

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：108年01月29日

測試項目：功率密度

測試模式：Mode 2: SISO B: 發射器 802.11ax (20MHz)

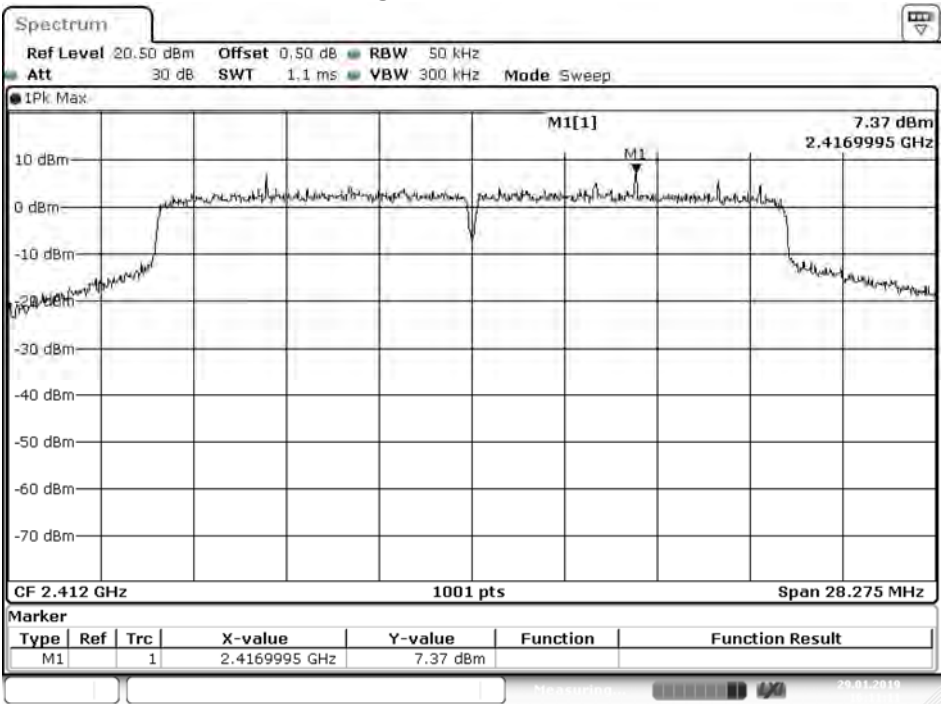
測試距離：Conducted

環境溫度：20 °C

環境濕度：50 %

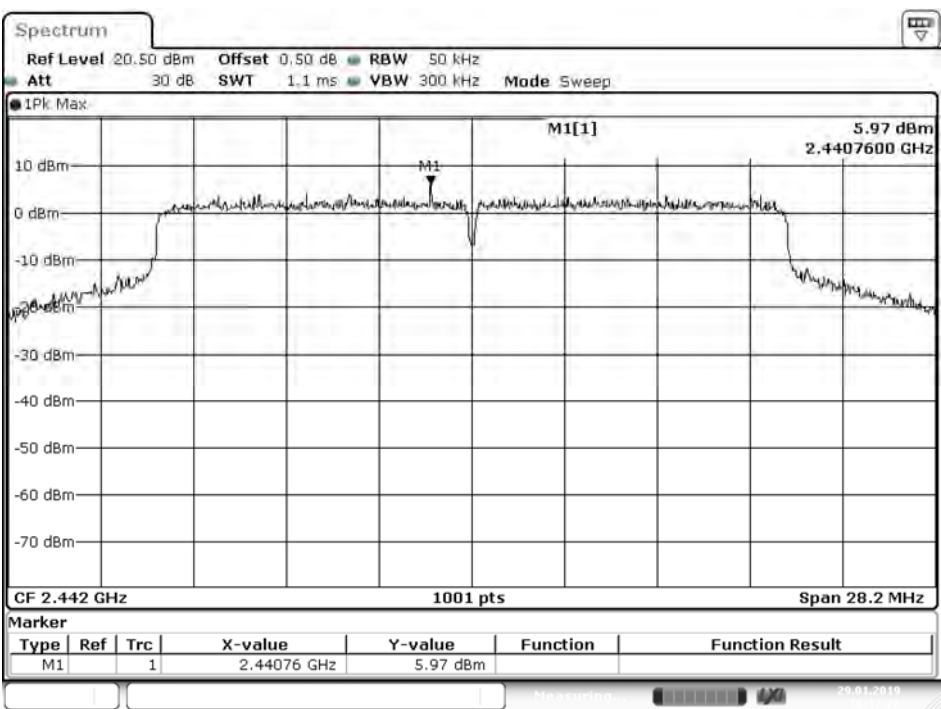
Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
01	2412	7.37	$\leq 8\text{dBm}$	Pass
07	2442	5.97	$\leq 8\text{dBm}$	Pass
11	2462	6.75	$\leq 8\text{dBm}$	Pass
12	2467	6.46	$\leq 8\text{dBm}$	Pass
13	2472	5.91	$\leq 8\text{dBm}$	Pass

Figure Channel 01:



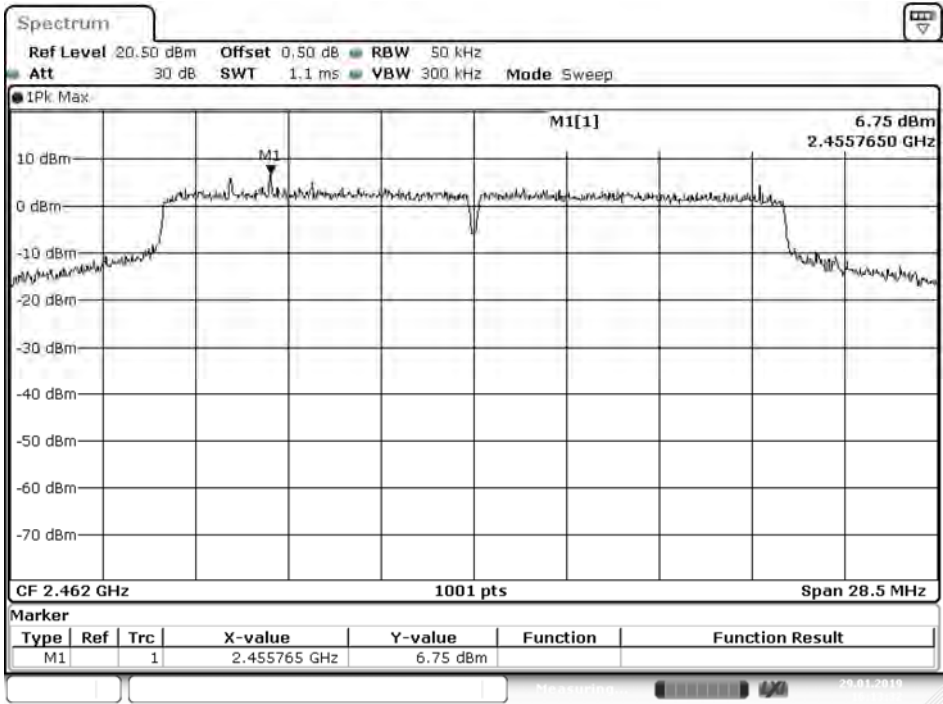
Date: 29.JAN.2019 16:11:11

Figure Channel 07:



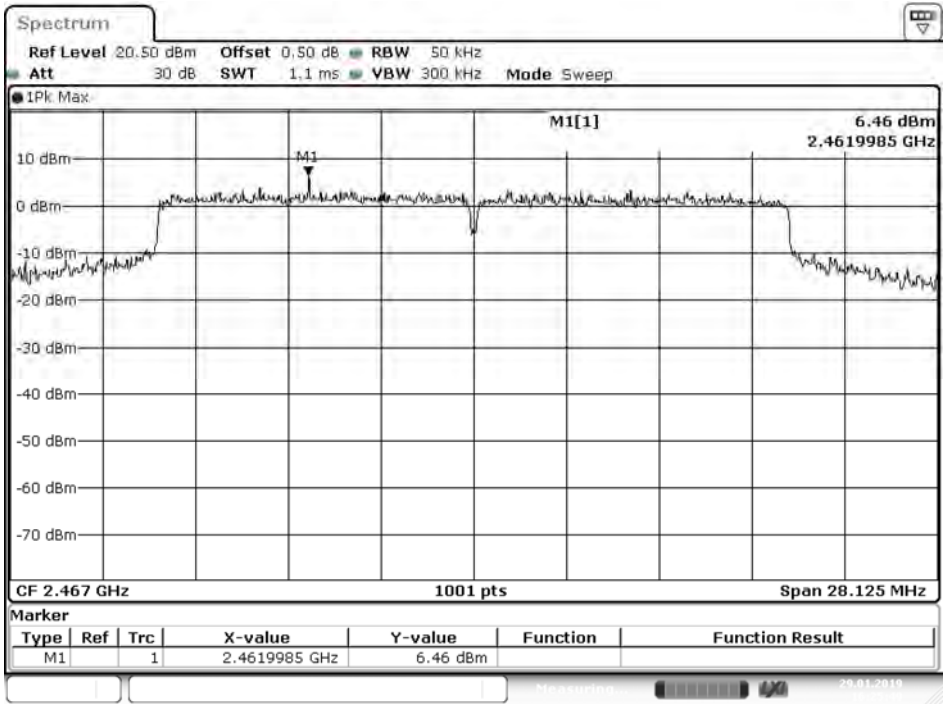
Date: 29.JAN.2019 16:12:27

Figure Channel 11:



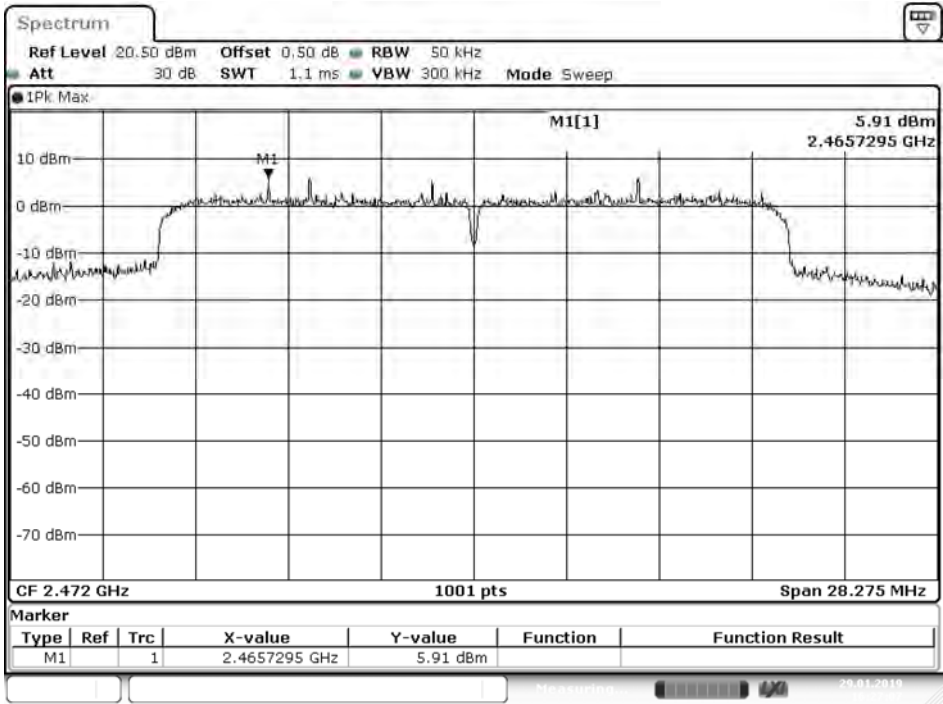
Date: 29.JAN.2019 16:13:33

Figure Channel 12:



Date: 29.JAN.2019 16:25:50

Figure Channel 13:



Date: 29.JAN.2019 16:27:08

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：108年01月29日

測試項目：功率密度

測試模式：Mode 2: SISO B: 發射器 802.11ax (40MHz)

