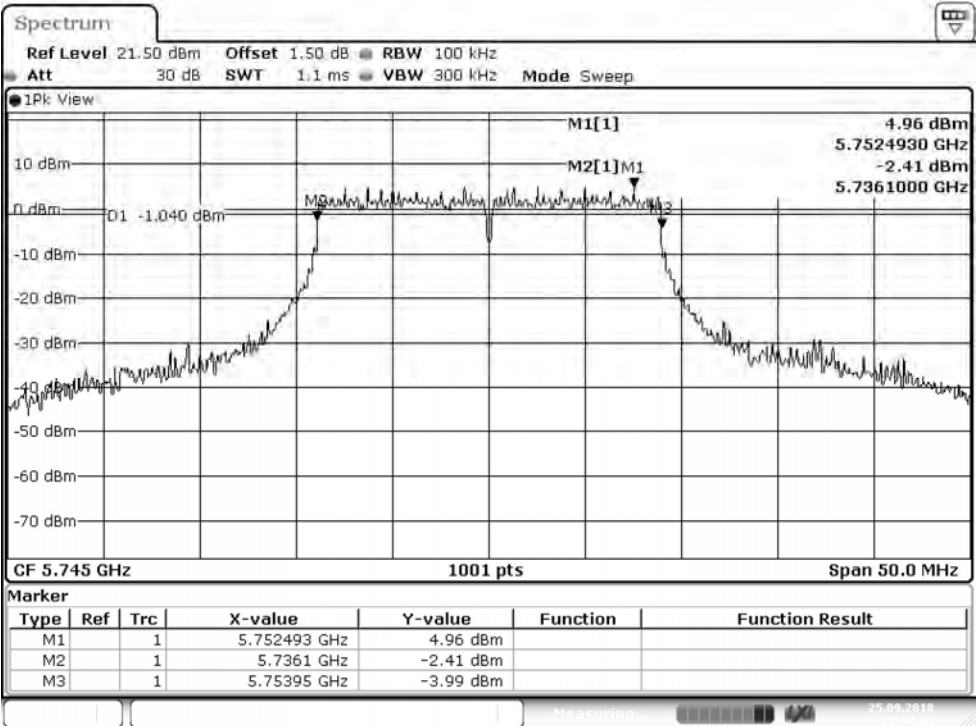
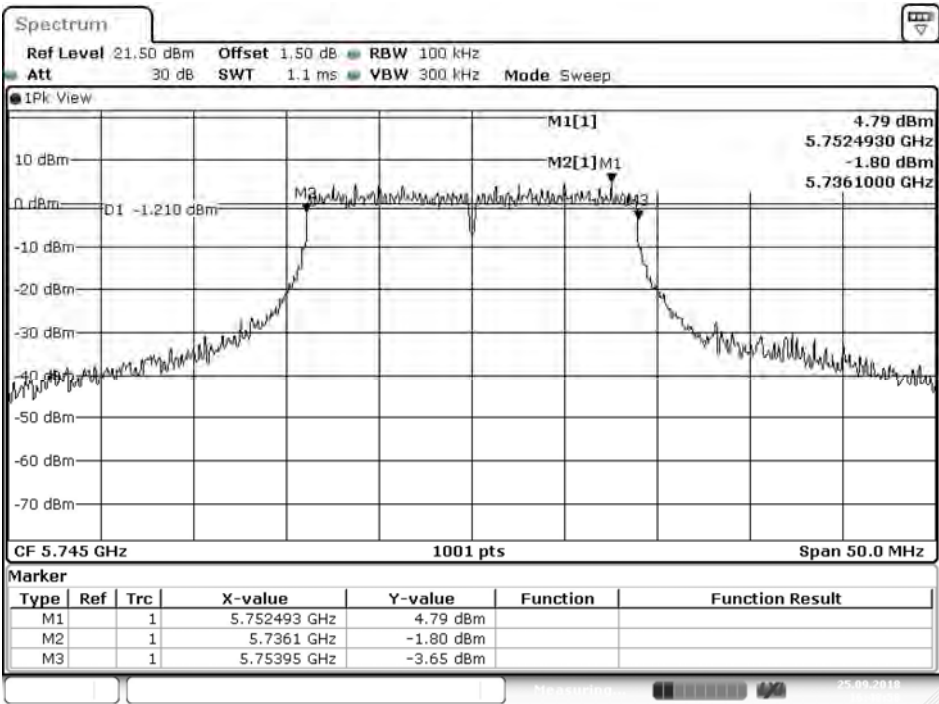


Figure Channel 149 (Chain B)



Date: 25.SEP.2018 16:48:58

Figure Channel 157 (Chain A)

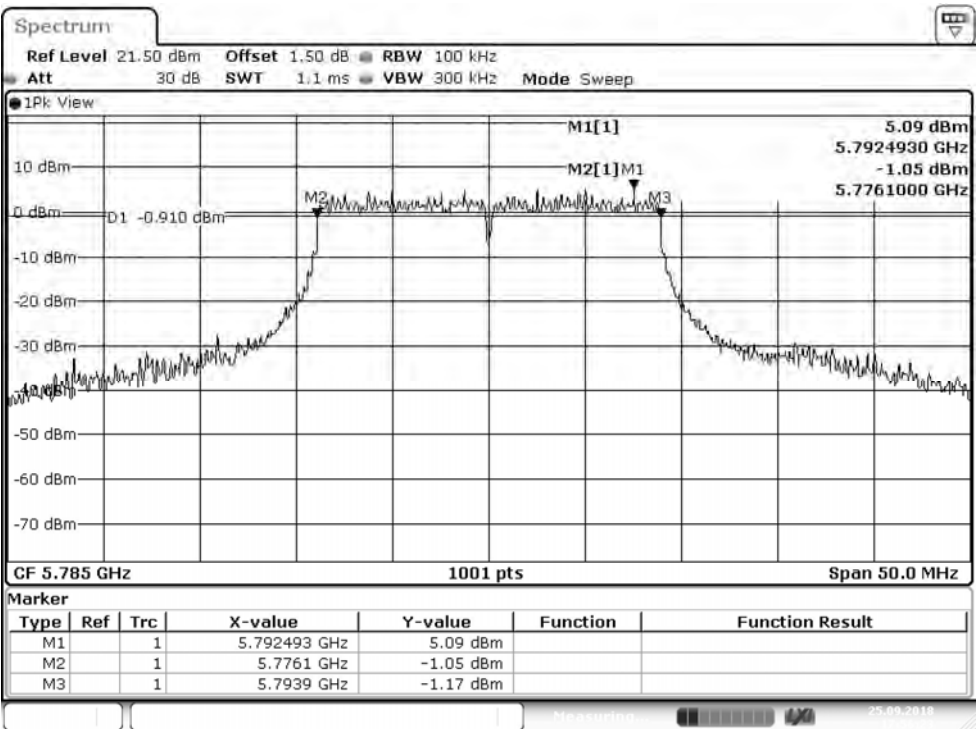
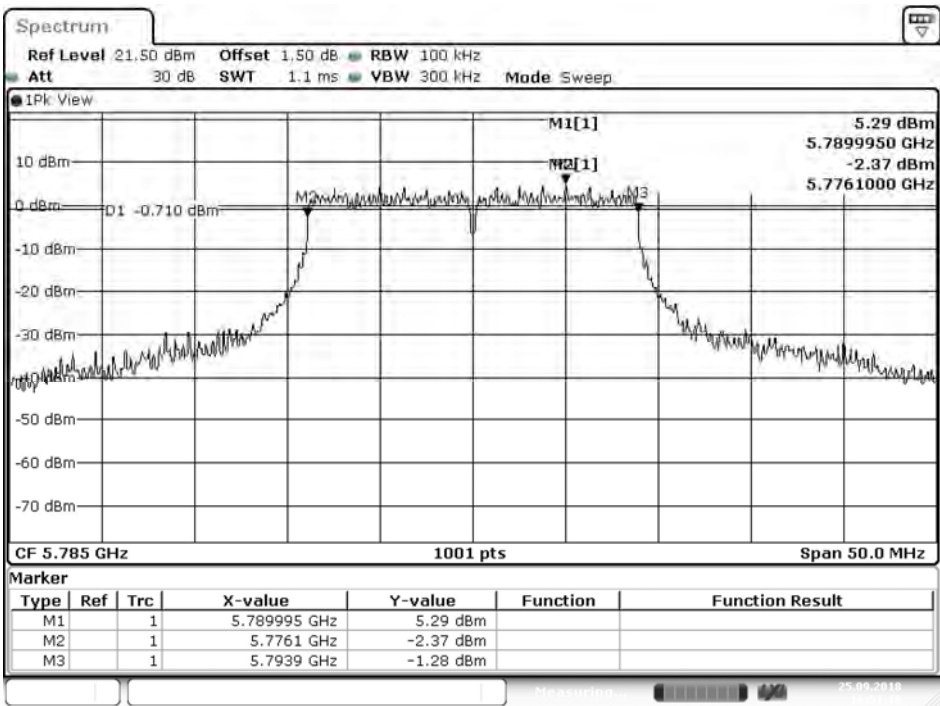


Figure Channel 157 (Chain B)



Date: 25.SEP.2018 16:51:18

Figure Channel 165 (Chain A)

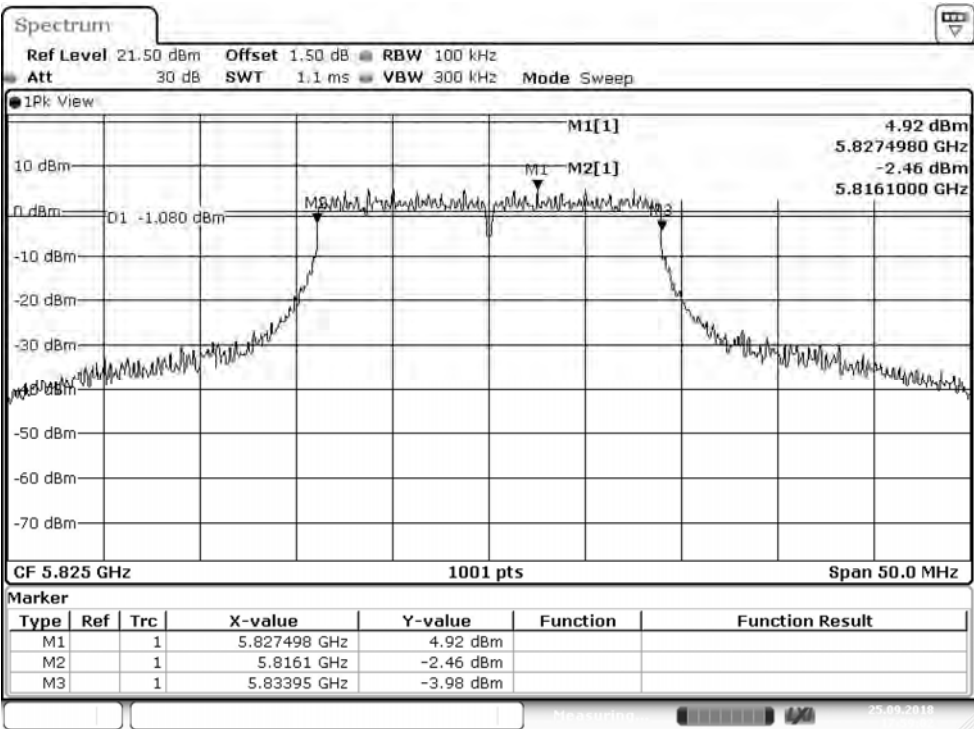
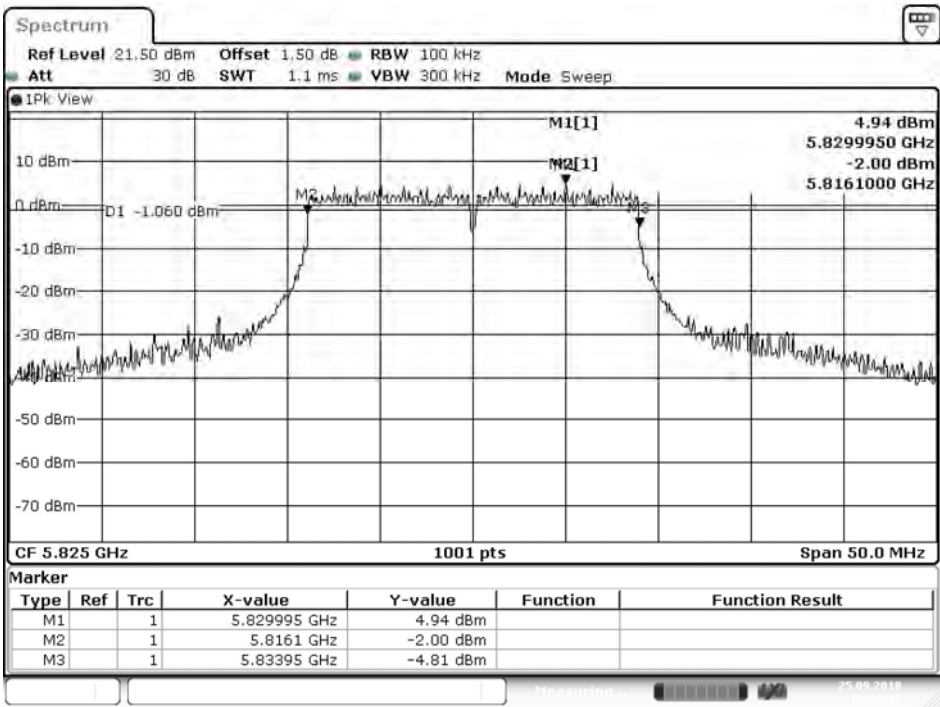


Figure Channel 165 (Chain B)



Date: 25.SEP.2018 16:53:57

待測物名稱：Intel® Wi-Fi 6 AX201

待測物型號：AX201D2W

測試頻道：--

6 dB 頻寬：100kHz

量測天線：--

檢測器：峰值

測試日期：107 年 09 月 25 日

測試項目：佔用頻帶寬度

測試模式：Mode 3: MIMO: 發射器 802.11n-40BW

視頻頻寬：300kHz

測試距離：Conducted

環境溫度：20 °C

環境濕度：48 %

Channel No.	Frequency (MHz)	Chain	Measurement Level (kHz)	Required Limit (kHz)	Result
151	5755	A	36700	>500	Pass
159	5795	A	36700	>500	Pass
151	5755	B	36700	>500	Pass
159	5795	B	36700	>500	Pass

Figure Channel 151 (Chain A)

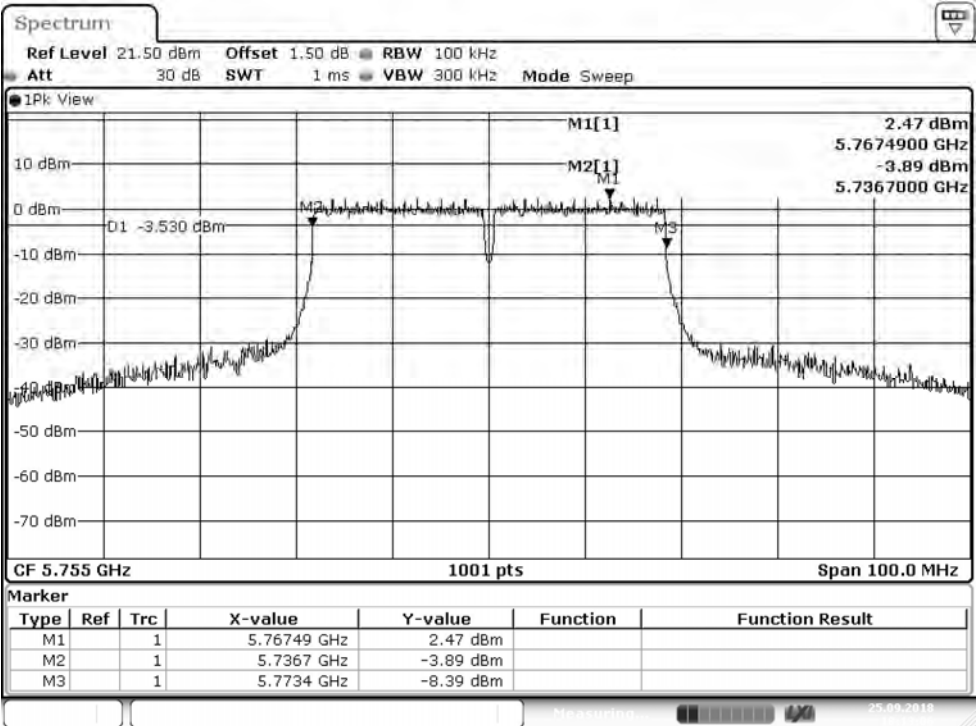
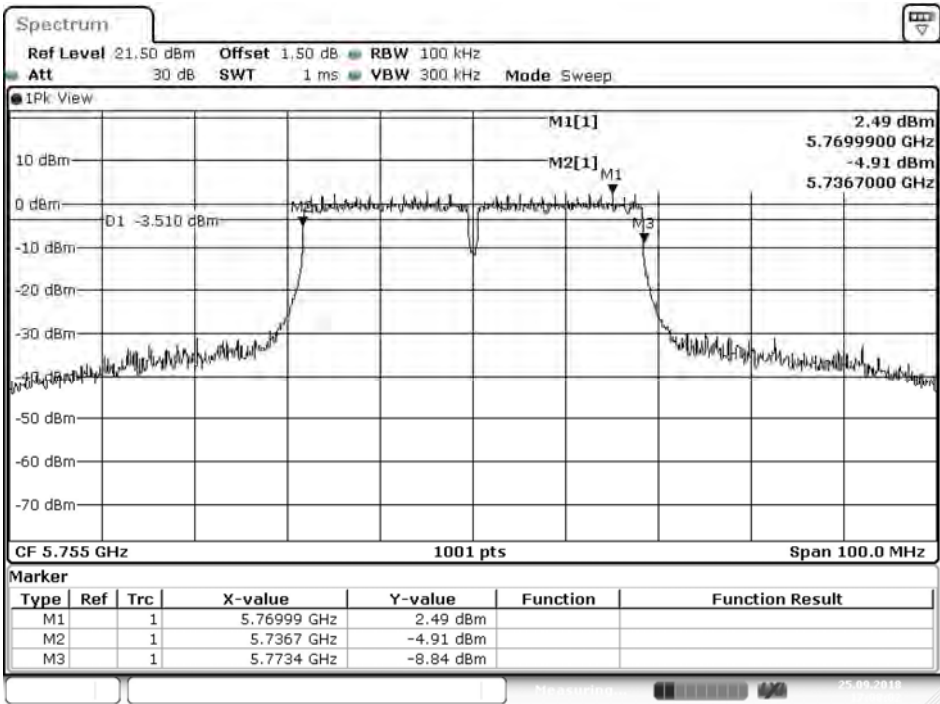


