低功率射頻電機技術規範測試報告

報告編號	**RT180808C26C**
申請者	網件有限公司
產品名稱	**Orbi Router / Orbi Satellite**
型號	**RBR50v2**
系列型號	**RBS50v2**
製造廠商	**NETGEAR, Inc. /USA**
商標或廠牌	**NETGEAR**
該產品樣品試驗 依據之試驗標準	國家通訊傳播委員會低功率射頻電機技術規範 **107** 年 **1** 月修訂
試驗結果	合格

香港商立德國際商品試驗有限公司桃園分公司林口實驗室
日期 **108** 年 **06** 月 **24** 日

報告簽署人簽章:

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目　　錄

報告發行紀錄 5

1　低功率射頻電機量測記錄表 7

2　一般敘述 9

2.1　待測設備 9
2.2　輔助測試之週邊設備描述 22
2.3　測試架構圖 22

3　適用規範 23

3.1　規範要求 23
3.2　限制使用之頻帶 28

2.4GHz 頻段測試紀錄結果 29

4　帶外發射之量測 29

4.1　適用標準 29
4.2　量測方法 29
4.3　量測儀器 30
4.4　測試配置 31
4.5　場強度之計算 32
4.6　量測結果 33
4.6.1　發射諧波 33
4.6.2　接收諧波 57
4.6.3　其它不必要之訊號 59
4.7　量測結果判定 62
4.8　配置照片 62

5　電源線傳導干擾之量測 63

5.1　適用標準 63
5.2　量測方法 63
5.3　量測儀器 63
5.4　測試配置 64
5.5　干擾值之計算 64
5.6　量測結果 65
5.7　量測結果判定 68
5.8　配置照片 68

6　發射頻寬之要求 69

6.1　適用標準 69
6.2　量測方法 69
6.3　量測儀器 69
6.4　測試配置 69
6.5　量測結果 70
6.6　量測結果判定 72

7　輸出峰值功率之量測 73

7.1　適用標準 73
7.2　量測方法 73
7.3　量測儀器 73
7.4　測試配置 73
7.5　量測結果 74

7.6 量測結果判定 75

8 功率密度之量測 76

8.1 適用標準 76
8.2 量測方法 76
8.3 量測儀器 76
8.4 測試配置 76
8.5 量測結果 77
8.6 量測結果判定 81

U-NII 頻段測試紀錄結果 82

9 帶外發射之量測 82

9.1 適用標準 82
9.2 量測方法 82
9.3 量測儀器 82
9.4 測試配置 82
9.5 場強度之計算 83
9.6 量測結果 84
9.6.1 發射諧波 84
9.6.2 接收諧波 138
9.6.3 其它不必要之訊號 140
9.7 量測結果判定 143
9.8 配置照片 143

10 電源線傳導干擾之量測 144

10.1 適用標準 144
10.2 量測方法 144
10.3 量測儀器 144
10.4 測試配置 144
10.5 干擾值之計算 144
10.6 量測結果 145
10.7 量測結果判定 148
10.8 配置照片 148

11 峰值傳導輸出功率量測及發射頻寬之要求 149

11.1 適用標準 149
11.2 量測方法 149
11.3 量測儀器 149
11.4 測試配置 149
11.5 量測結果 150
11.6 量測結果判定 157

12 功率頻譜密度之量測 158

12.1 適用標準 158
12.2 量測方法 158
12.3 量測儀器 158
12.4 測試配置 158
12.5 量測結果 159
12.6 量測結果判定 169

13 6 dB 頻寬之要求 170

13.1 適用標準 170
13.2 量測方法 170

13.3 量測儀器 170
13.4 測試配置 170
13.5 量測結果 171
13.6 量測結果判定 174

14 電波暴露量之評估 175

14.1 適用標準 175
14.2 評估方法 175
14.3 評估結果 176

15 檢測實驗室基本資料 177

報告發行紀錄

Issue No.	Description	Date Issued
RT180808C26C	Original release	108 年 06 月 24 日

證 明 書

發行日期：108 年 06 月 24 日

產 品 名 稱： Orbi Router / Orbi Satellite
商 標： NETGEAR
型 號： RBR50v2
系 列 型 號： RBS50v2
申 請 者： 網件有限公司
量 測 規 範： 低功率射頻電機技術規範 LP0002
ANSI C63.10-2013

香港商立德國際商品試驗有限公司桃園分公司在此證明上述待測設備樣品一台(型號：RBR50v2, RBS50v2)，收件日期 107 年 08 月 08 日，於 107 年 08 月 20 日至 107 年 10 月 04 日，在本公司之標準測試場地完成量測並於 107 年 12 月 12 日(型號：RBR50v2)及 107 年 12 月 20 日(型號：RBS50v2)取得 FCC 認證，而此案為加作 NCC 低功率射頻電機型式認證申請。報告中所描述之測試結果和待測設備的架構組合，均根據樣品實際的量測情況作詳實的記錄。

立德桃園分公司依**"低功率射頻電機技術規範"**、**"低功率電波輻射性電機管理辦法"**及**"電信管制射頻器材審驗辦法"**製作測試結果報告。

特 此 證 明 ！

報告製作者： 陳佩珊 ，日 期： 108 年 06 月 24 日
陳佩珊 / 高級專員

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陳志偉 / 專案工程師

香港商立德國際商品試驗有限公司桃園分公司
實驗室地址：新北市林口區嘉寶里 14 鄰 47-2 號

此份報告不得摘錄複製，除全份
複製外，需經實驗室書面同意。

1 低功率射頻電機量測記錄表

申請廠商: 網件有限公司

製造廠商: NETGEAR, Inc. /USA

申請廠商地址: 台北市內湖區基湖路 3 巷 9 號 3 樓

廠牌: NETGEAR

產品名稱: Orbi Router / Orbi Satellite

型號: RBR50v2

系列型號: RBS50v2

量測單位名稱: 香港商立德國際商品試驗有限公司桃園分公司
林口實驗室華亞檢測部

量測單位地址: 桃園市龜山區文化里華亞二路 19 號

量測單位認可編號: TAF 2021 (9kHz~40GHz)

量測規範: 低功率射頻電機技術規範 LP0002
ANSI C63.10-2013
KDB 558074
KDB 662911
KDB 789033

WLAN 2.4GHz 頻段概要

項次	量測項目	規　　範	量測結果判定
1	電源線傳導干擾	低功率射頻電機技術規範 2.3 節	合格
2	帶外發射	低功率射頻電機技術規範 3.10.1.5 節	合格
3	6 dB 頻寬	低功率射頻電機技術規範 3.10.1.6 節	合格
4	輸出峰值功率	低功率射頻電機技術規範 3.10.1.2 節	合格
5	功率頻譜密度	低功率射頻電機技術規範 3.10.1.6 節	合格

WLAN 5.150~5.250GHz 頻段概要

項次	量測項目	規　　範	量測結果判定
1	電源線傳導干擾	低功率射頻電機技術規範2.3節	合格
2	帶外發射	低功率射頻電機技術規範4.7.4節	合格
3	最大傳導輸出功率	低功率射頻電機技術規範4.7.3.1節	合格
4	最大功率頻譜密度	低功率射頻電機技術規範4.7.3.1節	合格

WLAN 5.725~5.850GHz 頻段概要

項次	量測項目	規　　範	量測結果判定
1	電源線傳導干擾	低功率射頻電機技術規範2.3節	合格
2	帶外發射	低功率射頻電機技術規範4.7.4節	合格
3	最大傳導輸出功率	低功率射頻電機技術規範4.7.3.3節	合格
4	最大功率頻譜密度	低功率射頻電機技術規範4.7.3.3節	合格
5	6dB 頻寬	低功率射頻電機技術規範4.7.5節	合格

最大暴露允許值(Maximum Permissible Exposure，MPE)

項次	量測項目	規　　範	量測結果判定
1	電波暴露量	低功率射頻電機技術規範第 5.20.2 節	合格

2 一般敘述

2.1 待測設備

產 品 名 稱：	Orbi Router / Orbi Satellite
型 號：	RBR50v2
系 列 型 號：	RBS50v2
額 定 電 源：	100-240Vac, 50-60Hz
調 變 技 術：	CCK, DQPSK, DBPSK for DSSS 256QAM, 64QAM, 16QAM, QPSK, BPSK for OFDM
傳 輸 速 率：	802.11b:11.0/ 5.5/ 2.0/ 1.0Mbps 802.11g: 54.0/ 48.0/ 36.0/ 24.0/ 18.0/ 12.0/ 9.0/ 6.0Mbps 802.11a: 54.0/ 48.0/ 36.0/ 24.0/ 18.0/ 12.0/ 9.0/ 6.0Mbps 802.11n (2.4GHz Band): up to 400Mbps 802.11n (5.0GHz Band): up to 600Mbps 802.11ac: up to 1733.0Mbps
載 波 頻 率：	2.4GHz: 2412 ~ 2462MHz 5.0GHz: 5180 ~ 5240MHz, 5745 ~ 5825MHz
頻 道 數：	2412 ~ 2462MHz: 11 for 802.11b, 802.11g, 802.11n (HT20) 7 for 802.11n (HT40) 5180 ~ 5240MHz: 4 for 802.11a, 802.11n (HT20), 802.11ac (VHT20) 2 for 802.11n (HT40), 802.11ac (VHT40) 1 for 802.11ac (VHT80) 5745 ~ 5825MHz: 5 for 802.11a, 802.11n (HT20), 802.11ac (VHT20) 2 for 802.11n (HT40), 802.11ac (VHT40) 1 for 802.11ac (VHT80)

發 射 功 率：	**2412 ~ 2462MHz:** CDD Mode: 802.11b: 29.19dBm 802.11g: 29.41dBm 802.11n (HT20): 29.32dBm 802.11n (HT40): 24.88dBm Beamforming NSS1 Mode: 802.11n (HT20): 29.32dBm 802.11n (HT40): 24.88dBm **5180 ~ 5240MHz:** CDD Mode: 802.11a: 29.44dBm 802.11ac (VHT20): 29.37dBm 802.11ac (VHT40): 27.67dBm 802.11ac (VHT80): 23.89dBm Beamforming_NSS1 Mode: 802.11ac (VHT20): 29.37dBm 802.11ac (VHT40): 27.94dBm 802.11ac (VHT80): 23.89dBm **5745 ~ 5825MHz:** CDD Mode: 802.11a: 29.64dBm 802.11ac (VHT20): 29.41dBm 802.11ac (VHT40): 29.48dBm 802.11ac (VHT80): 29.44dBm Beamforming_NSS1 Mode: 802.11ac (VHT20): 27.82dBm 802.11ac (VHT40): 27.76dBm 802.11ac (VHT80): 27.79dBm Beamforming_NSS2 Mode: 802.11ac (VHT20): 29.41dBm 802.11ac (VHT40): 29.48dBm 802.11ac (VHT80): 29.44dBm
天 線 種 類：	見註 3
電 源 線 類 別：	NA
信 號 線 類 別：	1.95m RJ45 non-shielded cable without core
配 件：	Adapter

註 1: 所有型號與型號差異詳列如下，經評估後，以型號: RBR50v2為最差測試模式，故以此模式進行最終量測。

Brand	Model	Product Name	FCC ID	RF Module	Difference
NETGEAR	RBR50v2	Orbi Router	PY318300418	Module 1	software firmware: RBR50_V2.2.5.4 Master mode only
				Module 2	
	RBS50v2	Orbi Satellite	PY318300419	Module 1	software firmware: RBS50_V2.2.5.4 Master and Client mode for 5.50-5.70GHz band
				Module 2	

Note:
All of the RF specifications (include antenna type and location) are identical except the differences stated.
RF Module 1 support WLAN 2.4GHz band, 5.18 ~ 5.24GHz and 5.26 ~ 5.32GHz band functionally.
RF Module 2 WLAN 5.50 ~ 5.70GHz and 5.745 ~ 5.825GHz band functionally.

註 2:此待測物之技術的種類為4Tx / 4Rx之組合。

2.4GHz Band		
Modulation Mode	Beamforming Mode	TX Function
802.11b	Not Support	2TX
802.11g	Not Support	2TX
802.11n (HT20)	Support (CDD / NSS1)	2TX
802.11n (HT40)	Support (CDD / NSS1)	2TX
5.0GHz Band (U-NII-1 Band)		
Modulation Mode	Beamforming Mode	TX Function
802.11a	Not Support	2TX
802.11n (HT20)	Support (CDD / NSS1)	2TX
802.11n (HT40)	Support (CDD / NSS1)	2TX
802.11ac (VHT20)	Support (CDD / NSS1)	2TX
802.11ac (VHT40)	Support (CDD / NSS1)	2TX
802.11ac (VHT80)	Support (CDD / NSS1)	2TX
5.0GHz Band (U-NII-3 Band)		
Modulation Mode	Beamforming Mode	TX Function
802.11a	Not Support	4TX
802.11n (HT20)	Support (CDD / NSS=1 / NSS=2)	4TX
802.11n (HT40)	Support (CDD / NSS=1 / NSS=2)	4TX
802.11ac (VHT20)	Support (CDD / NSS=1 / NSS=2)	4TX
802.11ac (VHT40)	Support (CDD / NSS=1 / NSS=2)	4TX
802.11ac (VHT80)	Support (CDD / NSS=1 / NSS=2)	4TX

* For 2.4GHz & 5GHz band, CDD mode is the worst case for final radiated emission below 1GHz and power line conducted emission tests after pretesting CDD mode and beamforming mode.
* The modulation and bandwidth are similar for 802.11n mode for 20MHz / 40MHz and 802.11ac mode for 20MHz / 40MHz, therefore investigated worst case to representative mode in test report. (Final test mode refer note 6)

註 3: 此待測設備搭配測試的天線，其資料如下：

Ant. Type	Dipole
Brand	Master Wave Technology
Model	907X00747X0
Connecter Type	I-PEX

Item	2.4G	5G Band 1	5G Band 2	5G Band 3	5G Band 4
Ant 0				3.56	3.54
Ant 1				3.74	3.79
Ant 2				3.79	3.76
Ant 3				3.74	3.79
Ant 4	2.42	3.46	3.49		
Ant 5	2.68	3.72	3.79		

Directional Antenna Gain (dBi)						
Item	2.4G	5G Band 1	5G Band 2	5G Band 3	5G Band 4	
					Nss1	Nss2
-	2.61	4.18	4.18	7.43	7.43	4.86

註 4: 此待測設備搭配使用之電源供應器如下:

Adapter 1	
Brand	NETGEAR
Model	2ABL030F1 NJ
PN	332-10948-01
Input Power	100-240Vac, 50/60Hz 1.0A
Output Power	12Vdc, 2.5A
Power Line	1.8m power cable without core attached on adapter

Adapter 2	
Brand	NETGEAR
Model	AD2067F10
PN	332-10944-01
Input Power	100-240Vac, 50/60Hz 1.0A
Output Power	12Vdc, 2.5A
Power Line	1.85m power cable without core attached on adapter

註 5: 此待測物量測預測試模式如下：

測試模式	測試情形
一	EUT power from adapter 1
二	EUT power from adapter 2

* 1GHz 以下的場強輻射量測及電源線傳導干擾量測以上述兩種測試模式進行測試，1GHz 以上的場強輻射量測與其餘測驗項目以測試模式一進行測試。

註 6: 此報告中，場強輻射量測經過評估後以下列測試模式進行最終量測。

載波頻率	量測項目	發射	接收
2412 ~ 2462MHz			
場強輻射量測	1GHz 以上量測	802.11b: Ch 1, 6, 11 802.11g: Ch 1, 6, 11 802.11n (HT20): Ch 1, 6, 11 802.11n (HT40): Ch 3, 6, 9	802.11g: Ch 6
	其它不必要之訊號	802.11g: Ch 6	
電源線傳導干擾		802.11g: Ch 6	
5180 ~ 5240MHz & 5745 ~ 5825MHz			
場強輻射量測	1GHz 以上量測	802.11a: Ch 36, 40, 48, 149, 157, 165 802.11n (HT20): Ch 36, 40, 48, 149, 157, 165 802.11n (HT40): Ch 38, 46, 151, 159 802.11ac (VHT80): Ch 42, 155	802.11a: Ch 149
	其它不必要之訊號	802.11a: Ch 149	
電源線傳導干擾		802.11a: Ch 149	

註 7: 此待測設備以直立擺放方式進行最終量測，並將測試結果紀錄。

註 8: Spurious emission of the simultaneous operation (WLAN 2.4GHz and WLAN 5GHz) has been evaluated and no non-compliance was found.

註 **9:** Duty cycle of test signal.

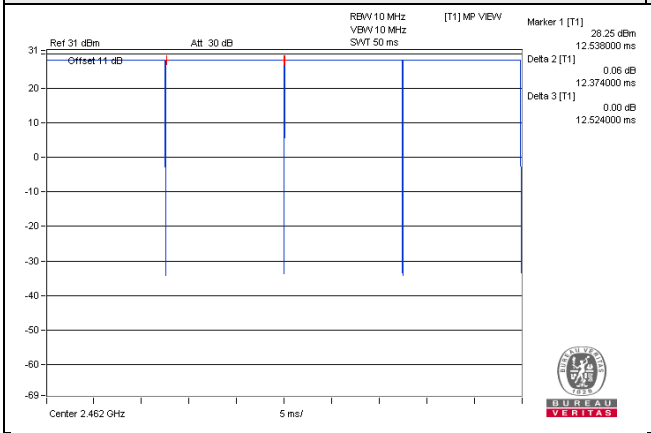
2.4GHz Band:

CDD Mode

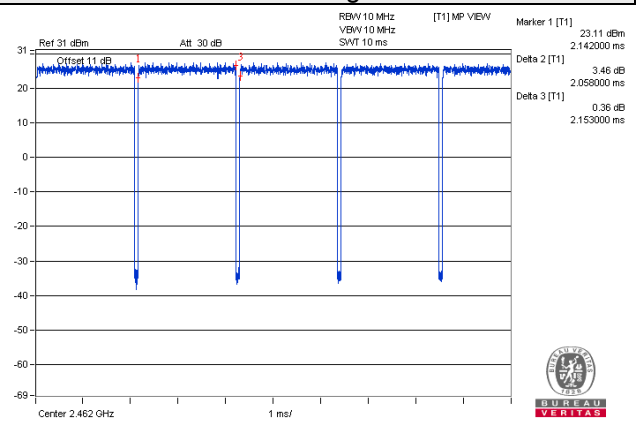
Duty cycle of test signal is ≥ 98%, duty factor is not required.
Duty cycle of test signal is < 98%, duty factor shall be considered.

802.11b: Duty cycle = 12.374/12.524 = 0.988
802.11g: Duty cycle = 2.058/2.153 =0.956, Duty factor = 10 * log(1/0.956) = 0.20
802.11n (HT20): Duty cycle = 4.995/5.098 =0.980
802.11n (HT40): Duty cycle = 2.423/2.513 =0.964, Duty factor = 10 * log(1/0.964) = 0.16

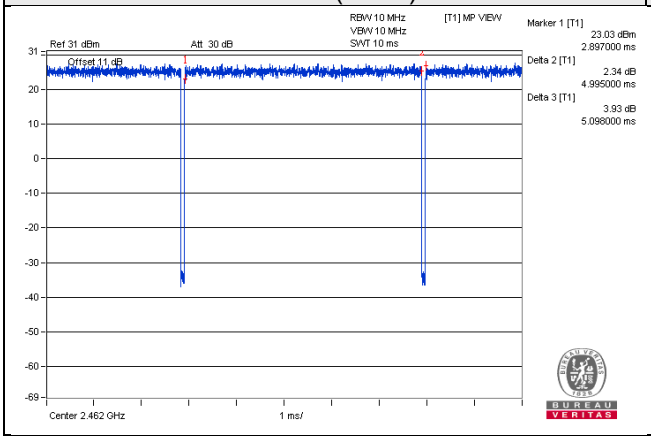
802.11b



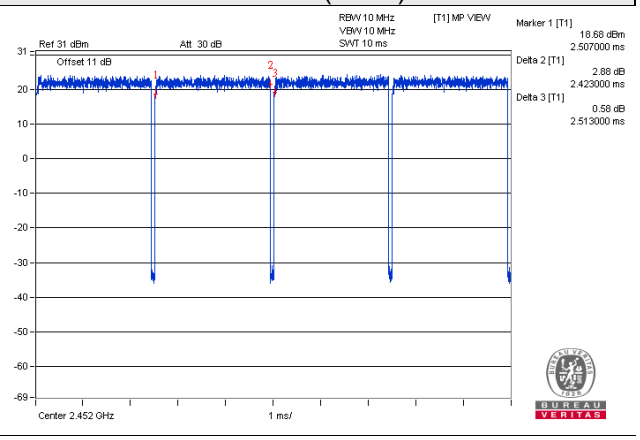
802.11g



802.11n (HT20)



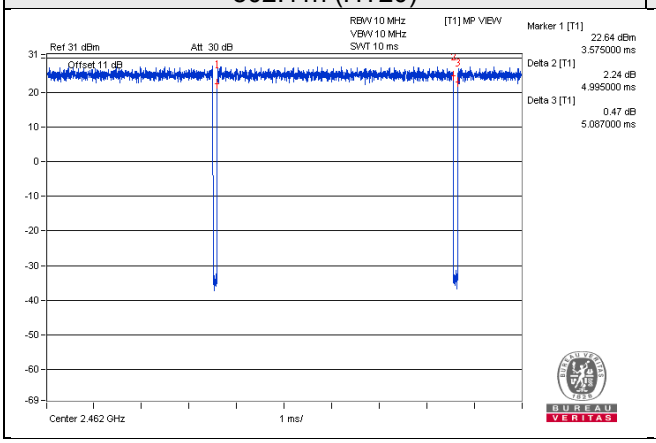
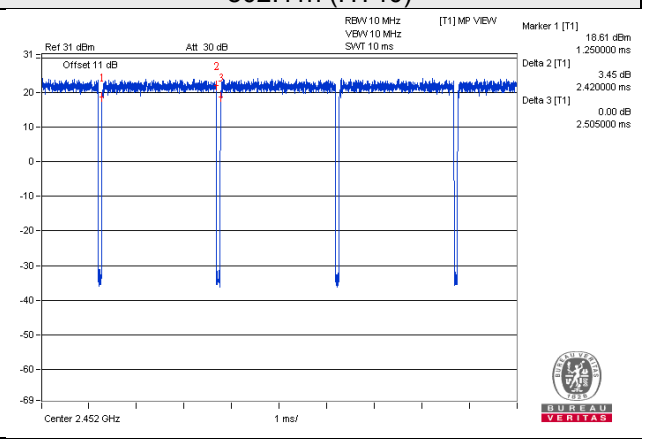
802.11n (HT40)



Beamforming NSS1 Mode

Duty cycle of test signal is ≥ 98%, duty factor is not required.
Duty cycle of test signal is < 98%, duty factor shall be considered.

802.11n (HT20): Duty cycle = 4.995/5.087 =0.982
802.11n (HT40): Duty cycle = 2.420/2.505 =0.966, Duty factor = 10 * log(1/0.966) = 0.15

802.11n (HT20)	802.11n (HT40)
	

5180~5240MHz & 5745~5825MHz

Duty cycle of test signal is ≥ 98%, duty factor is not required.
Duty cycle of test signal is < 98%, duty factor shall be considered.

5GHz U-NII-1Band:

CDD Mode

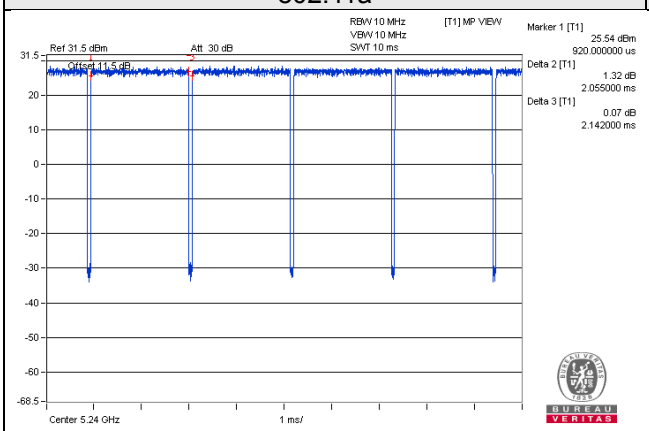
802.11a: Duty cycle = 2.055/2.142 = 0.959, Duty factor = 10 * log(1/0.959) = 0.18

802.11ac (VHT20): Duty cycle = 4.980/5.073 =0.982

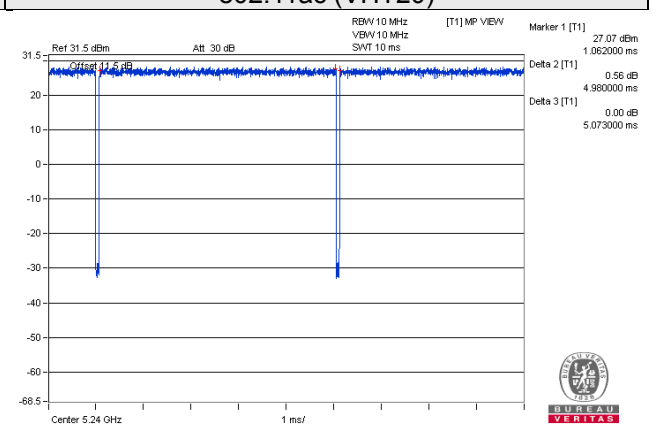
802.11ac (VHT40): Duty cycle = 2.415/2.505 =0.964, Duty factor = 10 * log(1/0.964) = 0.16

802.11ac (VHT80): Duty cycle = 1.125/1.227 =0.917, Duty factor = 10 * log(1/0.917) = 0.38

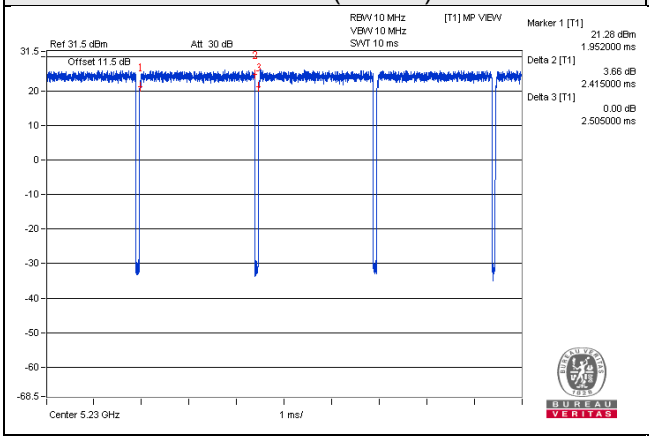
802.11a



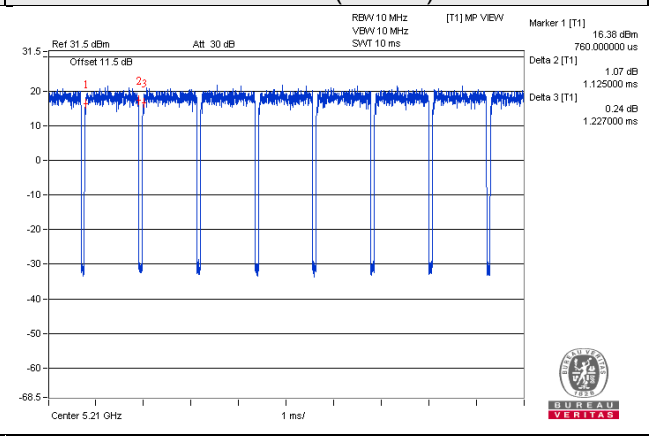
802.11ac (VHT20)



802.11ac (VHT40)



802.11ac (VHT80)



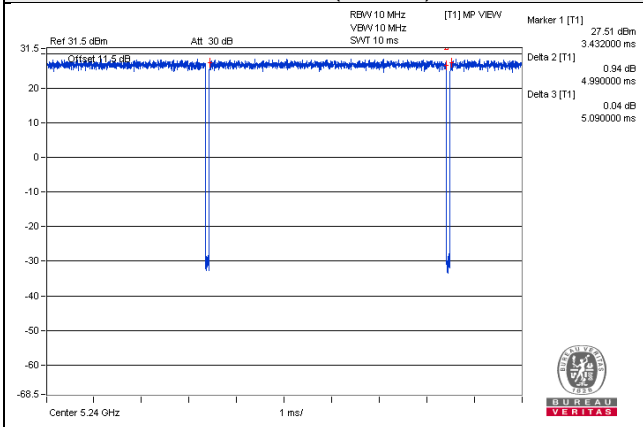
Beamforming_NSS1 Mode

802.11ac (VHT20): Duty cycle = 4.990/5.090 =0.9803

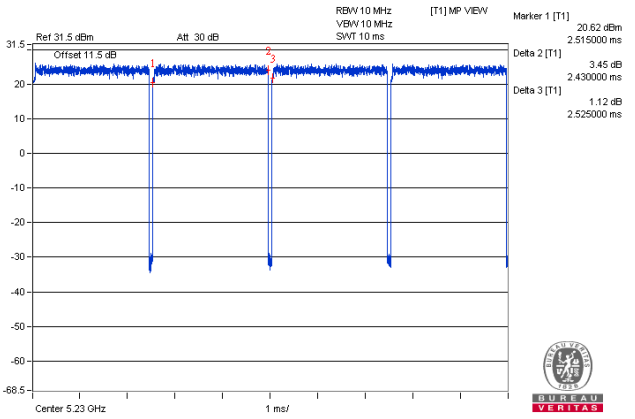
802.11ac (VHT40): Duty cycle = 2.430/2.525 =0.962, Duty factor = 10 * log(1/0.962) = 0.17

802.11ac (VHT80): Duty cycle = 1.140/1.245 =0.916, Duty factor = 10 * log(1/0.916) = 0.38

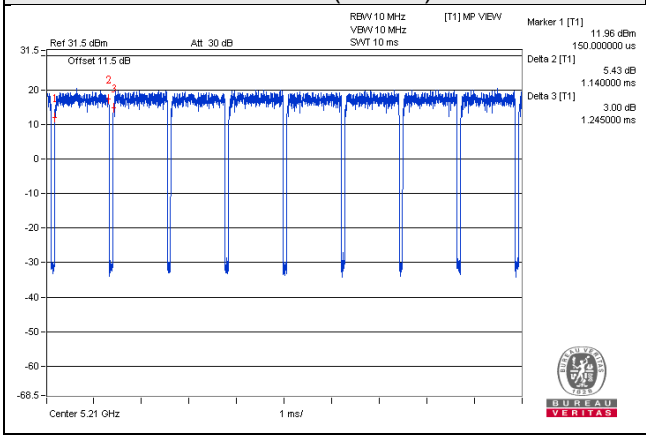
802.11ac (VHT20)



802.11ac (VHT40)



802.11ac (VHT80)



5GHz U-NII-3 Band:

CDD Mode

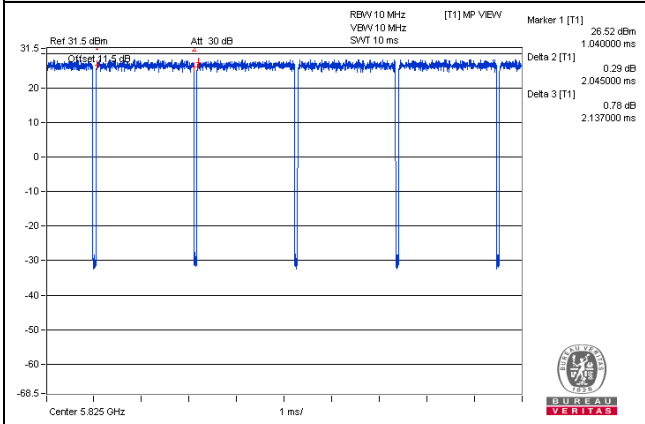
802.11a: Duty cycle = 2.045/2.137 = 0.957, Duty factor = 10 * log(1/0.957) = 0.19

802.11ac (VHT20): Duty cycle = 4.970/5.070 =0.9802

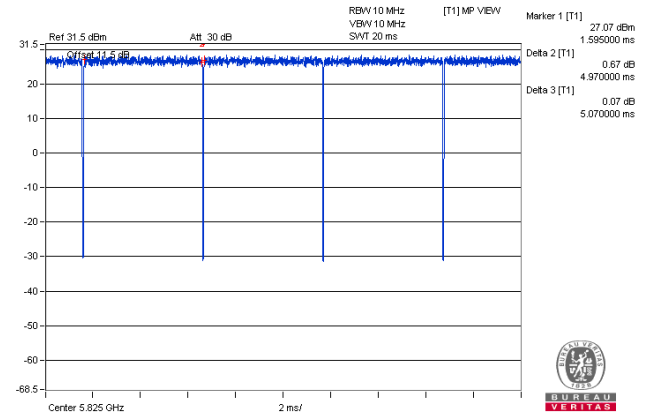
802.11ac (VHT40): Duty cycle = 2.418/2.493 =0.970, Duty factor = 10 * log(1/0.970) = 0.13

802.11ac (VHT80): Duty cycle = 1.142/1.217 =0.938, Duty factor = 10 * log(1/0.938) = 0.28

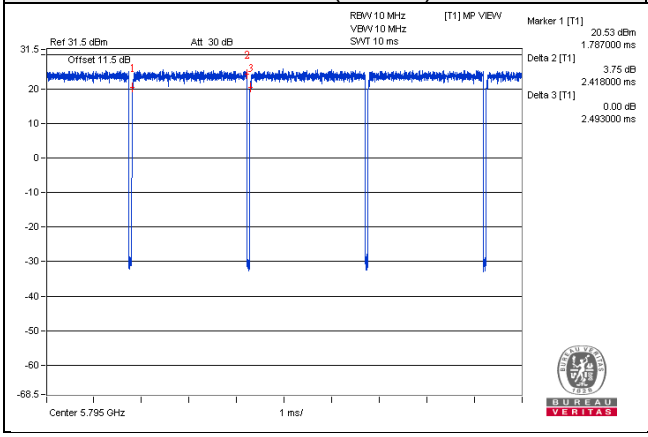
802.11a



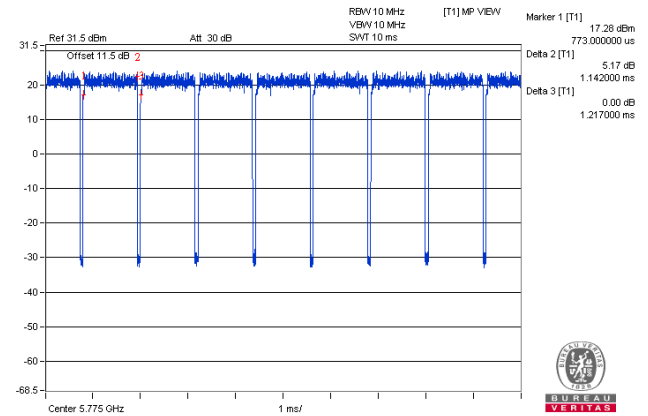
802.11ac (VHT20)



802.11ac (VHT40)



802.11ac (VHT80)



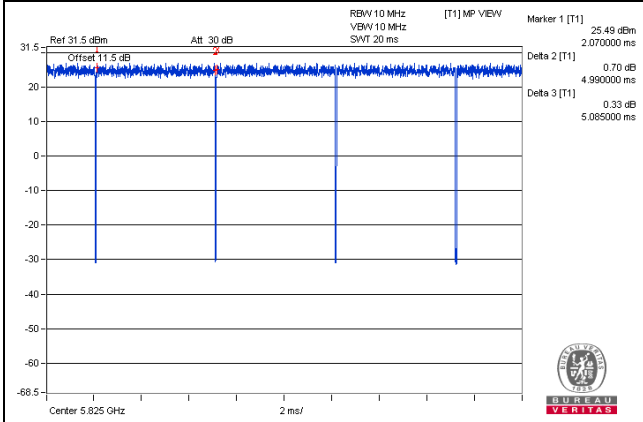
Beamforming_NSS1 Mode

802.11ac (VHT20): Duty cycle = 4.990/5.085 =0.981

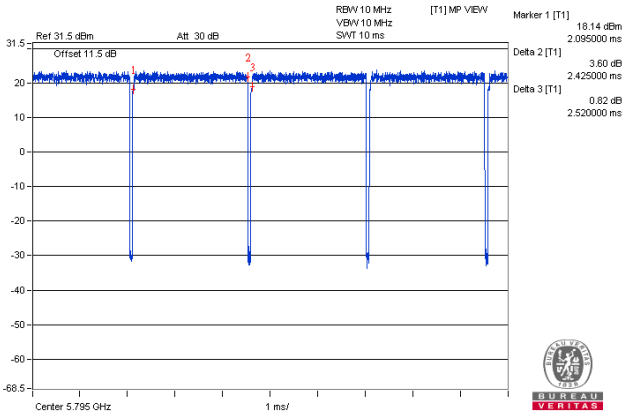
802.11ac (VHT40): Duty cycle = 2.425/2.520 =0.962, Duty factor = 10 * log(1/0.962) = 0.17

802.11ac (VHT80): Duty cycle = 1.129/1.217 =0.928, Duty factor = 10 * log(1/0.928) = 0.33

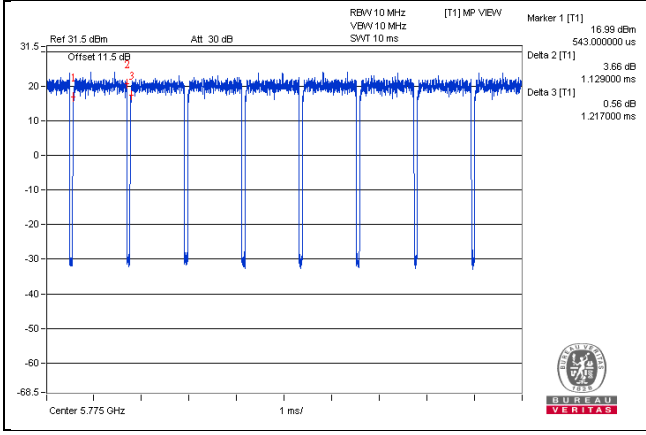
802.11ac (VHT20)



802.11ac (VHT40)



802.11ac (VHT80)



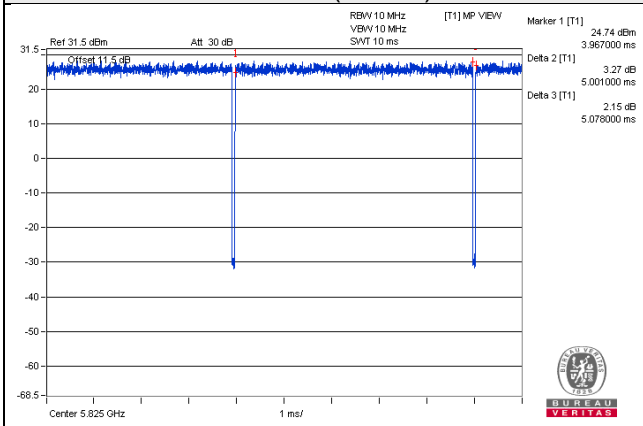
Beamforming_NSS2 Mode

802.11ac (VHT20): Duty cycle = 5.001/5.078 =0.985

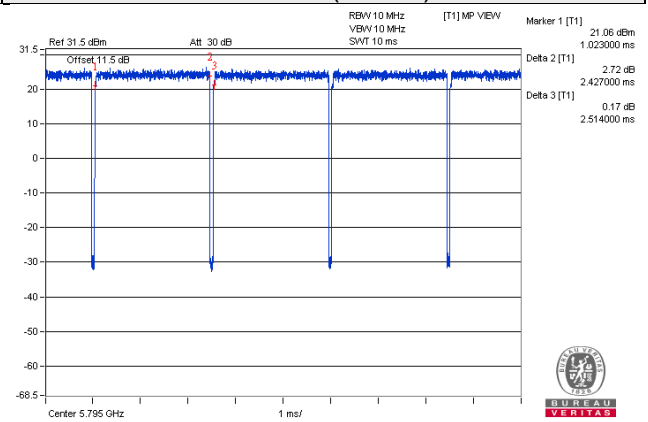
802.11ac (VHT40): Duty cycle = 2.427/2.514 =0.965, Duty factor = 10 * log(1/0.965) = 0.15

802.11ac (VHT80): Duty cycle = 1.137/1.209 =0.940, Duty factor = 10 * log(1/0.940) = 0.27

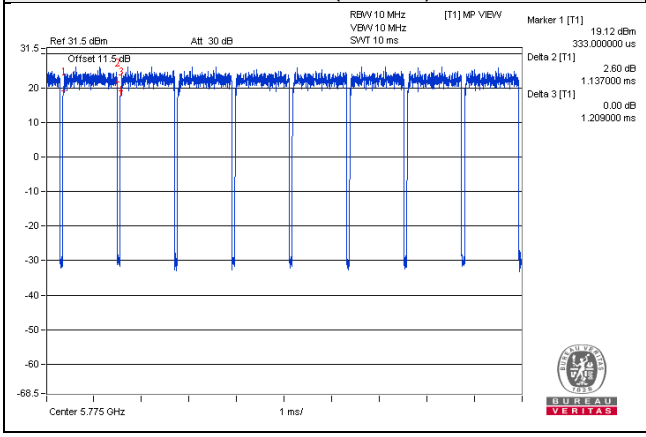
802.11ac (VHT20)



802.11ac (VHT40)



802.11ac (VHT80)



此裝置各頻道的中心頻率如下：

2.4 GHz 頻段:

802.11b, 802.11g, 802.11n (HT20):

頻道	對應頻率 (MHz)	頻道	對應頻率 (MHz)
01	2412	07	2442
02	2417	08	2447
03	2422	09	2452
04	2427	10	2457
05	2432	11	2462
06	2437		

802.11n (HT40):

頻道	對應頻率 (MHz)	頻道	對應頻率 (MHz)
03	2422	07	2442
04	2427	08	2447
05	2432	09	2452
06	2437		

5GHz 頻段:
802.11a, 802.11n (HT20) , 802.11ac (VHT20):

頻道	對應頻率 (MHz)	頻道	對應頻率 (MHz)
36	5180 MHz	153	5765 MHz
40	5200 MHz	157	5785 MHz
44	5220 MHz	161	5805 MHz
48	5240 MHz	165	5825 MHz
149	5745 MHz		

802.11n (HT40) , 802.11ac (VHT40):

頻道	對應頻率 (MHz)	頻道	對應頻率 (MHz)
38	5190 MHz	151	5755 MHz
46	5230 MHz	159	5795 MHz

802.11ac (VHT80):

頻道	對應頻率 (MHz)	頻道	對應頻率 (MHz)
42	5210MHz	155	5775 MHz

詳細之規格請參考使用說明書。
型號: RBR50v2 產品的照片請參照 BVCPS 報告編號: 190613C28
型號: RBS50v2 產品的照片請參照 BVCPS 報告編號: 190613C28-1

2.2 輔助測試之週邊設備描述

待測設備於受測時均接上其所屬的配件或一般用途之相關設備；下列輔助設備或配件測試中所使用的配備，以形成一個代表待測物實際運作的受測系統。

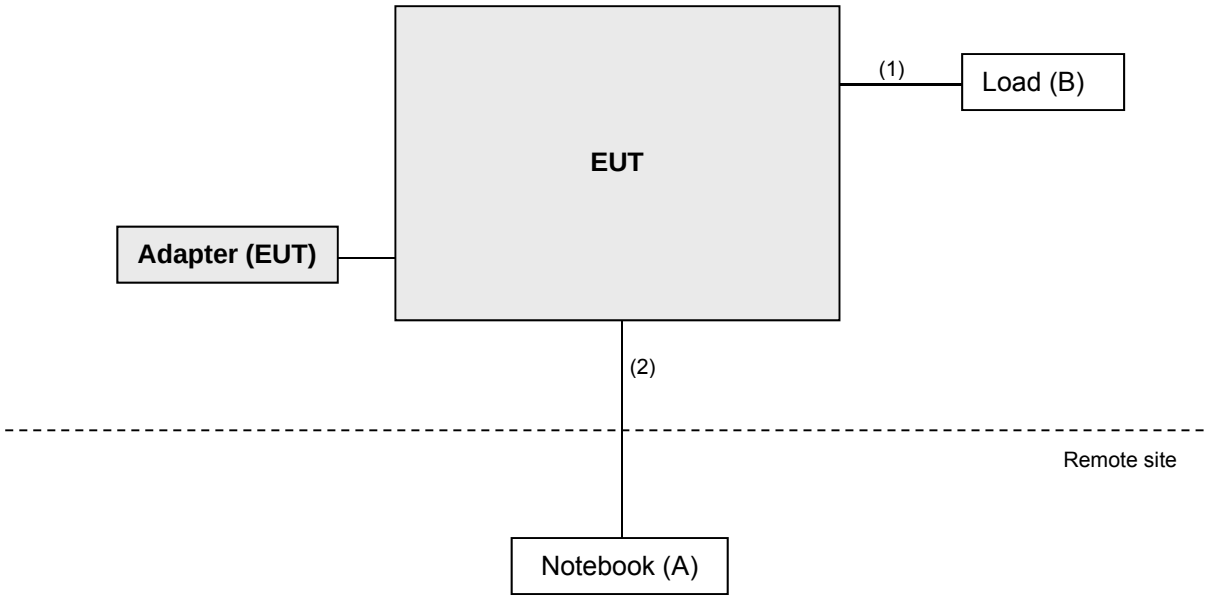
ID	Product	Brand	Model No.	Serial No.	FCC ID	Remarks
A.	Notebook	DELL	E5410	6RP2YM1	FCC DoC Approved	-
B.	Load	N/A	N/A	N/A	N/A	-

Note:

1. All power cords of the above support units are non-shielded (1.8m).
2. Item A acted as a communication partner to transfer data.

