

待測物名稱：Intel® Wi-Fi 6 AX200

待測物型號：AX200D2WL

測試頻道：--

6 dB 頻寬：100kHz

量測天線：--

檢測器：峰值

測試日期：108 年 01 月 20 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

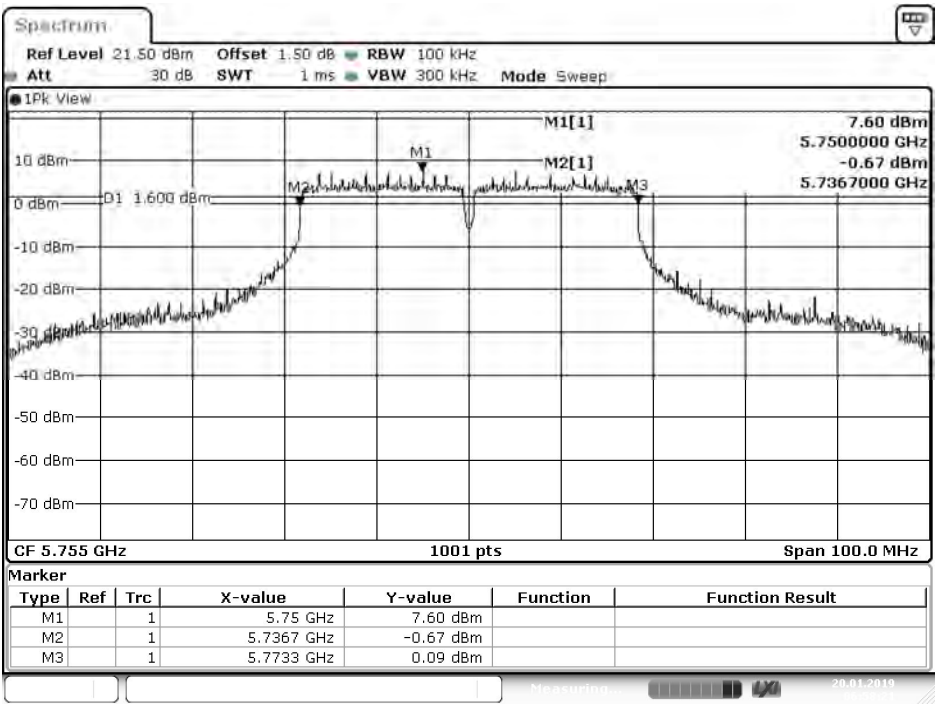
測試距離：Conducted

環境溫度：20 °C

環境濕度：48 %

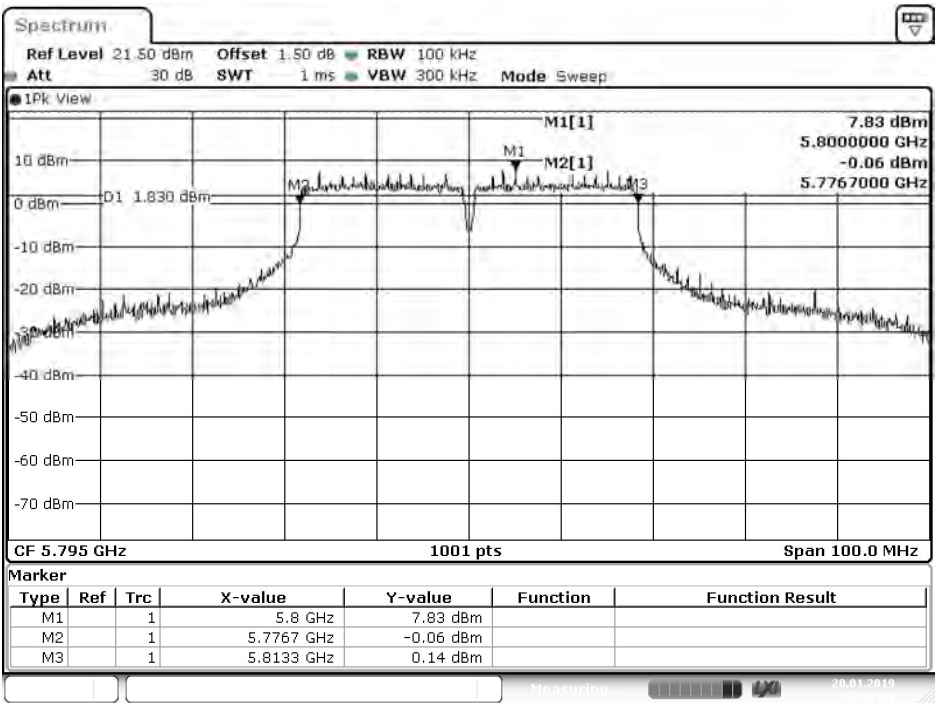
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
151	5755	36600	>500	Pass
159	5795	36600	>500	Pass

Figure Channel 151



Date: 20.JAN.2019 06:58:21

Figure Channel 159



Date: 20.JAN.2019 07:02:24

待測物名稱：Intel® Wi-Fi 6 AX200

待測物型號：AX200D2WL

測試頻道：--

6 dB 頻寬：100kHz

量測天線：--

檢測器：峰值

測試日期：108 年 01 月 20 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

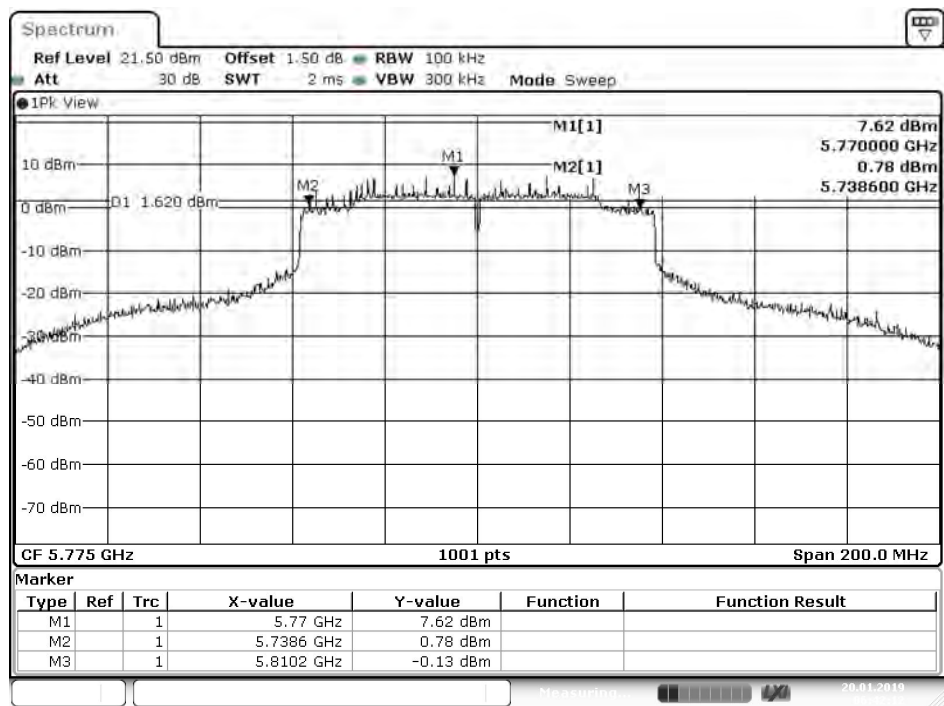
測試距離：Conducted

環境溫度：20 °C

環境濕度：48 %

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
155	5775	71600	>500	Pass

Figure Channel 155



Date: 20.JAN.2019 06:42:12

待測物名稱：Intel® Wi-Fi 6 AX200

待測物型號：AX200D2WL

測試頻道：--

6 dB 頻寬：100kHz

量測天線：--

檢測器：峰值

測試日期：108 年 01 月 21 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

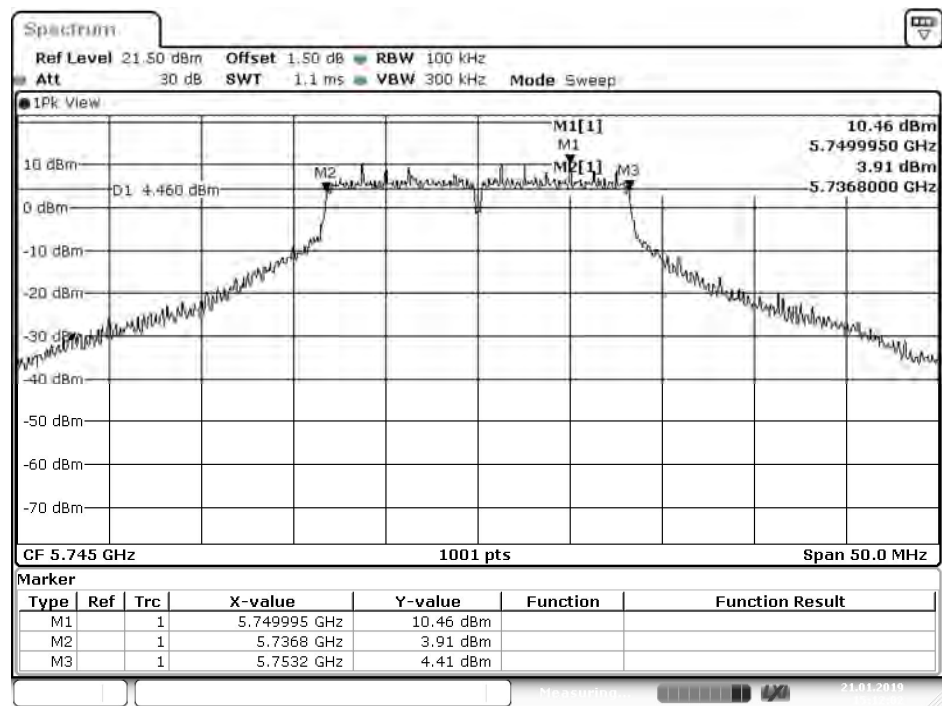
測試距離：Conducted

環境溫度：20 °C

環境濕度：48 %

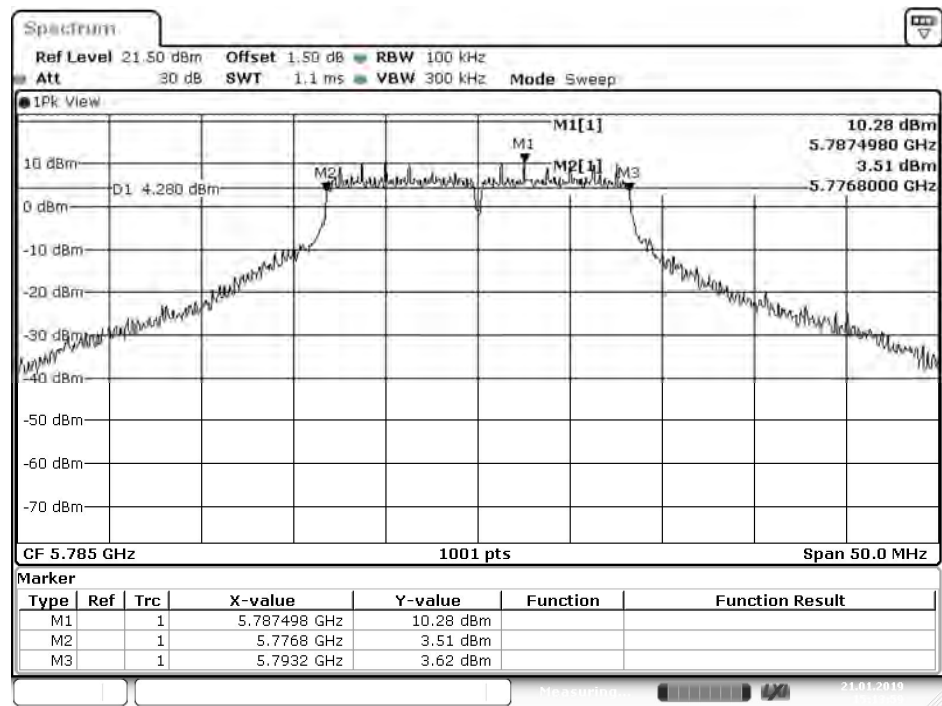
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
149	5745	16400	>500	Pass
157	5785	16400	>500	Pass
165	5825	16450	>500	Pass

Figure Channel 149



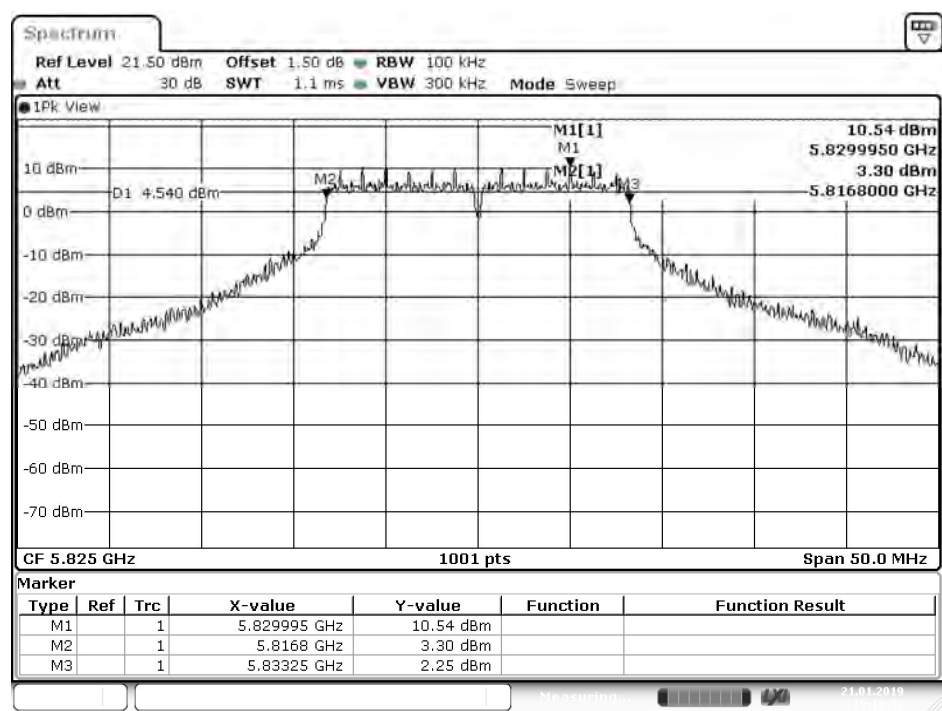
Date: 21.JAN.2019 15:12:03

Figure Channel 157



Date: 21.JAN.2019 15:13:59

Figure Channel 165



Date: 21.JAN.2019 15:18:54

待測物名稱：Intel® Wi-Fi 6 AX200

待測物型號：AX200D2WL

測試頻道：--

6 dB 頻寬：100kHz

量測天線：--

檢測器：峰值

測試日期：108 年 01 月 21 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

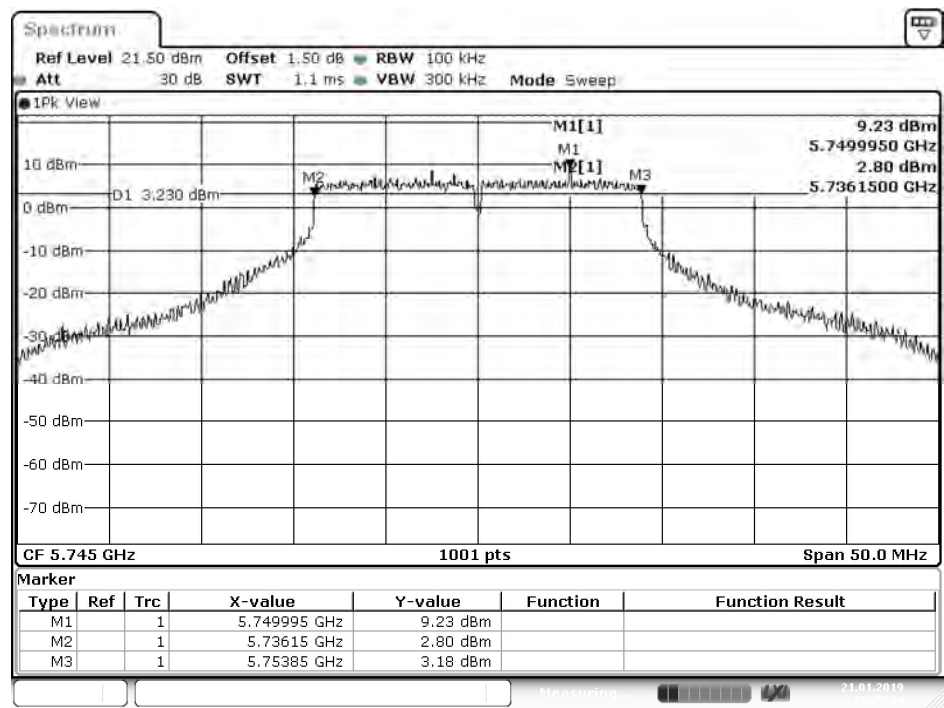
測試距離：Conducted

環境溫度：20 °C

環境濕度：48 %

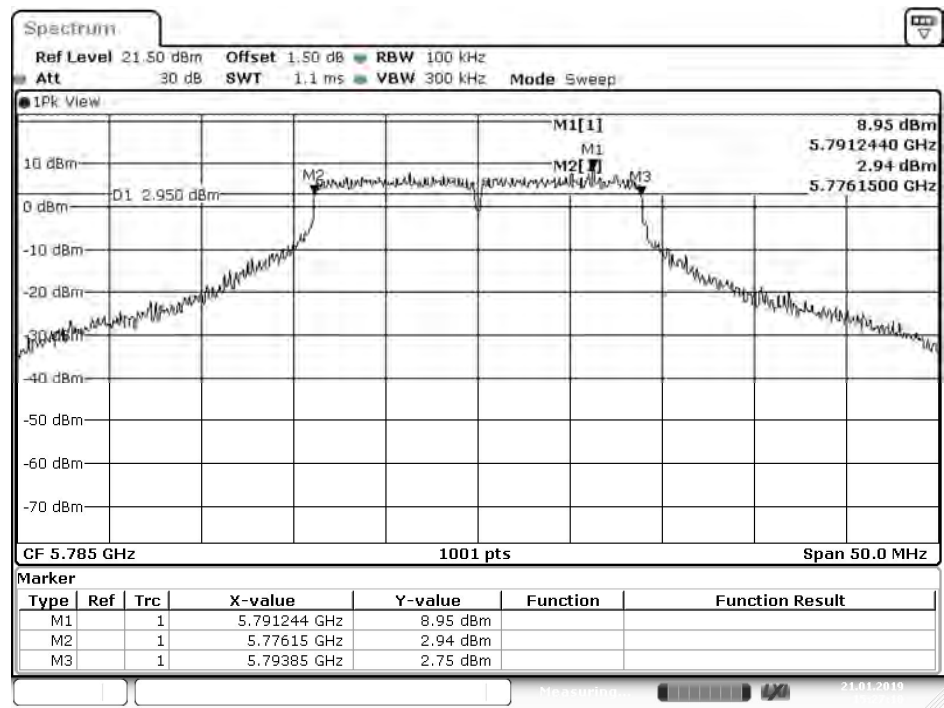
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
149	5745	17700	>500	Pass
157	5785	17700	>500	Pass
165	5825	17700	>500	Pass

Figure Channel 149



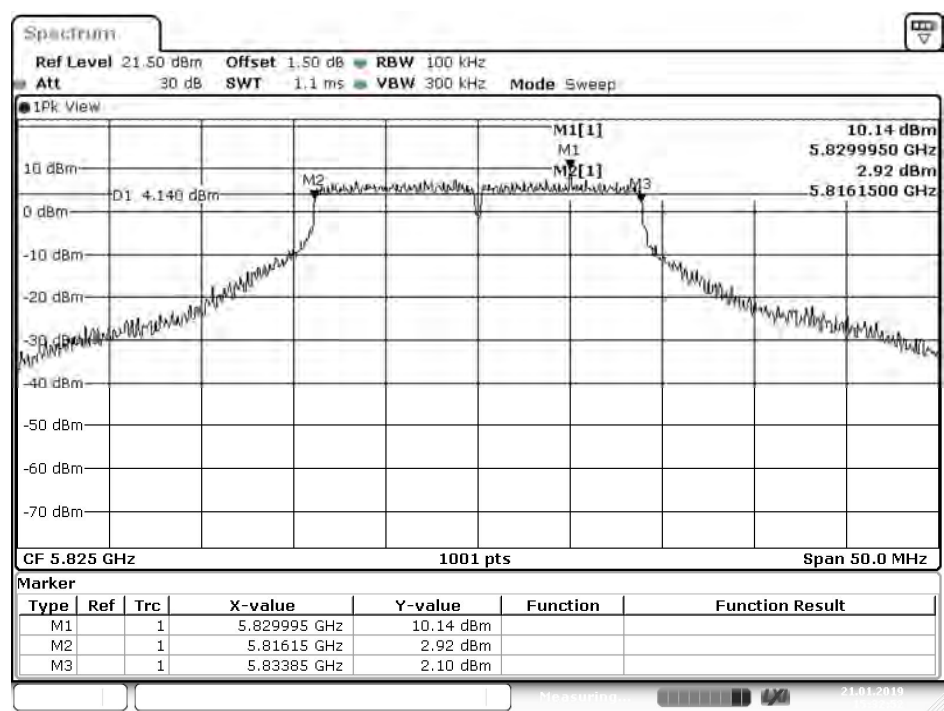
Date: 21.JAN.2019 15:25:04

Figure Channel 157



Date: 21.JAN.2019 15:27:10

Figure Channel 165



Date: 21.JAN.2019 15:32:52

待測物名稱：Intel® Wi-Fi 6 AX200

待測物型號：AX200D2WL

測試頻道：--

6 dB 頻寬：100kHz

量測天線：--

檢測器：峰值

測試日期：108 年 01 月 21 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

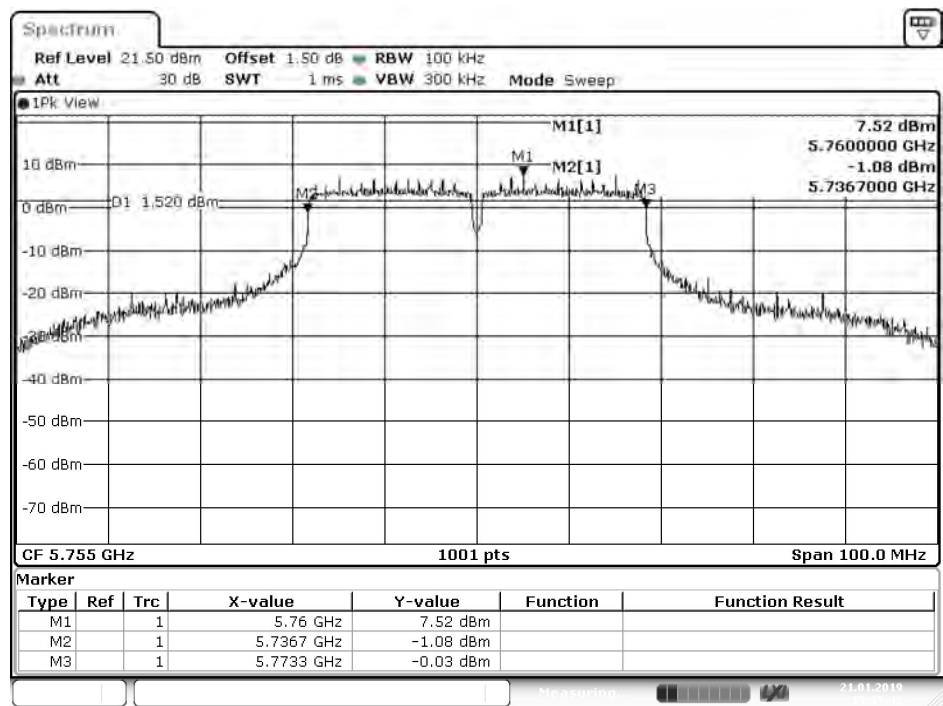
測試距離：Conducted

環境溫度：20 °C

環境濕度：48 %

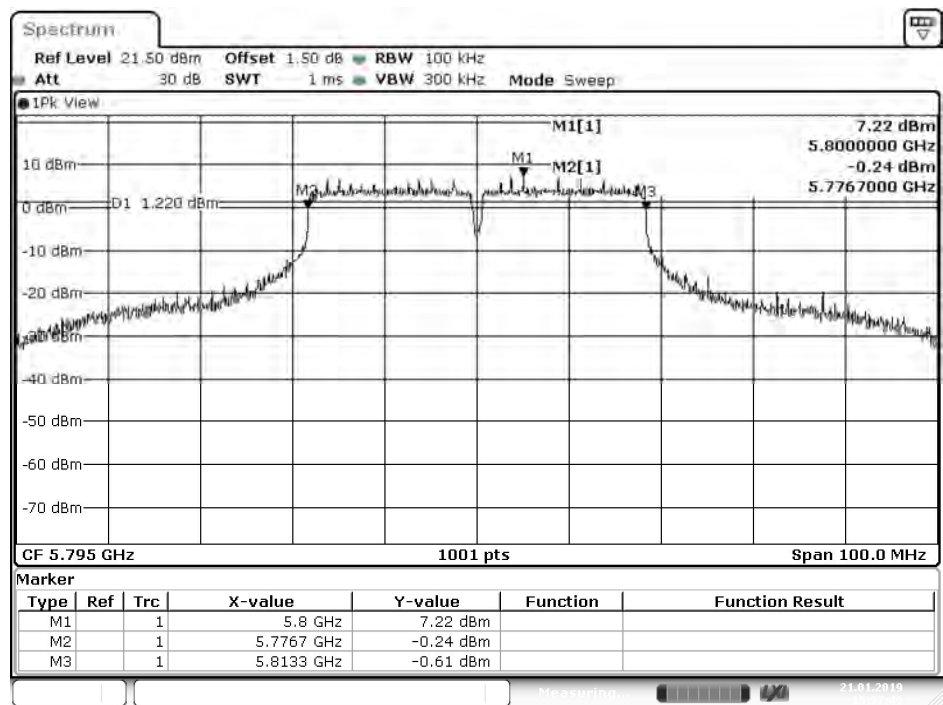
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
151	5755	36600	>500	Pass
159	5795	36600	>500	Pass

