

低功率射頻電機 檢驗報告

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製造廠商	Canon Inc.
受檢設備名稱	WIRELESS FILE TRANSMITTER
廠牌	Canon
型號	DS586194
檢驗依據標準	國家通訊傳播委員會低功率射頻電機 技術規範 (LP0002)
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實驗室認可編號及範圍: 0371 (9 kHz to 325 GHz)

實驗室認可證書有效期限: 110年10月31日



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測試報告記錄

申請廠商：台灣佳能資訊股份有限公司
 製造廠商：Canon Inc.
 廠牌：Canon
 品名：WIRELESS FILE TRANSMITTER
 型號：DS586194
 檢驗依據標準：國家通訊傳播委員會低功率射頻電機技術規範(LP0002)
 規範修訂日期107年01月10日
 發射功率(電場強度)：7.48 dBm (發射功率)
 工作頻率及調變方式：5500 ~ 5700 MHz / DSSS + OFDM
 天線規格：廠牌/型號/天線增益: Canon/ canon-ant-2018-03-1/ 2.04 dBi
 廠牌/型號/天線增益: Canon/ canon-ant-2018-03-2/ 0.79 dBi

- 備註：1. 本試驗報告中是描述本實驗室以最佳的知識和能力進行試驗，我們的責任僅限於合理與謹慎的試驗，並非確保賣方之法律和/或合同的義務。
 2. 本符合性試驗係依據適當的標準及試驗樣品進行測試，本試驗報告的結果僅與測試項目有關，且僅針對受試驗之樣品負責，無法確保產品生產過程中的品質與性能要求。
 3. 非經本中心同意，檢驗報告不得摘錄複印使用。（全部複製除外）。

項次	測試項目	適用規範	量測設備	測試結果	結果判定
1	電源線傳導干擾之要求	低功率射頻電機技術規範 2.3節	請參閱4.3節	請參閱4.4節	合格
2	天線增益之要求	低功率射頻電機技術規範 4.7.8節	----	請參閱5.2節	----
3	發射頻寬之量測	低功率射頻電機技術規範 4.7.2節(1)(2)	請參閱6.3節	請參閱6.4節	----
4	最大傳導輸出功率之要求	低功率射頻電機技術規範 4.7.2節(1)(2)	請參閱7.3節	請參閱7.4節	合格
5	功率密度之要求	低功率射頻電機技術規範 4.7.2節(1)(2)	請參閱8.3節	請參閱8.4節	合格
6	混附波發射限制之要求	低功率射頻電機技術規範 4.7.3節(1)(2)(3)	請參閱9.3節	請參閱9.4節	合格
7	場強輻射之要求	低功率射頻電機技術規範 4.7.3節(4)(5)	請參閱10.3節	請參閱10.5節	合格
8	DFS之要求	低功率射頻電機技術規範 4.7.7.2節	請參閱12.3節	請參閱12.5節	合格
	以下空白				

測量實驗室負責人：

蔡百豪
108.09.09

直接主管：

黃敬珩
108.09.09

量測員：

郭世偉
108/09/09

1 一般資料

1.1 產品描述

- a) 產品型態 : WIRELESS FILE TRANSMITTER
 b) 商 標 : Canon
 c) 產品型號 : DS586194
 d) 供應電源 : DC 3.3V

備註：1. 本產品內含 WLAN 無線技術，WLAN 部份包含 DTS 與 UNII 頻帶。本報告僅記錄 UNII Band 3 (5500 至 5700 MHz) 部份，DTS 部份請見 ETC 報告編號: 19-07-MAS-008-01，UNII Band 1 (5180 MHz 至 5240 MHz) 部份請見 ETC 報告編號: 19-07-MAS-008-02，UNII Band 2 (5260 至 5320 MHz) 部份請見 ETC 報告編號: 19-07-MAS-008-03，UNII Band 4 (5725 至 5850 MHz) 部份請見 ETC 報告編號: 19-07-MAS-008-05。
 2. 本器材不具備主控運作模式動態頻率選擇與Ad-hoc功能。

1.2 產品特性

此裝置為 WIRELESS FILE TRANSMITTER，其發射頻率落於5500 至 5700 MHz頻段，採用 IEEE 802.11a/n/ac 直接序列展頻調變技術。其應用為區域網路無線傳輸。主波發射功率為 7.48 dBm，即為 5.60 mW，其無線特性列表如下：

RF chain	2T2R	
Operating Frequency	IEEE802.11a/n 20/ac20MHz: 5.5GHz~5.7GHz, 11ch IEEE 802.11n 40MHz/ac 40MHz Bnd 5.51GHz~5.67GHz, 5ch IEEE 802.11ac 80MHz 5.53GHz~5.61GHz;2ch	
Modulation	IEEE 802.11a(OFDM/DSSS) 48/54 Mbps (QAM-64) 24/36 Mbps (QAM-64) 12/18 Mbps (QPSK) 6/19 Mbps (BPSK)	IEEE 802.11n(OFDM/DSSS) QAM-64 QAM-16 QPSK BPSK
	IEEE 802.11ac(20MHz,40MHz,80MHz)(OFDM/DSSS) QAM-256, QAM-64, QAM-16, QPSK,BPSK	

1.3 測試方法之依據

本測試報告之所有項目皆依據國家通訊傳播委員會低功率射頻電機技術規範以及參考IEEE ANSI、歐盟ETSI EN與美國EIA、FCC 47 CFR PART 2、KDB及ARIB STD-T67 等有關檢驗之規定。

試驗室介紹：財團法人台灣電子檢驗中心電磁相容試驗室通過下列評鑑、認可、登錄與相互認可協議：

- ① ISO/IEC 17025: BSMI, TAF, NCC, NVLAP, ILAC MRA, UL, Compliance
- ② Filing: FCC, Industry Canada, VCCI
- ③ MRA: Australia, Hong Kong, New Zealand, Singapore, USA, Japan, Korea, China, ILAC MRA through TAF
- ④ FCC Registration Number: TW0371, TW1112
- ⑤ Industry Canada Site Registration Number: IC 2949A-2

2 適用規範

2.1 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：

頻率範圍 MHz	傳導限制值(dB μ V)	
	準峰值(Quasi-peak)	平均值(Average)
0.15 – 0.5	66-56(註)	56-46(註)
0.5 – 5	56	46
5 – 30	60	50

註:隨頻率之對數遞減

(2) 天線增益之要求

天線的規格不受國家通訊傳播委員會低功率射頻電機技術規範(2.2)節規定之限制。若使用超過 6dBi 方向增益之發射天線，則以超過 6dBi 天線方向增益的 dBi 總量，等量減少峰值發射功率以及峰值功率頻譜密度。

(3) 頻寬之量測

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(1)之規定，5.470~5.725 GHz 頻帶，在操作頻帶下之峰值發射功率不能超過 250 mW 或11分貝毫瓦(dBm) +10 log B (B是26dB 發射頻寬，單位 MHz) 之較小者。

(4) 最大傳導輸出功率與功率密度之要求

依據國家通訊傳播委員會低功率射頻電機技術規範4.7.3.2節之規定：

- (1) 5.470~5.725 GHz 頻帶，在操作頻帶下之最大傳導輸出功率應小於或等於 250 mW 或 11分貝毫瓦(dBm) +10 log B (B是26dB 發射頻寬，單位 MHz) 之較小者。
- (2) 最大功率頻譜密度在任何 1 MHz 頻帶中應小於或等於 11 dBm。
- (3) 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。

依據國家通訊傳播委員會低功率射頻電機技術規範4.7.3.4節之規定：

- (1) 最大傳導輸出功率必須使用依據均方根等效電壓校準之儀器測量於任何連傳輸之時段，測量結果須依儀器限制(如偵測器反應時間、相較於發射頻寬有限之解析頻寬能力，靈敏度等)調整得出正確之峰值測量，以符合本段落所提之發射定義。
- (2) 最大功率頻譜密度檢驗規定：
 - (A) 應將測試儀器直接連接待測物，以傳導方式執行。
 - (B) 5.15~5.25 GHz、5.25~5.35 GHz 及 5.470~5.725 GHz 頻段，測試儀器之頻寬應設定為 1 MHz 頻寬或待測物之 26 dB 發射頻寬，兩者取較小者。
 - (C) 5.725~5.850 GHz 頻段，測試儀器之頻寬應設定為 500 kHz 或待測物之 26 dB 發射頻寬，兩者取較小者。
 - (D) 解析頻寬小於 (B)或 (C)時，應以補償方式計算總功率頻譜密度。

(5) 發射限制之要求

依據國家通訊傳播委員會低功率射頻電機技術規範4.7.4.1之規定，在 5.15~5.35 GHz 及 5.470~5.725 GHz 頻帶操作的發射器：帶外發射之有效等向輻射功率 (EIRP) 不應超過 -27 dBm/MHz。

依據國家通訊傳播委員會低功率射頻電機技術規範4.7.4.3之規定，測量不必要發射時，應使用之最低解析頻寬為 1 MHz。必要時，於頻帶邊緣附近可使用小於 1 MHz 之解析頻寬，並以補償方式計算其總值。

(6) 輻射之規定

依據國家通訊傳播委員會低功率射頻電機技術規範4.7.4.5節之規定，在 1GHz 以下的不必要之發射，應符合第 2.8 節之規定，任何使用交流市電為供應電之設備亦須符合第 2.3 節之電源線傳導限制值。

依據國家通訊傳播委員會低功率射頻電機技術規範4.7.4.6節之規定，不必要發射頻率屬 2.7 規定頻段者，應符合 2.8節之規定。

落於2.7節禁用頻段之輻射干擾需符合2.8節之一般限制要求：

頻率 MHz	測試距離 m	限制值 $\mu\text{V/m}$
0.009 - 0.490(含)	300	2400/頻率(kHz)
0.490(不含) - 1.705(含)	30	24000/頻率(kHz)
1.705(不含) - 30(不含)	30	30
30(含) - 88(含)	3	100
88(不含) - 216(含)	3	150
216(不含) - 960(含)	3	200
960(不含)以上	3	500

(7) 發射功率控制(TPC)及動態頻率選擇(DFS)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4.7.7.1節之規定。

發射功率控制(TPC):操作於5.25 GHz~5.35 GHz 與 5470 GHz~5725 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 6dB 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。

依據國家通訊傳播委員會低功率射頻電機技術規範4.7.7.2節之規定。

動態頻率選擇(DFS):操作於 5.25GHz~5.35GHz 與 5470 GHz~5725 GHz 頻段之設備應具備動態頻率選電達偵測功能並啟動之,以完整偵測使用帶內之雷達訊號。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 200mW~1W 之設備,其最低動態頻率選擇的偵測門檻值為 -64 dBm。
- (B) 最大 EIRP 低於 200mW,且功率頻譜密度小於 10dBm/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 200mW,且功率頻譜密度大於或等於 10dBm/MHz 之設備,其最低動態頻率選擇的偵測門檻值為 -64 dBm。
- (D) 此偵測門檻為 1 微秒內之平均接收功率,並以 0dBi 天線為參考基準。頻道初始設定得由系統隨機選取或使用使用者手動選取。

(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,設備才可以開始用該頻道。

(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) 不可佔用時間:某一頻道已被頻道可用性檢查或"服務中"監觀顯示含有雷達系統,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。

2.2 限制使用之頻帶

MHz	MHz
0.090 - 0.110	1660.0 – 1785.0
0.490 - 0.510	1805.0 – 1880.0
2.172 - 2.198	1855.0 – 1900.0
3.013 - 3.033	1905.0 – 1985.0
4.115 - 4.198	2010.0 – 2025.0
5.670 - 5.690	2110.0 – 2170.0
6.200 - 6.300	2200.0 – 2300.0
8.230 - 8.400	2310.0 - 2390.0
12.265 - 12.600	2483.5 - 2900.0
13.340 - 13.430	3260.0 – 3267.0
14.965 - 15.020	3332.0 – 3339.0
16.700 - 16.755	3345.8 – 3358.0
19.965 - 20.020	3500.0 - 4400.0
25.500 - 25.700	4500.0 – 5250.0
37.475 - 38.275	5350.0 - 5460.0
73.500 - 75.400	7250.0 - 7750.0
108.00 - 138.00	8025.0 - 8500.0
149.90 - 150.05	9000.0 - 9200.0
156.70 - 156.90	9300.0 - 9500.0
162.01 – 167.17	10600 - 12700
167.72 – 173.20	13250 - 13400
240.00 – 285.00	14470 - 14500
322.00 – 335.40	15350 - 16200
399.90 – 410.00	17700 - 21400
485.00 – 510.00	22010 - 23120
608.00 – 614.00	23600 - 24000
703.00 – 748.00	31200 - 31800
758.00 – 803.00	36430 - 36500
825.00 – 915.00	38600 以上
930.00 – 1240.0	
1300.0 – 1427.0	
1435.0 – 1626.5	

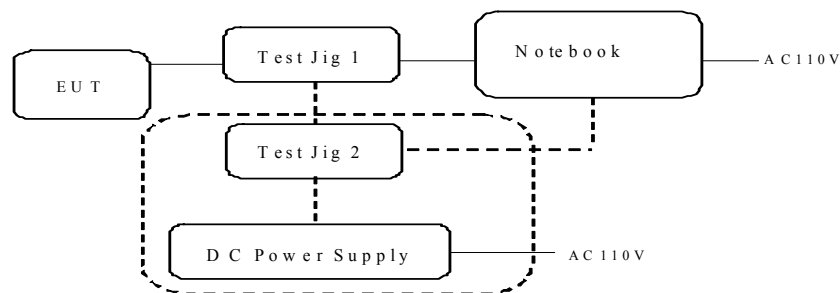
3 受測裝置之系統說明

3.1 受測裝置

裝置名稱	製造者/代理者	型 號	纜線說明
* WIRELESS FILE TRANSMITTER	Canon Inc.	DS586194	----
Test Jig 1	N/A	N/A	非隔離信號線 0.7m * 1
Notebook	HP	6570b	非隔離電源線 2.8m * 1/Adapter 非隔離信號線 1.0m * 1 (USB) (Buffalo/BCVAMNSM210BK)
Test Jig 2	N/A	N/A	非隔離電源線 1.8m * 1 非隔離信號線 1.5m * 1(USB) 非隔離信號線 1.m * 1(USB)
DC Power Supply	GW	GPS-3030D	非隔離電源線 1.8m*1

註: 1.標記“*”表欲申請之受測物。

2.測試配置：



註: Test Jig 2及DC Power Supply在完成測試模式設定之後，從以上測試配置中移除來進行最終測試，以降低雜訊之干擾。

3 測試模式:

3.1 IEEE 802.11a, 802.11n HT20, IEEE 802.11ac (20MHz) mode:

測試頻道如下:

Chnnel	Frequency (MHz)
Low = 100	5500
Middle = 120	5580
High = 140	5700

IEEE 802.11a mode: 6 Mbps data rate is the worse case for full testing.

IEEE 802.11n HT20 mode: MCS0 6.5 Mbps, data rate is the worse case for full testing.

IEEE 802.11ac (20MHz) mode: MCS0 6.5 Mbps, data rate is the worse case for full testing.

3.2 IEEE 802.11n HT40, IEEE 802.11ac (40MHz) mode:

測試頻道如下:

Chnnel	Frequency (MHz)
Low = 102	5510
Middle = 110	5590
High = 134	5670

IEEE 802.11n HT40 mode: MCS0 13.5 Mbps, data rate is the worse case for full testing.

IEEE 802.11ac (40MHz) mode: MCS0 13.5 Mbps, data rate is the worse case for full testing.

3.3 IEEE 802.11ac (80MHz) mode:

測試頻道如下:

Chnnel	Frequency (MHz)
106	5530
122	5610

IEEE 802.11ac (80MHz) mode: MCS0 29.3 Mbps, data rate is the worse case for full testing.

4. 軟體設定：

	Power Setting
IEEE 802.11a	3
	3
	3
IEEE 802.11n HT20	3
	3
	3
IEEE 802.11n HT40	3
	3
	3
IEEE 802.11ac (20MHz)	3
	3
	3
IEEE 802.11ac (40MHz)	3
	3
	3
IEEE 802.11ac (80MHz)	3
	3

3.2 測試模式說明

3.2.1 調變方式及模式

Test Mode	Modulation	Note
A	IEEE 802.11a	-
B	IEEE 802.11n HT20	-
C	IEEE 802.11n HT40	-
D	IEEE 802.11ac (20MHz)	-
E	IEEE 802.11ac (40MHz)	-
F	IEEE 802.11ac (80MHz)	-

Mode	IEEE 802.11a/n20/ac (20MHz)	IEEE 802.11n40/ac (40MHz)	IEEE 802.11ac (80MHz)
Test Chnnel	Frequency (MHz)	Frequency (MHz)	Frequency (MHz)
Chnnel Low (L)	5500	5510	5530
Chnnel Mid (M)	5580	5590	-
Chnnel High (H)	5700	5670	5610

3.2.2 測試項目及模式

Item	測試項目	測試模式	測試頻率(MHz)
1	電源線傳導干擾之量測	F (註1)	M (註2)
2	發射頻寬之量測	A, B, C, F (註3)	L, M, H
3	峰值輸出功率之量測	A, B, C, D, E, F(註4)	L, M, H
4	功率密度之量測	A, B, C, F (註3、4)	L, M, H
5	混附波發射限制之量測	A, B, C, F (註3)	L, M, H
6	場強輻射之量測(主諧波)	A, B, C, F (註3)	L, M, H
6.1	場強輻射之量測(1GHz以下)	F (註1)	M (註2)
6.2	場強輻射之量測(1GHz以上)	A, B, C, F (註3)	L, M, H

註: 1. 以上調變方式預掃時無差異，擇一作最終測試並記錄之。

2. 高，中，低頻道預掃時無差異，擇中間頻道作最終測試並記錄之。

3. Test Mode B 與 Test Mode D / Test Mode C 與 Test Mode E 使用相同調變技術及頻寬，故以最大傳導輸出功率較大者 Test Mode B 及 Test Mode C 為 Worse case，作最終測試並記錄之。

4. 本產品內含雙天線，802.11n模式下有MIMO之功能，故對兩隻天線分別進行測試再加總並記錄之。802.11b/g無MIMO之功能，以峰值輸出功率較大者做為Worse Case，進行其他項目之量測。

5. 進行 DFS 測試時，產品操作於 Normal mode，並對所有的調變及頻道進行測試，確認所有調變及頻道均合格後，擇一做最終測試並記錄之。

6. 量測場強輻射時，此產品分別要以三軸向(X、Y、Z)放置，並分別測試以找出最大輻射電場強度軸向，其中以 Y 軸模式較差，並記錄其讀值與軸向放置。

3.2.3 測試場地

項次	測 試 場 地
1	RE02 — EMC B1 — N2 第一大樓地下二樓 3m 半電波暗室(N2)
2	CE04 — 10M 2F 第三大樓二樓傳導測試室(10m 大樓)
3	RF — Cond01 第一大樓地下一樓直量測試區
4	RF — Cond02 第一大樓地下二樓直量測試區

3.2.4 Duty cycle

File: 19-07-MAS-008_5-2a_Ant1

Dat #21a

Date: 2019/7/31

Temperature: 25 °C

Time: 下午 04:19:57

Humidity: 56 %



Condition: UNII-Band1-2-Bandedge

EUT: Wireless File Transmitter

Model: DS586194

Test Mode: TX_UNII Band1_Ant1

Note: Operator: Phillip

NCC_LP0002_802.11a Duty-1 (Duty cycle >98%)

RF Conducted

Sweep Time: 100ms

RBW: 1000 KHz

Att.: 15dB

VBW: 3000 KHz

File: 19-07-MAS-008_5-2n20_Ant1

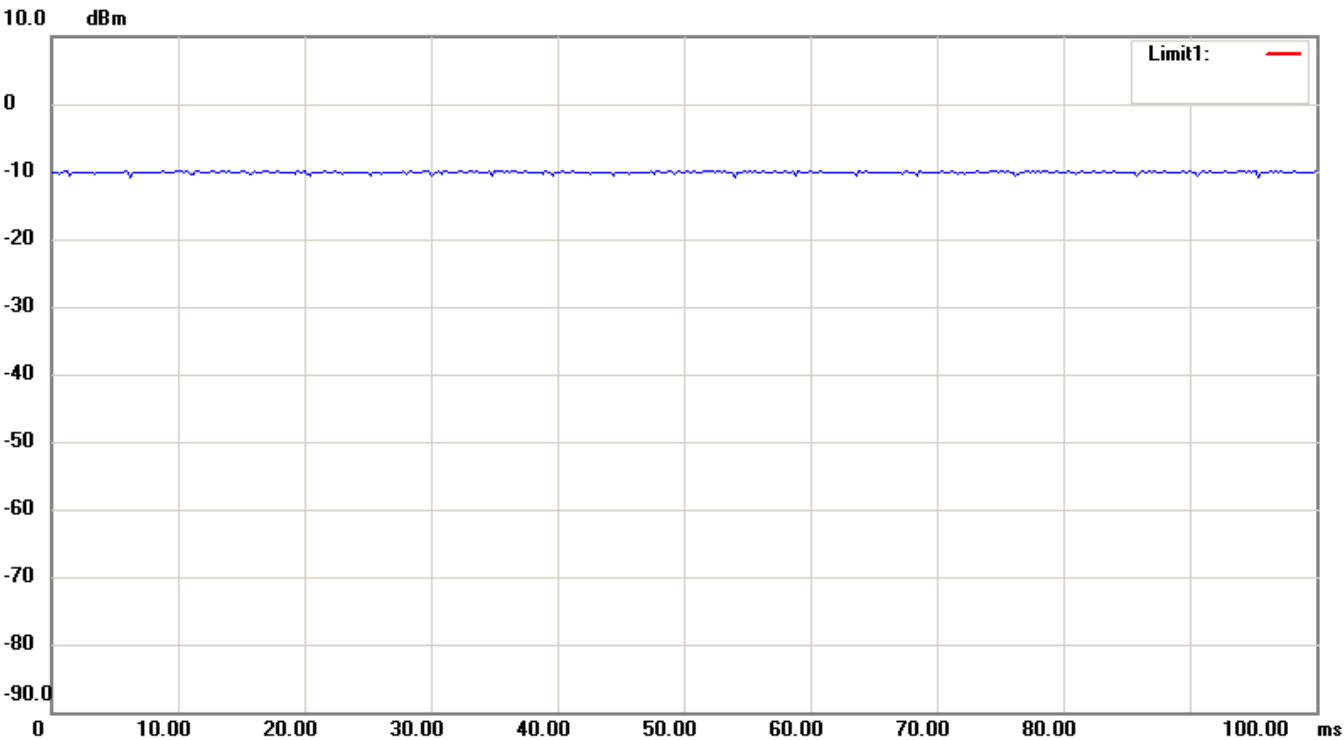
Dat #21a

Date: 2019/7/31

Temperature: 25 °C

Time: 下午 05:01:24

Humidity: 56 %



Condition:	UNII-Band1-2-Bandedge	RF Conducted
EUT:	Wireless File Transmitter	Sweep Time: 100ms Att.: 15dB
Model:	DS586194	RBW: 1000 KHz VBW: 3000 KHz
Test Mode:	TX_UNII Band1_Ant1	
Note:	Operator: Phillip	
	NCC_LP0002_802.11n20 Duty-1(Duty Cycle > 98%)	

File: 19-07-MAS-008_5-2n40_Ant1

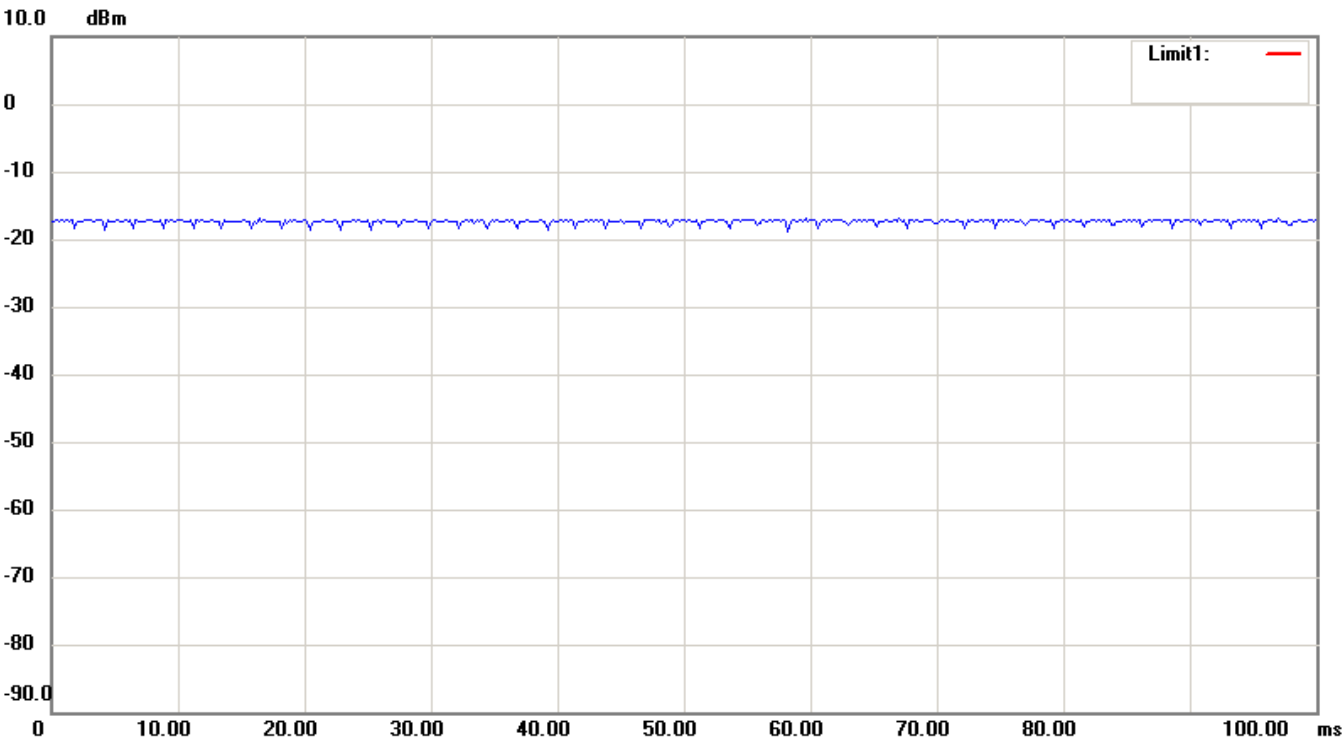
Dat #15a

Date: 2019/7/31

Temperature: 25 °C

Time: 下午 06:33:55

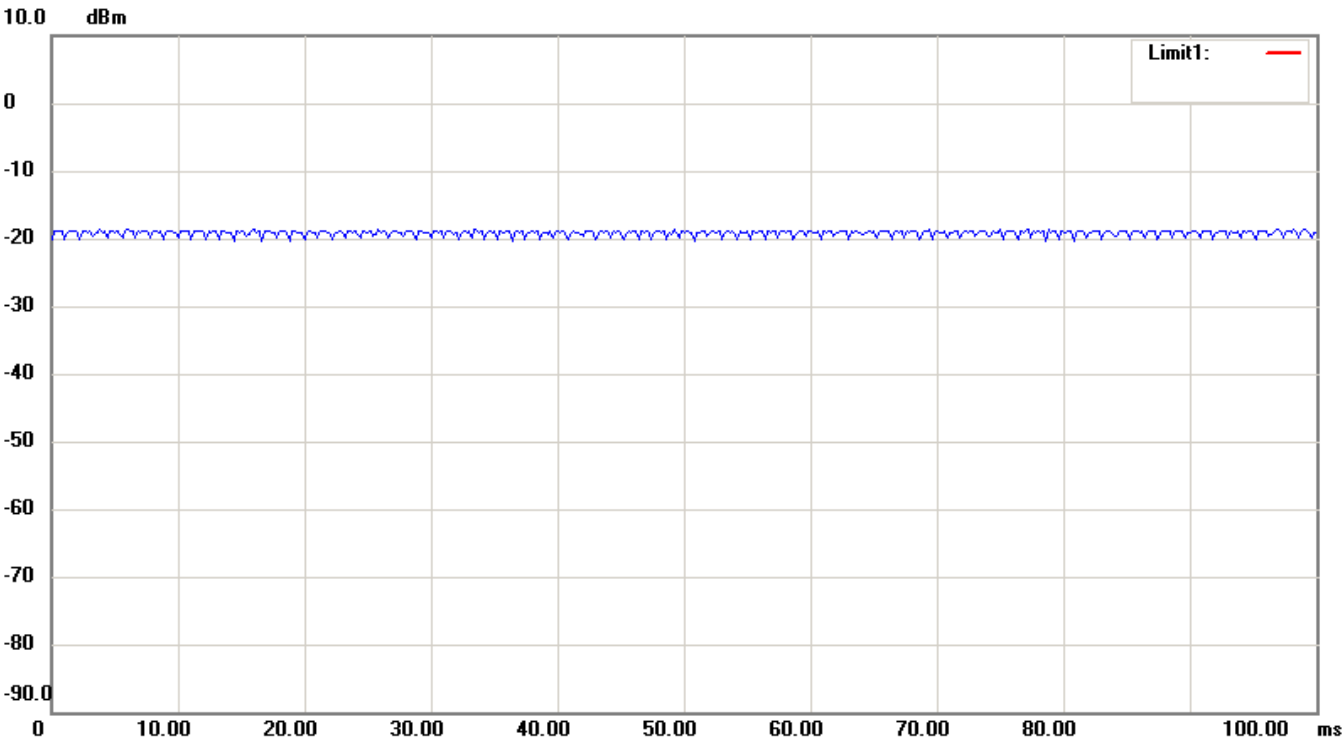
Humidity: 56 %



Condition:	UNII-Band1-2-Bandedge	RF Conducted
EUT:	Wireless File Transmitter	Sweep Time: 100ms Att.: 15dB
Model:	DS586194	RBW: 1000 KHz VBW: 3000 KHz
Test Mode:	TX_UNII Band1_Ant1	
Note:	Operator: Phillip	
	NCC_LP0002_802.11n40 Duty-1(Duty Cycle >98%)	

File: 19-07-MAS-008_5-3ac80_Ant1 Dat #10 Date 2019/8/1 Temperature: 25 °C
a :

Site RF-Cond01 Humidity: 56 %
:



Condition:	UNII-Band1-2-Bandedge	RF Conducted
EUT:	Wireless File Transmitter	Sweep Time: 100ms Att.: 15dB
Model:	DS586194	RBW: 1000 KHz VBW: 3000 KHz
Test Mode:	TX_UNII Band2_Ant1	Operator:
Note:	Operator: Phillip (測試場地: RF-Cond01) NCC_LP0002_802.11ac80 Duty-1(Duty Cycle>98%)	

4 電源線傳導干擾之量測

4.1 適用標準

依據國家通訊傳播委員會低功率射頻電機技術規範2.3節之要求。

4.2 測試方法

將待測物置於0.8米高的非金屬桌面，使其在工作狀態，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 之間之電源線傳導干擾強度。

4.3 量測電源線傳導干擾之儀器

儀器名稱	廠 牌	型 號
EMI Test Receiver	R&S	ESCI
V-LISN	R&S	ENV216

測試軟體: EZ-EMC (Ver. ETC-03A1)

4.4 傳導干擾之量測結果

測試工程師: 羅世勇

File: 19-07-MAS-008

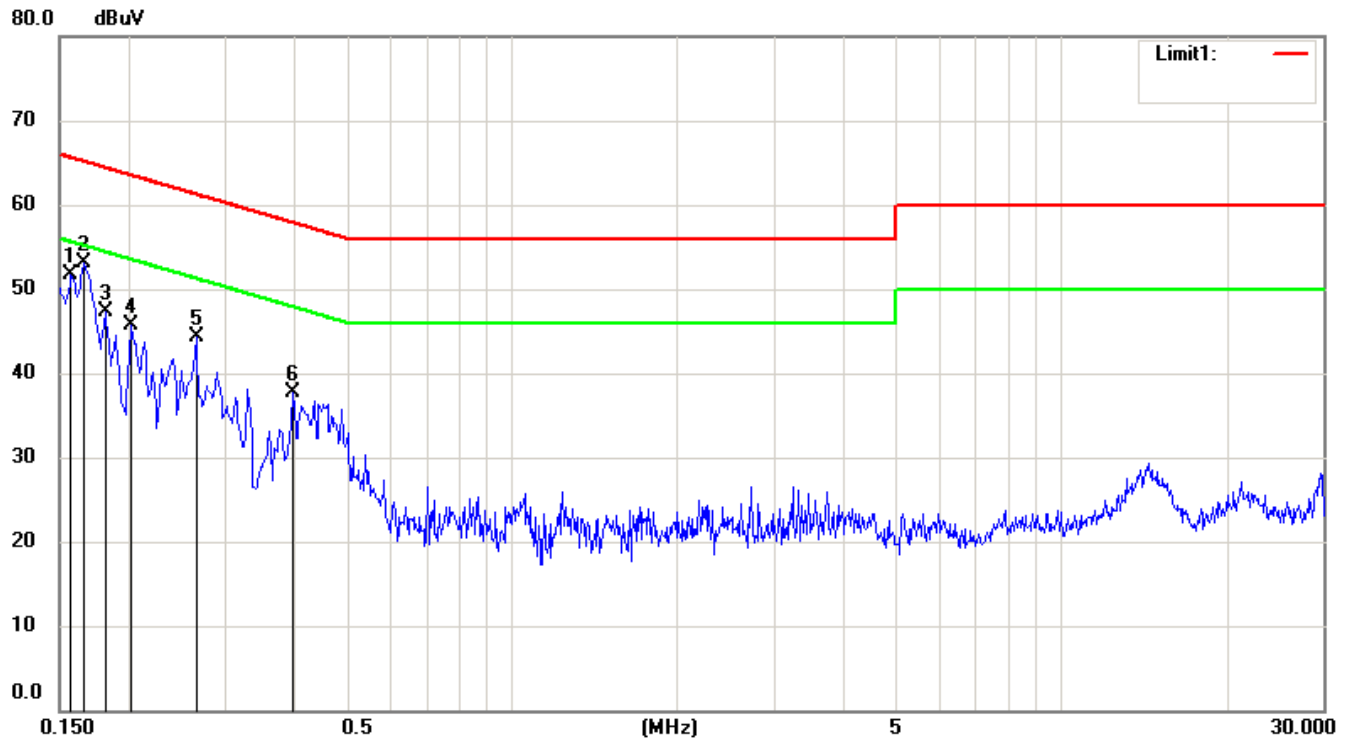
Data: #7

Date: 2019/9/3

Temperature: 24 °C

Site: CE04-10M 2F

Humidity: 51 %



Condition: NCC Conduction(QP)

Phase: L1

EUT: Wireless File Transmitter

Model: DS586194

Test Mode: Band3

Operator: Phillip

No.	Frequency (MHz)	Reading (dBuV)	Detector	Corrected dB	Result (dBuV)	Limit (dBuV)	Margin (dB)
1*	0.1540	44.56	QP	9.68	54.24	65.78	-11.54
2	0.1700	42.04	QP	9.68	51.72	64.96	-13.24
3	0.1760	37.85	QP	9.68	47.53	64.67	-17.14
4	0.1760	26.30	AVG	9.68	35.98	54.67	-18.69
5	0.1860	38.43	QP	9.68	48.11	64.21	-16.10
6	0.2460	38.69	QP	9.68	48.37	61.89	-13.52
7	0.2620	34.60	QP	9.68	44.28	61.37	-17.09

註： 1. “---”表示量測準峰值的結果符合平均值的限制值，則視為同時符合準峰值與平均值的限制值，不需再對其平均值進行量測。

2. “#”表示干擾值太小，直接量取其峰值。

3. 標記“***”表示為本地震盪頻率及其諧波。

4. 量測不準確度: $\pm 2.5\text{dB}$ ($150\text{kHz} \leq f \leq 30\text{MHz}$)。

File: 19-07-MAS-008

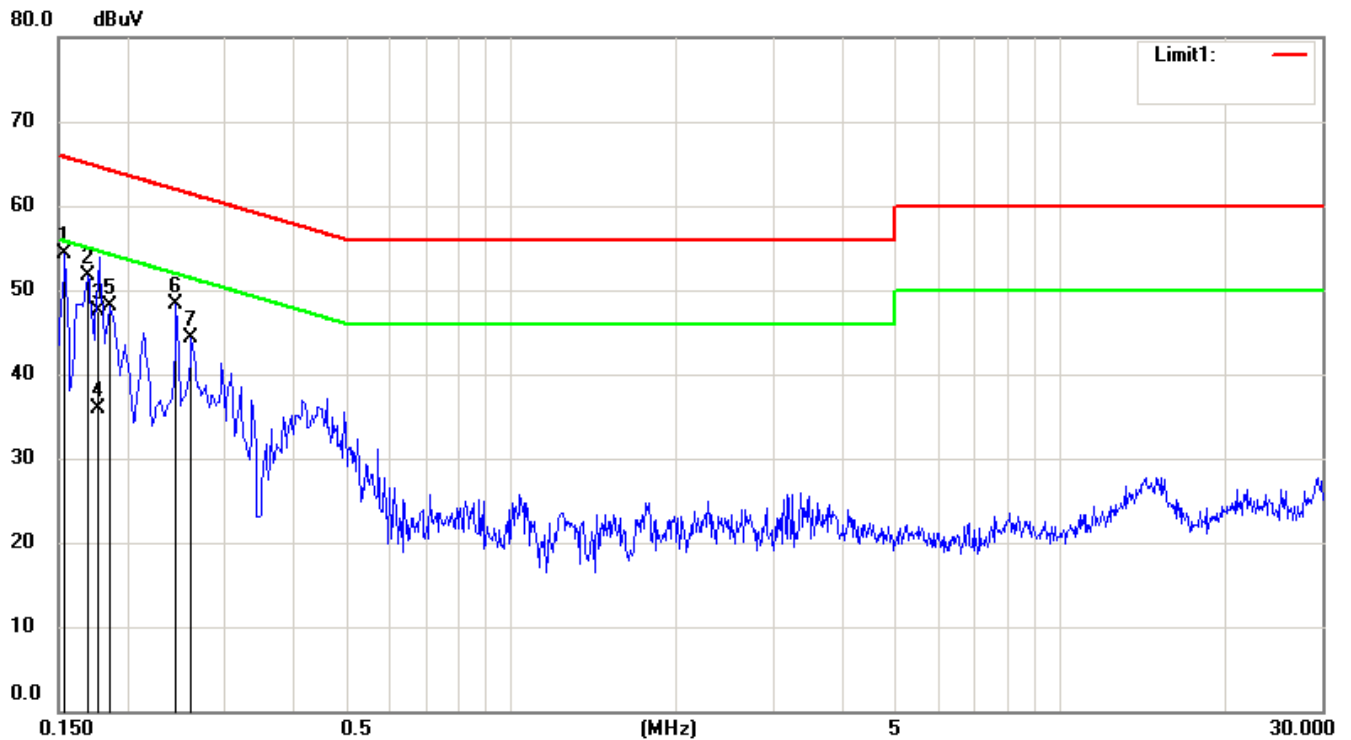
Data: #8

Date: 2019/9/3

Temperature: 24 °C

Site: CE04-10M 2F

Humidity: 51 %



Condition: NCC Conduction(QP)

Phase: N

EUT: Wireless File Transmitter

Model: DS586194

Test Mode: Band3

Operator: Phillip

No.	Frequency (MHz)	Reading (dBuV)	Detector	Corrected dB	Result (dBuV)	Limit (dBuV)	Margin (dB)
1*	0.1580	42.86	QP	9.68	52.54	65.57	-13.03
2	0.1700	42.08	QP	9.68	51.76	64.96	-13.20
3	0.1780	41.23	QP	9.68	50.91	64.58	-13.67
4	0.1980	36.16	QP	9.68	45.84	63.69	-17.85
5	0.2180	33.19	QP	9.68	42.87	62.89	-20.02
6	0.2540	33.11	QP	9.68	42.79	61.63	-18.84

註： 1. “----”表示量測準峰值的結果符合平均值的限制值，則視為同時符合準峰值與平均值的限制值，不需再對其平均值進行量測。

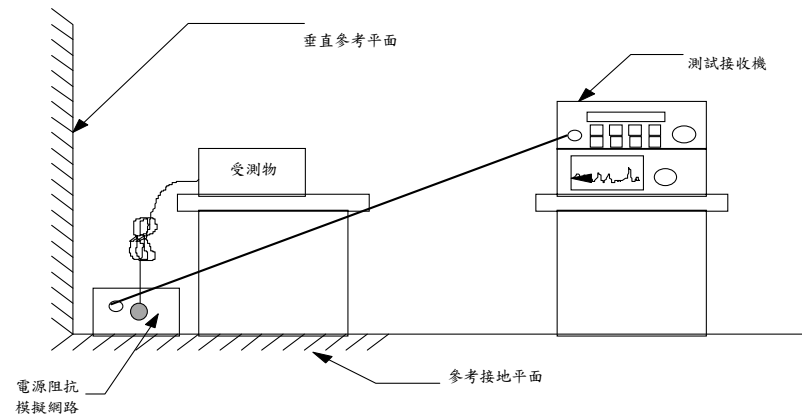
2. “#”表示干擾值太小，直接量取其峰值。

3. 標記“***”表示為本地震盪頻率及其諧波。

4. 量測不準確度: $\pm 2.5\text{dB}$ ($150\text{kHz} \leq f \leq 30\text{MHz}$)。

4.5 電源線傳導干擾之測試配置

圖 1



4.6 傳導量測之配置照片

請參考產品照片

5 天線增益之要求

5.1 適用標準

天線的規格不受國家通訊傳播委員會低功率射頻電機技術規範(2.2)節規定之限制。若使用超過 6dBi 方向增益之發射天線，則以超過 6dBi 天線方向增益的 dBi 總量，等量減少峰值發射功率以及峰值功率頻譜密度。

5.2 天線增益

CHAIN 1 :

廠牌: Canon

型號: canon-ant-2018-03-1

Antenna Type	PCB Antenna
Operation Frequency Rnge	5.47~5.725 GHz
Antenna Gain	2.04 dBi

CHAIN 2 :

廠牌: Canon

型號: canon-ant-2018-03-2

Antenna Type	PIFA
Operation Frequency Rnge	5.47~5.725GHz
Antenna Gain	0.79dBi

(參照天線規格資料)

5.3 結果判定

CHAIN 1 及 CHAIN 2 之方向性增益皆未超過 6 dBi，因此不需減少最大傳導輸出功率限制值及功率密度之限制值。

在MIMO模式下 CHAIN 1 + CHAIN 2 之方向性增益為 4.45 dBi 低於 6 dBi，因此不需等量減少最大傳導輸出功率限制值及功率密度之限制值。

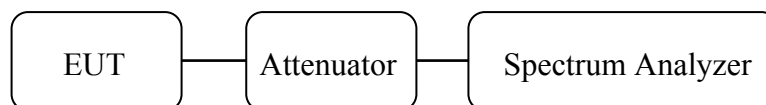
6 發射頻寬之量測

6.1 適用標準

依據國家通訊傳播委員會低功率射頻電機技術規範4.7.3.2節(1)之規定，5.470~5.725 GHz 頻帶，在操作頻帶下之峰值發射功率不能超過 250 mW 或11分貝毫瓦(dBm) +10 log B (B是 26dB 發射頻寬，單位 MHz) 之較小者。

6.2 測試配置

圖 2：發射頻寬之測試配置



6.3 發射頻寬之量測儀器

儀器名稱	製造者	型 號
Spectrum Analyzer	Agilent	E4446A
Attenuator	WEINSCHEL	56-10

測試軟體: LZ-RF (Ver. ETC-3A2)

6.4 量測結果

測試工程師: 羅世勇

6.4.1 調變技術: IEEE 802.11a

測試日期: Aug. 05, 2019

環境溫度 : 26°C

環境濕度: 59%

Chnnel	26dB Bndwidth (MHz)	Chart
L	20.7570	Page 26
M	20.5942	Page 27
H	20.5128	Page 28

註：1. 繪圖資料請參考第 26-28 頁。

2. 量測不準確度 8.25×10^{-7} ($1\text{GHz} \leq f \leq 18\text{GHz}$)

File: 19-07-MAS-
008_5-6a_Ant2

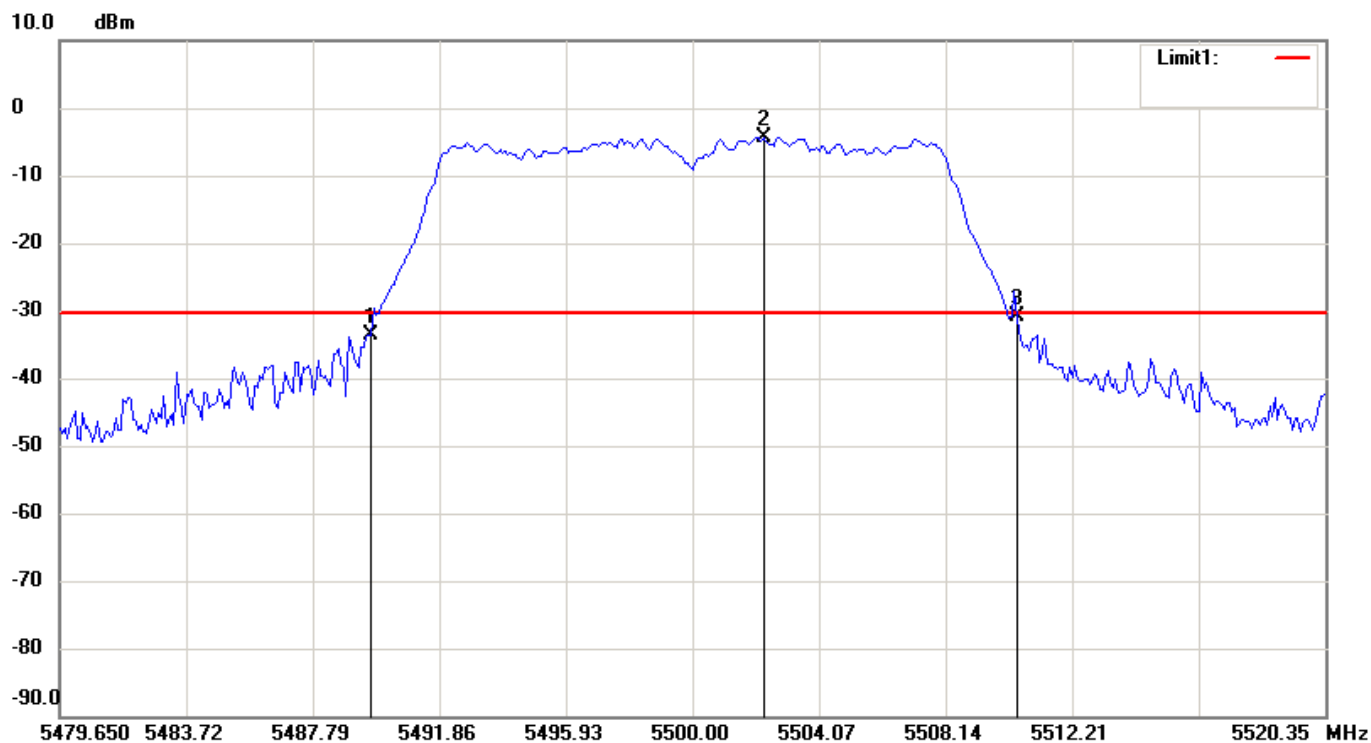
#2

Date: 2019/8/5

Temperature: 26 °C

Time: 下午 04:02:28

Humidity: 59 %



Condition: -30.38dBm

EUT: Wireless File Transmitter

Model: DS586194

Test Mode: TX_UNII Band3_Ant2

Note: Operator: Phillip (測試場地: RF-Cond01)

NCC_LP0002_802.11a Channel 100_-26dB EBW

RF Conducted

Sweep Time: 1ms Att.: 15dB

RBW: 300 KHz

VBW: 1000 KHz

No.	Frequency(MHz)	Level(dBm)
1	5489.66220	-33.56
2	5502.27920	-4.38
3	5510.41920	-30.98

No.		△Frequency(MHz)	△Level(dB)
1	mk3-mk1	20.757	2.58

File: 19-07-MAS-
008_5-6a_Ant2

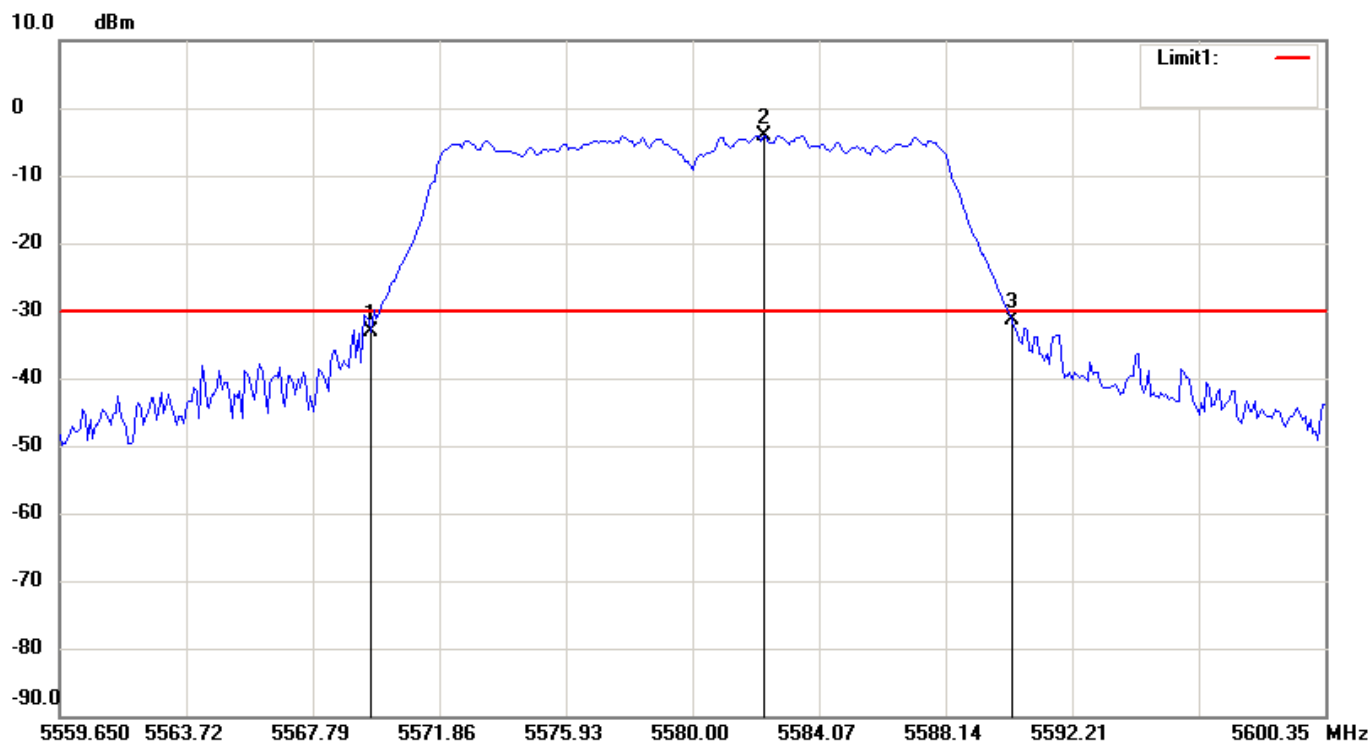
#9

Date: 2019/8/5

Temperature: 26 °C

Time: 下午 04:07:34

Humidity: 59 %



Condition: -30.12dBm

EUT: Wireless File Transmitter

Model: DS586194

Test Mode: TX_UNII Band3_Ant2

Note: Operator: Phillip (測試場地: RF-Cond01)

NCC_LP0002_802.11a Channel 116_-26dB EBW

RF Conducted

Sweep Time: 1ms Att.: 15dB

RBW: 300 KHz VBW: 1000 KHz

No.	Frequency(MHz)	Level(dBm)
1	5569.66220	-33.18
2	5582.27920	-4.12
3	5590.25640	-31.41

No.		Δ Frequency(MHz)	Δ Level(dB)
1	mk3-mk1	20.5942	1.77

File: 19-07-MAS-
008_5-6a_Ant2

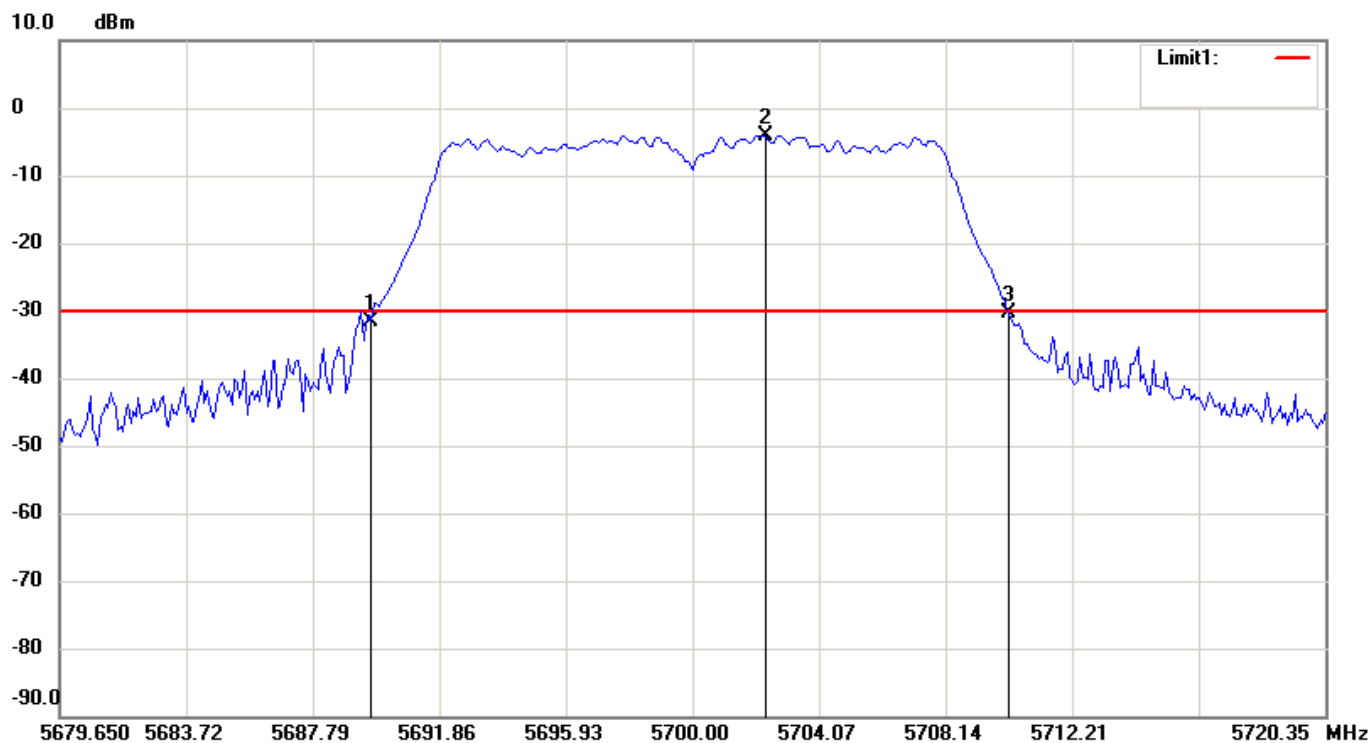
#15

Date: 2019/8/5

Temperature: 26 °C

Time: 下午 04:14:33

Humidity: 59 %



Condition: -30.13dBm

EUT: Wireless File Transmitter

Model: DS586194

Test Mode: TX_UNII Band3_Ant2

Note: Operator: Phillip (測試場地: RF-Cond01)

NCC_LP0002_802.11a Channel 140_-26dB EBW

RF Conducted

Sweep Time: 1ms Att.: 15dB

RBW: 300 KHz VBW: 1000 KHz

No.	Frequency(MHz)	Level(dBm)
1	5689.66220	-31.69
2	5702.36060	-4.13
3	5710.17500	-30.36

No.		△Frequency(MHz)	△Level(dB)
1	mk3-mk1	20.5128	1.33

6.4.2 調變技術: IEEE 802.11n HT20

6.4.2.1 CHAIN 1

測試日期: Aug. 05, 2019

環境溫度: 26°C

環境濕度: 59%

Chnnel	26dB Bndwidth (MHz)	Chart
L	20.5942	Page 30
M	21.2454	Page 31
H	20.5942	Page 32

註：1. 繪圖資料請參考第 30-32 頁。

2. 量測不準確度 8.25×10^{-7} ($1\text{GHz} \leq f \leq 18\text{GHz}$)。

File: 19-07-MAS-
008_5-
6n20_Ant1

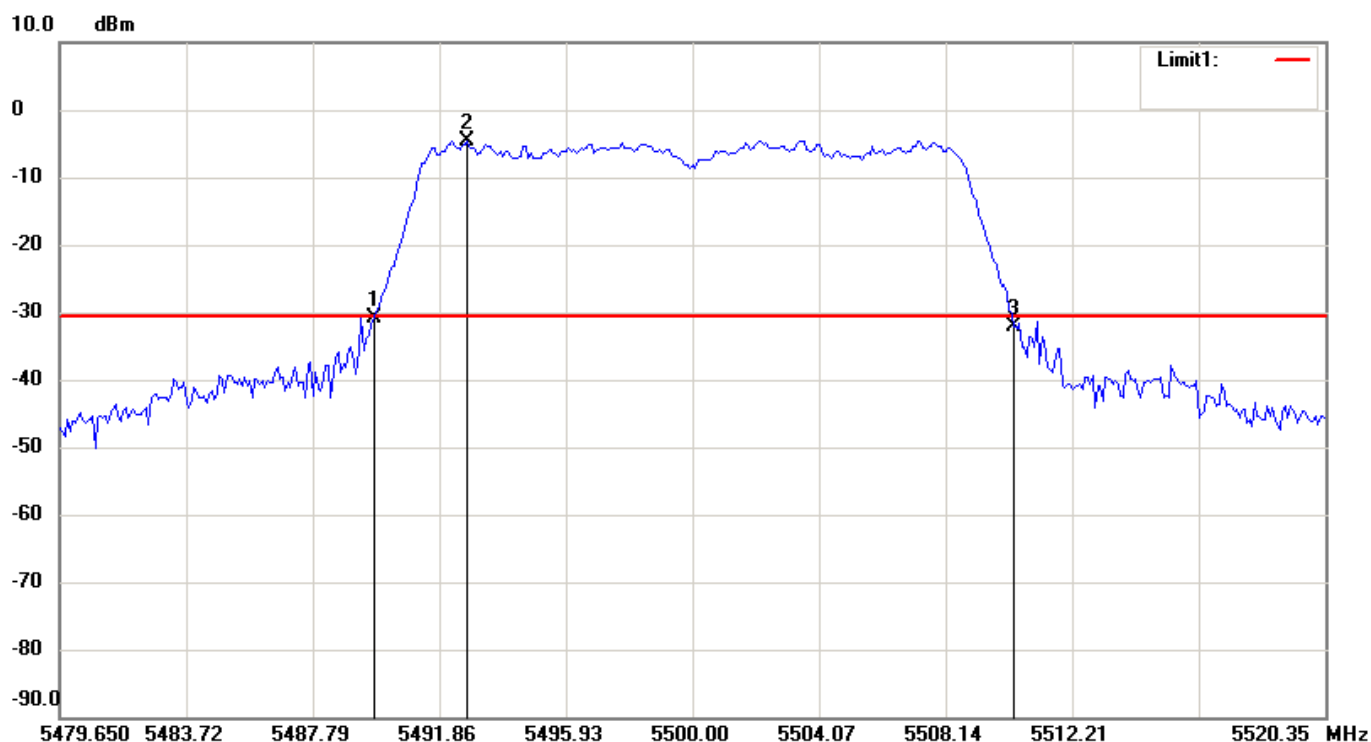
#2

Date: 2019/8/5

Temperature: 26 °C

Time: 下午 06:19:26

Humidity: 59 %



Condition: -30.53dBm

RF Conducted

EUT: Wireless File Transmitter

Sweep Time: 1ms Att.: 15dB

Model: DS586194

RBW: 300 KHz

VBW: 1000 KHz

Test Mode: TX_UNII Band3_Ant1

Note: Operator: Phillip (測試場地: RF-Cond01)

NCC_LP0002_802.11n20 Channel 100_-26dB EBW

No.	Frequency(MHz)	Level(dBm)
1	5489.74360	-30.85
2	5492.75540	-4.53
3	5510.33780	-32.11

No.		△Frequency(MHz)	△Level(dB)
1	mk3-mk1	20.5942	-1.26

File: 19-07-MAS-
008_5-
6n20_Ant1

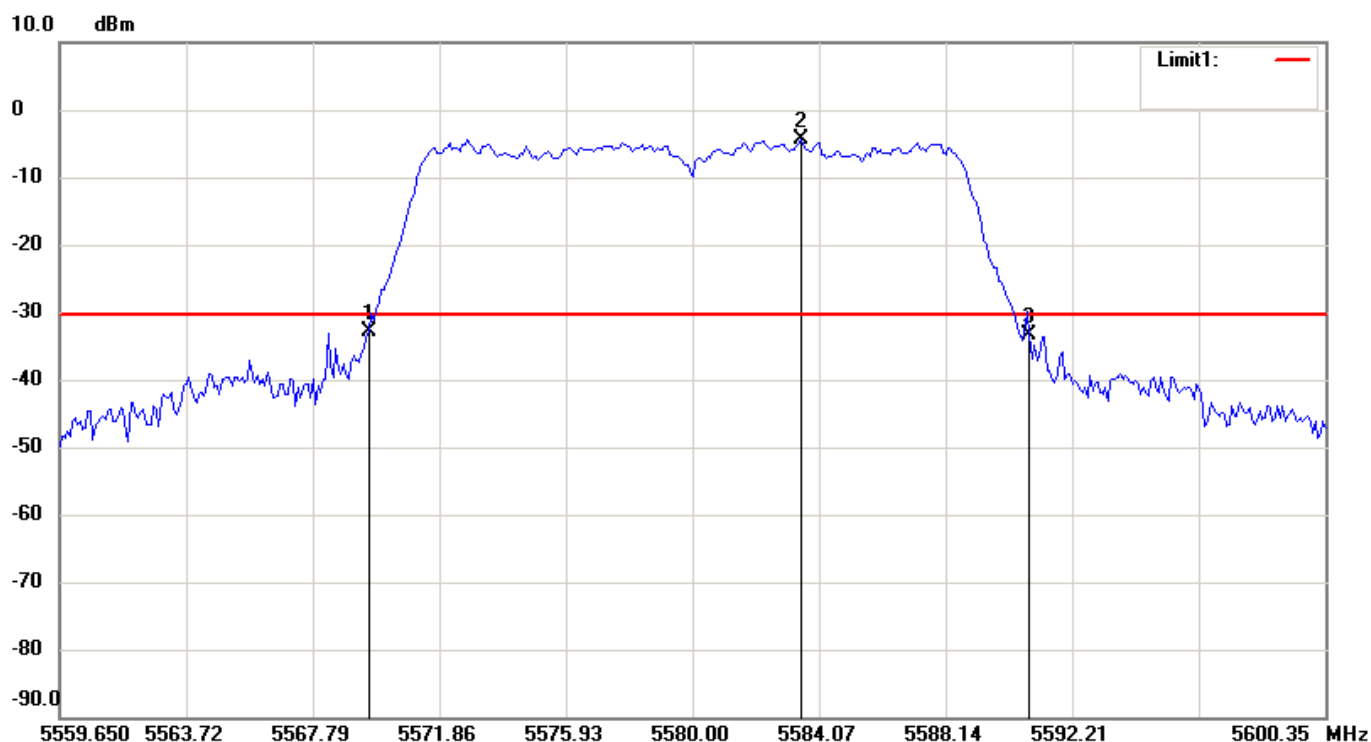
#9

Date: 2019/8/5

Temperature: 26 °C

Time: 下午 06:25:31

Humidity: 59 %



Condition: -30.35dBm

EUT: Wireless File Transmitter

Model: DS586194

Test Mode: TX_UNII Band3_Ant1

Note: Operator: Phillip (測試場地: RF-Cond01)

NCC_LP0002_802.11n20 Channel 116_-26dB EBW

RF Conducted

Sweep Time: 1ms Att.: 15dB

RBW: 300 KHz

VBW: 1000 KHz

No.	Frequency(MHz)	Level(dBm)
1	5569.58080	-32.83
2	5583.50020	-4.35
3	5590.82620	-33.46

No.		Δ Frequency(MHz)	Δ Level(dB)
1	mk3-mk1	21.2454	-0.63

File: 19-07-MAS-
008_5-
6n20_Ant1

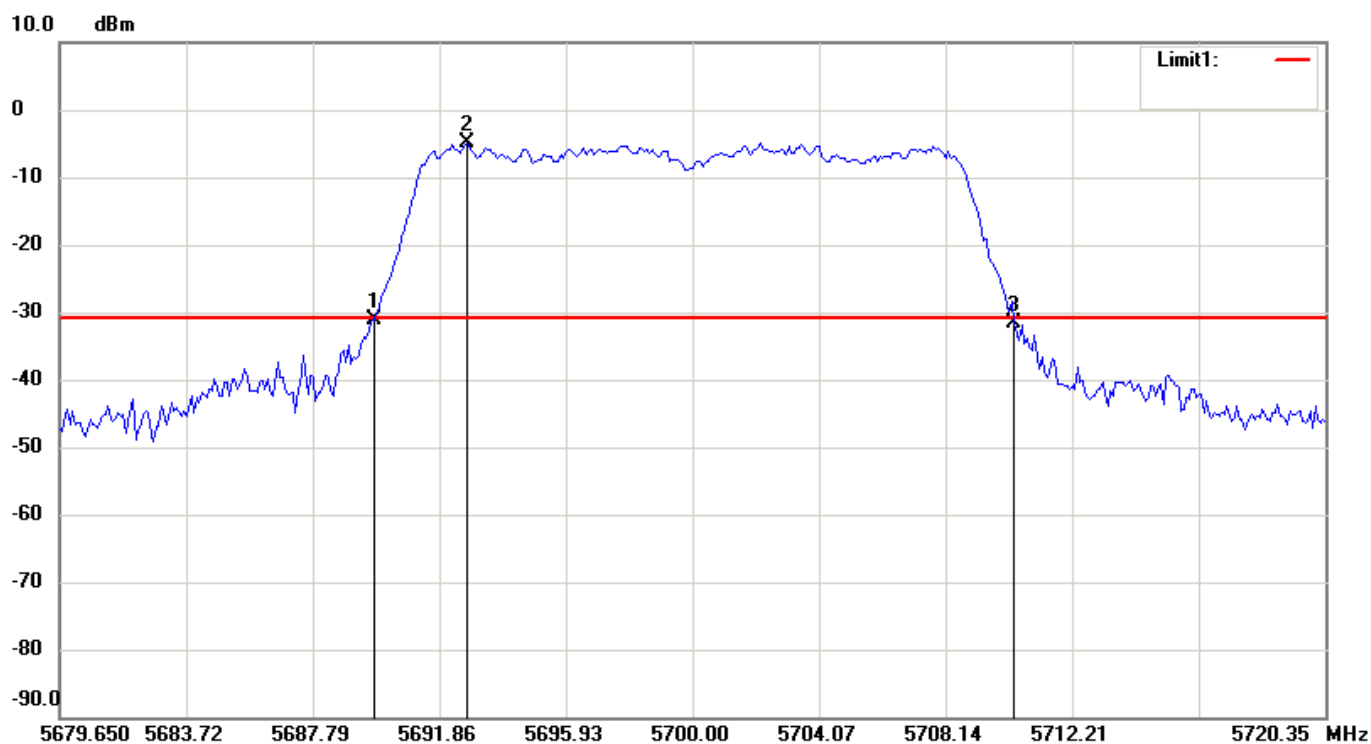
#15

Date: 2019/8/5

Temperature: 26 °C

Time: 下午 06:32:03

Humidity: 59 %



Condition: -30.81dBm

EUT: Wireless File Transmitter

Model: DS586194

Test Mode: TX_UNII Band3_Ant1

Note: Operator: Phillip (測試場地: RF-Cond01)

NCC_LP0002_802.11n20 Channel 140_-26dB EBW

RF Conducted

Sweep Time: 1ms Att.: 15dB

RBW: 300 KHz VBW: 1000 KHz

No.	Frequency(MHz)	Level(dBm)
1	5689.74360	-31.10
2	5692.75540	-4.81
3	5710.33780	-31.56

No.		△Frequency(MHz)	△Level(dB)
1	mk3-mk1	20.5942	-0.46

6.4.2.2 CHAIN 2

測試日期: Aug. 05, 2019

環境溫度: 26°C

環境濕度: 59%

Chnnel	26dB Bndwidth (MHz)	Chart
L	20.5942	Page 34
M	20.5942	Page 35
H	20.4314	Page 36

註：1. 繪圖資料請參考第 34-36 頁。

2. 量測不準確度 8.25×10^{-7} ($1\text{GHz} \leq f \leq 18\text{GHz}$)。

File: 19-07-MAS-
008_5-
6n20_Ant2

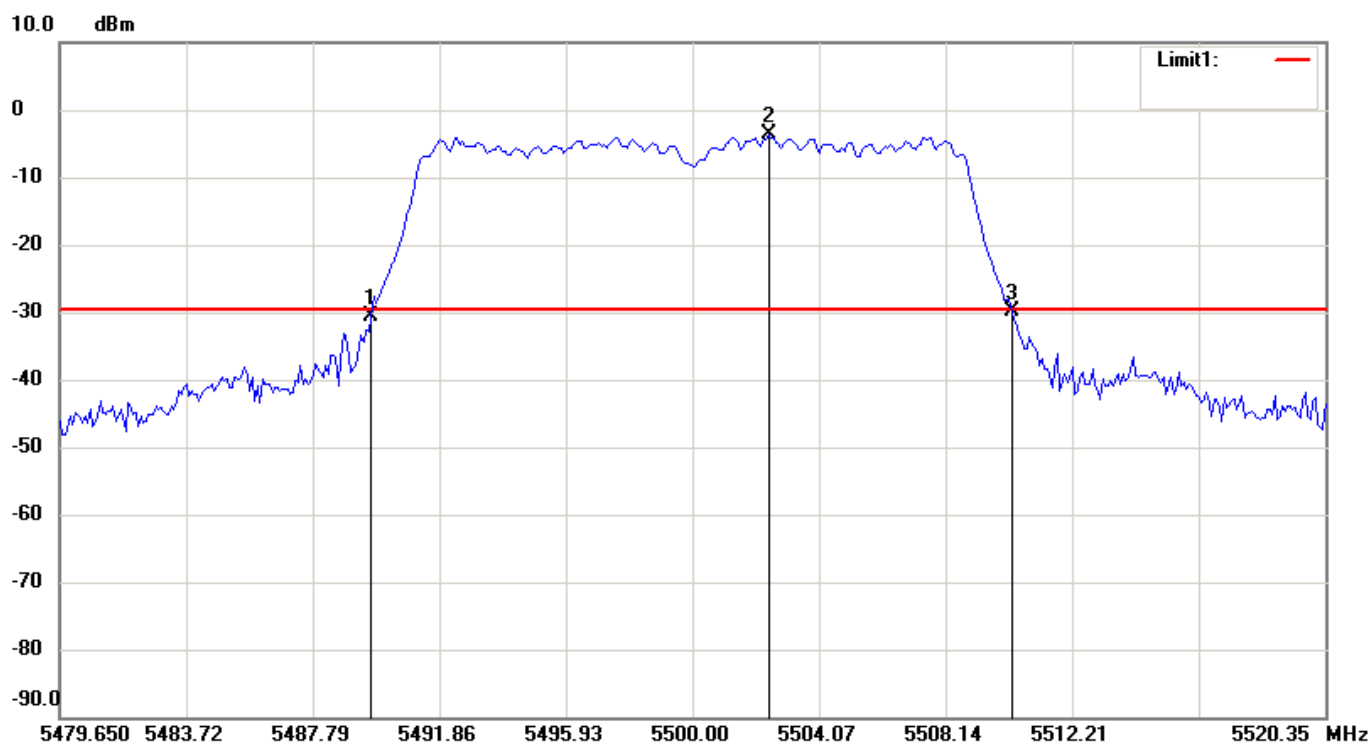
#2

Date: 2019/8/5

Temperature: 26 °C

Time: 下午 04:26:22

Humidity: 59 %



Condition: -29.59dBm

RF Conducted

EUT: Wireless File Transmitter

Sweep Time: 1ms Att.: 15dB

Model: DS586194

RBW: 300 KHz

VBW: 1000 KHz

Test Mode: TX_UNII Band3_Ant2

Note: Operator: Phillip (測試場地: RF-Cond01)

NCC_LP0002_802.11n20 Channel 100_-26dB EBW

No.	Frequency(MHz)	Level(dBm)
1	5489.66220	-30.59
2	5502.44200	-3.59
3	5510.25640	-29.84

No.		Δ Frequency(MHz)	Δ Level(dB)
1	mk3-mk1	20.5942	0.75

File: 19-07-MAS-
008_5-
6n20_Ant2

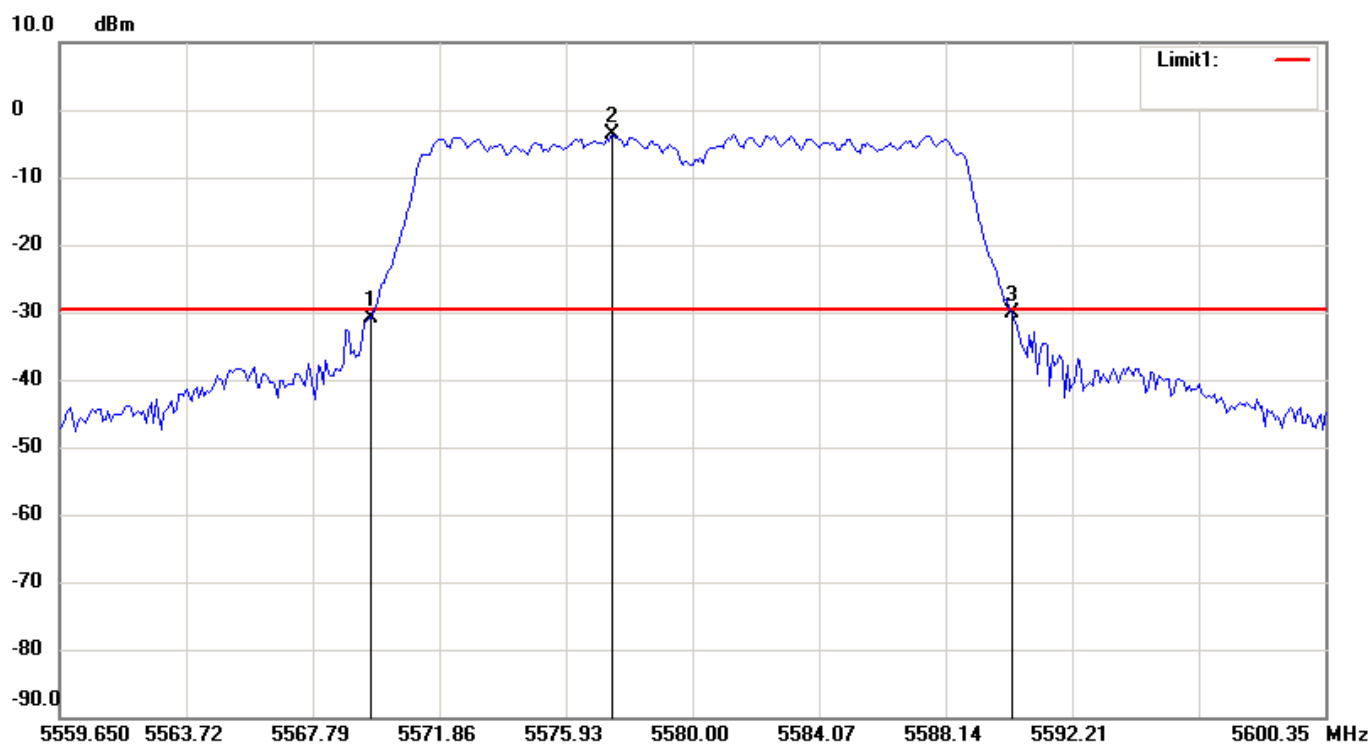
#9

Date: 2019/8/5

Temperature: 26 °C

Time: 下午 04:32:01

Humidity: 59 %



Condition: -29.57dBm

RF Conducted

EUT: Wireless File Transmitter

Sweep Time: 1ms Att.: 15dB

Model: DS586194

RBW: 300 KHz

VBW: 1000 KHz

Test Mode: TX_UNII Band3_Ant2

Note: Operator: Phillip (測試場地: RF-Cond01)

NCC_LP0002_802.11n20 Channel 116_-26dB EBW

No.	Frequency(MHz)	Level(dBm)
1	5569.66220	-30.88
2	5577.39520	-3.57
3	5590.25640	-30.13

No.		Δ Frequency(MHz)	Δ Level(dB)
1	mk3-mk1	20.5942	0.75

File: 19-07-MAS-
008_5-
6n20_Ant2

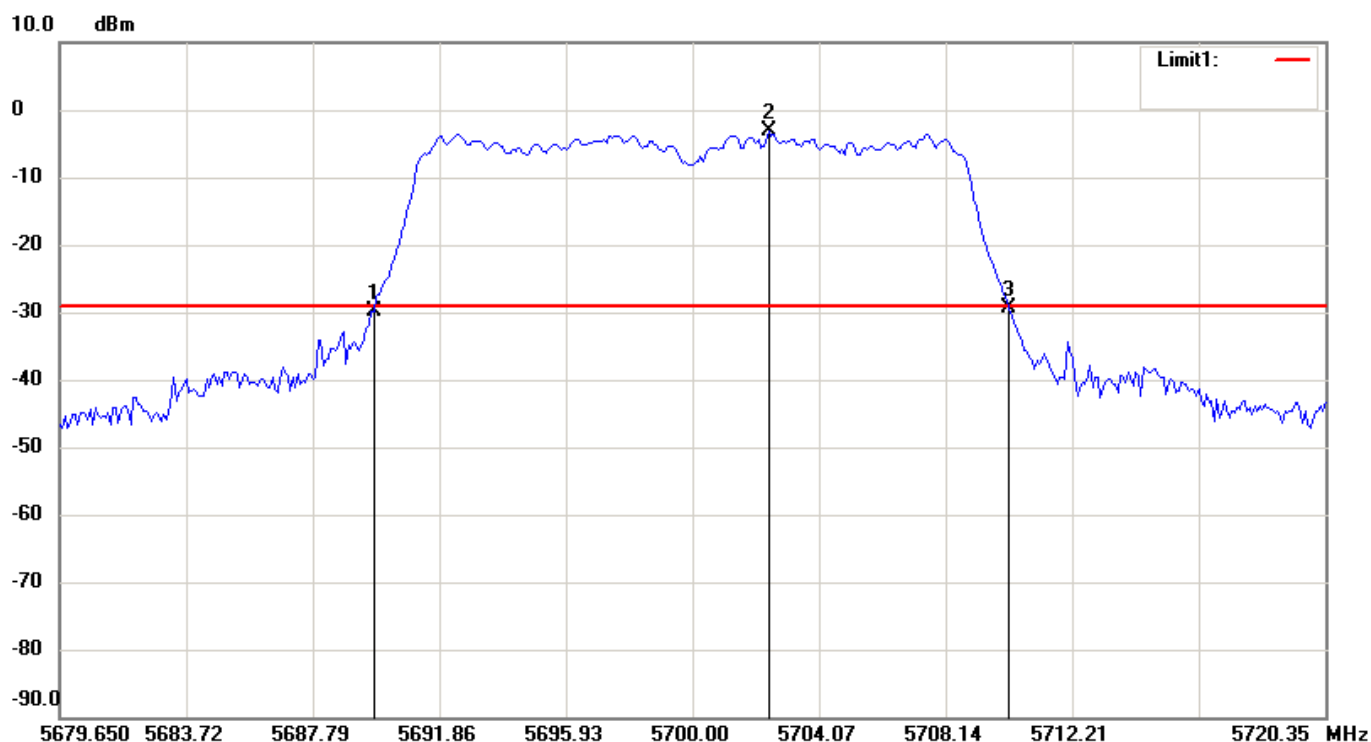
#15

Date: 2019/8/5

Temperature: 26 °C

Time: 下午 04:37:05

Humidity: 59 %



Condition: -29.21dBm

RF Conducted

EUT: Wireless File Transmitter

Sweep Time: 1ms Att.: 15dB

Model: DS586194

RBW: 300 KHz

VBW: 1000 KHz

Test Mode: TX_UNII Band3_Ant2

Note: Operator: Phillip (測試場地: RF-Cond01)

NCC_LP0002_802.11n20 Channel 140_-26dB EBW

No.	Frequency(MHz)	Level(dBm)
1	5689.74360	-29.86
2	5702.44200	-3.21
3	5710.17500	-29.40

No.		△Frequency(MHz)	△Level(dB)
1	mk3-mk1	20.4314	0.46

6.4.3 調變技術: IEEE 802.11n HT40

6.4.3.1 CHAIN 1

測試日期: Aug. 05, 2019

環境溫度: 26°C

環境濕度: 59%

Chnnel	26dB Bndwidth (MHz)	Chart
L	41.9508	Page 38
M	42.1134	Page 39
H	41.9508	Page 40

註：1. 繪圖資料請參考第 38-40 頁。

2. 量測不準確度 8.25×10^{-7} ($1\text{GHz} \leq f \leq 18\text{GHz}$)。

File: 19-07-MAS-
008_5-
6n40_Ant1

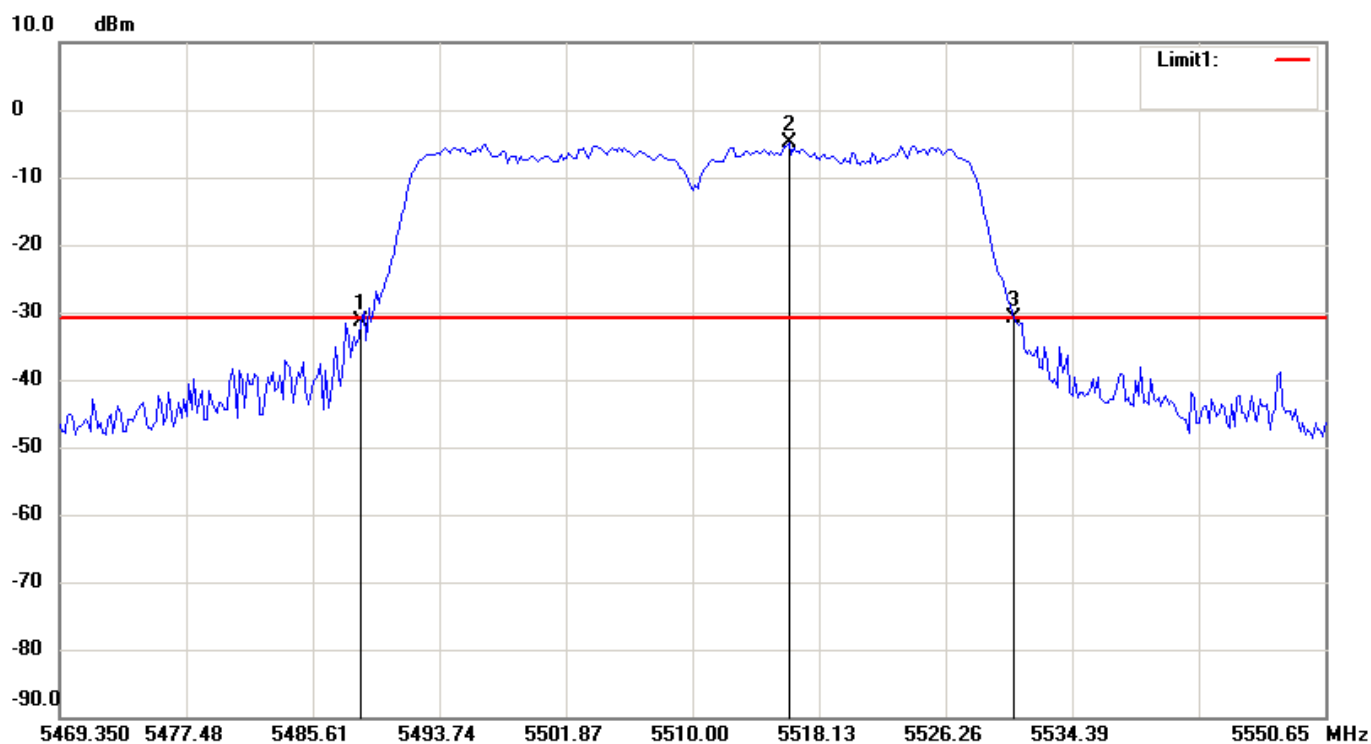
#2

Date: 2019/8/5

Temperature: 26 °C

Time: 下午 07:22:28

Humidity: 59 %



Condition: -30.83dBm

RF Conducted

EUT: Wireless File Transmitter

Sweep Time: 1ms Att.: 15dB

Model: DS586194

RBW: 500 KHz

VBW: 3000 KHz

Test Mode: TX_UNII Band3_Ant1

Note: Operator: Phillip (測試場地: RF-Cond01)

NCC_LP0002_802.11n40 Channel 102_-26dB EBW

No.	Frequency(MHz)	Level(dBm)
1	5488.69940	-31.32
2	5516.17880	-4.83
3	5530.65020	-30.95

No.		Δ Frequency(MHz)	Δ Level(dB)
1	mk3-mk1	41.9508	0.37

File: 19-07-MAS-
008_5-
6n40_Ant1

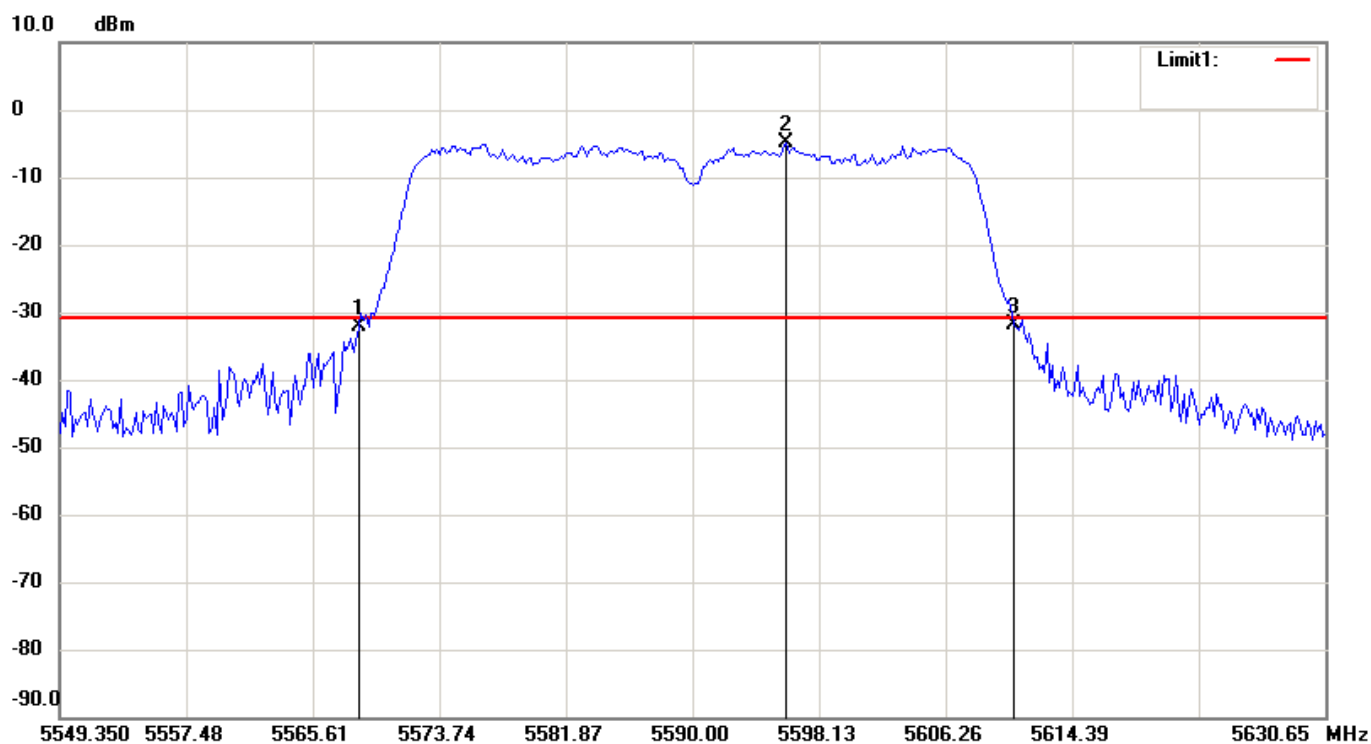
#9

Date: 2019/8/5

Temperature: 26 °C

Time: 下午 07:33:38

Humidity: 59 %



Condition: -30.83dBm

EUT: Wireless File Transmitter

Model: DS586194

Test Mode: TX_UNII Band3_Ant1

Note: Operator: Phillip (測試場地: RF-Cond01)
NCC_LP0002_802.11n40 Channel 118_-26dB EBW

RF Conducted

Sweep Time: 1ms Att.: 15dB

RBW: 500 KHz VBW: 3000 KHz

No.	Frequency(MHz)	Level(dBm)
1	5568.53680	-32.22
2	5596.01620	-4.83
3	5610.65020	-31.94

No.		Δ Frequency(MHz)	Δ Level(dB)
1	mk3-mk1	42.1134	0.28

File: 19-07-MAS-
008_5-
6n40_Ant1

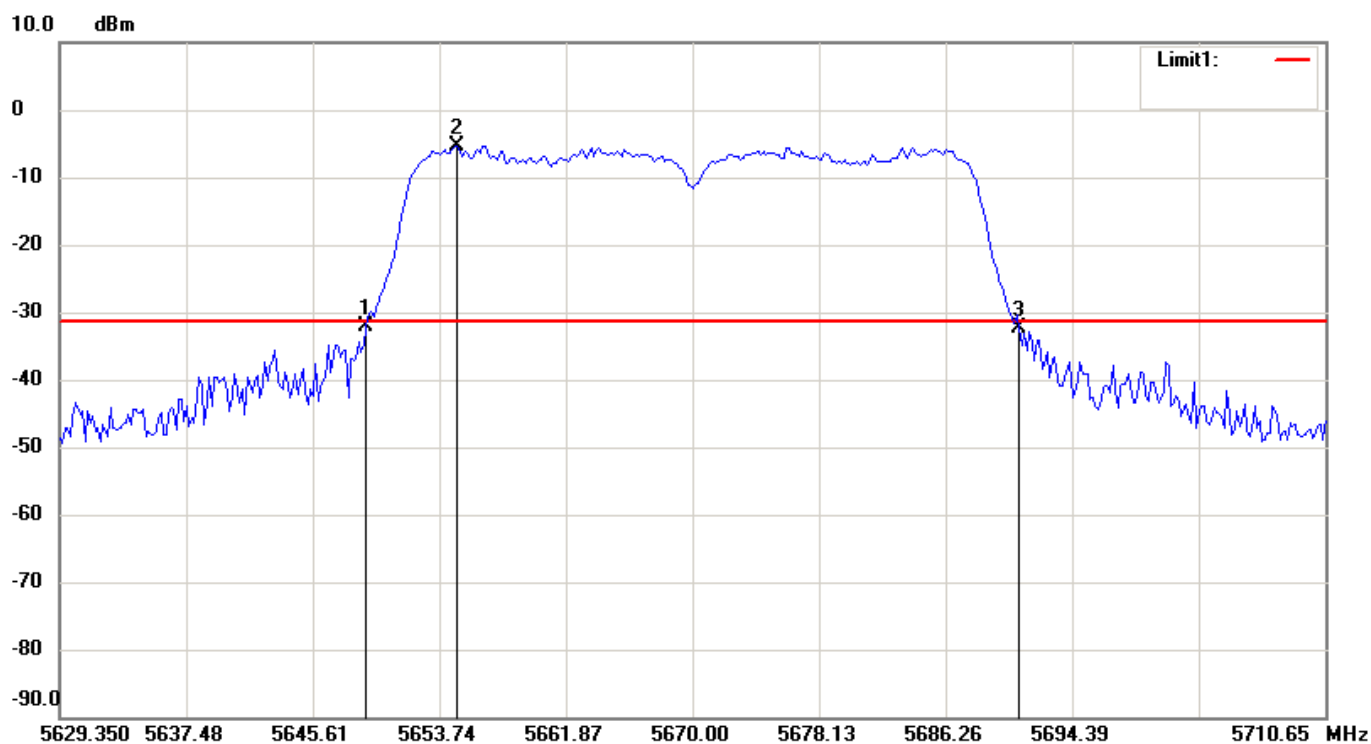
#15

Date: 2019/8/5

Temperature: 26 °C

Time: 下午 07:44:33

Humidity: 59 %



Condition: -31.42dBm

RF Conducted

EUT: Wireless File Transmitter

Sweep Time: 1ms Att.: 15dB

Model: DS586194

RBW: 500 KHz

VBW: 3000 KHz

Test Mode: TX_UNII Band3_Ant1

Note: Operator: Phillip (測試場地: RF-Cond01)