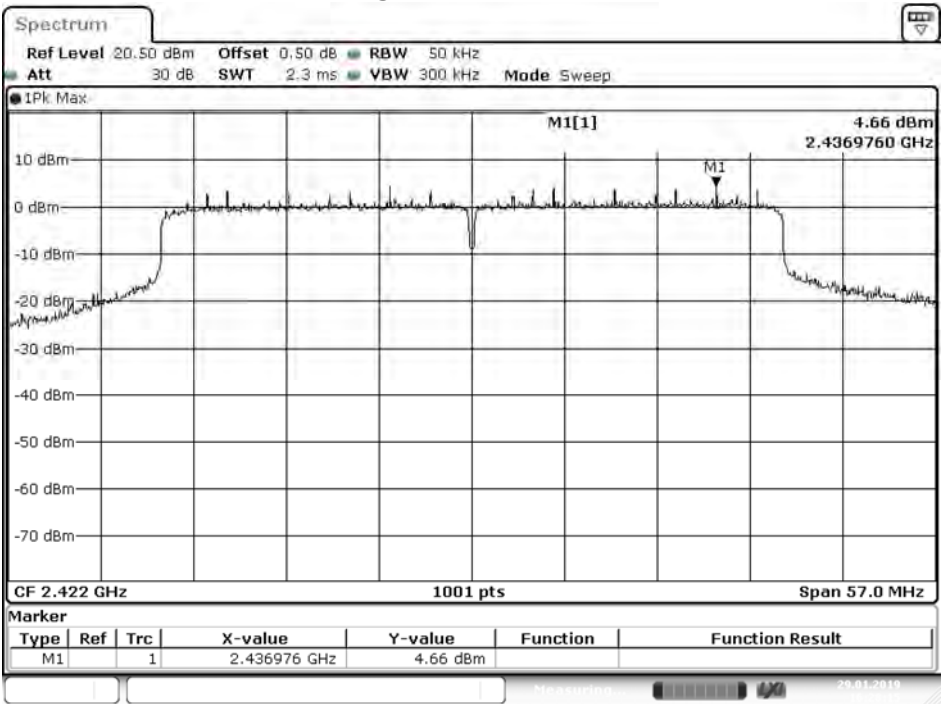
測試距離：Conducted

環境溫度：20 °C

環境濕度：50 %

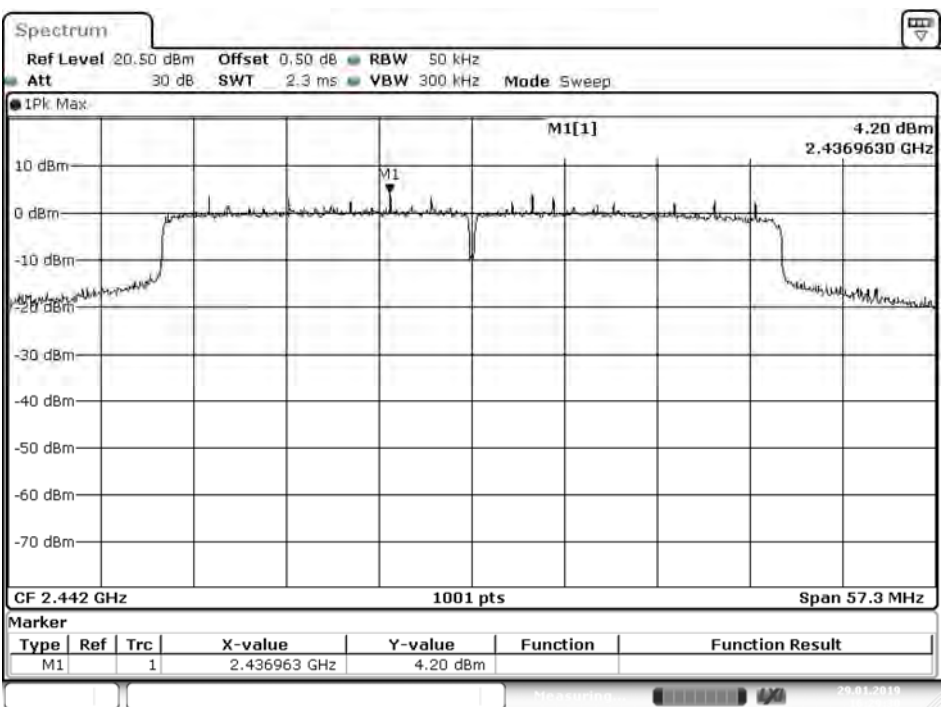
Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
03	2422	4.66	$\leq 8\text{dBm}$	Pass
07	2442	4.2	$\leq 8\text{dBm}$	Pass
09	2452	4.57	$\leq 8\text{dBm}$	Pass
10	2457	4.71	$\leq 8\text{dBm}$	Pass
11	2462	4.05	$\leq 8\text{dBm}$	Pass

Figure Channel 03:



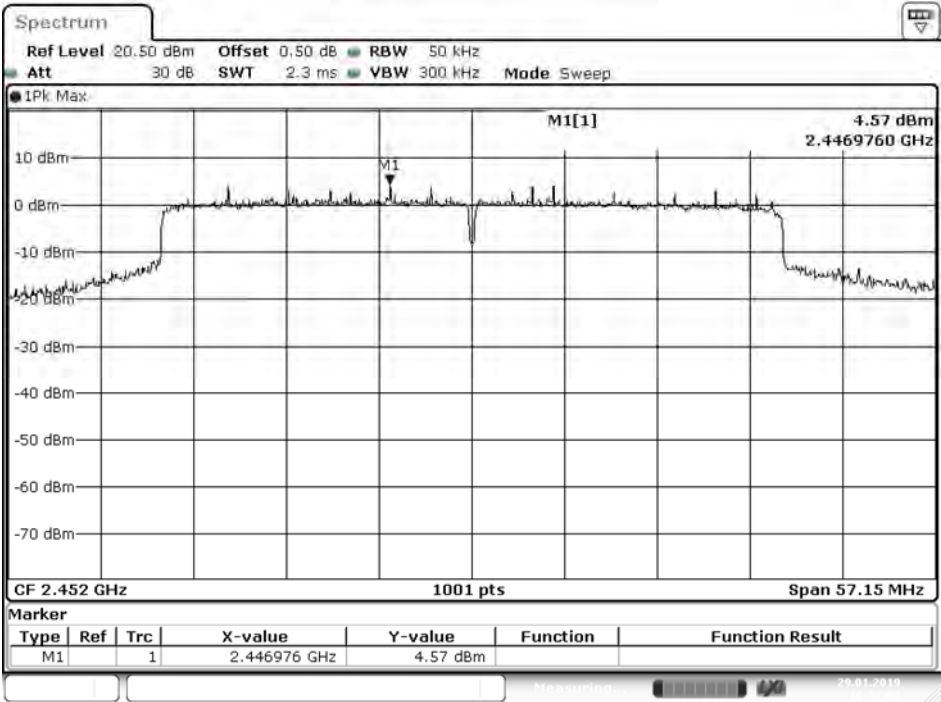
Date: 29.JAN.2019 16:28:16

Figure Channel 07:



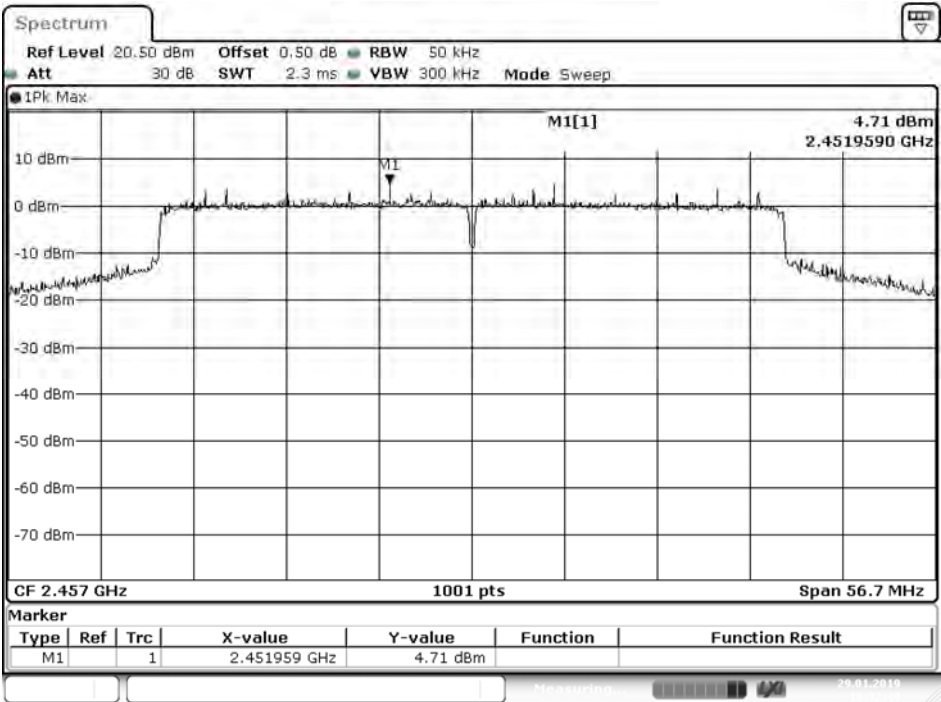
Date: 29.JAN.2019 16:29:31

Figure Channel 09:



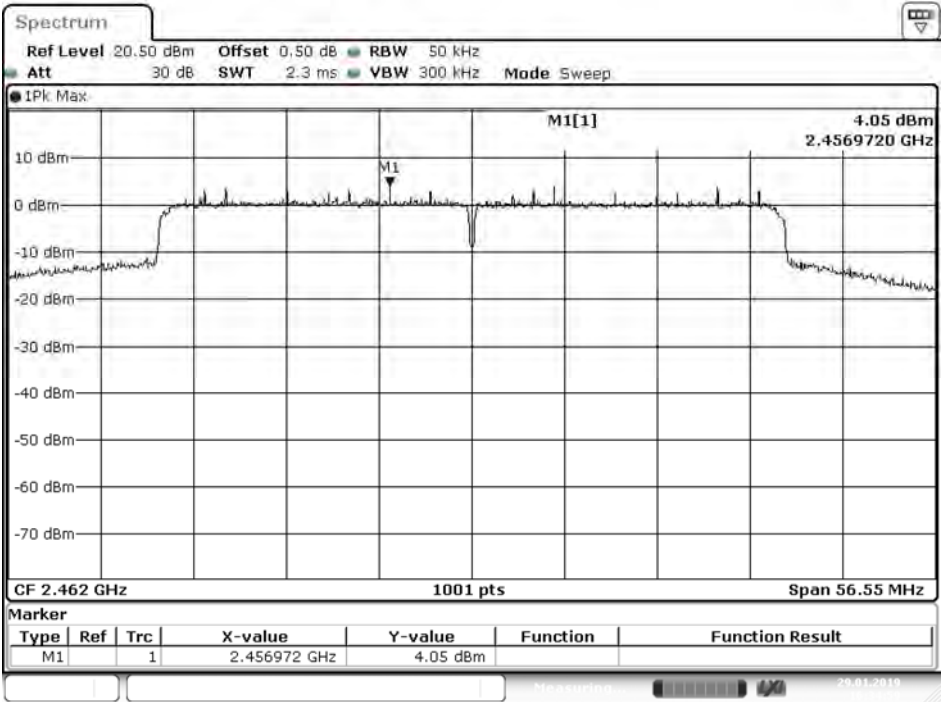
Date: 29.JAN.2019 16:32:08

Figure Channel 10:



Date: 29.JAN.2019 16:32:49

Figure Channel 11:



Date: 29. JAN. 2019 16:34:59

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：108年01月23日

測試項目：功率密度

測試模式：Mode 3: MIMO: 發射器 802.11ax (20MHz)

測試距離：Conducted

環境溫度：20 °C

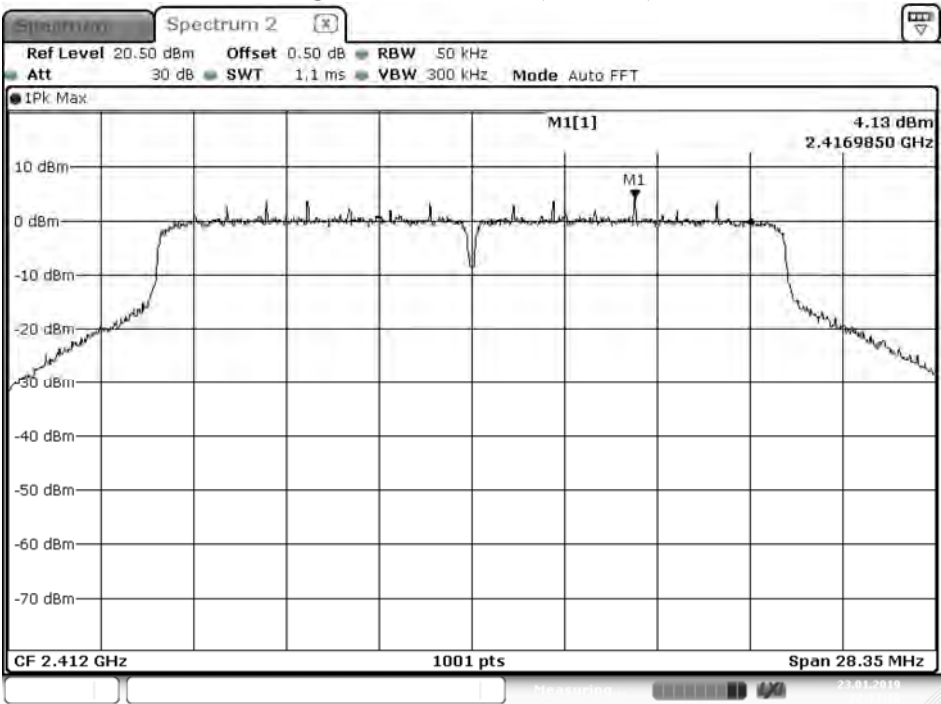
環境濕度：50 %

Channel No.	Frequency (MHz)	Chain	PPSD/MHz (dBm)	10*log(2) (dB)	Measure Level (dBm)	Limit (dBm)	Result
01	2412	A	4.13	3.01	7.14	≤ 8dBm	Pass
		B	4.13	3.01	7.14	≤ 8dBm	Pass
07	2442	A	4.22	3.01	7.23	≤ 8dBm	Pass
		B	4.11	3.01	7.12	≤ 8dBm	Pass
11	2462	A	4.19	3.01	7.20	≤ 8dBm	Pass
		B	4.17	3.01	7.18	≤ 8dBm	Pass
12	2467	A	4.33	3.01	7.34	≤ 8dBm	Pass
		B	4.31	3.01	7.32	≤ 8dBm	Pass
13	2472	A	4.23	3.01	7.24	≤ 8dBm	Pass
		B	4.10	3.01	7.11	≤ 8dBm	Pass

Note:

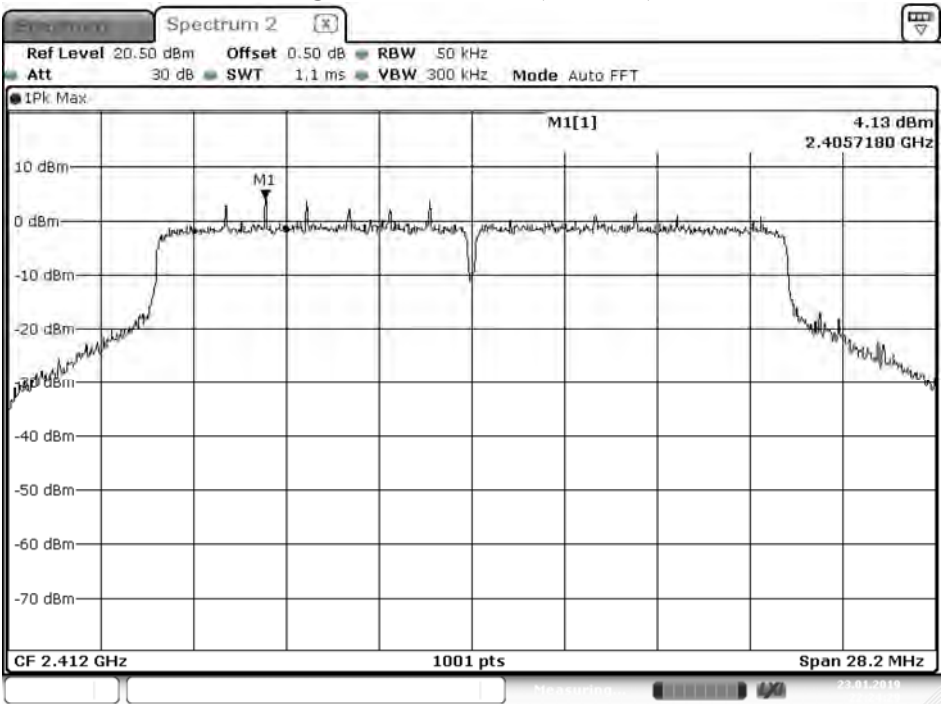
The quantity 10*log 2 (two antennas) is added to the spectrum peak value according to document 662911 D01.