Figure Channel 151



Date: 21.JAN.2019 15:35:42

Figure Channel 159



Date: 21.JAN.2019 15:37:49

待測物名稱：Intel® Wi-Fi 6 AX200

待測物型號：AX200D2WL

測試頻道：--

6 dB 頻寬：100kHz

量測天線：--

檢測器：峰值

測試日期：108 年 01 月 21 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

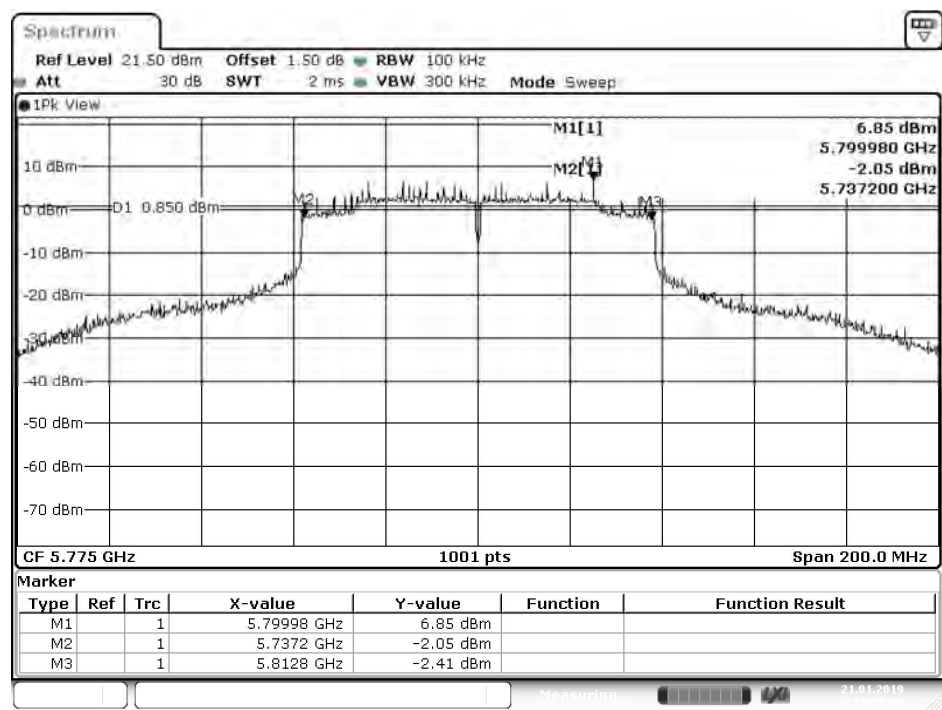
測試距離：Conducted

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



Date: 21.JAN.2019 15:21:24

待測物名稱：Intel® Wi-Fi 6 AX200

待測物型號：AX200D2WL

測試頻道：--

6 dB 頻寬：100kHz

量測天線：--

檢測器：峰值

測試日期：108 年 01 月 22 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

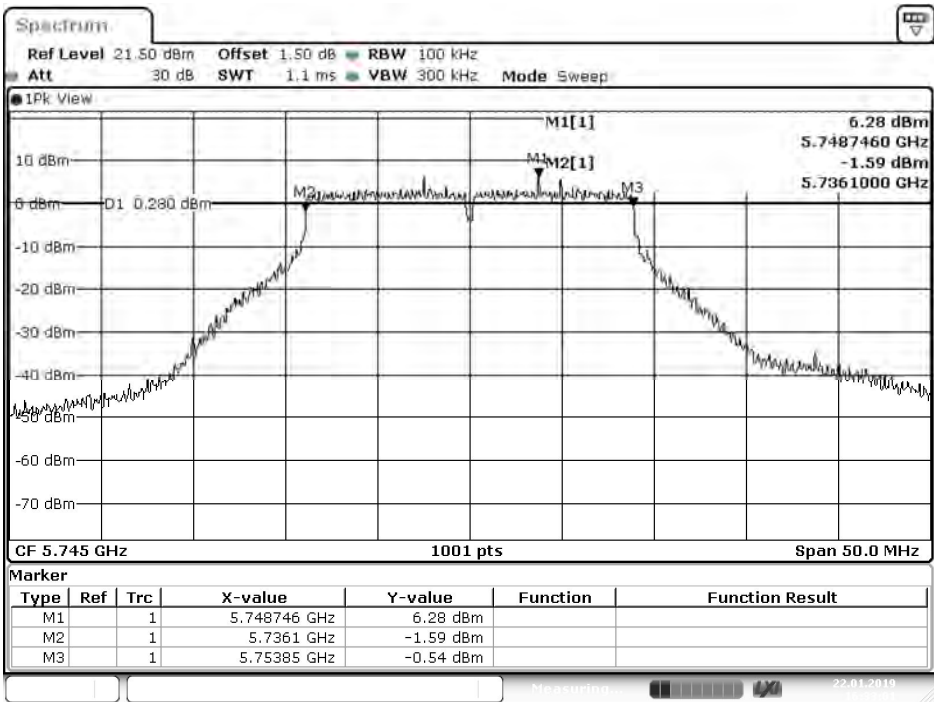
測試距離：Conducted

環境溫度：20 °C

環境濕度：48 %

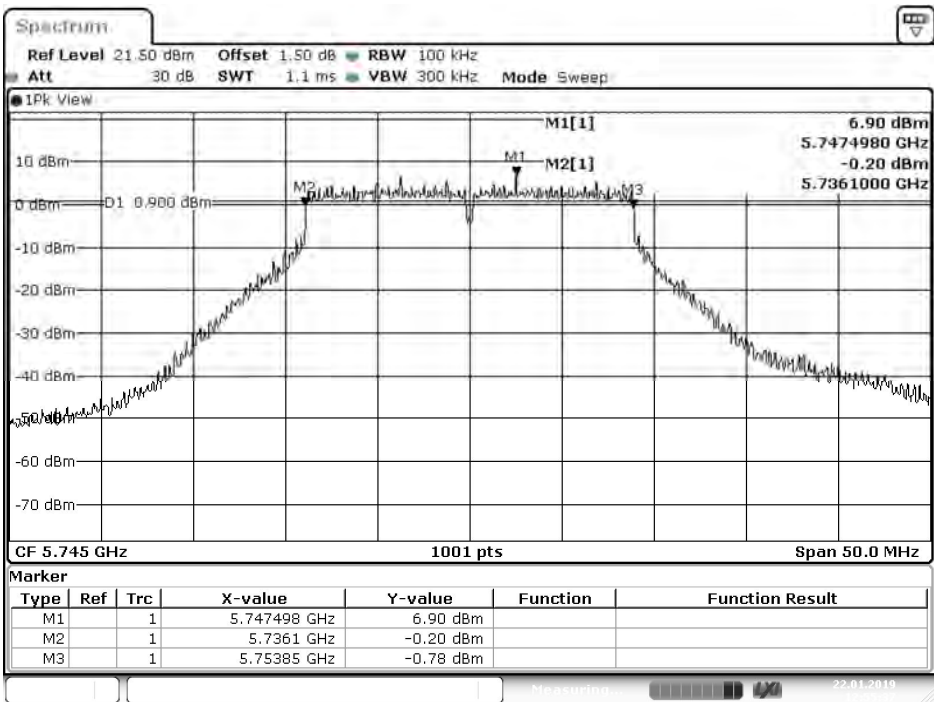
Channel No.	Frequency (MHz)	Chain	Measurement Level (kHz)	Required Limit (kHz)	Result
149	5745	A	17750	>500	Pass
157	5785	A	17700	>500	Pass
165	5825	A	17700	>500	Pass
149	5745	B	17750	>500	Pass
157	5785	B	17650	>500	Pass
165	5825	B	17700	>500	Pass

Figure Channel 149 (Chain A)



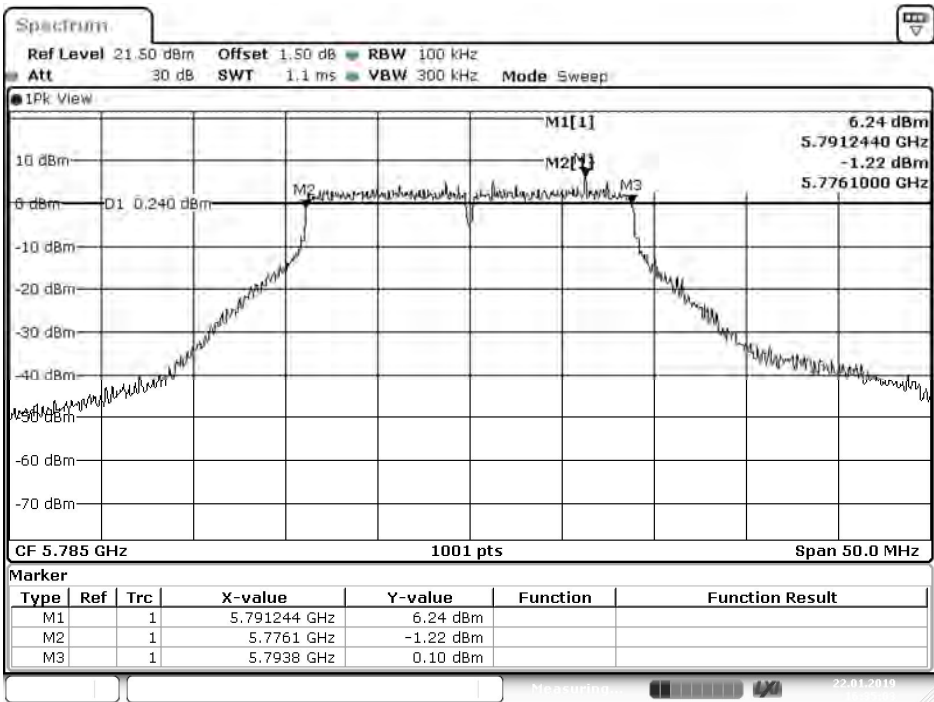
Date: 22.JAN.2019 16:33:01

Figure Channel 149 (Chain B)



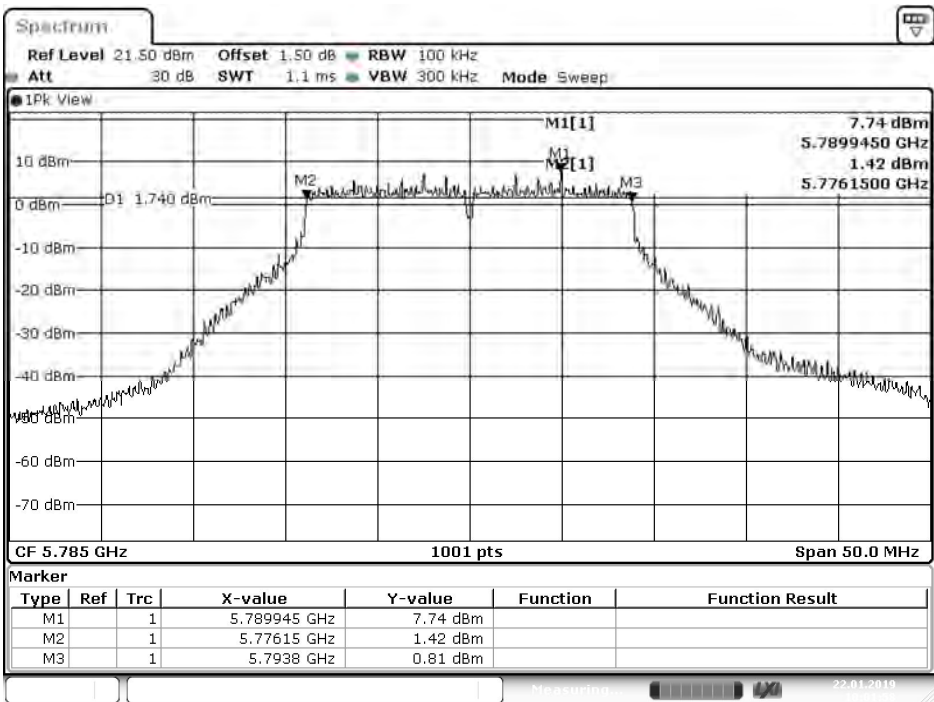
Date: 22.JAN.2019 12:55:37

Figure Channel 157 (Chain A)



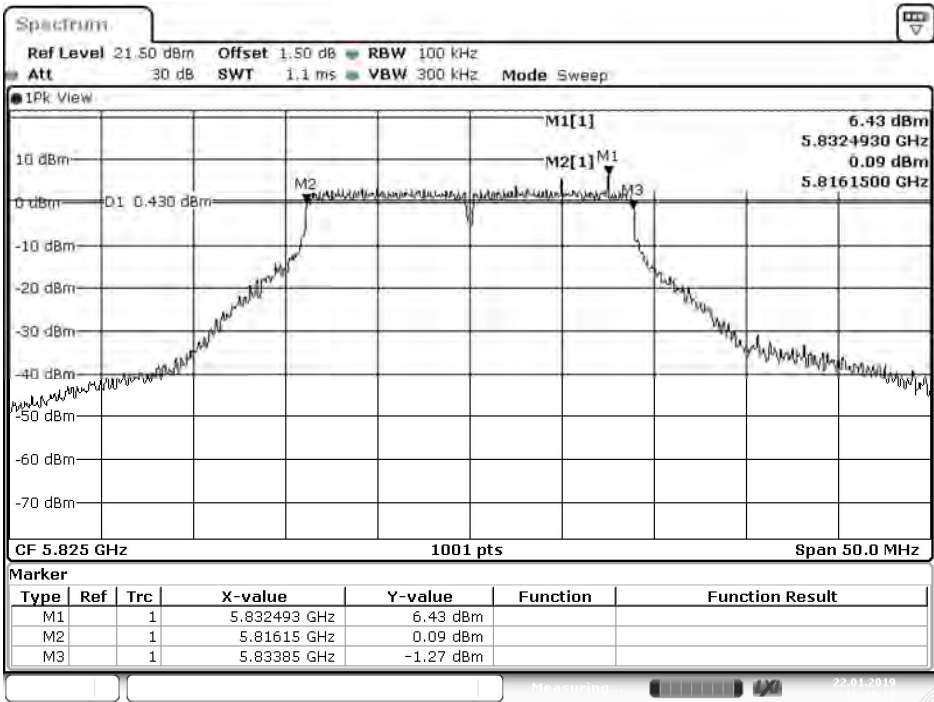
Date: 22.JAN.2019 16:35:04

Figure Channel 157 (Chain B)



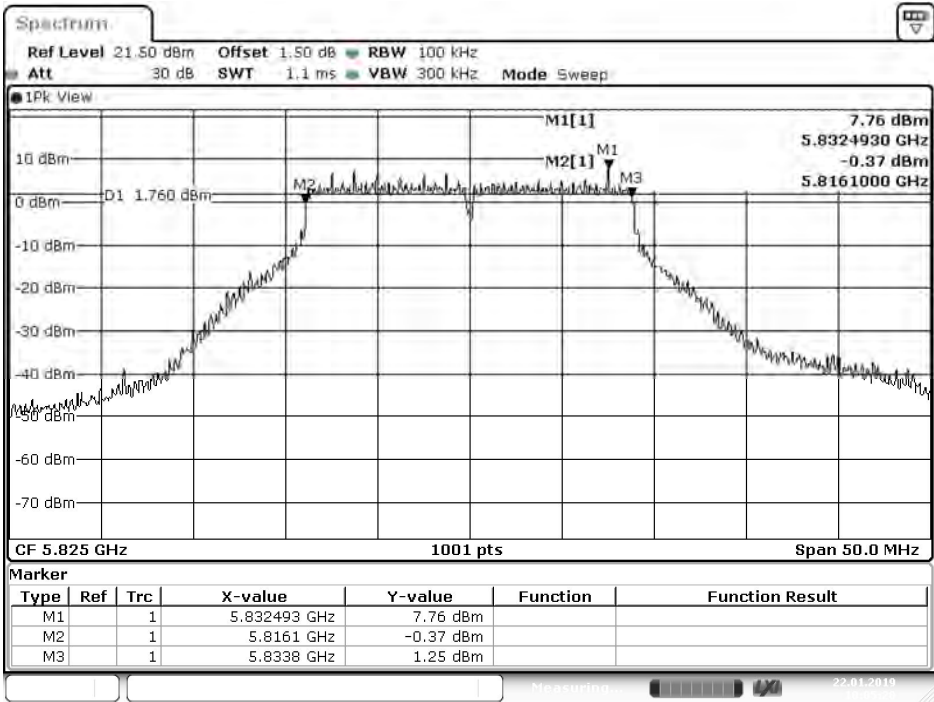
Date: 22.JAN.2019 10:01:58

Figure Channel 165 (Chain A)



Date: 22.JAN.2019 16:40:17

Figure Channel 165 (Chain B)



Date: 22.JAN.2019 10:05:20

待測物名稱：Intel® Wi-Fi 6 AX200

待測物型號：AX200D2WL

測試頻道：--

6 dB 頻寬：100kHz

量測天線：--

檢測器：峰值

測試日期：108 年 01 月 22 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

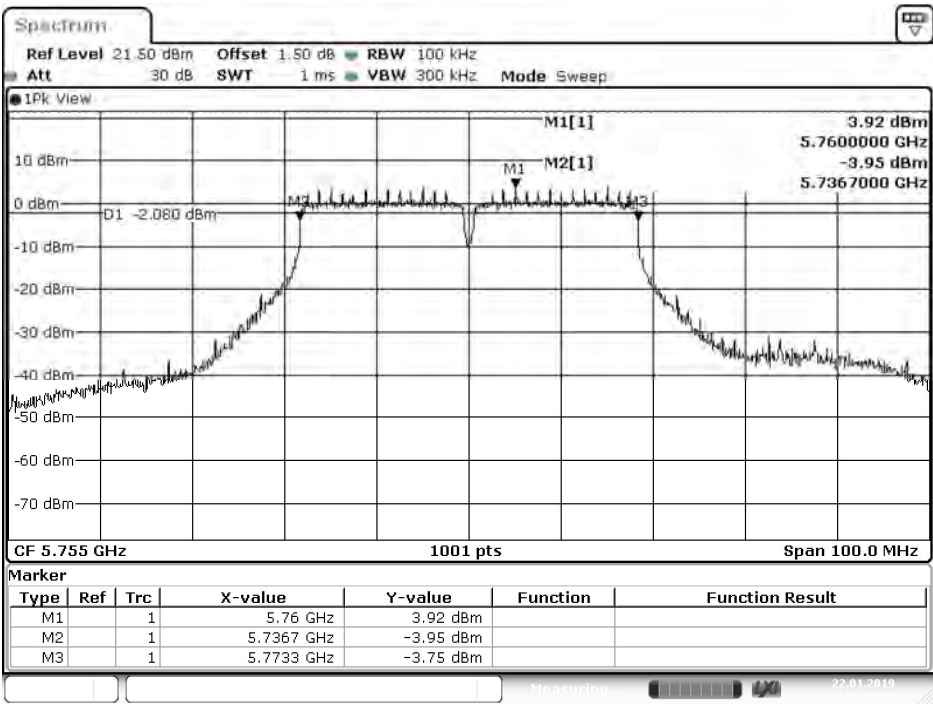
測試距離：Conducted

環境溫度：20 °C

環境濕度：48 %

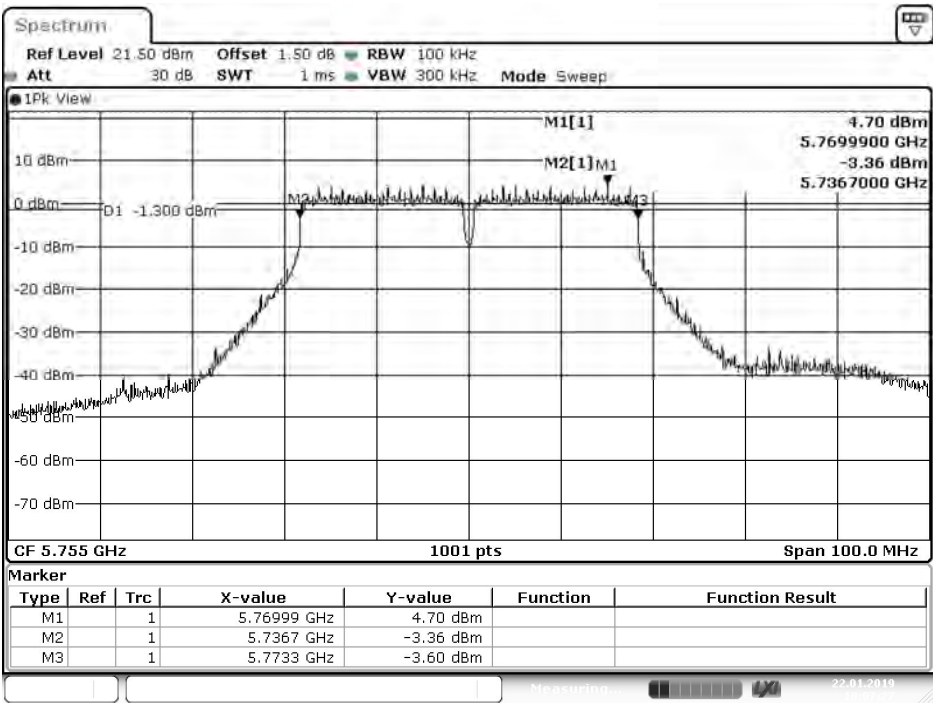
Channel No.	Frequency (MHz)	Chain	Measurement Level (kHz)	Required Limit (kHz)	Result
151	5755	A	36600	>500	Pass
159	5795	A	36600	>500	Pass
151	5755	B	36600	>500	Pass
159	5795	B	36600	>500	Pass

