



晶復科技股份有限公司

A Test Lab Techno Corp.

低功率射頻器材試驗報告

報告編號 2109DR42

版本(Rev.) 01

產品名稱 Herowatch 2 4G兒童智慧手錶

申請廠商 關於時間科技股份有限公司

廠牌 Herowatch

型式 (號) Herowatch 2

產品試驗依據之標準 低功率射頻器材技術規範(LP0002) 109 年 7 月 1 日

報告發行日期 110 年 09 月 30 日

填發本型式認可報告之試驗機構 (認可代號)

晶復科技股份有限公司
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財團法人全國認證基金會
認證編號 : 1330
認證有效期間 : 108.09.06 ~ 111.09.05
認可能量範圍 : 低功率射頻器材技術規範(LP0002) (頻率範圍:9 kHz to 40 GHz)

免責聲明

- 1.本測試報告所敘述之測試結果，僅對顧客所提供之測試樣品，在此測試報告所述及之測試條件下，所實施之量測有效。
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報告修訂紀錄

版本 (Rev.)	發行日期	修訂內容	修訂者
00	110 年 09 月 24 日	初版發行	趙翊如
01	110 年 09 月 30 日	更新證明書(P.3) 更新 1.1 章節(P.5) 更新 2.1 章節(P.7) 更新 2.3 章節(P.10) 更新 Annex A(P.23 ~ P.24) 更新 Annex B(P.25 ~ P.26) 更新 Test Setup Photographs	趙翊如

低功率射頻器材測試證明書

產品名稱：Herowatch 2 4G兒童智慧手錶

廠牌：Herowatch

型號：Herowatch 2

申請廠商：關於時間科技股份有限公司

申請者地址：新北市汐止區新台五路1段97號14樓之12

製造廠商：深圳市阿拉町科技發展有限公司

製造商地址：中國深圳市龍崗區平湖街道禾花社區同富路37號恆順科技園B棟301

待測物電壓：DC 5 V, 1 A

量測規範：低功率射頻器材技術規範(LP0002) 109年7月1日

試驗實驗室：晶復科技股份有限公司(桃園市八德區長安街140-1號)

樣品接受日期：110 年 08 月 24 日

試驗日期：110 年 09 月 07 日~110 年 09 月 29 日

報告中所描述之測試結果與待測設備之架構組合，均根據實際量測情況作詳實的記錄。

由測試結果顯示，上述待測設備樣機確實已符合低功率射頻器材技術規範(LP0002)所規定的各項限制值。

特此證明！

Approved By :

Kai Yu Yang

(Kai Yu Yang)

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1. 一般敘述

1.1 待測設備一般敘述

本敘述僅針對產品簡單說明之，其他詳細之規格請參考使用說明書。

產 品 名 稱	Herowatch 2 4G兒童智慧手錶		
廠 牌	Herowatch		
型 號	Herowatch 2		
I M E I N o .	867400020150409		
額 定 電 源	DC 5 V, 1 A		
待 測 物 電 源 類 別	Power Adapter / Battery		
調 變 方 式	IEEE 802.11b: DSSS IEEE 802.11g: OFDM IEEE 802.11n 2.4 GHz 20 MHz (64QAM): OFDM IEEE 802.11n 2.4 GHz 20 MHz (256QAM): OFDM		
頻 率 使 用 範 圍	Mode	Frequency Range (MHz)	
	IEEE 802.11b / IEEE 802.11g IEEE 802.11n 2.4 GHz 20 Hz(64QAM) (256QAM)	2412 – 2462	
天 線 廠 牌	深圳市瑪雅通訊設備有限公司		
天 線 型 號	T3		
天 線 型 態	PIFA Antenna		
天 線 增 益 值	-0.12 dBi		
R F 最 大 輸 出 功 率	Mode	Power	
	IEEE 802.11b	19.31 dBm	0.085 W
	IEEE 802.11g	21.62 dBm	0.145 W
	IEEE 802.11n 2.4 GHz 20 MHz	21.47 dBm	0.140 W
	IEEE 802.11n 2.4 GHz 20 MHz(256QAM)	21.58 dBm	0.144 W

輸出/輸入埠說明：

輸 出 / 入 埠		數量	介面內容說明
1	DC Power Port	1	連接至 Herowatch 2 充電盤
2	SIM Card Port	1	連接至 NANO SIM Card

附屬裝置表：

裝置名稱		廠牌	型號	備註
(A)	內建固定式電池	hereu hero	HERO-E7	DC 3.8 V, 650 mAh
(B)	Herowatch 2 充電盤	Herowatch	Herowatch 2	INPUT : 5 VDC, 1 A OUTPUT : 5 VDC, 1 A
(C)	USB Cable	hereu	hero	STD-A → Micro-B Shielded, 0.5 m

1.2 其他相關聲明

本測試報告屬(以下選擇一種打■)

☒	申請新的型式檢驗認可的測試.
☐	已取得型式檢驗認可之商品,因設計變更而重新測試. 登錄號碼: XXXXXXXX

2. 量測儀器及測試配置說明

2.1 量測設備

For Conducted

Test Period: Sep. 13, 2021

測試者: 陳立祥

名 稱	廠 牌	型 號	序 號	本次校驗日期	校驗年限
Power Sensor	Anritsu	MA2411B	1126022	09/03/2021	1 year
Power Meter	Anritsu	ML2495A	1135009	09/03/2021	1 year
Spectrum Analyzer (9kHz~26.5 GHz)	Agilent	N9010A	MY48030518	07/23/2021	1 year
Power Supply	KEITHLEY	2303	4045290	02/01/2021	1 year

For Conducted Emission

Test Period: Sep. 13 ~ Sep. 29, 2021

測試者: 呂迪曄, 申世傑

名 稱	廠 牌	型 號	序 號	本次校驗日期	校驗年限
測試接收機 (9 kHz~3 GHz)	R&S	ESCI	100367	05/21/2021	1 year
線性阻抗模擬網路	R&S	ENV216	101040	03/29/2021	1 year
線性阻抗模擬網路	R&S	ENV216	101041	04/08/2021	1 year

For Radiated Emissions

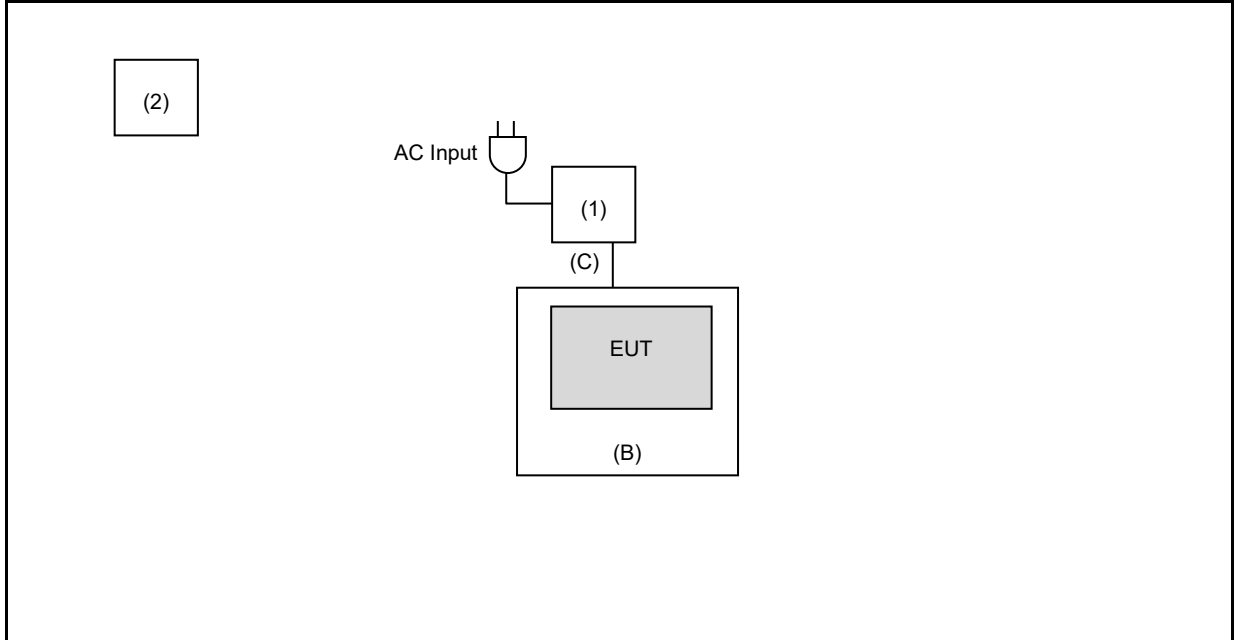
Test Period: Sep. 07 ~ Sep. 29, 2021

測試者: 李亭衛

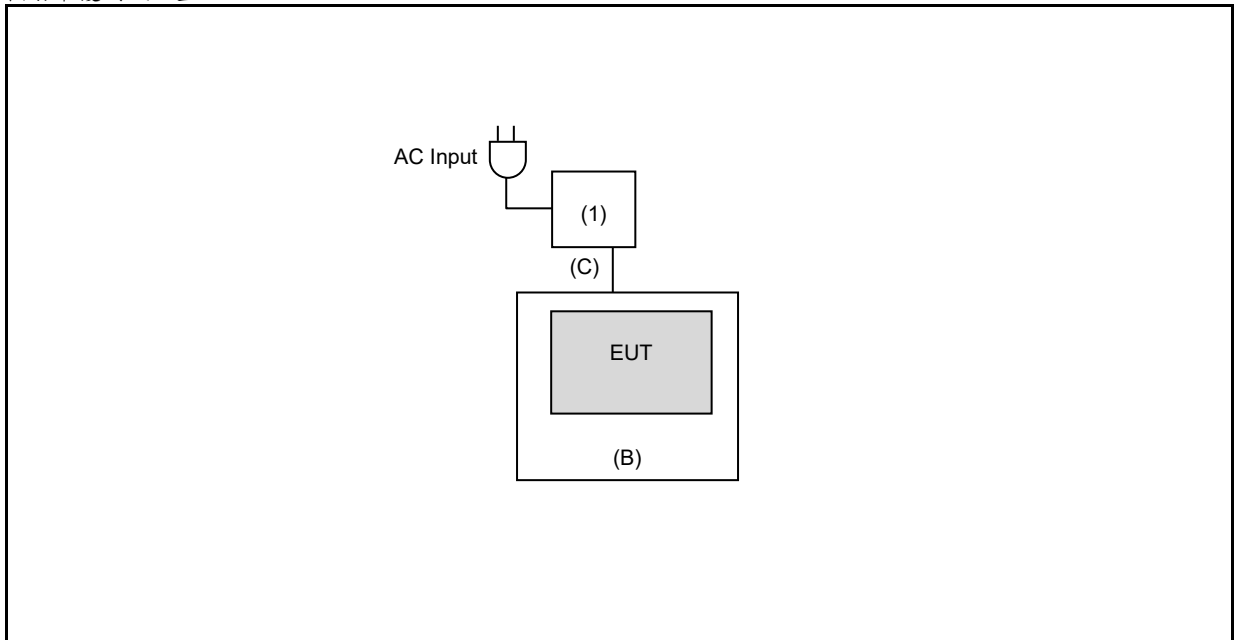
名 稱	廠 牌	型 號	序 號	本次校驗日期	校驗年限
Spectrum Analyzer	KEYSIGHT	N9030B	MY57143537	04/19/2021	1 year
Amplifier	Agilent	8447D	2944A11119	01/15/2021	1 year
Amplifier	Agilent	8449B	3008A02237	10/21/2020	1 year
天線	SCHWARZBECK MESS-ELEKTRONIK	VULB9168	01146	07/19/2021	1 year
天線(1~18 GHz)	SCHWARZBECK MESS-ELEKTRONIK	BBHA9120D	02207	07/09/2021	1 year
天線(18~40 GHz)	ETS	3116	00086467	12/03/2020	1 year

2.2 檢驗系統示意圖

電源傳導干擾測試配置



輻射干擾測試配置



2.3 輔助測試之週邊設備描述

下列輔助設備或配件為測試中所使用，以形成一個代表性的受測系統。

週邊名稱	廠牌	型號	序號	電源線	備註
(1)	AC Adapter	LG	MCS-V02TR	---	INPUT : 100-240 VAC, 50/60 Hz, 0.4 A OUTPUT : 5 VDC, 2 A (實驗室提供)
(2)	Netgear Access Point	Netgear	R7800	---	NCC ID : CCAJ16LP0910T1 (實驗室提供)

測試搭配組合：

EUT Configure Mode	CE	RE<1 GHz	RE ≥ 1 GHz	備註	
內建固定式電池	V	V	V		
Herowatch 2 充電盤	V	V	V		
USB Cable	V	V	V		
AC Adapter	V	V	V	測試週邊(1)	
Netgear Access Point	V		---	測試週邊(2)	Normal Link

RE ≥ 1 GHz : Radiated Emission above 1 GHz & Bandedge Measurement

RE<1 GHz : Radiated Emission below 1 GHz

CE : Conducted Emission

V : Final mode

X : Non support

--- : No evaluation required

Blank Space : Pre-test mode

2.4 測試軟體版本

Measurement Software			
No.	Description	Software	Version
1	Conducted Emission	EZ EMC	1.1.4.3
2	Radiated Emission	EZ EMC	1.1.4.4

2.5 測試模式

使用定頻模式量測

Pre-Test Mode
Mode 1: Transmit Mode
Mode 2: IEEE 802.11b Continuous TX Mode
Mode 3: IEEE 802.11g Continuous TX Mode
Mode 4: IEEE 802.11n 2.4 GHz 20 MHz(64QAM) Continuous TX Mode
Mode 5: IEEE 802.11n 2.4 GHz 20 MHz(256QAM) Continuous TX Mode
Mode 6: Receiver Mode

Final-Test Mode
Mode 1: Transmit Mode
Mode 2: IEEE 802.11b Continuous TX Mode
Mode 3: IEEE 802.11g Continuous TX Mode
Mode 5: IEEE 802.11n 2.4 GHz 20 MHz(256QAM) Continuous TX Mode
Mode 6: Receiver Mode

Note : Investigation has been done on all the possible configurations for searching the worst cases (2.4 GHz 256QAM covers 64QAM). The table is a list of the test modes show in this test report.

Test Mode	Frequency (MHz)	RF Power setting in Test Software	Test Software Version
		ANT-0	
Mode 2	2412	24.0	Engineering mode *##83781#**
	2437	24.0	
	2462	24.0	
Mode 3	2412	24.0	
	2437	24.0	
	2462	24.0	
Mode 4	2412	24.0	
	2437	24.0	
	2462	24.0	
Mode 5	2412	24.0	
	2437	24.0	
	2462	24.0	

Test Mode	ANT-0
Mode 2	V
Mode 3	V
Mode 4	V
Mode 5	V

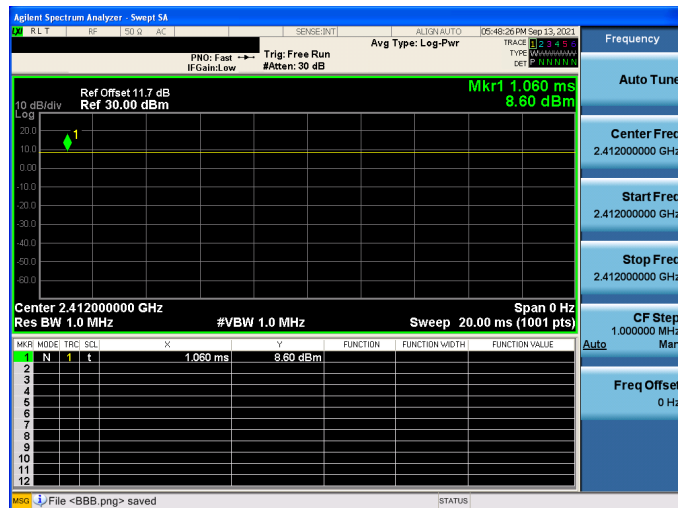
Test Mode	Antenna Delivery	Data Rate (Mbps)	Test Channel
Mode 2	1TX / 1RX	1	1, 6, 11
Mode 3	1TX / 1RX	6	1, 6, 11
Mode 4	1TX / 1RX	6.5	1, 6, 11
Mode 5	1TX / 1RX	6.5	1, 6, 11

Duty cycle

Test Mode	Frequency (MHz)	on time (ms)	on+off time (ms)	Duty cycle	Duty Factor (dB)	1/T Minimun VBW (kHz)
Mode 2	2412	20.000	20.000	1.000	0.000	0.010
Mode 3	2412	5.520	5.535	0.997	0.012	0.010
Mode 5	2412	5.115	5.130	0.997	0.013	0.010

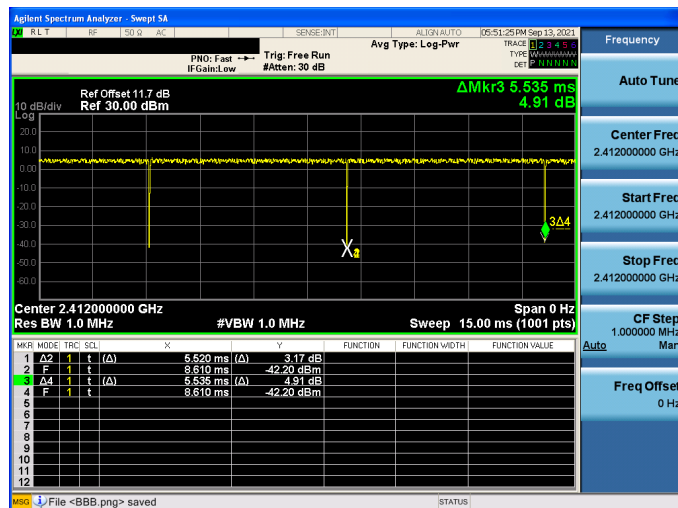
Mode 2: IEEE 802.11b Continuous TX Mode

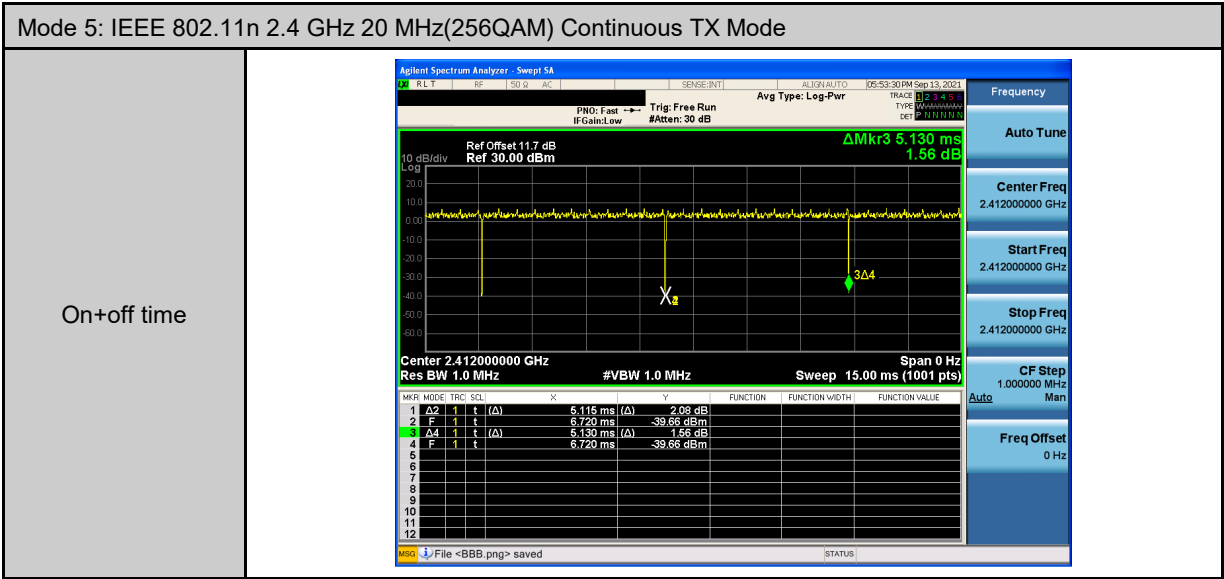
On+off time



Mode 3: IEEE 802.11g Continuous TX Mode

On+off time





2.6 量測不確定度

下列量測不確定水準是參照量測儀器 CISPR 16-4-2 所規定之不確定度。

Test Item	Frequency Range	Uncertainty
Conducted Emission	150 kHz ~ 30 MHz	2.7 dB
Radiated Emission	9 kHz ~ 30 MHz	2.2 dB
	30 MHz ~ 1000 MHz	5.1 dB
	1000 MHz ~ 18000 MHz	5.2 dB
	18000 MHz ~ 26500 MHz	4.6 dB
	26500 MHz ~ 40000 MHz	4.6 dB
Conducted Output Power	1.1 dB	
RF Bandwidth	4.7 %	
Power Spectral Density	1.1 dB	

2.7 試驗環境

產品測試時之實驗室環境條件如下：

項 目	測 試 項 目	需 求	實 際
溫度 Temperature (°C)	LP0002	10 - 40	20 - 30
濕度 Humidity (%RH)		10 - 90	45 - 75

3. 測試項目與結果判定總表

本測試報告之所有項目皆依據 NCC 低功率射頻器材技術規範(LP0002)之檢驗法。

2.4 GHz 頻段適用下列表格

項次	測試項目	適用規範	測試結果	量測設備	結果判定
1	電源線傳導干擾(*)	低功率射頻器材技術規範 3.3 節	Annex A.	請參閱 2.1 節	符合
2	場強輻射	低功率射頻器材技術規範 3.5 節、3.6 節、4.10.1.5 節	Annex B.	請參閱 2.1 節	符合
3	頻帶邊緣外之輻射發射	低功率射頻器材技術規範 4.10.1.5 節	Annex B.	請參閱 2.1 節	符合
4	峰值傳導輸出功率	低功率射頻器材技術規範 4.10.1.2(1)(C)節	Annex C.	請參閱 2.1 節	符合
5	天線規格	低功率射頻器材技術規範 4.10.1.3(3)、4.10.1.4 節	請參閱 4.4 節	-----	符合
6	非必要頻帶	低功率射頻器材技術規範 4.10.1.5(1)節	Annex C.	請參閱 2.1 節	符合
7	6 dB 頻寬	低功率射頻器材技術規範 4.10.1.6(2)(A)節	Annex C.	請參閱 2.1 節	符合
8	峰值發射功率頻譜密度	低功率射頻器材技術規範 4.10.1.6(2)(B)節	Annex C.	請參閱 2.1 節	符合
9	電波暴露量之評估	低功率射頻器材技術規範 6.20.2 節	Annex C.	請參閱 2.1 節	符合

* 此項目為在 RF 功能作動下進行

本產品透過預測試場強輻射確認 X、Y 和 Z 個軸中最差之結果軸向為 X 軸，因此場強輻射完整測試 X 軸並將其結果記錄於報告中。

Decision Rule

☒ Uncertainty is not included.

☐ Uncertainty is included.

4. 測試項目表列

4.1 電源線傳導干擾之量測

合格標準：

依據 NCC 低功率射頻器材技術規範(LP0002)之 3.3 節，以市電為電源之低功率射頻器材，其傳導回電源線上頻率自 150 kHz 至 30 MHz 之射頻電壓（在電源端子每一電源線對接地點）不得超過下表所列之限值。測量時應經過 50 Ω /50 μ H 之電源線阻抗模擬網路 (LISN)。頻率重疊處，以較低限值為準。

Frequency (MHz)	傳導限制值 (dBuV)	
	準峰值 (Quasi – peak)	平均值 (Average)
0.15 – 0.5	66 - 56 (註)	56 - 46 (註)
0.5 – 5	56	46
5 - 30	60	50

註：隨頻率之對數遞減。

測試方法：

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

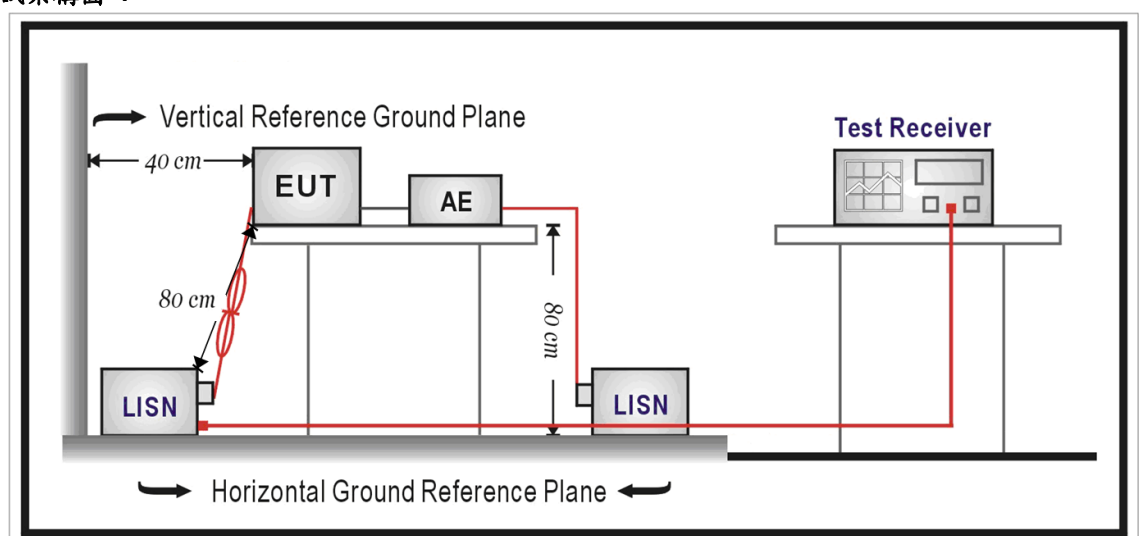
干擾值之計算

電源傳導干擾電壓之計算公式如下

結果值 = 儀器讀值(QP/AV) + 校正因子

其中校正因子為：饋線損失 + 電源阻抗模擬網路損失

測試架構圖：



4.2 場強輻射之量測

合格標準：

依據 NCC 低功率射頻器材技術規範(LP0002)之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。如發射機以依據 NCC 低功率射頻器材技術規範(LP0002)之 4.10.1.2(1)(C)節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 3.5 節禁用頻段之輻射發射，應符合第 3.6 節之規定。

依據 NCC 低功率射頻器材技術規範第 3.5 節之規定,禁用頻段如下：

頻率(MHz)	頻率(MHz)	頻率(MHz)	頻率(MHz)
0.090~0.110	108.00~138.00	1660.0~1785.0	8025.0~8500.0
0.490~0.510	149.90~150.05	1805.0~1888.0	9000.0~9200.0
2.172~2.198	156.70~156.90	1885.0~1900.0	9300.0~9500.0
3.013~3.033	162.01~167.17	1905.0~1985.0	10600~12700
4.115~4.198	167.72~173.20	2010.0~2025.0	13250~13400
5.670~5.690	240.00~285.00	2110.0~2170.0	14470~14500
6.200~6.300	322.00~335.40	2200.0~2300.0	15350~16200
8.230~8.400	399.90~410.00	2310.0~2390.0	17700~21400
12.265~12.600	485.00~510.00	2483.5~2900.0	22010~23120
13.340~13.430	608.00~614.00	3260.0~3267.0	23600~24000
14.965~15.020	703.00~748.00	3332.0~3339.0	31200~31800
16.700~16.755	758.00~803.00	3345.8~3358.0	36430~36500
19.965~20.020	825.00~915.00	3500.0~4400.0	38600 以上
25.500~25.700	930.00~1240.0	4500.0~5250.0	
37.475~38.275	1300.0~1427.0	5350.0~5460.0	
73.500~75.400	1435.0~1626.5	7250.0~7750.0	

依據 NCC 低功率射頻器材技術規範第 3.6 節之規定,除本規範各章節另有放寬規定者外,其電場強度不得超過下表之限值,且其不必要之發射皆不得大於主波發射強度。各頻段重疊處,以較嚴格之限制值為準。

頻 率 (MHz)	電場強度 (μ V/m)	測距(m)
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

測試方法：

測試場地為開放測試場,將待測物置於 0.8 米高的非金屬桌面,使其在工作狀態,接收天線置於 3 米外相同的高度。待測物分別要垂直或水平放置,而且桌面要 360 度旋轉,另外接收天線也要從 1.0 米至 4.0 米升降變化,以找出最大的輻射電場強度,接收天線置於水平、垂直極向各執行測試一次。