Figure Channel 01: (Chain A)



Date: 23. JAN. 2019 22:13:19

Figure Channel 01: (Chain B)



Date: 23. JAN. 2019 22:24:29

Figure Channel 07: (Chain A)

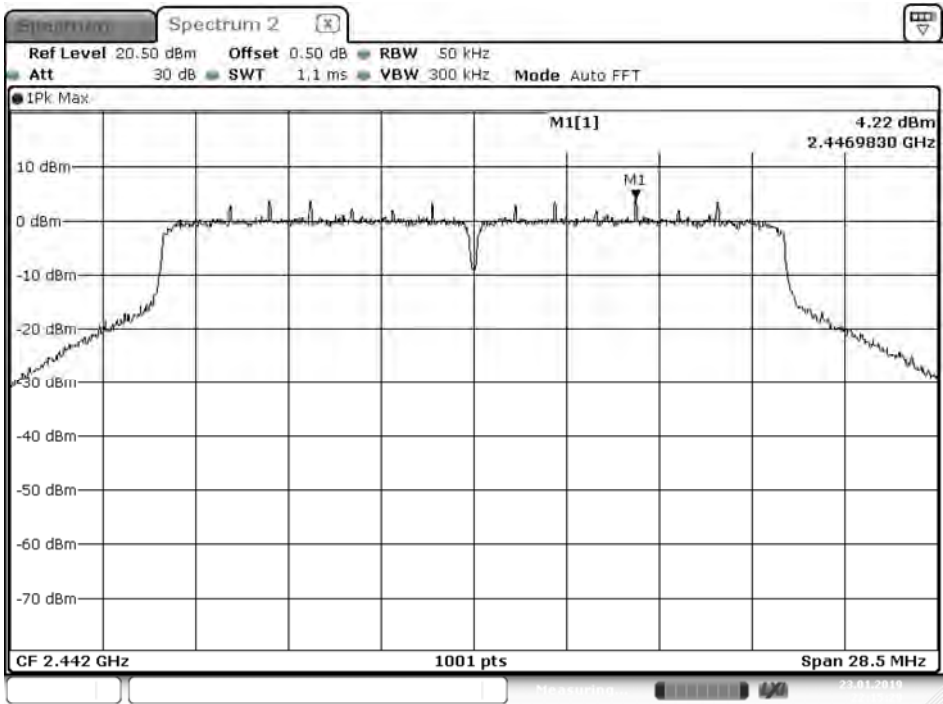


Figure Channel 07: (Chain B)

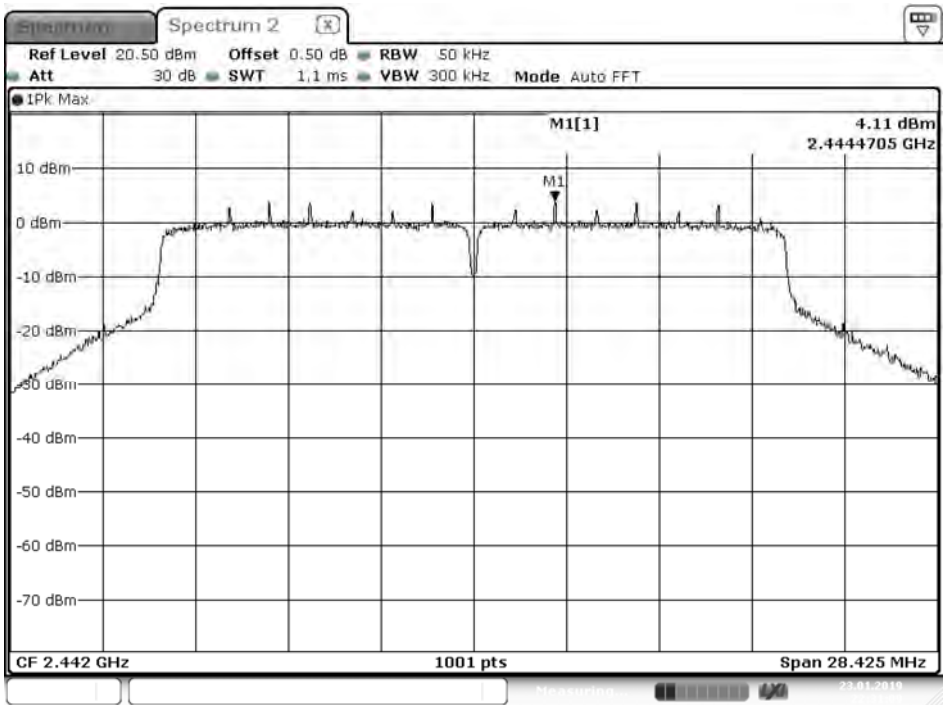
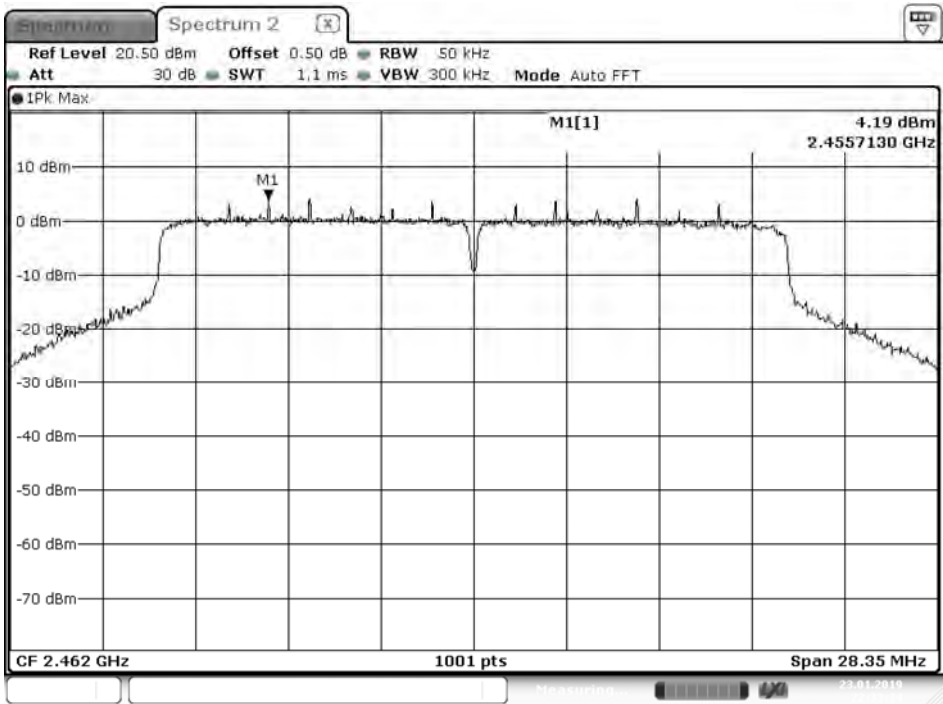
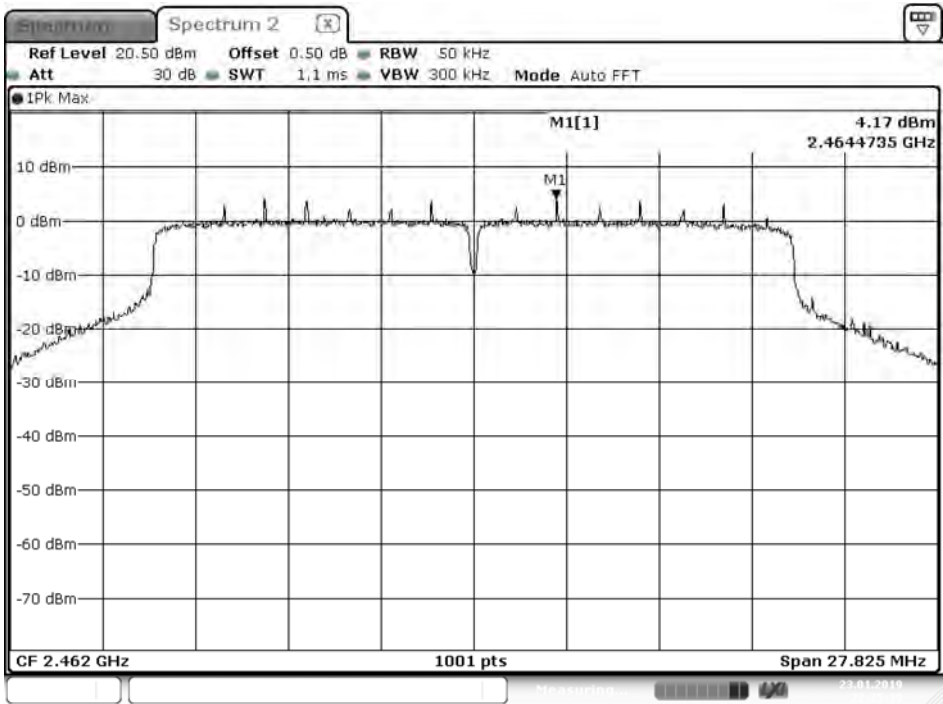


Figure Channel 11: (Chain A)



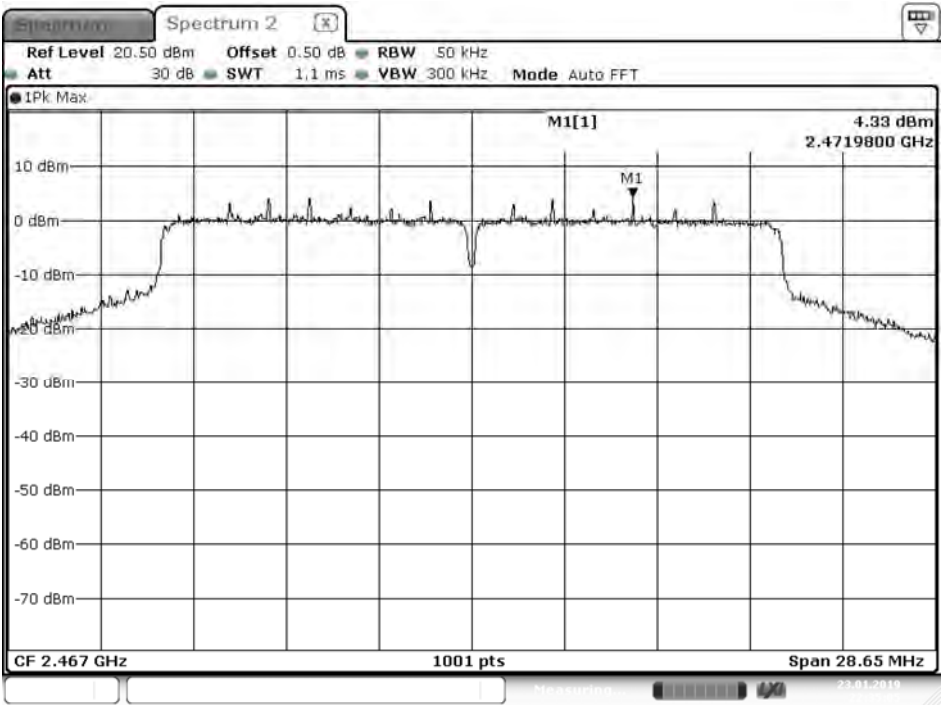
Date: 23. JAN. 2019 22:33:35

Figure Channel 11: (Chain B)