ID	Descriptions	Qty.	Length (m)	Shielding (Yes/No)	Cores (Qty.)	Remarks
1.	RJ45	3	1.8	N	0	-
2.	RJ45	1	10	N	0	-

2.3 測試架構圖



3 適用規範

3.1 規範要求

(1) 傳導之規定

依據國家通訊傳播委員會低功率射頻電機技術規範之 2.3 節，電源傳導干擾之限制要求如下:

頻率(MHz)	傳導限制值 (dBuV)	
	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。

(2) 帶外發射之規定

(I) 操作於 2.4000~2.4835 GHz band:

依據國家通訊傳播委員會低功率射頻電機技術規範3.10.1.5節之要求，操作頻帶範圍外之任意100 kHz 內，發射機所產生的射頻功率相較於使用頻帶範圍中包含最高所需功率之100 kHz 內的射頻功率，其衰減值限制如下：(1) 輸出功率以附件二之峰值輸出功率方式測量者，至少須衰減20 dB，可使用射頻傳導或輻射方式測量。(2) 輸出功率以3.10.1.2(1)(C)之最大傳導輸出功率測量方式者，至少須衰減30 dB。

(II) 操作於 5.15 GHz~5.35 GHz 及 5.470 GHz ~5.725 GHz 頻段:

依據國家通訊傳播委員會低功率射頻電機技術規範4.7.4.1節之要求，帶外發射之有效等向輻射功率(EIRP)≦-27 dBm/MHz。

(III) 操作於 5.725 GHz~5.850 GHz 頻段:

依據國家通訊傳播委員會低功率射頻電機技術規範4.7.4.2節之要求，所有頻帶邊緣向外5 MHz 內頻率之發射，有效等向輻射功率(EIRP)≦27 dBm/MHz～15.6 dBm/MHz (以線性法計算對應之限制值)；所有頻帶邊緣向外5 MHz～25 MHz，有效等向輻射功率35(EIRP)≦15.6 dBm/MHz～10 dBm/MHz (以線性法計算對應之限制值)；所有頻帶邊緣外25 MHz～75 MHz，有效等向輻射功率(EIRP)≦10 dBm/MHz～-27 dBm/MHz(以線性法計算對應之限制值)；所有頻帶邊緣外≧75 MHz 的頻率之發射，有效等向輻射功率(EIRP)≦-27 dBm/MHz；有關遮罩限制值詳圖1。

在5.725 GHz～5.850 GHz 頻段操作且天線增益大於10dBi 之設備於106 年3 月2日前得適用3.10.1.5 帶外發射限制；在5.725 GHz～5.850 GHz 頻段操作且天線增益小於等於10dBi之設備於107年3月2 日前得適用3.10.1.5帶外發射限制規定。

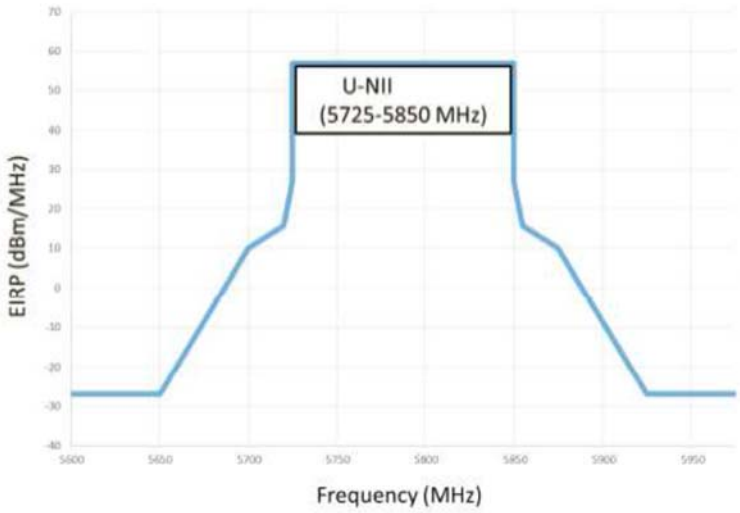


圖 1

在 1 GHz 以下不必要之發射，應符合 2.8 之規定。此外，落於 2.7 禁用頻段之輻射發射，應符合 2.8 之規定。

頻率(MHz)	電場強度(微伏特/公尺, uV/m)	測距(公尺)
0.009 - 0.490(含)	2,400/f(kHz)	300
0.490 (不含) - 1.705 (含)	24,000/f(kHz)	30
1.705(不含) - 30 (不含)	30	30
30 (含) - 88 (含)	100	3
88 (不含)- 216 (含)	150	3
216 (不含)- 960 (含)	200	3
960 (不含)以上	500	3

(3) 天線之規定

天線規格不受第 2.2 節規定之限制。

(4) 天線增益之要求

低功率發射機，依據國家通訊傳播委員會低功率射頻電機技術規範 3.10.1.3 節及 4.7.3 節之規定如下：

(I) 操作於 2400 MHz～2483.5 MHz 頻段：

(A) 進行固定式點對點操作時，其發射天線之方向性增益超過6 dBi，每超過3 dBi，最大傳導輸出功率限制值應降低1 dB。

(B) 天線以多向波束發射方式(含同時發射或循序發射)將訊號導向多個接收機或接收機群組時，應符合下列規定：

(a) 非同時發射多向波束者，所有載波或頻道傳輸至所有天線陣列或陣列群之總和傳導輸出功率應符合3.10.1.2 之功率限制值。如天線/天線陣列群之方向性增益超過6 dBi，每超過3 dBi，總和傳導輸出功率限制值應降低1 dB。方向性增益值應計算如下：

(i) 方向性增益值= 10log(天線陣列之單元數目)+各單元中最高之方向性增益值。

(ii) 天線陣列間之遮蔽效應或波束干涉損失能充分佐證時，方向性增益得低於(i)計算數值。

(b) 同時發射多向波束於相同或不同頻道者，其每一波束功率應符合(a)之功率限制值。如發射波束有重疊現象，功率應降低，以確保總和傳導輸出功率符合(a)之限制值。同時發射的所有波束總和傳導輸出功率不大於(a) 總和傳導輸出功率限制值加8 dB。方向性增益值計算同(a)。

(c) 發射機之天線具備單向波束功能者，應符合(1)(A)及(3)後段之規定。

除(A)及(B)外，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限制值。

(II) 操作於 5.15 GHz~5.25 GHz 頻段：

(A) 供戶外操作使用: 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。在水平面仰角超過30 度時，其最大 EIRP 應小於或等於21 dBm。

(B) 供室內操作使用: 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。

(C) 供固定式點對點操作使用: 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。固定式點對點操作，不包括點對多點系統、全方向性應用及多台共站發射機傳送相同資訊。

(D) 供用戶端裝置(Client Device)操作使用: 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。

(III) 操作於 5.25 GHz~5.35 GHz 與 5.470 GHz ~5.725 GHz 頻段:

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。

(IV) 操作於 5.725 GHz~5.850 GHz 頻段:

(A) 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。

(B) 除(A)外，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。

(5) 6dB 頻寬之要求

(I) 操作於 2400 MHz～2483.5 MHz 頻段：

對使用數位調變技術(digital modulation techniques)系統之低功率發射機，依據國家通訊傳播委員會低功率射頻電機技術規範3.10.1.6節之規定，6dB頻寬至少應有500kHz。

(II) 操作於 5.725 GHz~5.850 GHz 頻段:

依據國家通訊傳播委員會低功率射頻電機技術規範4.7.5節之規定，其6dB頻寬至少應有500kHz。

(6) 傳導輸出功率之要求

(I) 操作於 2.4000~2.4835 GHz band:

依據國家通訊傳播委員會低功率射頻電機技術規範3.10.1.2節之規定：

數位調變技術系統：1 W(含)以下。

(II) 操作於 5.15 GHz~5.25 GHz 頻段:

依據國家通訊傳播委員會低功率射頻電機技術規範4.7.3.1節之要求:

(A) 供戶外操作使用/供室內操作使用/供固定式點對點操作使用: 最大傳導輸出功率應小於或等於1 W。

(B) 供用戶端裝置(Client Device)操作使用: 最大傳導輸出功率應小於或等於250 mW。

(III) 操作於 5.25 GHz~5.35 GHz 及 5.470 GHz ~5.725 GHz 頻段:

依據國家通訊傳播委員會低功率射頻電機技術規範4.7.3.2節之規定，最大傳導輸出功率應小於或等於250 mW或11dBm+10log B (B是26 dB發射頻寬，單位MHz)之較小者。

(IV) 操作於 5.725 GHz~5.850 GHz 頻段:

依據國家通訊傳播委員會低功率射頻電機技術規範4.7.3.3節之規定，最大傳導輸出功率應小於或等於1 W。

(7) 功率頻譜密度之要求

(I) 操作於 2.4000~2.4835 GHz band:

依據國家通訊傳播委員會低功率射頻電機技術規範3.10.1.6節之規定，在使用頻率範圍之任一3 kHz 頻寬內，由發射機傳導至天線之功率頻譜密度在任意傳輸期間內，皆小於或等於8 毫分貝(dBm)，且應依3.10.1.3 之方式降低功率頻譜密度限制值。

(II) 操作於 5.15 GHz~5.25 GHz 頻段:

依據國家通訊傳播委員會低功率射頻電機技術規範4.7.3.1節之要求:

(A) 供戶外操作使用/供室內操作使用/供固定式點對點操作使用: 在任何1 MHz 頻帶中最大功率頻譜密度應小於或等於17 dBm。

(B) 供用戶端裝置(Client Device)操作使用: 在任何1 MHz 頻帶中最大功率頻譜密度應小於或等於11 dBm。

(III) 操作於 5.25 GHz~5.35 GHz 及 5.470 GHz ~5.725 GHz 頻段:

依據國家通訊傳播委員會低功率射頻電機技術規範4.7.3.2節之規定，最大功率頻譜密度在任何1 MHz 頻帶中應小於或等於11 dBm。

(IV) 操作於 5.725 GHz~5.850 GHz 頻段:

依據國家通訊傳播委員會低功率射頻電機技術規範4.7.3.3節之規定，在任何500 kHz 頻帶中最大功率頻譜密度應小於或等於30 dBm。

(8) 發射功率控制(TPC)及動態頻率選擇(DFS)之要求

依據國家通訊傳播委員會低功率射頻電機技術規範 4.7.7.1 及 4.7.7.2 節之規定。

發射功率控制(TPC)：操作於 5.25 GHz～5.35 GHz 與 5.470 GHz～5.725 GHz 頻段的設備，應具備發射功率控制功能。設備必須至少具有 6 dB 低於平均 EIRP 30 dBm 的能力。EIRP 低於 500 mW 之系統不須具備 TPC 功能。

動態頻率選擇(DFS)：操作於 5.25 GHz～5.35 GHz 與 5.470 GHz～5.725 GHz 頻段之設備應具備動態頻率選擇雷達偵測功能並啟動之，以完整偵測使用頻帶內之雷達訊號，避免與雷達系統同頻道操作。相關規定如下：

(1) 最低動態頻率選擇的偵測門檻

(A) 最大EIRP 為200 mW～1 W之設備，其最低動態頻率選擇的偵測門檻值為-64dBm。

(B) 最大EIRP 低於200 mW，且功率頻譜密度小於10 dBm/MHz 之設備，其最低動態頻率選擇的偵測門檻值為-62 dBm。

(C) 最大EIRP 低於200 mW，且功率頻譜密度大於或等於10 dBm/MHz 之設備，其最低動態頻率選擇的偵測門檻值為-64 dBm。

(D) 此偵測門檻值為1 微秒內之平均接收功率，並以0 dBi 天線為參考基準。頻道初始設定得由系統隨機選取或使用者手動選取。

(2) 操作模式：動態頻率選擇之規定適用於以下之操作模式：

(A) 頻道可用性檢查時間之規定，適用於主控運作模式。

(B) 頻道移動時間之規定，適用於主控及受控運作模式。

(3) 頻道可用性檢查時間：設備必須檢查其可在某一頻道上起始傳送之前是否有雷達系統已經操作在該頻道上，以及何時其必須移動到另一新的頻道，在60 秒內若沒有偵測到功率位準大過上述之干擾門檻值的雷達訊號時，設備才可開始使用該頻道。

(4) 頻道移動時間：在偵測到雷達的存在後，所有在該操作頻道上的所有傳輸須在10秒內停止，在偵測到雷達訊號後，該期間內的傳輸應維持最多200 毫秒的正常通訊。另外，間歇性的管理與控制訊號可在剩餘的時間中傳送，以便撤離該操作頻道。

(5) 不可佔用期間：某一頻道已被頻道可用性檢查或"服務中"監視顯示含有雷達系統，至少須有30 分鐘的不可佔用期間。不可佔用期間起始於偵測到雷達系統的當時。

(9) 無線資訊傳輸設備必須擁有安全功能之要求:

依據國家通訊傳播委員會低功率射頻電機技術規範 4.7.7.3 節之規定，無線資訊傳輸設備必須擁有安全功能，以保護未經授權之一方更改軟體。製造商應提出符合本節規定之相關證明文件或符合性聲明。

(10) 依據國家通訊傳播委員會低功率射頻電機技術規範 4.7.7.4 節之規定，製造商必須在操作於 U-NII 頻段上之數位調變系統中提供安全功能，使第三方團體無法重寫程式，使其操作於非經認證之設定。該軟體必須避免發射機操作於非經認證之頻率、輸出功率、調變形式或其他射頻參數。製造商可使用私有網路，只有經授權的用戶能下載軟體、進行軟體式電子簽章或硬體式的韌體更新，新的軟體可以被合法的載入到設備中，同時又能符合上述事項，並於應用程式中描述設備授權的方法。

(11) 依據國家通訊傳播委員會低功率射頻電機技術規範 4.7.7.5 節之規定，製造商必須確保 DFS 功能無法被無線資訊傳輸設備之操作者取消。

(12) 電波暴露量之評估

依據國家通訊傳播委員會低功率射頻電機技術規範 5.20.2 節之規定，若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。

限制值如下：

(1) 職業性/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	6
3 - 30	1842/f	4.89/f	$*900/f^2$	6
30 - 300	61.4	0.163	1.0	6
300 - 1,500	---	---	f/300	6
1,500 – 100,000	---	---	5.0	6

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)。

(2) 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)。

3.2 限制使用之頻帶

除本規範另有規定外，任何低功率射頻電機之主波皆不得使用下表所列各頻段之頻率；低功率射頻電機落於下表所列頻段之混附發射，其電場強度必須符合 2.8 之限制規定。

頻率(兆赫)	頻率(兆赫)	頻率(兆赫)
0.090～0.110	240.00～285.00	3332.0～3339.0
0.490～0.510	322.00～335.40	3345.8～3358.0
2.172～2.198	399.90～410.00	3500.0～4400.0
3.013～3.033	485.00～510.00	4500.0～5250.0
4.115～4.198	608.00～614.00	5350.0～5460.0
5.670～5.690	703.00～748.00	7250.0～7750.0
6.200～6.300	758.00～803.00	8025.0～8500.0
8.230～8.400	825.00～915.00	9000.0～9200.0
12.265～12.600	930.00～1240.0	9300.0～9500.0
13.340～13.430	1300.0～1427.0	10600～12700
14.965～15.020	1435.0～1626.5	13250～13400
16.700～16.755	1660.0～1785.0	14470～14500
19.965～20.020	1805.0～1880.0	15350～16200
25.500～25.700	1885.0～1900.0	17700～21400
37.475～38.275	1905.0～1985.0	22010～23120
73.500～75.400	2010.0～2025.0	23600～24000
108.00～138.00	2110.0～2170.0	31200～31800
149.90～150.05	2200.0～2300.0	36430～36500
156.70～156.90	2310.0～2390.0	38600 以上
162.01～167.17	2483.5～2900.0	
167.72～173.20	3260.0～3267.0	

2.4GHz 頻段測試紀錄結果

4 帶外發射之量測

4.1 適用標準

請見本報告3.1節第2項(I)的規定。

4.2 量測方法

在電波暗室，將待測物置於0.8米高的非金屬桌面，使其操作在工作狀態。接收天線置於3米距離。桌面要360度旋轉，另外接收天線從離地1米至4米升降變化，以找出最大的輻射電場強度，接收天線分別置於水平、垂直極化各執行測試一次。

Note: 對於 1GHz 以上場強輻射的測試，待測物則置於1.5米高的非金屬桌面。

4.3 量測儀器

Description & Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Due
Test Receiver ROHDE & SCHWARZ	ESCI	100424	Oct. 17, 2017	Oct. 16, 2018
Spectrum Analyzer ROHDE & SCHWARZ	FSP40	100041	Dec. 12, 2017	Dec. 11, 2018
BILOG Antenna SCHWARZBECK	VULB9168	9168-155	Dec. 11, 2017	Dec. 10, 2018
HORN Antenna SCHWARZBECK	BBHA 9120D	9120D-1170	Dec. 13, 2017	Dec. 12, 2018
HORN Antenna SCHWARZBECK	BBHA 9170	BBHA9170241	Dec. 01, 2017	Nov. 30, 2018
Preamplifier Agilent (Below 1GHz)	8447D	2944A10631	Aug. 08, 2018	Aug. 07, 2019
Preamplifier KEYSIGHT (Above 1GHz)	83017A	MY53270295	Jul. 02, 2018	Jul. 01, 2019
RF signal cable HUBER+SUHNER	SUCOFLEX 104	MY 13380+295012/04	Aug. 08, 2018	Aug. 07, 2019
RF signal cable HUBER+SUHNER	SUCOFLEX 104	Cable-CH4-03 (250724)	Aug. 08, 2018	Aug. 07, 2019
Software BV ADT	ADT_Radiated_ V7.6.15.9.5	NA	NA	NA
Antenna Tower inn-co GmbH	MA 4000	010303	NA	NA
Antenna Tower Controller BV ADT	AT100	AT93021703	NA	NA
Turn Table BV ADT	TT100	TT93021703	NA	NA
Turn Table Controller BV ADT	SC100	SC93021703	NA	NA
Boresight Antenna Fixture	FBA-01	FBA-SIP01	NA	NA
USB Wideband Power Sensor KEYSIGHT	U2021XA	MY55050005/MY5519 0004/MY55190007/MY 55210005	Jul. 17, 2018	Jul. 16, 2019

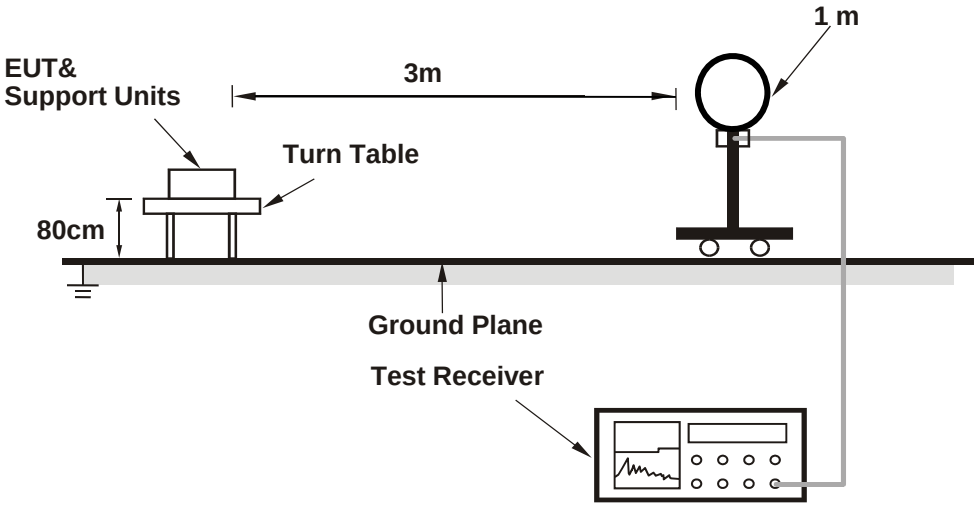
Note:

1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. The test was performed in HwaYa Chamber 4.
3. The following table is for the measurement uncertainty, which is calculated as per the document CISPR 16-4-2. This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

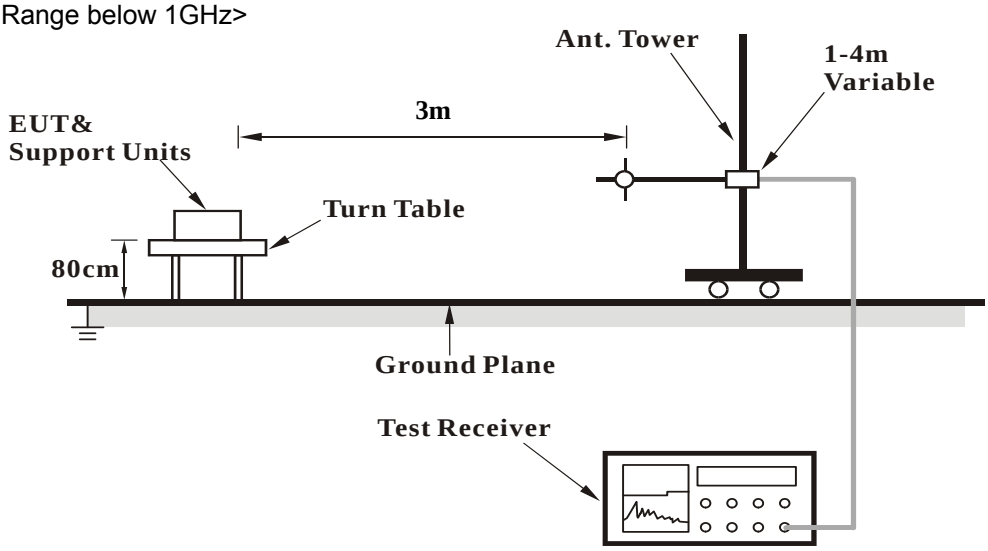
Measurement	Frequency	Uncertainty
Radiated emissions	30MHz ~ 200MHz	3.59 dB
	200MHz ~1000MHz	3.60 dB
	1GHz ~ 18GHz	2.29 dB
	18GHz ~ 40GHz	2.29 dB

4.4 測試配置

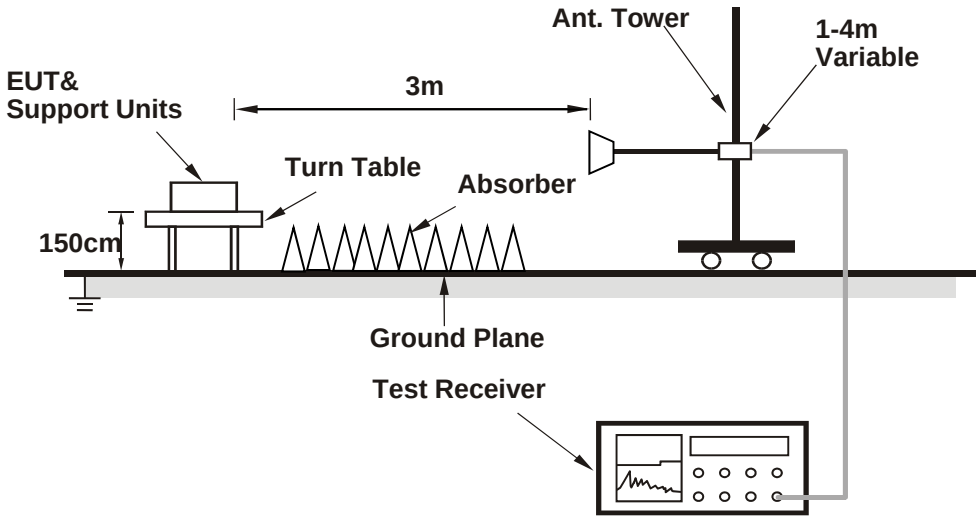
<Frequency Range below 30MHz>



<Frequency Range below 1GHz>



<Frequency Range above 1GHz>



4.5 場強度之計算

場強之計算公式如下：

結果值Emission level (dBuV/m)=機器讀值 Raw Value (dBuV) +校正因子Correction Factor (dB/m)
餘裕度Margin(dB)= 結果值Emission level (dBuV/m)-限制值Limit value (dBuV/m)

量測結果請見下頁。

4.6 量測結果

4.6.1 發射諧波

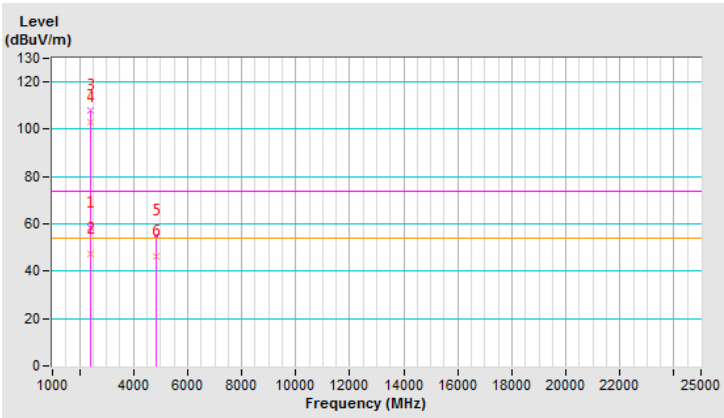
802.11b

操作模式：	發射	調變技術：	DSSS
基本波頻率：	CH 1：2412 MHz	測試儀器：	(PK) RB=1MHz, VB=3MHz (AV) RB=1MHz, VB=10Hz
量測場地溫度：	25℃	量測場地濕度：	70%RH
測試日期：	107 年 09 月 05 日	測試者：	張家誠

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	58.3 PK	74.0	-15.7	1.00 H	120	25.0	33.3
2	2390.00	47.1 AV	54.0	-6.9	1.00 H	120	13.8	33.3
3	*2412.00	108.2 PK			1.00 H	120	74.8	33.4
4	*2412.00	103.1 AV			1.00 H	120	69.7	33.4
5	4824.00	55.3 PK	74.0	-18.7	1.20 H	153	42.7	12.6
6	4824.00	46.3 AV	54.0	-7.7	1.20 H	153	33.7	12.6
	7236.00	-	-	-	-	-	-	-
	9648.00	-	-	-	-	-	-	-
	12060.00	-	-	-	-	-	-	-
	14472.00	-	-	-	-	-	-	-
	16884.00	-	-	-	-	-	-	-
	19296.00	-	-	-	-	-	-	-
	21708.00	-	-	-	-	-	-	-
	24120.00	-	-	-	-	-	-	-

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency (主頻)
6. " - ": The emission levels were too low to be detected
7. The blank is not available, the limit of fundamental frequency was restricted at the peak output power (see LP0002 3.10.1.2)

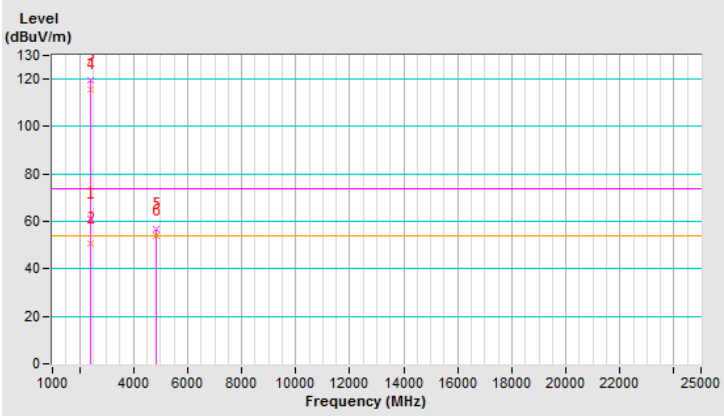


操 作 模 式 ：	發射	調 變 技 術 ：	DSSS
基 本 波 頻 率 ：	CH 1：2412 MHz	測 試 儀 器 ：	(PK) RB=1MHz, VB=3MHz (AV) RB=1MHz, VB=10Hz
量 測 場 地 溫 度 ：	25℃	量 測 場 地 濕 度 ：	67%RH
測 試 日 期 ：	107 年 08 月 20 日	測 試 者 ：	張家誠

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	61.0 PK	74.0	-13.0	1.00 V	140	27.6	33.4
2	2390.00	50.6 AV	54.0	-3.4	1.00 V	140	17.2	33.4
3	*2412.00	119.7 PK			1.00 V	140	86.3	33.4
4	*2412.00	115.7 AV			1.00 V	140	82.3	33.4
5	4824.00	56.6 PK	74.0	-17.4	1.08 V	342	43.9	12.7
6	4824.00	53.8 AV	54.0	-0.2	1.08 V	342	41.1	12.7
	7236.00	-	-	-	-	-	-	-
	9648.00	-	-	-	-	-	-	-
	12060.00	-	-	-	-	-	-	-
	14472.00	-	-	-	-	-	-	-
	16884.00	-	-	-	-	-	-	-
	19296.00	-	-	-	-	-	-	-
	21708.00	-	-	-	-	-	-	-
	24120.00	-	-	-	-	-	-	-

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency (主頻)
6. " - ": The emission levels were too low to be detected
7. The blank is not available, the limit of fundamental frequency was restricted at the peak output power (see LP0002 3.10.1.2)

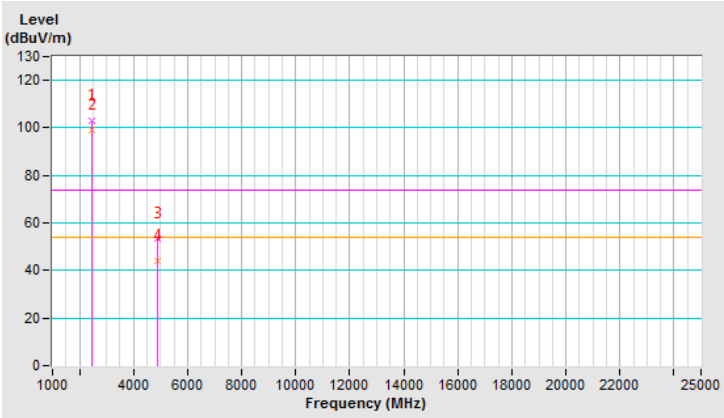


操 作 模 式 ：	發射	調 變 技 術 ：	DSSS
基 本 波 頻 率 ：	CH 6：2437 MHz	測 試 儀 器 ：	(PK) RB=1MHz, VB=3MHz (AV) RB=1MHz, VB=10Hz
量 測 場 地 溫 度 ：	25℃	量 測 場 地 濕 度 ：	70%RH
測 試 日 期 ：	107 年 09 月 05 日	測 試 者 ：	張家誠

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2437.00	102.9 PK			1.00 H	79	69.5	33.4
2	*2437.00	98.9 AV			1.00 H	79	65.5	33.4
3	4874.00	53.2 PK	74.0	-20.8	1.00 H	103	40.8	12.4
4	4874.00	44.1 AV	54.0	-9.9	1.00 H	103	31.7	12.4
	7311.00	-	-	-	-	-	-	-
	9748.00	-	-	-	-	-	-	-
	12185.00	-	-	-	-	-	-	-
	14622.00	-	-	-	-	-	-	-
	17059.00	-	-	-	-	-	-	-
	19496.00	-	-	-	-	-	-	-
	21933.00	-	-	-	-	-	-	-
	24370.00	-	-	-	-	-	-	-

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency (主頻)
6. " - ": The emission levels were too low to be detected
7. The blank is not available, the limit of fundamental frequency was restricted at the peak output power (see LP0002 3.10.1.2)

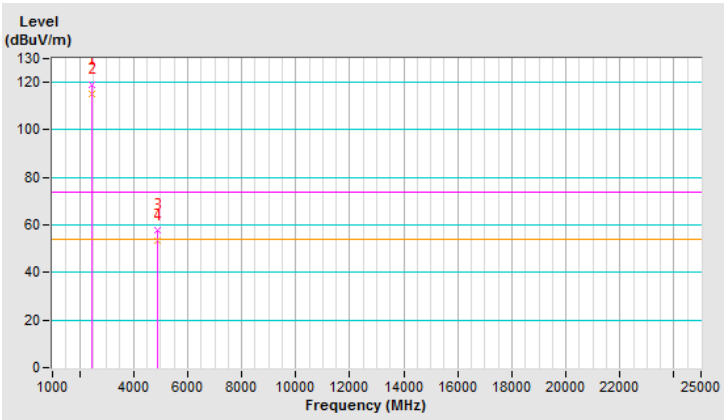


操 作 模 式 ：	發射	調 變 技 術 ：	DSSS
基 本 波 頻 率 ：	CH 6：2437 MHz	測 試 儀 器 ：	(PK) RB=1MHz, VB=3MHz (AV) RB=1MHz, VB=10Hz
量 測 場 地 溫 度 ：	25℃	量 測 場 地 濕 度 ：	67%RH
測 試 日 期 ：	107 年 08 月 20 日	測 試 者 ：	張家誠

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2437.00	119.0 PK			1.17 V	147	85.6	33.4
2	*2437.00	115.1 AV			1.17 V	147	81.7	33.4
3	4874.00	57.8 PK	74.0	-16.2	1.00 V	202	45.3	12.5
4	4874.00	53.7 AV	54.0	-0.3	1.00 V	202	41.2	12.5
	7311.00	-	-	-	-	-	-	-
	9748.00	-	-	-	-	-	-	-
	12185.00	-	-	-	-	-	-	-
	14622.00	-	-	-	-	-	-	-
	17059.00	-	-	-	-	-	-	-
	19496.00	-	-	-	-	-	-	-
	21933.00	-	-	-	-	-	-	-
	24370.00	-	-	-	-	-	-	-

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency (主頻)
6. " - ": The emission levels were too low to be detected
7. The blank is not available, the limit of fundamental frequency was restricted at the peak output power (see LP0002 3.10.1.2)

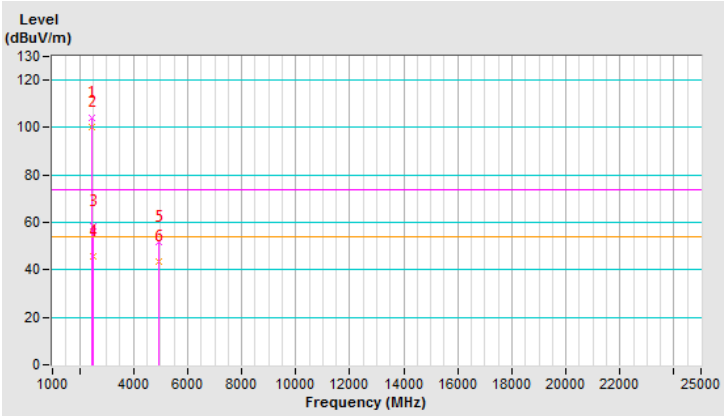


操 作 模 式 ：	發射	調 變 技 術 ：	DSSS
基 本 波 頻 率 ：	CH 11：2462 MHz	測 試 儀 器 ：	(PK) RB=1MHz, VB=3MHz (AV) RB=1MHz, VB=10Hz
量 測 場 地 溫 度 ：	25℃	量 測 場 地 濕 度 ：	70%RH
測 試 日 期 ：	107 年 09 月 05 日	測 試 者 ：	張家誠

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2462.00	104.3 PK			1.52 H	127	70.8	33.5
2	*2462.00	100.4 AV			1.52 H	127	66.9	33.5
3	2483.50	58.3 PK	74.0	-15.7	1.52 H	127	24.8	33.5
4	2483.50	45.9 AV	54.0	-8.1	1.52 H	127	12.4	33.5
5	4924.00	51.6 PK	74.0	-22.4	2.15 H	120	39.2	12.4
6	4924.00	43.7 AV	54.0	-10.3	2.15 H	120	31.3	12.4
	7386.00	-	-	-	-	-	-	-
	9848.00	-	-	-	-	-	-	-
	12310.00	-	-	-	-	-	-	-
	14772.00	-	-	-	-	-	-	-
	17234.00	-	-	-	-	-	-	-
	19696.00	-	-	-	-	-	-	-
	22158.00	-	-	-	-	-	-	-
	24620.00	-	-	-	-	-	-	-

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency (主頻)
6. " - ": The emission levels were too low to be detected
7. The blank is not available, the limit of fundamental frequency was restricted at the peak output power (see LP0002 3.10.1.2)

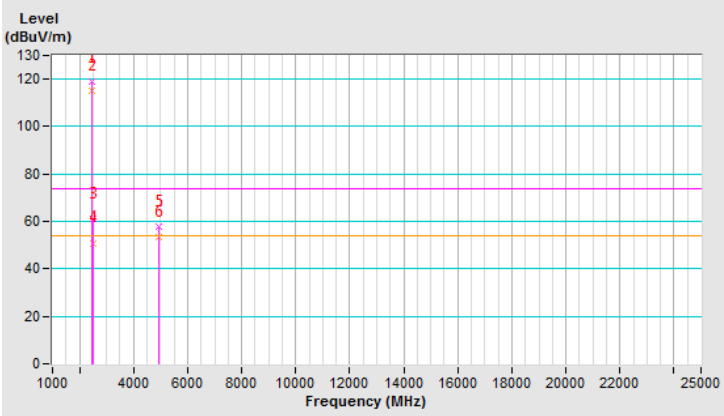


操 作 模 式 ：	發射	調 變 技 術 ：	DSSS
基 本 波 頻 率 ：	CH 11：2462 MHz	測 試 儀 器 ：	(PK) RB=1MHz, VB=3MHz (AV) RB=1MHz, VB=10Hz
量 測 場 地 溫 度 ：	25℃	量 測 場 地 濕 度 ：	67%RH
測 試 日 期 ：	107 年 08 月 20 日	測 試 者 ：	張家誠

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2462.00	118.7 PK			1.16 V	46	85.2	33.5
2	*2462.00	115.0 AV			1.16 V	46	81.5	33.5
3	2483.50	61.0 PK	74.0	-13.0	1.16 V	46	27.5	33.5
4	2483.50	51.0 AV	54.0	-3.0	1.16 V	46	17.5	33.5
5	4924.00	57.8 PK	74.0	-16.2	1.16 V	310	45.2	12.6
6	4924.00	53.7 AV	54.0	-0.3	1.16 V	310	41.1	12.6
	7386.00	-	-	-	-	-	-	-
	9848.00	-	-	-	-	-	-	-
	12310.00	-	-	-	-	-	-	-
	14772.00	-	-	-	-	-	-	-
	17234.00	-	-	-	-	-	-	-
	19696.00	-	-	-	-	-	-	-
	22158.00	-	-	-	-	-	-	-
	24620.00	-	-	-	-	-	-	-

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency (主頻)
6. " - ": The emission levels were too low to be detected
7. The blank is not available, the limit of fundamental frequency was restricted at the peak output power (see LP0002 3.10.1.2)



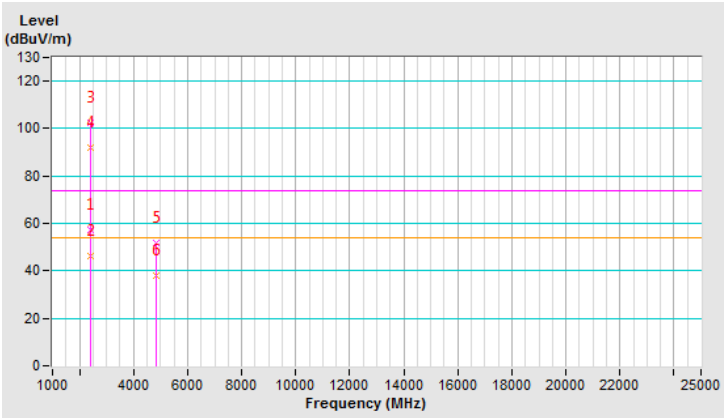
802.11g

操 作 模 式 ：	發射	調 變 技 術 ：	OFDM
基 本 波 頻 率 ：	CH 1：2412 MHz	測 試 儀 器 ：	(PK) RB=1MHz, VB=3MHz (AV) RB=1MHz, VB=1kHz
量 測 場 地 溫 度 ：	25℃	量 測 場 地 濕 度 ：	70%RH
測 試 日 期 ：	107 年 09 月 05 日	測 試 者 ：	張家誠

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	57.2 PK	74.0	-16.8	1.00 H	120	23.9	33.3
2	2390.00	46.3 AV	54.0	-7.7	1.00 H	120	13.0	33.3
3	*2412.00	102.3 PK			1.00 H	120	68.9	33.4
4	*2412.00	91.9 AV			1.00 H	120	58.5	33.4
5	4824.00	51.6 PK	74.0	-22.4	1.21 H	192	39.0	12.6
6	4824.00	38.0 AV	54.0	-16.0	1.21 H	192	25.4	12.6
	7236.00	-	-	-	-	-	-	-
	9648.00	-	-	-	-	-	-	-
	12060.00	-	-	-	-	-	-	-
	14472.00	-	-	-	-	-	-	-
	16884.00	-	-	-	-	-	-	-
	19296.00	-	-	-	-	-	-	-
	21708.00	-	-	-	-	-	-	-
	24120.00	-	-	-	-	-	-	-

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency (主頻)
6. " - ": The emission levels were too low to be detected
7. The blank is not available, the limit of fundamental frequency was restricted at the peak output power (see LP0002 3.10.1.2)

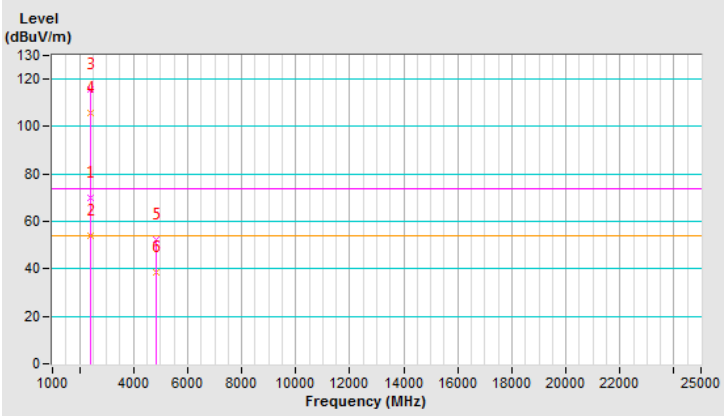


操 作 模 式 ：	發射	調 變 技 術 ：	OFDM
基 本 波 頻 率 ：	CH 1：2412 MHz	測 試 儀 器 ：	(PK) RB=1MHz, VB=3MHz (AV) RB=1MHz, VB=1kHz
量 測 場 地 溫 度 ：	25℃	量 測 場 地 濕 度 ：	67%RH
測 試 日 期 ：	107 年 08 月 20 日	測 試 者 ：	張家誠

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	69.8 PK	74.0	-4.2	1.00 V	141	36.4	33.4
2	2390.00	53.9 AV	54.0	-0.1	1.00 V	141	20.5	33.4
3	*2412.00	115.5 PK			1.00 V	141	82.1	33.4
4	*2412.00	105.6 AV			1.00 V	141	72.2	33.4
5	4824.00	52.2 PK	74.0	-21.8	1.21 V	305	39.5	12.7
6	4824.00	38.4 AV	54.0	-15.6	1.21 V	305	25.7	12.7
	7236.00	-	-	-	-	-	-	-
	9648.00	-	-	-	-	-	-	-
	12060.00	-	-	-	-	-	-	-
	14472.00	-	-	-	-	-	-	-
	16884.00	-	-	-	-	-	-	-
	19296.00	-	-	-	-	-	-	-
	21708.00	-	-	-	-	-	-	-
	24120.00	-	-	-	-	-	-	-

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency (主頻)
6. " - ": The emission levels were too low to be detected
7. The blank is not available, the limit of fundamental frequency was restricted at the peak output power (see LP0002 3.10.1.2)

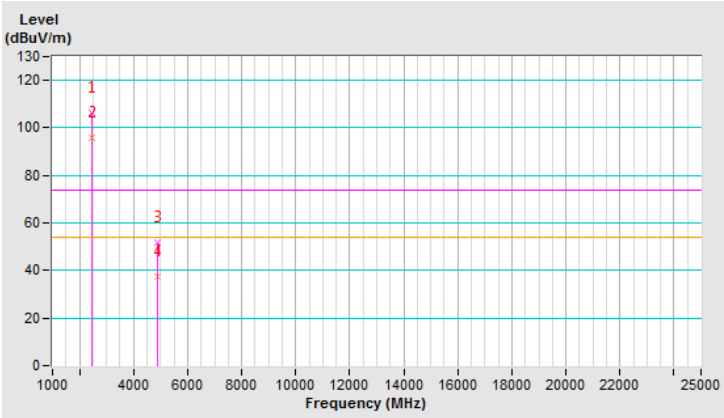


操 作 模 式 ：	發射	調 變 技 術 ：	OFDM
基 本 波 頻 率 ：	CH 6：2437 MHz	測 試 儀 器 ：	(PK) RB=1MHz, VB=3MHz (AV) RB=1MHz, VB=1kHz
量 測 場 地 溫 度 ：	25℃	量 測 場 地 濕 度 ：	70%RH
測 試 日 期 ：	107 年 09 月 05 日	測 試 者 ：	張家誠

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2437.00	106.4 PK			1.23 H	174	73.0	33.4
2	*2437.00	96.1 AV			1.23 H	174	62.7	33.4
3	4874.00	51.6 PK	74.0	-22.4	2.62 H	125	39.2	12.4
4	4874.00	37.5 AV	54.0	-16.5	2.62 H	125	25.1	12.4
	7311.00	-	-	-	-	-	-	-
	9748.00	-	-	-	-	-	-	-
	12185.00	-	-	-	-	-	-	-
	14622.00	-	-	-	-	-	-	-
	17059.00	-	-	-	-	-	-	-
	19496.00	-	-	-	-	-	-	-
	21933.00	-	-	-	-	-	-	-
	24370.00	-	-	-	-	-	-	-

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency (主頻)
6. " - ": The emission levels were too low to be detected
7. The blank is not available, the limit of fundamental frequency was restricted at the peak output power (see LP0002 3.10.1.2)

