

NCC

低功率射頻電機型式試驗報告

產品名稱 : ACCESS POINT
主型號 : APEX0374
系列型號 : APEX0375, APEX0377
廠牌 : 
申請者 : 慧與科技股份有限公司
申請者地址 : 臺北市南港區經貿二路 66 號 10 樓之 1
測試標準 : LP0002 (105 年版) 3.10 章節
參考法規 : ANSI C63.10-2013
測試結果 : 符合
測試日期 : 2017.08.05 ~ 2017.11.15
發行日期 : 2017.12.10

測試工程師 :


(柯文凱)

報告審核人 :


(陳柏均)

報告簽屬人 :


(柯承志)



本測試報告僅對實驗室所受測之樣品負責

本測試報告非經本公司同意不可局部複製使用

修訂紀錄

報告編號	版本	描述	發行日期
1710TW0108-T1	1.0	Original Report	2017-12-10

CONTENTS

Description	Page
1. 一般資訊	5
2. 產品資訊	6
2.1. 待測物裝置資料	6
2.2. 通道清單	6
2.3. 測試模式	7
2.4. 測試系統組合圖	7
2.5. 測試周邊	8
2.6. 待測裝置測試時之典型操作程式	8
3. 量測不確定度	9
4. 測試設備明細	10
5. 測試結果	11
5.1. 電源端點干擾測試	12
5.1.1. 適用標準	12
5.1.2. 量測方法	12
5.1.3. 測試架構圖	12
5.1.4. 電源端點測試結果	13
5.2. 峰值傳導輸出功率	14
5.2.1. 適用標準	14
5.2.2. 量測方法	14
5.2.3. 測試架構圖	14
5.2.4. 峰值傳導輸出功率測試結果	15
5.3. 天線之要求	16
5.3.1. 適用標準	16
5.3.2. 天線樣式	16
5.4. 輻射干擾測試	17
5.4.1. 適用標準	17
5.4.2. 量測方法	17
5.4.3. 測試架構圖	18
5.4.4. 輻射干擾測試結果	19
5.5. 混附發射之 RF 傳導發射	20
5.5.1. 適用標準	20
5.5.2. 量測方法	20
5.5.3. 測試架構圖	20

5.5.4.	混附發射之 RF 傳導發射測試結果.....	20
5.6.	開放頻帶邊緣之不必要幅射要求.....	21
5.6.1.	適用標準	21
5.6.2.	量測方法	21
5.6.3.	測試架構圖.....	22
5.6.4.	測試結果	22
5.7.	佔用頻道寬度.....	23
5.7.1.	適用標準	23
5.7.2.	量測方法	23
5.7.3.	測試架構圖.....	23
5.7.4.	佔用頻帶寬度測試結果.....	23
5.8.	發射電功率密度	24
5.8.1.	適用標準	24
5.8.2.	量測方法	24
5.8.3.	測試架構圖.....	24
5.8.4.	功率密度量測結果	24
附錄 A.....		
附錄 B.....		
附錄 C.....		

1. 一般資訊

申請者	慧與科技股份有限公司
申請者地址	臺北市南港區經貿二路 66 號 10 樓之 1
製造商	Hewlett Packard Enterprise Company
製造商地址	3000 Hanover St. Palo Alto, CA 94304, USA
認證實驗室	台灣曼瑞檢測科技有限公司
實驗室地址	臺灣桃園市龜山區復興二路 38 號
測試設備序列號	APEX0374 (傳導樣品序列號: CNDNK7Z002, 輻射樣品序列號: CNDNK7Z001)
	APEX0375 (傳導樣品序列號: CNDJK8001T, 輻射樣品序列號: CNDJK8001L)
	APEX0377 (傳導樣品序列號: CNDJK8001J, 輻射樣品序列號: CNDNK81002)

Test Facility / Accreditations

Measurements were performed at MRT Laboratory located in Fuxing Rd., Taoyuan, Taiwan (R.O.C)

- MRT facility is a FCC registered (MRT Reg. No. 153292) test facility with the site description report on file and is designated by the FCC as an Accredited Test Film.
- MRT facility is an IC registered (MRT Reg. No. 21723-1) test laboratory with the site description on file at Industry Canada.
- MRT Lab is accredited to ISO 17025 by the Taiwan Accreditation Foundation (TAF Cert. No. 3261) in EMC, Telecommunications and Radio testing for FCC, Industry Taiwan, EU and TELEC Rules.

2. 產品資訊

2.1. 待測物裝置資料

產品名稱	ACCESS POINT
產品型號	APEX0374, APEX0375, APEX0377
天線樣式	Refer to the table "Antenna List"
天線規格	Refer to the table "Antenna List"
待測物額定電壓	POE input or AC adapter input
調變模式	DSSS for IEEE 802.11 b, OFDM for IEEE 802.11g/n
傳輸速率	Up to 11Mbps for IEEE 802.11 b Up to 54Mbps for IEEE 802.11 g Up to 300Mbps for IEEE 802.11 n
頻道控制	Auto

Note 1: The difference between three models is that the EUT use different antenna and appearance, other hardware and software are the same. Each model has its own power parameter value.

Note 2: The applicant provide one POE adapter (Manufacturer: MICROSEMI & Model: PD-9001GR/AT/AC) for approval testing, it is not for sale.

2.2. 通道清單

802.11b/g/n-HT20

Channel	Frequency	Channel	Frequency	Channel	Frequency
01	2412 MHz	02	2417 MHz	03	2422 MHz
04	2427 MHz	05	2432 MHz	06	2437 MHz
07	2442 MHz	08	2447 MHz	09	2452 MHz
10	2457 MHz	11	2462 MHz	--	--

802.11n-HT40

Channel	Frequency	Channel	Frequency	Channel	Frequency
03	2422 MHz	04	2427 MHz	05	2432 MHz
06	2437 MHz	07	2442 MHz	08	2447 MHz
09	2452 MHz	--	--	--	--

2.3. 測試模式

Mode 1: 發射器 802.11b

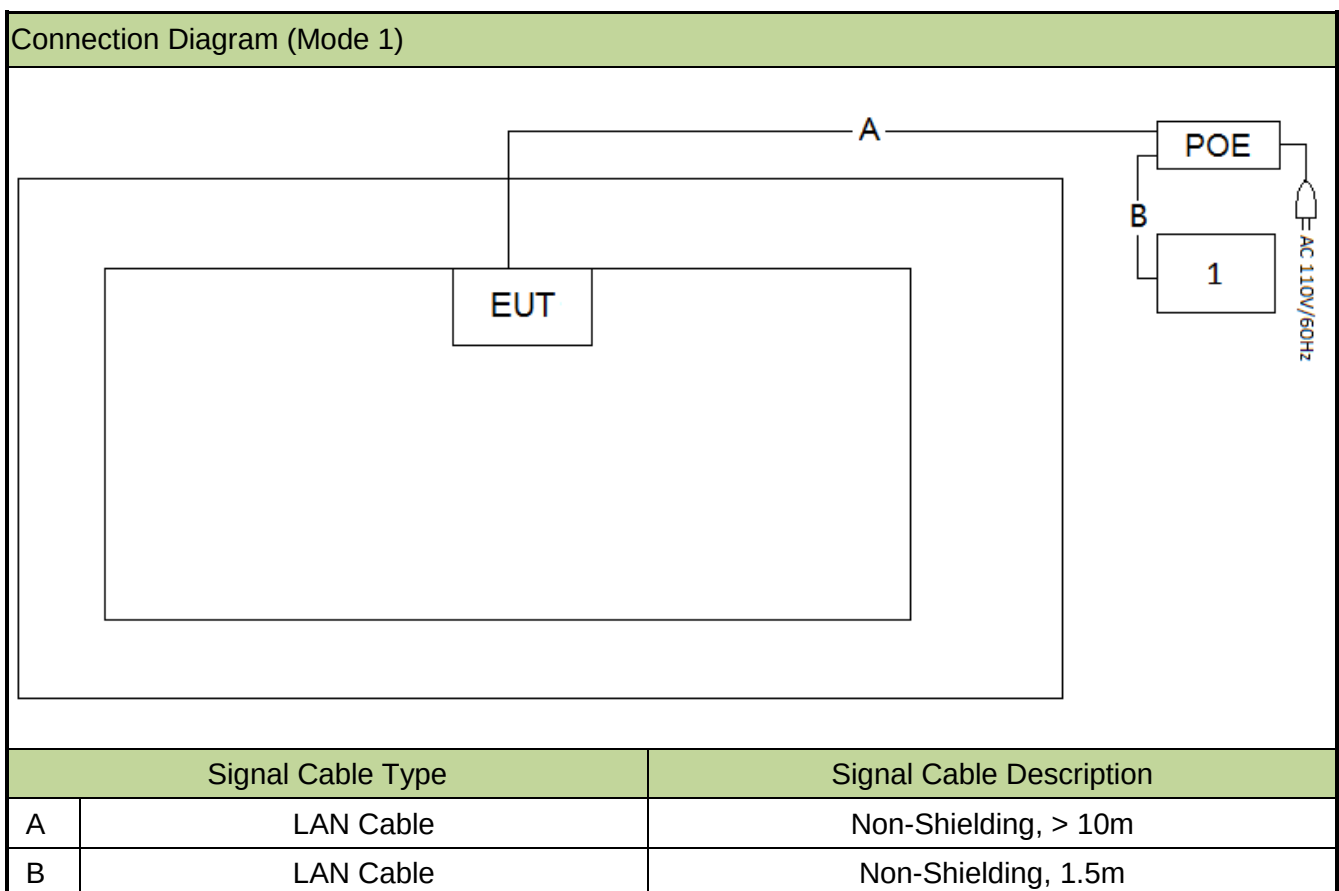
Mode 2: 發射器 802.11g

Mode 3: 發射器 802.11n-HT20

Mode 4: 發射器 802.11n-HT40

2.4GHz Test Mode	Ant 0 + 1	
	CDD	Beam-Forming
802.11b	√	×
802.11g	√	×
802.11n-HT20	√	√
802.11n-HT40	√	√

2.4. 測試系統組合圖



2.5. 測試周邊

Item	Product	Manufacturer	Model No.	Serial No.	Power Cord
1	Notebook	Lenovo	E430c	N/A	Non-Shielded, 1.8m

2.6. 待測裝置測試時之典型操作程式

1.	Setup the EUT and simulators as shown on 2.4
2.	Turn on the power of all equipment.
3.	Execute “QCARCT” program.
4.	Configure the test channel and the data rate.
5.	Start test.

3. 量測不確定度

AC Conducted Emission Measurement - SR2
Measuring Uncertainty for a Level of Confidence of 95% ($U=2U_c(y)$): 150kHz~30MHz: 3.46dB
Radiated Emission Measurement - AC1
Measuring Uncertainty for a Level of Confidence of 95% ($U=2U_c(y)$): 9kHz ~ 1GHz: 4.18dB 1GHz ~ 25GHz: 4.76dB
Spurious Emissions, Conducted - SR1
Measuring Uncertainty for a Level of Confidence of 95% ($U=2U_c(y)$): 0.78dB
Output Power - SR1
Measuring Uncertainty for a Level of Confidence of 95% ($U=2U_c(y)$): 1.13dB
Power Spectrum Density - SR1
Measuring Uncertainty for a Level of Confidence of 95% ($U=2U_c(y)$): 1.15dB
Occupied Bandwidth - SR1
Measuring Uncertainty for a Level of Confidence of 95% ($U=2U_c(y)$): 0.28%

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of $k=2$.

4. 測試設備明細

Conducted Emissions

Instrument	Manufacturer	Type No.	Asset No.	Cali. Interval	Cali. Due Date
EMI Test Receiver	R&S	ESR3	MRTTWA00045	1 year	2018/03/17
Two-Line V-Network	R&S	ENV216	MRTTWA00019	1 year	2018/03/23
Two-Line V-Network	R&S	ENV216	MRTTWA00020	1 year	2018/03/23
Temperature/Humidity Meter	TFA	35.1078.10.IT	MRTTWA00033	1 year	2018/06/08

Radiated Emissions

Instrument	Manufacturer	Type No.	Asset No.	Cali. Interval	Cali. Due Date
Signal Analyzer	R&S	FSV40	MRTTWA00007	1 year	2018/03/02
EMI Test Receiver	R&S	ESR3	MRTTWA00009	1 year	2018/03/16
Broadband Preamplifier	SCHWARZBECK	BBV 9718	MRTTWA00005	1 year	2018/04/06
Broadband Amplifier	SCHWARZBECK	BBV 9721	MRTTWA00006	1 year	2018/04/06
Active Loop Antenna	SCHWARZBECK	FMZB 1519B	MRTTWA00002	1 year	2018/04/06
Broadband TRILOG Antenna	SCHWARZBECK	VULB 9162	MRTTWA00001	1 year	2018/04/06
Broadband Hornantenna	SCHWARZBECK	BBHA 9120D	MRTTWA00003	1 year	2018/04/06
Breitband Hornantenna	SCHWARZBECK	BBHA 9170	MRTTWA00004	1 year	2018/04/06
Temperature/Humidity Meter	TFA	35.1078.10.IT	MRTTWA00033	1 year	2018/06/08

Conducted Test Equipment

Instrument	Manufacturer	Type No.	Asset No.	Cali. Interval	Cali. Due Date
EXA Signal Analyzer	KEYSIGHT	N9010A	MRTTWA00012	1 year	2018/07/10
PSA Series Spectrum Analyzer	Agilent	E4447A	MRTTWA00060	1 year	2018/12/11
X-Series USB Peak and Average Power Sensor	KEYSIGHT	U2021XA	MRTTWA00014	1 year	2018/03/18
X-Series USB Peak and Average Power Sensor	KEYSIGHT	U2021XA	MRTTWA00015	1 year	2018/03/18
Programmable Temperature & Humidity Chamber	TEN BILLION	TTH-B3UP	MRTTWA00036	1 year	2018/05/10
Temperature/Humidity Meter	TFA	35.1078.10.IT	MRTTWA00033	1 year	2018/06/08

Test software

Software	Version	Function
e3	V 8.3.5	EMI Test Software
EMI	Quietek	V3

5. 測試結果

產品名稱

ACCESS POINT

型號

APEX0374, APEX0375, APEX0377

章節	量測項目	限制值	測試結果	測試數據
2.3	電源傳導	低功率射頻電機技術規範 2.3 節	符合	第 5.1 章節
3.10.1.2	峰值傳導輸出功率	$\leq 30.00\text{dBm}$	符合	第 5.2 章節
3.10.1.3	天線之要求	低功率射頻電機技術規範 3.10.1.3 節	符合	第 5.3 章節
3.10.1.5	帶外發射限制	$\leq 30\text{dBc(Average)}$	符合	第 5.4 章節
2.7	輻射電場強度	低功率射頻電機技術規範 2.8 節	符合	第 5.5 章節
2.7	頻帶邊緣	$\leq 74\text{dBuV/m(Peak)}$ $\leq 54\text{dBuV/m(Average)}$	符合	第 5.6 章節
3.10.1.6(2)(A)	佔用頻寬	$\geq 500\text{kHz}$	符合	第 5.7 章節
3.10.1.6(2)(B)	功率頻譜密度	$\leq 8\text{dBm}$	符合	第 5.8 章節

5.1. 電源端點干擾測試

5.1.1. 適用標準

依據國家通訊傳播委員會低功率射頻電機技術規範之第 2.3 節，以市電為電源之低功率射頻電機，其傳導回電源線上頻率自 150kHz 至 30MHz 之射頻電壓(在電源端子每一電源線對接地點)應小於或等於下表所列之限值。測量時應經過 50 微亨利(μH)及 50 歐姆(Ω)之電源線阻抗模擬網路(LISN)。頻率重疊處，以較低限值為準。

Frequency 頻率範圍 MHz	傳導限制值(dBuV)	
	準尖峰值	平均值
0.15 - 0.50	66-56 ^(註)	56-46 ^(註)
0.50 - 5.0	56	46
5.0 - 30	60	50

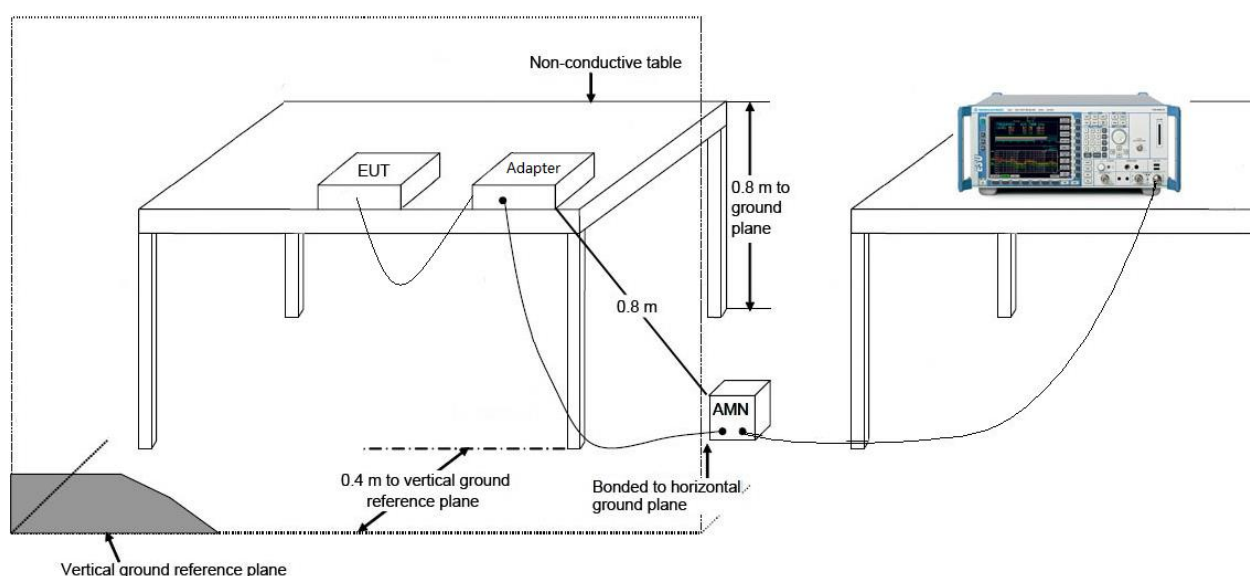
註:隨頻率之對數遞減

5.1.2. 量測方法

待測物置於高 80 公分之非導體桌面（落地型產品置於地上），將待測物之電源線接至電源阻抗網路器(LISN)，同時保持待測物至 LISN 距 80 公分，並將電源線多餘部份以 30 至 40 公分之八字形捆綁於電源線中央並離地 40cm，於在正常工作狀態下，執行待測物之火線(Line)及地線(neutral)各一次量測。電源端點場強之測量範圍由 0.15MHz –30MHz，所量測之讀值皆為準尖峰值(Quasi-Peak Value)及平均值(Average Value)。場強接收機之解析頻寬為 9kHz。

備 註: 經初測驗證過，電源端點干擾測試對測試頻道數並無差異，因此檢附其中一個測試頻道之測試數。

5.1.3. 測試架構圖



5.1.4. 電源端點測試結果

對於 APEX0374, 請參考附錄 A 章節 1;
對於 APEX0375, 請參考附錄 B 章節 1;
對於 APEX0377, 請參考附錄 C 章節 1。

5.2. 峰值傳導輸出功率

5.2.1. 適用標準

依據國家通訊傳播委員會低功率射頻電機技術規範之第 3.10.1.2(1)(C)節，操作於 2400-2483.5 MHz 之數位調變的發射器材：1 瓦(W)(含)以下。

依據國家通訊傳播委員會低功率射頻電機技術規範之第 3.10.1.3 節，天線增益限制如下：

(1) 操作於 2400 MHz~2483.5 MHz 頻段：

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

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

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

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

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

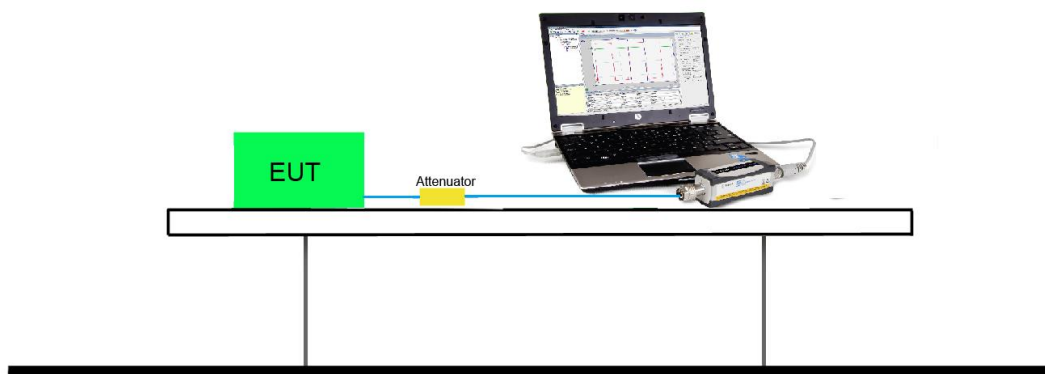
同時發射多向波束於相同或不同頻道者，其每一波束功率應符合(a)之功率限制值。如發射波束有重疊現象，功率應降低，以確保總和傳導輸出功率符合(a)之限制值。同時發射的所有波束總和傳導輸出功率不大於(a) 總和傳導輸出功率限制值加 8 dB。方向性增益值計算同(a)。

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

5.2.2. 量測方法

待測物之天線埠經由適當之衰減直接連至頻譜分析儀 RF 輸入端，設定頻譜分析儀之解析度頻寬大於 6dB 發射頻寬或使用峰值功率表。

5.2.3. 測試架構圖



5.2.4. 峰值傳導輸出功率測試結果

對於 APEX0374, 請參考附錄 A 章節 2;
對於 APEX0375, 請參考附錄 B 章節 2;
對於 APEX0377, 請參考附錄 C 章節 2。

5.3. 天線之要求

5.3.1. 適用標準

低功率射頻電機之發射機或收發信機所使用之天線，應為全固定、半固定式或以獨特之耦合(unique coupling)方式連接機體。製造者可設計供使用者因損壞而替換之天線，但不得設計或使用原認證以外之天線或可供引接各類電纜之標準天線插座或電氣連接頭，如：BNC、F type、N type、M type、UG type、RCA、SMA、SMB...等及其他各類工業或通訊標準接頭。

5.3.2. 天線樣式

對於 APEX0374, 請參考附錄 A 章節 3;
對於 APEX0375, 請參考附錄 B 章節 3;
對於 APEX0377, 請參考附錄 C 章節 3。

5.4. 輻射干擾測試

5.4.1. 適用標準

依據國家通訊傳播委員會低功率射頻電機技術規範之第 3.10.1.5 節，使用頻帶範圍外之任意 100 千赫 (kHz) 內，發射器所產生的射頻功率相較於使用頻帶範圍中包含最高所需功率之 100 千赫 (kHz) 內的射頻功率，衰減值限制如下：

(1) 輸出功率以低功率射頻電機技術規範附件二之峰值輸出功率方式量測者，至少須衰減 20 dB，可使用射頻傳導或輻射方式測量。

(2) 輸出功率以低功率射頻電機技術規範 3.10.1(2)(2.3) 之最大傳導輸出功率量測方式者，至少須衰減 30 dB。

此外，落於第 2.7 節禁用頻段之輻射發射，應符合第 2.8 節之規定。

依據國家通訊傳播委員會低功率射頻電機技術規範之第 2.8 節，低功率射頻電機，除本規範各章節另有放寬規定者外，其電場強度不得超過下表之限值，且其不必要之發射皆不得大於主波發射強度。各頻段重疊處，以較嚴格之限制值為準。

頻 率(兆赫)	電場強度(微伏/公尺)	測距(公尺)
0.009 - 0.490(含)	2,400/頻率(千赫)	300
0.490 (不含) – 1.705 (含)	24,000/頻率(千赫)	30
1.705(不含) – 30 (不含)	30	30
30 (含) – 88 (含)	100	3
88 (不含)- 216 (含)	150	3
216 (不含)- 960 (含)	200	3
960 (不含)以上	500	3

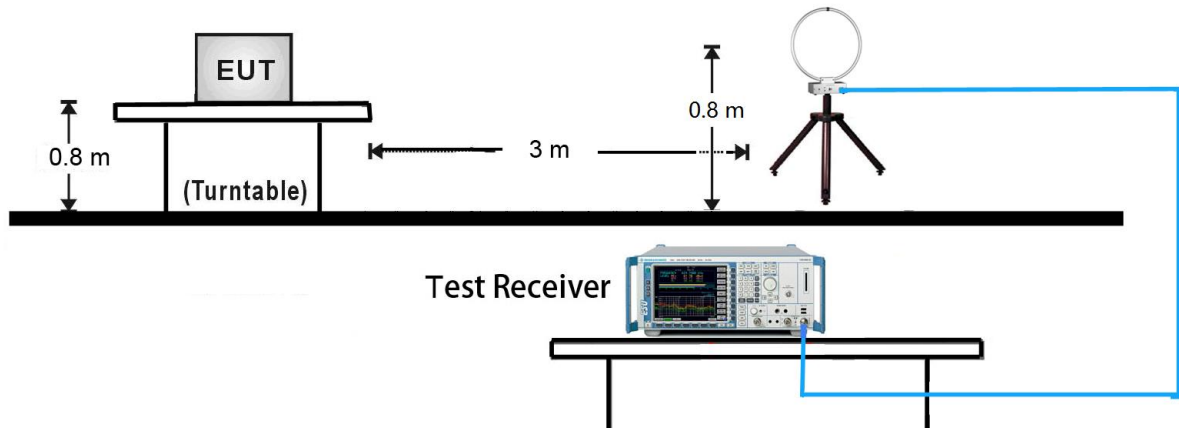
上表規定之電場強度，頻率在 9-90kHz 千赫(kHz)、110-490 千赫(kHz)以及 1000 兆赫(MHz)以上之發射，其量測以平均值檢波器為基準，且須符合第 5.14 節之規定；其他頻率之發射，應以 CISPR 準峰值(quasi-peak) 檢波器測量；非以上表所指定之距離測量時須符合第 5.5 節之規定，而輻射發射之量測頻率範圍須符合第 5.12 節之規定。