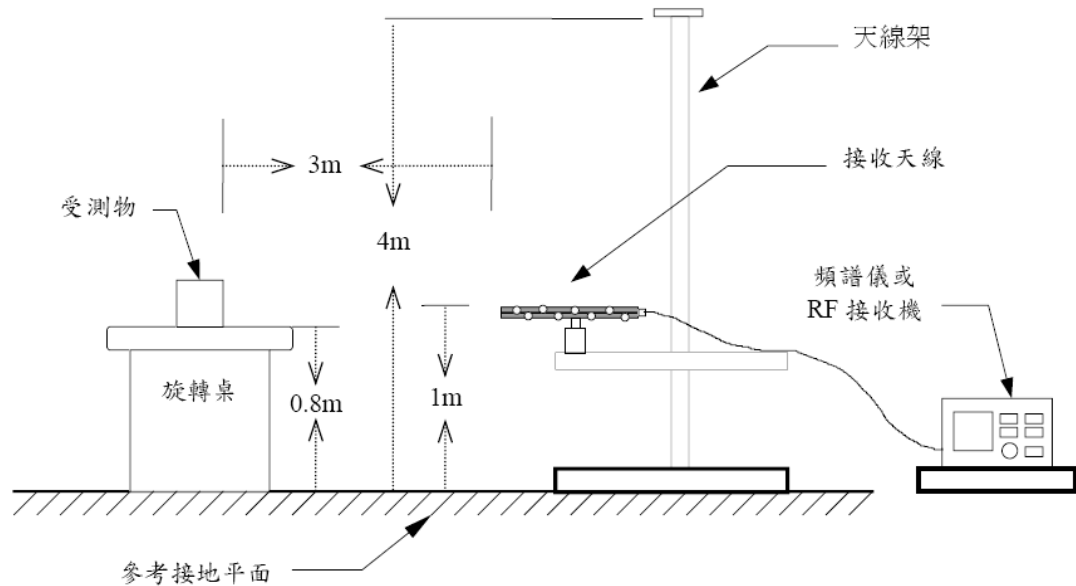
場強度之計算

場強之計算公式為：結果值 = 讀值 + 校正因子

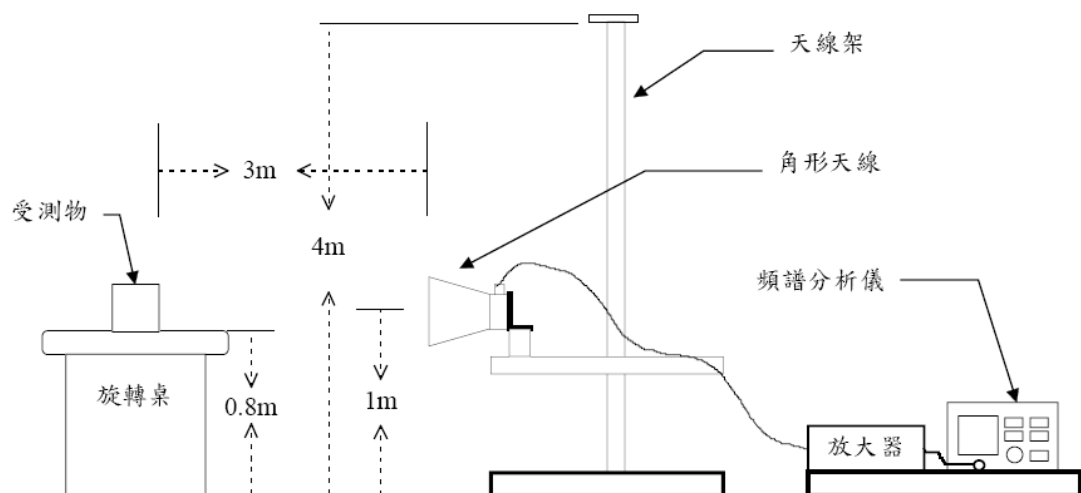
其中校正因子為：天線因子+ 饋線損失 + 濾波器損失（若有使用） - 放大器增益（若有使用）

測試架構圖：

量測頻率低於 1 GHz 以下之測試配置



量測頻率高於 1 GHz 以上之測試配置

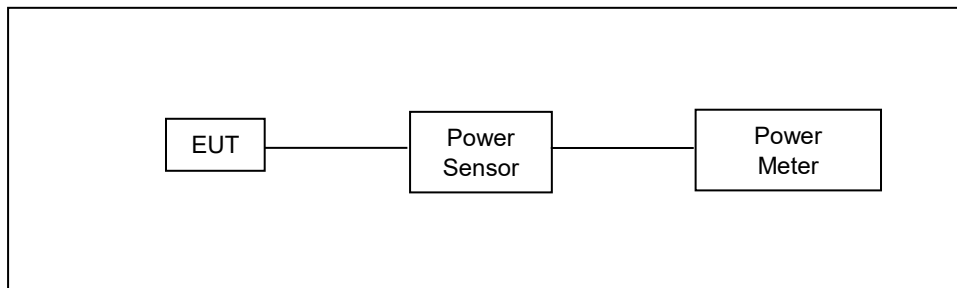


4.3 峰值傳導輸出功率之量測

合格標準：

依據 NCC 低功率射頻器材技術規範(LP0002)之 4.10.1.2(1)(C)節之要求，操作於 2400-2483.5 兆赫(MHz)數位調變技術系統：1 瓦(W)(含)以下

測試架構圖：



4.4 天線規格之要求

合格標準：

依據 NCC 低功率射頻器材技術規範(LP0002)之 4.10.1.3(3)節之要求，除 4.10.1.3(1)及 4.10.1.3(2)外，使用超過 6 dBi 方向增益之發射天線時，應依超過 6 dBi 天線方向增益的 dBi 總量，等量減少最大傳導輸出功率限制值。

依據 NCC 低功率射頻器材技術規範(LP0002)之 4.10.1.4 節之要求，天線之規格不受第 3.2 節規定之限制

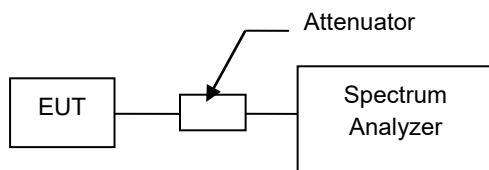
判定結果：符合。

4.5 非必要頻帶之量測

合格標準：

發射限制： 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，須衰減 20 分貝(dB)，以射頻傳導或輻射方式測量。

測試架構圖：



附註 1: 於使用頻帶範圍之任意 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 20 分貝(dB)以上，符合規定。

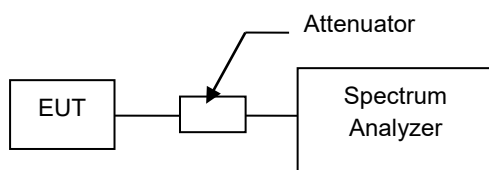
附註 2: 測試結果頻帶外之輻射雜訊皆小於主頻 TX 20 dB。

4.6 6 dB頻寬之要求

合格標準：

依據 NCC 低功率射頻器材技術規範 4.10.1.6(2)(A)節之要求，對使用數位調變技術(Digital Modulation Techniques)系統而言， 6 dB 頻寬至少應有 500 千赫(kHz)。

測試架構圖：



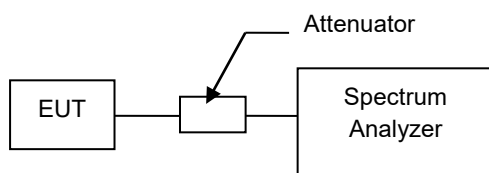
4.7 峰值發射功率頻譜密度之要求

合格標準：

依據 NCC 低功率射頻器材技術規範(LP0002)之 4.10.1.6(2)(B)節之要求，數位調變技術(Digital Modulation Techniques)系統之功率密度,再使用頻率範圍之任意 3 kHz 頻寬內,由發射機傳導至天線之峰值發射功率頻譜密度在任意期間內,皆不得大於 8 dBm(複合系統時, 關閉跳頻作業狀態檢驗)。

測試架構圖：

測試場地測試配置如圖所示。



4.8 電波暴露量之評估

合格標準：

若受測物於正常操作模式下，其發射機距離人體 20 公分以上者，可測試最大暴露允許值(Maximum Permissible Exposure, MPE)以證明其符合電波暴露量之要求。限制值如下：

6.20.2.1 職業性/可控制之暴露

頻率範圍 (MHz)	電場強度 (V/m)	磁場強度 (A/m)	功率密度 (mW/cm ²)	平均時間 (minutes)
0.3~3.0	614	1.63	*100	6
3~30	1842/f	4.89/f	*900/f ²	6
30~300	61.4	0.163	1.0	6
300~1,500	-----	-----	f/300	6
1,500~100,000	-----	-----	5.0	6

註 1：標記*表平面波等效功率密度。

註 2：f 表測試頻率，單位：MHz。

6.20.2.2 一般人/不可控制之暴露

頻率範圍 (MHz)	電場強度 (V/m)	磁場強度 (A/m)	功率密度 (mW/cm ²)	平均時間 (minutes)
0.3~1.34	614	1.63	*100	30
1.34~30	824/F	2.19/F	*180/F ²	30
30~300	27.5	0.073	0.2	30
300~1,500	-----	-----	F/1500	30
1,500~100,000	-----	-----	1.0	30

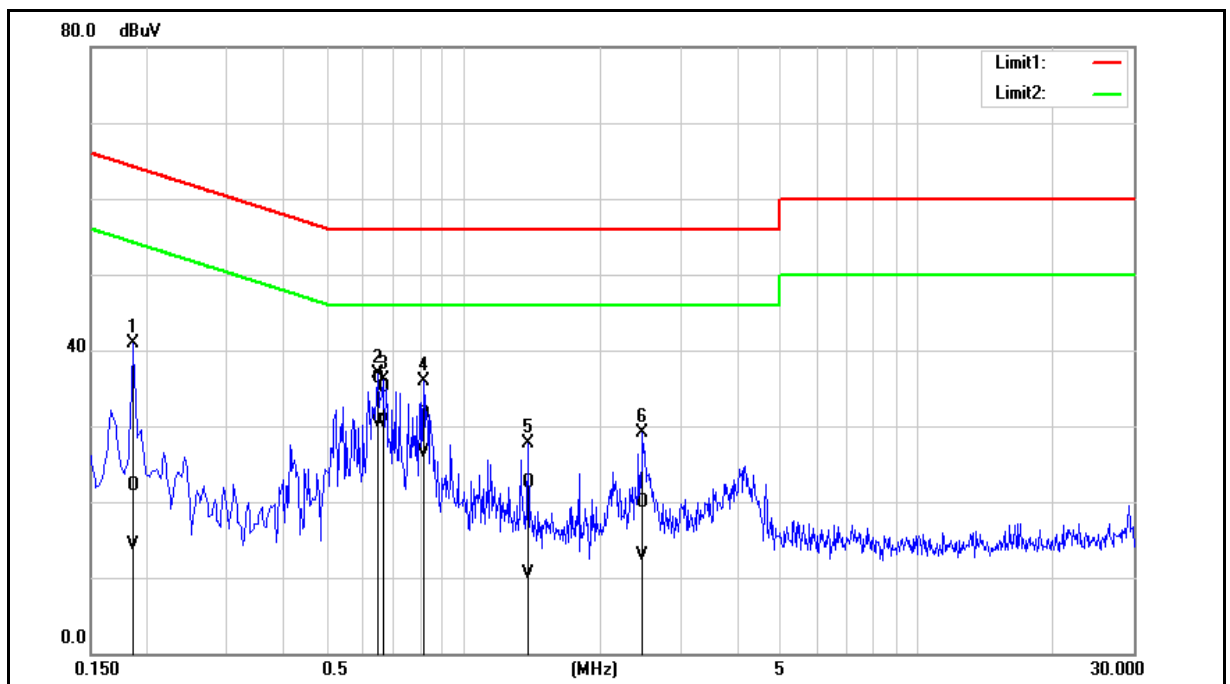
註 1：標記*表平面波等效功率密度。

註 2：f 表測試頻率，單位：MHz。

5. Test Results

Annex A. Conducted Emission

Standard:	LP0002	Line:	L1
Test item:	Conducted Emission	Power:	AC 110 V/60 Hz
Mode:	Mode 1		
Description:			

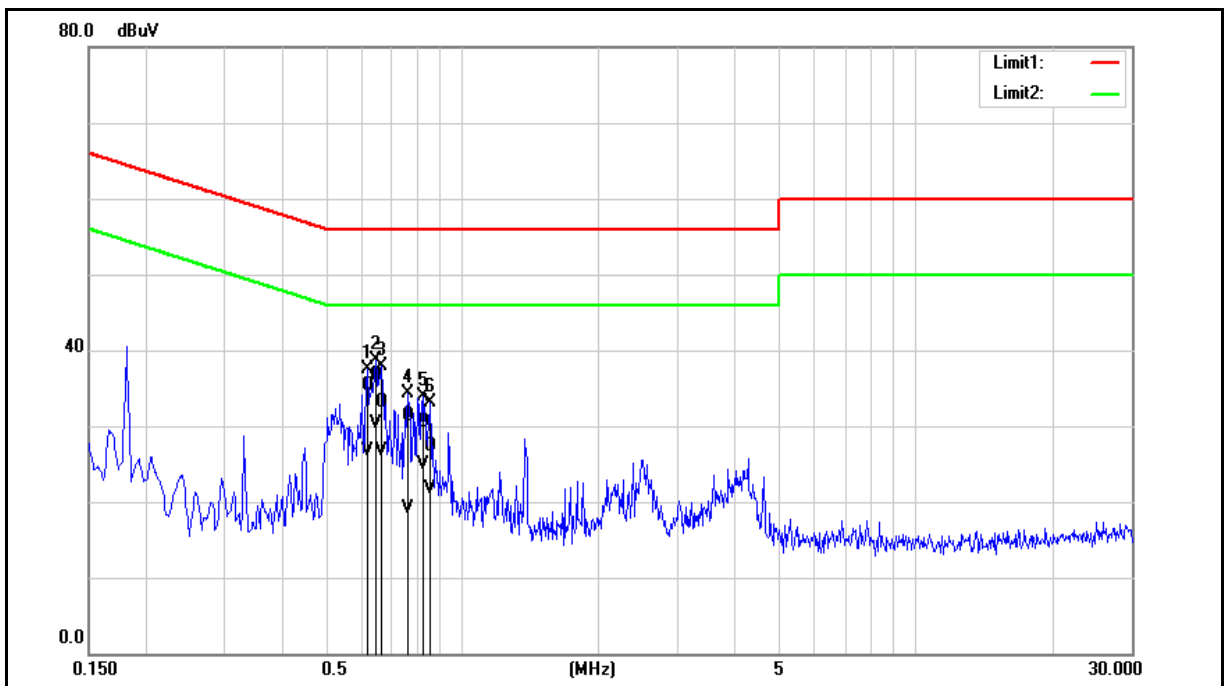


No.	Frequency (MHz)	QP reading (dBuV)	AVG reading (dBuV)	Correction factor (dB)	QP result (dBuV)	AVG result (dBuV)	QP limit (dBuV)	AVG limit (dBuV)	QP margin (dB)	AVG margin (dB)	Remark
1	0.1860	12.37	4.49	9.74	22.11	14.23	64.21	54.21	-42.10	-39.98	Pass
2	0.6460	26.46	20.74	9.75	36.21	30.49	56.00	46.00	-19.79	-15.51	Pass
3	0.6620	25.27	20.68	9.75	35.02	30.43	56.00	46.00	-20.98	-15.57	Pass
4	0.8140	21.85	16.81	9.75	31.60	26.56	56.00	46.00	-24.40	-19.44	Pass
5	1.3860	12.79	0.70	9.77	22.56	10.47	56.00	46.00	-33.44	-35.53	Pass
6	2.4740	10.01	3.02	9.81	19.82	12.83	56.00	46.00	-36.18	-33.17	Pass

註：1. 干擾值(dBuV) = 校正係數(dB) + 讀值(dBuV)。

2. 校正係數(dB) = 量測信號線損失(dB) + 電源阻抗模擬網路係數(dB)。

Standard:	LP0002	Line:	N
Test item:	Conducted Emission	Power:	AC 110 V/60 Hz
Mode:	Mode 1		
Description:			



No.	Frequency (MHz)	QP reading (dBuV)	AVG reading (dBuV)	Correction factor (dB)	QP result (dBuV)	AVG result (dBuV)	QP limit (dBuV)	AVG limit (dBuV)	QP margin (dB)	AVG margin (dB)	Remark
1	0.6180	25.53	16.94	9.73	35.26	26.67	56.00	46.00	-20.74	-19.33	Pass
2	0.6460	27.02	20.66	9.74	36.76	30.40	56.00	46.00	-19.24	-15.60	Pass
3	0.6660	23.43	16.90	9.74	33.17	26.64	56.00	46.00	-22.83	-19.36	Pass
4	0.7620	21.59	9.31	9.75	31.34	19.06	56.00	46.00	-24.66	-26.94	Pass
5	0.8180	20.83	15.06	9.75	30.58	24.81	56.00	46.00	-25.42	-21.19	Pass
6	0.8500	17.59	11.88	9.75	27.34	21.63	56.00	46.00	-28.66	-24.37	Pass

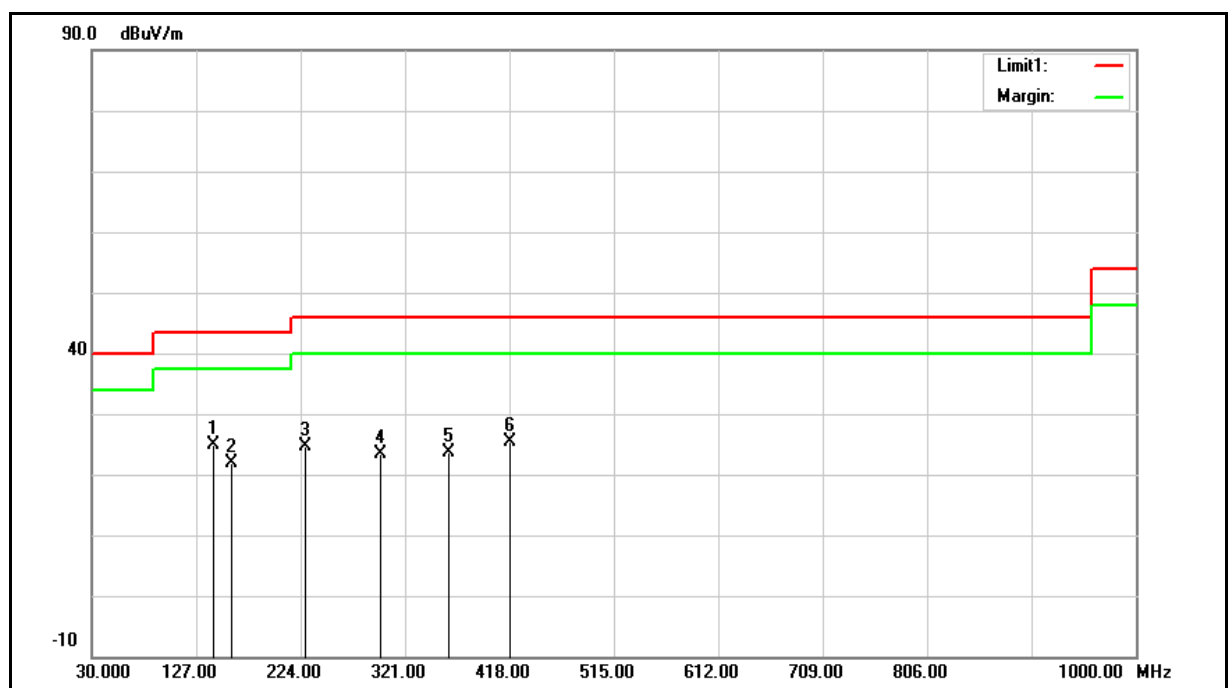
註：1. 干擾值(dBuV) = 校正係數(dB) + 讀值(dBuV)。

2. 校正係數(dB) = 量測信號線損失(dB) + 電源阻抗模擬網路係數(dB)。

Annex B. Radiated Emission Measurement

其它不必要之訊號 (1 GHz 以下)

Standard:	LP0002	Test Distance:	3 m
Test item:	Radiated Emission		
Frequency:	2462 MHz		
Mode:	Mode 5		
Ant.Polar.:	Horizontal		



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	143.4900	31.98	-7.08	24.90	43.50	-18.60	QP
2	159.9800	28.37	-6.42	21.95	43.50	-21.55	QP
3	227.8800	32.67	-8.06	24.61	46.00	-21.39	QP
4	298.6900	28.82	-5.46	23.36	46.00	-22.64	QP
5	361.7400	27.87	-4.34	23.53	46.00	-22.47	QP
6	418.9700	28.38	-3.01	25.37	46.00	-20.63	QP

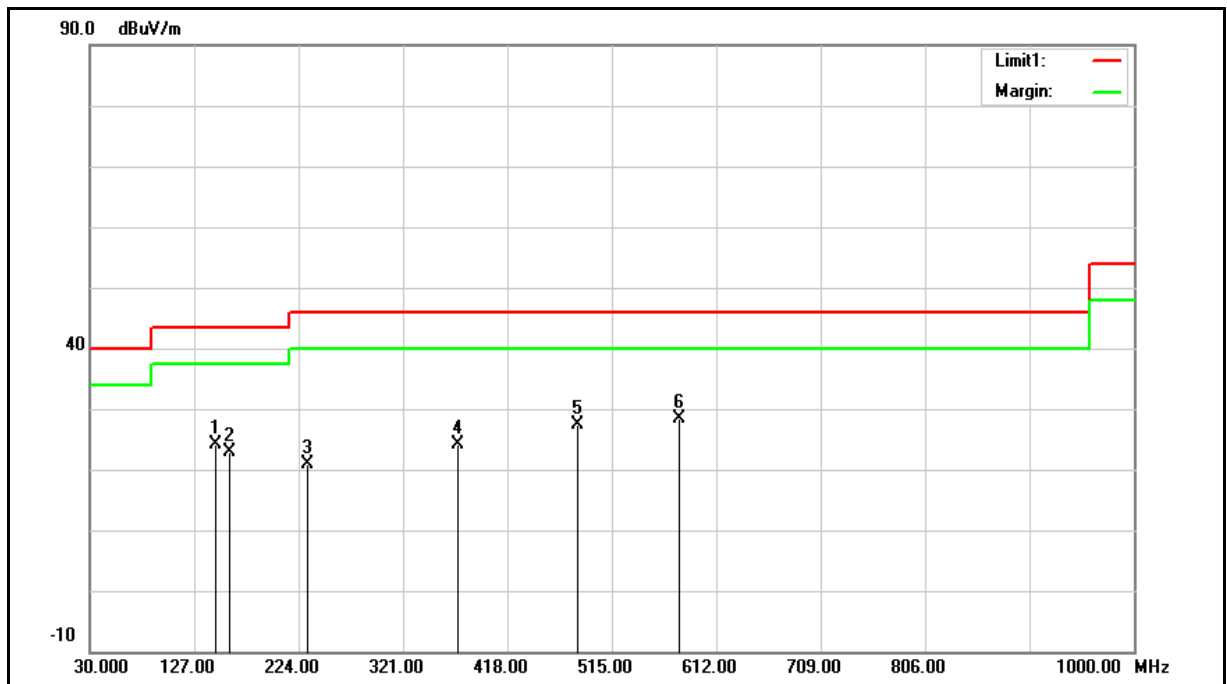
Note: 1. Result (dBuV/m) = Correct Factor (dB/m) + Reading (dBuV).

Example: $22.79 = -6.59 + 29.38$

2. Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	LP0002	Test Distance:	3 m
Test item:	Radiated Emission		
Frequency:	2462 MHz		
Mode:	Mode 5		
Ant.Polar.:	Vertical		



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	147.3700	31.07	-6.83	24.24	43.50	-19.26	QP
2	159.9800	29.35	-6.42	22.93	43.50	-20.57	QP
3	231.7600	28.57	-7.80	20.77	46.00	-25.23	QP
4	371.4400	28.16	-4.08	24.08	46.00	-21.92	QP
5	482.9900	29.41	-2.12	27.29	46.00	-18.71	QP
6	577.0800	28.53	-0.10	28.43	46.00	-17.57	QP

Note: 1. Result (dBuV/m) = Correct Factor (dB/m) + Reading (dBuV).

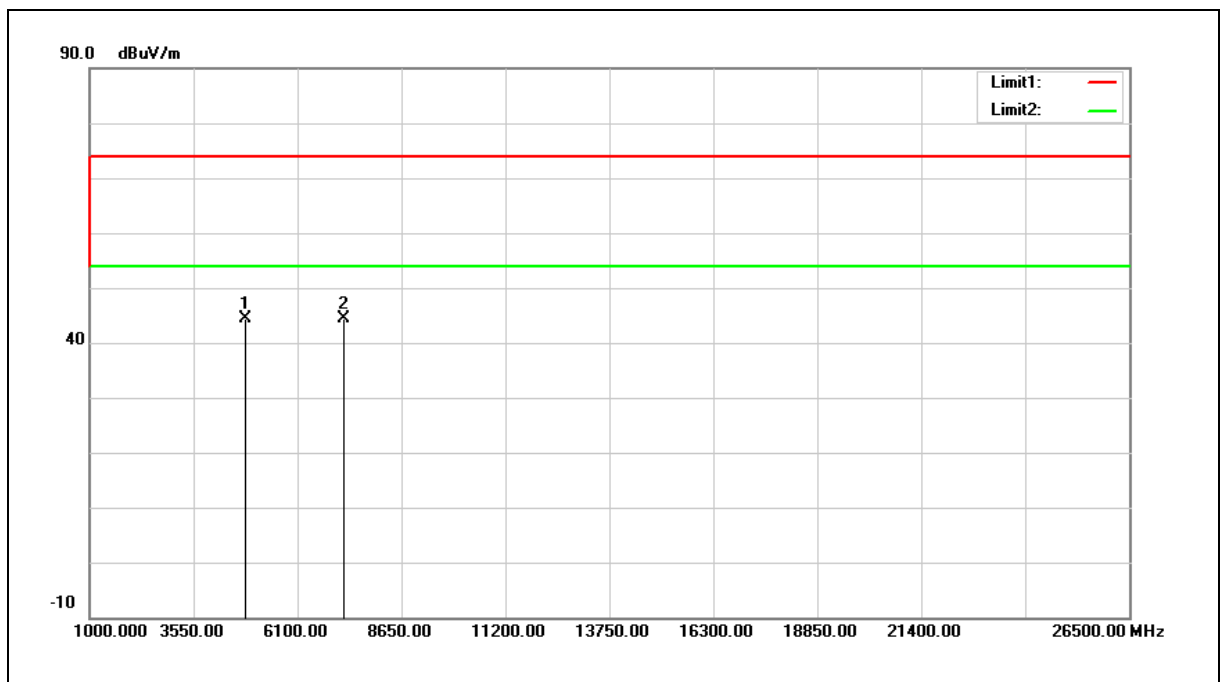
Example: $32.60 = -10.35 + 42.95$

2. Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3. When the peak results are less than average limit, so not need to evaluate the average.

場強輻射量測 (1 GHz 以上)

Standard:	LP0002	Test Distance:	3 m
Test item:	Harmonic		
Frequency:	2412 MHz		
Mode:	Mode 2		
Ant.Polar.:	Horizontal		



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4824.000	41.73	2.72	44.45	74.00	-29.55	peak
2	7236.000	36.04	8.30	44.34	74.00	-29.66	peak

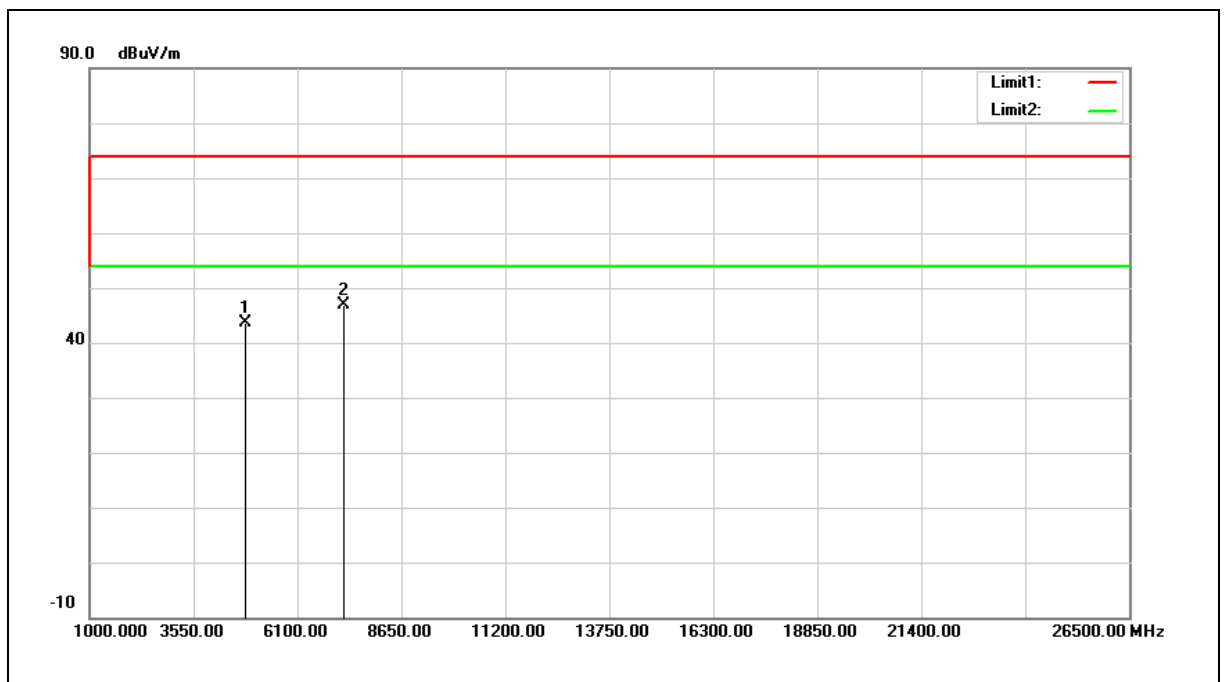
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

Example: $44.45 = 2.72 + 41.73$

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3.When the peak results are less than average limit, so not need to evaluate the average.