Figure Channel 151 (Chain A)



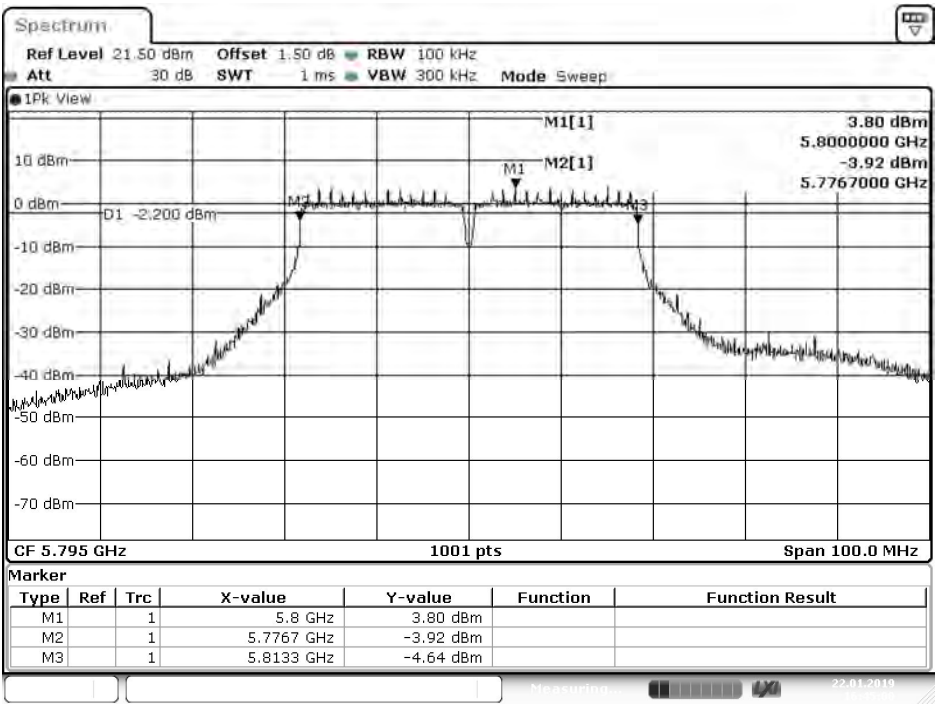
Date: 22.JAN.2019 16:42:30

Figure Channel 151 (Chain B)



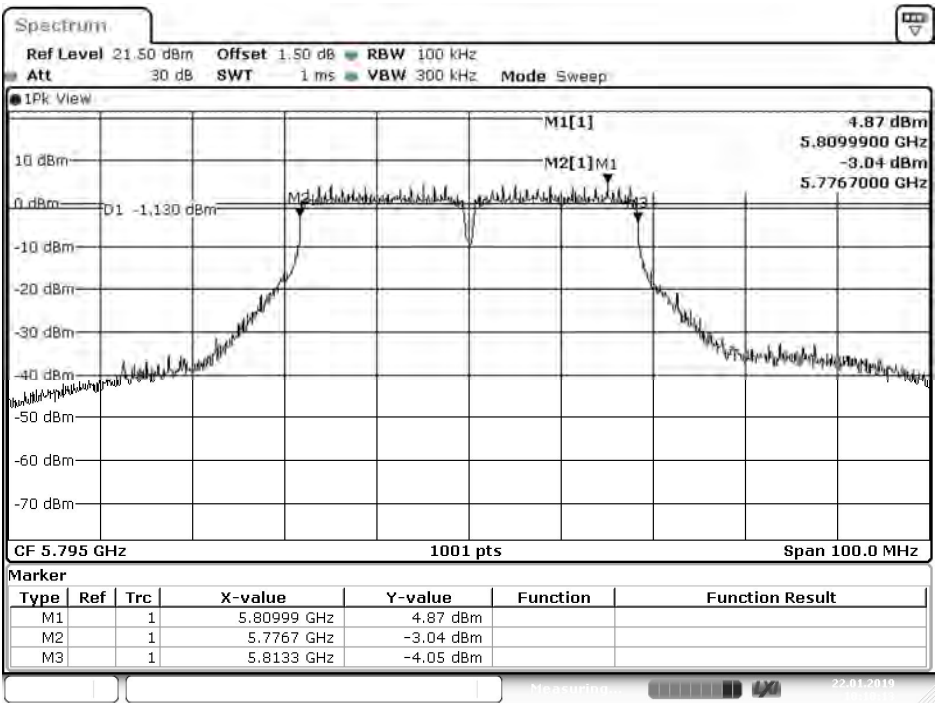
Date: 22.JAN.2019 10:07:26

Figure Channel 159 (Chain A)



Date: 22.JAN.2019 16:45:00

Figure Channel 159 (Chain B)



Date: 22.JAN.2019 10:10:13

待測物名稱：Intel® Wi-Fi 6 AX200

待測物型號：AX200D2WL

測試頻道：--

6 dB 頻寬：100kHz

量測天線：--

檢測器：峰值

測試日期：108 年 01 月 22 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

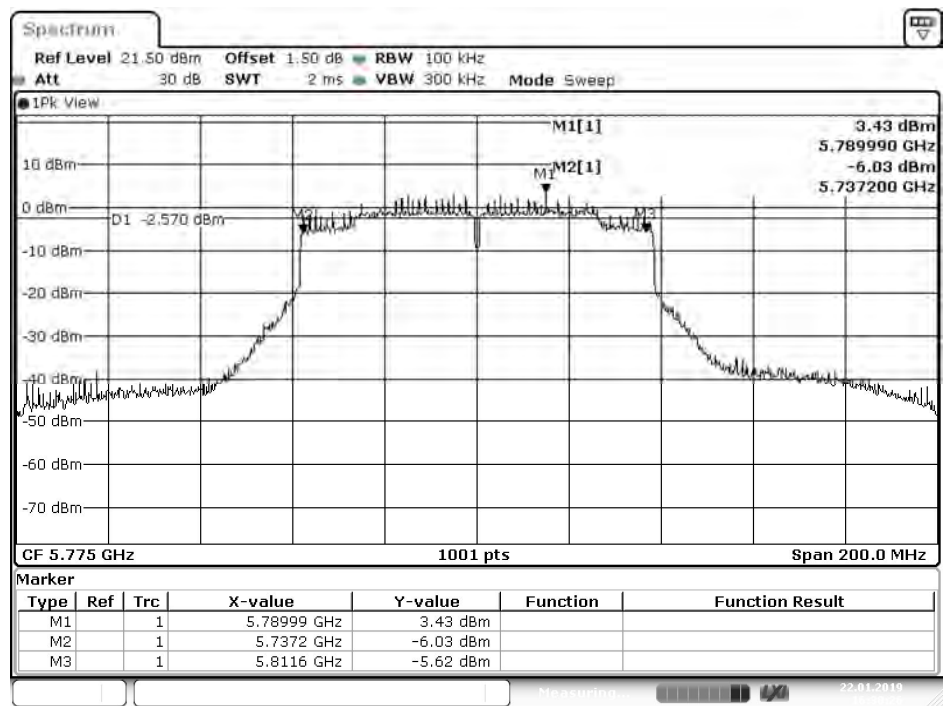
測試距離：Conducted

環境溫度：20 °C

環境濕度：48 %

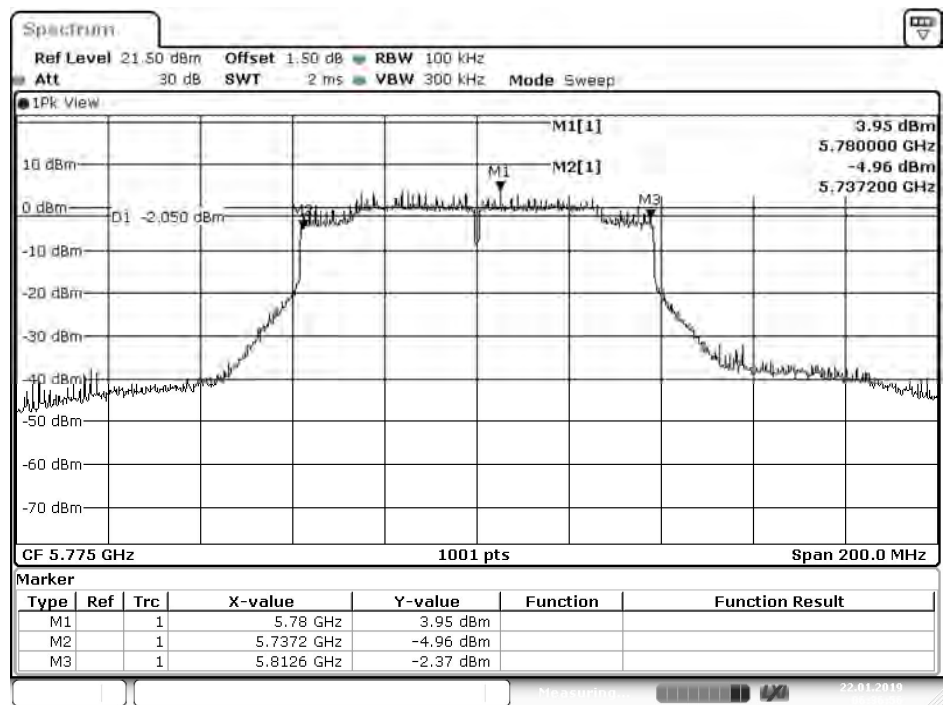
Channel No.	Frequency (MHz)	Chain	Measurement Level (kHz)	Required Limit (kHz)	Result
155	5775	A	74400	>500	Pass
155	5775	B	75400	>500	Pass

Figure Channel 155 (Chain A)



Date: 22.JAN.2019 16:30:26

Figure Channel 155 (Chain B)



Date: 22.JAN.2019 06:36:56

待測物名稱：Intel® Wi-Fi 6 AX200

待測物型號：AX200D2WL

測試頻道：--

6 dB 頻寬：100kHz

量測天線：--

檢測器：峰值

測試日期：108 年 01 月 24 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

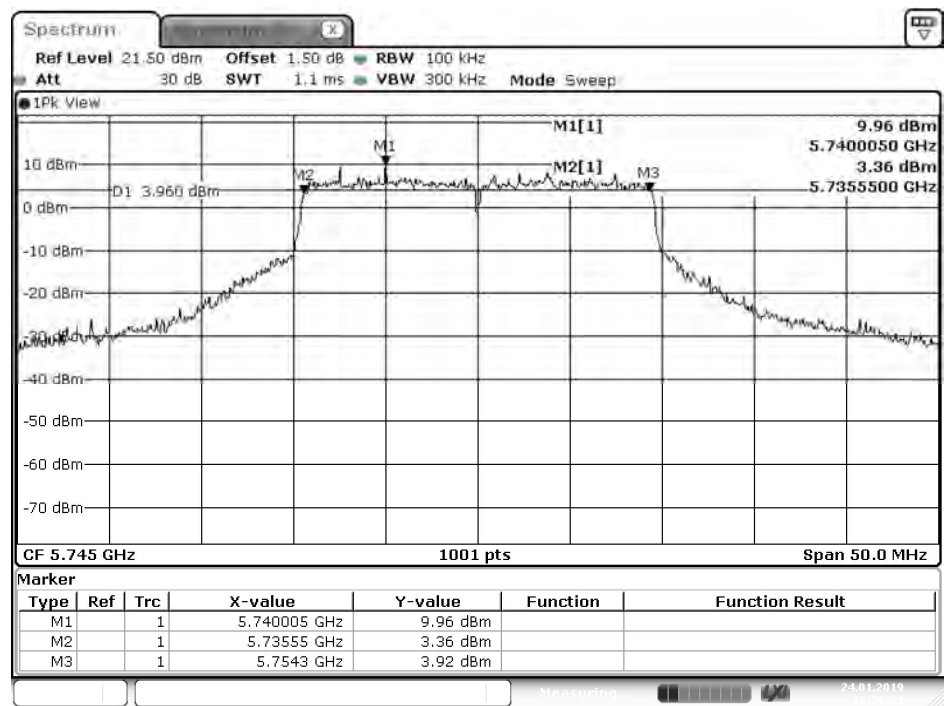
測試距離：Conducted

環境溫度：20 °C

環境濕度：48 %

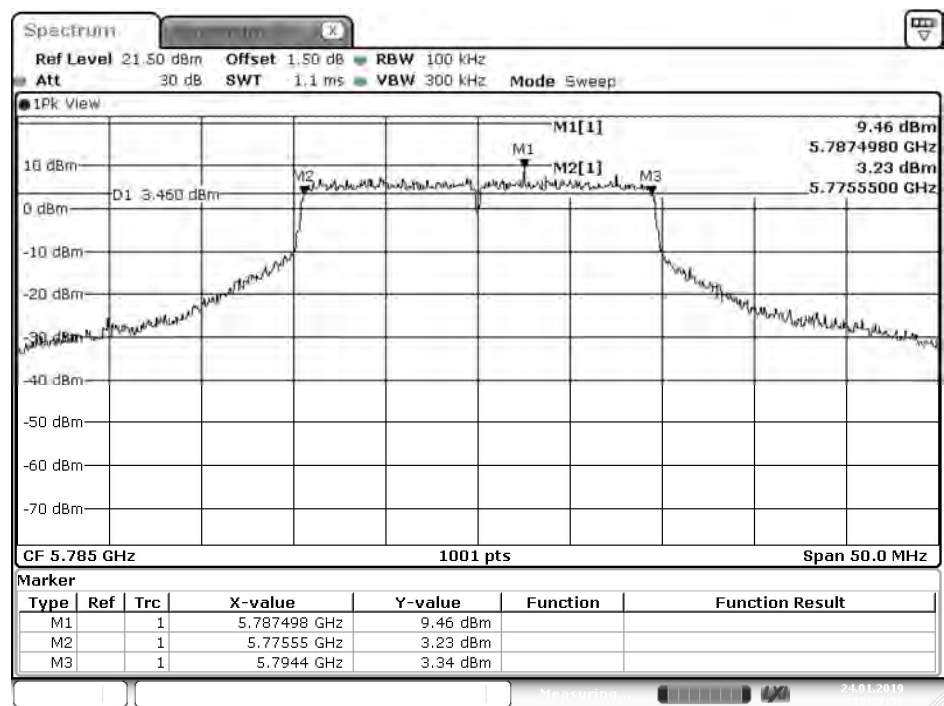
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
149	5745	18750	>500	Pass
157	5785	18850	>500	Pass
165	5825	18950	>500	Pass

Figure Channel 149



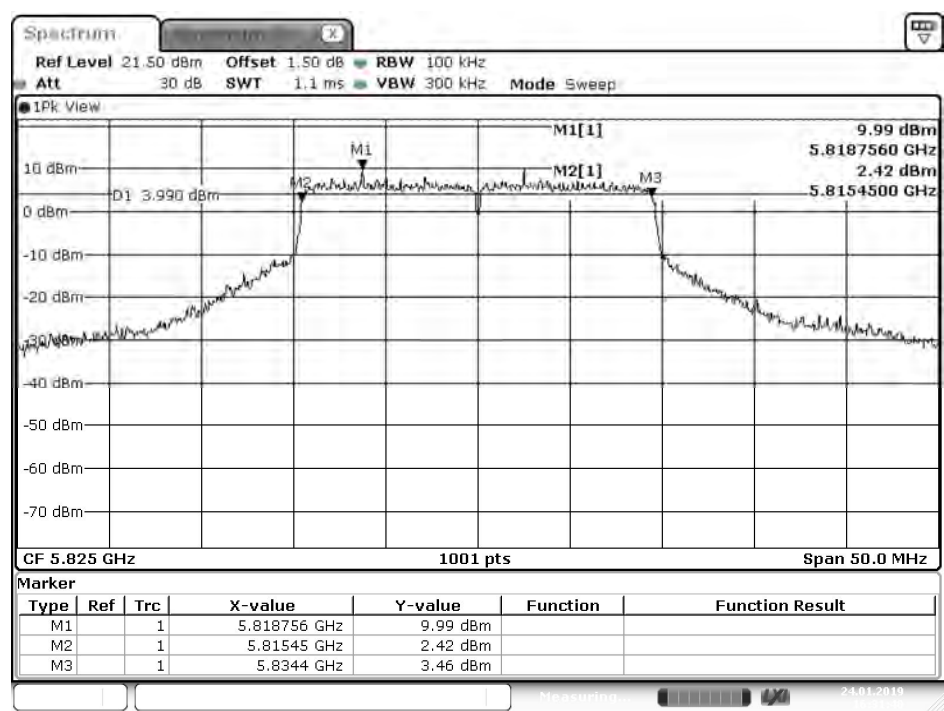
Date: 24.JAN.2019 16:26:01

Figure Channel 157



Date: 24.JAN.2019 16:27:50

Figure Channel 165



Date: 24.JAN.2019 16:31:40

待測物名稱：Intel® Wi-Fi 6 AX200

待測物型號：AX200D2WL

測試頻道：--

6 dB 頻寬：100kHz

量測天線：--

檢測器：峰值

測試日期：108 年 01 月 24 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

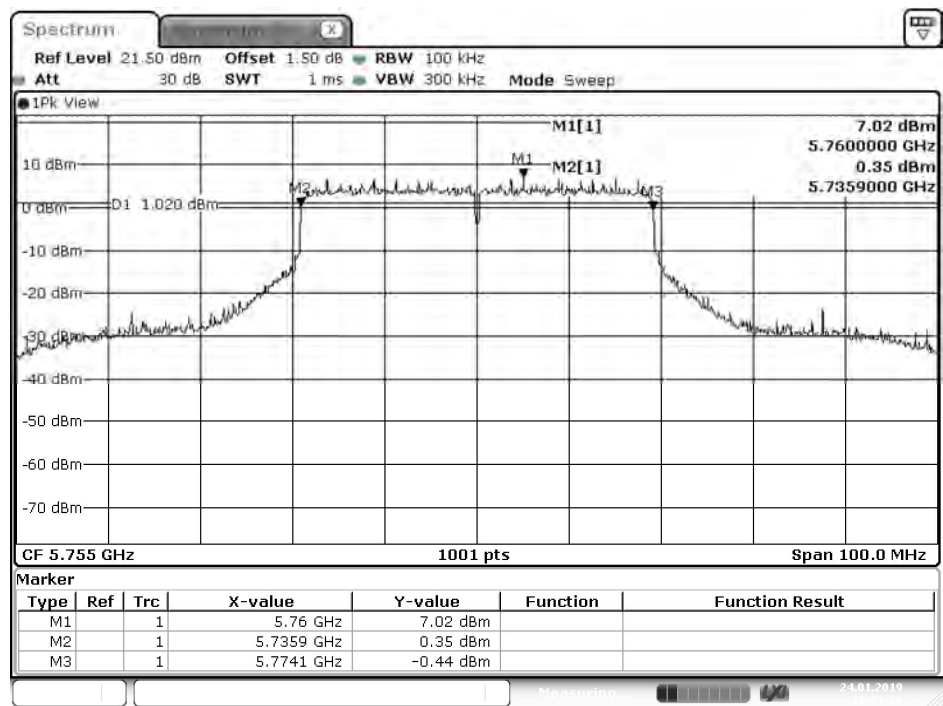
測試距離：Conducted

環境溫度：20 °C

環境濕度：48 %

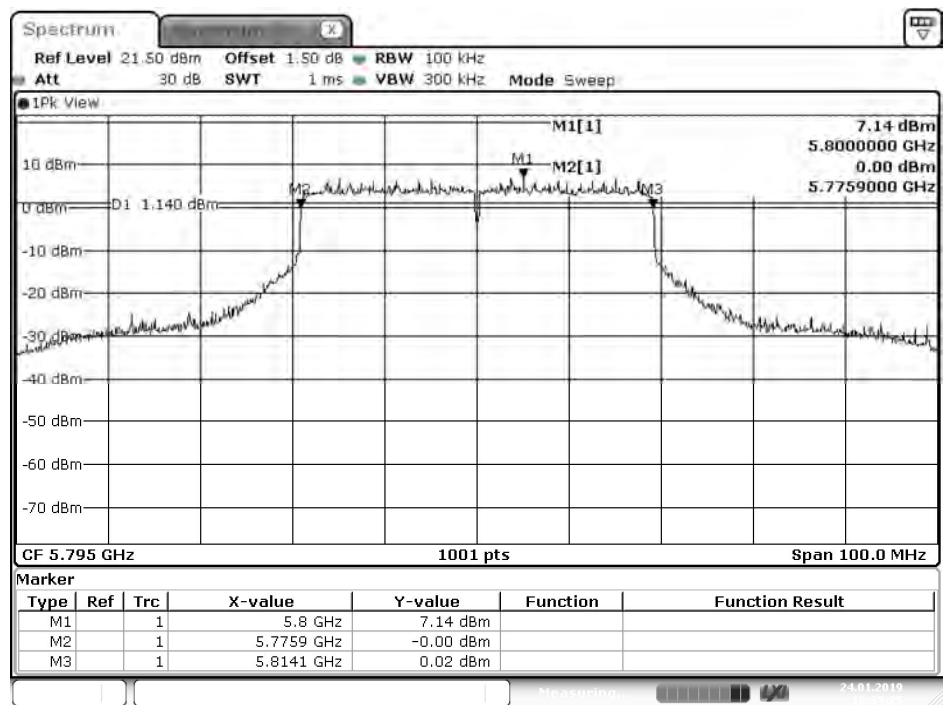
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
151	5755	38200	>500	Pass
159	5795	38200	>500	Pass

