



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 2009DR73

版本(Rev.) 01

產品名稱 HUAWEI Sound X 無線音箱

申請廠商 訊嵐技術有限公司

廠 牌 HUAWEI

型式 (號) AIS-B80-90

產品試驗依據之標準 低功率射頻器材技術規範(LP0002) 109 年 07 月 01 日

報告發行日期 109 年 10 月 28 日

填發本型式認可報告之試驗機構 (認可代號)

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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

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報告修訂紀錄

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00	109 年 10 月 20 日	初版發行	趙翊如
01	109 年 10 月 28 日	更新 1.1 章節(P.5) 更新 2.5 章節(P.10) 更新 NCC_External Photos	趙翊如

低功率射頻器材測試證明書

產品名稱 : HUAWEI Sound X 無線音箱

廠 牌 : HUAWEI

型 號 : AIS-B80-90

申請廠商 : 訊巖技術有限公司

申請者地址 : 臺北市內湖區洲子街55、57號3樓

製造廠商 : Huawei Device Co., Ltd.

製造商地址 : No.2 of Xincheng Road, Songshan Lake Zone, Dongguan, Guangdong
523808, People's Republic of China

待測物電壓 : DC 24 V, 2.71 A

試驗電壓 : 110 Vac, 60 Hz

量測規範 : 低功率射頻器材技術規範(LP0002) 109年07月01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)

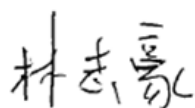
樣品接受日期 : 109 年 09 月 17 日

試驗日期 : 109 年 09 月 23 日 ~ 109 年 09 月 24 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 ！

審 核 者：



(林 志 豪)

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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	HUAWEI Sound X 無線音箱		
廠 牌	HUAWEI		
型 號	AIS-B80-90		
額 定 電 源	DC 24 V, 2.71 A		
調 變 方 式	GFSK, $\pi/4$ -DQPSK, 8DPSK		
頻 率 使 用 範 圍	2402 MHz – 2480 MHz		
天 線 廠 牌	通力電子		
天 線 型 號	47-ANT469-XX1-M		
天 線 型 態	FPC Antenna		
天 線 增 益 值	3 dBi		
RF 最大輸出功率	BR, GFSK:	7.50 dBm/	0.00562 W
	EDR, $\pi/4$ -DQPSK:	7.30 dBm/	0.00537 W
	EDR, 8DPSK:	7.36 dBm/	0.00545 W
RF 平均輸出功率	LE, GFSK:	3.77 dBm/	0.00238 W
	2LE, GFSK:	3.77 dBm/	0.00238 W

輸出/輸入埠說明：

輸 出 / 入 埠		數量	介面內容說明
1	DC Power In Port	1	連接至電源供應器
2	USB Port	1	原廠 Debug 使用，一般消費者無法使用

附屬裝置表：

裝置名稱	廠牌	型號	備註
電源供應器	HUAWEI	HW-240271D0D	INPUT : 100-240 VAC, 50/60 Hz, 1.5 A OUTPUT : DC 24.0 V, 2.71 A Non-Shielded, 1.5 m
分離式電源線組	LINETEK	LP-12	125 VAC, 7 A Non-Shielded, 0.9 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 (變更內容請參考產品概述). 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.23, 2020

測試者: 呂迪曄

名稱	廠牌	型號	序號	本次校驗日期	校驗年限
Power Sensor	Anritsu	MA2411B	1126022	09/01/2020	1 year
Power Meter	Anritsu	ML2495A	1135009	09/01/2020	1 year
Spectrum Analyzer (20 Hz~26.5 GHz)	Agilent	N9030A	MY53120541	01/06/2020	1 year
Wireless Connectivity Tester	R & S	CMW270	102208	06/18/2020	1 year

For Conducted Emission

Test Period: Sep.24, 2020

測試者: 邱孝儒

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	05/25/2020	1 year
線性阻抗模擬網路	R&S	ENV216	101040	03/23/2020	1 year
線性阻抗模擬網路	R&S	ENV216	101041	04/06/2020	1 year

For Radiated Emissions

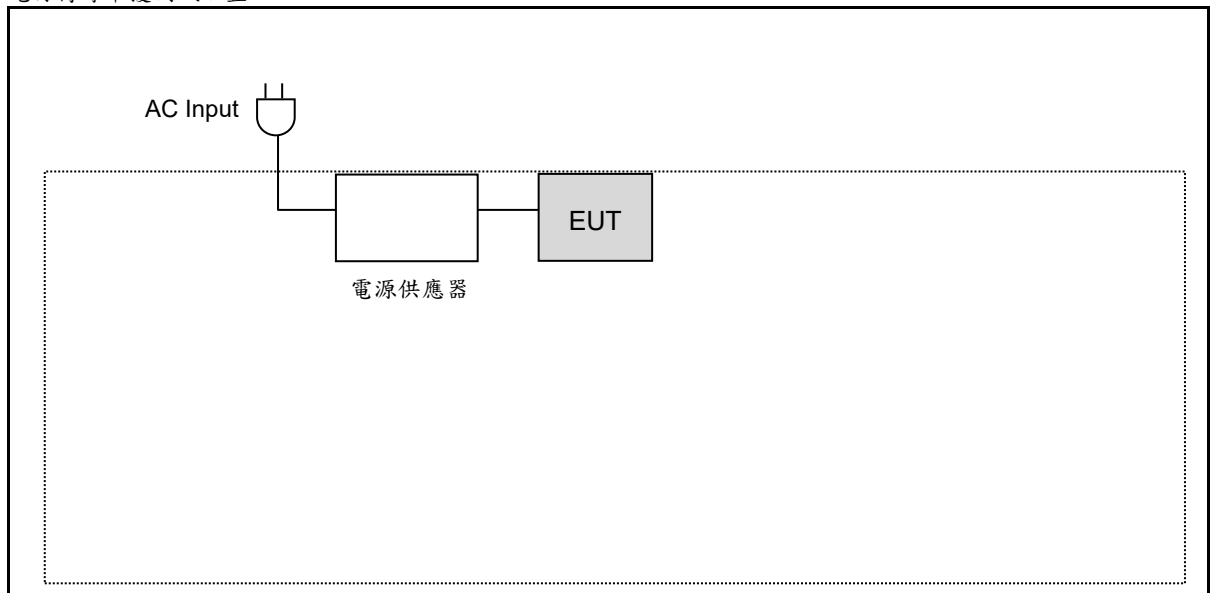
Test Period: Sep.23 ~ Sep.24, 2020

測試者: 劉彥聖, 葉佳原

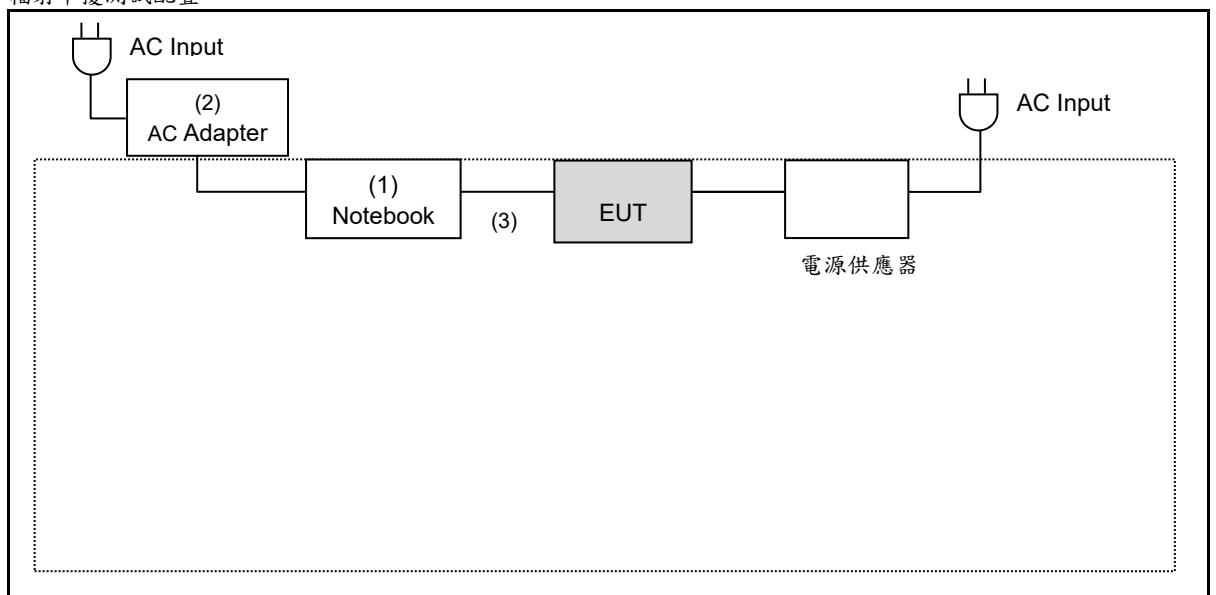
名稱	廠牌	型號	序號	本次校驗日期	校驗年限
Spectrum Analyzer	KEYSIGHT	N9030B	MY57143537	04/14/2020	1 year
Amplifier	Agilent	8449B	3008A02237	10/18/2019	1 year
Amplifier	Agilent	8447D	2944A11119	01/15/2020	1 year
天線	SCHWARZBECK MESS-ELEKTRONIK	VULB9168	01146	07/03/2020	1 year
天線(1~18 GHz)	SCHWARZBECK MESS-ELEKTRONIK	BBHA9120D	02207	06/30/2020	1 year
天線(18~40 GHz)	SCHWARZBECK MESS-ELEKTRONIK	BBHA9170	9170-320	08/18/2020	1 year
Wireless Connectivity Tester	R & S	CMW270	102208	06/18/2020	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)	Notebook	HP	HP541	CNU9181SCN	---	(實驗室提供)
(2)	AC Adapter	HP	Series PPP014L-S	---	Non-Shielded, 0.8 m	INPUT : 100-240 VDC, 50/60 Hz, 2.4 A OUTPUT : 19 VDC, 4.74 A (實驗室提供)
(3)	USB Cable	HUAWEI	04071002	---	---	規格 : STD-A to Micro-B 長度 : 1 m Test Mode 使用 (實驗室提供)

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: Standby Mode
Mode 2: BR, GFSK Continuous TX Mode
Mode 3: EDR, $\pi/4$ -DQPSK Continuous TX Mode
Mode 4: EDR, 8DPSK Continuous TX Mode
Mode 5: LE, GFSK Continuous TX Mode
Mode 6: 2LE, GFSK Continuous TX Mode
Mode 7: Receiver Mode

Final-Test Mode
Mode 1: Standby Mode
Mode 2: BR, GFSK Continuous TX Mode
Mode 4: EDR, 8DPSK Continuous TX Mode
Mode 5: LE, GFSK Continuous TX Mode
Mode 6: 2LE, GFSK Continuous TX Mode
Mode 7: Receiver Mode

測試搭配組合：

EUT Configure Mode	CE	RE<1 GHz	RE $\geq$ 1 GHz	備註	
電源供應器	V	V	V		
分離式電源線組	V	V	V		
Notebook	X	V	V	測試週邊(1)	Test Mode使用
AC Adapter	X	V	V	測試週邊(2)	Test Mode使用
USB Cable	X	V	V	測試週邊(3)	Test Mode使用

RE $\geq$ 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

Test Mode	Frequency (MHz)	Packet Type	RF Power setting in Test Software	Test Software Version
Mode 2	2402	DH1	Default	CMW270
		DH3	Default	
		DH5	Default	
	2441	DH1	Default	
		DH3	Default	
		DH5	Default	
	2480	DH1	Default	
		DH3	Default	
		DH5	Default	
Mode 3	2402	2DH1	Default	
		2DH3	Default	
		2DH5	Default	
	2441	2DH1	Default	
		2DH3	Default	
		2DH5	Default	
	2480	2DH1	Default	
		2DH3	Default	
		2DH5	Default	
Mode 4	2402	3DH1	Default	
		3DH3	Default	
		3DH5	Default	
	2441	3DH1	Default	
		3DH3	Default	
		3DH5	Default	
	2480	3DH1	Default	
		3DH3	Default	
		3DH5	Default	

Test Mode	Frequency (MHz)	RF Power setting in Test Software	Test Software Version
Mode 5	2402	Default	CMD
	2440	Default	
	2480	Default	
Mode 6	2402	Default	CMD
	2440	Default	
	2480	Default	

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 (dB)
Conducted Emission	150 kHz ~ 30 MHz	2.68
Radiated Emission	9 kHz ~ 30 MHz	2.14
	30 MHz ~ 1000 MHz	4.99
	1000 MHz ~ 18000 MHz	4.99
	18000 MHz ~ 26500 MHz	4.23
	26500 MHz ~ 40000 MHz	4.39
Conducted Output Power	0.92 dB	
RF Bandwidth	4.79 %	
Power Spectral Density	0.92 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。

BR/EDR 測試項目

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 (1 GHz以上)	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	場強輻射其它不必要之訊號 (1 GHz以下)	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
4	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
5	輸出峰值功率	低功率射頻器材技術規範 4.10.1.2(1)(B)節	Annex C.	請參閱2.1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	頻率範圍	低功率射頻器材技術規範 4.10.1.1節	Annex C.	請參閱2.1節	符合
8	發射頻寬	低功率射頻器材技術規範 4.10.1.6(1)(A)節	Annex C.	請參閱2.1節	符合
9	頻道數	低功率射頻器材技術規範 4.10.1.6(1)(A)(a)節	Annex C.	請參閱2.1節	符合
10	跳頻系統之載波頻率頻道間隔	低功率射頻器材技術規範 4.10.1.6(1)(A)節	Annex C.	請參閱2.1節	符合
11	跳頻系統之任一頻率佔用之 平均時間	低功率射頻器材技術規範 4.10.1.6(1)(A)(a)節	Annex C.	請參閱2.1節	符合
12	天線規格	低功率射頻器材技術規範 4.10.1.3(3)節、4.10.1.4節	請參閱4.11節	-----	符合

LE/2LE 測試項目

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 (1 GHz以上)	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	場強輻射其它不必要之訊號 (1 GHz以下)	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
4	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
5	輸出峰值功率	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
6	非必要頻帶	低功率射頻器材技術規範 4.10.1.5節	Annex C.	請參閱2.1節	符合
7	發射頻寬	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	功率密度	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	天線規格	低功率射頻器材技術規範 4.10.1.3(3)節、4.10.1.4節	請參閱4.11節	-----	符合

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。

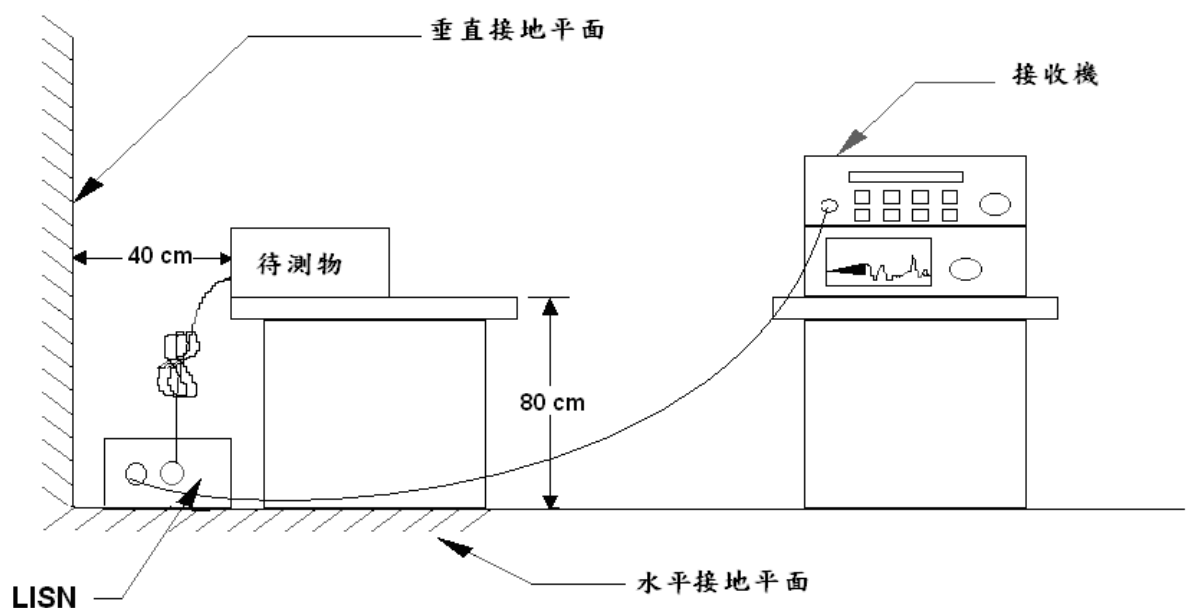
干擾值之計算

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 4.10.1.5(2)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(μV/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。

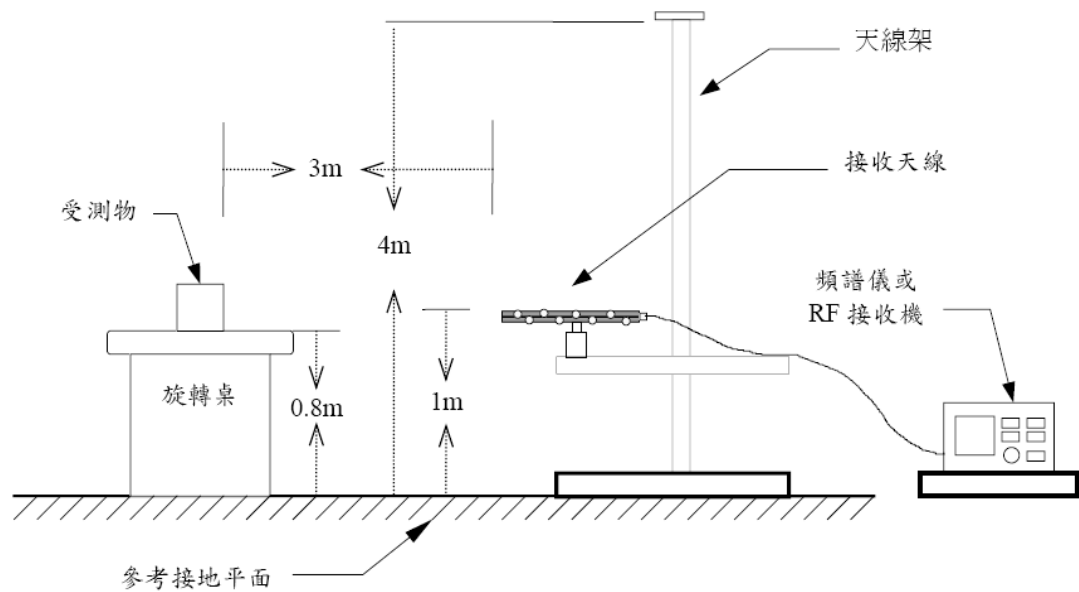
場強度之計算

場強之計算公式為：結果值 = 讀值 + 校正因子

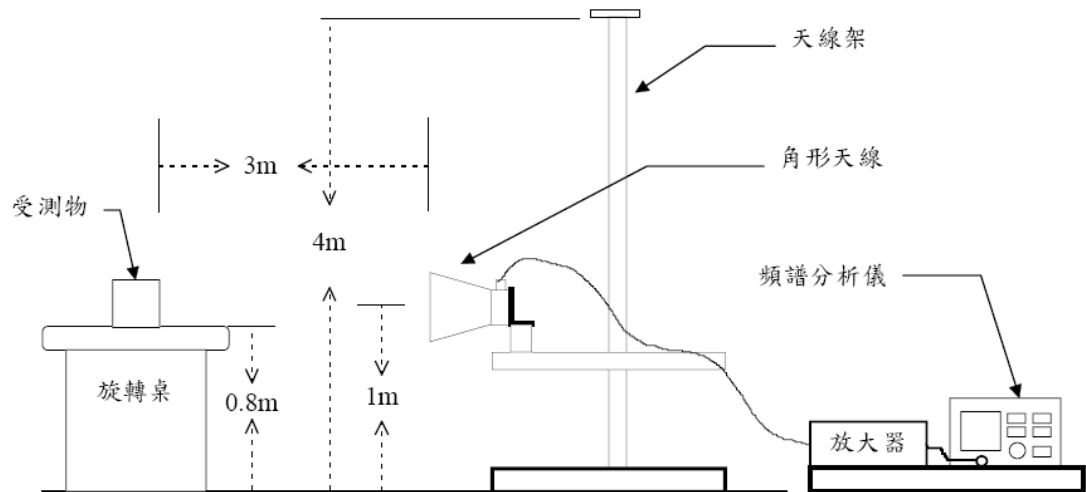
其中校正因子為：天線因子+ 饋線損失 + 濾波器損失（若有使用） - 放大器增益（若有使用）

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 輸出峰值功率之量測

合格標準：

BR/EDR

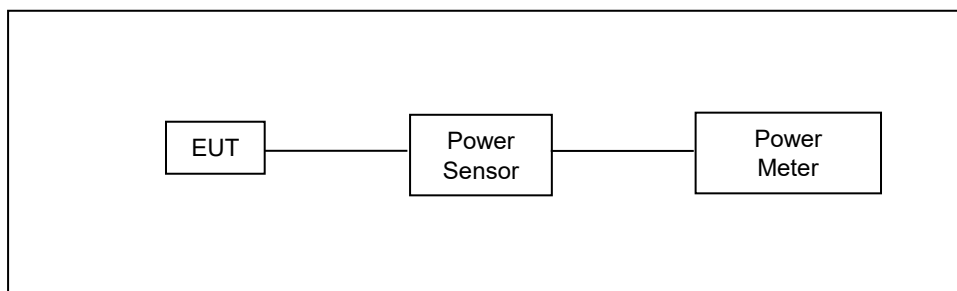
依據 NCC 低功率射頻器材技術規範(LP0002)之 4.10.1.2(1)(B)節之要求，所有操作於 2400-2483.5 兆赫且輸出功率應小於或等於 0.125 W。

LE

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)之所有數位調變技術系統：1 瓦(W)以下。

除使用附件二之峰值輸出功率量測方式外，並得使用以最大傳導輸出功率(Maximum Conducted Output Power)作為量測方式。

測試架構圖：

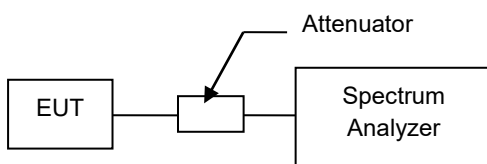


4.4 非必要頻帶之量測

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，BR/EDR 須衰減 20 分貝(dB)；LE/2LE 須衰減 30 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，BR/EDR 衰減 20 分貝(dB)；LE/2LE 衰減 30 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 BR/EDR TX 20 dB；LE/2LE TX 30 dB。

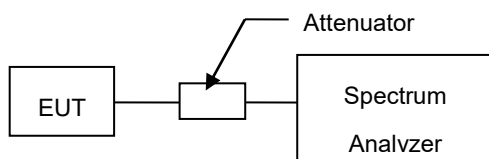
4.5 頻率範圍之要求

合格標準：

依據 NCC 低功率射頻器材技術規範(LP0002)之 4.10.1.1 節之要求，允許使用的頻率範圍為 2400 至 2483.5 MHz。

測試架構圖：

測試場地測試配置如圖所示。



4.6 發射頻寬之要求

合格標準：

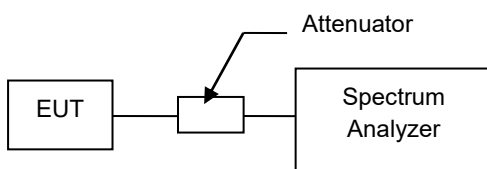
BR/EDR

對跳頻系統(Frequency Hopping System)而言，依據 NCC 低功率射頻器材技術規範 4.10.1.6(1)(A)節之要求，跳頻系統之載波頻率頻道間隔應至少 25 千赫(kHz)或跳頻頻道 20 dB 頻寬之三分之二，兩者取較寬者。系統之跳頻頻道應依虛擬亂數排列，在各頻率之跳頻頻道上跳躍。每一發射機必須均等的使用每一頻率。系統接收機應具有與發射機跳躍頻道頻寬相匹配之輸入頻寬，且應隨所發射的信號同步偏移接收頻率。

LE

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：

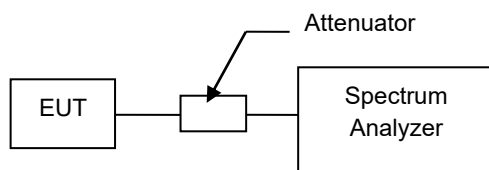


4.7 頻道數之要求

合格標準：

對跳頻系統(Frequency Hopping System)而言，依據 NCC 低功率射頻器材技術規範(LP0002)之 4.10.1.6(1)(A)(a)節之要求，至少使用 15 個無重疊之頻道(複合系統時，關閉數位調變作業狀態檢驗)。

測試架構圖：

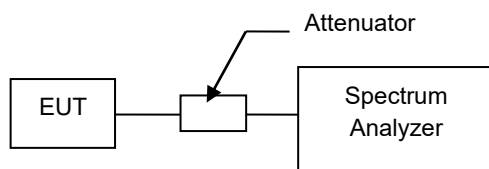


4.8 跳頻系統之載波頻率頻道間隔之量測

合格標準：

依據 NCC 低功率射頻器材技術規範(LP0002) 之 4.10.1.6(1)(A)節要求，應至少 25 kHz 或跳頻頻道之 20 dB 頻寬之三分之二，兩者取較寬者。

測試架構圖：

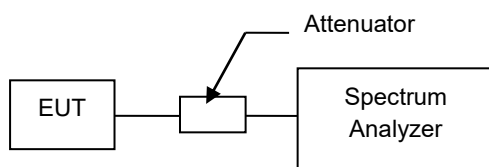


4.9 跳頻系統之任一頻率佔用之平均時間之量測

合格標準：

依據 NCC 低功率射頻器材技術規範(LP0002)之 4.10.1.6(1)(A)(a)節之要求，若使用 15 個無重疊之頻道，在 0.4 秒乘以跳頻頻道數之週期內，任一頻道佔用之平均時間不得超過 0.4 秒(複合系統時，關閉跳頻作業狀態檢驗)。

測試架構圖：



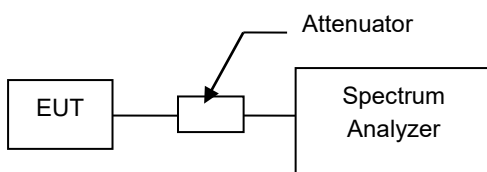
4.10 功率密度之要求

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電功率密度在任意期間內，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。



4.11 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。

4.12 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

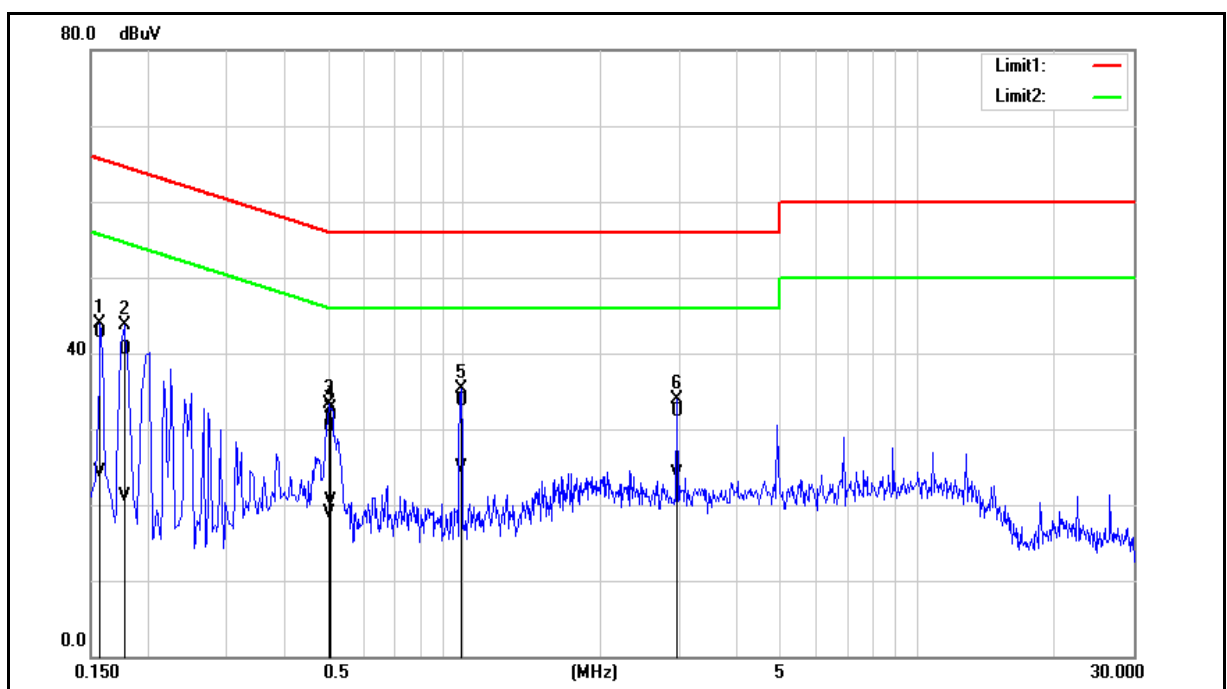
註 1：標記*表平面波等效功率密度。

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:			

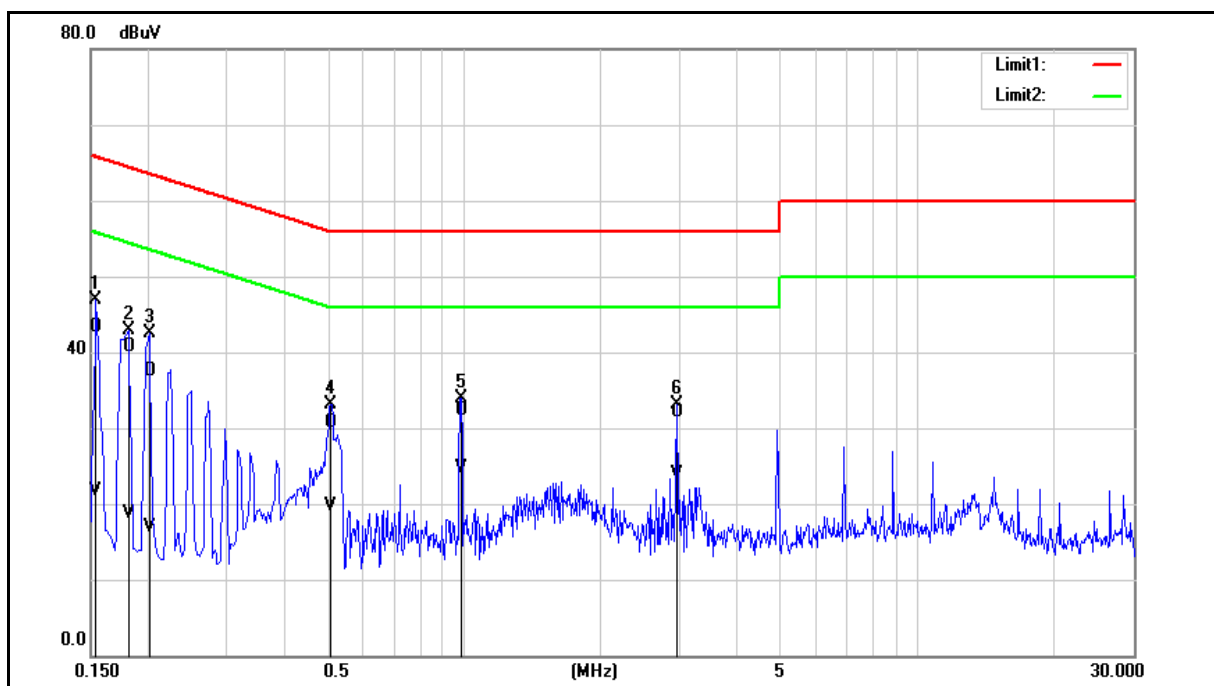


No.	Frequency (MHz)	QP reading (dBuV)	AVG reading (dBuV)	Correction factor (dB)	QP result (dBuV)	AVG result (dBuV)	QP limit (dBuV)	AVG limit (dBuV)	QP margin (dB)	AVG margin (dB)	Remark
1	0.1580	33.00	14.55	9.70	42.70	24.25	65.57	55.57	-22.87	-31.32	Pass
2	0.1780	30.72	11.47	9.70	40.42	21.17	64.58	54.58	-24.16	-33.41	Pass
3	0.5020	20.66	9.14	9.71	30.37	18.85	56.00	46.00	-25.63	-27.15	Pass
4	0.5100	21.90	10.80	9.71	31.61	20.51	56.00	46.00	-24.39	-25.49	Pass
5	0.9860	24.00	15.28	9.71	33.71	24.99	56.00	46.00	-22.29	-21.01	Pass
6	2.9540	22.48	14.25	9.78	32.26	24.03	56.00	46.00	-23.74	-21.97	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	0.1540	33.56	11.94	9.69	43.25	21.63	65.78	55.78	-22.53	-34.15	Pass
2	0.1820	31.04	9.07	9.69	40.73	18.76	64.39	54.39	-23.66	-35.63	Pass
3	0.2020	27.86	7.21	9.69	37.55	16.90	63.53	53.53	-25.98	-36.63	Pass
4	0.5100	20.96	10.07	9.70	30.66	19.77	56.00	46.00	-25.34	-26.23	Pass
5	0.9860	22.59	14.96	9.70	32.29	24.66	56.00	46.00	-23.71	-21.34	Pass
6	2.9540	22.24	14.05	9.77	32.01	23.82	56.00	46.00	-23.99	-22.18	Pass

