晶復科技股份有限公司
A Test Lab Techno Corp.

低功率射頻電機試驗報告

報告編號	1905DR28
版本(Rev.)	00
產品名稱	WIFI 分享器
申請廠商	訊崴技術有限公司
商標或廠牌	HUAWEI
型式 (號)	eA680-950
產品試驗依據之標準	低功率射頻電機技術規範(LP0002) 107 年 1 月 10 日
報告發行日期	108 年 05 月 14 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
33465 桃園市八德區長安街 140-1 號
Tel：03-2710188 / Fax：03-2710190

財團法人全國認證基金會
認證編號 ：1330
認證有效期間：105.09.06 ~ 108.09.05
認可能量範圍：低功率射頻電機技術規範(LP0002)
2.4 GHz 射頻電信終端設備技術規範(RTTE01)

實 驗 室 聲 明

本測試報告內之測試結果可藉由測試儀器設備之校正報告與本報告內所評估量測不確定度追溯至國家或國際標準。

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低功率射頻電機測試證明書

發行日期：108年05月14日

產 品 名 稱　：WIFI分享器

商　　標　：HUAWEI

型　　號　：eA680-950

申 請 廠 商　：訊崴技術有限公司

申請者地址　：臺北市內湖區洲子街55、57號3樓

製 造 廠 商　：HUAWEI TECHNOLOGIES CO., LTD.

製造商地址　：Administration Building, Headquarters of Huawei Technologies Co., Ltd., Bantian, Longgang District, Shenzhen

待測物電壓　：DC 54 V, 0.65 A

試 驗 電壓　：110 Vac, 60 Hz

量 測 規 範　：低功率射頻電機技術規範(LP0002) 107年1月10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)

試驗受理日期：108 年 02 月 27 號

樣品接受日期：108 年 04 月 19 號

試驗完成日期：108 年 05 月 07 號

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電機技術規範(LP0002)所規定的各項限制值。

特 此 證 明 ！

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（歐 陽 良 相）

審 核 者：呂宗霖
（呂 宗 霖）

本測試報告所敘述之測試結果, 僅對客戶所提供之測試樣品,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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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	WIFI 分享器		
商 標 或 廠 牌	HUAWEI		
型 號	eA680-950		
額 定 電 源	DC 54 V, 0.65 A		
調 變 方 式	IEEE 802.11b: DSSS IEEE 802.11g: OFDM IEEE 802.11n 2.4 GHz 20 MHz / 40 MHz: OFDM		
頻 率 使 用 範 圍	Mode		Frequency Range (MHz)
	IEEE 802.11b / IEEE 802.11g / IEEE 802.11n 2.4 GHz 20 MHz		2412 – 2462
	IEEE 802.11n 2.4 GHz 40 MHz		2422 – 2452
天 線 製 造 商	上海日安天線有限公司		
天 線 型 號	C15N17Z100IX		
天 線 型 態	全向天線		
天 線 增 益 值	2 dBi		
RF 最大輸出功率	Mode	Power	
	IEEE 802.11b	25.88 dBm	0.387 W
	IEEE 802.11g	27.78 dBm	0.600 W
	IEEE 802.11n 2.4 GHz 20 MHz	27.95 dBm	0.624 W
	IEEE 802.11n 2.4 GHz 40 MHz	27.80 dBm	0.603 W

輸出/輸入埠說明：

輸 出 / 入 埠		數量	介面內容說明
1	PoE Port	1	連接至 PoE Adapter
2	Antenna Port	2	連接至 N/A
3	USB Port	1	連接至 Notebook

待測設備外圍說明：

電 源 線 類 別	本產品透過 PoE Adapter 供電
附 屬 裝 置	無

1.2 其他相關聲明

本測試報告屬(以下選擇一種打■)

■	新設計之機型,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: Apr. 25, 2019

名 稱	廠 牌	型 號	序 號	本次校驗日期	校驗年限
Spectrum Analyzer (20 Hz~26.5 GHz)	Agilent	N9020A	US47520902	09/25/2018	1 year
Power Sensor	Anritsu	MA2411B	1126022	08/29/2018	1 year
Power Meter	Anritsu	ML2495A	1135009	08/29/2018	1 year

For Conducted Emission
Test Period: May 07, 2019

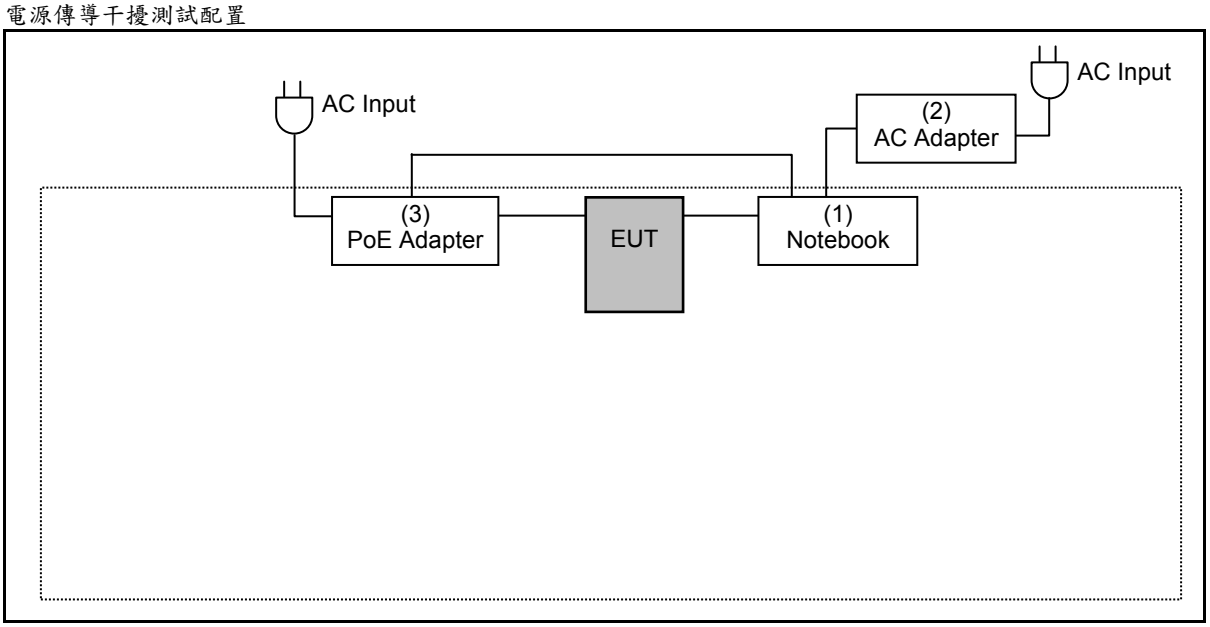
名 稱	廠 牌	型 號	序 號	本次校驗日期	校驗年限
測試接收機 (9 kHz~3 GHz)	R&S	ESCI	100367	05/21/2018	1 year
線性阻抗模擬網路	R&S	ENV216	101040	04/03/2019	1 year
線性阻抗模擬網路	R&S	ENV216	101041	03/28/2019	1 year