Figure Channel 151



Date: 24.JAN.2019 16:33:30

Figure Channel 159



Date: 24.JAN.2019 16:35:26

待測物名稱：Intel® Wi-Fi 6 AX200

待測物型號：AX200D2WL

測試頻道：--

6 dB 頻寬：100kHz

量測天線：--

檢測器：峰值

測試日期：108 年 01 月 24 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

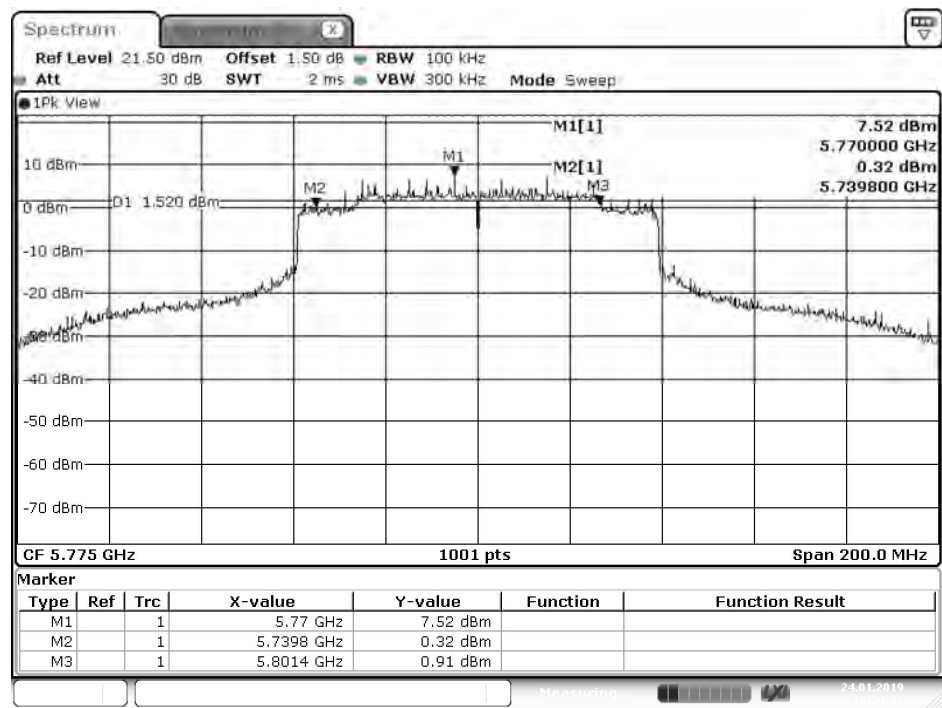
測試距離：Conducted

環境溫度：20 °C

環境濕度：48 %

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
155	5775	61600	>500	Pass

Figure Channel 155



Date: 24.JAN.2019 16:24:04

待測物名稱：Intel® Wi-Fi 6 AX200

待測物型號：AX200D2WL

測試頻道：--

6 dB 頻寬：100kHz

量測天線：--

檢測器：峰值

測試日期：108 年 01 月 24 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

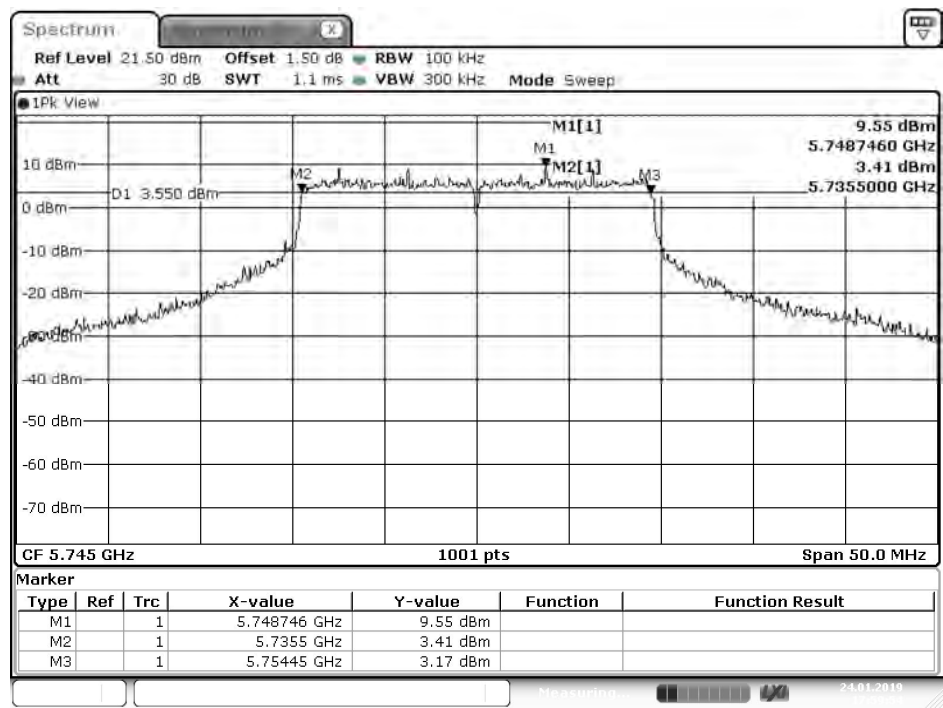
測試距離：Conducted

環境溫度：20 °C

環境濕度：48 %

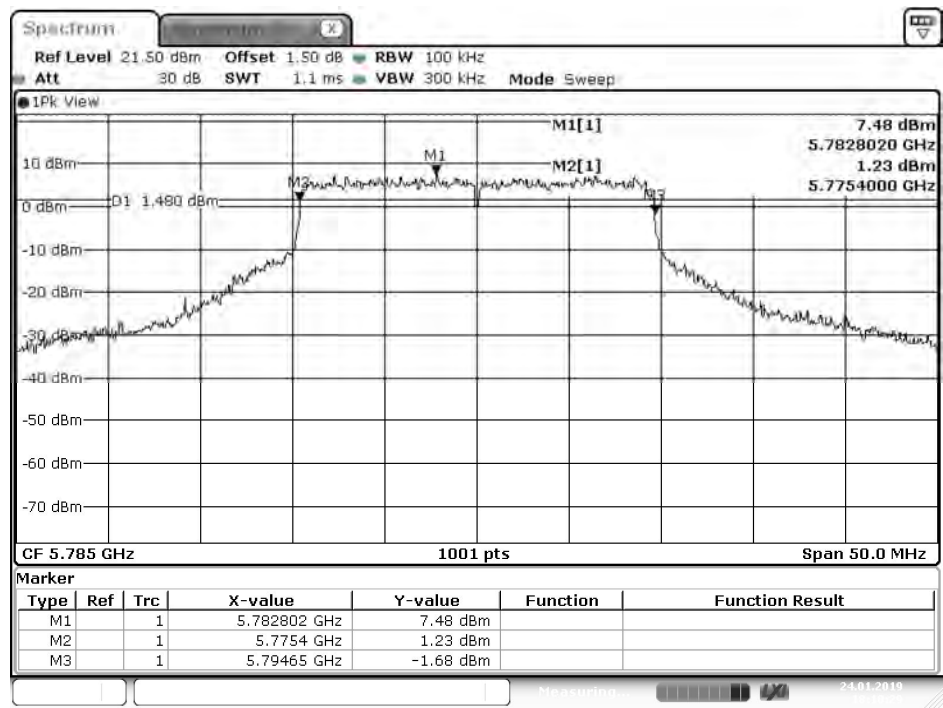
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
149	5745	18950	>500	Pass
157	5785	19250	>500	Pass
165	5825	19000	>500	Pass

Figure Channel 149



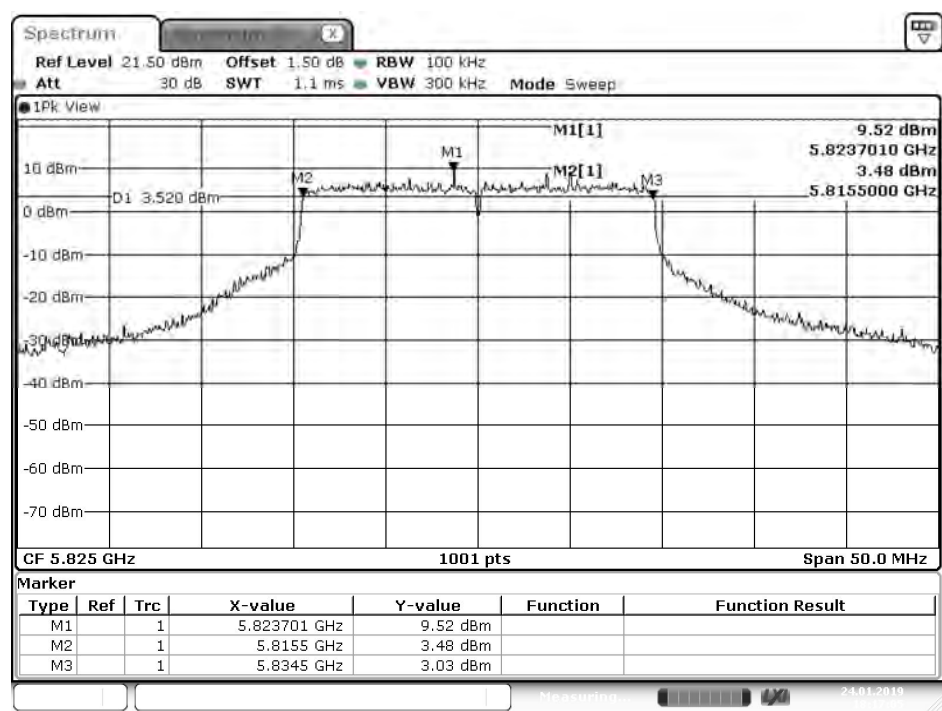
Date: 24.JAN.2019 17:59:54

Figure Channel 157



Date: 24.JAN.2019 18:10:29

Figure Channel 165



Date: 24.JAN.2019 18:17:05

待測物名稱：Intel® Wi-Fi 6 AX200

待測物型號：AX200D2WL

測試頻道：--

6 dB 頻寬：100kHz

量測天線：--

檢測器：峰值

測試日期：108 年 01 月 24 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

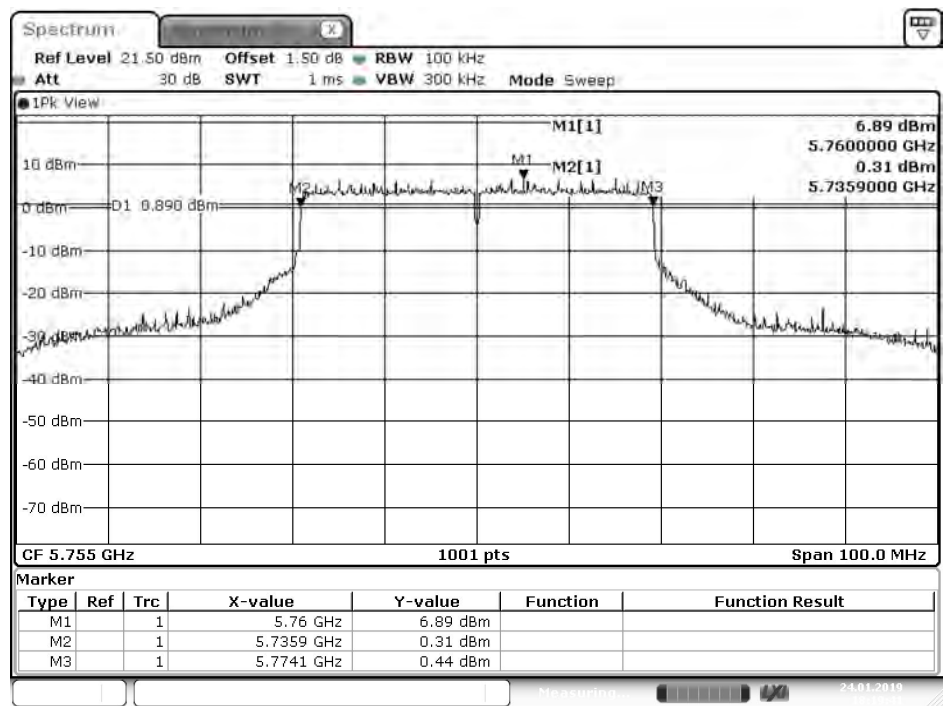
測試距離：Conducted

環境溫度：20 °C

環境濕度：48 %

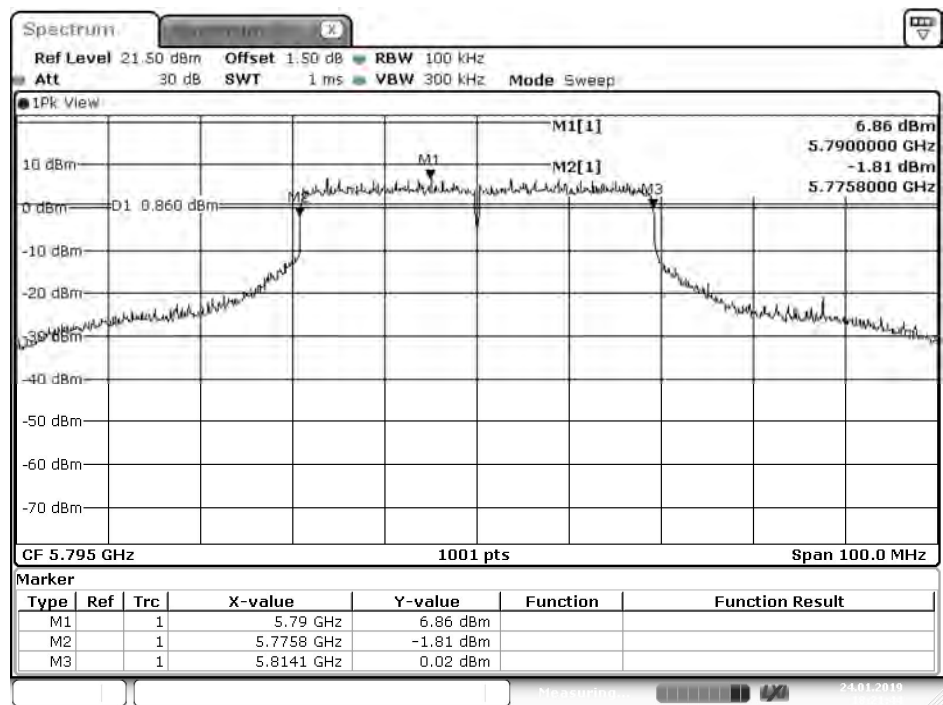
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
151	5755	38200	>500	Pass
159	5795	38300	>500	Pass

Figure Channel 151



Date: 24.JAN.2019 18:19:42

Figure Channel 159



Date: 24.JAN.2019 18:21:45

待測物名稱：Intel® Wi-Fi 6 AX200

待測物型號：AX200D2WL

測試頻道：--

6 dB 頻寬：100kHz

量測天線：--

檢測器：峰值

測試日期：108 年 01 月 24 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

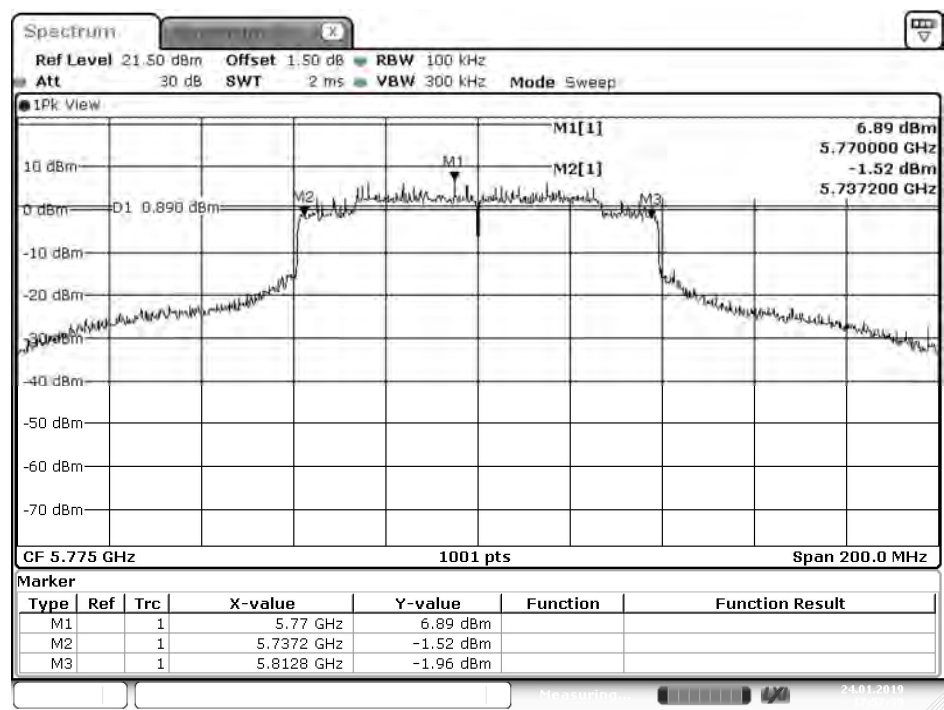
測試距離：Conducted

環境溫度：20 °C

環境濕度：48 %

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

Figure Channel 155



Date: 24.JAN.2019 17:57:40

待測物名稱：Intel® Wi-Fi 6 AX200

待測物型號：AX200D2WL

測試頻道：--

6 dB 頻寬：100kHz

量測天線：--

檢測器：峰值

測試日期：108 年 01 月 22 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

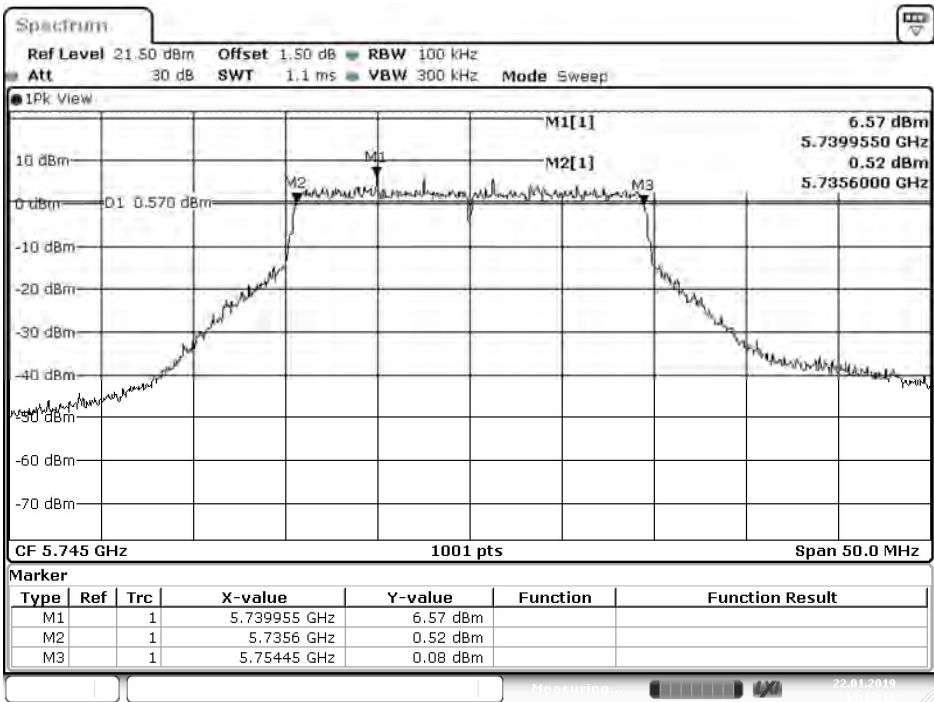
測試距離：Conducted

環境溫度：20 °C

環境濕度：48 %

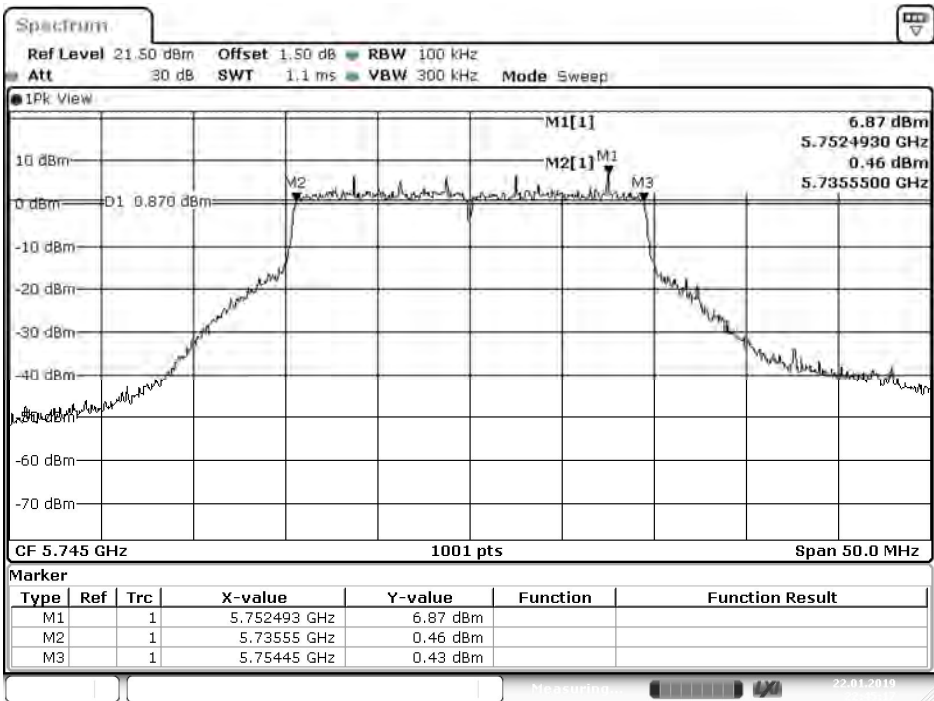
Channel No.	Frequency (MHz)	Chain	Measurement Level (kHz)	Required Limit (kHz)	Result
149	5745	A	18850	>500	Pass
157	5785	A	19150	>500	Pass
165	5825	A	19100	>500	Pass
149	5745	B	18900	>500	Pass
157	5785	B	18900	>500	Pass
165	5825	B	19050	>500	Pass

Figure Channel 149 (Chain A)