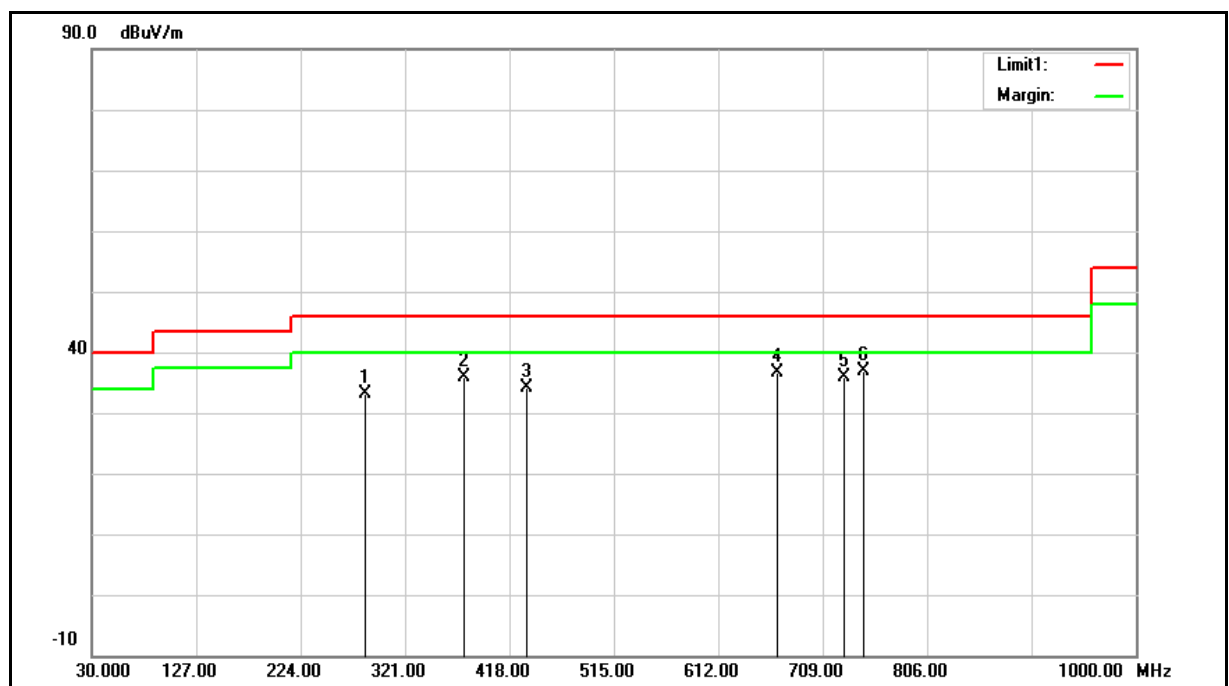
註：1. 干擾值(dBuV) = 校正係數(dB) + 讀值(dBuV)。

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:	2402 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	284.1400	40.19	-6.97	33.22	46.00	-12.78	QP
2	375.3200	41.02	-5.23	35.79	46.00	-10.21	QP
3	434.4900	38.43	-4.23	34.20	46.00	-11.80	QP
4	666.3200	37.26	-0.55	36.71	46.00	-9.29	QP
5	729.3700	35.38	0.41	35.79	46.00	-10.21	QP
6	746.8300	36.28	0.71	36.99	46.00	-9.01	QP

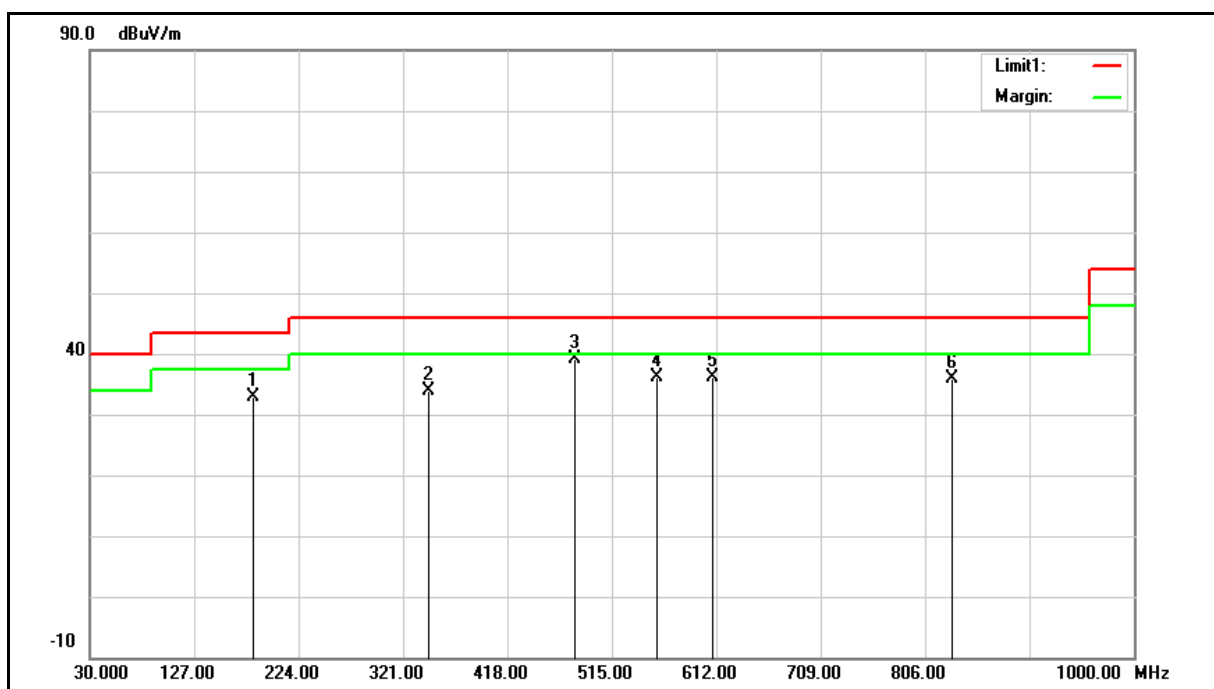
Note: 1. Result (dBuV/m) = Correct Factor (dB/m) + Reading (dBuV).

Example: $33.22 = -6.97 + 40.19$

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:	2402 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	181.3200	42.03	-9.20	32.83	43.50	-10.67	QP
2	344.2800	39.71	-5.77	33.94	46.00	-12.06	QP
3	480.0800	42.83	-3.81	39.02	46.00	-6.98	QP
4	556.7100	38.36	-2.35	36.01	46.00	-9.99	QP
5	609.0900	37.40	-1.24	36.16	46.00	-9.84	QP
6	831.2200	33.94	1.91	35.85	46.00	-10.15	QP

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

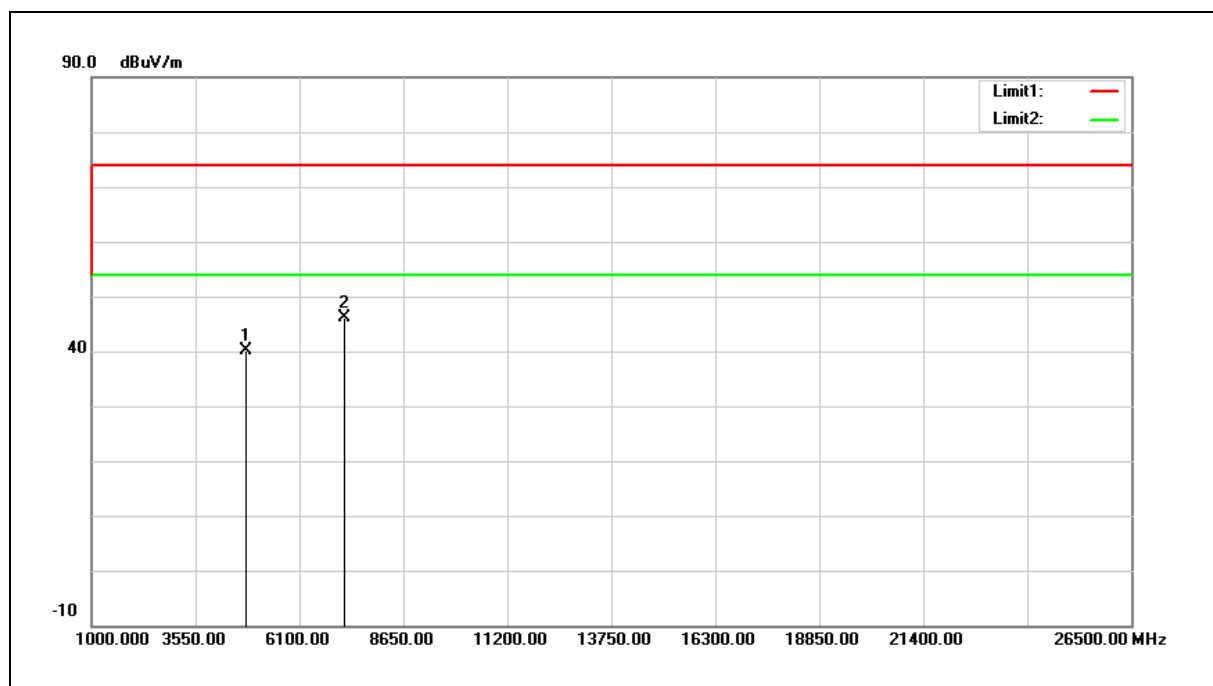
Example: $32.83 = -9.20 + 42.03$

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:	2402 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	4804.000	37.40	2.80	40.20	74.00	-33.80	peak
2	7206.000	37.42	8.82	46.24	74.00	-27.76	peak

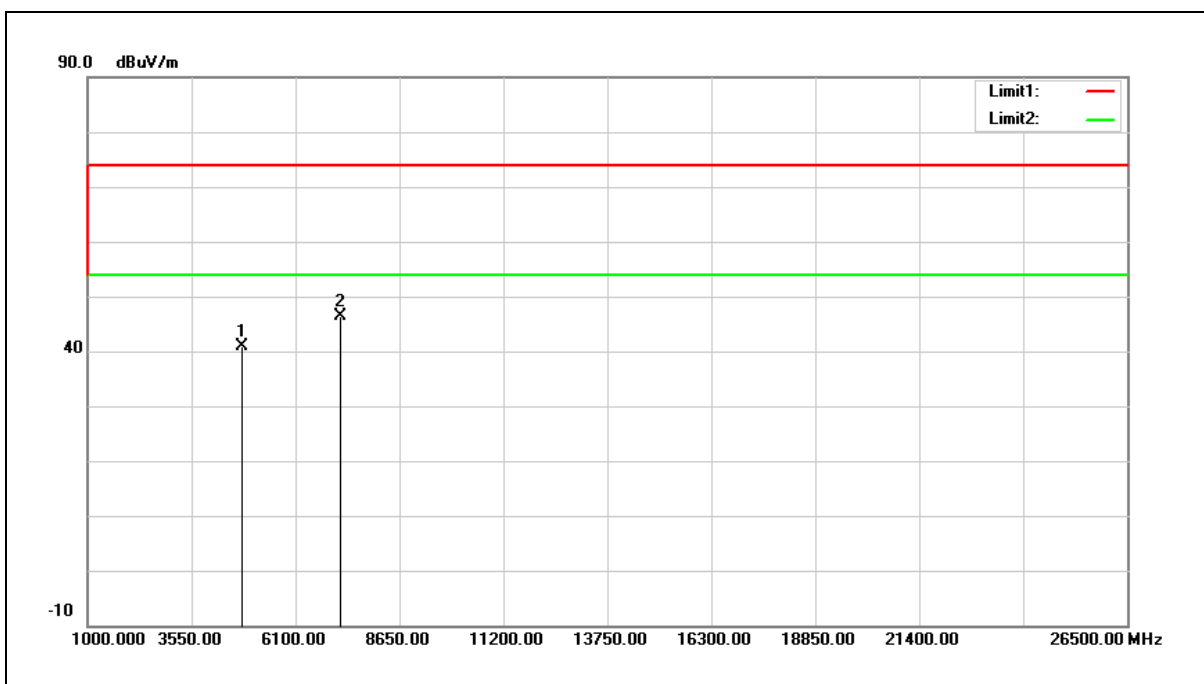
Note: 1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

Example: $40.20 = 2.80 + 37.40$

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:	2402 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	4804.000	38.12	2.80	40.92	74.00	-33.08	peak
2	7206.000	37.61	8.82	46.43	74.00	-27.57	peak

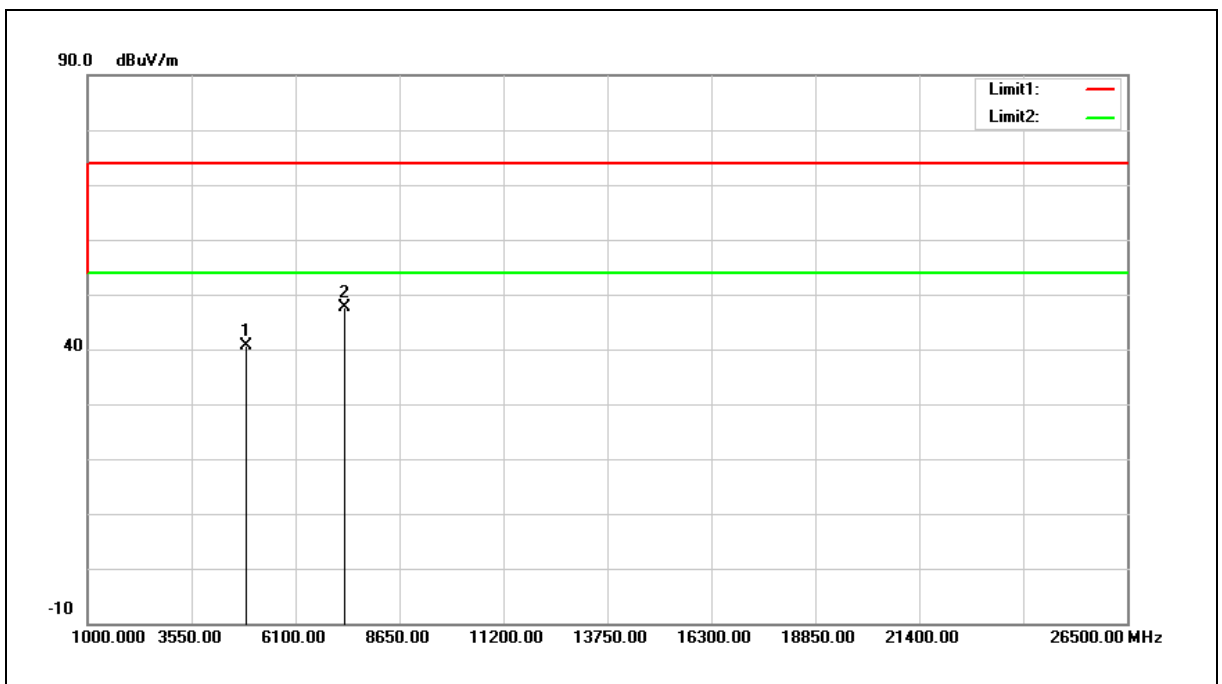
Note: 1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

Example: $40.92 = 2.80 + 38.12$

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:	2441 MHz		
Mode:	Mode 2		
Ant.Polar.:	Horizontal		



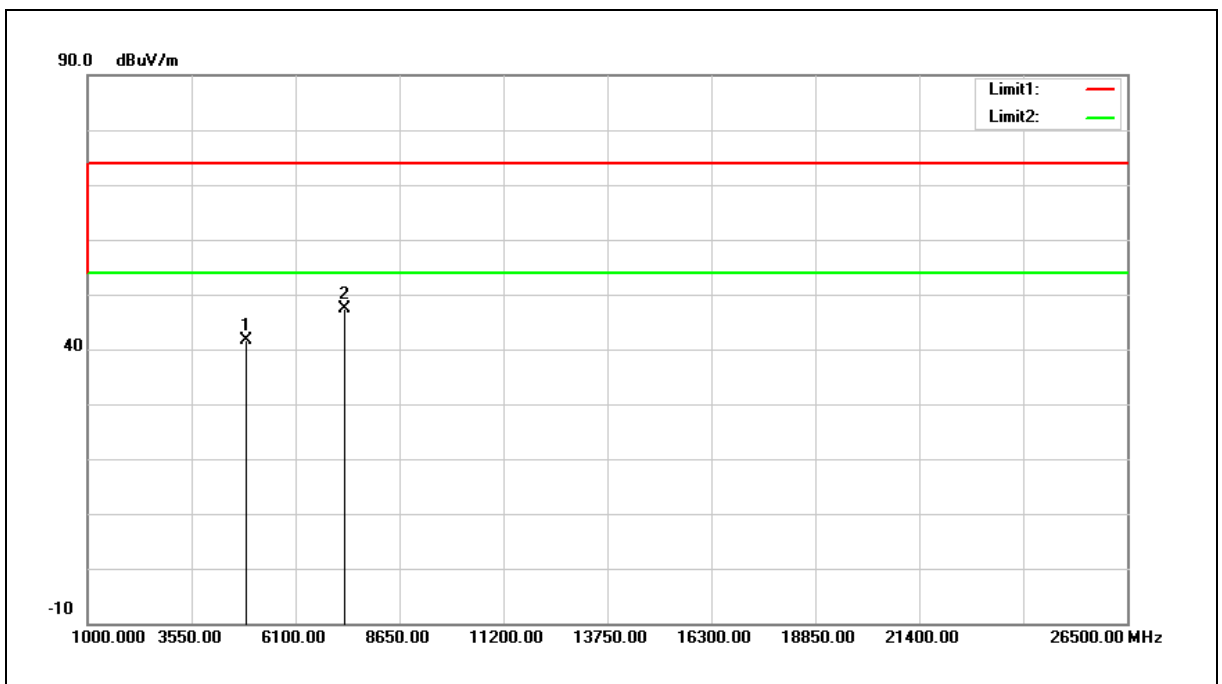
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4882.000	37.66	2.98	40.64	74.00	-33.36	peak
2	7323.000	38.42	9.18	47.60	74.00	-26.40	peak

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:	2441 MHz		
Mode:	Mode 2		
Ant.Polar.:	Vertical		



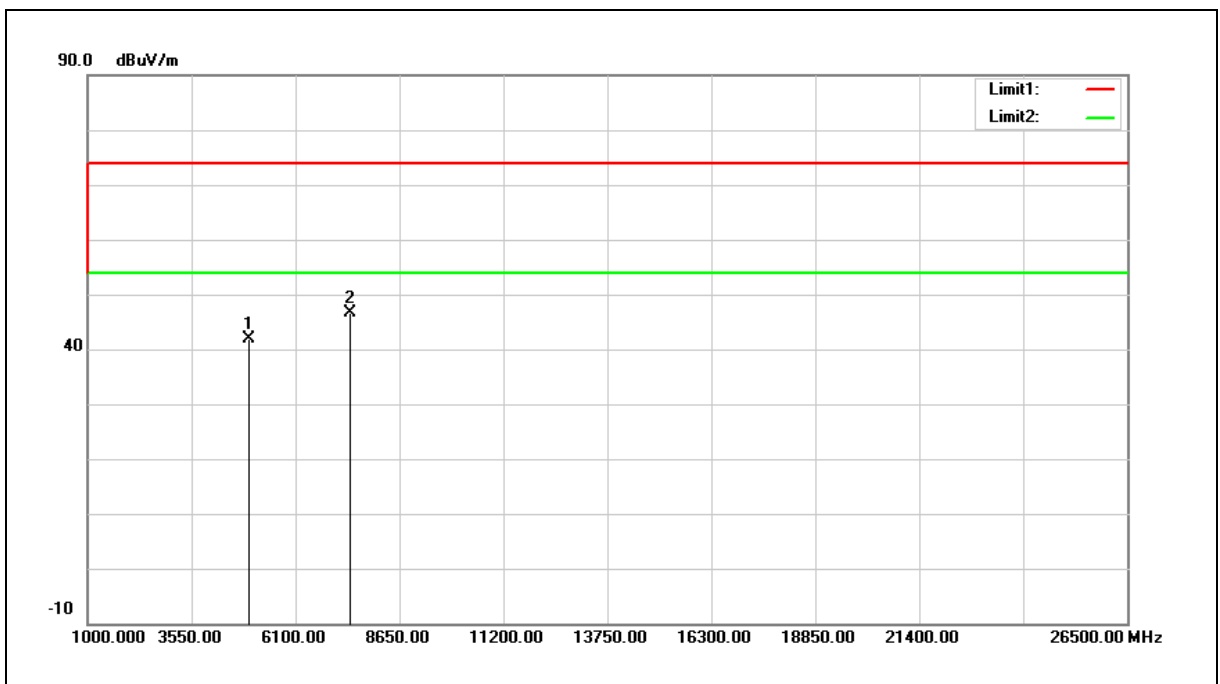
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4882.000	38.53	2.98	41.51	74.00	-32.49	peak
2	7323.000	38.21	9.18	47.39	74.00	-26.61	peak

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:	2480 MHz		
Mode:	Mode 2		
Ant.Polar.:	Horizontal		



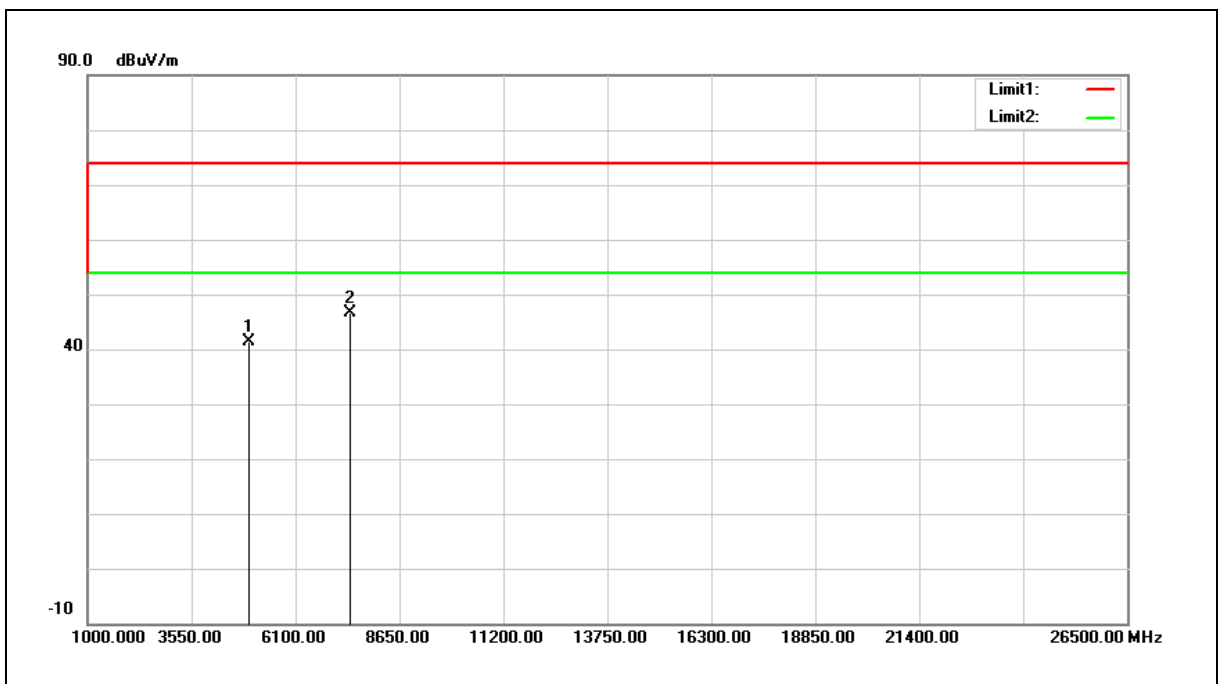
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4960.000	38.68	3.17	41.85	74.00	-32.15	peak
2	7440.000	37.18	9.55	46.73	74.00	-27.27	peak

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:	2480 MHz		
Mode:	Mode 2		
Ant.Polar.:	Vertical		



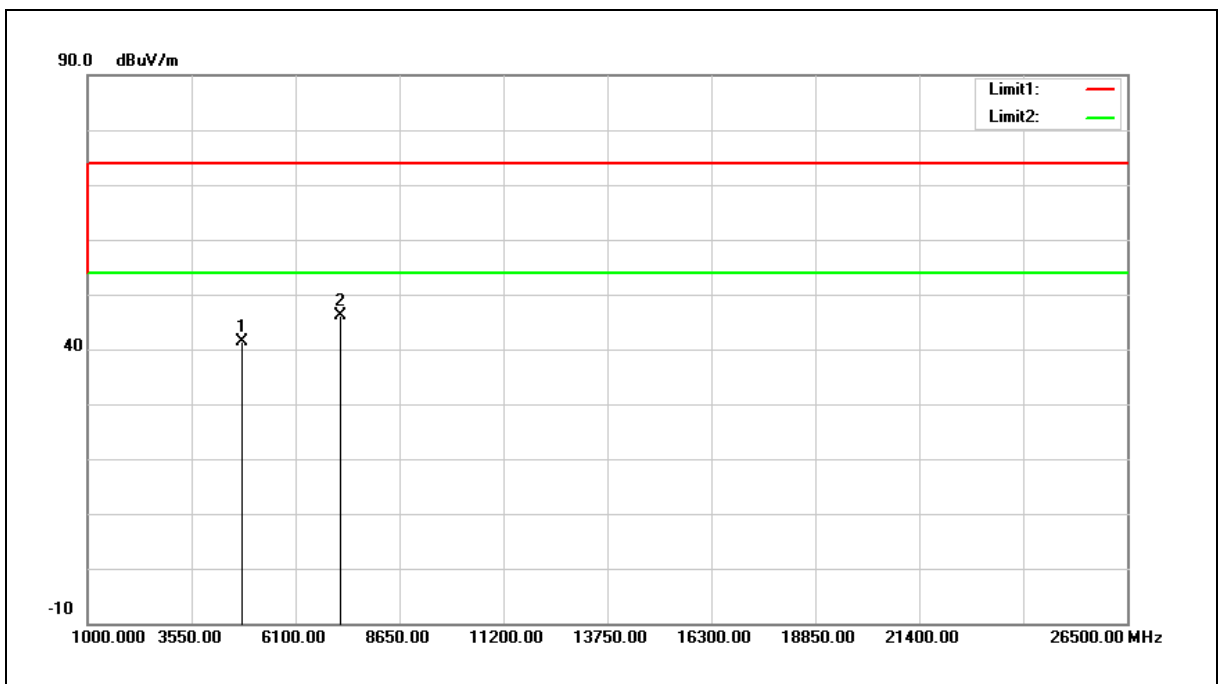
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4960.000	38.13	3.17	41.30	74.00	-32.70	peak
2	7440.000	37.18	9.55	46.73	74.00	-27.27	peak

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:	2402 MHz		
Mode:	Mode 4		
Ant.Polar.:	Horizontal		



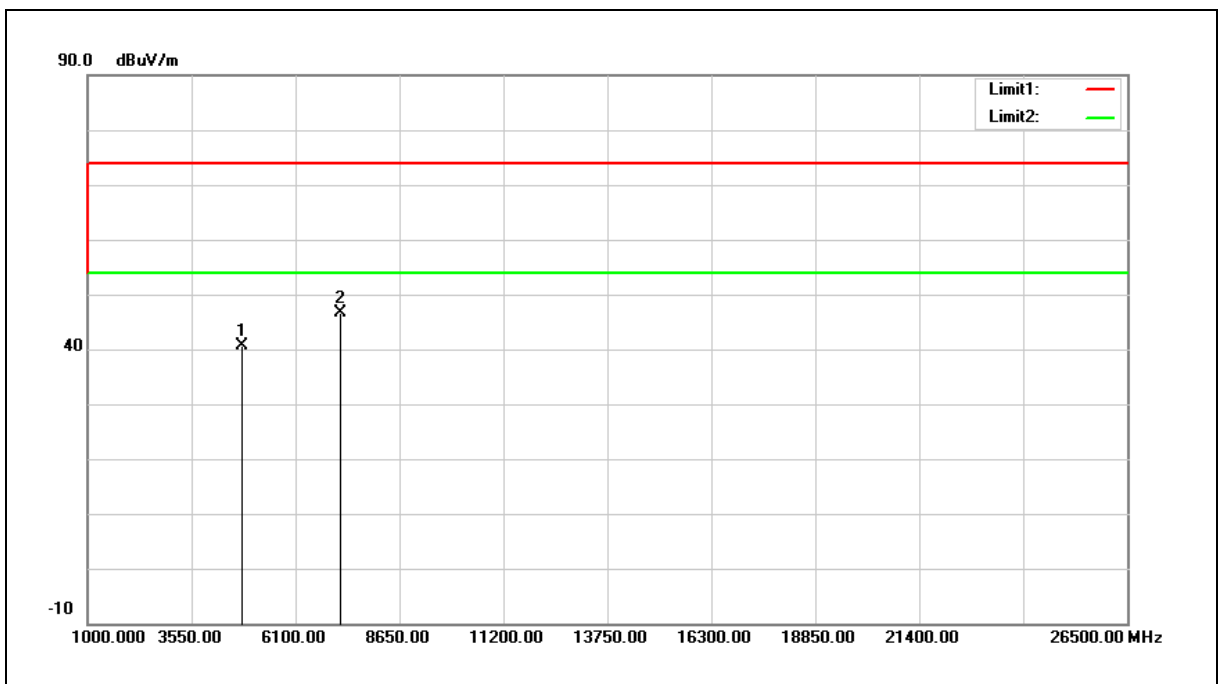
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4804.000	38.61	2.80	41.41	74.00	-32.59	peak
2	7206.000	37.32	8.82	46.14	74.00	-27.86	peak

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:	2402 MHz		
Mode:	Mode 4		
Ant.Polar.:	Vertical		



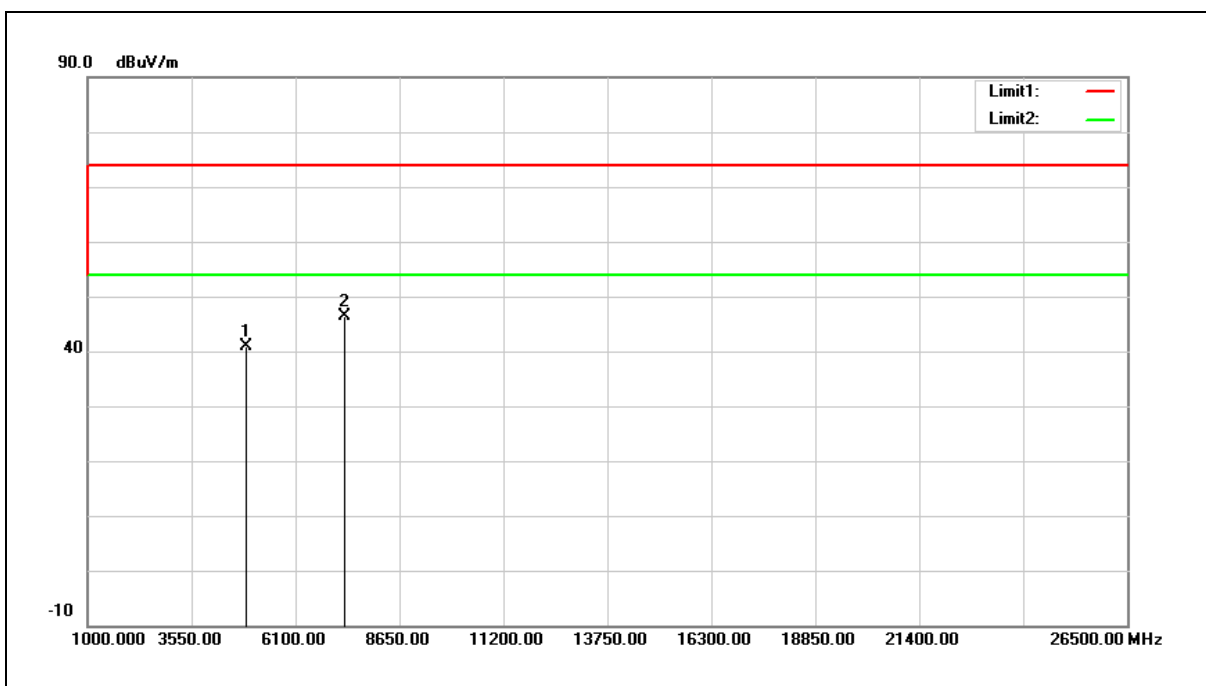
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4804.000	37.90	2.80	40.70	74.00	-33.30	peak
2	7206.000	37.76	8.82	46.58	74.00	-27.42	peak

