

Figure Channel 1: (MIMO-Chain A)

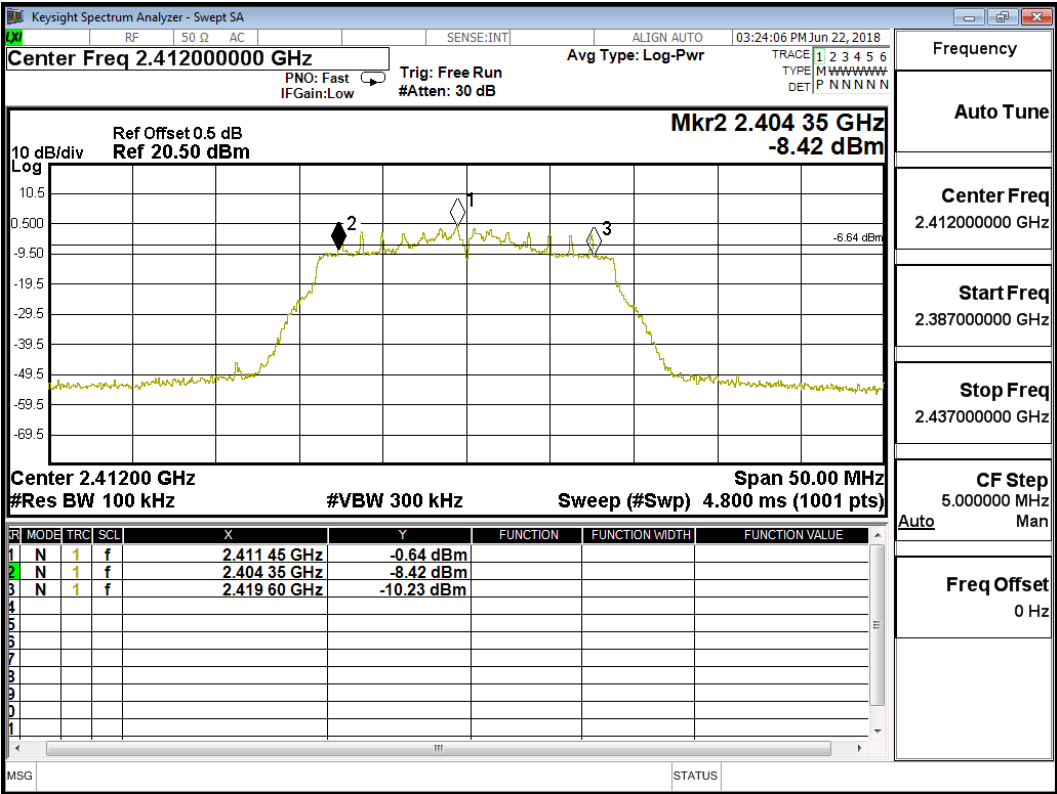


Figure Channel 1: (MIMO-Chain B)

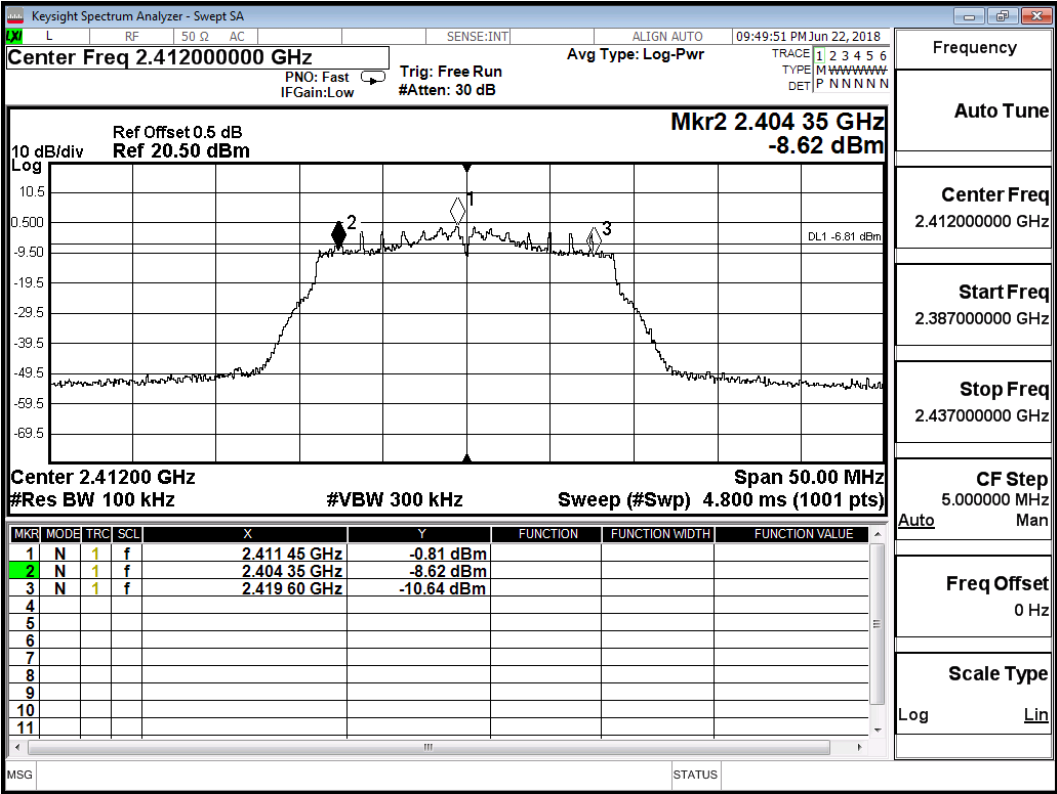


Figure Channel 6: (SISO-Chain A)

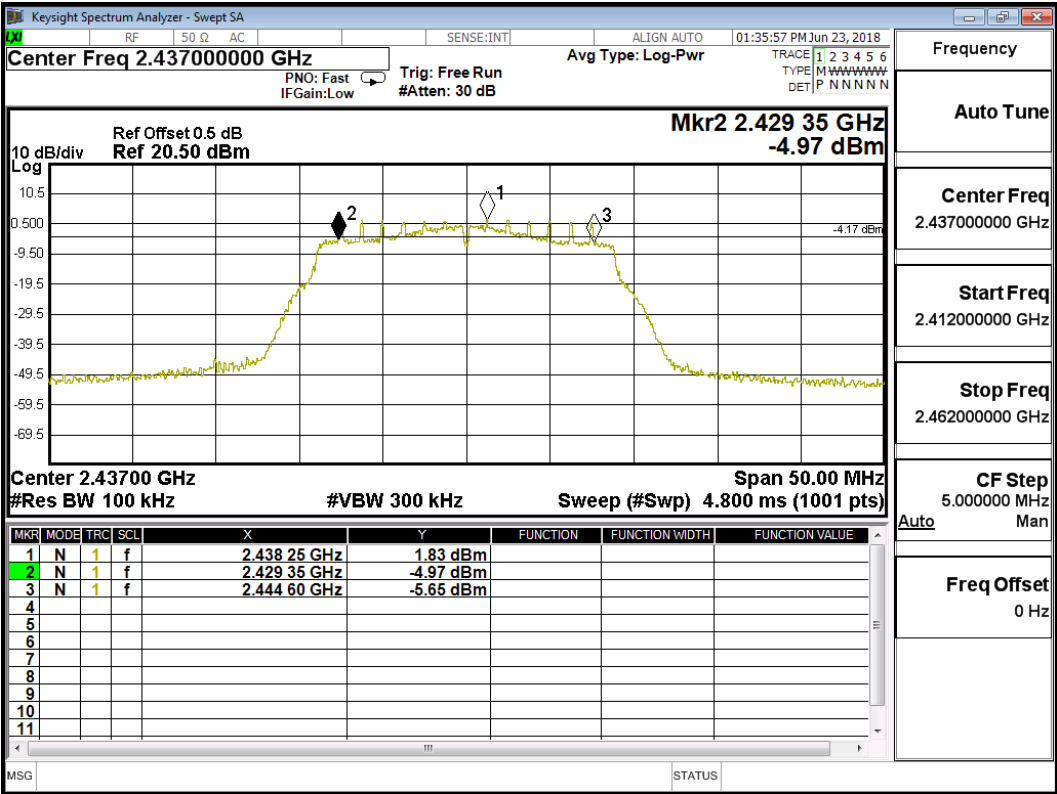


Figure Channel 6: (SISO-Chain B)

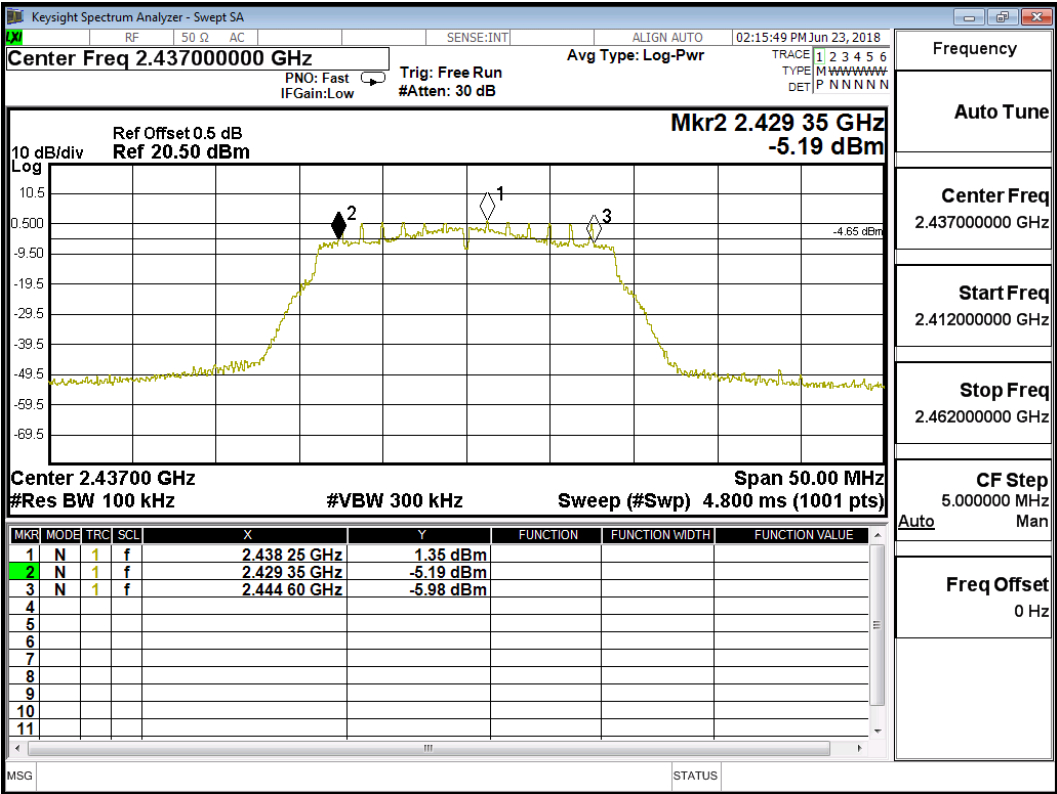


Figure Channel 6: (MIMO-Chain A)

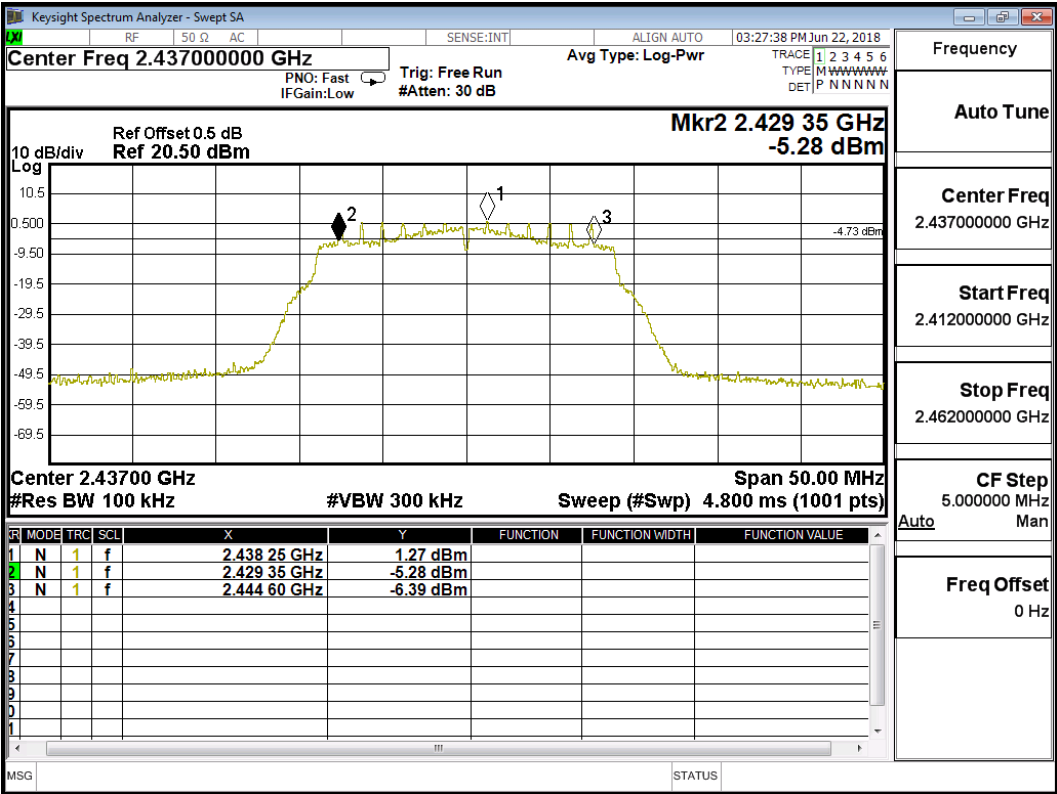


Figure Channel 6: (MIMO-Chain B)

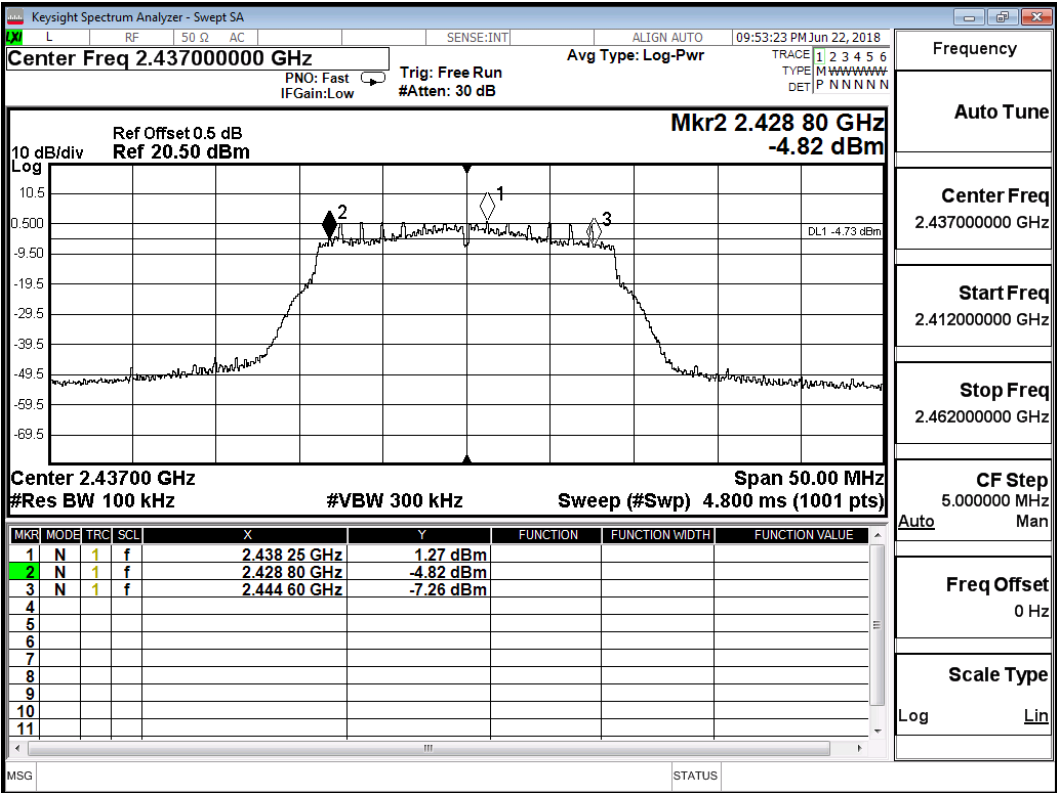


Figure Channel 11: (SISO-Chain A)