NCC_LP0002_802.11n40 Channel 134_-26dB EBW

No.	Frequency(MHz)	Level(dBm)
1	5649.02460	-32.22
2	5654.87820	-5.42
3	5690.97540	-32.46

No.		△Frequency(MHz)	△Level(dB)
1	mk3-mk1	41.9508	-0.24

6.4.3.2 CHAIN 2

測試日期: Aug. 05, 2019

環境溫度: 26°C

環境濕度: 59%

Chnnel	26dB Bndwidth (MHz)	Chart
L	40.9752	Page 42
M	40.9752	Page 43
H	40.8126	Page 44

註：1. 繪圖資料請參考第 42-44 頁。

2. 量測不準確度 8.25×10^{-7} ($1\text{GHz} \leq f \leq 18\text{GHz}$)。

File: 19-07-MAS-
008_5-
6n40_Ant2

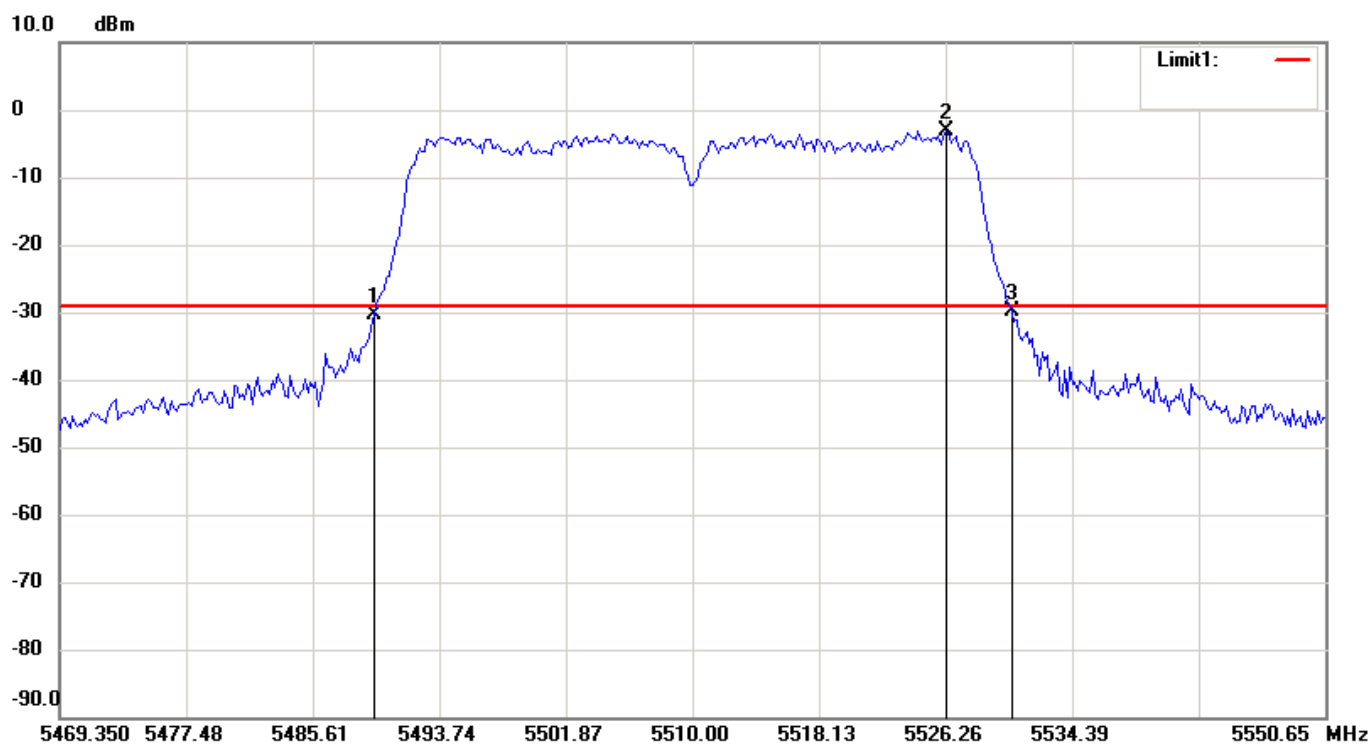
#2

Date: 2019/8/5

Temperature: 26 °C

Time: 下午 08:58:38

Humidity: 59 %



Condition: -29.17dBm

RF Conducted

EUT: Wireless File Transmitter

Sweep Time: 1ms Att.: 15dB

Model: DS586194

RBW: 500 KHz

VBW: 3000 KHz

Test Mode: TX_UNII Band3_Ant2

Note: Operator: Phillip (測試場地: RF-Cond01)

NCC_LP0002_802.11n40 Channel 102_-26dB EBW

No.	Frequency(MHz)	Level(dBm)
1	5489.51240	-30.31
2	5526.26000	-3.17
3	5530.48760	-29.75

No.		Δ Frequency(MHz)	Δ Level(dB)
1	mk3-mk1	40.9752	0.56

File: 19-07-MAS-
008_5-
6n40_Ant2

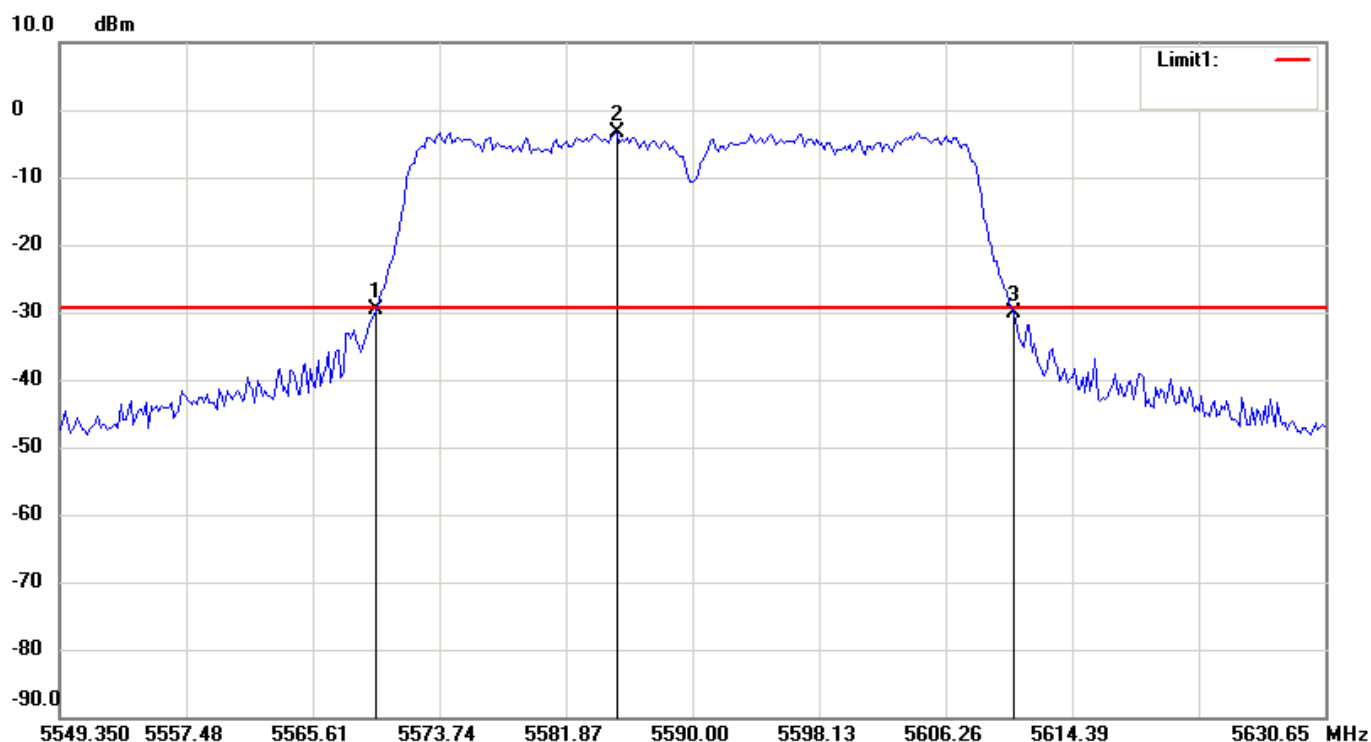
#9

Date: 2019/8/5

Temperature: 26 °C

Time: 下午 09:05:43

Humidity: 59 %



Condition: -29.48dBm

RF Conducted

EUT: Wireless File Transmitter

Sweep Time: 1ms Att.: 15dB

Model: DS586194

RBW: 500 KHz

VBW: 3000 KHz

Test Mode: TX_UNII Band3_Ant2

Note: Operator: Phillip (測試場地: RF-Cond01)

NCC_LP0002_802.11n40 Channel 118_-26dB EBW

No.	Frequency(MHz)	Level(dBm)
1	5569.67500	-29.55
2	5585.12200	-3.48
3	5610.65020	-30.14

No.		Δ Frequency(MHz)	Δ Level(dB)
1	mk3-mk1	40.9752	-0.59

File: 19-07-MAS-
008_5-
6n40_Ant2

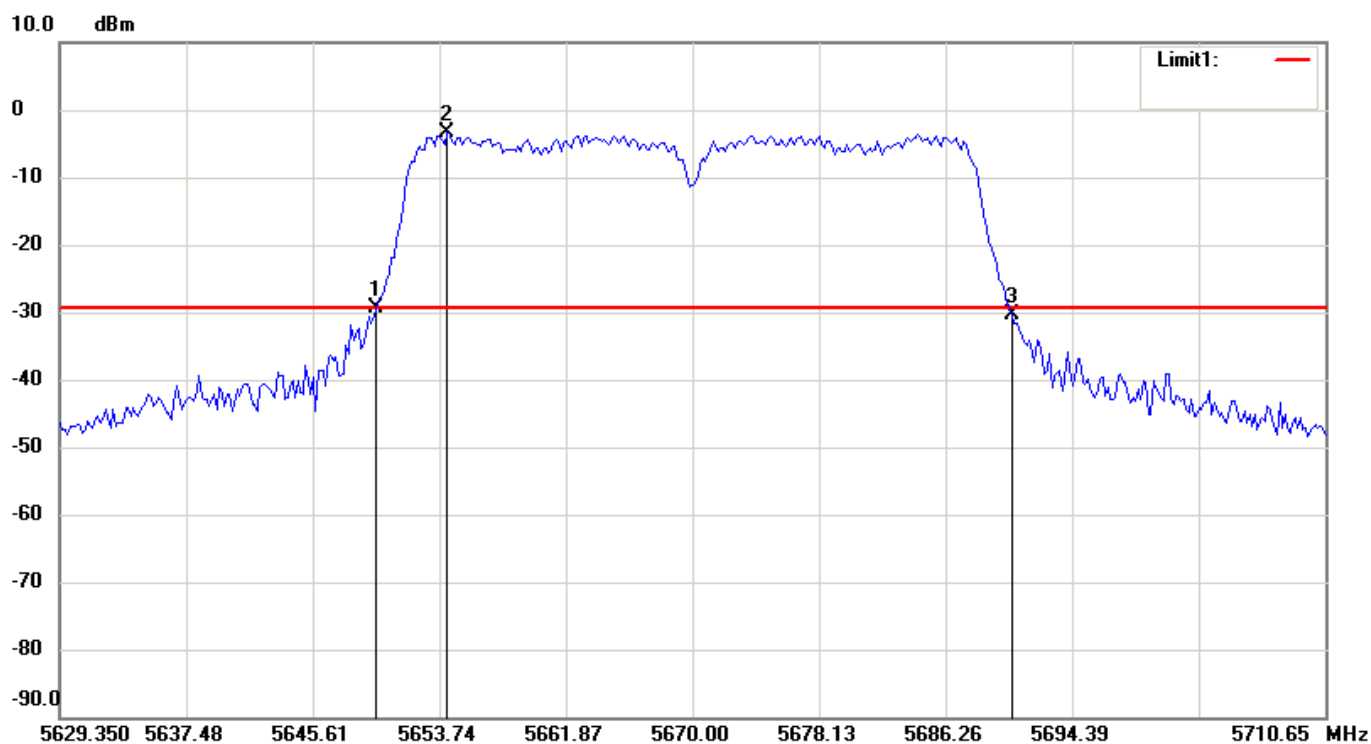
#15

Date: 2019/8/5

Temperature: 26 °C

Time: 下午 09:10:31

Humidity: 59 %



Condition: -29.41dBm

RF Conducted

EUT: Wireless File Transmitter

Sweep Time: 1ms Att.: 15dB

Model: DS586194

RBW: 500 KHz

VBW: 3000 KHz

Test Mode: TX_UNII Band3_Ant2

Note: Operator: Phillip (測試場地: RF-Cond01)

NCC_LP0002_802.11n40 Channel 134_-26dB EBW

No.	Frequency(MHz)	Level(dBm)
1	5649.67500	-29.46
2	5654.22780	-3.41
3	5690.48760	-30.30

No.		Δ Frequency(MHz)	Δ Level(dB)
1	mk3-mk1	40.8126	-0.84

6.4.4 調變技術:IEEE 802.11ac (80MHz)

6.4.4.1 CHAIN 1

測試日期: Aug. 06, 2019

環境溫度: 26°C

環境濕度: 62%

Chnnel	26dB Bndwidth (MHz)	Chart
L	82.8040	Page 46
H	83.7820	Page 47

註：1. 繪圖資料請參考第 46-47 頁。

2. 量測不準確度 8.25×10^{-7} ($1\text{GHz} \leq f \leq 18\text{GHz}$)。

File: 19-07-MAS-
008_5-
6ac80_Ant1

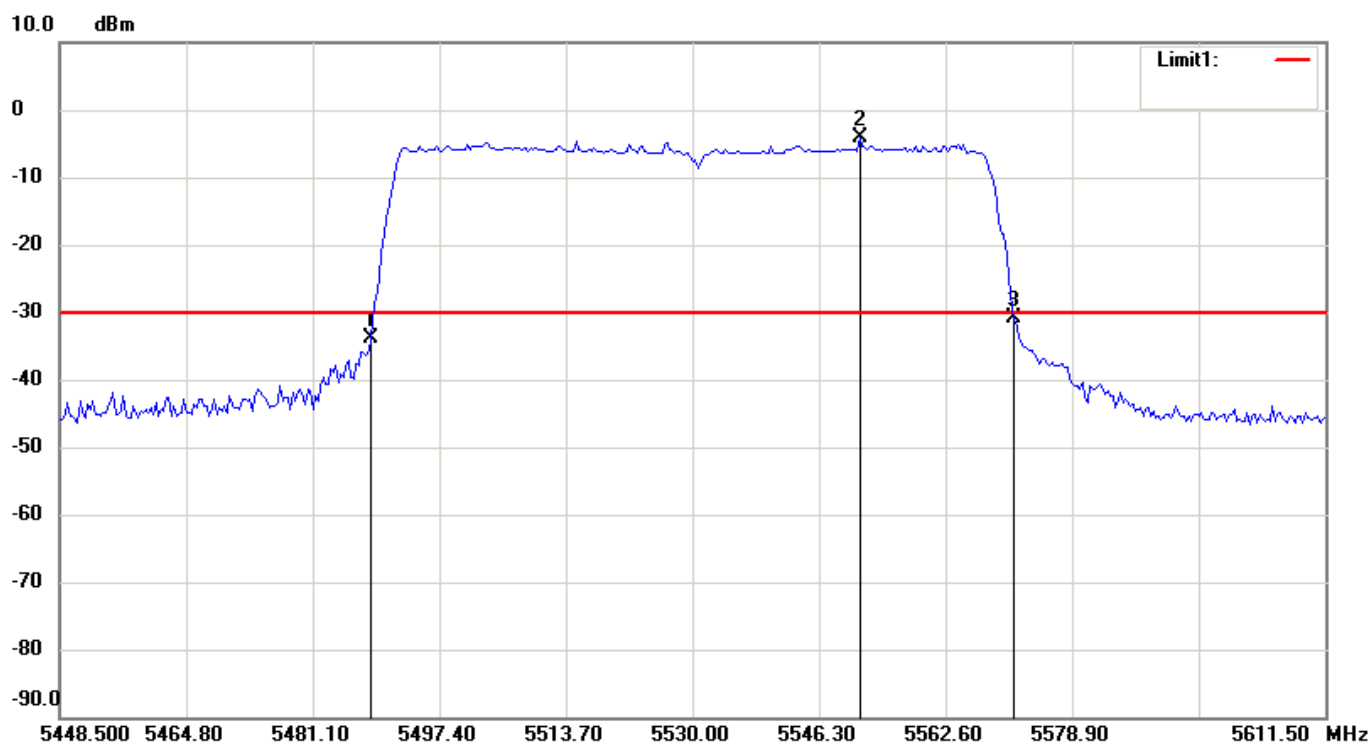
#2

Date: 2019/8/6

Temperature: 26 °C

Time: 上午 10:06:51

Humidity: 62 %



Condition: -30.04dBm

RF Conducted

EUT: Wireless File Transmitter

Sweep Time: 1ms Att.: 15dB

Model: DS586194

RBW: 1000 KHz VBW: 3000 KHz

Test Mode: TX_UNII Band3_Ant1

Note: Operator: Phillip (測試場地: RF-Cond01)

NCC_LP0002_802.11ac80 Channel 106_-26dB EBW

No.	Frequency(MHz)	Level(dBm)
1	5488.59800	-33.94
2	5551.51600	-4.04
3	5571.40200	-30.84

No.		△Frequency(MHz)	△Level(dB)
1	mk3-mk1	82.804	3.1

File: 19-07-MAS-
008_5-
6ac80_Ant1

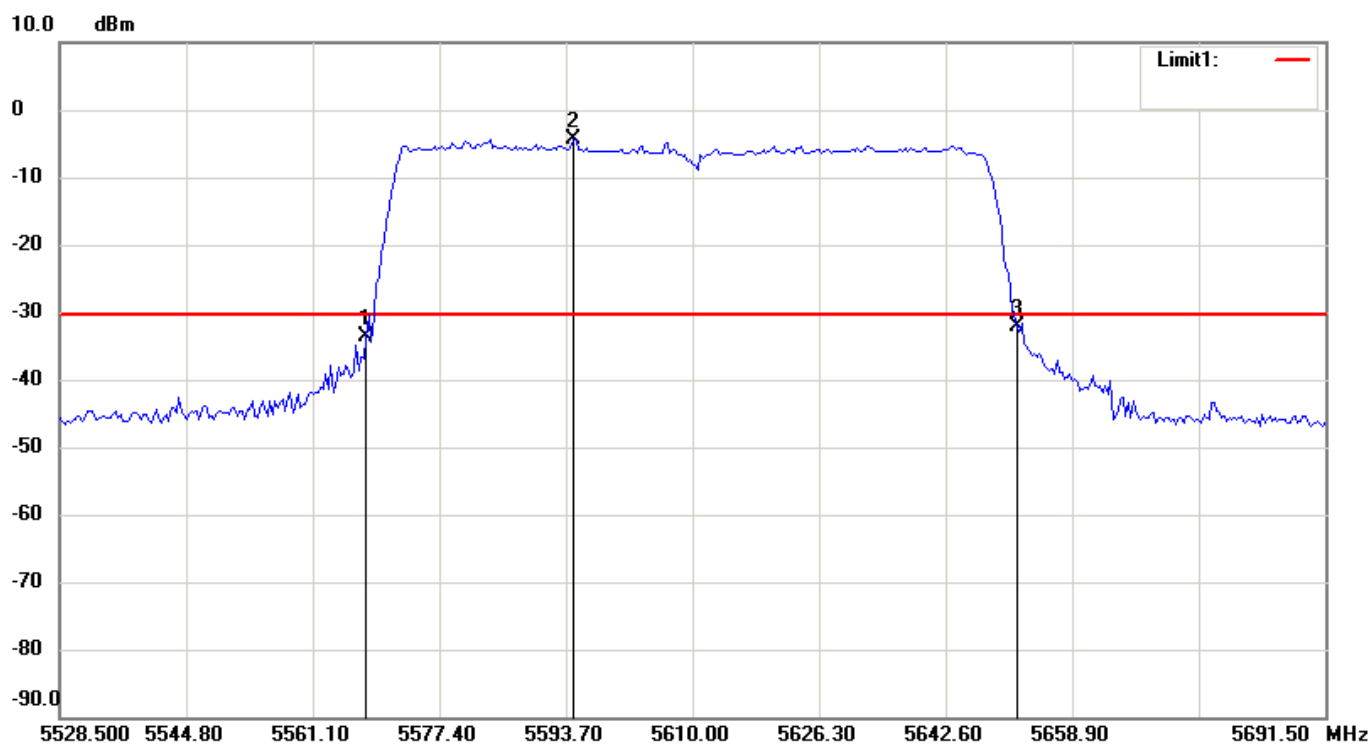
#9

Date: 2019/8/6

Temperature: 26 °C

Time: 上午 10:13:25

Humidity: 62 %



Condition: -30.32dBm

RF Conducted

EUT: Wireless File Transmitter

Sweep Time: 1ms Att.: 15dB

Model: DS586194

RBW: 1000 KHz VBW: 3000 KHz

Test Mode: TX_UNII Band3_Ant1

Note: Operator: Phillip (測試場地: RF-Cond01)

NCC_LP0002_802.11ac80 Channel 122_-26dB EBW

No.	Frequency(MHz)	Level(dBm)
1	5567.94600	-33.58
2	5594.67800	-4.32
3	5651.72800	-32.01

No.		Δ Frequency(MHz)	Δ Level(dB)
1	mk3-mk1	83.782	1.57

6.4.4.2 CHAIN 2

測試日期: Aug. 06, 2019

環境溫度: 26°C

環境濕度: 62%

Chnnel	26dB Bndwidth (MHz)	Chart
L	82.478	Page 49
H	81.826	Page 50

註：1. 繪圖資料請參考第 49-50 頁。

2. 量測不準確度 8.25×10^{-7} ($1\text{GHz} \leq f \leq 18\text{GHz}$)。

6.5 結果判定

僅提供數據，無須判定。

File: 19-07-MAS-
008_5-
6ac80_Ant2

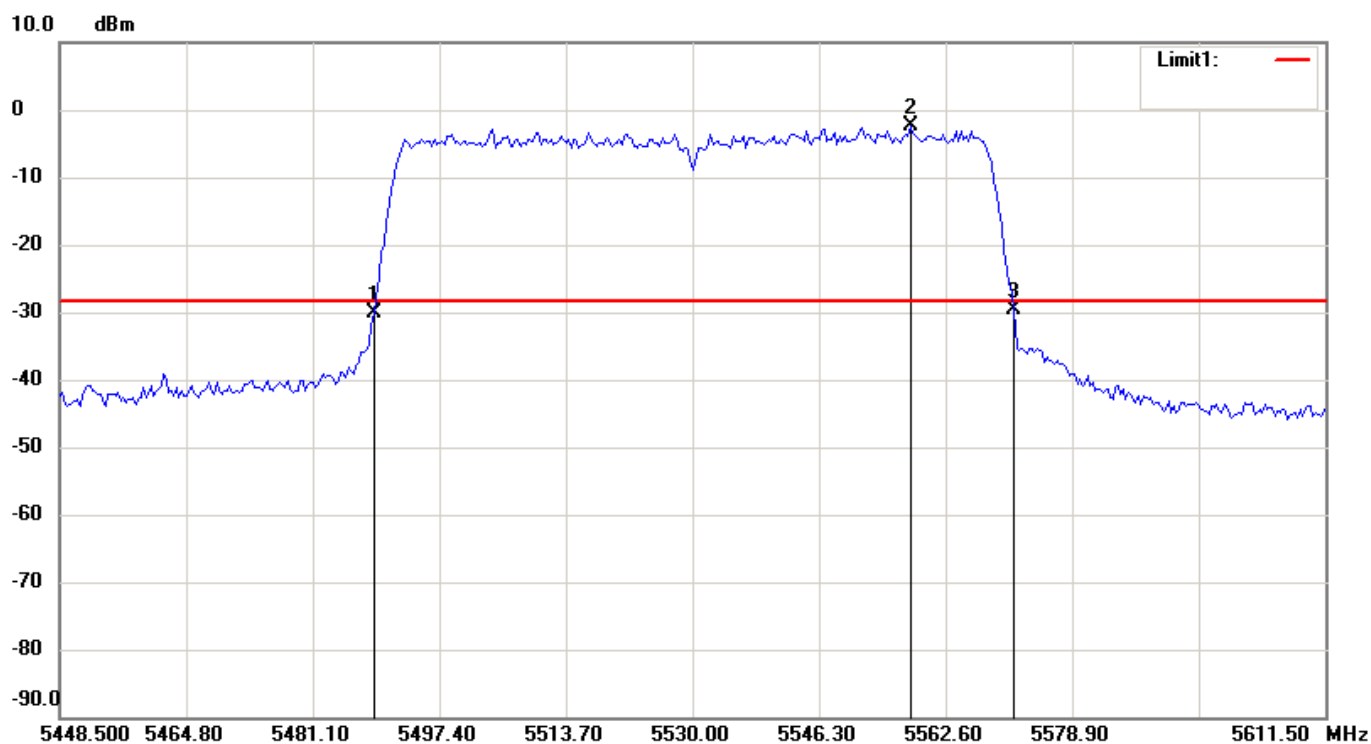
#2

Date: 2019/8/6

Temperature: 26 °C

Time: 上午 09:29:22

Humidity: 62 %



Condition: -28.42dBm

RF Conducted

EUT: Wireless File Transmitter

Sweep Time: 1ms Att.: 15dB

Model: DS586194

RBW: 1000 KHz VBW: 3000 KHz

Test Mode: TX_UNII Band3_Ant2

Note: Operator: Phillip (測試場地: RF-Cond01)

NCC_LP0002_802.11ac80 Channel 106_-26dB EBW

No.	Frequency(MHz)	Level(dBm)
1	5488.92400	-30.23
2	5558.03600	-2.42
3	5571.40200	-29.68

No.		Δ Frequency(MHz)	Δ Level(dB)
1	mk3-mk1	82.478	0.55

File: 19-07-MAS-
008_5-
6ac80_Ant2

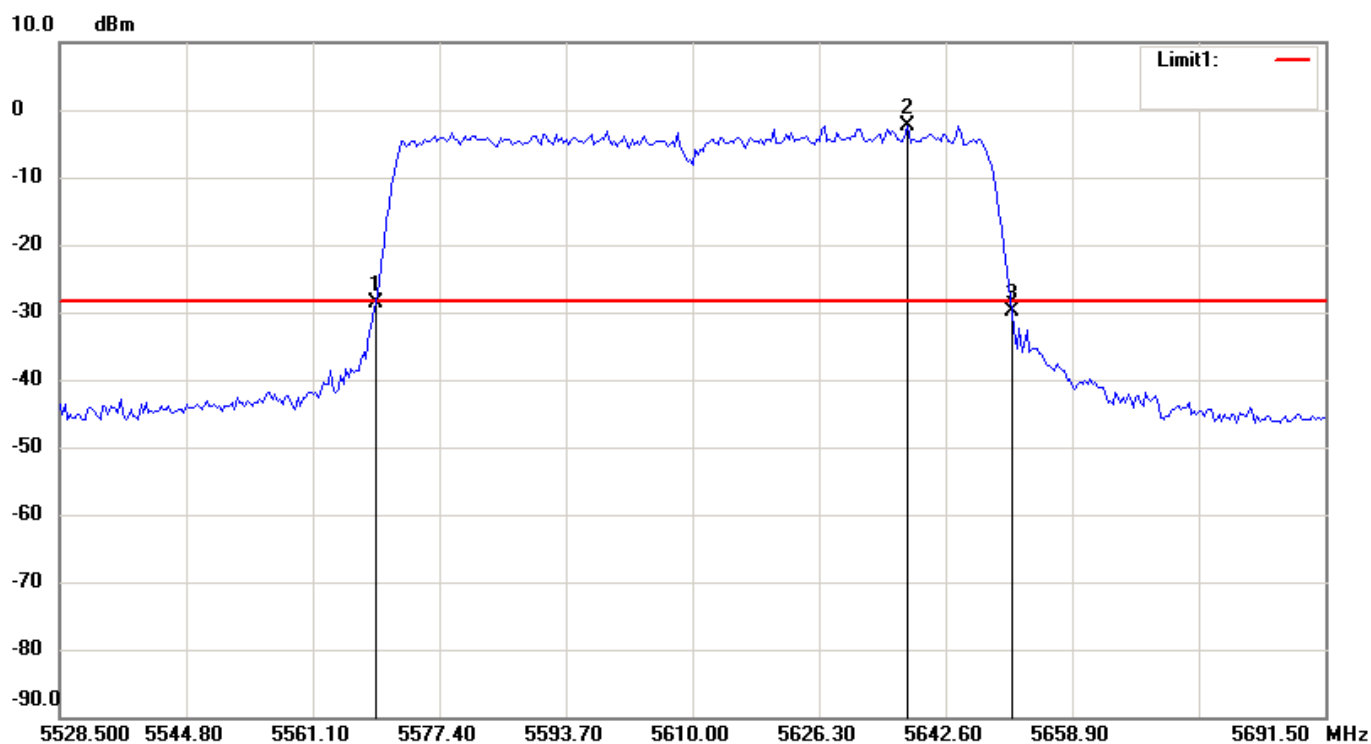
#9

Date: 2019/8/6

Temperature: 26 °C

Time: 上午 09:57:27

Humidity: 62 %



Condition: -28.44dBm

RF Conducted

EUT: Wireless File Transmitter

Sweep Time: 1ms Att.: 15dB

Model: DS586194

RBW: 1000 KHz VBW: 3000 KHz

Test Mode: TX_UNII Band3_Ant2

Note: Operator: Phillip (測試場地: RF-Cond01)

NCC_LP0002_802.11ac80 Channel 122_-26dB EBW

No.	Frequency(MHz)	Level(dBm)
1	5569.25000	-28.52
2	5637.71000	-2.44
3	5651.07600	-29.80

No.		Δ Frequency(MHz)	Δ Level(dB)
1	mk3-mk1	81.826	-1.28

7 最大傳導輸出功率之量測

7.1 最大傳導輸出功率適用標準

依據國家通訊傳播委員會低功率射頻電機技術規範4.7.3.2節之規定：

- (1) 5.470~5.725 GHz 頻帶，在操作頻帶下之最大傳導輸出功率應小於或等於 250 mW 或 11分貝毫瓦(dBm) +10 log B (B是26dB 發射頻寬，單位 MHz) 之較小者。
- (3) 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力率及最大功率頻譜密度。

7.2 最大傳導輸出功率之測試配置

如圖 2 所示。

7.3 最大傳導輸出功率之量測儀器

儀器名稱	製造者	型 號
Spectrum Analyzer	Agilent	E4446A
Attenuator	WEINSCHEL	56-10

測試軟體: LZ-RF (Ver. ETC-3A2)

7.4 最大傳導輸出功率之量測結果

測試工程師: 羅世勇

7.4.1 調變技術: IEEE 802.11a

7.4.1.1 CHAIN 1

測試日期: Aug. 05, 2019

環境溫度: 26°C

環境濕度: 59%

天線增益最大值為 2.04 dBi, NCC Limit 如下表所示:

Chnnel	Fixd limit (dBm)	26dB BW (MHz)	Limit (dBm)	Output Power (dBm)	NCC Limit (dBm)	Chart
L	24	20.757	24.17	3.48	24	Page 53
M	24	20.594	24.14	3.46	24	Page 54
H	24	20.513	24.12	3.18	24	Page 55

註: 1. 繪圖資料請參考第 53-55 頁。

2. 最大傳導輸出功率 (Maximum Output Power) 為經儀器校正補償過後的結果值。

3. Fixed Limit = 250mW=24dBm

4. Caculated Limit = 11dBm + 10 log (26dB BW)

5. If ntenna gain $\leq$ 6dBi, NCC Limit = (Minimum of Fixed Limit nd Caculated Limit) dBm

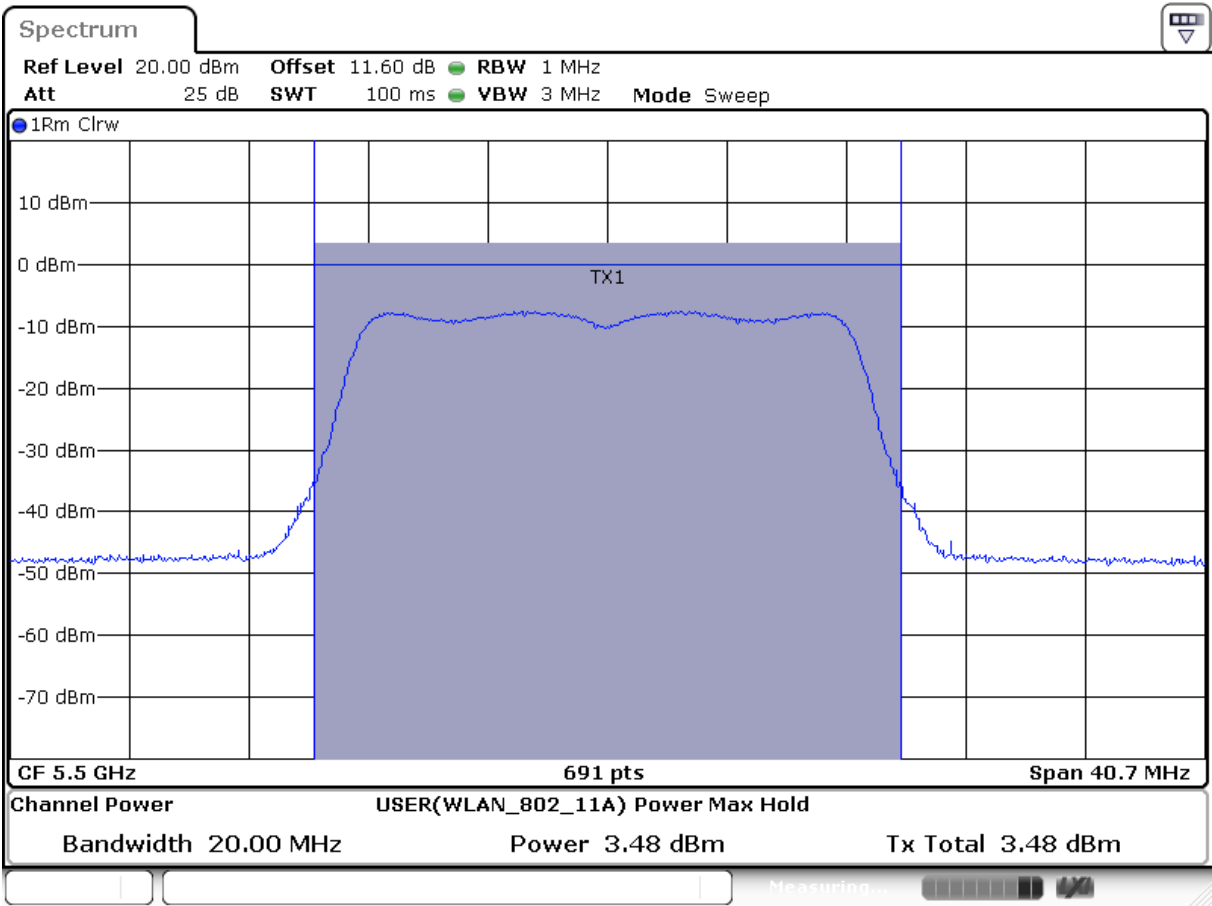
6. If ntenna gain > 6dBi, NCC Limit = (Minimum of Fixed Limit nd Caculated Limit) dBm – (highest ntenna gain – 6 dBi)

7. 量測不準確度: $\pm 1.5\text{dB}$ ($1\text{GHz} \leq f \leq 18\text{GHz}$)

File: 19-07-MAS-008_5-6a_Ant1

Date 2019/8/5
:

Temperature: 26 °C
Humidity: 59 %



Date: 5 AUG 2019 17:12:47

Condition:

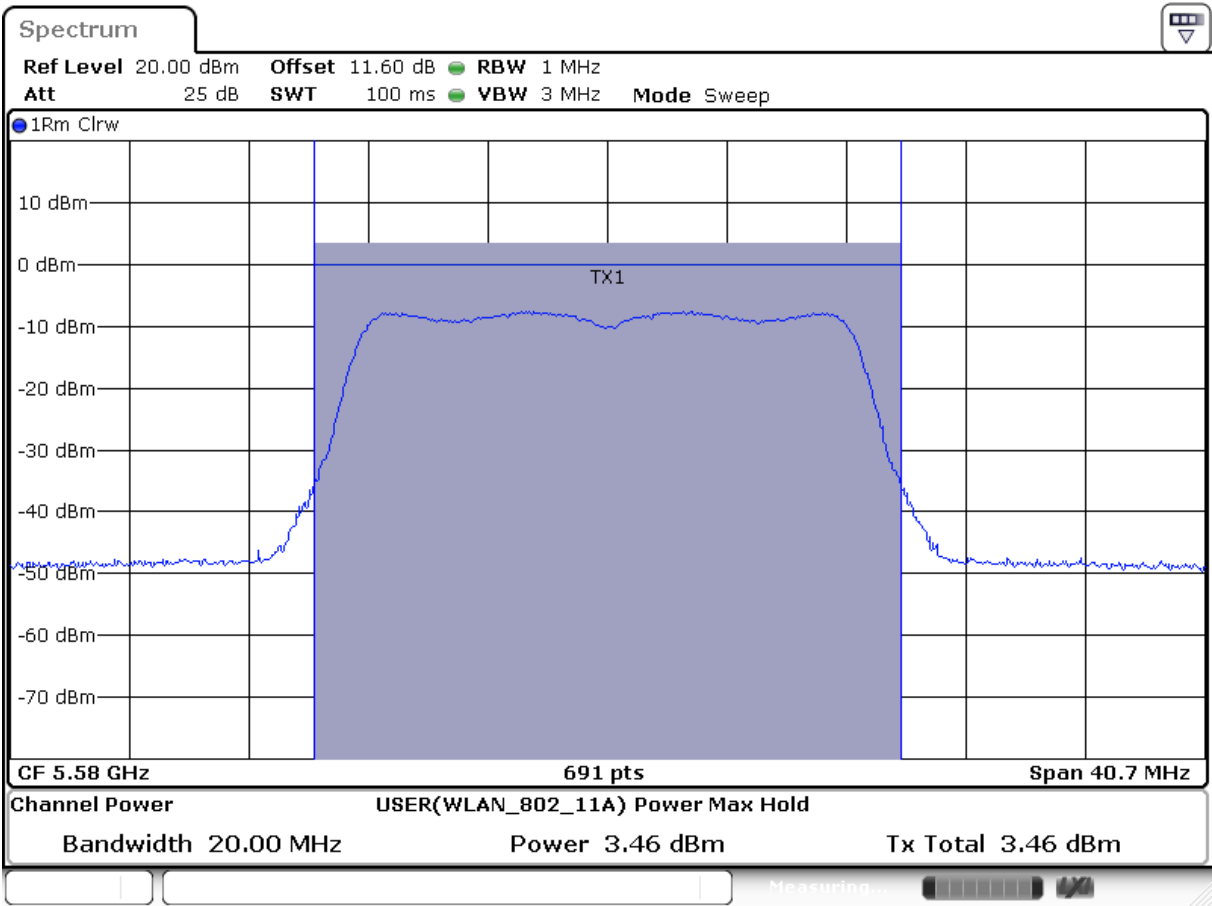
EUT: Wireless File Transmitter
Model: DS586194
Test Mode: TX_UNII Band3_Ant1
Note: Operator: Phillip (測試場地: RF-Cond01)
NCC_LP0002_802.11a_Channel 100_Output power

RF Conducted
Sweep Time: 100ms Att.: 25dB
RBW: 1000 KHz VBW: 3000 KHz

File: 19-07-MAS-008_5-6a_Ant1

Date 2019/8/5
:

Temperature: 26 ℃
Humidity: 59 %



Date: 5 AUG 2019 17:20:19

Condition:

EUT: Wireless File Transmitter
Model: DS586194
Test Mode: TX_UNII Band3_Ant1
Note: Operator: Phillip (測試場地: RF-Cond01)
NCC_LP0002_802.11a_Channel 116_Output power

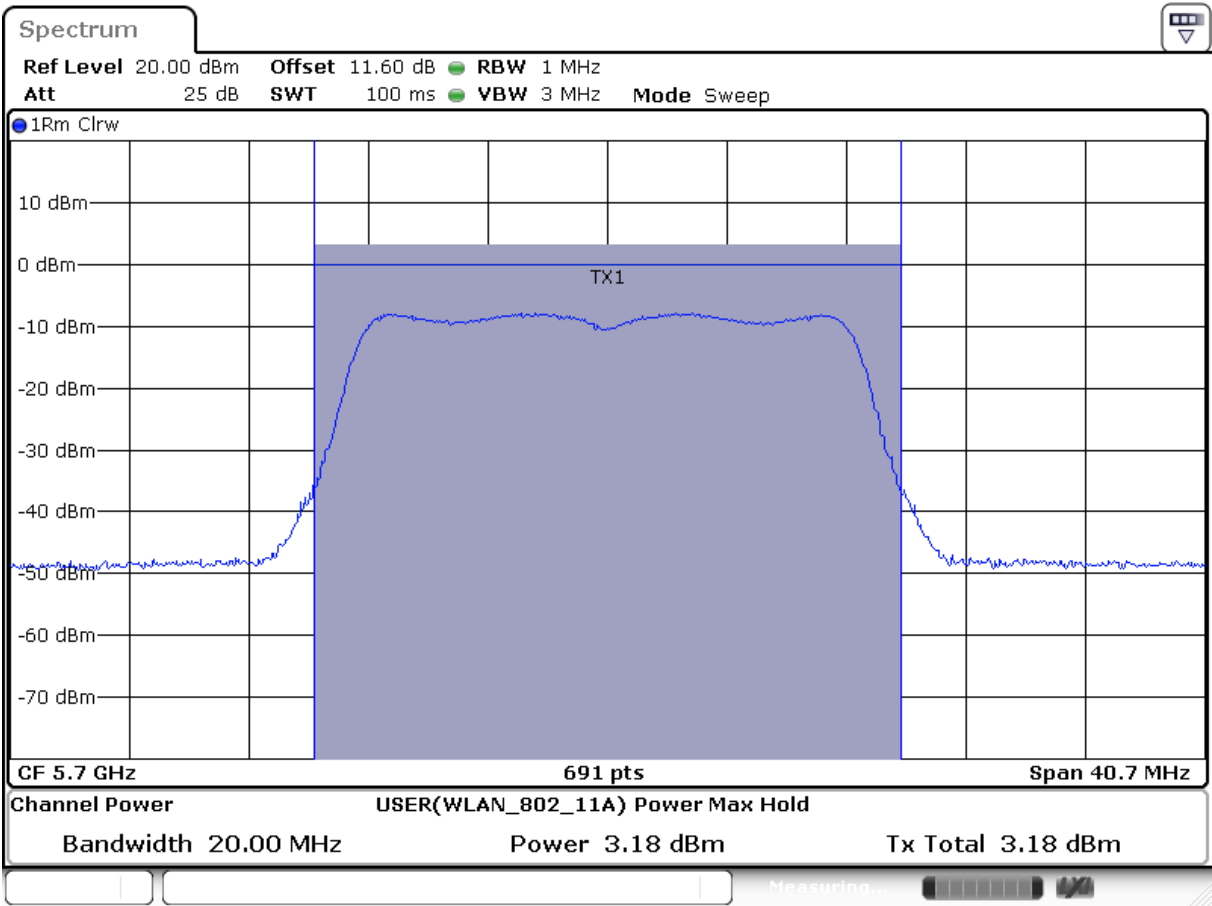
RF Conducted

Sweep Time: 100ms Att.: 25dB
RBW: 1000 KHz VBW: 3000 KHz

File: 19-07-MAS-008_5-6a_Ant1

Date 2019/8/5
:

Temperature: 26 ℃
Humidity: 59 %



Date: 5 AUG 2019 17:28:13

Condition:

EUT: Wireless File Transmitter
Model: DS586194
Test Mode: TX_UNII Band3_Ant1
Note: Operator: Phillip (測試場地: RF-Cond01)
NCC_LP0002_802.11a_Channel 140_Output power

RF Conducted
Sweep Time: 100ms Att.: 25dB
RBW: 1000 KHz VBW: 3000 KHz

7.4.1.2 CHAIN 2

測試日期: Aug. 05, 2019

環境溫度: 26°C

環境濕度: 59%

天線增益最大值為 0.79 dBi，NCC Limit 如下表所示：

Chnnel	Fixd limit (dBm)	26dB BW (MHz)	Limit (dBm)	Output Power (dBm)	NCC Limit (dBm)	Chart
L	24	20.757	24.17	3.83	24	Page 57
M	24	20.594	24.14	4.10	24	Page 58
H	24	20.513	24.12	4.28	24	Page 59

註：1. 繪圖資料請參考第 57-59 頁。

2. 最大傳導輸出功率 (Maximum Output Power) 為經儀器校正補償過後的結果值。

3. Fixed Limit = 250mW=24dBm

4. Caculated Limit = 11dBm + 10 log (26dB BW)

5. If ntenna gain $\leq$ 6dBi, NCC Limit = (Minimum of Fixed Limit nd Caculated Limit) dBm

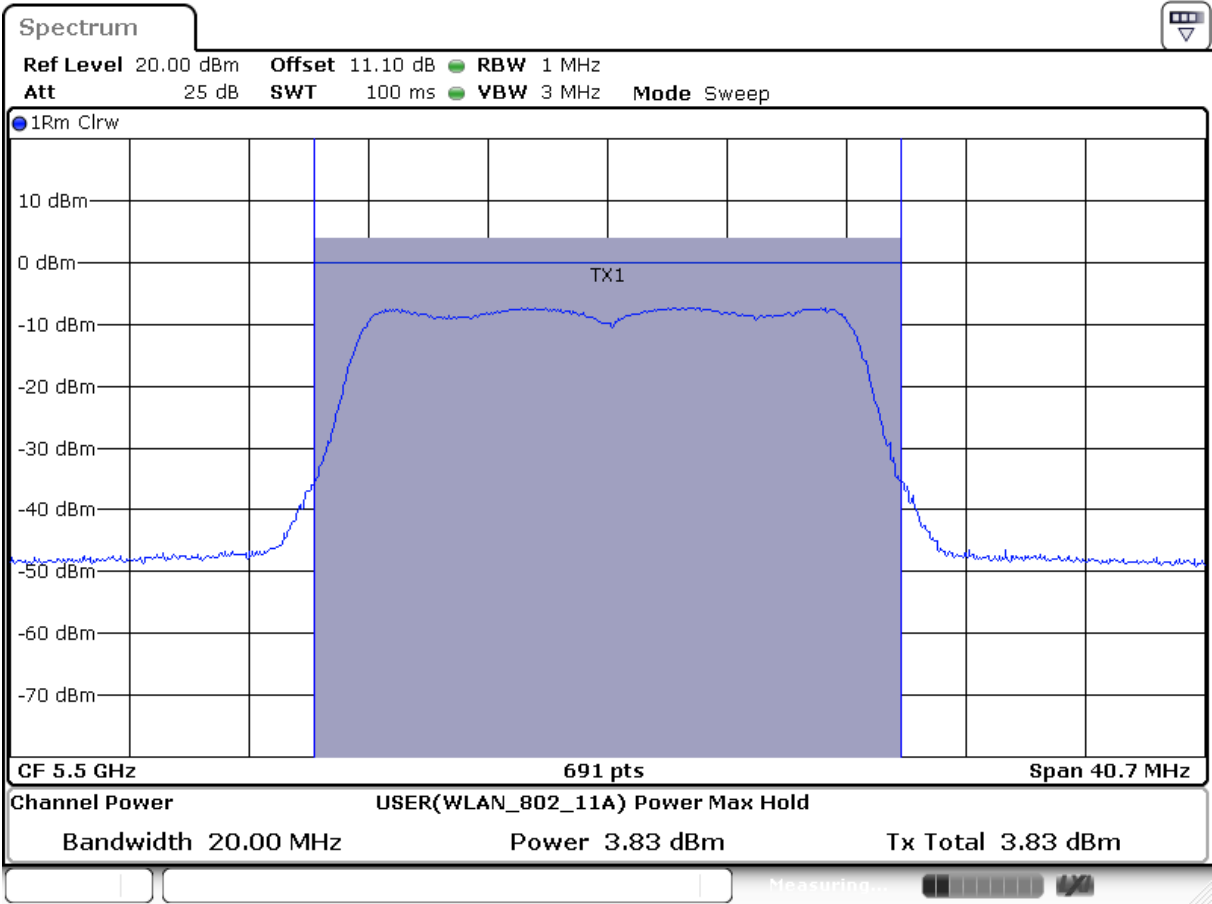
6. If ntenna gain > 6dBi, NCC Limit = (Minimum of Fixed Limit nd Caculated Limit) dBm – (highest ntenna gain – 6 dBi)

7. 量測不準確度: $\pm 1.5\text{dB}$ ($1\text{GHz} \leq f \leq 18\text{GHz}$)

File: 19-07-MAS-008_5-6a_Ant2

Date 2019/8/5
:

Temperature: 26 °C
Humidity: 59 %



Date: 5 AUG 2019 16:02:59

Condition:

EUT: Wireless File Transmitter
Model: DS586194
Test Mode: TX_UNII Band3_Ant2
Note: Operator: Phillip (測試場地: RF-Cond01)
NCC_LP0002_802.11a_Channel 100_Output power

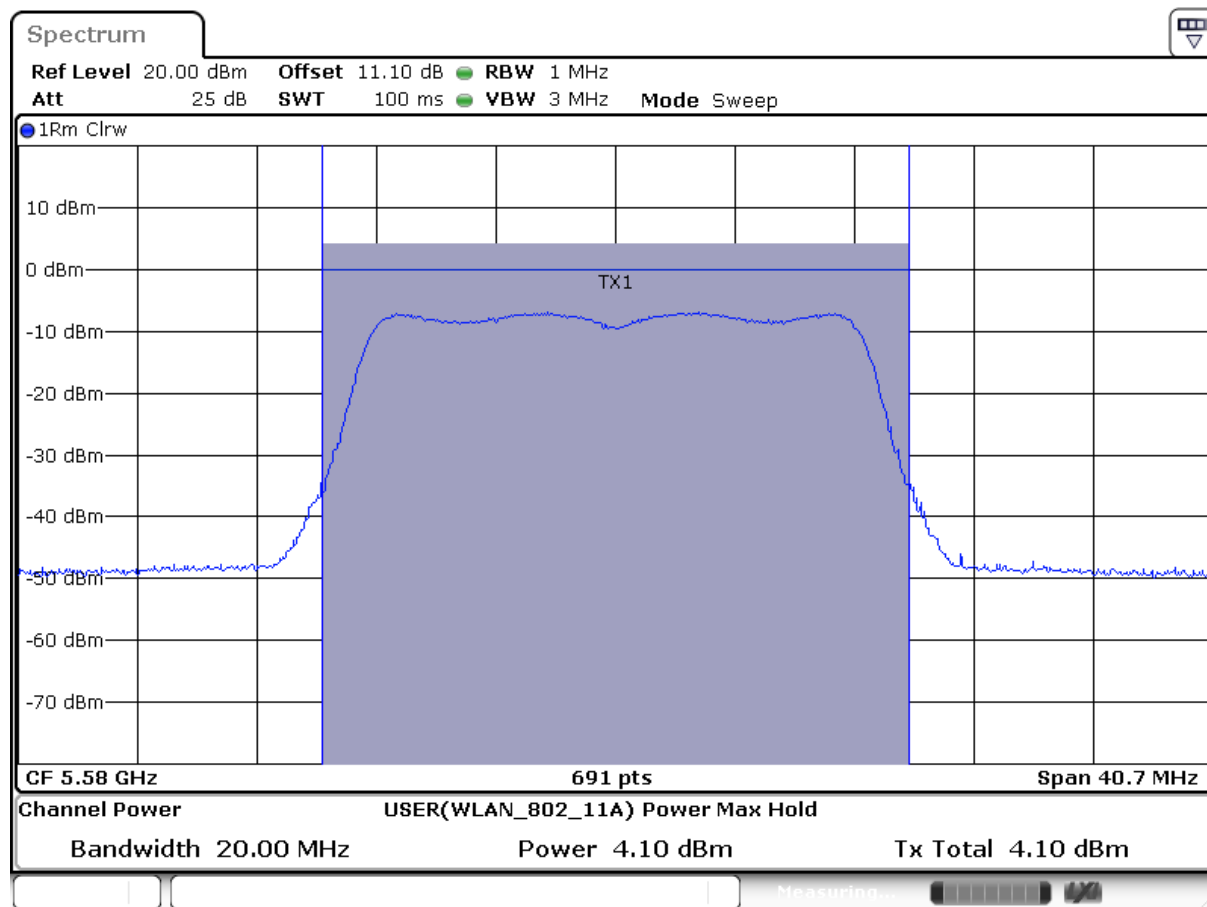
RF Conducted
Sweep Time: 100ms Att.: 25dB
RBW: 1000 KHz VBW: 3000 KHz

File: 19-07-MAS-
008_5-6a_Ant2

Date 2019/8/5
:

Temperature: 26 °C

Humidity: 59 %



Date: 5 AUG 2019 16:08:07

Condition:

EUT: Wireless File Transmitter

Model: DS586194

Test Mode: TX_UNII Band3_Ant2

Note: Operator: Phillip (測試場地: RF-Cond01)

NCC_LP0002_802.11a_Channel 116_Output power

RF Conducted

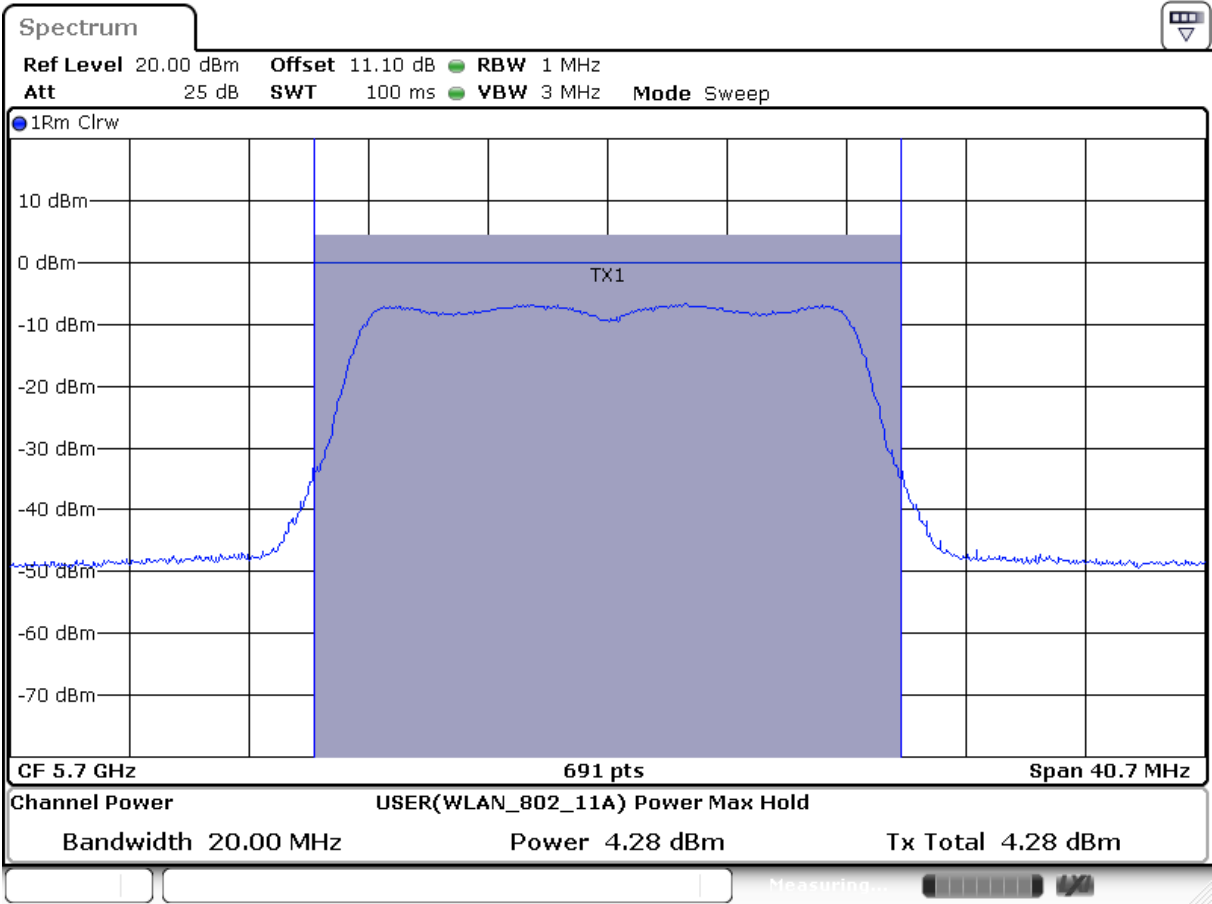
Sweep Time: 100ms Att.: 25dB

RBW: 1000 KHz VBW: 3000 KHz

File: 19-07-MAS-008_5-6a_Ant2

Date 2019/8/5
:

Temperature: 26 ℃
Humidity: 59 %



Date: 5 AUG 2019 16:15:06

Condition:

EUT: Wireless File Transmitter
Model: DS586194
Test Mode: TX_UNII Band3_Ant2
Note: Operator: Phillip (測試場地: RF-Cond01)
NCC_LP0002_802.11a_Channel 140_Output power

RF Conducted
Sweep Time: 100ms Att.: 25dB
RBW: 1000 KHz VBW: 3000 KHz

7.4.2 調變技術:IEEE 802.11n HT20

7.4.2.1 CHAIN 1

測試日期: Aug. 05, 2019

環境溫度: 26°C

環境濕度: 59%

天線增益最大值為 2.04 dBi，NCC Limit 如下表所示：

Chnnel	Fixd limit (dBm)	26dB BW (MHz)	Limit (dBm)	Output Power (dBm)	NCC Limit (dBm)	Chart
L	24	20.594	24.14	3.79	24	Page 61
M	24	21.245	24.27	3.72	24	Page 62
H	24	20.594	24.14	3.38	24	Page 63

註：1. 繪圖資料請參考第 61-63 頁。

2. 最大傳導輸出功率 (Maximum Output Power) 為經儀器校正補償過後的結果值。

3. Fixed Limit = 250mW=24dBm

4. Caculated Limit = 11dBm + 10 log (26dB BW)

5. If ntenna gain $\leq$ 6dBi, NCC Limit = (Minimum of Fixed Limit nd Caculated Limit) dBm

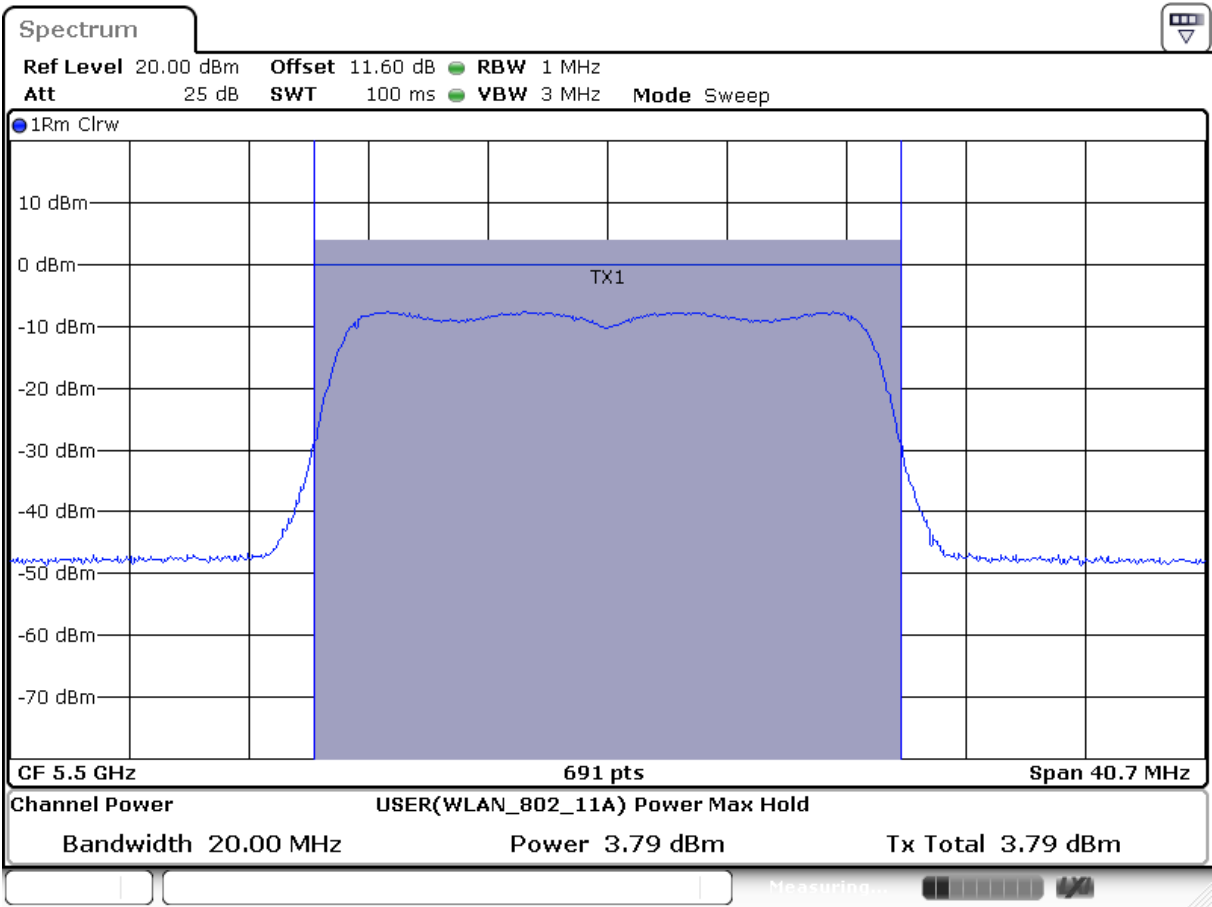
6. If ntenna gain > 6dBi, NCC Limit = (Minimum of Fixed Limit nd Caculated Limit) dBm – (highest ntenna gain – 6 dBi)

7. 量測不準確度:±1.5dB(1GHz≤f≤18GHz)

File: 19-07-MAS-008_5-6n20_Ant1

Date 2019/8/5
:

Temperature: 26 °C
Humidity: 59 %



Date: 5 AUG 2019 18:41:25

Condition:

EUT: Wireless File Transmitter
Model: DS586194
Test Mode: TX_UNII Band3_Ant1
Note: Operator: Phillip (測試場地: RF-Cond01)
NCC_LP0002_802.11n20_Channel 100_Output power

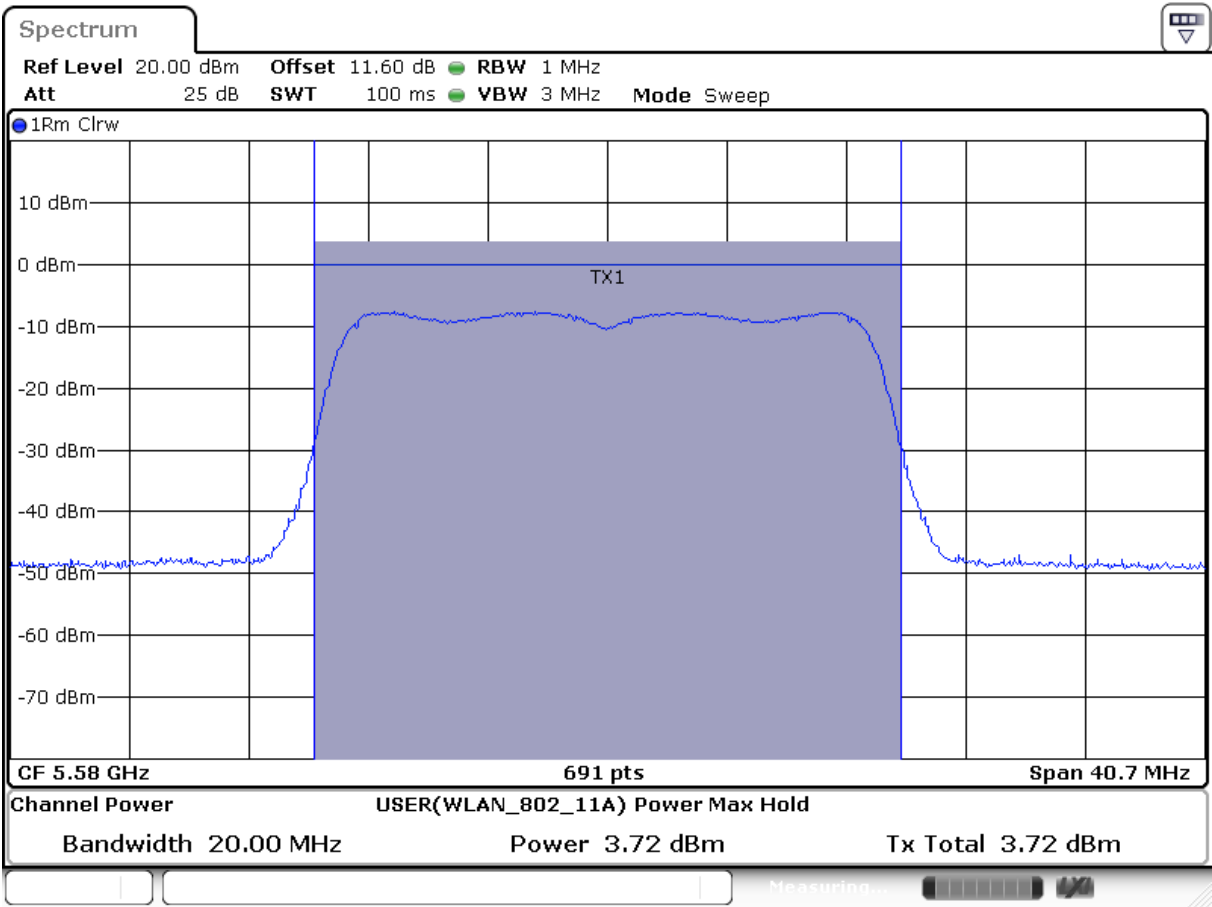
RF Conducted
Sweep Time: 100ms Att.: 25dB
RBW: 1000 KHz VBW: 3000 KHz

File: 19-07-MAS-008_5-6n20_Ant1

Date 2019/8/5

Temperature: 26 °C

Humidity: 59 %



Date: 5 AUG 2019 18:48:49

Condition:

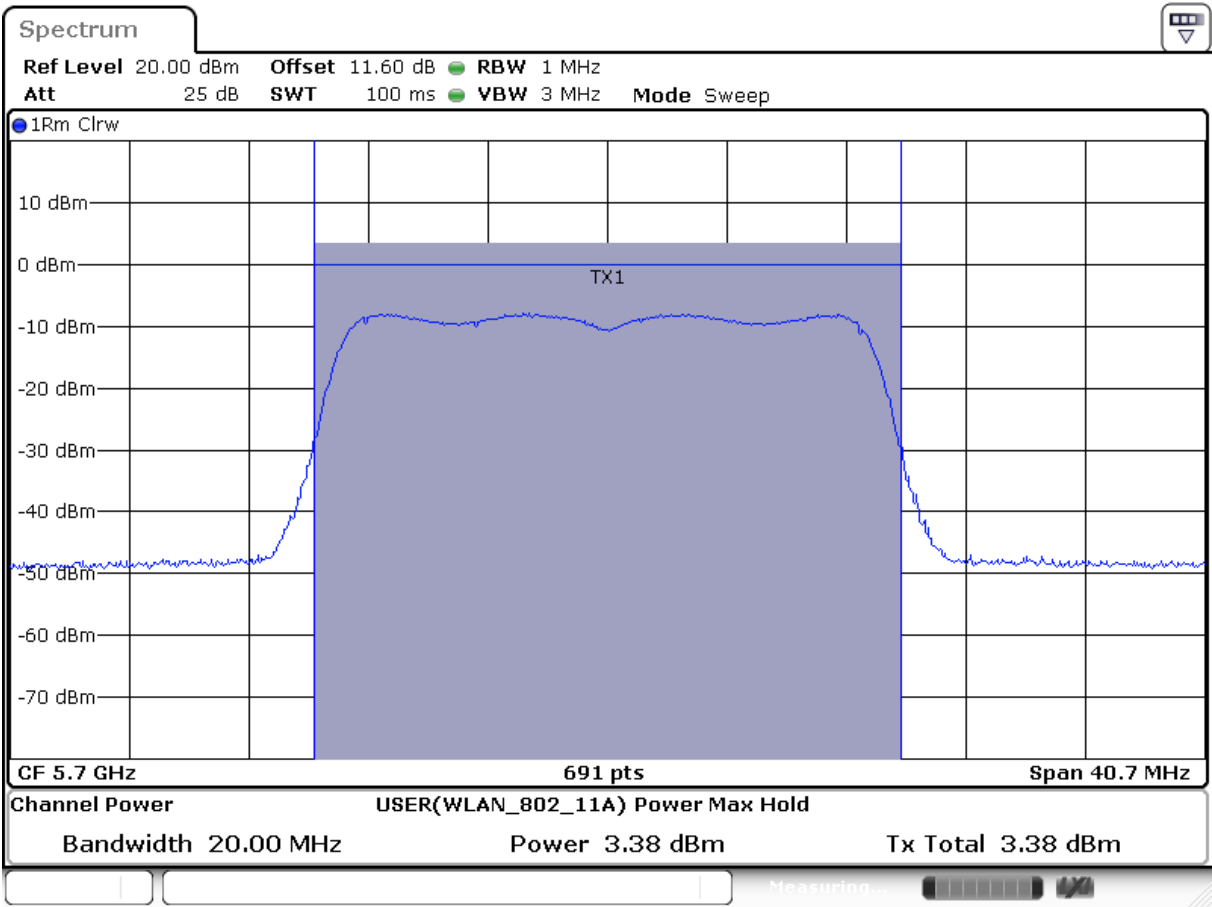
EUT: Wireless File Transmitter
Model: DS586194
Test Mode: TX_UNII Band3_Ant1
Note: Operator: Phillip (測試場地: RF-Cond01)
NCC_LP0002_802.11n20_Channel 116_Output power

RF Conducted
Sweep Time: 100ms Att.: 25dB
RBW: 1000 KHz VBW: 3000 KHz

File: 19-07-MAS-008_5-6n20_Ant1

Date 2019/8/5
:

Temperature: 26 °C
Humidity: 59 %



Date: 5 AUG 2019 18:54:29

Condition:

EUT: Wireless File Transmitter
Model: DS586194
Test Mode: TX_UNII Band3_Ant1
Note: Operator: Phillip (測試場地: RF-Cond01)
NCC_LP0002_802.11n20_Channel 140_Output power

RF Conducted
Sweep Time: 100ms Att.: 25dB
RBW: 1000 KHz VBW: 3000 KHz

7.4.2.2 CHAIN 2

測試日期: Aug. 05, 2019

環境溫度: 26°C

環境濕度: 59%

天線增益最大值為 0.79 dBi，NCC Limit 如下表所示：

Chnnel	Fixd limit (dBm)	26dB BW (MHz)	Limit (dBm)	Output Power (dBm)	NCC Limit (dBm)	Chart
L	24	20.594	24.14	4.17	24	Page 65
M	24	20.594	24.14	4.42	24	Page 66
H	24	20.431	24.10	4.50	24	Page 67

註：1. 繪圖資料請參考第 65-67 頁。

2. 最大傳導輸出功率 (Maximum Output Power) 為經儀器校正補償過後的結果值。

3. Fixed Limit = 250mW=24dBm

4. Caculated Limit = 11dBm + 10 log (26dB BW)

5. If ntenna gain $\leq$ 6dBi, NCC Limit = (Minimum of Fixed Limit nd Caculated Limit) dBm

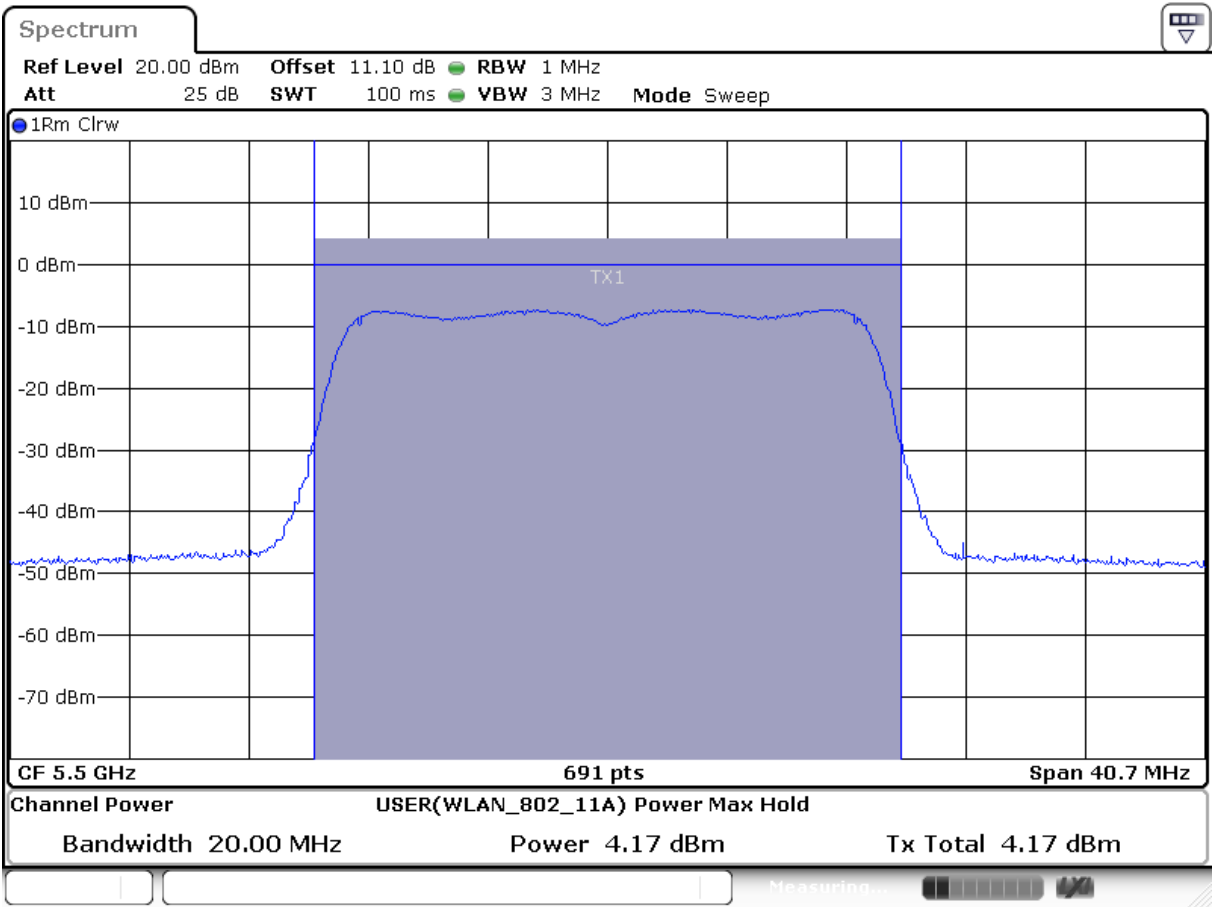
6. If ntenna gain > 6dBi, NCC Limit = (Minimum of Fixed Limit nd Caculated Limit) dBm – (highest ntenna gain – 6 dBi)

7. 量測不準確度: $\pm 1.5\text{dB}$ ($1\text{GHz} \leq f \leq 18\text{GHz}$)

File: 19-07-MAS-008_5-6n20_Ant2

Date 2019/8/5
:

Temperature: 26 °C
Humidity: 59 %



Date: 5 AUG 2019 16:49:39

Condition:

EUT: Wireless File Transmitter
Model: DS586194
Test Mode: TX_UNII Band3_Ant2
Note: Operator: Phillip (測試場地: RF-Cond01)
NCC_LP0002_802.11n20_Channel 100_Output power

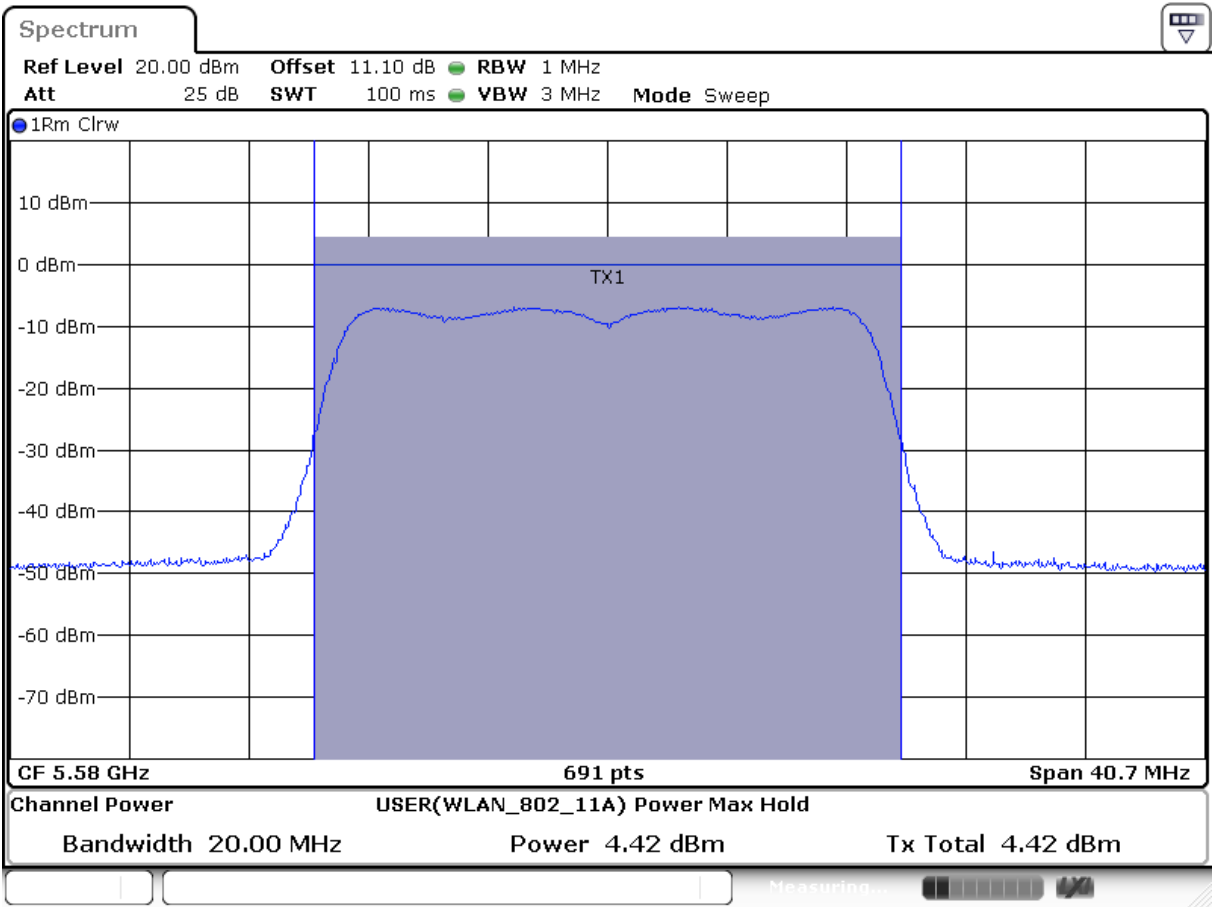
RF Conducted
Sweep Time: 100ms Att.: 25dB
RBW: 1000 KHz VBW: 3000 KHz

File: 19-07-MAS-008_5-6n20_Ant2

Date 2019/8/5
:

Temperature: 26 ℃

Humidity: 59 %



Date: 5 AUG 2019 16:56:46

Condition:

EUT: Wireless File Transmitter
Model: DS586194
Test Mode: TX_UNII Band3_Ant2
Note: Operator: Phillip (測試場地: RF-Cond01)
NCC_LP0002_802.11n20_Channel 116_Output power

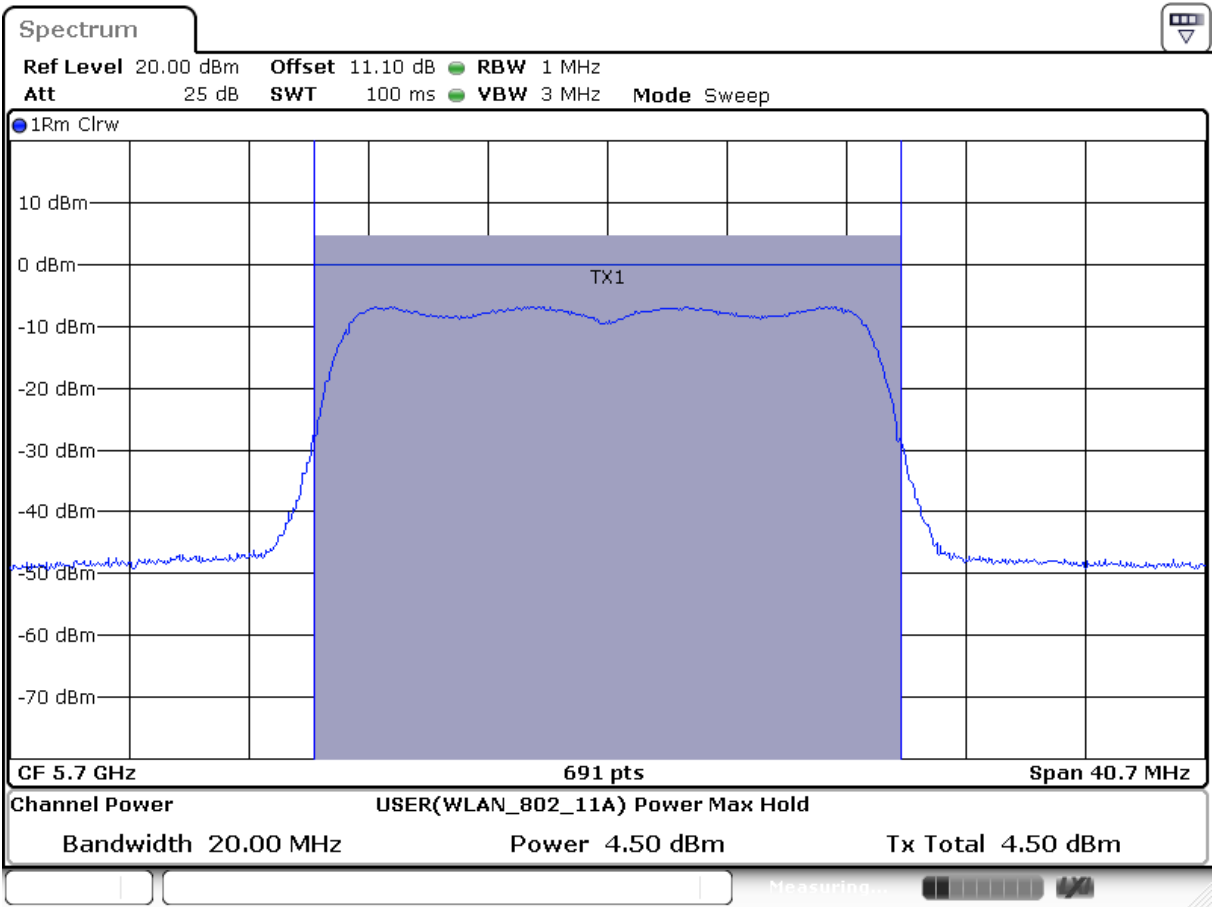
RF Conducted
Sweep Time: 100ms Att.: 25dB
RBW: 1000 KHz VBW: 3000 KHz

File: 19-07-MAS-008_5-6n20_Ant2

Date 2019/8/5

Temperature: 26 °C

Humidity: 59 %



Date: 5 AUG 2019 17:02:53

Condition:

EUT:

Wireless File Transmitter

Model:

DS586194

Test Mode:

TX_UNII Band3_Ant2

Note:

Operator: Phillip (測試場地: RF-Cond01)

NCC_LP0002_802.11n20_Channel 140_Output power

RF Conducted

Sweep Time: 100ms Att.: 25dB

RBW: 1000 KHz VBW: 3000 KHz

7.4.2.3 CHAIN 1 + CHAIN 2

測試日期: Aug. 05, 2019

環境溫度: 26°C

環境濕度: 59%

Ant 1 / Ant 2 combination 天線增益最大值為 4.45 dBi，NCC Limit 如下表所示：

Chnnel	CHAIN 1 Maximum Output Power (dBm)	CHAIN 2 Maximum Output Power (dBm)	TOTAL Power (dBm)	NCC Limit (dBm)	Chart
L	3.79	4.17	6.99	24	-
M	3.72	4.42	7.09	24	-
H	3.38	4.50	6.99	24	-

註:

1. 最大發射輸出功率 (Maximum Output Power) 為經儀器校正補償過後的結果值。
2. Fixed Limit = 250mW=24dBm
3. Caculated Limit = 11dBm + 10 log (26dB BW)
4. If ntenna gain $\leq$ 6dBi, NCC Limit = (Minimum of Fixed Limit nd Caculated Limit) dBm
5. If ntenna gain > 6dBi, NCC Limit = (Minimum of Fixed Limit nd Caculated Limit) dBm – (highest ntenna gain – 6 dBi)
6. 量測不準確度: $\pm 1.5\text{dB}$ ($1\text{GHz} \leq f \leq 18\text{GHz}$)

7.4.3 調變技術: IEEE 802.11n HT40

7.4.3.1 CHAIN 1

測試日期: Aug. 05, 2019

環境溫度: 26°C

環境濕度: 59%

天線增益最大值為 2.04 dBi, NCC Limit 如下表所示:

Chnnel	Fixd limit (dBm)	26dB BW (MHz)	Limit (dBm)	Output Power (dBm)	NCC Limit (dBm)	Chart
L	24	41.951	27.23	3.73	24	Page 70
M	24	42.113	27.24	3.61	24	Page 71
H	24	41.951	27.23	3.54	24	Page 72

註: 1. 繪圖資料請參考第 70-72 頁。

2. 最大傳導輸出功率 (Maximum Output Power) 為經儀器校正補償過後的結果值。

3. Fixed Limit = 250mW=24dBm

4. Caculated Limit = 11dBm + 10 log (26dB BW)

5. If ntenna gain $\leq$ 6dBi, NCC Limit = (Minimum of Fixed Limit nd Caculated Limit) dBm

6. If ntenna gain > 6dBi, NCC Limit = (Minimum of Fixed Limit nd Caculated Limit) dBm – (highest ntenna gain – 6 dBi)

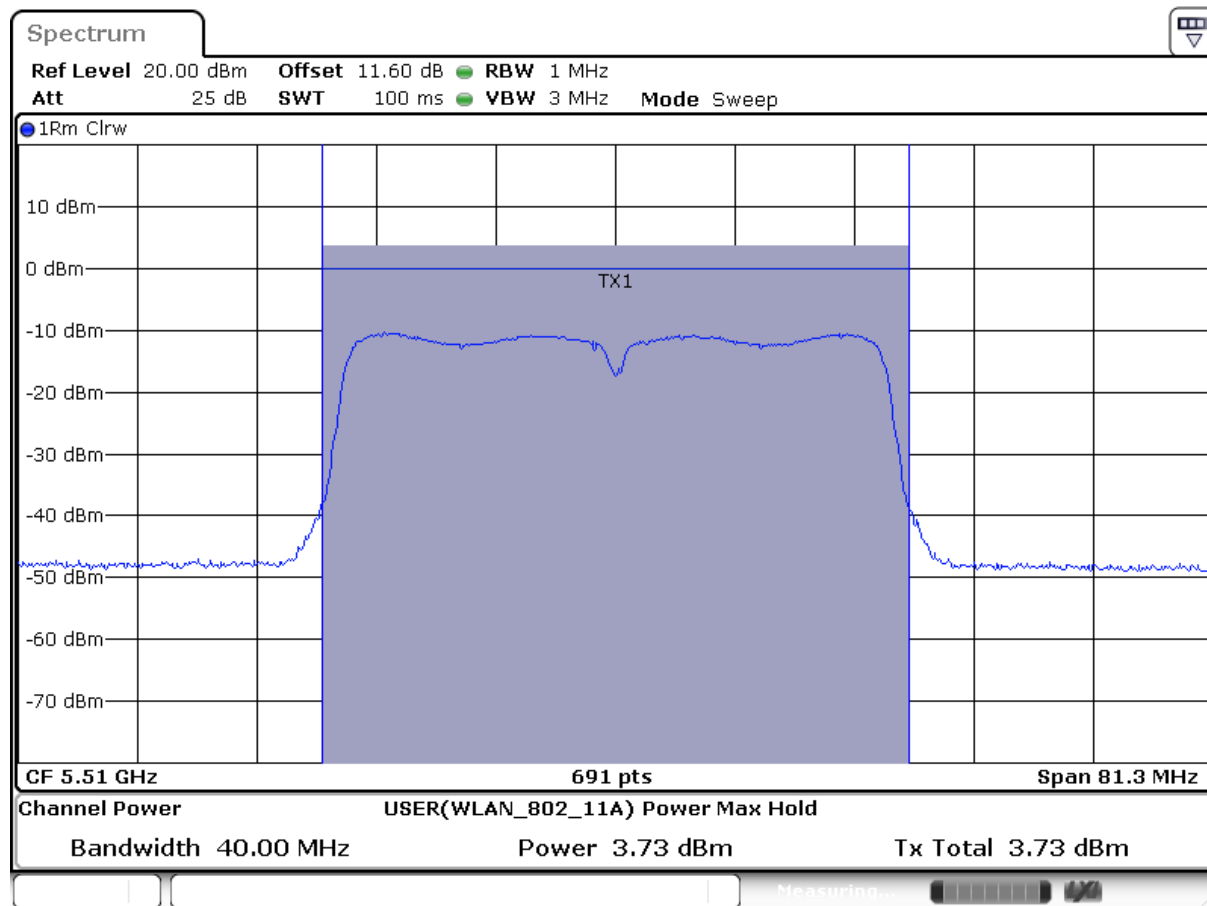
7. 量測不準確度: $\pm 1.5\text{dB}$ ($1\text{GHz} \leq f \leq 18\text{GHz}$)

File: 19-07-MAS-
008_5-
6n40_Ant1

Date 2019/8/5
:

Temperature: 26 °C

Humidity: 59 %



Date: 5 AUG 2019 19:23:00

Condition:

EUT: Wireless File Transmitter

Model: DS586194

Test Mode: TX_UNII Band3_Ant1

Note: Operator: Phillip (測試場地: RF-Cond01)