Figure Channel 151 (Chain B)



Date: 25.SEP.2018 17:08:02

Figure Channel 159 (Chain A)

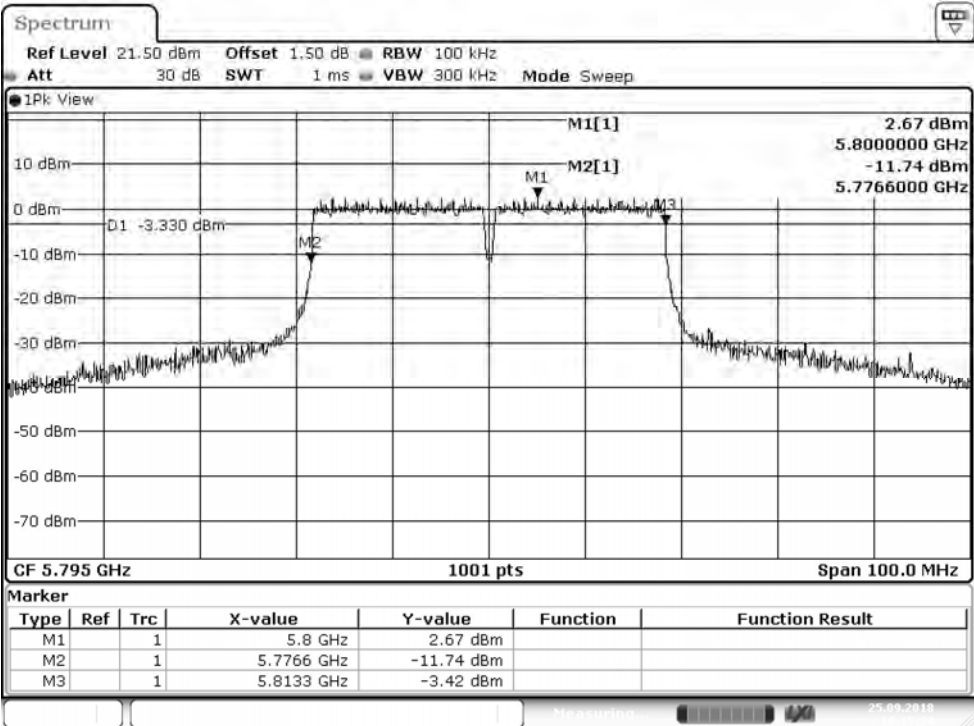
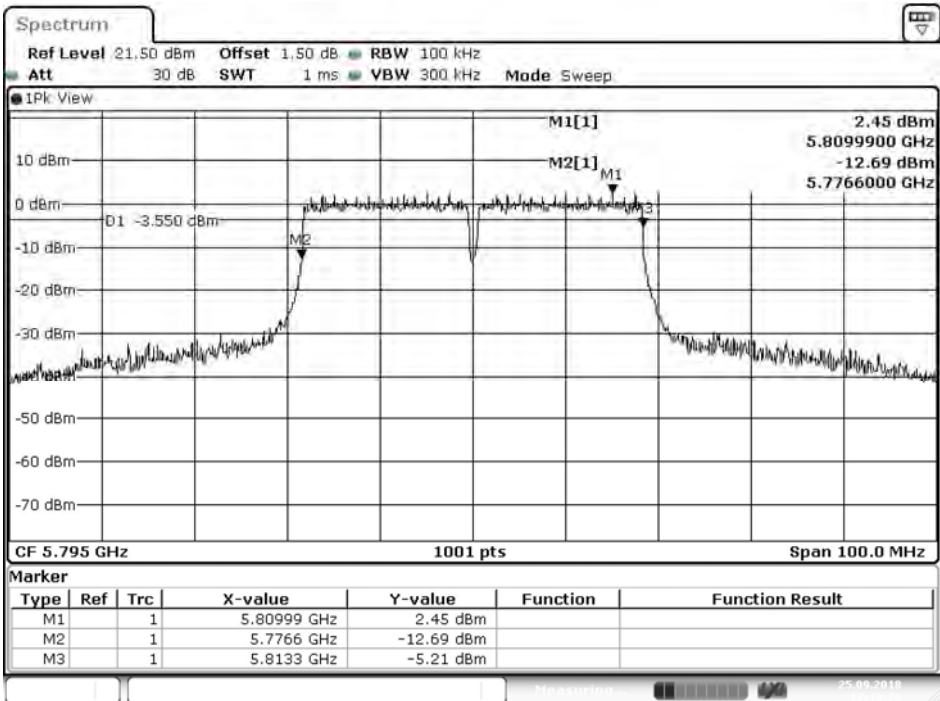


Figure Channel 159 (Chain B)



Date: 25.SEP.2018 17:10:20

待測物名稱：Intel® Wi-Fi 6 AX201

待測物型號：AX201D2W

測試頻道：--

6 dB 頻寬：100kHz

量測天線：--

檢測器：峰值

測試日期：107 年 09 月 25 日

測試項目：佔用頻帶寬度

測試模式：Mode 3: MIMO: 發射器 802.11ac-80BW

視頻頻寬：300kHz

測試距離：Conducted

環境溫度：20 °C

環境濕度：48 %

Channel No.	Frequency (MHz)	Chain	Measurement Level (kHz)	Required Limit (kHz)	Result
155	5775	A	75600	>500	Pass
155	5775	B	75600	>500	Pass

Figure Channel 155 (Chain A)

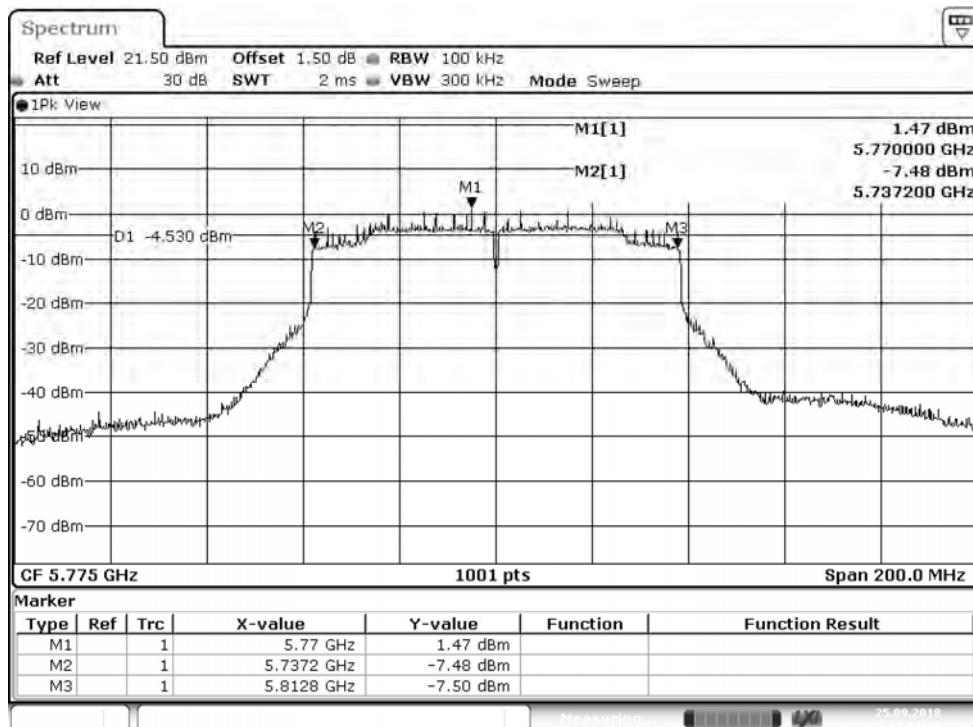
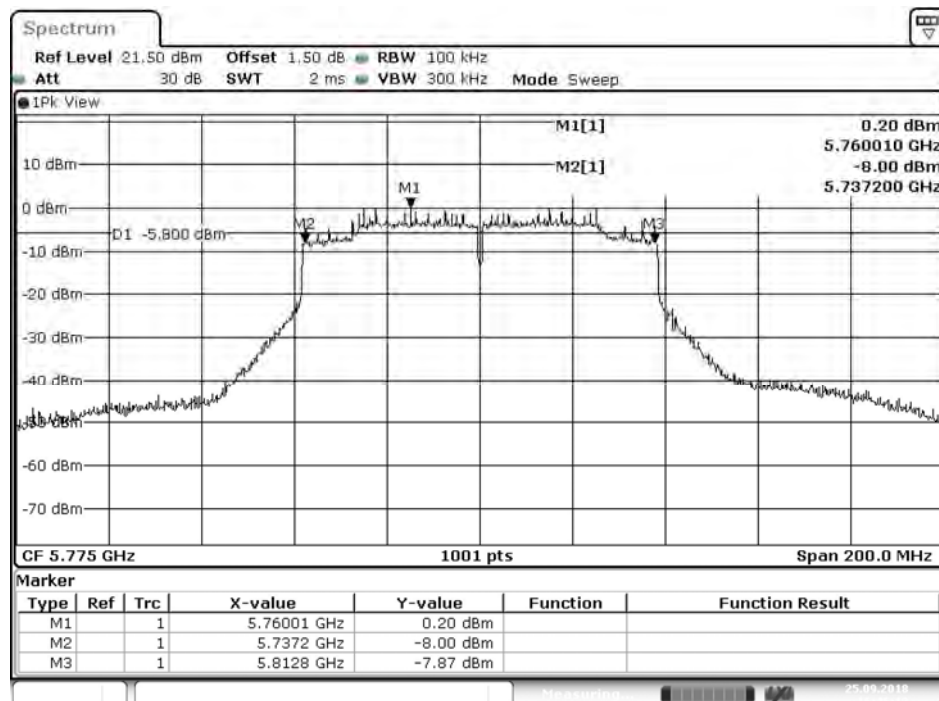


Figure Channel 155 (Chain B)



Date: 25.SEP.2018 16:46:13

待測物名稱：Intel® Wi-Fi 6 AX201

待測物型號：AX201D2W

測試頻道：--

6 dB 頻寬：100kHz

量測天線：--

檢測器：峰值

測試日期：107 年 09 月 25 日

測試項目：佔用頻帶寬度

測試模式：Mode 1: SISO A: 發射器 802.11ax-20BW

視頻頻寬：300kHz

測試距離：Conducted

環境溫度：20 °C

環境濕度：48 %

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
149	5745	19150	>500	Pass
157	5785	19150	>500	Pass
165	5825	19150	>500	Pass

Figure Channel 149

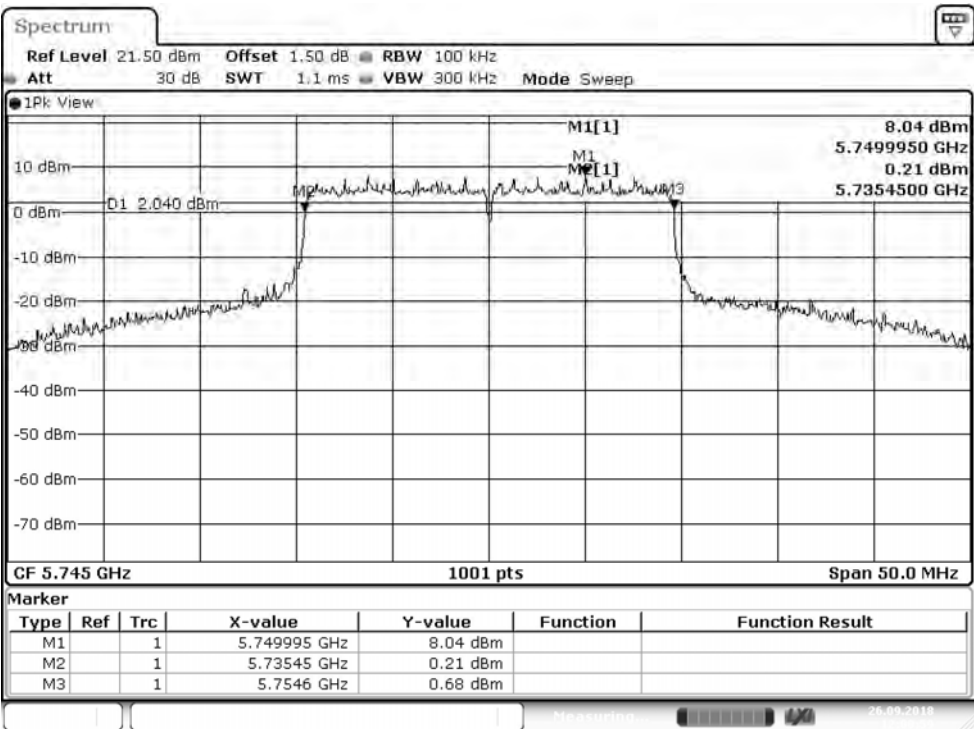


Figure Channel 157

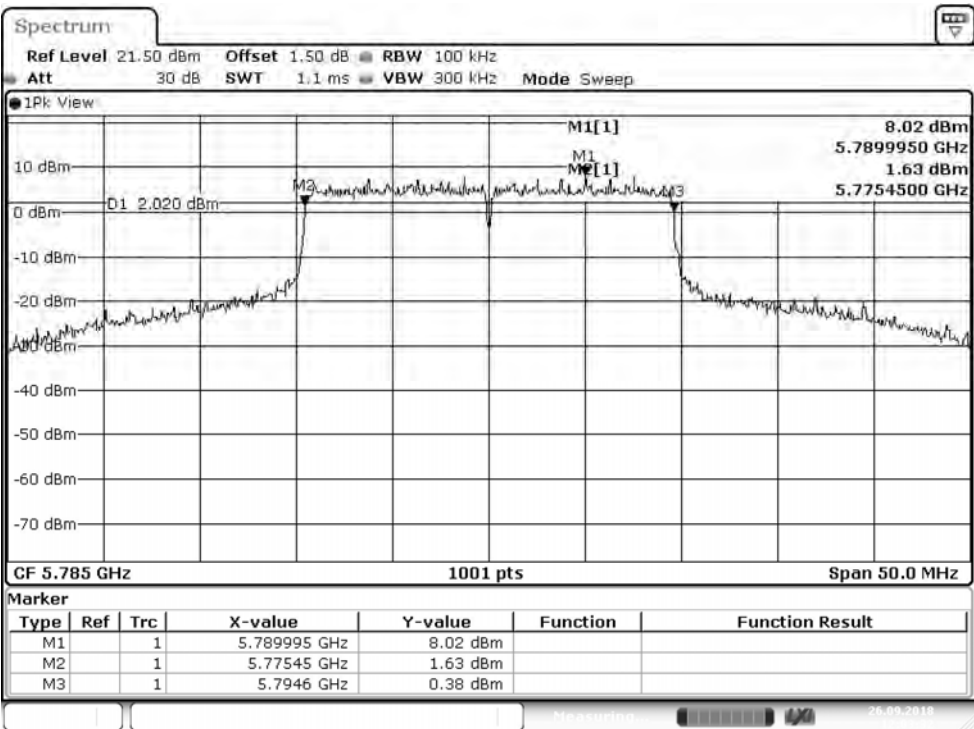
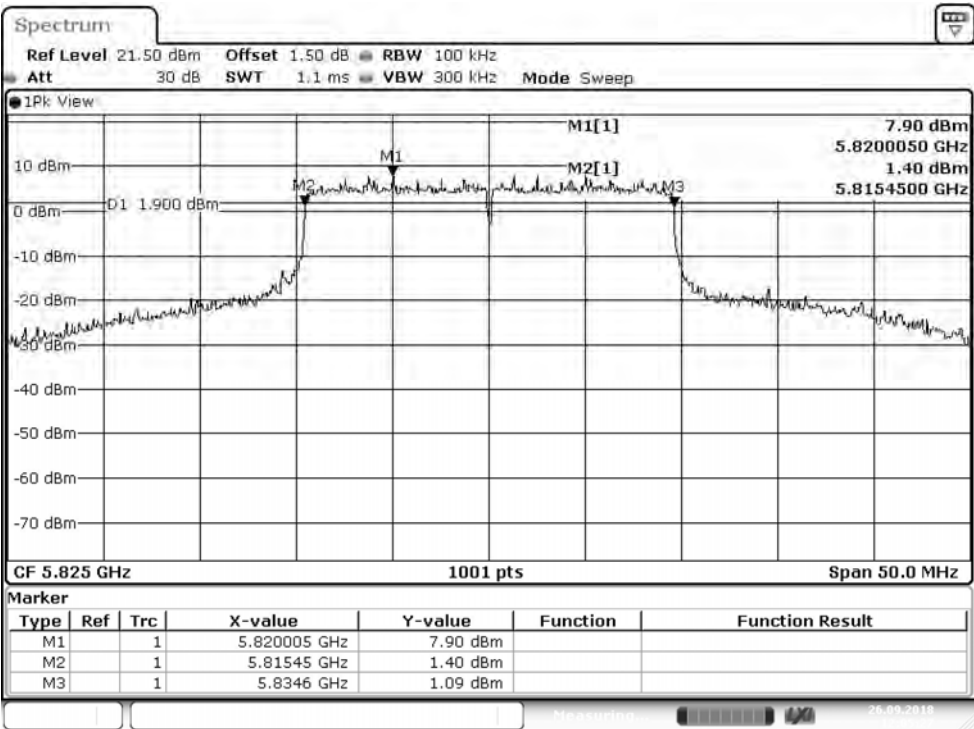


Figure Channel 165



待測物名稱：Intel® Wi-Fi 6 AX201

待測物型號：AX201D2W

測試頻道：--

6 dB 頻寬：100kHz

量測天線：--

檢測器：峰值

測試日期：107 年 09 月 26 日

測試項目：佔用頻帶寬度

測試模式：Mode 1: SISO A: 發射器 802.11ax-40BW

視頻頻寬：300kHz

測試距離：Conducted

環境溫度：20 °C

環境濕度：48 %

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
151	5755	38400	>500	Pass
159	5795	38400	>500	Pass