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:	Harmonic		
Frequency:	2441 MHz		
Mode:	Mode 4		
Ant.Polar.:	Horizontal		



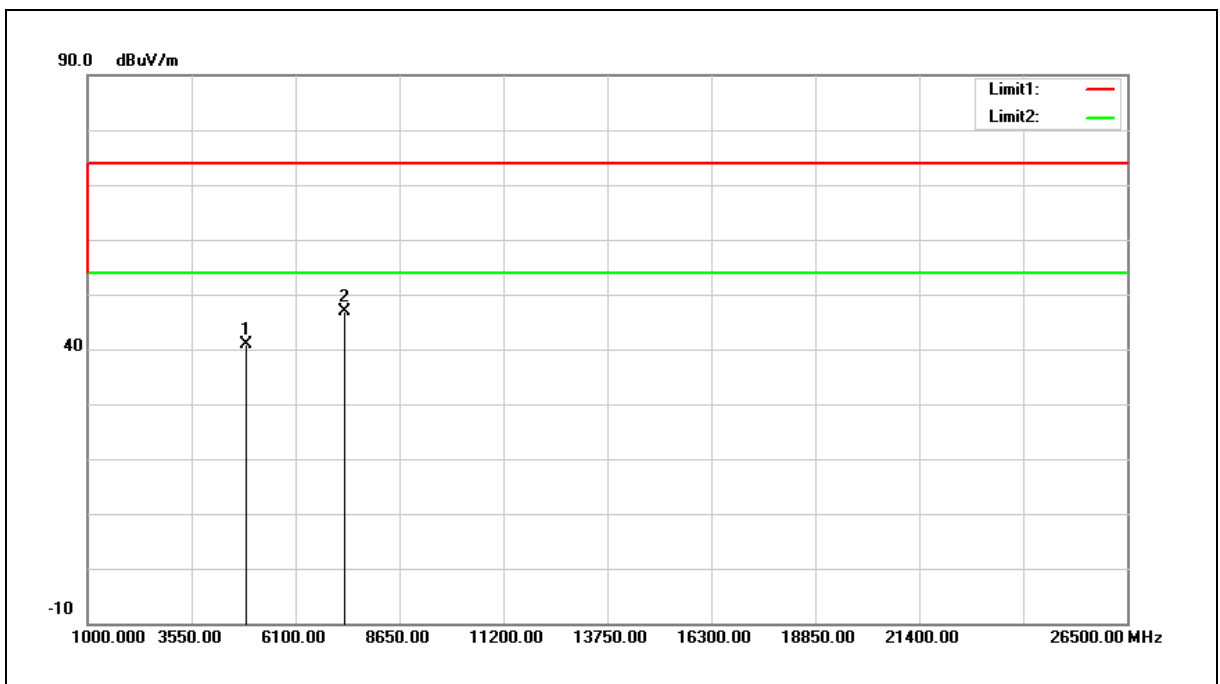
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4882.000	37.96	2.98	40.94	74.00	-33.06	peak
2	7323.000	37.22	9.18	46.40	74.00	-27.60	peak

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:	2441 MHz		
Mode:	Mode 4		
Ant.Polar.:	Vertical		



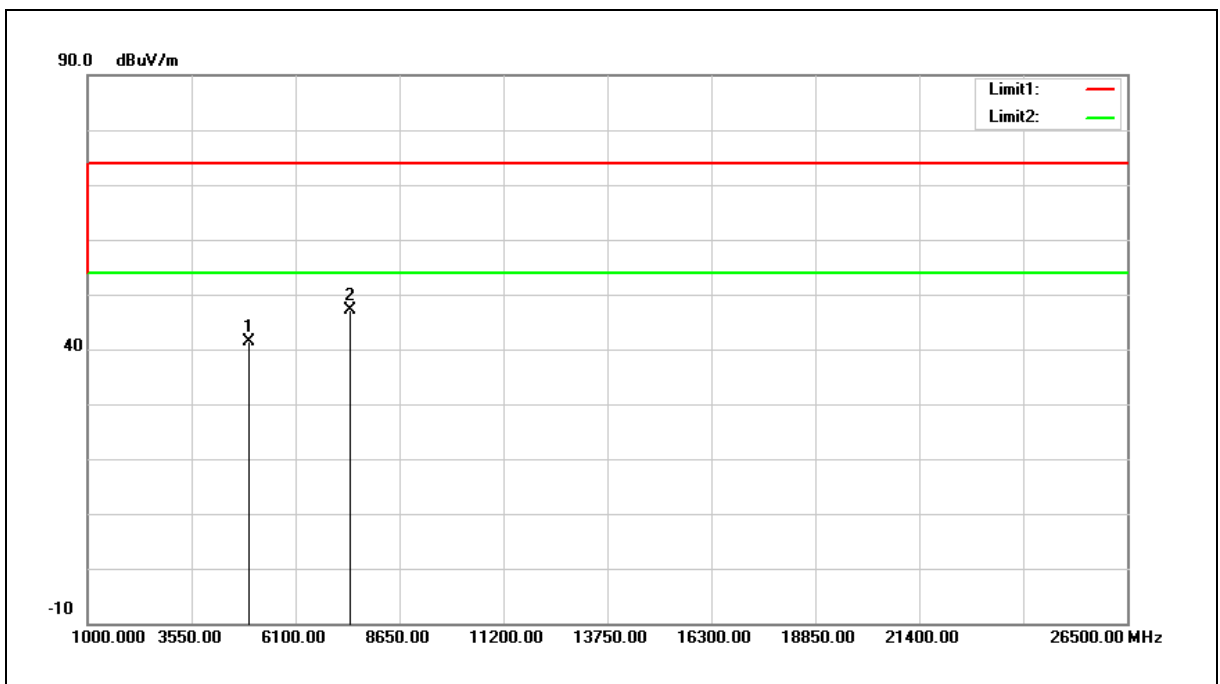
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4882.000	37.94	2.98	40.92	74.00	-33.08	peak
2	7323.000	37.73	9.18	46.91	74.00	-27.09	peak

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:	2480 MHz		
Mode:	Mode 4		
Ant.Polar.:	Horizontal		



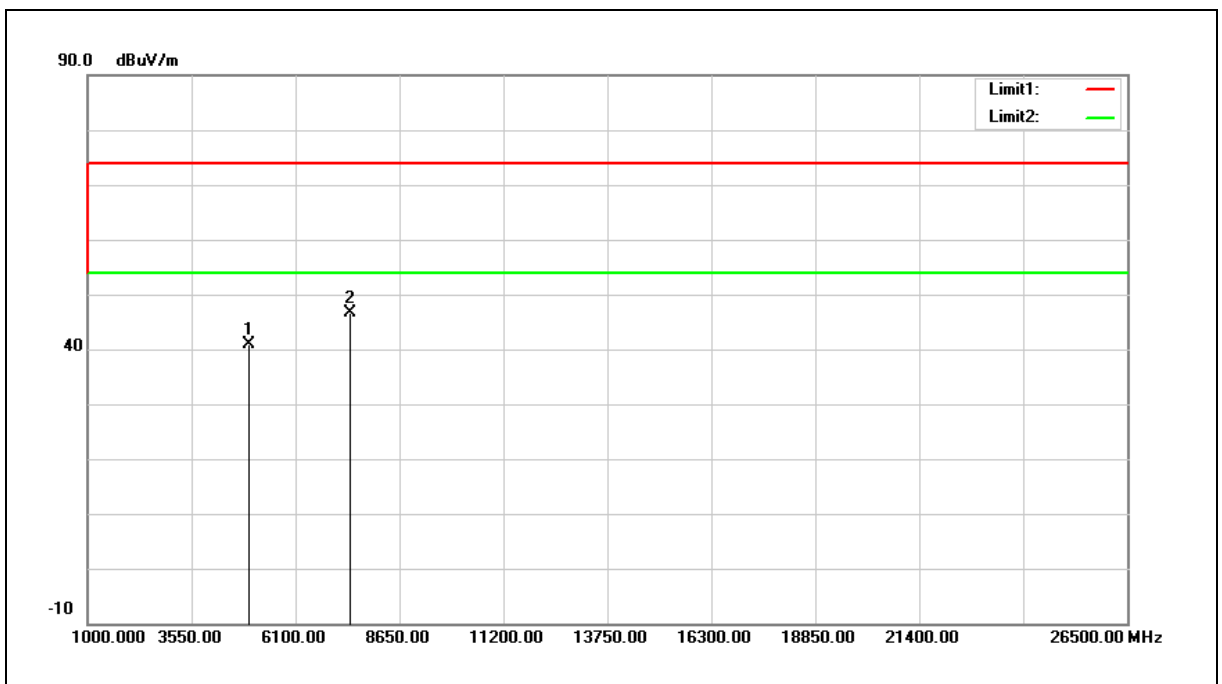
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4960.000	38.14	3.17	41.31	74.00	-32.69	peak
2	7440.000	37.65	9.55	47.20	74.00	-26.80	peak

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:	2480 MHz		
Mode:	Mode 4		
Ant.Polar.:	Vertical		



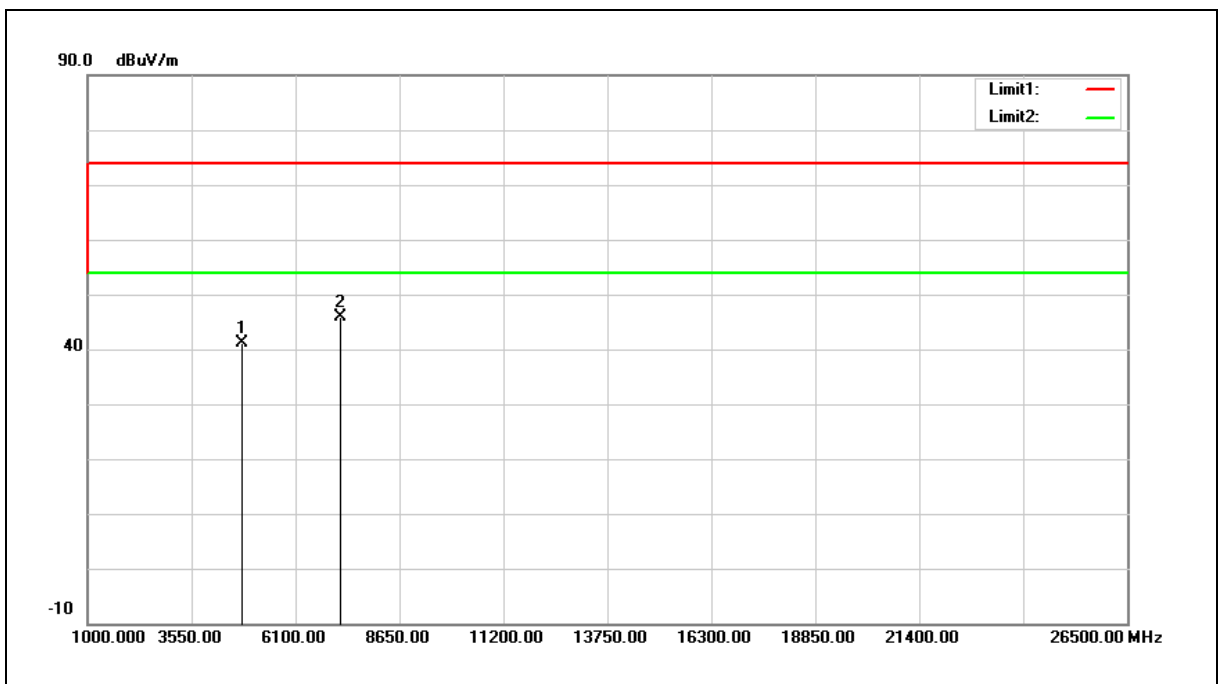
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4960.000	37.75	3.17	40.92	74.00	-33.08	peak
2	7440.000	37.13	9.55	46.68	74.00	-27.32	peak

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:	2402 MHz		
Mode:	Mode 5		
Ant.Polar.:	Horizontal		



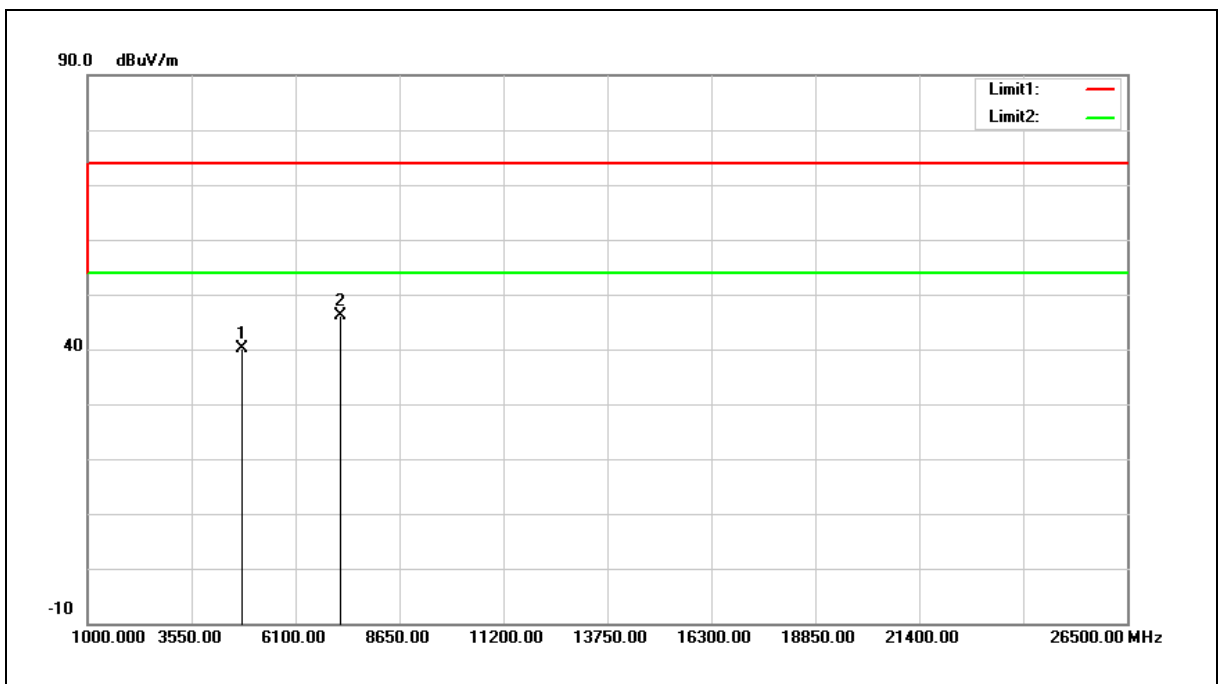
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4804.000	38.34	2.80	41.14	74.00	-32.86	peak
2	7206.000	37.15	8.82	45.97	74.00	-28.03	peak

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:	2402 MHz		
Mode:	Mode 5		
Ant.Polar.:	Vertical		



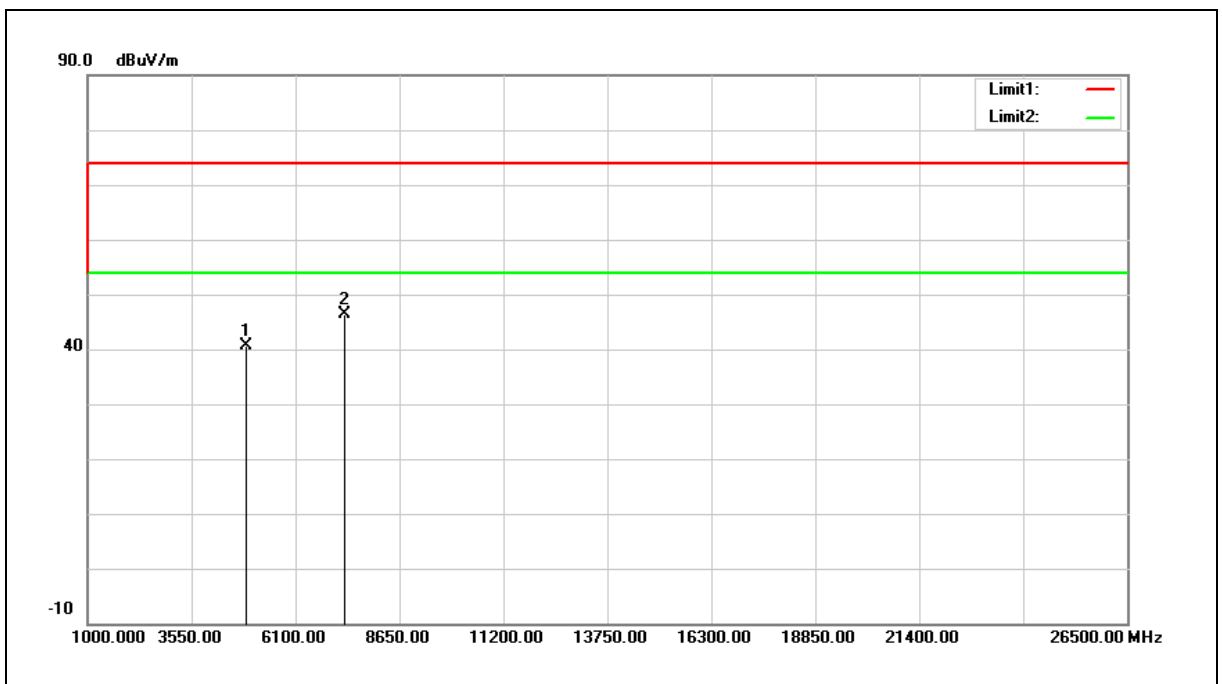
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4804.000	37.38	2.80	40.18	74.00	-33.82	peak
2	7206.000	37.24	8.82	46.06	74.00	-27.94	peak

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:	Harmonic		
Frequency:	2440 MHz		
Mode:	Mode 5		
Ant.Polar.:	Horizontal		



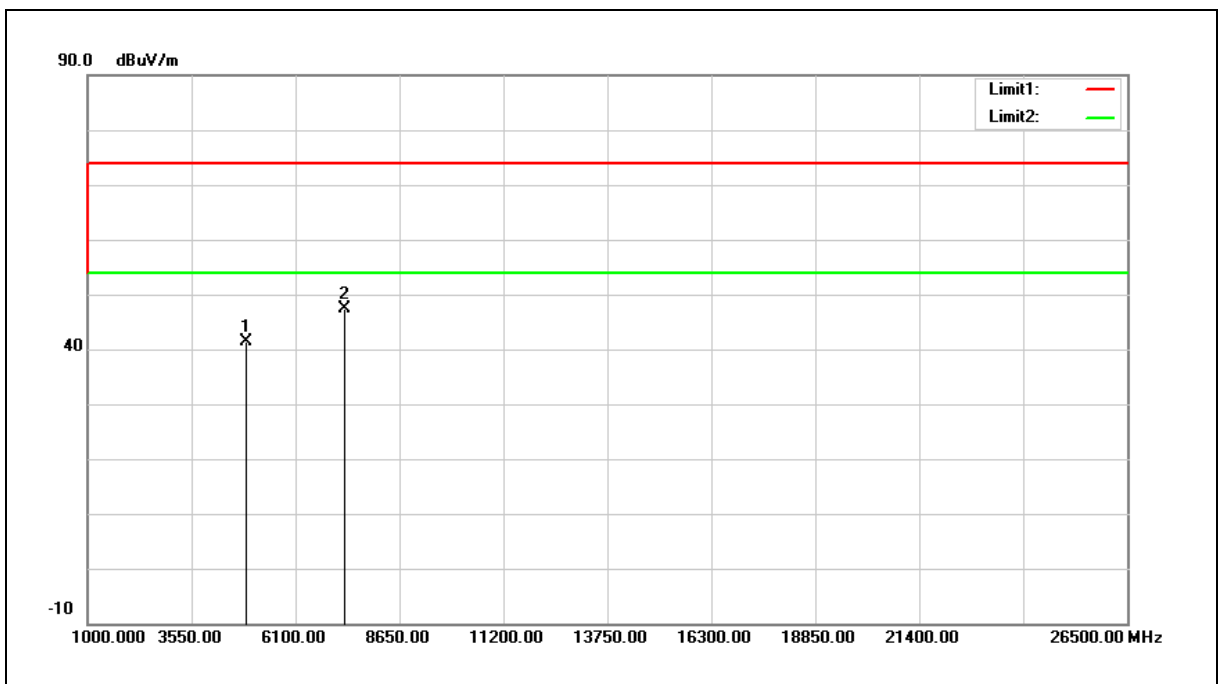
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4880.000	37.76	2.97	40.73	74.00	-33.27	peak
2	7320.000	37.09	9.18	46.27	74.00	-27.73	peak

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:	2440 MHz		
Mode:	Mode 5		
Ant.Polar.:	Vertical		



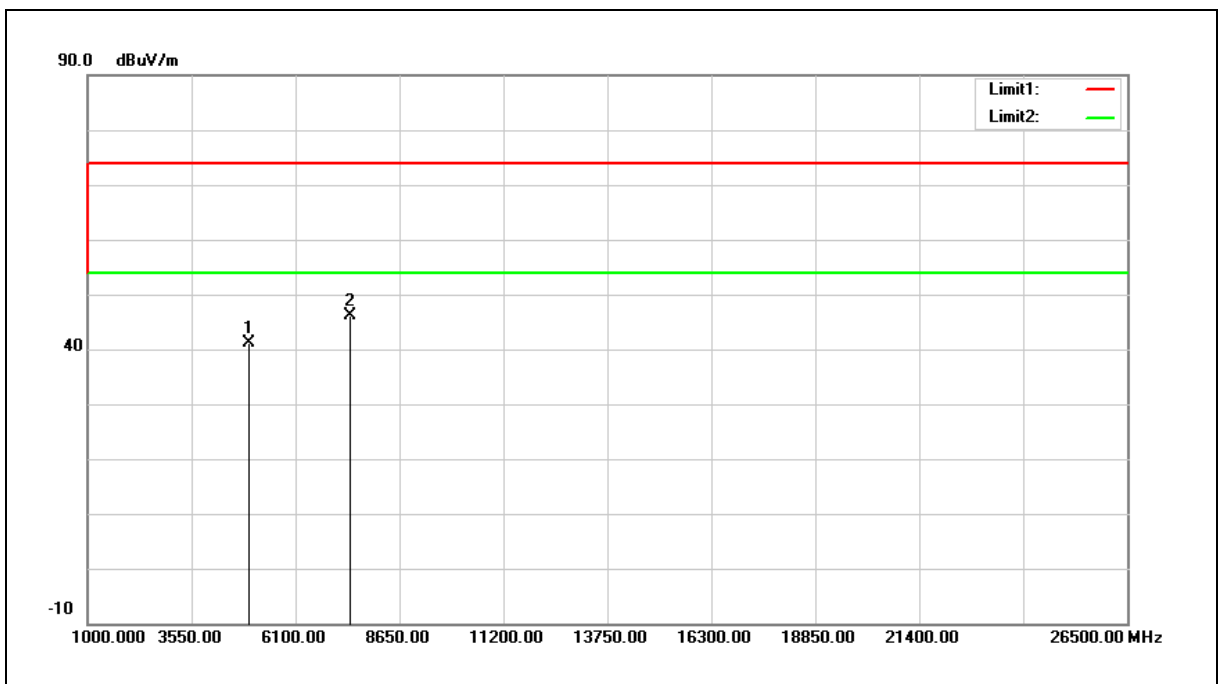
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4880.000	38.34	2.97	41.31	74.00	-32.69	peak
2	7320.000	38.28	9.18	47.46	74.00	-26.54	peak

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:	2480 MHz		
Mode:	Mode 5		
Ant.Polar.:	Horizontal		



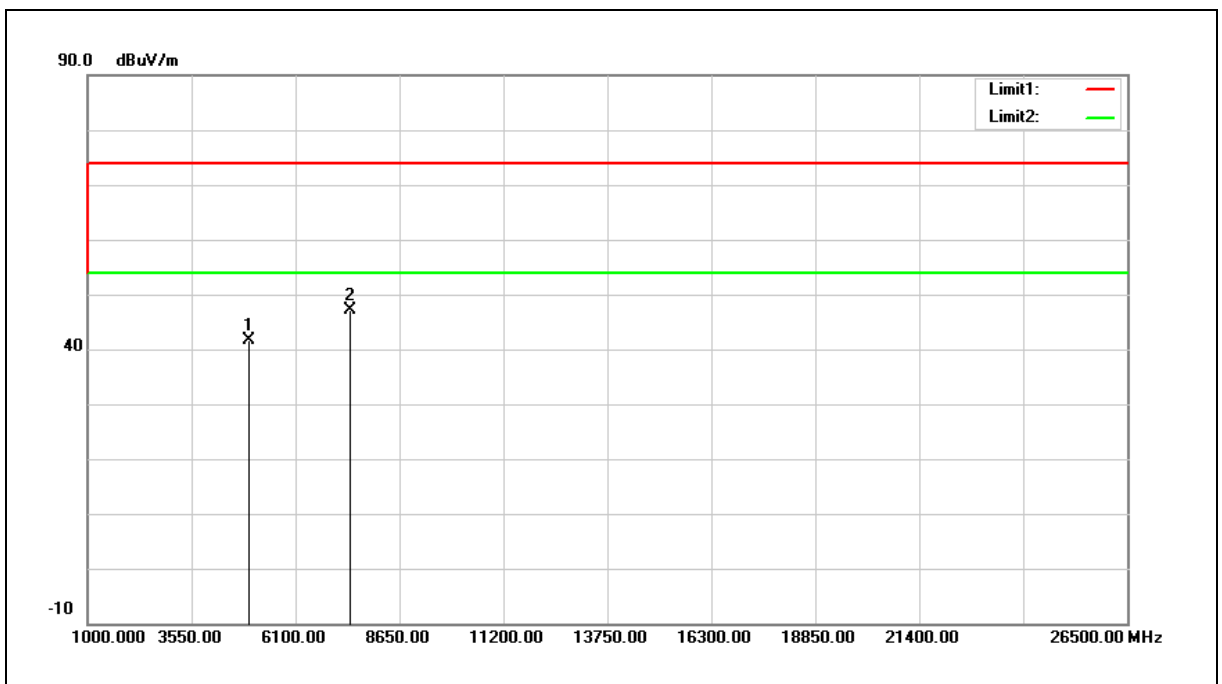
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4960.000	38.01	3.17	41.18	74.00	-32.82	peak
2	7440.000	36.54	9.55	46.09	74.00	-27.91	peak

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:	2480 MHz		
Mode:	Mode 5		
Ant.Polar.:	Vertical		



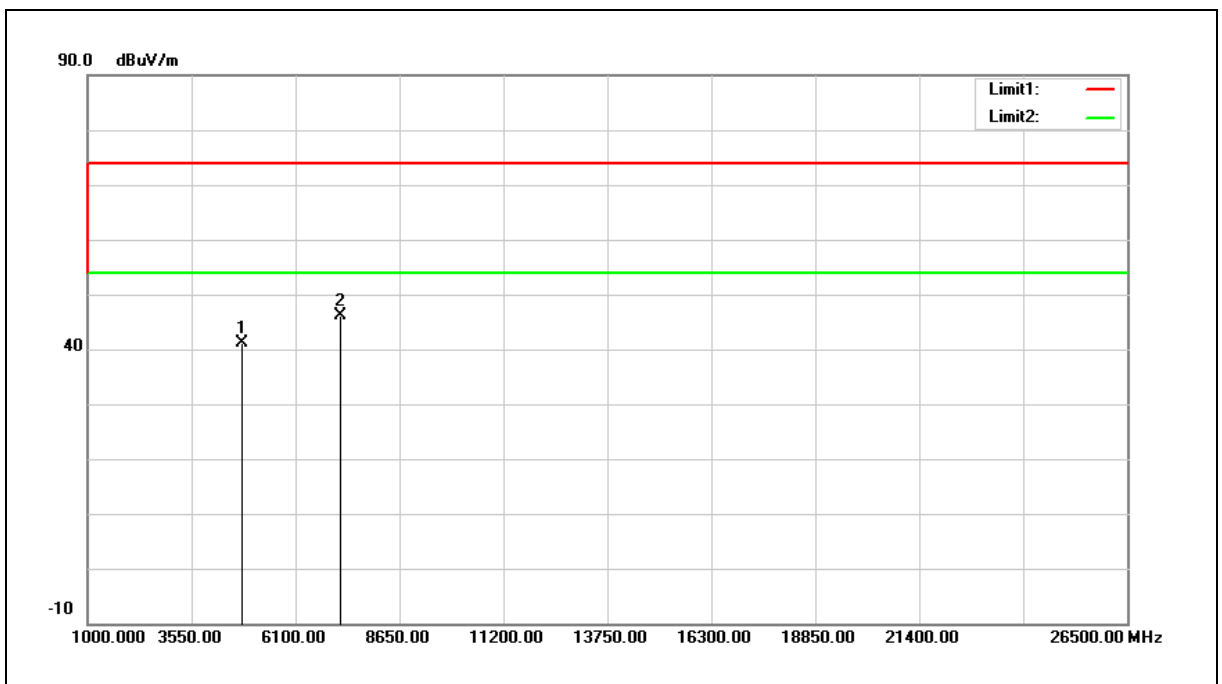
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4960.000	38.52	3.17	41.69	74.00	-32.31	peak
2	7440.000	37.63	9.55	47.18	74.00	-26.82	peak

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:	2402 MHz		
Mode:	Mode 6		
Ant.Polar.:	Horizontal		



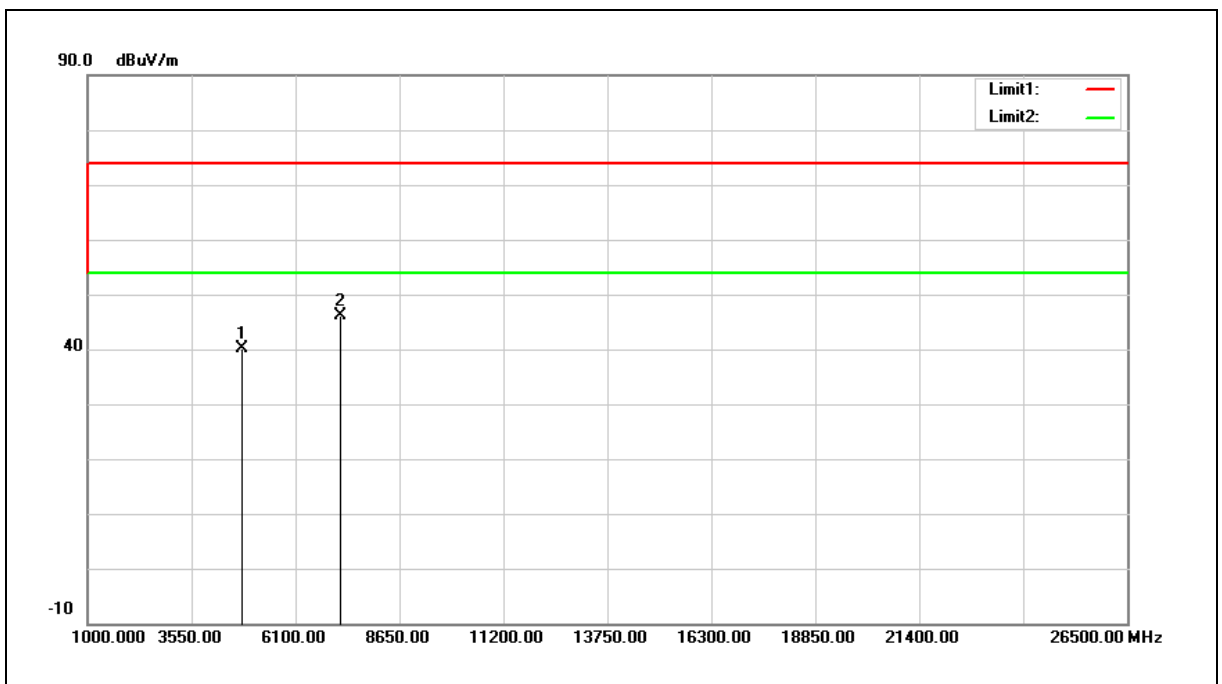
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4804.000	38.28	2.80	41.08	74.00	-32.92	peak
2	7206.000	37.19	8.82	46.01	74.00	-27.99	peak