For Radiated Emissions
Test Period: Apr. 19 ~ Apr. 24, 2019

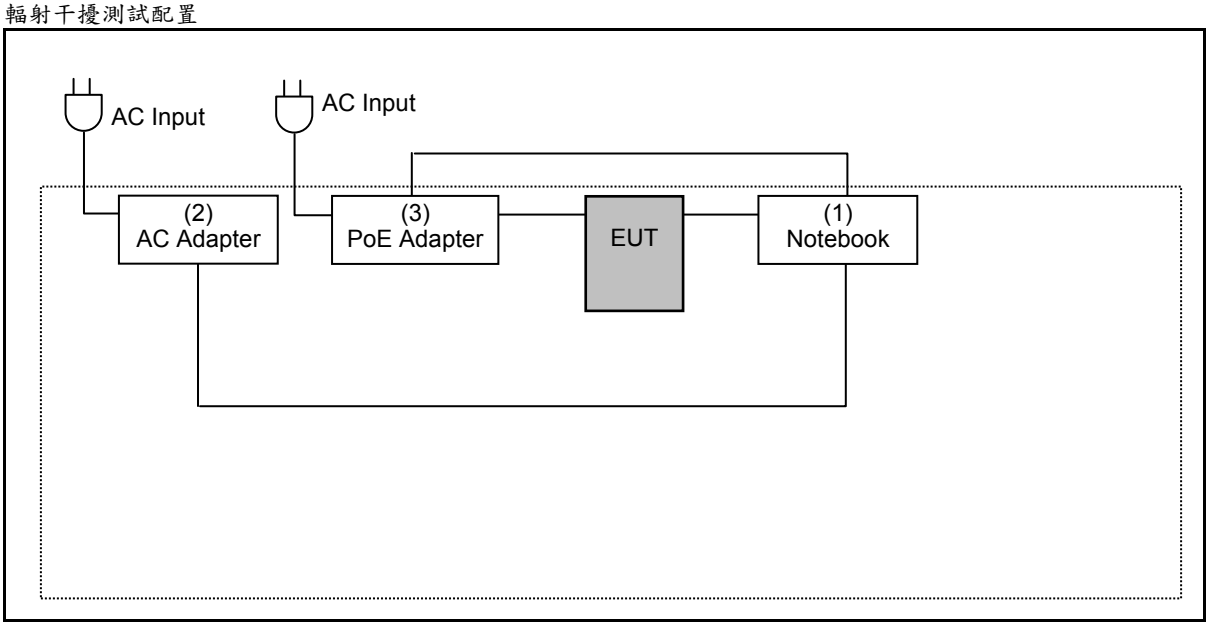
名 稱	廠 牌	型 號	序 號	本次校驗日期	校驗年限
Spectrum Analyzer	Agilent	E4445A	MY46181986	5/28/2018	1 year
Amplifier	Agilent	8449B	3008A02456	3/20/2019	1 year
Amplifier	Agilent	8447D	2944A11120	12/13/2018	1 year
天線	SCHWARZBECK	SB AC VULB	9168-0841	11/19/2018	1 year
天線(1~18 G)	ETS	3117	00152321	9/28/2018	1 year
Pre Amplifier (26.5~40 GHz)	EMCI	EMC2654045	980028	08/23/2018	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		商標	型 號	序 號	電 源 線	備註
(1)	Notebook	DELL	LATITUDE E6440	48GBD72	---	---
(2)	AC Adapter	DELL	HA65NM130	---	Non-Shielded, 0.8 m	INPUT : 100-240 VAC , 50/60 Hz, 1.7 A OUTPUT : 19.5 VDC , 3.34 A
(3)	PoE Adapter	UBiQUiTi	UBI-POE-48-5G	--	Non-Shielded, 0.8 m	INPUT : 100 V-240 VAC , 50/60 Hz, 0.55 A OUTPUT : 48 VDC, 0.5 A

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

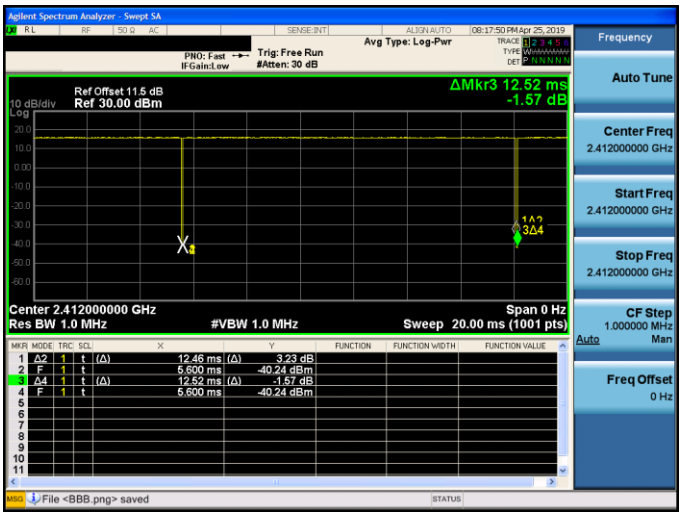
Pre-Test Mode
Mode 1: Transmit Mode
Mode 2: IEEE 802.11b Continuous TX Mode
Mode 3: IEEE 802.11g Continuous TX Mode
Mode 4: IEEE 802.11n 2.4 GHz 20 MHz Continuous TX Mode
Mode 5: IEEE 802.11n 2.4 GHz 40 MHz Continuous TX Mode
Mode 6: Receiver Mode