Standard:	LP0002	Test Distance:	3 m
Test item:	Harmonic		
Frequency:	2412 MHz		
Mode:	Mode 2		
Ant.Polar.:	Vertical		



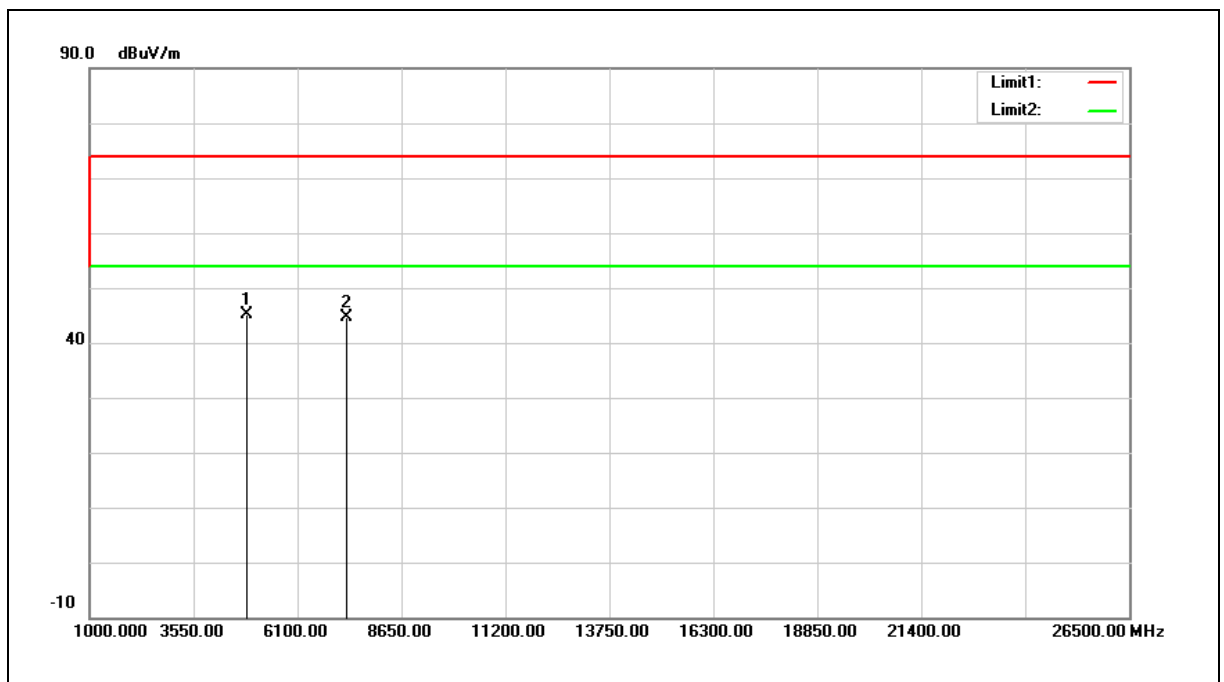
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4824.000	40.92	2.72	43.64	74.00	-30.36	peak
2	7236.000	38.70	8.30	47.00	74.00	-27.00	peak

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3.When the peak results are less than average limit, so not need to evaluate the average.

Standard:	LP0002	Test Distance:	3 m
Test item:	Harmonic		
Frequency:	2437 MHz		
Mode:	Mode 2		
Ant.Polar.:	Horizontal		



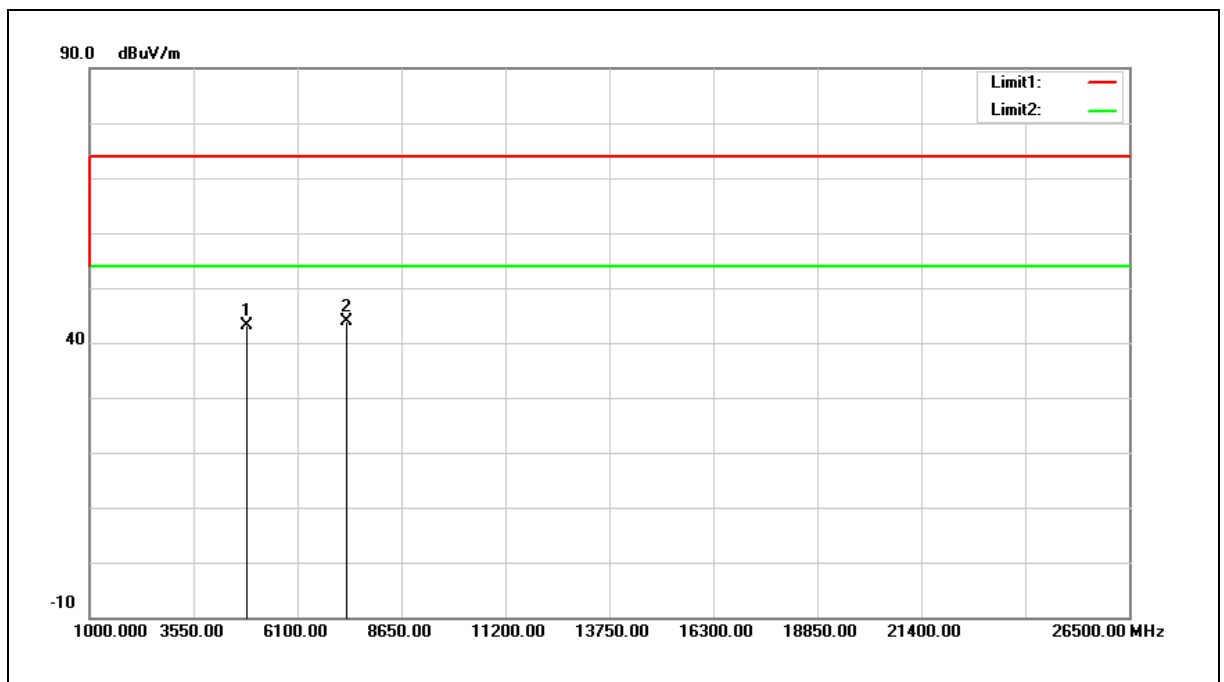
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4874.000	42.33	2.84	45.17	74.00	-28.83	peak
2	7311.000	36.03	8.53	44.56	74.00	-29.44	peak

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3.When the peak results are less than average limit, so not need to evaluate the average.

Standard:	LP0002	Test Distance:	3 m
Test item:	Harmonic		
Frequency:	2437 MHz		
Mode:	Mode 2		
Ant.Polar.:	Vertical		



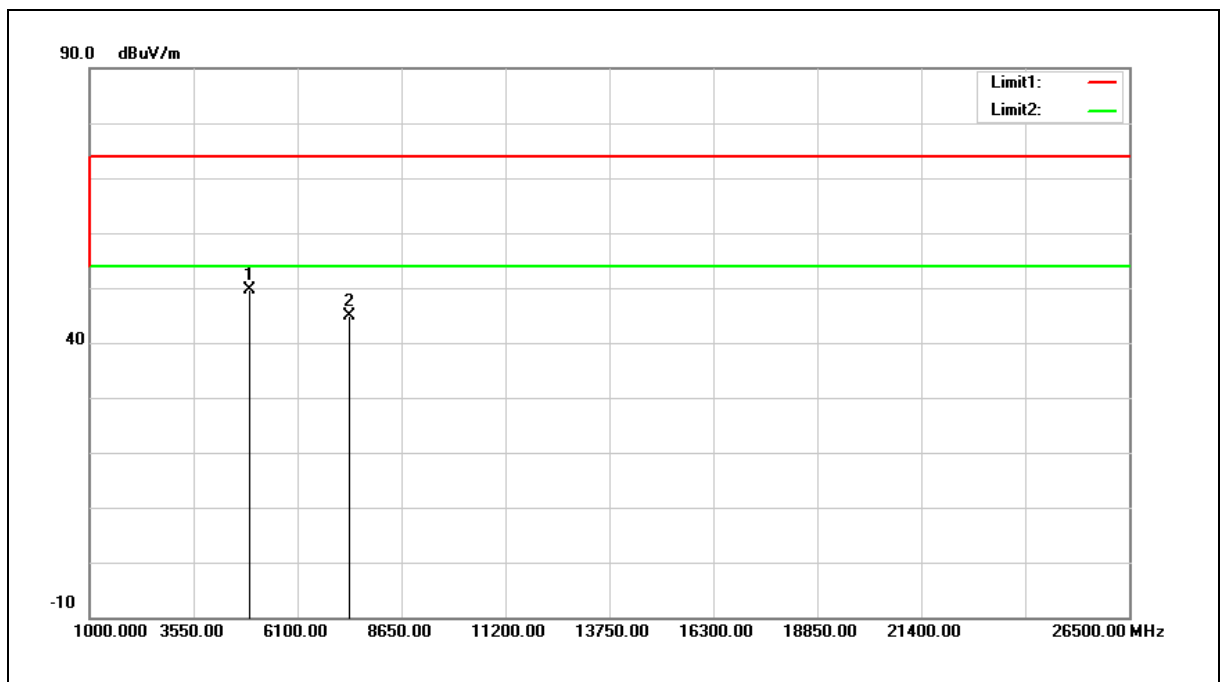
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4874.000	40.26	2.84	43.10	74.00	-30.90	peak
2	7311.000	35.36	8.53	43.89	74.00	-30.11	peak

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3.When the peak results are less than average limit, so not need to evaluate the average.

Standard:	LP0002	Test Distance:	3 m
Test item:	Harmonic		
Frequency:	2462 MHz		
Mode:	Mode 2		
Ant.Polar.:	Horizontal		



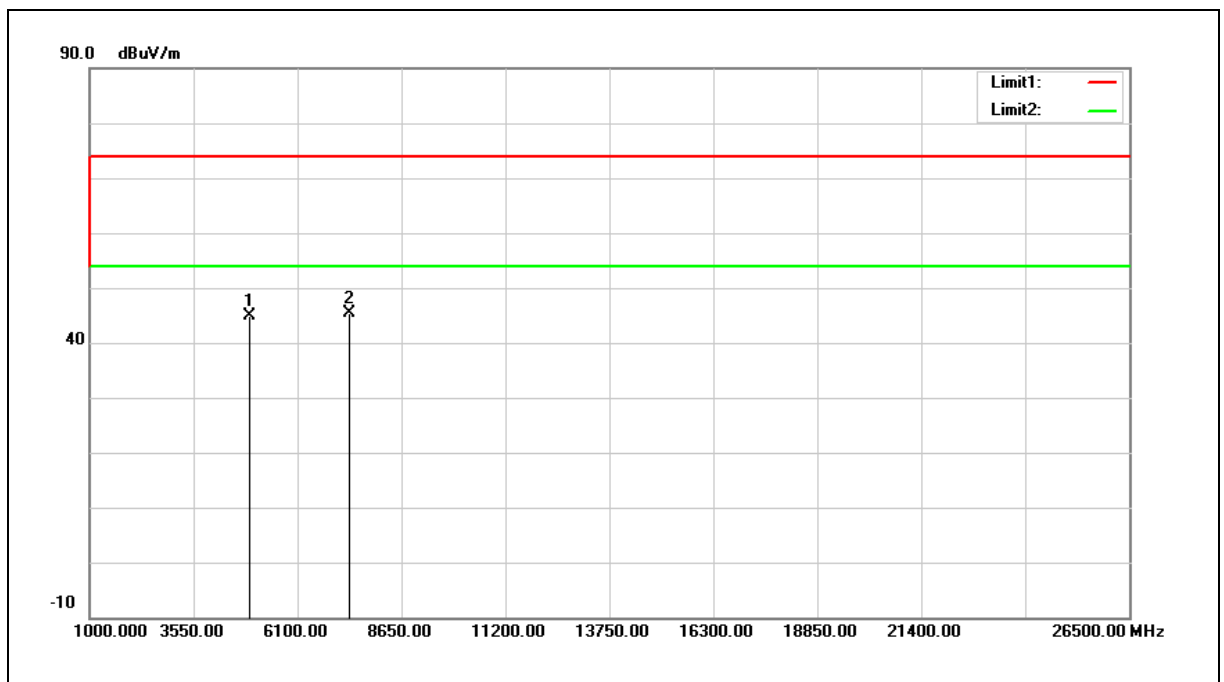
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4924.000	46.57	2.96	49.53	74.00	-24.47	peak
2	7386.000	36.07	8.77	44.84	74.00	-29.16	peak

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3.When the peak results are less than average limit, so not need to evaluate the average.

Standard:	LP0002	Test Distance:	3 m
Test item:	Harmonic		
Frequency:	2462 MHz		
Mode:	Mode 2		
Ant.Polar.:	Vertical		



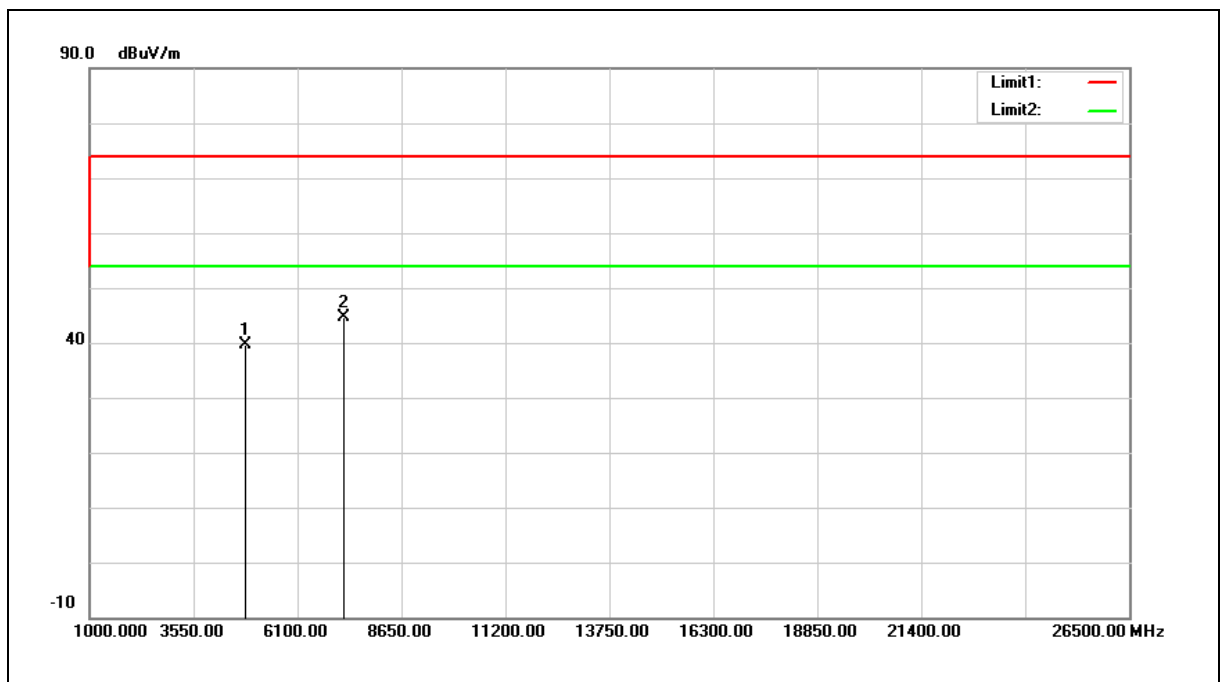
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4924.000	41.94	2.96	44.90	74.00	-29.10	peak
2	7386.000	36.52	8.77	45.29	74.00	-28.71	peak

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3.When the peak results are less than average limit, so not need to evaluate the average.

Standard:	LP0002	Test Distance:	3 m
Test item:	Harmonic		
Frequency:	2412 MHz		
Mode:	Mode 3		
Ant.Polar.:	Horizontal		



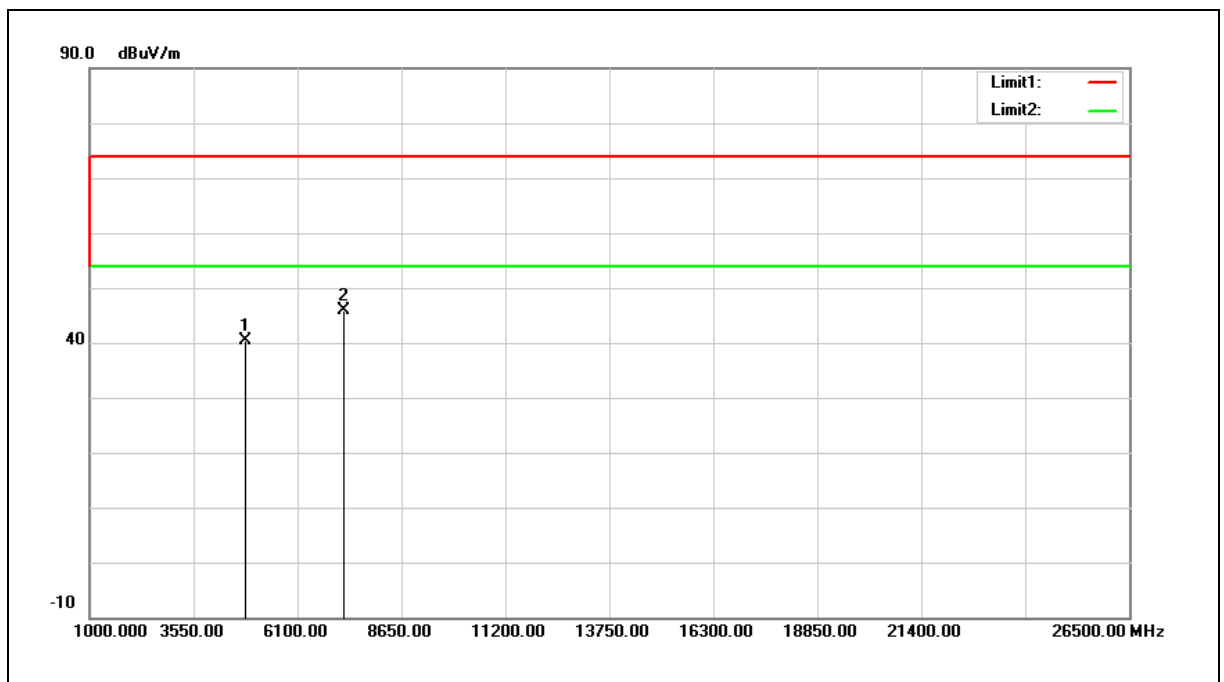
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4824.000	36.93	2.72	39.65	74.00	-34.35	peak
2	7236.000	36.43	8.30	44.73	74.00	-29.27	peak

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3.When the peak results are less than average limit, so not need to evaluate the average.

Standard:	LP0002	Test Distance:	3 m
Test item:	Harmonic		
Frequency:	2412 MHz		
Mode:	Mode 3		
Ant.Polar.:	Vertical		



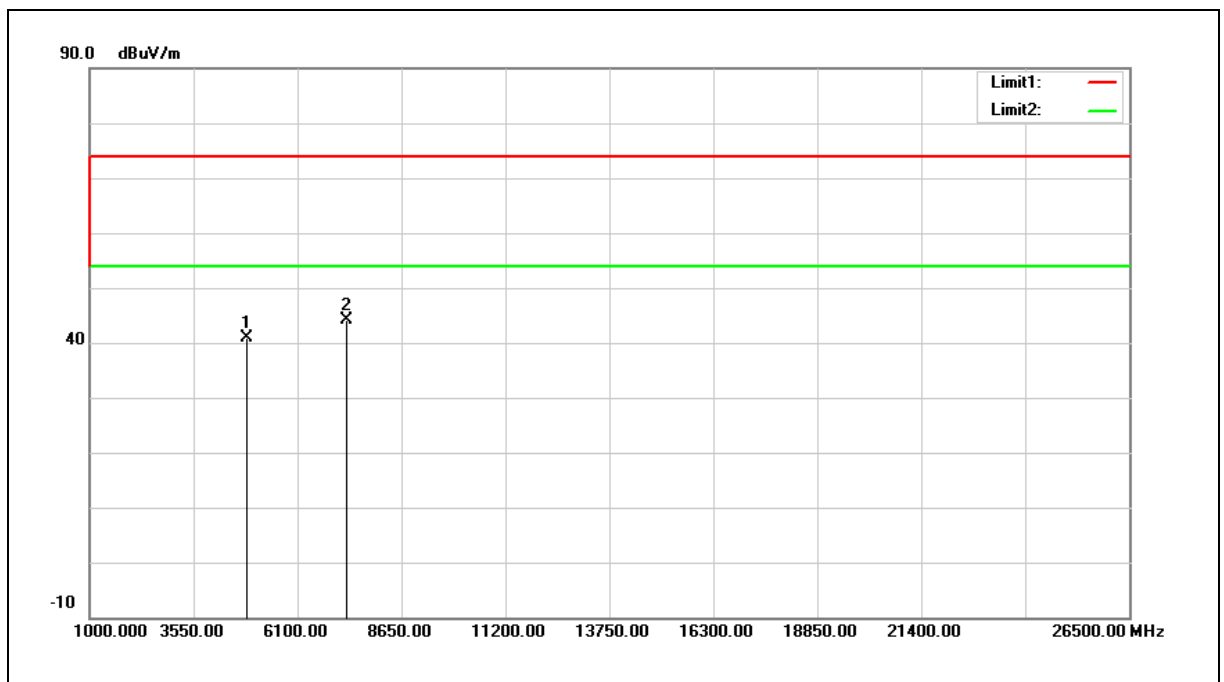
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4824.000	37.59	2.72	40.31	74.00	-33.69	peak
2	7236.000	37.66	8.30	45.96	74.00	-28.04	peak

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3.When the peak results are less than average limit, so not need to evaluate the average.

Standard:	LP0002	Test Distance:	3 m
Test item:	Harmonic		
Frequency:	2437 MHz		
Mode:	Mode 3		
Ant.Polar.:	Horizontal		



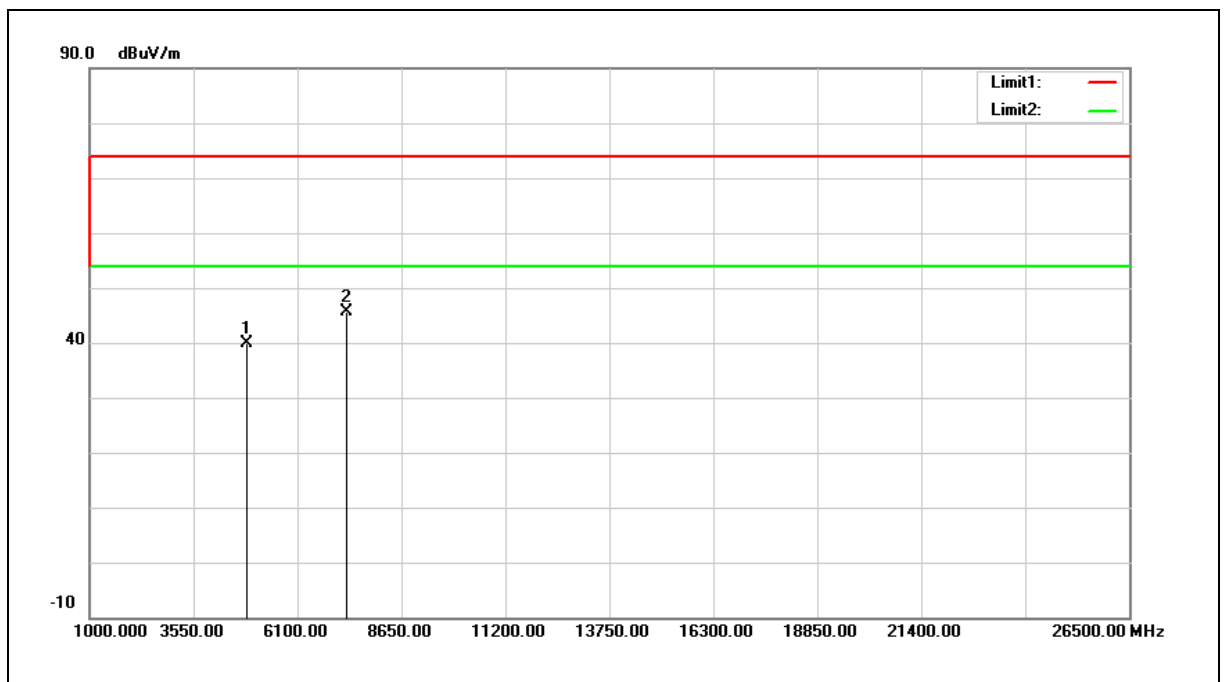
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4874.000	38.08	2.84	40.92	74.00	-33.08	peak
2	7311.000	35.55	8.53	44.08	74.00	-29.92	peak

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3.When the peak results are less than average limit, so not need to evaluate the average.

Standard:	LP0002	Test Distance:	3 m
Test item:	Harmonic		
Frequency:	2437 MHz		
Mode:	Mode 3		
Ant.Polar.:	Vertical		



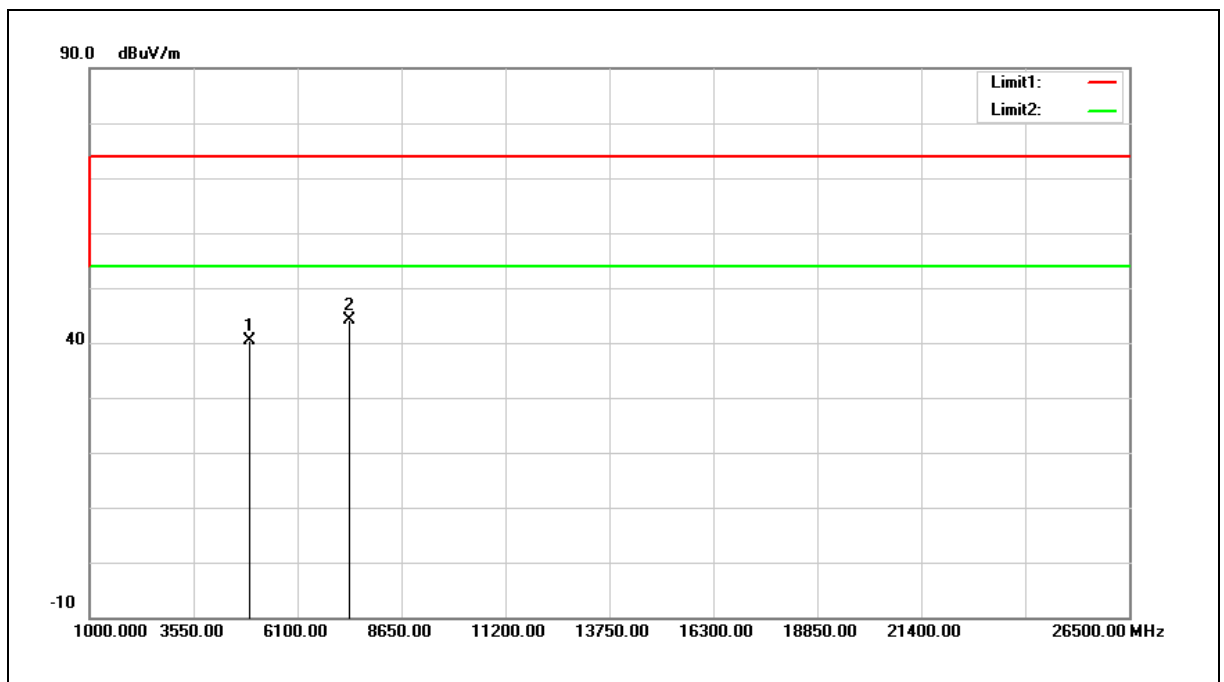
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4874.000	37.00	2.84	39.84	74.00	-34.16	peak
2	7311.000	37.18	8.53	45.71	74.00	-28.29	peak

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3.When the peak results are less than average limit, so not need to evaluate the average.

Standard:	LP0002	Test Distance:	3 m
Test item:	Harmonic		
Frequency:	2462 MHz		
Mode:	Mode 3		
Ant.Polar.:	Horizontal		



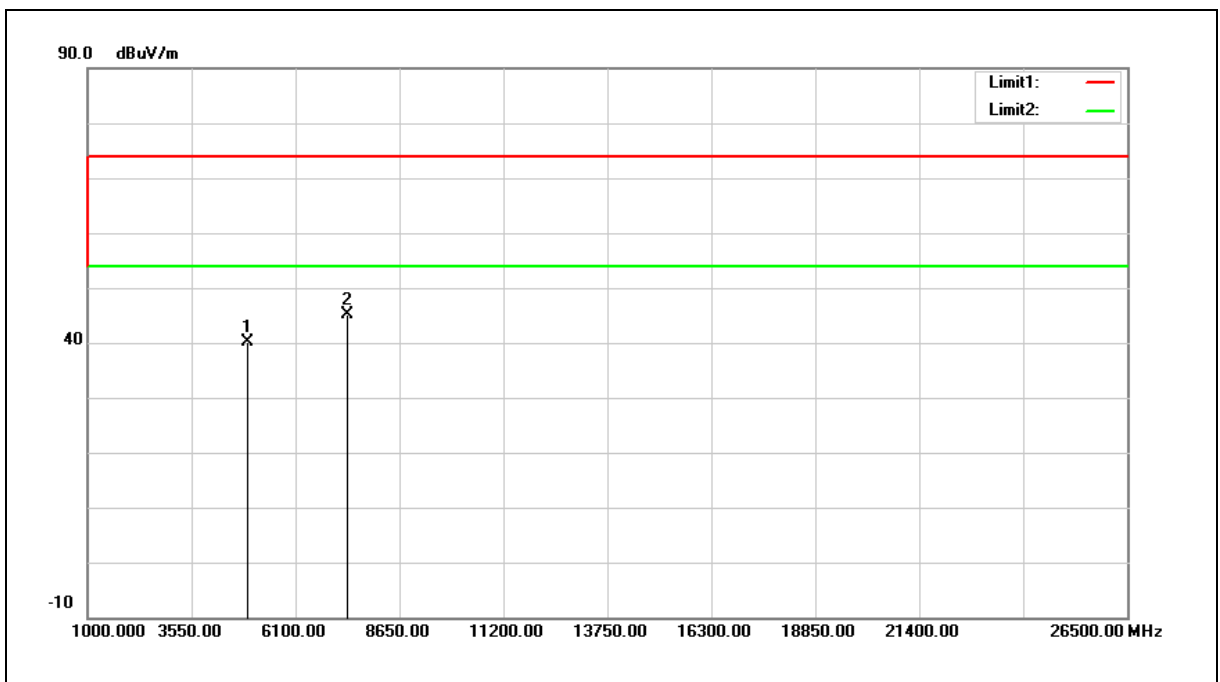
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4924.000	37.34	2.96	40.30	74.00	-33.70	peak
2	7386.000	35.41	8.77	44.18	74.00	-29.82	peak

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3.When the peak results are less than average limit, so not need to evaluate the average.