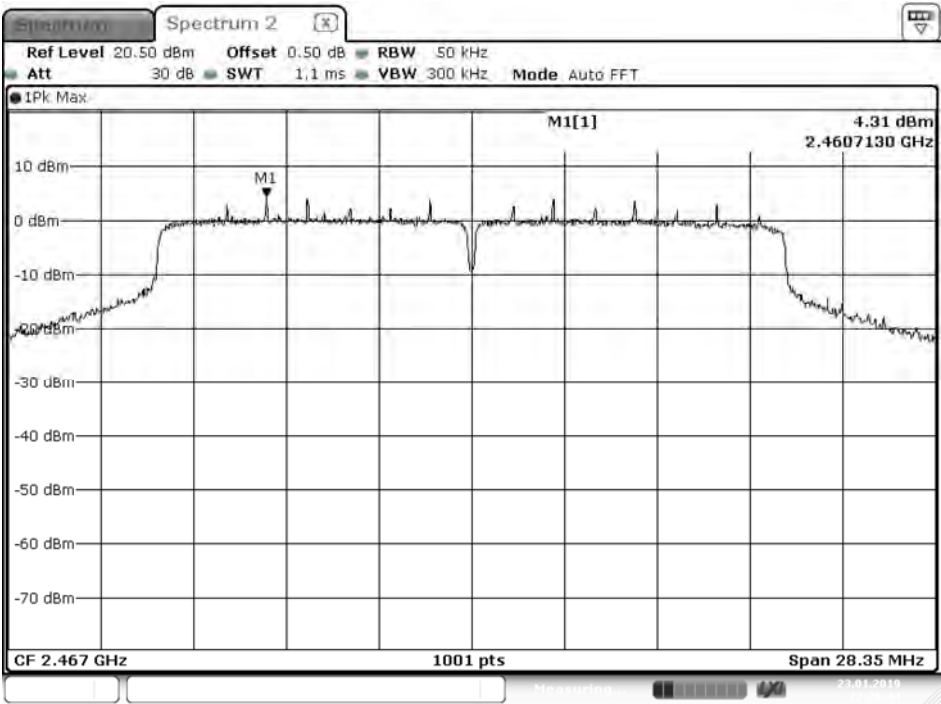
Date: 23. JAN. 2019 22:25:40

Figure Channel 12: (Chain A)



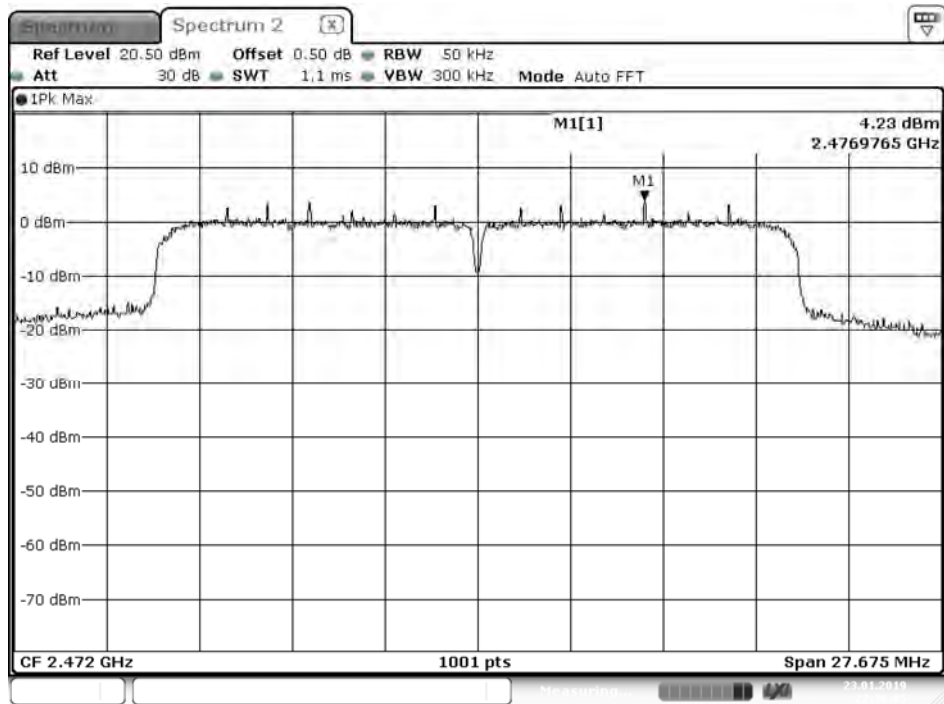
Date: 23.JAN.2019 22:35:06

Figure Channel 12: (Chain B)



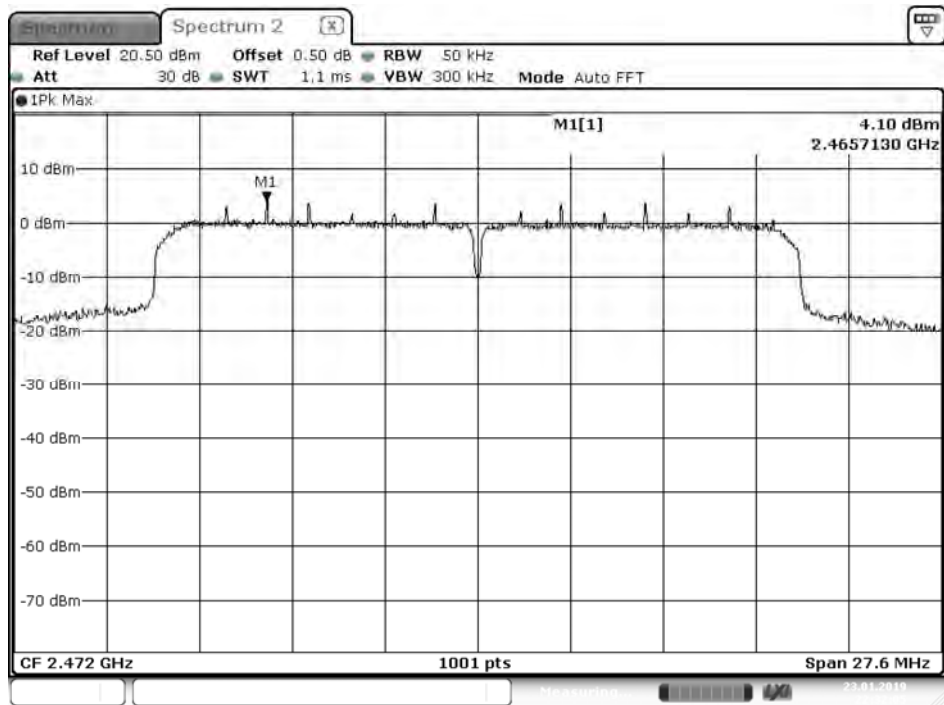
Date: 23.JAN.2019 22:26:44

Figure Channel 13: (Chain A)



Date: 23. JAN. 2019 22:36:05

Figure Channel 13: (Chain B)



Date: 23. JAN. 2019 22:32:05

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：108年01月23日

測試項目：功率密度

測試模式：Mode 3: MIMO: 發射器 802.11ax (40MHz)

測試距離：Conducted

環境溫度：20 °C

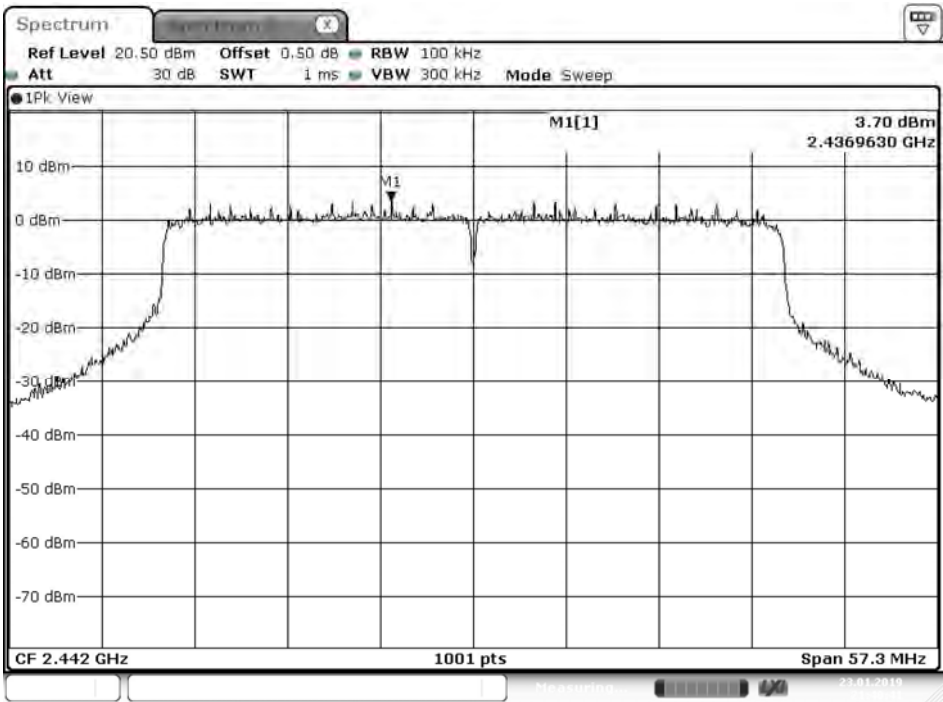
環境濕度：50 %

Channel No.	Frequency (MHz)	Chain	PPSD/MHz (dBm)	10*log(2) (dB)	Measure Level (dBm)	Limit (dBm)	Result
03	2422	A	3.77	3.01	6.78	$\leq 8\text{dBm}$	Pass
		B	3.57	3.01	6.58	$\leq 8\text{dBm}$	Pass
07	2442	A	3.70	3.01	6.71	$\leq 8\text{dBm}$	Pass
		B	3.82	3.01	6.83	$\leq 8\text{dBm}$	Pass
09	2452	A	3.80	3.01	6.81	$\leq 8\text{dBm}$	Pass
		B	3.41	3.01	6.42	$\leq 8\text{dBm}$	Pass
10	2457	A	3.53	3.01	6.54	$\leq 8\text{dBm}$	Pass
		B	3.45	3.01	6.46	$\leq 8\text{dBm}$	Pass
11	2462	A	3.50	3.01	6.51	$\leq 8\text{dBm}$	Pass
		B	2.99	3.01	6.00	$\leq 8\text{dBm}$	Pass

Note:

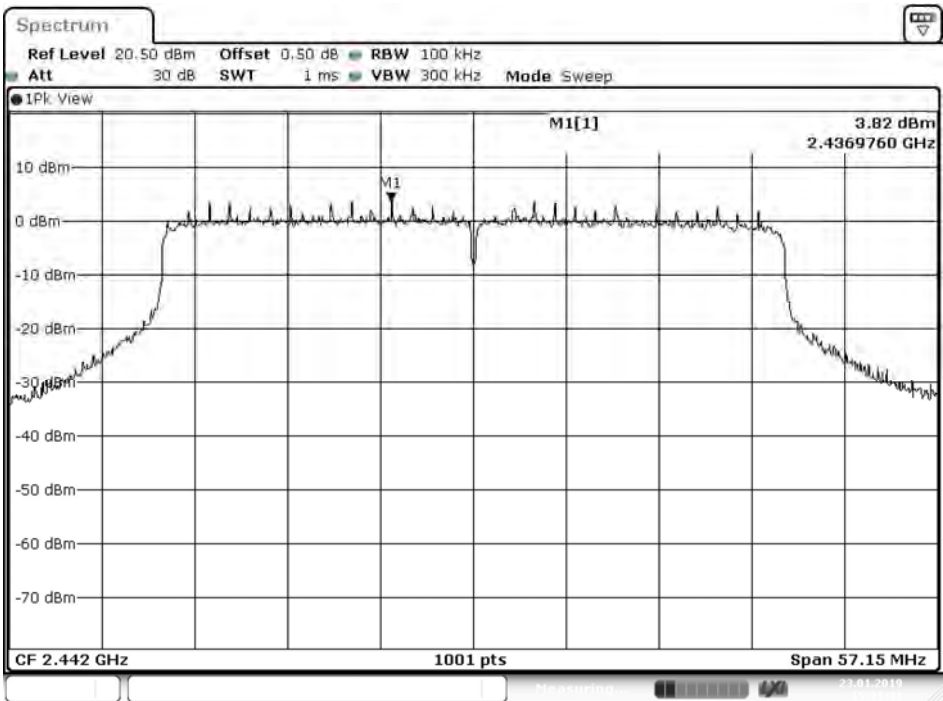
The quantity $10 \cdot \log 2$ (two antennas) is added to the spectrum peak value according to document 662911 D01.