Final-Test Mode
Mode 1: Transmit Mode
Mode 2: IEEE 802.11b Continuous TX Mode
Mode 3: IEEE 802.11g Continuous TX Mode
Mode 4: IEEE 802.11n 2.4 GHz 20 MHz Continuous TX Mode
Mode 5: IEEE 802.11n 2.4 GHz 40 MHz Continuous TX Mode
Mode 6: Receiver Mode

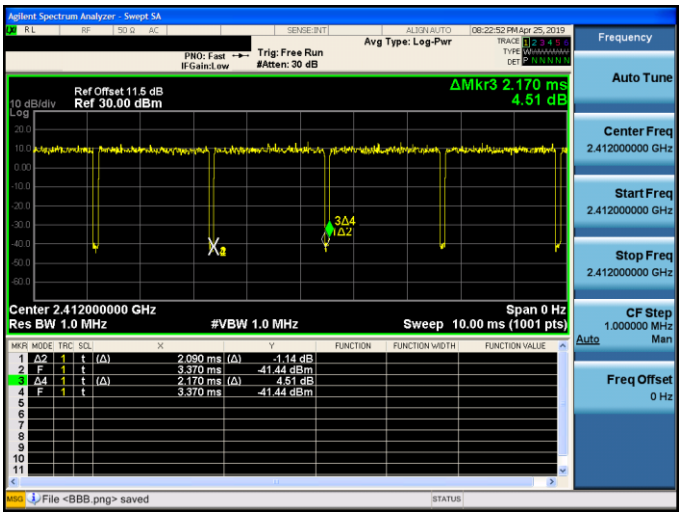
Duty cycle

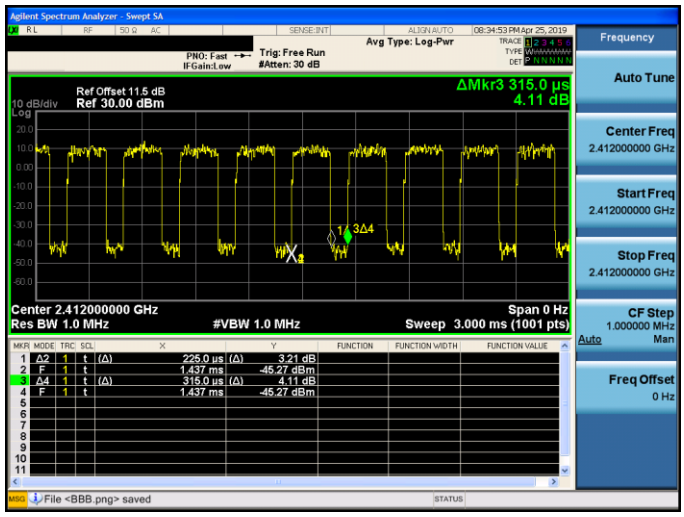
Test Mode	Frequency (MHz)	on time (ms)	on+off time (ms)	Duty cycle	Duty Factor (dB)	1/T Minimun VBW (kHz)
Mode 2	2412.0	12.460	12.520	0.995	0.021	0.010
Mode 3	2412.0	2.090	2.170	0.963	0.163	0.478
Mode 4	2412.0	0.225	0.315	0.714	1.461	4.444
Mode 5	2422.0	0.129	0.219	0.589	2.299	7.752

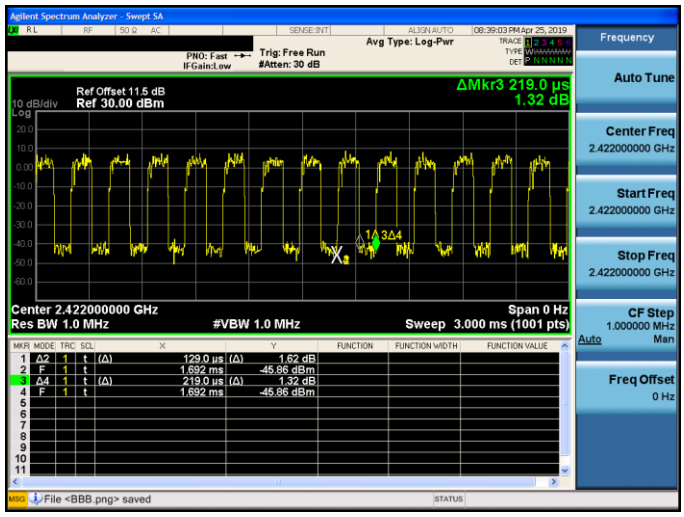
Mode 2: IEEE 802.11b Continuous TX Mode



Mode 3: IEEE 802.11g Continuous TX Mode



Mode 4: IEEE 802.11n 2.4 GHz 20 MHz Continuous TX Mode


Mode 5: IEEE 802.11n 2.4 GHz 40 MHz Continuous TX Mode


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	9 kHz ~ 150 kHz	2.7
	150 kHz ~ 30 MHz	2.7
Radiated Emission	9 kHz ~ 30 MHz	1.7
	30 MHz ~ 1000 MHz	5.7
	1000 MHz ~ 18000 MHz	5.5
	18000 MHz ~ 26500 MHz	4.8
	26500 MHz ~ 40000 MHz	4.8
Conducted Output Power	+0.27 dB / -0.28 dB	
RF Bandwidth	4.96 %	
Power Spectral Density	+0.71 dB / -0.77 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	26
濕度 Humidity (%RH)		10 - 90	60

中華民國實驗室認證體系
認可編號: 1330
測試實驗室名稱　　: 晶復科技股份有限公司
TEL: 886-3-2710188 / FAX: 886-3-2710190
傳導干擾電壓量測地點: 桃園市八德區長安街 140-1 號.
輻射干擾場強量測地點: 桃園市八德區長安街 140-1 號.