Figure Channel 151

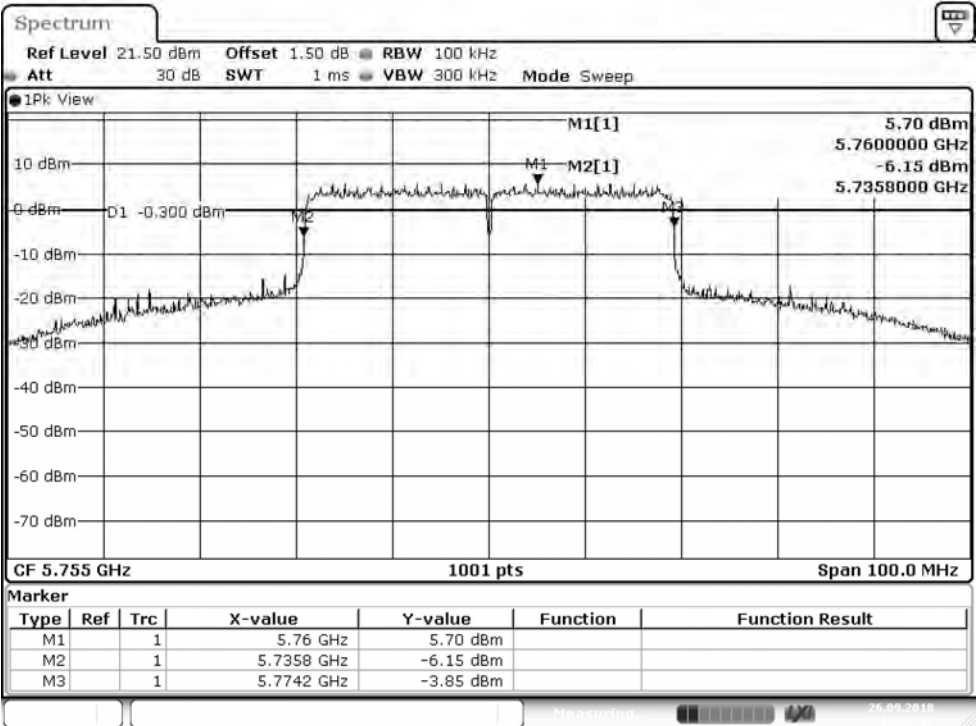
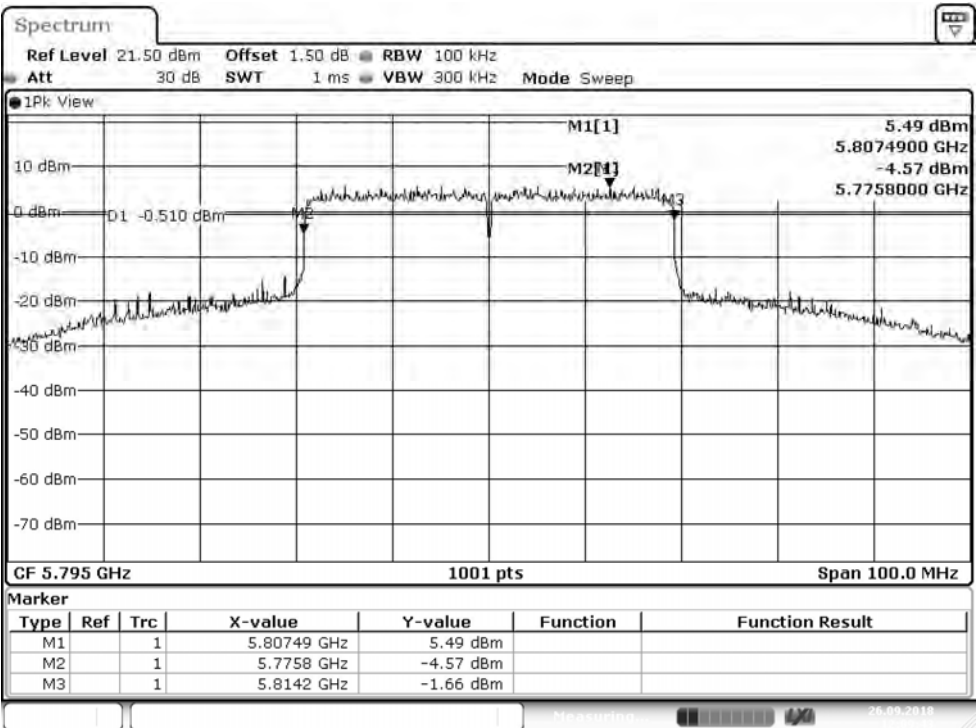


Figure Channel 159



待測物名稱：Intel® Wi-Fi 6 AX201

待測物型號：AX201D2W

測試頻道：--

6 dB 頻寬：100kHz

量測天線：--

檢測器：峰值

測試日期：107 年 09 月 25 日

測試項目：佔用頻帶寬度

測試模式：Mode 1: SISO A: 發射器 802.11ax-80BW

視頻頻寬：300kHz

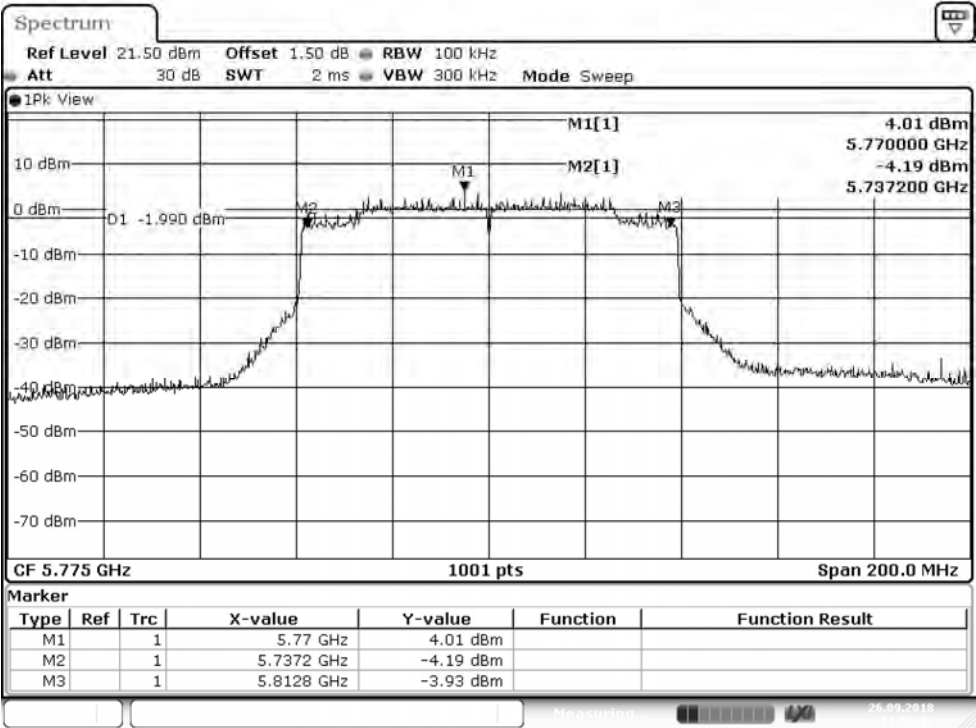
測試距離：Conducted

環境溫度：20 °C

環境濕度：48 %

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
155	5775	75600	>500	Pass

Figure Channel 155



待測物名稱：Intel® Wi-Fi 6 AX201

待測物型號：AX201D2W

測試頻道：--

6 dB 頻寬：100kHz

量測天線：--

檢測器：峰值

測試日期：107 年 09 月 25 日

測試項目：佔用頻帶寬度

測試模式：Mode 2: SISO B: 發射器 802.11ax-20BW

視頻頻寬：300kHz

測試距離：Conducted

環境溫度：20 °C

環境濕度：48 %

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
149	5745	19150	>500	Pass
157	5785	19150	>500	Pass
165	5825	19100	>500	Pass

Figure Channel 149

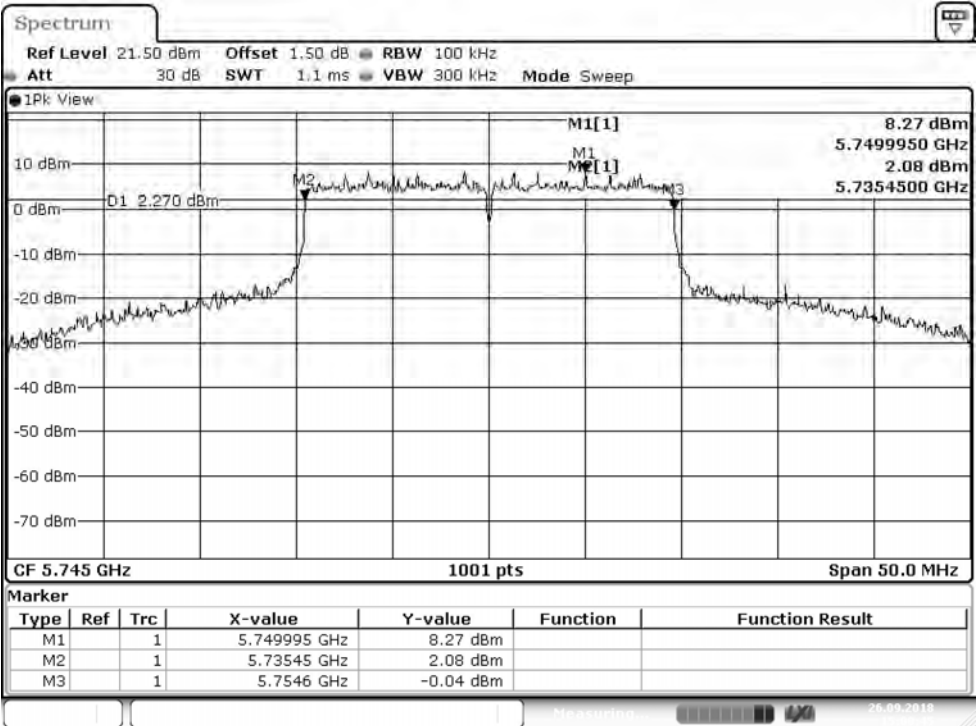


Figure Channel 157

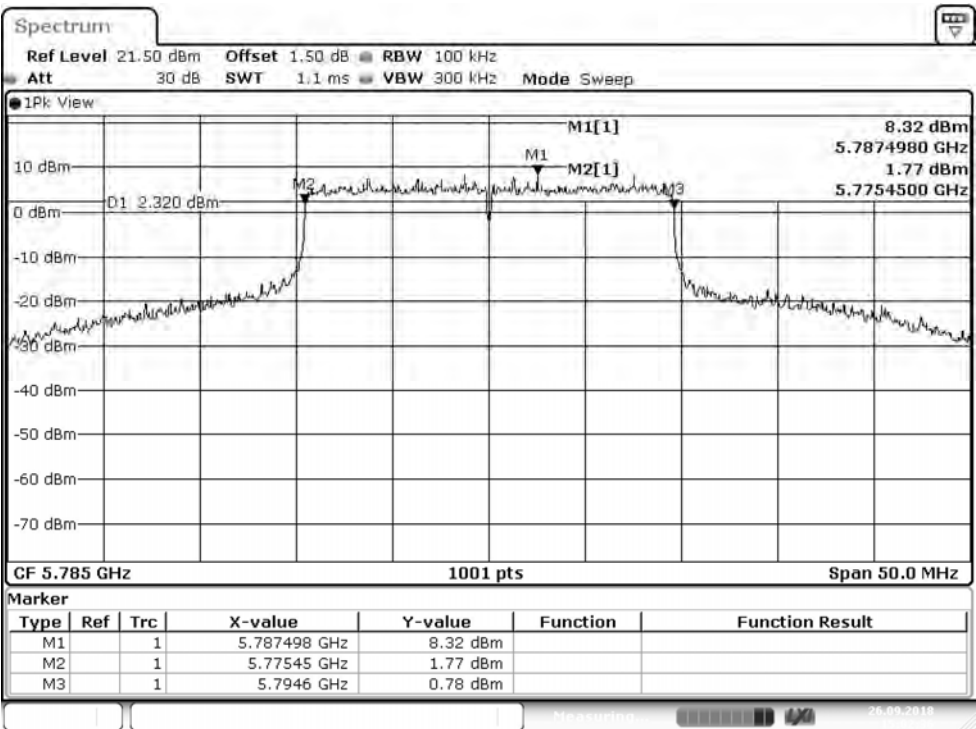
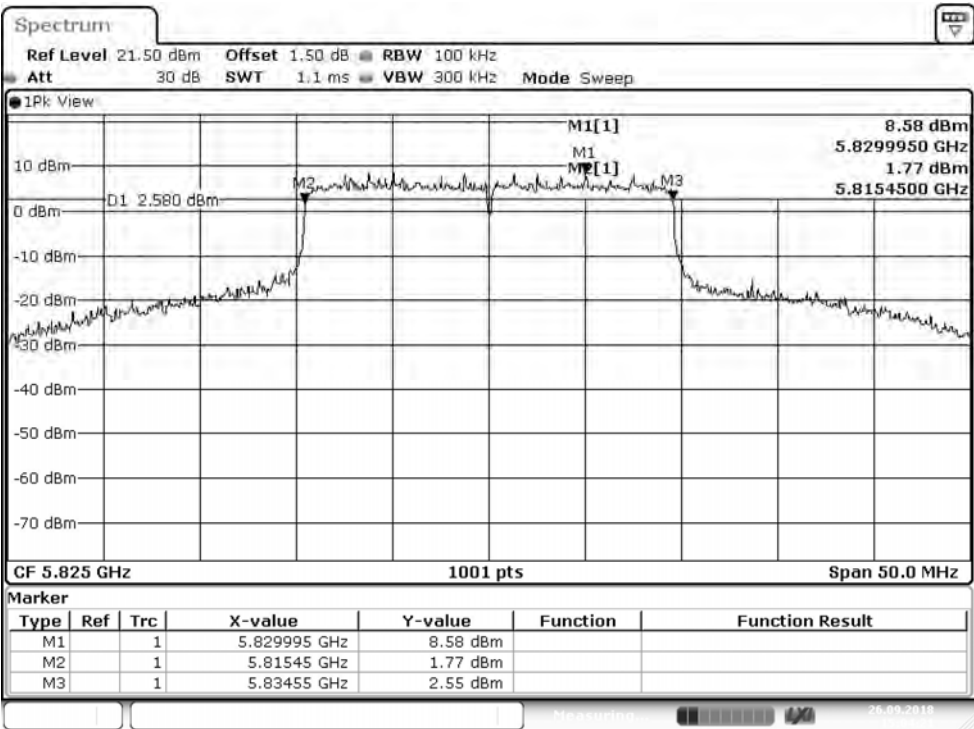


Figure Channel 165



待測物名稱：Intel® Wi-Fi 6 AX201

待測物型號：AX201D2W

測試頻道：--

6 dB 頻寬：100kHz

量測天線：--

檢測器：峰值

測試日期：107 年 09 月 26 日

測試項目：佔用頻帶寬度

測試模式：Mode 2: SISO B: 發射器 802.11ax-40BW

視頻頻寬：300kHz

測試距離：Conducted

環境溫度：20 °C

環境濕度：48 %

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
151	5755	38400	>500	Pass
159	5795	38300	>500	Pass

Figure Channel 151

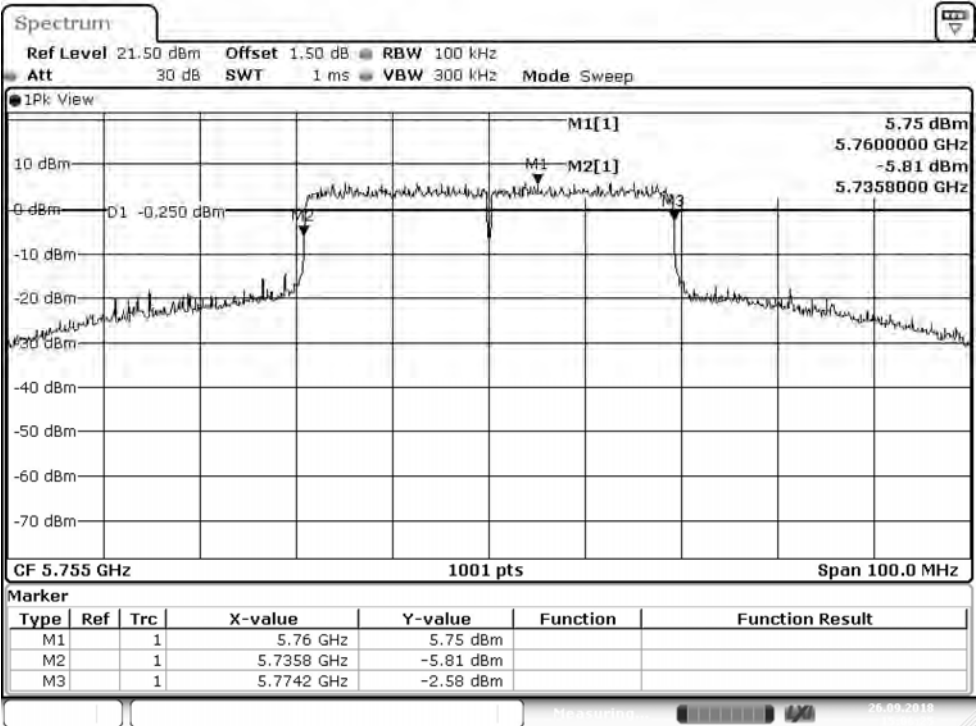
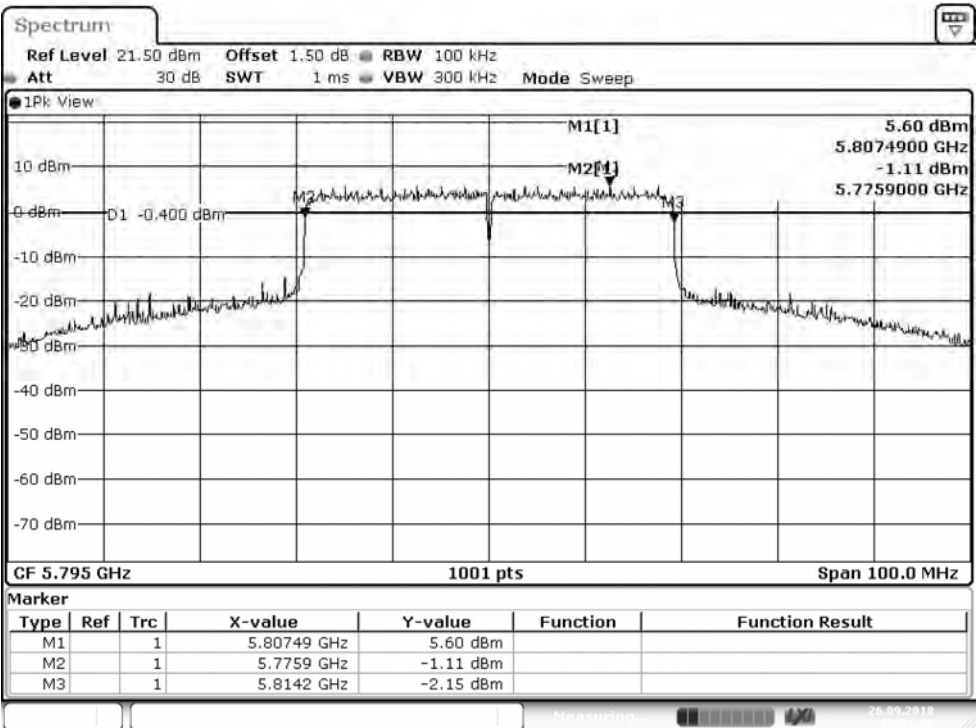