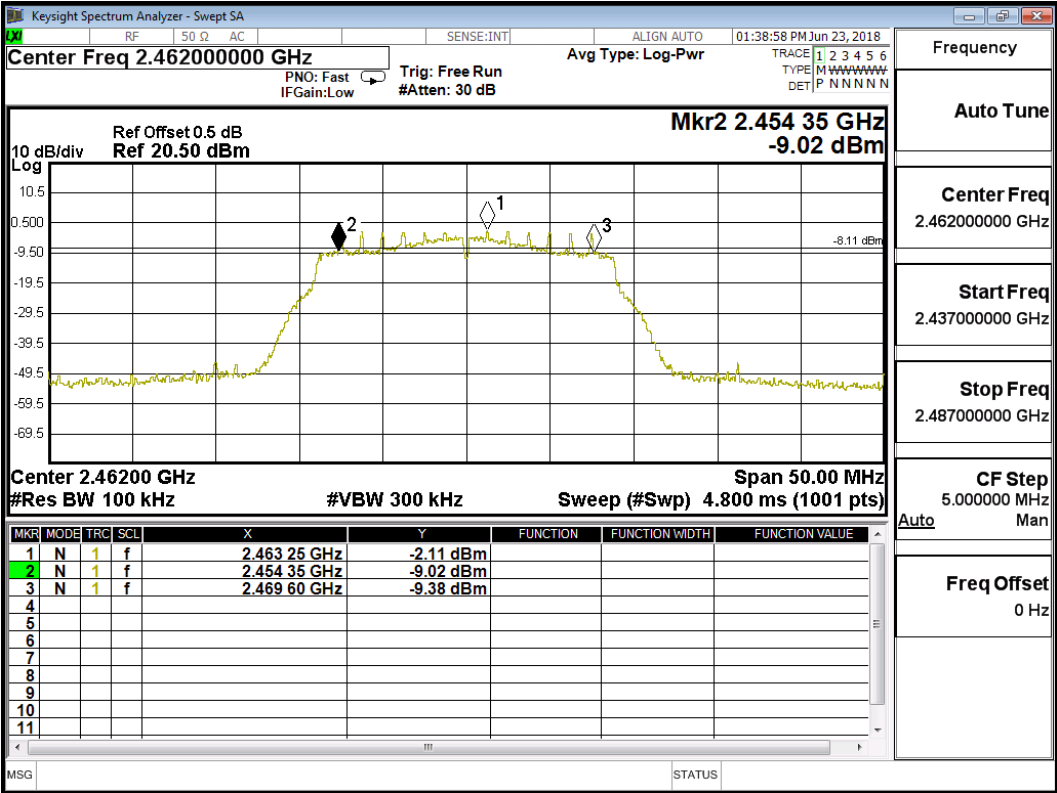


Figure Channel 11: (SISO-Chain B)

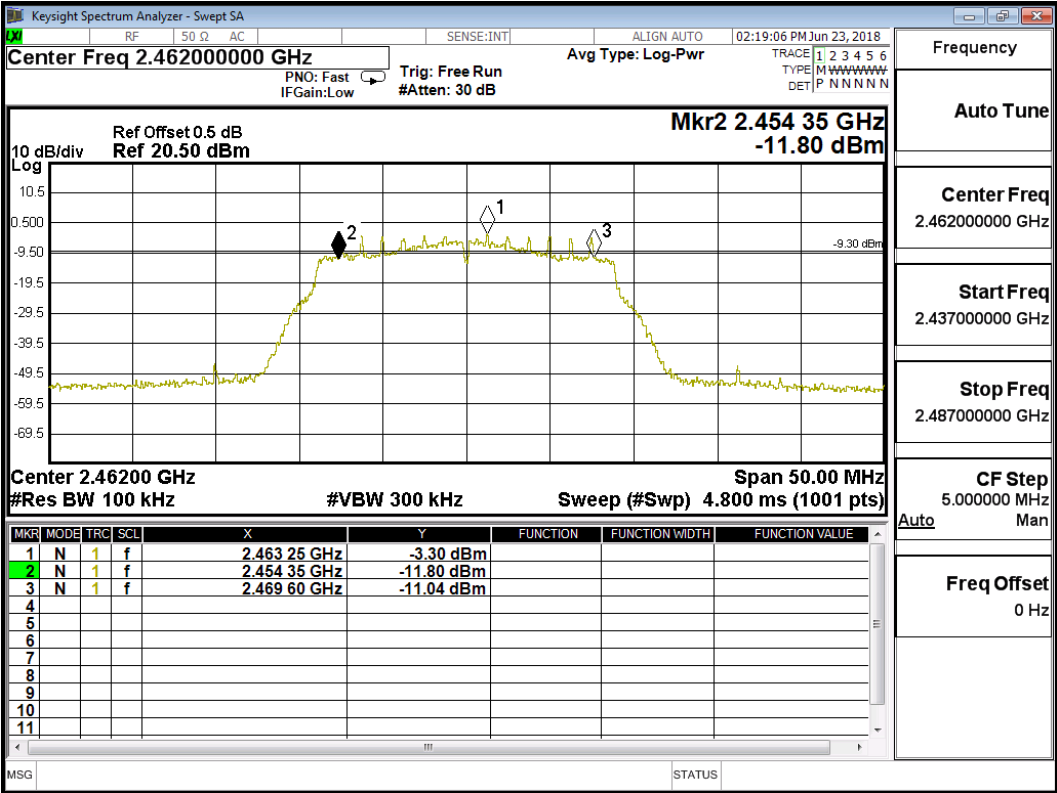


Figure Channel 11: (MIMO-Chain A)

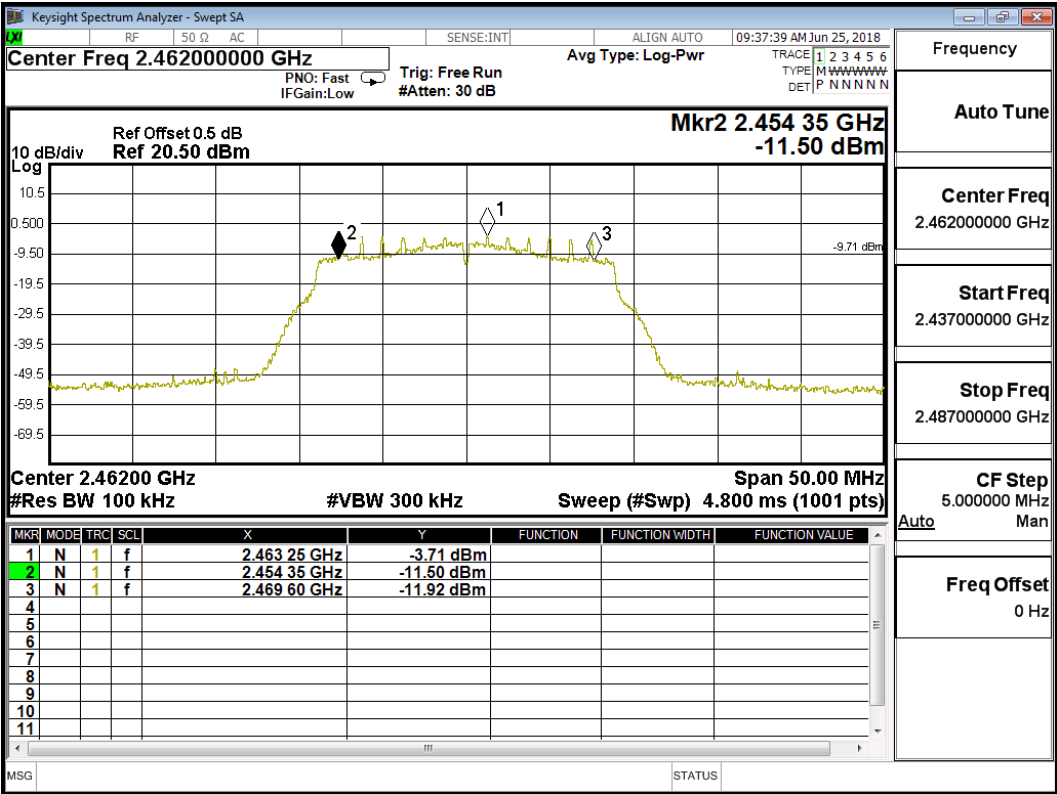
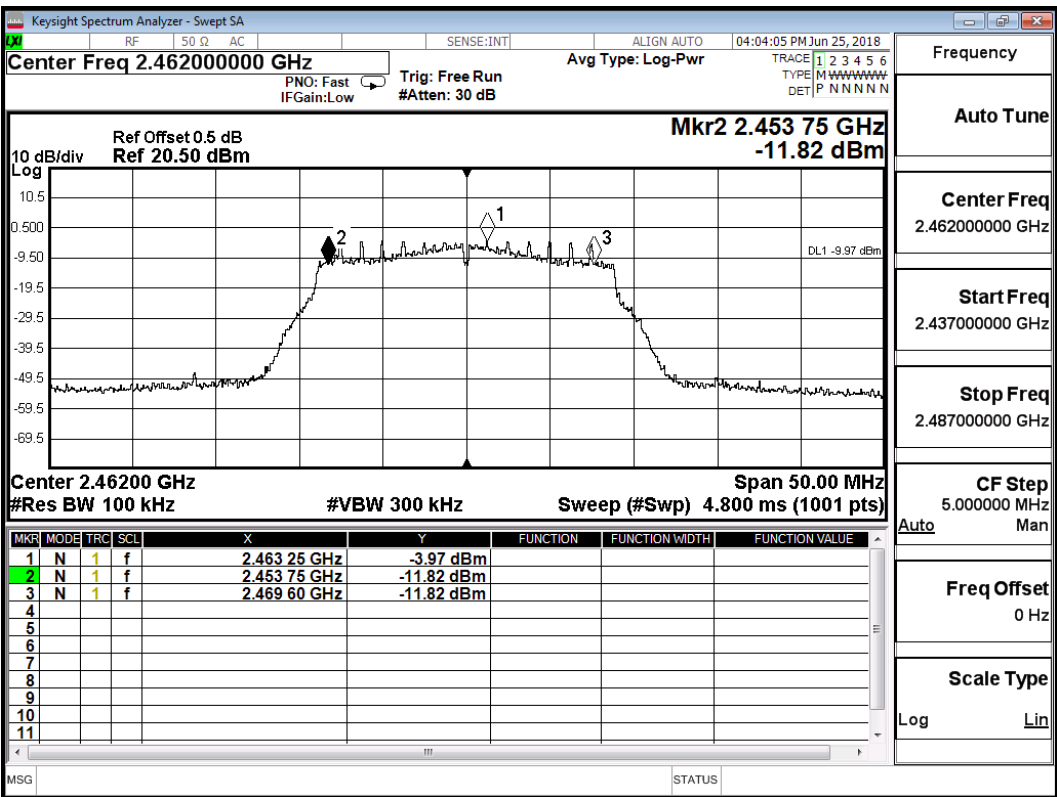


Figure Channel 11: (MIMO-Chain B)



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

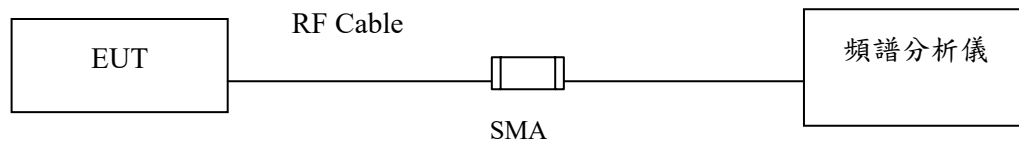
依據國家通訊傳播委員會低功率射頻電機技術規範之第 3.10.1.6 節，在使用頻率範圍之任意 3 千赫(kHz)頻寬內，由發射機傳導至天線之峰值發射電功率密度在任意期間內，皆不得大於 8dBm，且應依 3.10.1.3 之方式降低功率頻譜密度限制值。

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：ATOM AP30

測試頻道：--

6 dB 頻寬：100kHz

量測天線：--

檢測器：峰值

測試日期：107年06月23日

測試項目：功率密度

測試模式：Mode 1: 發射器 802.11b

視頻頻寬：300kHz

測試距離：Conducted

環境溫度：20 °C

環境濕度：50 %

SISO-Chain A

Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
01	2412.000	7.280	$\leq 8\text{dBm}$	Pass
06	2437.000	6.380	$\leq 8\text{dBm}$	Pass
11	2462.000	7.900	$\leq 8\text{dBm}$	Pass

SISO-Chain B

Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
01	2412.000	7.110	$\leq 8\text{dBm}$	Pass
06	2437.000	7.390	$\leq 8\text{dBm}$	Pass
11	2462.000	7.330	$\leq 8\text{dBm}$	Pass

MIMO

Channel No.	Frequency (MHz)	Chain	PPSD/MHz (dBm)	Total PPSP/MHz (dBm)	Limit (dBm)	Result
01	2412.000	A	4.620	7.630	$\leq 8\text{dBm}$	Pass
		B	4.870	7.880	$\leq 8\text{dBm}$	Pass
06	2437.000	A	4.160	7.170	$\leq 8\text{dBm}$	Pass
		B	3.890	6.900	$\leq 8\text{dBm}$	Pass
11	2462.000	A	4.260	7.270	$\leq 8\text{dBm}$	Pass
		B	4.340	7.350	$\leq 8\text{dBm}$	Pass

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

Figure Channel 1: (SISO-Chain A)

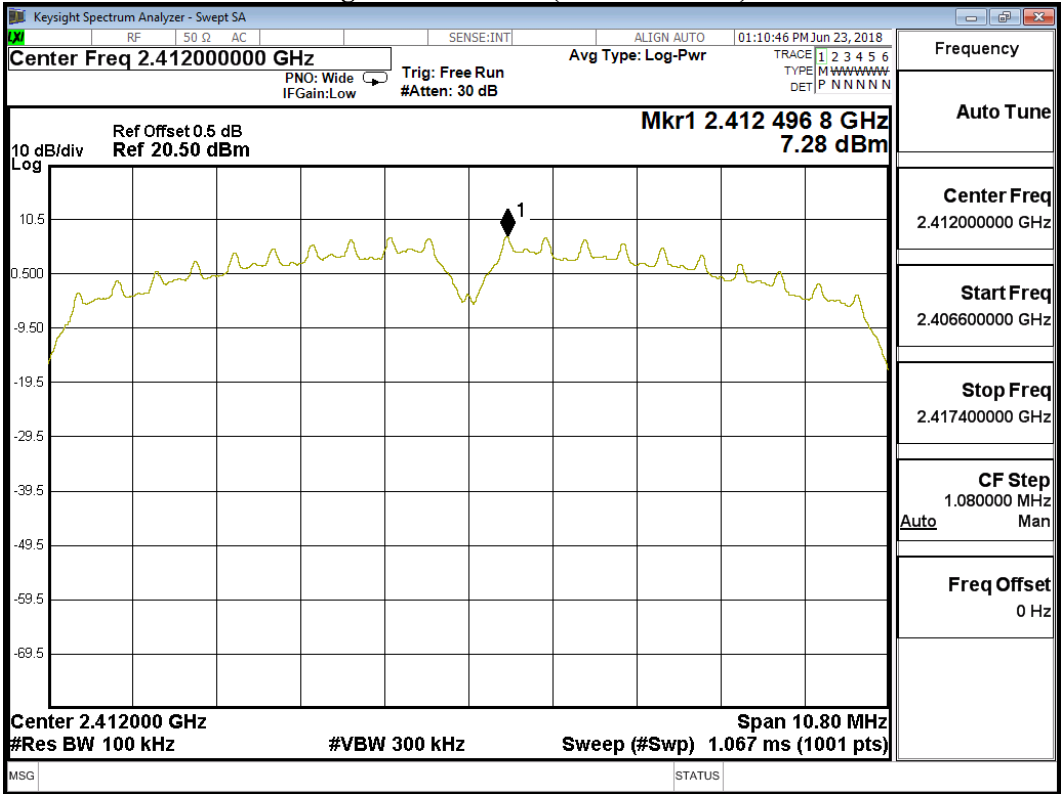


Figure Channel 1: (SISO-Chain B)

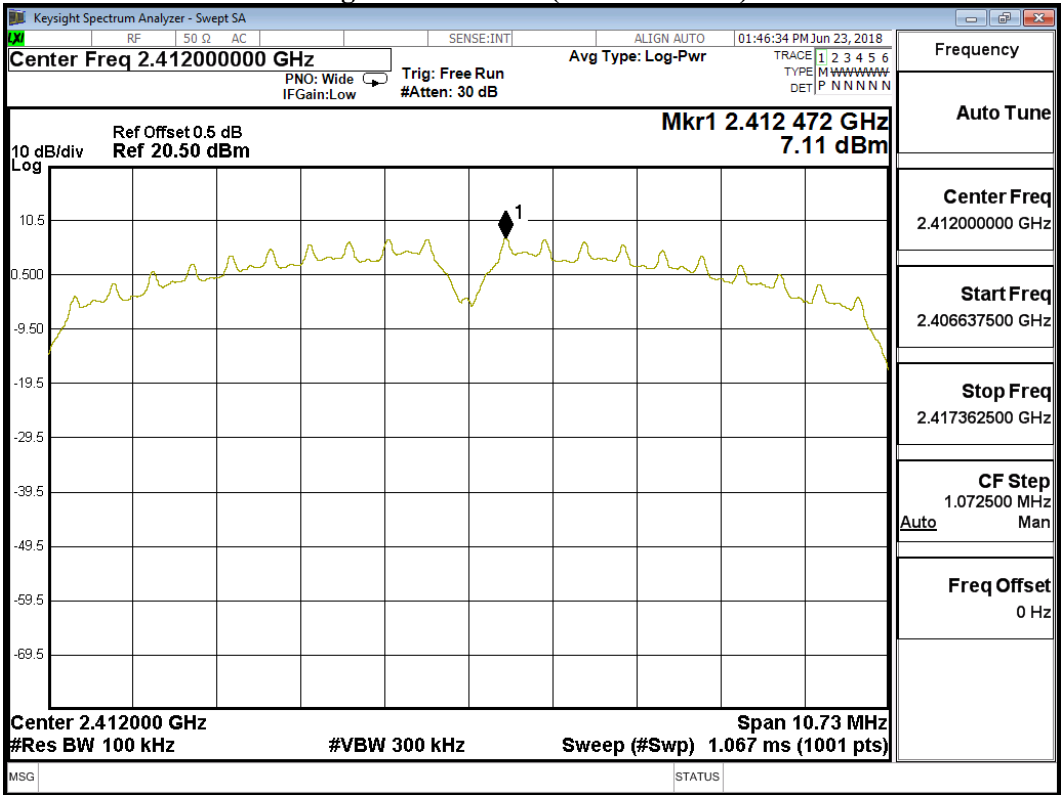


Figure Channel 1: (MIMO-Chain A)