Standard:	LP0002	Test Distance:	3 m
Test item:	Harmonic		
Frequency:	2462 MHz		
Mode:	Mode 3		
Ant.Polar.:	Vertical		



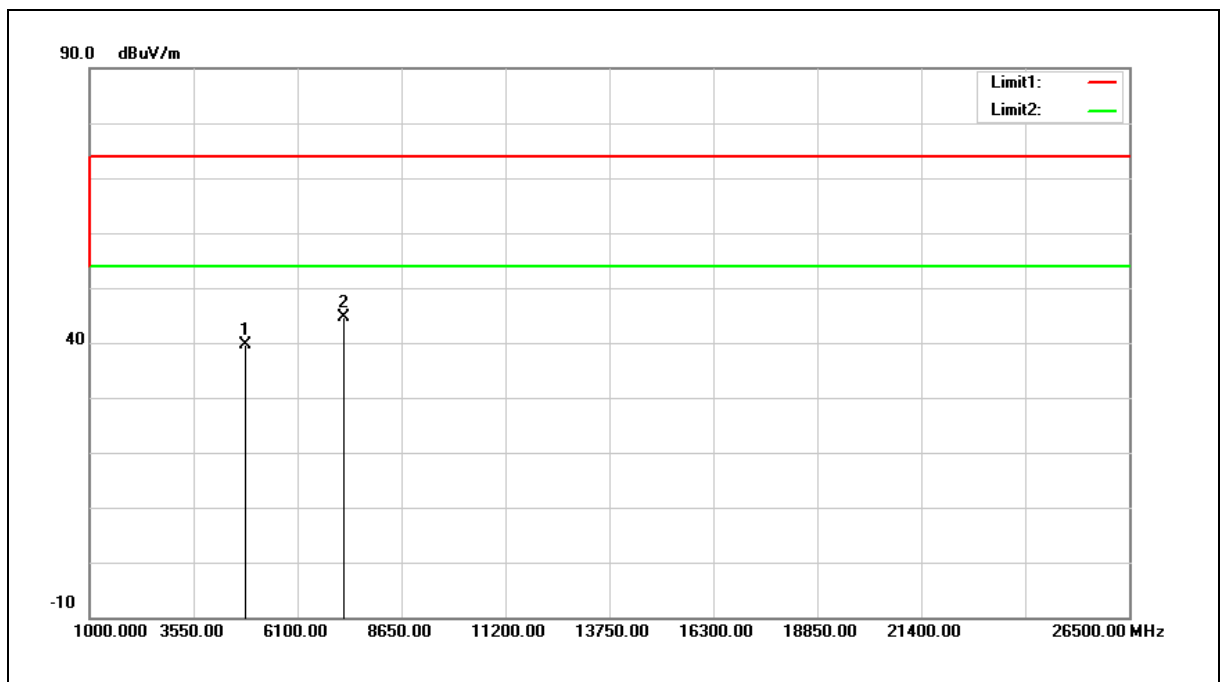
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4924.000	37.29	2.96	40.25	74.00	-33.75	peak
2	7386.000	36.24	8.77	45.01	74.00	-28.99	peak

Note: 1. Result (dBuV/m) = Correct Factor (dB/m) + Reading (dBuV).

2. Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	LP0002	Test Distance:	3 m
Test item:	Harmonic		
Frequency:	2412 MHz		
Mode:	Mode 5		
Ant.Polar.:	Horizontal		



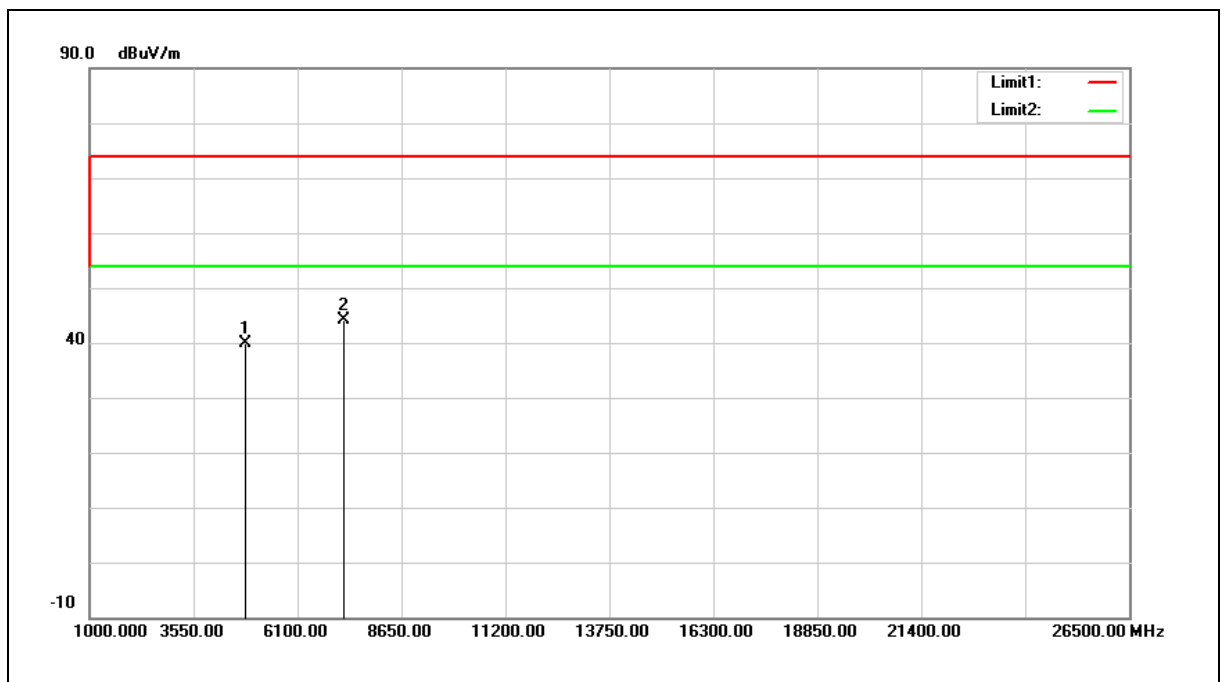
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4824.000	36.89	2.72	39.61	74.00	-34.39	peak
2	7236.000	36.30	8.30	44.60	74.00	-29.40	peak

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3.When the peak results are less than average limit, so not need to evaluate the average.

Standard:	LP0002	Test Distance:	3 m
Test item:	Harmonic		
Frequency:	2412 MHz		
Mode:	Mode 5		
Ant.Polar.:	Vertical		



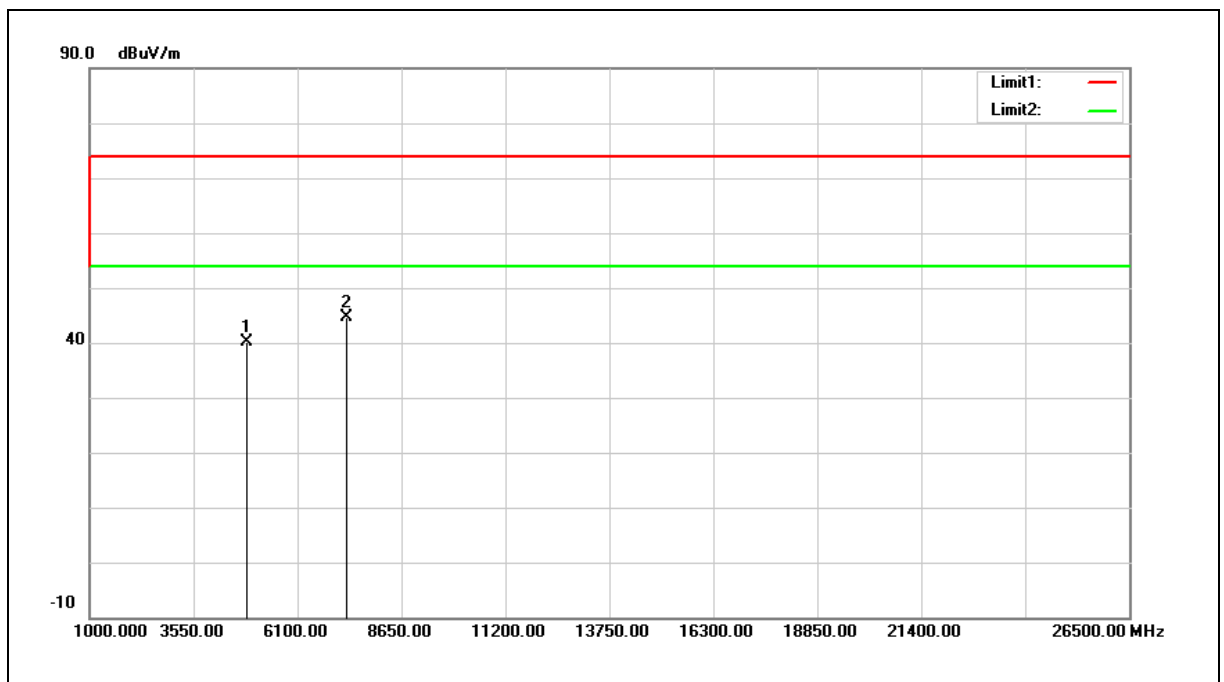
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4824.000	37.26	2.72	39.98	74.00	-34.02	peak
2	7236.000	35.84	8.30	44.14	74.00	-29.86	peak

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3.When the peak results are less than average limit, so not need to evaluate the average.

Standard:	LP0002	Test Distance:	3 m
Test item:	Harmonic		
Frequency:	2437 MHz		
Mode:	Mode 5		
Ant.Polar.:	Horizontal		



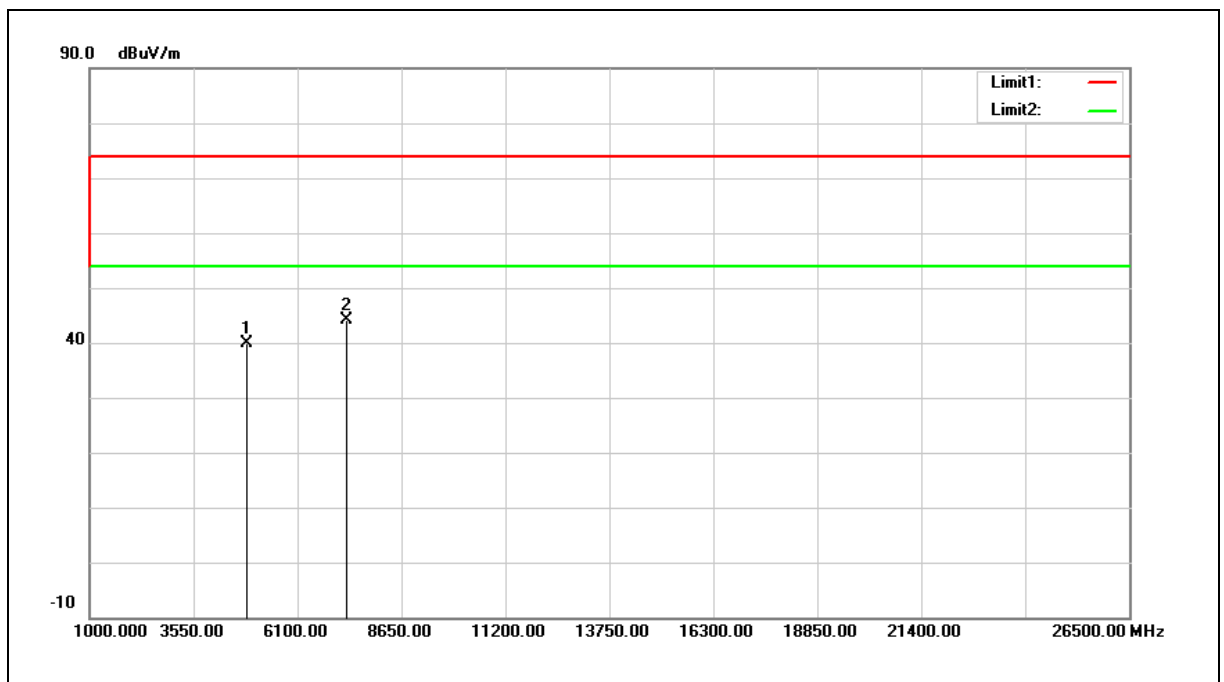
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4874.000	37.27	2.84	40.11	74.00	-33.89	peak
2	7311.000	36.03	8.53	44.56	74.00	-29.44	peak

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3.When the peak results are less than average limit, so not need to evaluate the average.

Standard:	LP0002	Test Distance:	3 m
Test item:	Harmonic		
Frequency:	2437 MHz		
Mode:	Mode 5		
Ant.Polar.:	Vertical		



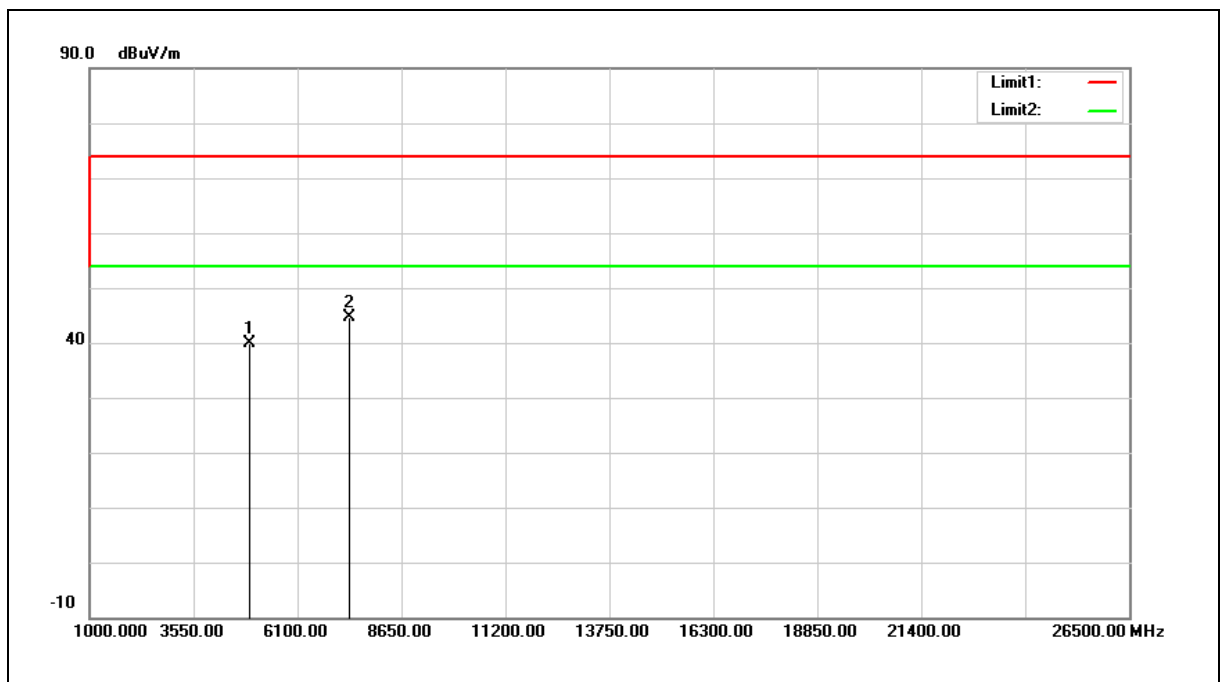
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4874.000	37.03	2.84	39.87	74.00	-34.13	peak
2	7311.000	35.67	8.53	44.20	74.00	-29.80	peak

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3.When the peak results are less than average limit, so not need to evaluate the average.

Standard:	LP0002	Test Distance:	3 m
Test item:	Harmonic		
Frequency:	2462 MHz		
Mode:	Mode 5		
Ant.Polar.:	Horizontal		



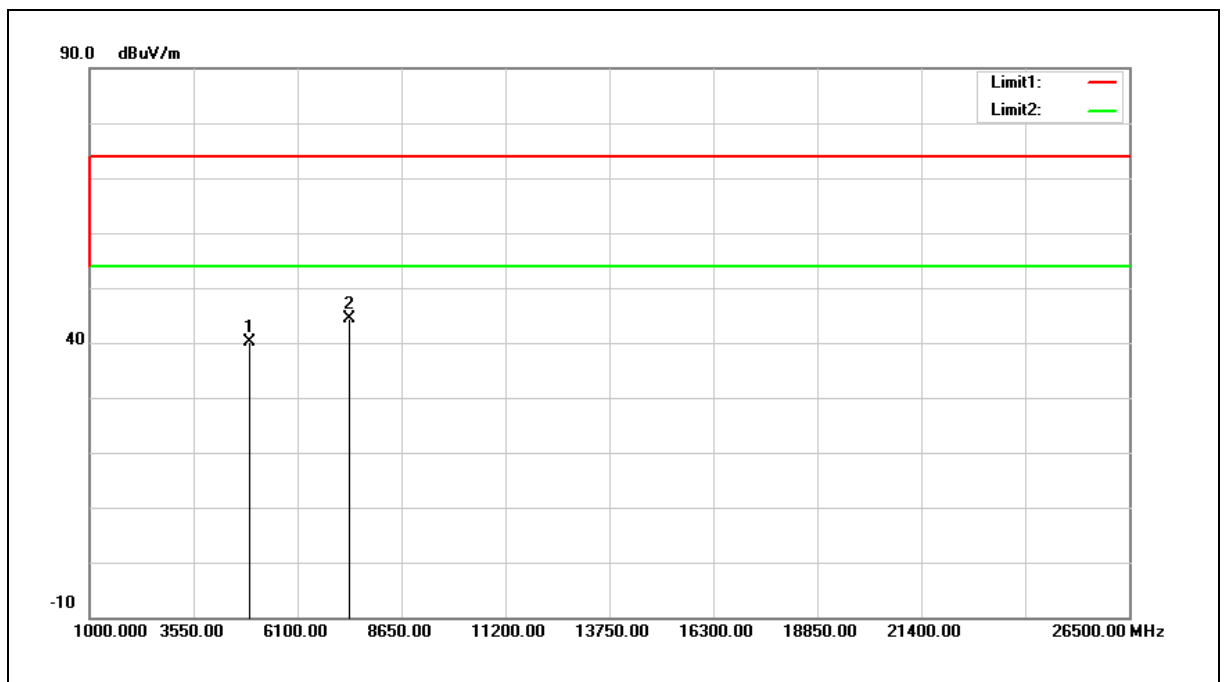
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4924.000	36.83	2.96	39.79	74.00	-34.21	peak
2	7386.000	35.82	8.77	44.59	74.00	-29.41	peak

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3.When the peak results are less than average limit, so not need to evaluate the average.

Standard:	LP0002	Test Distance:	3 m
Test item:	Harmonic		
Frequency:	2462 MHz		
Mode:	Mode 5		
Ant.Polar.:	Vertical		



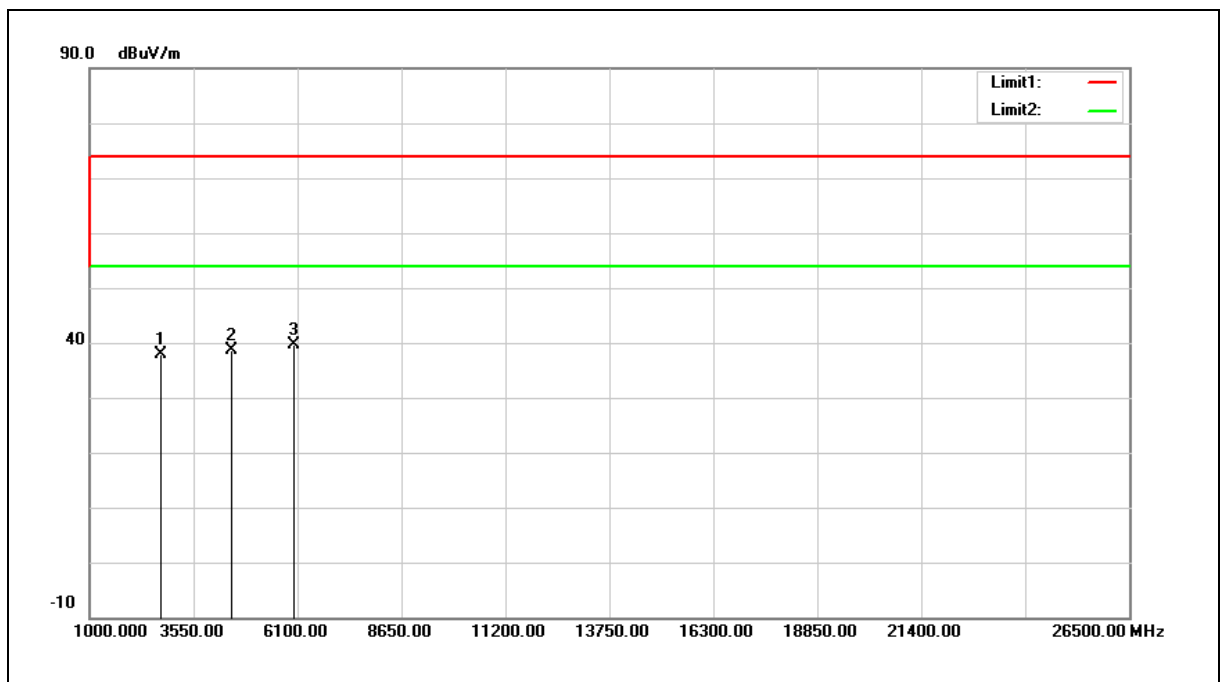
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4924.000	37.25	2.96	40.21	74.00	-33.79	peak
2	7386.000	35.72	8.77	44.49	74.00	-29.51	peak

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3.When the peak results are less than average limit, so not need to evaluate the average.

Standard:	LP0002	Test Distance:	3 m
Test item:	Harmonic		
Mode:	Mode 6		
Ant.Polar.:	Horizontal		
Description:			



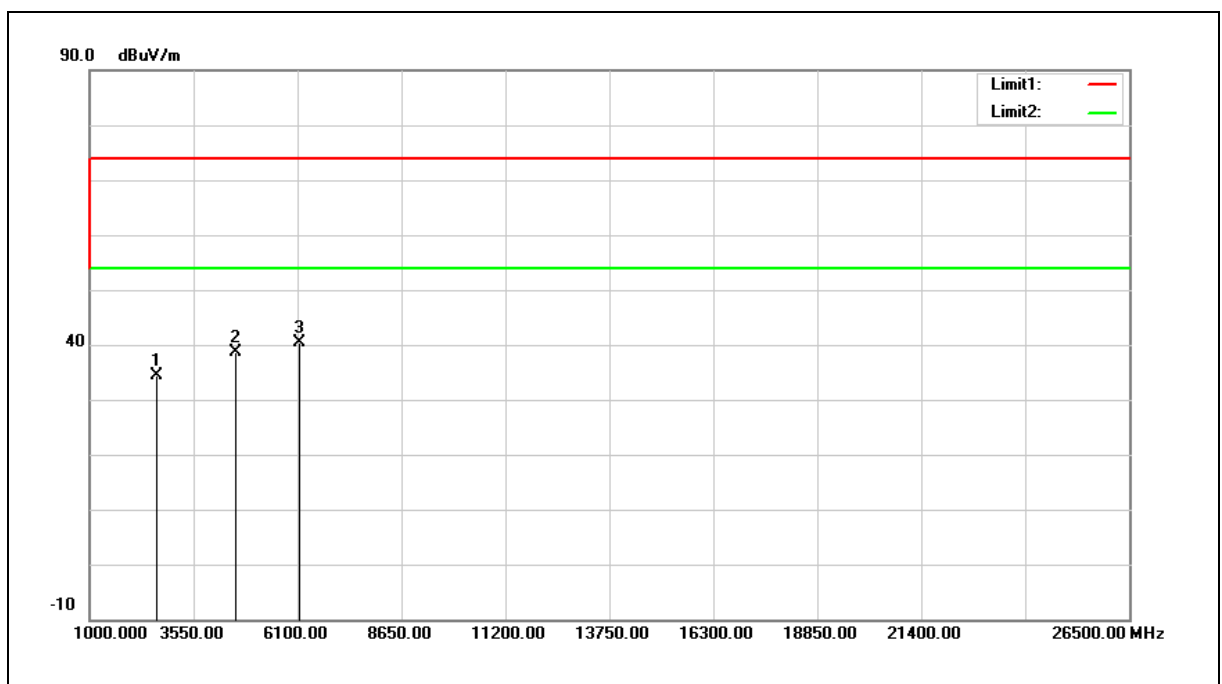
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2734.000	39.93	-2.13	37.80	74.00	-36.20	peak
2	4485.000	36.85	1.89	38.74	74.00	-35.26	peak
3	6015.000	35.02	4.71	39.73	74.00	-34.27	peak

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3.When the peak results are less than average limit, so not need to evaluate the average.

Standard:	LP0002	Test Distance:	3 m
Test item:	Harmonic		
Mode:	Mode 6		
Ant.Polar.:	Vertical		
Description:			



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2649.000	36.66	-2.38	34.28	74.00	-39.72	peak
2	4553.000	36.65	2.07	38.72	74.00	-35.28	peak
3	6134.000	35.33	5.09	40.42	74.00	-33.58	peak

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

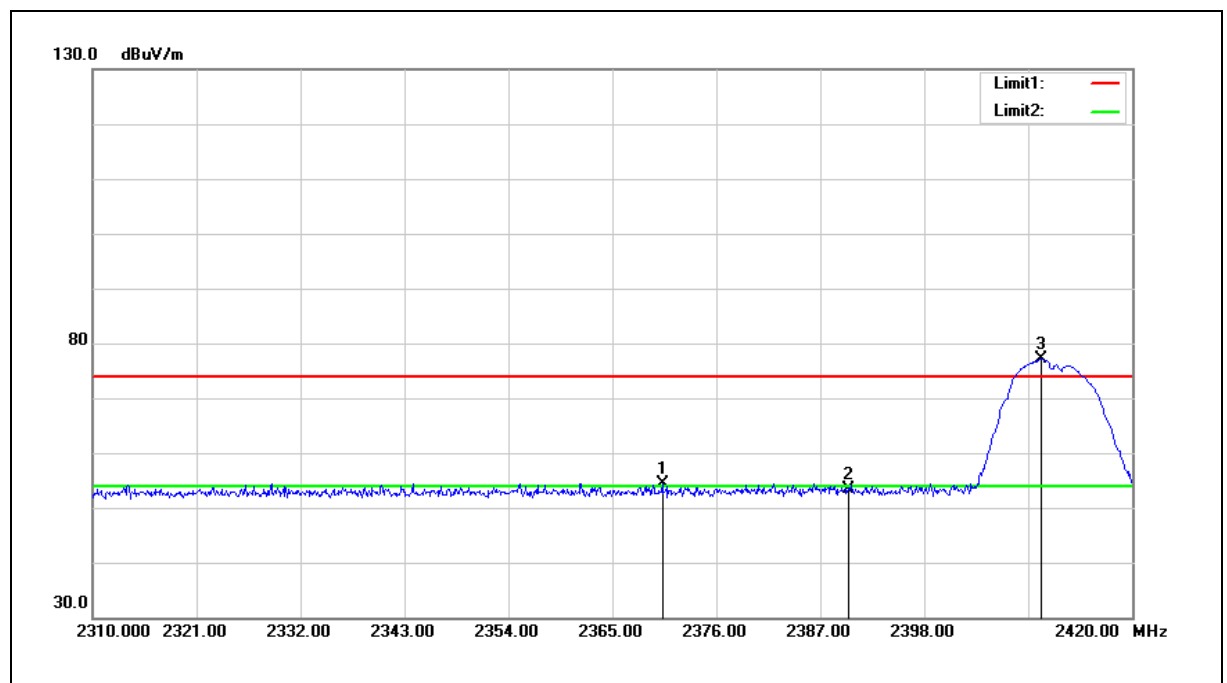
2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3.When the peak results are less than average limit, so not need to evaluate the average.