5.4.2. 量測方法

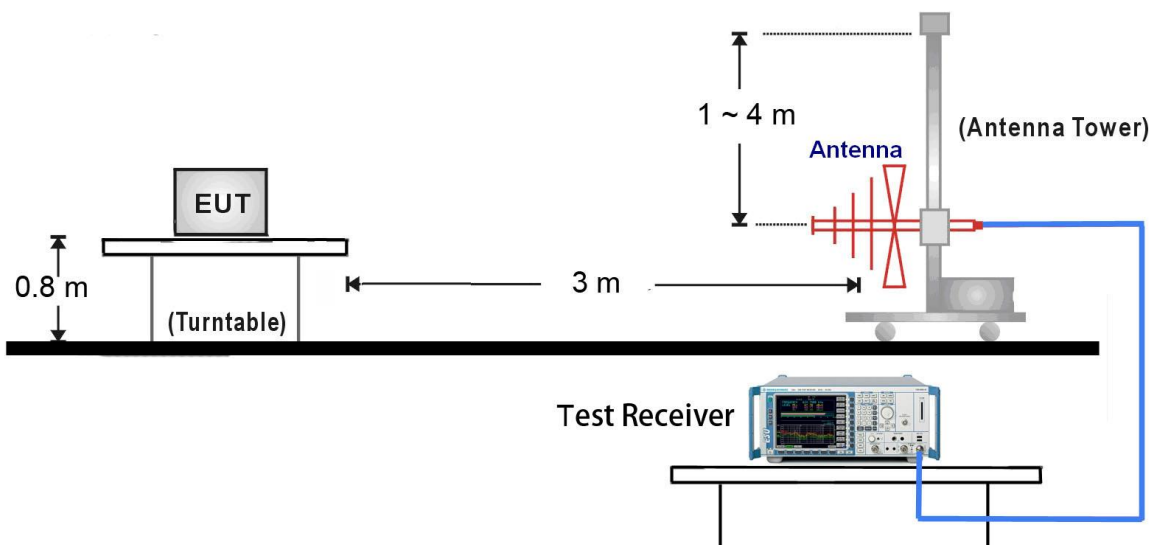
低頻待測物置於高 80 公分之非導體桌面（落地型產品置於地上），高頻待測物置於高 150 公分之非導體桌面，受測物與配件設備之電源線無須束綁，桌面上受測設備的所有電源線由桌子的後緣垂下沿旋轉桌表面接至交流插座。落地型設備的交流電源線可以方便的型態走線。桌面可 360 度旋轉，接收天線置於距待測物 3m 距離，高度可在 1 至 4 公尺間變動，以量測待測物之最大輻射電場強度。接收天線並應於水準及垂直極化方向各量測一次。

5.4.3. 測試架構圖

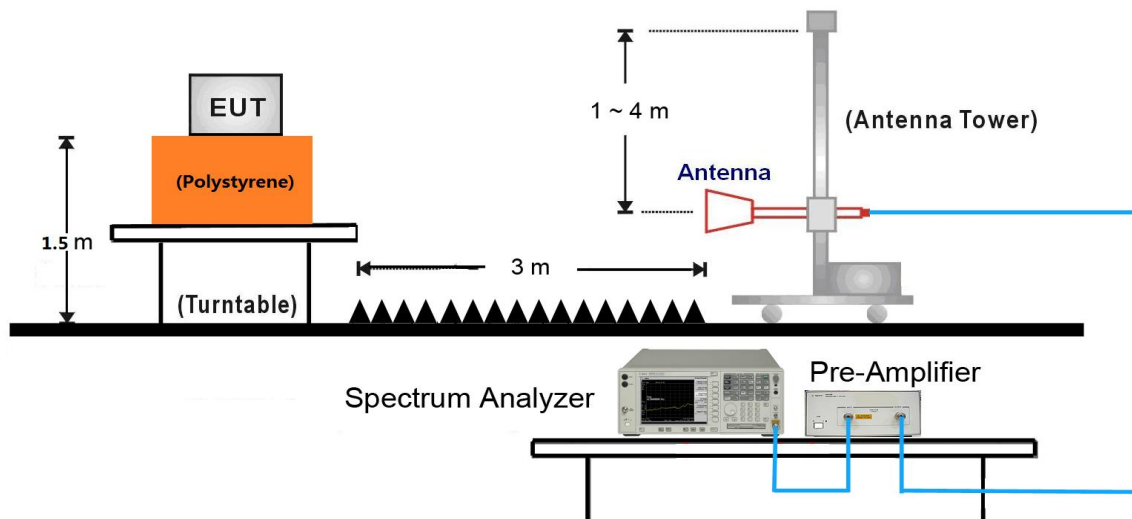
9kHz ~ 30MHz Test Setup:



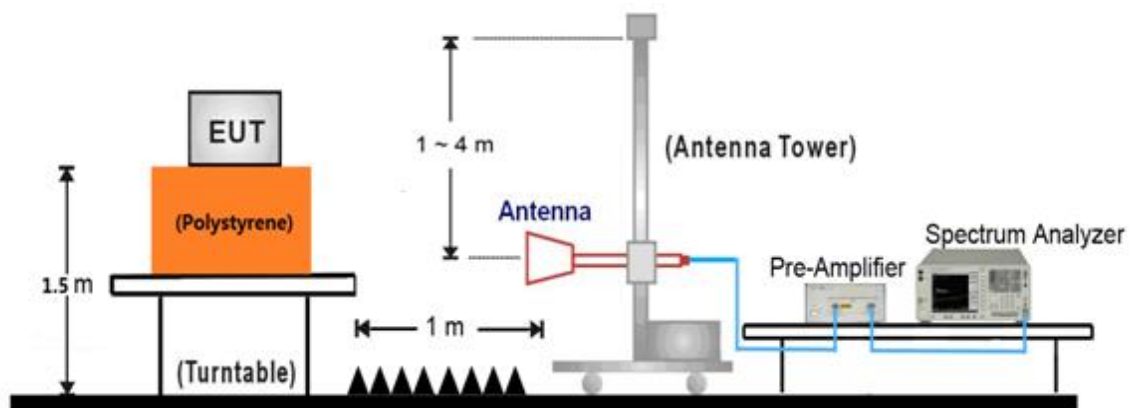
30MHz ~ 1GHz Test Setup:



1GHz ~ 18GHz Test Setup:



18GHz ~ 25GHz Test Setup:



5.4.4. 輻射干擾測試結果

對於 APEX0374, 請參考附錄 A 章節 4;
 對於 APEX0375, 請參考附錄 B 章節 4;
 對於 APEX0377, 請參考附錄 C 章節 4。

5.5. 混附發射之 RF 傳導發射

5.5.1. 適用標準

依據國家通訊傳播委員會低功率射頻電機技術規範之第 3.10.1.5 節，使用頻帶範圍外之任意 100 千赫 (kHz) 內，發射機所產生的射頻功率相較於使用頻帶範圍中包含最高所需功率之 100 千赫 (kHz) 內的射頻功率，至少須衰減 20 dB，以射頻傳導或輻射方式測量。如發射機以本節 3.10.1(2)(2.3) 之峰值傳導輸出功率量測方式者，至少須衰減 30 dB。此外，落於第 2.7 節禁用頻段之輻射發射，應符合第 2.8 節之規定。

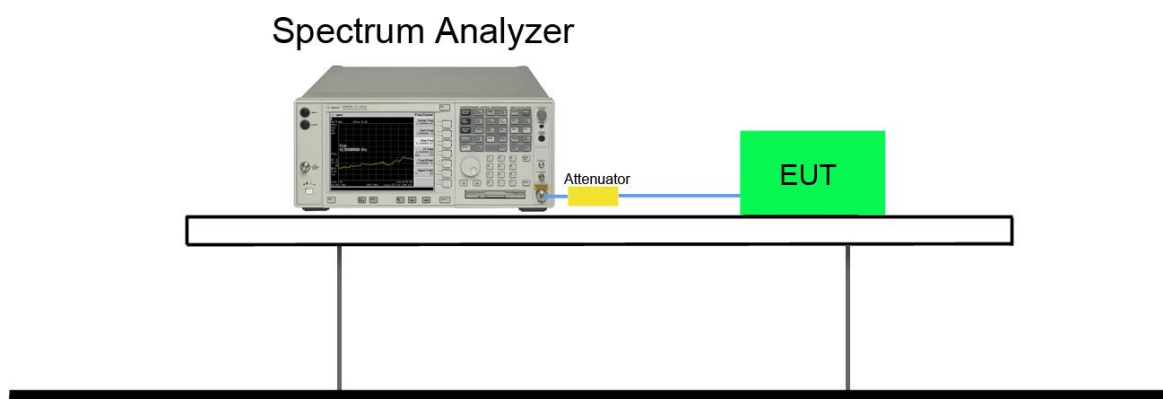
5.5.2. 量測方法

依據國家通訊傳播委員會低功率射頻電機技術規範之附件三，頻率跳頻展頻系統檢測之參考程式七 混附發射之 RF 傳導發射：

(一) 頻譜分析儀設定如下：

1. 頻率掃描範圍足以檢測頻帶內的發射波峰位準以及由受測物產生之最低頻率到第 10 次諧波的所有混附發射，通常需要分幾段以涵蓋全部頻率範圍。
2. 解析頻寬為 100kHz，視訊頻寬不小於解析頻寬。
3. 掃描時間為自動，檢波功能為峰值，訊號軌跡為最大保留(Max Hold)。
4. 將標記設定於任何欲紀錄之波峰上，所顯示之位準值必須符合指定之限制值。

5.5.3. 測試架構圖



5.5.4. 混附發射之 RF 傳導發射測試結果

對於 APEX0374, 請參考附錄 A 章節 5;
對於 APEX0375, 請參考附錄 B 章節 5;
對於 APEX0377, 請參考附錄 C 章節 5。

5.6. 開放頻帶邊緣之不必要幅射要求

5.6.1. 適用標準

依據國家通訊傳播委員會低功率射頻電機技術規範之第 3.10.1.5 節，使用頻帶範圍外之任意 100 千赫 (kHz) 內，發射器所產生的射頻功率相較於使用頻帶範圍中包含最高所需功率之 100 千赫 (kHz) 內的射頻功率，衰減值限制如下：

(1) 輸出功率以低功率射頻電機技術規範附件二之峰值輸出功率方式量測者，至少須衰減 20 dB，可使用射頻傳導或輻射方式測量。

(2) 輸出功率以低功率射頻電機技術規範 3.10.1(2)(2.3) 之最大傳導輸出功率量測方式者，至少須衰減 30 dB。

此外，落於第 2.7 節禁用頻段之輻射發射，應符合第 2.8 節之規定(限制要求如下)：

發射依據國家通訊傳播委員會低功率射頻電機技術規範之第 2.8 節，低功率射頻電機，除本規範各章節另有放寬規定者外，其電場強度不得超過下表之限值，且其不必要之發射皆不得大於主波發射強度。各頻段重疊處，以較嚴格之限制值為準。

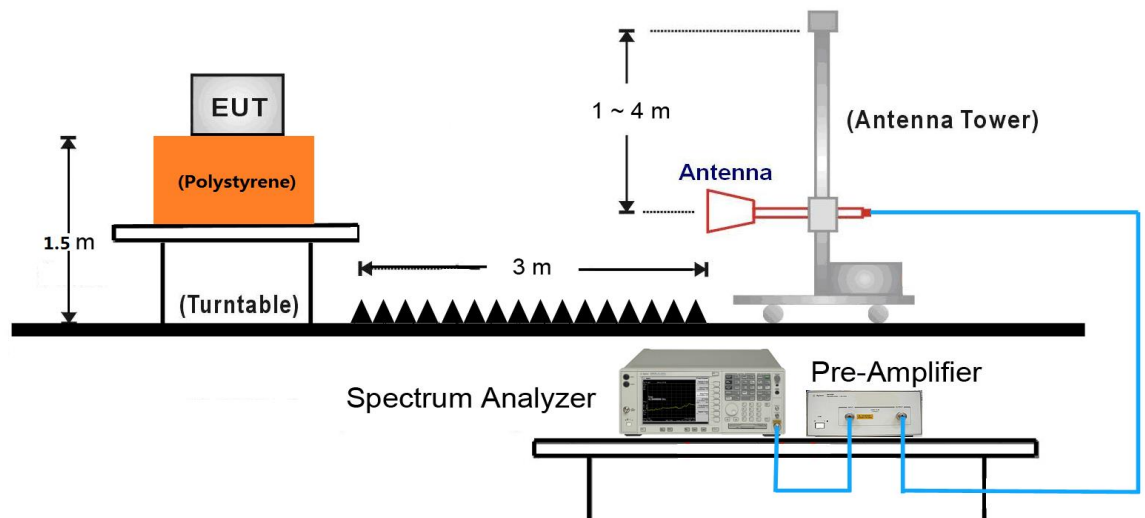
頻 率(兆赫)	電場強度(微伏/公尺)	測距(公尺)
0.009 - 0.490(含)	2,400/頻率(千赫)	300
0.490 (不含) – 1.705 (含)	24,000/頻率(千赫)	30
1.705(不含) – 30 (不含)	30	30
30 (含) – 88 (含)	100	3
88 (不含)- 216 (含)	150	3
216 (不含)- 960 (含)	200	3
960 (不含)以上	500	3

上表規定之電場強度，頻率在 9-90kHz 千赫(kHz)、110-490 千赫(kHz)以及 1000 兆赫(MHz)以上之發射，其量測以平均值檢波器為基準，且須符合第 5.14 節之規定；其他頻率之發射，應以 CISPR 準峰值(quasi-peak) 檢波器測量；非以上表所指定之距離測量時須符合第 5.5 節之規定，而輻射發射之量測頻率範圍須符合第 5.12 節之規定。

5.6.2. 量測方法

待測物置於高 80 公分之非導體桌面（落地型產品置於地上），受測物與配件設備之電源線無須束綁，桌面上受測設備的所有電源線由桌子的後緣垂下沿旋轉桌表面接至交流插座。落地型設備的交流電源線可以方便的型態走線。桌面可 360 度旋轉，接收天線置於距待測物 3m 距離，高度可在 1 至 4 公尺間變動，以量測待測物之最大輻射電場強度。接收天線並應於水準及垂直極化方向各量測一次。

5.6.3. 測試架構圖



備註: 使用頻率範圍外之任意 100 千赫雜訊，使用輻射方式測量，6 dB 頻寬使用 1MHz 遠大於 100kHz 仍可 PASS，檢附其測試數據。

5.6.4. 測試結果

對於 APEX0374, 請參考附錄 A 章節 6;
對於 APEX0375, 請參考附錄 B 章節 6;
對於 APEX0377, 請參考附錄 C 章節 6。

5.7. 佔用頻道寬度

5.7.1. 適用標準

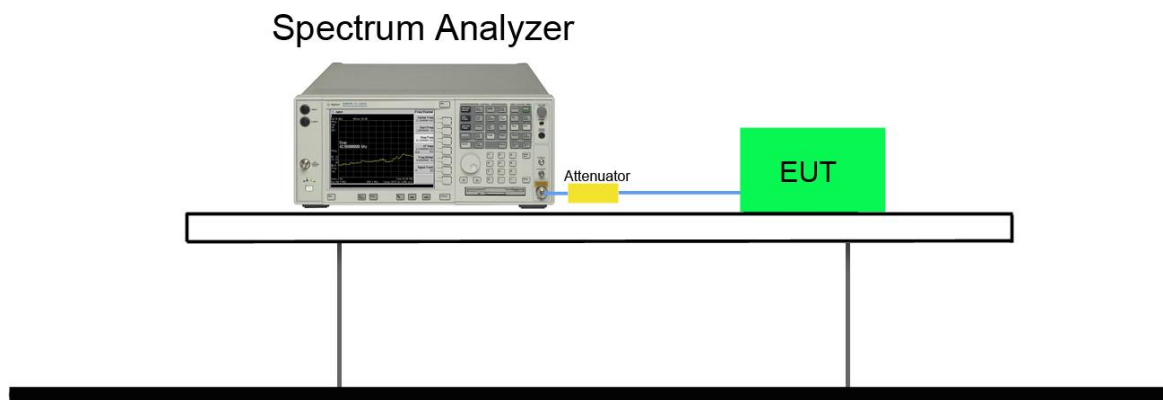
依據國家通訊傳播委員會低功率射頻電機技術規範之第 3.10.1.6(2)(A)節之要求，6dB 頻寬至少應有 500kHz。

5.7.2. 量測方法

待測物之天線埠經由適當之衰減直接連至頻譜分析儀 RF 輸入端，設定頻譜分析儀之解析度頻寬為 100kHz，視訊頻寬不小於解析度頻寬，頻率掃瞄範圍(SPAN)遠大於解析度頻寬。

待測物應在正常發射狀態下量測。

5.7.3. 測試架構圖



5.7.4. 佔用頻帶寬度測試結果

對於 APEX0374, 請參考附錄 A 章節 7;
對於 APEX0375, 請參考附錄 B 章節 7;
對於 APEX0377, 請參考附錄 C 章節 7。

5.8. 發射電功率密度

5.8.1. 適用標準

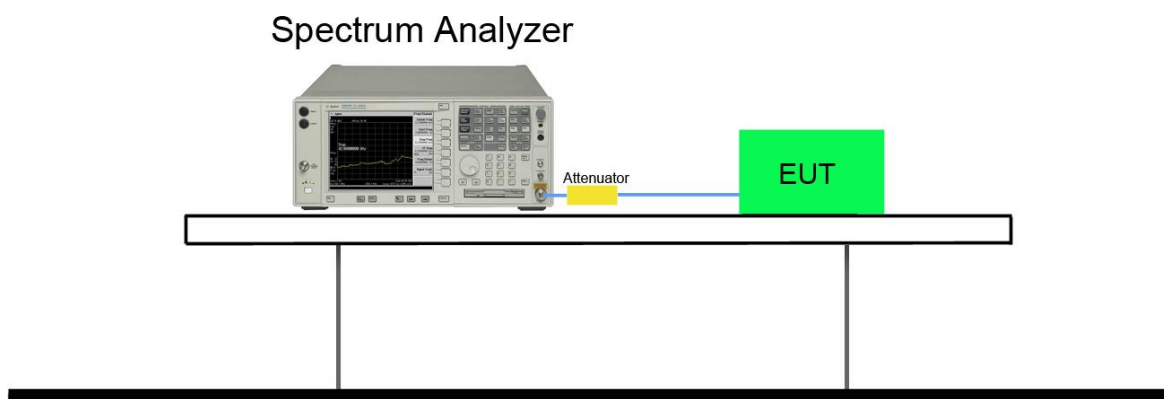
依據國家通訊傳播委員會低功率射頻電機技術規範之第 3.10.1.6(2)(B)節，在使用頻率範圍之任意 3 千赫(kHz)頻寬內，由發射機傳導至天線之峰值發射電功率密度在任意期間內，皆不得大於 8dBm。

5.8.2. 量測方法

待測物之天線埠經由適當之衰減直接連至頻譜分析儀 RF 輸入端。找出發射峰值並擴展於通帶內，設定頻譜分析儀之解析度頻寬為 3kHz，視訊頻寬大於解析度頻寬，掃瞄時間為頻率掃瞄範圍除以 3kHz。
($\text{SWEEP TIME} = \text{SPAN}/3\text{kHz}$)。

待測物應在正常發射狀態下量測。

5.8.3. 測試架構圖



5.8.4. 功率密度量測結果

對於 APEX0374, 請參考附錄 A 章節 8;
對於 APEX0375, 請參考附錄 B 章節 8;
對於 APEX0377, 請參考附錄 C 章節 8。

結束

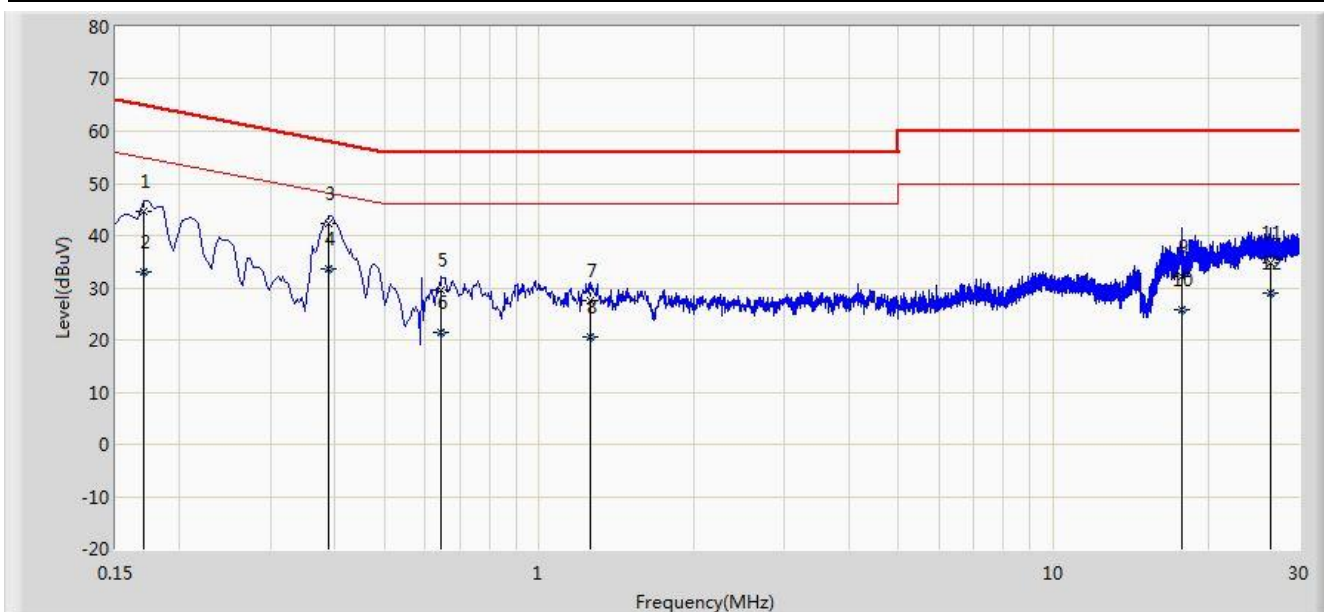
附錄 A

低功率射頻電機型式試驗測試結果

型號: APEX0374

1. 電源端點干擾測試結果

Site: SR2	Time: 2017/09/13 - 15:48
Limit: NCC LP0002_CE_0.15MHz-30MHz	Engineer: Kevin Ker
Probe: ENV216_101683_Filter On	Polarity: Line
EUT: ACCESS POINT	Power: AC 110V/60Hz
Worse Case Mode: Transmit by 802.11n-HT20 at Channel 2412MHz Ant 0 + 1	



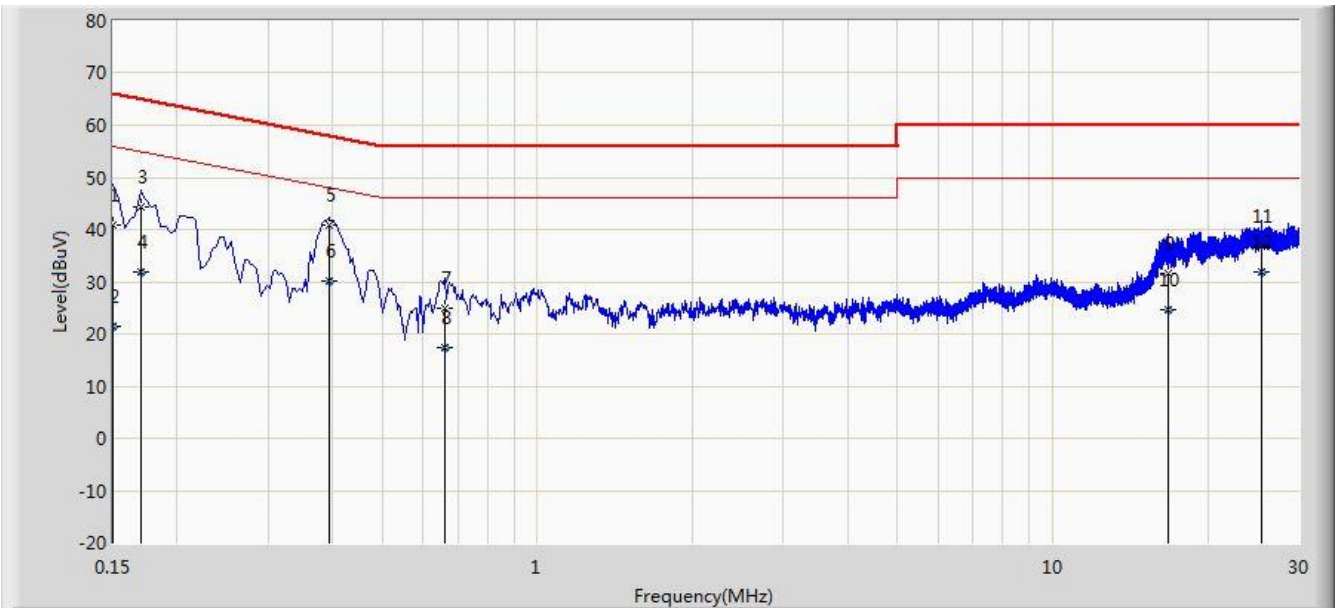
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV)	Factor (dB)	Type
1			0.170	44.727	34.649	-20.234	64.960	10.078	QP
2			0.170	33.003	22.925	-21.958	54.960	10.078	AV
3			0.390	42.360	32.283	-15.704	58.064	10.077	QP
4		*	0.390	33.678	23.601	-14.386	48.064	10.077	AV
5			0.646	29.521	19.431	-26.479	56.000	10.091	QP
6			0.646	21.347	11.256	-24.653	46.000	10.091	AV
7			1.254	27.395	17.496	-28.605	56.000	9.900	QP

8			1.254	20.561	10.662	-25.439	46.000	9.900	AV
9			17.790	32.188	22.095	-27.812	60.000	10.093	QP
10			17.790	25.765	15.671	-24.235	50.000	10.093	AV
11			26.426	34.737	24.494	-25.263	60.000	10.243	QP
12			26.426	29.056	18.814	-20.944	50.000	10.243	AV

Note: Measure Level (dBμV) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + LISN Factor (dB)

Site: SR2	Time: 2017/09/13 - 15:52
Limit: NCC LP0002_CE_0.15MHz-30MHz	Engineer: Kevin Ker
Probe: ENV216_101683_Filter On	Polarity: Neutral
EUT: ACCESS POINT	Power: AC 110V/60Hz
Worse Case Mode: Transmit by 802.11n-HT20 at Channel 2412MHz Ant 0 + 1	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV)	Factor (dB)	Type
1			0.150	40.809	29.667	-25.191	66.000	11.142	QP
2			0.150	21.455	10.313	-34.545	56.000	11.142	AV
3			0.170	44.252	34.188	-20.709	64.960	10.064	QP
4			0.170	31.751	21.687	-23.209	54.960	10.064	AV
5		*	0.394	40.818	30.710	-17.161	57.979	10.108	QP
6			0.394	30.031	19.924	-17.947	47.979	10.108	AV
7			0.662	24.865	14.768	-31.135	56.000	10.096	QP
8			0.662	17.247	7.151	-28.753	46.000	10.096	AV
9			16.702	31.708	21.594	-28.292	60.000	10.114	QP
10			16.702	24.656	14.541	-25.344	50.000	10.114	AV
11			25.426	36.912	26.589	-23.088	60.000	10.323	QP
12			25.426	31.779	21.456	-18.221	50.000	10.323	AV

Note: Measure Level (dBμV) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + LISN Factor (dB)

2. 峰值傳導輸出功率測試結果

Power output test was verified over all data rates of each mode shown as below table, and then choose the maximum power output (gray marker) for final test of each channel.