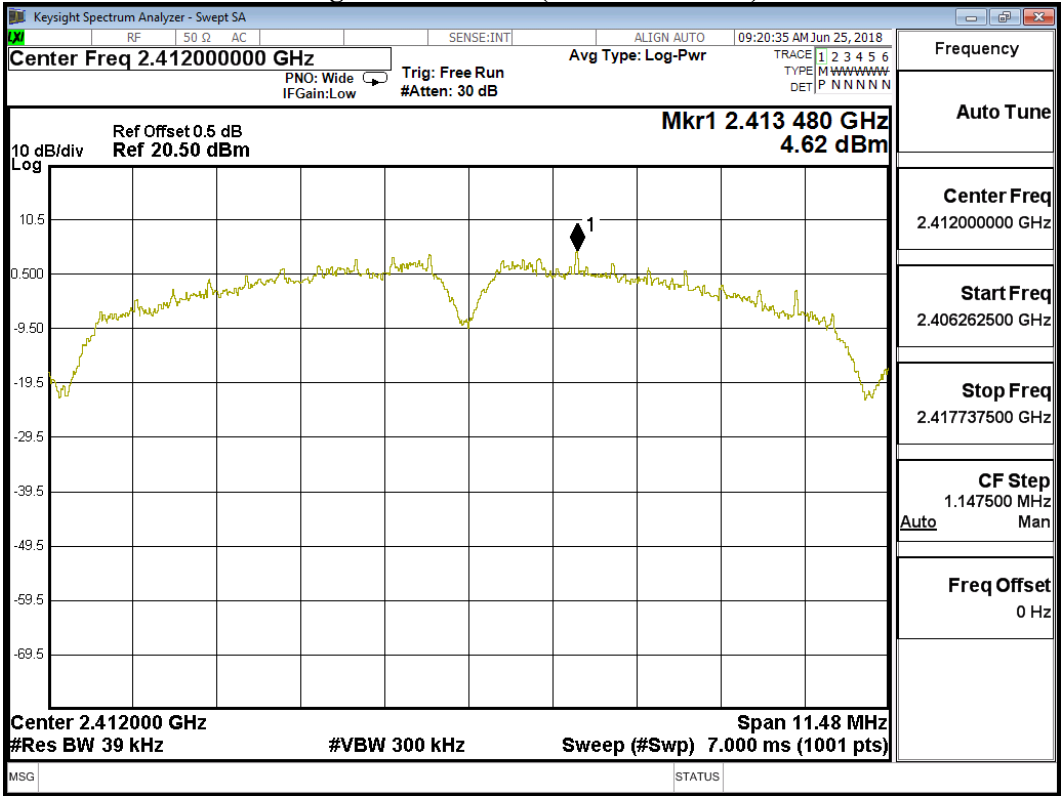


Figure Channel 1: (MIMO-Chain B)

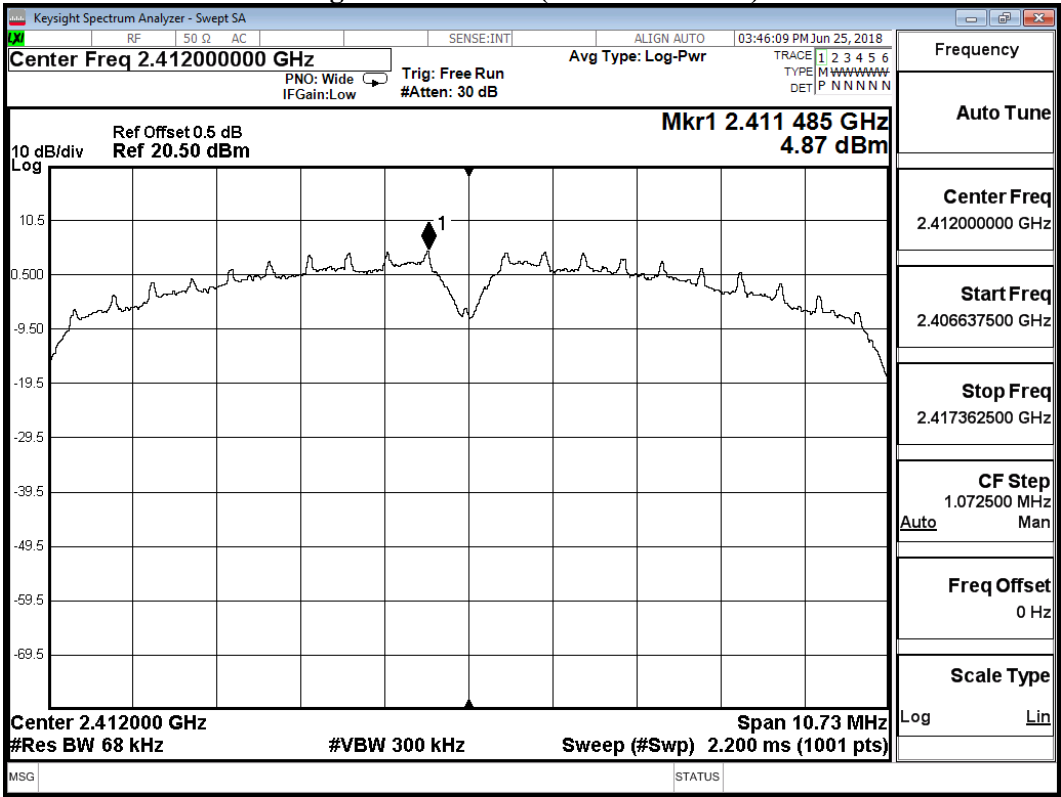


Figure Channel 6: (SISO-Chain A)

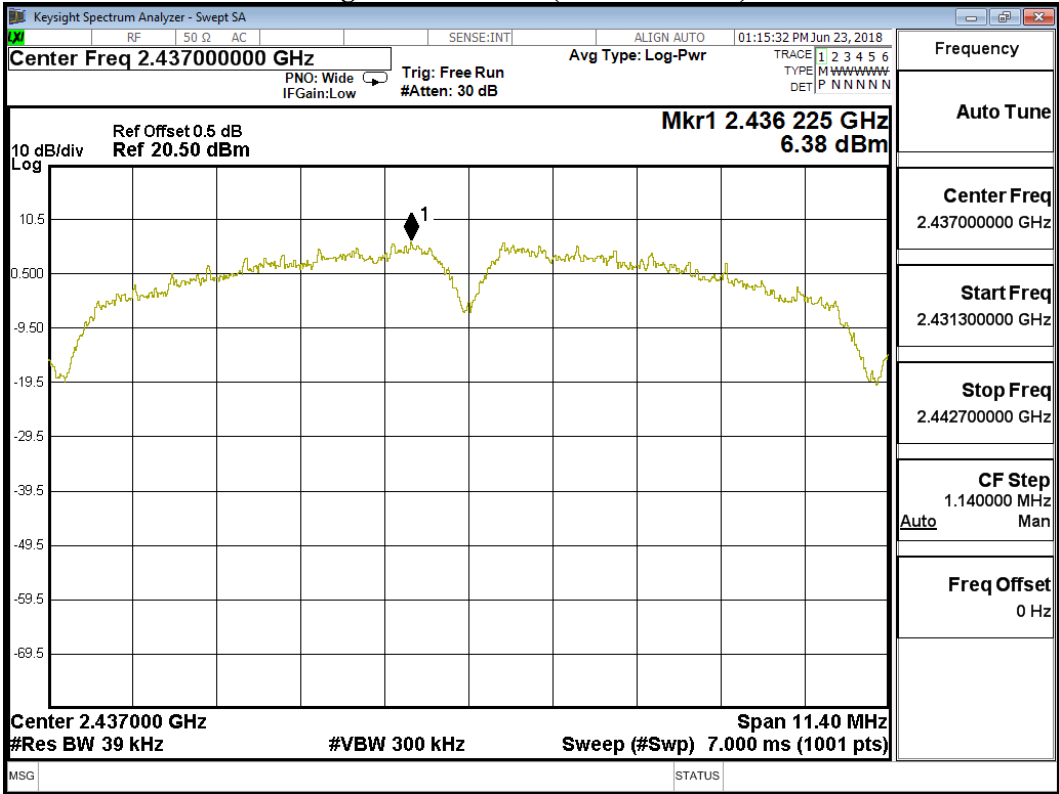


Figure Channel 6: (SISO-Chain B)

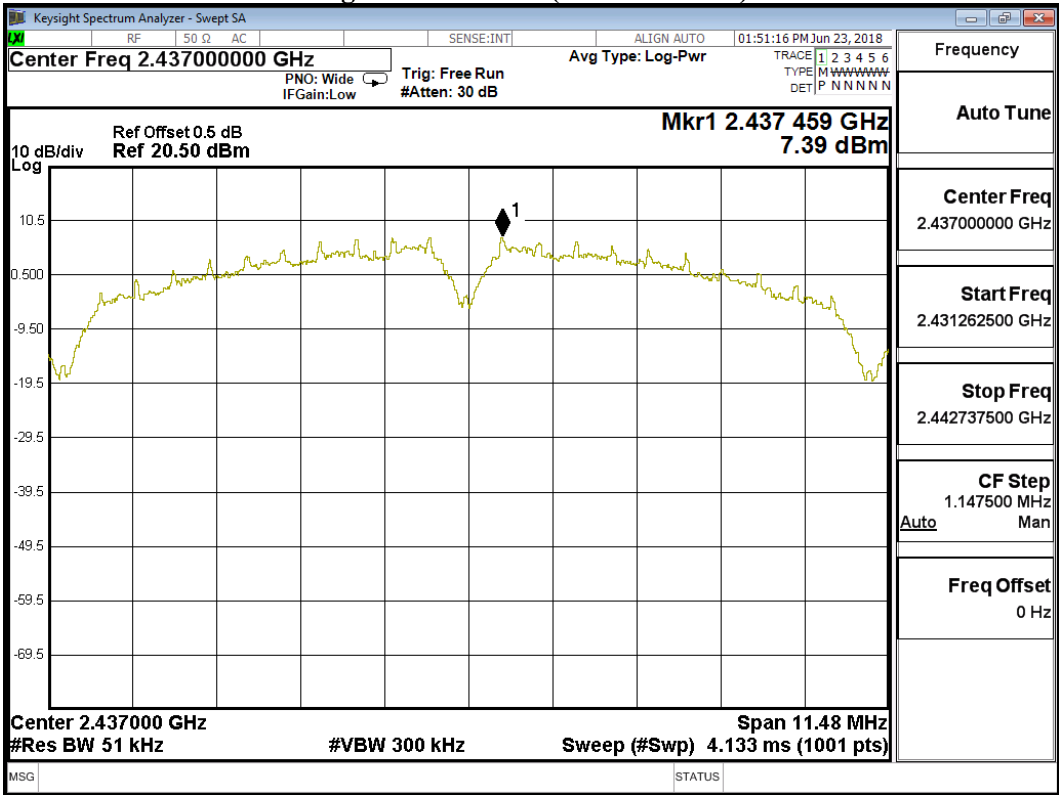


Figure Channel 6: (MIMO-Chain A)

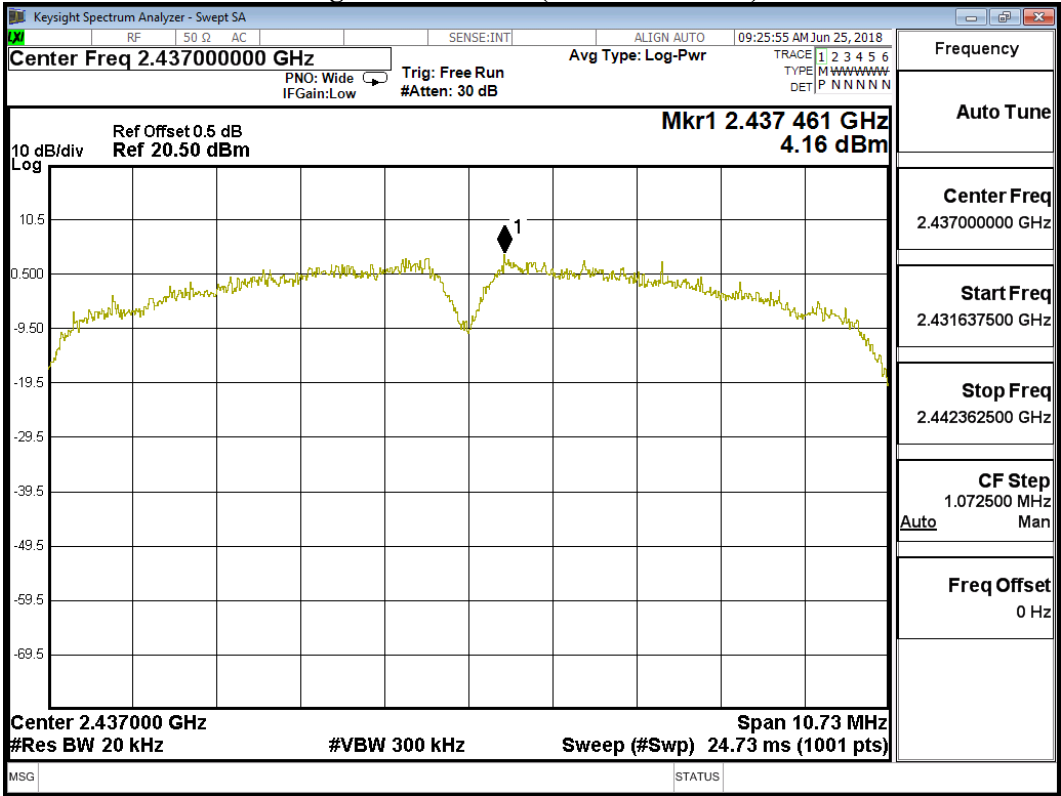


Figure Channel 6: (MIMO-Chain B)

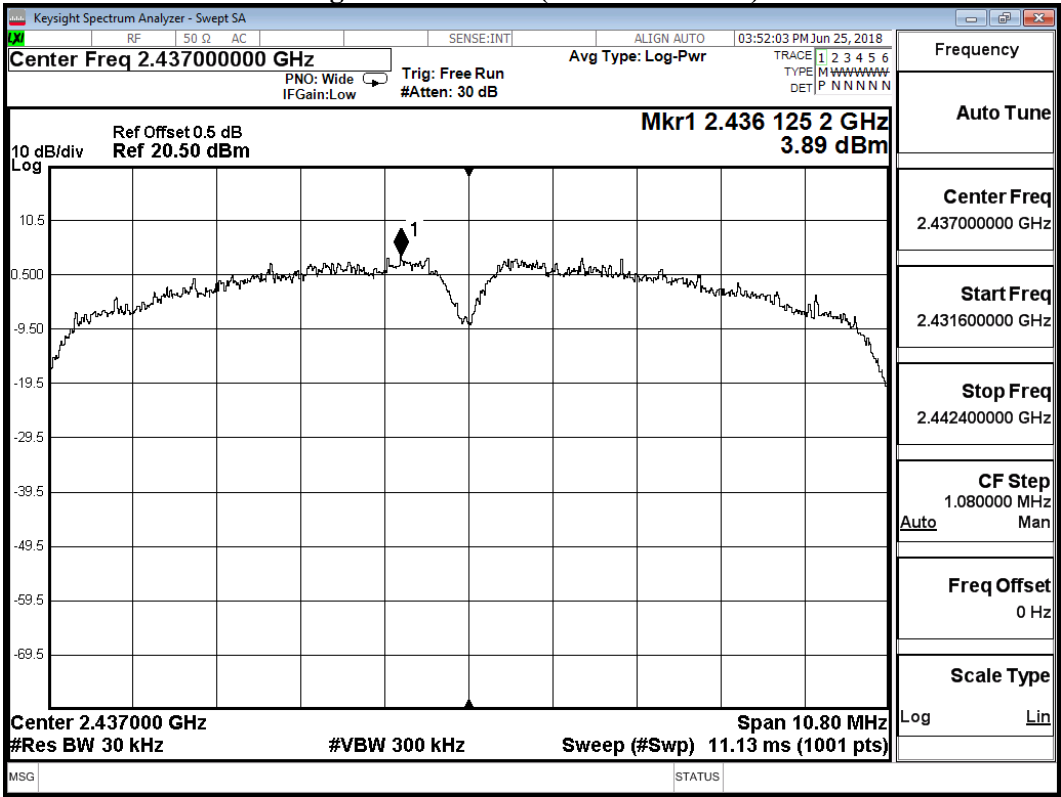


Figure Channel 11: (SISO-Chain A)