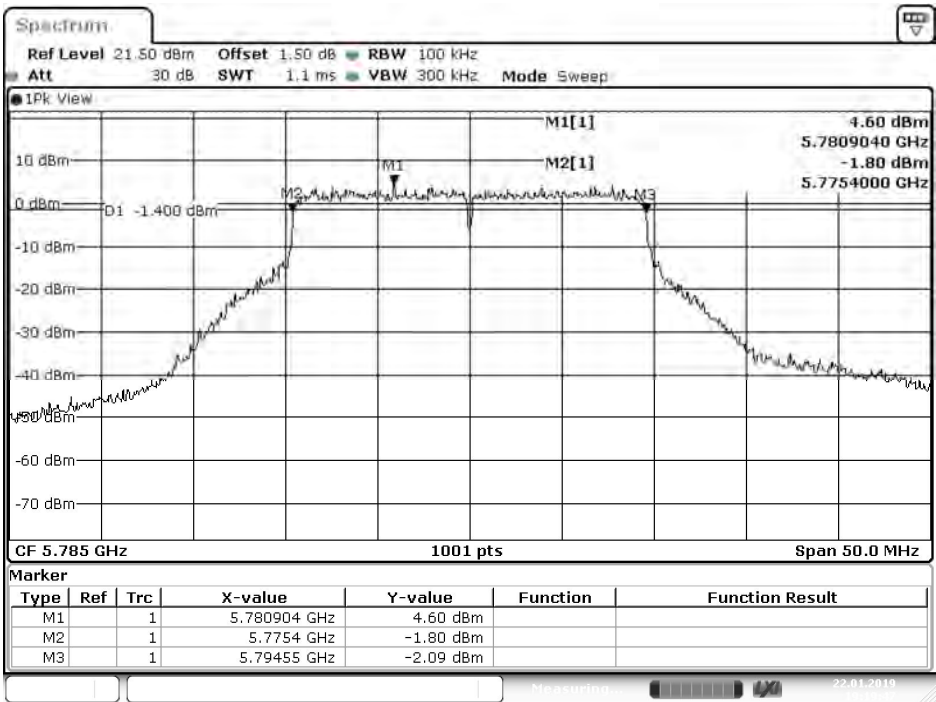
Date: 22.JAN.2019 19:10:12

Figure Channel 149 (Chain B)



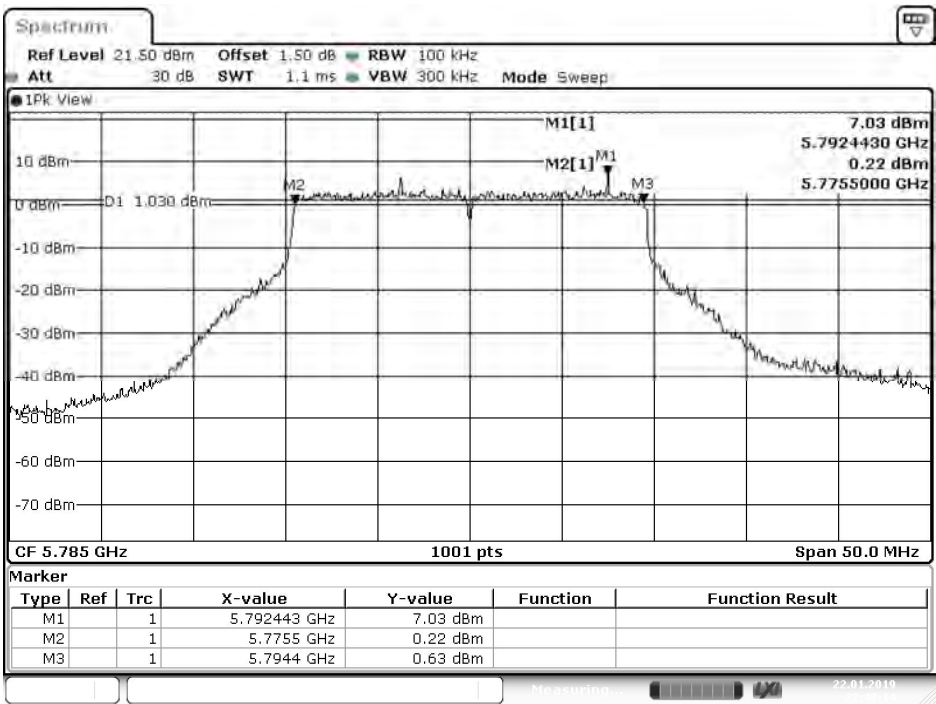
Date: 22.JAN.2019 22:45:18

Figure Channel 157 (Chain A)



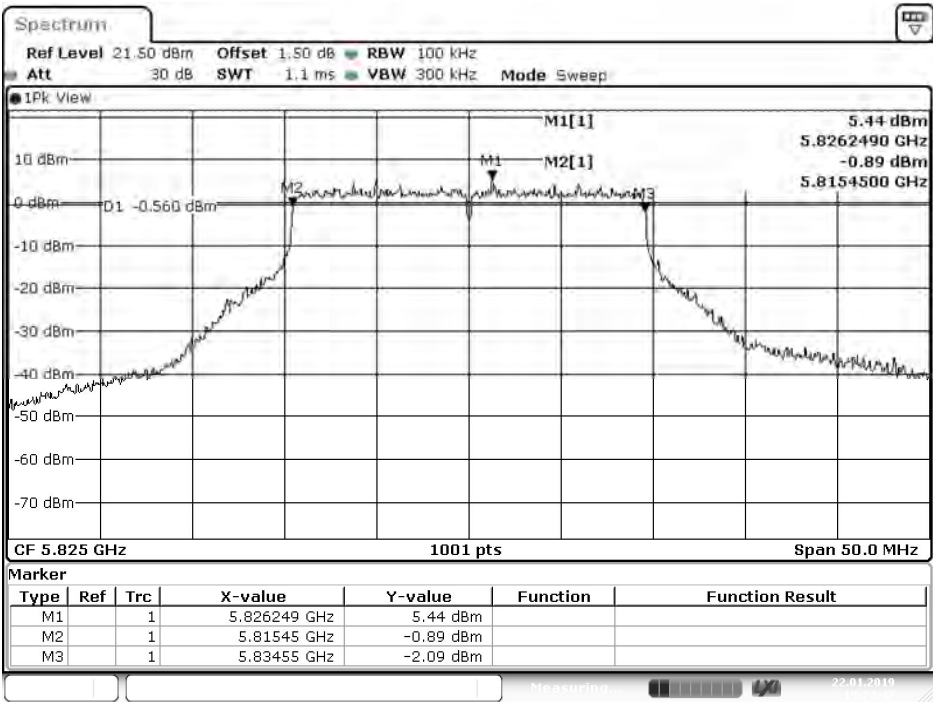
Date: 22.JAN.2019 19:19:48

Figure Channel 157 (Chain B)



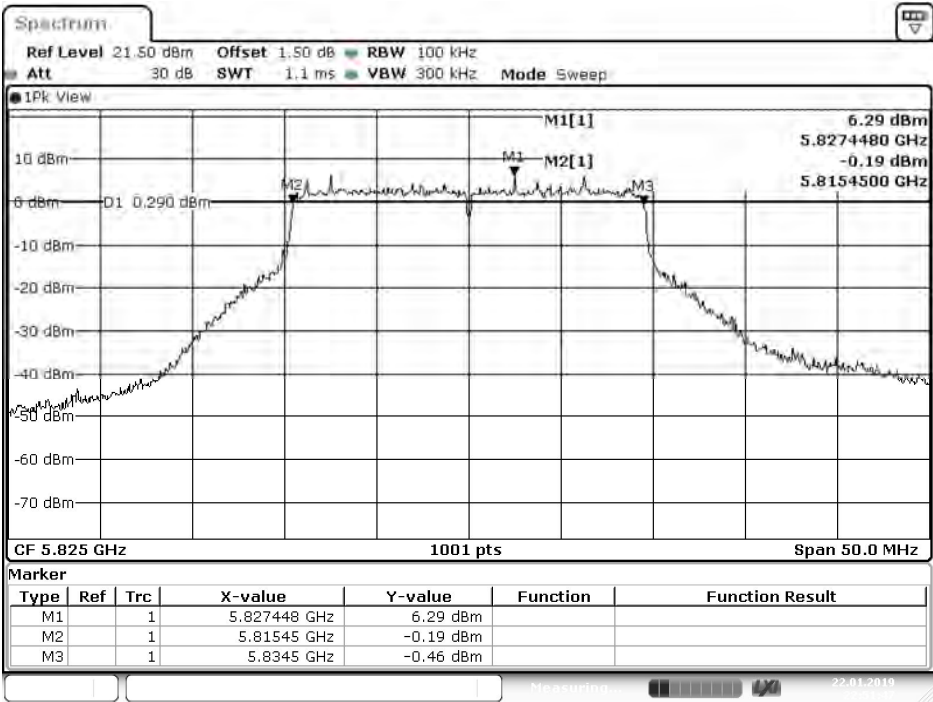
Date: 22.JAN.2019 22:48:14

Figure Channel 165 (Chain A)



Date: 22.JAN.2019 19:24:47

Figure Channel 165 (Chain B)



Date: 22.JAN.2019 22:51:47

待測物名稱：Intel® Wi-Fi 6 AX200

待測物型號：AX200D2WL

測試頻道：--

6 dB 頻寬：100kHz

量測天線：--

檢測器：峰值

測試日期：108 年 01 月 22 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

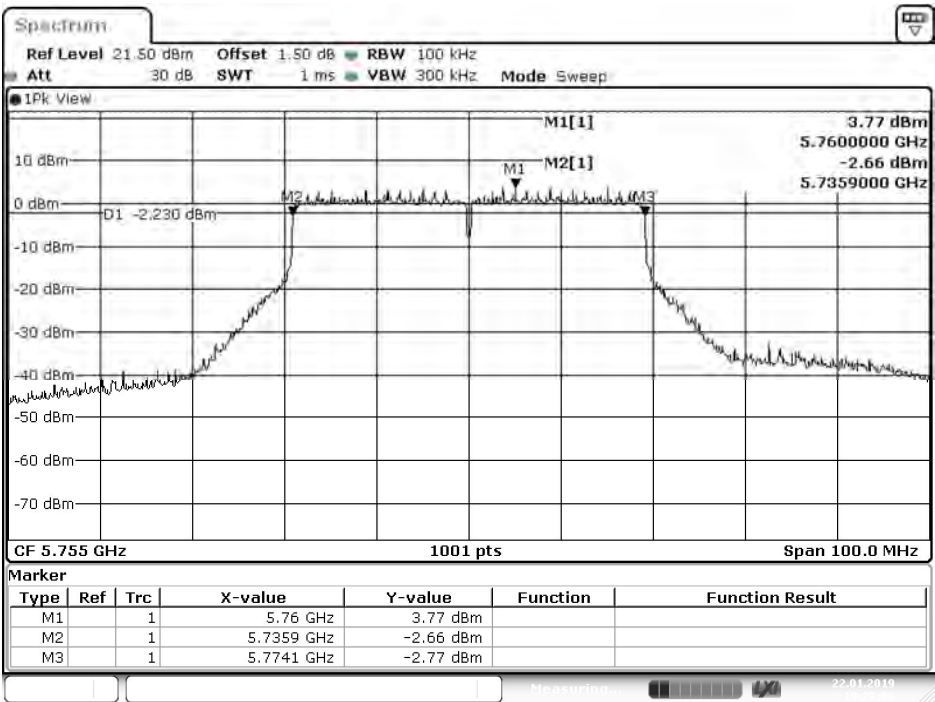
測試距離：Conducted

環境溫度：20 °C

環境濕度：48 %

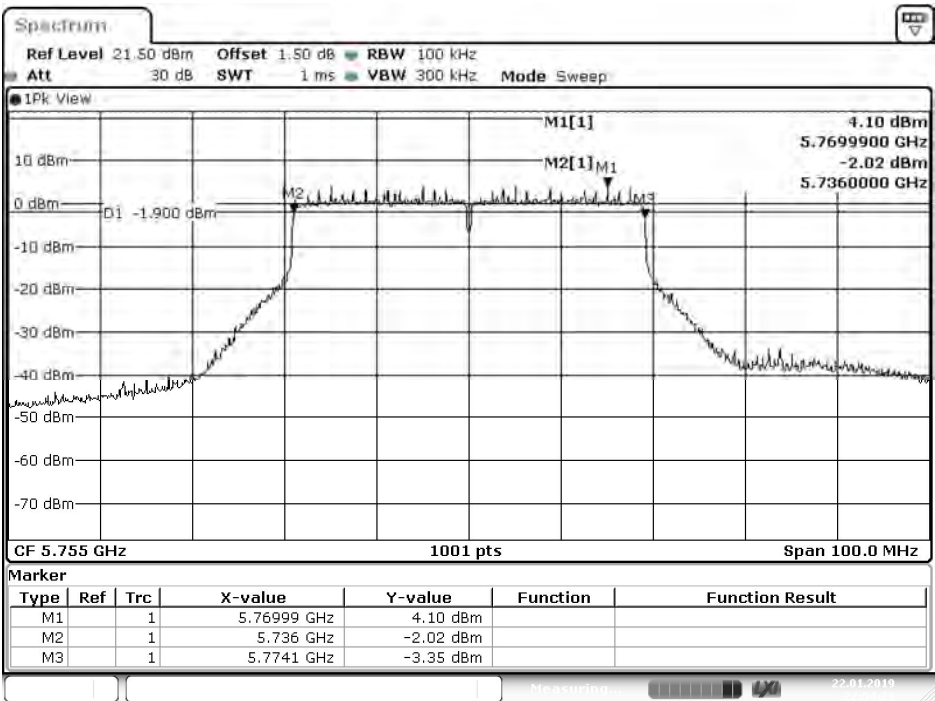
Channel No.	Frequency (MHz)	Chain	Measurement Level (kHz)	Required Limit (kHz)	Result
151	5755	A	38200	>500	Pass
159	5795	A	38200	>500	Pass
151	5755	B	38100	>500	Pass
159	5795	B	38100	>500	Pass

Figure Channel 151 (Chain A)



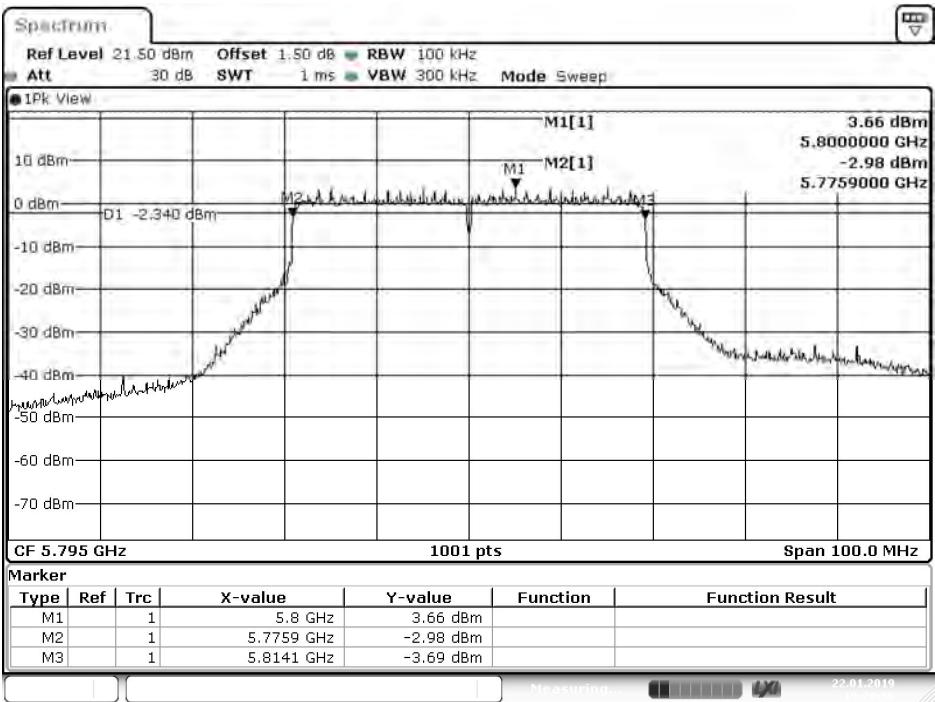
Date: 22.JAN.2019 19:27:06

Figure Channel 151 (Chain B)



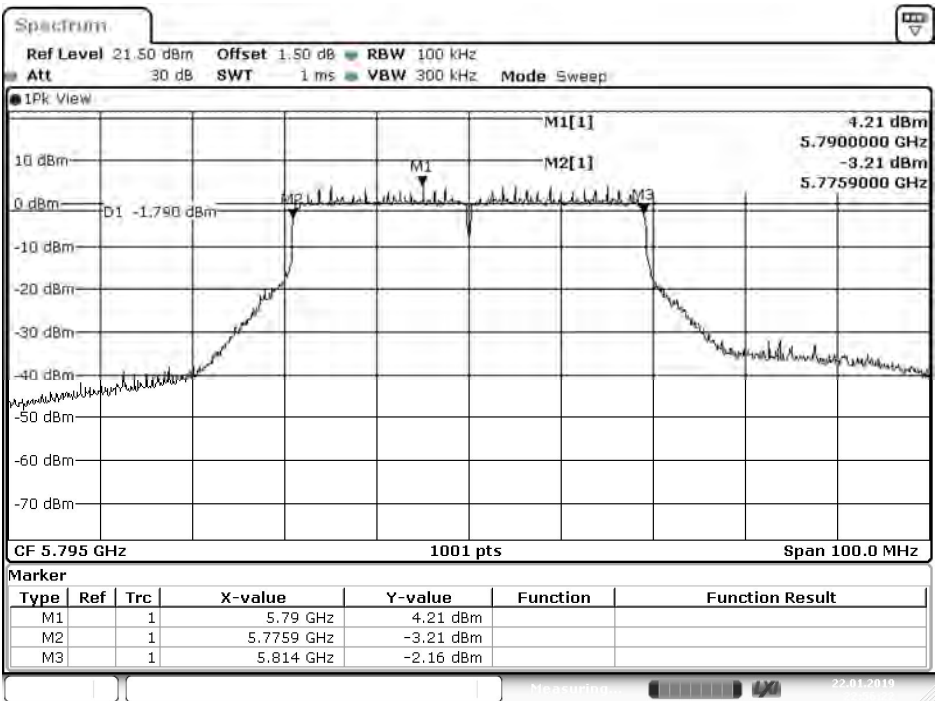
Date: 22.JAN.2019 22:54:23

Figure Channel 159 (Chain A)



Date: 22.JAN.2019 19:28:56

Figure Channel 159 (Chain B)



Date: 22.JAN.2019 22:56:23

待測物名稱：Intel® Wi-Fi 6 AX200

待測物型號：AX200D2WL

測試頻道：--

6 dB 頻寬：100kHz

量測天線：--

檢測器：峰值

測試日期：108 年 01 月 22 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

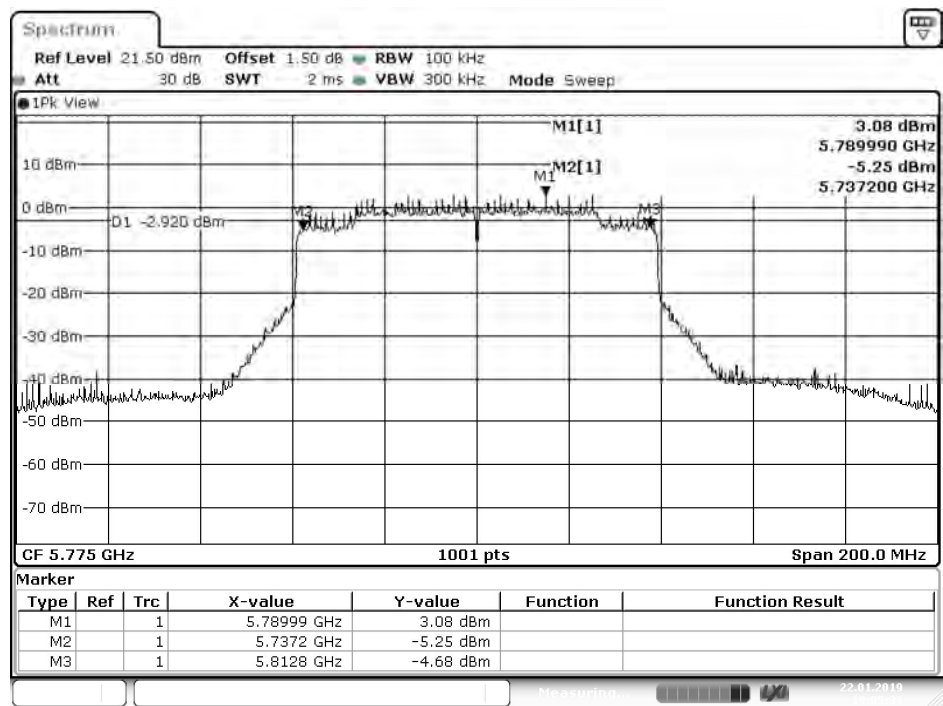
測試距離：Conducted

環境溫度：20 °C

環境濕度：48 %

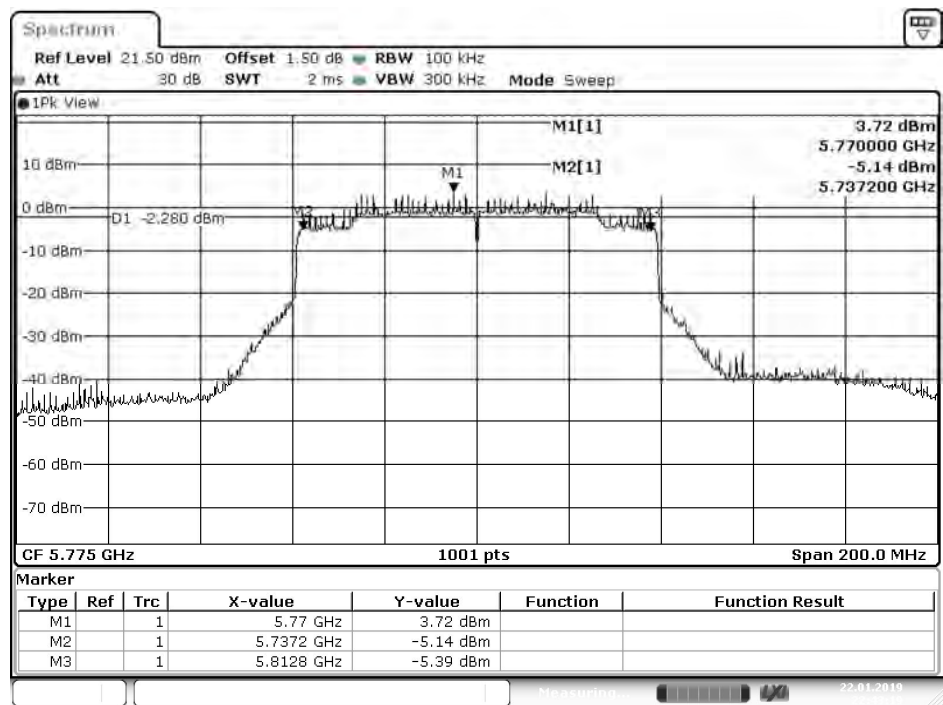
Channel No.	Frequency (MHz)	Chain	Measurement Level (kHz)	Required Limit (kHz)	Result
155	5775	A	75600	>500	Pass
155	5775	B	75600	>500	Pass

Figure Channel 155 (Chain A)



Date: 22.JAN.2019 19:05:34

Figure Channel 155 (Chain B)