For Ant 0 / Ant 0 + 1 port of Omni Antenna (ANT-2x2-2005):

Test Mode	Bandwidth (MHz)	Channel No.	Frequency (MHz)	Data Rate/ MCS	Average Power (dBm)
802.11b	20	6	2437	1Mbps	21.47
				5.5Mbps	21.13
				11Mbps	20.89
802.11g	20	6	2437	6Mbps	21.89
				24Mbps	21.45
				54Mbps	21.04
802.11n	20	6	2437	MCS0	22.03
				MCS3	21.56
				MCS7	21.23
802.11n	40	6	2437	MCS0	17.54
				MCS3	17.33
				MCS7	17.04

Product	ACCESS POINT	Temperature	27°C
Test Engineer	Kevin Ker	Relative Humidity	65%
Test Site	SR2	Test Date	2017/08/29
Antenna Type	Omni Antenna (ANT-2x2-2005)		

Test Mode	Data Rate/ MCS	Channel No.	Freq. (MHz)	Ant 0 Average Power (dBm)	Ant 1 Average Power (dBm)	Total Average Power (dBm)	Limit (dBm)	Result
Ant 0 + 1 (CDD Mode)								
11b	1Mbps	1	2412	22.47	22.19	25.34	≤ 30.00	Pass
11b	1Mbps	6	2437	21.47	22.07	24.79	≤ 30.00	Pass
11b	1Mbps	11	2462	21.41	22.16	24.81	≤ 30.00	Pass
11g	6Mbps	1	2412	19.17	19.28	22.24	≤ 30.00	Pass
11g	6Mbps	6	2437	21.89	22.15	25.03	≤ 30.00	Pass
11g	6Mbps	11	2462	21.73	22.03	24.89	≤ 30.00	Pass
11n-HT20	MCS0	1	2412	18.38	18.65	21.53	≤ 30.00	Pass
11n-HT20	MCS0	2	2417	21.71	21.75	24.74	≤ 30.00	Pass
11n-HT20	MCS0	6	2437	22.03	22.39	25.22	≤ 30.00	Pass
11n-HT20	MCS0	11	2462	21.92	22.17	25.06	≤ 30.00	Pass
11n-HT40	MCS0	3	2422	15.57	15.62	18.61	≤ 30.00	Pass
11n-HT40	MCS0	6	2437	17.54	18.09	20.83	≤ 30.00	Pass
11n-HT40	MCS0	9	2452	16.62	16.89	19.77	≤ 30.00	Pass
Ant 0 + 1 (Beam-Forming Mode)								
11n-HT20	MCS0	1	2412	18.38	18.65	21.53	≤ 30.00	Pass
11n-HT20	MCS0	2	2417	21.71	21.75	24.74	≤ 30.00	Pass
11n-HT20	MCS0	6	2437	22.03	22.39	25.22	≤ 30.00	Pass
11n-HT20	MCS0	11	2462	21.92	22.17	25.06	≤ 30.00	Pass
11n-HT40	MCS0	3	2422	15.57	15.62	18.61	≤ 30.00	Pass
11n-HT40	MCS0	6	2437	17.54	18.09	20.83	≤ 30.00	Pass
11n-HT40	MCS0	9	2452	16.62	16.89	19.77	≤ 30.00	Pass

Note: Total Average Power (dBm) = $10 \cdot \log\{10^{(\text{Ant 0 Average Power}/10)} + 10^{(\text{Ant 1 Average Power}/10)}\}$ (dBm).

Product	ACCESS POINT	Temperature	27°C
Test Engineer	Kevin Ker	Relative Humidity	65%
Test Site	SR2	Test Date	2017/08/29
Antenna Type	Directional Antenna (ANT-2x2-2314)		

Test Mode	Data Rate/ MCS	Channel No.	Freq. (MHz)	Ant 0 Average Power (dBm)	Ant 1 Average Power (dBm)	Total Average Power (dBm)	Limit (dBm)	Result
Ant 0 + 1 (CDD Mode)								
11b	1Mbps	1	2412	18.94	18.84	21.90	≤ 22.00	Pass
11b	1Mbps	6	2437	18.37	19.05	21.73	≤ 22.00	Pass
11b	1Mbps	11	2462	18.33	19.22	21.81	≤ 22.00	Pass
11g	6Mbps	1	2412	16.11	16.46	19.30	≤ 22.00	Pass
11g	6Mbps	6	2437	18.70	18.98	21.85	≤ 22.00	Pass
11g	6Mbps	11	2462	16.69	17.14	19.93	≤ 22.00	Pass
11n-HT20	MCS0	1	2412	15.28	15.59	18.45	≤ 22.00	Pass
11n-HT20	MCS0	2	2417	17.14	17.27	20.22	≤ 22.00	Pass
11n-HT20	MCS0	6	2437	18.29	18.72	21.52	≤ 22.00	Pass
11n-HT20	MCS0	10	2457	17.36	17.47	20.43	≤ 22.00	Pass
11n-HT20	MCS0	11	2462	14.86	15.36	18.13	≤ 22.00	Pass
11n-HT40	MCS0	3	2422	12.56	12.42	15.50	≤ 22.00	Pass
11n-HT40	MCS0	6	2437	14.69	14.93	17.82	≤ 22.00	Pass
11n-HT40	MCS0	9	2452	13.12	13.44	16.29	≤ 22.00	Pass
Ant 0 + 1 (Beam-Forming Mode)								
11n-HT20	MCS0	1	2412	15.28	15.59	18.45	≤ 22.00	Pass
11n-HT20	MCS0	2	2417	17.14	17.27	20.22	≤ 22.00	Pass
11n-HT20	MCS0	6	2437	18.29	18.72	21.52	≤ 22.00	Pass
11n-HT20	MCS0	10	2457	17.36	17.47	20.43	≤ 22.00	Pass
11n-HT20	MCS0	11	2462	14.86	15.36	18.13	≤ 22.00	Pass
11n-HT40	MCS0	3	2422	12.56	12.42	15.50	≤ 22.00	Pass
11n-HT40	MCS0	6	2437	14.69	14.93	17.82	≤ 22.00	Pass
11n-HT40	MCS0	9	2452	13.12	13.44	16.29	≤ 22.00	Pass

Note 1: Total Average Power (dBm) = $10 \cdot \log\{10^{(\text{Ant 0 Average Power}/10)} + 10^{(\text{Ant 1 Average Power}/10)}\}$ (dBm).

Note 2: Limit (dBm) = 30 dBm – (14 dBi – 6 dBi) = 22 dBm.

3. 天線樣式

Antenna No.	Polarization	Frequency Band (GHz)	Model No.	Max Peak Gain (dBi)	30 Degree Antenna Gain (dBi)	BF Directional Gain (dBi)	CDD Directional Gain (dBi)	
							For Power	For PSD
Wi-Fi External Antenna List (2.4GHz 2*2 MIMO, 5GHz 4*4 MIMO)								
1 (Note 3)	Omni	2.4	ANT-2x2-2005	5.0	N/A	5.00	5.0	5.00
2 (Note 3)	Omni	5	ANT-2x2-5005	5.0	0	8.01	5.0	8.01
3 (Note 3)	Directional	2.4	ANT-2x2-2314	14.0	N/A	14.00	14.0	14.00
4 (Note 3)	Directional	5	ANT-3x3-5712	11.5	1.5	14.51	11.5	14.51
5 (Note 3)	Directional	5	ANT-4x4-5314	14.0	6.0	17.01	14.0	17.01
6 (Note 3)	Directional	5	MT-484052/NVH	16.0	3.0	19.01	16.0	19.01
7 (Note 3)	Directional	2.4	ANT-3x3-D608	7.5	N/A	10.51	7.5	10.51
		5		7.5	4.5	10.51	7.5	10.51
8 (Note 3)	Directional	2.4	ANT-3x3-D100	5.0	N/A	8.01	5.0	8.01
		5		5.0	4.0	8.01	5.0	8.01
Bluetooth Internal Antenna								
PCB		2.4	N2415AM4	3.0				

Note:

- The EUT supports Cyclic Delay Diversity (CDD) mode, and CDD signals are correlated.
For CDD transmissions, directional gain is calculated as follows, $N_{ANT} = 2$, $N_{SS} = 1$.
If all antennas have the same gain, G_{ANT} , Directional gain = $G_{ANT} + \text{Array Gain}$, where Array Gain is as follows.
 - For power spectral density (PSD) measurements on all devices,
Array Gain = $10 \log (N_{ANT} / N_{SS})$ dB = 3.01;
 - For power measurements on IEEE 802.11 devices,
Array Gain = 0 dB for $N_{ANT} \leq 4$;
- The EUT also supports Beam Forming mode, and the Beam Forming support 802.11n/ac, not include 802.11a/b/g.
Directional gain = $G_{ANT} + \text{BF Gain}$, BF Gain was declared by the applicant.
- These antennas have Cross-Polarized design, the detail see the antenna specification.
- We selected the max peak gain antenna of each type to perform RF testing. (Omni antenna 1# and 2#, Directional antenna 3# and 6#).

4. 輻射干擾測試結果

For Omni Antenna (ANT-2x2-2005)

Product	ACCESS POINT	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	56%
Test Site	AC1	Test Date	2017/08/26
Test Mode:	802.11b - Ant 0 + 1 (CDD Mode)	Test Channel:	01
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	4825.0	46.3	3.7	50.0	74.0	-24.0	Peak	Horizontal
	7553.5	32.7	12.8	45.5	74.0	-28.5	Peak	Horizontal
*	8701.0	31.6	13.8	45.4	89.1	-43.7	Peak	Horizontal
*	9857.0	31.5	16.2	47.7	89.1	-41.4	Peak	Horizontal
	4825.0	43.9	3.7	47.6	74.0	-26.4	Peak	Vertical
	7468.5	31.4	12.8	44.2	74.0	-29.8	Peak	Vertical
*	8633.0	32.5	13.5	46.0	89.1	-43.1	Peak	Vertical
*	9848.5	31.9	16.1	48.0	89.1	-41.1	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 30dBc of the fundamental emission level (119.1dBμV/m) or 15.209 which is higher.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	ACCESS POINT	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	56%
Test Site	AC1	Test Date	2017/08/26
Test Mode:	802.11b - Ant 0 + 1 (CDD Mode)	Test Channel:	06
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	4876.0	44.5	3.7	48.2	74.0	-25.8	Peak	Horizontal
	7536.5	33.1	12.8	45.9	74.0	-28.1	Peak	Horizontal
*	8743.5	31.7	13.9	45.6	89.0	-43.4	Peak	Horizontal
*	9840.0	30.8	16.0	46.8	89.0	-42.2	Peak	Horizontal
	4876.0	39.6	3.7	43.3	74.0	-30.7	Peak	Vertical
	7613.0	34.2	12.6	46.8	74.0	-27.2	Peak	Vertical
*	8616.0	32.3	13.5	45.8	89.0	-43.2	Peak	Vertical
*	9772.0	32.7	14.9	47.6	89.0	-41.4	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 30dBc of the fundamental emission level (119.0dBμV/m) or 15.209 which is higher.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	ACCESS POINT	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	56%
Test Site	AC1	Test Date	2017/08/26
Test Mode:	802.11b - Ant 0 + 1 (CDD Mode)	Test Channel:	11
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	4927.0	40.5	3.7	44.2	74.0	-29.8	Peak	Horizontal
	7570.5	32.9	12.8	45.7	74.0	-28.3	Peak	Horizontal
*	8692.5	32.1	13.7	45.8	89.0	-43.2	Peak	Horizontal
*	9840.0	31.9	16.0	47.9	89.0	-41.1	Peak	Horizontal
	4927.0	37.0	3.7	40.7	74.0	-33.3	Peak	Vertical
	7511.0	34.0	12.8	46.8	74.0	-27.2	Peak	Vertical
*	8811.5	31.6	14.0	45.6	89.0	-43.4	Peak	Vertical
*	10001.5	32.4	15.4	47.8	89.0	-41.2	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is 30dBc of the fundamental emission level (119.0dBμV/m) or 15.209 which is higher.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	ACCESS POINT	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	56%
Test Site	AC1	Test Date	2017/08/26
Test Mode:	802.11g - Ant 0 + 1 (CDD Mode)	Test Channel:	01
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	4825.0	39.6	3.7	43.3	74.0	-30.7	Peak	Horizontal
	7655.5	33.3	12.5	45.8	74.0	-28.2	Peak	Horizontal
*	8658.5	32.4	13.6	46.0	90.3	-44.3	Peak	Horizontal
*	9721.0	31.6	14.7	46.3	90.3	-44.0	Peak	Horizontal
	4816.5	37.7	3.7	41.4	74.0	-32.6	Peak	Vertical
	7511.0	34.1	12.8	46.9	74.0	-27.1	Peak	Vertical
*	8828.5	32.3	14.0	46.3	90.3	-44.0	Peak	Vertical
*	9882.5	32.7	15.6	48.3	90.3	-42.0	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 30dBc of the fundamental emission level (120.3dBμV/m) or 15.209 which is higher.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	ACCESS POINT	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	56%
Test Site	AC1	Test Date	2017/08/26
Test Mode:	802.11g - Ant 0 + 1 (CDD Mode)	Test Channel:	06
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	4876.0	42.1	3.7	45.8	74.0	-28.2	Peak	Horizontal
	7562.0	33.1	12.8	45.9	74.0	-28.1	Peak	Horizontal
*	8650.0	32.0	13.6	45.6	93.0	-47.4	Peak	Horizontal
*	9865.5	31.9	16.0	47.9	93.0	-45.1	Peak	Horizontal
	4876.0	38.3	3.7	42.0	74.0	-32.0	Peak	Vertical
	7494.0	32.4	12.8	45.2	74.0	-28.8	Peak	Vertical
*	8803.0	31.6	14.0	45.6	93.0	-47.4	Peak	Vertical
*	9534.0	33.5	14.4	47.9	93.0	-45.1	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 30dBc of the fundamental emission level (123.0BμV/m) or 15.209 which is higher.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	ACCESS POINT	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	56%
Test Site	AC1	Test Date	2017/08/26
Test Mode:	802.11g - Ant 0 + 1 (CDD Mode)	Test Channel:	11
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	4918.5	38.0	3.7	41.7	74.0	-32.3	Peak	Horizontal
	7570.5	32.8	12.8	45.6	74.0	-28.4	Peak	Horizontal
*	8735.0	31.7	13.9	45.6	93.1	-47.5	Peak	Horizontal
*	9857.0	31.6	16.2	47.8	93.1	-45.3	Peak	Horizontal
	4893.0	36.2	3.7	39.9	74.0	-34.1	Peak	Vertical
	7494.0	32.4	12.8	45.2	74.0	-28.8	Peak	Vertical
*	8590.5	32.4	13.4	45.8	93.1	-47.3	Peak	Vertical
*	9695.5	33.5	14.6	48.1	93.1	-45.0	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 30dBc of the fundamental emission level (123.1dBμV/m) or 15.209 which is higher.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	ACCESS POINT	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	56%
Test Site	AC1	Test Date	2017/08/26
Test Mode:	802.11n-HT20 - Ant 0 + 1 (CDD Mode)	Test Channel:	01
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	4825.0	39.3	3.7	43.0	74.0	-31.0	Peak	Horizontal
	7494.0	32.6	12.8	45.4	74.0	-28.6	Peak	Horizontal
*	8582.0	31.6	13.4	45.0	89.9	-44.9	Peak	Horizontal
*	9823.0	31.9	15.6	47.5	89.9	-42.4	Peak	Horizontal
	4825.0	36.8	3.7	40.5	74.0	-33.5	Peak	Vertical
	7494.0	32.3	12.8	45.1	74.0	-28.9	Peak	Vertical
*	8624.5	32.6	13.5	46.1	89.9	-43.8	Peak	Vertical
*	9661.5	33.9	14.5	48.4	89.9	-41.5	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 30dBc of the fundamental emission level (119.9dBμV/m) or 15.209 which is higher.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	ACCESS POINT	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	56%
Test Site	AC1	Test Date	2017/08/26
Test Mode:	802.11n-HT20 - Ant 0 + 1 (CDD Mode)	Test Channel:	06
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	4876.0	42.2	3.7	45.9	74.0	-28.1	Peak	Horizontal
	7468.5	32.4	12.8	45.2	74.0	-28.8	Peak	Horizontal
*	8650.0	31.7	13.6	45.3	93.0	-47.7	Peak	Horizontal
*	9551.0	32.5	14.4	46.9	93.0	-46.1	Peak	Horizontal
	4859.0	38.7	3.7	42.4	74.0	-31.6	Peak	Vertical
	7400.5	32.9	12.6	45.5	74.0	-28.5	Peak	Vertical
*	8709.5	31.9	13.8	45.7	93.0	-47.3	Peak	Vertical
*	9891.0	31.6	15.5	47.1	93.0	-45.9	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 30dBc of the fundamental emission level (123.0dBμV/m) or 15.209 which is higher.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	ACCESS POINT	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	56%
Test Site	AC1	Test Date	2017/08/26
Test Mode:	802.11n-HT20 - Ant 0 + 1 (CDD Mode)	Test Channel:	11
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	4918.5	37.5	3.7	41.2	74.0	-32.8	Peak	Horizontal
	7392.0	33.6	12.6	46.2	74.0	-27.8	Peak	Horizontal
*	8658.5	31.6	13.6	45.2	93.2	-48.0	Peak	Horizontal
*	9712.5	33.2	14.7	47.9	93.2	-45.3	Peak	Horizontal
	4842.0	35.0	3.7	38.7	74.0	-35.3	Peak	Vertical
	7409.0	32.2	12.6	44.8	74.0	-29.2	Peak	Vertical
*	8828.5	31.6	14.0	45.6	93.2	-47.6	Peak	Vertical
*	9840.0	31.0	16.0	47.0	93.2	-46.2	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 30dBc of the fundamental emission level (123.2dBμV/m) or 15.209 which is higher.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	ACCESS POINT	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	56%
Test Site	AC1	Test Date	2017/08/26
Test Mode:	802.11n-HT40 - Ant 0 + 1 (CDD Mode)	Test Channel:	03
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	4842.0	35.7	3.7	39.4	74.0	-34.6	Peak	Horizontal
	7451.5	32.8	12.8	45.6	74.0	-28.4	Peak	Horizontal
*	8786.0	31.4	13.9	45.3	84.3	-39.0	Peak	Horizontal
*	9891.0	32.6	15.5	48.1	84.3	-36.2	Peak	Horizontal
	4884.5	35.4	3.7	39.1	74.0	-34.9	Peak	Vertical
	7613.0	32.5	12.6	45.1	74.0	-28.9	Peak	Vertical
*	8650.0	32.2	13.6	45.8	84.3	-38.5	Peak	Vertical
*	9848.5	31.2	16.1	47.3	84.3	-37.0	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 30dBc of the fundamental emission level (114.3dBμV/m) or 15.209 which is higher.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	ACCESS POINT	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	56%
Test Site	AC1	Test Date	2017/08/26
Test Mode:	802.11n-HT40 - Ant 0 + 1 (CDD Mode)	Test Channel:	06
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	4876.0	39.6	3.7	43.3	74.0	-30.7	Peak	Horizontal
	7502.5	32.7	12.8	45.5	74.0	-28.5	Peak	Horizontal
*	8573.5	32.5	13.3	45.8	88.0	-42.2	Peak	Horizontal
*	9848.5	31.5	16.1	47.6	88.0	-40.4	Peak	Horizontal
	4859.0	36.2	3.7	39.9	74.0	-34.1	Peak	Vertical
	7511.0	33.0	12.8	45.8	74.0	-28.2	Peak	Vertical
*	8709.5	31.8	13.8	45.6	88.0	-42.4	Peak	Vertical
*	9721.0	32.3	14.7	47.0	88.0	-41.0	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 30dBc of the fundamental emission level (118.0dBμV/m) or 15.209 which is higher.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	ACCESS POINT	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	56%
Test Site	AC1	Test Date	2017/08/26
Test Mode:	802.11n-HT40 - Ant 0 + 1 (CDD Mode)	Test Channel:	09
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	4901.5	36.1	3.7	39.8	74.0	-34.2	Peak	Horizontal
	7570.5	33.2	12.8	46.0	74.0	-28.0	Peak	Horizontal
*	8658.5	32.2	13.6	45.8	88.1	-42.3	Peak	Horizontal
*	9865.5	31.7	16.0	47.7	88.1	-40.4	Peak	Horizontal
	4901.5	35.1	3.7	38.8	74.0	-35.2	Peak	Vertical
	7553.5	33.5	12.8	46.3	74.0	-27.7	Peak	Vertical
*	8692.5	31.4	13.7	45.1	88.1	-43.0	Peak	Vertical
*	9610.5	32.6	14.4	47.0	88.1	-41.1	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 30dBc of the fundamental emission level (118.1dBμV/m) or 15.209 which is higher.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	ACCESS POINT	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	56%
Test Site	AC1	Test Date	2017/08/26
Test Mode:	802.11n-HT20 - Ant 0 + 1 (Beam-Forming Mode)	Test Channel:	01
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	7443.0	31.9	12.7	44.6	74.0	-29.4	Peak	Horizontal
	8318.5	32.3	11.9	44.2	74.0	-29.8	Peak	Horizontal
*	9899.5	31.4	15.4	46.8	83.8	-37.0	Peak	Horizontal
*	12951.0	30.2	19.7	49.9	83.8	-33.9	Peak	Horizontal
	7332.5	68.5	-24.1	44.4	74.0	-29.6	Peak	Vertical
	8471.5	68.7	-23.9	44.8	74.0	-29.2	Peak	Vertical
*	10035.5	70.1	-23.1	47.0	83.8	-36.8	Peak	Vertical
*	12951.0	69.6	-19.7	49.9	83.8	-33.9	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 30dBc of the fundamental emission level (113.8dBμV/m) or 15.209 which is higher.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	ACCESS POINT	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	56%
Test Site	AC1	Test Date	2017/08/26
Test Mode:	802.11n-HT20 - Ant 0 + 1 (Beam-Forming Mode)	Test Channel:	06
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	4876.0	40.8	3.7	44.5	74.0	-29.5	Peak	Horizontal
	7434.5	32.4	12.7	45.1	74.0	-28.9	Peak	Horizontal
*	8854.0	32.0	14.0	46.0	85.6	-39.6	Peak	Horizontal
*	10494.5	31.7	17.2	48.9	85.6	-36.7	Peak	Horizontal
	4867.5	36.6	3.7	40.3	74.0	-33.7	Peak	Vertical
	7366.5	68.5	-24.0	44.5	74.0	-29.5	Peak	Vertical
*	8888.0	68.6	-22.9	45.7	85.6	-39.9	Peak	Vertical
*	10494.5	70.6	-22.4	48.2	85.6	-37.4	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 30dBc of the fundamental emission level (115.6dBμV/m) or 15.209 which is higher.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	ACCESS POINT	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	56%
Test Site	AC1	Test Date	2017/08/26
Test Mode:	802.11n-HT20 - Ant 0 + 1 (Beam-Forming Mode)	Test Channel:	11
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	4927.0	37.2	3.7	40.9	74.0	-33.1	Peak	Horizontal
	7332.5	31.5	12.4	43.9	74.0	-30.1	Peak	Horizontal
*	8888.0	30.7	14.0	44.7	88.3	-43.6	Peak	Horizontal
*	10350.0	31.0	16.8	47.8	88.3	-40.5	Peak	Horizontal
	7400.5	68.1	-24.0	44.1	74.0	-29.9	Peak	Vertical
	8386.5	67.0	-24.3	42.7	74.0	-31.3	Peak	Vertical
*	9942.0	69.7	-23.3	46.4	88.3	-41.9	Peak	Vertical
*	12781.0	69.6	-20.1	49.5	88.3	-38.8	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 30dBc of the fundamental emission level (118.3dBμV/m) or 15.209 which is higher.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	ACCESS POINT	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	56%
Test Site	AC1	Test Date	2017/08/26
Test Mode:	802.11n-HT40 - Ant 0 + 1 (Beam-Forming Mode)	Test Channel:	03
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	7332.5	31.7	12.4	44.1	74.0	-29.9	Peak	Horizontal
	8352.5	31.7	12.0	43.7	74.0	-30.3	Peak	Horizontal
*	9942.0	31.2	15.3	46.5	85.1	-38.6	Peak	Horizontal
*	12781.0	30.4	19.0	49.4	85.1	-35.7	Peak	Horizontal
	7332.5	68.2	-24.1	44.1	74.0	-29.9	Peak	Vertical
	8301.5	67.4	-24.6	42.8	74.0	-31.2	Peak	Vertical
*	9942.0	69.2	-23.3	45.9	85.1	-39.2	Peak	Vertical
*	12840.5	69.9	-20.0	49.9	85.1	-35.2	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 30dBc of the fundamental emission level (115.1dBμV/m) or 15.209 which is higher.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	ACCESS POINT	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	56%
Test Site	AC1	Test Date	2017/08/26
Test Mode:	802.11n-HT40 - Ant 0 + 1 (Beam-Forming Mode)	Test Channel:	06
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	7324.0	31.3	12.4	43.7	74.0	-30.3	Peak	Horizontal
	8174.0	31.4	12.0	43.4	74.0	-30.6	Peak	Horizontal
*	10035.5	30.7	15.5	46.2	84.4	-38.2	Peak	Horizontal
*	12840.5	30.6	19.2	49.8	84.4	-34.6	Peak	Horizontal
	7324.0	67.7	-24.1	43.6	74.0	-30.4	Peak	Vertical
	8429.0	67.5	-24.1	43.4	74.0	-30.6	Peak	Vertical
*	9993.0	69.9	-23.2	46.7	84.4	-37.7	Peak	Vertical
*	12840.5	69.6	-20.0	49.6	84.4	-34.8	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 30dBc of the fundamental emission level (114.4dBμV/m) or 15.209 which is higher.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	ACCESS POINT	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	56%
Test Site	AC1	Test Date	2017/08/26
Test Mode:	802.11n-HT40 - Ant 0 + 1 (Beam-Forming Mode)	Test Channel:	09
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	7434.5	31.8	12.7	44.5	74.0	-29.5	Peak	Horizontal
	8242.0	31.4	11.9	43.3	74.0	-30.7	Peak	Horizontal
*	10078.0	30.8	15.6	46.4	83.6	-37.2	Peak	Horizontal
*	12840.5	30.3	19.2	49.5	83.6	-34.1	Peak	Horizontal
	7434.5	68.4	-23.9	44.5	74.0	-29.5	Peak	Vertical
	8369.5	67.2	-24.3	42.9	74.0	-31.1	Peak	Vertical
*	10061.0	69.3	-23.0	46.3	83.6	-37.3	Peak	Vertical
*	12891.5	70.0	-19.9	50.1	83.6	-33.5	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 30dBc of the fundamental emission level (113.6dBμV/m) or 15.209 which is higher.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

