

低功率射頻器材 檢驗報告

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製造廠商	silex technology, Inc.
受檢設備名稱	Wireless Embedded Module
廠牌	silex technology
型號	SX-SDMAC
檢驗依據標準	國家通訊傳播委員會低功率射頻器材 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：台灣佐藤自動識別系統股份有限公司
 製造廠商：silex technology, Inc.
 廠牌：silex technology
 品名：Wireless Embedded Module
 型號：SX-SDMAC
 檢驗依據標準：國家通訊傳播委員會低功率射頻器材技術規範(LP0002)
 規範修訂日期109年07月01日
 發射功率(電場強度)：9.15 dBm (發射功率)
 工作頻率及調變方式：5745 ~ 5825 MHz / OFDM
 天線規格：天線1. 廠牌: Unictron, 型號: H2B1PC1A1C, 天線增益: 4.4 dBi
 天線2. 廠牌: SANSEI ELECTRONIC Co.,LTD, 型號: ANTDP-027A0,
 天線增益: 2.1 dBi
 天線3. 廠牌: SANSEI ELECTRONIC Co.,LTD, 型號: ANTDP-039A0,
 天線增益: 2.1 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 3.3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 5.7.8節	----	請參閱5.2節	----
3	發射頻寬之要求	低功率射頻電機技術規範 5.7.5節	請參閱6.3節	請參閱6.4節	合格
4	最大傳導輸出功率之要求	低功率射頻電機技術規範 5.7.3.3節(1)	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 5.7.3.3節(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 5.7.4.2節	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 5.7.4.6節	請參閱10.3節	請參閱10.5節	合格

測量實驗室負責人：鄭景文 109.10.05 直接主管：黃敬瑞 109.10.05 量測員：鄧世昂 109/10/05

1 一般資料

1.1 產品描述

- a) 產品型態 : Wireless Embedded Module
 b) 商 標 : silex technology
 c) 產品型號 : SX-SDMAC
 d) 供應電源 : DC 3.3V

- 備註：1. 本產品內含 WLAN、Bluetooth 及 Bluetooth LE 無線技術，WLAN 部份包含 DTS 與 UNII 頻帶。本報告僅記錄 UNII Band 4 (5725 至 5850 MHz)部份，Bluetooth 部份請見 ETC 報告編號: 20-02-MAS-101-01，Bluetooth LE 部份請見 ETC 報告編號: 20-02-MAS-101-02，DTS 部份請見 ETC 報告編號: 20-02-MAS-101-03，UNII Band 1 (5180 MHz 至 5240 MHz)部份請見 ETC 報告編號: 20-02-MAS-101-04，UNII Band 2 (5260 至 5320 MHz)部份請見 ETC 報告編號: 20-02-MAS-101-05，UNII Band 3 (5500 至 5700 MHz) 部份請見 ETC 報告編號: 20-02-MAS-101-06。
2. 本器材不具備主控運作模式動態頻率選擇與Ad-hoc功能。
3. 此產品測試依照”完全模組”之要求進行測試。
4. 本案經申請者切結器材不提供隨貨配件，配件由實驗室(或申請者)提供併同檢驗。

1.2 產品特性

此裝置為 Wireless Embedded Module，內含之WLAN其發射頻率落於 5745 至 5825 MHz頻段，採用 IEEE 802.11a/n/ac OFDM 調變技術，其應用為區域網路無線傳輸。主波發射功率為 9.15 dBm，即為 8.22 mW。

RF chain	1T1R	
Operating Frequency	IEEE 802.11a/n 20/ac 20MHz: 5.745GHz~5.825GHz, 5ch IEEE 802.11ac 40MHz Bnd: 5.755GHz~5.795GHz, 2ch IEEE 802.11ac 80MHz: 5.775 GHz, 1ch	
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器材技術規範以及參考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：財團法人台灣商品檢測驗證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：

- ❶ ISO/IEC 17025 : TAF(0371), NVLAP(Lab code: 200133-0), CBTL([TÜ V SÜ D](#))
- ❷ Recognized : BSMI, NCC, FCC(TW0371, TW1112), ISED(Industry Canada Site # 2949A-2)
- ❸ Filing : VCCI (C-13518, R-13177, G-10098, T-11682)
- ❹ MRA : Australia, New Zealand, Singapore

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器材技術規範之3.3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器材技術規範3.2節規定之限制，其發射天線之方向性增益超過6dBi時，應依其所超過之dB數等量降低峰值輸出功率。

如用於固定式點對點操作時，依法規5.7.3.3(3)供固定式點對點操作時，使用方向增益超過6 dBi 之發射天線，可不需對應減少發射器之傳導輸出功率限制值。

(3) 頻寬之要求

依據國家通訊傳播委員會低功率射頻器材技術規範5.7.5節之規定，6dB頻寬至少應有500 kHz。

(4) 最大傳導輸出功率之要求

依據國家通訊傳播委員會低功率射頻器材技術規範5.7.3.3節(1)之規定，最大傳導輸出功率應小於或等於1 W。

(5) 功率密度之要求

依據國家通訊傳播委員會低功率射頻器材技術規範5.7.3.3節之(2)規定，在任何500 kHz 頻帶中最大功率頻譜密度應小於或等於30 dBm

(6) 發射限制之要求

依據國家通訊傳播委員會低功率射頻器材技術規範5.7.4.2節之規定，在5.725 GHz～5.850 GHz 的頻段操作之發射器：所有頻帶邊緣向外5MHz 內頻率之發射，有效等向輻射功率(EIRP) ≤ 27 dBm/MHz ~ 15.6 dBm/MHz (以線性法計算對應之限制值)；所有頻帶邊緣向外5 MHz ~ 25 MHz，有效等向輻射功率(EIRP) ≤ 15.6 dBm/MHz ~ 10 dBm/MHz (以線性法計算對應之限制值)；所有頻帶邊緣外25 MHz ~ 75 MHz，有效等向輻射功率(EIRP) ≤ 10 dBm/MHz ~ -27 dBm/MHz (以線性法計算對應之限制值)；所有頻帶邊緣外 ≥ 75 MHz 的頻率之發射，有效等向輻射功率(EIRP) ≤ -27 dBm/MHz；有關遮罩限制值詳圖 1。

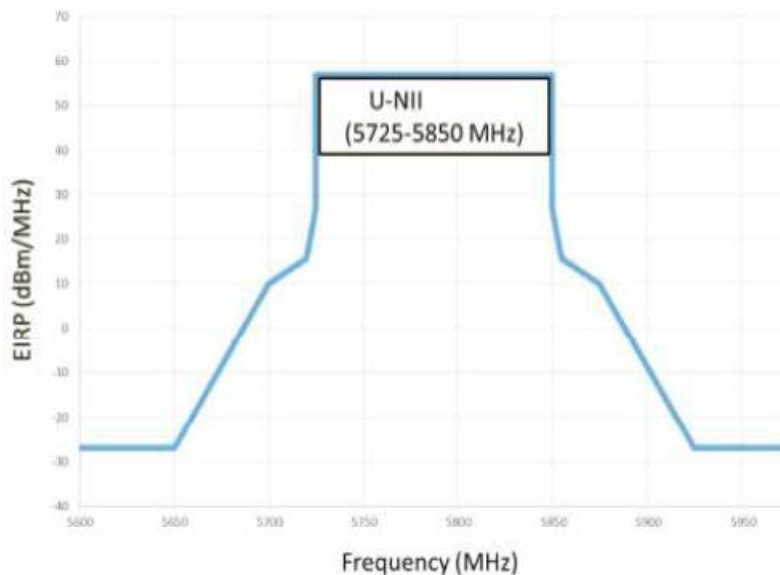


圖 1

(7) 輻射之規定

依據國家通訊傳播委員會低功率射頻器材技術規範 5.7.4.6節之要求，不必要發射頻率屬3.5 節規定頻段者，應符合3.6 節之規定。3.6 節限制要求：

頻率(f) MHz	電場強度 (微伏特/公尺， μ V/m)	測距 (公尺)
$0.009 \leq f \leq 0.490$	$2400/f(\text{kHz})$	300
$0.490 < f \leq 1.705$	$24000/f(\text{kHz})$	30
$1.705 < f < 30$	30	30
$30 \leq f \leq 88$	100	3
$88 < f \leq 216$	150	3
$216 < f \leq 960$	200	3
$960 < f$	500	3

2.2 限制使用之頻帶

頻率 (MHz)	頻率 (MHz)
0.090~0.110	1660.0~1785.0
0.490~0.510	1805.0~1880.0
2.172~2.198	1885.0~1900.0
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	

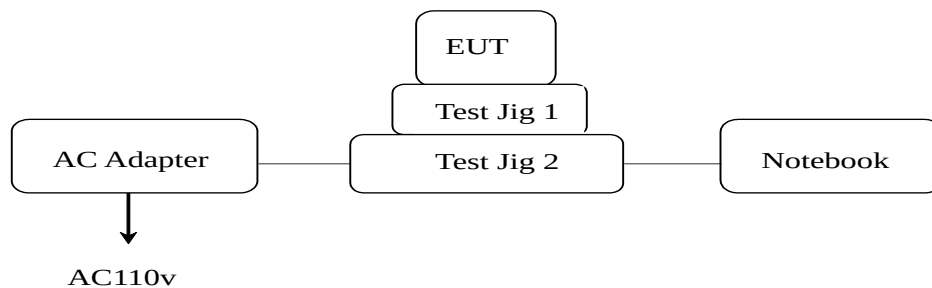
3 受測裝置之系統說明

3.1 受測裝置

裝置名稱	製造者/代理者	型 號	纜線說明
* Wireless Embedded Module	silex technology, Inc.	SX-SDMAC	非隔離電源線 1.5m
Test Jig 1	N/A	N/A	----
Test Jig 2	N/A	N/A	----
Notebook	DELL	Latitude 5590	----
AC Adapter	亞源科技	WB-10E05R	非隔離電源線1.8m* 1/
LAN Cable	fujiei	N/A	隔離信號線 1.0m * 1

註: 1.標記“*”表欲申請之受測物及配件。

2.測試配置：



3. 測試模式:

3.1 IEEE 802.11a, 802.11n HT20, 802.11ac VHT20 mode:

測試頻道如下:

Channel	Frequency (MHz)
Low = 149	5745
Middle = 157	5785
High = 165	5825

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

IEEE 802.11 n HT20, 802.11ac VHT20 mode: MCS0 data rate is the worse case for full testing.

3.2 IEEE 802.11n HT40, 802.11ac VHT40 mode:

測試頻道如下:

Channel	Frequency (MHz)
Low = 151	5755
High = 159	5795

IEEE 802.11 n HT40, 802.11ac VHT40 mode: MCS0 data rate is the worse case for full testing.

3.3 IEEE 802.11ac VHT80 mode:

測試頻道如下:

Channel	Frequency (MHz)
155	5775

IEEE 802.11 ac VHT80 mode: MCS0 data rate is the worse case for full testing.

4. 軟體設定: QRCT.exe

	Power Setting
IEEE 802.11a	8
IEEE 802.11n HT20	8
IEEE 802.11n HT40	8
IEEE 802.11ac VHT20	8
IEEE 802.11ac VHT40	8
IEEE 802.11ac VHT80	9

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 802.11ac VHT20	-
D	IEEE 802.11n HT40	-
E	IEEE 802.11ac VHT40	-
F	IEEE 802.11ac VHT80	-

Mode	IEEE 802.11a/n20/ac20	IEEE 802.11n40/ac40	IEEE 802.11ac80
Test Channel	Frequency (MHz)	Frequency (MHz)	Frequency (MHz)
Channel Low (L)	5745	5755	5775
Channel Mid (M)	5785	n/a	n/a
Channel High (H)	5825	5795	n/a

3.2.2 測試項目及模式

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

註: 1. 各測試模式預掃時無差異，擇一作最終測試並記錄之。

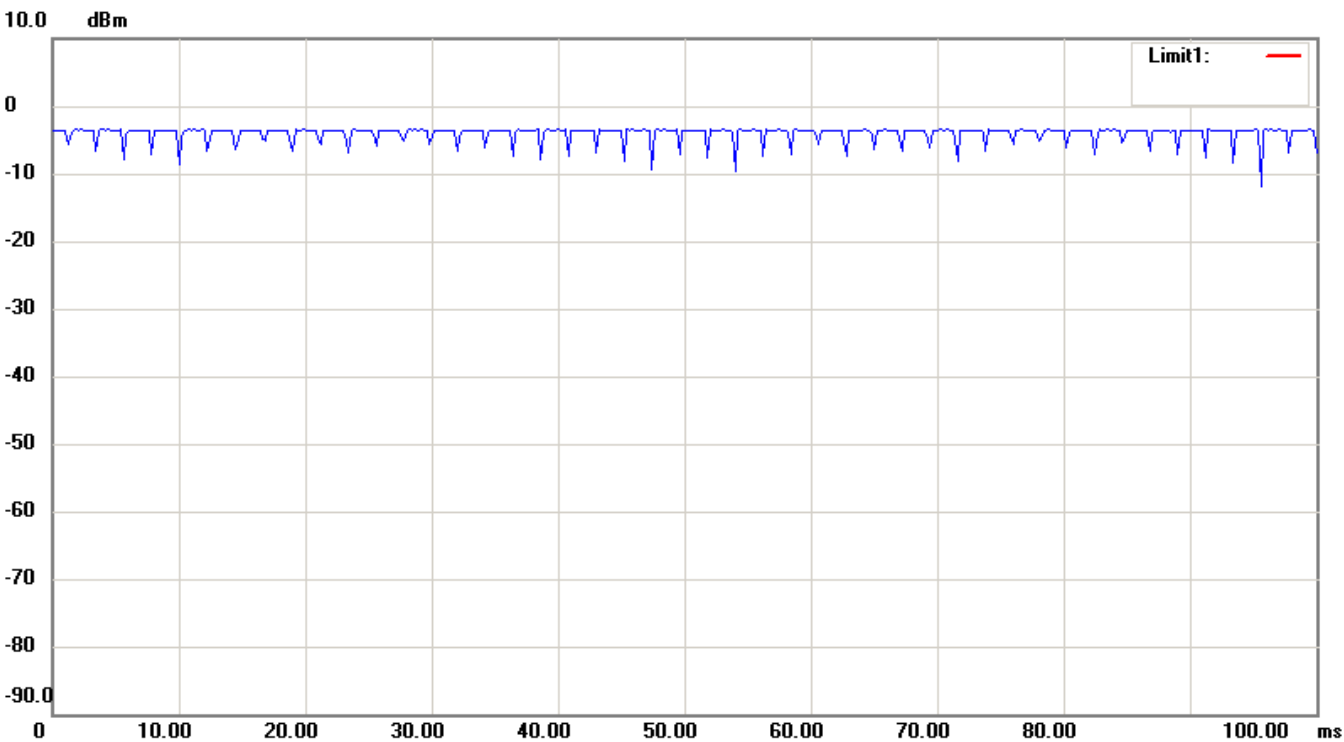
2. Test Mode B 與 Test Mode C / Test Mode D 與 Test Mode E 使用相同調變技術及頻寬，故以最大傳導輸出功率較大者 Test Mode C 及 Test Mode E 為 Worse case，作最終測試並記錄之。
3. 量測場強輻射時，應對其三個正交軸 (X、Y、Z) 的方位評估測試，並分別測試以找出最大輻射電場強度軸向，以最差軸模式測試，並記錄其值與軸向放置。
4. 依 NCC 74 次一致性會議：審驗時不具一般正常使用模式者，得不包括一般正常使用模式。
5. 此產品搭配三隻天線，正常操作時擇一使用，其中天線 1 的 Type 及 Gain 值均不同於其他兩隻天線，故對其進行測試並記錄。天線 2 及天線 3 僅型號及顏色不同，但 Type 及 Gain 值均相同，經預掃後以天線 2 做為 worse case 並作最終測試並記錄之。

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
IEEE 802.11a

File: 20-02-MAS-101_5-2a #22 Date: 2020/4/30 Temperature: 23 °C
Site: RF-Cond01 Humidity: 59 %



Condition:	UNII-Band1-2-Bandedge	RF Conducted	
EUT:	Wireless Embedded Module	Sweep Time: 100ms	Att.: 15dB
Model:	SX-SDMAC	RBW: 1000 KHz	VBW: 3000 KHz
Test Mode:	UNII	Operator:	Phillip
Note:	NCC_LP0002_802.11a Duty-1		

File: 20-02-MAS-101_5-2a

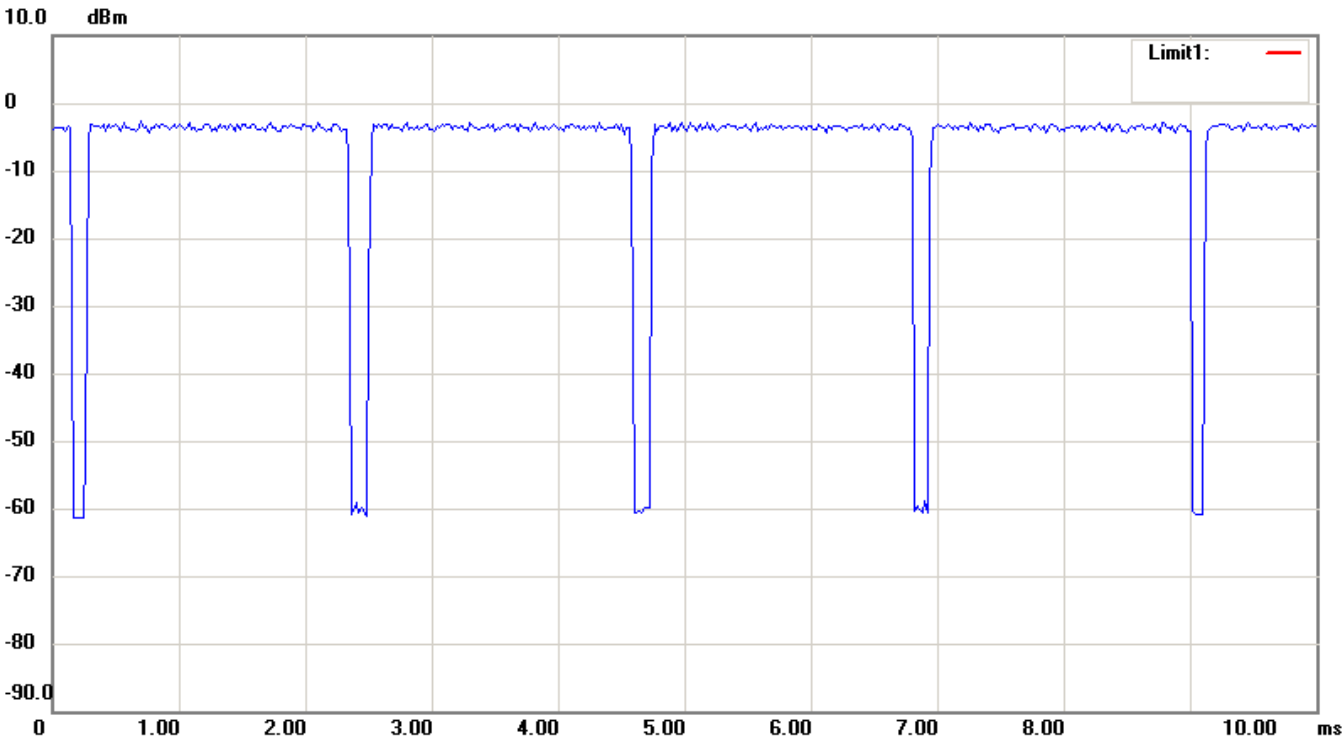
#23

Date: 2020/4/30

Temperature: 23 °C

Site: RF-Cond01

Humidity: 59 %



Condition:	UNII-Band1-2-Bandedge	RF Conducted	
EUT:	Wireless Embedded Module	Sweep Time: 10ms	Att.: 15dB
Model:	SX-SDMAC	RBW: 1000 KHz	VBW: 3000 KHz
Test Mode:	UNII	Operator:	Phillip
Note:	NCC_LP0002_802.11a Duty-2 (Duty Cycle = 93.8%)		

IEEE 802.11ac VHT20

File: 20-02-MAS-101_5-2ac20

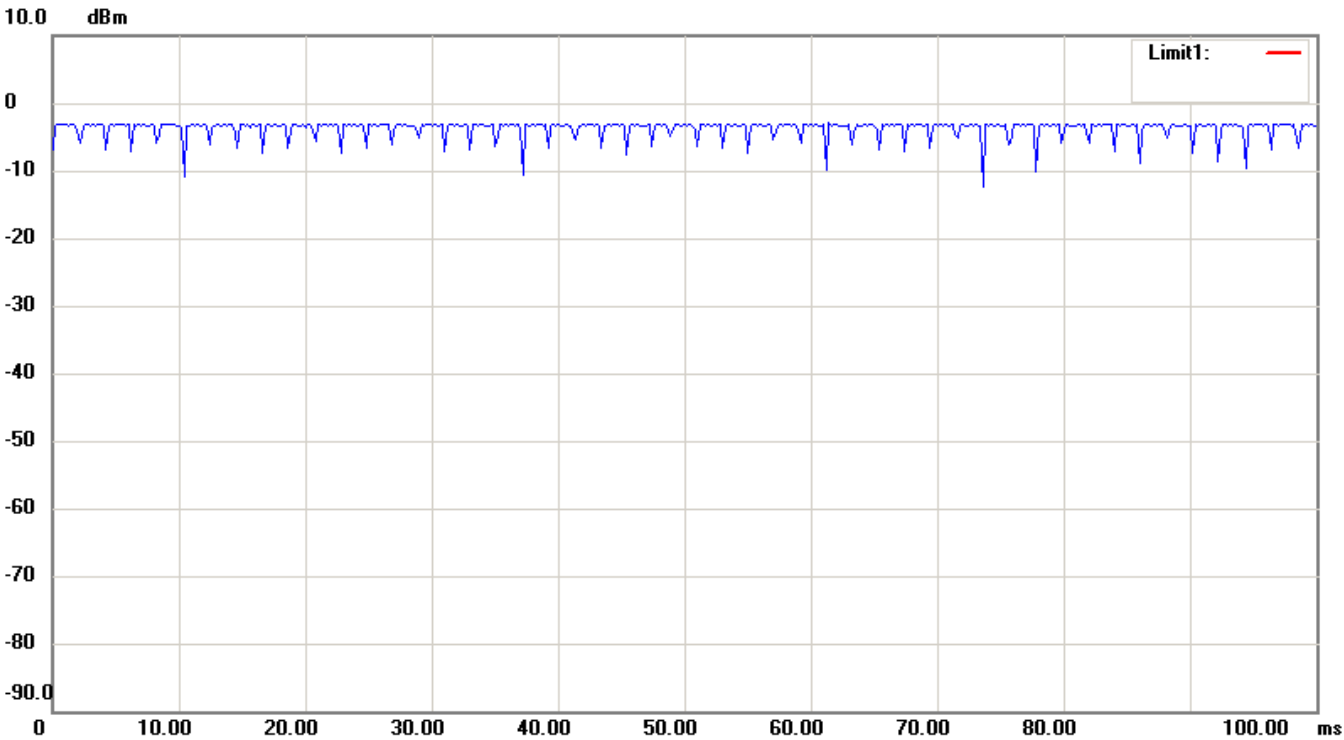
Site: RF-Cond01

#21

Date: 2020/4/30

Temperature: 23 °C

Humidity: 59 %



Condition:	UNII-Band1-2-Bandedge	RF Conducted	
EUT:	Wireless Embedded Module	Sweep Time: 100ms	Att.: 15dB
Model:	SX-SDMAC	RBW: 1000 KHz	VBW: 3000 KHz
Test Mode:	UNII	Operator:	Phillip
Note:	NCC_LP0002_802.11ac20 Duty-1		

File: 20-02-MAS-101_5-2ac20

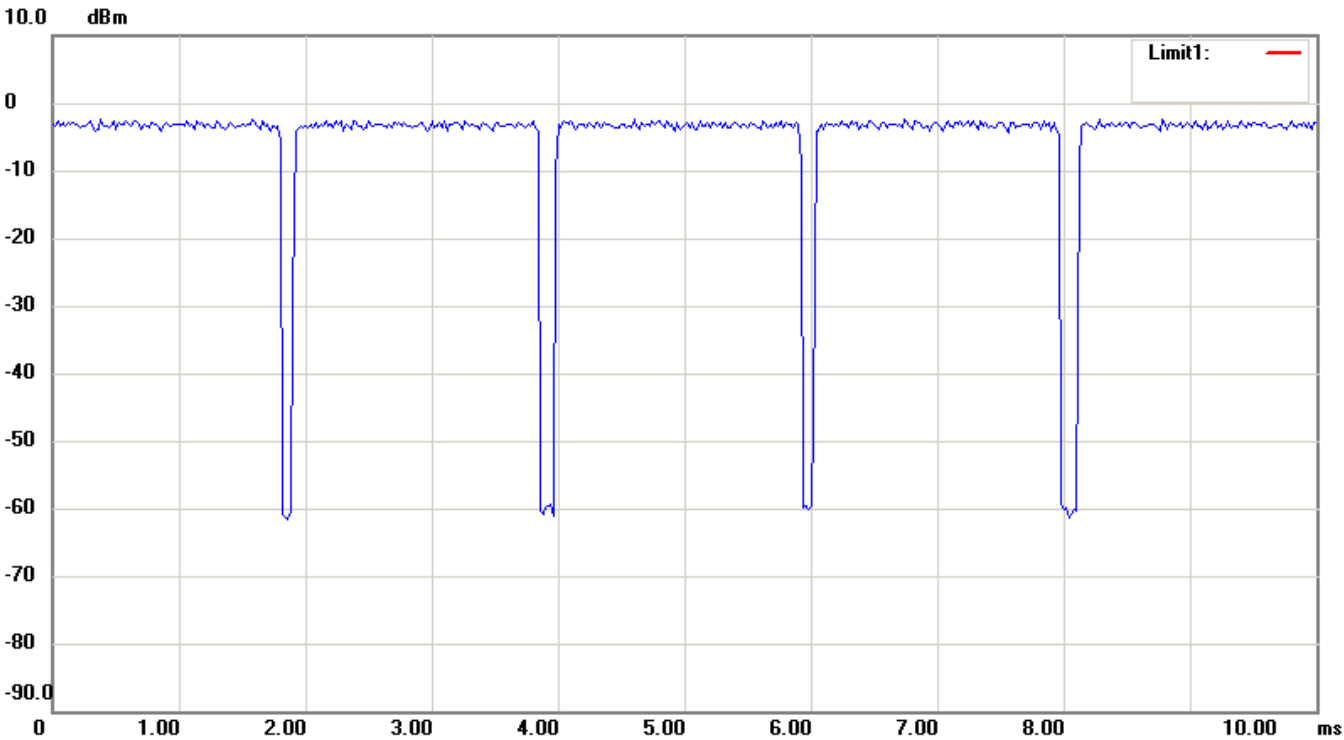
#22

Date: 2020/4/30

Temperature: 23 °C

Site: RF-Cond01

Humidity: 59 %



Condition:	UNII-Band1-2-Bandedge	RF Conducted	
EUT:	Wireless Embedded Module	Sweep Time: 10ms	Att.: 15dB
Model:	SX-SDMAC	RBW: 1000 KHz	VBW: 3000 KHz
Test Mode:	UNII	Operator:	Phillip
Note:	NCC_LP0002_802.11ac20 Duty-2 (Duty Cycle = 95.1%)		

IEEE 802.11ac VHT40

File: 20-02-MAS-101_5-2ac40

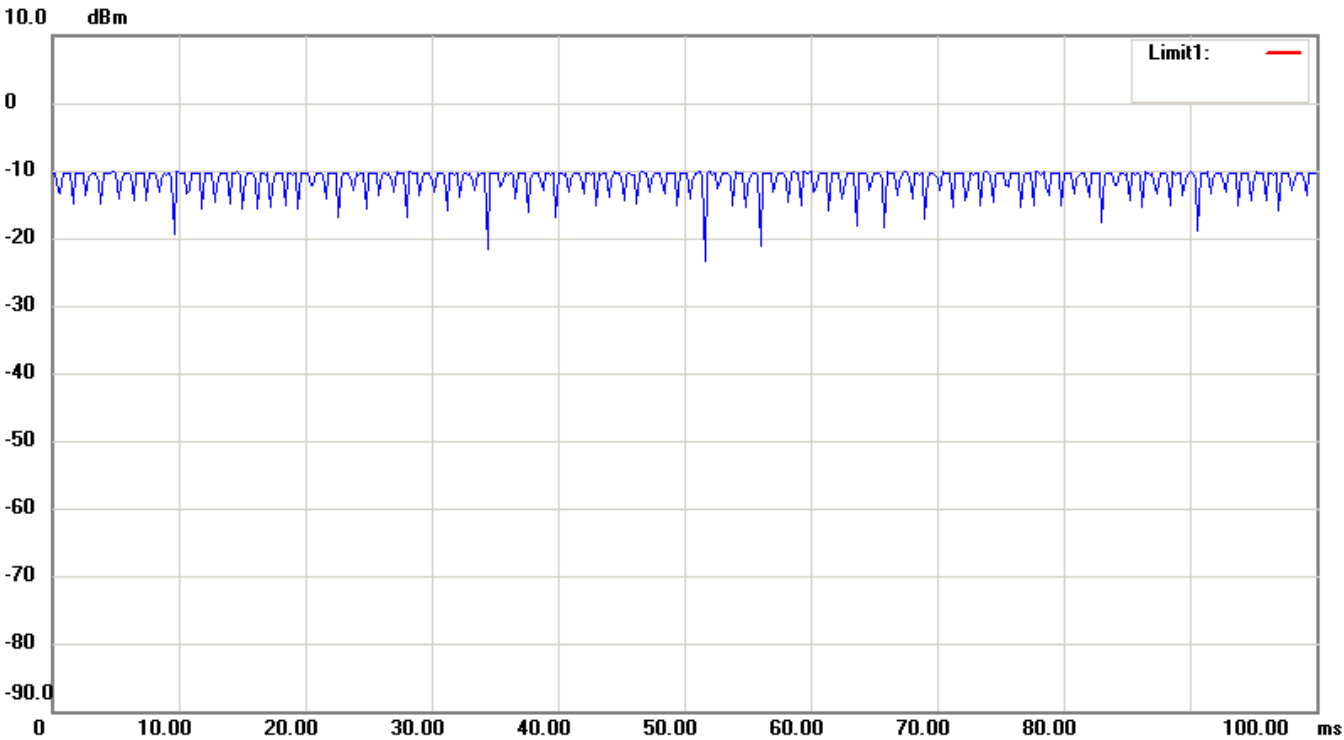
#15

Date: 2020/4/30

Temperature: 23 °C

Site: RF-Cond01

Humidity: 59 %



Condition:	UNII-Band1-2-Bandedge	RF Conducted	
EUT:	Wireless Embedded Module	Sweep Time: 100ms	Att.: 15dB
Model:	SX-SDMAC	RBW: 1000 KHz	VBW: 3000 KHz
Test Mode:	UNII	Operator:	Phillip
Note:	NCC_LP0002_802.11ac40 Duty-1		

File: 20-02-MAS-101_5-2ac40

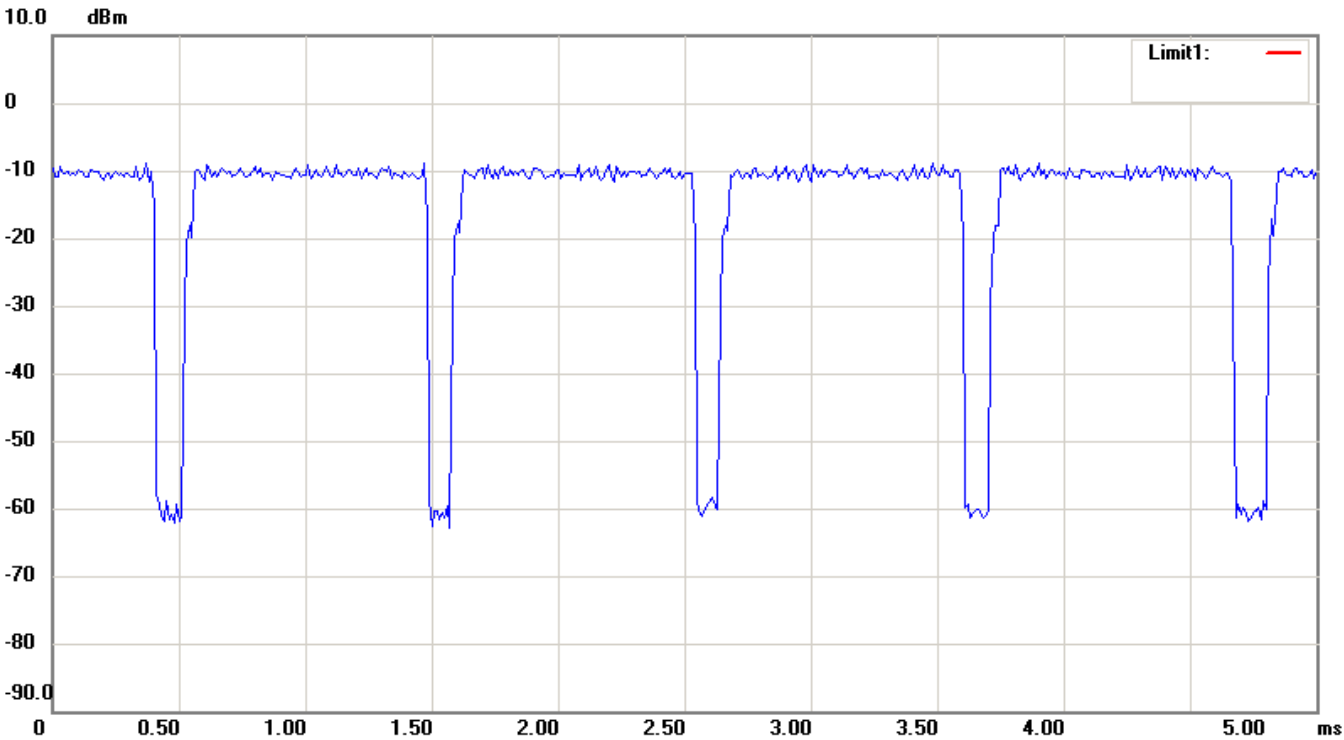
#16

Date: 2020/4/30

Temperature: 23 °C

Site: RF-Cond01

Humidity: 59 %



Condition:	UNII-Band1-2-Bandedge	RF Conducted	
EUT:	Wireless Embedded Module	Sweep Time: 5ms	Att.: 15dB
Model:	SX-SDMAC	RBW: 1000 KHz	VBW: 3000 KHz
Test Mode:	UNII	Operator:	Phillip
Note:	NCC_LP0002_802.11ac40 Duty-2 (Duty Cycle = 91.5%)		

IEEE 802.11ac VHT80

File: 20-02-MAS-101_5-2ac80

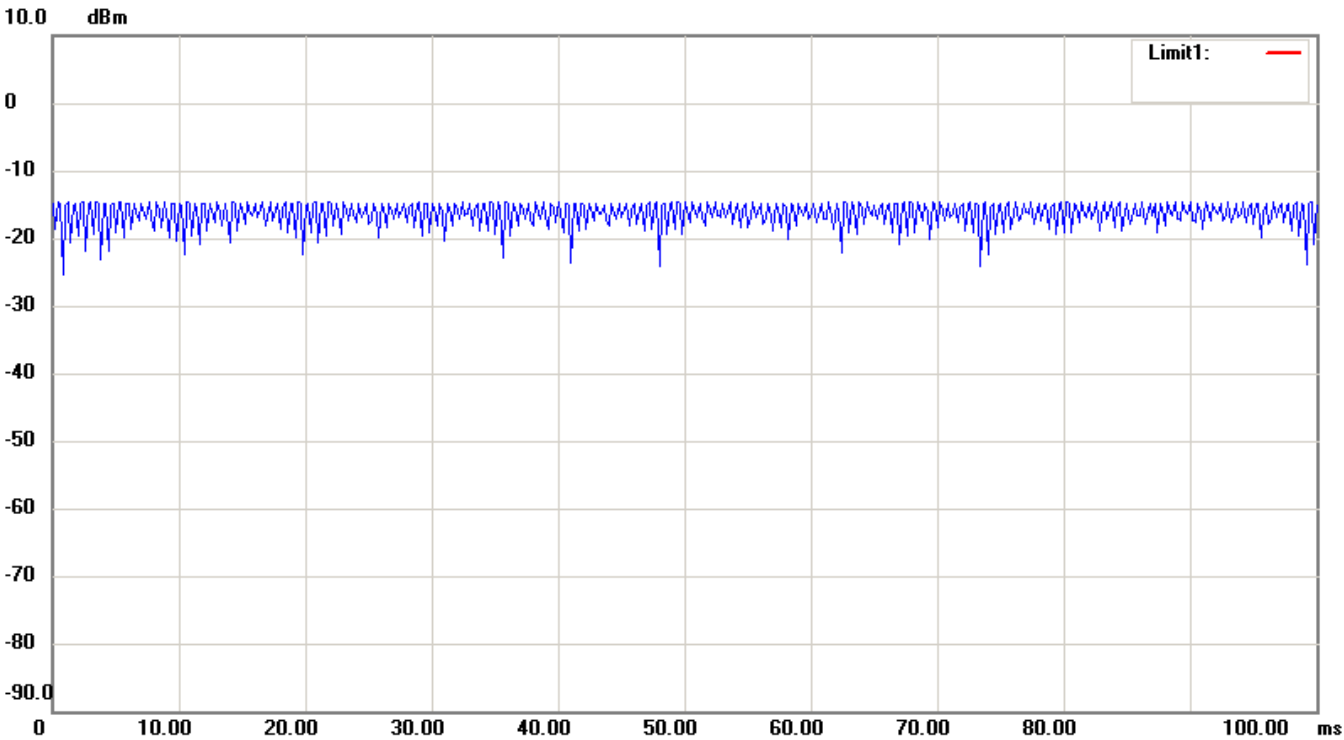
Site: RF-Cond01

#9

Date: 2020/4/30

Temperature: 23 °C

Humidity: 59 %



Condition:	UNII-Band1-2-Bandedge	RF Conducted	
EUT:	Wireless Embedded Module	Sweep Time: 100ms	Att.: 15dB
Model:	SX-SDMAC	RBW: 1000 KHz	VBW: 3000 KHz
Test Mode:	UNII	Operator:	Phillip
Note:	NCC_LP0002_802.11ac80 Duty-1		

File: 20-02-MAS-101_5-2ac80

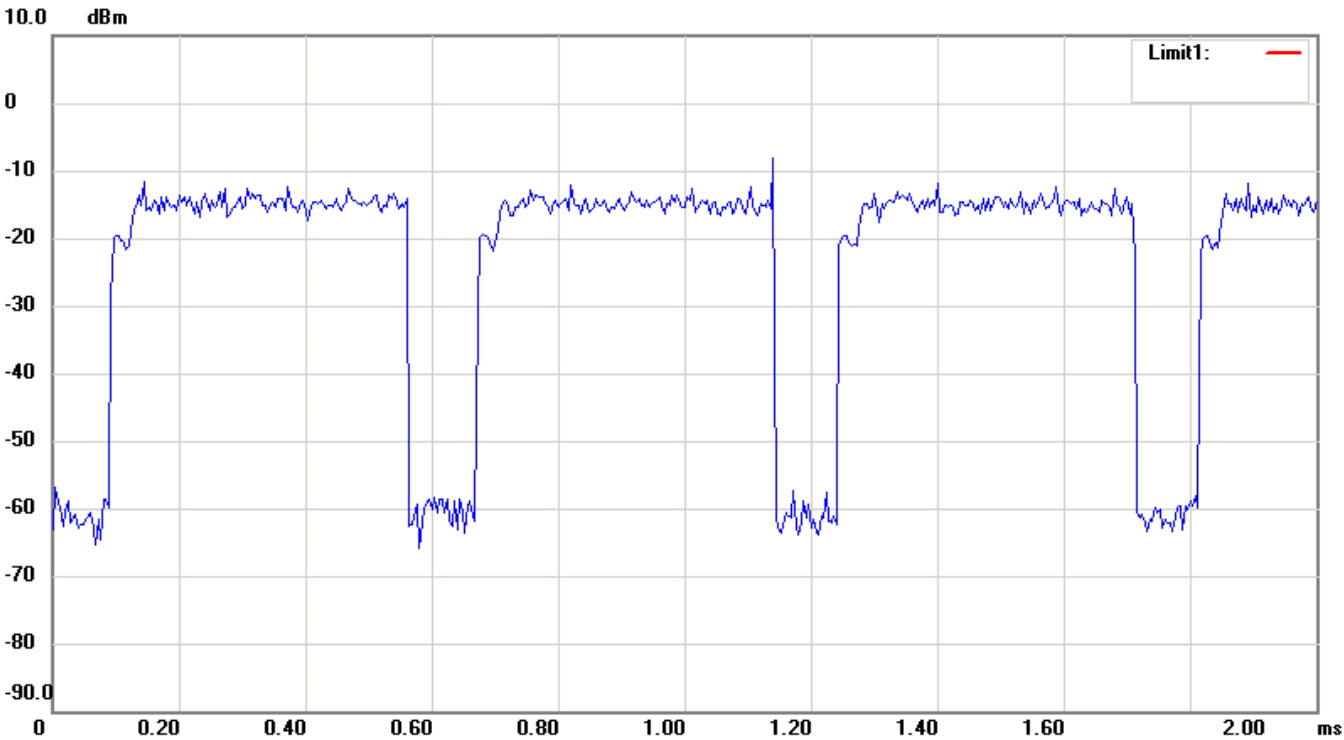
#10

Date: 2020/4/30

Temperature: 23 °C

Site: RF-Cond01

Humidity: 59 %



Condition:	UNII-Band1-2-Bandedge	RF Conducted	
EUT:	Wireless Embedded Module	Sweep Time: 2ms	Att.: 15dB
Model:	SX-SDMAC	RBW: 1000 KHz	VBW: 3000 KHz
Test Mode:	UNII	Operator:	Phillip
Note:	NCC_LP0002_802.11ac80 Duty-2 (Duty Cycle = 81.5%)		

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器材技術規範3.3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

4.4.1 測試狀態: Antenna 1

File: 20-02-MAS-101_Ant1

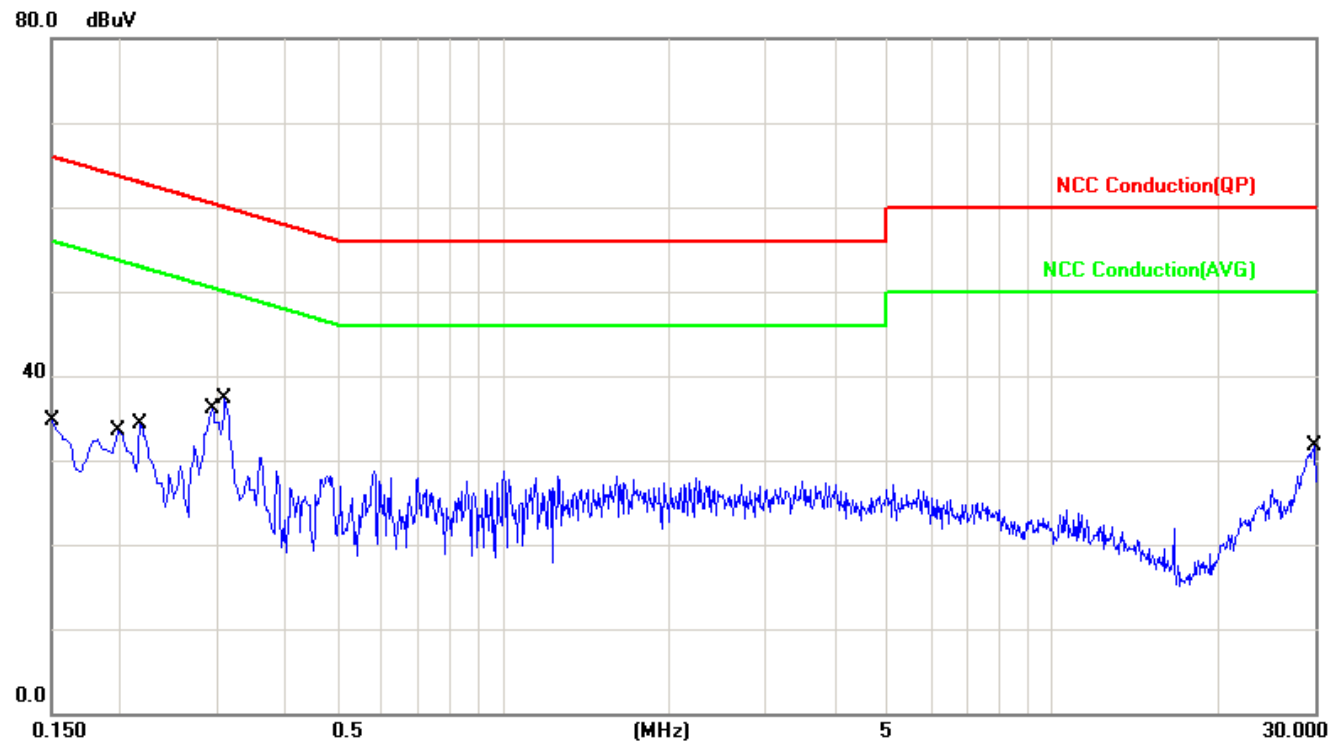
#2

Date: 2020/8/21

Temperature: 25 °C

Time: 下午 05:59:03

Humidity: 50 %



Site: CE04-10M 2F

Condition: NCC Conduction(QP)

EUT: Wireless Embedded Module

Model: SX-SDMAC

Test Mode: Band4

Note:

Phase: L1

Power: AC 110V/60Hz

Operator: Phillip

No.	Frequency	Reading	Detector	Corrected	Result	Limit	Margin
	(MHz)	(dBuV)		(dB)	(dBuV)	(dBuV)	(dB)
1	0.150	25.05	QP	9.65	34.70	66.00	-31.30
2	0.198	23.82	QP	9.64	33.46	63.69	-30.23
3	0.218	24.60	QP	9.64	34.24	62.89	-28.65
4	0.294	26.49	QP	9.64	36.13	60.41	-24.28
*5	0.310	27.72	QP	9.64	37.36	59.97	-22.61
6	29.910	21.68	QP	9.93	31.61	60.00	-28.39

- 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: 20-02-MAS-101_Ant1

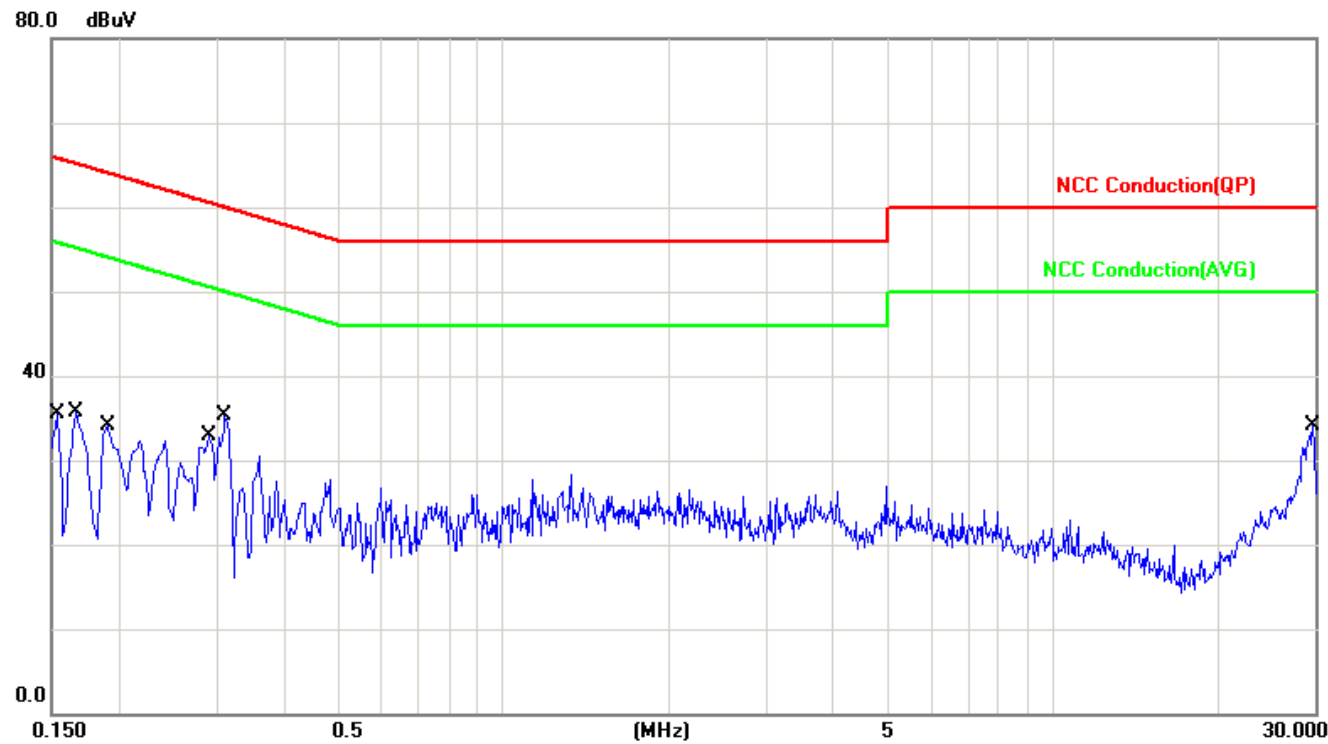
#1

Date: 2020/8/21

Temperature: 25 °C

Time: 下午 05:58:04

Humidity: 50 %



Site: CE04-10M 2F

Condition: NCC Conduction(QP)

EUT: Wireless Embedded Module

Model: SX-SDMAC

Test Mode: Band4

Note:

Phase: N

Power: AC 110V/60Hz

Operator: Phillip

No.	Frequency (MHz)	Reading (dBuV)	Detector	Corrected (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)
1	0.154	25.86	QP	9.59	35.45	65.78	-30.33
2	0.166	26.08	QP	9.59	35.67	65.16	-29.49
3	0.190	24.47	QP	9.58	34.05	64.04	-29.99
4	0.290	23.34	QP	9.58	32.92	60.52	-27.60
*5	0.310	25.80	QP	9.58	35.38	59.97	-24.59
6	29.786	24.10	QP	10.04	34.14	60.00	-25.86

- 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: $\pm 2.5\text{dB}(150\text{kHz} \leq f \leq 30\text{MHz})$ 。

4.4.2 測試狀態: Antenna 2

File: 20-02-MAS-
101_Ant2

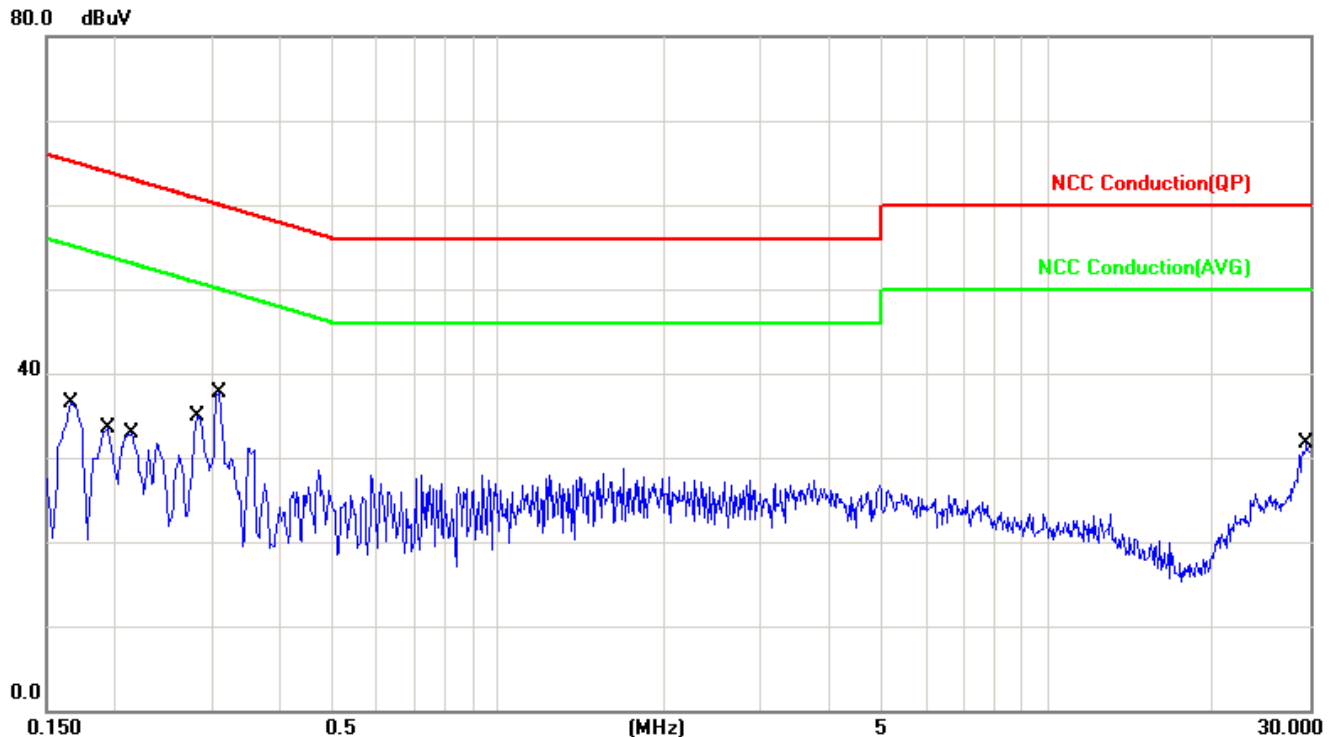
#9

Date: 2020/8/21

Temperature: 25 °C

Time: 下午 05:54:57

Humidity: 50 %



Site: CE04-10M 2F
 Condition: NCC Conduction(QP)
 EUT: Wireless Embedded Module
 Model: SX-SDMAC
 Test Mode: Band4
 Note:

Phase: L1
 Power: AC 110V/60Hz
 Operator: Phillip

No.	Frequency (MHz)	Reading (dBuV)	Detector	Corrected (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)
1	0.166	26.87	QP	9.65	36.52	65.16	-28.64
2	0.194	23.79	QP	9.64	33.43	63.86	-30.43
3	0.214	23.20	QP	9.64	32.84	63.05	-30.21
4	0.282	25.20	QP	9.64	34.84	60.76	-25.92
*5	0.310	28.15	QP	9.64	37.79	59.97	-22.18
6	29.538	21.71	QP	9.93	31.64	60.00	-28.36

- 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: 20-02-MAS-101_Ant2

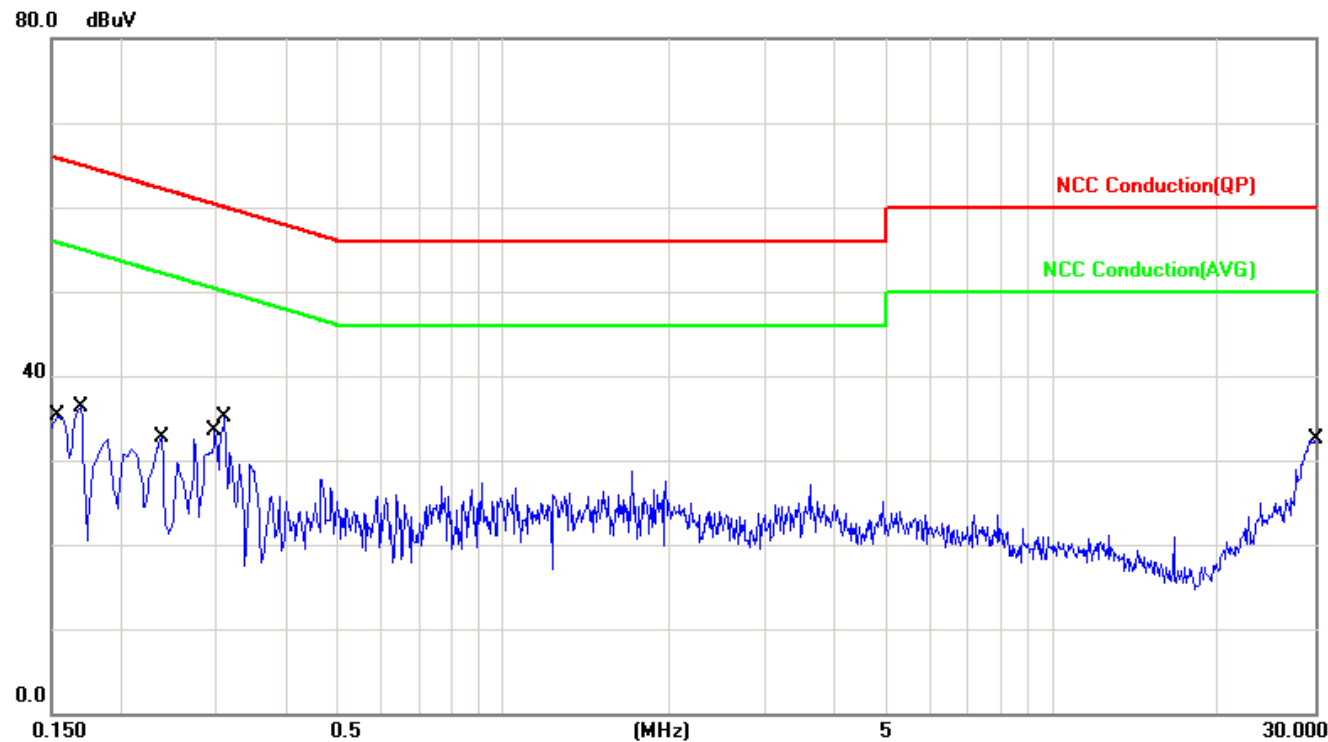
#10

Date: 2020/8/21

Temperature: 25 °C

Time: 下午 05:55:51

Humidity: 50 %



Site: CE04-10M 2F

Condition: NCC Conduction(QP)

EUT: Wireless Embedded Module

Model: SX-SDMAC

Test Mode: Band4

Note:

Phase: N

Power: AC 110V/60Hz

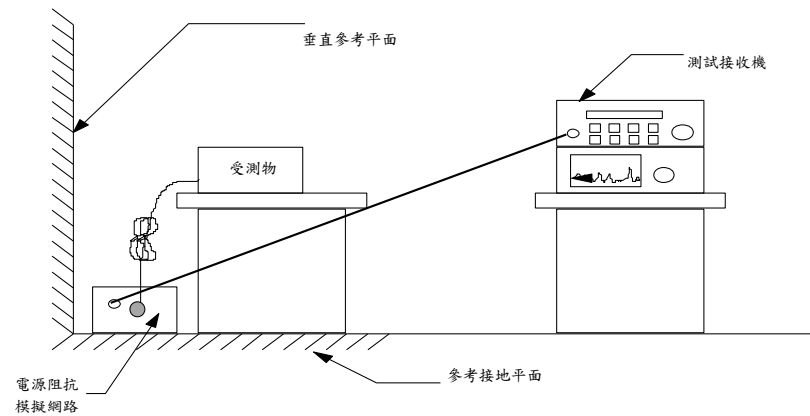
Operator: Phillip

No.	Frequency (MHz)	Reading (dBuV)	Detector	Corrected (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)
1	0.154	25.64	QP	9.59	35.23	65.78	-30.55
2	0.170	26.76	QP	9.59	36.35	64.96	-28.61
3	0.238	23.05	QP	9.58	32.63	62.17	-29.54
4	0.298	23.91	QP	9.58	33.49	60.30	-26.81
*5	0.310	25.46	QP	9.58	35.04	59.97	-24.93
6	30.000	22.54	QP	10.04	32.58	60.00	-27.42

- 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器材技術規範3.2節規定之限制，其發射天線之方向性增益超過6dBi時，應依其所超過之dB數等量降低峰值輸出功率。

如用於固定式點對點操作時，依法規5.7.3.3(3)供固定式點對點操作時，使用方向增益超過6 dBi 之發射天線，可不需對應減少發射器之傳導輸出功率限制值。

5.2 天線增益

此裝置使用外接式天線，其天線資料如下：

天線1: 廠牌: Unictron 型號: H2B1PC1A1C

Antenna Type	PCB
Operation Frequency Rnge	5.15~5.85 GHz
Antenna Gain	4.4 dBi

天線2:廠牌: SANSEI ELECTRONIC Co., LTD 型號: ANTDP-027A0

Antenna Type	Dipole
Operation Frequency Rnge	5.15~5.825 GHz
Antenna Gain	1.7 dBi

天線3:廠牌: SANSEI ELECTRONIC Co., LTD 型號: ANTDP-039A0

Antenna Type	Dipole
Operation Frequency Rnge	5.15~5.825 GHz
Antenna Gain	1.7 dBi

(參照天線規格資料)

5.3 結果判定

天線之方向性增益未超過6dBi，不須降低最大傳導輸出功率及功率密度之限制值。

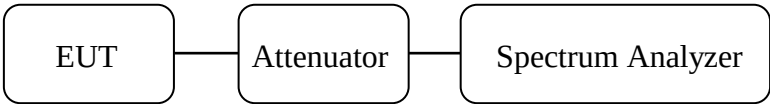
6 發射頻寬之要求

6.1 適用標準

依據國家通訊傳播委員會低功率射頻器材技術規範5.7.5節之規定，6dB頻寬至少應有500 kHz。

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	R&S	FSV
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: Jun. 18, 2020

環境溫度: 24°C

環境濕度: 56%

Channel	6dB Bndwidth (MHz)	NCC Limit (kHz)	Chart
L	14.7	500	Page 32
M	15.3	500	Page 33
H	15.5	500	Page 34

註：繪圖資料請參考第 32-34 頁。

File: 20-02-MAS-101_5-8a

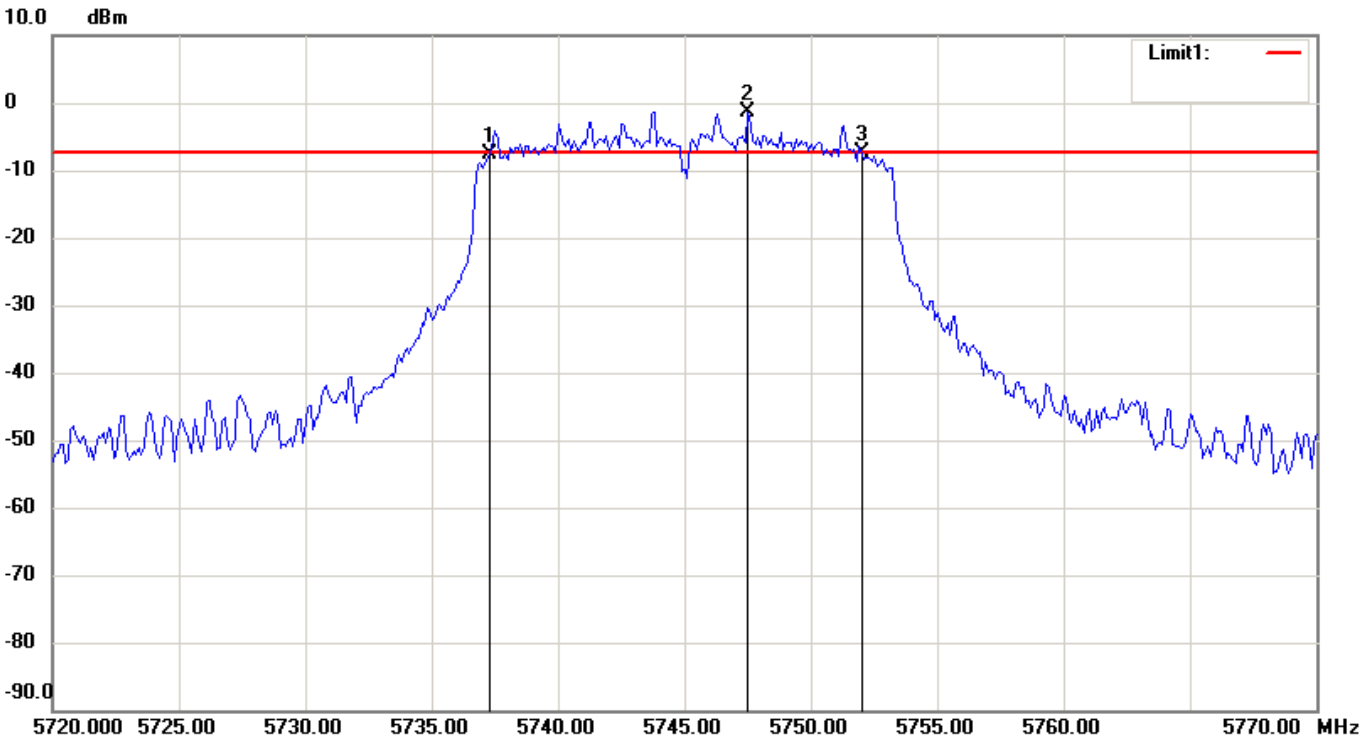
#25

Date: 2020/6/18

Temperature: 24 °C

Site: RF-Cond01

Humidity: 56 %



Condition: -7.47dBm

RF Conducted

EUT: Wireless Embedded Module

Sweep Time: 1.08ms

Att.: 15dB

Model: SX-SDMAC

RBW: 100 KHz

VBW: 300 KHz

Test Mode: UNII

Operator: Phillip

Note: NCC_LP0002_802.11a Channel 149_-6dB MIN EBW

No.	Frequency(MHz)	Level(dBm)
1	5737.30000	-7.71
2	5747.50000	-1.47
3	5752.00000	-7.48

No.		Δ Frequency(MHz)	Δ Level(dB)
1	mk3-mk1	14.7	0.23

File: 20-02-MAS-101_5-8a

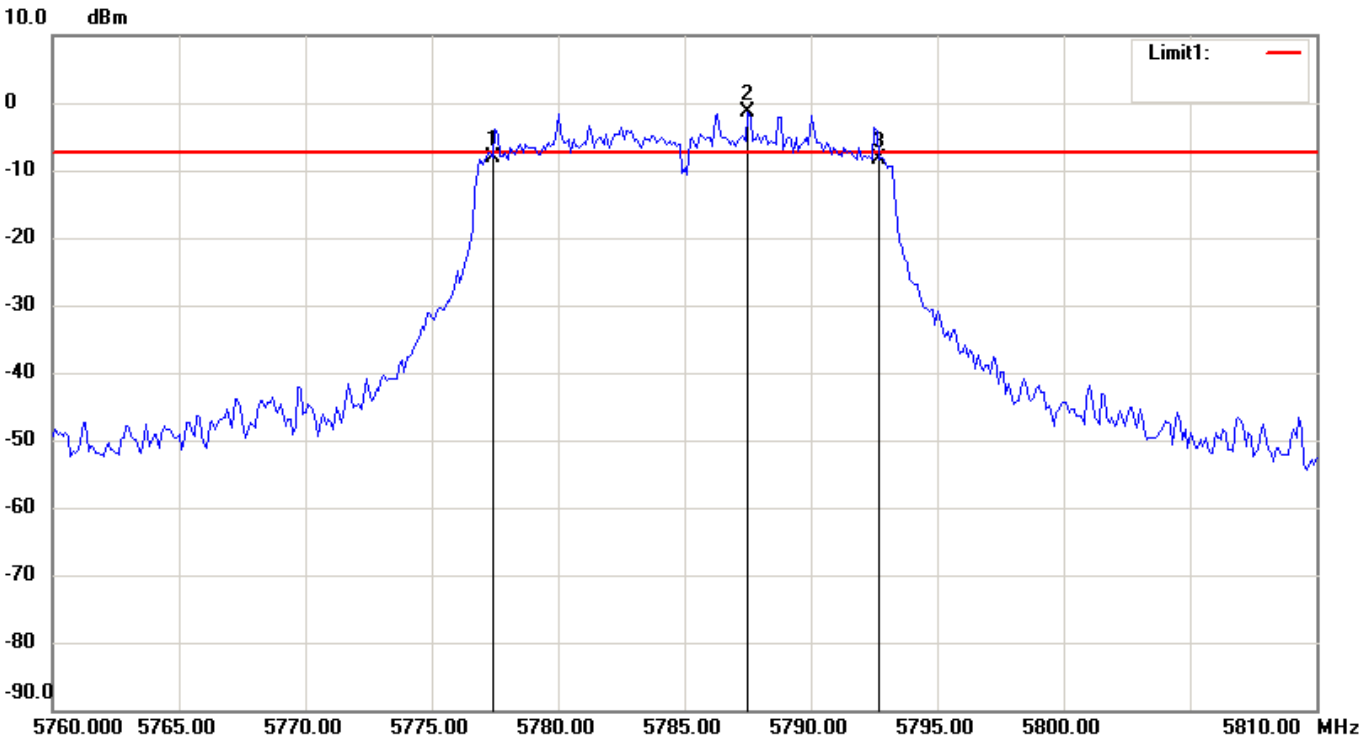
#33

Date: 2020/6/18

Temperature: 24 °C

Site: RF-Cond01

Humidity: 56 %



Condition: -7.25dBm

EUT: Wireless Embedded Module

Model: SX-SDMAC

Test Mode: UNII

Note: NCC_LP0002_802.11a Channel 157_-6dB MIN EBW

RF Conducted

Sweep Time: 1.08ms

RBW: 100 KHz

Operator:

Att.: 15dB

VBW: 300 KHz

Phillip

No.	Frequency(MHz)	Level(dBm)
1	5777.40000	-8.07
2	5787.50000	-1.25
3	5792.70000	-8.47

No.		Δ Frequency(MHz)	Δ Level(dB)
1	mk3-mk1	15.3	-0.4

File: 20-02-MAS-101_5-8a

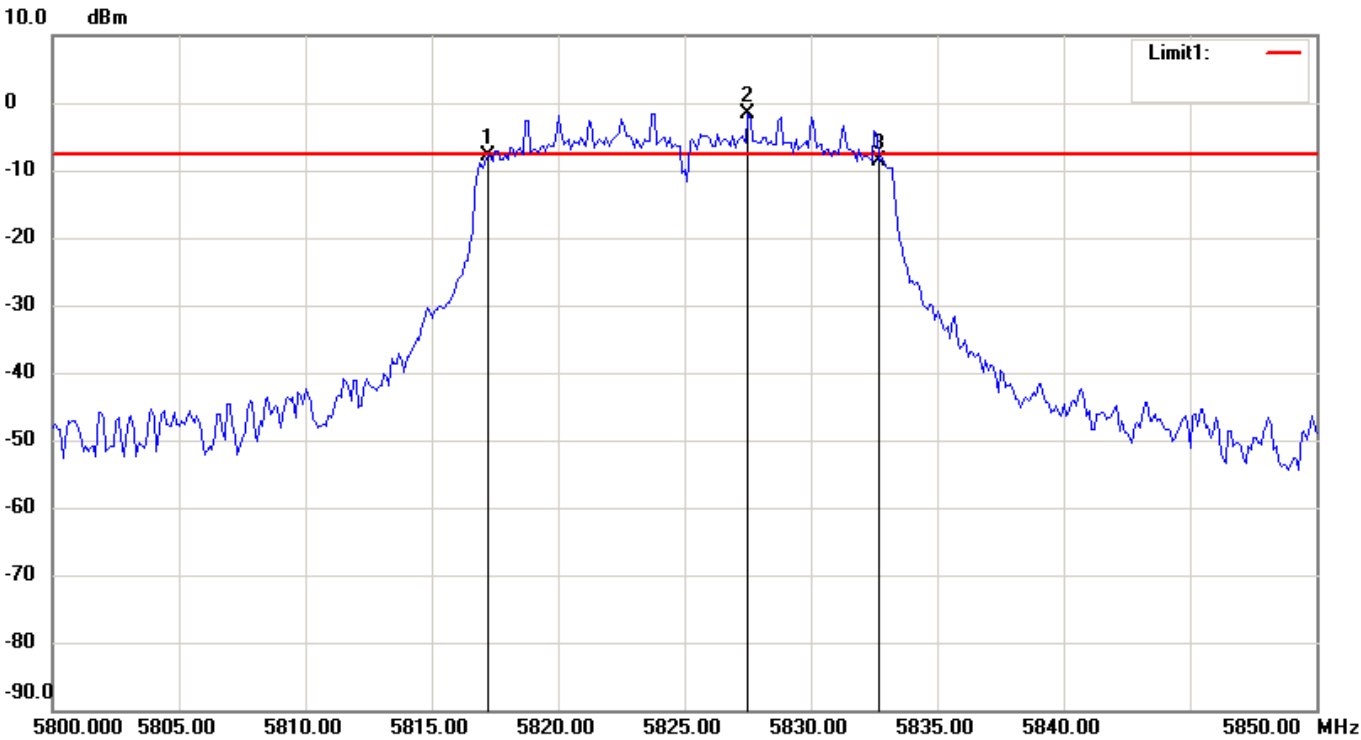
Site: RF-Cond01

#40

Date: 2020/6/18

Temperature: 24 °C

Humidity: 56 %



Condition: -7.56dBm

EUT: Wireless Embedded Module

Model: SX-SDMAC

Test Mode: UNII

Note: NCC_LP0002_802.11a Channel 165_-6dB MIN EBW

RF Conducted

Sweep Time: 1.08ms

RBW: 100 KHz

Operator:

Att.: 15dB

VBW: 300 KHz

Phillip

No.	Frequency(MHz)	Level(dBm)
1	5817.20000	-7.89
2	5827.50000	-1.56
3	5832.70000	-8.71

No.		Δ Frequency(MHz)	Δ Level(dB)
1	mk3-mk1	15.5	-0.82

6.4.2 調變技術: IEEE 802.11ac VHT20

測試日期: Jun. 18, 2020 環境溫度: 24℃ 環境濕度: 56%

Channel	6dB Bndwidth (MHz)	NCC Limit (kHz)	Chart
L	15.4	500	Page 36
M	15.3	500	Page 37
H	15.4	500	Page 38

註：繪圖資料請參考第 36-38 頁。

File: 20-02-MAS-101_5-8ac20

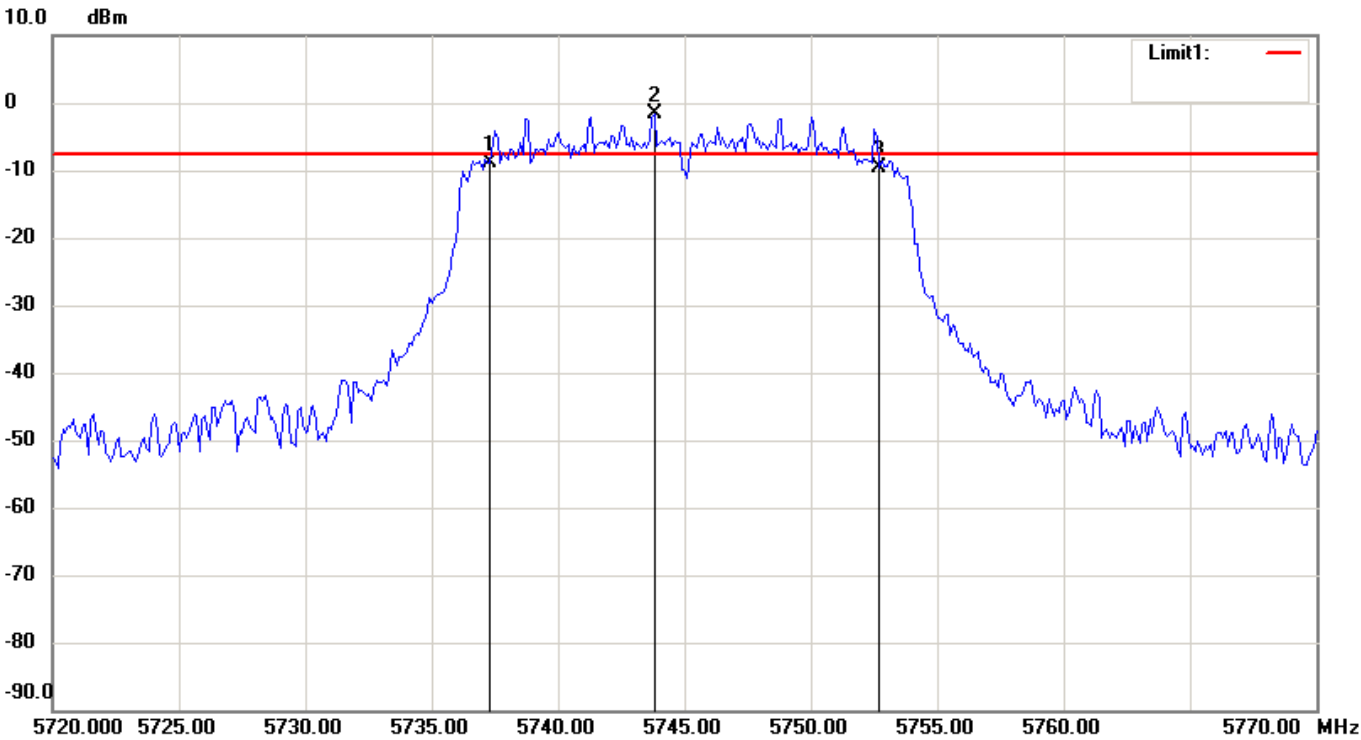
#25

Date: 2020/6/18

Temperature: 24 °C

Site: RF-Cond01

Humidity: 56 %



Condition: -7.61dBm

EUT: Wireless Embedded Module

Model: SX-SDMAC

Test Mode: UNII

Note: NCC_LP0002_802.11ac20 Channel 149_-6dB MIN EBW

RF Conducted

Sweep Time: 1.08ms

RBW: 100 KHz

Operator:

Att.: 15dB

VBW: 300 KHz

Phillip

No.	Frequency(MHz)	Level(dBm)
1	5737.30000	-8.77
2	5743.80000	-1.61
3	5752.70000	-9.67

No.		Δ Frequency(MHz)	Δ Level(dB)
1	mk3-mk1	15.4	-0.9

File: 20-02-MAS-101_5-8ac20

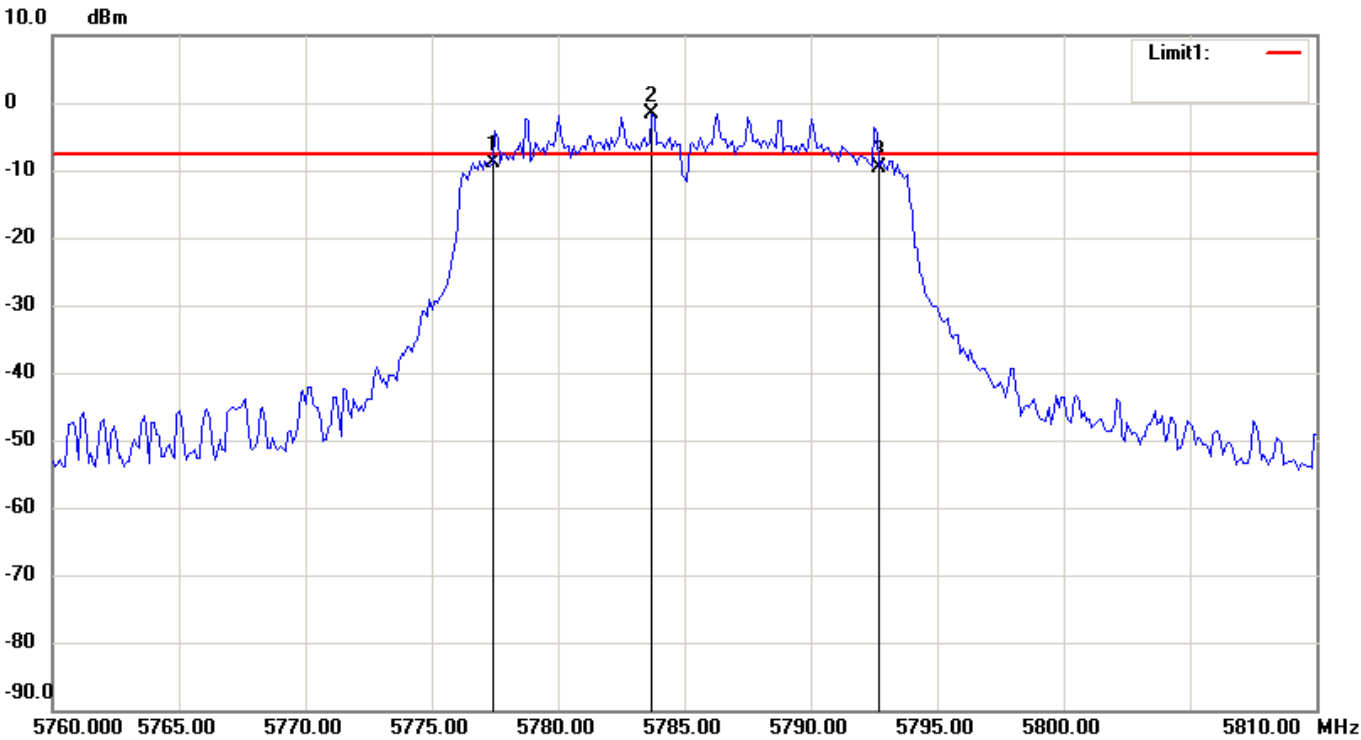
#33

Date: 2020/6/18

Temperature: 24 °C

Site: RF-Cond01

Humidity: 56 %



Condition: -7.69dBm

EUT: Wireless Embedded Module

Model: SX-SDMAC

Test Mode: UNII

Note: NCC_LP0002_802.11ac20 Channel 157_-6dB MIN EBW

RF Conducted

Sweep Time: 1.08ms

RBW: 100 KHz

Operator:

Att.: 15dB

VBW: 300 KHz

Phillip

No.	Frequency(MHz)	Level(dBm)
1	5777.40000	-8.78
2	5783.70000	-1.69
3	5792.70000	-9.57

No.		Δ Frequency(MHz)	Δ Level(dB)
1	mk3-mk1	15.3	-0.79

File: 20-02-MAS-101_5-8ac20

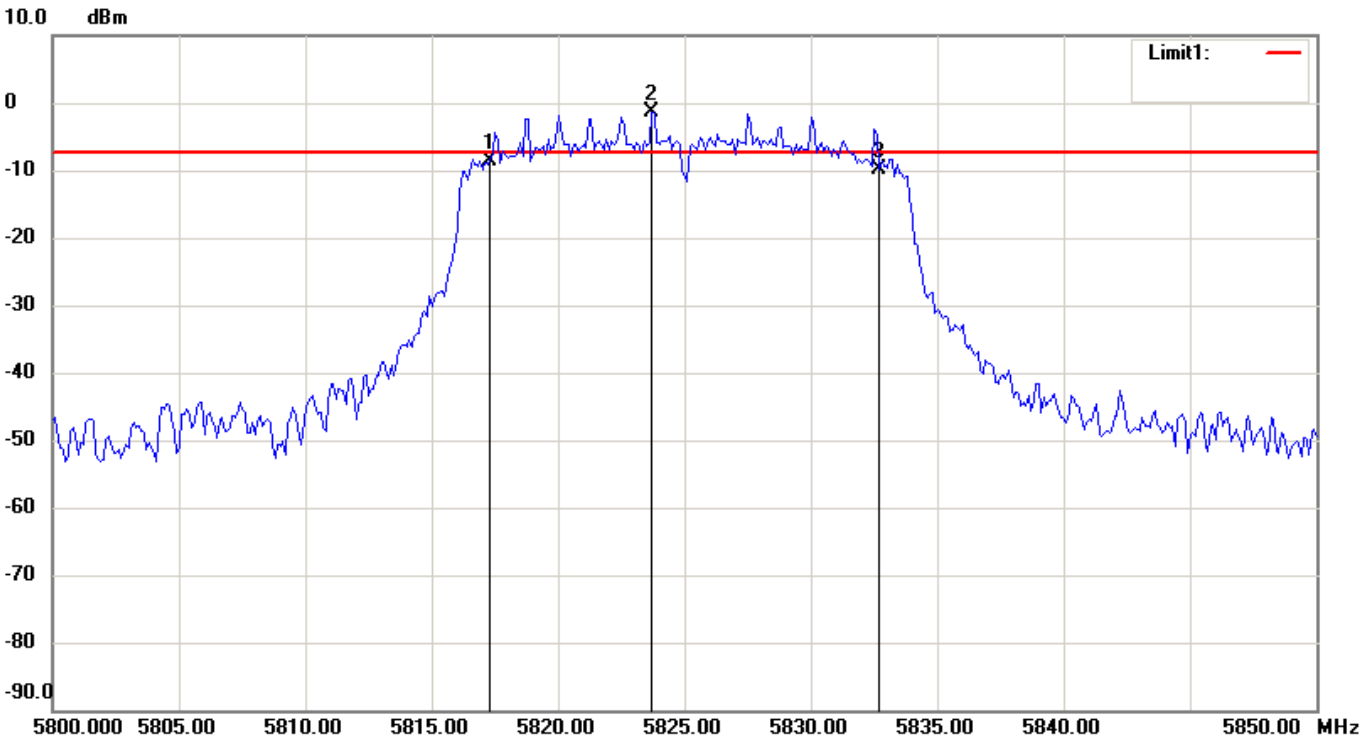
#40

Date: 2020/6/18

Temperature: 24 °C

Site: RF-Cond01

Humidity: 56 %



Condition: -7.46dBm

EUT: Wireless Embedded Module

Model: SX-SDMAC

Test Mode: UNII

Note: NCC_LP0002_802.11ac20 Channel 165_-6dB MIN EBW

RF Conducted

Sweep Time: 1.08ms

RBW: 100 KHz

Operator:

Att.: 15dB

VBW: 300 KHz

Phillip

No.	Frequency(MHz)	Level(dBm)
1	5817.30000	-8.63
2	5823.70000	-1.46
3	5832.70000	-9.80

No.		Δ Frequency(MHz)	Δ Level(dB)
1	mk3-mk1	15.4	-1.17

6.4.3 調變技術: IEEE 802.11ac VHT40

測試日期: Jun. 18, 2020 環境溫度: 24℃ 環境濕度: 56%

Channel	6dB Bndwidth (MHz)	NCC Limit (kHz)	Chart
L	35.6	500	Page 40
H	35.6	500	Page 41

註：繪圖資料請參考第 40-41 頁。

File: 20-02-MAS-101_5-8ac40

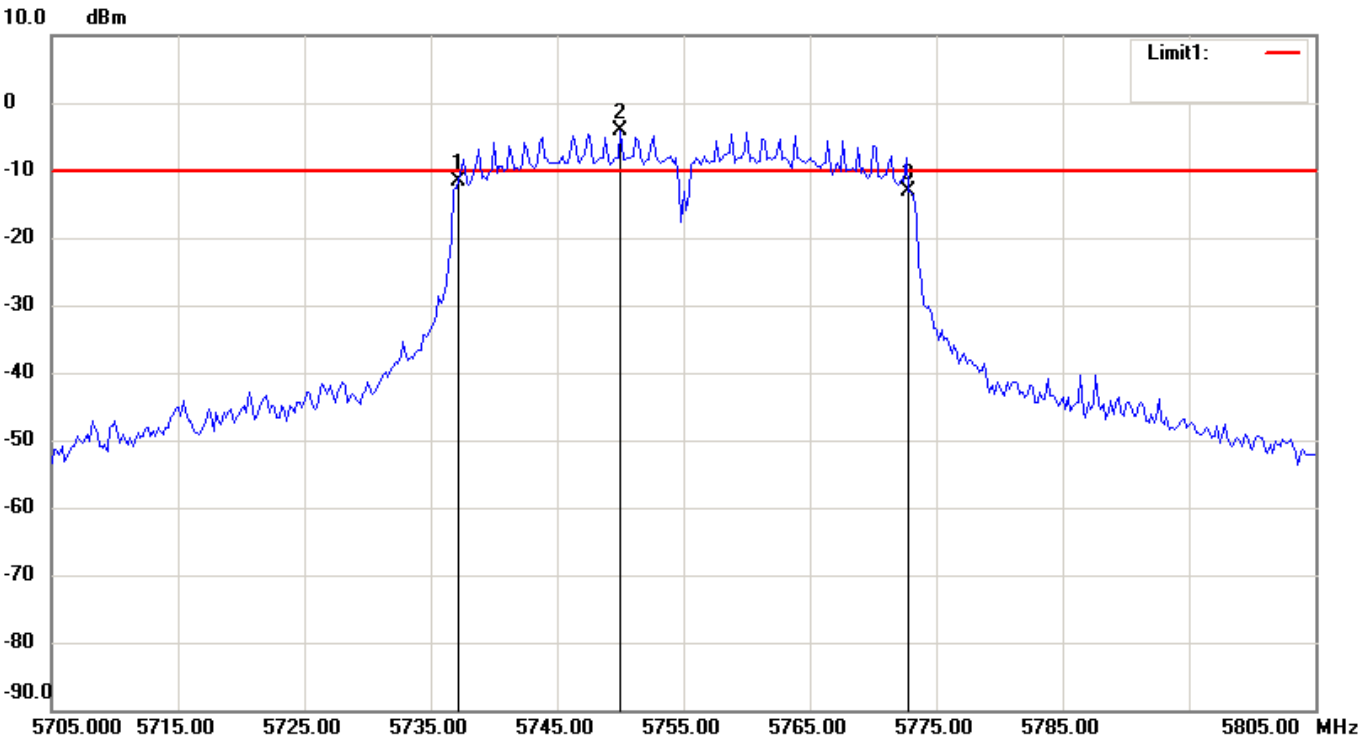
#20

Date: 2020/6/18

Temperature: 24 °C

Site: RF-Cond01

Humidity: 56 %



Condition: -10.2dBm

EUT: Wireless Embedded Module

Model: SX-SDMAC

Test Mode: UNII

Note: NCC_LP0002_802.11ac40 Channel 151_-6dB EBW

RF Conducted

Sweep Time: 1ms

RBW: 100 KHz

Operator:

Att.: 15dB

VBW: 300 KHz

Phillip

No.	Frequency(MHz)	Level(dBm)
1	5737.20000	-11.68
2	5750.00000	-4.20
3	5772.80000	-13.04

No.		Δ Frequency(MHz)	Δ Level(dB)
1	mk3-mk1	35.6	-1.36

File: 20-02-MAS-101_5-8ac40

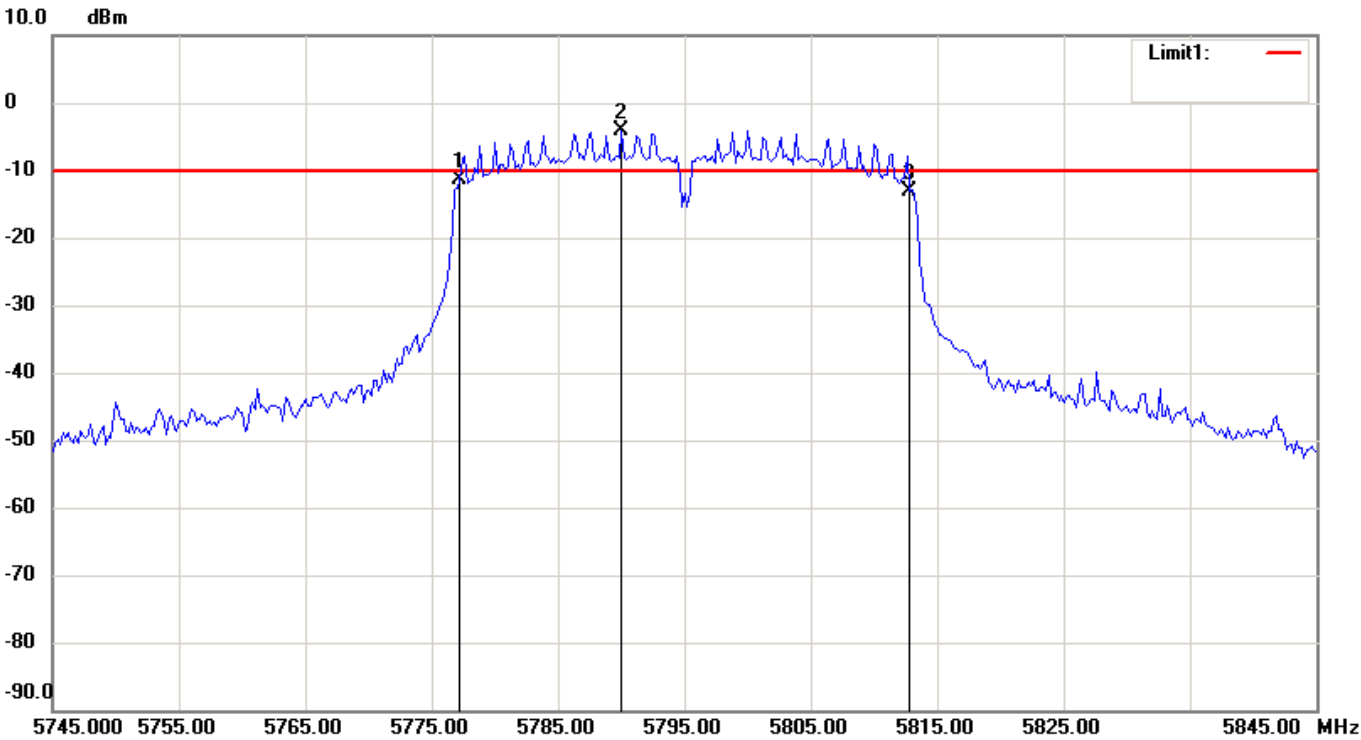
#28

Date: 2020/6/18

Temperature: 24 °C

Site: RF-Cond01

Humidity: 56 %



Condition: -10.03dBm

EUT: Wireless Embedded Module

Model: SX-SDMAC

Test Mode: UNII

Note: NCC_LP0002_802.11ac40 Channel 159_-6dB EBW

RF Conducted

Sweep Time: 1ms

RBW: 100 KHz

Operator:

Att.: 15dB

VBW: 300 KHz

Phillip

No.	Frequency(MHz)	Level(dBm)
1	5777.20000	-11.34
2	5790.00000	-4.03
3	5812.80000	-13.04

No.		Δ Frequency(MHz)	Δ Level(dB)
1	mk3-mk1	35.6	-1.7

6.4.4 調變技術:IEEE 802.11ac VHT80

測試日期: Jun. 18, 2020 環境溫度: 24℃ 環境濕度: 56%

Channel	6dB Bndwidth (MHz)	NCC Limit (kHz)	Chart
L	76.0	500	Page 43

註：繪圖資料請參考第 43 頁。

6.5 結果判定

高、中、低頻段的 6dB 頻寬皆大於 500KHz。

File: 20-02-MAS-101_5-8ac80

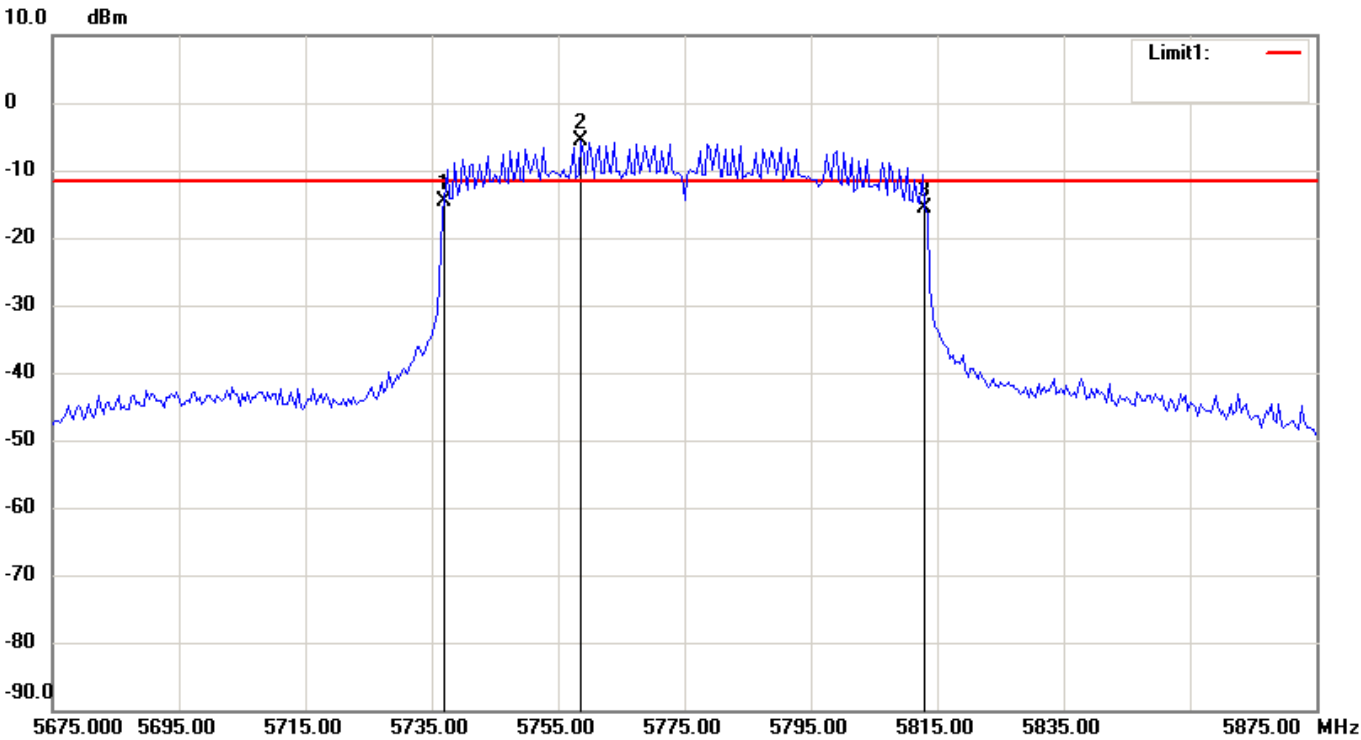
#11

Date: 2020/6/18

Temperature: 24 °C

Site: RF-Cond01

Humidity: 56 %



Condition: -11.62dBm

EUT: Wireless Embedded Module

Model: SX-SDMAC

Test Mode: UNII

Note: NCC_LP0002_802.11ac80 Channel 155_-6dB EBW

RF Conducted

Sweep Time: 2ms

RBW: 100 KHz

Operator:

Att.: 15dB

VBW: 300 KHz

Phillip

No.	Frequency(MHz)	Level(dBm)
1	5737.00000	-14.50
2	5758.60000	-5.62
3	5813.00000	-15.57

No.		Δ Frequency(MHz)	Δ Level(dB)
1	mk3-mk1	76	-1.07

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器材技術規範5.7.3.3節(1)之規定，最大傳導輸出功率應小於或等於 1 W。

如用於固定式點對點操作時，依法規5.7.3.3(3)供固定式點對點操作時，使用方向增益超過6 dBi 之發射天線，可不需對應減少發射器之傳導輸出功率限制值。

依法規5.7.3.3 (4) 除(3)外，使用超過6 dBi 方向增益之發射天線時，應依超過6 dBi 天線方向增益的dBi 總量，等量減少最大傳導輸出功率及最大功率頻譜密度。

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	R&S	FSV
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

測試日期: Jun. 18, 2020 環境溫度: 24°C 環境濕度: 56%

天線增益最大值為 4.4 dBi，NCC Limit 如下表所示：

Channel	Maximum Output Power (dBm)	NCC Limit (dBm)	Chart
L	8.73	30	Page 46
M	8.99	30	Page 47
H	8.71	30	Page 48

註：1. 繪圖資料請參考第 46-48 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. If antenna gain $\leq$ 6dBi, NCC Limit = 30 dBm

4. If antenna gain > 6dBi, NCC Limit = 30dBm – (highest antenna gain – 6 dBi)

5. NCC Limit (dBm)=10 log NCC Limit (mW)

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

File: 20-02-MAS-101_5-8a

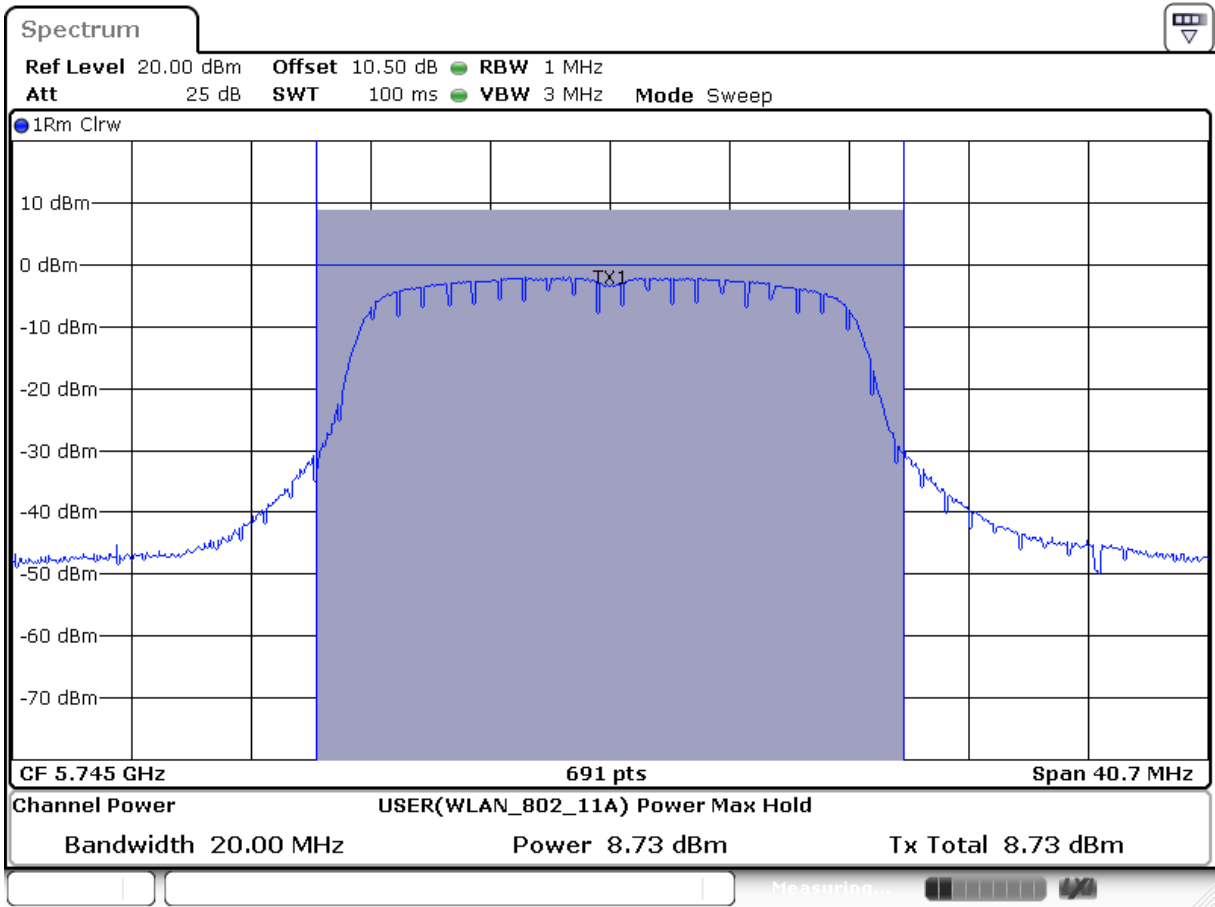
#24

Date: 2020/6/18

Temperature: 24 °C

Site: RF-Cond01

Humidity: 56 %



Condition:		RF Conducted	
EUT:	Wireless Embedded Module	Sweep Time: 100ms	Att.: 25dB
Model:	SX-SDMAC	RBW: 1000 KHz	VBW: 3000 KHz
Test Mode:	UNII	Operator:	Phillip
Note:	NCC_LP0002_802.11a_Channel 149_Output power		

File: 20-02-MAS-101_5-8a

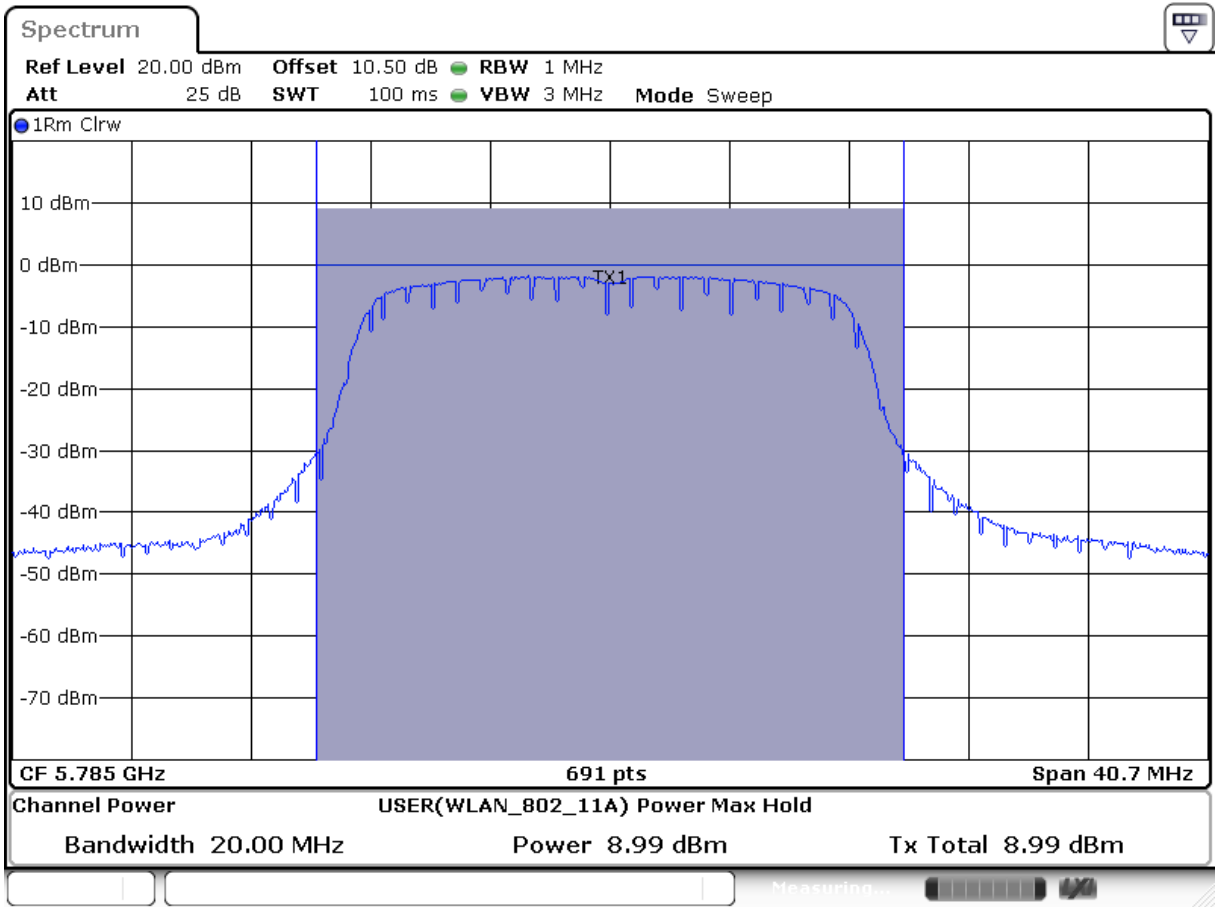
#32

Date: 2020/6/18

Temperature: 24 °C

Site: RF-Cond01

Humidity: 56 %



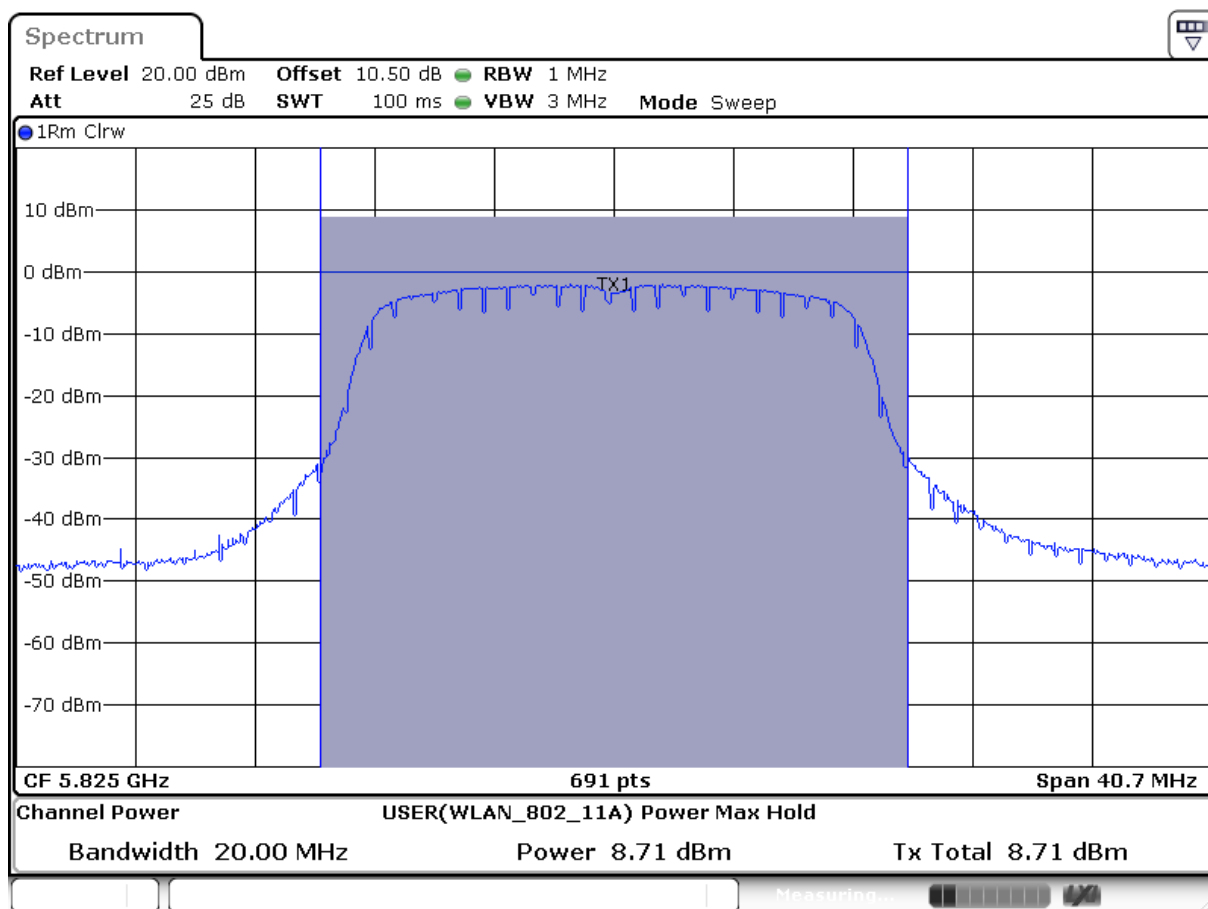
Condition:		RF Conducted	
EUT:	Wireless Embedded Module	Sweep Time: 100ms	Att.: 25dB
Model:	SX-SDMAC	RBW: 1000 KHz	VBW: 3000 KHz
Test Mode:	UNII	Operator:	Phillip
Note:	NCC_LP0002_802.11a_Channel 157_Output power		

File: 20-02-MAS-101_5-8a
Site: RF-Cond01

#39

Date: 2020/6/18

Temperature: 24 °C
Humidity: 56 %



Condition:

EUT: **Wireless Embedded Module**

Model: SX-SDMAC

Test Mode: UNII

Note: NCC_LP0002_802.11a_Channel 165_Output power

RF Conducted

Sweep Time: 100ms Att.: 25dB

RBW: 1000 KHz VBW: 3000 KHz

Operator: Phillip

7.4.2 調變技術: IEEE 802.11n HT20

測試日期: Jun. 18, 2020 環境溫度: 24°C 環境濕度: 56%

天線增益最大值為 4.4 dBi，NCC Limit 如下表所示：

Channel	Maximum Output Power (dBm)	NCC Limit (dBm)	Chart
L	8.54	30	Page 50
M	8.39	30	Page 51
H	8.49	30	Page 52

註：1. 繪圖資料請參考第 50-52 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. If antenna gain $\leq$ 6dBi, NCC Limit = 30 dBm

4. If antenna gain > 6dBi, NCC Limit = 30dBm – (highest antenna gain – 6 dBi)

5. NCC Limit (dBm)=10 log NCC Limit (mW)

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

File: 20-02-MAS-101_5-8n20

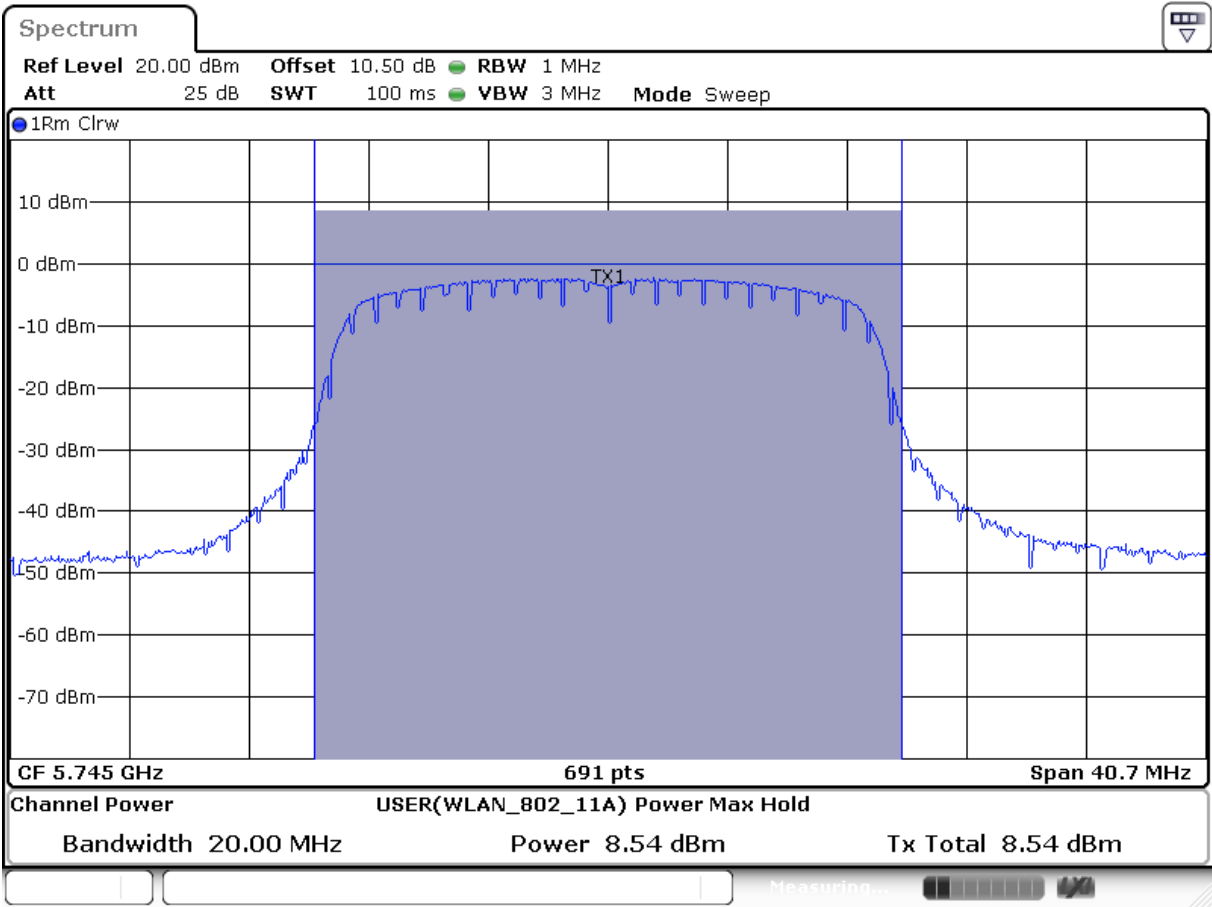
#42

Date: 2020/6/18

Temperature: 24 °C

Site: RF-Cond01

Humidity: 56 %



Condition:		RF Conducted	
EUT:	Wireless Embedded Module	Sweep Time: 100ms	Att.: 25dB
Model:	SX-SDMAC	RBW: 1000 KHz	VBW: 3000 KHz
Test Mode:	UNII	Operator:	Phillip
Note:	NCC_LP0002_802.11n20_Channel 149_Output power		

File: 20-02-MAS-101_5-8n20

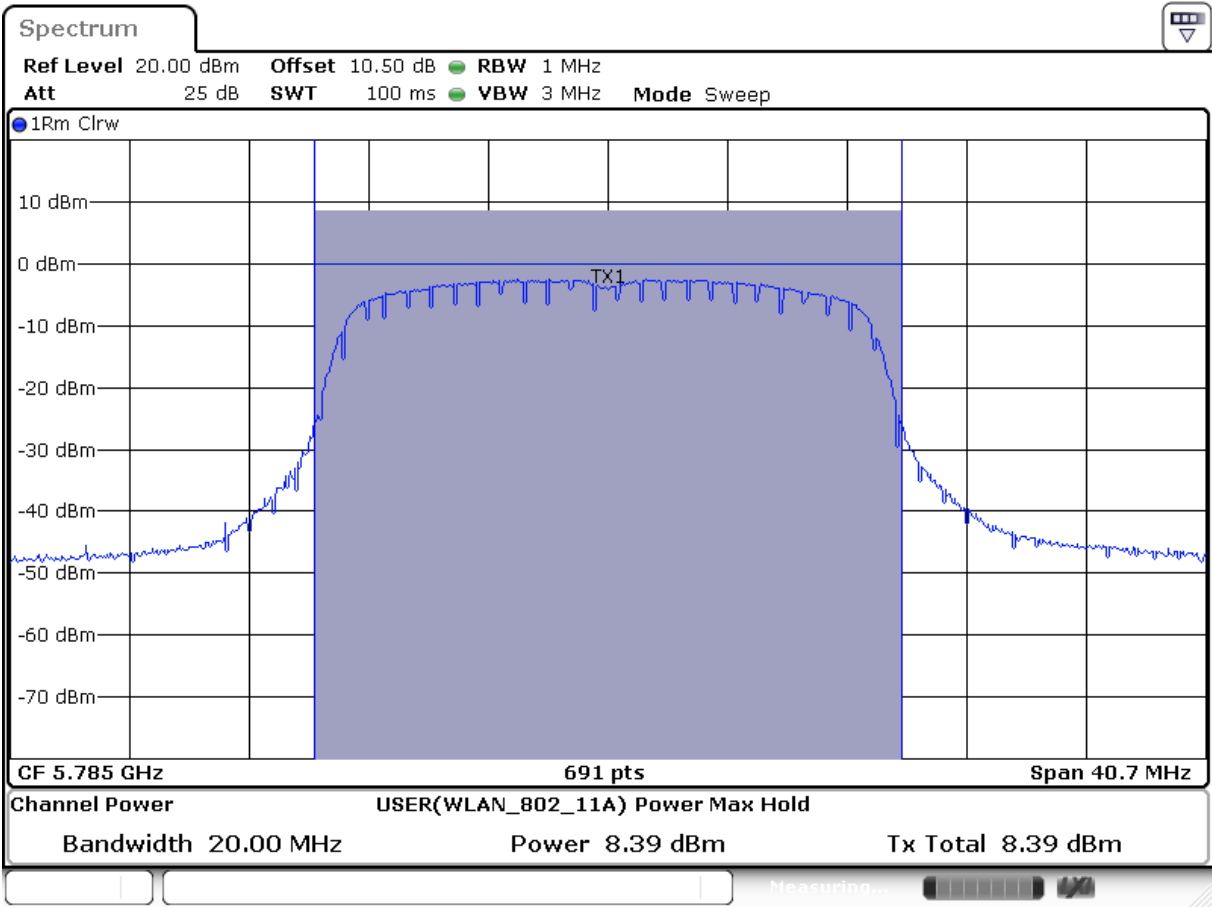
#50

Date: 2020/6/18

Temperature: 24 °C

Site: RF-Cond01

Humidity: 56 %



Condition:		RF Conducted	
EUT:	Wireless Embedded Module	Sweep Time: 100ms	Att.: 25dB
Model:	SX-SDMAC	RBW: 1000 KHz	VBW: 3000 KHz
Test Mode:	UNII	Operator:	Phillip
Note:	NCC_LP0002_802.11n20_Channel 157_Output power		

File: 20-02-MAS-101_5-8n20

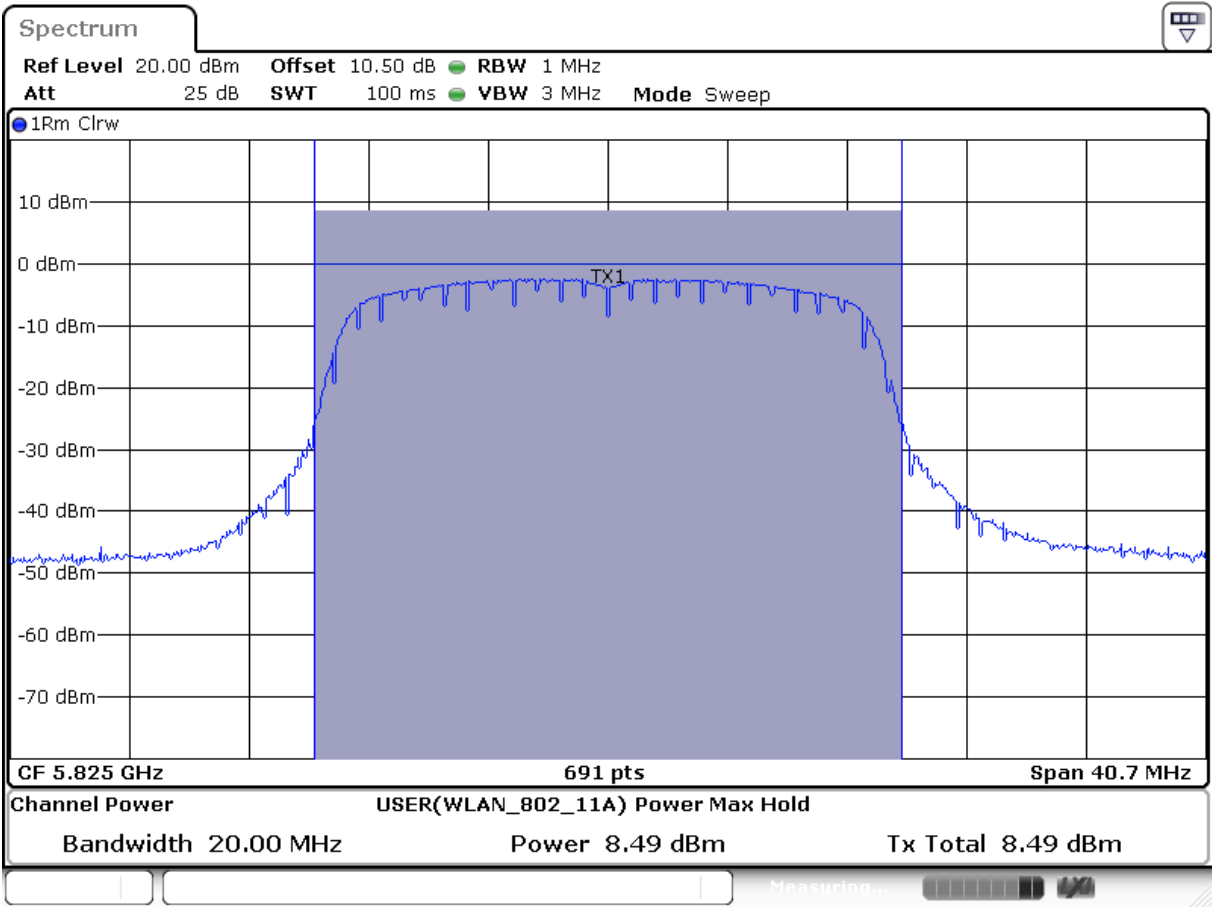
#57

Date: 2020/6/18

Temperature: 24 °C

Site: RF-Cond01

Humidity: 56 %



Condition:		RF Conducted	
EUT:	Wireless Embedded Module	Sweep Time: 100ms	Att.: 25dB
Model:	SX-SDMAC	RBW: 1000 KHz	VBW: 3000 KHz
Test Mode:	UNII	Operator:	Phillip
Note:	NCC_LP0002_802.11n20_Channel 165_Output power		

7.4.3 調變技術: IEEE 802.11n HT40

測試日期: Jun. 18, 2020 環境溫度: 24°C 環境濕度: 56%%

天線增益最大值為 4.4 dBi，NCC Limit 如下表所示：

Channel	Maximum Peak Output Power (dBm)	NCC Limit (dBm)	Chart
L	8.40	30	Page 54
H	8.72	30	Page 55

註：1. 繪圖資料請參考第 54-55 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. If antenna gain $\leq$ 6dBi, NCC Limit = 30 dBm

4. If antenna gain > 6dBi, NCC Limit = 30dBm – (highest antenna gain – 6 dBi)

5. NCC Limit (dBm)=10 log NCC Limit (mW)

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

File: 20-02-MAS-101_5-8n40

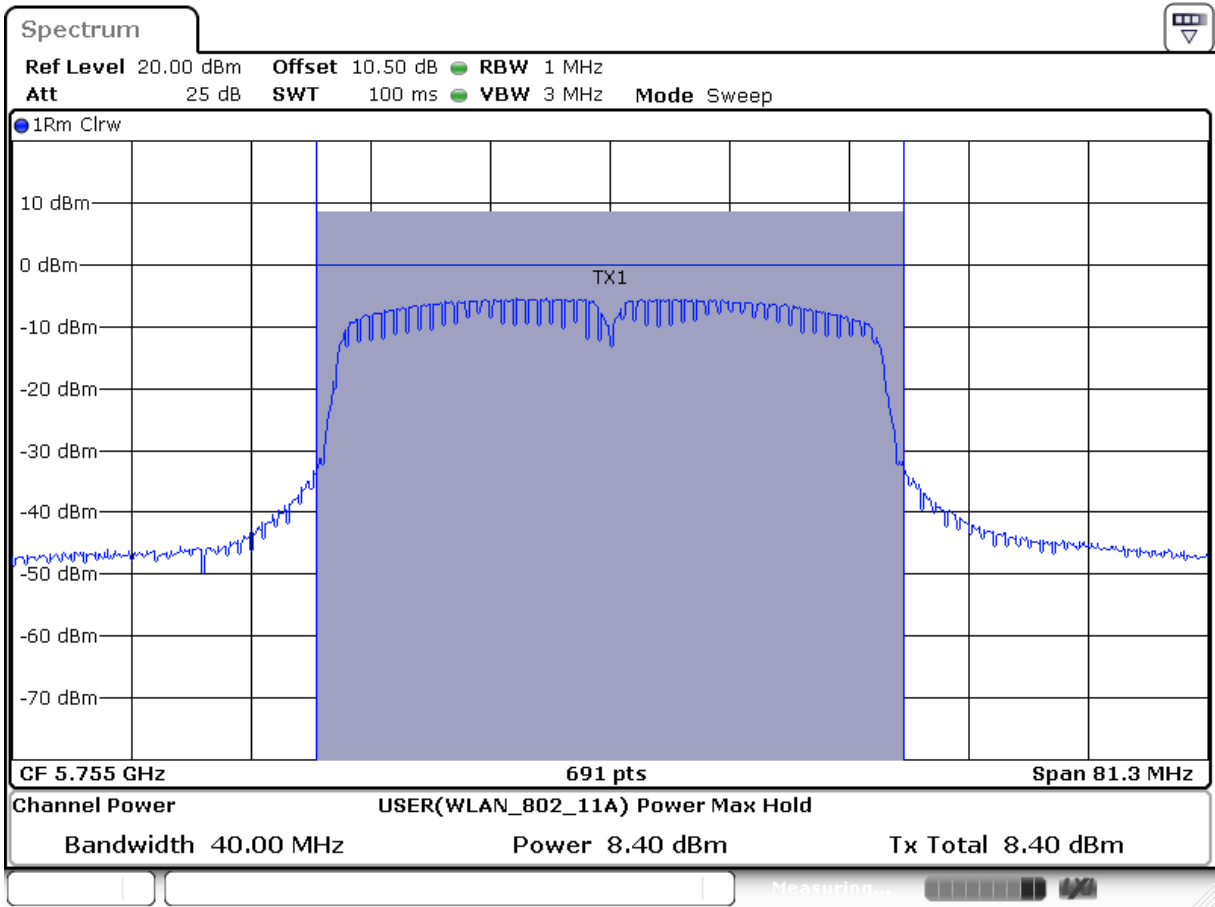
#17

Date: 2020/6/18

Temperature: 24 °C

Site: RF-Cond01

Humidity: 56 %



Condition:		RF Conducted	
EUT:	Wireless Embedded Module	Sweep Time: 100ms	Att.: 25dB
Model:	SX-SDMAC	RBW: 1000 KHz	VBW: 3000 KHz
Test Mode:	UNII	Operator:	Phillip
Note:	NCC_LP0002_802.11n40_Channel 151_Output power		

File: 20-02-MAS-101_5-8n40

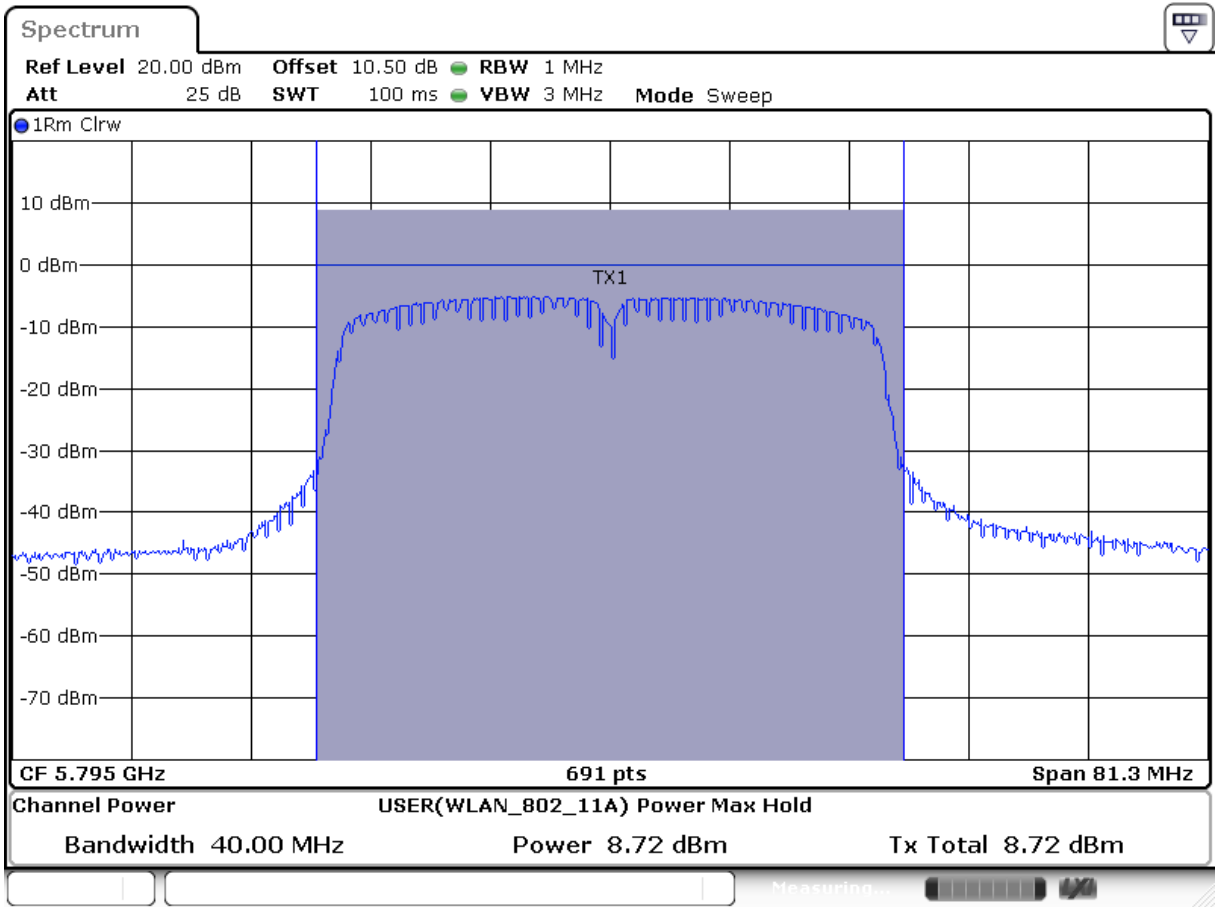
#25

Date: 2020/6/18

Temperature: 24 °C

Site: RF-Cond01

Humidity: 56 %



Condition:		RF Conducted	
EUT:	Wireless Embedded Module	Sweep Time: 100ms	Att.: 25dB
Model:	SX-SDMAC	RBW: 1000 KHz	VBW: 3000 KHz
Test Mode:	UNII	Operator:	Phillip
Note:	NCC_LP0002_802.11n40_Channel 159_Output power		

7.4.4 調變技術: IEEE 802.11ac VHT20

測試日期: Jun. 18, 2020 環境溫度: 24°C 環境濕度: 56%

天線增益最大值為 4.4 dBi，NCC Limit 如下表所示：

Channel	Maximum Peak Output Power (dBm)	NCC Limit (dBm)	Chart
L	8.68	30	Page 57
M	8.74	30	Page 58
H	8.95	30	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. If antenna gain $\leq$ 6dBi, NCC Limit = 30 dBm

4. If antenna gain > 6dBi, NCC Limit = 30dBm – (highest antenna gain – 6 dBi)

5. NCC Limit (dBm)=10 log NCC Limit (mW)

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

File: 20-02-MAS-101_5-8ac20

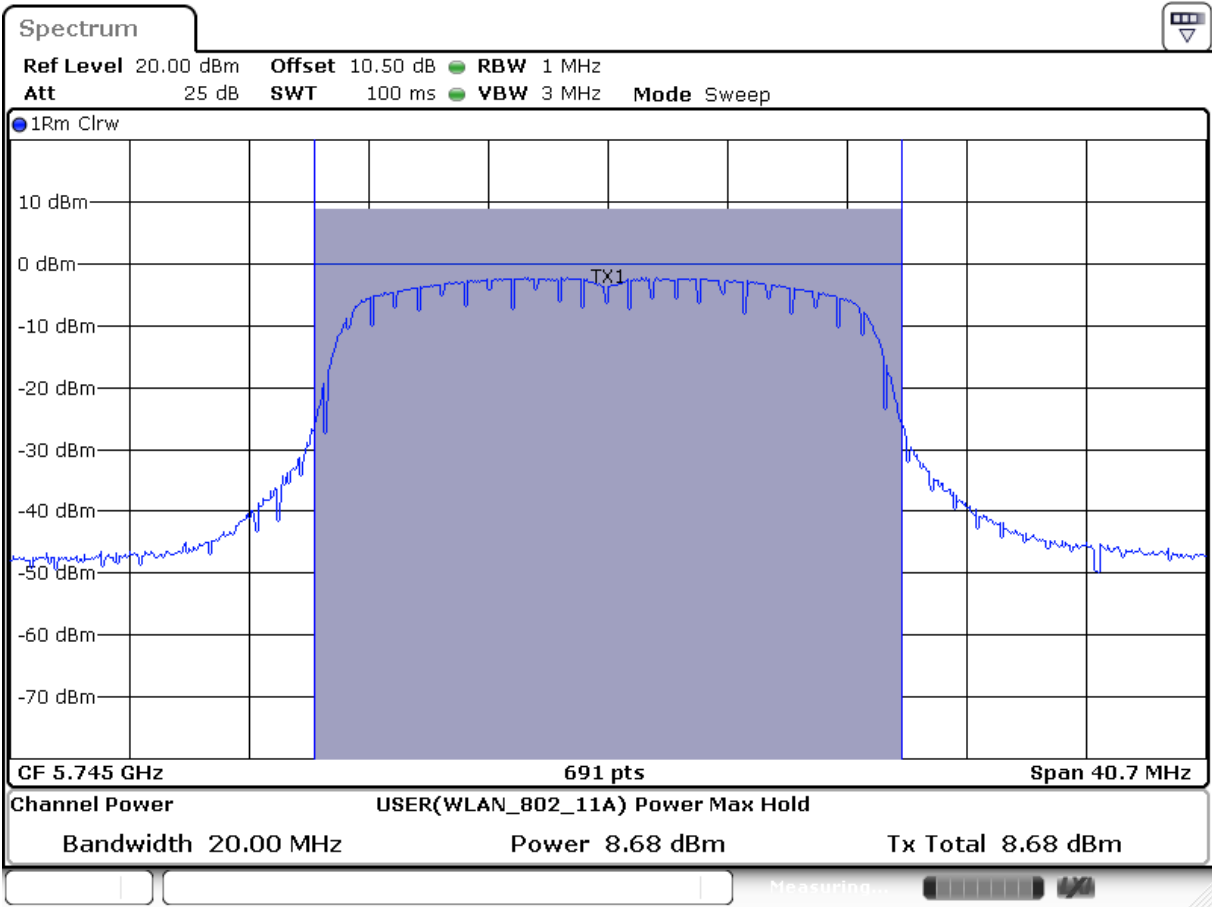
#24

Date: 2020/6/18

Temperature: 24 °C

Site: RF-Cond01

Humidity: 56 %



Condition:		RF Conducted	
EUT:	Wireless Embedded Module	Sweep Time: 100ms	Att.: 25dB
Model:	SX-SDMAC	RBW: 1000 KHz	VBW: 3000 KHz
Test Mode:	UNII	Operator:	Phillip
Note:	NCC_LP0002_802.11ac20_Channel 149_Output power		