Figure Channel 07: (Chain A)



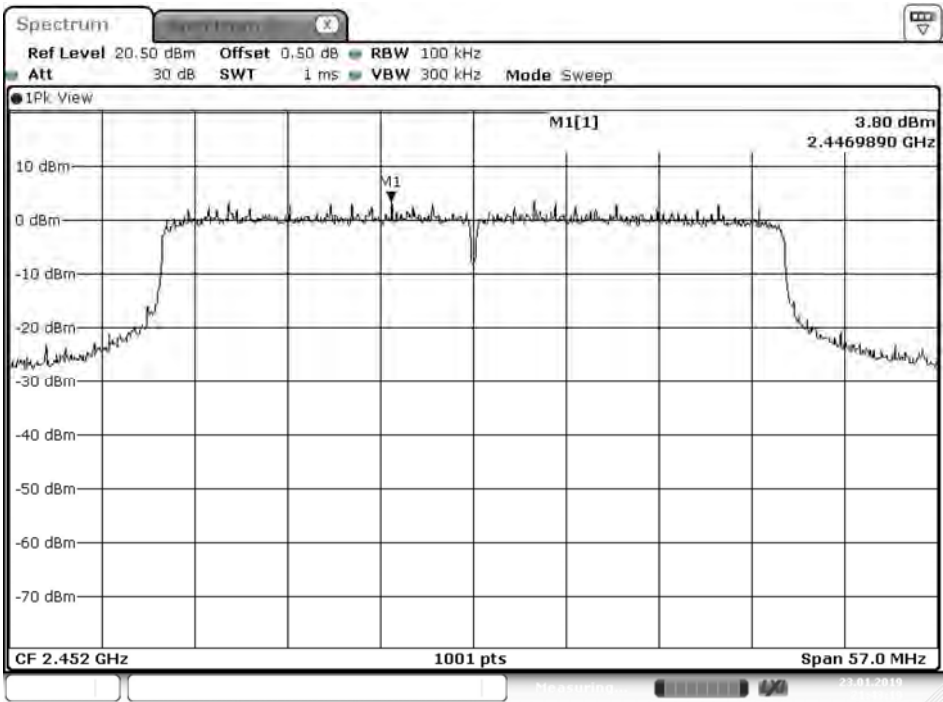
Date: 23.JAN.2019 21:40:42

Figure Channel 07: (Chain B)



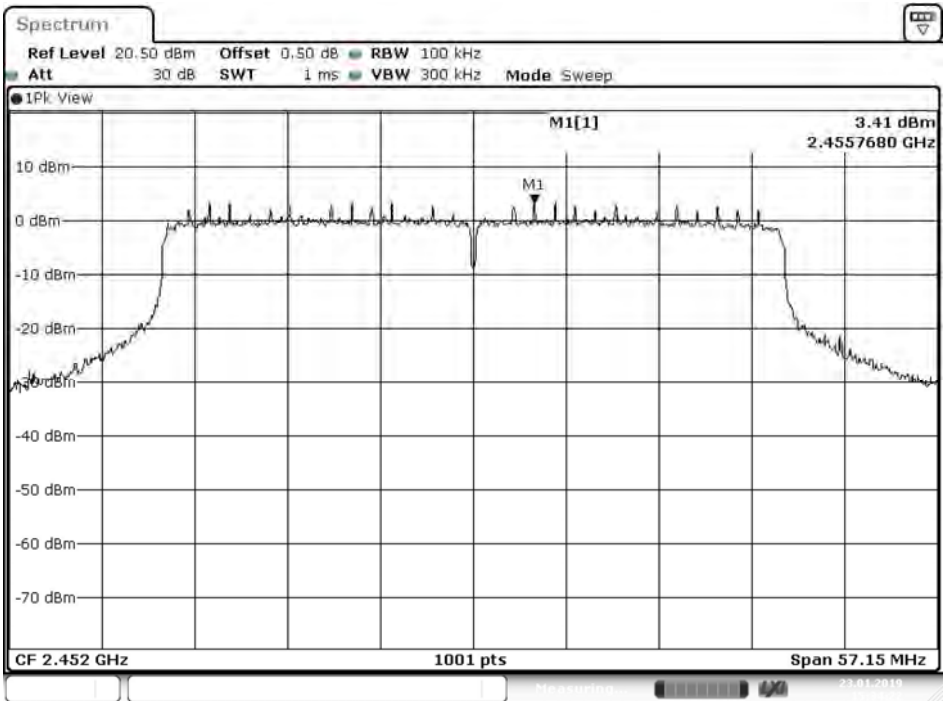
Date: 23.JAN.2019 15:31:41

Figure Channel 09: (Chain A)



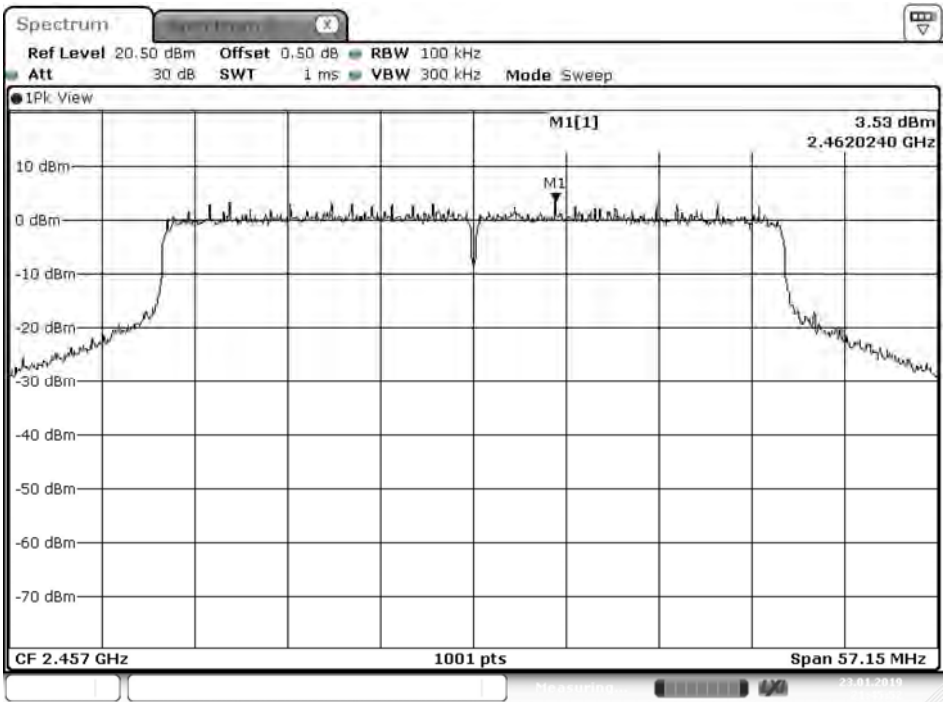
Date: 23.JAN.2019 21:43:19

Figure Channel 09: (Chain B)



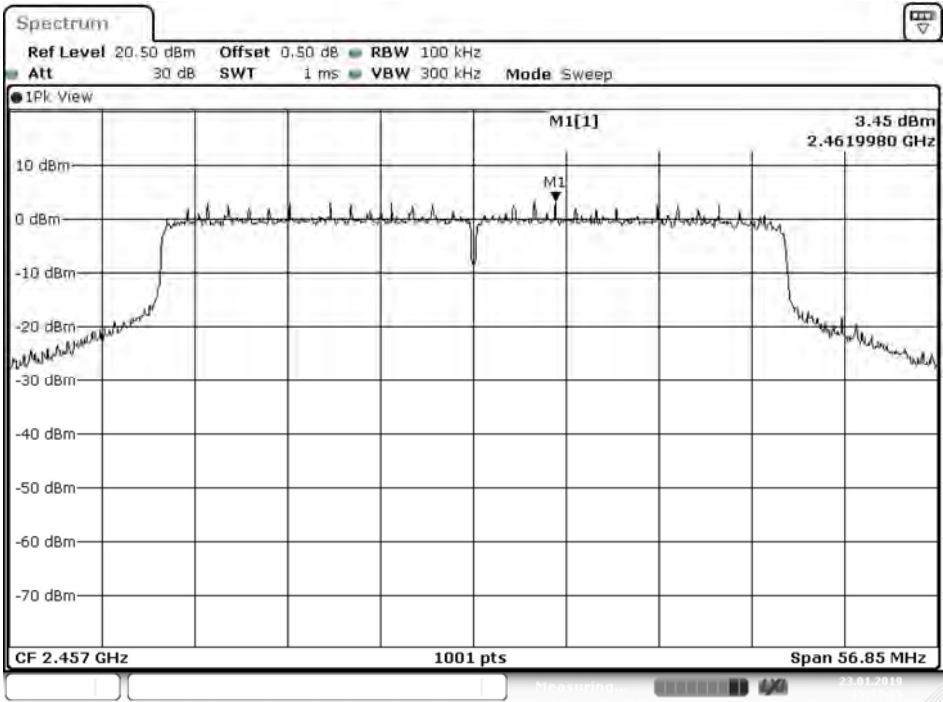
Date: 23.JAN.2019 15:34:21

Figure Channel 10: (Chain A)



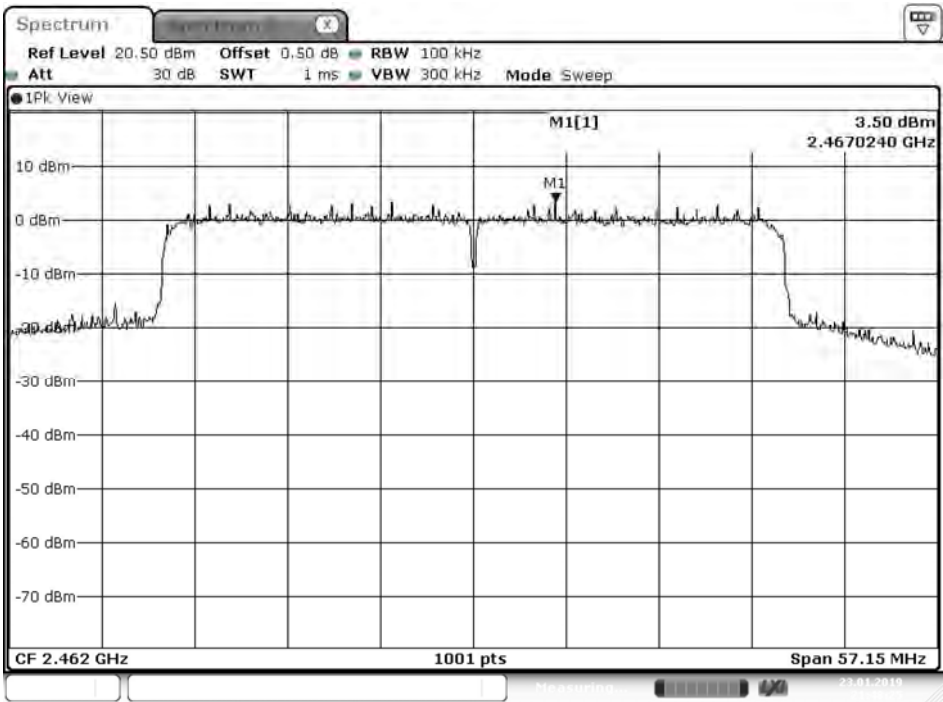
Date: 23.JAN.2019 21:45:53

Figure Channel 10: (Chain B)



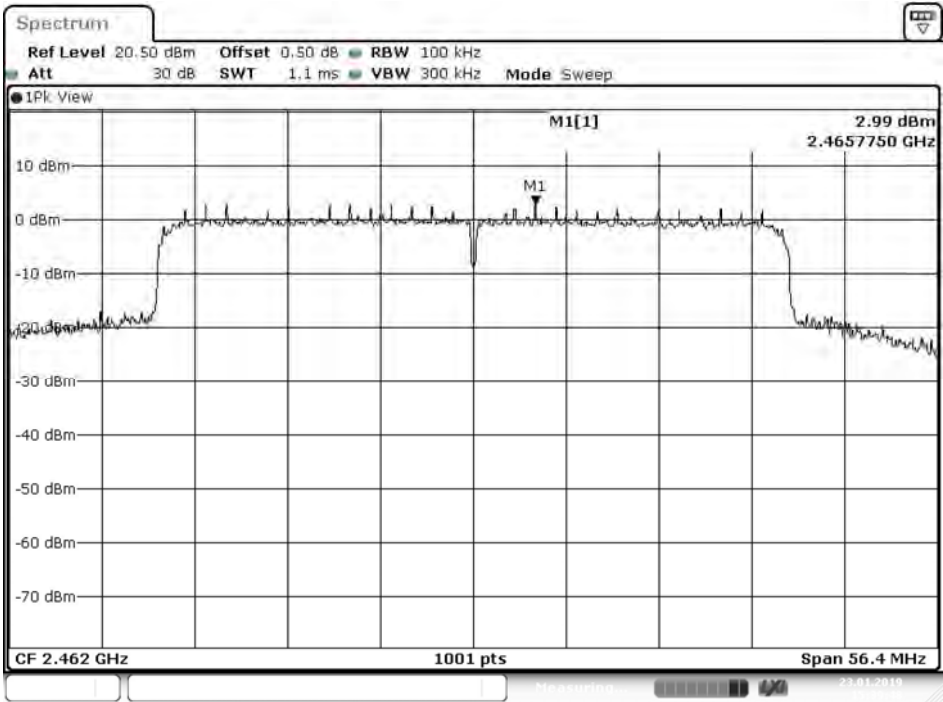
Date: 23.JAN.2019 15:37:05

Figure Channel 11: (Chain A)



Date: 23.JAN.2019 21:48:24

Figure Channel 11: (Chain B)



Date: 23.JAN.2019 15:39:48

功率密度測試結果:

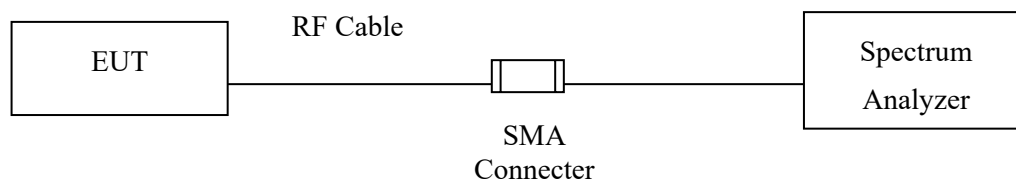
PASS

11. Duty Cycle

11.1. 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。

11.2. 測試架構圖



11.3. 量測不確定度

此項測試之量測不確定度為 $\pm 2.31\text{msec}$

11.4. 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 24 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

2.4GHz band	Ton (ms)	Ton + Toff (ms)	Duty Cycle (%)	Duty Factor (dB)
802.11b	8.4203	8.5942	97.98	0.09
802.11g	2.1159	2.3478	90.12	0.45
802.11n20	25.0140	25.1010	99.65	0.02
802.11n40	17.9855	18.1449	99.12	0.04
802.11ax20	24.9420	25.0290	99.65	0.02
802.11ax40	18.8551	18.9420	99.54	0.02