For Directional Antenna (ANT-2x2-2314)

Product	ACCESS POINT	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	56%
Test Site	AC1	Test Date	2017/08/26
Test Mode:	802.11b - Ant 0 + 1 (CDD Mode)	Test Channel:	01
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	4825.0	47.4	3.7	51.1	74.0	-22.9	Peak	Horizontal
	7383.5	33.1	12.5	45.6	74.0	-28.4	Peak	Horizontal
*	8675.5	32.4	13.7	46.1	92.4	-46.3	Peak	Horizontal
*	9738.0	33.3	14.8	48.1	92.4	-44.3	Peak	Horizontal
	4825.0	40.3	3.7	44.0	74.0	-30.0	Peak	Vertical
	7468.5	32.4	12.8	45.2	74.0	-28.8	Peak	Vertical
*	8828.5	31.9	14.0	45.9	92.4	-46.5	Peak	Vertical
*	9593.5	33.2	14.4	47.6	92.4	-44.8	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is 30dBc of the fundamental emission level (122.4dBμV/m) or 15.209 which is higher.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	ACCESS POINT	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	56%
Test Site	AC1	Test Date	2017/08/26
Test Mode:	802.11b - Ant 0 + 1 (CDD Mode)	Test Channel:	06
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	4876.0	49.1	3.7	52.8	74.0	-21.2	Peak	Horizontal
	7307.0	33.8	12.3	46.1	74.0	-27.9	Peak	Horizontal
*	8633.0	31.7	13.5	45.2	93.4	-48.2	Peak	Horizontal
*	9848.5	32.6	16.1	48.7	93.4	-44.7	Peak	Horizontal
	4876.0	41.8	3.7	45.5	74.0	-28.5	Peak	Vertical
	7383.5	32.0	12.5	44.5	74.0	-29.5	Peak	Vertical
*	8811.5	31.9	14.0	45.9	93.4	-47.5	Peak	Vertical
*	9772.0	33.3	14.9	48.2	93.4	-45.2	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is 30dBc of the fundamental emission level (123.4dBμV/m) or 15.209 which is higher.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	ACCESS POINT	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	56%
Test Site	AC1	Test Date	2017/08/26
Test Mode:	802.11b - Ant 0 + 1 (CDD Mode)	Test Channel:	11
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	4927.0	47.2	3.7	50.9	74.0	-23.1	Peak	Horizontal
	7460.0	32.7	12.8	45.5	74.0	-28.5	Peak	Horizontal
*	8582.0	32.3	13.4	45.7	93.4	-47.7	Peak	Horizontal
*	9610.5	33.6	14.4	48.0	93.4	-45.4	Peak	Horizontal
	4927.0	40.1	3.7	43.8	74.0	-30.2	Peak	Vertical
	7511.0	32.7	12.8	45.5	74.0	-28.5	Peak	Vertical
*	8947.5	33.3	14.0	47.3	93.4	-46.1	Peak	Vertical
*	9865.5	32.2	16.0	48.2	93.4	-45.2	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 30dBc of the fundamental emission level (123.4dBμV/m) or 15.209 which is higher.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	ACCESS POINT	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	56%
Test Site	AC1	Test Date	2017/08/26
Test Mode:	802.11g - Ant 0 + 1 (CDD Mode)	Test Channel:	01
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	4825.0	39.8	3.7	43.5	74.0	-30.5	Peak	Horizontal
	7638.5	33.1	12.6	45.7	74.0	-28.3	Peak	Horizontal
*	8820.0	31.4	14.0	45.4	93.6	-48.2	Peak	Horizontal
*	9891.0	32.4	15.5	47.9	93.6	-45.7	Peak	Horizontal
	4859.0	34.8	3.7	38.5	74.0	-35.5	Peak	Vertical
	7332.5	32.5	12.4	44.9	74.0	-29.1	Peak	Vertical
*	8573.5	32.2	13.3	45.5	93.6	-48.1	Peak	Vertical
*	9823.0	31.6	15.6	47.2	93.6	-46.4	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 30dBc of the fundamental emission level (123.6dBμV/m) or 15.209 which is higher.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	ACCESS POINT	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	56%
Test Site	AC1	Test Date	2017/08/26
Test Mode:	802.11g - Ant 0 + 1 (CDD Mode)	Test Channel:	06
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	4876.0	44.9	3.7	48.6	74.0	-25.4	Peak	Horizontal
	7307.0	33.1	12.3	45.4	74.0	-28.6	Peak	Horizontal
*	8641.5	32.3	13.5	45.8	93.6	-47.8	Peak	Horizontal
*	9891.0	30.9	15.5	46.4	93.6	-47.2	Peak	Horizontal
	4876.0	40.1	3.7	43.8	74.0	-30.2	Peak	Vertical
	7502.5	33.0	12.8	45.8	74.0	-28.2	Peak	Vertical
*	8658.5	32.2	13.6	45.8	93.6	-47.8	Peak	Vertical
*	9874.0	32.2	15.8	48.0	93.6	-45.6	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 30dBc of the fundamental emission level (123.6dBμV/m) or 15.209 which is higher.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	ACCESS POINT	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	56%
Test Site	AC1	Test Date	2017/08/26
Test Mode:	802.11g - Ant 0 + 1 (CDD Mode)	Test Channel:	11
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	4927.0	37.7	3.7	41.4	74.0	-32.6	Peak	Horizontal
	7477.0	33.0	12.8	45.8	74.0	-28.2	Peak	Horizontal
*	8692.5	32.0	13.7	45.7	93.7	-48.0	Peak	Horizontal
*	10129.0	32.4	15.9	48.3	93.7	-45.4	Peak	Horizontal
	4910.0	35.3	3.7	39.0	74.0	-35.0	Peak	Vertical
	7681.0	33.4	12.5	45.9	74.0	-28.1	Peak	Vertical
*	8624.5	32.1	13.5	45.6	93.7	-48.1	Peak	Vertical
*	9772.0	31.0	14.9	45.9	93.7	-47.8	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 30dBc of the fundamental emission level (123.7dBμV/m) or 15.209 which is higher.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	ACCESS POINT	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	56%
Test Site	AC1	Test Date	2017/08/26
Test Mode:	802.11n-HT20 - Ant 0 + 1 (CDD Mode)	Test Channel:	01
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	4825.0	38.7	3.7	42.4	74.0	-31.6	Peak	Horizontal
	7536.5	32.5	12.8	45.3	74.0	-28.7	Peak	Horizontal
*	8743.5	31.7	13.9	45.6	93.9	-48.3	Peak	Horizontal
*	9831.5	32.1	15.9	48.0	93.9	-45.9	Peak	Horizontal
	4629.5	35.3	3.3	38.6	74.0	-35.4	Peak	Vertical
	7570.5	33.5	12.8	46.3	74.0	-27.7	Peak	Vertical
*	8786.0	31.3	13.9	45.2	93.9	-48.7	Peak	Vertical
*	9976.0	32.1	15.3	47.4	93.9	-46.5	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is 30dBc of the fundamental emission level (123.9dBμV/m) or 15.209 which is higher.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	ACCESS POINT	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	56%
Test Site	AC1	Test Date	2017/08/26
Test Mode:	802.11n-HT20 - Ant 0 + 1 (CDD Mode)	Test Channel:	06
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	4876.0	44.0	3.7	47.7	74.0	-26.3	Peak	Horizontal
	7553.5	32.4	12.8	45.2	74.0	-28.8	Peak	Horizontal
*	8667.0	32.8	13.6	46.4	93.7	-47.3	Peak	Horizontal
*	10069.5	32.3	15.6	47.9	93.7	-45.8	Peak	Horizontal
	4876.0	38.3	3.7	42.0	74.0	-32.0	Peak	Vertical
	7485.5	32.4	12.8	45.2	74.0	-28.8	Peak	Vertical
*	8658.5	33.1	13.6	46.7	93.7	-47.0	Peak	Vertical
*	10273.5	32.6	16.5	49.1	93.7	-44.6	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 30dBc of the fundamental emission level (123.7dBμV/m) or 15.209 which is higher.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	ACCESS POINT	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	56%
Test Site	AC1	Test Date	2017/08/26
Test Mode:	802.11n-HT20 - Ant 0 + 1 (CDD Mode)	Test Channel:	11
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	4927.0	37.8	3.7	41.5	74.0	-32.5	Peak	Horizontal
	7621.5	33.2	12.6	45.8	74.0	-28.2	Peak	Horizontal
*	8633.0	31.9	13.5	45.4	93.6	-48.2	Peak	Horizontal
*	9848.5	31.4	16.1	47.5	93.6	-46.1	Peak	Horizontal
	4808.0	35.4	3.7	39.1	74.0	-34.9	Peak	Vertical
	7494.0	32.8	12.8	45.6	74.0	-28.4	Peak	Vertical
*	8641.5	32.5	13.5	46.0	93.6	-47.6	Peak	Vertical
*	9882.5	32.0	15.6	47.6	93.6	-46.0	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 30dBc of the fundamental emission level (123.6dBμV/m) or 15.209 which is higher.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	ACCESS POINT	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	56%
Test Site	AC1	Test Date	2017/08/26
Test Mode:	802.11n-HT40 - Ant 0 + 1 (CDD Mode)	Test Channel:	03
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	4850.5	35.5	3.7	39.2	74.0	-34.8	Peak	Horizontal
	7511.0	32.9	12.8	45.7	74.0	-28.3	Peak	Horizontal
*	8633.0	32.2	13.5	45.7	87.3	-41.6	Peak	Horizontal
*	10018.5	32.7	15.4	48.1	87.3	-39.2	Peak	Horizontal
	4842.0	35.4	3.7	39.1	74.0	-34.9	Peak	Vertical
	7468.5	32.8	12.8	45.6	74.0	-28.4	Peak	Vertical
*	8650.0	32.9	13.6	46.5	87.3	-40.8	Peak	Vertical
*	9772.0	30.6	14.9	45.5	87.3	-41.8	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 30dBc of the fundamental emission level (117.3dBμV/m) or 15.209 which is higher.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	ACCESS POINT	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	56%
Test Site	AC1	Test Date	2017/08/26
Test Mode:	802.11n-HT40 - Ant 0 + 1 (CDD Mode)	Test Channel:	06
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	4859.0	42.8	3.7	46.5	74.0	-27.5	Peak	Horizontal
	7315.5	34.7	12.3	47.0	74.0	-27.0	Peak	Horizontal
*	8879.5	31.7	14.0	45.7	88.3	-42.6	Peak	Horizontal
*	9763.5	32.4	14.9	47.3	88.3	-41.0	Peak	Horizontal
	4859.0	36.2	3.7	39.9	74.0	-34.1	Peak	Vertical
	7587.5	33.3	12.7	46.0	74.0	-28.0	Peak	Vertical
*	8684.0	32.3	13.7	46.0	88.3	-42.3	Peak	Vertical
*	9925.0	32.1	15.3	47.4	88.3	-40.9	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 30dBc of the fundamental emission level (118.3dBμV/m) or 15.209 which is higher.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	ACCESS POINT	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	56%
Test Site	AC1	Test Date	2017/08/26
Test Mode:	802.11n-HT40 - Ant 0 + 1 (CDD Mode)	Test Channel:	09
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	4791.0	35.0	3.7	38.7	74.0	-35.3	Peak	Horizontal
	7477.0	32.9	12.8	45.7	74.0	-28.3	Peak	Horizontal
*	8641.5	33.0	13.5	46.5	88.7	-42.2	Peak	Horizontal
*	9721.0	32.0	14.7	46.7	88.7	-42.0	Peak	Horizontal
	4850.5	35.3	3.7	39.0	74.0	-35.0	Peak	Vertical
	7434.5	33.5	12.7	46.2	74.0	-27.8	Peak	Vertical
*	8641.5	32.1	13.5	45.6	88.7	-43.1	Peak	Vertical
*	9916.5	32.7	15.3	48.0	88.7	-40.7	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 30dBc of the fundamental emission level (118.7dBμV/m) or 15.209 which is higher.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	ACCESS POINT	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	56%
Test Site	AC1	Test Date	2017/08/26
Test Mode:	802.11n-HT20 - Ant 0 + 1 (Beam-Forming Mode)	Test Channel:	01
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	7332.5	29.9	12.4	42.3	74.0	-31.7	Peak	Horizontal
	8199.5	31.3	12.0	43.3	74.0	-30.7	Peak	Horizontal
*	9942.0	29.9	15.3	45.2	91.5	-46.3	Peak	Horizontal
*	12721.5	28.1	18.8	46.9	91.5	-44.6	Peak	Horizontal
	7366.5	29.7	12.5	42.2	74.0	-31.8	Peak	Vertical
	8199.5	30.0	12.0	42.0	74.0	-32.0	Peak	Vertical
*	10146.0	30.2	16.0	46.2	91.5	-45.3	Peak	Vertical
*	12721.5	28.1	18.8	46.9	91.5	-44.6	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 30dBc of the fundamental emission level (121.5dBμV/m) or 15.209 which is higher.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	ACCESS POINT	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	56%
Test Site	AC1	Test Date	2017/08/26
Test Mode:	802.11n-HT20 - Ant 0 + 1 (Beam-Forming Mode)	Test Channel:	06
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	7366.5	29.7	12.5	42.2	74.0	-31.8	Peak	Horizontal
	8488.5	28.7	12.7	41.4	74.0	-32.6	Peak	Horizontal
*	10035.5	29.1	15.5	44.6	91.6	-47.0	Peak	Horizontal
*	12908.5	27.1	19.5	46.6	91.6	-45.0	Peak	Horizontal
	7502.5	29.9	12.8	42.7	74.0	-31.3	Peak	Vertical
	8310.0	29.9	11.9	41.8	74.0	-32.2	Peak	Vertical
*	10188.5	27.1	16.2	43.3	91.6	-48.3	Peak	Vertical
*	12908.5	27.1	19.5	46.6	91.6	-45.0	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 30dBc of the fundamental emission level (121.6dBμV/m) or 15.209 which is higher.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	ACCESS POINT	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	56%
Test Site	AC1	Test Date	2017/08/26
Test Mode:	802.11n-HT20 - Ant 0 + 1 (Beam-Forming Mode)	Test Channel:	11
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	7502.5	29.9	12.8	42.7	74.0	-31.3	Peak	Horizontal
	8497.0	30.3	12.8	43.1	74.0	-30.9	Peak	Horizontal
*	9882.5	30.5	15.6	46.1	91.7	-45.6	Peak	Horizontal
*	12781.0	26.2	19.0	45.2	91.7	-46.5	Peak	Horizontal
	7400.5	29.3	12.6	41.9	74.0	-32.1	Peak	Vertical
	8242.0	30.2	11.9	42.1	74.0	-31.9	Peak	Vertical
*	10086.5	29.1	15.7	44.8	91.7	-46.9	Peak	Vertical
*	12781.0	26.2	19.0	45.2	91.7	-46.5	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 30dBc of the fundamental emission level (121.7dBμV/m) or 15.209 which is higher.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	ACCESS POINT	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	56%
Test Site	AC1	Test Date	2017/08/26
Test Mode:	802.11n-HT40 - Ant 0 + 1 (Beam-Forming Mode)	Test Channel:	03
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	7400.5	29.3	12.6	41.9	74.0	-32.1	Peak	Horizontal
	8497.0	30.0	12.8	42.8	74.0	-31.2	Peak	Horizontal
*	9993.0	28.7	15.4	44.1	85.6	-41.5	Peak	Horizontal
*	13146.5	26.1	20.1	46.2	85.6	-39.4	Peak	Horizontal
	7536.5	29.3	12.8	42.1	74.0	-31.9	Peak	Vertical
	8352.5	29.4	12.0	41.4	74.0	-32.6	Peak	Vertical
*	10180.0	29.0	16.1	45.1	85.6	-40.5	Peak	Vertical
*	13146.5	26.1	20.1	46.2	85.6	-39.4	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is 30dBc of the fundamental emission level (115.6dBμV/m) or 15.209 which is higher.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	ACCESS POINT	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	56%
Test Site	AC1	Test Date	2017/08/26
Test Mode:	802.11n-HT40 - Ant 0 + 1 (Beam-Forming Mode)	Test Channel:	06
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	7536.5	29.3	12.8	42.1	74.0	-31.9	Peak	Horizontal
	8301.5	29.6	11.9	41.5	74.0	-32.5	Peak	Horizontal
*	10137.5	27.8	15.9	43.7	85.2	-41.5	Peak	Horizontal
*	12840.5	26.9	19.2	46.1	85.2	-39.1	Peak	Horizontal
	7502.5	29.1	12.8	41.9	74.0	-32.1	Peak	Vertical
	8310.0	30.2	11.9	42.1	74.0	-31.9	Peak	Vertical
*	10120.5	28.7	15.8	44.5	85.2	-40.7	Peak	Vertical
*	12840.5	26.9	19.2	46.1	85.2	-39.1	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 30dBc of the fundamental emission level (115.2dBμV/m) or 15.209 which is higher.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	ACCESS POINT	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	56%
Test Site	AC1	Test Date	2017/08/26
Test Mode:	802.11n-HT40 - Ant 0 + 1 (Beam-Forming Mode)	Test Channel:	09
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	7502.5	29.1	12.8	41.9	74.0	-32.1	Peak	Horizontal
	8471.5	28.6	12.6	41.2	74.0	-32.8	Peak	Horizontal
*	9993.0	27.8	15.4	43.2	84.2	-41.0	Peak	Horizontal
*	12951.0	25.6	19.7	45.3	84.2	-38.9	Peak	Horizontal
	7502.5	29.3	12.8	42.1	74.0	-31.9	Peak	Vertical
	8454.5	29.6	12.5	42.1	74.0	-31.9	Peak	Vertical
*	10052.5	28.9	15.5	44.4	84.2	-39.8	Peak	Vertical
*	12951.0	25.6	19.7	45.3	84.2	-38.9	Peak	Vertical

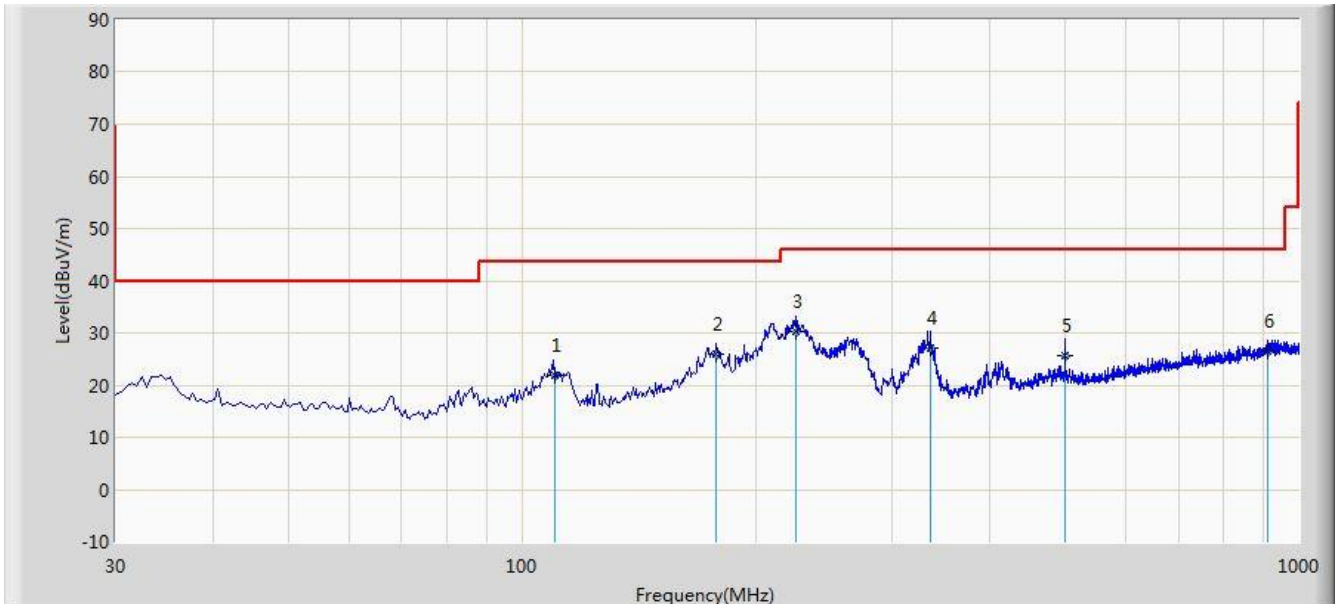
Note 1: "*" is not in restricted band, its limit is 30dBc of the fundamental emission level (114.2dBμV/m) or 15.209 which is higher.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

The Worst Case of Radiated Emission below 1GHz:

Site: AC1	Time: 2017/09/07 - 20:55
Limit: NCC LP0002_1GHz-40GHz	Engineer: Kevin Ker
Probe: VULB 9168_20-2000MHz	Polarity: Horizontal
EUT: ACCESS POINT - Directional Antenna (ANT-2x2-2314)	Power: AC 120V/60Hz
Note: There is the worst case within frequency range 30MHz~1GHz.	