NCC_LP0002_802.11n40_Channel 102_Output power

RF Conducted

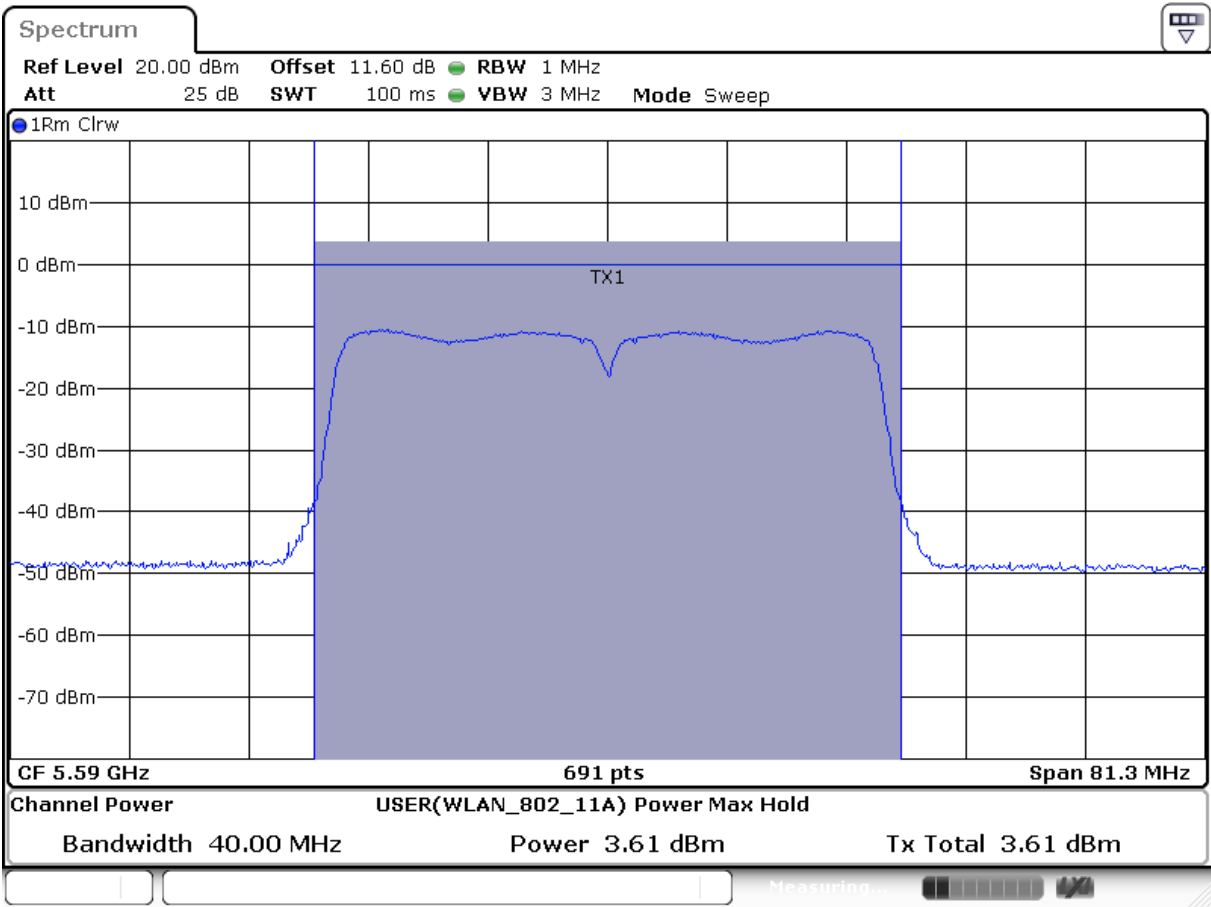
Sweep Time: 100ms Att.: 25dB

RBW: 1000 KHz VBW: 3000 KHz

File: 19-07-MAS-008_5-6n40_Ant1

Date 2019/8/5
:

Temperature: 26 °C
Humidity: 59 %



Date: 5 AUG 2019 19:34:11

Condition:

EUT: Wireless File Transmitter
Model: DS586194
Test Mode: TX_UNII Band3_Ant1
Note: Operator: Phillip (測試場地: RF-Cond01)
NCC_LP0002_802.11n40_Channel 118_Output power

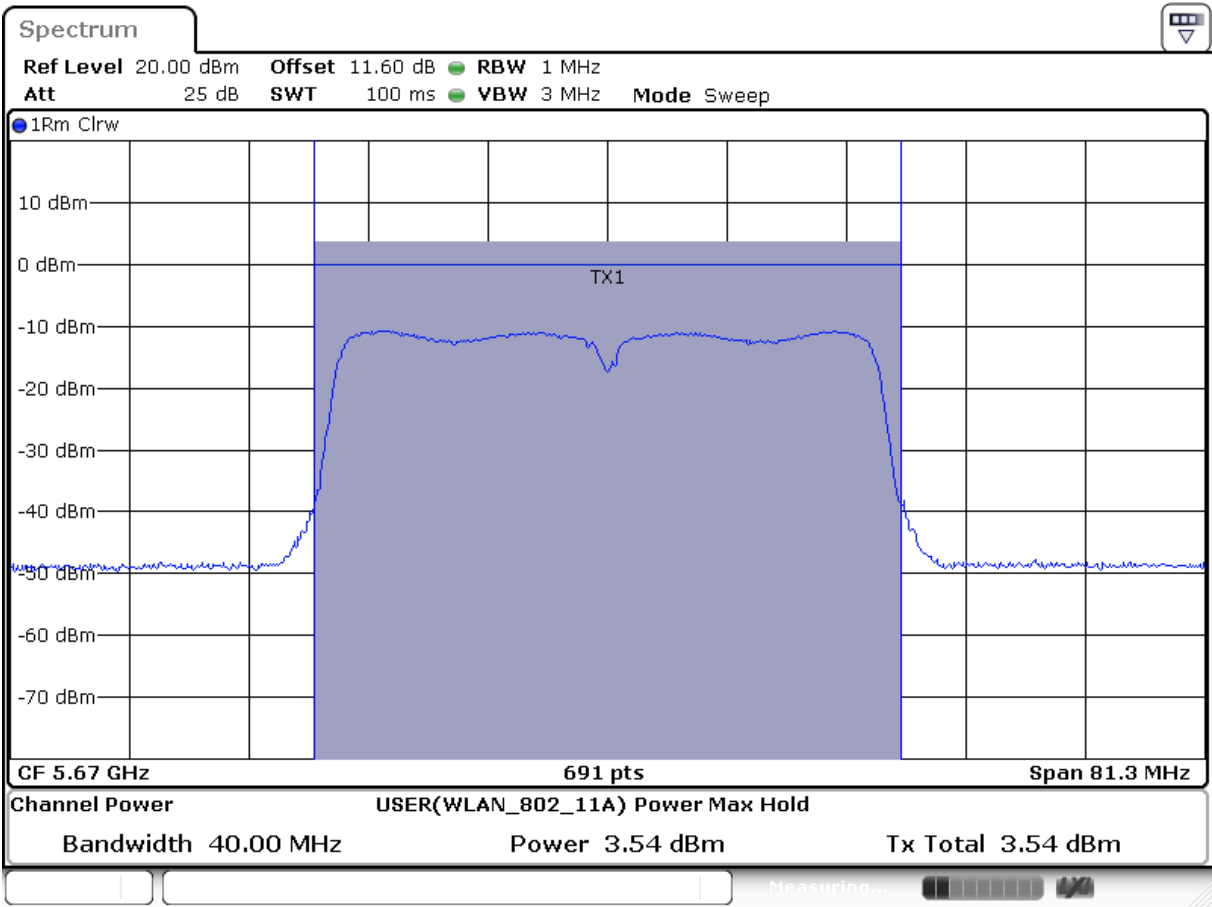
RF Conducted
Sweep Time: 100ms Att.: 25dB
RBW: 1000 KHz VBW: 3000 KHz

File: 19-07-MAS-008_5-6n40_Ant1

Date 2019/8/5
:

Temperature: 26 ℃

Humidity: 59 %



Date: 5 AUG 2019 19:45:06

Condition:

EUT: Wireless File Transmitter
Model: DS586194
Test Mode: TX_UNII Band3_Ant1
Note: Operator: Phillip (測試場地: RF-Cond01)
NCC_LP0002_802.11n40_Channel 134_Output power

RF Conducted

Sweep Time: 100ms Att.: 25dB
RBW: 1000 KHz VBW: 3000 KHz

7.4.3.2 CHAIN 2

測試日期: Aug. 05, 2019

環境溫度: 26°C

環境濕度: 59%

天線增益最大值為 0.79 dBi，NCC Limit 如下表所示：

Chnnel	Fixd limit (dBm)	26dB BW (MHz)	Limit (dBm)	Output Power (dBm)	NCC Limit (dBm)	Chart
L	24	40.975	27.13	4.41	24	Page 74
M	24	40.975	27.13	4.47	24	Page 75
H	24	40.813	27.11	4.50	24	Page 76

註：1. 繪圖資料請參考第 74-76 頁。

2. 最大傳導輸出功率 (Maximum Output Power) 為經儀器校正補償過後的結果值。

3. Fixed Limit = 250mW=24dBm

4. Caculated Limit = 11dBm + 10 log (26dB BW)

5. If ntenna gain $\leq$ 6dBi, NCC Limit = (Minimum of Fixed Limit nd Caculated Limit) dBm

6. If ntenna gain > 6dBi, NCC Limit = (Minimum of Fixed Limit nd Caculated Limit) dBm – (highest ntenna gain – 6 dBi)

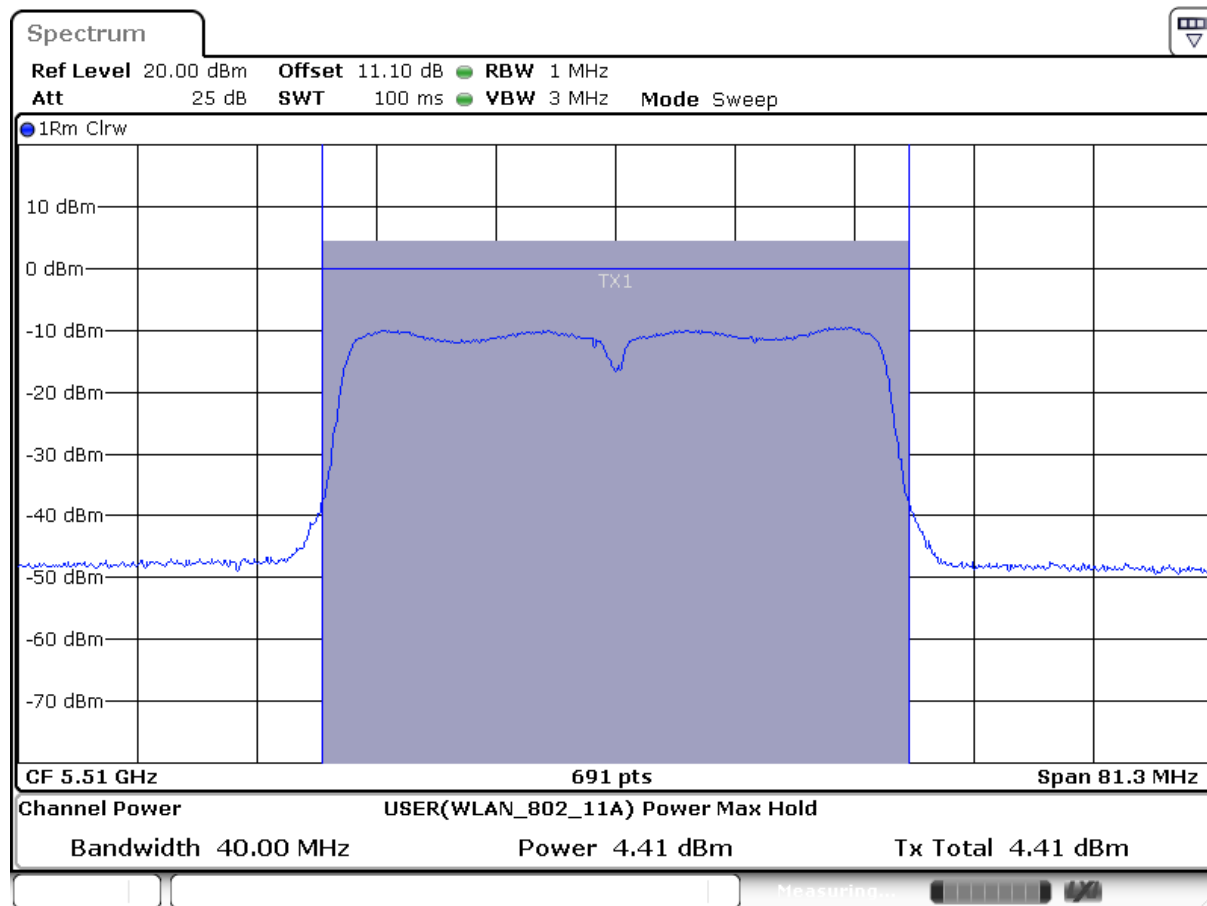
7. 量測不準確度: $\pm 1.5\text{dB}$ ($1\text{GHz} \leq f \leq 18\text{GHz}$)

File: 19-07-MAS-
008_5-
6n40_Ant2

Date 2019/8/5
:

Temperature: 26 °C

Humidity: 59 %



Date: 5 AUG 2019 20:59:09

Condition:

EUT: Wireless File Transmitter

Model: DS586194

Test Mode: TX_UNII Band3_Ant2

Note: Operator: Phillip (測試場地: RF-Cond01)

NCC_LP0002_802.11n40_Channel 102_Output power

RF Conducted

Sweep Time: 100ms Att.: 25dB

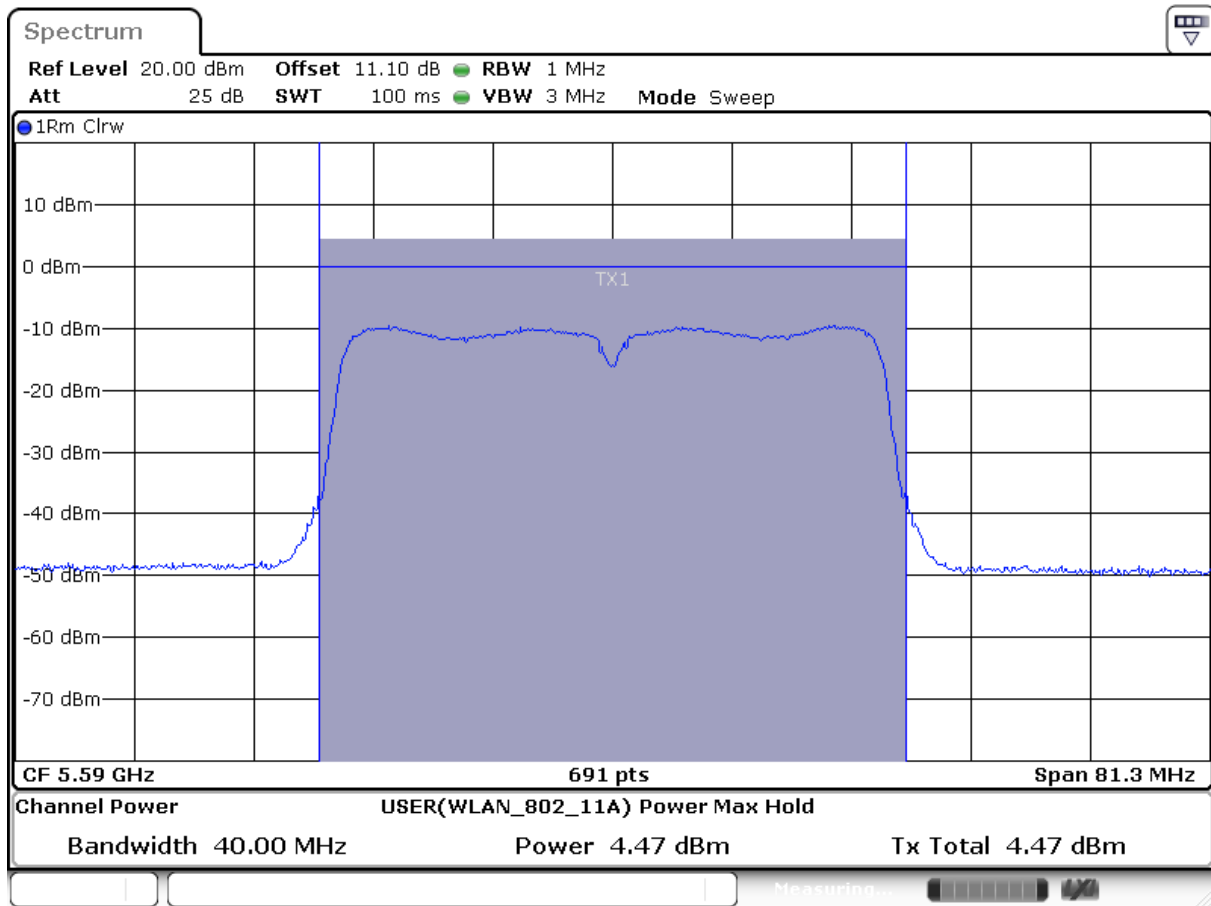
RBW: 1000 KHz VBW: 3000 KHz

File: 19-07-MAS-
008_5-
6n40_Ant2

Date 2019/8/5
:

Temperature: 26 °C

Humidity: 59 %



Date: 5 AUG 2019 21:06:15

Condition:

EUT: Wireless File Transmitter

Model: DS586194

Test Mode: TX_UNII Band3_Ant2

Note: Operator: Phillip (測試場地: RF-Cond01)

NCC_LP0002_802.11n40_Channel 118_Output power

RF Conducted

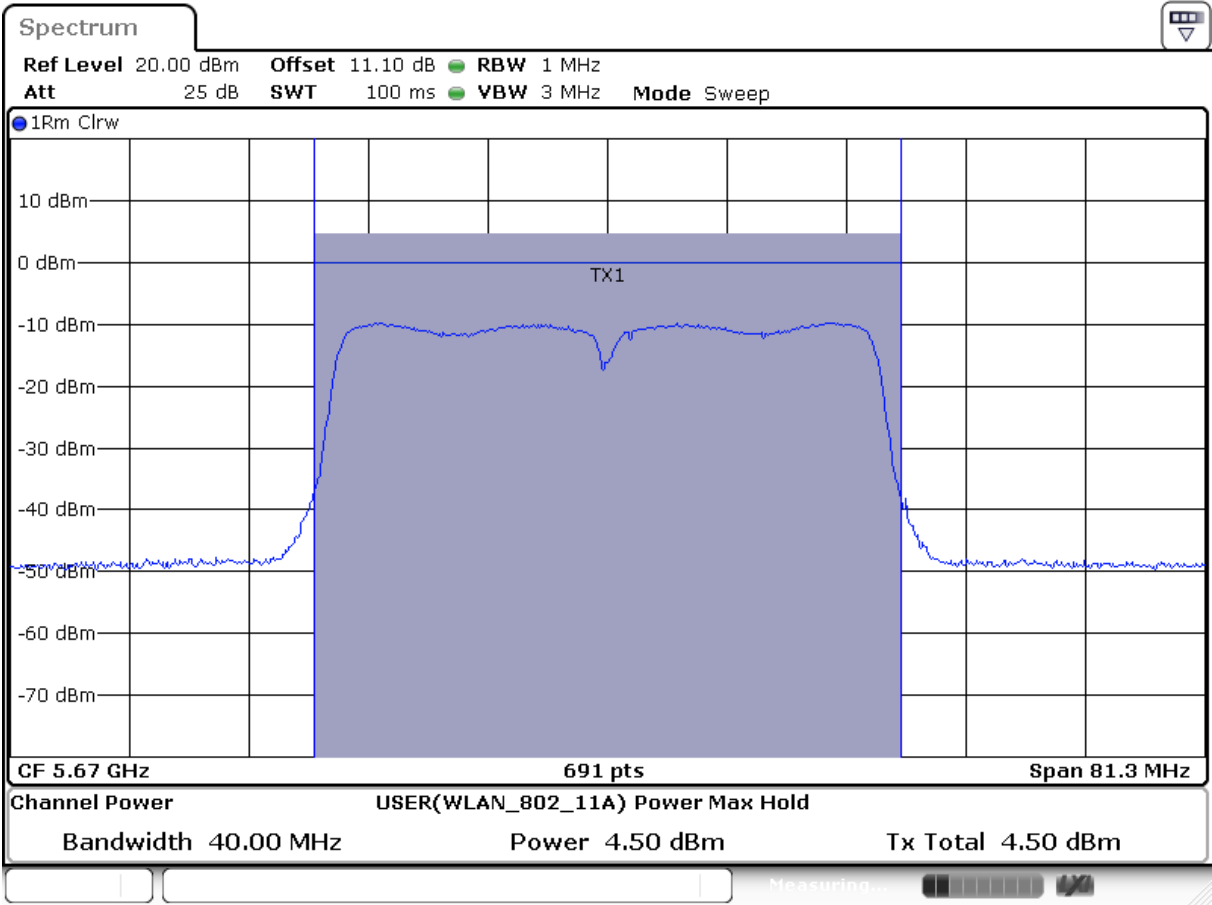
Sweep Time: 100ms Att.: 25dB

RBW: 1000 KHz VBW: 3000 KHz

File: 19-07-MAS-008_5-6n40_Ant2

Date 2019/8/5
:

Temperature: 26 °C
Humidity: 59 %



Date: 5 AUG 2019 21:11:04

Condition:

EUT: Wireless File Transmitter
Model: DS586194
Test Mode: TX_UNII Band3_Ant2
Note: Operator: Phillip (測試場地: RF-Cond01)
NCC_LP0002_802.11n40_Channel 134_Output power

RF Conducted
Sweep Time: 100ms Att.: 25dB
RBW: 1000 KHz VBW: 3000 KHz

7.4.3.3 CHAIN 1 + CHAIN 2

測試日期: Aug. 05, 2019

環境溫度: 26°C

環境濕度: 59%

Ant 1 / Ant 2 combination 天線增益最大值為 4.45 dBi, NCC Limit 如下表所示:

Chnnel	CHAIN 1 Maximum Output Power (dBm)	CHAIN 2 Maximum Output Power (dBm)	TOTAL Power (dBm)	NCC Limit (dBm)	Chart
L	3.73	4.41	7.09	24	-
M	3.61	4.47	7.07	24	-
H	3.54	4.50	7.06	24	-

註: 1. 繪圖資料請參考第81-86頁。

1. Fixed Limit = 250mW=24dBm

4. Caculated Limit = 11dBm + 10 log (26dB BW)

5. If ntenna gain $\leq$ 6dBi, NCC Limit = (Minimum of Fixed Limit nd Caculated Limit) dBm6. If ntenna gain > 6dBi, NCC Limit = (Minimum of Fixed Limit nd Caculated Limit)
dBm – (highest ntenna gain – 6 dBi)7. 量測不準確度: $\pm 1.5\text{dB}$ ($1\text{GHz} \leq f \leq 18\text{GHz}$)

7.4.4 調變技術: IEEE 802.11ac (20MHz)

7.4.4.1 CHAIN 1

測試日期: Aug. 05, 2019

環境溫度: 26°C

環境濕度: 59%

天線增益最大值為 2.04 dBi，NCC Limit 如下表所示：

Chnnel	Fixd limit (dBm)	26dB BW (MHz)	Limit (dBm)	Output Power (dBm)	NCC Limit (dBm)	Chart
L	24	20.594	24.14	3.79	24	Page 79
M	24	21.245	24.27	3.71	24	Page 80
H	24	20.594	24.14	3.36	24	Page 81

註：1. 繪圖資料請參考第 79-81 頁。

2. 最大傳導輸出功率 (Maximum Output Power) 為經儀器校正補償過後的結果值。

3. Fixed Limit = 250mW=24dBm

4. Caculated Limit = 11dBm + 10 log (26dB BW)

5. If ntenna gain $\leq$ 6dBi, NCC Limit = (Minimum of Fixed Limit nd Caculated Limit) dBm

6. If ntenna gain > 6dBi, NCC Limit = (Minimum of Fixed Limit nd Caculated Limit) dBm – (highest ntenna gain – 6 dBi)

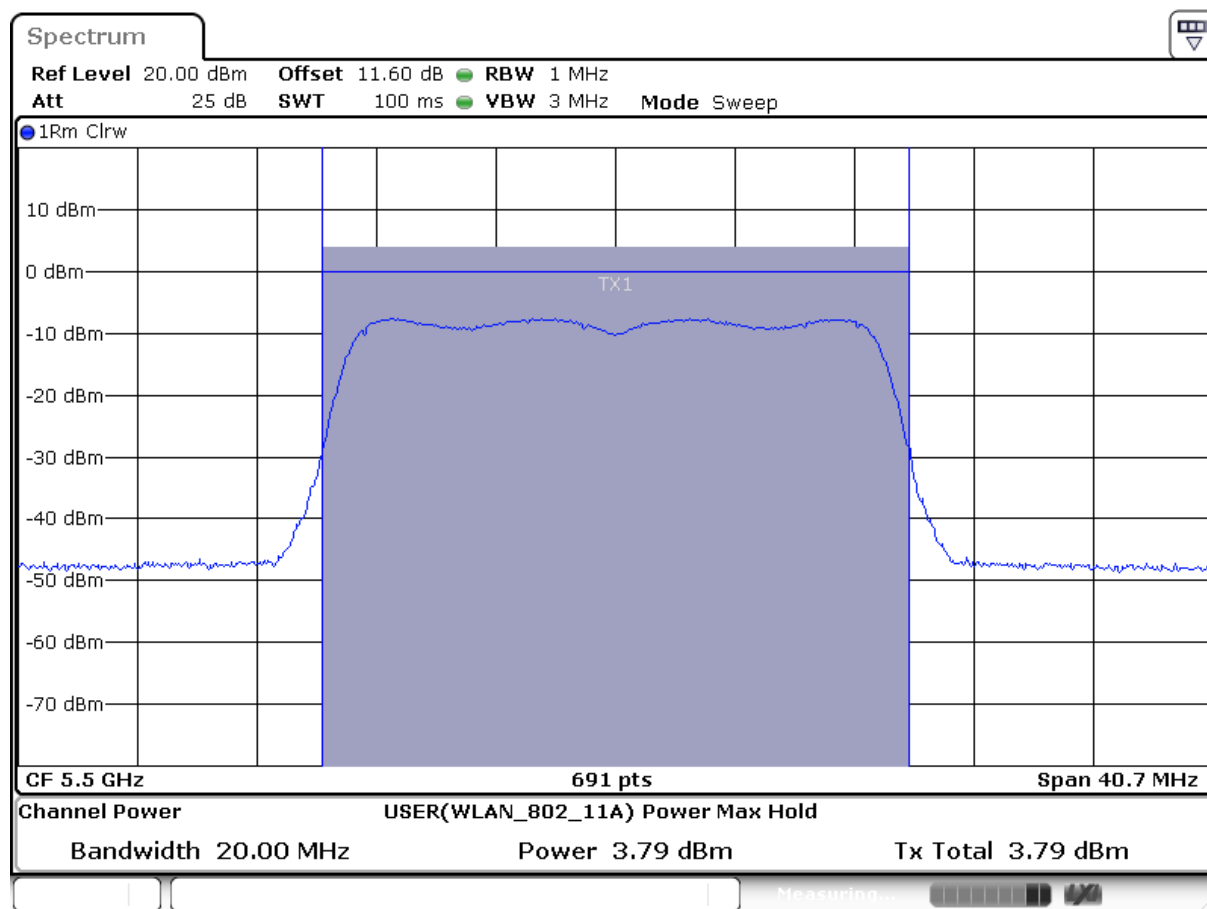
7. 量測不準確度: $\pm 1.5\text{dB}$ ($1\text{GHz} \leq f \leq 18\text{GHz}$)

File: 19-07-MAS-
008_5-
6ac20_Ant1

Date 2019/8/5
:

Temperature: 26 °C

Humidity: 59 %



Date: 5 AUG 2019 18:19:58

Condition:

EUT: Wireless File Transmitter

Model: DS586194

Test Mode: TX_UNII Band3_Ant1

Note: Operator: Phillip (測試場地: RF-Cond01)

NCC_LP0002_802.11ac20_Channel 100_Output power

RF Conducted

Sweep Time: 100ms Att.: 25dB

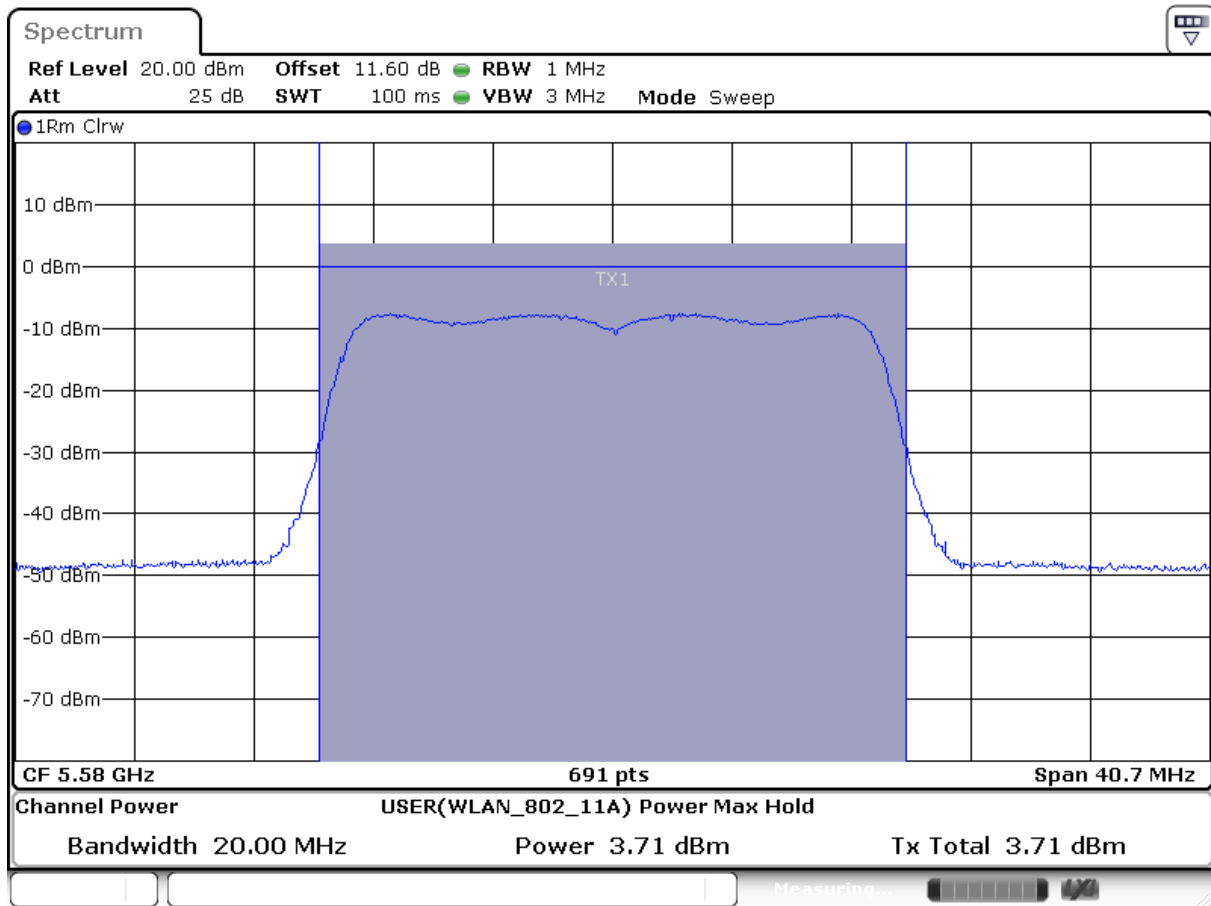
RBW: 1000 KHz VBW: 3000 KHz

File: 19-07-MAS-
008_5-
6ac20_Ant1

Date 2019/8/5
:

Temperature: 26 °C

Humidity: 59 %



Date: 5 AUG 2019 18:26:04

Condition:

EUT: Wireless File Transmitter

Model: DS586194

Test Mode: TX_UNII Band3_Ant1

Note: Operator: Phillip (測試場地: RF-Cond01)

NCC_LP0002_802.11ac20_Channel 116_Output power

RF Conducted

Sweep Time: 100ms Att.: 25dB

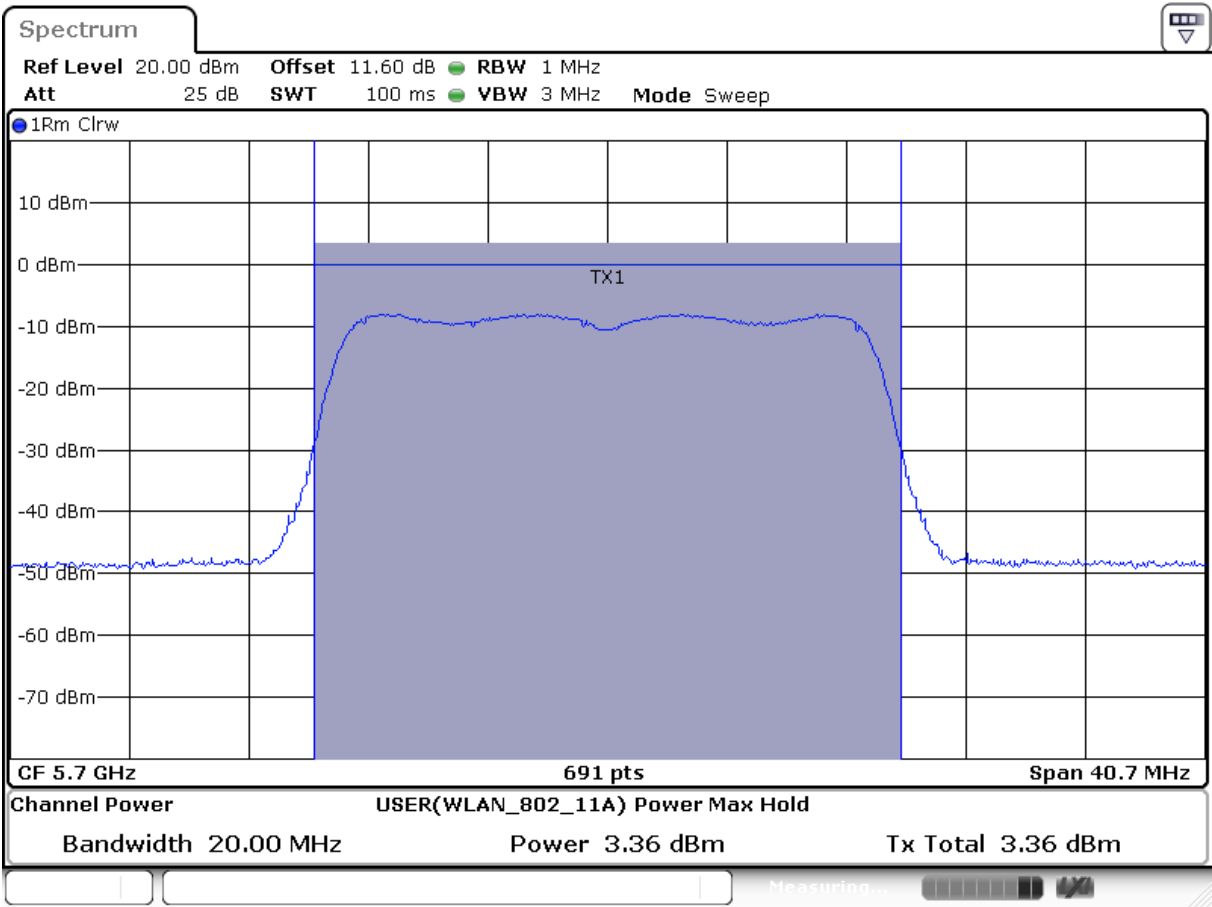
RBW: 1000 KHz VBW: 3000 KHz

File: 19-07-MAS-008_5-6ac20_Ant1

Date 2019/8/5
:

Temperature: 26 °C

Humidity: 59 %



Date: 5 AUG 2019 18:32:36

Condition:

EUT: Wireless File Transmitter
Model: DS586194
Test Mode: TX_UNII Band3_Ant1
Note: Operator: Phillip (測試場地: RF-Cond01)
NCC_LP0002_802.11ac20_Channel 140_Output power

RF Conducted
Sweep Time: 100ms Att.: 25dB
RBW: 1000 KHz VBW: 3000 KHz

7.4.4.2 CHAIN 2

測試日期: Aug. 05, 2019

環境溫度: 26°C

環境濕度: 59%

天線增益最大值為 0.79 dBi，NCC Limit 如下表所示：

Chnnel	Fixd limit (dBm)	26dB BW (MHz)	Limit (dBm)	Output Power (dBm)	NCC Limit (dBm)	Chart
L	24	20.594	24.14	4.12	24	Page 83
M	24	20.594	24.14	4.34	24	Page 84
H	24	20.431	24.10	4.47	24	Page 85

註：1. 繪圖資料請參考第 83-85 頁。

2. 最大傳導輸出功率 (Maximum Output Power) 為經儀器校正補償過後的結果值。

3. Fixed Limit = 250mW=24dBm

4. Caculated Limit = 11dBm + 10 log (26dB BW)

5. If ntenna gain $\leq$ 6dBi, NCC Limit = (Minimum of Fixed Limit nd Caculated Limit) dBm

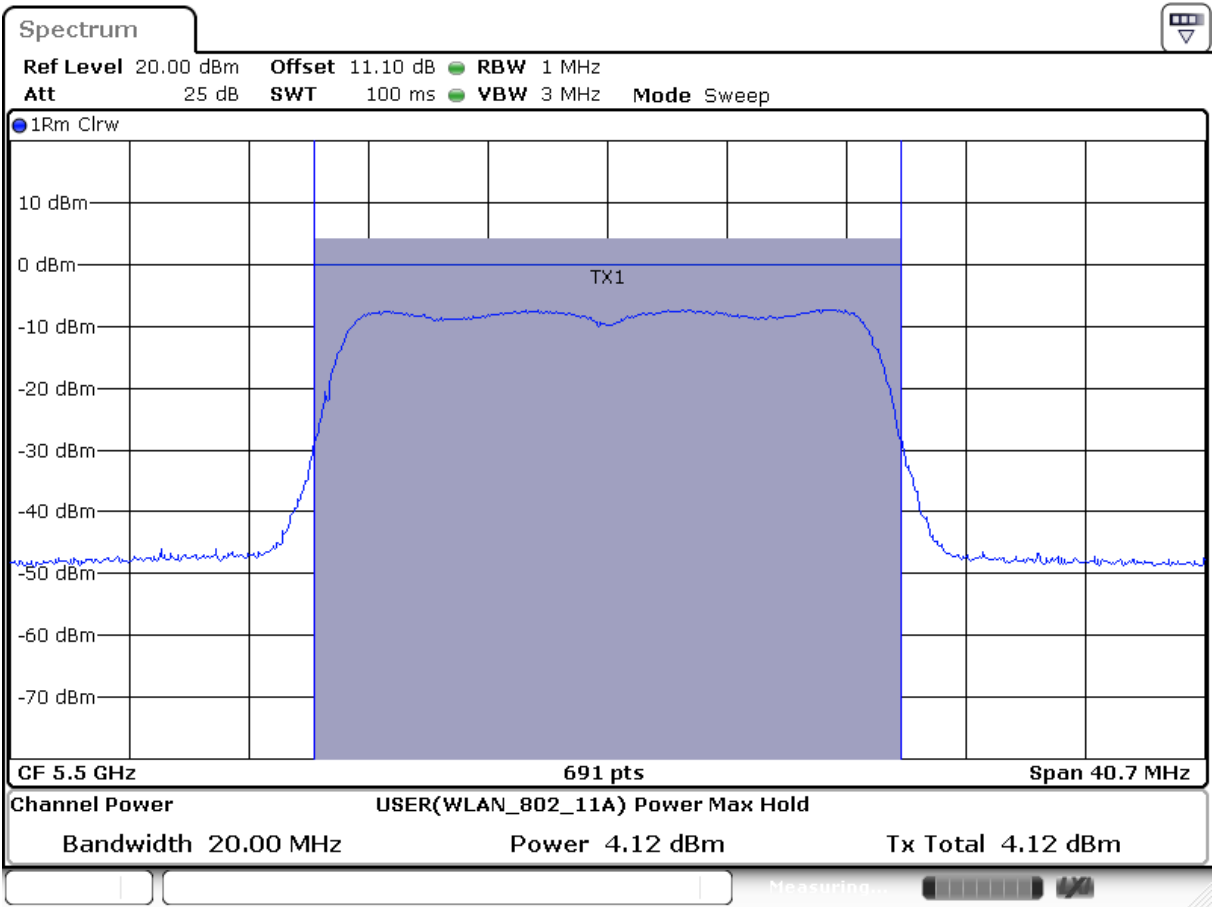
6. If ntenna gain > 6dBi, NCC Limit = (Minimum of Fixed Limit nd Caculated Limit) dBm – (highest ntenna gain – 6 dBi)

7. 量測不準確度: $\pm 1.5\text{dB}$ ($1\text{GHz} \leq f \leq 18\text{GHz}$)

File: 19-07-MAS-008_5-6ac20_Ant2

Date 2019/8/5
:

Temperature: 26 °C
Humidity: 59 %



Date: 5 AUG 2019 16:26:54

Condition:

EUT: Wireless File Transmitter
Model: DS586194
Test Mode: TX_UNII Band3_Ant2
Note: Operator: Phillip (測試場地: RF-Cond01)
NCC_LP0002_802.11ac20_Channel 100_Output power

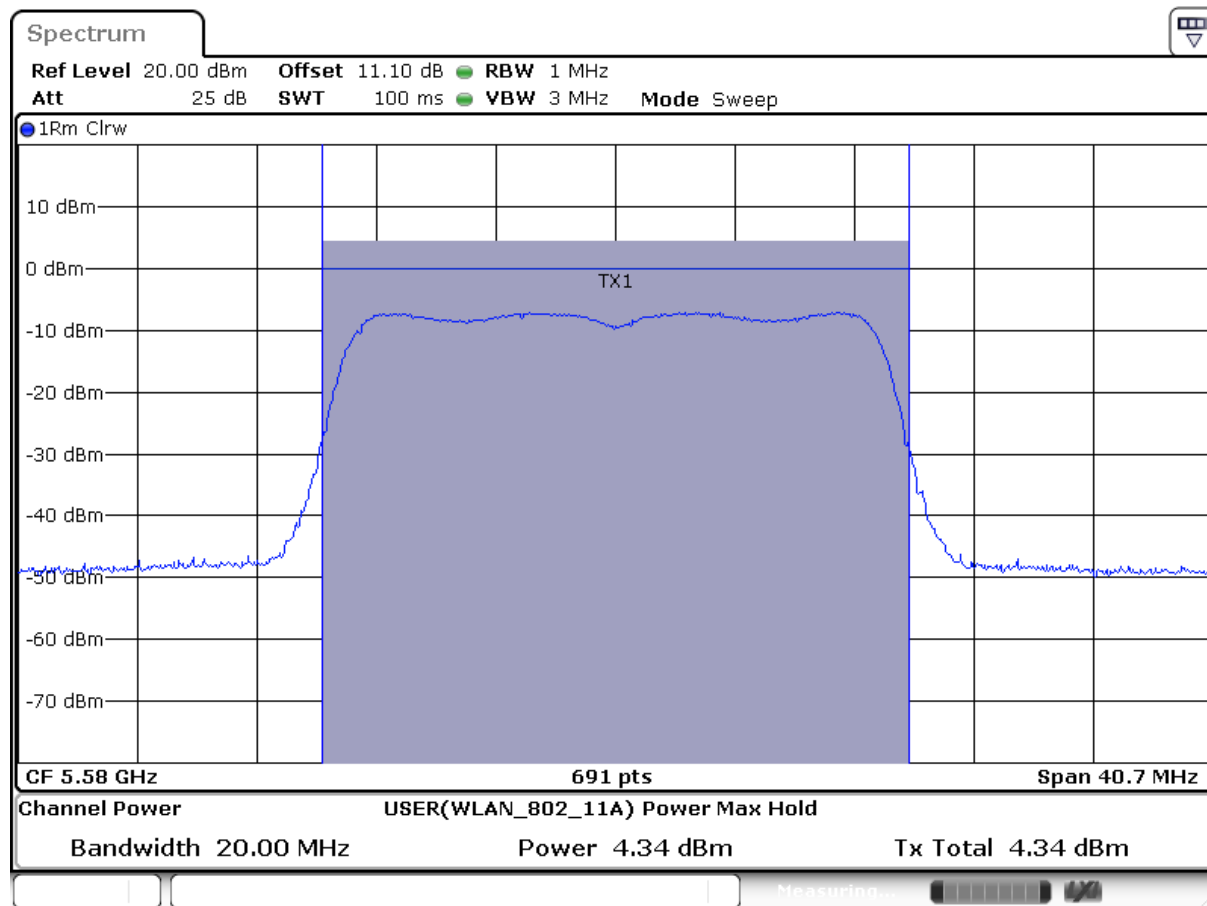
RF Conducted
Sweep Time: 100ms Att.: 25dB
RBW: 1000 KHz VBW: 3000 KHz

File: 19-07-MAS-
008_5-
6ac20_Ant2

Date 2019/8/5
:

Temperature: 26 °C

Humidity: 59 %



Date: 5 AUG 2019 16:32:35

Condition:

EUT: Wireless File Transmitter

Model: DS586194

Test Mode: TX_UNII Band3_Ant2

Note: Operator: Phillip (測試場地: RF-Cond01)

NCC_LP0002_802.11ac20_Channel 116_Output power

RF Conducted

Sweep Time: 100ms Att.: 25dB

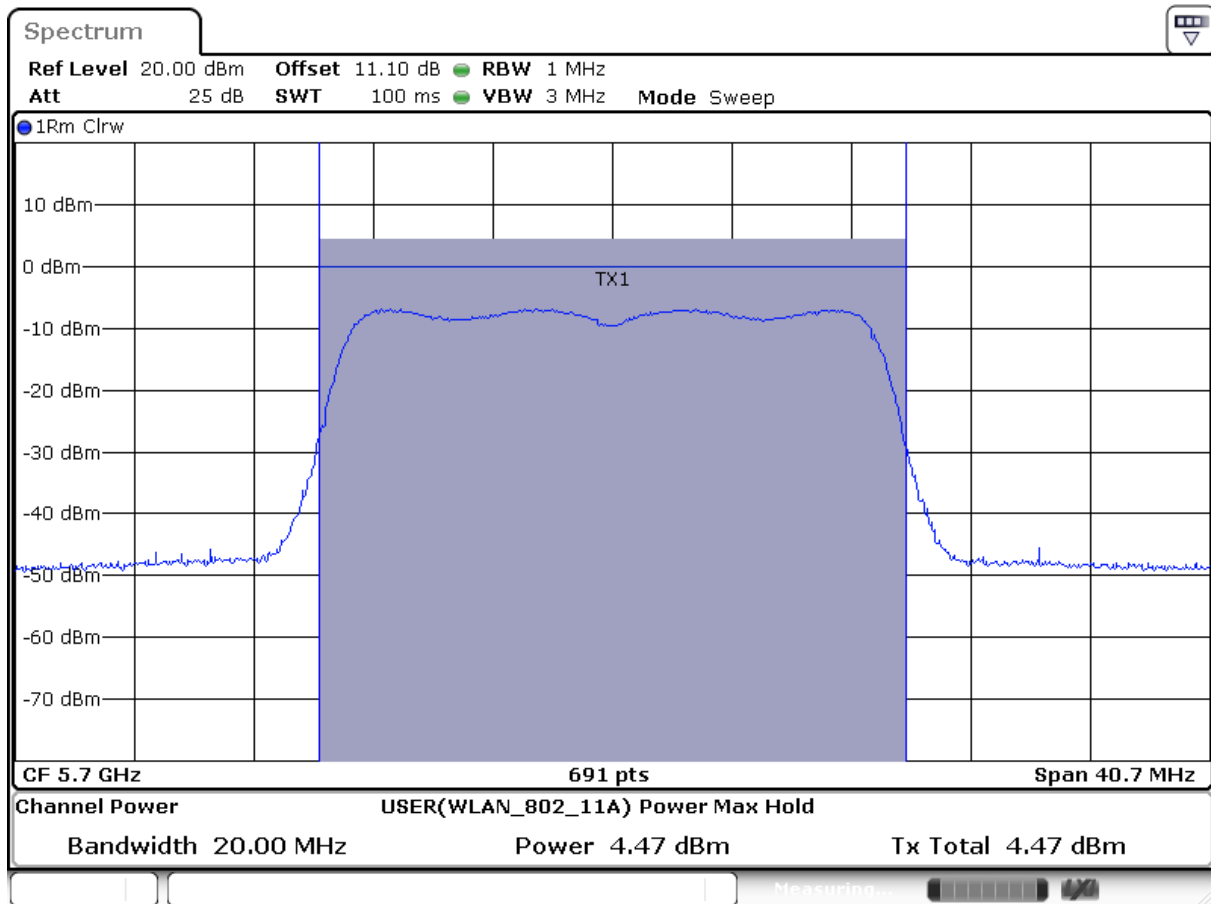
RBW: 1000 KHz VBW: 3000 KHz

File: 19-07-MAS-
008_5-
6ac20_Ant2

Date 2019/8/5
:

Temperature: 26 °C

Humidity: 59 %



Date: 5 AUG 2019 16:37:38

Condition:

EUT: Wireless File Transmitter

Model: DS586194

Test Mode: TX_UNII Band3_Ant2

Note: Operator: Phillip (測試場地: RF-Cond01)

NCC_LP0002_802.11ac20_Channel 140_Output power

RF Conducted

Sweep Time: 100ms Att.: 25dB

RBW: 1000 KHz VBW: 3000 KHz

7.4.4.3 CHAIN 1 + CHAIN 2

測試日期: Aug. 05, 2019

環境溫度: 26°C

環境濕度: 59%

Ant 1 / Ant 2 combination 天線增益最大值為 4.45 dBi, NCC Limit 如下表所示:

Chnnel	CHAIN 1 Maximum Output Power (dBm)	CHAIN 2 Maximum Output Power (dBm)	TOTAL Power (dBm)	NCC Limit (dBm)	Chart
L	3.79	4.12	6.97	24	-
M	3.71	4.34	7.05	24	-
H	3.36	4.47	6.96	24	-

- 註: 1. 最大發射輸出功率 (Maximum Output Power) 為經儀器校正補償過後的結果值。
2. Fixed Limit = 250mW=24dBm
3. Caculated Limit = 4dBm + 10 log (26dB BW)
4. If ntenna gain $\leq$ 6dBi, NCC Limit = (Minimum of Fixed Limit nd Caculated Limit) dBm
5. If ntenna gain > 6dBi, NCC Limit = (Minimum of Fixed Limit nd Caculated Limit) dBm – (highest ntenna gain – 6 dBi)
6. 量測不準確度: $\pm 1.5\text{dB}$ ($1\text{GHz} \leq f \leq 18\text{GHz}$)

7.4.5 調變技術: IEEE 802.11ac (40MHz)

7.4.5.1 CHAIN 1

測試日期: Aug. 05, 2019

環境溫度: 26°C

環境濕度: 59%

天線增益最大值為 2.04 dBi，NCC Limit 如下表所示：

Chnnel	Fixd limit (dBm)	26dB BW (MHz)	Limit (dBm)	Output Power (dBm)	NCC Limit (dBm)	Chart
L	24	41.951	27.23	3.72	24	Page 88
M	24	42.113	27.24	3.60	24	Page 89
H	24	41.951	27.23	3.53	24	Page 90

註：1. 繪圖資料請參考第 88-90 頁。

2. 最大傳導輸出功率 (Maximum Output Power) 為經儀器校正補償過後的結果值。

3. Fixed Limit = 250mW=24dBm

4. Caculated Limit = 11dBm + 10 log (26dB BW)

5. If ntenna gain $\leq$ 6dBi, NCC Limit = (Minimum of Fixed Limit nd Caculated Limit) dBm

6. If ntenna gain > 6dBi, NCC Limit = (Minimum of Fixed Limit nd Caculated Limit) dBm – (highest ntenna gain – 6 dBi)

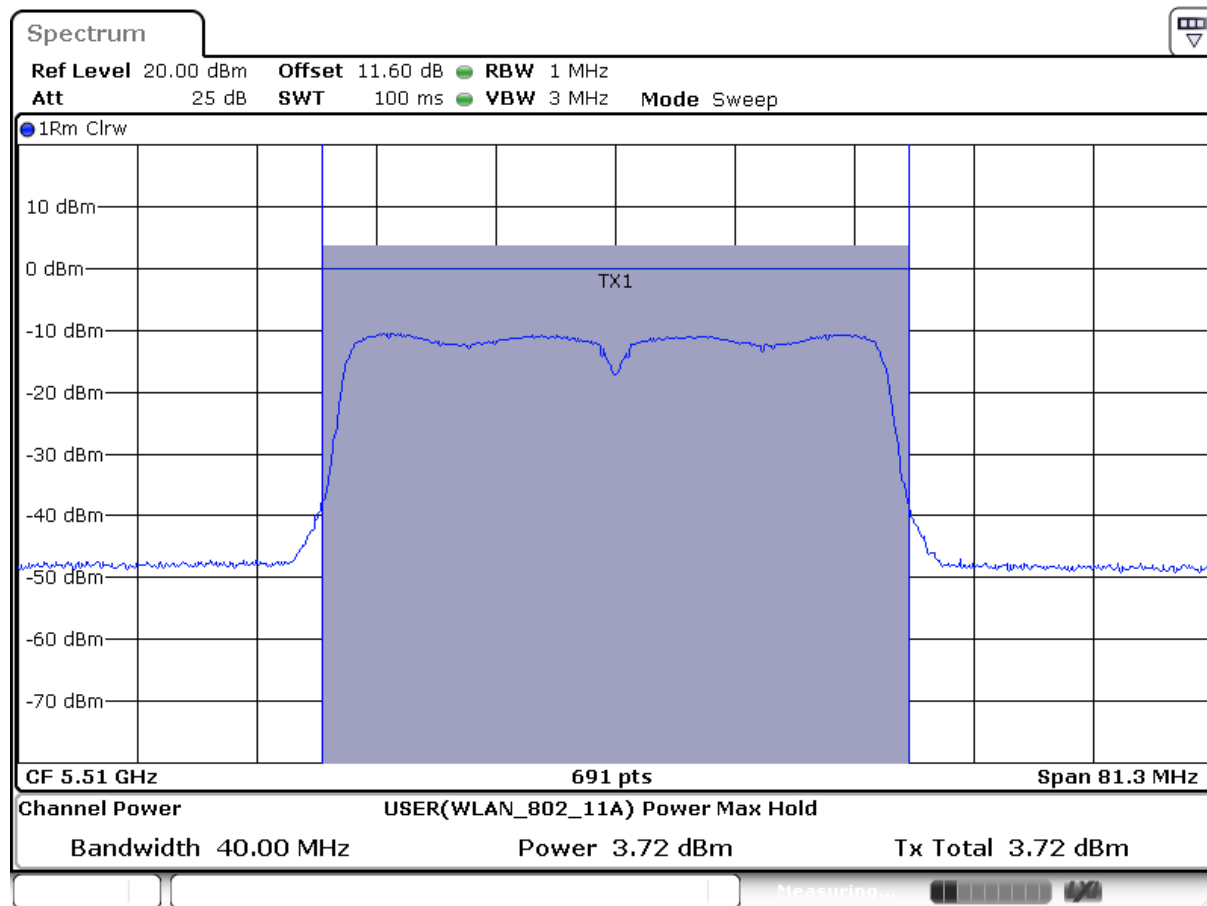
7. 量測不準確度: $\pm 1.5\text{dB}$ ($1\text{GHz} \leq f \leq 18\text{GHz}$)

File: 19-07-MAS-
008_5-
6ac40_Ant1

Date 2019/8/5
:

Temperature: 26 °C

Humidity: 59 %



Date: 5 AUG 2019 19:52:08

Condition:

EUT: Wireless File Transmitter

Model: DS586194

Test Mode: TX_UNII Band3_Ant1

Note: Operator: Phillip (測試場地: RF-Cond01)

NCC_LP0002_802.11ac40_Channel 102_Output power

RF Conducted

Sweep Time: 100ms Att.: 25dB

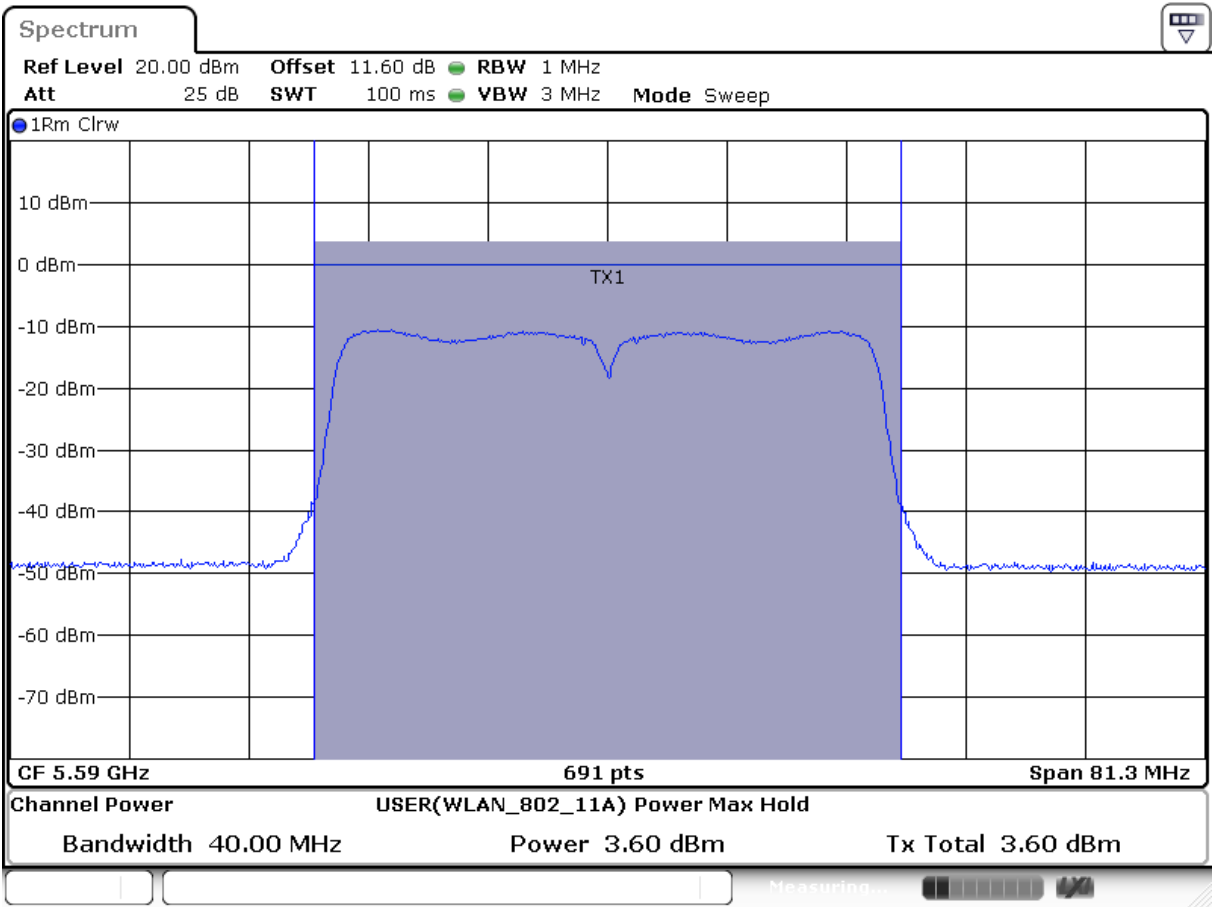
RBW: 1000 KHz VBW: 3000 KHz

File: 19-07-MAS-008_5-6ac40_Ant1

Date 2019/8/5

Temperature: 26 °C

Humidity: 59 %



Date: 5 AUG 2019 19:57:30

Condition:

EUT: Wireless File Transmitter
Model: DS586194
Test Mode: TX_UNII Band3_Ant1
Note: Operator: Phillip (測試場地: RF-Cond01)
NCC_LP0002_802.11ac40_Channel 118_Output power

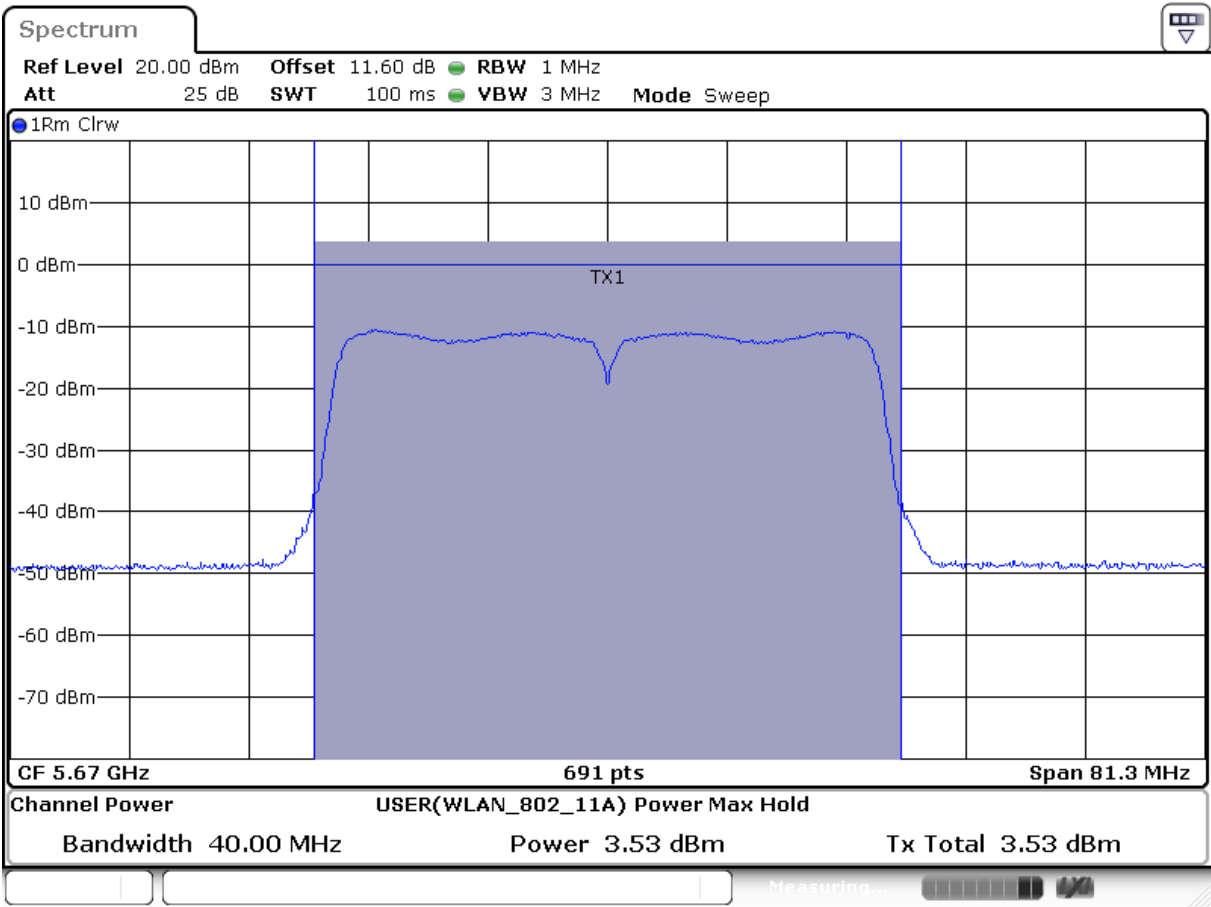
RF Conducted

Sweep Time: 100ms Att.: 25dB
RBW: 1000 KHz VBW: 3000 KHz

File: 19-07-MAS-008_5-6ac40_Ant1

Date 2019/8/5
:

Temperature: 26 °C
Humidity: 59 %



Date: 5 AUG 2019 20:03:02

Condition:

EUT: Wireless File Transmitter
Model: DS586194
Test Mode: TX_UNII Band3_Ant1
Note: Operator: Phillip (測試場地: RF-Cond01)
NCC_LP0002_802.11ac40_Channel 134_Output power

RF Conducted
Sweep Time: 100ms Att.: 25dB
RBW: 1000 KHz VBW: 3000 KHz

7.4.5.2 CHAIN 2

測試日期: Aug. 05, 2019

環境溫度: 26°C

環境濕度: 59%

天線增益最大值為 0.79 dBi，NCC Limit 如下表所示：

Chnnel	Fixd limit (dBm)	26dB BW (MHz)	Limit (dBm)	Output Power (dBm)	NCC Limit (dBm)	Chart
L	24	40.975	27.13	4.38	24	Page 92
M	24	40.975	27.13	4.46	24	Page 93
H	24	40.813	27.11	4.49	24	Page 94

註：1. 繪圖資料請參考第 92-94 頁。

2. 最大傳導輸出功率 (Maximum Output Power) 為經儀器校正補償過後的結果值。

3. Fixed Limit = 250mW=24dBm

4. Caculated Limit = 11dBm + 10 log (26dB BW)

5. If ntenna gain $\leq$ 6dBi, NCC Limit = (Minimum of Fixed Limit nd Caculated Limit) dBm

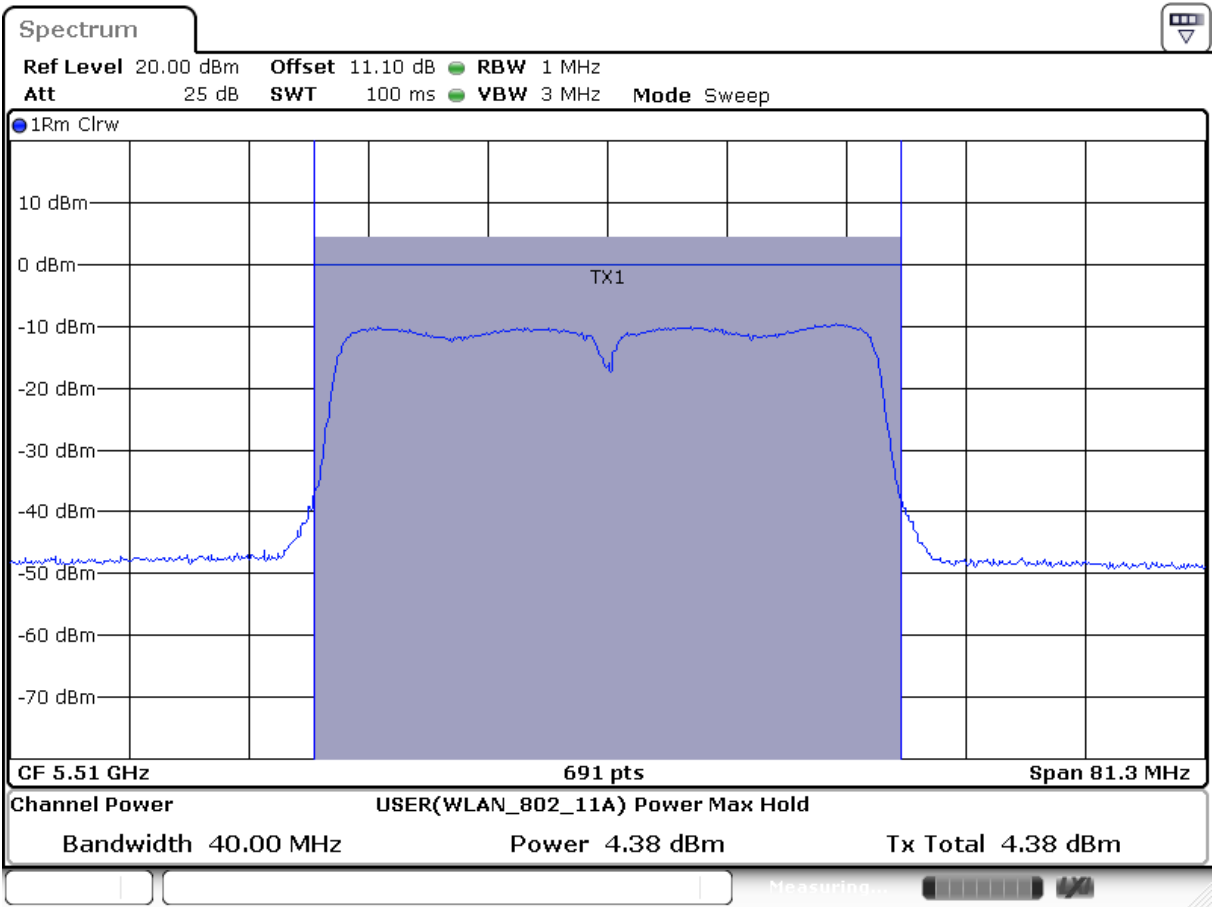
6. If ntenna gain > 6dBi, NCC Limit = (Minimum of Fixed Limit nd Caculated Limit) dBm – (highest ntenna gain – 6 dBi)

7. 量測不準確度: $\pm 1.5\text{dB}$ ($1\text{GHz} \leq f \leq 18\text{GHz}$)

File: 19-07-MAS-008_5-6n40_Ant2

Date 2019/8/5
:

Temperature: 26 °C
Humidity: 59 %



Date: 5 AUG 2019 20:32:15

Condition:

EUT: Wireless File Transmitter
Model: DS586194
Test Mode: TX_UNII Band3_Ant2
Note: Operator: Phillip (測試場地: RF-Cond01)
NCC_LP0002_802.11ac40_Channel 102_Output power

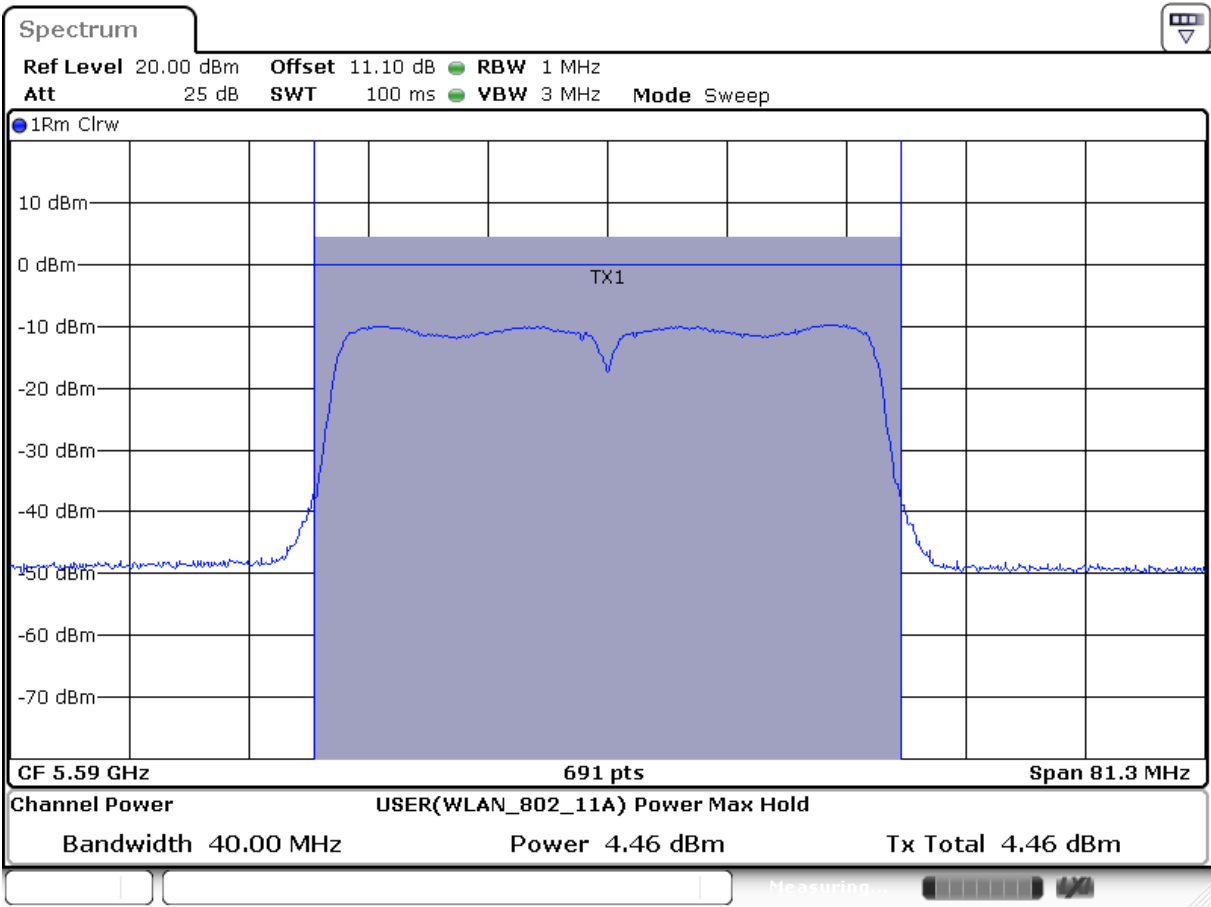
RF Conducted
Sweep Time: 100ms Att.: 25dB
RBW: 1000 KHz VBW: 3000 KHz

File: 19-07-MAS-008_5-6n40_Ant2

Date 2019/8/5
:

Temperature: 26 ℃

Humidity: 59 %



Date: 5 AUG 2019 20:38:48

Condition:

EUT: Wireless File Transmitter
Model: DS586194
Test Mode: TX_UNII Band3_Ant2
Note: Operator: Phillip (測試場地: RF-Cond01)
NCC_LP0002_802.11ac40_Channel 118_Output power

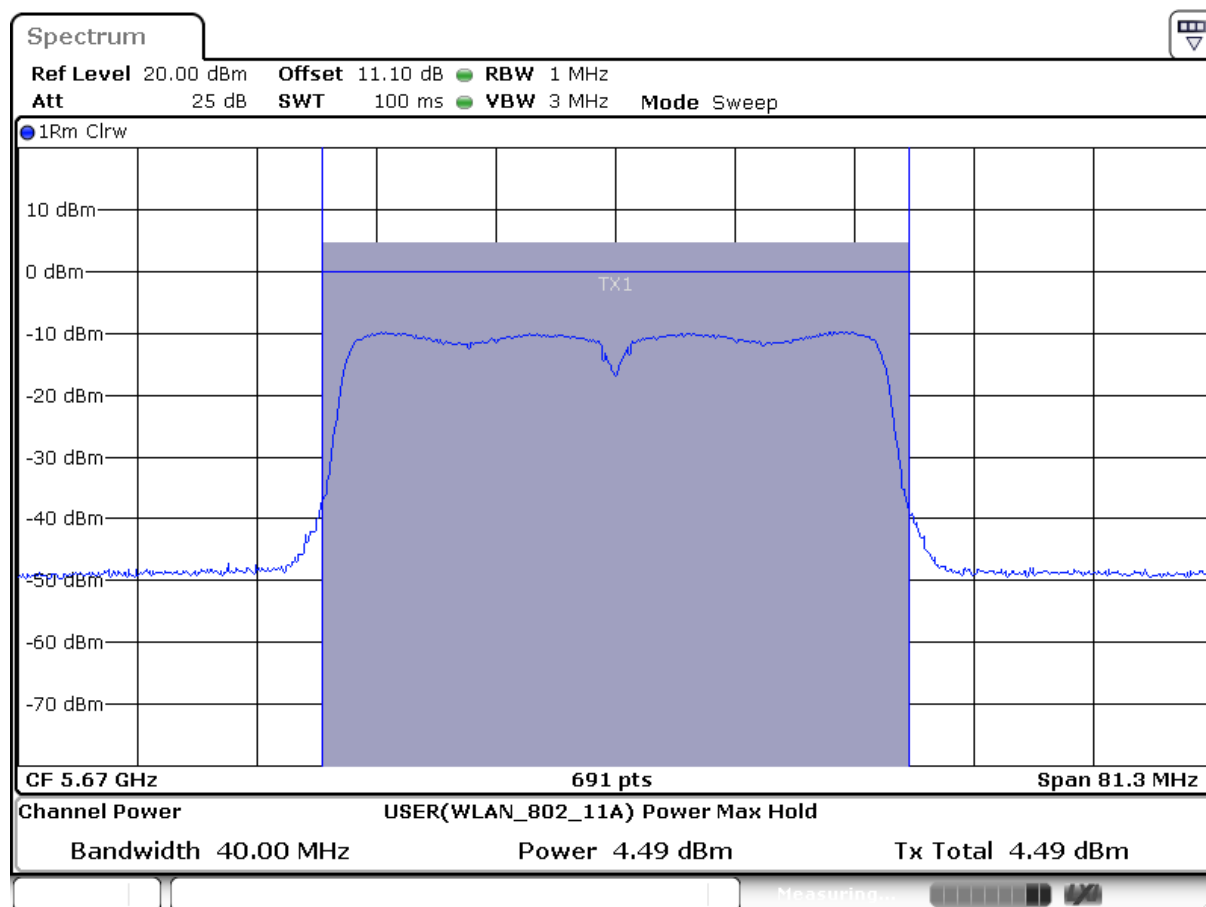
RF Conducted
Sweep Time: 100ms Att.: 25dB
RBW: 1000 KHz VBW: 3000 KHz

File: 19-07-MAS-
008_5-
6n40_Ant2

Date 2019/8/5
:

Temperature: 26 °C

Humidity: 59 %



Date: 5 AUG 2019 20:43:44

Condition:

EUT: Wireless File Transmitter

Model: DS586194

Test Mode: TX_UNII Band3_Ant2

Note: Operator: Phillip (測試場地: RF-Cond01)

NCC_LP0002_802.11ac40_Channel 134_Output power

RF Conducted

Sweep Time: 100ms Att.: 25dB

RBW: 1000 KHz VBW: 3000 KHz

7.4.5.3 CHAIN 1 + CHAIN 2

測試日期: Aug. 05, 2019

環境溫度: 26°C

環境濕度: 59%

Ant 1 / Ant 2 combination 天線增益最大值為 4.45 dBi, NCC Limit 如下表所示:

Chnnel	CHAIN 1 Maximum Output Power (dBm)	CHAIN 2 Maximum Output Power (dBm)	TOTAL Power (dBm)	NCC Limit (dBm)	Chart
L	3.72	4.38	7.07	24	-
M	3.60	4.46	7.06	24	-
H	3.53	4.49	7.05	24	-

- 註: 1. 最大發射輸出功率 (Maximum Output Power) 為經儀器校正補償過後的結果值。
2. Fixed Limit = 250mW=24dBm
3. Caculated Limit = 4dBm + 10 log (26dB BW)
4. If ntenna gain $\leq$ 6dBi, NCC Limit = (Minimum of Fixed Limit nd Caculated Limit) dBm
5. If ntenna gain > 6dBi, NCC Limit = (Minimum of Fixed Limit nd Caculated Limit) dBm – (highest ntenna gain – 6 dBi)
6. 量測不準確度: $\pm 1.5\text{dB}$ ($1\text{GHz} \leq f \leq 18\text{GHz}$)

7.4.6 調變技術: IEEE 802.11ac (80MHz)

7.4.6.1 CHAIN 1

測試日期: Aug. 06, 2019

環境溫度: 26°C

環境濕度: 62%

天線增益最大值為 2.04 dBi，NCC Limit 如下表所示：

Chnnel	Fixd limit (dBm)	26dB BW (MHz)	Limit (dBm)	Output Power (dBm)	NCC Limit (dBm)	Chart
L	24	82.804	30.18	4.09	24	Page 97
H	24	83.782	30.23	4.06	24	Page 98

註：1. 繪圖資料請參考第 97-98 頁。

2. 最大傳導輸出功率 (Maximum Output Power) 為經儀器校正補償過後的結果值。

3. Fixed Limit = 250mW=24dBm

4. Caculated Limit = 11dBm + 10 log (26dB BW)

5. If ntenna gain $\leq$ 6dBi, NCC Limit = (Minimum of Fixed Limit nd Caculated Limit) dBm

6. If ntenna gain > 6dBi, NCC Limit = (Minimum of Fixed Limit nd Caculated Limit) dBm – (highest ntenna gain – 6 dBi)

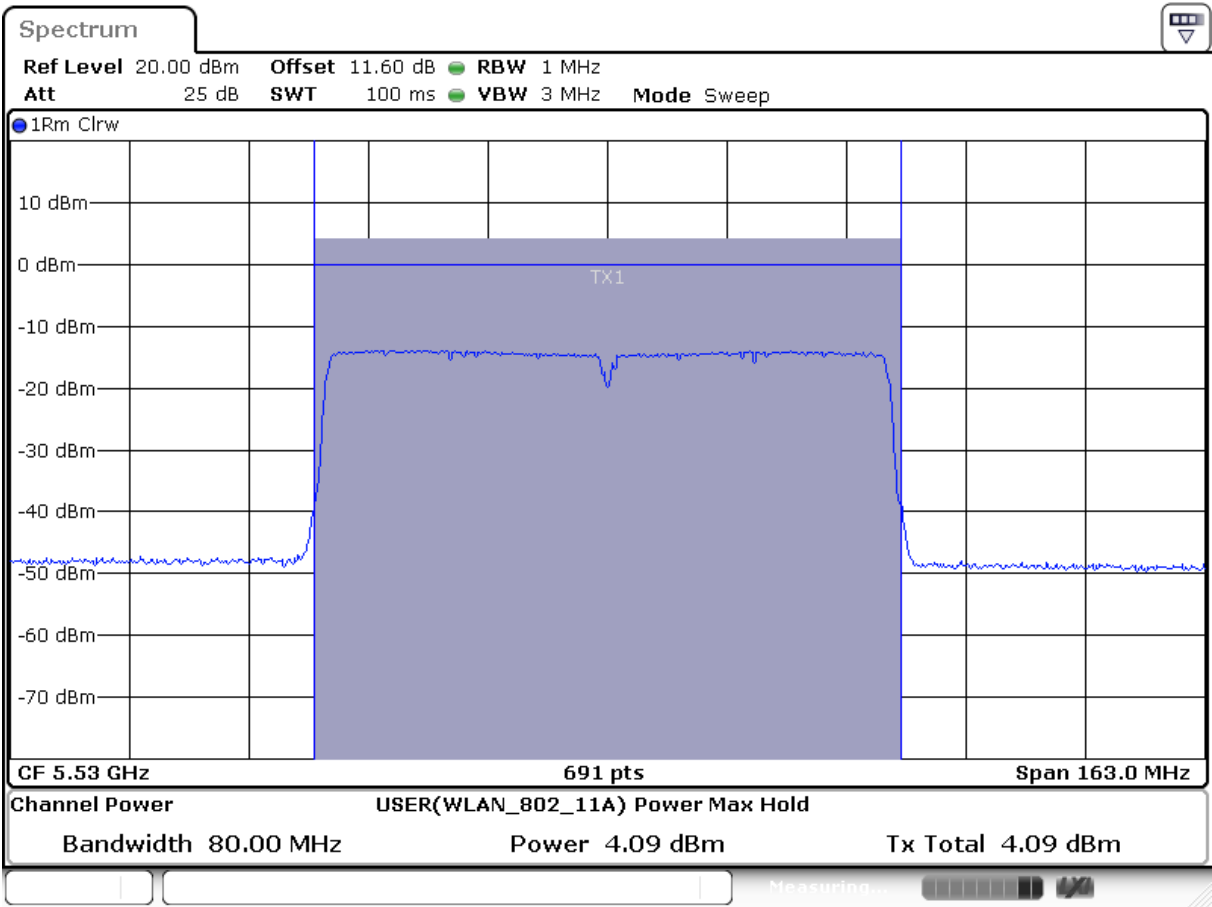
7. 量測不準確度: $\pm 1.5\text{dB}$ ($1\text{GHz} \leq f \leq 18\text{GHz}$)

File: 19-07-MAS-008_5-6ac80_Ant1

Date 2019/8/6
:

Temperature: 26 ℃

Humidity: 62 %



Date: 6 AUG 2019 10:07:23

Condition:

EUT: Wireless File Transmitter
Model: DS586194
Test Mode: TX_UNII Band3_Ant1
Note: Operator: Phillip (測試場地: RF-Cond01)
NCC_LP0002_802.11ac80_Channel 106_Output power

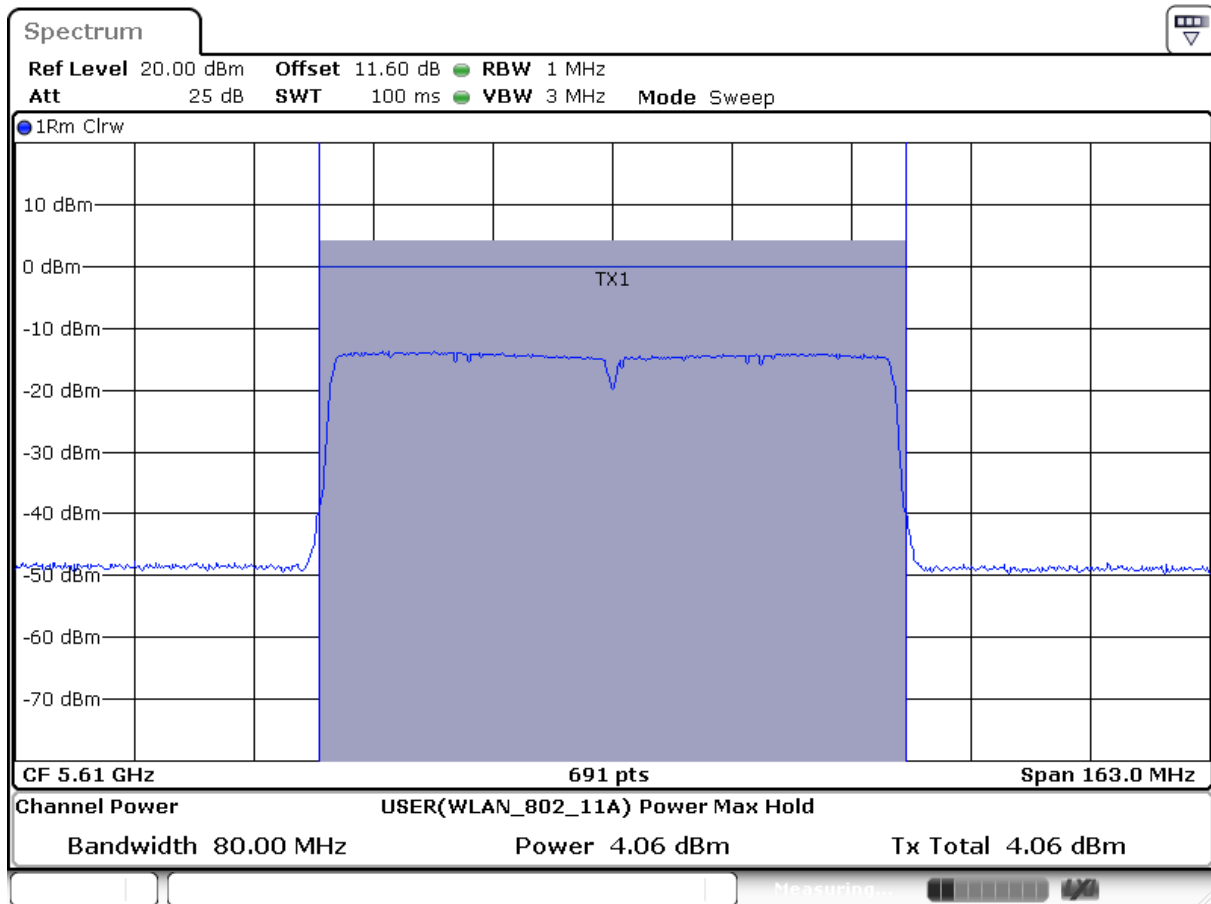
RF Conducted
Sweep Time: 100ms Att.: 25dB
RBW: 1000 KHz VBW: 3000 KHz

File: 19-07-MAS-
008_5-
6ac80_Ant1

Date 2019/8/6
:

Temperature: 26 °C

Humidity: 62 %



Date: 6 AUG 2019 10:14:02

Condition:

EUT: Wireless File Transmitter

Model: DS586194

Test Mode: TX_UNII Band3_Ant1

Note: Operator: Phillip (測試場地: RF-Cond01)

NCC_LP0002_802.11ac80_Channel 122_Output power

RF Conducted

Sweep Time: 100ms Att.: 25dB

RBW: 1000 KHz VBW: 3000 KHz

7.4.6.2 CHAIN 2

測試日期: Aug. 06, 2019

環境溫度: 26°C

環境濕度: 62%

天線增益最大值為 0.79 dBi，NCC Limit 如下表所示：

Chnnel	Fixd limit (dBm)	26dB BW (MHz)	Limit (dBm)	Output Power (dBm)	NCC Limit (dBm)	Chart
L	24	82.478	30.16	4.73	24	Page 100
H	24	81.826	30.13	4.85	24	Page 101

註：1. 繪圖資料請參考第 100-101 頁。

2. 最大傳導輸出功率 (Maximum Output Power) 為經儀器校正補償過後的結果值。

3. Fixed Limit = 250mW=24dBm

4. Caculated Limit = 11dBm + 10 log (26dB BW)

5. If ntenna gain $\leq$ 6dBi, NCC Limit = (Minimum of Fixed Limit nd Caculated Limit) dBm

6. If ntenna gain > 6dBi, NCC Limit = (Minimum of Fixed Limit nd Caculated Limit) dBm – (highest ntenna gain – 6 dBi)

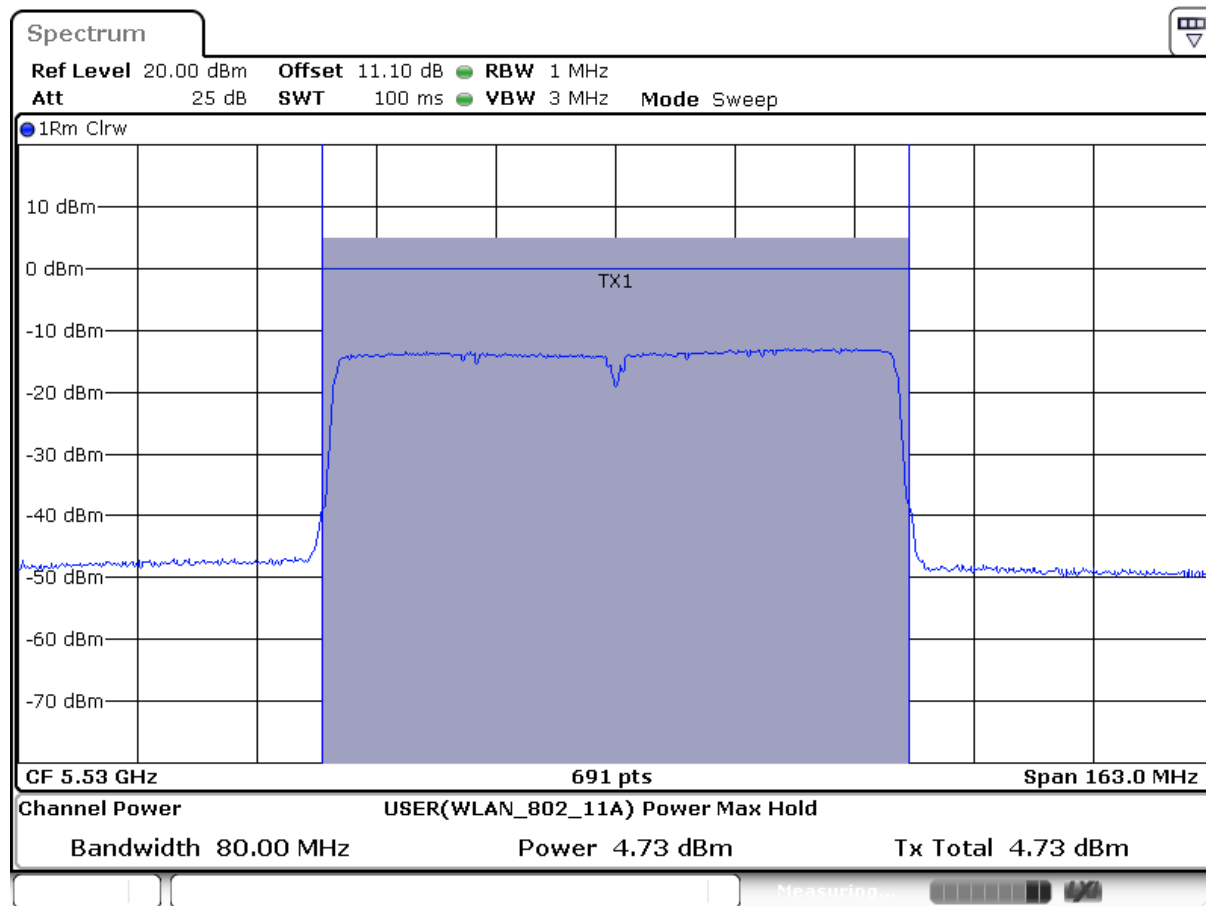
7. 量測不準確度: $\pm 1.5\text{dB}$ ($1\text{GHz} \leq f \leq 18\text{GHz}$)

File: 19-07-MAS-
008_5-
6ac80_Ant2

Date 2019/8/6
:

Temperature: 26 °C

Humidity: 62 %



Date: 6 AUG 2019 09:29:50

Condition:

EUT: Wireless File Transmitter

Model: DS586194

Test Mode: TX_UNII Band3_Ant2

Note: Operator: Phillip (測試場地: RF-Cond01)

NCC_LP0002_802.11ac80_Channel 106_Output power

RF Conducted

Sweep Time: 100ms Att.: 25dB

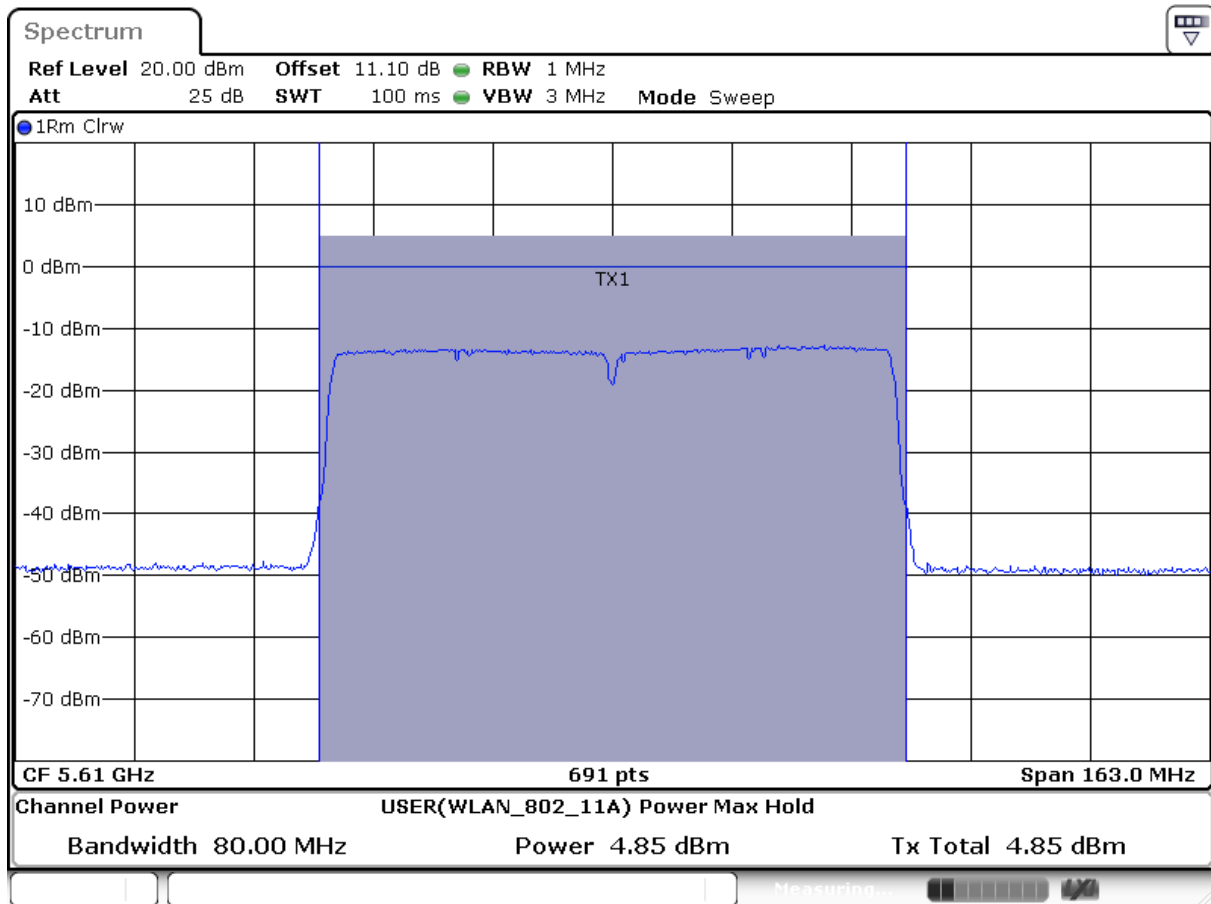
RBW: 1000 KHz VBW: 3000 KHz

File: 19-07-MAS-
008_5-
6ac80_Ant2

Date 2019/8/6
:

Temperature: 26 °C

Humidity: 62 %



Date: 6 AUG 2019 09:58:03

Condition:

EUT: Wireless File Transmitter

Model: DS586194

Test Mode: TX_UNII Band3_Ant2

Note: Operator: Phillip (測試場地: RF-Cond01)

NCC_LP0002_802.11ac80_Channel 122_Output power

RF Conducted

Sweep Time: 100ms Att.: 25dB

RBW: 1000 KHz VBW: 3000 KHz

7.4.6.3 CHAIN 1 + CHAIN 2

測試日期: Aug. 06, 2019

環境溫度: 26°C

環境濕度: 62%

Ant 1 / Ant 2 combination 天線增益最大值為 4.45 dBi, NCC Limit 如下表所示:

Chnnel	CHAIN 1 Maximum Output Power (dBm)	CHAIN 2 Maximum Output Power (dBm)	TOTAL Power (dBm)	NCC Limit (dBm)	Chart
L	4.09	4.73	7.43	24	-
H	4.06	4.85	7.48	24	-

- 註: 1. 最大發射輸出功率 (Maximum Output Power) 為經儀器校正補償過後的結果值。
 2. Fixed Limit = 250mW=24dBm
 3. Caculated Limit = 4dBm + 10 log (26dB BW)
 4. If ntenna gain $\leq$ 6dBi, NCC Limit = (Minimum of Fixed Limit nd Caculated Limit) dBm
 5. If ntenna gain > 6dBi, NCC Limit = (Minimum of Fixed Limit nd Caculated Limit) dBm – (highest ntenna gain – 6 dBi)
 6. 量測不準確度: $\pm 1.5\text{dB}$ ($1\text{GHz} \leq f \leq 18\text{GHz}$)

7.5 結果判定

高、中、低頻段的最大傳導輸出功率皆低於限制值。

8 功率密度之量測

8.1 適用標準

依據國家通訊傳播委員會低功率射頻電機技術規範4.7.3.2節之規定：

- (2) 最大功率頻譜密度在任何 1 MHz 頻帶中應小於或等於 11 dBm。
- (3) 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力率及最大功率頻譜密度。

8.2 量測功率密度之配置

如圖 2 所示。

8.3 量測功率密度之儀器

儀器名稱	製造者	型 號
Spectrum Analyzer	Agilent	E4446A
Attenuator	WEINSCHEL	56-10

測試軟體: LZ-RF (Ver. ETC-3A2)

8.4 量測結果

測試工程師: 羅世勇

8.4.1 調變技術: IEEE 802.11a

測試日期: Aug. 05, 2019

環境溫度: 26°C

環境濕度: 59%

天線增益最大值為 0.79 dBi, NCC Limit 如下表所示:

Chnnel	Power Spectral Density (dBm)	NCC Limit (dBm)	Chart
L	-2.37	11.00	Page 105
M	-2.22	11.00	Page 106
H	-2.06	11.00	Page 107

註: 1. 繪圖資料請參考第 105-107 頁。

2. 功率頻譜密度 (Power Spectral Density) 為經儀器校正補償過後的結果值。

3. If ntenna gain $\leq$ 6dBi, NCC Limit =11 dBm

4. If ntenna gain > 6dBi, NCC Limit =11 dBm – (highest ntenna gain – 6 dBi)

5. 量測不準確度: $\pm 1.5\text{dB}$ ($1\text{GHz} \leq f \leq 18\text{GHz}$)

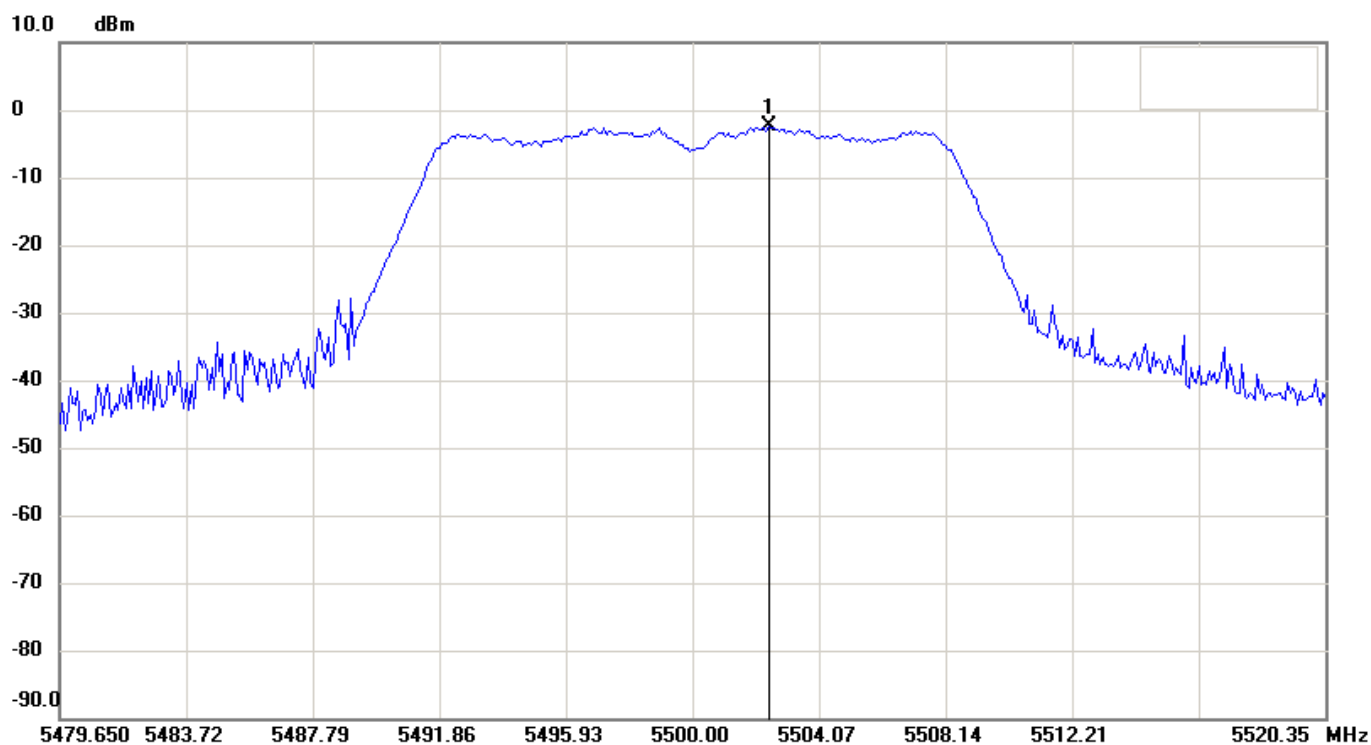
File: 19-07-MAS- #4
008_5-6a_Ant2

Date: 2019/8/5

Temperature: 26 °C

Time: 下午 04:03:18

Humidity: 59 %



Condition:

EUT: Wireless File Transmitter

Model: DS586194

Test Mode: TX_UNII Band3_Ant2

Note: Operator: Phillip (測試場地: RF-Cond01)

NCC_LP0002_802.11a_Channel 100_Power Density

RF Conducted

Sweep Time: 1ms Att.: 15dB

RBW: 1000 KHz VBW: 3000 KHz

No.	Frequency(MHz)	Level(dBm)
1	5502.44200	-2.37

File: 19-07-MAS-
008_5-6a_Ant2

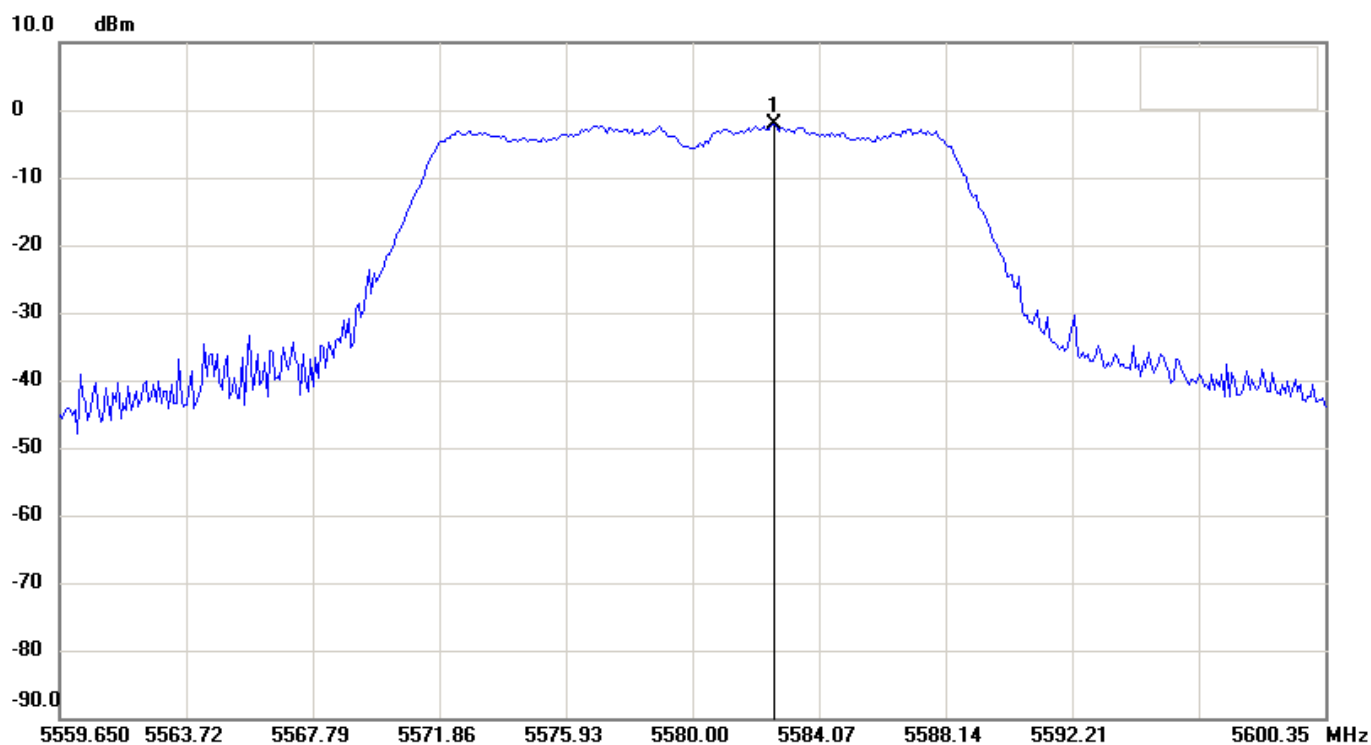
#11

Date: 2019/8/5

Temperature: 26 °C

Time: 下午 04:08:25

Humidity: 59 %

**Condition:****EUT:**

Wireless File Transmitter

Model:

DS586194

Test Mode:

TX_UNII Band3_Ant2

Note:

Operator: Phillip (測試場地: RF-Cond01)

NCC_LP0002_802.11a_Channel 116_Power Density

RF Conducted**Sweep Time:** 1ms **Att.:** 15dB**RBW:** 1000 KHz **VBW:** 3000 KHz

No.	Frequency(MHz)	Level(dBm)
1	5582.60480	-2.22

File: 19-07-MAS-
008_5-6a_Ant2

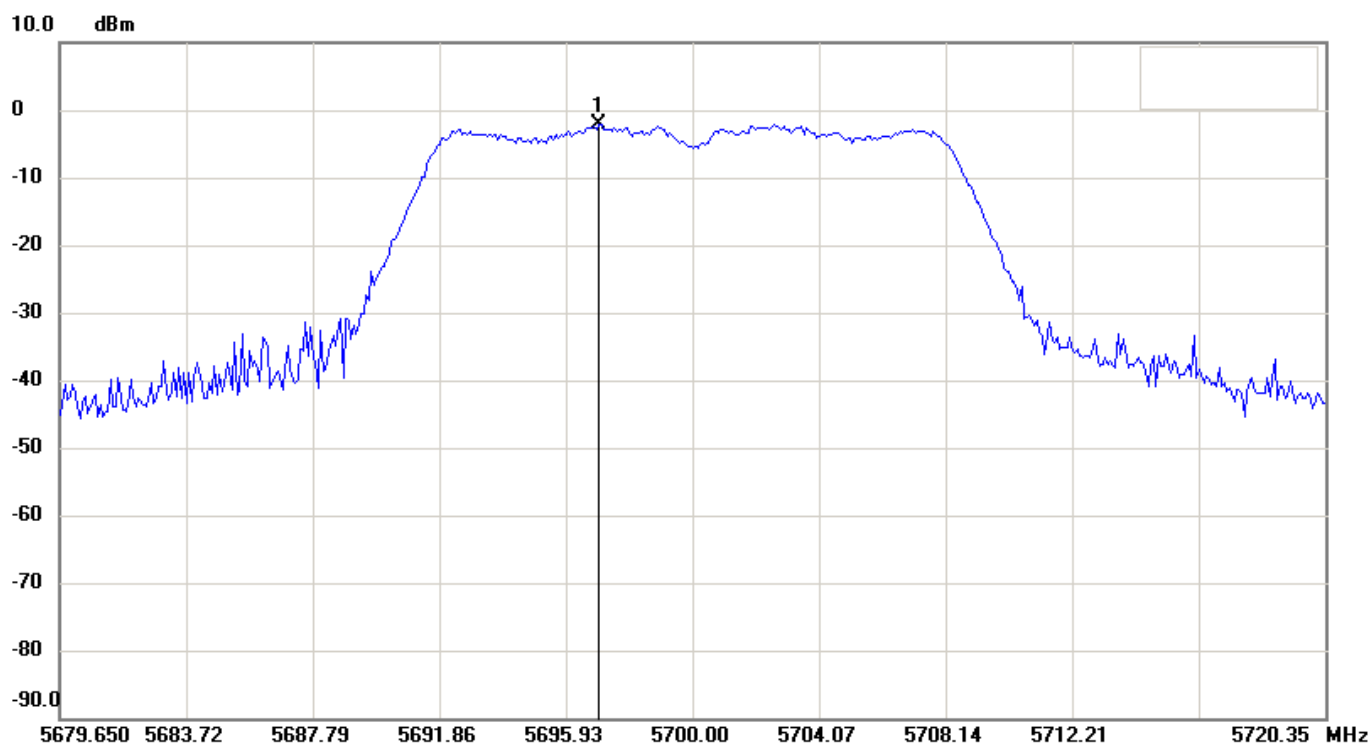
#17

Date: 2019/8/5

Temperature: 26 °C

Time: 下午 04:15:23

Humidity: 59 %

**Condition:**

EUT:

Wireless File Transmitter

Model:

DS586194

Test Mode:

TX_UNII Band3_Ant2

Note:

Operator: Phillip (測試場地: RF-Cond01)

NCC_LP0002_802.11a_Channel 140_Power Density

RF Conducted

Sweep Time: 1ms Att.: 15dB

RBW: 1000 KHz VBW: 3000 KHz

No.	Frequency(MHz)	Level(dBm)
1	5696.98820	-2.06

8.4.2 調變技術:IEEE 802.11n HT20

8.4.2.1 CHAIN 1

測試日期: Aug. 05, 2019

環境溫度: 26°C

環境濕度: 59%

天線增益最大值為 2.04 dBi, NCC Limit 如下表所示:

Chnnel	Power Spectral Density (dBm)	NCC Limit (dBm)	Chart
L	-2.52	11.0	Page 109
M	-2.88	11.0	Page 110
H	-3.03	11.0	Page 111

註: 1. 繪圖資料請參考第 109-111 頁。

2. 功率頻譜密度 (Power Spectral Density) 為經儀器校正補償過後的結果值。

3. If ntenna gain $\leq$ 6dBi, NCC Limit =11 dBm4. If ntenna gain $>$ 6dBi, NCC Limit =11 dBm – (highest ntenna gain – 6 dBi)5. 量測不準確度: ± 1.5 dB($1\text{GHz} \leq f \leq 18\text{GHz}$)

File: 19-07-MAS-
008_5-
6n20_Ant1

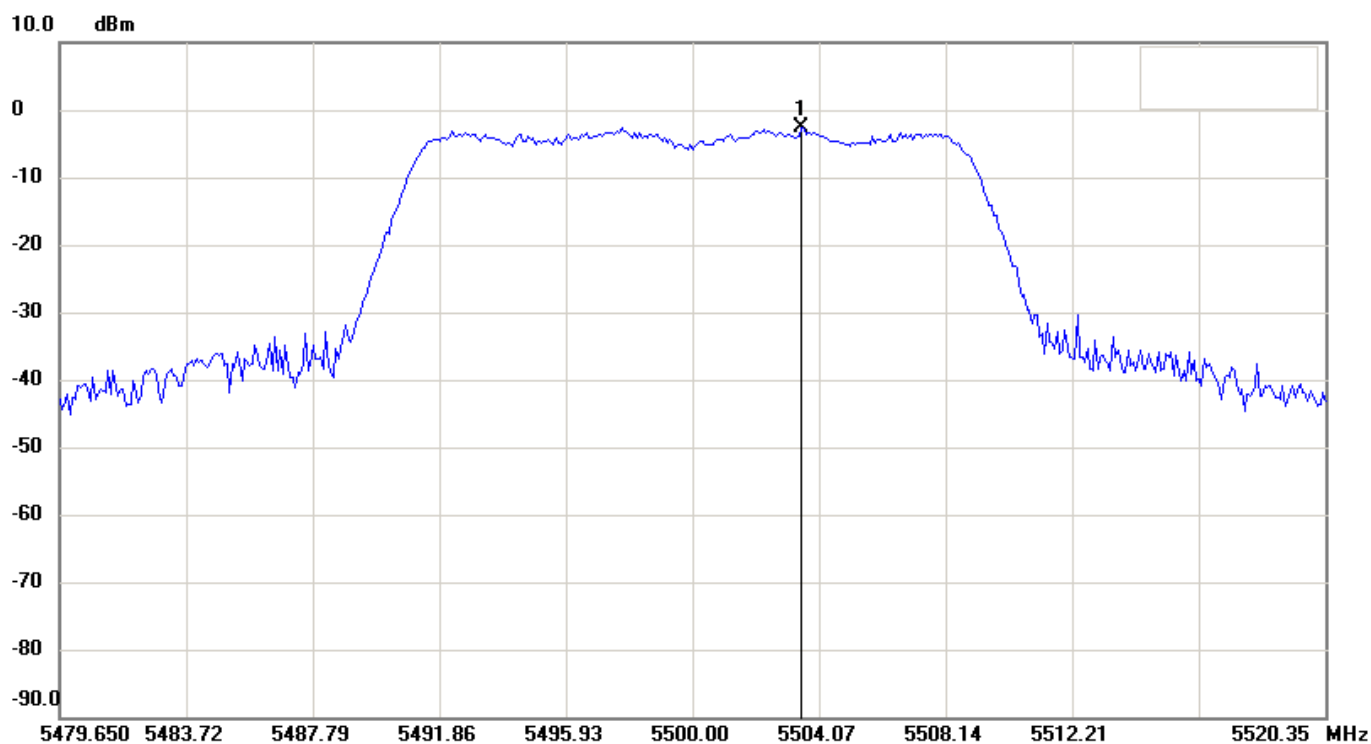
#4

Date: 2019/8/5

Temperature: 26 °C

Time: 下午 06:20:16

Humidity: 59 %



Condition:

EUT:

Wireless File Transmitter

RF Conducted

Sweep Time: 1ms Att.: 15dB

Model:

DS586194

RBW: 1000 KHz

VBW: 3000 KHz

Test Mode:

TX_UNII Band3_Ant1

Note:

Operator: Phillip (測試場地: RF-Cond01)

NCC_LP0002_802.11n20_Channel 100_Power Density

No.	Frequency(MHz)	Level(dBm)
1	5503.50020	-2.52

File: 19-07-MAS-
008_5-
6n20_Ant1

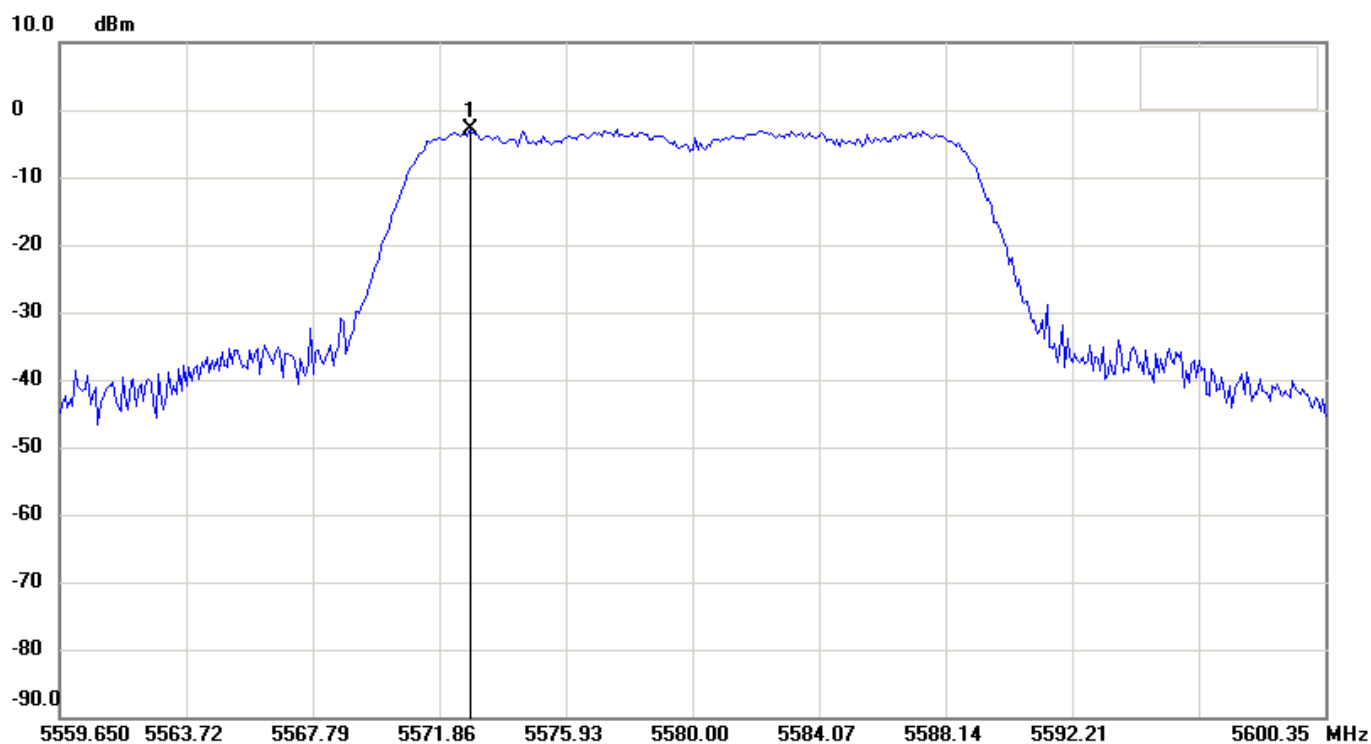
#11

Date: 2019/8/5

Temperature: 26 °C

Time: 下午 06:26:21

Humidity: 59 %

**Condition:**

EUT:

Wireless File Transmitter

Model:

DS586194

Test Mode:

TX_UNII Band3_Ant1

Note:

Operator: Phillip (測試場地: RF-Cond01)

NCC_LP0002_802.11n20_Channel 116_Power Density

RF Conducted

Sweep Time: 1ms Att.: 15dB

RBW: 1000 KHz VBW: 3000 KHz

No.	Frequency(MHz)	Level(dBm)
1	5572.83680	-2.88

File: 19-07-MAS-
008_5-
6n20_Ant1

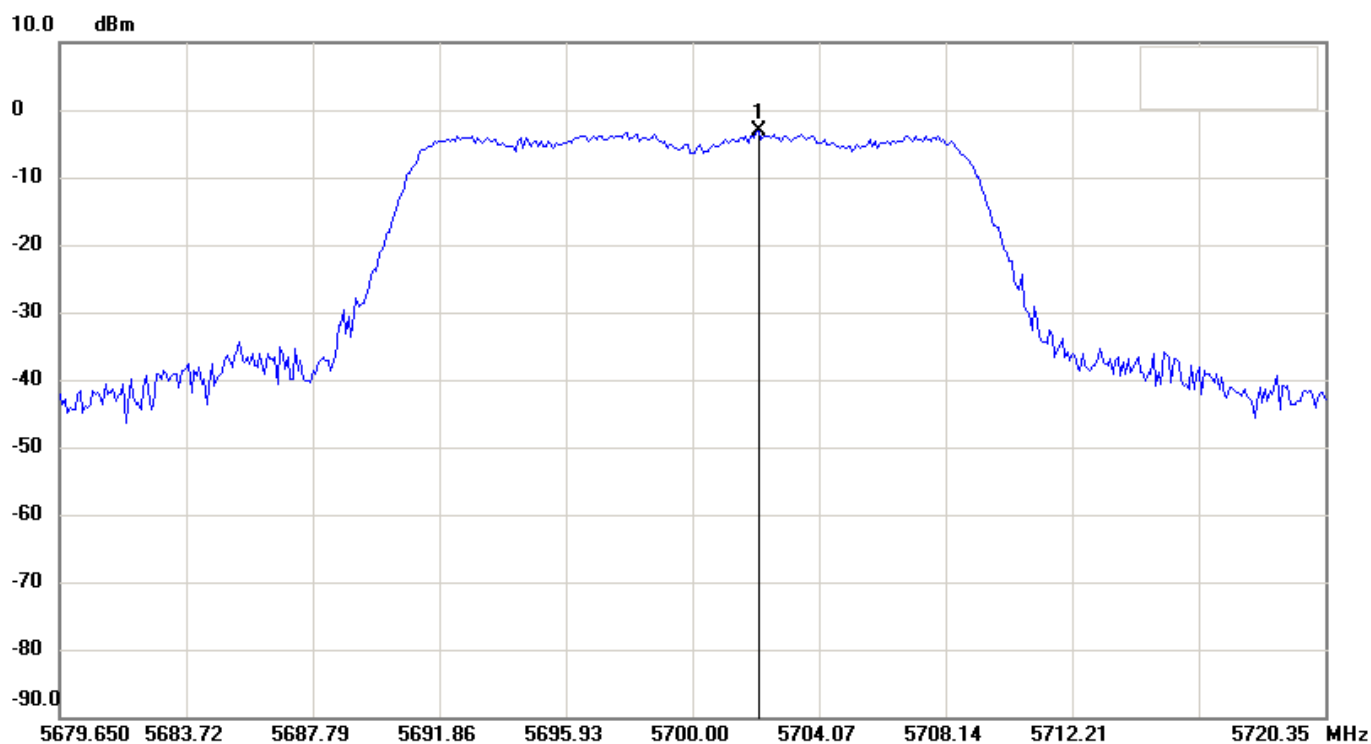
#17

Date: 2019/8/5

Temperature: 26 °C

Time: 下午 06:32:53

Humidity: 59 %

**Condition:**

EUT:

Wireless File Transmitter

RF Conducted

Sweep Time: 1ms Att.: 15dB

Model:

DS586194

RBW: 1000 KHz

VBW: 3000 KHz

Test Mode:

TX_UNII Band3_Ant1

Note:

Operator: Phillip (測試場地: RF-Cond01)

NCC_LP0002_802.11n20_Channel 140_Power Density

No.	Frequency(MHz)	Level(dBm)
1	5702.11640	-3.03

8.4.2.2 CHAIN 2

測試日期: Aug. 05, 2019

環境溫度: 26°C

環境濕度: 59%

天線增益最大值為 0.79 dBi，NCC Limit 如下表所示：

Chnnel	Power Spectral Density (dBm)	NCC Limit (dBm)	Chart
L	-1.37	11.0	Page 113
M	-0.98	11.0	Page 114
H	-0.98	11.0	Page 115

註：1. 繪圖資料請參考第 113-115 頁。

2. 功率頻譜密度 (Power Spectral Density) 為經儀器校正補償過後的結果值。

3. If ntenna gain $\leq$ 6dBi, NCC Limit =11 dBm

4. If ntenna gain > 6dBi, NCC Limit =11 dBm – (highest ntenna gain – 6 dBi)

5. 量測不準確度: $\pm 1.5\text{dB}$ ($1\text{GHz} \leq f \leq 18\text{GHz}$)

File: 19-07-MAS-
008_5-
6n20_Ant2

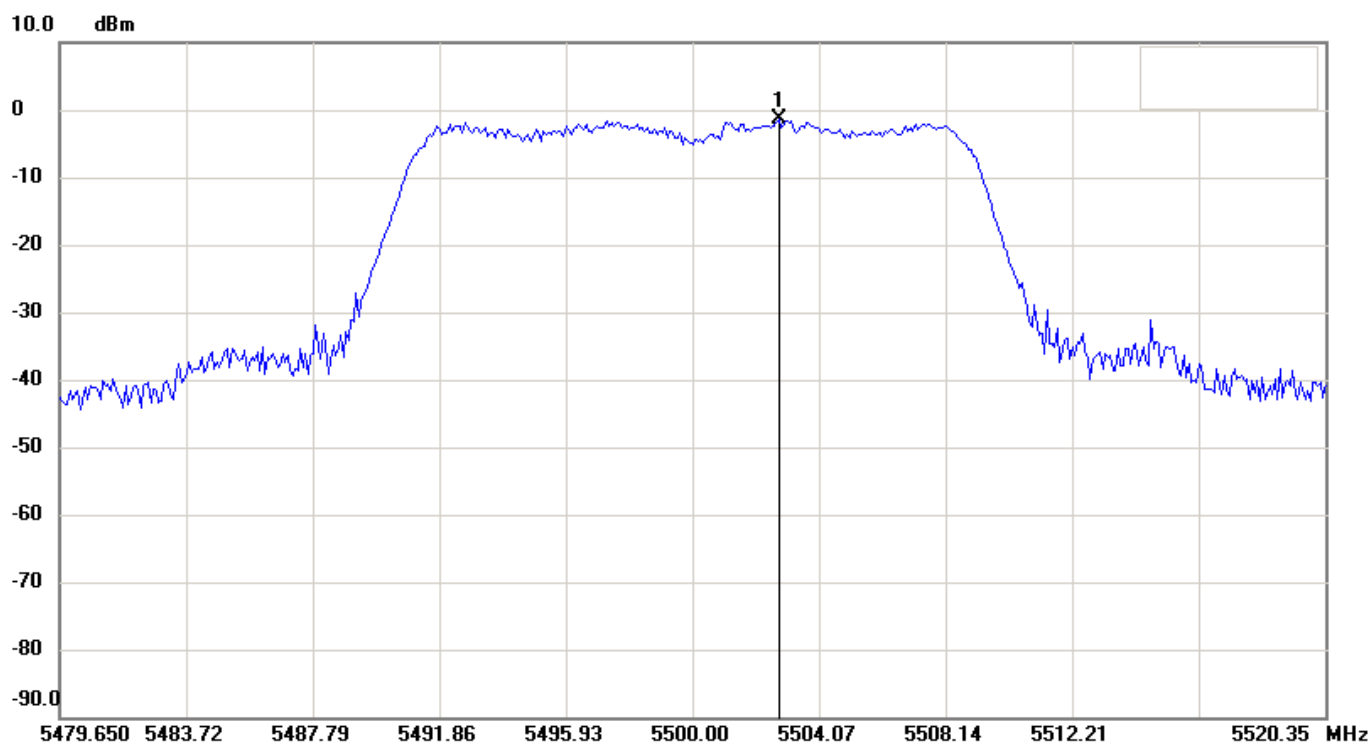
#4

Date: 2019/8/5

Temperature: 26 °C

Time: 下午 04:27:11

Humidity: 59 %

**Condition:**

EUT:

Wireless File Transmitter

RF Conducted

Sweep Time: 1ms Att.: 15dB

Model:

DS586194

RBW: 1000 KHz

VBW: 3000 KHz

Test Mode:

TX_UNII Band3_Ant2

Note:

Operator: Phillip (測試場地: RF-Cond01)

NCC_LP0002_802.11n20_Channel 100_Power Density

No.	Frequency(MHz)	Level(dBm)
1	5502.76760	-1.37

File: 19-07-MAS-
008_5-
6n20_Ant2

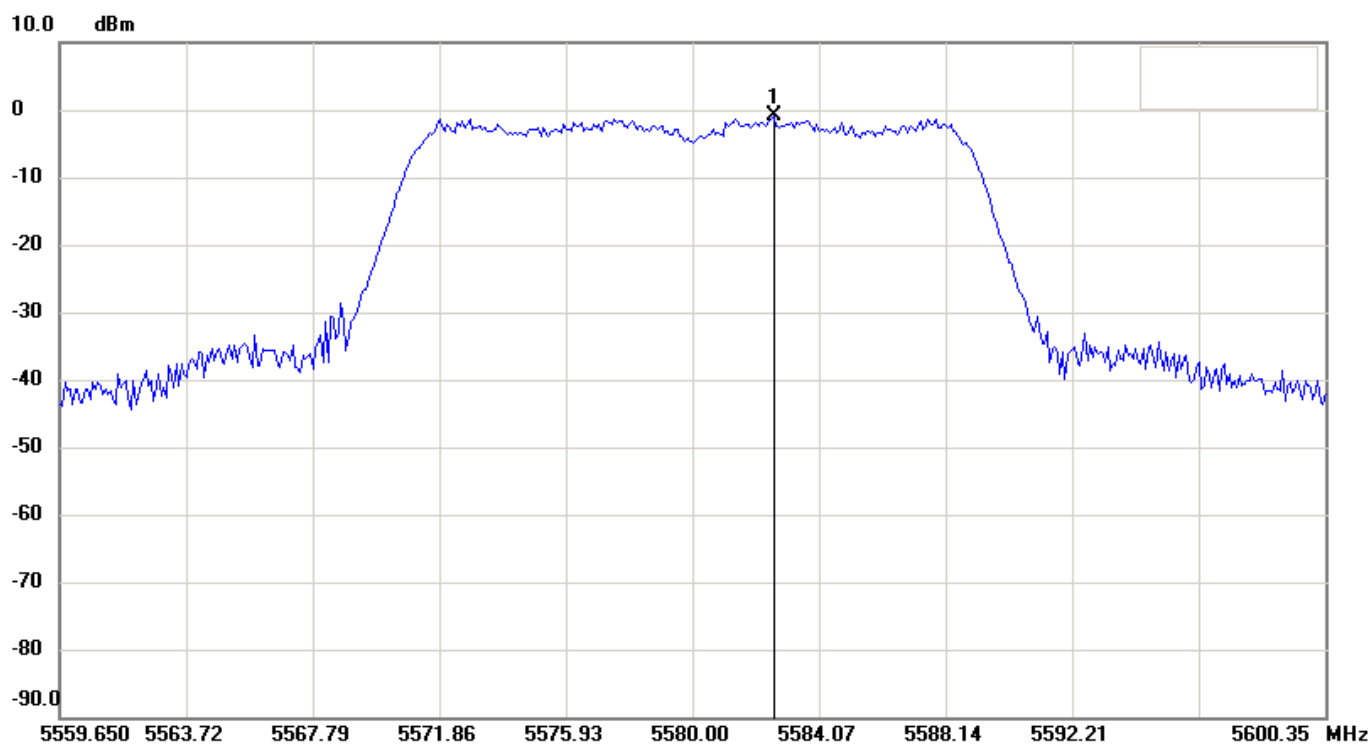
#11

Date: 2019/8/5

Temperature: 26 °C

Time: 下午 04:33:01

Humidity: 59 %

**Condition:****EUT:**

Wireless File Transmitter

Model:

DS586194

Test Mode:

TX_UNII Band3_Ant2

Note:

Operator: Phillip (測試場地: RF-Cond01)

NCC_LP0002_802.11n20_Channel 116_Power Density

RF Conducted**Sweep Time:** 1ms **Att.:** 15dB**RBW:** 1000 KHz **VBW:** 3000 KHz

No.	Frequency(MHz)	Level(dBm)
1	5582.60480	-0.98

File: 19-07-MAS-
008_5-
6n20_Ant2

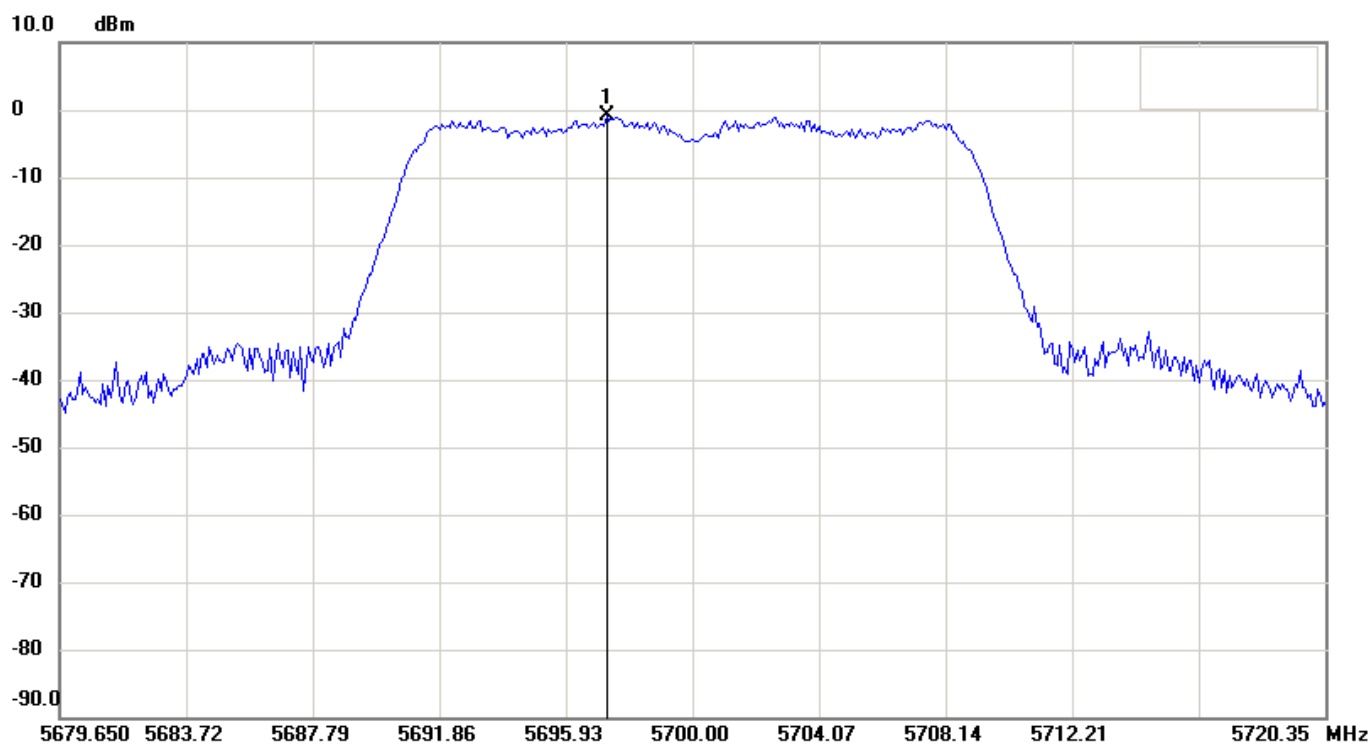
#17

Date: 2019/8/5

Temperature: 26 °C

Time: 下午 04:37:55

Humidity: 59 %

**Condition:**

EUT:

Wireless File Transmitter

Model:

DS586194

Test Mode:

TX_UNII Band3_Ant2

Note:

Operator: Phillip (測試場地: RF-Cond01)

NCC_LP0002_802.11n20_Channel 140_Power Density

RF Conducted

Sweep Time: 1ms Att.: 15dB

RBW: 1000 KHz VBW: 3000 KHz

No.	Frequency(MHz)	Level(dBm)
1	5697.23240	-0.98

8.4.2.3 CHAIN 1 + CHAIN 2

測試日期: Aug. 05, 2019

環境溫度: 26°C

環境濕度: 59%

Total power density calculation formula:

$$10 \log (10^{(\text{CHAIN 1 PPSD} / 10)} + 10^{(\text{CHAIN 2 PPSD} / 10)})$$

天線增益最大值為 4.45 dBi，NCC Limit 如下表所示：

Chnnel	Peak Power Spectral Density (dBm)		Total Peak Power Spectral Density (dBm)	NCC Limit (dBm)	Chart
	CHAIN 1	CHAIN 2			
L	-2.52	-1.37	1.10	11	-
M	-2.88	-0.98	1.18	11	-
H	-3.03	-0.98	1.13	11	-

註：1. 功率頻譜密度 (Power Spectral Density) 為經儀器校正補償過後的結果值。

2. If antenna gain $\leq$ 6dBi, NCC Limit = 11 dBm3. If antenna gain $>$ 6dBi, NCC Limit = 11 dBm – (highest antenna gain – 6 dBi)4. 量測不準確度: $\pm 1.5\text{dB}$ ($1\text{GHz} \leq f \leq 18\text{GHz}$)

8.4.3 調變技術: IEEE 802.11n HT40

8.4.3.1 CHAIN 1

測試日期: Aug. 05, 2019

環境溫度: 26°C

環境濕度: 59%

天線增益最大值為 2.04 dBi, NCC Limit 如下表所示:

Chnnel	Power Spectral Density (dBm)	NCC Limit (dBm)	Chart
L	-5.37	11.0	Page 118
M	-5.23	11.0	Page 119
H	-5.95	11.0	Page 120

註: 1. 繪圖資料請參考第 118-120 頁。

2. 功率頻譜密度 (Power Spectral Density) 為經儀器校正補償過後的結果值。

3. If ntenna gain $\leq$ 6dBi, NCC Limit =11 dBm

4. If ntenna gain > 6dBi, NCC Limit =11 dBm – (highest ntenna gain – 6 dBi)

5. 量測不準確度: $\pm 1.5\text{dB}$ ($1\text{GHz} \leq f \leq 18\text{GHz}$)

File: 19-07-MAS-
008_5-
6n40_Ant1

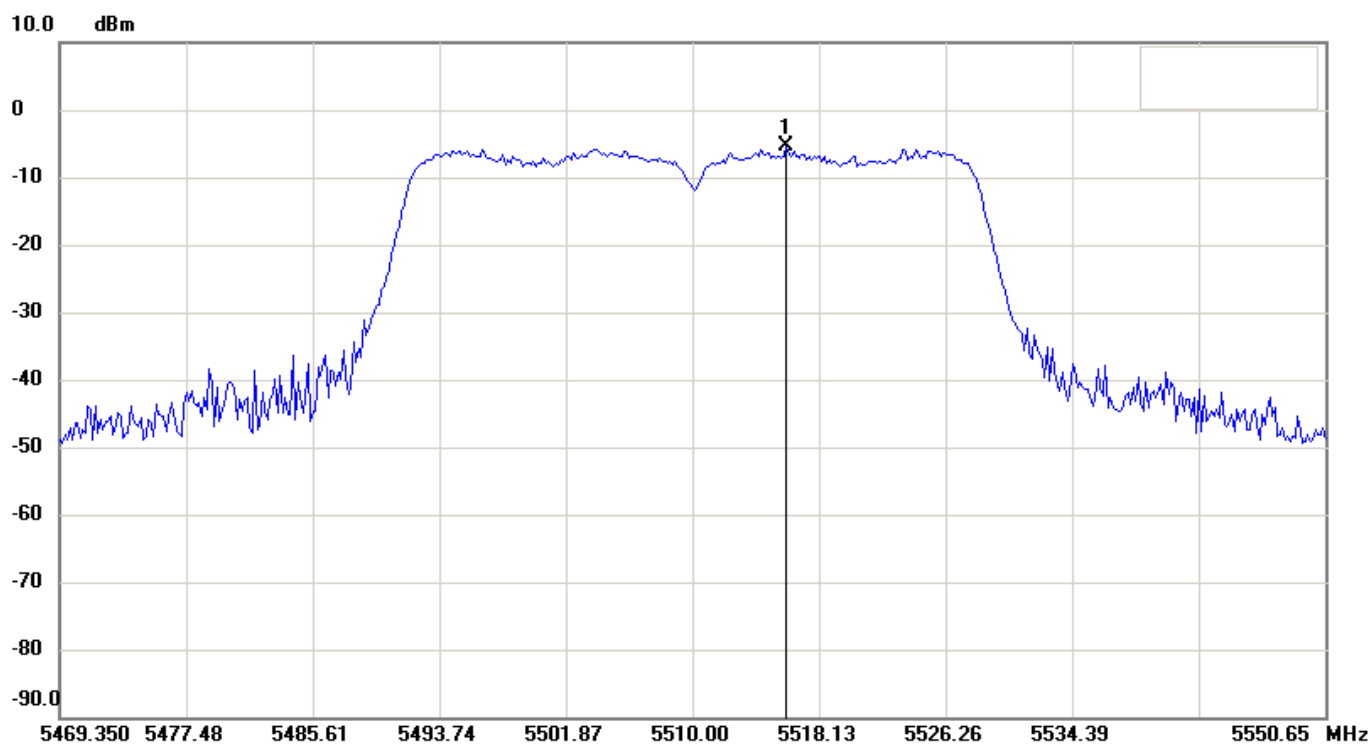
#4

Date: 2019/8/5

Temperature: 26 °C

Time: 下午 07:23:18

Humidity: 59 %



Condition:

EUT:

Wireless File Transmitter

RF Conducted

Sweep Time: 1ms Att.: 15dB

Model:

DS586194

RBW: 1000 KHz

VBW: 3000 KHz

Test Mode:

TX_UNII Band3_Ant1

Note:

Operator: Phillip (測試場地: RF-Cond01)

NCC_LP0002_802.11n40_Channel 102_Power Density

No.	Frequency(MHz)	Level(dBm)
1	5516.01620	-5.37

File: 19-07-MAS-008_5-6n40_Ant1

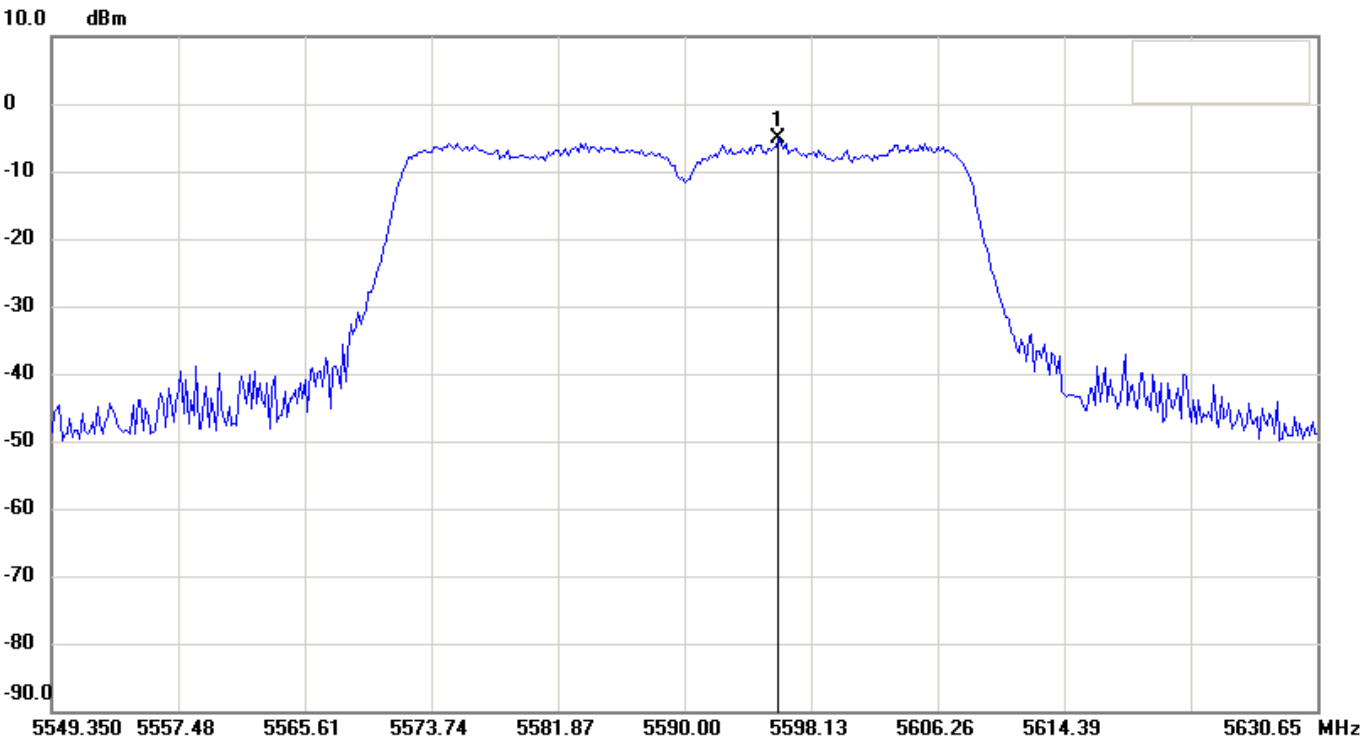
#11

Date: 2019/8/5

Temperature: 26 ℃

Time: 下午 07:34:28

Humidity: 59 %



Condition:

EUT: Wireless File Transmitter

Model: DS586194

Test Mode: TX_UNII Band3_Ant1

Note: Operator: Phillip (測試場地: RF-Cond01)
NCC_LP0002_802.11n40_Channel 118_Power Density

RF Conducted

Sweep Time: 1ms Att.: 15dB

RBW: 1000 KHz VBW: 3000 KHz

No.	Frequency(MHz)	Level(dBm)
1	5596.01620	-5.23

File: 19-07-MAS-
008_5-
6n40_Ant1

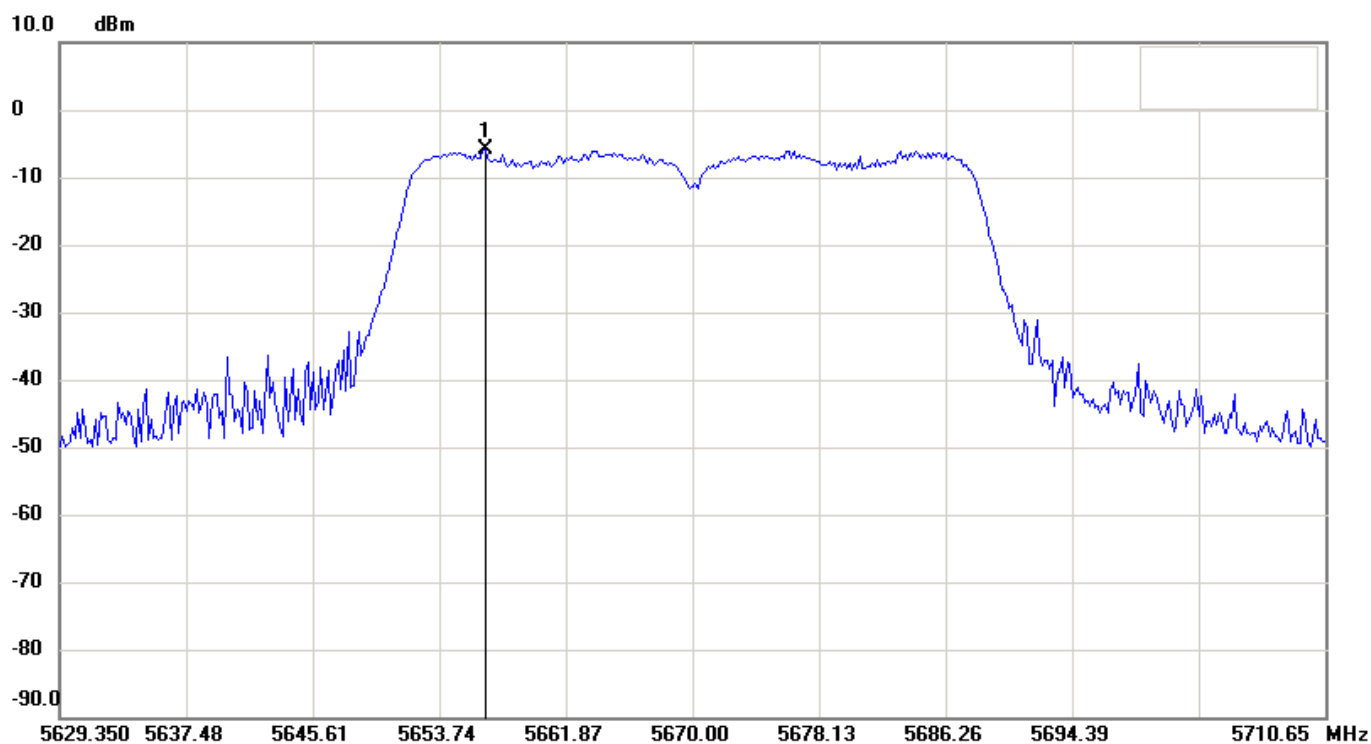
#17

Date: 2019/8/5

Temperature: 26 °C

Time: 下午 07:45:23

Humidity: 59 %

**Condition:**

EUT:

Wireless File Transmitter

RF Conducted

Sweep Time: 1ms Att.: 15dB

Model:

DS586194

RBW: 1000 KHz

VBW: 3000 KHz

Test Mode:

TX_UNII Band3_Ant1

Note:

Operator: Phillip (測試場地: RF-Cond01)

NCC_LP0002_802.11n40_Channel 134_Power Density

No.	Frequency(MHz)	Level(dBm)
1	5656.66680	-5.95

8.4.3.2 CHAIN 2

測試日期: Aug. 05, 2019

環境溫度: 26°C

環境濕度: 59%

天線增益最大值為 0.79 dBi，NCC Limit 如下表所示：

Chnnel	Power Spectral Density (dBm)	NCC Limit (dBm)	Chart
L	-3.76	11.0	Page 122
M	-3.98	11.0	Page 123
H	-3.67	11.0	Page 124

註：1. 繪圖資料請參考第 122-124 頁。

2. 功率頻譜密度 (Power Spectral Density) 為經儀器校正補償過後的結果值。

3. If ntenna gain $\leq$ 6dBi, NCC Limit =11 dBm

4. If ntenna gain > 6dBi, NCC Limit =11 dBm – (highest ntenna gain – 6 dBi)

5. 量測不準確度: $\pm 1.5\text{dB}$ ($1\text{GHz} \leq f \leq 18\text{GHz}$)

File: 19-07-MAS-
008_5-
6n40_Ant2

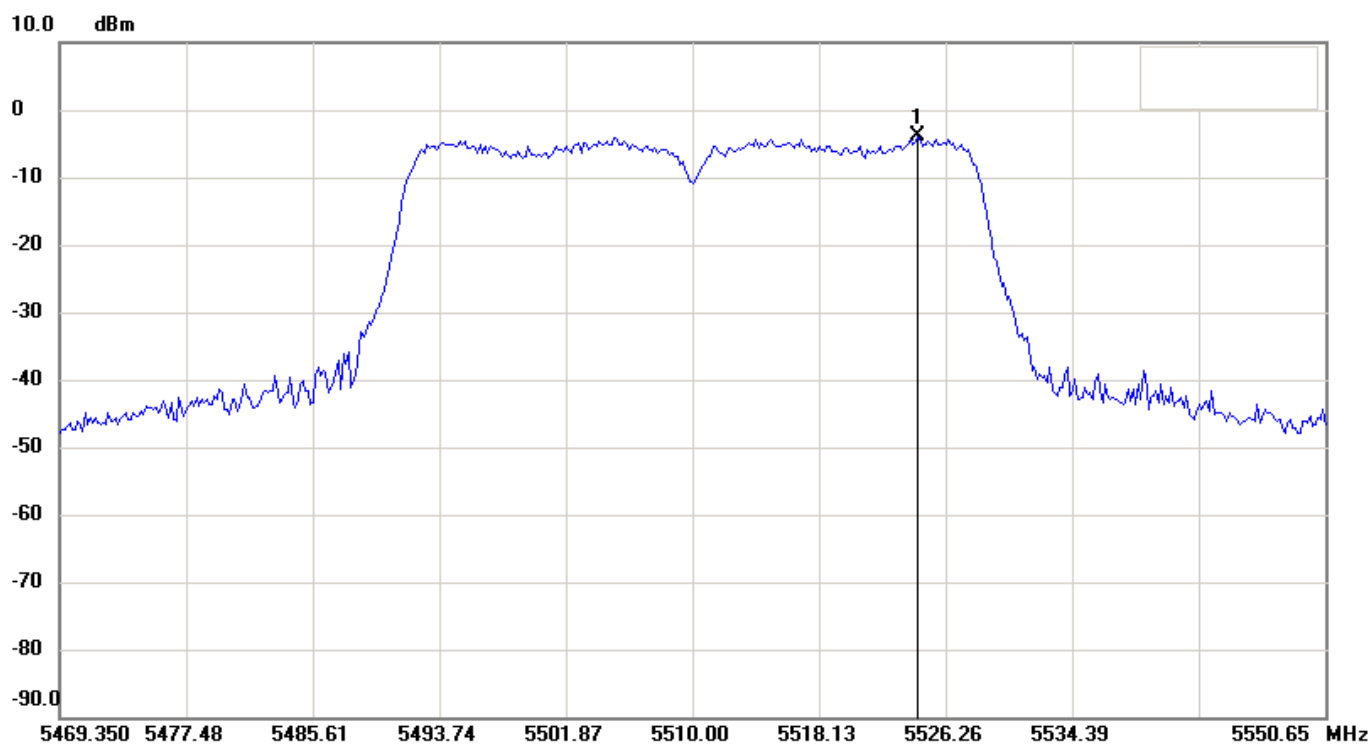
#4

Date: 2019/8/5

Temperature: 26 °C

Time: 下午 08:59:29

Humidity: 59 %

**Condition:****EUT:**

Wireless File Transmitter

RF Conducted**Sweep Time:** 1ms **Att.:** 15dB**Model:**

DS586194

RBW: 1000 KHz**VBW:** 3000 KHz**Test Mode:**

TX_UNII Band3_Ant2

Note:

Operator: Phillip (測試場地: RF-Cond01)

NCC_LP0002_802.11n40_Channel 102_Power Density

No.	Frequency(MHz)	Level(dBm)
1	5524.47140	-3.76

File: 19-07-MAS-
008_5-
6n40_Ant2

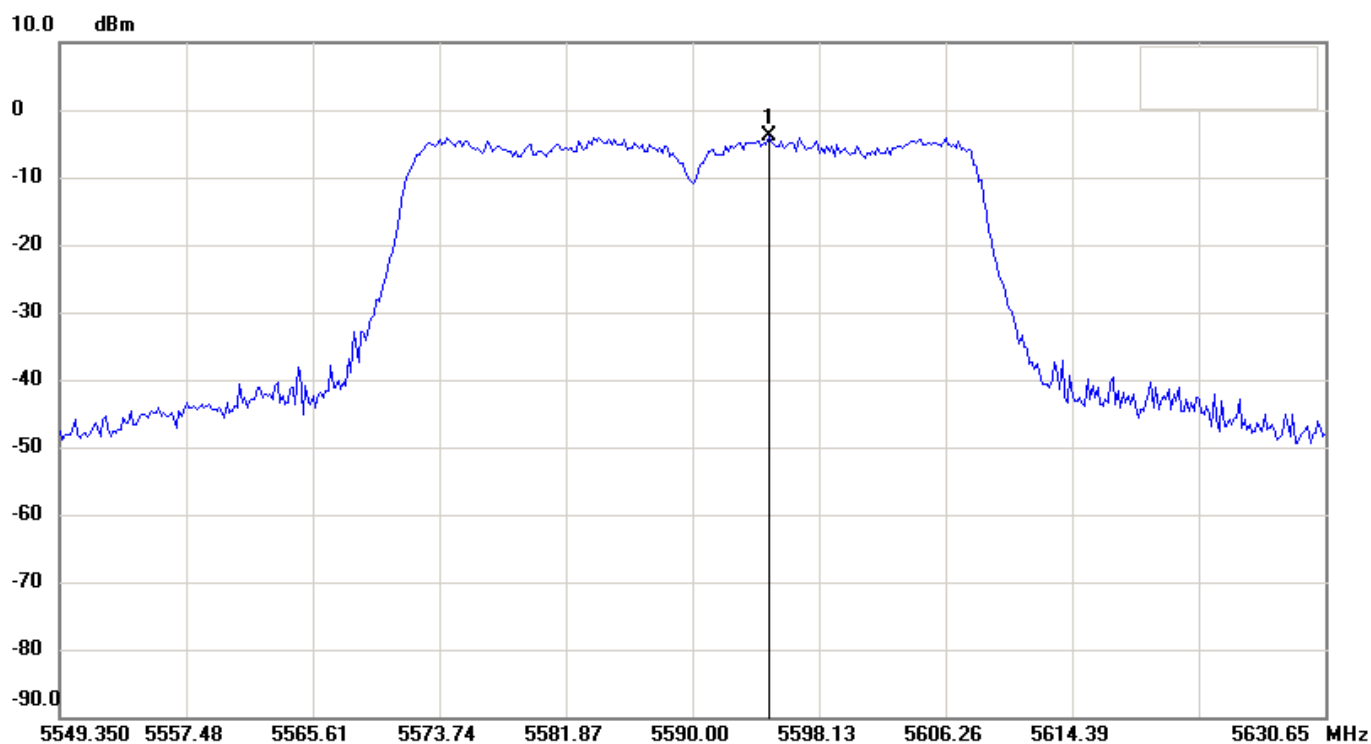
#11

Date: 2019/8/5

Temperature: 26 °C

Time: 下午 09:06:33

Humidity: 59 %

**Condition:**

EUT:

Wireless File Transmitter

RF Conducted

Sweep Time: 1ms Att.: 15dB

Model:

DS586194

RBW: 1000 KHz

VBW: 3000 KHz

Test Mode:

TX_UNII Band3_Ant2

Note:

Operator: Phillip (測試場地: RF-Cond01)

NCC_LP0002_802.11n40_Channel 118_Power Density

No.	Frequency(MHz)	Level(dBm)
1	5594.87800	-3.98

File: 19-07-MAS-
008_5-
6n40_Ant2

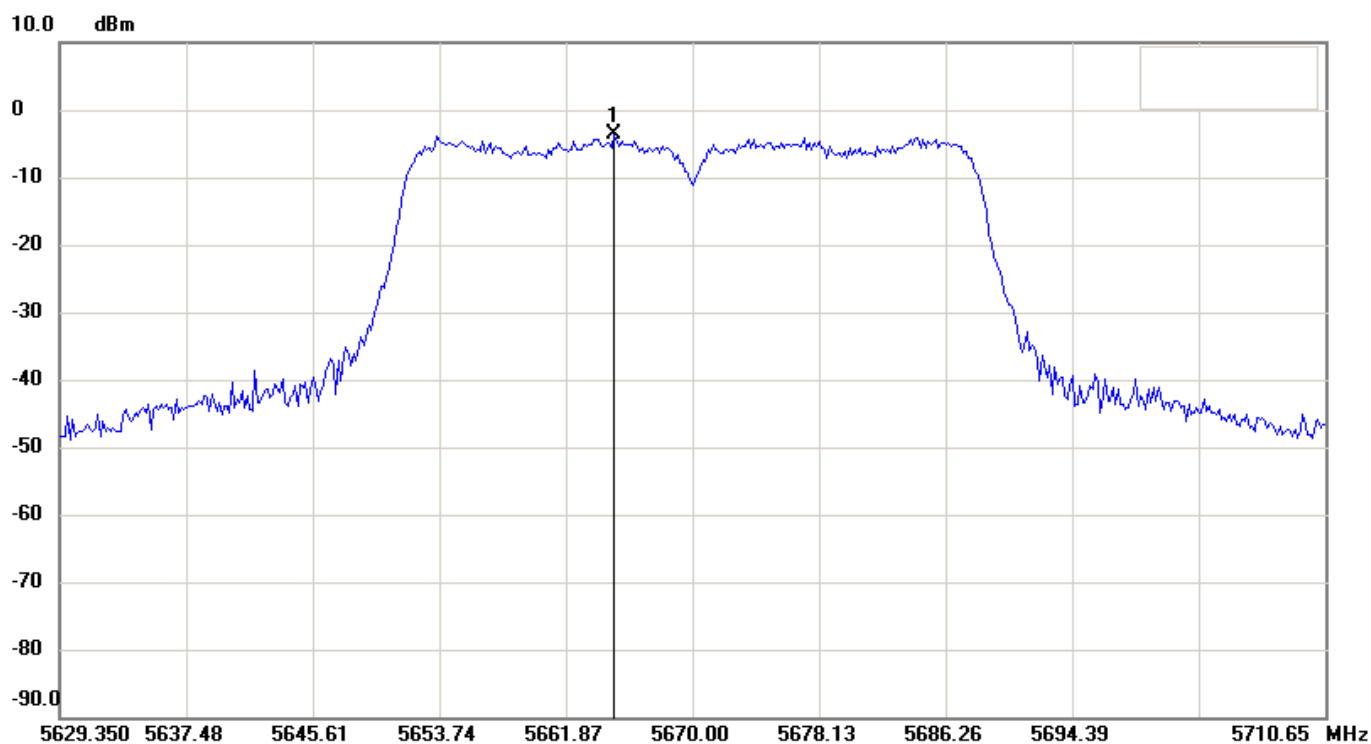
#17

Date: 2019/8/5

Temperature: 26 °C

Time: 下午 09:11:22

Humidity: 59 %

**Condition:**

EUT:

Wireless File Transmitter

Model:

DS586194

Test Mode:

TX_UNII Band3_Ant2

Note:

Operator: Phillip (測試場地: RF-Cond01)

NCC_LP0002_802.11n40_Channel 134_Power Density

RF Conducted

Sweep Time: 1ms Att.: 15dB

RBW: 1000 KHz VBW: 3000 KHz

No.	Frequency(MHz)	Level(dBm)
1	5664.95940	-3.67

8.4.3.3 CHAIN 1 + CHAIN 2

測試日期: Aug. 05, 2019

環境溫度: 26°C

環境濕度: 59%

Total power density calculation formula:

$$10 \log (10^{(\text{CHAIN 1 PPSD} / 10)} + 10^{(\text{CHAIN 2 PPSD} / 10)})$$

天線增益最大值為 4.45 dBi，NCC Limit 如下表所示：

Chnnel	Peak Power Spectral Density (dBm)		Total Peak Power Spectral Density (dBm)	NCC Limit (dBm)	Chart
	CHAIN 1	CHAIN 2			
L	-5.37	-3.76	-1.48	11	-
M	-5.23	-3.98	-1.55	11	-
H	-5.95	-3.67	-1.65	11	-

註：1. 功率頻譜密度 (Power Spectral Density) 為經儀器校正補償過後的結果值。

2. If antenna gain $\leq 6\text{dBi}$, NCC Limit = 11 dBm3. If antenna gain $> 6\text{dBi}$, NCC Limit = 11 dBm – (highest antenna gain – 6 dBi)4. 量測不準確度: $\pm 1.5\text{dB}$ ($1\text{GHz} \leq f \leq 18\text{GHz}$)

8.4.4 調變技術: IEEE 802.11ac (80MHz)

8.4.4.1 CHAIN 1

測試日期: Aug. 06, 2019

環境溫度: 26°C

環境濕度: 62%

天線增益最大值為 2.04 dBi，NCC Limit 如下表所示：

Chnnel	Power Spectral Density (dBm)	NCC Limit (dBm)	Chart
L	-8.76	11.00	Page 127
H	-8.69	11.00	Page 128

註：1. 繪圖資料請參考第 127-128 頁。

2. 功率頻譜密度 (Power Spectral Density) 為經儀器校正補償過後的結果值。

3. If ntenna gain $\leq$ 6dBi, NCC Limit =11 dBm4. If ntenna gain $>$ 6dBi, NCC Limit =11 dBm – (highest ntenna gain – 6 dBi)5. 量測不準確度: $\pm 1.5\text{dB}$ ($1\text{GHz} \leq f \leq 18\text{GHz}$)

File: 19-07-MAS-
008_5-
6ac80_Ant1

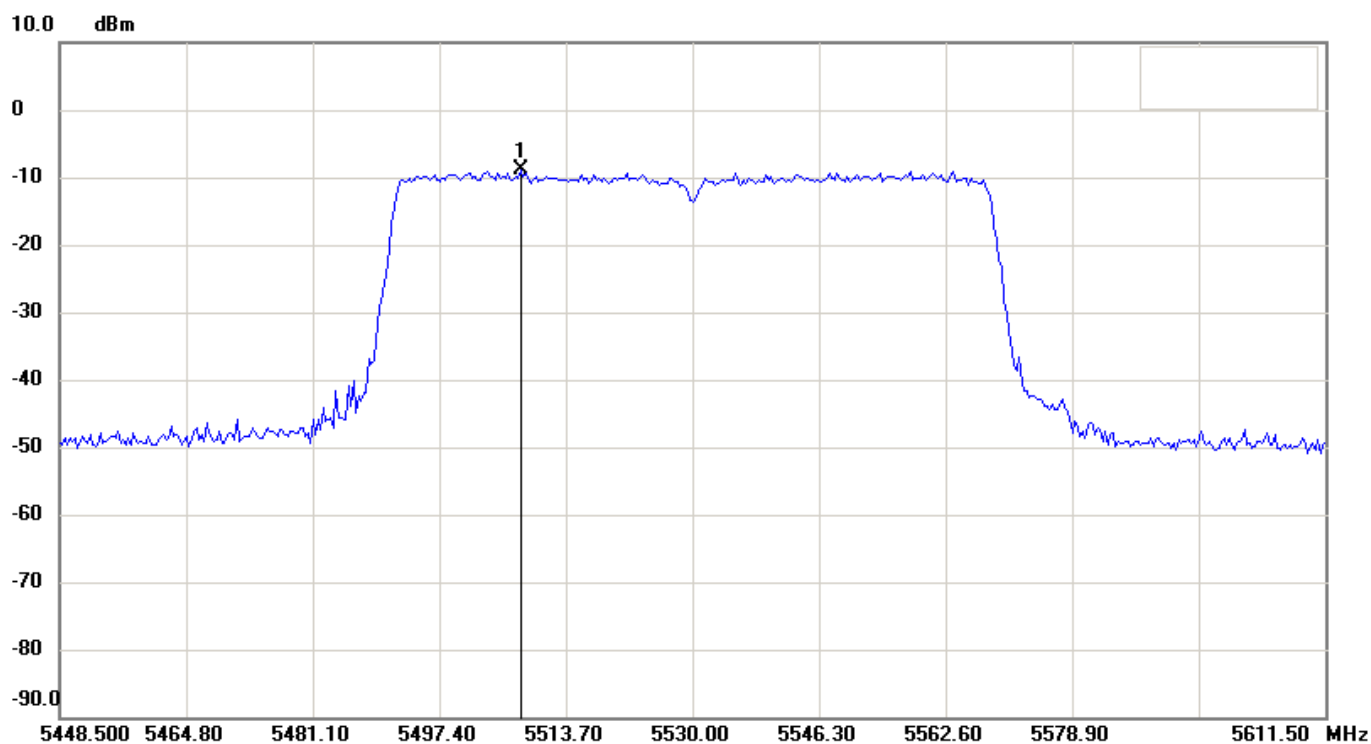
#4

Date: 2019/8/6

Temperature: 26 °C

Time: 上午 10:07:49

Humidity: 62 %

**Condition:**

EUT:

Wireless File Transmitter

Model:

DS586194

Test Mode:

TX_UNII Band3_Ant1

Note:

Operator: Phillip (測試場地: RF-Cond01)

NCC_LP0002_802.11ac80_Channel 106_Power Density

RF Conducted

Sweep Time: 1ms Att.: 15dB

RBW: 1000 KHz VBW: 3000 KHz

No.	Frequency(MHz)	Level(dBm)
1	5507.83200	-8.76

File: 19-07-MAS-
008_5-
6ac80_Ant1

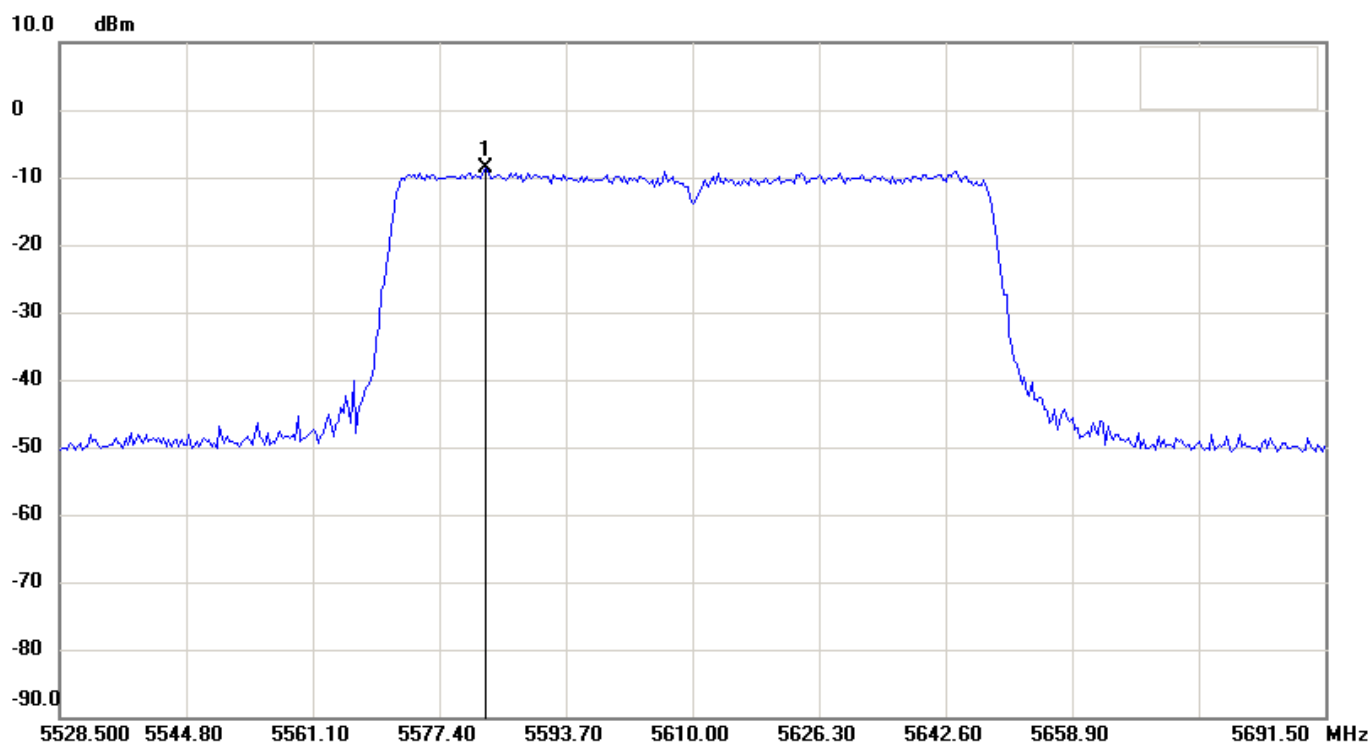
#11

Date: 2019/8/6

Temperature: 26 °C

Time: 上午 10:14:19

Humidity: 62 %

**Condition:**

EUT:

Wireless File Transmitter

RF Conducted

Sweep Time: 1ms Att.: 15dB

Model:

DS586194

RBW: 1000 KHz

VBW: 3000 KHz

Test Mode:

TX_UNII Band3_Ant1

Note:

Operator: Phillip (測試場地: RF-Cond01)

NCC_LP0002_802.11ac80_Channel 122_Power Density

No.	Frequency(MHz)	Level(dBm)
1	5583.26800	-8.69

8.4.4.2 CHAIN 2

測試日期: Aug. 06, 2019

環境溫度: 26°C

環境濕度: 62%

天線增益最大值為 0.79 dBi，NCC Limit 如下表所示：

Chnnel	Power Spectral Density (dBm)	NCC Limit (dBm)	Chart
L	-7.09	11.00	Page 130
H	-7.02	11.00	Page 131

註：1. 繪圖資料請參考第 130-131 頁。

2. 功率頻譜密度 (Power Spectral Density) 為經儀器校正補償過後的結果值。

3. If ntenna gain $\leq$ 6dBi, NCC Limit =11 dBm4. If ntenna gain $>$ 6dBi, NCC Limit =11 dBm – (highest ntenna gain – 6 dBi)5. 量測不準確度: $\pm 1.5\text{dB}$ ($1\text{GHz} \leq f \leq 18\text{GHz}$)

File: 19-07-MAS-
008_5-
6ac80_Ant2

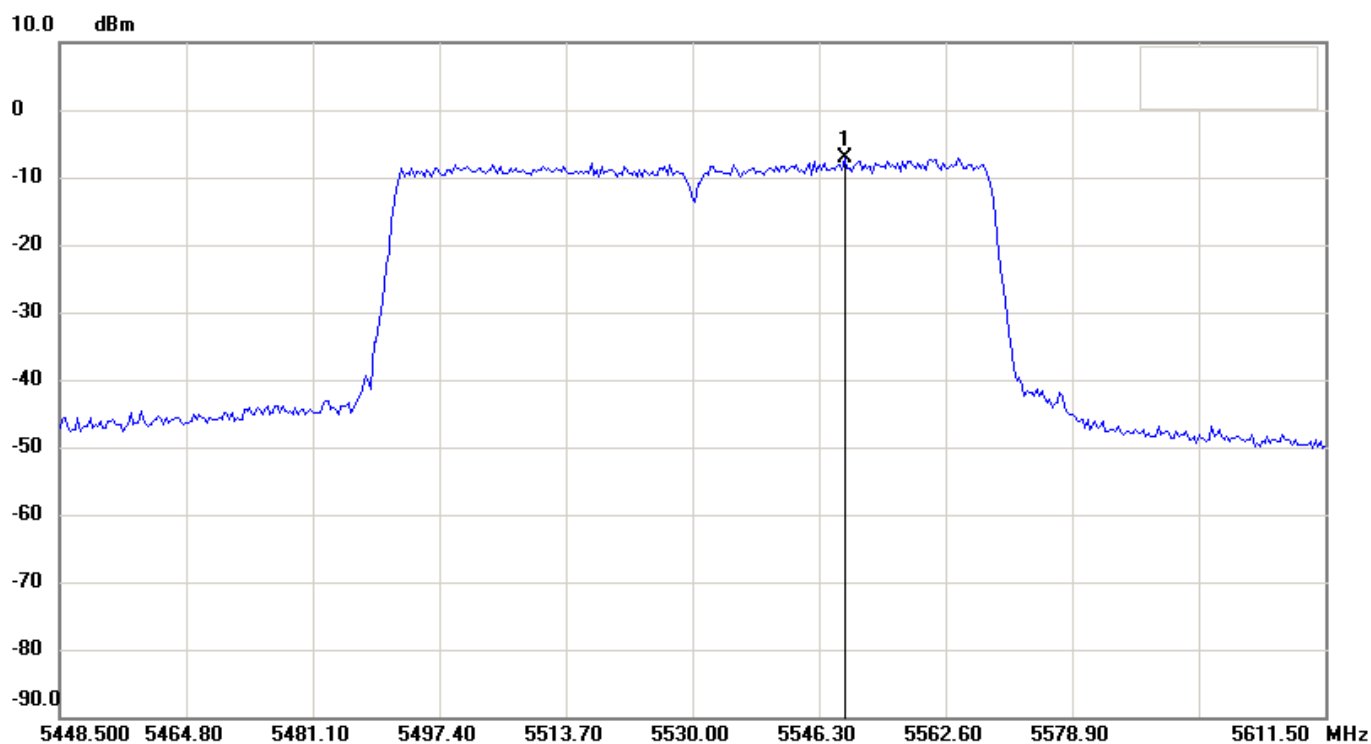
#4

Date: 2019/8/6

Temperature: 26 °C

Time: 上午 09:30:20

Humidity: 62 %



Condition:

EUT:

Wireless File Transmitter

RF Conducted

Sweep Time: 1ms Att.: 15dB

Model:

DS586194

RBW: 1000 KHz

VBW: 3000 KHz

Test Mode:

TX_UNII Band3_Ant2

Note:

Operator: Phillip (測試場地: RF-Cond01)

NCC_LP0002_802.11ac80_Channel 106_Power Density

No.	Frequency(MHz)	Level(dBm)
1	5549.56000	-7.09

File: 19-07-MAS-
008_5-
6ac80_Ant2

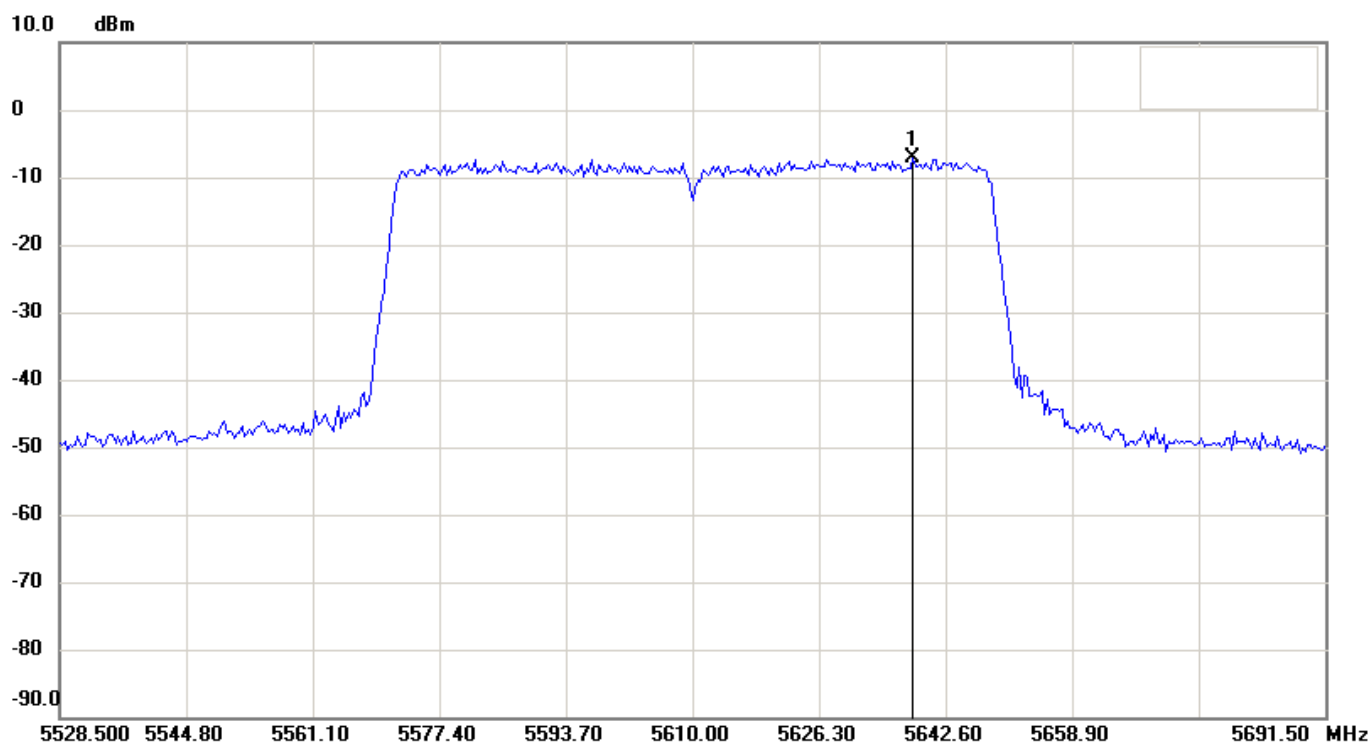
#11

Date: 2019/8/6

Temperature: 26 °C

Time: 上午 09:58:21

Humidity: 62 %

**Condition:****EUT:**

Wireless File Transmitter

Model:

DS586194

Test Mode:

TX_UNII Band3_Ant2

Note:

Operator: Phillip (測試場地: RF-Cond01)

NCC_LP0002_802.11ac80_Channel 122_Power Density

RF Conducted**Sweep Time:** 1ms **Att.:** 15dB**RBW:** 1000 KHz **VBW:** 3000 KHz

No.	Frequency(MHz)	Level(dBm)
1	5638.36200	-7.02

8.4.4.3 CHAIN 1 + CHAIN 2

測試日期: Aug. 06, 2019

環境溫度: 26°C

環境濕度: 62%

Total power density calculation formula:

$$10 \log (10^{(\text{CHAIN 1 PPSD} / 10)} + 10^{(\text{CHAIN 2 PPSD} / 10)})$$

天線增益最大值為 4.45 dBi，NCC Limit 如下表所示：

Chnnel	Peak Power Spectral Density (dBm)		Total Peak Power Spectral Density (dBm)	NCC Limit (dBm)	Chart
	CHAIN 1	CHAIN 2			
L	-8.76	-7.09	-4.83	11	-
H	-8.69	-7.02	-4.76	11	-

註：1. 功率頻譜密度 (Power Spectral Density) 為經儀器校正補償過後的結果值。

2. If ntenna gain $\leq$ 6dBi, NCC Limit = 11 dBm

3. If ntenna gain > 6dBi, NCC Limit = 11 dBm – (highest ntenna gain – 6 dBi)

4. 量測不準確度: $\pm 1.5\text{dB}$ ($1\text{GHz} \leq f \leq 18\text{GHz}$)

8.5 結果判定

高、中、低頻段的峰值功率頻譜密度皆低於限值，合乎標準規定。

9 混附波發射限制之量測

9.1 適用標準

依據國家通訊傳播委員會低功率射頻電機技術規範4.7.4.1之規定，在 5.15-5.35 GHz 及 5.470-5.725 GHz 頻帶操作的發射器：帶外發射之有效等向輻射功率 (EIRP) 不應超過 -27 dBm/MHz。

依據國家通訊傳播委員會低功率射頻電機技術規範4.7.4.3之規定，測量不必要發射時，應使用之最低解析頻寬為 1 MHz。必要時，於頻帶邊緣附近可使用小於 1 MHz 之解析頻寬，並以補償方式計算其總值。

9.2 混附波發射限制之測試配置

如圖2 所示。

9.3 量測混附波發射限制之儀器

儀器名稱	製造者	型 號
Spectrum Analyzer	Agilent	E4446A
Attenuator	WEINSCHEL	56-10

測試軟體: LZ-RF (Ver. ETC-3A2)

9.4 混附波發射限制之量測結果 (傳導方式量測)

Single Conducted Limit:

Eirp Limit – Antenna Directional Gain – $10 \log[\text{number of Tx output(s)}]$

測試工程師: 羅世勇

9.4.1 調變技術: IEEE 802.11a

測試日期: Aug. 05, 2019

環境溫度: 26°C

環境濕度: 59%

註：1. 繪圖資料請參考第 134-139 頁。

2. 量測不準確度: $\pm 1.5 \text{ dB}$ ($1 \text{ GHz} \leq f \leq 40 \text{ GHz}$)