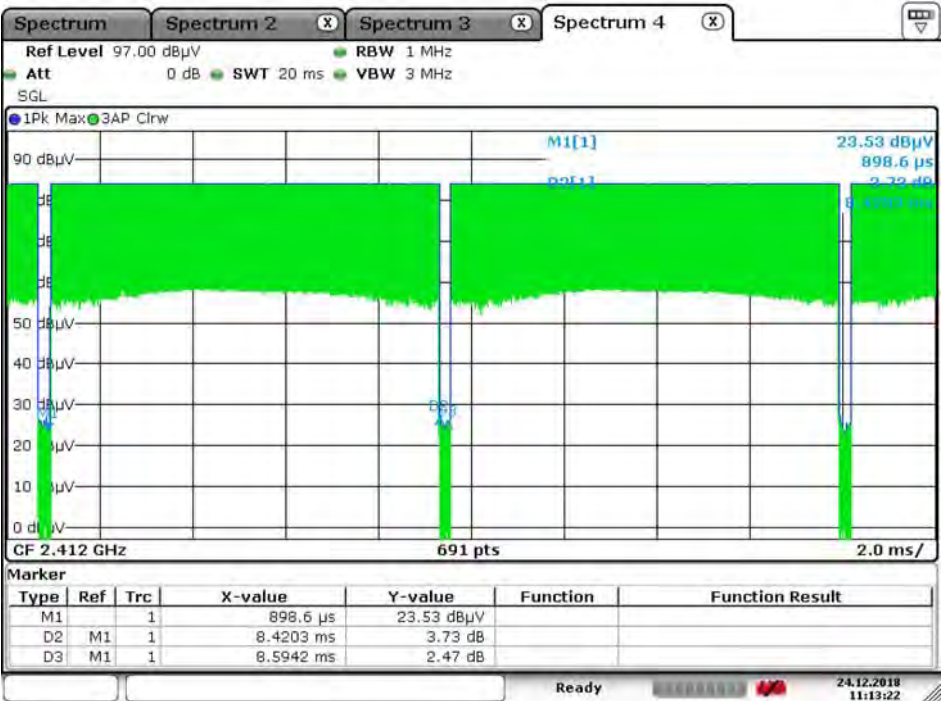
SISO B

2.4GHz band	Ton (ms)	Ton + Toff (ms)	Duty Cycle (%)	Duty Factor (dB)
802.11b	8.3188	8.6087	96.63	0.15
802.11g	2.0870	2.3478	88.89	0.51
802.11n20	24.8696	25.1739	98.79	0.05
802.11n40	17.9130	18.1304	98.80	0.05
802.11ax20	24.7536	25.0435	98.84	0.05
802.11ax40	18.7391	19.0290	98.48	0.07

MIMO

2.4GHz band	Ton (ms)	Ton + Toff (ms)	Duty Cycle (%)	Duty Factor (dB)
802.11n20	18.5000	18.7500	98.67	0.06
802.11n40	8.9000	9.2000	96.74	0.14
802.11ax20	19.7500	20.0500	98.50	0.07
802.11ax40	9.9000	10.2000	97.06	0.13

802.11b (SISO A)



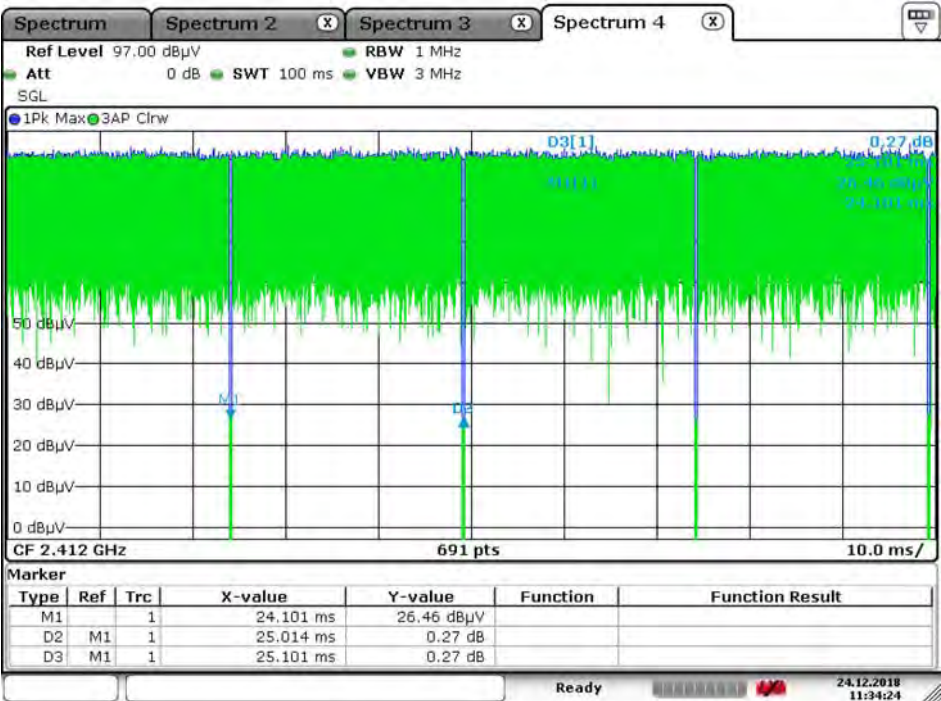
Date: 24.DEC.2018 11:13:22

802.11g (SISO A)



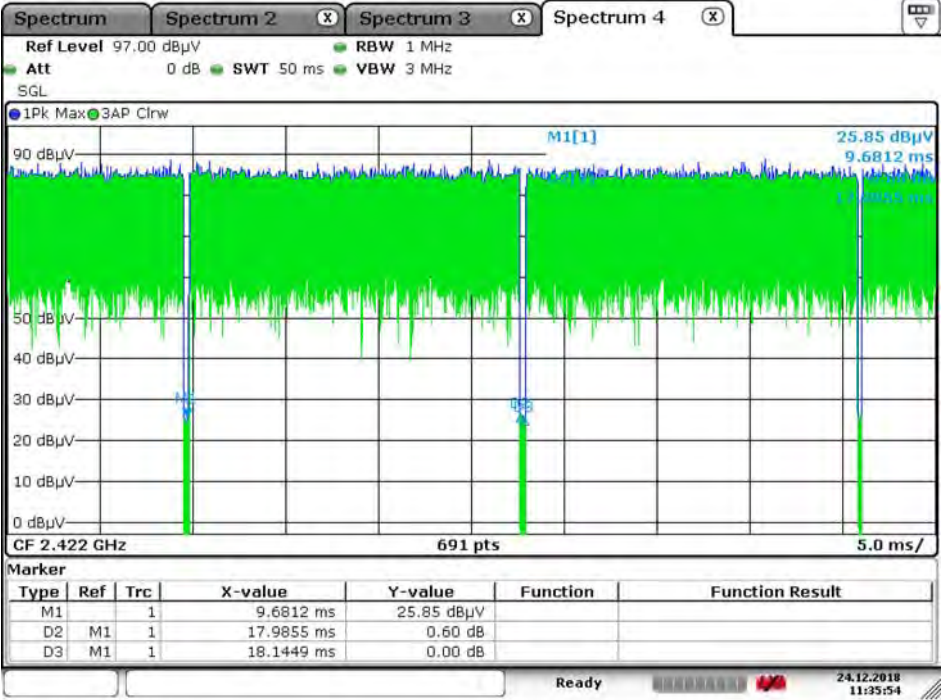
Date: 24.DEC.2018 11:20:29

802.11n20 (SISO A)



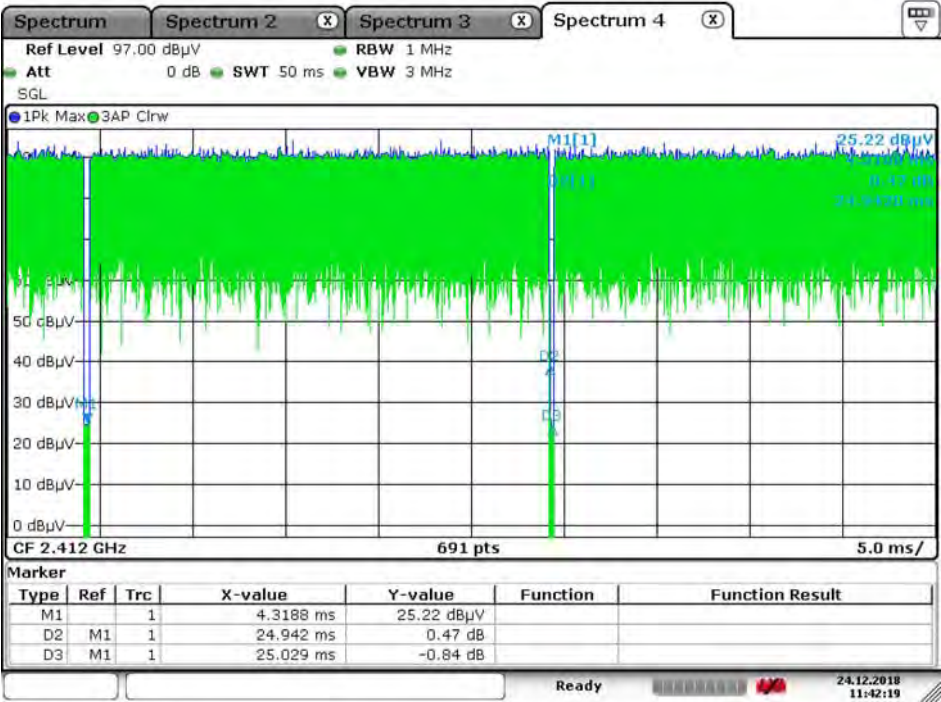
Date: 24.DEC.2018 11:34:24

802.11n40 (SISO A)



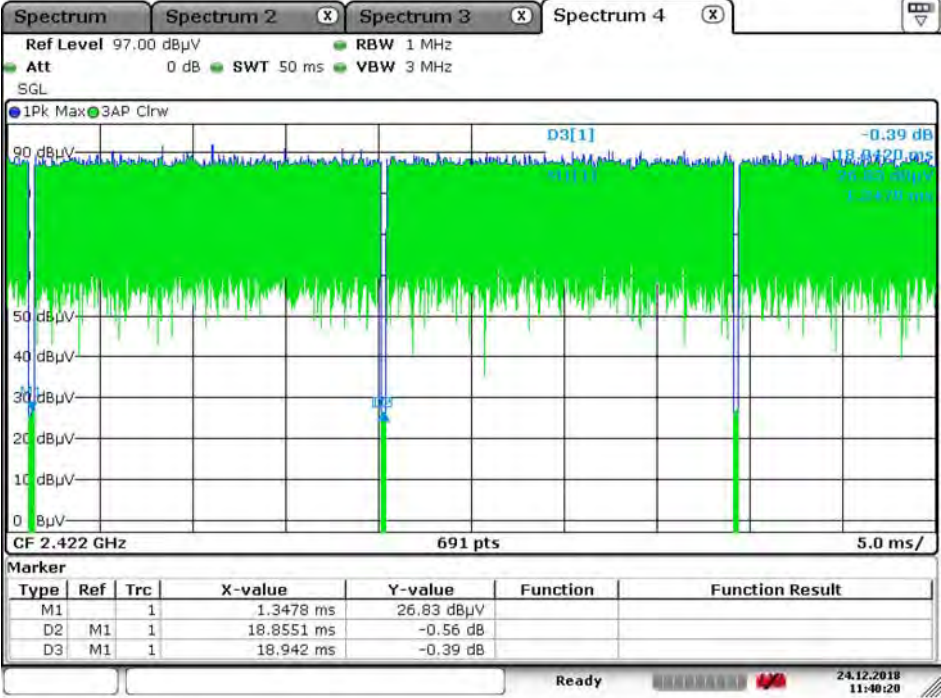
Date: 24.DEC.2018 11:35:55

802.11ax20 (SISO A)



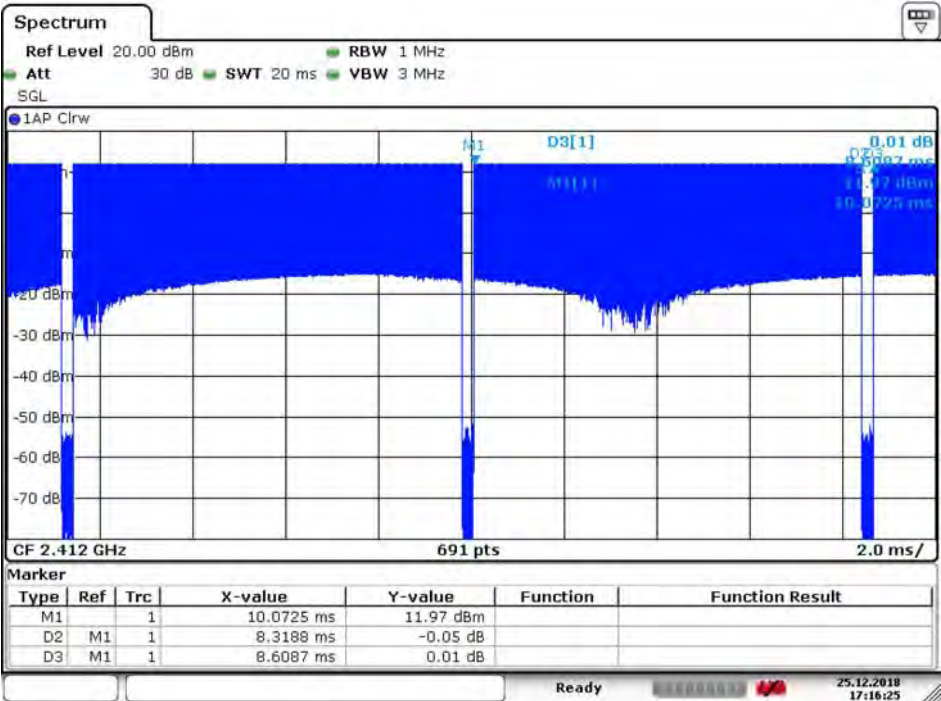
Date: 24.DEC.2018 11:42:19

802.11ax40 (SISO A)