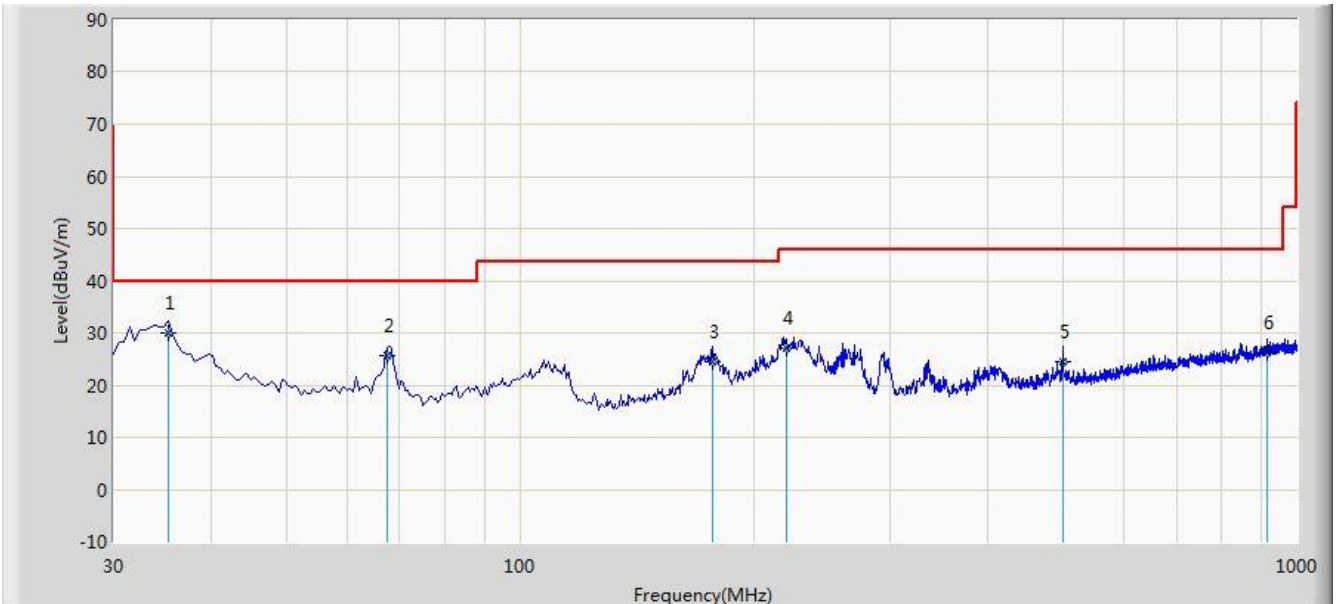
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			110.050	21.972	8.968	-21.528	43.500	13.004	QP
2			177.925	25.950	15.060	-17.550	43.500	10.890	QP
3		*	224.970	30.321	17.328	-15.679	46.000	12.994	QP
4			335.550	27.231	11.490	-18.769	46.000	15.741	QP
5			499.965	25.727	7.150	-20.273	46.000	18.576	QP
6			912.215	26.463	1.950	-19.537	46.000	24.513	QP

Note 1: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Note 2: The test trace is same as the ambient noise and the amplitude of the emissions are attenuated more than 20dB below the permissible (the test frequency range: 9kHz ~ 30MHz, 18GHz ~ 25GHz), therefore no data appear in the report.

Site: AC1	Time: 2017/09/07 - 20:57
Limit: NCC LP0002_1GHz-40GHz	Engineer: Kevin Ker
Probe: VULB 9168_20-2000MHz	Polarity: Vertical
EUT: ACCESS POINT - Directional Antenna (ANT-2x2-2314)	Power: AC 120V/60Hz
Note: There is the worst case within frequency range 30MHz~1GHz.	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	35.335	30.057	17.050	-9.943	40.000	13.007	QP
2			67.380	25.636	13.840	-14.364	40.000	11.796	QP
3			176.950	24.466	13.650	-19.034	43.500	10.816	QP
4			220.120	26.975	14.180	-19.025	46.000	12.796	QP
5			499.954	24.556	5.980	-21.444	46.000	18.576	QP
6			916.580	26.193	1.650	-19.807	46.000	24.542	QP

Note 1: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Note 2: The test trace is same as the ambient noise and the amplitude of the emissions are attenuated more than 20dB below the permissible (the test frequency range: 9kHz ~ 30MHz, 18GHz ~ 25GHz), therefore no data appear in the report.

5. 混附發射之 RF 傳導發射測試結果

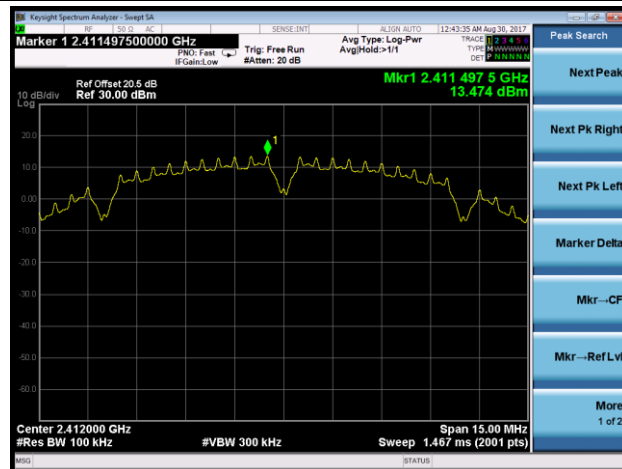
Product	ACCESS POINT	Temperature	27°C
Test Engineer	Kevin Ker	Relative Humidity	65%
Test Site	SR2	Test Date	2017/08/30
Antenna Type	Omni Antenna (ANT-2x2-2005)		

Test Mode	Data Rate / MCS	Channel No.	Frequency (MHz)	Limit (dBc)	Result
Ant 0 / Ant 0 + 1					
802.11b	1Mbps	01	2412	30	Pass
802.11b	1Mbps	06	2437	30	Pass
802.11b	1Mbps	11	2462	30	Pass
802.11g	6Mbps	01	2412	30	Pass
802.11g	6Mbps	06	2437	30	Pass
802.11g	6Mbps	11	2462	30	Pass
802.11n-HT20	MCS0	01	2412	30	Pass
802.11n-HT20	MCS0	06	2437	30	Pass
802.11n-HT20	MCS0	11	2462	30	Pass
802.11n-HT40	MCS0	03	2422	30	Pass
802.11n-HT40	MCS0	06	2437	30	Pass
802.11n-HT40	MCS0	09	2452	30	Pass

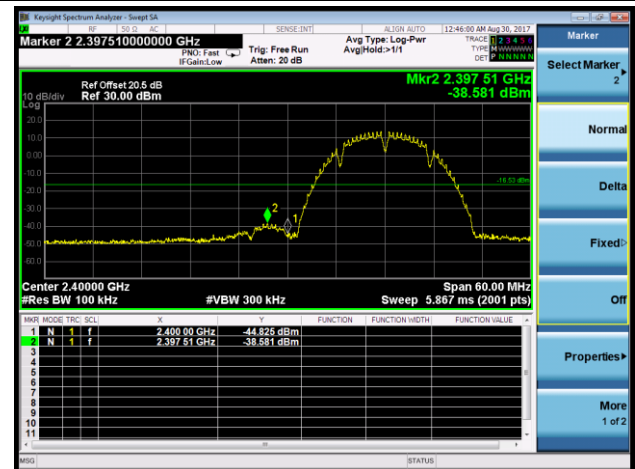
802.11b Out-of-Band Emissions - Ant 0 / Ant 0 + 1

Channel 01 (2412MHz)

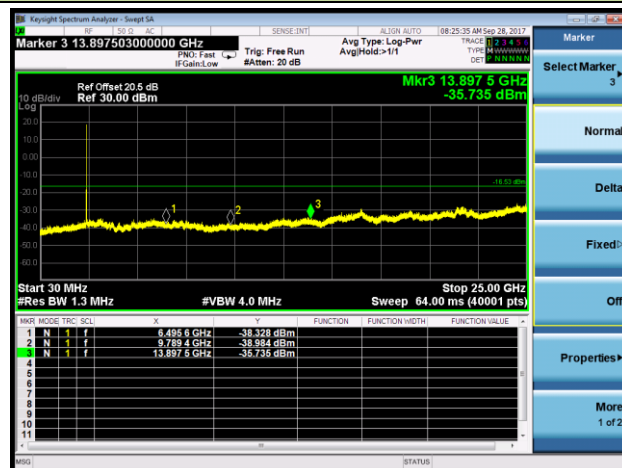
100kHz PSD reference Level



Low Band Edge



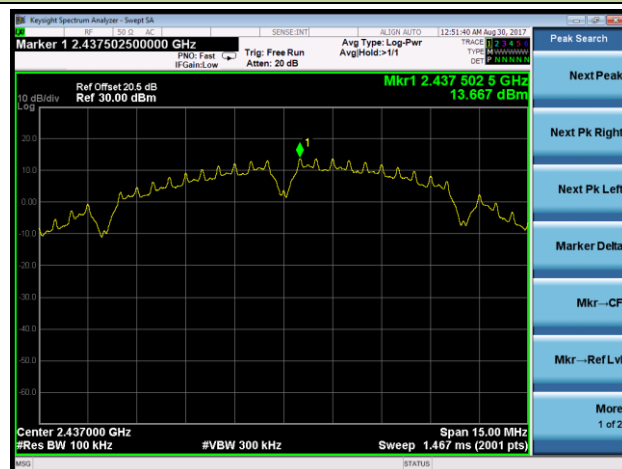
Spurious Emission



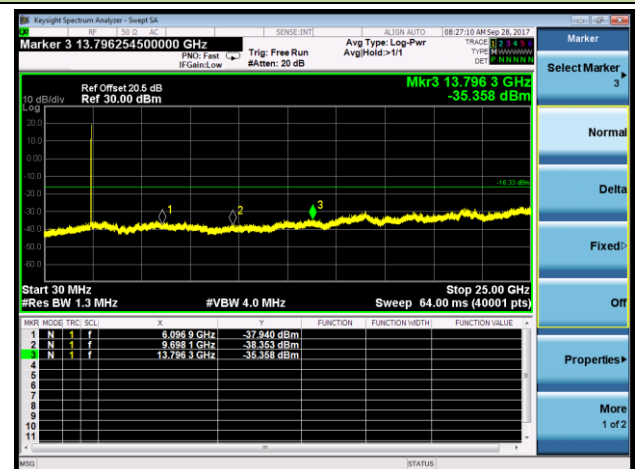
Note: The Value of the Display Line is -16.53dBm

Channel 06 (2437MHz)

100kHz PSD reference Level



Spurious Emission

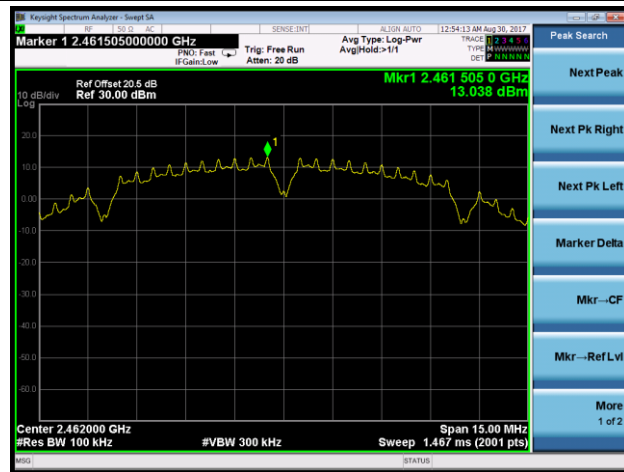


Note: The Value of the Display Line is -16.33dBm

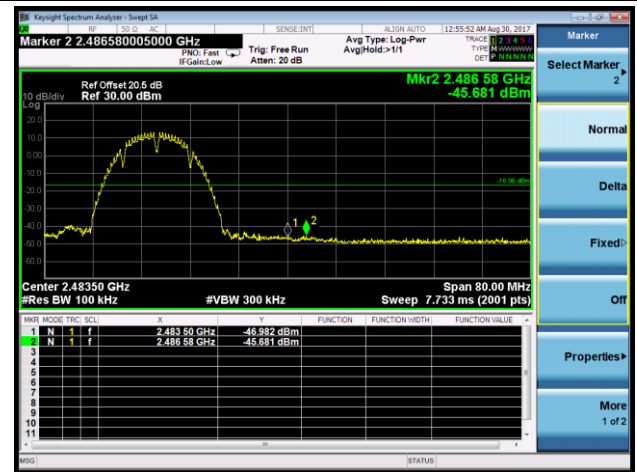
802.11b Out-of-Band Emissions - Ant 0 / Ant 0 + 1

Channel 11 (2462MHz)

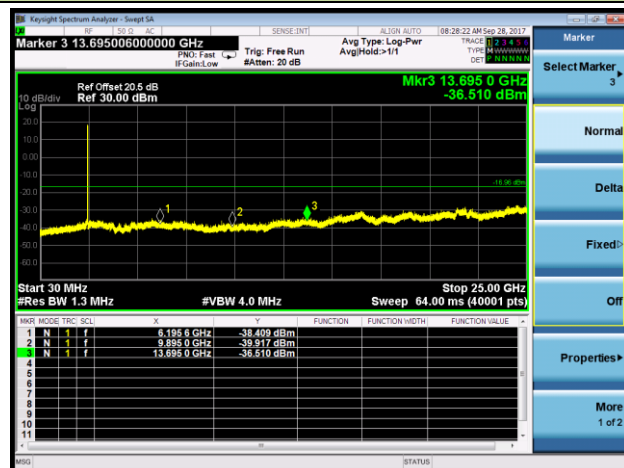
100kHz PSD reference Level



High Band Edge



Spurious Emission



Note: The Value of the Display Line is -16.96dBm

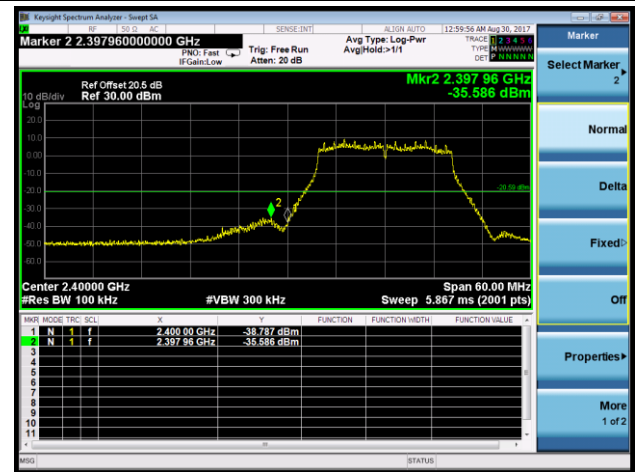
802.11g Out-of-Band Emissions - Ant 0 / Ant 0 + 1

Channel 01 (2412MHz)

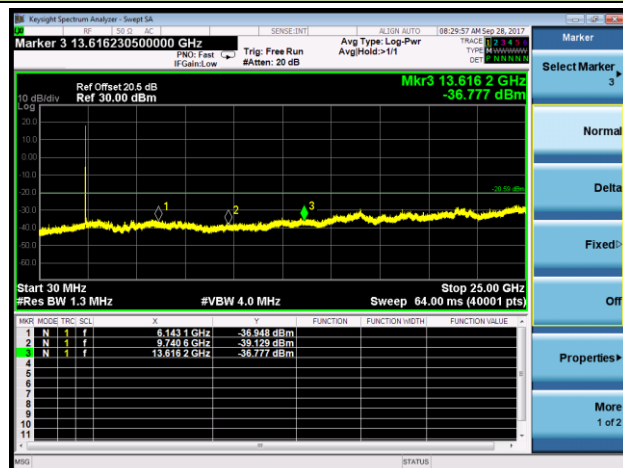
100kHz PSD reference Level



Low Band Edge



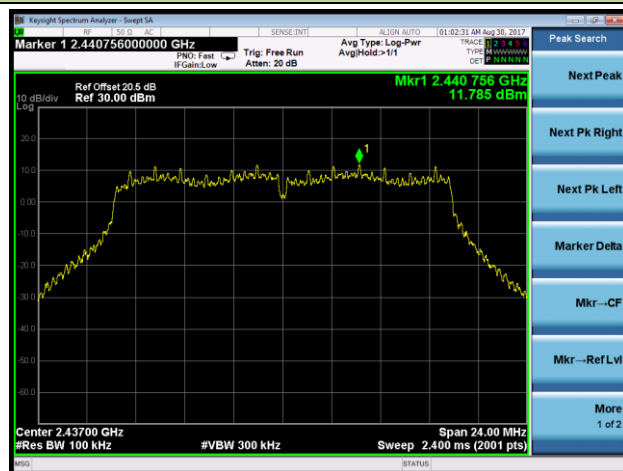
Spurious Emission



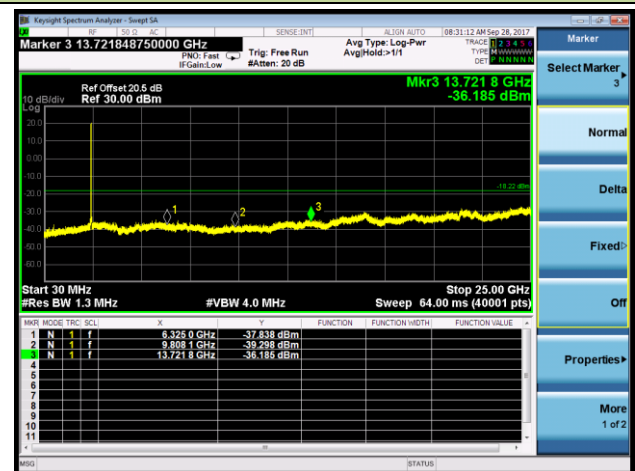
Note: The Value of the Display Line is -20.59dBm

Channel 06 (2437MHz)

100kHz PSD reference Level



Spurious Emission



Note: The Value of the Display Line is -18.22dBm

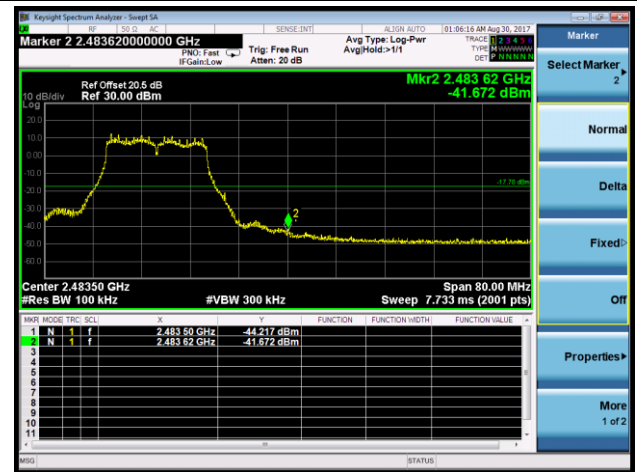
802.11g Out-of-Band Emissions - Ant 0 / Ant 0 + 1

Channel 11 (2462MHz)

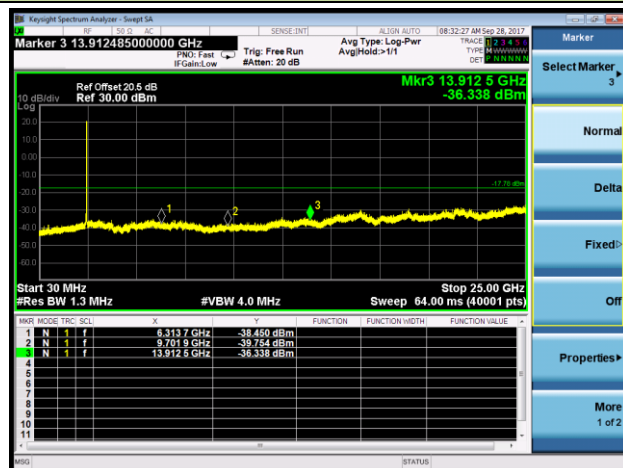
100kHz PSD reference Level



High Band Edge



Spurious Emission



Note: The Value of the Display Line is -17.78dBm

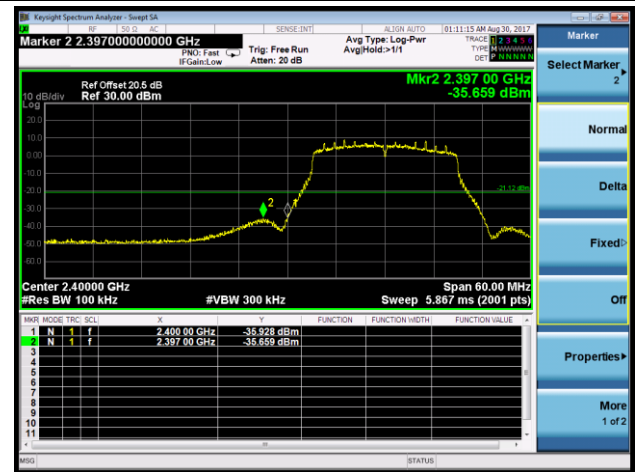
802.11n-HT20 Out-of-Band Emissions - Ant 0 / Ant 0 + 1

Channel 01 (2412MHz)

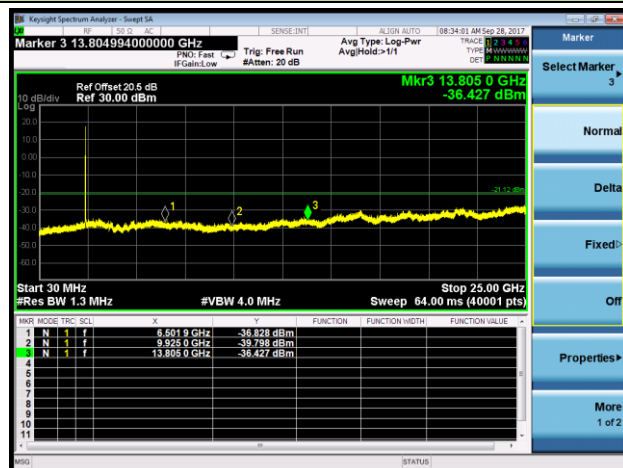
100kHz PSD reference Level



Low Band Edge



Spurious Emission



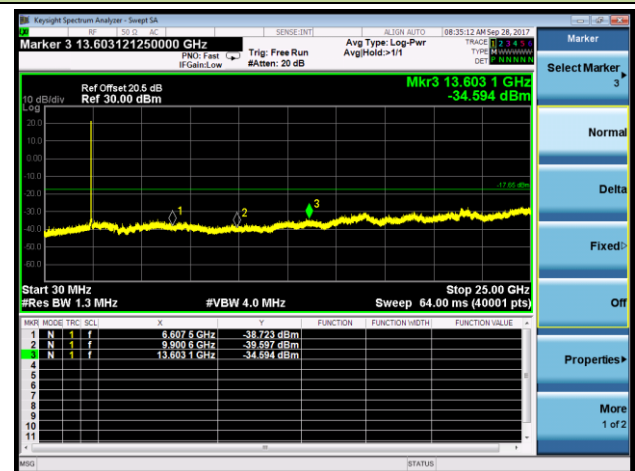
Note: The Value of the Display Line is -21.12dBm

Channel 06 (2437MHz)

100kHz PSD reference Level



Spurious Emission

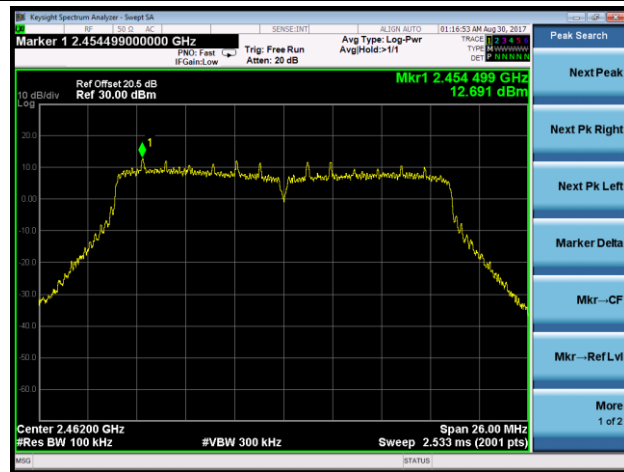


Note: The Value of the Display Line is -17.65dBm

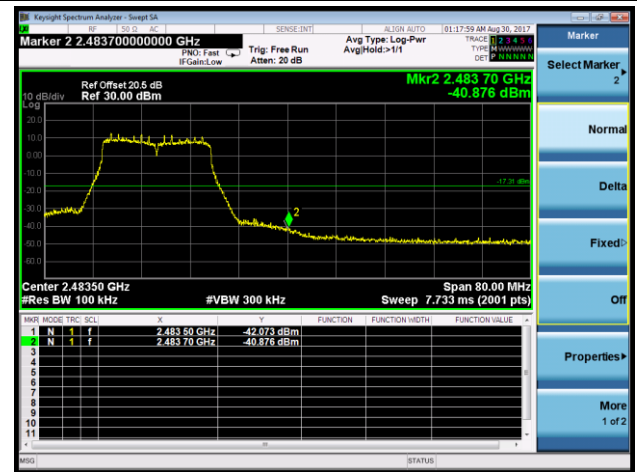
802.11n-HT20 Out-of-Band Emissions - Ant 0 / Ant 0 + 1