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:	2402 MHz		
Mode:	Mode 6		
Ant.Polar.:	Vertical		



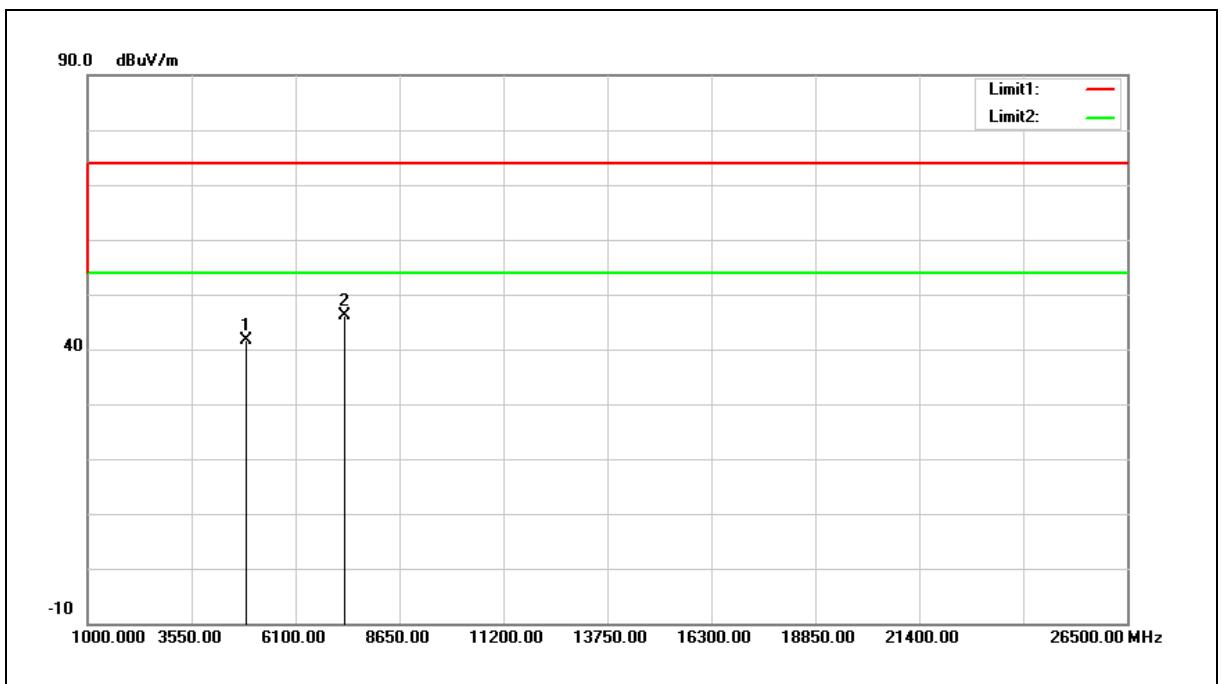
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4804.000	37.44	2.80	40.24	74.00	-33.76	peak
2	7206.000	37.32	8.82	46.14	74.00	-27.86	peak

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:	2440 MHz		
Mode:	Mode 6		
Ant.Polar.:	Horizontal		



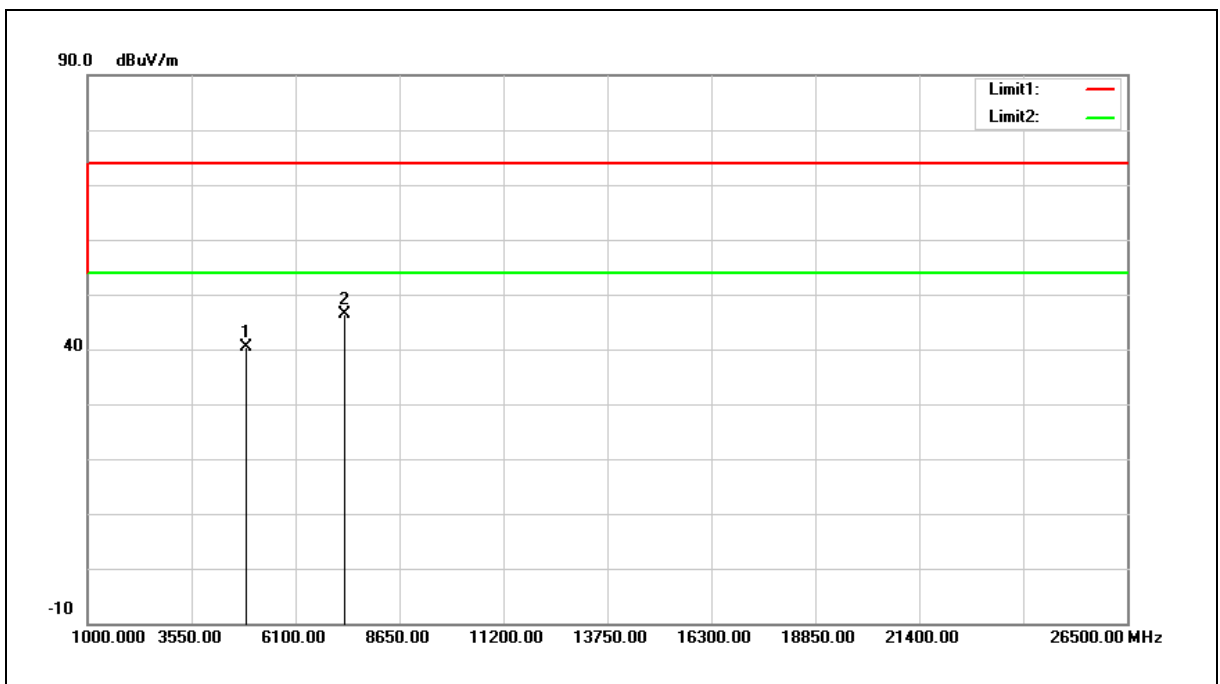
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4880.000	38.75	2.97	41.72	74.00	-32.28	peak
2	7320.000	36.90	9.18	46.08	74.00	-27.92	peak

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:	2440 MHz		
Mode:	Mode 6		
Ant.Polar.:	Vertical		



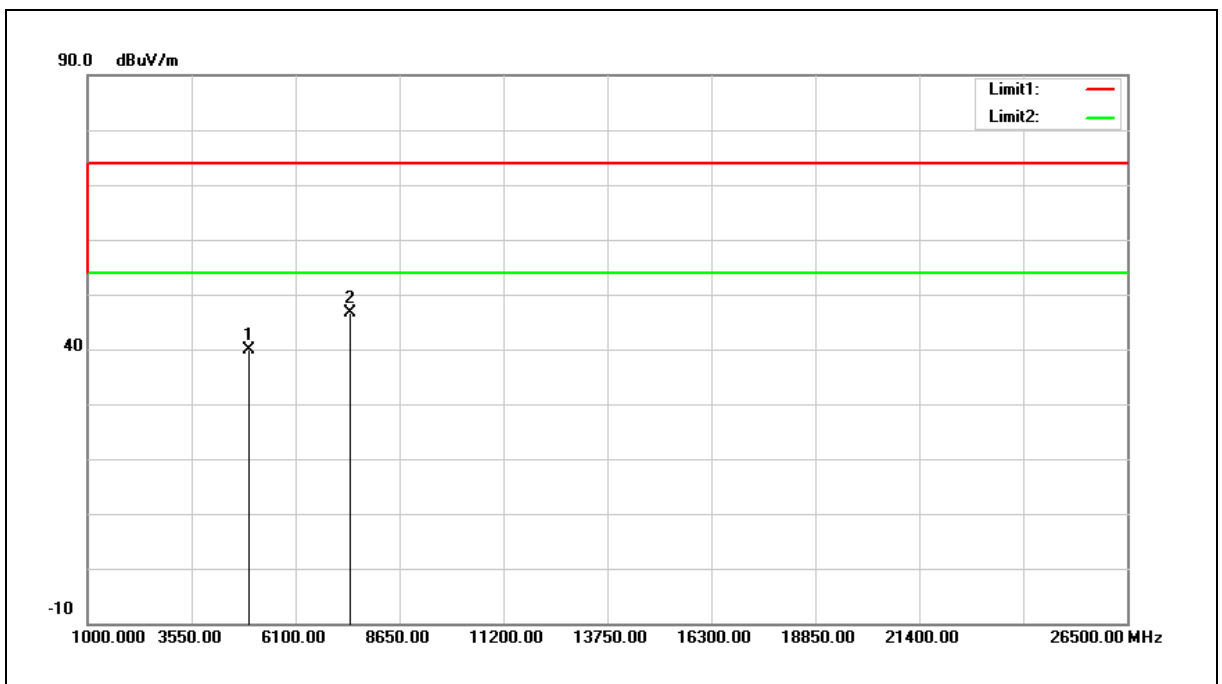
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4880.000	37.34	2.97	40.31	74.00	-33.69	peak
2	7320.000	37.11	9.18	46.29	74.00	-27.71	peak

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:	2480 MHz		
Mode:	Mode 6		
Ant.Polar.:	Horizontal		



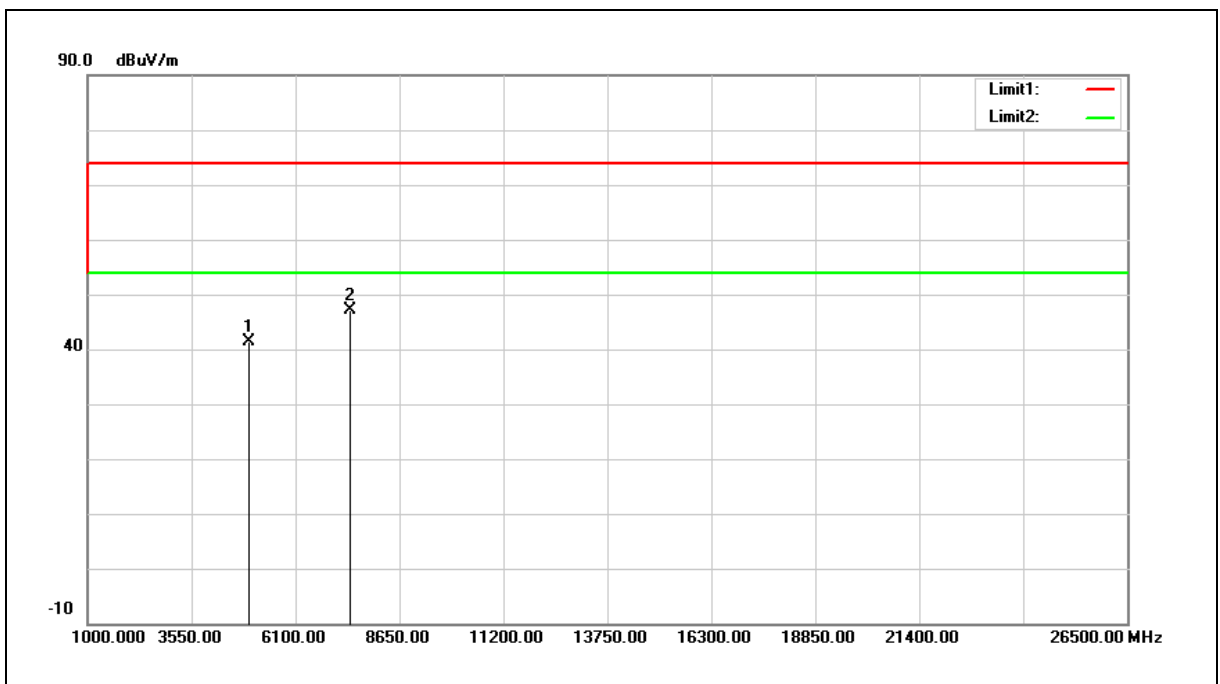
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4960.000	36.74	3.17	39.91	74.00	-34.09	peak
2	7440.000	37.16	9.55	46.71	74.00	-27.29	peak

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:	2480 MHz		
Mode:	Mode 6		
Ant.Polar.:	Vertical		



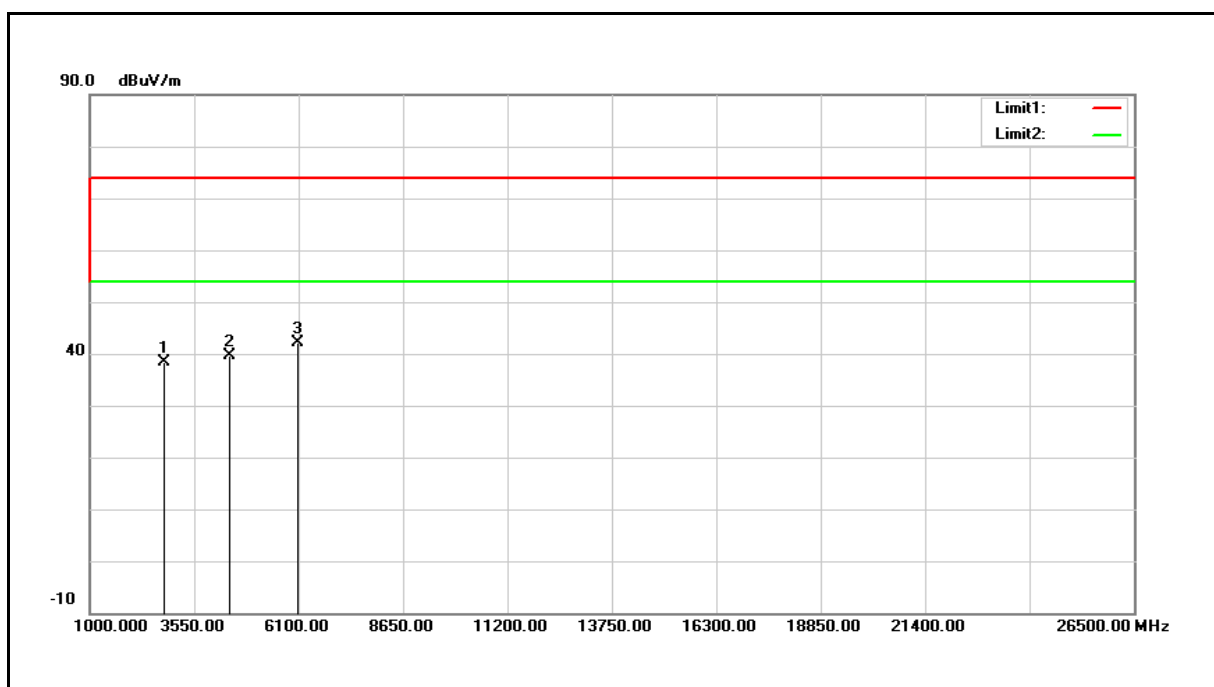
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4960.000	38.31	3.17	41.48	74.00	-32.52	peak
2	7440.000	37.64	9.55	47.19	74.00	-26.81	peak

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:	Simultaneous Transmitting		
	(Bluetooth + WLAN 2.4 GHz)		
Ant.Polar.:	Horizontal		



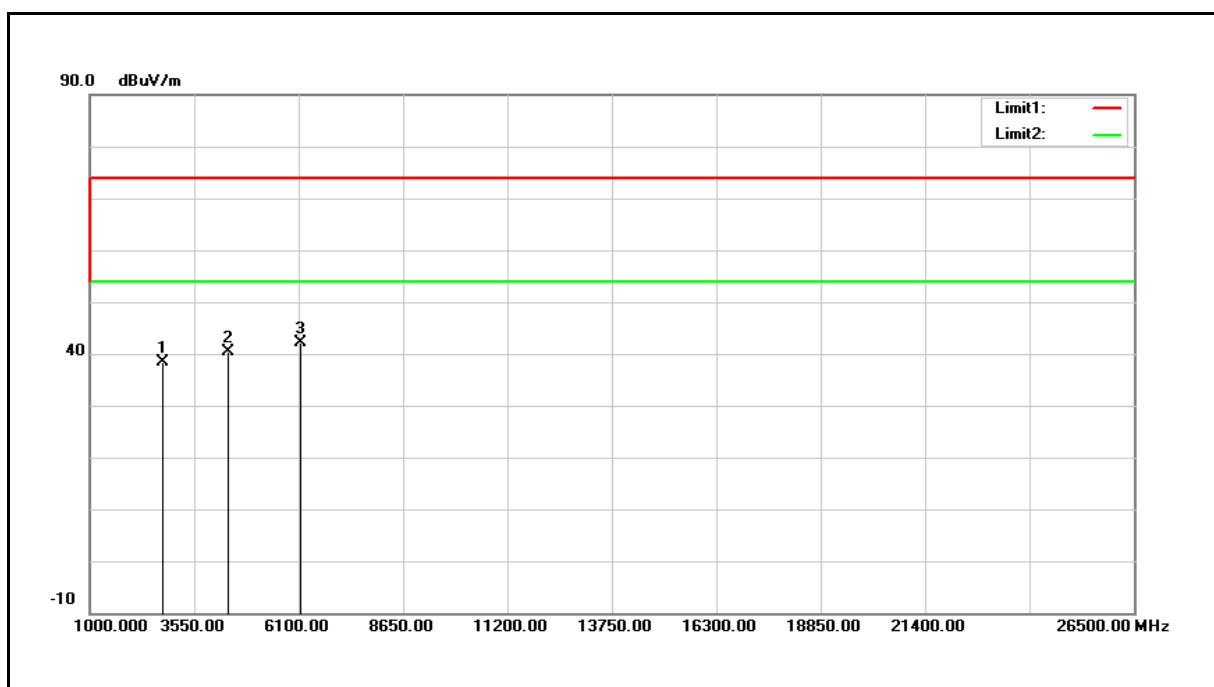
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2802.000	40.25	-1.77	38.48	74.00	-35.52	peak
2	4417.000	37.79	1.86	39.65	74.00	-34.35	peak
3	6083.000	36.80	5.24	42.04	74.00	-31.96	peak

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:	Simultaneous Transmitting (Bluetooth + WLAN 2.4 GHz)		
Ant.Polar.:	Vertical		



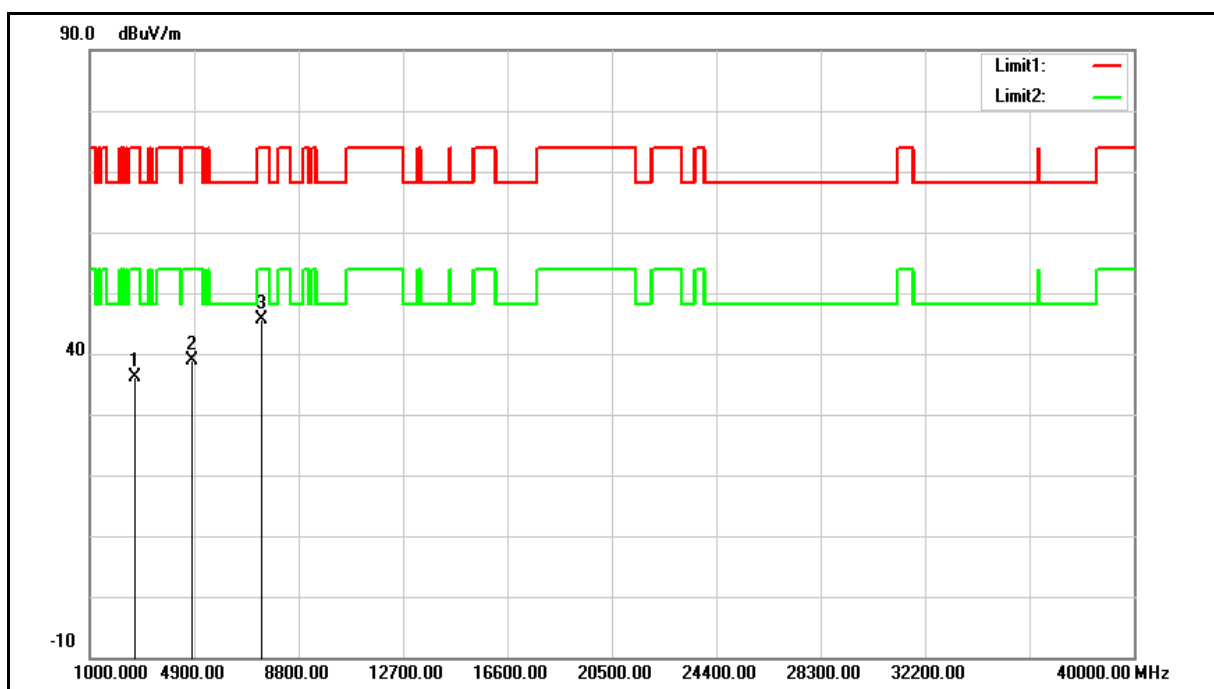
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2785.000	40.22	-1.83	38.39	74.00	-35.61	peak
2	4383.000	38.59	1.77	40.36	74.00	-33.64	peak
3	6151.000	36.58	5.45	42.03	74.00	-31.97	peak

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:	Harmonic		
Mode:	Simultaneous Transmitting (Bluetooth + 5 GHz)		
Ant.Polar.:	Horizontal		



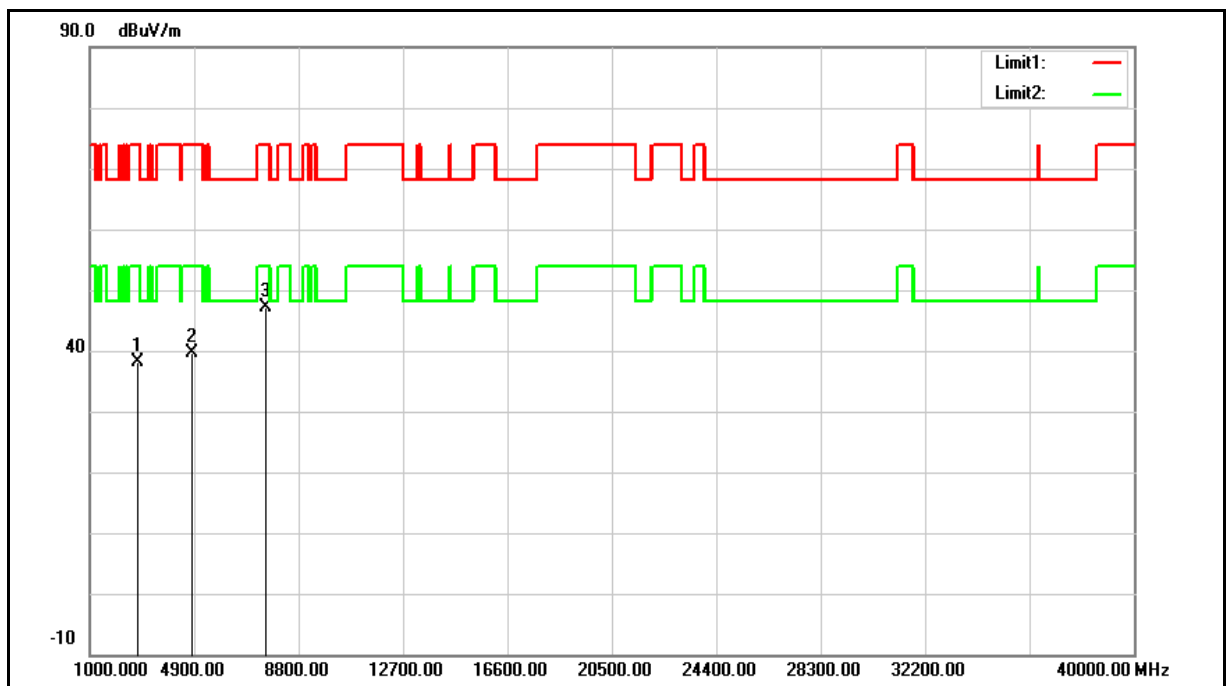
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2666.000	38.41	-2.28	36.13	74.00	-37.87	peak
2	4842.000	35.92	2.88	38.80	74.00	-35.20	peak
3	7409.000	36.12	9.46	45.58	74.00	-28.42	peak

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:	Harmonic		
Mode:	Simultaneous Transmitting		
	(Bluetooth + 5 GHz)		
Ant.Polar.:	Vertical		



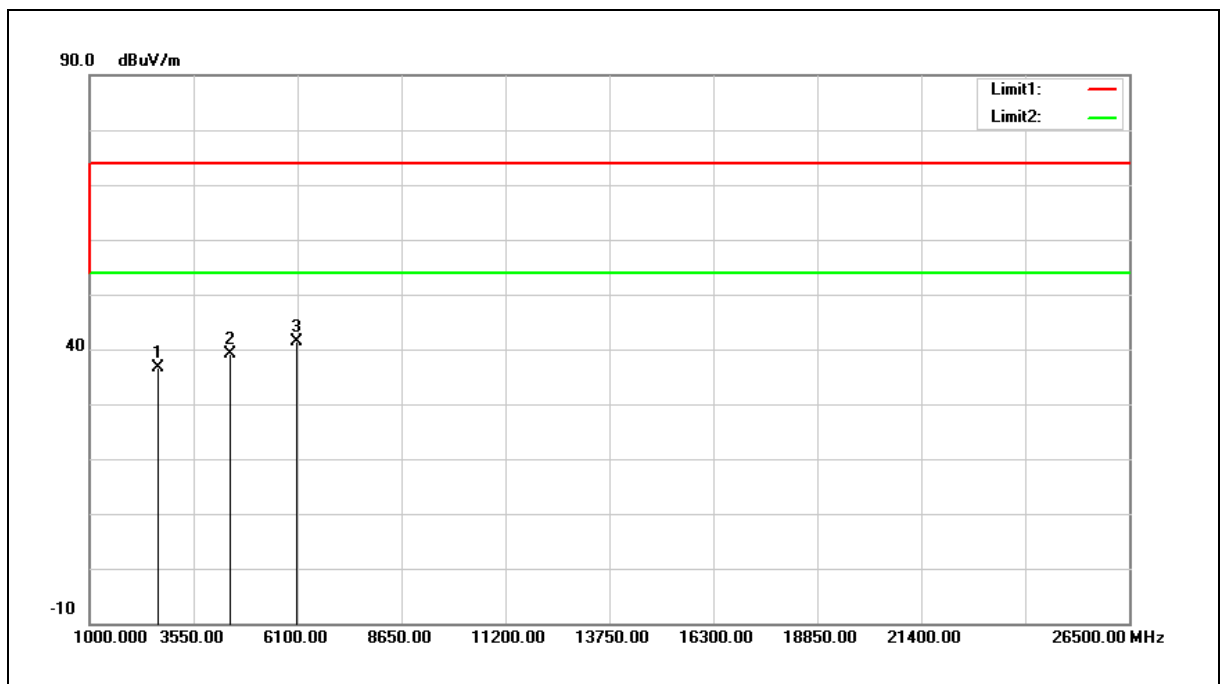
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2785.000	39.95	-1.83	38.12	74.00	-35.88	peak
2	4825.000	36.70	2.85	39.55	74.00	-34.45	peak
3	7562.000	37.42	9.81	47.23	74.00	-26.77	peak

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 7		
Ant.Polar.:	Horizontal		
Description:			



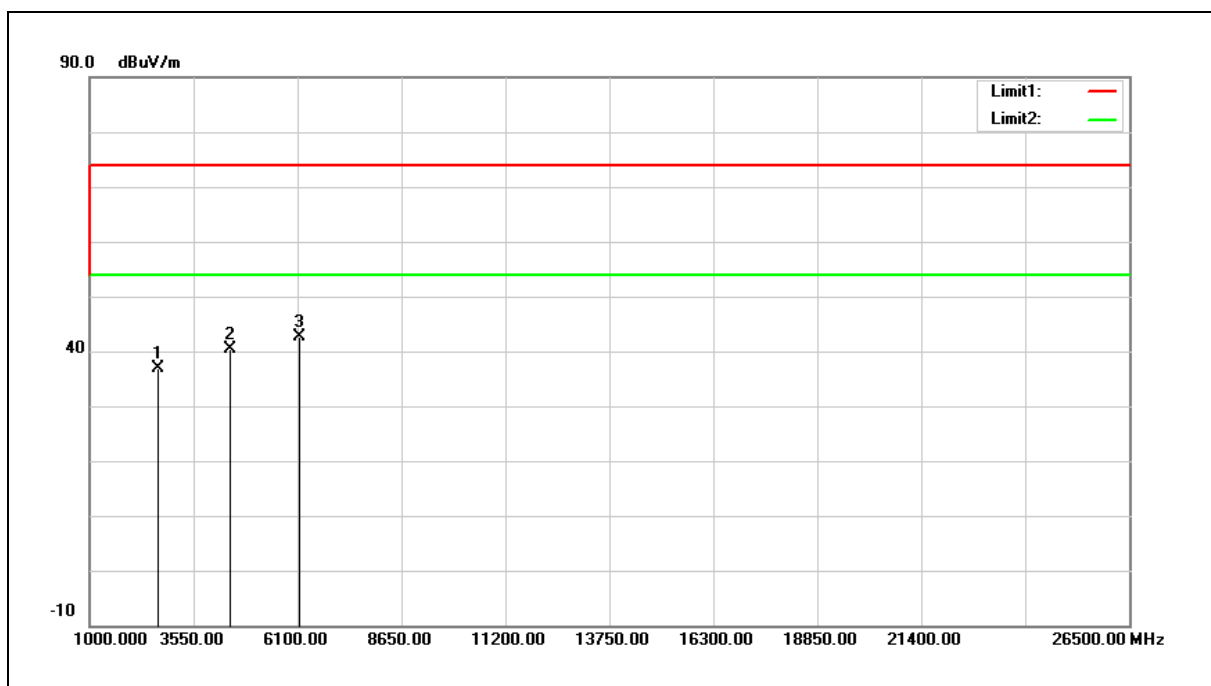
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2683.000	38.80	-2.21	36.59	74.00	-37.41	peak
2	4434.000	37.30	1.89	39.19	74.00	-34.81	peak
3	6083.000	36.08	5.24	41.32	74.00	-32.68	peak

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 7		
Ant.Polar.:	Vertical		
Description:			



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2683.000	39.10	-2.21	36.89	74.00	-37.11	peak
2	4434.000	38.43	1.89	40.32	74.00	-33.68	peak
3	6151.000	37.18	5.45	42.63	74.00	-31.37	peak

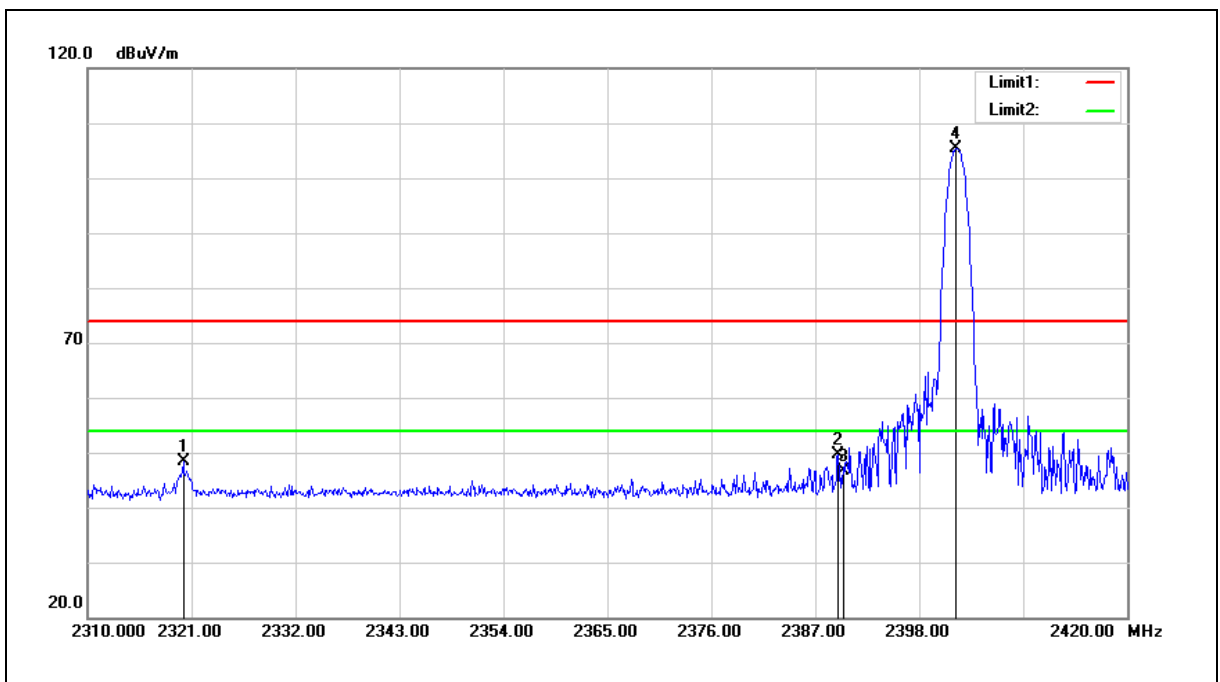
Note: 1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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.