Date: 22.JAN.2019 22:43:19

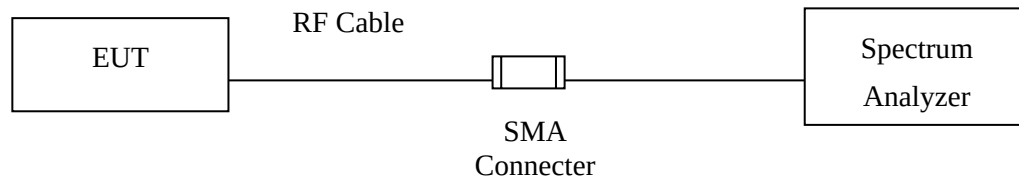
佔用頻帶寬度測試結果:	PASS
-------------	------

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 AX200

待測物型號：AX200D2WL

測試頻道：--

量測天線：--

檢測器：峰值

測試日期：107 年 12 月 25 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:

$\text{Duty Cycle} = \text{Ton} / (\text{Ton} + \text{Toff})$

$\text{Duty Factor} = 10 \text{ Log } (1/\text{Duty Cycle})$

Results:

SISO A

5GHz band	Ton (ms)	Ton + Toff (ms)	Duty Cycle (%)	Duty Factor (dB)
802.11 a	2.0870	2.3478	88.89	0.51
802.11 n20	24.8696	25.1304	98.96	0.05
802.11 n40	17.8261	18.0870	98.56	0.06
802.11 ac80	10.9855	11.2754	97.43	0.11
802.11 ac160	5.5362	5.7681	95.98	0.18
802.11 ax20	24.7826	25.0725	98.84	0.05
802.11 ax40	18.6957	18.9855	98.47	0.07
802.11 ax80	8.9855	9.2754	96.87	0.14
802.11 ax160	4.5217	4.7826	94.54	0.24

SISO B

5GHz band	Ton (ms)	Ton + Toff (ms)	Duty Cycle (%)	Duty Factor (dB)
802.11 a	2.0870	2.3478	88.89	0.51
802.11 n20	24.8696	25.1594	98.85	0.05
802.11 n40	17.8841	18.1449	98.56	0.06
802.11 ac80	11.0000	11.2609	97.68	0.10
802.11 ac160	5.5362	5.7681	95.98	0.18
802.11 ax20	24.7826	25.0725	98.84	0.05
802.11 ax40	18.6812	18.9420	98.62	0.06
802.11 ax80	8.9710	9.2319	97.17	0.12
802.11 ax160	4.5217	4.7536	95.12	0.22

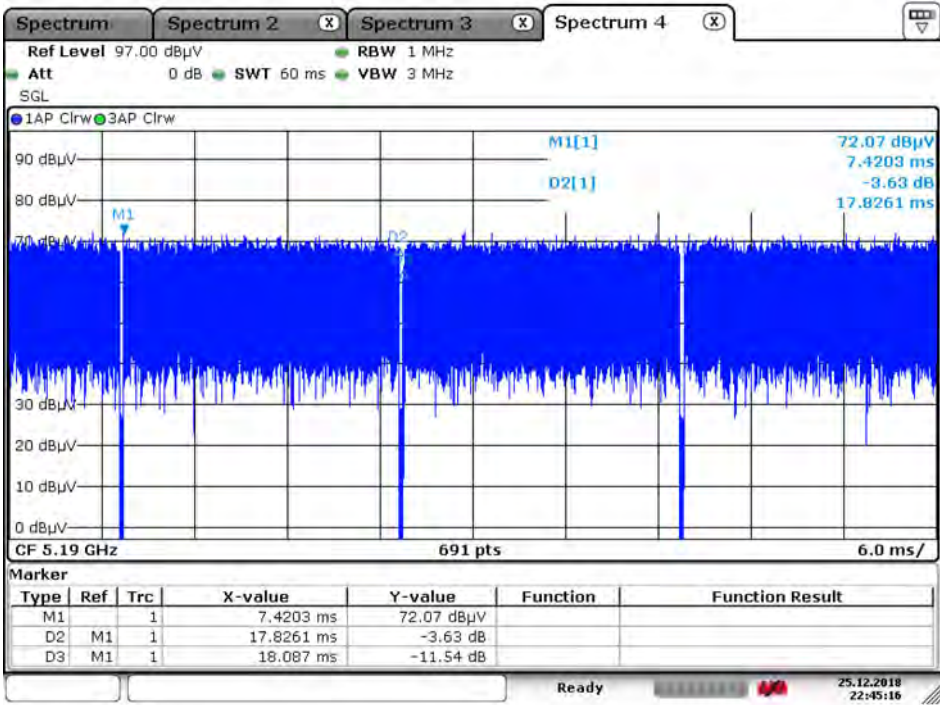
MIMO

5GHz band	Ton (ms)	Ton + Toff (ms)	Duty Cycle (%)	Duty Factor (dB)
802.11 n20	18.5797	18.8116	98.77	0.05
802.11 n40	8.9565	9.2174	97.17	0.12
802.11 ac80	10.9855	11.2464	97.68	0.10
802.11 ac160	2.7850	3.0400	91.61	0.38
802.11 ax20	18.6813	18.9400	98.63	0.06
802.11 ax40	9.3500	9.6275	97.12	0.13
802.11 ax80	4.5125	4.7713	94.58	0.24
802.11 ax160	2.2800	2.5375	89.85	0.46

Date: 25,DEC.2018 22:42:41

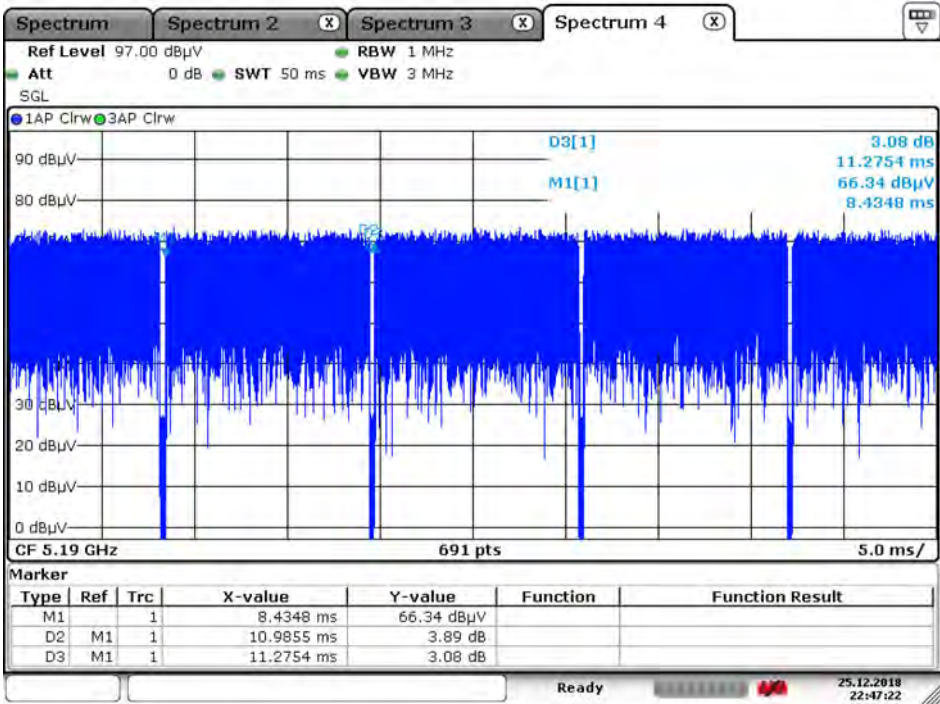
Date: 25,DEC.2018 22:44:25

802.11n40 (SISO A)



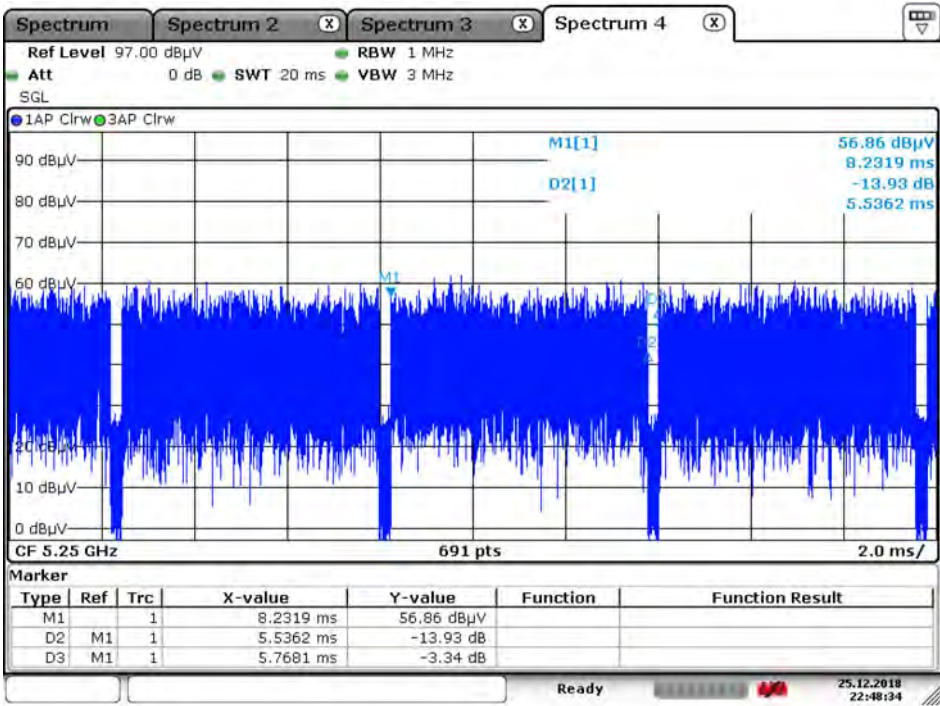
Date: 25.DEC.2018 22:45:16

802.11ac80 (SISO A)



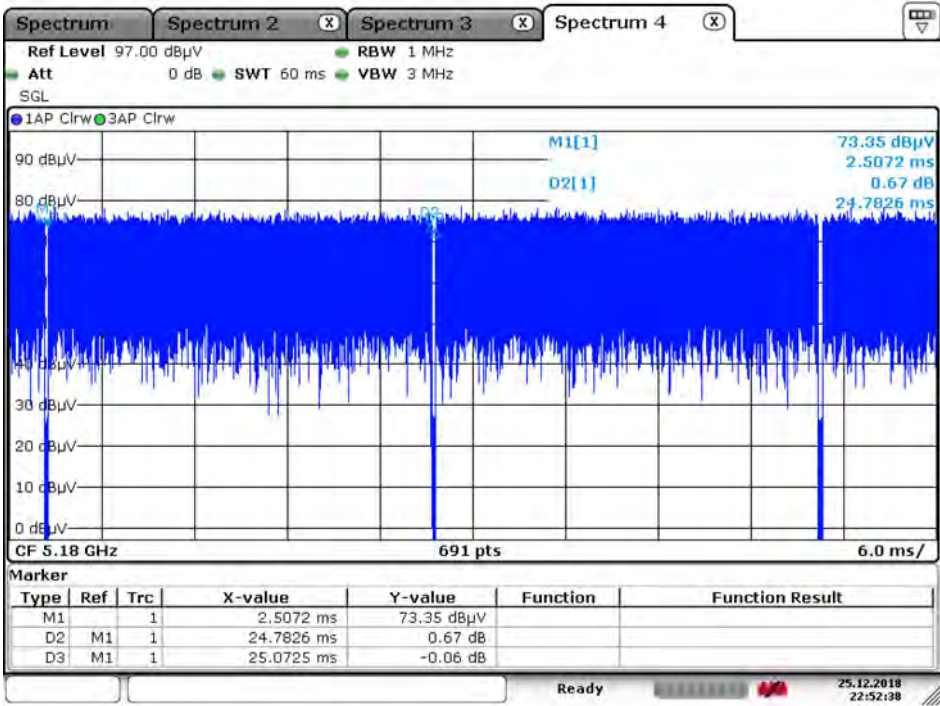
Date: 25.DEC.2018 22:47:22

802.11ac160 (SISO A)



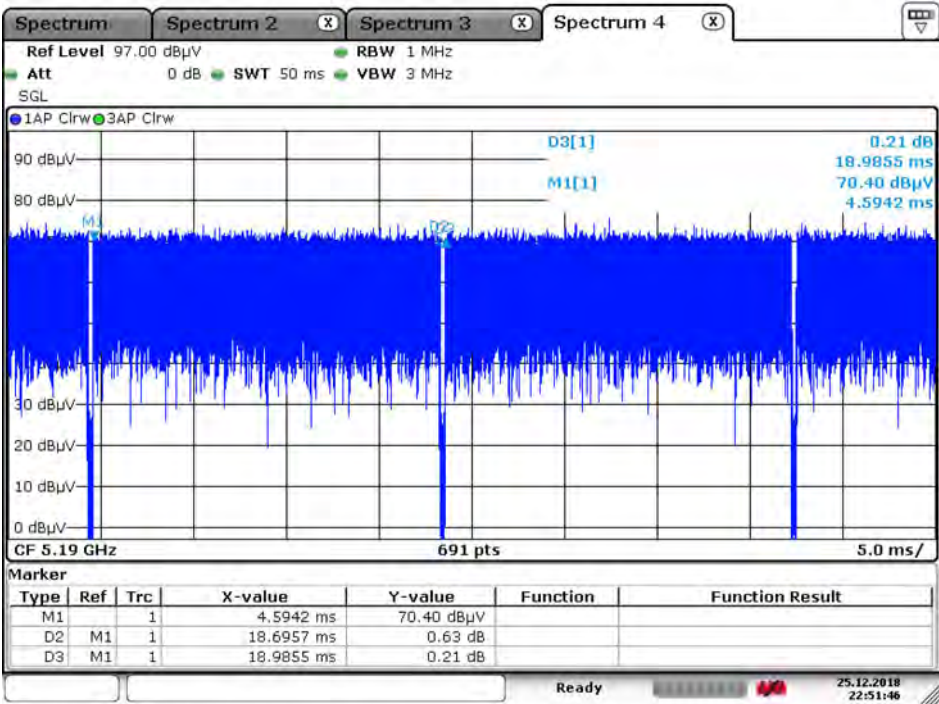
Date: 25. DEC. 2018 22:48:34

802.11ax20 (SISO A)



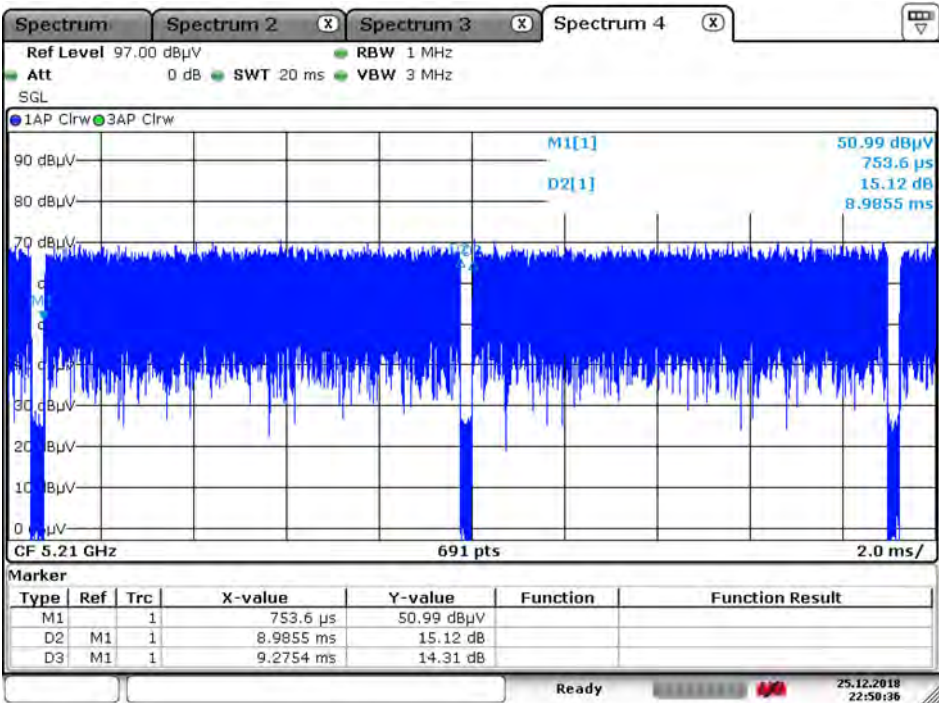
Date: 25. DEC. 2018 22:52:38

802.11ax40 (SISO A)

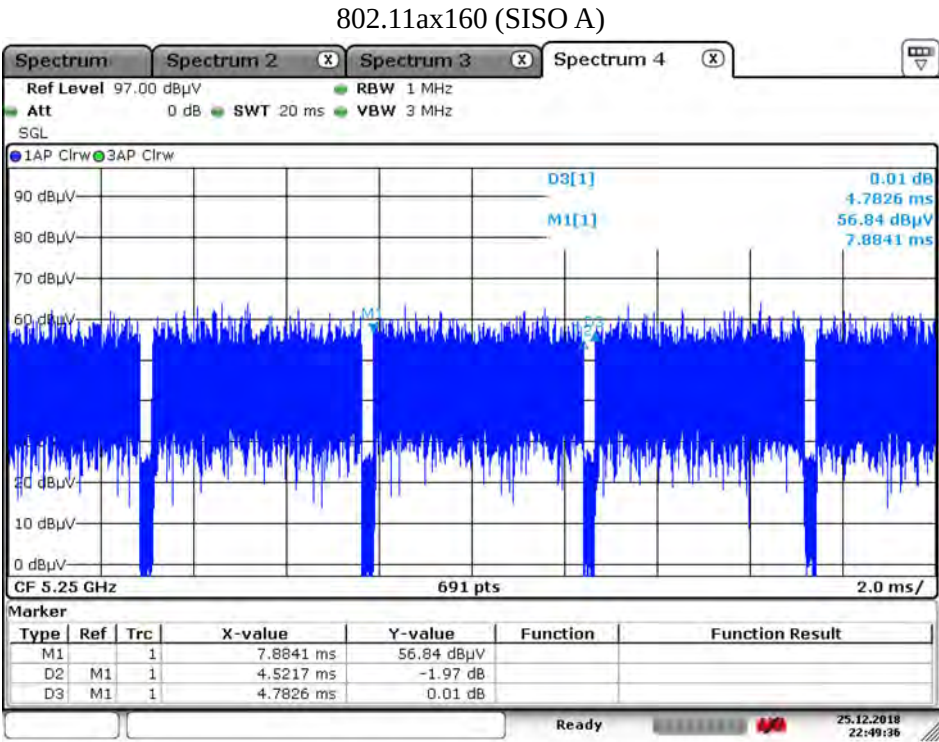


Date: 25. DEC. 2018 22:51:46

802.11ax80 (SISO A)

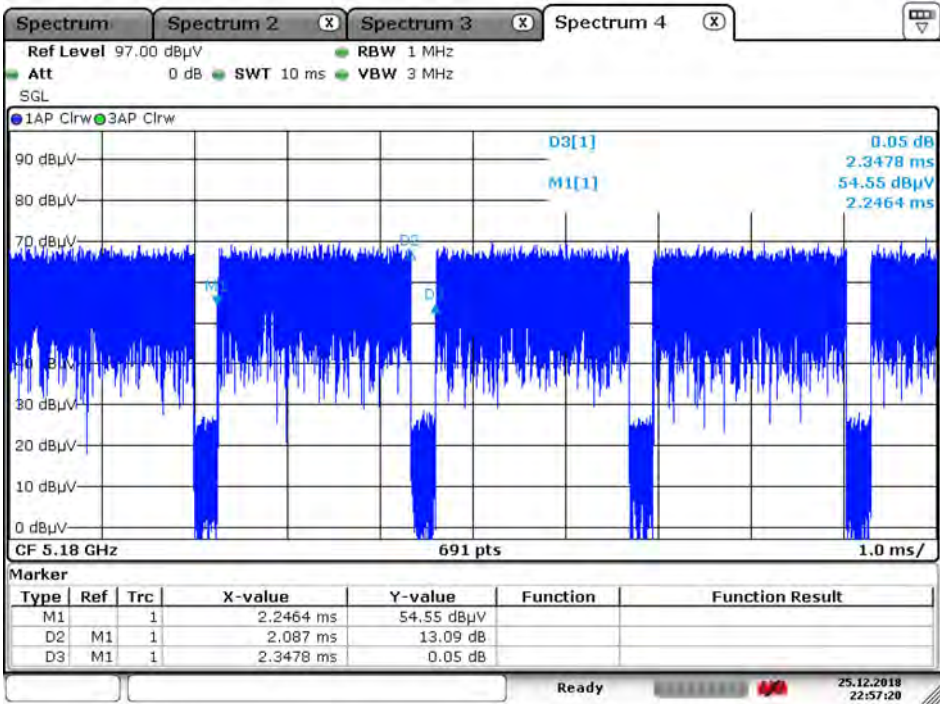


Date: 25. DEC. 2018 22:50:36



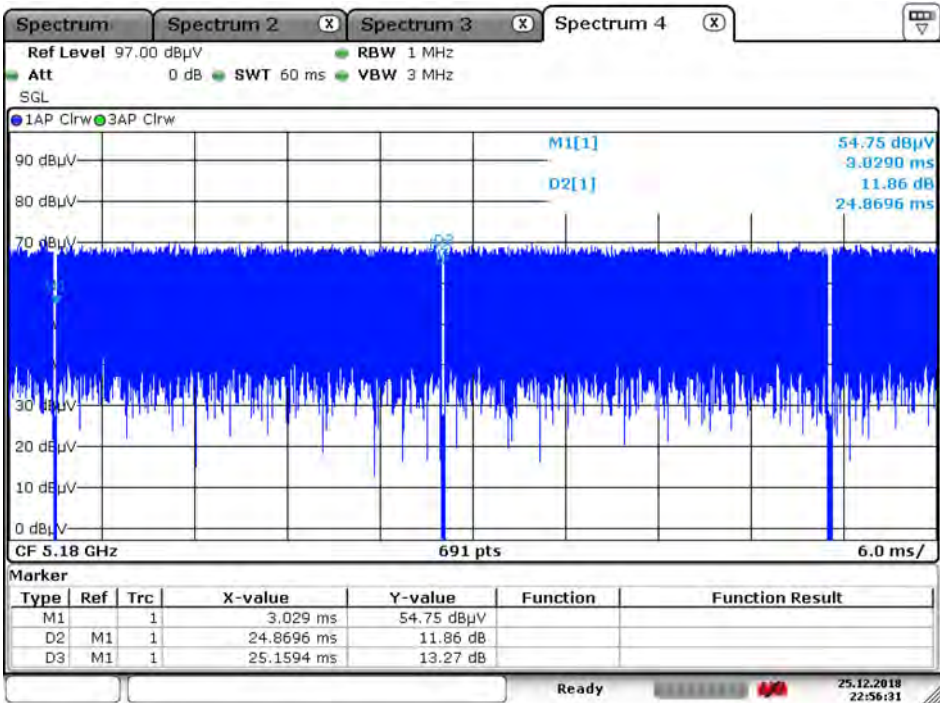
Date: 25.DEC.2018 22:49:36

802.11a (SISO B)