Figure Channel 159



待測物名稱：Intel® Wi-Fi 6 AX201

待測物型號：AX201D2W

測試頻道：--

6 dB 頻寬：100kHz

量測天線：--

檢測器：峰值

測試日期：107 年 09 月 25 日

測試項目：佔用頻帶寬度

測試模式：Mode 2: SISO B: 發射器 802.11ax-80BW

視頻頻寬：300kHz

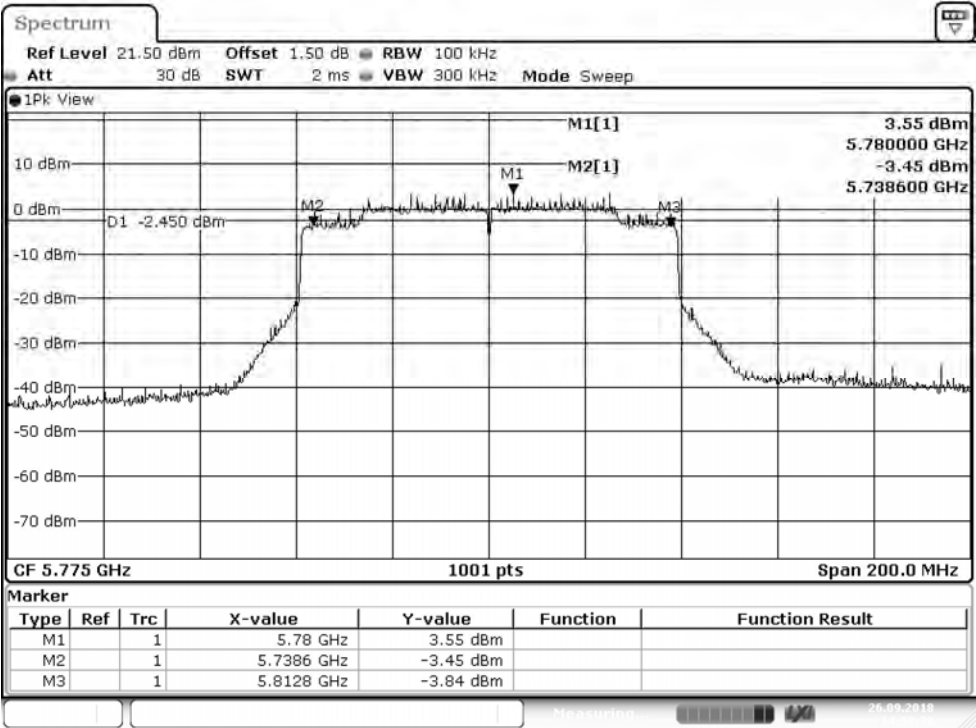
測試距離：Conducted

環境溫度：20 °C

環境濕度：48 %

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
155	5775	74200	>500	Pass

Figure Channel 155



待測物名稱：Intel® Wi-Fi 6 AX201

待測物型號：AX201D2W

測試頻道：--

6 dB 頻寬：100kHz

量測天線：--

檢測器：峰值

測試日期：107 年 09 月 25 日

測試項目：佔用頻帶寬度

測試模式：Mode 3: MIMO: 發射器 802.11ax-20BW

視頻頻寬：300kHz

測試距離：Conducted

環境溫度：20 °C

環境濕度：48 %

Channel No.	Frequency (MHz)	Chain	Measurement Level (kHz)	Required Limit (kHz)	Result
149	5745	A	19150	>500	Pass
157	5785	A	19200	>500	Pass
165	5825	A	19150	>500	Pass
149	5745	B	19150	>500	Pass
157	5785	B	19150	>500	Pass
165	5825	B	19200	>500	Pass

Figure Channel 149 (Chain A)

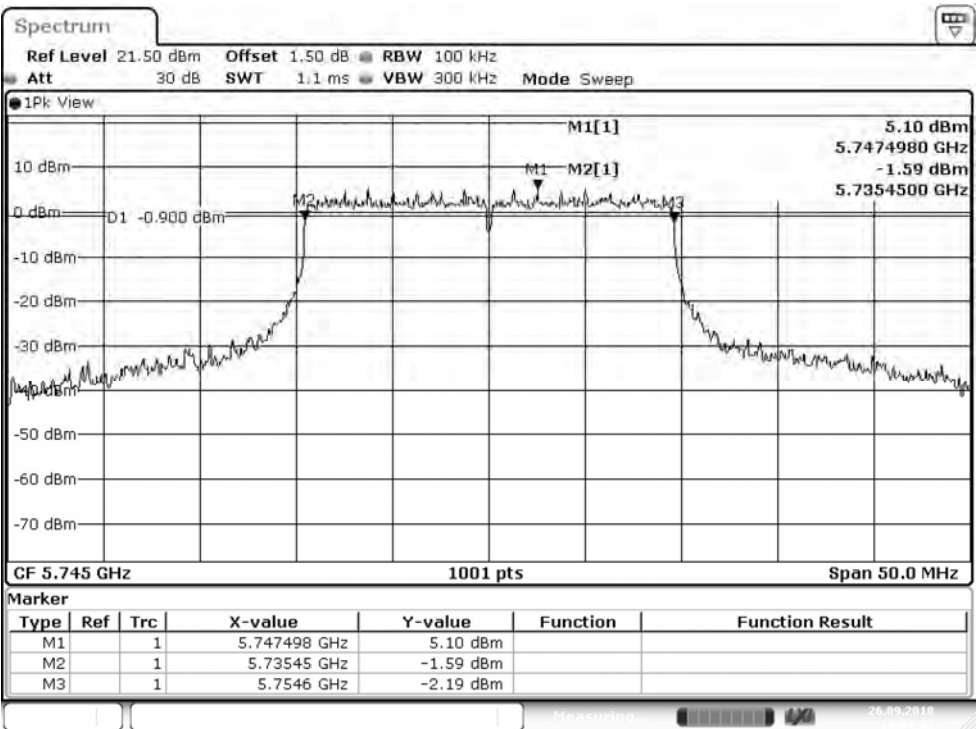
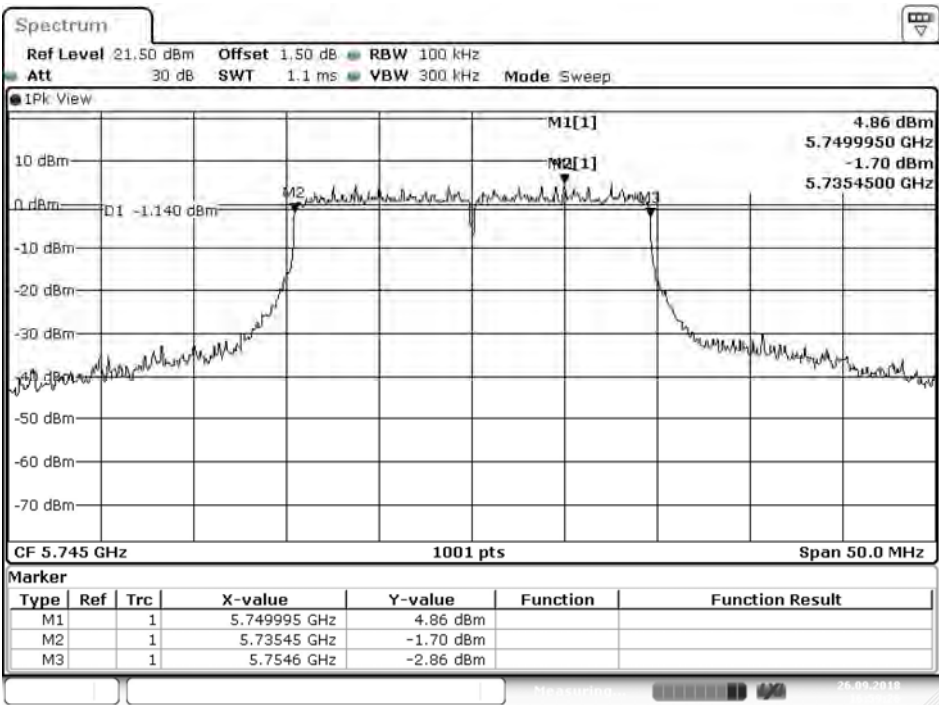


Figure Channel 149 (Chain B)



Date: 26.SEP.2018 16:59:27

Figure Channel 157 (Chain A)

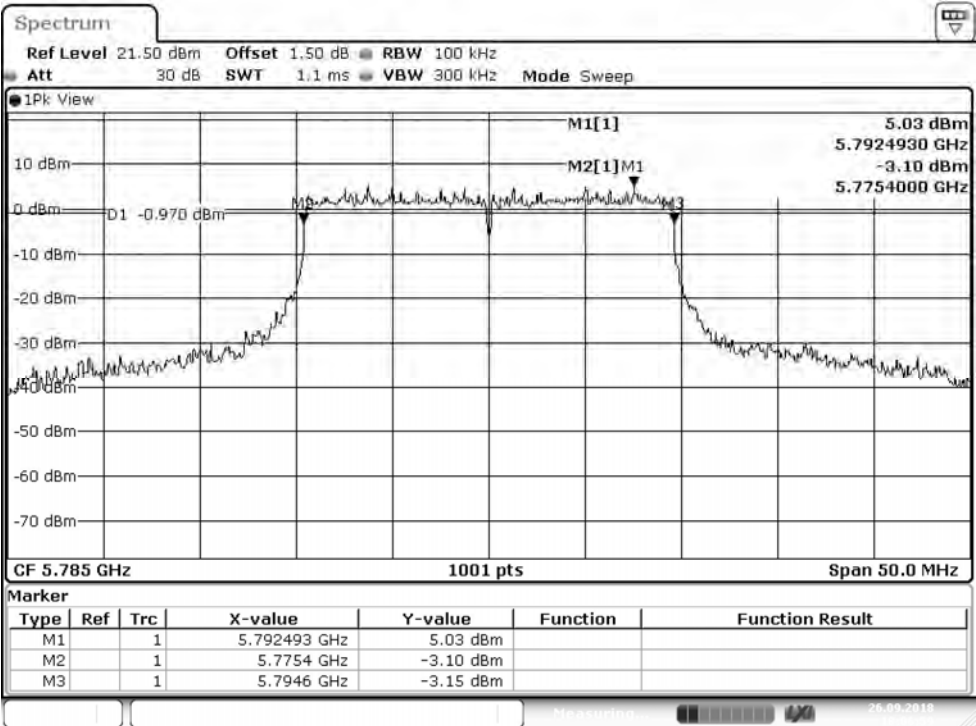
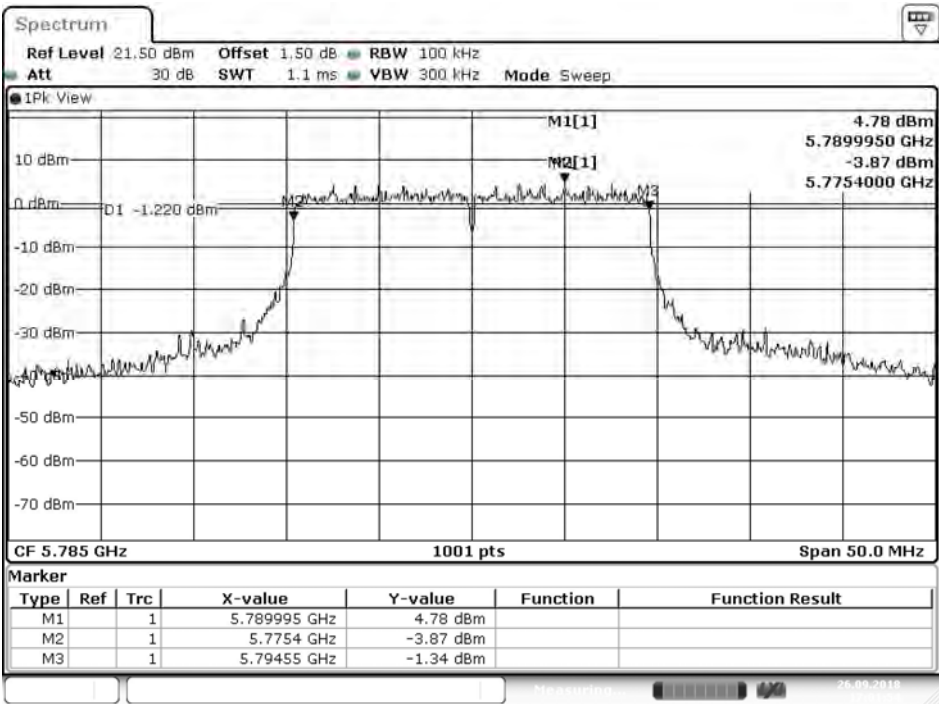


Figure Channel 157 (Chain B)



Date: 26.SEP.2018 17:01:54

Figure Channel 165 (Chain A)

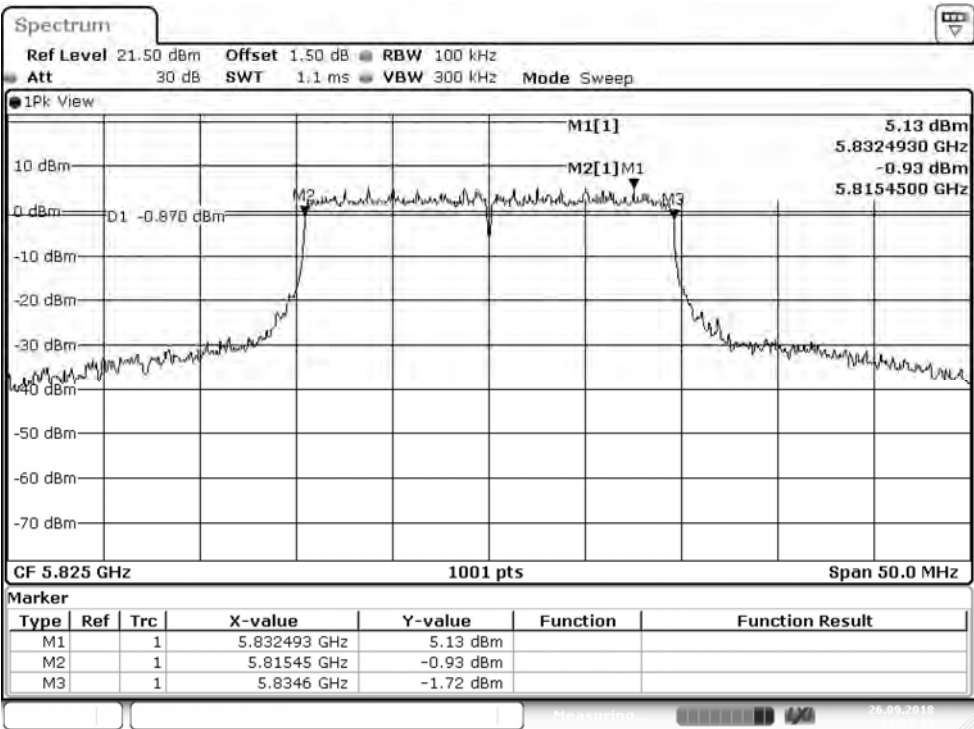
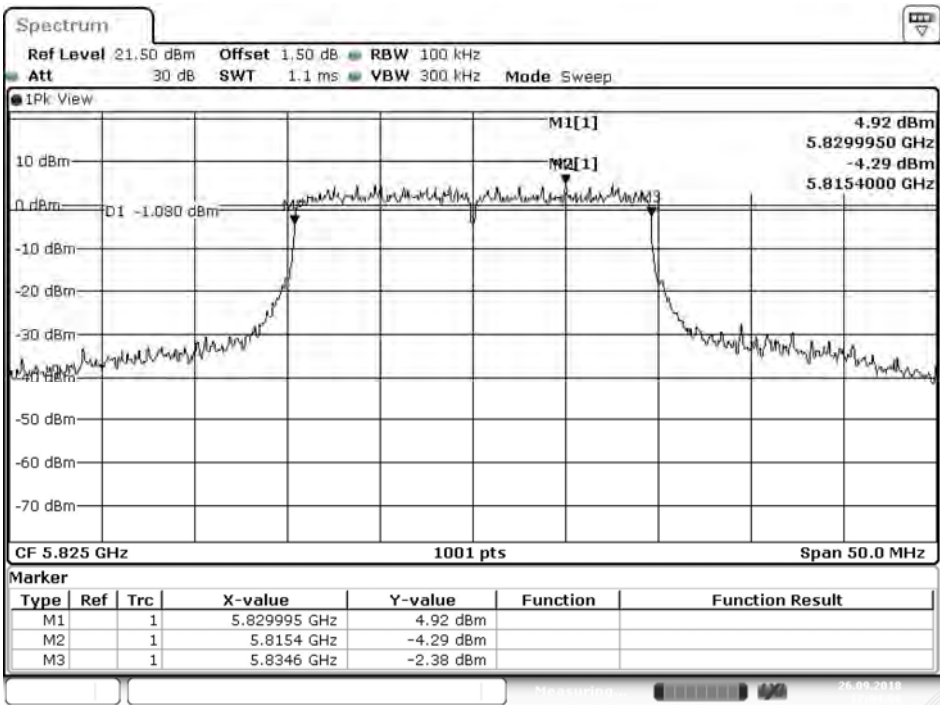


Figure Channel 165 (Chain B)



Date: 26.SEP.2018 17:04:09

待測物名稱：Intel® Wi-Fi 6 AX201

待測物型號：AX201D2W

測試頻道：--

6 dB 頻寬：100kHz

量測天線：--

檢測器：峰值

測試日期：107 年 09 月 25 日

測試項目：佔用頻帶寬度

測試模式：Mode 3: MIMO: 發射器 802.11ax-40BW

視頻頻寬：300kHz

測試距離：Conducted

環境溫度：20 °C

環境濕度：48 %

Channel No.	Frequency (MHz)	Chain	Measurement Level (kHz)	Required Limit (kHz)	Result
151	5755	A	38400	>500	Pass
159	5795	A	38400	>500	Pass
151	5755	B	38400	>500	Pass
159	5795	B	38400	>500	Pass

Figure Channel 151 (Chain A)