Channel 11 (2462MHz)

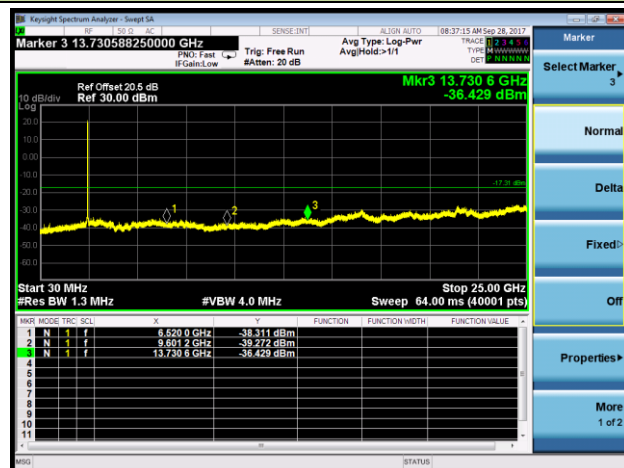
100kHz PSD reference Level



High Band Edge



Spurious Emission



Note: The Value of the Display Line is -17.31dBm

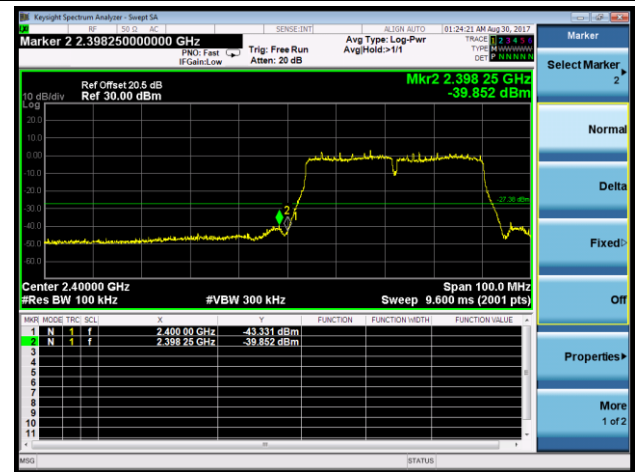
802.11n-HT40 Out-of-Band Emissions - Ant 0 / Ant 0 + 1

Channel 03 (2422MHz)

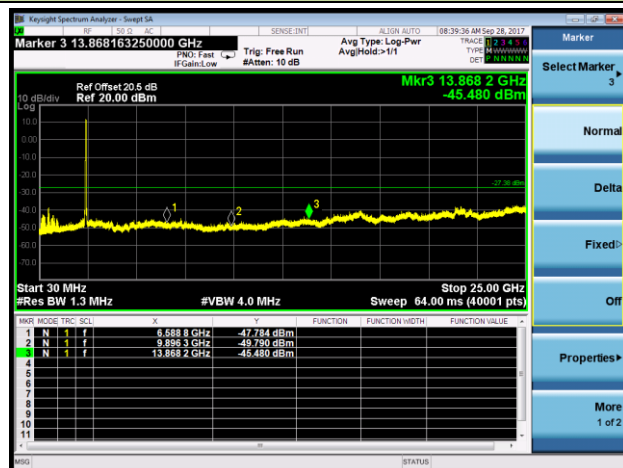
100kHz PSD reference Level



Low Band Edge



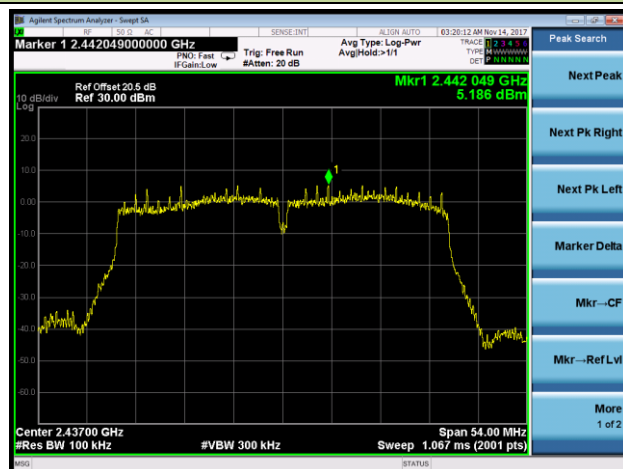
Spurious Emission



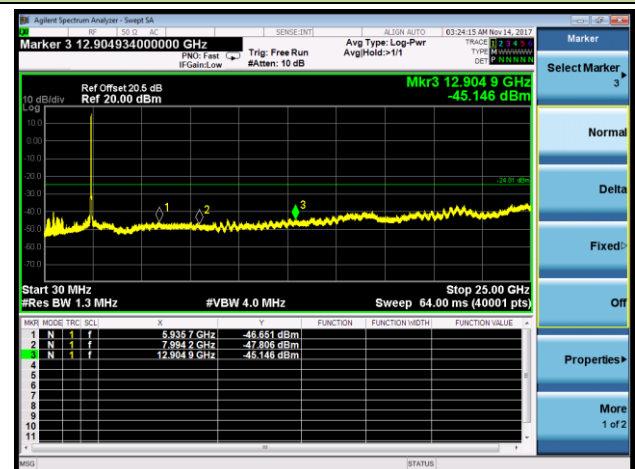
Note: The Value of the Display Line is -27.38dBm

Channel 06 (2437MHz)

100kHz PSD reference Level



Spurious Emission

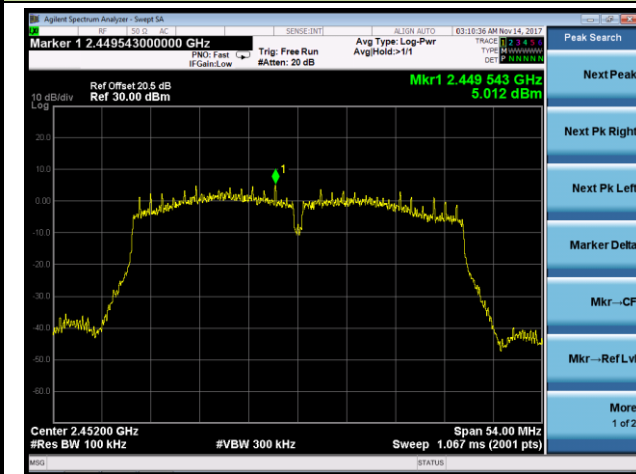


Note: The Value of the Display Line is -24.81dBm

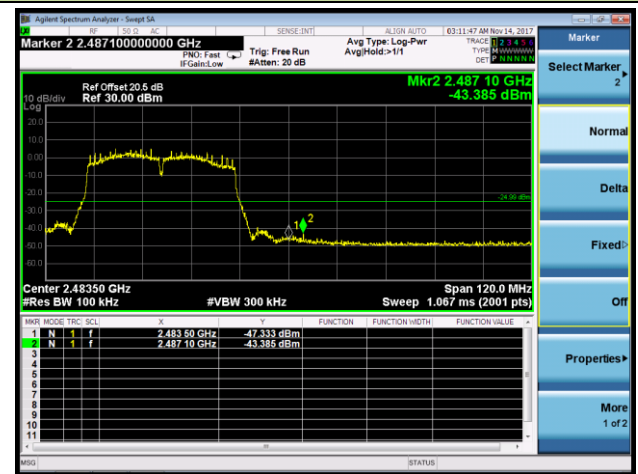
802.11n-HT40 Out-of-Band Emissions - Ant 0 / Ant 0 + 1

Channel 09 (2452MHz)

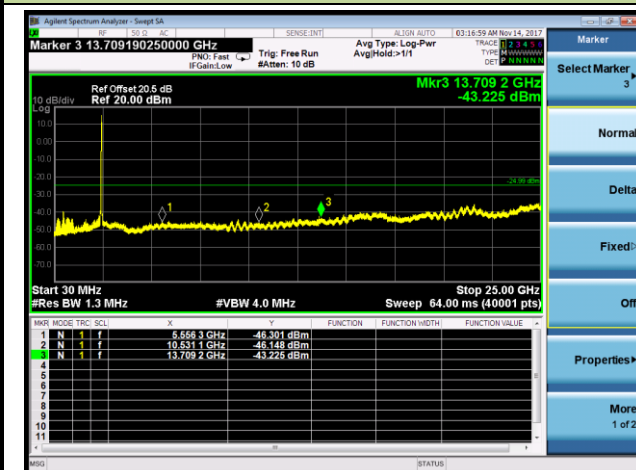
100kHz PSD reference Level



High Band Edge



Spurious Emission

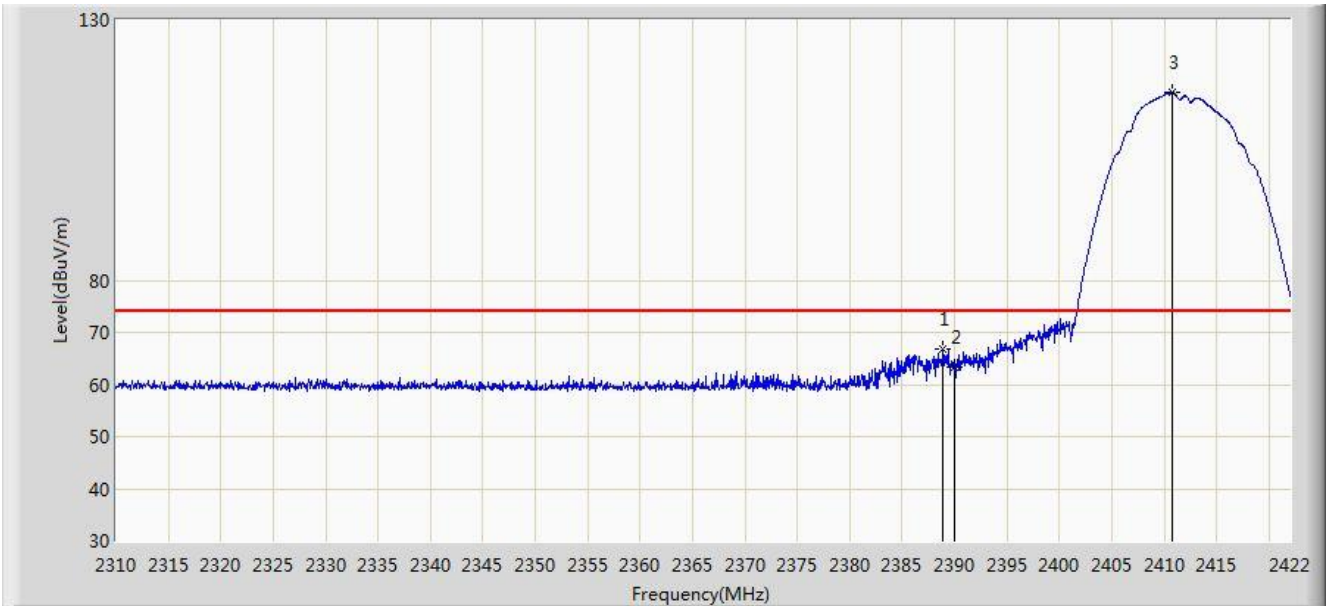


Note: The Value of the Display Line is -24.99dBm

6. 開放頻帶邊緣之不必要幅射要求測試結果

For Omni Antenna (ANT-2X2-2005)

Site: AC1	Time: 2017/08/26 - 02:10
Limit: NCC LP0002_1GHz-40GHz	Engineer: Kevin Ker
Probe: BBHA9120D_1GHz_18GHz	Polarity: Horizontal
EUT: ACCESS POINT	Power: POE (DC 57V)
Test Mode: Transmit by 802.11b at Channel 2412MHz Ant 0 + 1 (CDD Mode)	

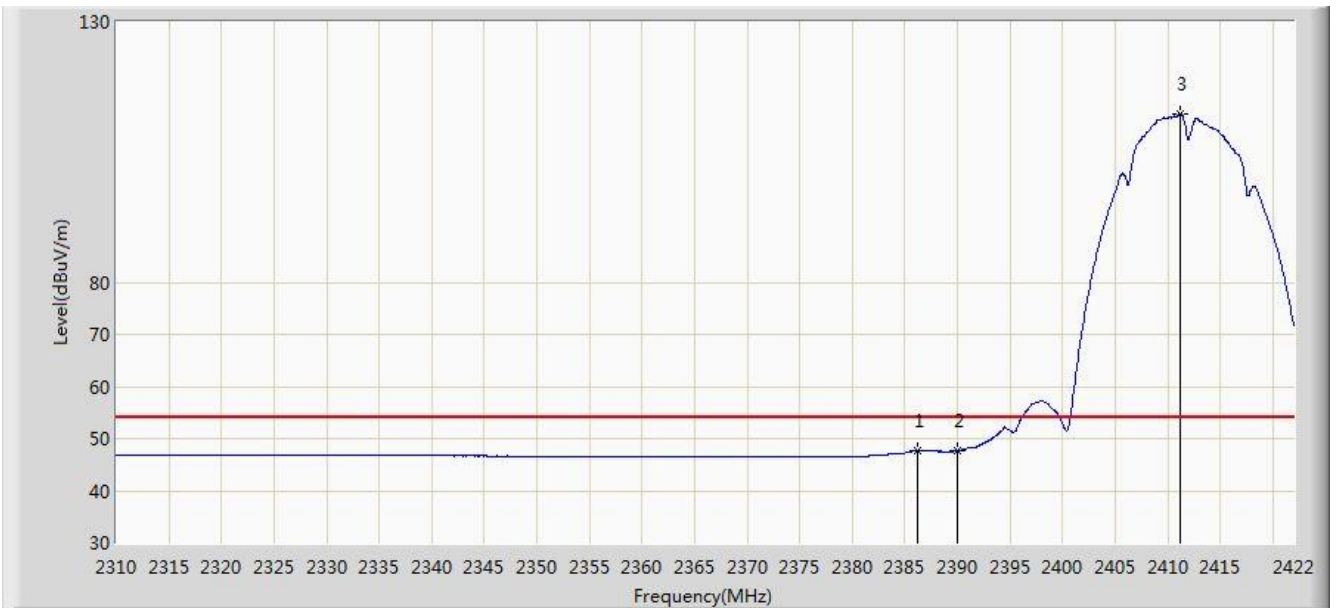


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2388.904	66.681	34.125	-7.319	74.000	32.556	PK
2			2390.000	63.310	30.756	-10.690	74.000	32.554	PK
3		*	2410.744	115.974	83.447	N/A	N/A	32.528	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: AC1	Time: 2017/08/26 - 02:16
Limit: NCC LP0002_1GHz-40GHz	Engineer: Kevin Ker
Probe: BBHA9120D_1GHz_18GHz	Polarity: Horizontal
EUT: ACCESS POINT	Power: POE (DC 57V)
Test Mode: Transmit by 802.11b at Channel 2412MHz Ant 0 + 1 (CDD Mode)	

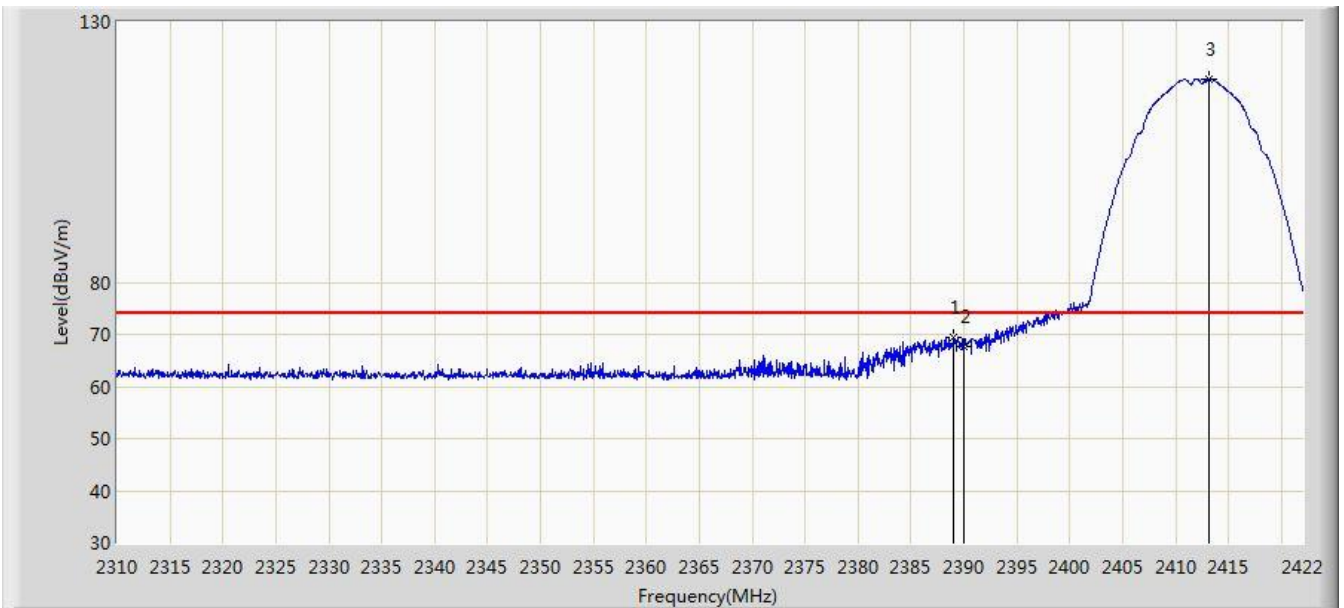


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2386.160	47.708	15.148	-6.292	54.000	32.559	AV
2			2390.000	47.633	15.079	-6.367	54.000	32.554	AV
3		*	2411.248	112.287	79.760	N/A	N/A	32.526	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: AC1	Time: 2017/08/26 - 02:18
Limit: NCC LP0002_1GHz-40GHz	Engineer: Kevin Ker
Probe: BBHA9120D_1GHz_18GHz	Polarity: Vertical
EUT: ACCESS POINT	Power: POE (DC 57V)
Test Mode: Transmit by 802.11b at Channel 2412MHz Ant 0 + 1 (CDD Mode)	

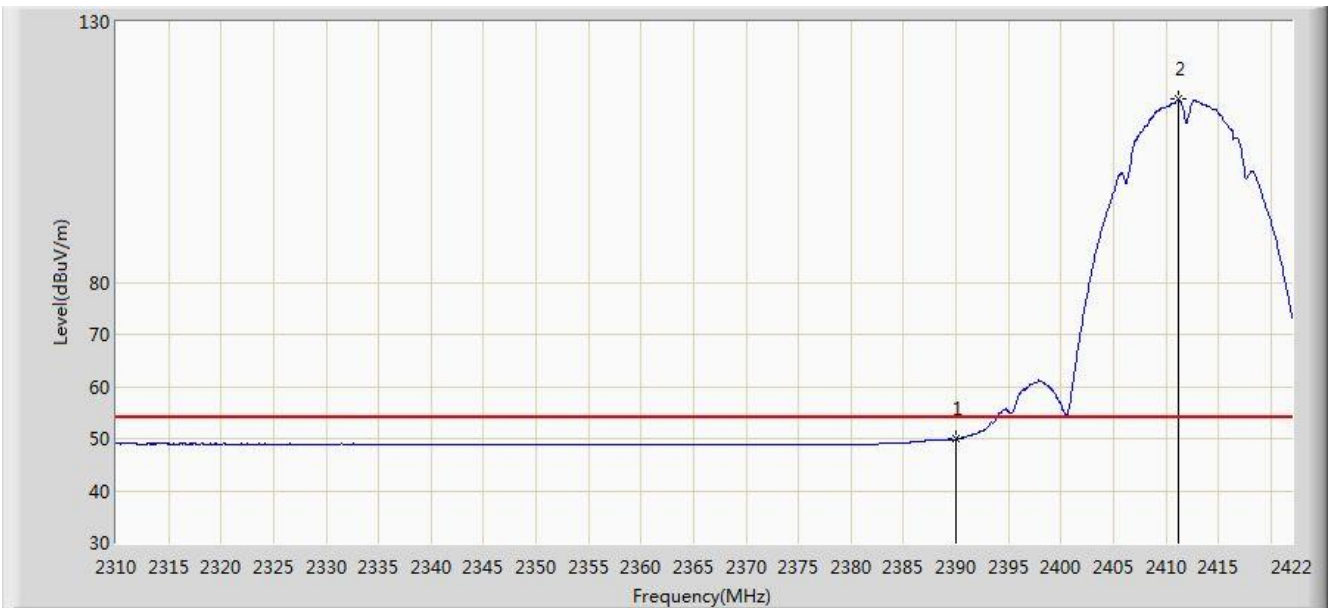


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2389.072	69.430	36.874	-4.570	74.000	32.556	PK
2			2390.000	67.813	35.259	-6.187	74.000	32.554	PK
3		*	2413.096	119.088	86.564	N/A	N/A	32.524	PK

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: AC1	Time: 2017/08/26 - 02:23
Limit: NCC LP0002_1GHz-40GHz	Engineer: Kevin Ker
Probe: BBHA9120D_1GHz_18GHz	Polarity: Vertical
EUT: ACCESS POINT	Power: POE (DC 57V)
Test Mode: Transmit by 802.11b at Channel 2412MHz Ant 0 + 1 (CDD Mode)	

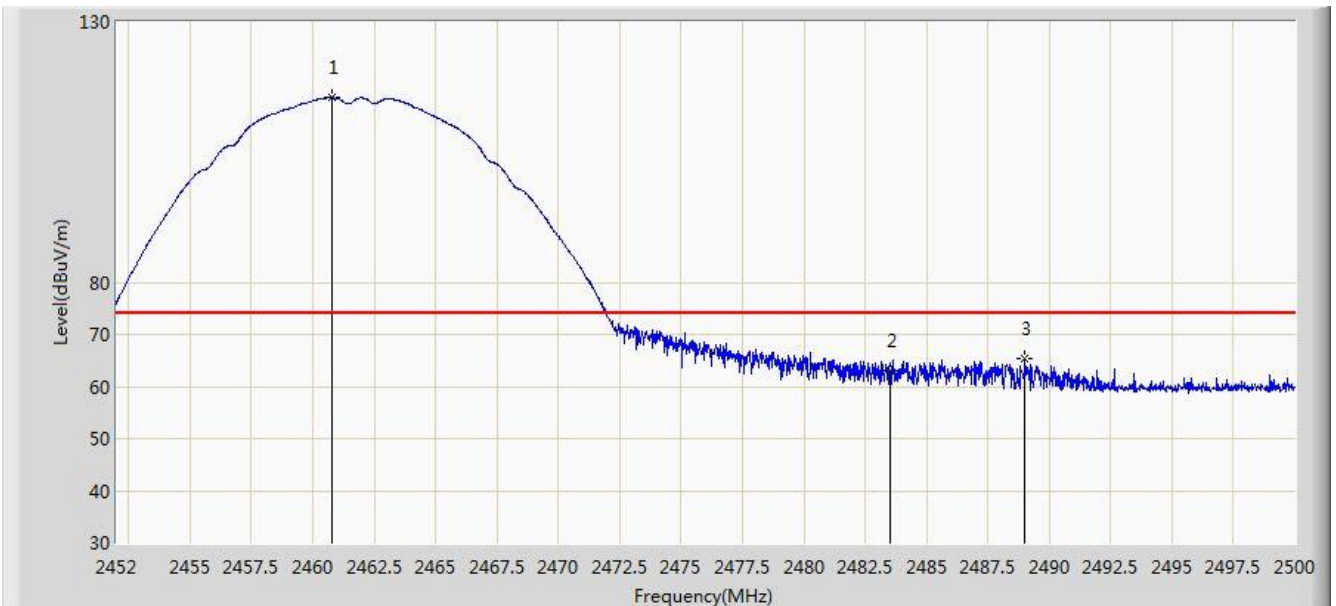


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2390.000	49.895	17.341	-4.105	54.000	32.554	AV
2		*	2411.192	115.130	82.603	N/A	N/A	32.527	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: AC1	Time: 2017/08/26 - 02:30
Limit: NCC LP0002_1GHz-40GHz	Engineer: Kevin Ker
Probe: BBHA9120D_1GHz_18GHz	Polarity: Horizontal
EUT: ACCESS POINT	Power: POE (DC 57V)
Test Mode: Transmit by 802.11b at Channel 2462MHz Ant 0 + 1 (CDD Mode)	

