



低功率射頻電機測試報告

惠州高盛達科技有限公司

器材名稱: WiFi Module

廠牌: TPV

型號: WC0SR2511

申請廠商 : 惠州高盛達科技有限公司
 惠州市惠澳大道惠南高新科技產業園金達路 2 號

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低功率射頻電機測試報告

受理日期：2020年04月20日
完成日期：2020年05月05日
報告號碼：EM-NC200126
實驗室名稱：敦吉檢測科技股份有限公司電磁相容部
實驗室地址：新北市林口區頂福里53-11號
實驗室電話：(02) 2609-9301, (02) 2609-2133
認可編號及範圍：TAF 1724 (9KHz ~ 40GHz)
申請廠商：惠州高盛達科技有限公司
製造廠商：惠州高盛達科技有限公司
器材名稱：WiFi Module
廠牌：TPV
型號：WC0SR2511



工作頻率/發射功率：

無線技術	工作頻率(MHz)		頻道數	發射功率(dBm)	
				峰值 (Peak)	平均值 (Average)
802.11b	2412-2472		13	19.22	16.64
802.11g	2412-2472		13	24.79	16.84
802.11n-HT20	2412-2472		13	25.69	16.56
802.11n-HT40	2422-2462		9	25.52	16.69
802.11a	UNII Band I	5180-5240	4	---	14.26
	UNII Band II	5260-5320	4	---	14.07
	UNII Band III	5500-5700	11	---	14.61
	UNII Band IV	5745-5825	5	---	14.63
802.11n-HT20/ 802.11ac-VHT20	UNII Band I	5180-5240	4	---	15.39
	UNII Band II	5260-5320	4	---	15.72
	UNII Band III	5500-5700	11	---	16.69
	UNII Band IV	5745-5825	5	---	16.49
802.11n-HT40/ 802.11ac-VHT40	UNII Band I	5190-5230	2	---	14.94
	UNII Band II	5270-5310	2	---	14.69
	UNII Band III	5510-5670	5	---	15.61
	UNII Band IV	5755-5795	2	---	14.85
802.11ac-VHT80	UNII Band I	5210	1	---	13.14
	UNII Band II	5290	1	---	12.94
	UNII Band III	5530-5610	2	---	13.73
	UNII Band IV	5775	1	---	13.50
UNII Band II & III [DFS Function-Slave (Without radar detection function)]					

調變方式：

無線技術	調變方式
802.11b	DSSS (DBPSK/ DQPSK/ CCK)
802.11a/g/n-HT20/n-HT40	OFDM (BPSK/ QPSK/ 16QAM/ 64QAM)
802.11ac-VHT20/VHT40/VHT80	OFDM (BPSK/ QPSK/ 16QAM/ 64QAM/ 256QAM)

天線規格：此裝置使用固定式天線，其天線資料如下：

No.	型號	製造商	天線類型	頻率(MHz)	最大天線增益(dBi)
1	WT3E-11	深圳市中天迅通信技術股份有限公司	PIFA	2400-2500	2.083
				5100-5850	3.096
2	WT3E-12	深圳市中天迅通信技術股份有限公司	PIFA	2400-2500	2.000
				5100-5850	3.079
註:天線已符合NCC低功率射頻電機技術規範2.2.節之規定					

- 備註：
1. 本試驗符合性判定之決定規則不另外考慮量測不確定度。
 2. 本測試報告僅對受測之樣品負責。
 3. 非經本公司同意，測試報告不得摘錄複印使用。（全部複製除外）
 4. 本產品所適用之規範修訂日期 2018 年 01 月 10 日。
 5. 此份報告是針對 WLAN 5G UNII Band I、II、III、IV 功能進行製作，
至於 WLAN 2.4GHz 功能報告於報告號碼(EM-NC200125)，
至於 WLAN 5G UNII Band II、III 之 DFS 功能於報告號碼(EM-NC200127)。

依低功率射頻電機技術規範 4.7 節，工作頻率為 5.15 GHz～5.25 GHz、5.25 GHz～5.35 GHz、5.470 GHz～5.725 GHz 及 5.725 GHz～5.85 GHz，採用無線資訊傳輸(U-NII)之發射設備。

項次	測試項目	適用規範章節	測試結果	量測設備	判定
1	電源傳導干擾電壓	低功率射頻電機技術規範 2.3 節	請參閱 4.2 節	無	合格
2	場強輻射	低功率射頻電機技術規範 4.7.4.1 節、4.7.4.2 節、4.7.4.6 節、2.8 節	請參閱 5.5 節	請參閱 2.1 節	合格
3	最大輸出功率及 26dB 或 6dB 量測	低功率射頻電機技術規範 4.7.3.1 節(1)(A)、(2)(A)、(3)(A)、(4)(A)、4.7.3.2 節(1)、4.7.3.3 節	請參閱 6.5 節	請參閱 2.2 節	合格
4	峰值功率頻譜密度	低功率射頻電機技術規範 4.7.3.1 節(1)(B)、(2)(B)、(3)(B)、(4)(B)、4.7.3.2 節(2)、4.7.3.3 節(2)	請參閱 7.5 節	請參閱 2.2 節	合格
5	頻帶邊緣之 RF 發射	低功率射頻電機技術規範 4.7.4.1 節、4.7.4.2 節	請參閱 8.5 節	請參閱 2.2 節	合格
6	電波暴露量	低功率射頻電機技術規範 5.20.2 節(2)	請參閱 9.2 節	無	合格

單位主管：薛舜誠 2020.5.8
(薛舜誠/課長)

測試員：吳俊澤 2020.5.8
(吳俊澤/主任)

1 一般資料

1.1 產品描述

- a) 產品型態：WiFi Module
- b) 廠牌：TPV
- c) 產品型號：WC0SR2511
- d) 供應電源：DC 5V (USB)
- e) 測試電源：DC 5V (經筆記型電腦供電)

1.2 產品特性

1.2.1. 此裝置係為 WiFi Module，具 802.11a/b/g/n/ac 及 DFS Function-Slave (Without radar detection function) 規格。

1.2.2. 此裝置之最高資料傳輸速度請參見下表：

Mode	最高資料傳輸速度 (Mbps)	
	WLAN 2.4G	WLAN 5G
802.11b	11	---
802.11g	54	---
802.11a	---	54
802.11n-HT20	144.4	144.4
802.11n-HT40	300	300
802.11ac-VHT20	---	173.3
802.11ac-VHT40	---	400
802.11ac-VHT80	---	866.7

1.2.3. 因 802.11ac-VHT20/VHT40 之調變方式與 802.11n-HT20/HT40 相同，802.11ac-VHT20/VHT40 之傳輸速率涵蓋 802.11n-HT20/HT40，經 802.11ac-VHT20/VHT40 與 802.11n-HT20/HT40 之最大發射功率量測，以功率較大之 802.11n-HT20/HT40 進行量測。

1.3 測試方法之依據

本測試報告之所有項目皆依據低功率射頻電機技術規範和一致性會議執行檢驗，未規範者請參照低功率射頻電機技術規範 2.12 節之相關檢驗之規定。

2 量測儀器

2.1 場強輻射量測儀器

2.1.1. 頻率範圍 30MHz~1000MHz 量測使用儀器(No.1 3m Semi Anechoic Chamber)

儀器名稱	製造者	型號	序號	校正日期	校正周期
頻譜分析儀	Agilent	N9010A-526	MY52220368	2019. 11. 26	1 年
測試接收機	R & S	ESCS30	100338	2019. 06. 12	1 年
前置放大器	HP	8447D	2944A06305	2020. 01. 16	1 年
廣帶域天線	CHASE	CBL6112D	33821	2020. 01. 17	1 年
同軸電纜	MIYAZAKI	5D2W	RE-11	2020. 01. 31	1 年
溫溼度計	IMax	HTC-1	No.1 3m A/C	2020. 04. 17	1 年
測試軟體	Audix	e3	V6.120619c	N.C.R.	N.C.R.

2.1.2. 頻率範圍 1GHz 以上量測使用儀器(Fully Anechoic Chamer)

儀器名稱	製造者	型號	序號	校正日期	校正周期
頻譜分析儀	Keysight	N9030A-526	MY53310269	2020. 01. 16	1 年
前置放大器	HP	8449B	3008A02678	2020. 02. 27	1 年
前置放大器	Keysight	83051A	MY53010042	2019. 08. 08	1 年
5GHz陷波濾波器	Microwave Circuits	N0452502	459775	2019. 05. 07	1 年
5GHz陷波濾波器	Microwave Circuits	N0555983	459481	2019. 05. 07	1 年
5GHz陷波濾波器	Microwave Circuits	N0257881	459776	2019. 08. 21	1 年
喇叭天線	ETS-Lindgren	3117	00135902	2020. 03. 10	1 年
喇叭天線	COM-POWER	AH-840	101092	2019. 05. 14	1 年
同軸電纜	HUBER+SUHNER	SUCOFLEX 104	RF CABLE-01	2019. 09. 20	1 年
同軸電纜	HUBER+SUHNER	SUCOFLEX 102	No.1 18-40GHz Cable	2019. 09. 20	1 年
溫溼度計	EVERY DAY	E-512	RF-02	2020. 04. 17	1 年
測試軟體	Audix	e3	V6.110601	N.C.R.	N.C.R.

2.1.3. 儀器設定

量測頻率範圍	儀器名稱/使用功能	檢波值	解析頻寬	視訊頻寬	
30至1000MHz	頻譜分析儀	Peak	120kHz	1MHz	
1GHz以上	頻譜分析儀	Peak	1MHz	1MHz	
	頻譜分析儀	Average	1MHz	802.11a	10Hz
				802.11n-HT20	10Hz
				802.11n-HT40	10Hz
				802.11ac-VHT80	10Hz

2.2 RF Conducted 量測儀器

儀器名稱	製造者	型號	序號	校正日期	校正周期
頻譜分析儀	Keysight	N9020B-544	MY57120357	2020. 01. 10	1 年
功率計	Anritsu	ML2495A	1145008	2019. 11. 06	1年
功率感應器	Anritsu	MA2411B	1126096	2019. 11. 06	1年
溫溼度計	Shenzhen Datronn Electronics	KT-905	RF	2020. 04. 17	1年

3 受測裝置之系統說明

3.1 申請之受測裝置

裝置名稱	製造商	型 號	說明(配件/纜線)
WiFi Module	惠州高盛達科技有限公司	WC0SR2511	---

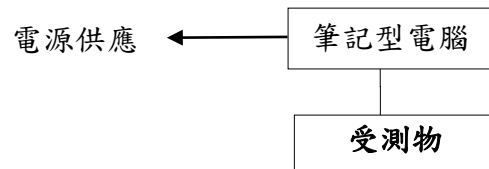
3.2 測試連接之週邊裝置

裝置名稱	製造者	型 號	說明/纜線
筆記型電腦	ASUS	X402C	信號線：可拆，無金屬被覆，0.3 米長 電源供應器：ASUS, M/N ADP-650W A DC 電源線：不可拆，無金屬被覆，1.8 米長， AC 電源線：可拆，無金屬被覆，1.8 米長

3.3 測試配置

3.3.1. 輻射之測試配置

- 受測物裝置與連接週邊裝置之架構圖



受測物: WiFi Module

- 量測場地擺設之架構圖

圖 1: 量測場地(3m Semi Anechoic Chamber)量測頻率低於 1GHz 之測試配置

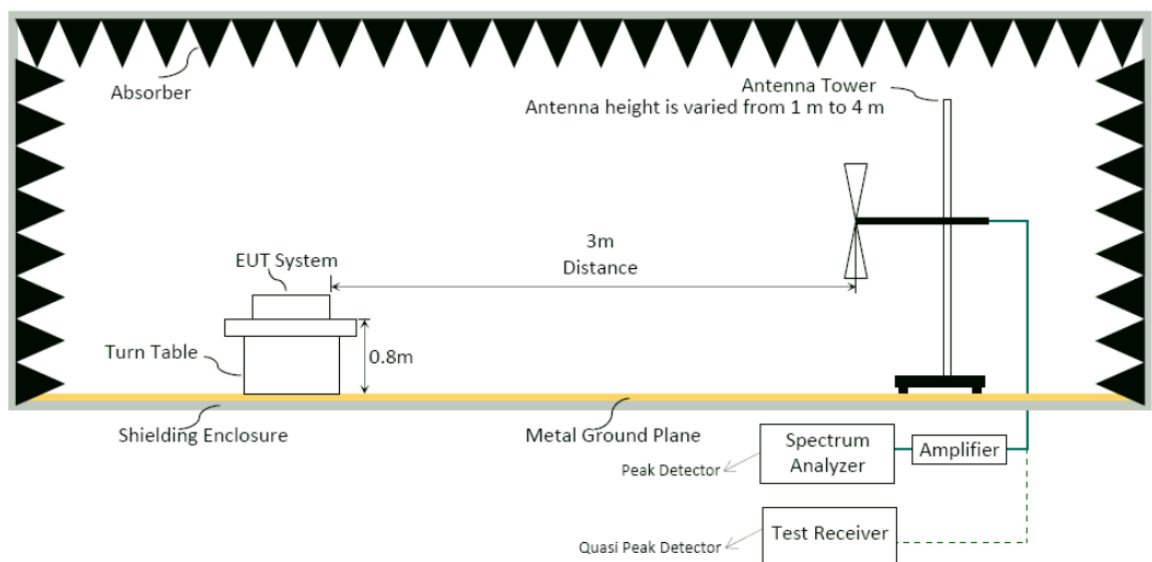
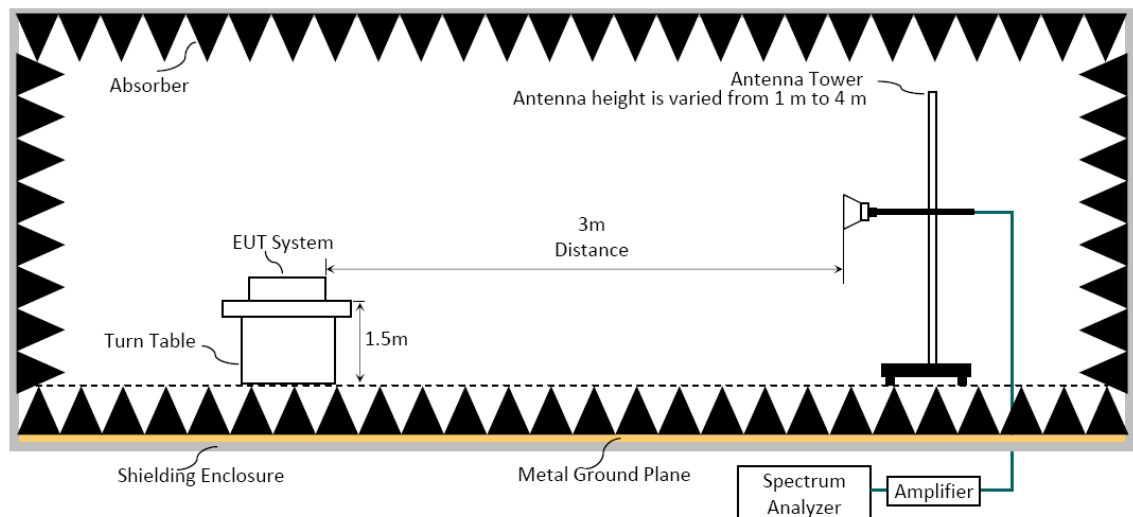
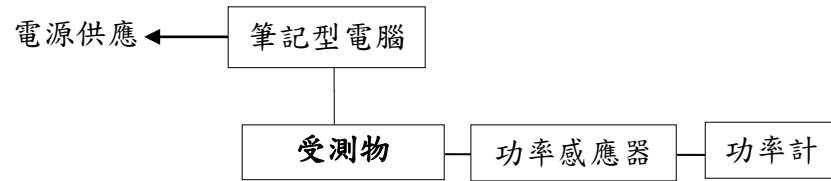


圖 2: 量測場地(Fully Anechoic Chamber)量測頻率高於 1GHz 之測試配置



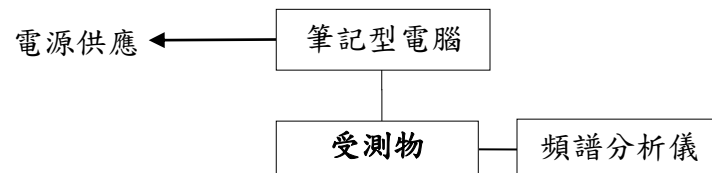
3.3.2. RF Conducted 之測試配置

● 峰值輸出功率



受測物: WiFi Module

● 其他 RF Conducted 測項及峰值輸出功率(only For 802.11ac-VHT80)

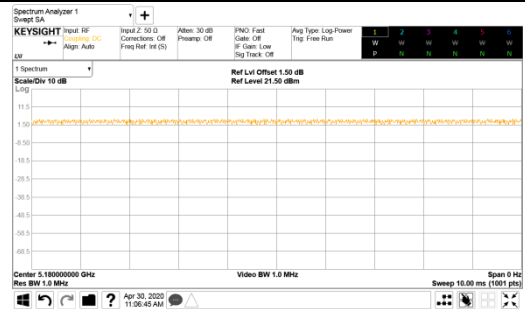
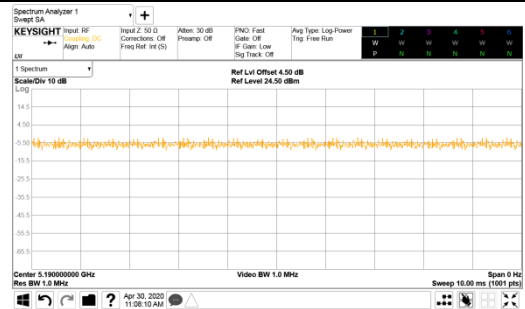
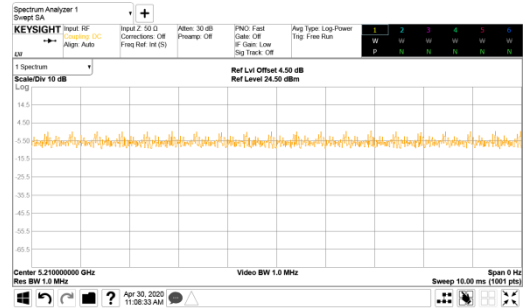


受測物: WiFi Module

3.5 Duty Cycle

模式	TX _{on} (ms)	1/ TX _{on} (kHz)	Duty Cycle (x)	Duty Cycle Factor [10log(1/x)] (dB)
802.11a	---	---	1.000	N/A
802.11n-HT20	---	---	1.000	N/A
802.11n-HT40	---	---	1.000	N/A
802.11ac-VHT80	---	---	1.000	N/A

Note: When duty cycle is less than 98% (0.98) that duty cycle factor 10log(1/x) is needed to add in conducted test items measured in average detector.

模式	TX _{on} (ms)	T _{on} +T _{off} (ms)
802.11a		--
802.11n-HT20		--
802.11n-HT40		--
802.11ac-VHT80		--

4 電源線傳導干擾之量測

4.1 適用標準

依據 NCC 低功率射頻電機技術規範之 2.3 節之規定，以市電為電源之低功率射頻電機，其傳導回電源線上頻率自 150 kHz~30 百萬赫(MHz)之射頻電壓(在電源端子每一電源線對接地點)應小於或等於下表所列之限制值。測量時應經過 50 微亨利(μH)及 50 歐姆(Ω)之電源線阻抗穩定網路(Line Impedance Stabilization Network；LISN)。頻率重疊處，以較低限制值為準。

頻率範圍 MHz	傳導限制值($\text{dB } \mu\text{V}$)	
	準峰值(Quasi-peak)	平均值(Average)
0.15 ~ 0.5	66~56(註)	56~46(註)
0.5 ~ 5	56	46
5 ~ 30	60	50

註：隨頻率之對數遞減

4.2 判定結果

此測試項目已於報告號碼(EM-NC200125)章節 4 進行評估，故不另行量測。

5 場強輻射之量測

5.1 適用標準

1. 依據 NCC 低功率射頻電機技術規範 4.7.4.1 節、4.7.4.2 節之要求，操作於 5.15 GHz~5.35 GHz 及 5.470 GHz~5.725 GHz、5.725 GHz~5.850 GHz 頻率帶外的發射有效等向輻射功率(EIRP)限制值如下：

操作頻率	有效等向輻射功率限制值	輻射場強限制值(3 m)
5.15 GHz~ 5.35 GHz	≤ -27 dBm/MHz	68.2 dB μ V/m
5.470 GHz~ 5.725 GHz		68.2 dB μ V/m
5.725 GHz ~ 5.850 GHz	≤ 27 dBm/MHz ~ 15.6 dBm/MHz ^{註 1}	≤ 122.2 dB μ V/m ~ 110.8 dB μ V/m ^{註 1}
	≤ 15.6 dBm/MHz ~ 10 dBm/MHz ^{註 2}	≤ 110.8 dB μ V/m ~ 105.2 dB μ V/m ^{註 2}
	≤ 10 dBm/MHz ~ -27 dBm/MHz ^{註 3}	≤ 105.2 dB μ V/m ~ 68.2 dB μ V/m ^{註 3}
	≤ -27 dBm/MHz ^{註 4}	≤ 68.2 dB μ V/m ^{註 4}

註 1: 頻帶邊緣向外 5MHz 內頻率之發射。

2. 頻帶邊緣向外 5MHz~25MHz 之發射。

3. 頻帶邊緣向外 25MHz~75MHz 之發射。

4: 頻帶邊緣外 ≥ 75 MHz 之發射。

5: 輻射場強限制值(3 m)= E.I.R.P. + 95.2 dB

2. 依據 NCC 低功率射頻電機技術規範 4.7.4.6 節之要求，不必要發射頻率屬 2.7 規定頻段者，應符合 2.8 之規定。

(2.8) 低功率射頻電機，除本規範各章節另有放寬規定者外，其電場強度不得超過下表之限值，且其不必要之發射皆不得大於主波發射強度。各頻段重疊處，以較嚴格之限制值為準。

頻率 MHz	測試距離 m	限制值 dB μ V/m	限制值 μ V/m
0.009 - 0.490(含)	300	67.6-20 log f(kHz)	2400/f (kHz)
0.490(不含) - 1.705(含)	30	87.6-20 log f(kHz)	24000/f (kHz)
1.705(不含) - 30(不含)	30	29.5	30
30(含) - 88(含)	3	40.0	100
88(不含) - 216(含)	3	43.5	150
216(不含) - 960(含)	3	46.0	200
960(不含)以上	3	54.0	500