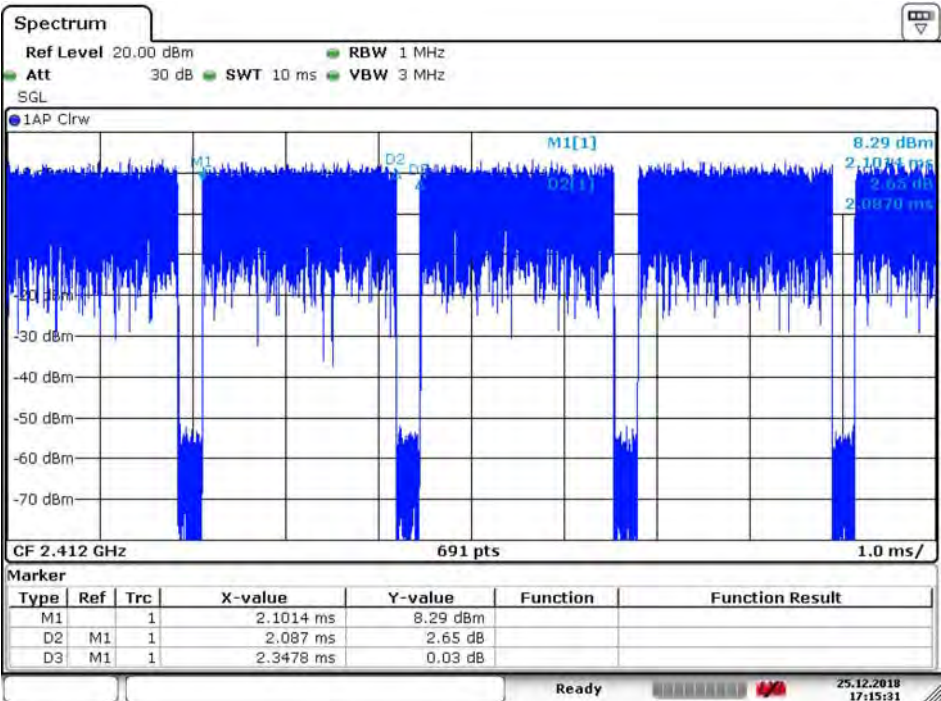
Date: 24.DEC.2018 11:40:20

802.11b (SISO B)



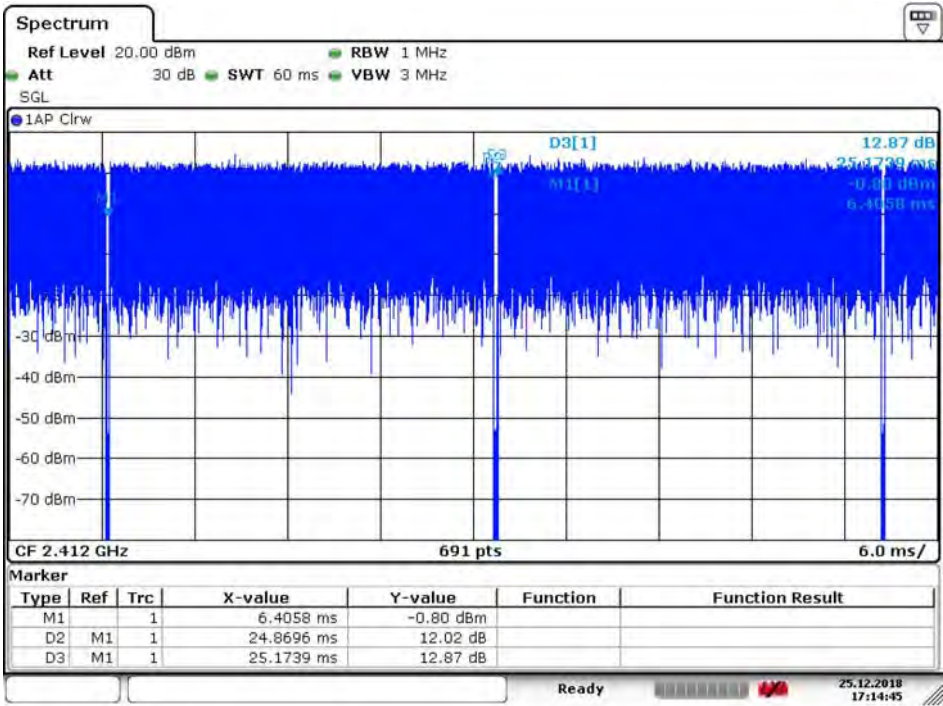
Date: 25.DEC.2018 17:16:25

802.11g (SISO B)



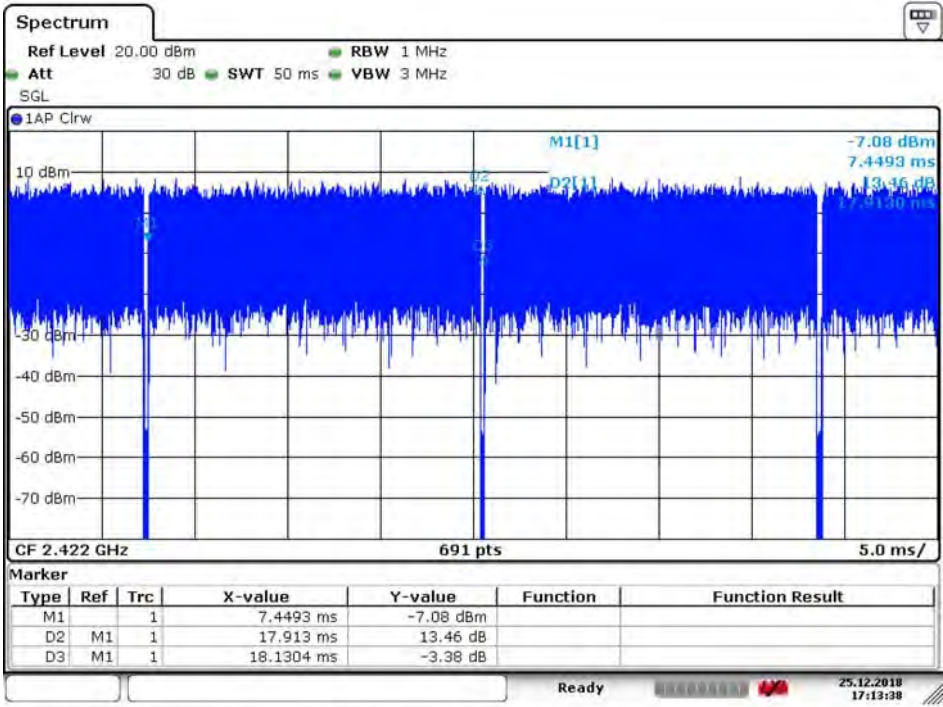
Date: 25.DEC.2018 17:15:31

802.11n20 (SISO B)



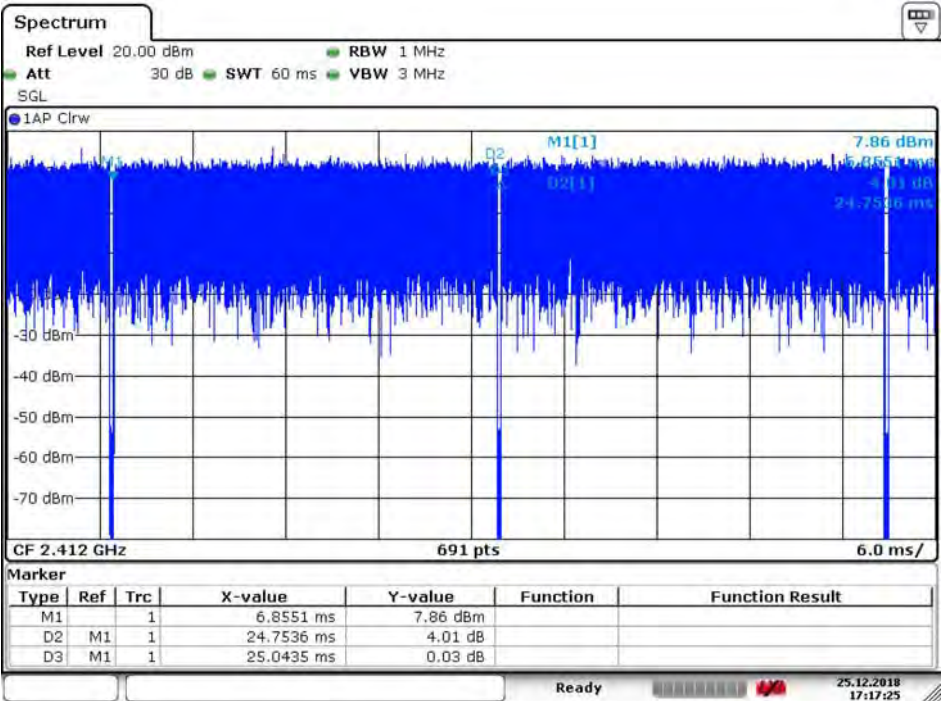
Date: 25.DEC.2018 17:14:46

802.11n40 (SISO B)



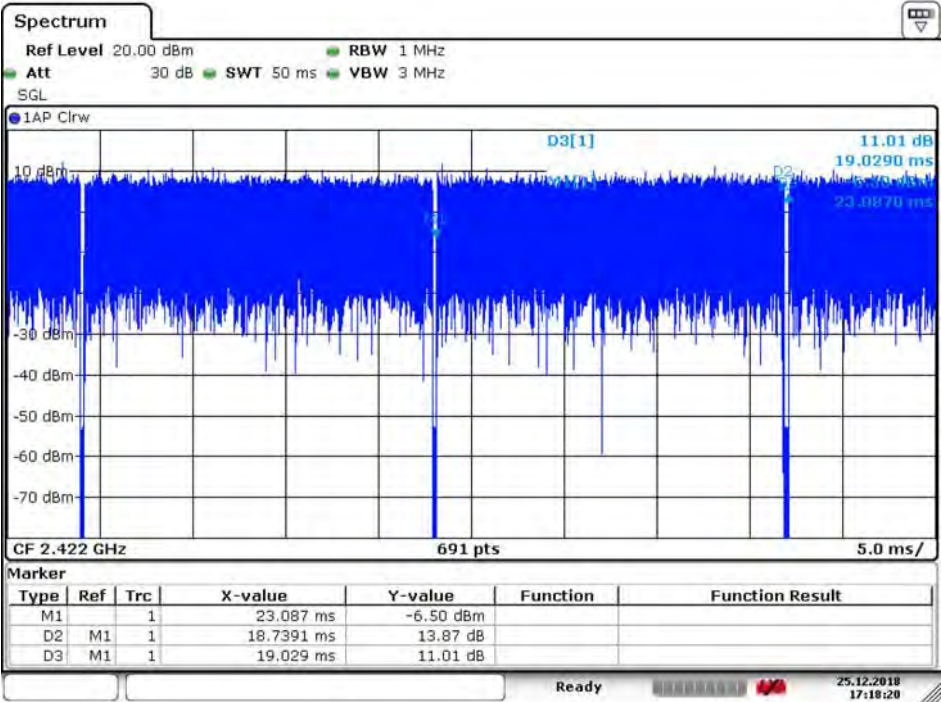
Date: 25.DEC.2018 17:13:39

802.11ax20 (SISO B)



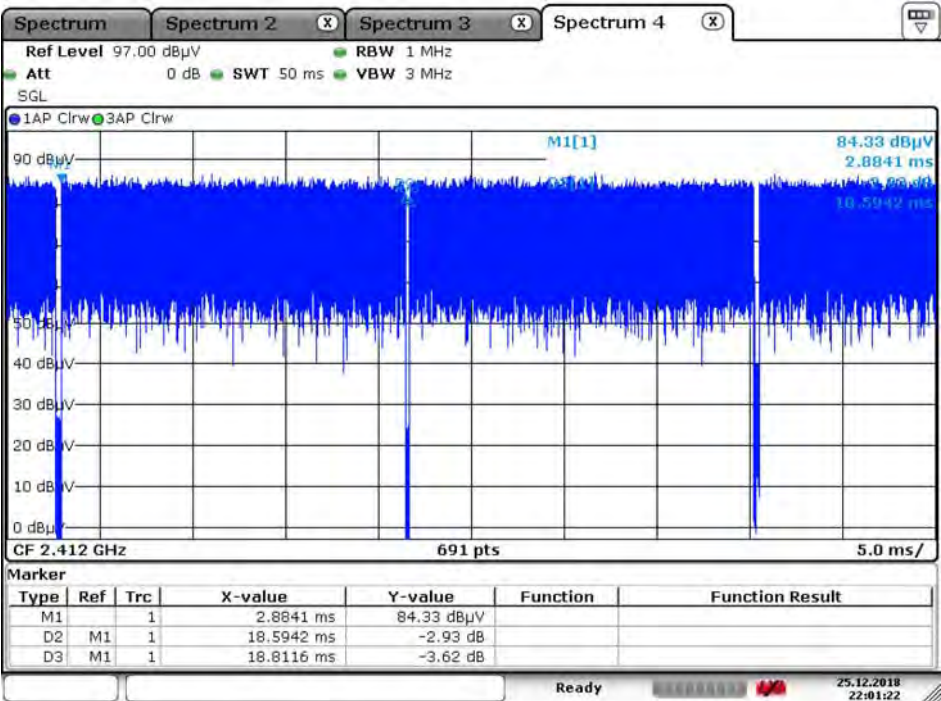
Date: 25.DEC.2018 17:17:25

802.11ax40 (SISO B)