頻帶邊緣

Peak

Standard:	LP0002	Test Distance:	3 m
Test item:	Band edge		
Frequency:	2412 MHz		
Mode:	Mode 2		
Ant.Polar.:	Horizontal		



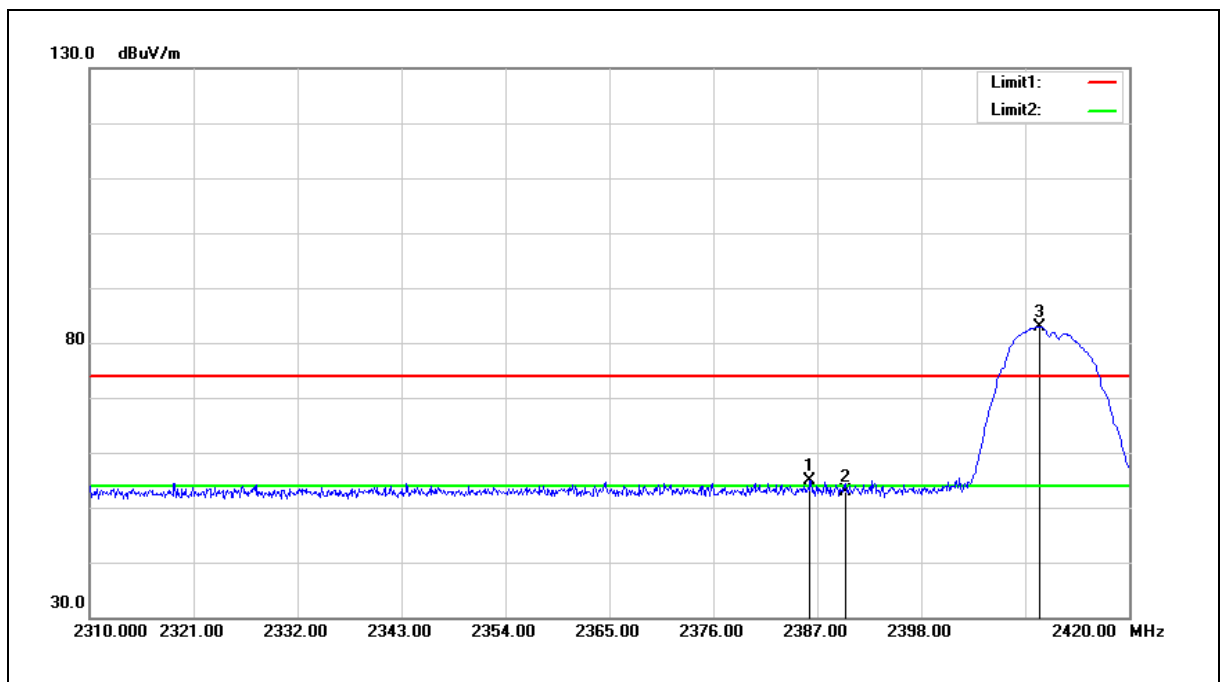
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2370.280	57.71	-3.26	54.45	74.00	-19.55	peak
2	2390.000	56.49	-3.19	53.30	74.00	-20.70	peak
3	2410.430	80.27	-3.12	77.15	--	--	peak

Note: 1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3.When the peak results are less than average limit, so not need to evaluate the average.

Standard:	LP0002	Test Distance:	3 m
Test item:	Band edge		
Frequency:	2412 MHz		
Mode:	Mode 2		
Ant.Polar.:	Vertical		



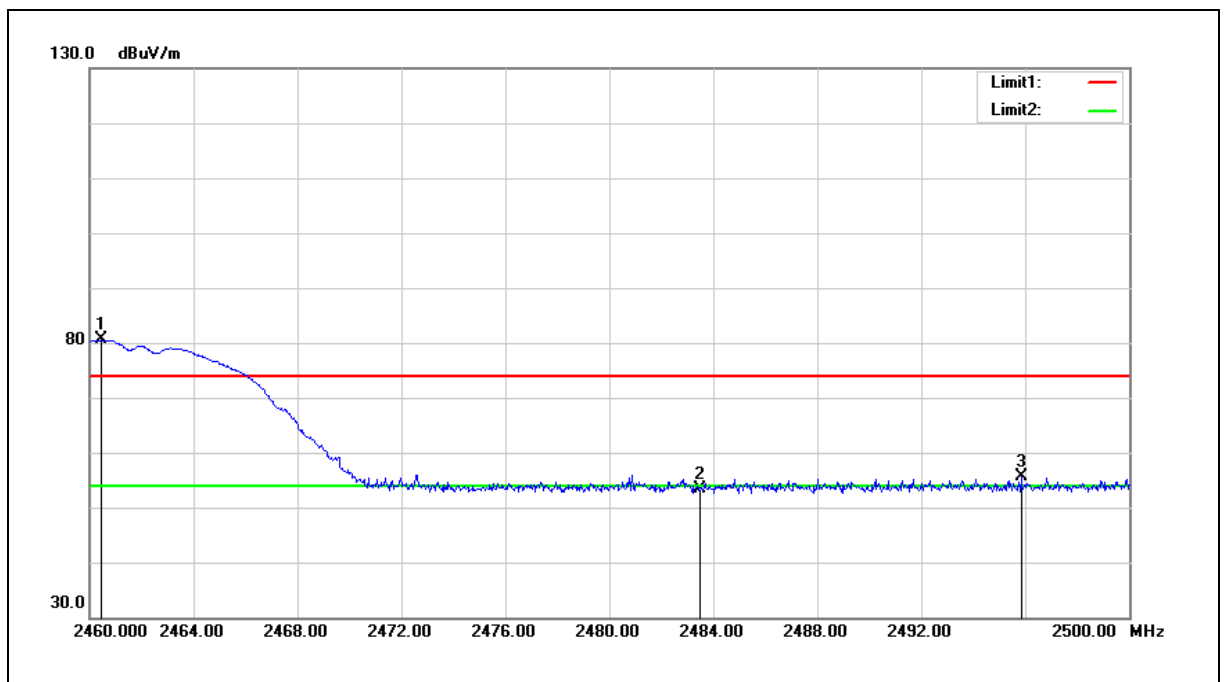
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2386.230	58.12	-3.20	54.92	74.00	-19.08	peak
2	2390.000	56.01	-3.19	52.82	74.00	-21.18	peak
3	2410.540	86.07	-3.12	82.95	--	--	peak

Note: 1. Result (dBuV/m) = Correct Factor (dB/m) + Reading (dBuV).

2. Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	LP0002	Test Distance:	3 m
Test item:	Band edge		
Frequency:	2462 MHz		
Mode:	Mode 2		
Ant.Polar.:	Horizontal		



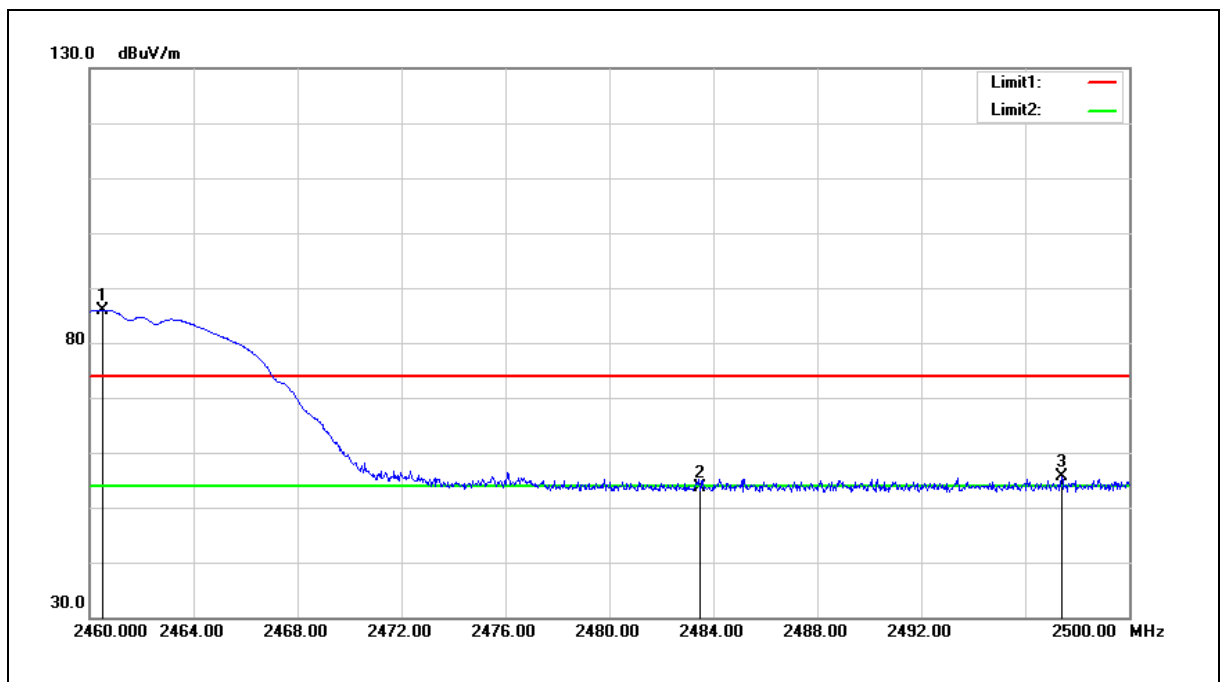
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2460.440	83.48	-2.94	80.54	--	--	peak
2	2483.500	56.18	-2.86	53.32	74.00	-20.68	peak
3	2495.840	58.33	-2.81	55.52	74.00	-18.48	peak

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3.When the peak results are less than average limit, so not need to evaluate the average.

Standard:	LP0002	Test Distance:	3 m
Test item:	Band edge		
Frequency:	2462 MHz		
Mode:	Mode 2		
Ant.Polar.:	Vertical		



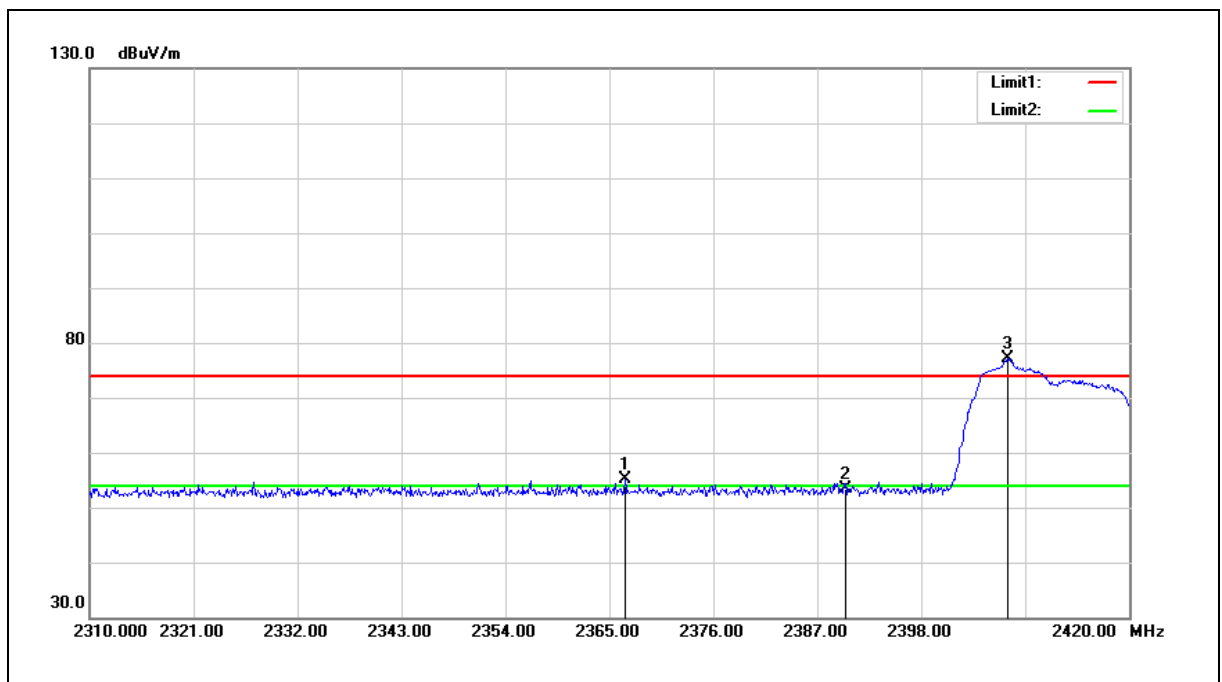
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2460.520	88.93	-2.94	85.99	--	--	peak
2	2483.500	56.52	-2.86	53.66	74.00	-20.34	peak
3	2497.400	58.39	-2.81	55.58	74.00	-18.42	peak

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3.When the peak results are less than average limit, so not need to evaluate the average.

Standard:	LP0002	Test Distance:	3 m
Test item:	Band edge		
Frequency:	2412 MHz		
Mode:	Mode 3		
Ant.Polar.:	Horizontal		



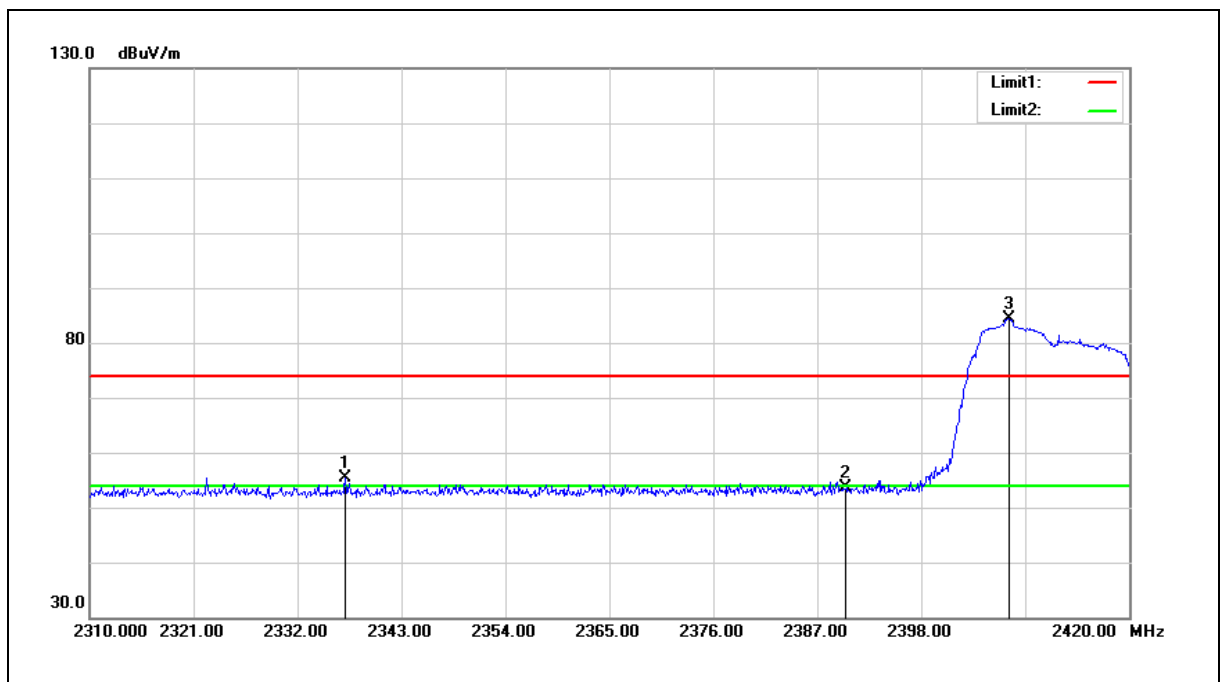
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2366.650	58.44	-3.27	55.17	74.00	-18.83	peak
2	2390.000	56.45	-3.19	53.26	74.00	-20.74	peak
3	2407.130	80.23	-3.13	77.10	--	--	peak

Note: 1. Result (dBuV/m) = Correct Factor (dB/m) + Reading (dBuV).

2. Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	LP0002	Test Distance:	3 m
Test item:	Band edge		
Frequency:	2412 MHz		
Mode:	Mode 3		
Ant.Polar.:	Vertical		



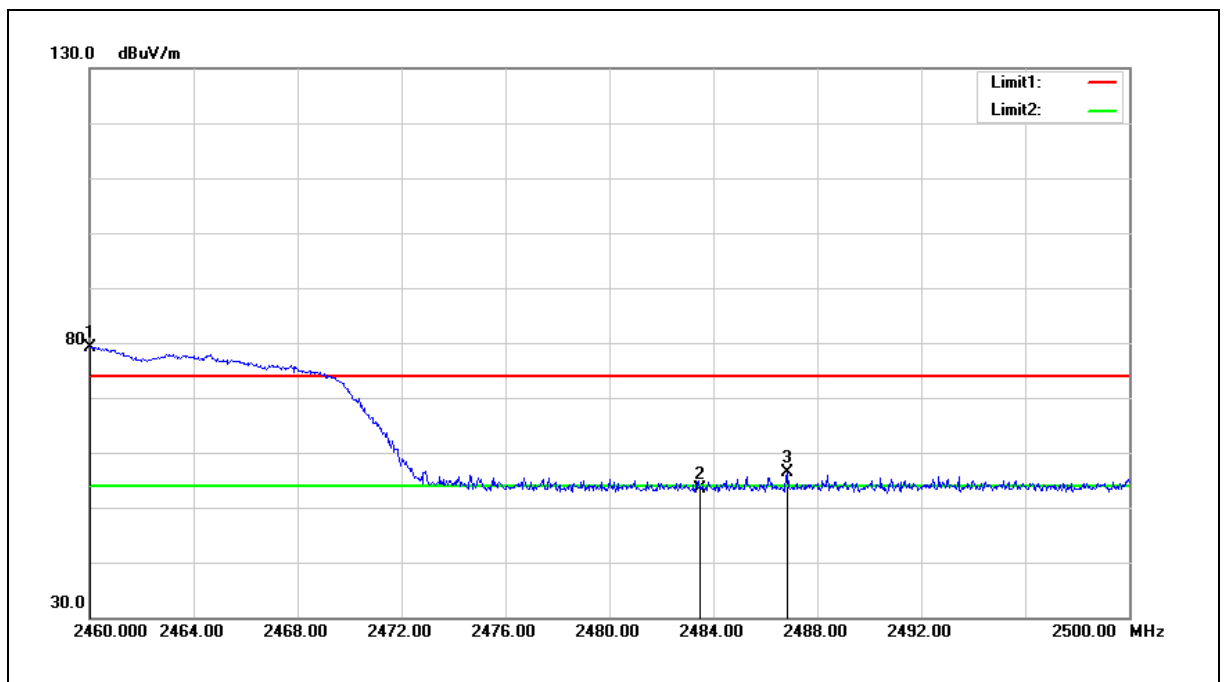
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2337.060	58.82	-3.37	55.45	74.00	-18.55	peak
2	2390.000	56.88	-3.19	53.69	74.00	-20.31	peak
3	2407.240	87.57	-3.13	84.44	--	--	peak

Note: 1. Result (dBuV/m) = Correct Factor (dB/m) + Reading (dBuV).

2. Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	LP0002	Test Distance:	3 m
Test item:	Band edge		
Frequency:	2462 MHz		
Mode:	Mode 3		
Ant.Polar.:	Horizontal		



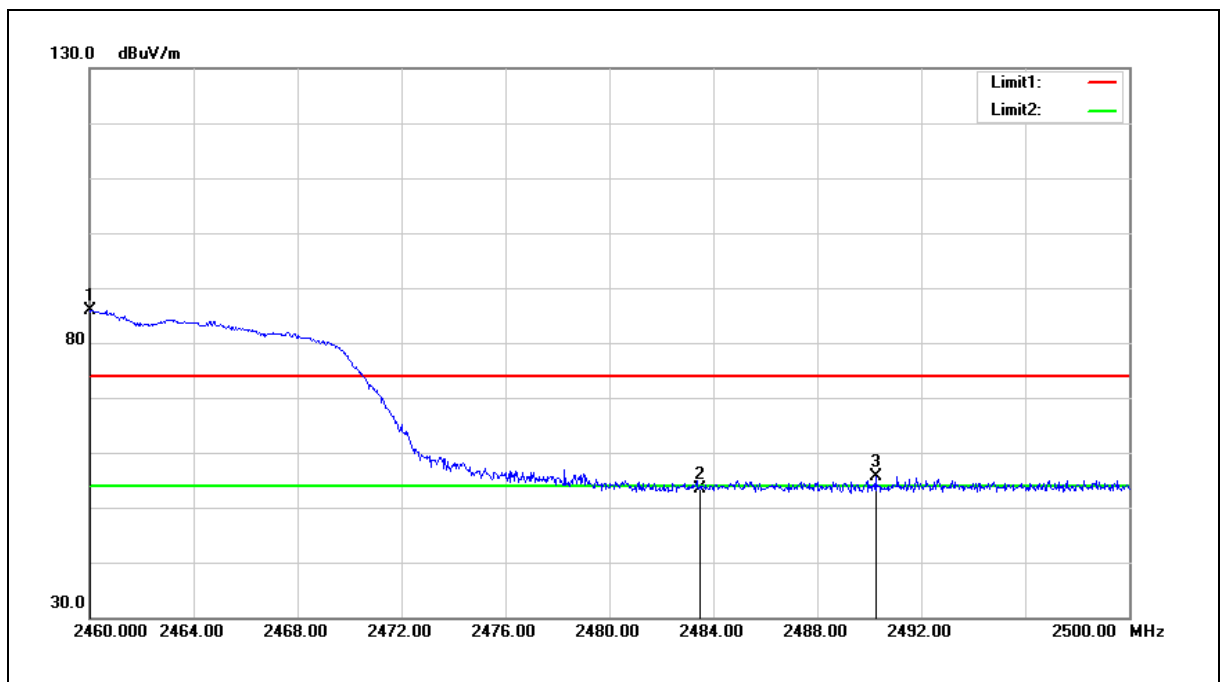
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2460.040	82.11	-2.94	79.17	--	--	peak
2	2483.500	56.17	-2.86	53.31	74.00	-20.69	peak
3	2486.840	59.14	-2.85	56.29	74.00	-17.71	peak

Note: 1. Result (dBuV/m) = Correct Factor (dB/m) + Reading (dBuV).

2. Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	LP0002	Test Distance:	3 m
Test item:	Band edge		
Frequency:	2462 MHz		
Mode:	Mode 3		
Ant.Polar.:	Vertical		



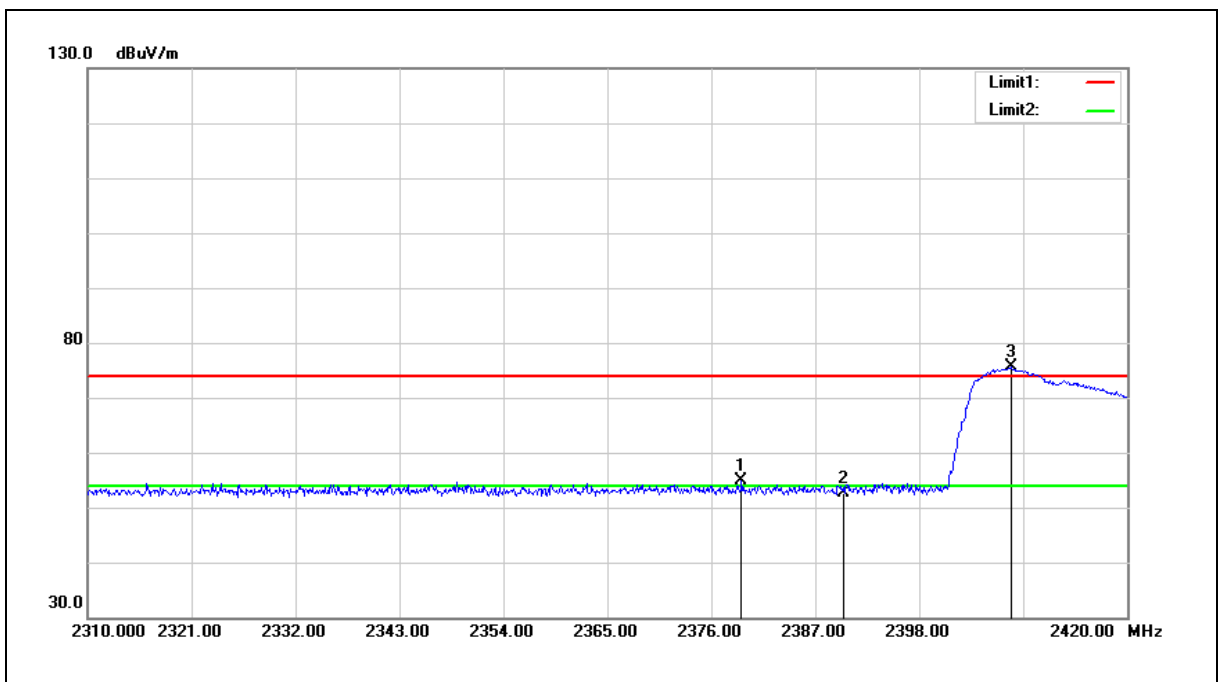
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2460.000	88.81	-2.94	85.87	--	--	peak
2	2483.500	56.13	-2.86	53.27	74.00	-20.73	peak
3	2490.240	58.44	-2.84	55.60	74.00	-18.40	peak

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3.When the peak results are less than average limit, so not need to evaluate the average.

Standard:	LP0002	Test Distance:	3 m
Test item:	Band edge		
Frequency:	2412 MHz		
Mode:	Mode 5		
Ant.Polar.:	Horizontal		



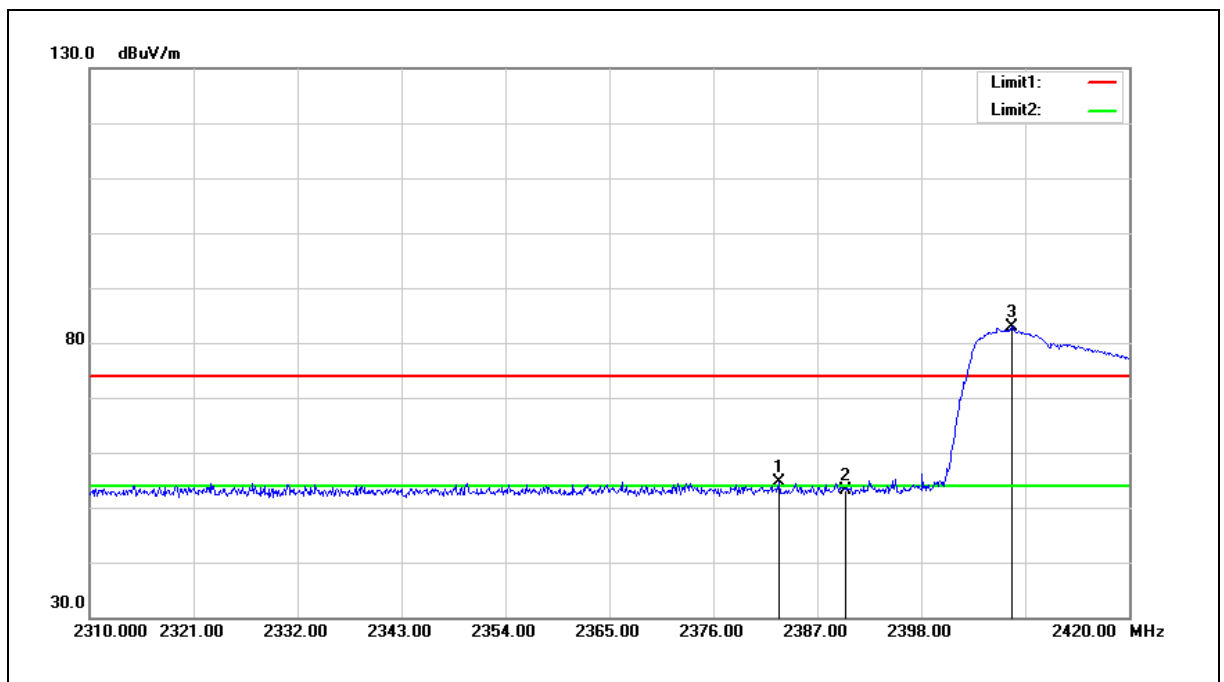
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2379.190	58.00	-3.23	54.77	74.00	-19.23	peak
2	2390.000	55.79	-3.19	52.60	74.00	-21.40	peak
3	2407.680	78.80	-3.13	75.67	--	--	peak

Note: 1. Result (dBuV/m) = Correct Factor (dB/m) + Reading (dBuV).

2. Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	LP0002	Test Distance:	3 m
Test item:	Band edge		
Frequency:	2412 MHz		
Mode:	Mode 5		
Ant.Polar.:	Vertical		



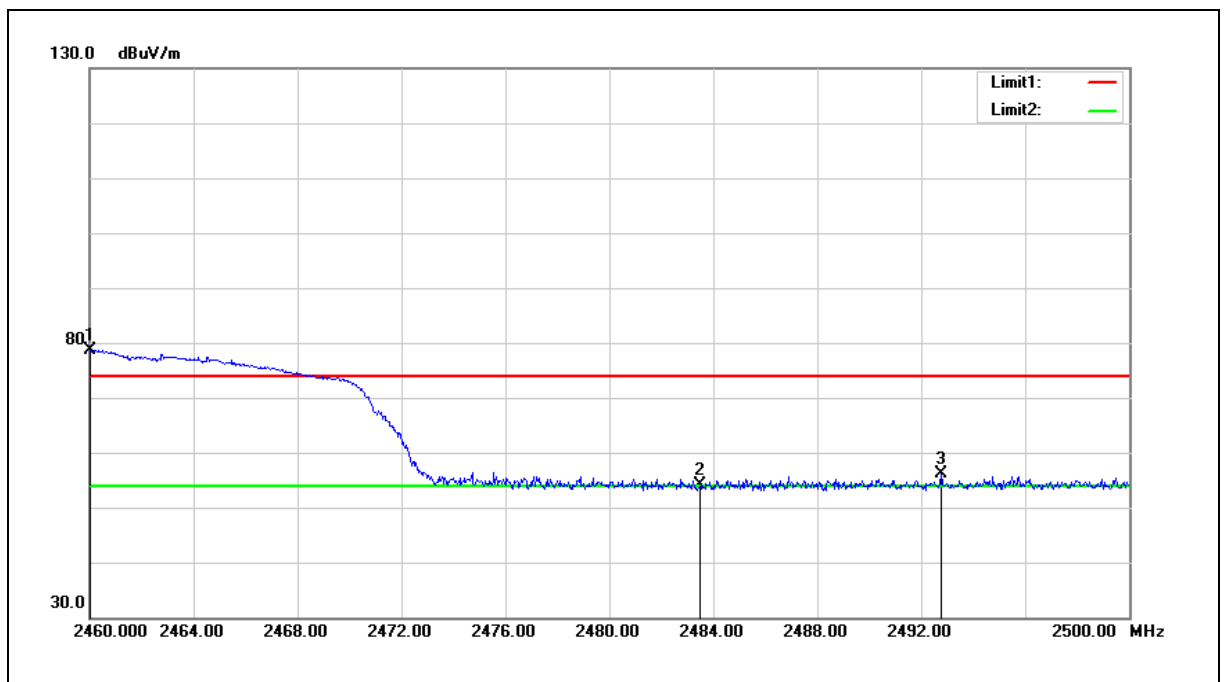
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2382.930	57.77	-3.22	54.55	74.00	-19.45	peak
2	2390.000	56.27	-3.19	53.08	74.00	-20.92	peak
3	2407.570	86.07	-3.13	82.94	--	--	peak

Note: 1. Result (dBuV/m) = Correct Factor (dB/m) + Reading (dBuV).

2. Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	LP0002	Test Distance:	3 m
Test item:	Band edge		
Frequency:	2462 MHz		
Mode:	Mode 5		
Ant.Polar.:	Horizontal		



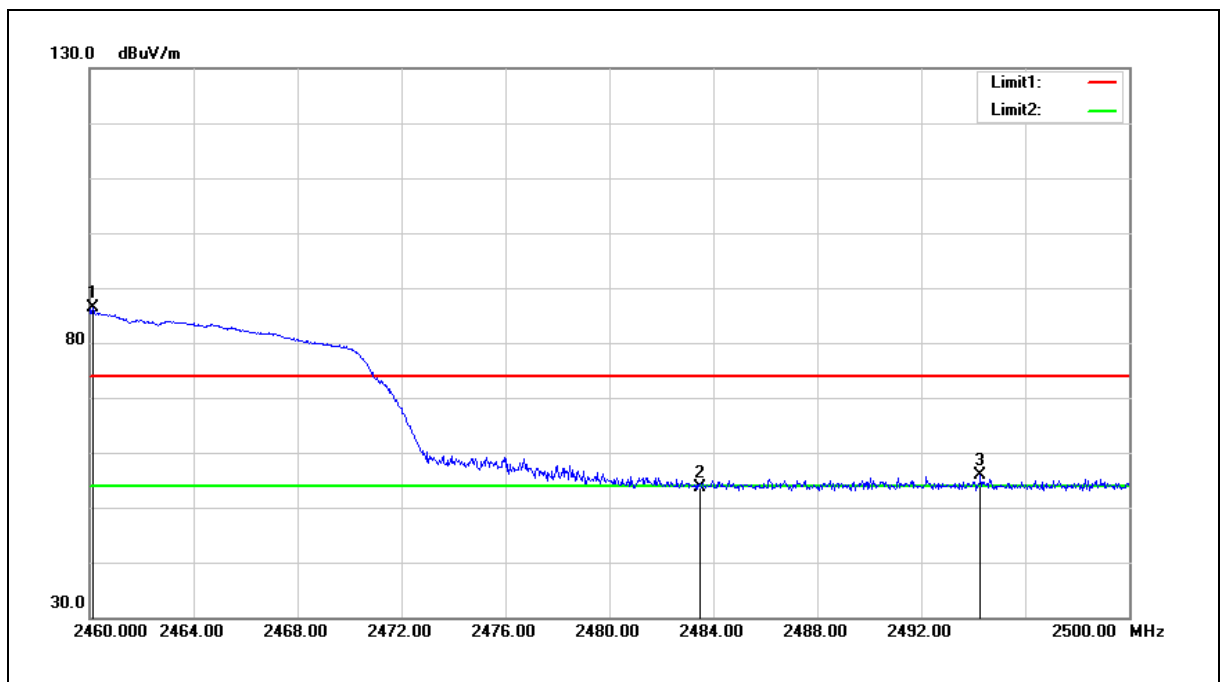
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2460.000	81.57	-2.94	78.63	--	--	peak
2	2483.500	56.94	-2.86	54.08	74.00	-19.92	peak
3	2492.760	58.86	-2.83	56.03	74.00	-17.97	peak

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3.When the peak results are less than average limit, so not need to evaluate the average.

Standard:	LP0002	Test Distance:	3 m
Test item:	Band edge		
Frequency:	2462 MHz		
Mode:	Mode 5		
Ant.Polar.:	Vertical		



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2460.120	89.34	-2.94	86.40	--	--	peak
2	2483.500	56.44	-2.86	53.58	74.00	-20.42	peak
3	2494.280	58.71	-2.82	55.89	74.00	-18.11	peak

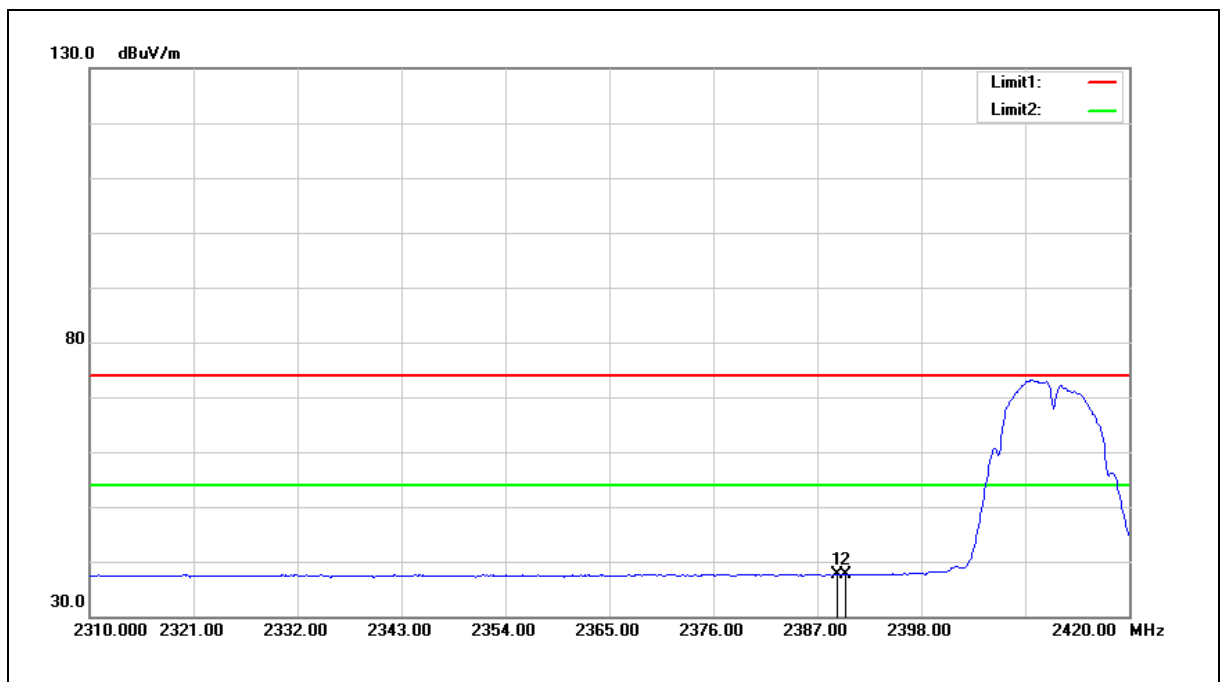
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3.When the peak results are less than average limit, so not need to evaluate the average.

AVG

Standard:	LP0002	Test Distance:	3 m
Test item:	Band edge		
Frequency:	2412 MHz		
Mode:	Mode 2		
Ant.Polar.:	Horizontal		



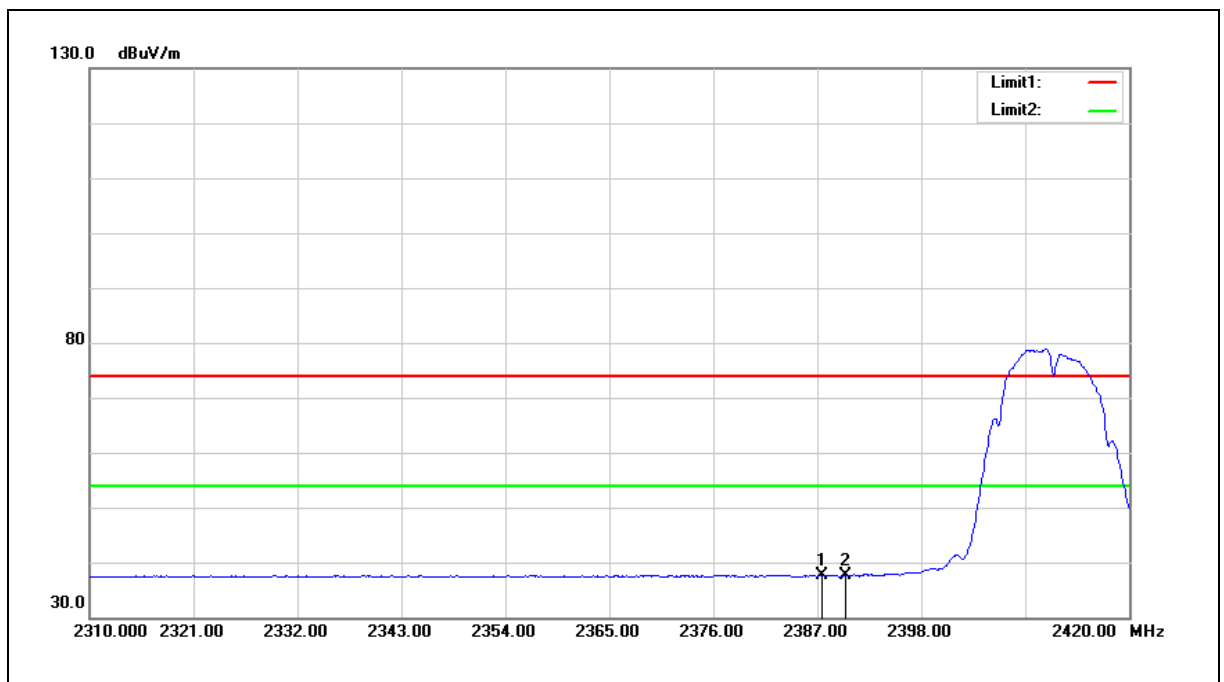
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2389.090	40.90	-3.19	37.71	54.00	-16.29	AVG
2	2390.000	40.88	-3.19	37.69	54.00	-16.31	AVG

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3.When the peak results are less than average limit, so not need to evaluate the average.

Standard:	LP0002	Test Distance:	3 m
Test item:	Band edge		
Frequency:	2412 MHz		
Mode:	Mode 2		
Ant.Polar.:	Vertical		



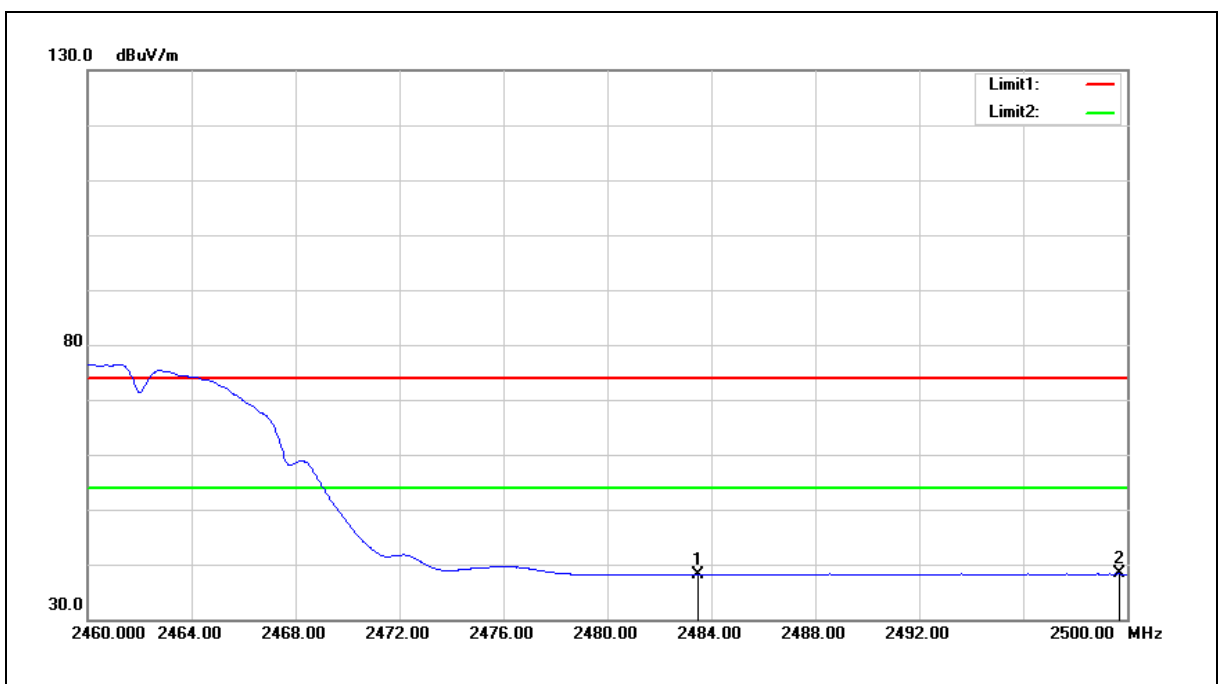
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2387.440	40.94	-3.20	37.74	54.00	-16.26	AVG
2	2390.000	40.82	-3.19	37.63	54.00	-16.37	AVG

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3.When the peak results are less than average limit, so not need to evaluate the average.

Standard:	LP0002	Test Distance:	3 m
Test item:	Band edge		
Frequency:	2462 MHz		
Mode:	Mode 2		
Ant.Polar.:	Horizontal		



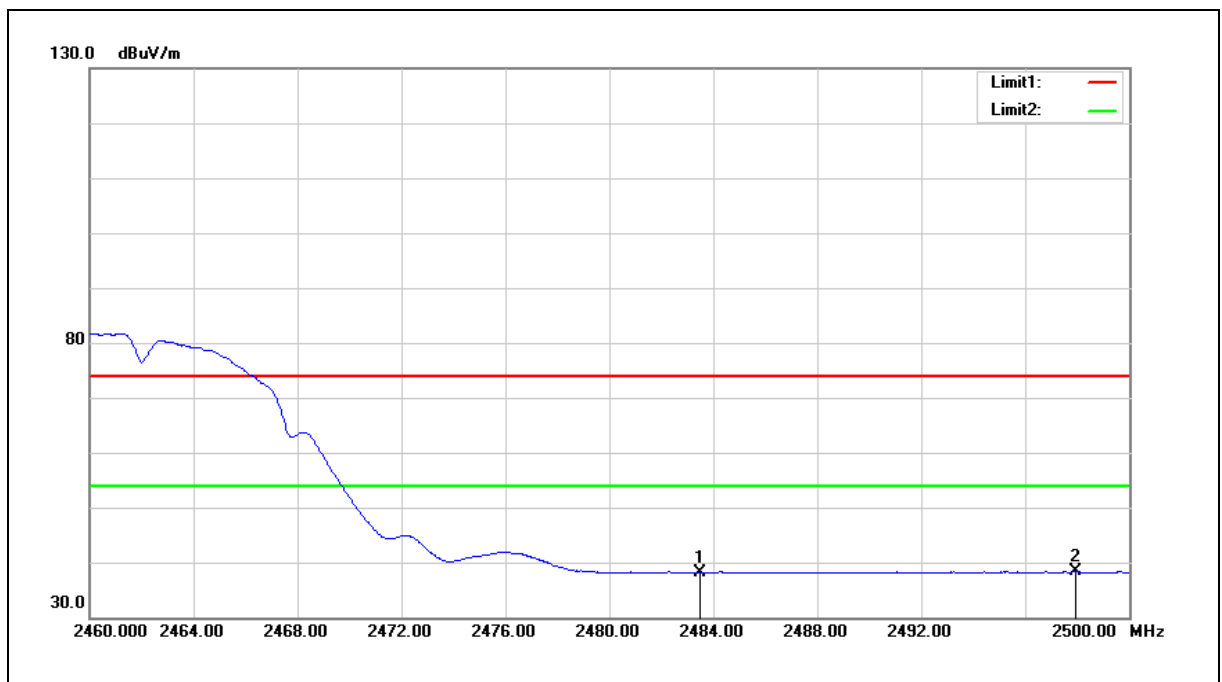
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	40.95	-2.86	38.09	54.00	-15.91	AVG
2	2499.680	41.15	-2.80	38.35	54.00	-15.65	AVG

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3.When the peak results are less than average limit, so not need to evaluate the average.

Standard:	LP0002	Test Distance:	3 m
Test item:	Band edge		
Frequency:	2462 MHz		
Mode:	Mode 2		
Ant.Polar.:	Vertical		



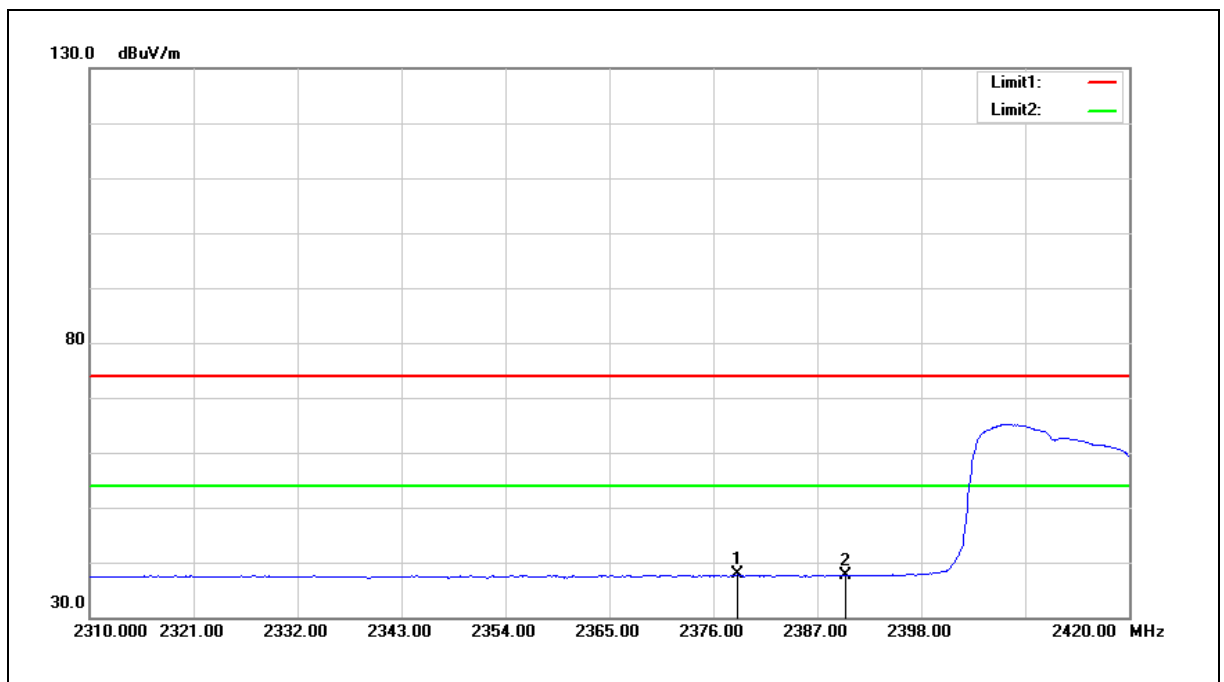
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	40.92	-2.86	38.06	54.00	-15.94	AVG
2	2497.960	41.14	-2.81	38.33	54.00	-15.67	AVG

Note: 1. Result (dBuV/m) = Correct Factor (dB/m) + Reading (dBuV).

2. Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	LP0002	Test Distance:	3 m
Test item:	Band edge		
Frequency:	2412 MHz		
Mode:	Mode 3		
Ant.Polar.:	Horizontal		



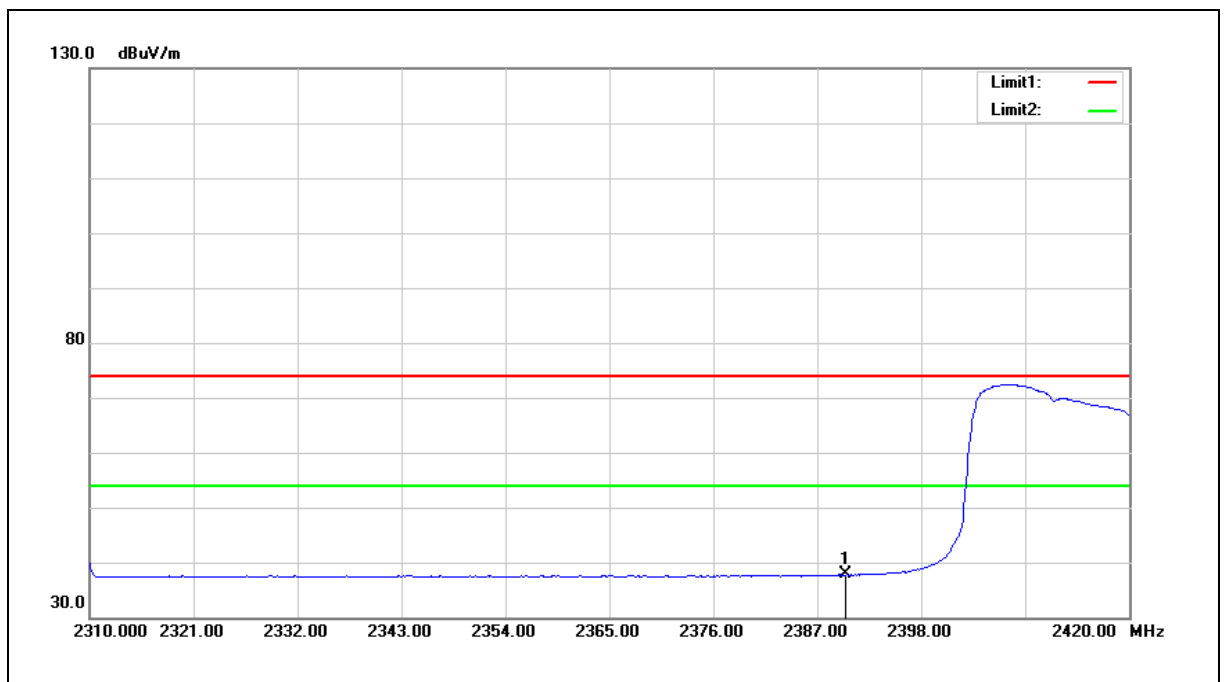
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2378.530	40.99	-3.23	37.76	54.00	-16.24	AVG
2	2390.000	40.83	-3.19	37.64	54.00	-16.36	AVG

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3.When the peak results are less than average limit, so not need to evaluate the average.

Standard:	LP0002	Test Distance:	3 m
Test item:	Band edge		
Frequency:	2412 MHz		
Mode:	Mode 3		
Ant.Polar.:	Vertical		



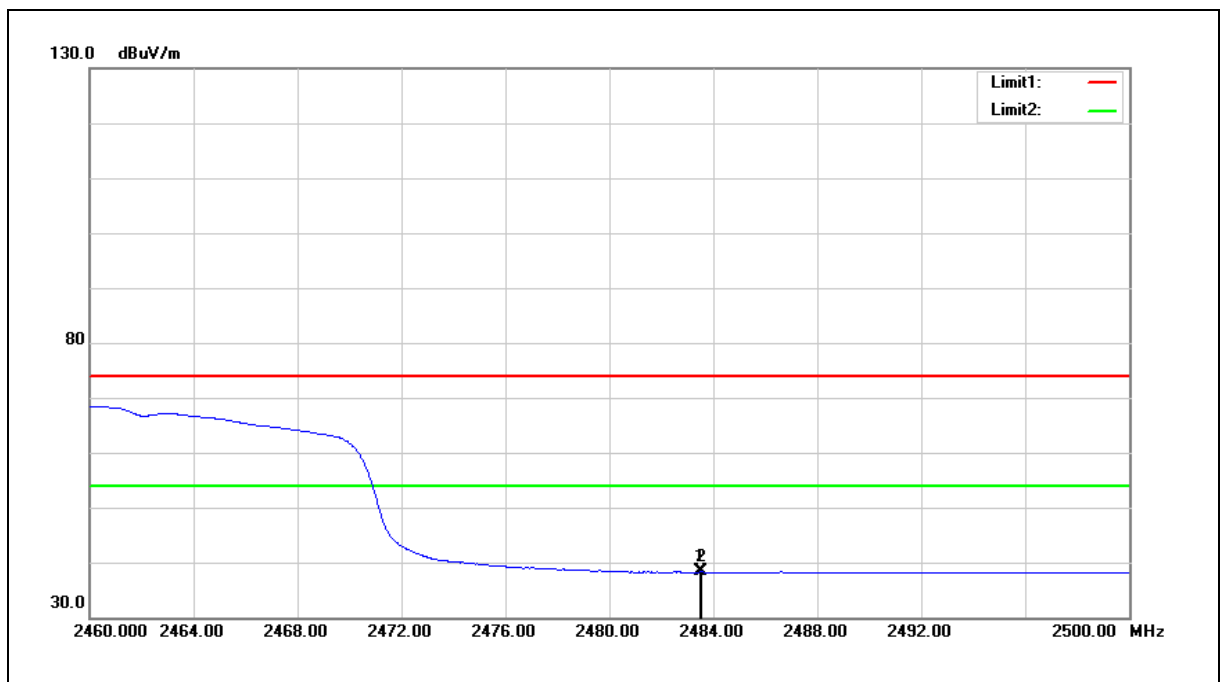
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2390.000	41.00	-3.19	37.81	54.00	-16.19	AVG

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3.When the peak results are less than average limit, so not need to evaluate the average.

Standard:	LP0002	Test Distance:	3 m
Test item:	Band edge		
Frequency:	2462 MHz		
Mode:	Mode 3		
Ant.Polar.:	Horizontal		



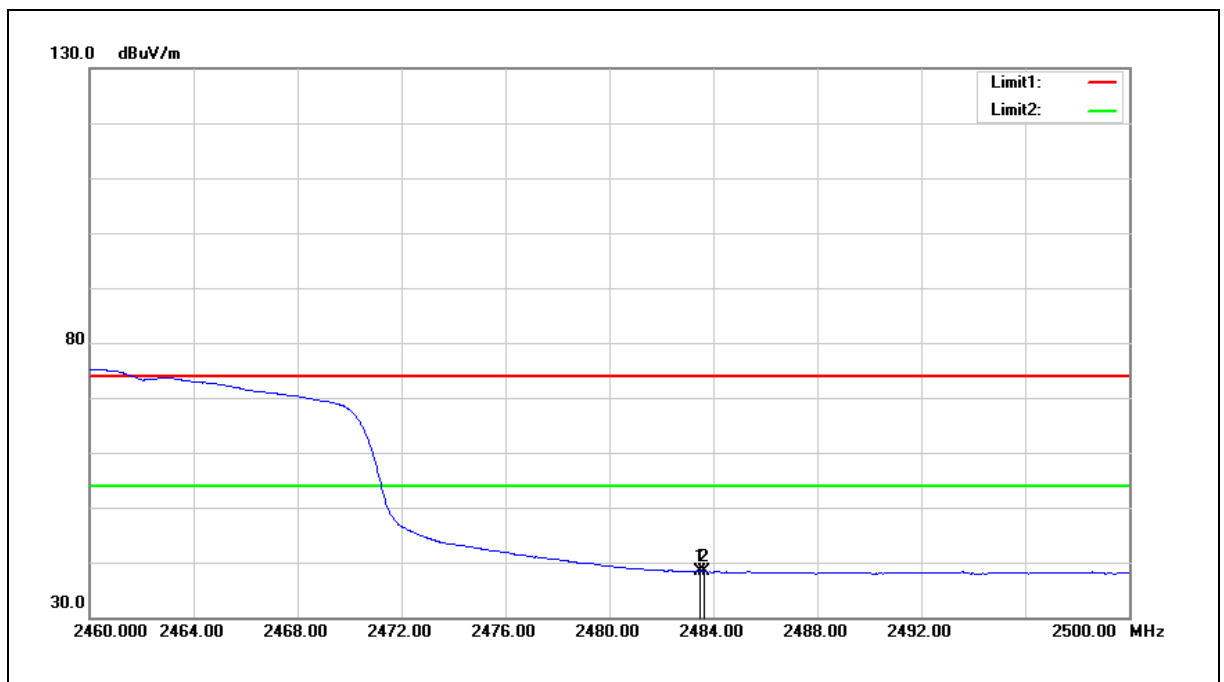
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	41.13	-2.86	38.27	54.00	-15.73	AVG
2	2483.560	41.16	-2.86	38.30	54.00	-15.70	AVG

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3.When the peak results are less than average limit, so not need to evaluate the average.