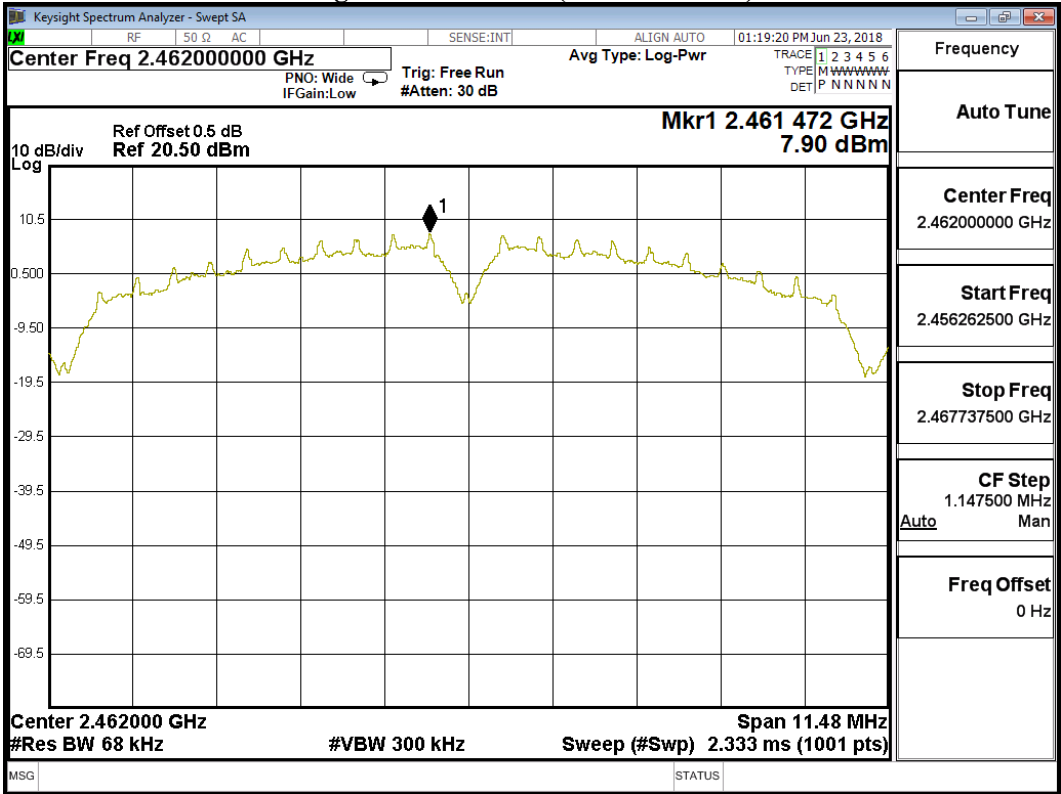


Figure Channel 11: (SISO-Chain B)

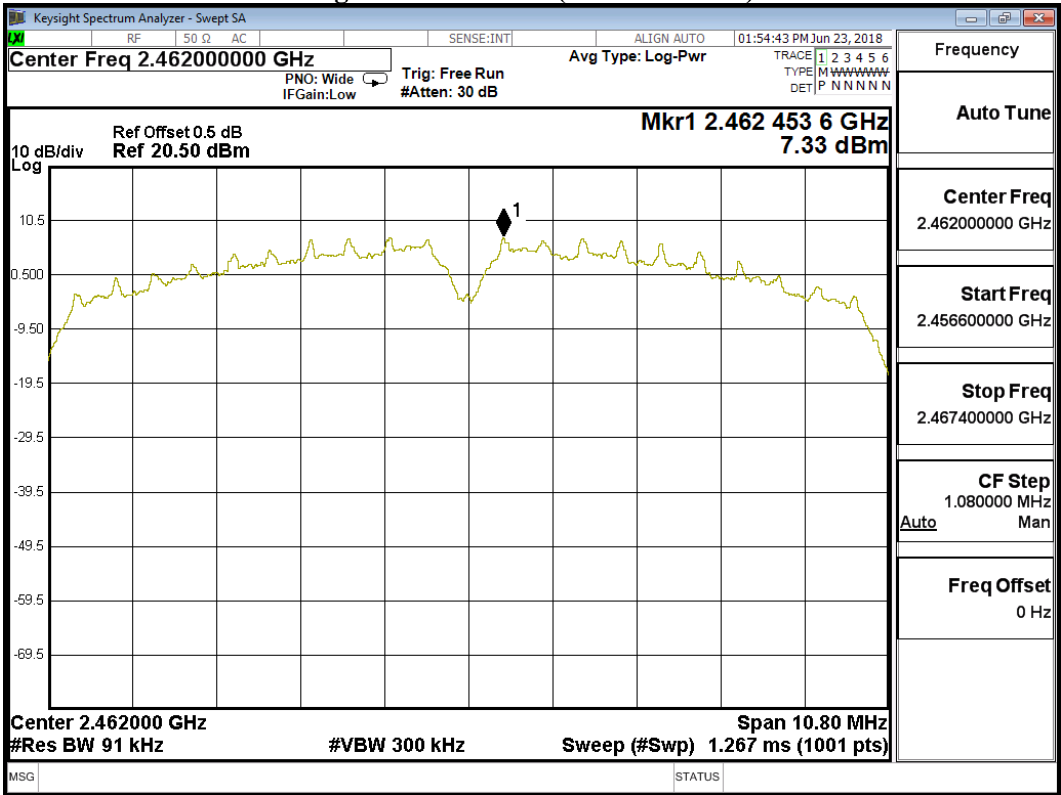


Figure Channel 11: (MIMO-Chain A)

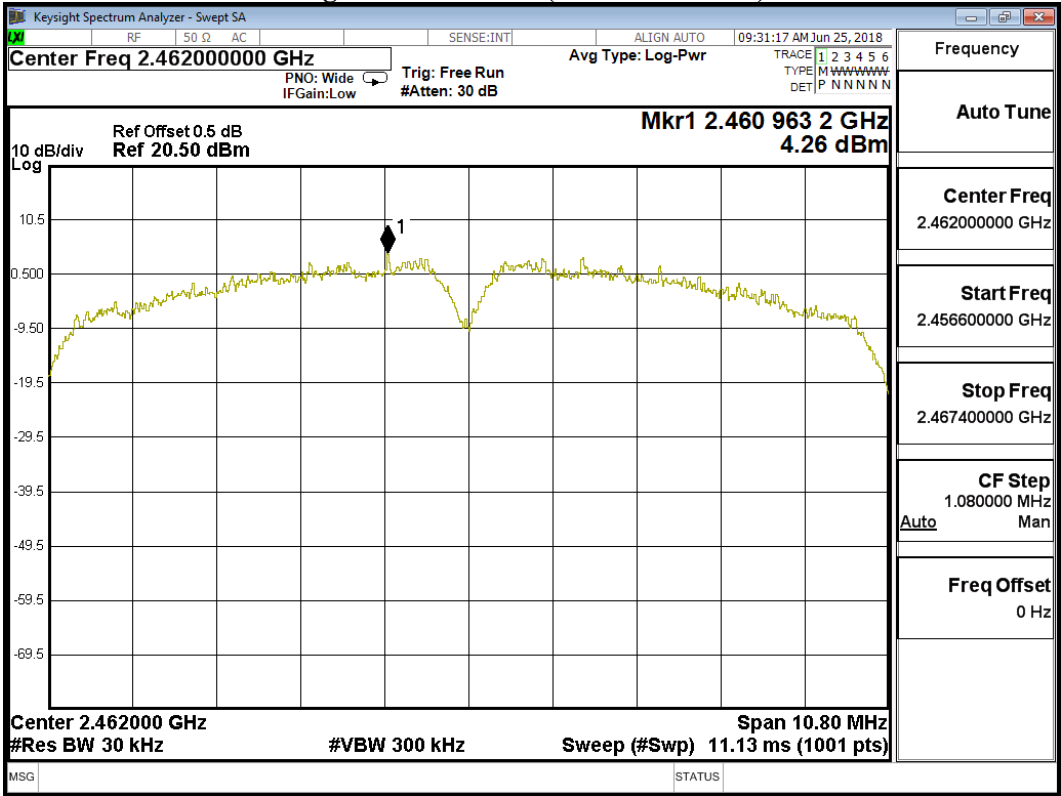
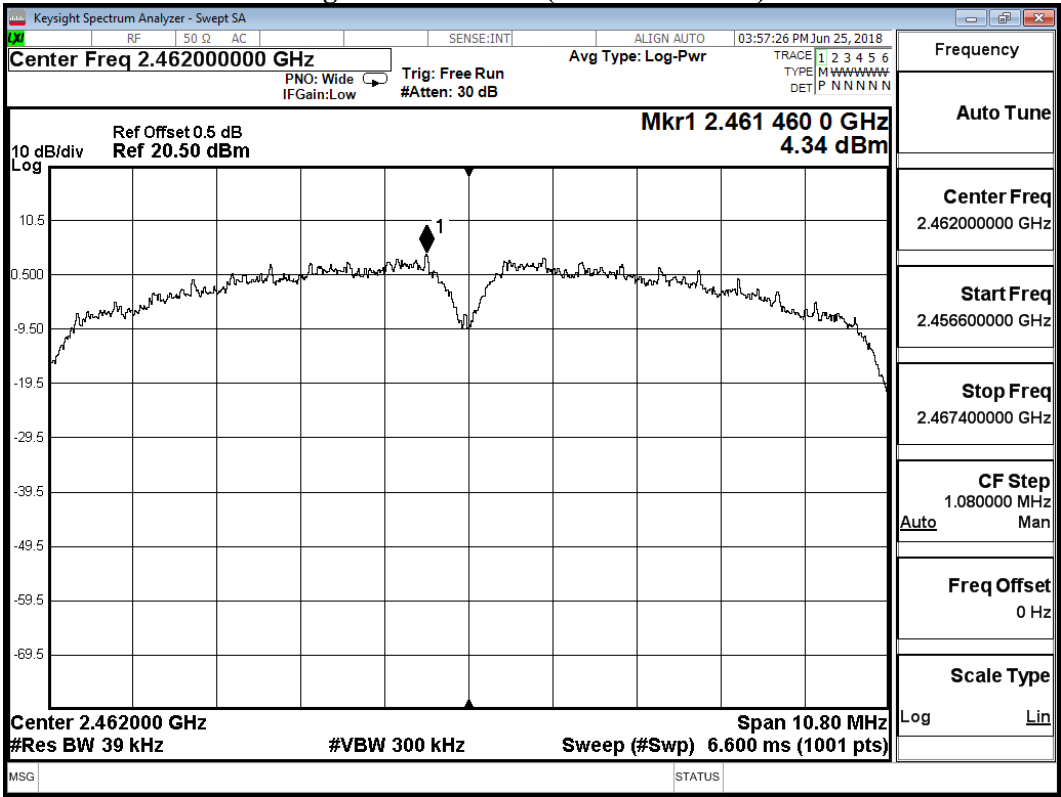


Figure Channel 11: (MIMO-Chain B)



待測物名稱：Wireless Access point

待測物型號：ATOM AP30

測試頻道：--

6 dB 頻寬：100kHz

量測天線：--

檢測器：峰值

測試日期：107年06月23日

測試項目：功率密度

測試模式：Mode 1: 發射器 802.11g

視頻頻寬：300kHz

測試距離：Conducted

環境溫度：20 °C

環境濕度：50 %

SISO-Chain A

Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
01	2412.000	-2.190	$\leq 8\text{dBm}$	Pass
06	2437.000	1.140	$\leq 8\text{dBm}$	Pass
11	2462.000	-1.920	$\leq 8\text{dBm}$	Pass

SISO-Chain B

Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
01	2412.000	-2.500	$\leq 8\text{dBm}$	Pass
06	2437.000	1.300	$\leq 8\text{dBm}$	Pass
11	2462.000	-3.340	$\leq 8\text{dBm}$	Pass

MIMO

Channel No.	Frequency (MHz)	Chain	PPSD/MHz (dBm)	Total PPSD/MHz (dBm)	Limit (dBm)	Result
01	2412.000	A	-0.590	2.420	$\leq 8\text{dBm}$	Pass
		B	-0.280	2.730	$\leq 8\text{dBm}$	Pass
06	2437.000	A	0.380	3.390	$\leq 8\text{dBm}$	Pass
		B	-0.270	2.740	$\leq 8\text{dBm}$	Pass
11	2462.000	A	-3.270	-0.260	$\leq 8\text{dBm}$	Pass
		B	-3.390	-0.380	$\leq 8\text{dBm}$	Pass

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

Figure Channel 1: (SISO-Chain A)

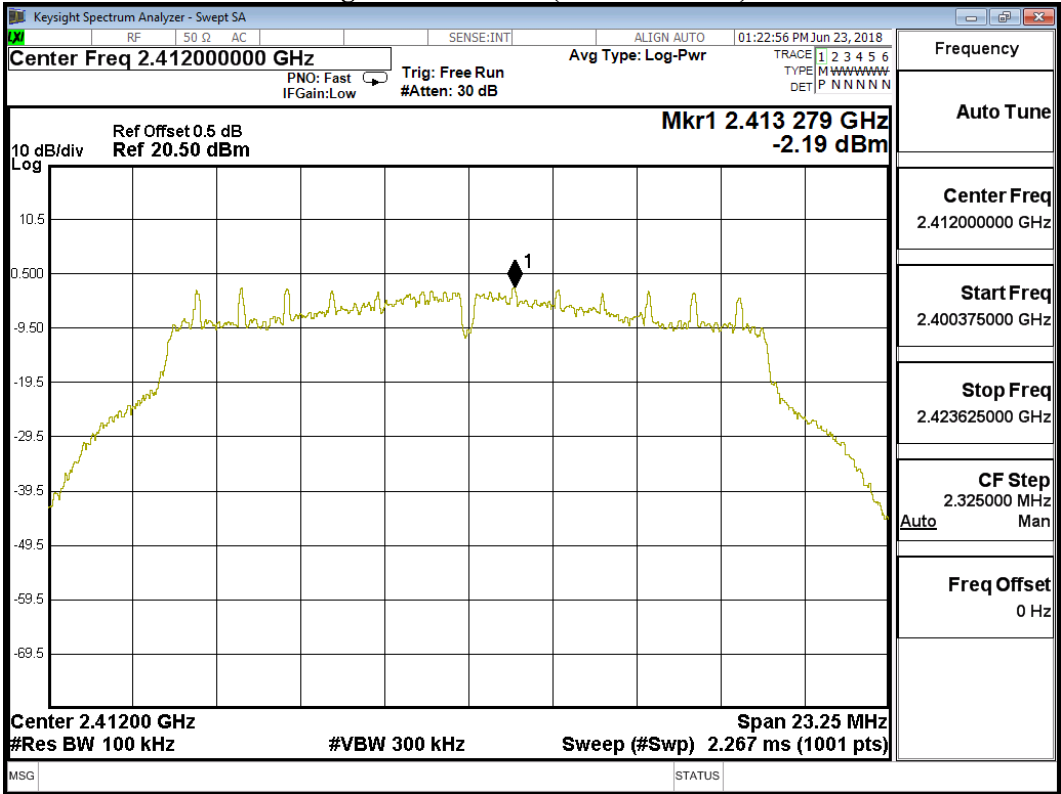


Figure Channel 1: (SISO-Chain B)

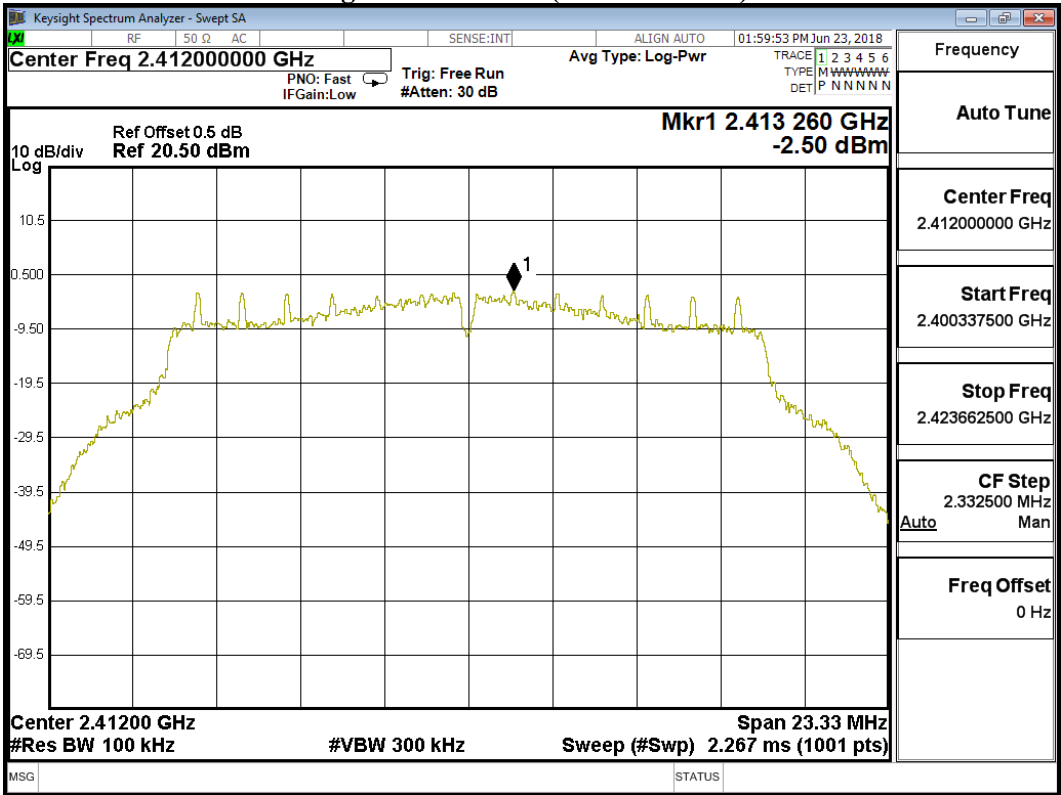


Figure Channel 1: (MIMO-Chain A)