File: 20-02-MAS-101_5-8ac20

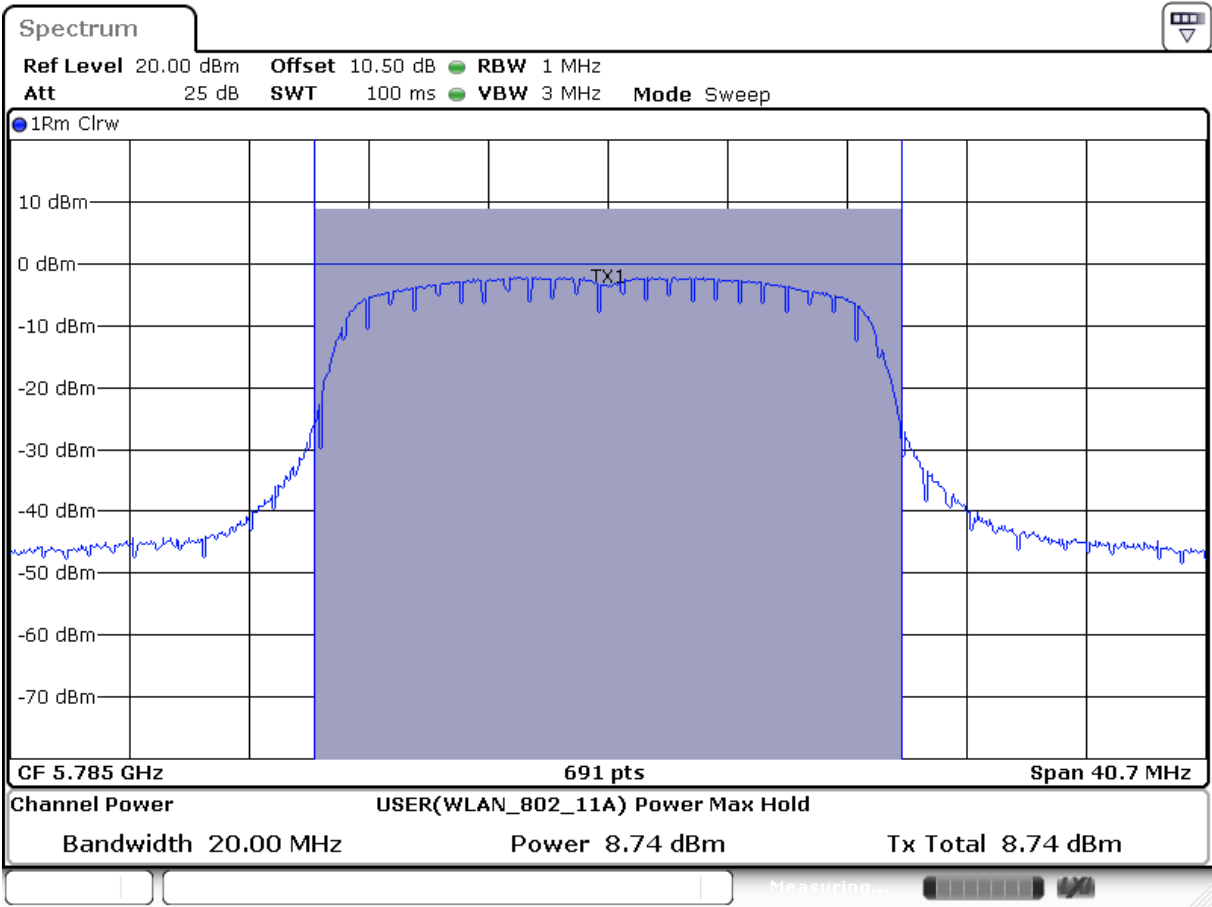
#32

Date: 2020/6/18

Temperature: 24 °C

Site: RF-Cond01

Humidity: 56 %



Condition:		RF Conducted	
EUT:	Wireless Embedded Module	Sweep Time: 100ms	Att.: 25dB
Model:	SX-SDMAC	RBW: 1000 KHz	VBW: 3000 KHz
Test Mode:	UNII	Operator:	Phillip
Note:	NCC_LP0002_802.11ac20_Channel 157_Output power		

File: 20-02-MAS-101_5-8ac20

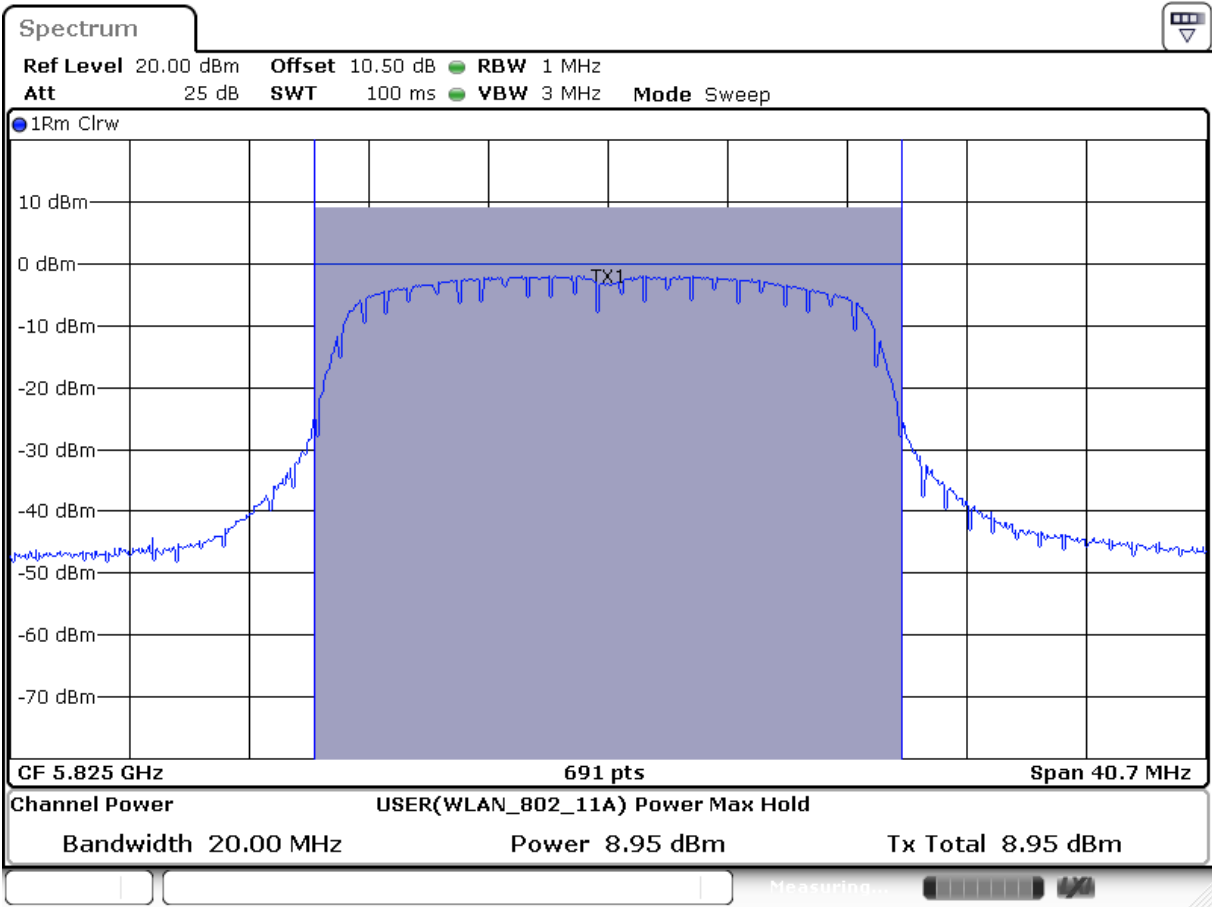
#39

Date: 2020/6/18

Temperature: 24 °C

Site: RF-Cond01

Humidity: 56 %



Condition:		RF Conducted	
EUT:	Wireless Embedded Module	Sweep Time: 100ms	Att.: 25dB
Model:	SX-SDMAC	RBW: 1000 KHz	VBW: 3000 KHz
Test Mode:	UNII	Operator:	Phillip
Note:	NCC_LP0002_802.11ac20_Channel 165_Output power		

7.4.5 調變技術: IEEE 802.11ac VHT40

測試日期: Jun. 18, 2020 環境溫度: 24°C 環境濕度: 56%

天線增益最大值為 4.4 dBi，NCC Limit 如下表所示：

Channel	Maximum Peak Output Power (dBm)	NCC Limit (dBm)	Chart
L	8.49	30	Page 61
H	8.76	30	Page 62

註：1. 繪圖資料請參考第 61-62 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. If antenna gain $\leq$ 6dBi, NCC Limit = 30 dBm

4. If antenna gain > 6dBi, NCC Limit = 30dBm – (highest antenna gain – 6 dBi)

5. NCC Limit (dBm)=10 log NCC Limit (mW)

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

File: 20-02-MAS-101_5-8ac40

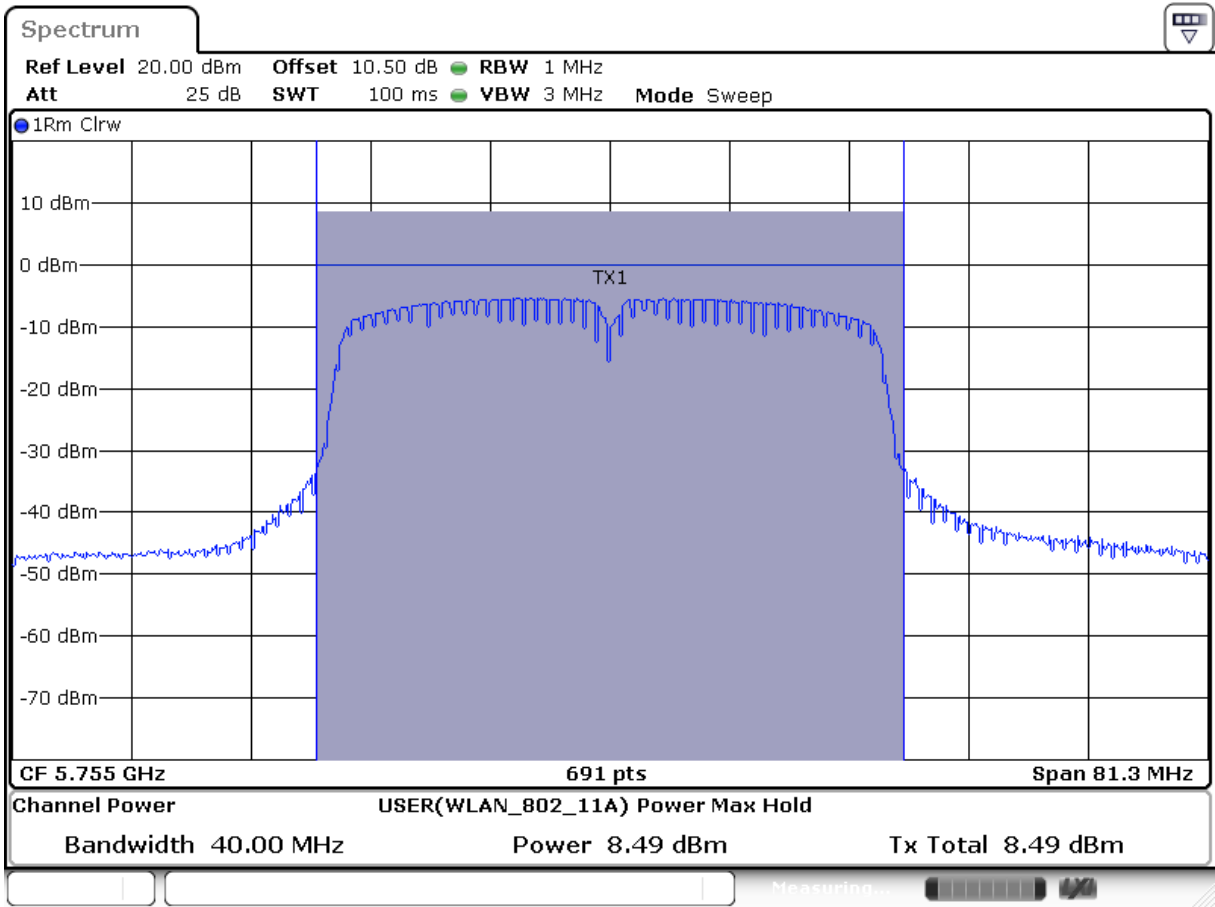
#19

Date: 2020/6/18

Temperature: 24 °C

Site: RF-Cond01

Humidity: 56 %



Condition:		RF Conducted
EUT:	Wireless Embedded Module	Sweep Time: 100ms Att.: 25dB
Model:	SX-SDMAC	RBW: 1000 KHz VBW: 3000 KHz
Test Mode:	UNII	Operator: Phillip
Note:	NCC_LP0002_802.11ac40_Channel 151_Output power	

File: 20-02-MAS-101_5-8ac40

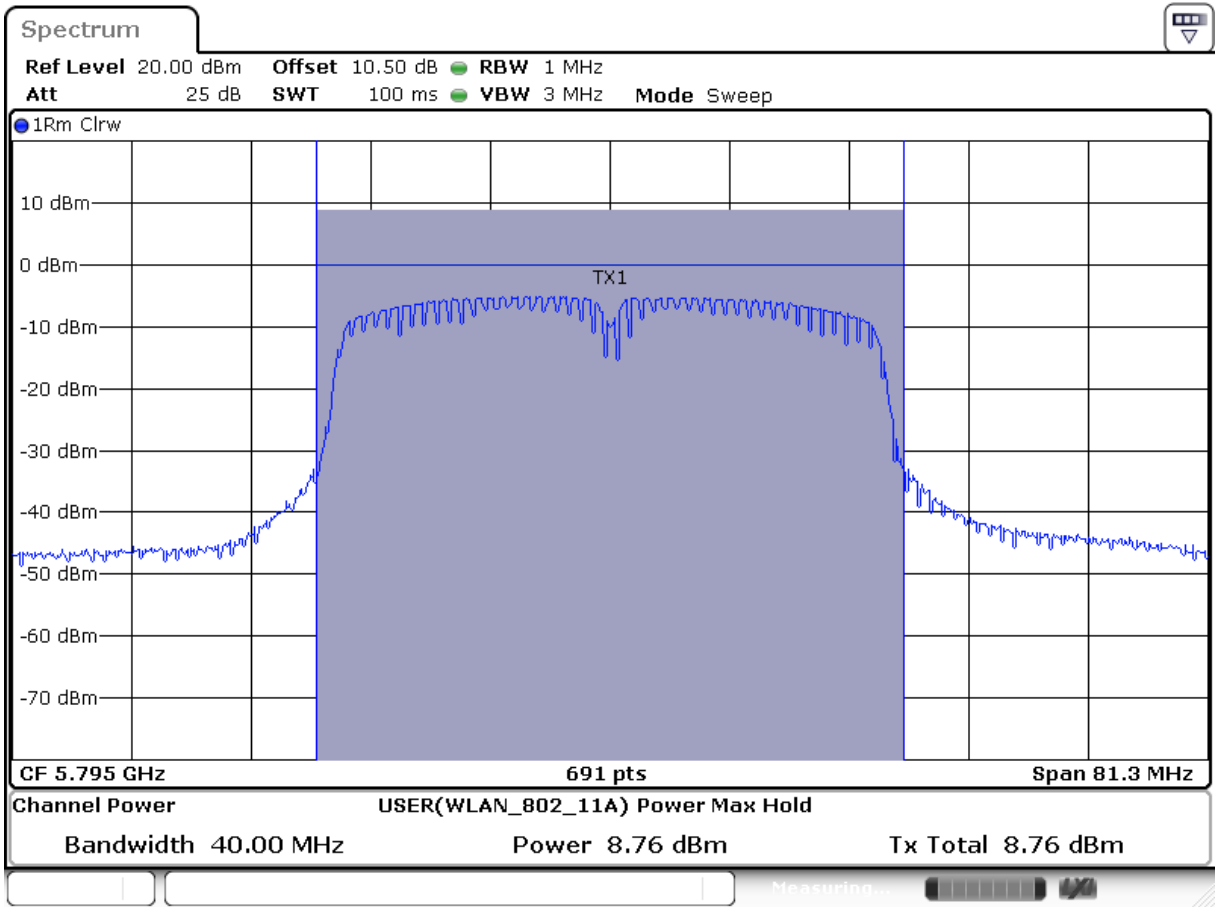
#27

Date: 2020/6/18

Temperature: 24 °C

Site: RF-Cond01

Humidity: 56 %



Condition:		RF Conducted
EUT:	Wireless Embedded Module	Sweep Time: 100ms Att.: 25dB
Model:	SX-SDMAC	RBW: 1000 KHz VBW: 3000 KHz
Test Mode:	UNII	Operator: Phillip
Note:	NCC_LP0002_802.11ac40_Channel 159_Output power	

7.4.6 調變技術: IEEE 802.11ac VHT80

測試日期: Jun. 18, 2020

環境溫度: 24°C

環境濕度: 56%

天線增益最大值為 4.4 dBi，NCC Limit 如下表所示：

Channel	Maximum Peak Output Power (dBm)	NCC Limit (dBm)	Chart
L	9.15	30	Page 64

註：1. 繪圖資料請參考第 64 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. If antenna gain $\leq$ 6dBi, NCC Limit = 30 dBm

4. If antenna gain > 6dBi, NCC Limit = 30dBm – (highest antenna gain – 6 dBi)

5. NCC Limit (dBm)=10 log NCC Limit (mW)

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。

File: 20-02-MAS-101_5-8ac80

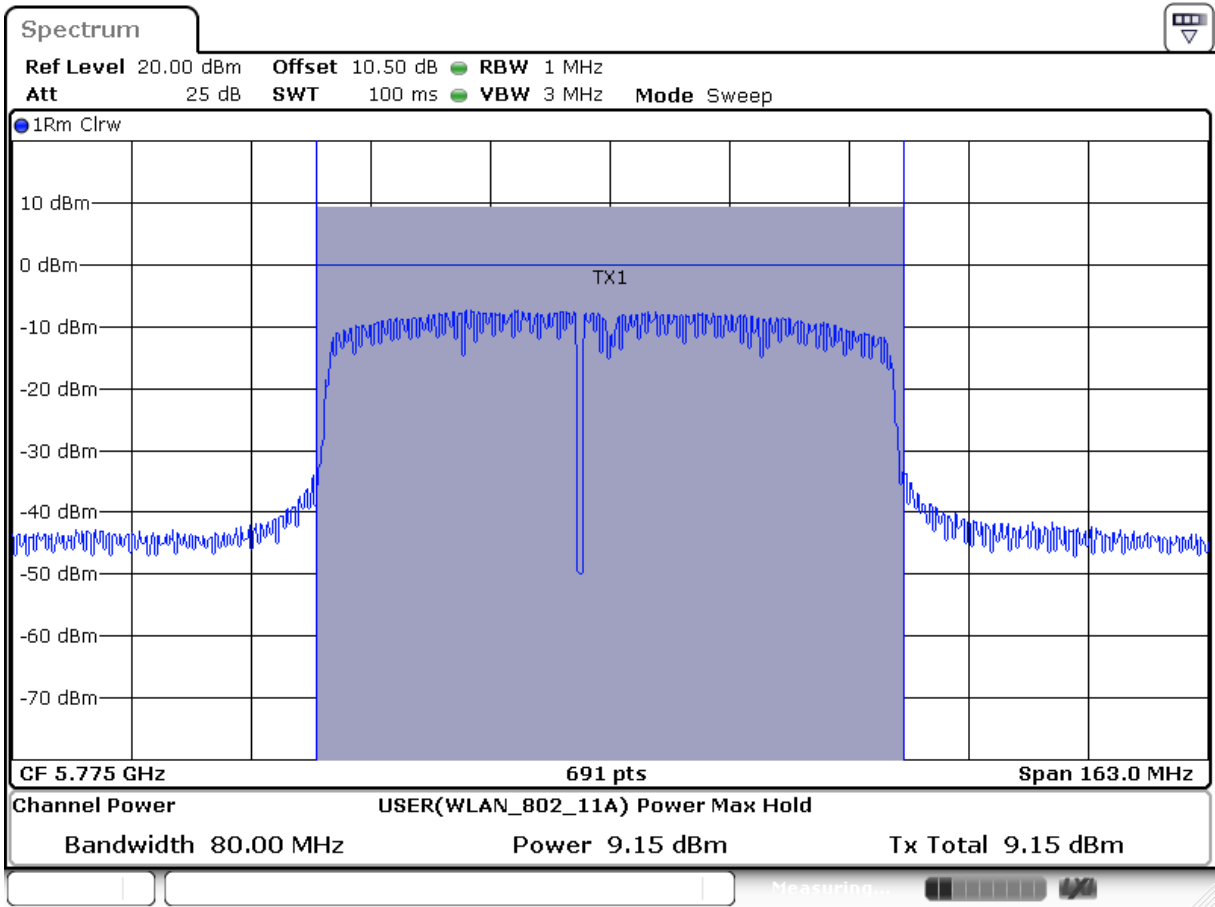
#10

Date: 2020/6/18

Temperature: 24 °C

Site: RF-Cond01

Humidity: 56 %



Condition:		RF Conducted
EUT:	Wireless Embedded Module	Sweep Time: 100ms Att.: 25dB
Model:	SX-SDMAC	RBW: 1000 KHz VBW: 3000 KHz
Test Mode:	UNII	Operator: Phillip
Note:	NCC_LP0002_802.11ac80_Channel 155_Output power	

8 功率密度之量測

8.1 適用標準

國家通訊傳播委員會低功率射頻器材技術規範5.7.3.3節(2)之規定，在任何500 kHz頻帶中最大功率頻譜密度應小於或等於30 dBm。

8.2 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	R&S	FSV
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: Jun. 18, 2020

環境溫度: 24°C

環境濕度: 56%

天線增益最大值為 4.4 dBi，NCC Limit 如下表所示：

Channel	Power Spectral Density (dBm)	NCC Limit (dBm)	Chart
L	1.99	30	Page 67
M	2.27	30	Page 68
H	2.08	30	Page 69

註：1. 繪圖資料請參考第 67-69 頁。

2. If antenna gain $\leq$ 6dBi, NCC Limit = 30 dBm

3. If antenna gain $>$ 6dBi, NCC Limit = 30dBm – (highest antenna gain – 6 dBi)

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

File: 20-02-MAS-101_5-8a

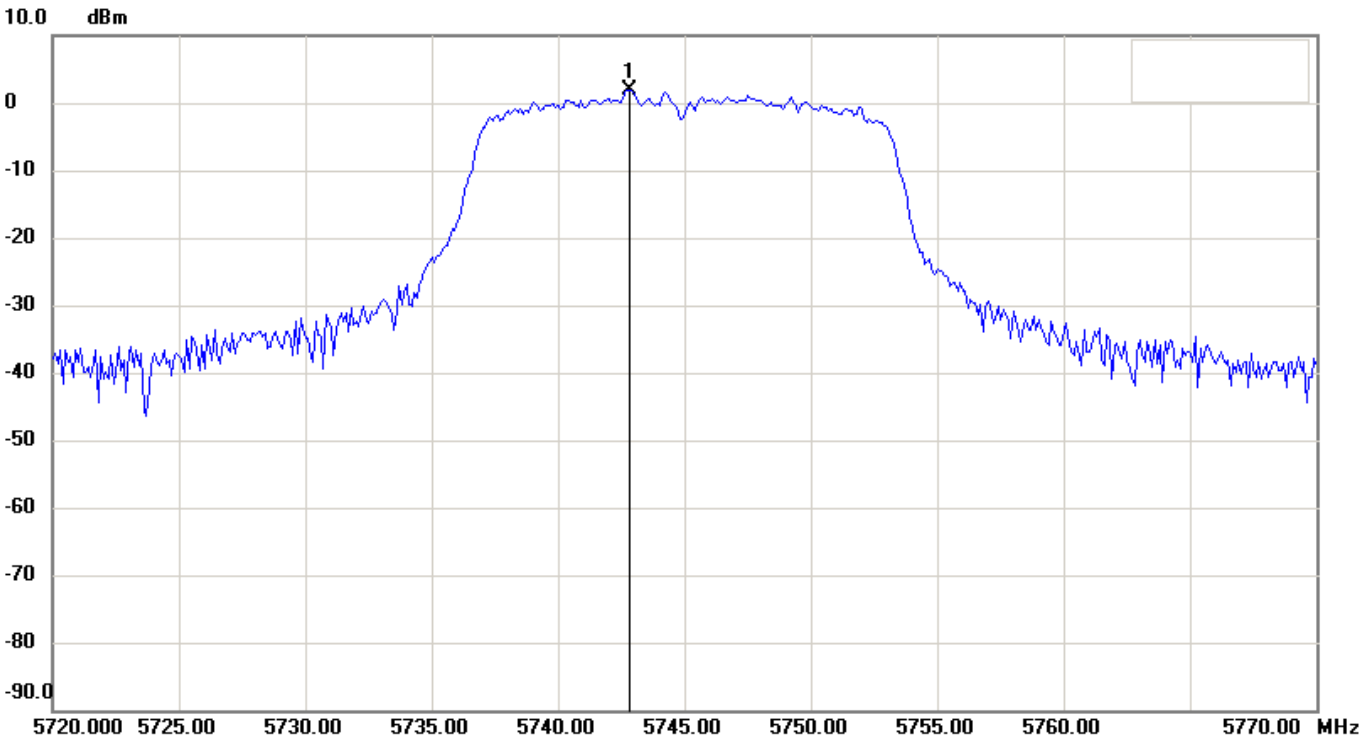
#28

Date: 2020/6/18

Temperature: 24 °C

Site: RF-Cond01

Humidity: 56 %



Condition:

EUT:

Model:

Test Mode:

Note:

Wireless Embedded Module

SX-SDMAC

UNII

NCC_LP0002_802.11a_Channel 149_Power Density

RF Conducted

Sweep Time: 1ms

RBW: 500 KHz

Operator:

Att.: 15dB

VBW: 1000 KHz

Phillip

No.	Frequency(MHz)	Level(dBm)
1	5742.80000	1.99

File: 20-02-MAS-101_5-8a

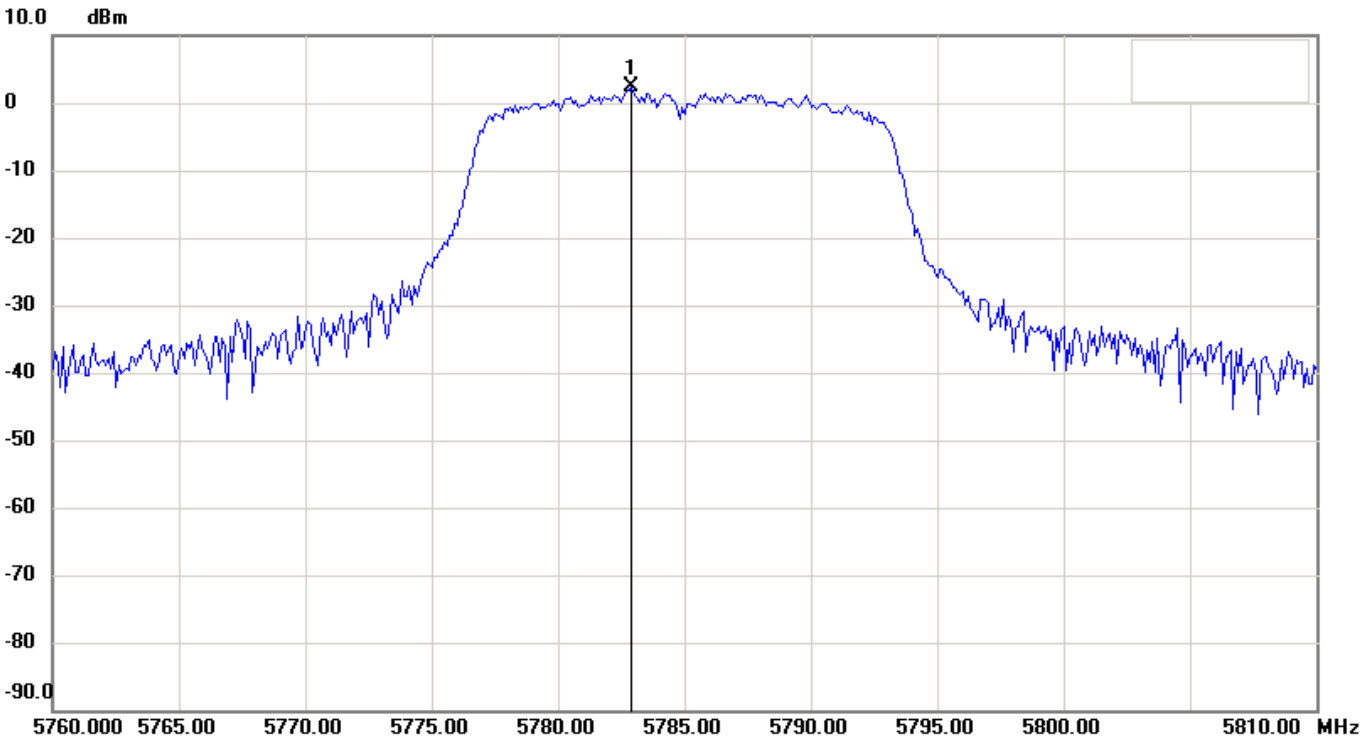
#36

Date: 2020/6/18

Temperature: 24 °C

Site: RF-Cond01

Humidity: 56 %



Condition:

EUT:

Model:

Test Mode:

Note:

Wireless Embedded Module

SX-SDMAC

UNII

NCC_LP0002_802.11a_Channel 157_Power Density

RF Conducted

Sweep Time: 1ms

RBW: 500 KHz

Operator:

Att.: 15dB

VBW: 1000 KHz

Phillip

No.	Frequency(MHz)	Level(dBm)
1	5782.90000	2.27

File: 20-02-MAS-101_5-8a

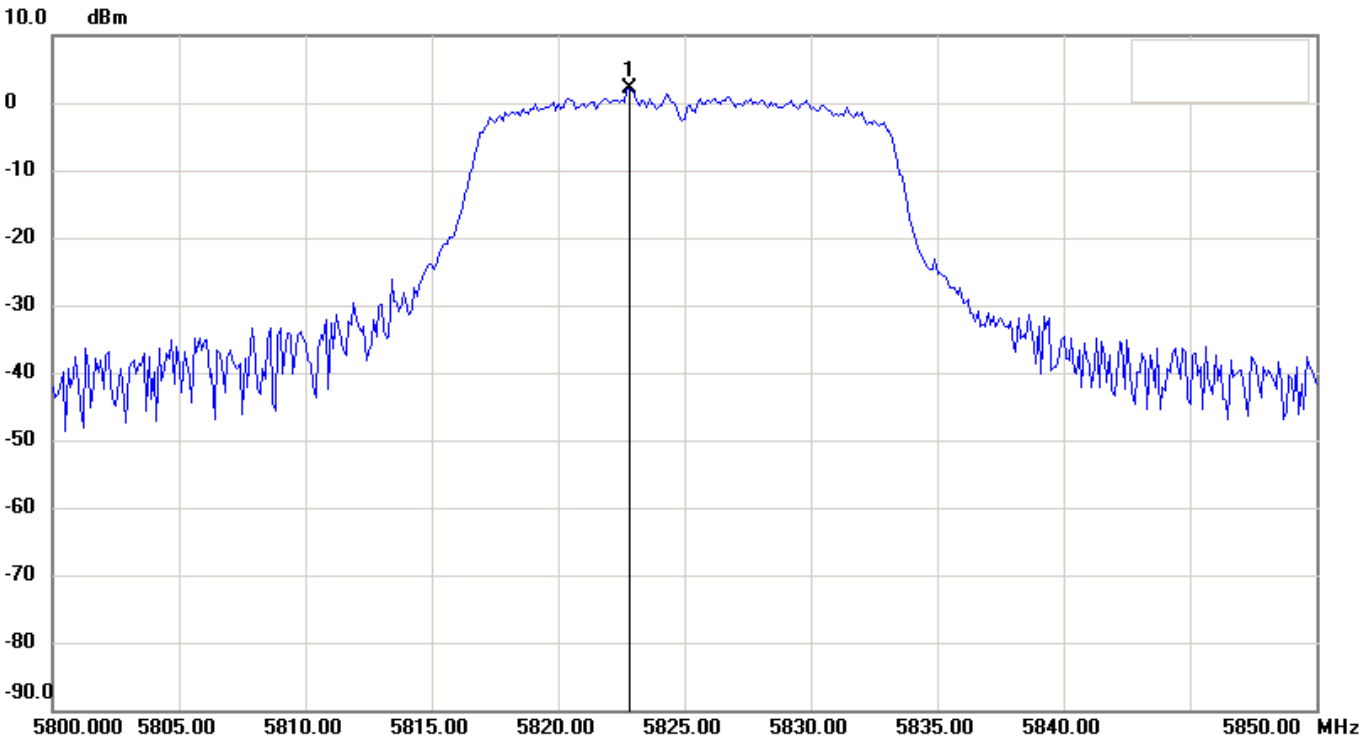
Site: RF-Cond01

#43

Date: 2020/6/18

Temperature: 24 °C

Humidity: 56 %



Condition:

EUT:

Model:

Test Mode:

Note:

Wireless Embedded Module

SX-SDMAC

UNII

NCC_LP0002_802.11a_Channel 165_Power Density

RF Conducted

Sweep Time: 1ms

RBW: 500 KHz

Operator:

Att.: 15dB

VBW: 1000 KHz

Phillip

No.	Frequency(MHz)	Level(dBm)
1	5822.80000	2.08

8.4.2 調變技術: IEEE 802.11ac VHT20

測試日期: Jun. 18, 2020

環境溫度: 24°C

環境濕度: 56%

天線增益最大值為 4.4 dBi，NCC Limit 如下表所示：

Channel	Power Spectral Density (dBm)	NCC Limit (dBm)	Chart
L	1.74	30	Page 71
M	1.23	30	Page 72
H	1.40	30	Page 73

註：1. 繪圖資料請參考第 71-73 頁。

2. If antenna gain $\leq$ 6dBi, NCC Limit = 30 dBm3. If antenna gain $>$ 6dBi, NCC Limit = 30dBm – (highest antenna gain – 6 dBi)4. 量測不準確度: $\pm 1.5\text{dB}$ ($1\text{GHz} \leq f \leq 18\text{GHz}$)

File: 20-02-MAS-101_5-8ac20

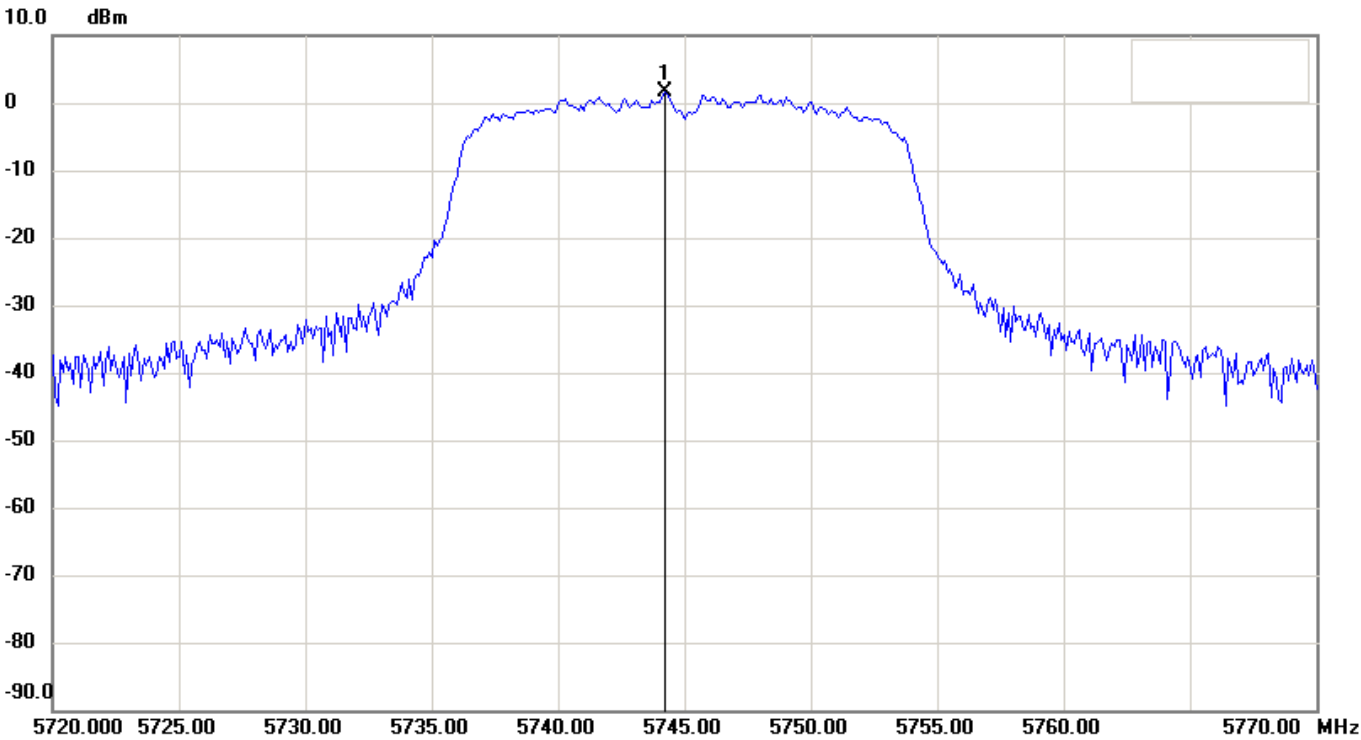
#28

Date: 2020/6/18

Temperature: 24 °C

Site: RF-Cond01

Humidity: 56 %



Condition:

EUT:

Model:

Test Mode:

Note:

Wireless Embedded Module

SX-SDMAC

UNII

NCC_LP0002_802.11ac20_Channel 149_Power Density

RF Conducted

Sweep Time: 1ms

RBW: 500 KHz

Operator:

Att.: 15dB

VBW: 1000 KHz

Phillip

No.	Frequency(MHz)	Level(dBm)
1	5744.20000	1.74

File: 20-02-MAS-101_5-8ac20

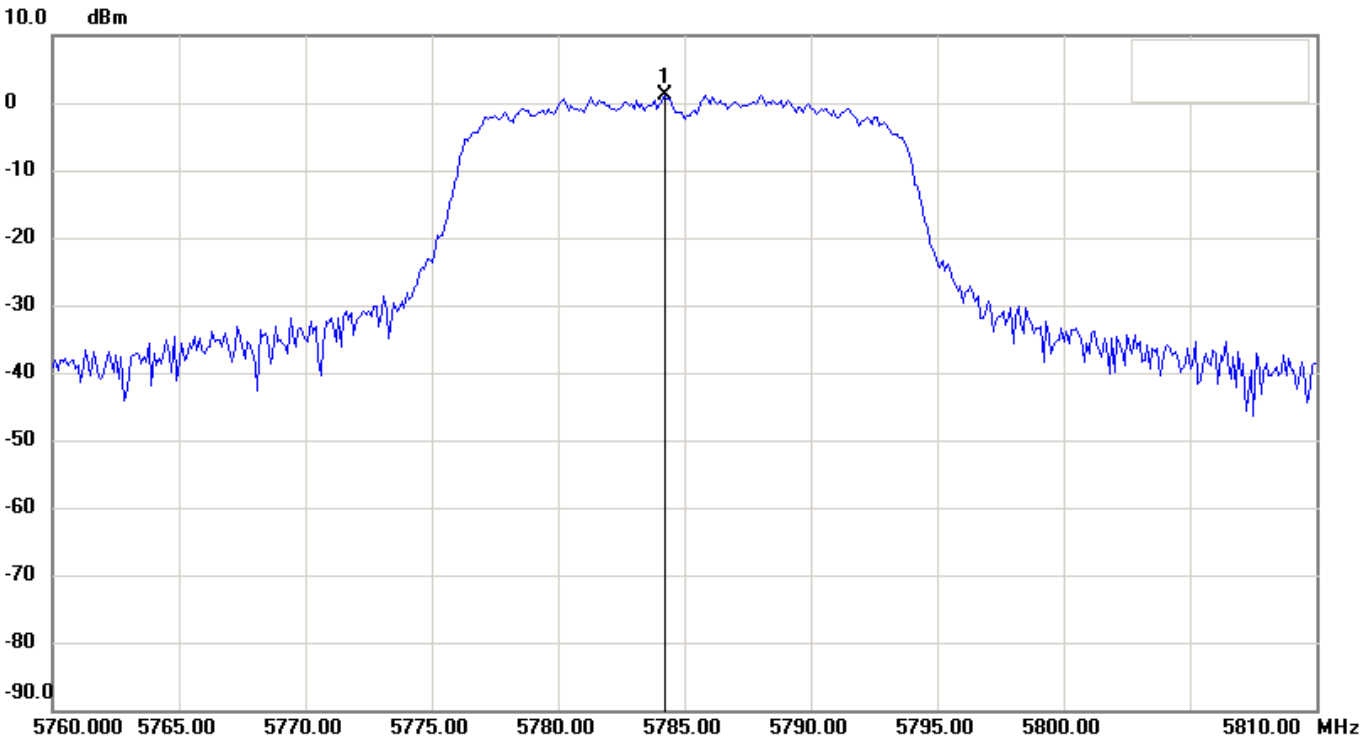
#36

Date: 2020/6/18

Temperature: 24 °C

Site: RF-Cond01

Humidity: 56 %



Condition:

EUT: Wireless Embedded Module

Model: SX-SDMAC

Test Mode: UNII

Note: NCC_LP0002_802.11ac20_Channel 157_Power Density

RF Conducted

Sweep Time: 1ms Att.: 15dB

RBW: 500 KHz VBW: 1000 KHz

Operator: Phillip

No.	Frequency(MHz)	Level(dBm)
1	5784.20000	1.23

File: 20-02-MAS-101_5-8ac20

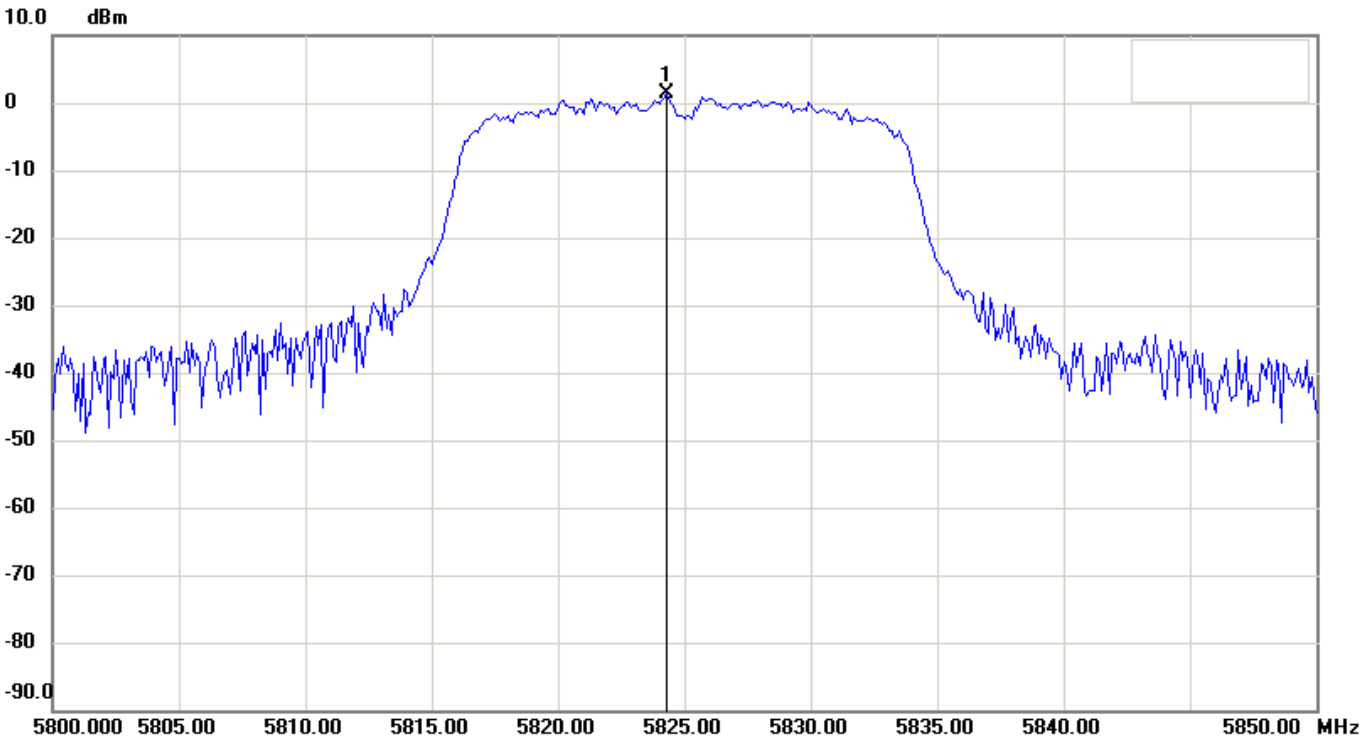
#43

Date: 2020/6/18

Temperature: 24 °C

Site: RF-Cond01

Humidity: 56 %



Condition:

EUT:

Model:

Test Mode:

Note:

Wireless Embedded Module

SX-SDMAC

UNII

NCC_LP0002_802.11ac20_Channel 165_Power Density

RF Conducted

Sweep Time: 1ms

RBW: 500 KHz

Operator:

Att.: 15dB

VBW: 1000 KHz

Phillip

No.	Frequency(MHz)	Level(dBm)
1	5824.30000	1.40

8.4.3 調變技術: IEEE 802.11ac VHT40

測試日期: Jun. 18, 2020

環境溫度: 24°C

環境濕度: 56%

天線增益最大值為 4.4 dBi, NCC Limit 如下表所示:

Channel	Power Spectral Density (dBm)	NCC Limit (dBm)	Chart
L	-2.13	30	Page 75
H	-1.42	30	Page 76

註: 1. 繪圖資料請參考第 75-76 頁。

2. If antenna gain $\leq$ 6dBi, NCC Limit = 30dBm3. If antenna gain $>$ 6dBi, NCC Limit = 30dBm – (highest antenna gain – 6 dBi)4. 量測不準確度: $\pm 1.5\text{dB}$ ($1\text{GHz} \leq f \leq 18\text{GHz}$)

File: 20-02-MAS-101_5-8ac40

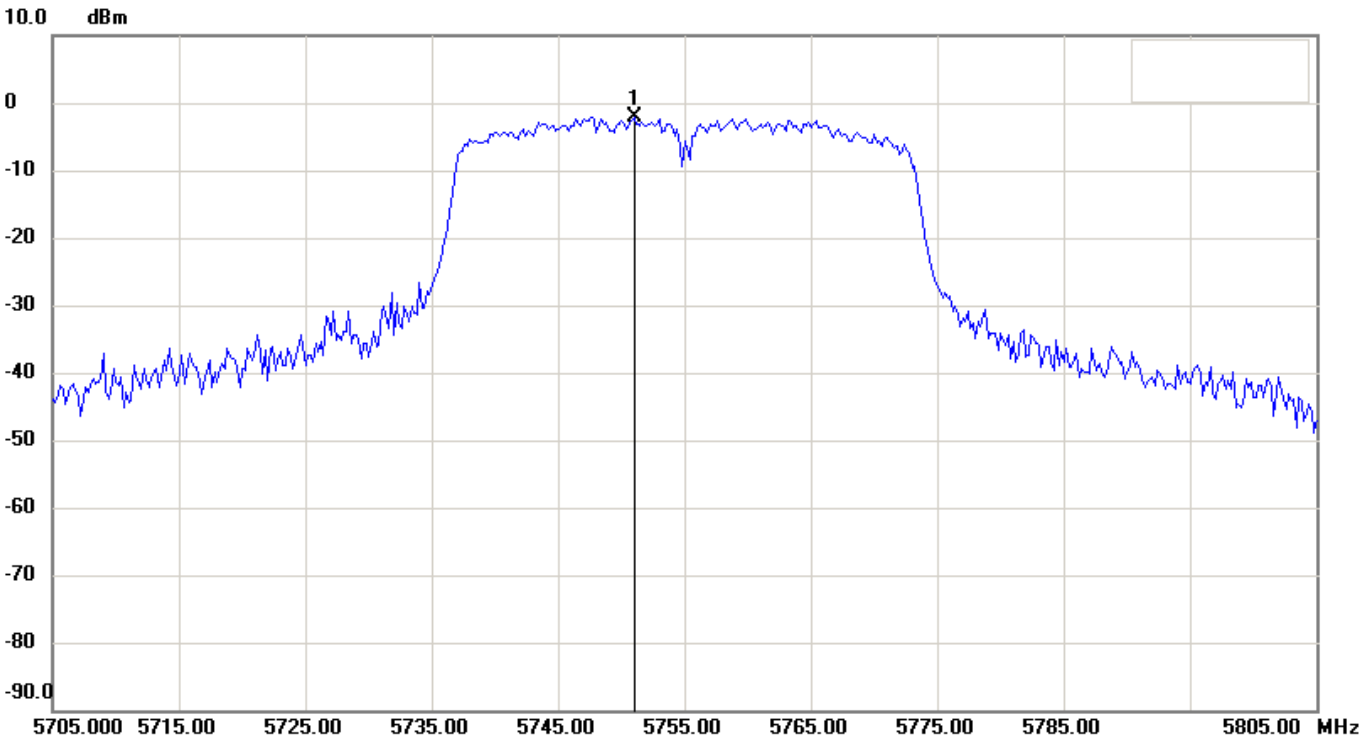
#23

Date: 2020/6/18

Temperature: 24 °C

Site: RF-Cond01

Humidity: 56 %



Condition:

EUT: Wireless Embedded Module

Model: SX-SDMAC

Test Mode: UNII

Note: NCC_LP0002_802.11ac40_Channel 151_Power Density

RF Conducted

Sweep Time: 1ms Att.: 15dB

RBW: 500 KHz VBW: 1000 KHz

Operator: Phillip

No.	Frequency(MHz)	Level(dBm)
1	5751.00000	-2.13

File: 20-02-MAS-101_5-8ac40

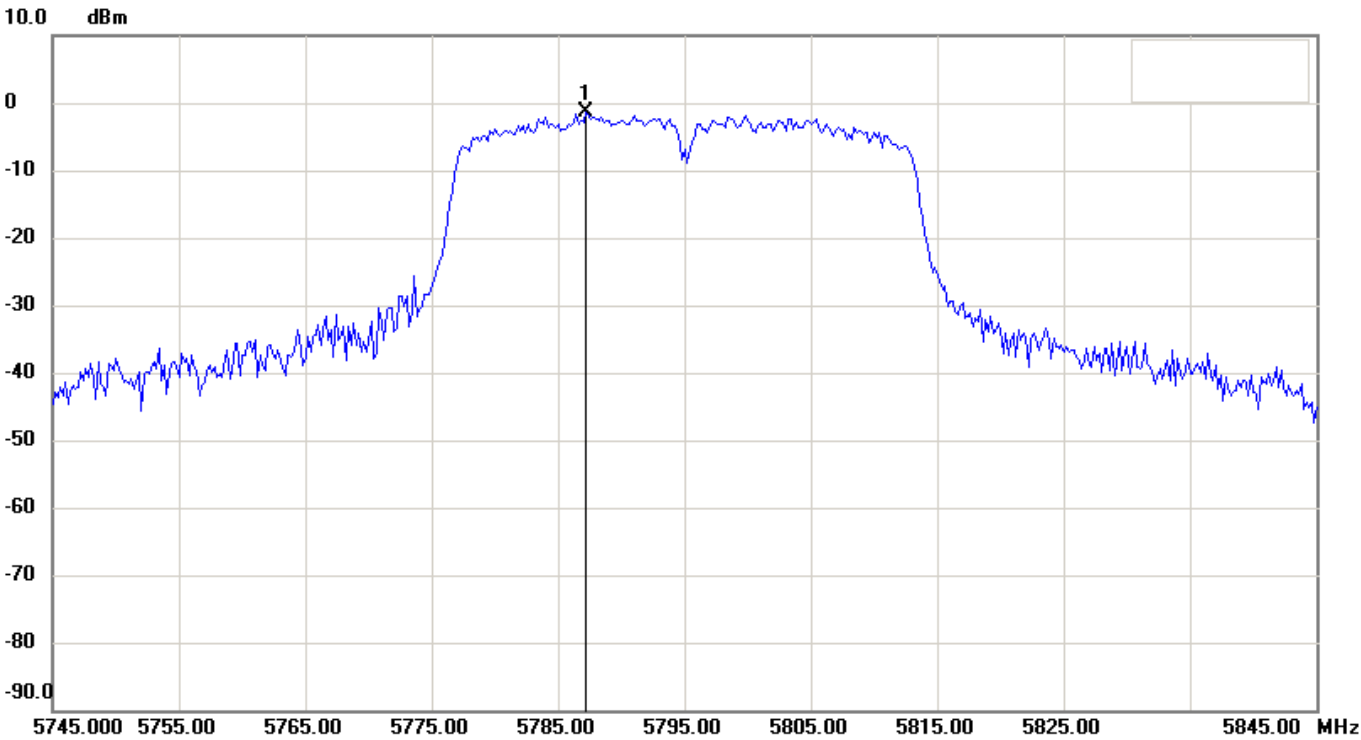
#31

Date: 2020/6/18

Temperature: 24 °C

Site: RF-Cond01

Humidity: 56 %



Condition:

EUT: Wireless Embedded Module

Model: SX-SDMAC

Test Mode: UNII

Note: NCC_LP0002_802.11ac40_Channel 159_Power Density

RF Conducted

Sweep Time: 1ms Att.: 15dB

RBW: 500 KHz VBW: 1000 KHz

Operator: Phillip

No.	Frequency(MHz)	Level(dBm)
1	5787.20000	-1.42

8.4.4 調變技術: IEEE 802.11ac VHT80

測試日期: Jun. 18, 2020

環境溫度: 24°C

環境濕度: 56%

天線增益最大值為 4.4 dBi，NCC Limit 如下表所示：

Channel	Power Spectral Density (dBm)	NCC Limit (dBm)	Chart
L	-3.55	30	Page 78

註：1. 繪圖資料請參考第 78 頁。

2. If antenna gain $\leq 6\text{dBi}$, NCC Limit =30 dBm3. If antenna gain $> 6\text{dBi}$, NCC Limit = 30dBm – (highest antenna gain – 6 dBi)4. 量測不準確度: $\pm 1.5\text{dB}$ ($1\text{GHz} \leq f \leq 18\text{GHz}$)

8.5 結果判定

高、中、低頻段的3kHz功率密度皆低於限制值，合乎標準規定。

File: 20-02-MAS-101_5-8ac80

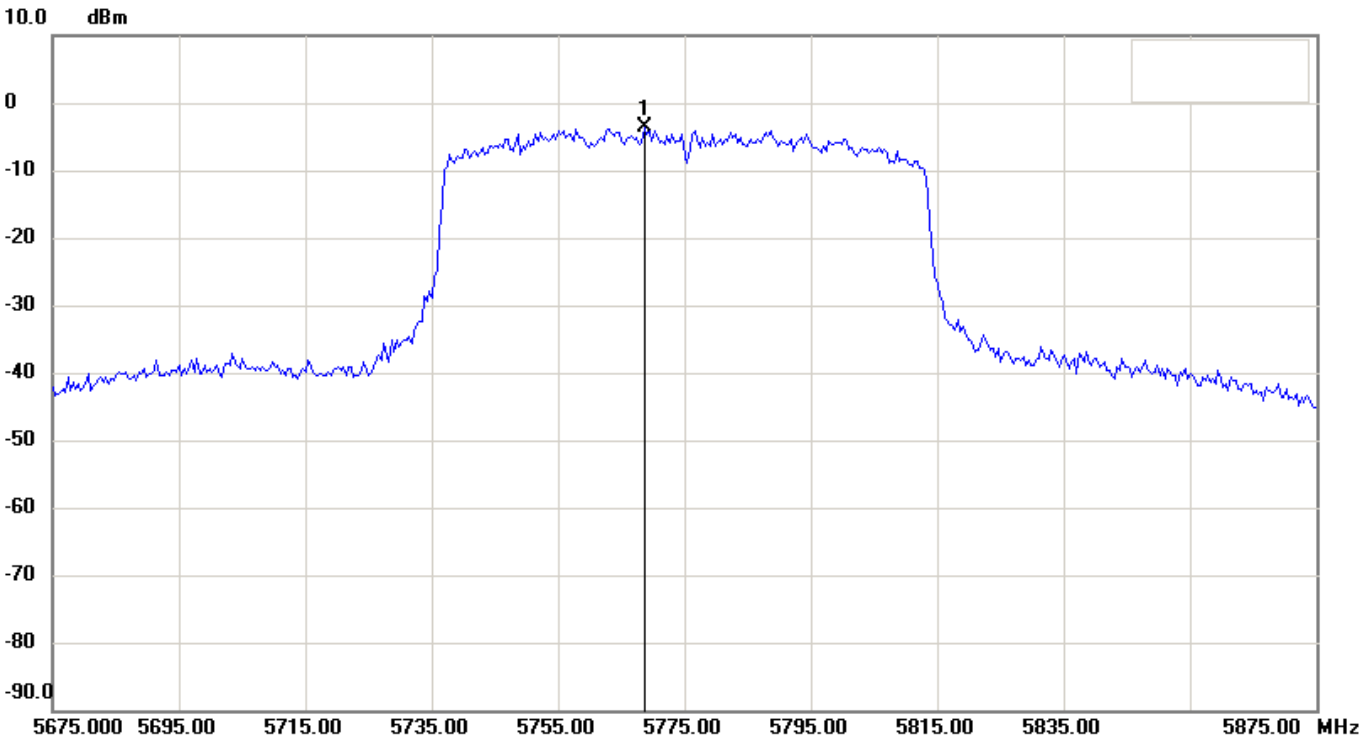
#14

Date: 2020/6/18

Temperature: 24 °C

Site: RF-Cond01

Humidity: 56 %



Condition:

EUT: Wireless Embedded Module

Model: SX-SDMAC

Test Mode: UNII

Note: NCC_LP0002_802.11ac80_Channel 155_Power Density

RF Conducted

Sweep Time: 1ms Att.: 15dB

RBW: 500 KHz VBW: 1000 KHz

Operator: Phillip

No.	Frequency(MHz)	Level(dBm)
1	5768.60000	-3.55

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器材技術規範5.7.4.2節之規定，在5.725 GHz～5.850 GHz 的頻段操作之發射器：所有頻帶邊緣向外5MHz 內頻率之發射，有效等向輻射功率(EIRP)≤27 dBm/MHz～15.6dBm/MHz (以線性法計算對應之限制值)；所有頻帶邊緣向外5 MHz～25MHz，有效等向輻射功率(EIRP)≤15.6 dBm/MHz～10 dBm/MHz (以線性法計算對應之限制值)；所有頻帶邊緣外25 MHz～75 MHz，有效等向輻射功率(EIRP)≤10 dBm/MHz～-27 dBm/MHz (以線性法計算對應之限制值)；所有頻帶邊緣外≥75 MHz 的頻率之發射，有效等向輻射功率(EIRP)≤-27 dBm/MHz。

此外落於國家通訊傳播委員會低功率射頻器材技術規範第3.5節禁用頻段之輻射，應符合國家通訊傳播委員會低功率射頻器材技術規範第3.6節之規定。

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	R&S	FSV
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)

測試工程師: 羅世勇

9.4.1 調變技術:IEEE 802.11a

測試日期: Jun. 18, 2020

環境溫度: 24℃

環境濕度: 56%

註：1. 繪圖資料請參考第 80-87 頁。

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

File: 20-02-MAS-101_5-8a

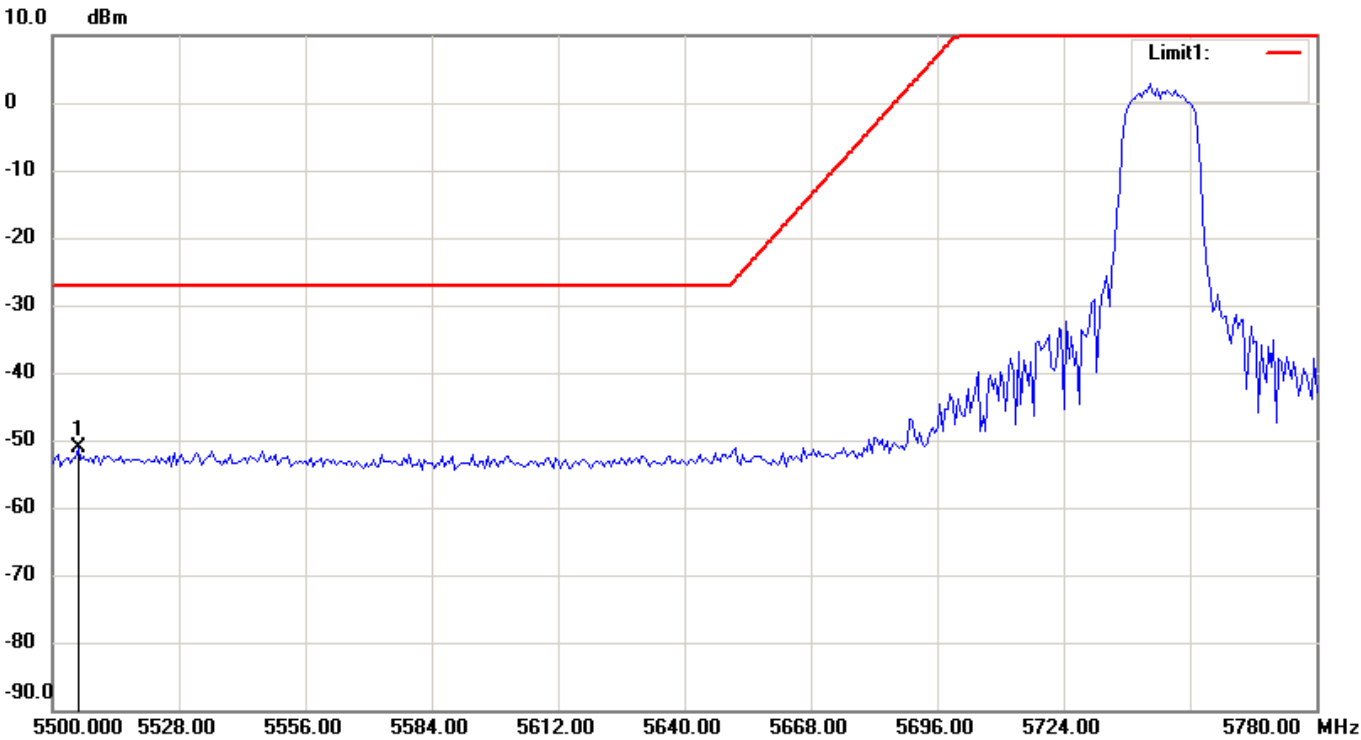
#31

Date: 2020/6/18

Temperature: 24 °C

Site: RF-Cond01

Humidity: 56 %



Condition: UNII-Band-4-Bandedge

EUT: Wireless Embedded Module

Model: SX-SDMAC

Test Mode: UNII

Note: NCC_LP0002_802.11a Channel 149_Low_Bandedge

RF Conducted

Sweep Time: 1ms

RBW: 1000 KHz

Operator:

Att.: 15dB

VBW: 3000 KHz

Phillip

No.	Frequency(MHz)	Level(dBm)
1	5505.60000	-51.22

File: 20-02-MAS-101_5-8a

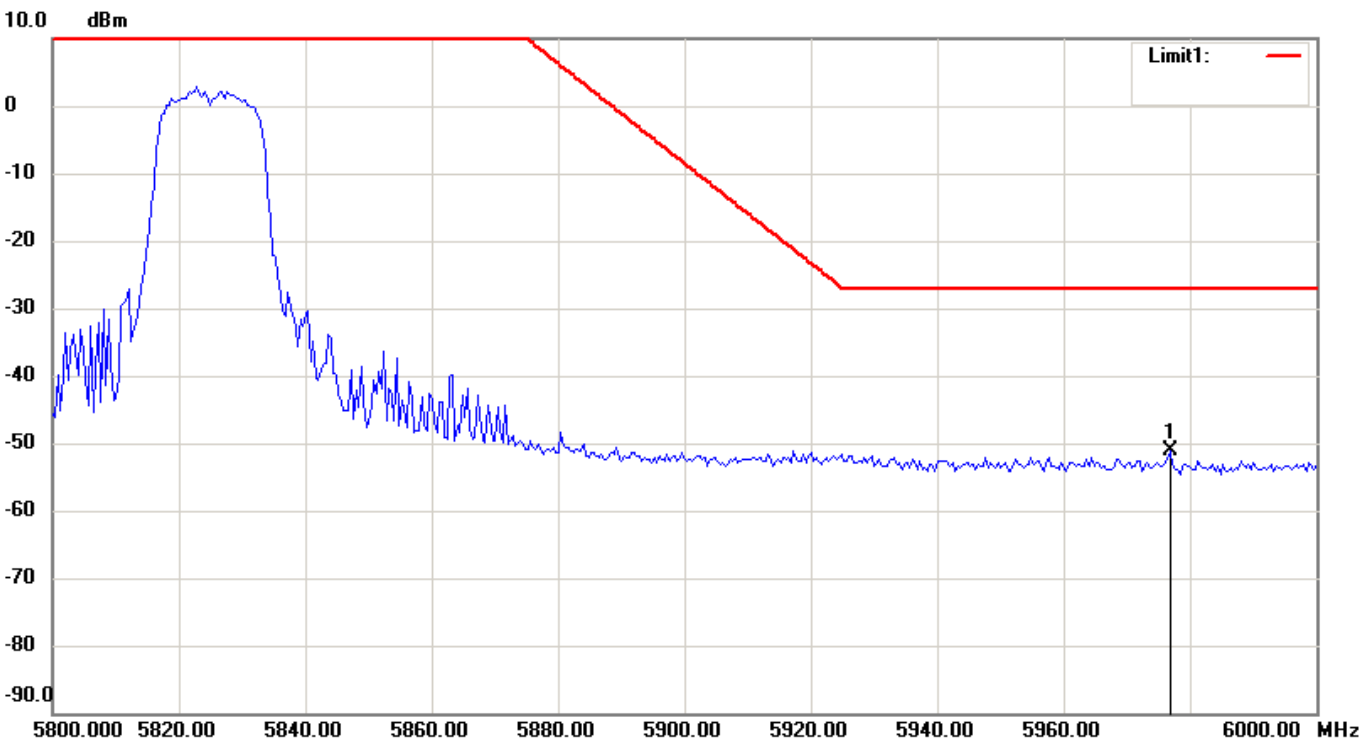
Site: RF-Cond01

#46

Date: 2020/6/18

Temperature: 24 °C

Humidity: 56 %



Condition: UNII-Band-4-Bandedge

EUT: Wireless Embedded Module

Model: SX-SDMAC

Test Mode: UNII

Note: NCC_LP0002_802.11a Channel 165_High_Bandedge

RF Conducted

Sweep Time: 1ms

RBW: 1000 KHz

Operator:

Att.: 15dB

VBW: 3000 KHz

Phillip

No.	Frequency(MHz)	Level(dBm)
1	5976.80000	-51.20

File: 20-02-MAS-101_5-8a

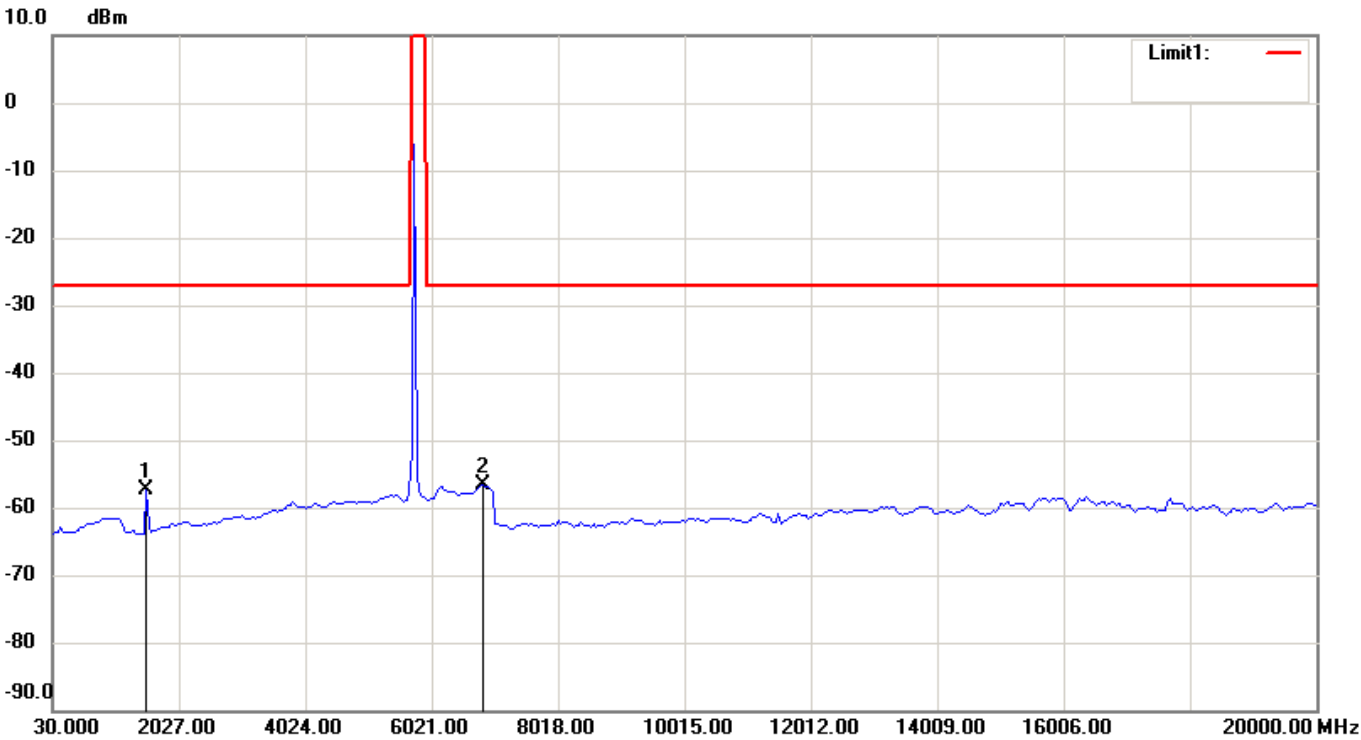
Site: RF-Cond01

#29

Date: 2020/6/18

Temperature: 24 °C

Humidity: 56 %



Condition: UNII-Band-4-Bandedge

EUT: Wireless Embedded Module

Model: SX-SDMAC

Test Mode: UNII

Note: NCC_LP0002_802.11a_Channel 149_Spurious-1

RF Conducted

Sweep Time: 79.9ms

RBW: 1000 KHz

Operator:

Att.: 15dB

VBW: 1000 KHz

Phillip

No.	Frequency(MHz)	Level(dBm)
1	1507.78000	-57.29
2	6819.80000	-56.68

File: 20-02-MAS-101_5-8a

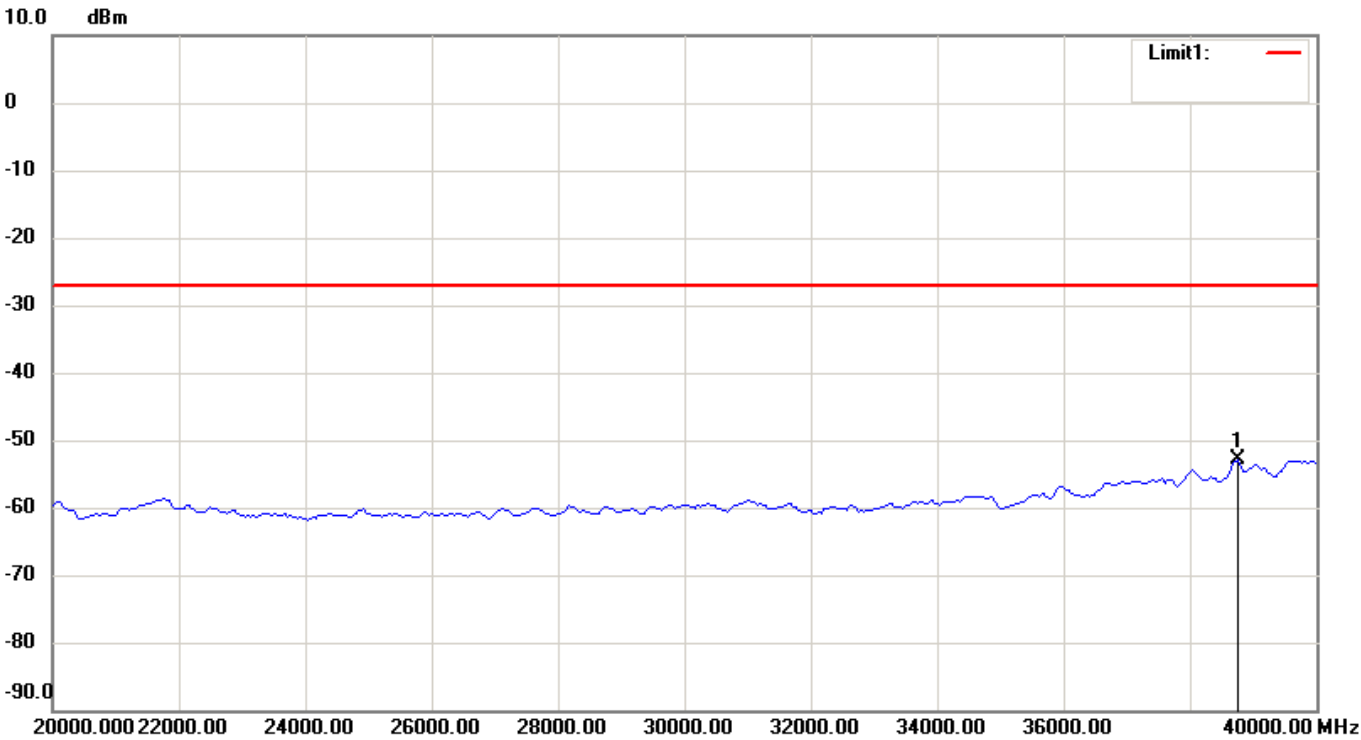
Site: RF-Cond01

#30

Date: 2020/6/18

Temperature: 24 °C

Humidity: 56 %



Condition: UNII-Band-4-Bandedge

EUT: Wireless Embedded Module

Model: SX-SDMAC

Test Mode: UNII

Note: NCC_LP0002_802.11a_Channel 149_Spurious-2

RF Conducted

Sweep Time: 80ms

RBW: 1000 KHz

Operator:

Att.: 15dB

VBW: 1000 KHz

Phillip

No.	Frequency(MHz)	Level(dBm)
1	38760.00000	-52.96

File: 20-02-MAS-101_5-8a

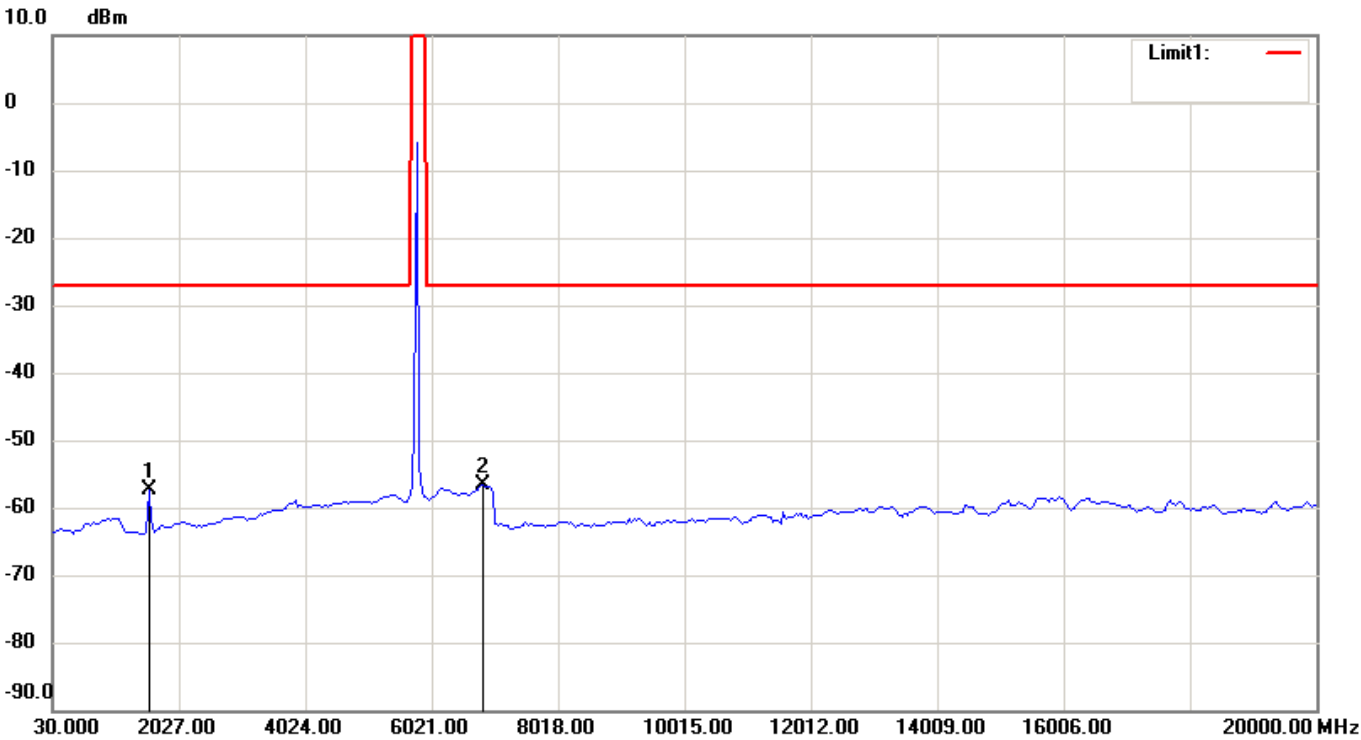
Site: RF-Cond01

#37

Date: 2020/6/18

Temperature: 24 °C

Humidity: 56 %



Condition: UNII-Band-4-Bandedge

EUT: Wireless Embedded Module

Model: SX-SDMAC

Test Mode: UNII

Note: NCC_LP0002_802.11a_Channel 157_Spurious-1

RF Conducted

Sweep Time: 79.9ms

RBW: 1000 KHz

Operator:

Att.: 15dB

VBW: 1000 KHz

Phillip

No.	Frequency(MHz)	Level(dBm)
1	1547.72000	-57.29
2	6819.80000	-56.67

File: 20-02-MAS-101_5-8a

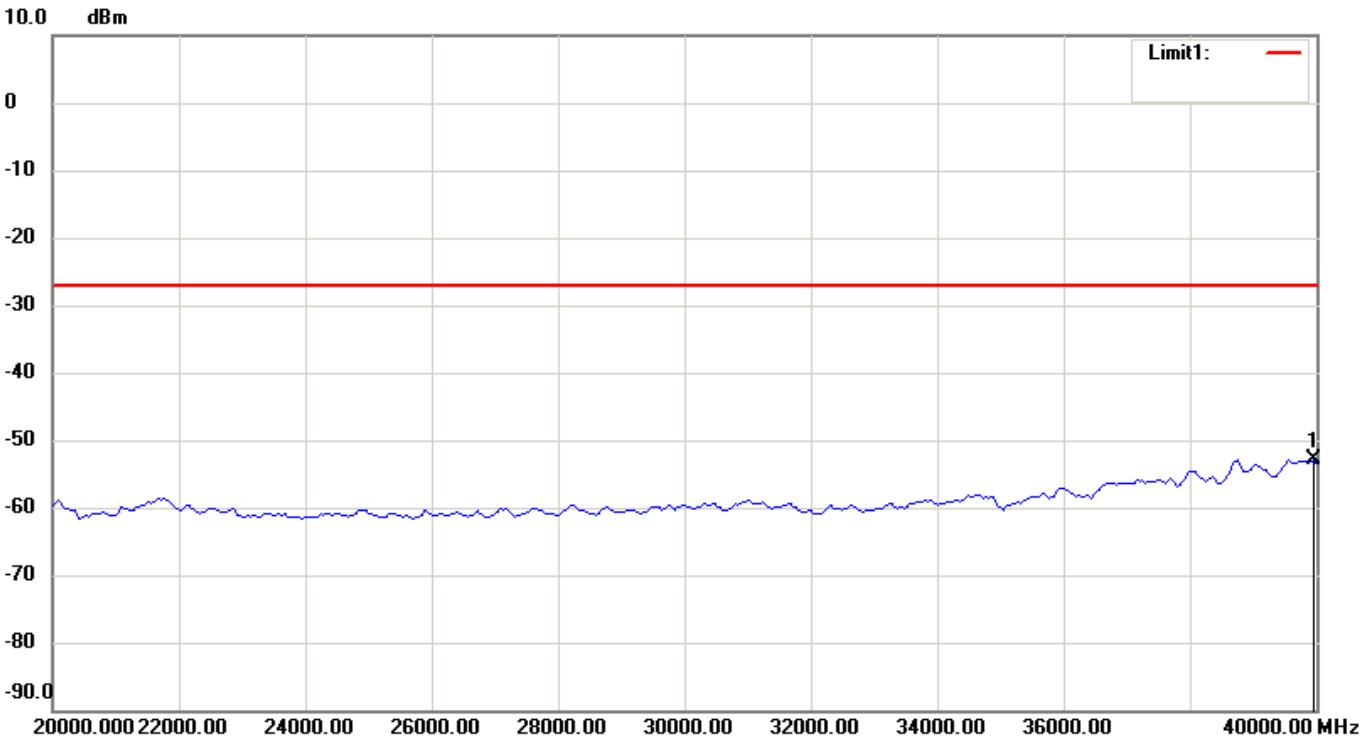
Site: RF-Cond01

#38

Date: 2020/6/18

Temperature: 24 °C

Humidity: 56 %



Condition: UNII-Band-4-Bandedge

EUT: Wireless Embedded Module

Model: SX-SDMAC

Test Mode: UNII

Note: NCC_LP0002_802.11a_Channel 157_Spurious-2

RF Conducted

Sweep Time: 80ms

RBW: 1000 KHz

Operator:

Att.: 15dB

VBW: 1000 KHz

Phillip

No.	Frequency(MHz)	Level(dBm)
1	39960.00000	-52.81

File: 20-02-MAS-101_5-8a

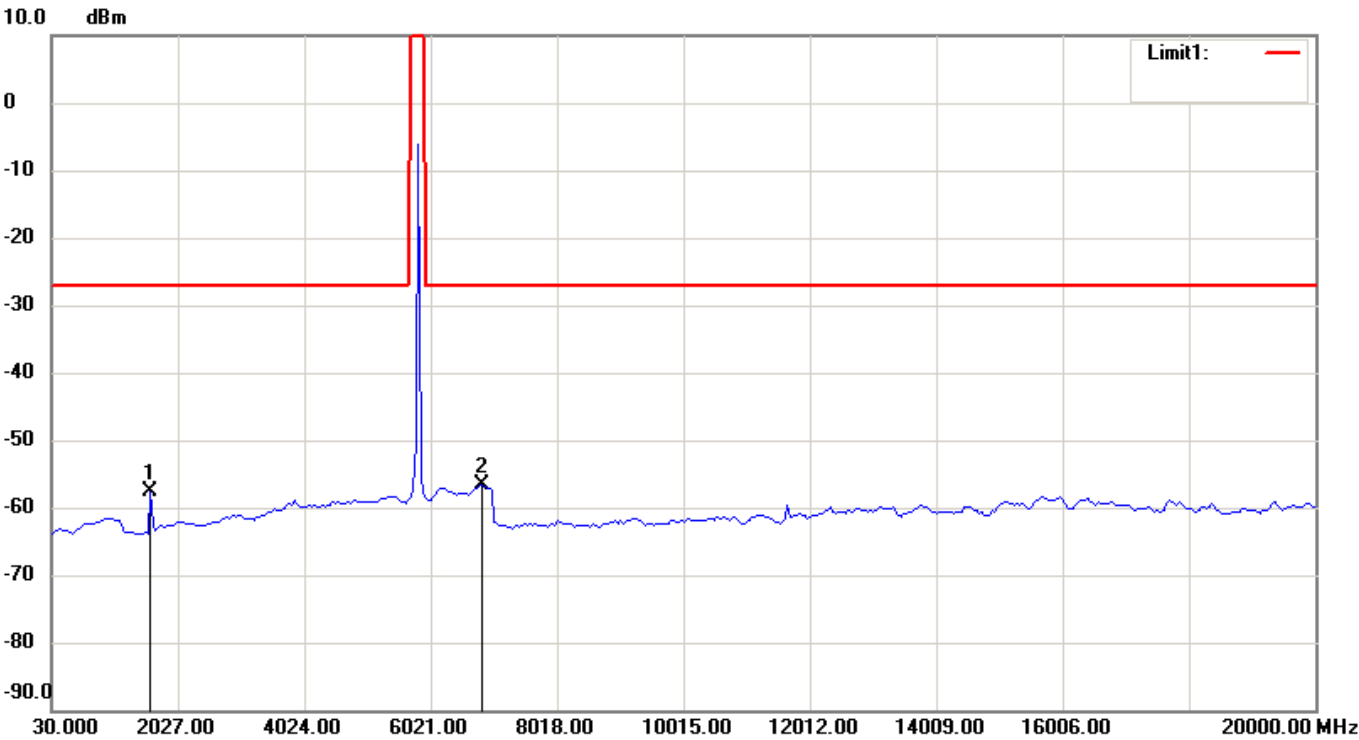
Site: RF-Cond01

#44

Date: 2020/6/18

Temperature: 24 °C

Humidity: 56 %



Condition: UNII-Band-4-Bandedge

EUT: Wireless Embedded Module

Model: SX-SDMAC

Test Mode: UNII

Note: NCC_LP0002_802.11a_Channel 165_Spurious-1

RF Conducted

Sweep Time: 79.9ms

RBW: 1000 KHz

Operator:

Att.: 15dB

VBW: 1000 KHz

Phillip

No.	Frequency(MHz)	Level(dBm)
1	1587.66000	-57.71
2	6819.80000	-56.69

File: 20-02-MAS-101_5-8a

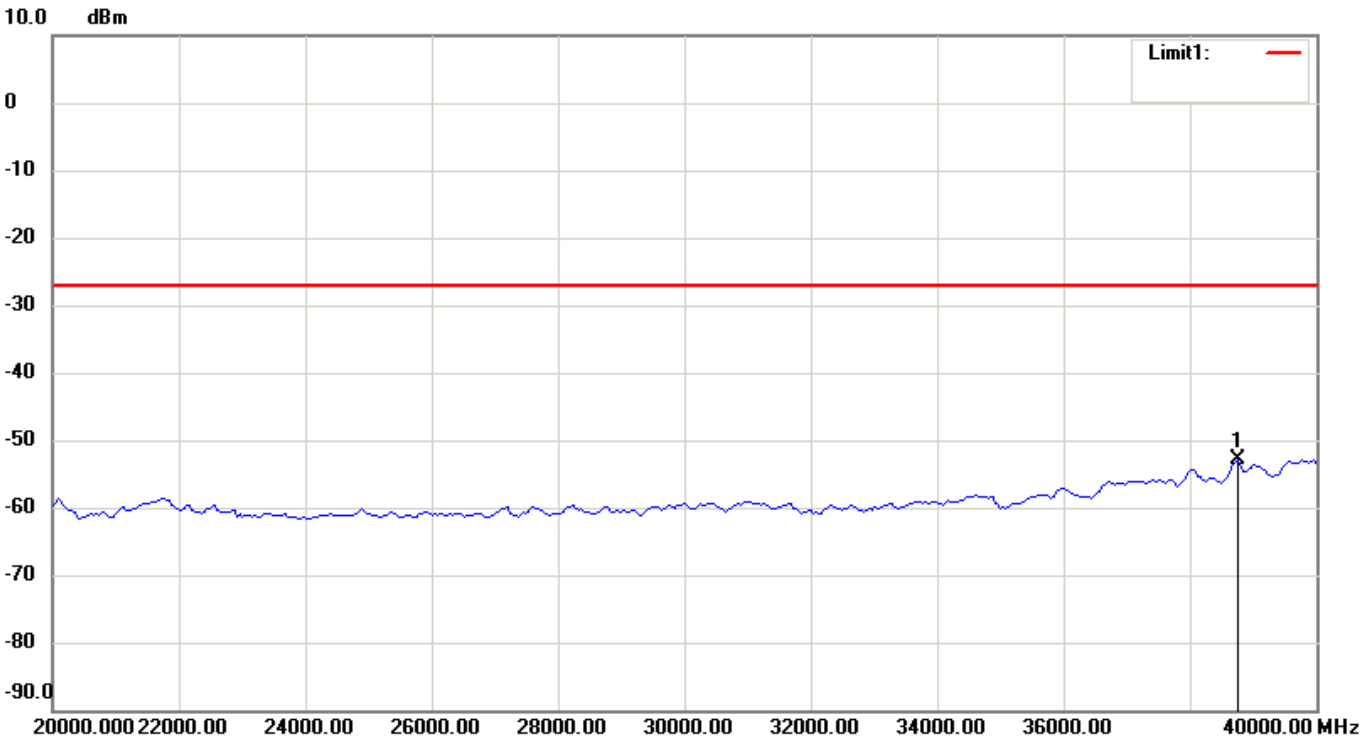
Site: RF-Cond01

#45

Date: 2020/6/18

Temperature: 24 °C

Humidity: 56 %



Condition: UNII-Band-4-Bandedge

EUT: Wireless Embedded Module

Model: SX-SDMAC

Test Mode: UNII

Note: NCC_LP0002_802.11a_Channel 165_Spurious-2

RF Conducted

Sweep Time: 80ms

RBW: 1000 KHz

Operator:

Att.: 15dB

VBW: 1000 KHz

Phillip

No.	Frequency(MHz)	Level(dBm)
1	38760.00000	-52.77

9.4.2 調變技術: IEEE 802.11ac VHT20

測試日期: Jun. 18, 2020

環境溫度: 24°C

環境濕度: 56%

註：1. 繪圖資料請參考第 89-96 頁。

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

File: 20-02-MAS-101_5-8ac20

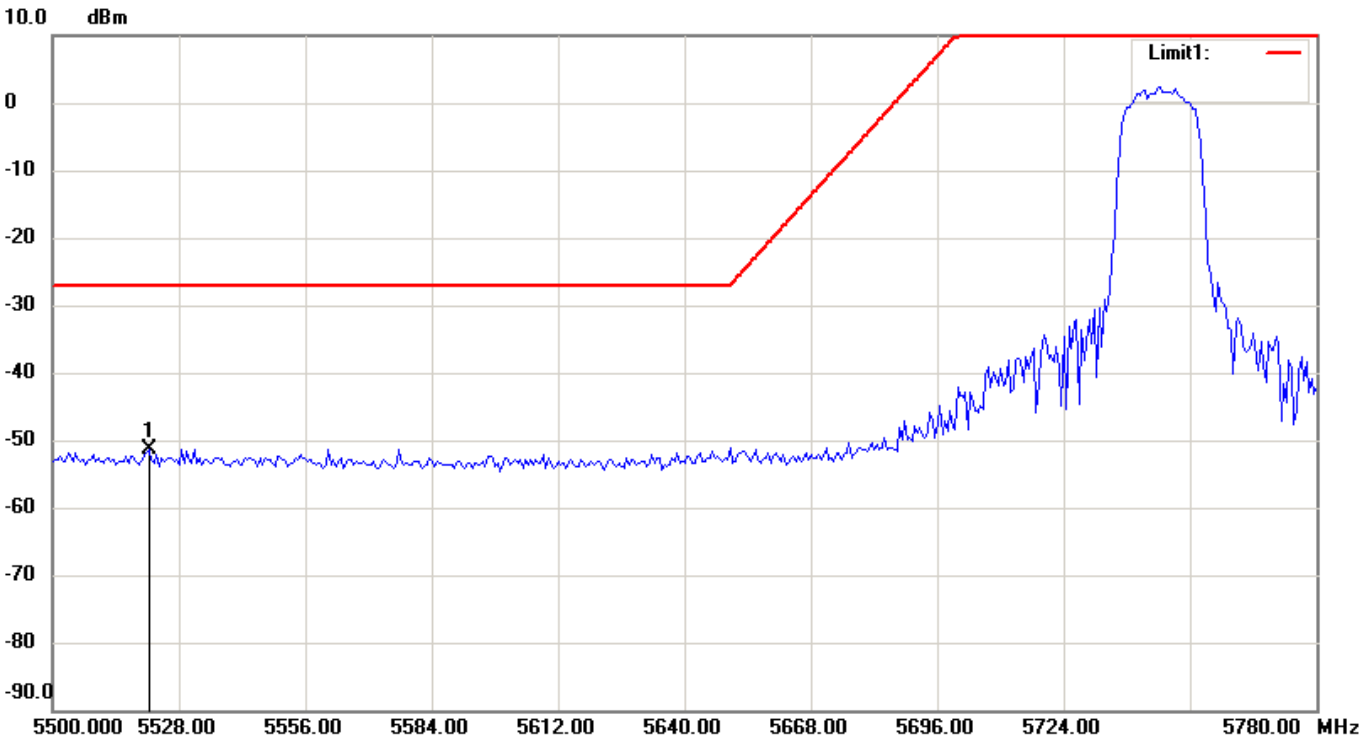
#31

Date: 2020/6/18

Temperature: 24 °C

Site: RF-Cond01

Humidity: 56 %



Condition: UNII-Band-4-Bandedge

EUT: Wireless Embedded Module

Model: SX-SDMAC

Test Mode: UNII

Note: NCC_LP0002_802.11ac20 Channel 149_Low_Bandedge

RF Conducted

Sweep Time: 1ms

RBW: 1000 KHz

Operator:

Att.: 15dB

VBW: 3000 KHz

Phillip

No.	Frequency(MHz)	Level(dBm)
1	5521.28000	-51.31

File: 20-02-MAS-101_5-8ac20

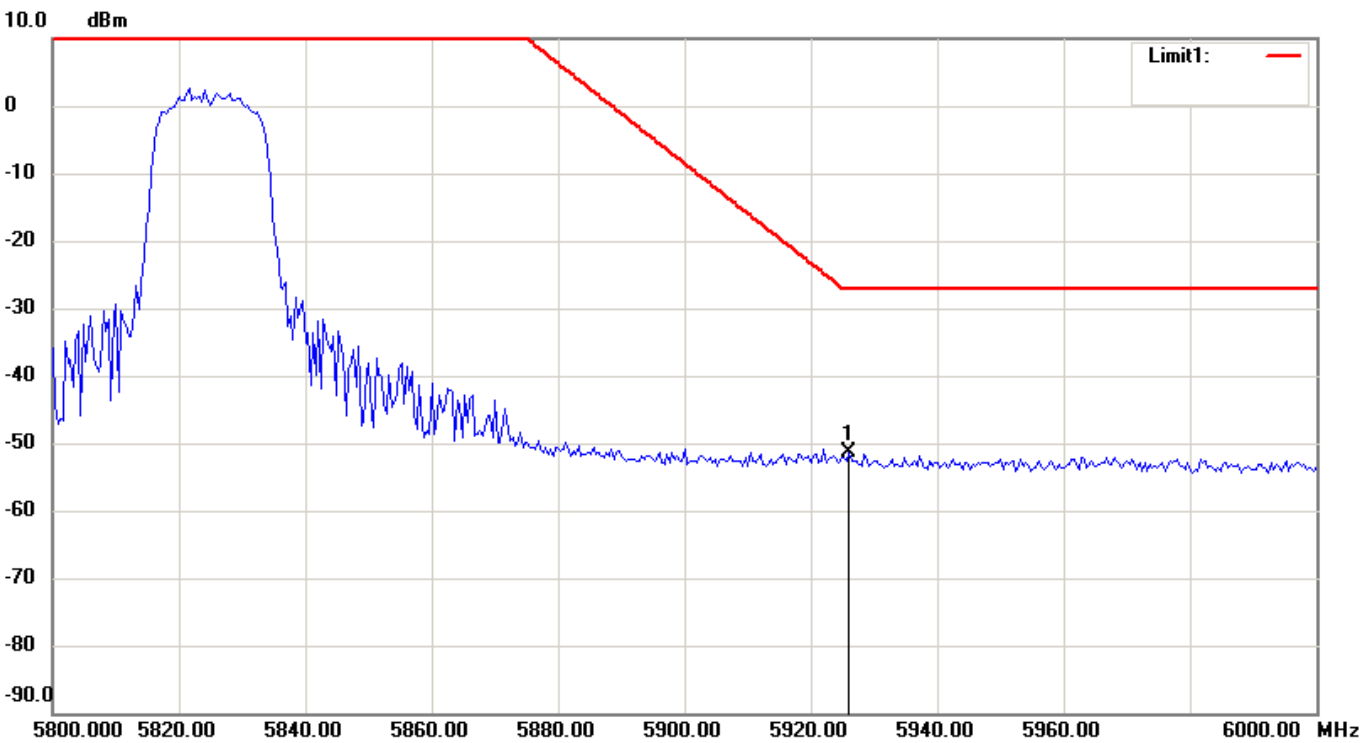
#46

Date: 2020/6/18

Temperature: 24 °C

Site: RF-Cond01

Humidity: 56 %



Condition: UNII-Band-4-Bandedge

EUT: Wireless Embedded Module

Model: SX-SDMAC

Test Mode: UNII

Note: NCC_LP0002_802.11ac20 Channel 165_High_Bandedge

RF Conducted

Sweep Time: 1ms

RBW: 1000 KHz

Operator:

Att.: 15dB

VBW: 3000 KHz

Phillip

No.	Frequency(MHz)	Level(dBm)
1	5926.00000	-51.48

File: 20-02-MAS-101_5-8ac20

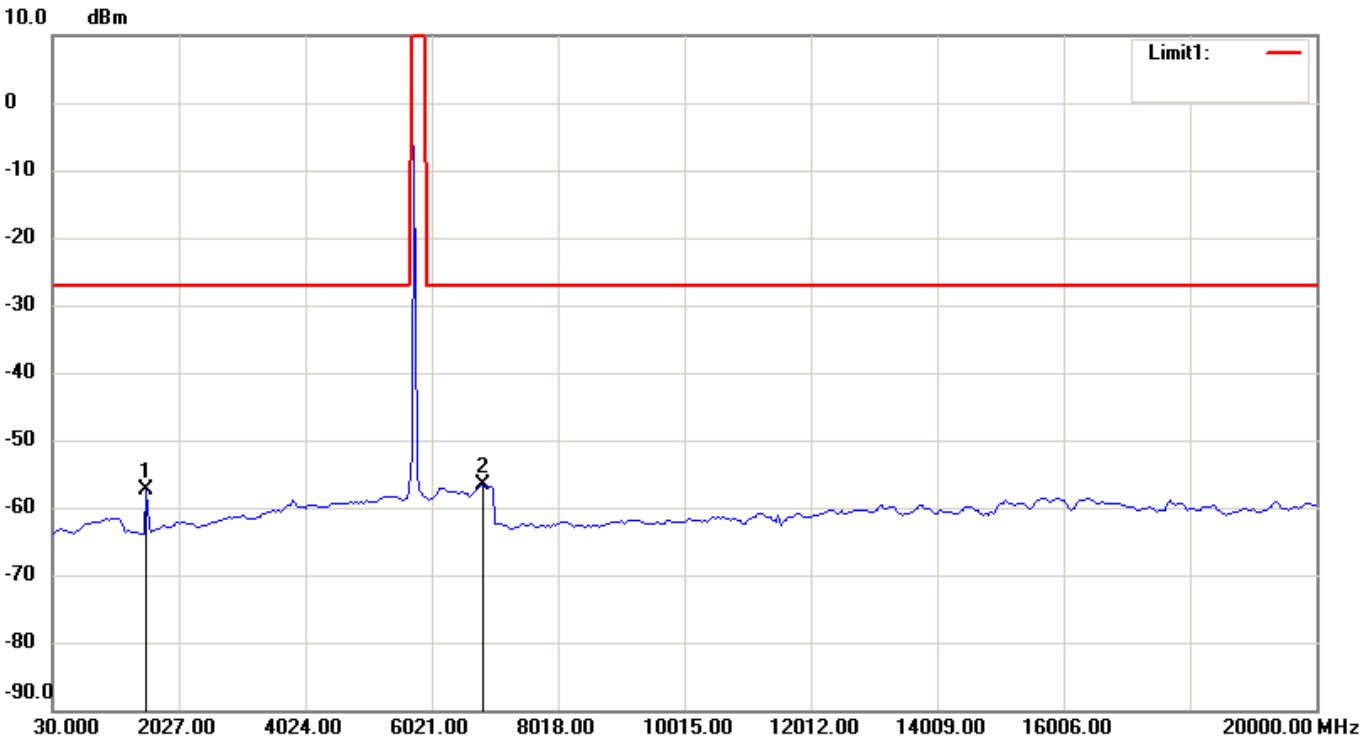
#29

Date: 2020/6/18

Temperature: 24 °C

Site: RF-Cond01

Humidity: 56 %



Condition: UNII-Band-4-Bandedge

RF Conducted

EUT: Wireless Embedded Module

Sweep Time: 79.9ms Att.: 15dB

Model: SX-SDMAC

RBW: 1000 KHz VBW: 1000 KHz

Test Mode: UNII

Operator: Phillip

Note: NCC_LP0002_802.11ac20_Channel 149_Spurious-1

No.	Frequency(MHz)	Level(dBm)
1	1507.78000	-57.33
2	6819.80000	-56.60

File: 20-02-MAS-101_5-8ac20

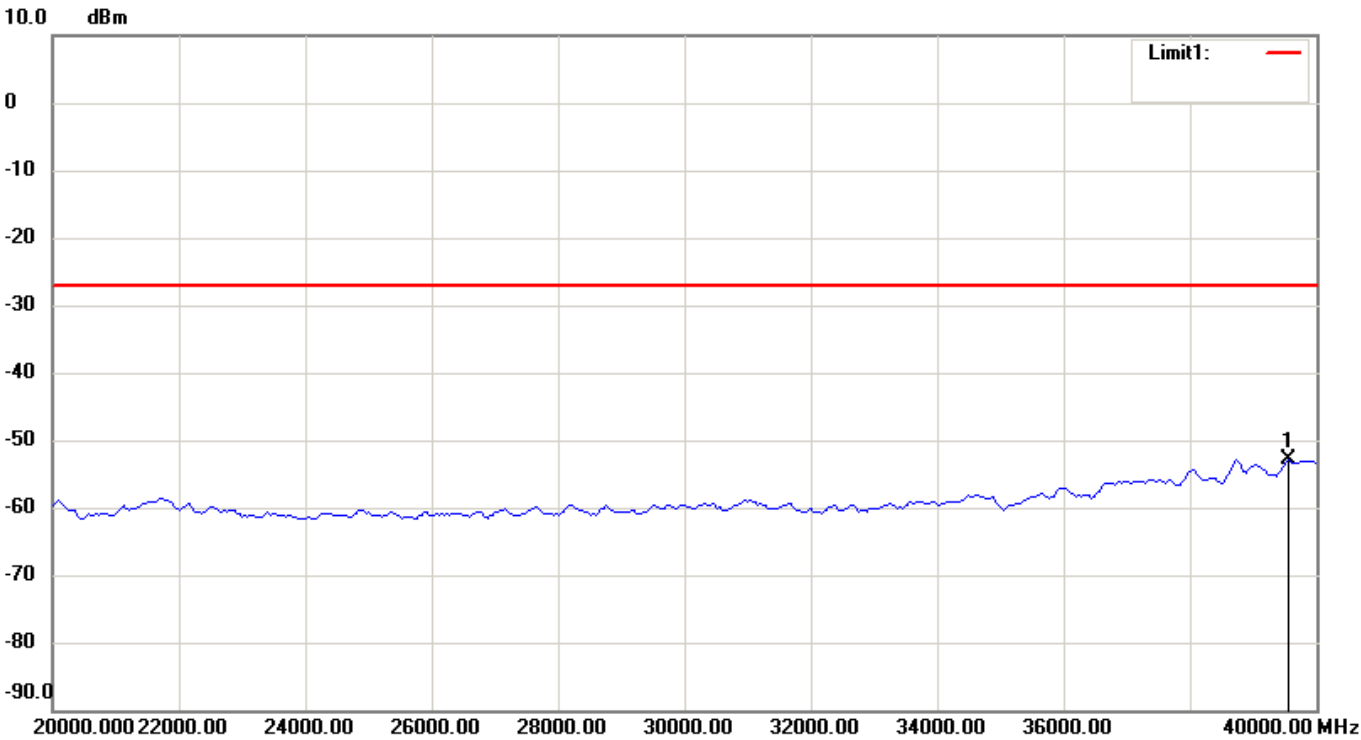
#30

Date: 2020/6/18

Temperature: 24 °C

Site: RF-Cond01

Humidity: 56 %



Condition: UNII-Band-4-Bandedge

EUT: Wireless Embedded Module

Model: SX-SDMAC

Test Mode: UNII

Note: NCC_LP0002_802.11ac20_Channel 149_Spurious-2

RF Conducted

Sweep Time: 80ms

RBW: 1000 KHz

Operator:

Att.: 15dB

VBW: 1000 KHz

Phillip

No.	Frequency(MHz)	Level(dBm)
1	39560.00000	-52.82

File: 20-02-MAS-101_5-8ac20

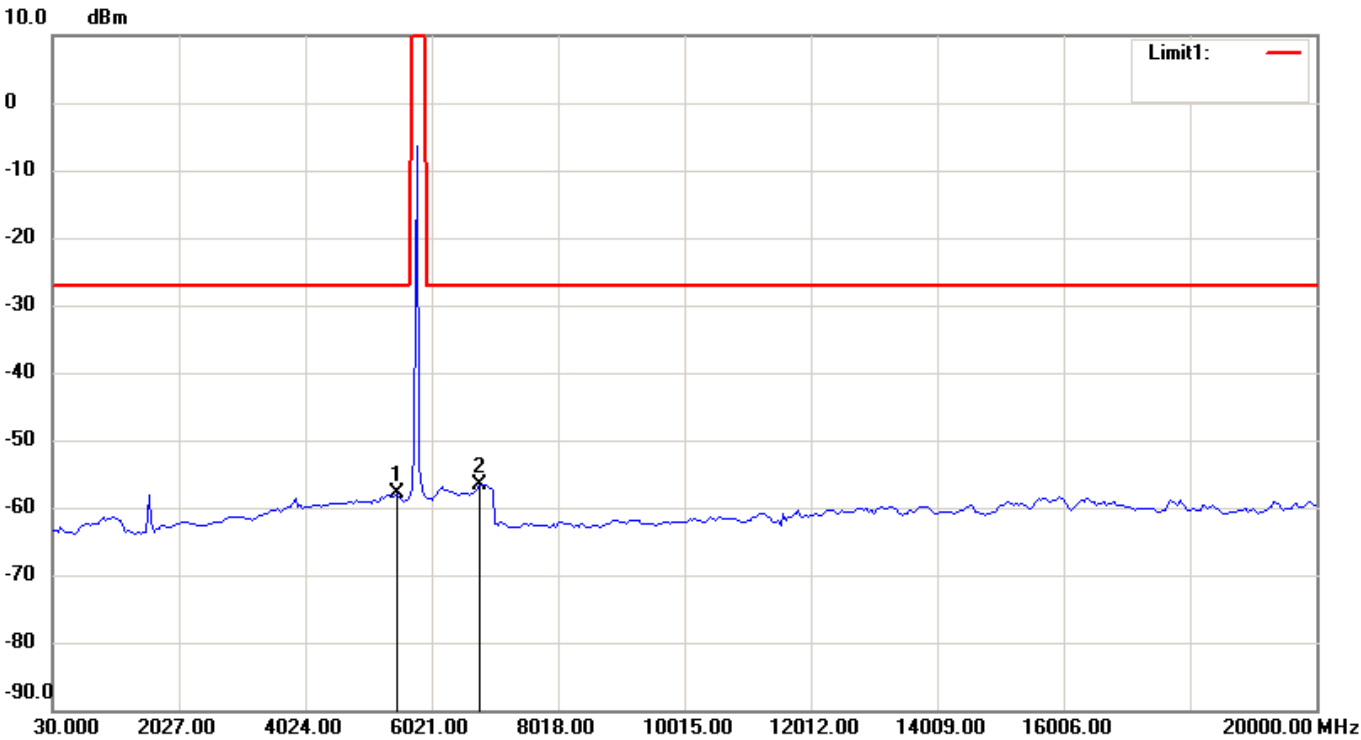
#37

Date: 2020/6/18

Temperature: 24 °C

Site: RF-Cond01

Humidity: 56 %



Condition: UNII-Band-4-Bandedge

RF Conducted

EUT: Wireless Embedded Module

Sweep Time: 79.9ms Att.: 15dB

Model: SX-SDMAC

RBW: 1000 KHz VBW: 1000 KHz

Test Mode: UNII

Operator: Phillip

Note: NCC_LP0002_802.11ac20_Channel 157_Spurious-1

No.	Frequency(MHz)	Level(dBm)
1	5461.84000	-57.99
2	6779.86000	-56.70

File: 20-02-MAS-101_5-8ac20

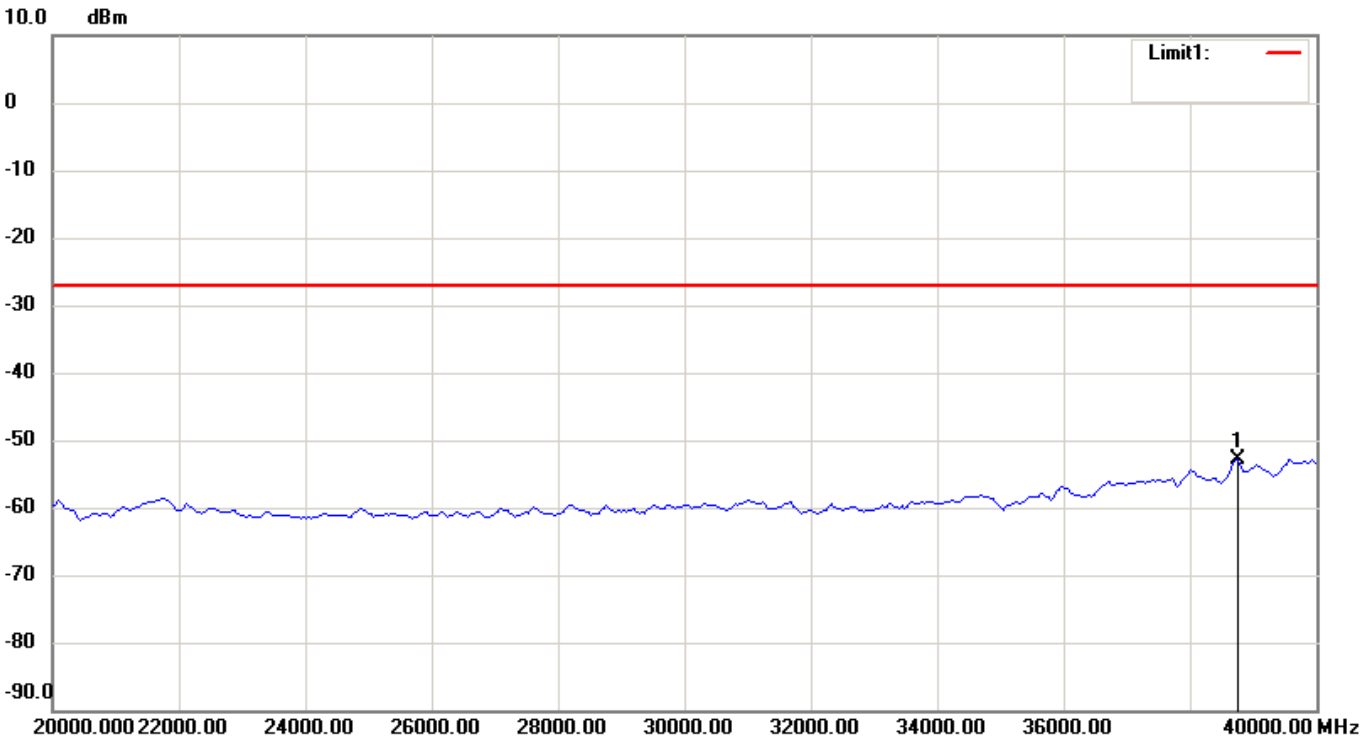
#38

Date: 2020/6/18

Temperature: 24 °C

Site: RF-Cond01

Humidity: 56 %



Condition: UNII-Band-4-Bandedge

RF Conducted

EUT: Wireless Embedded Module

Sweep Time: 80ms Att.: 15dB

Model: SX-SDMAC

RBW: 1000 KHz VBW: 1000 KHz

Test Mode: UNII

Operator: Phillip

Note: NCC_LP0002_802.11ac20_Channel 157_Spurious-2

No.	Frequency(MHz)	Level(dBm)
1	38760.00000	-52.88

File: 20-02-MAS-101_5-8ac20

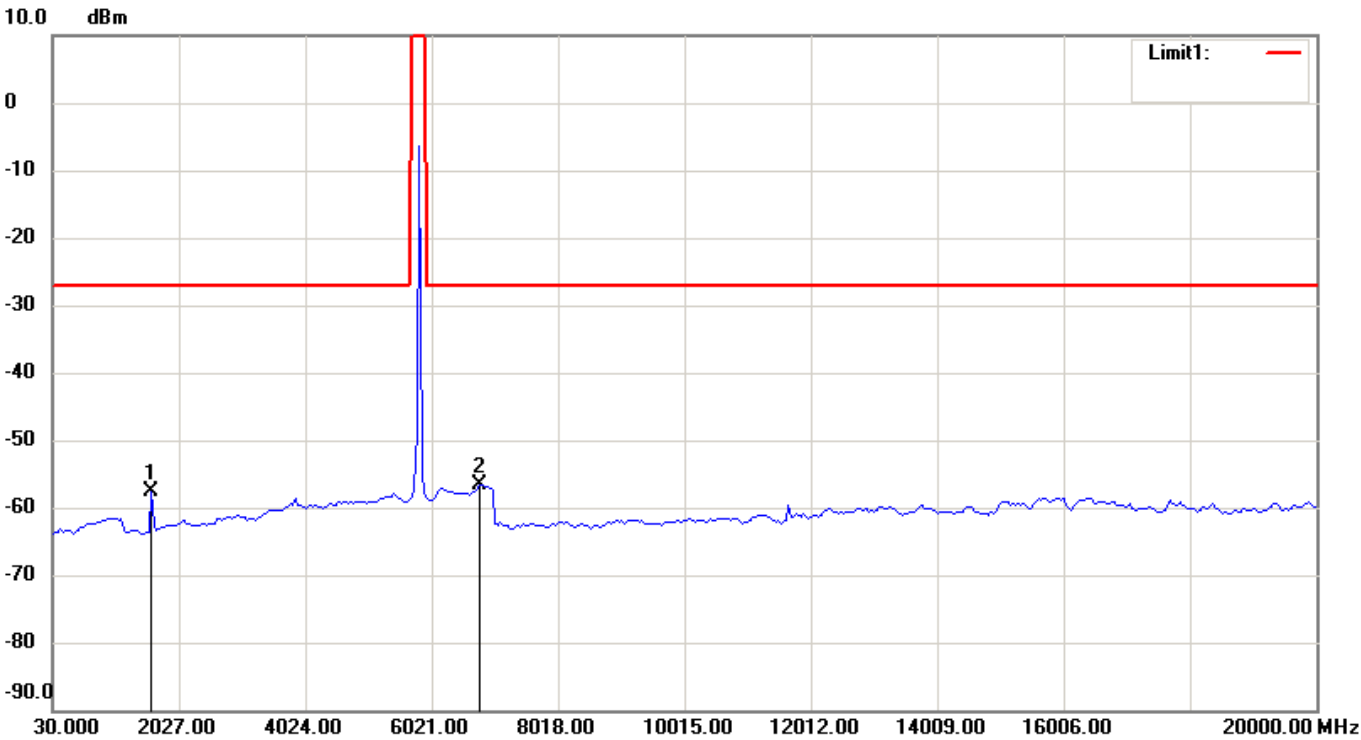
#44

Date: 2020/6/18

Temperature: 24 °C

Site: RF-Cond01

Humidity: 56 %



Condition: UNII-Band-4-Bandedge

EUT: Wireless Embedded Module

Model: SX-SDMAC

Test Mode: UNII

Note: NCC_LP0002_802.11ac20_Channel 165_Spurious-1

RF Conducted

Sweep Time: 79.9ms

RBW: 1000 KHz

Operator:

Att.: 15dB

VBW: 1000 KHz

Phillip

No.	Frequency(MHz)	Level(dBm)
1	1587.66000	-57.54
2	6779.86000	-56.70

File: 20-02-MAS-101_5-8ac20

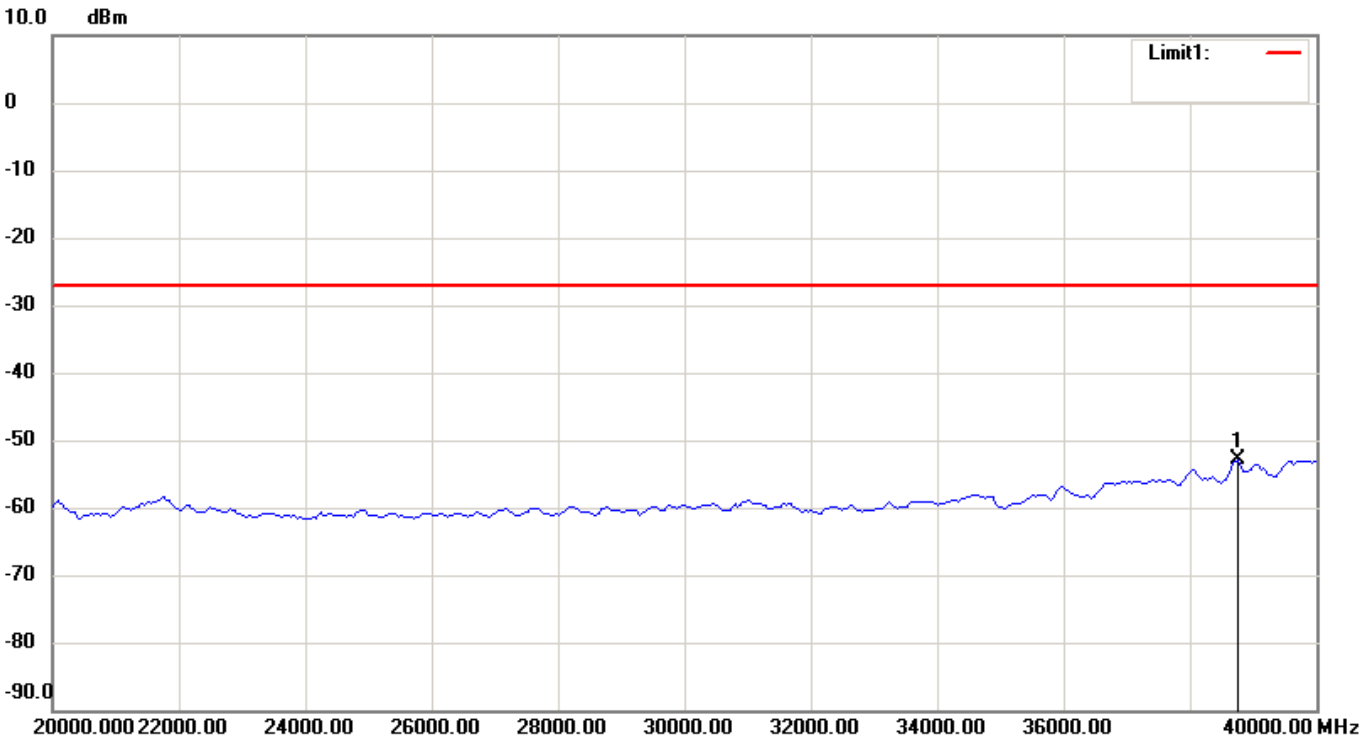
#45

Date: 2020/6/18

Temperature: 24 °C

Site: RF-Cond01

Humidity: 56 %



Condition: UNII-Band-4-Bandedge

RF Conducted

EUT: Wireless Embedded Module

Sweep Time: 80ms Att.: 15dB

Model: SX-SDMAC

RBW: 1000 KHz VBW: 1000 KHz

Test Mode: UNII

Operator: Phillip

Note: NCC_LP0002_802.11ac20_Channel 165_Spurious-2

No.	Frequency(MHz)	Level(dBm)
1	38760.00000	-52.92

9.4.3 調變技術: IEEE 802.11ac VHT40

測試日期: Jun. 18, 2020

環境溫度: 24°C

環境濕度: 56%

註：1. 繪圖資料請參考第 98-103 頁。

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

File: 20-02-MAS-101_5-8ac40

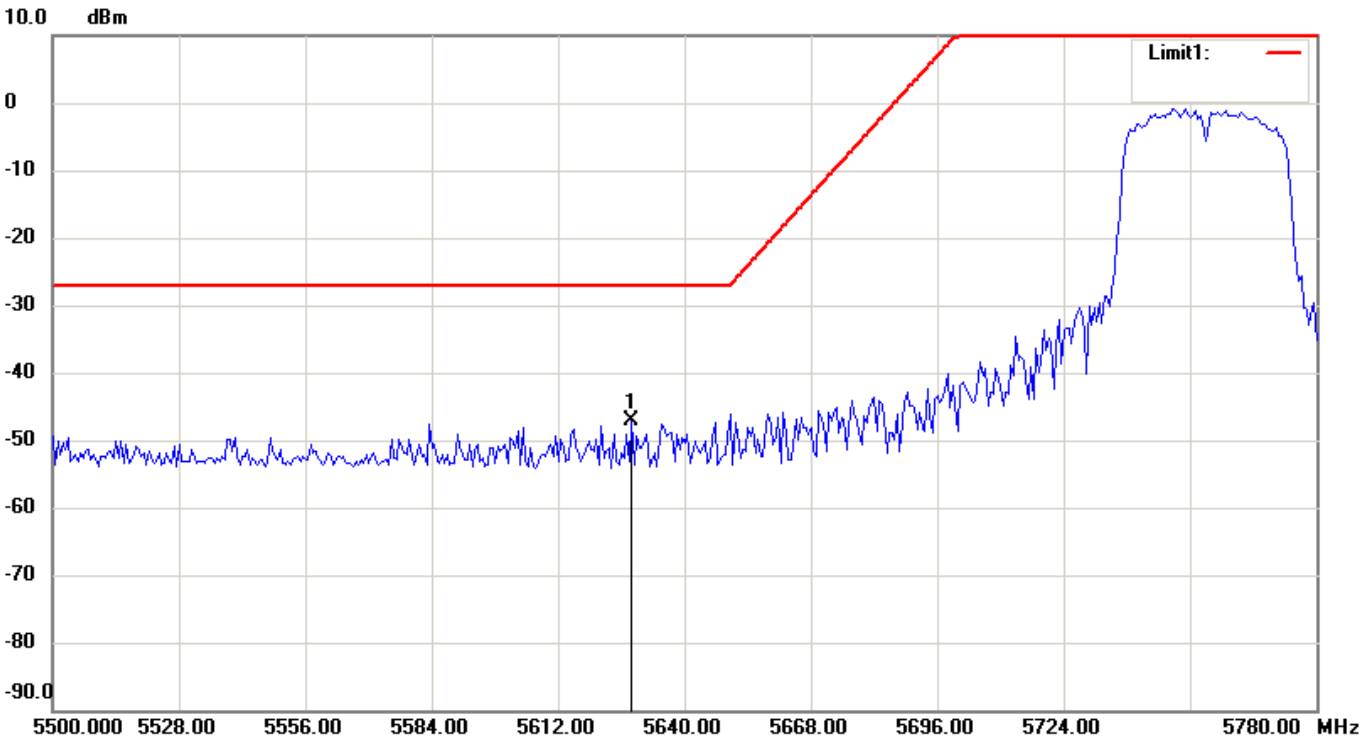
#26

Date: 2020/6/18

Temperature: 24 °C

Site: RF-Cond01

Humidity: 56 %



Condition: UNII-Band-4-Bandedge

EUT: Wireless Embedded Module

Model: SX-SDMAC

Test Mode: UNII

Note: NCC_LP0002_802.11ac40 Channel 151_Low_Bandedge

RF Conducted

Sweep Time: 1ms

RBW: 1000 KHz

Operator:

Att.: 15dB

VBW: 3000 KHz

Phillip

No.	Frequency(MHz)	Level(dBm)
1	5628.24000	-47.10

File: 20-02-MAS-101_5-8ac40

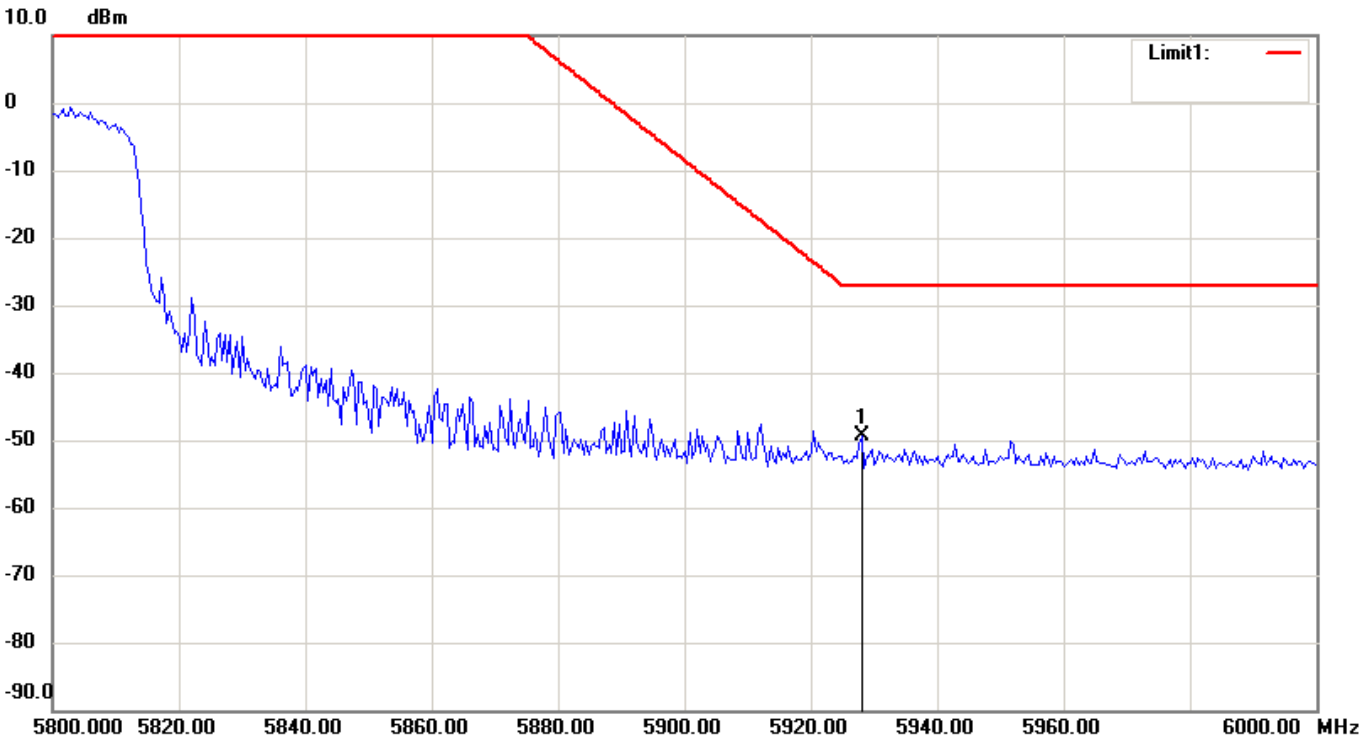
#34

Date: 2020/6/18

Temperature: 24 °C

Site: RF-Cond01

Humidity: 56 %



Condition: UNII-Band-4-Bandedge

RF Conducted

EUT: Wireless Embedded Module

Sweep Time: 1ms Att.: 15dB

Model: SX-SDMAC

RBW: 1000 KHz VBW: 3000 KHz

Test Mode: UNII

Operator: Phillip

Note: NCC_LP0002_802.11ac40 Channel 159_High_Bandedge

No.	Frequency(MHz)	Level(dBm)
1	5928.00000	-49.49

File: 20-02-MAS-101_5-8ac40

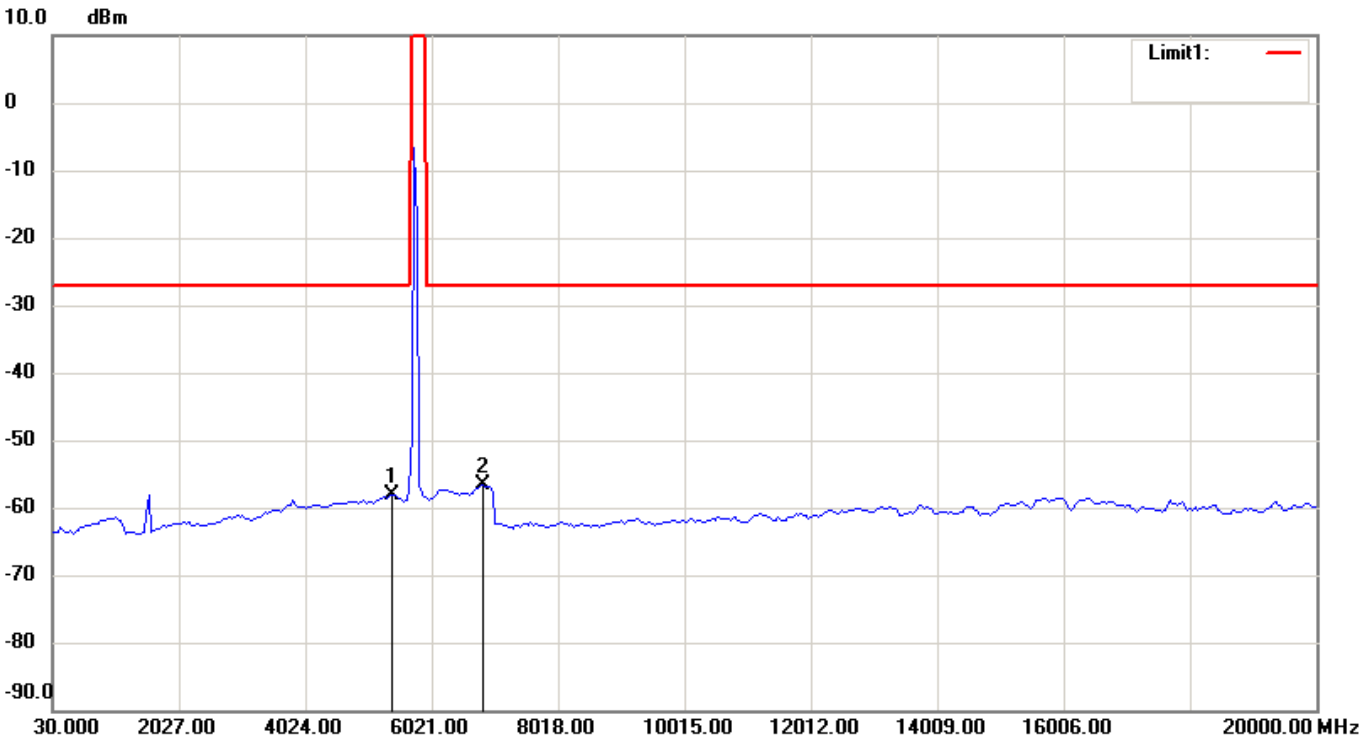
Site: RF-Cond01

#24

Date: 2020/6/18

Temperature: 24 °C

Humidity: 56 %



Condition: UNII-Band-4-Bandedge

EUT: Wireless Embedded Module

Model: SX-SDMAC

Test Mode: UNII

Note: NCC_LP0002_802.11ac40_Channel 151_Spurious-1

RF Conducted

Sweep Time: 79.9ms

RBW: 1000 KHz

Operator:

Att.: 15dB

VBW: 1000 KHz

Phillip

No.	Frequency(MHz)	Level(dBm)
1	5381.96000	-58.14
2	6819.80000	-56.66

File: 20-02-MAS-101_5-8ac40

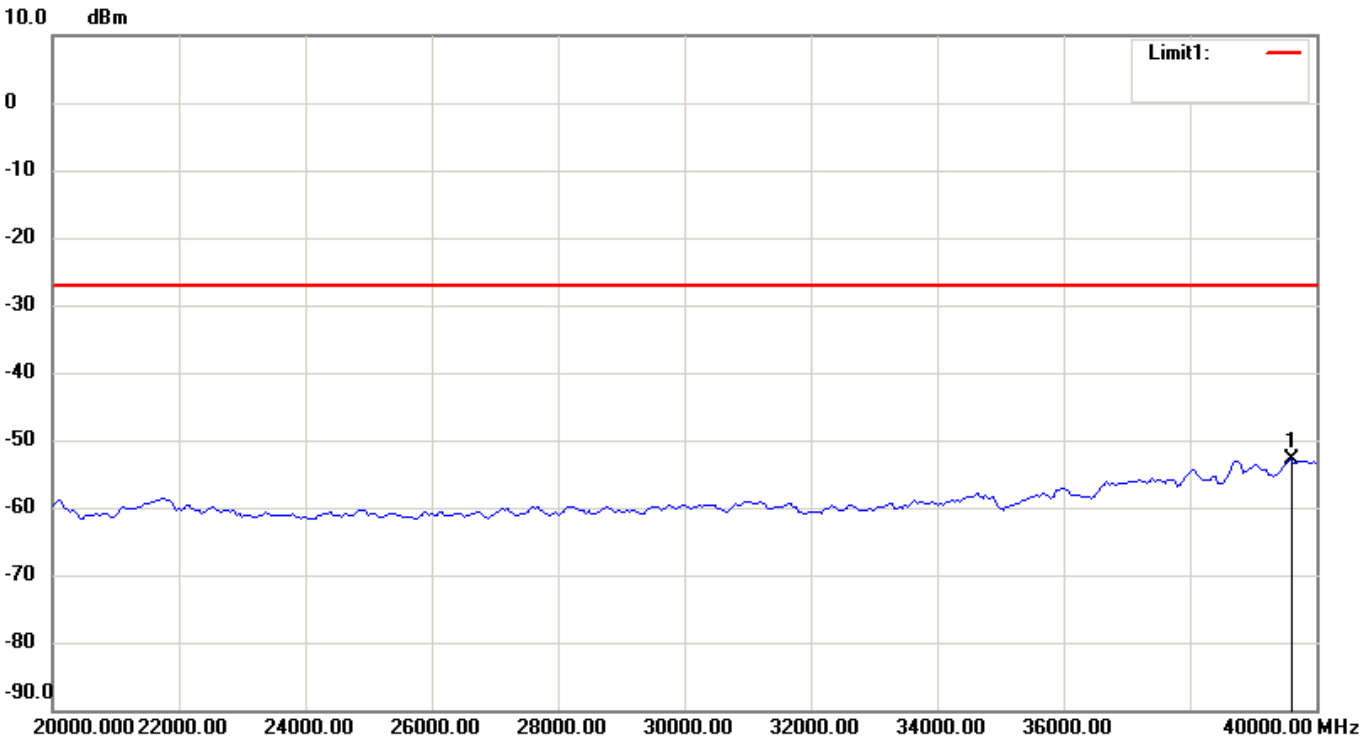
#25

Date: 2020/6/18

Temperature: 24 °C

Site: RF-Cond01

Humidity: 56 %



Condition: UNII-Band-4-Bandedge

EUT: Wireless Embedded Module

Model: SX-SDMAC

Test Mode: UNII

Note: NCC_LP0002_802.11ac40_Channel 151_Spurious-2

RF Conducted

Sweep Time: 80ms

RBW: 1000 KHz

Operator:

Att.: 15dB

VBW: 1000 KHz

Phillip

No.	Frequency(MHz)	Level(dBm)
1	39600.00000	-52.99

File: 20-02-MAS-101_5-8ac40

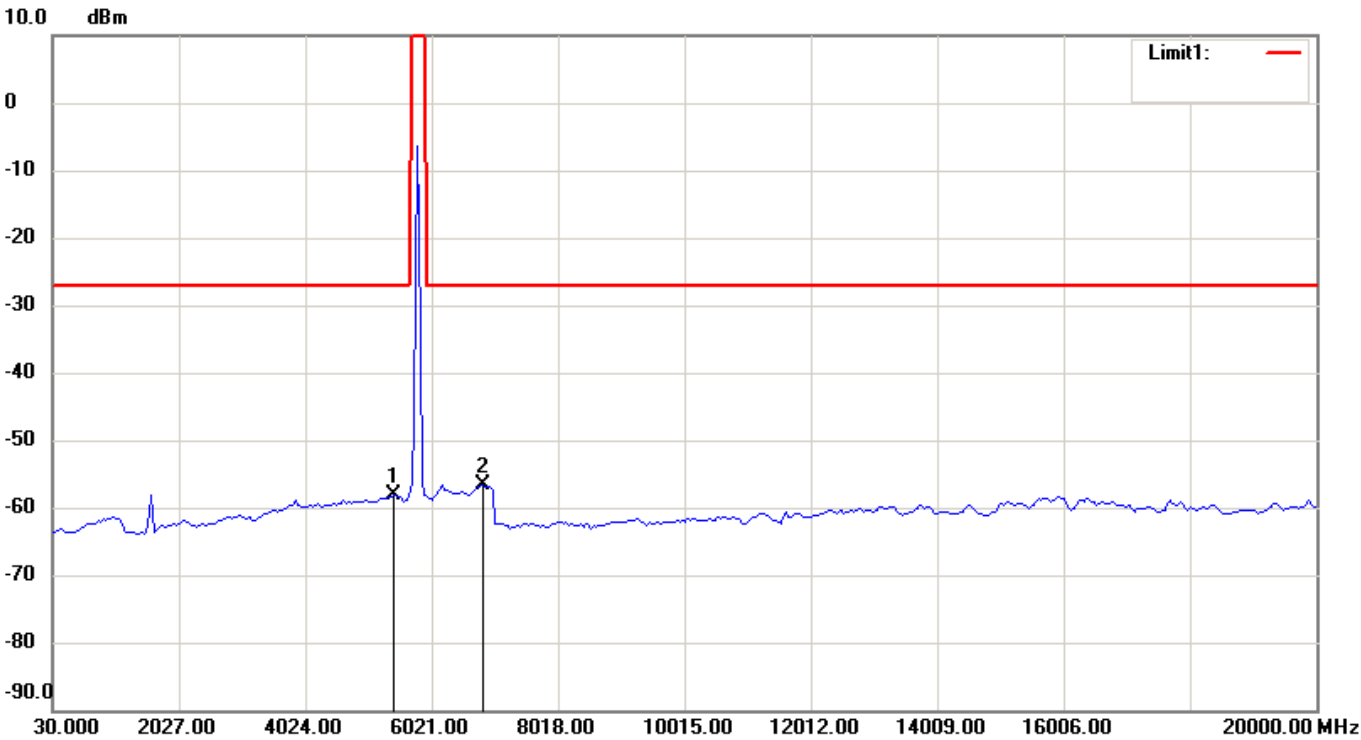
#32

Date: 2020/6/18

Temperature: 24 °C

Site: RF-Cond01

Humidity: 56 %



Condition: UNII-Band-4-Bandedge

RF Conducted

EUT: Wireless Embedded Module

Sweep Time: 79.9ms Att.: 15dB

Model: SX-SDMAC

RBW: 1000 KHz VBW: 1000 KHz

Test Mode: UNII

Operator: Phillip

Note: NCC_LP0002_802.11ac40_Channel 159_Spurious-1

No.	Frequency(MHz)	Level(dBm)
1	5421.90000	-58.06
2	6819.80000	-56.61

File: 20-02-MAS-101_5-8ac40

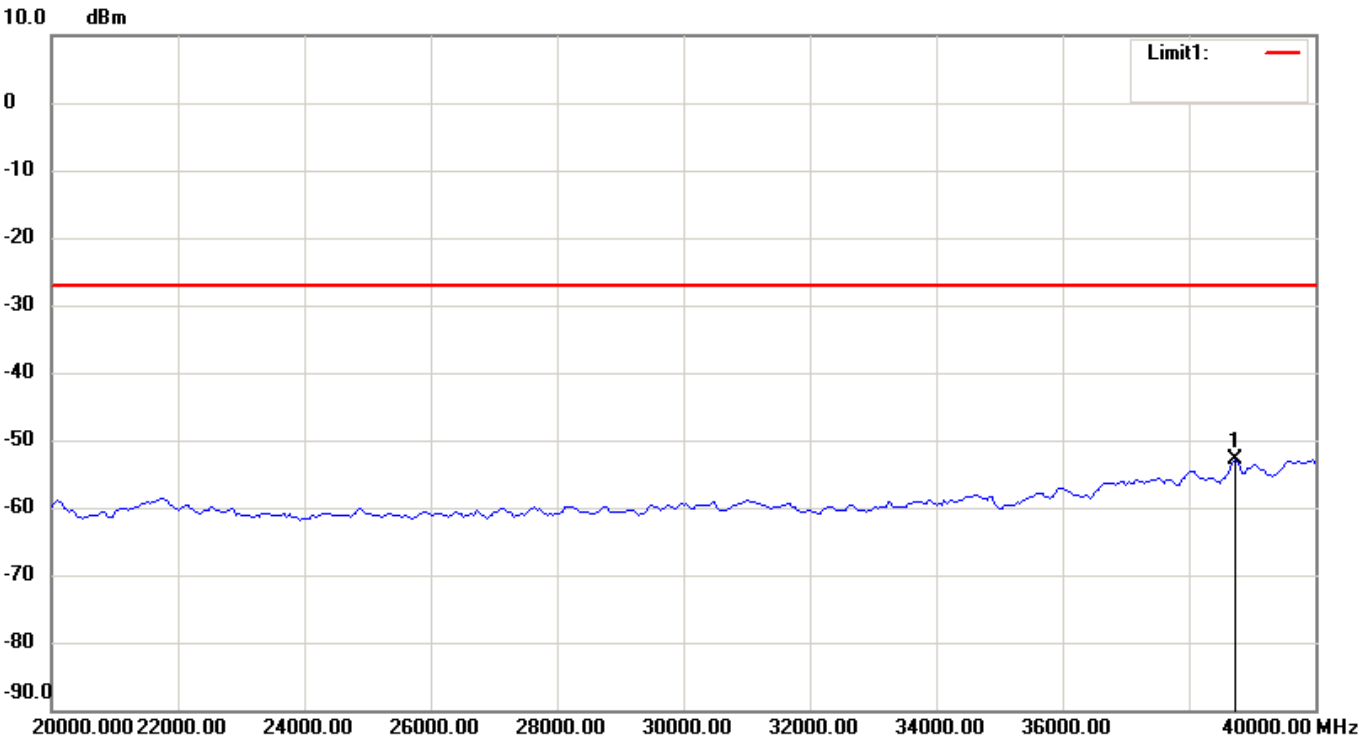
#33

Date: 2020/6/18

Temperature: 24 °C

Site: RF-Cond01

Humidity: 56 %



Condition: UNII-Band-4-Bandedge

EUT: Wireless Embedded Module

Model: SX-SDMAC

Test Mode: UNII

Note: NCC_LP0002_802.11ac40_Channel 159_Spurious-2

RF Conducted

Sweep Time: 80ms

RBW: 1000 KHz

Operator:

Att.: 15dB

VBW: 1000 KHz

Phillip

No.	Frequency(MHz)	Level(dBm)
1	38720.00000	-52.83

9.4.4 調變技術:IEEE 802.11ac VHT80

測試日期: Jun. 18, 2020

環境溫度: 24°C

環境濕度: 56%

註：1. 繪圖資料請參考第 105-108 頁。

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

9.5 結果判定

混附波之發射皆低於使用頻帶內最高的射頻功率20dB以上，符合標準規定。

File: 20-02-MAS-101_5-8ac80

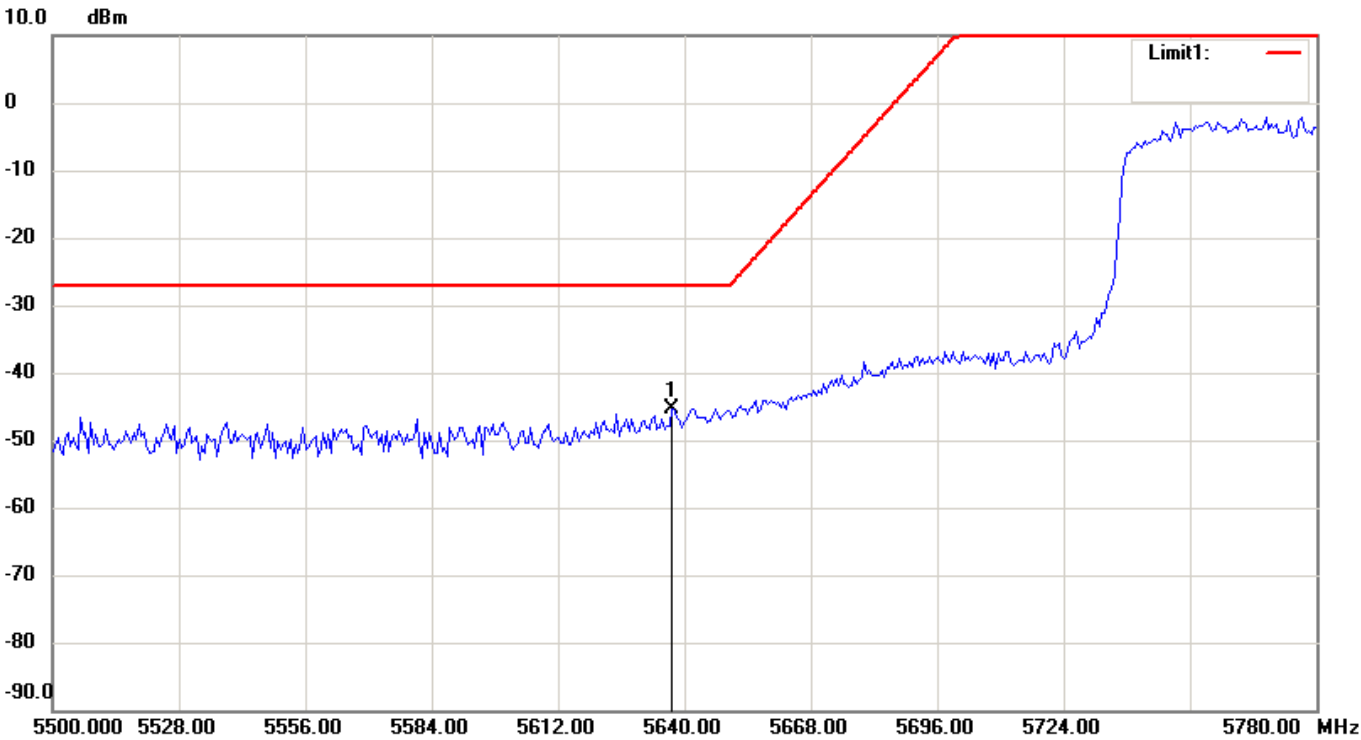
#17

Date: 2020/6/18

Temperature: 24 °C

Site: RF-Cond01

Humidity: 56 %



Condition: UNII-Band-4-Bandedge

EUT: Wireless Embedded Module

Model: SX-SDMAC

Test Mode: UNII

Note: NCC_LP0002_802.11ac80 Channel 155_Low_Bandedge

RF Conducted

Sweep Time: 1ms

RBW: 1000 KHz

Operator:

Att.: 15dB

VBW: 3000 KHz

Phillip

No.	Frequency(MHz)	Level(dBm)
1	5637.20000	-45.29

File: 20-02-MAS-101_5-8ac80

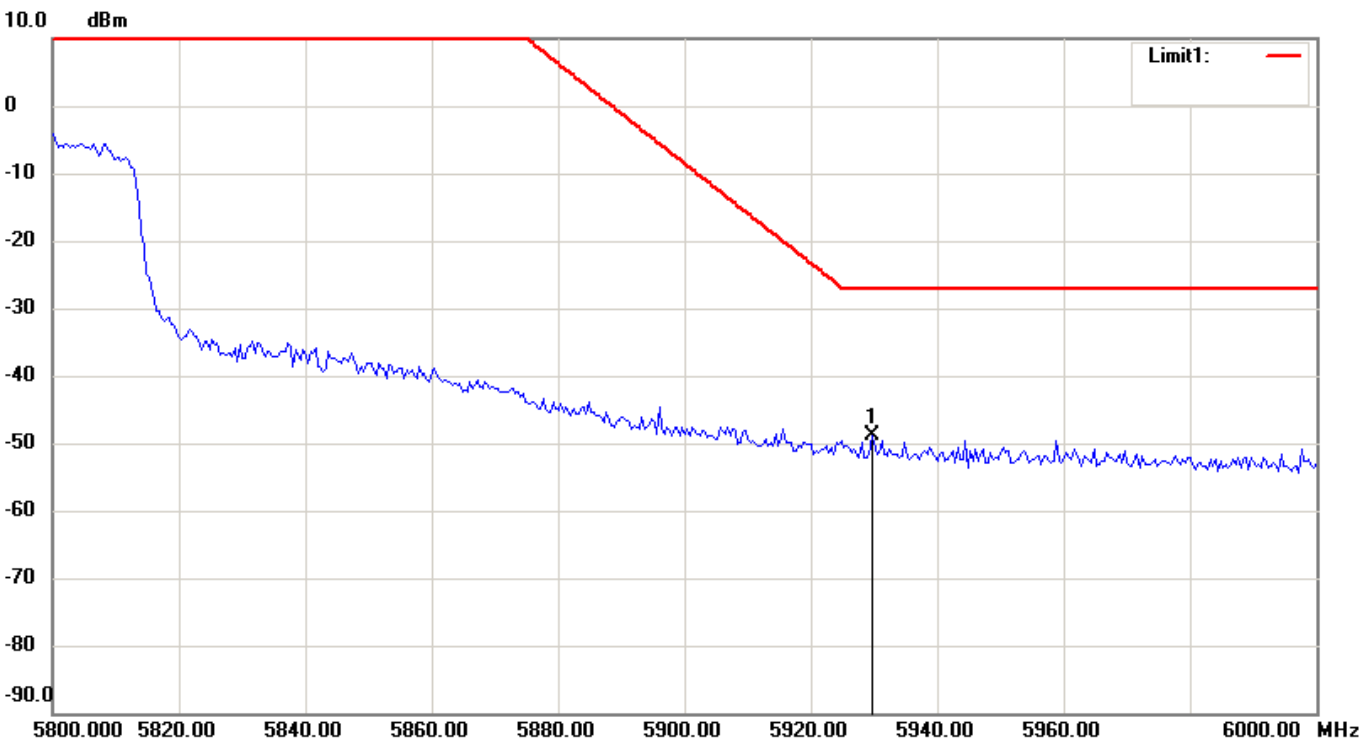
#18

Date: 2020/6/18

Temperature: 24 °C

Site: RF-Cond01

Humidity: 56 %



Condition: UNII-Band-4-Bandedge

EUT: Wireless Embedded Module

Model: SX-SDMAC

Test Mode: UNII

Note: NCC_LP0002_802.11ac80 Channel 155_High_Bandedge

RF Conducted

Sweep Time: 1ms

RBW: 1000 KHz

Operator:

Att.: 15dB

VBW: 3000 KHz

Phillip

No.	Frequency(MHz)	Level(dBm)
1	5929.60000	-48.77

File: 20-02-MAS-101_5-8ac80

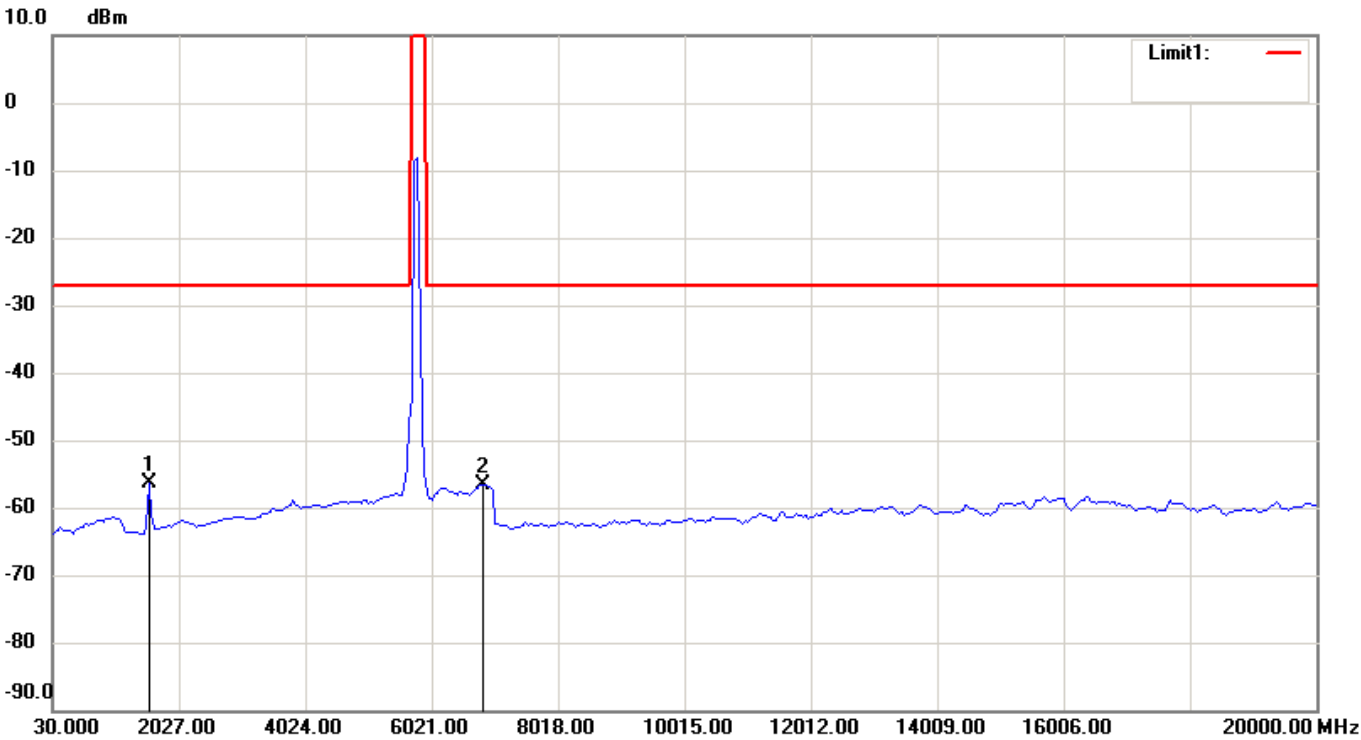
#15

Date: 2020/6/18

Temperature: 24 °C

Site: RF-Cond01

Humidity: 56 %



Condition: UNII-Band-4-Bandedge

RF Conducted

EUT: Wireless Embedded Module

Sweep Time: 79.9ms Att.: 15dB

Model: SX-SDMAC

RBW: 1000 KHz VBW: 1000 KHz

Test Mode: UNII

Operator: Phillip

Note: NCC_LP0002_802.11ac80_Channel 155_Spurious-1

No.	Frequency(MHz)	Level(dBm)
1	1547.72000	-56.45
2	6819.80000	-56.67

File: 20-02-MAS-101_5-8ac80

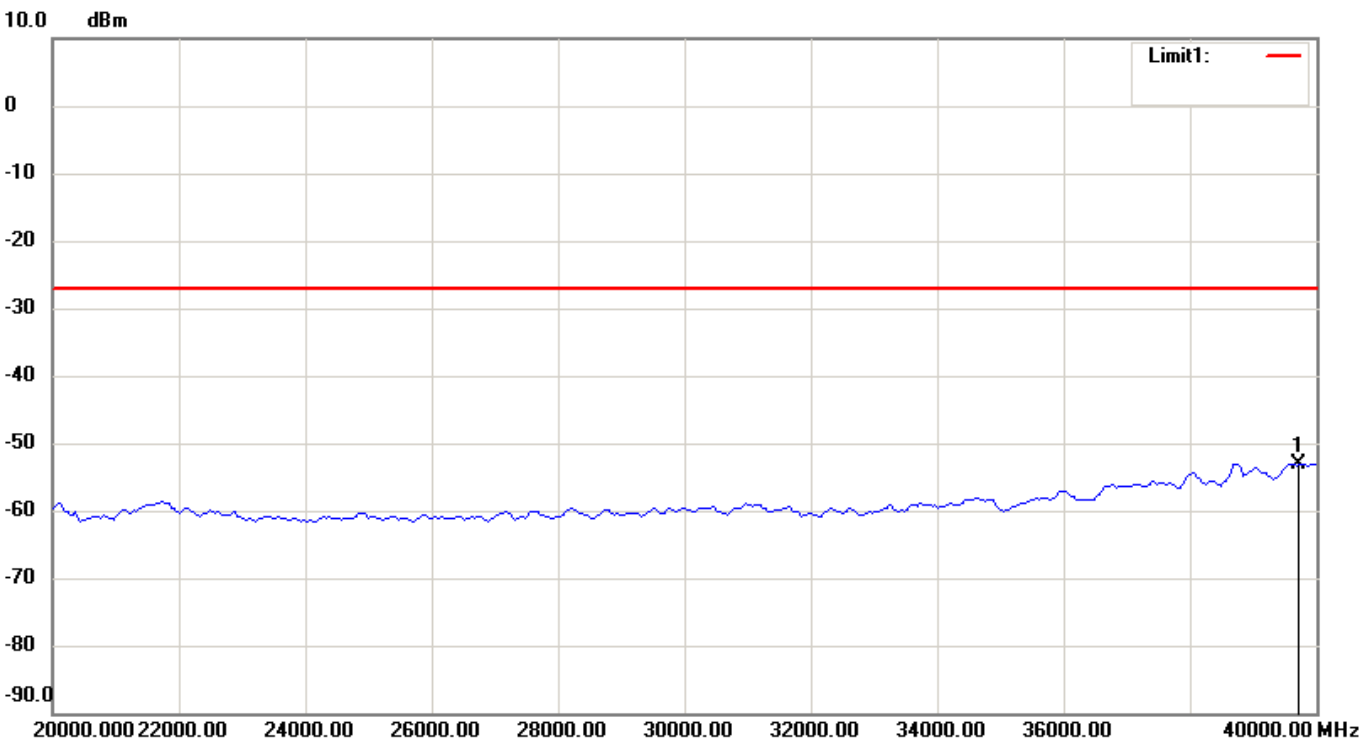
#16

Date: 2020/6/18

Temperature: 24 °C

Site: RF-Cond01

Humidity: 56 %



Condition: UNII-Band-4-Bandedge

EUT: Wireless Embedded Module

Model: SX-SDMAC

Test Mode: UNII

Note: NCC_LP0002_802.11ac80_Channel 155_Spurious-2

RF Conducted

Sweep Time: 80ms

RBW: 1000 KHz

Operator:

Att.: 15dB

VBW: 1000 KHz

Phillip

No.	Frequency(MHz)	Level(dBm)
1	39720.00000	-53.01

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器材技術規範5.7.4.5節之規定，在 1GHz 以下的非必要之發射，應符合第 3.6節之規定，任何使用交流市電為供應電之設備亦須符合第 3.3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器材技術規範 5.7.4.6節之要求，不必要發射頻率屬 3.5 節規定頻段者，應符合3.6 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、低各頻道產生最高最大傳導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 Aantenna	EMCO	3117
Horn Aantenna	EMCO	3116
PRE-Amplifier	Agilent	8449B
PRE-Amplifier	Agilent	8447D
BiLog Aantenna	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

10.5.1 諧波發射量測值

10.5.1.1 Antenna 1

10.5.1.1.1 調變技術: IEEE 802.11a

a. Channel Low

操作模式 : 發射接收

基本波頻率 : 5745 MHz

測試日期: Jun. 16, 2020

環境溫度: 23°C

環境濕度: 60%

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)
11490.0000	H	---	---	7.19	---	---	74.0	54.0	---
11486.3141	V	52.81	39.26	7.19	60.00	46.45	74.0	54.0	-7.55
17235.0000	H	---	---	12.93	---	---	74.0	54.0	---
17235.0000	V	---	---	12.93	---	---	74.0	54.0	---
22980.0000	H	---	---	18.41	---	---	74.0	54.0	---
22980.0000	V	---	---	18.41	---	---	74.0	54.0	---
28725.0000	H	---	---	15.66	---	---	74.0	54.0	---
28725.0000	V	---	---	15.66	---	---	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。

3. 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：5785MHz

測試日期: Jun. 16, 2020

環境溫度: 23°C

環境濕度: 60%

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)
11570.0000	H	---	---	7.26	---	---	74.0	54.0	---
11566.1538	V	52.67	39.20	7.26	59.93	46.46	74.0	54.0	-7.54
17355.0000	H	---	---	12.63	---	---	74.0	54.0	---
17355.0000	V	---	---	12.63	---	---	74.0	54.0	---
23140.0000	H	---	---	18.39	---	---	74.0	54.0	---
23140.0000	V	---	---	18.39	---	---	74.0	54.0	---
28925.0000	H	---	---	15.73	---	---	74.0	54.0	---
28925.0000	V	---	---	15.73	---	---	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。

3. 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：5825MHz

測試日期: Jun. 16, 2020

環境溫度: 23°C

環境濕度: 60%

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)
11650.0000	H	---	---	7.33	---	---	74.0	54.0	---
11646.3141	V	52.51	38.38	7.33	59.84	45.71	74.0	54.0	-8.29
17475.0000	H	---	---	12.33	---	---	74.0	54.0	---
17475.0000	V	---	---	12.33	---	---	74.0	54.0	---
23300.0000	H	---	---	18.34	---	---	74.0	54.0	---
23300.0000	V	---	---	18.34	---	---	74.0	54.0	---
29125.0000	H	---	---	15.91	---	---	74.0	54.0	---
29125.0000	V	---	---	15.91	---	---	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。

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

10.5.1.1.2 調變技術: IEEE 802.11ac VHT20

a. Channel Low

操作模式：發射接收

基本波頻率：5745 MHz

測試日期: Jun. 16, 2020

環境溫度: 23°C

環境濕度: 60%%

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) (dB)
		Peak	AVG		Peak	AVG	Peak	AVG	
(MHz)	H/V			(dB)					
11490.0000	H	---	---	7.19	---	---	74.0	54.0	---
11488.3974	V	54.18	38.54	7.19	61.37	45.73	74.0	54.0	-8.27
17235.0000	H	---	---	12.93	---	---	74.0	54.0	---
17235.0000	V	---	---	12.93	---	---	74.0	54.0	---
22980.0000	H	---	---	18.41	---	---	74.0	54.0	---
22980.0000	V	---	---	18.41	---	---	74.0	54.0	---
28725.0000	H	---	---	15.66	---	---	74.0	54.0	---
28725.0000	V	---	---	15.66	---	---	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。

3. 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：5785MHz

測試日期: Jun. 16, 2020

環境溫度: 23°C

環境濕度: 60%

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)
11570.0000	H	---	---	7.26	---	---	74.0	54.0	---
11568.4776	V	54.58	38.85	7.26	61.84	46.11	74.0	54.0	-7.89
17355.0000	H	---	---	12.63	---	---	74.0	54.0	---
17355.0000	V	---	---	12.63	---	---	74.0	54.0	---
23140.0000	H	---	---	18.39	---	---	74.0	54.0	---
23140.0000	V	---	---	18.39	---	---	74.0	54.0	---
28925.0000	H	---	---	15.73	---	---	74.0	54.0	---
28925.0000	V	---	---	15.73	---	---	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。

3. 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：5825MHz

測試日期: Jun. 16, 2020

環境溫度: 23°C

環境濕度: 60%

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)
11650.0000	H	---	---	7.33	---	---	74.0	54.0	---
11648.1571	V	52.64	38.35	7.33	59.97	45.68	74.0	54.0	-8.32
17475.0000	H	---	---	12.33	---	---	74.0	54.0	---
17475.0000	V	---	---	12.33	---	---	74.0	54.0	---
23300.0000	H	---	---	18.34	---	---	74.0	54.0	---
23300.0000	V	---	---	18.34	---	---	74.0	54.0	---
29125.0000	H	---	---	15.91	---	---	74.0	54.0	---
29125.0000	V	---	---	15.91	---	---	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。

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

10.5.1.1.3 調變技術: IEEE 802.11ac VHT40

a. Channel Low

操作模式：發射接收

基本波頻率：5755 MHz

測試日期: Jun. 16, 2020

環境溫度: 23°C

環境濕度: 60%

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)
		Peak	AVG		Peak	AVG	Peak	AVG	
(MHz)	H/V			(dB)					(dB)
11510.0000	H	---	---	7.21	---	---	74.0	54.0	---
11510.2244	V	50.80	37.87	7.21	58.01	45.08	74.0	54.0	-8.92
17265.0000	H	---	---	12.86	---	---	74.0	54.0	---
17265.0000	V	---	---	12.86	---	---	74.0	54.0	---
23020.0000	H	---	---	18.41	---	---	74.0	54.0	---
23020.0000	V	---	---	18.41	---	---	74.0	54.0	---
28775.0000	H	---	---	15.67	---	---	74.0	54.0	---
28775.0000	V	---	---	15.67	---	---	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。

3. 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：5795 MHz

測試日期: Jun. 16, 2020

環境溫度: 23°C

環境濕度: 60%

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)
11590.0000	H	---	---	7.28	---	---	74.0	54.0	----
11589.5192	V	51.49	38.10	7.28	58.77	45.38	74.0	54.0	-8.62
17385.0000	H	---	---	12.55	---	---	74.0	54.0	---
17385.0000	V	---	---	12.55	---	---	74.0	54.0	---
23180.0000	H	---	---	18.37	---	---	74.0	54.0	---
23180.0000	V	---	---	18.37	---	---	74.0	54.0	---
28975.0000	H	---	---	15.75	---	---	74.0	54.0	---
28975.0000	V	---	---	15.75	---	---	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。

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

10.5.1.1.4 調變技術: IEEE 802.11ac VHT80

操作模式：發射接收

基本波頻率：5775 MHz

測試日期: Jun. 16, 2020

環境溫度: 23°C

環境濕度: 60%

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)
		Peak	AVG		Peak	AVG	Peak	AVG	
(MHz)	H/V			(dB)					(dB)
11550.0000	H	---	---	7.24	---	---	74.0	54.0	---
11549.8397	V	53.58	37.94	7.24	60.82	45.18	74.0	54.0	-8.82
17325.0000	H	---	---	12.71	---	---	74.0	54.0	---
17325.0000	V	---	---	12.71	---	---	74.0	54.0	---
23100.0000	H	---	---	18.39	---	---	74.0	54.0	---
23100.0000	V	---	---	18.39	---	---	74.0	54.0	---
28875.0000	H	---	---	15.71	---	---	74.0	54.0	---
28875.0000	V	---	---	15.71	---	---	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。

3. 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 Antenna 2

10.5.1.2.1 調變技術: IEEE 802.11a

a. Channel Low

操作模式：發射接收

基本波頻率：5745 MHz

測試日期: Aug. 05, 2020

環境溫度: 24°C

環境濕度: 62%

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) (dB)
		Peak	AVG		Peak	AVG	Peak	AVG	
11490.0000	H	---	---	7.19	---	---	74.0	54.0	---
11486.3942	V	54.45	37.87	7.19	61.64	45.06	74.0	54.0	-8.94
17235.0000	H	---	---	12.93	---	---	74.0	54.0	---
17235.0000	V	---	---	12.93	---	---	74.0	54.0	---
22980.0000	H	---	---	18.41	---	---	74.0	54.0	---
22980.0000	V	---	---	18.41	---	---	74.0	54.0	---
28725.0000	H	---	---	15.66	---	---	74.0	54.0	---
28725.0000	V	---	---	15.66	---	---	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。

3. 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：5785MHz

測試日期: Aug. 05, 2020

環境溫度: 24°C

環境濕度: 62%

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)
11569.3590	H	51.03	35.12	7.26	58.29	42.38	74.0	54.0	-11.62
11573.2853	V	57.30	39.96	7.26	64.56	47.22	74.0	54.0	-6.78
17355.0000	H	---	---	12.63	---	---	74.0	54.0	---
17355.0000	V	---	---	12.63	---	---	74.0	54.0	---
23140.0000	H	---	---	18.39	---	---	74.0	54.0	---
23140.0000	V	---	---	18.39	---	---	74.0	54.0	---
28925.0000	H	---	---	15.73	---	---	74.0	54.0	---
28925.0000	V	---	---	15.73	---	---	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。

3. 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：5825MHz

測試日期: Aug. 05, 2020

環境溫度: 24°C

環境濕度: 62%

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)
11650.8814	H	49.68	35.27	7.33	57.01	42.60	74.0	54.0	-11.40
11652.6442	V	58.18	40.65	7.33	65.51	47.98	74.0	54.0	-6.02
17475.0000	H	---	---	12.33	---	---	74.0	54.0	---
17475.0000	V	---	---	12.33	---	---	74.0	54.0	---
23300.0000	H	---	---	18.34	---	---	74.0	54.0	---
23300.0000	V	---	---	18.34	---	---	74.0	54.0	---
29125.0000	H	---	---	15.91	---	---	74.0	54.0	---
29125.0000	V	---	---	15.91	---	---	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。

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

10.5.1.2.2 調變技術: IEEE 802.11ac VHT20

a. Channel Low

操作模式：發射接收

基本波頻率：5745 MHz

測試日期: Aug. 05, 2020

環境溫度: 24°C

環境濕度: 62%%

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) (dB)
		Peak	AVG		Peak	AVG	Peak	AVG	
(MHz)	H/V			(dB)					
11490.0000	H	---	---	7.19	---	---	74.0	54.0	---
11487.5160	V	54.37	36.44	7.19	61.56	43.63	74.0	54.0	-10.37
17235.0000	H	---	---	12.93	---	---	74.0	54.0	---
17235.0000	V	---	---	12.93	---	---	74.0	54.0	---
22980.0000	H	---	---	18.41	---	---	74.0	54.0	---
22980.0000	V	---	---	18.41	---	---	74.0	54.0	---
28725.0000	H	---	---	15.66	---	---	74.0	54.0	---
28725.0000	V	---	---	15.66	---	---	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。

3. 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：5785MHz

測試日期: Aug. 05, 2020

環境溫度: 24°C

環境濕度: 62%

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)
11569.2788	H	49.75	34.81	7.26	57.01	42.07	74.0	54.0	-11.93
11567.0865	V	57.38	38.57	7.26	64.64	45.83	74.0	54.0	-8.17
17355.0000	H	---	---	12.63	---	---	74.0	54.0	---
17355.0000	V	---	---	12.63	---	---	74.0	54.0	---
23140.0000	H	---	---	18.39	---	---	74.0	54.0	---
23140.0000	V	---	---	18.39	---	---	74.0	54.0	---
28925.0000	H	---	---	15.73	---	---	74.0	54.0	---
28925.0000	V	---	---	15.73	---	---	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。

3. 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：5825MHz

測試日期: Aug. 05, 2020

環境溫度: 24°C

環境濕度: 62%

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)
11647.9968	H	49.72	34.29	7.33	57.05	41.62	74.0	54.0	-12.38
11647.9166	V	57.73	38.33	7.33	65.06	45.66	74.0	54.0	-8.34
17475.0000	H	---	---	12.33	---	---	74.0	54.0	---
17475.0000	V	---	---	12.33	---	---	74.0	54.0	---
23300.0000	H	---	---	18.34	---	---	74.0	54.0	---
23300.0000	V	---	---	18.34	---	---	74.0	54.0	---
29125.0000	H	---	---	15.91	---	---	74.0	54.0	---
29125.0000	V	---	---	15.91	---	---	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。

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

10.5.1.2.3 調變技術: IEEE 802.11ac VHT40

a. Channel Low

操作模式：發射接收

基本波頻率：5755 MHz

測試日期: Aug. 05, 2020

環境溫度: 24°C

環境濕度: 62%

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)
11510.0000	H	---	---	7.21	---	---	74.0	54.0	---
11510.4808	V	50.64	35.70	7.21	57.85	42.91	74.0	54.0	-11.09
17265.0000	H	---	---	12.86	---	---	74.0	54.0	---
17265.0000	V	---	---	12.86	---	---	74.0	54.0	---
23020.0000	H	---	---	18.41	---	---	74.0	54.0	---
23020.0000	V	---	---	18.41	---	---	74.0	54.0	---
28775.0000	H	---	---	15.67	---	---	74.0	54.0	---
28775.0000	V	---	---	15.67	---	---	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。

3. 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：5795 MHz

測試日期: Aug. 05, 2020

環境溫度: 24°C

環境濕度: 62%

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)
11590.0000	H	---	---	7.28	---	---	74.0	54.0	---
11588.8782	V	55.48	38.31	7.27	62.75	45.58	74.0	54.0	-8.42
17385.0000	H	---	---	12.55	---	---	74.0	54.0	---
17385.0000	V	---	---	12.55	---	---	74.0	54.0	---
23180.0000	H	---	---	18.37	---	---	74.0	54.0	---
23180.0000	V	---	---	18.37	---	---	74.0	54.0	---
28975.0000	H	---	---	15.75	---	---	74.0	54.0	---
28975.0000	V	---	---	15.75	---	---	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。

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

10.5.1.2.4 調變技術: IEEE 802.11ac VHT80

操作模式：發射接收

基本波頻率：5775 MHz

測試日期: Aug. 05, 2020

環境溫度: 24°C

環境濕度: 62%

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)
		Peak	AVG		Peak	AVG	Peak	AVG	
(MHz)	H/V			(dB)					(dB)
11548.3974	H	51.36	35.21	7.24	58.60	42.45	74.0	54.0	-11.55
11550.0000	V	58.68	40.51	7.24	65.92	47.75	74.0	54.0	-6.25
17325.0000	H	---	---	12.71	---	---	74.0	54.0	---
17325.0000	V	---	---	12.71	---	---	74.0	54.0	---
23100.0000	H	---	---	18.39	---	---	74.0	54.0	---
23100.0000	V	---	---	18.39	---	---	74.0	54.0	---
28875.0000	H	---	---	15.71	---	---	74.0	54.0	---
28875.0000	V	---	---	15.71	---	---	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。

3. 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 Antenna 1

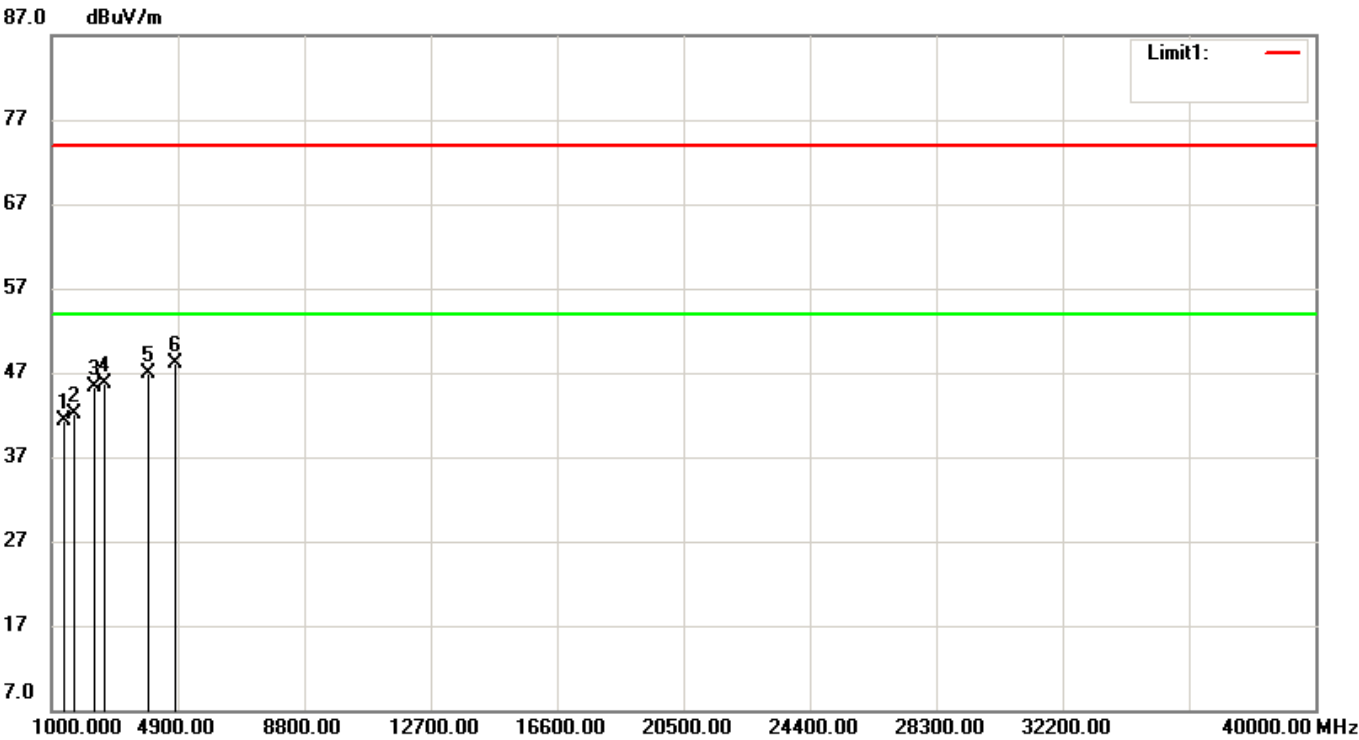
10.5.2.1.1 調變技術: IEEE 802.11a

a. Channel Low

操作模式：發射接收

基本波頻率：5745 MHz

File: 20-02-MAS-101_5-8a #30 Date: 2020/6/16 Temperature: 23 °C
Site: RE02-EMC B1-N2 Humidity: 60 %



Condition: NCC_Above1G_Pk Polarization: Horizontal
EUT: Wireless Embedded Module Distance: 3m
Model: SX-SDMAC
Test Mode: UNII Operator: Phillip
Note: CH LOW-1

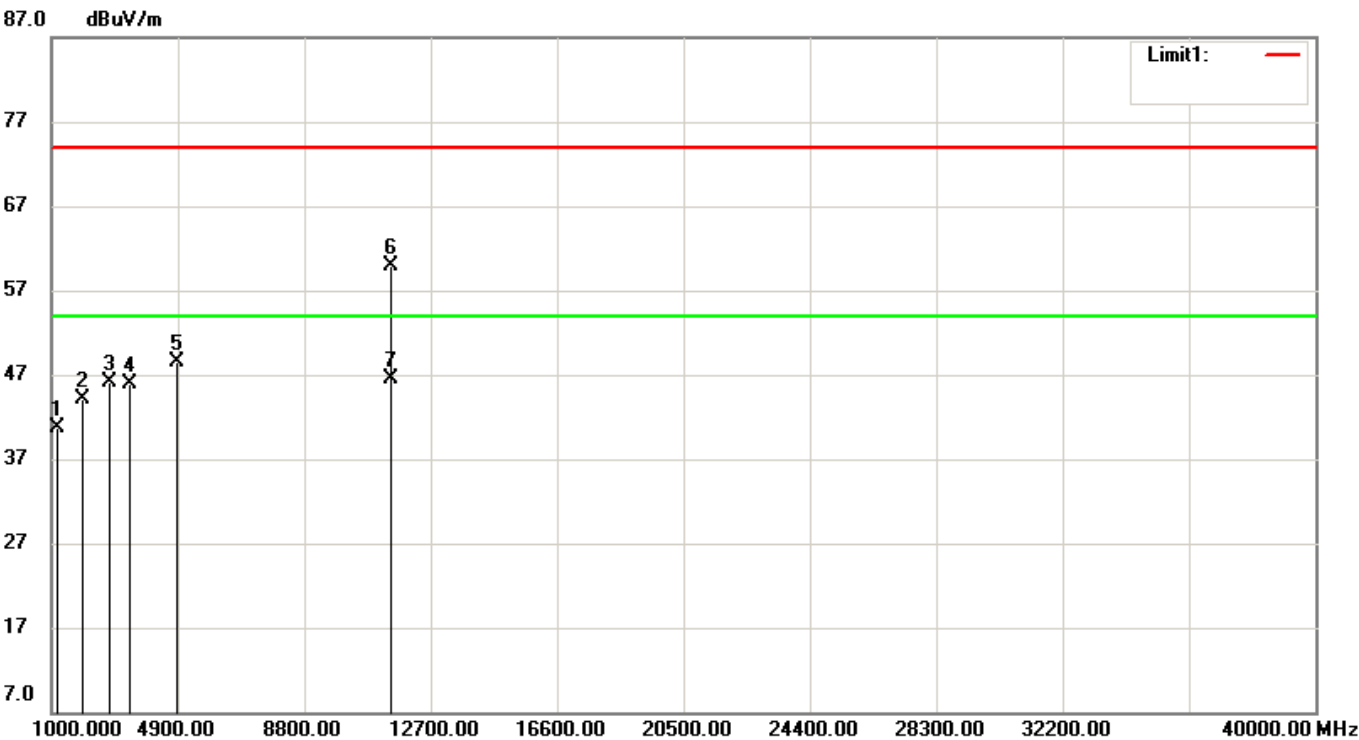
No.	Frequency (MHz)	Reading (dBuV/m)	Detector	Corrected dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)
1	1318.02880	49.96	peak	-8.65	41.31	74.00	-32.69
2	1636.05760	49.05	peak	-6.97	42.08	74.00	-31.92
3	2272.11530	48.38	peak	-3.02	45.36	74.00	-28.64
4	2620.43260	47.90	peak	-2.29	45.61	74.00	-28.39
5	3960.69710	46.91	peak	0.03	46.94	74.00	-27.06
6*	4770.91340	47.16	peak	0.98	48.14	74.00	-25.86

註：1. 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。

2. 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：5745 MHz

File: 20-02-MAS-101_5-8a #31 Date: 2020/6/16 Temperature: 23 °C
Site: RE02-EMC B1-N2 Humidity: 60 %



Condition: NCC_Above1G_Pk Polarization: Vertical
EUT: Wireless Embedded Module Distance: 3m
Model: SX-SDMAC
Test Mode: UNII Operator: Phillip
Note: CH LOW-1

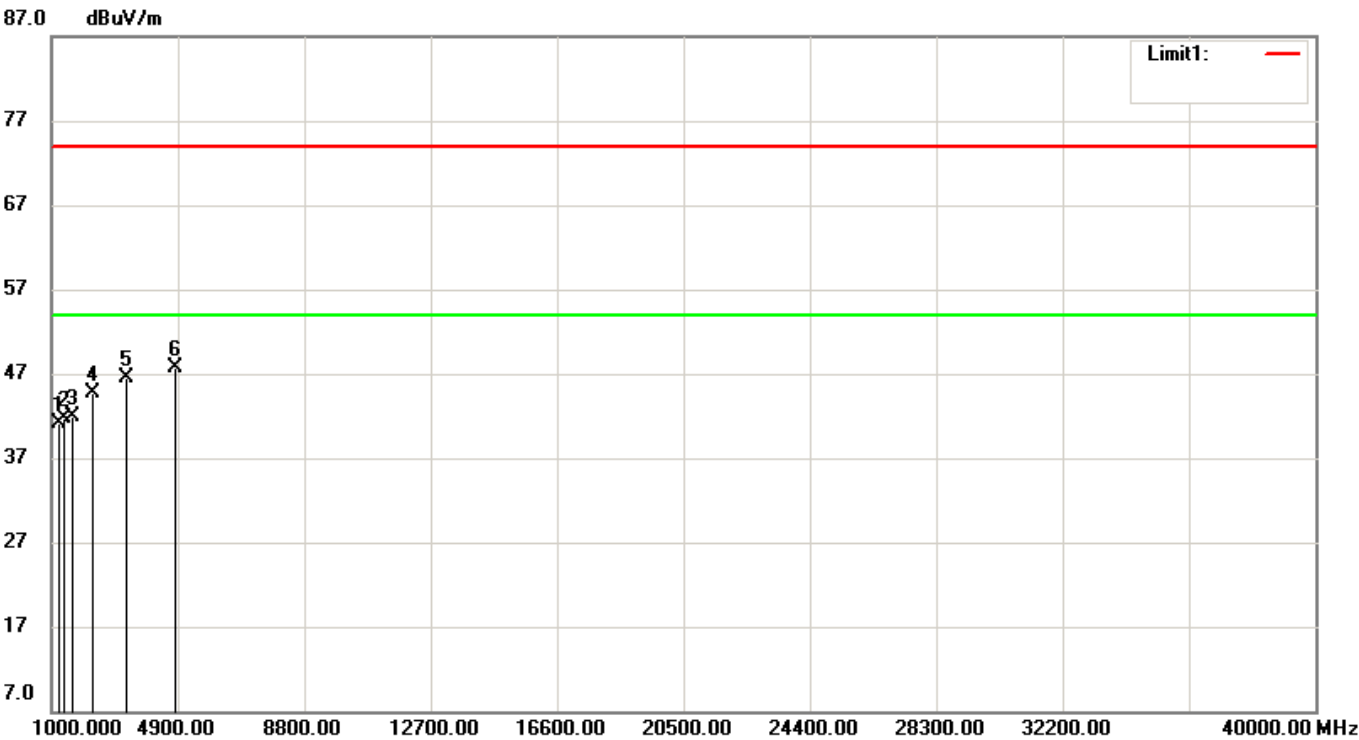
No.	Frequency (MHz)	Reading (dBuV/m)	Detector	Corrected dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)
1	1151.44230	49.77	peak	-9.08	40.69	74.00	-33.31
2	1916.22600	48.67	peak	-4.48	44.19	74.00	-29.81
3	2779.44710	48.29	peak	-2.13	46.16	74.00	-27.84
4	3392.78840	47.29	peak	-1.33	45.96	74.00	-28.04
5	4839.06250	47.30	peak	1.11	48.41	74.00	-25.59
6	11486.31410	52.81	peak	7.19	60.00	74.00	-14.00
7*	11486.31410	39.26	AVG	7.19	46.45	54.00	-7.55

註：1. 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。
2. 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：5785 MHz

File: 20-02-MAS-101_5-8a #32 Date: 2020/6/16 Temperature: 23 °C
Site: RE02-EMC B1-N2 Humidity: 60 %



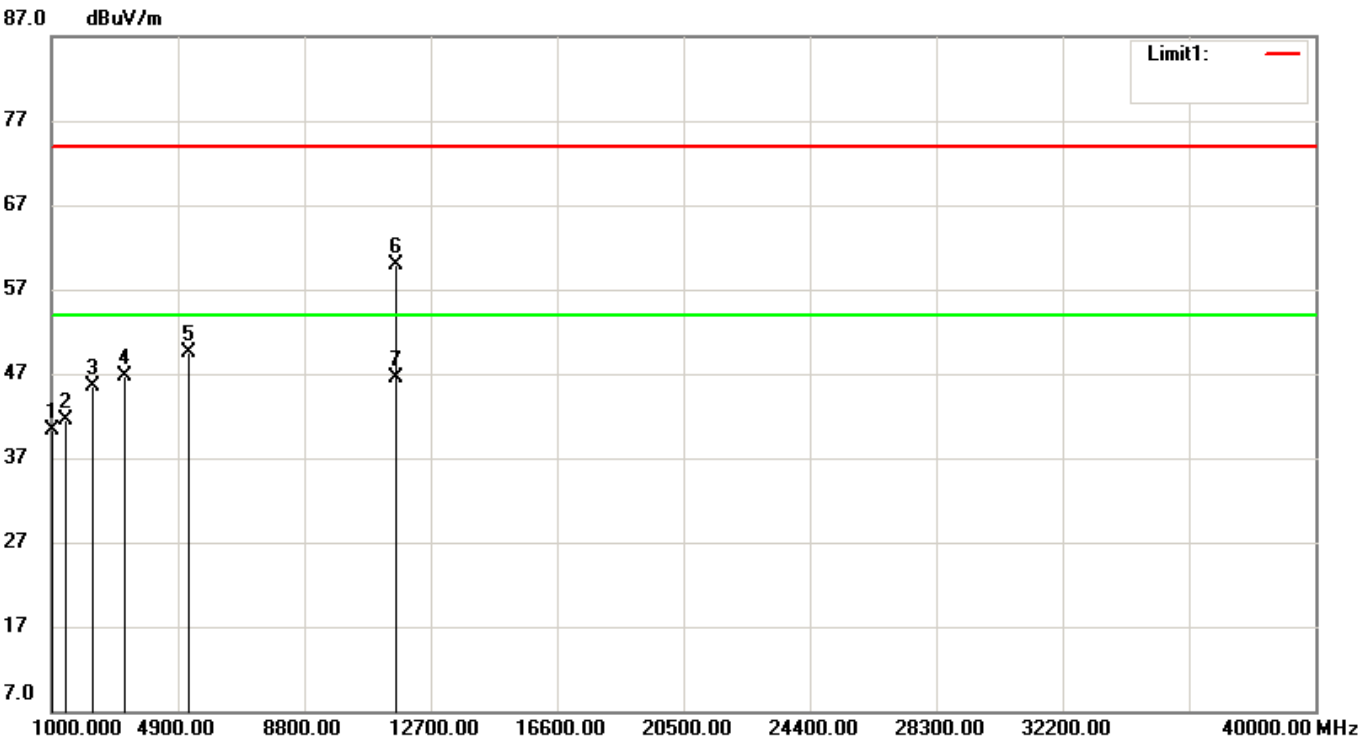
Condition: NCC_Above1G_Pk Polarization: Horizontal
EUT: Wireless Embedded Module Distance: 3m
Model: SX-SDMAC
Test Mode: UNII Operator: Phillip
Note: CH MID-1

No.	Frequency (MHz)	Reading (dBuV/m)	Detector	Corrected dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)
1	1196.87500	50.00	peak	-8.96	41.04	74.00	-32.96
2	1318.02880	50.33	peak	-8.65	41.68	74.00	-32.32
3	1590.62500	49.30	peak	-7.38	41.92	74.00	-32.08
4	2203.96630	47.90	peak	-3.19	44.71	74.00	-29.29
5	3286.77880	48.04	peak	-1.49	46.55	74.00	-27.45
6*	4770.91340	46.69	peak	0.98	47.67	74.00	-26.33

註：1. 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。
2. 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：5785 MHz

File: 20-02-MAS-101_5-8a #33 Date: 2020/6/16 Temperature: 23 °C
Site: RE02-EMC B1-N2 Humidity: 60 %



Condition: NCC_Above1G_Pk Polarization: Vertical
EUT: Wireless Embedded Module Distance: 3m
Model: SX-SDMAC
Test Mode: UNII Operator: Phillip
Note: CH MID-1

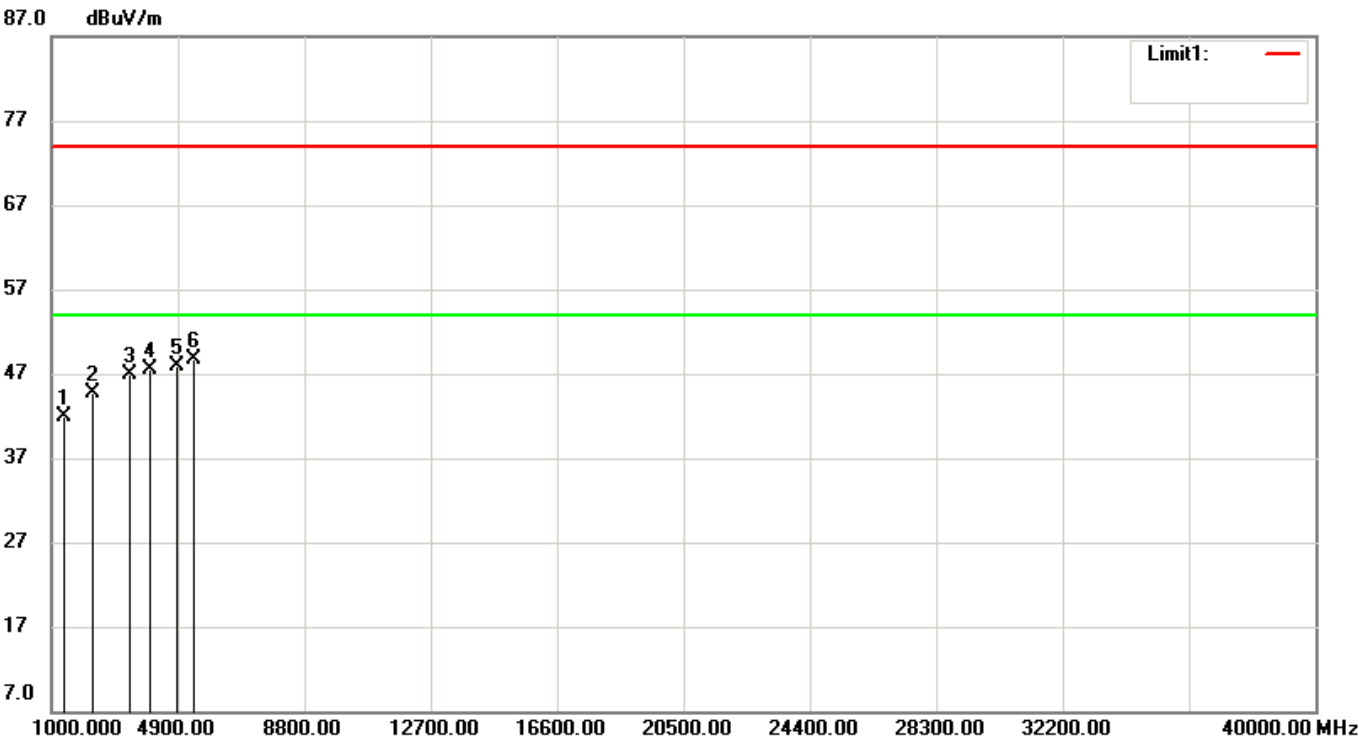
No.	Frequency (MHz)	Reading (dBuV/m)	Detector	Corrected dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)
1	1022.71630	49.74	peak	-9.41	40.33	74.00	-33.67
2	1393.75000	49.87	peak	-8.45	41.42	74.00	-32.58
3	2226.68260	48.59	peak	-3.13	45.46	74.00	-28.54
4	3241.34610	48.16	peak	-1.54	46.62	74.00	-27.38
5	5247.95670	47.48	peak	1.98	49.46	74.00	-24.54
6	11566.15380	52.67	peak	7.26	59.93	74.00	-14.07
7*	11566.15380	39.20	AVG	7.26	46.46	54.00	-7.54

註：1. 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。
2. 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：5825 MHz

File: 20-02-MAS-101_5-8a #34 Date: 2020/6/16 Temperature: 23 °C
Site: RE02-EMC B1-N2 Humidity: 60 %



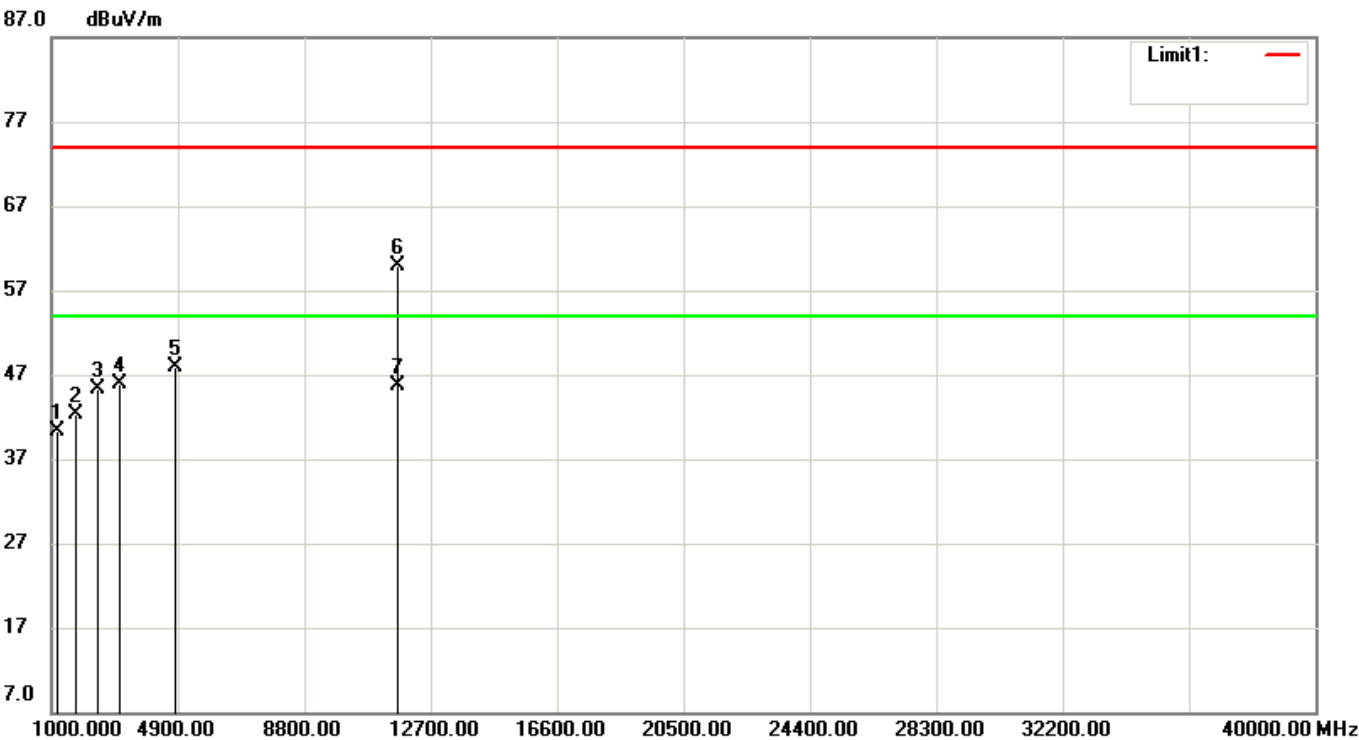
Condition: NCC_Above1G_Pk Polarization: Horizontal
EUT: Wireless Embedded Module Distance: 3m
Model: SX-SDMAC
Test Mode: UNII Operator: Phillip
Note: CH HIGH-1

No.	Frequency (MHz)	Reading (dBuV/m)	Detector	Corrected dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)
1	1318.02880	50.61	peak	-8.65	41.96	74.00	-32.04
2	2211.53840	47.91	peak	-3.17	44.74	74.00	-29.26
3	3415.50480	48.11	peak	-1.29	46.82	74.00	-27.18
4	4051.56250	47.28	peak	0.17	47.45	74.00	-26.55
5	4839.06250	46.75	peak	1.11	47.86	74.00	-26.14
6*	5353.96630	46.44	peak	2.23	48.67	74.00	-25.33

註：1. 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。
2. 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：5825 MHz

File: 20-02-MAS-101_5-8a #35 Date: 2020/6/16 Temperature: 23 °C
Site: RE02-EMC B1-N2 Humidity: 60 %



Condition: NCC_Above1G_Pk Polarization: Vertical
EUT: Wireless Embedded Module Distance: 3m
Model: SX-SDMAC
Test Mode: UNII Operator: Phillip
Note: CH HIGH-1

No.	Frequency (MHz)	Reading (dBuV/m)	Detector	Corrected dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)
1	1151.44230	49.40	peak	-9.08	40.32	74.00	-33.68
2	1742.06730	48.24	peak	-6.02	42.22	74.00	-31.78
3	2408.41340	47.95	peak	-2.66	45.29	74.00	-28.71
4	3112.62010	47.70	peak	-1.73	45.97	74.00	-28.03
5	4793.62980	46.87	peak	1.02	47.89	74.00	-26.11
6	11646.31410	52.51	peak	7.33	59.84	74.00	-14.16
7*	11646.31410	38.38	AVG	7.33	45.71	54.00	-8.29

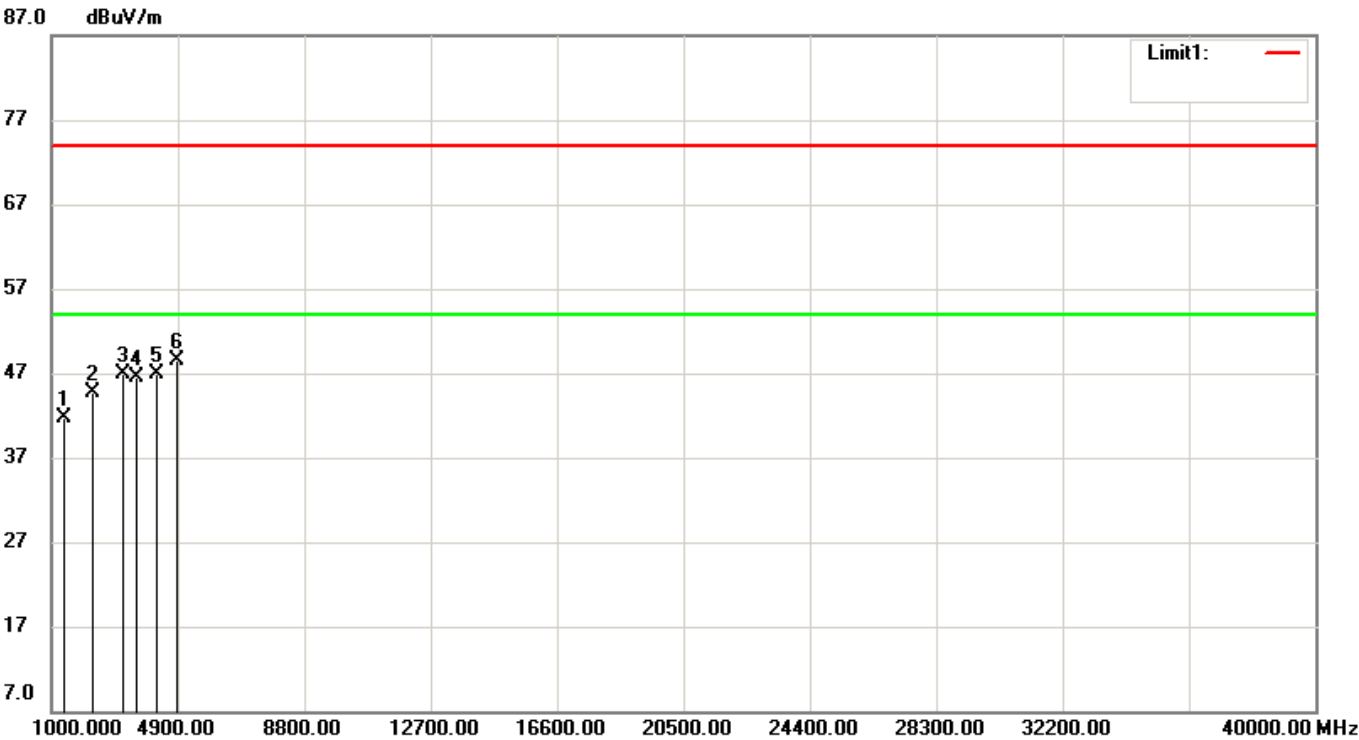
註：1. 若以峰值檢測功能測量之值符合平均值限制值，則可視同以平均值功能測量之值亦符合平均值限制值。
2. 量測不準確度: $\pm 4.1\text{dB}(1\text{GHz} \leq f < 18\text{GHz})$
 $\pm 4.4\text{dB}(18\text{GHz} \leq f \leq 40\text{GHz})$

10.5.2.1.2 調變技術: IEEE 802.11ac VHT20

a. Channel Low

操作模式：發射接收
基本波頻率：5745 MHz

File: 20-02-MAS-101_5-8ac20 #30 Date: 2020/6/16 Temperature: 23 °C
Site: RE02-EMC B1-N2 Humidity: 60 %



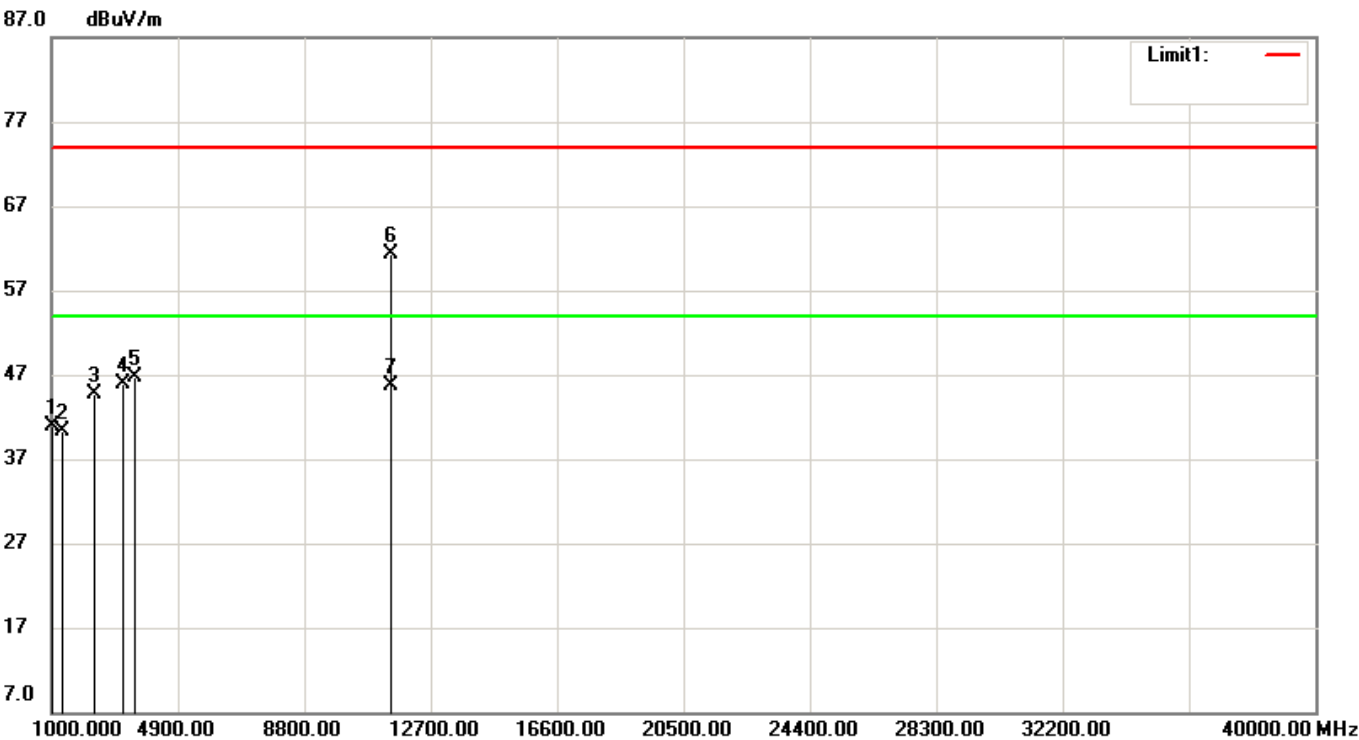
Condition: NCC_Above1G_Pk Polarization: Horizontal
EUT: Wireless Embedded Module Distance: 3m
Model: SX-SDMAC
Test Mode: UNII Operator: Phillip
Note: CH LOW-1

No.	Frequency (MHz)	Reading (dBuV/m)	Detector	Corrected dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)
1	1318.02880	50.27	peak	-8.65	41.62	74.00	-32.38
2	2203.96630	47.92	peak	-3.19	44.73	74.00	-29.27
3	3150.48060	48.50	peak	-1.68	46.82	74.00	-27.18
4	3574.51920	47.54	peak	-0.97	46.57	74.00	-27.43
5	4195.43260	46.67	peak	0.27	46.94	74.00	-27.06
6*	4831.49030	47.32	peak	1.09	48.41	74.00	-25.59

註：1. 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。
2. 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：5745 MHz

File: 20-02-MAS-101_5-8ac20 #31 Date: 2020/6/16 Temperature: 23 °C
Site: RE02-EMC B1-N2 Humidity: 60 %