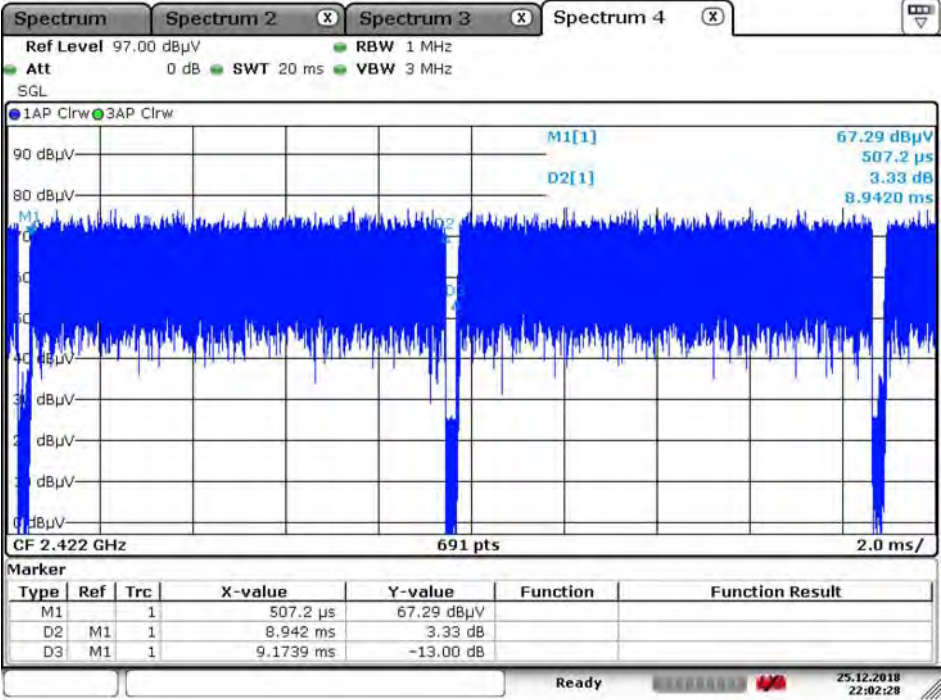
Date: 25.DEC.2018 17:18:20

802.11n20 (MIMO)



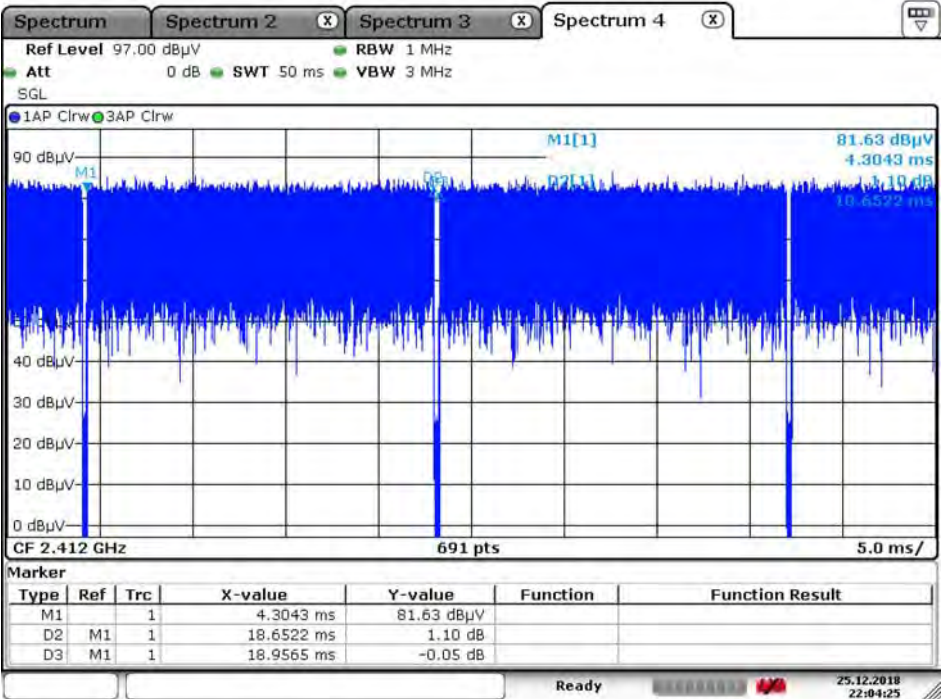
Date: 25.DEC.2018 22:01:22

802.11n40 (MIMO)



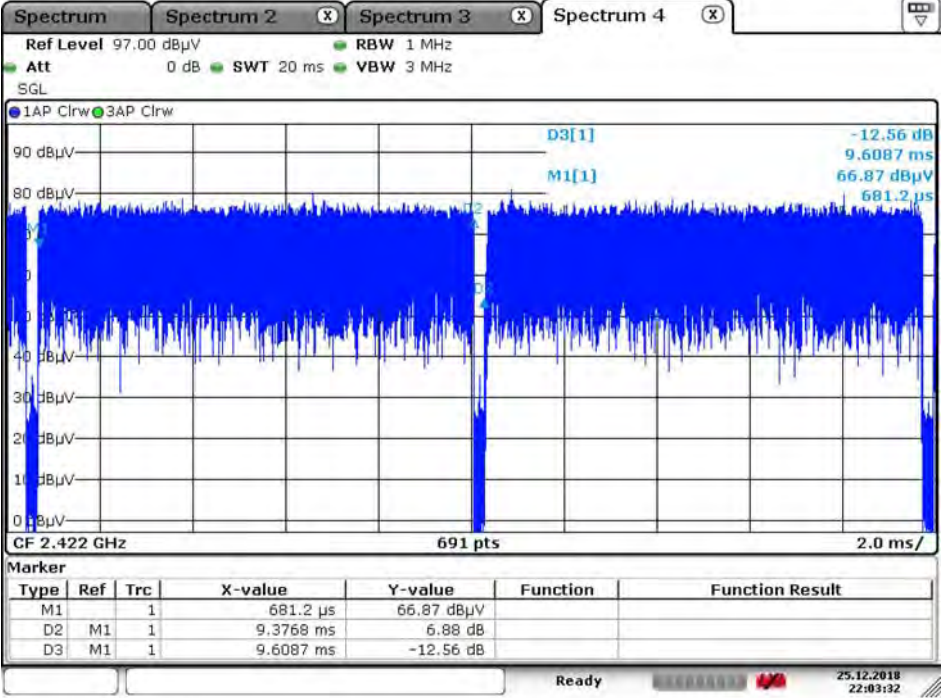
Date: 25.DEC.2018 22:02:28

802.11ax20 (MIMO)



Date: 25.DEC.2018 22:04:26

802.11ax40 (MIMO)



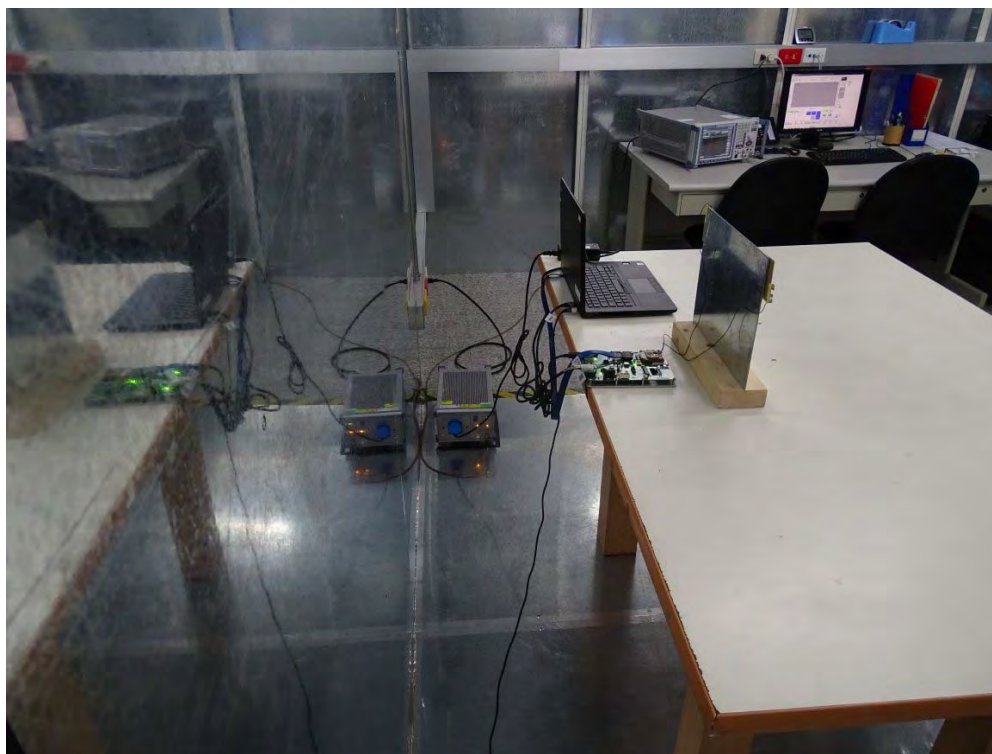
Date: 25.DEC.2018 22:03:32

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



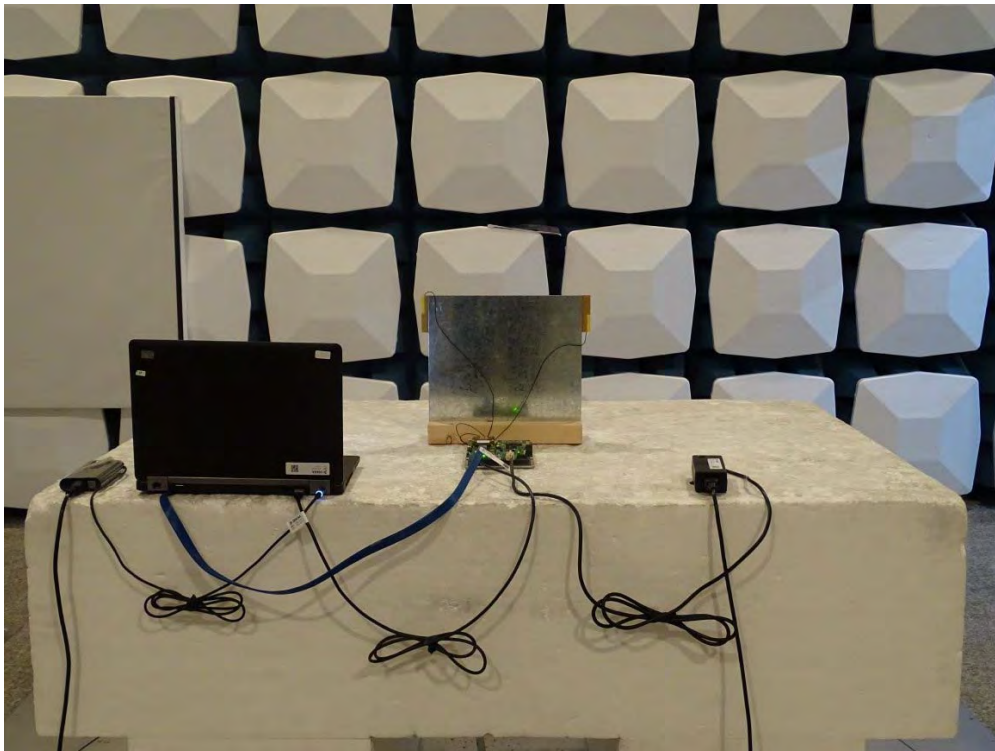
測試相片：電源端點測試 背面相片



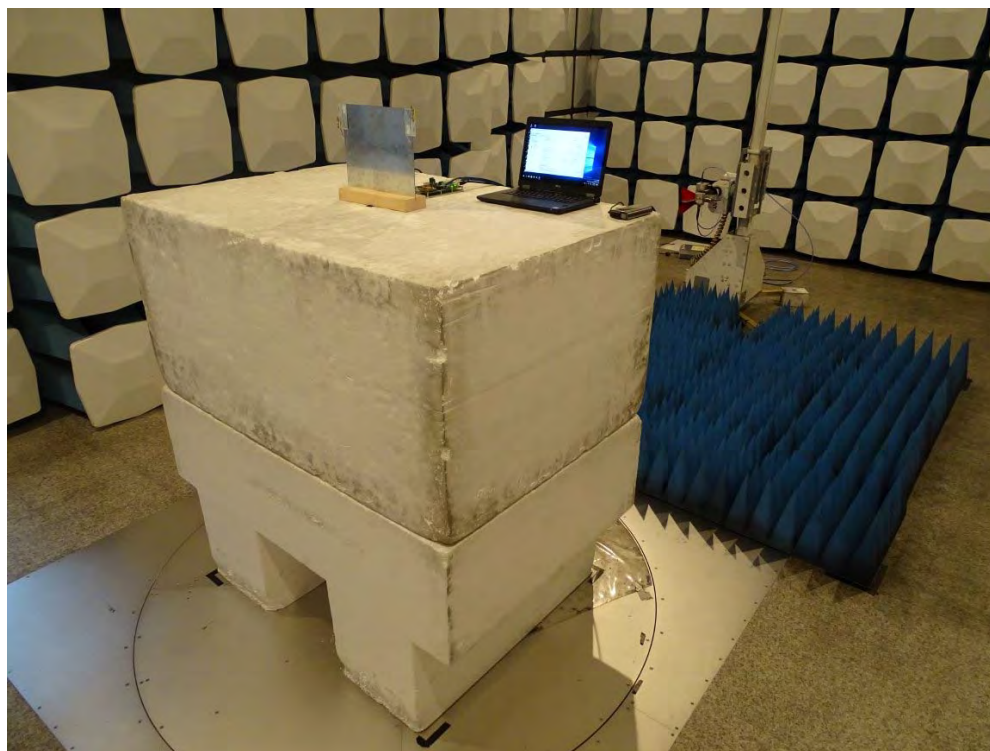
測試相片：輻射測試 正面相片



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)