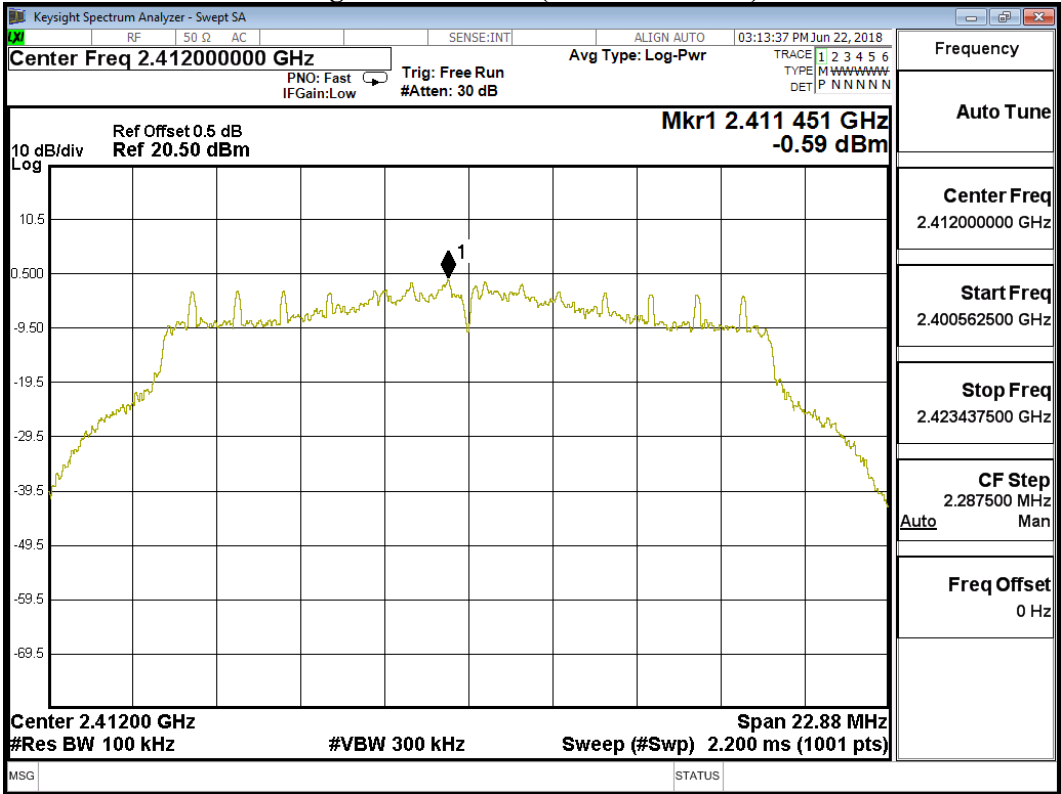


Figure Channel 1: (MIMO-Chain B)

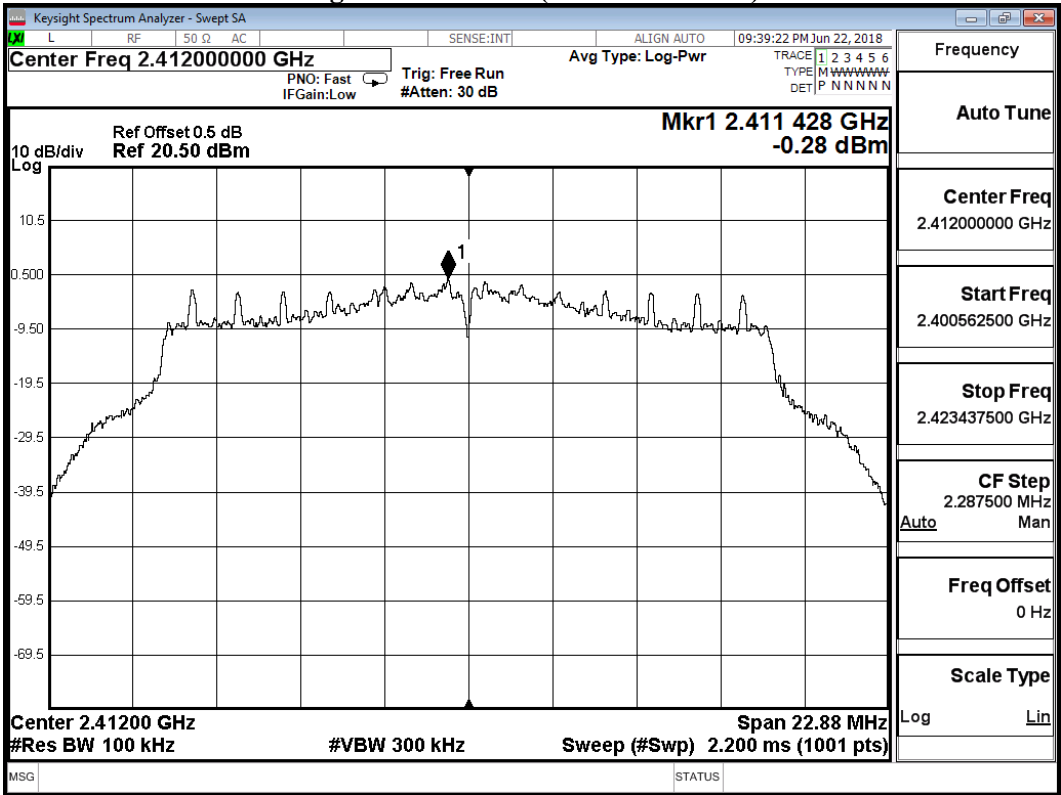


Figure Channel 6: (SISO-Chain A)

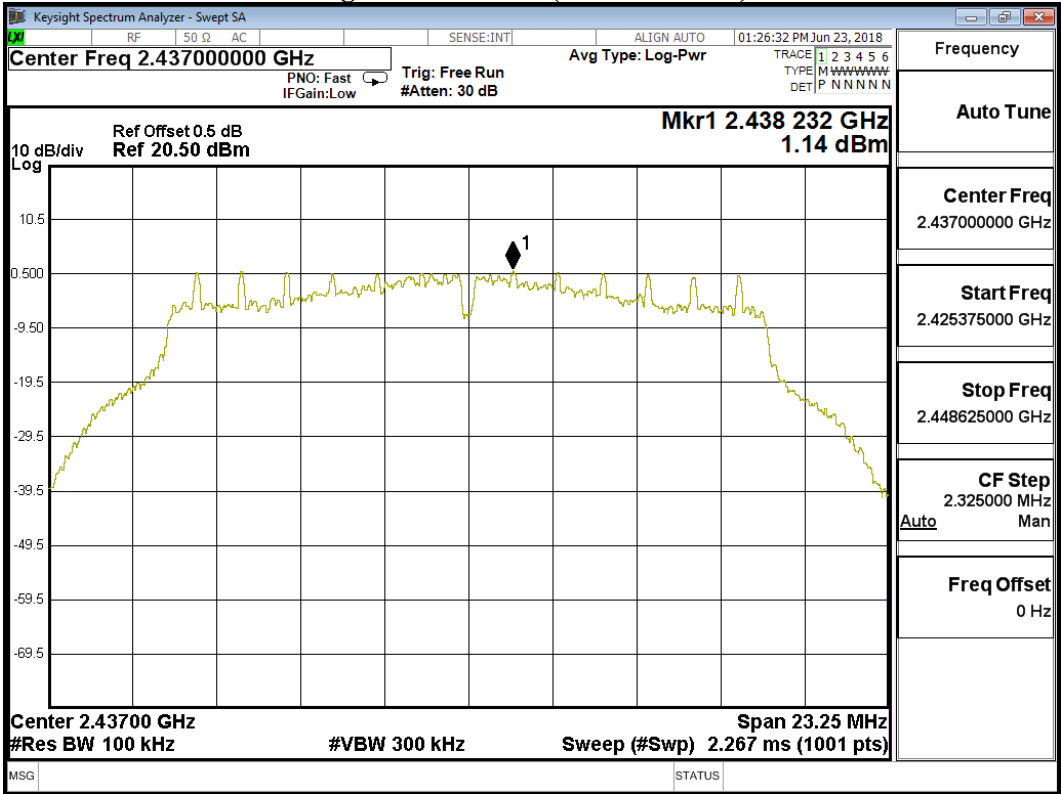


Figure Channel 6: (SISO-Chain B)

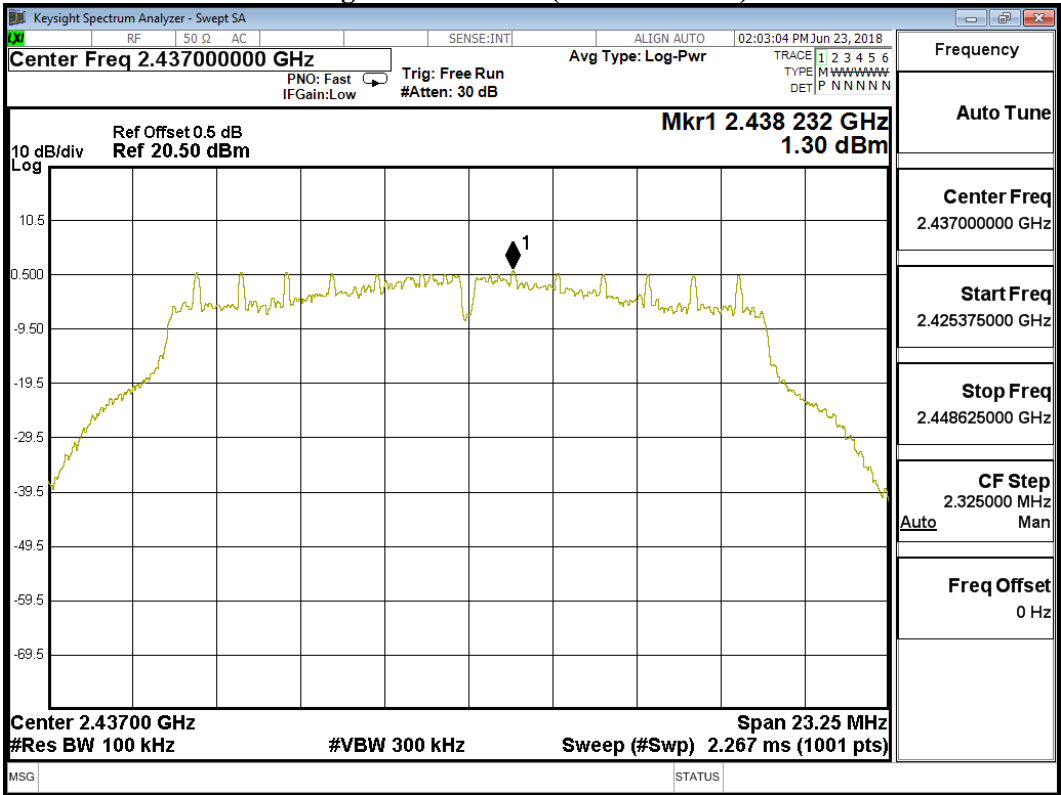


Figure Channel 6: (MIMO-Chain A)

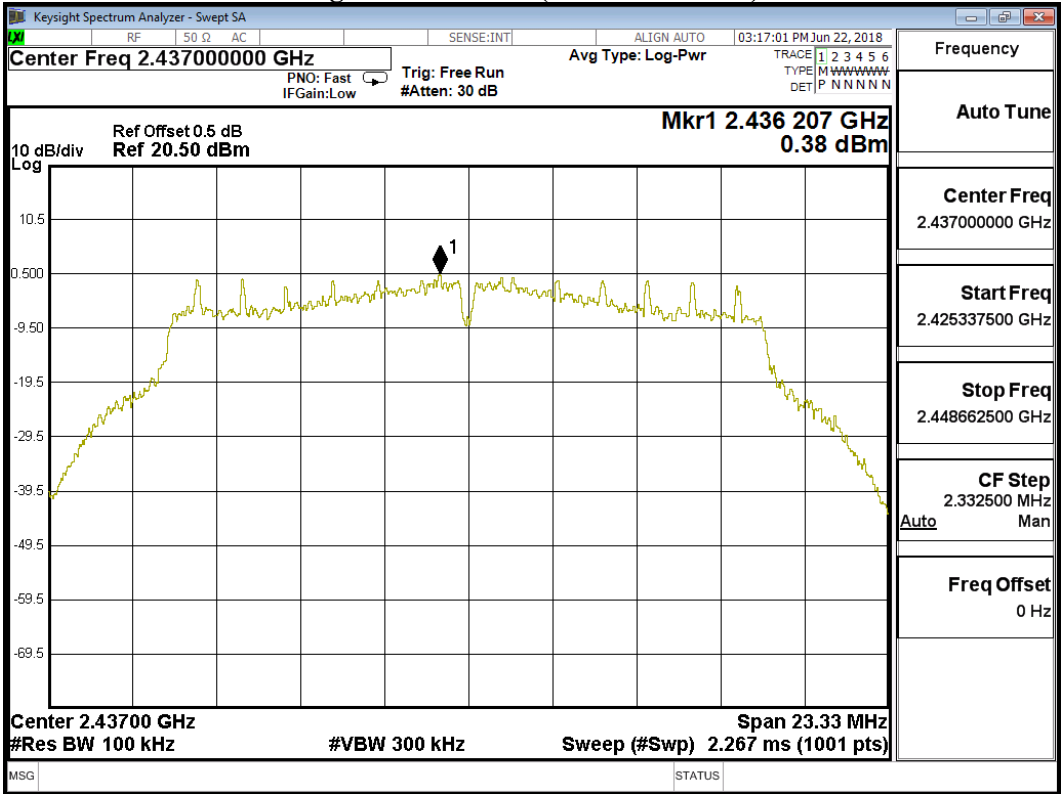


Figure Channel 6: (MIMO-Chain B)

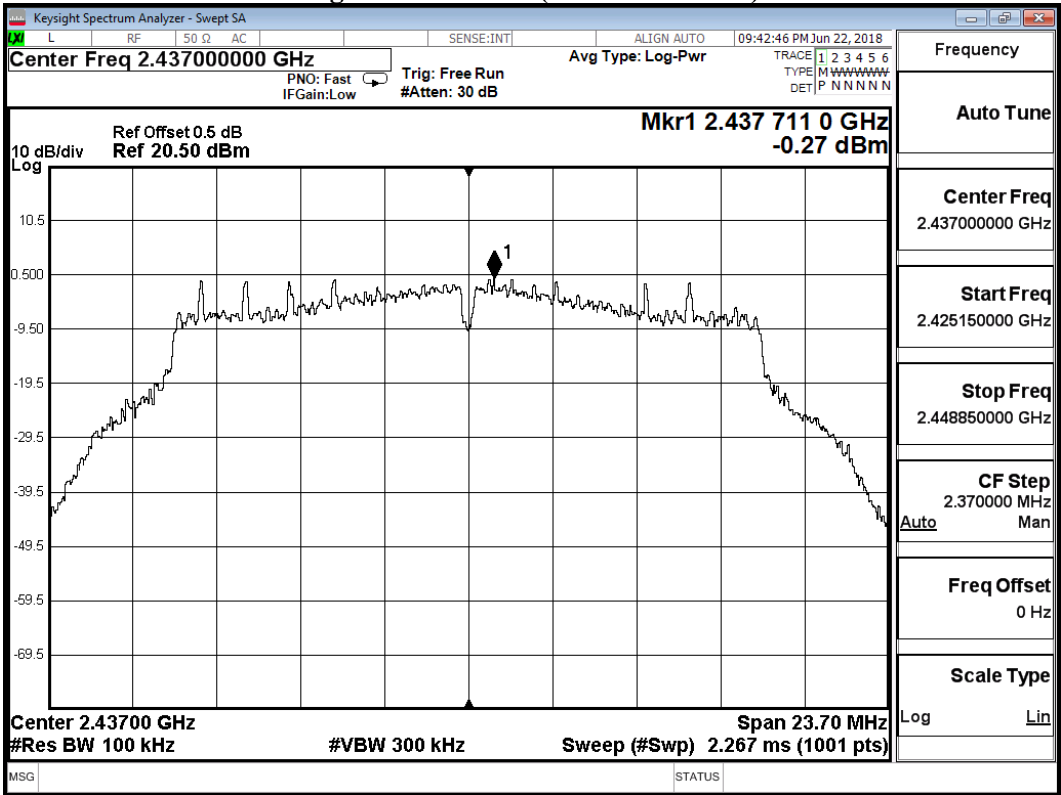


Figure Channel 11: (SISO-Chain A)