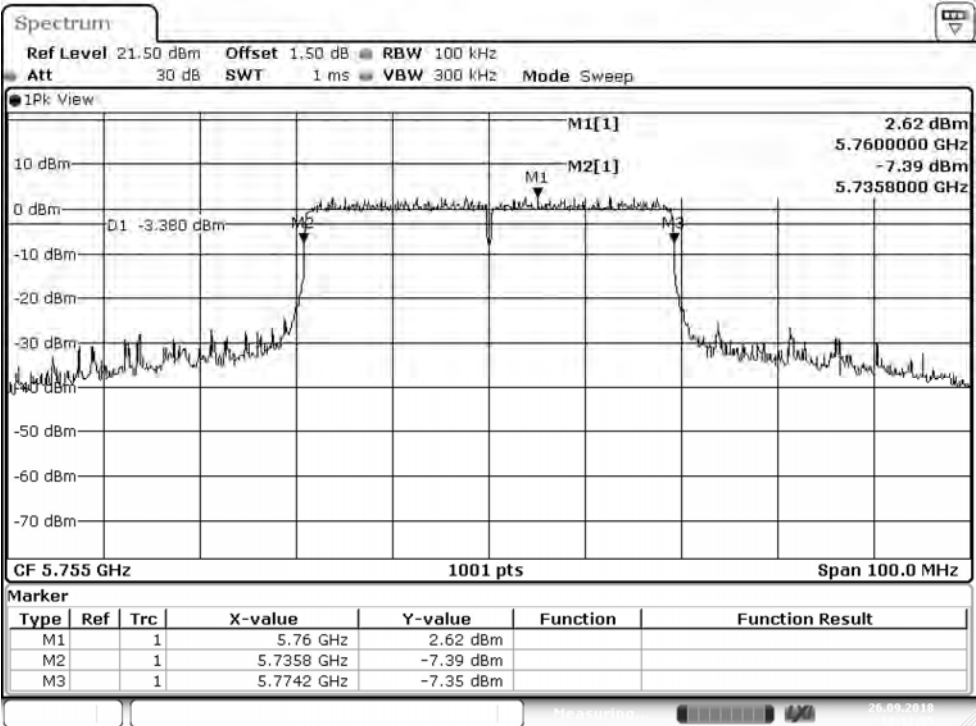
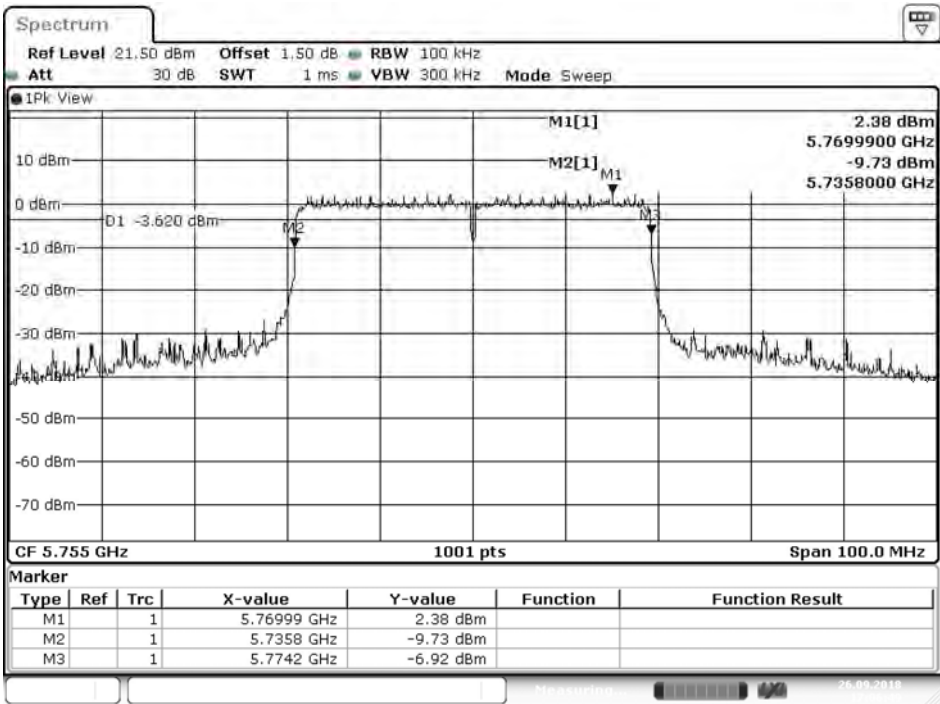


Figure Channel 151 (Chain B)



Date: 26.SEP.2018 17:06:50

Figure Channel 159 (Chain A)

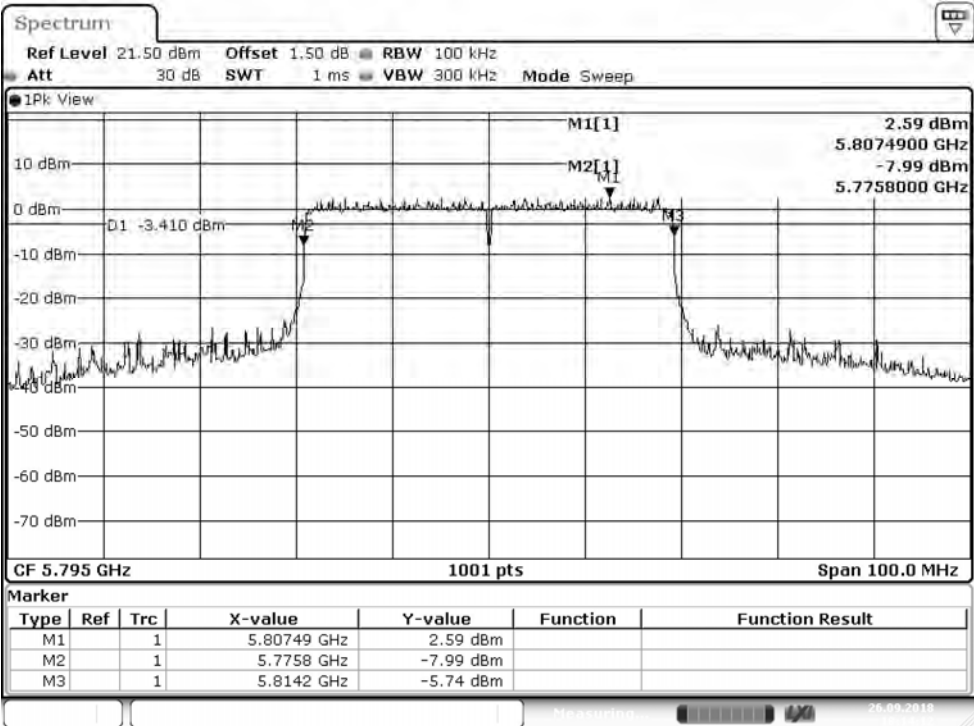
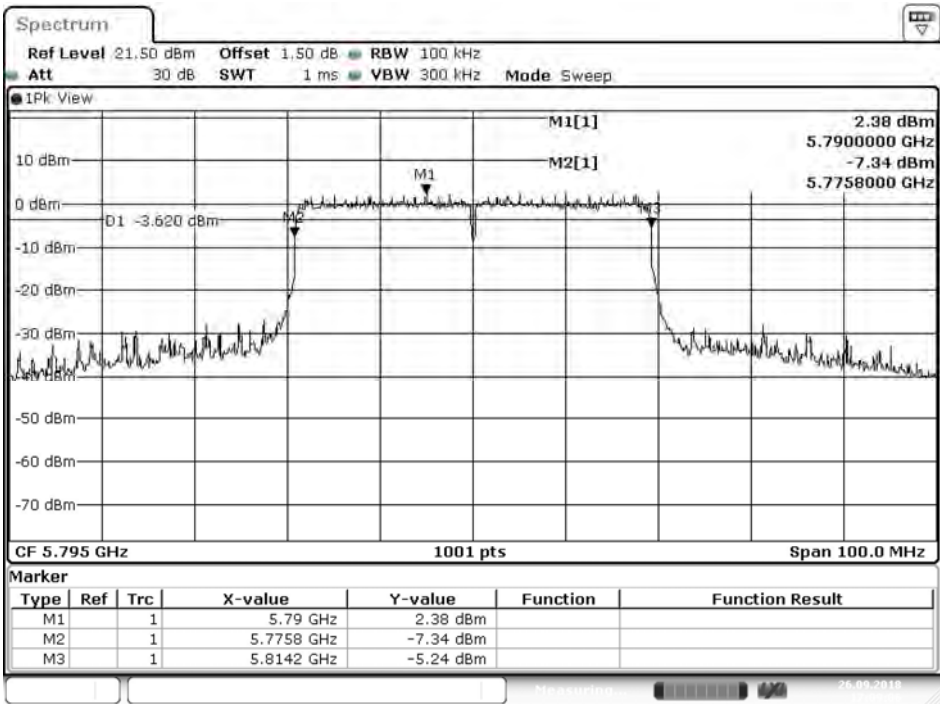


Figure Channel 159 (Chain B)



Date: 26.SEP.2018 17:09:07

待測物名稱：Intel® Wi-Fi 6 AX201

待測物型號：AX201D2W

測試頻道：--

6 dB 頻寬：100kHz

量測天線：--

檢測器：峰值

測試日期：107 年 09 月 25 日

測試項目：佔用頻帶寬度

測試模式：Mode 3: MIMO: 發射器 802.11ax-80BW

視頻頻寬：300kHz

測試距離：Conducted

環境溫度：20 °C

環境濕度：48 %

Channel No.	Frequency (MHz)	Chain	Measurement Level (kHz)	Required Limit (kHz)	Result
155	5775	A	74200	>500	Pass
155	5775	B	75600	>500	Pass

Figure Channel 155 (Chain A)

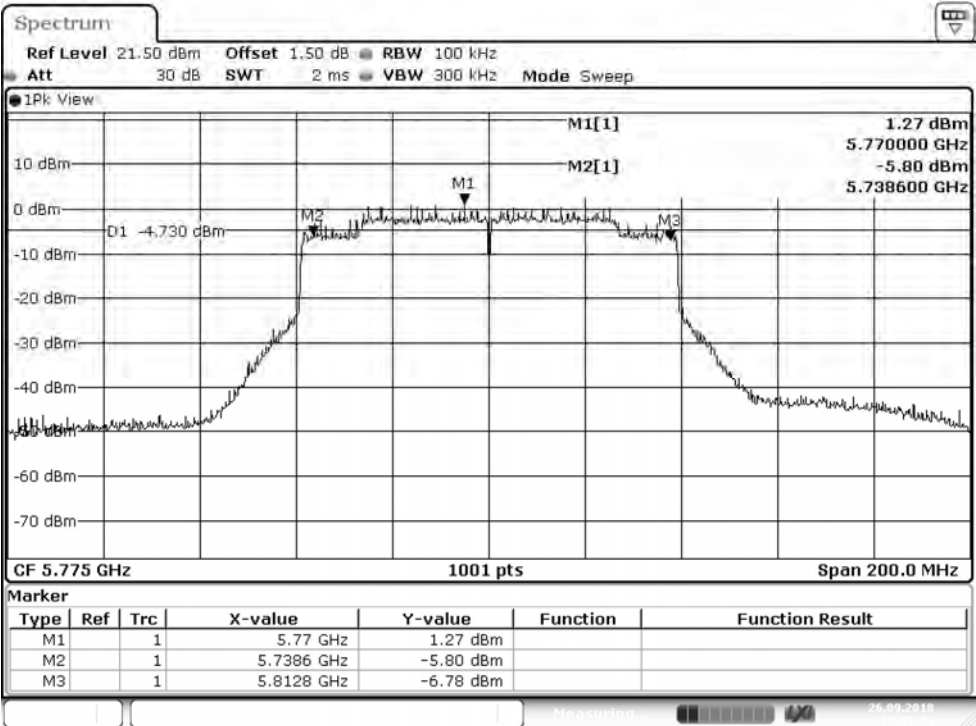
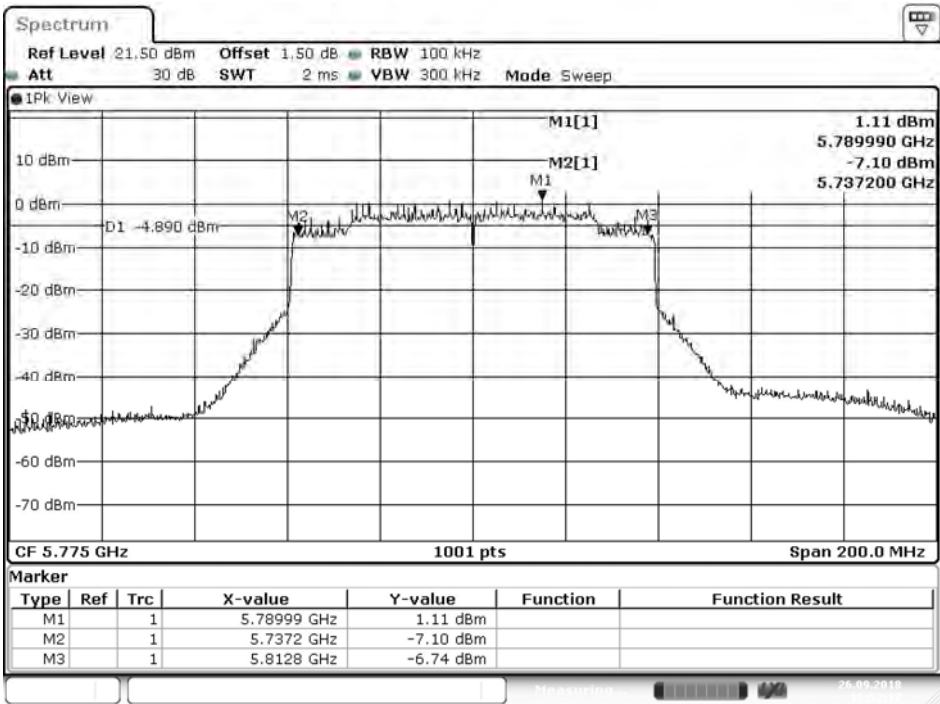


Figure Channel 155 (Chain B)



Date: 26.SEP.2018 16:52:18

佔用頻帶寬度測試結果:

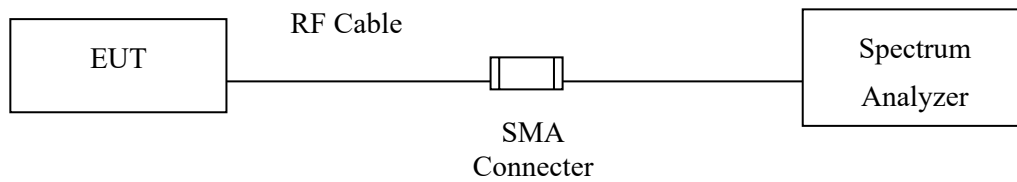
PASS

12. Duty Cycle

12.1. 量測方法

待測物之天線埠經由適當之衰減直接連至頻譜分析儀RF輸入端，
待測物應在正常發射狀態下量測。

12.2. 測試架構圖



12.3. 量測不確定度

此項測試之量測不確定度為 $\pm 2.31\text{msec}$

12.4. Duty Cycle 測試結果

待測物名稱：Intel® Wi-Fi 6 AX201

待測物型號：AX201D2W

測試頻道：--

量測天線：--

檢測器：峰值

測試日期：107年10月22日

測試項目：Duty Cycle

測試模式：--

測試距離：Conducted

環境溫度：20 °C

環境濕度：50 %

Duty Cycle Formula:

Duty Cycle = Ton / (Ton + Toff)

Duty Factor = 10 Log (1/Duty Cycle)

Results:

SISO A

5GHz band	Ton (ms)	Ton + Toff (ms)	Duty Cycle (%)	Duty Factor (dB)
802.11a	2.0800	2.3400	88.89	0.51
802.11n20	24.7800	25.1400	98.57	0.06
802.11n40	17.8100	18.1100	98.34	0.07
802.11ac80	11.0100	11.3100	97.35	0.12
802.11ac160	5.5100	5.7900	95.16	0.22
802.11ax20	24.6900	24.9600	98.92	0.05
802.11ax40	19.6900	19.9600	98.65	0.06
802.11ax80	9.4900	9.7600	97.23	0.12
802.11ax160	4.7600	5.0200	94.82	0.23

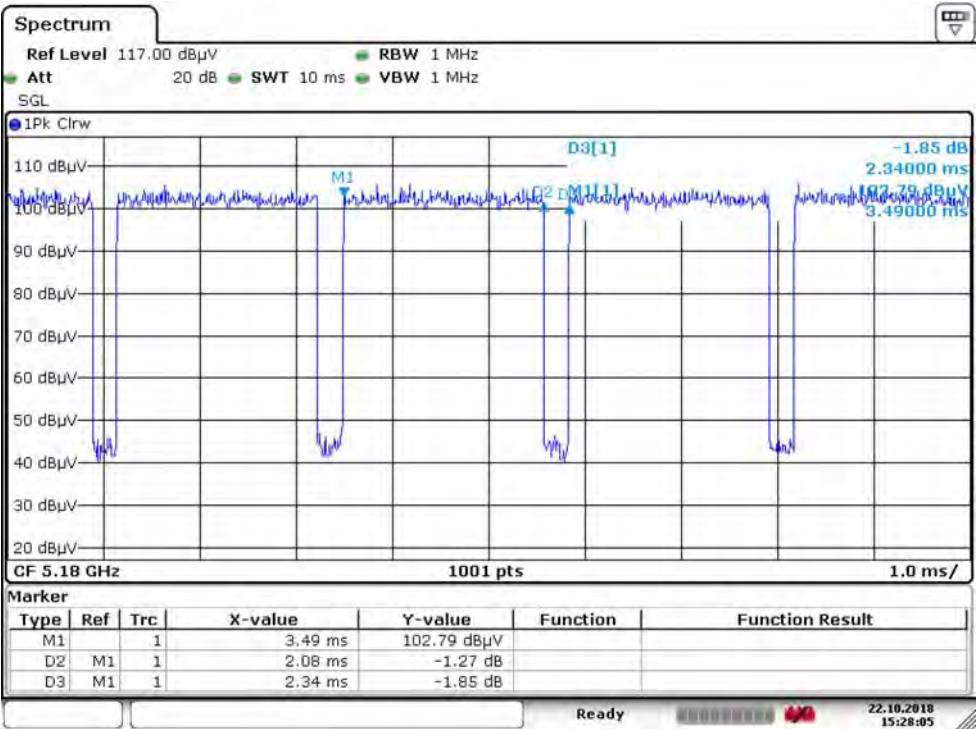
SISO B

5GHz band	Ton (ms)	Ton + Toff (ms)	Duty Cycle (%)	Duty Factor (dB)
802.11a	2.0800	2.3500	88.51	0.53
802.11n20	24.7900	25.0900	98.80	0.05
802.11n40	17.8900	18.1900	98.35	0.07
802.11ac80	10.9900	11.2600	97.60	0.11
802.11ac160	5.4900	5.7900	94.82	0.23
802.11ax20	24.6300	24.9400	98.76	0.05
802.11ax40	19.8300	19.9400	99.45	0.02
802.11ax80	9.4300	9.7400	96.82	0.14
802.11ax160	4.7800	5.0400	94.84	0.23