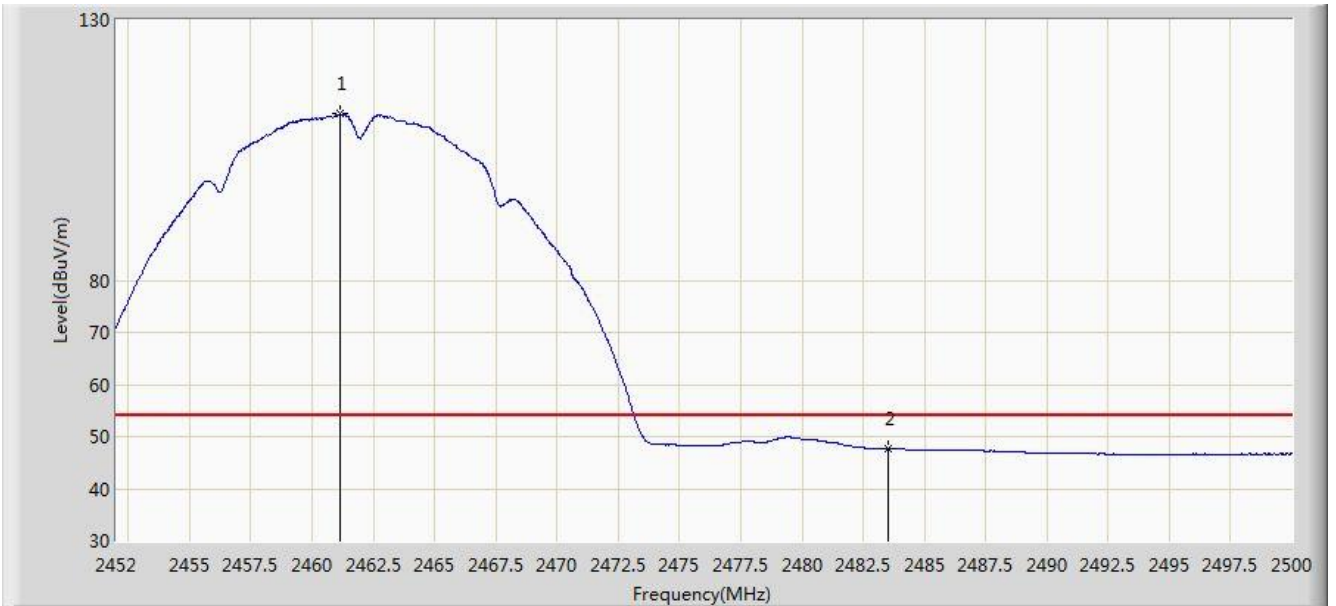


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2460.760	115.418	82.904	N/A	N/A	32.514	PK
2			2483.500	63.107	30.526	-10.893	74.000	32.580	PK
3			2489.008	65.307	32.710	-8.693	74.000	32.597	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: AC1	Time: 2017/08/26 - 02:36
Limit: NCC LP0002_1GHz-40GHz	Engineer: Kevin Ker
Probe: BBHA9120D_1GHz_18GHz	Polarity: Horizontal
EUT: ACCESS POINT	Power: POE (DC 57V)
Test Mode: Transmit by 802.11b at Channel 2462MHz Ant 0 + 1 (CDD Mode)	

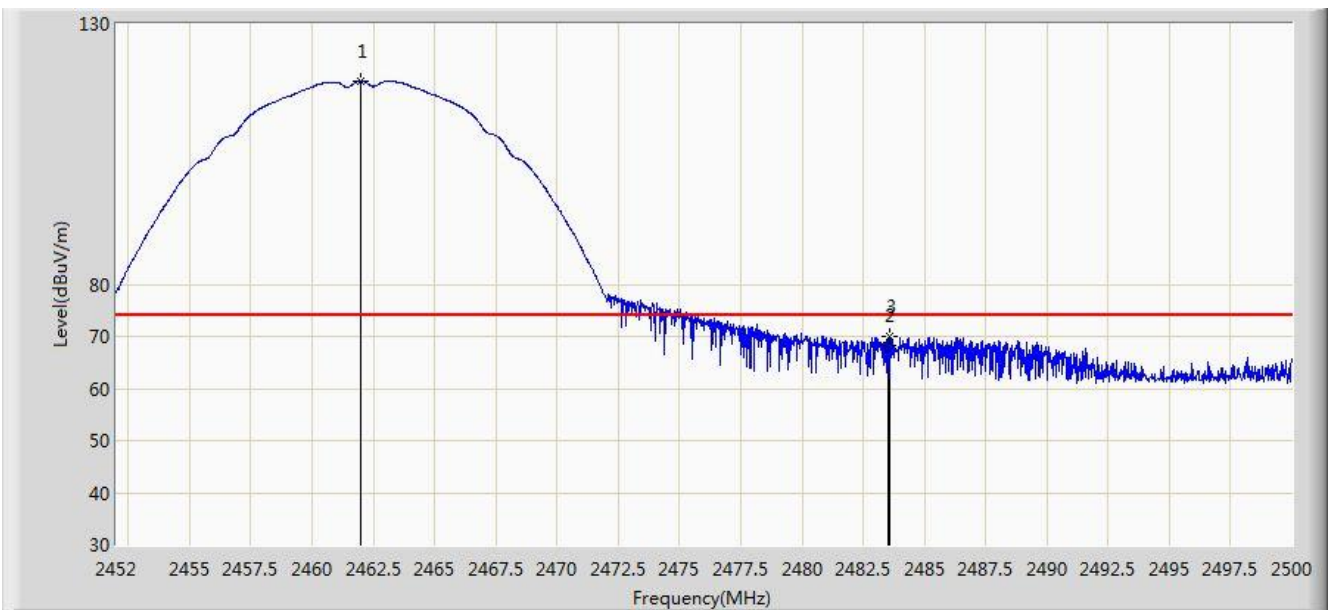


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	X	*	2461.168	111.950	79.435	N/A	N/A	32.515	AV
2			2483.500	47.637	15.056	-6.363	54.000	32.580	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: AC1	Time: 2017/08/26 - 02:38
Limit: NCC LP0002_1GHz-40GHz	Engineer: Kevin Ker
Probe: BBHA9120D_1GHz_18GHz	Polarity: Vertical
EUT: ACCESS POINT	Power: POE (DC 57V)
Test Mode: Transmit by 802.11b at Channel 2462MHz Ant 0 + 1 (CDD Mode)	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2461.984	118.989	86.473	N/A	N/A	32.516	PK
2			2483.500	68.349	35.768	-5.651	74.000	32.580	PK
3			2483.608	69.953	37.372	-4.047	74.000	32.581	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: AC1	Time: 2017/08/26 - 02:40
Limit: NCC LP0002_1GHz-40GHz	Engineer: Kevin Ker
Probe: BBHA9120D_1GHz_18GHz	Polarity: Vertical
EUT: ACCESS POINT	Power: POE (DC 57V)
Test Mode: Transmit by 802.11b at Channel 2462MHz Ant 0 + 1 (CDD Mode)	

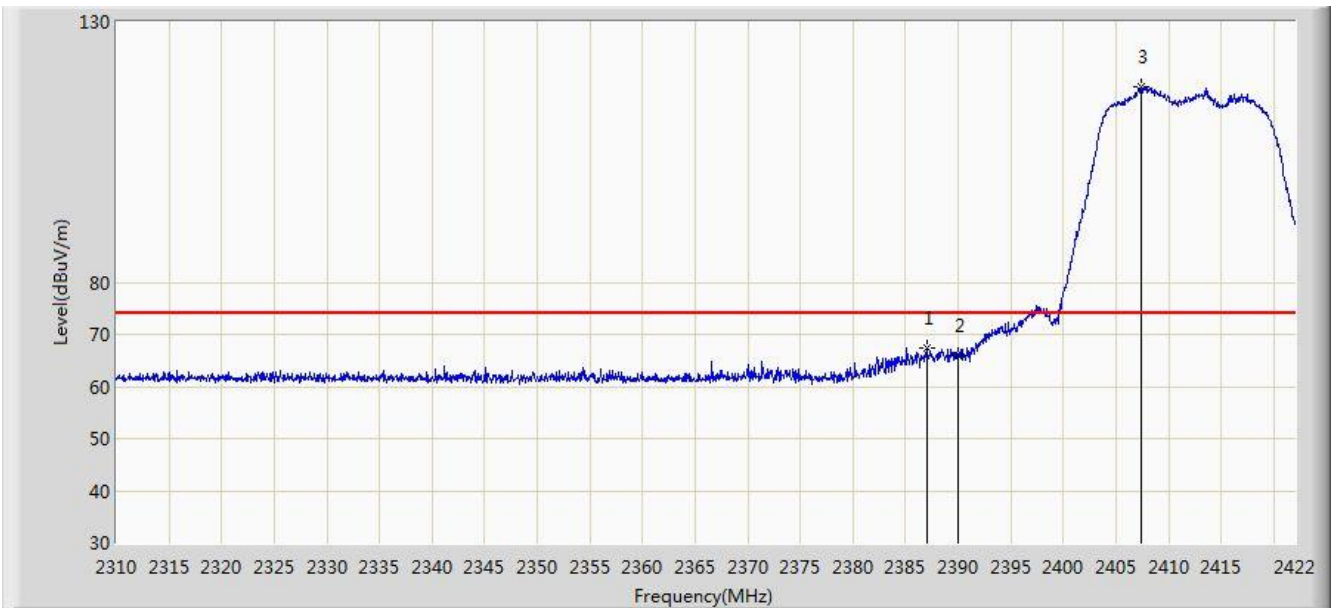


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	X	*	2461.240	115.449	82.934	N/A	N/A	32.515	AV
2			2483.500	49.960	17.379	-4.040	54.000	32.580	AV
3			2486.776	49.990	17.400	-4.010	54.000	32.590	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: AC1	Time: 2017/08/26 - 02:53
Limit: NCC LP0002_1GHz-40GHz	Engineer: Kevin Ker
Probe: BBHA9120D_1GHz_18GHz	Polarity: Horizontal
EUT: ACCESS POINT	Power: POE (DC 57V)
Test Mode: Transmit by 802.11g at Channel 2412MHz Ant 0 + 1 (CDD Mode)	

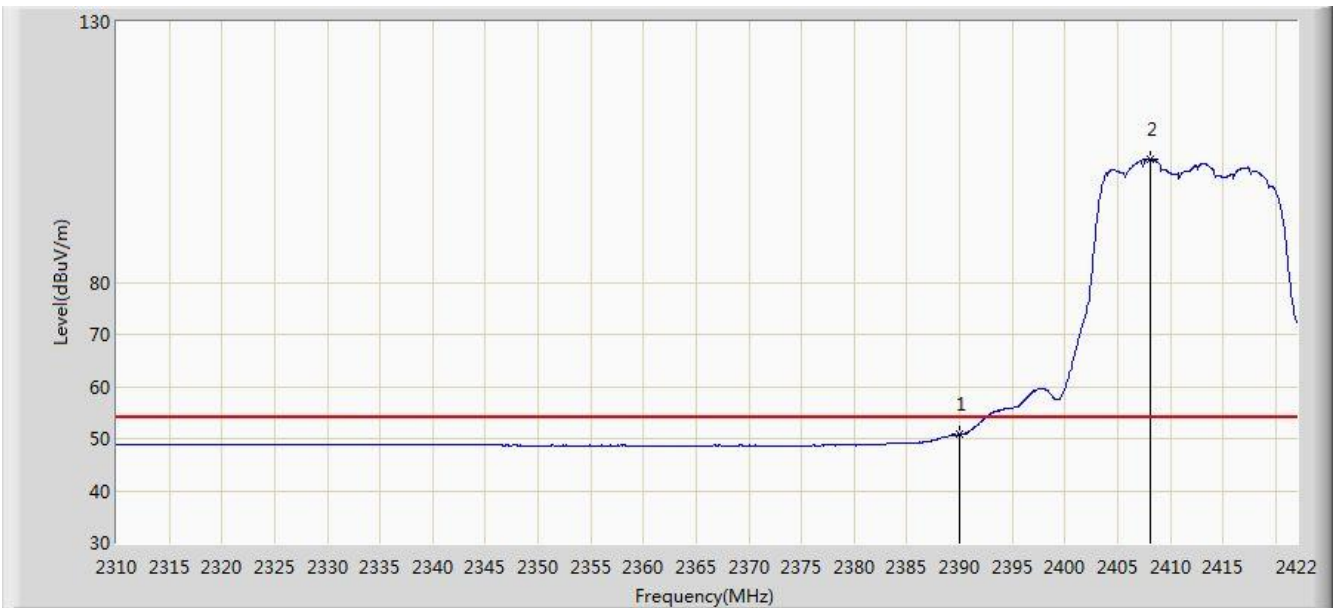


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2387.000	67.316	34.757	-6.684	74.000	32.558	PK
2			2390.000	65.887	33.333	-8.113	74.000	32.554	PK
3		*	2407.384	117.579	85.047	N/A	N/A	32.532	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: AC1	Time: 2017/08/26 - 02:58
Limit: NCC LP0002_1GHz-40GHz	Engineer: Kevin Ker
Probe: BBHA9120D_1GHz_18GHz	Polarity: Horizontal
EUT: ACCESS POINT	Power: POE (DC 57V)
Test Mode: Transmit by 802.11g at Channel 2412MHz Ant 0 + 1 (CDD Mode)	

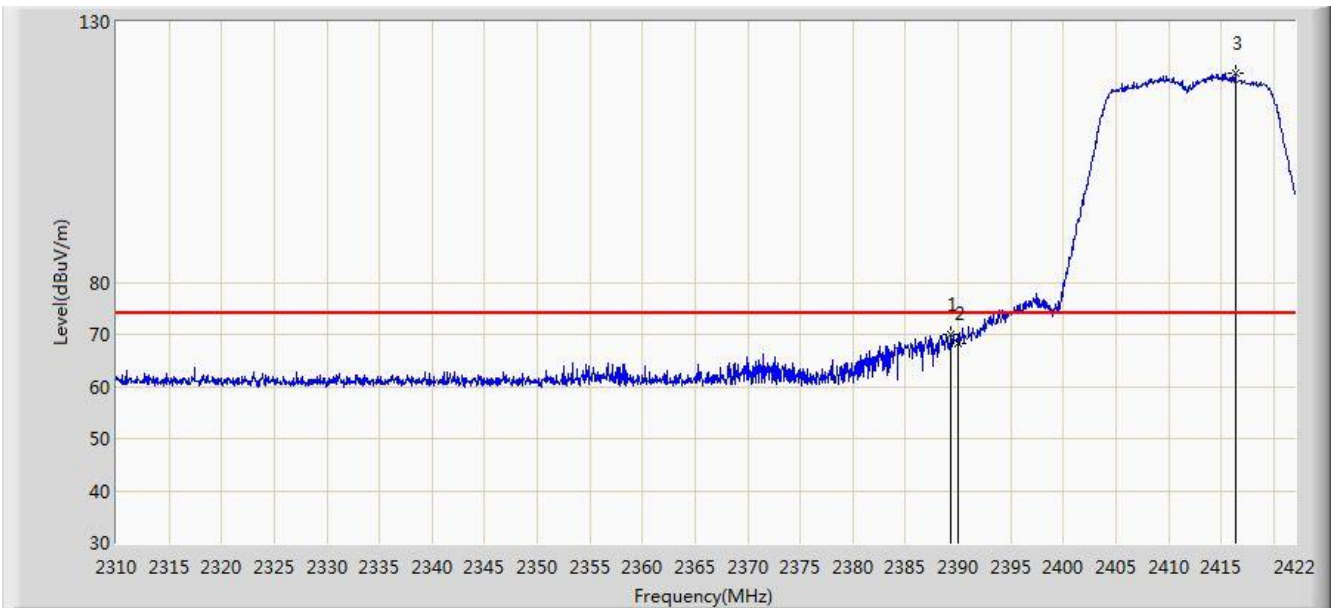


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2390.000	50.756	18.202	-3.244	54.000	32.554	AV
2		*	2408.112	103.670	71.139	N/A	N/A	32.530	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: AC1	Time: 2017/08/26 - 02:52
Limit: NCC LP0002_1GHz-40GHz	Engineer: Kevin Ker
Probe: BBHA9120D_1GHz_18GHz	Polarity: Vertical
EUT: ACCESS POINT	Power: POE (DC 57V)
Test Mode: Transmit by 802.11g at Channel 2412MHz Ant 0 + 1 (CDD Mode)	

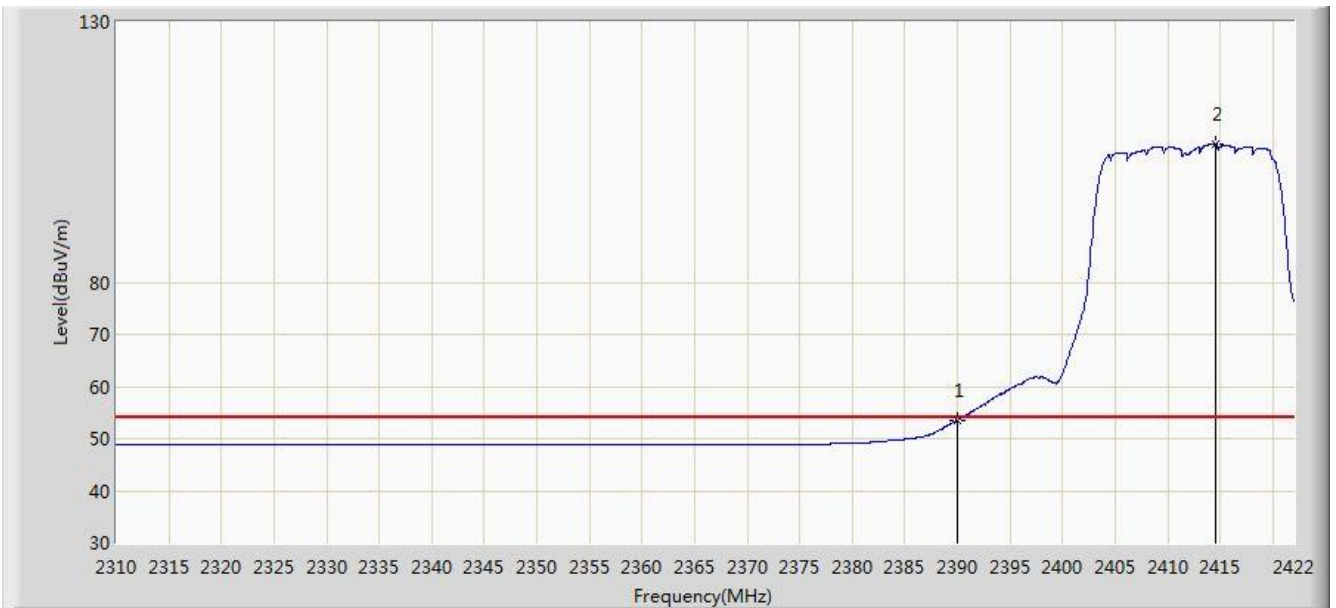


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2389.296	70.044	37.489	-3.956	74.000	32.555	PK
2			2390.000	68.374	35.820	-5.626	74.000	32.554	PK
3		*	2416.344	120.273	87.753	N/A	N/A	32.520	PK

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: AC1	Time: 2017/08/26 - 02:51
Limit: NCC LP0002_1GHz-40GHz	Engineer: Kevin Ker
Probe: BBHA9120D_1GHz_18GHz	Polarity: Vertical
EUT: ACCESS POINT	Power: POE (DC 57V)
Test Mode: Transmit by 802.11g at Channel 2412MHz Ant 0 + 1 (CDD Mode)	

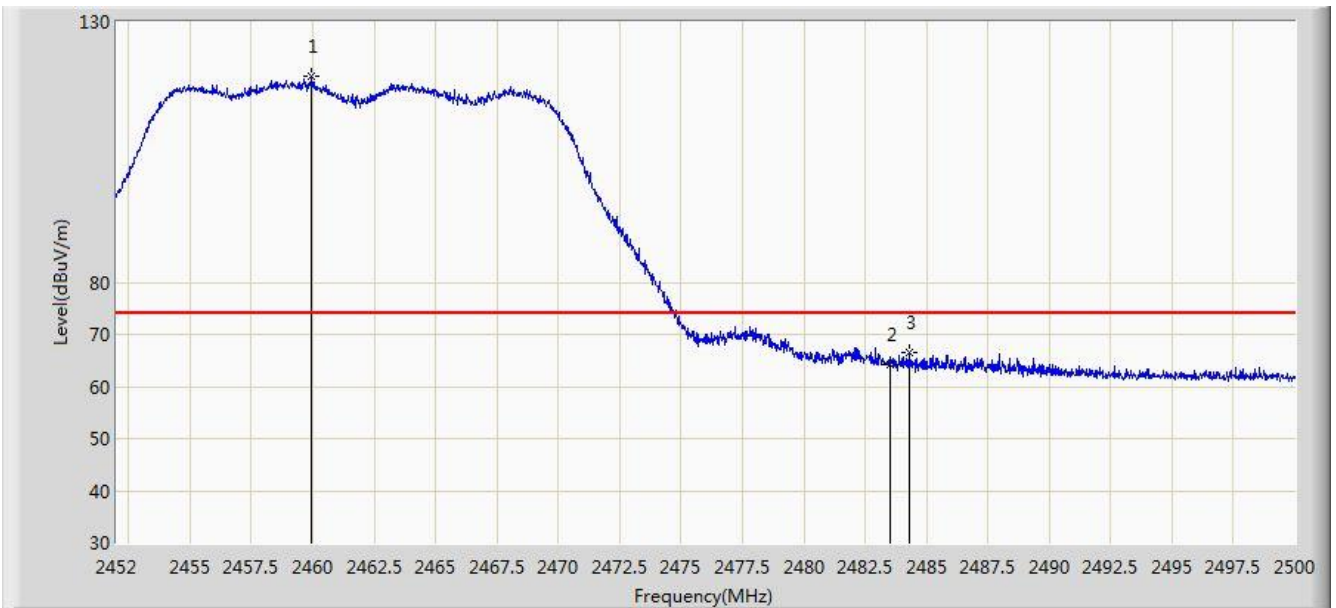


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2390.000	53.587	21.033	-0.413	54.000	32.554	AV
2		*	2414.496	106.516	73.993	N/A	N/A	32.523	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: AC1	Time: 2017/08/26 - 03:06
Limit: NCC LP0002_1GHz-40GHz	Engineer: Kevin Ker
Probe: BBHA9120D_1GHz_18GHz	Polarity: Horizontal
EUT: ACCESS POINT	Power: POE (DC 57V)
Test Mode: Transmit by 802.11g at Channel 2462MHz Ant 0 + 1 (CDD Mode)	

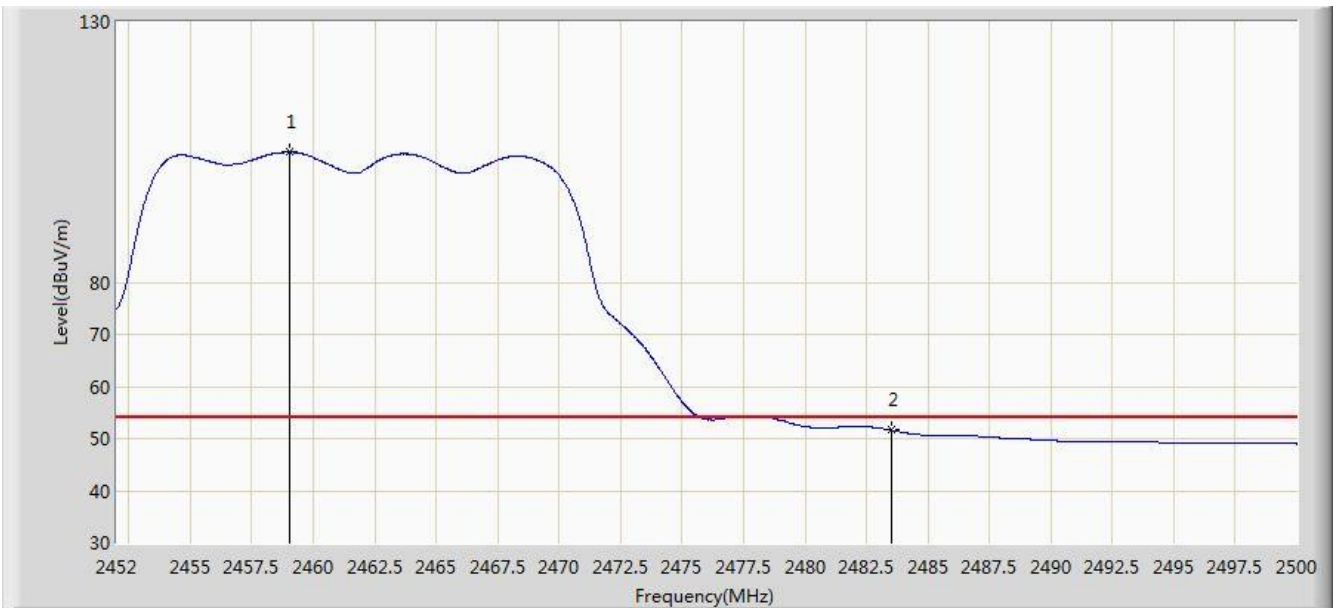


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2459.968	119.467	86.954	N/A	N/A	32.513	PK
2			2483.500	64.333	31.752	-9.667	74.000	32.580	PK
3			2484.280	66.402	33.819	-7.598	74.000	32.583	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: AC1	Time: 2017/08/26 - 03:08
Limit: NCC LP0002_1GHz-40GHz	Engineer: Kevin Ker
Probe: BBHA9120D_1GHz_18GHz	Polarity: Horizontal
EUT: ACCESS POINT	Power: POE (DC 57V)
Test Mode: Transmit by 802.11g at Channel 2462MHz Ant 0 + 1 (CDD Mode)	