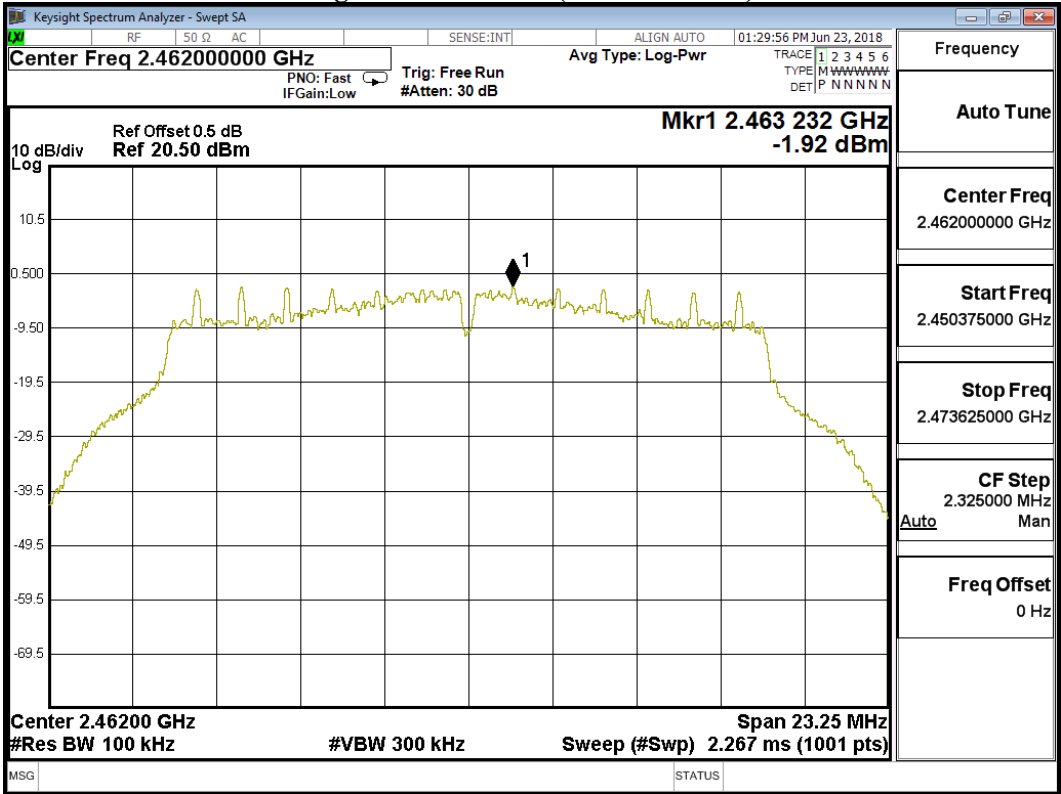


Figure Channel 11: (SISO-Chain B)

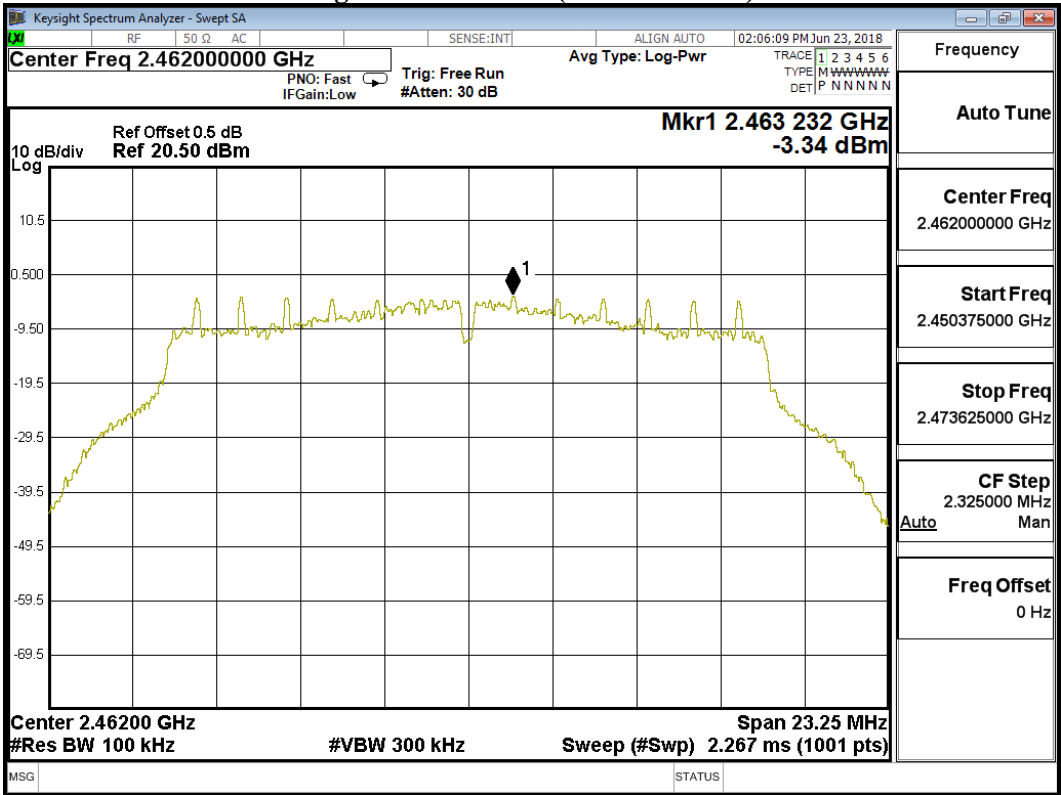


Figure Channel 11: (MIMO-Chain A)

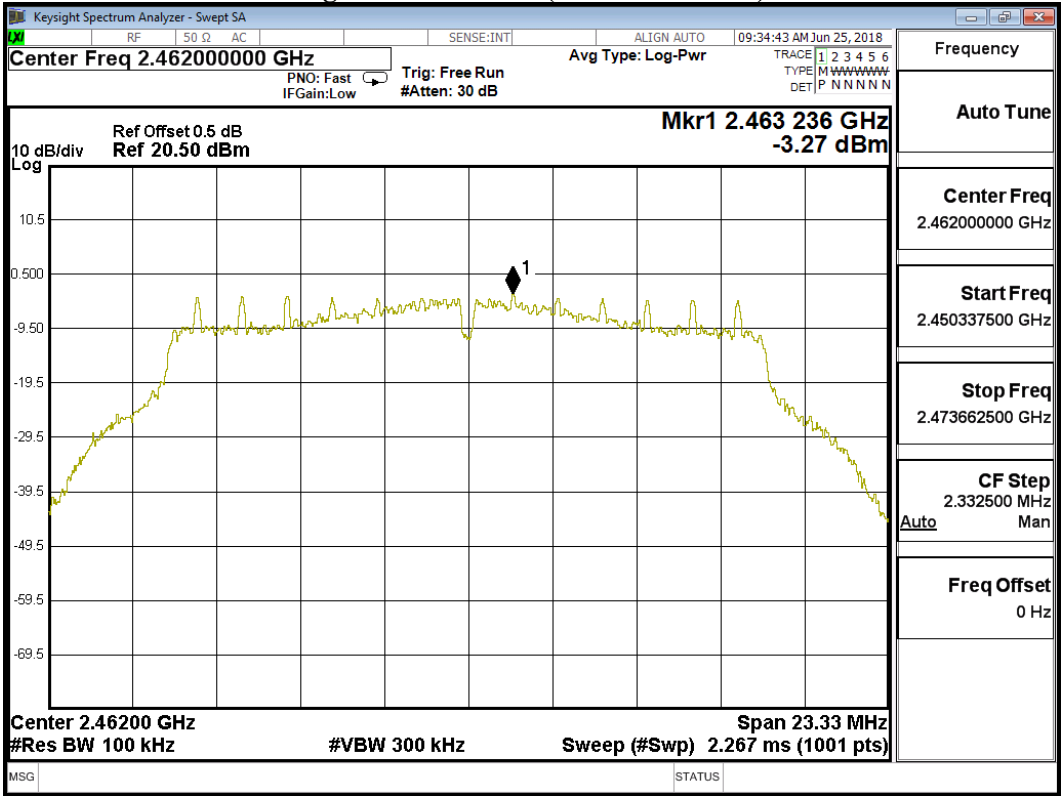
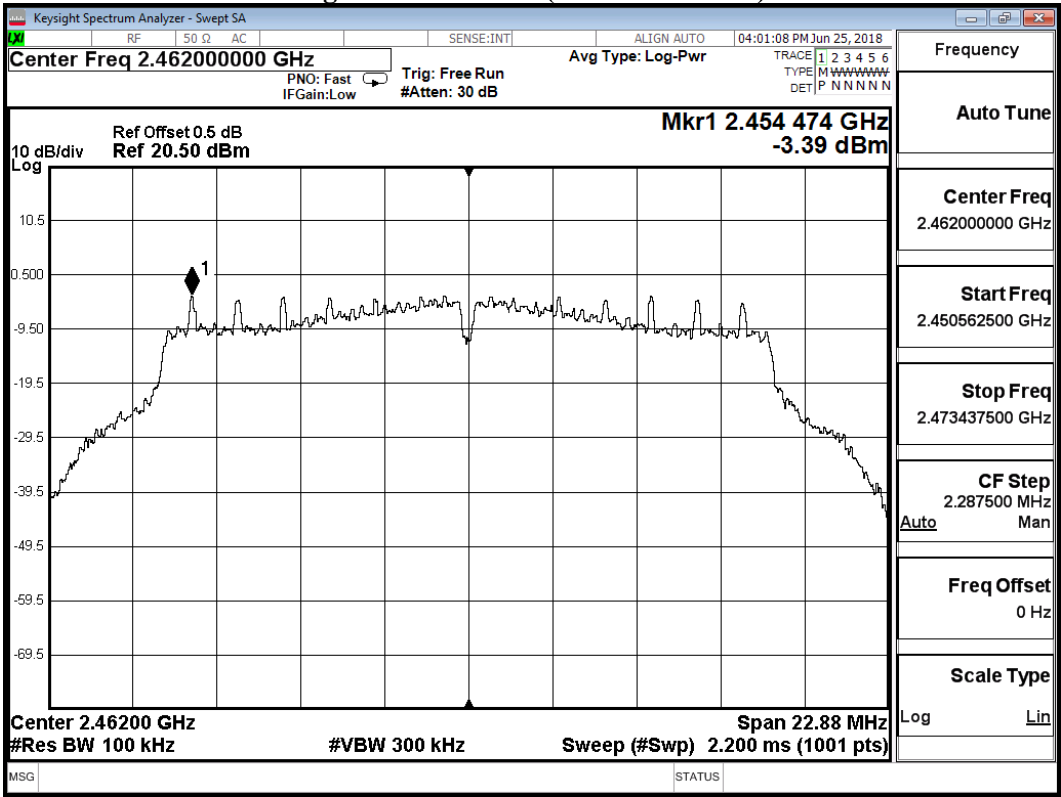


Figure Channel 11: (MIMO-Chain B)



待測物名稱：Wireless Access point

待測物型號：ATOM AP30

測試頻道：--

6 dB 頻寬：100kHz

量測天線：--

檢測器：峰值

測試日期：107年06月23日

測試項目：功率密度

測試模式：Mode 1: 發射器 802.11n (20MHz)

視頻頻寬：300kHz

測試距離：Conducted

環境溫度：20 °C

環境濕度：50 %

SISO-Chain A

Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
01	2412.000	-1.590	$\leq 8\text{dBm}$	Pass
06	2437.000	1.920	$\leq 8\text{dBm}$	Pass
11	2462.000	-2.120	$\leq 8\text{dBm}$	Pass

SISO-Chain B

Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
01	2412.000	-1.680	$\leq 8\text{dBm}$	Pass
06	2437.000	1.360	$\leq 8\text{dBm}$	Pass
11	2462.000	-3.520	$\leq 8\text{dBm}$	Pass

MIMO

Channel No.	Frequency (MHz)	Chain	PPSD/MHz (dBm)	Total PPSP/MHz (dBm)	Limit (dBm)	Result
01	2412.000	A	-0.600	2.410	$\leq 8\text{dBm}$	Pass
		B	-0.430	2.580	$\leq 8\text{dBm}$	Pass
06	2437.000	A	1.140	4.150	$\leq 8\text{dBm}$	Pass
		B	1.240	4.250	$\leq 8\text{dBm}$	Pass
11	2462.000	A	-3.760	-0.750	$\leq 8\text{dBm}$	Pass
		B	-0.650	2.360	$\leq 8\text{dBm}$	Pass

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

Figure Channel 1: (SISO-Chain A)

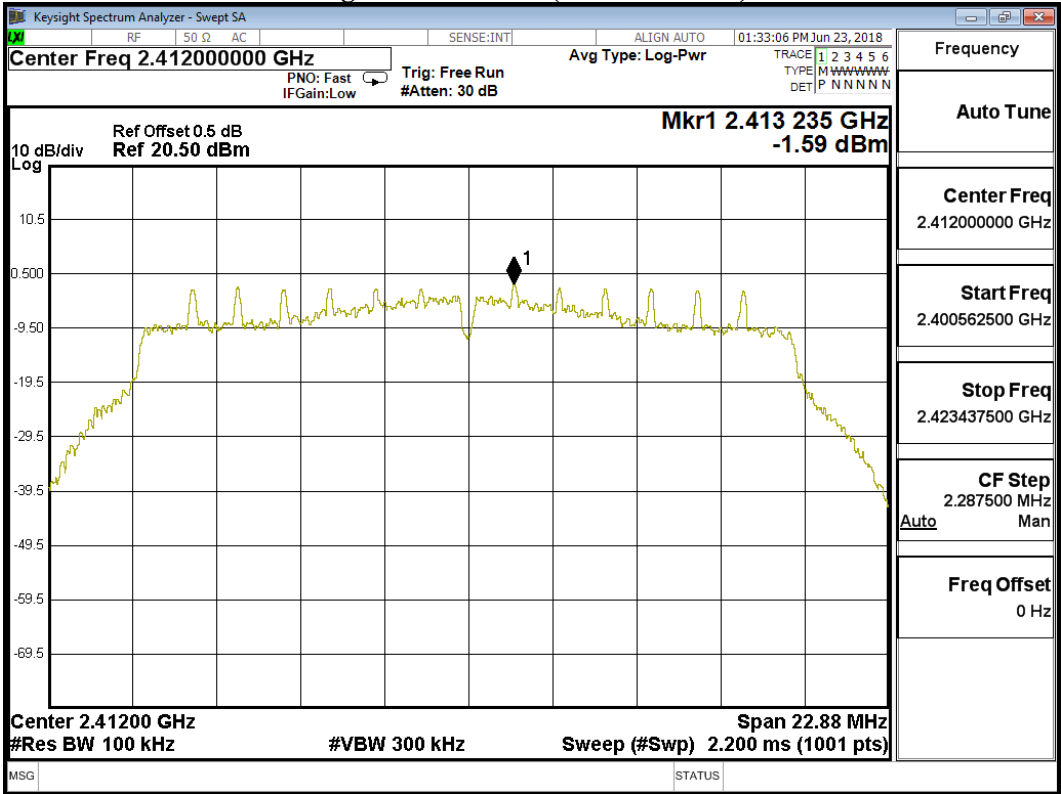


Figure Channel 1: (SISO-Chain B)

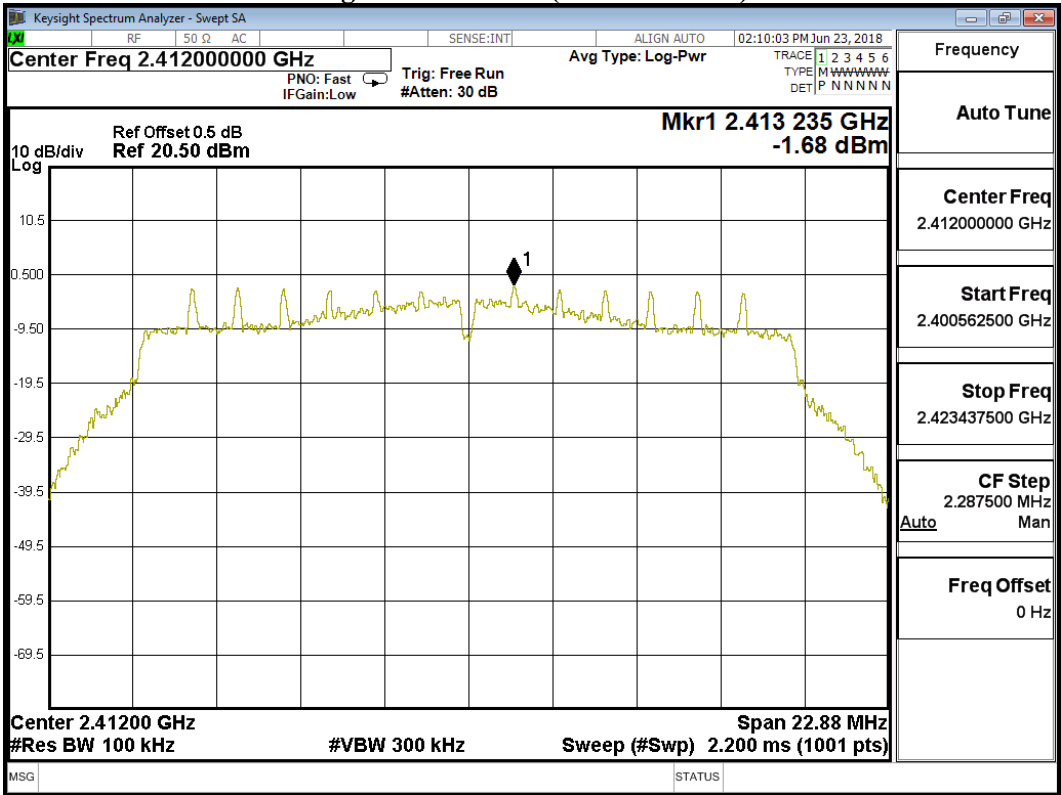


Figure Channel 1: (MIMO-Chain A)