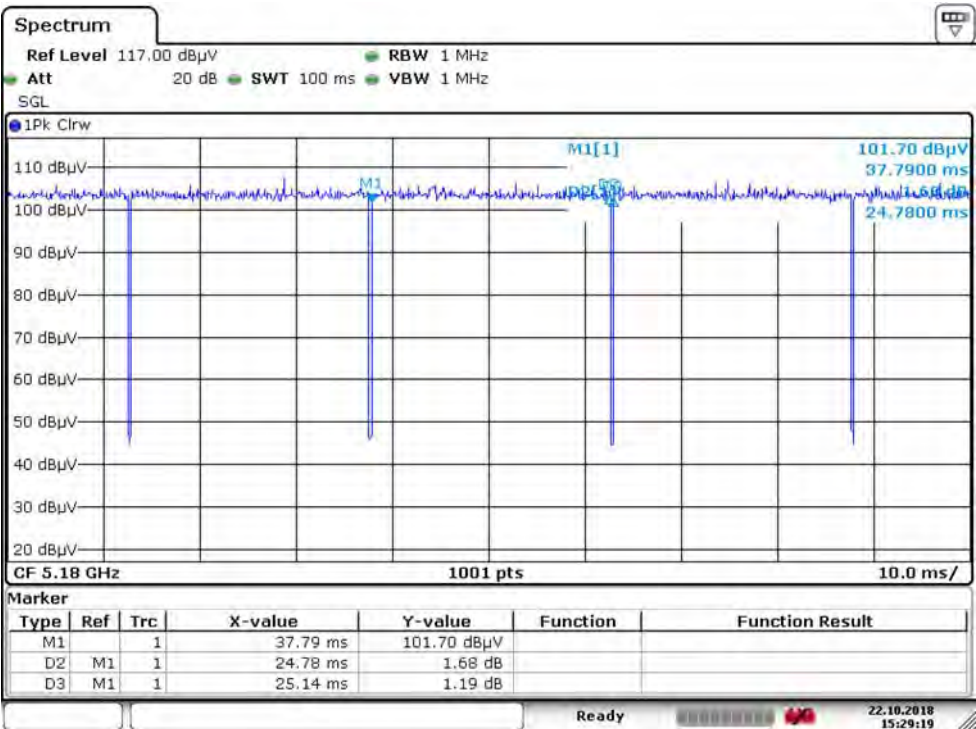
MIMO

5GHz band	Ton (ms)	Ton + Toff (ms)	Duty Cycle (%)	Duty Factor (dB)
802.11n20	18.5500	18.8500	98.41	0.07
802.11n40	8.9500	9.2500	96.76	0.14
802.11ac80	0.4700	0.7600	61.84	2.09
802.11ac160	2.7700	3.0400	91.12	0.40
802.11ax20	19.7500	20.0500	98.50	0.07
802.11ax40	9.8500	10.1500	97.04	0.13
802.11ax80	4.7300	5.0600	93.48	0.29
802.11ax160	2.3900	2.6600	89.85	0.46

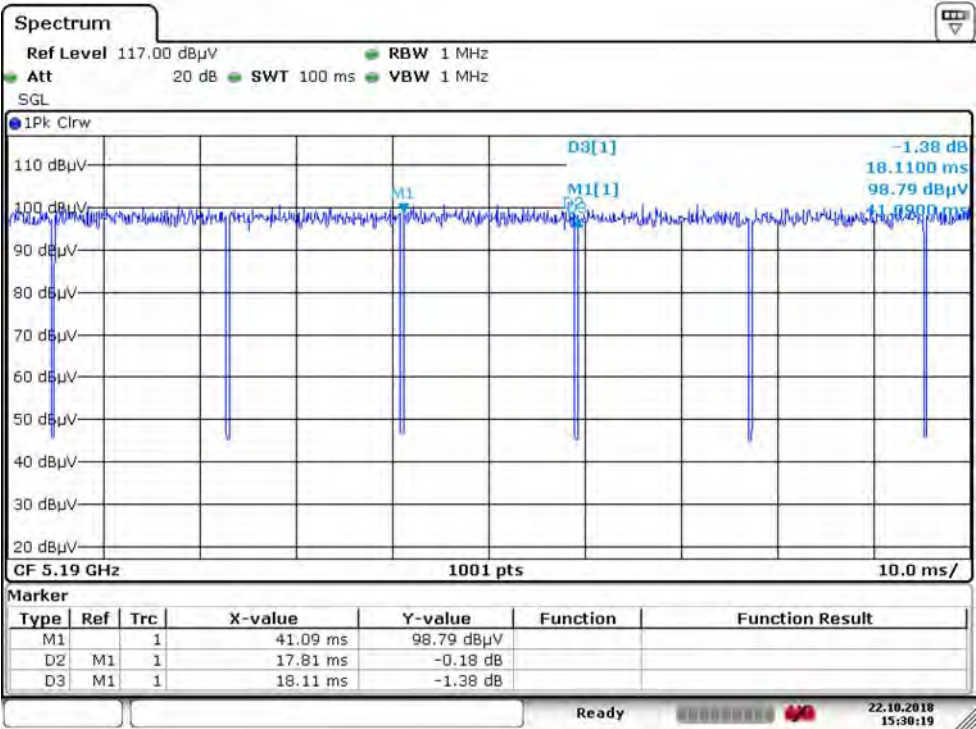
802.11a (SISO A)



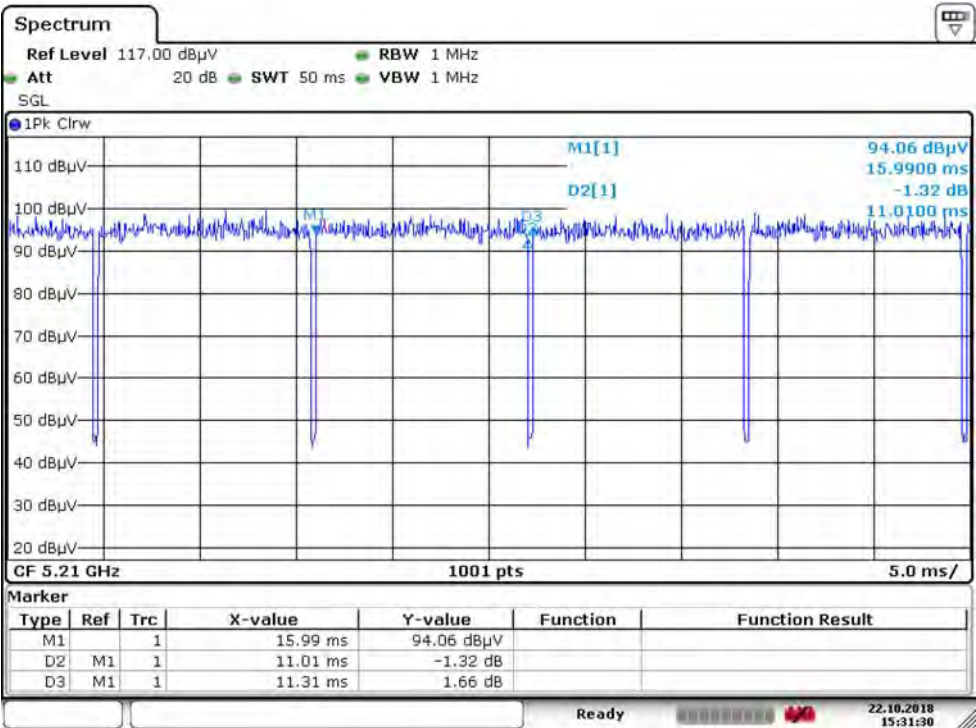
802.11n20 (SISO A)



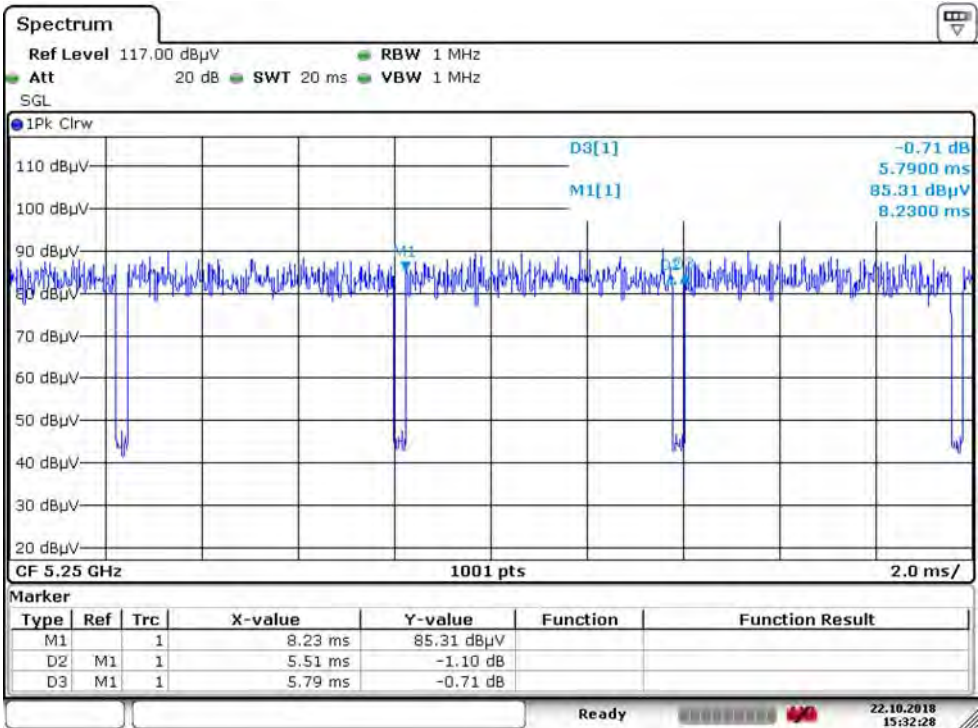
802.11n40 (SISO A)



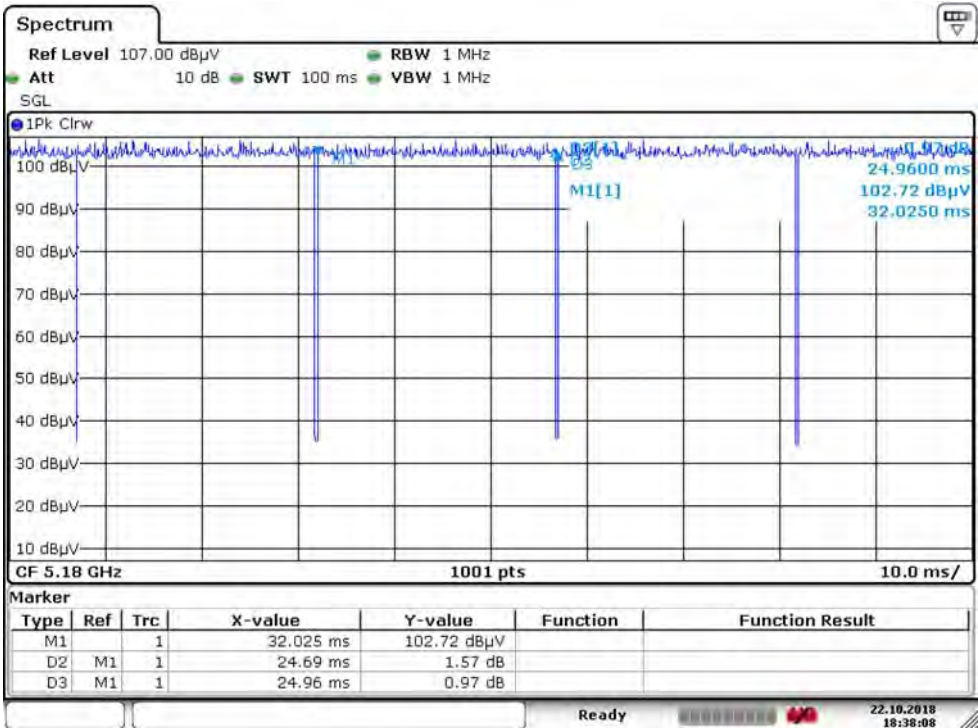
802.11ac80 (SISO A)



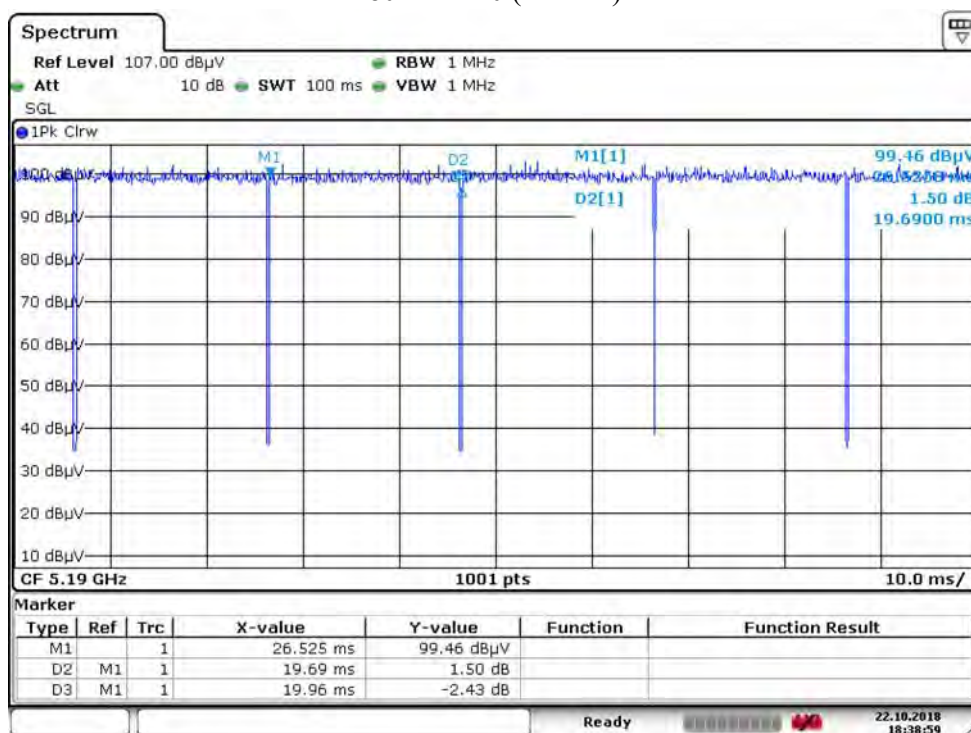
802.11ac160 (SISO A)



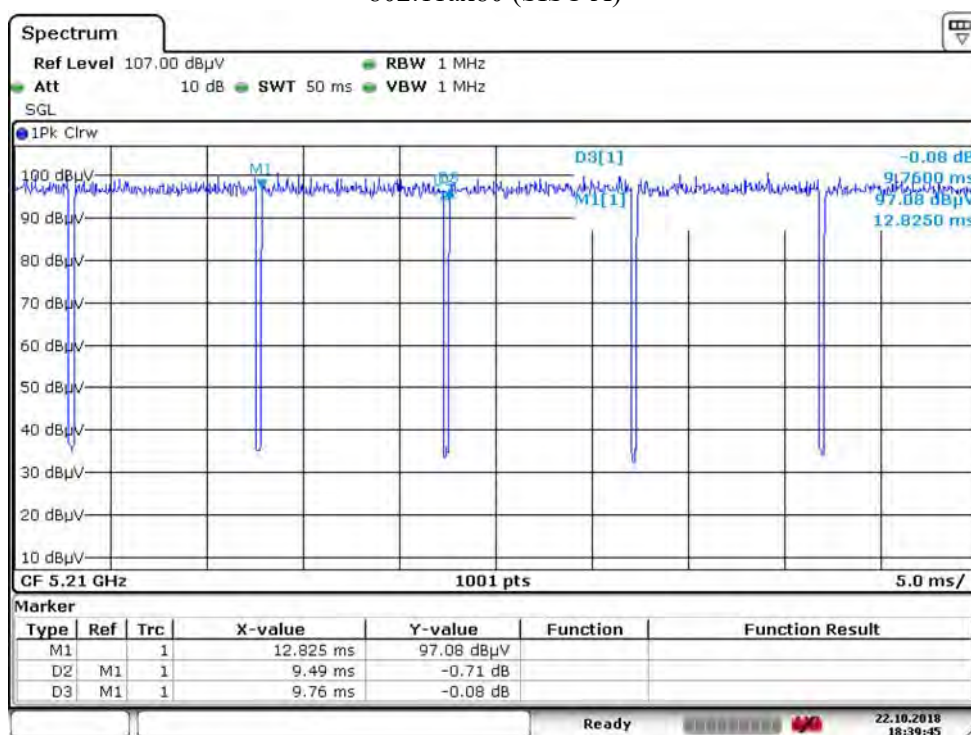
802.11ax20 (SISO A)



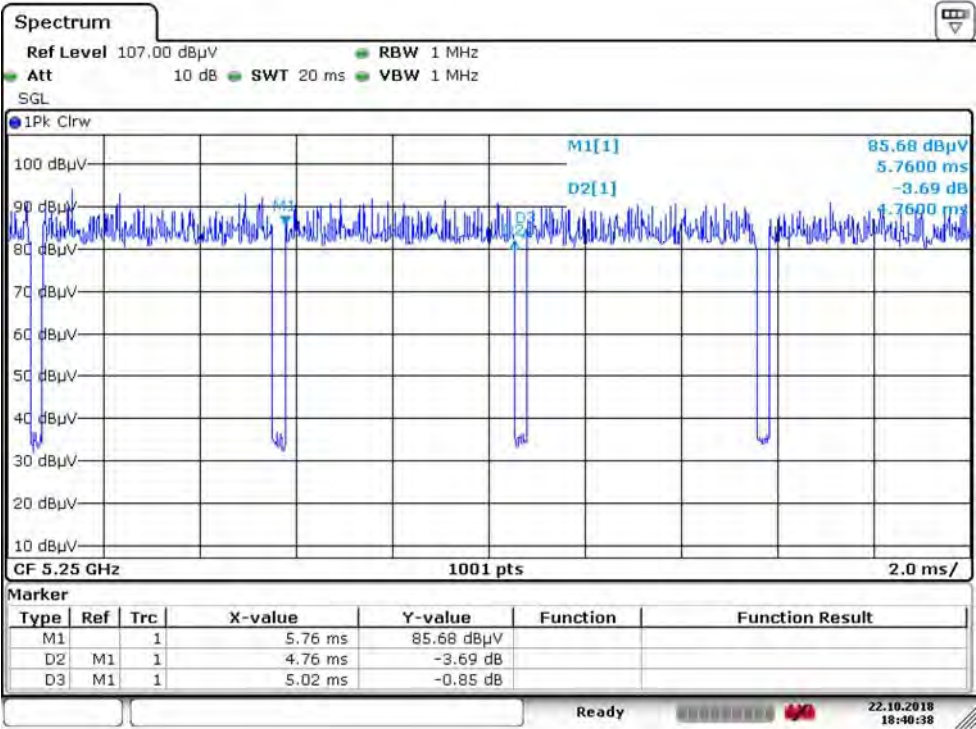
802.11ax40 (SISO A)