5.2 量測方法

- 5.2.1. 輻射干擾場強量測時待測物與電波暗室場地擺設依 3.3.1 圖示。
- 5.2.2. 測試接收機之頻寬設定為 120kHz，接收天線應使用偶極平衡天線或經校正的廣帶域天線如雙錐形天線與對數週期天線。
- 5.2.3. 受測物裝置放置於測試區地面 80 公分(量測頻率低於 1GHz)或 150 公分(量測頻率高於 1GHz)之非金屬桌上且可 360 度旋轉的轉盤上，而後調整轉盤角度並從接收機上量得受測物之最大場強。
- 5.2.4. 接收天線距受測物 3 公尺，操作天線升降機使接收天線在離地 1 公尺與 4 公尺間(量測頻率低於 1GHz)或天線在離地 1 公尺與 3 公尺間(量測頻率高於 1GHz)並從接收器量得受測物之最大場強。
- 5.2.5. 在測試頻率範圍內，重覆 5.2.3 及 5.2.4 之步驟，以量得受測物每一頻率點之輻射干擾最大場強。
- 5.2.6. 接收天線的水平極化偏波與垂直極化偏波需分別依上述程序進行量測。
- 5.2.7. 量測頻率低於 1GHz: 場強度之計算，公式如下：
場強結果值(Emission Level)=接收機讀值(Read Level)+ 校正因子。

其中校正因子為：

天線因數(Antenna Factor)+電纜損失(Cable Loss)-放大器增益(Preamplifier Gain)+
濾波器損失(若有使用)。

*若峰值已低於準峰值限制值，故不另檢附準峰值之讀值。

頻率範圍量測至主波發射的 10 倍諧波，其他未列在報告上乃因訊號太小無法量測。

5.2.8. 量測頻率高於 1GHz: 場強度之計算，公式如下：

■ 場強結果值(Emission Level)=接收機讀值(Read Level)+ 校正因子。

其中校正因子為：

天線因數(Antenna Factor)+電纜損失(Cable Loss) -放大器增益(Preamplifier Gain)+
濾波器損失。

*若峰值之讀值小於平均值之限制值，故不再對平均值進行讀值。

□ 場強結果值(Average Emission Level)=
峰值場強結果值(Peak Emission Level)+DCCF。

Duty Cycle Correction Factor (DCCF)= $20\log(TX_{on}/TX_{on+off})$ 。

“ TX_{on+off} ” means the period of the pulse train or 100ms if the pulse train length is greater than 100ms

頻率範圍量測至主波發射的 10 倍諧波，其他未列在報告上乃因訊號太小無法量測。

5.3 量測時受測物之工作狀況

筆記型電腦執行測試程式“Realtek 11ac 8822B USB WLAN MP diagnostic program 0.0005.01.20180205”使受測物進行發射及接收動作量測，動作持續不斷直到測試結束。

5.5 量測之不確定度

測試場地		頻率範圍	不確定度
☒	No.1 3m Semi Anechoic Chamber	30MHz-200MHz, 3m, Horizontal	±4.1dB
		200MHz-1000MHz, 3m, Horizontal	±3.9dB
		30MHz-200MHz, 3m, Vertical	±4.2dB
		200MHz-1000MHz, 3m, Vertical	±4.1dB
		1GHz-6GHz, 3m	±4.2dB
		6GHz-18GHz, 3m	±4.6dB
☐	No.3 3m Semi Anechoic Chamber	30MHz-200MHz, 3m, Horizontal	±3.9dB
		200MHz-1000MHz, 3m, Horizontal	±3.9dB
		30MHz-200MHz, 3m, Vertical	±4.4dB
		200MHz-1000MHz, 3m, Vertical	±4.1dB
☐	No.4 3m Semi Anechoic Chamber	30MHz-200MHz, 3m, Horizontal	±4.3dB
		200MHz-1000MHz, 3m, Horizontal	±4.0dB
		30MHz-200MHz, 3m, Vertical	±4.3dB
		200MHz-1000MHz, 3m, Vertical	±4.4dB
		1GHz-6GHz, 3m	±4.5dB
		6GHz-18GHz, 3m	±4.6dB
☐	No.5 3m Semi Anechoic Chamber	30MHz-200MHz, 3m, Horizontal	±4.0dB
		200MHz-1000MHz, 3m, Horizontal	±3.9dB
		30MHz-200MHz, 3m, Vertical	±4.2dB
		200MHz-1000MHz, 3m, Vertical	±4.3dB
		1GHz-6GHz, 3m	±4.3dB
		6GHz-18GHz, 3m	±4.7dB
☒	Fully Anechoic Chamber	30MHz~1000MHz	±4.7dB
		1GHz~18GHz	±5.3dB

5.6 場強輻射之量測結果

量測結果皆合乎標準規定，請參見附錄一。

6 最大輸出功率及 26dB/6dB 頻寬之量測

6.1 適用標準

依據 NCC 低功率射頻電機技術規範 4.7.3.1 節(1)(A)、(2)(A)、(3)(A) 及(4)(A)之要求:使用於 5.15 ~ 5.25GHz 頻段，依不同產品類別之峰值輸出功率限制值，請參見下表：

產品類別	峰值輸出的限制值
供戶外操作使用 ^註	$\leq 1 \text{ W}(30 \text{ dBm})$
供室內操作使用	$\leq 1 \text{ W}(30 \text{ dBm})$
供固定式點對點操作使用	$\leq 1 \text{ W}(30 \text{ dBm})$
供用戶端裝置(Client Device)操作使用	$\leq 250 \text{ mW}(24 \text{ dBm})$
註：在水平面仰角超過 30 度時，其最大 EIRP 應小於或等於 21dBm	

依據 NCC 低功率射頻電機技術規範 4.7.3.2 節(1)、4.7.3.3 節(1)之要求，使用於 5.25 GHz~5.35 GHz, 5.470 GHz~5.725 GHz 及 5.725 GHz~5.850 GHz 頻帶下之峰值輸出功率的限制值如下：

操作頻率	峰值輸出功率的限制值
5.25GHz ~ 5.35GHz	$\leq 250 \text{ mW}$ 或
5.470GHz ~ 5.725GHz	$\leq 11 \text{ dBm} + 10 \log B$ ^註 之較小者
5.725GHz ~ 5.85GHz	$\leq 1 \text{ W}(30 \text{ dBm})$

註: B 是 26 dB 發射頻寬，單位 MHz

6.2 量測方法

6.2.1. 峰值輸出功率

802.11a/n-HT20/n-HT40 量測：

將天線發射端直接連接至 Power Sensor，以 Power Meter 量測。

802.11ac-VHT80 量測：

設定頻譜分析儀的解析頻寬為 1MHz、視訊頻寬 3MHz，使用 Channel Power Function 量測。

6.2.2. 26dB 或 6dB 頻寬

將射頻輸出連接到頻譜分析儀，進行量測低、中、高的頻帶寬度。設定頻譜分析儀之解析頻寬為 $\geq 1\%$ 的 26dB 或解析頻寬為 100kHz 的 6dB 頻寬，視訊頻寬不小於解析頻寬，量測利用差值記號以發射峰值下降 26dB 或 6dB 頻寬作為測試頻寬的基準。

6.3 量測時受測物之工作狀況

筆記型電腦執行測試程式“Realtek 11ac 8822B USB WLAN MP diagnostic program 0.0005.01.20180205”使受測物進行發射動作量測，動作持續不斷直到測試結束。

6.4 量測之不確定度

實驗室峰值輸出功率量測之不確定度為 $\pm 0.11\text{dB}$ 。

實驗室 26dB 頻寬量測之不確定度為 $\pm 0.196\text{MHz}$ 。

6.5 最大輸出功率及 26dB/6dB 頻寬之量測結果

量測結果，請參見附錄一。

7 峰值功率頻譜密度之量測

7.1 適用標準

依據 NCC 低功率射頻電機技術規範 4.7.3.1 節(1)(B)、(2)(B)、(3)(B)及(4)(B)之要求：使用於 5.15～5.25GHz 頻段，依不同產品類別之最大功率頻譜密度限制值，請參見下表：

產品類別	最大功率頻譜密度限制值
供戶外操作使用	$\leq 17 \text{ dBm/1MHz}$ 註 1
供室內操作使用	
供固定式點對點操作使用	$\leq 17 \text{ dBm/1MHz}$ 註 2
供用戶端裝置(Client Device)操作使用	$\leq 11 \text{ dBm/1MHz}$ 註 1

註 1: 使用超過 6 dBi 方向增益之發射天線時，應依超過 6 dBi 天線方向增益的 dBi 總量，等量減少最大傳導輸出功率及最大功率頻譜密度。

2: 使用超過 23 dBi 方向增益之指向性天線時，應依超過 23 dBi 天線方向增益的 dBi 總量，等量減少最大傳導輸出功率及最大功率頻譜密度。

依據 NCC 低功率射頻電機技術規範 4.7.3.2 節(2) 及 4.7.3.3 節(2)之要求，使用於 5.25 GHz～5.35 GHz 與 5.470 GHz～5.725 GHz 及 5.725 GHz～5.850 GHz 頻段下峰值功率頻譜密度的限制值如下：

操作頻率(GHz)	峰值功率頻譜密度的限制值
5.25GHz～5.35GHz	$\leq 11 \text{ dBm/1MHz}$ 註 1
5.470GHz～5.725GHz	$\leq 11 \text{ dBm/1MHz}$ 註 1
5.725GHz～5.85GHz	$\leq 30\text{dBm/500 kHz}$ 註 2

註 1: 若使用超過 6dBi 方向增益之發射天線，則以超過 6dBi 天線方向增益的 dBi 總量，等量減少峰值功率頻譜密度。

2: 供固定式點對點操作時，使用方向增益超過 6 dBi 之發射天線，可不需對應減少發射器之傳導輸出功率限制值。

若非固定式點對點操作時，使用超過 6 dBi 方向增益之發射天線時，應依超過 6 dBi 天線方向增益的 dBi 總量，等量減少最大傳導輸出功率及最大功率頻譜密度。

7.2 量測方法

將射頻輸出連接到頻譜分析儀，進行量測低、中、高三個頻道的功率密度。頻譜分析儀之解析頻寬為 1MHz 或 100kHz，視訊頻寬為 3MHz 或 300kHz。

7.3 量測時受測物之工作狀況

筆記型電腦執行測試程式“Realtek 11ac 8822B USB WLAN MP diagnostic program 0.0005.01.20180205”使受測物進行發射動作量測，動作持續不斷直到測試結束。

7.4 量測之不確定度

實驗室峰值功率頻譜密度量測之不確定度為 $\pm 0.196\text{dB}$ 。

7.5 峰值功率頻譜密度之量測結果

量測結果，請參見附錄一。

8 頻帶邊緣之 RF 傳導發射之量測

8.1 適用標準

依據 NCC 低功率射頻電機技術規範 4.7.4.1 節、4.7.4.2 節之要求，操作於 5.15 GHz ~ 5.35 GHz 及 5.470 GHz ~ 5.725 GHz、5.725 GHz ~ 5.850 GHz 頻率帶外的發射有效等向輻射功率(EIRP)限制值如下：

操作頻率	有效等向輻射功率限制值
5.15 GHz ~ 5.35 GHz	$\leq -27 \text{ dBm/MHz}$
5.470 GHz ~ 5.725 GHz	
5.725 GHz ~ 5.850 GHz	$\leq 27 \text{ dBm/MHz} \sim 15.6 \text{ dBm/MHz}$ 註1
	$\leq 15.6 \text{ dBm/MHz} \sim 10 \text{ dBm/MHz}$ 註2
	$\leq 10 \text{ dBm/MHz} \sim -27 \text{ dBm/MHz}$ 註3
	$\leq -27 \text{ dBm/MHz}$ 註4

註 1: 頻帶邊緣向外 5MHz 內頻率之發射。

2. 頻帶邊緣向外 5MHz~25MHz 之發射。

3. 頻帶邊緣向外 25MHz~75MHz 之發射。

4: 頻帶邊緣外 $\geq 75\text{MHz}$ 之發射。

8.2 量測方法

將射頻輸出連接到頻譜分析儀，設定頻譜分析儀之解析頻寬為 1MHz，視訊頻寬大於 3 倍解析頻寬。

8.3 量測時受測物之工作狀況

筆記型電腦執行測試程式“Realtek 11ac 8822B USB WLAN MP diagnostic program 0.0005.01.20180205”使受測物進行發射動作量測，動作持續不斷直到測試結束。

8.4 量測之不確定度

實驗室頻帶邊緣之 RF 傳導發射量測之不確定度為 $\pm 0.13\text{dB}$ 。

8.5 頻帶邊緣之 RF 傳導發射之量測結果

量測結果，請參見附錄一。

9 電波暴露量之要求

9.1 適用標準

依據NCC低功率射頻電機技術規範5.20.2節(2)之規定，受測物於正常操作模式下，其發射機距離人體20公分以上者，可測試最大暴露允許值(Maximum Permissible Exposure，MPE)以證明其符電波暴露量之要求。

一般人/不可控制之暴露：

頻率範圍(MHz)	電場強度 (V/m)	磁場強度 (A/m)	功率密度 (mW/cm ²)	平均時間 (minutes)
0.3-3.0	614	1.63	*100	30
3-30	1842/f	4.89/f	*180/f ²	30
30-300	27.5	0.073	1.0	30
300-1,500			f/1500	30
1,500-100,000			1.0	30

註 1：標記*表平面波等效功率密度。

註 2：f 表測試頻率，單位：百萬赫(MHz)。

註 3：電波暴露量 $MPE(S) = (P * G) / (4 * \pi * r^2)$

r 表:距離人體; P 表:最大發射功率; G 表:最大天線增益。

9.2 電波暴露量之量測結果

量測結果，請參見附錄一。

附錄 一

受測裝置之測試結果

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1. 場強輻射之量測

對受測物裝置之其他不必要之發射(測至本地振盪頻率之 10 次諧波)依下列測試模式分別於電波暗室內進行量測，實驗室先將受測物裝置分別以三種不同的擺設方式(站立、平放、側立)進行量試評估，最後選取最大場強值的擺設方式(平放)以低、中、高頻率來進行量測，並將下列測試模式之測試數據隨案件所附。最後，選擇較差模式進行讀值之測量，所得讀值資料請見章節 1.1 ~1.2：

支援 802.11a/n/ac，依測試要求評估低、中、高頻率，並檢附三頻率之最差模式於此測試報告中。

模式	動作狀態	基本頻率		量測頻率範圍
802.11a	發射	UNII Band I	5180MHz (CH36)	1000-40000MHz
		UNII Band II	5260MHz (CH52)	
		UNII Band III	5500MHz (CH100)	
		UNII Band IV	5785MHz (CH157)	
802.11n-HT20	發射	UNII Band I	5200MHz (CH40)	1000-40000MHz
		UNII Band II	5300MHz (CH60)	
		UNII Band III	5580MHz (CH116)*	30-1000MHz
		UNII Band IV	5825MHz (CH165)	1000-40000MHz
802.11n-HT40	發射	UNII Band I	5190MHz (CH38)	1000-40000MHz
		UNII Band II	5270MHz (CH54)	
		UNII Band III	5510MHz (CH102)	
		UNII Band IV	5755MHz (CH151)	
802.11ac-VHT80	發射	UNII Band I	5210MHz (CH42)	1000-40000MHz
		UNII Band II	5290MHz (CH58)	
		UNII Band III	5530MHz (CH106)	
		UNII Band IV	5775MHz (CH155)	
---	接收	UNII Band III	5500MHz (CH100)	30-1000MHz
				1000-40000MHz

註: *: 經評估後，以最差頻率進行 30-1000MHz 量測。

對受測物裝置落於技術規範第 2.7 章節的禁用頻帶之混附發射以下列測試模式依規定分別進行量測，所得量測資料請見章節 1.3。

模式	動作狀態	基本頻率		量測頻率範圍
802.11a	發射	UNII Band I	5180MHz (CH36)	5100-5200MHz
		UNII Band II	5320MHz (CH64)	5300-5460MHz
		UNII Band III	5500MHz (CH100)	5420-5520MHz
			5700MHz (CH140)	5680-5760MHz
802.11n-HT20	發射	UNII Band I	5180MHz (CH36)	5100-5200MHz
		UNII Band II	5320MHz (CH64)	5300-5460MHz
		UNII Band III	5500MHz (CH100)	5420-5520MHz
			5700MHz (CH140)	5680-5760MHz
802.11n-HT40	發射	UNII Band I	5190MHz (CH38)	5100-5210MHz
		UNII Band II	5310MHz (CH62)	5290-5460MHz
		UNII Band III	5510MHz (CH102)	5420-5530MHz
			5670MHz (CH134)	5650-5760MHz
802.11ac-VHT80	發射	UNII Band I	5210MHz (CH42)	5100-5250MHz
		UNII Band II	5290MHz (CH58)	5250-5460MHz
		UNII Band III	5530MHz (CH106)	5420-5570MHz
			5610MHz (CH122)	5560-5760MHz

測試日期	2020/04/23~30	環境溫/濕度	19~22°C/55~61%
測試電壓	DC 5V (經 USB 連接筆記型電腦供電)	測試人員	Kuper Hsu

1.1. 30-1000MHz 頻率範圍，其他不必要發射量測

Mode	802.11n-HT20	UNII Band	III
		Frequency	TX 5580MHz

Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
34.850	22.18	1.35	26.52	27.43	24.44	40.00	15.56	Peak
120.210	18.71	2.68	26.20	43.24	38.43	43.50	5.07	Peak
136.700	18.17	2.90	26.12	42.36	37.31	43.50	6.19	Peak
246.310	18.44	3.98	25.78	34.96	31.60	46.00	14.40	Peak
741.010	25.48	7.83	27.46	29.10	34.95	46.00	11.05	Peak
986.420	27.32	9.10	26.87	29.24	38.79	54.00	15.21	Peak

Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
34.850	22.18	1.35	26.52	27.18	24.19	40.00	15.81	Peak
120.210	18.71	2.68	26.20	36.97	32.16	43.50	11.34	Peak
265.710	18.89	4.19	25.75	31.16	28.49	46.00	17.51	Peak
399.570	21.82	6.02	26.52	31.26	32.58	46.00	13.42	Peak
638.190	24.87	7.25	27.49	29.37	34.00	46.00	12.00	Peak
980.600	27.28	9.07	26.90	28.19	37.64	54.00	16.36	Peak

Mode	---	Frequency	RX 5500MHz
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Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
33.880	22.55	1.32	26.52	27.91	25.26	40.00	14.74	Peak
120.210	18.71	2.68	26.20	42.65	37.84	43.50	5.66	Peak
266.680	18.90	4.20	25.75	37.87	35.22	46.00	10.78	Peak
345.250	20.53	5.22	26.11	32.59	32.23	46.00	13.77	Peak
595.510	24.75	7.03	27.48	28.84	33.14	46.00	12.86	Peak
978.660	27.28	9.07	26.90	28.69	38.14	54.00	15.86	Peak

Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
35.820	21.56	1.38	26.52	27.88	24.30	40.00	15.70	Peak
120.210	18.71	2.68	26.20	36.45	31.64	43.50	11.86	Peak
266.680	18.90	4.20	25.75	30.81	28.16	46.00	17.84	Peak
399.570	21.82	6.02	26.52	29.90	31.22	46.00	14.78	Peak
464.560	22.94	6.61	26.99	31.14	33.70	46.00	12.30	Peak
979.630	27.28	9.07	26.90	29.00	38.45	54.00	15.55	Peak

1.2. 1000MHz 以上頻率範圍，其他不必要發射量測

頻率範圍量測至 40GHz，其他未列在報告上乃因訊號太小無法量測。

Mode	802.11a	Frequency	TX 5180MHz
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Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
10360.000	37.63	14.75	34.87	32.54	50.05	54.00	3.95	Average
10360.000	37.63	14.75	34.87	46.41	63.92	74.00	10.08	Peak

Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
10360.000	37.63	14.75	34.87	23.66	41.17	54.00	12.83	Average
10360.000	37.63	14.75	34.87	37.53	55.04	74.00	18.96	Peak

Mode	802.11a	Frequency	TX 5260MHz
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Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
10520.000	37.70	14.84	34.72	30.94	48.76	54.00	5.24	Average
10520.000	37.70	14.84	34.72	44.82	62.64	74.00	11.36	Peak

Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
10520.000	37.70	14.84	34.72	35.88	53.70	54.00	0.30	Peak

Mode	802.11a	Frequency	TX 5500MHz
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Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
11000.000	37.90	15.12	34.59	33.91	52.34	54.00	1.66	Average
11000.000	37.90	15.12	34.59	47.78	66.21	74.00	7.79	Peak

Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
11000.000	37.90	15.12	34.59	22.90	41.33	54.00	12.67	Average
11000.000	37.90	15.12	34.59	36.77	55.20	74.00	18.80	Peak

Mode	802.11a	Frequency	TX 5785MHz
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Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
11570.000	38.37	15.53	34.65	23.36	42.61	54.00	11.39	Average
11570.000	38.37	15.53	34.65	37.23	56.48	74.00	17.52	Peak

Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
11570.000	38.37	15.53	34.65	31.75	51.00	54.00	3.00	Peak

Mode	802.11n-HT20	Frequency	TX 5200MHz
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Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
10400.000	37.70	14.77	34.81	26.65	44.31	54.00	9.69	Average
10400.000	37.70	14.77	34.81	41.93	59.59	74.00	14.41	Peak

Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
10400.000	37.70	14.77	34.81	36.04	53.70	54.00	0.30	Peak

Mode	802.11n-HT20	Frequency	TX 5300MHz
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Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
10600.000	37.80	14.89	34.70	29.49	47.48	54.00	6.52	Average
10600.000	37.80	14.89	34.70	44.77	62.76	74.00	11.24	Peak

Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
10600.000	37.80	14.89	34.70	22.22	40.21	54.00	13.79	Average
10600.000	37.80	14.89	34.70	37.50	55.49	74.00	18.51	Peak

Mode	802.11n-HT20	Frequency	TX 5580MHz
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Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
11160.000	38.00	15.24	34.61	29.27	47.90	54.00	6.10	Average
11160.000	38.00	15.24	34.61	44.55	63.18	74.00	10.82	Peak

Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
11150.000	38.00	15.23	34.61	22.20	40.82	54.00	13.18	Average
11150.000	38.00	15.23	34.61	37.48	56.10	74.00	17.90	Peak

Mode	802.11n-HT20	Frequency	TX 5825MHz
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Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
11640.000	38.40	15.58	34.66	22.69	42.01	54.00	11.99	Average
11640.000	38.40	15.58	34.66	37.98	57.30	74.00	16.70	Peak

Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
11640.000	38.40	15.58	34.66	31.61	50.93	54.00	3.07	Peak

Mode	802.11n-HT40	Frequency	TX 5190MHz
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Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
10380.000	37.70	14.76	34.84	35.79	53.41	54.00	0.59	Peak

Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
10380.000	37.70	14.76	34.84	32.95	50.57	54.00	3.43	Peak