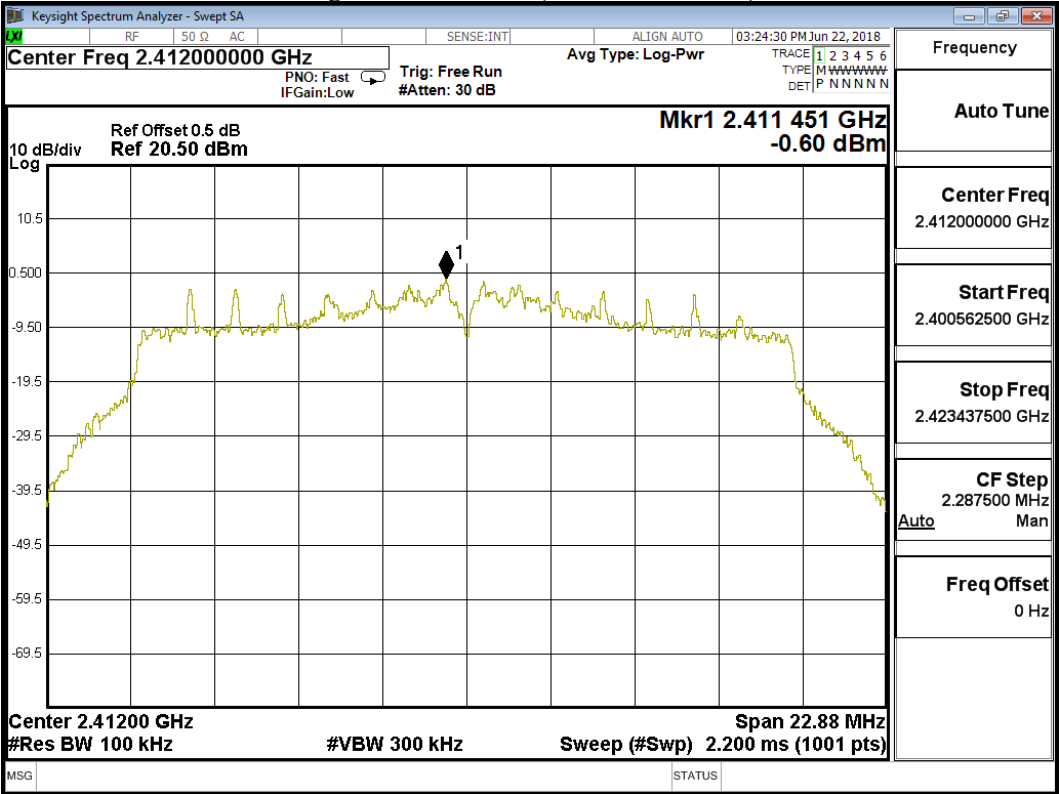


Figure Channel 1: (MIMO-Chain B)

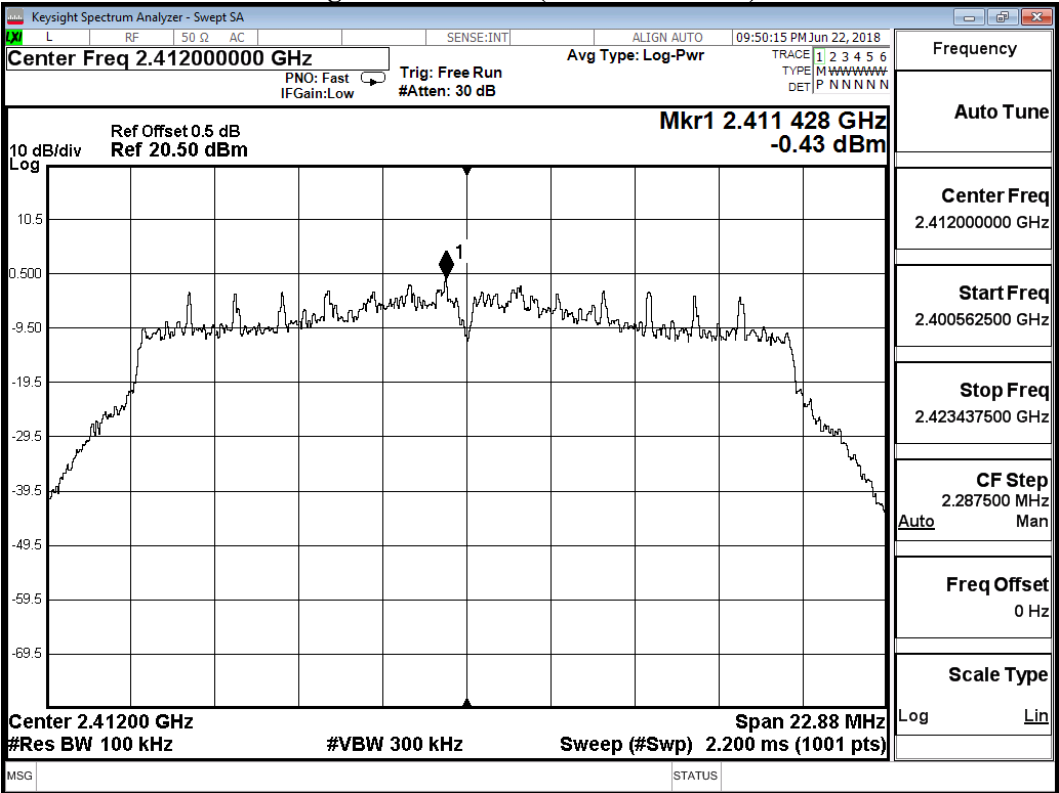


Figure Channel 6: (SISO-Chain A)

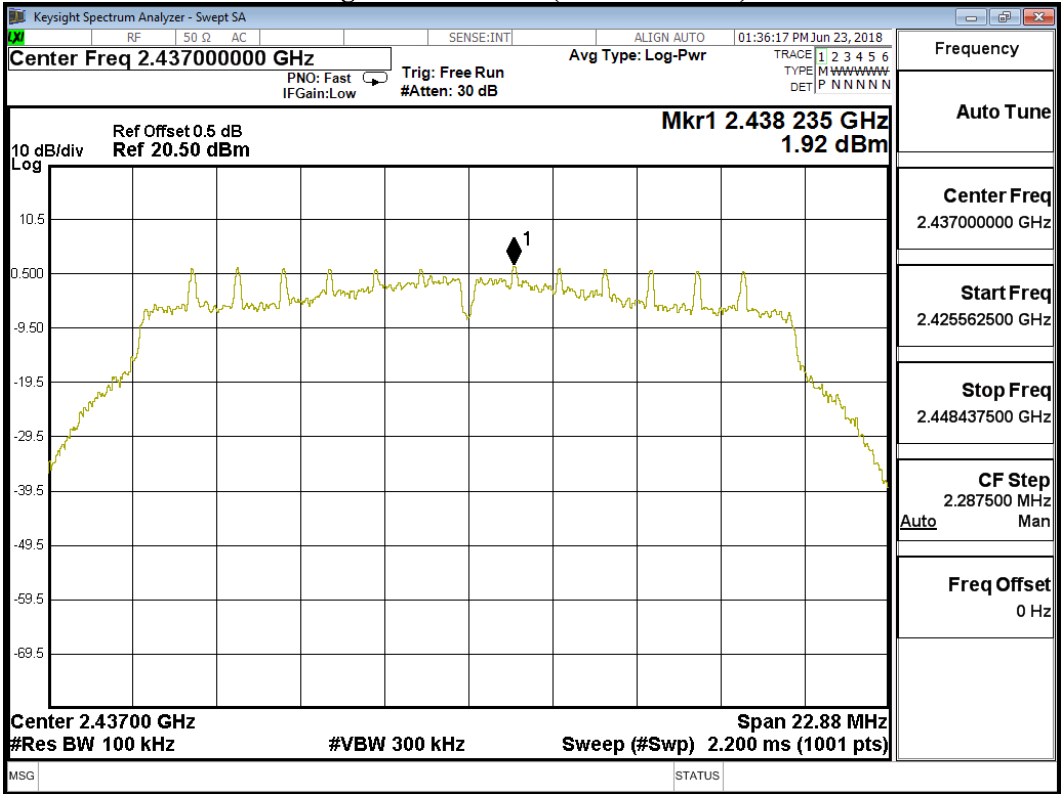


Figure Channel 6: (SISO-Chain B)

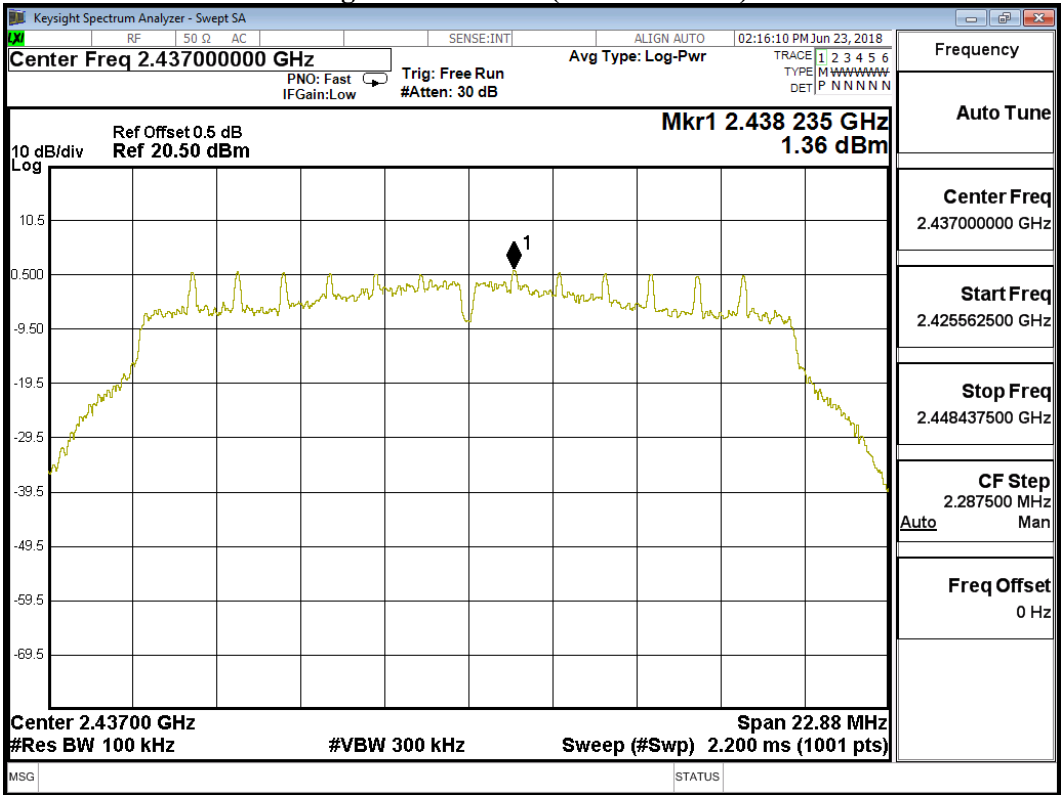


Figure Channel 6: (MIMO-Chain A)

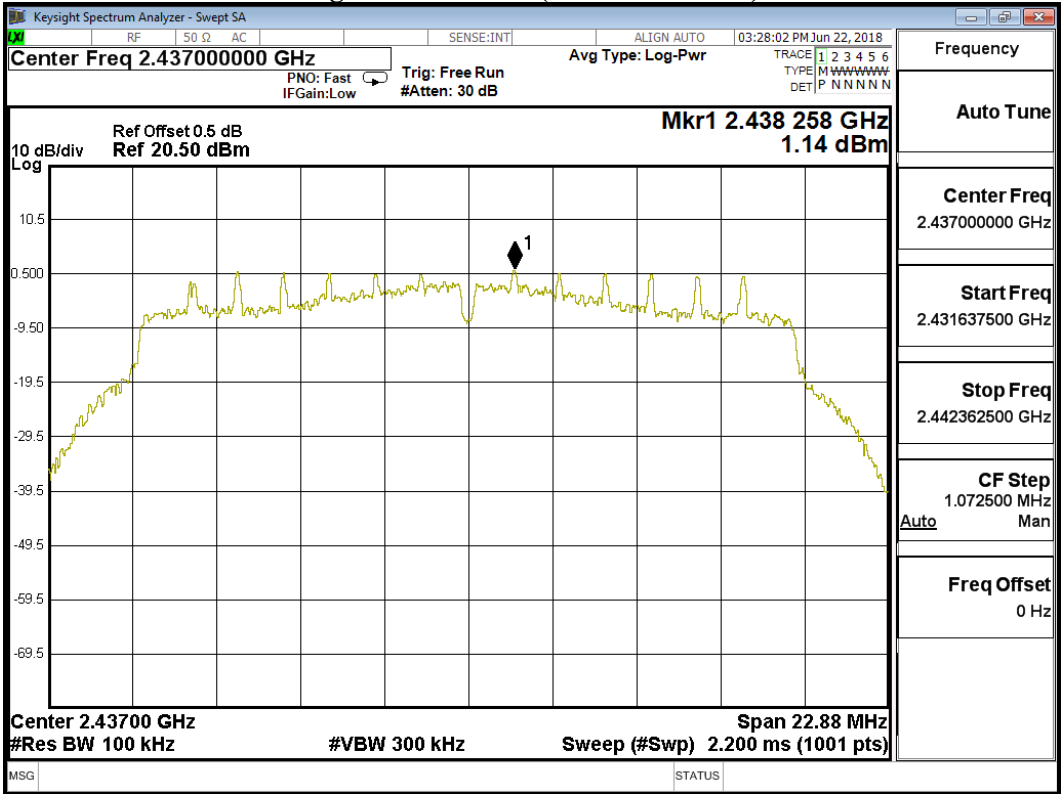


Figure Channel 6: (MIMO-Chain B)

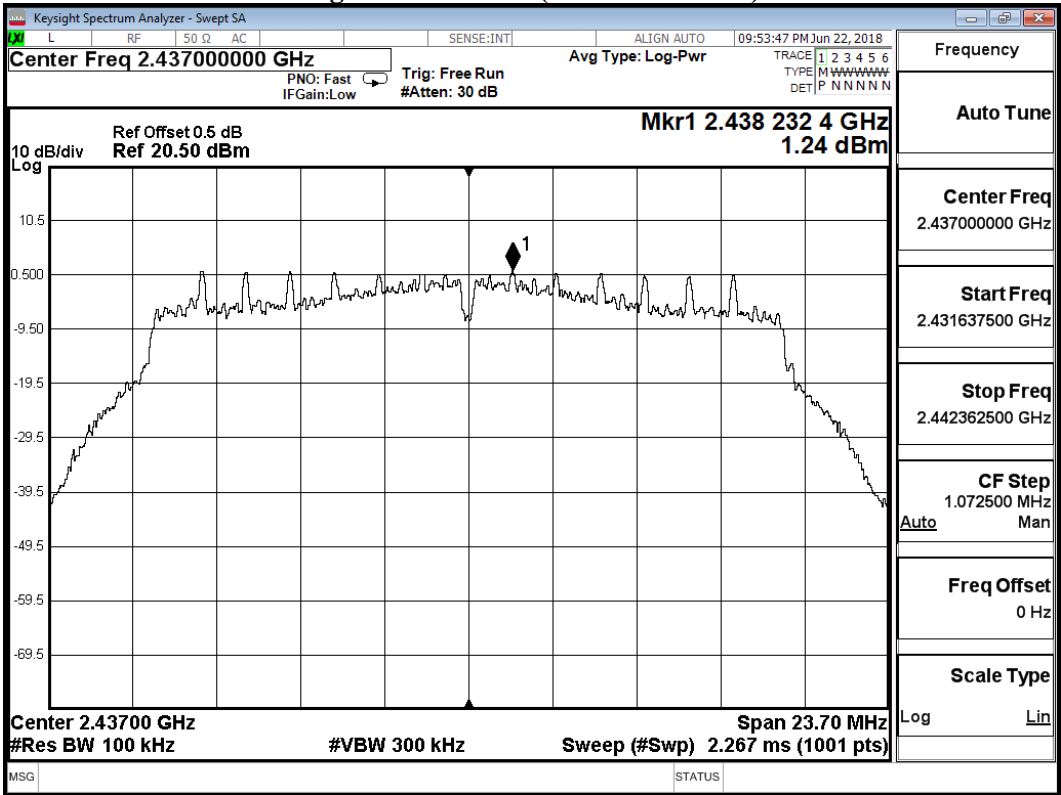


Figure Channel 11: (SISO-Chain A)