Condition: NCC_Above1G_Pk Polarization: Vertical
EUT: Wireless Embedded Module Distance: 3m
Model: SX-SDMAC Operator: Phillip
Test Mode: UNII
Note: CH LOW-1

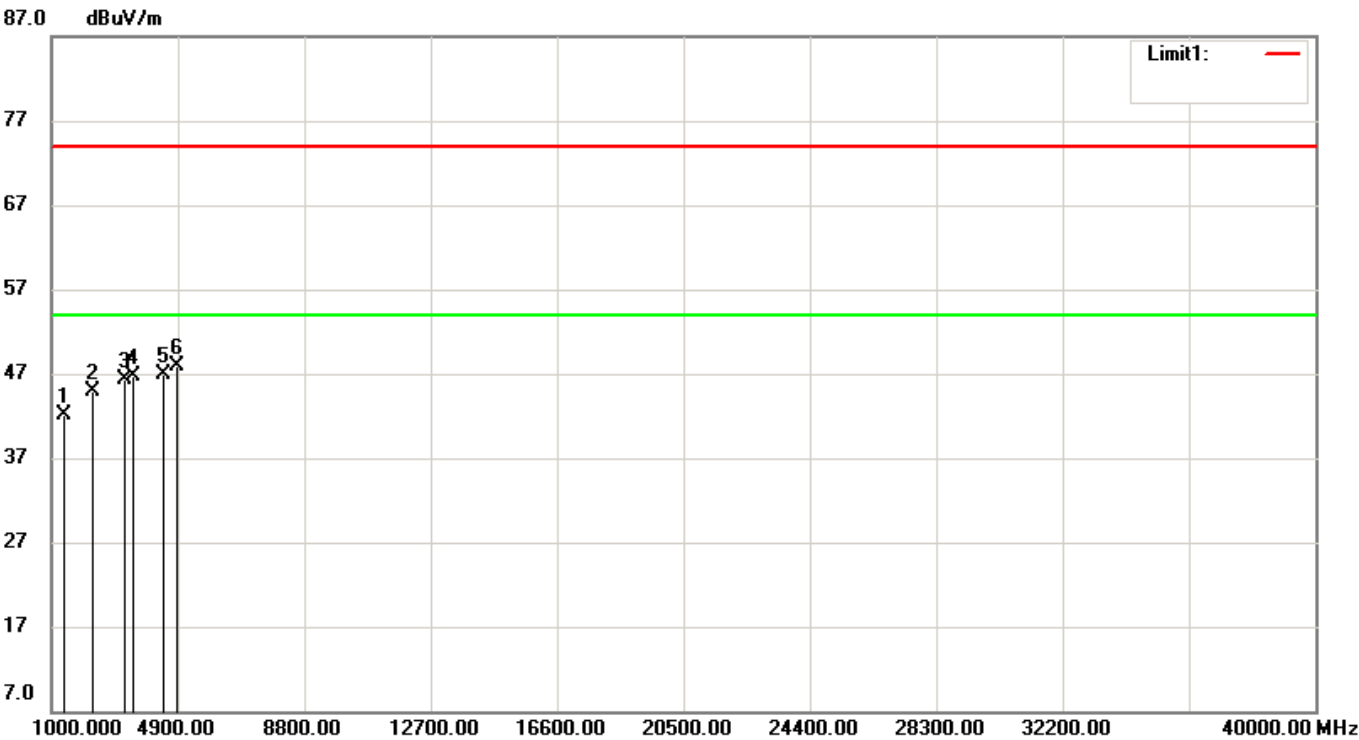
No.	Frequency (MHz)	Reading (dBuV/m)	Detector	Corrected dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)
1	1037.86050	50.25	peak	-9.37	40.88	74.00	-33.12
2	1310.45670	49.07	peak	-8.67	40.40	74.00	-33.60
3	2256.97110	47.81	peak	-3.06	44.75	74.00	-29.25
4	3135.33650	47.61	peak	-1.71	45.90	74.00	-28.10
5	3521.51440	47.75	peak	-1.11	46.64	74.00	-27.36
6	11488.39740	54.18	peak	7.19	61.37	74.00	-12.63
7*	11488.39740	38.54	AVG	7.19	45.73	54.00	-8.27

註：1. 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。
2. 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：5785 MHz

File: 20-02-MAS-101_5-8ac20 #32 Date: 2020/6/16 Temperature: 23 °C
Site: RE02-EMC B1-N2 Humidity: 60 %



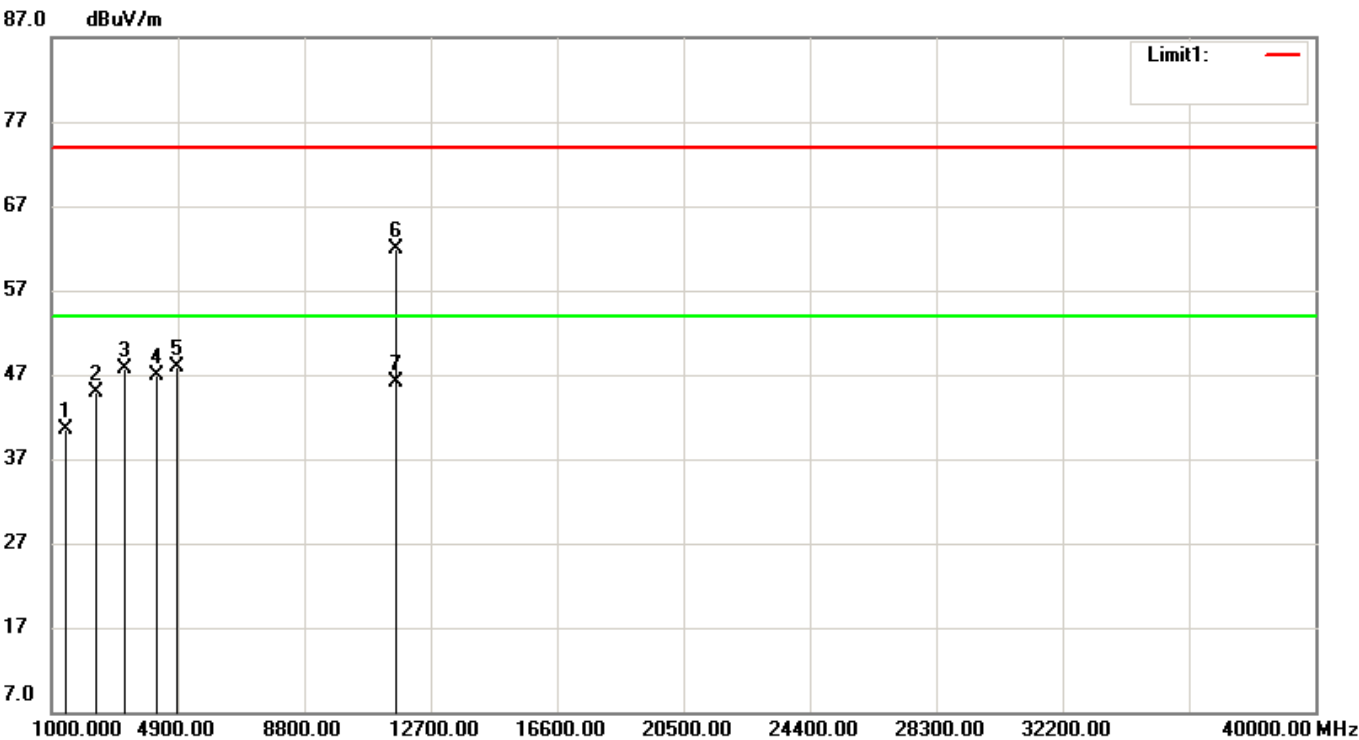
Condition: NCC_Above1G_Pk Polarization: Horizontal
EUT: Wireless Embedded Module Distance: 3m
Model: SX-SDMAC
Test Mode: UNII Operator: Phillip
Note: CH MID-1

No.	Frequency (MHz)	Reading (dBuV/m)	Detector	Corrected dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)
1	1318.02880	50.84	peak	-8.65	42.19	74.00	-31.81
2	2196.39420	48.18	peak	-3.21	44.97	74.00	-29.03
3	3218.62980	47.94	peak	-1.58	46.36	74.00	-27.64
4	3476.08170	47.86	peak	-1.20	46.66	74.00	-27.34
5	4422.59610	46.43	peak	0.41	46.84	74.00	-27.16
6*	4816.34610	46.77	peak	1.07	47.84	74.00	-26.16

註：1. 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。
2. 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：5785 MHz

File: 20-02-MAS-101_5-8ac20 #33 Date: 2020/6/16 Temperature: 23 °C
Site: RE02-EMC B1-N2 Humidity: 60 %



Condition: NCC_Above1G_Pk Polarization: Vertical
EUT: Wireless Embedded Module Distance: 3m
Model: SX-SDMAC
Test Mode: UNII Operator: Phillip
Note: CH MID-1

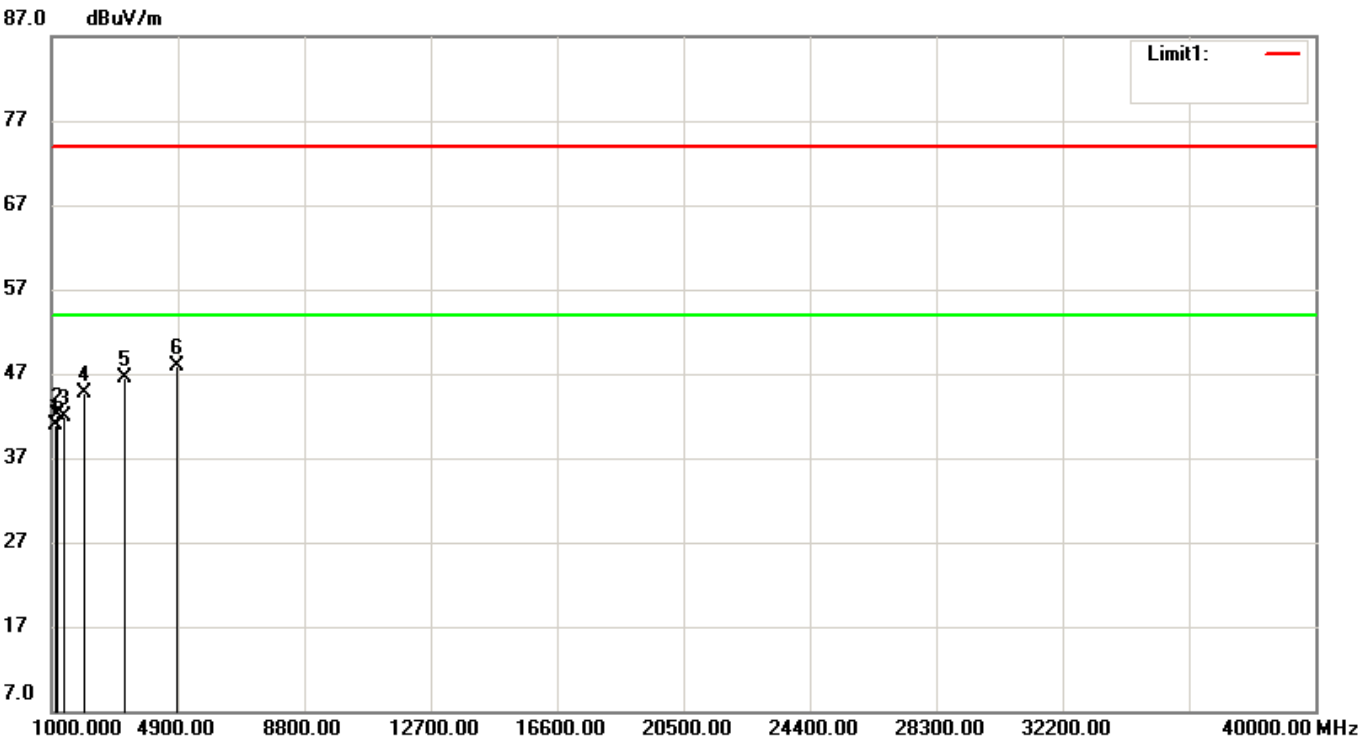
No.	Frequency (MHz)	Reading (dBuV/m)	Detector	Corrected dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)
1	1393.75000	48.94	peak	-8.45	40.49	74.00	-33.51
2	2347.83650	47.63	peak	-2.82	44.81	74.00	-29.19
3	3218.62980	49.20	peak	-1.58	47.62	74.00	-26.38
4	4203.00480	46.63	peak	0.26	46.89	74.00	-27.11
5	4831.49030	46.76	peak	1.09	47.85	74.00	-26.15
6	11568.47760	54.58	peak	7.26	61.84	74.00	-12.16
7*	11568.47760	38.85	AVG	7.26	46.11	54.00	-7.89

註：1. 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。
2. 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：5825 MHz

File: 20-02-MAS-101_5-8ac20 #34 Date: 2020/6/16 Temperature: 23 °C
Site: RE02-EMC B1-N2 Humidity: 60 %



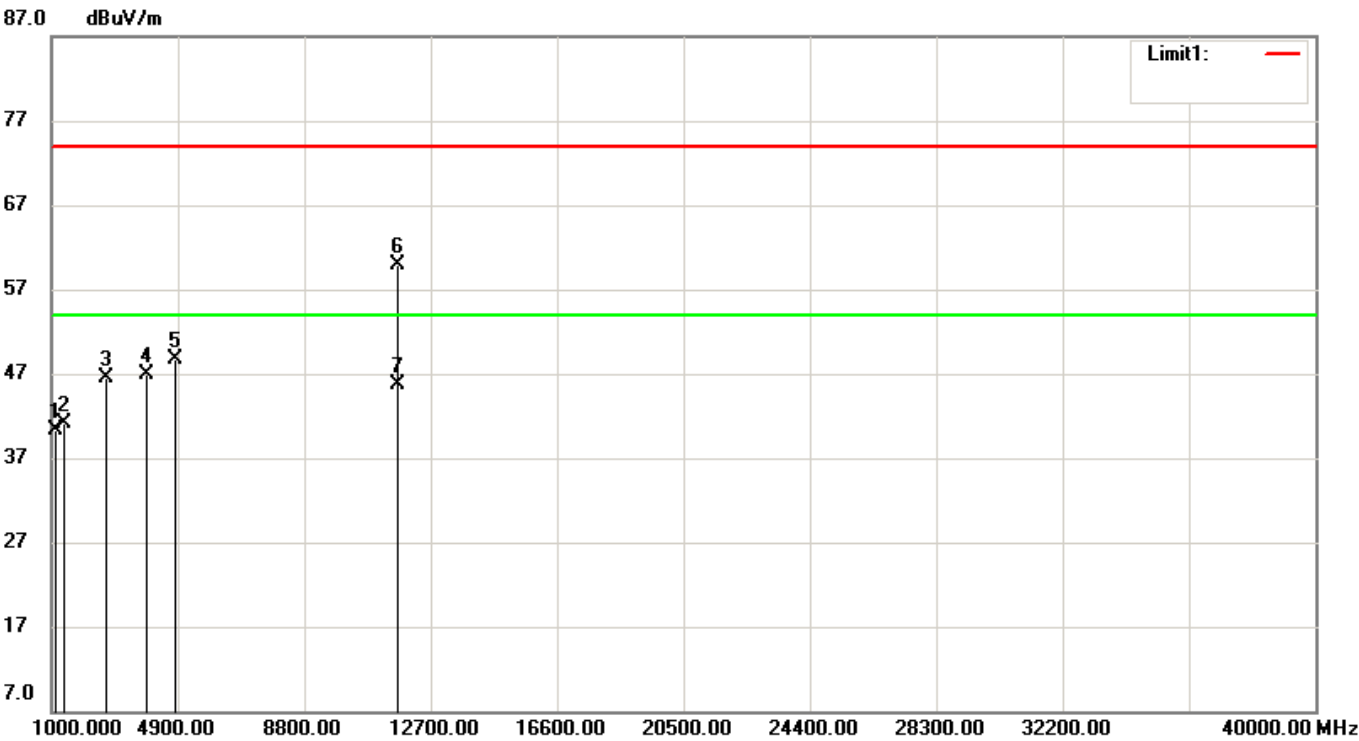
Condition: NCC_Above1G_Pk Polarization: Horizontal
EUT: Wireless Embedded Module Distance: 3m
Model: SX-SDMAC
Test Mode: UNII Operator: Phillip
Note: CH HIGH-1

No.	Frequency	Reading	Detector	Corrected	Result	Limit	Margin
	(MHz)	(dBuV/m)		dB/m	(dBuV/m)	(dBuV/m)	(dB)
1	1075.72110	50.26	peak	-9.28	40.98	74.00	-33.02
2	1181.73070	51.09	peak	-9.00	42.09	74.00	-31.91
3	1318.02880	50.59	peak	-8.65	41.94	74.00	-32.06
4	1991.94710	48.43	peak	-3.80	44.63	74.00	-29.37
5	3241.34610	47.97	peak	-1.54	46.43	74.00	-27.57
6*	4846.63460	46.71	peak	1.12	47.83	74.00	-26.17

註：1. 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。
2. 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：5825 MHz

File: 20-02-MAS-101_5-8ac20 #35 Date: 2020/6/16 Temperature: 23 °C
Site: RE02-EMC B1-N2 Humidity: 60 %



Condition: NCC_Above1G_Pk Polarization: Vertical
EUT: Wireless Embedded Module Distance: 3m
Model: SX-SDMAC
Test Mode: UNII Operator: Phillip
Note: CH HIGH-1

No.	Frequency (MHz)	Reading (dBuV/m)	Detector	Corrected dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)
1	1068.14900	49.55	peak	-9.29	40.26	74.00	-33.74
2	1371.03360	49.63	peak	-8.51	41.12	74.00	-32.88
3	2628.00480	48.84	peak	-2.29	46.55	74.00	-27.45
4	3884.97600	47.02	peak	-0.17	46.85	74.00	-27.15
5	4763.34130	47.74	peak	0.96	48.70	74.00	-25.30
6	11648.15710	52.64	peak	7.33	59.97	74.00	-14.03
7*	11648.15710	38.35	AVG	7.33	45.68	54.00	-8.32

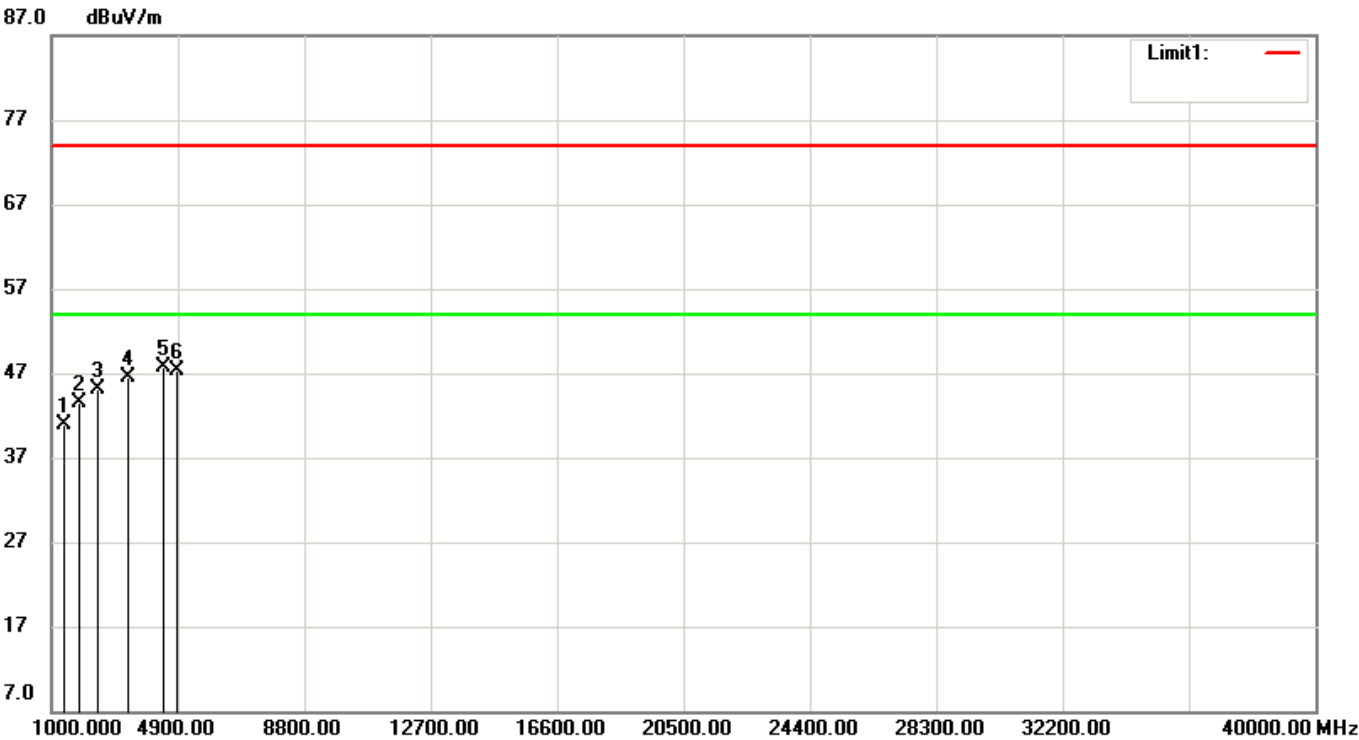
註：1. 若以峰值檢測功能測量之值符合平均值限制值，則可視同以平均值功能測量之值亦符合平均值限制值。
2. 量測不準確度: $\pm 4.1\text{dB}(1\text{GHz} \leq f < 18\text{GHz})$
 $\pm 4.4\text{dB}(18\text{GHz} \leq f \leq 40\text{GHz})$

10.5.2.1.3 調變技術: IEEE 802.11ac VHT40

a. Channel Low

操作模式：發射接收
基本波頻率：5755 MHz

File: 20-02-MAS-101_5-8ac40 #21 Date: 2020/6/16 Temperature: 23 °C
Site: RE02-EMC B1-N2 Humidity: 60 %



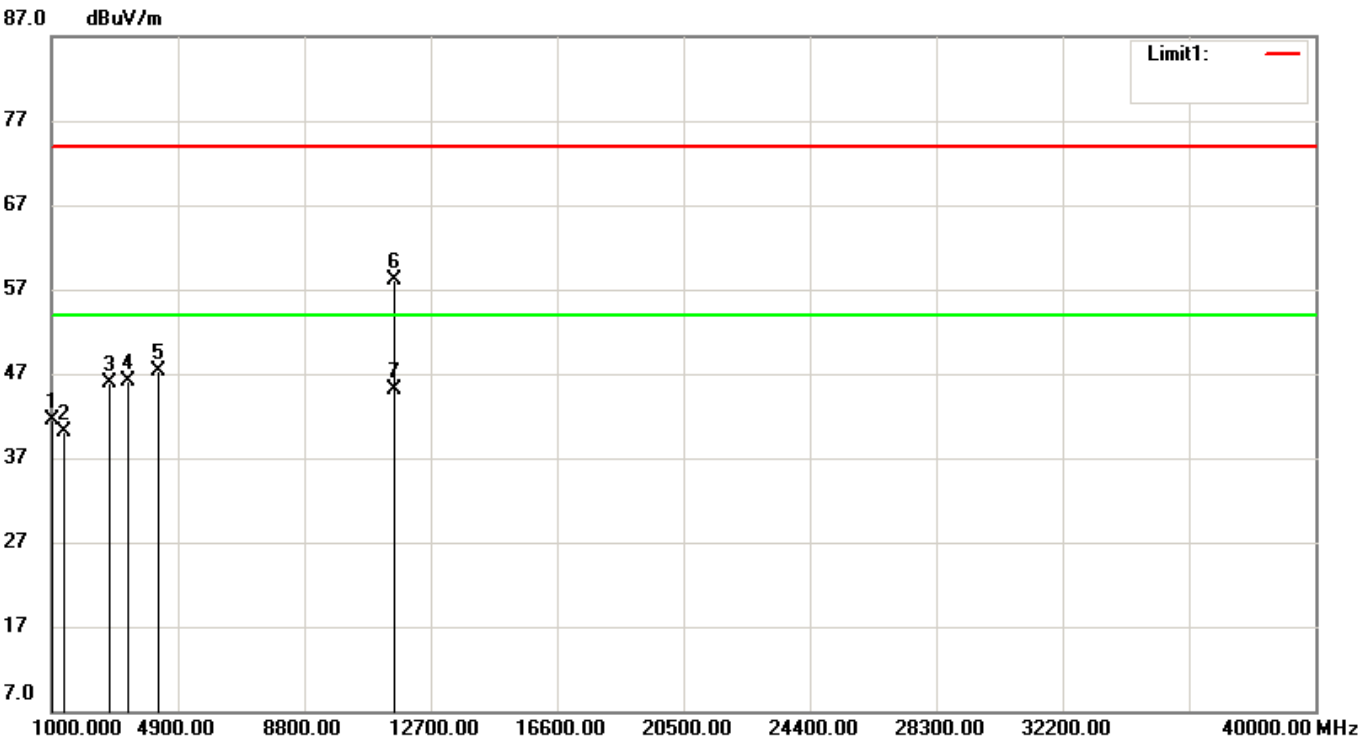
Condition: NCC_Above1G_Pk Polarization: Horizontal
EUT: Wireless Embedded Module Distance: 3m
Model: SX-SDMAC
Test Mode: UNII Operator: Phillip
Note: CH LOW-1

No.	Frequency (MHz)	Reading (dBuV/m)	Detector	Corrected dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)
1	1318.02880	49.54	peak	-8.65	40.89	74.00	-33.11
2	1870.79320	48.33	peak	-4.89	43.44	74.00	-30.56
3	2378.12500	47.80	peak	-2.74	45.06	74.00	-28.94
4	3370.07210	47.92	peak	-1.36	46.56	74.00	-27.44
5*	4430.16820	47.35	peak	0.41	47.76	74.00	-26.24
6	4823.91820	46.31	peak	1.08	47.39	74.00	-26.61

註：1. 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。
2. 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：5755 MHz

File: 20-02-MAS-101_5-8ac40 #22 Date: 2020/6/16 Temperature: 23 °C
Site: RE02-EMC B1-N2 Humidity: 60 %



Condition: NCC_Above1G_Pk Polarization: Vertical
EUT: Wireless Embedded Module Distance: 3m
Model: SX-SDMAC
Test Mode: UNII Operator: Phillip
Note: CH LOW-1

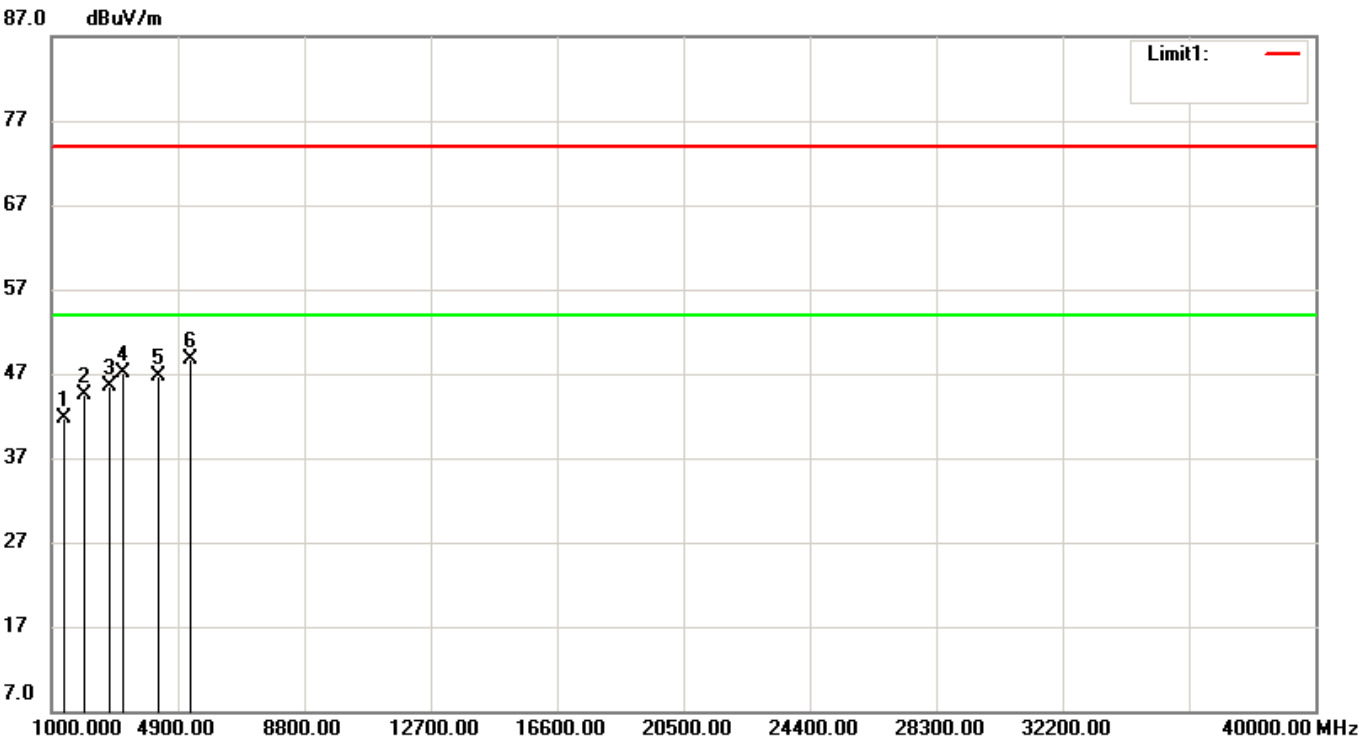
No.	Frequency (MHz)	Reading (dBuV/m)	Detector	Corrected dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)
1	1045.43260	50.80	peak	-9.35	41.45	74.00	-32.55
2	1340.74510	48.60	peak	-8.59	40.01	74.00	-33.99
3	2779.44710	48.10	peak	-2.13	45.97	74.00	-28.03
4	3370.07210	47.48	peak	-1.36	46.12	74.00	-27.88
5	4309.01440	46.95	peak	0.34	47.29	74.00	-26.71
6	11510.22440	50.80	peak	7.21	58.01	74.00	-15.99
7*	11510.22440	37.87	AVG	7.21	45.08	54.00	-8.92

註：1. 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。
2. 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：5795 MHz

File: 20-02-MAS-101_5-8ac40 #23 Date: 2020/6/16 Temperature: 23 °C
Site: RE02-EMC B1-N2 Humidity: 60 %



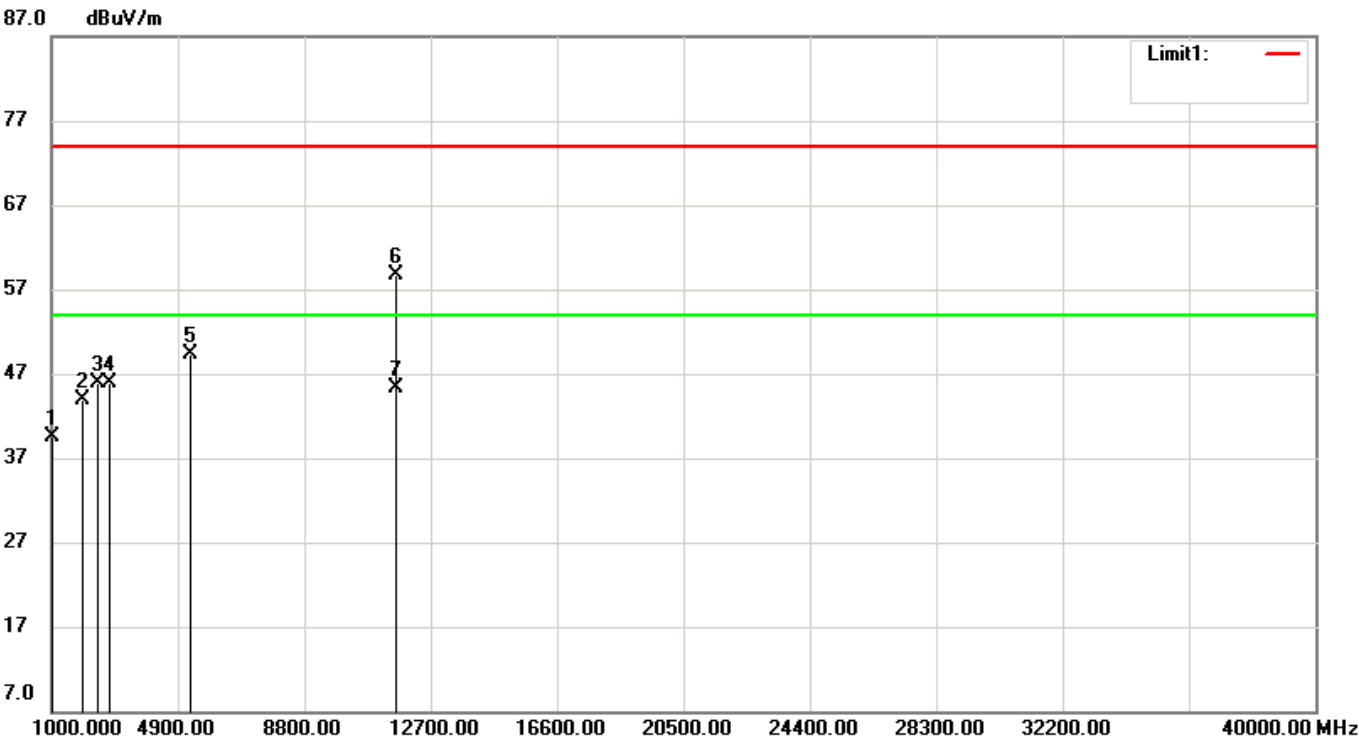
Condition: NCC_Above1G_Pk Polarization: Horizontal
EUT: Wireless Embedded Module Distance: 3m
Model: SX-SDMAC
Test Mode: UNII Operator: Phillip
Note: CH HIGH-1

No.	Frequency (MHz)	Reading (dBuV/m)	Detector	Corrected dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)
1	1318.02880	50.43	peak	-8.65	41.78	74.00	-32.22
2	1991.94710	48.37	peak	-3.80	44.57	74.00	-29.43
3	2756.73060	47.62	peak	-2.15	45.47	74.00	-28.53
4	3165.62500	48.78	peak	-1.65	47.13	74.00	-26.87
5	4256.00960	46.33	peak	0.30	46.63	74.00	-27.37
6*	5270.67300	46.59	peak	2.04	48.63	74.00	-25.37

註：1. 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。
2. 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：5795 MHz

File: 20-02-MAS-101_5-8ac40 #24 Date: 2020/6/16 Temperature: 23 °C
Site: RE02-EMC B1-N2 Humidity: 60 %



Condition: NCC_Above1G_Pk Polarization: Vertical
EUT: Wireless Embedded Module Distance: 3m
Model: SX-SDMAC
Test Mode: UNII Operator: Phillip
Note: CH HIGH-1

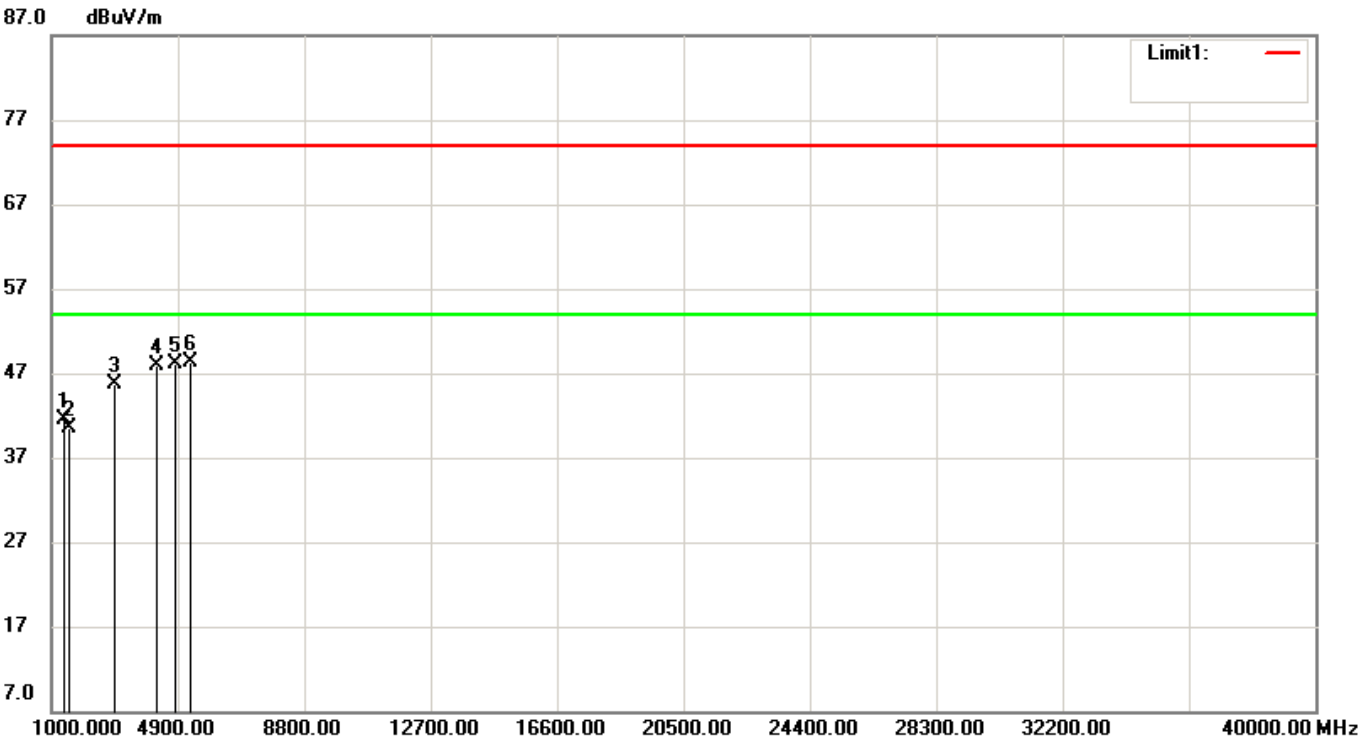
No.	Frequency (MHz)	Reading (dBuV/m)	Detector	Corrected dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)
1	1000.0000	48.95	peak	-9.47	39.48	74.00	-34.52
2	1893.50960	48.50	peak	-4.68	43.82	74.00	-30.18
3	2408.41340	48.54	peak	-2.66	45.88	74.00	-28.12
4	2794.59130	47.92	peak	-2.11	45.81	74.00	-28.19
5	5308.53360	47.08	peak	2.13	49.21	74.00	-24.79
6	11589.51920	51.49	peak	7.28	58.77	74.00	-15.23
7*	11589.51920	38.10	AVG	7.28	45.38	54.00	-8.62

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

10.5.2.1.4 調變技術: IEEE 802.11ac VHT80

操作模式：發射接收
基本波頻率：5775 MHz

File: 20-02-MAS-101_5-8ac80 #12 Date: 2020/6/16 Temperature: 23 °C
Site: RE02-EMC B1-N2 Humidity: 60 %



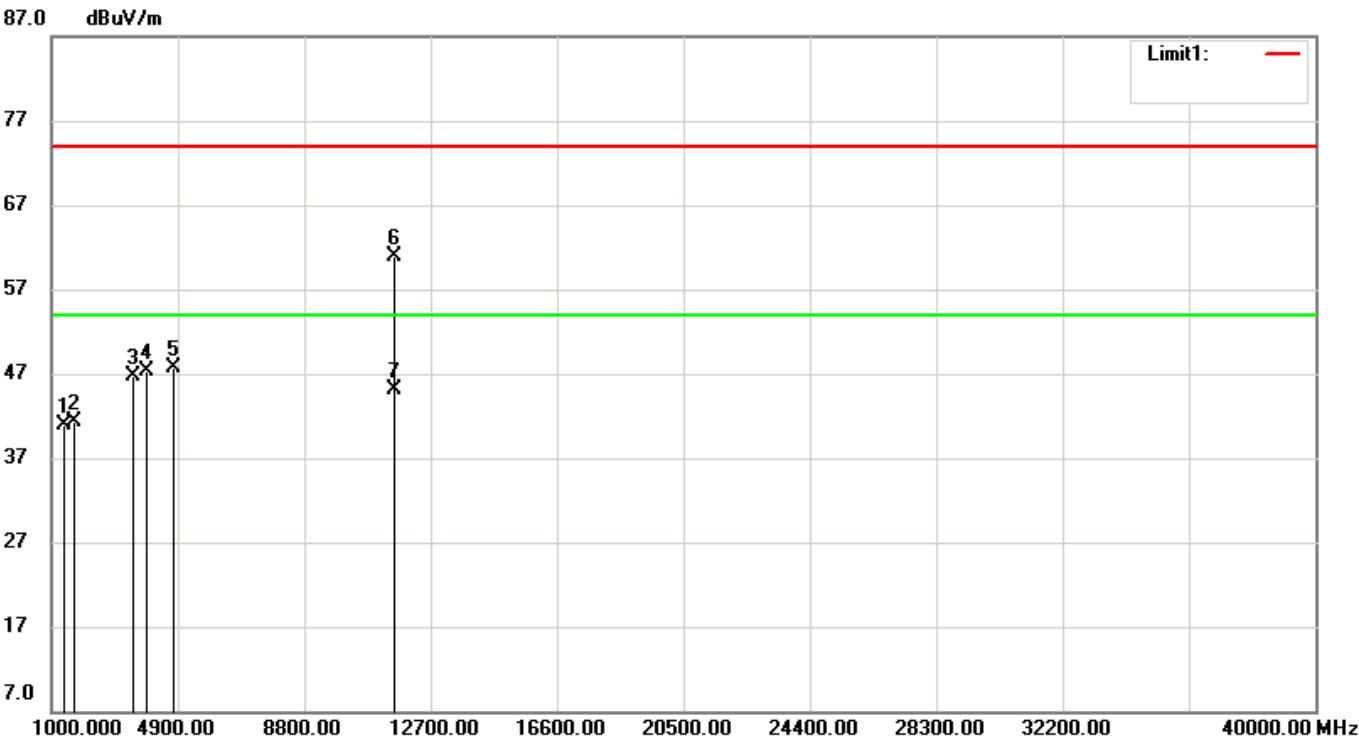
Condition: NCC_Above1G_Pk Polarization: Horizontal
EUT: Wireless Embedded Module Distance: 3m
Model: SX-SDMAC
Test Mode: UNII Operator: Phillip
Note: CH LOW-1

No.	Frequency (MHz)	Reading (dBuV/m)	Detector	Corrected dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)
1	1318.02880	50.07	peak	-8.65	41.42	74.00	-32.58
2	1560.33650	48.23	peak	-7.64	40.59	74.00	-33.41
3	2900.60100	47.74	peak	-2.00	45.74	74.00	-28.26
4	4248.43750	47.70	peak	0.30	48.00	74.00	-26.00
5	4793.62980	47.17	peak	1.02	48.19	74.00	-25.81
6*	5255.52880	46.33	peak	2.01	48.34	74.00	-25.66

註：1. 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。
2. 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：5775 MHz

File: 20-02-MAS-101_5-8ac80 #13 Date: 2020/6/16 Temperature: 23 °C
Site: RE02-EMC B1-N2 Humidity: 60 %



Condition: NCC_Above1G_Pk Polarization: Vertical
EUT: Wireless Embedded Module Distance: 3m
Model: SX-SDMAC
Test Mode: UNII Operator: Phillip
Note: CH LOW-1

No.	Frequency (MHz)	Reading (dBuV/m)	Detector	Corrected dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)
1	1363.46150	49.50	peak	-8.53	40.97	74.00	-33.03
2	1651.20200	48.13	peak	-6.83	41.30	74.00	-32.70
3	3460.93750	47.94	peak	-1.23	46.71	74.00	-27.29
4	3892.54800	47.51	peak	-0.14	47.37	74.00	-26.63
5	4748.19710	46.74	peak	0.93	47.67	74.00	-26.33
6	11549.83970	53.58	peak	7.24	60.82	74.00	-13.18
7*	11549.83970	37.94	AVG	7.24	45.18	54.00	-8.82

註：1. 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。
2. 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 Antenna 2

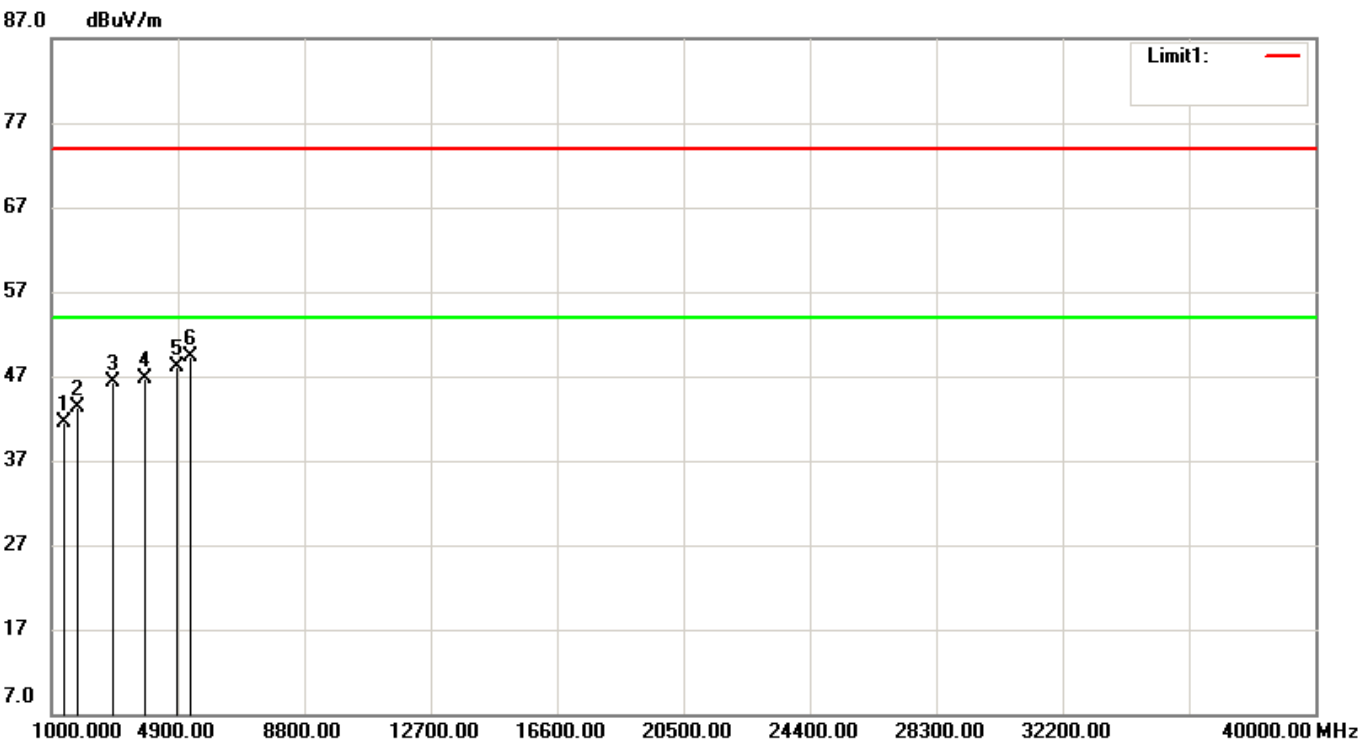
10.5.2.2.1 調變技術: IEEE 802.11a

a. Channel Low

操作模式：發射接收

基本波頻率：5745 MHz

File: 20-02-MAS-101_5-8a_Ant2 #20 Date: 2020/8/5 Temperature: 24 °C
Site: RE02-EMC B1-N2 Humidity: 62 %



Condition: NCC_Above1G_Pk Polarization: Horizontal
EUT: Wireless Embedded Module Distance: 3m
Model: SX-SDMAC
Test Mode: UNII Operator: Phillip
Note: CH LOW-1

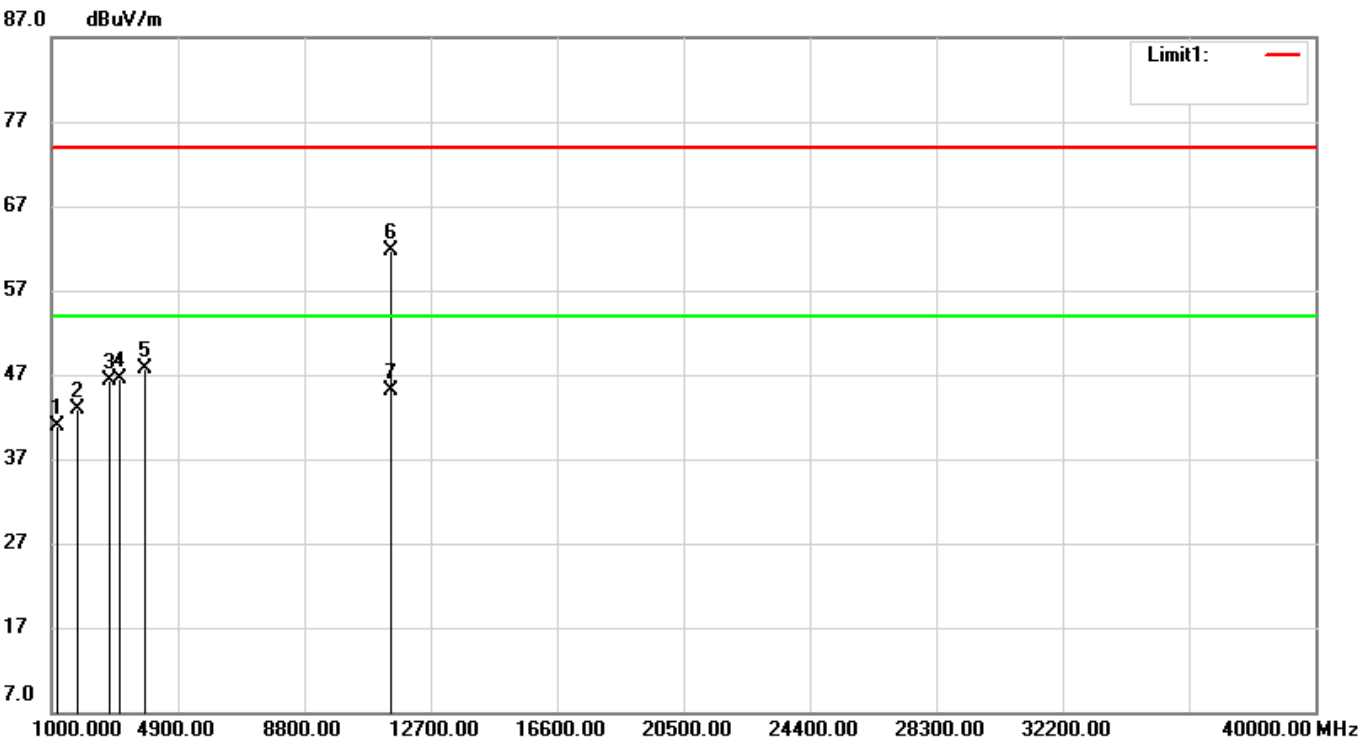
No.	Frequency (MHz)	Reading (dBuV/m)	Detector	Corrected dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)
1	1318.02880	50.10	peak	-8.65	41.45	74.00	-32.55
2	1787.50000	48.94	peak	-5.62	43.32	74.00	-30.68
3	2855.16810	48.37	peak	-2.06	46.31	74.00	-27.69
4	3847.11530	46.89	peak	-0.26	46.63	74.00	-27.37
5	4823.91820	46.99	peak	1.08	48.07	74.00	-25.93
6*	5263.10100	47.19	peak	2.02	49.21	74.00	-24.79

註：1. 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。

2. 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：5745 MHz

File: 20-02-MAS-101_5-8a_Ant2 #21 Date: 2020/8/5 Temperature: 24 °C
Site: RE02-EMC B1-N2 Humidity: 62 %



Condition: NCC_Above1G_Pk Polarization: Vertical
EUT: Wireless Embedded Module Distance: 3m
Model: SX-SDMAC
Test Mode: UNII Operator: Phillip
Note: CH LOW-1

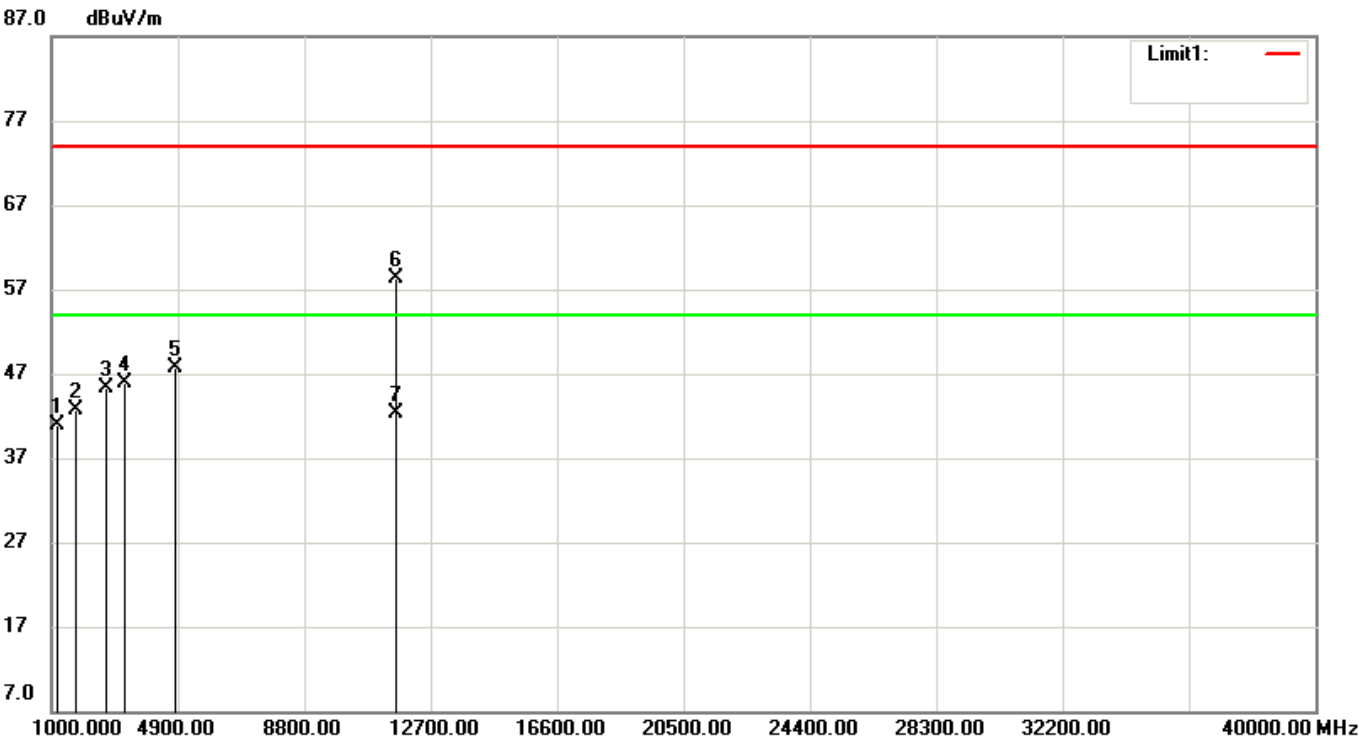
No.	Frequency (MHz)	Reading (dBuV/m)	Detector	Corrected dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)
1	1181.73070	49.96	peak	-9.00	40.96	74.00	-33.04
2	1772.35570	48.56	peak	-5.75	42.81	74.00	-31.19
3	2771.87500	48.51	peak	-2.13	46.38	74.00	-27.62
4	3097.47600	48.34	peak	-1.76	46.58	74.00	-27.42
5	3831.97110	48.00	peak	-0.29	47.71	74.00	-26.29
6	11486.39420	54.45	peak	7.19	61.64	74.00	-12.36
7*	11486.39420	37.87	AVG	7.19	45.06	54.00	-8.94

註：1. 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。
2. 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：5785 MHz

File: 20-02-MAS-101_5-8a_Ant2 #22 Date: 2020/8/5 Temperature: 24 °C
Site: RE02-EMC B1-N2 Humidity: 62 %



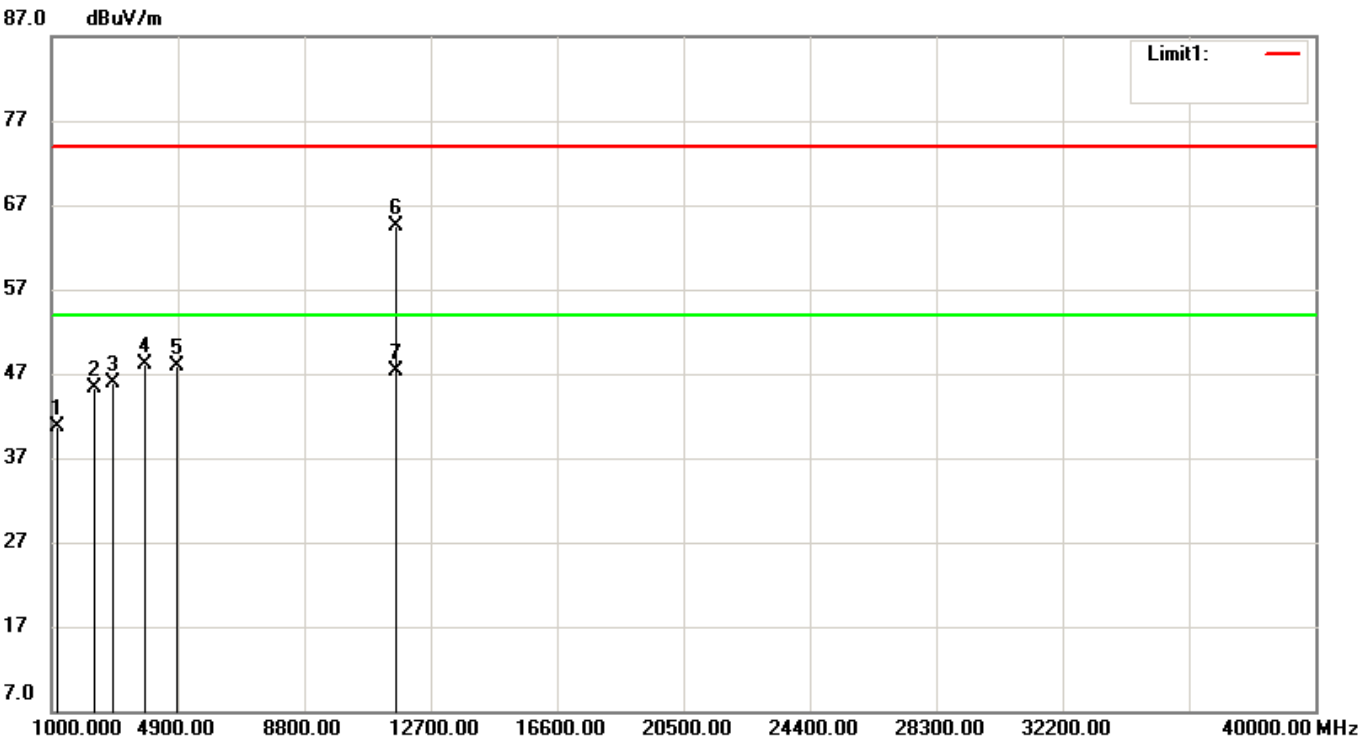
Condition: NCC_Above1G_Pk Polarization: Horizontal
EUT: Wireless Embedded Module Distance: 3m
Model: SX-SDMAC
Test Mode: UNII Operator: Phillip
Note: CH MID-1

No.	Frequency (MHz)	Reading (dBuV/m)	Detector	Corrected dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)
1	1181.73070	49.85	peak	-9.00	40.85	74.00	-33.15
2	1711.77880	48.93	peak	-6.29	42.64	74.00	-31.36
3	2665.86530	47.62	peak	-2.25	45.37	74.00	-28.63
4	3248.91810	47.49	peak	-1.54	45.95	74.00	-28.05
5	4778.48550	46.75	peak	0.99	47.74	74.00	-26.26
6	11569.35900	51.03	peak	7.26	58.29	74.00	-15.71
7*	11569.35900	35.12	AVG	7.26	42.38	54.00	-11.62

註：1. 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。
2. 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：5785 MHz

File: 20-02-MAS-101_5-8a_Ant2 #23 Date: 2020/8/5 Temperature: 24 °C
Site: RE02-EMC B1-N2 Humidity: 62 %



Condition: NCC_Above1G_Pk Polarization: Vertical
EUT: Wireless Embedded Module Distance: 3m
Model: SX-SDMAC
Test Mode: UNII Operator: Phillip
Note: CH MID-1

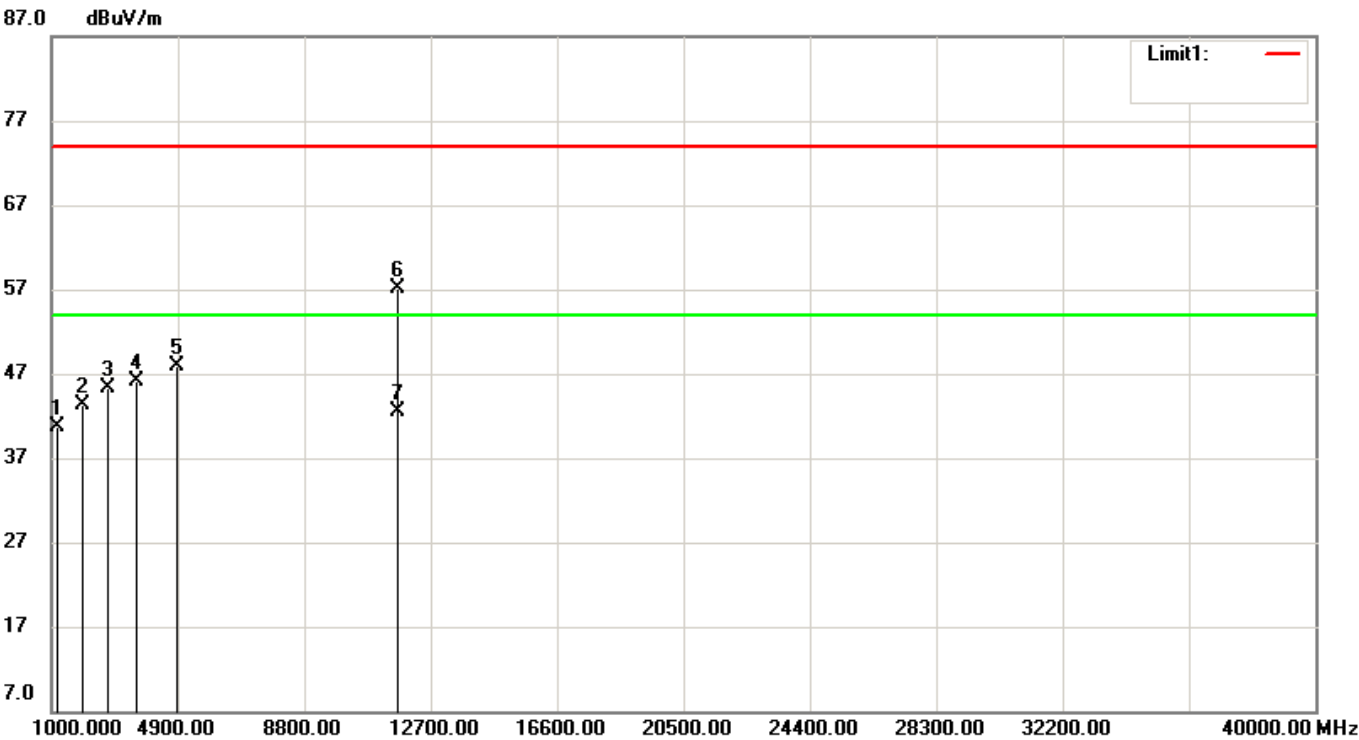
No.	Frequency (MHz)	Reading (dBuV/m)	Detector	Corrected dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)
1	1181.73070	49.73	peak	-9.00	40.73	74.00	-33.27
2	2294.83170	48.27	peak	-2.96	45.31	74.00	-28.69
3	2862.74030	47.94	peak	-2.04	45.90	74.00	-28.10
4	3854.68750	48.40	peak	-0.23	48.17	74.00	-25.83
5	4831.49030	46.73	peak	1.09	47.82	74.00	-26.18
6	11573.28530	57.30	peak	7.26	64.56	74.00	-9.44
7*	11573.28530	39.96	AVG	7.26	47.22	54.00	-6.78

註：1. 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。
2. 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：5825 MHz

File: 20-02-MAS-101_5-8a_Ant2 #24 Date: 2020/8/5 Temperature: 24 °C
Site: RE02-EMC B1-N2 Humidity: 62 %



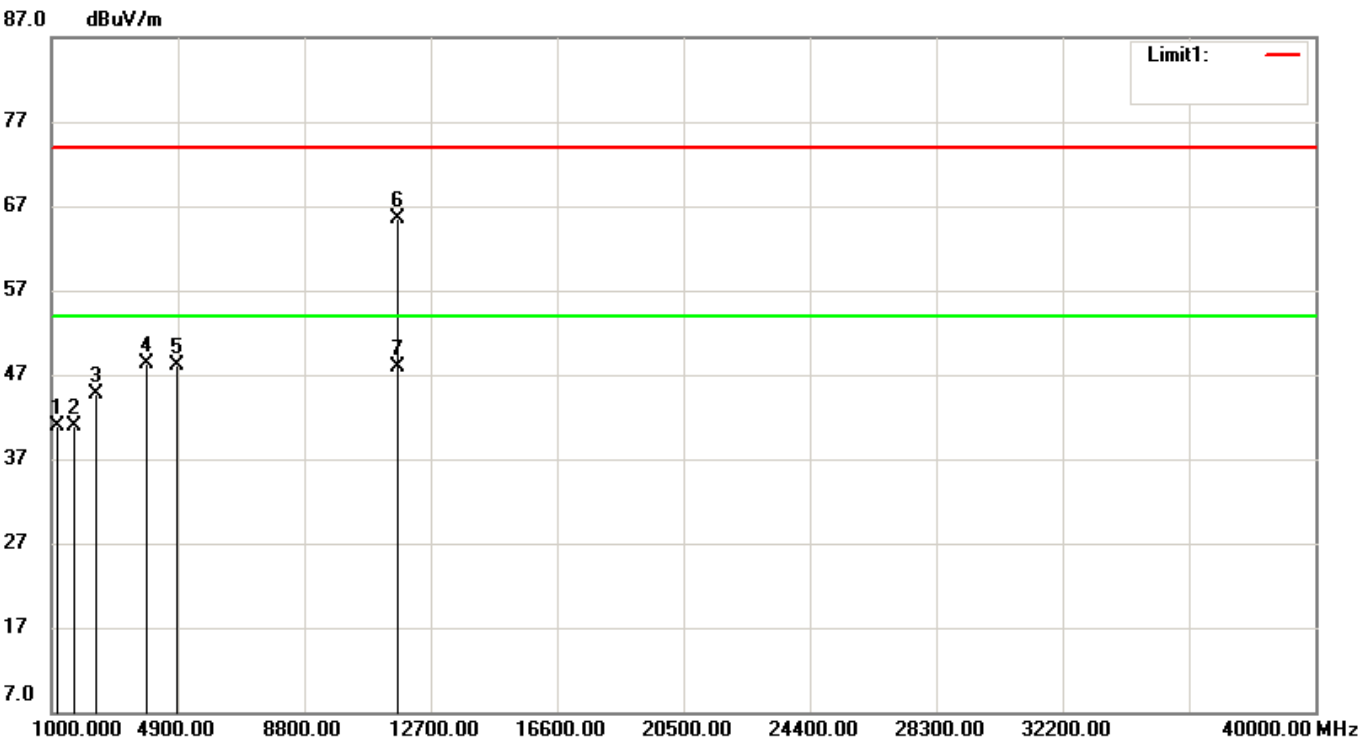
Condition: NCC_Above1G_Pk Polarization: Horizontal
EUT: Wireless Embedded Module Distance: 3m
Model: SX-SDMAC
Test Mode: UNII Operator: Phillip
Note: CH HIGH-1

No.	Frequency (MHz)	Reading (dBuV/m)	Detector	Corrected dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)
1	1181.73070	49.68	peak	-9.00	40.68	74.00	-33.32
2	1893.50960	47.93	peak	-4.68	43.25	74.00	-30.75
3	2749.15860	47.38	peak	-2.16	45.22	74.00	-28.78
4	3604.80760	47.07	peak	-0.89	46.18	74.00	-27.82
5	4839.06250	46.76	peak	1.11	47.87	74.00	-26.13
6	11650.88140	49.68	peak	7.33	57.01	74.00	-16.99
7*	11650.88140	35.27	AVG	7.33	42.60	54.00	-11.40

註：1. 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。
2. 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：5825 MHz

File: 20-02-MAS-101_5-8a_Ant2 #25 Date: 2020/8/5 Temperature: 24 °C
Site: RE02-EMC B1-N2 Humidity: 62 %



Condition: NCC_Above1G_Pk Polarization: Vertical
EUT: Wireless Embedded Module Distance: 3m
Model: SX-SDMAC
Test Mode: UNII Operator: Phillip
Note: CH HIGH-1

