

待測物名稱：Wireless Access Point

待測物型號：AP305C、AP305CX

測試頻道：--

測試項目：佔用頻帶寬度

測試模式：Mode 14: Radio 0_CDD: 發射器 802.11ac
(20MHz)

6 dB 頻寬：100kHz

視頻頻寬：300kHz

量測天線：--

測試距離：Conducted

檢測器：峰值

測試日期：108 年 11 月 21 日

Chain A

Channel No.	Frequency (MHz)	Measure Level (kHz)	Limit (kHz)	Result
01	2412	17700	>500	Pass
06	2437	17700	>500	Pass
11	2462	17700	>500	Pass

Chain B

Channel No.	Frequency (MHz)	Measure Level (kHz)	Limit (kHz)	Result
01	2412	17650	>500	Pass
06	2437	17700	>500	Pass
11	2462	17700	>500	Pass

Figure Channel 01 (Chain A):

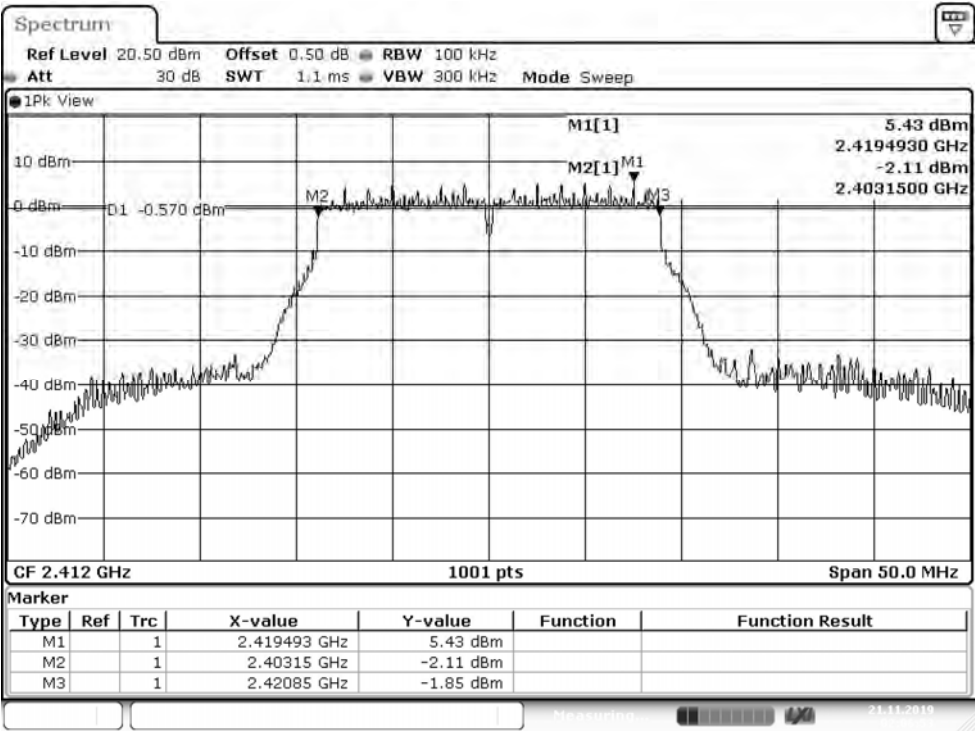
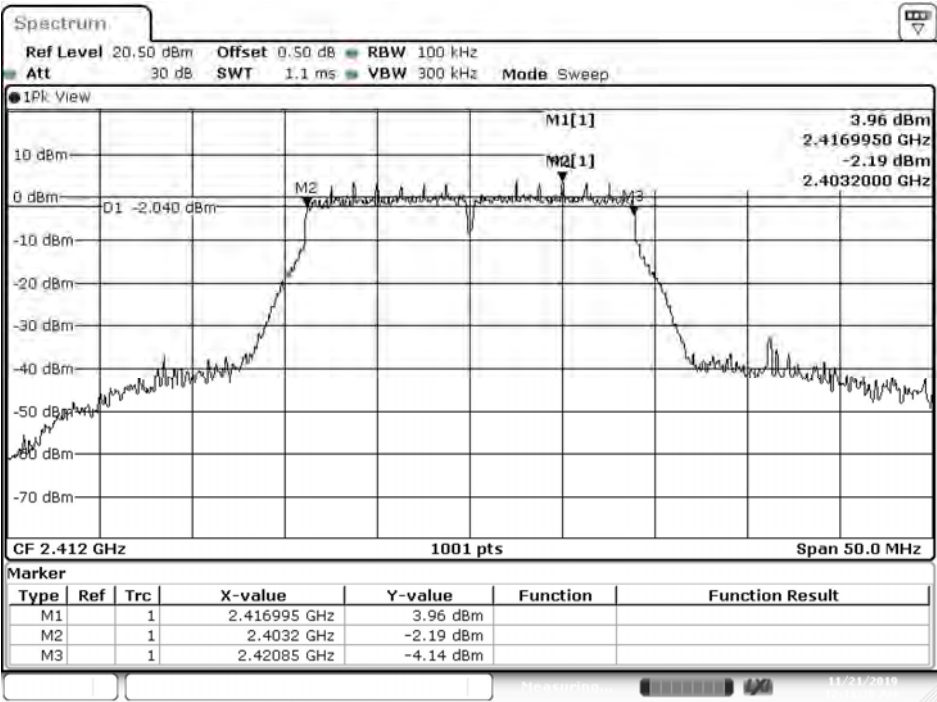
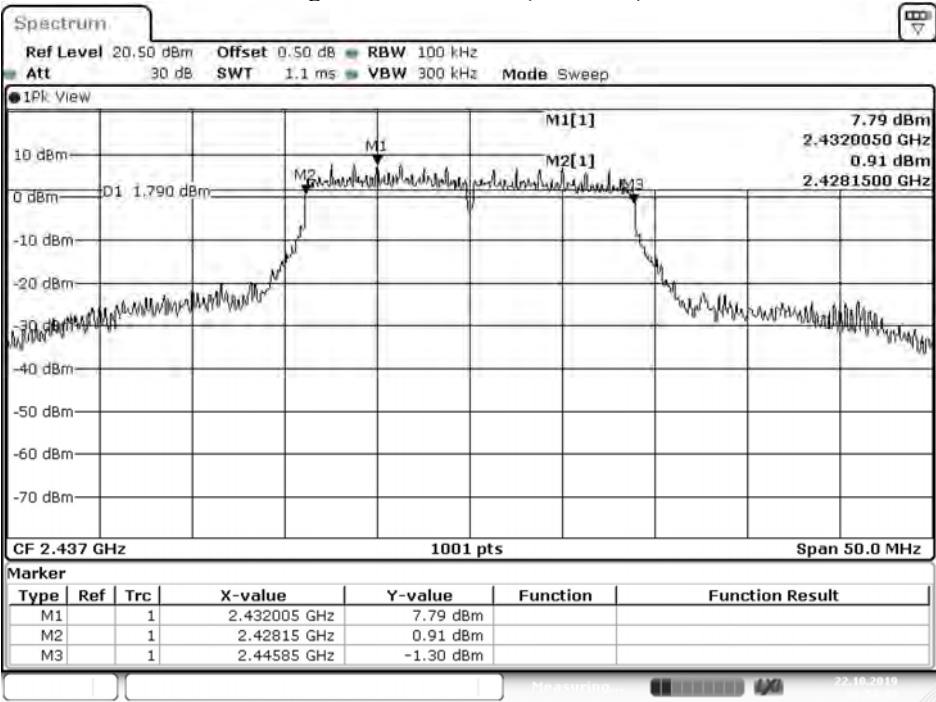


Figure Channel 01 (Chain B):



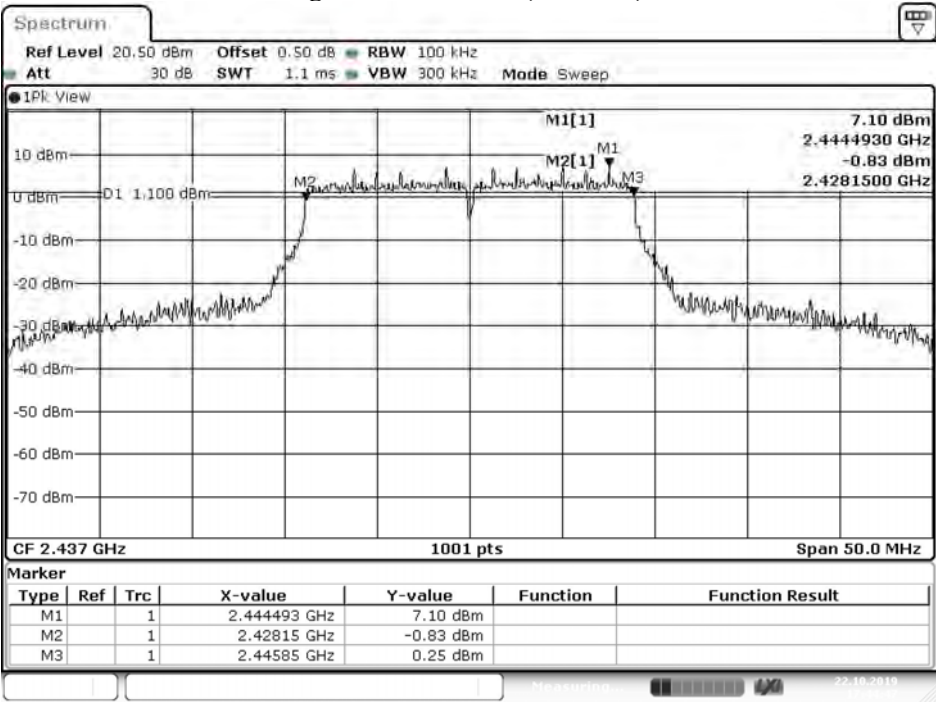
Date: 21.NOV.2019 00:11:28

Figure Channel 06 (Chain A):



Date: 22.OCT.2019 06:54:49

Figure Channel 06 (Chain B):



Date: 22.OCT.2019 17:44:48

Figure Channel 11 (Chain A):

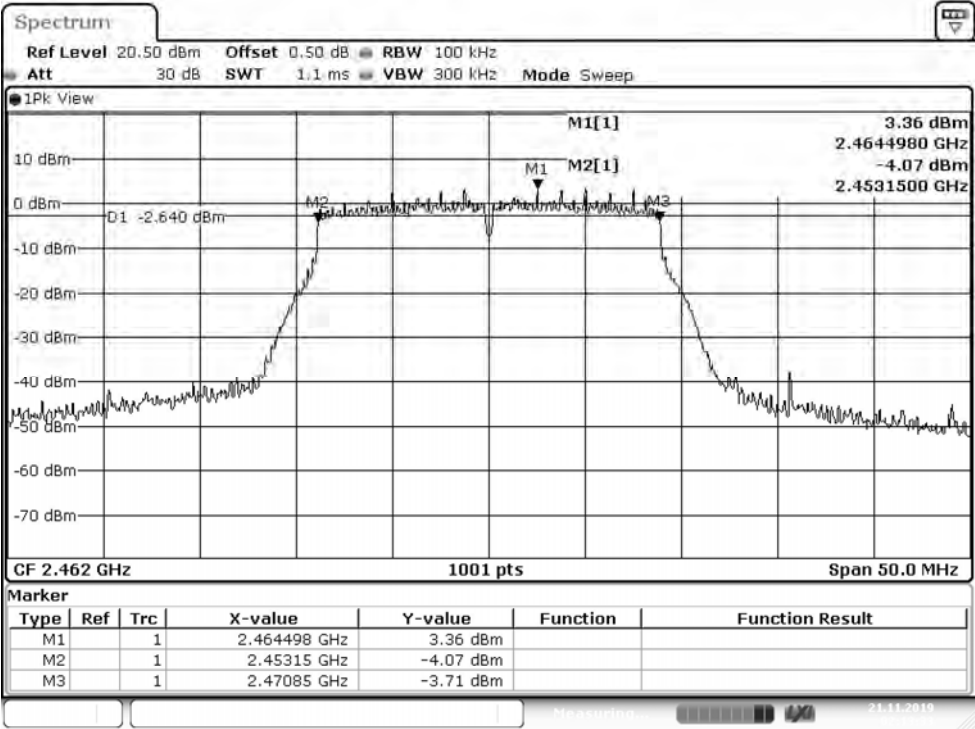
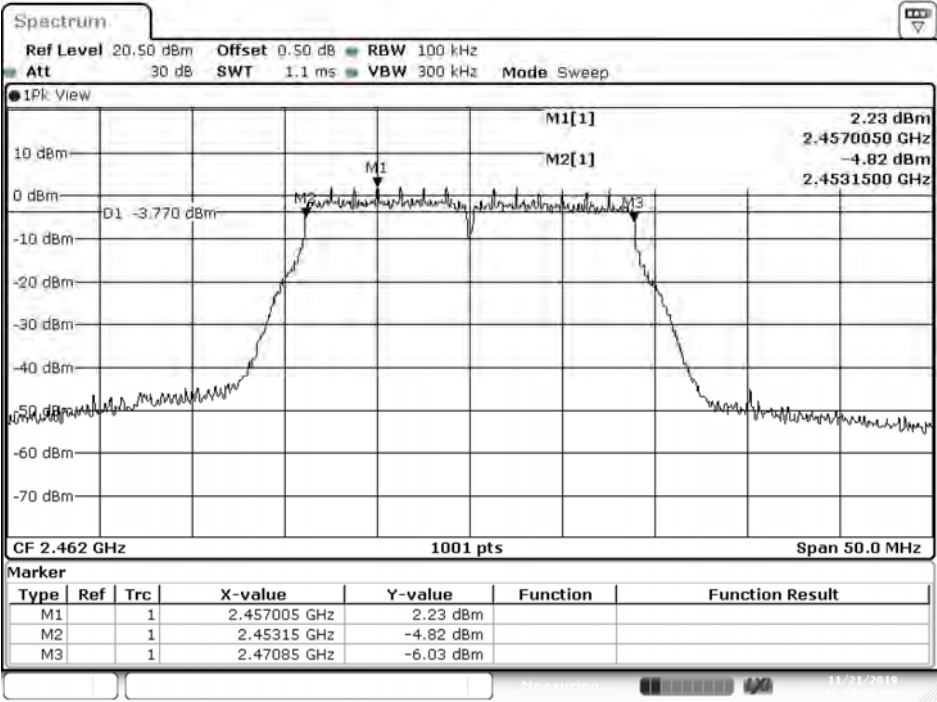


Figure Channel 11 (Chain B):



Date: 21.NOV.2019 00:18:08

待測物名稱：Wireless Access Point

待測物型號：AP305C、AP305CX

測試頻道：--

測試項目：佔用頻帶寬度

測試模式：Mode 15: Radio 0_CDD: 發射器 802.11ax
(20MHz)

6 dB 頻寬：100kHz

視頻頻寬：300kHz

量測天線：--

測試距離：Conducted

檢測器：峰值

測試日期：108年11月21日

Chain A

Channel No.	Frequency (MHz)	Measure Level (kHz)	Limit (kHz)	Result
01	2412	18850	>500	Pass
06	2437	19000	>500	Pass
11	2462	18650	>500	Pass

Chain B

Channel No.	Frequency (MHz)	Measure Level (kHz)	Limit (kHz)	Result
01	2412	19100	>500	Pass
06	2437	19050	>500	Pass
11	2462	18900	>500	Pass

Figure Channel 01 (Chain A):

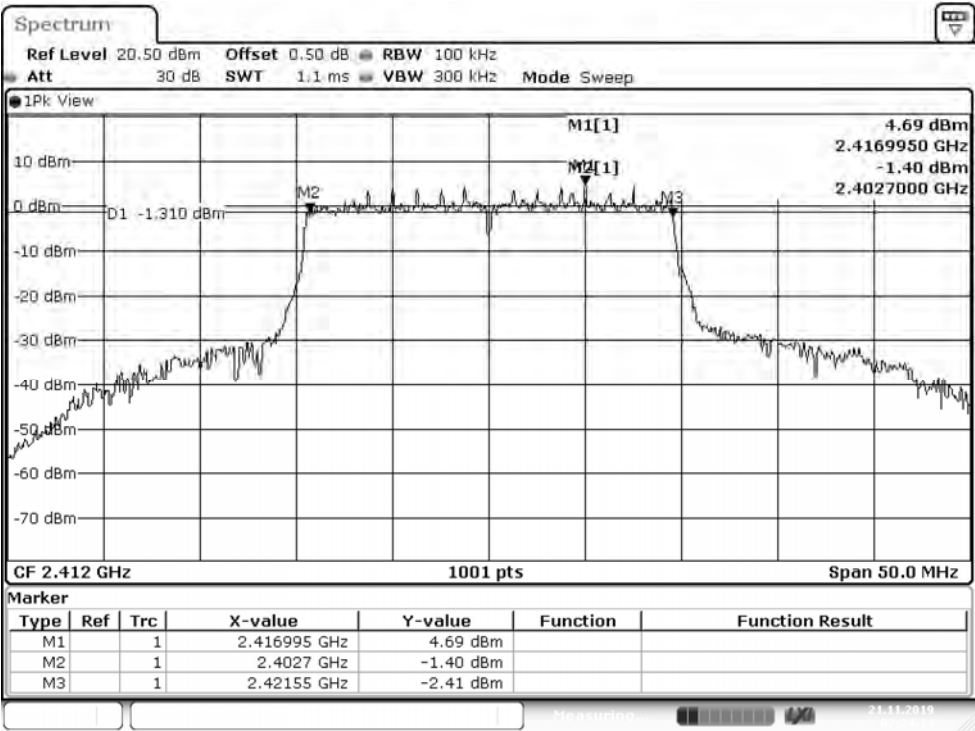
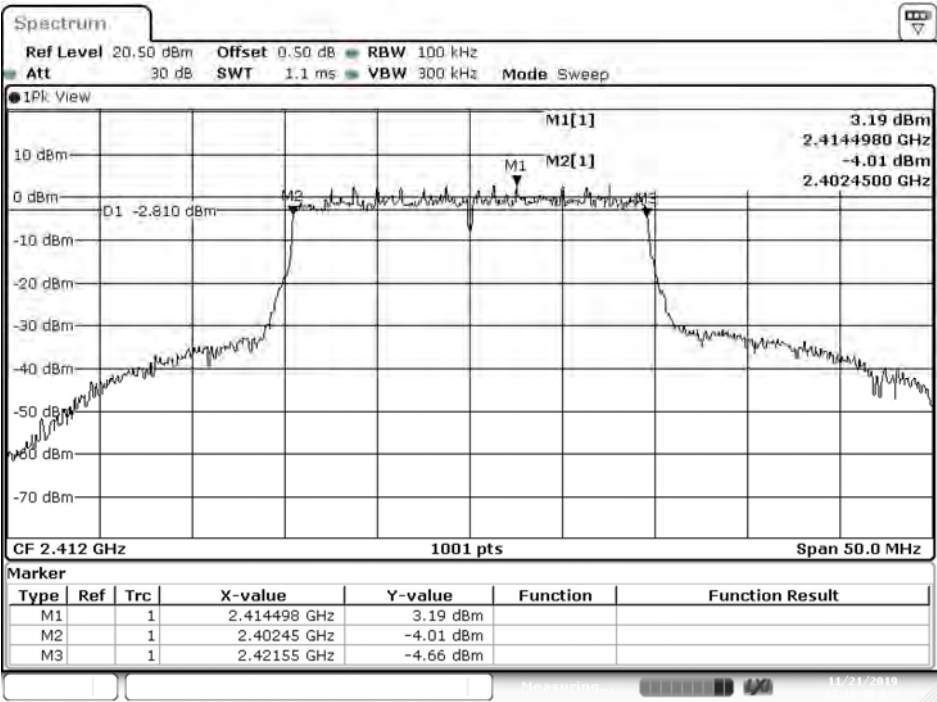
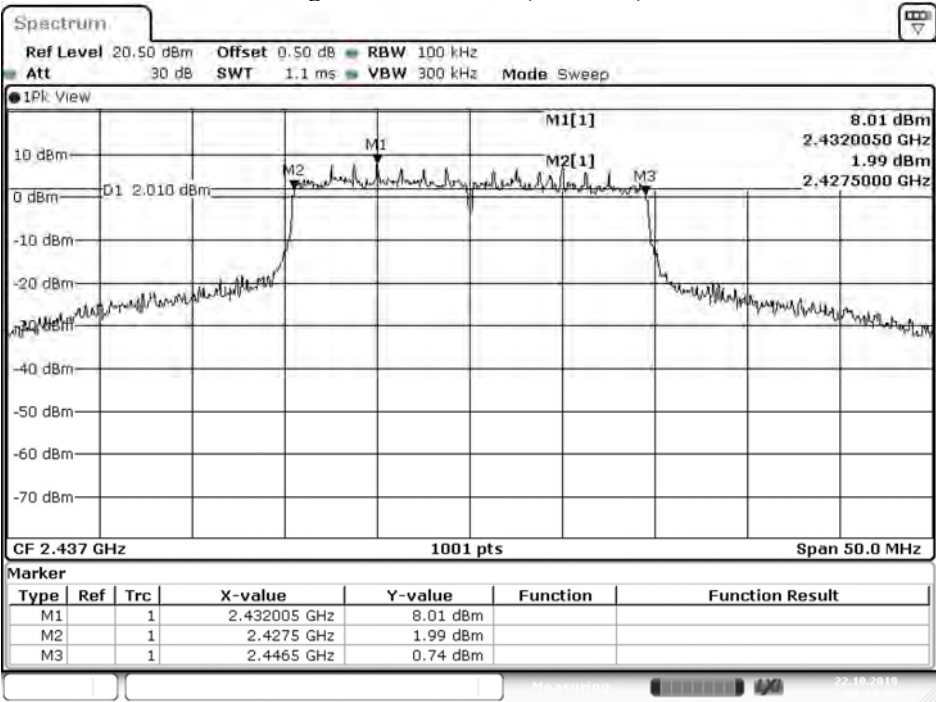


Figure Channel 01 (Chain B):



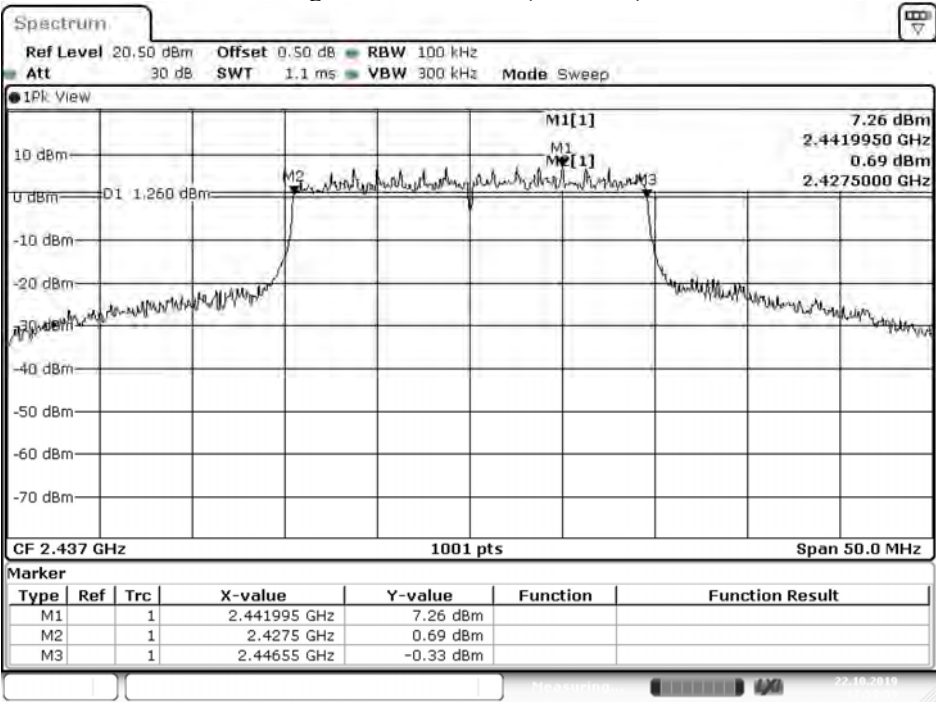
Date: 21.NOV.2019 00:28:49

Figure Channel 06 (Chain A):



Date: 22.OCT.2019 07:10:00

Figure Channel 06 (Chain B):



Date: 22.OCT.2019 17:59:59

Figure Channel 11 (Chain A):

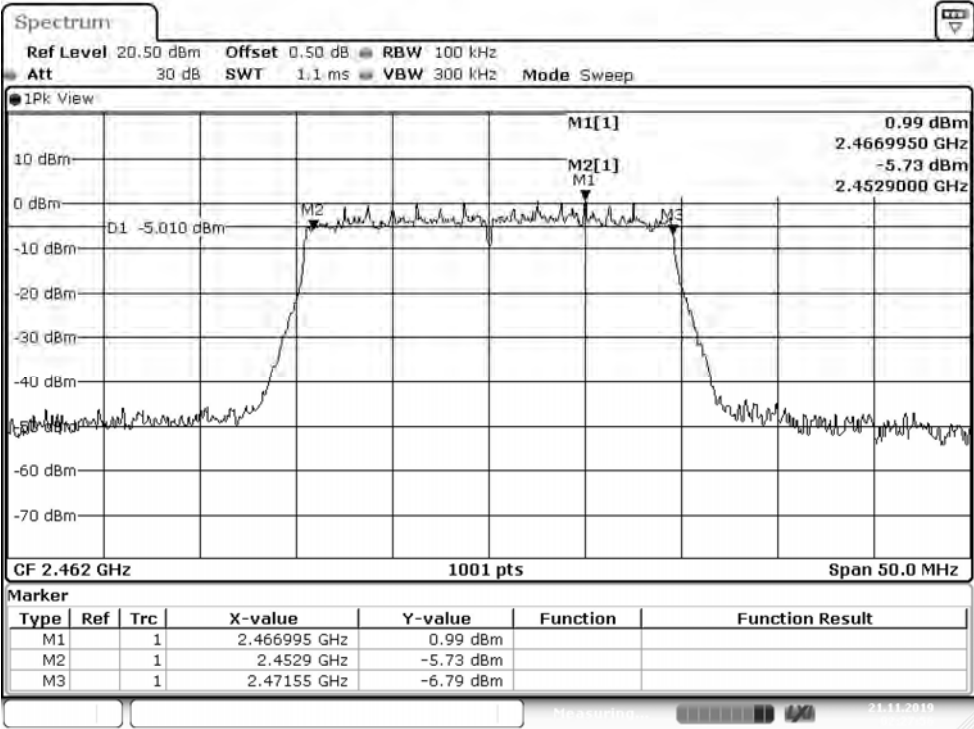
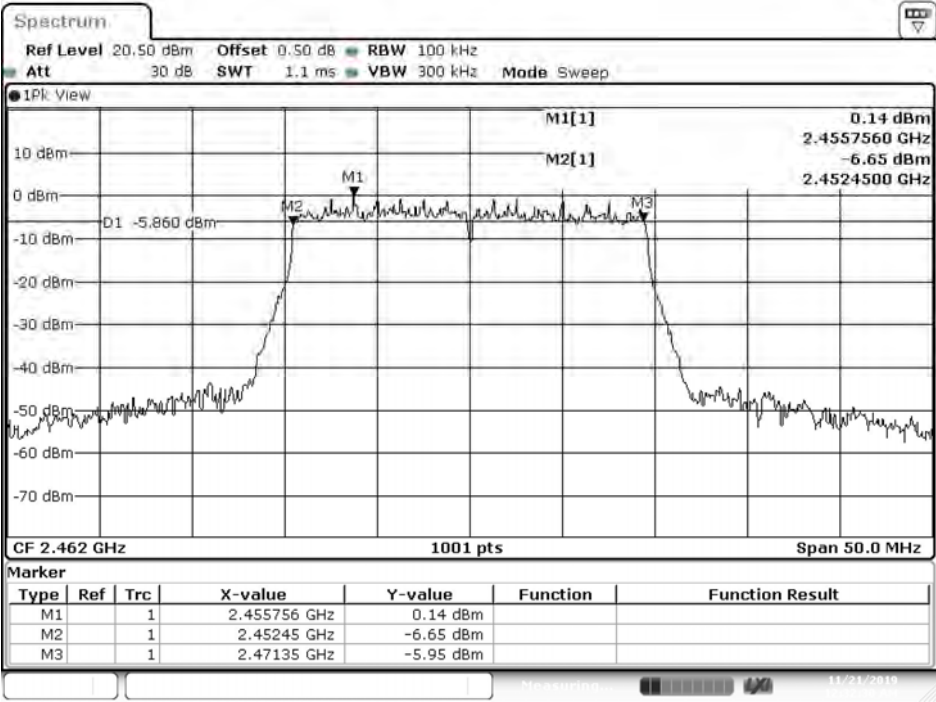


Figure Channel 11 (Chain B):



Date: 21.NOV.2019 00:32:31

待測物名稱：Wireless Access Point

待測物型號：AP305C、AP305CX

測試頻道：--

6 dB 頻寬：100kHz

量測天線：--

檢測器：峰值

測試日期：108年11月21日

測試項目：佔用頻帶寬度

測試模式：Mode 16: Radio 0_Beamforming: 發射器
802.11n (20MHz)

視頻頻寬：300kHz

測試距離：Conducted

Chain A

Channel No.	Frequency (MHz)	Measure Level (kHz)	Limit (kHz)	Result
01	2412	17700	>500	Pass
06	2437	17650	>500	Pass
11	2462	17700	>500	Pass

Chain B

Channel No.	Frequency (MHz)	Measure Level (kHz)	Limit (kHz)	Result
01	2412	17750	>500	Pass
06	2437	17750	>500	Pass
11	2462	17450	>500	Pass

Figure Channel 01 (Chain A):

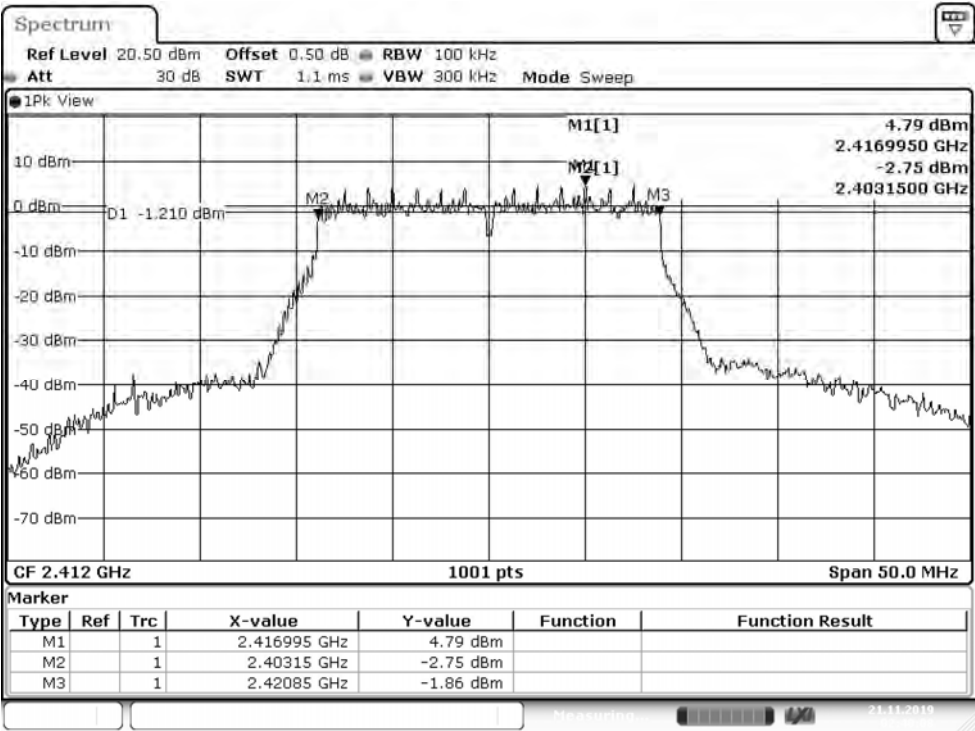
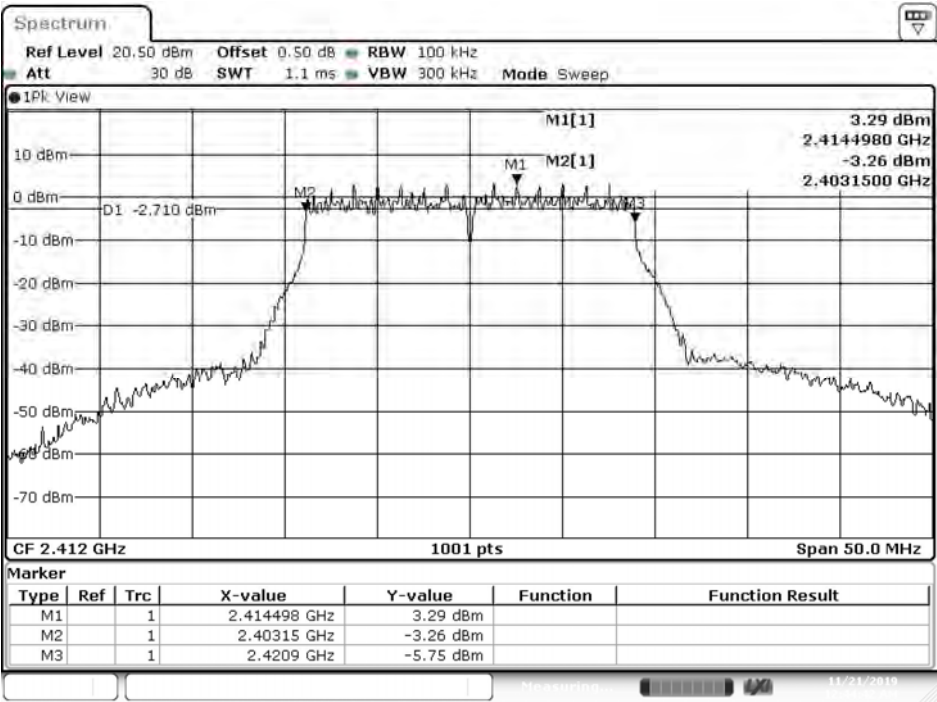
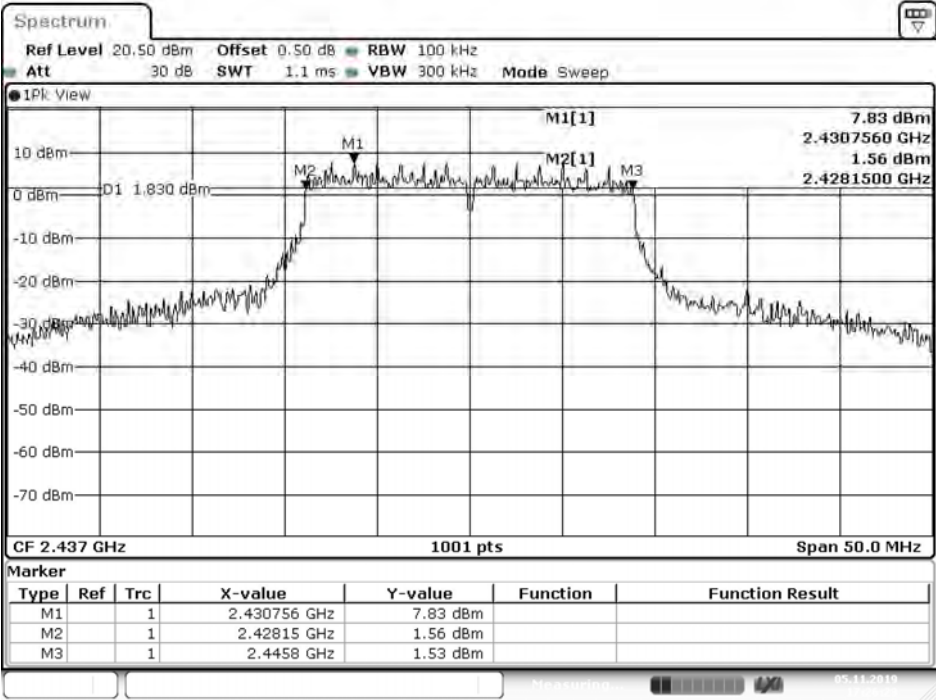


Figure Channel 01 (Chain B):



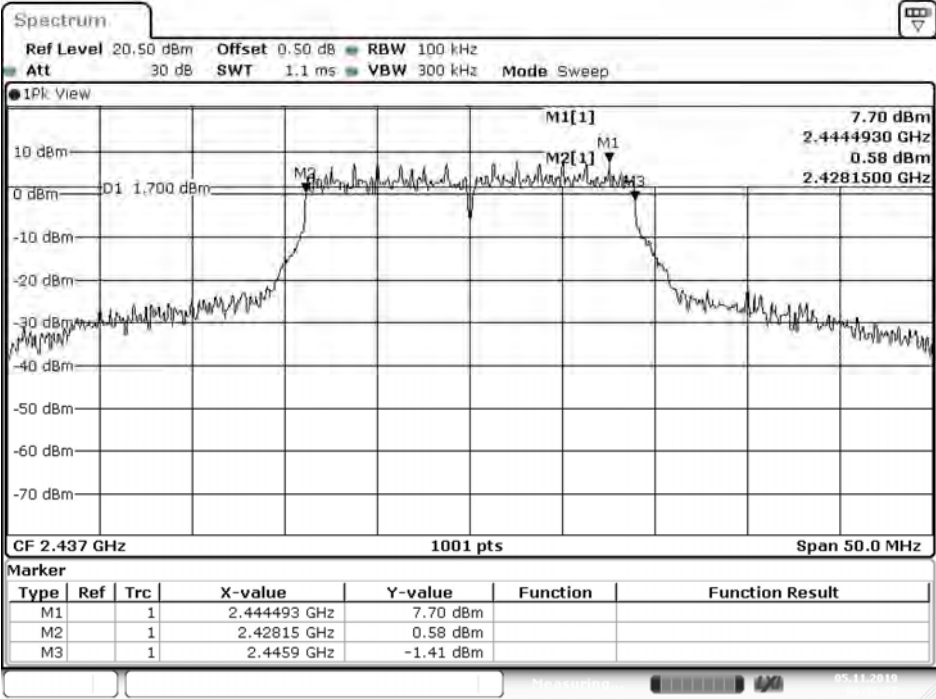
Date: 21.NOV.2019 00:44:43

Figure Channel 06 (Chain A):



Date: 5.NOV.2019 17:26:23

Figure Channel 06 (Chain B):



Date: 5.NOV.2019 06:36:27

Figure Channel 11 (Chain A):