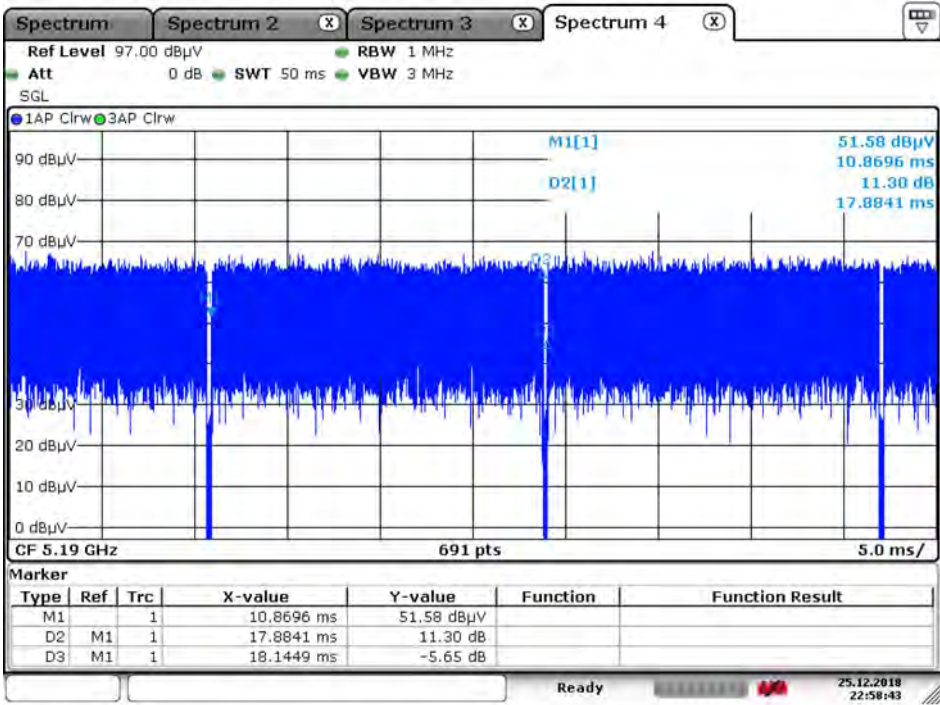
Date: 25. DEC. 2018 22:57:20

802.11n20 (SISO B)



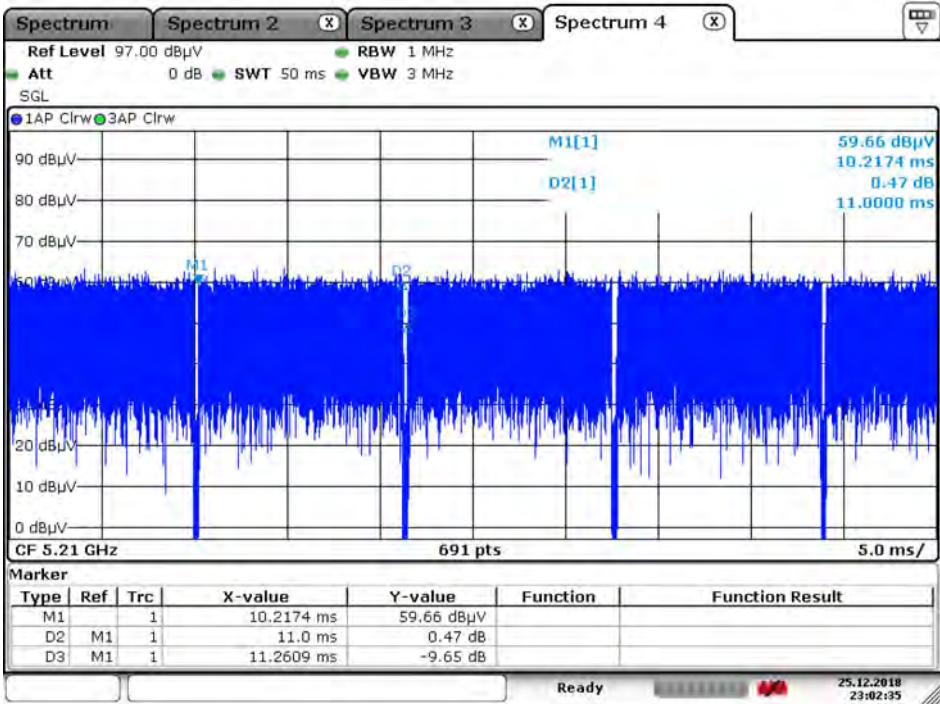
Date: 25. DEC. 2018 22:56:31

802.11n40 (SISO B)



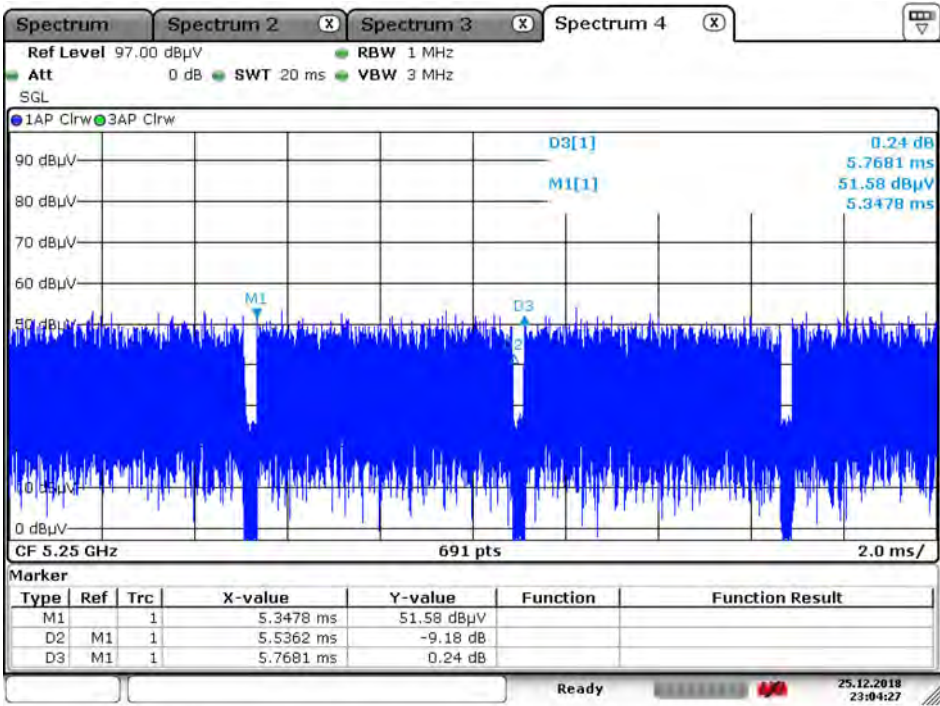
Date: 25. DEC. 2018 22:58:43

802.11ac80 (SISO B)



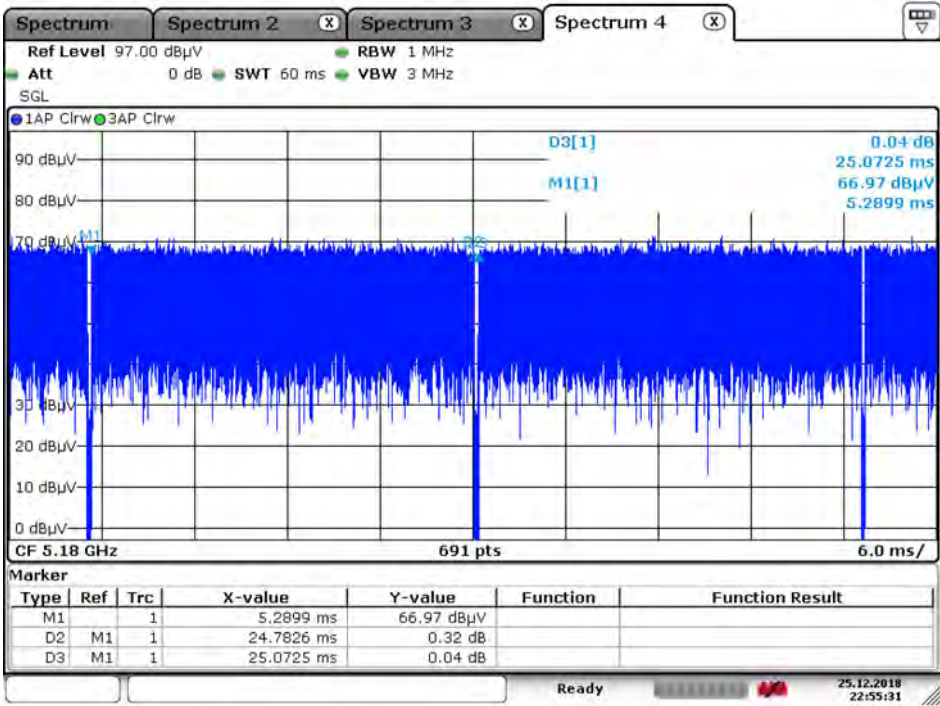
Date: 25. DEC. 2018 23:02:35

802.11ac160 (SISO B)



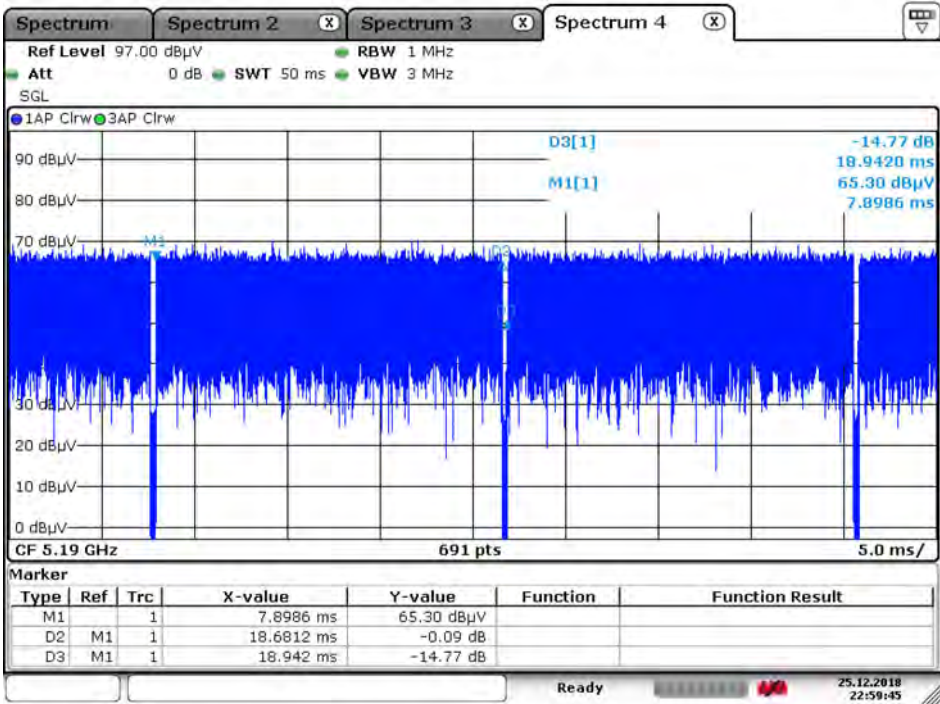
Date: 25. DEC. 2018 23:04:27

802.11ax20 (SISO B)



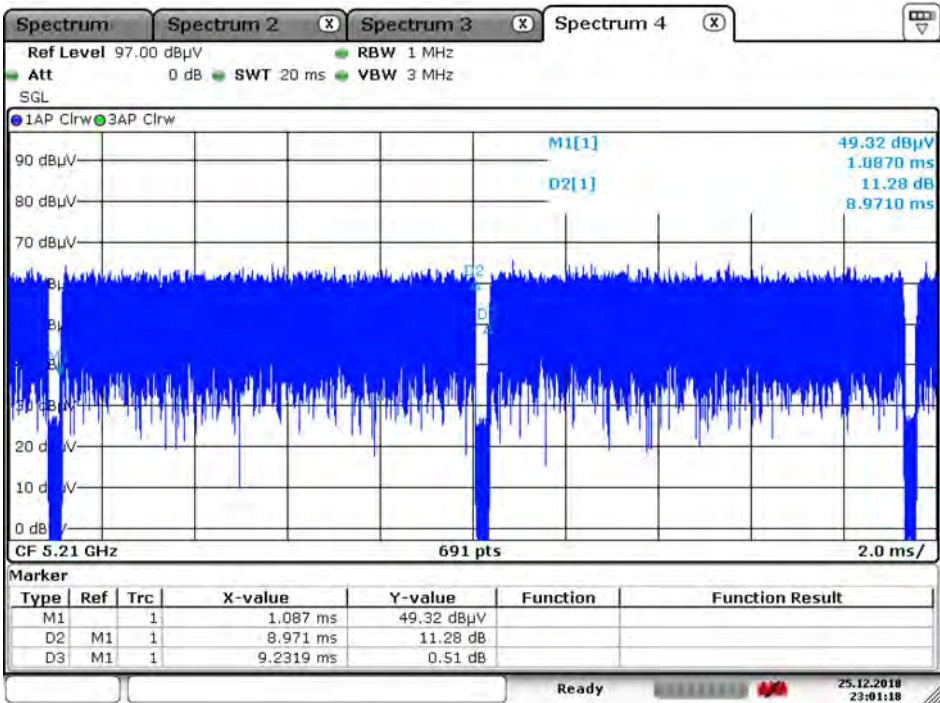
Date: 25. DEC. 2018 22:55:31

802.11ax40 (SISO B)



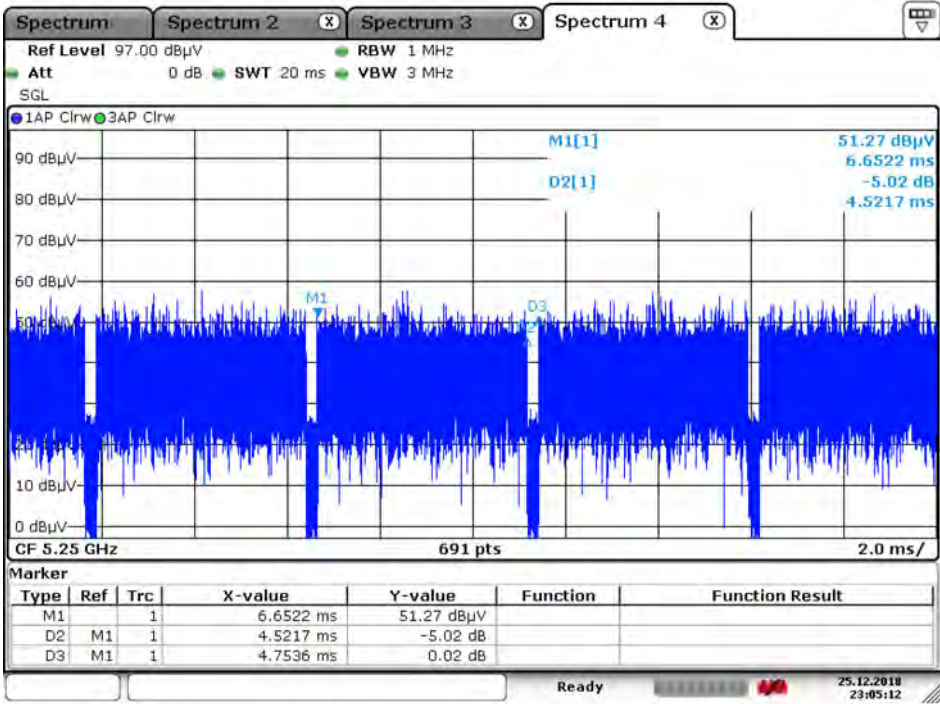
Date: 25. DEC. 2018 22:59:46

802.11ax80 (SISO B)



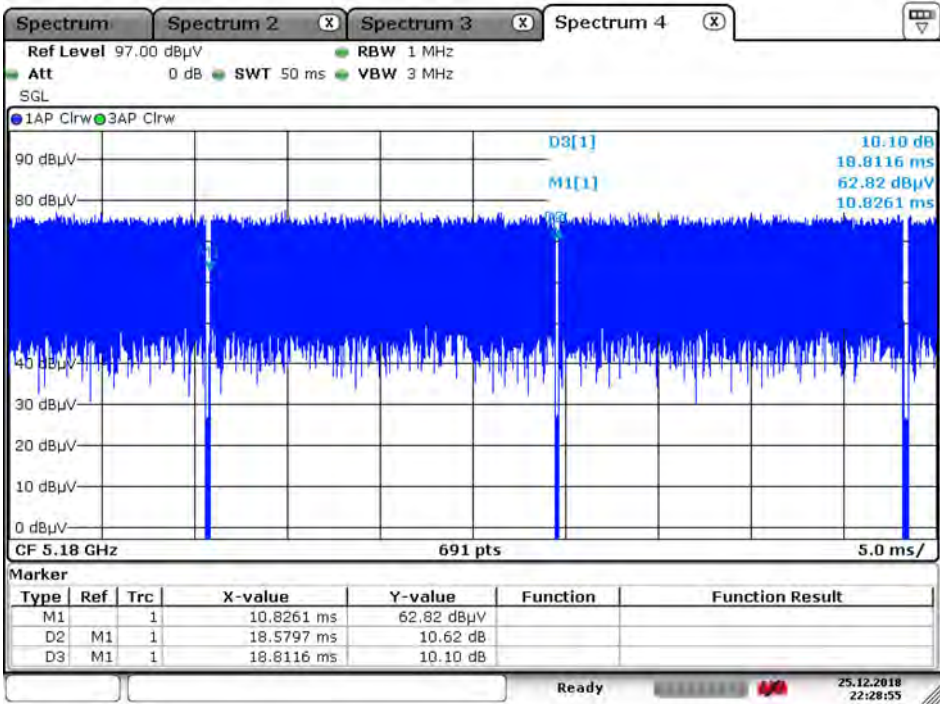
Date: 25. DEC. 2018 23:01:19

802.11ax160 (SISO B)



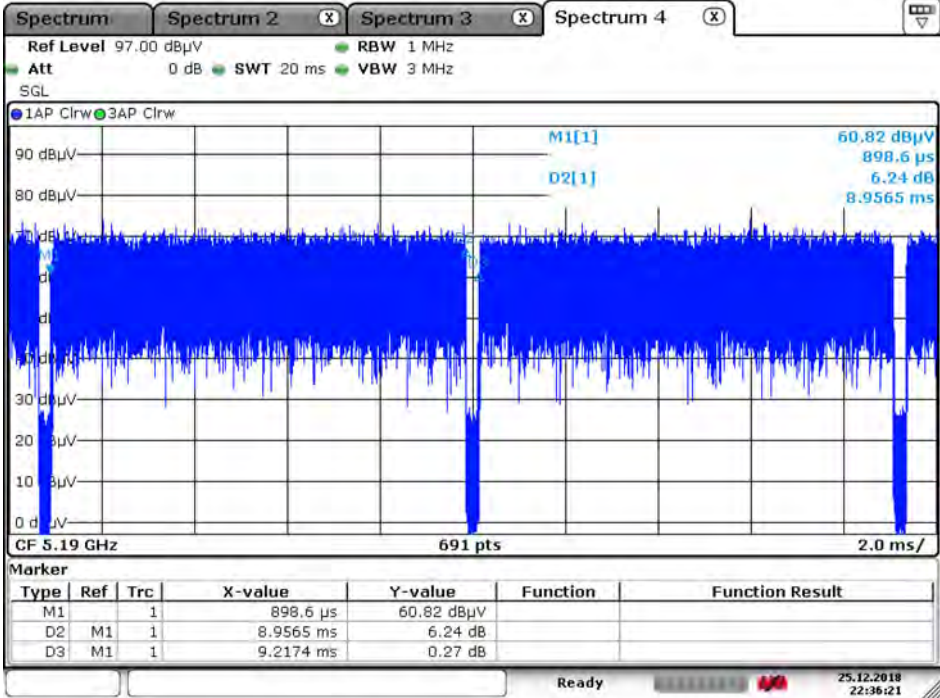
Date: 25.DEC.2018 23:05:12

802.11n20 (MIMO)



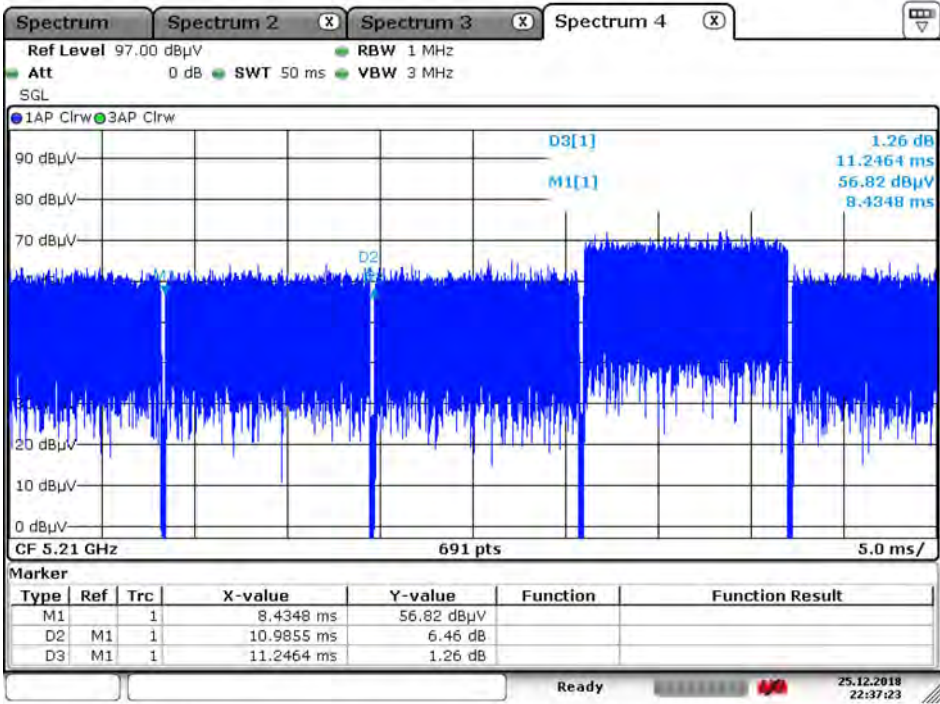
Date: 25, DEC. 2018 22:28:55

802.11n40 (MIMO)