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Standard:	LP0002	Test Distance:	3 m
Test item:	Band edge		
Frequency:	2402 MHz		
Mode:	Mode 2		
Ant.Polar.:	Horizontal		



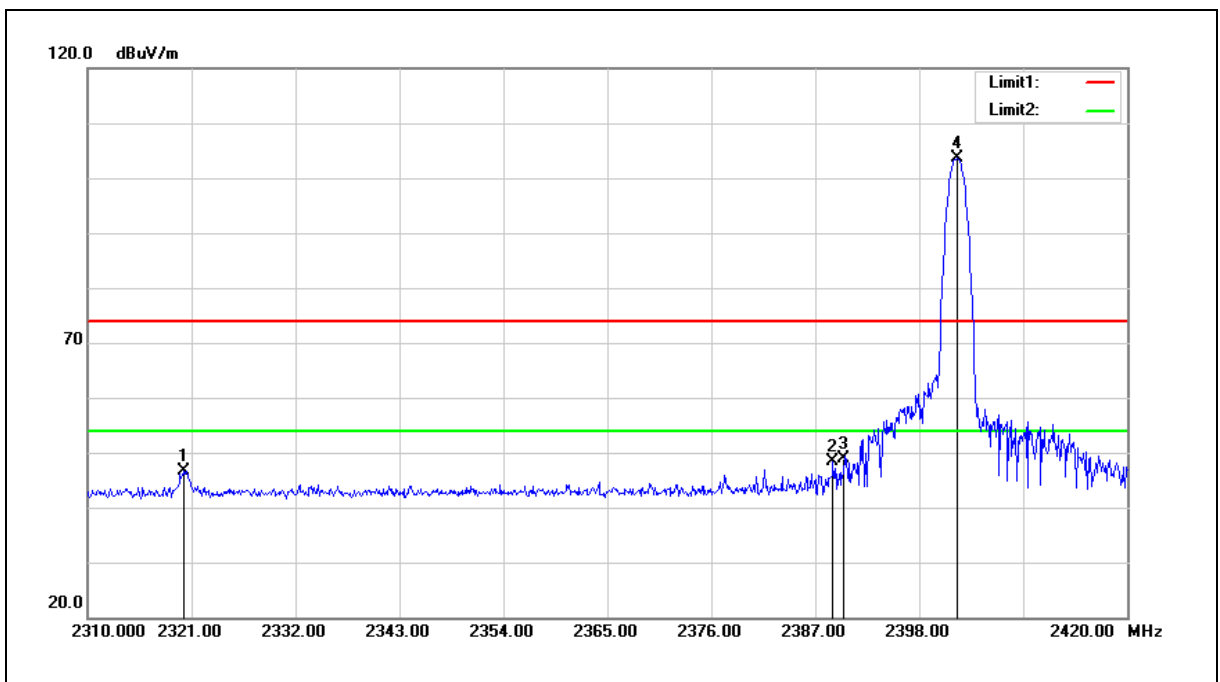
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2320.120	51.87	-3.53	48.34	74.00	-25.66	peak
2	2389.420	52.89	-3.28	49.61	74.00	-24.39	peak
3	2390.000	49.83	-3.28	46.55	74.00	-27.45	peak
4	2401.850	108.50	-3.23	105.27	--	--	peak

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:	Band edge		
Frequency:	2402 MHz		
Mode:	Mode 2		
Ant.Polar.:	Vertical		



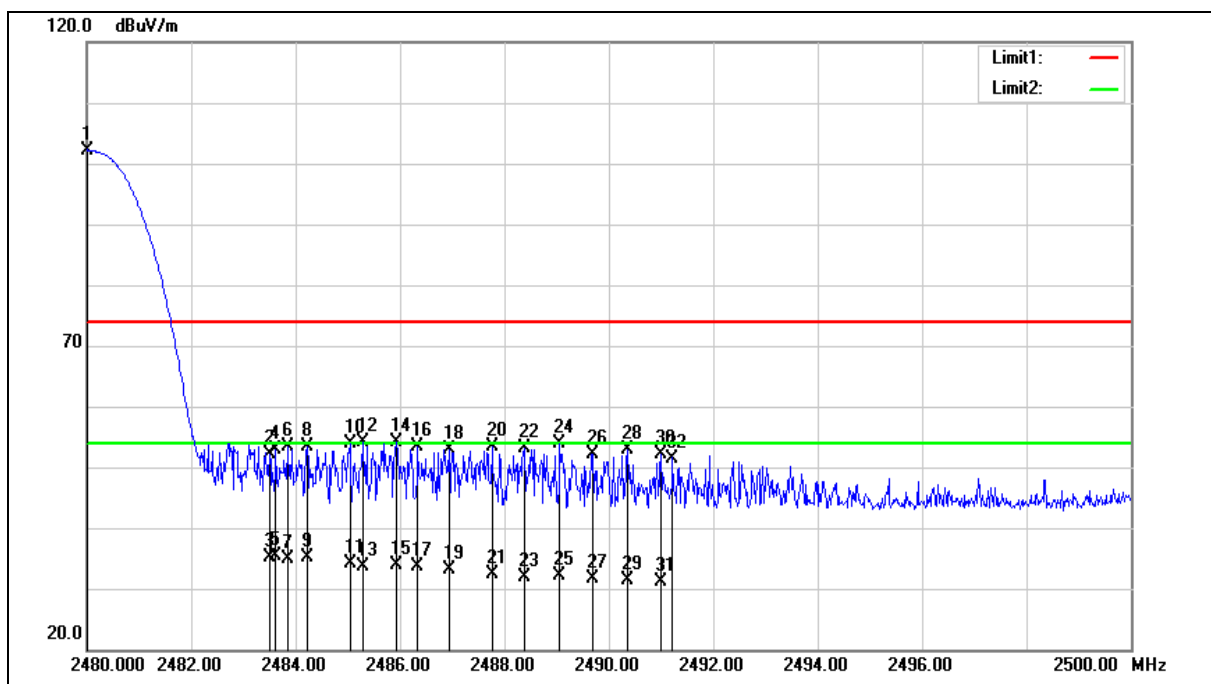
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2320.120	50.18	-3.53	46.65	74.00	-27.35	peak
2	2388.870	51.66	-3.28	48.38	74.00	-25.62	peak
3	2390.000	52.05	-3.28	48.77	74.00	-25.23	peak
4	2402.070	106.79	-3.23	103.56	--	--	peak

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:	2480 MHz		
Mode:	Mode 2		
Ant.Polar.:	Horizontal		



Standard:	LP0002	Test Distance:	3 m
Test item:	Band edge		
Frequency:	2480 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	2480.000	105.19	-2.94	102.25	--	--	peak
2	2483.500	55.03	-2.93	52.10	74.00	-21.90	peak
3	2483.500	38.14	-2.93	35.21	54.00	-18.79	AVG
4	2483.620	55.75	-2.93	52.82	74.00	-21.18	peak
5	2483.620	38.20	-2.93	35.27	54.00	-18.73	AVG
6	2483.840	56.26	-2.93	53.33	74.00	-20.67	peak
7	2483.840	37.92	-2.93	34.99	54.00	-19.01	AVG
8	2484.220	56.20	-2.93	53.27	74.00	-20.73	peak
9	2484.220	37.94	-2.93	35.01	54.00	-18.99	AVG
10	2485.040	56.71	-2.92	53.79	74.00	-20.21	peak
11	2485.040	36.93	-2.92	34.01	54.00	-19.99	AVG
12	2485.280	56.99	-2.92	54.07	74.00	-19.93	peak
13	2485.280	36.62	-2.92	33.70	54.00	-20.30	AVG
14	2485.920	57.02	-2.92	54.10	74.00	-19.90	peak
15	2485.920	36.70	-2.92	33.78	54.00	-20.22	AVG
16	2486.340	56.38	-2.92	53.46	74.00	-20.54	peak
17	2486.340	36.53	-2.92	33.61	54.00	-20.39	AVG
18	2486.940	55.90	-2.92	52.98	74.00	-21.02	peak
19	2486.940	36.04	-2.92	33.12	54.00	-20.88	AVG
20	2487.760	56.37	-2.92	53.45	74.00	-20.55	peak
21	2487.760	35.20	-2.92	32.28	54.00	-21.72	AVG
22	2488.380	56.04	-2.91	53.13	74.00	-20.87	peak
23	2488.380	34.86	-2.91	31.95	54.00	-22.05	AVG
24	2489.060	56.78	-2.91	53.87	74.00	-20.13	peak
25	2489.060	34.93	-2.91	32.02	54.00	-21.98	AVG
26	2489.700	55.13	-2.91	52.22	74.00	-21.78	peak
27	2489.700	34.66	-2.91	31.75	54.00	-22.25	AVG

Standard:	LP0002	Test Distance:	3 m
Test item:	Band edge		
Frequency:	2480 MHz		
Mode:	Mode 2		
Ant.Polar.:	Horizontal		

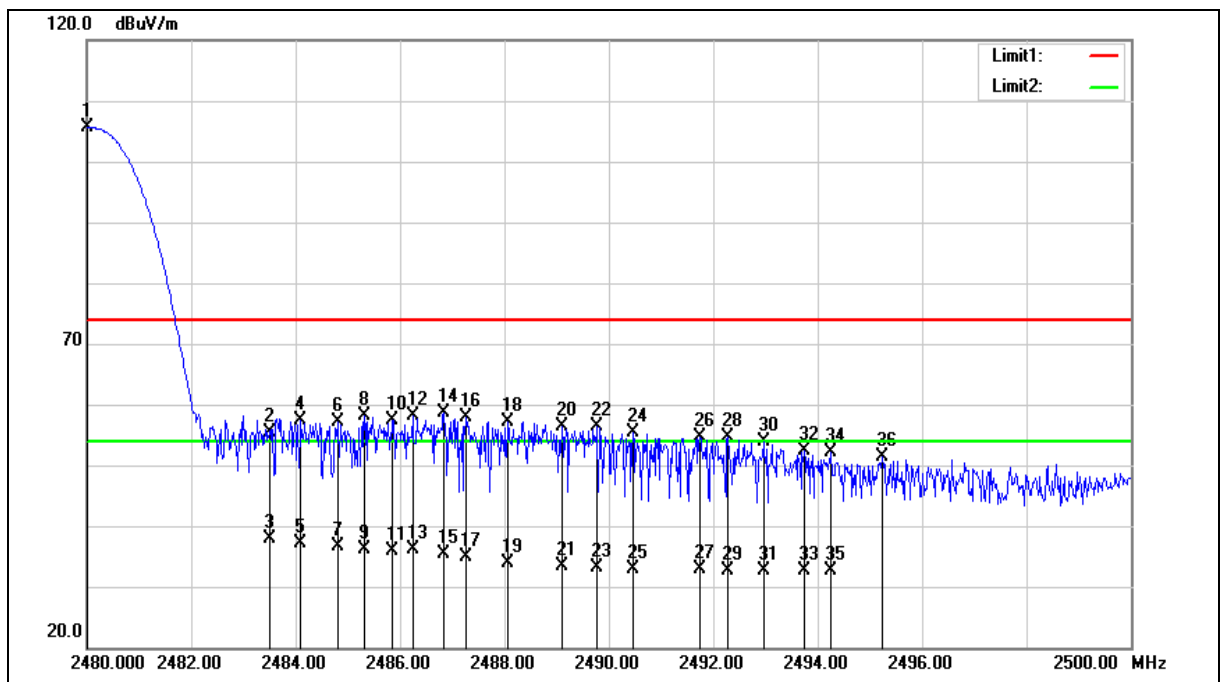
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
28	2490.360	55.87	-2.91	52.96	74.00	-21.04	peak
29	2490.360	34.38	-2.91	31.47	54.00	-22.53	AVG
30	2491.000	55.12	-2.91	52.21	74.00	-21.79	peak
31	2491.000	34.12	-2.91	31.21	54.00	-22.79	AVG
32	2491.220	54.41	-2.91	51.50	74.00	-22.50	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:	2480 MHz		
Mode:	Mode 2		
Ant.Polar.:	Vertical		



Standard:	LP0002	Test Distance:	3 m
Test item:	Band edge		
Frequency:	2480 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	2480.020	108.66	-2.94	105.72	--	--	peak
2	2483.500	58.21	-2.93	55.28	74.00	-18.72	peak
3	2483.500	40.93	-2.93	38.00	54.00	-16.00	AVG
4	2484.100	60.35	-2.93	57.42	74.00	-16.58	peak
5	2484.100	40.05	-2.93	37.12	54.00	-16.88	AVG
6	2484.800	60.15	-2.93	57.22	74.00	-16.78	peak
7	2484.800	39.57	-2.93	36.64	54.00	-17.36	AVG
8	2485.320	61.09	-2.92	58.17	74.00	-15.83	peak
9	2485.320	39.12	-2.92	36.20	54.00	-17.80	AVG
10	2485.860	60.39	-2.92	57.47	74.00	-16.53	peak
11	2485.860	38.87	-2.92	35.95	54.00	-18.05	AVG
12	2486.240	60.98	-2.92	58.06	74.00	-15.94	peak
13	2486.240	38.98	-2.92	36.06	54.00	-17.94	AVG
14	2486.840	61.53	-2.92	58.61	74.00	-15.39	peak
15	2486.840	38.34	-2.92	35.42	54.00	-18.58	AVG
16	2487.260	60.86	-2.92	57.94	74.00	-16.06	peak
17	2487.260	37.73	-2.92	34.81	54.00	-19.19	AVG
18	2488.060	60.08	-2.92	57.16	74.00	-16.84	peak
19	2488.060	36.77	-2.92	33.85	54.00	-20.15	AVG
20	2489.100	59.27	-2.91	56.36	74.00	-17.64	peak
21	2489.100	36.41	-2.91	33.50	54.00	-20.50	AVG
22	2489.780	59.25	-2.91	56.34	74.00	-17.66	peak
23	2489.780	36.12	-2.91	33.21	54.00	-20.79	AVG
24	2490.460	58.28	-2.91	55.37	74.00	-18.63	peak
25	2490.460	35.68	-2.91	32.77	54.00	-21.23	AVG
26	2491.740	57.52	-2.90	54.62	74.00	-19.38	peak
27	2491.740	35.66	-2.90	32.76	54.00	-21.24	AVG

Standard:	LP0002	Test Distance:	3 m
Test item:	Band edge		
Frequency:	2480 MHz		
Mode:	Mode 2		
Ant.Polar.:	Vertical		

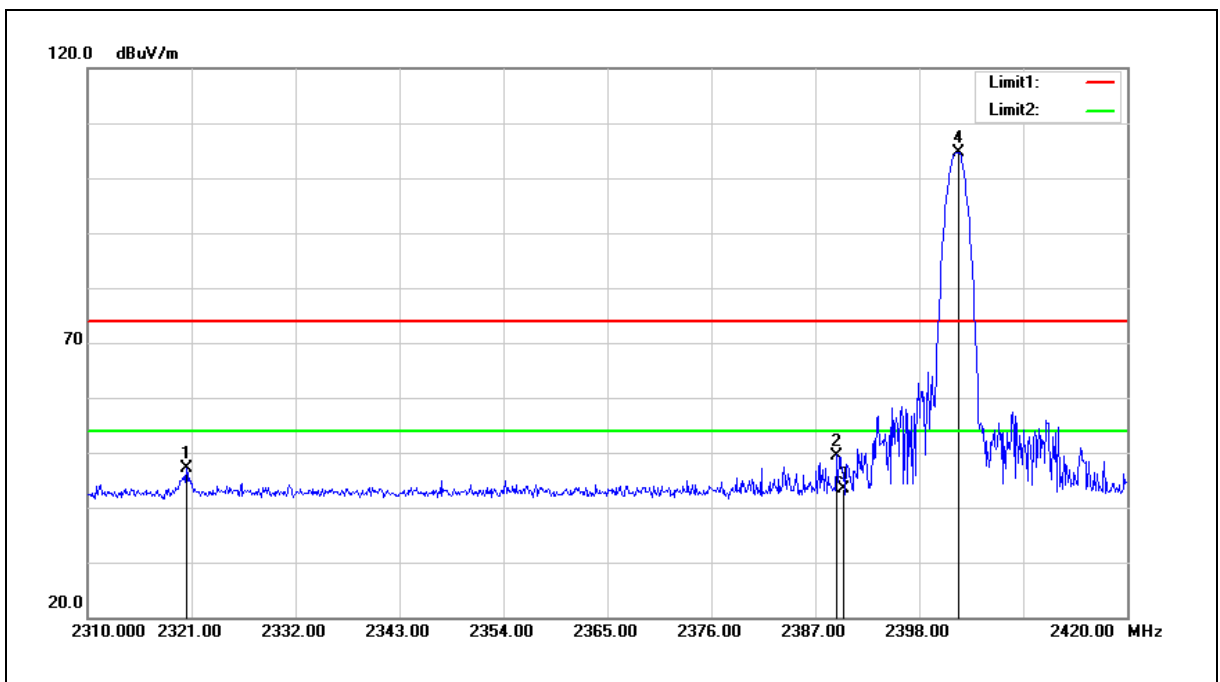
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
28	2492.280	57.49	-2.90	54.59	74.00	-19.41	peak
29	2492.280	35.61	-2.90	32.71	54.00	-21.29	AVG
30	2492.960	56.75	-2.90	53.85	74.00	-20.15	peak
31	2492.960	35.52	-2.90	32.62	54.00	-21.38	AVG
32	2493.740	55.36	-2.89	52.47	74.00	-21.53	peak
33	2493.740	35.48	-2.89	32.59	54.00	-21.41	AVG
34	2494.260	55.06	-2.89	52.17	74.00	-21.83	peak
35	2494.260	35.62	-2.89	32.73	54.00	-21.27	AVG
36	2495.240	54.31	-2.88	51.43	74.00	-22.57	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:	2402 MHz		
Mode:	Mode 4		
Ant.Polar.:	Horizontal		



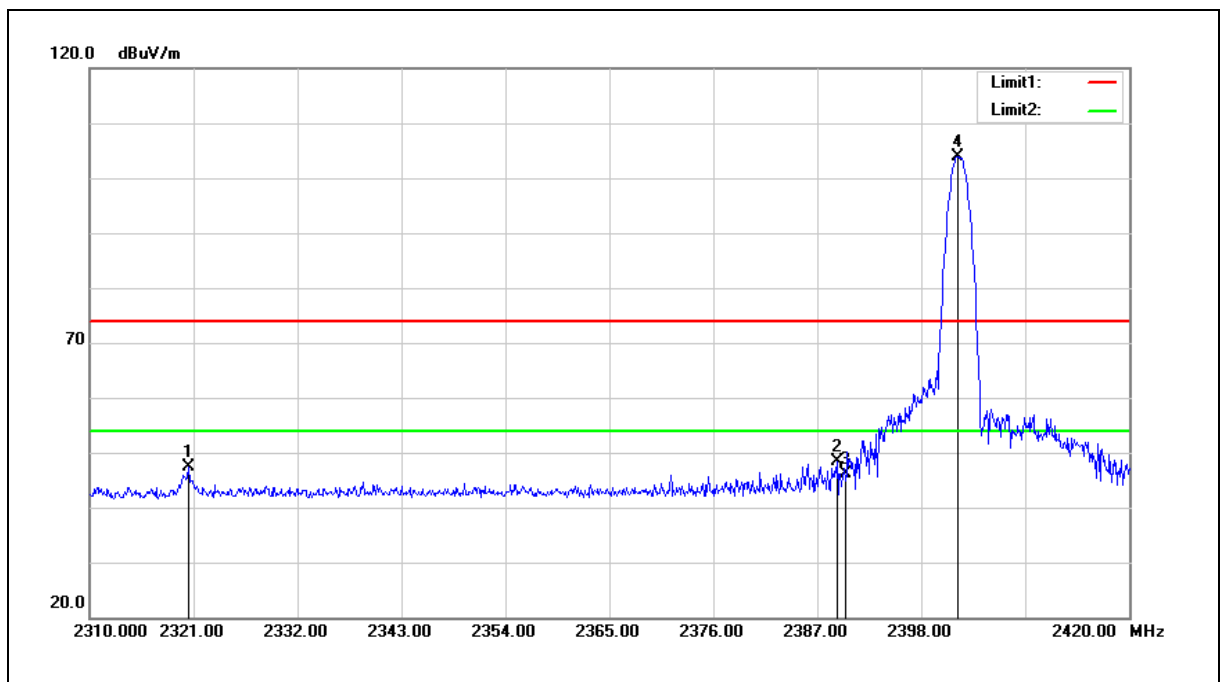
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2320.450	50.69	-3.53	47.16	74.00	-26.84	peak
2	2389.310	52.78	-3.28	49.50	74.00	-24.50	peak
3	2390.000	46.58	-3.28	43.30	74.00	-30.70	peak
4	2402.180	107.92	-3.23	104.69	--	--	peak

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:	2402 MHz		
Mode:	Mode 4		
Ant.Polar.:	Vertical		



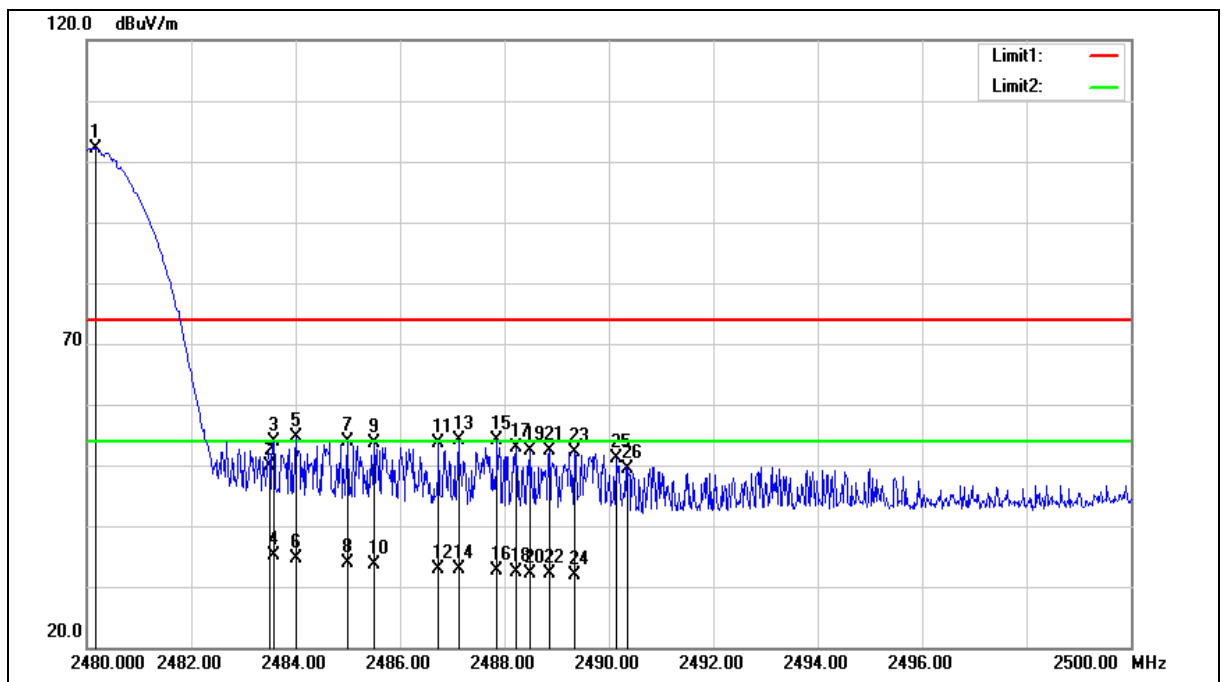
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2320.450	50.94	-3.53	47.41	74.00	-26.59	peak
2	2389.090	51.62	-3.28	48.34	74.00	-25.66	peak
3	2390.000	49.31	-3.28	46.03	74.00	-27.97	peak
4	2401.850	107.04	-3.23	103.81	--	--	peak

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:	2480 MHz		
Mode:	Mode 4		
Ant.Polar.:	Horizontal		



Standard:	LP0002	Test Distance:	3 m
Test item:	Band edge		
Frequency:	2480 MHz		
Mode:	Mode 4		
Ant.Polar.:	Horizontal		

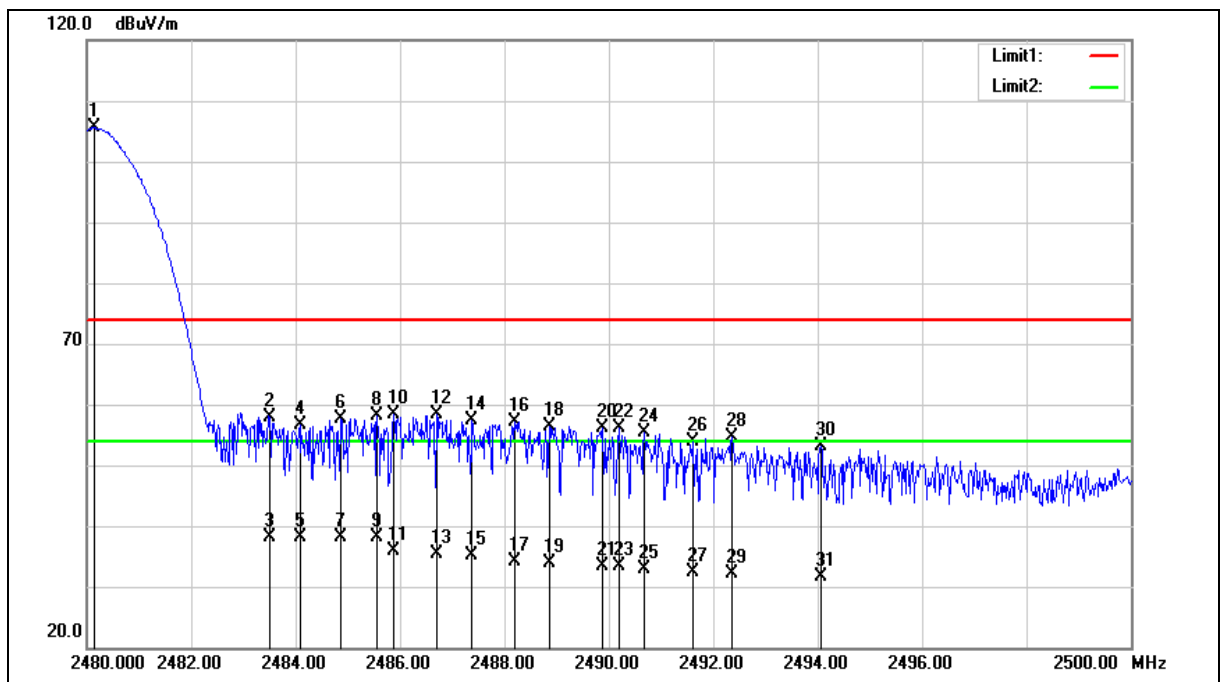
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2480.180	105.09	-2.94	102.15	--	--	peak
2	2483.500	52.90	-2.93	49.97	74.00	-24.03	peak
3	2483.580	56.84	-2.93	53.91	74.00	-20.09	peak
4	2483.580	38.04	-2.93	35.11	54.00	-18.89	AVG
5	2484.000	57.63	-2.93	54.70	74.00	-19.30	peak
6	2484.000	37.67	-2.93	34.74	54.00	-19.26	AVG
7	2485.000	56.75	-2.93	53.82	74.00	-20.18	peak
8	2485.000	36.92	-2.93	33.99	54.00	-20.01	AVG
9	2485.500	56.64	-2.92	53.72	74.00	-20.28	peak
10	2485.500	36.52	-2.92	33.60	54.00	-20.40	AVG
11	2486.740	56.64	-2.92	53.72	74.00	-20.28	peak
12	2486.740	35.84	-2.92	32.92	54.00	-21.08	AVG
13	2487.120	57.09	-2.92	54.17	74.00	-19.83	peak
14	2487.120	35.83	-2.92	32.91	54.00	-21.09	AVG
15	2487.860	56.99	-2.92	54.07	74.00	-19.93	peak
16	2487.860	35.51	-2.92	32.59	54.00	-21.41	AVG
17	2488.220	55.72	-2.92	52.80	74.00	-21.20	peak
18	2488.220	35.27	-2.92	32.35	54.00	-21.65	AVG
19	2488.500	55.25	-2.91	52.34	74.00	-21.66	peak
20	2488.500	35.06	-2.91	32.15	54.00	-21.85	AVG
21	2488.860	55.18	-2.91	52.27	74.00	-21.73	peak
22	2488.860	34.93	-2.91	32.02	54.00	-21.98	AVG
23	2489.340	55.02	-2.91	52.11	74.00	-21.89	peak
24	2489.340	34.76	-2.91	31.85	54.00	-22.15	AVG
25	2490.140	54.14	-2.91	51.23	74.00	-22.77	peak
26	2490.360	52.26	-2.91	49.35	74.00	-24.65	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:	2480 MHz		
Mode:	Mode 4		
Ant.Polar.:	Vertical		



Standard:	LP0002	Test Distance:	3 m
Test item:	Band edge		
Frequency:	2480 MHz		
Mode:	Mode 4		
Ant.Polar.:	Vertical		

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2480.140	108.52	-2.94	105.58	--	--	peak
2	2483.500	60.76	-2.93	57.83	74.00	-16.17	peak
3	2483.500	41.02	-2.93	38.09	54.00	-15.91	AVG
4	2484.080	59.47	-2.93	56.54	74.00	-17.46	peak
5	2484.080	41.05	-2.93	38.12	54.00	-15.88	AVG
6	2484.860	60.65	-2.93	57.72	74.00	-16.28	peak
7	2484.860	41.08	-2.93	38.15	54.00	-15.85	AVG
8	2485.560	60.96	-2.92	58.04	74.00	-15.96	peak
9	2485.560	41.03	-2.92	38.11	54.00	-15.89	AVG
10	2485.880	61.32	-2.92	58.40	74.00	-15.60	peak
11	2485.880	38.80	-2.92	35.88	54.00	-18.12	AVG
12	2486.700	61.34	-2.92	58.42	74.00	-15.58	peak
13	2486.700	38.23	-2.92	35.31	54.00	-18.69	AVG
14	2487.380	60.34	-2.92	57.42	74.00	-16.58	peak
15	2487.380	37.94	-2.92	35.02	54.00	-18.98	AVG
16	2488.200	60.09	-2.92	57.17	74.00	-16.83	peak
17	2488.200	37.14	-2.92	34.22	54.00	-19.78	AVG
18	2488.860	59.35	-2.91	56.44	74.00	-17.56	peak
19	2488.860	36.74	-2.91	33.83	54.00	-20.17	AVG
20	2489.880	58.92	-2.91	56.01	74.00	-17.99	peak
21	2489.880	36.34	-2.91	33.43	54.00	-20.57	AVG
22	2490.200	58.97	-2.91	56.06	74.00	-17.94	peak
23	2490.200	36.21	-2.91	33.30	54.00	-20.70	AVG
24	2490.680	58.33	-2.91	55.42	74.00	-18.58	peak
25	2490.680	35.80	-2.91	32.89	54.00	-21.11	AVG
26	2491.620	56.84	-2.91	53.93	74.00	-20.07	peak
27	2491.620	35.41	-2.91	32.50	54.00	-21.50	AVG

Standard:	LP0002	Test Distance:	3 m
Test item:	Band edge		
Frequency:	2480 MHz		
Mode:	Mode 4		
Ant.Polar.:	Vertical		