Mode	802.11n-HT40	Frequency	TX 5270MHz
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Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
10540.000	37.73	14.85	34.71	33.79	51.66	54.00	2.34	Peak

Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
10540.000	37.73	14.85	34.71	31.65	49.52	54.00	4.48	Peak

Mode	802.11n-HT40	Frequency	TX 5510MHz
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Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
11020.000	37.90	15.13	34.59	34.74	53.18	54.00	0.82	Peak

Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
11020.000	37.90	15.13	34.59	31.97	50.41	54.00	3.59	Peak

Mode	802.11n-HT40	Frequency	TX 5755MHz
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Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
11510.000	38.30	15.49	34.64	33.27	52.42	54.00	1.58	Peak

Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
11510.000	38.30	15.49	34.64	32.15	51.30	54.00	2.70	Peak

Mode	802.11ac-VHT80	Frequency	TX 5210MHz
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Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
10420.000	37.70	14.78	34.81	35.43	53.10	54.00	0.90	Peak

Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
10420.000	37.70	14.78	34.81	30.56	48.23	54.00	5.77	Peak

Mode	802.11ac-VHT80	Frequency	TX 5290MHz
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Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
10580.000	37.77	14.88	34.70	34.98	52.93	54.00	1.07	Peak

Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
10580.000	37.77	14.88	34.70	31.09	49.04	54.00	4.96	Peak

Mode	802.11ac-VHT80	Frequency	TX 5530MHz
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Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
11060.000	37.97	15.19	34.60	34.19	52.75	54.00	1.25	Peak

Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
11060.000	37.93	15.17	34.59	31.48	49.99	54.00	4.01	Peak

Mode	802.11ac-VHT80	Frequency	TX 5775MHz
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Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
11550.000	38.33	15.52	34.65	31.32	50.52	54.00	3.48	Peak

Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
11550.000	38.33	15.52	34.65	29.78	48.98	54.00	5.02	Peak

Mode	---	Frequency	RX 5500
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Antenna at Horizontal Polarization

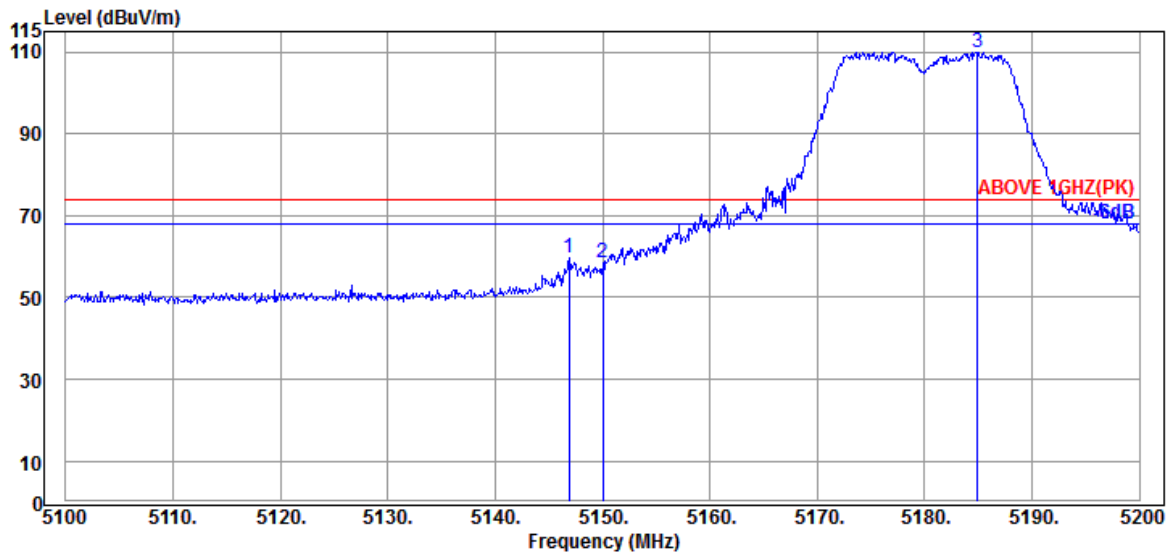
Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
11000.000	37.90	15.12	34.59	30.30	48.73	54.00	5.27	Peak

Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
11000.000	37.90	15.12	34.59	30.14	48.57	54.00	5.43	Peak

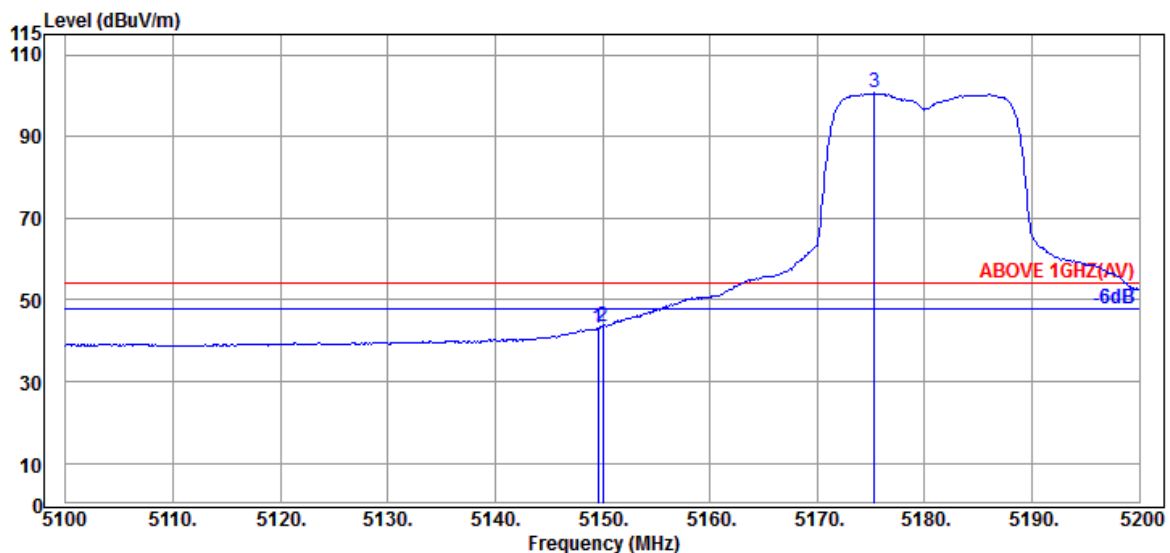
1.3. 禁用頻帶量測結果 (其他不必要發射)

Mode	802.11a	Frequency	TX 5180MHz
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Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
5146.900	34.40	10.36	34.38	49.32	59.70	74.00	14.30	Peak
5150.000	34.40	10.36	34.38	48.08	58.46	74.00	15.54	Peak
@ 5184.900	34.47	10.38	34.37	99.52	110.00	---	---	Peak

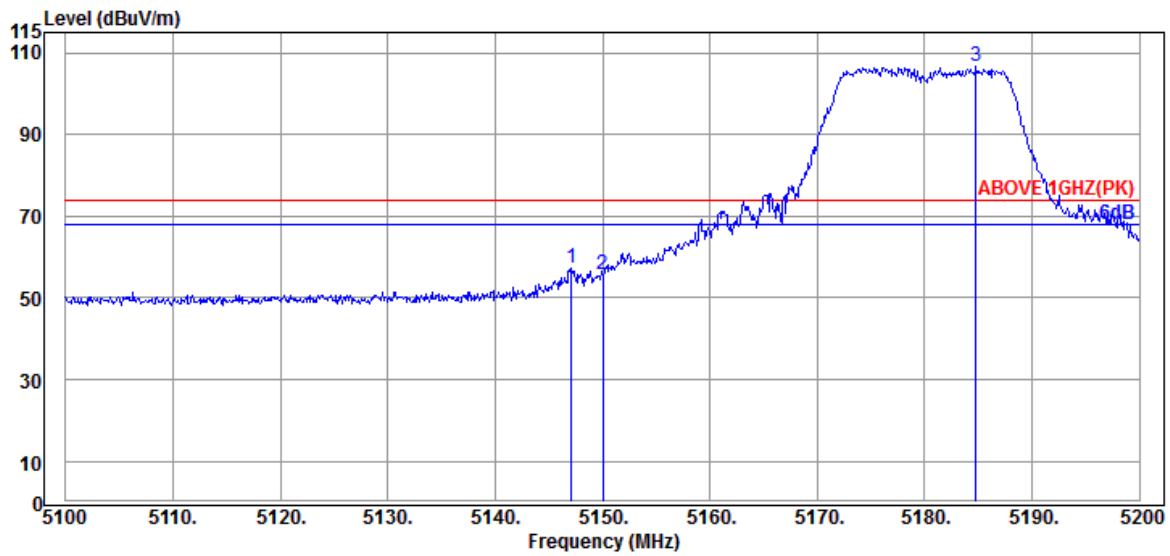


Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
5149.600	34.40	10.36	34.38	32.77	43.15	54.00	10.85	Average
5150.000	34.40	10.36	34.38	33.08	43.46	54.00	10.54	Average
@ 5175.300	34.47	10.38	34.37	90.11	100.59	---	---	Average

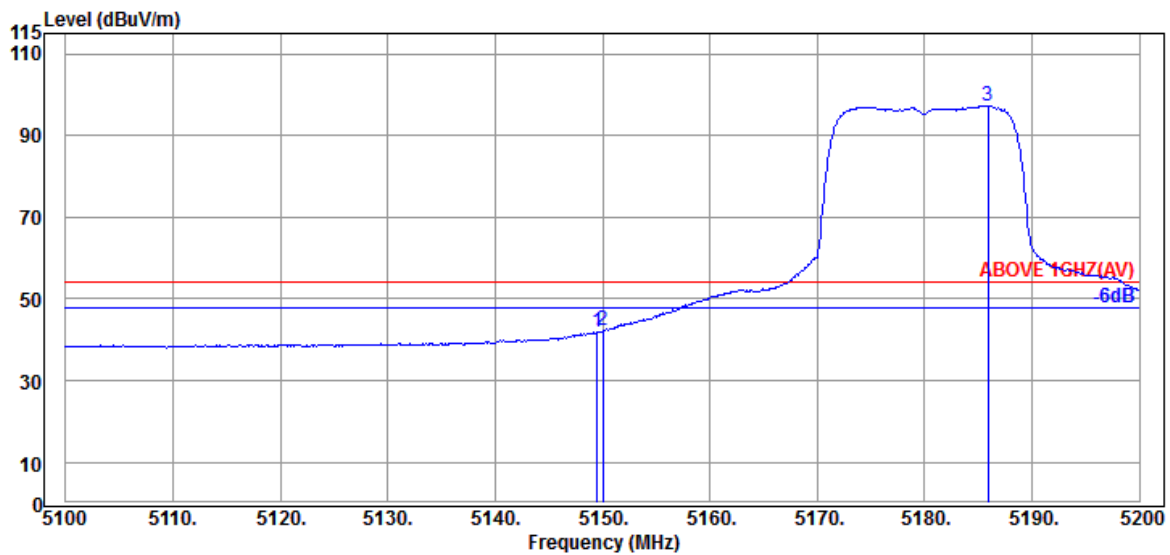
備註：“@”為主波，在此章節是不予以判定。

Mode	802.11a	Frequency	TX 5180MHz
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Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
5147.100	34.40	10.36	34.38	47.07	57.45	74.00	16.55	Peak
5150.000	34.40	10.36	34.38	45.18	55.56	74.00	18.44	Peak
@ 5184.800	34.47	10.38	34.37	96.11	106.59	---	---	Peak

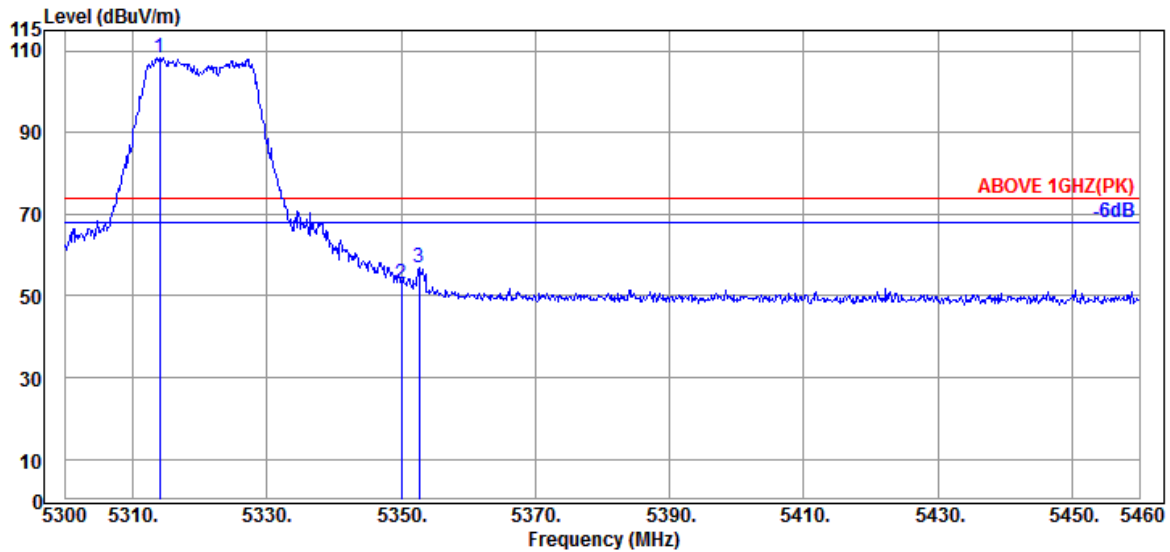


Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
5149.500	34.40	10.36	34.38	31.42	41.80	54.00	12.20	Average
5150.000	34.40	10.36	34.38	31.78	42.16	54.00	11.84	Average
@ 5185.900	34.47	10.38	34.37	86.80	97.28	---	---	Average

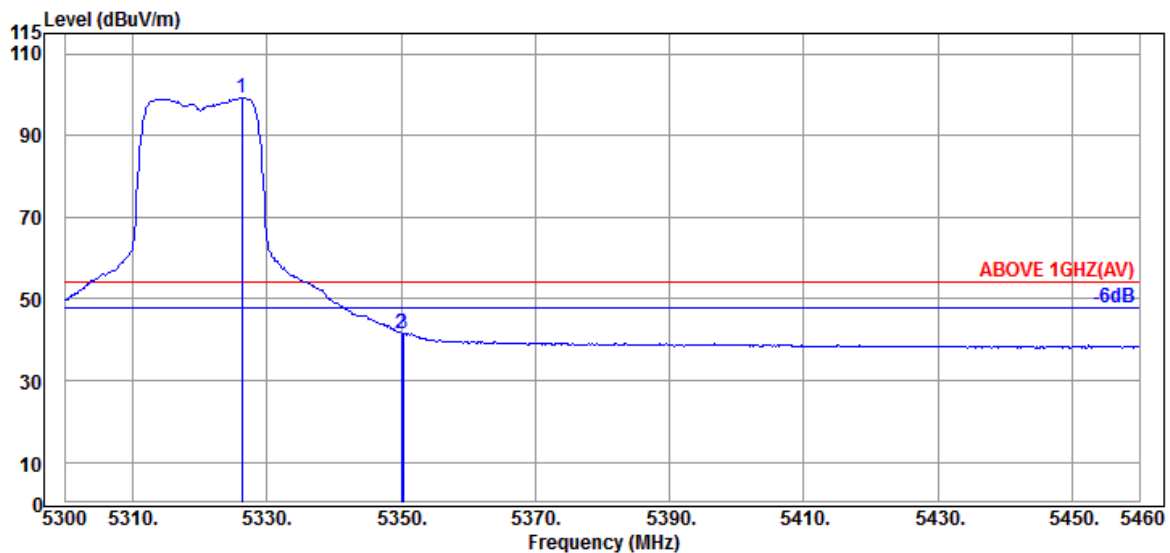
備註：“@”為主波，在此章節是不予以判定。

Mode	802.11a	Frequency	TX 5320MHz
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Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
@ 5314.080	34.60	10.46	34.33	97.66	108.39	---	---	Peak
5350.080	34.60	10.48	34.31	42.23	53.00	74.00	21.00	Peak
5352.640	34.60	10.48	34.31	45.97	56.74	74.00	17.26	Peak

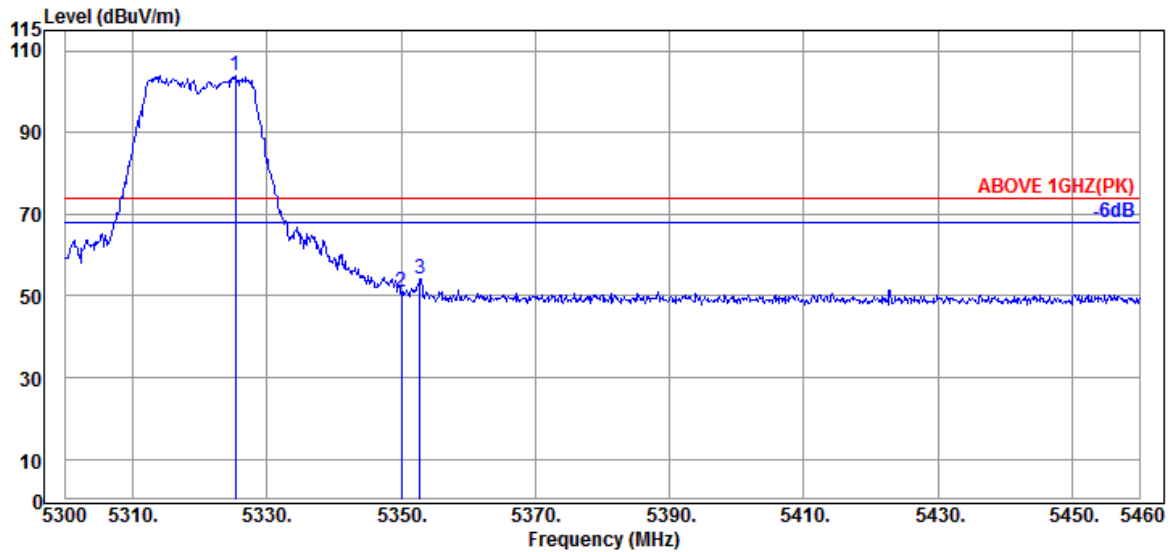


Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
@ 5326.240	34.60	10.46	34.33	88.64	99.37	---	---	Average
5350.080	34.60	10.48	34.31	30.86	41.63	54.00	12.37	Average
5350.240	34.60	10.48	34.31	30.86	41.63	54.00	12.37	Average

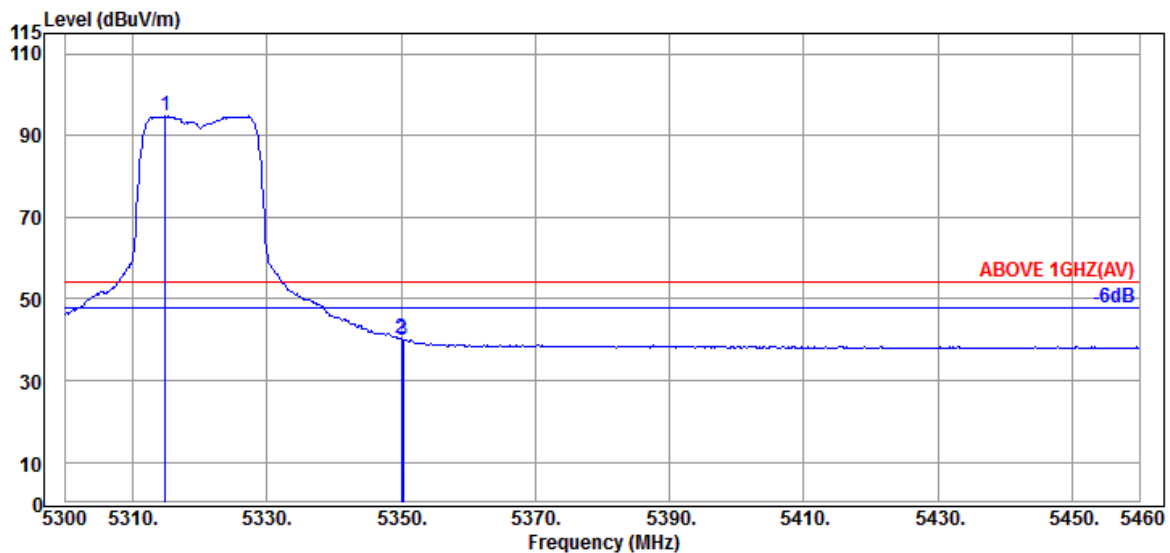
備註：“@”為主波，在此章節是不予以判定。

Mode	802.11a	Frequency	TX 5320MHz
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Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
@ 5325.280	34.60	10.46	34.33	93.38	104.11	---	---	Peak
5350.080	34.60	10.48	34.31	40.20	50.97	74.00	23.03	Peak
5352.800	34.60	10.48	34.31	43.45	54.22	74.00	19.78	Peak

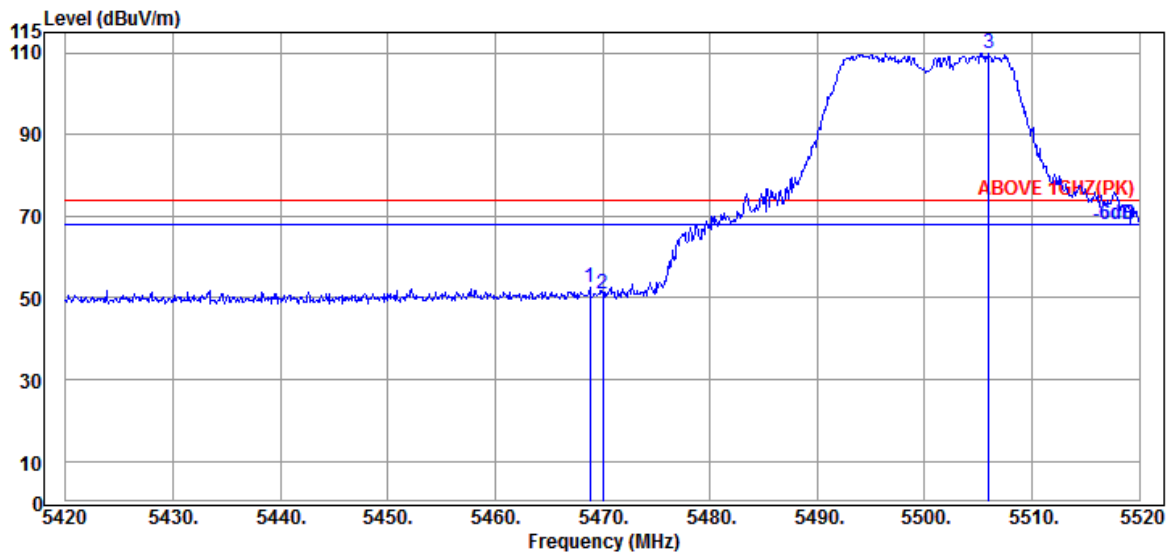


Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
@ 5314.880	34.60	10.46	34.33	84.05	94.78	---	---	Average
5350.080	34.60	10.48	34.31	29.46	40.23	54.00	13.77	Average
5350.240	34.60	10.48	34.31	29.27	40.04	54.00	13.96	Average