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 低功率射頻電機技術規範(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	低功率射頻電機技術規範 2.3 節	請參閱 4.1 節	請參閱 2.1 節	合格
2	場強輻射	低功率射頻電機技術規範 2.8 節、2.9 節、3.10.1.5.(1)節	請參閱 4.2.1 節	請參閱 2.1 節	合格
3	頻帶邊緣外之輻射發射	低功率射頻電機技術規範 3.10.1.5.(1)節	請參閱 4.2.1 節	請參閱 2.1 節	合格
4	峰值傳導輸出功率	低功率射頻電機技術規範 3.10.1.2(1)(C)節	請參閱 4.2.2 節	請參閱 2.1 節	合格
5	天線規格	低功率射頻電機技術規範 3.10.1.3(3)、3.10.1.4 節	請參閱 4.2.3 節	-------	合格
6	非必要頻帶	低功率射頻電機技術規範 3.10.1.5(1)節	請參閱 4.2.4 節	請參閱 2.1 節	合格
7	6 dB 頻寬	低功率射頻電機技術規範 3.10.1.6(2)(A)節	請參閱 4.2.5 節	請參閱 2.1 節	合格
8	峰值發射功率頻譜密度	低功率射頻電機技術規範 3.10.1.6(2)(B)節	請參閱 4.2.6 節	請參閱 2.1 節	合格
9	電波暴露量之評估	低功率射頻電機技術規範 5.20.2.1 節、5.20.2.2 節	請參閱 4.2.7 節	請參閱 2.1 節	合格

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 低功率射頻電機技術規範(LP0002)之 2.3 節，以市電為電源之低功率射頻電機，其傳導回電源線上頻率自 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 μH 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。

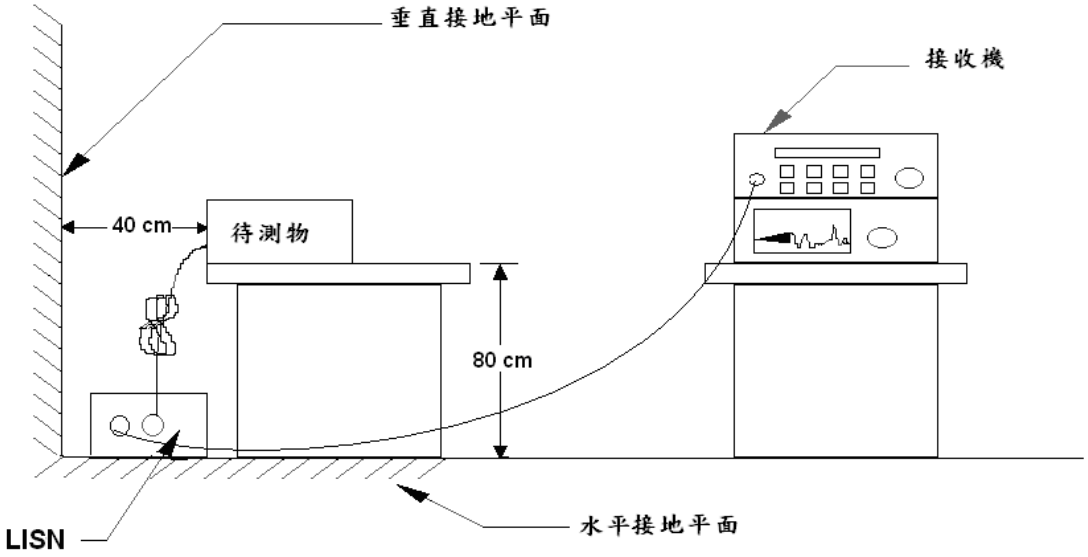
干擾值之計算

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

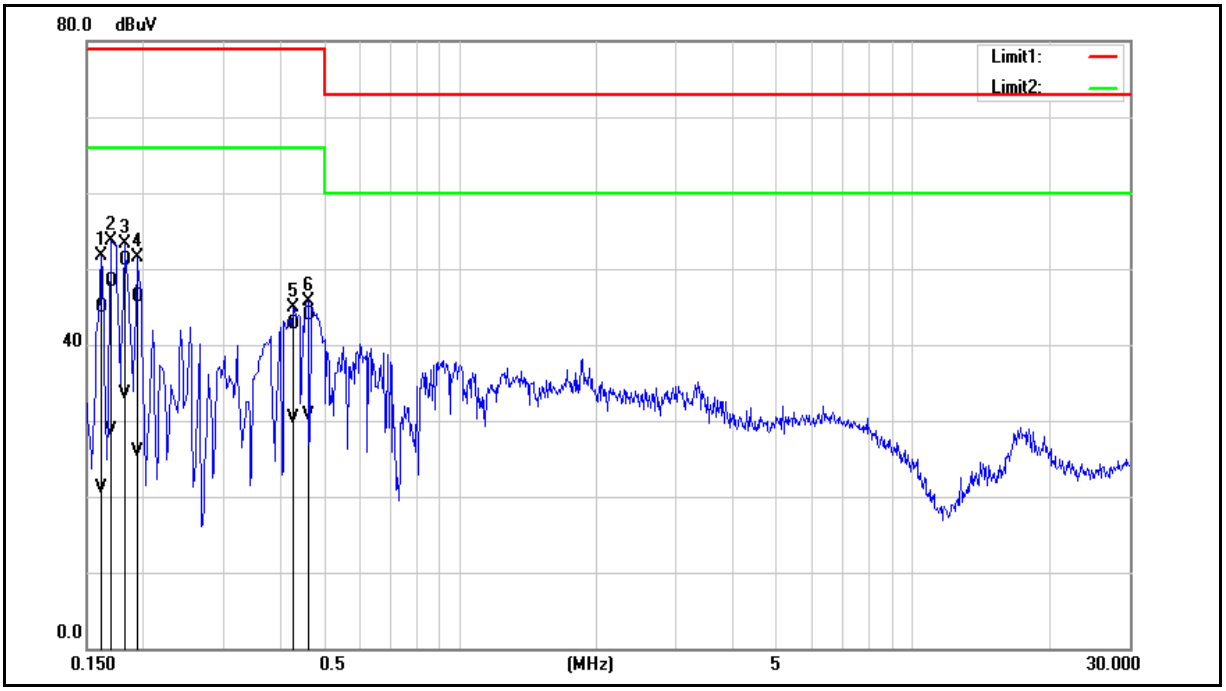
其中校正因子為： 饋線損失 + 電源阻抗模擬網路損失

測試架構圖 ：



測試結果:

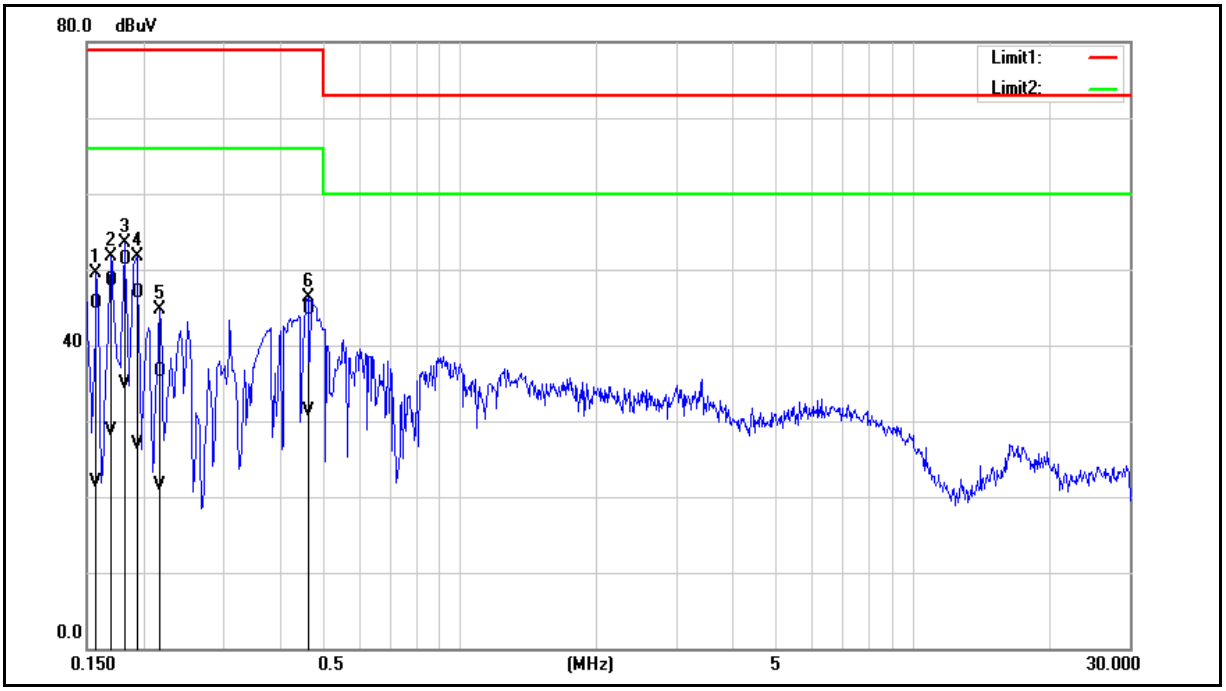
Standard:	LP0002	Line:	L1
Test item:	Conducted Emission	Power:	AC 110 V/60 Hz
Test Mode:	Mode 1	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Description:			



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	0.1620	35.32	11.48	9.60	44.92	21.08	79.00	66.00	-34.08	-44.92	Pass
2	0.1700	38.80	19.05	9.60	48.40	28.65	79.00	66.00	-30.60	-37.35	Pass
3	0.1820	41.54	23.98	9.60	51.14	33.58	79.00	66.00	-27.86	-32.42	Pass
4	0.1940	36.78	16.37	9.60	46.38	25.97	79.00	66.00	-32.62	-40.03	Pass
5	0.4300	33.10	20.68	9.60	42.70	30.28	79.00	66.00	-36.30	-35.72	Pass
6	0.4620	34.39	21.19	9.60	43.99	30.79	79.00	66.00	-35.01	-35.21	Pass

註：1. QP / AVG result (dBuV) = Correction factor (dB) + QP / AVG reading (dBuV)。
2. Correction factor 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
Test Mode:	Mode 1	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
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	35.74	12.24	9.71	45.45	21.95	79.00	66.00	-33.55	-44.05	Pass
2	0.1700	38.88	19.04	9.71	48.59	28.75	79.00	66.00	-30.41	-37.25	Pass
3	0.1820	41.57	25.29	9.70	51.27	34.99	79.00	66.00	-27.73	-31.01	Pass
4	0.1940	37.11	17.23	9.70	46.81	26.93	79.00	66.00	-32.19	-39.07	Pass
5	0.2180	26.74	11.82	9.70	36.44	21.52	79.00	66.00	-42.56	-44.48	Pass
6	0.4620	34.94	21.69	9.71	44.65	31.40	79.00	66.00	-34.35	-34.60	Pass

註：1. QP / AVG result (dBuV) = Correction factor (dB) + QP / AVG reading (dBuV)。
2. Correction factor dB) = 量測信號線損失(dB) + 電源阻抗模擬網路係數(dB)。

4.2 2.4 GHz 檢驗項目

4.2.1 場強輻射之量測

合格標準:

依據 NCC 低功率射頻電機技術規範(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 低功率射頻電機技術規範(LP0002)之 3.10.1.2(1)(C)之峰值傳導輸出功率量測方式者，至少須衰減 30 dB。此外，落於第 2.7 節禁用頻段之輻射發射，應符合第 2.8 節之規定。

依據 NCC 低功率射頻電機技術規範第 2.7 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 低功率射頻電機技術規範第 2.8 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。