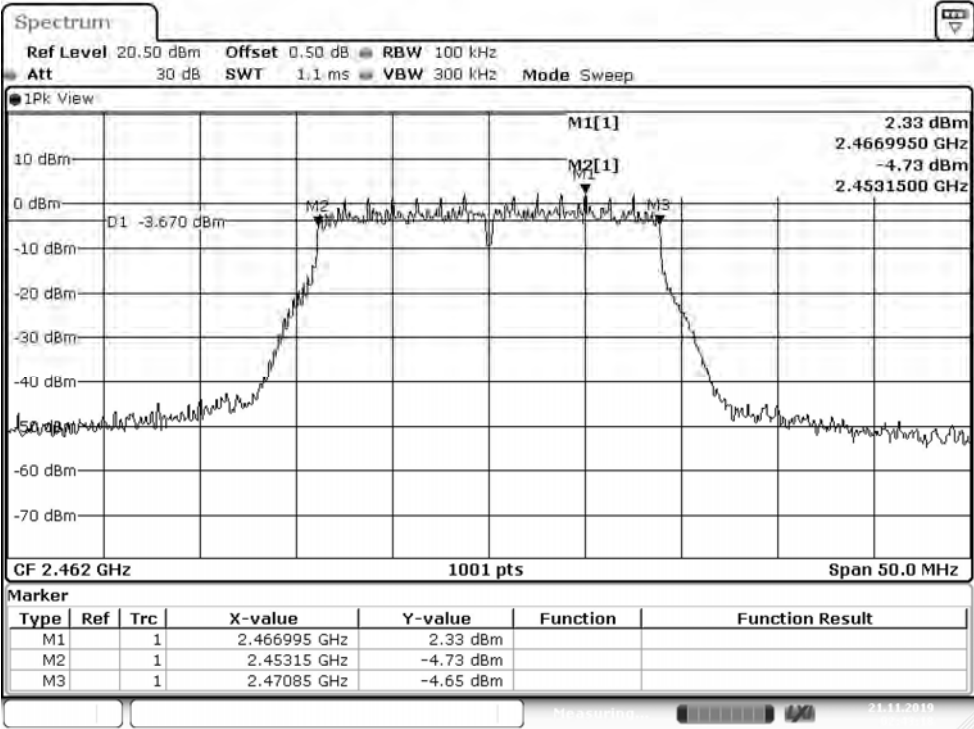
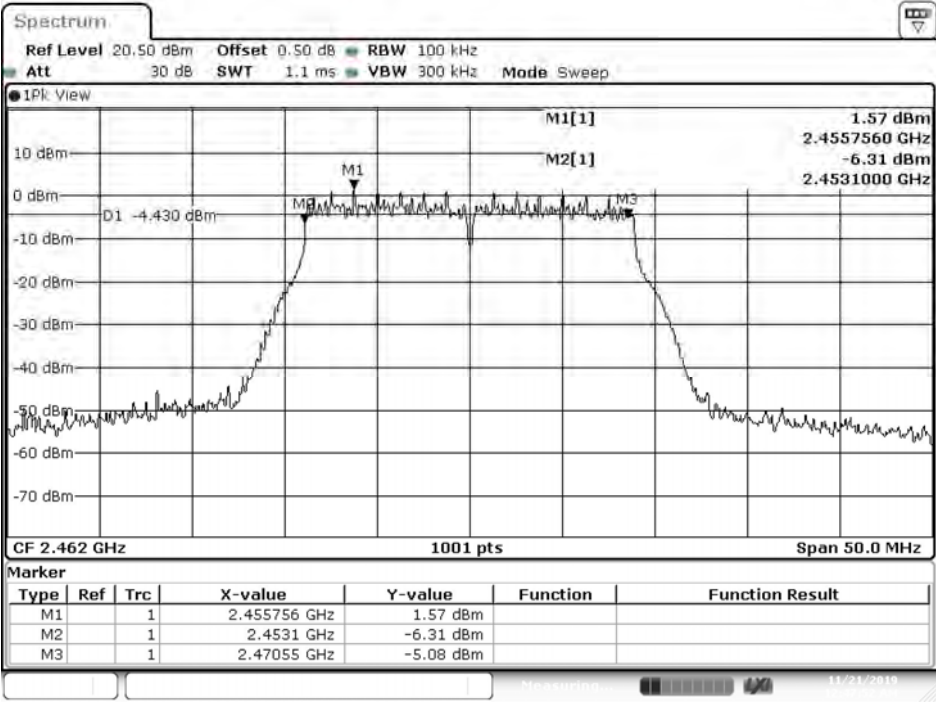


Figure Channel 11 (Chain B):



Date: 21.NOV.2019 00:47:53

待測物名稱：Wireless Access Point

待測物型號：AP305C、AP305CX

測試頻道：--

6 dB 頻寬：100kHz

量測天線：--

檢測器：峰值

測試日期：108 年 11 月 21 日

測試項目：佔用頻帶寬度

測試模式：Mode 17: Radio 0_Beamforming: 發射器
802.11ac (20MHz)

視頻頻寬：300kHz

測試距離：Conducted

Chain A

Channel No.	Frequency (MHz)	Measure Level (kHz)	Limit (kHz)	Result
01	2412	17700	>500	Pass
06	2437	17700	>500	Pass
11	2462	17700	>500	Pass

Chain B

Channel No.	Frequency (MHz)	Measure Level (kHz)	Limit (kHz)	Result
01	2412	17700	>500	Pass
06	2437	17700	>500	Pass
11	2462	17750	>500	Pass

Figure Channel 01 (Chain A):

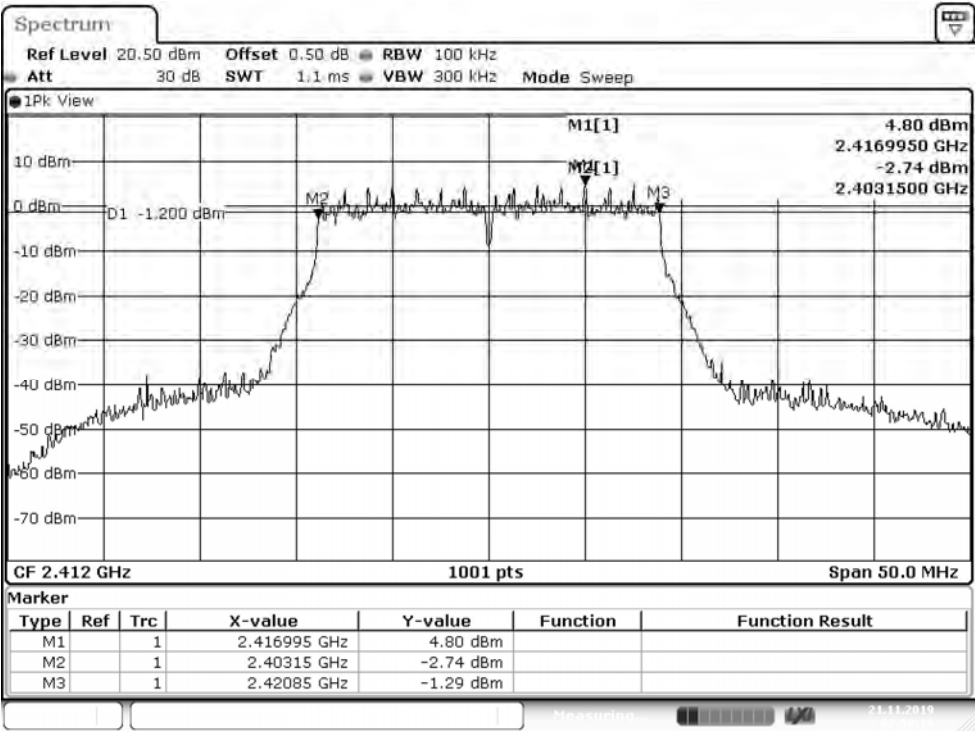
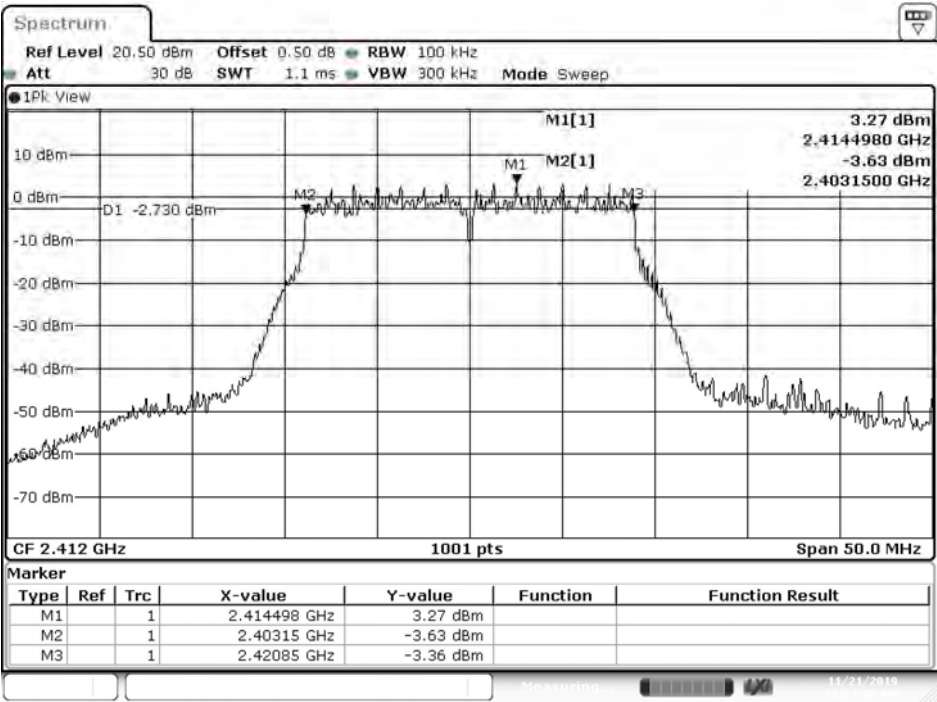
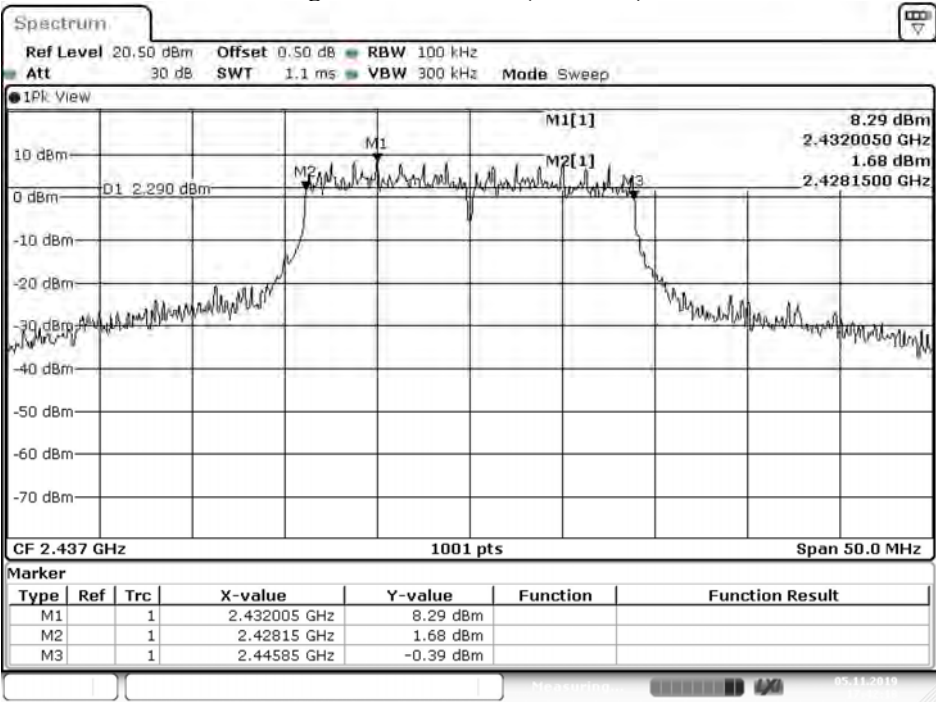


Figure Channel 01 (Chain B):



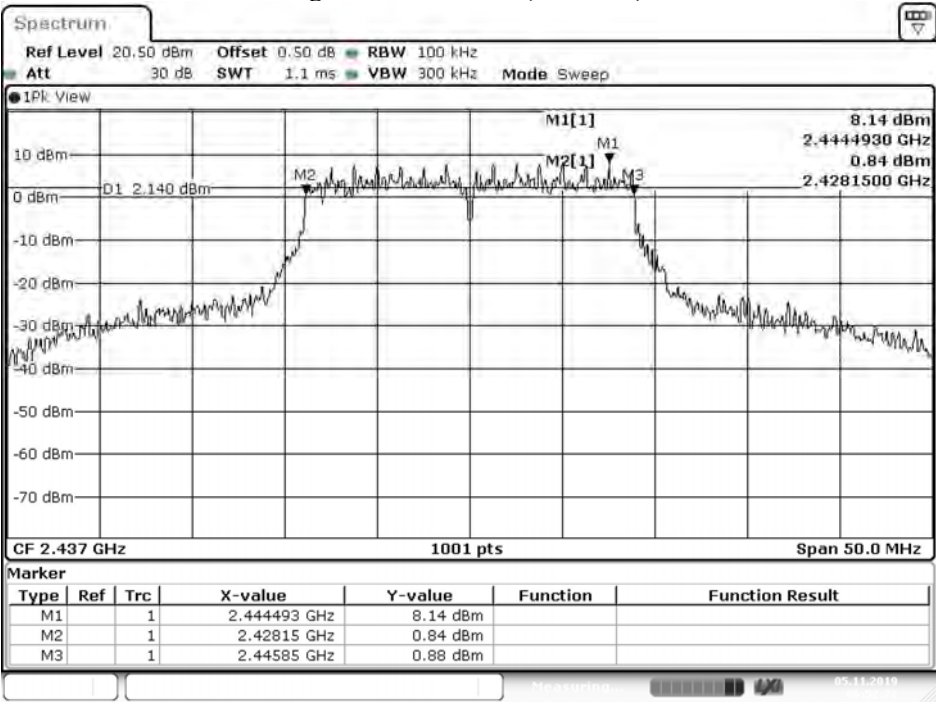
Date: 21.NOV.2019 00:54:46

Figure Channel 06 (Chain A):



Date: 5.NOV.2019 17:42:18

Figure Channel 06 (Chain B):



Date: 5.NOV.2019 06:52:23

Figure Channel 11 (Chain A):

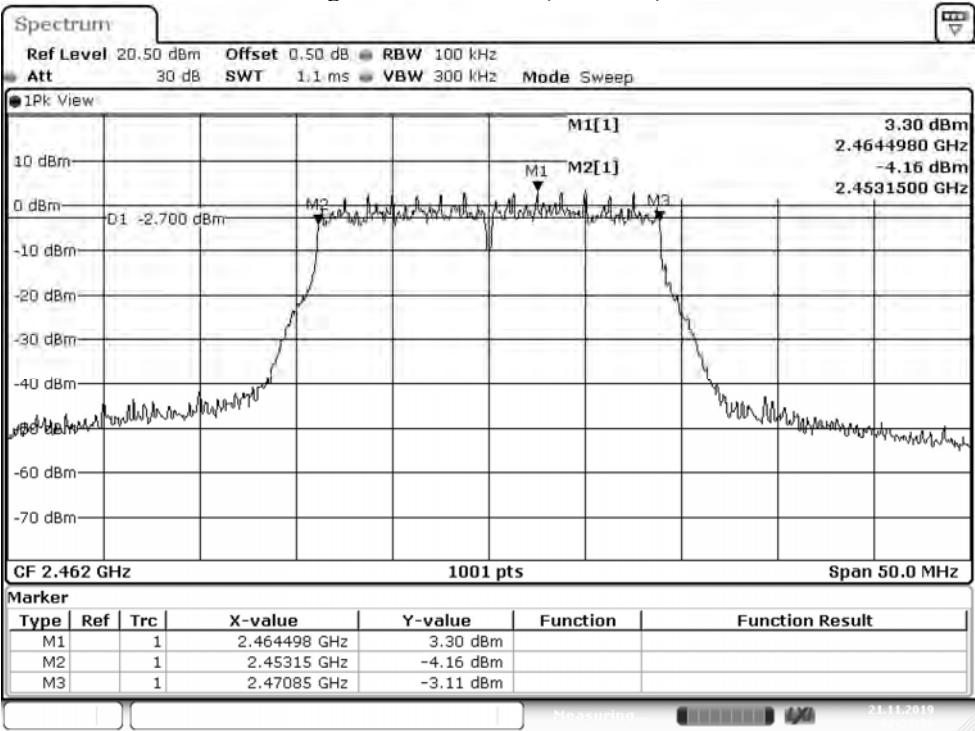
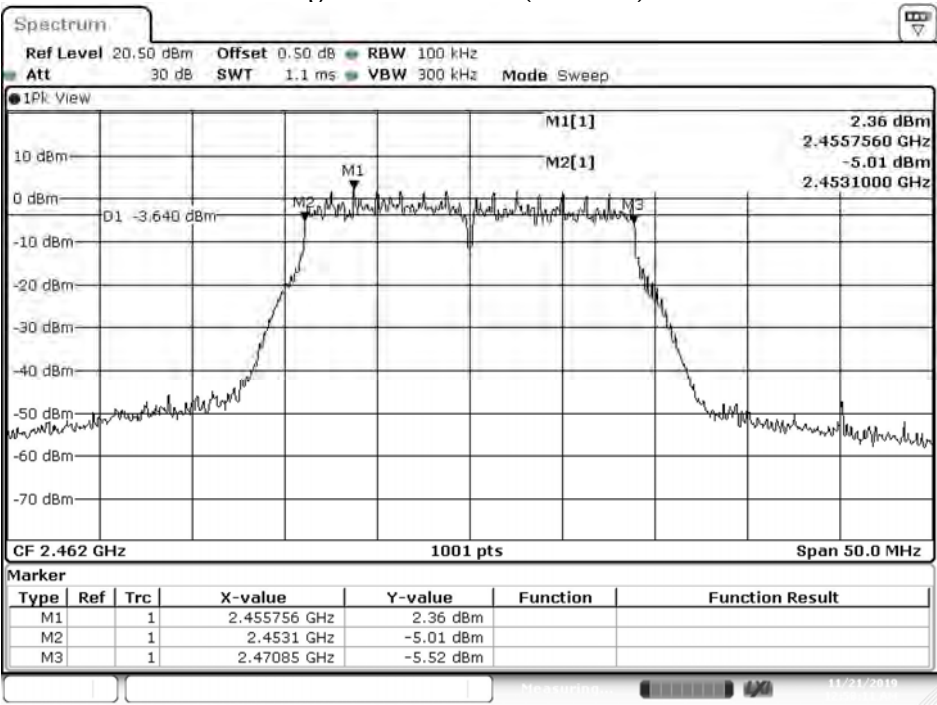


Figure Channel 11 (Chain B):



Date: 21.NOV.2019 00:58:11

待測物名稱：Wireless Access Point

待測物型號：AP305C、AP305CX

測試頻道：--

6 dB 頻寬：100kHz

量測天線：--

檢測器：峰值

測試日期：108 年 11 月 21 日

測試項目：佔用頻帶寬度

測試模式：Mode 18: Radio 0_Beamforming: 發射器
802.11ax (20MHz)

視頻頻寬：300kHz

測試距離：Conducted

Chain A

Channel No.	Frequency (MHz)	Measure Level (kHz)	Limit (kHz)	Result
01	2412	18650	>500	Pass
06	2437	18750	>500	Pass
11	2462	18650	>500	Pass

Chain B

Channel No.	Frequency (MHz)	Measure Level (kHz)	Limit (kHz)	Result
01	2412	18950	>500	Pass
06	2437	19000	>500	Pass
11	2462	18800	>500	Pass

Figure Channel 01 (Chain A):

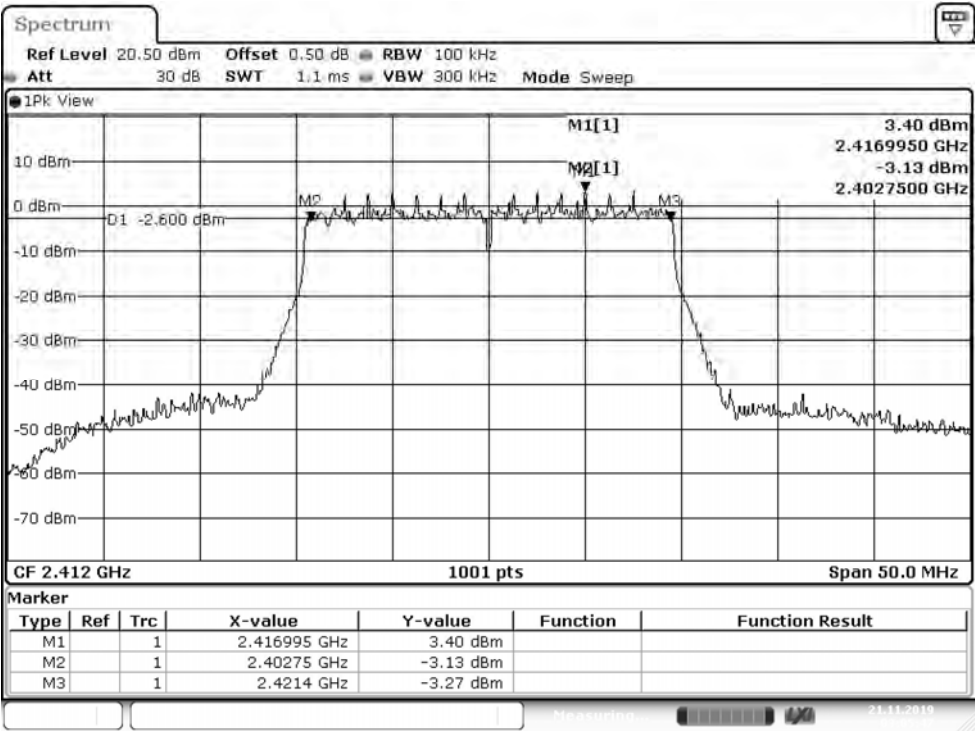
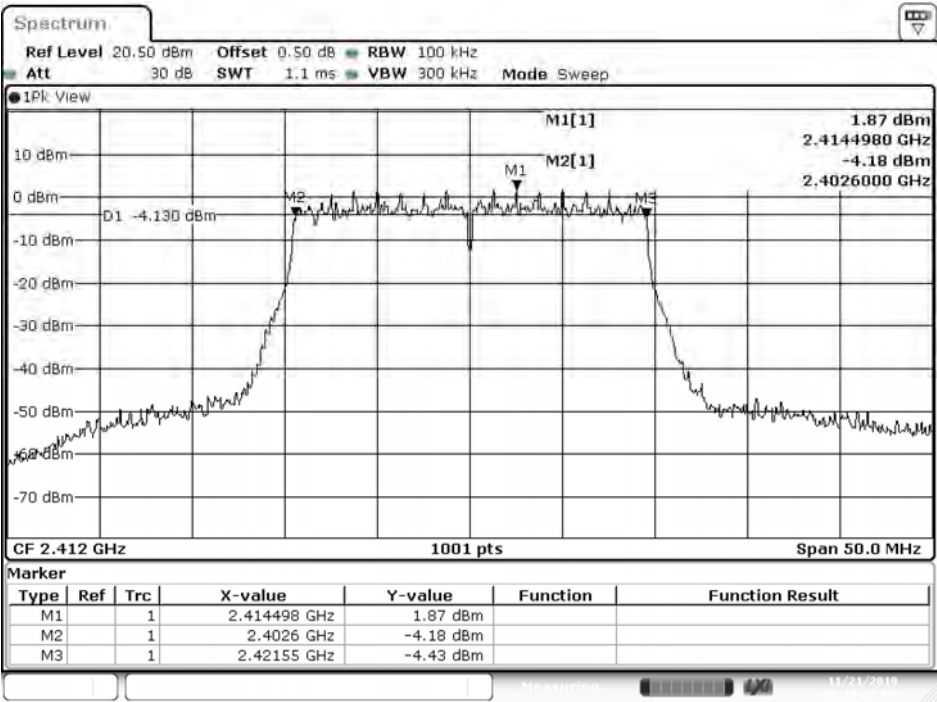
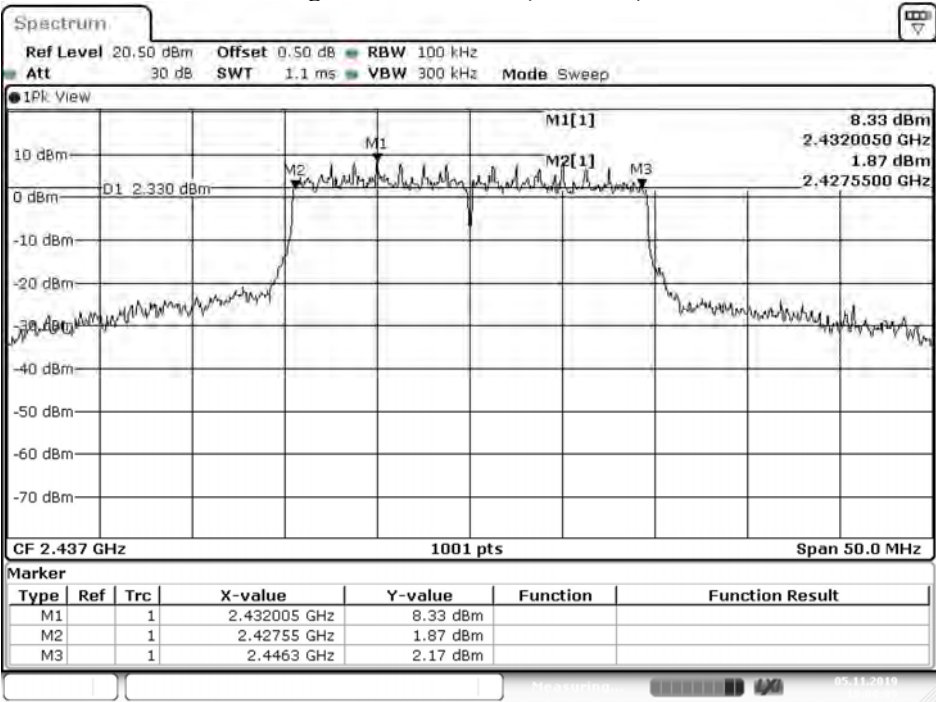


Figure Channel 01 (Chain B):



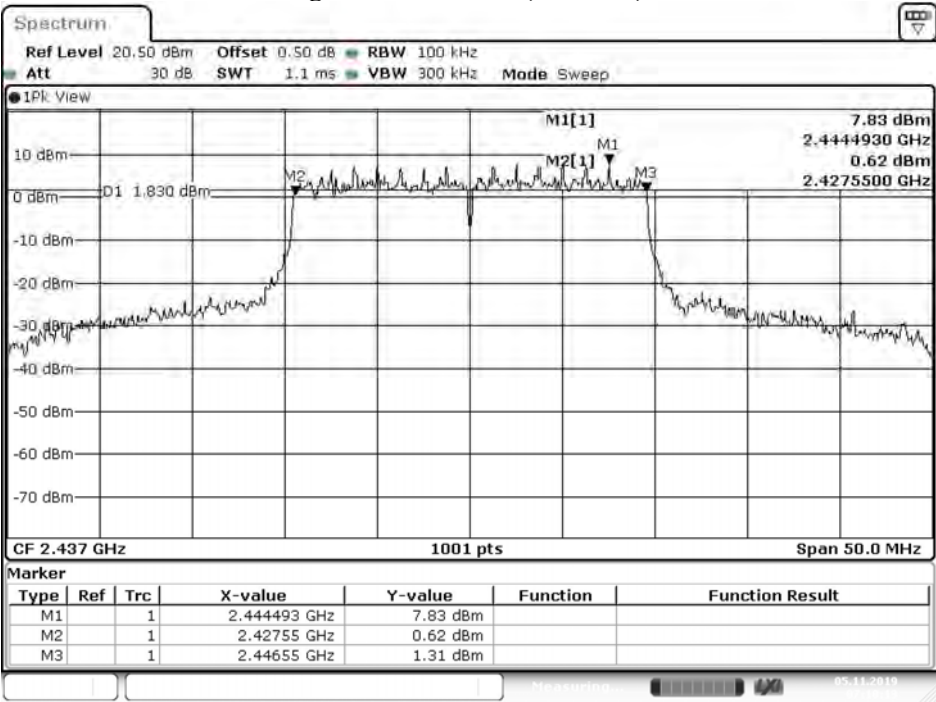
Date: 21.NOV.2019 01:10:22

Figure Channel 06 (Chain A):



Date: 5.NOV.2019 18:00:09

Figure Channel 06 (Chain B):



Date: 5.NOV.2019 07:10:14

Figure Channel 11 (Chain A):

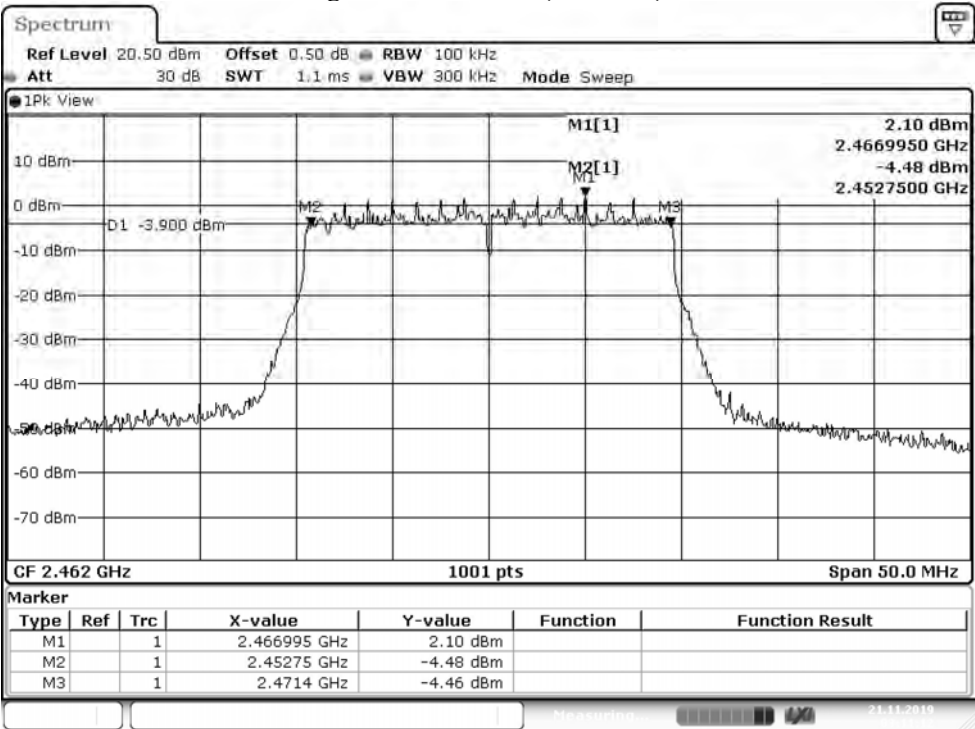
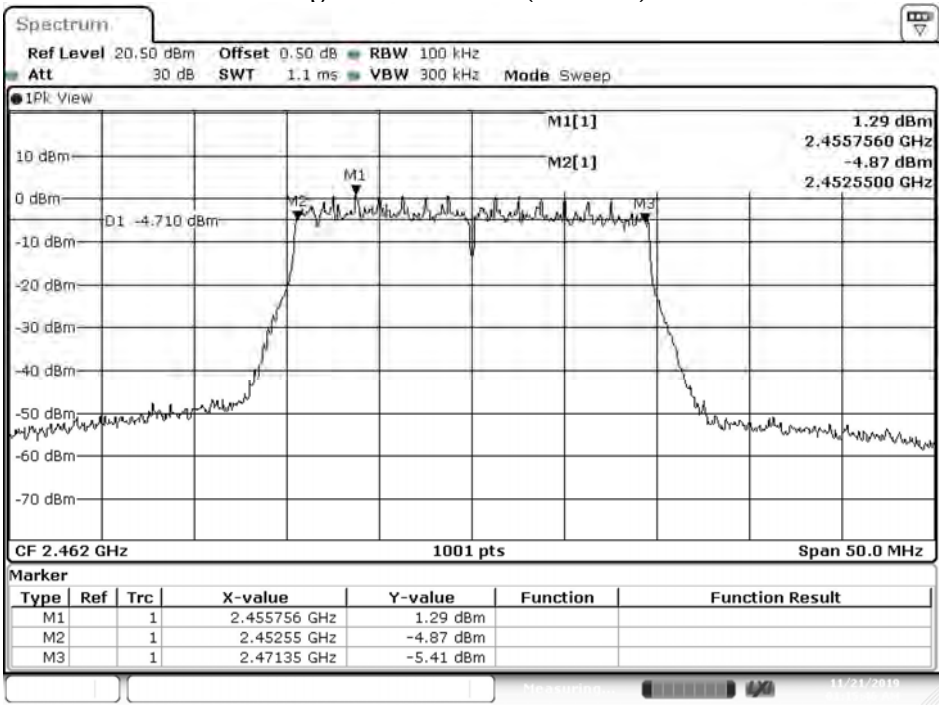


Figure Channel 11 (Chain B):



Date: 21.NOV.2019 01:15:46

佔用頻道寬度測試結果:	PASS
-------------	------

10. 發射電功率密度

10.1. 適用標準

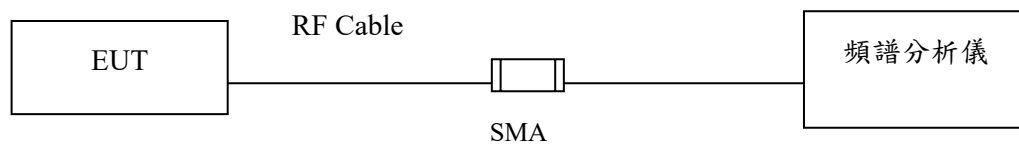
依據國家通訊傳播委員會低功率射頻電機技術規範之第 3.10.1.6 節，在使用頻率範圍之任意 3 千赫(kHz)頻寬內，由發射機傳導至天線之峰值發射電功率密度在任意期間內，皆不得大於 8dBm，且應依 3.10.1.3 之方式降低功率頻譜密度限制值。

10.2. 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。找出發射峰值並擴展於通帶內，設定頻譜分析儀之解析度頻寬為 3kHz，視訊頻寬大於解析度頻寬，掃瞄時間為頻率掃瞄範圍除以 3kHz。(SWEEP TIME=SPAN/3kHz)。

待測物應在正常發射狀態下量測。

10.3. 測試架構圖



10.4. 量測不確定度

此項測試之量測不確定度為 $\pm 1.23\text{dB}$ 。

10.5. 功率密度量測結果

待測物名稱：Wireless Access Point

待測物型號：AP305C、AP305CX

測試頻道：--

量測天線：--

檢測器：峰值

測試日期：108年11月05日

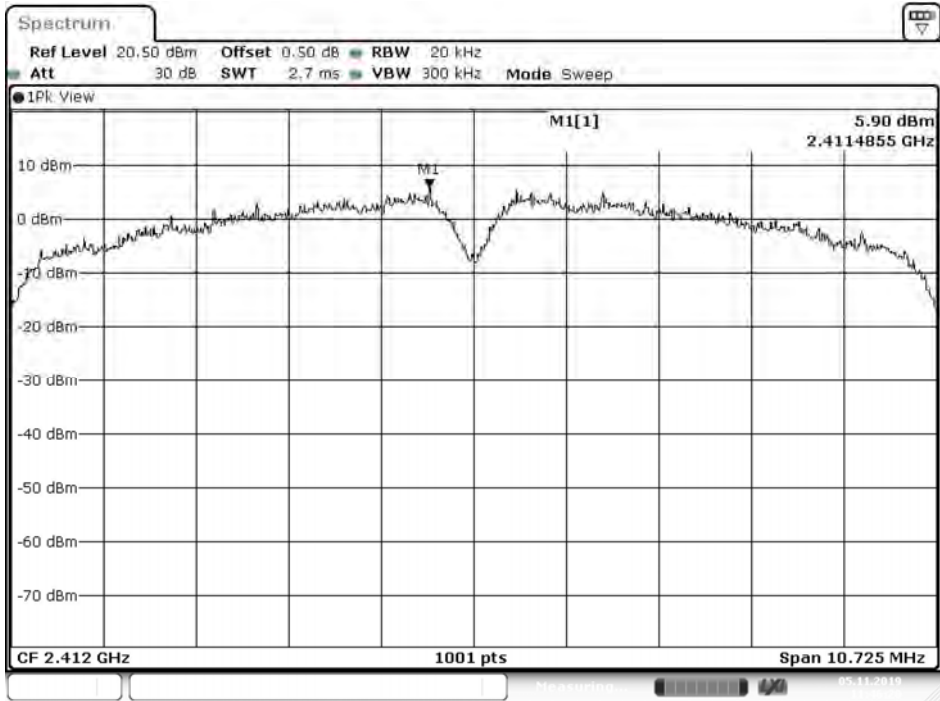
測試項目：功率密度

測試模式：Mode 1: Radio 0_SISO A: 發射器 802.11b

測試距離：Conducted

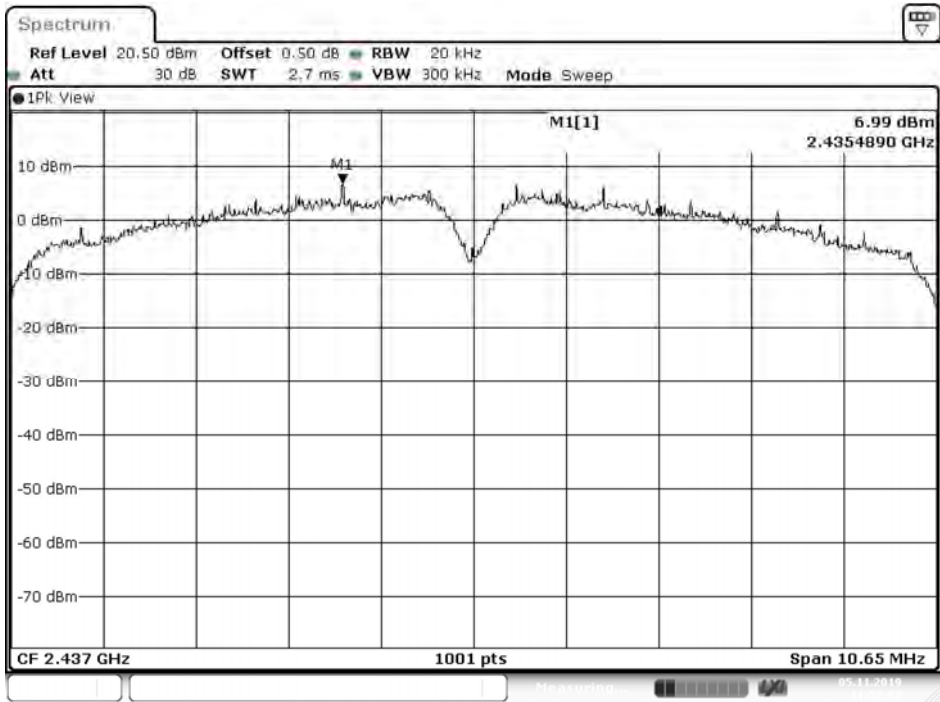
Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
01	2412	5.90	$\leq 8\text{dBm}$	Pass
06	2437	6.99	$\leq 8\text{dBm}$	Pass
11	2462	7.27	$\leq 8\text{dBm}$	Pass

Figure Channel 01:



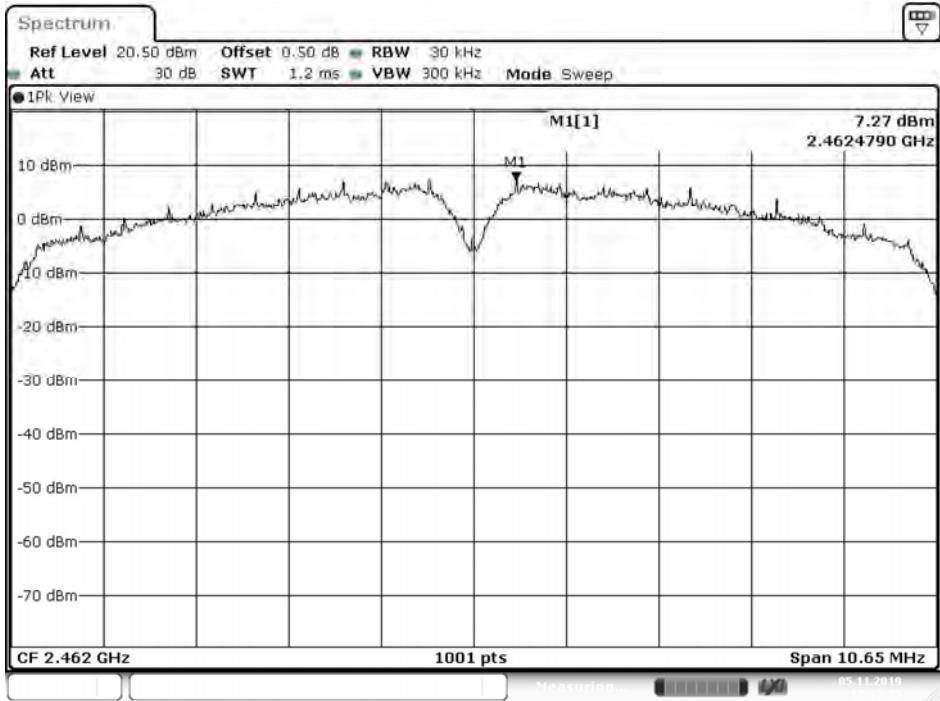
Date: 5.NOV.2019 11:46:20

Figure Channel 06:



Date: 5.NOV.2019 11:52:07

Figure Channel 11:



Date: 5.NOV.2019 12:15:40

待測物名稱：Wireless Access Point

待測物型號：AP305C、AP305CX

測試頻道：--

量測天線：--

檢測器：峰值

測試日期：108年11月21日

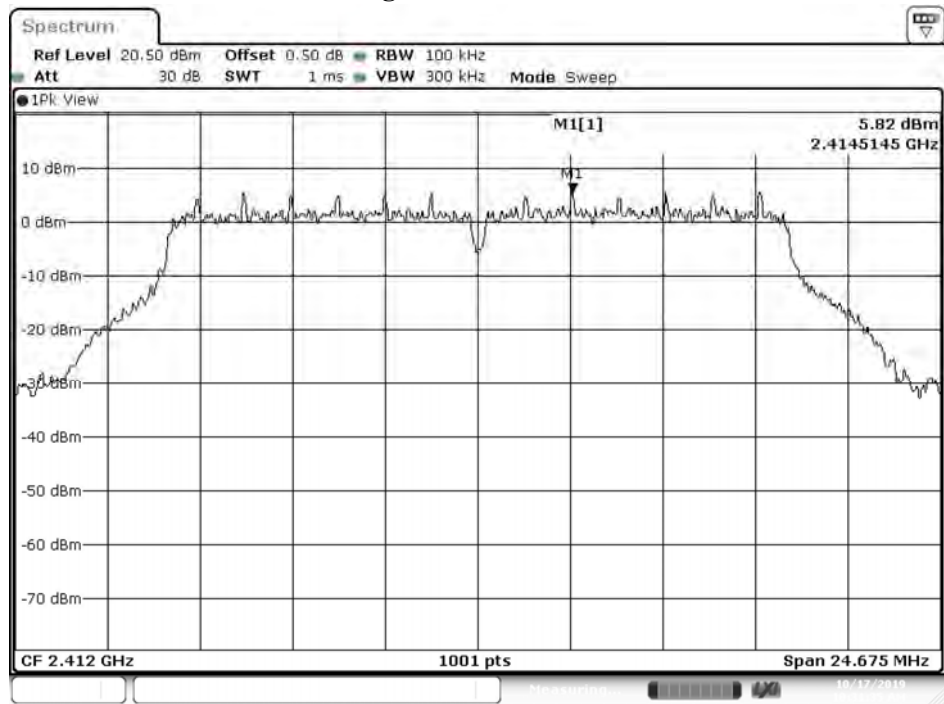
測試項目：功率密度

測試模式：Mode 2: Radio 0_SISO A: 發射器 802.11g

測試距離：Conducted

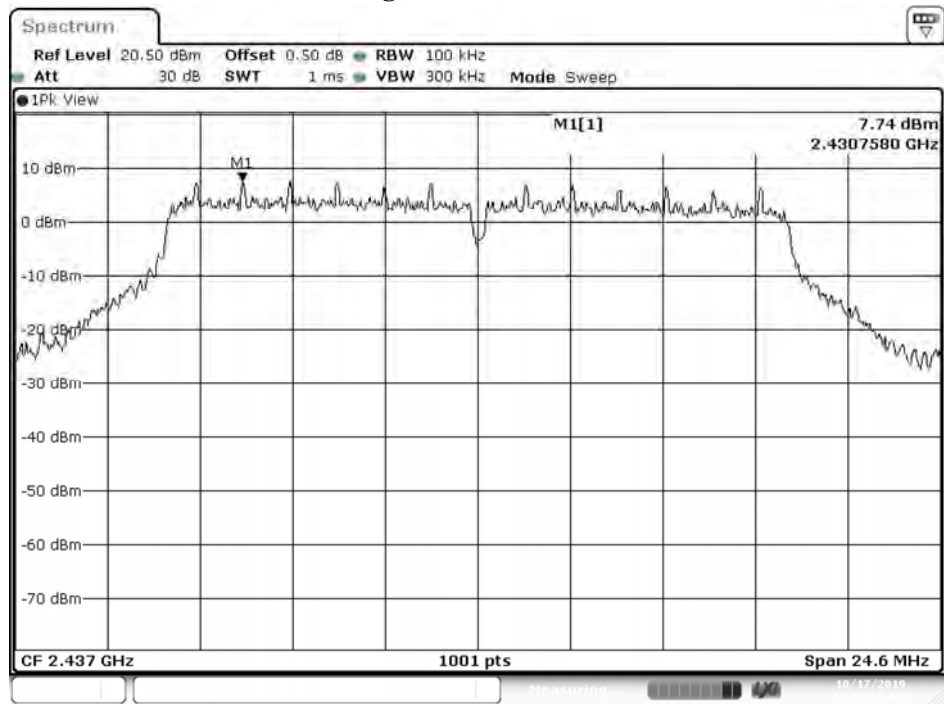
Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
01	2412	5.82	≤8dBm	Pass
06	2437	7.74	≤8dBm	Pass
11	2462	4.01	≤8dBm	Pass

Figure Channel 01:



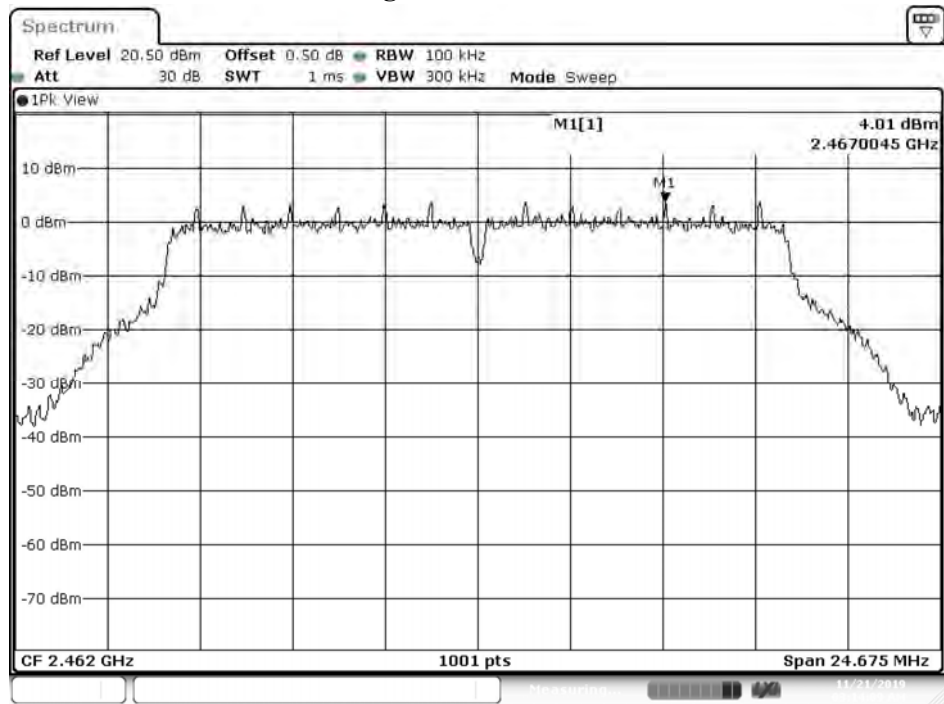
Date: 17.OCT.2019 10:31:35

Figure Channel 06:



Date: 17.OCT.2019 10:35:03

Figure Channel 11:



Date: 21.NOV.2019 03:14:10

待測物名稱：Wireless Access Point

待測物型號：AP305C、AP305CX

測試頻道：--

測試項目：功率密度

測試模式：Mode 3: Radio 0_SISO A: 發射器 802.11n
(20MHz)

量測天線：--

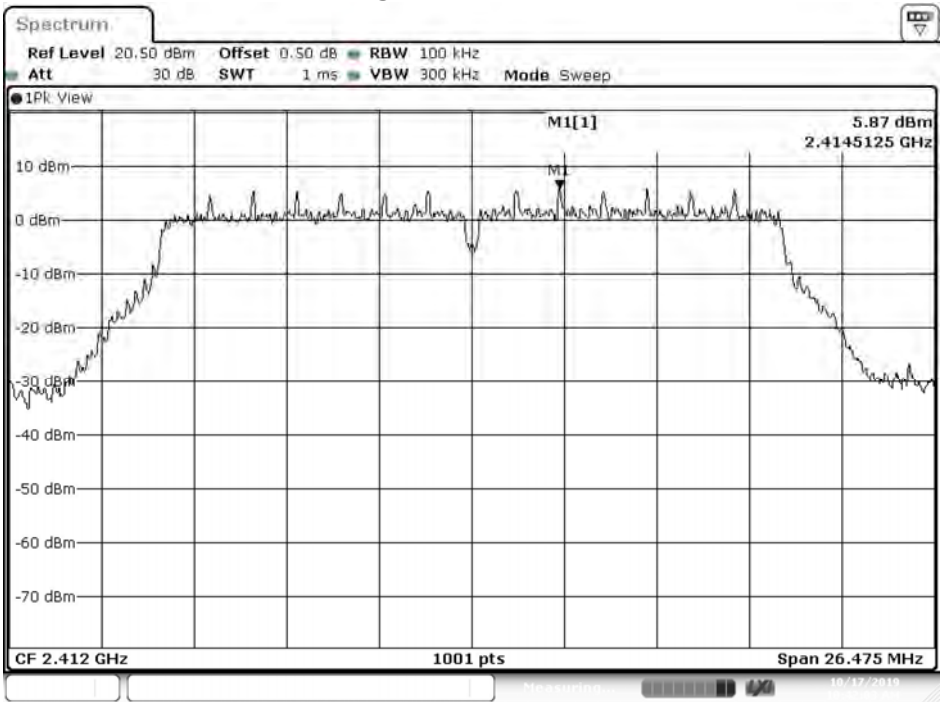
測試距離：Conducted

檢測器：峰值

測試日期：108年11月21日

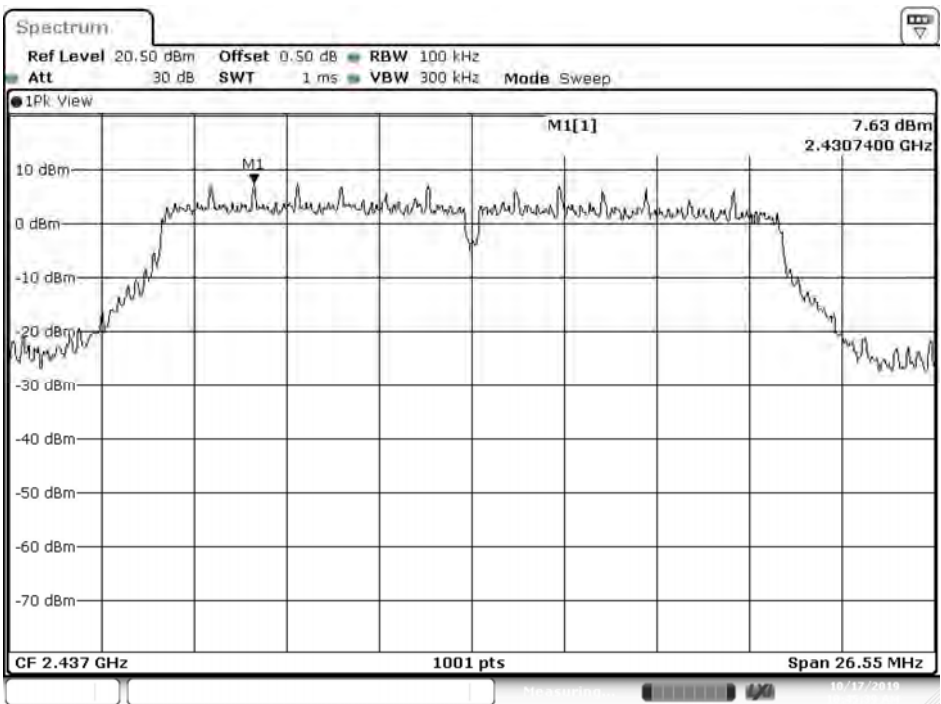
Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
01	2412	5.87	$\leq 8\text{dBm}$	Pass
06	2437	7.63	$\leq 8\text{dBm}$	Pass
11	2462	4.12	$\leq 8\text{dBm}$	Pass

Figure Channel 01:



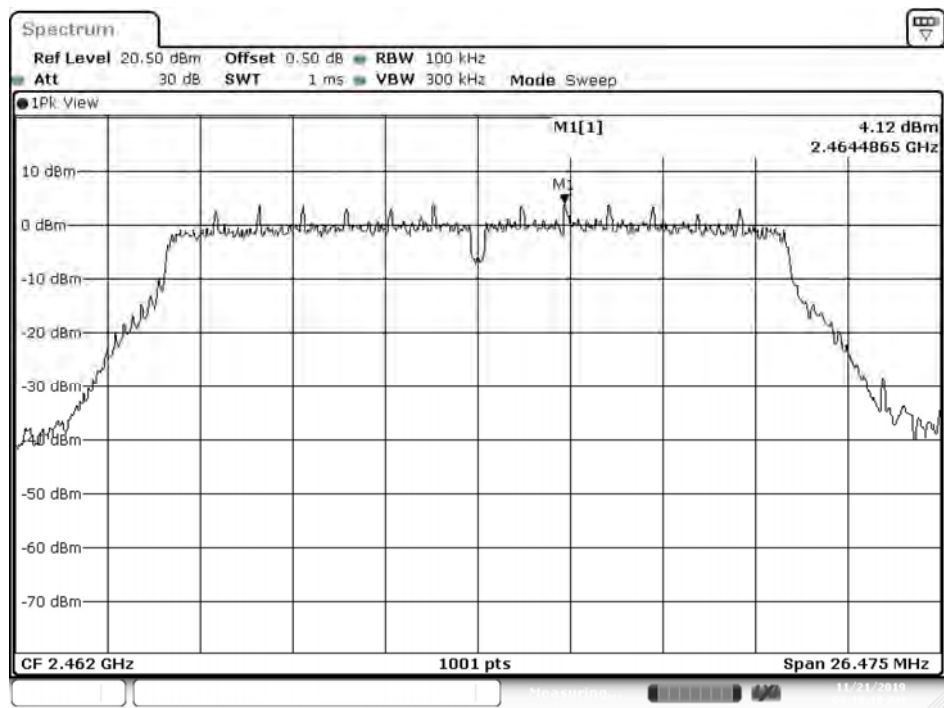
Date: 17.OCT.2019 10:42:04

Figure Channel 06:



Date: 17.OCT.2019 10:45:40

Figure Channel 11:



Date: 21.NOV.2019 03:19:10

待測物名稱：Wireless Access Point

待測物型號：AP305C、AP305CX

測試頻道：--

測試項目：功率密度

測試模式：Mode 4: Radio 0_SISO A: 發射器 802.11ac
(20MHz)

量測天線：--

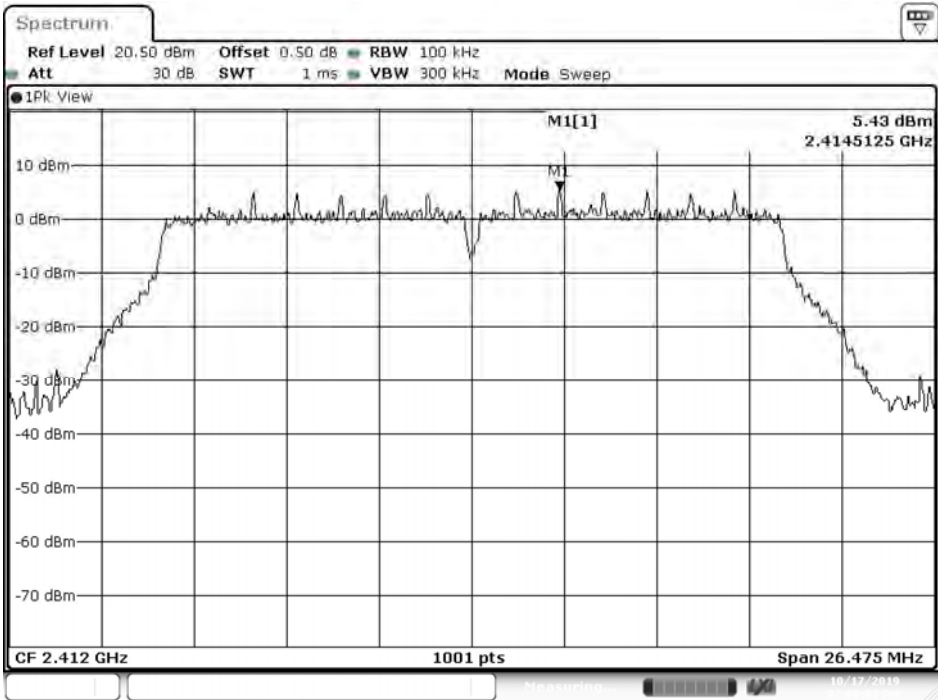
測試距離：Conducted

檢測器：峰值

測試日期：108年10月17日

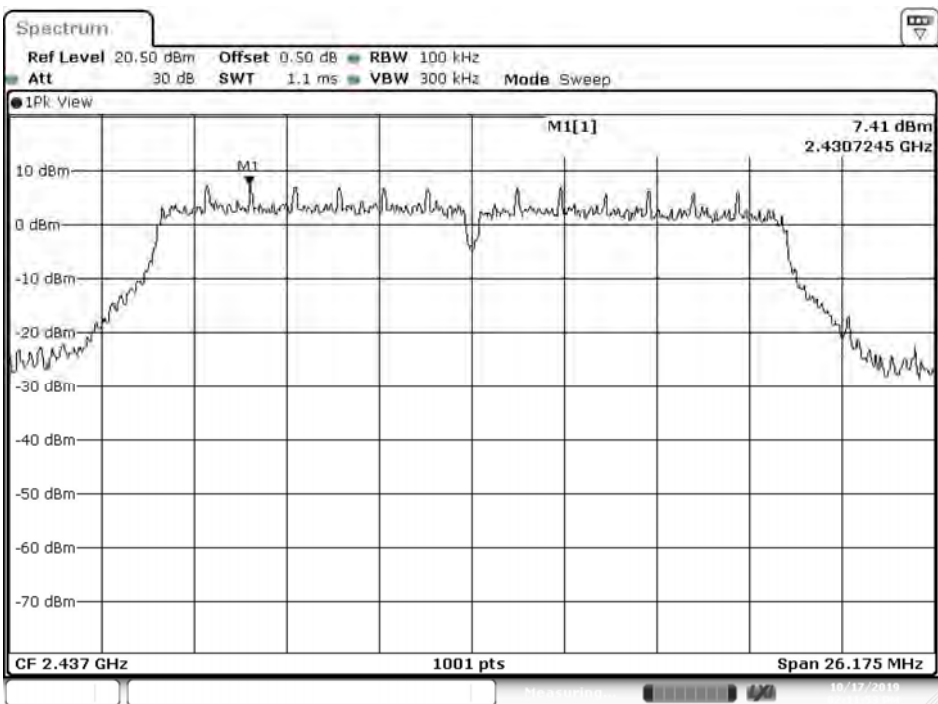
Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
01	2412	5.43	$\leq 8\text{dBm}$	Pass
06	2437	7.41	$\leq 8\text{dBm}$	Pass
11	2462	4.24	$\leq 8\text{dBm}$	Pass

Figure Channel 01:



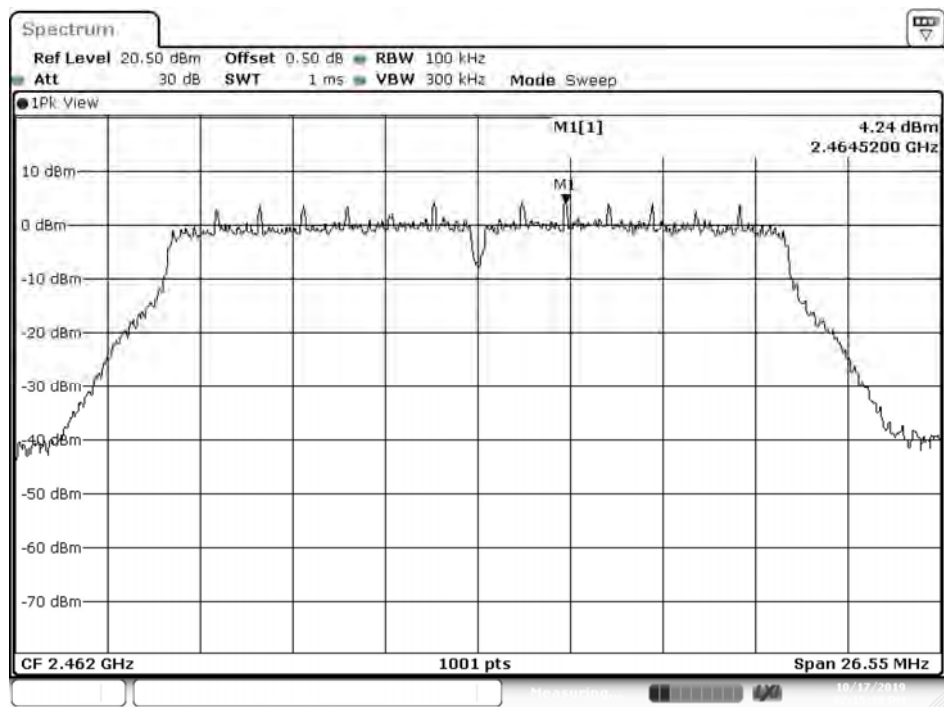
Date: 17.OCT.2019 14:08:04

Figure Channel 06:



Date: 17.OCT.2019 14:11:53

Figure Channel 11:



Date: 17.OCT.2019 14:15:39

待測物名稱：Wireless Access Point

待測物型號：AP305C、AP305CX

測試頻道：--

測試項目：功率密度

測試模式：Mode 5: Radio 0_SISO A: 發射器 802.11ax
(20MHz)

量測天線：--

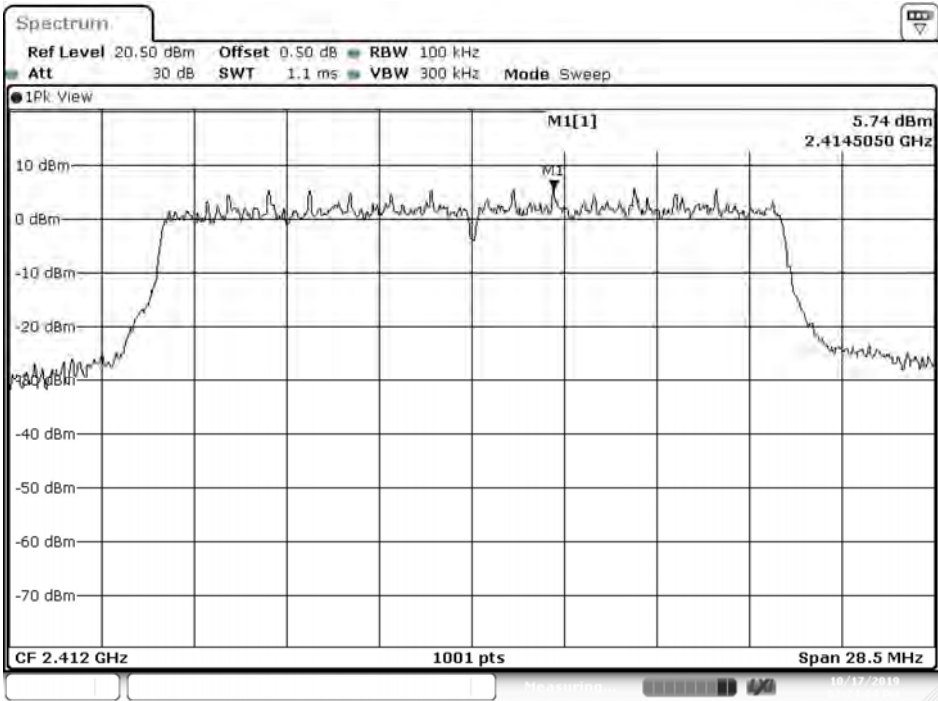
測試距離：Conducted

檢測器：峰值

測試日期：108年11月21日

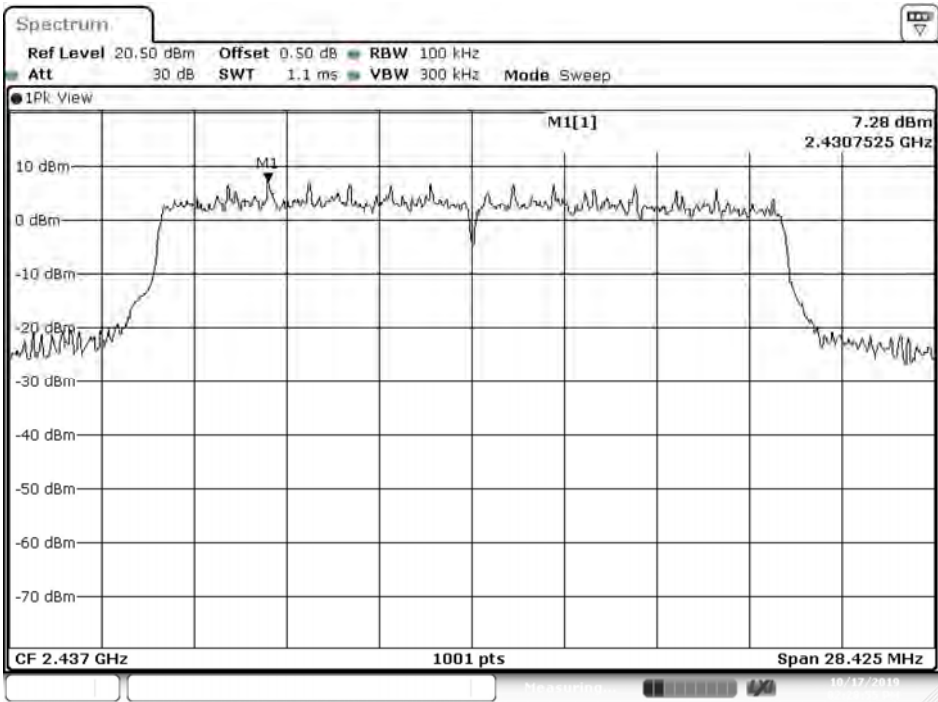
Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
01	2412	5.74	$\leq 8\text{dBm}$	Pass
06	2437	7.28	$\leq 8\text{dBm}$	Pass
11	2462	1.40	$\leq 8\text{dBm}$	Pass

Figure Channel 01:



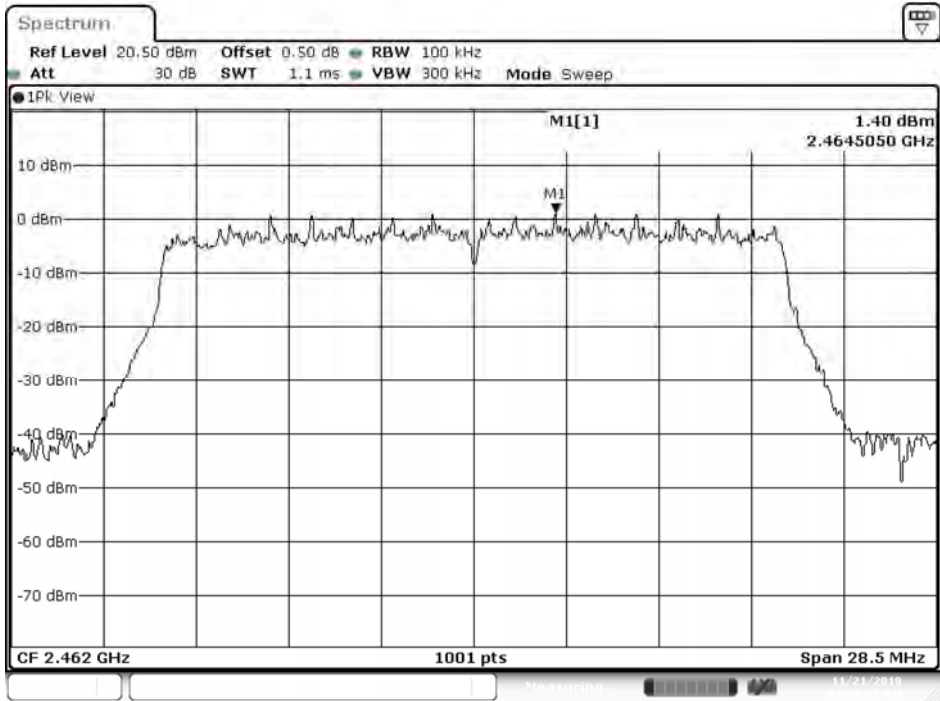
Date: 17.OCT.2019 14:24:05

Figure Channel 06:



Date: 17.OCT.2019 14:28:56

Figure Channel 11:



Date: 21.NOV.2019 03:38:07

待測物名稱：Wireless Access Point

待測物型號：AP305C、AP305CX

測試頻道：--

量測天線：--

檢測器：峰值

測試日期：108年11月05日

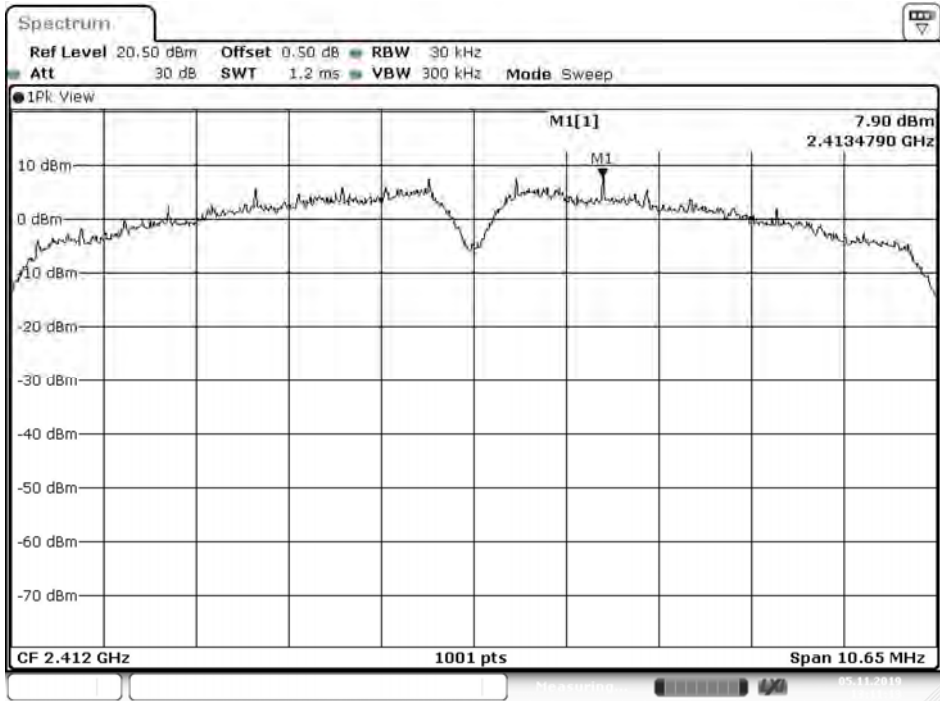
測試項目：功率密度

測試模式：Mode 6: Radio 0_SISO B: 發射器 802.11b

測試距離：Conducted

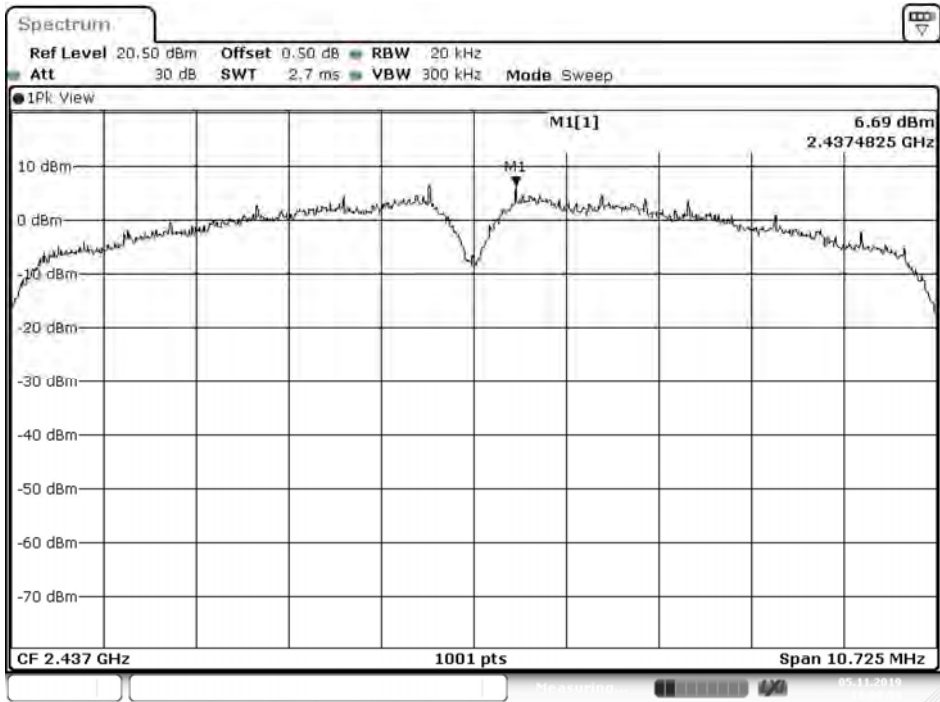
Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
01	2412	7.90	$\leq 8\text{dBm}$	Pass
06	2437	6.69	$\leq 8\text{dBm}$	Pass
11	2462	5.91	$\leq 8\text{dBm}$	Pass

Figure Channel 01:



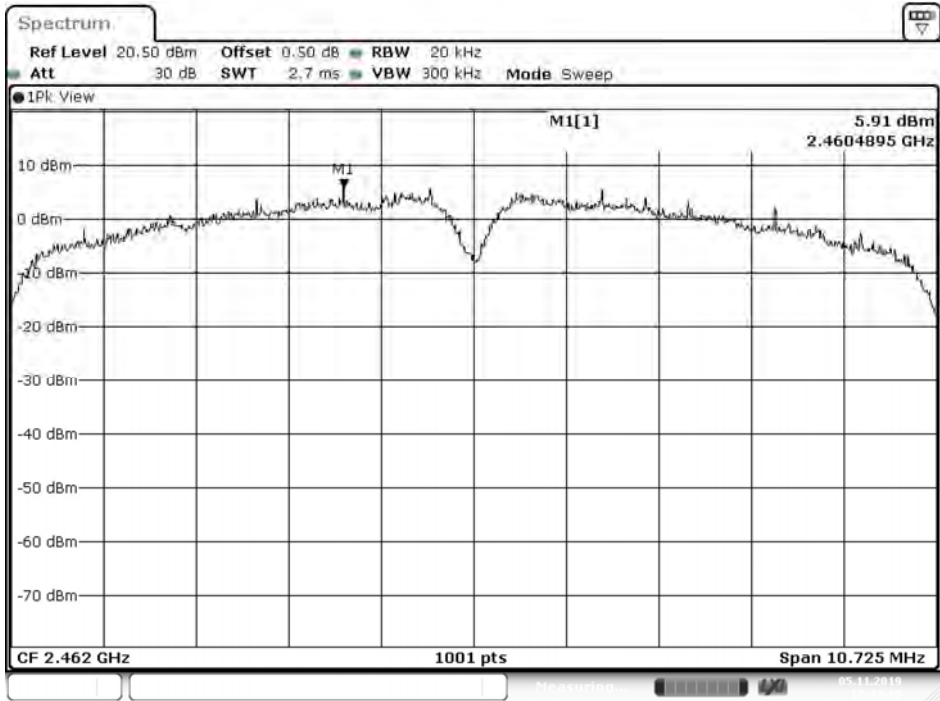
Date: 5.NOV.2019 13:11:14

Figure Channel 06:



Date: 5.NOV.2019 13:00:54

Figure Channel 11:



Date: 5.NOV.2019 12:43:10

待測物名稱：Wireless Access Point

待測物型號：AP305C、AP305CX

測試頻道：--

量測天線：--

檢測器：峰值

測試日期：108年10月17日

測試項目：功率密度

測試模式：Mode 7: Radio 0_SISO B: 發射器 802.11g

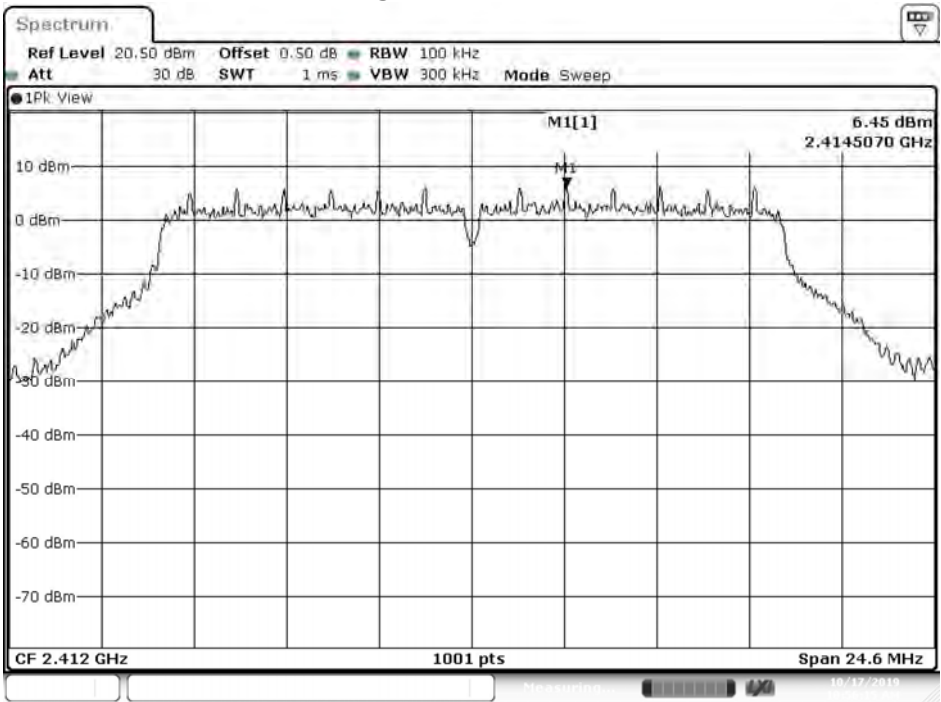
測試距離：Conducted

環境溫度：20 °C

環境濕度：50 %

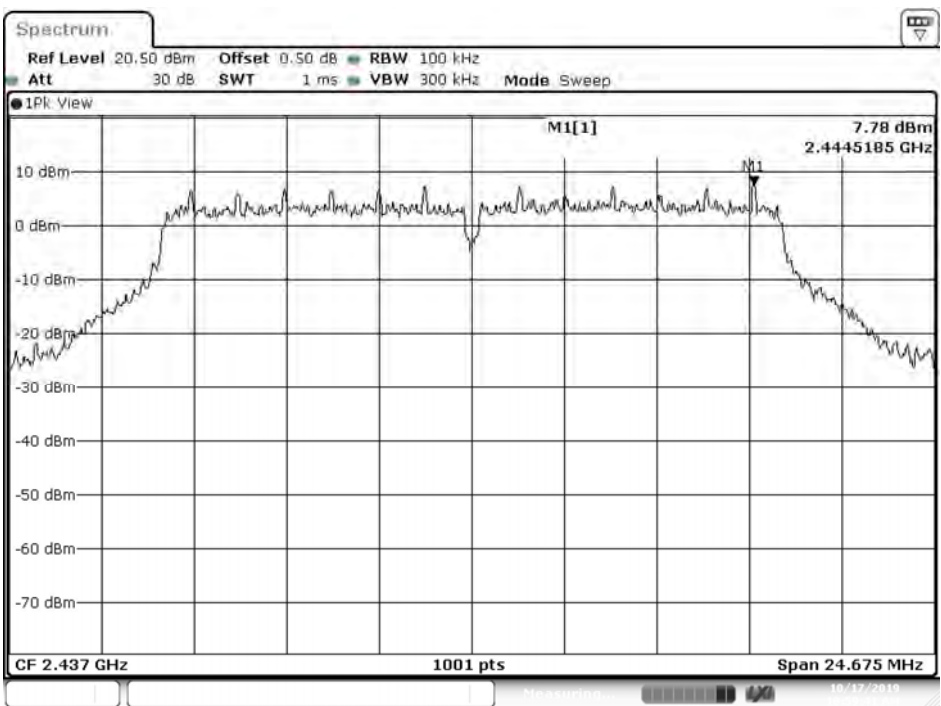
Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
01	2412	6.45	$\leq 8\text{dBm}$	Pass
06	2437	7.78	$\leq 8\text{dBm}$	Pass
11	2462	4.87	$\leq 8\text{dBm}$	Pass

Figure Channel 01:



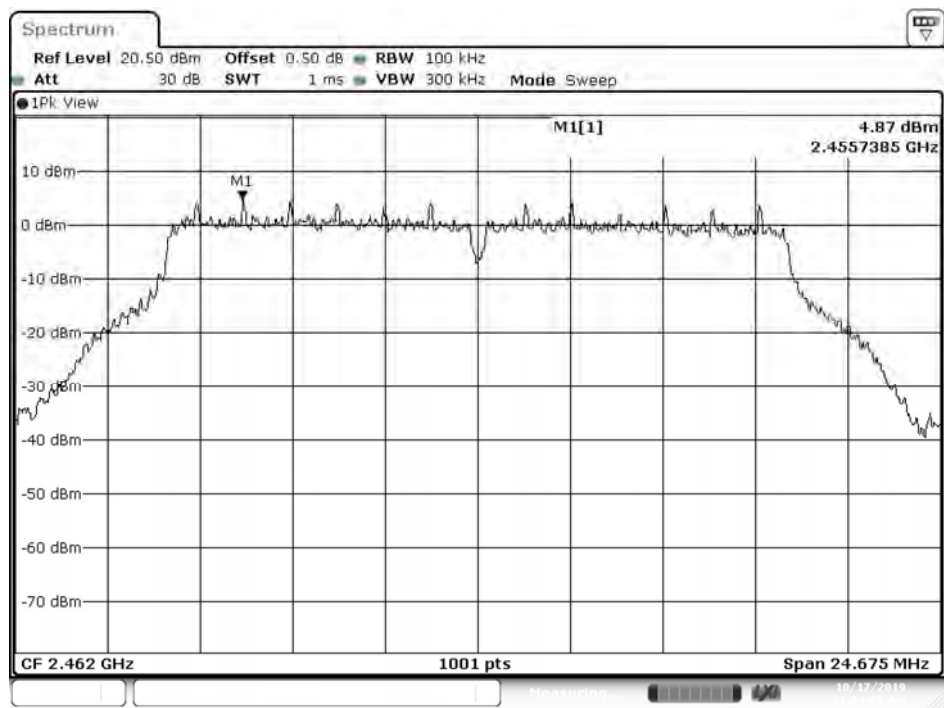
Date: 17.OCT.2019 10:56:16

Figure Channel 06:



Date: 17.OCT.2019 10:59:41

Figure Channel 11:



Date: 17.OCT.2019 11:04:09

待測物名稱：Wireless Access Point

待測物型號：AP305C、AP305CX

測試頻道：--

測試項目：功率密度

測試模式：Mode 8: Radio 0_SISO B: 發射器 802.11n
(20MHz)

量測天線：--

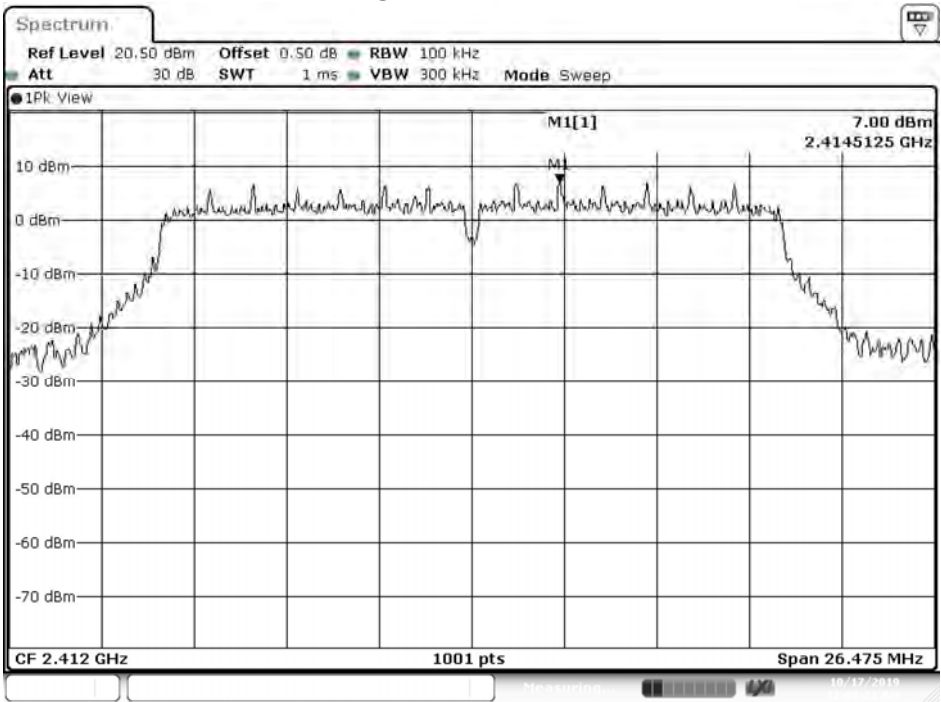
測試距離：Conducted

檢測器：峰值

測試日期：108年10月17日

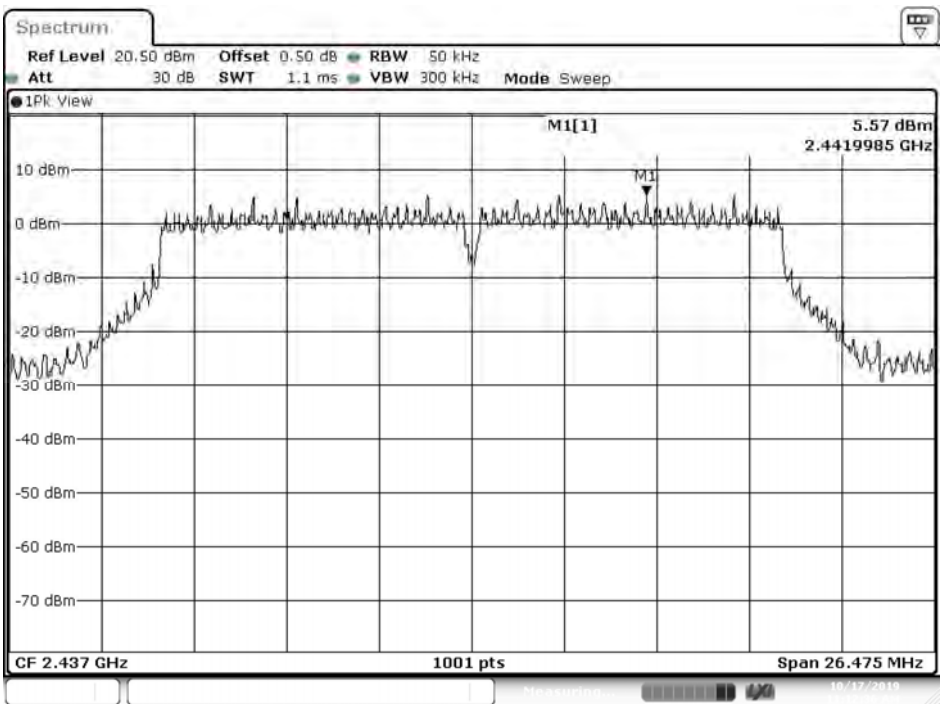
Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
01	2412	7.00	$\leq 8\text{dBm}$	Pass
06	2437	5.57	$\leq 8\text{dBm}$	Pass
11	2462	4.13	$\leq 8\text{dBm}$	Pass

Figure Channel 01:



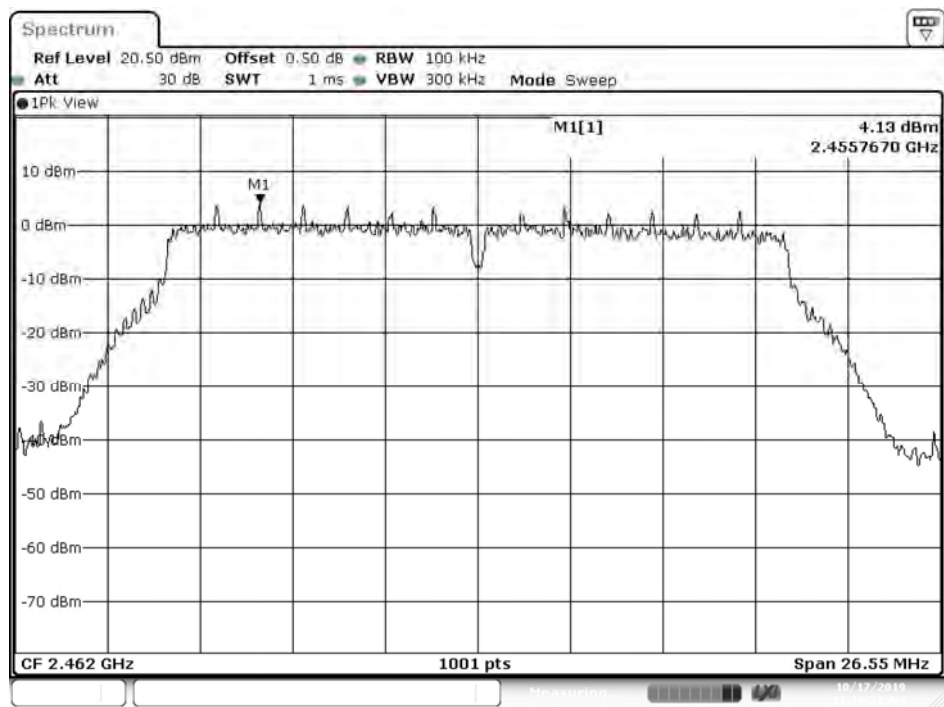
Date: 17.OCT.2019 11:08:21

Figure Channel 06:



Date: 17.OCT.2019 11:12:36

Figure Channel 11:



Date: 17.OCT.2019 11:16:21

待測物名稱：Wireless Access Point

待測物型號：AP305C、AP305CX

測試頻道：--

測試項目：功率密度

測試模式：Mode 9: Radio 0_SISO B: 發射器 802.11ac
(20MHz)

量測天線：--

測試距離：Conducted

檢測器：峰值

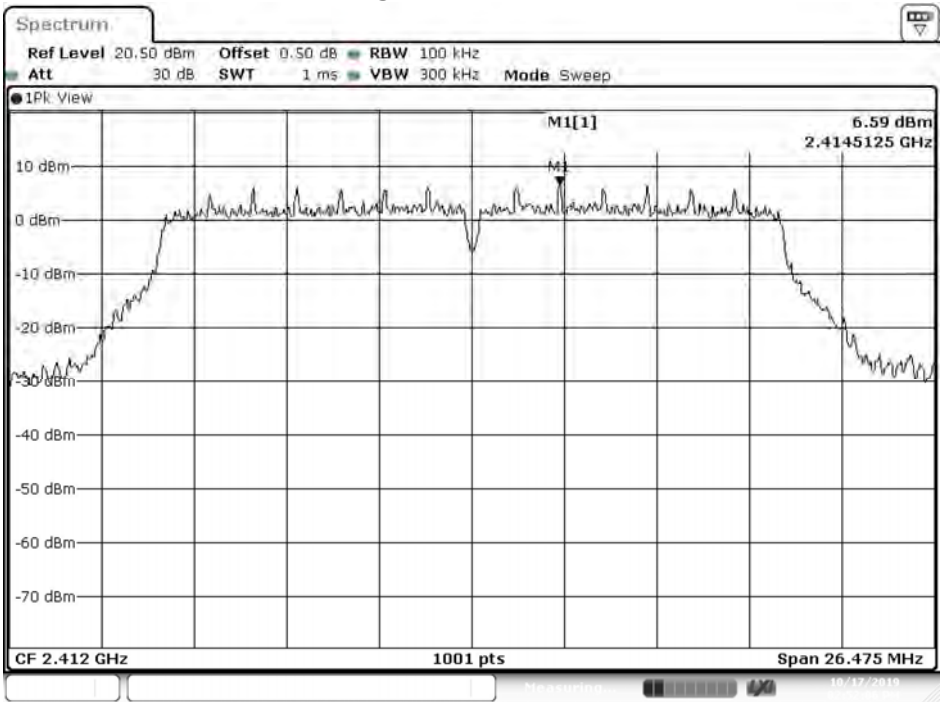
環境溫度：20 °C

測試日期：108年10月17日

環境濕度：50 %

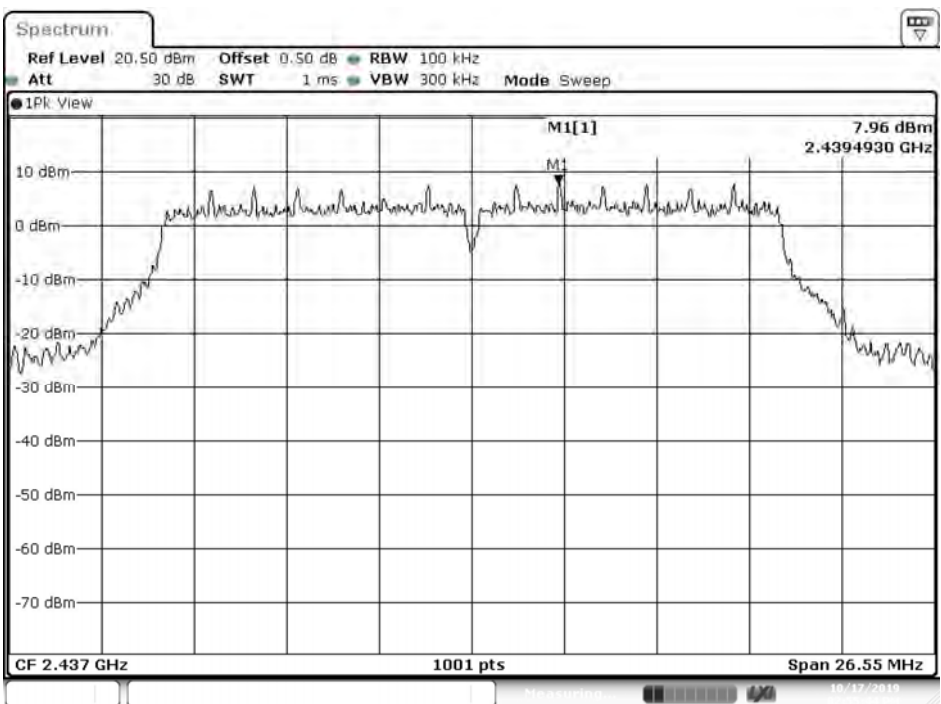
Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
01	2412	6.59	$\leq 8\text{dBm}$	Pass
06	2437	7.96	$\leq 8\text{dBm}$	Pass
11	2462	4.41	$\leq 8\text{dBm}$	Pass

Figure Channel 01:



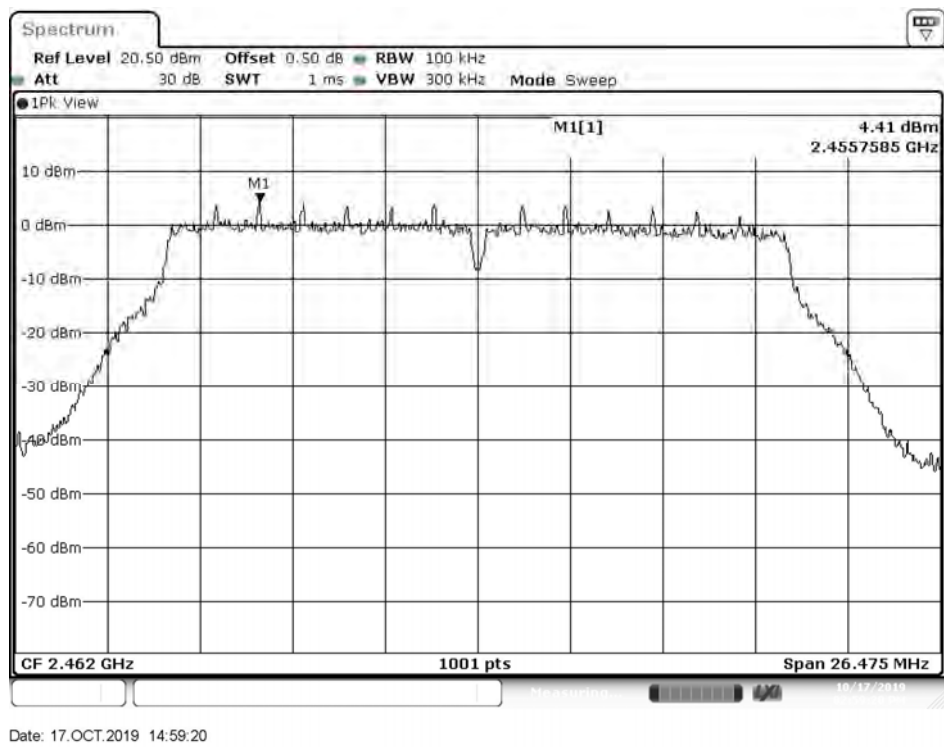
Date: 17.OCT.2019 14:52:06

Figure Channel 06:



Date: 17.OCT.2019 14:55:44

Figure Channel 11:



待測物名稱：Wireless Access Point

待測物型號：AP305C、AP305CX

測試頻道：--

測試項目：功率密度

測試模式：Mode 10: Radio 0_SISO B: 發射器 802.11ax
(20MHz)

量測天線：--

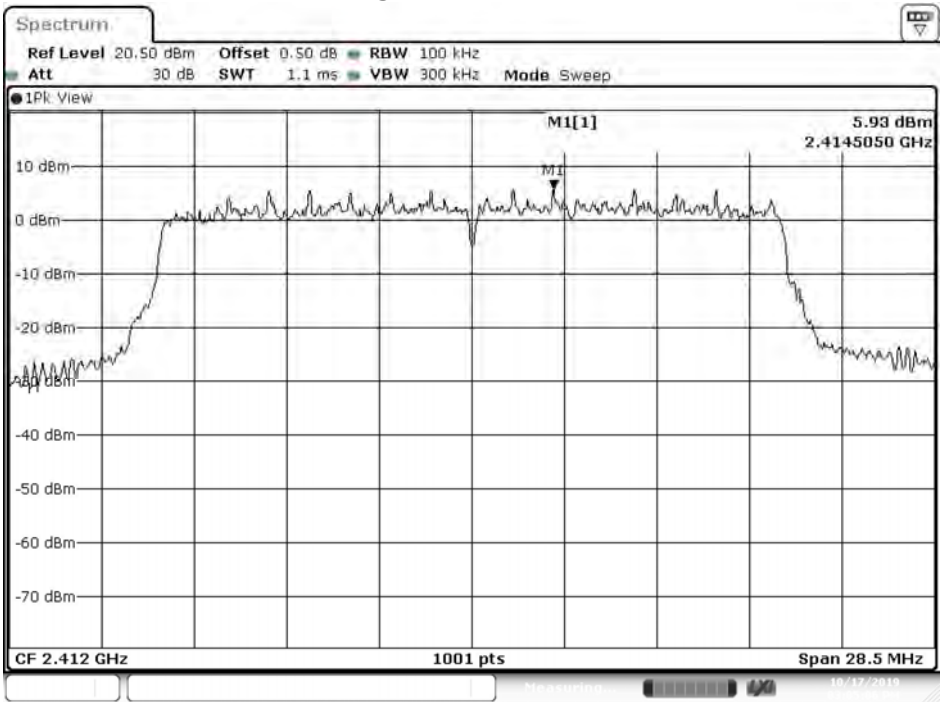
測試距離：Conducted

檢測器：峰值

測試日期：108年11月21日

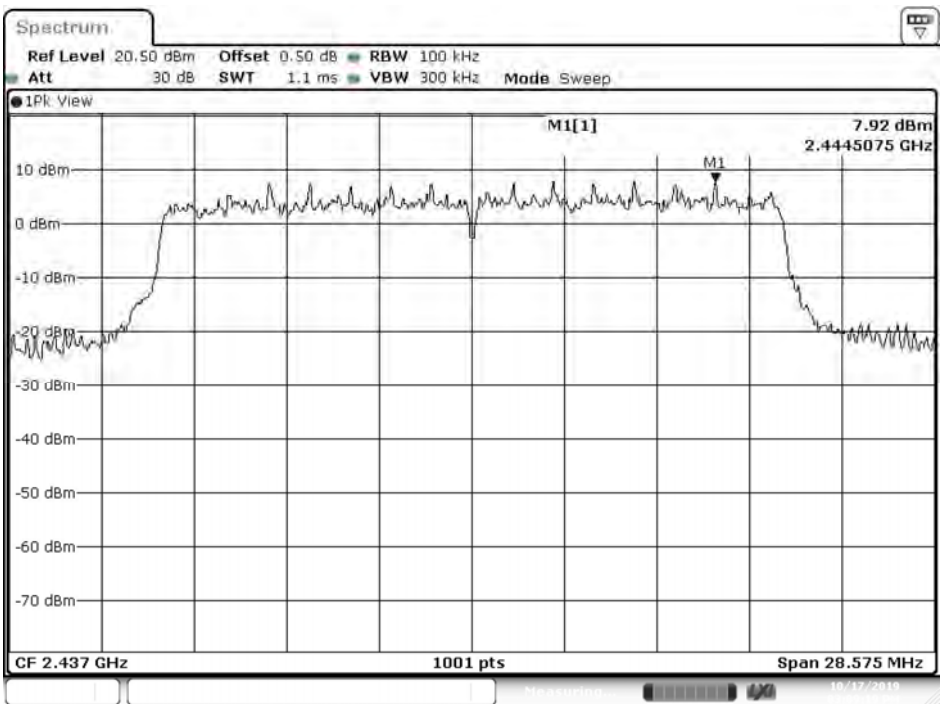
Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
01	2412	5.93	$\leq 8\text{dBm}$	Pass
06	2437	7.92	$\leq 8\text{dBm}$	Pass
11	2462	2.66	$\leq 8\text{dBm}$	Pass

Figure Channel 01:



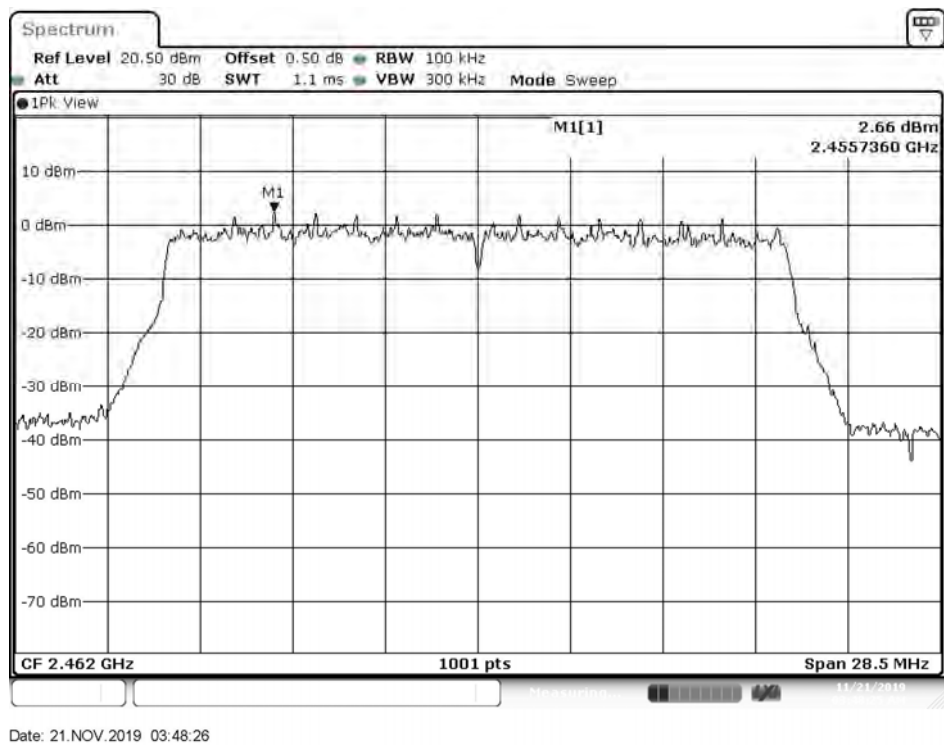
Date: 17.OCT.2019 15:05:07

Figure Channel 06:



Date: 17.OCT.2019 15:09:19

Figure Channel 11:



待測物名稱：Wireless Access Point

待測物型號：AP305C、AP305CX

測試項目：功率密度

測試頻道：--

測試模式：Mode 11: Radio 0_CDD: 發射器 802.11b

量測天線：--

測試距離：Conducted

檢測器：峰值

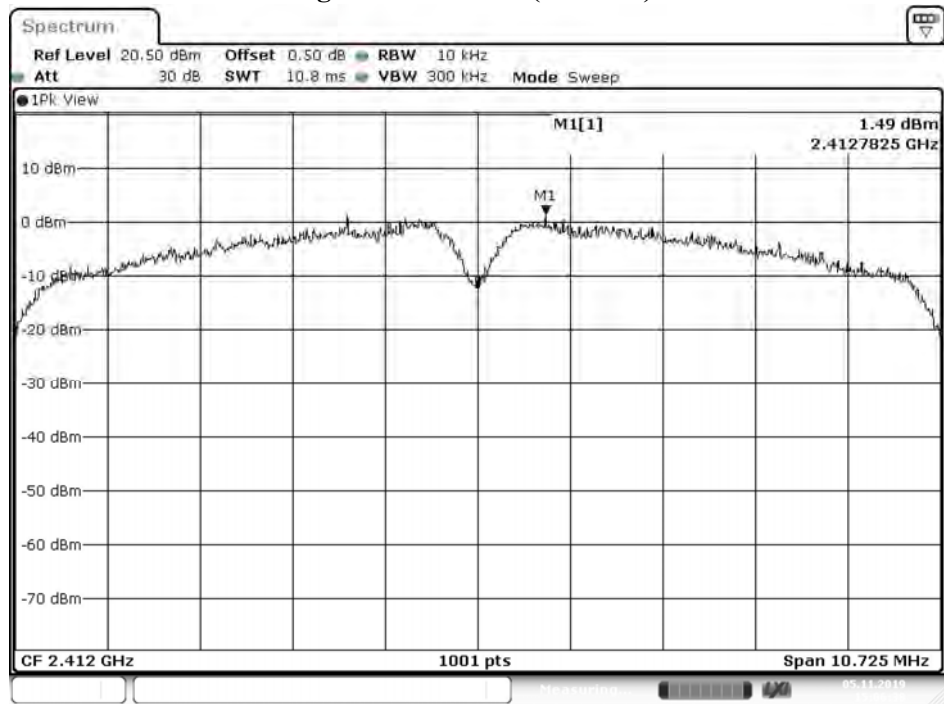
測試日期：108年11月05日

Channel No.	Frequency (MHz)	Chain	PPSD (dBm)	10*log(2) (dB)	Measure Level (dBm)	Limit (dBm)	Result
01	2412	A	1.490	3.010	4.500	$\leq 8\text{dBm}$	Pass
		B	3.220	3.010	6.230	$\leq 8\text{dBm}$	Pass
06	2437	A	2.350	3.010	5.360	$\leq 8\text{dBm}$	Pass
		B	2.720	3.010	5.730	$\leq 8\text{dBm}$	Pass
11	2462	A	2.000	3.010	5.010	$\leq 8\text{dBm}$	Pass
		B	3.010	3.010	6.020	$\leq 8\text{dBm}$	Pass

Note:

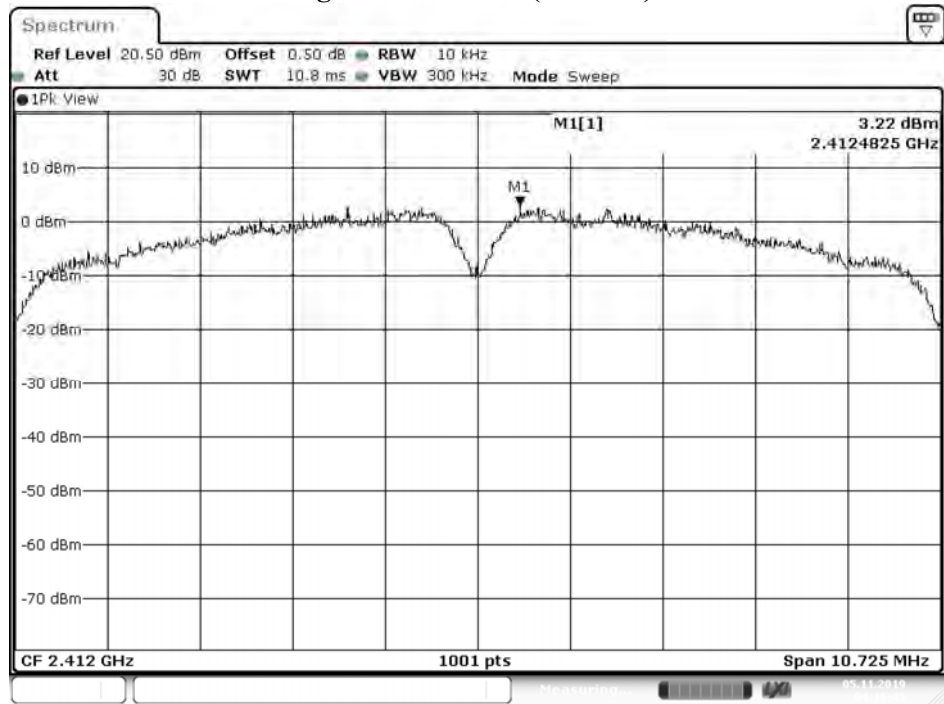
The quantity $10 \cdot \log 2$ (two antennas) is added to the spectrum peak value according to document 662911 D01.

Figure Channel 01 (Chain A):



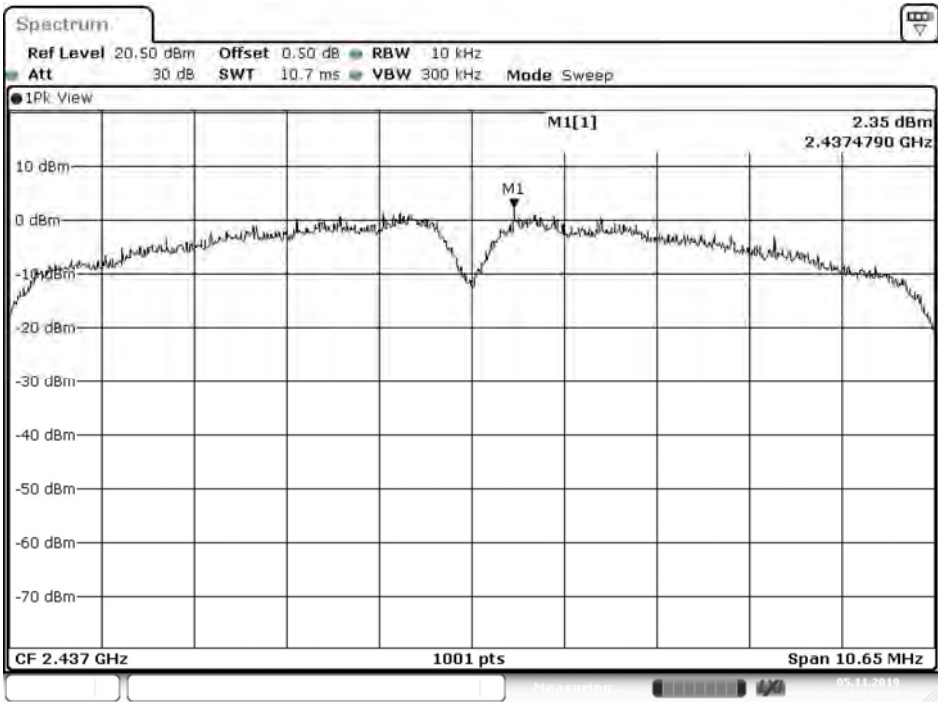
Date: 5.NOV.2019 15:06:38

Figure Channel 01 (Chain B):



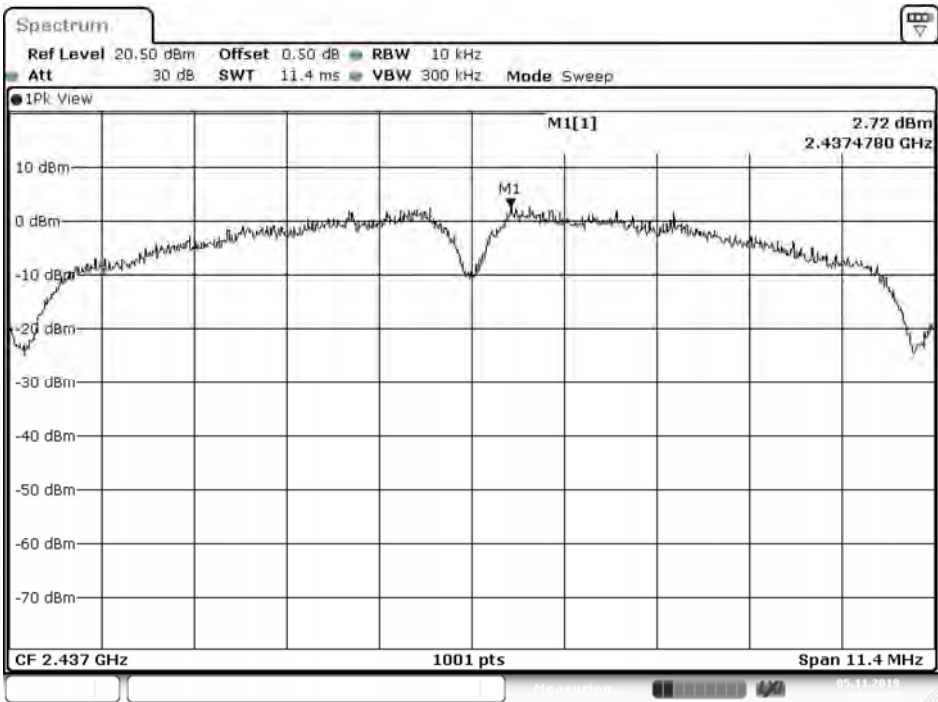
Date: 5.NOV.2019 04:16:42

Figure Channel 06 (Chain A):



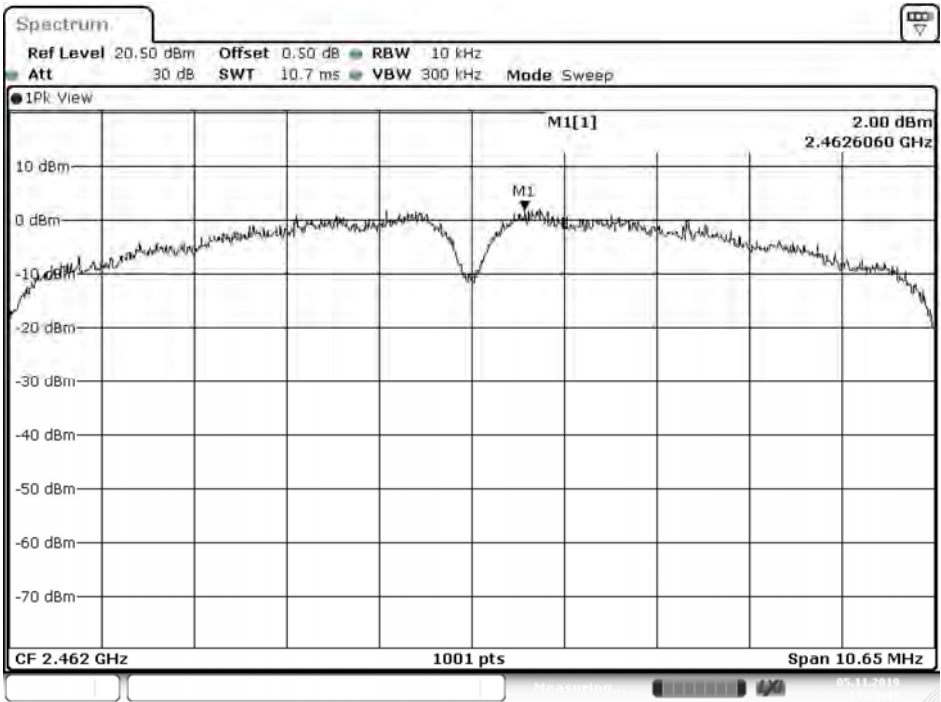
Date: 5.NOV.2019 15:15:23

Figure Channel 06 (Chain B):