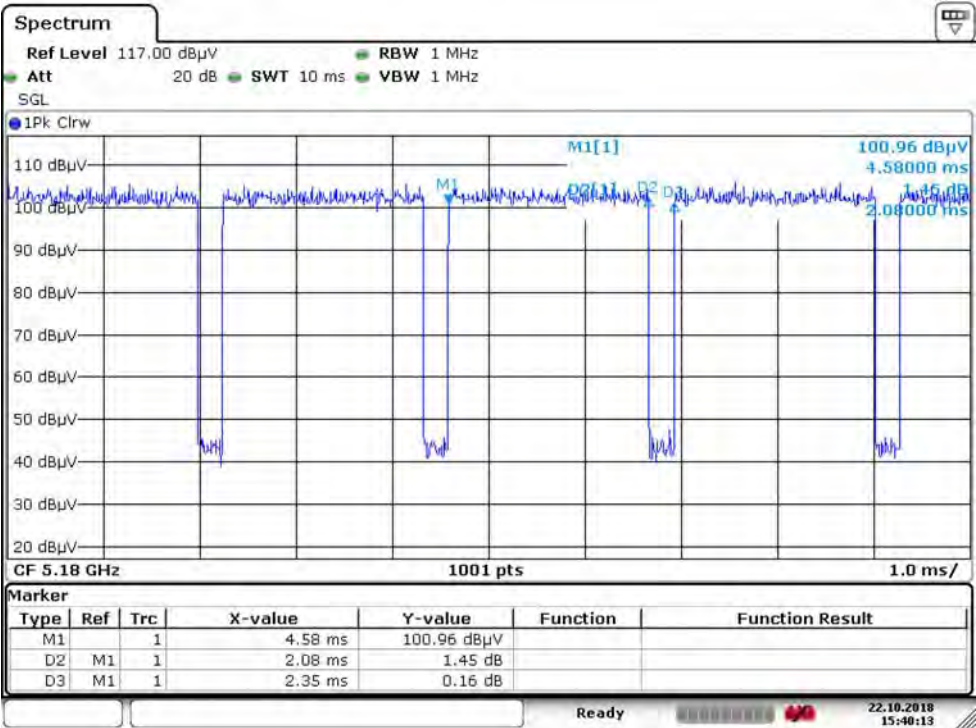
802.11ax80 (SISO A)



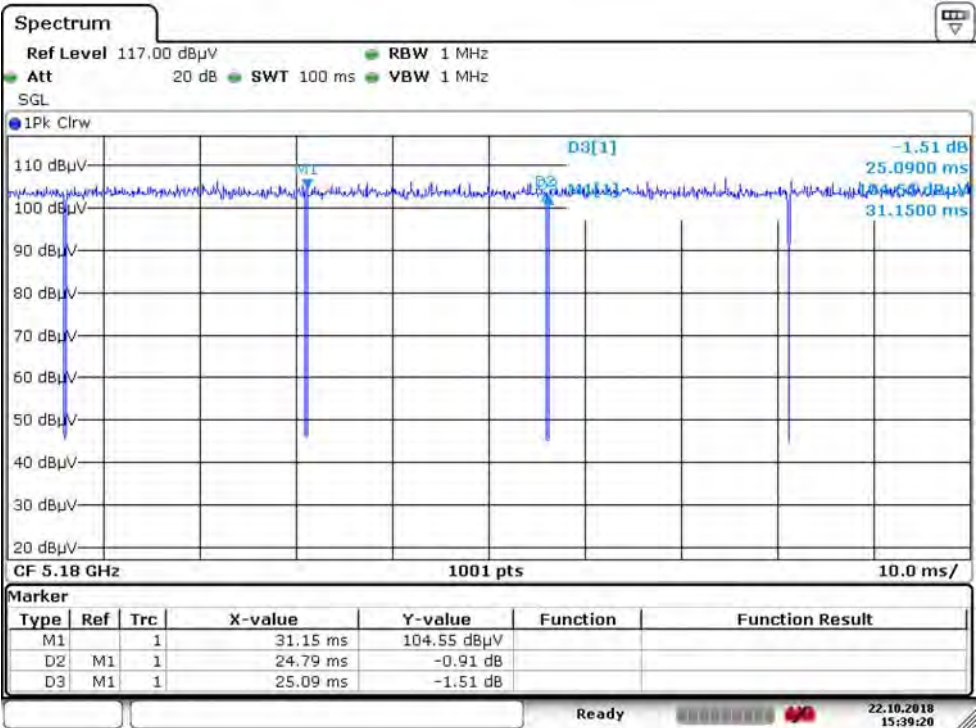
802.11ax160 (SISO A)



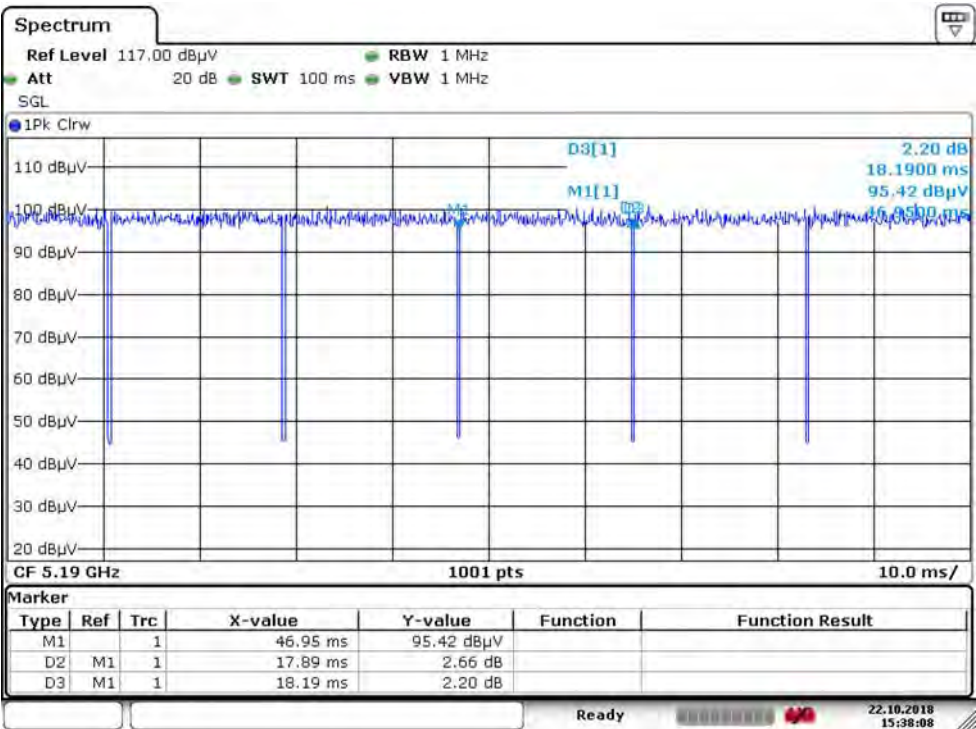
802.11a (SISO B)



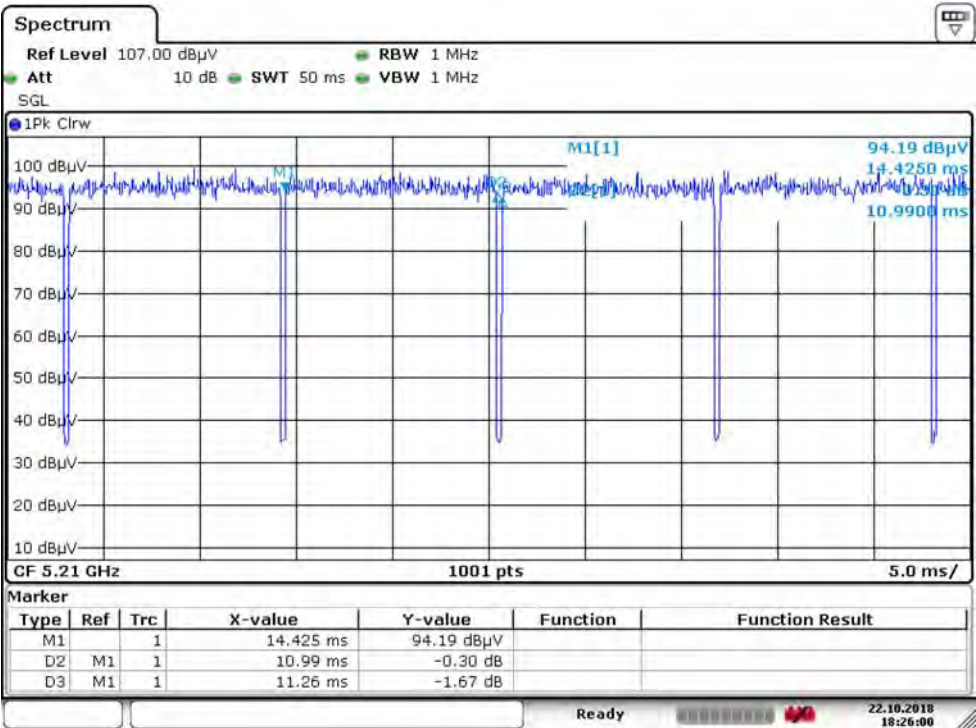
802.11n20 (SISO B)



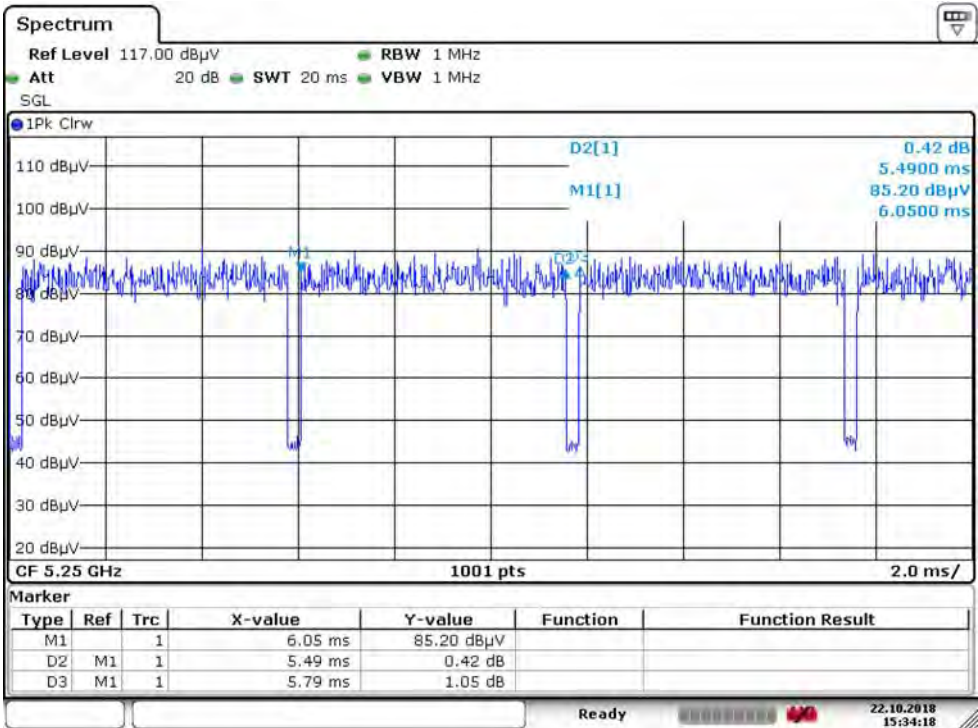
802.11n40 (SISO B)



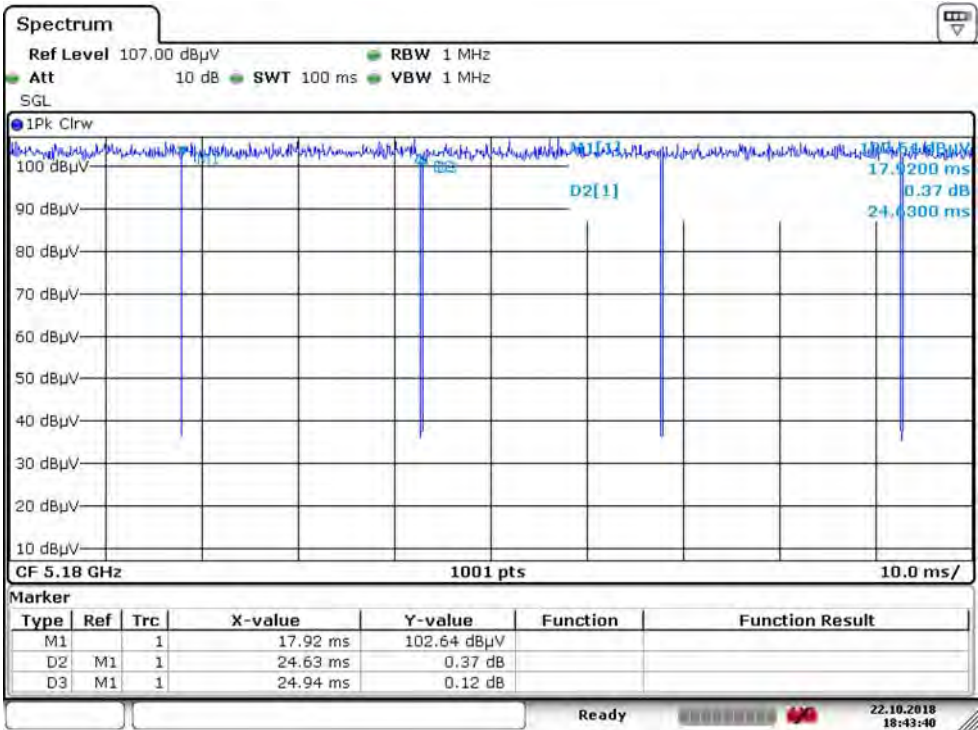
802.11ac80 (SISO B)



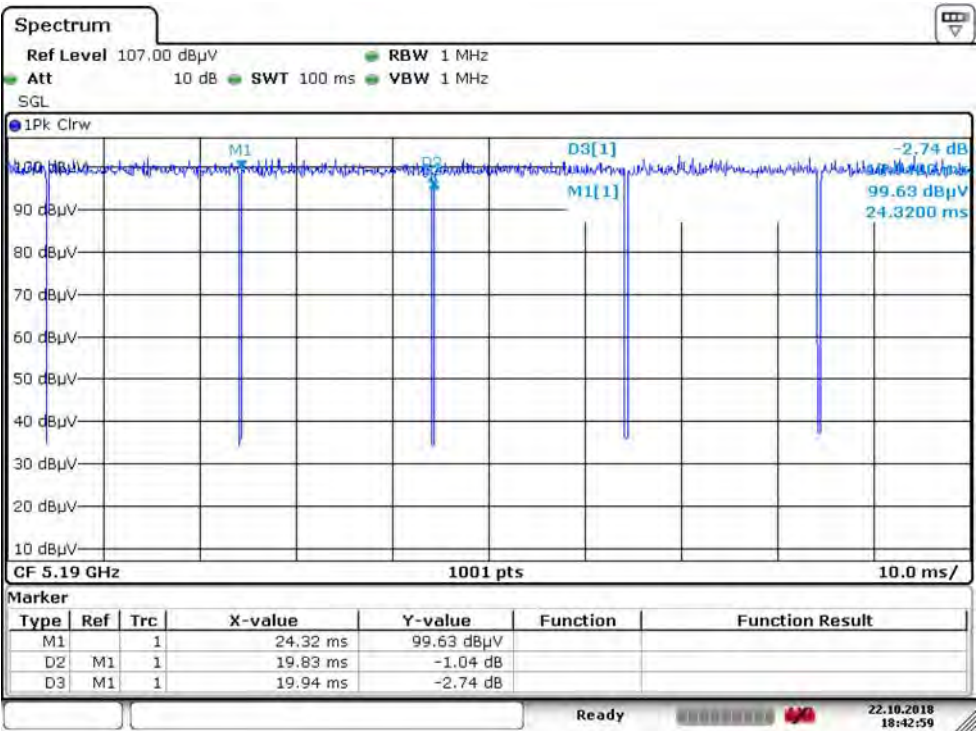
802.11ac160 (SISO B)



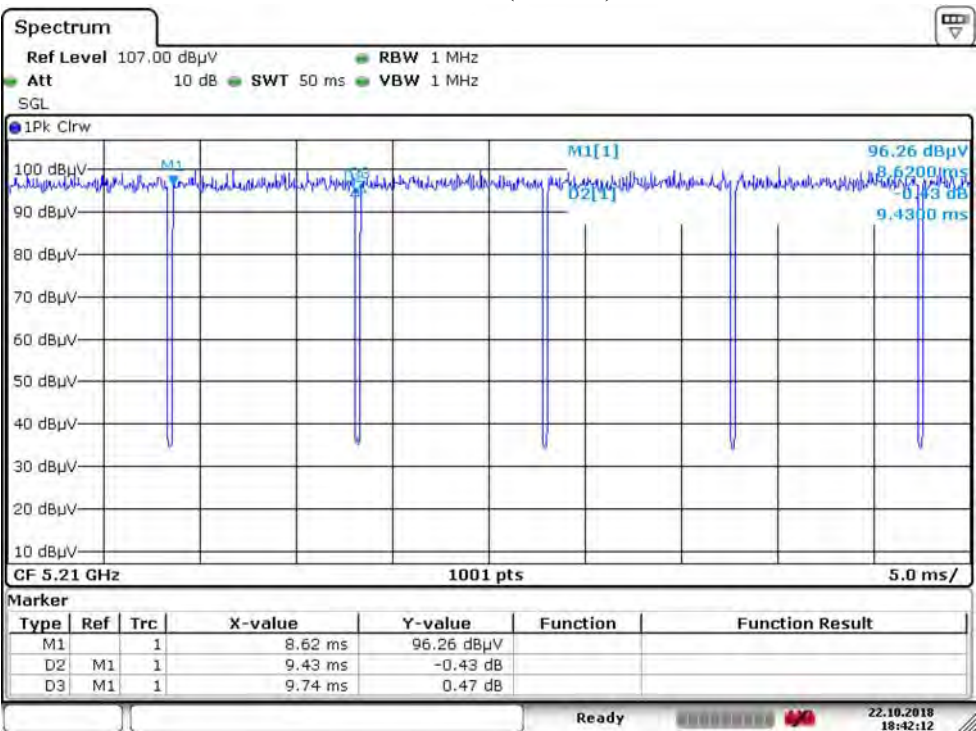
802.11ax20 (SISO B)