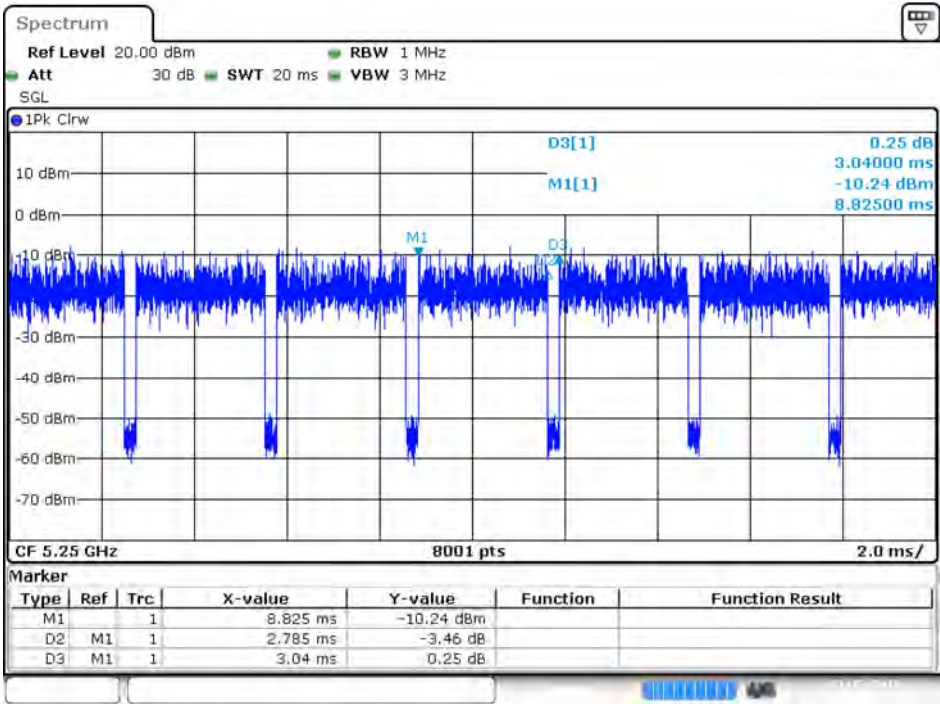
Date: 25, DEC. 2018 22:36:21

802.11ac80 (MIMO)



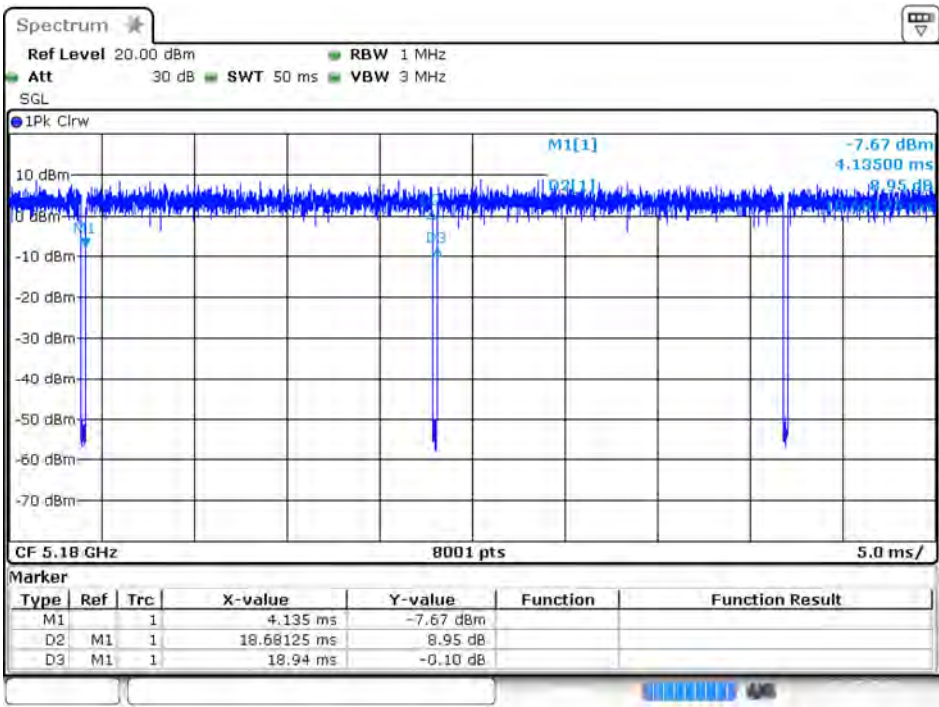
Date: 25.DEC.2018 22:37:23

802.11ac160 (MIMO)

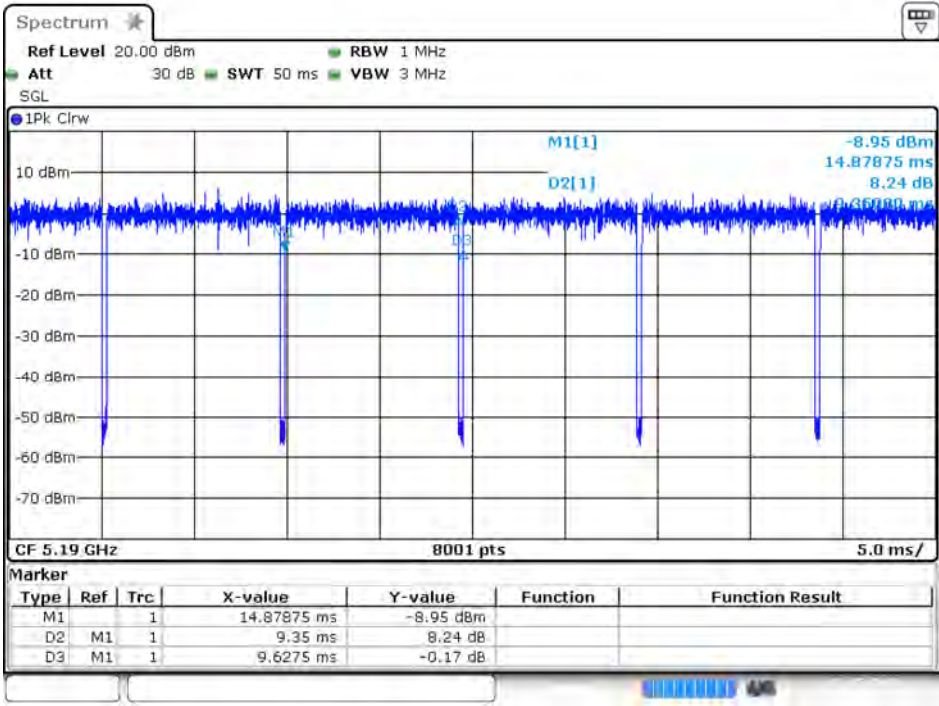


Date: 15.FEB.2019 10:06:04

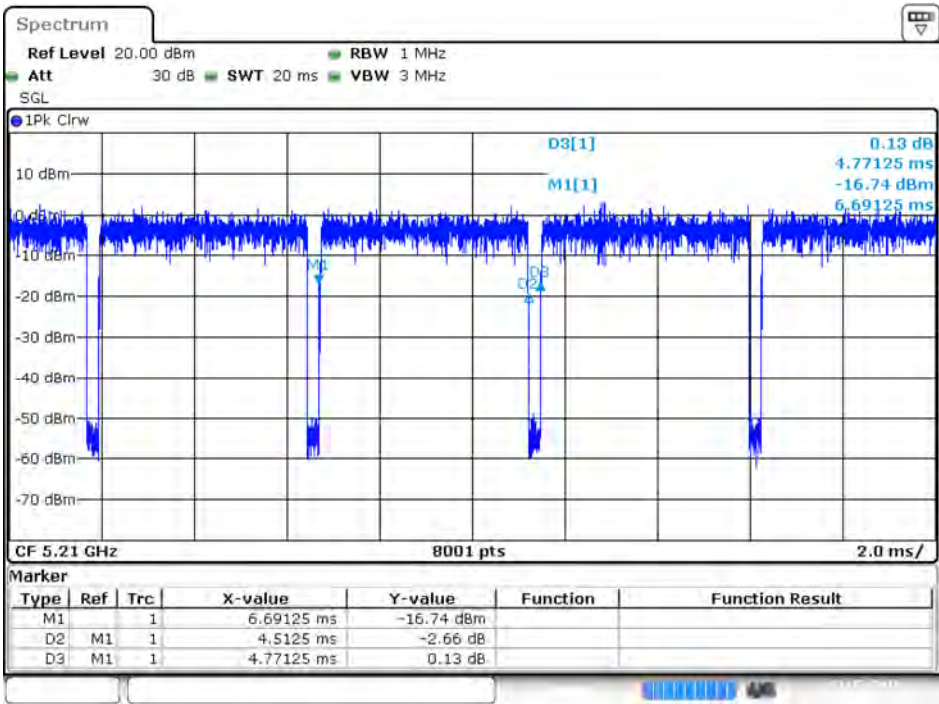
802.11ax20 (MIMO)



802.11ax40 (MIMO)

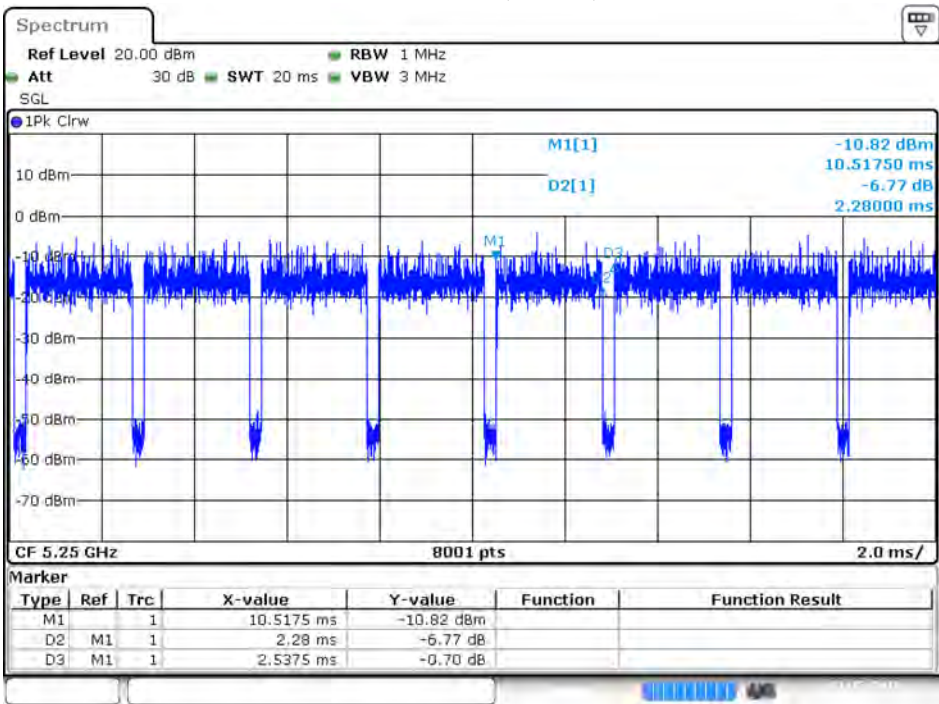


802.11ax80 (MIMO)



Date: 15.FEB.2019 10:11:21

802.11ax160 (MIMO)



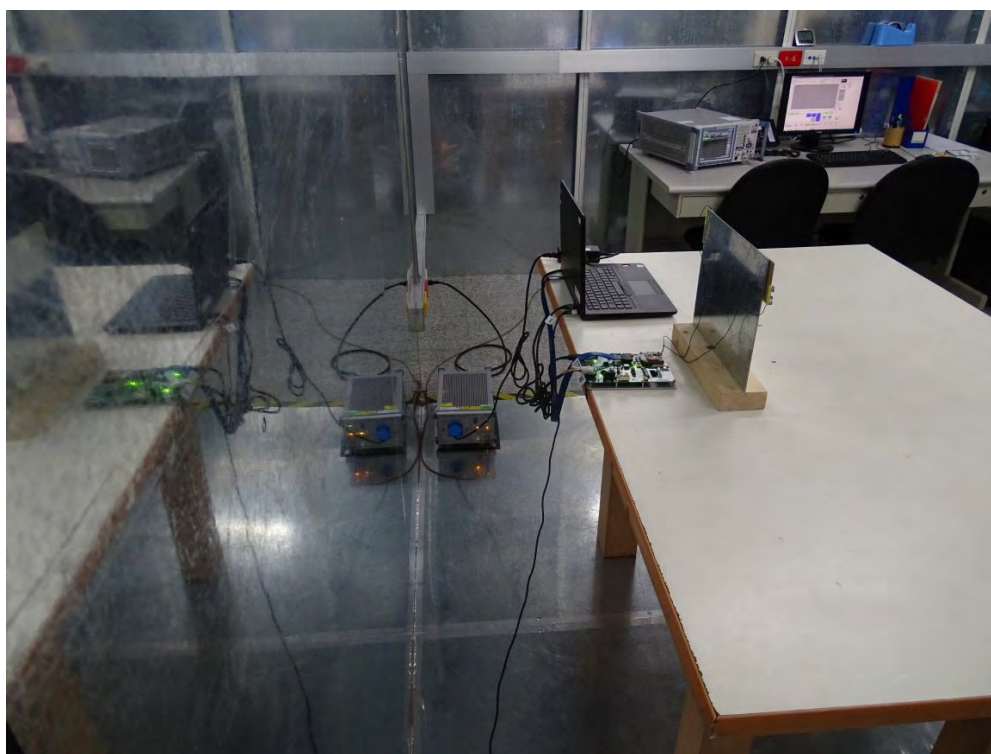
Date: 15.FEB.2019 10:07:48

附件 1: 待測物測試擺設相片

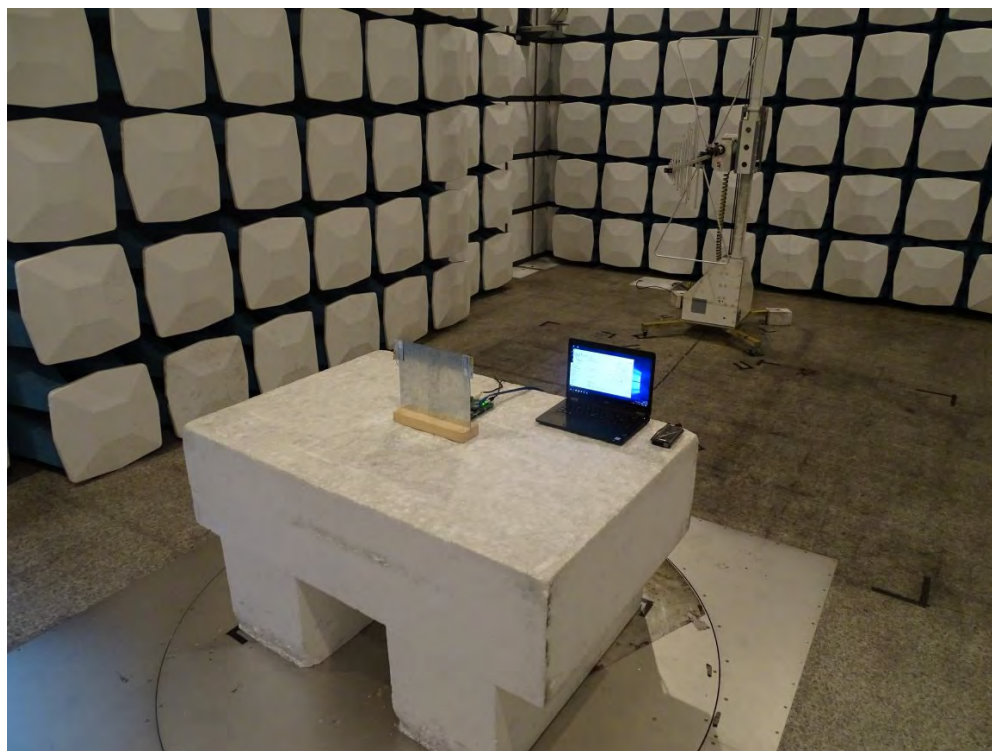
測試相片：電源端點測試 正面相片



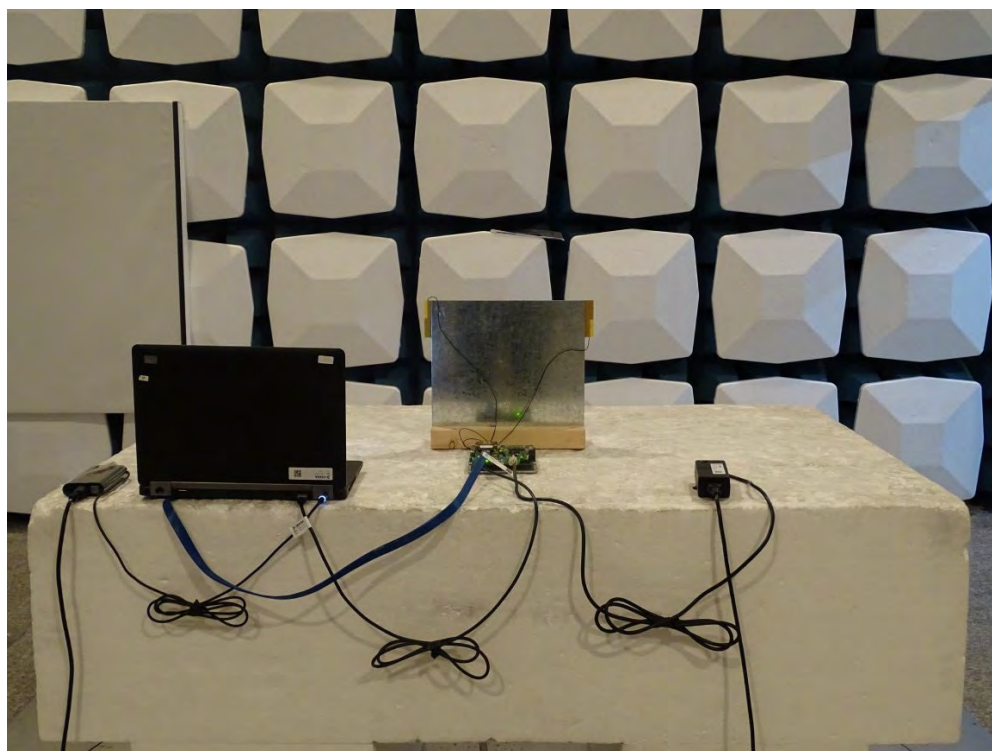
測試相片：電源端點測試 背面相片



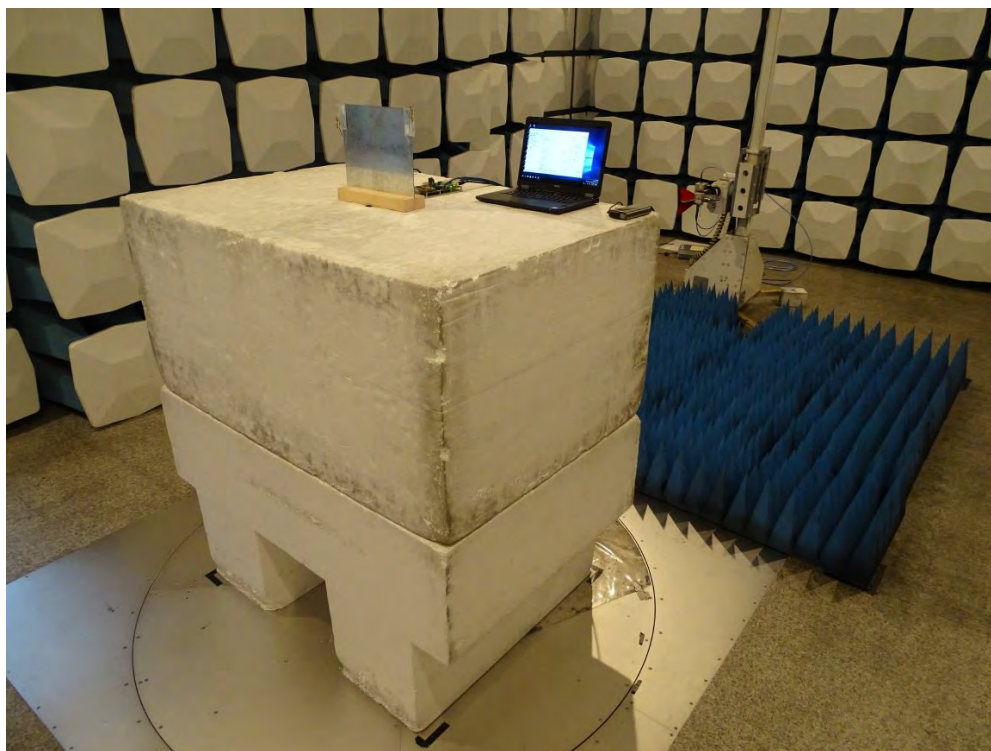
測試相片：輻射測試 正面相片



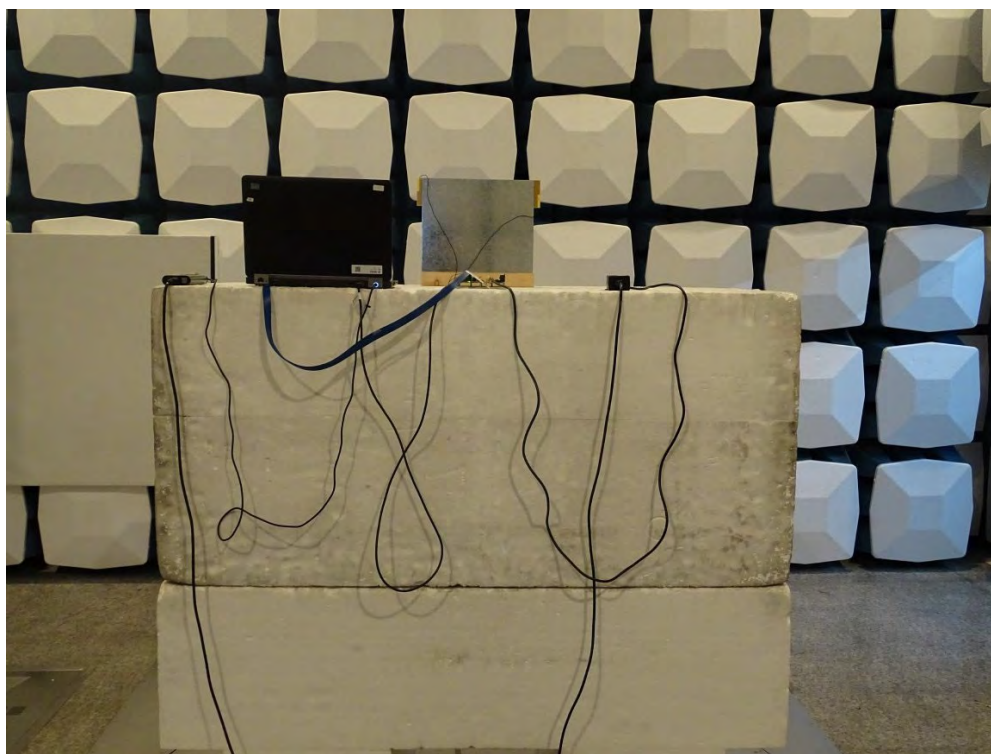
測試相片：輻射測試 背面相片



測試相片：輻射測試 正面相片(Horn)



測試相片：輻射測試 背面相片(Horn)



測試相片：輻射測試 正面相片(Horn)



測試相片：輻射測試 背面相片(Horn)