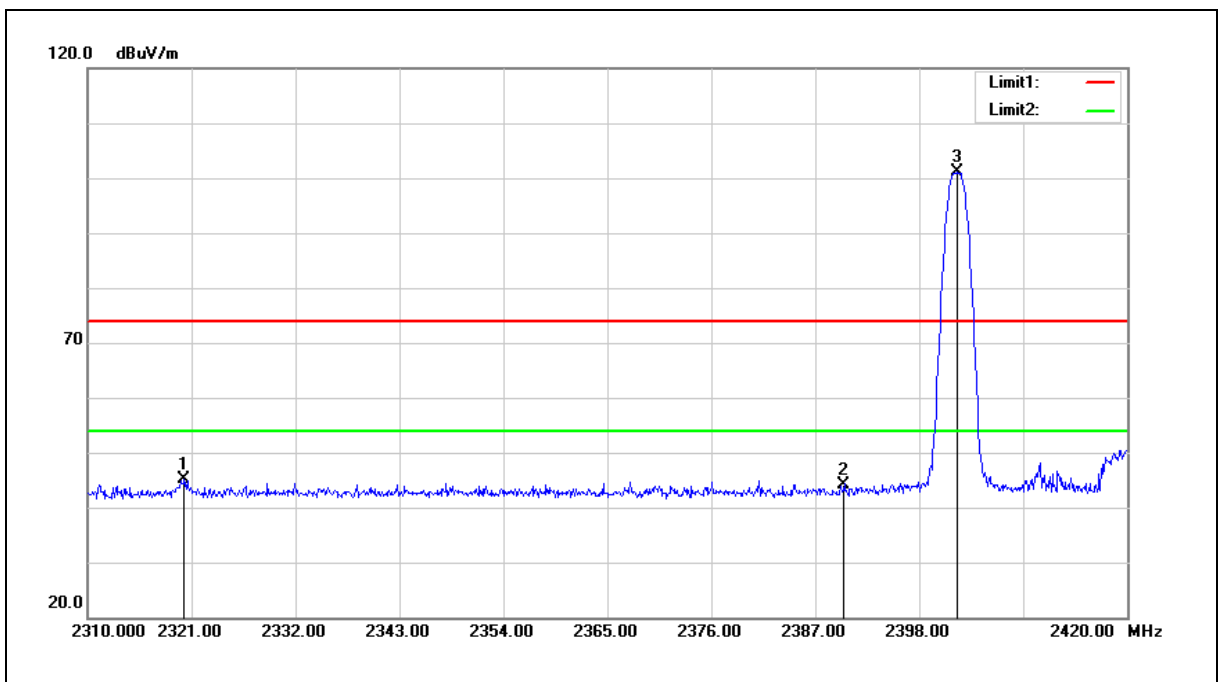
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
28	2492.360	57.45	-2.90	54.55	74.00	-19.45	peak
29	2492.360	35.10	-2.90	32.20	54.00	-21.80	AVG
30	2494.060	56.08	-2.89	53.19	74.00	-20.81	peak
31	2494.060	34.61	-2.89	31.72	54.00	-22.28	AVG

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:	2402 MHz		
Mode:	Mode 5		
Ant.Polar.:	Horizontal		



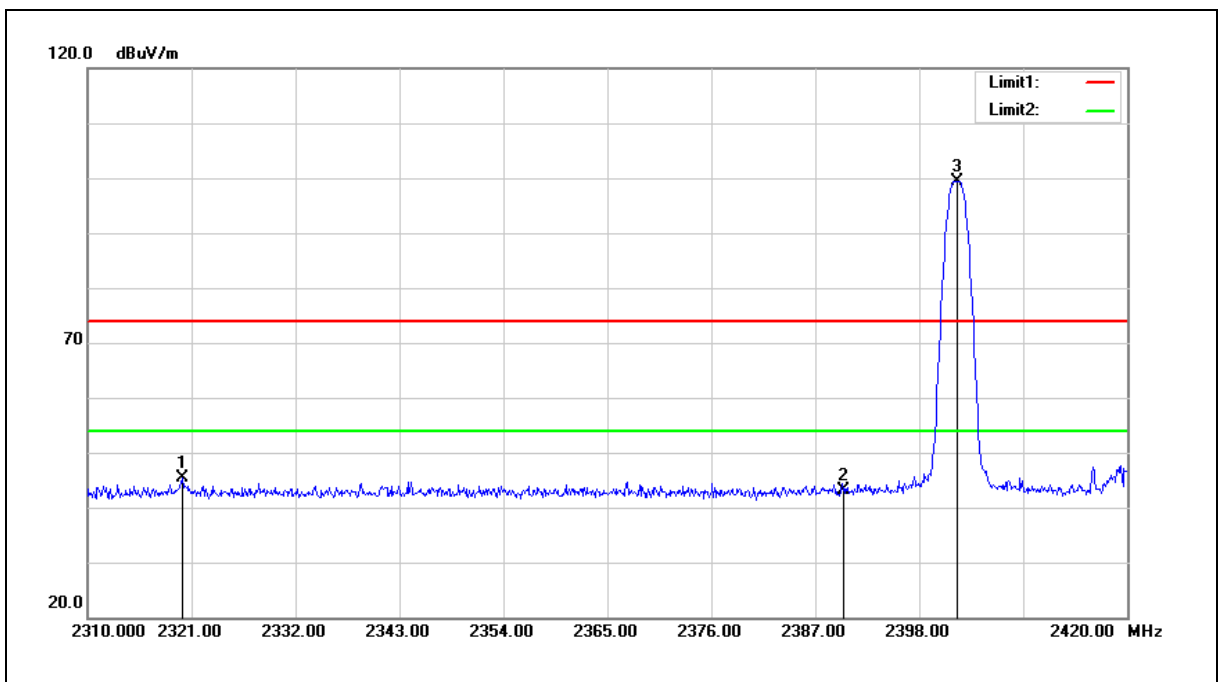
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2320.230	48.67	-3.53	45.14	74.00	-28.86	peak
2	2390.000	47.53	-3.28	44.25	74.00	-29.75	peak
3	2402.070	104.24	-3.23	101.01	--	--	peak

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:	2402 MHz		
Mode:	Mode 5		
Ant.Polar.:	Vertical		



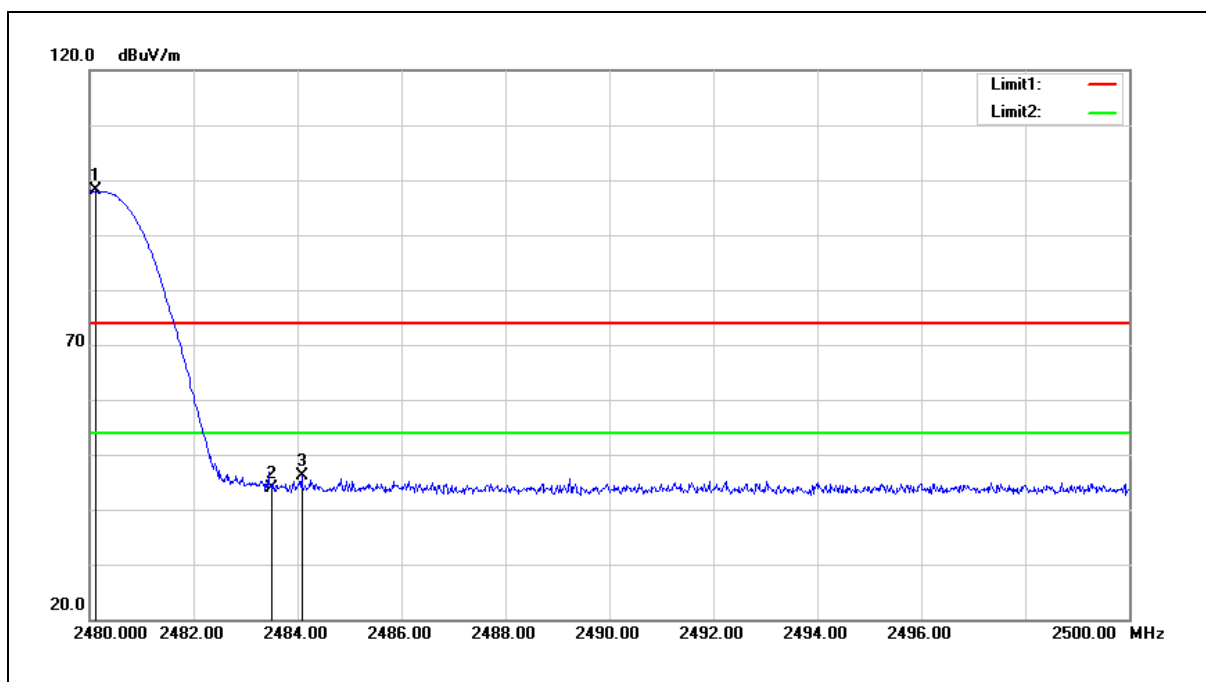
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2320.010	48.83	-3.53	45.30	74.00	-28.70	peak
2	2390.000	46.53	-3.28	43.25	74.00	-30.75	peak
3	2401.960	102.64	-3.23	99.41	--	--	peak

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:	Band edge		
Frequency:	2480 MHz		
Mode:	Mode 5		
Ant.Polar.:	Horizontal		



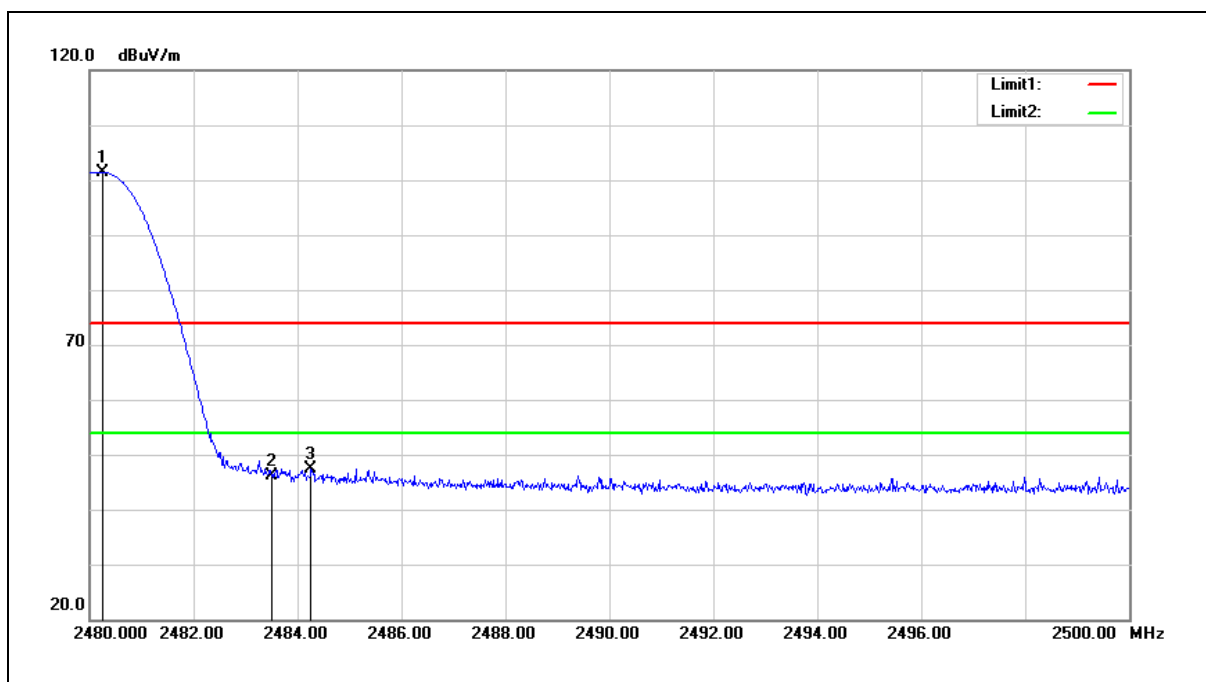
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2480.120	100.97	-2.94	98.03	--	--	peak
2	2483.500	46.85	-2.93	43.92	74.00	-30.08	peak
3	2484.080	49.18	-2.93	46.25	74.00	-27.75	peak

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:	2480 MHz		
Mode:	Mode 5		
Ant.Polar.:	Vertical		



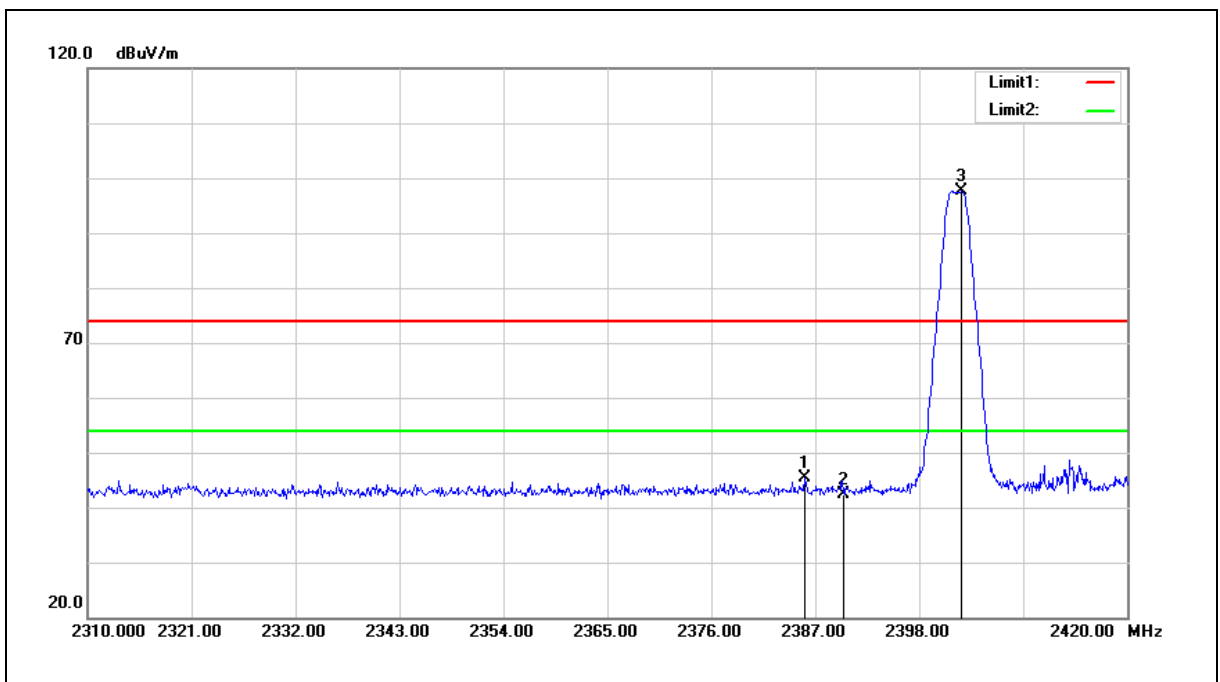
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2480.240	104.44	-2.94	101.50	--	--	peak
2	2483.500	49.10	-2.93	46.17	74.00	-27.83	peak
3	2484.260	50.29	-2.93	47.36	74.00	-26.64	peak

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:	2402 MHz		
Mode:	Mode 6		
Ant.Polar.:	Horizontal		



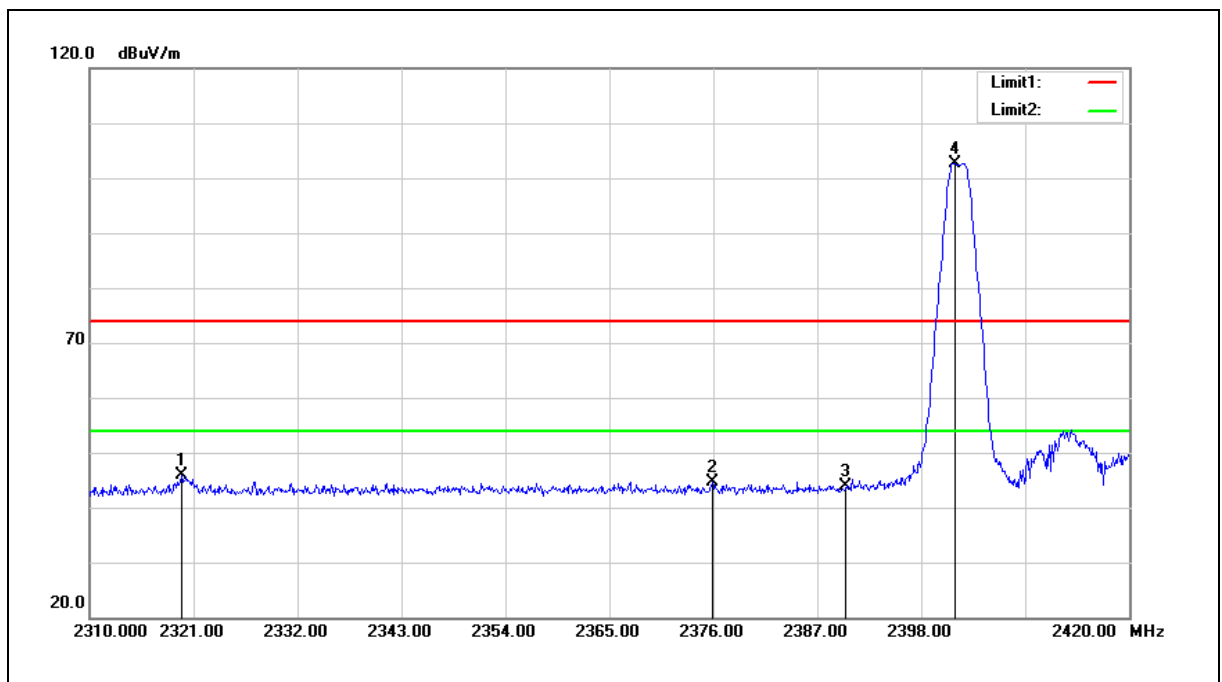
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2385.900	48.63	-3.29	45.34	74.00	-28.66	peak
2	2390.000	45.62	-3.28	42.34	74.00	-31.66	peak
3	2402.510	100.86	-3.23	97.63	--	--	peak

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:	2402 MHz		
Mode:	Mode 6		
Ant.Polar.:	Vertical		



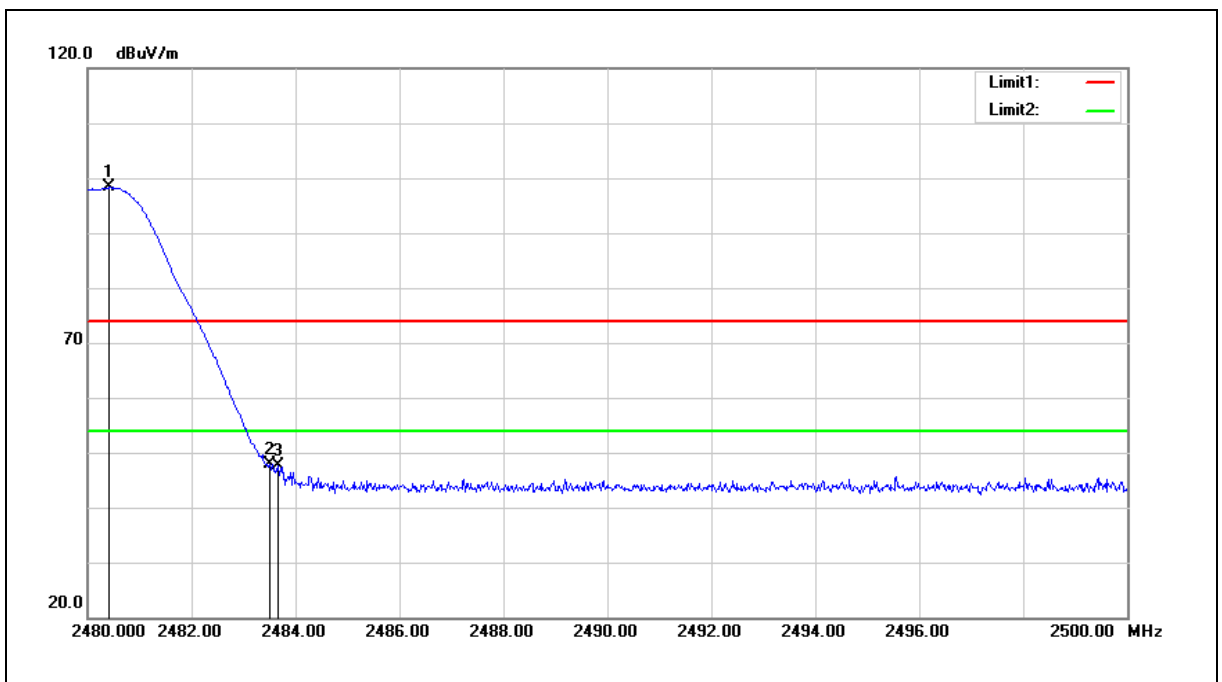
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2319.790	49.31	-3.53	45.78	74.00	-28.22	peak
2	2375.890	47.95	-3.33	44.62	74.00	-29.38	peak
3	2390.000	47.28	-3.28	44.00	74.00	-30.00	peak
4	2401.520	105.98	-3.24	102.74	--	--	peak

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:	2480 MHz		
Mode:	Mode 6		
Ant.Polar.:	Horizontal		



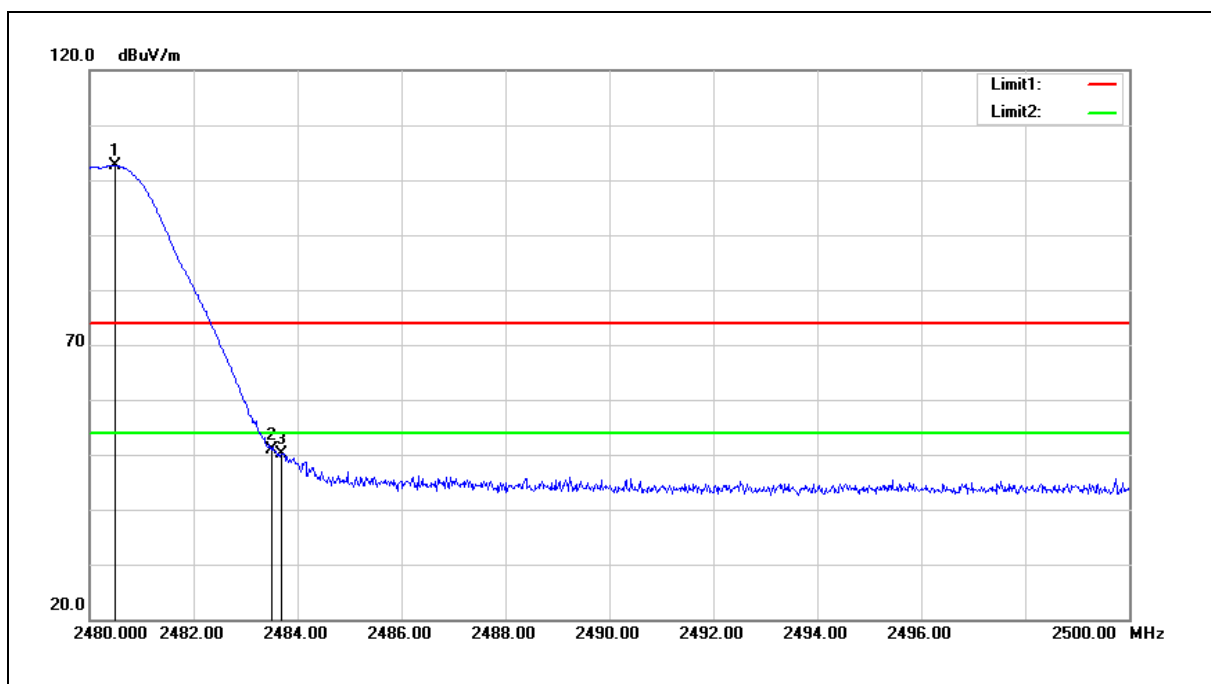
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2480.420	101.22	-2.94	98.28	--	--	peak
2	2483.500	50.76	-2.93	47.83	74.00	-26.17	peak
3	2483.660	50.60	-2.93	47.67	74.00	-26.33	peak

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:	2480 MHz		
Mode:	Mode 6		
Ant.Polar.:	Vertical		



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2480.480	105.59	-2.94	102.65	--	--	peak
2	2483.500	53.81	-2.93	50.88	74.00	-23.12	peak
3	2483.700	53.18	-2.93	50.25	74.00	-23.75	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.

Annex C. Conducted Test Results

輸出峰值功率之量測

操作模式 : Mode 2: BR,GFSK Continuous TX Mode						
頻道		輸出功率(Average)		輸出功率(Peak)		限制值
		dBm	W	dBm	W	W
低頻道	DH1	6.99	0.00500	7.41	0.00551	≤0.125
	DH3	7.05	0.00507	7.45	0.00556	≤0.125
	DH5	7.09	0.00512	7.50	0.00562	≤0.125
中頻道	DH1	6.81	0.00480	7.13	0.00516	≤0.125
	DH3	6.86	0.00485	7.20	0.00525	≤0.125
	DH5	6.90	0.00490	7.26	0.00532	≤0.125
高頻道	DH1	6.61	0.00458	6.97	0.00498	≤0.125
	DH3	6.66	0.00463	7.00	0.00501	≤0.125
	DH5	6.71	0.00469	7.06	0.00508	≤0.125

操作模式 : Mode 3: EDR, π/4-DQPSK Continuous TX Mode						
頻道		輸出功率(Average)		輸出功率(Peak)		限制值
		dBm	W	dBm	W	W
低頻道	2DH1	5.88	0.00387	7.18	0.00522	≤0.125
	2DH3	5.94	0.00393	7.24	0.00530	≤0.125
	2DH5	6.00	0.00398	7.30	0.00537	≤0.125
中頻道	2DH1	5.58	0.00361	6.85	0.00484	≤0.125
	2DH3	5.65	0.00367	6.92	0.00492	≤0.125
	2DH5	5.72	0.00373	6.97	0.00498	≤0.125
高頻道	2DH1	5.50	0.00355	6.79	0.00478	≤0.125
	2DH3	5.55	0.00359	6.84	0.00483	≤0.125
	2DH5	5.61	0.00364	6.90	0.00490	≤0.125

操作模式 : Mode 4:EDR, 8DPSK Continuous TX Mode						
頻道		輸出功率(Average)		輸出功率(Peak)		限制值
		dBm	W	dBm	W	W
低頻道	3DH1	5.92	0.00391	7.21	0.00526	≤0.125
	3DH3	5.98	0.00396	7.29	0.00536	≤0.125
	3DH5	6.04	0.00402	7.36	0.00545	≤0.125
中頻道	3DH1	5.63	0.00366	6.88	0.00488	≤0.125
	3DH3	5.68	0.00370	6.95	0.00495	≤0.125
	3DH5	5.75	0.00376	7.01	0.00502	≤0.125
高頻道	3DH1	5.56	0.00360	6.84	0.00483	≤0.125
	3DH3	5.58	0.00361	6.88	0.00488	≤0.125
	3DH5	5.64	0.00366	6.95	0.00495	≤0.125

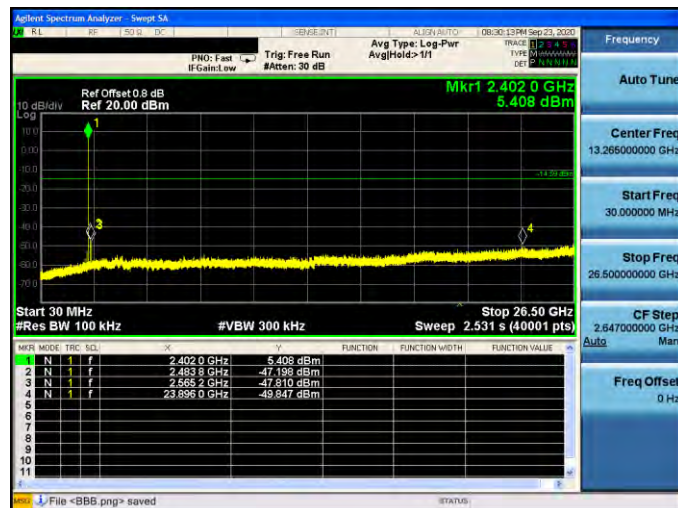
操作模式 : Mode 5: LE, GFSK Continuous TX Mode			
頻道	輸出功率(Average)		限制值
	dBm	W	W
低頻道	3.49	0.00223	≤ 1
中頻道	3.53	0.00225	≤ 1
高頻道	3.77	0.00238	≤ 1

操作模式 : Mode 6: 2LE, GFSK Continuous TX Mode			
頻道	輸出功率(Average)		限制值
	dBm	W	W
低頻道	3.50	0.00224	≤ 1
中頻道	3.53	0.00225	≤ 1
高頻道	3.77	0.00238	≤ 1