Standard:	LP0002	Test Distance:	3 m
Test item:	Band edge		
Frequency:	2462 MHz		
Mode:	Mode 3		
Ant.Polar.:	Vertical		



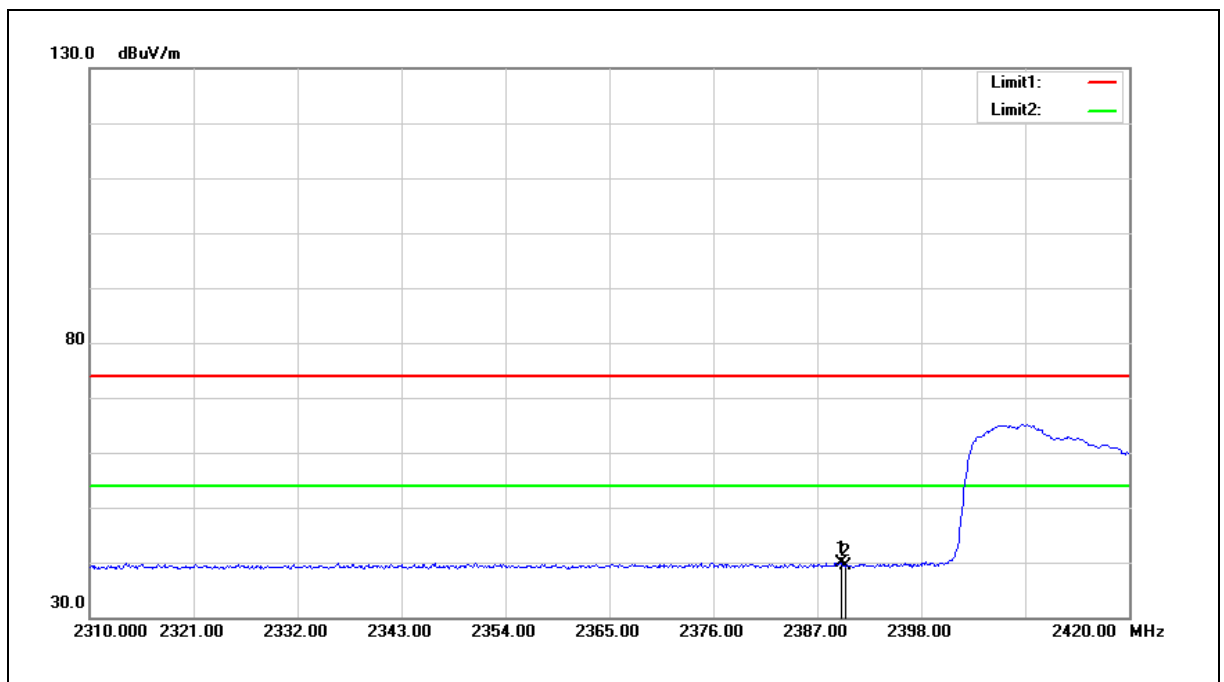
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	41.16	-2.86	38.30	54.00	-15.70	AVG
2	2483.640	41.25	-2.86	38.39	54.00	-15.61	AVG

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3.When the peak results are less than average limit, so not need to evaluate the average.

Standard:	LP0002	Test Distance:	3 m
Test item:	Band edge		
Frequency:	2412 MHz		
Mode:	Mode 5		
Ant.Polar.:	Horizontal		



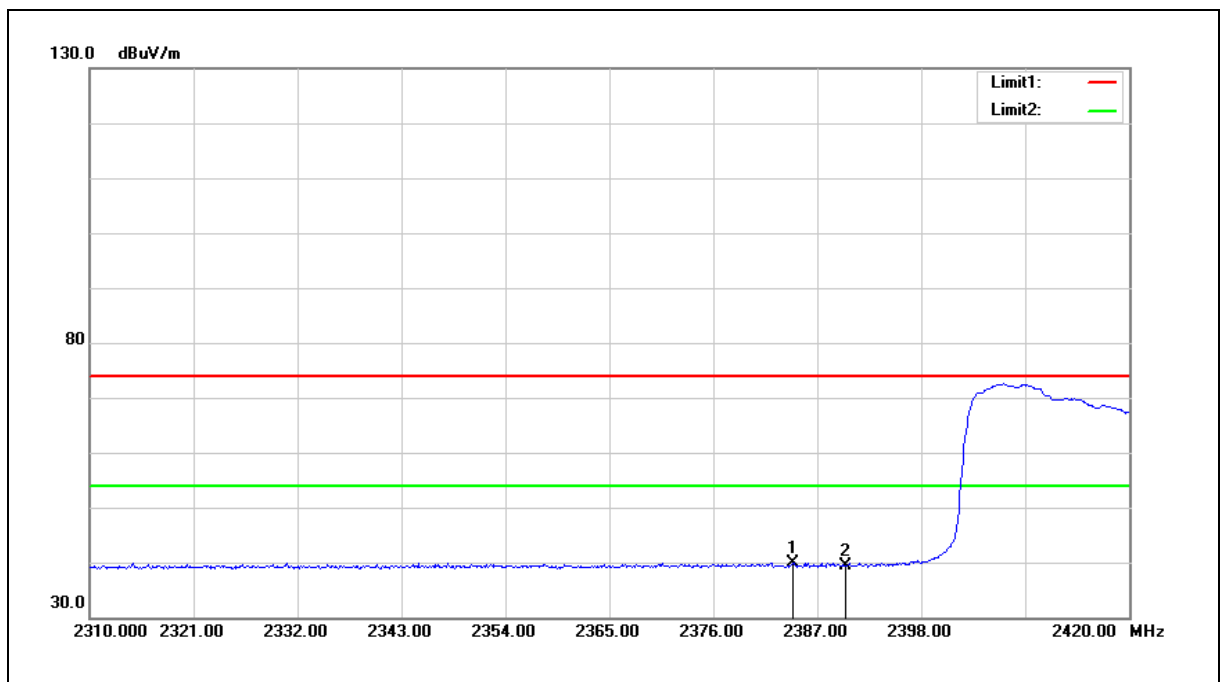
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2389.530	43.15	-3.19	39.96	54.00	-14.04	AVG
2	2390.000	42.69	-3.19	39.50	54.00	-14.50	AVG

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3.When the peak results are less than average limit, so not need to evaluate the average.

Standard:	LP0002	Test Distance:	3 m
Test item:	Band edge		
Frequency:	2412 MHz		
Mode:	Mode 5		
Ant.Polar.:	Vertical		



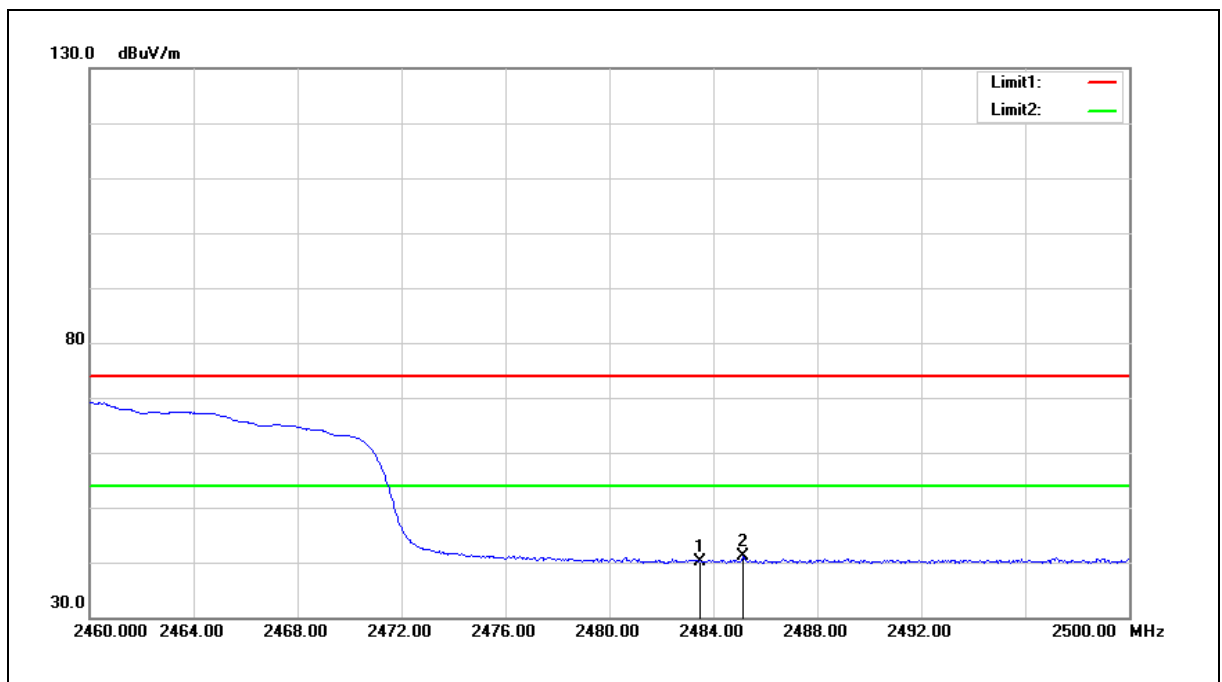
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2384.360	43.16	-3.21	39.95	54.00	-14.05	AVG
2	2390.000	42.64	-3.19	39.45	54.00	-14.55	AVG

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3.When the peak results are less than average limit, so not need to evaluate the average.

Standard:	LP0002	Test Distance:	3 m
Test item:	Band edge		
Frequency:	2462 MHz		
Mode:	Mode 5		
Ant.Polar.:	Horizontal		



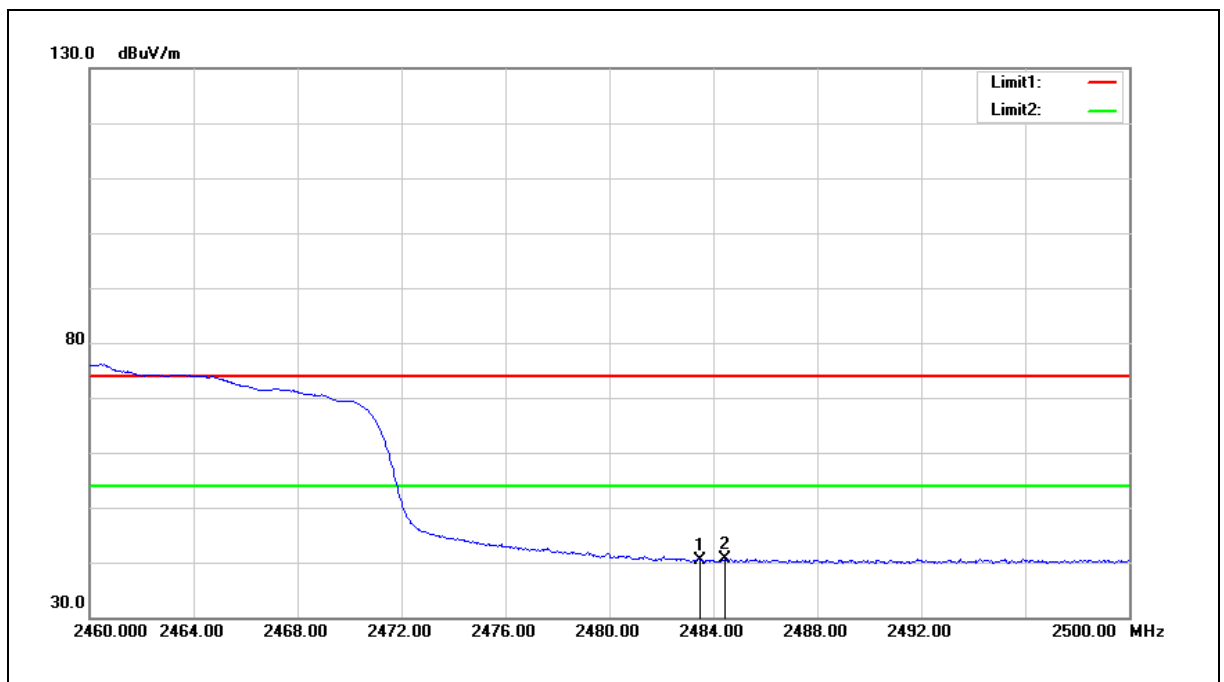
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	42.99	-2.86	40.13	54.00	-13.87	AVG
2	2485.160	43.87	-2.85	41.02	54.00	-12.98	AVG

Note: 1. Result (dBuV/m) = Correct Factor (dB/m) + Reading (dBuV).

2. Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	LP0002	Test Distance:	3 m
Test item:	Band edge		
Frequency:	2462 MHz		
Mode:	Mode 5		
Ant.Polar.:	Vertical		



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	43.35	-2.86	40.49	54.00	-13.51	AVG
2	2484.440	43.56	-2.85	40.71	54.00	-13.29	AVG

Note: 1. Result (dBuV/m) = Correct Factor (dB/m) + Reading (dBuV).

2. Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3. When the peak results are less than average limit, so not need to evaluate the average.

Annex C. Conducted Test Results

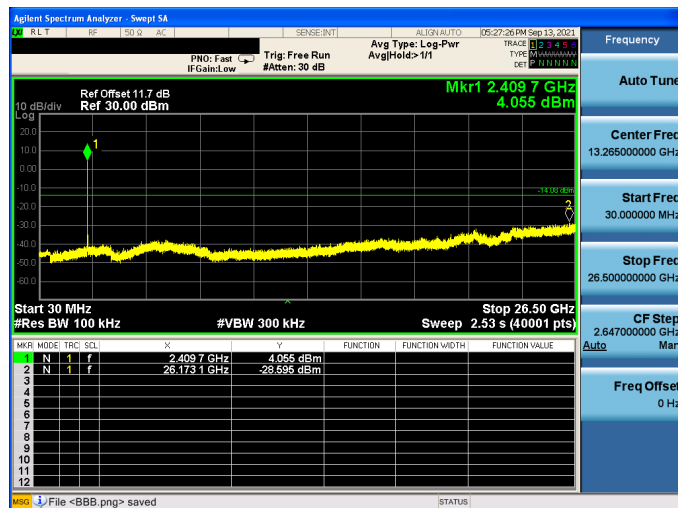
Maximum Conducted Output Power

操作模式	Data Rate (Mbps)	頻道 CH	輸出功率(Average)		輸出功率(Peak)		Limit (dBm)
			dBm	W	dBm	W	
Mode 2	1	1	14.89	0.031	17.97	0.063	≤ 30.00
		6	11.11	0.013	14.17	0.026	≤ 30.00
		11	16.16	0.041	19.31	0.085	≤ 30.00
Mode 3	6	1	12.23	0.017	20.66	0.116	≤ 30.00
		6	9.55	0.009	18.57	0.072	≤ 30.00
		11	13.64	0.023	21.62	0.145	≤ 30.00
Mode 4	6.5	1	10.84	0.012	19.56	0.090	≤ 30.00
		6	8.33	0.007	17.03	0.050	≤ 30.00
		11	12.80	0.019	21.47	0.140	≤ 30.00
Mode 5	6.5	1	11.05	0.013	19.86	0.097	≤ 30.00
		6	8.64	0.007	17.26	0.053	≤ 30.00
		11	12.84	0.019	21.58	0.144	≤ 30.00

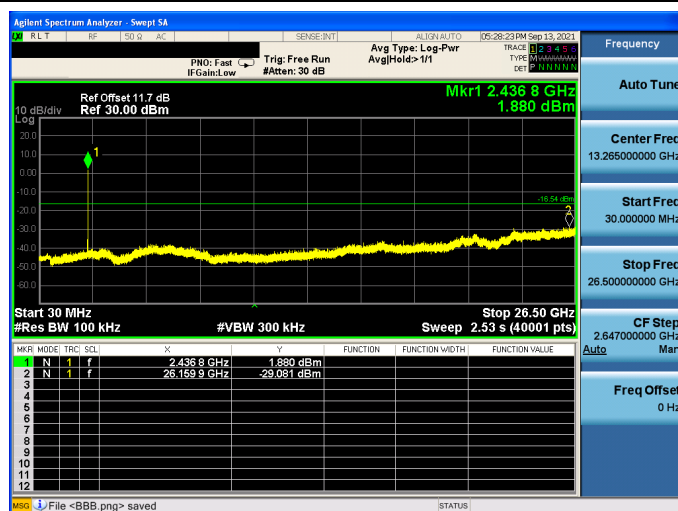
Out of Band Conducted Spurious Emission

Mode 2: IEEE 802.11b Continuous TX Mode

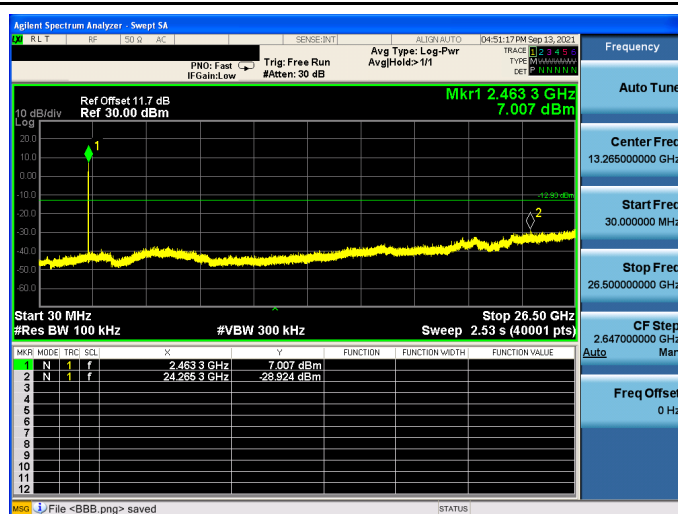
CH01



CH06

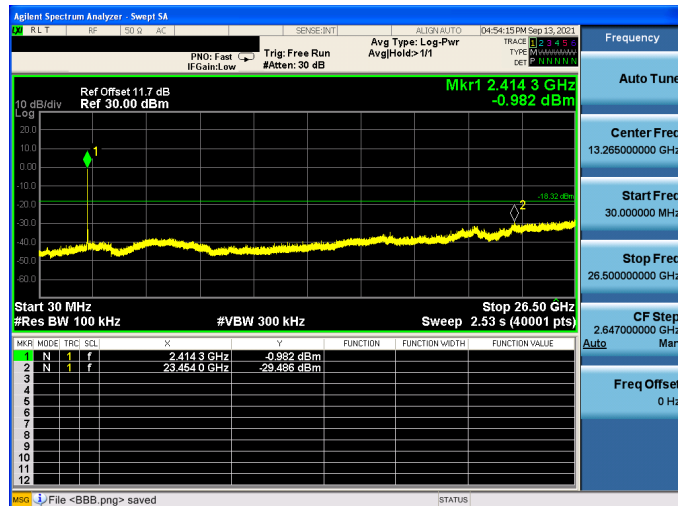


CH11

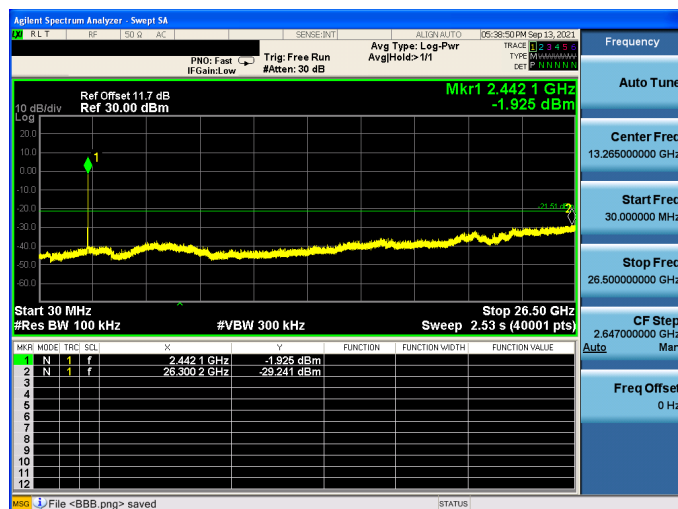


Mode 3: IEEE 802.11g Continuous TX Mode

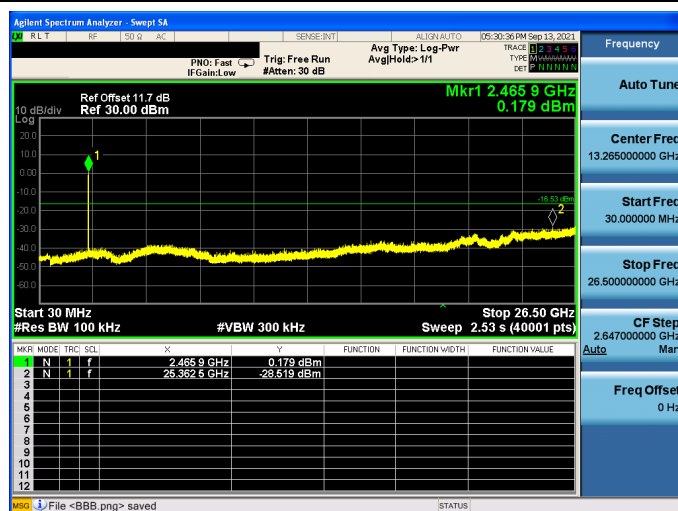
CH01



CH06

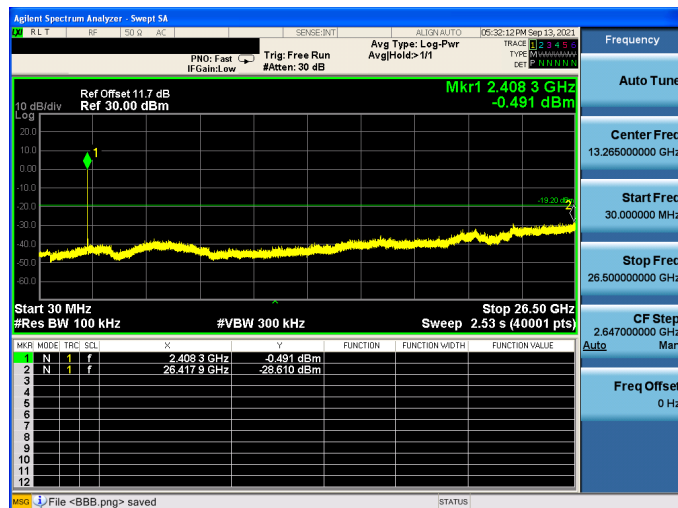


CH11

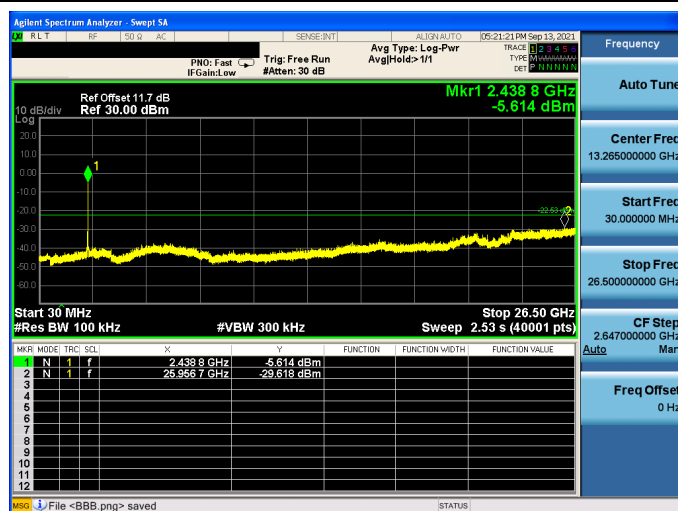


Mode 5: IEEE 802.11n 2.4 GHz 20 MHz(256QAM) Continuous TX Mode

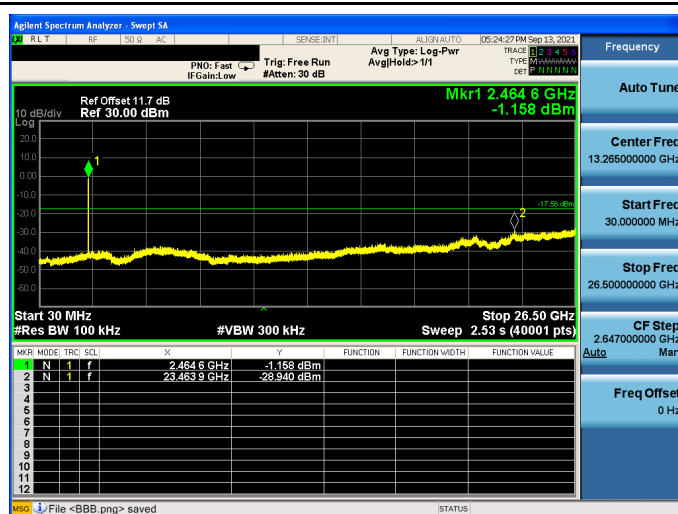
CH01



CH06



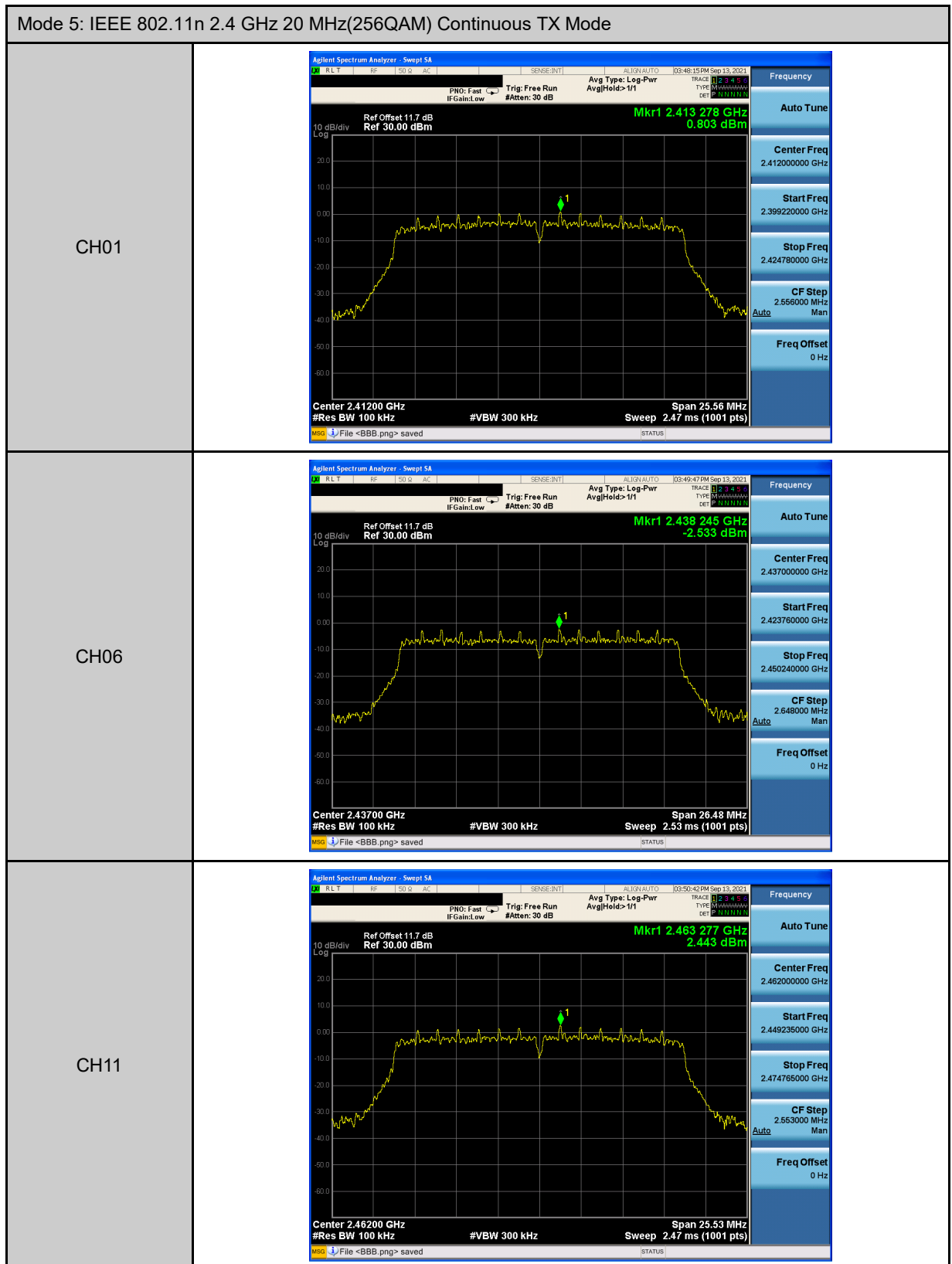
CH11



Reference level

Mode 2: IEEE 802.11b Continuous TX Mode	
CH01	
CH06	
CH11	

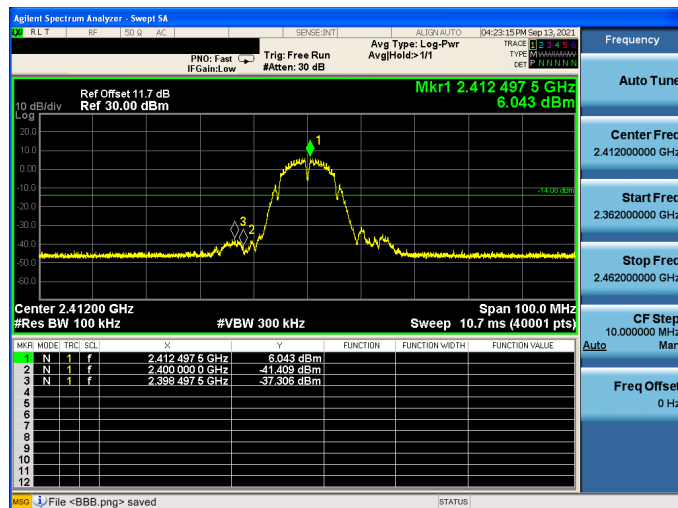
Mode 3: IEEE 802.11g Continuous TX Mode	
CH01	
CH06	
CH11	