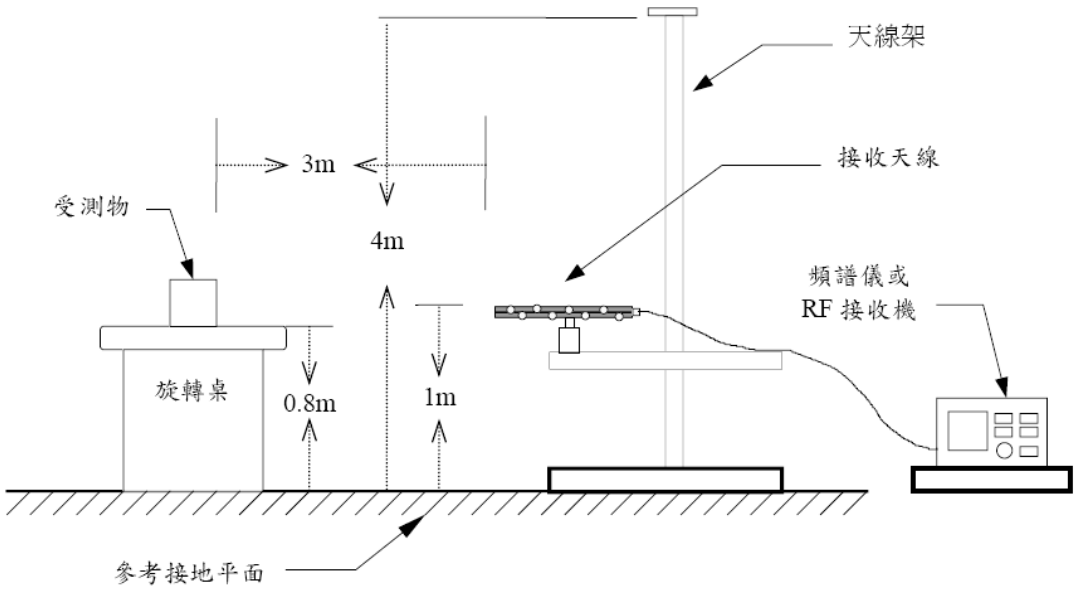
場強度之計算

場強之計算公式為：結果值 = 讀值 + 校正因子

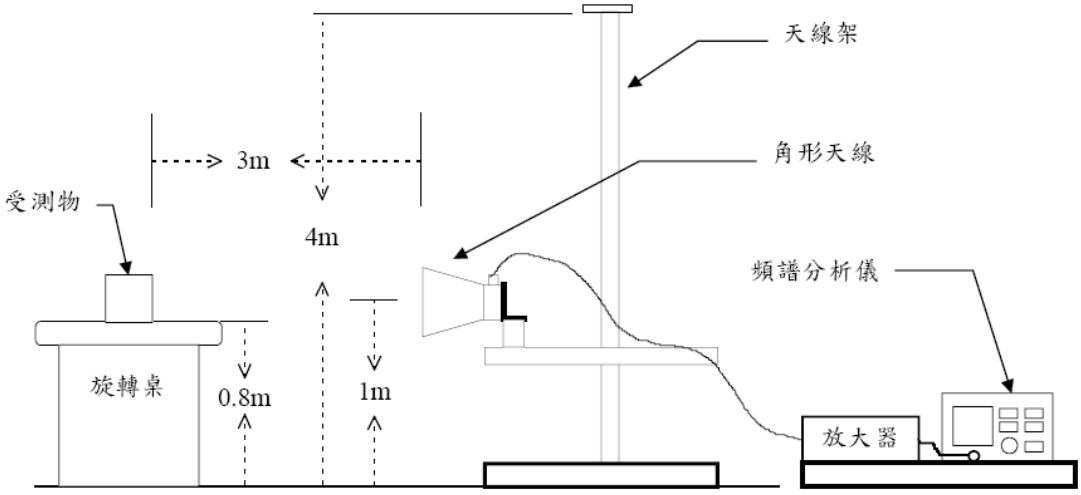
其中校正因子為： 天線因子+ 饋線損失 + 濾波器損失（若有使用） - 放大器增益（若有使用）

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



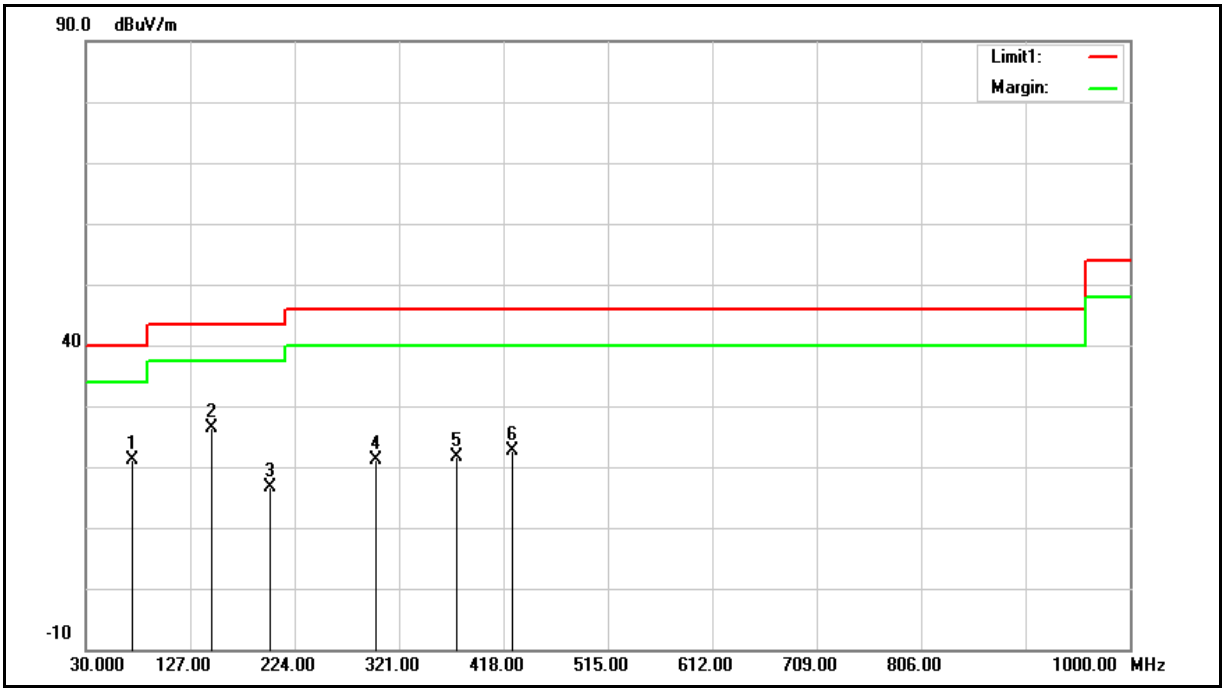
測試結果:

本產品透過預測試確認 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。

場強輻射之量測依據輸出峰值功率之量測結果取其最大值之操作模式為場強輻射測試模式。

其它不必要之訊號 (1 GHz 以下)

Standard:	LP0002	Test Distance:	3 m
Test item:	Harmonic	Power:	AC 110 V/60 Hz
Frequency:	2437 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Test 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	74.0000	31.14	-9.92	21.22	40.00	-18.78	QP
2	148.0000	32.95	-6.65	26.30	43.50	-17.20	QP
3	202.0000	25.78	-9.07	16.71	43.50	-26.79	QP
4	300.0000	26.39	-5.28	21.11	46.00	-24.89	QP
5	374.5000	25.42	-3.89	21.53	46.00	-24.47	QP
6	426.0000	25.57	-2.83	22.74	46.00	-23.26	QP

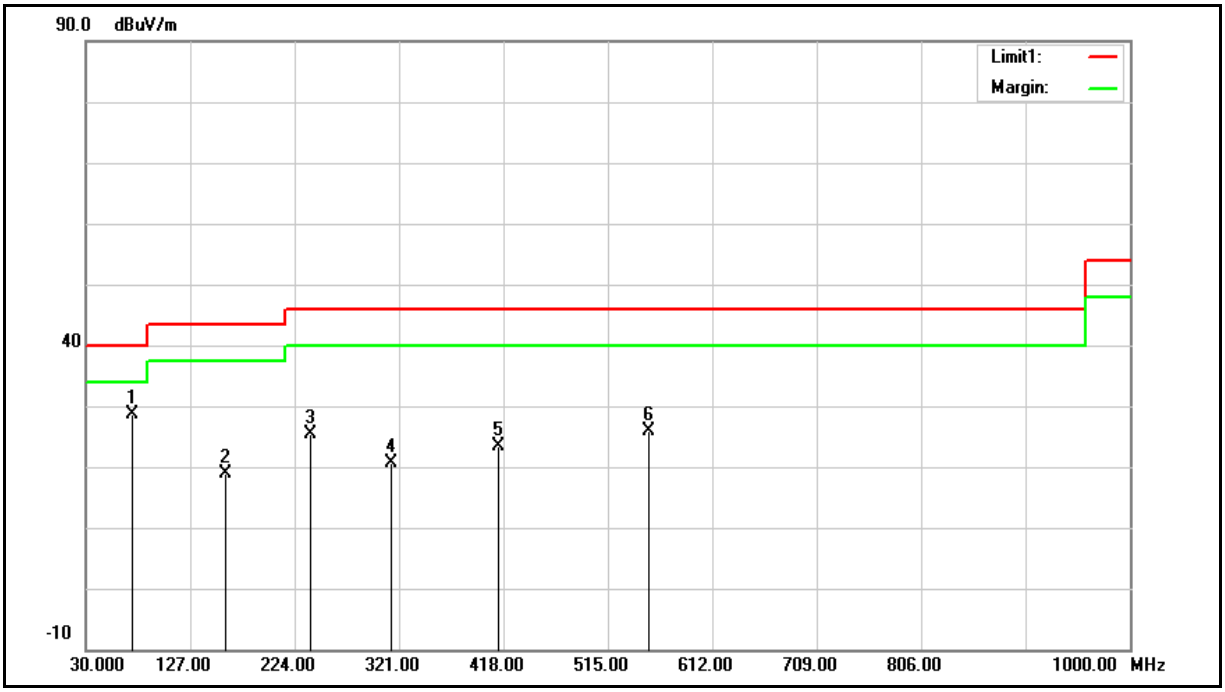
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

Example: 21.22 = -9.92 + 31.14.

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	Power:	AC 110 V/60 Hz
Frequency:	2437 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Test 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	74.0000	38.59	-9.92	28.67	40.00	-11.33	QP
2	160.0000	25.21	-6.40	18.81	43.50	-24.69	QP
3	239.5000	32.84	-7.44	25.40	46.00	-20.60	QP
4	315.0000	25.77	-5.03	20.74	46.00	-25.26	QP
5	413.5000	26.38	-3.07	23.31	46.00	-22.69	QP
6	553.5000	26.45	-0.67	25.78	46.00	-20.22	QP

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

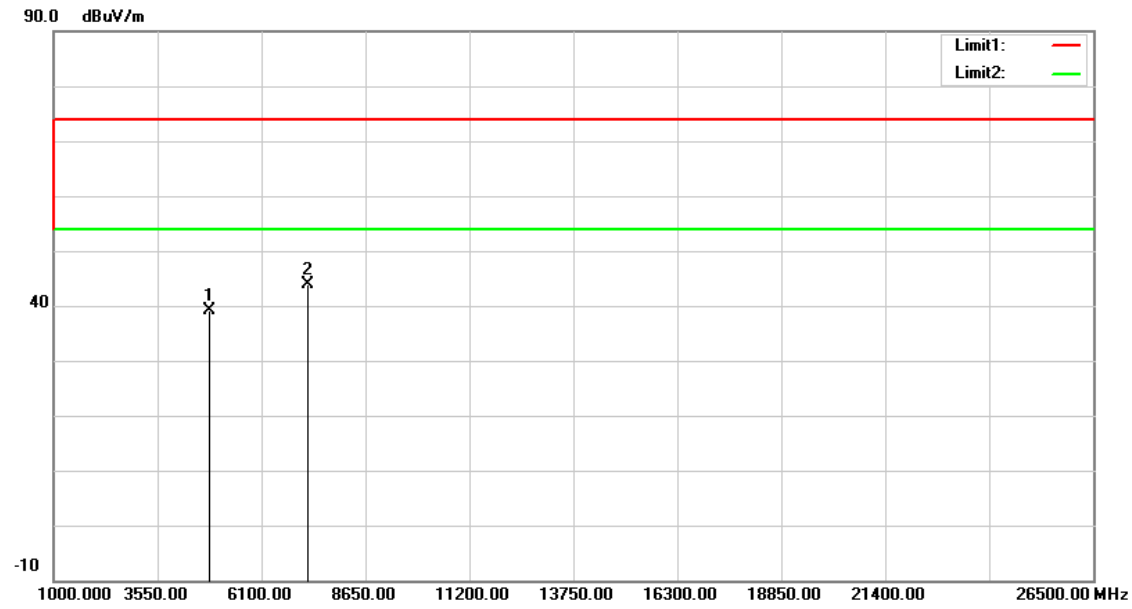
Example: 28.67 = -9.92 + 38.59.