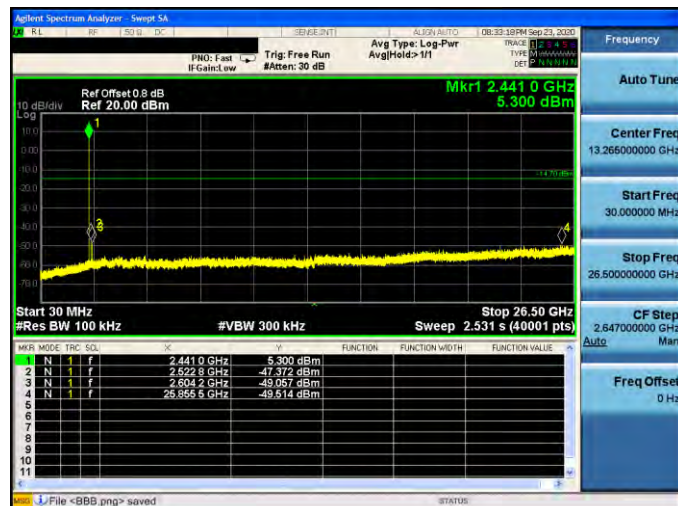
Out of Band Conducted Spurious Emission

Mode 2: BR, GFSK Continuous TX Mode

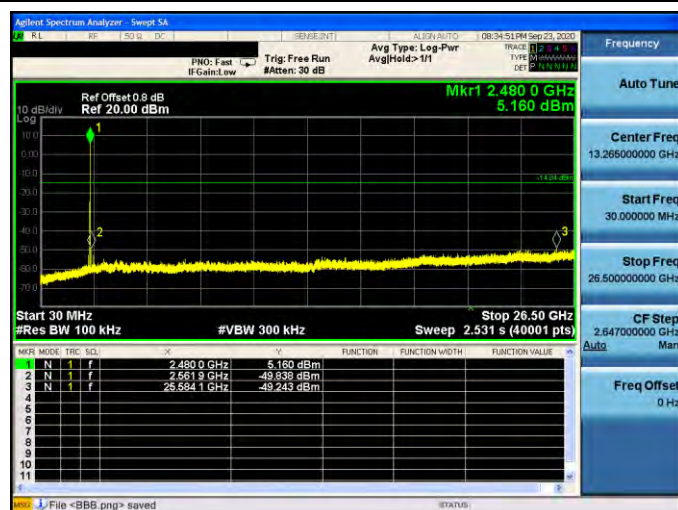
低頻道

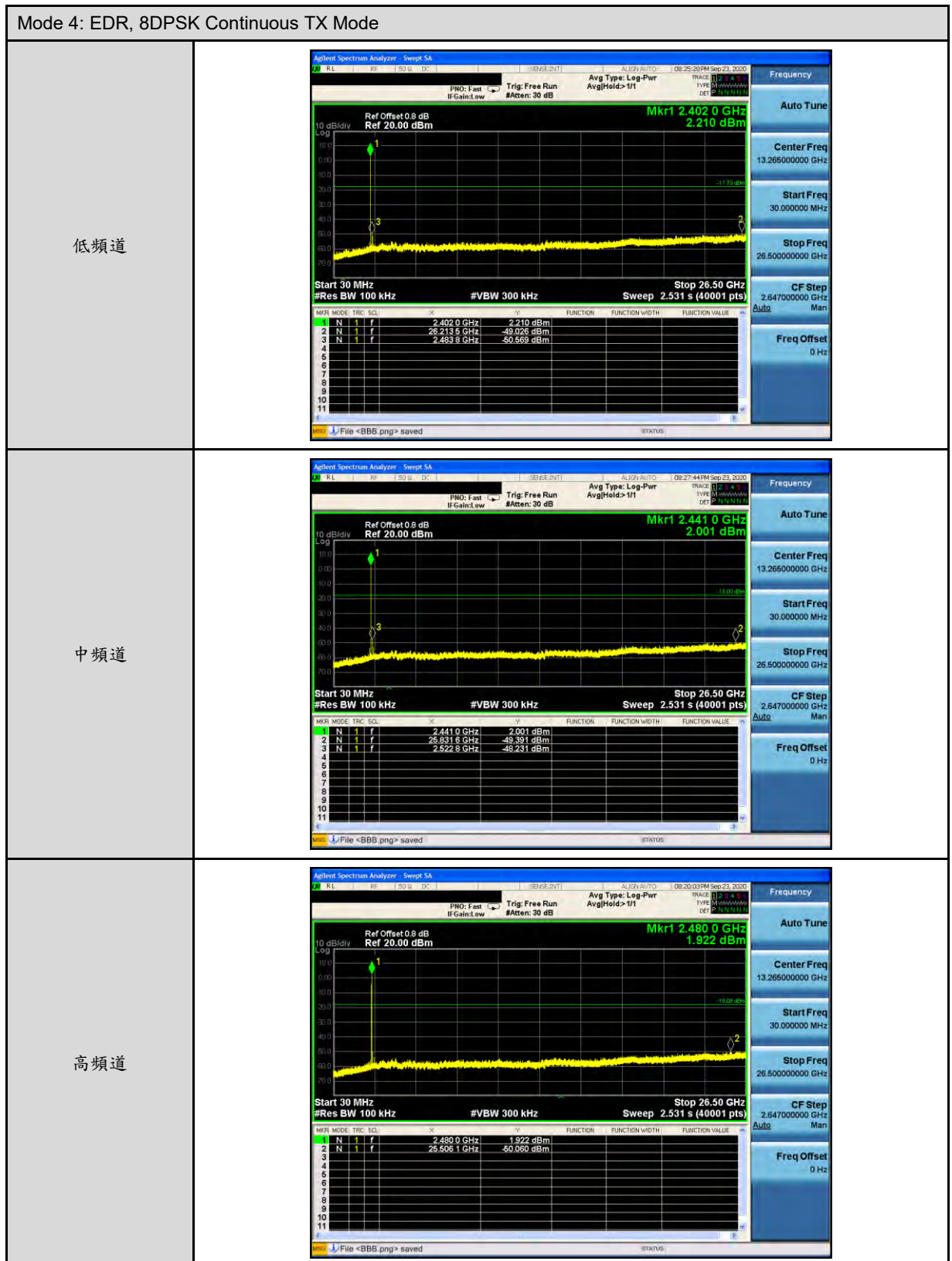


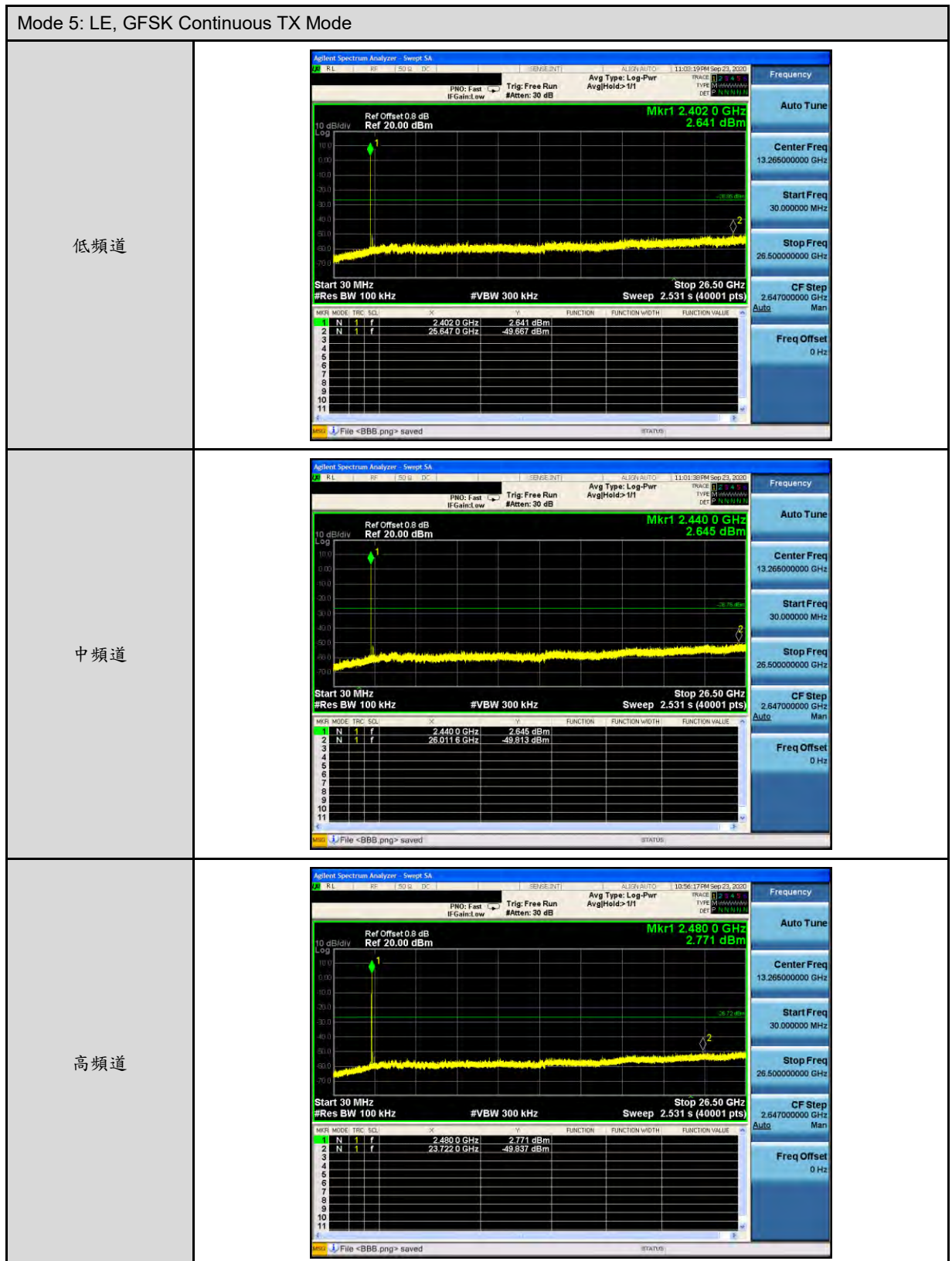
中頻道

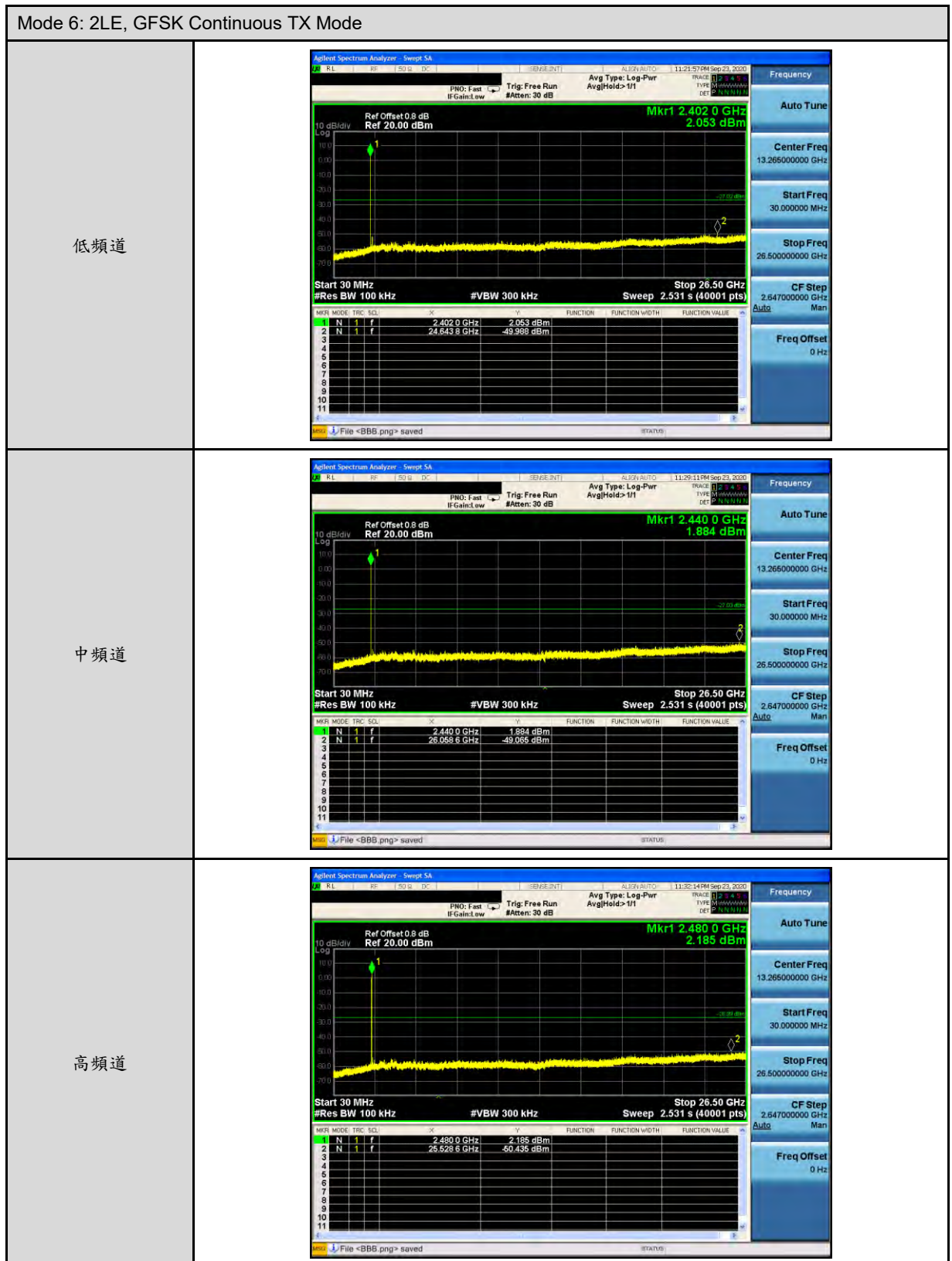


高頻道



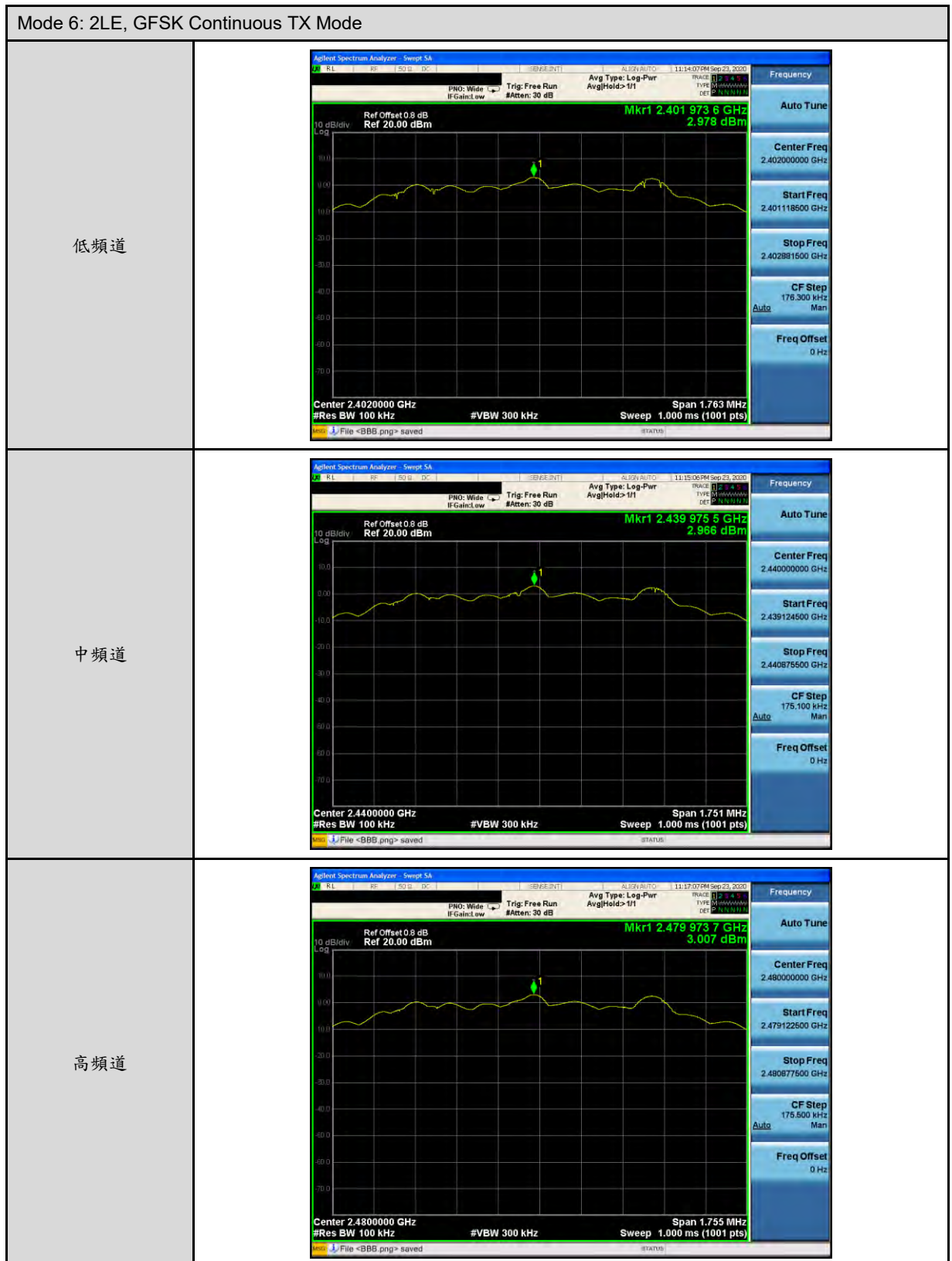






Reference level

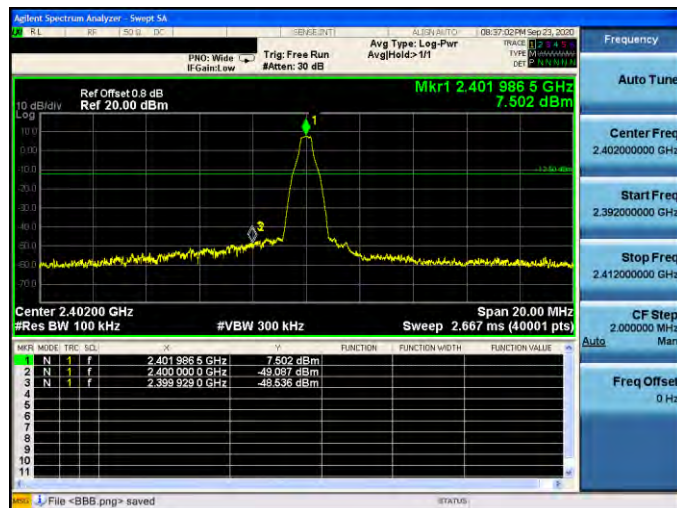




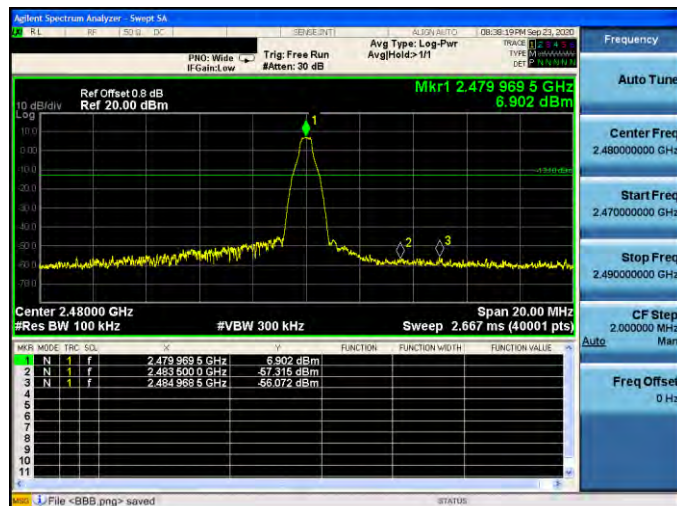
Conducted Band Edge

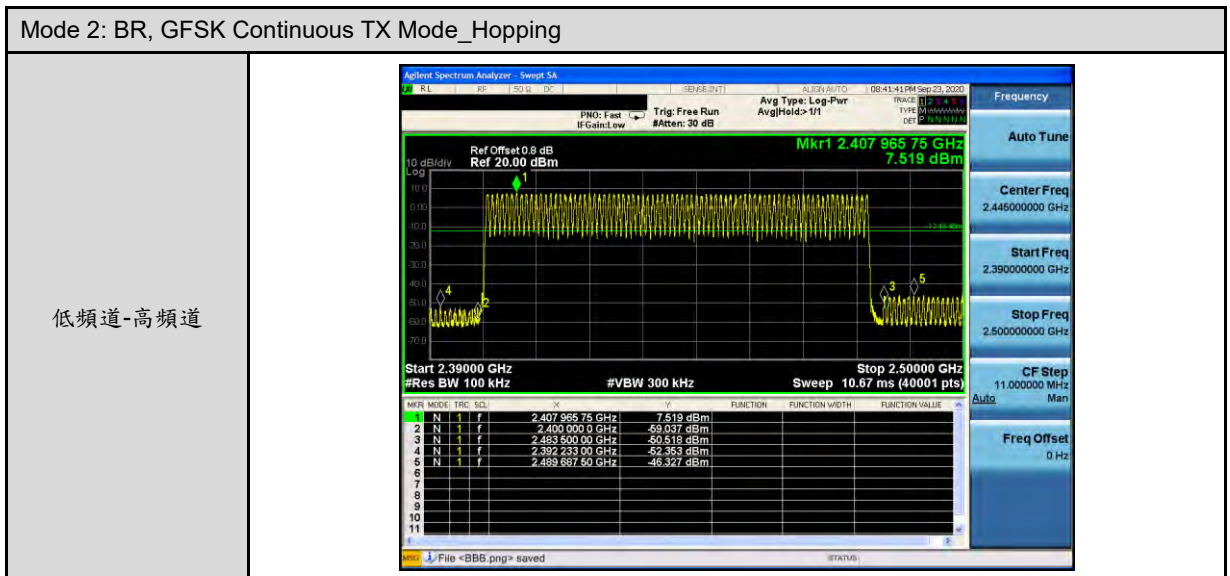
Mode 2: BR, GFSK Continuous TX Mode_Un-hopping