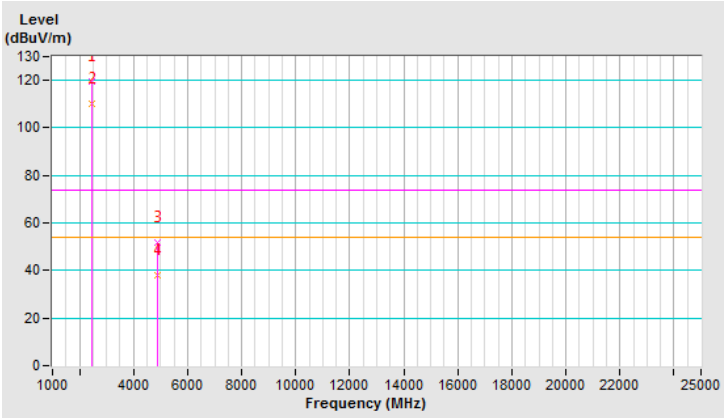


操 作 模 式 ：	發射	調 變 技 術 ：	OFDM
基 本 波 頻 率 ：	CH 6：2437 MHz	測 試 儀 器 ：	(PK) RB=1MHz, VB=3MHz (AV) RB=1MHz, VB=1kHz
量 測 場 地 溫 度 ：	25℃	量 測 場 地 濕 度 ：	67%RH
測 試 日 期 ：	107 年 08 月 20 日	測 試 者 ：	張家誠

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2437.00	119.8 PK			2.38 V	56	86.4	33.4
2	*2437.00	110.0 AV			2.38 V	56	76.6	33.4
3	4874.00	51.9 PK	74.0	-22.1	1.48 V	320	39.4	12.5
4	4874.00	37.9 AV	54.0	-16.1	1.48 V	320	25.4	12.5
	7311.00	-	-	-	-	-	-	-
	9748.00	-	-	-	-	-	-	-
	12185.00	-	-	-	-	-	-	-
	14622.00	-	-	-	-	-	-	-
	17059.00	-	-	-	-	-	-	-
	19496.00	-	-	-	-	-	-	-
	21933.00	-	-	-	-	-	-	-
	24370.00	-	-	-	-	-	-	-

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency (主頻)
6. " - ": The emission levels were too low to be detected
7. The blank is not available, the limit of fundamental frequency was restricted at the peak output power (see LP0002 3.10.1.2)

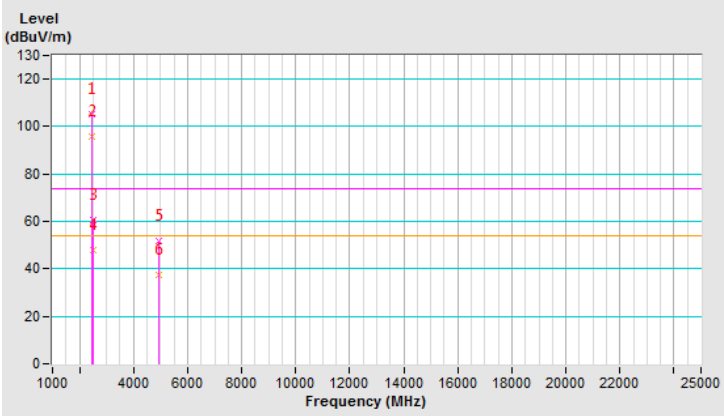


操 作 模 式 ：	發射	調 變 技 術 ：	OFDM
基 本 波 頻 率 ：	CH 11：2462 MHz	測 試 儀 器 ：	(PK) RB=1MHz, VB=3MHz (AV) RB=1MHz, VB=1kHz
量 測 場 地 溫 度 ：	25℃	量 測 場 地 濕 度 ：	70%RH
測 試 日 期 ：	107 年 09 月 05 日	測 試 者 ：	張家誠

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2462.00	105.3 PK			1.87 H	221	71.8	33.5
2	*2462.00	95.6 AV			1.87 H	221	62.1	33.5
3	2483.50	60.5 PK	74.0	-13.5	1.87 H	221	27.0	33.5
4	2483.50	47.8 AV	54.0	-6.2	1.87 H	221	14.3	33.5
5	4924.00	51.6 PK	74.0	-22.4	1.53 H	266	39.2	12.4
6	4924.00	37.5 AV	54.0	-16.5	1.53 H	266	25.1	12.4
	7386.00	-	-	-	-	-	-	-
	9848.00	-	-	-	-	-	-	-
	12310.00	-	-	-	-	-	-	-
	14772.00	-	-	-	-	-	-	-
	17234.00	-	-	-	-	-	-	-
	19696.00	-	-	-	-	-	-	-
	22158.00	-	-	-	-	-	-	-
	24620.00	-	-	-	-	-	-	-

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency (主頻)
6. " - ": The emission levels were too low to be detected
7. The blank is not available, the limit of fundamental frequency was restricted at the peak output power (see LP0002 3.10.1.2)

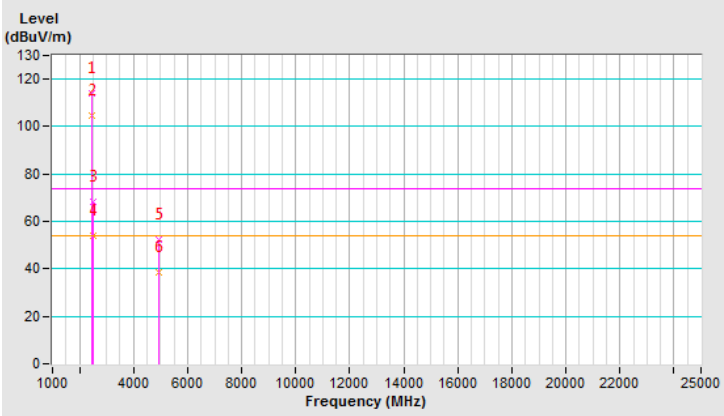


操 作 模 式 ：	發射	調 變 技 術 ：	OFDM
基 本 波 頻 率 ：	CH 11：2462 MHz	測 試 儀 器 ：	(PK) RB=1MHz, VB=3MHz (AV) RB=1MHz, VB=1kHz
量 測 場 地 溫 度 ：	25℃	量 測 場 地 濕 度 ：	67%RH
測 試 日 期 ：	107 年 08 月 20 日	測 試 者 ：	張家誠

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2462.00	114.2 PK			2.07 V	97	80.7	33.5
2	*2462.00	104.5 AV			2.07 V	97	71.0	33.5
3	2483.50	68.2 PK	74.0	-5.8	2.07 V	97	34.7	33.5
4	2483.50	53.8 AV	54.0	-0.2	2.07 V	97	20.3	33.5
5	4924.00	52.4 PK	74.0	-21.6	1.54 V	315	39.8	12.6
6	4924.00	38.4 AV	54.0	-15.6	1.54 V	315	25.8	12.6
	7386.00	-	-	-	-	-	-	-
	9848.00	-	-	-	-	-	-	-
	12310.00	-	-	-	-	-	-	-
	14772.00	-	-	-	-	-	-	-
	17234.00	-	-	-	-	-	-	-
	19696.00	-	-	-	-	-	-	-
	22158.00	-	-	-	-	-	-	-
	24620.00	-	-	-	-	-	-	-

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency (主頻)
6. " - ": The emission levels were too low to be detected
7. The blank is not available, the limit of fundamental frequency was restricted at the peak output power (see LP0002 3.10.1.2)



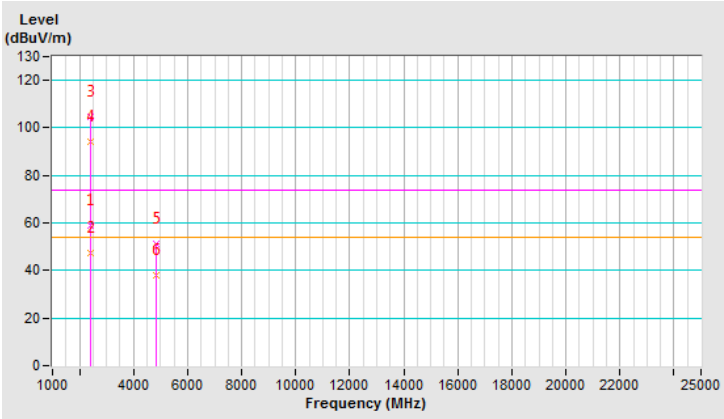
802.11n (HT20)

操 作 模 式 ：	發射	調 變 技 術 ：	OFDM
基 本 波 頻 率 ：	CH 1：2412 MHz	測 試 儀 器 ：	(PK) RB=1MHz, VB=3MHz (AV) RB=1MHz, VB=1kHz
量 測 場 地 溫 度 ：	25℃	量 測 場 地 濕 度 ：	70%RH
測 試 日 期 ：	107 年 09 月 05 日	測 試 者 ：	張家誠

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	58.8 PK	74.0	-15.2	1.77 H	218	25.5	33.3
2	2390.00	47.3 AV	54.0	-6.7	1.77 H	218	14.0	33.3
3	*2412.00	104.5 PK			1.77 H	218	71.1	33.4
4	*2412.00	94.1 AV			1.77 H	218	60.7	33.4
5	4824.00	51.2 PK	74.0	-22.8	2.55 H	236	38.6	12.6
6	4824.00	37.8 AV	54.0	-16.2	2.55 H	236	25.2	12.6
	7236.00	-	-	-	-	-	-	-
	9648.00	-	-	-	-	-	-	-
	12060.00	-	-	-	-	-	-	-
	14472.00	-	-	-	-	-	-	-
	16884.00	-	-	-	-	-	-	-
	19296.00	-	-	-	-	-	-	-
	21708.00	-	-	-	-	-	-	-
	24120.00	-	-	-	-	-	-	-

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency (主頻)
6. " - ": The emission levels were too low to be detected
7. The blank is not available, the limit of fundamental frequency was restricted at the peak output power (see LP0002 3.10.1.2)

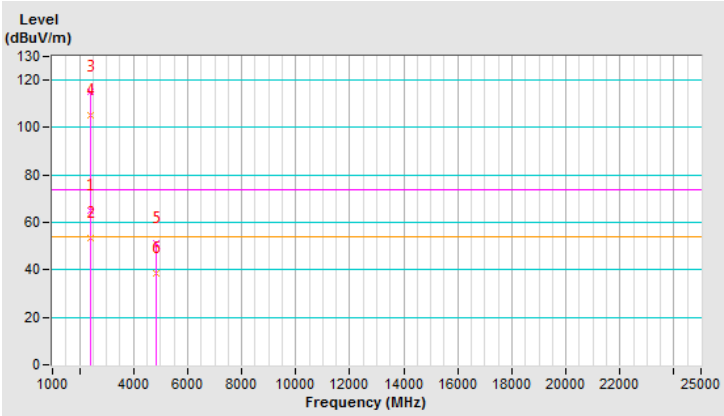


操 作 模 式 ：	發射	調 變 技 術 ：	OFDM
基 本 波 頻 率 ：	CH 1：2412 MHz	測 試 儀 器 ：	(PK) RB=1MHz, VB=3MHz (AV) RB=1MHz, VB=1kHz
量 測 場 地 溫 度 ：	25℃	量 測 場 地 濕 度 ：	67%RH
測 試 日 期 ：	107 年 08 月 20 日	測 試 者 ：	張家誠

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	65.0 PK	74.0	-9.0	1.00 V	147	31.6	33.4
2	2390.00	53.7 AV	54.0	-0.3	1.00 V	147	20.3	33.4
3	*2412.00	115.3 PK			1.00 V	147	81.9	33.4
4	*2412.00	105.0 AV			1.00 V	147	71.6	33.4
5	4824.00	51.5 PK	74.0	-22.5	1.25 V	315	38.8	12.7
6	4824.00	38.5 AV	54.0	-15.5	1.25 V	315	25.8	12.7
	7236.00	-	-	-	-	-	-	-
	9648.00	-	-	-	-	-	-	-
	12060.00	-	-	-	-	-	-	-
	14472.00	-	-	-	-	-	-	-
	16884.00	-	-	-	-	-	-	-
	19296.00	-	-	-	-	-	-	-
	21708.00	-	-	-	-	-	-	-
	24120.00	-	-	-	-	-	-	-

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency (主頻)
6. " - ": The emission levels were too low to be detected
7. The blank is not available, the limit of fundamental frequency was restricted at the peak output power (see LP0002 3.10.1.2)

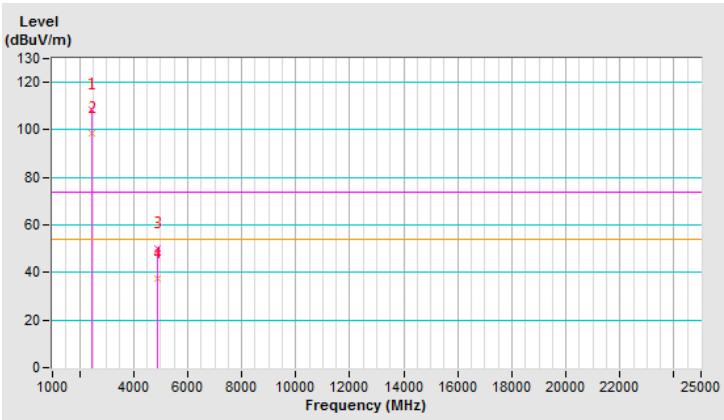


操 作 模 式 ：	發射	調 變 技 術 ：	OFDM
基 本 波 頻 率 ：	CH 6：2437 MHz	測 試 儀 器 ：	(PK) RB=1MHz, VB=3MHz (AV) RB=1MHz, VB=1kHz
量 測 場 地 溫 度 ：	25℃	量 測 場 地 濕 度 ：	70%RH
測 試 日 期 ：	107 年 09 月 05 日	測 試 者 ：	張家誠

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2437.00	108.6 PK			1.48 H	217	75.2	33.4
2	*2437.00	98.7 AV			1.48 H	217	65.3	33.4
3	4874.00	50.4 PK	74.0	-23.6	2.59 H	152	38.0	12.4
4	4874.00	37.5 AV	54.0	-16.5	2.59 H	152	25.1	12.4
	7311.00	-	-	-	-	-	-	-
	9748.00	-	-	-	-	-	-	-
	12185.00	-	-	-	-	-	-	-
	14622.00	-	-	-	-	-	-	-
	17059.00	-	-	-	-	-	-	-
	19496.00	-	-	-	-	-	-	-
	21933.00	-	-	-	-	-	-	-
	24370.00	-	-	-	-	-	-	-

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency (主頻)
6. " - ": The emission levels were too low to be detected
7. The blank is not available, the limit of fundamental frequency was restricted at the peak output power (see LP0002 3.10.1.2)

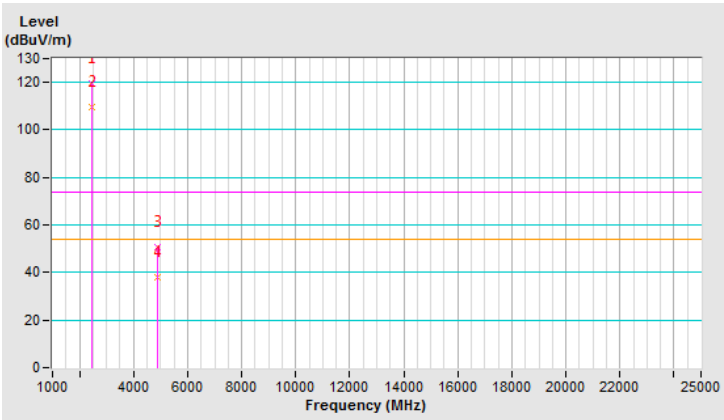


操 作 模 式 ：	發射	調 變 技 術 ：	OFDM
基 本 波 頻 率 ：	CH 6：2437 MHz	測 試 儀 器 ：	(PK) RB=1MHz, VB=3MHz (AV) RB=1MHz, VB=1kHz
量 測 場 地 溫 度 ：	25℃	量 測 場 地 濕 度 ：	67%RH
測 試 日 期 ：	107 年 08 月 22 日	測 試 者 ：	張家誠

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2437.00	119.7 PK			2.27 V	57	86.3	33.4
2	*2437.00	109.4 AV			2.27 V	57	76.0	33.4
3	4874.00	50.9 PK	74.0	-23.1	1.52 V	332	38.4	12.5
4	4874.00	37.8 AV	54.0	-16.2	1.52 V	332	25.3	12.5
	7311.00	-	-	-	-	-	-	-
	9748.00	-	-	-	-	-	-	-
	12185.00	-	-	-	-	-	-	-
	14622.00	-	-	-	-	-	-	-
	17059.00	-	-	-	-	-	-	-
	19496.00	-	-	-	-	-	-	-
	21933.00	-	-	-	-	-	-	-
	24370.00	-	-	-	-	-	-	-

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency (主頻)
6. " - ": The emission levels were too low to be detected
7. The blank is not available, the limit of fundamental frequency was restricted at the peak output power (see LP0002 3.10.1.2)

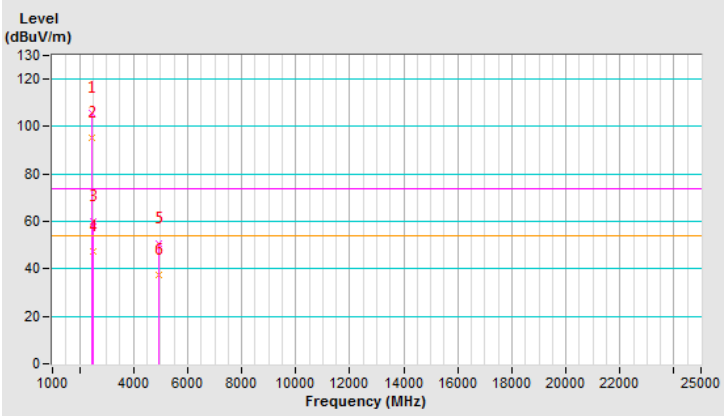


操 作 模 式 ：	發射	調 變 技 術 ：	OFDM
基 本 波 頻 率 ：	CH 11：2462 MHz	測 試 儀 器 ：	(PK) RB=1MHz, VB=3MHz (AV) RB=1MHz, VB=1kHz
量 測 場 地 溫 度 ：	25℃	量 測 場 地 濕 度 ：	70%RH
測 試 日 期 ：	107 年 09 月 05 日	測 試 者 ：	張家誠

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2462.00	105.8 PK			3.28 H	219	72.3	33.5
2	*2462.00	95.5 AV			3.28 H	219	62.0	33.5
3	2483.50	60.3 PK	74.0	-13.7	3.28 H	219	26.8	33.5
4	2483.50	47.5 AV	54.0	-6.5	3.28 H	219	14.0	33.5
5	4924.00	50.6 PK	74.0	-23.4	1.52 H	159	38.2	12.4
6	4924.00	37.7 AV	54.0	-16.3	1.52 H	159	25.3	12.4
	7386.00	-	-	-	-	-	-	-
	9848.00	-	-	-	-	-	-	-
	12310.00	-	-	-	-	-	-	-
	14772.00	-	-	-	-	-	-	-
	17234.00	-	-	-	-	-	-	-
	19696.00	-	-	-	-	-	-	-
	22158.00	-	-	-	-	-	-	-
	24620.00	-	-	-	-	-	-	-

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency (主頻)
6. " - ": The emission levels were too low to be detected
7. The blank is not available, the limit of fundamental frequency was restricted at the peak output power (see LP0002 3.10.1.2)

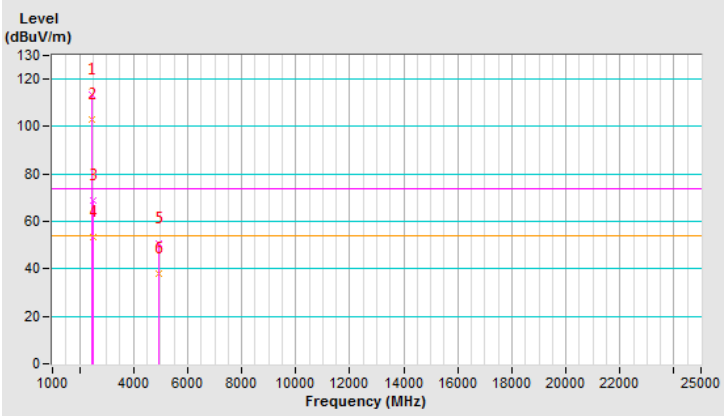


操 作 模 式 ：	發射	調 變 技 術 ：	OFDM
基 本 波 頻 率 ：	CH 11：2462 MHz	測 試 儀 器 ：	(PK) RB=1MHz, VB=3MHz (AV) RB=1MHz, VB=1kHz
量 測 場 地 溫 度 ：	25℃	量 測 場 地 濕 度 ：	67%RH
測 試 日 期 ：	107 年 08 月 22 日	測 試 者 ：	張家誠

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2462.00	113.5 PK			2.04 V	90	80.0	33.5
2	*2462.00	102.9 AV			2.04 V	90	69.4	33.5
3	2483.50	69.0 PK	74.0	-5.0	2.04 V	90	35.5	33.5
4	2483.50	53.5 AV	54.0	-0.5	2.04 V	90	20.0	33.5
5	4924.00	50.8 PK	74.0	-23.2	1.50 V	352	38.4	12.4
6	4924.00	38.0 AV	54.0	-16.0	1.50 V	352	25.6	12.4
	7386.00	-	-	-	-	-	-	-
	9848.00	-	-	-	-	-	-	-
	12310.00	-	-	-	-	-	-	-
	14772.00	-	-	-	-	-	-	-
	17234.00	-	-	-	-	-	-	-
	19696.00	-	-	-	-	-	-	-
	22158.00	-	-	-	-	-	-	-
	24620.00	-	-	-	-	-	-	-

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency (主頻)
6. " - ": The emission levels were too low to be detected
7. The blank is not available, the limit of fundamental frequency was restricted at the peak output power (see LP0002 3.10.1.2)



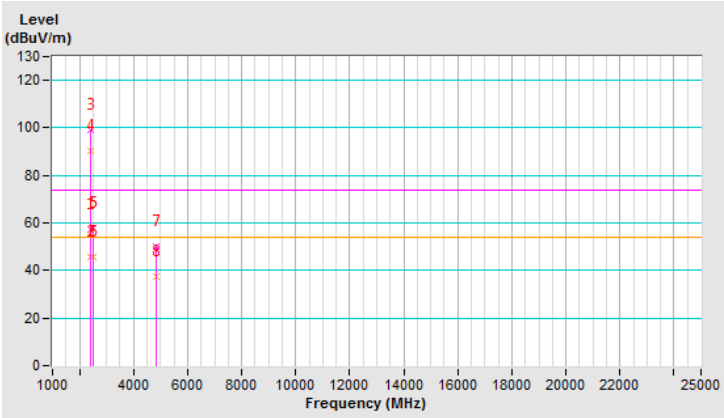
802.11n (HT40)

操 作 模 式 ：	發射	調 變 技 術 ：	OFDM
基 本 波 頻 率 ：	CH 3：2422 MHz	測 試 儀 器 ：	(PK) RB=1MHz, VB=3MHz (AV) RB=1MHz, VB=1kHz
量 測 場 地 溫 度 ：	25℃	量 測 場 地 濕 度 ：	70%RH
測 試 日 期 ：	107 年 09 月 05 日	測 試 者 ：	張家誠

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	57.5 PK	74.0	-16.5	3.75 H	153	24.2	33.3
2	2390.00	45.9 AV	54.0	-8.1	3.75 H	153	12.6	33.3
3	*2422.00	99.1 PK			3.75 H	153	65.7	33.4
4	*2422.00	90.1 AV			3.75 H	153	56.7	33.4
5	2483.50	57.6 PK	74.0	-16.4	3.75 H	153	24.1	33.5
6	2483.50	45.7 AV	54.0	-8.3	3.75 H	153	12.2	33.5
7	4844.00	50.4 PK	74.0	-23.6	2.10 H	263	37.9	12.5
8	4844.00	37.4 AV	54.0	-16.6	2.10 H	263	24.9	12.5
	7266.00	-	-	-	-	-	-	-
	9688.00	-	-	-	-	-	-	-
	12110.00	-	-	-	-	-	-	-
	14532.00	-	-	-	-	-	-	-
	16954.00	-	-	-	-	-	-	-
	19376.00	-	-	-	-	-	-	-
	21798.00	-	-	-	-	-	-	-
	24220.00	-	-	-	-	-	-	-

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency (主頻)
6. " - ": The emission levels were too low to be detected
7. The blank is not available, the limit of fundamental frequency was restricted at the peak output power (see LP0002 3.10.1.2)

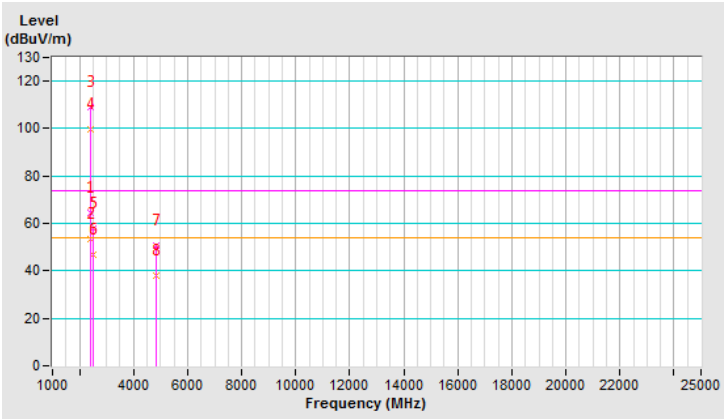


操 作 模 式 ：	發射	調 變 技 術 ：	OFDM
基 本 波 頻 率 ：	CH 3：2422 MHz	測 試 儀 器 ：	(PK) RB=1MHz, VB=3MHz (AV) RB=1MHz, VB=1kHz
量 測 場 地 溫 度 ：	25℃	量 測 場 地 濕 度 ：	67%RH
測 試 日 期 ：	107 年 08 月 22 日	測 試 者 ：	張家誠

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	64.3 PK	74.0	-9.7	2.12 V	46	31.0	33.3
2	2390.00	53.7 AV	54.0	-0.3	2.12 V	46	20.4	33.3
3	*2422.00	108.9 PK			2.12 V	46	75.5	33.4
4	*2422.00	99.7 AV			2.12 V	46	66.3	33.4
5	2483.50	58.0 PK	74.0	-16.0	2.12 V	46	24.5	33.5
6	2483.50	46.6 AV	54.0	-7.4	2.12 V	46	13.1	33.5
7	4844.00	50.9 PK	74.0	-23.1	1.22 V	312	38.4	12.5
8	4844.00	37.8 AV	54.0	-16.2	1.22 V	312	25.3	12.5
	7266.00	-	-	-	-	-	-	-
	9688.00	-	-	-	-	-	-	-
	12110.00	-	-	-	-	-	-	-
	14532.00	-	-	-	-	-	-	-
	16954.00	-	-	-	-	-	-	-
	19376.00	-	-	-	-	-	-	-
	21798.00	-	-	-	-	-	-	-
	24220.00	-	-	-	-	-	-	-

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency (主頻)
6. " - ": The emission levels were too low to be detected
7. The blank is not available, the limit of fundamental frequency was restricted at the peak output power (see LP0002 3.10.1.2)

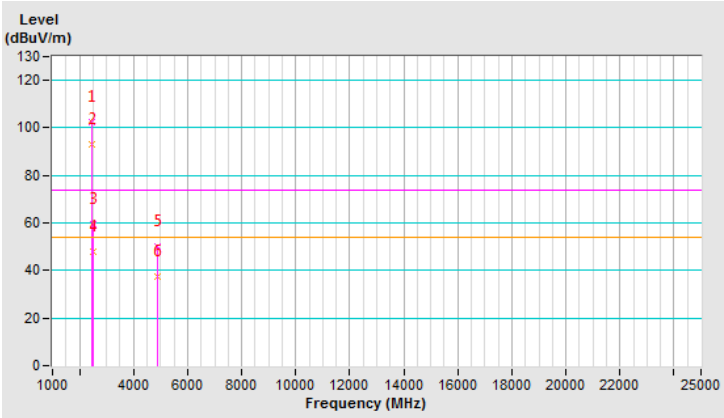


操 作 模 式 ：	發射	調 變 技 術 ：	OFDM
基 本 波 頻 率 ：	CH 6：2437 MHz	測 試 儀 器 ：	(PK) RB=1MHz, VB=3MHz (AV) RB=1MHz, VB=1kHz
量 測 場 地 溫 度 ：	25℃	量 測 場 地 濕 度 ：	70%RH
測 試 日 期 ：	107 年 09 月 05 日	測 試 者 ：	張家誠

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2437.00	102.5 PK			3.43 H	219	69.1	33.4
2	*2437.00	93.2 AV			3.43 H	219	59.8	33.4
3	2483.50	59.6 PK	74.0	-14.4	3.43 H	219	26.1	33.5
4	2483.50	47.8 AV	54.0	-6.2	3.43 H	219	14.3	33.5
5	4874.00	50.4 PK	74.0	-23.6	2.15 H	152	38.0	12.4
6	4874.00	37.2 AV	54.0	-16.8	2.15 H	152	24.8	12.4
	7311.00	-	-	-	-	-	-	-
	9748.00	-	-	-	-	-	-	-
	12185.00	-	-	-	-	-	-	-
	14622.00	-	-	-	-	-	-	-
	17059.00	-	-	-	-	-	-	-
	19496.00	-	-	-	-	-	-	-
	21933.00	-	-	-	-	-	-	-
	24370.00	-	-	-	-	-	-	-

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency (主頻)
6. " - ": The emission levels were too low to be detected
7. The blank is not available, the limit of fundamental frequency was restricted at the peak output power (see LP0002 3.10.1.2)

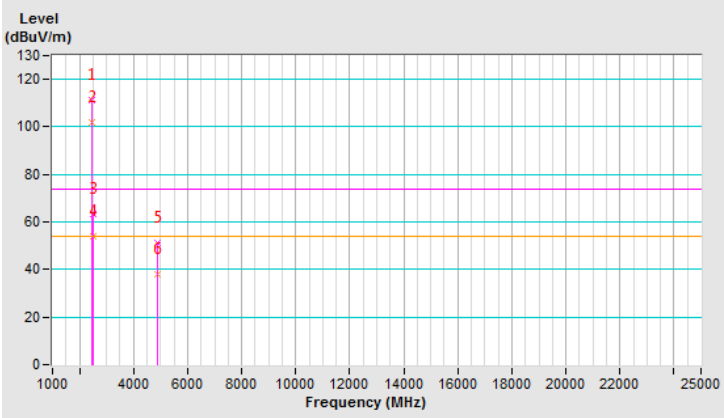


操 作 模 式 ：	發射	調 變 技 術 ：	OFDM
基 本 波 頻 率 ：	CH 6：2437 MHz	測 試 儀 器 ：	(PK) RB=1MHz, VB=3MHz (AV) RB=1MHz, VB=1kHz
量 測 場 地 溫 度 ：	25℃	量 測 場 地 濕 度 ：	67%RH
測 試 日 期 ：	107 年 08 月 22 日	測 試 者 ：	張家誠

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2437.00	111.1 PK			2.16 V	90	77.7	33.4
2	*2437.00	102.1 AV			2.16 V	90	68.7	33.4
3	2483.50	63.6 PK	74.0	-10.4	2.16 V	90	30.1	33.5
4	2483.50	53.8 AV	54.0	-0.2	2.16 V	90	20.3	33.5
5	4874.00	51.0 PK	74.0	-23.0	1.59 V	302	38.6	12.4
6	4874.00	37.8 AV	54.0	-16.2	1.59 V	302	25.4	12.4
	7311.00	-	-	-	-	-	-	-
	9748.00	-	-	-	-	-	-	-
	12185.00	-	-	-	-	-	-	-
	14622.00	-	-	-	-	-	-	-
	17059.00	-	-	-	-	-	-	-
	19496.00	-	-	-	-	-	-	-
	21933.00	-	-	-	-	-	-	-
	24370.00	-	-	-	-	-	-	-

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency (主頻)
6. " - ": The emission levels were too low to be detected
7. The blank is not available, the limit of fundamental frequency was restricted at the peak output power (see LP0002 3.10.1.2)

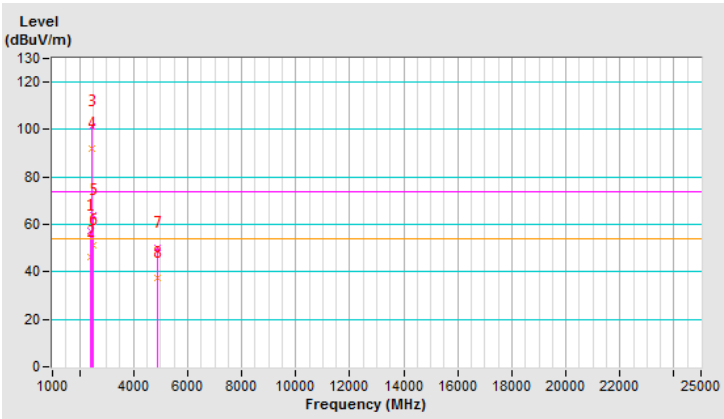


操 作 模 式 ：	發射	調 變 技 術 ：	OFDM
基 本 波 頻 率 ：	CH 9：2452 MHz	測 試 儀 器 ：	(PK) RB=1MHz, VB=3MHz (AV) RB=1MHz, VB=1kHz
量 測 場 地 溫 度 ：	25℃	量 測 場 地 濕 度 ：	70%RH
測 試 日 期 ：	107 年 09 月 05 日	測 試 者 ：	張家誠

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	57.1 PK	74.0	-16.9	3.45 H	161	23.8	33.3
2	2390.00	46.1 AV	54.0	-7.9	3.45 H	161	12.8	33.3
3	*2452.00	101.3 PK			3.45 H	161	67.9	33.4
4	*2452.00	92.2 AV			3.45 H	161	58.8	33.4
5	2483.50	64.0 PK	74.0	-10.0	3.45 H	161	30.5	33.5
6	2483.50	51.1 AV	54.0	-2.9	3.45 H	161	17.6	33.5
7	4904.00	50.2 PK	74.0	-23.8	1.05 H	104	37.7	12.5
8	4904.00	37.3 AV	54.0	-16.7	1.05 H	104	24.8	12.5
	7356.00	-	-	-	-	-	-	-
	9808.00	-	-	-	-	-	-	-
	12260.00	-	-	-	-	-	-	-
	14712.00	-	-	-	-	-	-	-
	17164.00	-	-	-	-	-	-	-
	19616.00	-	-	-	-	-	-	-
	22068.00	-	-	-	-	-	-	-
	24520.00	-	-	-	-	-	-	-

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency (主頻)
6. " - ": The emission levels were too low to be detected
7. The blank is not available, the limit of fundamental frequency was restricted at the peak output power (see LP0002 3.10.1.2)

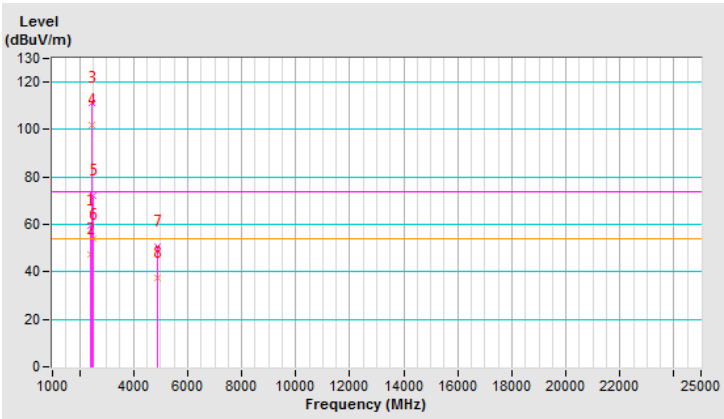


操 作 模 式 ：	發射	調 變 技 術 ：	OFDM
基 本 波 頻 率 ：	CH 9：2452 MHz	測 試 儀 器 ：	(PK) RB=1MHz, VB=3MHz (AV) RB=1MHz, VB=1kHz
量 測 場 地 溫 度 ：	25℃	量 測 場 地 濕 度 ：	67%RH
測 試 日 期 ：	107 年 08 月 22 日	測 試 者 ：	張家誠

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	59.3 PK	74.0	-14.7	2.22 V	158	26.0	33.3
2	2390.00	47.6 AV	54.0	-6.4	2.22 V	158	14.3	33.3
3	*2452.00	111.2 PK			2.22 V	158	77.8	33.4
4	*2452.00	101.8 AV			2.22 V	158	68.4	33.4
5	2483.50	72.2 PK	74.0	-1.8	2.22 V	158	38.7	33.5
6	2483.50	53.7 AV	54.0	-0.3	2.22 V	158	20.2	33.5
7	4904.00	50.8 PK	74.0	-23.2	1.52 V	336	38.3	12.5
8	4904.00	37.6 AV	54.0	-16.4	1.52 V	336	25.1	12.5
	7356.00	-	-	-	-	-	-	-
	9808.00	-	-	-	-	-	-	-
	12260.00	-	-	-	-	-	-	-
	14712.00	-	-	-	-	-	-	-
	17164.00	-	-	-	-	-	-	-
	19616.00	-	-	-	-	-	-	-
	22068.00	-	-	-	-	-	-	-
	24520.00	-	-	-	-	-	-	-

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency (主頻)
6. " - ": The emission levels were too low to be detected
7. The blank is not available, the limit of fundamental frequency was restricted at the peak output power (see LP0002 3.10.1.2)



4.6.2 接收諧波

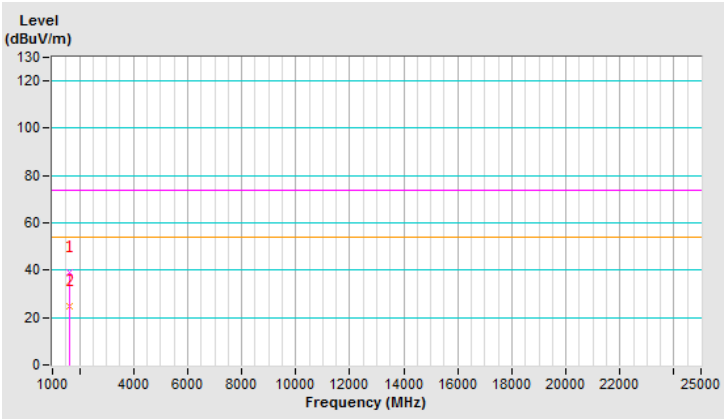
802.11g

操 作 模 式 ：	接收	調 變 技 術 ：	OFDM
基 本 波 頻 率 ：	CH 6：2437 MHz	測 試 儀 器 ：	(PK) RB=1MHz, VB=3MHz (AV) RB=1MHz, VB=10Hz
量 測 場 地 溫 度 ：	25℃	量 測 場 地 濕 度 ：	70%RH
測 試 日 期 ：	107 年 10 月 03 日	測 試 者 ：	張家誠

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	1625.00	39.0 PK	74.0	-35.0	1.55 H	231	40.5	-1.5
2	1625.00	25.0 AV	54.0	-29.0	1.55 H	231	26.5	-1.5

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit
4. Margin value = Emission Level – Limit value

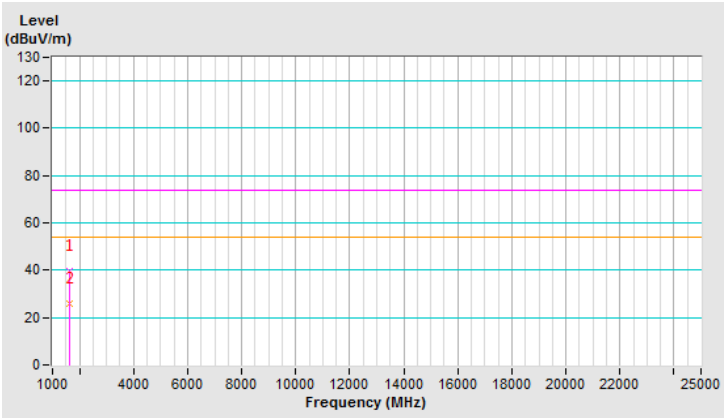


操 作 模 式 ：	接收	調 變 技 術 ：	OFDM
基 本 波 頻 率 ：	CH 6：2437 MHz	測 試 儀 器 ：	(PK) RB=1MHz, VB=3MHz (AV) RB=1MHz, VB=10Hz
量 測 場 地 溫 度 ：	25℃	量 測 場 地 濕 度 ：	70%RH
測 試 日 期 ：	107 年 10 月 03 日	測 試 者 ：	張家誠

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	1625.00	39.6 PK	74.0	-34.4	1.50 V	144	41.1	-1.5
2	1625.00	25.8 AV	54.0	-28.2	1.50 V	144	27.3	-1.5

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit
4. Margin value = Emission Level – Limit value



4.6.3 其它不必要之訊號

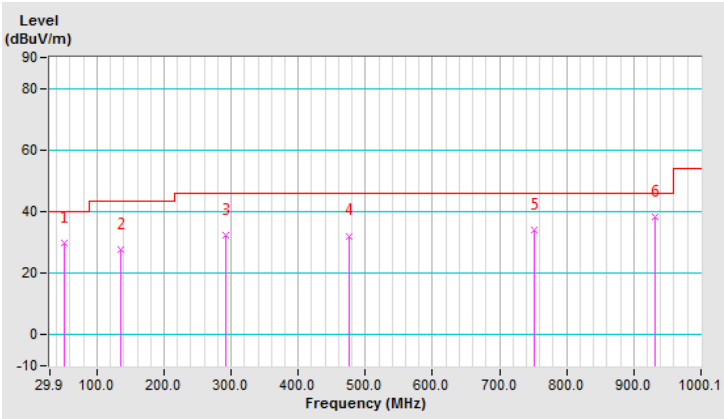
802.11g

操 作 模 式 ：	發射/接收	調 變 技 術 ：	OFDM
基 本 波 頻 率 ：	CH 6：2437 MHz	測 試 儀 器 ：	(QP) RB=120kHz
量 測 場 地 溫 度 ：	25℃	量 測 場 地 濕 度 ：	70%RH
測 試 日 期 ：	107 年 10 月 03 日	測 試 者 ：	張家誠
測 試 模 式 ：	一		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	51.24	29.7 QP	40.0	-10.3	1.50 H	85	38.4	-8.7
2	134.68	27.7 QP	43.5	-15.8	1.50 H	100	37.4	-9.7
3	291.85	32.2 QP	46.0	-13.8	1.00 H	297	40.3	-8.1
4	476.19	32.2 QP	46.0	-13.8	1.50 H	209	37.4	-5.2
5	751.73	34.0 QP	46.0	-12.0	1.00 H	235	32.9	1.1
6	932.19	38.4 QP	46.0	-7.6	1.00 H	6	34.3	4.1

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit of frequency range 30MHz ~ 1000MHz
4. Margin value = Emission Level – Limit value
5. The emission levels were very low against the limit of frequency range 9kHz ~ 30MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report

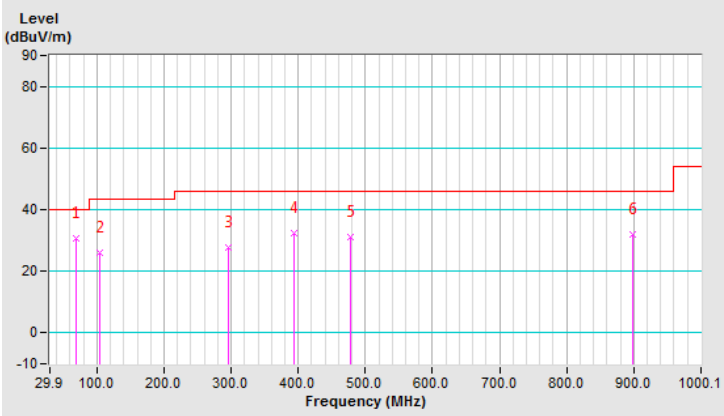


操 作 模 式 ：	發射/接收	調 變 技 術 ：	OFDM
基 本 波 頻 率 ：	CH 6：2437 MHz	測 試 儀 器 ：	(QP) RB=120kHz
量 測 場 地 溫 度 ：	25℃	量 測 場 地 濕 度 ：	70%RH
測 試 日 期 ：	107 年 10 月 03 日	測 試 者 ：	張家誠
測 試 模 式 ：	一		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	68.71	30.6 QP	40.0	-9.4	1.50 V	300	40.7	-10.1
2	103.64	26.0 QP	43.5	-17.5	1.50 V	269	38.7	-12.7
3	295.73	27.8 QP	46.0	-18.2	1.50 V	196	35.9	-8.1
4	394.70	32.3 QP	46.0	-13.7	1.50 V	276	38.8	-6.5
5	478.13	31.2 QP	46.0	-14.8	1.50 V	8	36.3	-5.1
6	899.20	31.9 QP	46.0	-14.1	1.01 V	85	28.3	3.6

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit of frequency range 30MHz ~ 1000MHz
4. Margin value = Emission Level – Limit value
5. The emission levels were very low against the limit of frequency range 9kHz ~ 30MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report

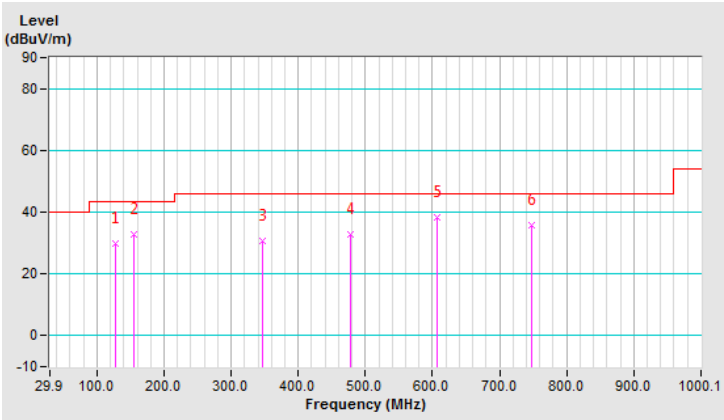


操 作 模 式 ：	發射/接收	調 變 技 術 ：	OFDM
基 本 波 頻 率 ：	CH 6：2437 MHz	測 試 儀 器 ：	(QP) RB=120kHz
量 測 場 地 溫 度 ：	25℃	量 測 場 地 濕 度 ：	70%RH
測 試 日 期 ：	107 年 10 月 03 日	測 試 者 ：	張家誠
測 試 模 式 ：	二		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	126.92	29.7 QP	43.5	-13.8	2.00 H	92	40.2	-10.5
2	156.03	32.9 QP	43.5	-10.6	1.51 H	105	41.4	-8.5
3	346.19	30.8 QP	46.0	-15.2	1.01 H	141	38.2	-7.4
4	478.13	32.6 QP	46.0	-13.4	1.51 H	6	37.7	-5.1
5	606.20	38.2 QP	46.0	-7.8	1.51 H	167	40.3	-2.1
6	747.85	35.6 QP	46.0	-10.4	1.51 H	125	34.6	1.0