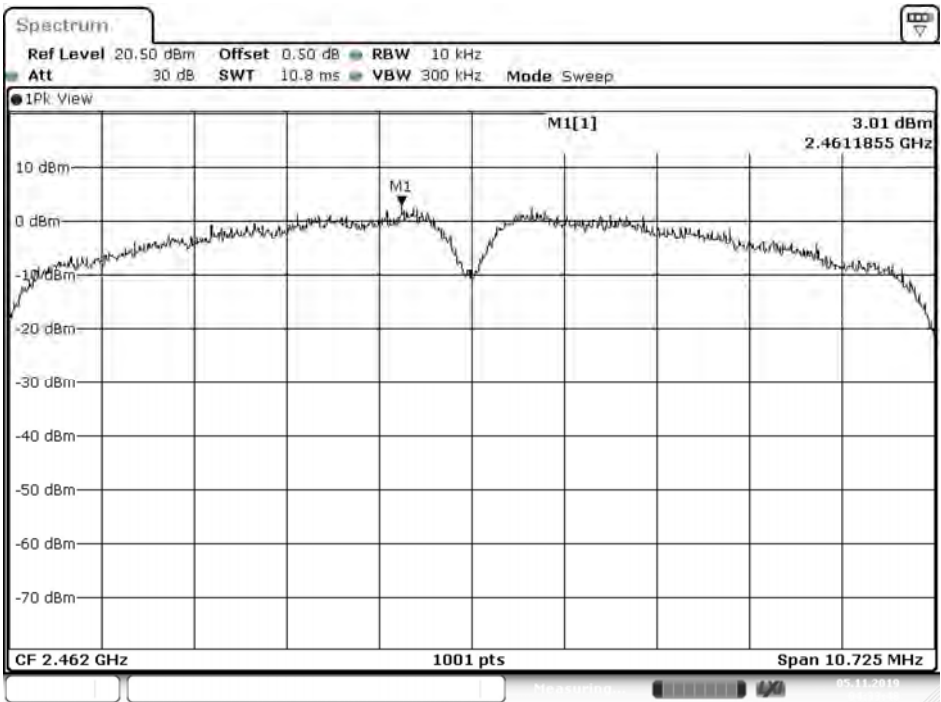
Date: 5.NOV.2019 04:25:27

Figure Channel 11 (Chain A):



Date: 5.NOV.2019 15:23:44

Figure Channel 11 (Chain B):



Date: 5.NOV.2019 04:33:48

待測物名稱：Wireless Access Point

待測物型號：AP305C、AP305CX

測試項目：功率密度

測試頻道：--

測試模式：Mode 12: Radio 0_CDD: 發射器 802.11g

量測天線：--

測試距離：Conducted

檢測器：峰值

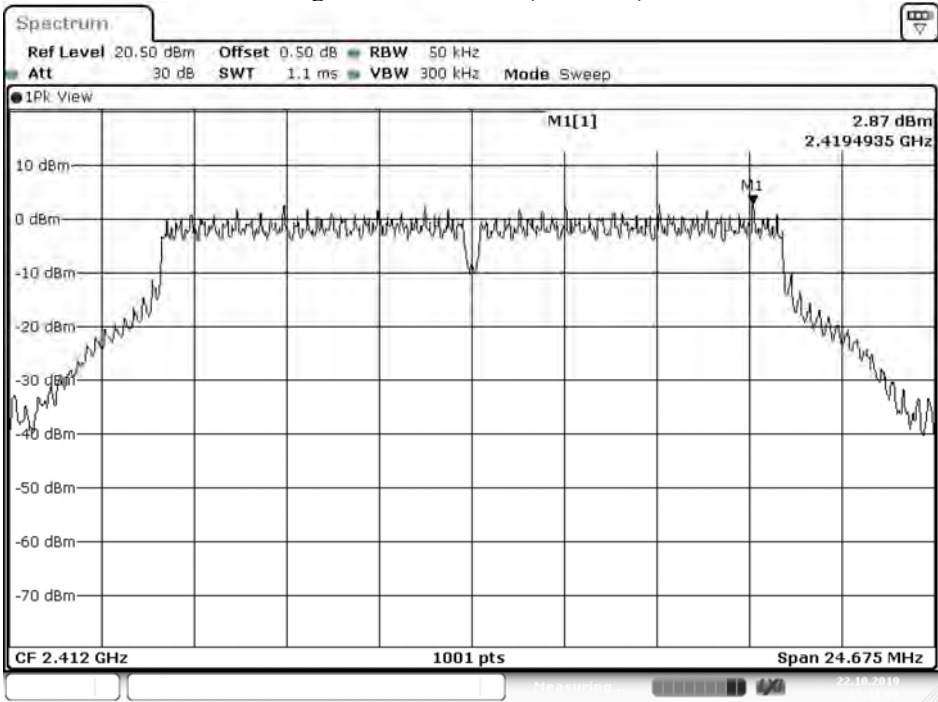
測試日期：108年11月21日

Channel No.	Frequency (MHz)	Chain	PPSD/MHz (dBm)	10*log(2) (dB)	Measure Level (dBm)	Limit (dBm)	Result
01	2412	A	2.870	3.010	5.880	$\leq 8\text{dBm}$	Pass
		B	3.770	3.010	6.780	$\leq 8\text{dBm}$	Pass
06	2437	A	3.530	3.010	6.540	$\leq 8\text{dBm}$	Pass
		B	4.930	3.010	7.940	$\leq 8\text{dBm}$	Pass
11	2462	A	2.120	3.010	5.130	$\leq 8\text{dBm}$	Pass
		B	1.400	3.010	4.410	$\leq 8\text{dBm}$	Pass

Note:

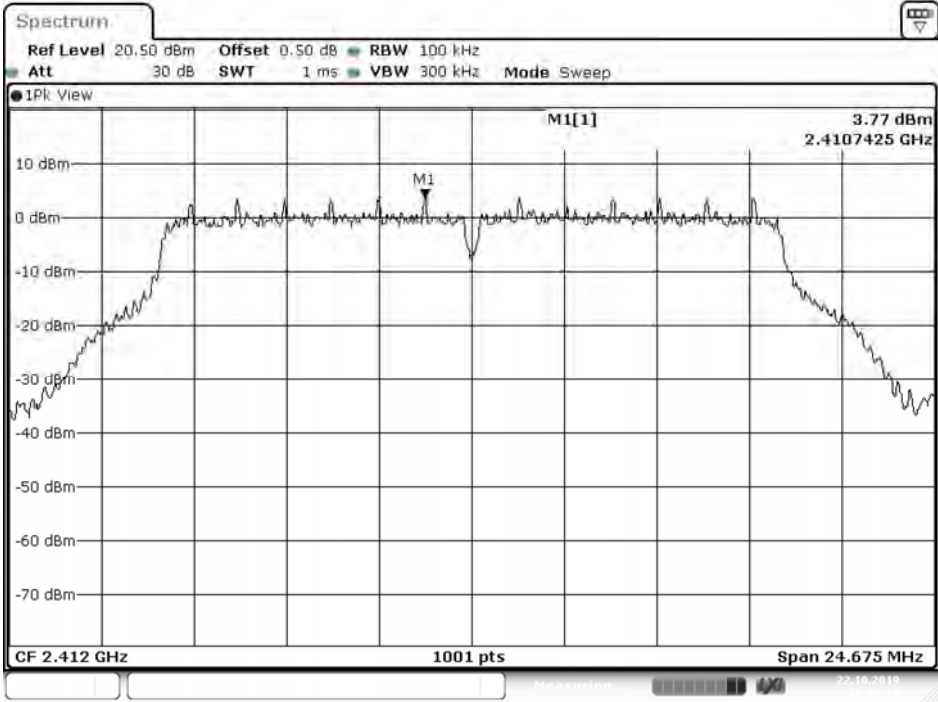
The quantity $10 \cdot \log 2$ (two antennas) is added to the spectrum peak value according to document 662911 D01.

Figure Channel 01 (Chain A):



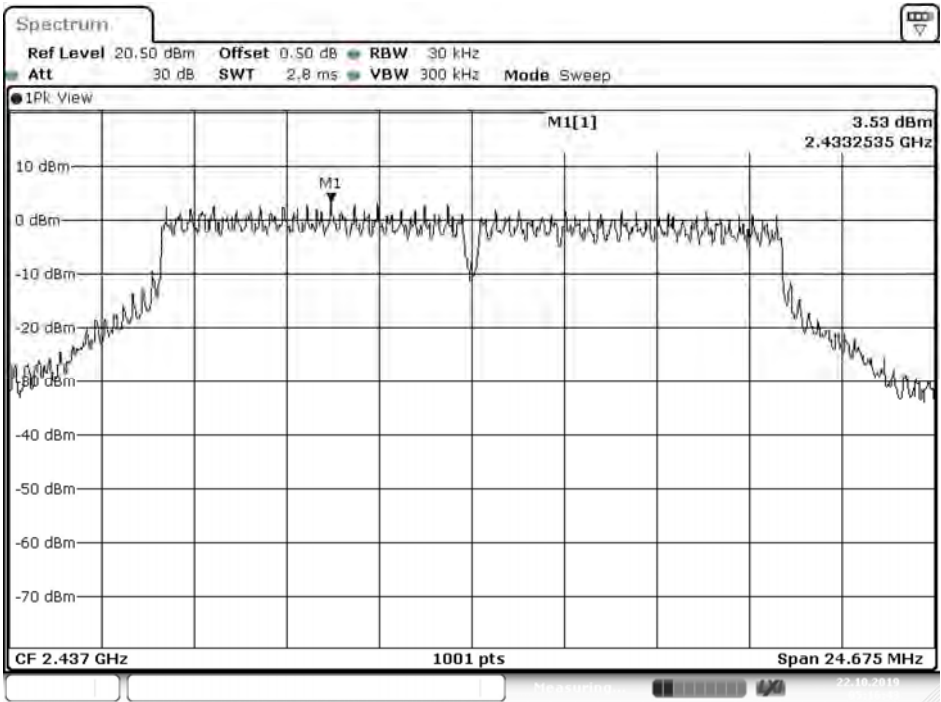
Date: 22.OCT.2019 05:11:08

Figure Channel 01 (Chain B):



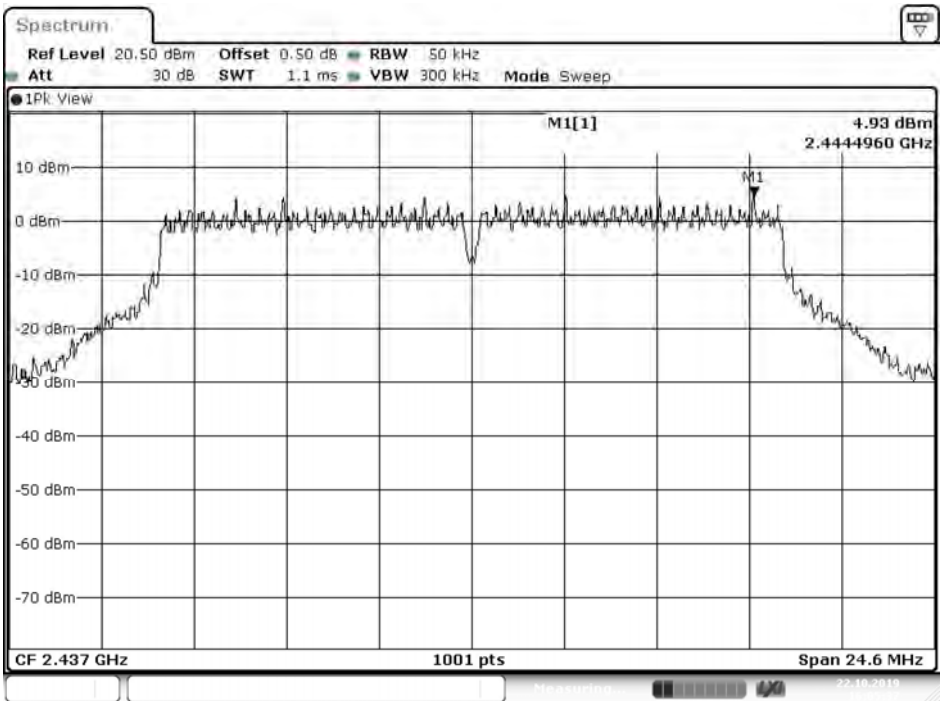
Date: 22.OCT.2019 16:00:18

Figure Channel 06 (Chain A):



Date: 22.OCT.2019 05:16:44

Figure Channel 06 (Chain B):



Date: 22.OCT.2019 16:05:38

Figure Channel 11 (Chain A):

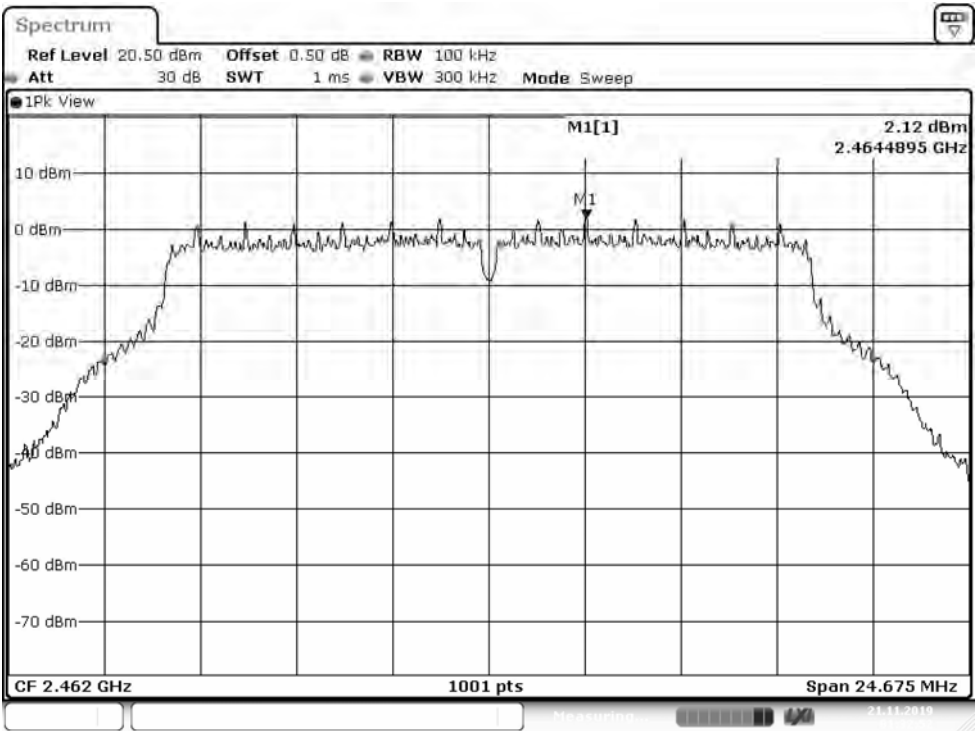
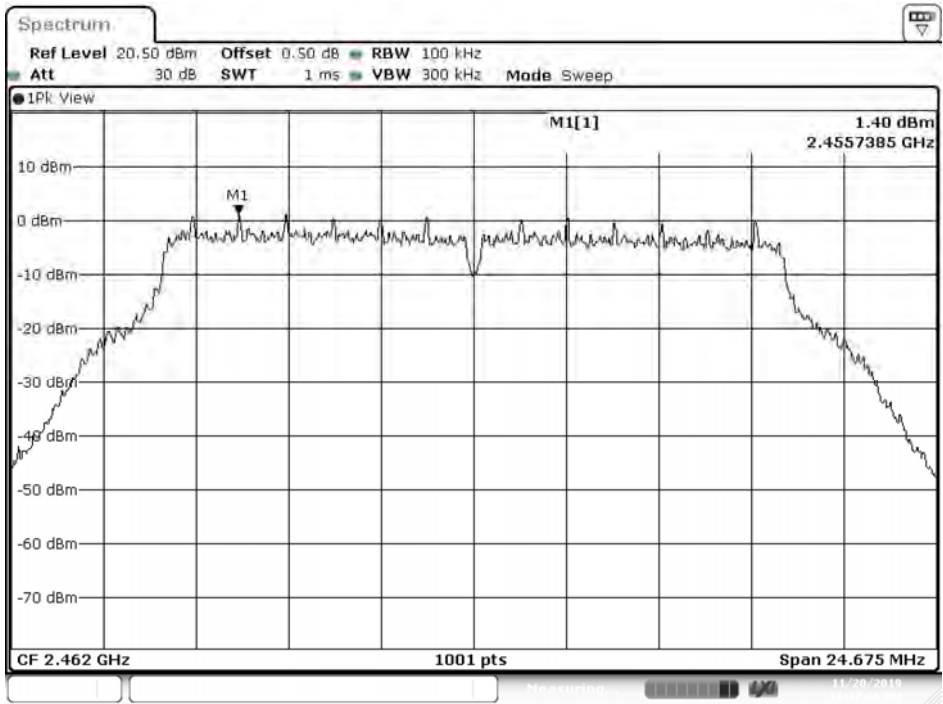


Figure Channel 11 (Chain B):



Date: 20.NOV.2019 23:37:26

待測物名稱：Wireless Access Point

待測物型號：AP305C、AP305CX

測試頻道：--

測試項目：功率密度

測試模式：Mode 13: Radio 0_CDD: 發射器 802.11n
(20MHz)

量測天線：--

測試距離：Conducted

檢測器：峰值

測試日期：108年11月21日

Channel No.	Frequency (MHz)	Chain	PPSD/MHz (dBm)	10*log(2) (dB)	Measure Level (dBm)	Limit (dBm)	Result
01	2412	A	2.540	3.010	5.550	$\leq 8\text{dBm}$	Pass
		B	3.700	3.010	6.710	$\leq 8\text{dBm}$	Pass
06	2437	A	3.410	3.010	6.420	$\leq 8\text{dBm}$	Pass
		B	4.670	3.010	7.680	$\leq 8\text{dBm}$	Pass
11	2462	A	3.380	3.010	6.390	$\leq 8\text{dBm}$	Pass
		B	2.620	3.010	5.630	$\leq 8\text{dBm}$	Pass

Note:

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

Figure Channel 01 (Chain A):

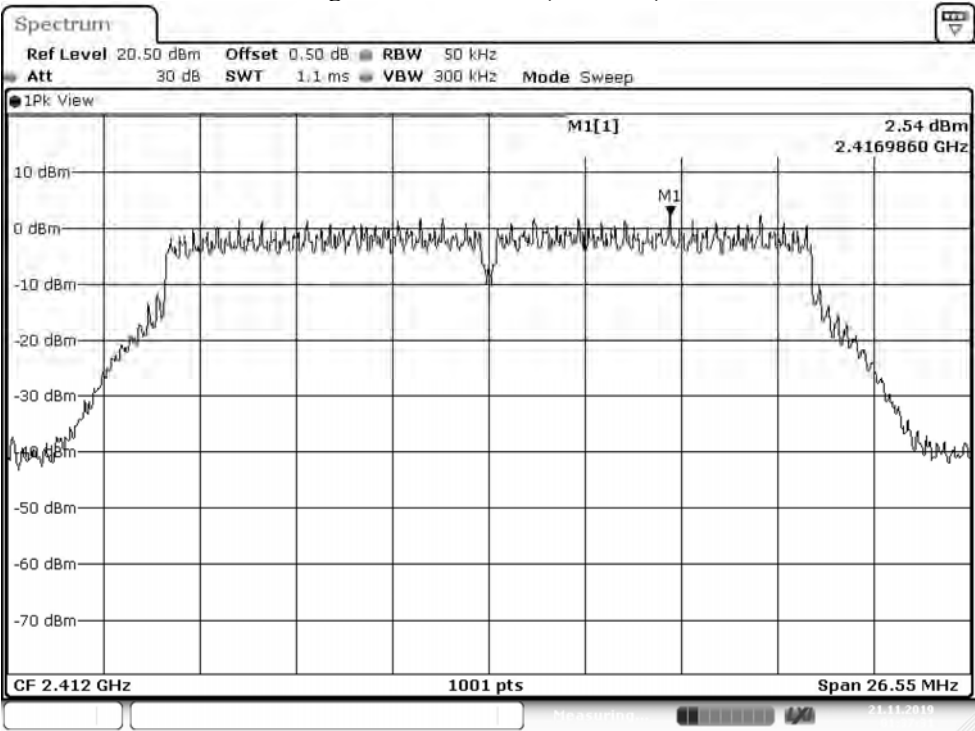
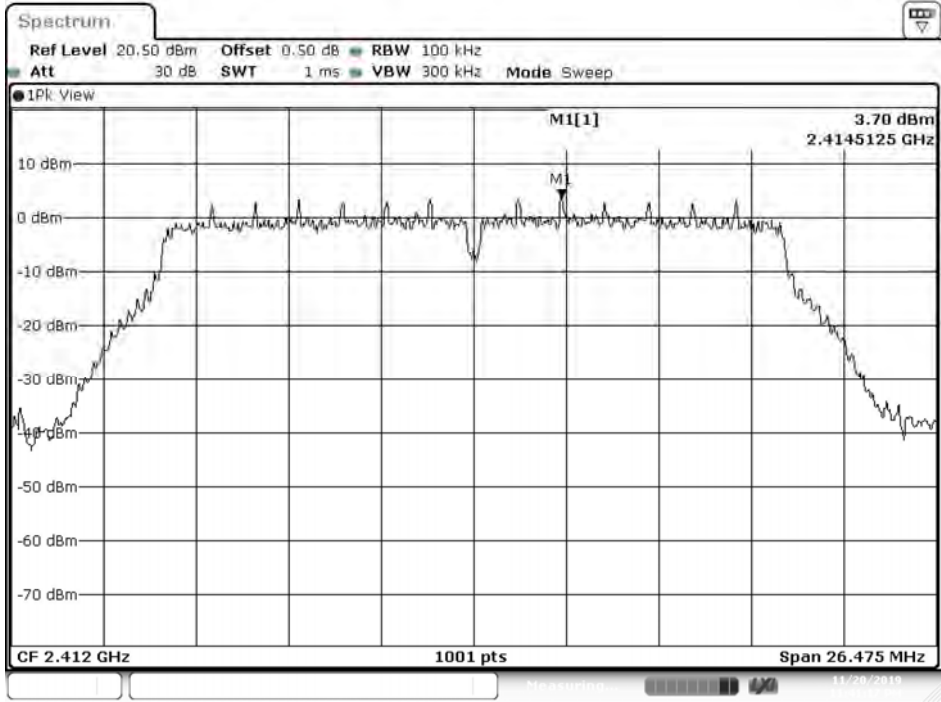
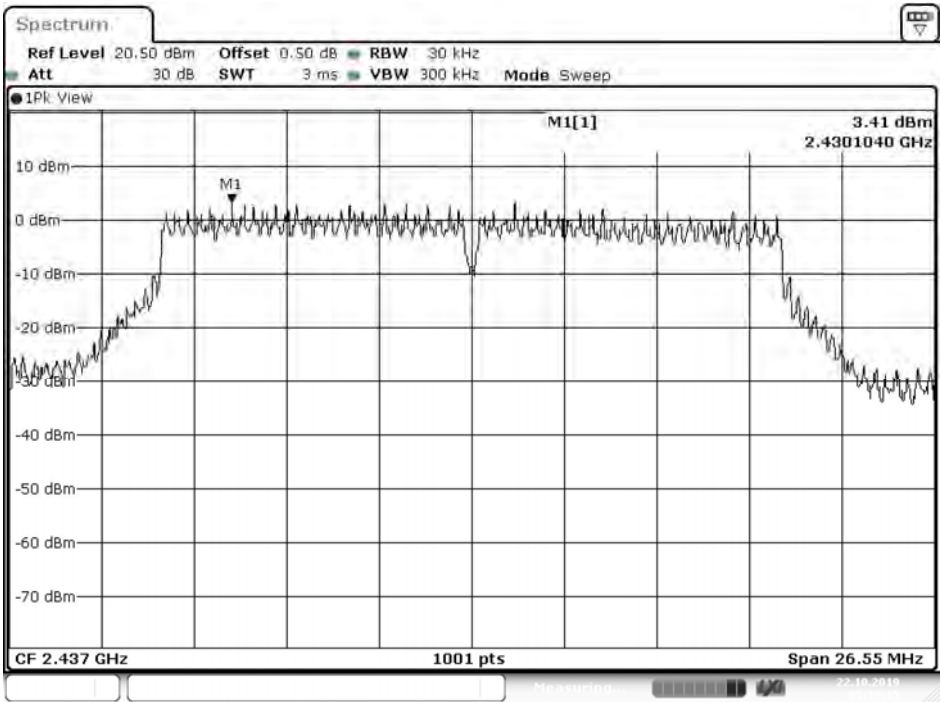


Figure Channel 01 (Chain B):



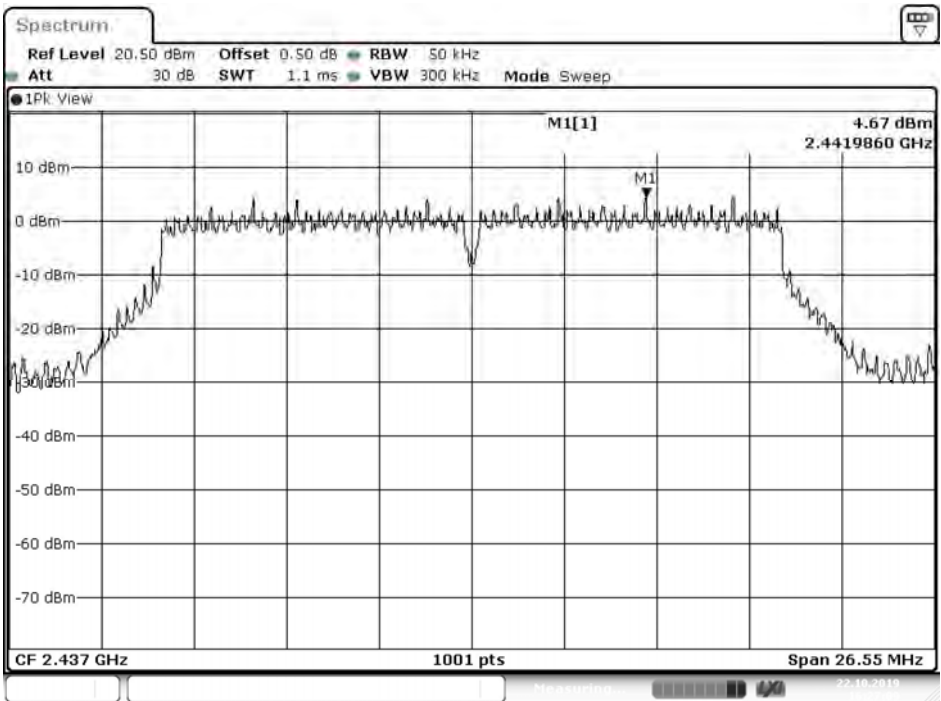
Date: 20.NOV.2019 23:41:17

Figure Channel 06 (Chain A):



Date: 22.OCT.2019 05:38:15

Figure Channel 06 (Chain B):



Date: 22.OCT.2019 16:27:09

Figure Channel 11 (Chain A):

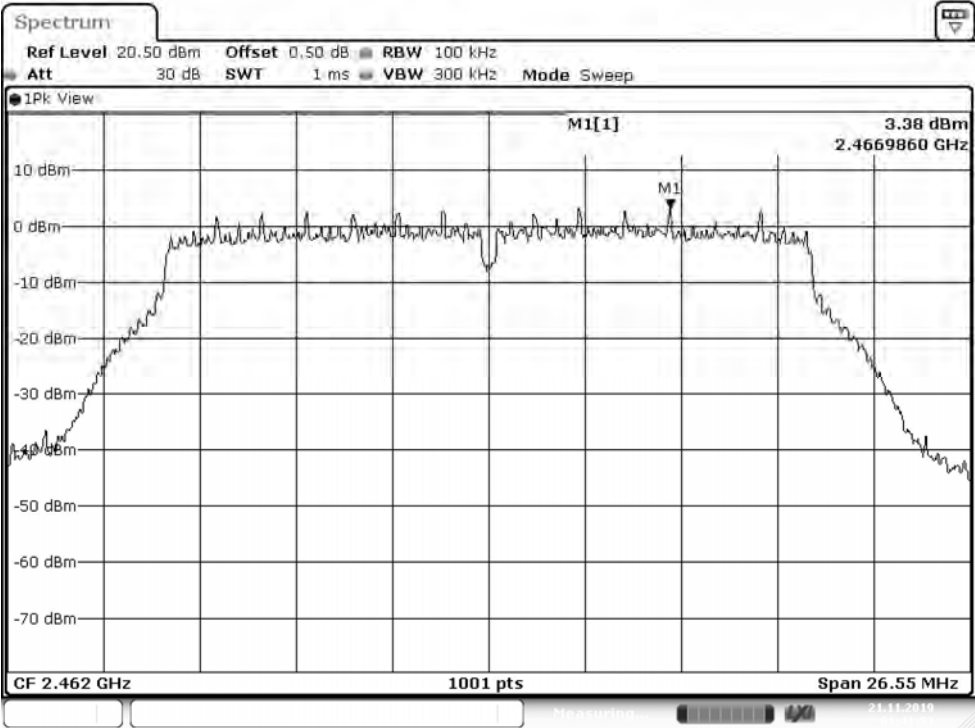
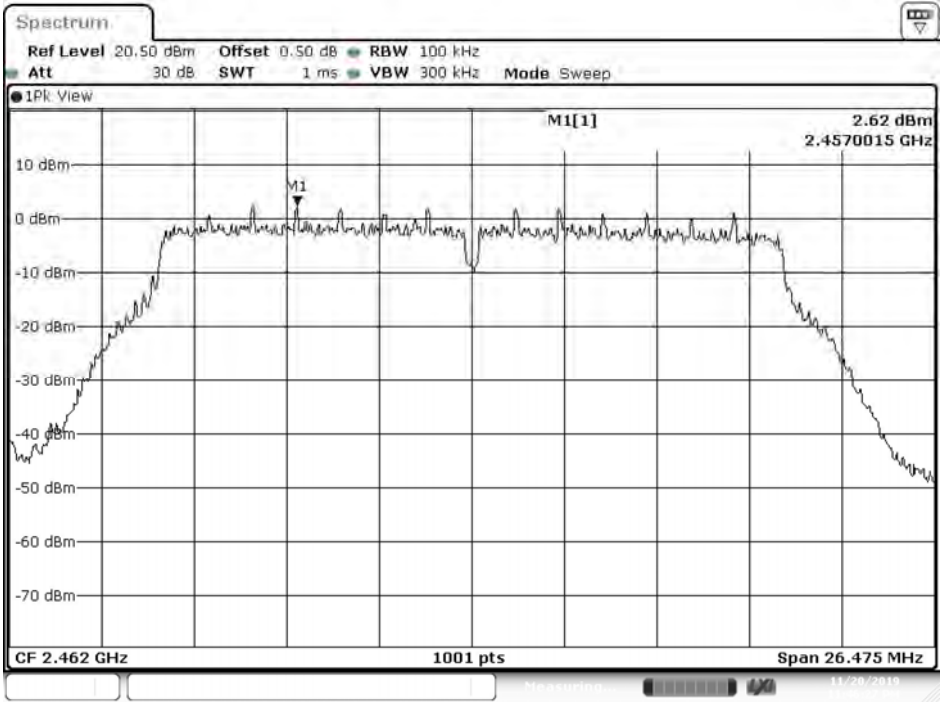


Figure Channel 11 (Chain B):



Date: 20.NOV.2019 23:46:27

待測物名稱：Wireless Access Point

待測物型號：AP305C、AP305CX

測試頻道：--

測試項目：功率密度

測試模式：Mode 14: Radio 0_CDD: 發射器 802.11ac
(20MHz)

量測天線：--

測試距離：Conducted

檢測器：峰值

測試日期：108年11月21日

Channel No.	Frequency (MHz)	Chain	PPSD/MHz (dBm)	10*log(2) (dB)	Measure Level (dBm)	Limit (dBm)	Result
01	2412	A	2.880	3.010	5.890	$\leq 8\text{dBm}$	Pass
		B	3.980	3.010	6.990	$\leq 8\text{dBm}$	Pass
06	2437	A	3.270	3.010	6.280	$\leq 8\text{dBm}$	Pass
		B	4.750	3.010	7.760	$\leq 8\text{dBm}$	Pass
11	2462	A	3.280	3.010	6.290	$\leq 8\text{dBm}$	Pass
		B	2.570	3.010	5.580	$\leq 8\text{dBm}$	Pass

Note:

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

Figure Channel 01 (Chain A):

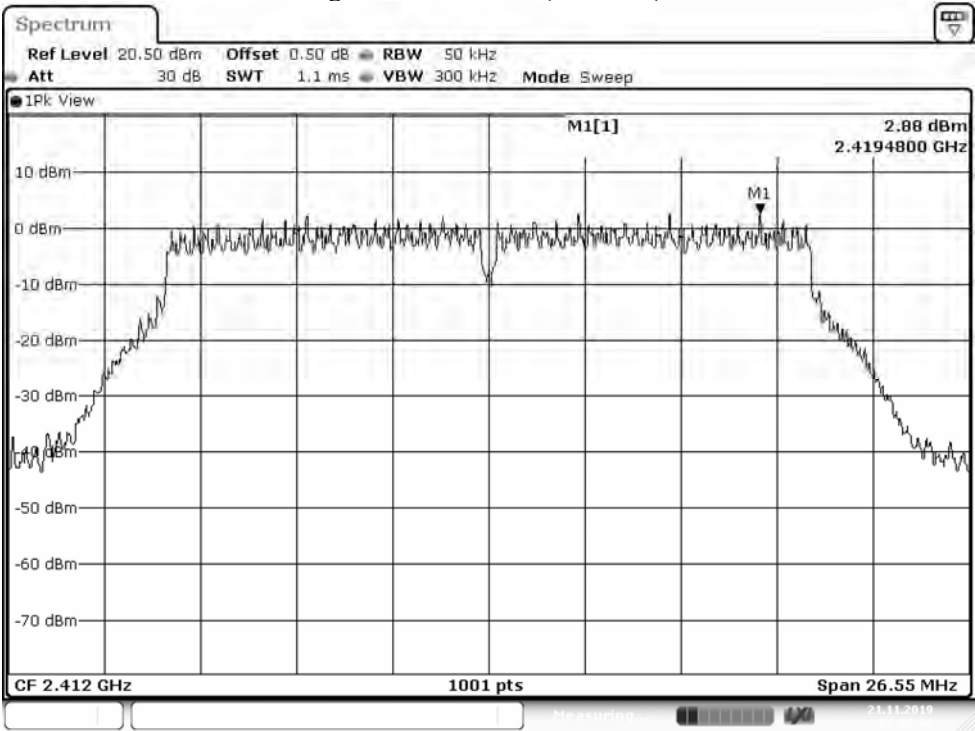
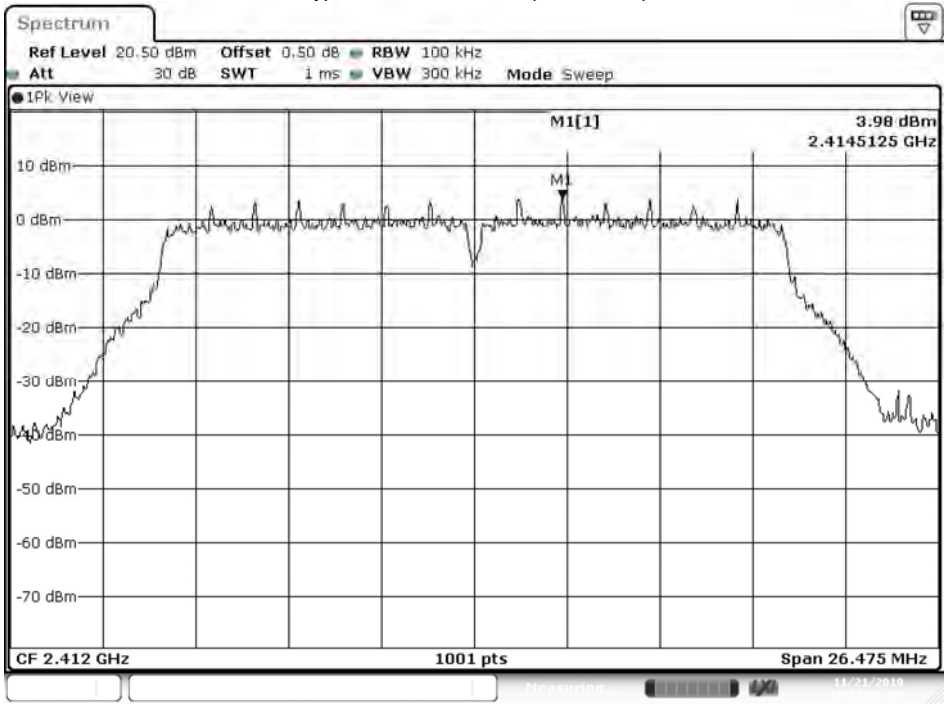
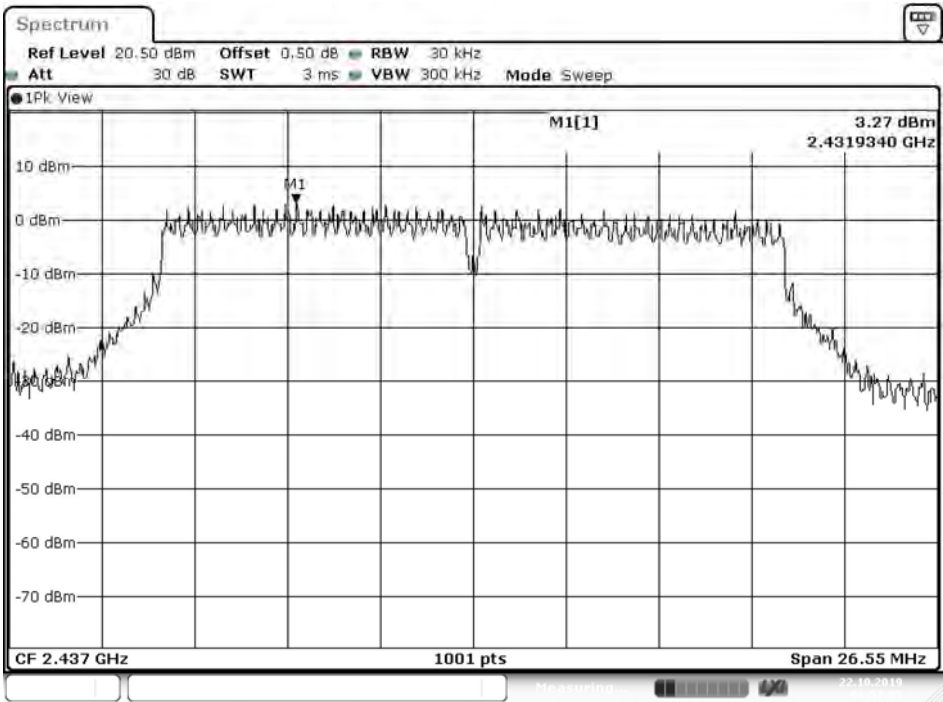


Figure Channel 01 (Chain B):