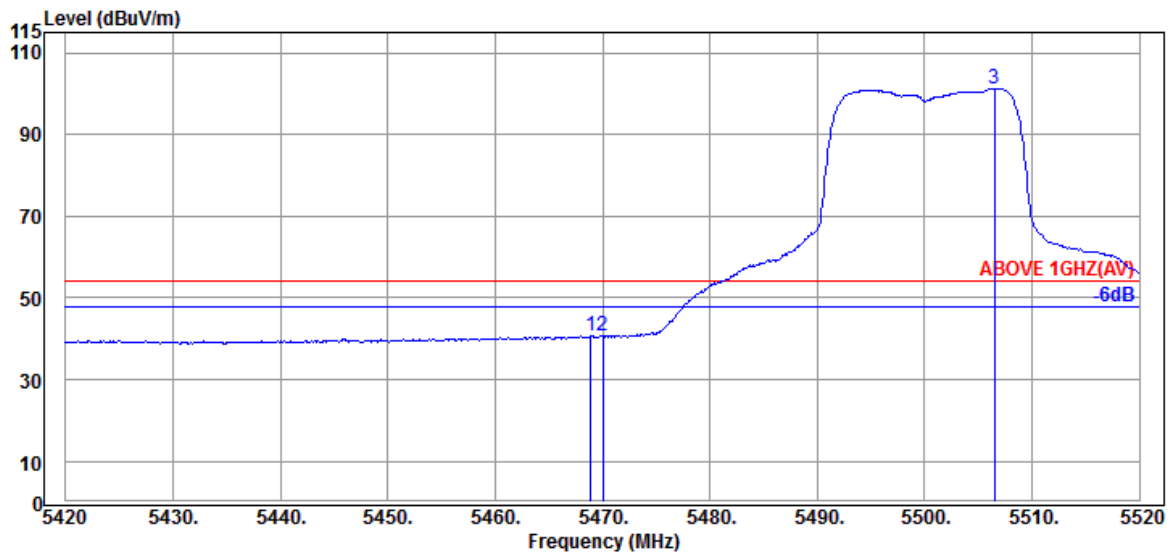
備註：“@”為主波，在此章節是不予以判定。

Mode	802.11a	Frequency	TX 5500MHz
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Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
5468.800	34.67	10.54	34.28	41.61	52.54	74.00	21.46	Peak
5470.000	34.67	10.54	34.28	39.98	50.91	74.00	23.09	Peak
@ 5506.000	34.60	10.56	34.28	98.92	109.80	---	---	Peak

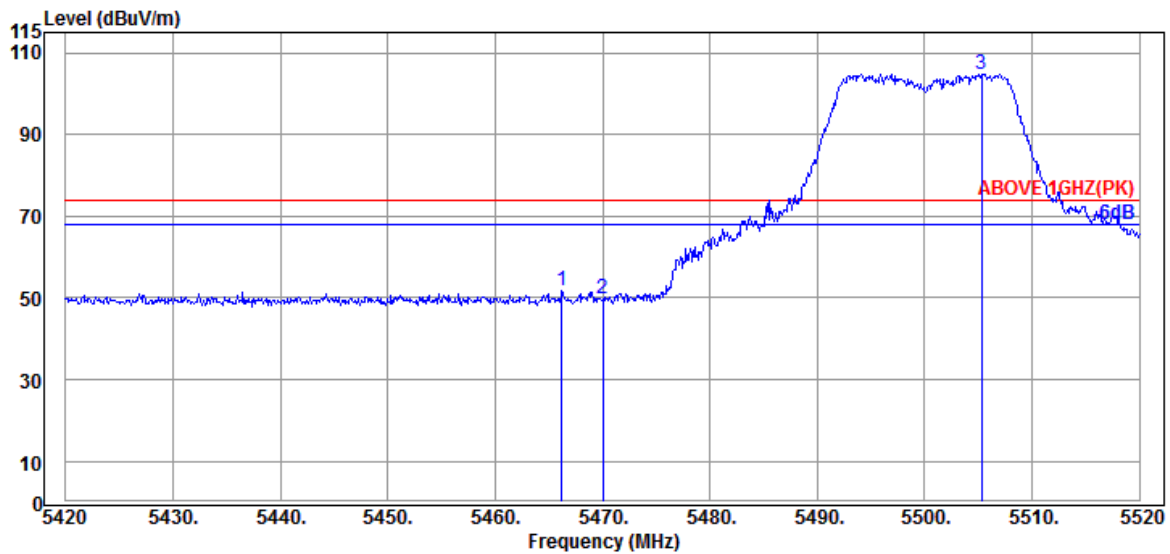


Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
5468.900	34.67	10.54	34.28	29.73	40.66	54.00	13.34	Average
5470.000	34.67	10.54	34.28	29.74	40.67	54.00	13.33	Average
@ 5506.500	34.60	10.56	34.28	90.45	101.33	---	---	Average

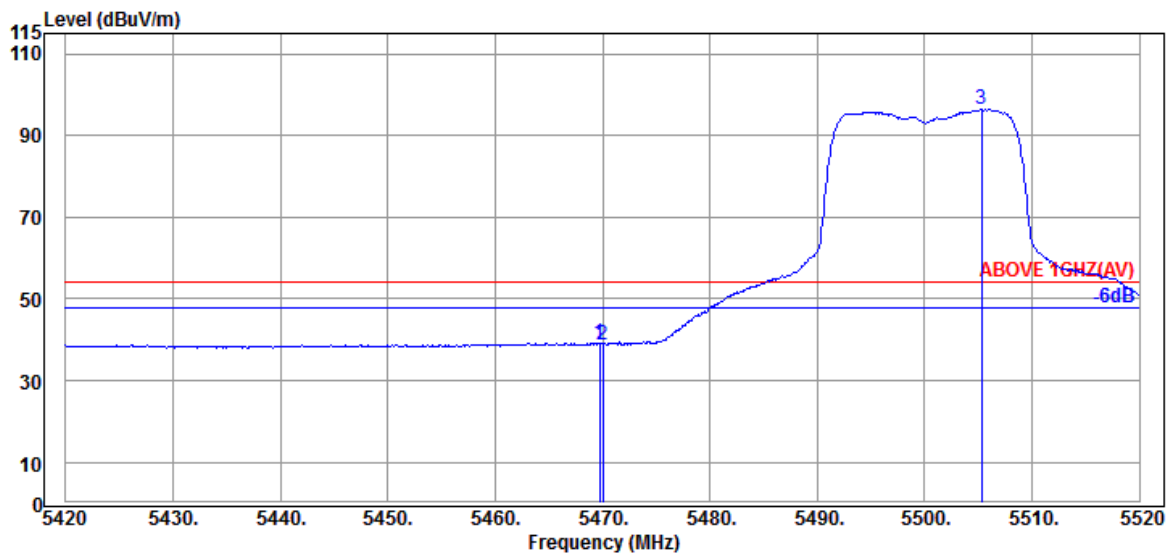
備註：“@”為主波，在此章節是不予以判定。

Mode	802.11a	Frequency	TX 5500MHz
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Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
5466.200	34.67	10.54	34.28	41.00	51.93	74.00	22.07	Peak
5470.000	34.67	10.54	34.28	38.82	49.75	74.00	24.25	Peak
@ 5505.300	34.60	10.56	34.27	93.87	104.76	---	---	Peak

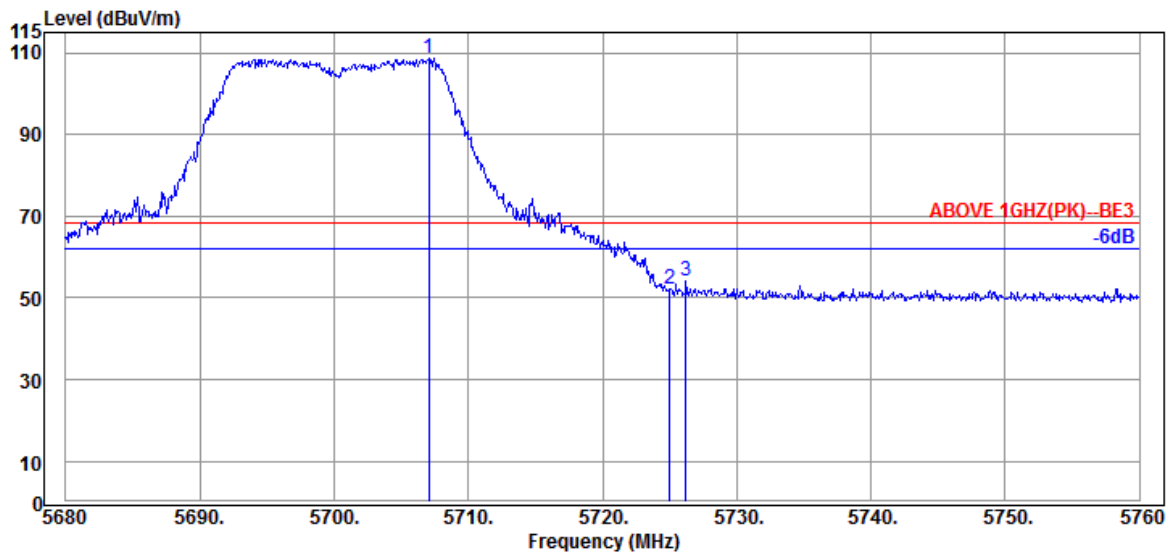


Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
5469.700	34.67	10.54	34.28	28.26	39.19	54.00	14.81	Average
5470.000	34.67	10.54	34.28	27.94	38.87	54.00	15.13	Average
@ 5505.300	34.60	10.56	34.27	85.47	96.36	---	---	Average

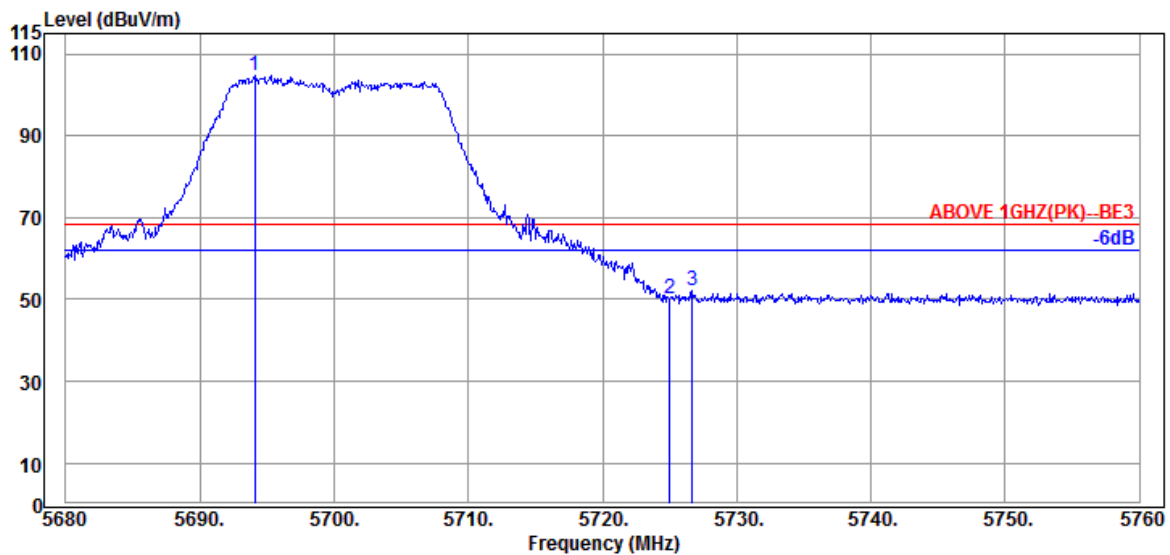
備註：“@”為主波，在此章節是不予以判定。

Mode	802.11a	Frequency	TX 5700MHz
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Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
@ 5707.040	34.80	10.82	34.36	97.41	108.67	68.20	---	Peak
5725.040	34.80	10.84	34.37	40.86	52.13	68.20	16.07	Peak
5726.240	34.80	10.84	34.37	42.83	54.10	68.20	14.10	Peak

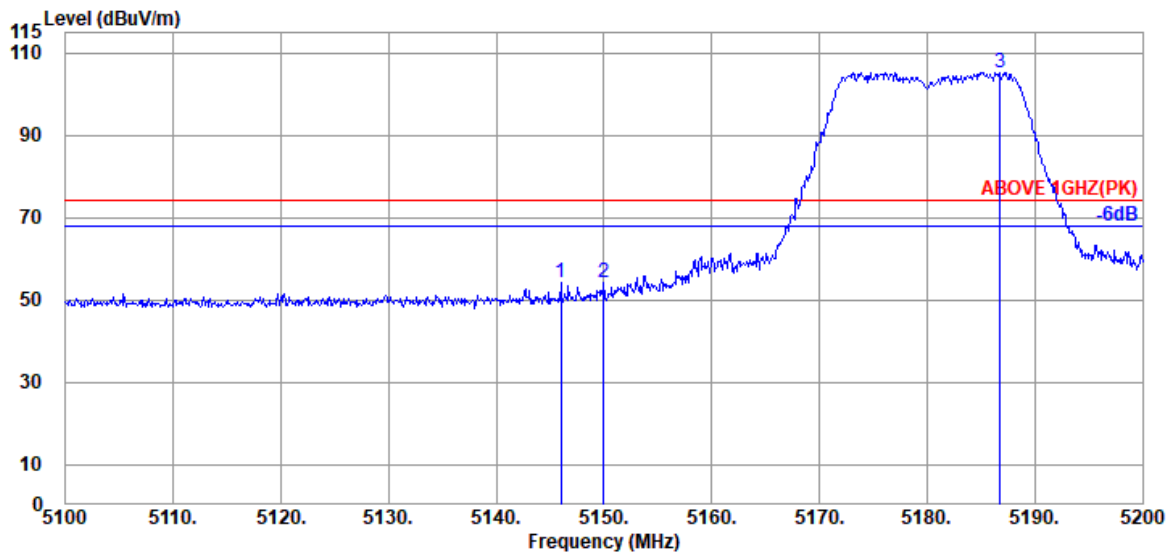


Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
@ 5694.080	34.80	10.80	34.36	93.53	104.77	68.20	---	Peak
5725.040	34.80	10.84	34.37	38.79	50.06	68.20	18.14	Peak
5726.720	34.80	10.84	34.38	40.86	52.12	68.20	16.08	Peak

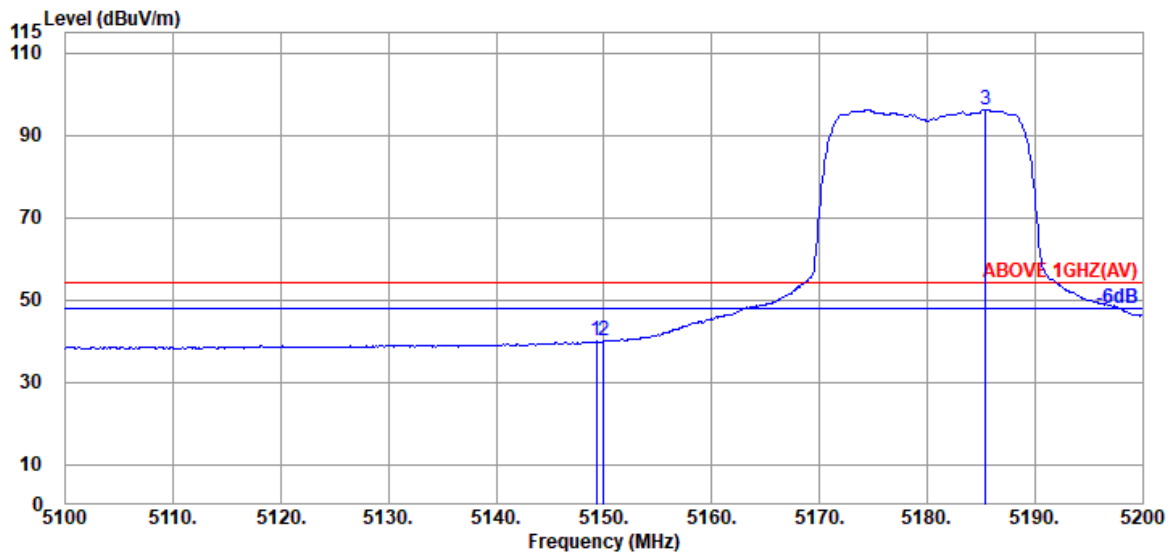
備註：“@”為主波，在此章節是不予以判定。

Mode	802.11n-HT20	Frequency	TX 5180MHz
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Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
5146.000	34.40	10.36	34.38	43.79	54.17	74.00	19.83	Peak
5150.000	34.40	10.36	34.38	43.91	54.29	74.00	19.71	Peak
@ 5186.800	34.50	10.38	34.37	94.85	105.36	---	---	Peak

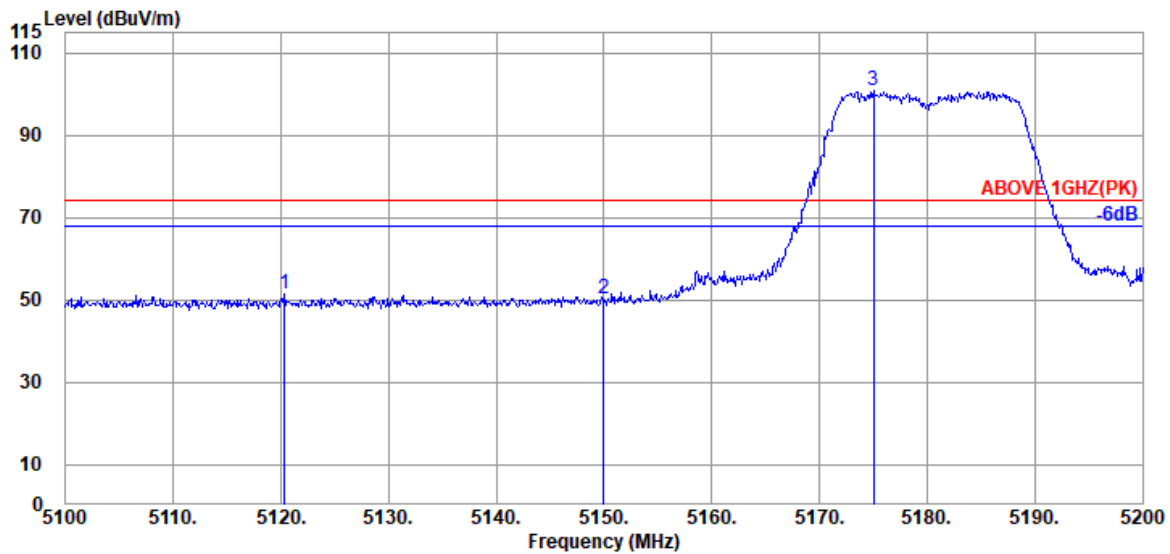


Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
5149.300	34.40	10.36	34.38	29.46	39.84	54.00	14.16	Average
5150.000	34.40	10.36	34.38	29.47	39.85	54.00	14.15	Average
@ 5185.400	34.47	10.38	34.37	85.77	96.25	---	---	Average

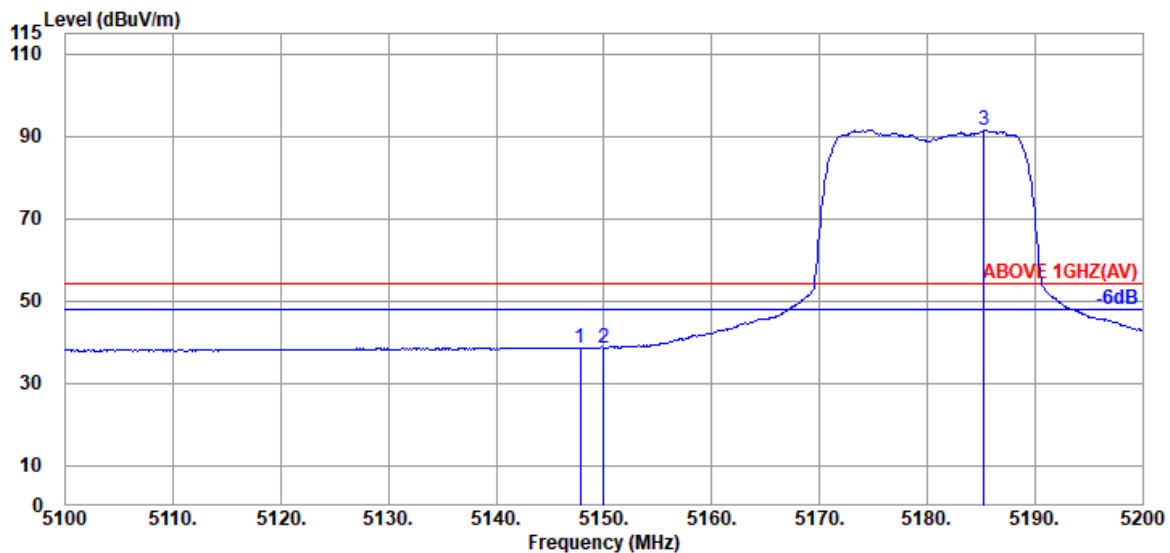
備註：“@”為主波，在此章節是不予以判定。

Mode	802.11n-HT20	Frequency	TX 5180MHz
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Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
5120.300	34.33	10.35	34.39	41.19	51.48	74.00	22.52	Peak
5150.000	34.40	10.36	34.38	39.91	50.29	74.00	23.71	Peak
@ 5175.000	34.47	10.38	34.37	90.32	100.80	---	---	Peak