No.	Frequency (MHz)	Reading (dBuV/m)	Detector	Corrected dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)
1	1181.73070	49.91	peak	-9.00	40.91	74.00	-33.09
2	1658.77400	47.72	peak	-6.77	40.95	74.00	-33.05
3	2332.69230	47.49	peak	-2.86	44.63	74.00	-29.37
4	3884.97600	48.57	peak	-0.17	48.40	74.00	-25.60
5	4823.91820	46.98	peak	1.08	48.06	74.00	-25.94
6	11652.64420	58.18	peak	7.33	65.51	74.00	-8.49
7*	11652.64420	40.65	AVG	7.33	47.98	54.00	-6.02

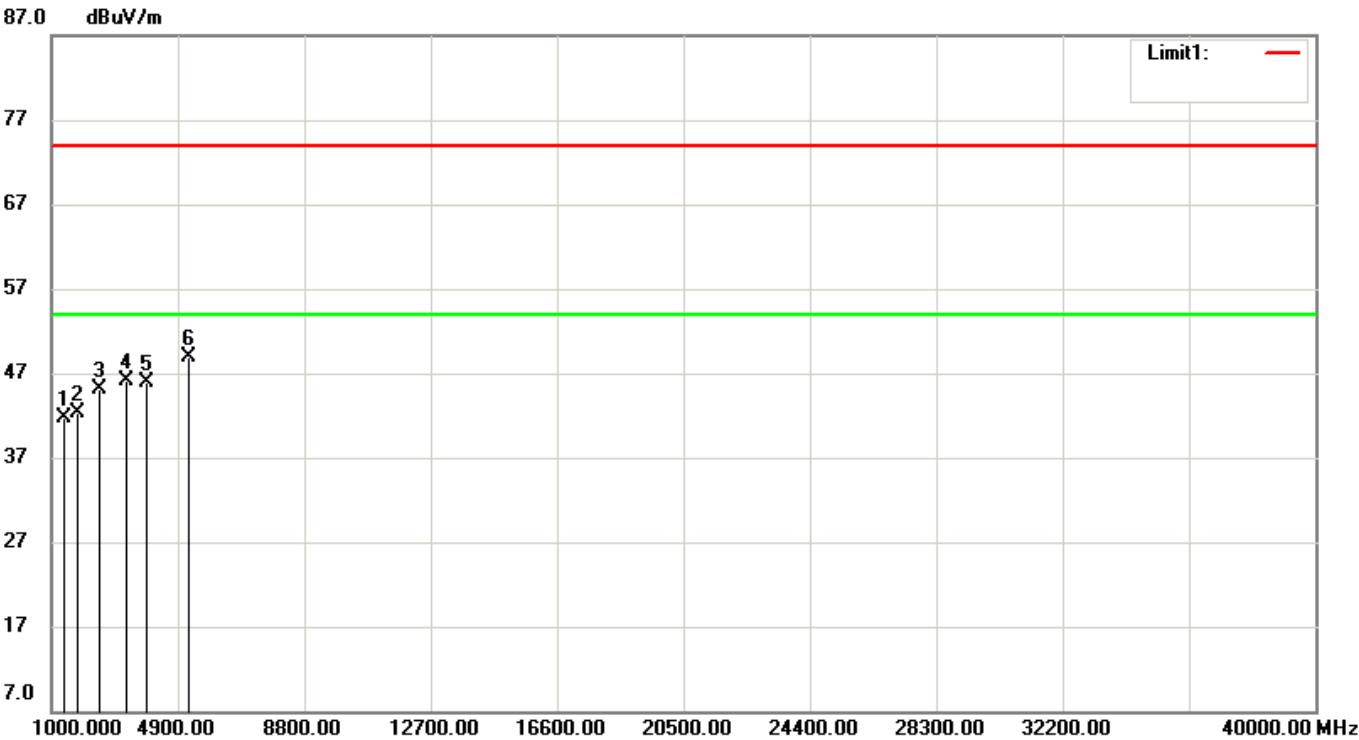
註：1. 若以峰值檢測功能測量之值符合平均值限制值，則可視同以平均值功能測量之值亦符合平均值限制值。
2. 量測不準確度: $\pm 4.1\text{dB}(1\text{GHz} \leq f < 18\text{GHz})$
 $\pm 4.4\text{dB}(18\text{GHz} \leq f \leq 40\text{GHz})$

10.5.2.2.2 調變技術: IEEE 802.11ac VHT20

a. Channel Low

操作模式：發射接收
基本波頻率：5745 MHz

File: 20-02-MAS-101_5-8ac20_Ant2 #20 Date: 2020/8/5 Temperature: 24 °C
Site: RE02-EMC B1-N2 Humidity: 62 %



Condition: NCC_Above1G_Pk Polarization: Horizontal
EUT: Wireless Embedded Module Distance: 3m
Model: SX-SDMAC
Test Mode: UNII Operator: Phillip
Note: CH LOW-1

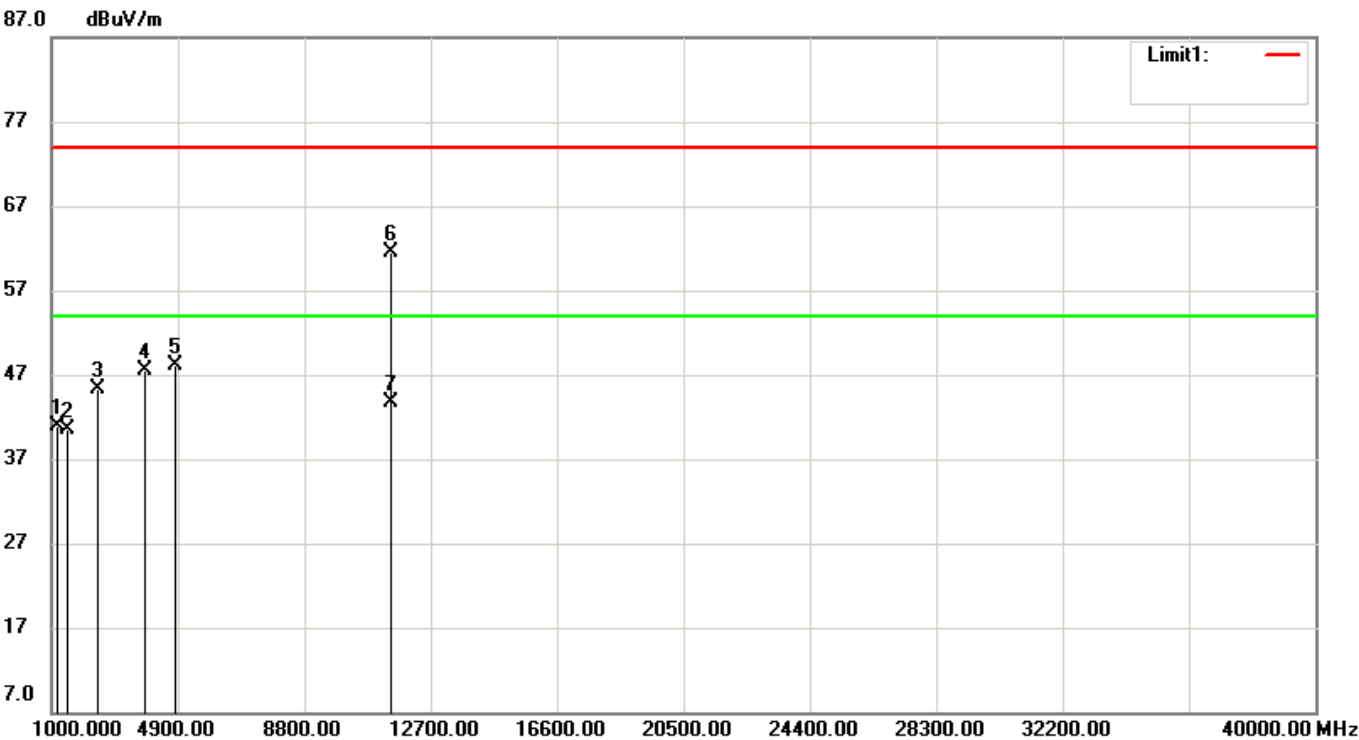
No.	Frequency (MHz)	Reading (dBuV/m)	Detector	Corrected dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)
1	1318.02880	50.41	peak	-8.65	41.76	74.00	-32.24
2	1795.07210	47.89	peak	-5.55	42.34	74.00	-31.66
3	2446.27400	47.62	peak	-2.56	45.06	74.00	-28.94
4	3256.49030	47.73	peak	-1.53	46.20	74.00	-27.80
5	3892.54800	46.06	peak	-0.14	45.92	74.00	-28.08
6*	5247.95670	46.97	peak	1.98	48.95	74.00	-25.05

註：1. 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。

2. 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：5745 MHz

File: 20-02-MAS-101_5-8ac20_Ant2 #21 Date: 2020/8/5 Temperature: 24 °C
Site: RE02-EMC B1-N2 Humidity: 62 %



Condition: NCC_Above1G_Pk Polarization: Vertical
EUT: Wireless Embedded Module Distance: 3m
Model: SX-SDMAC
Test Mode: UNII Operator: Phillip
Note: CH LOW-1

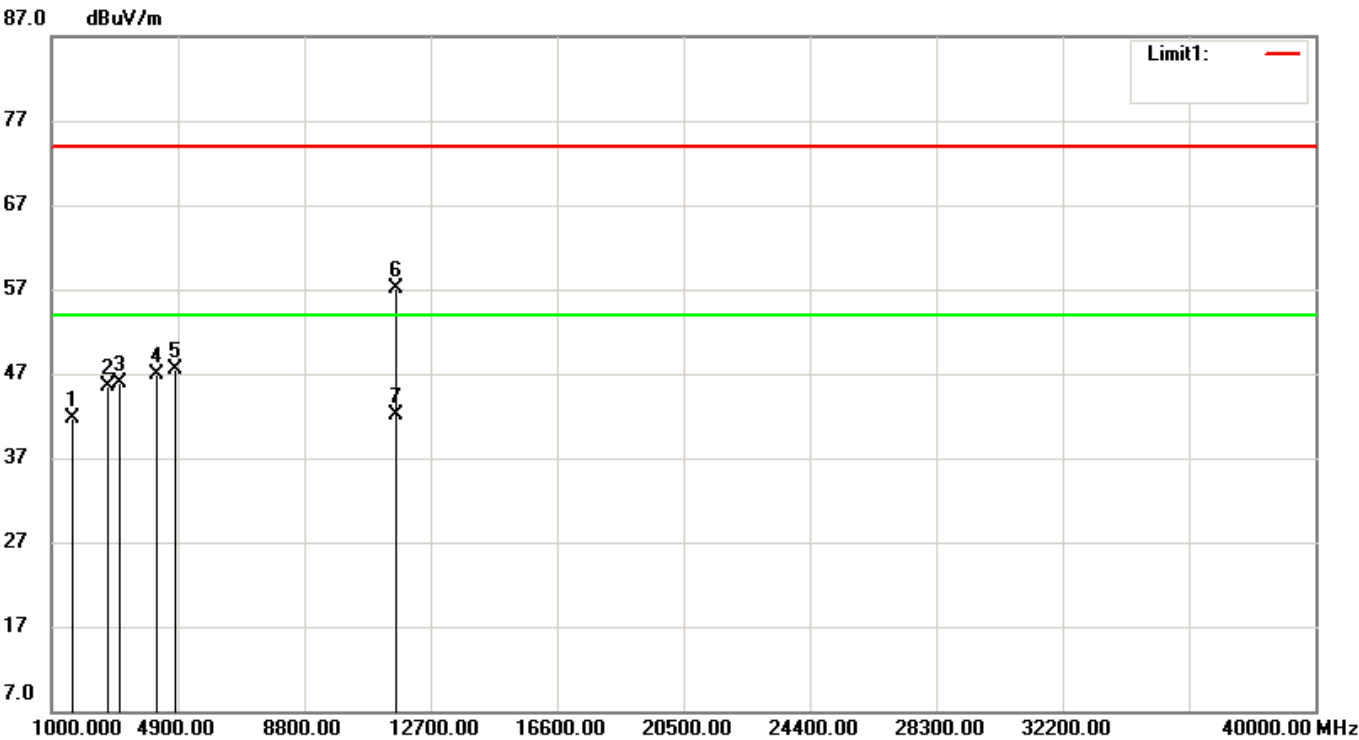
No.	Frequency (MHz)	Reading (dBuV/m)	Detector	Corrected dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)
1	1181.73070	49.91	peak	-9.00	40.91	74.00	-33.09
2	1461.89900	48.88	peak	-8.28	40.60	74.00	-33.40
3	2408.41340	47.91	peak	-2.66	45.25	74.00	-28.75
4	3831.97110	47.84	peak	-0.29	47.55	74.00	-26.45
5	4793.62980	47.03	peak	1.02	48.05	74.00	-25.95
6	11487.51600	54.37	peak	7.19	61.56	74.00	-12.44
7*	11487.51600	36.44	AVG	7.19	43.63	54.00	-10.37

註：1. 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。
2. 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：5785 MHz

File: 20-02-MAS-101_5-8ac20_Ant2 #22 Date: 2020/8/5 Temperature: 24 °C
Site: RE02-EMC B1-N2 Humidity: 62 %



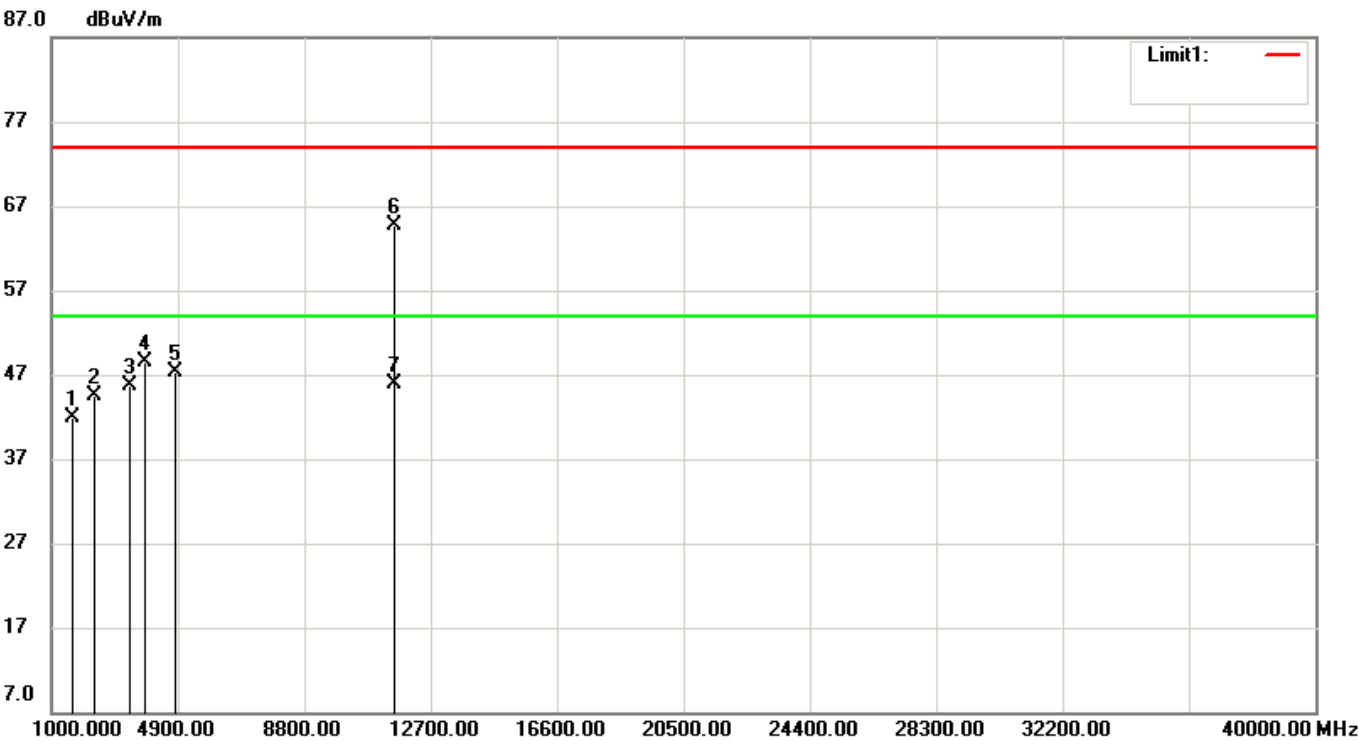
Condition: NCC_Above1G_Pk Polarization: Horizontal
EUT: Wireless Embedded Module Distance: 3m
Model: SX-SDMAC
Test Mode: UNII Operator: Phillip
Note: CH MID-1

No.	Frequency (MHz)	Reading (dBuV/m)	Detector	Corrected dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)
1	1598.19710	49.02	peak	-7.30	41.72	74.00	-32.28
2	2741.58650	47.63	peak	-2.17	45.46	74.00	-28.54
3	3120.19230	47.73	peak	-1.73	46.00	74.00	-28.00
4	4218.14900	46.65	peak	0.27	46.92	74.00	-27.08
5	4808.77400	46.52	peak	1.04	47.56	74.00	-26.44
6	11569.27880	49.75	peak	7.26	57.01	74.00	-16.99
7*	11569.27880	34.81	AVG	7.26	42.07	54.00	-11.93

註：1. 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。
2. 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：5785 MHz

File: 20-02-MAS-101_5-8ac20_Ant2 #23 Date: 2020/8/5 Temperature: 24 °C
Site: RE02-EMC B1-N2 Humidity: 62 %



Condition: NCC_Above1G_Pk Polarization: Vertical
EUT: Wireless Embedded Module Distance: 3m
Model: SX-SDMAC
Test Mode: UNII Operator: Phillip
Note: CH MID-1

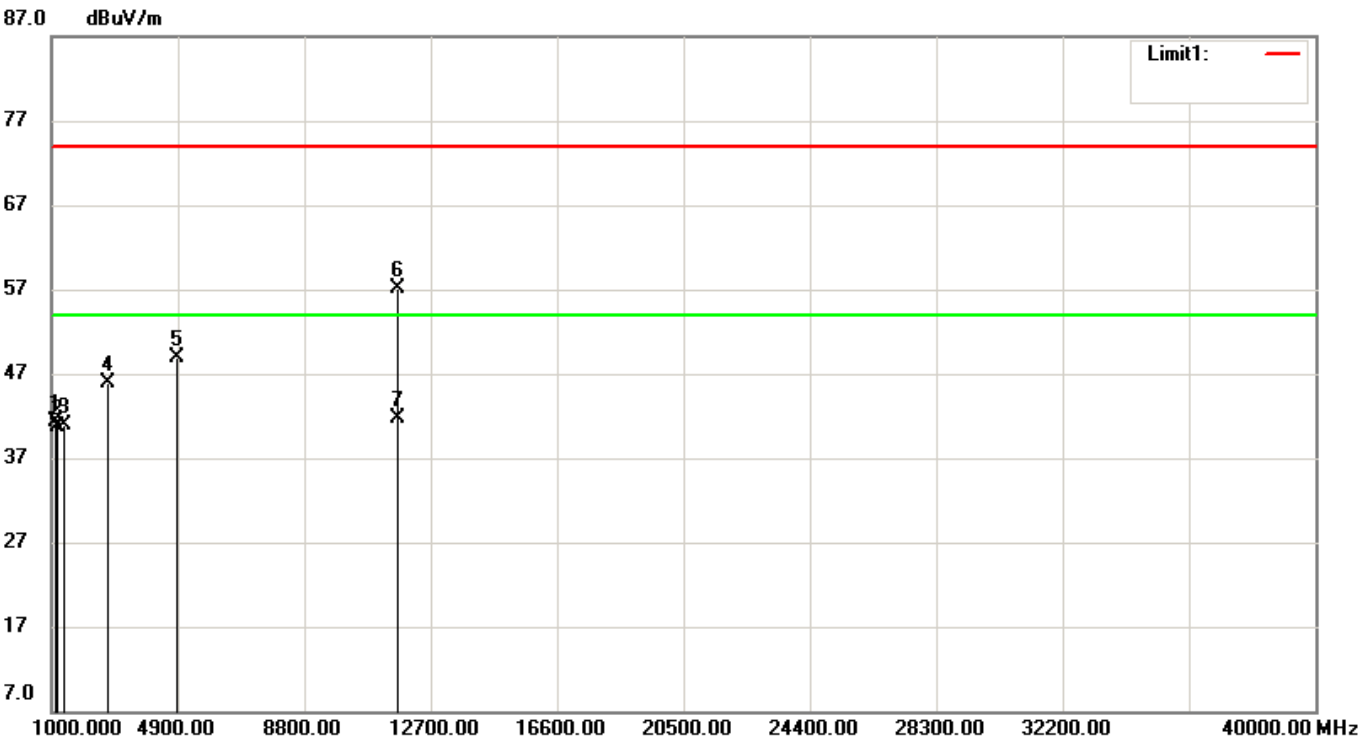
No.	Frequency (MHz)	Reading (dBuV/m)	Detector	Corrected dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)
1	1598.19710	49.29	peak	-7.30	41.99	74.00	-32.01
2	2279.68750	47.60	peak	-3.00	44.60	74.00	-29.40
3	3423.07700	47.08	peak	-1.28	45.80	74.00	-28.20
4	3854.68750	48.68	peak	-0.23	48.45	74.00	-25.55
5	4755.76920	46.40	peak	0.95	47.35	74.00	-26.65
6	11567.08650	57.38	peak	7.26	64.64	74.00	-9.36
7*	11567.08650	38.57	AVG	7.26	45.83	54.00	-8.17

註：1. 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。
2. 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：5825 MHz

File: 20-02-MAS-101_5-8ac20_Ant2 #24 Date: 2020/8/5 Temperature: 24 °C
Site: RE02-EMC B1-N2 Humidity: 62 %



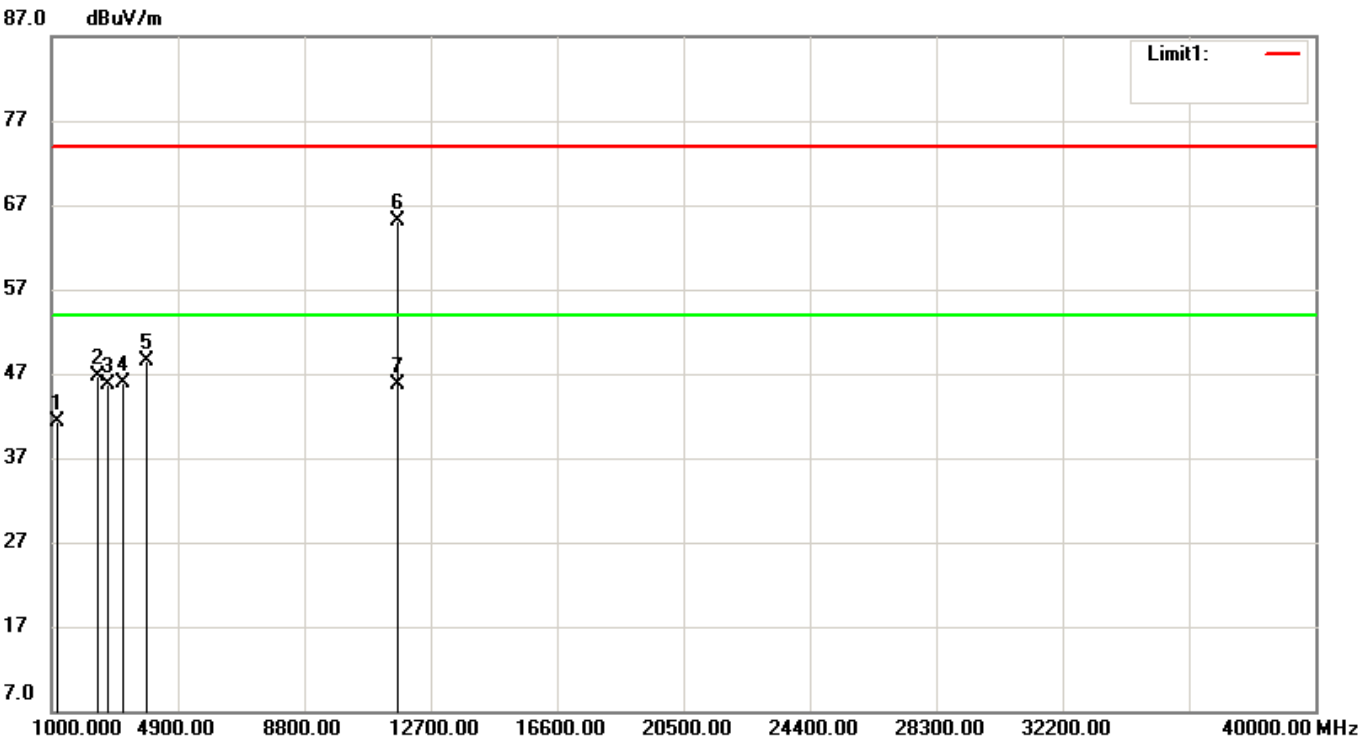
Condition: NCC_Above1G_Pk Polarization: Horizontal
EUT: Wireless Embedded Module Distance: 3m
Model: SX-SDMAC
Test Mode: UNII Operator: Phillip
Note: CH HIGH-1

No.	Frequency (MHz)	Reading (dBuV/m)	Detector	Corrected dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)
1	1068.14900	50.59	peak	-9.29	41.30	74.00	-32.70
2	1181.73070	49.78	peak	-9.00	40.78	74.00	-33.22
3	1318.02880	49.61	peak	-8.65	40.96	74.00	-33.04
4	2741.58650	48.00	peak	-2.17	45.83	74.00	-28.17
5	4839.06250	47.86	peak	1.11	48.97	74.00	-25.03
6	11647.99680	49.72	peak	7.33	57.05	74.00	-16.95
7*	11647.99680	34.29	AVG	7.33	41.62	54.00	-12.38

註：1. 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。
2. 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：5825 MHz

File: 20-02-MAS-101_5-8ac20_Ant2 #25 Date: 2020/8/5 Temperature: 24 °C
Site: RE02-EMC B1-N2 Humidity: 62 %



Condition: NCC_Above1G_Pk Polarization: Vertical
EUT: Wireless Embedded Module Distance: 3m
Model: SX-SDMAC
Test Mode: UNII Operator: Phillip
Note: CH HIGH-1

No.	Frequency (MHz)	Reading (dBuV/m)	Detector	Corrected dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)
1	1181.73070	50.21	peak	-9.00	41.21	74.00	-32.79
2	2415.98550	49.31	peak	-2.64	46.67	74.00	-27.33
3	2703.72600	47.89	peak	-2.21	45.68	74.00	-28.32
4	3150.48060	47.61	peak	-1.68	45.93	74.00	-28.07
5	3884.97600	48.74	peak	-0.17	48.57	74.00	-25.43
6	11647.91660	57.73	peak	7.33	65.06	74.00	-8.94
7*	11647.91660	38.33	AVG	7.33	45.66	54.00	-8.34

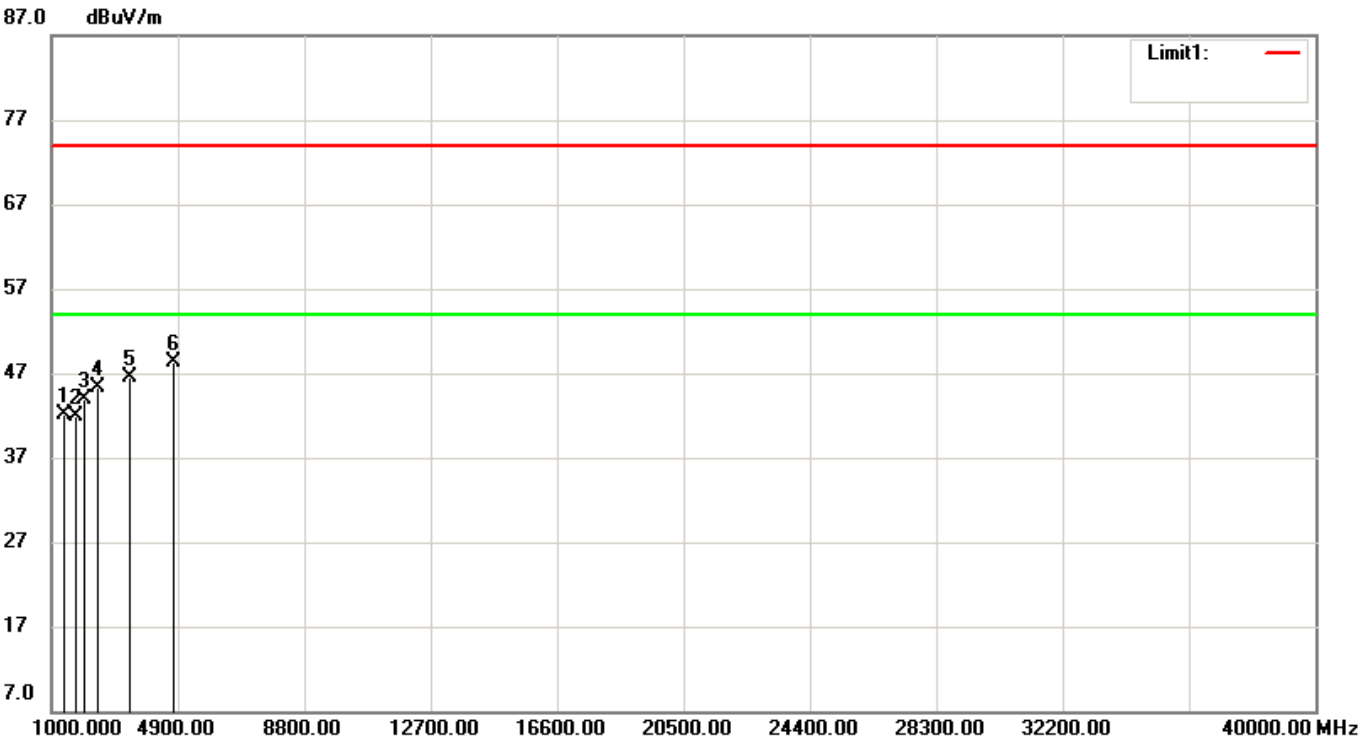
註：1. 若以峰值檢測功能測量之值符合平均值限制值，則可視同以平均值功能測量之值亦符合平均值限制值。
2. 量測不準確度: $\pm 4.1\text{dB}(1\text{GHz} \leq f < 18\text{GHz})$
 $\pm 4.4\text{dB}(18\text{GHz} \leq f \leq 40\text{GHz})$

10.5.2.2.3 調變技術: IEEE 802.11ac VHT40

a. Channel Low

操作模式：發射接收
基本波頻率：5755 MHz

File: 20-02-MAS-101_5-8ac40_Ant2 #13 Date: 2020/8/5 Temperature: 24 °C
Site: RE02-EMC B1-N2 Humidity: 62 %



Condition: NCC_Above1G_Pk Polarization: Horizontal
EUT: Wireless Embedded Module Distance: 3m
Model: SX-SDMAC
Test Mode: UNII Operator: Phillip
Note: CH LOW-1

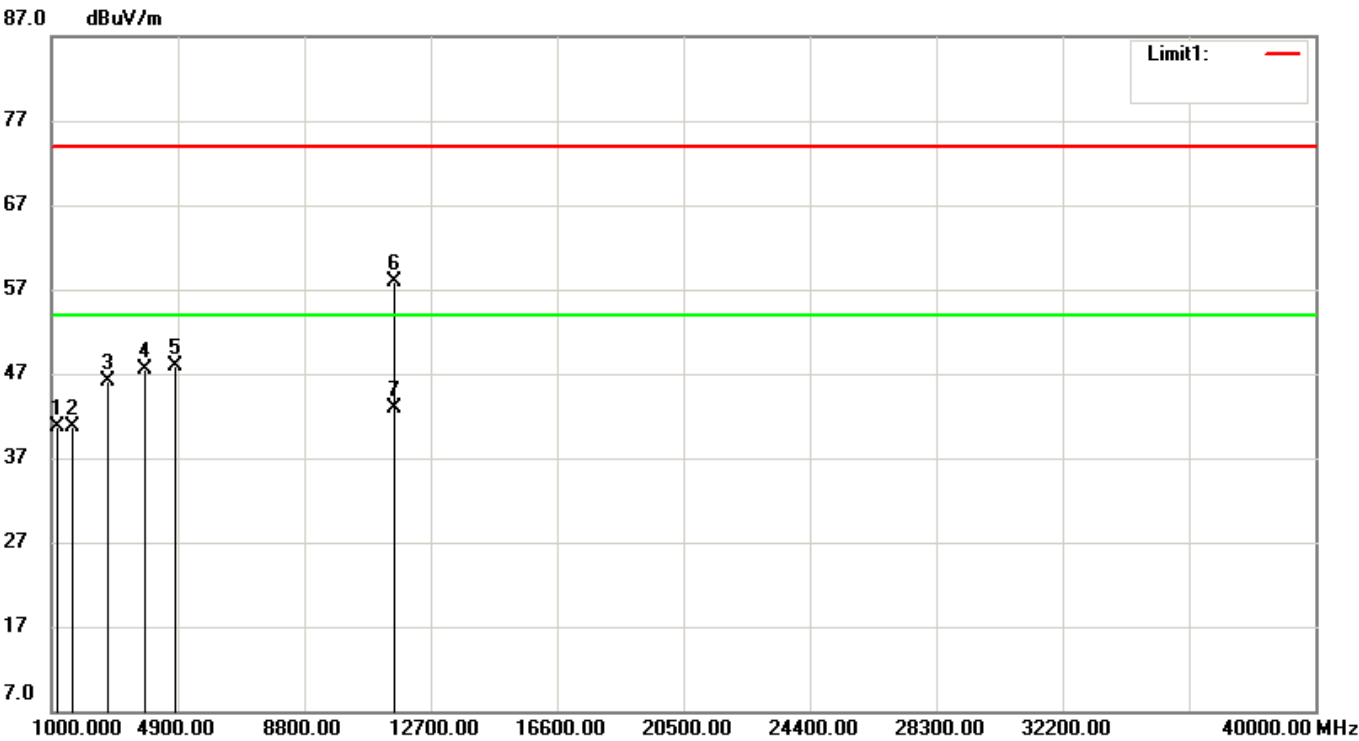
No.	Frequency (MHz)	Reading (dBuV/m)	Detector	Corrected dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)
1	1318.02880	50.84	peak	-8.65	42.19	74.00	-31.81
2	1689.06250	48.48	peak	-6.50	41.98	74.00	-32.02
3	1946.51440	48.17	peak	-4.21	43.96	74.00	-30.04
4	2408.41340	48.03	peak	-2.66	45.37	74.00	-28.63
5	3423.07700	47.82	peak	-1.28	46.54	74.00	-27.46
6*	4748.19710	47.37	peak	0.93	48.30	74.00	-25.70

註：1. 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。

2. 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：5755 MHz

File: 20-02-MAS-101_5-8ac40_Ant2 #14 Date: 2020/8/5 Temperature: 24 °C
Site: RE02-EMC B1-N2 Humidity: 62 %



Condition: NCC_Above1G_Pk Polarization: Vertical
EUT: Wireless Embedded Module Distance: 3m
Model: SX-SDMAC
Test Mode: UNII Operator: Phillip
Note: CH LOW-1

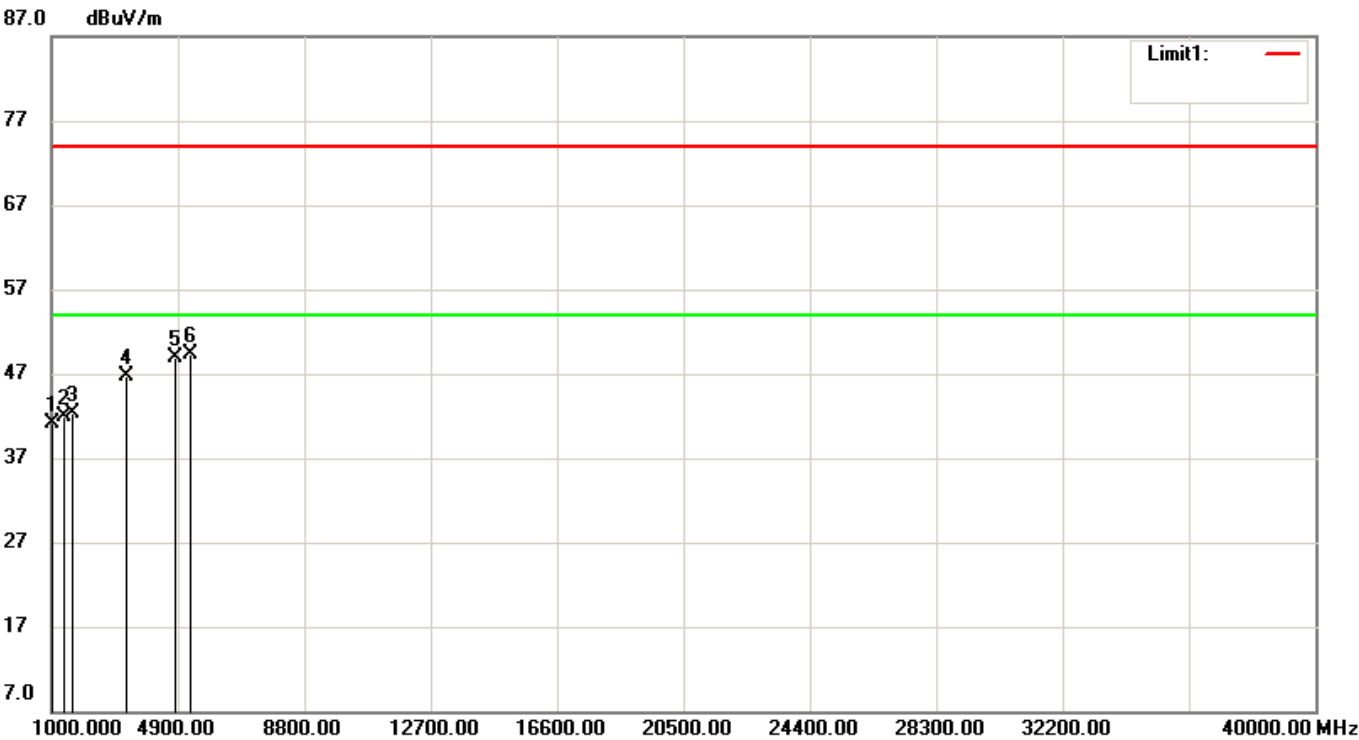
No.	Frequency (MHz)	Reading (dBuV/m)	Detector	Corrected dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)
1	1181.73070	49.75	peak	-9.00	40.75	74.00	-33.25
2	1567.90860	48.32	peak	-7.58	40.74	74.00	-33.26
3	2726.44230	48.32	peak	-2.19	46.13	74.00	-27.87
4	3839.54320	47.72	peak	-0.28	47.44	74.00	-26.56
5	4801.20200	46.81	peak	1.03	47.84	74.00	-26.16
6	11510.48080	50.64	peak	7.21	57.85	74.00	-16.15
7*	11510.48080	35.70	AVG	7.21	42.91	54.00	-11.09

註：1. 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。
2. 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：5795 MHz

File: 20-02-MAS-101_5-8ac40_Ant2 #15 Date: 2020/8/5 Temperature: 24 °C
Site: RE02-EMC B1-N2 Humidity: 62 %



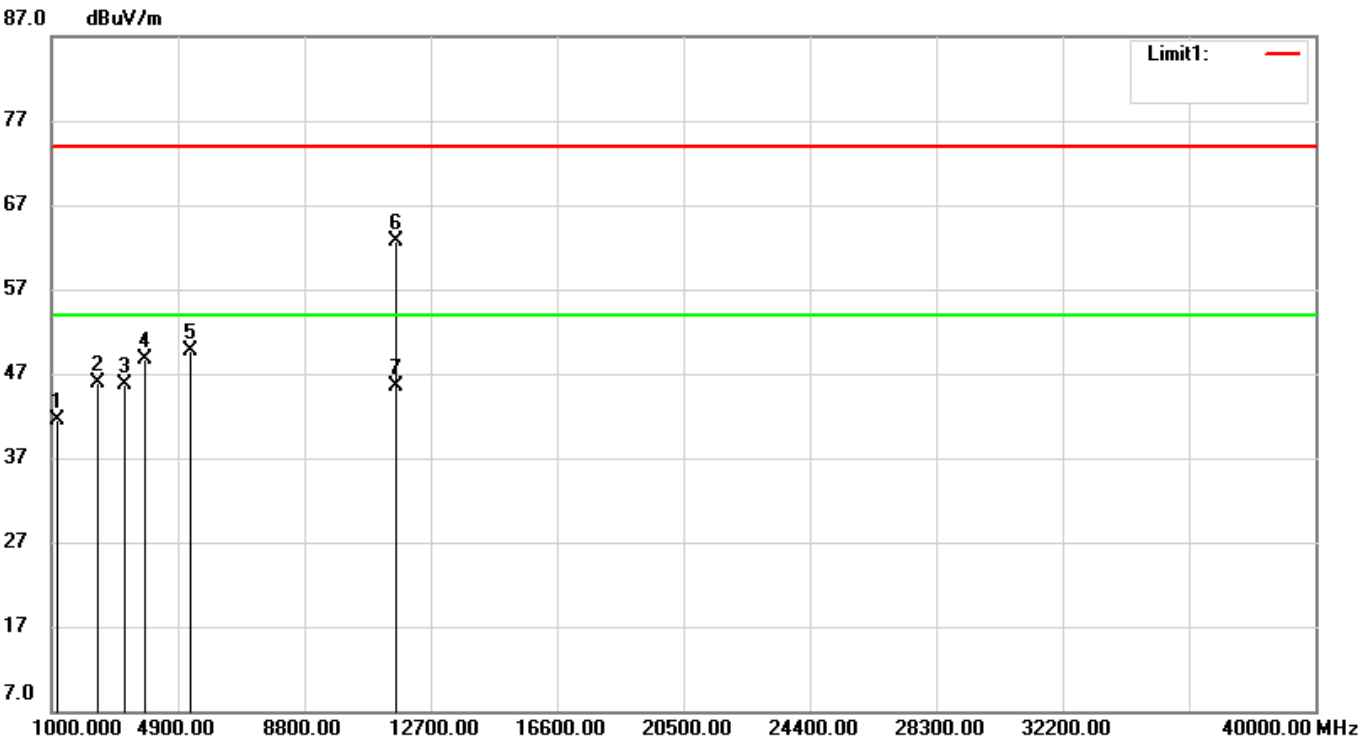
Condition: NCC_Above1G_Pk Polarization: Horizontal
EUT: Wireless Embedded Module Distance: 3m
Model: SX-SDMAC
Test Mode: UNII Operator: Phillip
Note: CH HIGH-1

No.	Frequency (MHz)	Reading (dBuV/m)	Detector	Corrected dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)
1	1037.86050	50.45	peak	-9.37	41.08	74.00	-32.92
2	1318.02880	50.65	peak	-8.65	42.00	74.00	-32.00
3	1598.19710	49.60	peak	-7.30	42.30	74.00	-31.70
4	3264.06250	48.31	peak	-1.51	46.80	74.00	-27.20
5	4778.48550	47.82	peak	0.99	48.81	74.00	-25.19
6*	5285.81730	47.28	peak	2.07	49.35	74.00	-24.65

註：1. 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。
2. 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：5795 MHz

File: 20-02-MAS-101_5-8ac40_Ant2 #16 Date: 2020/8/5 Temperature: 24 °C
Site: RE02-EMC B1-N2 Humidity: 62 %



Condition: NCC_Above1G_Pk Polarization: Vertical
EUT: Wireless Embedded Module Distance: 3m
Model: SX-SDMAC
Test Mode: UNII Operator: Phillip
Note: CH HIGH-1

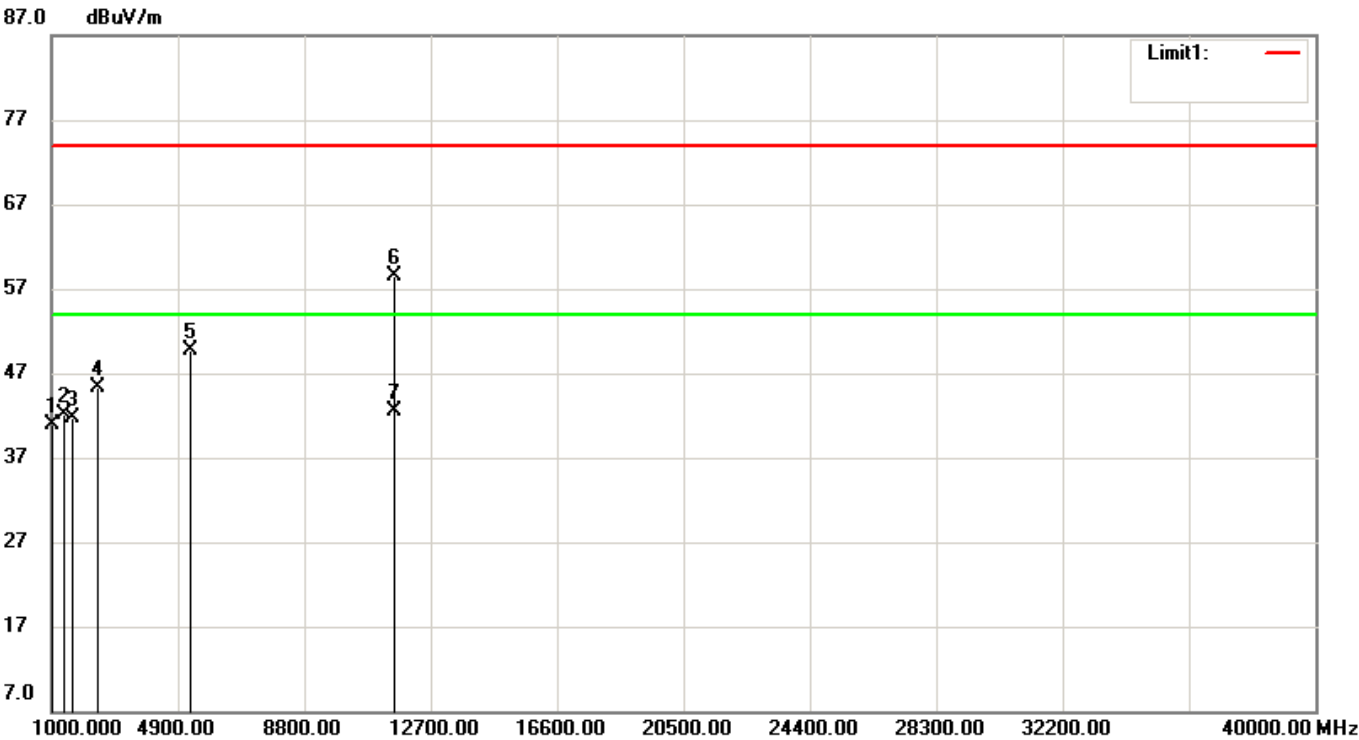
No.	Frequency (MHz)	Reading (dBuV/m)	Detector	Corrected dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)
1	1181.73070	50.55	peak	-9.00	41.55	74.00	-32.45
2	2415.98550	48.63	peak	-2.64	45.99	74.00	-28.01
3	3195.91340	47.33	peak	-1.61	45.72	74.00	-28.28
4	3862.25960	48.97	peak	-0.23	48.74	74.00	-25.26
5	5300.96150	47.57	peak	2.10	49.67	74.00	-24.33
6	11588.87820	55.48	peak	7.27	62.75	74.00	-11.25
7*	11588.87820	38.31	AVG	7.27	45.58	54.00	-8.42

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

10.5.2.2.4 調變技術: IEEE 802.11ac VHT80

操作模式：發射接收
基本波頻率：5775 MHz

File: 20-02-MAS-101_5-8ac80_Ant2 #11 Date: 2020/8/5 Temperature: 24 °C
Site: RE02-EMC B1-N2 Humidity: 62 %



Condition: NCC_Above1G_Pk Polarization: Horizontal
EUT: Wireless Embedded Module Distance: 3m
Model: SX-SDMAC
Test Mode: UNII Operator: Phillip
Note: CH LOW-1

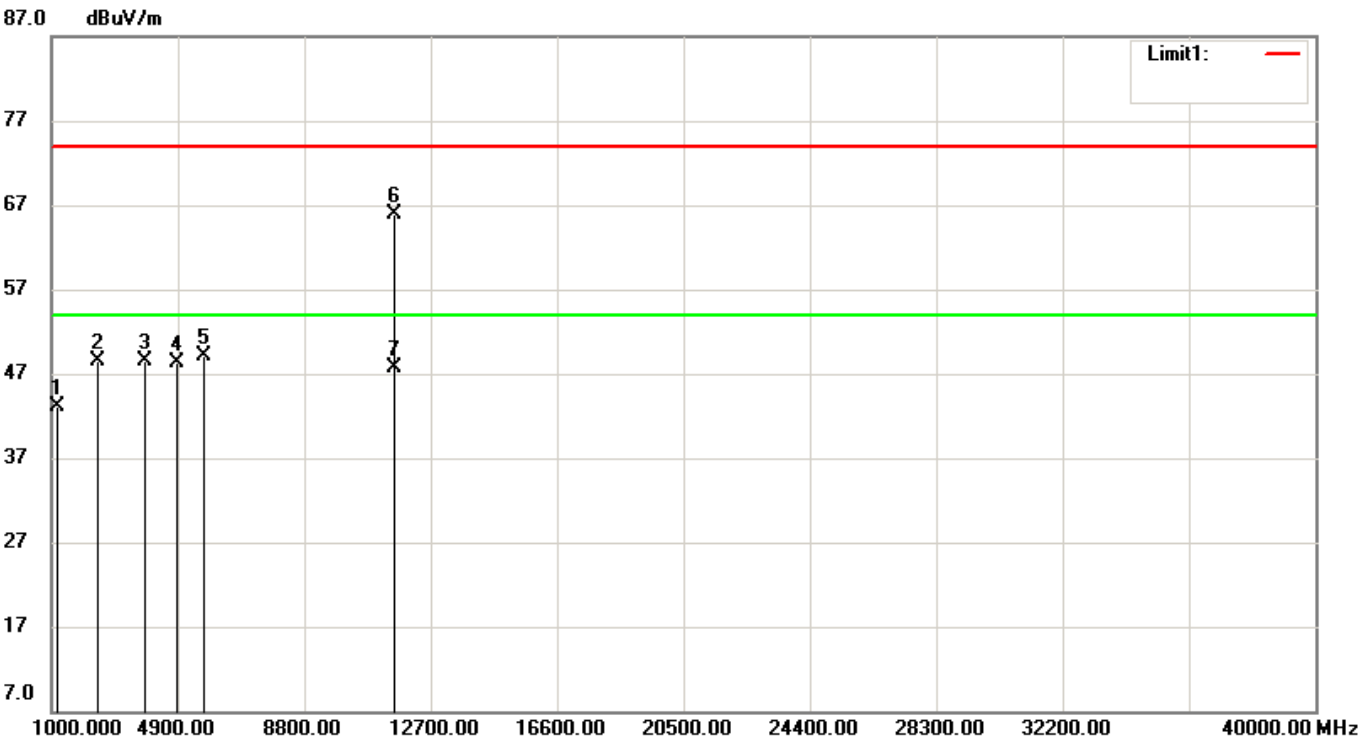
No.	Frequency (MHz)	Reading (dBuV/m)	Detector	Corrected dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)
1	1015.14420	50.43	peak	-9.43	41.00	74.00	-33.00
2	1318.02880	50.71	peak	-8.65	42.06	74.00	-31.94
3	1598.19710	49.06	peak	-7.30	41.76	74.00	-32.24
4	2408.41340	47.95	peak	-2.66	45.29	74.00	-28.71
5	5285.81730	47.58	peak	2.07	49.65	74.00	-24.35
6	11548.39740	51.36	peak	7.24	58.60	74.00	-15.40
7*	11548.39740	35.21	AVG	7.24	42.45	54.00	-11.55

註：1. 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。

2. 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：5775 MHz

File: 20-02-MAS-101_5-8ac80_Ant2 #12 Date: 2020/8/5 Temperature: 24 °C
Site: RE02-EMC B1-N2 Humidity: 62 %



Condition: NCC_Above1G_Pk Polarization: Vertical
EUT: Wireless Embedded Module Distance: 3m
Model: SX-SDMAC
Test Mode: UNII Operator: Phillip
Note: CH LOW-1

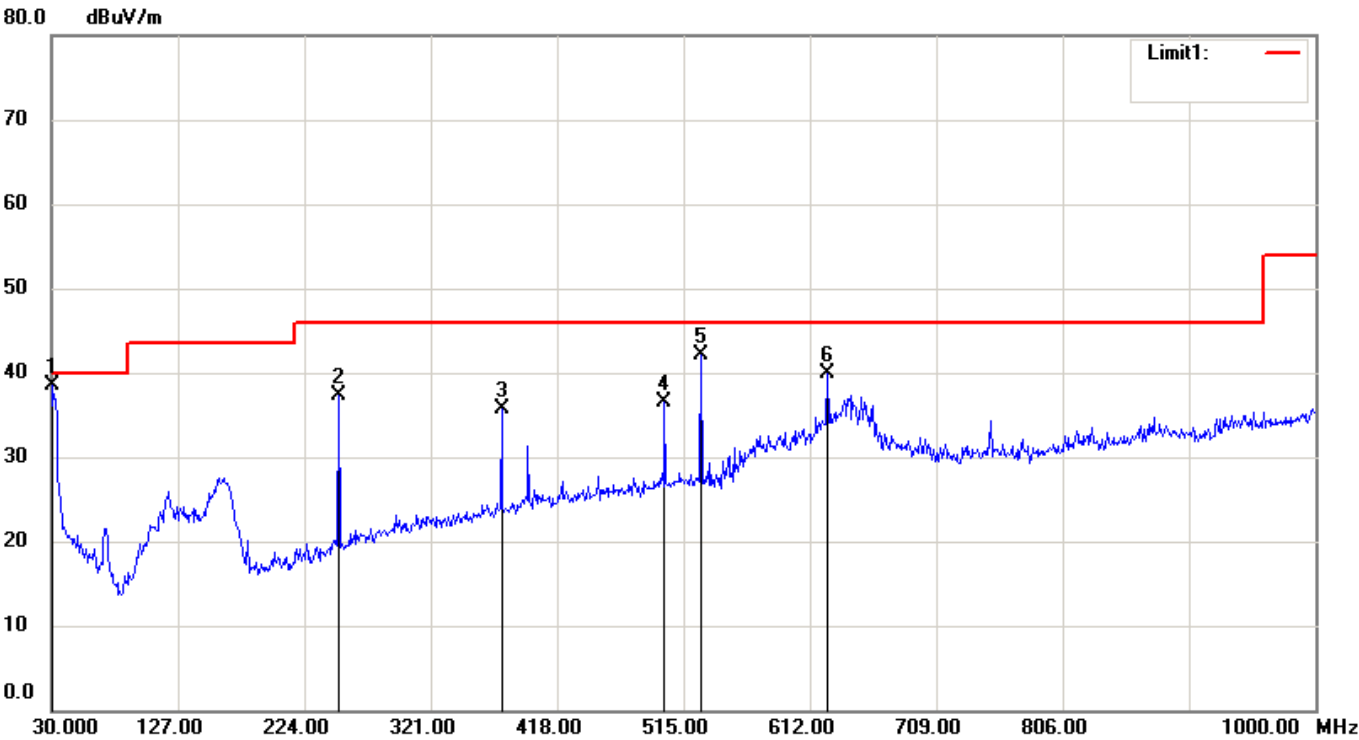
No.	Frequency (MHz)	Reading (dBuV/m)	Detector	Corrected dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)
1	1174.15860	52.10	peak	-9.02	43.08	74.00	-30.92
2	2408.41340	51.17	peak	-2.66	48.51	74.00	-25.49
3	3854.68750	48.80	peak	-0.23	48.57	74.00	-25.43
4	4869.35100	47.13	peak	1.16	48.29	74.00	-25.71
5	5671.99510	46.54	peak	2.55	49.09	74.00	-24.91
6	11550.00000	58.68	peak	7.24	65.92	74.00	-8.08
7*	11550.00000	40.51	AVG	7.24	47.75	54.00	-6.25

註：1. 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。
2. 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

10.5.3.1 測試狀態：Antenna 1

File: 20-02-MAS-101_Below #31 Date: 2020/9/1 Temperature: 21 °C
1G_Ant1
Site: RE02-EMC B1-N2 Humidity: 60 %



Condition: NCC_LP0002_30-1000MHz Polarization: Horizontal
EUT: Wireless Embedded Module Distance: 3m
Model: SX-SDMAC
Test Mode: Band4 Operator: Phillip
Note:

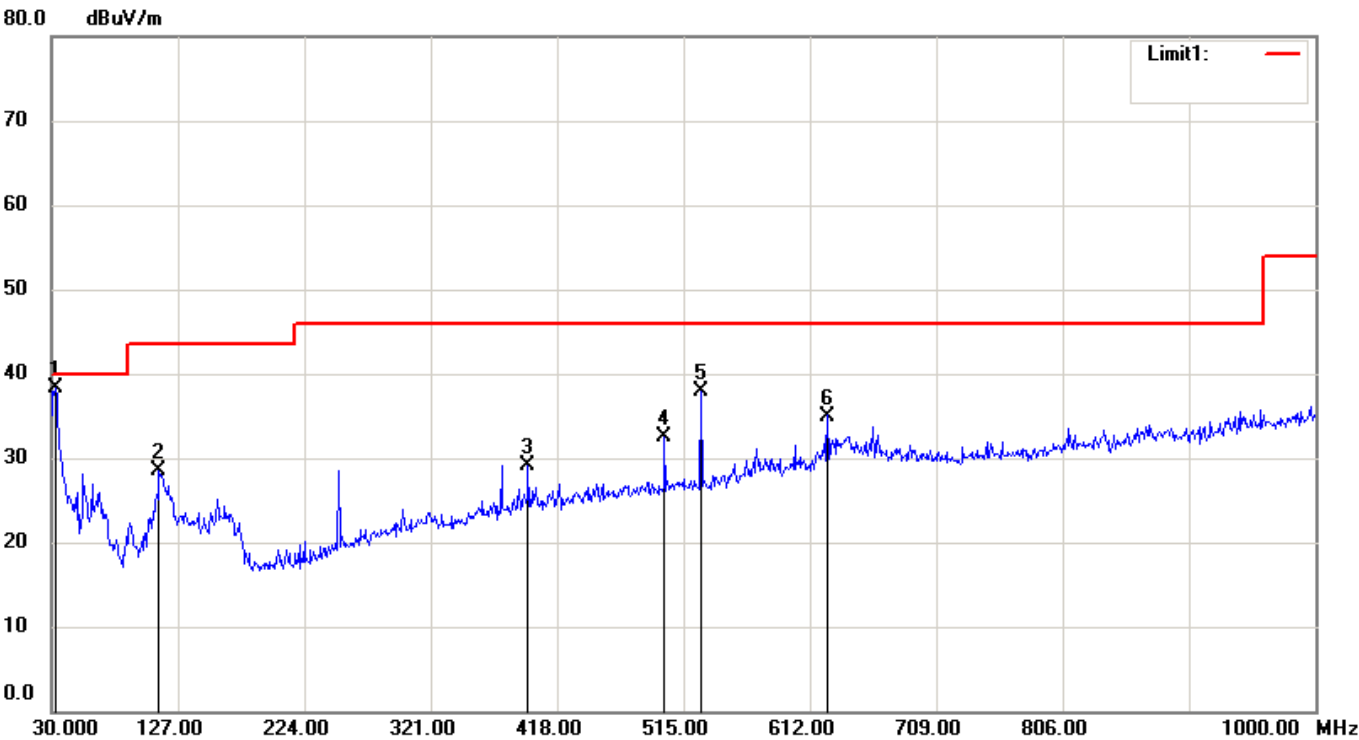
No.	Frequency (MHz)	Reading (dBuV/m)	Detector	Corrected dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)
1*	30.9700	42.39	QP	-3.92	38.47	40.00	-1.53
2	250.1900	43.81	QP	-6.52	37.29	46.00	-8.71
3	375.3200	38.20	QP	-2.55	35.65	46.00	-10.35
4	500.4500	37.38	QP	-0.79	36.59	46.00	-9.41
5	528.5800	42.47	QP	-0.35	42.12	46.00	-3.88
6	625.5800	38.44	QP	1.39	39.83	46.00	-6.17

File: 20-02-MAS-101_Below
1G_Ant1
Site: RE02-EMC B1-N2

#32

Date: 2020/9/1

Temperature: 21 °C
Humidity: 60 %



Condition: NCC_LP0002_30-1000MHz
EUT: Wireless Embedded Module
Model: SX-SDMAC
Test Mode: Band4
Note:

Polarization: Vertical
Distance: 3m
Operator: Phillip

No.	Frequency (MHz)	Reading (dBuV/m)	Detector	Corrected dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)
1*	32.9100	42.58	peak	-4.28	38.30	40.00	-1.70
2	112.4500	33.29	peak	-4.72	28.57	43.50	-14.93
3	395.6900	31.09	peak	-1.92	29.17	46.00	-16.83
4	500.4500	33.23	peak	-0.79	32.44	46.00	-13.56
5	528.5800	38.32	peak	-0.35	37.97	46.00	-8.03
6	625.5800	33.61	peak	1.39	35.00	46.00	-11.00

註：1. 若以峰值檢測功能測量之值符合準峰值限制值，則可視同以準峰值功能測量之值亦符合準峰值限制值。

2. 量測不準確度: +4.20dB/ -4.24 dB (30MHz≤f<1GHz)

10.5.3.2 測試狀態: Antenna 2

File: 20-02-MAS-101_Below
1G_Ant2_New

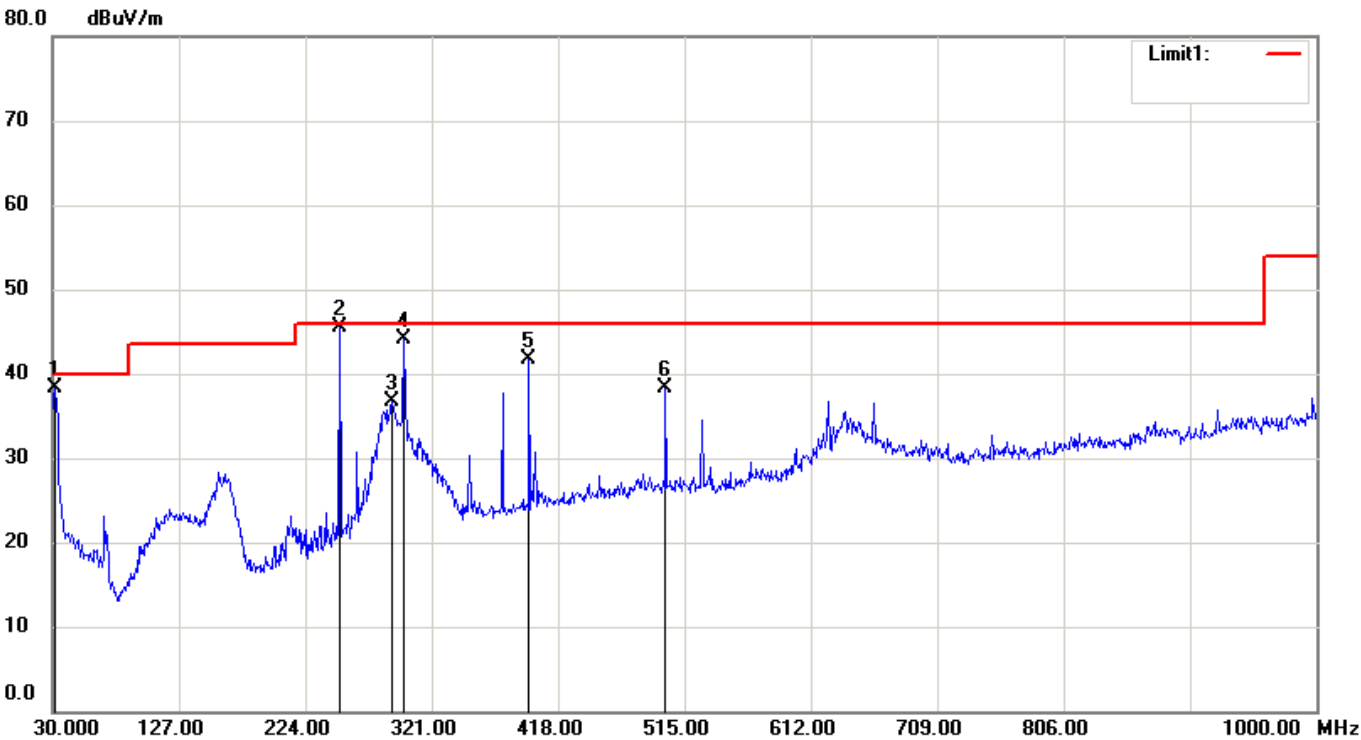
#11

Date: 2020/9/1

Temperature: 21 °C

Site: RE02-EMC B1-N2

Humidity: 60 %



Condition: NCC_LP0002_30-1000MHz

EUT: Wireless Embedded Module

Model: SX-SDMAC

Test Mode: Band 4

Note:

Polarization: Horizontal

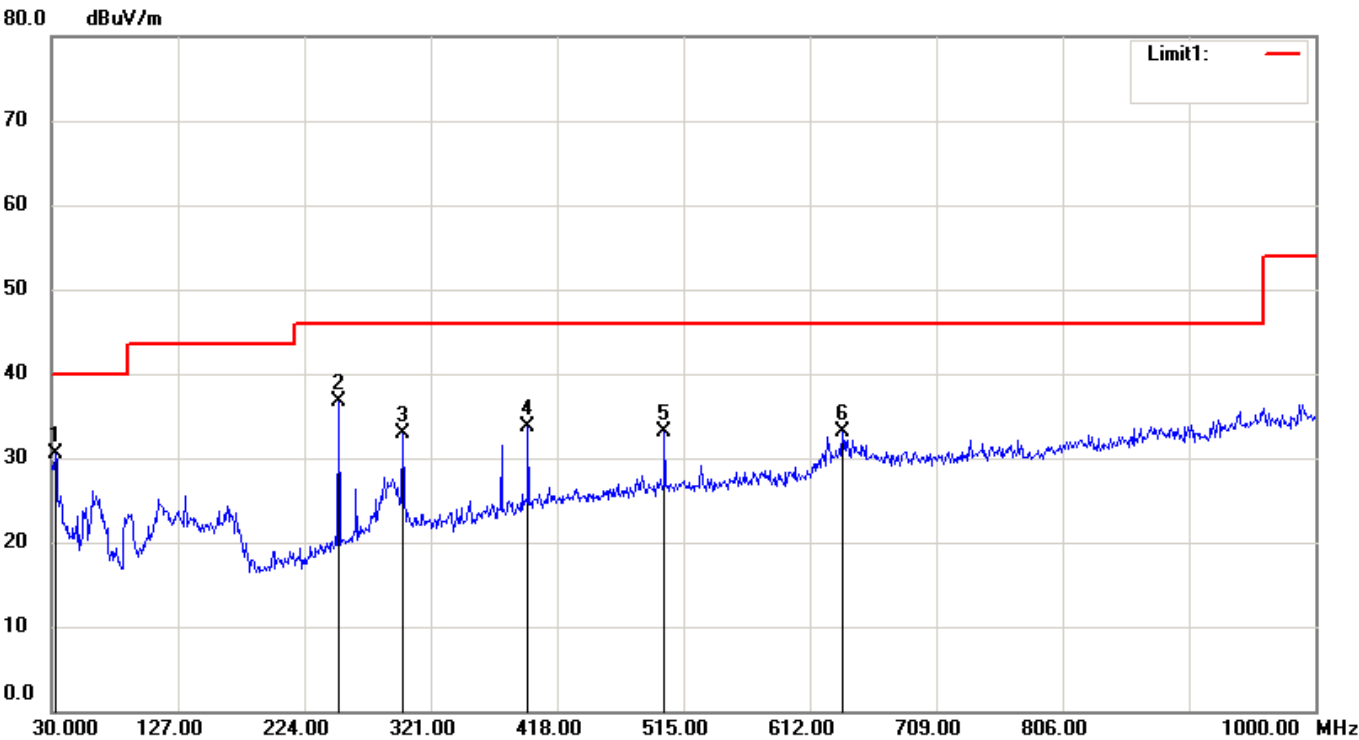
Distance: 3m

Operator: Phillip

No.	Frequency (MHz)	Reading (dBuV/m)	Detector	Corrected dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)
1	31.9400	42.34	QP	-4.10	38.24	40.00	-1.76
2*	250.1900	52.11	QP	-6.52	45.59	46.00	-0.41
3	290.9300	41.36	QP	-4.60	36.76	46.00	-9.24
4	299.6600	48.50	QP	-4.44	44.06	46.00	-1.94
5	395.6900	43.61	QP	-1.92	41.69	46.00	-4.31
6	500.4500	39.18	QP	-0.79	38.39	46.00	-7.61

File: 20-02-MAS-101_Below
1G_Ant2_New
Site: RE02-EMC B1-N2

#12 Date: 2020/9/1 Temperature: 21 °C
Humidity: 60 %



Condition: NCC_LP0002_30-1000MHz
EUT: Wireless Embedded Module
Model: SX-SDMAC
Test Mode: Band 4
Note:

Polarization: Vertical
Distance: 3m
Operator: Phillip

No.	Frequency (MHz)	Reading (dBuV/m)	Detector	Corrected dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)
1	32.9100	34.71	QP	-4.28	30.43	40.00	-9.57
2*	250.1900	43.21	QP	-6.52	36.69	46.00	-9.31
3	299.6600	37.29	QP	-4.44	32.85	46.00	-13.15
4	395.6900	35.72	QP	-1.92	33.80	46.00	-12.20
5	500.4500	33.89	QP	-0.79	33.10	46.00	-12.90
6	637.2200	31.15	QP	1.89	33.04	46.00	-12.96

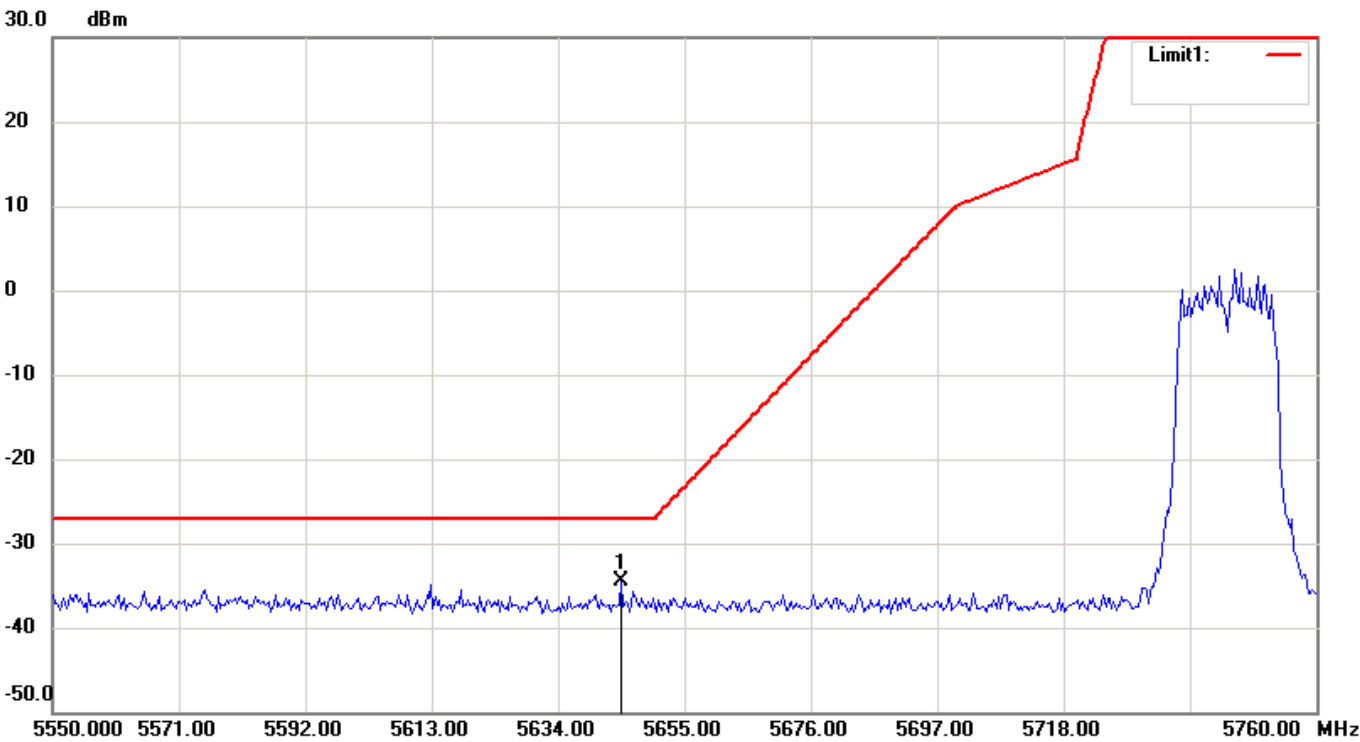
註：1. 若以峰值檢測功能測量之值符合準峰值限制值，則可視同以準峰值功能測量之值亦符合準峰值限制值。

2. 量測不準確度: +4.20dB/ -4.24 dB (30MHz≤f<1GHz)

10.6 頻帶外邊輻射量測之量測結果

Antenna 1
調變技術: IEEE 802.11a

File: 20-02-MAS-101_5-8a #19 Date: 2020/6/16 Temperature: 23 °C
Site: RE02-EMC B1-N2 Humidity: 60 %



Condition: 5.8G Bandedge Polarization: Vertical
EUT: Wireless Embedded Module Distance: 3m
Model: SX-SDMAC
Test Mode: UNII Operator: Phillip
Note: Low Bandedge

No.	Frequency	Reading	Detector	Corrected	Result	Limit	Margin	Height	Degree	Comment
	(MHz)	(dBm)		dB	(dBm)	(dBm)	(dB)	(cm)	(°)	
1*	5644.56730	-85.68	peak	51.26	-34.42	-27.00	-7.42	---	---	

File: 20-02-MAS-101_5-8a

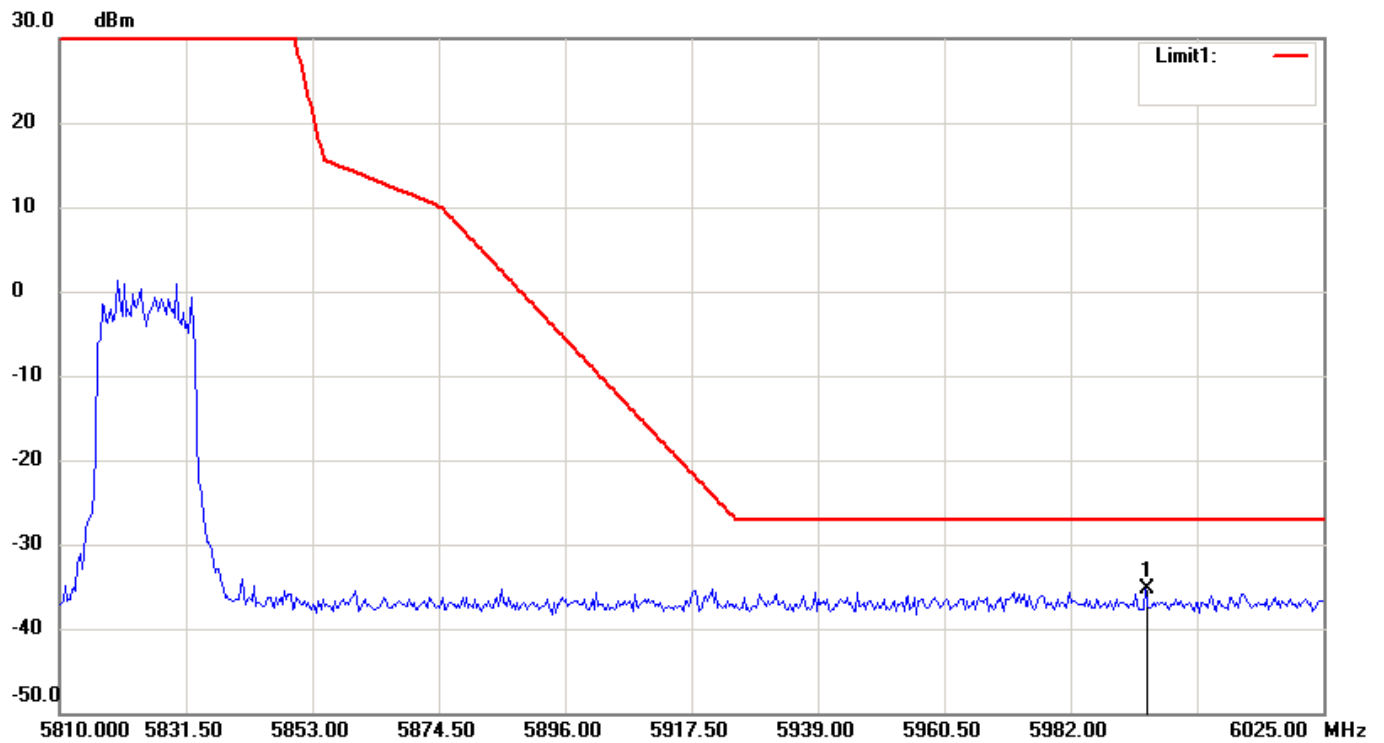
#20

Date: 2020/6/16

Temperature: 23 °C

Site: RE02-EMC B1-N2

Humidity: 60 %



Condition: 5.8G Bandedge

Polarization: Vertical

EUT: Wireless Embedded Module

Distance: 3m

Model: SX-SDMAC

Test Mode: UNII

Operator: Phillip

Note: High Bandedge

No.	Frequency	Reading	Detector	Corrected	Result	Limit	Margin	Height	Degree	Comment
	(MHz)	(dBm)		dB	(dBm)	(dBm)	(dB)	(cm)	(°)	
1*	5994.67950	-86.62	peak	51.33	-35.29	-27.00	-8.29	---	---	

調變技術: IEEE 802.11ac VHT20

File: 20-02-MAS-101_5-8ac20

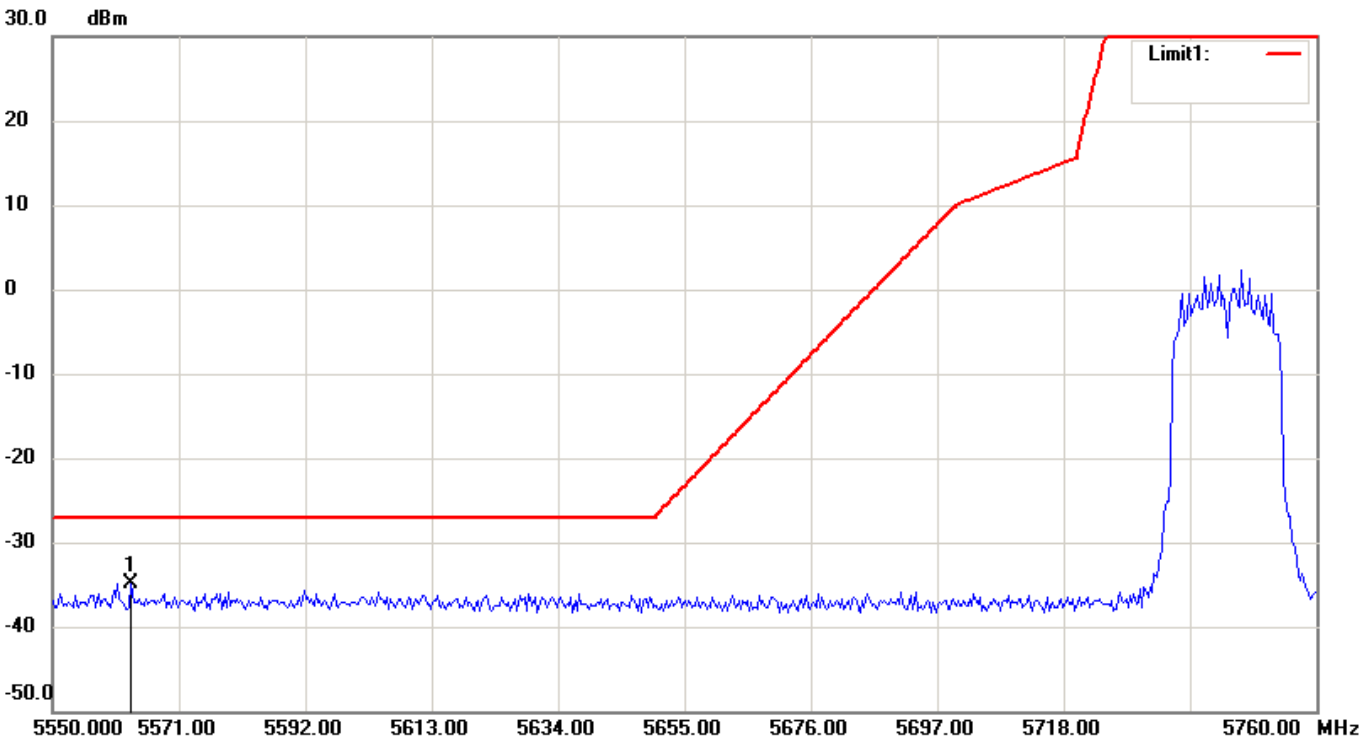
#19

Date: 2020/6/16

Temperature: 23 °C

Site: RE02-EMC B1-N2

Humidity: 60 %



Condition: 5.8G Bandedge

Polarization: Vertical

EUT: Wireless Embedded Module

Distance: 3m

Model: SX-SDMAC

Test Mode: UNII

Operator: Phillip

Note: Low Bandedge

No.	Frequency	Reading	Detector	Corrected	Result	Limit	Margin	Height	Degree	Comment
	(MHz)	(dBm)		dB	(dBm)	(dBm)	(dB)	(cm)	(°)	
1*	5563.12500	-86.06	peak	51.25	-34.81	-27.00	-7.81	---	---	

File: 20-02-MAS-101_5-8ac20

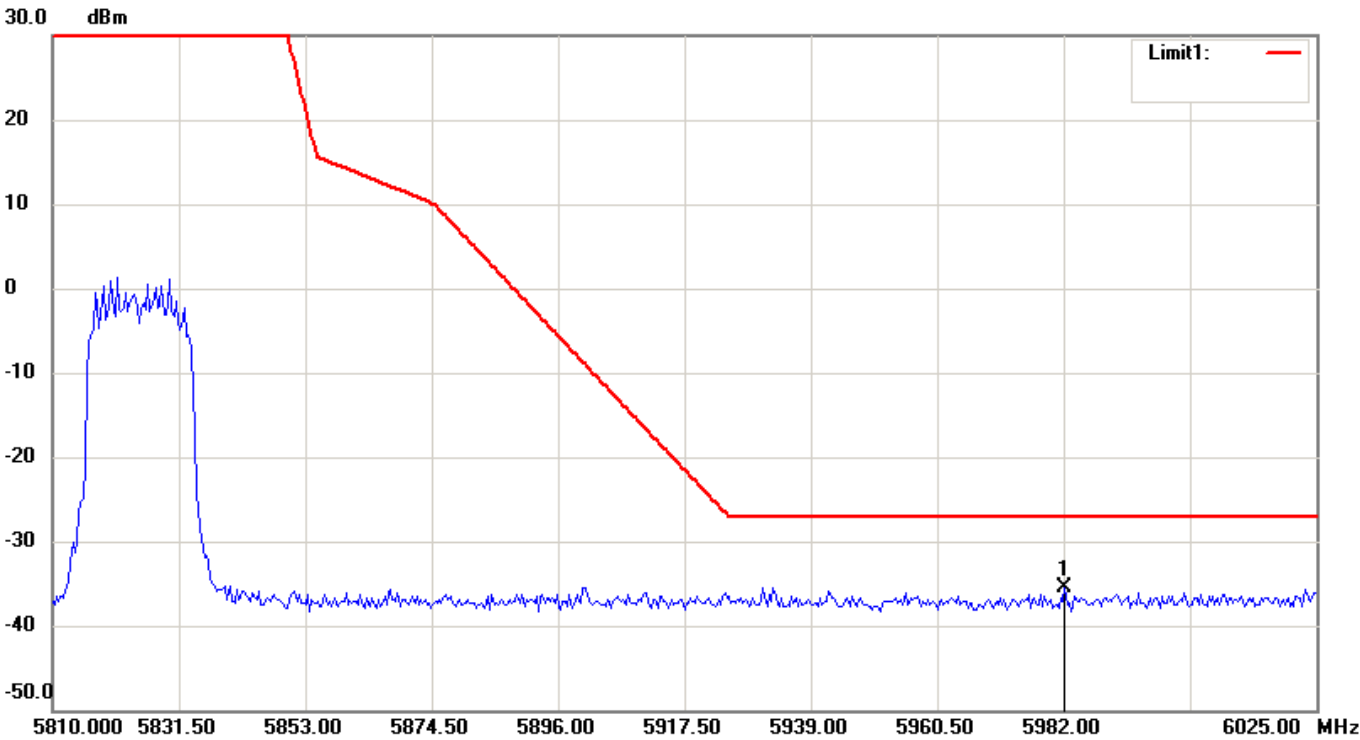
#20

Date: 2020/6/16

Temperature: 23 °C

Site: RE02-EMC B1-N2

Humidity: 60 %



Condition: 5.8G Bandedge

Polarization: Vertical

EUT: Wireless Embedded Module

Distance: 3m

Model: SX-SDMAC

Operator: Phillip

Test Mode: UNII

Note: High Bandedge

No.	Frequency	Reading	Detector	Corrected	Result	Limit	Margin	Height	Degree	Comment
	(MHz)	(dBm)		dB	(dBm)	(dBm)	(dB)	(cm)	(°)	
1*	5982.27560	-86.91	peak	51.32	-35.59	-27.00	-8.59	---	---	

調變技術: IEEE 802.11ac VHT40

File: 20-02-MAS-101_5-8ac40

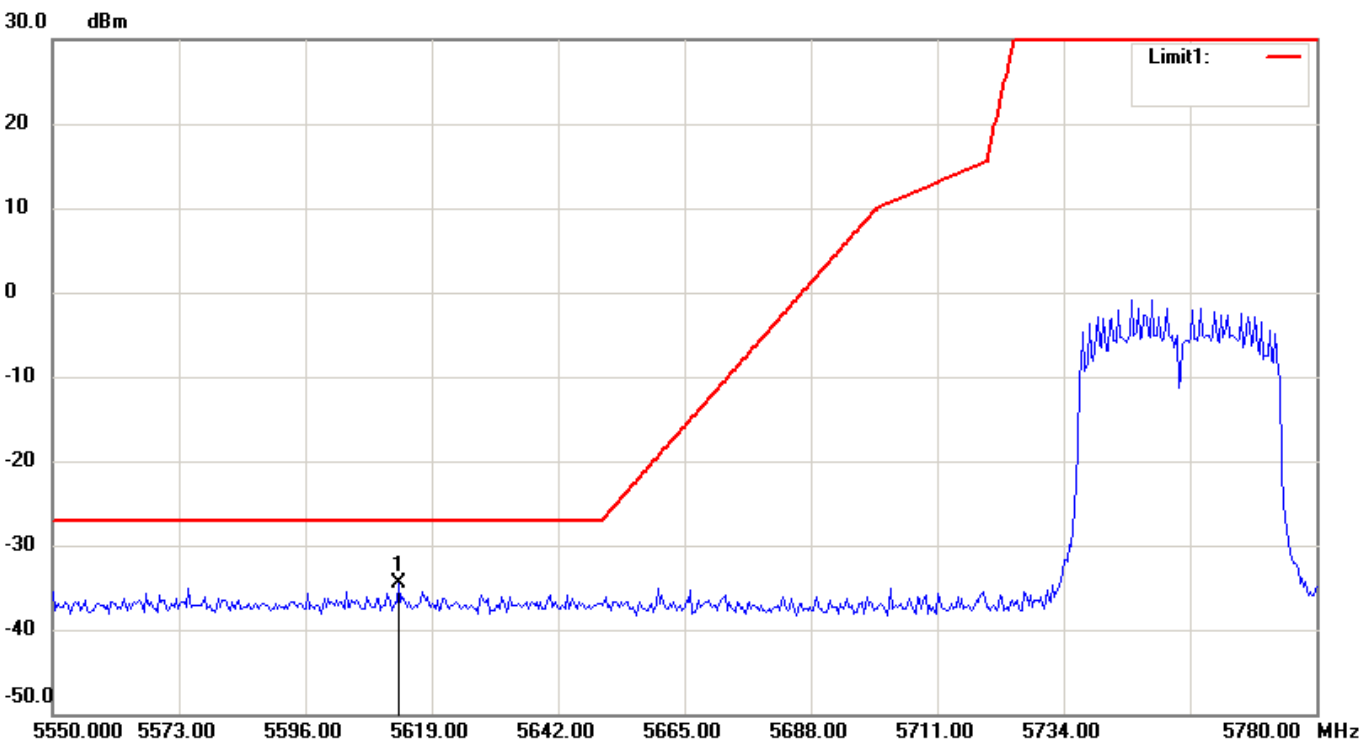
#13

Date: 2020/6/16

Temperature: 23 °C

Site: RE02-EMC B1-N2

Humidity: 60 %



Condition: 5.8G Bandedge

EUT: Wireless Embedded Module

Model: SX-SDMAC

Test Mode: UNII

Note: Low Bandedge

Polarization: Vertical

Distance: 3m

Operator: Phillip

No.	Frequency	Reading	Detector	Corrected	Result	Limit	Margin	Height	Degree	Comment
	(MHz)	(dBm)		dB	(dBm)	(dBm)	(dB)	(cm)	(°)	
1*	5613.02880	-85.76	peak	51.26	-34.50	-27.00	-7.50	---	---	

File: 20-02-MAS-101_5-8ac40

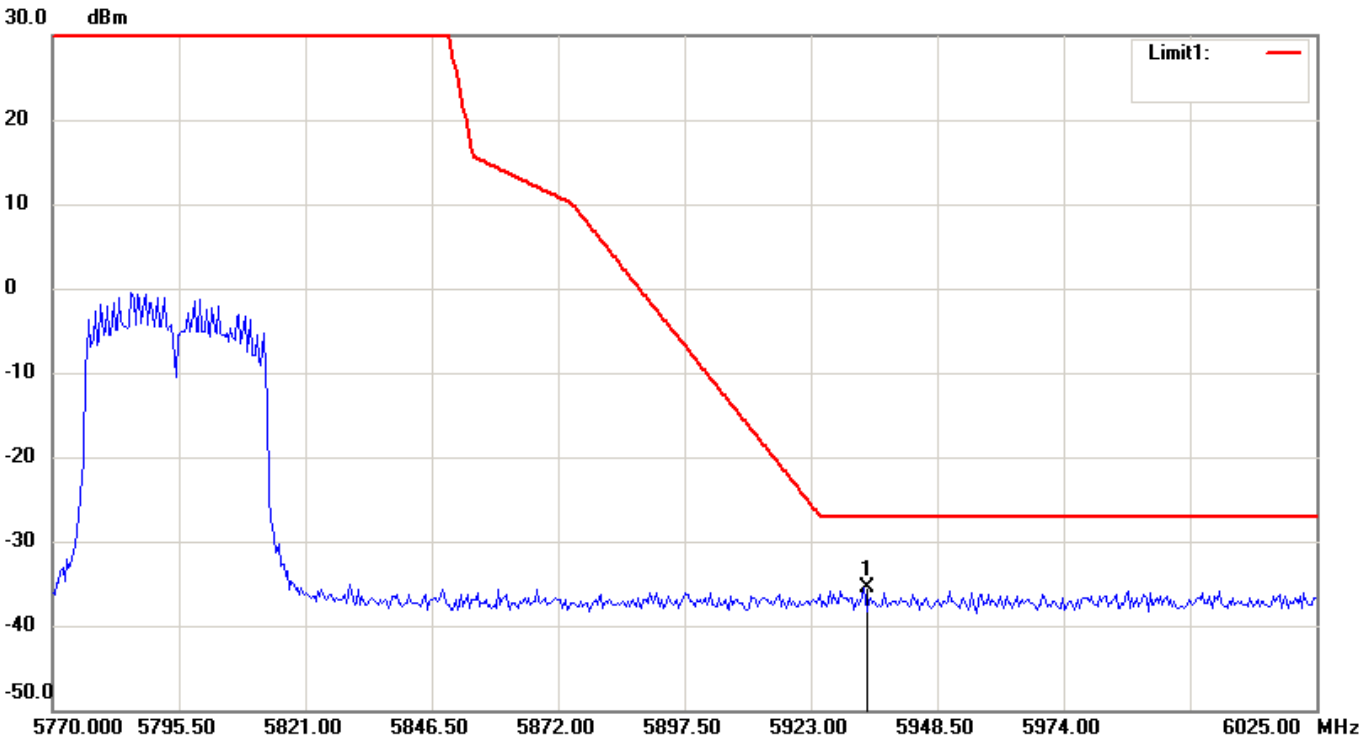
#14

Date: 2020/6/16

Temperature: 23 °C

Site: RE02-EMC B1-N2

Humidity: 60 %



Condition: 5.8G Bandedge

Polarization: Vertical

EUT: Wireless Embedded Module

Distance: 3m

Model: SX-SDMAC

Operator: Phillip

Test Mode: UNII

Note: High Bandedge

No.	Frequency	Reading	Detector	Corrected	Result	Limit	Margin	Height	Degree	Comment
	(MHz)	(dBm)		dB	(dBm)	(dBm)	(dB)	(cm)	(°)	
1*	5933.87020	-86.80	peak	51.31	-35.49	-27.00	-8.49	---	---	

調變技術: IEEE 802.11 ac VHT80

File: 20-02-MAS-101_5-8ac80

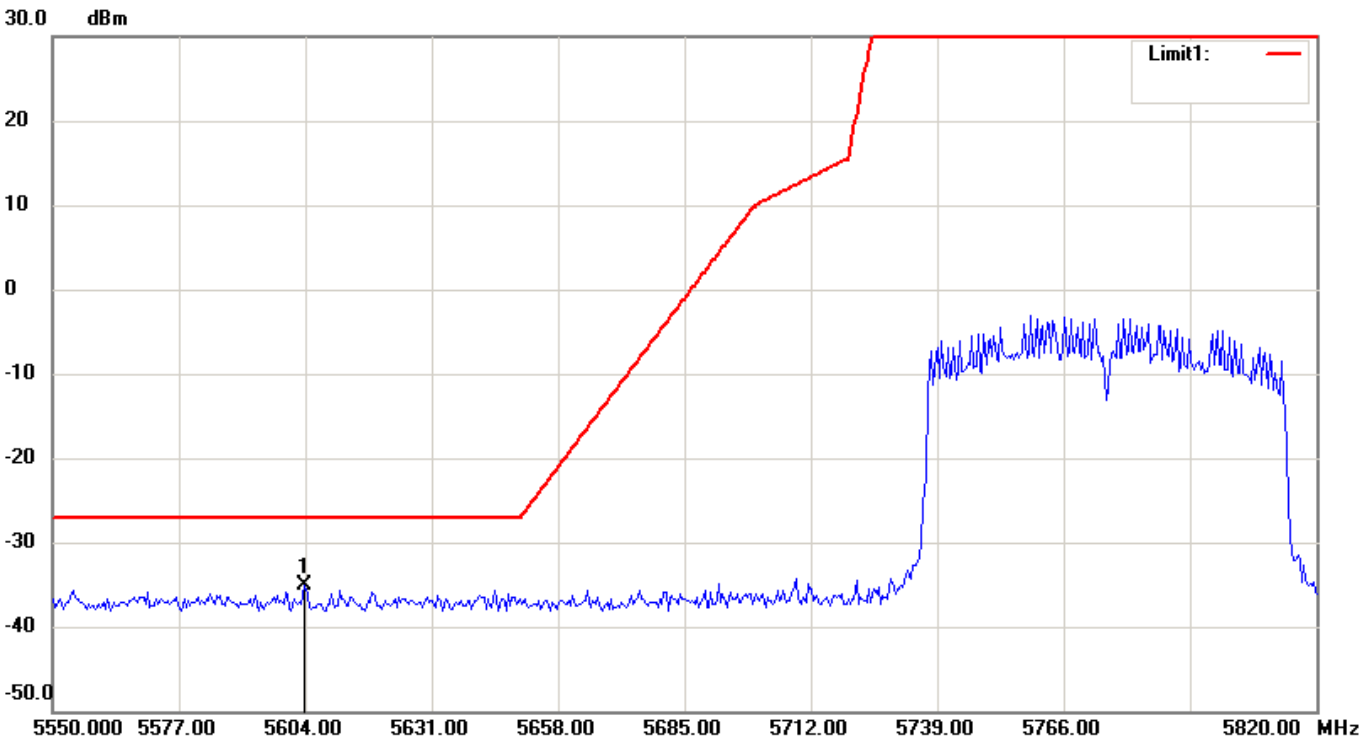
#8

Date: 2020/6/16

Temperature: 23 °C

Site: RE02-EMC B1-N2

Humidity: 60 %



Condition: 5.8G Bandedge

EUT: Wireless Embedded Module

Model: SX-SDMAC

Test Mode: UNII

Note: Low Bandedge

Polarization: Vertical

Distance: 3m

Operator: Phillip

No.	Frequency	Reading	Detector	Corrected	Result	Limit	Margin	Height	Degree	Comment
	(MHz)	(dBm)		dB	(dBm)	(dBm)	(dB)	(cm)	(°)	
1*	5603.65380	-86.40	peak	51.25	-35.15	-27.00	-8.15	---	---	

File: 20-02-MAS-101_5-8ac80

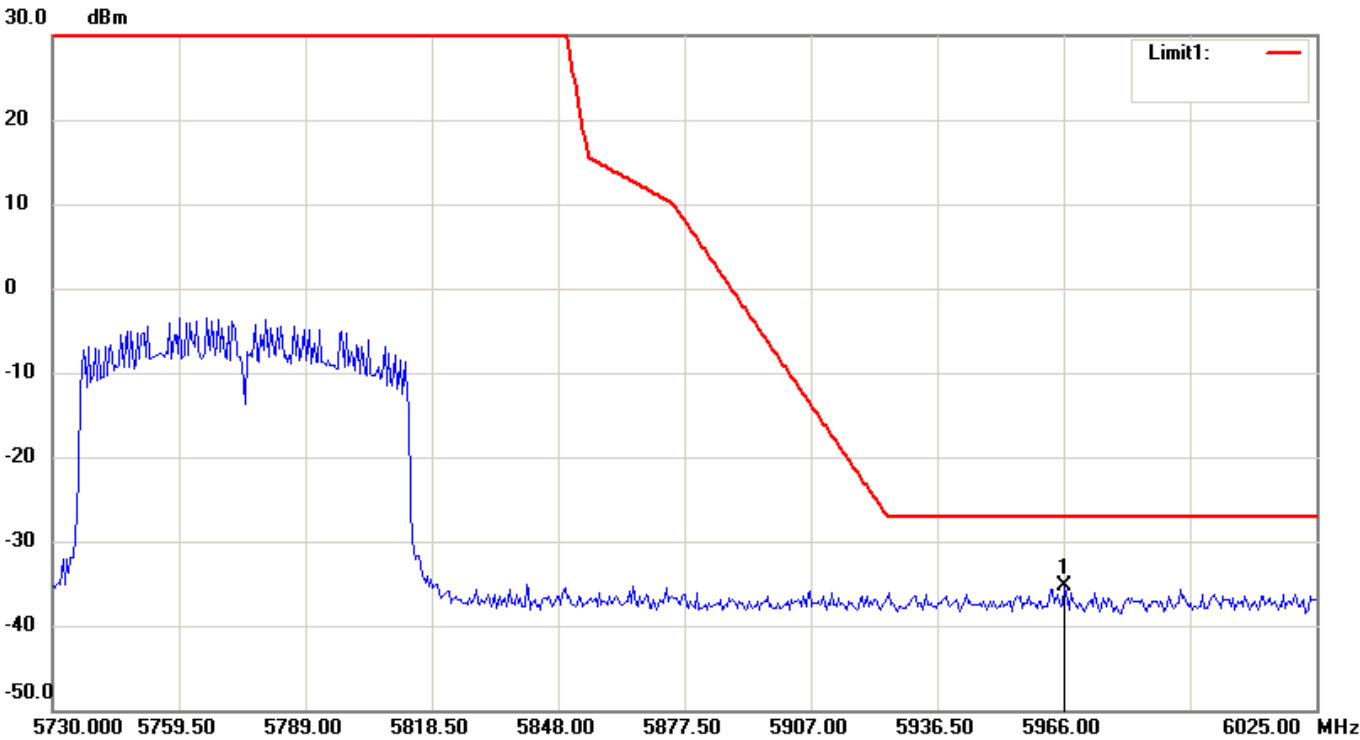
#7

Date: 2020/6/16

Temperature: 23 °C

Site: RE02-EMC B1-N2

Humidity: 60 %



Condition: 5.8G Bandedge

Polarization: Vertical

EUT: Wireless Embedded Module

Distance: 3m

Model: SX-SDMAC

Operator: Phillip

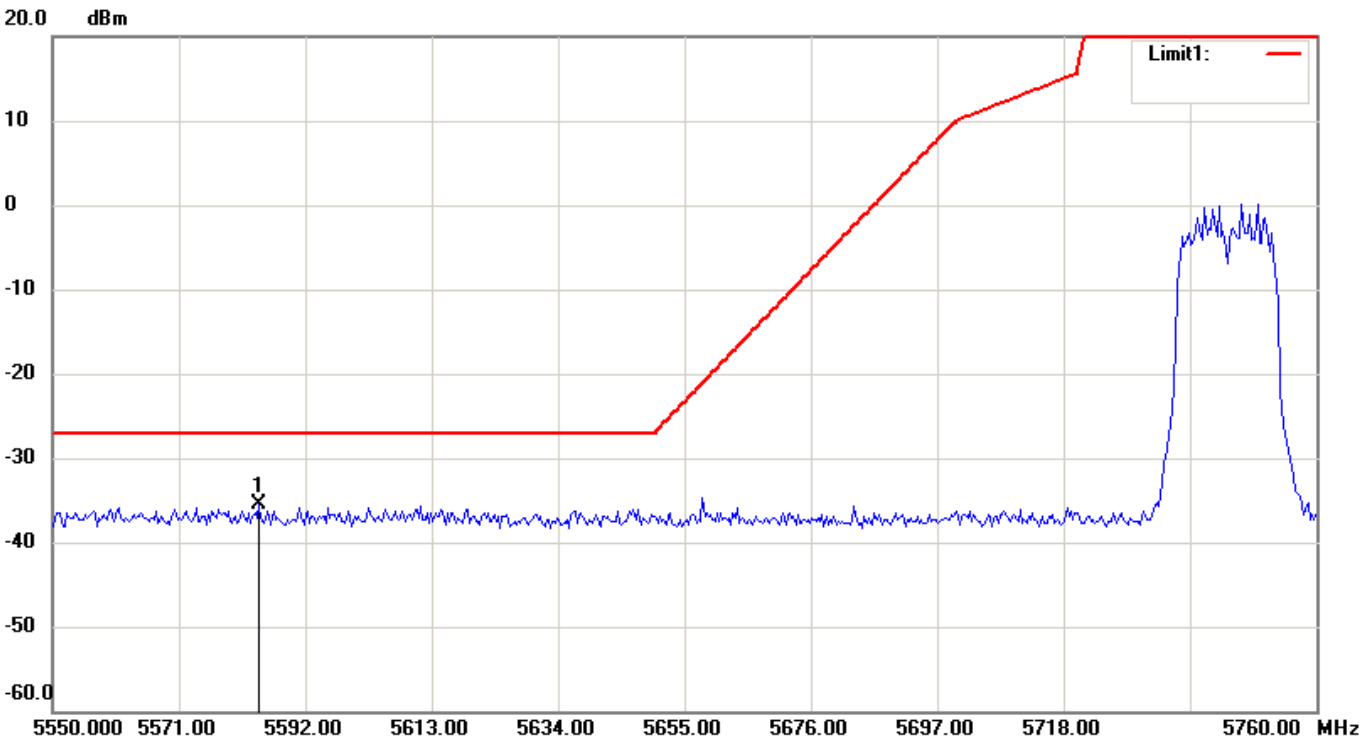
Test Mode: UNII

Note: High Bandedge

No.	Frequency	Reading	Detector	Corrected	Result	Limit	Margin	Height	Degree	Comment
	(MHz)	(dBm)		dB	(dBm)	(dBm)	(dB)	(cm)	(°)	
1*	5966.37820	-86.59	peak	51.33	-35.26	-27.00	-8.26	---	---	

Antenna 2
調變技術: IEEE 802.11a

File: 20-02-MAS-101_5-8a_Ant2 #19 Date: 2020/8/5 Temperature: 24 °C
Site: RE02-EMC B1-N2 Humidity: 62 %



Condition: 5.8G Bandedge Polarization: Vertical
EUT: Wireless Embedded Module Distance: 3m
Model: SX-SDMAC
Test Mode: UNII Operator: Phillip
Note: Low Bandedge

No.	Frequency	Reading	Detector	Corrected	Result	Limit	Margin	Height	Degree	Comment
	(MHz)	(dBm)		dB	(dBm)	(dBm)	(dB)	(cm)	(°)	
1*	5584.32700	-86.50	peak	51.04	-35.46	-27.00	-8.46	---	---	

File: 20-02-MAS-101_5-8a_Ant2

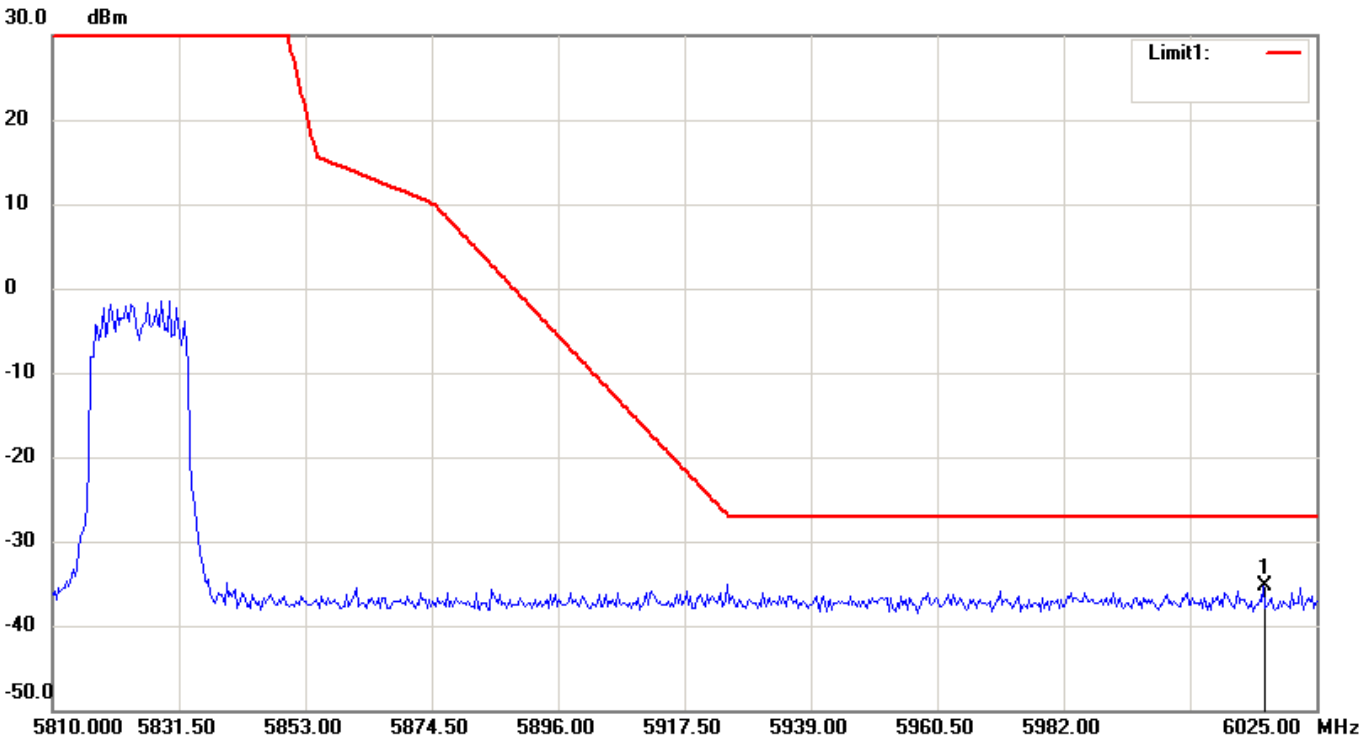
#18

Date: 2020/8/5

Temperature: 24 °C

Site: RE02-EMC B1-N2

Humidity: 62 %



Condition: 5.8G Bandedge

Polarization: Vertical

EUT: Wireless Embedded Module

Distance: 3m

Model: SX-SDMAC

Operator: Phillip

Test Mode: UNII

Note: High Bandedge

No.	Frequency	Reading	Detector	Corrected	Result	Limit	Margin	Height	Degree	Comment
	(MHz)	(dBm)		dB	(dBm)	(dBm)	(dB)	(cm)	(°)	
1*	6016.04170	-86.49	peak	51.13	-35.36	-27.00	-8.36	---	---	

調變技術: IEEE 802.11ac VHT20

File: 20-02-MAS-101_5-8ac20_Ant2

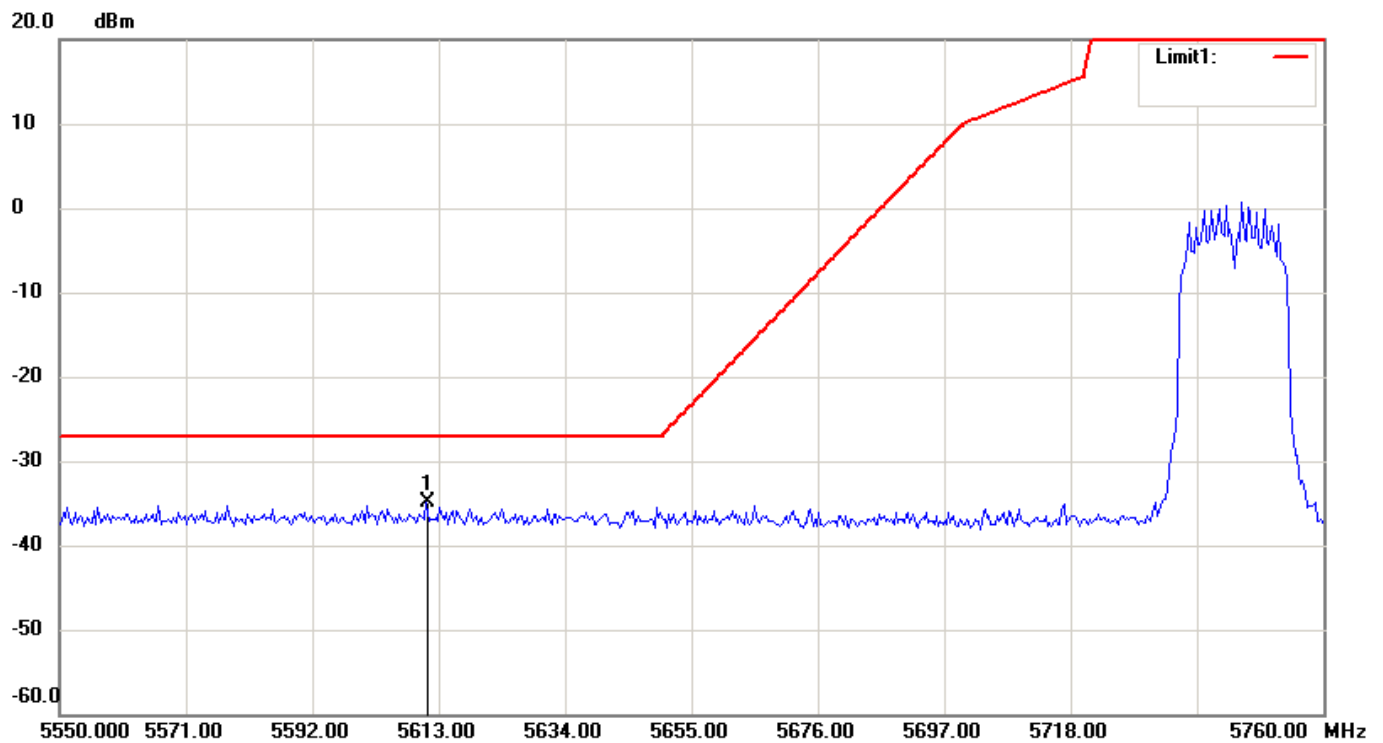
#19

Date: 2020/8/5

Temperature: 24 °C

Site: RE02-EMC B1-N2

Humidity: 62 %



Condition: 5.8G Bandedge

Polarization: Vertical

EUT: Wireless Embedded Module

Distance: 3m

Model: SX-SDMAC

Test Mode: UNII

Operator: Phillip

Note: Low Bandedge

No.	Frequency	Reading	Detector	Corrected	Result	Limit	Margin	Height	Degree	Comment
	(MHz)	(dBm)		dB	(dBm)	(dBm)	(dB)	(cm)	(°)	
1*	5610.91350	-85.87	peak	51.05	-34.82	-27.00	-7.82	---	---	

File: 20-02-MAS-101_5-8ac20_Ant2

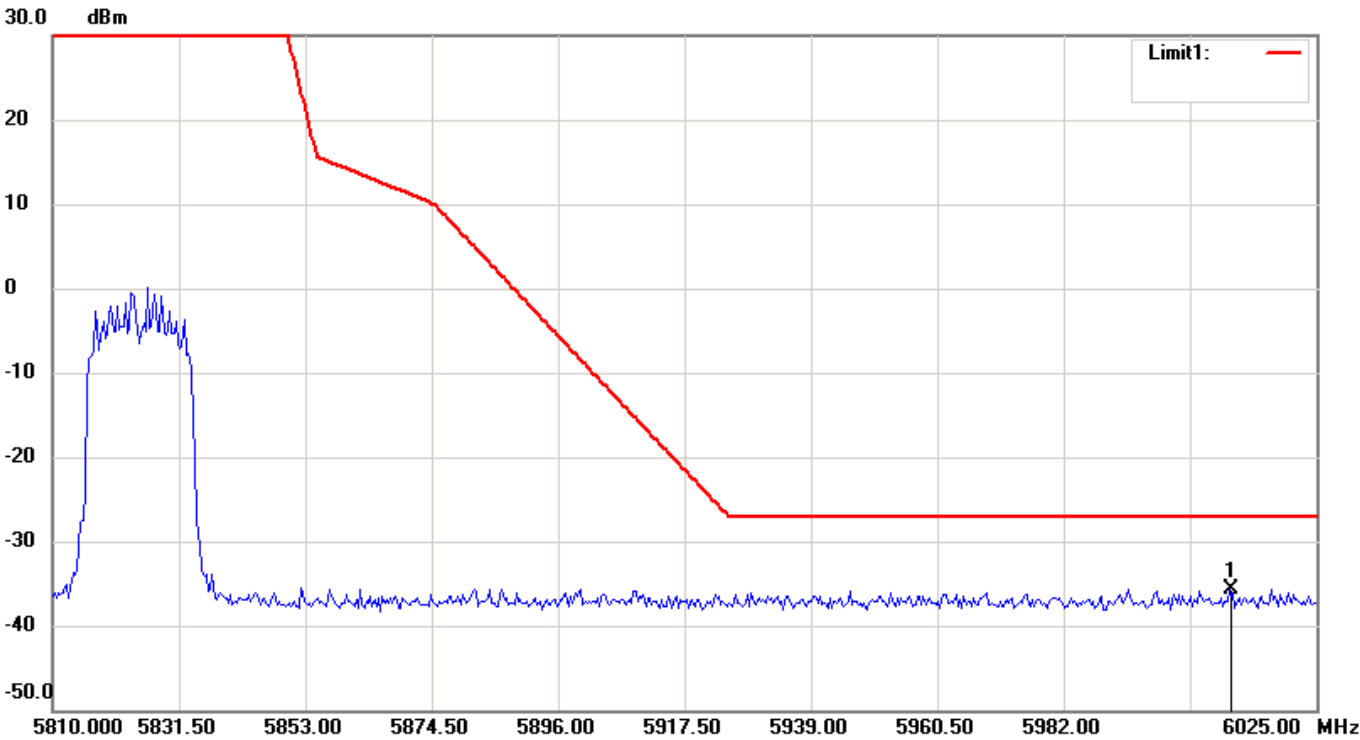
#18

Date: 2020/8/5

Temperature: 24 °C

Site: RE02-EMC B1-N2

Humidity: 62 %



Condition: 5.8G Bandedge

Polarization: Vertical

EUT: Wireless Embedded Module

Distance: 3m

Model: SX-SDMAC

Operator: Phillip

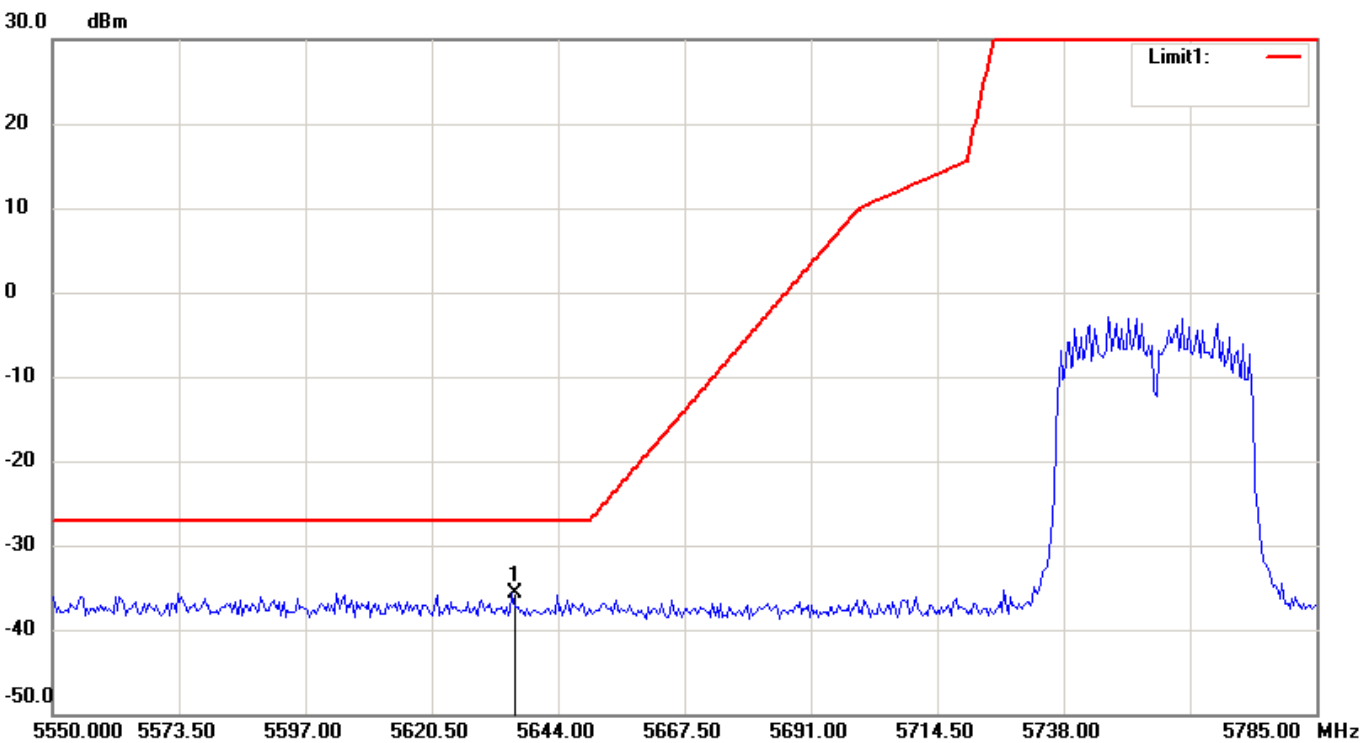
Test Mode: UNII

Note: High Bandedge

No.	Frequency	Reading	Detector	Corrected	Result	Limit	Margin	Height	Degree	Comment
	(MHz)	(dBm)		dB	(dBm)	(dBm)	(dB)	(cm)	(°)	
1*	6010.18430	-86.76	peak	51.11	-35.65	-27.00	-8.65	---	---	

調變技術: IEEE 802.11ac VHT40

File: 20-02-MAS-101_5-8ac40_Ant2 #11 Date: 2020/8/5 Temperature: 24 °C
Site: RE02-EMC B1-N2 Humidity: 62 %



Condition: 5.8G Bandedge Polarization: Vertical
EUT: Wireless Embedded Module Distance: 3m
Model: SX-SDMAC
Test Mode: UNII Operator: Phillip
Note: Low Bandedge

No.	Frequency	Reading	Detector	Corrected	Result	Limit	Margin	Height	Degree	Comment
	(MHz)	(dBm)		dB	(dBm)	(dBm)	(dB)	(cm)	(°)	
1*	5635.48880	-86.78	peak	51.05	-35.73	-27.00	-8.73	---	---	

File: 20-02-MAS-101_5-8ac40_Ant2

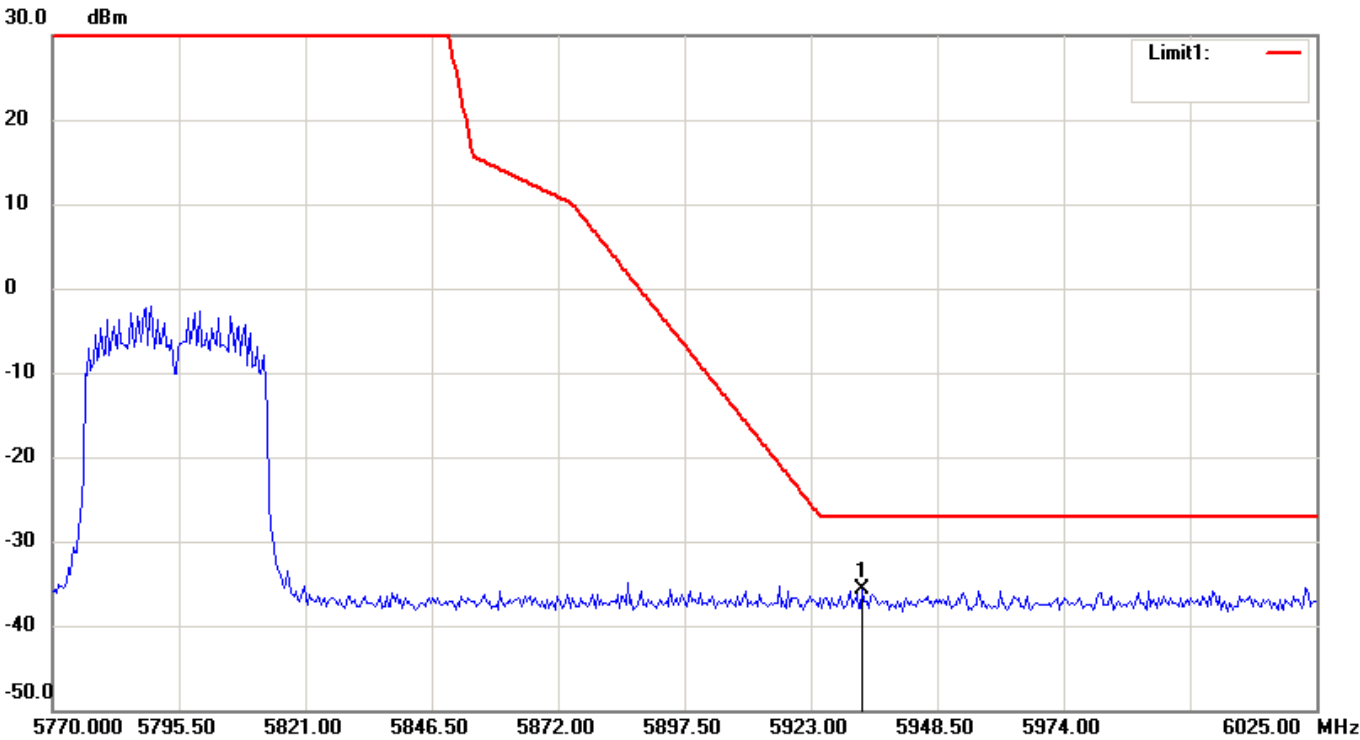
#12

Date: 2020/8/5

Temperature: 24 °C

Site: RE02-EMC B1-N2

Humidity: 62 %



Condition: 5.8G Bandedge

Polarization: Vertical

EUT: Wireless Embedded Module

Distance: 3m

Model: SX-SDMAC

Operator: Phillip

Test Mode: UNII

Note: High Bandedge

No.	Frequency	Reading	Detector	Corrected	Result	Limit	Margin	Height	Degree	Comment
	(MHz)	(dBm)		dB	(dBm)	(dBm)	(dB)	(cm)	(°)	
1*	5933.46150	-86.79	peak	51.09	-35.70	-27.00	-8.70	---	---	

調變技術: IEEE 802.11 ac VHT80

File: 20-02-MAS-101_5-8ac80_Ant2

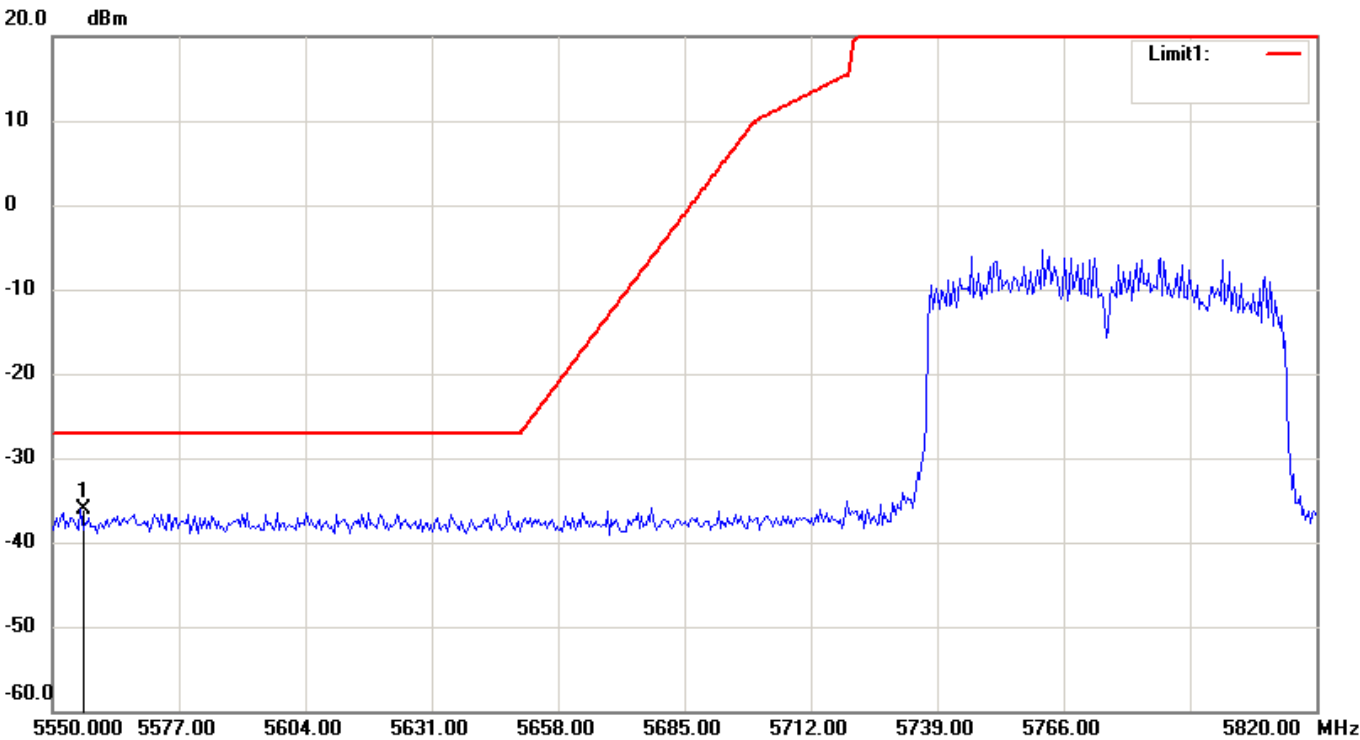
#10

Date: 2020/8/5

Temperature: 24 °C

Site: RE02-EMC B1-N2

Humidity: 62 %



Condition: 5.8G Bandedge

Polarization: Vertical

EUT: Wireless Embedded Module

Distance: 3m

Model: SX-SDMAC

Test Mode: UNII

Operator: Phillip

Note: Low Bandedge

No.	Frequency	Reading	Detector	Corrected	Result	Limit	Margin	Height	Degree	Comment
	(MHz)	(dBm)		dB	(dBm)	(dBm)	(dB)	(cm)	(°)	
1*	5556.05770	-87.09	peak	51.04	-36.05	-27.00	-9.05	---	---	

File: 20-02-MAS-101_5-8ac80_Ant2

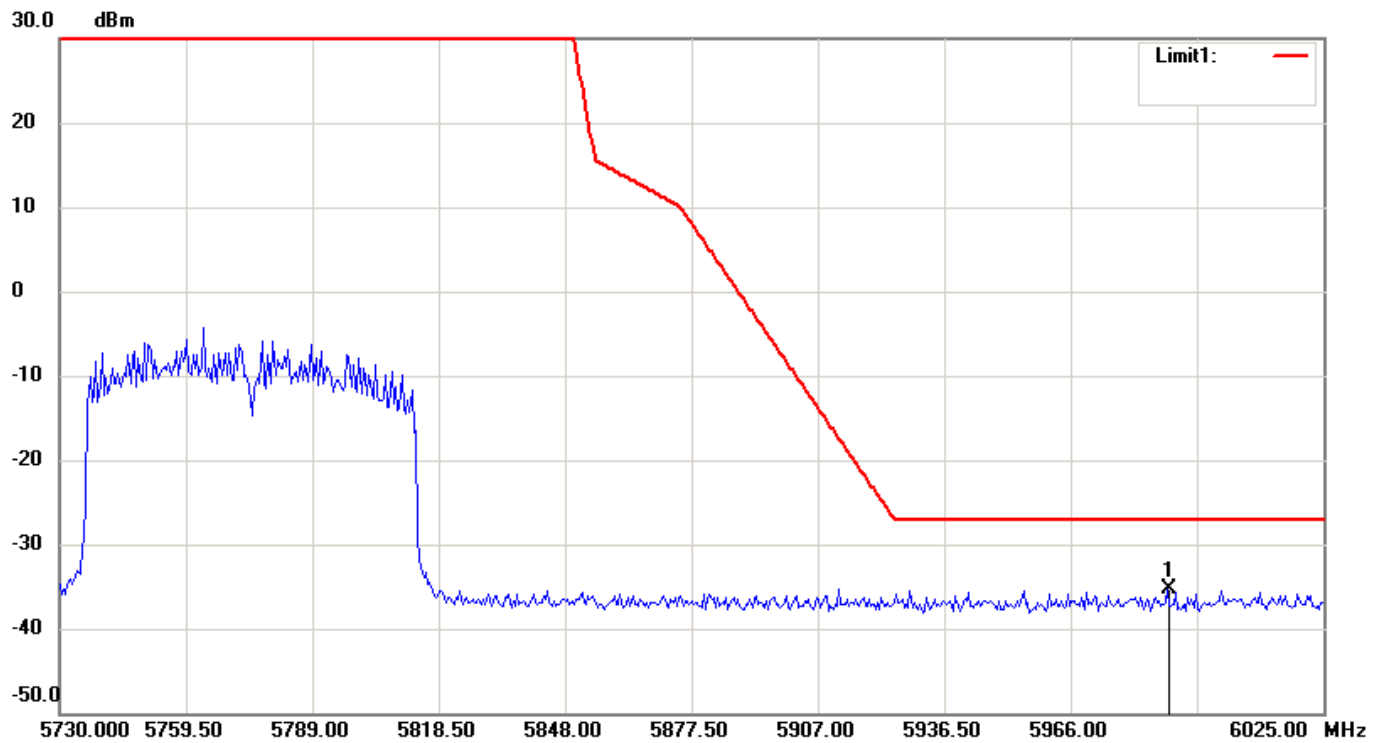
#9

Date: 2020/8/5

Temperature: 24 °C

Site: RE02-EMC B1-N2

Humidity: 62 %



Condition: 5.8G Bandedge

Polarization: Vertical

EUT: Wireless Embedded Module

Distance: 3m

Model: SX-SDMAC

Test Mode: UNII

Operator: Phillip

Note: High Bandedge

No.	Frequency	Reading	Detector	Corrected	Result	Limit	Margin	Height	Degree	Comment
	(MHz)	(dBm)		dB	(dBm)	(dBm)	(dB)	(cm)	(°)	
1*	5988.59780	-86.41	peak	51.10	-35.31	-27.00	-8.31	---	---	

10.7 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。

10.8 輻射之測試配置

圖 3: 量測頻率低於1GHz之測試配置

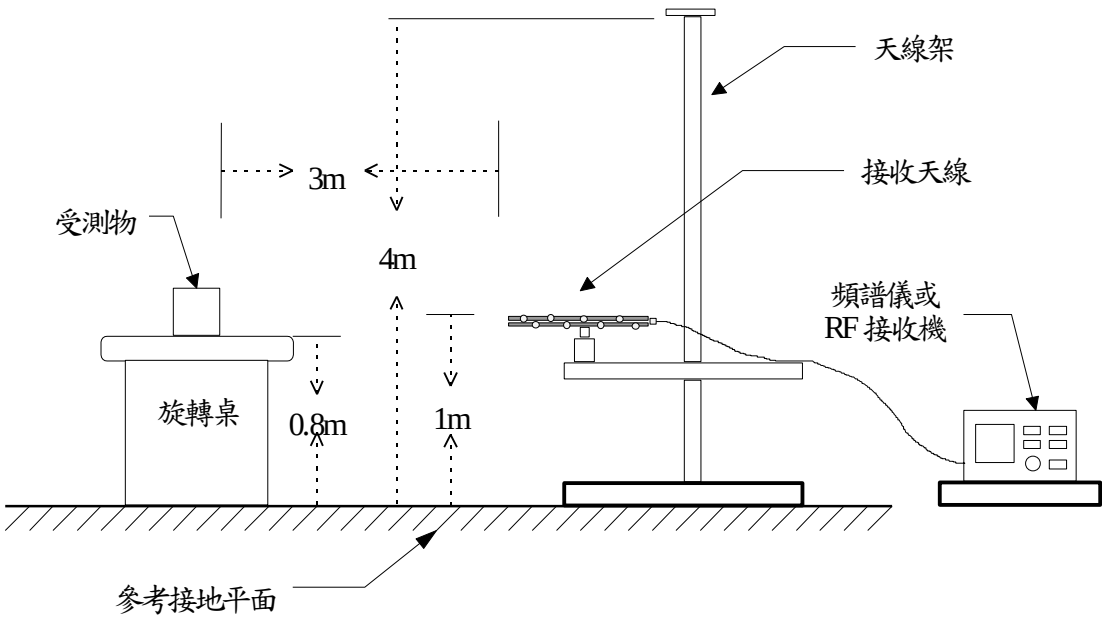
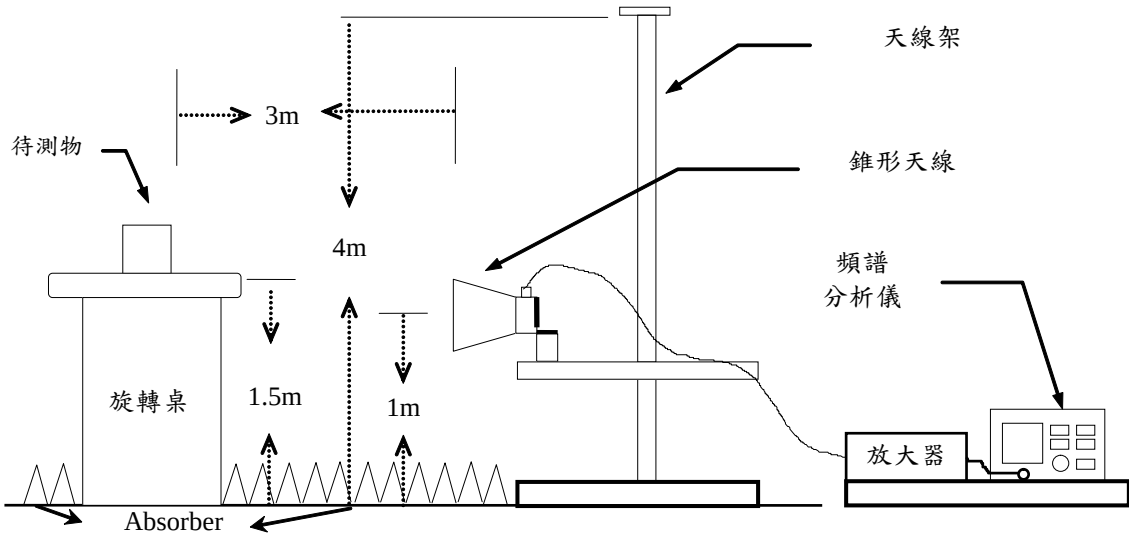


圖 4: 量測頻率高於1GHz之測試配置



10.9 輻射量測之配置照片

請參考產品照片

11 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	11/26/2019	11/25/2020
V-LISN	R&S	ENV216	13057719-001	09/20/2019	09/19/2020
Spectrum Analyzer	R&S	FSV	13052017-001	06/12/2020	06/11/2021
Attenuator	WEINSCHEL	56-10	58772	04/24/2020	04/23/2021
EMI Receiver	R&S	ESCI	13054423-001	12/24/2019	12/25/2020
Spectrum Analyzer	R&S	FSU46	13040904-001	05/28/2020	05/27/2021
Horn Antenna	EMCO	3117	13059211-004	04/21/2020	04/20/2021
Horn Antenna	EMCO	3116	13059202-001	11/15/2019	11/14/2020
PRE-Amplifier	Agilent	8449B	13040709-001	12/31/2019	12/30/2020
PRE-Amplifier	Agilent	8447D	13040715-002	04/22/2020	04/21/2021
BiLog Antenna	ETC	MCTD 2786	BL19J04024	01/14/2020	01/13/2021
PRE-Amplifier	Agilent	83051A	13052916001	09/19/2019	09/18/2020
Vector Signal Generator	R&S	SMU200A	13549901-002	06/08/2020	06/07/2021