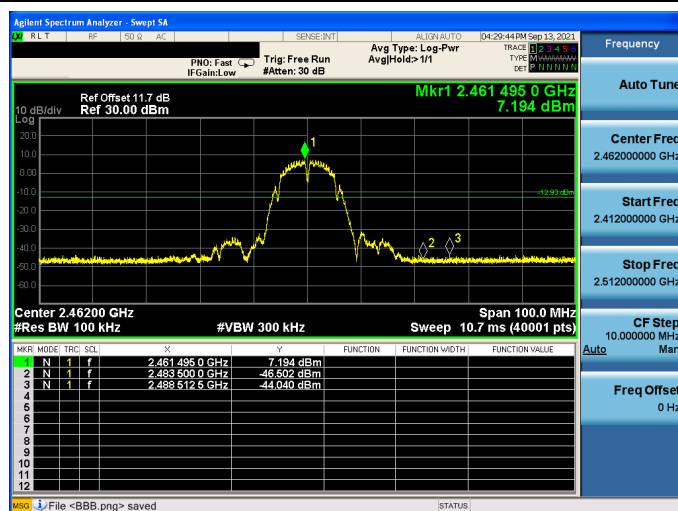
Conducted Band Edge

Mode 2: IEEE 802.11b Continuous TX Mode

CH01

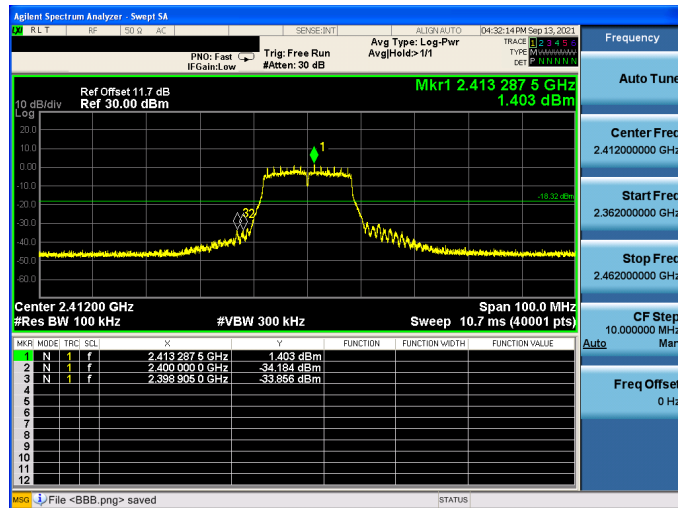


CH11

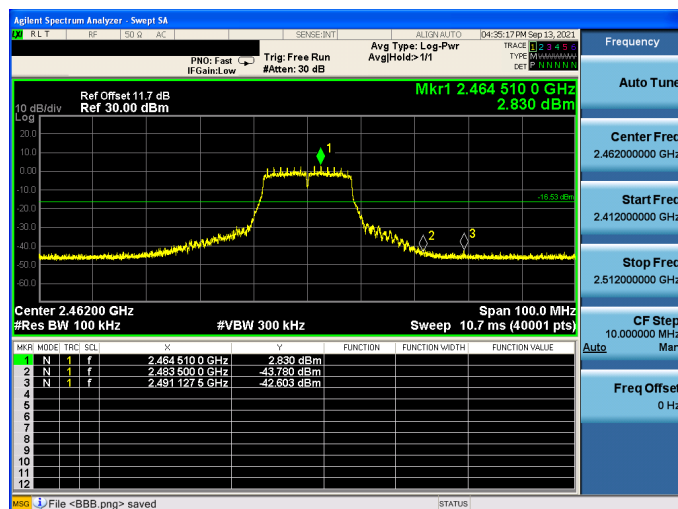


Mode 3: IEEE 802.11g Continuous TX Mode

CH01

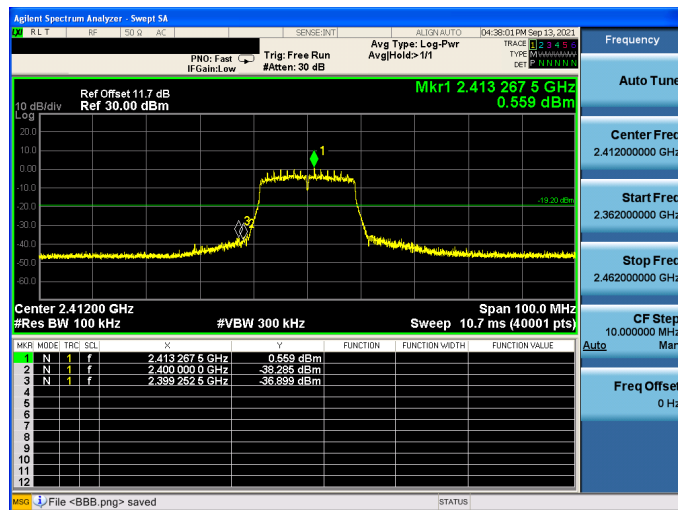


CH11

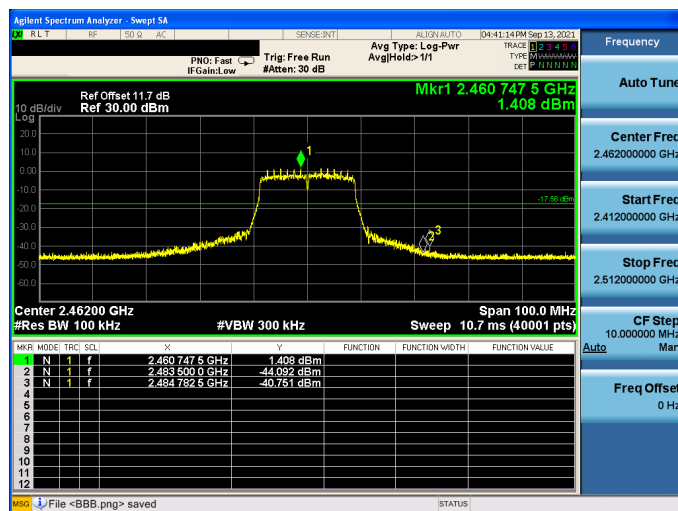


Mode 5: IEEE 802.11n 2.4 GHz 20 MHz(256QAM) Continuous TX Mode

CH01



CH11

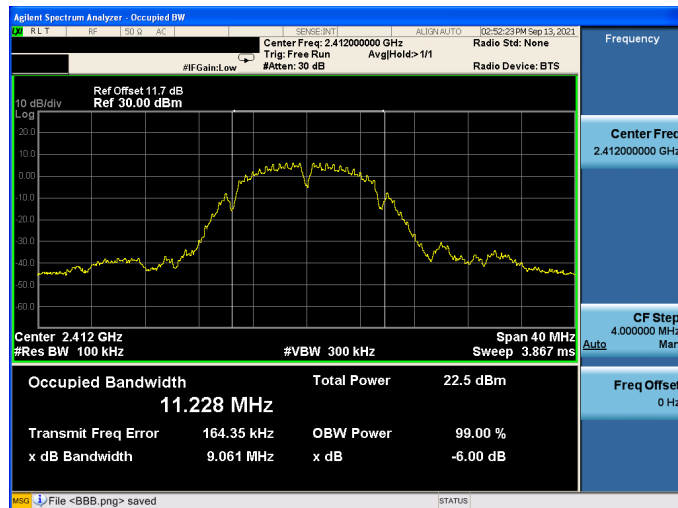


6 dB Bandwidth

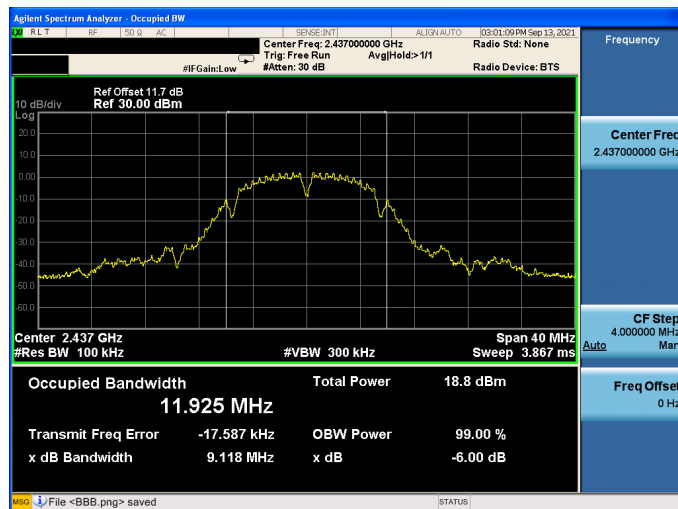
操作模式	頻道	量測值 (kHz)	限制值 (kHz)
Mode 2	CH01	9061	≥ 500
	CH06	9118	≥ 500
	CH11	8120	≥ 500
Mode 3	CH01	16340	≥ 500
	CH06	16430	≥ 500
	CH11	16330	≥ 500
Mode 5	CH01	17040	≥ 500
	CH06	17650	≥ 500
	CH11	17020	≥ 500

Mode 2: IEEE 802.11b Continuous TX Mode

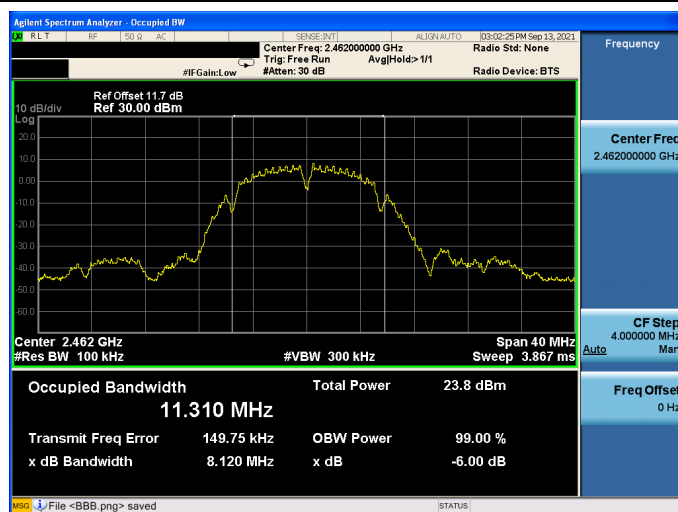
CH01



CH06

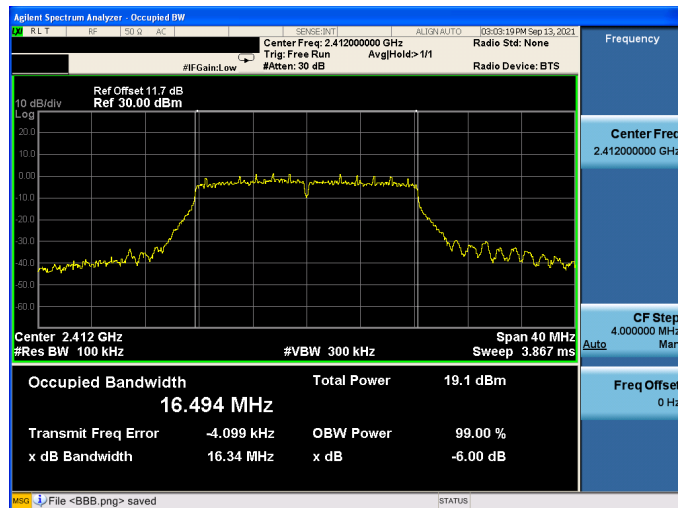


CH11

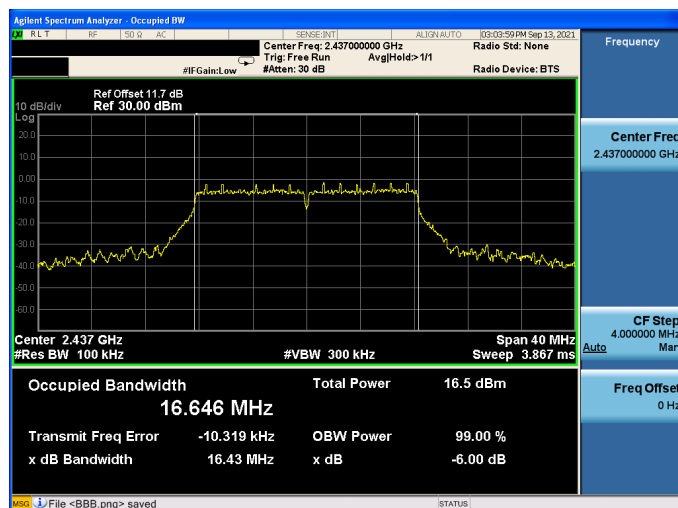


Mode 3: IEEE 802.11g Continuous TX Mode

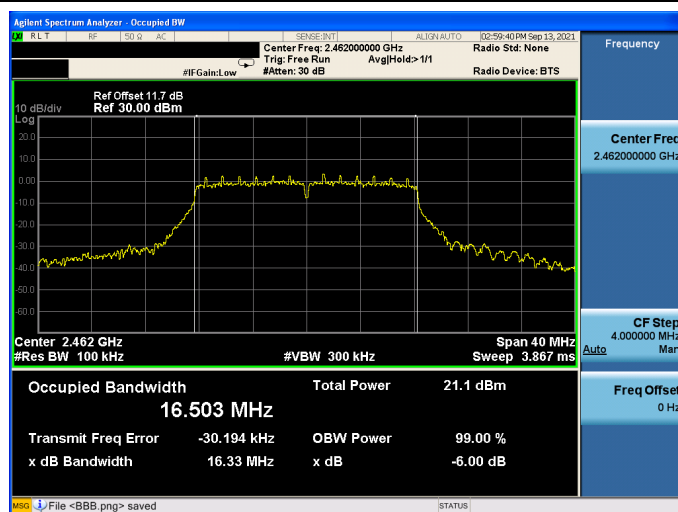
CH01



CH06

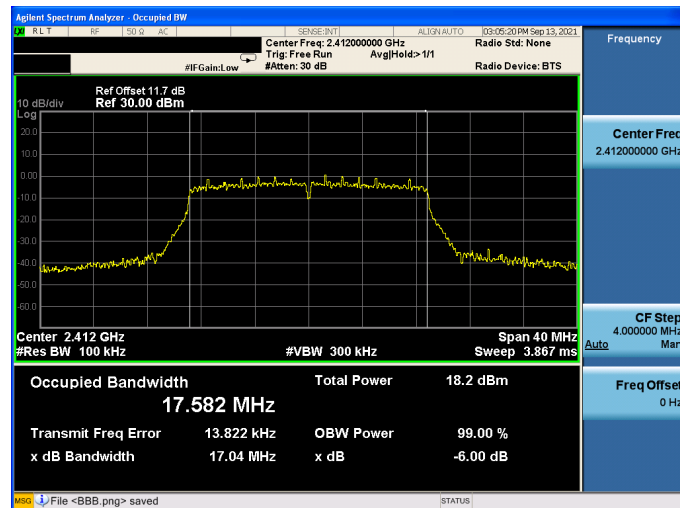


CH11

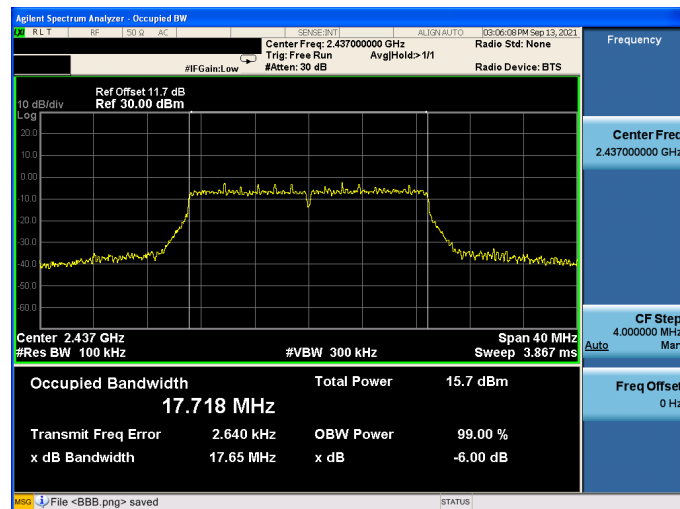


Mode 5: IEEE 802.11n 2.4 GHz 20 MHz(256QAM) Continuous TX Mode

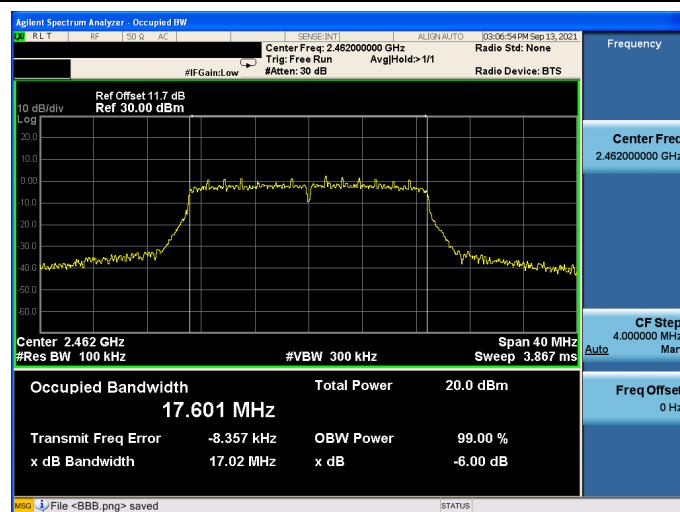
CH01



CH06

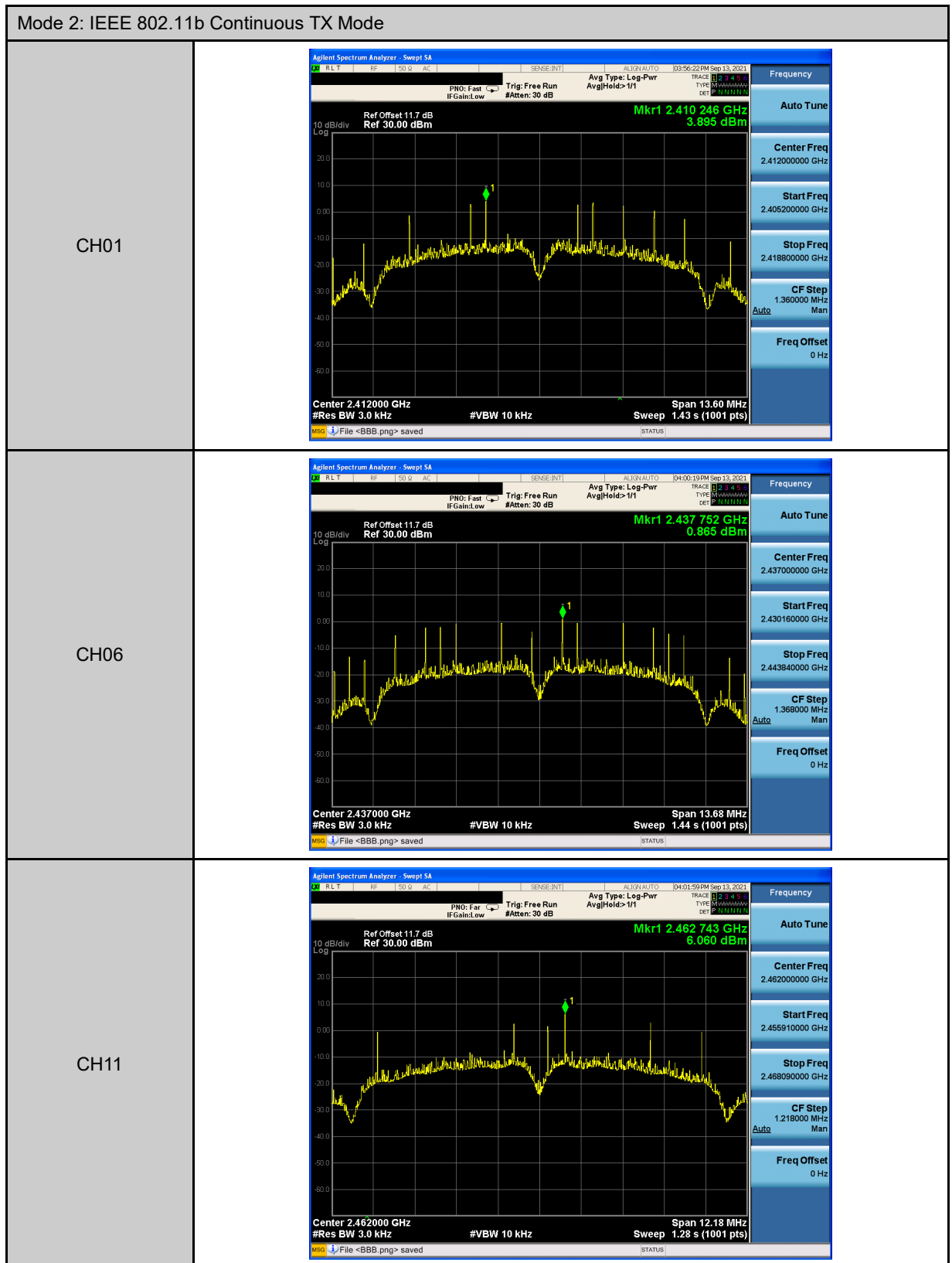


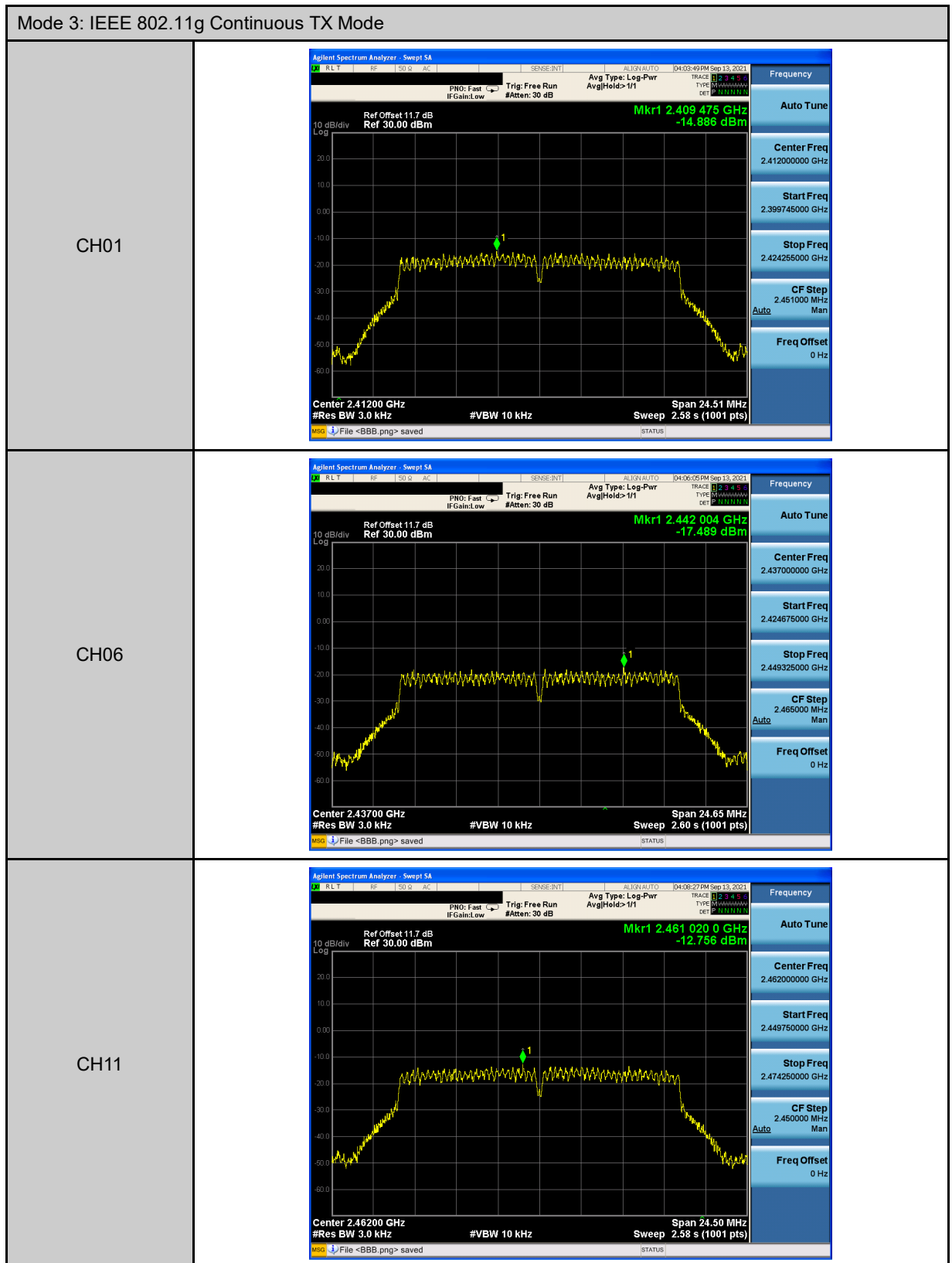
CH11

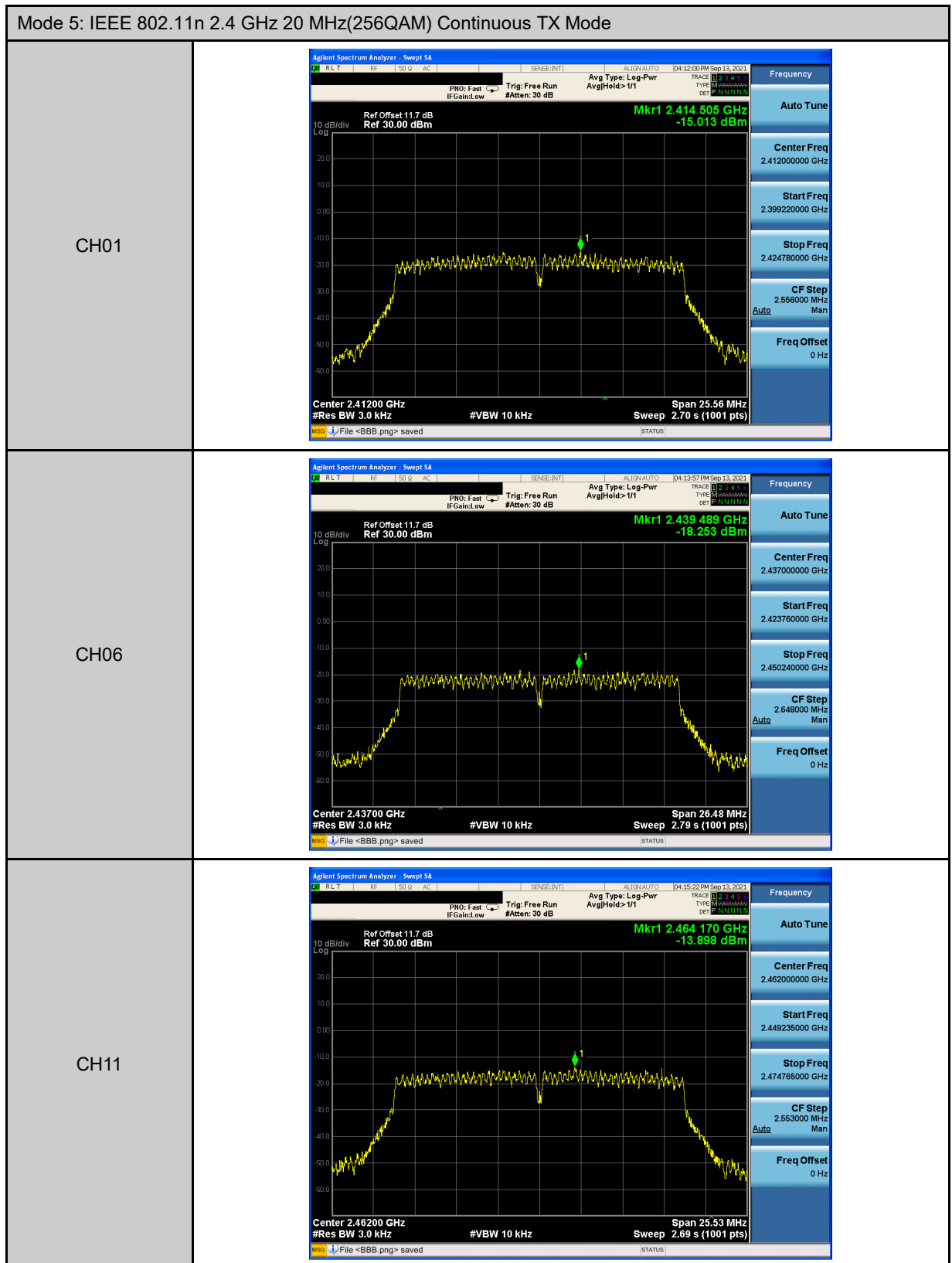


Maximum Power Spectral Density

操作模式	頻道	量測值 (dBm)	限制值 (dBm)
Mode 2	CH01	3.895	≤ 8
	CH06	0.865	≤ 8
	CH11	6.060	≤ 8
Mode 3	CH01	-14.886	≤ 8
	CH06	-17.489	≤ 8
	CH11	-12.756	≤ 8
Mode 5	CH01	-15.013	≤ 8
	CH06	-18.253	≤ 8
	CH11	-13.898	≤ 8







電波暴露量(MPE)

Band	Frequency (MHz)	Limit (mW/cm ²)	Distance [R] (cm)	Power [P] (dBm)	ANT Gain (dBi)	Numeric Gain [G] (dBi)	Duty Cycle	With Duty cycle [P] x [G] (mW)	Power Density [S] (mW/cm ²)
WLAN 2.4 GHz	2412~2462	1	20	16.16	-0.12	0.97	1	40.066	0.0080

6. EUT Photos

請參照 文件編號: 21-1225_NCC_External Photos 和 21-1225_NCC_Internal Photos。

---END---