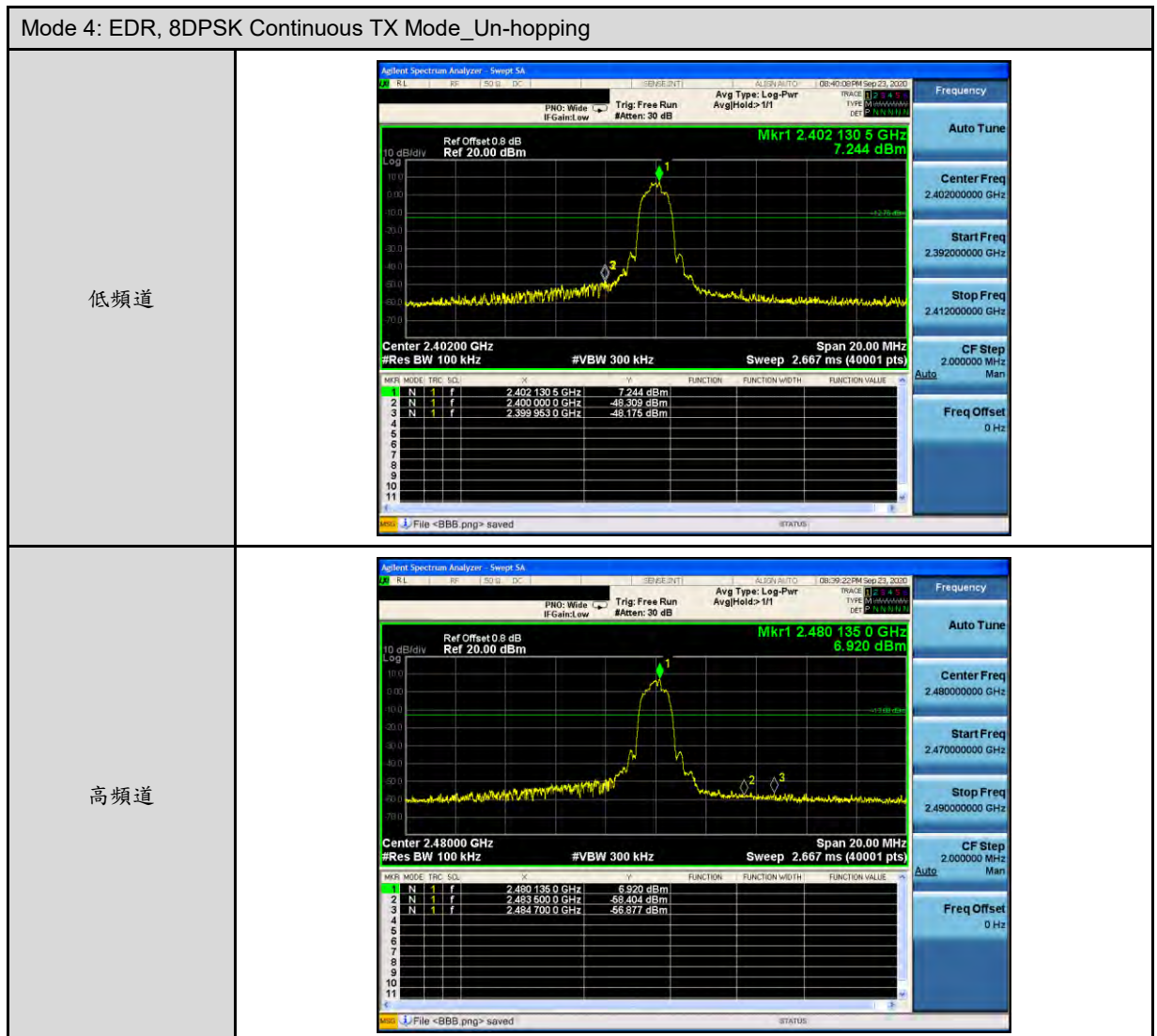
低頻道

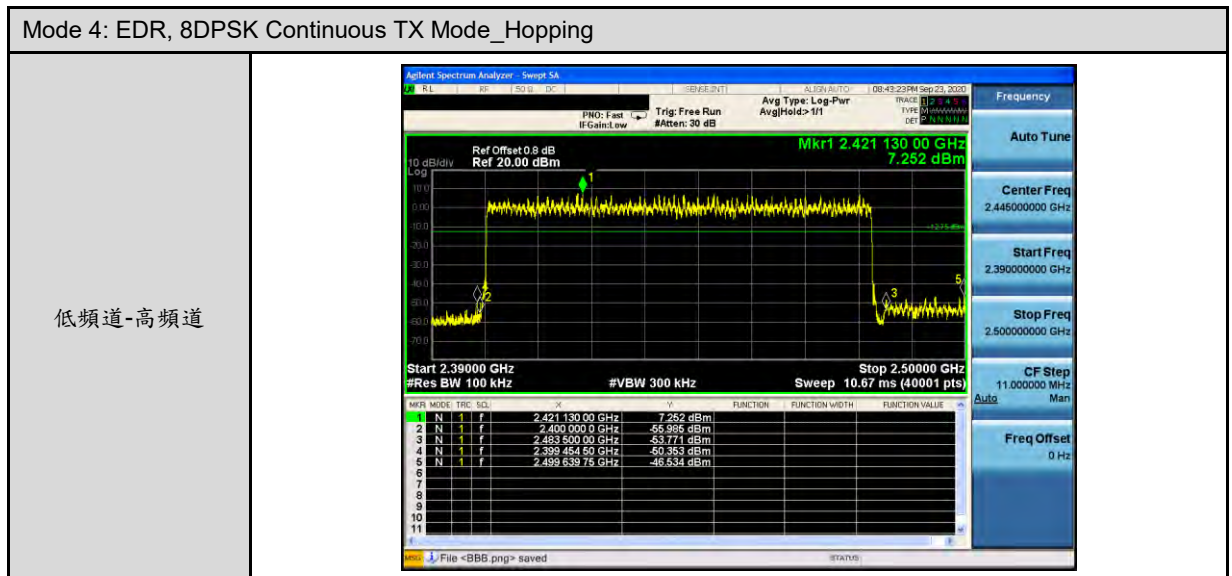


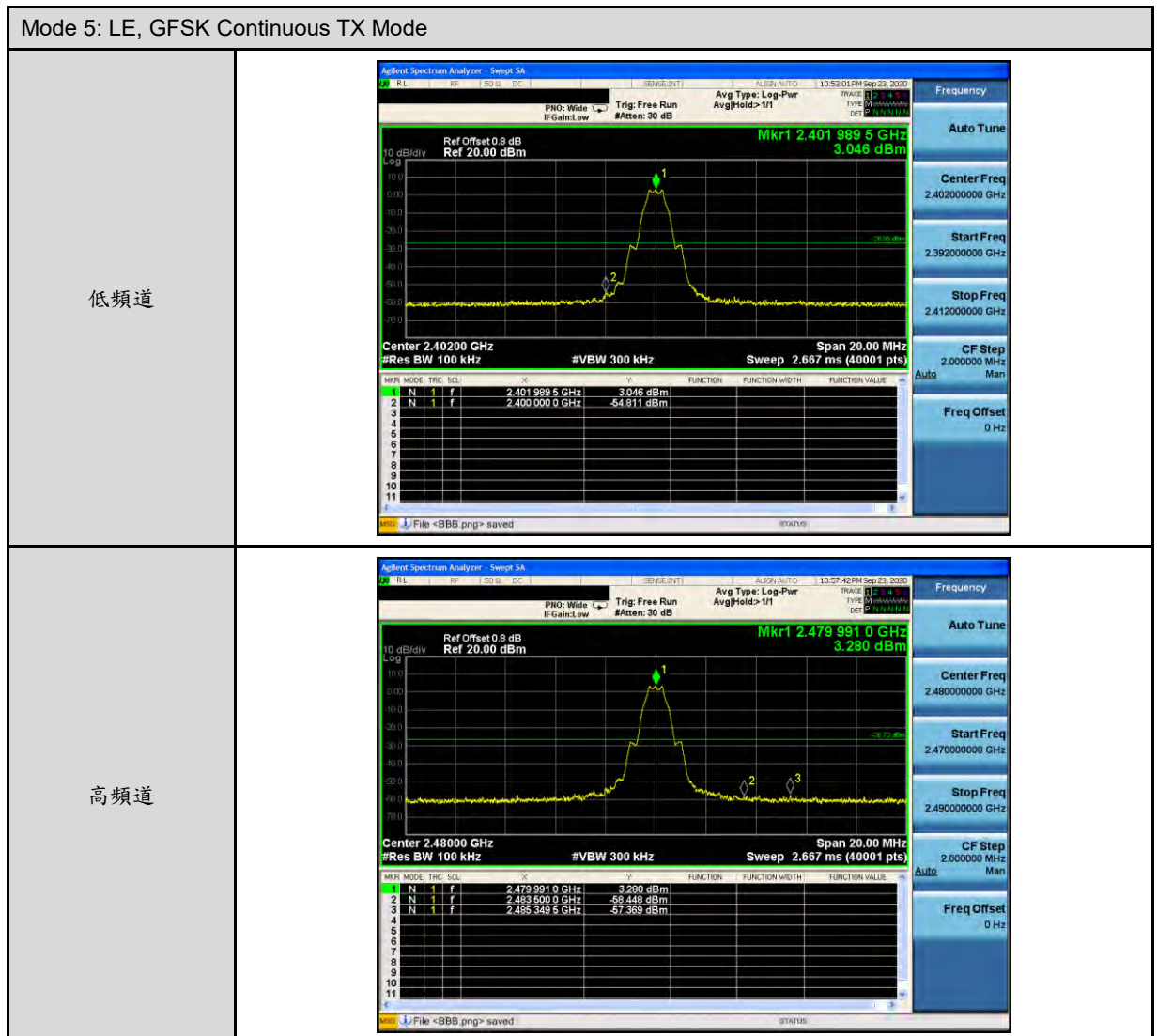
高頻道

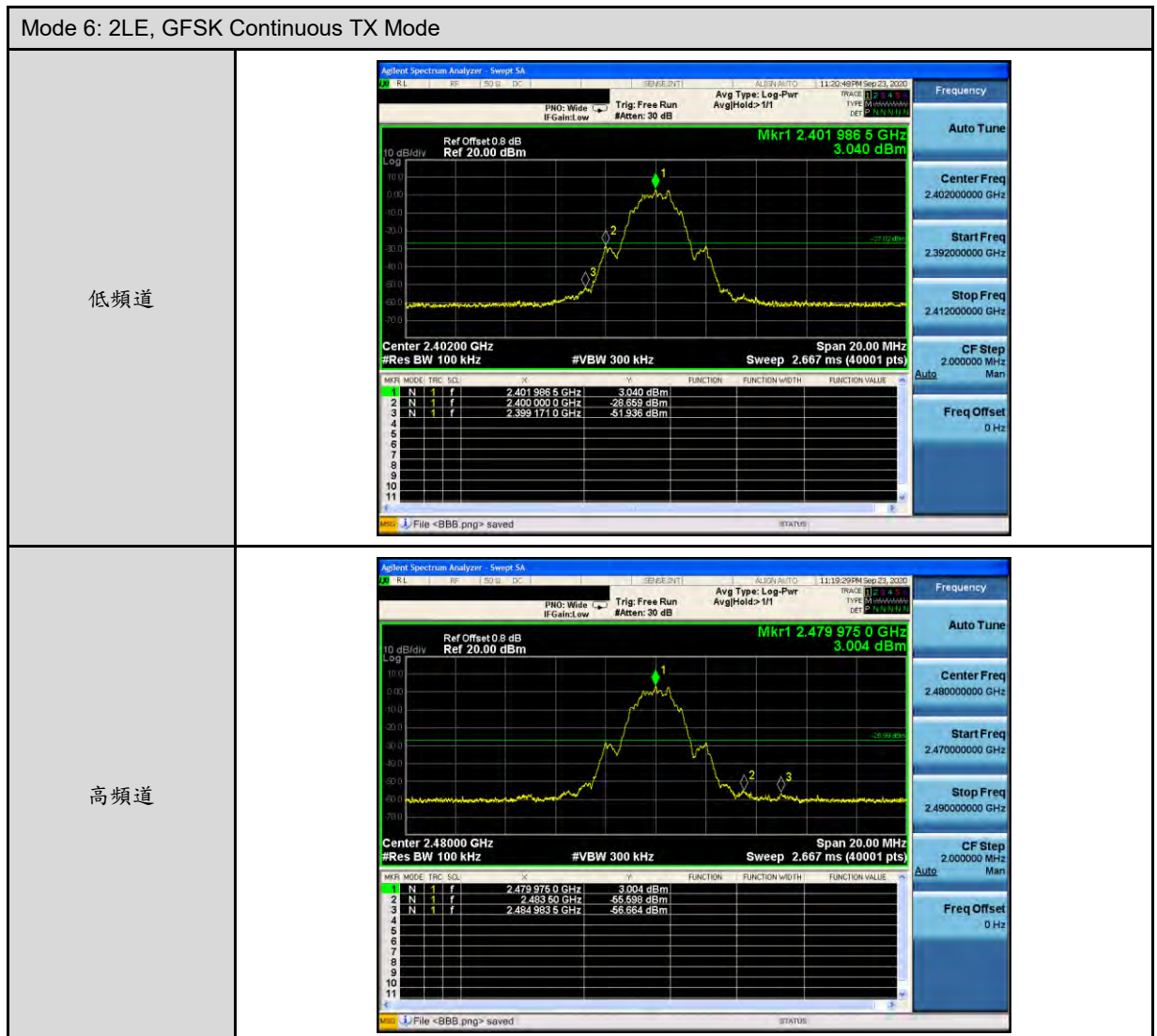




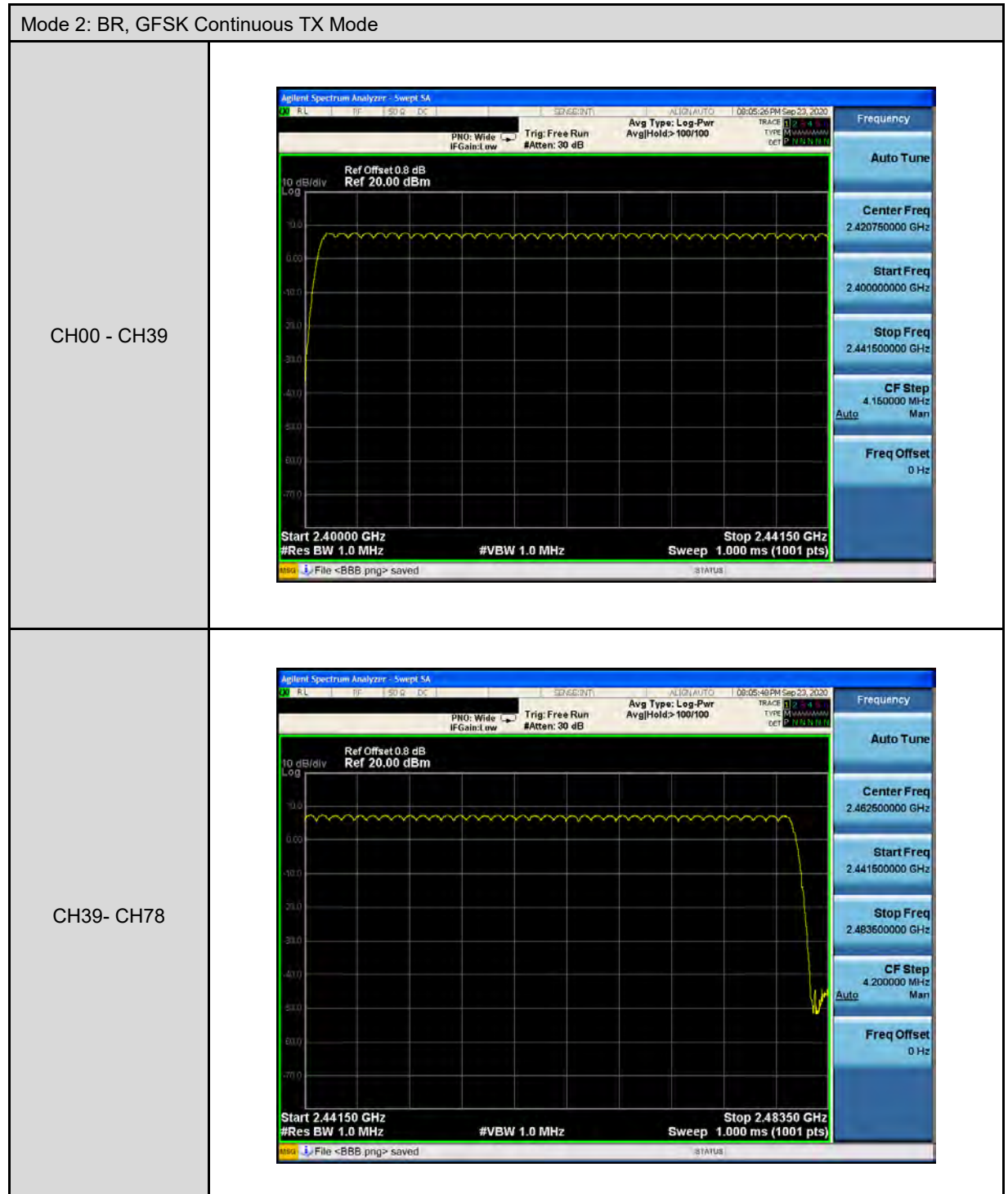








頻率範圍及頻道數之要求

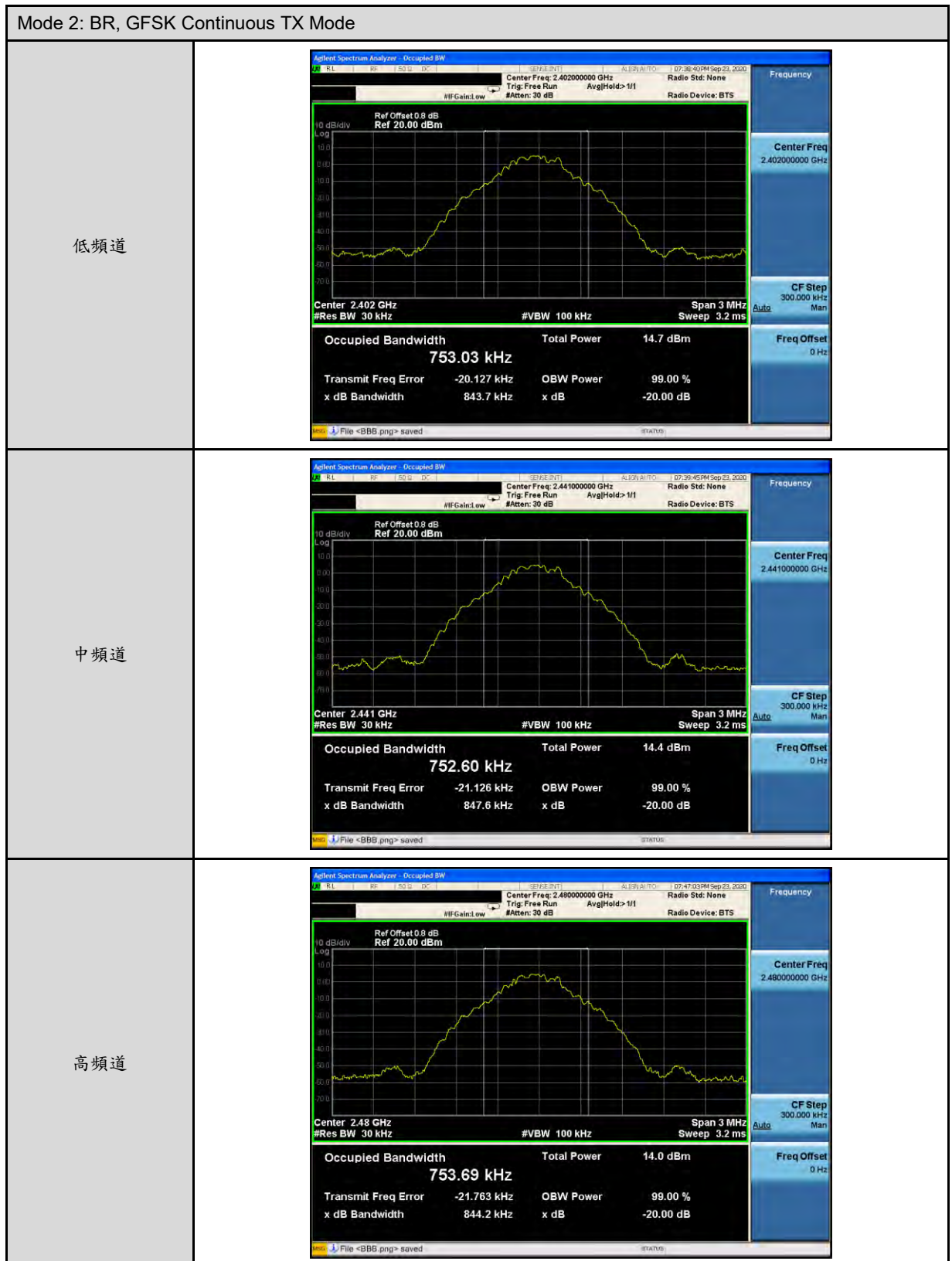




發射頻寬之要求

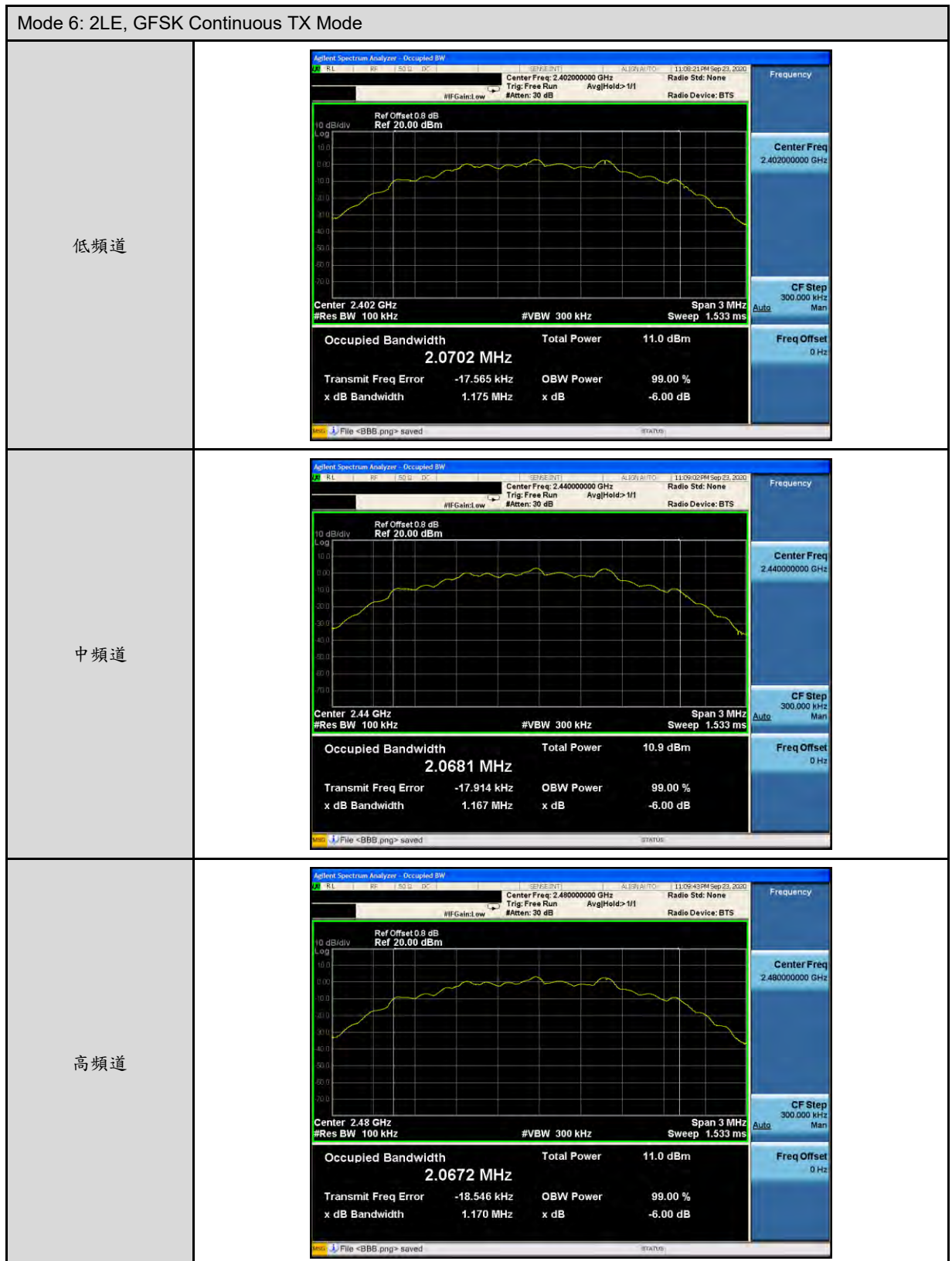
操作模式 : Mode 2: BR, GFSK Continuous TX Mode Mode 4: EDR, 8DPSK Continuous TX Mode				
操作模式	頻道	發射頻寬(20 dB)		
		量測值 (MHz)	2/3 量測值 (MHz)	限制值 (MHz)
Mode 2	低頻道	0.844	0.562	-----
	中頻道	0.848	0.565	-----
	高頻道	0.844	0.563	-----
Mode 4	低頻道	1.268	0.845	-----
	中頻道	1.265	0.843	-----
	高頻道	1.267	0.845	-----
註: 發射頻寬(20 dB) 之 2/3 量測值 = 量測值 x 2 / 3				

操作模式 : Mode 5: LE, GFSK Continuous TX Mode Mode 6: 2LE, GFSK Continuous TX Mode			
操作模式	頻道	發射頻寬(6dB)	
		量測值 (kHz)	限制值 (kHz)
Mode 5	低頻道	698.100	≥ 500
	中頻道	692.400	≥ 500
	高頻道	690.700	≥ 500
Mode 6	低頻道	1175.000	≥ 500
	中頻道	1167.000	≥ 500
	高頻道	1170.000	≥ 500









跳頻系統之載波頻率頻道間隔之量測

操作模式： Mode 2: BR, GFSK Continuous TX Mode Mode 4: EDR, 8DPSK Continuous TX Mode			
操作模式	頻道	相鄰頻道載波間隔	
		量測值 (MHz)	限制值 (MHz)
Mode 2	低頻道	1.000	≥ 0.562
	中頻道	1.000	≥ 0.565
	高頻道	1.000	≥ 0.563
Mode 4	低頻道	1.000	≥ 0.845
	中頻道	1.000	≥ 0.843
	高頻道	1.000	≥ 0.845

Mode 2: BR, GFSK Continuous TX Mode

低頻道

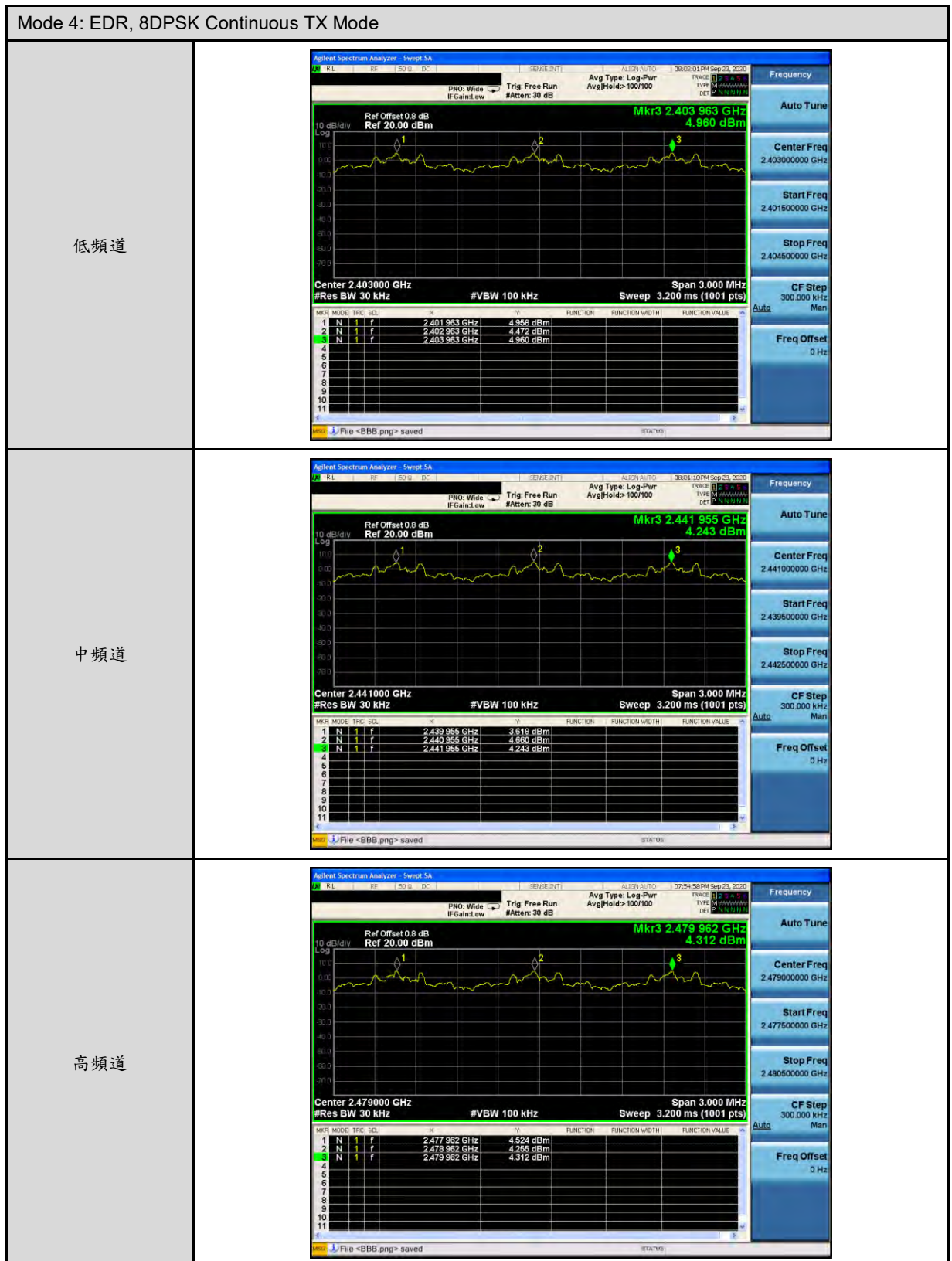


中頻道



高頻道





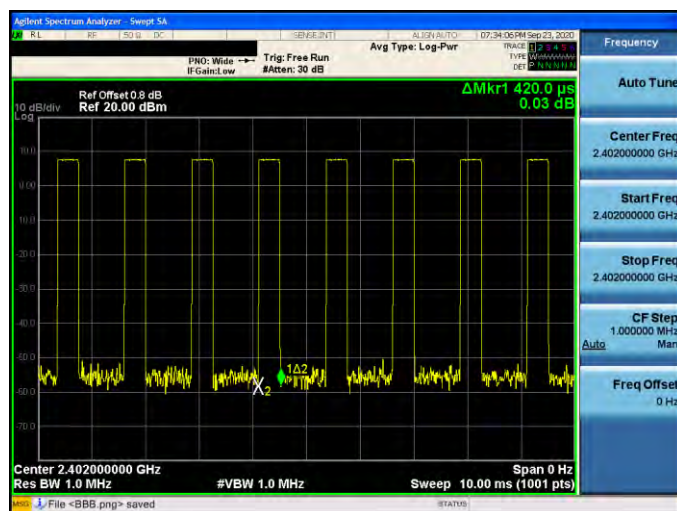
跳頻系統之任一頻率佔用之平均時間之量測

Mode 2: BR, GFSK Continuous TX Mode	
DH1 模式	
需量測之週期(秒)	$79\text{CH} * 0.4 = 31.6$ (秒)
待測物每秒跳頻之總次數	1600(藍牙通訊協定標準)
頻道每秒佔用之次數	$800/79\text{CH} = 10.13$ (次/秒)
頻道每次佔用之時間(1)	0.420 ms (秒)
週期內頻道佔用之總次數(2)	$31.6 * 10.13 = 320.108$ (次)
週期內佔用的平均時間(1) * (2)	134.445 ms (秒)
LIMIT(msec)	≤ 400
DH3 模式	
需量測之週期(秒)	$79\text{CH} * 0.4 = 31.6$ (秒)
待測物每秒跳頻之總次數	1600(藍牙通訊協定標準)
頻道每秒佔用之次數	$400/79\text{CH} = 5.06$ (次/秒)
頻道每次佔用之時間(1)	1.670 ms (秒)
週期內頻道佔用之總次數(2)	$31.6 * 5.06 = 159.896$ (次)
週期內佔用的平均時間(1) * (2)	267.026 ms (秒)
LIMIT(msec)	≤ 400
DH5 模式	
需量測之週期(秒)	$79\text{CH} * 0.4 = 31.6$ (秒)
待測物每秒跳頻之總次數	1600(藍牙通訊協定標準)
頻道每秒佔用之次數	$266.7/79\text{CH} = 3.38$ (次/秒)
頻道每次佔用之時間(1)	2.920 ms (秒)
週期內頻道佔用之總次數(2)	$31.6 * 3.38 = 106.808$ (次)
週期內佔用的平均時間(1) * (2)	311.879 ms (秒)
LIMIT(msec)	≤ 400

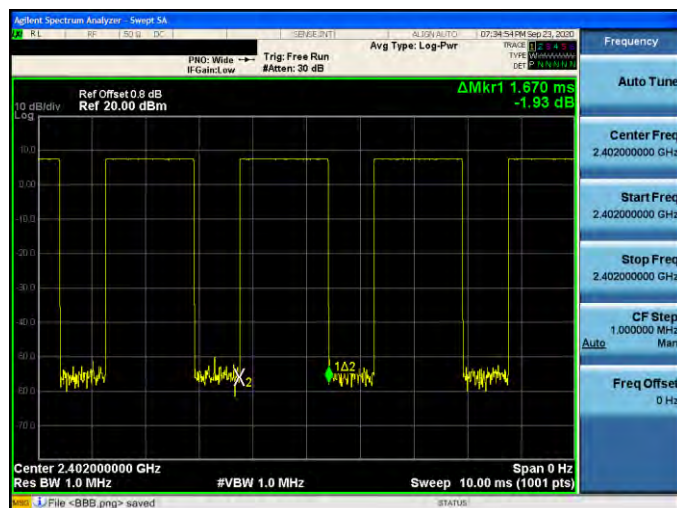
附註: RB=1 MHz ; VB=1 MHz ; SPAN=0 MHz ; Sweep Time=10 msec

Mode 2: BR, GFSK Continuous TX Mode

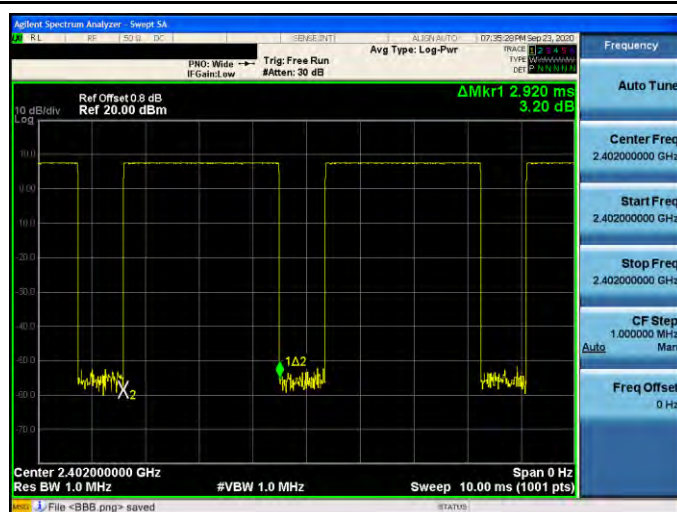
DH1



DH3



DH5



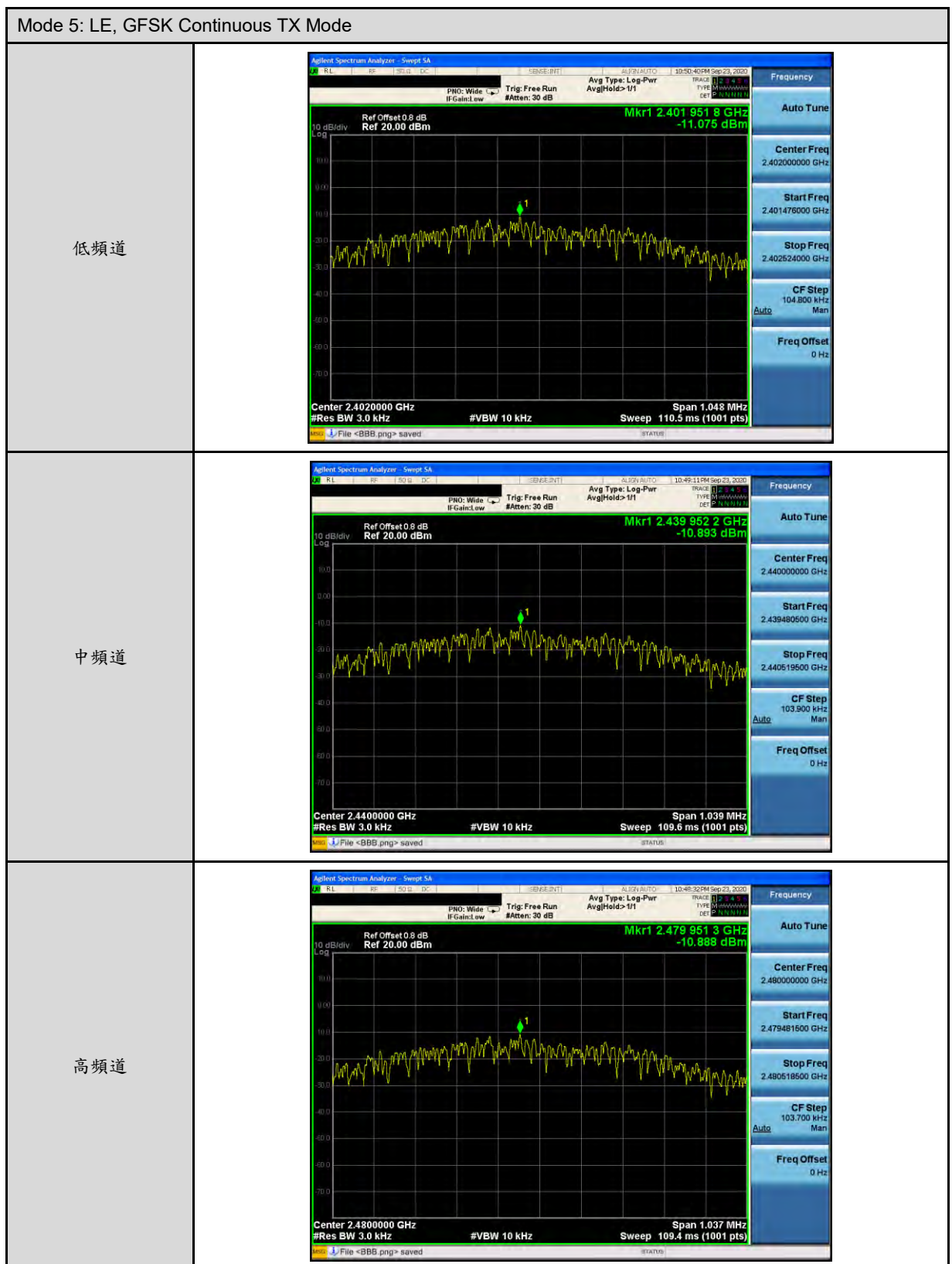
Mode 4: EDR, 8DPSK Continuous TX Mode	
3DH1 模式	
需量測之週期(秒)	$79\text{CH} * 0.4 = 31.6$ (秒)
待測物每秒跳頻之總次數	1600(藍牙通訊協定標準)
頻道每秒佔用之次數	$800/79\text{CH} = 10.13$ (次/秒)
頻道每次佔用之時間(1)	0.420 ms (秒)
週期內頻道佔用之總次數(2)	$31.6 * 10.13 = 320.108$ (次)
週期內佔用的平均時間(1) * (2)	134.445 ms (秒)
LIMIT(msec)	≤ 400
3DH3 模式	
需量測之週期(秒)	$79\text{CH} * 0.4 = 31.6$ (秒)
待測物每秒跳頻之總次數	1600(藍牙通訊協定標準)
頻道每秒佔用之次數	$400/79\text{CH} = 5.06$ (次/秒)
頻道每次佔用之時間(1)	1.670 ms (秒)
週期內頻道佔用之總次數(2)	$31.6 * 5.06 = 159.896$ (次)
週期內佔用的平均時間(1) * (2)	267.026 ms (秒)
LIMIT(msec)	≤ 400
3DH5 模式	
需量測之週期(秒)	$79\text{CH} * 0.4 = 31.6$ (秒)
待測物每秒跳頻之總次數	1600(藍牙通訊協定標準)
頻道每秒佔用之次數	$266.7/79\text{CH} = 3.38$ (次/秒)
頻道每次佔用之時間(1)	2.920 ms (秒)
週期內頻道佔用之總次數(2)	$31.6 * 3.38 = 106.808$ (次)
週期內佔用的平均時間(1) * (2)	311.879 ms (秒)
LIMIT(msec)	≤ 400

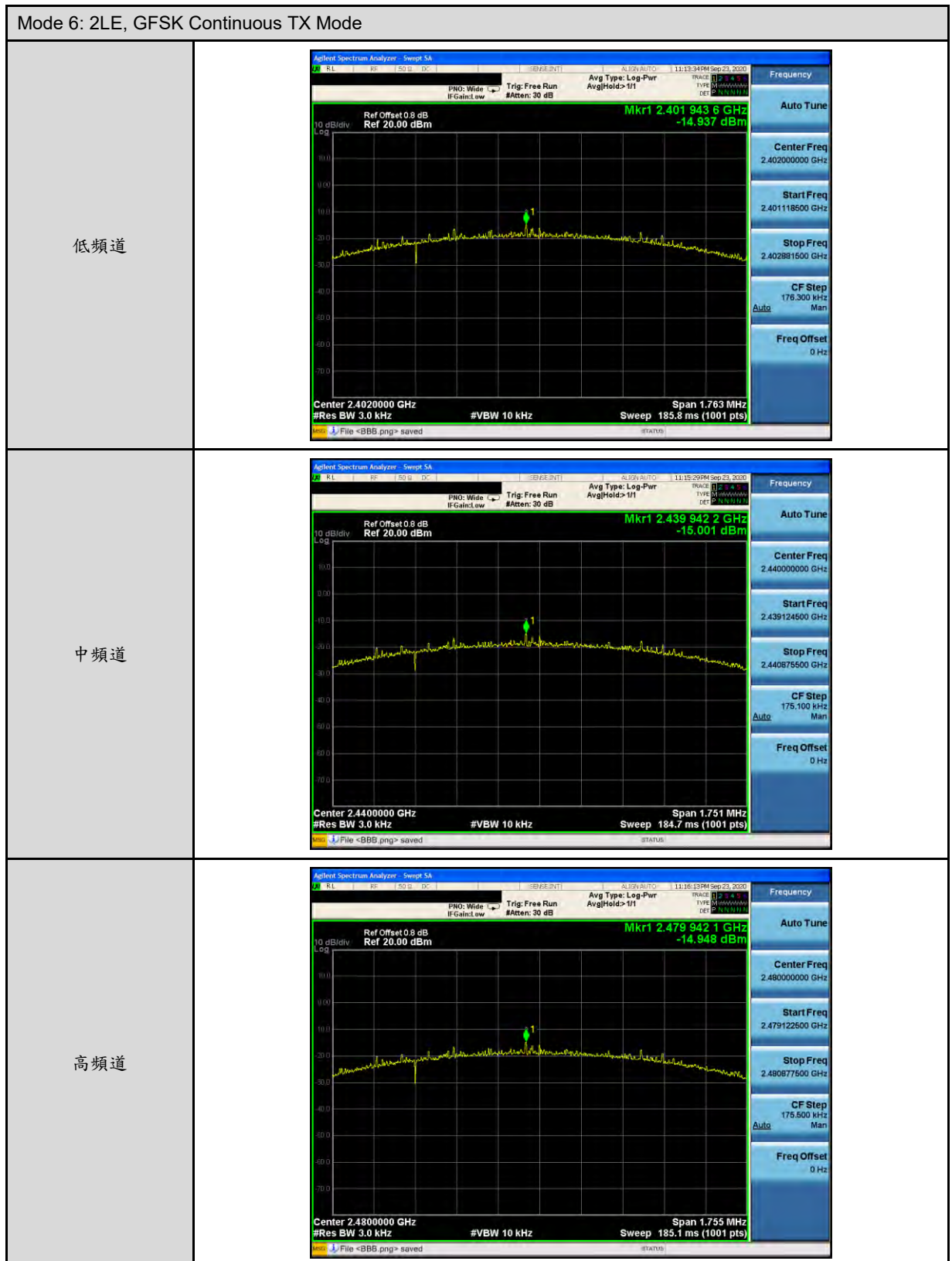
附註: RB=1 MHz ; VB=1 MHz ; SPAN=0 MHz ; Sweep Time=10 msec

Mode 4: EDR, 8DPSK Continuous TX Mode	
3DH1	Agilent Spectrum Analyzer - Swept SA Ref Offset: 0.0 dB Ref: 20.00 dBm ΔMkr1 420.0 μs -1.11 dB Center 2.402000000 GHz Res BW 1.0 MHz #VBW 1.0 MHz Sweep 10.00 ms (1001 pts) File <BBB.png> saved
3DH3	Agilent Spectrum Analyzer - Swept SA Ref Offset: 0.0 dB Ref: 20.00 dBm ΔMkr1 1.670 ms 2.47 dB Center 2.402000000 GHz Res BW 1.0 MHz #VBW 1.0 MHz Sweep 10.00 ms (1001 pts) File <BBB.png> saved
3DH5	Agilent Spectrum Analyzer - Swept SA Ref Offset: 0.0 dB Ref: 20.00 dBm ΔMkr1 2.920 ms 2.26 dB Center 2.402000000 GHz Res BW 1.0 MHz #VBW 1.0 MHz Sweep 10.00 ms (1001 pts) File <BBB.png> saved

功率密度之要求

操作模式 : Mode 5: LE, GFSK Continuous TX Mode Mode 6: 2LE, GFSK Continuous TX Mode			
操作模式	頻道	量測值 (dBm/3 kHz)	限制值 (dBm/3 kHz)
Mode 5	低頻道	-11.075	≤ 8
	中頻道	-10.893	≤ 8
	高頻道	-10.888	≤ 8
Mode 6	低頻道	-14.937	≤ 8
	中頻道	-15.001	≤ 8
	高頻道	-14.948	≤ 8





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