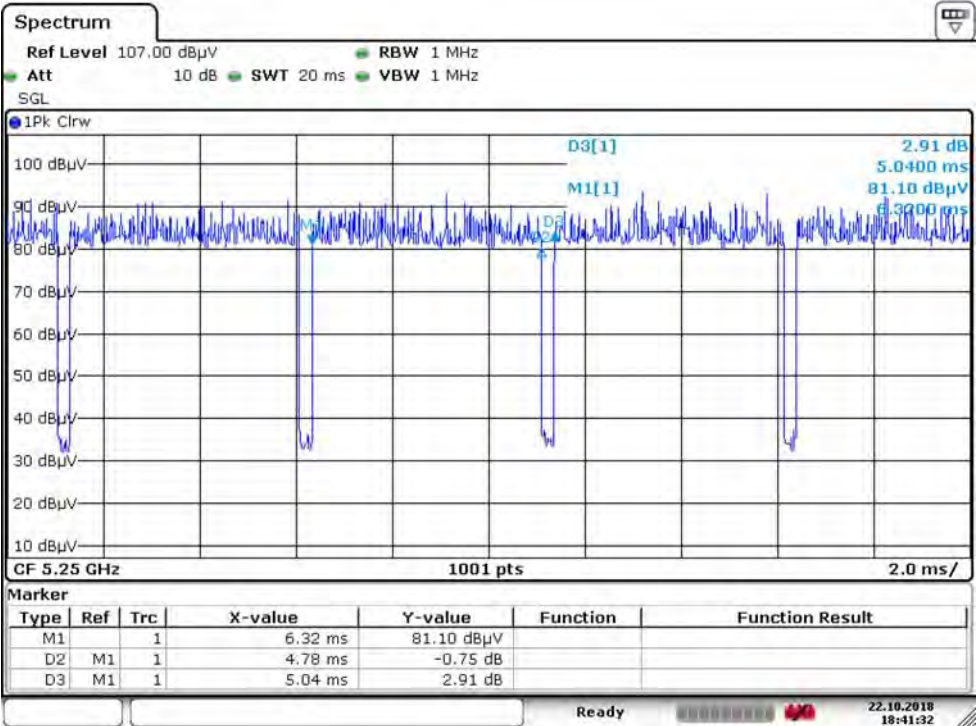
802.11ax40 (SISO B)



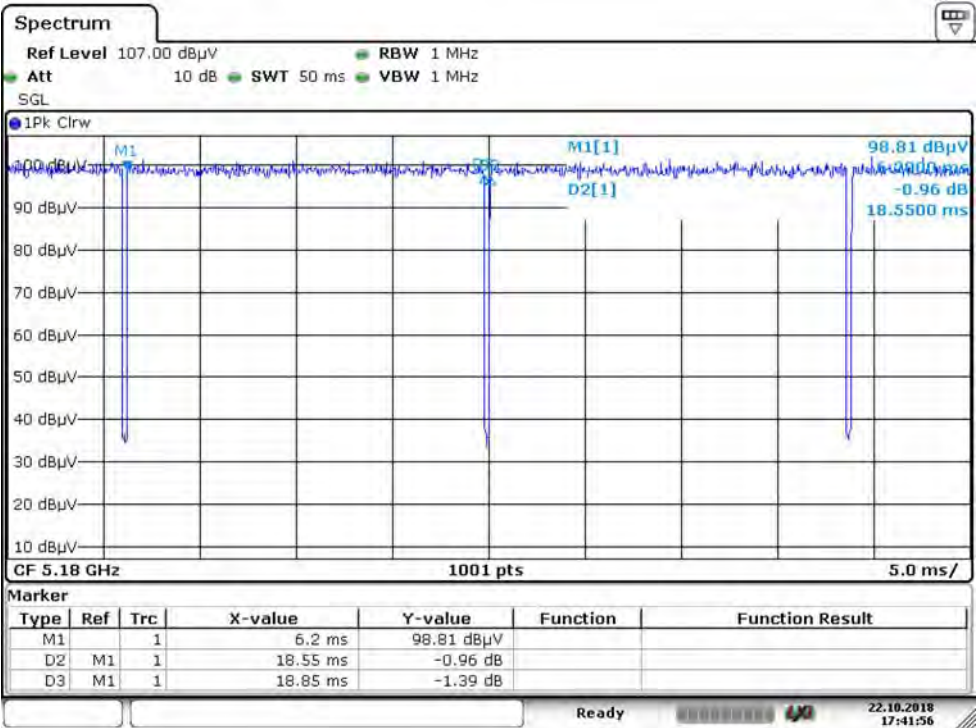
802.11ax80 (SISO B)



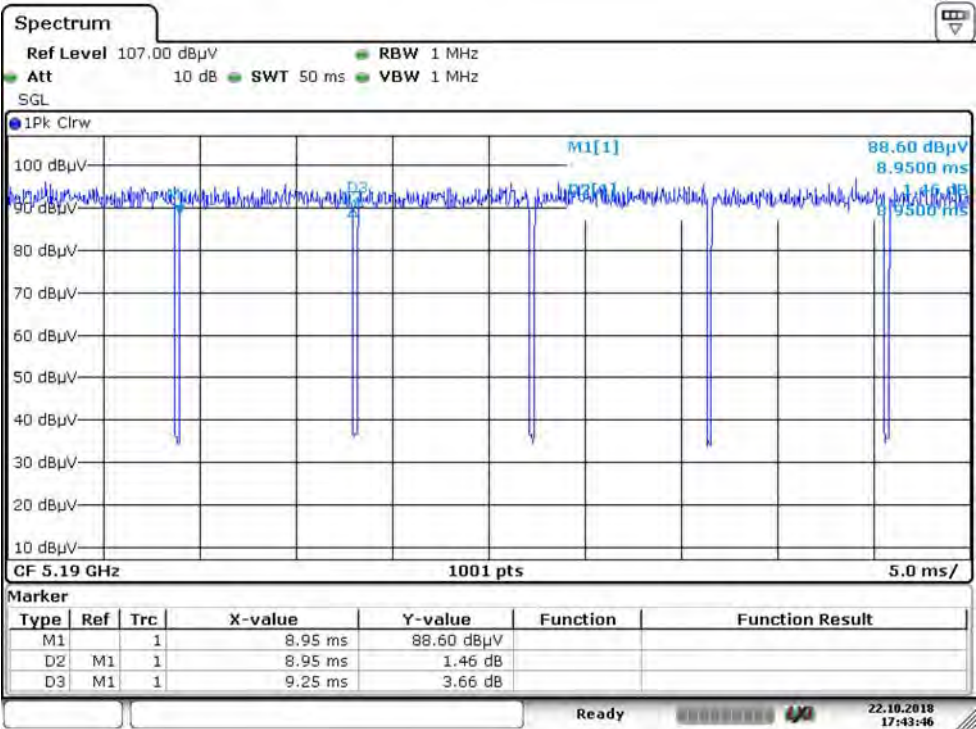
802.11ax160 (SISO B)



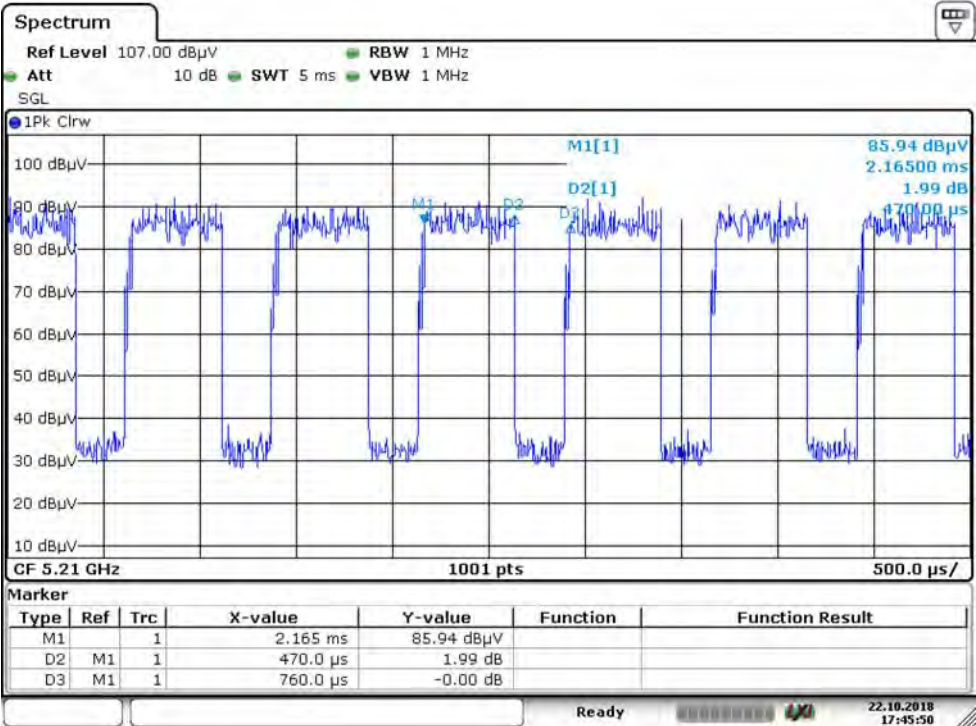
802.11n20 (MIMO)



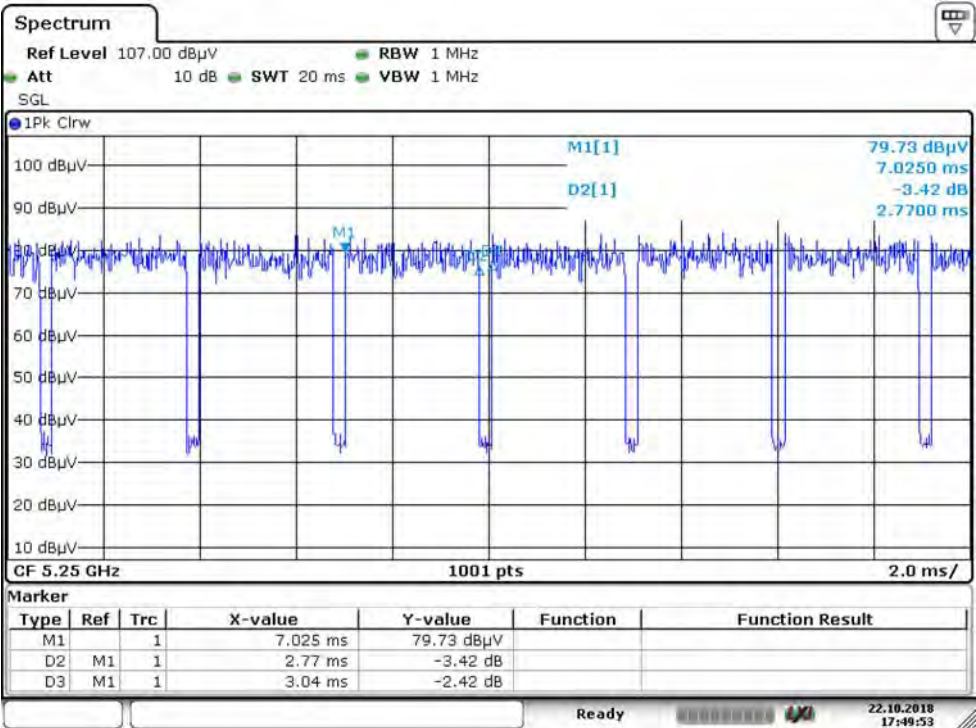
802.11n40 (MIMO)



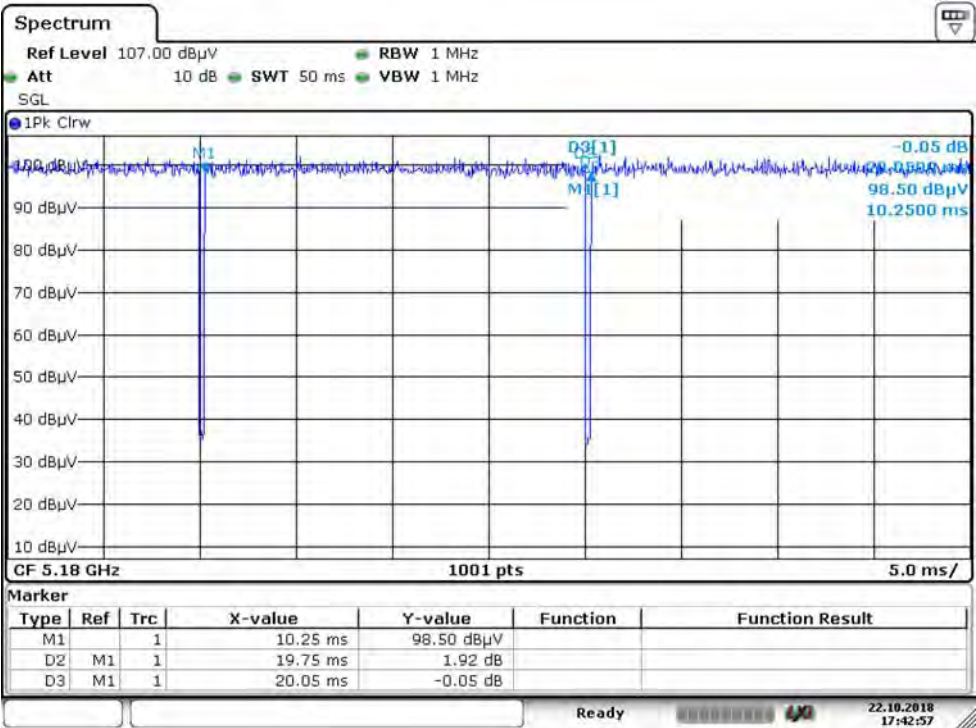
802.11ac80 (MIMO)



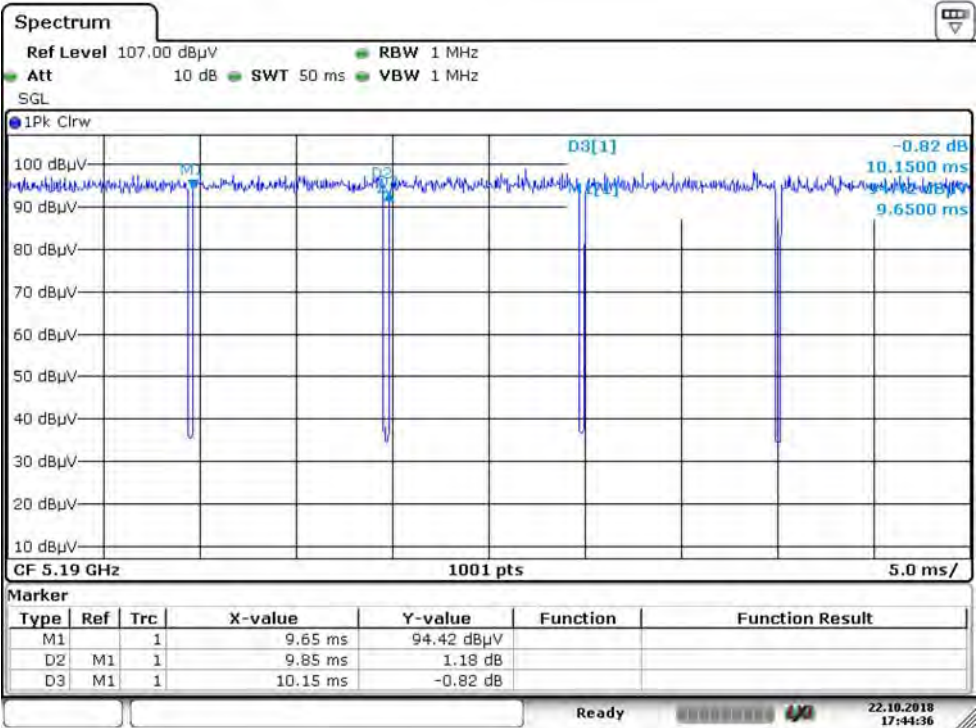
802.11ac160 (MIMO)



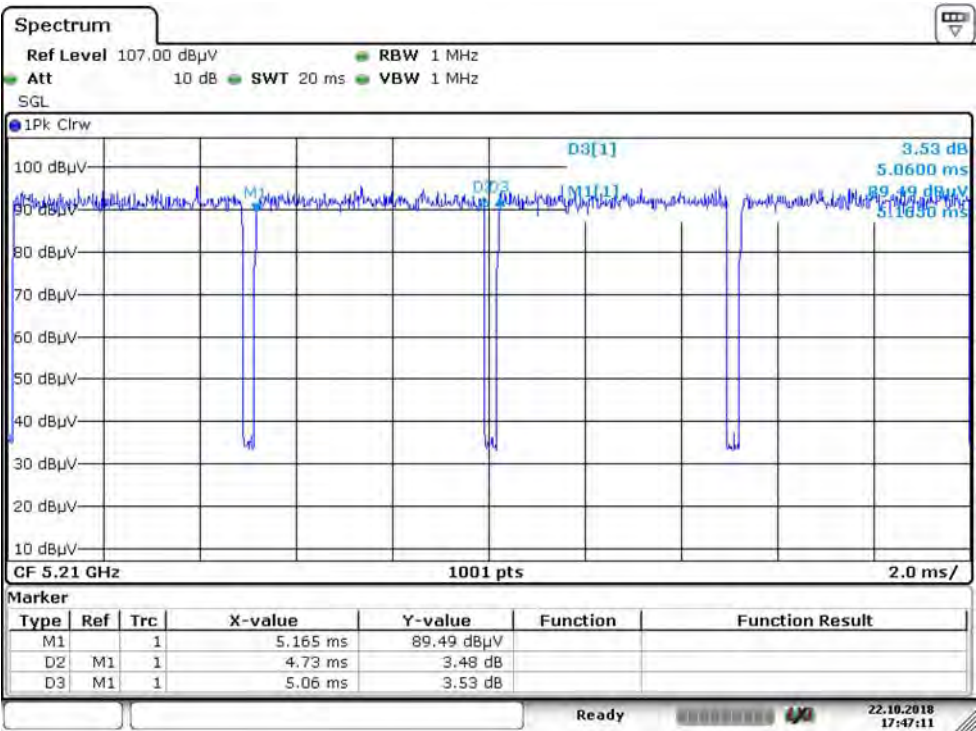
802.11ax20 (MIMO)



802.11ax40 (MIMO)



802.11ax80 (MIMO)



802.11ax160 (MIMO)