File: 19-07-MAS-
008_5-6a_Ant2

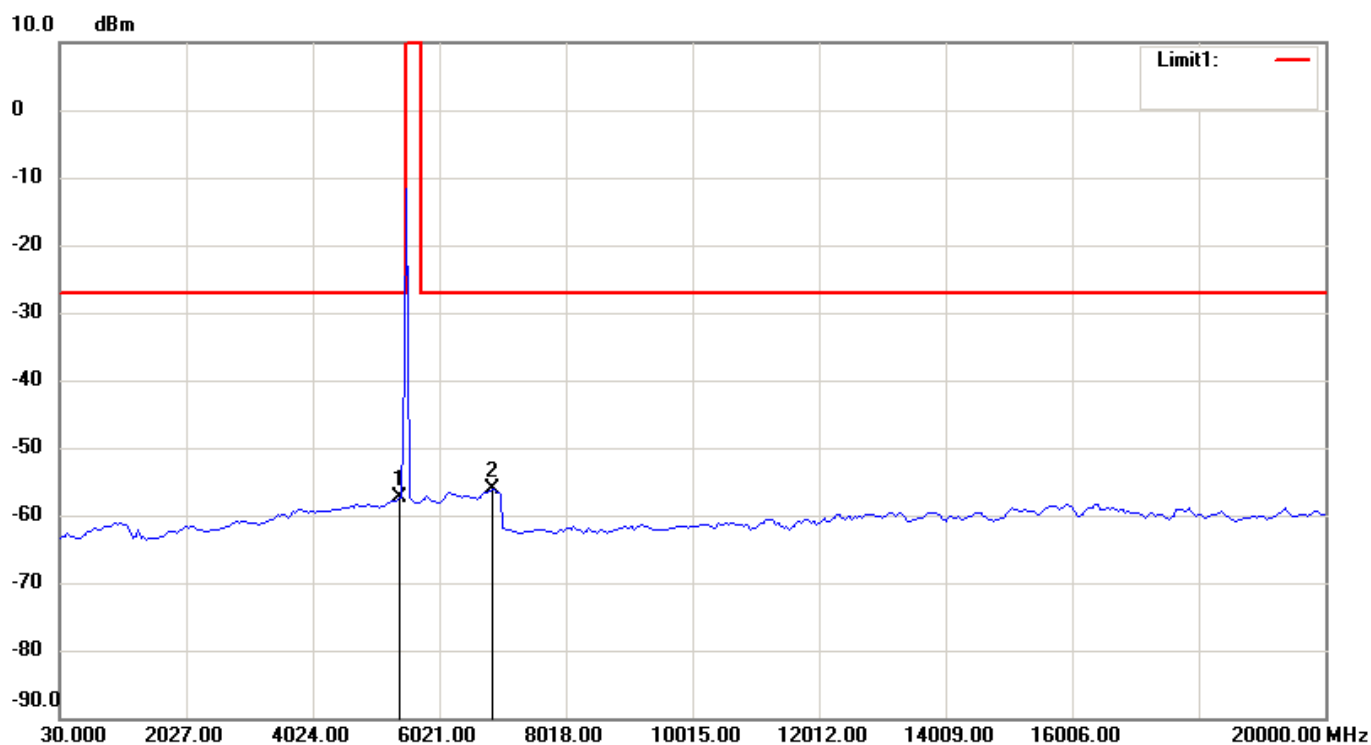
#5

Date: 2019/8/5

Temperature: 26 °C

Time: 下午 04:04:24

Humidity: 59 %



Condition: UNII-Band-3-Bandedge

EUT: Wireless File Transmitter

Model: DS586194

Test Mode: TX_UNII Band3_Ant2

Note: Operator: Phillip (測試場地: RF-Cond01)

NCC_LP0002_802.11a_Channel 100_Spurious-1

RF Conducted

Sweep Time: 79.9ms Att.: 15dB

RBW: 1000 KHz VBW: 1000 KHz

No.	Frequency(MHz)	Level(dBm)
1	5381.96000	-57.44
2	6859.74000	-56.23

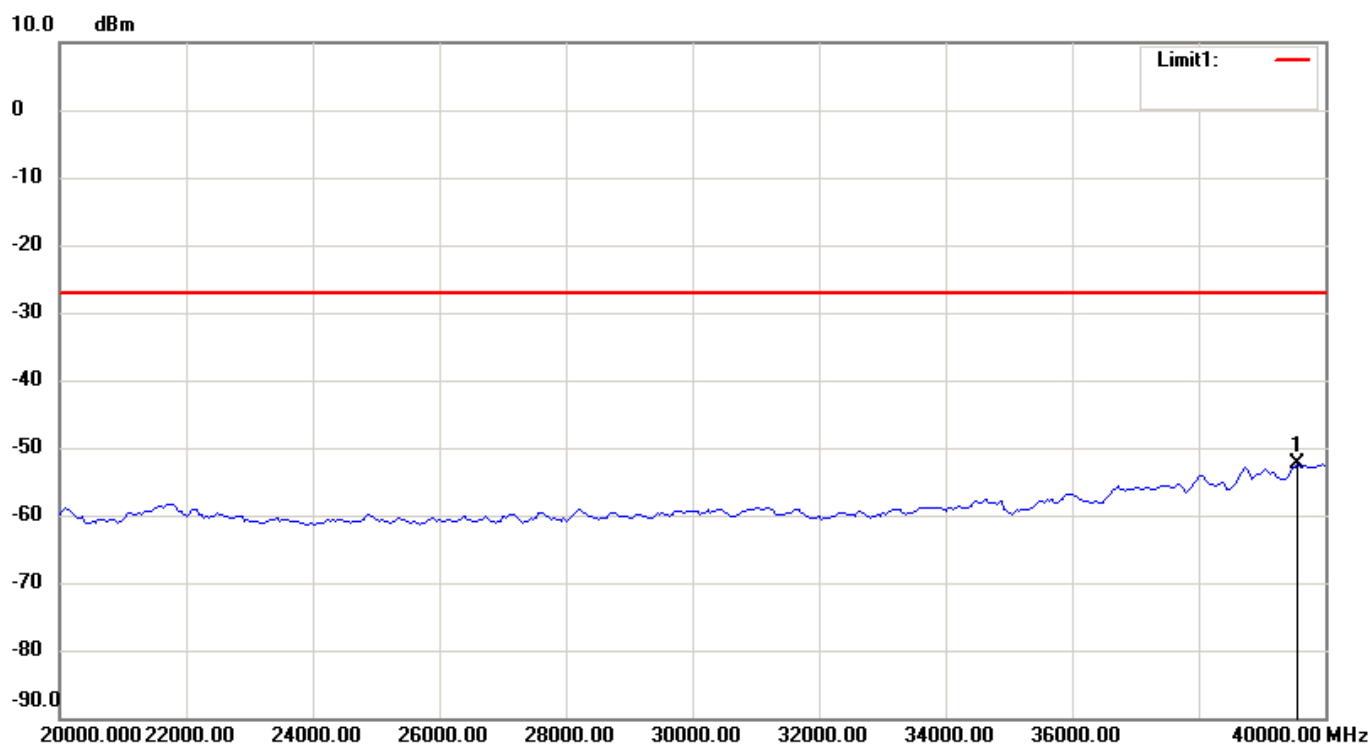
File: 19-07-MAS- #6
008_5-6a_Ant2

Date: 2019/8/5

Temperature: 26 °C

Time: 下午 04:05:24

Humidity: 59 %



Condition: UNII-Band-3-Bandedge

RF Conducted

EUT: Wireless File Transmitter

Sweep Time: 80ms Att.: 15dB

Model: DS586194

RBW: 1000 KHz VBW: 1000 KHz

Test Mode: TX_UNII Band3_Ant2

Note: Operator: Phillip (測試場地: RF-Cond01)

NCC_LP0002_802.11a_Channel 100_Spurious-2

No.	Frequency(MHz)	Level(dBm)
1	39560.00000	-52.47

File: 19-07-MAS-
008_5-6a_Ant2

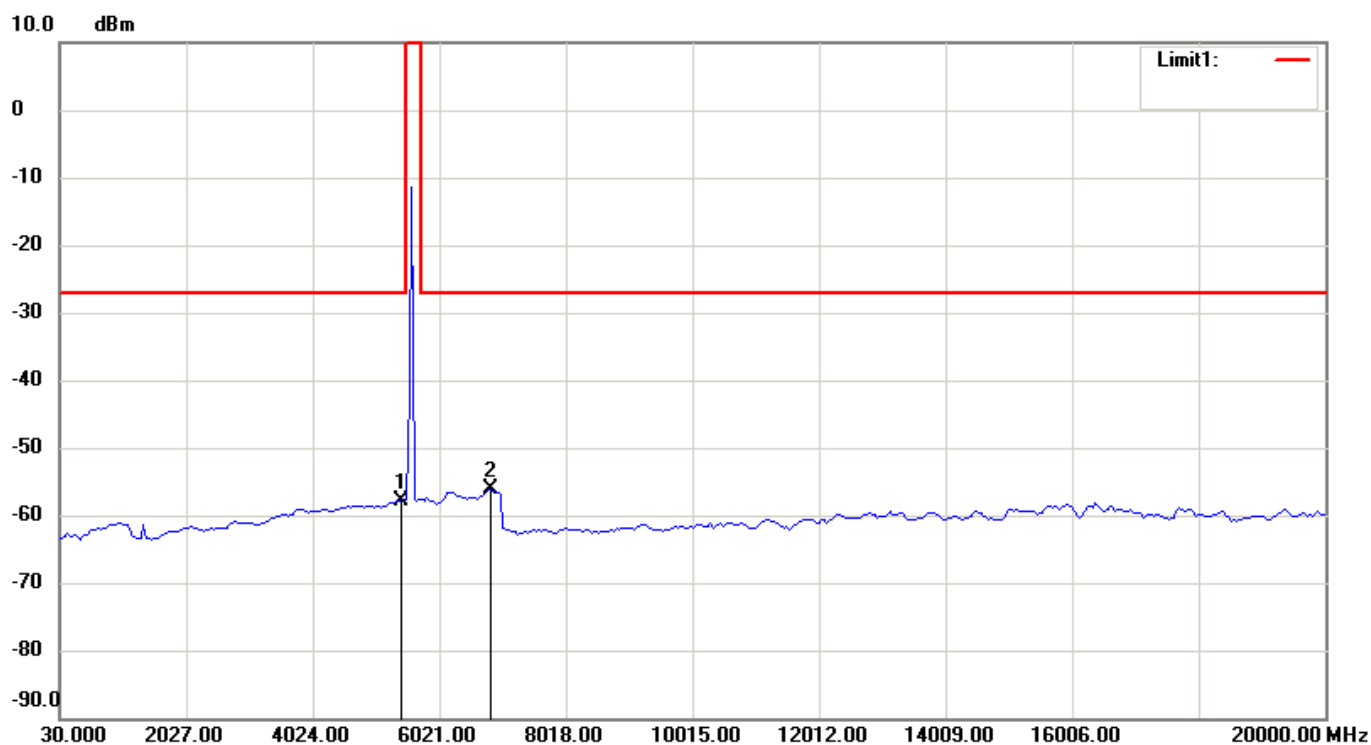
#12

Date: 2019/8/5

Temperature: 26 °C

Time: 下午 04:09:30

Humidity: 59 %



Condition: UNII-Band-3-Bandedge

EUT: Wireless File Transmitter

Model: DS586194

Test Mode: TX_UNII Band3_Ant2

Note: Operator: Phillip (測試場地: RF-Cond01)

NCC_LP0002_802.11a_Channel 116_Spurious-1

RF Conducted

Sweep Time: 79.9ms Att.: 15dB

RBW: 1000 KHz VBW: 1000 KHz

No.	Frequency(MHz)	Level(dBm)
1	5421.90000	-57.82
2	6819.80000	-56.11

File: 19-07-MAS-008_5-6a_Ant2

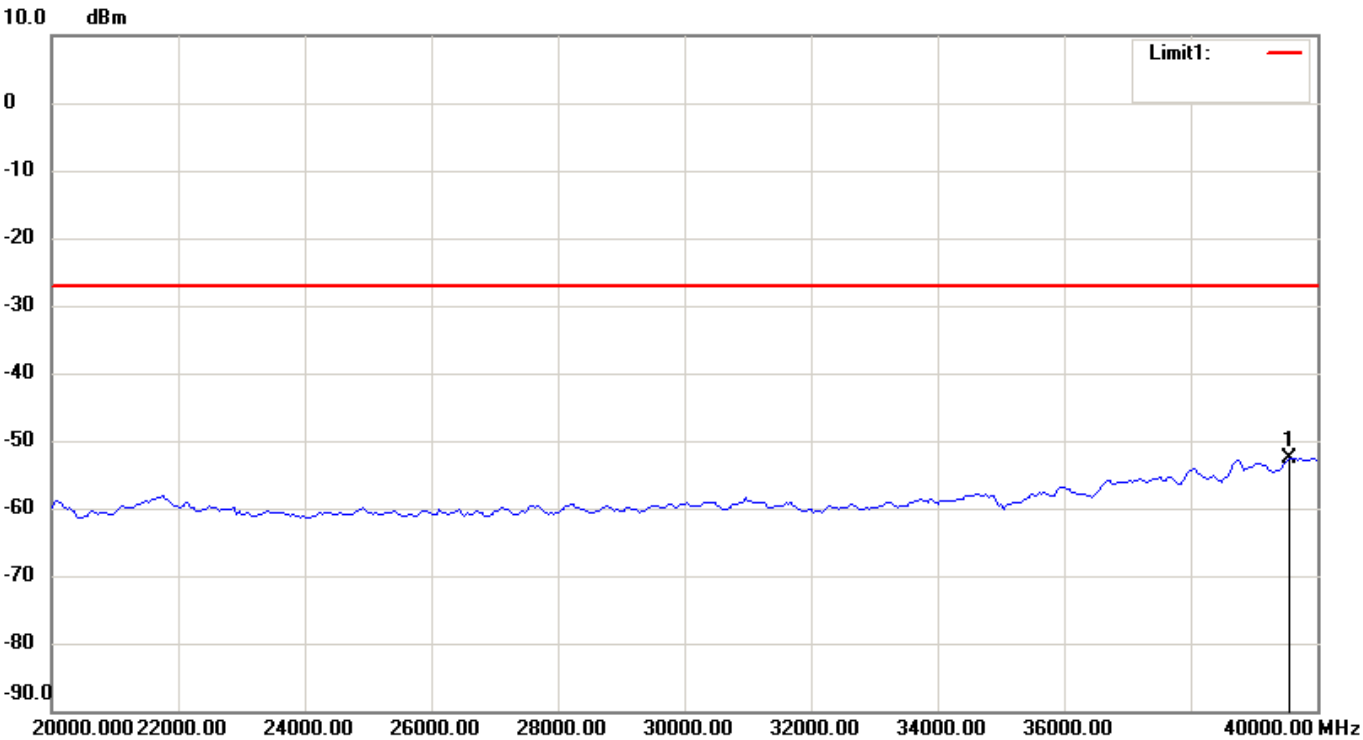
#13

Date: 2019/8/5

Temperature: 26 °C

Time: 下午 04:10:31

Humidity: 59 %



Condition: UNII-Band-3-Bandedge

EUT: Wireless File Transmitter

Model: DS586194

Test Mode: TX_UNII Band3_Ant2

Note: Operator: Phillip (測試場地: RF-Cond01)

NCC_LP0002_802.11a_Channel 116_Spurious-2

RF Conducted

Sweep Time: 80ms Att.: 15dB

RBW: 1000 KHz VBW: 1000 KHz

No.	Frequency(MHz)	Level(dBm)
1	39560.00000	-52.56

File: 19-07-MAS-
008_5-6a_Ant2

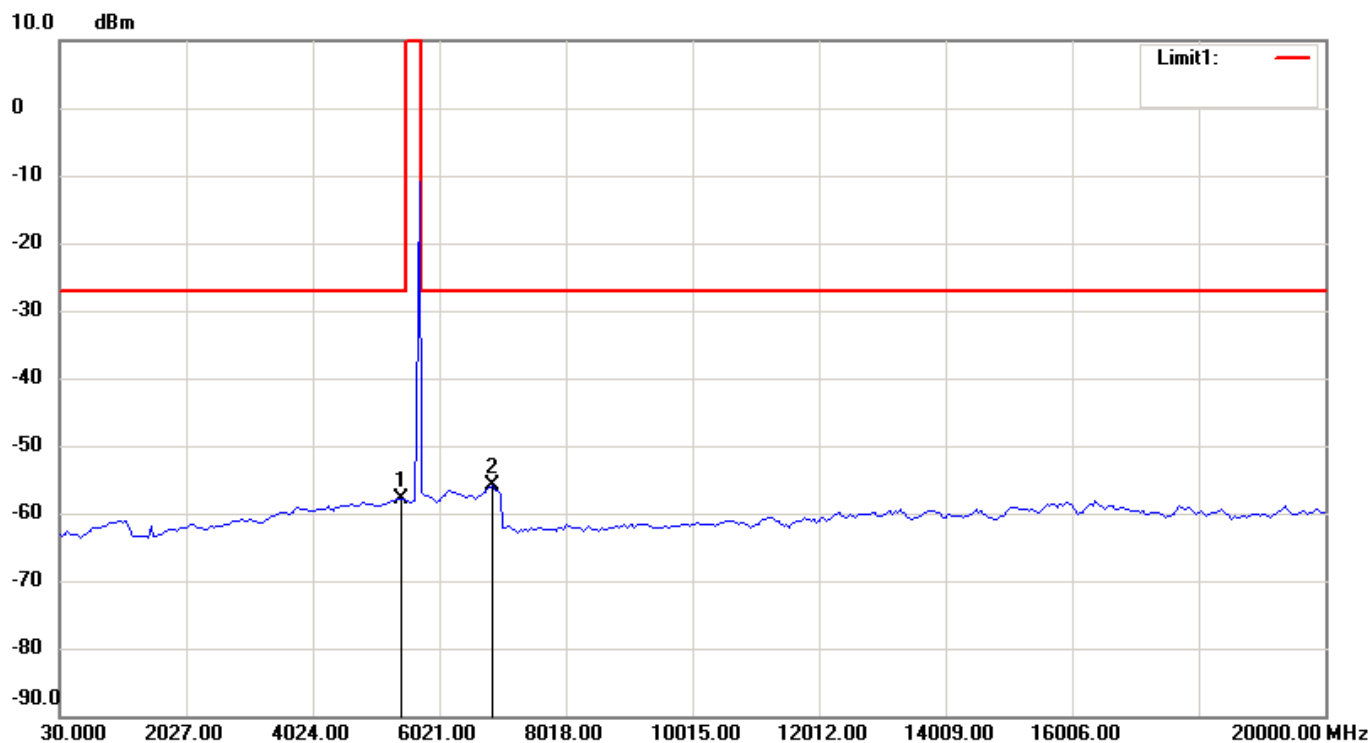
#18

Date: 2019/8/5

Temperature: 26 °C

Time: 下午 04:16:29

Humidity: 59 %



Condition: UNII-Band-3-Bandedge

EUT: Wireless File Transmitter

Model: DS586194

Test Mode: TX_UNII Band3_Ant2

Note: Operator: Phillip (測試場地: RF-Cond01)

NCC_LP0002_802.11a_Channel 140_Spurious-1

RF Conducted

Sweep Time: 79.9ms Att.: 15dB

RBW: 1000 KHz VBW: 1000 KHz

No.	Frequency(MHz)	Level(dBm)
1	5421.90000	-57.76
2	6859.74000	-55.93

File: 19-07-MAS-
008_5-6a_Ant2

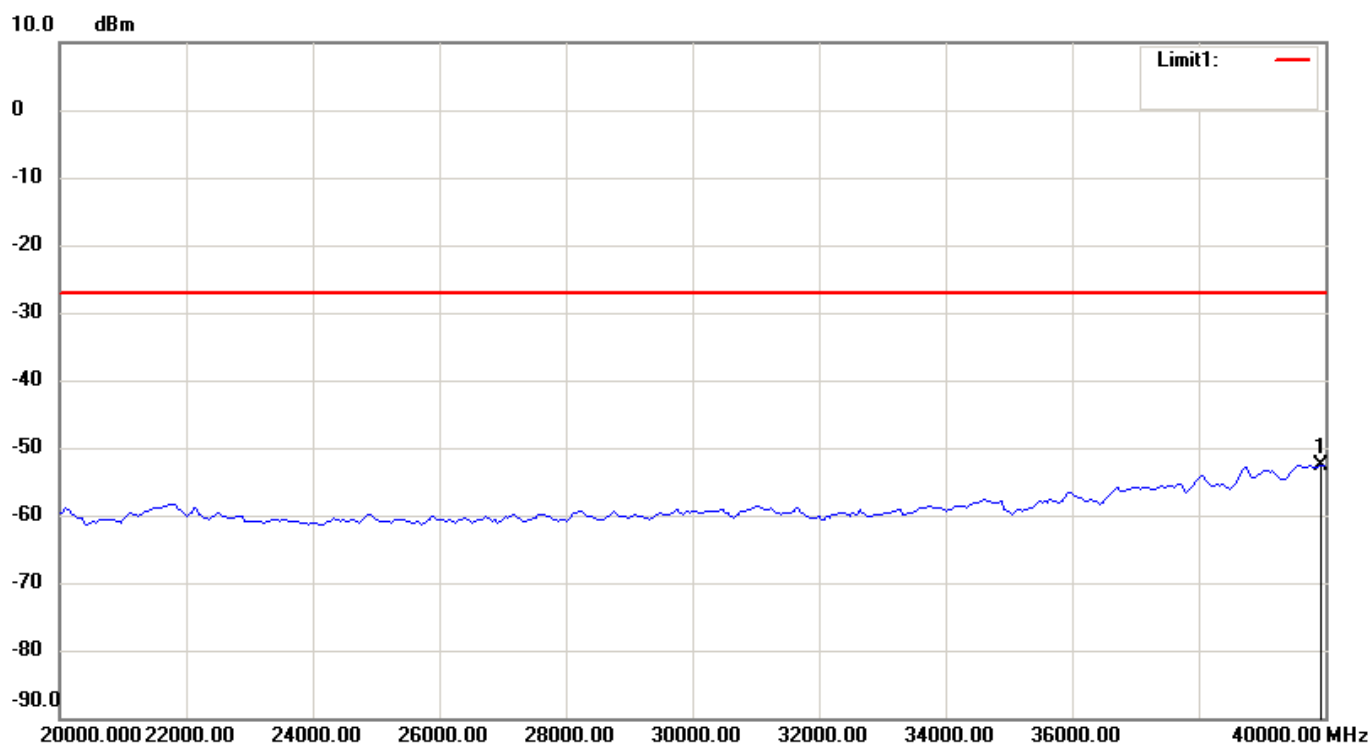
#19

Date: 2019/8/5

Temperature: 26 °C

Time: 下午 04:17:29

Humidity: 59 %



Condition: UNII-Band-3-Bandedge

EUT: Wireless File Transmitter

Model: DS586194

Test Mode: TX_UNII Band3_Ant2

Note: Operator: Phillip (測試場地: RF-Cond01)

NCC_LP0002_802.11a_Channel 140_Spurious-2

RF Conducted

Sweep Time: 80ms Att.: 15dB

RBW: 1000 KHz VBW: 1000 KHz

No.	Frequency(MHz)	Level(dBm)
1	39920.00000	-52.55

9.4.2 調變技術:IEEE 802.11n HT20

9.4.2.1 CHAIN 1

測試日期: Aug. 05, 2019

環境溫度: 26°C

環境濕度: 59%

註: 1. 繪圖資料請參考第 141-146 頁。

2. 量測不準確度: $\pm 1.5\text{dB}$ ($1\text{GHz} \leq f \leq 40\text{GHz}$)

File: 19-07-MAS-
008_5-
6n20_Ant1

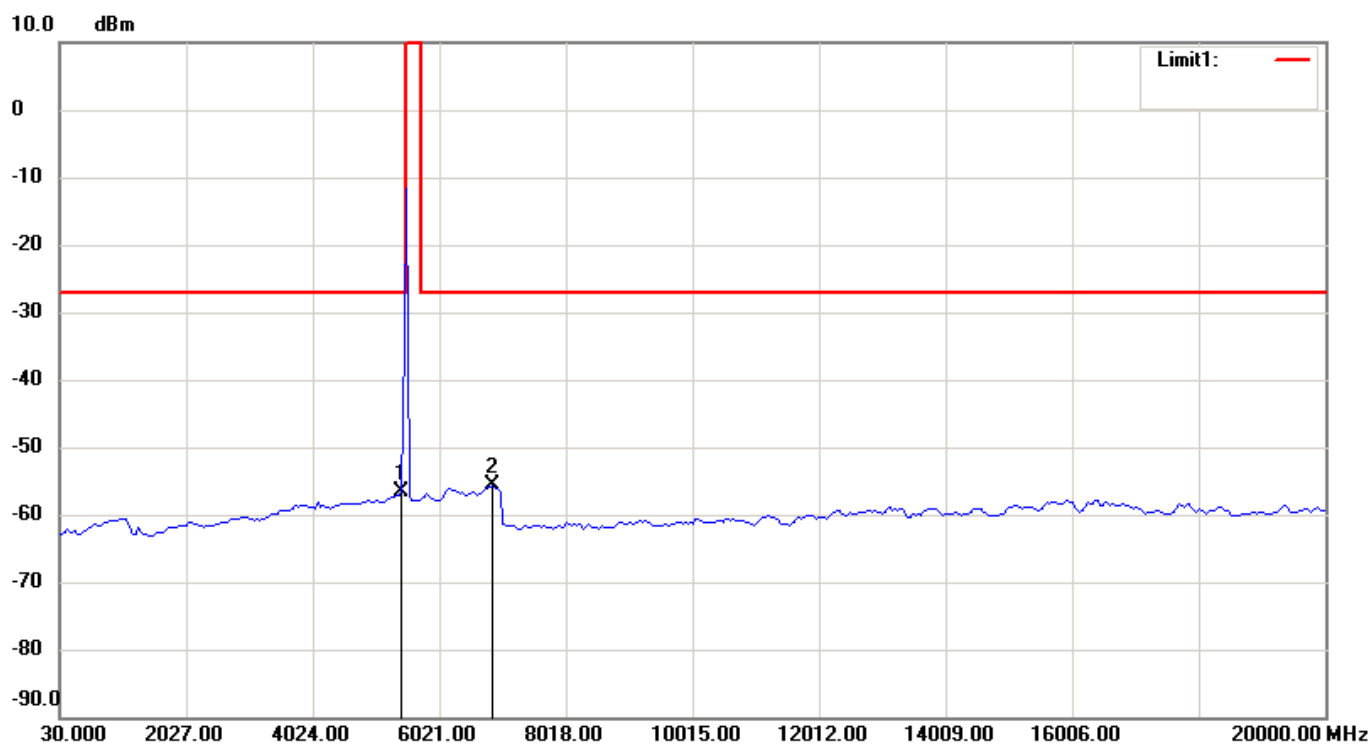
#5

Date: 2019/8/5

Temperature: 26 °C

Time: 下午 06:21:21

Humidity: 59 %



Condition: UNII-Band-3-Bandedge

RF Conducted

EUT: Wireless File Transmitter

Sweep Time: 79.9ms Att.: 15dB

Model: DS586194

RBW: 1000 KHz

VBW: 1000 KHz

Test Mode: TX_UNII Band3_Ant1

Note: Operator: Phillip (測試場地: RF-Cond01)

NCC_LP0002_802.11n20_Channel 100_Spurious-1

No.	Frequency(MHz)	Level(dBm)
1	5421.90000	-56.69
2	6859.74000	-55.51

File: 19-07-MAS-
008_5-
6n20_Ant1

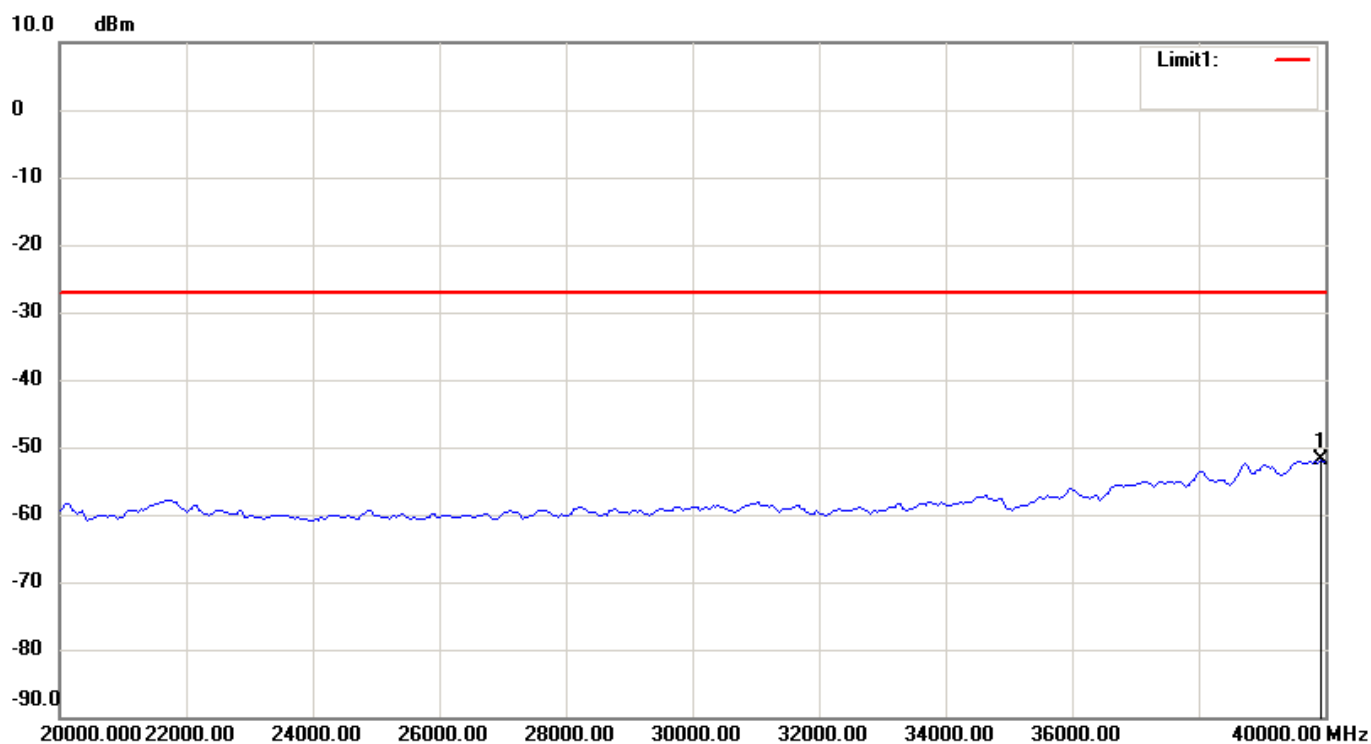
#6

Date: 2019/8/5

Temperature: 26 °C

Time: 下午 06:22:23

Humidity: 59 %



Condition: UNII-Band-3-Bandedge

RF Conducted

EUT: Wireless File Transmitter

Sweep Time: 80ms Att.: 15dB

Model: DS586194

RBW: 1000 KHz VBW: 1000 KHz

Test Mode: TX_UNII Band3_Ant1

Note: Operator: Phillip (測試場地: RF-Cond01)

NCC_LP0002_802.11n20_Channel 100_Spurious-2

No.	Frequency(MHz)	Level(dBm)
1	39920.00000	-51.98

File: 19-07-MAS-
008_5-
6n20_Ant1

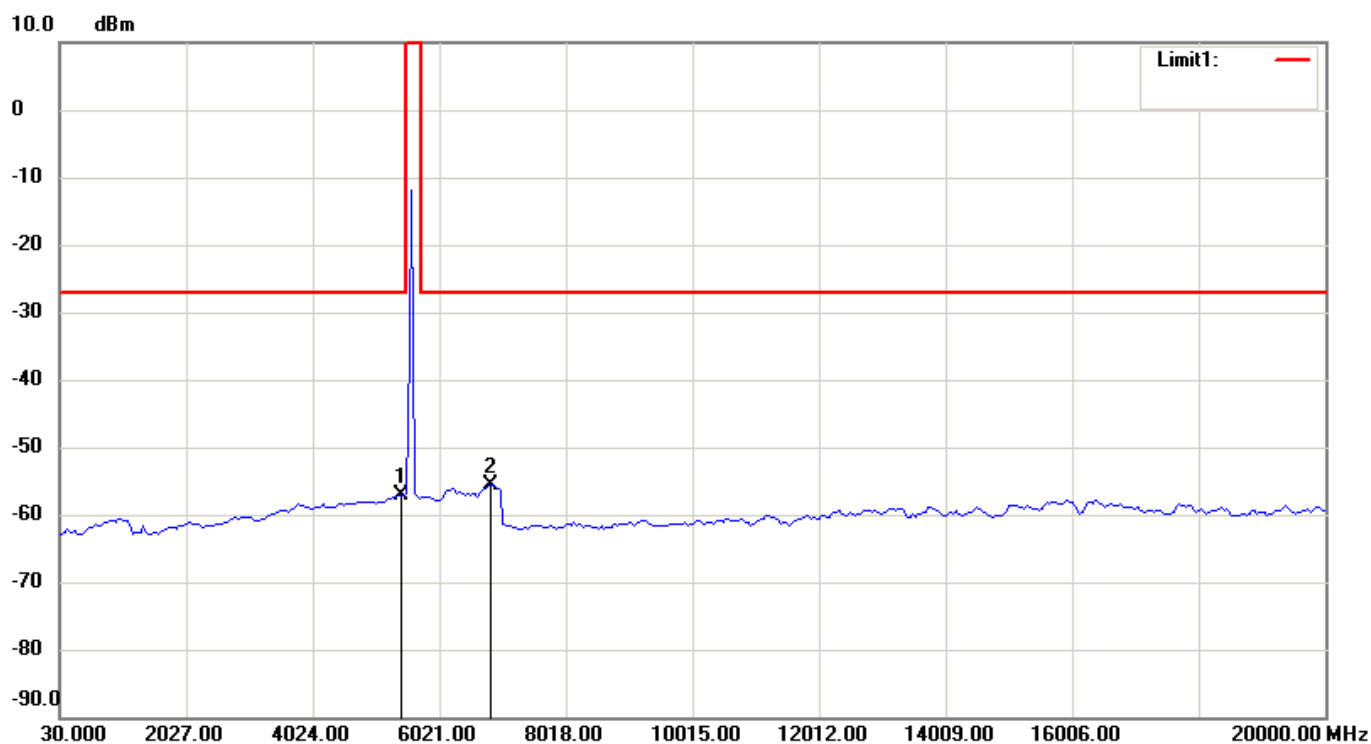
#12

Date: 2019/8/5

Temperature: 26 °C

Time: 下午 06:27:27

Humidity: 59 %



Condition: UNII-Band-3-Bandedge

EUT: Wireless File Transmitter

Model: DS586194

Test Mode: TX_UNII Band3_Ant1

Note: Operator: Phillip (測試場地: RF-Cond01)

NCC_LP0002_802.11n20_Channel 116_Spurious-1

RF Conducted

Sweep Time: 79.9ms Att.: 15dB

RBW: 1000 KHz VBW: 1000 KHz

No.	Frequency(MHz)	Level(dBm)
1	5421.90000	-57.05
2	6819.80000	-55.65

File: 19-07-MAS-008_5-6n20_Ant1

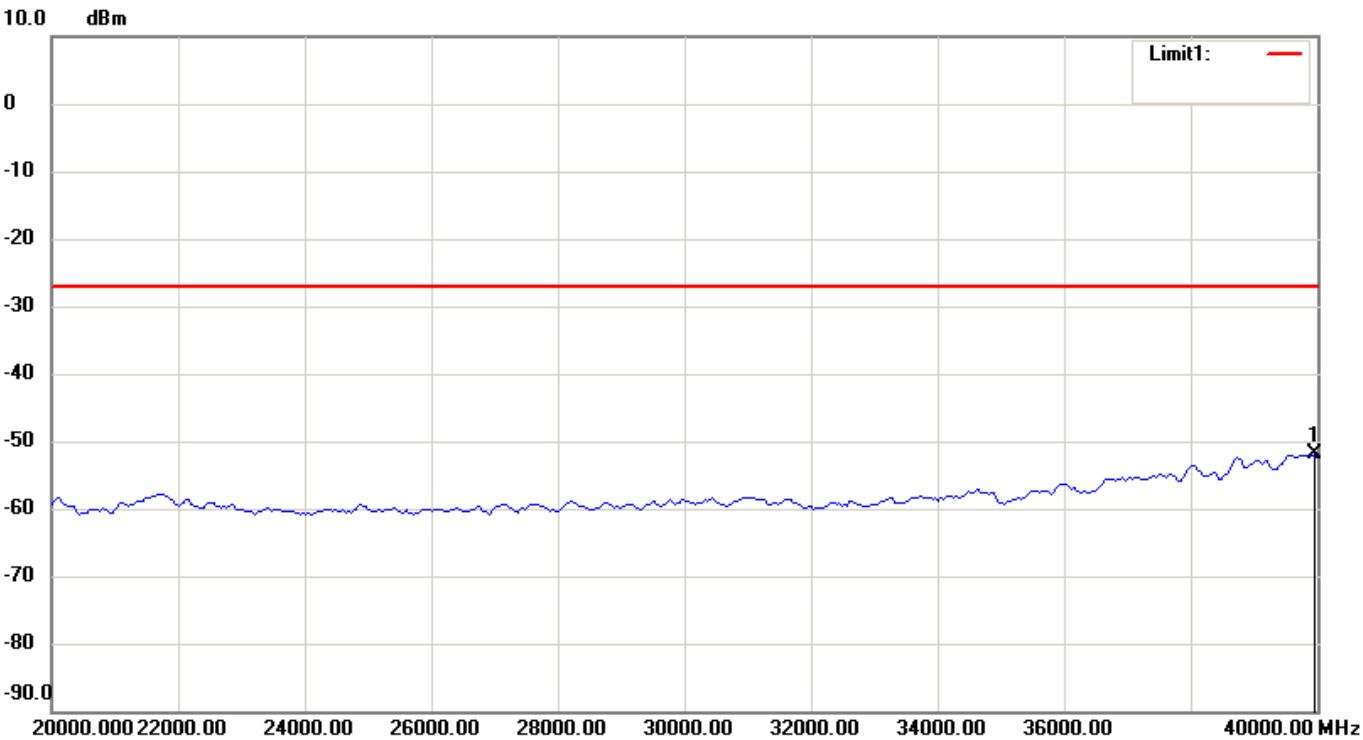
#13

Date: 2019/8/5

Temperature: 26 °C

Time: 下午 06:28:27

Humidity: 59 %



Condition: UNII-Band-3-Bandedge

EUT: Wireless File Transmitter

Model: DS586194

Test Mode: TX_UNII Band3_Ant1

Note: Operator: Phillip (測試場地: RF-Cond01)

NCC_LP0002_802.11n20_Channel 116_Spurious-2

RF Conducted

Sweep Time: 80ms Att.: 15dB

RBW: 1000 KHz VBW: 1000 KHz

No.	Frequency(MHz)	Level(dBm)
1	39960.00000	-51.98

File: 19-07-MAS-
008_5-
6n20_Ant1

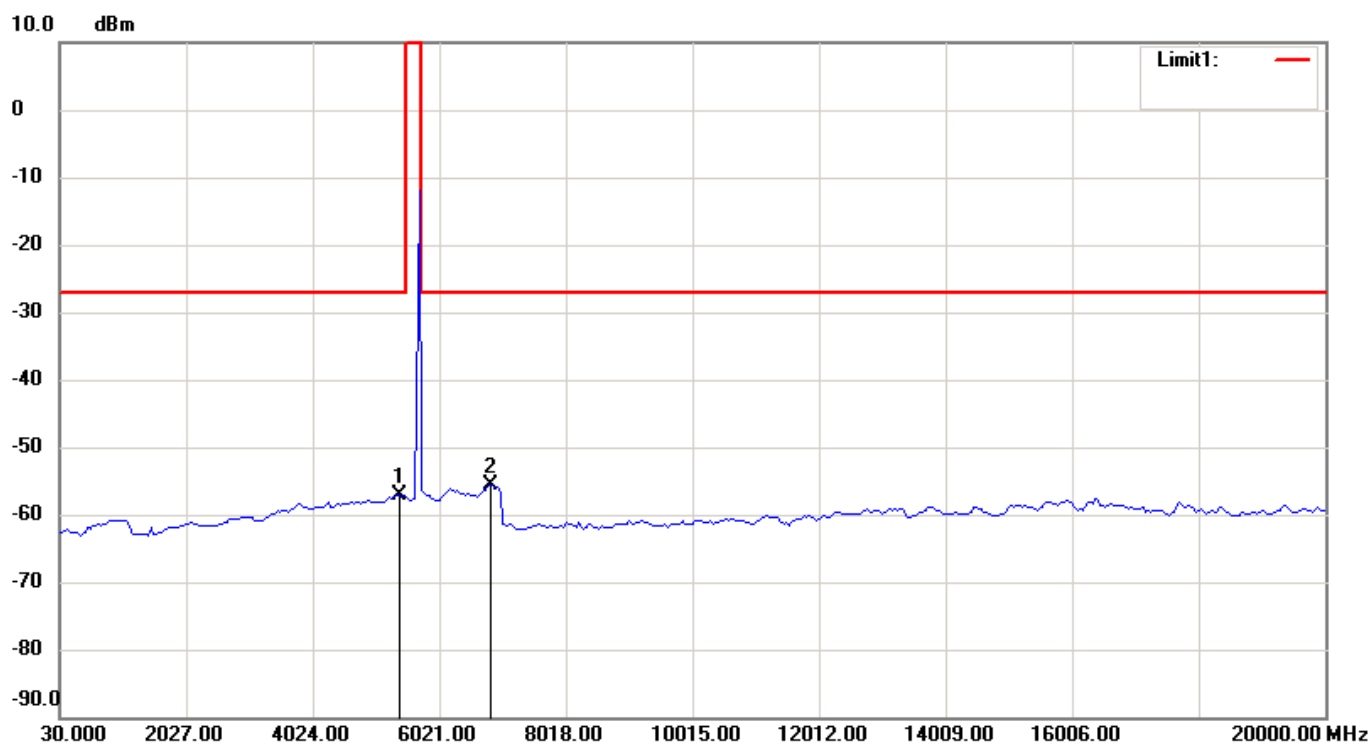
#18

Date: 2019/8/5

Temperature: 26 °C

Time: 下午 06:33:59

Humidity: 59 %



Condition: UNII-Band-3-Bandedge

RF Conducted

EUT: Wireless File Transmitter

Sweep Time: 79.9ms Att.: 15dB

Model: DS586194

RBW: 1000 KHz

VBW: 1000 KHz

Test Mode: TX_UNII Band3_Ant1

Note: Operator: Phillip (測試場地: RF-Cond01)

NCC_LP0002_802.11n20_Channel 140_Spurious-1

No.	Frequency(MHz)	Level(dBm)
1	5381.96000	-57.10
2	6819.80000	-55.67

File: 19-07-MAS-
008_5-
6n20_Ant1

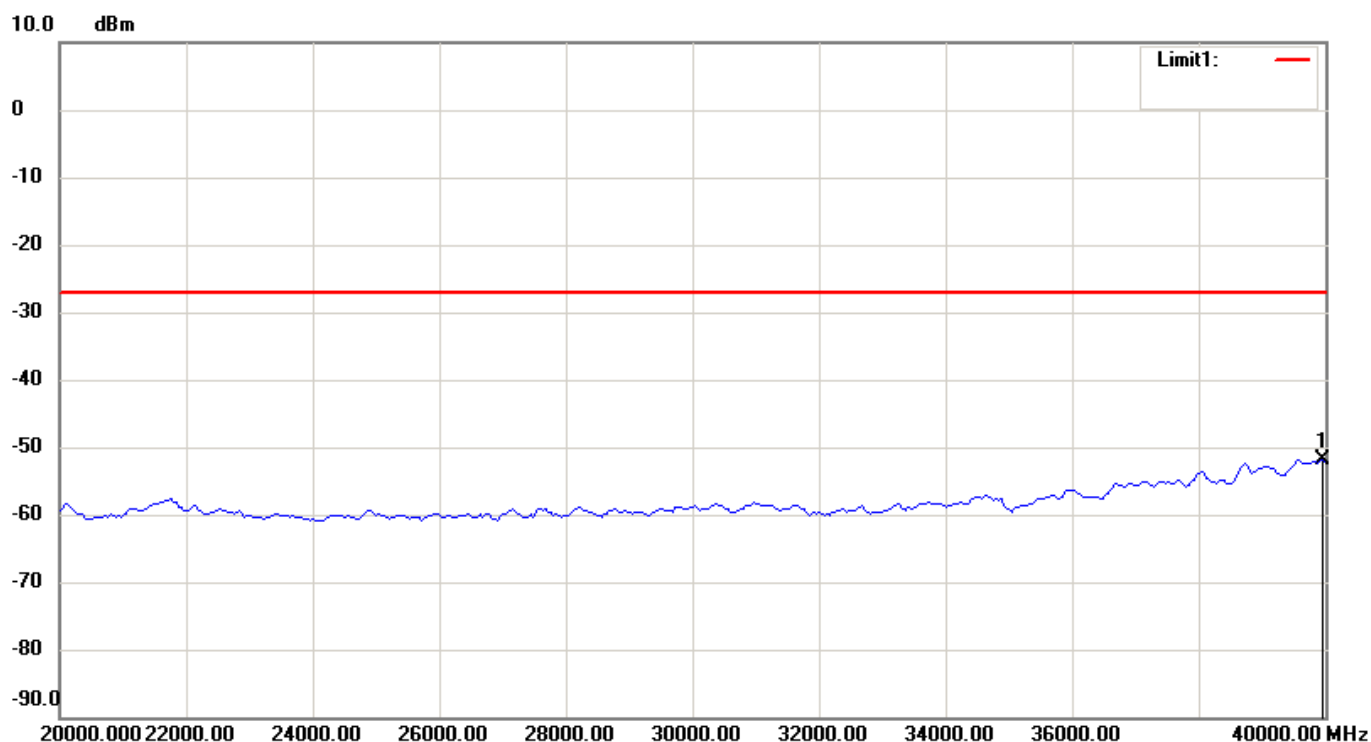
#19

Date: 2019/8/5

Temperature: 26 °C

Time: 下午 06:34:59

Humidity: 59 %



Condition: UNII-Band-3-Bandedge

RF Conducted

EUT: Wireless File Transmitter

Sweep Time: 80ms Att.: 15dB

Model: DS586194

RBW: 1000 KHz VBW: 1000 KHz

Test Mode: TX_UNII Band3_Ant1

Note: Operator: Phillip (測試場地: RF-Cond01)

NCC_LP0002_802.11n20_Channel 140_Spurious-2

No.	Frequency(MHz)	Level(dBm)
1	39960.00000	-51.95

9.4.2.2 CHAIN 2

測試日期: Aug. 05, 2019

環境溫度: 26°C

環境濕度: 59%

- 註：1. 繪圖資料請參考第 148-153 頁。
2. 量測不準確度: $\pm 1.5\text{dB}$ ($1\text{GHz} \leq f \leq 40\text{GHz}$)

File: 19-07-MAS-
008_5-
6n20_Ant2

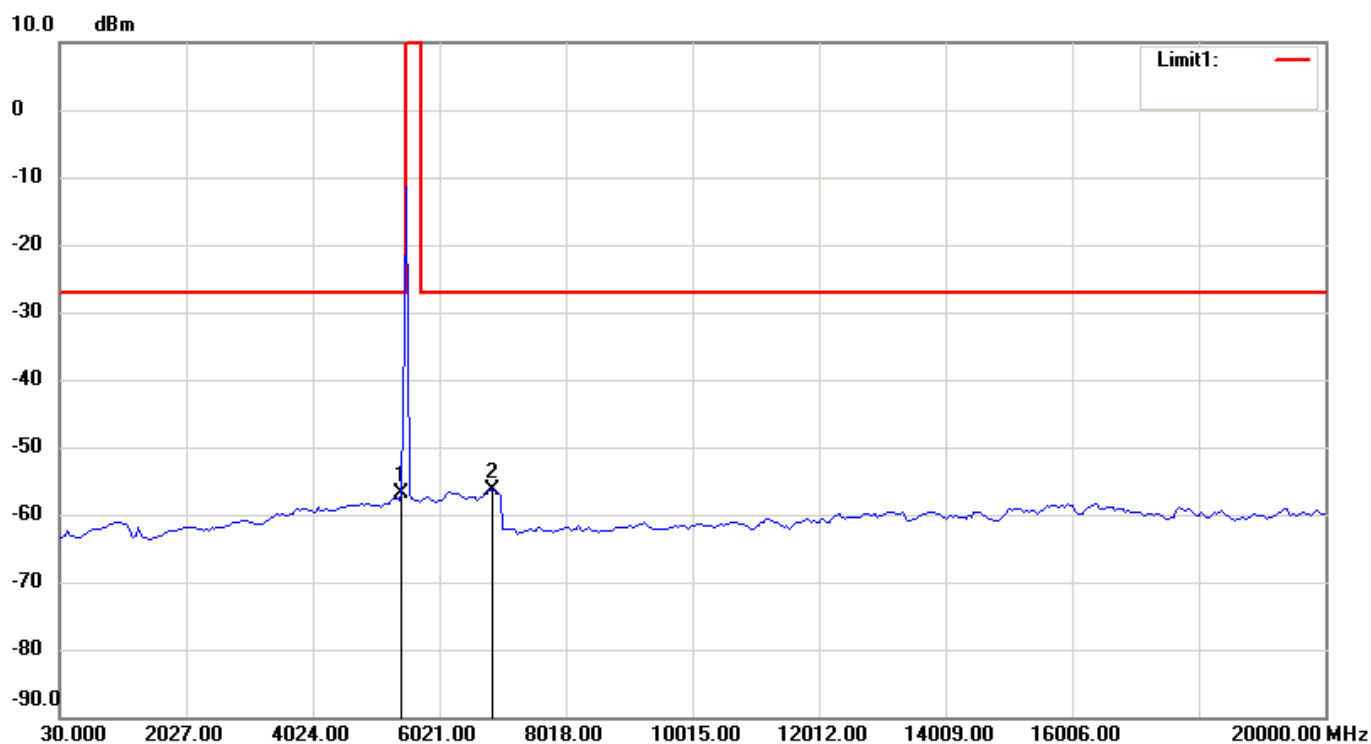
#5

Date: 2019/8/5

Temperature: 26 °C

Time: 下午 04:28:17

Humidity: 59 %



Condition: UNII-Band-3-Bandedge

RF Conducted

EUT: Wireless File Transmitter

Sweep Time: 79.9ms Att.: 15dB

Model: DS586194

RBW: 1000 KHz

VBW: 1000 KHz

Test Mode: TX_UNII Band3_Ant2

Note: Operator: Phillip (測試場地: RF-Cond01)

NCC_LP0002_802.11n20_Channel 100_Spurious-1

No.	Frequency(MHz)	Level(dBm)
1	5421.90000	-56.84
2	6859.74000	-56.31

File: 19-07-MAS-
008_5-
6n20_Ant2

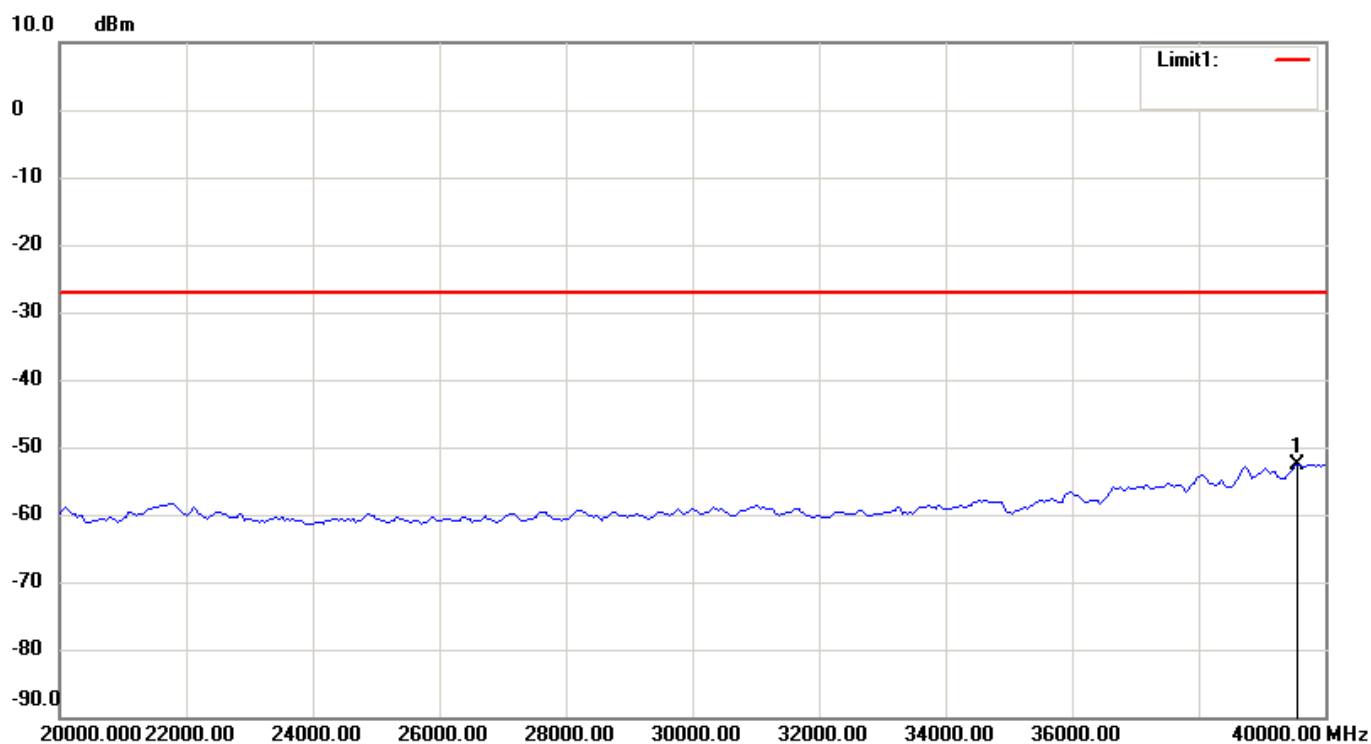
#6

Date: 2019/8/5

Temperature: 26 °C

Time: 下午 04:29:17

Humidity: 59 %



Condition: UNII-Band-3-Bandedge

RF Conducted

EUT: Wireless File Transmitter

Sweep Time: 80ms Att.: 15dB

Model: DS586194

RBW: 1000 KHz VBW: 1000 KHz

Test Mode: TX_UNII Band3_Ant2

Note: Operator: Phillip (測試場地: RF-Cond01)

NCC_LP0002_802.11n20_Channel 100_Spurious-2

No.	Frequency(MHz)	Level(dBm)
1	39560.00000	-52.54

File: 19-07-MAS-
008_5-
6n20_Ant2

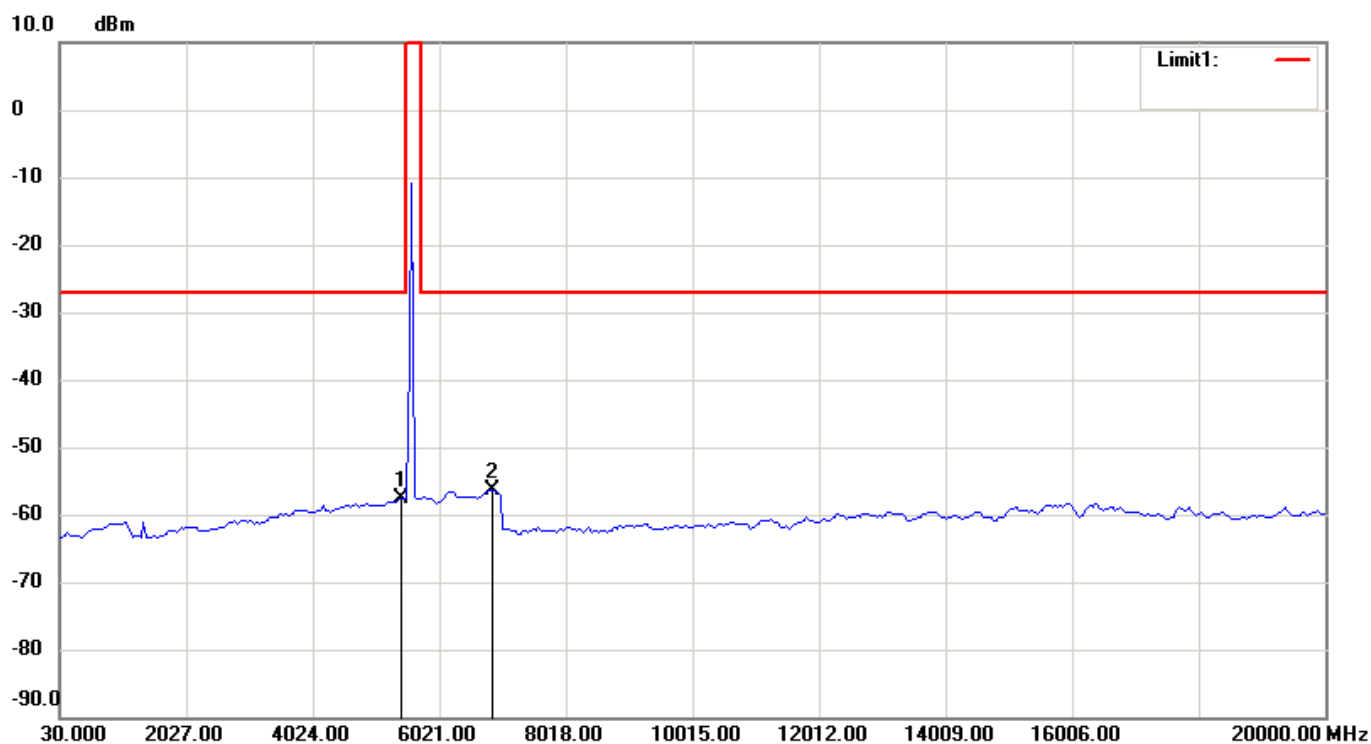
#12

Date: 2019/8/5

Temperature: 26 °C

Time: 下午 04:34:06

Humidity: 59 %



Condition: UNII-Band-3-Bandedge

RF Conducted

EUT: Wireless File Transmitter

Sweep Time: 79.9ms Att.: 15dB

Model: DS586194

RBW: 1000 KHz

VBW: 1000 KHz

Test Mode: TX_UNII Band3_Ant2

Note: Operator: Phillip (測試場地: RF-Cond01)

NCC_LP0002_802.11n20_Channel 116_Spurious-1

No.	Frequency(MHz)	Level(dBm)
1	5421.90000	-57.66
2	6859.74000	-56.28

File: 19-07-MAS-
008_5-
6n20_Ant2

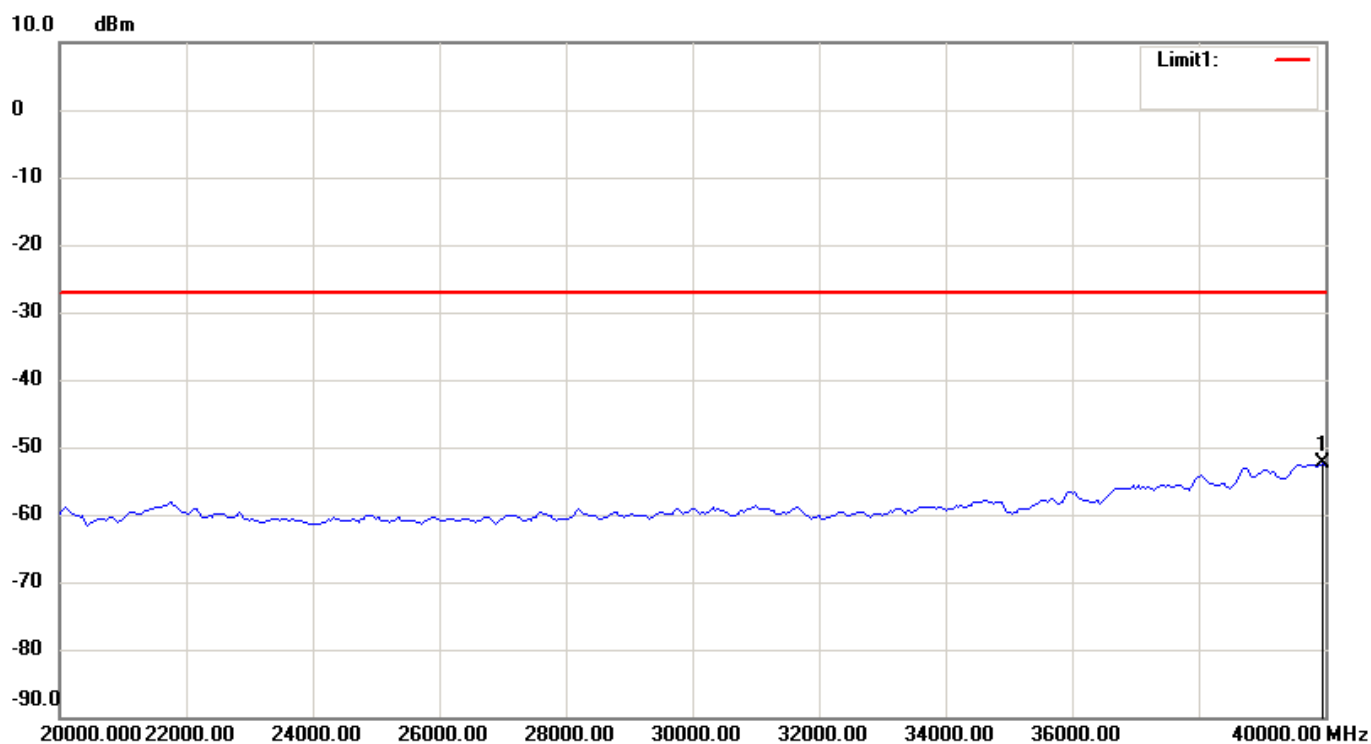
#13

Date: 2019/8/5

Temperature: 26 °C

Time: 下午 04:35:06

Humidity: 59 %



Condition: UNII-Band-3-Bandedge

RF Conducted

EUT: Wireless File Transmitter

Sweep Time: 80ms Att.: 15dB

Model: DS586194

RBW: 1000 KHz VBW: 1000 KHz

Test Mode: TX_UNII Band3_Ant2

Note: Operator: Phillip (測試場地: RF-Cond01)

NCC_LP0002_802.11n20_Channel 116_Spurious-2

No.	Frequency(MHz)	Level(dBm)
1	39960.00000	-52.43

File: 19-07-MAS-
008_5-
6n20_Ant2

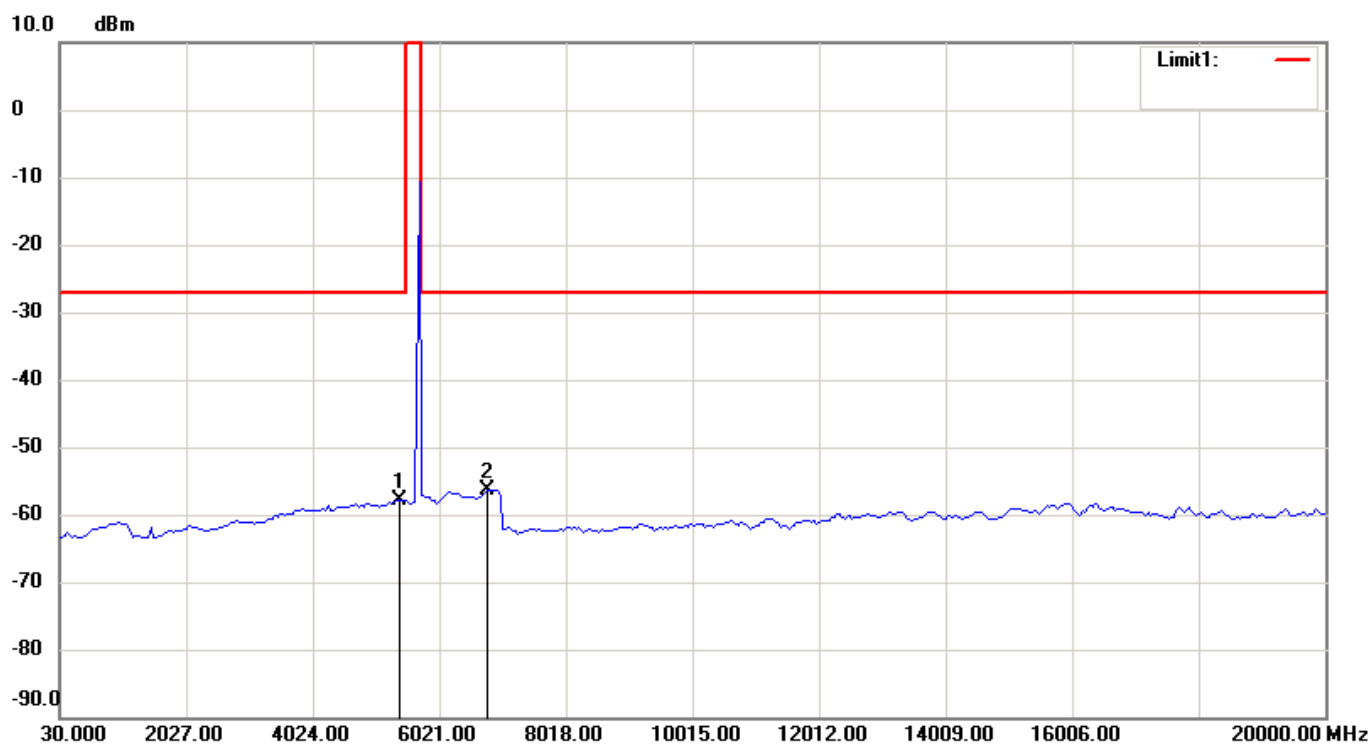
#18

Date: 2019/8/5

Temperature: 26 °C

Time: 下午 04:39:01

Humidity: 59 %



Condition: UNII-Band-3-Bandedge

RF Conducted

EUT: Wireless File Transmitter

Sweep Time: 79.9ms Att.: 15dB

Model: DS586194

RBW: 1000 KHz

VBW: 1000 KHz

Test Mode: TX_UNII Band3_Ant2

Note: Operator: Phillip (測試場地: RF-Cond01)

NCC_LP0002_802.11n20_Channel 140_Spurious-1

No.	Frequency(MHz)	Level(dBm)
1	5381.96000	-57.85
2	6779.86000	-56.30

File: 19-07-MAS-
008_5-
6n20_Ant2

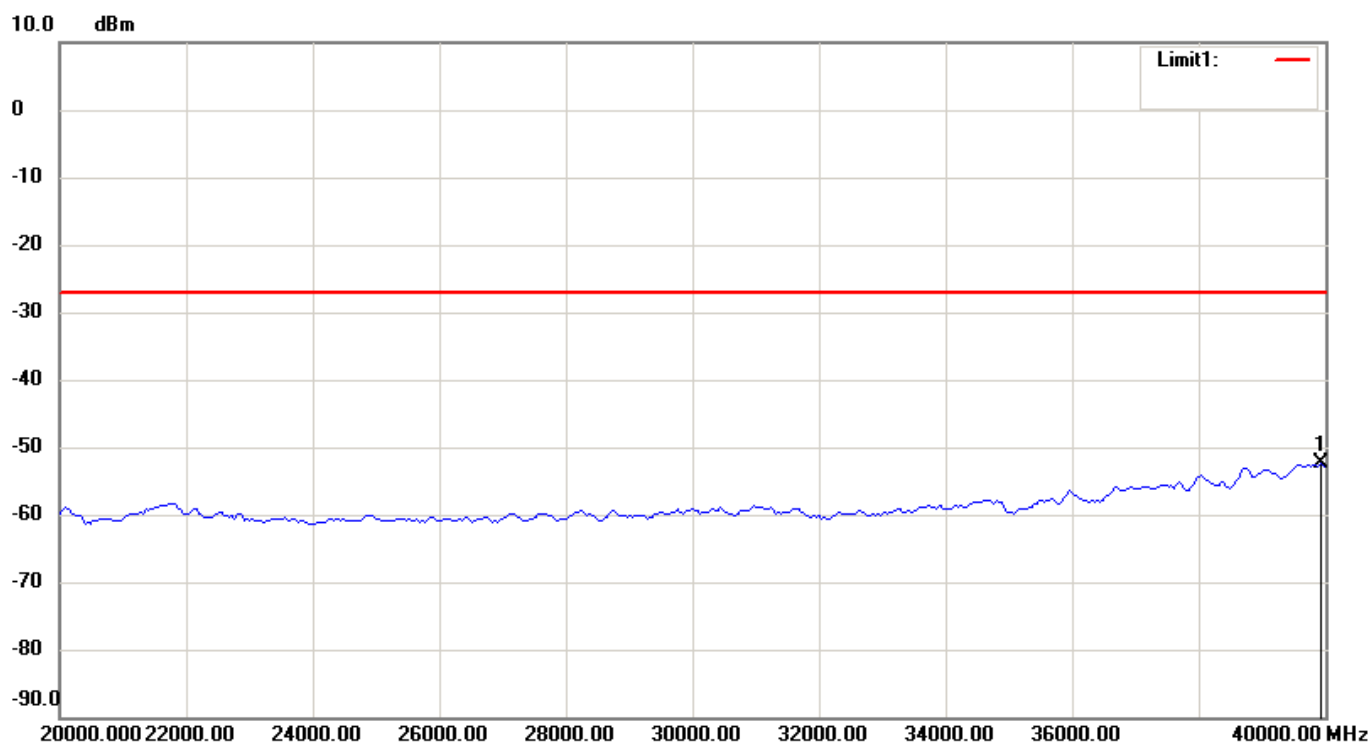
#19

Date: 2019/8/5

Temperature: 26 °C

Time: 下午 04:40:01

Humidity: 59 %



Condition: UNII-Band-3-Bandedge

RF Conducted

EUT: Wireless File Transmitter

Sweep Time: 80ms Att.: 15dB

Model: DS586194

RBW: 1000 KHz VBW: 1000 KHz

Test Mode: TX_UNII Band3_Ant2

Note: Operator: Phillip (測試場地: RF-Cond01)

NCC_LP0002_802.11n20_Channel 140_Spurious-2

No.	Frequency(MHz)	Level(dBm)
1	39920.00000	-52.41

9.4.3 調變技術: IEEE 802.11n HT40

9.4.3.1 CHAIN 1

測試日期: Aug. 05, 2019

環境溫度: 26°C

環境濕度: 59%

註: 1. 繪圖資料請參考第 155-160 頁。

2. 量測不準確度: $\pm 1.5\text{dB}$ ($1\text{GHz} \leq f \leq 40\text{GHz}$)

File: 19-07-MAS-
008_5-
6n40_Ant1

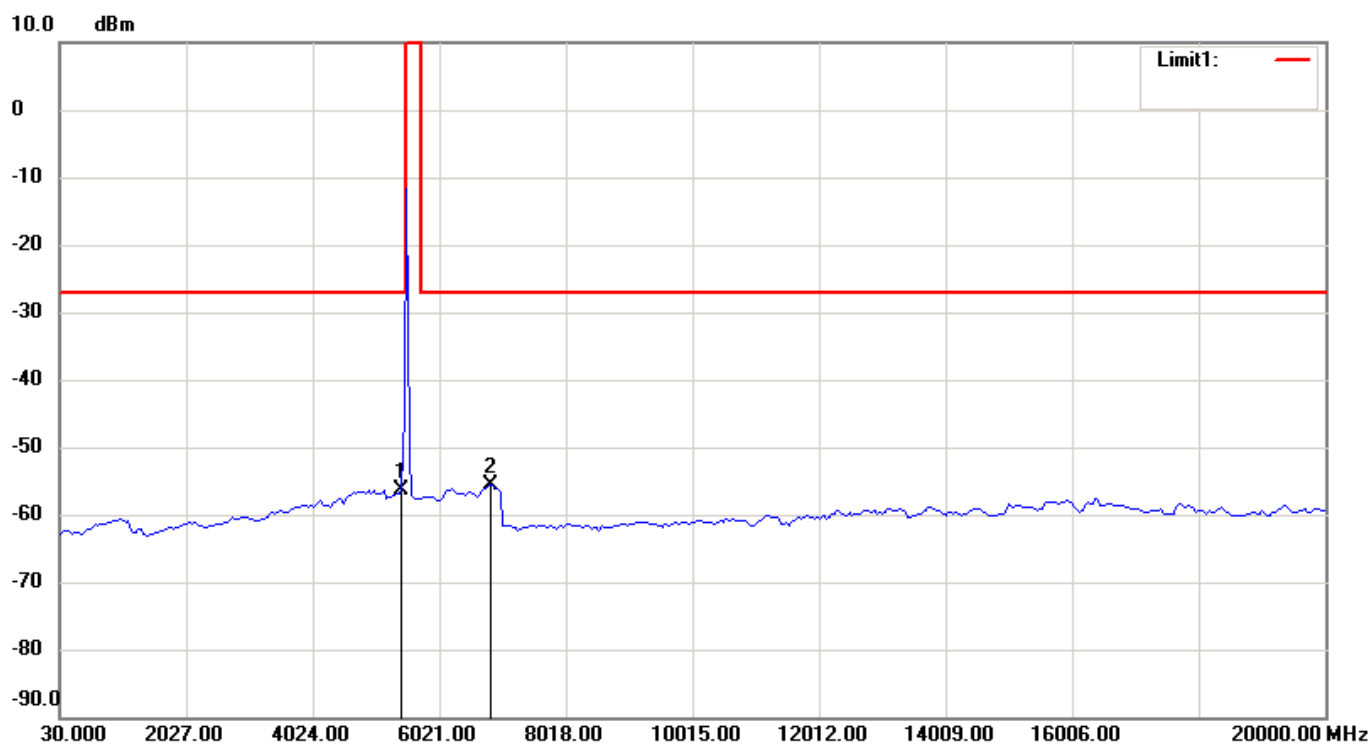
#5

Date: 2019/8/5

Temperature: 26 °C

Time: 下午 07:24:24

Humidity: 59 %



Condition:

UNII-Band-3-Bandedge

RF Conducted

EUT:

Wireless File Transmitter

Sweep Time: 79.9ms Att.: 15dB

Model:

DS586194

RBW: 1000 KHz

VBW: 1000 KHz

Test Mode:

TX_UNII Band3_Ant1

Note:

Operator: Phillip (測試場地: RF-Cond01)

NCC_LP0002_802.11n40_Channel 102_Spurious-1

No.	Frequency(MHz)	Level(dBm)
1	5421.90000	-56.30
2	6819.80000	-55.67

File: 19-07-MAS-
008_5-
6n40_Ant1

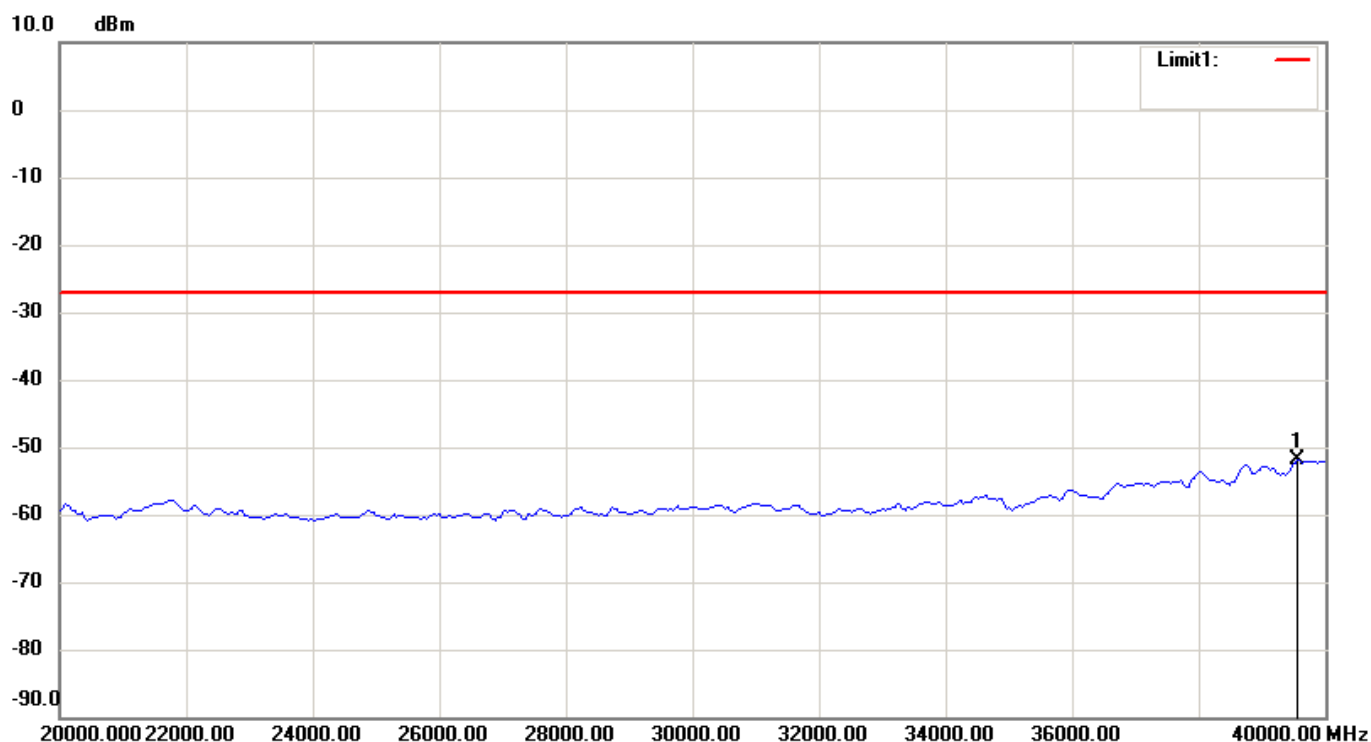
#6

Date: 2019/8/5

Temperature: 26 °C

Time: 下午 07:25:24

Humidity: 59 %



Condition: UNII-Band-3-Bandedge

RF Conducted

EUT: Wireless File Transmitter

Sweep Time: 80ms Att.: 15dB

Model: DS586194

RBW: 1000 KHz VBW: 1000 KHz

Test Mode: TX_UNII Band3_Ant1

Note: Operator: Phillip (測試場地: RF-Cond01)

NCC_LP0002_802.11n40_Channel 102_Spurious-2

No.	Frequency(MHz)	Level(dBm)
1	39560.00000	-51.90

File: 19-07-MAS-
008_5-
6n40_Ant1

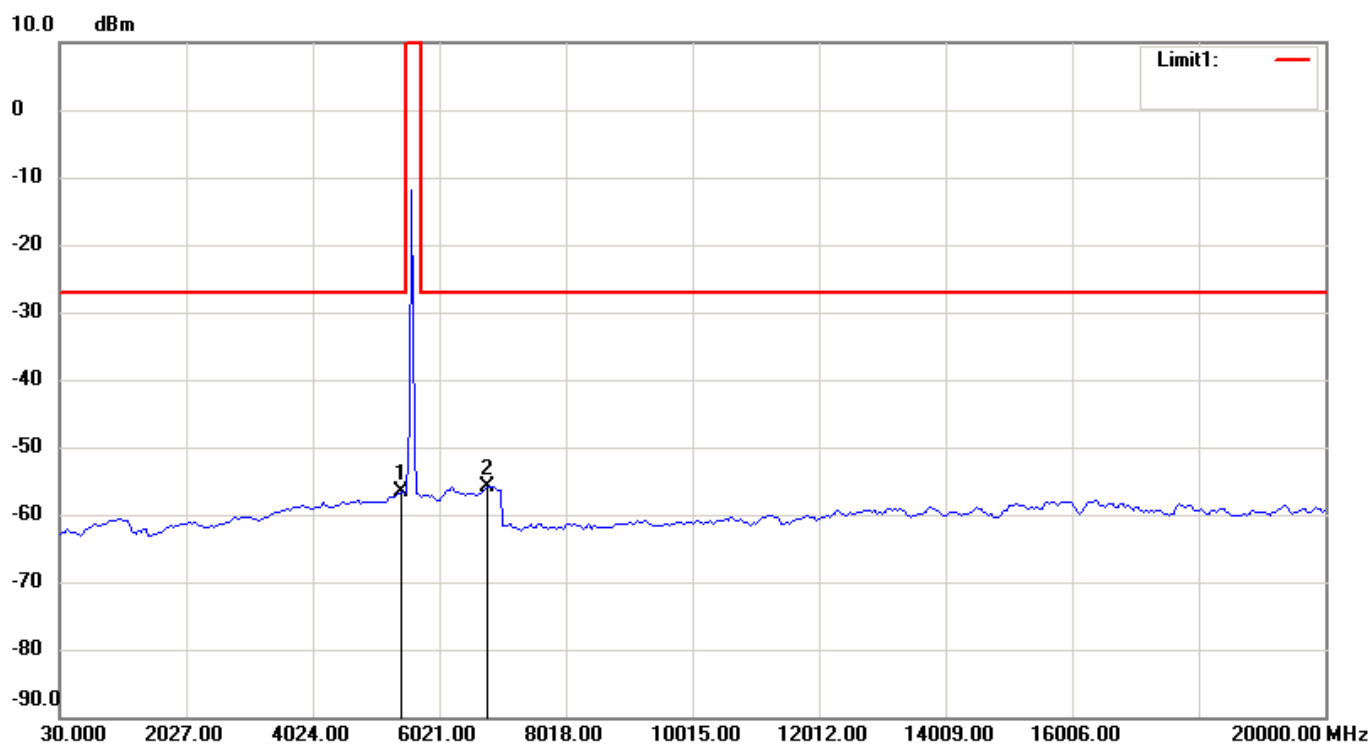
#12

Date: 2019/8/5

Temperature: 26 °C

Time: 下午 07:35:33

Humidity: 59 %



Condition: UNII-Band-3-Bandedge

RF Conducted

EUT: Wireless File Transmitter

Sweep Time: 79.9ms Att.: 15dB

Model: DS586194

RBW: 1000 KHz

VBW: 1000 KHz

Test Mode: TX_UNII Band3_Ant1

Note: Operator: Phillip (測試場地: RF-Cond01)

NCC_LP0002_802.11n40_Channel 118_Spurious-1

No.	Frequency(MHz)	Level(dBm)
1	5421.90000	-56.62
2	6779.86000	-55.91

File: 19-07-MAS-
008_5-
6n40_Ant1

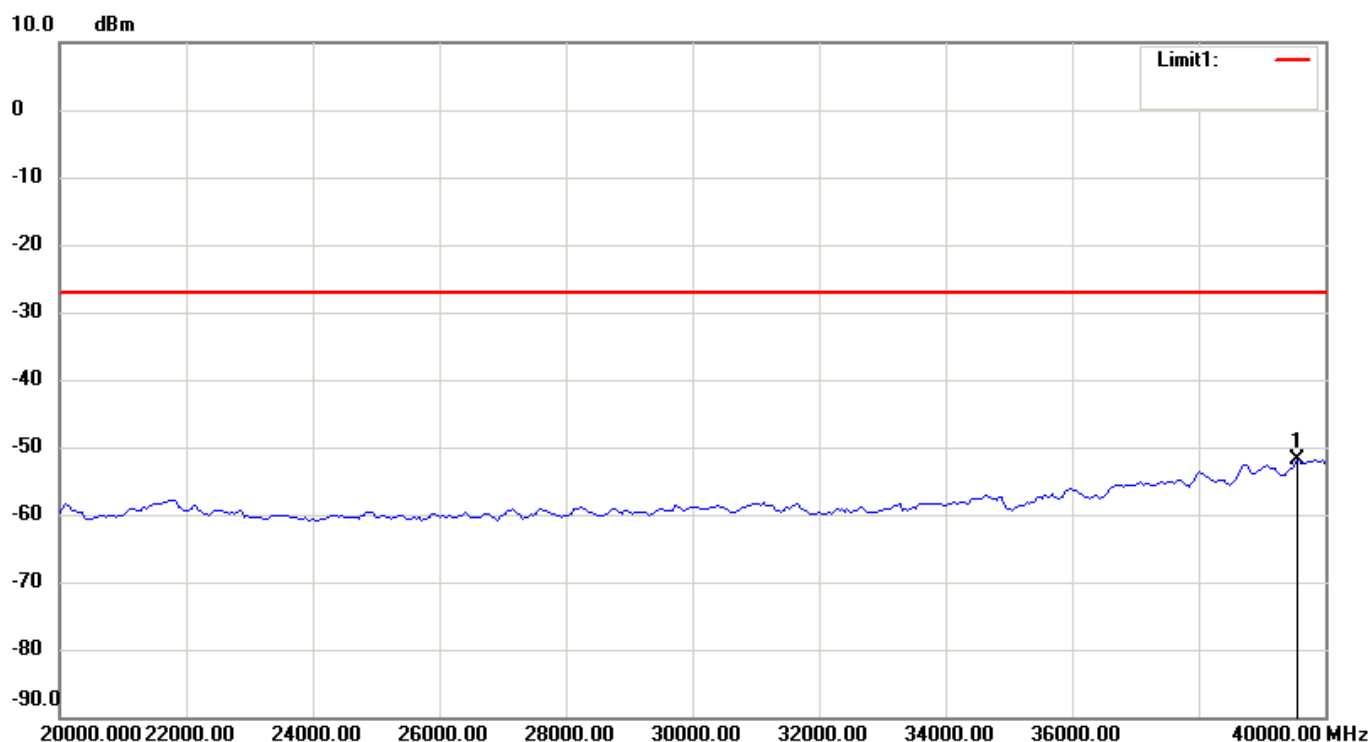
#13

Date: 2019/8/5

Temperature: 26 °C

Time: 下午 07:36:33

Humidity: 59 %



Condition: UNII-Band-3-Bandedge

RF Conducted

EUT: Wireless File Transmitter

Sweep Time: 80ms Att.: 15dB

Model: DS586194

RBW: 1000 KHz VBW: 1000 KHz

Test Mode: TX_UNII Band3_Ant1

Note: Operator: Phillip (測試場地: RF-Cond01)

NCC_LP0002_802.11n40_Channel 118_Spurious-2

No.	Frequency(MHz)	Level(dBm)
1	39560.00000	-51.85

File: 19-07-MAS-
008_5-
6n40_Ant1

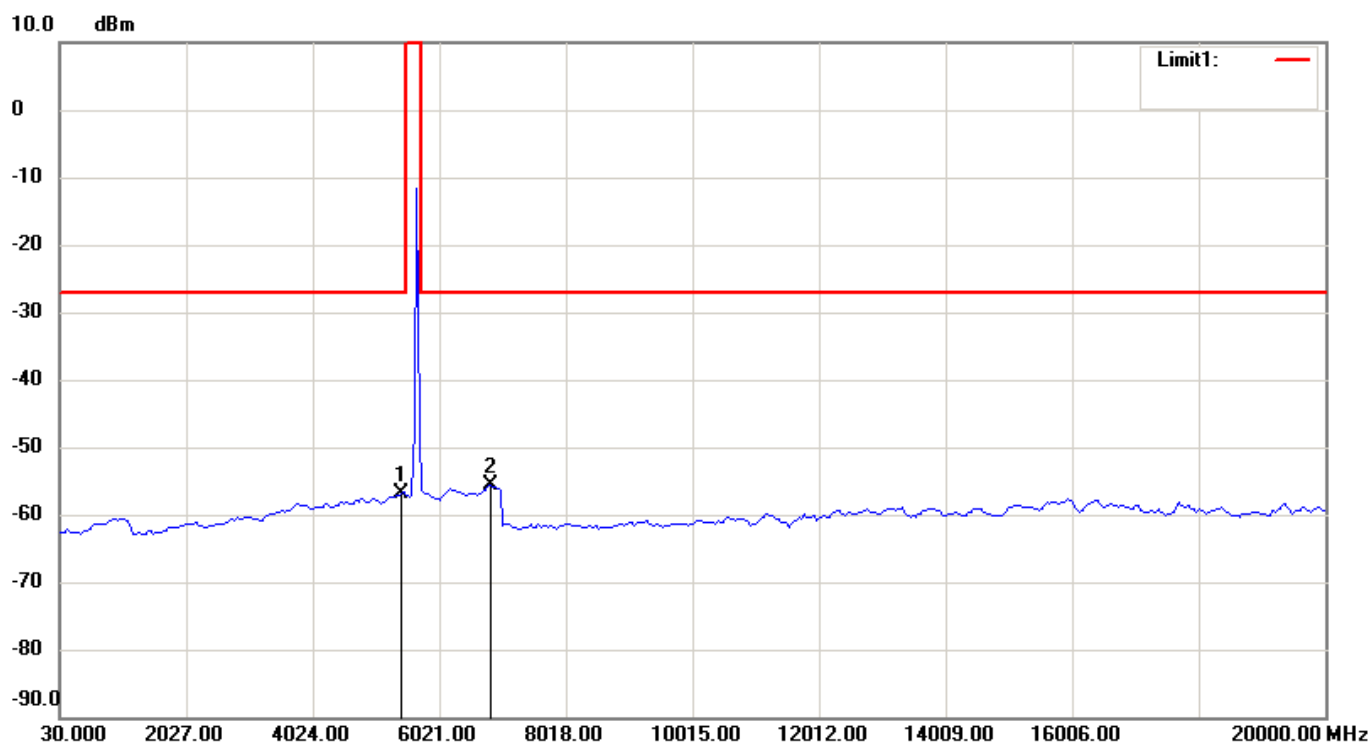
#18

Date: 2019/8/5

Temperature: 26 °C

Time: 下午 07:46:28

Humidity: 59 %



Condition: UNII-Band-3-Bandedge

RF Conducted

EUT: Wireless File Transmitter

Sweep Time: 79.9ms Att.: 15dB

Model: DS586194

RBW: 1000 KHz VBW: 1000 KHz

Test Mode: TX_UNII Band3_Ant1

Note: Operator: Phillip (測試場地: RF-Cond01)

NCC_LP0002_802.11n40_Channel 134_Spurious-1

No.	Frequency(MHz)	Level(dBm)
1	5421.90000	-56.86
2	6819.80000	-55.66

File: 19-07-MAS-
008_5-
6n40_Ant1

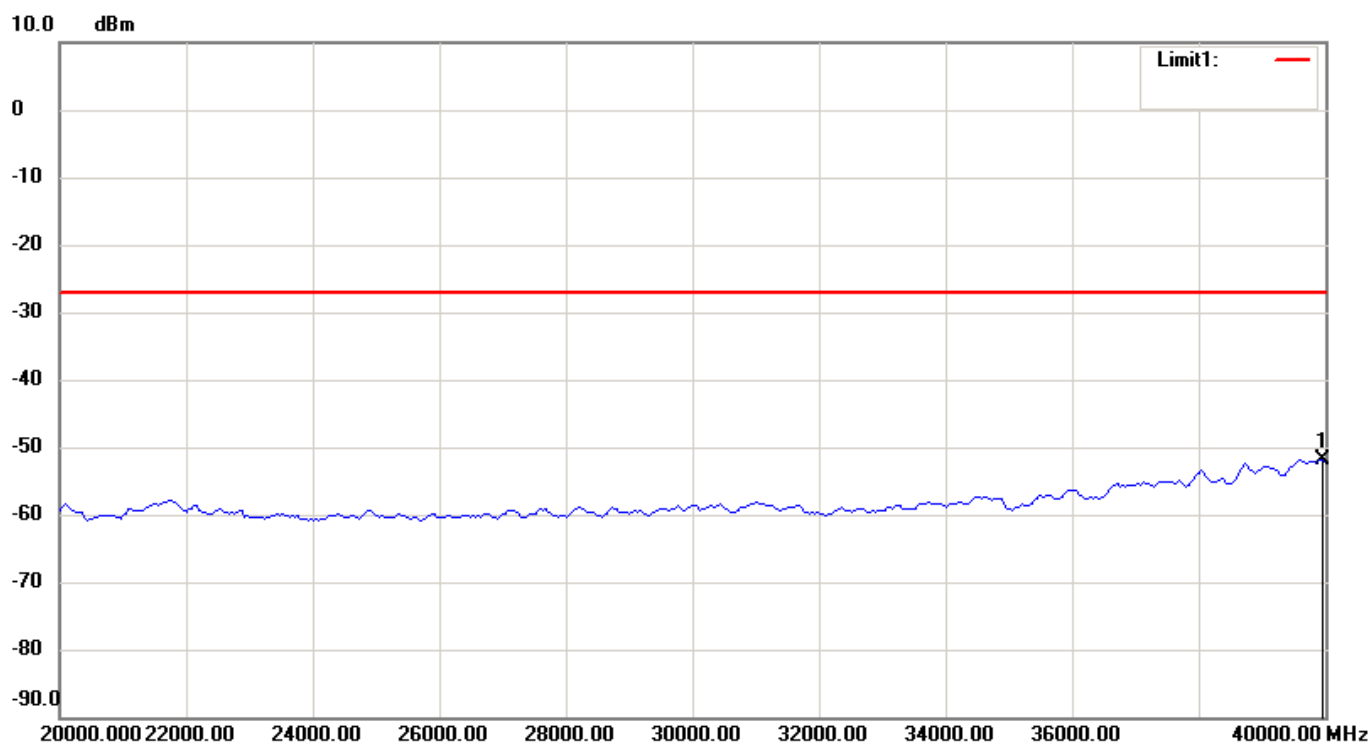
#19

Date: 2019/8/5

Temperature: 26 °C

Time: 下午 07:47:28

Humidity: 59 %



Condition: UNII-Band-3-Bandedge

RF Conducted

EUT: Wireless File Transmitter

Sweep Time: 80ms Att.: 15dB

Model: DS586194

RBW: 1000 KHz VBW: 1000 KHz

Test Mode: TX_UNII Band3_Ant1

Note: Operator: Phillip (測試場地: RF-Cond01)