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit of frequency range 30MHz ~ 1000MHz
4. Margin value = Emission Level – Limit value
5. The emission levels were very low against the limit of frequency range 9kHz ~ 30MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report

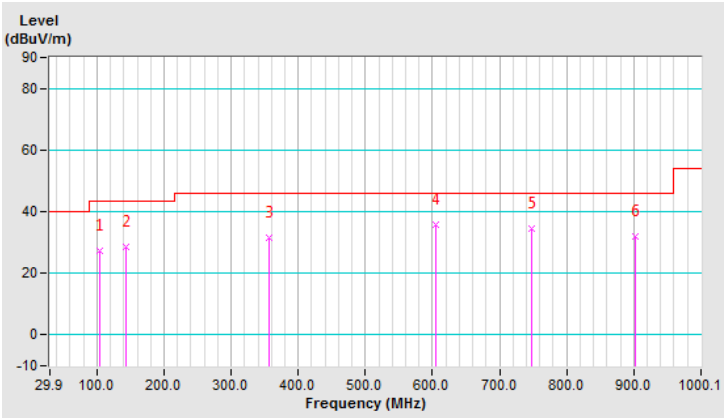


操 作 模 式 ：	發射/接收	調 變 技 術 ：	OFDM
基 本 波 頻 率 ：	CH 6：2437 MHz	測 試 儀 器 ：	(QP) RB=120kHz
量 測 場 地 溫 度 ：	25℃	量 測 場 地 濕 度 ：	70%RH
測 試 日 期 ：	107 年 10 月 03 日	測 試 者 ：	張家誠
測 試 模 式 ：	二		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	103.64	27.3 QP	43.5	-16.2	1.00 V	317	40.0	-12.7
2	142.44	28.5 QP	43.5	-15.0	1.00 V	144	37.6	-9.1
3	355.89	31.6 QP	46.0	-14.4	1.49 V	68	38.8	-7.2
4	604.26	35.8 QP	46.0	-10.2	1.49 V	184	38.0	-2.2
5	747.85	34.7 QP	46.0	-11.3	2.00 V	5	33.7	1.0
6	903.08	31.9 QP	46.0	-14.1	1.00 V	50	28.1	3.8

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit of frequency range 30MHz ~ 1000MHz
4. Margin value = Emission Level – Limit value
5. The emission levels were very low against the limit of frequency range 9kHz ~ 30MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report



4.7 量測結果判定

依據測試數據結果，符合低功率射頻電機技術規範之要求。

4.8 配置照片

請參閱附件（測試設置照片）。

5 電源線傳導干擾之量測

5.1 適用標準

請見本報告3.1節第1項的規定。

5.2 量測方法

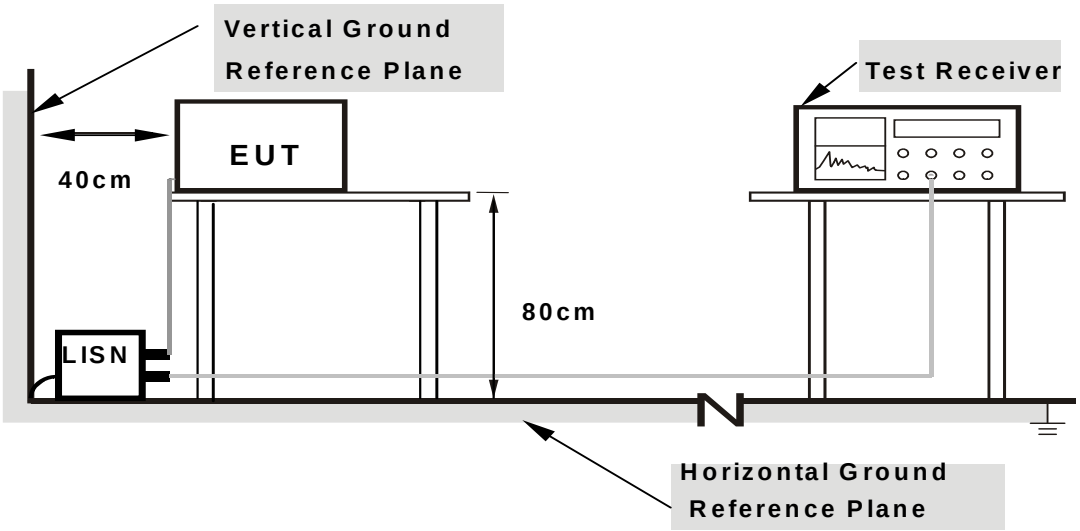
將待測物置於0.8米高的非金屬桌面，使其操作在工作狀態，待測物電源線接至電源線阻抗穩定網路上，從測試接收機記錄頻率由0.15MHz至30MHz之間之電源線傳導放射強度。

5.3 量測儀器

Description & Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Due
Test Receiver ROHDE & SCHWARZ	ESCI	100613	Dec. 10, 2018	Dec. 09, 2019
RF signal cable Woken	5D-FB	Cable-cond1-01	Sep. 05, 2018	Sep. 04, 2019
LISN ROHDE & SCHWARZ (EUT)	ENV216	101826	Feb. 21, 2019	Feb. 20, 2020
LISN ROHDE & SCHWARZ (Peripheral)	ESH3-Z5	100311	Aug. 19, 2018	Aug. 18, 2019
Software ADT	BV ADT_Cond_ V7.3.7.4	NA	NA	NA

Note:
1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. The test was performed in HwaYa Shielded Room 1.
3. The VCCI Site Registration No. is C-12040.
4. The measurement uncertainty is 2.94 dB, which is calculated as per the document CISPR 16-4-2. This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

5.4 測試配置



Note: 1.Support units were connected to second LISN.
2.Both of LISNs (AMN) are 80 cm from EUT and at least 80 from other units and other metal planes

5.5 干擾值之計算

餘裕度Margin(dB)= 結果值Emission level (dBuV)-限制值Limit value (dBuV)

電源傳導干擾電壓之計算公式如下

結果值Emission level (dBuV)=校正因子Correction Factor (dB)+儀器讀值Reading value (dBuV)
其中校正因子Correction Factor (dB)為 ：

饋線損失+電源阻抗模擬網路損失

5.6 量測結果

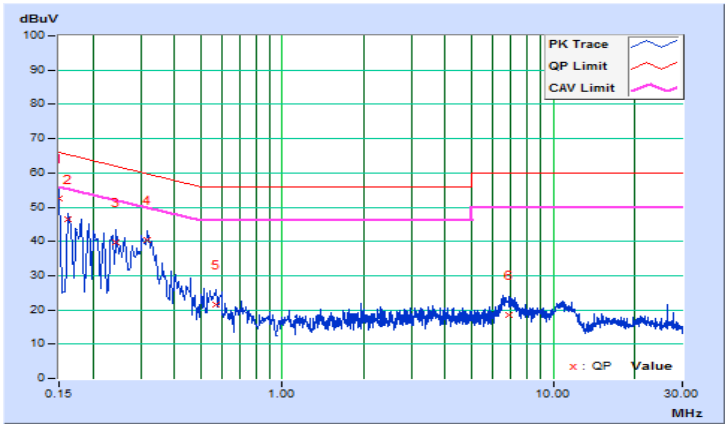
802.11g

操作模式	發射/接收	測試日期	107 年 10 月 03 日
基本波頻率	CH 6: 2437MHz	量測場地溫度	25℃
調變技術	OFDM	量測場地濕度	67%RH
測試者	張睿晉	測試模式	—

		6 dB Bandwidth: 9kHz				PHASE: LINE (L)			
輻射頻率	校正因子	儀器讀值		結果值		限制值		餘裕度	
[MHz]	[dB]	[dB (uV)]		[dB (uV)]		[dB (uV)]		[dB]	
		Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
0.15000	9.73	42.65	25.19	52.38	34.92	66.00	56.00	-13.62	-21.08
0.16181	9.73	36.86	18.37	46.59	28.10	65.37	55.37	-18.78	-27.27
0.24384	9.73	29.84	15.14	39.57	24.87	61.96	51.96	-22.39	-27.09
0.31813	9.74	30.52	20.59	40.26	30.33	59.76	49.76	-19.50	-19.43
0.56837	9.73	11.88	4.58	21.61	14.31	56.00	46.00	-34.39	-31.69
6.90648	9.83	8.76	0.29	18.59	10.12	60.00	50.00	-41.41	-39.88

Note:

1.Q.P. and AV. are abbreviations of quasi-peak and average individually.
2.The emission levels of other frequencies were very low against the limit.
3.Margin value = Emission level - Limit value
4.Correction factor = Insertion loss + Cable loss
5.Emission Level = Correction Factor + Reading Value.

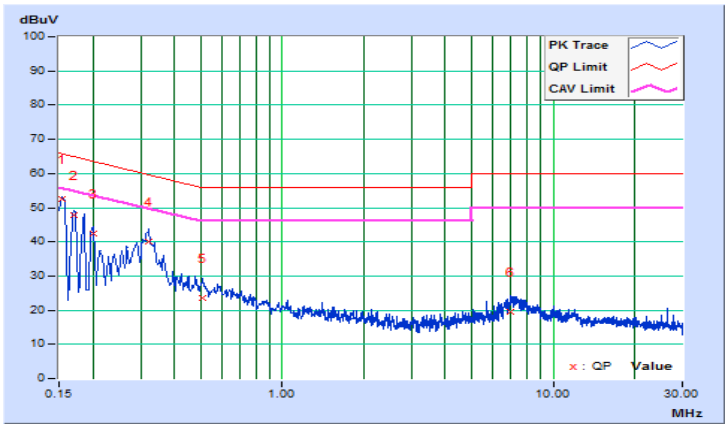


操作模式	發射/接收	測試日期	107 年 10 月 03 日
基本波頻率	CH 6: 2437MHz	量測場地溫度	25℃
調變技術	OFDM	量測場地濕度	67%RH
測試者	張睿晉	測試模式	ー

		6 dB Bandwidth: 9kHz				PHASE: NEUTRAL (N)			
輻射頻率	校正因子	儀器讀值		結果值		限制值		餘裕度	
[MHz]	[dB]	[dB (uV)]		[dB (uV)]		[dB (uV)]		[dB]	
		Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
0.15391	9.72	42.76	25.01	52.48	34.73	65.79	55.79	-13.31	-21.06
0.16967	9.72	37.97	20.15	47.69	29.87	64.98	54.98	-17.29	-25.11
0.19978	9.73	32.67	17.01	42.40	26.74	63.62	53.62	-21.22	-26.88
0.32187	9.74	30.24	20.89	39.98	30.63	59.66	49.66	-19.68	-19.03
0.50908	9.74	13.94	5.48	23.68	15.22	56.00	46.00	-32.32	-30.78
6.95340	9.86	9.66	1.54	19.52	11.40	60.00	50.00	-40.48	-38.60

Note:

1.Q.P. and AV. are abbreviations of quasi-peak and average individually.
2.The emission levels of other frequencies were very low against the limit.
3.Margin value = Emission level - Limit value
4.Correction factor = Insertion loss + Cable loss
5.Emission Level = Correction Factor + Reading Value.

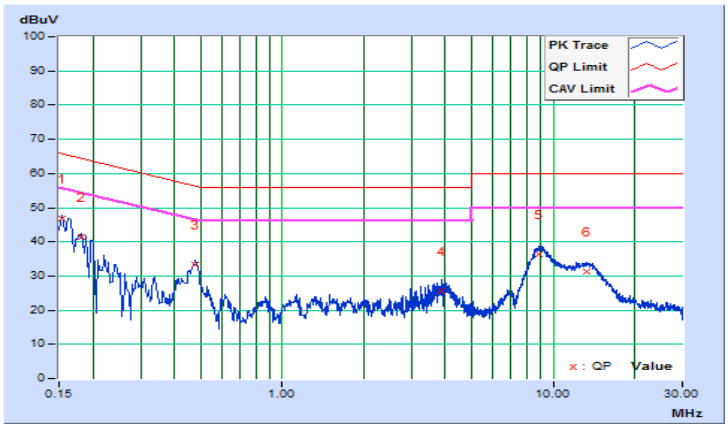


操作模式	發射/接收	測試日期	107 年 10 月 03 日
基本波頻率	CH 6: 2437MHz	量測場地溫度	25℃
調變技術	OFDM	量測場地濕度	67%RH
測試者	張睿晉	測試模式	二

		6 dB Bandwidth: 9kHz				PHASE: LINE (L)			
輻射頻率	校正因子	儀器讀值		結果值		限制值		餘裕度	
[MHz]	[dB]	[dB (uV)]		[dB (uV)]		[dB (uV)]		[dB]	
		Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
0.15391	9.73	37.03	18.17	46.76	27.90	65.79	55.79	-19.03	-27.89
0.18128	9.72	31.73	16.71	41.45	26.43	64.43	54.43	-22.98	-28.00
0.47844	9.74	23.57	17.85	33.31	27.59	56.37	46.37	-23.06	-18.78
3.90360	9.79	15.79	5.56	25.58	15.35	56.00	46.00	-30.42	-30.65
8.86148	9.86	26.62	20.46	36.48	30.32	60.00	50.00	-23.52	-19.68
13.29933	9.91	21.45	14.60	31.36	24.51	60.00	50.00	-28.64	-25.49

Note:

1.Q.P. and AV. are abbreviations of quasi-peak and average individually.
2.The emission levels of other frequencies were very low against the limit.
3.Margin value = Emission level - Limit value
4.Correction factor = Insertion loss + Cable loss
5.Emission Level = Correction Factor + Reading Value.

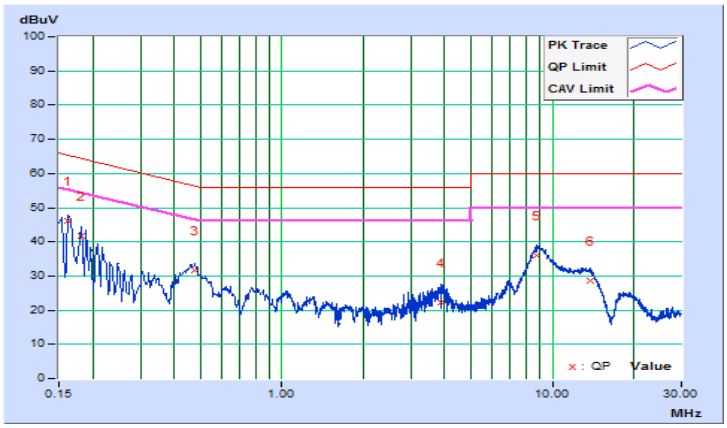


操作模式	發射/接收	測試日期	107 年 10 月 03 日
基本波頻率	CH 6: 2437MHz	量測場地溫度	25℃
調變技術	OFDM	量測場地濕度	67%RH
測試者	張睿晉	測試模式	二

		6 dB Bandwidth: 9kHz				PHASE: NEUTRAL (N)			
輻射頻率	校正因子	儀器讀值		結果值		限制值		餘裕度	
[MHz]	[dB]	[dB (uV)]		[dB (uV)]		[dB (uV)]		[dB]	
		Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
0.16181	9.72	36.24	21.61	45.96	31.33	65.37	55.37	-19.41	-24.04
0.18128	9.73	32.01	18.26	41.74	27.99	64.43	54.43	-22.69	-26.44
0.47844	9.75	21.92	16.00	31.67	25.75	56.37	46.37	-24.70	-20.62
3.89969	9.81	12.58	2.06	22.39	11.87	56.00	46.00	-33.61	-34.13
8.77937	9.89	26.29	20.04	36.18	29.93	60.00	50.00	-23.82	-20.07
13.87410	9.98	18.62	12.19	28.60	22.17	60.00	50.00	-31.40	-27.83

Note:

1.Q.P. and AV. are abbreviations of quasi-peak and average individually.
2.The emission levels of other frequencies were very low against the limit.
3.Margin value = Emission level - Limit value
4.Correction factor = Insertion loss + Cable loss
5.Emission Level = Correction Factor + Reading Value.



5.7 量測結果判定

依據測試數據結果，符合低功率射頻電機技術規範之要求。

5.8 配置照片

請參閱附件（測試設置照片）。

6 發射頻寬之要求

6.1 適用標準

請見本報告3.1節第5項(I)的規定。

6.2 量測方法

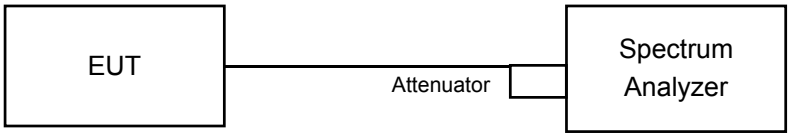
a) 將待測物輸出經由衰減器接到頻譜分析儀上。
b) 設定待測物處於連續發射狀態。
c) 計算由最大輸出功率峰值減6dB的最大頻率範圍。

6.3 量測儀器

Description & Manufacturer	Model No.	Serial No.	Date of Calibration	Due Date of Calibration
Spectrum Analyzer ROHDE & SCHWARZ	FSP40	100041	Dec. 12, 2017	Dec. 11, 2018

Note: 1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. The measurement uncertainty is 207Hz, which is calculated as per the document ETSI TR 100 028. This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

6.4 測試配置



6.5 量測結果

操作模式	發射	測試日期	107 年 09 月 05 日
量測場地溫度	25℃	量測場地濕度	60%RH
測試者	蔡仲陽		

CDD Mode

802.11b

Channel	Frequency (MHz)	6dB Bandwidth (MHz)		Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1		
1	2412	8.11	8.12	0.5	Pass
6	2437	9.07	9.07	0.5	Pass
11	2462	9.10	8.07	0.5	Pass

802.11g

Channel	Frequency (MHz)	6dB Bandwidth (MHz)		Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1		
1	2412	16.42	16.40	0.5	Pass
6	2437	16.35	16.34	0.5	Pass
11	2462	16.39	16.37	0.5	Pass

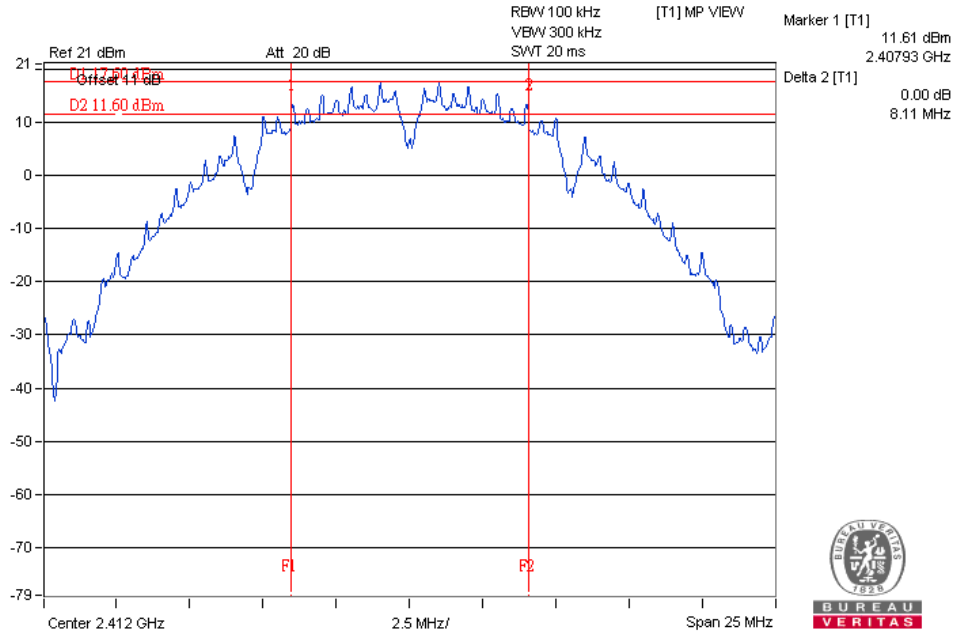
802.11n (HT20)

Channel	Frequency (MHz)	6dB Bandwidth (MHz)		Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1		
1	2412	17.62	17.62	0.5	Pass
6	2437	17.60	17.61	0.5	Pass
11	2462	17.60	17.60	0.5	Pass

802.11n (HT40)

Channel	Frequency (MHz)	6dB Bandwidth (MHz)		Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1		
3	2422	35.22	35.23	0.5	Pass
6	2437	35.26	35.23	0.5	Pass
9	2452	35.23	35.25	0.5	Pass

**此測試圖僅放測試結果最差的頻道。



Beamforming NSS1 Mode

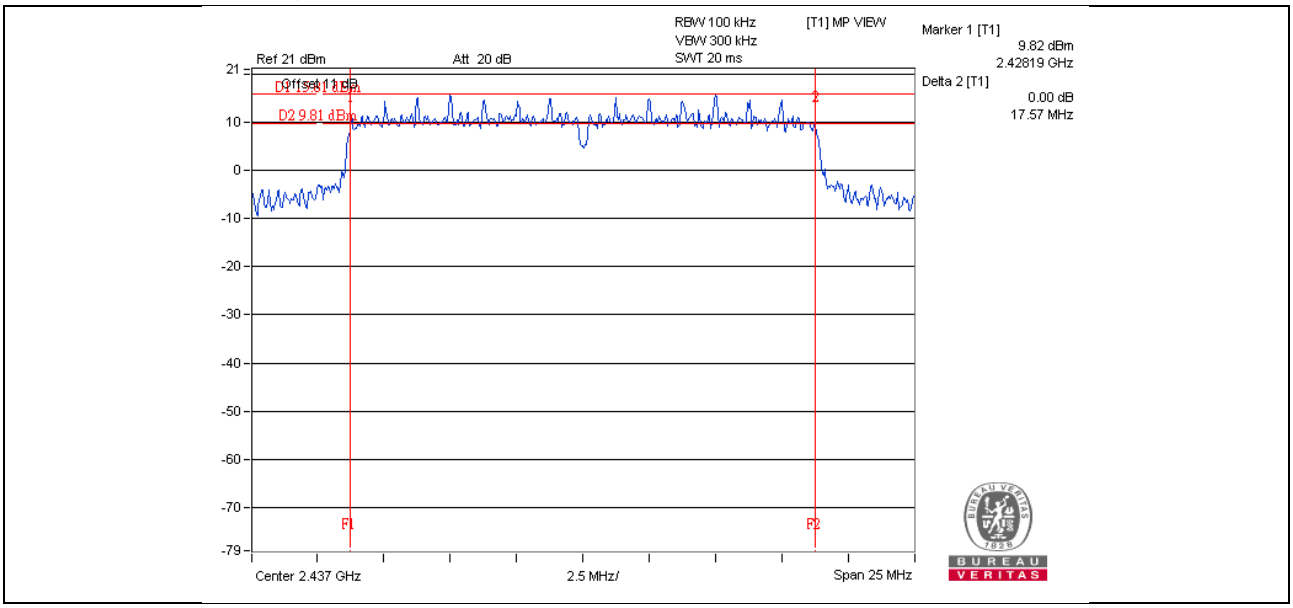
802.11n (HT20)

Channel	Frequency (MHz)	6dB Bandwidth (MHz)		Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1		
1	2412	17.59	17.61	0.5	Pass
6	2437	17.59	17.57	0.5	Pass
11	2462	17.59	17.59	0.5	Pass

802.11n (HT40)

Channel	Frequency (MHz)	6dB Bandwidth (MHz)		Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1		
3	2422	35.31	35.30	0.5	Pass
6	2437	35.26	35.20	0.5	Pass
9	2452	35.21	35.26	0.5	Pass

**此測試圖僅放測試結果最差的頻道。



6.6 量測結果判定

依據測試數據結果，符合低功率射頻電機技術規範之要求。

7 輸出峰值功率之量測

7.1 適用標準

請見本報告3.1節第6項(I)及4項(I)的規定。

7.2 量測方法

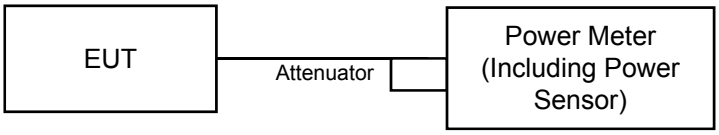
a) 將待測物輸出經由衰減器接到功率計上(Average Detector with Gating Function)。
b) 設定待測物處於連續發射狀態。
c) 計算其輸出功率值。

7.3 量測儀器

Description & Manufacturer	Model No.	Serial No.	Date of Calibration	Due Date of Calibration
USB Wideband Power Meter (Including Power Sensor) KEYSIGHT	U2021XA	MY55050005/MY55190004/MY55190007/MY55210005	Jul. 17, 2018	Jul. 16, 2019

Note: 1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. The measurement uncertainty is 1.393dB, which is calculated as per the document ETSI TR 100 028. This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

7.4 測試配置



7.5 量測結果

操作模式	發射	測試日期	107 年 09 月 05 日
量測場地溫度	25℃	量測場地濕度	60%RH
測試者	蔡仲陽		

CDD Mode

802.11b

Chan.	Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
1	2412	25.40	25.26	682.475	28.34	30	Pass
6	2437	26.22	26.14	829.944	29.19	30	Pass
11	2462	25.96	25.86	779.935	28.92	30	Pass

802.11g

Chan.	Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
1	2412	21.60	21.21	276.674	24.42	30	Pass
6	2437	26.54	26.26	**873.486**	29.41	30	Pass
11	2462	21.51	21.28	275.855	24.41	30	Pass

802.11n (HT20)

Chan.	Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
1	2412	21.46	21.56	283.178	24.52	30	Pass
6	2437	26.33	26.28	854.156	29.32	30	Pass
11	2462	21.38	21.35	273.862	24.38	30	Pass

802.11n (HT40)

Chan.	Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
3	2422	18.68	18.92	151.773	21.81	30	Pass
6	2437	22.12	21.60	307.474	24.88	30	Pass
9	2452	21.61	21.12	274.297	24.38	30	Pass

Beamforming NSS1 Mode

802.11n (HT20)

Chan.	Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
1	2412	21.46	21.56	283.178	24.52	30	Pass
6	2437	26.33	26.28	**854.156**	29.32	30	Pass
11	2462	21.38	21.35	273.862	24.38	30	Pass

Note: Directional gain = 2.61dBi < 6dBi, so the power limit is not reduced.

802.11n (HT40)

Chan.	Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
3	2422	18.68	18.92	151.773	21.81	30	Pass
6	2437	22.12	21.60	307.474	24.88	30	Pass
9	2452	21.61	21.12	274.297	24.38	30	Pass

Note: Directional gain = 2.61dBi < 6dBi, so the power limit is not reduced.

7.6 量測結果判定

依據測試數據結果，符合低功率射頻電機技術規範之要求。

8 功率密度之量測

8.1 適用標準

請見本報告3.1節第7項(I)的規定。

8.2 量測方法

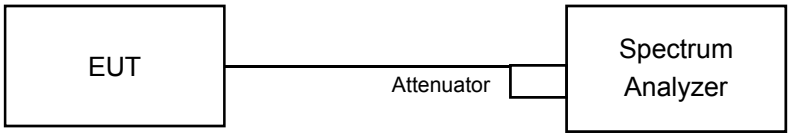
a) 將待測物之天線埠經由適當之衰減直接連至測試儀器。
b) 設定解析頻寬為10kHz，視訊頻寬為30kHz，掃描時間為auto
c) 掃描頻寬設於足夠觀察發射機所產生的主頻信號，並找到最大的峰值準位。
d) 校正後的值，其峰值位準必須不大於+8dBm。

8.3 量測儀器

Description & Manufacturer	Model No.	Serial No.	Date of Calibration	Due Date of Calibration
Spectrum Analyzer ROHDE & SCHWARZ	FSP40	100041	Dec. 12, 2017	Dec. 11, 2018

Note: 1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. The measurement uncertainty is 207Hz, which is calculated as per the document ETSI TR 100 028. This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

8.4 測試配置



8.5 量測結果

操作模式	發射	測試日期	107 年 09 月 05 日
量測場地溫度	25℃	量測場地濕度	60%RH
測試者	蔡仲陽		

CDD Mode

802.11b

TX chain	Channel	Freq. (MHz)	PSD (dBm)	10 log (N=2) dB	Total PSD (dBm)	Limit (dBm)	Pass/Fail
0	1	2412	-1.24	3.01	1.77	8.00	Pass
	6	2437	-1.23	3.01	1.78	8.00	Pass
	11	2462	-1.06	3.01	1.95	8.00	Pass
1	1	2412	-1.41	3.01	1.60	8.00	Pass
	6	2437	-0.86	3.01	2.15	8.00	Pass
	11	2462	-0.69	3.01	2.32	8.00	Pass

Note:
1. Method 1 of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain = 2.61dBi < 6dBi, so the limit no need to reduced.

802.11g

TX chain	Channel	Freq. (MHz)	PSD (dBm)	10 log (N=2) dB	Duty Factor	Total PSD with Duty Factor (dBm)	Limit (dBm)	Pass/Fail
0	1	2412	-8.03	3.01	0.20	-4.82	8.00	Pass
	6	2437	-4.35	3.01	0.20	-1.14	8.00	Pass
	11	2462	-8.44	3.01	0.20	-5.23	8.00	Pass
1	1	2412	-8.27	3.01	0.20	-5.06	8.00	Pass
	6	2437	-4.52	3.01	0.20	-1.31	8.00	Pass
	11	2462	-8.46	3.01	0.20	-5.25	8.00	Pass

Note:
1. Method 1 of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain = 2.61dBi < 6dBi, so the limit no need to reduced.
3. Refer to section 2.1 for duty cycle spectrum plot.

802.11n (HT20)

TX chain	Channel	Freq. (MHz)	PSD (dBm)	10 log (N=2) dB	Total PSD (dBm)	Limit (dBm)	Pass/Fail
0	1	2412	-7.86	3.01	-4.85	8.00	Pass
	6	2437	-4.14	3.01	-1.13	8.00	Pass
	11	2462	-7.87	3.01	-4.86	8.00	Pass
1	1	2412	-7.75	3.01	-4.74	8.00	Pass
	6	2437	-3.83	3.01	-0.82	8.00	Pass
	11	2462	-7.44	3.01	-4.43	8.00	Pass

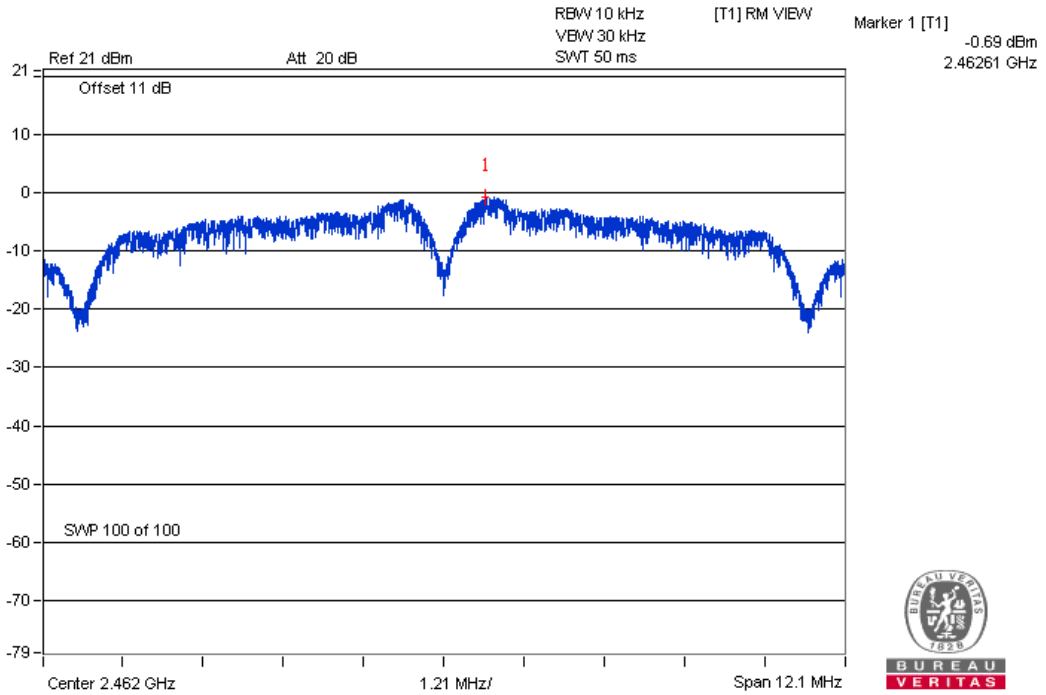
Note:
1. Method 1 of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain = 2.61dBi < 6dBi, so the limit no need to reduced.

802.11n (HT40)

TX chain	Channel	Freq. (MHz)	PSD (dBm)	10 log (N=2) dB	Duty Factor	Total PSD with Duty Factor (dBm)	Limit (dBm)	Pass/Fail
0	3	2422	-14.29	3.01	0.16	-11.12	8.00	Pass
	6	2437	-10.76	3.01	0.16	-7.59	8.00	Pass
	9	2452	-11.69	3.01	0.16	-8.52	8.00	Pass
1	3	2422	-14.07	3.01	0.16	-10.90	8.00	Pass
	6	2437	-11.33	3.01	0.16	-8.16	8.00	Pass
	9	2452	-11.66	3.01	0.16	-8.49	8.00	Pass

Note:
1. Method 1 of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain = 2.61dBi < 6dBi, so the limit no need to reduced.
3. Refer to section 2.1 for duty cycle spectrum plot.

**此測試圖僅放測試結果最差的頻道。



Beamforming NSS1 Mode

802.11n (HT20)

TX chain	Channel	Freq. (MHz)	PSD (dBm)	10 log (N=2) dB	Total PSD (dBm)	Limit (dBm)	Pass/Fail
0	1	2412	-7.92	3.01	-4.91	8.00	Pass
	6	2437	-4.12	3.01	-1.11	8.00	Pass
	11	2462	-8.06	3.01	-5.05	8.00	Pass
1	1	2412	-8.10	3.01	-5.09	8.00	Pass
	6	2437	-4.04	3.01	-1.03	8.00	Pass
	11	2462	-7.61	3.01	-4.60	8.00	Pass

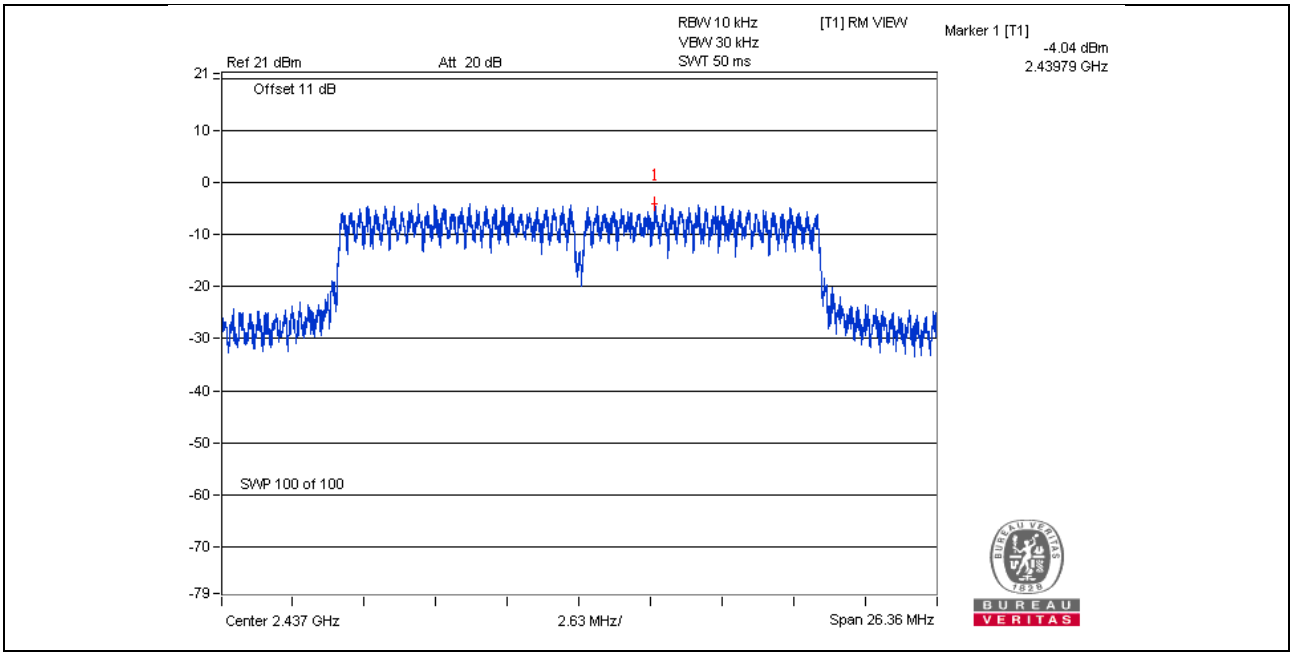
Note:
1. Method 1 of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain = 2.61dBi < 6dBi, so the limit no need to reduced.

802.11n (HT40)

TX chain	Channel	Freq. (MHz)	PSD (dBm)	10 log (N=2) dB	Duty Factor	Total PSD with Duty Factor (dBm)	Limit (dBm)	Pass/Fail
0	3	2422	-14.21	3.01	0.15	-11.05	8.00	Pass
	6	2437	-11.51	3.01	0.15	-8.35	8.00	Pass
	9	2452	-12.40	3.01	0.15	-9.24	8.00	Pass
1	3	2422	-14.73	3.01	0.15	-11.57	8.00	Pass
	6	2437	-11.36	3.01	0.15	-8.20	8.00	Pass
	9	2452	-11.46	3.01	0.15	-8.30	8.00	Pass

Note:
1. Method 1 of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain = 2.61dBi < 6dBi, so the limit no need to reduced.
3. Refer to section 2.1 for duty cycle spectrum plot.

**此測試圖僅放測試結果最差的頻道。



8.6 量測結果判定

依據測試數據結果，符合低功率射頻電機技術規範之要求。

U-NII 頻段測試紀錄結果

9 帶外發射之量測

9.1 適用標準

待測物操作頻帶	適用標準
☒ 5.15 GHz~5.25 GHz	請見本報告 3.1 節第 2 項(II)的規定
☐ 5.25 GHz~5.35 GHz	請見本報告 3.1 節第 2 項(II)的規定
☐ 5.470 GHz~5.725 GHz	請見本報告 3.1 節第 2 項(II)的規定
☒ 5.725 GHz~5.850 GHz	請見本報告 3.1 節第 2 項(III)的規定

9.2 量測方法

在電波暗室，將待測物置於0.8米高的非金屬桌面，使其操作在工作狀態。接收天線置於3米距離。桌面要360度旋轉，另外接收天線從離地1米至4米升降變化，以找出最大的輻射電場強度，接收天線分別置於水平、垂直極化各執行測試一次。

Note: 對於 1GHz 以上場強輻射的測試，待測物則置於1.5米高的非金屬桌面。

9.3 量測儀器

同4.3節。

9.4 測試配置

同4.4節。

9.5 場強度之計算

場強之計算公式如下:

結果值Emission level (dBuV/m)=機器讀值 Raw Value (dBuV) +校正因子Correction Factor (dB/m)
餘裕度Margin(dB)= 結果值Emission level (dBuV/m)-限制值Limit value (dBuV/m)

*有效等向輻射功率限制值轉換場強值如下：

<table>
<tr><th colspan="3">Applicable To</th><th colspan="2">Limit</th></tr>
<tr><td colspan="3" rowspan="2">789033 D02 General UNII Test Procedure New Rules v02r01</td><td colspan="2">Field Strength at 3m</td></tr>
<tr><td>PK:74 (dBμV/m)</td><td>AV:54 (dBμV/m)</td></tr>
<tr><td>操作頻帶</td><td colspan="2">Applicable To</td><td>EIRP Limit</td><td>Equivalent Field Strength at 3m</td></tr>
<tr><td>5150~5250 MHz</td><td colspan="2">技術規範 4.7.4.1 節</td><td rowspan="3">PK:-27 (dBm/MHz)</td><td rowspan="3">PK:68.2(dBμV/m)</td></tr>
<tr><td>5250~5350 MHz</td><td colspan="2">技術規範 4.7.4.1 節</td></tr>
<tr><td>5470~5725 MHz</td><td colspan="2">技術規範 4.7.4.1 節</td></tr>
<tr><td rowspan="2">5725~5850 MHz</td><td>☒</td><td>技術規範 4.7.4.2 節</td><td>PK:-27 (dBm/MHz) *1
PK:10 (dBm/MHz) *2
PK:15.6 (dBm/MHz) *3
PK:27 (dBm/MHz) *4</td><td>PK: 68.2(dBμV/m) *1
PK:105.2 (dBμV/m) *2
PK: 110.8(dBμV/m) *3
PK:122.2 (dBμV/m) *4</td></tr>
<tr><td>☐</td><td>技術規範 4.7.4.7 節</td><td colspan="2">適用 3.10.1.5 節帶外發射限制</td></tr>
<tr><td colspan="5">*1 beyond 75 MHz or more above of the band edge.
*2 below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above.
*3 below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above.
*4 from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.</td></tr>
</table>

Note:

有效等向輻射功率限制值轉換場強之公式如下:

$E=(30PG)^{1/2}/d$

E: 以最寬解析頻寬所測得之最大場強值，單位:V/m。
G: 發射天線相對於全向性輻射器之數值增益。
d: 測試場強的距離，單位: m。
P: 求得之功率，單位:W。

量測結果請見下頁。

9.6 量測結果

9.6.1 發射諧波

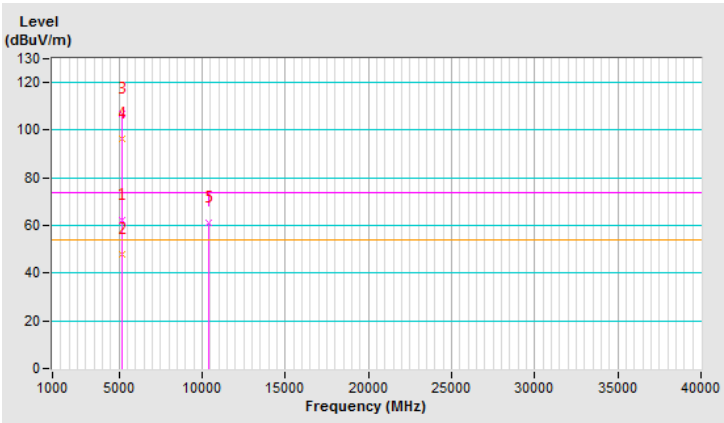
802.11a

操 作 模 式 ：	發射	調 變 技 術 ：	OFDM
基 本 波 頻 率 ：	CH 36：5180 MHz	測 試 儀 器 ：	(PK) RB=1MHz, VB=3MHz (AV) RB=1MHz, VB=1kHz
量 測 場 地 溫 度 ：	25℃	量 測 場 地 濕 度 ：	70%RH
測 試 日 期 ：	107 年 09 月 12 日	測 試 者 ：	張家誠

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	62.4 PK	74.0	-11.6	1.00 H	136	50.6	11.8
2	5150.00	48.1 AV	54.0	-5.9	1.00 H	136	36.3	11.8
3	*5180.00	106.7 PK			1.00 H	136	65.9	40.8
4	*5180.00	96.3 AV			1.00 H	136	55.5	40.8
5	#10360.00	61.3 PK	68.2	-6.9	2.11 H	282	39.2	22.1
6	15540.00	-	-	-	-	-	-	-
7	20720.00	-	-	-	-	-	-	-
8	25900.00	-	-	-	-	-	-	-
9	31080.00	-	-	-	-	-	-	-
10	36260.00	-	-	-	-	-	-	-

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency (主頻).
6. " # ": The radiated frequency is out of the restricted band.
7. " - ": The emission levels were too low to be detected.
8. The blank is not available, the limit of fundamental frequency was restricted at the peak output power (see LP0002 4.7.3)

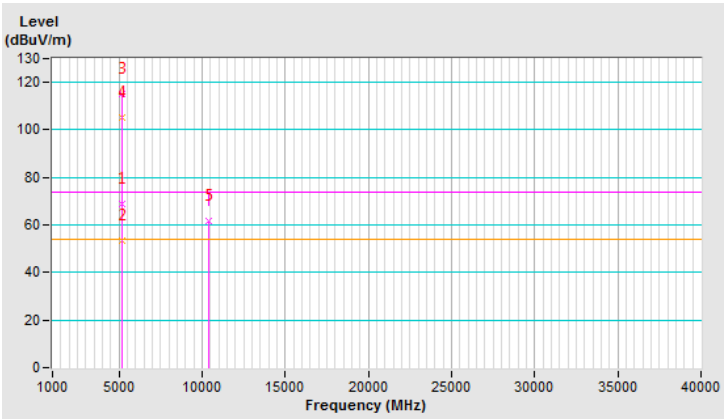


操 作 模 式 ：	發射	調 變 技 術 ：	OFDM
基 本 波 頻 率 ：	CH 36：5180 MHz	測 試 儀 器 ：	(PK) RB=1MHz, VB=3MHz (AV) RB=1MHz, VB=1kHz
量 測 場 地 溫 度 ：	25℃	量 測 場 地 濕 度 ：	70%RH
測 試 日 期 ：	107 年 09 月 12 日	測 試 者 ：	張家誠

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	68.7 PK	74.0	-5.3	1.00 V	133	56.9	11.8
2	5150.00	53.5 AV	54.0	-0.5	1.00 V	133	41.7	11.8
3	*5180.00	115.2 PK			1.00 V	133	74.4	40.8
4	*5180.00	105.2 AV			1.00 V	133	64.4	40.8
5	#10360.00	61.5 PK	68.2	-6.7	2.22 V	156	39.4	22.1
6	15540.00	-	-	-	-	-	-	-
7	20720.00	-	-	-	-	-	-	-
8	25900.00	-	-	-	-	-	-	-
9	31080.00	-	-	-	-	-	-	-
10	36260.00	-	-	-	-	-	-	-