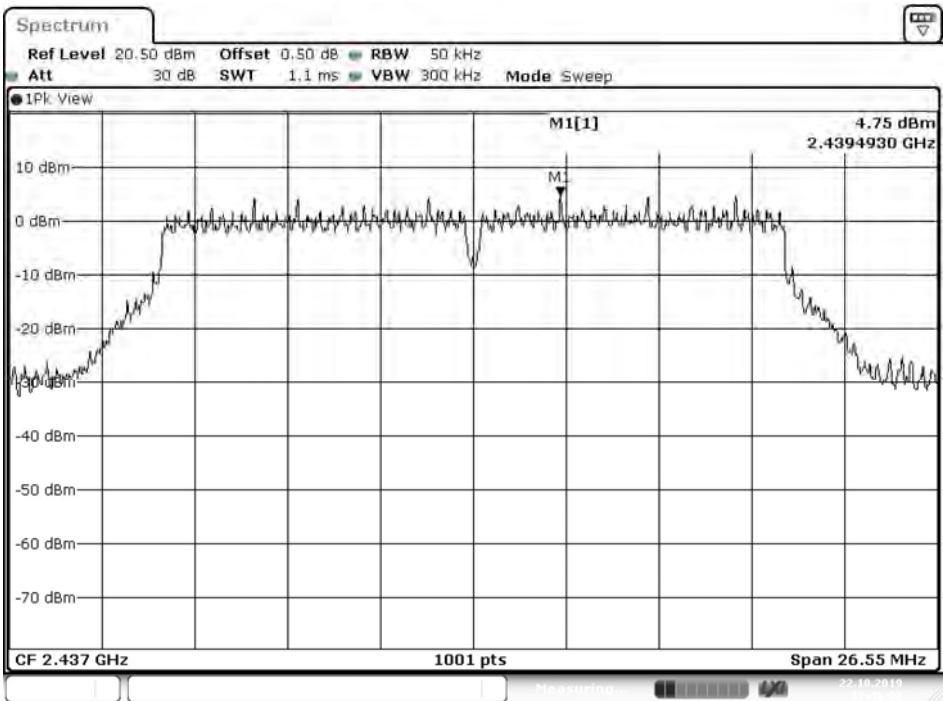
Date: 21.NOV.2019 00:11:52

Figure Channel 06 (Chain A):



Date: 22.OCT.2019 06:57:06

Figure Channel 06 (Chain B):



Date: 22.OCT.2019 17:46:00

Figure Channel 11 (Chain A):

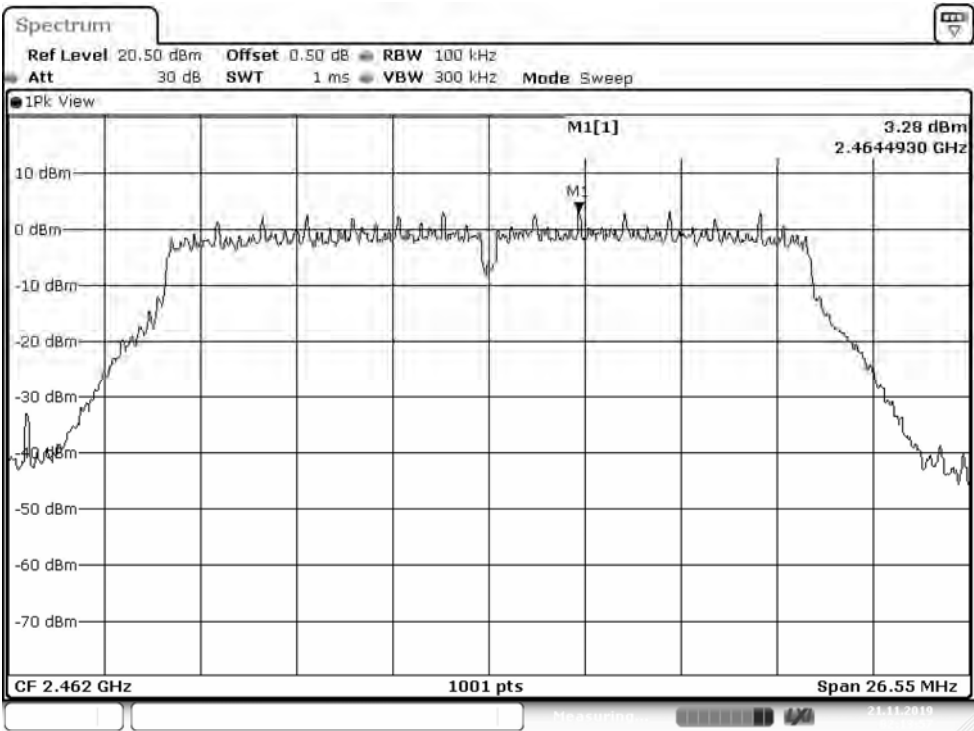
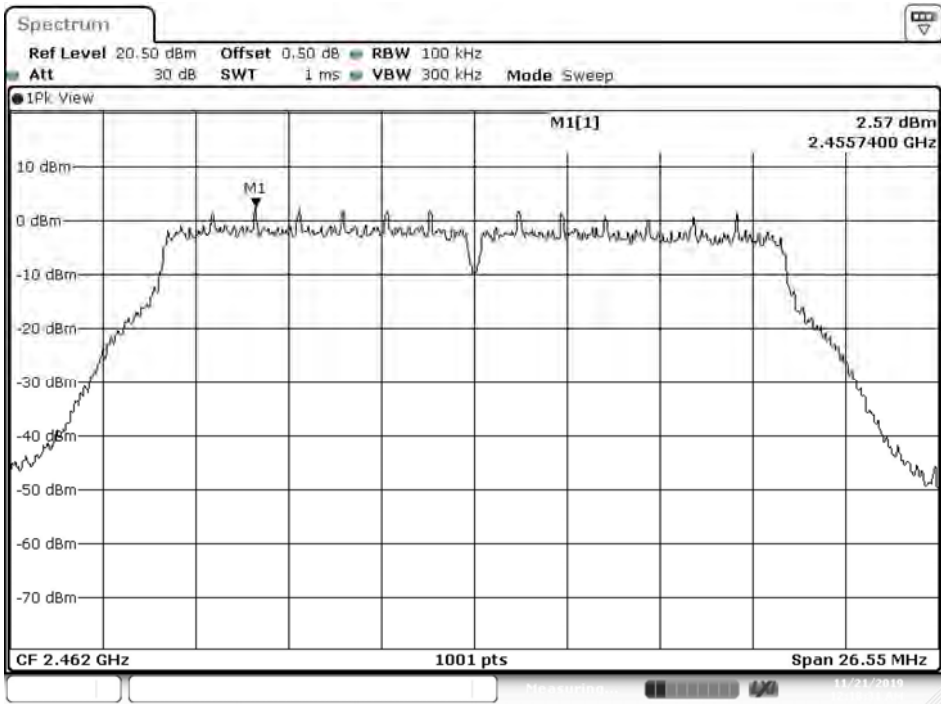


Figure Channel 11 (Chain B):



Date: 21.NOV.2019 00:18:31

待測物名稱：Wireless Access Point

待測物型號：AP305C、AP305CX

測試頻道：--

測試項目：功率密度

測試模式：Mode 15: Radio 0_CDD: 發射器 802.11ax
(20MHz)

量測天線：--

測試距離：Conducted

檢測器：峰值

測試日期：108年11月21日

Channel No.	Frequency (MHz)	Chain	PPSD/MHz (dBm)	10*log(2) (dB)	Measure Level (dBm)	Limit (dBm)	Result
01	2412	A	4.590	3.010	7.600	$\leq 8\text{dBm}$	Pass
		B	3.140	3.010	6.150	$\leq 8\text{dBm}$	Pass
06	2437	A	2.130	3.010	5.140	$\leq 8\text{dBm}$	Pass
		B	4.940	3.010	7.950	$\leq 8\text{dBm}$	Pass
11	2462	A	0.960	3.010	3.970	$\leq 8\text{dBm}$	Pass
		B	0.110	3.010	3.120	$\leq 8\text{dBm}$	Pass

Note:

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

Figure Channel 01 (Chain A):

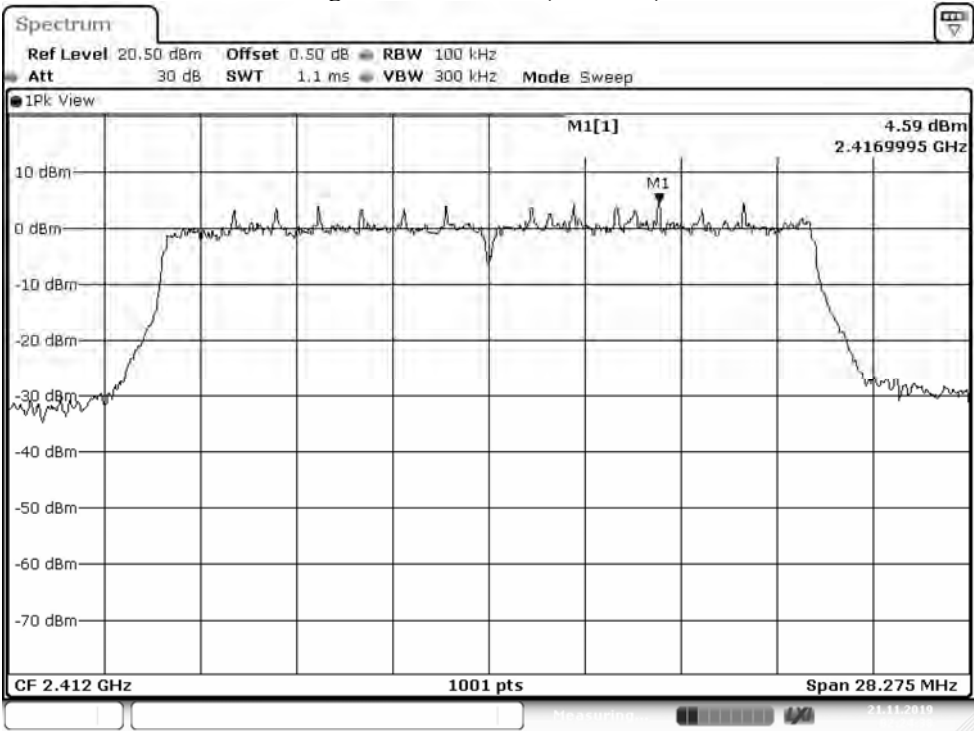
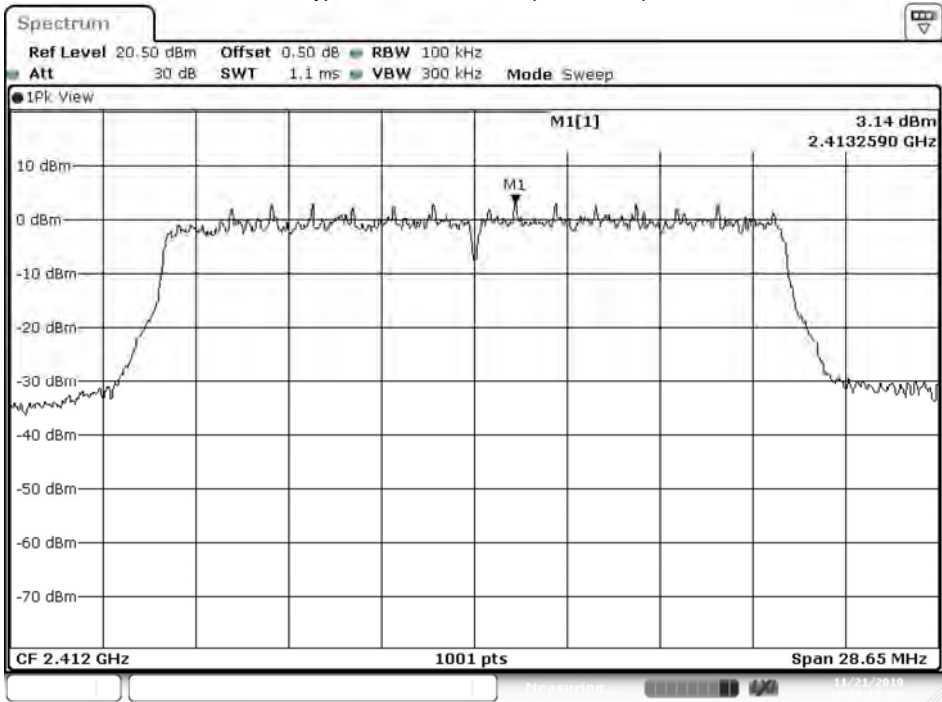
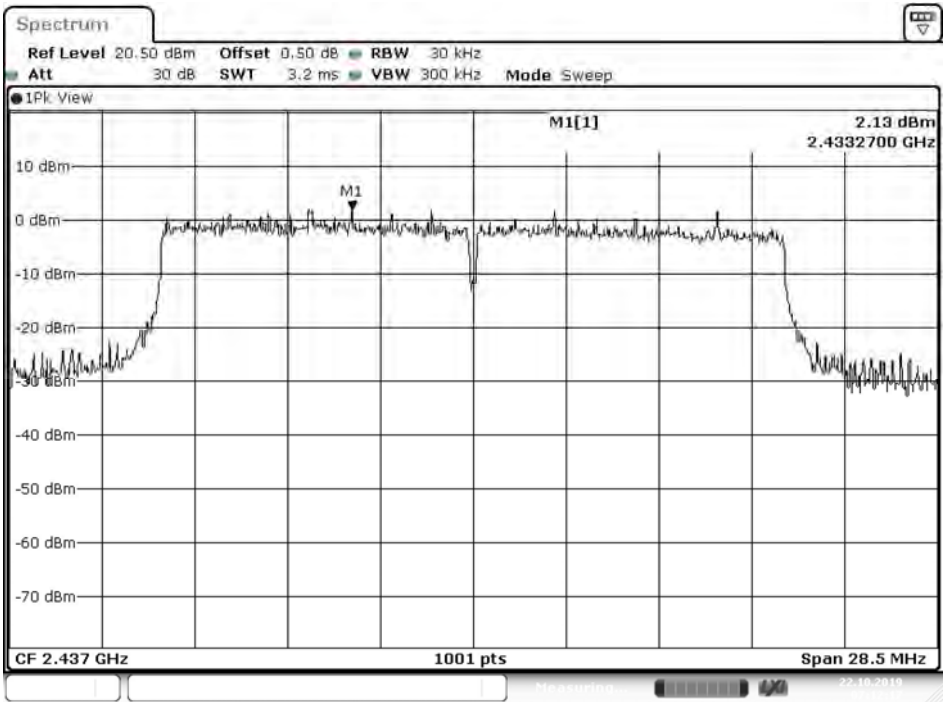


Figure Channel 01 (Chain B):



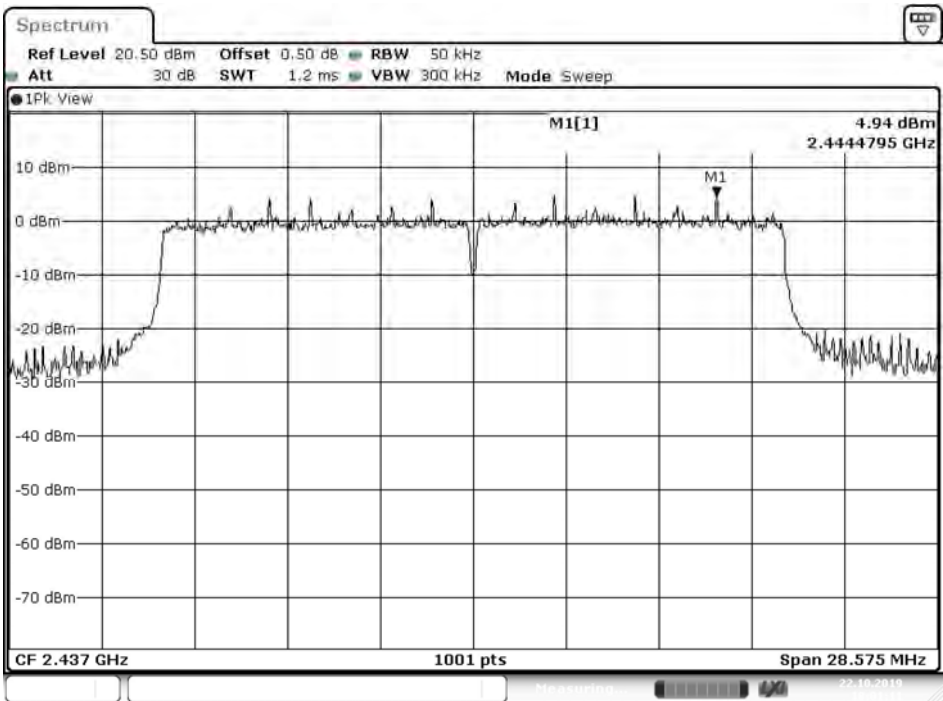
Date: 21.NOV.2019 00:29:12

Figure Channel 06 (Chain A):



Date: 22.OCT.2019 07:12:17

Figure Channel 06 (Chain B):



Date: 22.OCT.2019 18:01:11

Figure Channel 11 (Chain A):

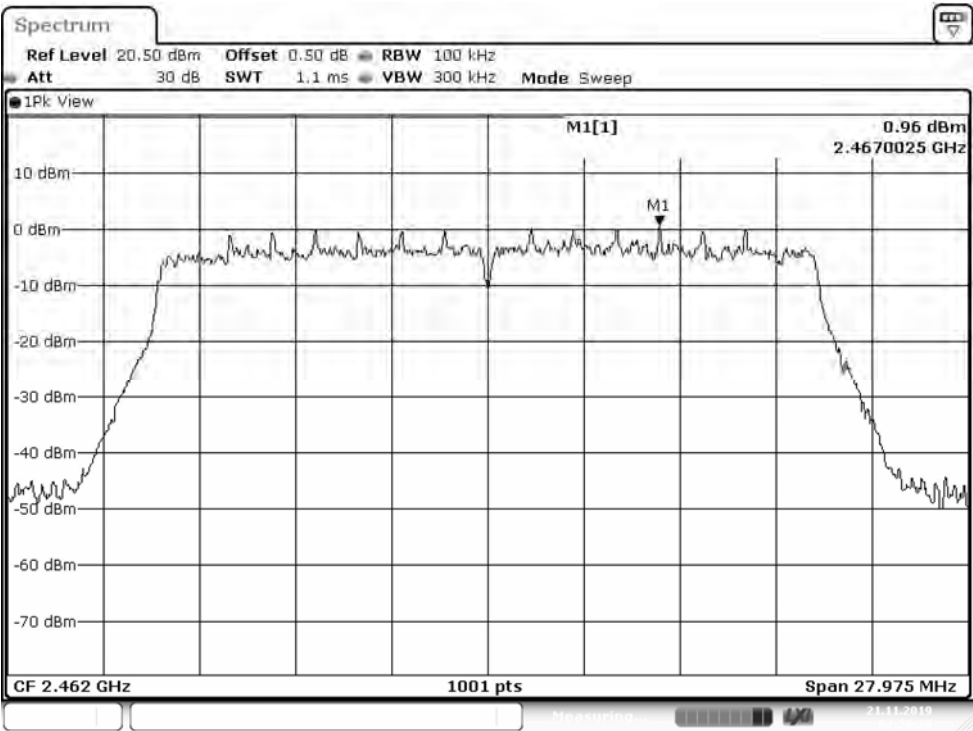
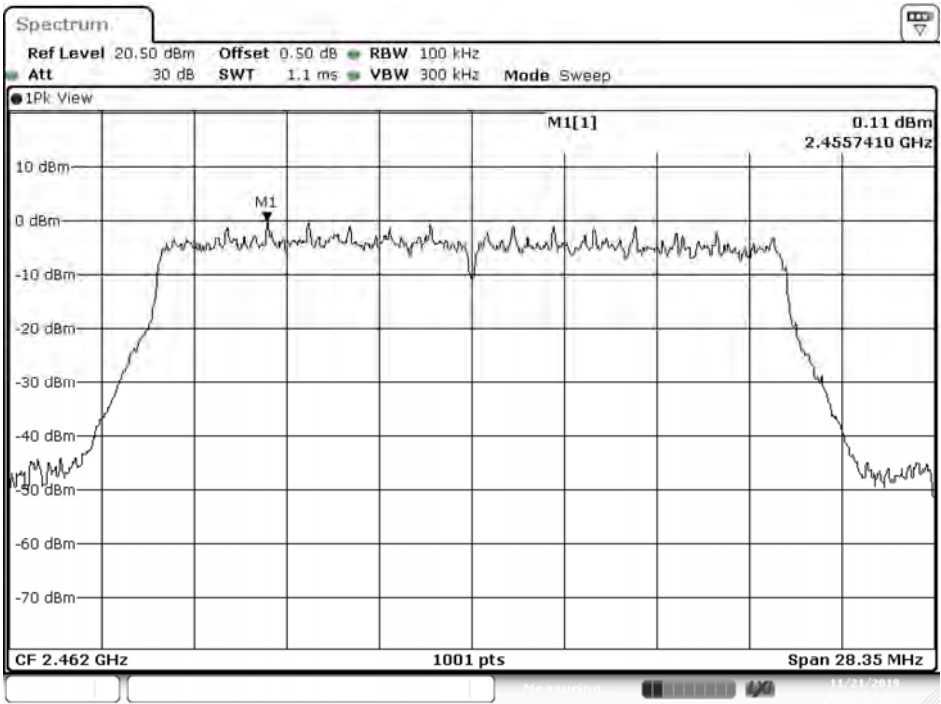


Figure Channel 11 (Chain B):



Date: 21.NOV.2019 00:32:54

待測物名稱：Wireless Access Point

待測物型號：AP305C、AP305CX

測試頻道：--

測試項目：功率密度

測試模式：Mode 16: Radio 0_Beamforming: 發射器
802.11n (20MHz)

量測天線：--

測試距離：Conducted

檢測器：峰值

測試日期：108年11月21日

Channel No.	Frequency (MHz)	Chain	PPSD/MHz (dBm)	10*log(2) (dB)	Measure Level (dBm)	Limit (dBm)	Result
01	2412	A	4.680	3.010	7.690	$\leq 8\text{dBm}$	Pass
		B	3.210	3.010	6.220	$\leq 8\text{dBm}$	Pass
06	2437	A	3.050	3.010	6.060	$\leq 8\text{dBm}$	Pass
		B	3.160	3.010	6.170	$\leq 8\text{dBm}$	Pass
11	2462	A	2.300	3.010	5.310	$\leq 8\text{dBm}$	Pass
		B	1.540	3.010	4.550	$\leq 8\text{dBm}$	Pass

Note:

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

Figure Channel 01 (Chain A):

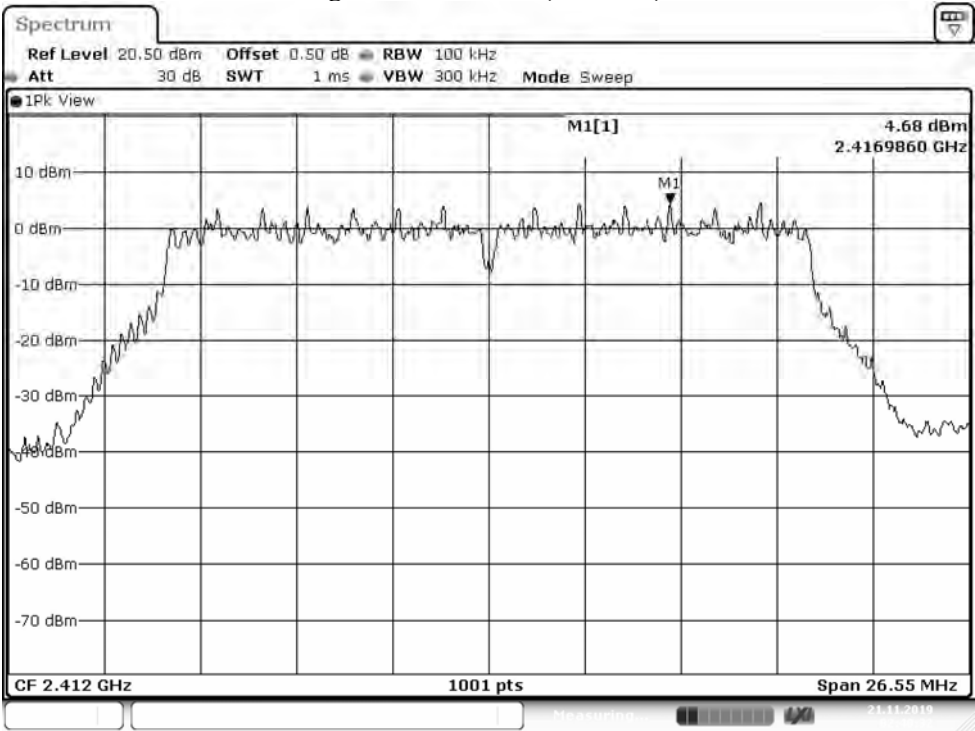
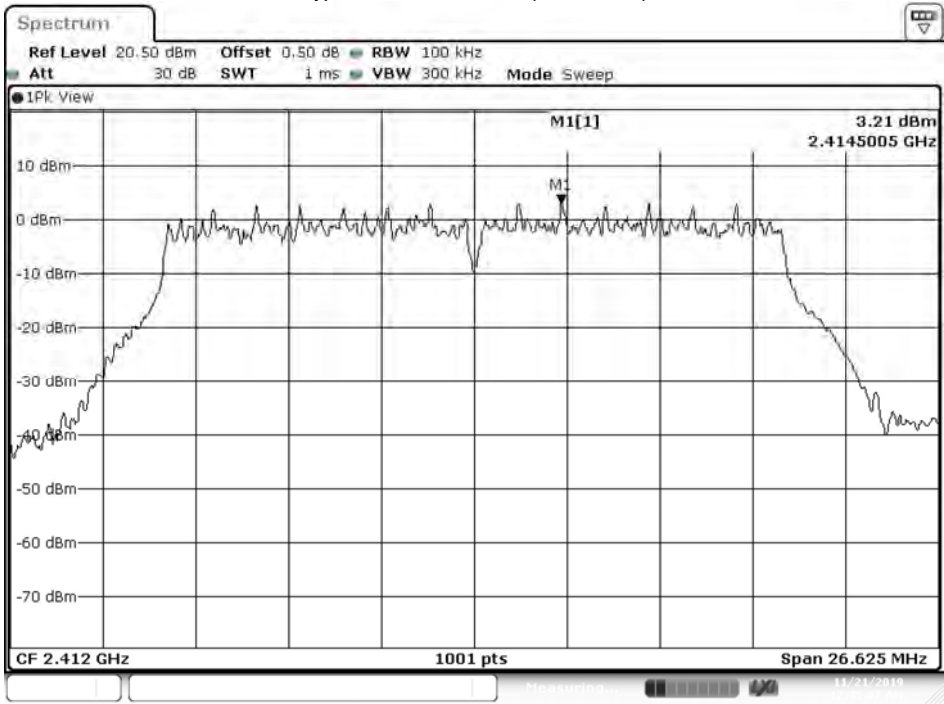
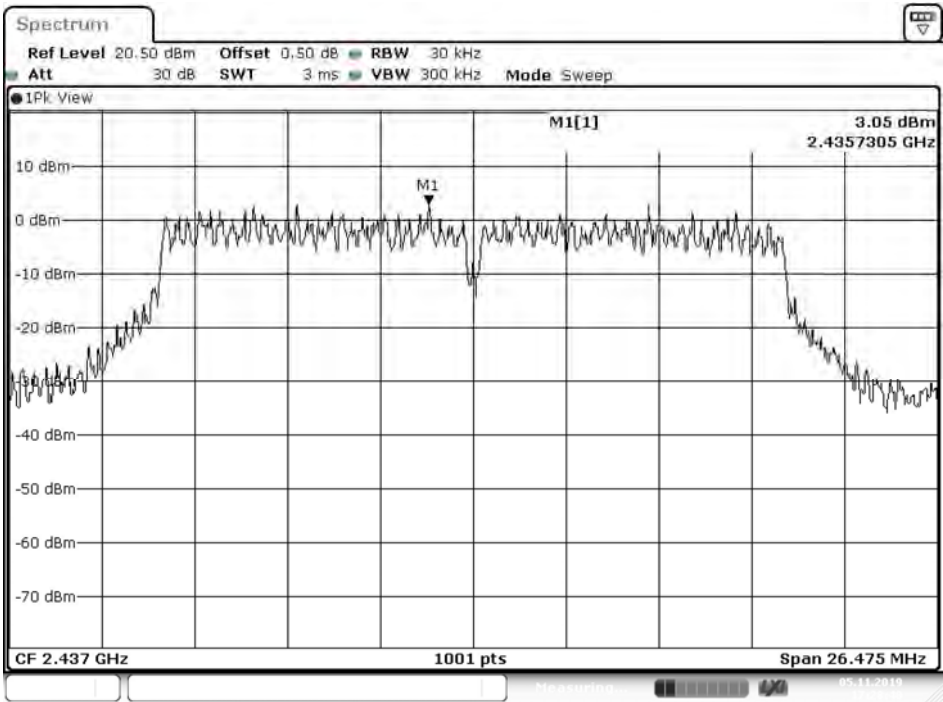


Figure Channel 01 (Chain B):



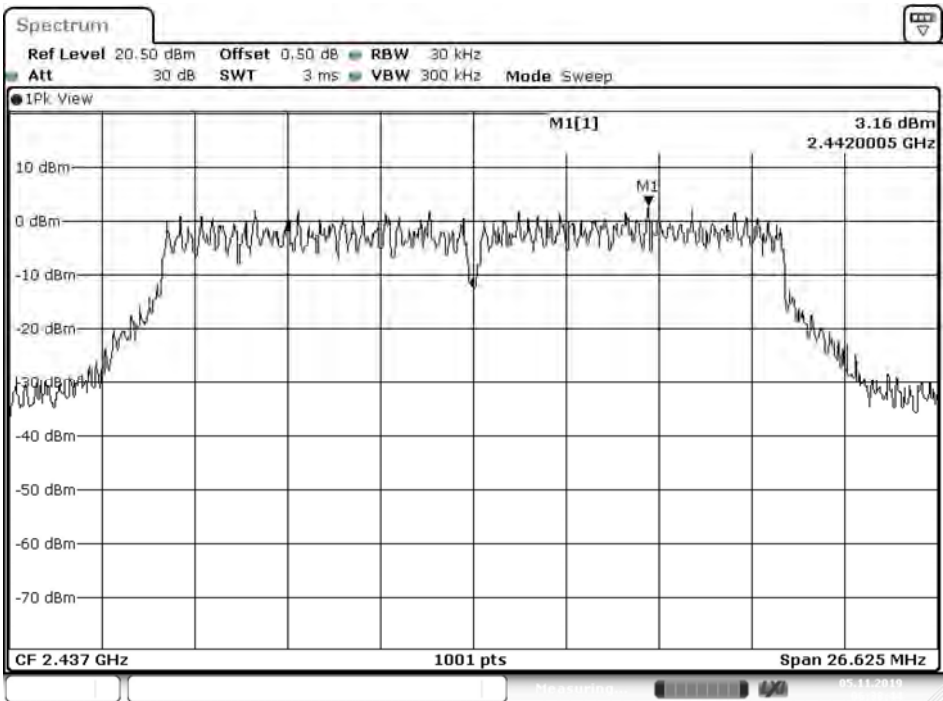
Date: 21.NOV.2019 00:45:07

Figure Channel 06 (Chain A):



Date: 5.NOV.2019 17:28:40

Figure Channel 06 (Chain B):



Date: 5.NOV.2019 06:38:44

Figure Channel 11 (Chain A):

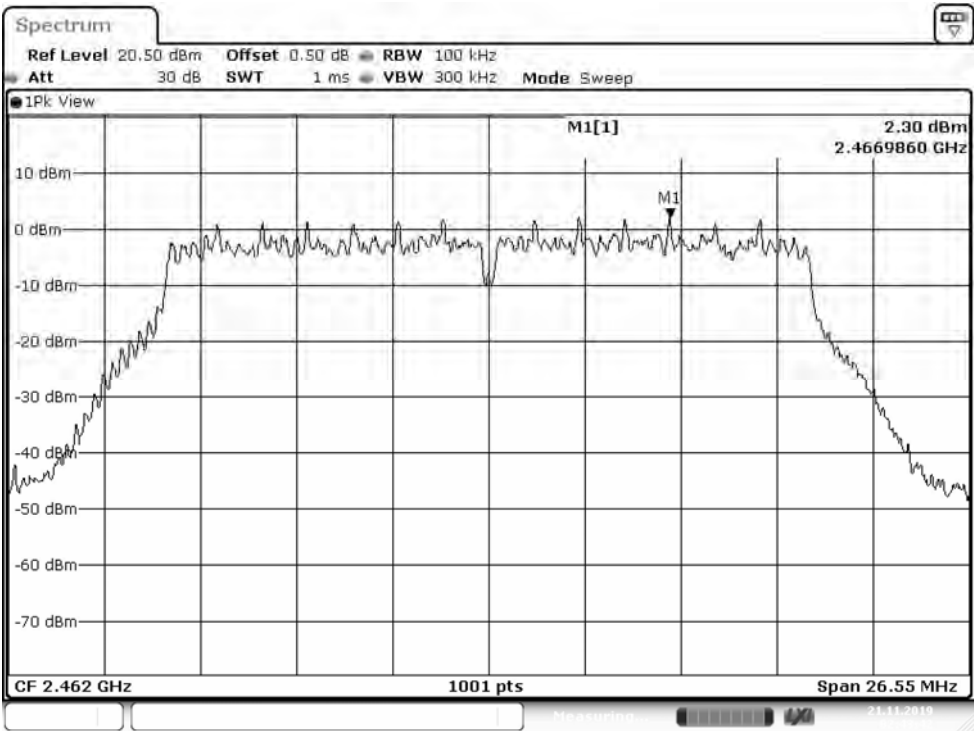
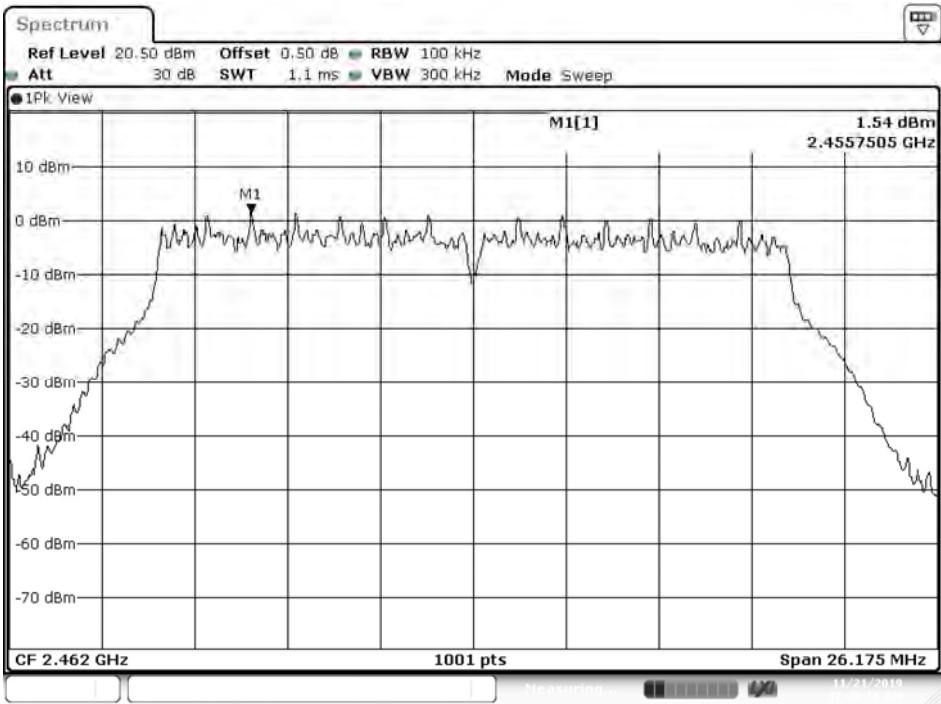


Figure Channel 11 (Chain B):



Date: 21.NOV.2019 00:48:17

待測物名稱：Wireless Access Point

待測物型號：AP305C、AP305CX

測試頻道：--

測試項目：功率密度

測試模式：Mode 17: Radio 0_Beamforming: 發射器
802.11ac (20MHz)

量測天線：--

測試距離：Conducted

檢測器：峰值

測試日期：108年11月21日

Channel No.	Frequency (MHz)	Chain	PPSD/MHz (dBm)	10*log(2) (dB)	Measure Level (dBm)	Limit (dBm)	Result
01	2412	A	4.730	3.010	7.740	$\leq 8\text{dBm}$	Pass
		B	3.230	3.010	6.240	$\leq 8\text{dBm}$	Pass
06	2437	A	3.410	3.010	6.420	$\leq 8\text{dBm}$	Pass
		B	2.910	3.010	5.920	$\leq 8\text{dBm}$	Pass
11	2462	A	3.490	3.010	6.500	$\leq 8\text{dBm}$	Pass
		B	2.360	3.010	5.370	$\leq 8\text{dBm}$	Pass

Note:

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

Figure Channel 01 (Chain A):