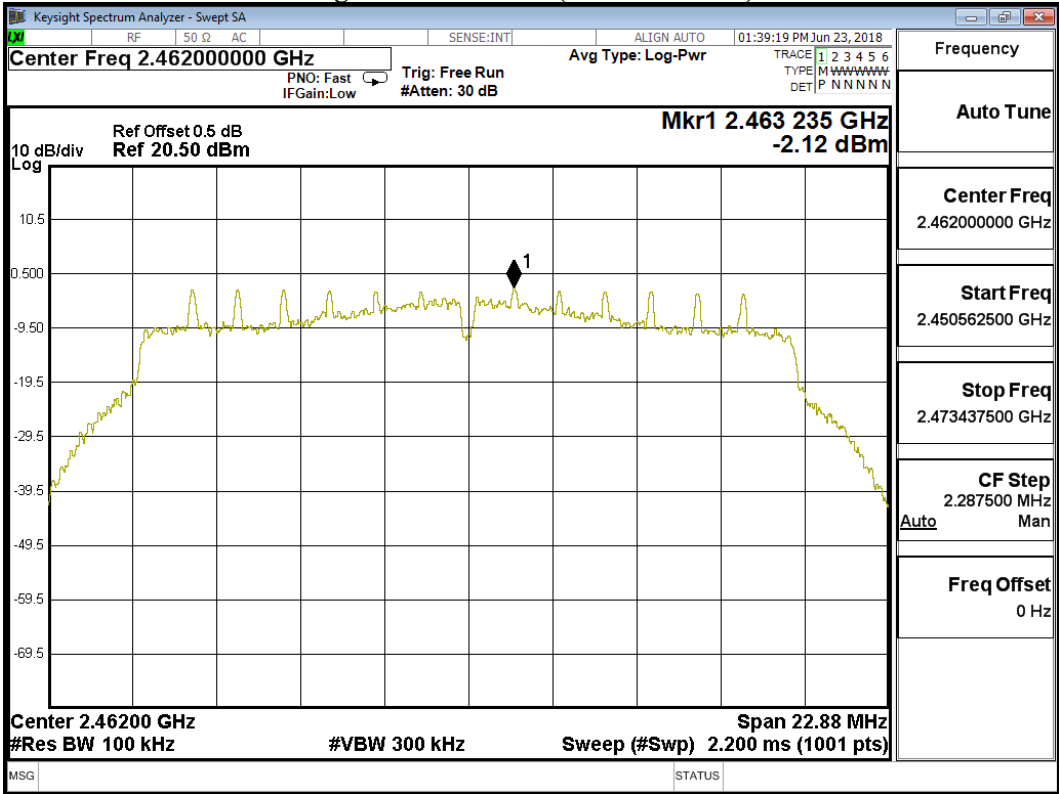


Figure Channel 11: (SISO-Chain B)

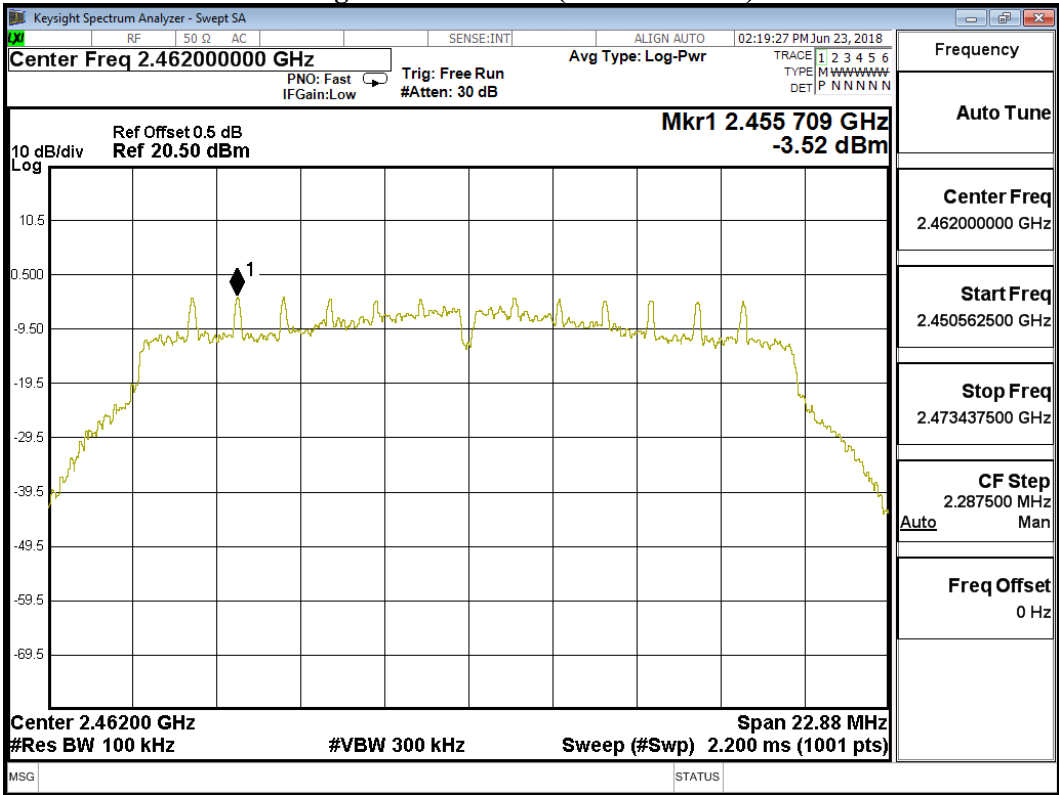


Figure Channel 11: (MIMO-Chain A)

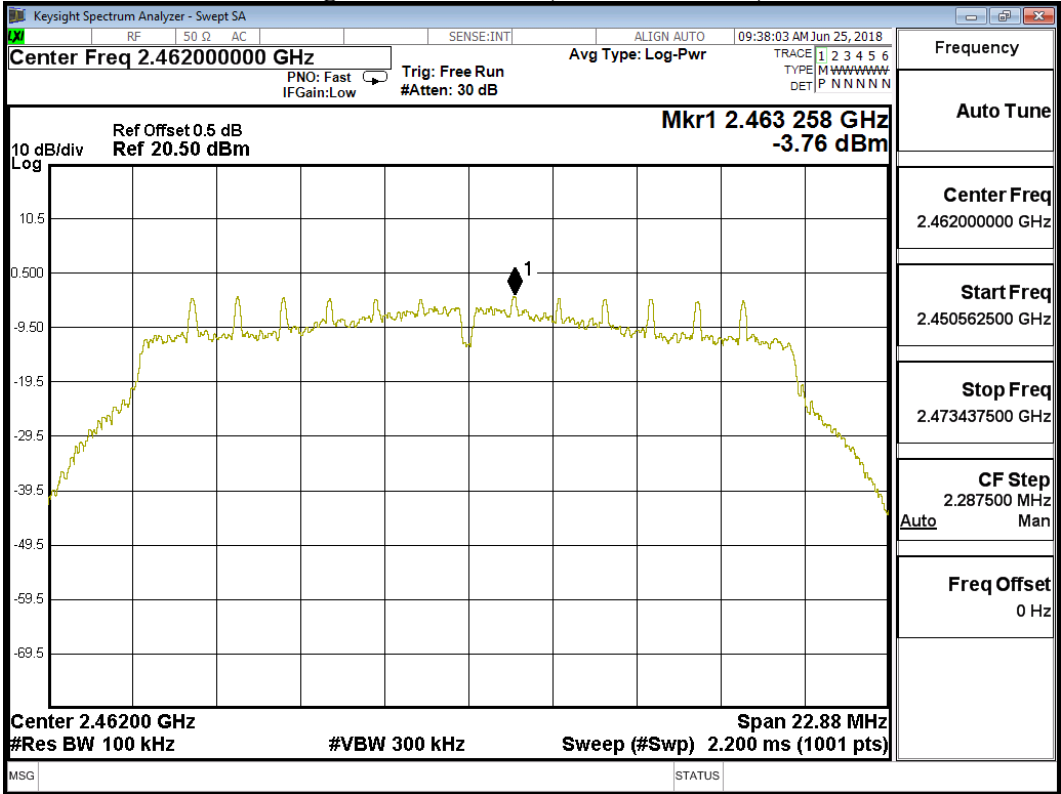
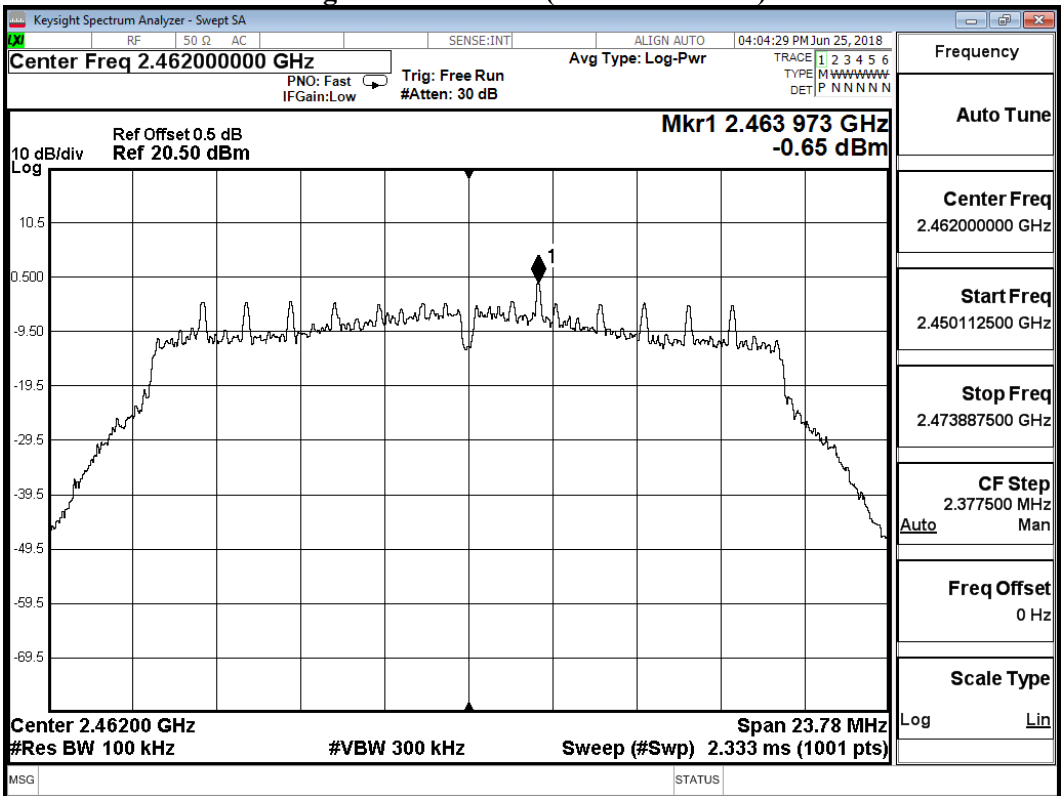


Figure Channel 11: (MIMO-Chain B)



功率密度測試結果:

PASS

附件 1: 待測物測試擺設相片

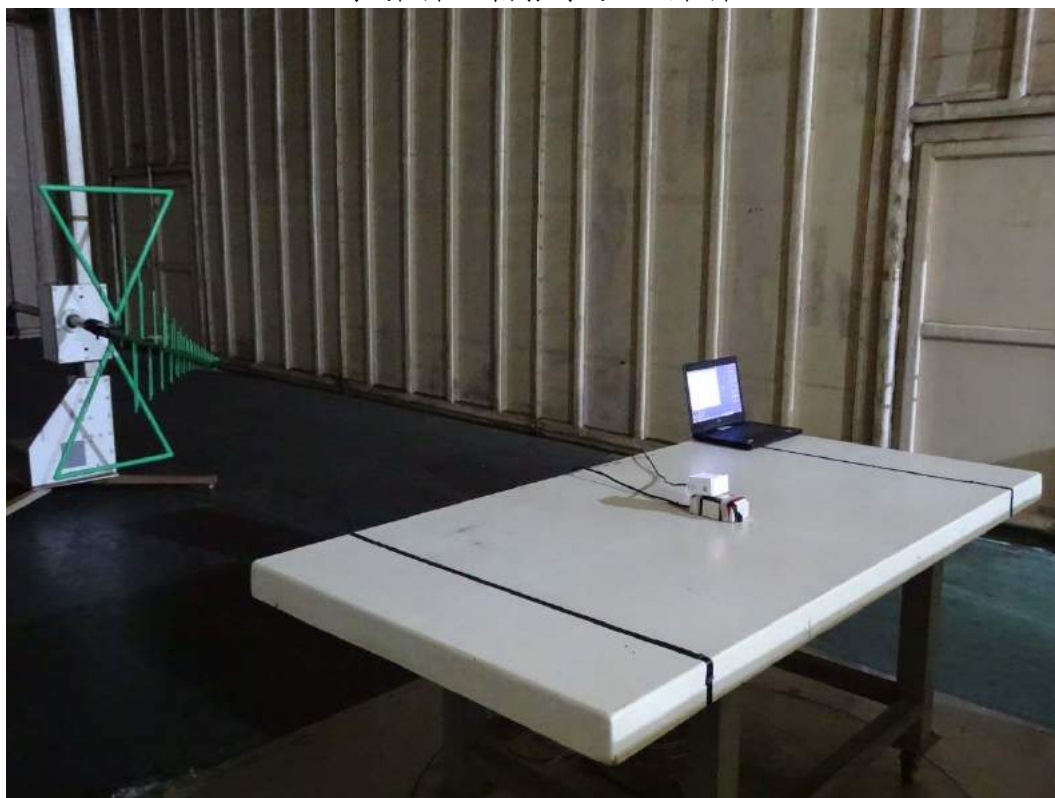
測試相片：電源端點測試 正面相片



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



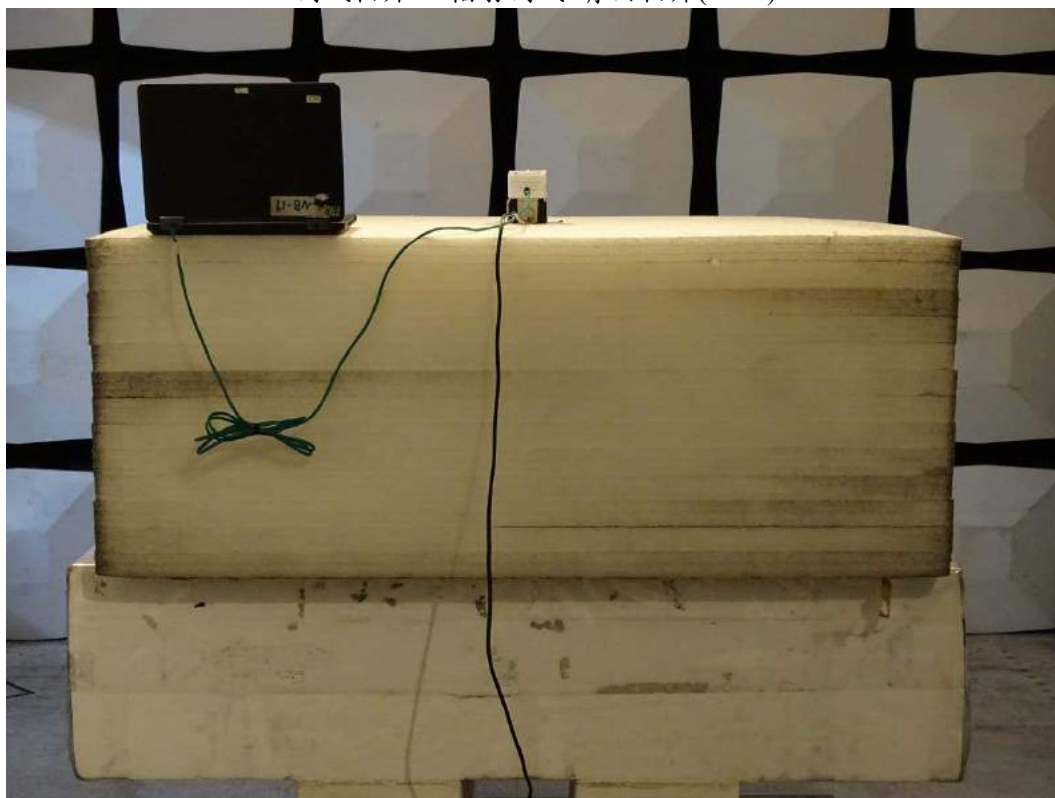
測試相片：輻射測試 背面相片



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)