NCC_LP0002_802.11n40_Channel 134_Spurious-2

No.	Frequency(MHz)	Level(dBm)
1	39960.00000	-51.95

9.4.3.2 CHAIN 2

測試日期: Aug. 05, 2019

環境溫度: 26°C

環境濕度: 59%

註：1. 繪圖資料請參考第 162-167 頁。

2. 量測不準確度: $\pm 1.5\text{dB}$ ($1\text{GHz} \leq f \leq 40\text{GHz}$)

File: 19-07-MAS-
008_5-
6n40_Ant2

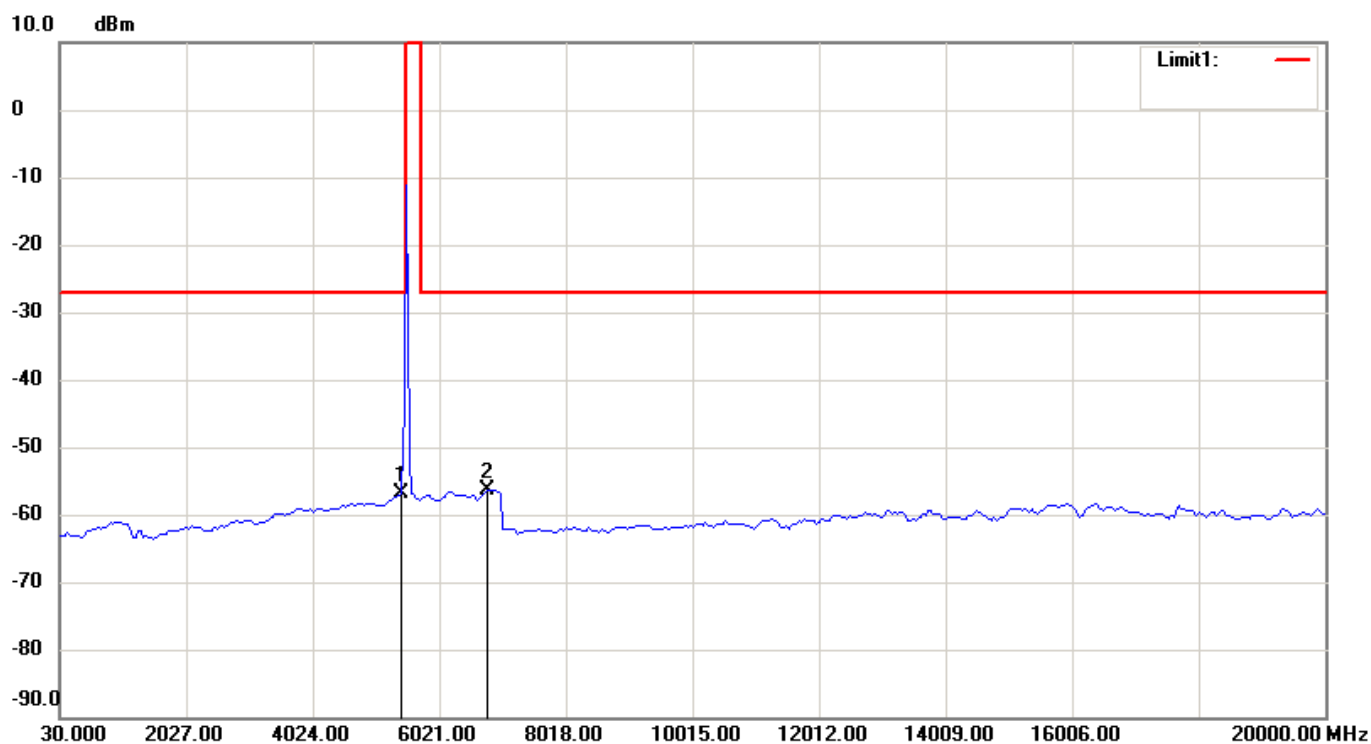
#5

Date: 2019/8/5

Temperature: 26 °C

Time: 下午 09:00:35

Humidity: 59 %



Condition: UNII-Band-3-Bandedge

RF Conducted

EUT: Wireless File Transmitter

Sweep Time: 79.9ms Att.: 15dB

Model: DS586194

RBW: 1000 KHz

VBW: 1000 KHz

Test Mode: TX_UNII Band3_Ant2

Note: Operator: Phillip (測試場地: RF-Cond01)

NCC_LP0002_802.11n40_Channel 102_Spurious-1

No.	Frequency(MHz)	Level(dBm)
1	5421.90000	-56.88
2	6779.86000	-56.32

File: 19-07-MAS-008_5-6n40_Ant2

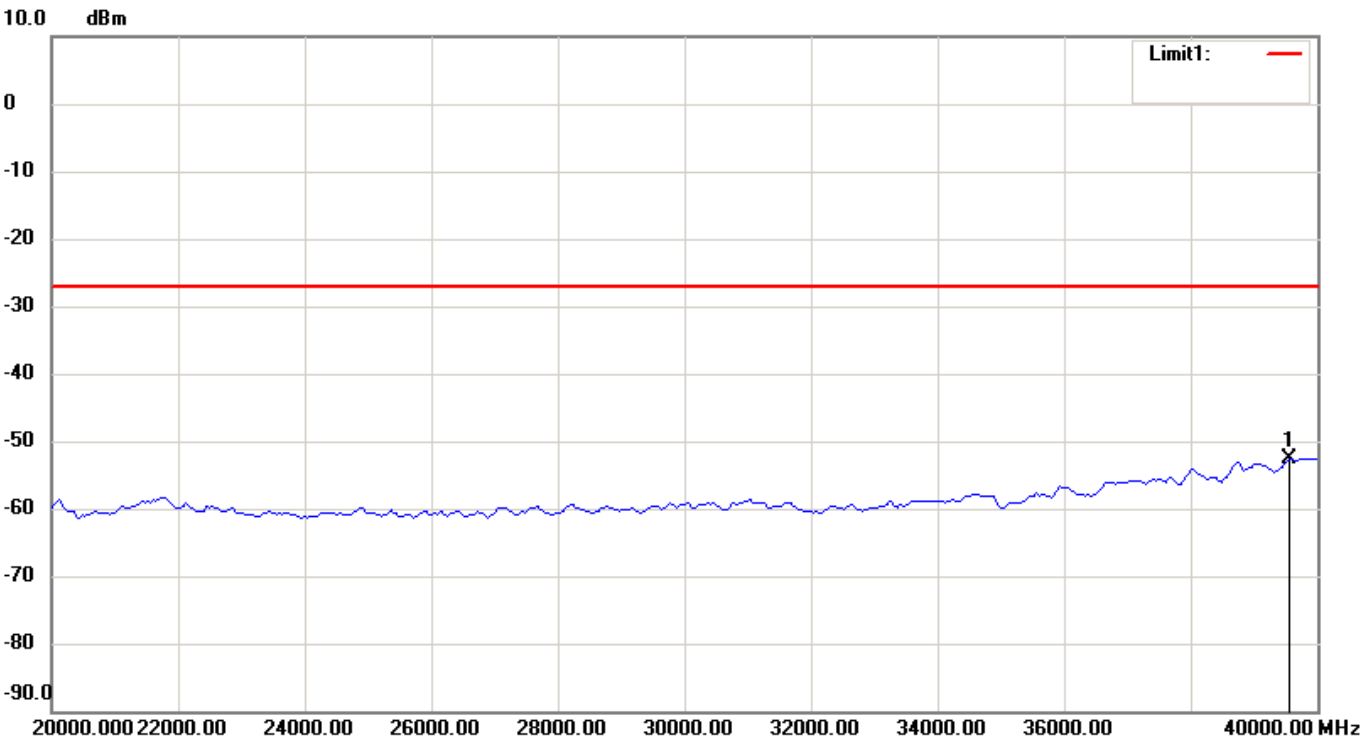
#6

Date: 2019/8/5

Temperature: 26 ℃

Time: 下午 09:01:35

Humidity: 59 %



Condition: UNII-Band-3-Bandedge

EUT: Wireless File Transmitter

Model: DS586194

Test Mode: TX_UNII Band3_Ant2

Note: Operator: Phillip (測試場地: RF-Cond01)

NCC_LP0002_802.11n40_Channel 102_Spurious-2

RF Conducted

Sweep Time: 80ms Att.: 15dB

RBW: 1000 KHz VBW: 1000 KHz

No.	Frequency(MHz)	Level(dBm)
1	39560.00000	-52.51

File: 19-07-MAS-
008_5-
6n40_Ant2

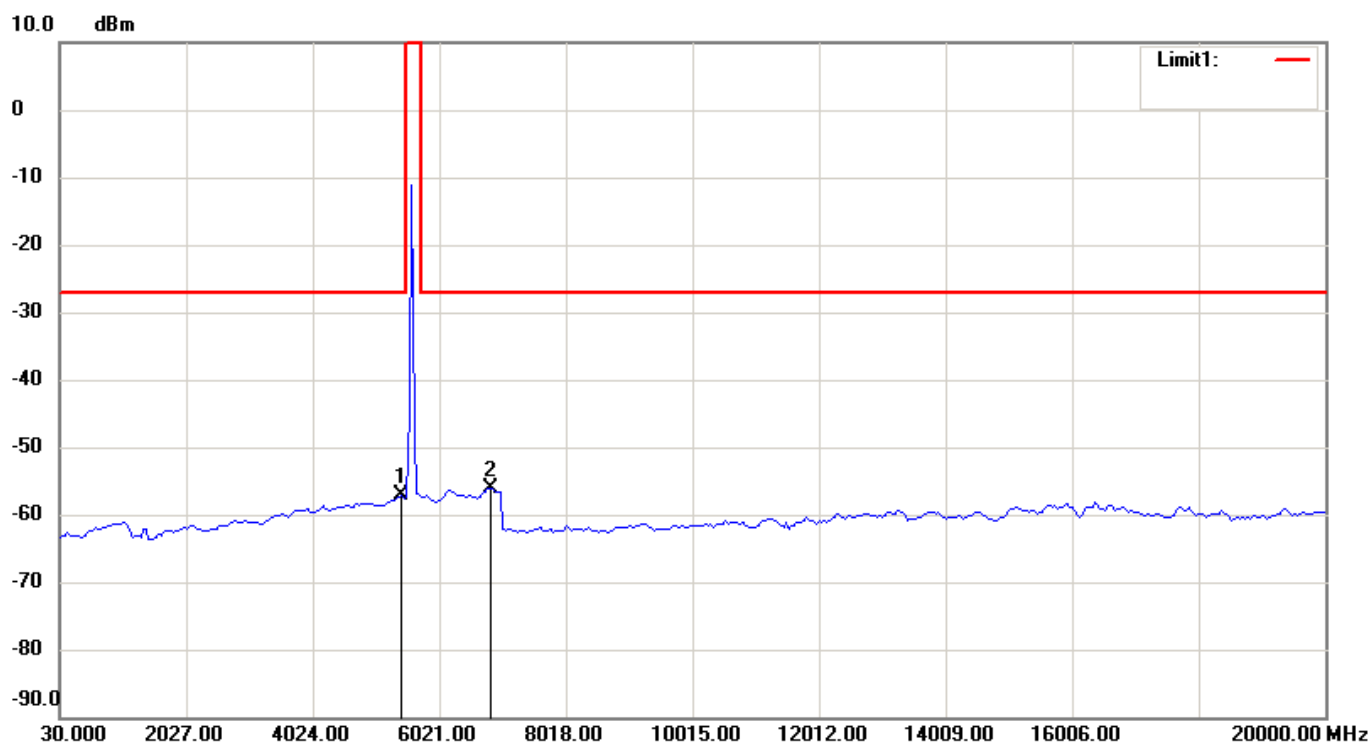
#12

Date: 2019/8/5

Temperature: 26 °C

Time: 下午 09:07:39

Humidity: 59 %



Condition: UNII-Band-3-Bandedge

EUT: Wireless File Transmitter

Model: DS586194

Test Mode: TX_UNII Band3_Ant2

Note: Operator: Phillip (測試場地: RF-Cond01)

NCC_LP0002_802.11n40_Channel 118_Spurious-1

RF Conducted

Sweep Time: 79.9ms Att.: 15dB

RBW: 1000 KHz VBW: 1000 KHz

No.	Frequency(MHz)	Level(dBm)
1	5421.90000	-57.18
2	6819.80000	-56.14

File: 19-07-MAS-008_5-6n40_Ant2

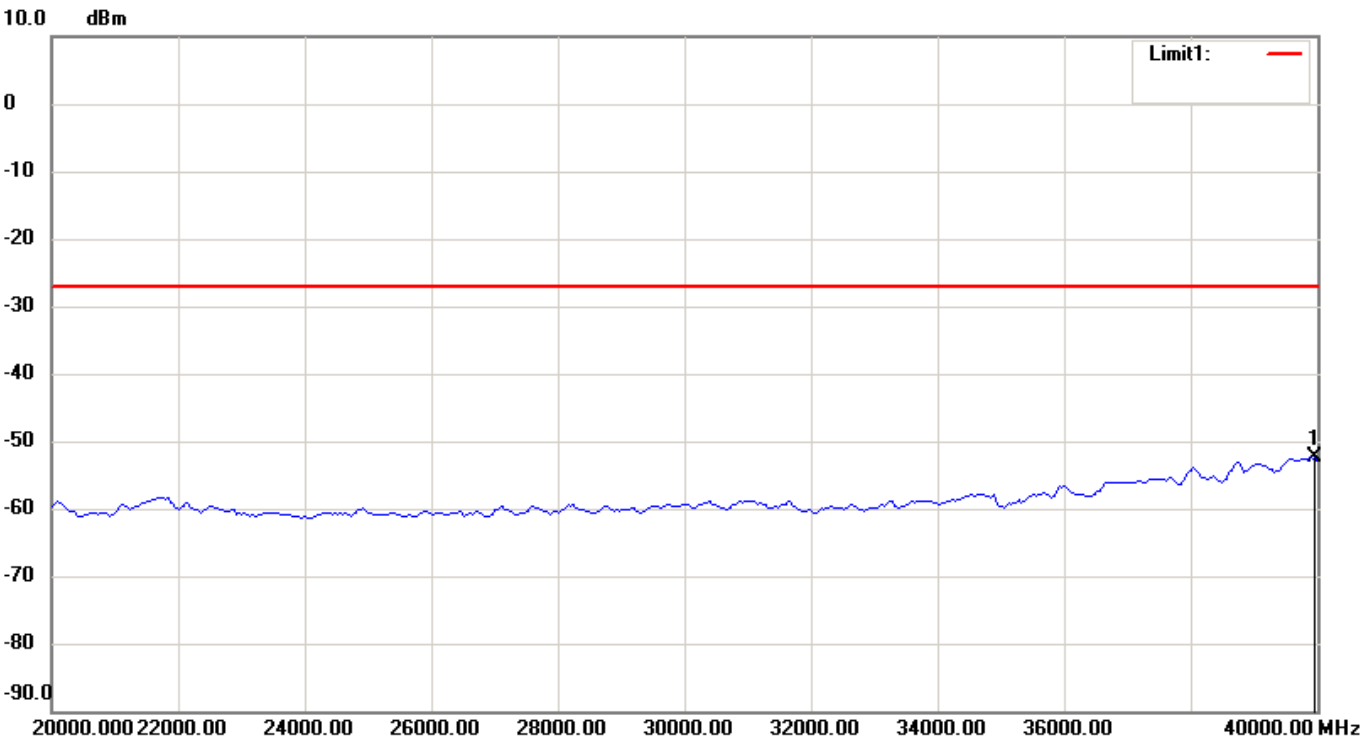
#13

Date: 2019/8/5

Temperature: 26 ℃

Time: 下午 09:08:39

Humidity: 59 %



Condition: UNII-Band-3-Bandedge

EUT: Wireless File Transmitter

Model: DS586194

Test Mode: TX_UNII Band3_Ant2

Note: Operator: Phillip (測試場地: RF-Cond01)

NCC_LP0002_802.11n40_Channel 118_Spurious-2

RF Conducted

Sweep Time: 80ms Att.: 15dB

RBW: 1000 KHz VBW: 1000 KHz

No.	Frequency(MHz)	Level(dBm)
1	39960.00000	-52.45

File: 19-07-MAS-
008_5-
6n40_Ant2

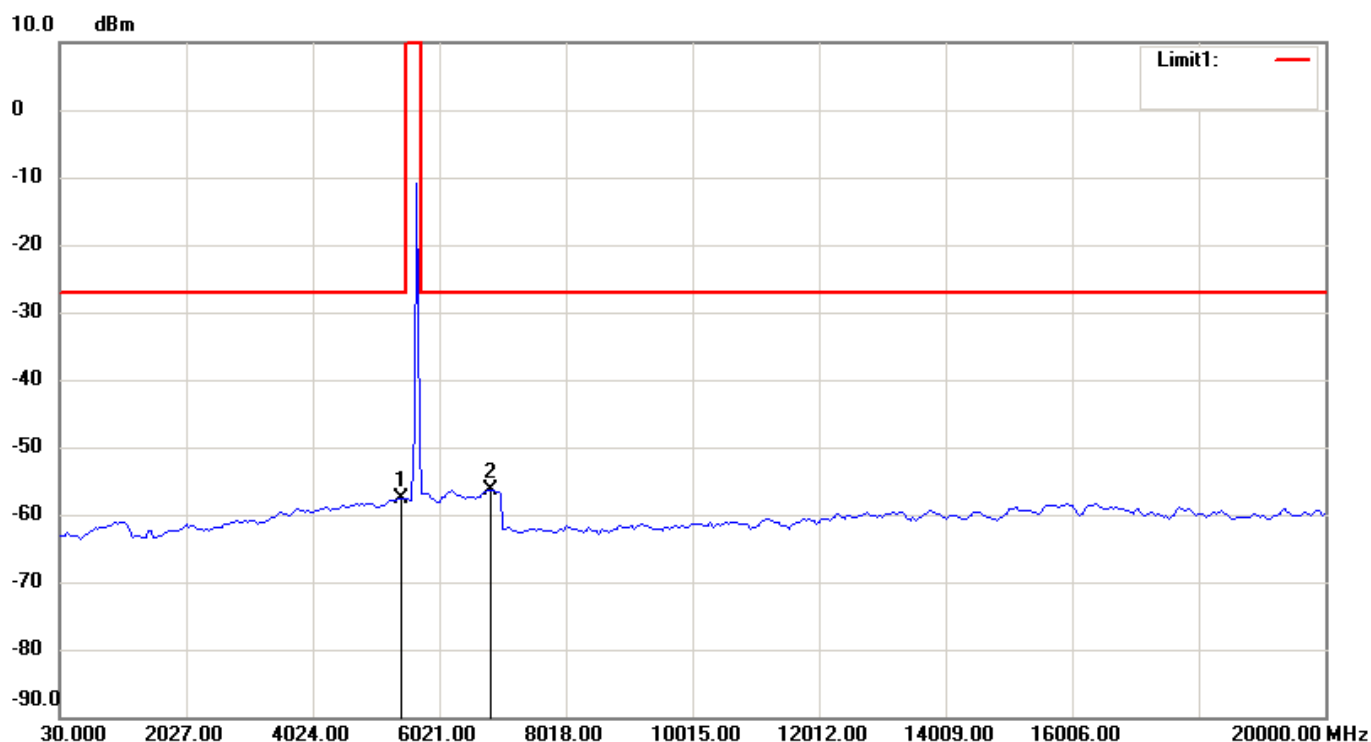
#18

Date: 2019/8/5

Temperature: 26 °C

Time: 下午 09:12:27

Humidity: 59 %



Condition: UNII-Band-3-Bandedge
 EUT: Wireless File Transmitter
 Model: DS586194
 Test Mode: TX_UNII Band3_Ant2
 Note: Operator: Phillip (測試場地: RF-Cond01)
 NCC_LP0002_802.11n40_Channel 134_Spurious-1

RF Conducted
 Sweep Time: 79.9ms Att.: 15dB
 RBW: 1000 KHz VBW: 1000 KHz

No.	Frequency(MHz)	Level(dBm)
1	5421.90000	-57.66
2	6819.80000	-56.30

File: 19-07-MAS-
008_5-
6n40_Ant2

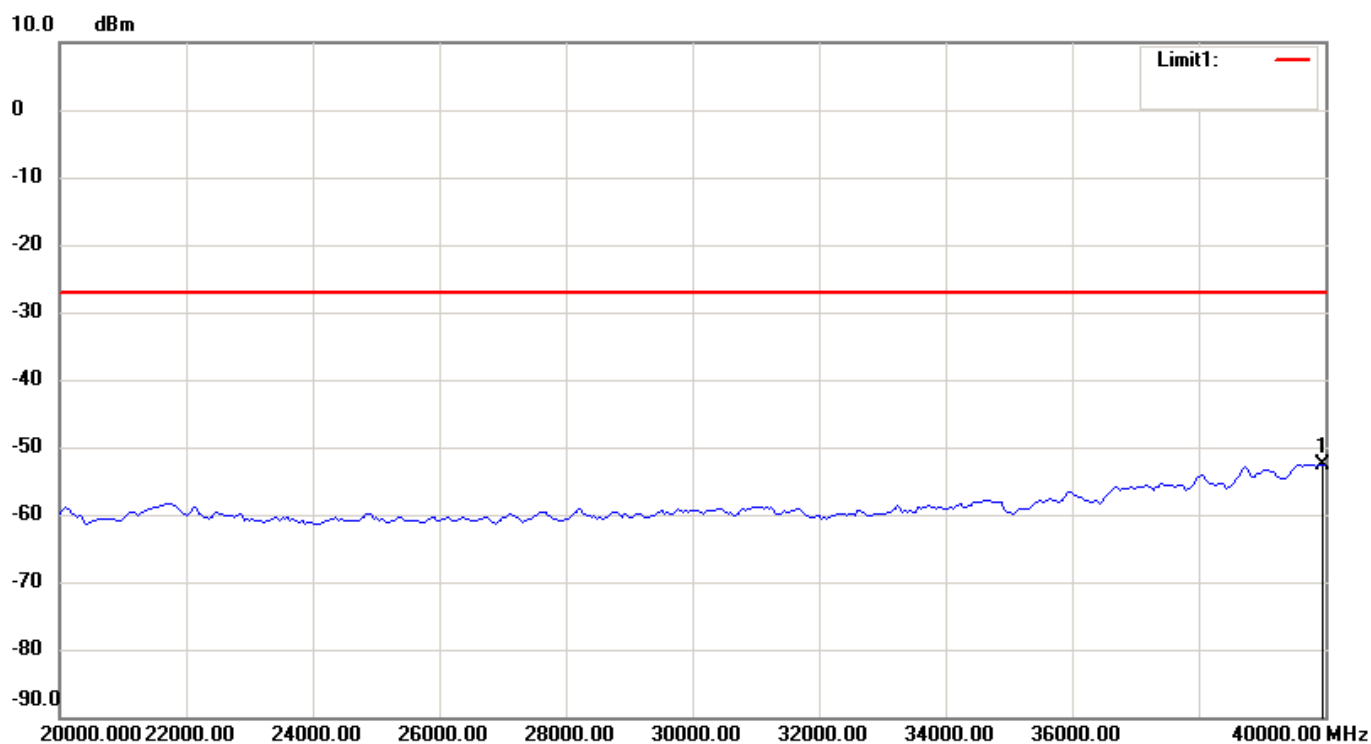
#19

Date: 2019/8/5

Temperature: 26 °C

Time: 下午 09:13:27

Humidity: 59 %



Condition: UNII-Band-3-Bandedge

RF Conducted

EUT: Wireless File Transmitter

Sweep Time: 80ms Att.: 15dB

Model: DS586194

RBW: 1000 KHz VBW: 1000 KHz

Test Mode: TX_UNII Band3_Ant2

Note: Operator: Phillip (測試場地: RF-Cond01)

NCC_LP0002_802.11n40_Channel 134_Spurious-2

No.	Frequency(MHz)	Level(dBm)
1	39960.00000	-52.53

9.4.4 調變技術: IEEE 802.11ac (80MHz)

9.4.4.1 CHAIN 1

測試日期: Aug. 06, 2019

環境溫度: 26°C

環境濕度: 62%

註: 1. 繪圖資料請參考第 169-172 頁。

2. 量測不準確度: $\pm 1.5\text{dB}$ ($1\text{GHz} \leq f \leq 40\text{GHz}$)

File: 19-07-MAS-
008_5-
6ac80_Ant1

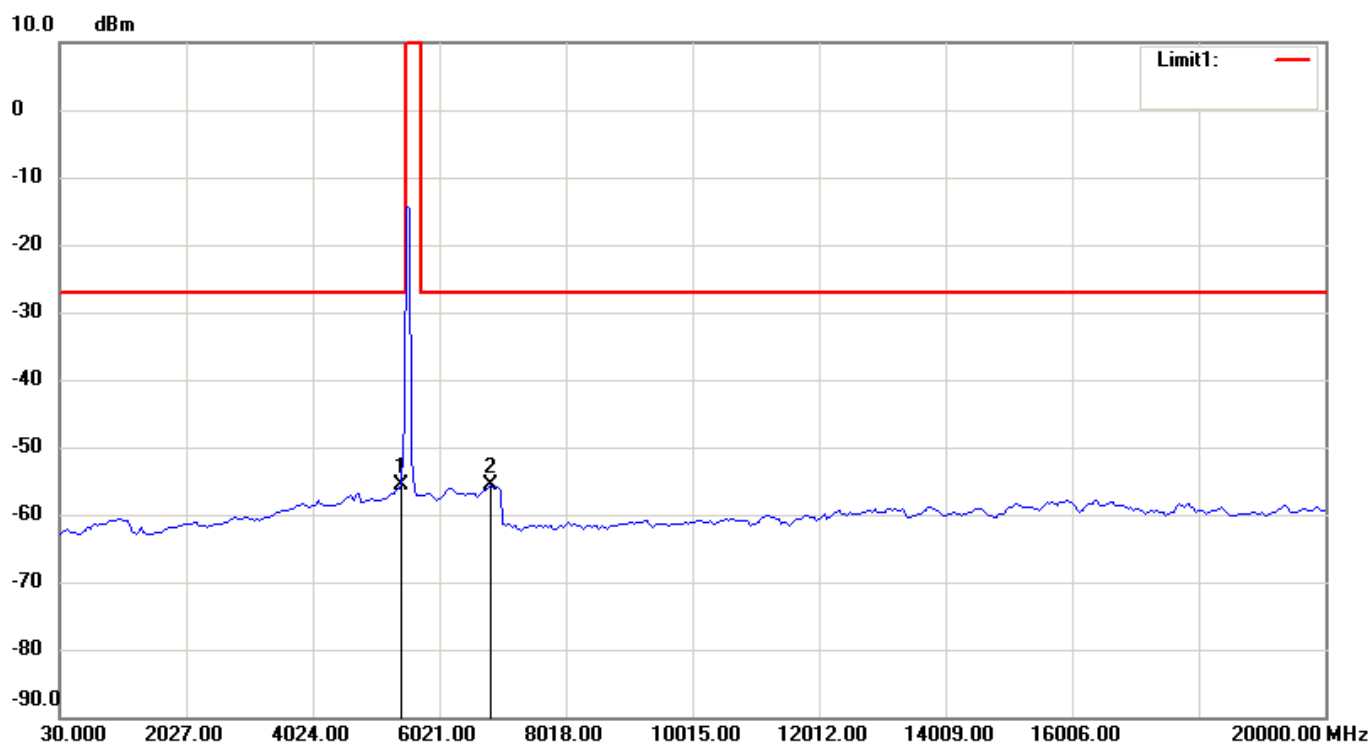
#5

Date: 2019/8/6

Temperature: 26 °C

Time: 上午 10:08:57

Humidity: 62 %



Condition: UNII-Band-3-Bandedge
EUT: Wireless File Transmitter
Model: DS586194
Test Mode: TX_UNII Band3_Ant1
Note: Operator: Phillip (測試場地: RF-Cond01)
NCC_LP0002_802.11ac80_Channel 106_Spurious-1

RF Conducted
Sweep Time: 79.9ms Att.: 15dB
RBW: 1000 KHz VBW: 1000 KHz

No.	Frequency(MHz)	Level(dBm)
1	5421.90000	-55.64
2	6819.80000	-55.72

File: 19-07-MAS-008_5-6ac80_Ant1

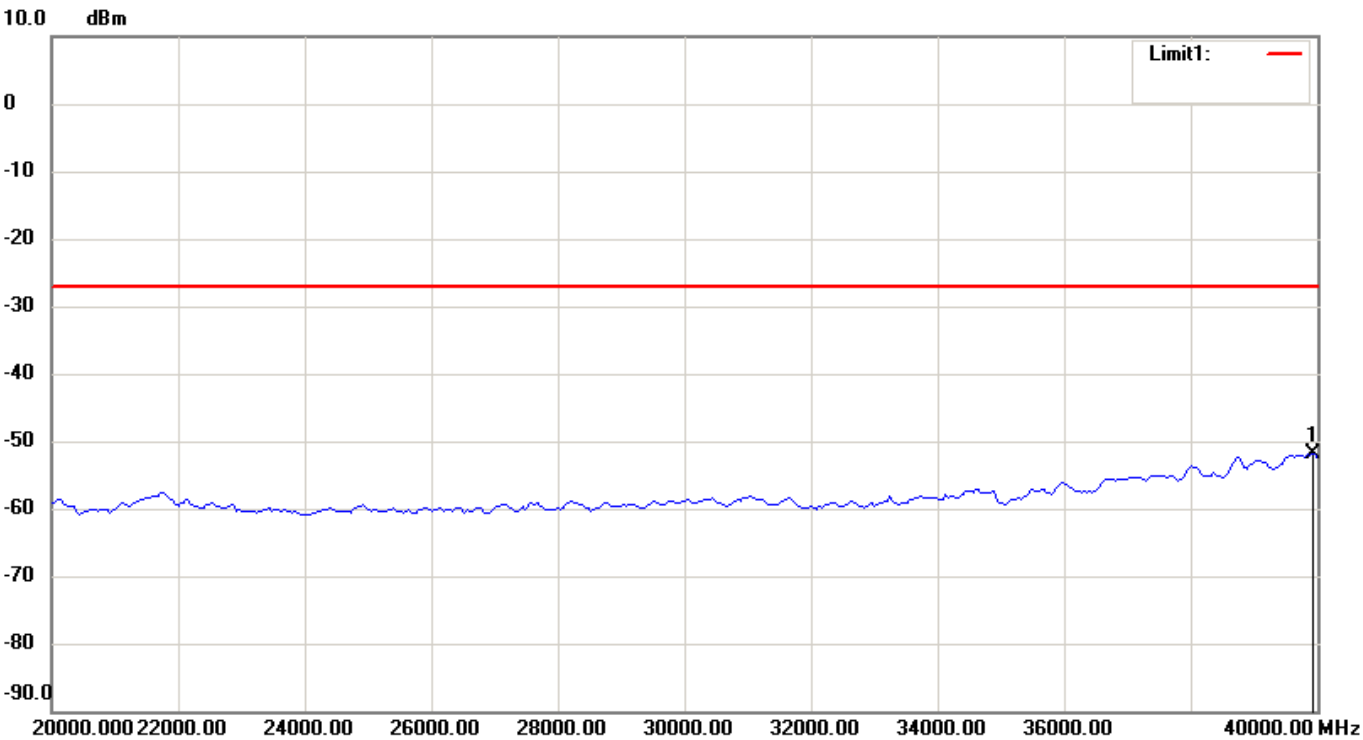
#6

Date: 2019/8/6

Temperature: 26 ℃

Time: 上午 10:09:57

Humidity: 62 %



Condition: UNII-Band-3-Bandedge

EUT: Wireless File Transmitter

Model: DS586194

Test Mode: TX_UNII Band3_Ant1

Note: Operator: Phillip (測試場地: RF-Cond01)

NCC_LP0002_802.11ac80_Channel 106_Spurious-2

RF Conducted

Sweep Time: 80ms Att.: 15dB

RBW: 1000 KHz VBW: 1000 KHz

No.	Frequency(MHz)	Level(dBm)
1	39920.00000	-51.84

File: 19-07-MAS-
008_5-
6ac80_Ant1

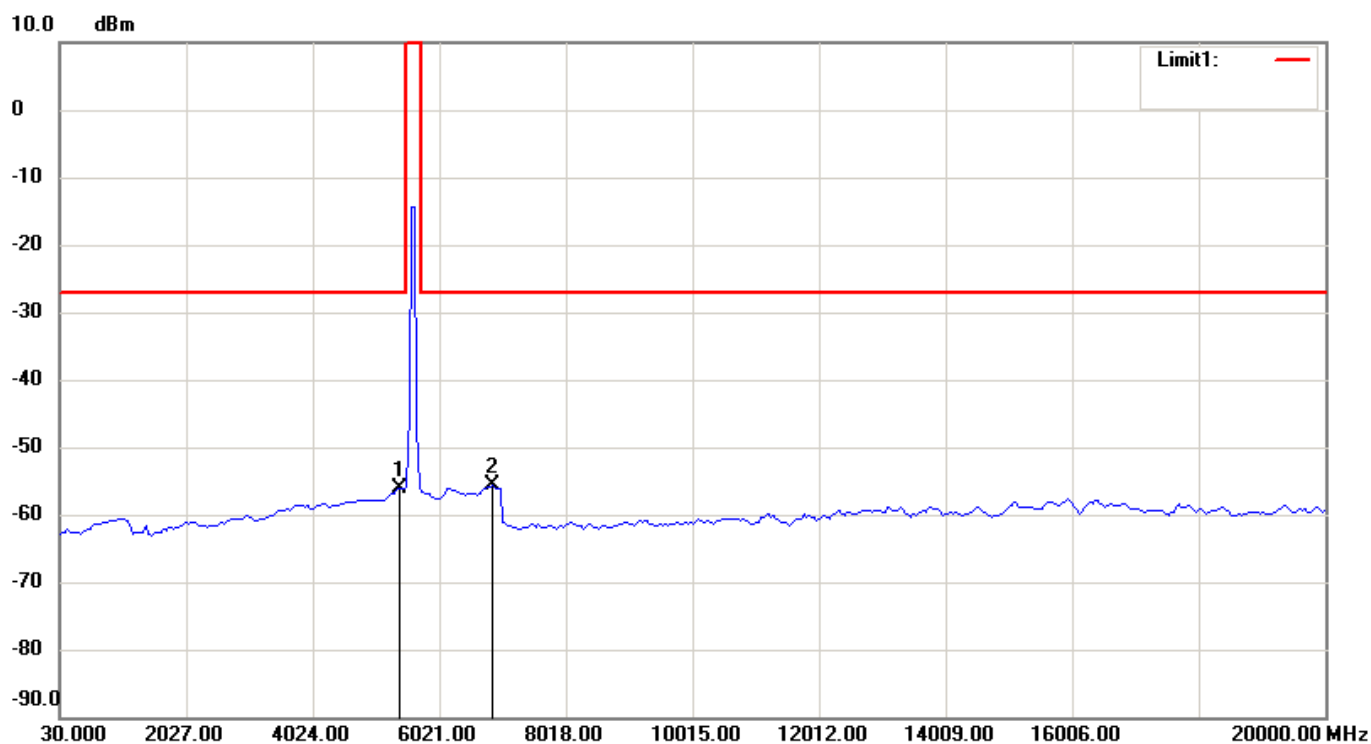
#12

Date: 2019/8/6

Temperature: 26 °C

Time: 上午 10:15:24

Humidity: 62 %



Condition: UNII-Band-3-Bandedge

RF Conducted

EUT: Wireless File Transmitter

Sweep Time: 79.9ms Att.: 15dB

Model: DS586194

RBW: 1000 KHz

VBW: 1000 KHz

Test Mode: TX_UNII Band3_Ant1

Note: Operator: Phillip (測試場地: RF-Cond01)

NCC_LP0002_802.11ac80_Channel 122_Spurious-1

No.	Frequency(MHz)	Level(dBm)
1	5381.96000	-56.08
2	6859.74000	-55.73

File: 19-07-MAS-
008_5-
6ac80_Ant1

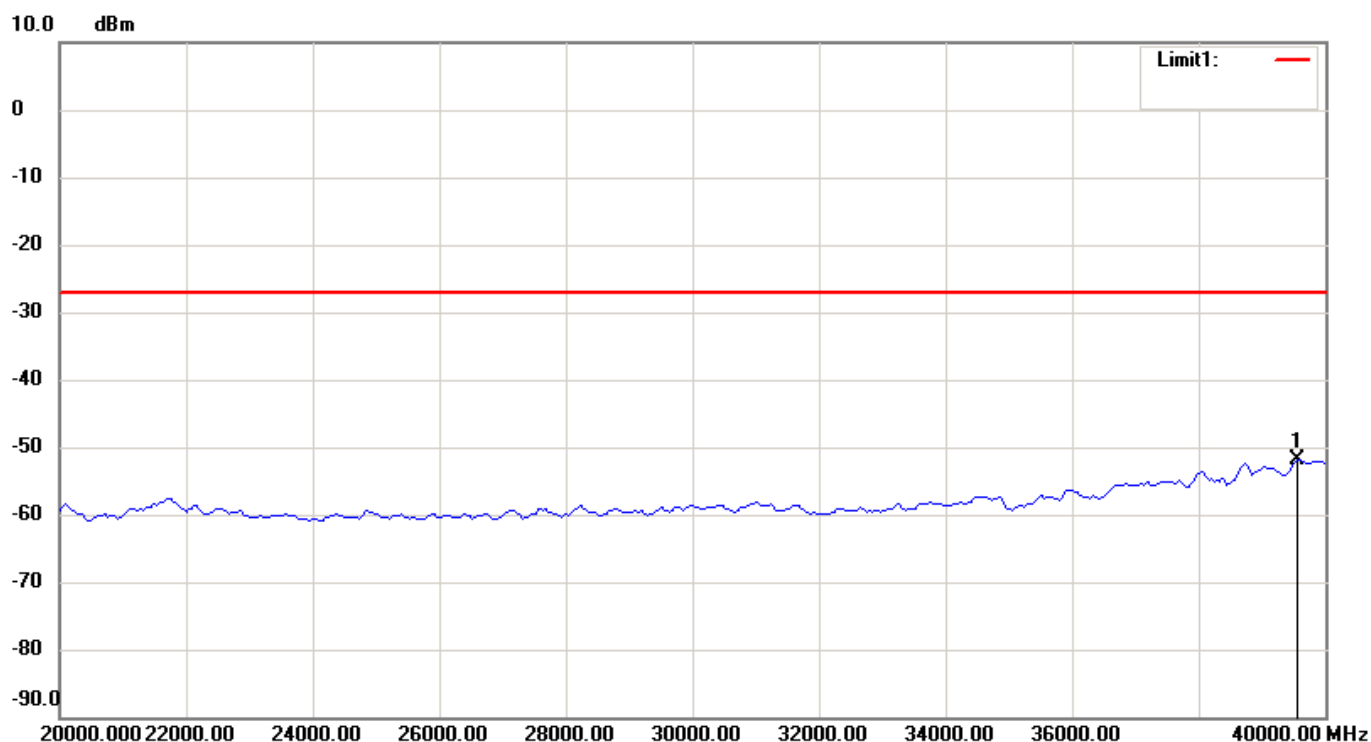
#13

Date: 2019/8/6

Temperature: 26 °C

Time: 上午 10:16:23

Humidity: 62 %



Condition: UNII-Band-3-Bandedge

RF Conducted

EUT: Wireless File Transmitter

Sweep Time: 80ms Att.: 15dB

Model: DS586194

RBW: 1000 KHz VBW: 1000 KHz

Test Mode: TX_UNII Band3_Ant1

Note: Operator: Phillip (測試場地: RF-Cond01)

NCC_LP0002_802.11ac80_Channel 122_Spurious-2

No.	Frequency(MHz)	Level(dBm)
1	39560.00000	-51.87

9.4.4.2 CHAIN 2

測試日期: Aug. 06, 2019

環境溫度: 26°C

環境濕度: 62%

註：1. 繪圖資料請參考第 174-177 頁。

2. 量測不準確度: $\pm 1.5\text{dB}$ ($1\text{GHz} \leq f \leq 40\text{GHz}$)

9.5 結果判定

混附波之發射皆低於限值，符合標準規定。

File: 19-07-MAS-
008_5-
6ac80_Ant2

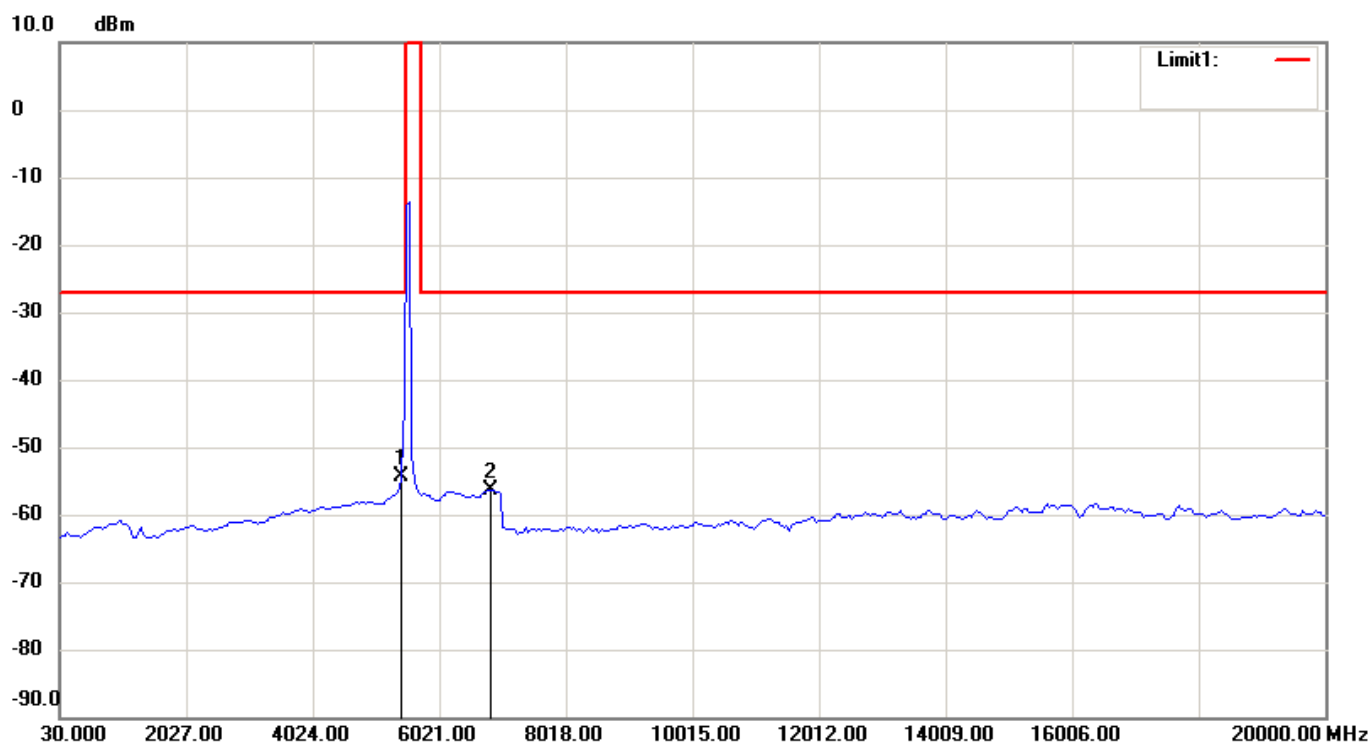
#5

Date: 2019/8/6

Temperature: 26 °C

Time: 上午 09:31:25

Humidity: 62 %



Condition: UNII-Band-3-Bandedge

RF Conducted

EUT: Wireless File Transmitter

Sweep Time: 79.9ms Att.: 15dB

Model: DS586194

RBW: 1000 KHz

VBW: 1000 KHz

Test Mode: TX_UNII Band3_Ant2

Note: Operator: Phillip (測試場地: RF-Cond01)

NCC_LP0002_802.11ac80_Channel 106_Spurious-1

No.	Frequency(MHz)	Level(dBm)
1	5421.90000	-54.49
2	6819.80000	-56.36

File: 19-07-MAS-
008_5-
6ac80_Ant2

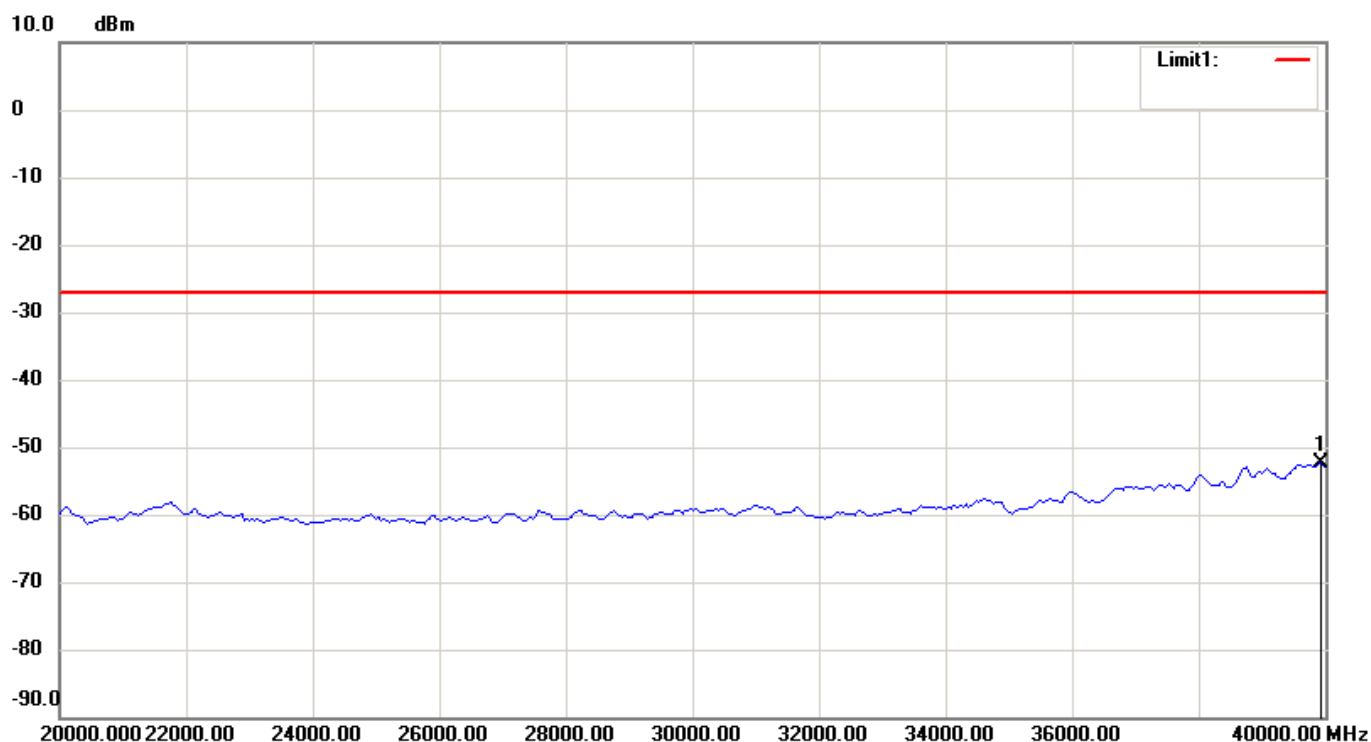
#6

Date: 2019/8/6

Temperature: 26 °C

Time: 上午 09:32:29

Humidity: 62 %



Condition: UNII-Band-3-Bandedge

RF Conducted

EUT: Wireless File Transmitter

Sweep Time: 80ms Att.: 15dB

Model: DS586194

RBW: 1000 KHz VBW: 1000 KHz

Test Mode: TX_UNII Band3_Ant2

Note: Operator: Phillip (測試場地: RF-Cond01)

NCC_LP0002_802.11ac80_Channel 106_Spurious-2

No.	Frequency(MHz)	Level(dBm)
1	39920.00000	-52.41

File: 19-07-MAS-
008_5-
6ac80_Ant2

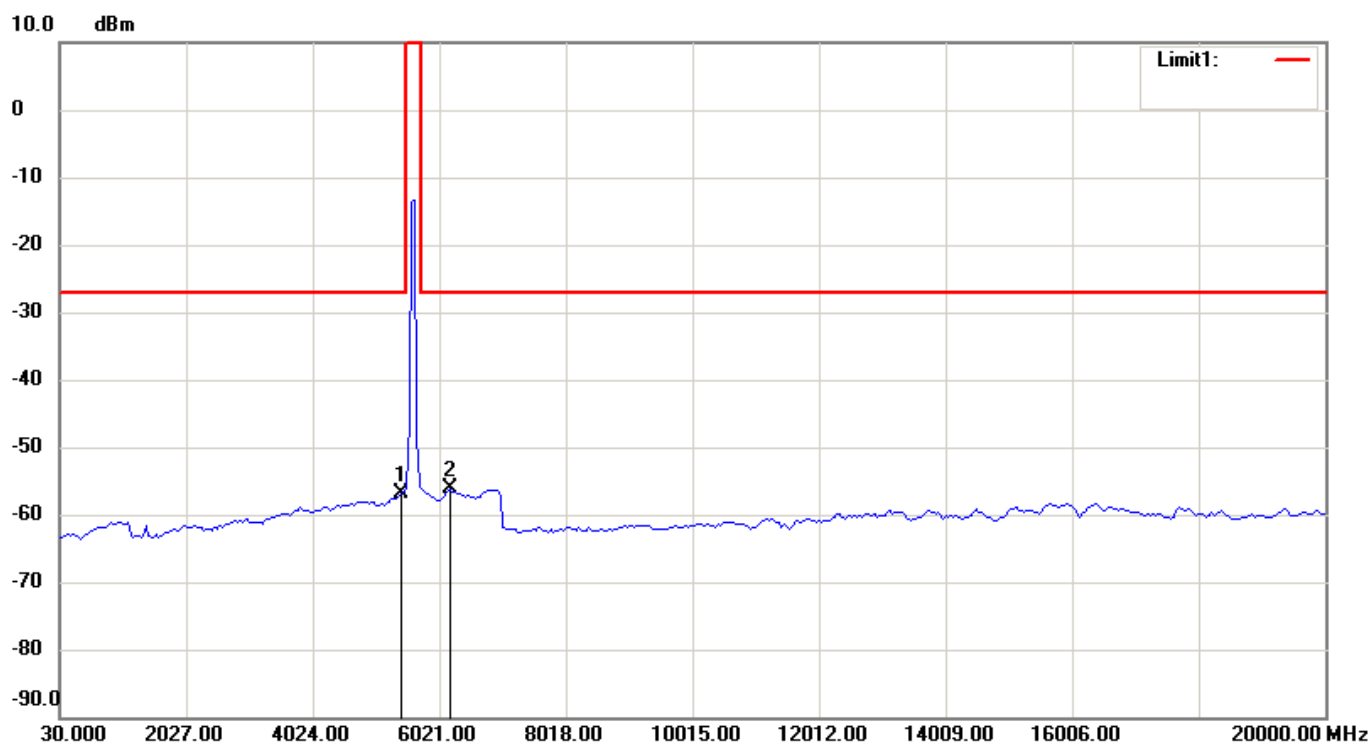
#12

Date: 2019/8/6

Temperature: 26 °C

Time: 上午 09:59:30

Humidity: 62 %



Condition: UNII-Band-3-Bandedge

EUT: Wireless File Transmitter

Model: DS586194

Test Mode: TX_UNII Band3_Ant2

Note: Operator: Phillip (測試場地: RF-Cond01)

NCC_LP0002_802.11ac80_Channel 122_Spurious-1

RF Conducted

Sweep Time: 79.9ms Att.: 15dB

RBW: 1000 KHz VBW: 1000 KHz

No.	Frequency(MHz)	Level(dBm)
1	5421.90000	-56.94
2	6180.76000	-56.16

File: 19-07-MAS-008_5-6ac80_Ant2

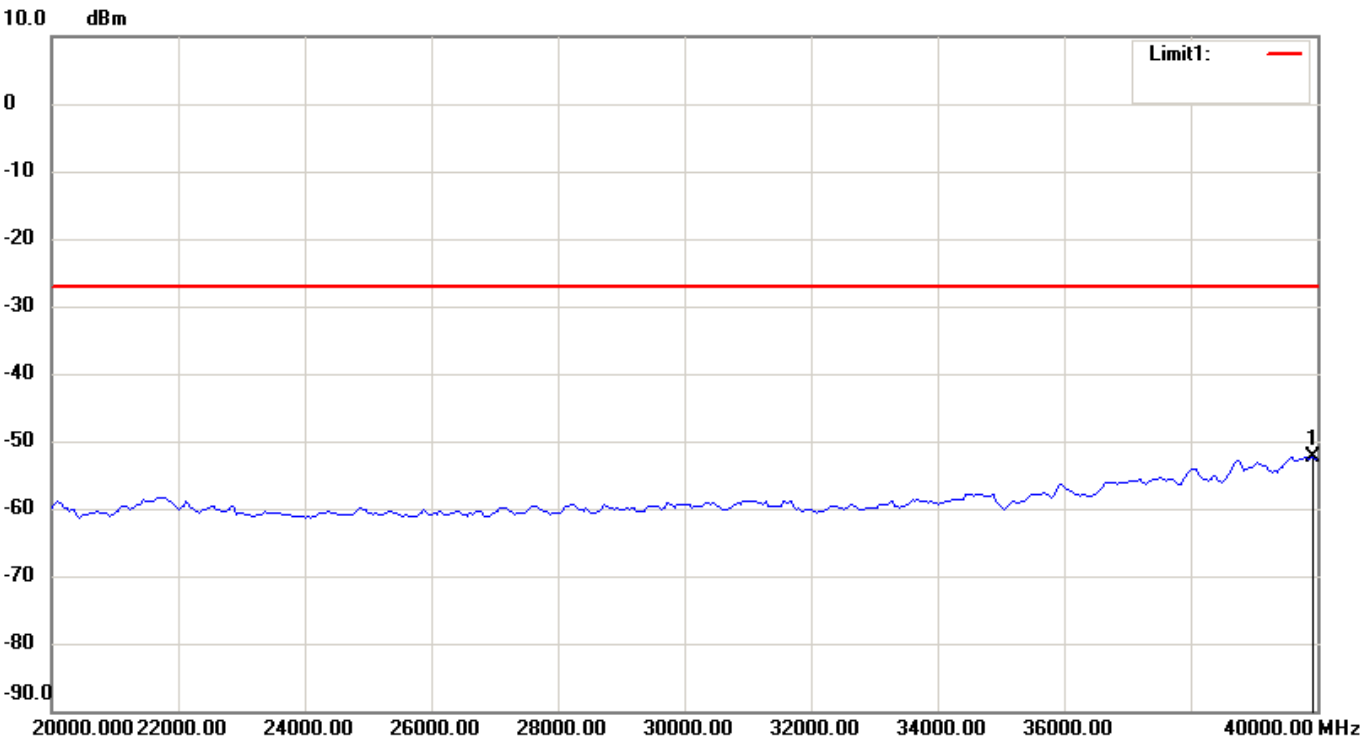
#13

Date: 2019/8/6

Temperature: 26 °C

Time: 上午 10:00:33

Humidity: 62 %



Condition: UNII-Band-3-Bandedge

EUT: Wireless File Transmitter

Model: DS586194

Test Mode: TX_UNII Band3_Ant2

Note: Operator: Phillip (測試場地: RF-Cond01)

NCC_LP0002_802.11ac80_Channel 122_Spurious-2

RF Conducted

Sweep Time: 80ms Att.: 15dB

RBW: 1000 KHz VBW: 1000 KHz

No.	Frequency(MHz)	Level(dBm)
1	39920.00000	-52.42

10 場強輻射之量測

10.1 適用標準

依據國家通訊傳播委員會低功率射頻電機技術規範4.7.4.5節之規定，在 1GHz 以下的不必要之發射，應符合第 2.8 節之規定，任何使用交流市電為供應電之設備亦須符合第 2.3 節之電源線傳導限制值。

依據國家通訊傳播委員會低功率射頻電機技術規範4.7.4.6節之規定，不必要發射頻率屬 2.7 規定頻段者，應符合 2.8節之規定。

10.2 量測方法

將待測物置於非金屬桌面，使其在測試模式狀態，且設定為高、中、低各頻道產生最高峰值輸出功率的傳輸速率，接收天線置於3米外，且桌面要360度旋轉，另外接收天線也要從 1米至4米升降變化，接收天線置於水平、垂直極向各執行測試一次。待測物若為手持式則分別要以三軸相放置，並分別測試以找出最大輻射電場強度。

10.3 量測場強輻射之儀器

(1)量測儀器

儀器名稱	製造者	型號
EMI Receiver	R&S	ESCI
Spectrum Analyzer	R&S	FSU46
Horn Antenna	EMCO	3117
Horn Antenna	EMCO	3116
PRE-Amplifier	Agilent	8449B
PRE-Amplifier	Agilent	8447D
BiLog Antenna	ETC	MCTD 2786
PRE-Amplifier	Agilent	83051A
Spectrum Analyzer	R&S	FSV

測試軟體: LZ-RF (Ver. ETC-3A2)

(2)儀器設定

Frequency Bnd (MHz)	Instrument	Function	Resolution Bndwidth	Video Bndwidth
30 to 1000	RF Test Receiver	Quasi-Peak	120 kHz	300 kHz
	RF Test Receiver	Peak	120 kHz	300 kHz
Above 1000	Spectrum Analyzer	Peak	1 MHz	1 MHz
	Spectrum Analyzer	Average	1 MHz	10 Hz

10.4 場強度之計算

場強之計算公式如下

$$\text{結果值} = \text{讀值} + \text{校正因子}$$

其中校正因子為：

天線因子+饋線損失+濾波器損失（若有使用）-放大器增益（若有使用）
量測結果請見下頁。

10.5 場強輻射之量測結果

測試工程師: 羅世勇

測試日期: Aug. 22, 2019

環境溫度: 24°C

環境濕度: 61%

10.5.1 諧波發射量測值

10.5.1.1 調變技術: IEEE 802.11a

a. Chnnel Low

基本波頻率 : 5500 MHz

輻射 頻率	天線 極性	機器讀值 (dBuV/m)@3m		校正 因子	結果值 (dBuV/m)@3m		限制值 (dBuV/m)@3m		餘裕值 (worse)
(MHz)	H/V	Peak	AVG	(dB)	Peak	AVG	Peak	AVG	(dB)
11000.0000	H	45.63	33.00	6.95	52.58	39.95	74.0	54.0	-14.05
11000.0000	V	46.29	33.10	6.95	53.24	40.05	74.0	54.0	-13.95
16500.0000	H	---	---	13.29	---	---	74.0	54.0	---
16500.0000	V	---	---	13.29	---	---	74.0	54.0	---
22000.0000	H	---	---	19.07	---	---	74.0	54.0	---
22000.0000	V	---	---	19.07	---	---	74.0	54.0	---
27500.0000	H	---	---	16.87	---	---	74.0	54.0	---
27500.0000	V	---	---	16.87	---	---	74.0	54.0	---

註：

1. 標記“---”表發射之訊號太弱而儀器無法量測。
2. 若以峰值檢測功能測量之值符合平均值限制值，則可視同以平均值功能測量之值亦符合平均值限制值，在此以標記“#”表之。
3. 標記“*”表示為本地震盪頻率及其諧波
4. 量測不準確度: $\pm 4.1\text{dB}$ ($1\text{GHz} \leq f < 18\text{GHz}$)

b. Chnnel Mid

基本波頻率：5580 MHz

輻射 頻率	天線 極性	機器讀值 (dBuV/m)@3m		校正 因子	結果值 (dBuV/m)@3m		限制值 (dBuV/m)@3m		餘裕值 (worse)
(MHz)	H/V	Peak	AVG	(dB)	Peak	AVG	Peak	AVG	(dB)
11160.0000	H	45.56	32.75	7.12	52.68	39.87	74.0	54.0	-14.13
11160.0000	V	46.68	32.83	7.12	53.80	39.95	74.0	54.0	-14.05
16740.0000	H	---	---	13.72	---	---	74.0	54.0	---
16740.0000	V	---	---	13.72	---	---	74.0	54.0	---
22320.0000	H	---	---	19.53	---	---	74.0	54.0	---
22320.0000	V	---	---	19.53	---	---	74.0	54.0	---
27900.0000	H	---	---	17.25	---	---	74.0	54.0	---
27900.0000	V	---	---	17.25	---	---	74.0	54.0	---

註：

1. 標記“---”表發射之訊號太弱而儀器無法量測。
2. 若以峰值檢測功能測量之值符合平均值限制值，則可視同以平均值功能測量之值亦符合平均值限制值，在此以標記“#”表之。
3. 標記“*”表示為本地震盪頻率及其諧波
4. 量測不準確度: $\pm 4.1\text{dB}$ ($1\text{GHz} \leq f < 18\text{GHz}$)

c. Chnnel High

基本波頻率：5700 MHz

輻射 頻率	天線 極性	機器讀值 (dBuV/m)@3m		校正 因子	結果值 (dBuV/m)@3m		限制值 (dBuV/m)@3m		餘裕值 (worse)
(MHz)	H/V	Peak	AVG	(dB)	Peak	AVG	Peak	AVG	(dB)
11400.0000	H	44.92	32.78	7.37	52.29	40.15	74.0	54.0	-13.85
11400.0000	V	45.56	32.97	7.37	52.93	40.34	74.0	54.0	-13.66
17100.0000	H	---	---	14.00	---	---	74.0	54.0	---
17100.0000	V	---	---	14.00	---	---	74.0	54.0	---
22800.0000	H	---	---	19.64	---	---	74.0	54.0	---
22800.0000	V	---	---	19.64	---	---	74.0	54.0	---
28500.0000	H	---	---	17.06	---	---	74.0	54.0	---
28500.0000	V	---	---	17.06	---	---	74.0	54.0	---

註：

1. 標記“---”表發射之訊號太弱而儀器無法量測。
2. 若以峰值檢測功能測量之值符合平均值限制值，則可視同以平均值功能測量之值亦符合平均值限制值，在此以標記“#”表之。
3. 標記“*”表示為本地震盪頻率及其諧波
4. 量測不準確度: $\pm 4.1\text{dB}$ ($1\text{GHz} \leq f < 18\text{GHz}$)
 $\pm 4.4\text{dB}$ ($18\text{GHz} \leq f \leq 40\text{GHz}$)

10.5.1.2 調變技術: IEEE 802.11n HT20

a. Chnnel Low

基本波頻率 : 5500 MHz

輻射 頻率	天線 極性	機器讀值 (dBuV/m)@3m		校正 因子	結果值 (dBuV/m)@3m		限制值 (dBuV/m)@3m		餘裕值 (worse)
(MHz)	H/V	Peak	AVG	(dB)	Peak	AVG	Peak	AVG	(dB)
11000.0000	H	45.93	33.26	6.95	52.88	40.21	74.0	54.0	-13.79
11000.0000	V	45.38	33.13	6.95	52.33	40.08	74.0	54.0	-13.92
16500.0000	H	---	---	13.29	---	---	74.0	54.0	---
16500.0000	V	---	---	13.29	---	---	74.0	54.0	---
22000.0000	H	---	---	19.07	---	---	74.0	54.0	---
22000.0000	V	---	---	19.07	---	---	74.0	54.0	---
27500.0000	H	---	---	16.87	---	---	74.0	54.0	---
27500.0000	V	---	---	16.87	---	---	74.0	54.0	---

註：

1. 標記“---”表發射之訊號太弱而儀器無法量測。
2. 若以峰值檢測功能測量之值符合平均值限制值，則可視同以平均值功能測量之值亦符合平均值限制值，在此以標記“#”表之。
3. 標記“*”表示為本地震盪頻率及其諧波
4. 量測不準確度: $\pm 4.1\text{dB}$ ($1\text{GHz} \leq f < 18\text{GHz}$)

b. Chnnel Mid

基本波頻率：5580 MHz

輻射 頻率	天線 極性	機器讀值 (dBuV/m)@3m		校正 因子	結果值 (dBuV/m)@3m		限制值 (dBuV/m)@3m		餘裕值 (worse)
(MHz)	H/V	Peak	AVG	(dB)	Peak	AVG	Peak	AVG	(dB)
11160.0000	H	46.68	32.94	7.12	53.80	40.06	74.0	54.0	-13.94
11160.0000	V	45.65	32.86	7.12	52.77	39.98	74.0	54.0	-14.02
16740.0000	H	---	---	13.72	---	---	74.0	54.0	---
16740.0000	V	---	---	13.72	---	---	74.0	54.0	---
22320.0000	H	---	---	19.53	---	---	74.0	54.0	---
22320.0000	V	---	---	19.53	---	---	74.0	54.0	---
27900.0000	H	---	---	17.25	---	---	74.0	54.0	---
27900.0000	V	---	---	17.25	---	---	74.0	54.0	---

註：

1. 標記“---”表發射之訊號太弱而儀器無法量測。
2. 若以峰值檢測功能測量之值符合平均值限制值，則可視同以平均值功能測量之值亦符合平均值限制值，在此以標記“#”表之。
3. 標記“*”表示為本地震盪頻率及其諧波
4. 量測不準確度: $\pm 4.1\text{dB}$ ($1\text{GHz} \leq f < 18\text{GHz}$)

c. Chnnel High

基本波頻率：5700 MHz

輻射 頻率	天線 極性	機器讀值 (dBuV/m)@3m		校正 因子	結果值 (dBuV/m)@3m		限制值 (dBuV/m)@3m		餘裕值 (worse)
(MHz)	H/V	Peak	AVG	(dB)	Peak	AVG	Peak	AVG	(dB)
11400.0000	H	45.43	32.80	7.37	52.80	40.17	74.0	54.0	-13.83
11400.0000	V	46.02	32.87	7.37	53.39	40.24	74.0	54.0	-13.76
17100.0000	H	---	---	14.00	---	---	74.0	54.0	---
17100.0000	V	---	---	14.00	---	---	74.0	54.0	---
22800.0000	H	---	---	19.64	---	---	74.0	54.0	---
22800.0000	V	---	---	19.64	---	---	74.0	54.0	---
28500.0000	H	---	---	17.06	---	---	74.0	54.0	---
28500.0000	V	---	---	17.06	---	---	74.0	54.0	---

註：

1. 標記“---”表發射之訊號太弱而儀器無法量測。
2. 若以峰值檢測功能測量之值符合平均值限制值，則可視同以平均值功能測量之值亦符合平均值限制值，在此以標記“#”表之。
3. 標記“*”表示為本地震盪頻率及其諧波
4. 量測不準確度: $\pm 4.1\text{dB}$ ($1\text{GHz} \leq f < 18\text{GHz}$)
 $\pm 4.4\text{dB}$ ($18\text{GHz} \leq f \leq 40\text{GHz}$)

10.5.1.3 調變技術: IEEE 802.11n HT40

a. Chnnel Low

基本波頻率 : 5510 MHz

輻射 頻率	天線 極性	機器讀值 (dBuV/m)@3m		校正 因子	結果值 (dBuV/m)@3m		限制值 (dBuV/m)@3m		餘裕值 (worse)
(MHz)	H/V	Peak	AVG	(dB)	Peak	AVG	Peak	AVG	(dB)
11020.0000	H	44.91	33.02	6.98	51.89	40.00	74.0	54.0	-14.00
11020.0000	V	45.15	33.07	6.98	52.13	40.05	74.0	54.0	-13.95
16530.0000	H	---	---	13.34	---	---	74.0	54.0	---
16530.0000	V	---	---	13.34	---	---	74.0	54.0	---
22040.0000	H	---	---	19.13	---	---	74.0	54.0	---
22040.0000	V	---	---	19.13	---	---	74.0	54.0	---
27550.0000	H	---	---	16.91	---	---	74.0	54.0	---
27550.0000	V	---	---	16.91	---	---	74.0	54.0	---

註：

1. 標記“---”表發射之訊號太弱而儀器無法量測。
2. 若以峰值檢測功能測量之值符合平均值限制值，則可視同以平均值功能測量之值亦符合平均值限制值，在此以標記“#”表之。
3. 標記“*”表示為本地震盪頻率及其諧波
4. 量測不準確度: $\pm 4.1\text{dB}$ ($1\text{GHz} \leq f < 18\text{GHz}$)

b. Chnnel Mid

基本波頻率：5590 MHz

輻射 頻率	天線 極性	機器讀值 (dBuV/m)@3m		校正 因子	結果值 (dBuV/m)@3m		限制值 (dBuV/m)@3m		餘裕值 (worse)
(MHz)	H/V	Peak	AVG	(dB)	Peak	AVG	Peak	AVG	(dB)
11180.0000	H	45.82	32.50	7.13	52.95	39.63	74.0	54.0	-14.37
11180.0000	V	45.86	32.62	7.13	52.99	39.75	74.0	54.0	-14.25
16770.0000	H	---	---	13.78	---	---	74.0	54.0	---
16770.0000	V	---	---	13.78	---	---	74.0	54.0	---
22360.0000	H	---	---	19.58	---	---	74.0	54.0	---
22360.0000	V	---	---	19.58	---	---	74.0	54.0	---
27950.0000	H	---	---	17.29	---	---	74.0	54.0	---
27950.0000	V	---	---	17.29	---	---	74.0	54.0	---

註：

1. 標記“---”表發射之訊號太弱而儀器無法量測。
2. 若以峰值檢測功能測量之值符合平均值限制值，則可視同以平均值功能測量之值亦符合平均值限制值，在此以標記“#”表之。
3. 標記“*”表示為本地震盪頻率及其諧波
4. 量測不準確度: $\pm 4.1\text{dB}$ ($1\text{GHz} \leq f < 18\text{GHz}$)

c. Chnnel High

基本波頻率：5670 MHz

輻射 頻率	天線 極性	機器讀值 (dBuV/m)@3m		校正 因子	結果值 (dBuV/m)@3m		限制值 (dBuV/m)@3m		餘裕值 (worse)
(MHz)	H/V	Peak	AVG	(dB)	Peak	AVG	Peak	AVG	(dB)
11340.0000	H	45.59	32.91	7.31	52.90	40.22	74.0	54.0	-13.78
11340.0000	V	45.92	32.95	7.31	53.23	40.26	74.0	54.0	-13.74
17010.0000	H	---	---	14.16	---	---	74.0	54.0	---
17010.0000	V	---	---	14.16	---	---	74.0	54.0	---
22680.0000	H	---	---	19.71	---	---	74.0	54.0	---
22680.0000	V	---	---	19.71	---	---	74.0	54.0	---
28350.0000	H	---	---	17.15	---	---	74.0	54.0	---
28350.0000	V	---	---	17.15	---	---	74.0	54.0	---

註：

1. 標記“---”表發射之訊號太弱而儀器無法量測。
2. 若以峰值檢測功能測量之值符合平均值限制值，則可視同以平均值功能測量之值亦符合平均值限制值，在此以標記“#”表之。
3. 標記“*”表示為本地震盪頻率及其諧波
4. 量測不準確度: $\pm 4.1\text{dB}$ ($1\text{GHz} \leq f < 18\text{GHz}$)
 $\pm 4.4\text{dB}$ ($18\text{GHz} \leq f \leq 40\text{GHz}$)

10.5.1.4 IEEE 802.11ac (80MHz)

a. Chnnel Low

基本波頻率：5530 MHz

輻射 頻率	天線 極性	機器讀值 (dBuV/m)@3m		校正 因子	結果值 (dBuV/m)@3m		限制值 (dBuV/m)@3m		餘裕值 (worse)
(MHz)	H/V	Peak	AVG	(dB)	Peak	AVG	Peak	AVG	(dB)
11060.0000	H	46.08	33.10	7.01	53.09	40.11	74.0	54.0	-13.89
11060.0000	V	45.54	32.90	7.01	52.55	39.91	74.0	54.0	-14.09
16590.0000	H	---	---	13.46	---	---	74.0	54.0	---
16590.0000	V	---	---	13.46	---	---	74.0	54.0	---
22120.0000	H	---	---	19.24	---	---	74.0	54.0	---
22120.0000	V	---	---	19.24	---	---	74.0	54.0	---
27650.0000	H	---	---	17.01	---	---	74.0	54.0	---
27650.0000	V	---	---	17.01	---	---	74.0	54.0	---

註：

1. 標記“---”表發射之訊號太弱而儀器無法量測。
2. 若以峰值檢測功能測量之值符合平均值限制值，則可視同以平均值功能測量之值亦符合平均值限制值，在此以標記“#”表之。
3. 標記“*”表示為本地震盪頻率及其諧波
4. 量測不準確度: $\pm 4.1\text{dB}$ ($1\text{GHz} \leq f < 18\text{GHz}$)

b. Chnnel High

基本波頻率：5610 MHz

輻射 頻率	天線 極性	機器讀值 (dBuV/m)@3m		校正 因子	結果值 (dBuV/m)@3m		限制值 (dBuV/m)@3m		餘裕值 (worse)
(MHz)	H/V	Peak	AVG	(dB)	Peak	AVG	Peak	AVG	(dB)
11220.0000	H	45.52	32.67	7.19	52.71	39.86	74.0	54.0	-14.14
11220.0000	V	45.93	32.83	7.19	53.12	40.02	74.0	54.0	-13.98
16830.0000	H	---	---	13.88	---	---	74.0	54.0	---
16830.0000	V	---	---	13.88	---	---	74.0	54.0	---
22440.0000	H	---	---	19.71	---	---	74.0	54.0	---
22440.0000	V	---	---	19.71	---	---	74.0	54.0	---
28050.0000	H	---	---	17.31	---	---	74.0	54.0	---
28050.0000	V	---	---	17.31	---	---	74.0	54.0	---

註：

1. 標記“---”表發射之訊號太弱而儀器無法量測。
2. 若以峰值檢測功能測量之值符合平均值限制值，則可視同以平均值功能測量之值亦符合平均值限制值，在此以標記“#”表之。
3. 標記“*”表示為本地震盪頻率及其諧波
4. 量測不準確度: $\pm 4.1\text{dB}$ ($1\text{GHz} \leq f < 18\text{GHz}$)
 $\pm 4.4\text{dB}$ ($18\text{GHz} \leq f \leq 40\text{GHz}$)

10.5.2 諧波及其它不必要之訊號測試圖

10.5.2.1 調變技術: IEEE 802.11a

a. Channel Low

操作模式：發射接收

基本波頻率：5500 MHz

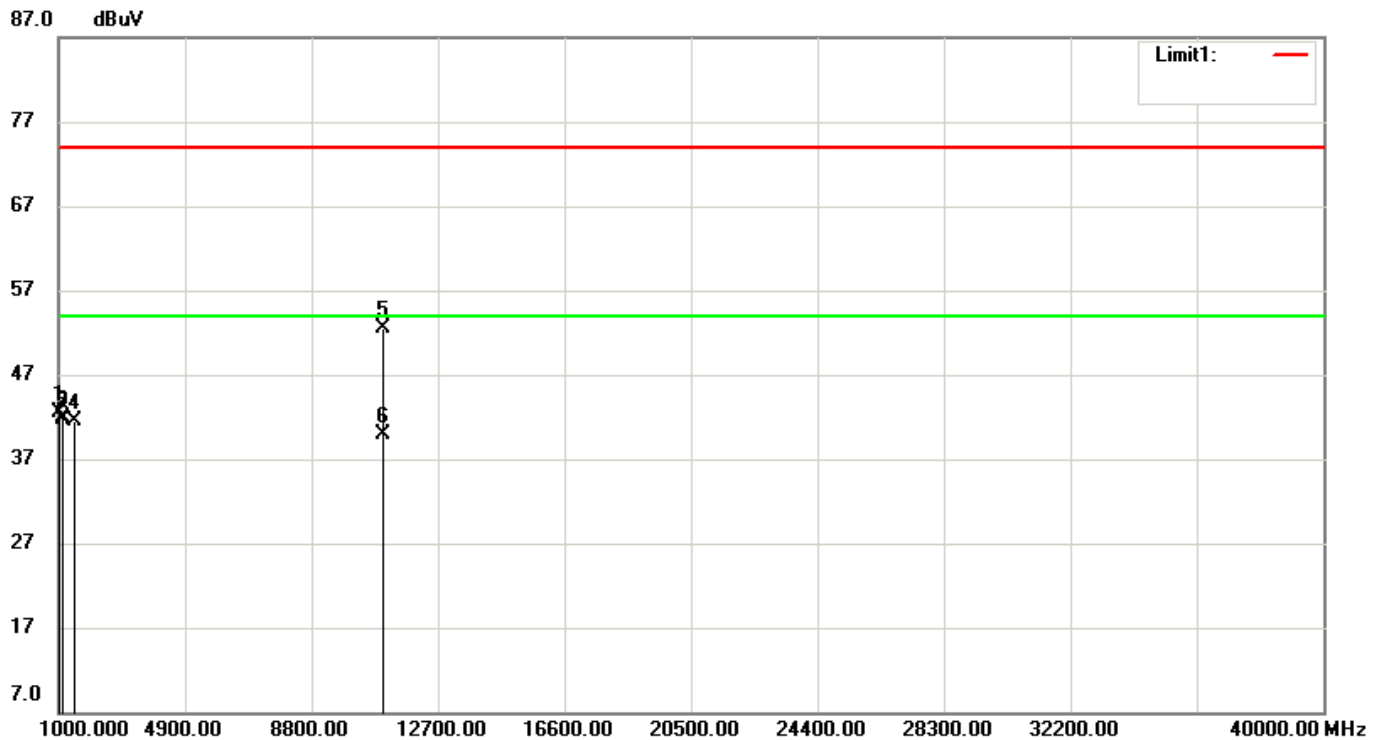
File: 19-07-MAS-008_5-6a
Site RE02-EMC B1- N2

#27

Date: 2019/8/22

Temperature: 24 °C

Humidity: 61 %

Condition: NCC_Above1G_Pk
EUT: Wireless File Transmitter
Model: DS586194
Test Mode: TX_Y
Note: CH LOWPolarization: Horizontal
Distance: 3m
Operator: Phillip

No.	Frequency (MHz)	Reading (dBuV)	Detector	Corrected dB	Result (dBuV)	Limit (dBuV)	Margin (dB)
1	1000.0000	52.56	peak	-10.04	42.52	74.00	-31.48
2	1071.63460	51.49	peak	-9.79	41.70	74.00	-32.30
3	1121.77880	51.56	peak	-9.62	41.94	74.00	-32.06
4	1494.27880	49.89	peak	-8.29	41.60	74.00	-32.40
5	11000.00000	45.63	peak	6.95	52.58	74.00	-21.42
6	11000.00000	33.00	AVG	6.95	39.95	54.00	-14.05

註：1. 標記“---”表發射之訊號太弱而儀器無法量測。

2. 若以峰值檢測功能測量之值符合平均值限制值，則可視同以平均值功能測量之值亦符合平均值限制值，在此以標記“#”表之。

3. 標記“*”表示為本地震盪頻率及其諧波

4. 量測不準確度: $\pm 4.1\text{dB}$ ($1\text{GHz} \leq f < 18\text{GHz}$)
 $\pm 4.4\text{dB}$ ($18\text{GHz} \leq f \leq 40\text{GHz}$)

操作模式：發射接收

基本波頻率：5500 MHz

File: 19-07-MAS-008_5-6a

#28

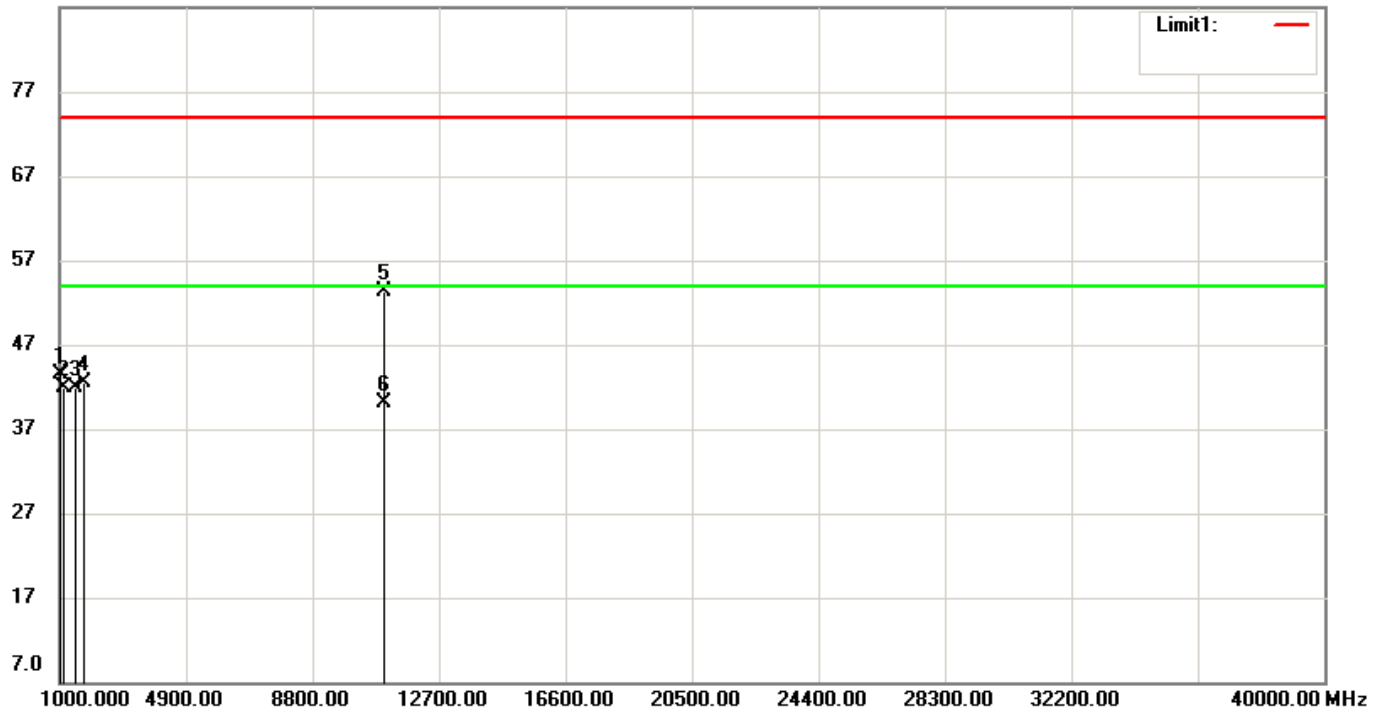
Date: 2019/8/22

Temperature: 24 °C

Site RE02-EMC B1- N2

Humidity: 61 %

87.0 dBuV



Condition: NCC_Above1G_Pk
 EUT: Wireless File Transmitter
 Model: DS586194
 Test Mode: TX_Y
 Note: CH LOW

Polarization: Vertical
 Distance: 3m
 Operator: Phillip

No.	Frequency (MHz)	Reading (dBuV)	Detector	Corrected dB	Result (dBuV)	Limit (dBuV)	Margin (dB)
1	1000.0000	53.54	peak	-10.04	43.50	74.00	-30.50
2	1071.63460	51.72	peak	-9.79	41.93	74.00	-32.07
3	1494.27880	50.29	peak	-8.29	42.00	74.00	-32.00
4	1694.85570	49.12	peak	-6.52	42.60	74.00	-31.40
5	11000.00000	46.29	peak	6.95	53.24	74.00	-20.76
6	11000.00000	33.10	AVG	6.95	40.05	54.00	-13.95

註：1. 標記“---”表發射之訊號太弱而儀器無法量測。

2. 若以峰值檢測功能測量之值符合平均值限制值，則可視同以平均值功能測量之值亦符合平均值限制值，在此以標記“#”表之。

3. 標記“*”表示為本地震盪頻率及其諧波

4. 量測不準確度: $\pm 4.1\text{dB}$ ($1\text{GHz} \leq f < 18\text{GHz}$)
 $\pm 4.4\text{dB}$ ($18\text{GHz} \leq f \leq 40\text{GHz}$)

b. Channel Mid

操作模式：發射接收

基本波頻率：5580 MHz

File: 19-07-MAS-008_5-6a

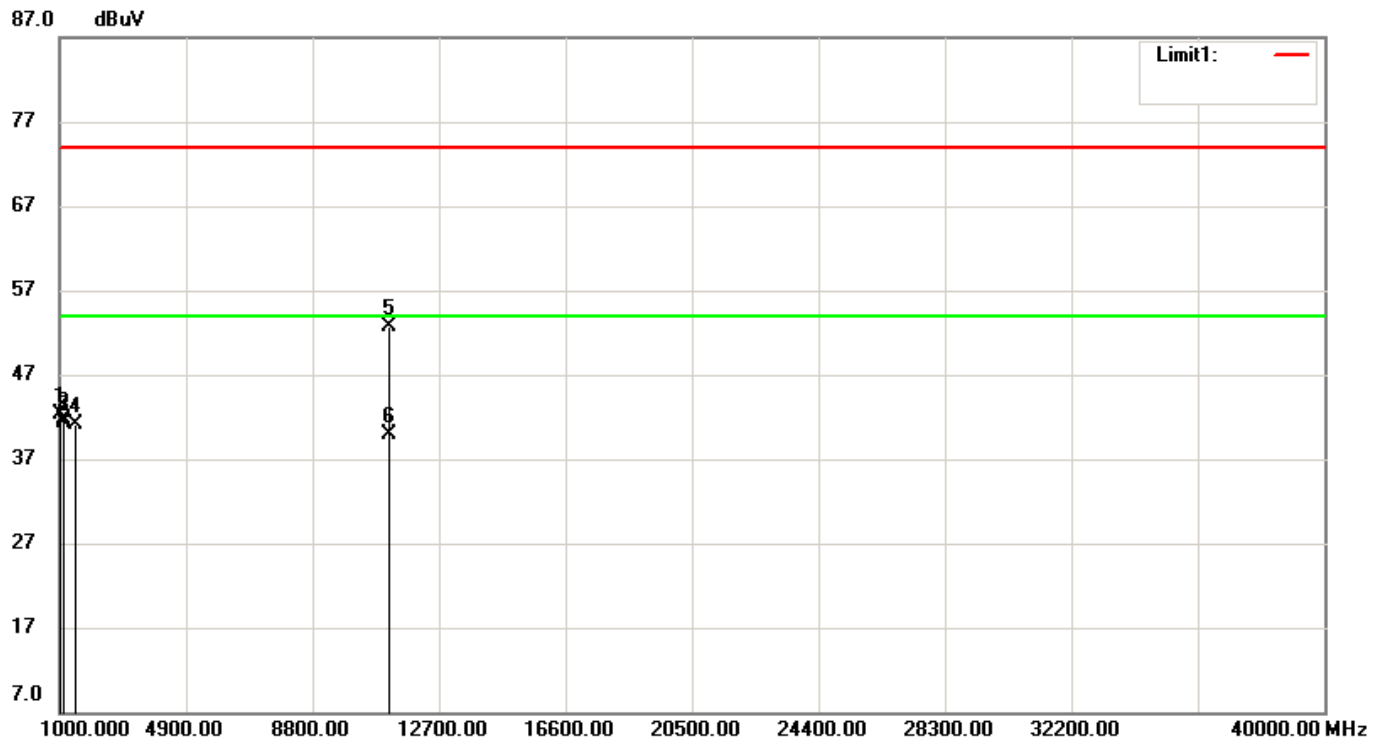
#29

Date: 2019/8/22

Temperature: 24 °C

Site RE02-EMC B1- N2

Humidity: 61 %



Condition: NCC_Above1G_Pk
 EUT: Wireless File Transmitter
 Model: DS586194
 Test Mode: TX_Y
 Note: CH MID

Polarization: Horizontal
 Distance: 3m
 Operator: Phillip

No.	Frequency (MHz)	Reading (dBuV)	Detector	Corrected dB	Result (dBuV)	Limit (dBuV)	Margin (dB)
1	1000.0000	52.35	peak	-10.04	42.31	74.00	-31.69
2	1071.63460	51.56	peak	-9.79	41.77	74.00	-32.23
3	1121.77880	50.84	peak	-9.62	41.22	74.00	-32.78
4	1494.27880	49.33	peak	-8.29	41.04	74.00	-32.96
5	11160.00000	45.56	peak	7.12	52.68	74.00	-21.32
6	11160.00000	32.75	AVG	7.12	39.87	54.00	-14.13

註：1. 標記“---”表發射之訊號太弱而儀器無法量測。

2. 若以峰值檢測功能測量之值符合平均值限制值，則可視同以平均值功能測量之值亦符合平均值限制值，在此以標記“#”表之。

3. 標記“*”表示為本地震盪頻率及其諧波

4. 量測不準確度: $\pm 4.1\text{dB}(1\text{GHz} \leq f < 18\text{GHz})$
 $\pm 4.4\text{dB}(18\text{GHz} \leq f \leq 40\text{GHz})$

操作模式：發射接收

基本波頻率：5580 MHz

File: 19-07-MAS-008_5-6a

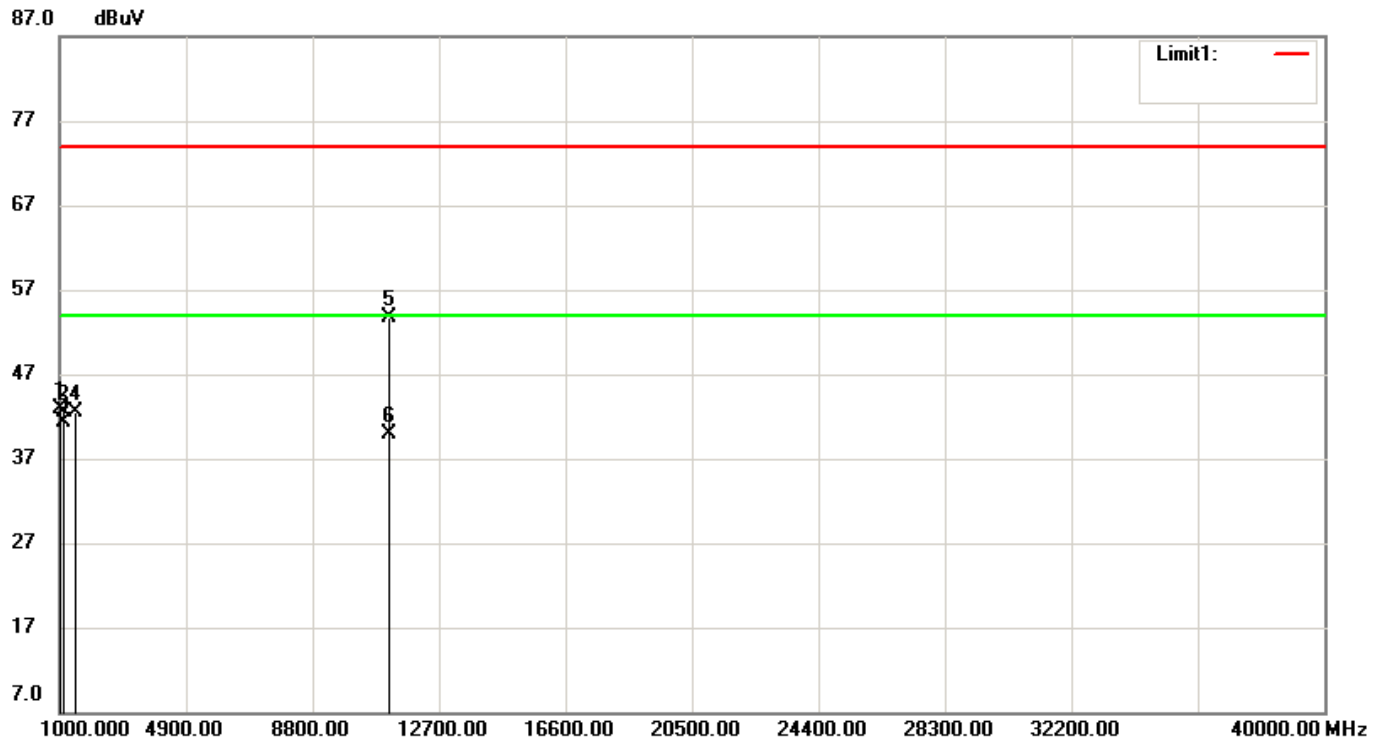
#30

Date: 2019/8/22

Temperature: 24 °C

Site RE02-EMC B1- N2

Humidity: 61 %



Condition: NCC_Above1G_Pk
 EUT: Wireless File Transmitter
 Model: DS586194
 Test Mode: TX_Y
 Note: CH MID