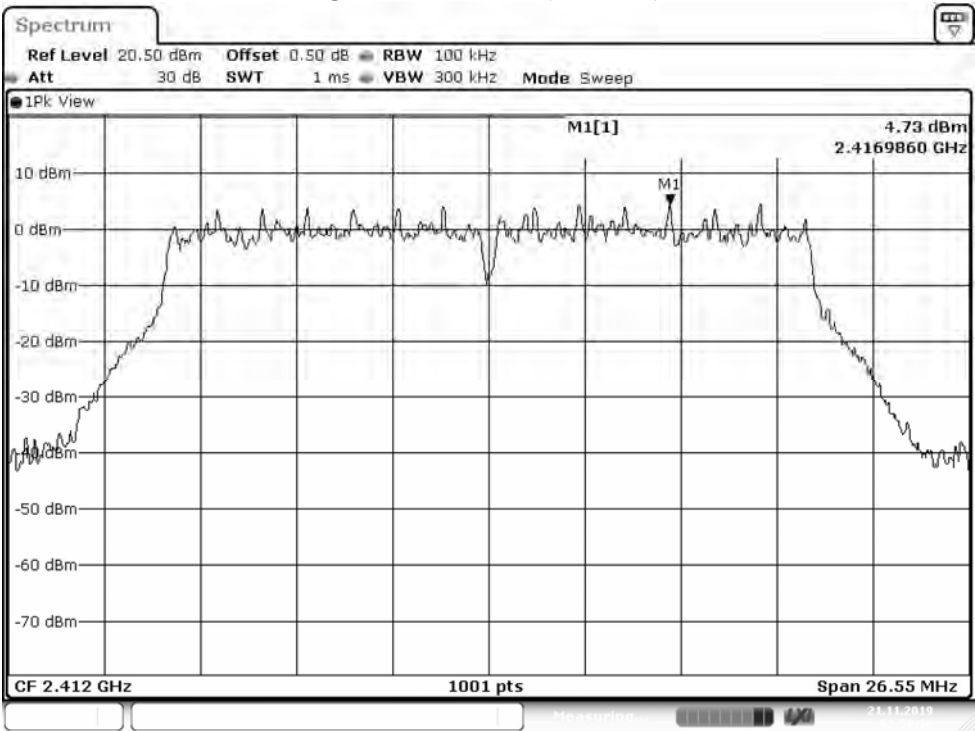
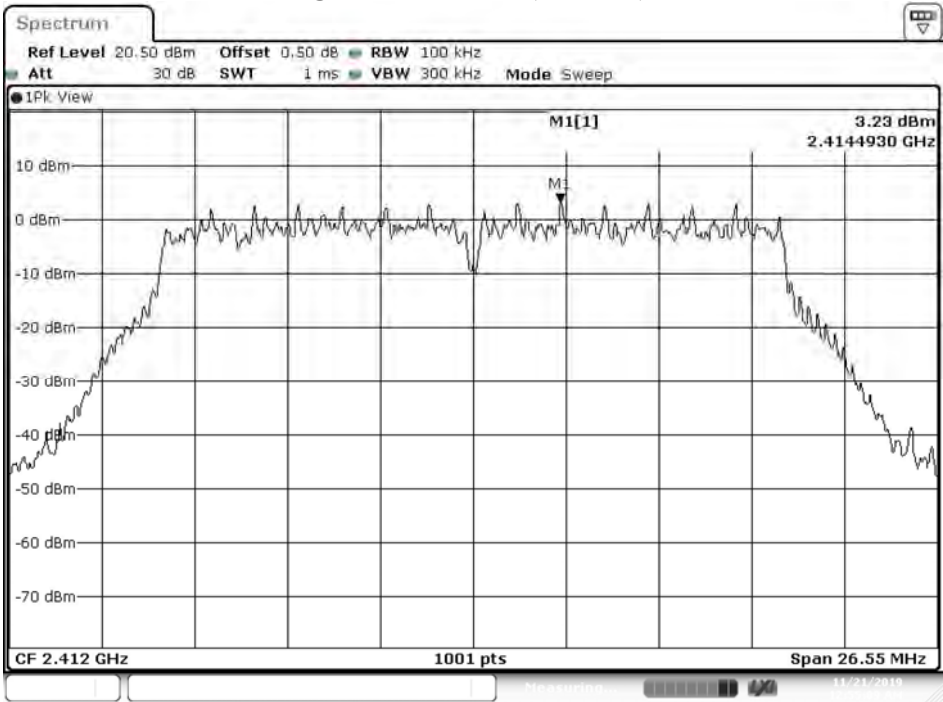
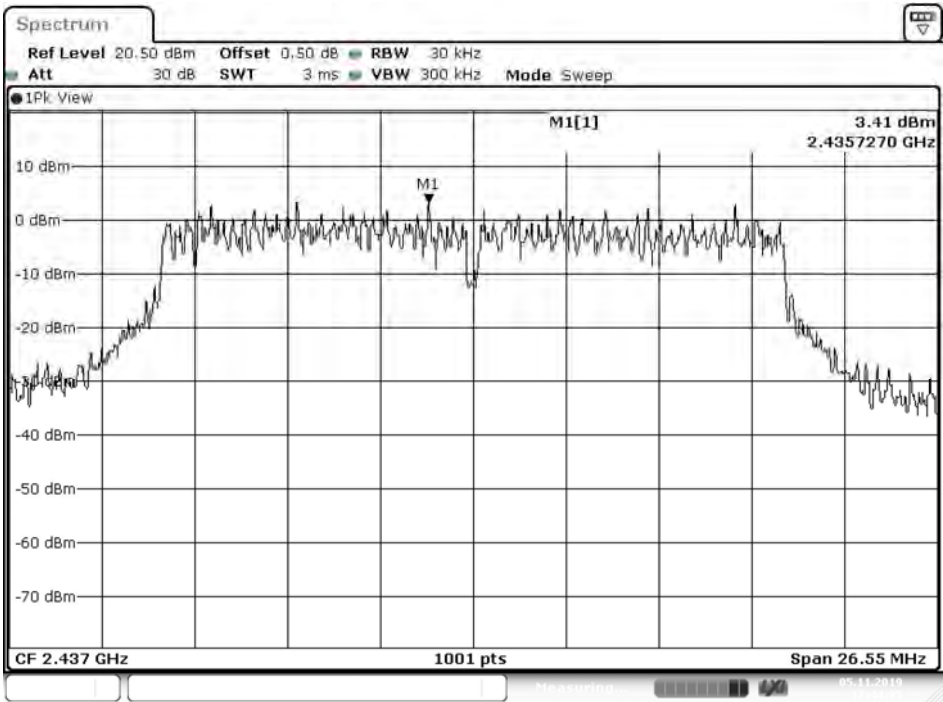


Figure Channel 01 (Chain B):



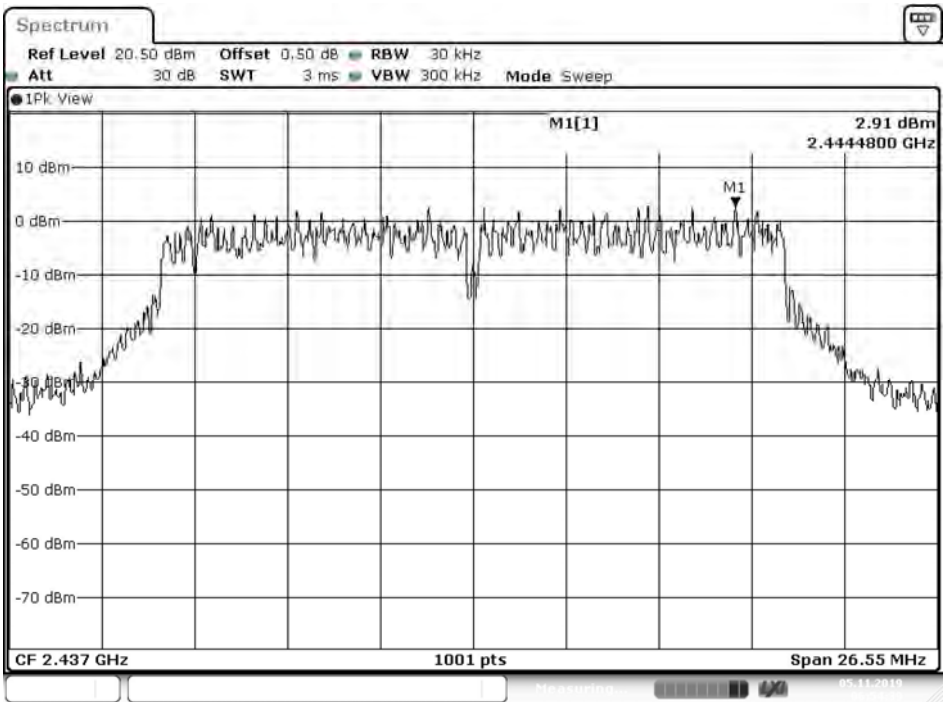
Date: 21.NOV.2019 00:55:10

Figure Channel 06 (Chain A):



Date: 5.NOV.2019 17:44:35

Figure Channel 06 (Chain B):



Date: 5.NOV.2019 06:54:40

Figure Channel 11 (Chain A):

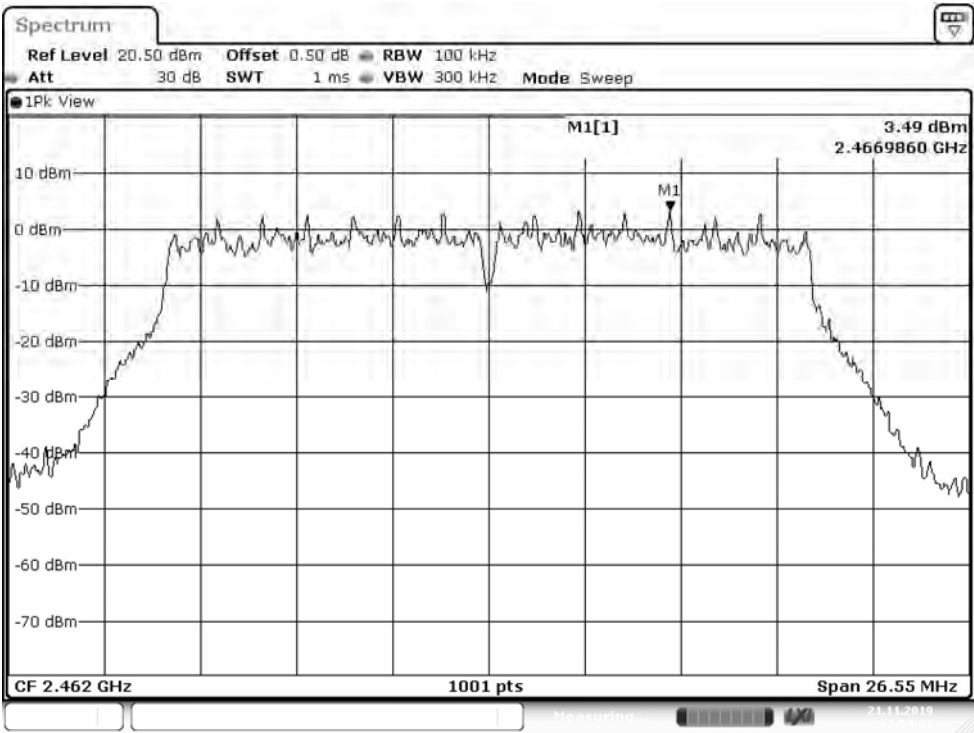
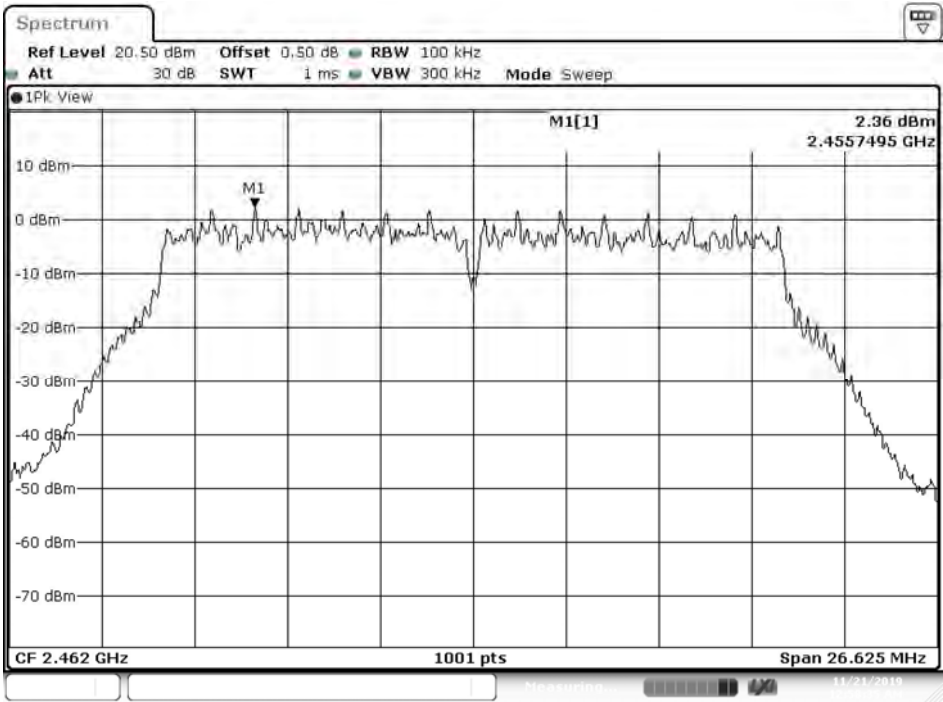


Figure Channel 11 (Chain B):



Date: 21.NOV.2019 00:58:36

待測物名稱：Wireless Access Point

待測物型號：AP305C、AP305CX

測試頻道：--

測試項目：功率密度

測試模式：Mode 18: Radio 0_Beamforming: 發射器
802.11ax (20MHz)

量測天線：--

測試距離：Conducted

檢測器：峰值

測試日期：108年11月21日

Channel No.	Frequency (MHz)	Chain	PPSD/MHz (dBm)	10*log(2) (dB)	Measure Level (dBm)	Limit (dBm)	Result
01	2412	A	3.310	3.010	6.320	$\leq 8\text{dBm}$	Pass
		B	1.850	3.010	4.860	$\leq 8\text{dBm}$	Pass
06	2437	A	2.860	3.010	5.870	$\leq 8\text{dBm}$	Pass
		B	2.010	3.010	5.020	$\leq 8\text{dBm}$	Pass
11	2462	A	2.050	3.010	5.060	$\leq 8\text{dBm}$	Pass
		B	1.280	3.010	4.290	$\leq 8\text{dBm}$	Pass

Note:

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

Figure Channel 01 (Chain A):

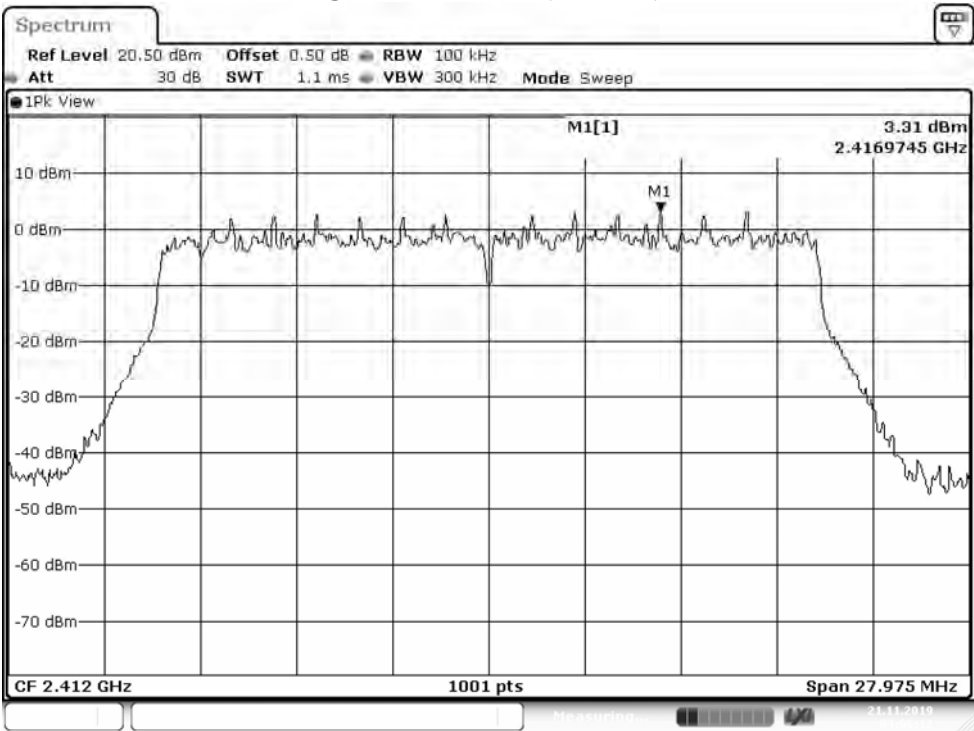
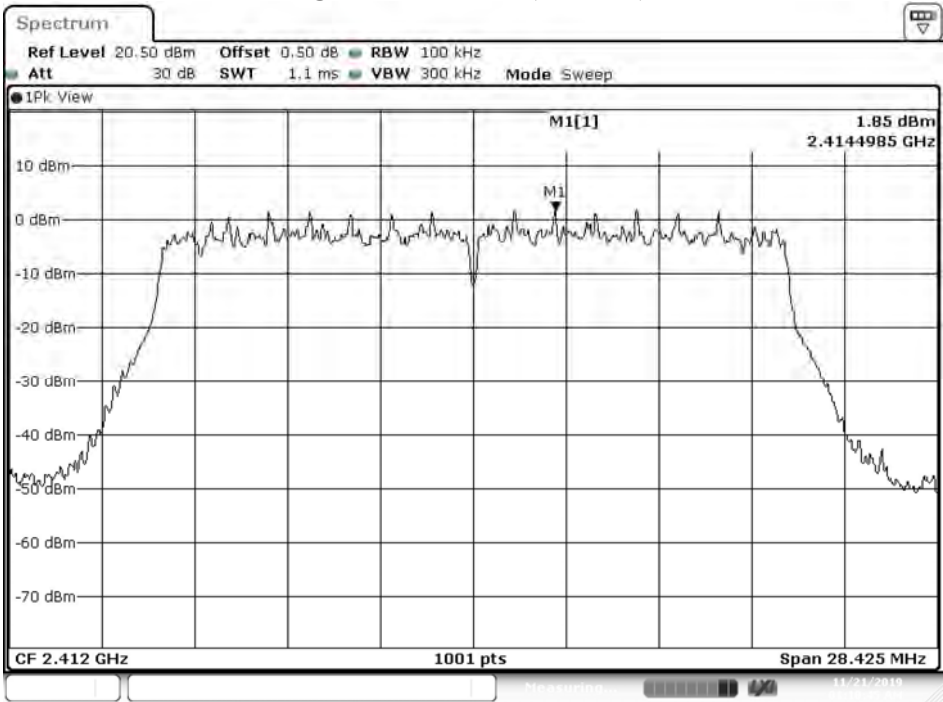
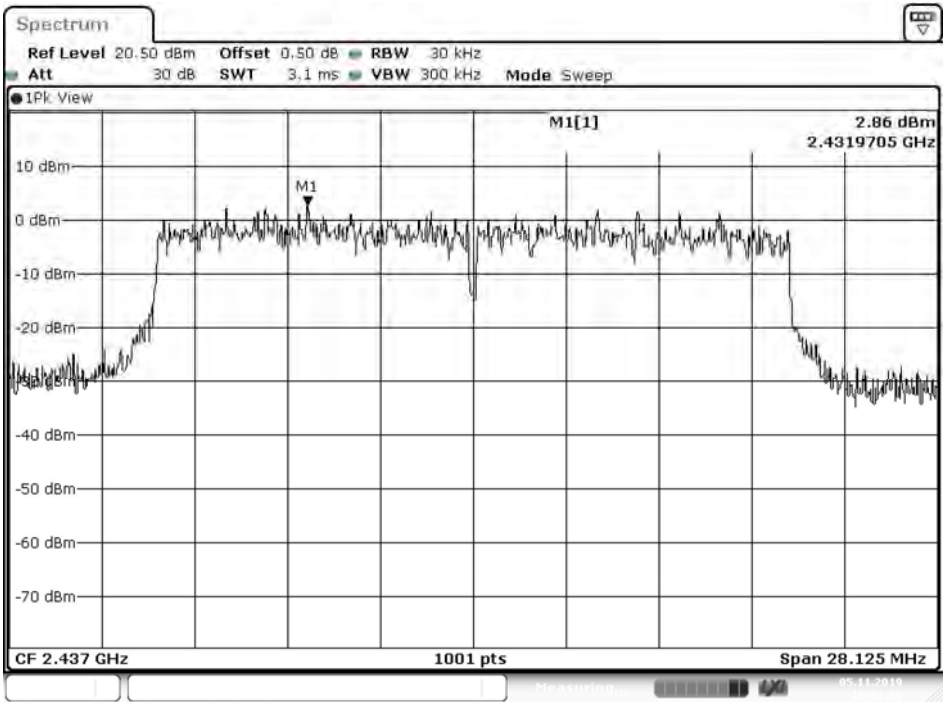


Figure Channel 01 (Chain B):



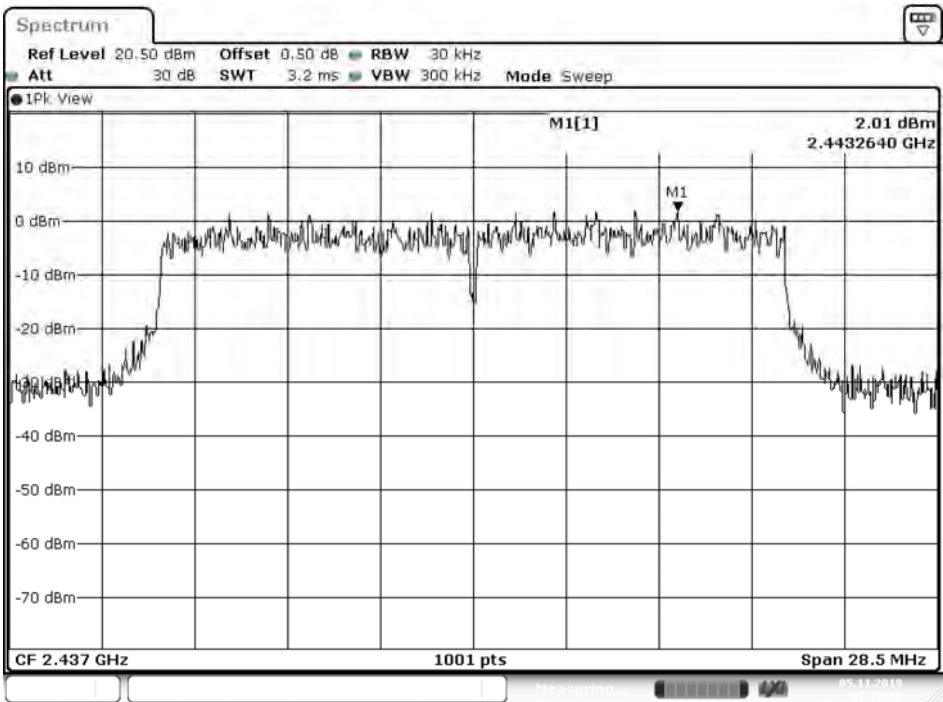
Date: 21.NOV.2019 01:10:46

Figure Channel 06 (Chain A):



Date: 5.NOV.2019 18:02:27

Figure Channel 06 (Chain B):



Date: 5.NOV.2019 07:12:31

Figure Channel 11 (Chain A):

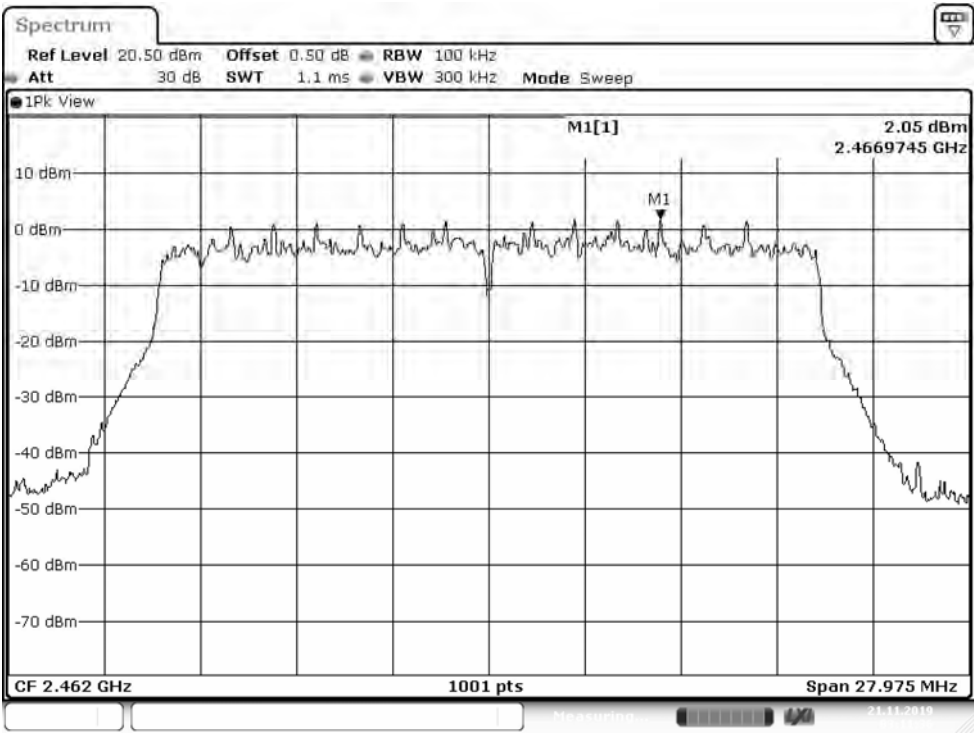
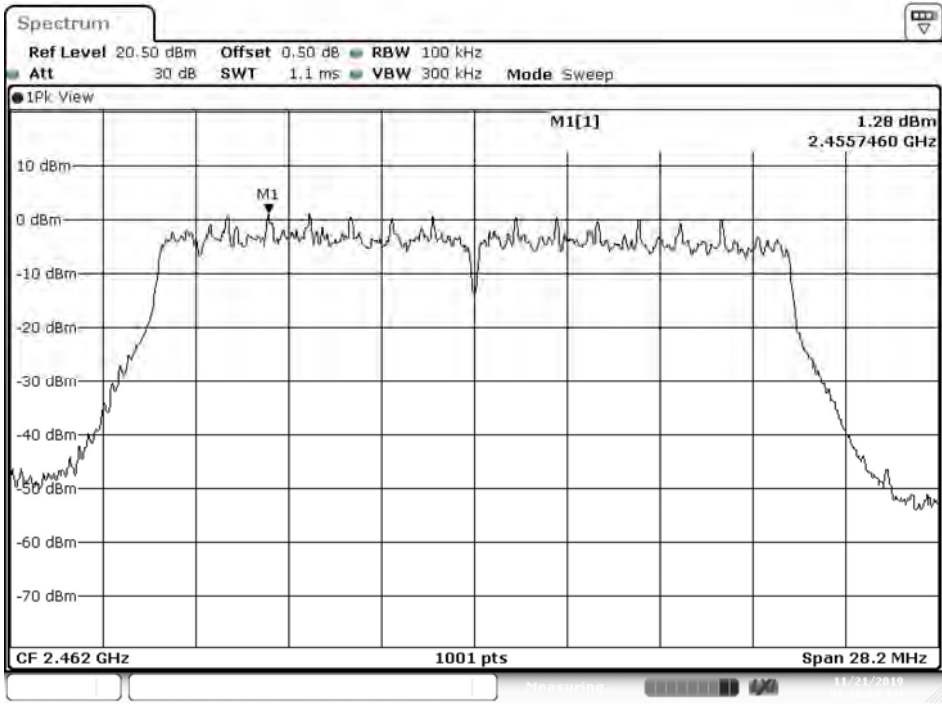


Figure Channel 11 (Chain B):



Date: 21.NOV.2019 01:16:10

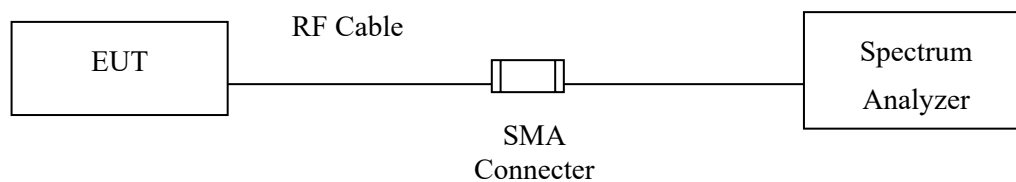
功率密度測試結果:	PASS
-----------	------

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：Wireless Access Point

待測物型號：AP305C、AP305CX

測試頻道：--

量測天線：--

檢測器：峰值

測試日期：108年11月08日

測試項目：Duty Cycle

測試模式：--

測試距離：Conducted

Duty Cycle Formula:

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

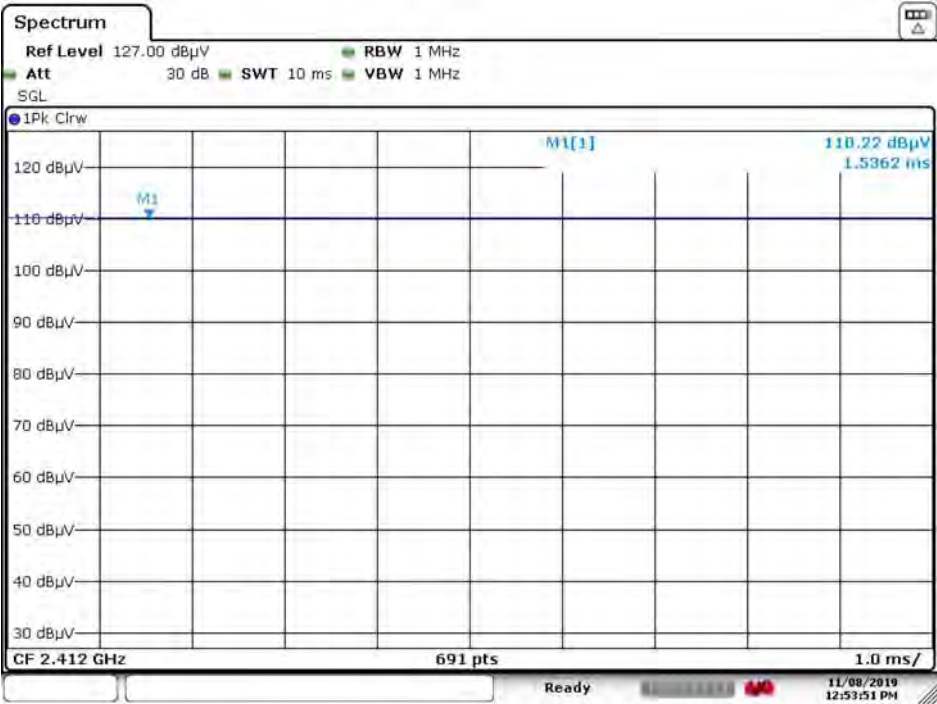
$\text{Duty Factor} = 10 \text{ Log } (1/\text{Duty Cycle})$

Results:

SISO A

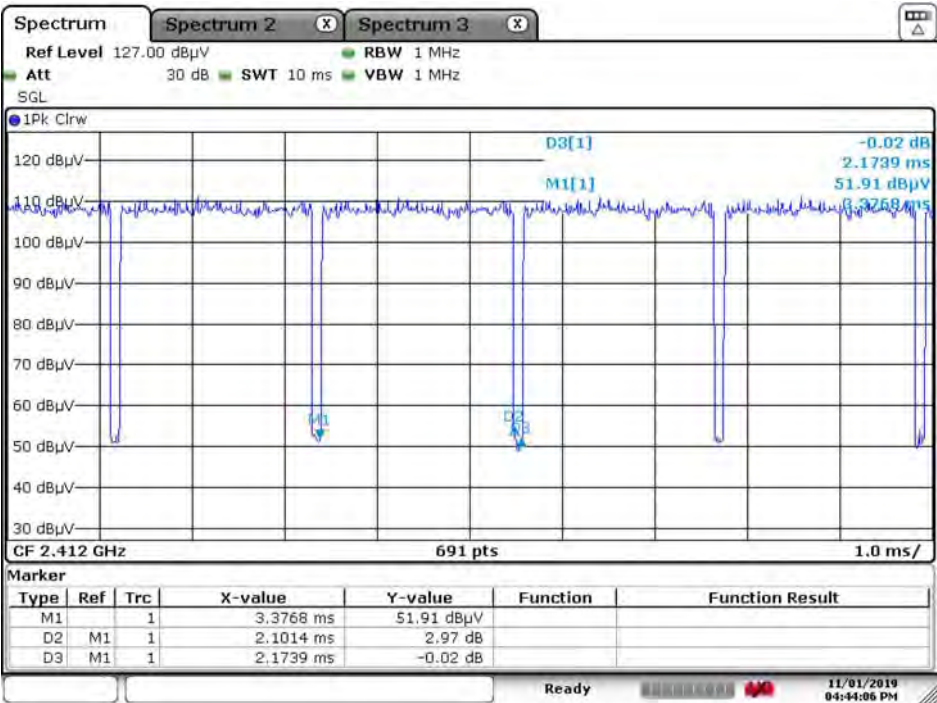
2.4GHz band	Ton (ms)	Ton + Toff (ms)	Duty Cycle (%)	Duty Factor (dB)
802.11b	1.5362	1.5362	100.00	0.00
802.11g	2.1014	2.1739	96.66	0.15
802.11n20	1.9565	2.0290	96.43	0.16
802.11ac20	1.9492	1.9565	99.63	0.02
802.11ax20	1.5144	1.5289	99.05	0.04

802.11b (SISO A)



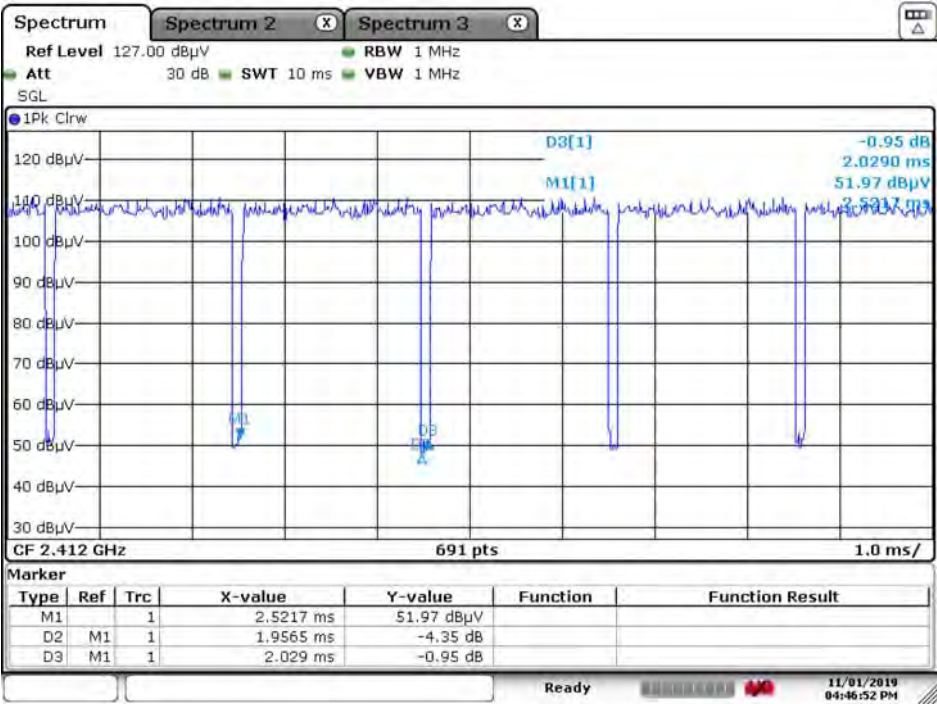
Date: 8 NOV 2019 12:53:51

802.11g (SISO A)



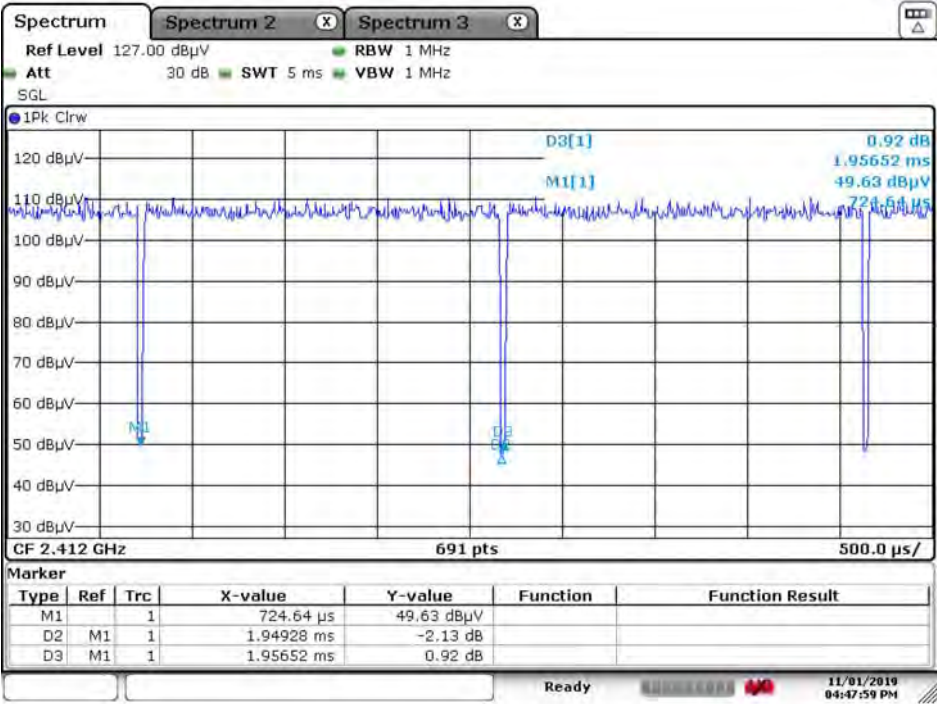
Date: 1 NOV 2019 16:44:06

802.11n20 (SISO A)



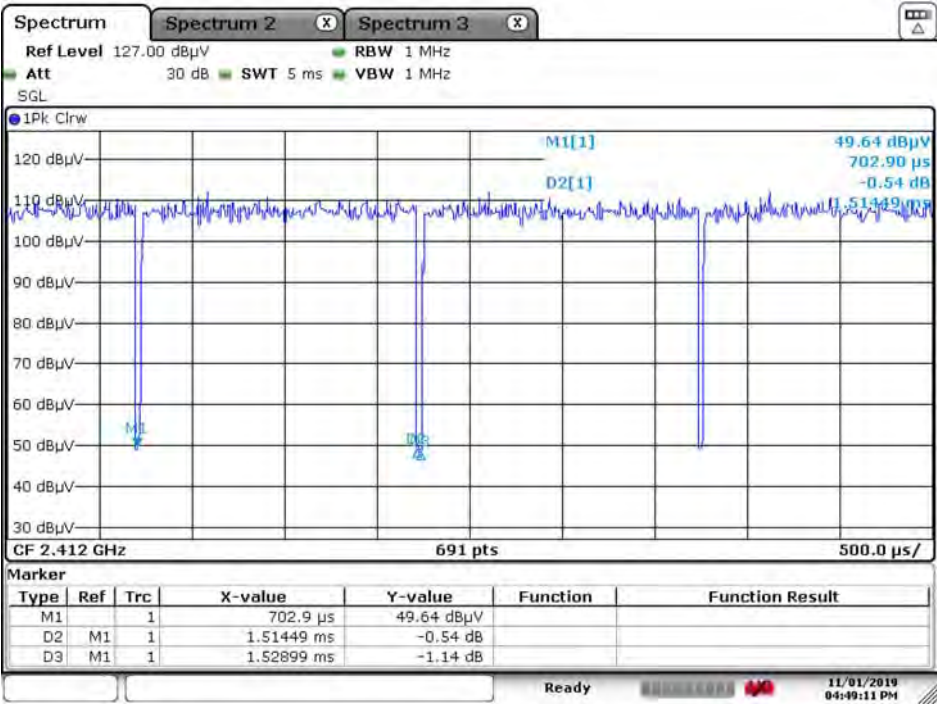
Date: 1.NOV.2019 16:46:52

802.11ac20 (SISO A)



Date: 1.NOV.2019 16:48:00

802.11ax20 (SISO A)



Date: 1.NOV.2019 16:49:12

待測物名稱：Wireless Access Point

待測物型號：AP305C、AP305CX

測試頻道：--

量測天線：--

檢測器：峰值

測試日期：108年11月08日

測試項目：Duty Cycle

測試模式：--

測試距離：Conducted

Duty Cycle Formula:

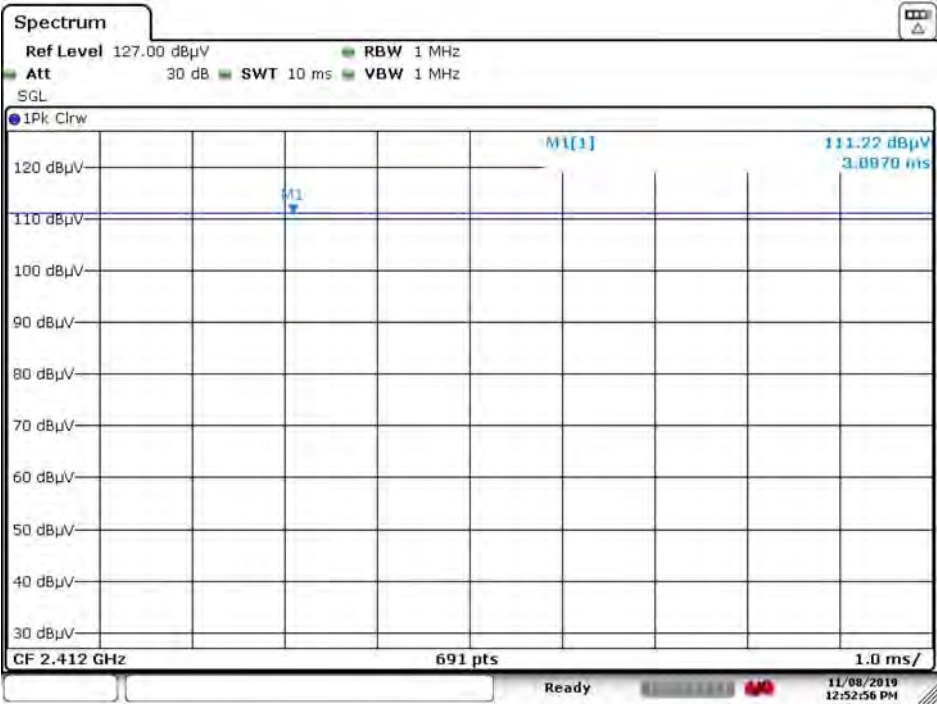
$$\text{Duty Cycle} = \text{Ton} / (\text{Ton} + \text{Toff})$$
$$\text{Duty Factor} = 10 \text{ Log } (1/\text{Duty Cycle})$$

Results:

SISO B

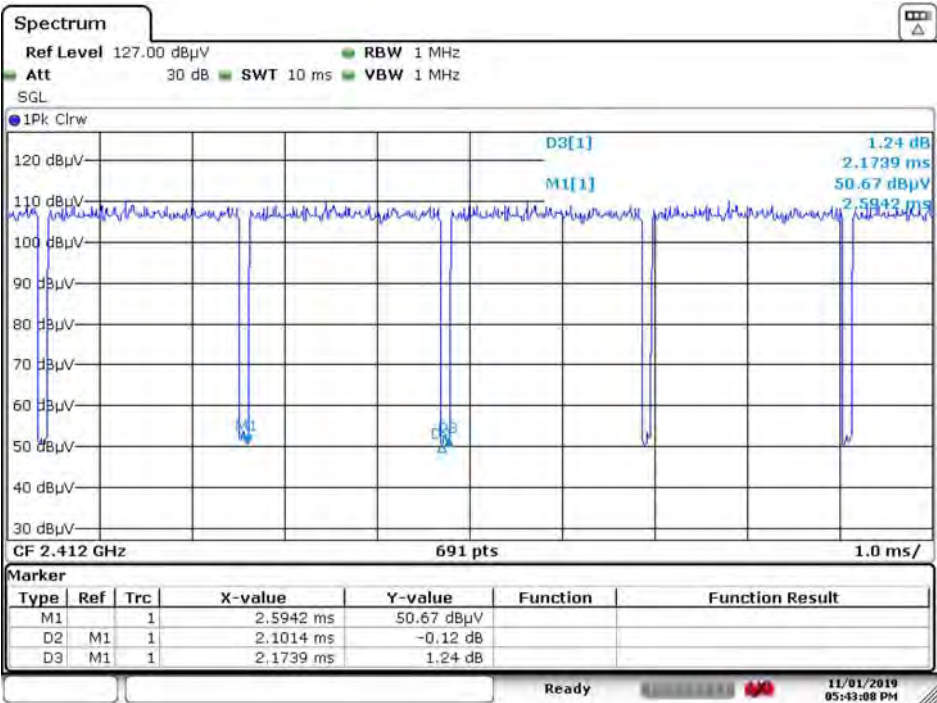
2.4GHz band	Ton (ms)	Ton + Toff (ms)	Duty Cycle (%)	Duty Factor (dB)
802.11b	3.0870	3.0870	100.00	0.00
802.11g	2.1014	2.1739	96.66	0.15
802.11n20	1.9565	2.0290	96.43	0.16
802.11ac20	1.9492	1.9637	99.26	0.03
802.11ax20	1.5072	1.5217	99.05	0.04

802.11b (SISO B)



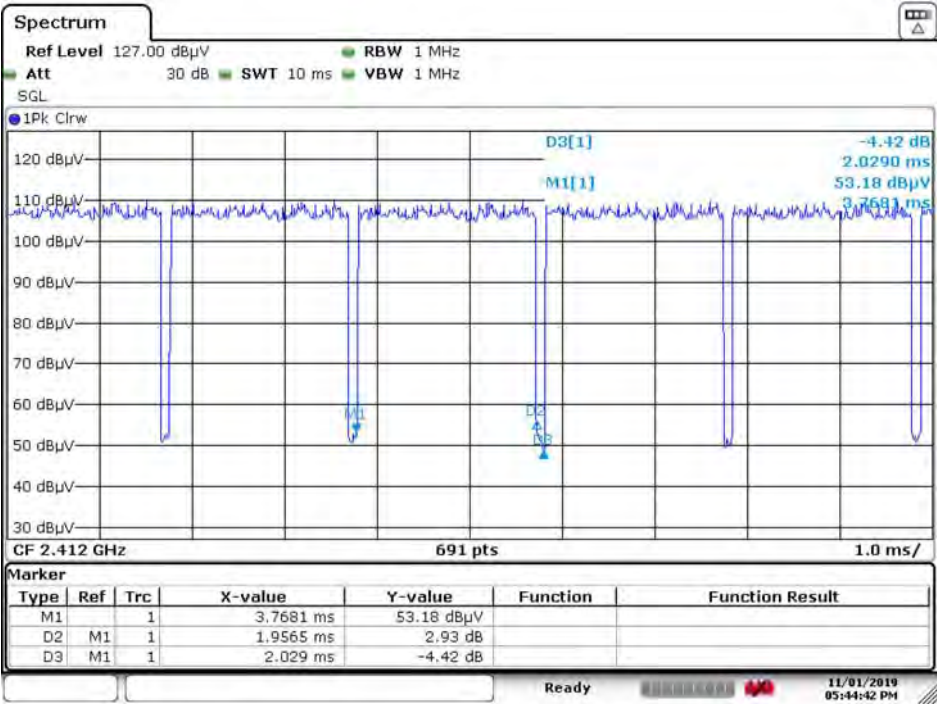
Date: 8 NOV 2019 12:52:57

802.11g (SISO B)



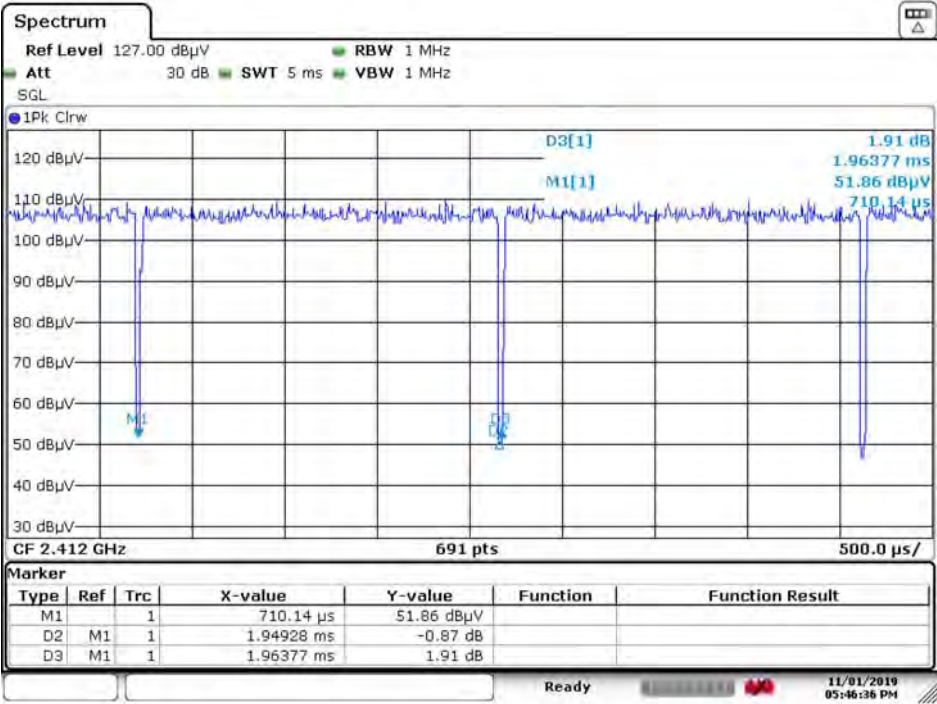
Date: 1 NOV 2019 17:43:09

802.11n20 (SISO B)



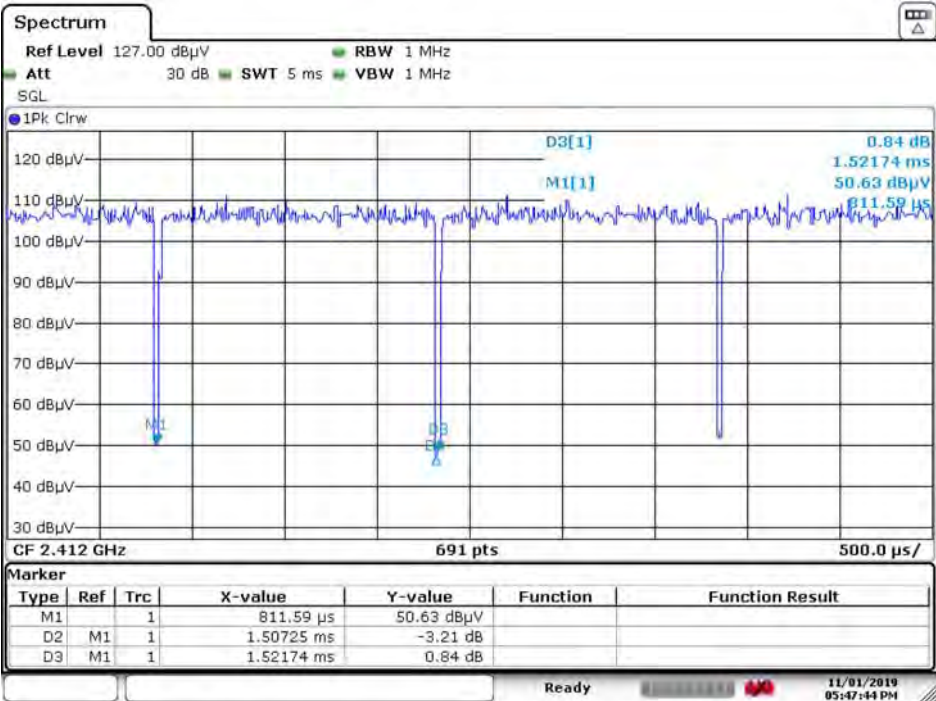
Date: 1 NOV. 2019 17:44:43

802.11ac20 (SISO B)



Date: 1 NOV. 2019 17:46:36

802.11ax20 (SISO B)



Date: 1 NOV 2019 17:47:44

待測物名稱：Wireless Access Point

待測物型號：AP305C、AP305CX

測試頻道：--

量測天線：--

檢測器：峰值

測試日期：108年11月08日

測試項目：Duty Cycle

測試模式：--

測試距離：Conducted

Duty Cycle Formula:

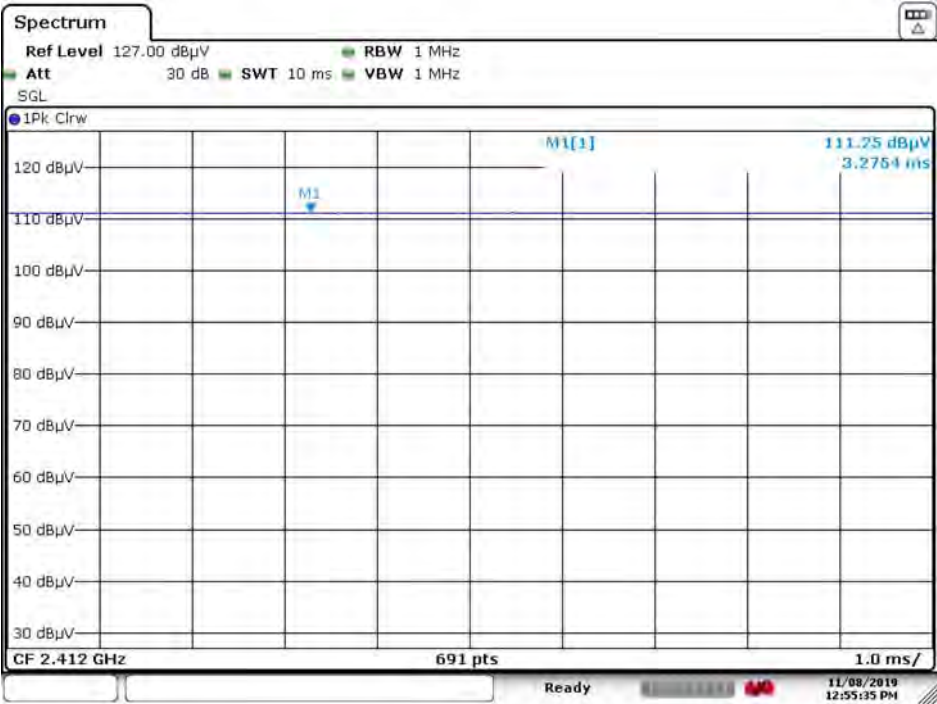
$$\text{Duty Cycle} = \text{Ton} / (\text{Ton} + \text{Toff})$$
$$\text{Duty Factor} = 10 \text{ Log } (1/\text{Duty Cycle})$$

Results:

CDD

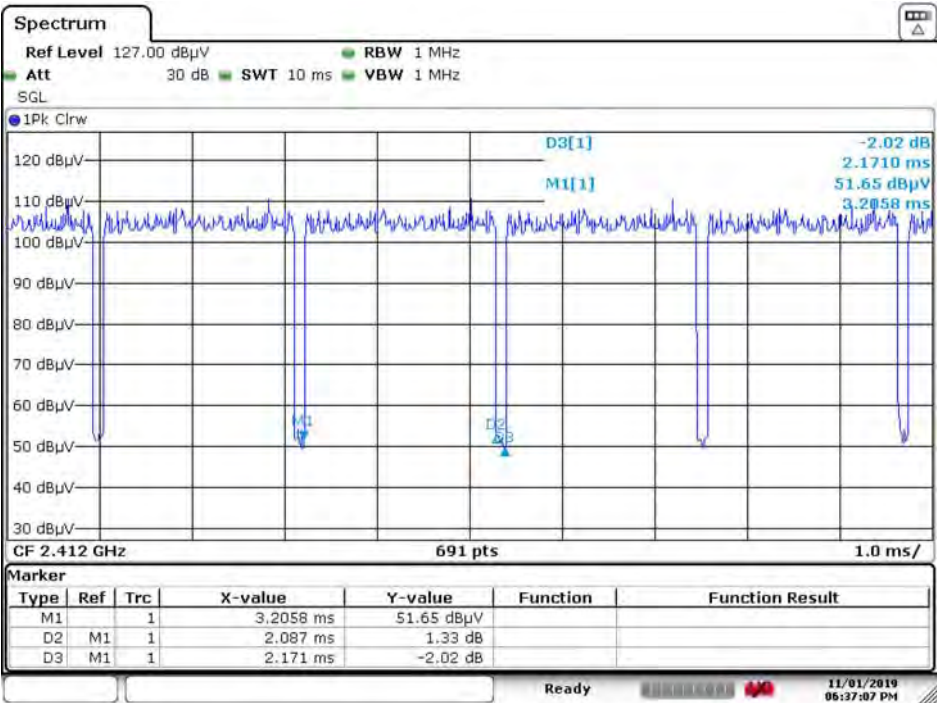
2.4GHz band	Ton (ms)	Ton + Toff (ms)	Duty Cycle (%)	Duty Factor (dB)
802.11b	3.2754	3.2754	100.00	0.00
802.11g	2.0870	2.1710	96.13	0.17
802.11n20	1.9536	2.0261	96.42	0.16
802.11ac20	1.9391	1.9536	99.26	0.03
802.11ax20	1.5043	1.5188	99.05	0.04

802.11b (CDD)



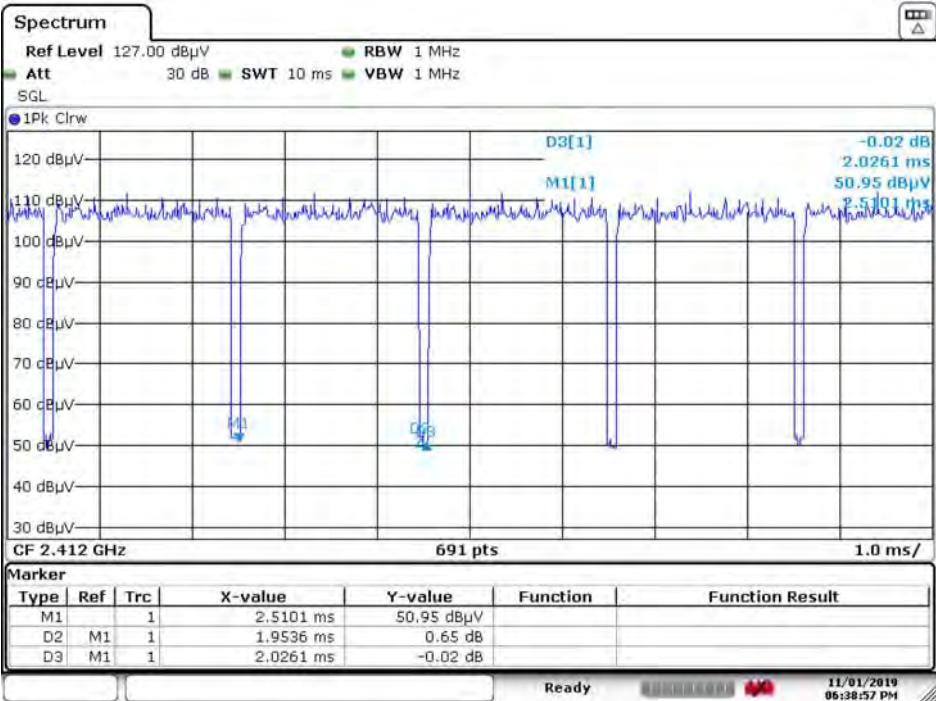
Date: 8.NOV.2019 12:55:35

802.11g (CDD)



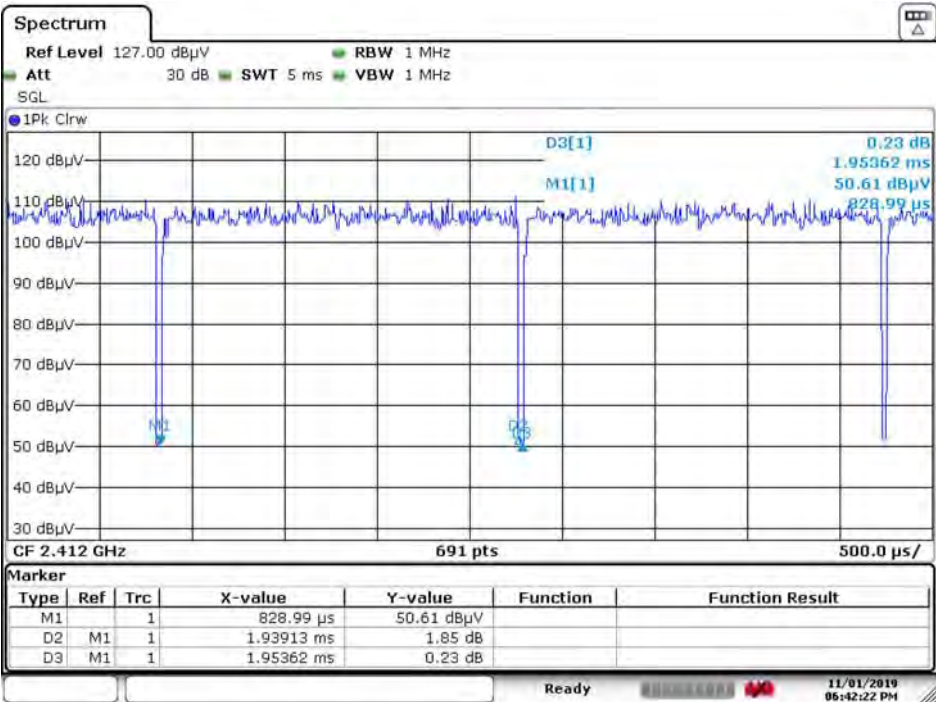
Date: 1.NOV.2019 18:37:07

802.11n20 (CDD)



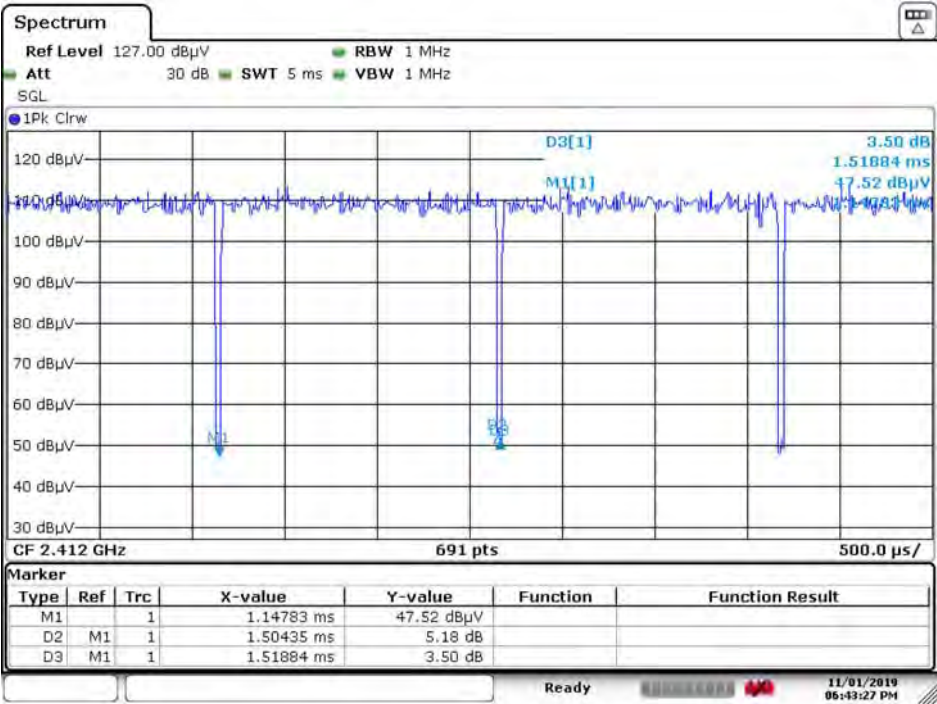
Date: 1.NOV.2019 18:38:58

802.11ac20 (CDD)



Date: 1.NOV.2019 18:42:23

802.11ax20 (CDD)



Date: 1.NOV.2019 18:43:28

待測物名稱：Wireless Access Point

待測物型號：AP305C、AP305CX

測試頻道：--

量測天線：--

檢測器：峰值

測試日期：108年11月01日

測試項目：Duty Cycle

測試模式：--

測試距離：Conducted

Duty Cycle Formula:

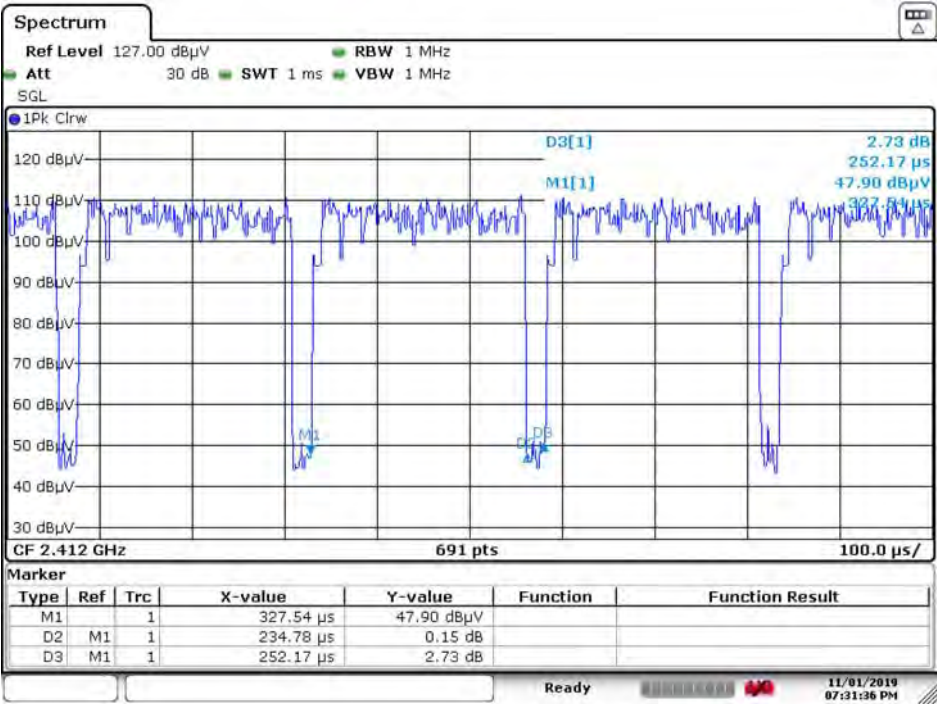
$$\text{Duty Cycle} = \text{Ton} / (\text{Ton} + \text{Toff})$$
$$\text{Duty Factor} = 10 \text{ Log } (1/\text{Duty Cycle})$$

Results:

Beamforming

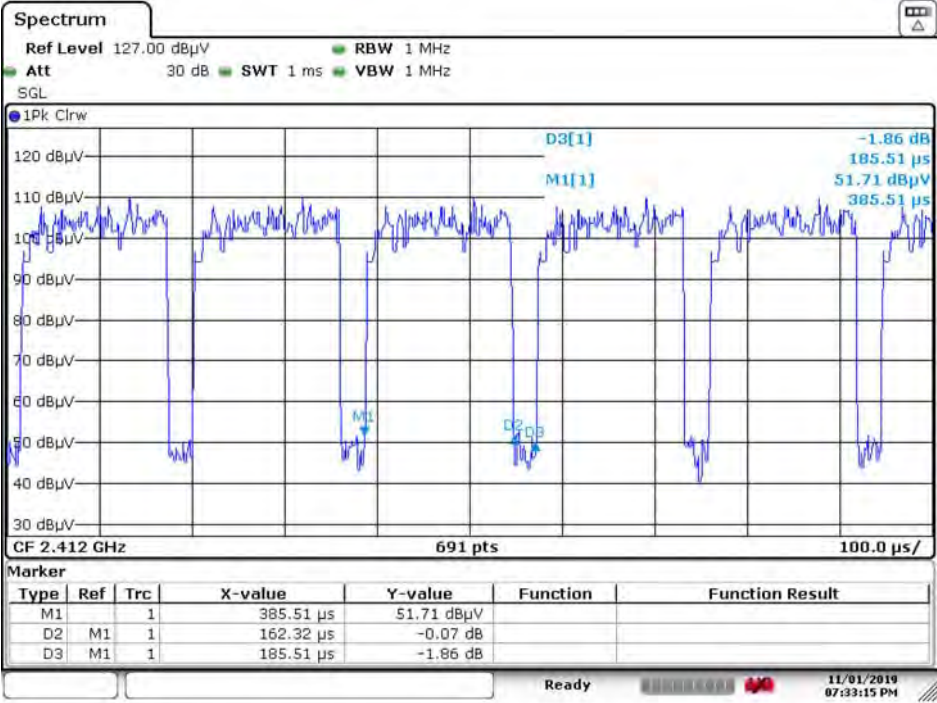
2.4GHz band	Ton (ms)	Ton + Toff (ms)	Duty Cycle (%)	Duty Factor (dB)
802.11n20	0.2347	0.2521	93.10	0.31
802.11ac20	0.1623	0.1855	87.49	0.58
802.11ax20	0.1623	0.1884	86.15	0.65

802.11n20 (Beamforming)



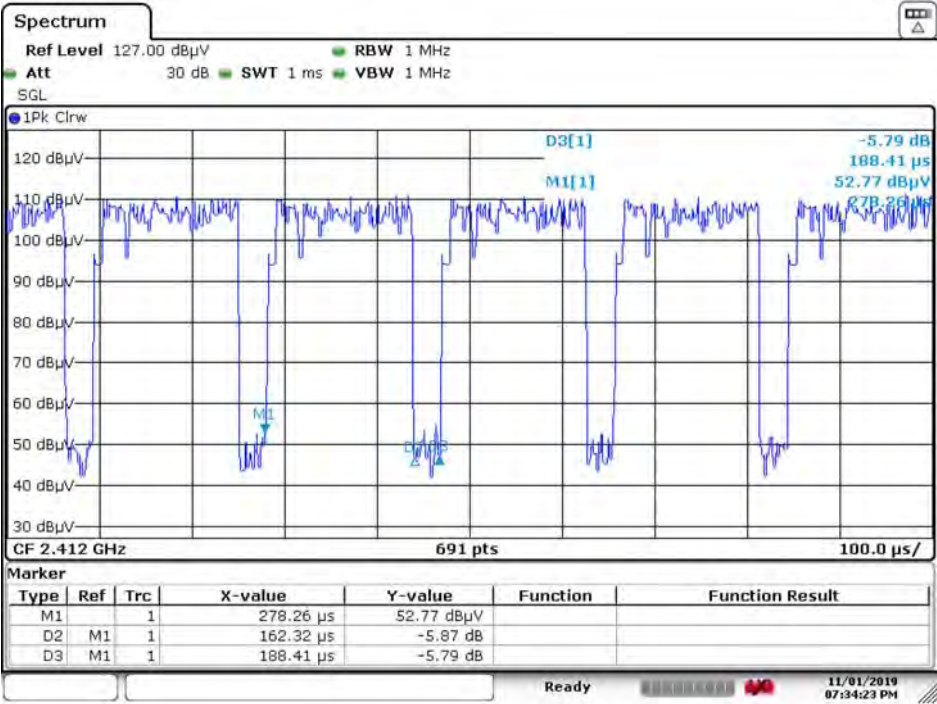
Date: 1.NOV.2019 19:31:37

802.11ac20 (Beamforming)



Date: 1.NOV.2019 19:33:16

802.11ax20 (Beamforming)



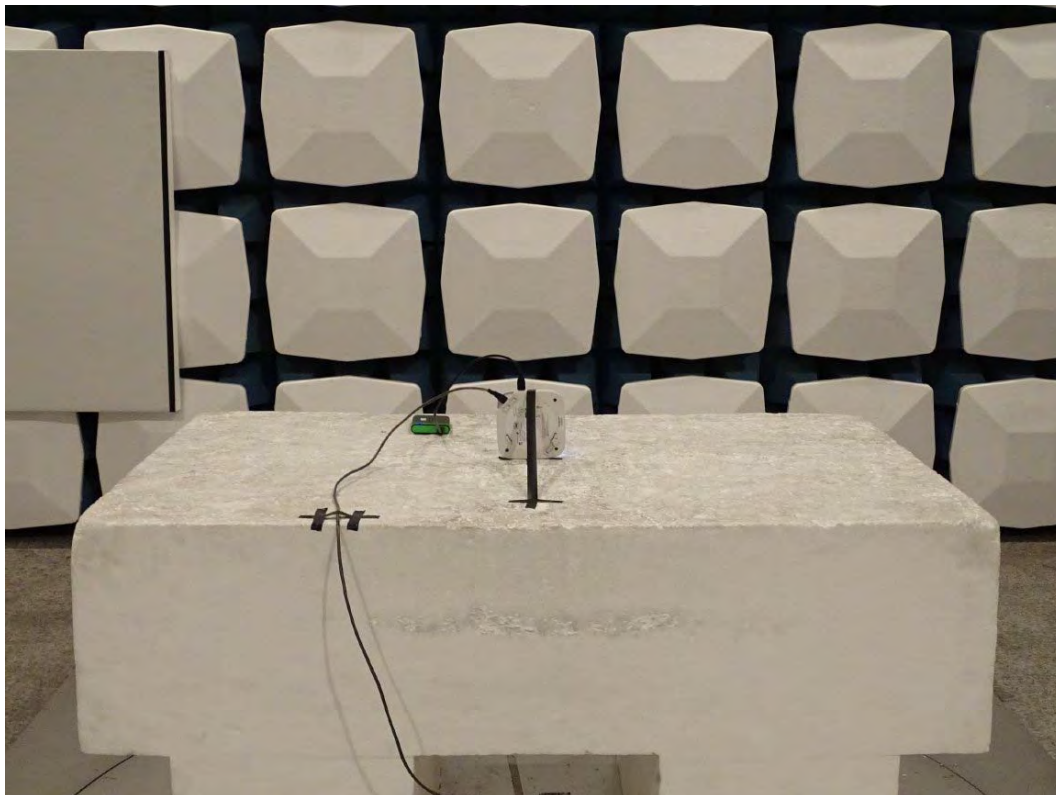
Date: 1.NOV.2019 19:34:24

附件 1: 待測物測試擺設相片

測試相片：輻射測試 正面相片-PIFA



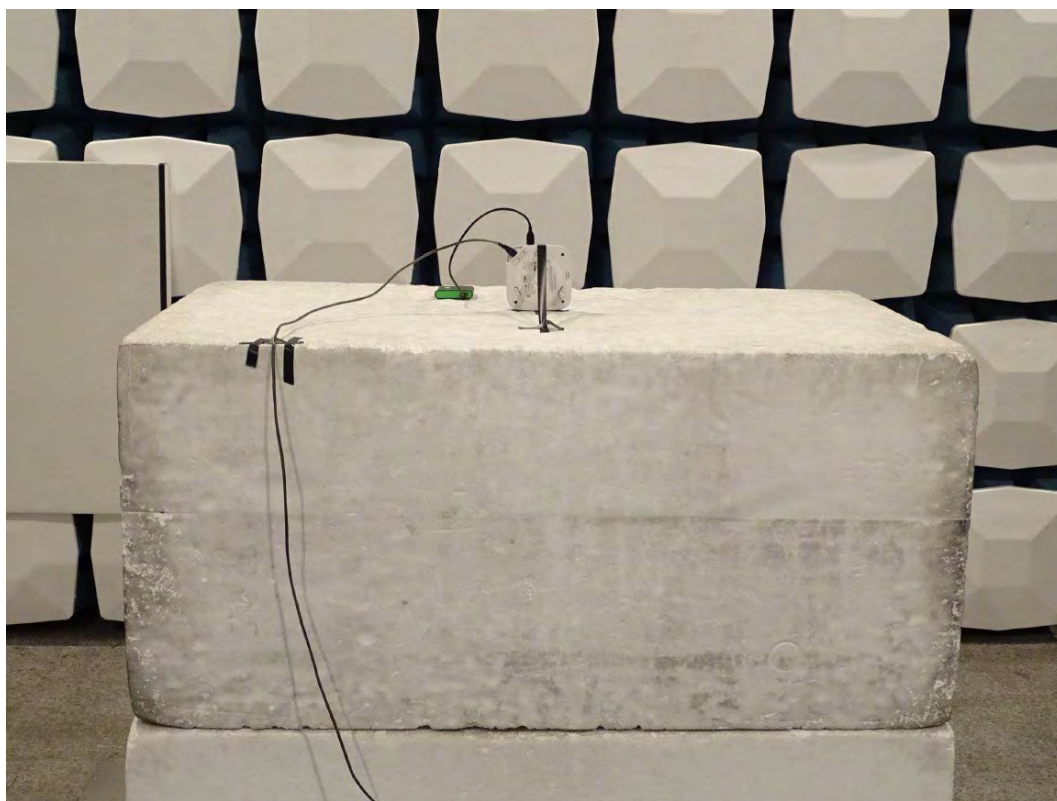
測試相片：輻射測試 背面相片-PIFA



測試相片：輻射測試 正面相片(Horn)-PIFA



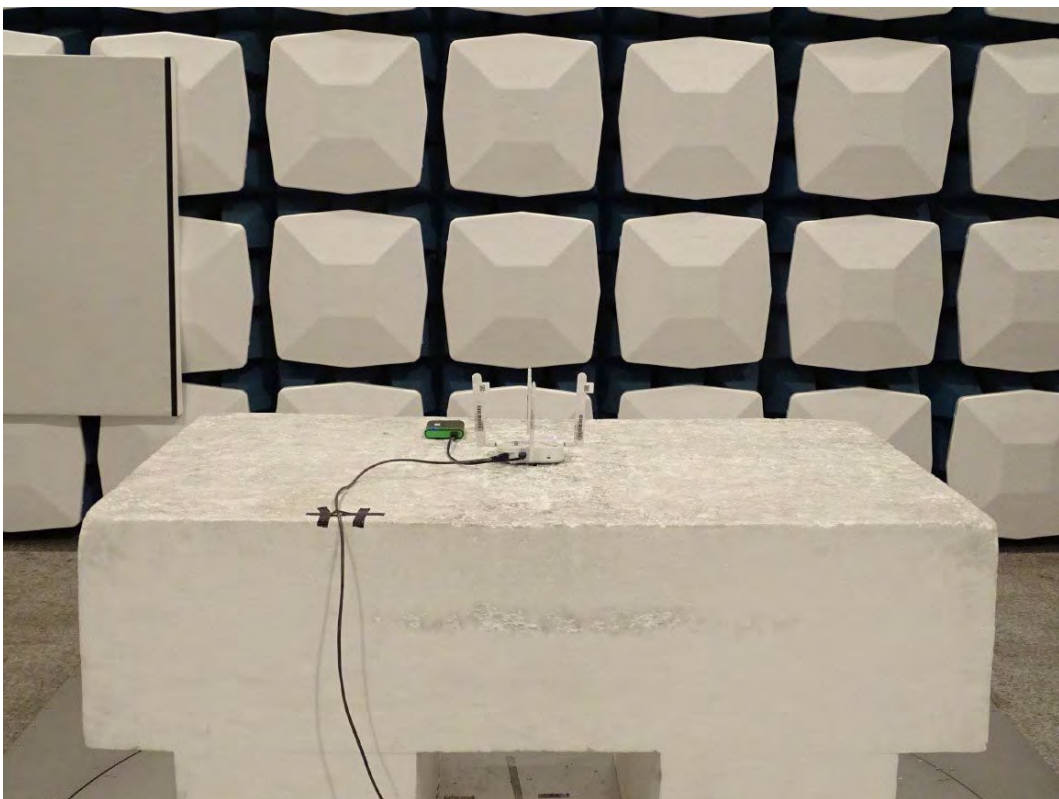
測試相片：輻射測試 背面相片(Horn)-PIFA



測試相片：輻射測試 正面相片-Dipole



測試相片：輻射測試 背面相片-Dipole



測試相片：輻射測試 正面相片(Horn)-Dipole



測試相片：輻射測試 背面相片(Horn)-Dipole