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency (主頻).
6. " # ": The radiated frequency is out of the restricted band.
7. " - ": The emission levels were too low to be detected.
8. The blank is not available, the limit of fundamental frequency was restricted at the peak output power (see LP0002 4.7.3)

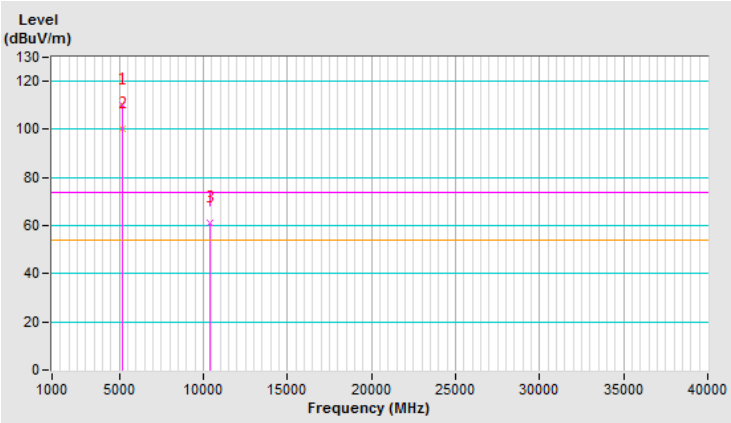


操 作 模 式 ：	發射	調 變 技 術 ：	OFDM
基 本 波 頻 率 ：	CH 40：5200 MHz	測 試 儀 器 ：	(PK) RB=1MHz, VB=3MHz (AV) RB=1MHz, VB=1kHz
量 測 場 地 溫 度 ：	25℃	量 測 場 地 濕 度 ：	70%RH
測 試 日 期 ：	107 年 09 月 12 日	測 試 者 ：	張家誠

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5200.00	110.3 PK			1.00 H	136	69.5	40.8
2	*5200.00	100.3 AV			1.00 H	136	59.5	40.8
3	#10400.00	61.4 PK	68.2	-6.8	2.71 H	200	39.0	22.4
4	15600.00	-	-	-	-	-	-	-
5	20800.00	-	-	-	-	-	-	-
6	26000.00	-	-	-	-	-	-	-
7	31200.00	-	-	-	-	-	-	-
8	36400.00	-	-	-	-	-	-	-

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency (主頻).
6. " # ": The radiated frequency is out of the restricted band.
7. " - ": The emission levels were too low to be detected.
8. The blank is not available, the limit of fundamental frequency was restricted at the peak output power (see LP0002 4.7.3)

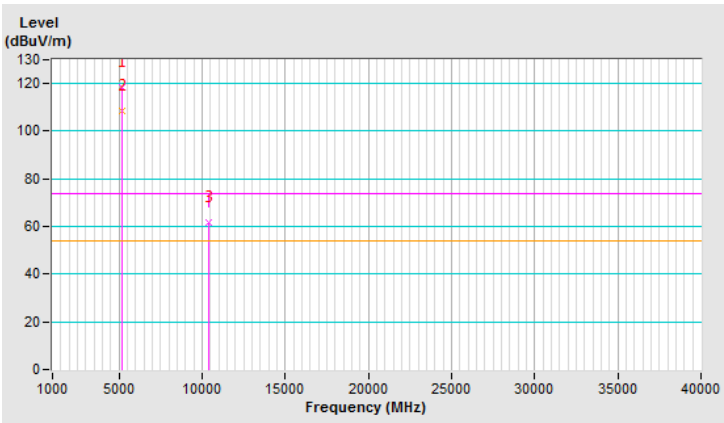


操 作 模 式 ：	發射	調 變 技 術 ：	OFDM
基 本 波 頻 率 ：	CH 40：5200 MHz	測 試 儀 器 ：	(PK) RB=1MHz, VB=3MHz (AV) RB=1MHz, VB=1kHz
量 測 場 地 溫 度 ：	25℃	量 測 場 地 濕 度 ：	70%RH
測 試 日 期 ：	107 年 09 月 12 日	測 試 者 ：	張家誠

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5200.00	118.5 PK			1.00 V	157	77.7	40.8
2	*5200.00	108.5 AV			1.00 V	157	67.7	40.8
3	#10400.00	61.5 PK	68.2	-6.7	2.63 V	233	39.1	22.4
4	15600.00	-	-	-	-	-	-	-
5	20800.00	-	-	-	-	-	-	-
6	26000.00	-	-	-	-	-	-	-
7	31200.00	-	-	-	-	-	-	-
8	36400.00	-	-	-	-	-	-	-

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency (主頻).
6. " # ": The radiated frequency is out of the restricted band.
7. " - ": The emission levels were too low to be detected.
8. The blank is not available, the limit of fundamental frequency was restricted at the peak output power (see LP0002 4.7.3)

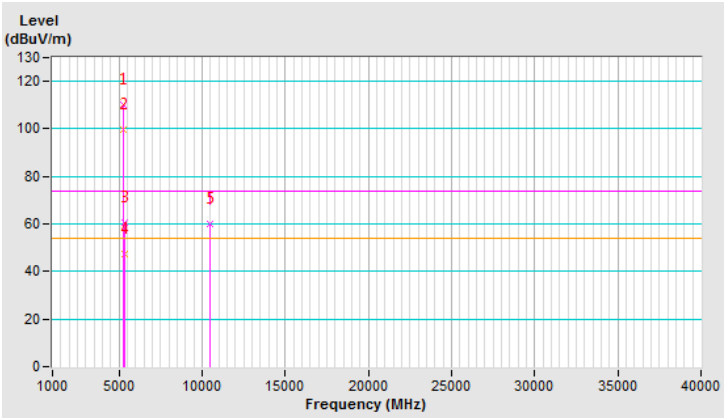


操 作 模 式 ：	發射	調 變 技 術 ：	OFDM
基 本 波 頻 率 ：	CH 48：5240 MHz	測 試 儀 器 ：	(PK) RB=1MHz, VB=3MHz (AV) RB=1MHz, VB=1kHz
量 測 場 地 溫 度 ：	25℃	量 測 場 地 濕 度 ：	70%RH
測 試 日 期 ：	107 年 09 月 05 日	測 試 者 ：	張家誠

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5240.00	110.1 PK			1.00 H	246	69.6	40.5
2	*5240.00	99.9 AV			1.00 H	246	59.4	40.5
3	5350.00	60.5 PK	74.0	-13.5	1.00 H	246	48.6	11.9
4	5350.00	47.5 AV	54.0	-6.5	1.00 H	246	35.6	11.9
5	#10480.00	60.2 PK	68.2	-8.0	2.56 H	320	38.0	22.2
6	15720.00	-	-	-	-	-	-	-
7	20960.00	-	-	-	-	-	-	-
8	26200.00	-	-	-	-	-	-	-
9	31440.00	-	-	-	-	-	-	-
10	36680.00	-	-	-	-	-	-	-

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency (主頻).
6. " # ": The radiated frequency is out of the restricted band.
7. " - ": The emission levels were too low to be detected.
8. The blank is not available, the limit of fundamental frequency was restricted at the peak output power (see LP0002 4.7.3)

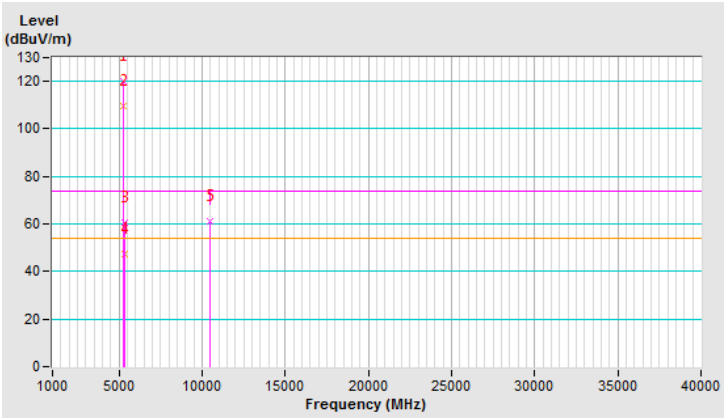


操 作 模 式 ：	發射	調 變 技 術 ：	OFDM
基 本 波 頻 率 ：	CH 48：5240 MHz	測 試 儀 器 ：	(PK) RB=1MHz, VB=3MHz (AV) RB=1MHz, VB=1kHz
量 測 場 地 溫 度 ：	25℃	量 測 場 地 濕 度 ：	67%RH
測 試 日 期 ：	107 年 08 月 22 日	測 試 者 ：	張家誠

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5240.00	120.2 PK			1.00 V	133	79.7	40.5
2	*5240.00	109.7 AV			1.00 V	133	69.2	40.5
3	5350.00	60.4 PK	74.0	-13.6	1.00 V	133	48.5	11.9
4	5350.00	47.3 AV	54.0	-6.7	1.00 V	133	35.4	11.9
5	#10480.00	61.1 PK	68.2	-7.1	2.44 V	275	38.9	22.2
6	15720.00	-	-	-	-	-	-	-
7	20960.00	-	-	-	-	-	-	-
8	26200.00	-	-	-	-	-	-	-
9	31440.00	-	-	-	-	-	-	-
10	36680.00	-	-	-	-	-	-	-

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency (主頻).
6. " # ": The radiated frequency is out of the restricted band.
7. " - ": The emission levels were too low to be detected.
8. The blank is not available, the limit of fundamental frequency was restricted at the peak output power (see LP0002 4.7.3)

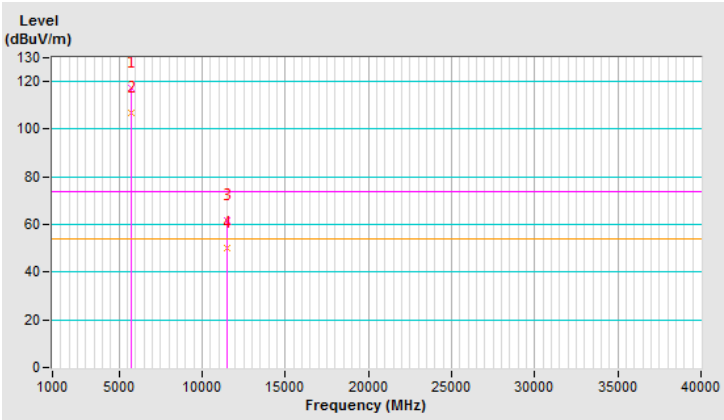


操 作 模 式 ：	發射	調 變 技 術 ：	OFDM
基 本 波 頻 率 ：	CH 149：5745 MHz	測 試 儀 器 ：	(PK) RB=1MHz, VB=3MHz (AV) RB=1MHz, VB=1kHz
量 測 場 地 溫 度 ：	25℃	量 測 場 地 濕 度 ：	67%RH
測 試 日 期 ：	107 年 09 月 05 日	測 試 者 ：	張家誠

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5745.00	117.3 PK			1.00 H	316	75.1	42.2
2	*5745.00	106.9 AV			1.00 H	316	64.7	42.2
3	11490.00	61.5 PK	74.0	-12.5	2.10 H	105	38.0	23.5
4	11490.00	50.0 AV	54.0	-4.0	2.10 H	105	26.5	23.5
5	17235.00	-	-	-	-	-	-	-
6	22980.00	-	-	-	-	-	-	-
7	28725.00	-	-	-	-	-	-	-
8	34470.00	-	-	-	-	-	-	-

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency (主頻).
6. " # ": The radiated frequency is out of the restricted band.
7. " - ": The emission levels were too low to be detected.
8. The blank is not available, the limit of fundamental frequency was restricted at the peak output power (see LP0002 4.7.3)

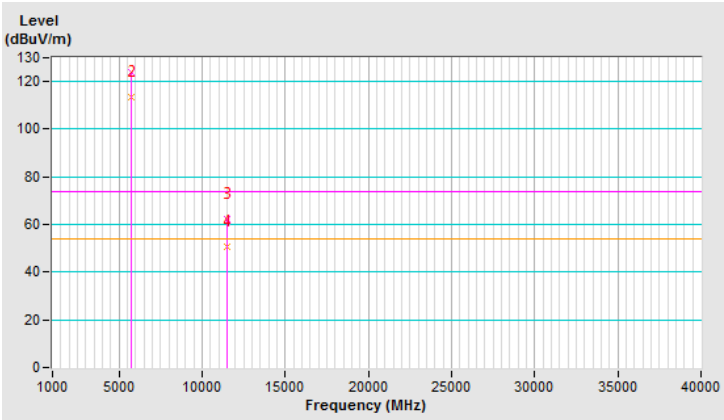


操 作 模 式 ：	發射	調 變 技 術 ：	OFDM
基 本 波 頻 率 ：	CH 149：5745 MHz	測 試 儀 器 ：	(PK) RB=1MHz, VB=3MHz (AV) RB=1MHz, VB=1kHz
量 測 場 地 溫 度 ：	25℃	量 測 場 地 濕 度 ：	67%RH
測 試 日 期 ：	107 年 08 月 22 日	測 試 者 ：	張家誠

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5745.00	124.0 PK			1.00 V	158	81.8	42.2
2	*5745.00	113.6 AV			1.00 V	158	71.4	42.2
3	11490.00	62.1 PK	74.0	-11.9	2.30 V	214	38.6	23.5
4	11490.00	50.6 AV	54.0	-3.4	2.30 V	214	27.1	23.5
6	17235.00	-	-	-	-	-	-	-
7	22980.00	-	-	-	-	-	-	-
8	28725.00	-	-	-	-	-	-	-
9	34470.00	-	-	-	-	-	-	-

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency (主頻).
6. " # ": The radiated frequency is out of the restricted band.
7. " - ": The emission levels were too low to be detected.
8. The blank is not available, the limit of fundamental frequency was restricted at the peak output power (see LP0002 4.7.3)

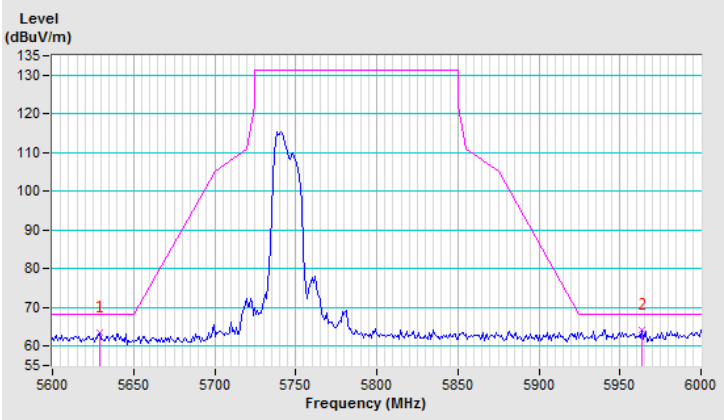


操 作 模 式 ：	發射	調 變 技 術 ：	OFDM
基 本 波 頻 率 ：	CH 149：5745 MHz (OOBE)	測 試 儀 器 ：	(PK) RB=1MHz, VB=3MHz (AV) RB=1MHz, VB=1kHz
量測場地溫度：	25℃	量 測 場 地 濕 度 ：	67%RH
測 試 日 期 ：	107 年 09 月 05 日	測 試 者 ：	張家誠

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5628.80	63.4 PK	68.2	-4.8	1.00 H	316	50.8	12.6
2	#5963.20	64.3 PK	68.2	-3.9	1.00 H	316	50.5	13.8

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " # ": The radiated frequency is out of the restricted band.

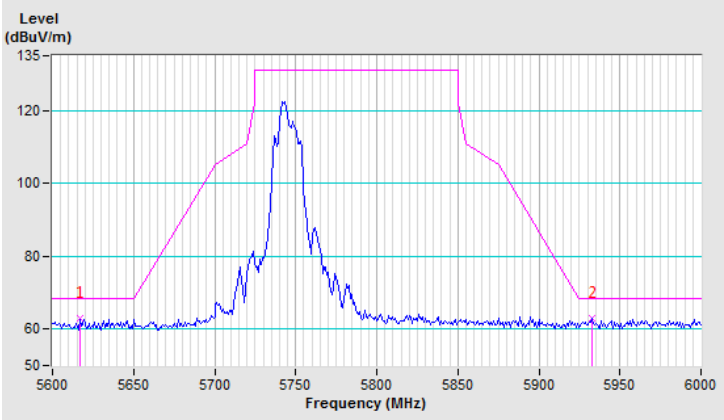


操 作 模 式 ：	發射	調 變 技 術 ：	OFDM
基 本 波 頻 率 ：	CH 149：5745 MHz (OOBE)	測 試 儀 器 ：	(PK) RB=1MHz, VB=3MHz (AV) RB=1MHz, VB=1kHz
量測場地溫度：	25℃	量 測 場 地 濕 度 ：	67%RH
測 試 日 期 ：	107 年 08 月 22 日	測 試 者 ：	張家誠

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5616.80	62.8 PK	68.2	-5.4	1.00 V	158	50.2	12.6
2	#5932.80	62.9 PK	68.2	-5.3	1.00 V	158	49.3	13.6

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " # ": The radiated frequency is out of the restricted band.

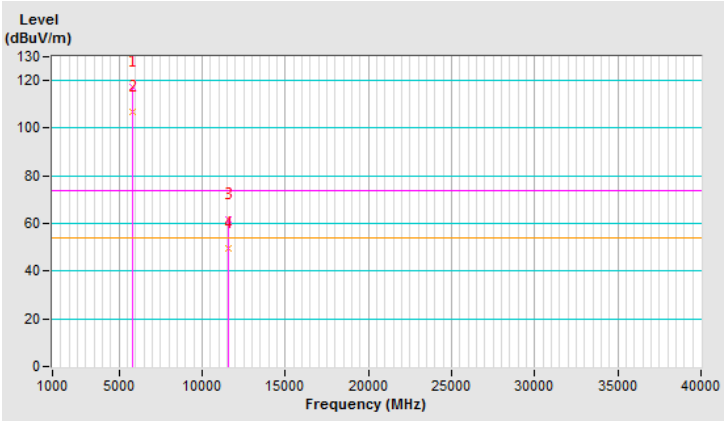


操 作 模 式 ：	發射	調 變 技 術 ：	OFDM
基 本 波 頻 率 ：	CH 157：5785 MHz	測 試 儀 器 ：	(PK) RB=1MHz, VB=3MHz (AV) RB=1MHz, VB=1kHz
量 測 場 地 溫 度 ：	25℃	量 測 場 地 濕 度 ：	67%RH
測 試 日 期 ：	107 年 09 月 05 日	測 試 者 ：	張家誠

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5785.00	117.4 PK			1.00 H	313	74.9	42.5
2	*5785.00	107.0 AV			1.00 H	313	64.5	42.5
3	11570.00	61.7 PK	74.0	-12.3	2.41 H	188	38.5	23.2
4	11570.00	49.7 AV	54.0	-4.3	2.41 H	188	26.5	23.2
5	17355.00	-	-	-	-	-	-	-
6	23140.00	-	-	-	-	-	-	-
7	28925.00	-	-	-	-	-	-	-
8	34710.00	-	-	-	-	-	-	-

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency (主頻).
6. " # ": The radiated frequency is out of the restricted band.
7. " - ": The emission levels were too low to be detected.
8. The blank is not available, the limit of fundamental frequency was restricted at the peak output power (see LP0002 4.7.3)

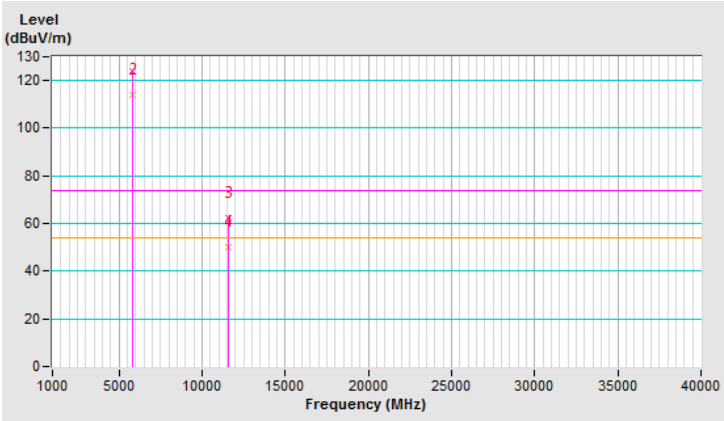


操 作 模 式 ：	發射	調 變 技 術 ：	OFDM
基 本 波 頻 率 ：	CH 157：5785 MHz	測 試 儀 器 ：	(PK) RB=1MHz, VB=3MHz (AV) RB=1MHz, VB=1kHz
量 測 場 地 溫 度 ：	25℃	量 測 場 地 濕 度 ：	67%RH
測 試 日 期 ：	107 年 08 月 22 日	測 試 者 ：	張家誠

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5785.00	123.9 PK			1.84 V	157	81.4	42.5
2	*5785.00	113.8 AV			1.84 V	157	71.3	42.5
3	11570.00	62.1 PK	74.0	-11.9	2.39 V	300	38.9	23.2
4	11570.00	49.9 AV	54.0	-4.1	2.39 V	300	26.7	23.2
5	17355.00	-	-	-	-	-	-	-
6	23140.00	-	-	-	-	-	-	-
7	28925.00	-	-	-	-	-	-	-
8	34710.00	-	-	-	-	-	-	-

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency (主頻).
6. " # ": The radiated frequency is out of the restricted band.
7. " - ": The emission levels were too low to be detected.
8. The blank is not available, the limit of fundamental frequency was restricted at the peak output power (see LP0002 4.7.3)

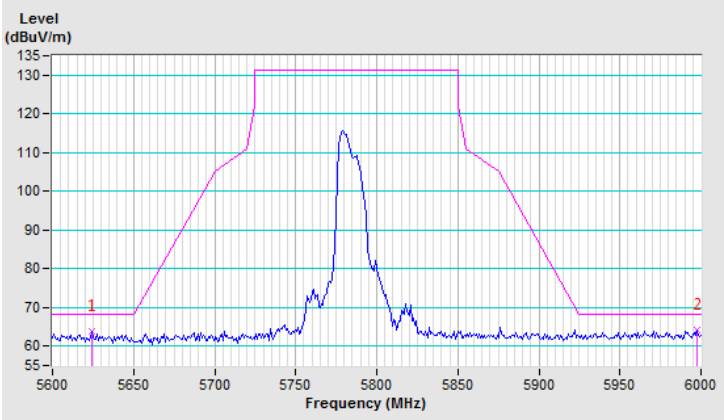


操 作 模 式 ：	發射	調 變 技 術 ：	OFDM
基 本 波 頻 率 ：	CH 157：5785 MHz (OOBE)	測 試 儀 器 ：	(PK) RB=1MHz, VB=3MHz (AV) RB=1MHz, VB=1kHz
量測場地溫度：	25℃	量 測 場 地 濕 度 ：	67%RH
測 試 日 期 ：	107 年 09 月 05 日	測 試 者 ：	張家誠

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5624.00	63.9 PK	68.2	-4.3	1.00 H	313	51.3	12.6
2	#5997.60	64.3 PK	68.2	-3.9	1.00 H	313	50.6	13.7

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " # ": The radiated frequency is out of the restricted band.

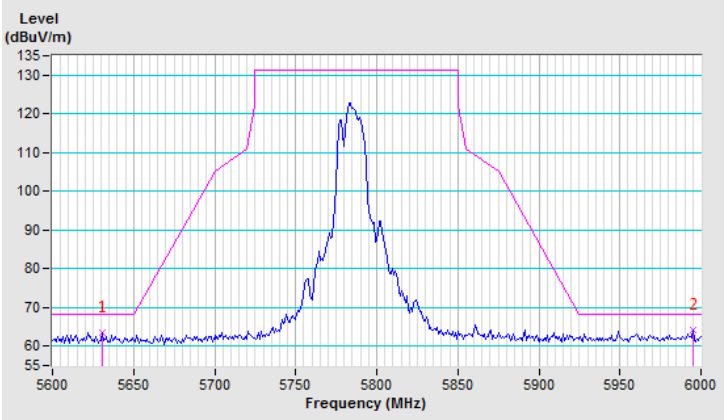


操 作 模 式 ：	發射	調 變 技 術 ：	OFDM
基 本 波 頻 率 ：	CH 157：5785 MHz (OOBE)	測 試 儀 器 ：	(PK) RB=1MHz, VB=3MHz (AV) RB=1MHz, VB=1kHz
量測場地溫度：	25℃	量 測 場 地 濕 度 ：	67%RH
測 試 日 期 ：	107 年 08 月 22 日	測 試 者 ：	張家誠

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5630.40	63.6 PK	68.2	-4.6	1.84 V	157	51.0	12.6
2	#5995.20	64.3 PK	68.2	-3.9	1.84 V	157	50.6	13.7

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " # ": The radiated frequency is out of the restricted band.

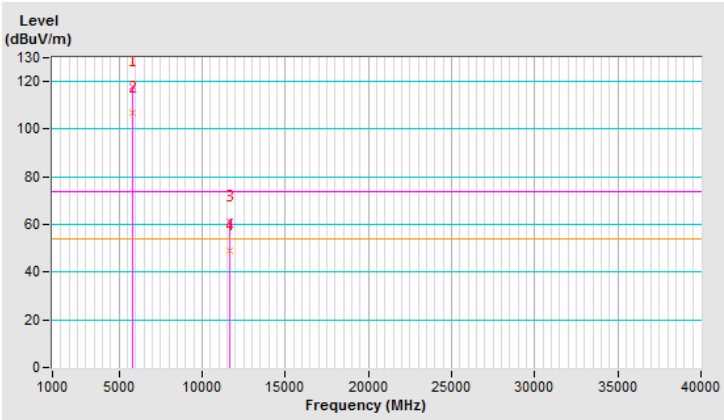


操 作 模 式 ：	發射	調 變 技 術 ：	OFDM
基 本 波 頻 率 ：	CH 165：5825 MHz	測 試 儀 器 ：	(PK) RB=1MHz, VB=3MHz (AV) RB=1MHz, VB=1kHz
量 測 場 地 溫 度 ：	25℃	量 測 場 地 濕 度 ：	67%RH
測 試 日 期 ：	107 年 09 月 05 日	測 試 者 ：	張家誠

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5825.00	118.0 PK			1.00 H	316	75.2	42.8
2	*5825.00	107.1 AV			1.00 H	316	64.3	42.8
3	11650.00	61.0 PK	74.0	-13.0	2.55 H	152	38.1	22.9
4	11650.00	49.2 AV	54.0	-4.8	2.55 H	152	26.3	22.9
5	17475.00	-	-	-	-	-	-	-
6	23300.00	-	-	-	-	-	-	-
7	29125.00	-	-	-	-	-	-	-
8	34950.00	-	-	-	-	-	-	-

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency (主頻).
6. " # ": The radiated frequency is out of the restricted band.
7. " - ": The emission levels were too low to be detected.
8. The blank is not available, the limit of fundamental frequency was restricted at the peak output power (see LP0002 4.7.3)

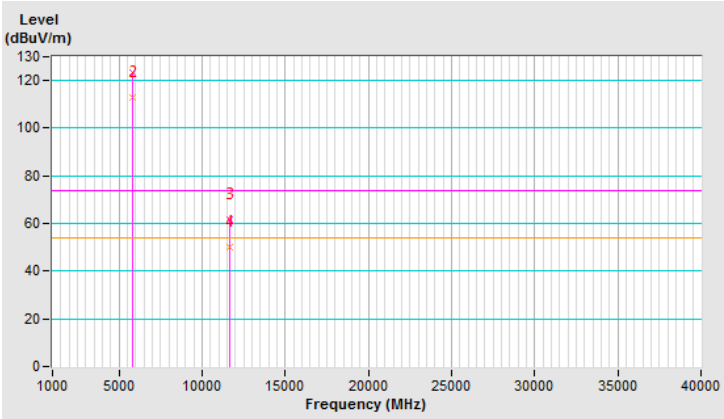


操 作 模 式 ：	發射	調 變 技 術 ：	OFDM
基 本 波 頻 率 ：	CH 165：5825 MHz	測 試 儀 器 ：	(PK) RB=1MHz, VB=3MHz (AV) RB=1MHz, VB=1kHz
量 測 場 地 溫 度 ：	25℃	量 測 場 地 濕 度 ：	67%RH
測 試 日 期 ：	107 年 08 月 22 日	測 試 者 ：	張家誠

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5825.00	123.2 PK			1.84 V	270	80.4	42.8
2	*5825.00	113.0 AV			1.84 V	270	70.2	42.8
3	11650.00	61.5 PK	74.0	-12.5	2.93 V	104	38.6	22.9
4	11650.00	49.9 AV	54.0	-4.1	2.93 V	104	27.0	22.9
5	17475.00	-	-	-	-	-	-	-
6	23300.00	-	-	-	-	-	-	-
7	29125.00	-	-	-	-	-	-	-
8	34950.00	-	-	-	-	-	-	-

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency (主頻).
6. " # ": The radiated frequency is out of the restricted band.
7. " - ": The emission levels were too low to be detected.
8. The blank is not available, the limit of fundamental frequency was restricted at the peak output power (see LP0002 4.7.3)

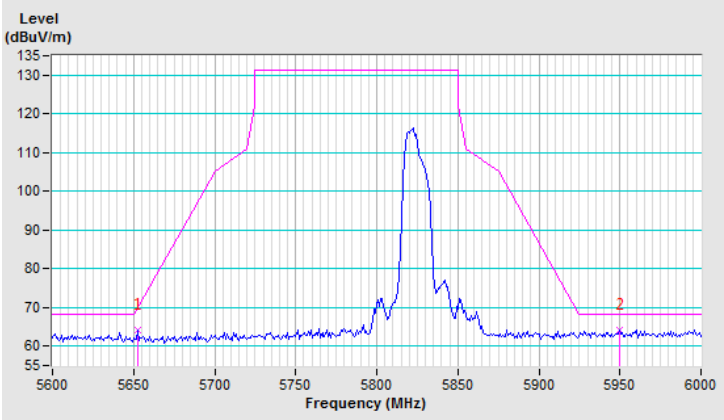


操 作 模 式 ：	發射	調 變 技 術 ：	OFDM
基 本 波 頻 率 ：	CH 165：5825 MHz (OOBE)	測 試 儀 器 ：	(PK) RB=1MHz, VB=3MHz (AV) RB=1MHz, VB=1kHz
量測場地溫度：	25℃	量 測 場 地 濕 度 ：	67%RH
測 試 日 期 ：	107 年 09 月 05 日	測 試 者 ：	張家誠

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5652.80	64.0 PK	70.3	-6.3	1.00 H	316	51.6	12.4
2	#5949.60	64.2 PK	68.2	-4.0	1.00 H	316	50.5	13.7

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " # ": The radiated frequency is out of the restricted band.

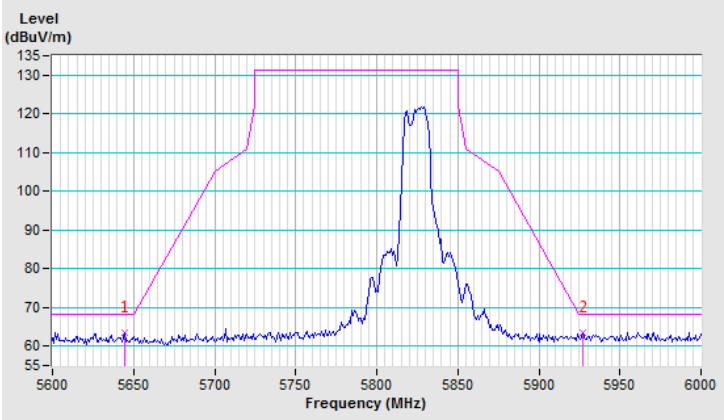


操 作 模 式 ：	發射	調 變 技 術 ：	OFDM
基 本 波 頻 率 ：	CH 165：5825 MHz (OOBE)	測 試 儀 器 ：	(PK) RB=1MHz, VB=3MHz (AV) RB=1MHz, VB=1kHz
量測場地溫度：	25℃	量 測 場 地 濕 度 ：	67%RH
測 試 日 期 ：	107 年 08 月 22 日	測 試 者 ：	張家誠

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5644.80	63.6 PK	68.2	-4.6	1.84 V	270	51.1	12.5
2	#5927.20	63.6 PK	68.2	-4.6	1.84 V	270	50.0	13.6

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " # ": The radiated frequency is out of the restricted band.



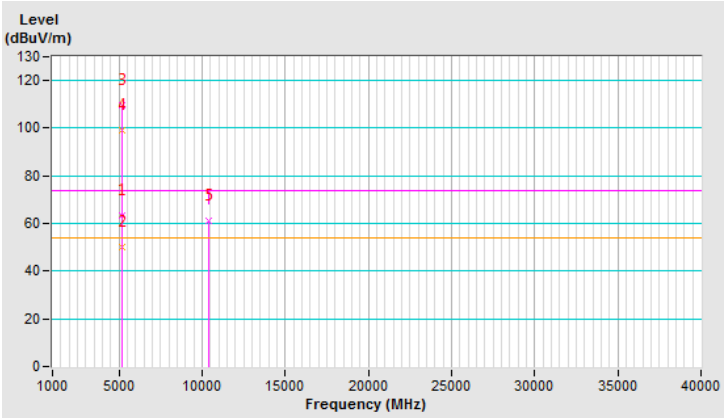
802.11n (HT20)

操 作 模 式 ：	發射	調 變 技 術 ：	OFDM
基 本 波 頻 率 ：	CH 36：5180 MHz	測 試 儀 器 ：	(PK) RB=1MHz, VB=3MHz (AV) RB=1MHz, VB=10Hz
量 測 場 地 溫 度 ：	25℃	量 測 場 地 濕 度 ：	70%RH
測 試 日 期 ：	107 年 09 月 05 日	測 試 者 ：	張家誠

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	63.2 PK	74.0	-10.8	1.98 H	127	51.4	11.8
2	5150.00	50.0 AV	54.0	-4.0	1.98 H	127	38.2	11.8
3	*5180.00	109.4 PK			1.98 H	127	68.6	40.8
4	*5180.00	99.1 AV			1.98 H	127	58.3	40.8
5	#10360.00	61.0 PK	68.2	-7.2	2.56 H	230	38.9	22.1
6	15540.00	-	-	-	-	-	-	-
7	20720.00	-	-	-	-	-	-	-
8	25900.00	-	-	-	-	-	-	-
9	31080.00	-	-	-	-	-	-	-
10	36260.00	-	-	-	-	-	-	-

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency (主頻).
6. " # ": The radiated frequency is out of the restricted band.
7. " - ": The emission levels were too low to be detected.
8. The blank is not available, the limit of fundamental frequency was restricted at the peak output power (see LP0002 4.7.3)

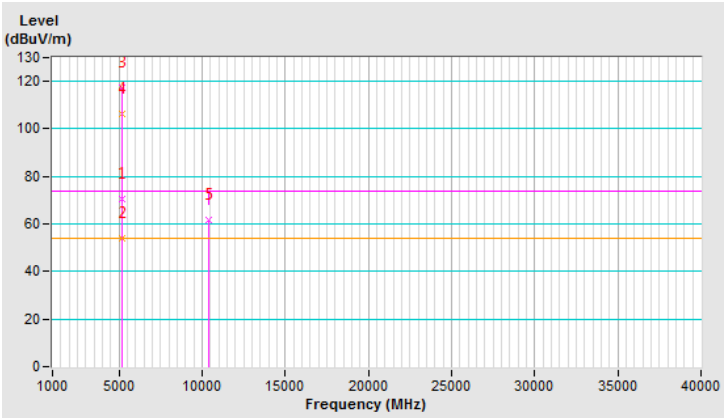


操 作 模 式 ：	發射	調 變 技 術 ：	OFDM
基 本 波 頻 率 ：	CH 36：5180 MHz	測 試 儀 器 ：	(PK) RB=1MHz, VB=3MHz (AV) RB=1MHz, VB=10Hz
量 測 場 地 溫 度 ：	25℃	量 測 場 地 濕 度 ：	67%RH
測 試 日 期 ：	107 年 08 月 22 日	測 試 者 ：	張家誠

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	70.7 PK	74.0	-3.3	1.00 V	131	58.9	11.8
2	5150.00	53.9 AV	54.0	-0.1	1.00 V	131	42.1	11.8
3	*5180.00	117.3 PK			1.00 V	131	76.5	40.8
4	*5180.00	106.3 AV			1.00 V	131	65.5	40.8
5	#10360.00	61.6 PK	68.2	-6.6	2.41 V	274	39.5	22.1
6	15540.00	-	-	-	-	-	-	-
7	20720.00	-	-	-	-	-	-	-
8	25900.00	-	-	-	-	-	-	-
9	31080.00	-	-	-	-	-	-	-
10	36260.00	-	-	-	-	-	-	-

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency (主頻).
6. " # ": The radiated frequency is out of the restricted band.
7. " - ": The emission levels were too low to be detected.
8. The blank is not available, the limit of fundamental frequency was restricted at the peak output power (see LP0002 4.7.3)

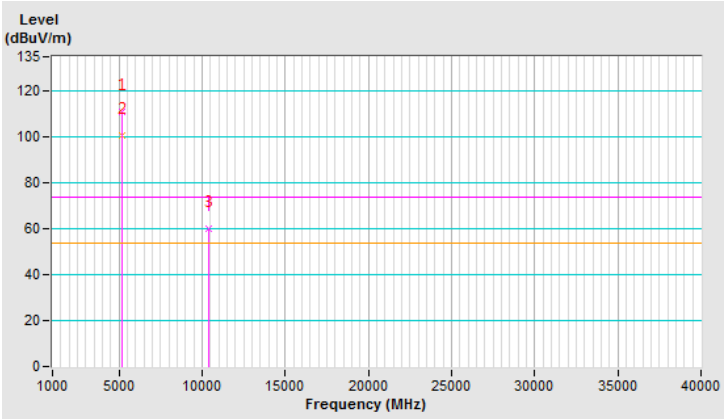


操 作 模 式 ：	發射	調 變 技 術 ：	OFDM
基 本 波 頻 率 ：	CH 40：5200 MHz	測 試 儀 器 ：	(PK) RB=1MHz, VB=3MHz (AV) RB=1MHz, VB=10Hz
量 測 場 地 溫 度 ：	25℃	量 測 場 地 濕 度 ：	70%RH
測 試 日 期 ：	107 年 09 月 12 日	測 試 者 ：	張家誠

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5200.00	110.7 PK			1.09 H	138	69.9	40.8
2	*5200.00	100.5 AV			1.09 H	138	59.7	40.8
3	#10400.00	60.3 PK	68.2	-7.9	2.41 H	274	37.9	22.4
4	15600.00	-	-	-	-	-	-	-
5	20800.00	-	-	-	-	-	-	-
6	26000.00	-	-	-	-	-	-	-
7	31200.00	-	-	-	-	-	-	-
8	36400.00	-	-	-	-	-	-	-

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency (主頻).
6. " # ": The radiated frequency is out of the restricted band.
7. " - ": The emission levels were too low to be detected.
8. The blank is not available, the limit of fundamental frequency was restricted at the peak output power (see LP0002 4.7.3)

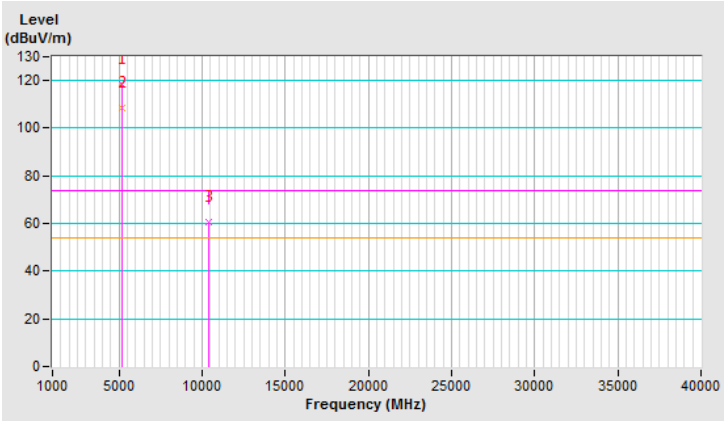


操 作 模 式 ：	發射	調 變 技 術 ：	OFDM
基 本 波 頻 率 ：	CH 40：5200 MHz	測 試 儀 器 ：	(PK) RB=1MHz, VB=3MHz (AV) RB=1MHz, VB=10Hz
量 測 場 地 溫 度 ：	25℃	量 測 場 地 濕 度 ：	70%RH
測 試 日 期 ：	107 年 09 月 12 日	測 試 者 ：	張家誠

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5200.00	118.7 PK			1.00 V	148	77.9	40.8
2	*5200.00	108.5 AV			1.00 V	148	67.7	40.8
3	#10400.00	60.5 PK	68.2	-7.7	2.56 V	234	38.1	22.4
4	15600.00	-	-	-	-	-	-	-
5	20800.00	-	-	-	-	-	-	-
6	26000.00	-	-	-	-	-	-	-
7	31200.00	-	-	-	-	-	-	-
8	36400.00	-	-	-	-	-	-	-

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency (主頻).
6. " # ": The radiated frequency is out of the restricted band.
7. " - ": The emission levels were too low to be detected.
8. The blank is not available, the limit of fundamental frequency was restricted at the peak output power (see LP0002 4.7.3)

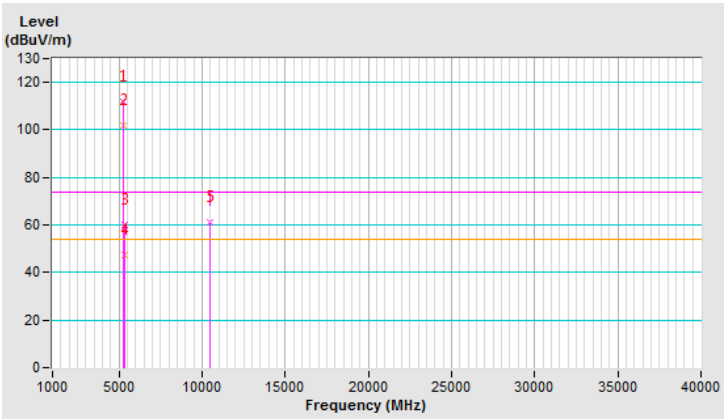


操 作 模 式 ：	發射	調 變 技 術 ：	OFDM
基 本 波 頻 率 ：	CH 48：5240 MHz	測 試 儀 器 ：	(PK) RB=1MHz, VB=3MHz (AV) RB=1MHz, VB=10Hz
量 測 場 地 溫 度 ：	25℃	量 測 場 地 濕 度 ：	70%RH
測 試 日 期 ：	107 年 09 月 05 日	測 試 者 ：	張家誠

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5240.00	111.7 PK			1.96 H	130	71.2	40.5
2	*5240.00	101.7 AV			1.96 H	130	61.2	40.5
3	5350.00	59.8 PK	74.0	-14.2	1.96 H	130	47.9	11.9
4	5350.00	47.4 AV	54.0	-6.6	1.96 H	130	35.5	11.9
5	#10480.00	61.2 PK	68.2	-7.0	2.39 H	269	39.0	22.2
6	15720.00	-	-	-	-	-	-	-
7	20960.00	-	-	-	-	-	-	-
8	26200.00	-	-	-	-	-	-	-
9	31440.00	-	-	-	-	-	-	-
10	36680.00	-	-	-	-	-	-	-

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency (主頻).
6. " # ": The radiated frequency is out of the restricted band.
7. " - ": The emission levels were too low to be detected.
8. The blank is not available, the limit of fundamental frequency was restricted at the peak output power (see LP0002 4.7.3)

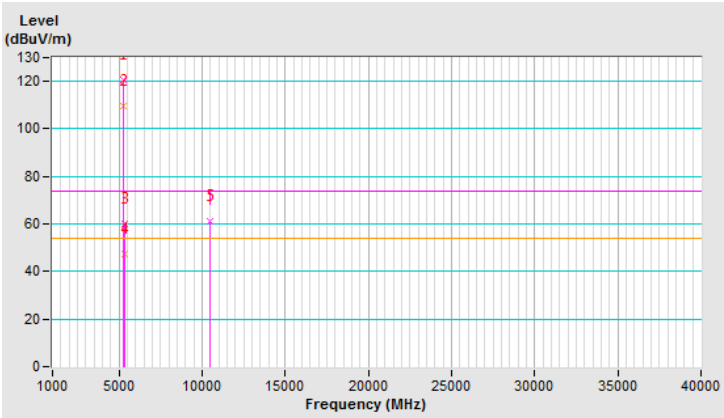


操 作 模 式 ：	發射	調 變 技 術 ：	OFDM
基 本 波 頻 率 ：	CH 48：5240 MHz	測 試 儀 器 ：	(PK) RB=1MHz, VB=3MHz (AV) RB=1MHz, VB=10Hz
量 測 場 地 溫 度 ：	25℃	量 測 場 地 濕 度 ：	67%RH
測 試 日 期 ：	107 年 08 月 22 日	測 試 者 ：	張家誠

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5240.00	120.8 PK			1.13 V	135	80.3	40.5
2	*5240.00	109.4 AV			1.13 V	135	68.9	40.5
3	5350.00	60.2 PK	74.0	-13.8	1.13 V	135	48.3	11.9
4	5350.00	47.2 AV	54.0	-6.8	1.13 V	135	35.3	11.9
5	#10480.00	61.4 PK	68.2	-6.8	2.44 V	286	39.2	22.2
6	15720.00	-	-	-	-	-	-	-
7	20960.00	-	-	-	-	-	-	-
8	26200.00	-	-	-	-	-	-	-
9	31440.00	-	-	-	-	-	-	-
10	36680.00	-	-	-	-	-	-	-

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency (主頻).
6. " # ": The radiated frequency is out of the restricted band.
7. " - ": The emission levels were too low to be detected.
8. The blank is not available, the limit of fundamental frequency was restricted at the peak output power (see LP0002 4.7.3)

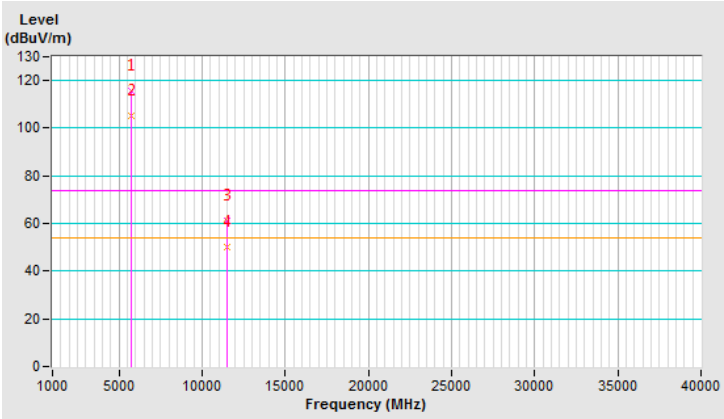


操 作 模 式 ：	發射	調 變 技 術 ：	OFDM
基 本 波 頻 率 ：	CH 149：5745 MHz	測 試 儀 器 ：	(PK) RB=1MHz, VB=3MHz (AV) RB=1MHz, VB=10Hz
量 測 場 地 溫 度 ：	25℃	量 測 場 地 濕 度 ：	67%RH
測 試 日 期 ：	107 年 09 月 05 日	測 試 者 ：	張家誠

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5745.00	115.7 PK			1.00 H	315	73.5	42.2
2	*5745.00	105.4 AV			1.00 H	315	63.2	42.2
3	11490.00	61.4 PK	74.0	-12.6	2.52 H	110	37.9	23.5
4	11490.00	50.2 AV	54.0	-3.8	2.52 H	110	26.7	23.5
5	17235.00	-	-	-	-	-	-	-
6	22980.00	-	-	-	-	-	-	-
7	28725.00	-	-	-	-	-	-	-
8	34470.00	-	-	-	-	-	-	-

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency (主頻).
6. " # ": The radiated frequency is out of the restricted band.
7. " - ": The emission levels were too low to be detected.
8. The blank is not available, the limit of fundamental frequency was restricted at the peak output power (see LP0002 4.7.3)

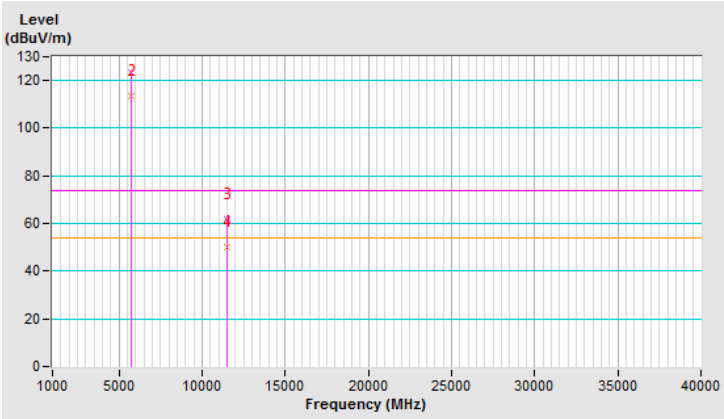


操 作 模 式 ：	發射	調 變 技 術 ：	OFDM
基 本 波 頻 率 ：	CH 149：5745 MHz	測 試 儀 器 ：	(PK) RB=1MHz, VB=3MHz (AV) RB=1MHz, VB=10Hz
量 測 場 地 溫 度 ：	25℃	量 測 場 地 濕 度 ：	67%RH
測 試 日 期 ：	107 年 08 月 22 日	測 試 者 ：	張家誠

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5745.00	123.5 PK			1.39 V	146	81.3	42.2
2	*5745.00	113.5 AV			1.39 V	146	71.3	42.2
3	11490.00	61.7 PK	74.0	-12.3	2.63 V	212	38.2	23.5
4	11490.00	50.4 AV	54.0	-3.6	2.63 V	212	26.9	23.5
5	17235.00	-	-	-	-	-	-	-
6	22980.00	-	-	-	-	-	-	-
7	28725.00	-	-	-	-	-	-	-
8	34470.00	-	-	-	-	-	-	-

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency (主頻).
6. " # ": The radiated frequency is out of the restricted band.
7. " - ": The emission levels were too low to be detected.
8. The blank is not available, the limit of fundamental frequency was restricted at the peak output power (see LP0002 4.7.3)

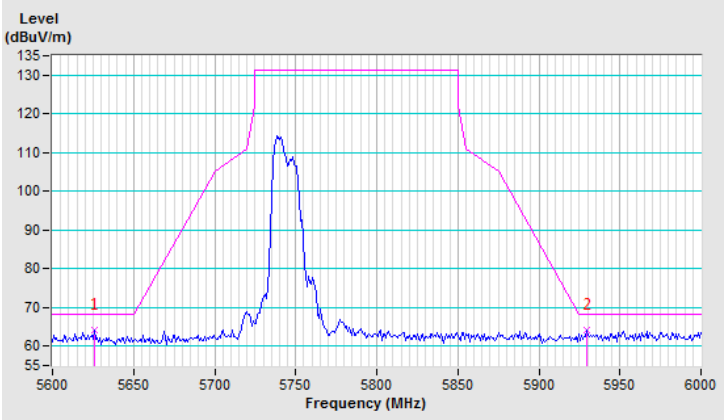


操 作 模 式 ：	發射	調 變 技 術 ：	OFDM
基 本 波 頻 率 ：	CH 149：5745 MHz (OOBE)	測 試 儀 器 ：	(PK) RB=1MHz, VB=3MHz (AV) RB=1MHz, VB=10Hz
量測場地溫度：	25℃	量 測 場 地 濕 度 ：	67%RH
測 試 日 期 ：	107 年 09 月 05 日	測 試 者 ：	張家誠

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5625.60	64.2 PK	68.2	-4.0	1.00 H	315	51.6	12.6
2	#5929.60	64.2 PK	68.2	-4.0	1.00 H	315	50.6	13.6

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " # ": The radiated frequency is out of the restricted band.