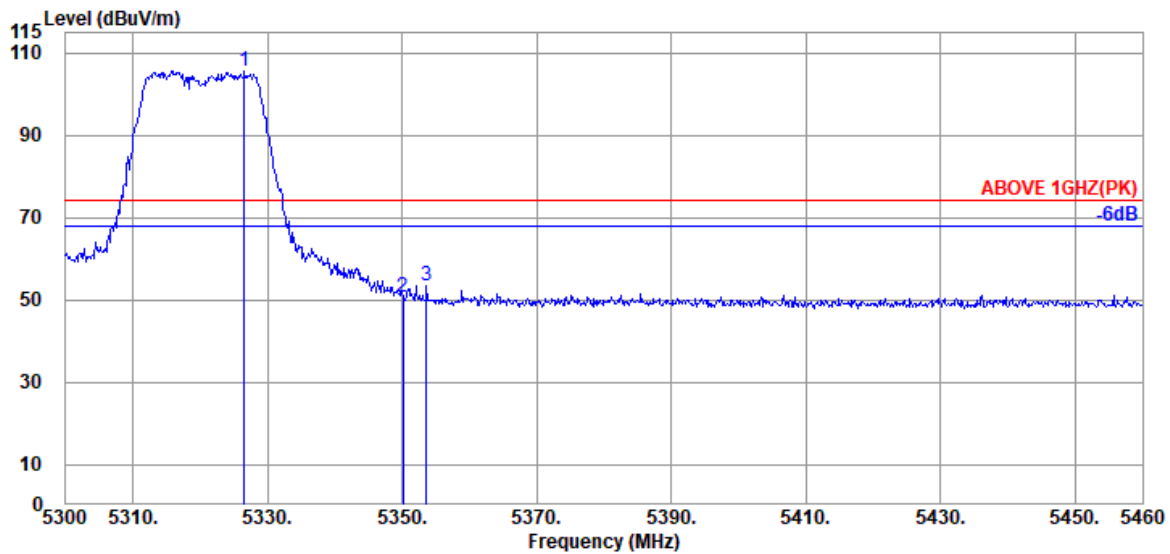


Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
5147.800	34.40	10.36	34.38	28.28	38.66	54.00	15.34	Average
5150.000	34.40	10.36	34.38	28.17	38.55	54.00	15.45	Average
@ 5185.300	34.47	10.38	34.37	81.03	91.51	---	---	Average

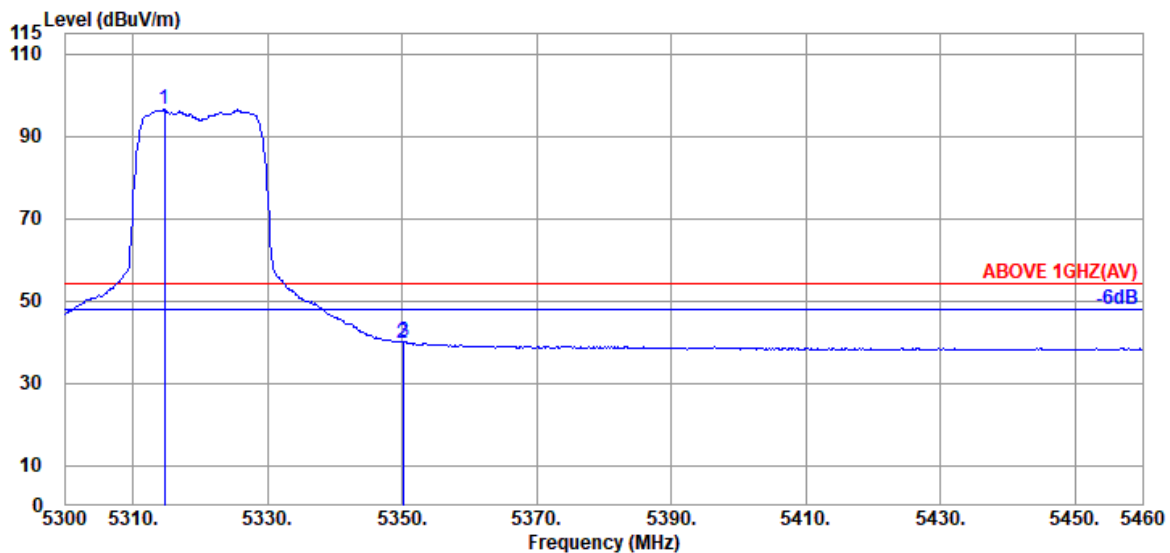
備註：“@”為主波，在此章節是不予以判定。

Mode	802.11n-HT20	Frequency	TX 5320MHz
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Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBμV)	Emission Level (dBUV/m)	Limits (dBUV/m)	Margin (dB)	Detector
@ 5326.560	34.60	10.47	34.33	94.72	105.46	---	---	Peak
5350.080	34.60	10.48	34.31	39.82	50.59	74.00	23.41	Peak
5353.600	34.60	10.48	34.31	42.68	53.45	74.00	20.55	Peak

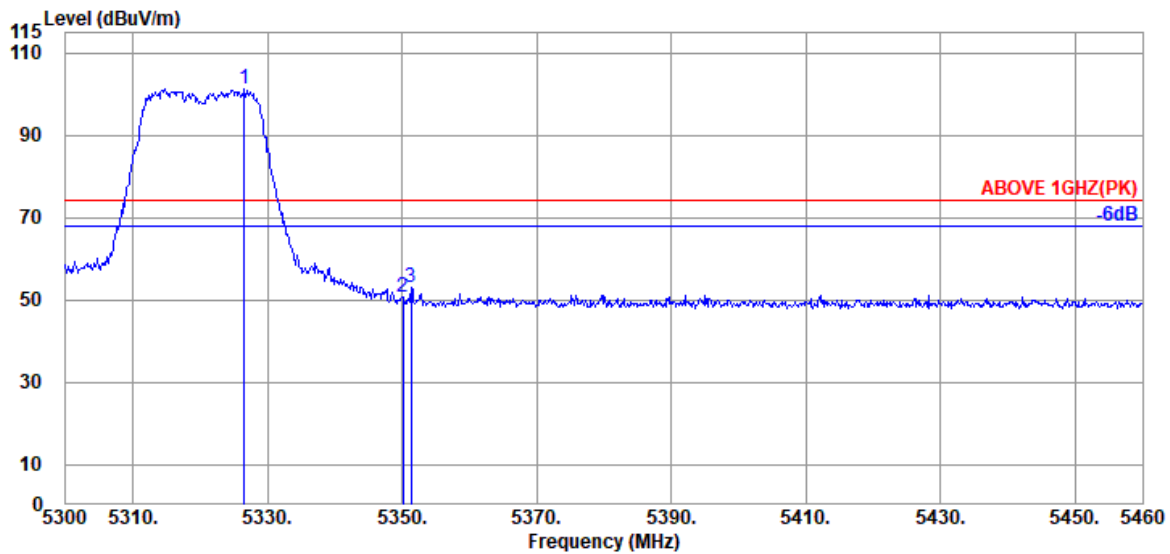


Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBμV)	Emission Level (dBUV/m)	Limits (dBUV/m)	Margin (dB)	Detector
@ 5314.720	34.60	10.46	34.33	85.78	96.51	---	---	Average
5350.080	34.60	10.48	34.31	28.95	39.72	54.00	14.28	Average
5350.240	34.60	10.48	34.31	29.12	39.89	54.00	14.11	Average

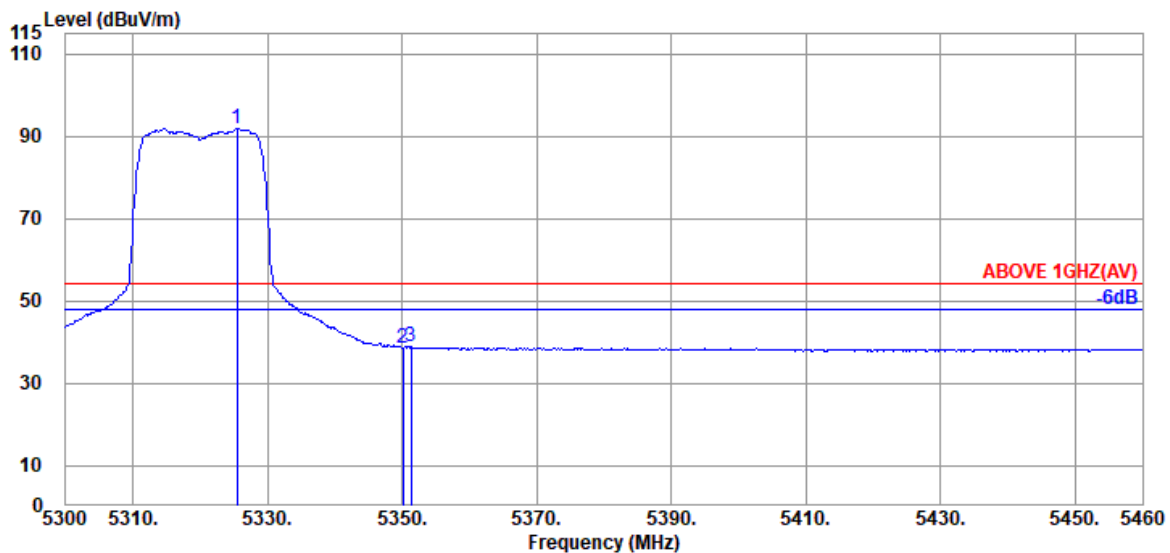
備註：“@”為主波，在此章節是不予以判定。

Mode	802.11n-HT20	Frequency	TX 5320MHz
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Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
@ 5326.560	34.60	10.47	34.33	90.42	101.16	---	---	Peak
5350.080	34.60	10.48	34.31	39.99	50.76	74.00	23.24	Peak
5351.360	34.60	10.48	34.31	42.04	52.81	74.00	21.19	Peak

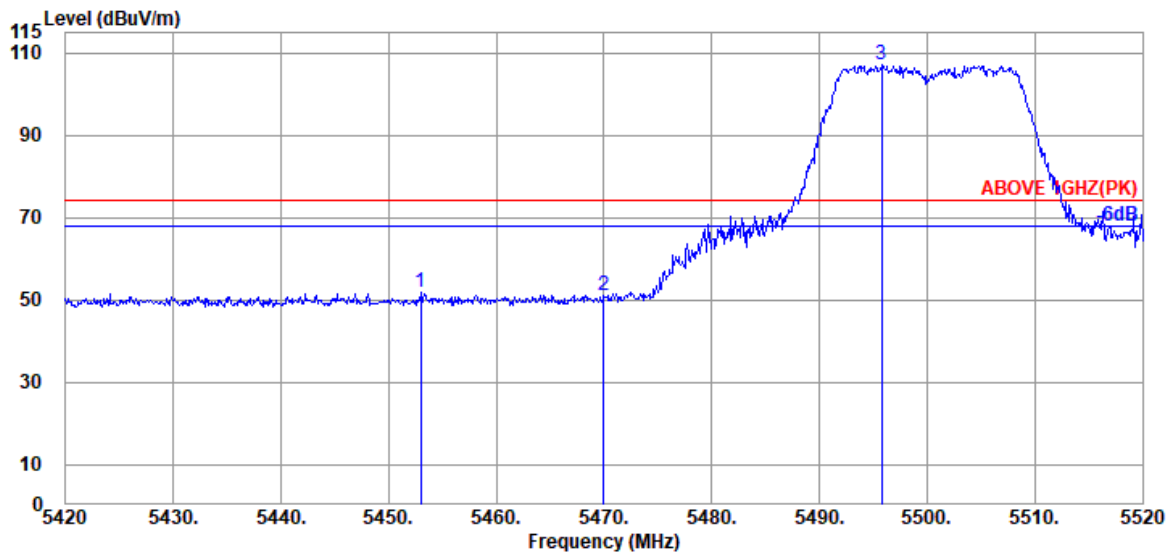


Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
@ 5325.440	34.60	10.46	34.33	81.10	91.83	---	---	Average
5350.080	34.60	10.48	34.31	27.84	38.61	54.00	15.39	Average
5351.360	34.60	10.48	34.31	28.06	38.83	54.00	15.17	Average

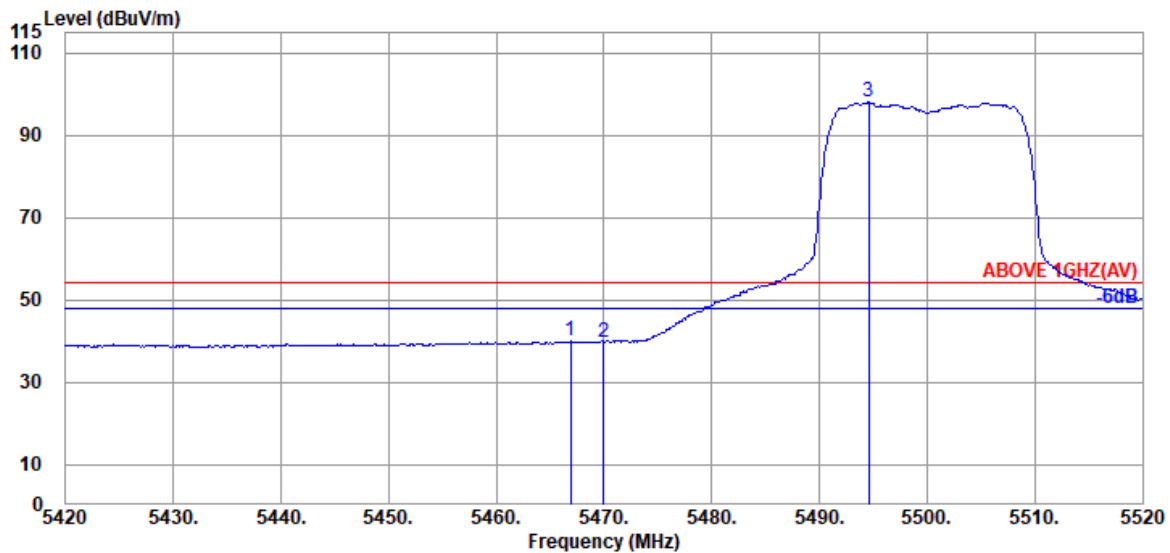
備註：“@”為主波，在此章節是不予以判定。

Mode	802.11n-HT20	Frequency	TX 5500MHz
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Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
5453.000	34.70	10.53	34.28	40.75	51.70	74.00	22.30	Peak
5470.000	34.67	10.54	34.28	40.24	51.17	74.00	22.83	Peak
@ 5495.800	34.60	10.55	34.27	96.09	106.97	---	---	Peak

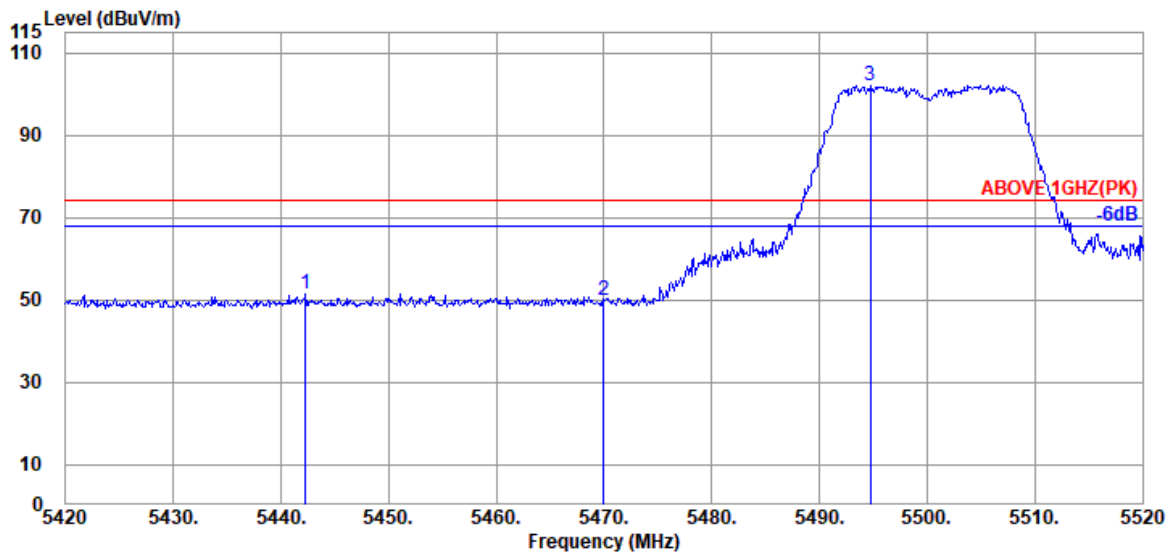


Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
5466.900	34.67	10.54	34.28	28.94	39.87	54.00	14.13	Average
5470.000	34.67	10.54	34.28	28.82	39.75	54.00	14.25	Average
@ 5494.600	34.63	10.55	34.27	87.07	97.98	---	---	Average

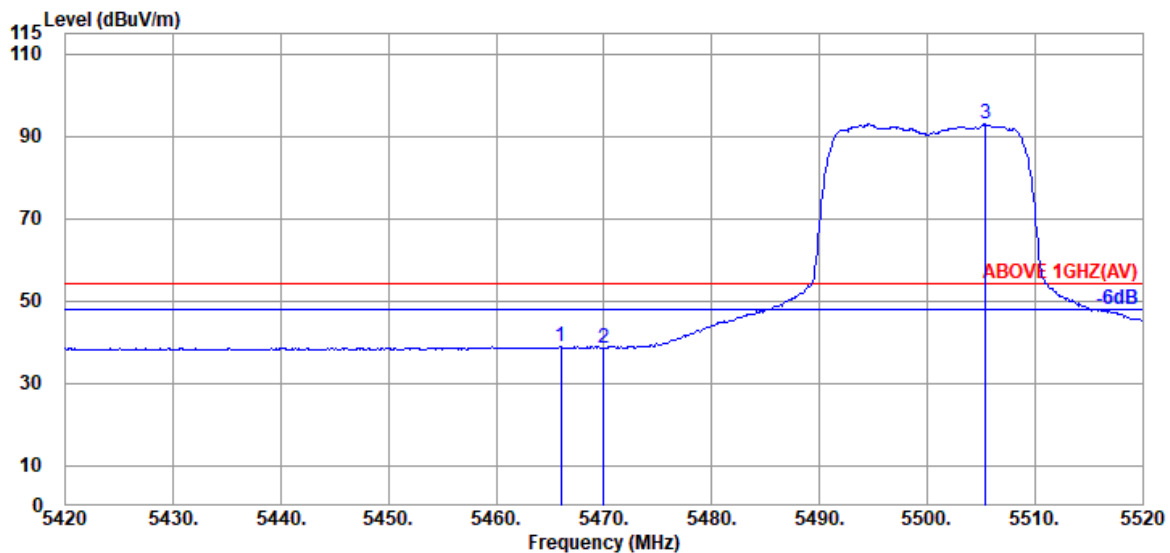
備註：“@”為主波，在此章節是不予以判定。

Mode	802.11n-HT20	Frequency	TX 5500MHz
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Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBUV)	Emission Level (dBUV/m)	Limits (dBUV/m)	Margin (dB)	Detector
5442.300	34.67	10.52	34.29	40.50	51.40	74.00	22.60	Peak
5470.000	34.67	10.54	34.28	38.88	49.81	74.00	24.19	Peak
@ 5494.700	34.63	10.55	34.27	91.27	102.18	---	---	Peak

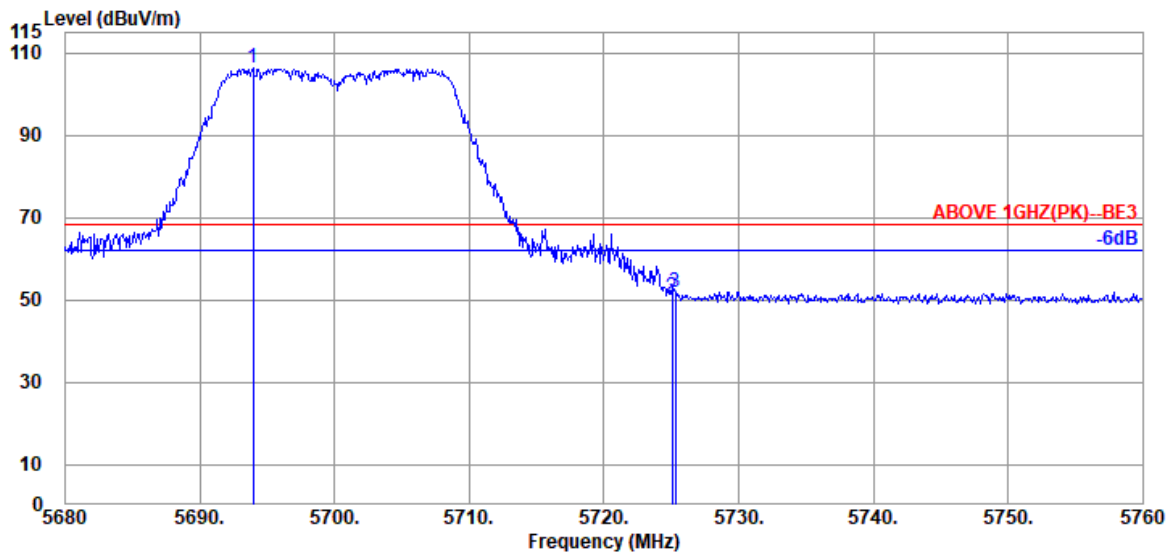


Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBUV)	Emission Level (dBUV/m)	Limits (dBUV/m)	Margin (dB)	Detector
5466.000	34.67	10.54	34.28	27.96	38.89	54.00	15.11	Average
5470.000	34.67	10.54	34.28	27.70	38.63	54.00	15.37	Average
@ 5505.400	34.60	10.56	34.27	82.00	92.89	---	---	Average

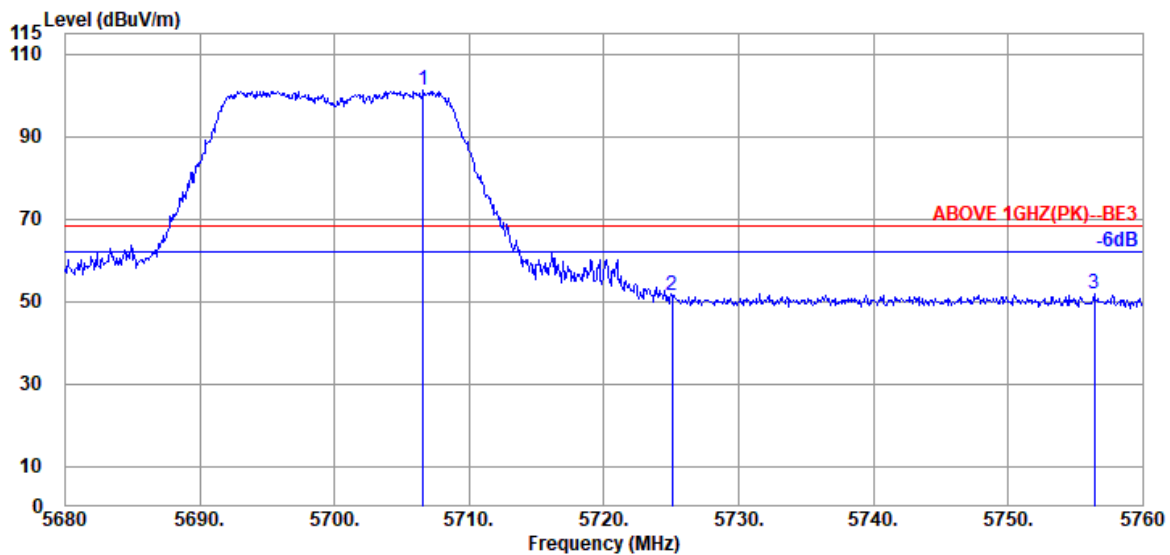
備註：“@”為主波，在此章節是不予以判定。

Mode	802.11n-HT20	Frequency	TX 5700MHz
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Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
@ 5693.920	34.80	10.80	34.36	95.01	106.25	68.20	---	Peak
5725.040	34.80	10.84	34.37	39.49	50.76	68.20	17.44	Peak
5725.280	34.80	10.84	34.37	40.57	51.84	68.20	16.36	Peak