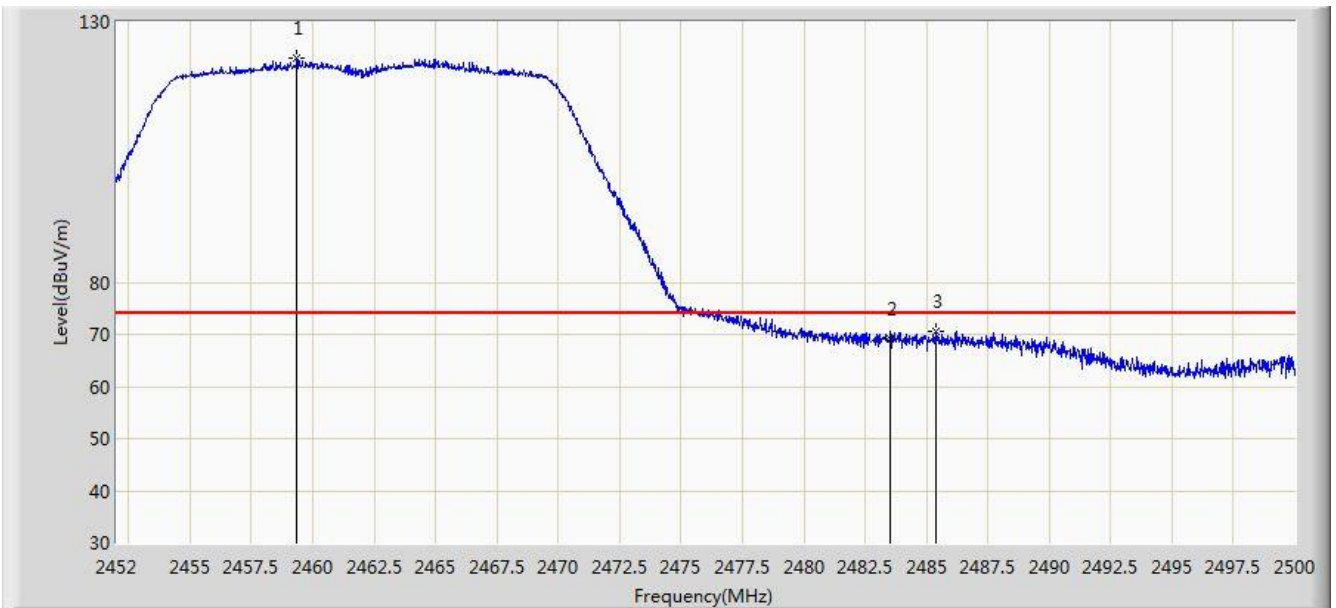


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2459.056	105.013	72.502	N/A	N/A	32.511	AV
2			2483.500	51.635	19.054	-2.365	54.000	32.580	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: AC1	Time: 2017/08/26 - 03:00
Limit: NCC LP0002_1GHz-40GHz	Engineer: Kevin Ker
Probe: BBHA9120D_1GHz_18GHz	Polarity: Vertical
EUT: ACCESS POINT	Power: POE (DC 57V)
Test Mode: Transmit by 802.11g at Channel 2462MHz Ant 0 + 1 (CDD Mode)	

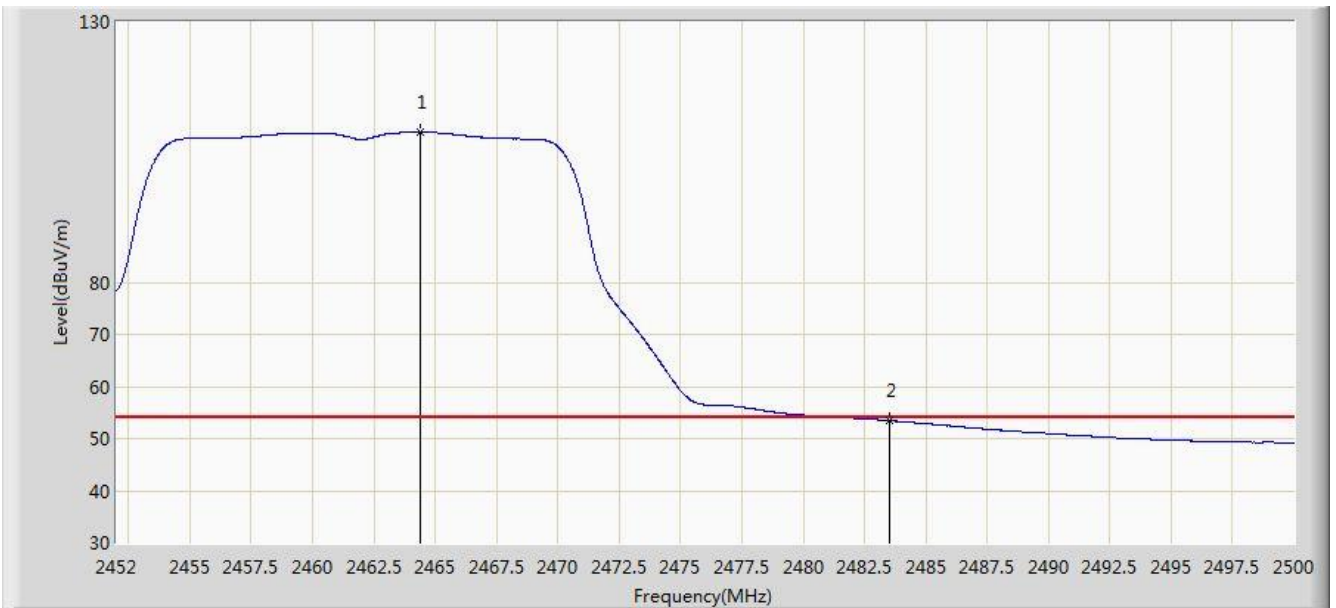


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2459.368	123.148	90.636	N/A	N/A	32.511	PK
2			2483.500	69.026	36.445	-4.974	74.000	32.580	PK
3			2485.384	70.574	37.988	-3.426	74.000	32.587	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: AC1	Time: 2017/08/26 - 03:05
Limit: NCC LP0002_1GHz-40GHz	Engineer: Kevin Ker
Probe: BBHA9120D_1GHz_18GHz	Polarity: Vertical
EUT: ACCESS POINT	Power: POE (DC 57V)
Test Mode: Transmit by 802.11g at Channel 2462MHz Ant 0 + 1 (CDD Mode)	

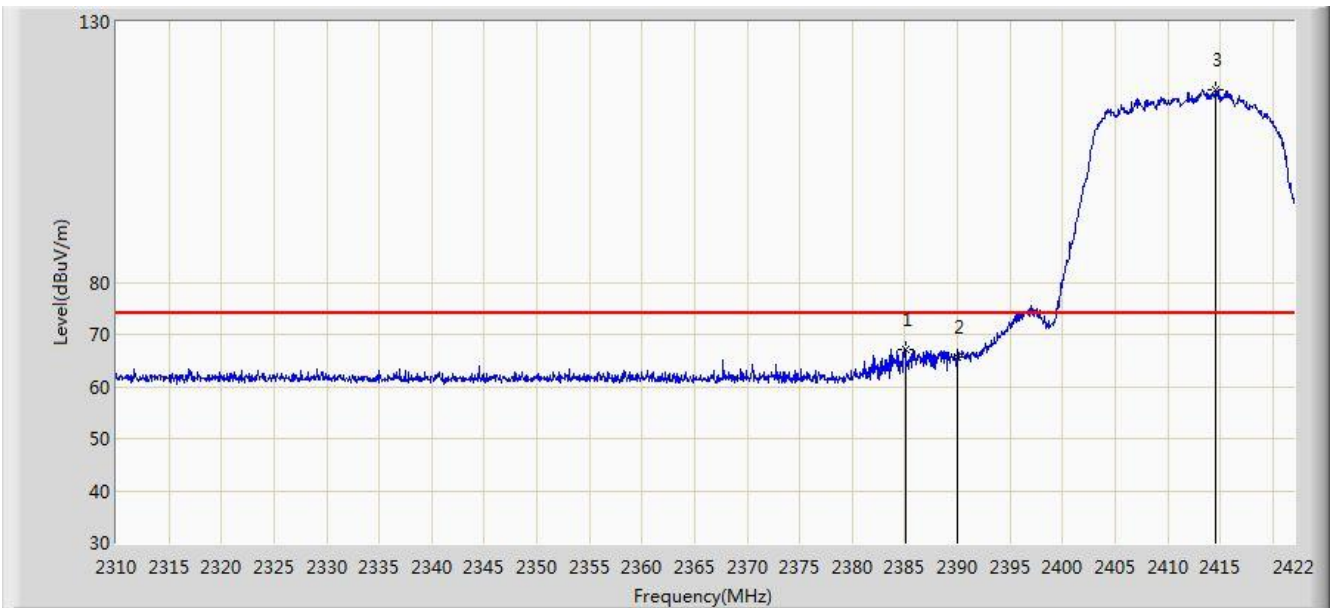


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2464.384	108.815	76.292	N/A	N/A	32.523	AV
2			2483.500	53.435	20.854	-0.565	54.000	32.580	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: AC1	Time: 2017/08/26 - 03:18
Limit: NCC LP0002_1GHz-40GHz	Engineer: Kevin Ker
Probe: BBHA9120D_1GHz_18GHz	Polarity: Horizontal
EUT: ACCESS POINT	Power: POE (DC 57V)
Test Mode: Transmit by 802.11n-HT20 at Channel 2412MHz Ant 0 + 1 (CDD Mode)	

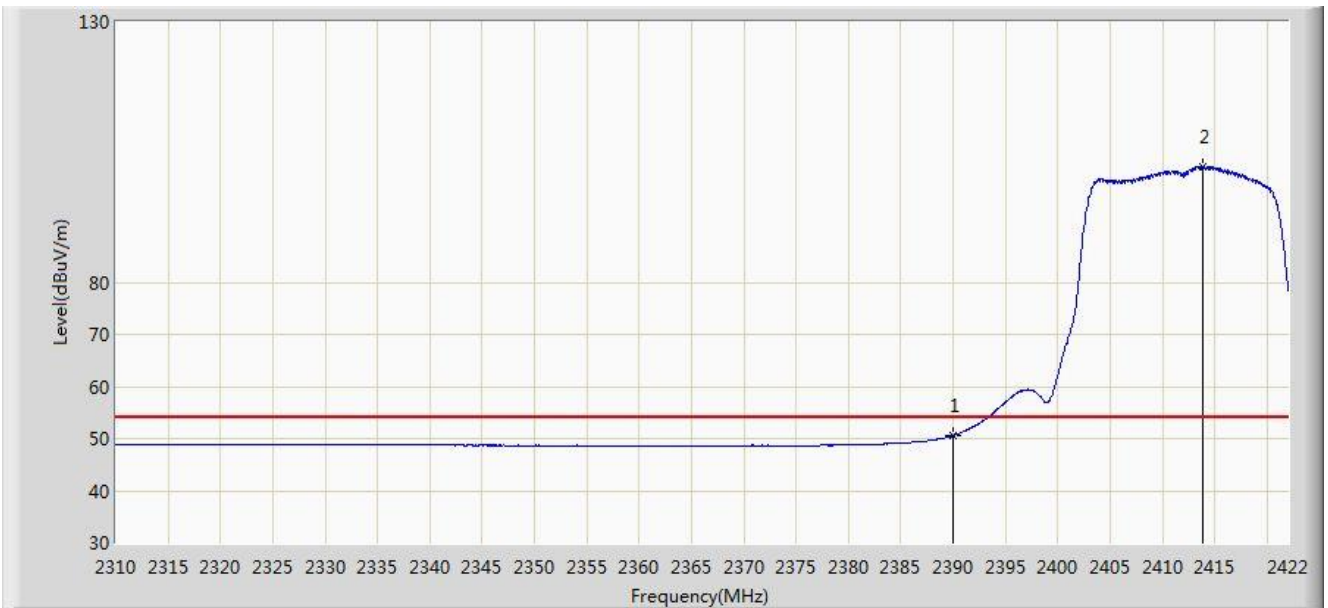


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2385.040	67.191	34.630	-6.809	74.000	32.561	PK
2			2390.000	65.517	32.963	-8.483	74.000	32.554	PK
3		*	2414.552	117.022	84.499	N/A	N/A	32.522	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: AC1	Time: 2017/08/26 - 03:21
Limit: NCC LP0002_1GHz-40GHz	Engineer: Kevin Ker
Probe: BBHA9120D_1GHz_18GHz	Polarity: Horizontal
EUT: ACCESS POINT	Power: POE (DC 57V)
Test Mode: Transmit by 802.11n-HT20 at Channel 2412MHz Ant 0 + 1 (CDD Mode)	

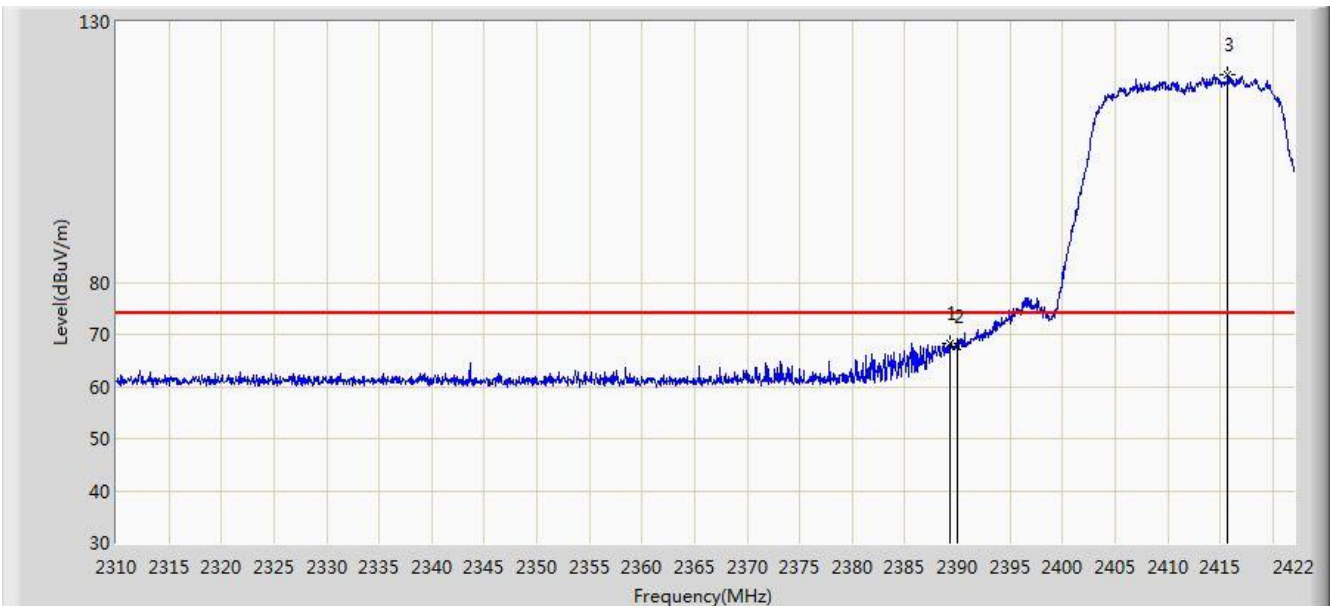


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2390.000	50.632	18.078	-3.368	54.000	32.554	AV
2		*	2413.824	102.221	69.698	N/A	N/A	32.523	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: AC1	Time: 2017/08/26 - 03:17
Limit: NCC LP0002_1GHz-40GHz	Engineer: Kevin Ker
Probe: BBHA9120D_1GHz_18GHz	Polarity: Vertical
EUT: ACCESS POINT	Power: POE (DC 57V)
Test Mode: Transmit by 802.11n-HT20 at Channel 2412MHz Ant 0 + 1 (CDD Mode)	

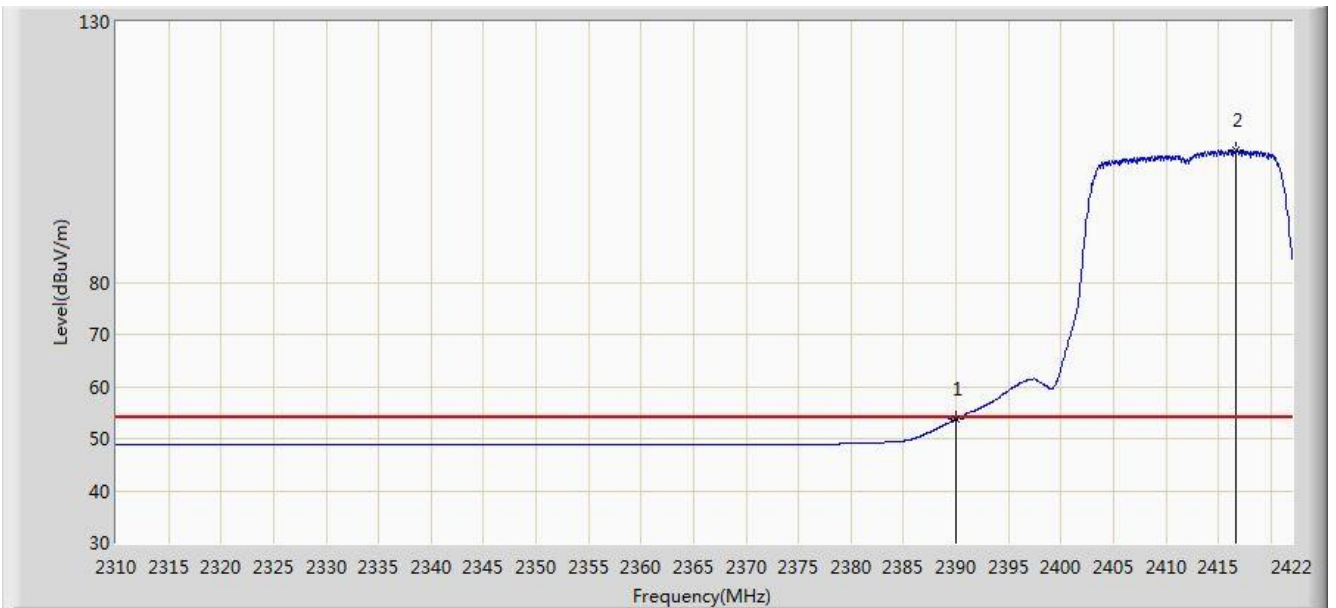


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2389.352	68.399	35.844	-5.601	74.000	32.555	PK
2			2390.000	67.745	35.191	-6.255	74.000	32.554	PK
3		*	2415.728	119.927	87.406	N/A	N/A	32.522	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: AC1	Time: 2017/08/26 - 03:16
Limit: NCC LP0002_1GHz-40GHz	Engineer: Kevin Ker
Probe: BBHA9120D_1GHz_18GHz	Polarity: Vertical
EUT: ACCESS POINT	Power: POE (DC 57V)
Test Mode: Transmit by 802.11n-HT20 at Channel 2412MHz Ant 0 + 1 (CDD Mode)	

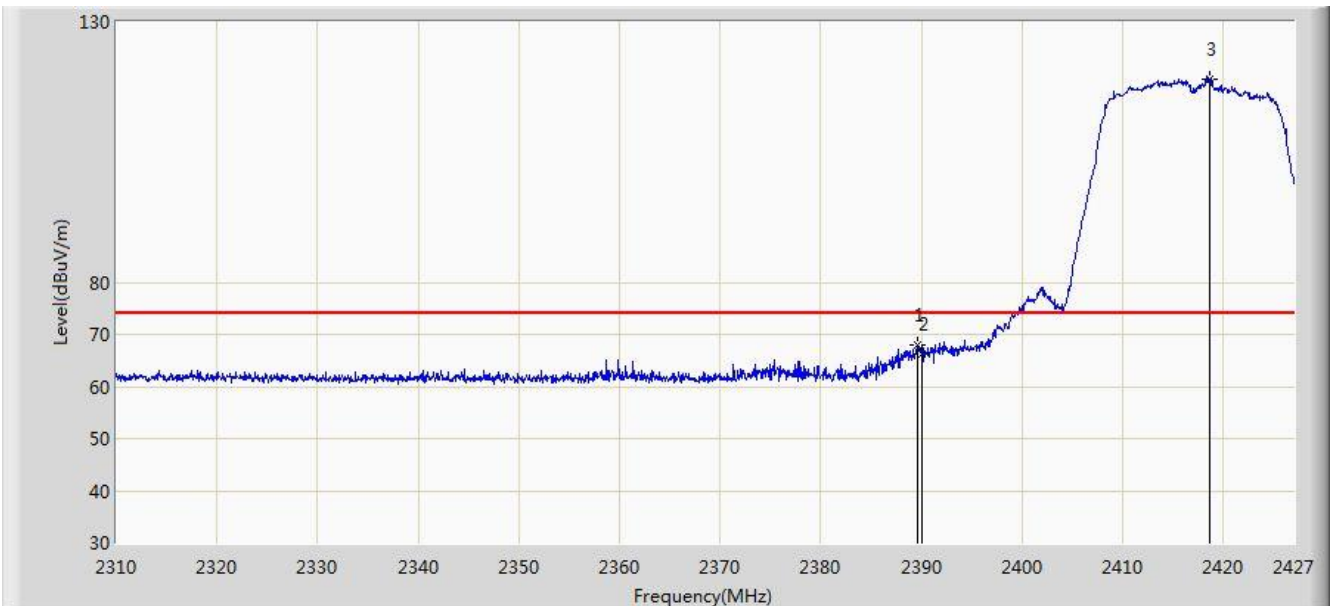


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2390.000	53.718	21.164	-0.282	54.000	32.554	AV
2		*	2416.624	105.282	72.762	N/A	N/A	32.520	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: AC1	Time: 2017/11/15 - 22:47
Limit: NCC LP0002_1GHz-40GHz	Engineer: Kevin Ker
Probe: BBHA9120D_1GHz_18GHz	Polarity: Horizontal
EUT: ACCESS POINT	Power: POE (DC 57V)
Test Mode: Transmit by 802.11n-HT20 at Channel 2417MHz Ant 0 + 1 (CDD Mode)	

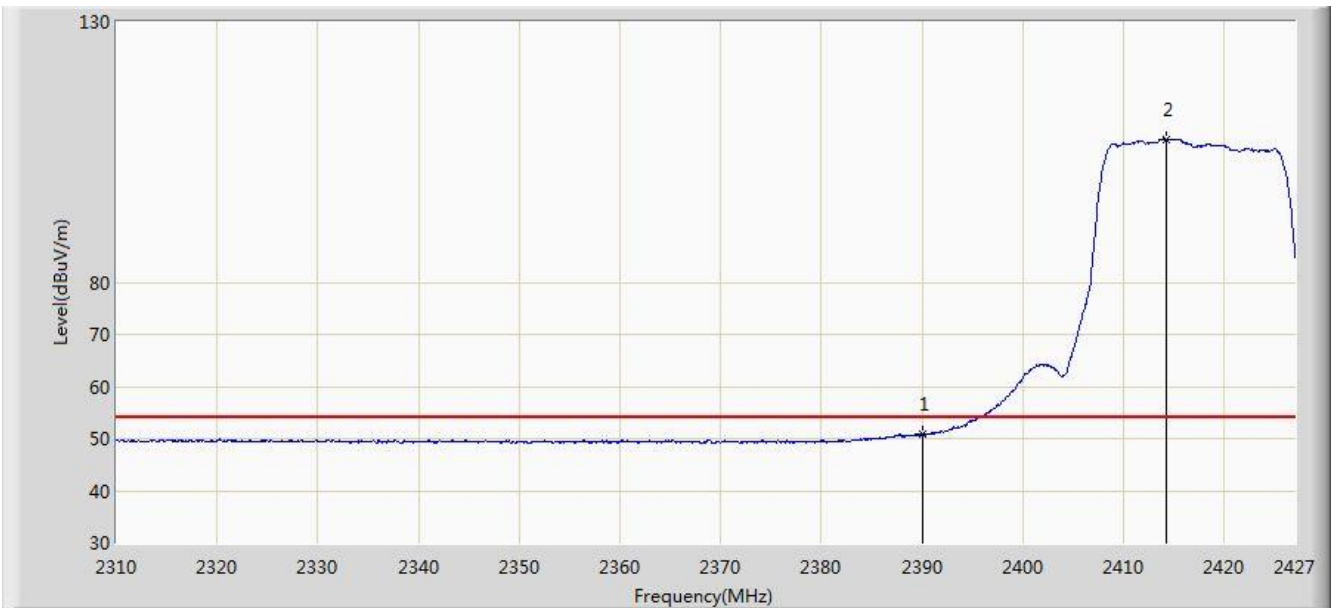


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2389.629	67.898	35.343	-6.102	74.000	32.555	PK
2			2390.000	66.206	33.652	-7.794	74.000	32.554	PK
3		*	2418.712	119.080	86.562	N/A	N/A	32.517	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: AC1	Time: 2017/11/15 - 22:50
Limit: NCC LP0002_1GHz-40GHz	Engineer: Kevin Ker
Probe: BBHA9120D_1GHz_18GHz	Polarity: Horizontal
EUT: ACCESS POINT	Power: POE (DC 57V)
Test Mode: Transmit by 802.11n-HT20 at Channel 2417MHz Ant 0 + 1 (CDD Mode)	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2390.000	50.796	18.242	-3.204	54.000	32.554	AV
2		*	2414.204	107.523	75.000	N/A	N/A	32.523	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)