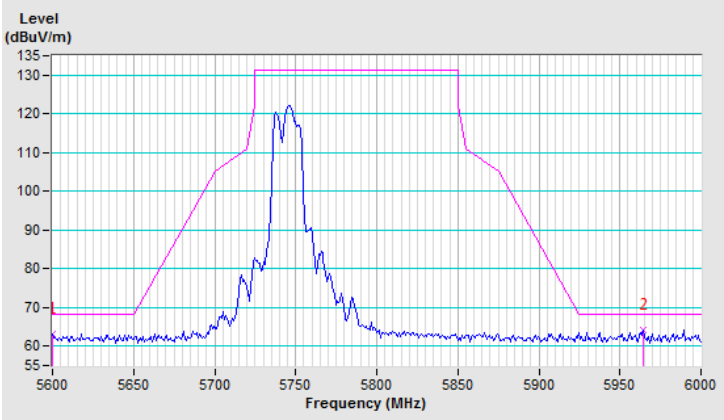


操 作 模 式 ：	發射	調 變 技 術 ：	OFDM
基 本 波 頻 率 ：	CH 149：5745 MHz (OOBE)	測 試 儀 器 ：	(PK) RB=1MHz, VB=3MHz (AV) RB=1MHz, VB=10Hz
量測場地溫度：	25℃	量 測 場 地 濕 度 ：	67%RH
測 試 日 期 ：	107 年 08 月 22 日	測 試 者 ：	張家誠

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5600.00	63.1 PK	68.2	-5.1	1.39 V	146	50.5	12.6
2	#5964.00	64.1 PK	68.2	-4.1	1.39 V	146	50.3	13.8

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " # ": The radiated frequency is out of the restricted band.

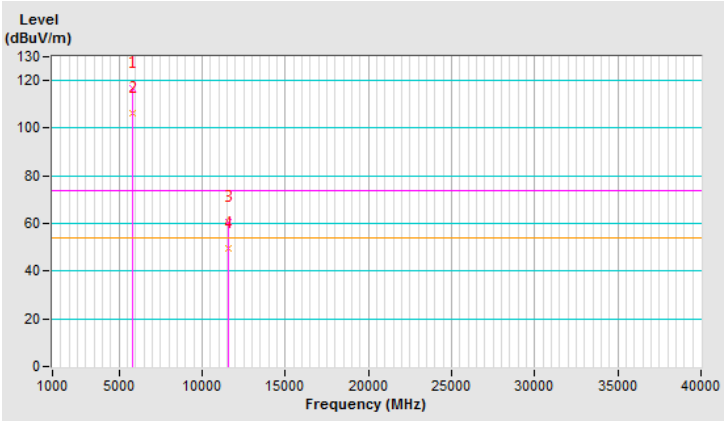


操 作 模 式 ：	發射	調 變 技 術 ：	OFDM
基 本 波 頻 率 ：	CH 157：5785 MHz	測 試 儀 器 ：	(PK) RB=1MHz, VB=3MHz (AV) RB=1MHz, VB=10Hz
量 測 場 地 溫 度 ：	25℃	量 測 場 地 濕 度 ：	67%RH
測 試 日 期 ：	107 年 09 月 05 日	測 試 者 ：	張家誠

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5785.00	116.6 PK			1.08 H	315	74.1	42.5
2	*5785.00	106.2 AV			1.08 H	315	63.7	42.5
3	11570.00	60.7 PK	74.0	-13.3	2.66 H	215	37.5	23.2
4	11570.00	49.4 AV	54.0	-4.6	2.66 H	215	26.2	23.2
5	17355.00	-	-	-	-	-	-	-
6	23140.00	-	-	-	-	-	-	-
7	28925.00	-	-	-	-	-	-	-
8	34710.00	-	-	-	-	-	-	-

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency (主頻).
6. " # ": The radiated frequency is out of the restricted band.
7. " - ": The emission levels were too low to be detected.
8. The blank is not available, the limit of fundamental frequency was restricted at the peak output power (see LP0002 4.7.3)

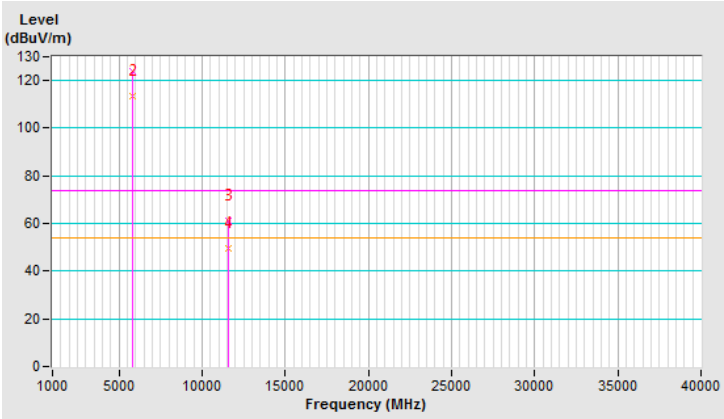


操 作 模 式 ：	發射	調 變 技 術 ：	OFDM
基 本 波 頻 率 ：	CH 157：5785 MHz	測 試 儀 器 ：	(PK) RB=1MHz, VB=3MHz (AV) RB=1MHz, VB=10Hz
量 測 場 地 溫 度 ：	25℃	量 測 場 地 濕 度 ：	67%RH
測 試 日 期 ：	107 年 08 月 22 日	測 試 者 ：	張家誠

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5785.00	124.0 PK			1.25 V	147	81.5	42.5
2	*5785.00	113.6 AV			1.25 V	147	71.1	42.5
3	11570.00	61.1 PK	74.0	-12.9	2.05 V	211	37.9	23.2
4	11570.00	49.6 AV	54.0	-4.4	2.05 V	211	26.4	23.2
5	17355.00	-	-	-	-	-	-	-
6	23140.00	-	-	-	-	-	-	-
7	28925.00	-	-	-	-	-	-	-
8	34710.00	-	-	-	-	-	-	-

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency (主頻).
6. " # ": The radiated frequency is out of the restricted band.
7. " - ": The emission levels were too low to be detected.
8. The blank is not available, the limit of fundamental frequency was restricted at the peak output power (see LP0002 4.7.3)

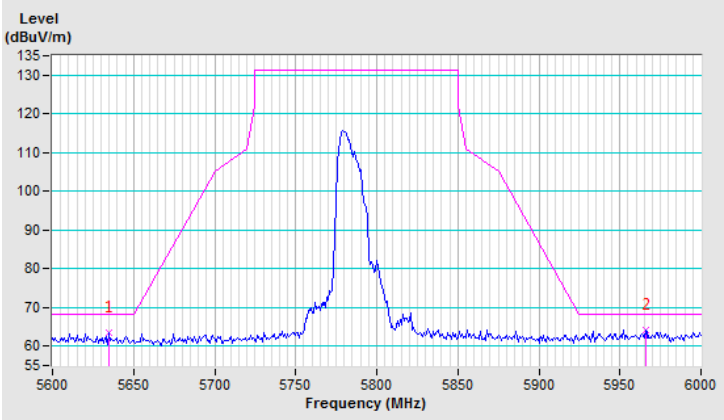


操 作 模 式 ：	發射	調 變 技 術 ：	OFDM
基 本 波 頻 率 ：	CH 157：5785 MHz (OOBE)	測 試 儀 器 ：	(PK) RB=1MHz, VB=3MHz (AV) RB=1MHz, VB=10Hz
量測場地溫度：	25℃	量 測 場 地 濕 度 ：	67%RH
測 試 日 期 ：	107 年 09 月 05 日	測 試 者 ：	張家誠

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5635.20	63.5 PK	68.2	-4.7	1.08 H	315	50.9	12.6
2	#5965.60	64.0 PK	68.2	-4.2	1.08 H	315	50.2	13.8

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " # ": The radiated frequency is out of the restricted band.

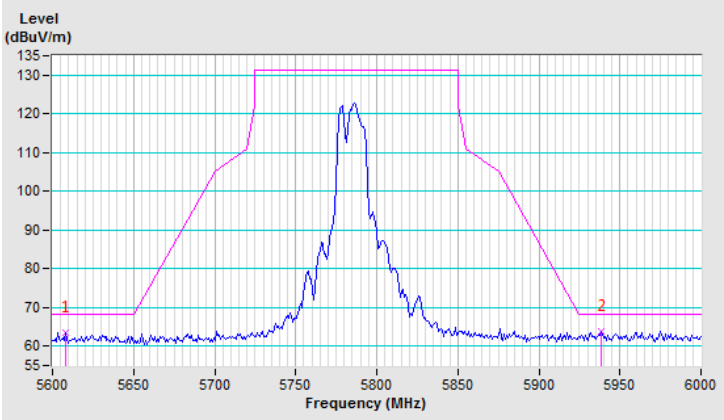


操 作 模 式 ：	發射	調 變 技 術 ：	OFDM
基 本 波 頻 率 ：	CH 157：5785 MHz (OOBE)	測 試 儀 器 ：	(PK) RB=1MHz, VB=3MHz (AV) RB=1MHz, VB=10Hz
量測場地溫度：	25℃	量 測 場 地 濕 度 ：	67%RH
測 試 日 期 ：	107 年 08 月 22 日	測 試 者 ：	張家誠

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5608.00	63.4 PK	68.2	-4.8	1.25 V	147	50.8	12.6
2	#5938.40	63.9 PK	68.2	-4.3	1.25 V	147	50.3	13.6

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " # ": The radiated frequency is out of the restricted band.

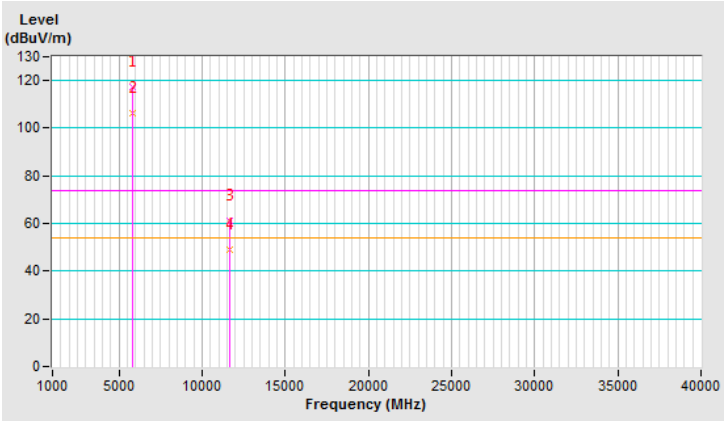


操 作 模 式 ：	發射	調 變 技 術 ：	OFDM
基 本 波 頻 率 ：	CH 165：5825 MHz	測 試 儀 器 ：	(PK) RB=1MHz, VB=3MHz (AV) RB=1MHz, VB=10Hz
量 測 場 地 溫 度 ：	25℃	量 測 場 地 濕 度 ：	67%RH
測 試 日 期 ：	107 年 09 月 05 日	測 試 者 ：	張家誠

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5825.00	117.2 PK			1.02 H	315	74.4	42.8
2	*5825.00	106.1 AV			1.02 H	315	63.3	42.8
3	11650.00	60.9 PK	74.0	-13.1	2.98 H	260	38.0	22.9
4	11650.00	49.2 AV	54.0	-4.8	2.98 H	260	26.3	22.9
5	17475.00	-	-	-	-	-	-	-
6	23300.00	-	-	-	-	-	-	-
7	29125.00	-	-	-	-	-	-	-
8	34950.00	-	-	-	-	-	-	-

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency (主頻).
6. " # ": The radiated frequency is out of the restricted band.
7. " - ": The emission levels were too low to be detected.
8. The blank is not available, the limit of fundamental frequency was restricted at the peak output power (see LP0002 4.7.3)

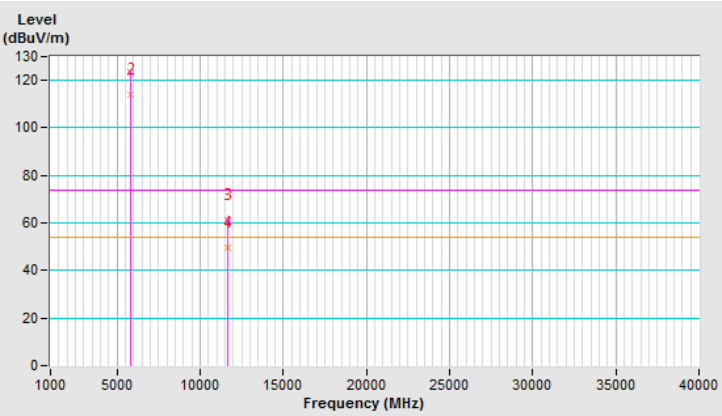


操 作 模 式 ：	發射	調 變 技 術 ：	OFDM
基 本 波 頻 率 ：	CH 165：5825 MHz	測 試 儀 器 ：	(PK) RB=1MHz, VB=3MHz (AV) RB=1MHz, VB=10Hz
量 測 場 地 溫 度 ：	25℃	量 測 場 地 濕 度 ：	67%RH
測 試 日 期 ：	107 年 08 月 22 日	測 試 者 ：	張家誠

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5825.00	123.6 PK			1.24 V	148	80.8	42.8
2	*5825.00	114.0 AV			1.24 V	148	71.2	42.8
3	11650.00	61.2 PK	74.0	-12.8	2.71 V	249	38.3	22.9
4	11650.00	49.6 AV	54.0	-4.4	2.71 V	249	26.7	22.9
5	17475.00	-	-	-	-	-	-	-
6	23300.00	-	-	-	-	-	-	-
7	29125.00	-	-	-	-	-	-	-
8	34950.00	-	-	-	-	-	-	-

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency (主頻).
6. " # ": The radiated frequency is out of the restricted band.
7. " - ": The emission levels were too low to be detected.
8. The blank is not available, the limit of fundamental frequency was restricted at the peak output power (see LP0002 4.7.3)

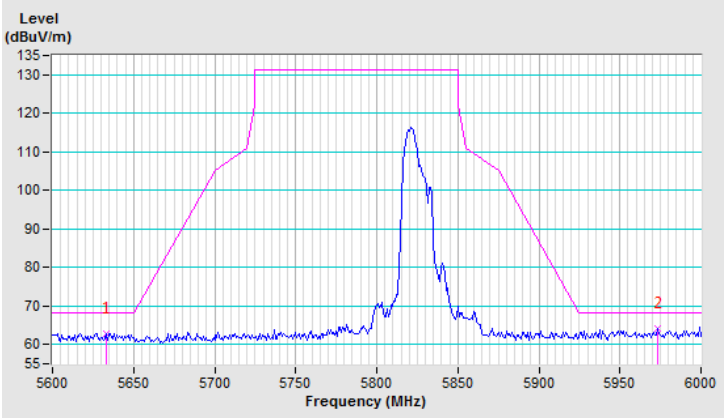


操 作 模 式 ：	發射	調 變 技 術 ：	OFDM
基 本 波 頻 率 ：	CH 165：5825 MHz (OOBE)	測 試 儀 器 ：	(PK) RB=1MHz, VB=3MHz (AV) RB=1MHz, VB=10Hz
量測場地溫度：	25℃	量 測 場 地 濕 度 ：	67%RH
測 試 日 期 ：	107 年 09 月 05 日	測 試 者 ：	張家誠

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5632.80	62.9 PK	68.2	-5.3	1.02 H	315	50.3	12.6
2	#5973.60	64.0 PK	68.2	-4.2	1.02 H	315	50.3	13.7

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " # ": The radiated frequency is out of the restricted band.

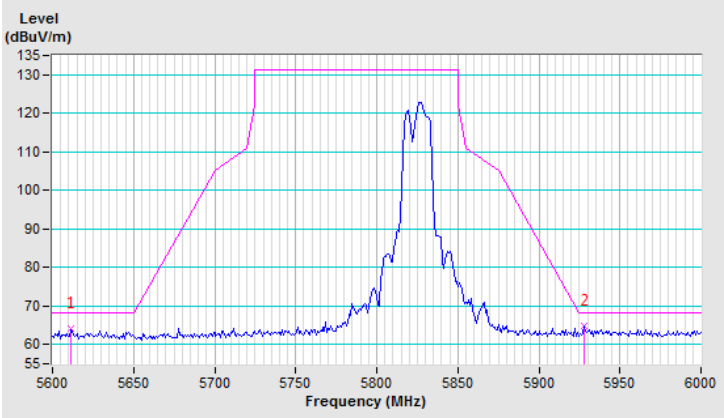


操 作 模 式 ：	發射	調 變 技 術 ：	OFDM
基 本 波 頻 率 ：	CH 165：5825 MHz (OOBE)	測 試 儀 器 ：	(PK) RB=1MHz, VB=3MHz (AV) RB=1MHz, VB=10Hz
量測場地溫度：	25℃	量 測 場 地 濕 度 ：	67%RH
測 試 日 期 ：	107 年 08 月 22 日	測 試 者 ：	張家誠

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5611.20	64.0 PK	68.2	-4.2	1.24 V	148	51.4	12.6
2	#5928.00	64.8 PK	68.2	-3.4	1.24 V	148	51.2	13.6

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
6. " # ": The radiated frequency is out of the restricted band.



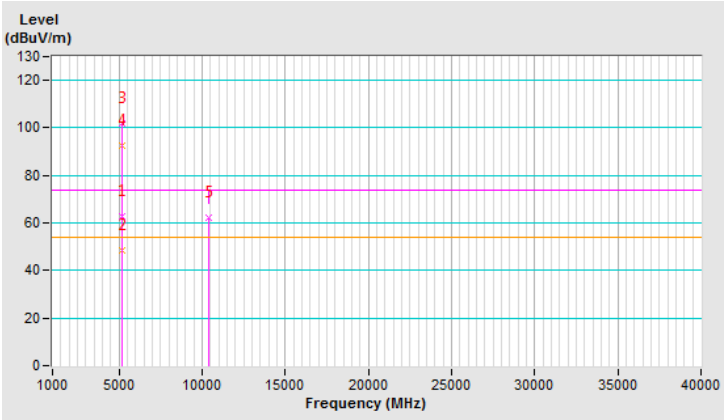
802.11n (HT40)

操 作 模 式 ：	發射	調 變 技 術 ：	OFDM
基 本 波 頻 率 ：	CH 38：5190 MHz	測 試 儀 器 ：	(PK) RB=1MHz, VB=3MHz (AV) RB=1MHz, VB=1kHz
量 測 場 地 溫 度 ：	25℃	量 測 場 地 濕 度 ：	70%RH
測 試 日 期 ：	107 年 09 月 12 日	測 試 者 ：	張家誠

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	62.7 PK	74.0	-11.3	1.00 H	139	50.9	11.8
2	5150.00	48.5 AV	54.0	-5.5	1.00 H	139	36.7	11.8
3	*5190.00	102.1 PK			1.00 H	139	61.3	40.8
4	*5190.00	92.7 AV			1.00 H	139	51.9	40.8
5	#10380.00	62.2 PK	68.2	-6.0	2.52 H	321	39.9	22.3
6	10380.00	-	-	-	-	-	-	-
7	15570.00	-	-	-	-	-	-	-
8	20760.00	-	-	-	-	-	-	-
9	25950.00	-	-	-	-	-	-	-
10	31140.00	-	-	-	-	-	-	-
11	36330.00	-	-	-	-	-	-	-

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency (主頻).
6. " # ": The radiated frequency is out of the restricted band.
7. " - ": The emission levels were too low to be detected.
8. The blank is not available, the limit of fundamental frequency was restricted at the peak output power (see LP0002 4.7.3)

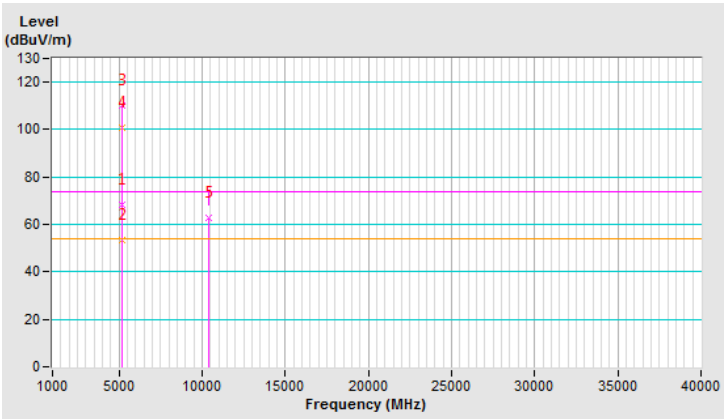


操 作 模 式 ：	發射	調 變 技 術 ：	OFDM
基 本 波 頻 率 ：	CH 38：5190 MHz	測 試 儀 器 ：	(PK) RB=1MHz, VB=3MHz (AV) RB=1MHz, VB=1kHz
量 測 場 地 溫 度 ：	25℃	量 測 場 地 濕 度 ：	70%RH
測 試 日 期 ：	107 年 09 月 12 日	測 試 者 ：	張家誠

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	68.3 PK	74.0	-5.7	1.29 V	149	56.5	11.8
2	5150.00	53.5 AV	54.0	-0.5	1.29 V	149	41.7	11.8
3	*5190.00	110.1 PK			1.29 V	149	69.3	40.8
4	*5190.00	100.6 AV			1.29 V	149	59.8	40.8
5	#10380.00	62.9 PK	68.2	-5.3	2.56 V	223	40.6	22.3
6	15570.00	-	-	-	-	-	-	-
7	20760.00	-	-	-	-	-	-	-
8	25950.00	-	-	-	-	-	-	-
9	31140.00	-	-	-	-	-	-	-
10	36330.00	-	-	-	-	-	-	-

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency (主頻).
6. " # ": The radiated frequency is out of the restricted band.
7. " - ": The emission levels were too low to be detected.
8. The blank is not available, the limit of fundamental frequency was restricted at the peak output power (see LP0002 4.7.3)

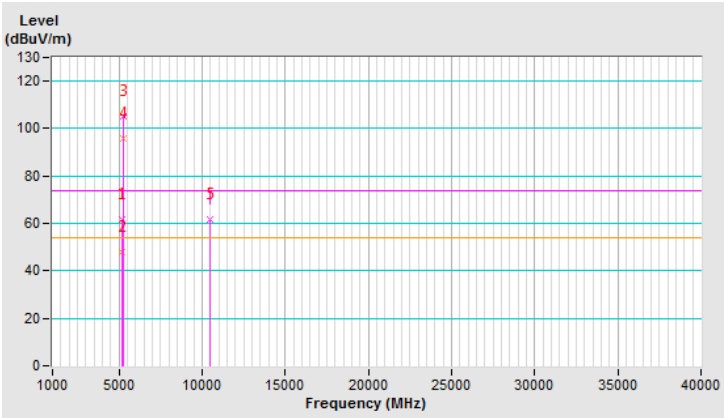


操 作 模 式 ：	發射	調 變 技 術 ：	OFDM
基 本 波 頻 率 ：	CH 46：5230 MHz	測 試 儀 器 ：	(PK) RB=1MHz, VB=3MHz (AV) RB=1MHz, VB=1kHz
量 測 場 地 溫 度 ：	25℃	量 測 場 地 濕 度 ：	70%RH
測 試 日 期 ：	107 年 09 月 12 日	測 試 者 ：	張家誠

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	61.8 PK	74.0	-12.2	1.00 H	133	50.0	11.8
2	5150.00	47.8 AV	54.0	-6.2	1.00 H	133	36.0	11.8
3	*5230.00	105.1 PK			1.00 H	133	64.5	40.6
4	*5230.00	96.0 AV			1.00 H	133	55.4	40.6
5	#10460.00	61.7 PK	68.2	-6.5	2.28 H	200	39.4	22.3
6	15690.00	-	-	-	-	-	-	-
7	20920.00	-	-	-	-	-	-	-
8	26150.00	-	-	-	-	-	-	-
9	31380.00	-	-	-	-	-	-	-
10	36610.00	-	-	-	-	-	-	-

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency (主頻).
6. " # ": The radiated frequency is out of the restricted band.
7. " - ": The emission levels were too low to be detected.
8. The blank is not available, the limit of fundamental frequency was restricted at the peak output power (see LP0002 4.7.3)

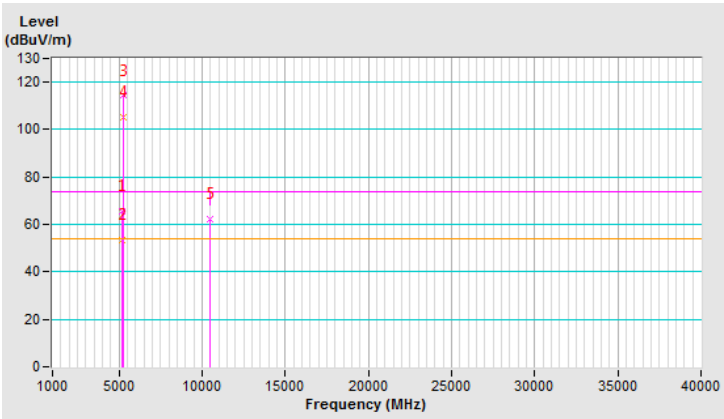


操 作 模 式 ：	發射	調 變 技 術 ：	OFDM
基 本 波 頻 率 ：	CH 46：5230 MHz	測 試 儀 器 ：	(PK) RB=1MHz, VB=3MHz (AV) RB=1MHz, VB=1kHz
量 測 場 地 溫 度 ：	25℃	量 測 場 地 濕 度 ：	70%RH
測 試 日 期 ：	107 年 09 月 12 日	測 試 者 ：	張家誠

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	65.6 PK	74.0	-8.4	1.23 V	148	53.8	11.8
2	5150.00	53.6 AV	54.0	-0.4	1.23 V	148	41.8	11.8
3	*5230.00	114.3 PK			1.23 V	148	73.7	40.6
4	*5230.00	105.2 AV			1.23 V	148	64.6	40.6
5	#10460.00	62.0 PK	68.2	-6.2	1.29 V	226	39.7	22.3
6	15690.00	-	-	-	-	-	-	-
7	20920.00	-	-	-	-	-	-	-
8	26150.00	-	-	-	-	-	-	-
9	31380.00	-	-	-	-	-	-	-
10	36610.00	-	-	-	-	-	-	-

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency (主頻).
6. " # ": The radiated frequency is out of the restricted band.
7. " - ": The emission levels were too low to be detected.
8. The blank is not available, the limit of fundamental frequency was restricted at the peak output power (see LP0002 4.7.3)

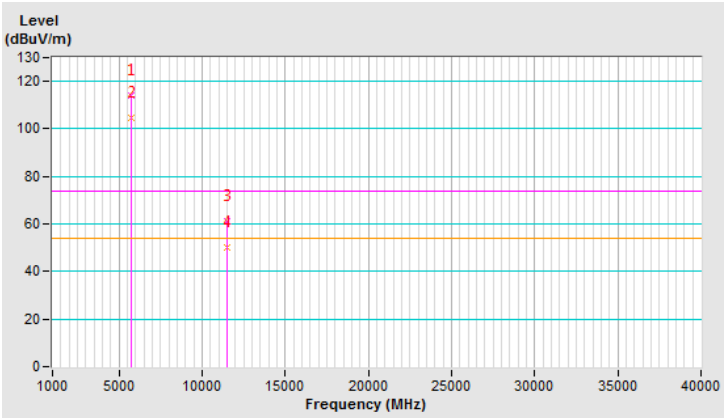


操 作 模 式 ：	發射	調 變 技 術 ：	OFDM
基 本 波 頻 率 ：	CH 151：5755 MHz	測 試 儀 器 ：	(PK) RB=1MHz, VB=3MHz (AV) RB=1MHz, VB=1kHz
量 測 場 地 溫 度 ：	25℃	量 測 場 地 濕 度 ：	67%RH
測 試 日 期 ：	107 年 09 月 05 日	測 試 者 ：	張家誠

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5755.00	114.1 PK			1.00 H	306	71.8	42.3
2	*5755.00	104.6 AV			1.00 H	306	62.3	42.3
3	11510.00	61.3 PK	74.0	-12.7	2.12 H	201	38.0	23.3
4	11510.00	50.1 AV	54.0	-3.9	2.12 H	201	26.8	23.3
5	17265.00	-	-	-	-	-	-	-
6	23020.00	-	-	-	-	-	-	-
7	28775.00	-	-	-	-	-	-	-
8	34530.00	-	-	-	-	-	-	-

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency (主頻).
6. " # ": The radiated frequency is out of the restricted band.
7. " - ": The emission levels were too low to be detected.
8. The blank is not available, the limit of fundamental frequency was restricted at the peak output power (see LP0002 4.7.3)

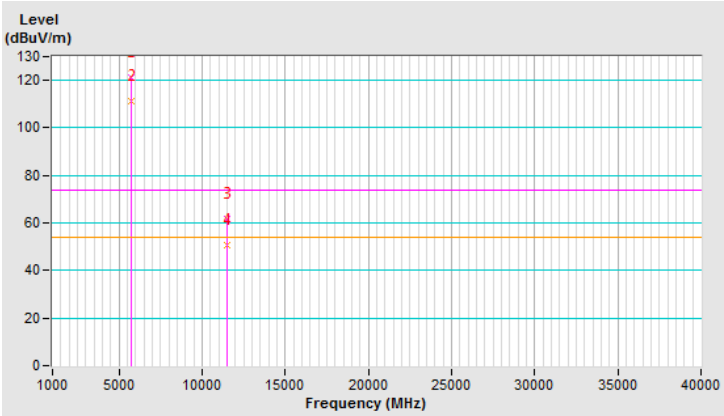


操 作 模 式 ：	發射	調 變 技 術 ：	OFDM
基 本 波 頻 率 ：	CH 151：5755 MHz	測 試 儀 器 ：	(PK) RB=1MHz, VB=3MHz (AV) RB=1MHz, VB=1kHz
量 測 場 地 溫 度 ：	25℃	量 測 場 地 濕 度 ：	67%RH
測 試 日 期 ：	107 年 08 月 22 日	測 試 者 ：	張家誠

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5755.00	121.0 PK			1.17 V	230	78.7	42.3
2	*5755.00	111.5 AV			1.17 V	230	69.2	42.3
3	11510.00	61.7 PK	74.0	-12.3	2.48 V	104	38.4	23.3
4	11510.00	50.5 AV	54.0	-3.5	2.48 V	104	27.2	23.3
5	17265.00	-	-	-	-	-	-	-
6	23020.00	-	-	-	-	-	-	-
7	28775.00	-	-	-	-	-	-	-
8	34530.00	-	-	-	-	-	-	-

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency (主頻).
6. " # ": The radiated frequency is out of the restricted band.
7. " - ": The emission levels were too low to be detected.
8. The blank is not available, the limit of fundamental frequency was restricted at the peak output power (see LP0002 4.7.3)

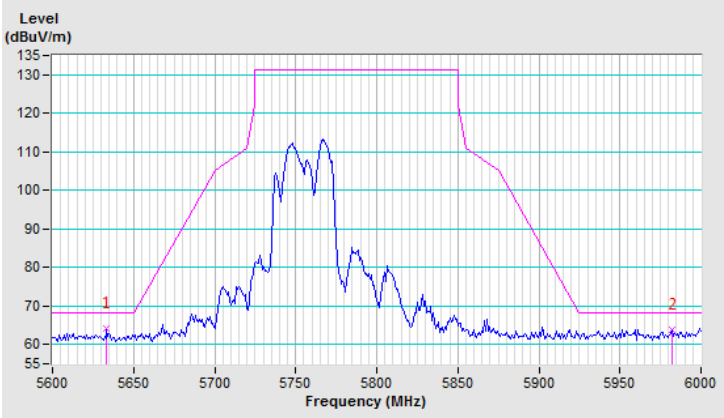


操 作 模 式 ：	發射	調 變 技 術 ：	OFDM
基 本 波 頻 率 ：	CH 151：5755 MHz (OOBE)	測 試 儀 器 ：	(PK) RB=1MHz, VB=3MHz (AV) RB=1MHz, VB=1kHz
量測場地溫度：	25℃	量 測 場 地 濕 度 ：	67%RH
測 試 日 期 ：	107 年 09 月 05 日	測 試 者 ：	張家誠

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5633.60	64.0 PK	68.2	-4.2	1.00 H	306	51.4	12.6
2	#5982.40	63.9 PK	68.2	-4.3	1.00 H	306	50.2	13.7

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " # ": The radiated frequency is out of the restricted band.

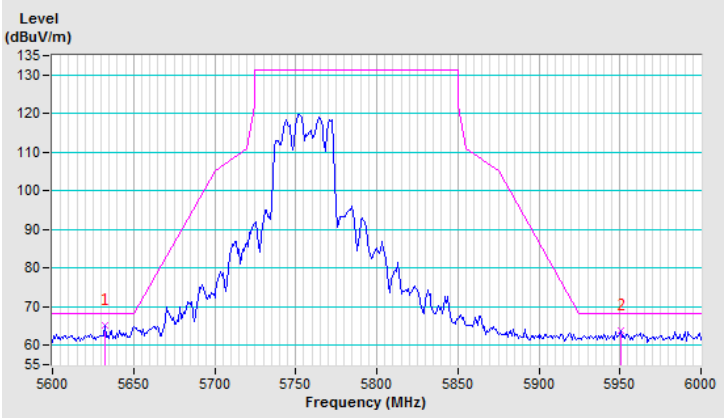


操 作 模 式 ：	發射	調 變 技 術 ：	OFDM
基 本 波 頻 率 ：	CH 151：5755 MHz (OOBE)	測 試 儀 器 ：	(PK) RB=1MHz, VB=3MHz (AV) RB=1MHz, VB=1kHz
量測場地溫度：	25℃	量 測 場 地 濕 度 ：	67%RH
測 試 日 期 ：	107 年 08 月 22 日	測 試 者 ：	張家誠

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5632.00	65.3 PK	68.2	-2.9	1.17 V	230	52.7	12.6
2	#5950.40	63.8 PK	68.2	-4.4	1.17 V	230	50.1	13.7

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " # ": The radiated frequency is out of the restricted band.

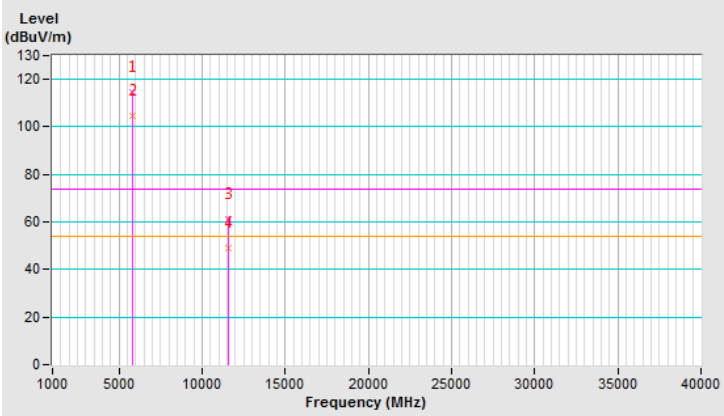


操 作 模 式 ：	發射	調 變 技 術 ：	OFDM
基 本 波 頻 率 ：	CH 159：5795 MHz	測 試 儀 器 ：	(PK) RB=1MHz, VB=3MHz (AV) RB=1MHz, VB=1kHz
量 測 場 地 溫 度 ：	25℃	量 測 場 地 濕 度 ：	67%RH
測 試 日 期 ：	107 年 09 月 05 日	測 試 者 ：	張家誠

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5795.00	114.5 PK			1.00 H	315	71.9	42.6
2	*5795.00	104.5 AV			1.00 H	315	61.9	42.6
3	11590.00	61.0 PK	74.0	-13.0	2.63 H	215	38.1	22.9
4	11590.00	49.2 AV	54.0	-4.8	2.63 H	215	26.3	22.9
5	17385.00	-	-	-	-	-	-	-
6	23180.00	-	-	-	-	-	-	-
7	28975.00	-	-	-	-	-	-	-
8	34770.00	-	-	-	-	-	-	-

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency (主頻).
6. " # ": The radiated frequency is out of the restricted band.
7. " - ": The emission levels were too low to be detected.
8. The blank is not available, the limit of fundamental frequency was restricted at the peak output power (see LP0002 4.7.3)

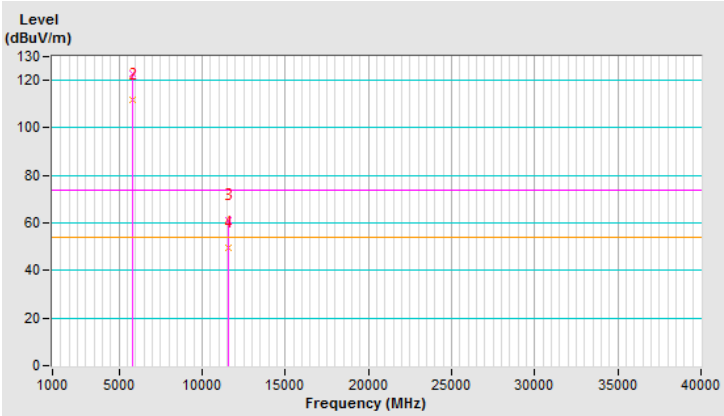


操 作 模 式 ：	發射	調 變 技 術 ：	OFDM
基 本 波 頻 率 ：	CH 159：5795 MHz	測 試 儀 器 ：	(PK) RB=1MHz, VB=3MHz (AV) RB=1MHz, VB=1kHz
量 測 場 地 溫 度 ：	25℃	量 測 場 地 濕 度 ：	67%RH
測 試 日 期 ：	107 年 08 月 22 日	測 試 者 ：	張家誠

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5795.00	122.7 PK			1.38 V	91	80.1	42.6
2	*5795.00	112.0 AV			1.38 V	91	69.4	42.6
3	11590.00	61.3 PK	74.0	-12.7	2.88 V	175	38.4	22.9
4	11590.00	49.6 AV	54.0	-4.4	2.88 V	175	26.7	22.9
5	17385.00	-	-	-	-	-	-	-
6	23180.00	-	-	-	-	-	-	-
7	28975.00	-	-	-	-	-	-	-
8	34770.00	-	-	-	-	-	-	-

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency (主頻).
6. " # ": The radiated frequency is out of the restricted band.
7. " - ": The emission levels were too low to be detected.
8. The blank is not available, the limit of fundamental frequency was restricted at the peak output power (see LP0002 4.7.3)

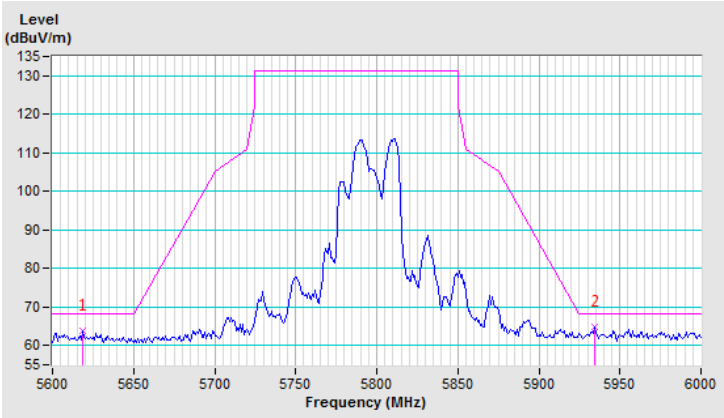


操 作 模 式 ：	發射	調 變 技 術 ：	OFDM
基 本 波 頻 率 ：	CH 159：5795 MHz (OOBE)	測 試 儀 器 ：	(PK) RB=1MHz, VB=3MHz (AV) RB=1MHz, VB=1kHz
量測場地溫度：	25℃	量 測 場 地 濕 度 ：	67%RH
測 試 日 期 ：	107 年 09 月 05 日	測 試 者 ：	張家誠

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5618.40	63.7 PK	68.2	-4.5	1.00 H	315	51.1	12.6
2	#5934.40	64.8 PK	68.2	-3.4	1.00 H	315	51.2	13.6

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " # ": The radiated frequency is out of the restricted band.