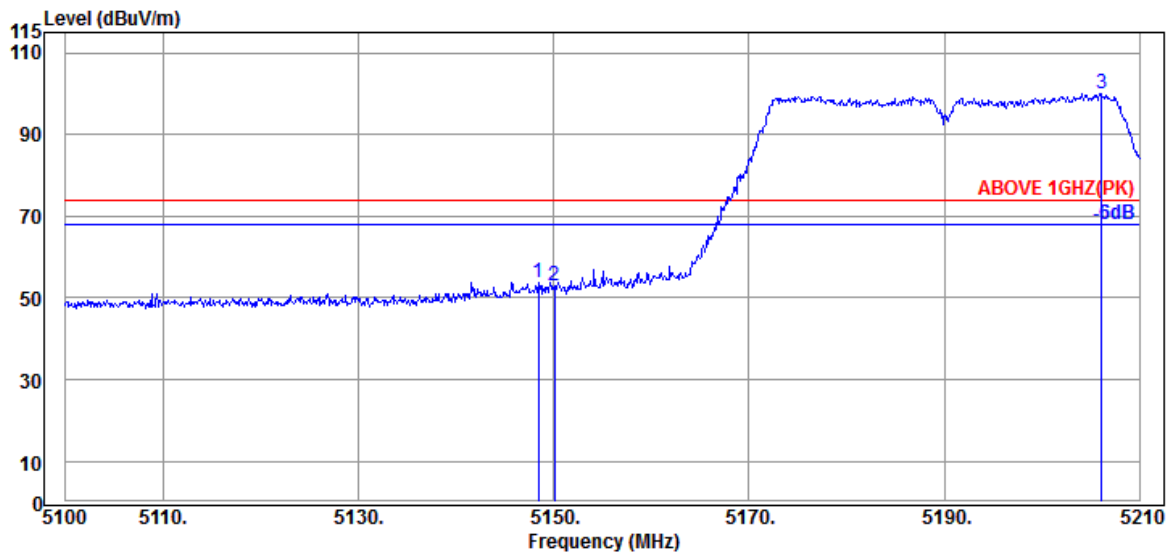


Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
@ 5706.560	34.80	10.82	34.36	90.05	101.31	68.20	---	Peak
5725.040	34.80	10.84	34.37	40.27	51.54	68.20	16.66	Peak
5756.400	34.90	10.89	34.39	40.28	51.68	68.20	16.52	Peak

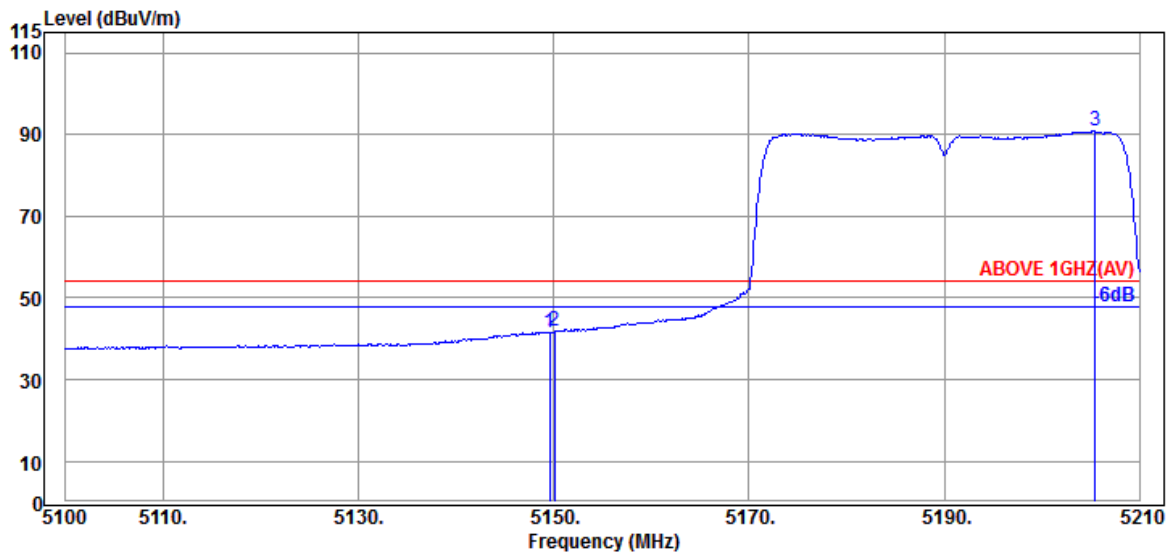
備註：“@”為主波，在此章節是不予以判定。

Mode	802.11n-HT40	Frequency	TX 5190MHz
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Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
5148.400	34.40	10.36	34.38	43.56	53.94	74.00	20.06	Peak
5150.050	34.40	10.36	34.38	42.54	52.92	74.00	21.08	Peak
@ 5206.150	34.50	10.39	34.36	89.58	100.11	---	---	Peak

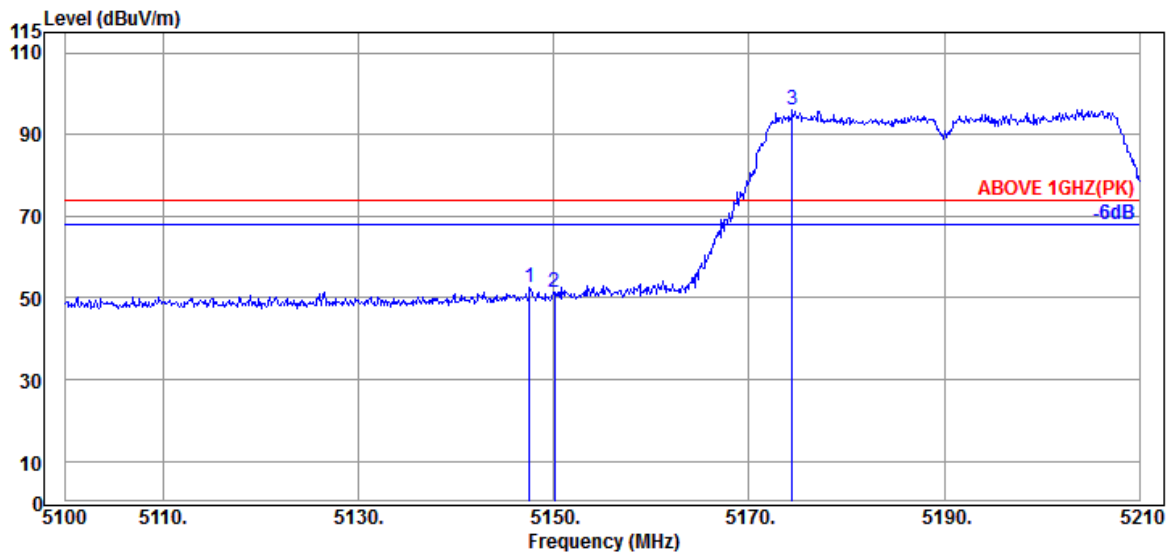


Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
5149.610	34.40	10.36	34.38	31.31	41.69	54.00	12.31	Average
5150.050	34.40	10.36	34.38	31.52	41.90	54.00	12.10	Average
@ 5205.490	34.50	10.39	34.36	80.21	90.74	---	---	Average

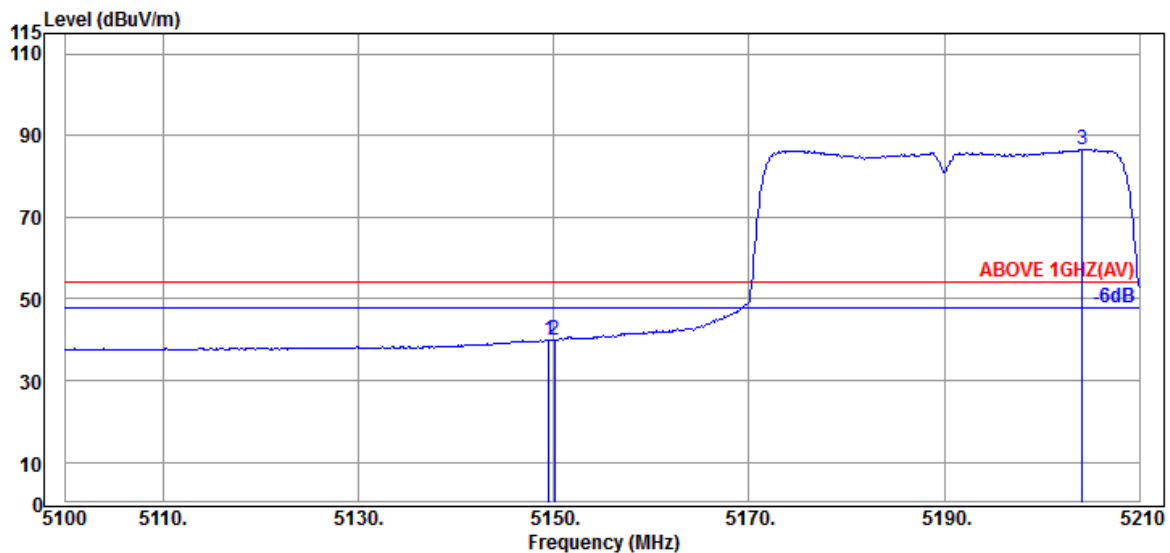
備註：“@”為主波，在此章節是不予以判定。

Mode	802.11n-HT40	Frequency	TX 5190MHz
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Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
5147.520	34.40	10.36	34.38	41.99	52.37	74.00	21.63	Peak
5150.050	34.40	10.36	34.38	40.85	51.23	74.00	22.77	Peak
@ 5174.470	34.47	10.38	34.37	85.48	95.96	---	---	Peak

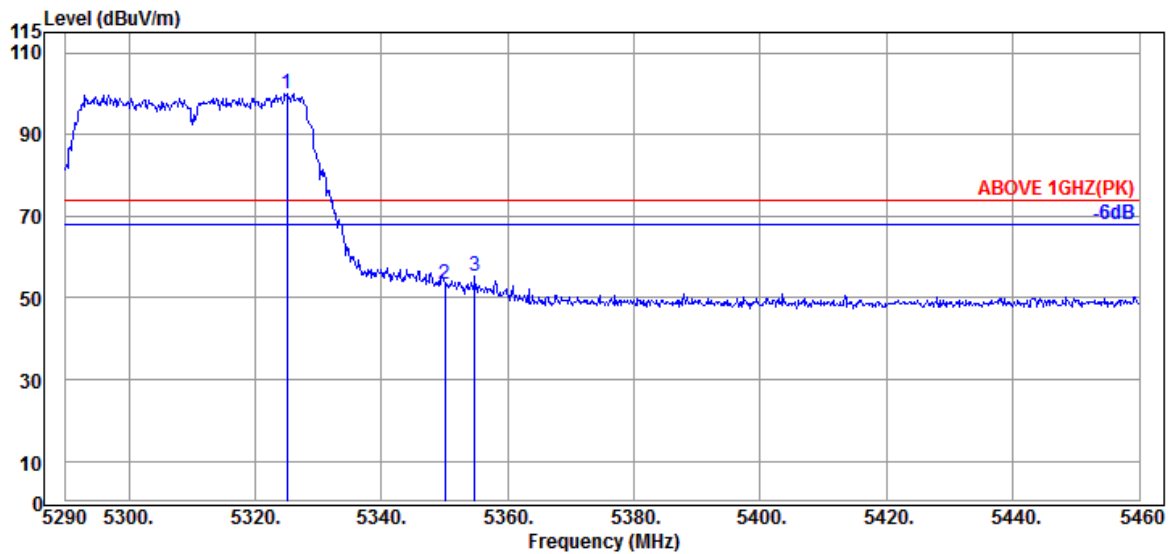


Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
5149.500	34.40	10.36	34.38	29.62	40.00	54.00	14.00	Average
5150.050	34.40	10.36	34.38	29.46	39.84	54.00	14.16	Average
@ 5204.170	34.50	10.39	34.36	76.01	86.54	---	---	Average

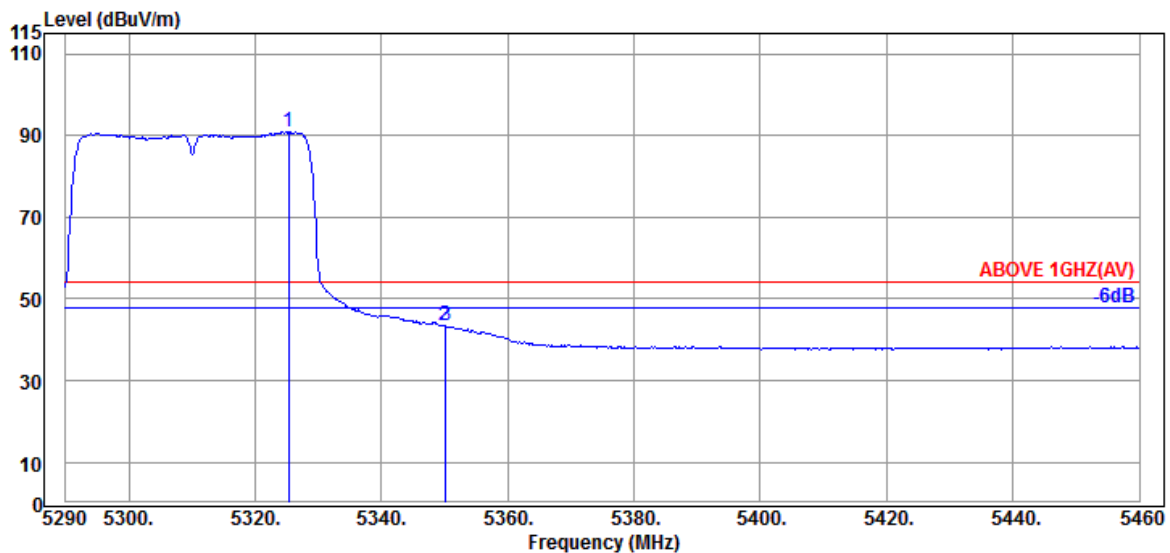
備註：“@”為主波，在此章節是不予以判定。

Mode	802.11n-HT40	Frequency	TX 5310MHz
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Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBμV)	Emission Level (dBUV/m)	Limits (dBUV/m)	Margin (dB)	Detector
@ 5325.020	34.60	10.46	34.33	89.38	100.11	---	---	Peak
5350.010	34.60	10.48	34.31	42.55	53.32	74.00	20.68	Peak
5354.770	34.60	10.48	34.31	44.54	55.31	74.00	18.69	Peak

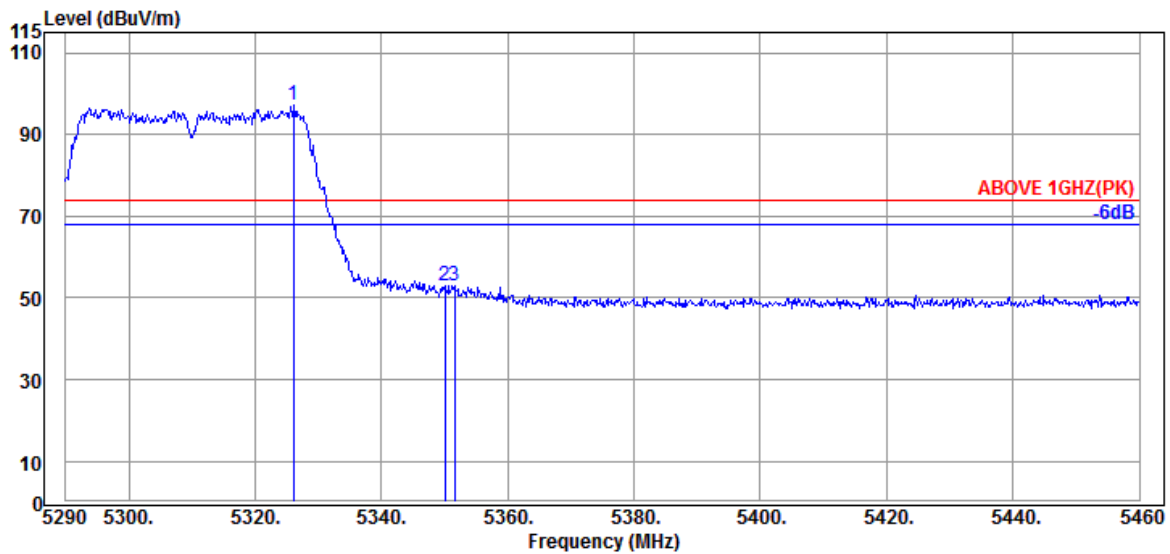


Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBμV)	Emission Level (dBUV/m)	Limits (dBUV/m)	Margin (dB)	Detector
@ 5325.360	34.60	10.46	34.33	80.28	91.01	---	---	Average
5350.010	34.60	10.48	34.31	32.70	43.47	54.00	10.53	Average
5350.180	34.60	10.48	34.31	32.65	43.42	54.00	10.58	Average

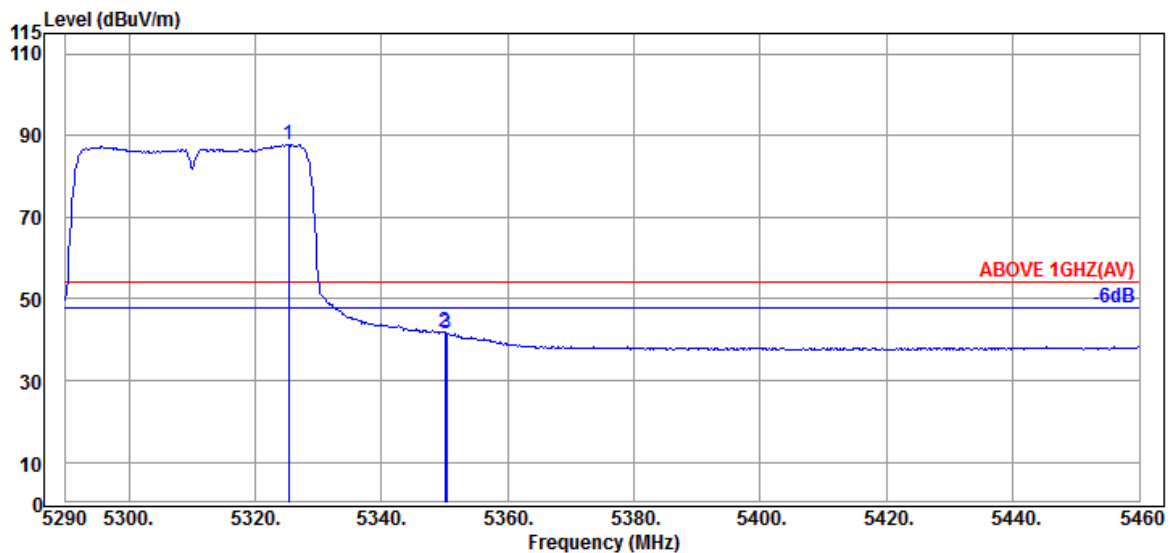
備註：“@”為主波，在此章節是不予以判定。

Mode	802.11n-HT40	Frequency	TX 5310MHz
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Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
@ 5326.040	34.60	10.46	34.33	86.34	97.07	---	---	Peak
5350.010	34.60	10.48	34.31	42.31	53.08	74.00	20.92	Peak
5351.540	34.60	10.48	34.31	42.28	53.05	74.00	20.95	Peak

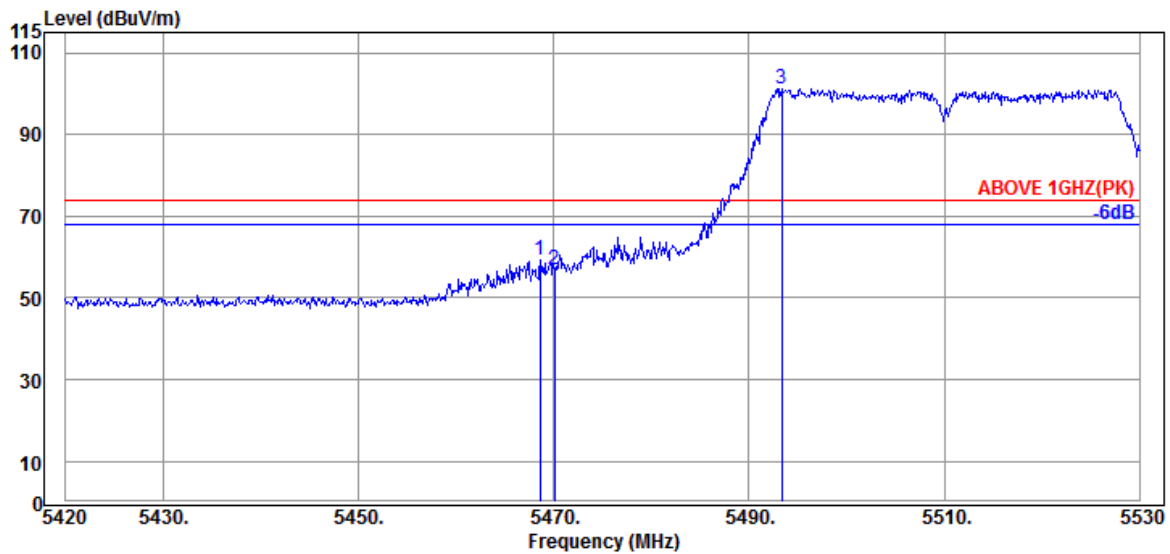


Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
@ 5325.360	34.60	10.46	34.33	76.95	87.68	---	---	Average
5350.010	34.60	10.48	34.31	30.99	41.76	54.00	12.24	Average
5350.350	34.60	10.48	34.31	30.92	41.69	54.00	12.31	Average