Polarization: Vertical
 Distance: 3m
 Operator: Phillip

No.	Frequency (MHz)	Reading (dBuV)	Detector	Corrected dB	Result (dBuV)	Limit (dBuV)	Margin (dB)
1	1000.0000	53.01	peak	-10.04	42.97	74.00	-31.03
2	1071.63460	52.23	peak	-9.79	42.44	74.00	-31.56
3	1121.77880	50.99	peak	-9.62	41.37	74.00	-32.63
4	1494.27880	50.75	peak	-8.29	42.46	74.00	-31.54
5	11160.00000	46.68	peak	7.12	53.80	74.00	-20.20
6	11160.00000	32.83	AVG	7.12	39.95	54.00	-14.05

註：1. 標記“---”表發射之訊號太弱而儀器無法量測。

2. 若以峰值檢測功能測量之值符合平均值限制值，則可視同以平均值功能測量之值亦符合平均值限制值，在此以標記“#”表之。

3. 標記“*”表示為本地震盪頻率及其諧波

4. 量測不準確度: $\pm 4.1\text{dB}$ ($1\text{GHz} \leq f < 18\text{GHz}$)
 $\pm 4.4\text{dB}$ ($18\text{GHz} \leq f \leq 40\text{GHz}$)

c. Channel High

操作模式：發射接收

基本波頻率：5700 MHz

File: 19-07-MAS-008_5-6a

#31

Date: 2019/8/22

Temperature: 24 °C

Site RE02-EMC B1- N2

Humidity: 61 %



Condition: NCC_Above1G_Pk
 EUT: Wireless File Transmitter
 Model: DS586194
 Test Mode: TX_Y
 Note: CH HIGH

Polarization: Horizontal
 Distance: 3m
 Operator: Phillip

No.	Frequency (MHz)	Reading (dBuV)	Detector	Corrected dB	Result (dBuV)	Limit (dBuV)	Margin (dB)
1	1000.0000	53.35	peak	-10.04	43.31	74.00	-30.69
2	1071.63460	51.03	peak	-9.79	41.24	74.00	-32.76
3	1121.77880	51.22	peak	-9.62	41.60	74.00	-32.40
4	1494.27880	50.06	peak	-8.29	41.77	74.00	-32.23
5	11400.00000	44.92	peak	7.37	52.29	74.00	-21.71
6	11400.00000	32.78	AVG	7.37	40.15	54.00	-13.85

註：1. 標記“---”表發射之訊號太弱而儀器無法量測。

2. 若以峰值檢測功能測量之值符合平均值限制值，則可視同以平均值功能測量之值亦符合平均值限制值，在此以標記“#”表之。

3. 標記“*”表示為本地震盪頻率及其諧波

4. 量測不準確度: $\pm 4.1\text{dB}$ ($1\text{GHz} \leq f < 18\text{GHz}$)
 $\pm 4.4\text{dB}$ ($18\text{GHz} \leq f \leq 40\text{GHz}$)

操作模式：發射接收

基本波頻率：5700 MHz

File: 19-07-MAS-008_5-6a

#32

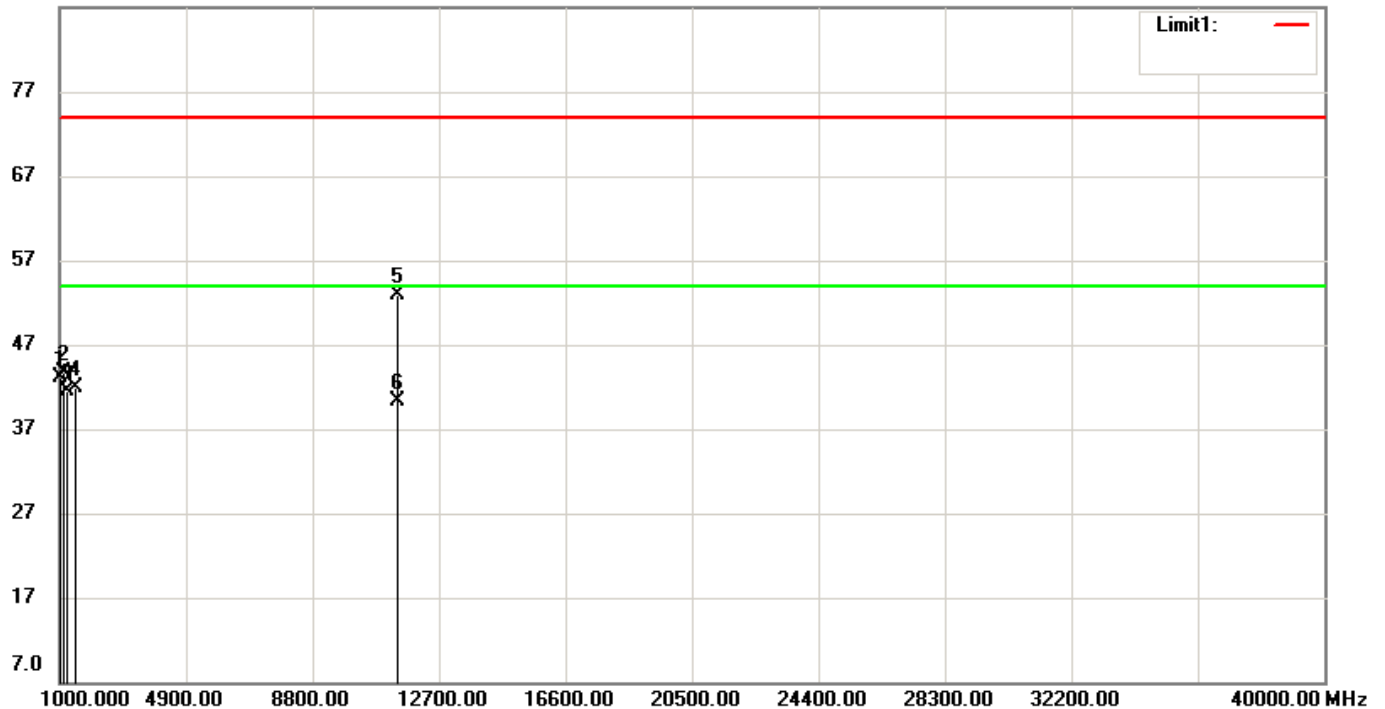
Date: 2019/8/22

Temperature: 24 °C

Site RE02-EMC B1- N2

Humidity: 61 %

87.0 dBuV



Condition: NCC_Above1G_Pk
 EUT: Wireless File Transmitter
 Model: DS586194
 Test Mode: TX_Y
 Note: CH HIGH

Polarization: Vertical
 Distance: 3m
 Operator: Phillip

No.	Frequency (MHz)	Reading (dBuV)	Detector	Corrected dB	Result (dBuV)	Limit (dBuV)	Margin (dB)
1	1000.0000	53.05	peak	-10.04	43.01	74.00	-30.99
2	1071.63460	53.47	peak	-9.79	43.68	74.00	-30.32
3	1222.06730	50.77	peak	-9.26	41.51	74.00	-32.49
4	1494.27880	50.28	peak	-8.29	41.99	74.00	-32.01
5	11400.00000	45.56	peak	7.37	52.93	74.00	-21.07
6	11400.00000	32.97	AVG	7.37	40.34	54.00	-13.66

註：1. 標記“---”表發射之訊號太弱而儀器無法量測。

2. 若以峰值檢測功能測量之值符合平均值限制值，則可視同以平均值功能測量之值亦符合平均值限制值，在此以標記“#”表之。

3. 標記“*”表示為本地震盪頻率及其諧波

4. 量測不準確度: $\pm 4.1\text{dB}$ ($1\text{GHz} \leq f < 18\text{GHz}$)
 $\pm 4.4\text{dB}$ ($18\text{GHz} \leq f \leq 40\text{GHz}$)

10.5.2.2 調變技術: IEEE 802.11an HT20

a. Channel Low

操作模式：發射接收

基本波頻率：5500 MHz

File: 19-07-MAS-008_5-6n20

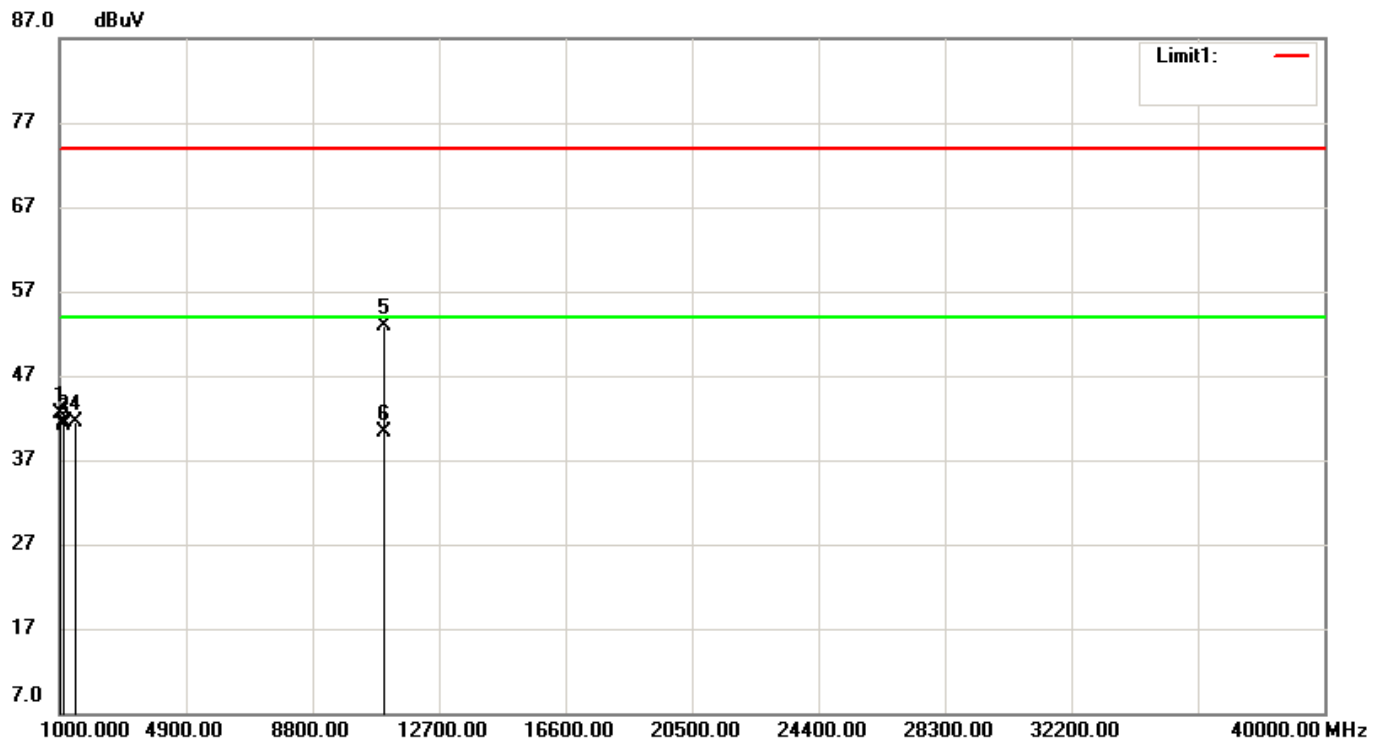
#27

Date: 2019/8/22

Temperature: 24 °C

Site RE02-EMC B1- N2

Humidity: 61 %



Condition: NCC_Above1G_Pk
 EUT: Wireless File Transmitter
 Model: DS586194
 Test Mode: TX_Y
 Note: CH LOW

Polarization: Horizontal
 Distance: 3m
 Operator: Phillip

No.	Frequency (MHz)	Reading (dBuV)	Detector	Corrected dB	Result (dBuV)	Limit (dBuV)	Margin (dB)
1	1000.0000	52.54	peak	-10.04	42.50	74.00	-31.50
2	1071.63460	51.37	peak	-9.79	41.58	74.00	-32.42
3	1121.77880	50.70	peak	-9.62	41.08	74.00	-32.92
4	1494.27880	49.82	peak	-8.29	41.53	74.00	-32.47
5	11000.00000	45.93	peak	6.95	52.88	74.00	-21.12
6	11000.00000	33.26	AVG	6.95	40.21	54.00	-13.79

註：1. 標記“---”表發射之訊號太弱而儀器無法量測。

2. 若以峰值檢測功能測量之值符合平均值限制值，則可視同以平均值功能測量之值亦符合平均值限制值，在此以標記“#”表之。

3. 標記“*”表示為本地震盪頻率及其諧波

4. 量測不準確度: $\pm 4.1\text{dB}$ ($1\text{GHz} \leq f < 18\text{GHz}$)
 $\pm 4.4\text{dB}$ ($18\text{GHz} \leq f \leq 40\text{GHz}$)

操作模式：發射接收

基本波頻率：5500 MHz

File: 19-07-MAS-008_5-6n20

#28

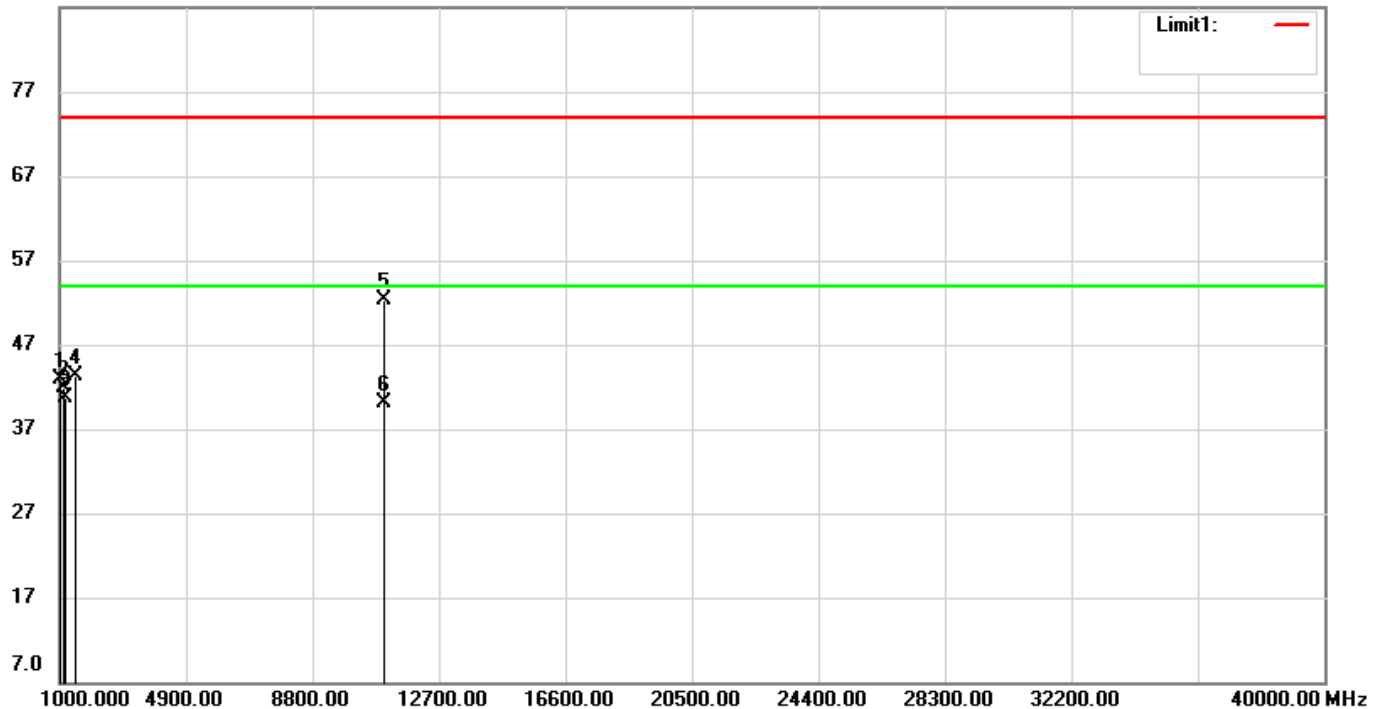
Date: 2019/8/22

Temperature: 24 °C

Site RE02-EMC B1- N2

Humidity: 61 %

87.0 dBuV



Condition: NCC_Above1G_Pk
 EUT: Wireless File Transmitter
 Model: DS586194
 Test Mode: TX_Y
 Note: CH LOW

Polarization: Vertical
 Distance: 3m
 Operator: Phillip

No.	Frequency (MHz)	Reading (dBuV)	Detector	Corrected dB	Result (dBuV)	Limit (dBuV)	Margin (dB)
1	1000.0000	52.88	peak	-10.04	42.84	74.00	-31.16
2	1071.63460	51.69	peak	-9.79	41.90	74.00	-32.10
3	1171.92300	50.23	peak	-9.44	40.79	74.00	-33.21
4	1494.27880	51.53	peak	-8.29	43.24	74.00	-30.76
5	11000.00000	45.38	peak	6.95	52.33	74.00	-21.67
6	11000.00000	33.13	AVG	6.95	40.08	54.00	-13.92

註：1. 標記“---”表發射之訊號太弱而儀器無法量測。

2. 若以峰值檢測功能測量之值符合平均值限制值，則可視同以平均值功能測量之值亦符合平均值限制值，在此以標記“#”表之。

3. 標記“*”表示為本地震盪頻率及其諧波

4. 量測不準確度: $\pm 4.1\text{dB}$ ($1\text{GHz} \leq f < 18\text{GHz}$)
 $\pm 4.4\text{dB}$ ($18\text{GHz} \leq f \leq 40\text{GHz}$)

b. Channel Mid

操作模式：發射接收

基本波頻率：5580 MHz

File: 19-07-MAS-008_5-6n20

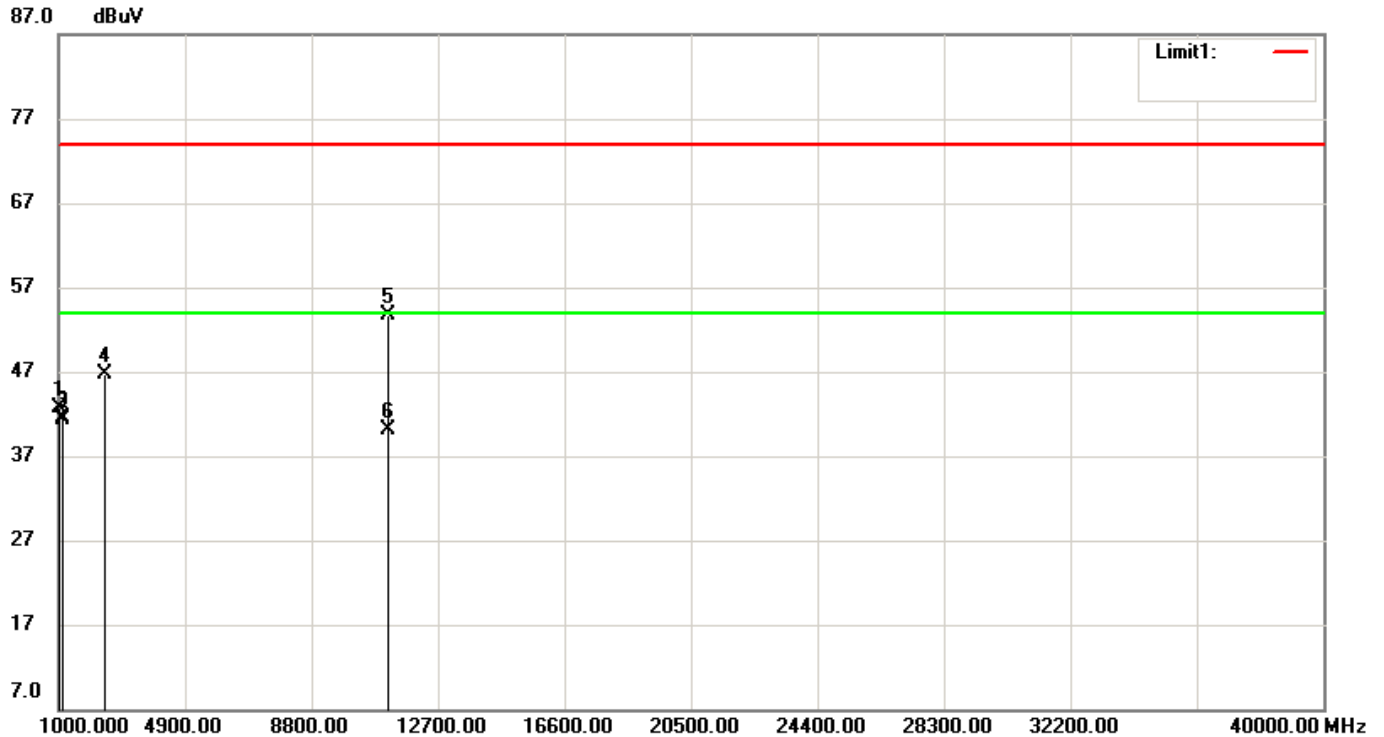
#29

Date: 2019/8/22

Temperature: 24 °C

Site RE02-EMC B1- N2

Humidity: 61 %



Condition: NCC_Above1G_Pk
 EUT: Wireless File Transmitter
 Model: DS586194
 Test Mode: TX_Y
 Note: CH MID

Polarization: Horizontal
 Distance: 3m
 Operator: Phillip

No.	Frequency (MHz)	Reading (dBuV)	Detector	Corrected dB	Result (dBuV)	Limit (dBuV)	Margin (dB)
1	1000.0000	52.83	peak	-10.04	42.79	74.00	-31.21
2	1071.63460	51.01	peak	-9.79	41.22	74.00	-32.78
3	1121.77880	51.13	peak	-9.62	41.51	74.00	-32.49
4	2418.36530	49.37	peak	-2.63	46.74	74.00	-27.26
5	11160.00000	46.68	peak	7.12	53.80	74.00	-20.20
6	11160.00000	32.94	AVG	7.12	40.06	54.00	-13.94

註：1. 標記“---”表發射之訊號太弱而儀器無法量測。

2. 若以峰值檢測功能測量之值符合平均值限制值，則可視同以平均值功能測量之值亦符合平均值限制值，在此以標記“#”表之。

3. 標記“*”表示為本地震盪頻率及其諧波

4. 量測不準確度: $\pm 4.1\text{dB}$ ($1\text{GHz} \leq f < 18\text{GHz}$)
 $\pm 4.4\text{dB}$ ($18\text{GHz} \leq f \leq 40\text{GHz}$)

操作模式：發射接收

基本波頻率：5580 MHz

File: 19-07-MAS-008_5-6n20

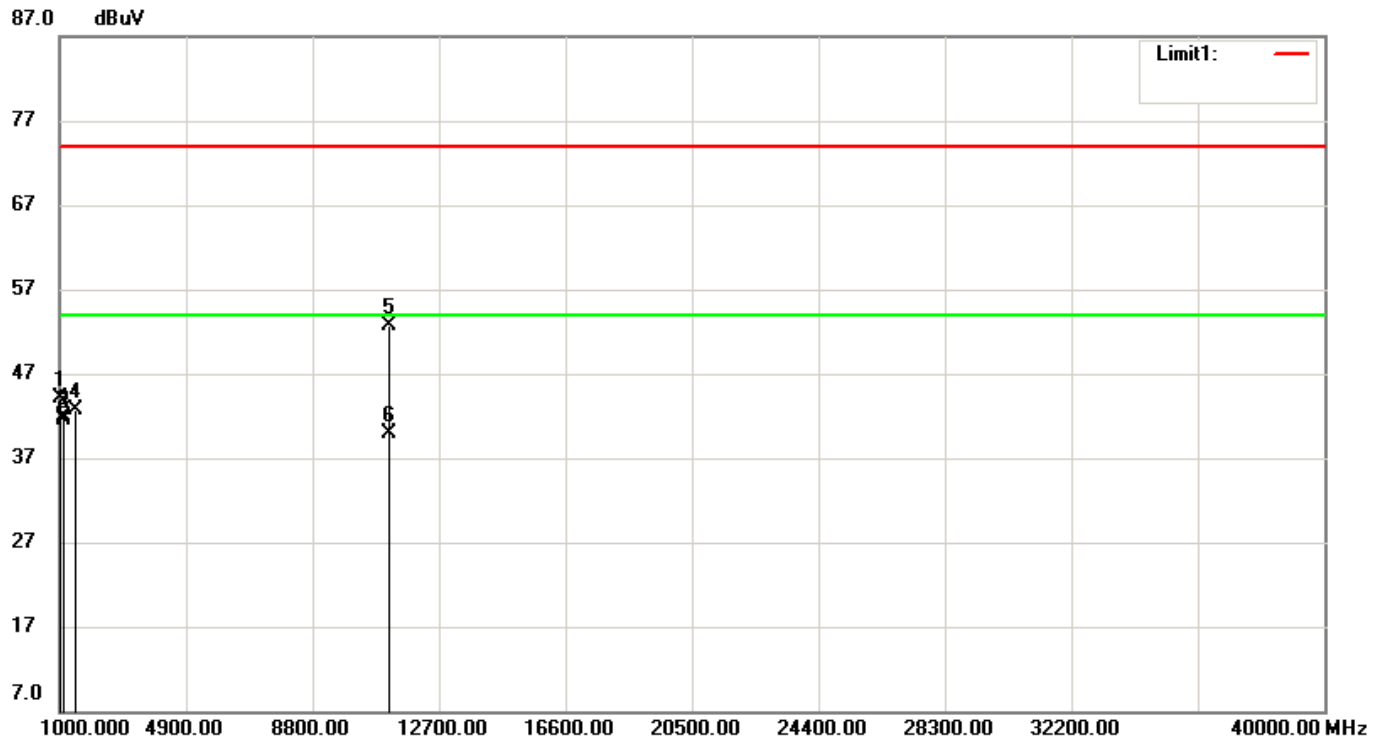
#30

Date: 2019/8/22

Temperature: 24 °C

Site RE02-EMC B1- N2

Humidity: 61 %



Condition: NCC_Above1G_Pk
 EUT: Wireless File Transmitter
 Model: DS586194
 Test Mode: TX_Y
 Note: CH MID

Polarization: Vertical
 Distance: 3m
 Operator: Phillip

No.	Frequency (MHz)	Reading (dBuV)	Detector	Corrected dB	Result (dBuV)	Limit (dBuV)	Margin (dB)
1	1000.0000	54.06	peak	-10.04	44.02	74.00	-29.98
2	1071.63460	51.78	peak	-9.79	41.99	74.00	-32.01
3	1121.77880	51.18	peak	-9.62	41.56	74.00	-32.44
4	1494.27880	50.91	peak	-8.29	42.62	74.00	-31.38
5	11160.00000	45.65	peak	7.12	52.77	74.00	-21.23
6	11160.00000	32.86	AVG	7.12	39.98	54.00	-14.02

註：1. 標記“---”表發射之訊號太弱而儀器無法量測。

2. 若以峰值檢測功能測量之值符合平均值限制值，則可視同以平均值功能測量之值亦符合平均值限制值，在此以標記“#”表之。

3. 標記“*”表示為本地震盪頻率及其諧波

4. 量測不準確度: $\pm 4.1\text{dB}$ ($1\text{GHz} \leq f < 18\text{GHz}$)
 $\pm 4.4\text{dB}$ ($18\text{GHz} \leq f \leq 40\text{GHz}$)

c. Channel High

操作模式：發射接收

基本波頻率：5700 MHz

File: 19-07-MAS-008_5-6n20

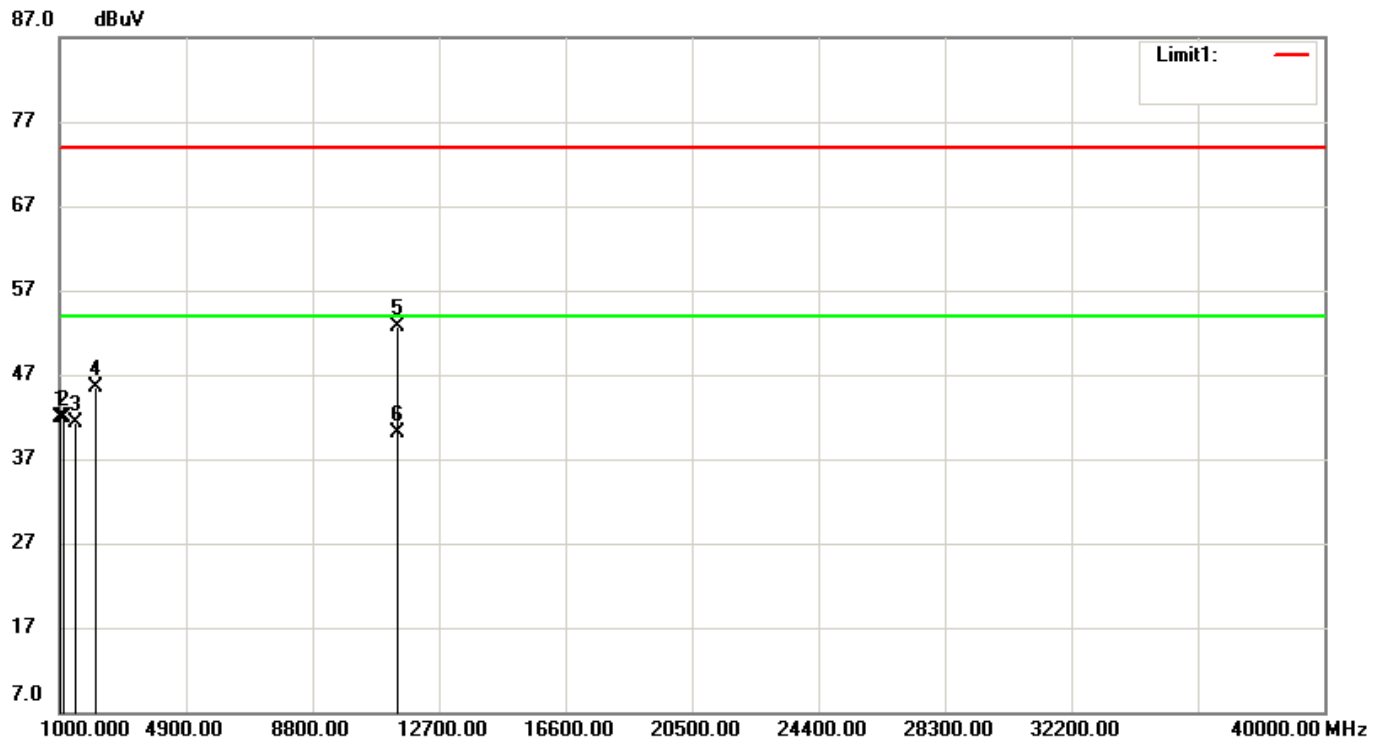
#31

Date: 2019/8/22

Temperature: 24 °C

Site RE02-EMC B1- N2

Humidity: 61 %



Condition: NCC_Above1G_Pk
 EUT: Wireless File Transmitter
 Model: DS586194
 Test Mode: TX_Y
 Note: CH HIGH

Polarization: Horizontal
 Distance: 3m
 Operator: Phillip

No.	Frequency (MHz)	Reading (dBuV)	Detector	Corrected dB	Result (dBuV)	Limit (dBuV)	Margin (dB)
1	1000.0000	52.04	peak	-10.04	42.00	74.00	-32.00
2	1121.77880	51.48	peak	-9.62	41.86	74.00	-32.14
3	1494.27880	49.66	peak	-8.29	41.37	74.00	-32.63
4	2074.51920	48.97	peak	-3.56	45.41	74.00	-28.59
5	11400.00000	45.43	peak	7.37	52.80	74.00	-21.20
6	11400.00000	32.80	AVG	7.37	40.17	54.00	-13.83

註：1. 標記“---”表發射之訊號太弱而儀器無法量測。

2. 若以峰值檢測功能測量之值符合平均值限制值，則可視同以平均值功能測量之值亦符合平均值限制值，在此以標記“#”表之。

3. 標記“*”表示為本地震盪頻率及其諧波

4. 量測不準確度: $\pm 4.1\text{dB}(1\text{GHz} \leq f < 18\text{GHz})$
 $\pm 4.4\text{dB}(18\text{GHz} \leq f \leq 40\text{GHz})$

操作模式：發射接收

基本波頻率：5700 MHz

File: 19-07-MAS-008_5-6n20

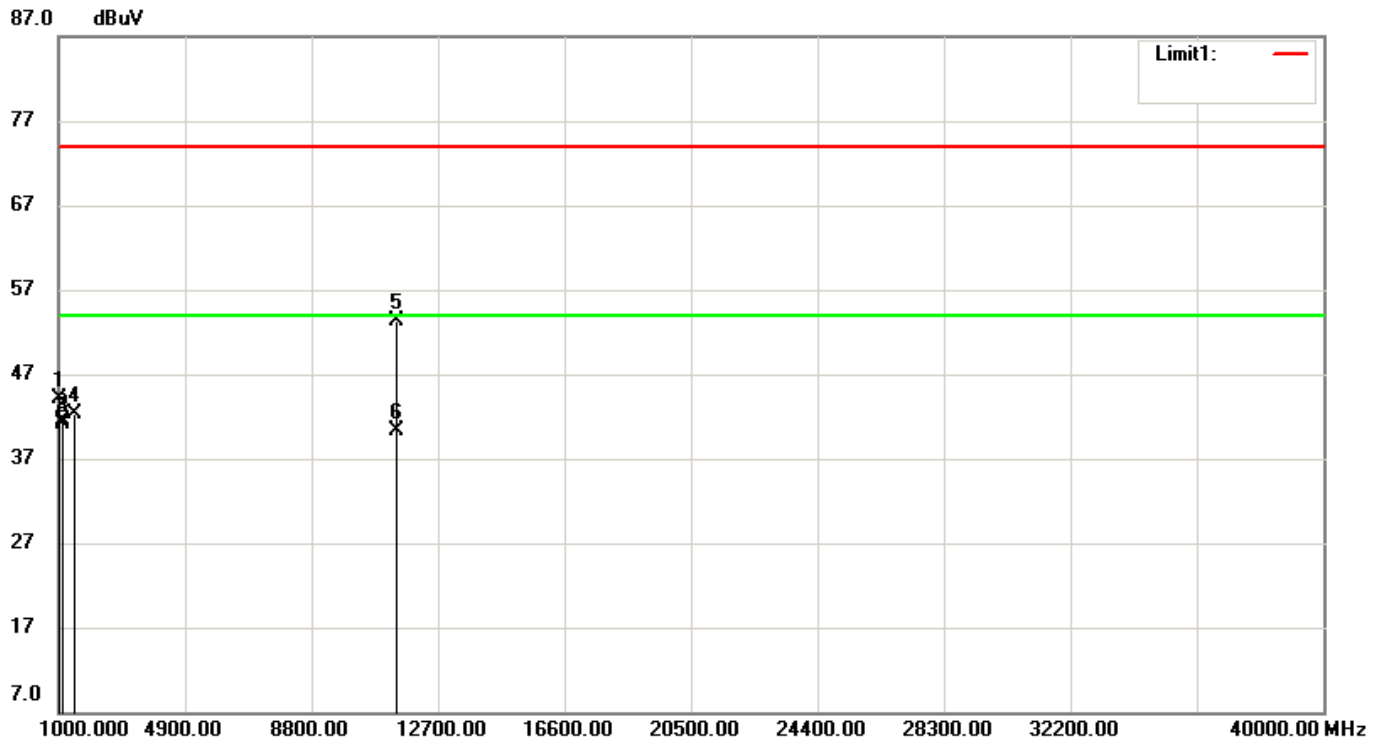
#32

Date: 2019/8/22

Temperature: 24 °C

Site RE02-EMC B1- N2

Humidity: 61 %



Condition: NCC_Above1G_Pk
 EUT: Wireless File Transmitter
 Model: DS586194
 Test Mode: TX_Y
 Note: CH HIGH

Polarization: Vertical
 Distance: 3m
 Operator: Phillip

No.	Frequency (MHz)	Reading (dBuV)	Detector	Corrected dB	Result (dBuV)	Limit (dBuV)	Margin (dB)
1	1000.0000	54.15	peak	-10.04	44.11	74.00	-29.89
2	1071.63460	51.32	peak	-9.79	41.53	74.00	-32.47
3	1121.77880	50.71	peak	-9.62	41.09	74.00	-32.91
4	1494.27880	50.55	peak	-8.29	42.26	74.00	-31.74
5	11400.00000	46.02	peak	7.37	53.39	74.00	-20.61
6	11400.00000	32.87	AVG	7.37	40.24	54.00	-13.76

註：1. 標記“---”表發射之訊號太弱而儀器無法量測。

2. 若以峰值檢測功能測量之值符合平均值限制值，則可視同以平均值功能測量之值亦符合平均值限制值，在此以標記“#”表之。

3. 標記“*”表示為本地震盪頻率及其諧波

4. 量測不準確度: $\pm 4.1\text{dB}$ ($1\text{GHz} \leq f < 18\text{GHz}$)
 $\pm 4.4\text{dB}$ ($18\text{GHz} \leq f \leq 40\text{GHz}$)

10.5.2.3 調變技術: IEEE 802.11an HT40

a. Channel Low

操作模式：發射接收

基本波頻率：5510 MHz

File: 19-07-MAS-008_5-6n40

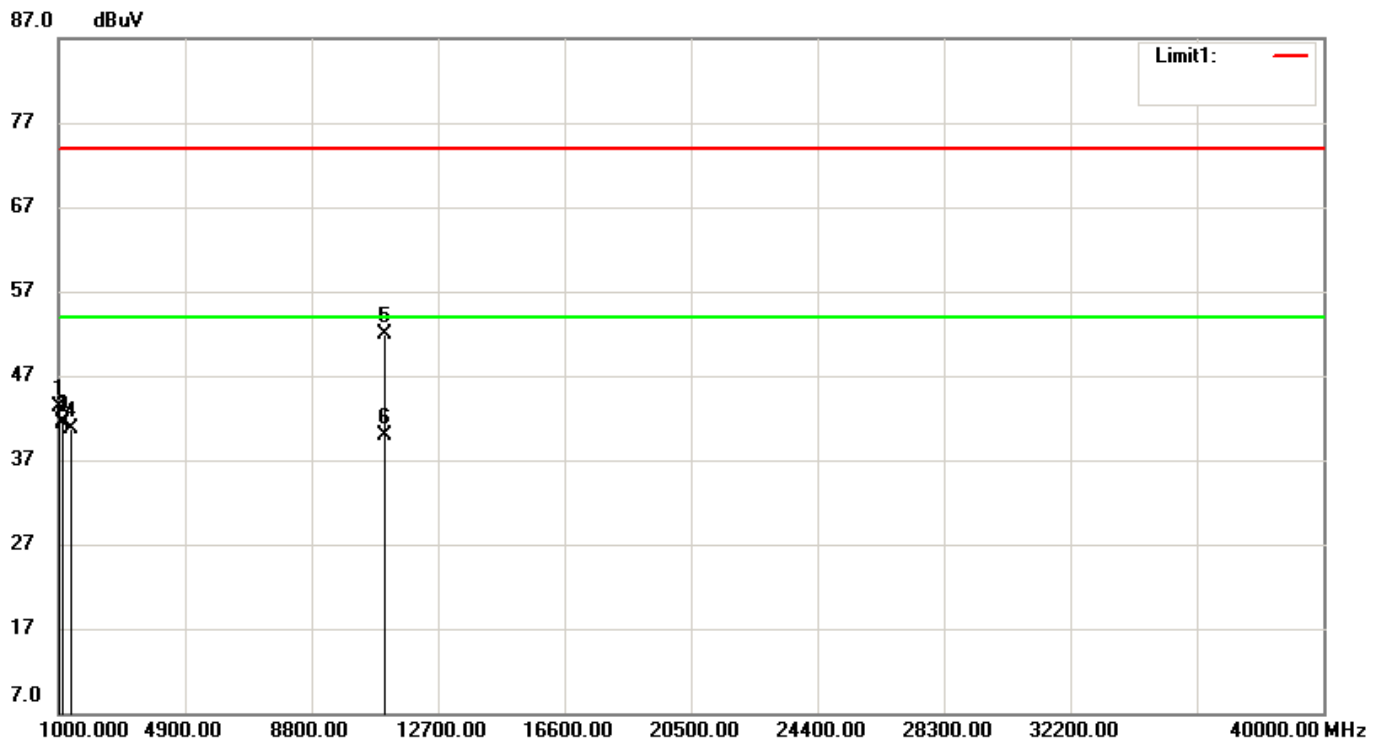
#27

Date: 2019/8/22

Temperature: 24 °C

Site RE02-EMC B1- N2

Humidity: 61 %



Condition: NCC_Above1G_Pk
 EUT: Wireless File Transmitter
 Model: DS586194
 Test Mode: TX_Y
 Note: CH LOW

Polarization: Horizontal
 Distance: 3m
 Operator: Phillip

No.	Frequency (MHz)	Reading (dBuV)	Detector	Corrected dB	Result (dBuV)	Limit (dBuV)	Margin (dB)
1	1000.0000	53.25	peak	-10.04	43.21	74.00	-30.79
2	1071.63460	51.15	peak	-9.79	41.36	74.00	-32.64
3	1121.77880	51.12	peak	-9.62	41.50	74.00	-32.50
4	1329.51920	49.56	peak	-8.87	40.69	74.00	-33.31
5	11020.00000	44.91	peak	6.98	51.89	74.00	-22.11
6	11020.00000	33.02	AVG	6.98	40.00	54.00	-14.00

註：1. 標記“---”表發射之訊號太弱而儀器無法量測。

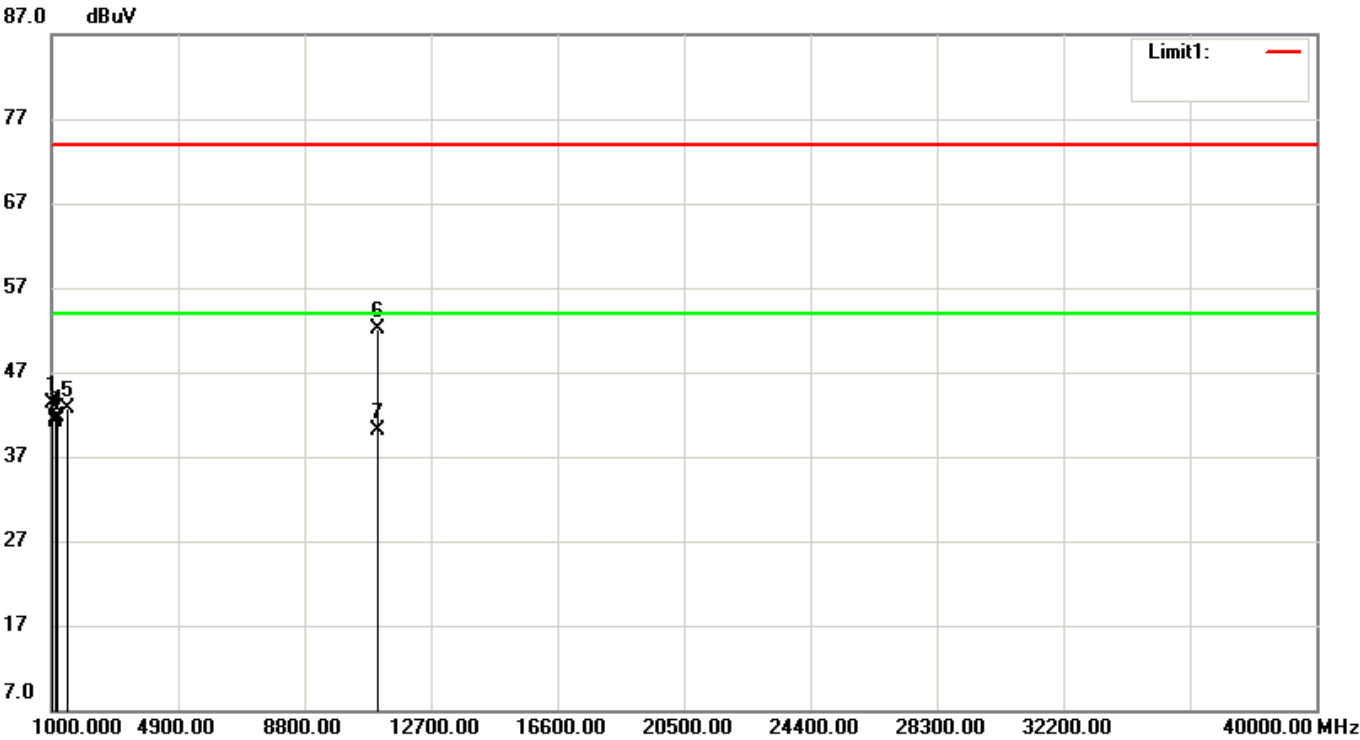
2. 若以峰值檢測功能測量之值符合平均值限制值，則可視同以平均值功能測量之值亦符合平均值限制值，在此以標記“#”表之。

3. 標記“*”表示為本地震盪頻率及其諧波

4. 量測不準確度: $\pm 4.1\text{dB}$ ($1\text{GHz} \leq f < 18\text{GHz}$)
 $\pm 4.4\text{dB}$ ($18\text{GHz} \leq f \leq 40\text{GHz}$)

操作模式：發射接收
基本波頻率：5510 MHz

File: 19-07-MAS-008_5-6n40 #28 Date: 2019/8/22 Temperature: 24 °C
Site RE02-EMC B1- N2 Humidity: 61 %



Condition: NCC_Above1G_Pk Polarization: Vertical
EUT: Wireless File Transmitter Distance: 3m
Model: DS586194
Test Mode: TX_Y Operator: Phillip
Note: CH LOW

No.	Frequency (MHz)	Reading (dBuV)	Detector	Corrected dB	Result (dBuV)	Limit (dBuV)	Margin (dB)
1	1000.0000	53.25	peak	-10.04	43.21	74.00	-30.79
2	1071.63460	50.88	peak	-9.79	41.09	74.00	-32.91
3	1121.77880	51.04	peak	-9.62	41.42	74.00	-32.58
4	1171.92300	51.22	peak	-9.44	41.78	74.00	-32.22
5	1494.27880	50.96	peak	-8.29	42.67	74.00	-31.33
6	11020.00000	45.15	peak	6.98	52.13	74.00	-21.87
7	11020.00000	33.07	AVG	6.98	40.05	54.00	-13.95

- 註：1. 標記“---”表發射之訊號太弱而儀器無法量測。
2. 若以峰值檢測功能測量之值符合平均值限制值，則可視同以平均值功能測量之值亦符合平均值限制值，在此以標記“#”表之。
3. 標記“*”表示為本地震盪頻率及其諧波
4. 量測不準確度: $\pm 4.1\text{dB}(1\text{GHz} \leq f < 18\text{GHz})$
 $\pm 4.4\text{dB}(18\text{GHz} \leq f \leq 40\text{GHz})$

b. Channel Mid

操作模式：發射接收

基本波頻率：5590 MHz

File: 19-07-MAS-008_5-6n40

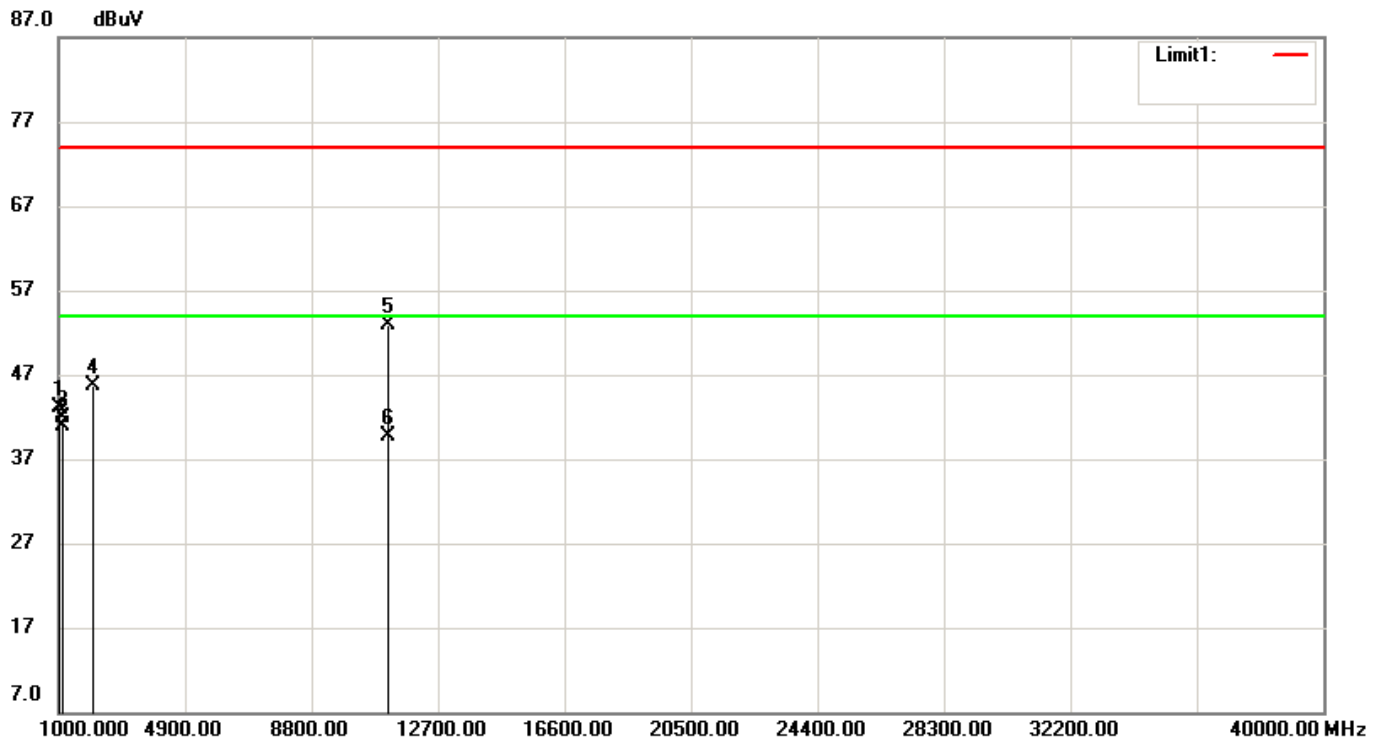
#29

Date: 2019/8/22

Temperature: 24 °C

Site RE02-EMC B1- N2

Humidity: 61 %



Condition: NCC_Above1G_Pk
 EUT: Wireless File Transmitter
 Model: DS586194
 Test Mode: TX_Y
 Note: CH MID

Polarization: Horizontal
 Distance: 3m
 Operator: Phillip

No.	Frequency (MHz)	Reading (dBuV)	Detector	Corrected dB	Result (dBuV)	Limit (dBuV)	Margin (dB)
1	1000.0000	53.11	peak	-10.04	43.07	74.00	-30.93
2	1071.63460	50.67	peak	-9.79	40.88	74.00	-33.12
3	1121.77880	51.46	peak	-9.62	41.84	74.00	-32.16
4	2024.37500	49.44	peak	-3.69	45.75	74.00	-28.25
5	11180.00000	45.82	peak	7.13	52.95	74.00	-21.05
6	11180.00000	32.50	AVG	7.13	39.63	54.00	-14.37

註：1. 標記“---”表發射之訊號太弱而儀器無法量測。

2. 若以峰值檢測功能測量之值符合平均值限制值，則可視同以平均值功能測量之值亦符合平均值限制值，在此以標記“#”表之。

3. 標記“*”表示為本地震盪頻率及其諧波

4. 量測不準確度: $\pm 4.1\text{dB}(1\text{GHz} \leq f < 18\text{GHz})$
 $\pm 4.4\text{dB}(18\text{GHz} \leq f \leq 40\text{GHz})$

操作模式：發射接收

基本波頻率：5590 MHz

File: 19-07-MAS-008_5-6n40

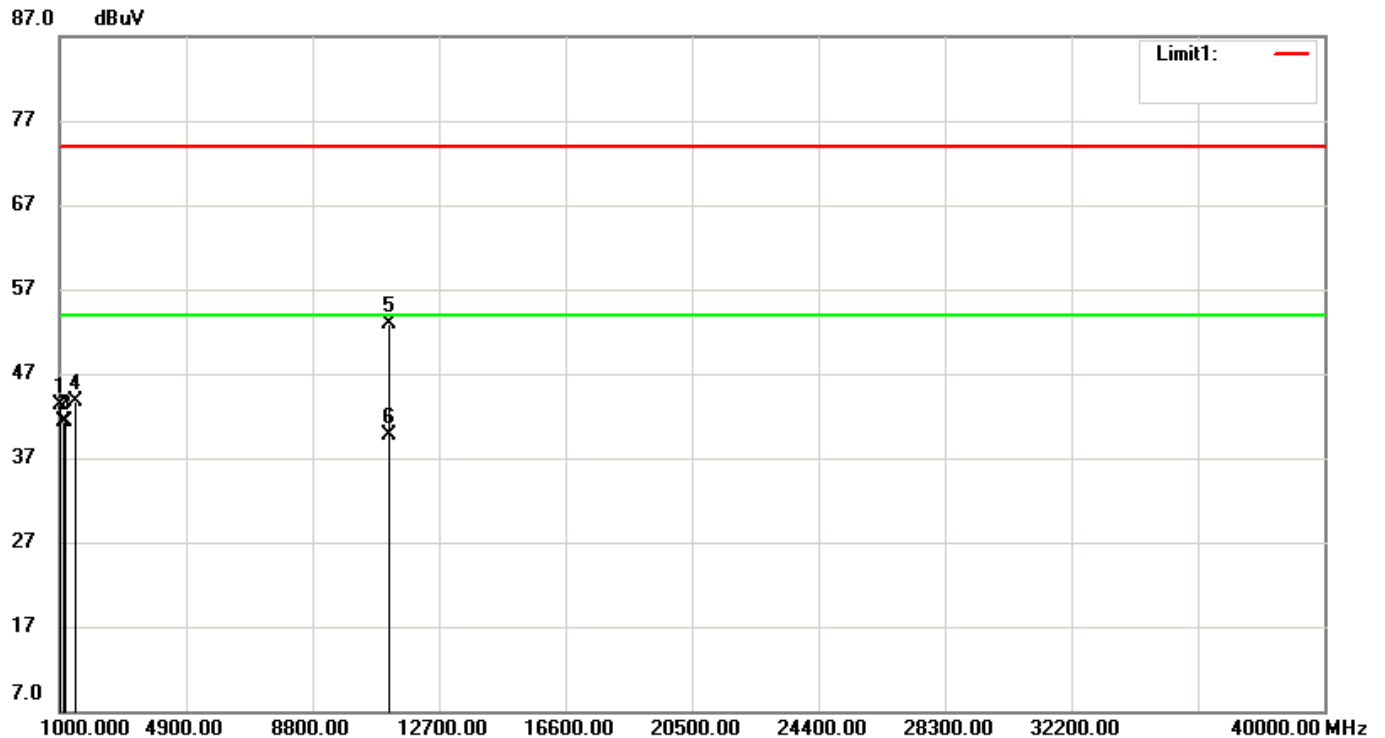
#30

Date: 2019/8/22

Temperature: 24 °C

Site RE02-EMC B1- N2

Humidity: 61 %



Condition: NCC_Above1G_Pk
 EUT: Wireless File Transmitter
 Model: DS586194
 Test Mode: TX_Y
 Note: CH MID

Polarization: Vertical
 Distance: 3m
 Operator: Phillip

No.	Frequency (MHz)	Reading (dBuV)	Detector	Corrected dB	Result (dBuV)	Limit (dBuV)	Margin (dB)
1	1000.0000	53.36	peak	-10.04	43.32	74.00	-30.68
2	1071.63460	51.04	peak	-9.79	41.25	74.00	-32.75
3	1171.92300	50.81	peak	-9.44	41.37	74.00	-32.63
4	1494.27880	51.95	peak	-8.29	43.66	74.00	-30.34
5	11180.00000	45.86	peak	7.13	52.99	74.00	-21.01
6	11180.00000	32.62	AVG	7.13	39.75	54.00	-14.25

註：1. 標記“---”表發射之訊號太弱而儀器無法量測。

2. 若以峰值檢測功能測量之值符合平均值限制值，則可視同以平均值功能測量之值亦符合平均值限制值，在此以標記“#”表之。

3. 標記“*”表示為本地震盪頻率及其諧波

4. 量測不準確度: $\pm 4.1\text{dB}$ ($1\text{GHz} \leq f < 18\text{GHz}$)
 $\pm 4.4\text{dB}$ ($18\text{GHz} \leq f \leq 40\text{GHz}$)

c. Channel High

操作模式：發射接收

基本波頻率：5670 MHz

File: 19-07-MAS-008_5-6n40

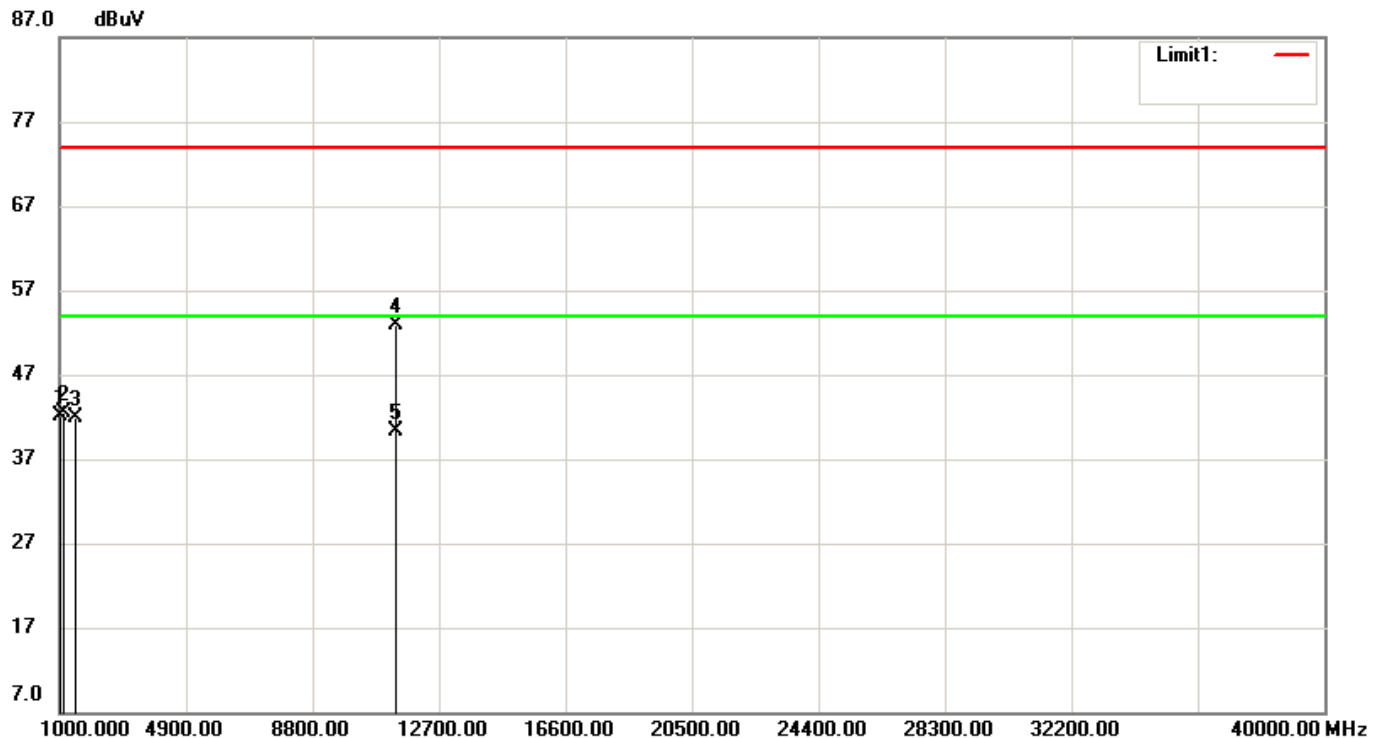
#31

Date: 2019/8/22

Temperature: 24 °C

Site RE02-EMC B1- N2

Humidity: 61 %



Condition: NCC_Above1G_Pk
 EUT: Wireless File Transmitter
 Model: DS586194
 Test Mode: TX_Y
 Note: CH HIGH

Polarization: Horizontal
 Distance: 3m
 Operator: Phillip

No.	Frequency (MHz)	Reading (dBuV)	Detector	Corrected dB	Result (dBuV)	Limit (dBuV)	Margin (dB)
1	1000.0000	52.17	peak	-10.04	42.13	74.00	-31.87
2	1121.77880	52.09	peak	-9.62	42.47	74.00	-31.53
3	1494.27880	50.19	peak	-8.29	41.90	74.00	-32.10
4	11340.00000	45.59	peak	7.31	52.90	74.00	-21.10
5	11340.00000	32.91	AVG	7.31	40.22	54.00	-13.78

註：1. 標記“---”表發射之訊號太弱而儀器無法量測。

2. 若以峰值檢測功能測量之值符合平均值限制值，則可視同以平均值功能測量之值亦符合平均值限制值，在此以標記“#”表之。

3. 標記“*”表示為本地震盪頻率及其諧波

4. 量測不準確度: $\pm 4.1\text{dB}$ ($1\text{GHz} \leq f < 18\text{GHz}$)
 $\pm 4.4\text{dB}$ ($18\text{GHz} \leq f \leq 40\text{GHz}$)

操作模式：發射接收

基本波頻率：5670 MHz

File: 19-07-MAS-008_5-6n40

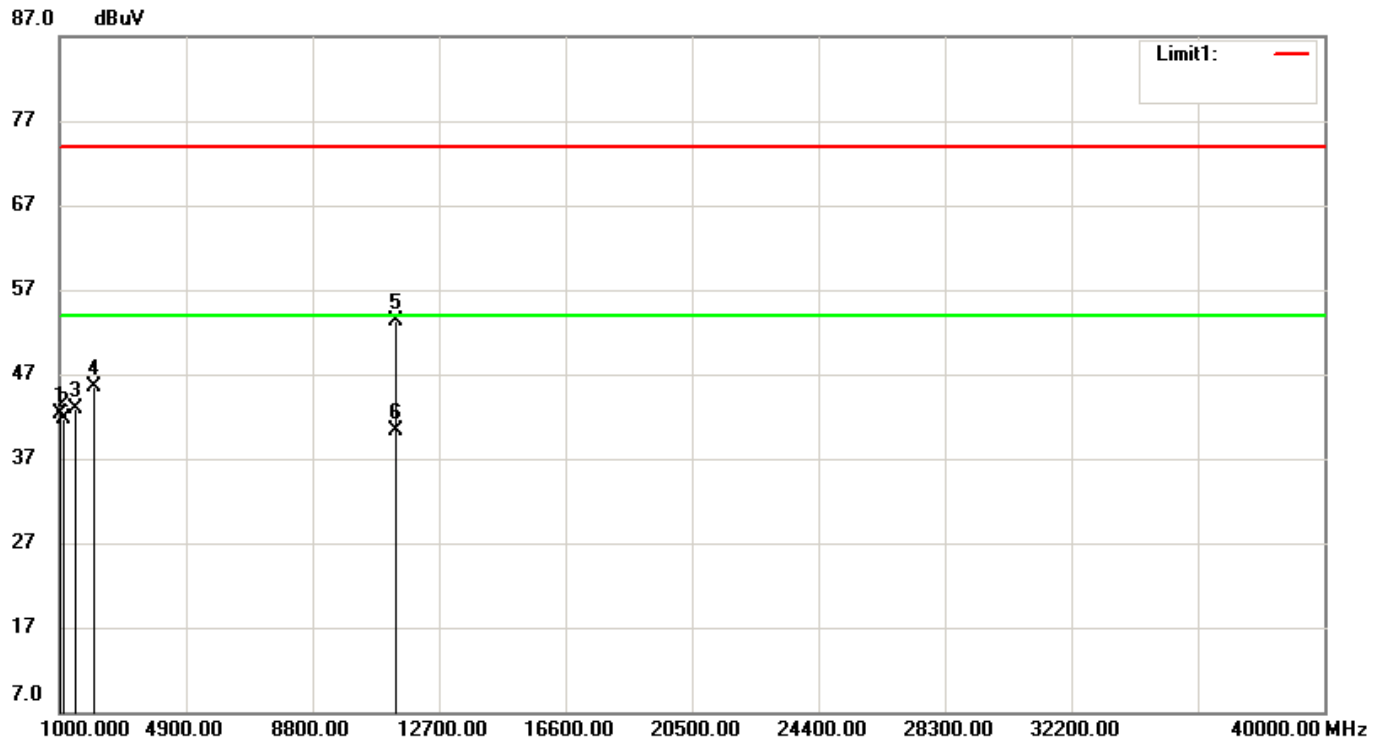
#32

Date: 2019/8/22

Temperature: 24 °C

Site RE02-EMC B1- N2

Humidity: 61 %



Condition: NCC_Above1G_Pk
 EUT: Wireless File Transmitter
 Model: DS586194
 Test Mode: TX_Y
 Note: CH HIGH

Polarization: Vertical
 Distance: 3m
 Operator: Phillip

No.	Frequency (MHz)	Reading (dBuV)	Detector	Corrected dB	Result (dBuV)	Limit (dBuV)	Margin (dB)
1	1000.0000	52.38	peak	-10.04	42.34	74.00	-31.66
2	1071.63460	51.59	peak	-9.79	41.80	74.00	-32.20
3	1494.27880	51.16	peak	-8.29	42.87	74.00	-31.13
4	2024.37500	49.21	peak	-3.69	45.52	74.00	-28.48
5	11340.00000	45.92	peak	7.31	53.23	74.00	-20.77
6	11340.00000	32.95	AVG	7.31	40.26	54.00	-13.74

註：1. 標記“---”表發射之訊號太弱而儀器無法量測。

2. 若以峰值檢測功能測量之值符合平均值限制值，則可視同以平均值功能測量之值亦符合平均值限制值，在此以標記“#”表之。

3. 標記“*”表示為本地震盪頻率及其諧波

4. 量測不準確度: $\pm 4.1\text{dB}$ ($1\text{GHz} \leq f < 18\text{GHz}$)
 $\pm 4.4\text{dB}$ ($18\text{GHz} \leq f \leq 40\text{GHz}$)

10.5.2.4 調變技術: IEEE 802.11ac (80MHz)

a. Channel Low

操作模式：發射接收

基本波頻率：5530 MHz

File: 19-07-MAS-008_5-6ac80

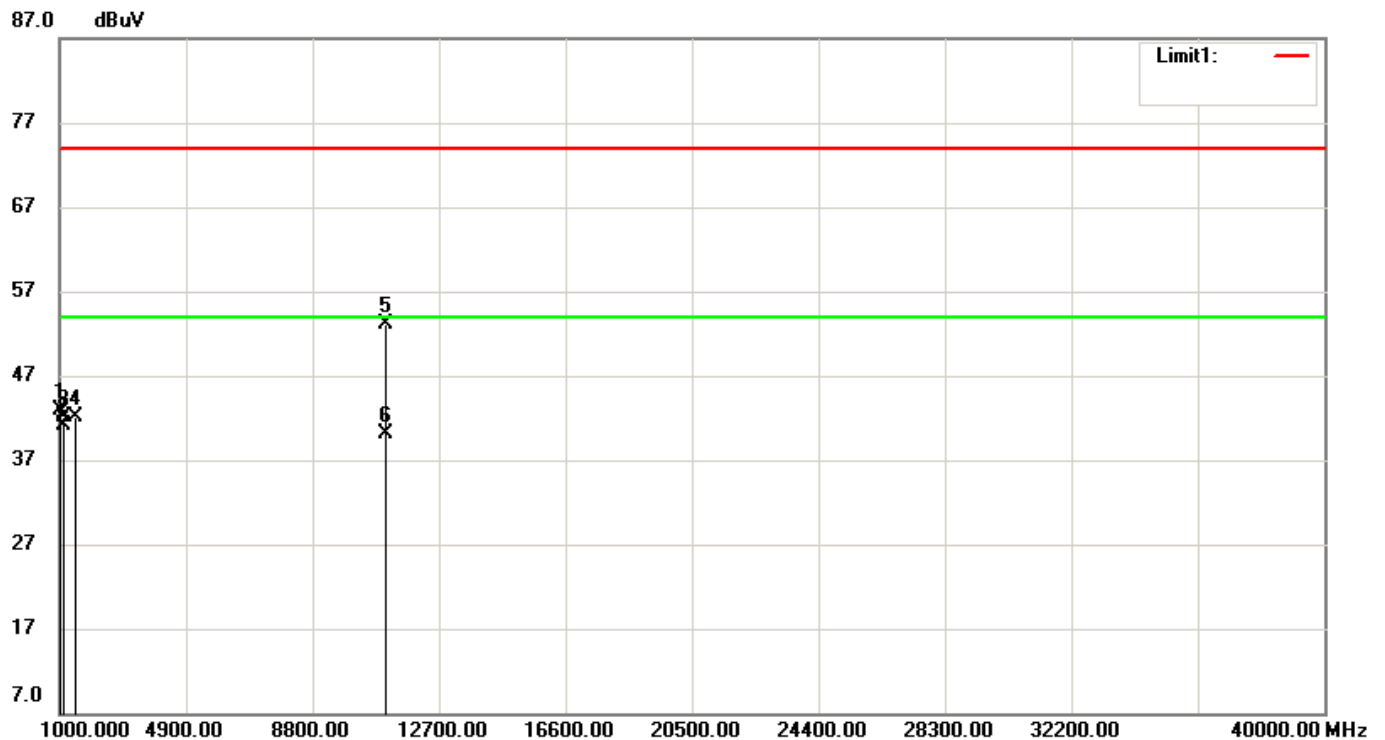
#25

Date: 2019/8/22

Temperature: 24 °C

Site RE02-EMC B1- N2

Humidity: 61 %



Condition: NCC_Above1G_Pk
 EUT: Wireless File Transmitter
 Model: DS586194
 Test Mode: TX_Y
 Note: CH LOW

Polarization: Horizontal
 Distance: 3m
 Operator: Phillip

No.	Frequency (MHz)	Reading (dBuV)	Detector	Corrected dB	Result (dBuV)	Limit (dBuV)	Margin (dB)
1	1000.0000	52.92	peak	-10.04	42.88	74.00	-31.12
2	1071.63460	50.80	peak	-9.79	41.01	74.00	-32.99
3	1121.77880	51.64	peak	-9.62	42.02	74.00	-31.98
4	1494.27880	50.34	peak	-8.29	42.05	74.00	-31.95
5	11060.00000	46.08	peak	7.01	53.09	74.00	-20.91
6	11060.00000	33.10	AVG	7.01	40.11	54.00	-13.89

註：1. 標記“---”表發射之訊號太弱而儀器無法量測。

2. 若以峰值檢測功能測量之值符合平均值限制值，則可視同以平均值功能測量之值亦符合平均值限制值，在此以標記“#”表之。

3. 標記“*”表示為本地震盪頻率及其諧波

4. 量測不準確度: $\pm 4.1\text{dB}$ ($1\text{GHz} \leq f < 18\text{GHz}$)
 $\pm 4.4\text{dB}$ ($18\text{GHz} \leq f \leq 40\text{GHz}$)

操作模式：發射接收

基本波頻率：5530 MHz

File: 19-07-MAS-008_5-6ac80

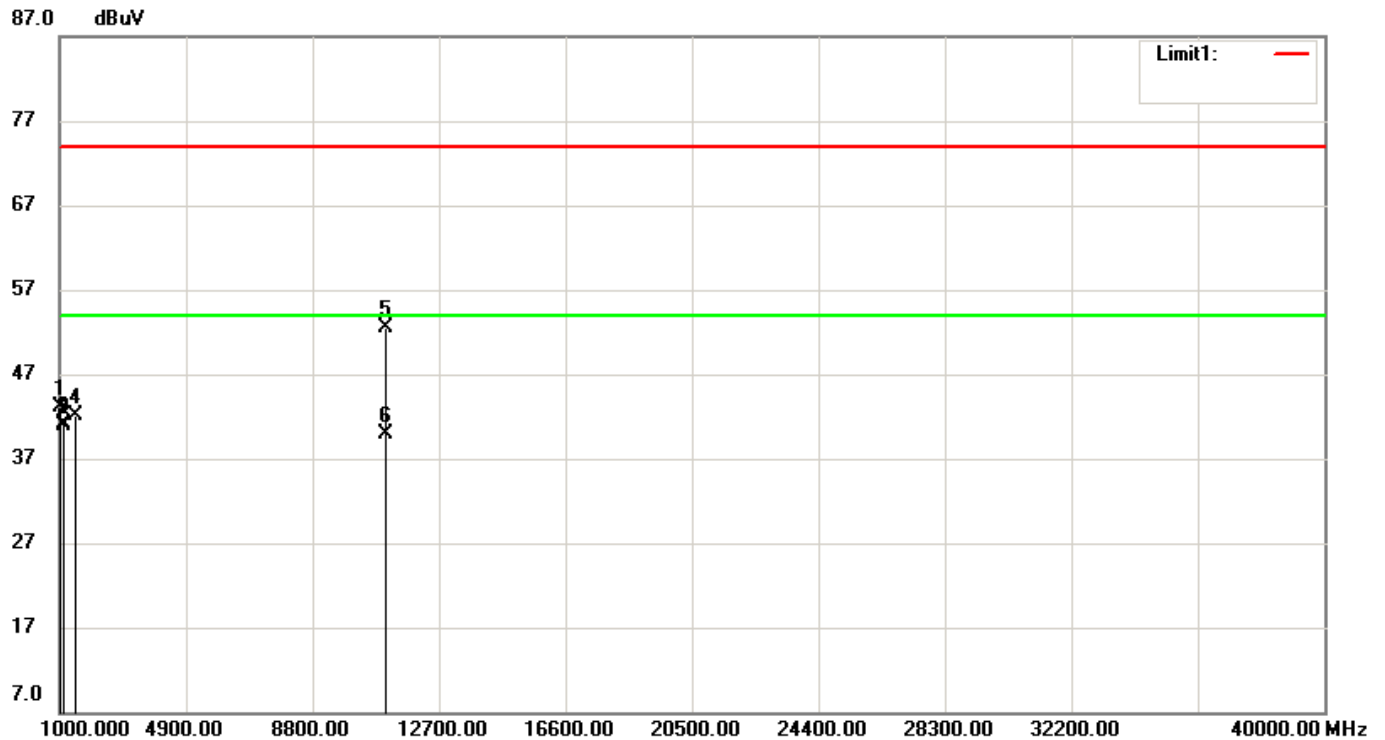
#26

Date: 2019/8/22

Temperature: 24 °C

Site RE02-EMC B1- N2

Humidity: 61 %



Condition: NCC_Above1G_Pk
 EUT: Wireless File Transmitter
 Model: DS586194
 Test Mode: TX_Y
 Note: CH LOW

Polarization: Vertical
 Distance: 3m
 Operator: Phillip

No.	Frequency (MHz)	Reading (dBuV)	Detector	Corrected dB	Result (dBuV)	Limit (dBuV)	Margin (dB)
1	1000.0000	53.15	peak	-10.04	43.11	74.00	-30.89
2	1071.63460	50.77	peak	-9.79	40.98	74.00	-33.02
3	1121.77880	50.67	peak	-9.62	41.05	74.00	-32.95
4	1494.27880	50.36	peak	-8.29	42.07	74.00	-31.93
5	11060.00000	45.54	peak	7.01	52.55	74.00	-21.45
6	11060.00000	32.90	AVG	7.01	39.91	54.00	-14.09

註：1. 標記“---”表發射之訊號太弱而儀器無法量測。

2. 若以峰值檢測功能測量之值符合平均值限制值，則可視同以平均值功能測量之值亦符合平均值限制值，在此以標記“#”表之。

3. 標記“*”表示為本地震盪頻率及其諧波

4. 量測不準確度: $\pm 4.1\text{dB}$ ($1\text{GHz} \leq f < 18\text{GHz}$)
 $\pm 4.4\text{dB}$ ($18\text{GHz} \leq f \leq 40\text{GHz}$)

b. Channel High

操作模式：發射接收

基本波頻率：5610 MHz

File: 19-07-MAS-008_5-6ac80

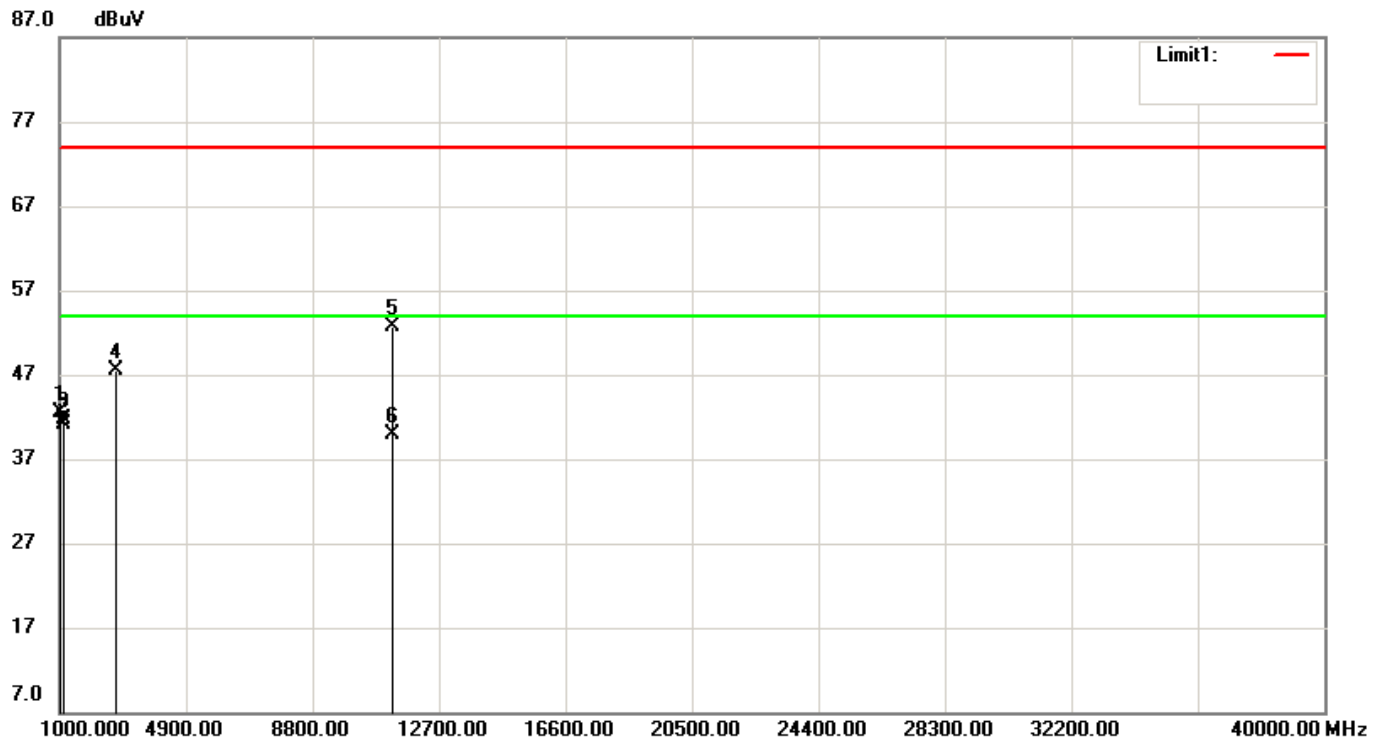
#27

Date: 2019/8/22

Temperature: 24 °C

Site RE02-EMC B1- N2

Humidity: 61 %



Condition: NCC_Above1G_Pk

Polarization: Horizontal

EUT: Wireless File Transmitter

Distance: 3m

Model: DS586194

Test Mode: TX_Y

Operator: Phillip

Note: CH HIGH

No.	Frequency (MHz)	Reading (dBuV)	Detector	Corrected dB	Result (dBuV)	Limit (dBuV)	Margin (dB)
1	1000.0000	52.63	peak	-10.04	42.59	74.00	-31.41
2	1071.63460	50.91	peak	-9.79	41.12	74.00	-32.88
3	1121.77880	51.38	peak	-9.62	41.76	74.00	-32.24
4	2733.55760	49.66	peak	-2.24	47.42	74.00	-26.58
5	11220.00000	45.52	peak	7.19	52.71	74.00	-21.29
6	11220.00000	32.67	AVG	7.19	39.86	54.00	-14.14

註：1. 標記“---”表發射之訊號太弱而儀器無法量測。

2. 若以峰值檢測功能測量之值符合平均值限制值，則可視同以平均值功能測量之值亦符合平均值限制值，在此以標記“#”表之。

3. 標記“*”表示為本地震盪頻率及其諧波

4. 量測不準確度: $\pm 4.1\text{dB}$ ($1\text{GHz} \leq f < 18\text{GHz}$)
 $\pm 4.4\text{dB}$ ($18\text{GHz} \leq f \leq 40\text{GHz}$)

操作模式：發射接收

基本波頻率：5610 MHz

File: 19-07-MAS-008_5-6ac80

#28

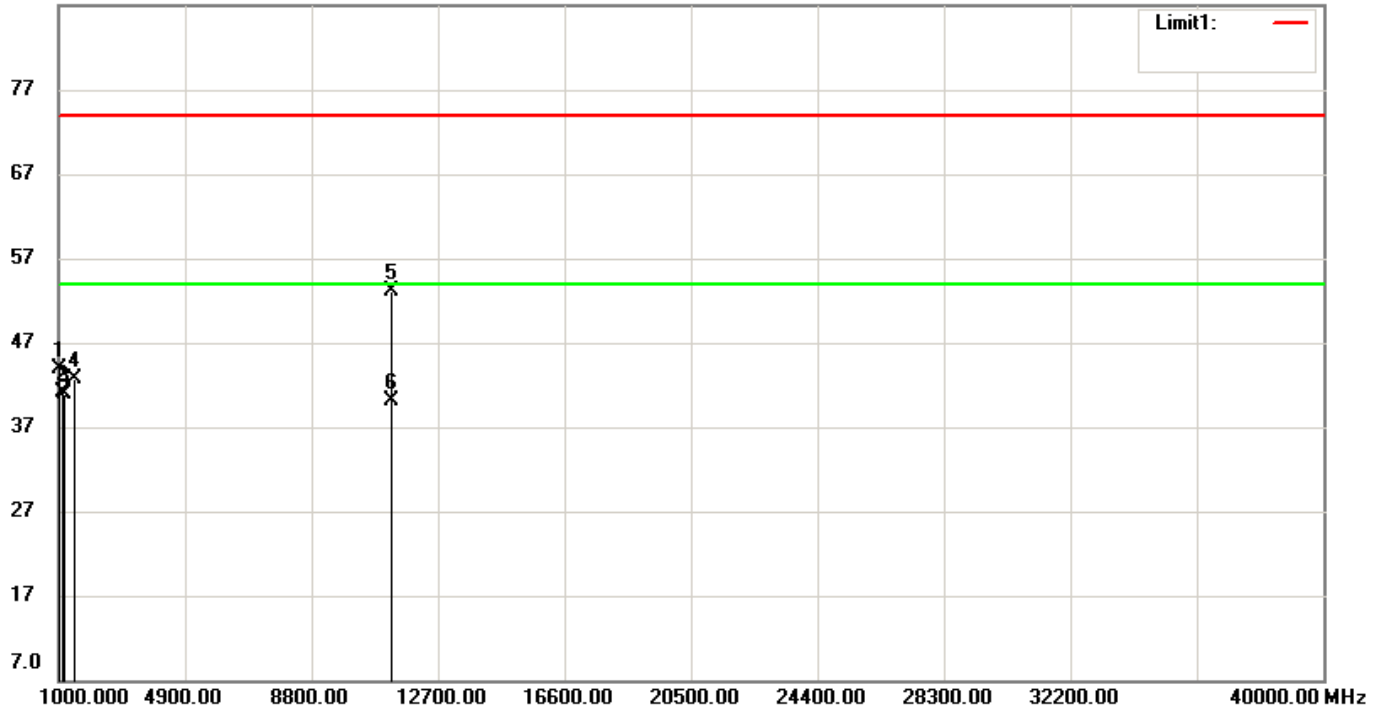
Date: 2019/8/22

Temperature: 24 °C

Site RE02-EMC B1- N2

Humidity: 61 %

87.0 dBuV



Condition: NCC_Above1G_Pk

Polarization: Vertical

EUT: Wireless File Transmitter

Distance: 3m

Model: DS586194

Test Mode: TX_Y

Operator: Phillip

Note: CH HIGH

No.	Frequency (MHz)	Reading (dBuV)	Detector	Corrected dB	Result (dBuV)	Limit (dBuV)	Margin (dB)
1	1000.0000	53.96	peak	-10.04	43.92	74.00	-30.08
2	1071.63460	50.85	peak	-9.79	41.06	74.00	-32.94
3	1171.92300	50.35	peak	-9.44	40.91	74.00	-33.09
4	1494.27880	50.95	peak	-8.29	42.66	74.00	-31.34
5	11220.00000	45.93	peak	7.19	53.12	74.00	-20.88
6	11220.00000	32.83	AVG	7.19	40.02	54.00	-13.98

註：1. 標記“---”表發射之訊號太弱而儀器無法量測。

2. 若以峰值檢測功能測量之值符合平均值限制值，則可視同以平均值功能測量之值亦符合平均值限制值，在此以標記“#”表之。

3. 標記“*”表示為本地震盪頻率及其諧波

4. 量測不準確度: $\pm 4.1\text{dB}$ ($1\text{GHz} \leq f < 18\text{GHz}$)
 $\pm 4.4\text{dB}$ ($18\text{GHz} \leq f \leq 40\text{GHz}$)

10.5.3 其它不必要之訊號

File: 19-07-MAS-008_Below 1G
 Site RE02-EMC B1- N2

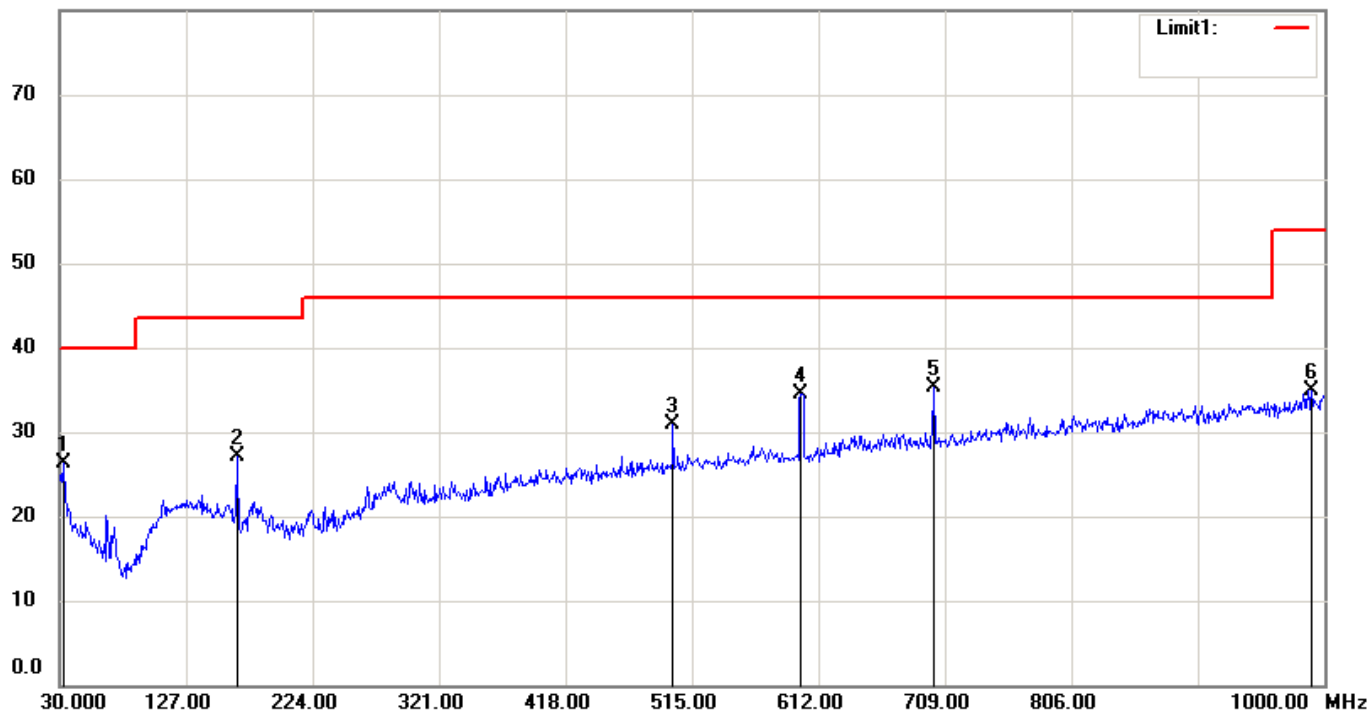
#10

Date: 2019/8/25

Temperature: 24 °C

Humidity: 61 %

80.0 dBuV/m



Condition: NCC_LP0002_30-1000MHz
 EUT: Wireless File Transmitter
 Model: DS586194
 Test Mode: UNII Band3
 Note:

Polarization: Horizontal
 Distance: 3m
 Operator:

No.	Frequency (MHz)	Reading (dBuV/m)	Detector	Corrected dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)
1	32.9100	34.21	QP	-7.84	26.37	40.00	-13.63
2	165.8000	35.76	QP	-8.71	27.05	43.50	-16.45
3	500.4500	32.22	QP	-1.24	30.98	46.00	-15.02
4	598.4200	34.59	QP	-0.14	34.45	46.00	-11.55
5	700.2700	33.49	QP	1.80	35.29	46.00	-10.71
6	990.3000	27.48	QP	7.41	34.89	54.00	-19.11

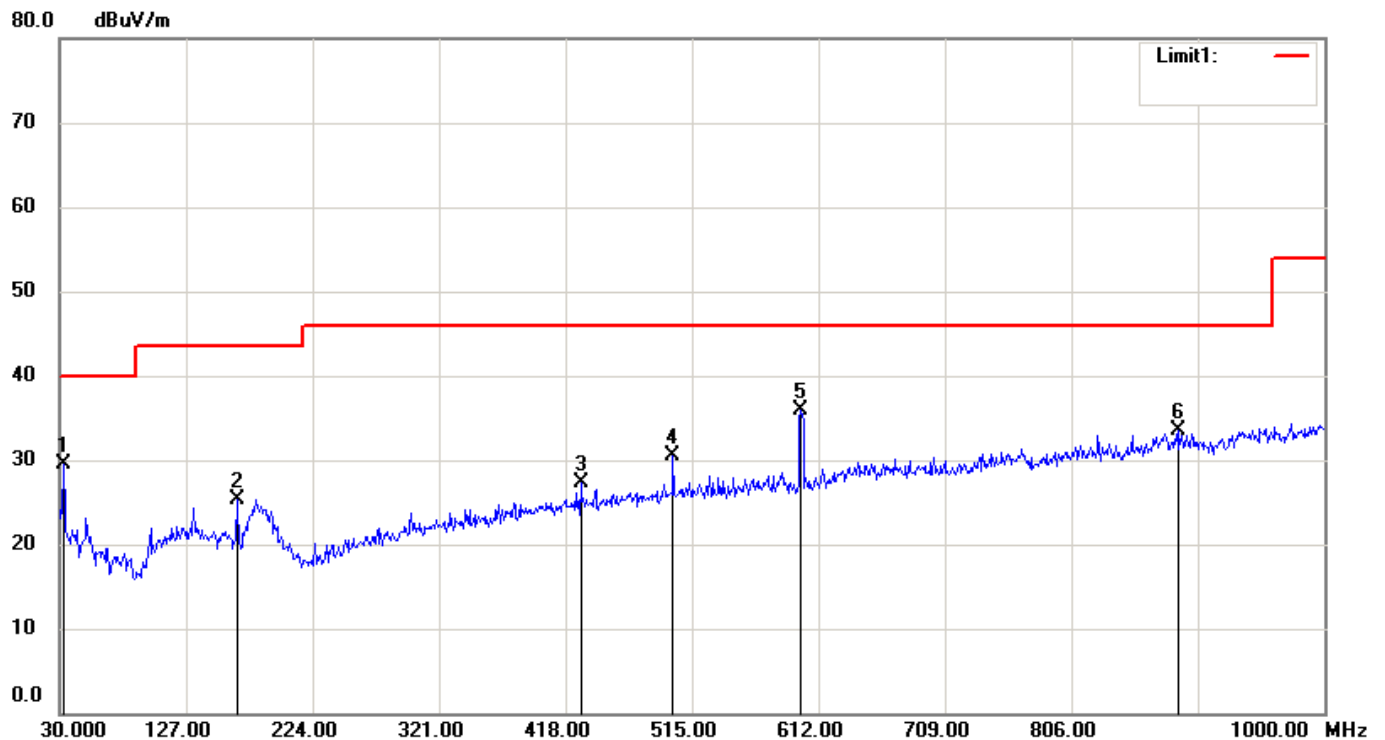
File: 19-07-MAS-008_Below 1G
Site RE02-EMC B1- N2