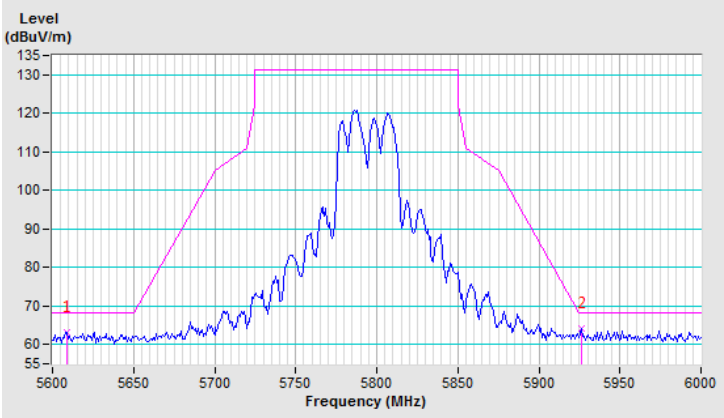


操 作 模 式 ：	發射	調 變 技 術 ：	OFDM
基 本 波 頻 率 ：	CH 159：5795 MHz (OOBE)	測 試 儀 器 ：	(PK) RB=1MHz, VB=3MHz (AV) RB=1MHz, VB=1kHz
量測場地溫度：	25℃	量 測 場 地 濕 度 ：	67%RH
測 試 日 期 ：	107 年 08 月 22 日	測 試 者 ：	張家誠

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5608.80	63.1 PK	68.2	-5.1	1.38 V	91	50.5	12.6
2	#5926.40	64.0 PK	68.2	-4.2	1.38 V	91	50.4	13.6

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " # ": The radiated frequency is out of the restricted band.



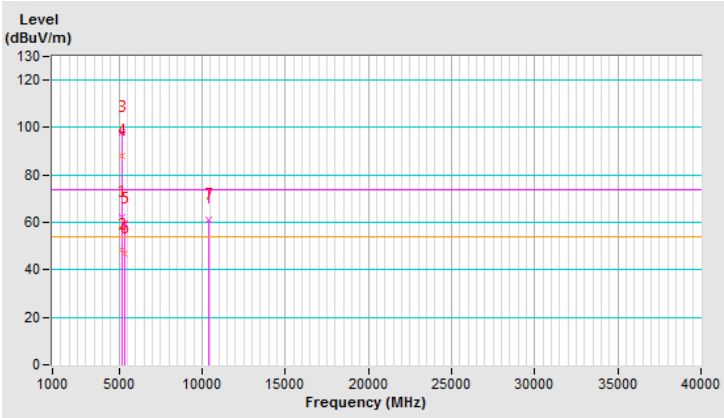
802.11ac (VHT80)

操 作 模 式 ：	發射	調 變 技 術 ：	OFDM
基 本 波 頻 率 ：	CH 42：5210 MHz	測 試 儀 器 ：	(PK) RB=1MHz, VB=3MHz (AV) RB=1MHz, VB=1kHz
量 測 場 地 溫 度 ：	25℃	量 測 場 地 濕 度 ：	70%RH
測 試 日 期 ：	107 年 09 月 12 日	測 試 者 ：	張家誠

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	62.0 PK	74.0	-12.0	1.11 H	133	50.2	11.8
2	5150.00	48.3 AV	54.0	-5.7	1.11 H	133	36.5	11.8
3	*5210.00	97.8 PK			1.11 H	133	57.1	40.7
4	*5210.00	88.0 AV			1.11 H	133	47.3	40.7
5	5350.00	59.3 PK	74.0	-14.7	1.11 H	133	47.4	11.9
6	5350.00	46.7 AV	54.0	-7.3	1.11 H	133	34.8	11.9
7	#10420.00	61.3 PK	68.2	-6.9	2.22 H	210	39.0	22.3
8	15630.00	-	-	-	-	-	-	-
9	20840.00	-	-	-	-	-	-	-
10	26050.00	-	-	-	-	-	-	-
11	31260.00	-	-	-	-	-	-	-
12	36470.00	-	-	-	-	-	-	-

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency (主頻).
6. " # ": The radiated frequency is out of the restricted band.
7. " - ": The emission levels were too low to be detected.
8. The blank is not available, the limit of fundamental frequency was restricted at the peak output power (see LP0002 4.7.3)

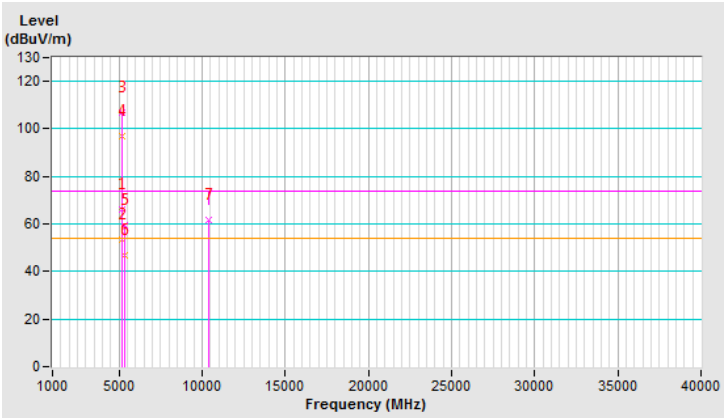


操 作 模 式 ：	發射	調 變 技 術 ：	OFDM
基 本 波 頻 率 ：	CH 42：5210 MHz	測 試 儀 器 ：	(PK) RB=1MHz, VB=3MHz (AV) RB=1MHz, VB=1kHz
量 測 場 地 溫 度 ：	25℃	量 測 場 地 濕 度 ：	70%RH
測 試 日 期 ：	107 年 09 月 12 日	測 試 者 ：	張家誠

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	66.2 PK	74.0	-7.8	1.00 V	149	54.4	11.8
2	5150.00	53.7 AV	54.0	-0.3	1.00 V	149	41.9	11.8
3	*5210.00	106.8 PK			1.00 V	149	66.1	40.7
4	*5210.00	97.0 AV			1.00 V	149	56.3	40.7
5	5350.00	59.6 PK	74.0	-14.4	1.00 V	149	47.7	11.9
6	5350.00	46.9 AV	54.0	-7.1	1.00 V	149	35.0	11.9
7	#10420.00	61.6 PK	68.2	-6.6	2.50 V	236	39.3	22.3
8	15630.00	-	-	-	-	-	-	-
9	20840.00	-	-	-	-	-	-	-
10	26050.00	-	-	-	-	-	-	-
11	31260.00	-	-	-	-	-	-	-
12	36470.00	-	-	-	-	-	-	-

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency (主頻).
6. " # ": The radiated frequency is out of the restricted band.
7. " - ": The emission levels were too low to be detected.
8. The blank is not available, the limit of fundamental frequency was restricted at the peak output power (see LP0002 4.7.3)

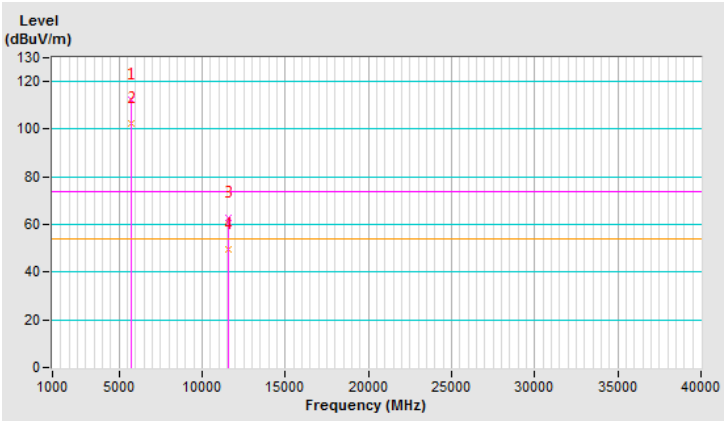


操 作 模 式 ：	發射	調 變 技 術 ：	OFDM
基 本 波 頻 率 ：	CH 155：5775 MHz	測 試 儀 器 ：	(PK) RB=1MHz, VB=3MHz (AV) RB=1MHz, VB=1kHz
量 測 場 地 溫 度 ：	25℃	量 測 場 地 濕 度 ：	70%RH
測 試 日 期 ：	107 年 09 月 14 日	測 試 者 ：	張家誠

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5775.00	112.5 PK			1.00 H	305	70.0	42.5
2	*5775.00	102.6 AV			1.00 H	305	60.1	42.5
3	11550.00	62.6 PK	74.0	-11.4	2.18 H	266	39.4	23.2
4	11550.00	49.6 AV	54.0	-4.4	2.18 H	266	26.4	23.2
5	17325.00	-	-	-	-	-	-	-
6	23100.00	-	-	-	-	-	-	-
7	28875.00	-	-	-	-	-	-	-
8	34650.00	-	-	-	-	-	-	-

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency (主頻).
6. " # ": The radiated frequency is out of the restricted band.
7. " - ": The emission levels were too low to be detected.
8. The blank is not available, the limit of fundamental frequency was restricted at the peak output power (see LP0002 4.7.3)

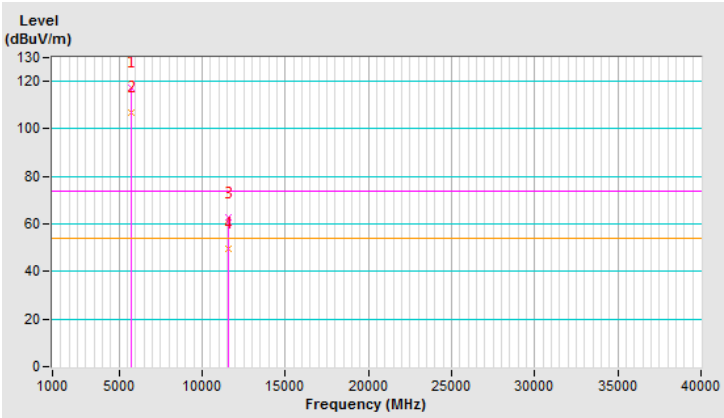


操 作 模 式 ：	發射	調 變 技 術 ：	OFDM
基 本 波 頻 率 ：	CH 155：5775 MHz	測 試 儀 器 ：	(PK) RB=1MHz, VB=3MHz (AV) RB=1MHz, VB=1kHz
量 測 場 地 溫 度 ：	25℃	量 測 場 地 濕 度 ：	70%RH
測 試 日 期 ：	107 年 09 月 14 日	測 試 者 ：	張家誠

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5775.00	117.2 PK			1.00 V	159	74.7	42.5
2	*5775.00	107.1 AV			1.00 V	159	64.6	42.5
3	11550.00	62.5 PK	74.0	-11.5	2.59 V	321	39.3	23.2
4	11550.00	49.8 AV	54.0	-4.2	2.59 V	321	26.6	23.2
5	17325.00	-	-	-	-	-	-	-
6	23100.00	-	-	-	-	-	-	-
7	28875.00	-	-	-	-	-	-	-
8	34650.00	-	-	-	-	-	-	-

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency (主頻).
6. " # ": The radiated frequency is out of the restricted band.
7. " - ": The emission levels were too low to be detected.
8. The blank is not available, the limit of fundamental frequency was restricted at the peak output power (see LP0002 4.7.3)

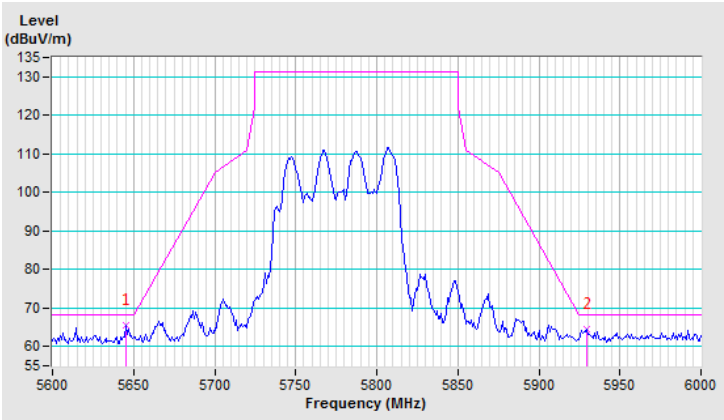


操 作 模 式 ：	發射	調 變 技 術 ：	OFDM
基 本 波 頻 率 ：	CH 155：5775 MHz (OOBE)	測 試 儀 器 ：	(PK) RB=1MHz, VB=3MHz (AV) RB=1MHz, VB=1kHz
量測場地溫度：	25℃	量 測 場 地 濕 度 ：	70%RH
測 試 日 期 ：	107 年 09 月 14 日	測 試 者 ：	張家誠

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5645.60	65.5 PK	68.2	-2.7	1.00 H	305	53.1	12.4
2	#5929.60	64.5 PK	68.2	-3.7	1.00 H	305	50.9	13.6

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " # ": The radiated frequency is out of the restricted band.

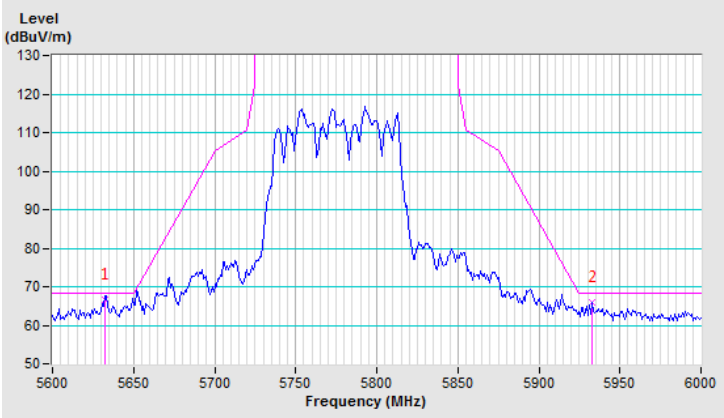


操 作 模 式 ：	發射	調 變 技 術 ：	OFDM
基 本 波 頻 率 ：	CH 155：5775 MHz (OOBE)	測 試 儀 器 ：	(PK) RB=1MHz, VB=3MHz (AV) RB=1MHz, VB=1kHz
量測場地溫度：	25℃	量 測 場 地 濕 度 ：	70%RH
測 試 日 期 ：	107 年 09 月 14 日	測 試 者 ：	張家誠

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5632.00	66.7 PK	68.2	-1.5	1.00 V	159	54.1	12.6
2	#5932.80	66.1 PK	68.2	-2.1	1.00 V	159	52.5	13.6

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " # ": The radiated frequency is out of the restricted band.



9.6.2 接收諧波

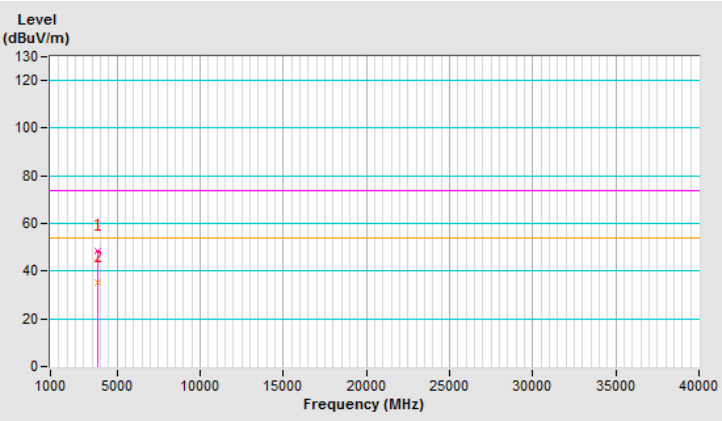
802.11a

操 作 模 式 ：	接收		
基 本 波 頻 率 ：	CH 149：5745 MHz	測 試 儀 器 ：	(PK) RB=1MHz, VB=3MHz (AV) RB=1MHz, VB=3kHz
量 測 場 地 溫 度 ：	25℃	量 測 場 地 濕 度 ：	70%RH
測 試 日 期 ：	107 年 10 月 03 日	測 試 者 ：	張家誠

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	3830.00	48.6 PK	74.0	-25.4	2.10 H	223	41.3	7.3
2	3830.00	35.2 AV	54.0	-18.8	2.10 H	223	27.9	7.3

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value

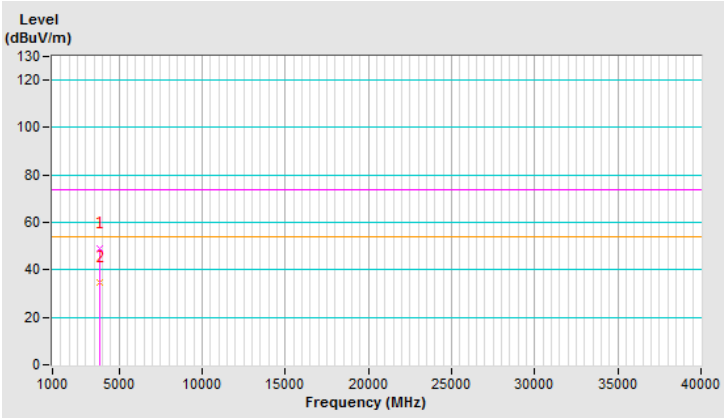


操 作 模 式 ：	接收		
基 本 波 頻 率 ：	CH 149：5745 MHz	測 試 儀 器 ：	(PK) RB=1MHz, VB=3MHz (AV) RB=1MHz, VB=3kHz
量 測 場 地 溫 度 ：	25℃	量 測 場 地 濕 度 ：	70%RH
測 試 日 期 ：	107 年 10 月 03 日	測 試 者 ：	張家誠

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	3830.00	49.2 PK	74.0	-24.8	1.10 V	124	41.9	7.3
2	3830.00	34.8 AV	54.0	-19.2	1.10 V	124	27.5	7.3

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value



9.6.3 其它不必要之訊號

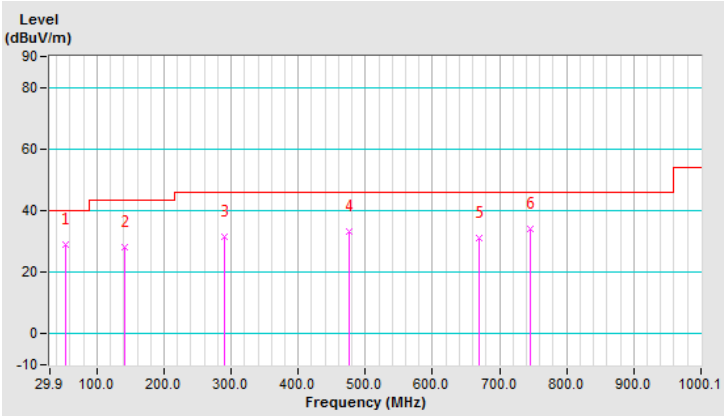
802.11a

操 作 模 式 ：	發射/接收	調 變 技 術 ：	OFDM
基 本 波 頻 率 ：	CH 149：5745 MHz	測 試 儀 器 ：	(QP) RB=VB=120kHz
量 測 場 地 溫 度 ：	25℃	量 測 場 地 濕 度 ：	70%RH
測 試 日 期 ：	108 年 10 月 03 日	測 試 者 ：	李哲銘
測 試 模 式 ：	一		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	53.18	28.9 QP	40.0	-11.1	1.01 H	102	37.6	-8.7
2	140.50	28.0 QP	43.5	-15.5	1.01 H	89	37.2	-9.2
3	289.91	31.4 QP	46.0	-14.6	1.01 H	121	39.5	-8.1
4	476.19	33.1 QP	46.0	-12.9	1.50 H	7	38.3	-5.2
5	670.23	31.2 QP	46.0	-14.8	1.01 H	297	32.3	-1.1
6	745.91	34.0 QP	46.0	-12.0	1.50 H	8	33.0	1.0

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit of frequency range 30MHz ~ 1000MHz.
4. Margin value = Emission Level – Limit value
5. The emission levels were very low against the limit of frequency range 9kHz ~ 30MHz.

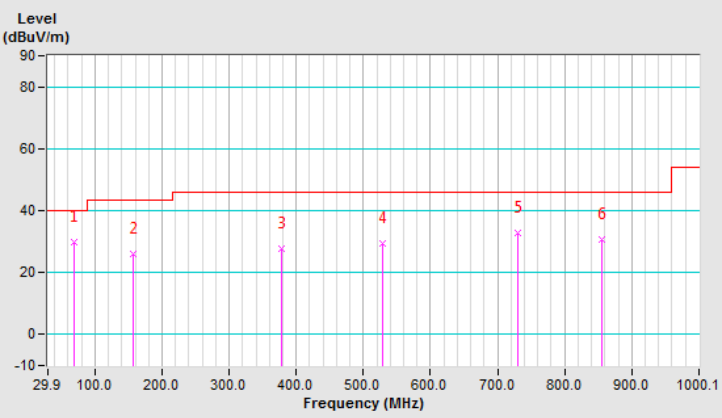


操 作 模 式 ：	發射/接收	調 變 技 術 ：	OFDM
基 本 波 頻 率 ：	CH 149：5745 MHz	測 試 儀 器 ：	(QP) RB=VB=120kHz
量 測 場 地 溫 度 ：	25℃	量 測 場 地 濕 度 ：	70%RH
測 試 日 期 ：	108 年 10 月 03 日	測 試 者 ：	李哲銘
測 試 模 式 ：	一		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	68.71	30.0 QP	40.0	-10.0	1.50 V	294	40.1	-10.1
2	157.97	26.2 QP	43.5	-17.3	1.00 V	6	34.7	-8.5
3	377.23	27.8 QP	46.0	-18.2	1.00 V	290	34.5	-6.7
4	528.58	29.6 QP	46.0	-16.4	1.00 V	35	34.0	-4.4
5	730.38	32.6 QP	46.0	-13.4	1.00 V	6	32.1	0.5
6	854.57	30.8 QP	46.0	-15.2	1.50 V	13	28.0	2.8

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit of frequency range 30MHz ~ 1000MHz.
4. Margin value = Emission Level – Limit value
5. The emission levels were very low against the limit of frequency range 9kHz ~ 30MHz.



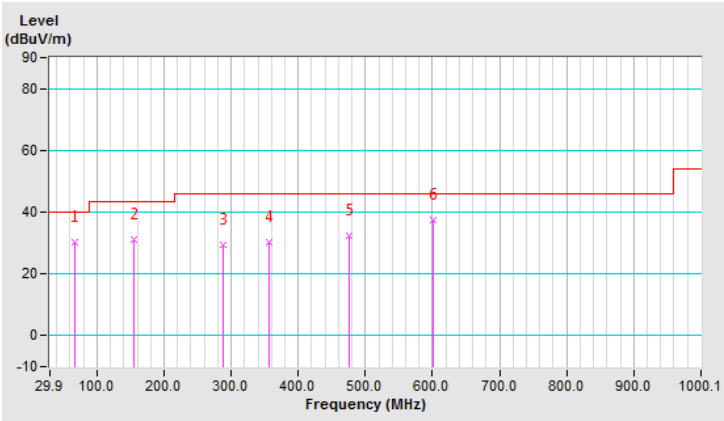
802.11a

操 作 模 式 ：	發射/接收	調 變 技 術 ：	OFDM
基 本 波 頻 率 ：	CH 149：5745 MHz	測 試 儀 器 ：	(QP) RB=VB=120kHz
量 測 場 地 溫 度 ：	25℃	量 測 場 地 濕 度 ：	70%RH
測 試 日 期 ：	108 年 10 月 03 日	測 試 者 ：	李哲銘
測 試 模 式 ：	二		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	66.77	30.3 QP	40.0	-9.7	1.00 H	118	40.2	-9.9
2	156.03	31.2 QP	43.5	-12.3	1.50 H	306	39.7	-8.5
3	287.97	29.6 QP	46.0	-16.4	1.00 H	258	37.8	-8.2
4	355.89	30.1 QP	46.0	-15.9	1.00 H	142	37.3	-7.2
5	476.19	32.2 QP	46.0	-13.8	1.50 H	209	37.4	-5.2
6	600.38	37.3 QP	46.0	-8.7	1.50 H	164	39.6	-2.3

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit of frequency range 30MHz ~ 1000MHz.
4. Margin value = Emission Level – Limit value
5. The emission levels were very low against the limit of frequency range 9kHz ~ 30MHz.

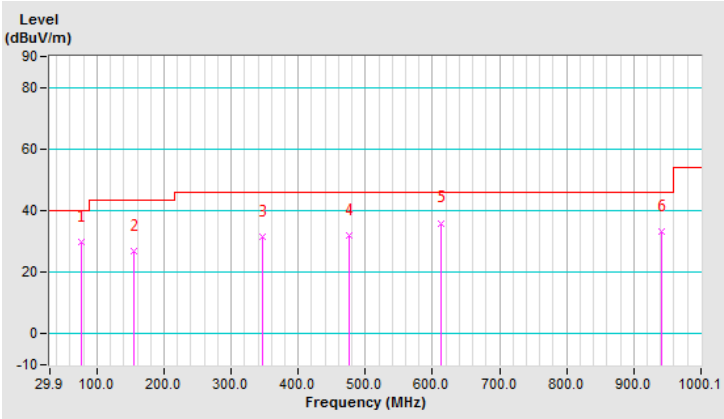


操 作 模 式 ：	發射/接收	調 變 技 術 ：	OFDM
基 本 波 頻 率 ：	CH 149：5745 MHz	測 試 儀 器 ：	(QP) RB=VB=120kHz
量 測 場 地 溫 度 ：	25℃	量 測 場 地 濕 度 ：	70%RH
測 試 日 期 ：	108 年 10 月 03 日	測 試 者 ：	李哲銘
測 試 模 式 ：	二		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	76.47	29.7 QP	40.0	-10.3	1.01 V	13	41.3	-11.6
2	156.03	26.9 QP	43.5	-16.6	1.50 V	66	35.4	-8.5
3	346.19	31.6 QP	46.0	-14.4	1.50 V	186	39.0	-7.4
4	476.19	32.0 QP	46.0	-14.0	1.50 V	34	37.2	-5.2
5	612.02	36.0 QP	46.0	-10.0	1.50 V	183	37.9	-1.9
6	941.89	33.2 QP	46.0	-12.8	1.01 V	62	28.9	4.3

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit of frequency range 30MHz ~ 1000MHz.
4. Margin value = Emission Level – Limit value
5. The emission levels were very low against the limit of frequency range 9kHz ~ 30MHz.



9.7 量測結果判定

依據測試數據結果，符合低功率射頻電機技術規範之要求。

9.8 配置照片

請參閱附件（測試設置照片）。

10 電源線傳導干擾之量測

10.1 適用標準

請見本報告3.1節第1項的規定。

10.2 量測方法

將待測物置於0.8米高的非金屬桌面，使其操作在工作狀態，待測物電源線接至電源線阻抗穩定網路上，從測試接收機記錄頻率由0.15MHz至30MHz之間之電源線傳導放射強度。

10.3 量測儀器

同 5.3 節。

10.4 測試配置

同 5.4 節。

10.5 干擾值之計算

同 5.5 節。

10.6 量測結果

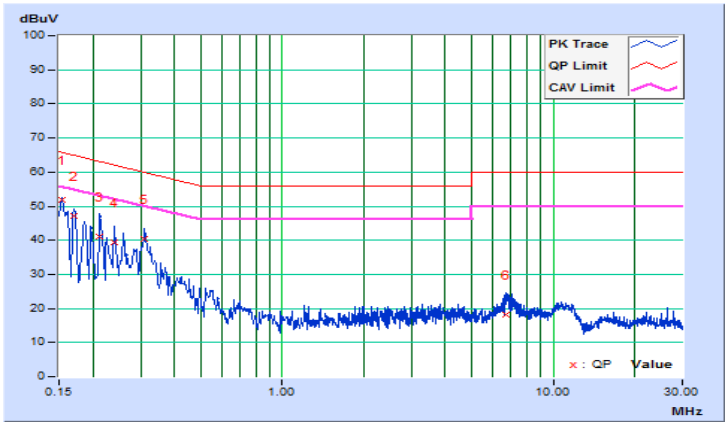
802.11a

操作模式	發射/接收	測試日期	107 年 10 月 03 日
基本波頻率	CH 149：5745 MHz	量測場地溫度	25℃
調變技術	OFDM	量測場地濕度	67%RH
測試者	張睿晉	測試模式	—

		6 dB Bandwidth: 9kHz				PHASE: LINE (L)			
輻射頻率	校正因子	儀器讀值		結果值		限制值		餘裕度	
[MHz]	[dB]	[dB (uV)]		[dB (uV)]		[dB (uV)]		[dB]	
		Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
0.15391	9.73	42.01	24.88	51.74	34.61	65.79	55.79	-14.05	-21.18
0.16967	9.73	37.37	20.08	47.10	29.81	64.98	54.98	-17.88	-25.17
0.21256	9.72	31.51	15.33	41.23	25.05	63.10	53.10	-21.87	-28.05
0.23993	9.73	29.63	14.97	39.36	24.70	62.10	52.10	-22.74	-27.40
0.31021	9.74	30.73	22.70	40.47	32.44	59.96	49.96	-19.49	-17.52
6.66406	9.83	8.49	0.47	18.32	10.30	60.00	50.00	-41.68	-39.70

Note:

1.Q.P. and AV. are abbreviations of quasi-peak and average individually.
2.The emission levels of other frequencies were very low against the limit.
3.Margin value = Emission level - Limit value
4.Correction factor = Insertion loss + Cable loss
5.Emission Level = Correction Factor + Reading Value.

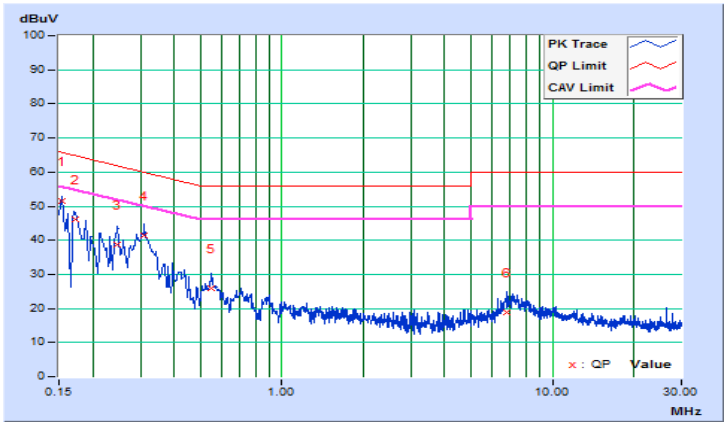


操作模式	發射/接收	測試日期	107 年 10 月 03 日
基本波頻率	CH 149：5745 MHz	量測場地溫度	25℃
調變技術	OFDM	量測場地濕度	67%RH
測試者	張睿晉	測試模式	一

		6 dB Bandwidth: 9kHz				PHASE: NEUTRAL (N)			
輻射頻率	校正因子	儀器讀值		結果值		限制值		餘裕度	
[MHz]	[dB]	[dB (uV)]		[dB (uV)]		[dB (uV)]		[dB]	
		Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
0.15391	9.72	41.74	24.31	51.46	34.03	65.79	55.79	-14.33	-21.76
0.17346	9.72	36.52	19.82	46.24	29.54	64.79	54.79	-18.55	-25.25
0.24775	9.73	28.90	15.89	38.63	25.62	61.83	51.83	-23.20	-26.21
0.31031	9.74	31.79	24.42	41.53	34.16	59.96	49.96	-18.43	-15.80
0.54882	9.74	16.34	10.16	26.08	19.90	56.00	46.00	-29.92	-26.10
6.78527	9.86	8.84	0.65	18.70	10.51	60.00	50.00	-41.30	-39.49

Note:

1.Q.P. and AV. are abbreviations of quasi-peak and average individually.
2.The emission levels of other frequencies were very low against the limit.
3.Margin value = Emission level - Limit value
4.Correction factor = Insertion loss + Cable loss
5.Emission Level = Correction Factor + Reading Value.

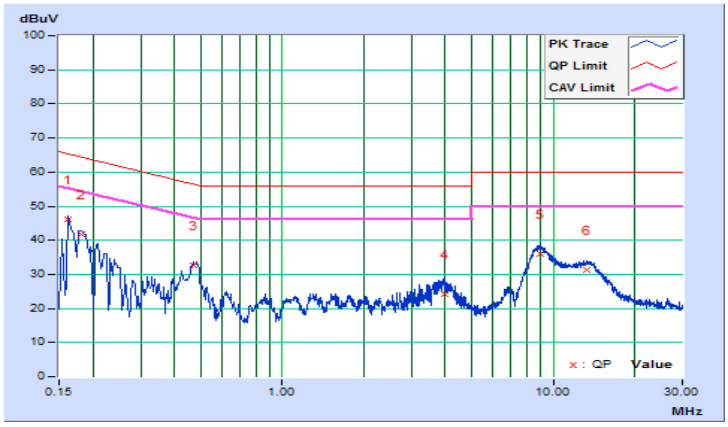


操作模式	發射/接收	測試日期	107 年 10 月 03 日
基本波頻率	CH 149：5745 MHz	量測場地溫度	25℃
調變技術	OFDM	量測場地濕度	67%RH
測試者	張睿晉	測試模式	二

		6 dB Bandwidth: 9kHz				PHASE: LINE (L)			
輻射頻率	校正因子	儀器讀值		結果值		限制值		餘裕度	
[MHz]	[dB]	[dB (uV)]		[dB (uV)]		[dB (uV)]		[dB]	
		Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
0.16181	9.73	36.38	20.44	46.11	30.17	65.37	55.37	-19.26	-25.20
0.18075	9.72	31.91	16.71	41.63	26.43	64.45	54.45	-22.82	-28.02
0.47039	9.74	22.98	13.84	32.72	23.58	56.51	46.51	-23.79	-22.93
3.98962	9.79	14.51	3.68	24.30	13.47	56.00	46.00	-31.70	-32.53
8.94359	9.86	26.27	20.08	36.13	29.94	60.00	50.00	-23.87	-20.06
13.29151	9.91	21.39	14.59	31.30	24.50	60.00	50.00	-28.70	-25.50

Note:

1.Q.P. and AV. are abbreviations of quasi-peak and average individually.
2.The emission levels of other frequencies were very low against the limit.
3.Margin value = Emission level - Limit value
4.Correction factor = Insertion loss + Cable loss
5.Emission Level = Correction Factor + Reading Value.

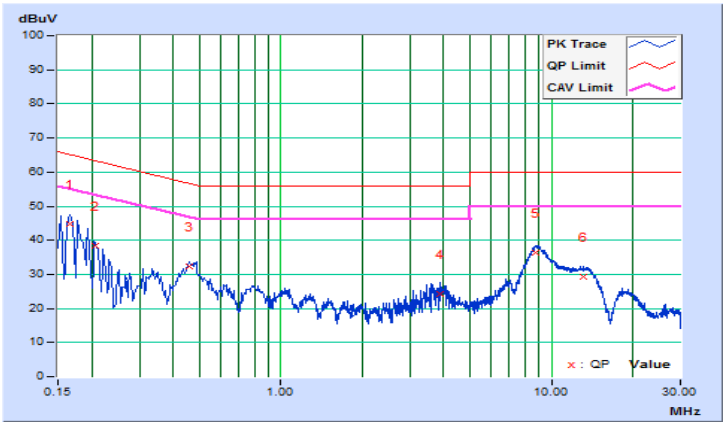


操作模式	發射/接收	測試日期	107 年 10 月 03 日
基本波頻率	CH 149：5745 MHz	量測場地溫度	25℃
調變技術	OFDM	量測場地濕度	67%RH
測試者	張睿晉	測試模式	二

		6 dB Bandwidth: 9kHz				PHASE: NEUTRAL (N)			
輻射頻率	校正因子	儀器讀值		結果值		限制值		餘裕度	
[MHz]	[dB]	[dB (uV)]		[dB (uV)]		[dB (uV)]		[dB]	
		Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
0.16569	9.72	35.06	18.41	44.78	28.13	65.17	55.17	-20.39	-27.04
0.20511	9.73	28.55	14.65	38.28	24.38	63.40	53.40	-25.12	-29.02
0.45937	9.75	22.43	17.98	32.18	27.73	56.70	46.70	-24.52	-18.97
3.88014	9.81	14.45	4.02	24.26	13.83	56.00	46.00	-31.74	-32.17
8.71693	9.89	26.35	20.09	36.24	29.98	60.00	50.00	-23.76	-20.02
13.21722	9.97	19.43	12.75	29.40	22.72	60.00	50.00	-30.60	-27.28

Note:

1.Q.P. and AV. are abbreviations of quasi-peak and average individually.
2.The emission levels of other frequencies were very low against the limit.
3.Margin value = Emission level - Limit value
4.Correction factor = Insertion loss + Cable loss
5.Emission Level = Correction Factor + Reading Value.



10.7 量測結果判定

依據測試數據結果，符合低功率射頻電機技術規範之要求。

10.8 配置照片

請參閱附件（測試設置照片）。

11 峰值傳導輸出功率量測及發射頻寬之要求

11.1 適用標準

待測物操作頻帶	適用標準
☒ 5.15 GHz~5.25 GHz	請見本報告 3.1 節第 6 項(II)及 4 項(II)的規定
☐ 5.25 GHz~5.35 GHz	請見本報告 3.1 節第 6 項(III)及 4 項(III)的規定
☐ 5.470 GHz~5.725 GHz	請見本報告 3.1 節第 6 項(III)及 4 項(III)的規定
☒ 5.725 GHz~5.850 GHz	請見本報告 3.1 節第 6 項(IV)及 4 項(IV)的規定

11.2 量測方法

輸出峰值功率量測方法:
a) 將待測物輸出經由衰減器接到功率計上。
b) 設定待測物處於連續發射狀態。
c) 計算其輸出功率峰值。

發射頻寬量測方法:
a) 將待測物輸出經由衰減器接到頻譜分析儀上。
b) 設定待測物處於連續發射狀態。
c) 最大輸出功率峰值減 26dB 的最大頻率範圍。

11.3 量測儀器

峰值傳導輸出功率量測儀器:同7.3節。
發射頻寬之量測儀器: 同6.3節。

11.4 測試配置

峰值傳導輸出功率測試配置:同7.4節。
發射頻寬之測試配置: 同6.4節。

11.5 量測結果

操作模式	發射	測試日期	107 年 09 月 05 日
量測場地溫度	25℃	量測場地濕度	60%RH
測試者	蔡仲陽		

Power Output:

For U-NII-1 Band:

CDD Mode

802.11a

Channel	Frequency (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
36	5180	22.50	22.71	364.466	25.62	30	Pass
40	5200	26.16	26.69	**879.707**	29.44	30	Pass
48	5240	25.29	25.45	688.817	28.38	30	Pass

802.11ac (VHT20)

Channel	Frequency (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
36	5180	22.49	22.78	367.090	25.65	30	Pass
40	5200	26.18	26.53	864.734	29.37	30	Pass
48	5240	25.21	25.47	684.265	28.35	30	Pass

802.11ac (VHT40)

Channel	Frequency (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
38	5190	20.82	21.18	252.001	24.01	30	Pass
46	5230	24.52	24.80	585.134	27.67	30	Pass

802.11ac (VHT80)

Channel	Frequency (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
42	5210	20.76	20.99	244.727	23.89	30	Pass

Beamforming_NSS1 Mode

802.11ac (VHT20)

Channel	Frequency (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
36	5180	22.49	22.78	367.090	25.65	30	Pass
40	5200	26.18	26.53	**864.734**	29.37	30	Pass
48	5240	25.21	25.47	684.265	28.35	30	Pass

Note: Directional gain = 4.18dBi < 6dBi, so the power limit is not reduced.

802.11ac (VHT40)

Channel	Frequency (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
38	5190	20.82	21.18	252.001	24.01	30	Pass
46	5230	24.75	25.10	622.132	27.94	30	Pass

Note: Directional gain = 4.18dBi < 6dBi, so the power limit is not reduced.

802.11ac (VHT80)

Channel	Frequency (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
42	5210	20.76	20.99	244.727	23.89	30	Pass

Note: Directional gain = 4.18dBi < 6dBi, so the power limit is not reduced.

For U-NII-3 Band:

CDD Mode

802.11a

Channel	Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
149	5745	23.65	23.35	23.74	23.71	**919.566**	29.64	30	Pass
157	5785	23.26	23.37	23.35	23.33	860.656	29.35	30	Pass
165	5825	23.47	23.38	23.41	23.20	868.312	29.39	30	Pass

802.11ac (VHT20)

Channel	Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
149	5745	23.45	23.14	23.55	23.41	873.116	29.41	30	Pass
157	5785	23.44	23.27	23.48	23.22	865.862	29.37	30	Pass
165	5825	23.66	23.22	23.53	23.12	872.708	29.41	30	Pass

802.11ac (VHT40)

Channel	Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
151	5755	23.30	23.37	23.54	23.33	872.288	29.41	30	Pass
159	5795	23.47	23.45	23.56	23.37	887.896	29.48	30	Pass

802.11ac (VHT80)

Channel	Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
155	5775	23.55	23.37	23.49	23.26	878.927	29.44	30	Pass

Beamforming_NSS1 Mode

802.11ac (VHT20)

Channel	Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
149	5745	21.53	21.61	22.23	21.70	602.130	27.80	28.57	Pass
157	5785	21.72	21.77	21.91	21.80	**605.503**	27.82	28.57	Pass
165	5825	21.65	21.60	21.91	21.59	590.213	27.71	28.57	Pass

Note: Directional gain = 7.43dBi > 6dBi, so the power limit shall be reduced to 30-(7.43-6) = 28.57dBm.

802.11ac (VHT40)

Channel	Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
151	5755	21.63	21.64	21.96	21.73	597.399	27.76	28.57	Pass
159	5795	21.69	21.66	22.00	21.55	595.504	27.75	28.57	Pass

Note: Directional gain = 7.43dBi > 6dBi, so the power limit shall be reduced to 30-(7.43-6) = 28.57dBm.

802.11ac (VHT80)

Channel	Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
155	5775	21.78	21.64	22.07	21.57	601.156	27.79	28.57	Pass

Note: Directional gain = 7.43dBi > 6dBi, so the power limit shall be reduced to 30-(7.43-6) = 28.57dBm.

Beamforming_NSS2 Mode

802.11ac (VHT20)

Channel	Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
149	5745	23.45	23.14	23.55	23.41	873.116	29.41	30	Pass
157	5785	23.44	23.27	23.48	23.22	865.862	29.37	30	Pass
165	5825	23.66	23.22	23.53	23.12	872.708	29.41	30	Pass

Note: Directional gain = 4.86dBi < 6dBi, so the power limit no need to reduced.

802.11ac (VHT40)

Channel	Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
151	5755	23.30	23.37	23.54	23.33	872.288	29.41	30	Pass
159	5795	23.47	23.45	23.56	23.37	**887.896**	29.48	30	Pass

Note: Directional gain = 4.86dBi < 6dBi, so the power limit no need to reduced.

802.11ac (VHT80)

Channel	Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
155	5775	23.55	23.37	23.49	23.26	878.927	29.44	30	Pass

Note: Directional gain = 4.86dBi < 6dBi, so the power limit no need to reduced.