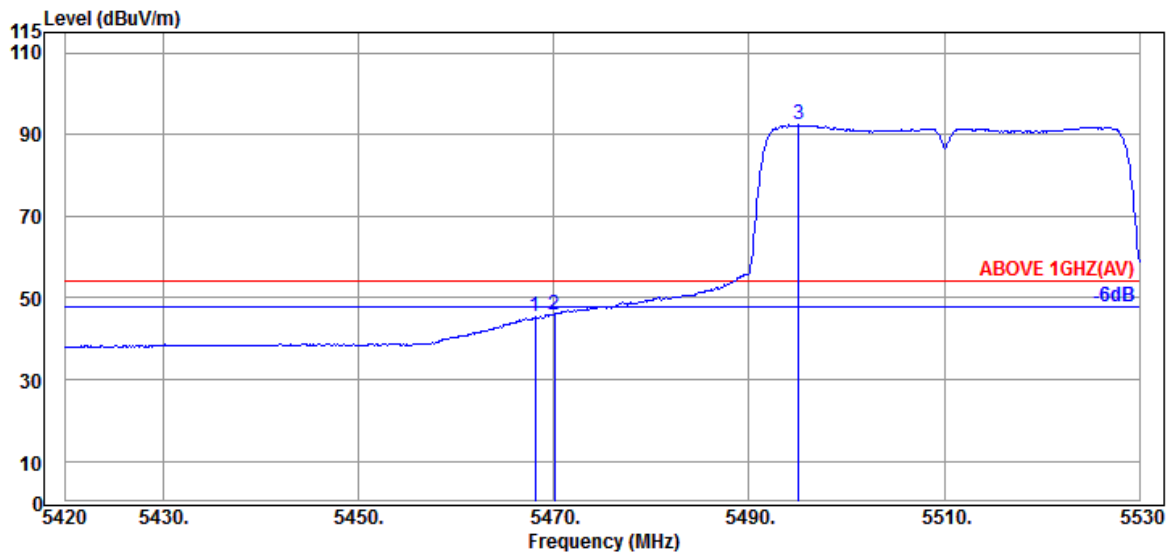
備註：“@”為主波，在此章節是不予以判定。

Mode	802.11n-HT40	Frequency	TX 5510MHz
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Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
5468.620	34.67	10.54	34.28	48.32	59.25	74.00	14.75	Peak
5470.050	34.67	10.54	34.28	46.11	57.04	74.00	16.96	Peak
@ 5493.370	34.63	10.55	34.27	90.36	101.27	---	---	Peak

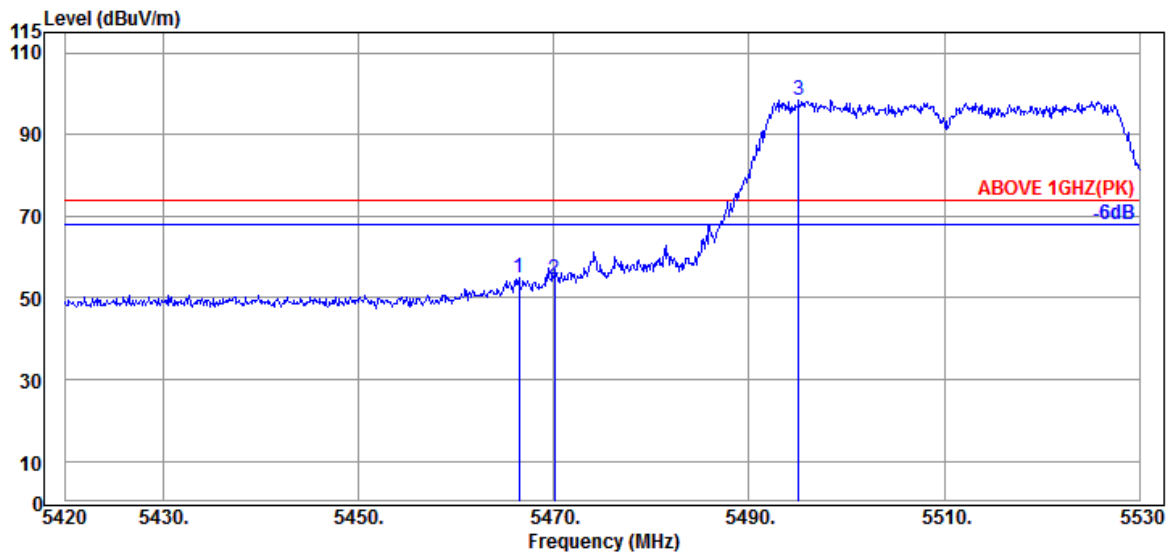


Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
5468.070	34.67	10.54	34.28	34.49	45.42	54.00	8.58	Average
5470.050	34.67	10.54	34.28	35.09	46.02	54.00	7.98	Average
@ 5495.130	34.63	10.55	34.27	81.44	92.35	---	---	Average

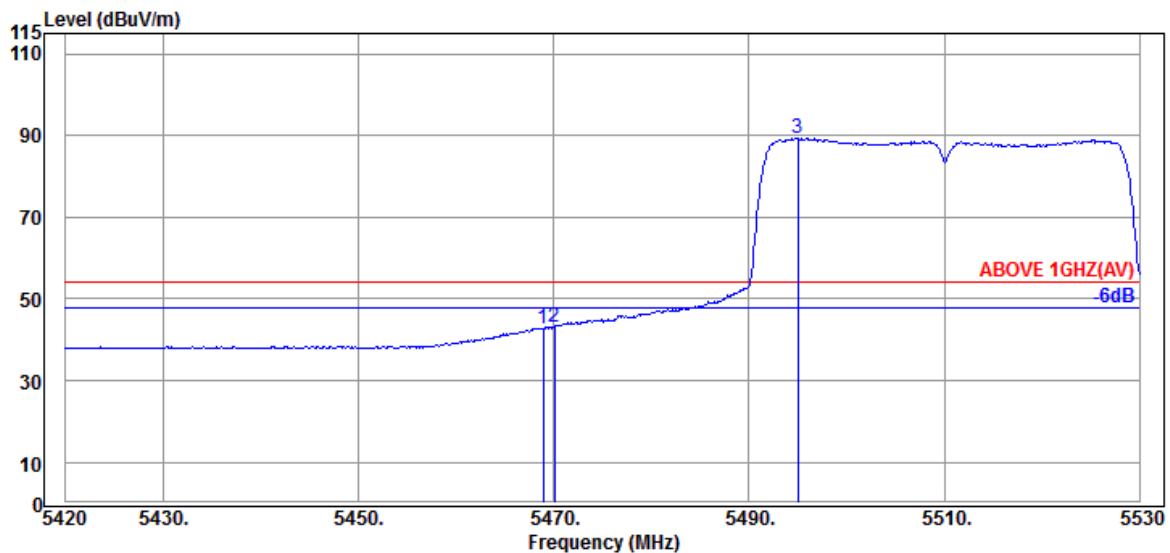
備註：“@”為主波，在此章節是不予以判定。

Mode	802.11n-HT40	Frequency	TX 5510MHz
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Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
5466.420	34.67	10.54	34.28	43.99	54.92	74.00	19.08	Peak
5470.050	34.67	10.54	34.28	43.54	54.47	74.00	19.53	Peak
@ 5495.130	34.63	10.55	34.27	87.64	98.55	---	---	Peak

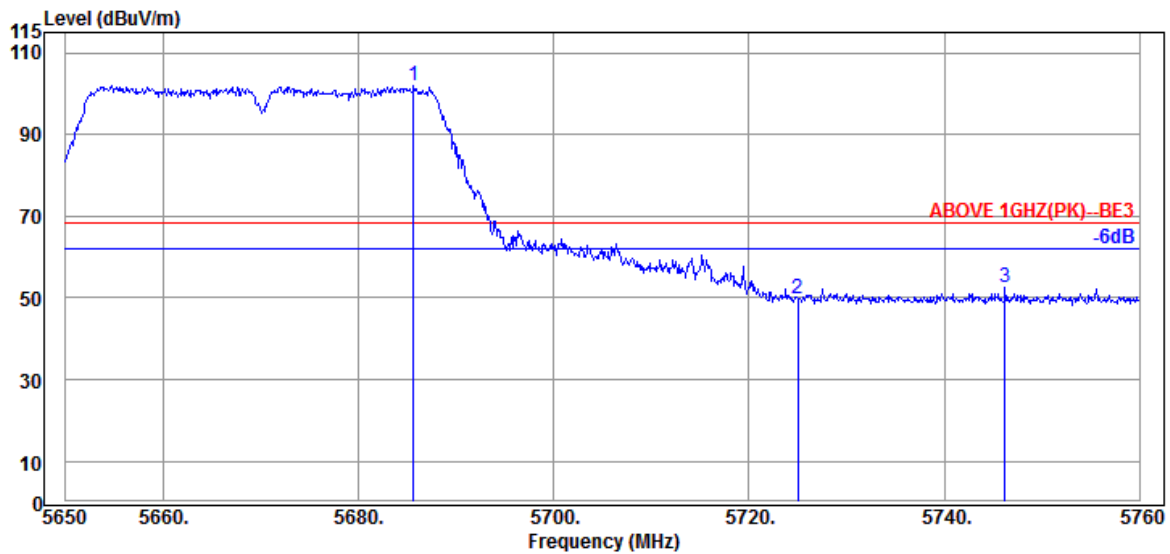


Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
5468.950	34.67	10.54	34.28	31.81	42.74	54.00	11.26	Average
5470.050	34.67	10.54	34.28	32.09	43.02	54.00	10.98	Average
@ 5495.020	34.63	10.55	34.27	78.42	89.33	---	---	Average

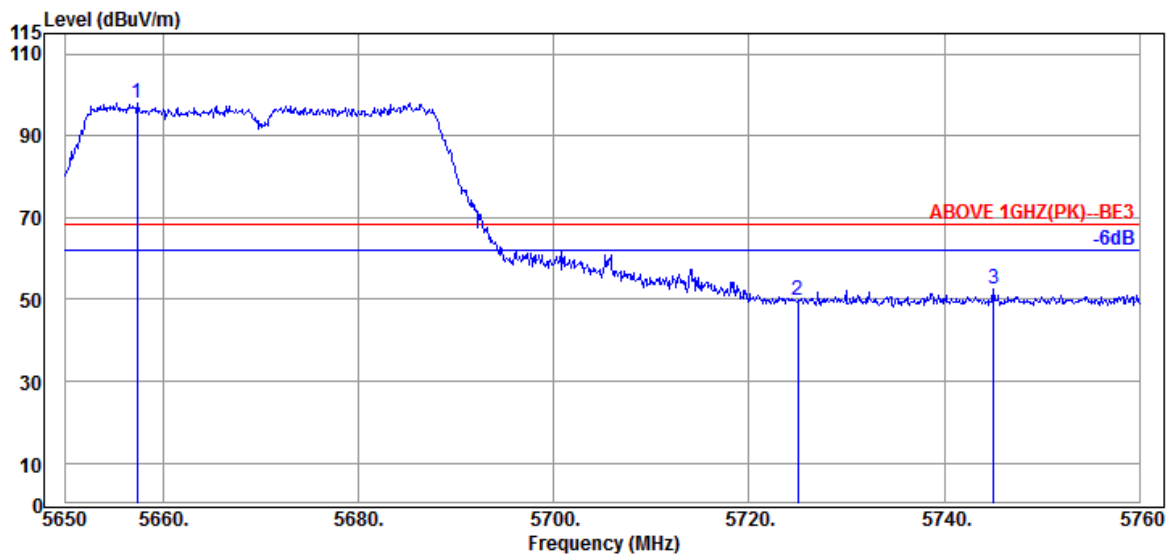
備註：“@”為主波，在此章節是不予以判定。

Mode	802.11n-HT40	Frequency	TX 5670MHz
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Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
@ 5685.640	34.73	10.80	34.36	90.70	101.87	68.20	---	Peak
5725.020	34.80	10.84	34.37	38.44	49.71	68.20	18.49	Peak
5746.250	34.80	10.86	34.39	41.12	52.39	68.20	15.81	Peak

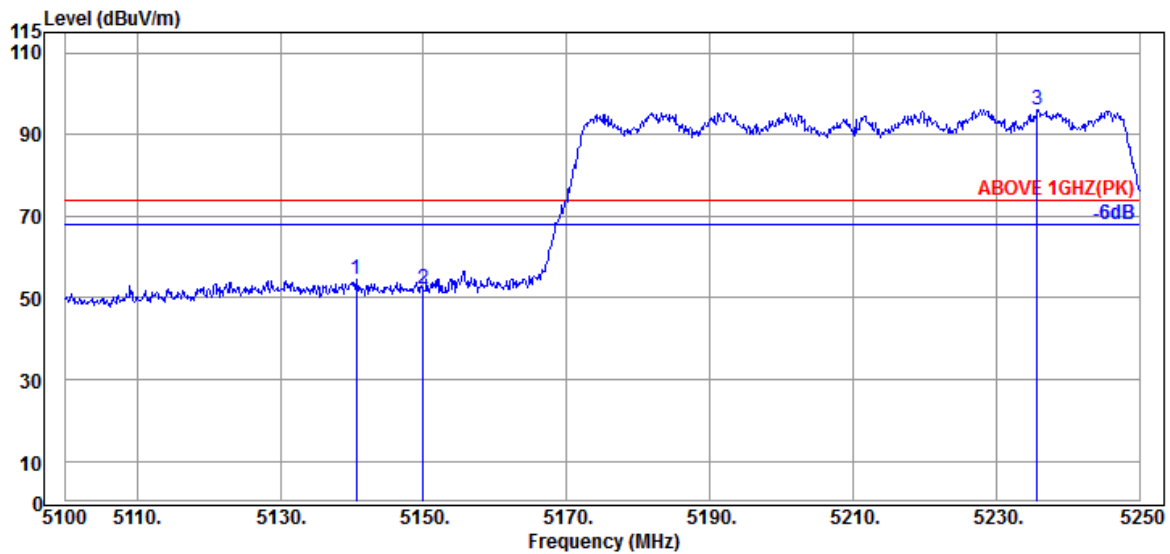


Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
@ 5657.370	34.67	10.76	34.35	86.92	98.00	68.20	---	Peak
5725.020	34.80	10.84	34.37	38.37	49.64	68.20	18.56	Peak
5745.040	34.80	10.86	34.38	41.34	52.62	68.20	15.58	Peak

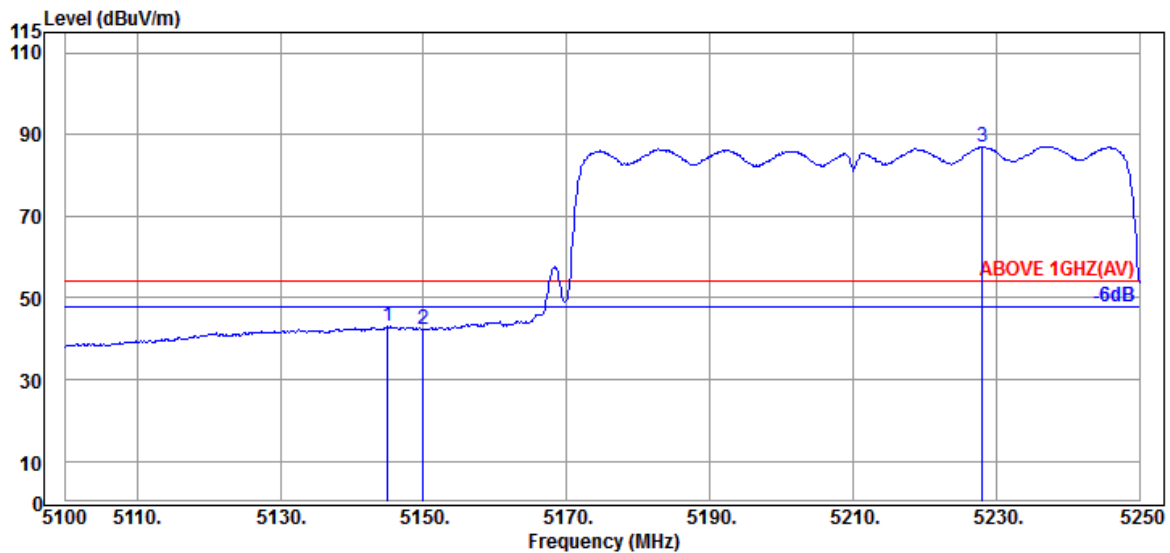
備註：“@”為主波，在此章節是不予以判定。

Mode	802.11ac-VHT80	Frequency	TX 5210MHz
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Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
5140.650	34.37	10.36	34.38	44.35	54.70	74.00	19.30	Peak
5149.950	34.40	10.36	34.38	41.88	52.26	74.00	21.74	Peak
@ 5235.750	34.50	10.41	34.35	85.54	96.10	---	---	Peak

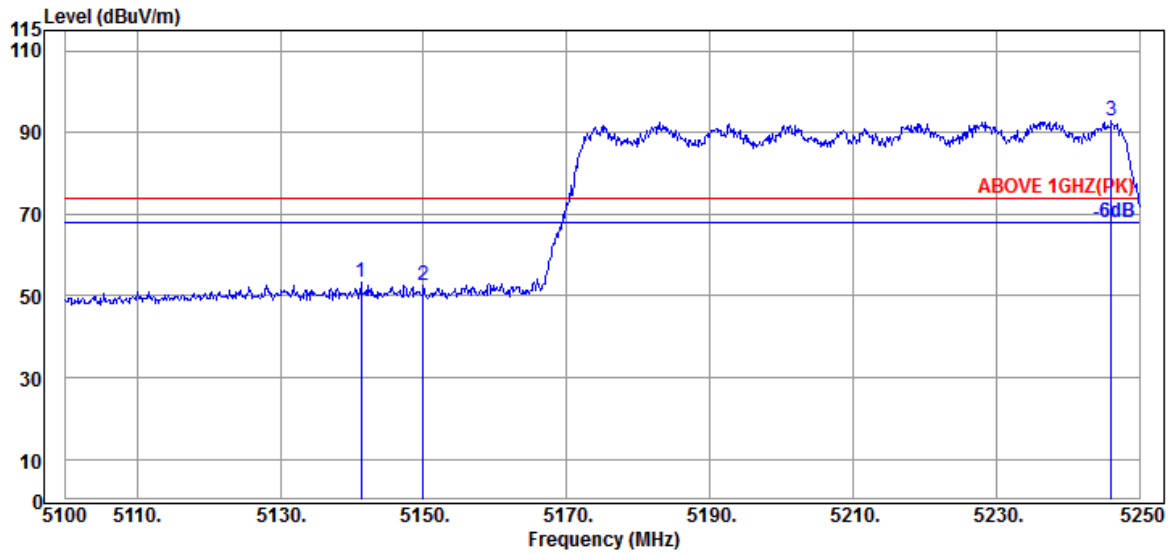


Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
5145.000	34.40	10.36	34.38	32.60	42.98	54.00	11.02	Average
5149.950	34.40	10.36	34.38	31.85	42.23	54.00	11.77	Average
@ 5228.100	34.50	10.41	34.35	76.43	86.99	---	---	Average

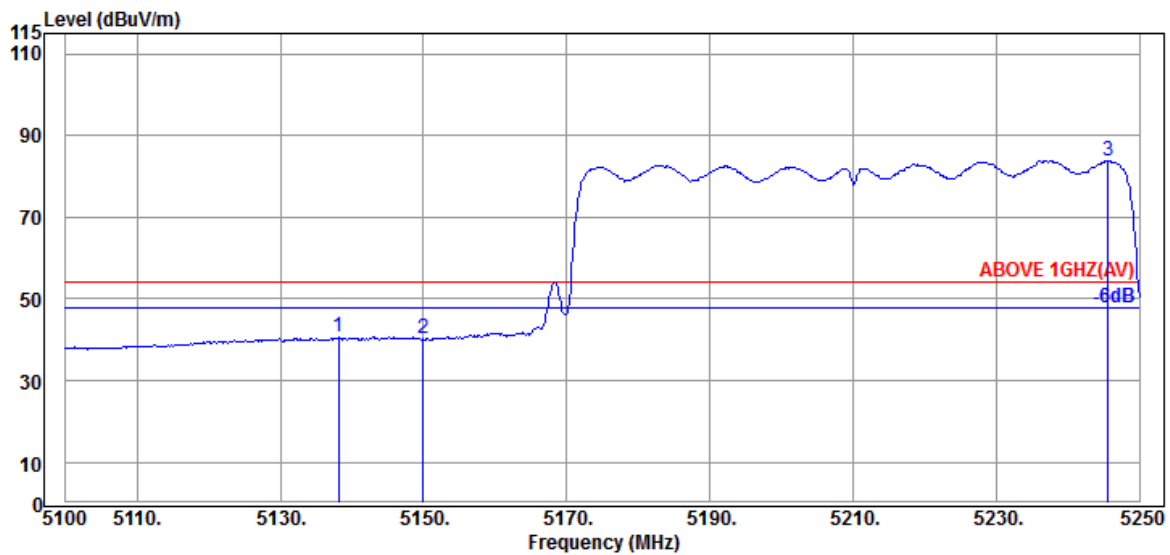
備註：“@”為主波，在此章節是不予以判定。

Mode	802.11ac-VHT80	Frequency	TX 5210MHz
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Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
5141.250	34.37	10.36	34.38	43.03	53.38	74.00	20.62	Peak
5149.950	34.40	10.36	34.38	42.22	52.60	74.00	21.40	Peak
@ 5246.100	34.50	10.42	34.35	82.15	92.72	---	---	Peak

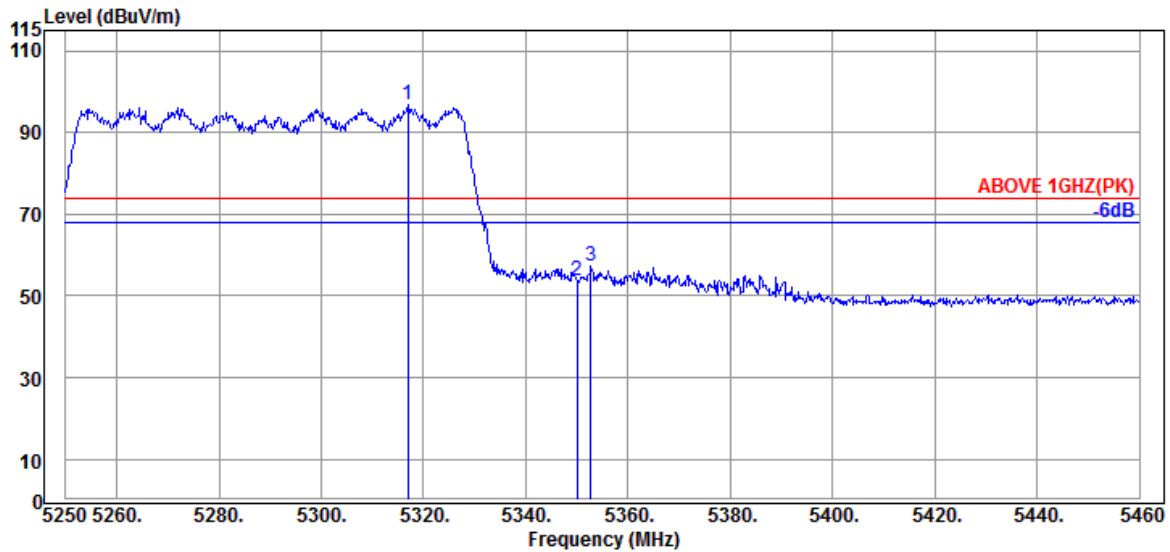


Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
5138.100	34.37	10.35	34.39	30.44	40.77	54.00	13.23	Average
5149.950	34.40	10.36	34.38	29.86	40.24	54.00	13.76	Average
@ 5245.650	34.50	10.42	34.35	73.30	83.87	---	---	Average