#11

Date: 2019/8/25

Temperature: 24 °C

Humidity: 61 %



Condition: NCC_LP0002_30-1000MHz
EUT: Wireless File Transmitter
Model: DS586194
Test Mode: UNII Band3
Note:

Polarization: Vertical
Distance: 3m
Operator:

No.	Frequency (MHz)	Reading (dBuV/m)	Detector	Corrected dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)
1	32.9100	37.27	QP	-7.84	29.43	40.00	-10.57
2	165.8000	34.10	QP	-8.71	25.39	43.50	-18.11
3	429.6400	29.27	QP	-2.02	27.25	46.00	-18.75
4	500.4500	31.71	QP	-1.24	30.47	46.00	-15.53
5	598.4200	36.03	QP	-0.14	35.89	46.00	-10.11
6	888.4500	28.24	QP	5.25	33.49	46.00	-12.51

- 註：1. “#”，表示干擾值很低，記錄其峰值。
2. 標記“---”表發射之訊號太弱而儀器無法量測。
3. 量測不準確度: +4.20dB/ -4.24 dB (30MHz ≤ f < 1GHz)
+4.10dB/ -4.10 dB (1GHz ≤ f < 18GHz)
+4.40dB/ -4.42 dB (18GHz ≤ f ≤ 40GHz)

10.6 頻帶外邊緣輻射場強之量測結果

操作模式: 發射接收

測試日期: Aug. 22, 2019

環境溫度: 24°C

環境濕度: 61%

10.6.1 調變技術: IEEE 802.11a

輻射 頻率	儀器讀值@3m (dBuV/m)				校正 因子	結果值		限制值@3m		餘裕值 (worse)	
	水平		垂直			(dBuV/m)		(dBuV/m)		(dB)	
(MHz)	峰值	平均值	峰值	平均值	(dB)	峰值	平均值	峰值	平均值	峰值	平均值
5460.000	27.1	13.0	27.0	13.0	38.7	65.8	51.6	74.0	54.0	-8.2	-2.4

10.6.2 調變技術: IEEE 802.11n HT20

輻射 頻率	儀器讀值@3m (dBuV/m)				校正 因子	結果值		限制值@3m		餘裕值 (worse)	
	水平		垂直			(dBuV/m)		(dBuV/m)		(dB)	
(MHz)	峰值	平均值	峰值	平均值	(dB)	峰值	平均值	峰值	平均值	峰值	平均值
5460.000	27.1	12.9	27.4	13.0	38.7	66.1	51.6	74.0	54.0	-7.9	-2.4

10.6.3 調變技術: IEEE 802.11n HT40

輻射 頻率	儀器讀值@3m (dBuV/m)				校正 因子	結果值		限制值@3m		餘裕值 (worse)	
	水平		垂直			(dBuV/m)		(dBuV/m)		(dB)	
(MHz)	峰值	平均值	峰值	平均值	(dB)	峰值	平均值	峰值	平均值	峰值	平均值
5460.000	27.2	13.0	27.1	13.1	38.7	65.9	51.8	74.0	54.0	-8.1	-2.3

10.6.4 調變技術: IEEE 802.11ac (80MHz)

輻射 頻率	儀器讀值@3m (dBuV/m)				校正 因子	結果值		限制值@3m		餘裕值 (worse)	
	水平		垂直			(dBuV/m)		(dBuV/m)		(dB)	
(MHz)	峰值	平均值	峰值	平均值	(dB)	峰值	平均值	峰值	平均值	峰值	平均值
5460.000	27.2	13.1	27.0	12.9	38.7	65.8	51.8	74.0	54.0	-8.2	-2.2

註:1. “----”表示干擾值太小而儀器無法量得。

2. “#”表示干擾值太小，直接量取其峰值。

3. 標記“***”表示為本地震盪頻率及其諧波。

4. 量測不準確度: $\pm 4.1\text{dB}$ ($1\text{GHz} \leq f \leq 18\text{GHz}$)

5. 量測頻率範圍為 4500 ~ 5250 MHz 及 5350 ~ 5460 MHz，並記錄兩頻率範圍中之最大讀值。

10.7 頻帶外邊緣直接量測之量測結果

調變技術: IEEE 802.11a

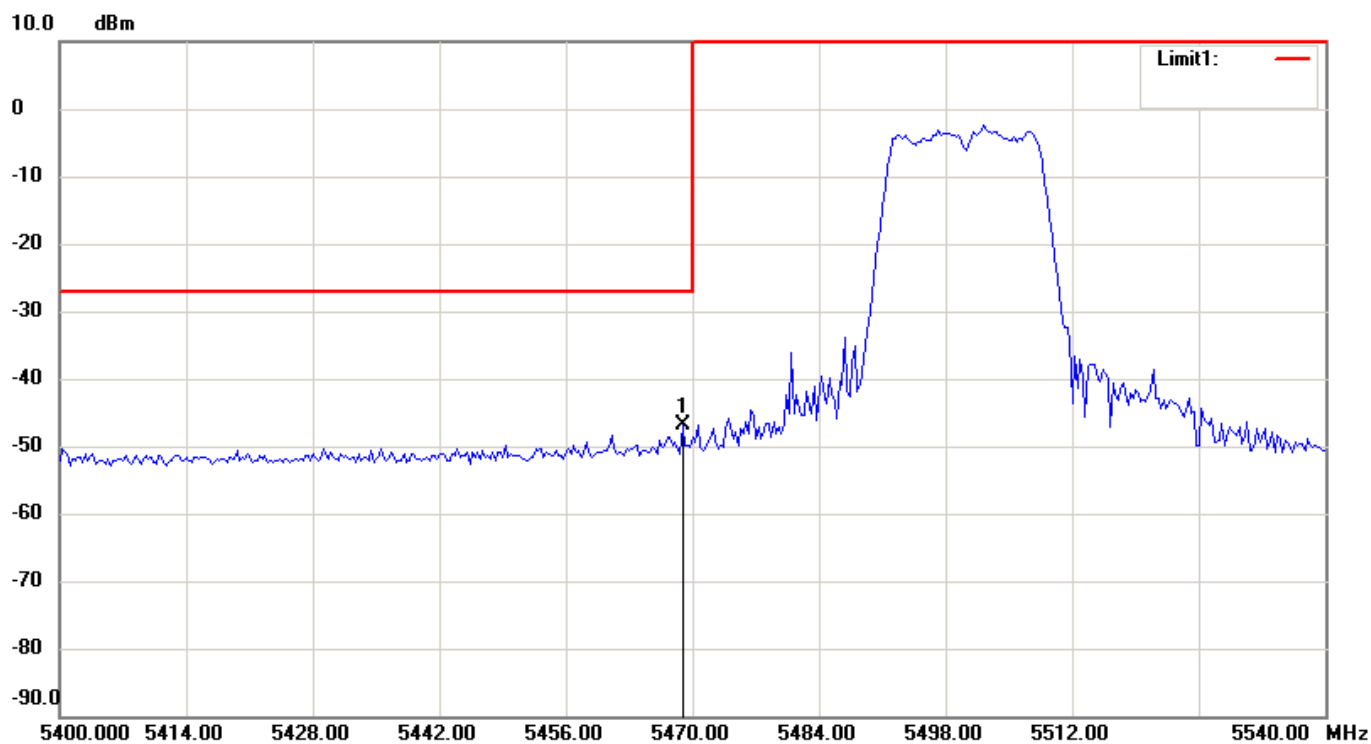
File: 19-07-MAS- #7
008_5-6a_Ant2

Date: 2019/8/5

Temperature: 26 °C

Time: 下午 04:05:56

Humidity: 59 %

Condition: UNII-Band-3-Bandedge
EUT: Wireless File Transmitter

RF Conducted

Sweep Time: 1ms Att.: 15dB

Model: DS586194

RBW: 1000 KHz VBW: 3000 KHz

Test Mode: TX_UNII Band3_Ant2

Note: Operator: Phillip (測試場地: RF-Cond01)

NCC_LP0002_802.11a Channel 100_Low_Bandedge

No.	Frequency(MHz)	Level(dBm)
1	5468.88000	-46.88

File: 19-07-MAS-
008_5-6a_Ant2

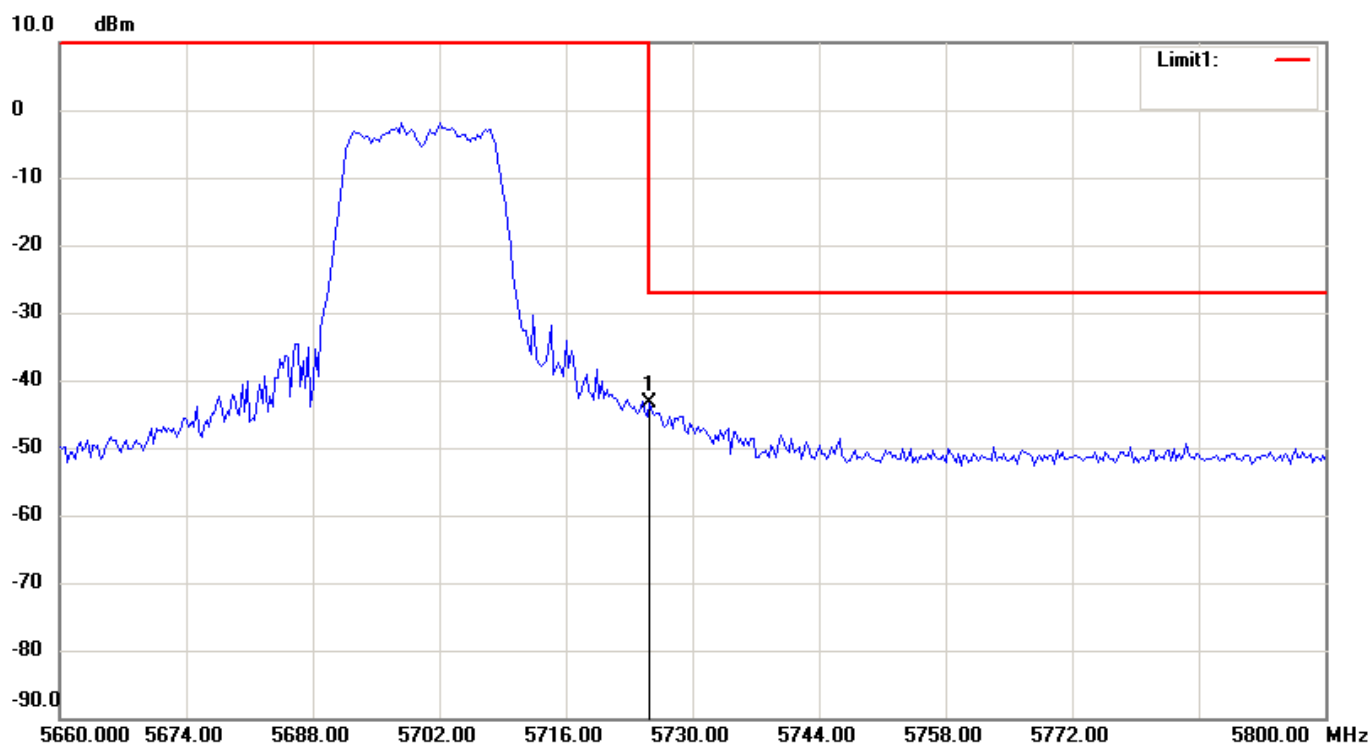
#20

Date: 2019/8/5

Temperature: 26 °C

Time: 下午 04:18:02

Humidity: 59 %



Condition: UNII-Band-3-Bandedge

EUT: Wireless File Transmitter

Model: DS586194

Test Mode: TX_UNII Band3_Ant2

Note: Operator: Phillip (測試場地: RF-Cond01)

NCC_LP0002_802.11a Channel 140_High_Bandedge

RF Conducted

Sweep Time: 1ms Att.: 15dB

RBW: 1000 KHz VBW: 3000 KHz

No.	Frequency(MHz)	Level(dBm)
1	5725.24000	-43.33

調變技術: IEEE 802.11n HT20

CHAIN 1

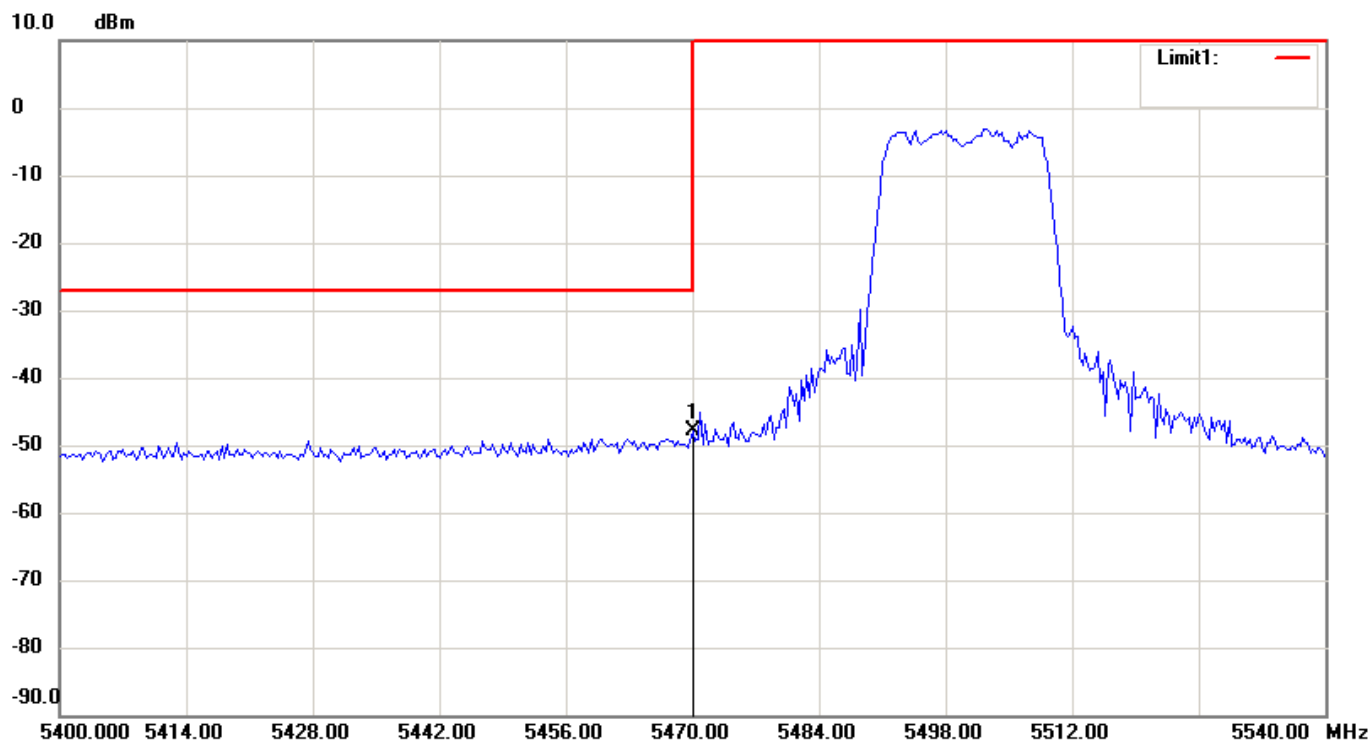
File: 19-07-MAS- #7
008_5-
6n20_Ant1

Date: 2019/8/5

Temperature: 26 °C

Time: 下午 06:22:55

Humidity: 59 %



Condition: UNII-Band-3-Bandedge
EUT: Wireless File Transmitter
Model: DS586194

RF Conducted

Sweep Time: 1ms Att.: 15dB

RBW: 1000 KHz VBW: 3000 KHz

Test Mode: TX_UNII Band3_Ant1

Note: Operator: Phillip (測試場地: RF-Cond01)

NCC_LP0002_802.11n20 Channel 100_Low_Bandedge

No.	Frequency(MHz)	Level(dBm)
1	5470.00000	-47.91

File: 19-07-MAS-
008_5-
6n20_Ant1

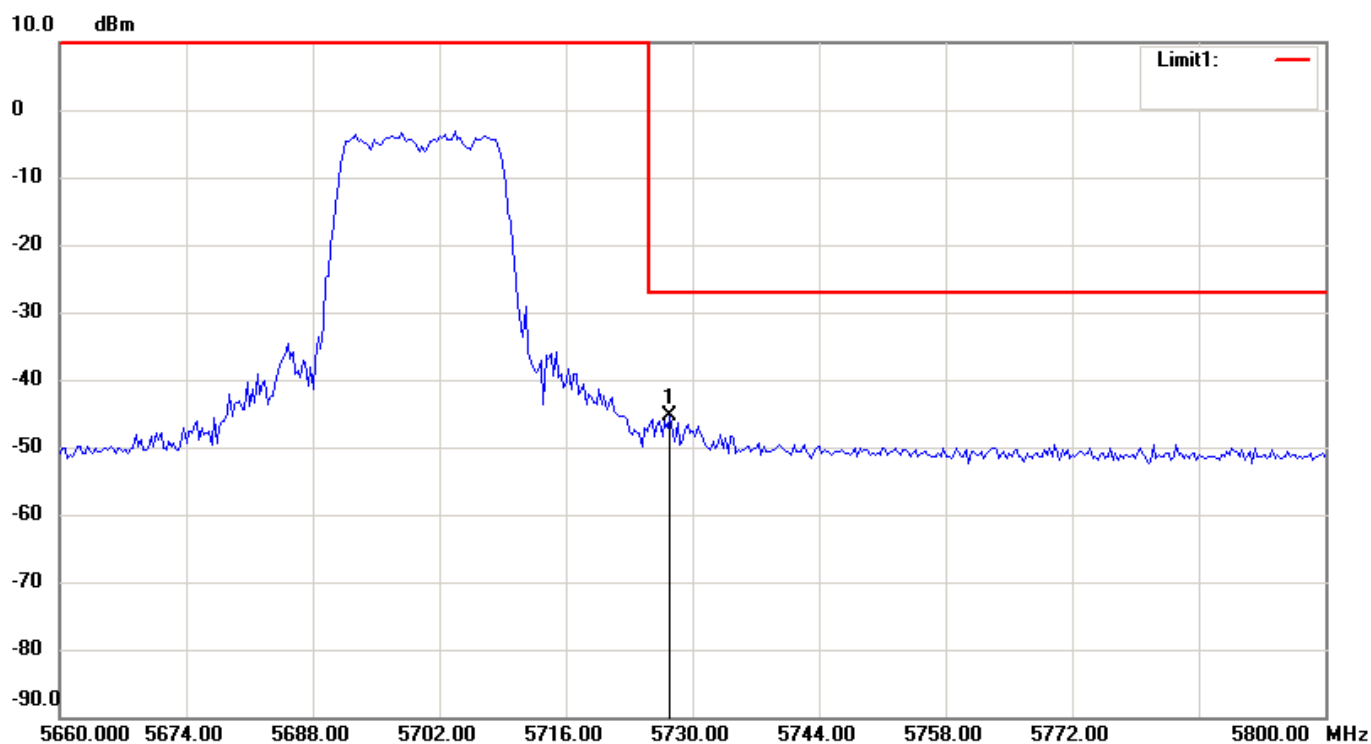
#20

Date: 2019/8/5

Temperature: 26 °C

Time: 下午 06:35:31

Humidity: 59 %



Condition: UNII-Band-3-Bandedge

EUT: Wireless File Transmitter

Model: DS586194

Test Mode: TX_UNII Band3_Ant1

Note: Operator: Phillip (測試場地: RF-Cond01)

NCC_LP0002_802.11n20 Channel 140_High_Bandedge

RF Conducted

Sweep Time: 1ms Att.: 15dB

RBW: 1000 KHz VBW: 3000 KHz

No.	Frequency(MHz)	Level(dBm)
1	5727.48000	-45.43

CHAIN 2

File: 19-07-MAS-
008_5-
6n20_Ant2

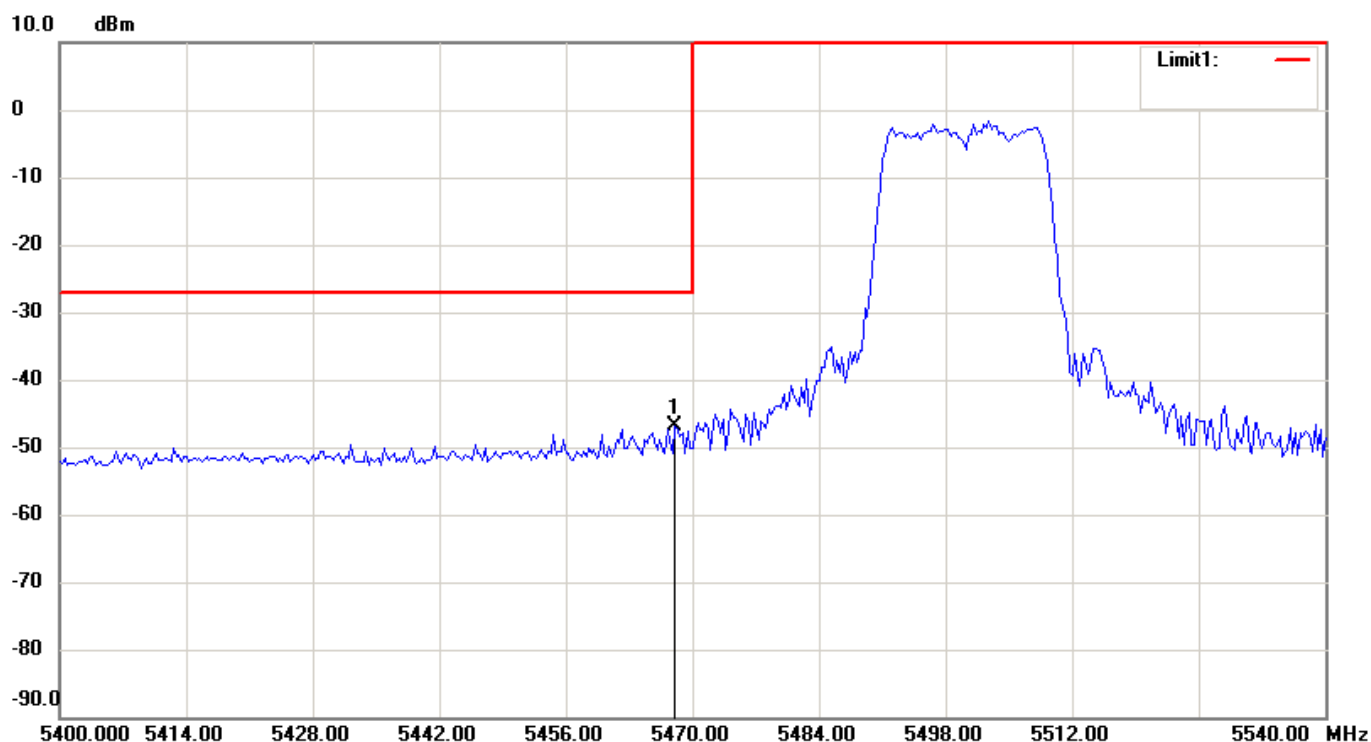
#7

Date: 2019/8/5

Temperature: 26 °C

Time: 下午 04:29:49

Humidity: 59 %



Condition: UNII-Band-3-Bandedge

RF Conducted

EUT: Wireless File Transmitter

Sweep Time: 1ms Att.: 15dB

Model: DS586194

RBW: 1000 KHz VBW: 3000 KHz

Test Mode: TX_UNII Band3_Ant2

Note: Operator: Phillip (測試場地: RF-Cond01)

NCC_LP0002_802.11n20 Channel 100_Low_Bandedge

No.	Frequency(MHz)	Level(dBm)
1	5468.04000	-46.97

File: 19-07-MAS-
008_5-
6n20_Ant2

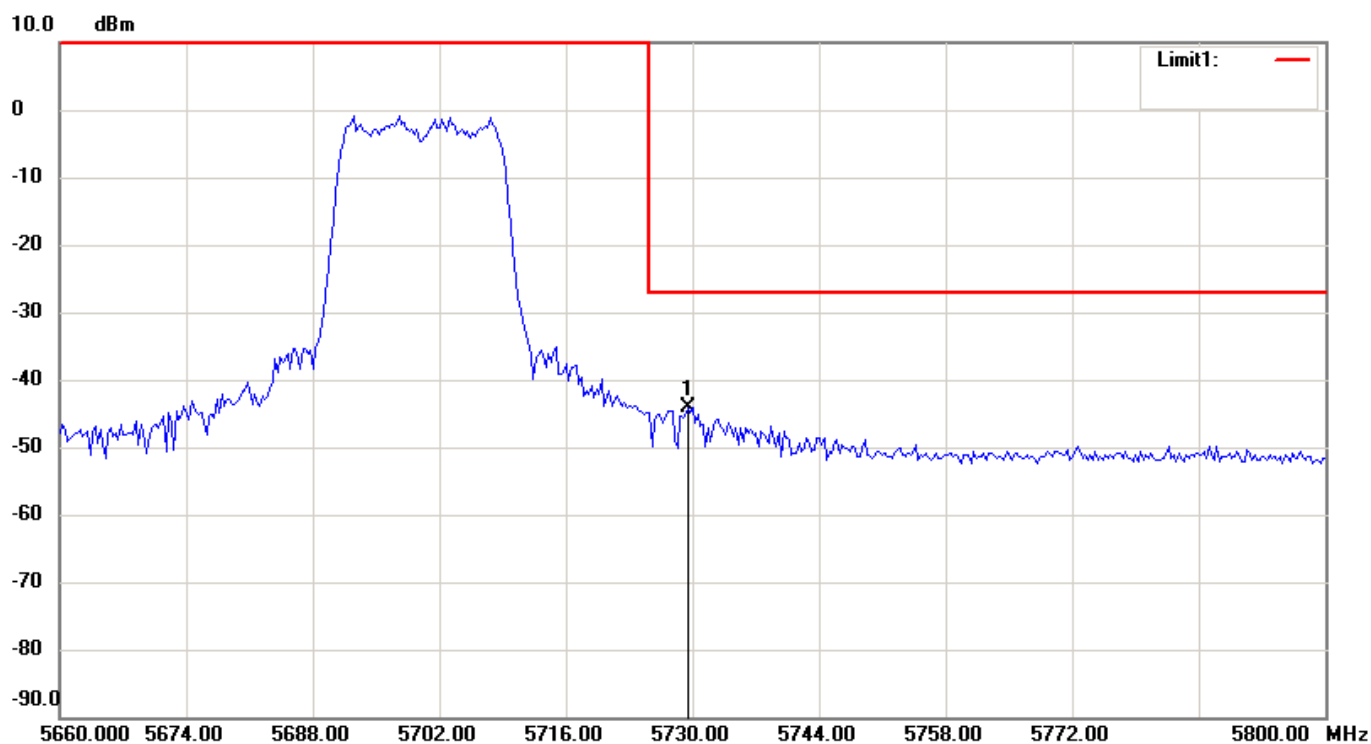
#20

Date: 2019/8/5

Temperature: 26 °C

Time: 下午 04:40:34

Humidity: 59 %



Condition: UNII-Band-3-Bandedge

EUT: Wireless File Transmitter

Model: DS586194

Test Mode: TX_UNII Band3_Ant2

Note: Operator: Phillip (測試場地: RF-Cond01)

NCC_LP0002_802.11n20 Channel 140_High_Bandedge

RF Conducted

Sweep Time: 1ms Att.: 15dB

RBW: 1000 KHz VBW: 3000 KHz

No.	Frequency(MHz)	Level(dBm)
1	5729.44000	-44.11

調變技術: IEEE 802.11n HT40

CHAIN 1

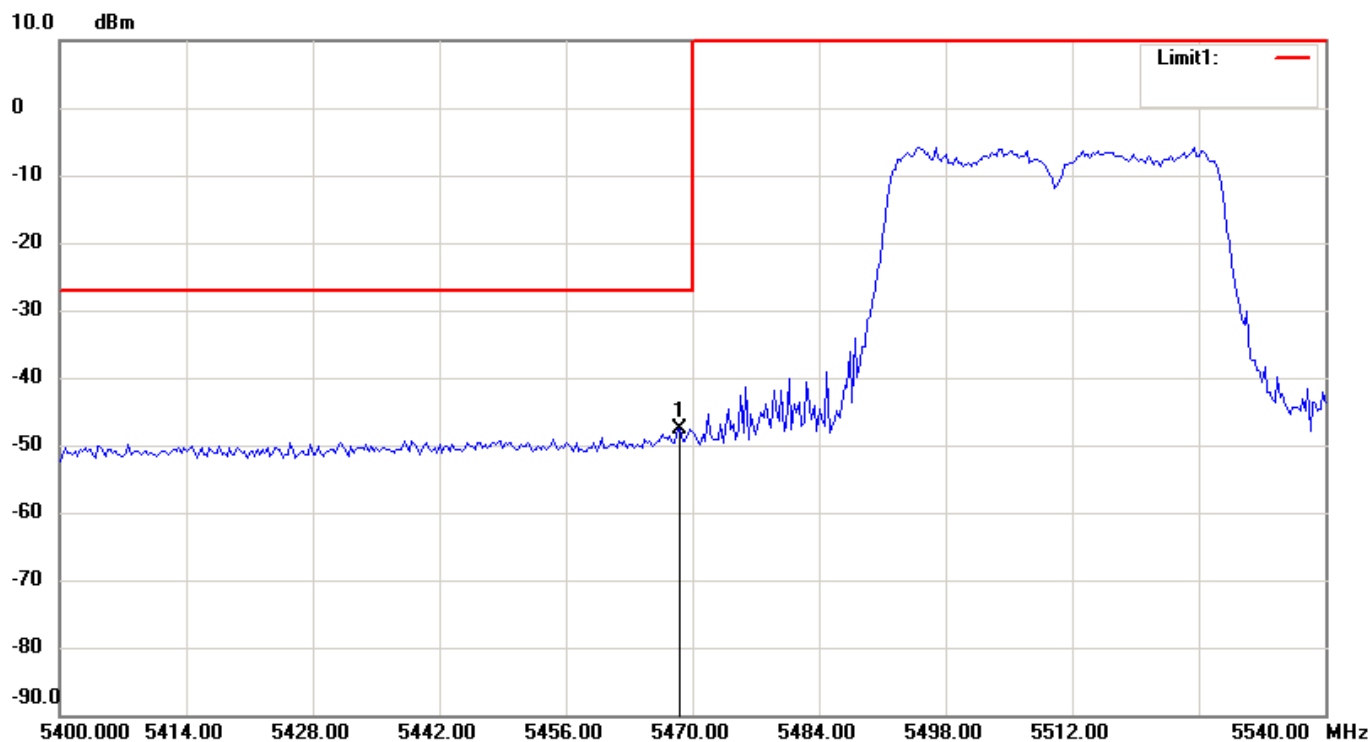
File: 19-07-MAS- #7
008_5-
6n40_Ant1

Date: 2019/8/5

Temperature: 26 °C

Time: 下午 07:25:56

Humidity: 59 %



Condition: UNII-Band-3-Bandedge
EUT: Wireless File Transmitter
Model: DS586194

RF Conducted
Sweep Time: 1ms Att.: 15dB
RBW: 1000 KHz VBW: 3000 KHz

Test Mode: TX_UNII Band3_Ant1
Note: Operator: Phillip (測試場地: RF-Cond01)
NCC_LP0002_802.11n40 Channel 102_Low_Bandedge

No.	Frequency(MHz)	Level(dBm)
1	5468.60000	-47.53

File: 19-07-MAS-
008_5-
6n40_Ant1

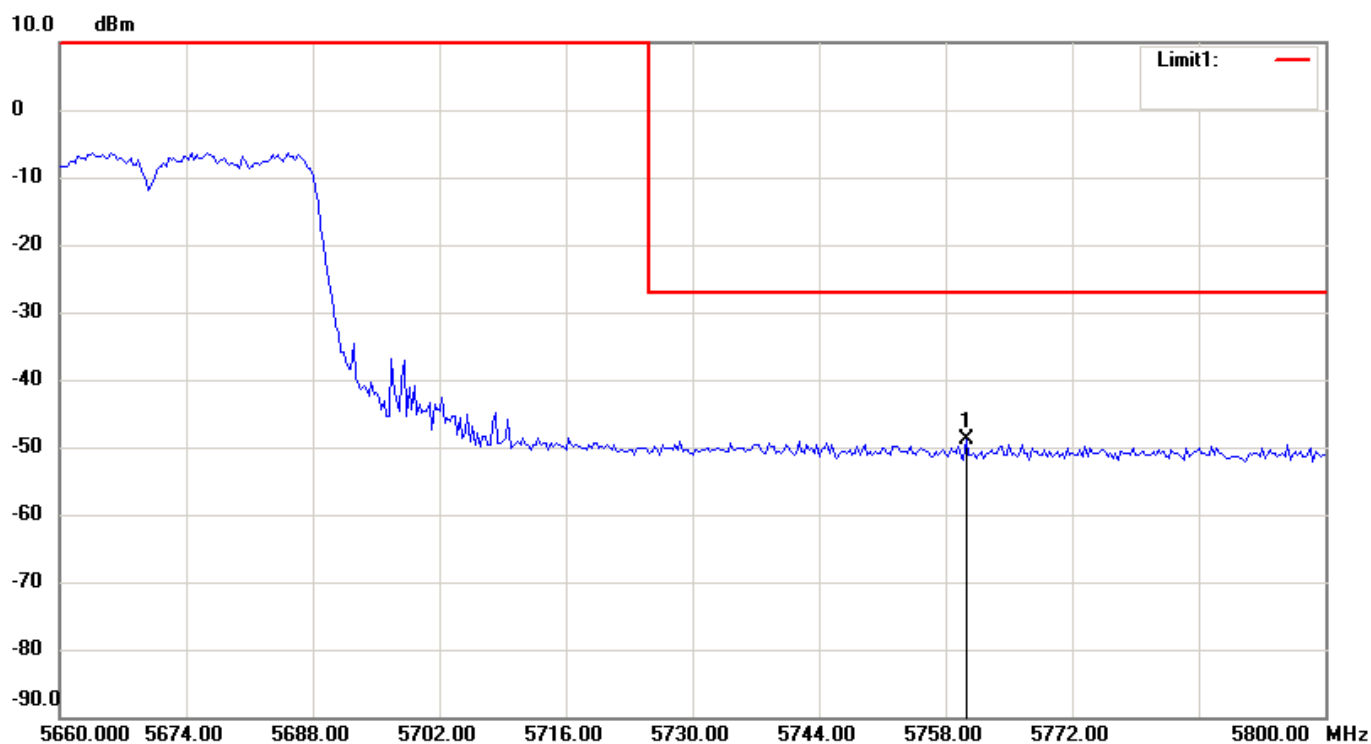
#20

Date: 2019/8/5

Temperature: 26 °C

Time: 下午 07:48:01

Humidity: 59 %



Condition: UNII-Band-3-Bandedge

EUT: Wireless File Transmitter

Model: DS586194

Test Mode: TX_UNII Band3_Ant1

Note: Operator: Phillip (測試場地: RF-Cond01)

NCC_LP0002_802.11n40 Channel 134_High_Bandedge

RF Conducted

Sweep Time: 1ms Att.: 15dB

RBW: 1000 KHz VBW: 3000 KHz

No.	Frequency(MHz)	Level(dBm)
1	5760.24000	-48.79

CHAIN 2

File: 19-07-MAS-
008_5-
6n40_Ant2

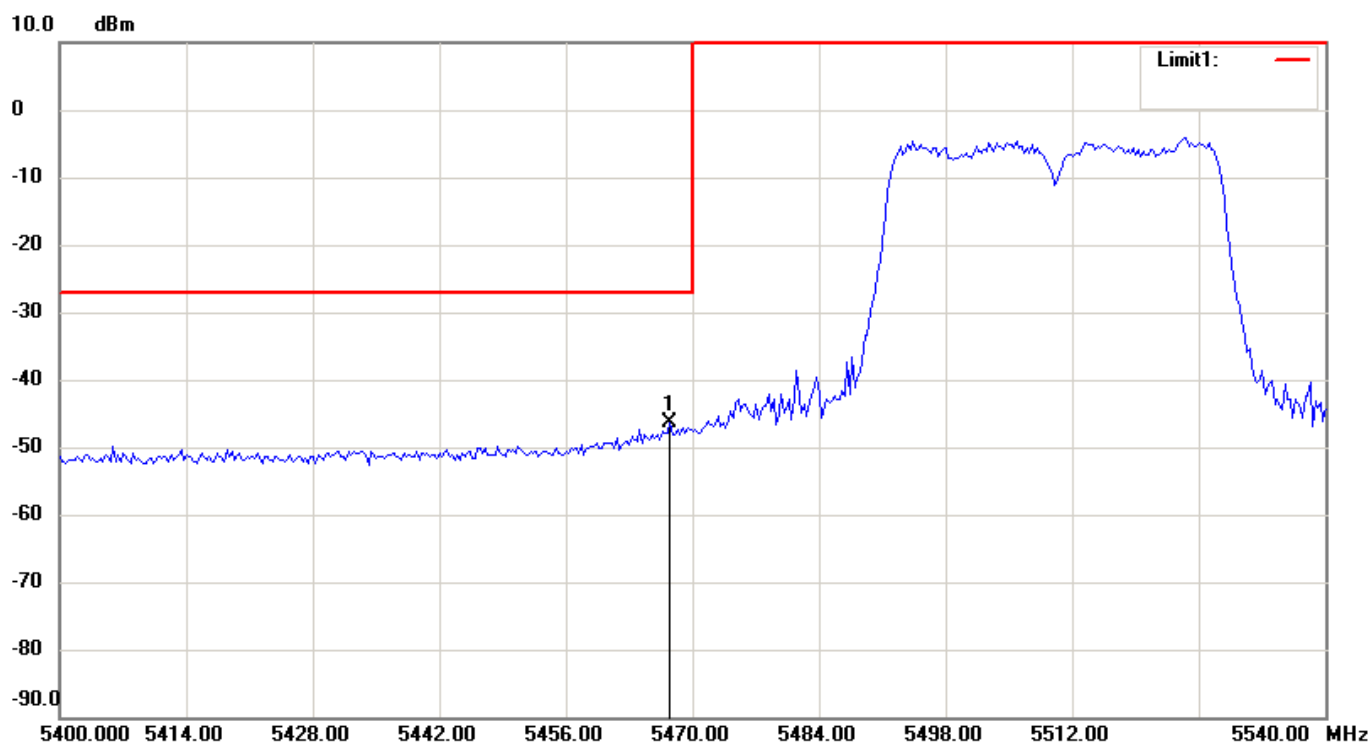
#7

Date: 2019/8/5

Temperature: 26 °C

Time: 下午 09:02:07

Humidity: 59 %



Condition: UNII-Band-3-Bandedge
EUT: Wireless File Transmitter
Model: DS586194

RF Conducted
Sweep Time: 1ms Att.: 15dB
RBW: 1000 KHz VBW: 3000 KHz

Test Mode: TX_UNII Band3_Ant2
Note: Operator: Phillip (測試場地: RF-Cond01)
NCC_LP0002_802.11n40 Channel 102_Low_Bandedge

No.	Frequency(MHz)	Level(dBm)
1	5467.48000	-46.34

File: 19-07-MAS-
008_5-
6n40_Ant2

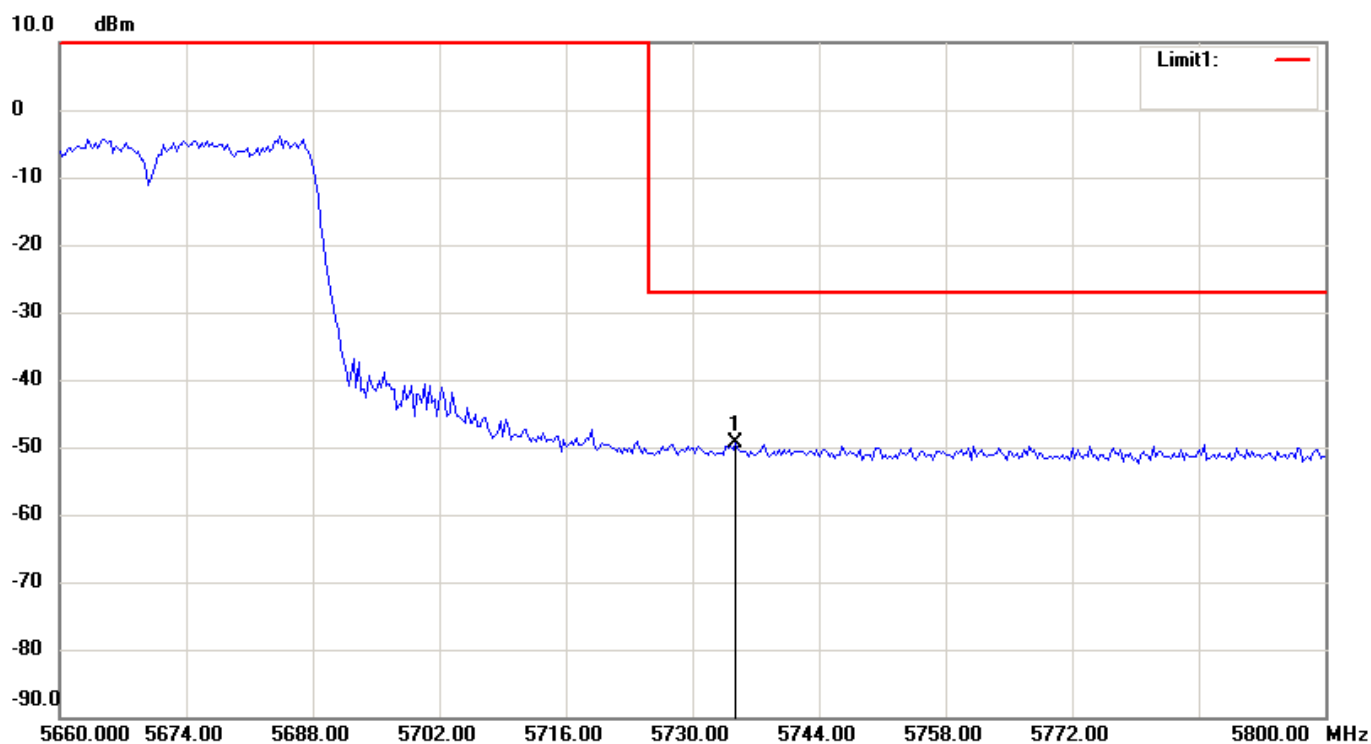
#20

Date: 2019/8/5

Temperature: 26 °C

Time: 下午 09:14:00

Humidity: 59 %



Condition: UNII-Band-3-Bandedge

RF Conducted

EUT: Wireless File Transmitter

Sweep Time: 1ms Att.: 15dB

Model: DS586194

RBW: 1000 KHz VBW: 3000 KHz

Test Mode: TX_UNII Band3_Ant2

Note: Operator: Phillip (測試場地: RF-Cond01)

NCC_LP0002_802.11n40 Channel 134_High_Bandedge

No.	Frequency(MHz)	Level(dBm)
1	5734.76000	-49.27

調變技術: IEEE 802.11ac80
CHAIN 1

File: 19-07-MAS-008_5-6ac80_Ant1

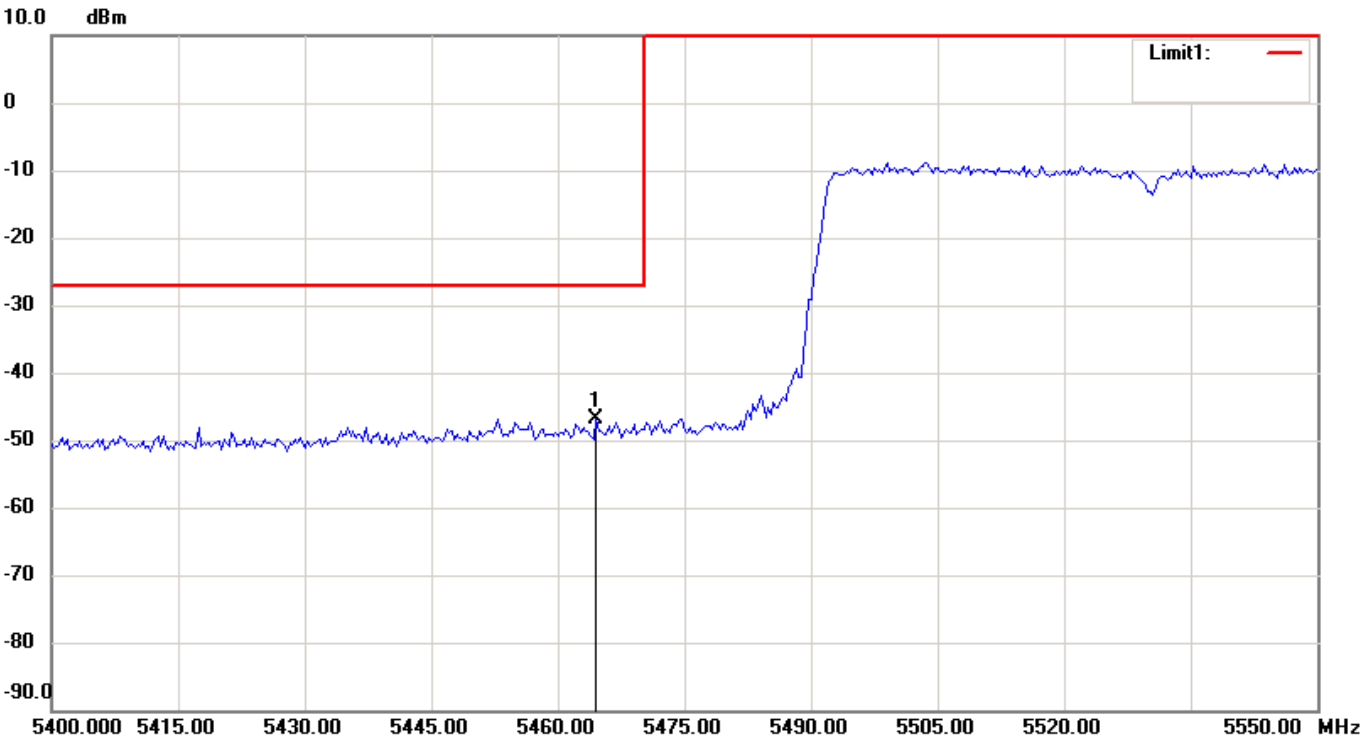
#7

Date: 2019/8/6

Temperature: 26 °C

Time: 上午 10:10:34

Humidity: 62 %



Condition: UNII-Band-3-Bandedge

EUT: Wireless File Transmitter

Model: DS586194

Test Mode: TX_UNII Band3_Ant1

Note: Operator: Phillip (測試場地: RF-Cond01)

NCC_LP0002_802.11ac80 Channel 106_Low_Bandedge

RF Conducted

Sweep Time: 1ms

RBW: 1000 KHz

Att.: 15dB

VBW: 3000 KHz

No.	Frequency(MHz)	Level(dBm)
1	5464.50000	-46.81

File: 19-07-MAS-
008_5-
6ac80_Ant1

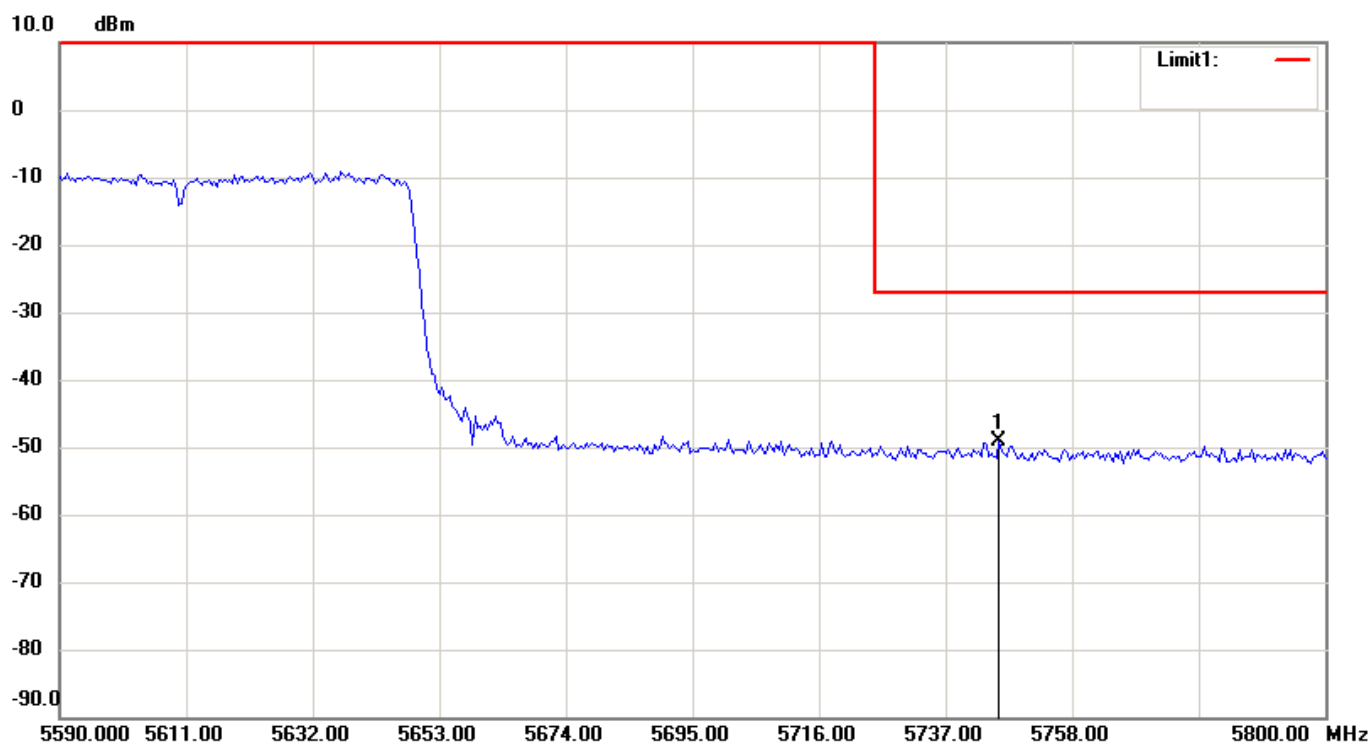
#14

Date: 2019/8/6

Temperature: 26 °C

Time: 上午 10:16:59

Humidity: 62 %



Condition: UNII-Band-3-Bandedge

RF Conducted

EUT: Wireless File Transmitter

Sweep Time: 1ms Att.: 15dB

Model: DS586194

RBW: 1000 KHz VBW: 3000 KHz

Test Mode: TX_UNII Band3_Ant1

Note: Operator: Phillip (測試場地: RF-Cond01)

NCC_LP0002_802.11ac80 Channel 122_High_Bandedge

No.	Frequency(MHz)	Level(dBm)
1	5745.82000	-49.00

CHAIN 2

File: 19-07-MAS-
008_5-
6ac80_Ant2

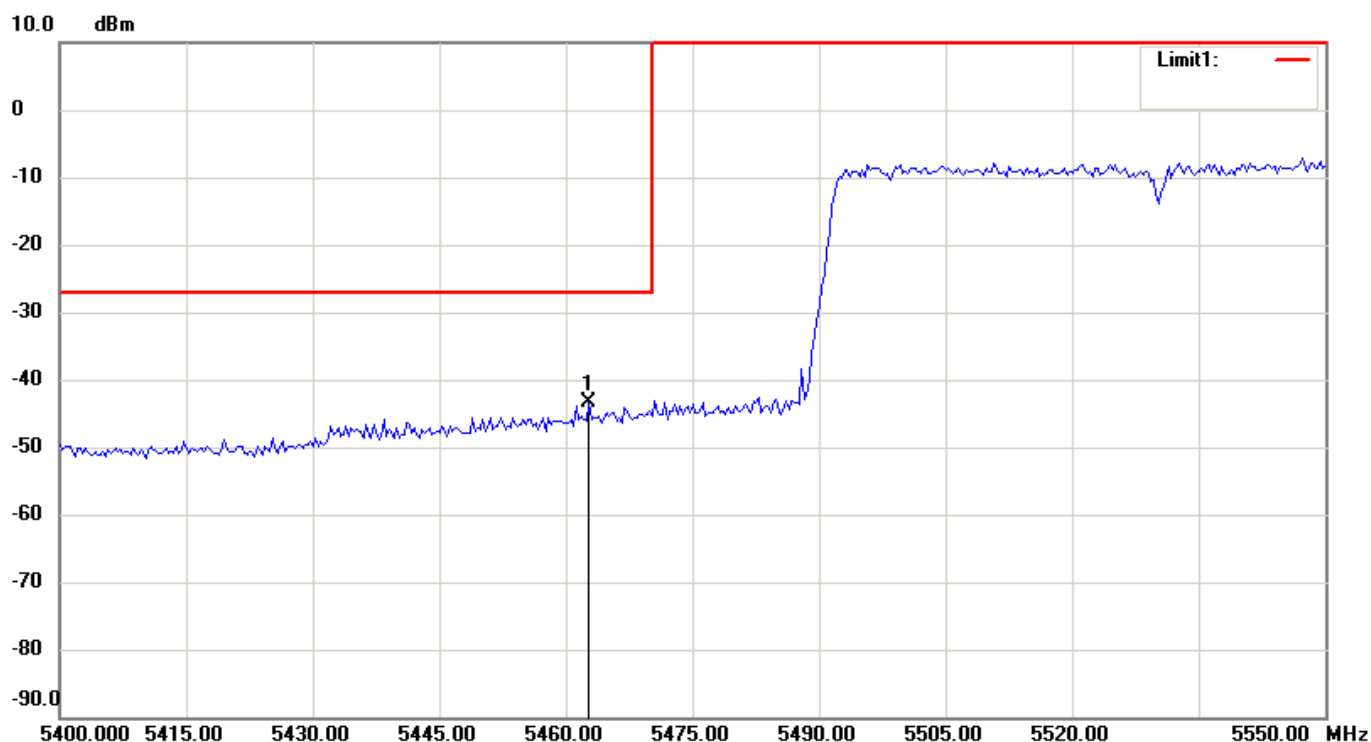
#7

Date: 2019/8/6

Temperature: 26 °C

Time: 上午 09:33:05

Humidity: 62 %



Condition: UNII-Band-3-Bandedge

RF Conducted

EUT: Wireless File Transmitter

Sweep Time: 1ms Att.: 15dB

Model: DS586194

RBW: 1000 KHz VBW: 3000 KHz

Test Mode: TX_UNII Band3_Ant2

Note: Operator: Phillip (測試場地: RF-Cond01)

NCC_LP0002_802.11ac80 Channel 106_Low_Bandedge

No.	Frequency(MHz)	Level(dBm)
1	5462.70000	-43.29

File: 19-07-MAS-
008_5-
6ac80_Ant2

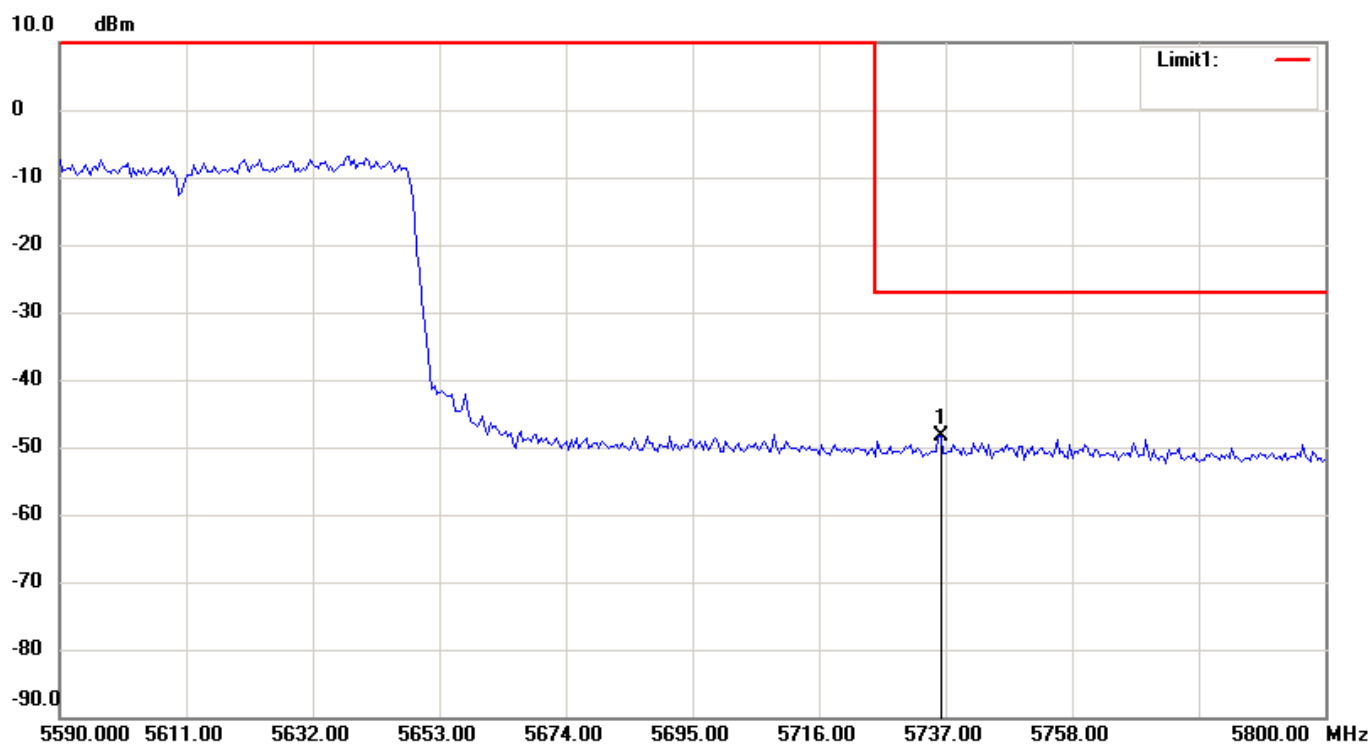
#14

Date: 2019/8/6

Temperature: 26 °C

Time: 上午 10:01:06

Humidity: 62 %



Condition: UNII-Band-3-Bandedge

RF Conducted

EUT: Wireless File Transmitter

Sweep Time: 1ms Att.: 15dB

Model: DS586194

RBW: 1000 KHz VBW: 3000 KHz

Test Mode: TX_UNII Band3_Ant2

Note: Operator: Phillip (測試場地: RF-Cond01)

NCC_LP0002_802.11ac80 Channel 122_High_Bandedge

No.	Frequency(MHz)	Level(dBm)
1	5736.16000	-48.38

10.8 結果判定

以上頻帶外邊緣測試之結果皆低於限制值-27dBm，合乎標準規定。

10.9 輻射之測試配置

圖 3: 量測頻率低於1GHz之測試配置

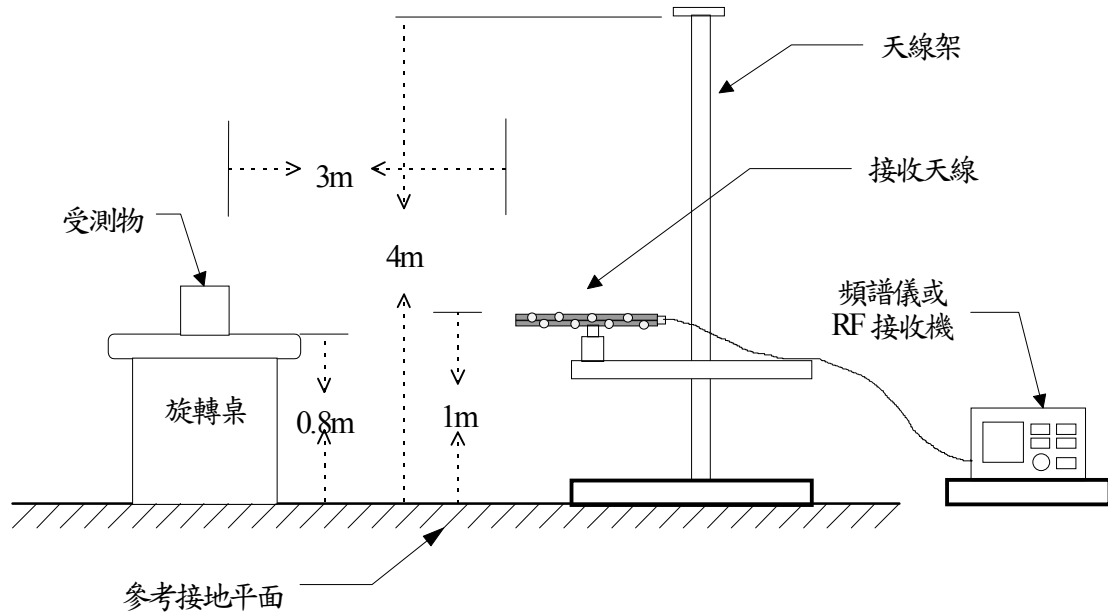
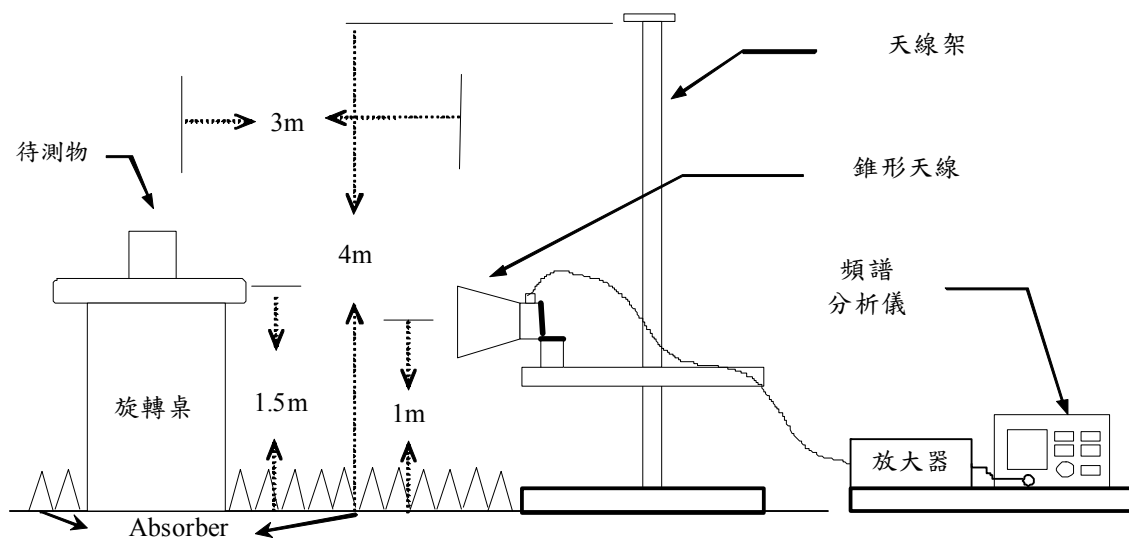


圖 4: 量測頻率高於1GHz之測試配置



10.10 輻射量測之配置照片

請參考產品照片

11 發射功率控制(TPC)之量測

11.1 發射功率控制(TPC)適用標準

依據國家通訊傳播委員會低功率射頻電機技術規範4.7.7.1節之規定，操作於 5.25GHz ~5.35GHz 與5.470GHz~5.725GHz 頻段的設備，應具備發射功率控制機能。設備必須至少具有6dB 低於平均 EIRP 30dBm 的能力。EIRP 低於 500mW 之系統不須具備TPC 機能。

11.2 發射功率控制(TPC)之測試配置

如圖 2 所示。

11.3 適用性

Highest Power Level in DFS Bnd (EIRP)		7.48dBm+4.45dBi =11.93dBm =15.6 mW
☒	EIRP < 500 mW	Not Applicable
☐	EIRP $\geq$ 500 mW	Applicable

12 動態頻率選擇(DFS)之量測

12.1 LIMITS

依據國家通訊傳播委員會低功率射頻電機技術規範 4.7.7.2 節之規定與 FCC KDB 905462 D02 UNII DFS Compliance Procedures New Rules v02 COMPLIANCE MEASUREMENT PROCEDURES FOR UNLICENSED-NATIONAL INFORMATION INFRASTRUCTURE DEVICES OPERATING IN THE 5250-5350 MHz AND 5470-5725 MHz BANDS INCORPORATING DYNAMIC FREQUENCY SELECTION.

Table 1: Applicability of DFS Requirements Prior to Use of a Chnnel

Requirement	Operational Mode		
	Master	Client Without Radar Detection	Client With Radar Detection
<i>Non-Occupancy Period</i>	Yes	Not required	Yes
<i>DFS Detection Threshold</i>	Yes	Not required	Yes
<i>Channel Availability Check Time</i>	Yes	Not required	Not required
<i>U-NII Detection Bandwidth</i>	Yes	Not required	Yes

Table 2: Applicability of DFS requirements during normal operation

Requirement	Operational Mode	
	Master Device or Client with Radar Detection	Client Without Radar Detection
<i>DFS Detection Threshold</i>	Yes	Not required
<i>Channel Closing Transmission Time</i>	Yes	Yes
<i>Channel Move Time</i>	Yes	Yes
<i>U-NII Detection Bandwidth</i>	Yes	Not required

Additional requirements for devices with multiple bandwidth modes	Master Device or Client with Radar Detection	Client Without Radar Detection
<i>U-NII Detection Bandwidth and Statistical Performance Check</i>	All BW modes must be tested	Not required
<i>Channel Move Time and Channel Closing Transmission Time</i>	Test using widest BW mode available	Test using the widest BW mode available for the link
<i>All other tests</i>	Any single BW mode	Not required
Note: Frequencies selected for statistical performance check (Section 7.8.4) should include several frequencies within the radar detection bandwidth and frequencies near the edge of the radar detection bandwidth. For 802.11 devices it is suggested to select frequencies in each of the bonded 20 MHz channels and the channel center frequency.		

Table 3: DFS Detection Thresholds for Master Devices and Client Devices with Radar Detection

Maximum Transmit Power	Value (See Notes 1, 2, and 3)
EIRP $\geq$ 200 milliwatt	-64 dBm
EIRP $<$ 200 milliwatt and power spectral density $<$ 10 dBm/MHz	-62 dBm
EIRP $<$ 200 milliwatt that do not meet the power spectral density requirement	-64 dBm
Note 1: This is the level at the input of the receiver assuming a 0 dBi receive antenna. Note 2: Throughout these test procedures an additional 1 dB has been added to the amplitude of the test transmission waveforms to account for variations in measurement equipment. This will ensure that the test signal is at or above the detection threshold level to trigger a DFS response. Note3: EIRP is based on the highest antenna gain. For MIMO devices refer to KDB Publication 662911 D01.	

Table 4: DFS Response Requirement Values

Parameter	Value
<i>Non-occupancy period</i>	Minimum 30 minutes
<i>Channel Availability Check Time</i>	60 seconds
<i>Channel Move Time</i>	10 seconds See Note 1.
<i>Channel Closing Transmission Time</i>	200 milliseconds + an aggregate of 60 milliseconds over remaining 10 second period. See Notes 1 and 2.
<i>U-NII Detection Bandwidth</i>	Minimum 100% of the U-NII 99% transmission power bandwidth. See Note 3.
Note 1: <i>Channel Move Time</i> and the <i>Channel Closing Transmission Time</i> should be performed with Radar Type 0. The measurement timing begins at the end of the Radar Type 0 burst. Note 2: The <i>Channel Closing Transmission Time</i> is comprised of 200 milliseconds starting at the beginning of the <i>Channel Move Time</i> plus any additional intermittent control signals required to facilitate a <i>Channel</i> move (an aggregate of 60 milliseconds) during the remainder of the 10 second period. The aggregate duration of control signals will not count quiet periods in between transmissions. Note 3: During the <i>U-NII Detection Bandwidth</i> detection test, radar type 0 should be used. For each frequency step the minimum percentage of detection is 90 percent. Measurements are performed with no data traffic.	

Table 5 – Short Pulse Radar Test Waveforms

Radar Type	Pulse Width (μsec)	PRI (μsec)	Number of Pulses	Minimum Percentage of Successful Detection	Minimum Number of Trials
0	1	1428	18	See Note 1	See Note 1
1	1	Test A: 15 unique PRI values randomly selected from the list of 23 PRI values in Table 5a Test B: 15 unique PRI values randomly selected within the range of 518-3066 μsec, with a minimum increment of 1 μsec, excluding PRI values selected in Test A	$\text{Roundup} \left\{ \left(\frac{1}{360} \right) \cdot \left(\frac{19 \cdot 10^6}{\text{PRI}_{\mu\text{sec}}} \right) \right\}$	60%	30
2	1-5	150-230	23-29	60%	30
3	6-10	200-500	16-18	60%	30
4	11-20	200-500	12-16	60%	30
Aggregate (Radar Types 1-4)				80%	120
Note 1: Short Pulse Radar Type 0 should be used for the detection bandwidth test, channel move time, and channel closing time tests.					

Table 5a - Pulse Repetition Intervals Values for Test A

Pulse Repetition Frequency Number	Pulse Repetition Frequency (Pulses Per Second)	Pulse Repetition Interval (Microseconds)
1	1930.5	518
2	1858.7	538
3	1792.1	558
4	1730.1	578
5	1672.2	598
6	1618.1	618
7	1567.4	638
8	1519.8	658
9	1474.9	678
10	1432.7	698
11	1392.8	718
12	1355	738
13	1319.3	758
14	1285.3	778
15	1253.1	798
16	1222.5	818
17	1193.3	838
18	1165.6	858
19	1139	878
20	1113.6	898
21	1089.3	918
22	1066.1	938
23	326.2	3066

Table 6 – Long Pulse Radar Test Waveform

Radar Type	Pulse Width (μsec)	Chirp Width (MHz)	PRI (μsec)	Number of Pulses per Burst	Number of Bursts	Minimum Percentage of Successful Detection	Minimum Number of Trials
5	50-100	5-20	1000-2000	1-3	8-20	80%	30

12.2 產品描述

12.2.1 待測物

DFS 操作頻帶	☒ 5470MHz~5725MHz
操作模式	☐ 主控 (Master)
	☒ 受控 (Client without In-Service Monitoring)
	☐ 受控 (Client with In-Service Monitoring)
頻道負載運作方式	☒ IP Based System
	☐ Frame Based System
	☐ Other System

Note: The tested level is lower thn the required level hence it provides margin to the limit.

12.3 測試系統

12.3.1 系統描述

12.3.1.1 雷達信號

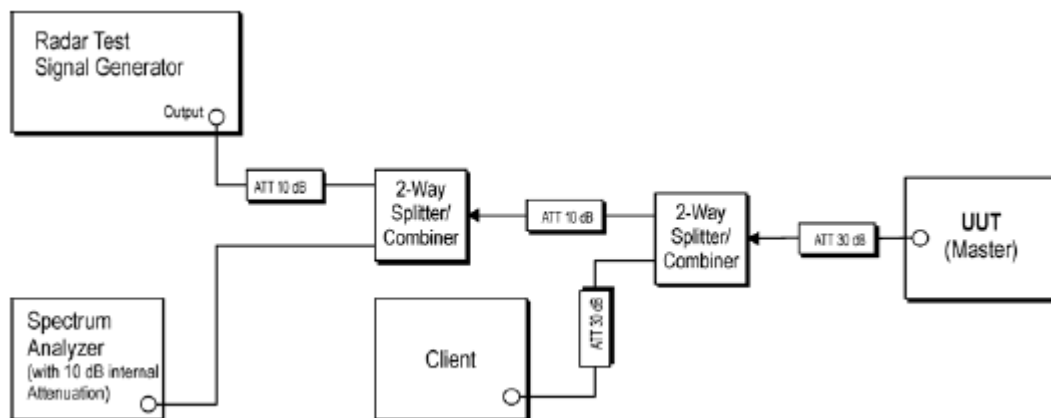
所有雷達信號依據 FCC KDB 905462 D02 UNII DFS Compliance Procedures New Rules v02 之規定產生。

12.3.1.2 參考信號負載

無線傳輸信號負載使用由美國電信資訊署(N.T.I.A)參考系統所提供之 MPEG 影像檔。
資料傳送方向由 Master 傳送到 Client。

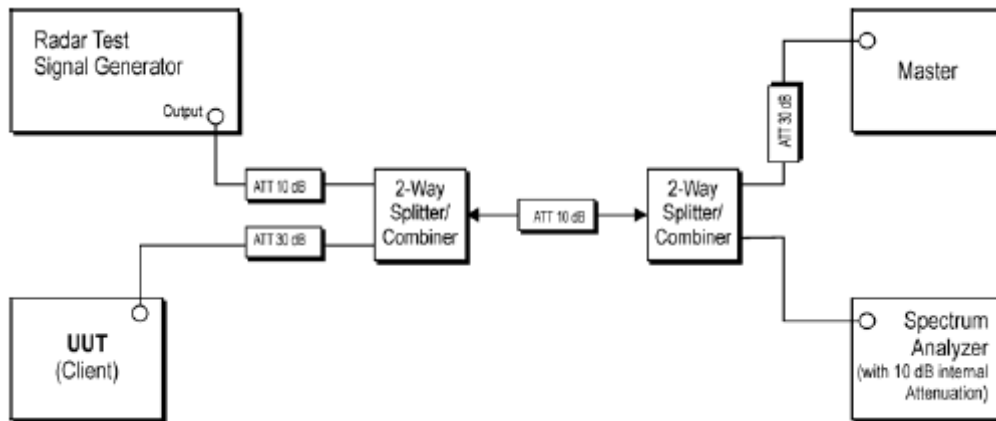
12.3.2 系統配置

12.3.2.1 Setup for Master with injection at the Master



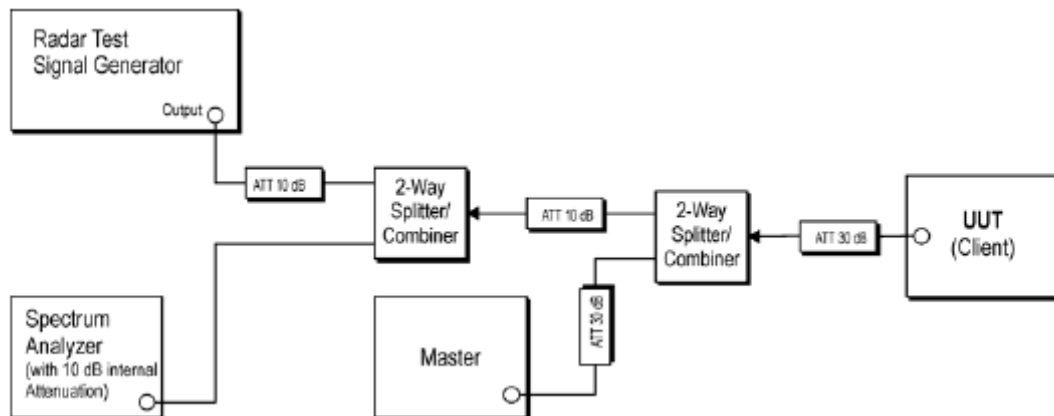
主控設備配置圖

12.3.2.2 Setup for Client with injection at the Master



受控設備配置圖 1(Client without In-Service Monitoring)

12.3.2.3 Setup for Client with injection at the Client



受控設備配置圖 2 (Client with In-Service Monitoring)

12.3.3 量測儀器

儀器名稱	製造者	型 號
Spectrum Analyzer	R&S	FSU46
Vector Signal Generator	R&S	SMU200A

12.3.4 使用週邊

裝置名稱	製造者/代理者	型 號	纜 線 說 明
Notebook	Dell	Inspiron 1420	非隔離電源線 3.3m*1 / Adaptor 非隔離信號線 1.0m*1/RJ45
Notebook	HP	650G1	非隔離電源線 2.8m*1 / Adaptor 非隔離信號線 1.0m*1/RJ45
Access Point	I O	WN-AC1167GR	非隔離電源線 1.5m*1 / Adaptor

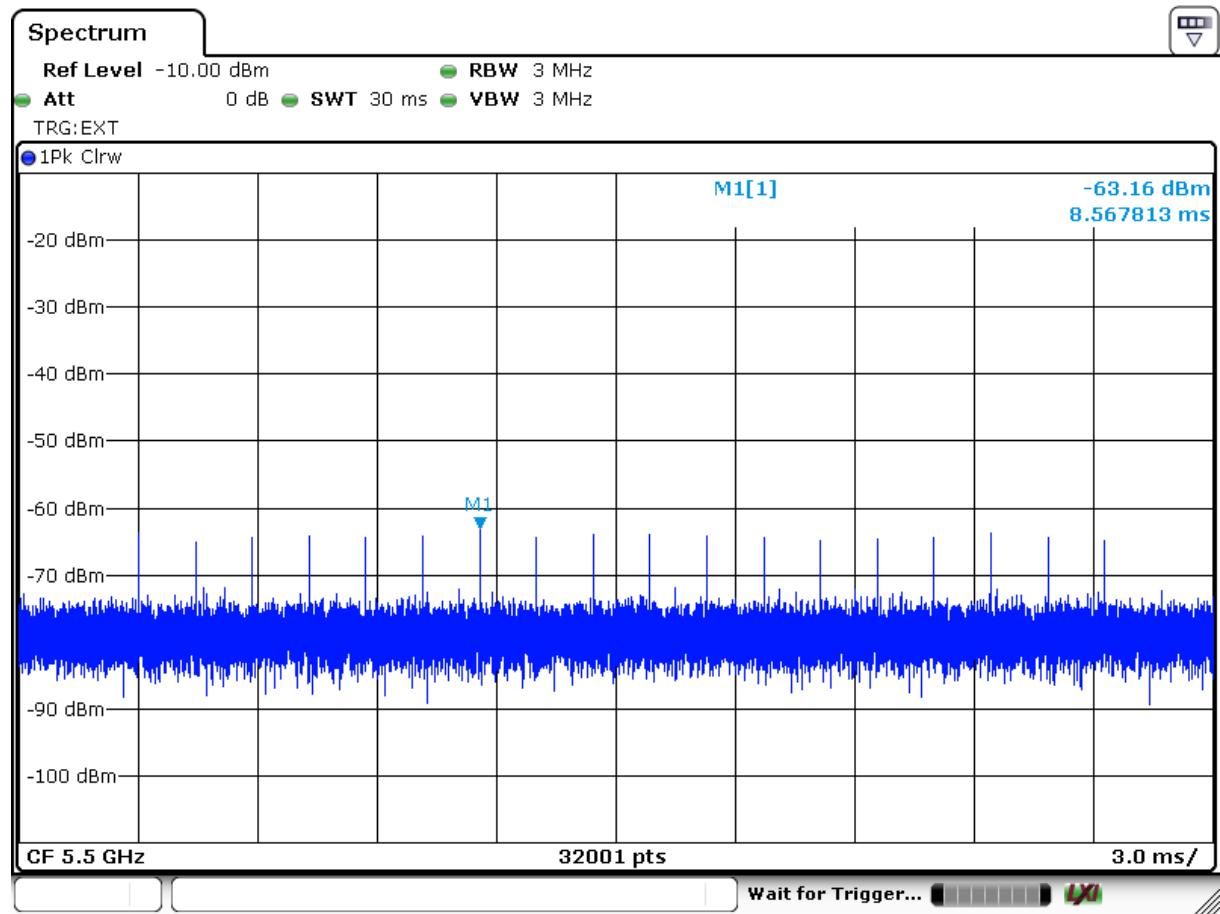
12.4 測試頻道及測試方法

12.4.1

測試方法	☒ 直接量測方式	☐ 輻射方式
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12.4.2 使用雷達信號

Short Pulse Radar Type 0



12.5 量測結果

12.5.1 Radar TYPE 0 CHANNEL MOVE TIME RESULTS

結果判定：符合標準規定。

Modulation	Operation Frequency (MHz)	Chnnel Move Time (s)	Limit (s)
IEEE 802.11ac VHT80	5530	< 10S	10

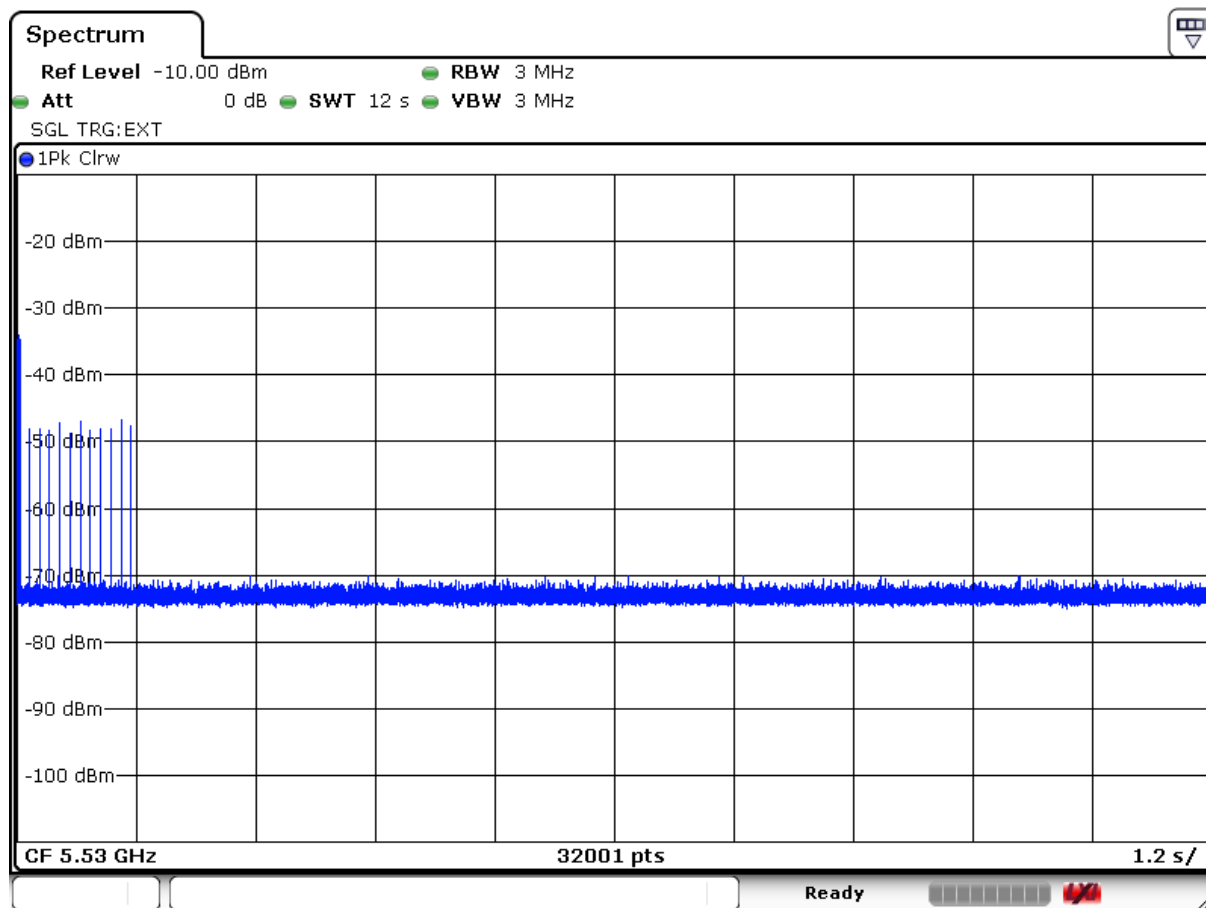
File: 19-07-MAS-008_5-3a

Date 2019/8/26

Temperature: 23 °C

:

Humidity: 55 %



Date: 26 AUG 2019 18:30:04

Condition: NCC_LP0002
EUT: Wireless File Transmitter
Model: DS586194
Test Mode: UNII Band3
Note: Operator: Phillip (測試場地: RF-Cond02)

12.5.2 Radar TYPE 0 CHANNEL CLOSING TRANSMISSION TIME RESULTS

The following plot demonstrates a channel close time of <200ms, with an aggregate of no more than 60 ms.

結果判定：符合標準規定。

Modulation	Operation Frequency (MHz)	Aggregate Transmission Time (ms)	Limit (ms)
IEEE 802.11ac VHT80	5530	7	60

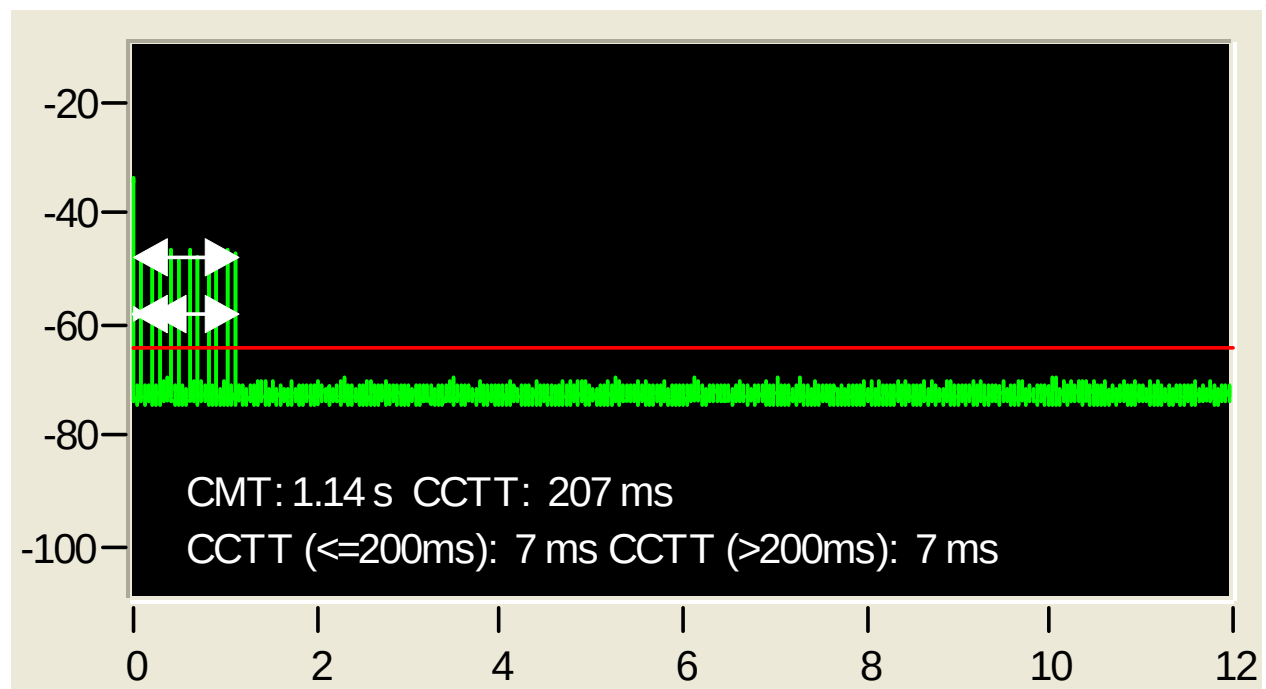
File: 19-07-MAS-008_5-3a

Date 2019/8/26

Temperature: 23 °C

:

Humidity: 55 %



Condition: NCC_LP0002
EUT: Wireless File Transmitter
Model: DS586194
Test Mode: UNII Band3
Note: Operator: Phillip (測試場地: RF-Cond02)

Aggregate Transmission Time =
(Number of analyzer bins showing transmission) * (dwell time per bin)
=7 ms

12.5.3 Non-occupancy Period (Associated Test)

No EUT transmissions were observed on the test channel during the 30-minute observation time.

結果判定：符合標準規定。

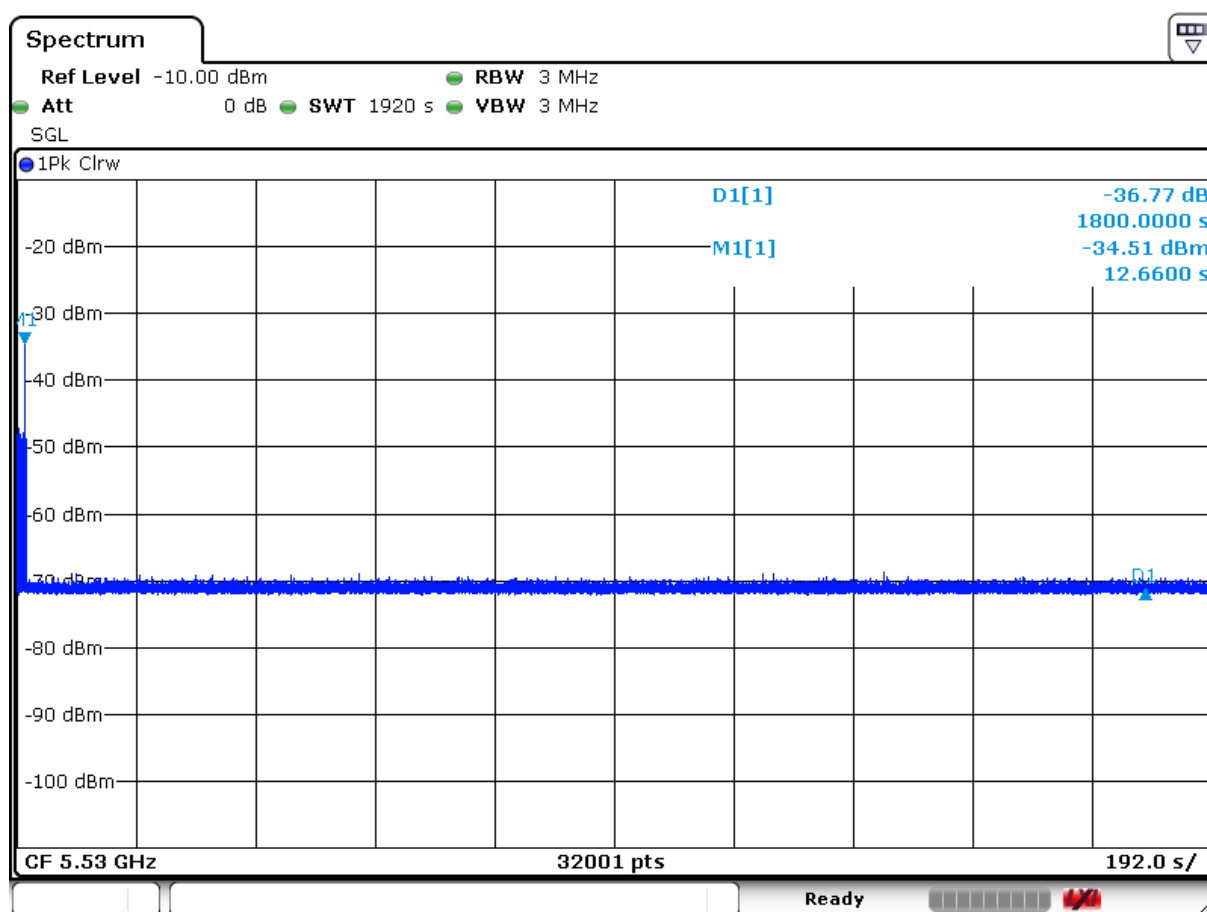
File: 19-07-MAS-008_5-3a

Date 2019/8/26

Temperature: 23 °C

:

Humidity: 55 %



Date: 26 AUG 2019 19:13:41

Condition: NCC_LP0002
EUT: Wireless File Transmitter
Model: DS586194
Test Mode: UNII Band3
Note: Operator: Phillip (測試場地: RF-Cond02)

13 量測之儀器

儀器名稱	製造者	型 號	財產編號/序號	校驗日期	下次校驗日期
EMI Test Receiver	R&S	ESCI	13054418-001	01/24/2019	01/23/2020
V-LISN	R&S	ENV216	13057719-001	09/21/2018	09/20/2019
Spectrum Analyzer	R&S	FSV	13052017-001	07/05/2019	07/04/2020
Attenuator	WEINSCHEL	56-10	58772	04/22/2019	04/21/2020
EMI Receiver	R&S	ESCI	13054423-001	01/04/2019	01/03/2020
Spectrum Analyzer	R&S	FSU46	13040904-001	06/10/2019	06/09/2020
Horn Antenna	EMCO	3117	13059211-004	04/24/2019	04/23/2020
Horn Antenna	EMCO	3116	13059202-001	11/23/2018	11/22/2019
PRE-Amplifier	Agilent	8449B	13040709-001	01/03/2019	01/02/2020
PRE-Amplifier	Agilent	8447D	13040715-002	04/24/2019	04/23/2020
BiLog Antenna	ETC	MCTD 2786	BL19J04024	01/15/2019	01/14/2020
PRE-Amplifier	Agilent	83051A	13052916001	09/19/2018	09/18/2019
Vector Signal Generator	R&S	SMU200A	13549901-002	06/11/2019	06/10/2020