26dB Bandwidth:

CDD Mode

802.11a

Channel	Frequency (MHz)	26dBc Bandwidth (MHz)	
		Chain 0	Chain 1
36	5180	20.04	20.18
40	5200	35.15	34.63
48	5240	35.22	36.88

802.11ac (VHT20)

Channel	Frequency (MHz)	26dBc Bandwidth (MHz)	
		Chain 0	Chain 1
36	5180	20.58	29.88
40	5200	34.19	45.38
48	5240	36.45	42.06

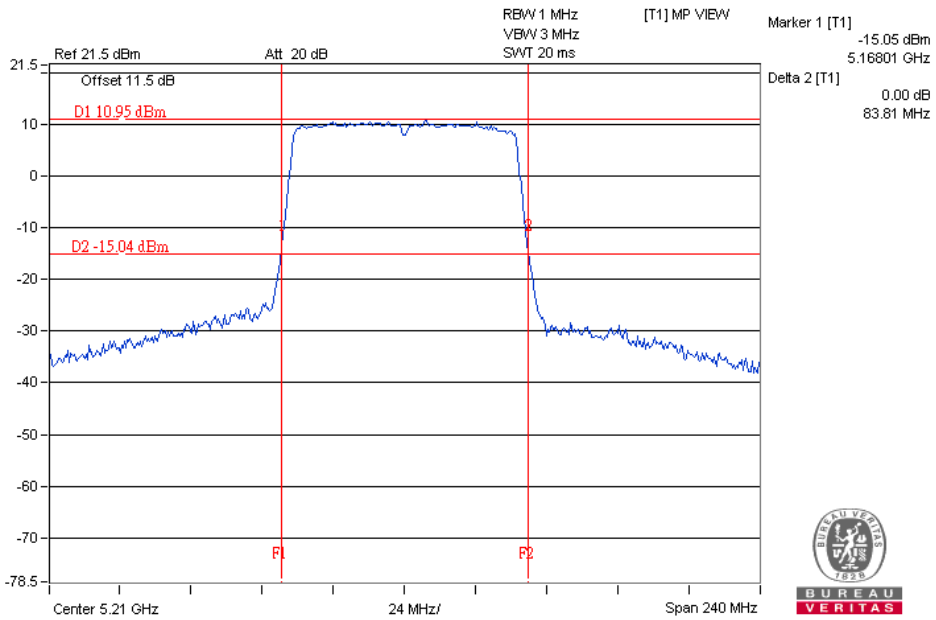
802.11ac (VHT40)

Channel	Frequency (MHz)	26dBc Bandwidth (MHz)	
		Chain 0	Chain 1
38	5190	40.80	41.01
46	5230	75.00	84.72

802.11ac (VHT80)

Channel	Frequency (MHz)	26dBc Bandwidth (MHz)	
		Chain 0	Chain 1
42	5210	83.81	83.79

**此測試圖僅放測試結果最差的頻道。



Beamforming_NSS1 Mode

802.11ac (VHT20)

Channel	Frequency (MHz)	26dBc Bandwidth (MHz)	
		Chain 0	Chain 1
36	5180	20.85	20.73
40	5200	42.77	41.69
48	5240	33.34	33.07

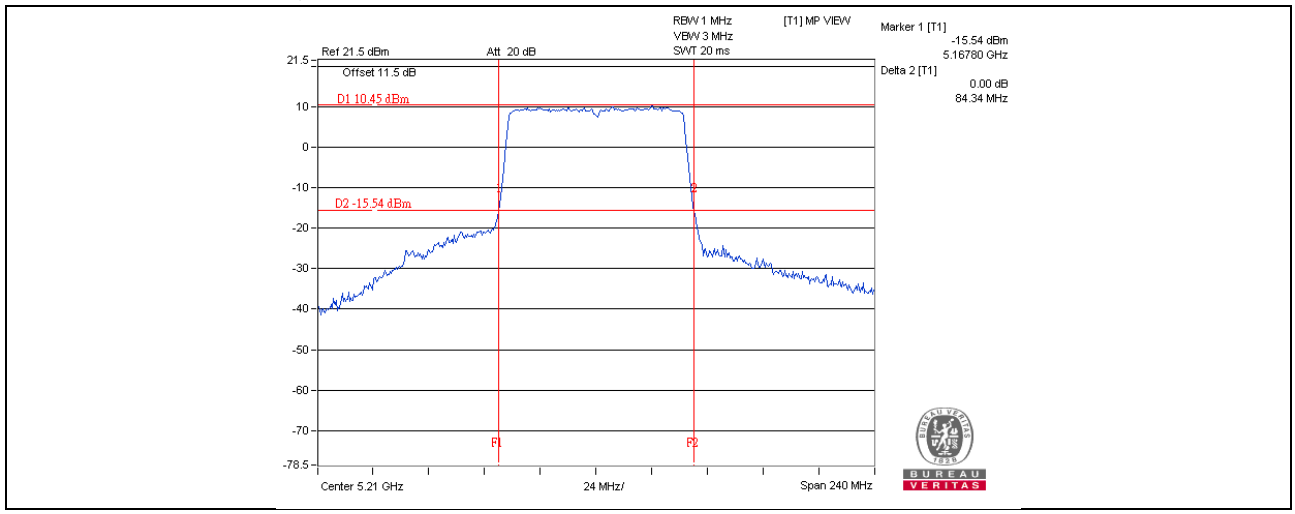
802.11ac (VHT40)

Channel	Frequency (MHz)	26dBc Bandwidth (MHz)	
		Chain 0	Chain 1
38	5190	41.05	40.71
46	5230	71.78	68.02

802.11ac (VHT80)

Channel	Frequency (MHz)	26dBc Bandwidth (MHz)	
		Chain 0	Chain 1
42	5210	84.34	84.17

**此測試圖僅放測試結果最差的頻道。



11.6 量測結果判定

依據測試數據結果，符合低功率射頻電機技術規範之要求。

12 功率頻譜密度之量測

12.1 適用標準

待測物操作頻帶	適用標準
☒ 5.15 GHz~5.25 GHz	請見本報告 3.1 節第 7 項(II)及 4 項(II)的規定
☐ 5.25 GHz~5.35 GHz	請見本報告 3.1 節第 7 項(III)及 4 項(III)的規定
☐ 5.470 GHz~5.725 GHz	請見本報告 3.1 節第 7 項(III)及 4 項(III)的規定
☒ 5.725 GHz~5.850 GHz	請見本報告 3.1 節第 7 項(IV)及 4 項(IV)的規定

12.2 量測方法

For 5180 ~ 5240MHz:
Duty cycle of test signal is ≥ 98%
Using method SA-1
1) Set span to encompass the entire emission bandwidth (EBW) of the signal.
2) Set RBW = 30 kHz, Set VBW ≥ 1 MHz, Detector = RMS
3) Set Channel power measure = 1MHz
4) Sweep time = auto, trigger set to “free run”.
5) Trace average at least 100 traces in power averaging mode.
6) Record the max value

Duty cycle of test signal is < 98%
Using method SA-2
1) Set span to encompass the entire emission bandwidth (EBW) of the signal.
2) Set RBW = 30 kHz, Set VBW ≥ 1 MHz, Detector = RMS
3) Set Channel power measure = 1MHz
4) Sweep time = auto, trigger set to “free run”.
5) Trace average at least 100 traces in power averaging mode.
6) Record the max value and add 10 log (1/duty cycle)

For 5745 ~ 5825MHz:
1) Set span to encompass the entire emission bandwidth (EBW) of the signal.
2) Set RBW = 500 kHz, Set VBW ≥ 3 RBW, Detector = RMS
3) Sweep time = auto, trigger set to “free run”.
4) Trace average at least 100 traces in power averaging mode.
5) Record the max value and add 10 log (1/duty cycle)
6) Scale the observed power level to an equivalent value in 500 kHz by adjusting (reducing) the measured power by a bandwidth correction factor (BWCF) where BWCF = 10log(500 kHz/300kHz)

12.3 量測儀器

同 8.3 節。

12.4 測試配置

同 8.4 節。

12.5 量測結果

操作模式	發射	測試日期	107 年 09 月 05 日
量測場地溫度	25℃	量測場地濕度	60%RH
測試者	蔡仲陽		

5.150 GHz~5.250 GHz

CDD Mode

802.11a

Chan.	Freq. (MHz)	PSD (dBm)		Total PSD w/o duty factor (dBm)	Duty factor	Total PSD with duty factor (dBm)	Max. Limit (dBm)	Pass / Fail
		Chain 0	Chain 1					
36	5180	8.63	8.64	11.65	0.18	11.83	17.00	Pass
40	5200	11.03	11.12	14.09	0.18	14.27	17.00	Pass
48	5240	11.07	11.36	14.23	0.18	14.41	17.00	Pass

Note:
1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain = 4.18dBi < 6dBi, so the limit no need to reduced.
3. Refer to section 2.1 for duty cycle spectrum plot.

802.11ac (VHT20)

Chan.	Freq. (MHz)	PSD (dBm)		Total PSD (dBm)	Max. Limit (dBm)	Pass / Fail
		Chain 0	Chain 1			
36	5180	8.21	8.40	11.32	17.00	Pass
40	5200	10.78	10.64	13.72	17.00	Pass
48	5240	10.92	11.20	14.07	17.00	Pass

Note:
1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain = 4.18dBi < 6dBi, so the limit no need to reduced.

802.11ac (VHT40)

Chan.	Freq. (MHz)	PSD (dBm)		Total PSD w/o duty factor (dBm)	Duty factor	Total PSD with duty factor (dBm)	Max. Limit (dBm)	Pass / Fail
		Chain 0	Chain 1					
38	5190	3.78	3.83	6.81	0.16	6.97	17.00	Pass
46	5230	7.67	7.98	10.84	0.16	11.00	17.00	Pass

Note:
1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain = 4.18dBi < 6dBi, so the limit no need to reduced.
3. Refer to section 2.1 for duty cycle spectrum plot.

802.11ac (VHT80)

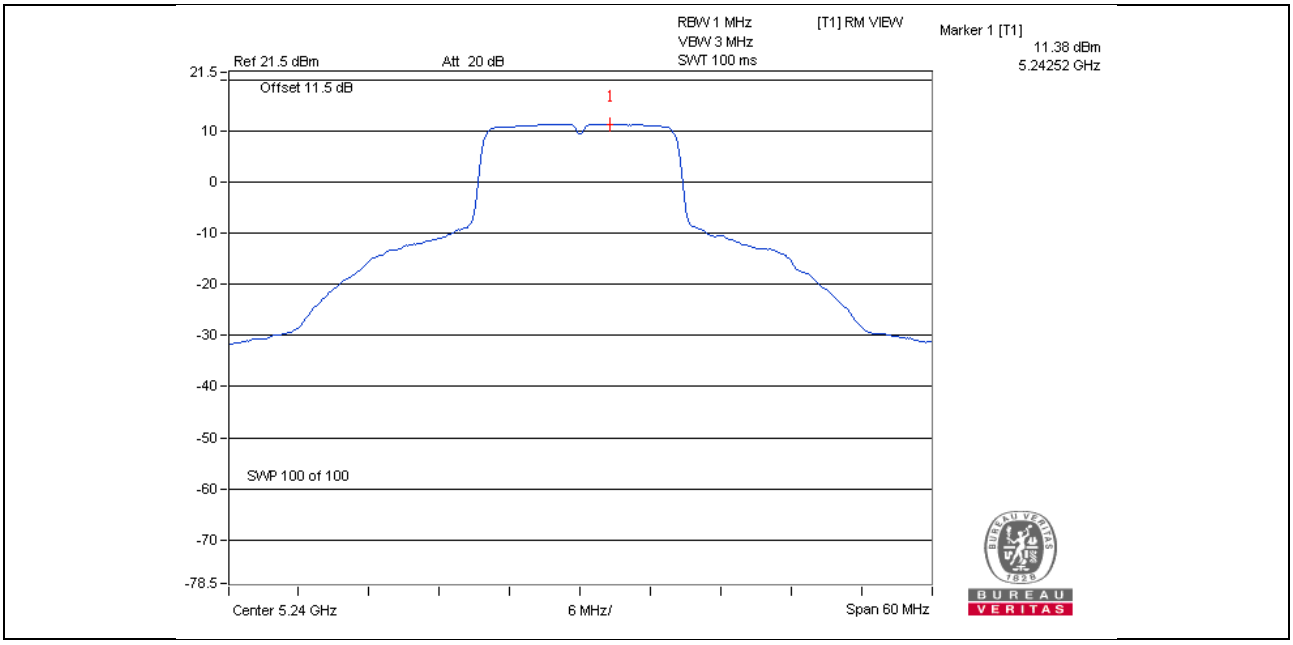
Chan.	Freq. (MHz)	PSD (dBm)		Total PSD w/o duty factor (dBm)	Duty factor	Total PSD with duty factor (dBm)	Max. Limit (dBm)	Pass / Fail
		Chain 0	Chain 1					
42	5210	0.20	0.50	3.36	0.38	3.74	17.00	Pass

Note:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain = 4.18dBi < 6dBi, so the limit no need to reduced.
3. Refer to section 2.1 for duty cycle spectrum plot.

**此測試圖僅放測試結果最差的頻道。

802.11a / Chain 1 / CH 48



Beamforming_NSS1 Mode

802.11ac (VHT20)

Chan.	Freq. (MHz)	PSD (dBm)		Total PSD (dBm)	Max. Limit (dBm)	Pass / Fail
		Chain 0	Chain 1			
36	5180	7.90	8.42	11.18	17.00	Pass
40	5200	10.69	11.58	14.17	17.00	Pass
48	5240	10.98	10.58	13.79	17.00	Pass

Note:
1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain = 4.18dBi < 6dBi, so the limit no need to reduced.

802.11ac (VHT40)

Chan.	Freq. (MHz)	PSD (dBm)		Total PSD w/o duty factor (dBm)	Duty factor	Total PSD with duty factor (dBm)	Max. Limit (dBm)	Pass / Fail
		Chain 0	Chain 1					
38	5190	3.30	3.69	6.51	0.17	6.68	17.00	Pass
46	5230	7.69	7.12	10.42	0.17	10.59	17.00	Pass

Note:
1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain = 4.18dBi < 6dBi, so the limit no need to reduced.
3. Refer to section 2.1 for duty cycle spectrum plot.

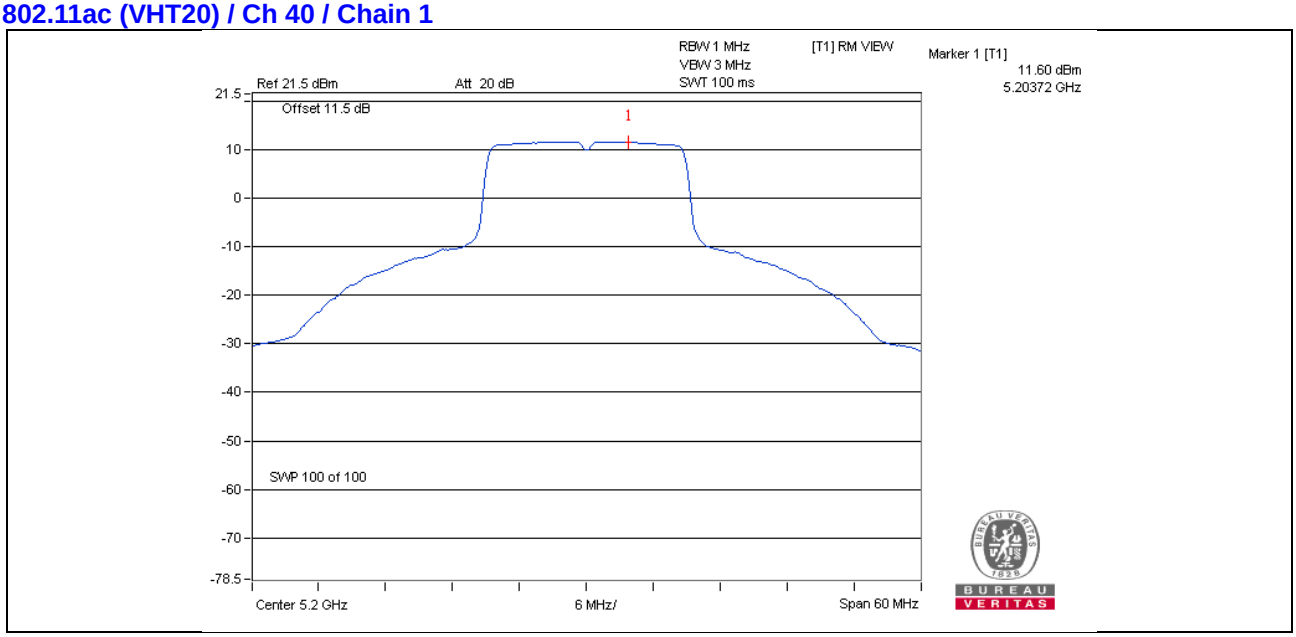
802.11ac (VHT80)

Chan.	Freq. (MHz)	PSD (dBm)		Total PSD w/o duty factor (dBm)	Duty factor	Total PSD with duty factor (dBm)	Max. Limit (dBm)	Pass / Fail
		Chain 0	Chain 1					
42	5210	-0.61	-0.11	2.66	0.38	3.04	17.00	Pass

Note:
1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain = 4.18dBi < 6dBi, so the limit no need to reduced.
3. Refer to section 2.1 for duty cycle spectrum plot.

**此測試圖僅放測試結果最差的頻道。

802.11ac (VHT20) / Ch 40 / Chain 1



5.725 GHz~5.850 GHz

CDD Mode

802.11a

TX chain	Channel	Freq. (MHz)	PSD (dBm/300kHz)	PSD (dBm/500kHz)	10 log (N=4) dB	Duty factor	Total PSD (dBm/500kHz)	Limit (dBm/500kHz)	Pass / Fail
0	149	5745	2.13	4.35	6.02	0.19	10.56	28.57	Pass
	157	5785	2.13	4.35	6.02	0.19	10.56	28.57	Pass
	165	5825	2.53	4.75	6.02	0.19	10.96	28.57	Pass
1	149	5745	2.04	4.26	6.02	0.19	10.47	28.57	Pass
	157	5785	1.64	3.86	6.02	0.19	10.07	28.57	Pass
	165	5825	2.21	4.43	6.02	0.19	10.64	28.57	Pass
2	149	5745	2.07	4.29	6.02	0.19	10.50	28.57	Pass
	157	5785	1.67	3.89	6.02	0.19	10.10	28.57	Pass
	165	5825	2.18	4.40	6.02	0.19	10.61	28.57	Pass
3	149	5745	1.83	4.05	6.02	0.19	10.26	28.57	Pass
	157	5785	1.32	3.54	6.02	0.19	9.75	28.57	Pass
	165	5825	1.68	3.90	6.02	0.19	10.11	28.57	Pass

Note:

1. Method 1 of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain = 7.43dBi > 6dBi, so the limit shall be reduced to 30-(7.43-6) = 28.57dBm.
3. Refer to section 2.1 for duty cycle spectrum plot.

802.11ac (VHT20)

TX chain	Channel	Freq. (MHz)	PSD (dBm/300kHz)	PSD (dBm/500kHz)	10 log (N=4) dB	Total PSD (dBm/500kHz)	Limit (dBm/500kHz)	Pass / Fail
0	149	5745	1.58	3.80	6.02	9.82	28.57	Pass
	157	5785	1.53	3.75	6.02	9.77	28.57	Pass
	165	5825	2.01	4.23	6.02	10.25	28.57	Pass
1	149	5745	1.52	3.74	6.02	9.76	28.57	Pass
	157	5785	1.45	3.67	6.02	9.69	28.57	Pass
	165	5825	1.80	4.02	6.02	10.04	28.57	Pass
2	149	5745	1.74	3.96	6.02	9.98	28.57	Pass
	157	5785	1.42	3.64	6.02	9.66	28.57	Pass
	165	5825	1.66	3.88	6.02	9.90	28.57	Pass
3	149	5745	1.49	3.71	6.02	9.73	28.57	Pass
	157	5785	1.07	3.29	6.02	9.31	28.57	Pass
	165	5825	1.50	3.72	6.02	9.74	28.57	Pass

Note:
1. Method 1 of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain = 7.43dBi > 6dBi, so the limit shall be reduced to 30-(7.43-6) = 28.57dBm.

802.11ac (VHT40)

TX chain	Channel	Freq. (MHz)	PSD (dBm/300kHz)	PSD (dBm/500kHz)	10 log (N=4) dB	Duty factor	Total PSD (dBm/500kHz)	Limit (dBm/500kHz)	Pass / Fail
0	151	5755	-1.48	0.74	6.02	0.13	6.89	28.57	Pass
	159	5795	-1.17	1.05	6.02	0.13	7.20	28.57	Pass
1	151	5755	-1.26	0.96	6.02	0.13	7.11	28.57	Pass
	159	5795	-0.98	1.24	6.02	0.13	7.39	28.57	Pass
2	151	5755	-1.23	0.99	6.02	0.13	7.14	28.57	Pass
	159	5795	-1.03	1.19	6.02	0.13	7.34	28.57	Pass
3	151	5755	-1.95	0.27	6.02	0.13	6.42	28.57	Pass
	159	5795	-1.57	0.65	6.02	0.13	6.80	28.57	Pass

Note:
1. Method 1 of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain = 7.43dBi > 6dBi, so the limit shall be reduced to 30-(7.43-6) = 28.57dBm.
3. Refer to section 2.1 for duty cycle spectrum plot.

802.11ac (VHT80)

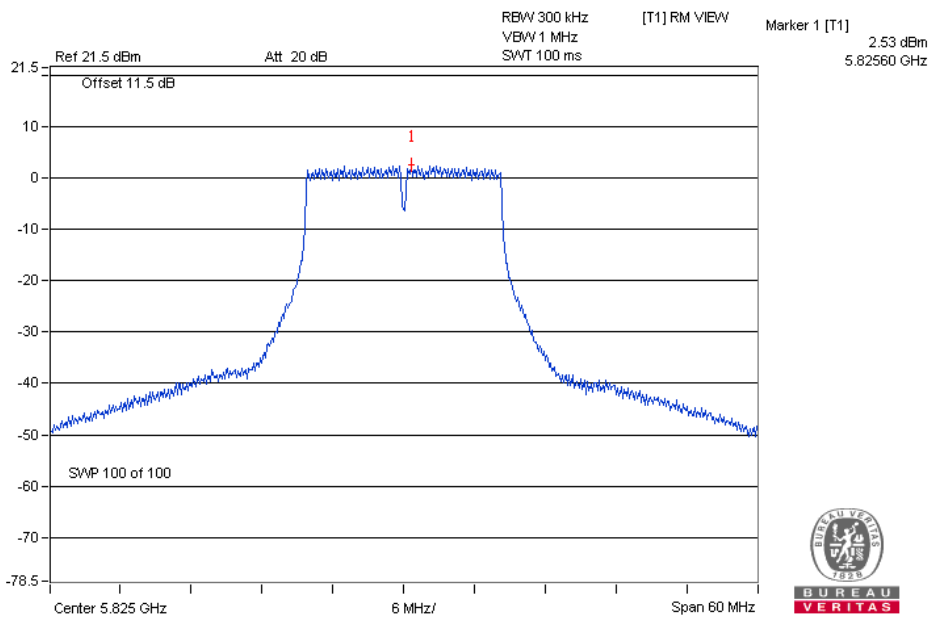
TX chain	Channel	Freq. (MHz)	PSD (dBm/300kHz)	PSD (dBm/500kHz)	10 log (N=4) dB	Duty factor	Total PSD (dBm/500kHz)	Limit (dBm/500kHz)	Pass / Fail
0	155	5775	-4.97	-2.75	6.02	0.28	3.55	28.57	Pass
1	155	5775	-4.74	-2.52	6.02	0.28	3.78	28.57	Pass
2	155	5775	-4.85	-2.63	6.02	0.28	3.67	28.57	Pass
3	155	5775	-5.73	-3.51	6.02	0.28	2.79	28.57	Pass

Note:

1. Method 1 of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain = 7.43dBi > 6dBi, so the limit shall be reduced to 30-(7.43-6) = 28.57dBm.
3. Refer to section 2.1 for duty cycle spectrum plot.

**此測試圖僅放測試結果最差的頻道。

802.11a / Ch 165 / Chain 0



Beamforming_NSS1 Mode

802.11ac (VHT20)

TX chain	Channel	Freq. (MHz)	PSD (dBm/300kHz)	PSD (dBm/500kHz)	10 log (N=4) dB	Total PSD (dBm/500kHz)	Limit (dBm/500kHz)	Pass / Fail
0	149	5745	-0.36	1.86	6.02	7.88	28.57	Pass
	157	5785	-0.29	1.93	6.02	7.95	28.57	Pass
	165	5825	-0.23	1.99	6.02	8.01	28.57	Pass
1	149	5745	-0.57	1.65	6.02	7.67	28.57	Pass
	157	5785	-0.31	1.91	6.02	7.93	28.57	Pass
	165	5825	-0.18	2.04	6.02	8.06	28.57	Pass
2	149	5745	-0.30	1.92	6.02	7.94	28.57	Pass
	157	5785	0.06	2.28	6.02	8.30	28.57	Pass
	165	5825	0.18	2.40	6.02	8.42	28.57	Pass
3	149	5745	-0.47	1.75	6.02	7.77	28.57	Pass
	157	5785	-0.24	1.98	6.02	8.00	28.57	Pass
	165	5825	0.07	2.29	6.02	8.31	28.57	Pass

Note:
1. Method 1 of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain = 7.43dBi > 6dBi, so the limit shall be reduced to 30-(7.43-6) = 28.57dBm.

802.11ac (VHT40)

TX chain	Channel	Freq. (MHz)	PSD (dBm/300kHz)	PSD (dBm/500kHz)	10 log (N=4) dB	Duty factor	Total PSD (dBm/500kHz)	Limit (dBm/500kHz)	Pass / Fail
0	151	5755	-3.37	-1.15	6.02	0.17	5.04	28.57	Pass
	159	5795	-3.37	-1.15	6.02	0.17	5.04	28.57	Pass
1	151	5755	-3.53	-1.31	6.02	0.17	4.88	28.57	Pass
	159	5795	-3.21	-0.99	6.02	0.17	5.20	28.57	Pass
2	151	5755	-3.49	-1.27	6.02	0.17	4.92	28.57	Pass
	159	5795	-3.33	-1.11	6.02	0.17	5.08	28.57	Pass
3	151	5755	-3.74	-1.52	6.02	0.17	4.67	28.57	Pass
	159	5795	-3.57	-1.35	6.02	0.17	4.84	28.57	Pass

Note:
1. Method 1 of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain = 7.43dBi > 6dBi, so the limit shall be reduced to 30-(7.43-6) = 28.57dBm.
3. Refer to section 2.1 for duty cycle spectrum plot.

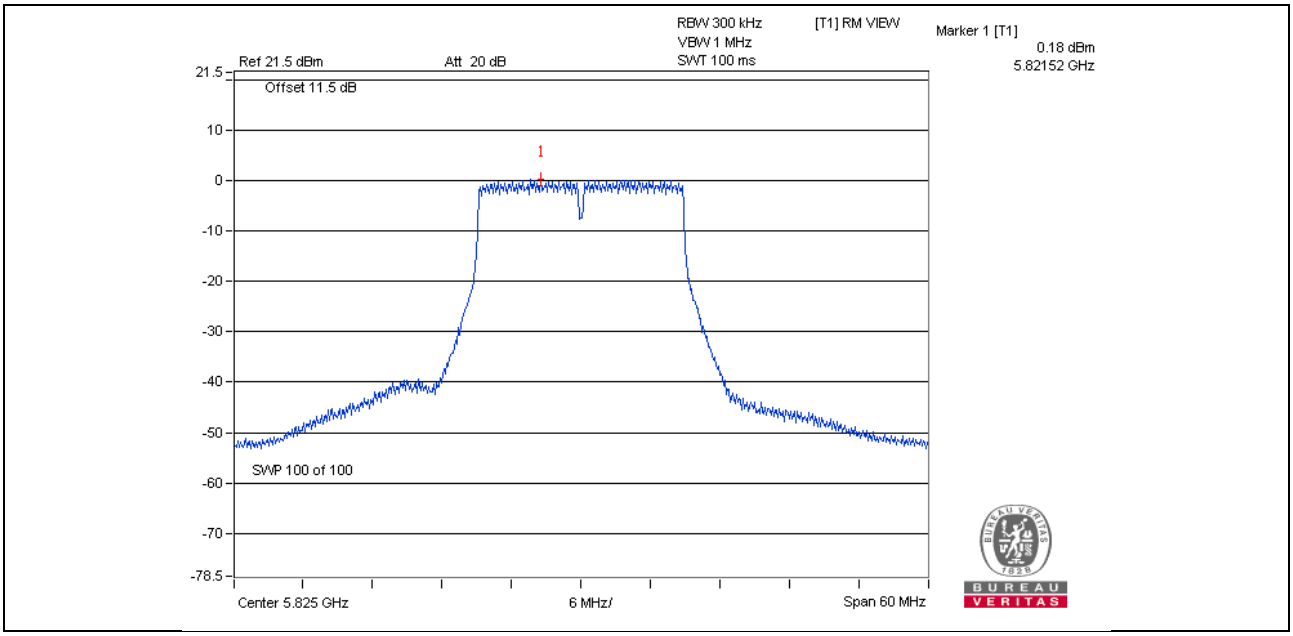
802.11ac (VHT80)

TX chain	Channel	Freq. (MHz)	PSD (dBm/300kHz)	PSD (dBm/500kHz)	10 log (N=4) dB	Duty factor	Total PSD (dBm/500kHz)	Limit (dBm/500kHz)	Pass / Fail
0	155	5775	-6.75	-4.53	6.02	0.33	1.82	28.57	Pass
1	155	5775	-6.87	-4.65	6.02	0.33	1.70	28.57	Pass
2	155	5775	-6.98	-4.76	6.02	0.33	1.59	28.57	Pass
3	155	5775	-7.14	-4.92	6.02	0.33	1.43	28.57	Pass

Note:
1. Method 1 of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain = 7.43dBi > 6dBi, so the limit shall be reduced to 30-(7.43-6) = 28.57dBm.
3. Refer to section 2.1 for duty cycle spectrum plot.

**此測試圖僅放測試結果最差的頻道。

802.11a / Ch 165 / Chain 2



Beamforming_NSS2 Mode

802.11ac (VHT20)

TX chain	Channel	Freq. (MHz)	PSD (dBm/300kHz)	PSD (dBm/500kHz)	10 log (N=4) dB	Total PSD (dBm/500kHz)	Limit (dBm/500kHz)	Pass / Fail
0	149	5745	1.09	3.31	6.02	9.33	30.00	Pass
	157	5785	1.20	3.42	6.02	9.44	30.00	Pass
	165	5825	1.27	3.49	6.02	9.51	30.00	Pass
1	149	5745	1.10	3.32	6.02	9.34	30.00	Pass
	157	5785	1.25	3.47	6.02	9.49	30.00	Pass
	165	5825	1.38	3.60	6.02	9.62	30.00	Pass
2	149	5745	1.06	3.28	6.02	9.30	30.00	Pass
	157	5785	1.33	3.55	6.02	9.57	30.00	Pass
	165	5825	1.54	3.76	6.02	9.78	30.00	Pass
3	149	5745	1.07	3.29	6.02	9.31	30.00	Pass
	157	5785	1.29	3.51	6.02	9.53	30.00	Pass
	165	5825	1.40	3.62	6.02	9.64	30.00	Pass

Note:
1. Method 1 of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain = 4.86dBi < 6dBi, so the power density limit is not reduced

802.11ac (VHT40)

TX chain	Channel	Freq. (MHz)	PSD (dBm/300kHz)	PSD (dBm/500kHz)	10 log (N=4) dB	Duty factor	Total PSD (dBm/500kHz)	Limit (dBm/500kHz)	Pass / Fail
0	151	5755	-0.95	1.27	6.02	0.15	7.44	30.00	Pass
	159	5795	-0.86	1.36	6.02	0.15	7.53	30.00	Pass
1	151	5755	-0.91	1.31	6.02	0.15	7.48	30.00	Pass
	159	5795	-0.80	1.42	6.02	0.15	7.59	30.00	Pass
2	151	5755	-1.07	1.15	6.02	0.15	7.32	30.00	Pass
	159	5795	-0.85	1.37	6.02	0.15	7.54	30.00	Pass
3	151	5755	-1.47	0.75	6.02	0.15	6.92	30.00	Pass
	159	5795	-1.14	1.08	6.02	0.15	7.25	30.00	Pass

Note:
1. Method 1 of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain = 4.86dBi < 6dBi, so the power density limit is not reduced.
3. Refer to section 2.1 for duty cycle spectrum plot.

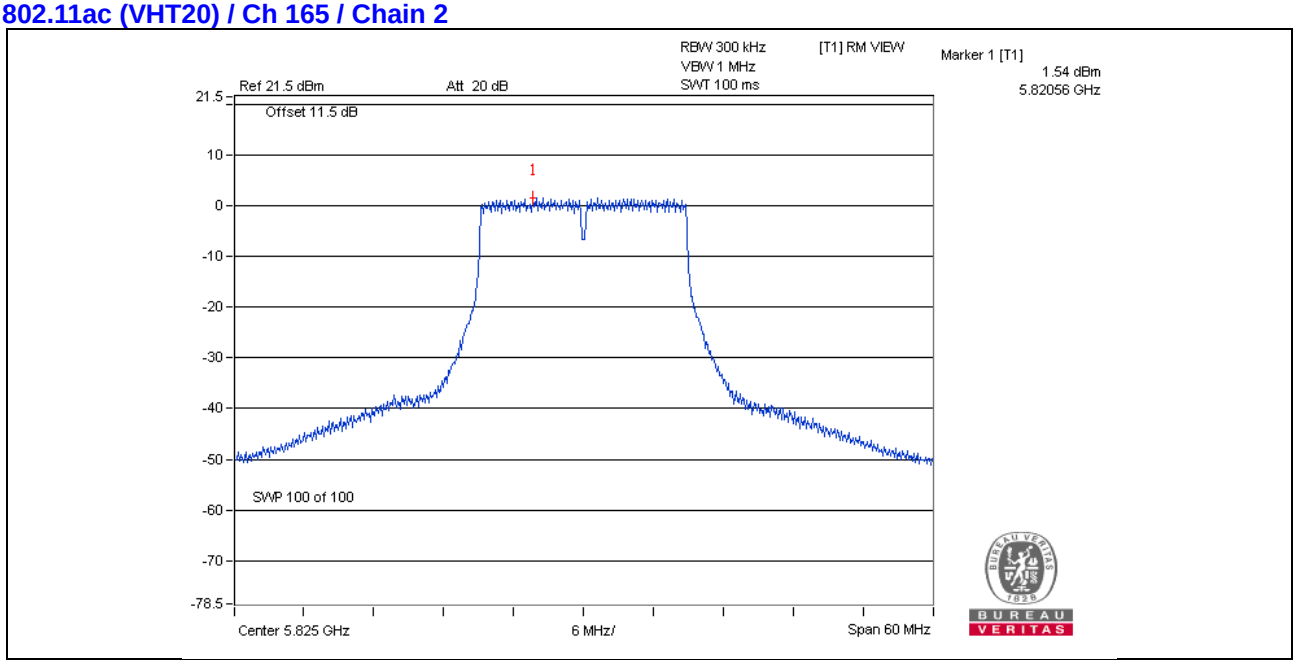
802.11ac (VHT80)

TX chain	Channel	Freq. (MHz)	PSD (dBm/300kHz)	PSD (dBm/500kHz)	10 log (N=4) dB	Duty factor	Total PSD (dBm/500kHz)	Limit (dBm/500kHz)	Pass / Fail
0	155	5775	-4.24	-2.02	6.02	0.27	4.27	30.00	Pass
1	155	5775	-4.27	-2.05	6.02	0.27	4.24	30.00	Pass
2	155	5775	-4.65	-2.43	6.02	0.27	3.86	30.00	Pass
3	155	5775	-4.80	-2.58	6.02	0.27	3.71	30.00	Pass

Note:
1. Method 1 of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain = 4.86dBi < 6dBi, so the power density limit is not reduced
3. Refer to section 2.1 for duty cycle spectrum plot.

**此測試圖僅放測試結果最差的頻道。

802.11ac (VHT20) / Ch 165 / Chain 2



12.6 量測結果判定

依據測試數據結果，符合低功率射頻電機技術規範之要求。

13 6 dB 頻寬之要求

13.1 適用標準

待測物操作頻帶	適用標準
☒ 5.725 GHz~5.850 GHz	請見本報告 3.1 節第 6 項(II)的規定

13.2 量測方法

a) 將待測物輸出經由衰減器接到頻譜分析儀上。
b) 設定待測物處於連續發射狀態。
c) 計算由最大輸出功率峰值減6dB的最大頻率範圍。

13.3 量測儀器

同 6.3 節。

13.4 測試配置

同 6.4 節。

13.5 量測結果

操作模式	發射	測試日期	107 年 09 月 05 日
量測場地溫度	25℃	量測場地濕度	60%RH
測試者	蔡仲陽		

CDD Mode

802.11a

Channel	Frequency (MHz)	6dB Bandwidth (MHz)				Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3		
149	5745	16.36	16.39	16.38	16.36	0.5	Pass
157	5785	16.38	16.40	16.38	16.37	0.5	Pass
165	5825	16.37	16.40	16.39	16.38	0.5	Pass

802.11ac (VHT20)

Channel	Frequency (MHz)	6dB Bandwidth (MHz)				Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3		
149	5745	17.56	17.63	17.63	17.21	0.5	Pass
157	5785	17.56	17.63	17.61	17.18	0.5	Pass
165	5825	17.59	17.63	17.57	17.61	0.5	Pass

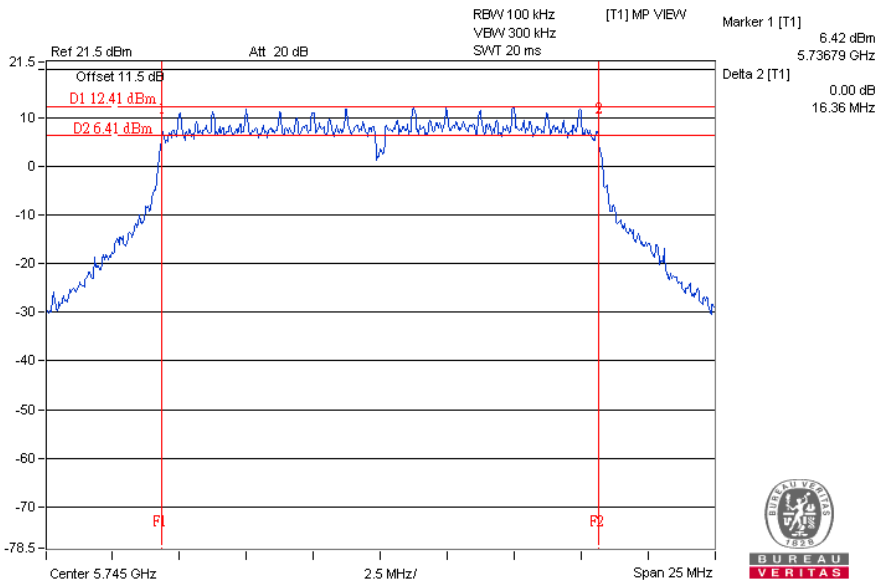
802.11ac (VHT40)

Channel	Frequency (MHz)	6dB Bandwidth (MHz)				Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3		
151	5755	35.20	35.21	35.18	35.21	0.5	Pass
159	5795	35.20	35.16	35.21	35.93	0.5	Pass

802.11ac (VHT80)

Channel	Frequency (MHz)	6dB Bandwidth (MHz)				Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3		
155	5775	75.52	74.20	75.44	75.47	0.5	Pass

**此測試圖僅放測試結果最差的頻道。



Beamforming_NSS1 Mode

802.11ac (VHT20)

Channel	Frequency (MHz)	6dB Bandwidth (MHz)				Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3		
149	5745	17.56	17.60	17.59	17.56	0.5	Pass
157	5785	17.57	17.58	17.60	17.62	0.5	Pass
165	5825	17.34	16.86	17.59	17.62	0.5	Pass

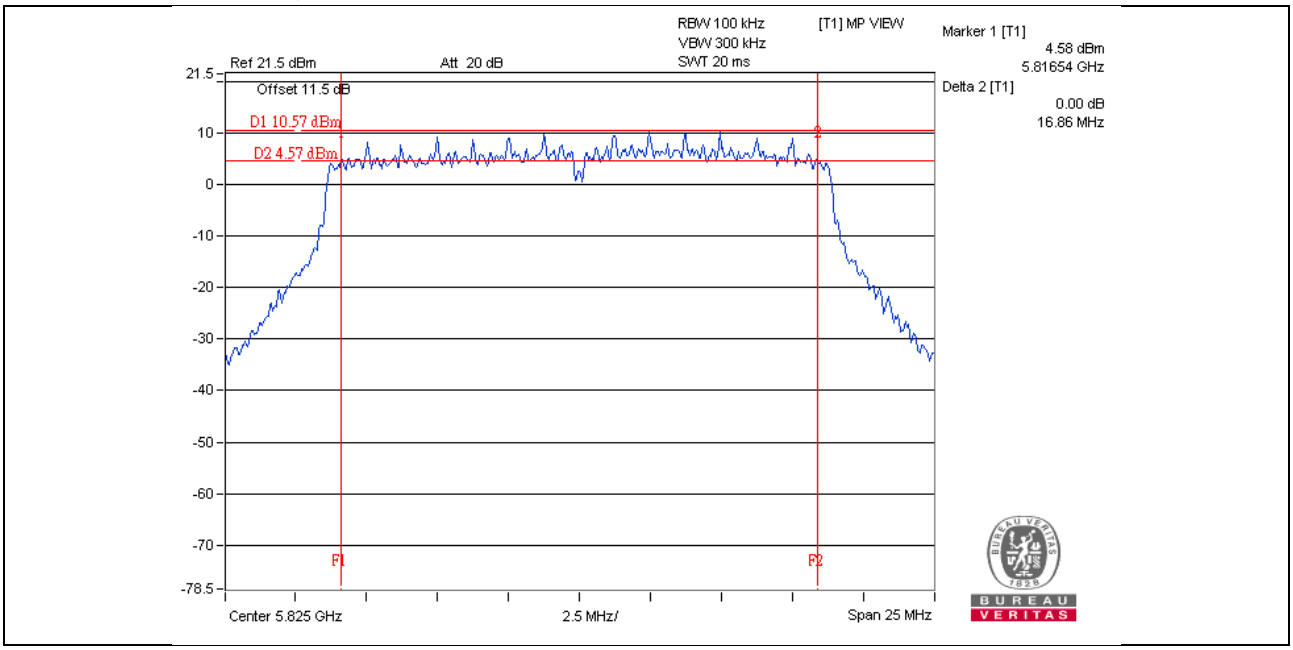
802.11ac (VHT40)

Channel	Frequency (MHz)	6dB Bandwidth (MHz)				Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3		
151	5755	35.21	35.20	35.20	35.21	0.5	Pass
159	5795	35.46	35.19	35.23	35.23	0.5	Pass

802.11ac (VHT80)

Channel	Frequency (MHz)	6dB Bandwidth (MHz)				Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3		
155	5775	76.40	75.97	76.44	76.02	0.5	Pass

**此測試圖僅放測試結果最差的頻道。



Beamforming_NSS2 Mode

802.11ac (VHT20)

Channel	Frequency (MHz)	6dB Bandwidth (MHz)				Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3		
149	5745	17.21	17.59	17.60	17.56	0.5	Pass
157	5785	17.35	17.60	17.62	17.21	0.5	Pass
165	5825	17.36	17.22	17.61	17.21	0.5	Pass

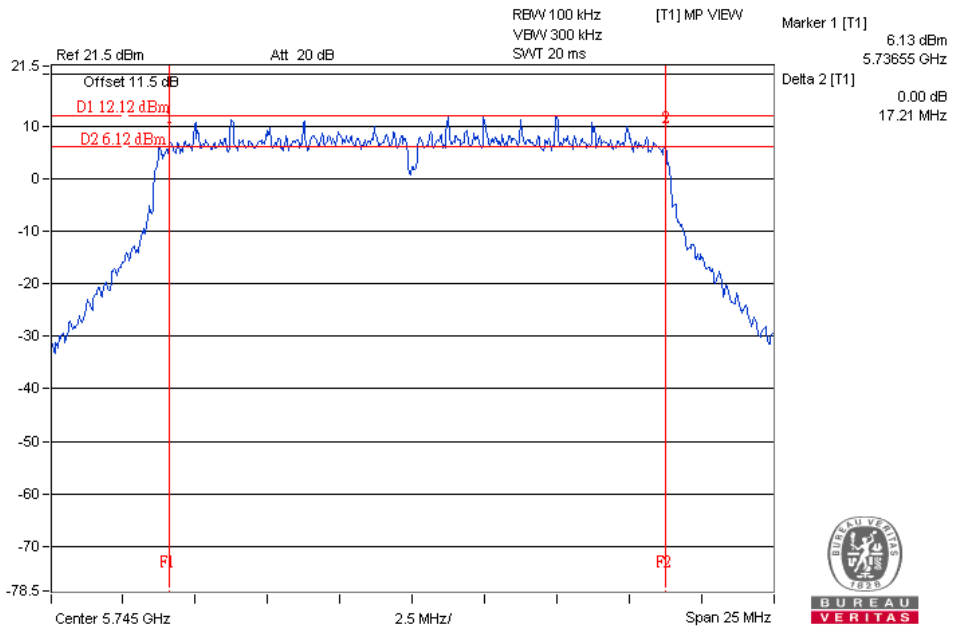
802.11ac (VHT40)

Channel	Frequency (MHz)	6dB Bandwidth (MHz)				Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3		
151	5755	35.20	35.18	35.20	35.20	0.5	Pass
159	5795	35.22	35.15	35.20	35.20	0.5	Pass

802.11ac (VHT80)

Channel	Frequency (MHz)	6dB Bandwidth (MHz)				Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3		
155	5775	75.76	76.00	75.64	75.99	0.5	Pass

**此測試圖僅放測試結果最差的頻道。



13.6 量測結果判定

依據測試數據結果，符合低功率射頻電機技術規範之要求。

14 電波暴露量之評估

14.1 適用標準

請見本報告3.1節第12項的規定。

14.2 評估方法

a) 以7.5、11.5節所測得的最大輸出功率值再加上待測物天線的增益值(Gain)帶入下面公式換算出待測物所輻射的功率密度。

b) $Pd = (Pout*G) / (4*pi*r^2)$

where

Pd = power density in mW/cm^2

Pout = output power to antenna in mW

G = gain of antenna in linear scale

pi = 3.1416

r = distance between observation point and center of the radiator in cm

14.3 評估結果

電波暴露量之評估
☐ 發射功率(含 Conducted Power 或 EIRP Power) <20mW，不需進行電波暴露量之評估
☒ 發射功率(含 Conducted Power 或 EIRP Power) >20mW，需進行電波暴露量之評估

Frequency Band (MHz)	Max Power (dBm)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm^2)	Limit (mW/cm^2)
CDD Mode					
2412-2462	29.41	2.61	25	0.203	1
5180-5240	29.44	4.18	25	0.293	1
5745-5825	29.64	7.43	25	0.649	1
Beamforming_NSS 1 Mode					
2412-2462	29.32	2.61	25	0.199	1
5180-5240	29.37	4.18	25	0.288	1
5745-5825	27.82	7.43	25	0.426	1
Beamforming_NSS 2 Mode					
5745-5825	29.48	4.86	25	0.346	1

Note:
2.4GHz: Directional gain = 2.61dBi
CDD & Beamforming_NSS 1 Mode
5GHz U-NII-1 Band: Directional gain = 4.18dBi
5GHz U-NII-3 Band: Directional gain = 7.43dBi
Beamforming_NSS 2 Mode
5GHz U-NII-3 Band: Directional gain = 4.86dBi

Conclusion:
The formula of calculated the MPE is:
CPD1 / LPD1 + CPD2 / LPD2 + ……etc. < 1
CPD = Calculation power density
LPD = Limit of power density

WLAN 2.4GHz + WLAN 5GHz (Band 4) = 0.203 + 0.649 = 0.852
WLAN 5GHz (Band 1) + WLAN 5GHz (Band 4) = 0.293 + 0.649 = 0.942

Therefore, the maximum calculations of above situations are less than the “1” limit.

15 檢測實驗室基本資料

立德國際商品試驗有限公司桃園分公司提供產業界最佳的檢測以及諮詢服務。
本公司為ISO/IEC 17025認可實驗室。

如您有任何問題或建議，請與下列實驗室聯絡：

林口 EMC / RF 實驗室 ：
Tel: 886-2-26052180
Fax: 886-2-26051924

新竹 EMC / RF 及通訊實驗室 ：
Tel: 886-3-6668565
Fax: 886-3-6668323

華亞 EMC / RF / Safety 實驗室:
Tel: 886-3-3183232
Fax: 886-3-3270892

Email:service.adt@tw.bureauveritas.com
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您也可以在我們的網站內找到各實驗室的地圖。

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