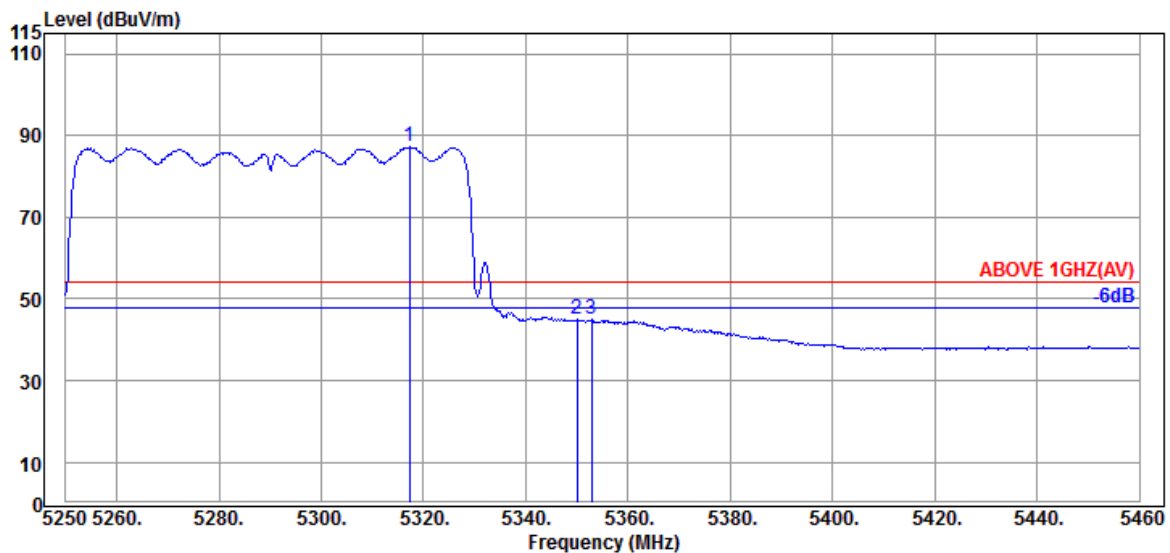
備註：“@”為主波，在此章節是不予以判定。

Mode	802.11ac-VHT80	Frequency	TX 5290MHz
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Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
@ 5316.990	34.60	10.46	34.33	86.04	96.77	---	---	Peak
5349.960	34.60	10.48	34.31	43.09	53.86	74.00	20.14	Peak
5352.690	34.60	10.48	34.31	46.48	57.25	74.00	16.75	Peak

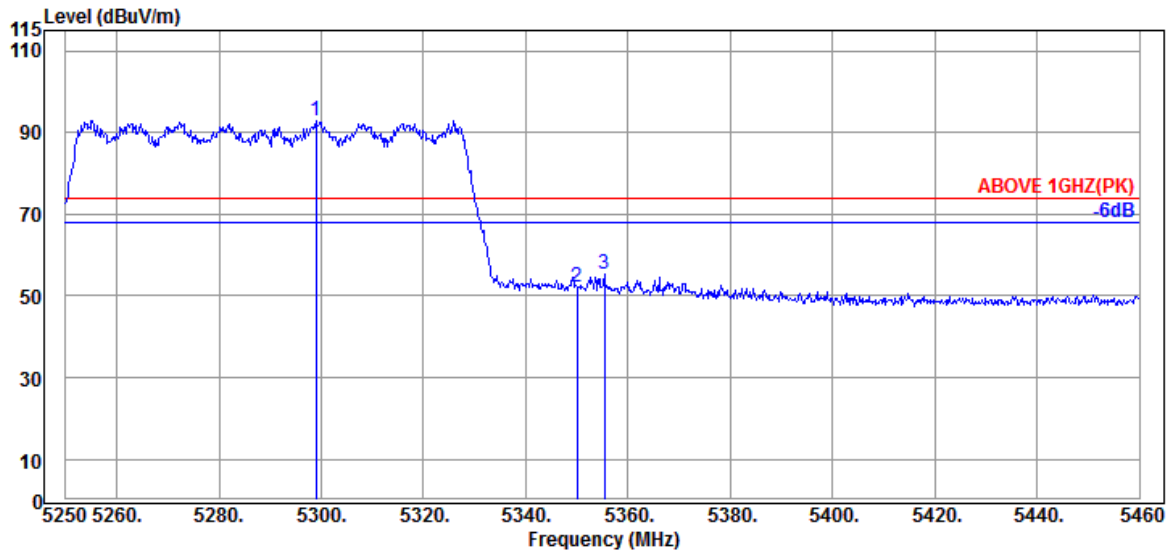


Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
@ 5317.200	34.60	10.46	34.33	76.47	87.20	---	---	Average
5349.960	34.60	10.48	34.31	34.22	44.99	54.00	9.01	Average
5352.900	34.60	10.48	34.31	34.20	44.97	54.00	9.03	Average

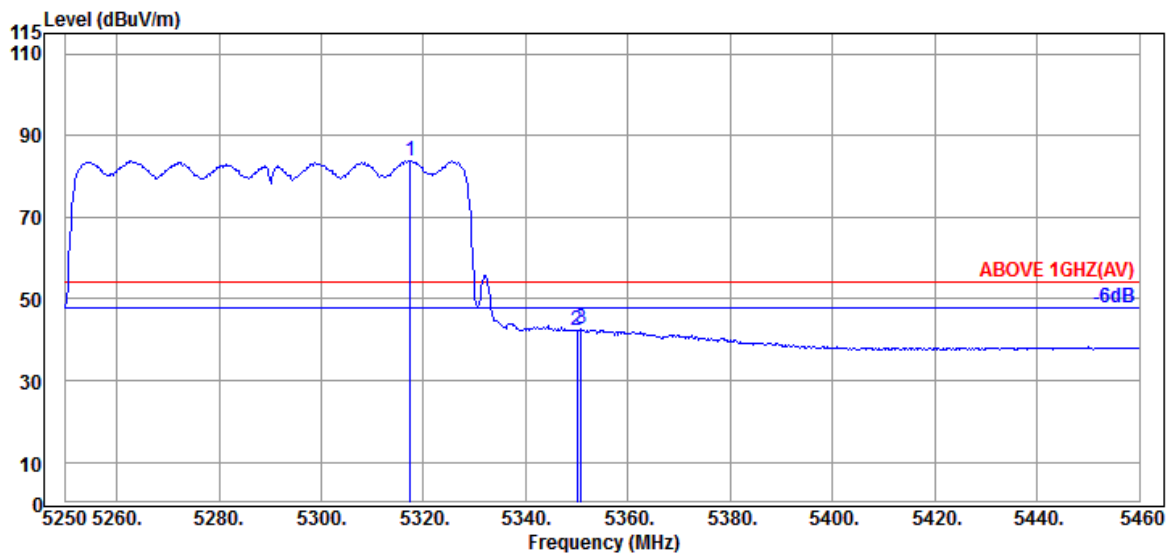
備註：“@”為主波，在此章節是不予以判定。

Mode	802.11ac-VHT80	Frequency	TX 5290MHz
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Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
@ 5298.930	34.60	10.45	34.33	82.18	92.90	---	---	Peak
5349.960	34.60	10.48	34.31	41.40	52.17	74.00	21.83	Peak
5355.420	34.60	10.48	34.31	44.57	55.34	74.00	18.66	Peak

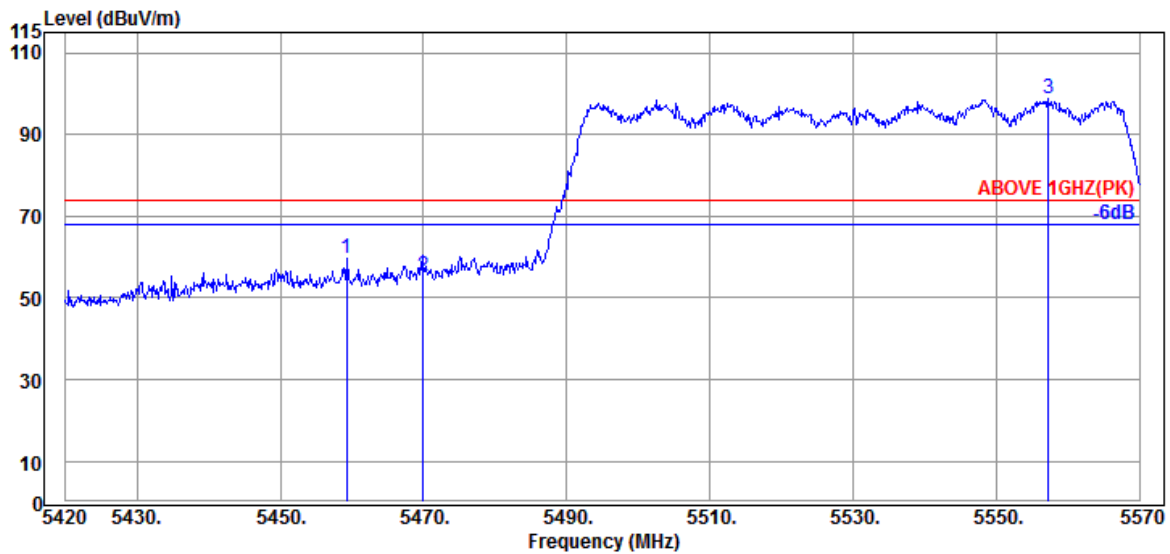


Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
@ 5317.410	34.60	10.46	34.33	73.12	83.85	---	---	Average
5349.960	34.60	10.48	34.31	31.43	42.20	54.00	11.80	Average
5350.800	34.60	10.48	34.31	31.76	42.53	54.00	11.47	Average

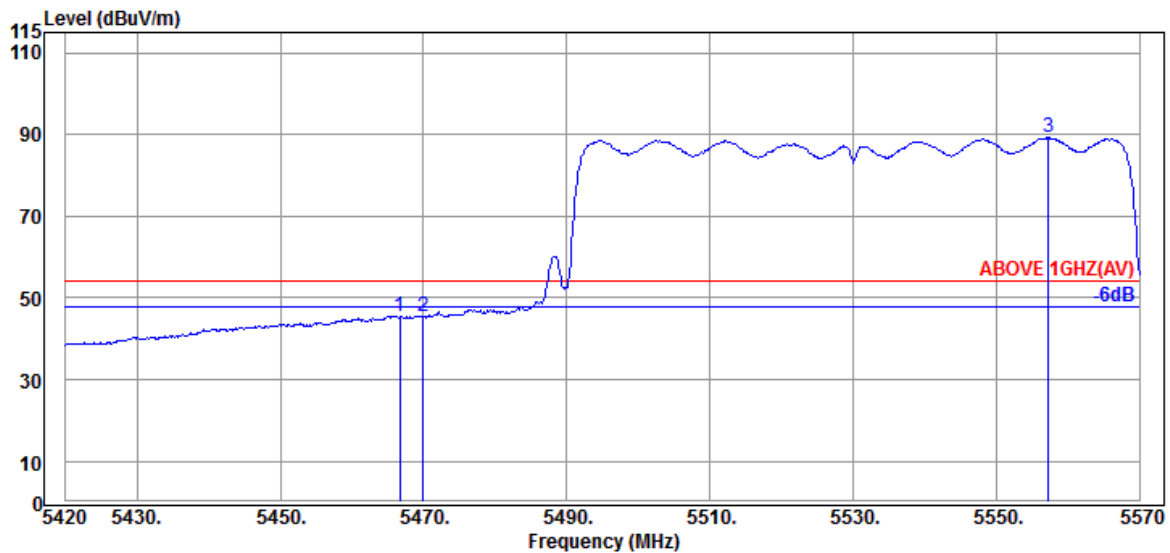
備註：“@”為主波，在此章節是不予以判定。

Mode	802.11ac-VHT80	Frequency	TX 5530MHz
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Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
5459.300	34.70	10.53	34.28	48.54	59.49	74.00	14.51	Peak
5469.950	34.67	10.54	34.28	44.56	55.49	74.00	18.51	Peak
@ 5557.250	34.60	10.63	34.30	87.69	98.62	---	---	Peak

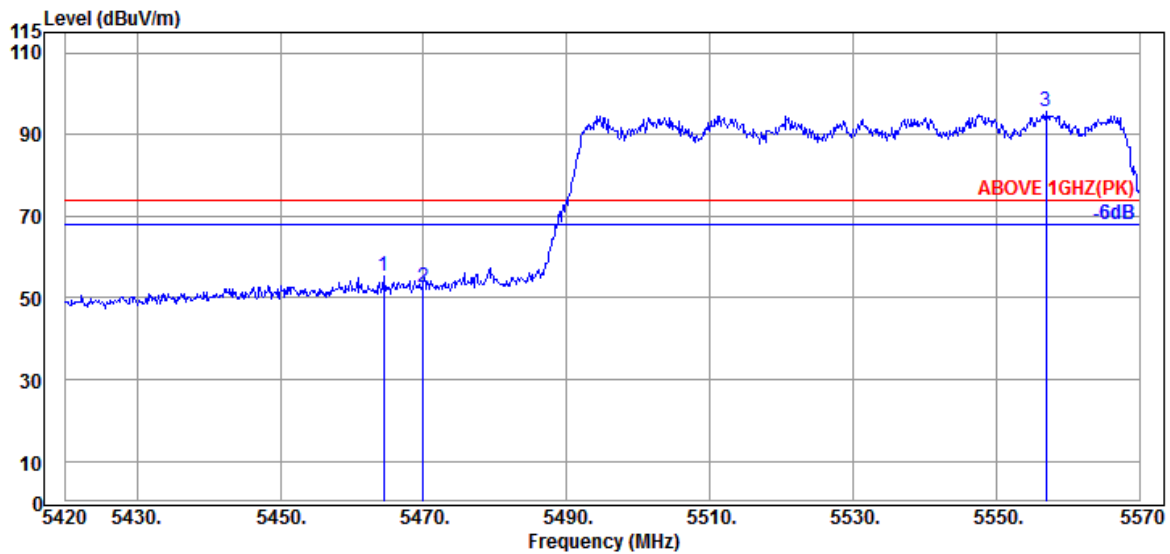


Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
5466.650	34.67	10.54	34.28	34.71	45.64	54.00	8.36	Average
5469.950	34.67	10.54	34.28	34.61	45.54	54.00	8.46	Average
@ 5557.250	34.60	10.63	34.30	78.25	89.18	---	---	Average

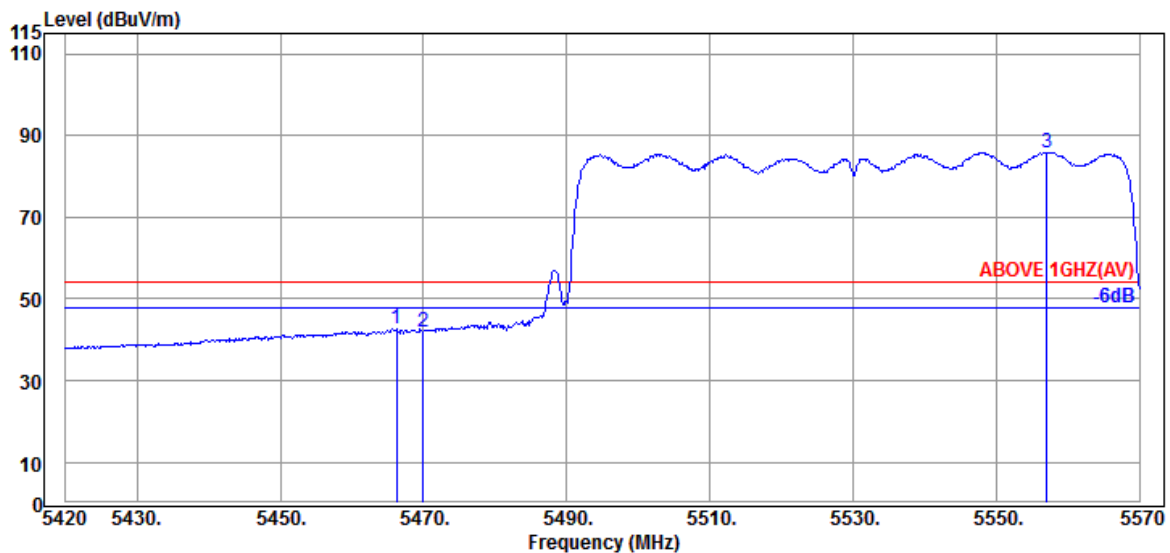
備註：“@”為主波，在此章節是不予以判定。

Mode	802.11ac-VHT80	Frequency	TX 5530MHz
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Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
5464.400	34.67	10.54	34.28	44.31	55.24	74.00	18.76	Peak
5469.950	34.67	10.54	34.28	41.62	52.55	74.00	21.45	Peak
@ 5556.950	34.60	10.63	34.30	84.61	95.54	---	---	Peak

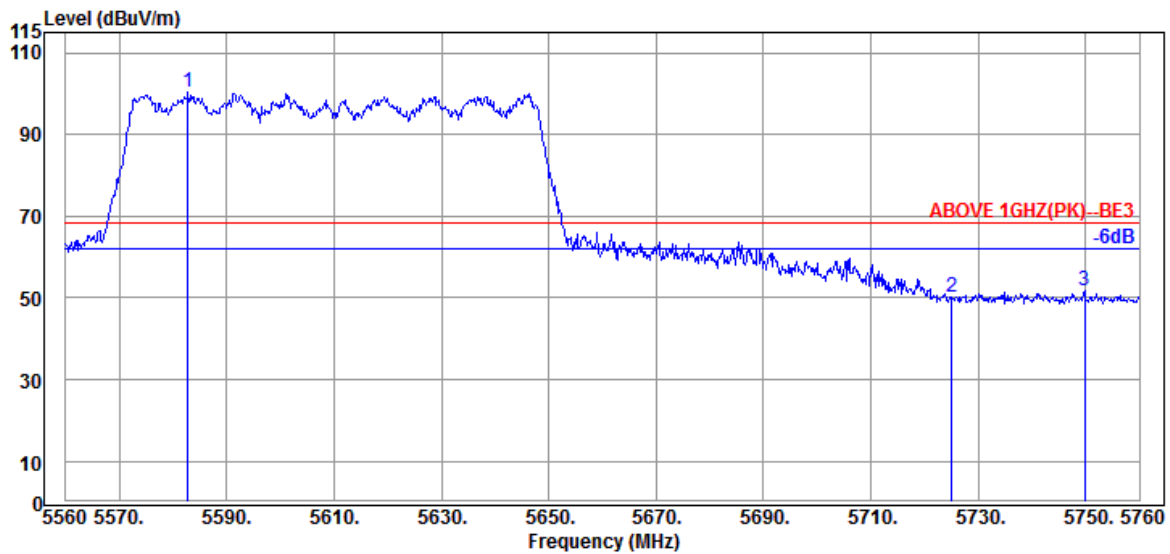


Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
5466.200	34.67	10.54	34.28	31.93	42.86	54.00	11.14	Average
5469.950	34.67	10.54	34.28	31.04	41.97	54.00	12.03	Average
@ 5557.100	34.60	10.63	34.30	74.97	85.90	---	---	Average

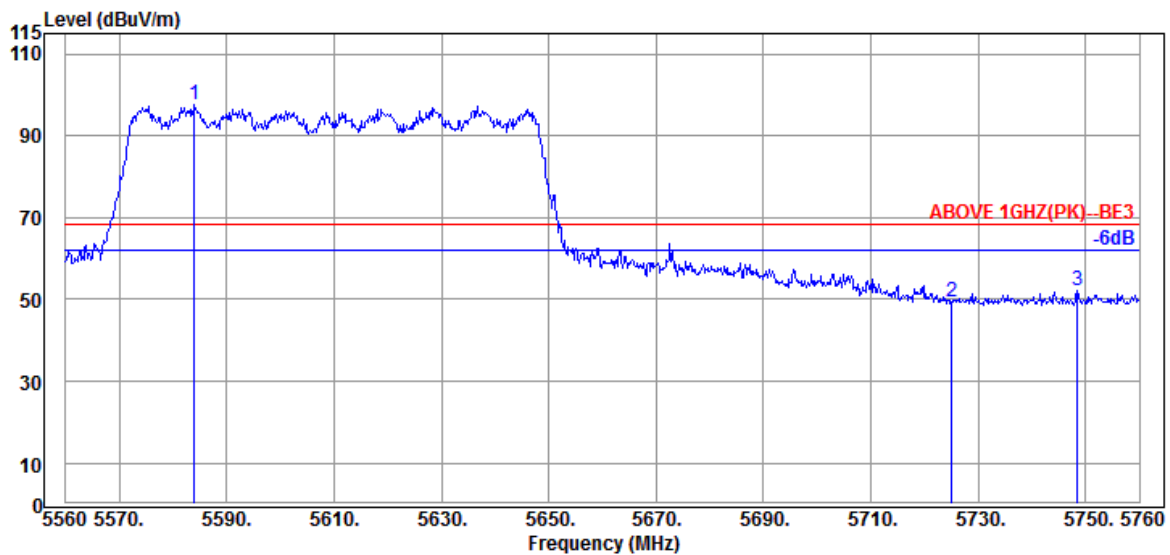
備註：“@”為主波，在此章節是不予以判定。

Mode	802.11ac-VHT80	Frequency	TX 5610MHz
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Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBμV)	Emission Level (dBUV/m)	Limits (dBUV/m)	Margin (dB)	Detector
@ 5582.800	34.60	10.67	34.31	89.25	100.21	68.20	---	Peak
5725.000	34.80	10.84	34.37	38.77	50.04	68.20	18.16	Peak
5749.800	34.80	10.86	34.39	40.50	51.77	68.20	16.43	Peak



Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBμV)	Emission Level (dBUV/m)	Limits (dBUV/m)	Margin (dB)	Detector
@ 5584.000	34.60	10.67	34.31	86.61	97.57	68.20	---	Peak
5725.000	34.80	10.84	34.37	38.11	49.38	68.20	18.82	Peak
5748.400	34.80	10.86	34.39	40.91	52.18	68.20	16.02	Peak

備註：“@”為主波，在此章節是不予以判定。