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.

場強輻射量側 (1 GHz 以上)

Standard:	LP0002	Test Distance:	3 m
Test item:	Harmonic	Power:	AC 110 V/60 Hz
Frequency:	2412 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
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	31.80	7.28	39.08	74.00	-34.92	peak
2	7236.000	33.86	9.93	43.79	74.00	-30.21	peak

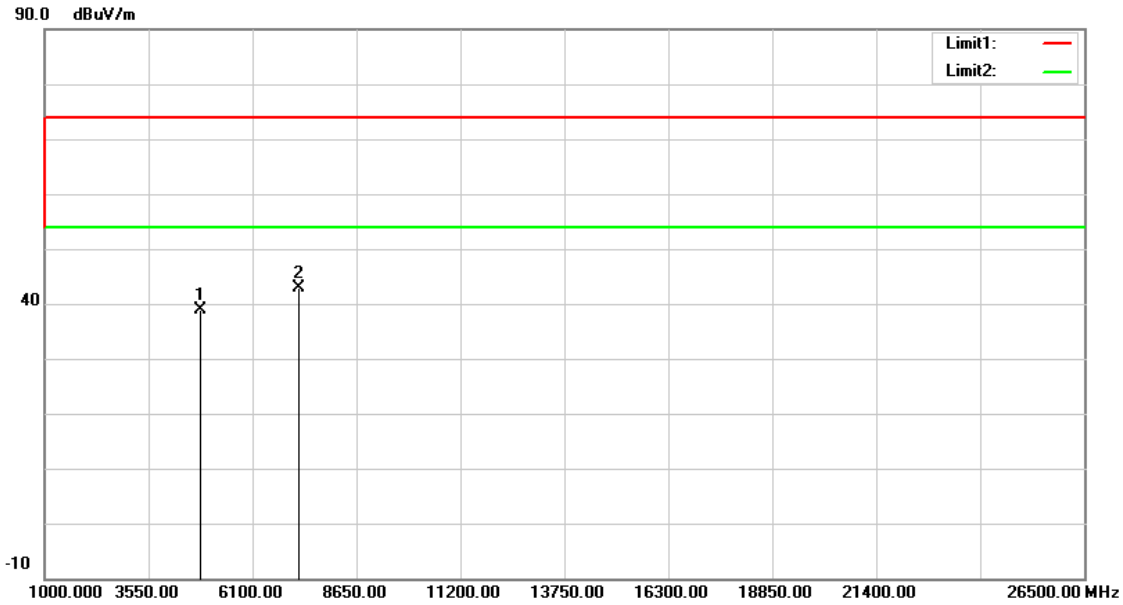
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

Example: 39.08 = 7.28 + 31.80.

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	Power:	AC 110 V/60 Hz
Frequency:	2412 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
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	31.57	7.28	38.85	74.00	-35.15	peak
2	7236.000	32.84	9.93	42.77	74.00	-31.23	peak

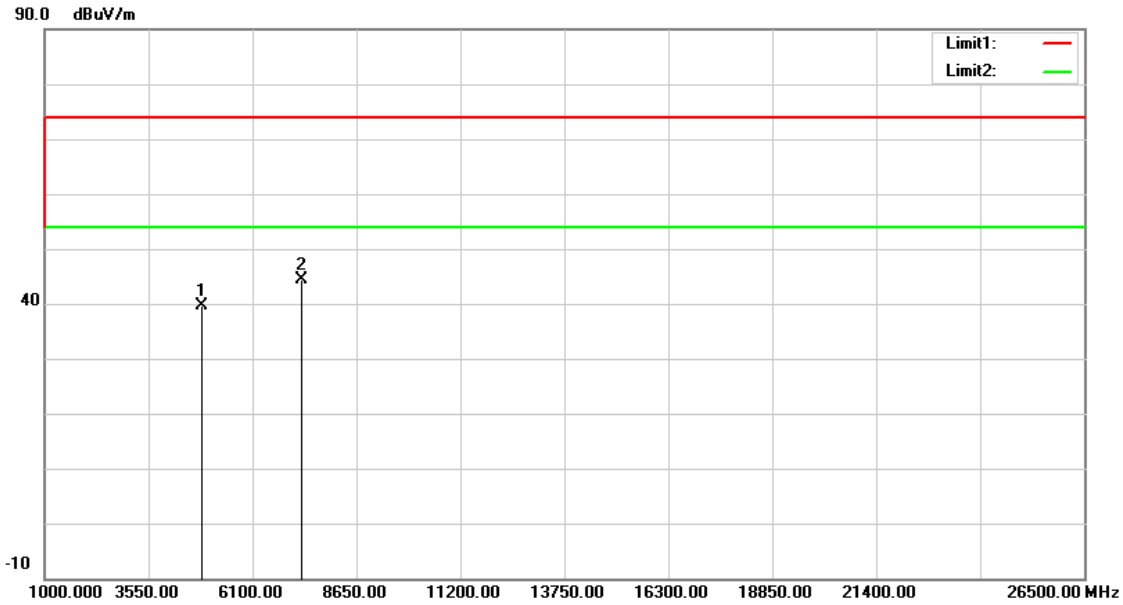
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

Example: 38.85 = 7.28 + 31.57.

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	Power:	AC 110 V/60 Hz
Frequency:	2437 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 2		
Ant.Polar.:	Horizontal		



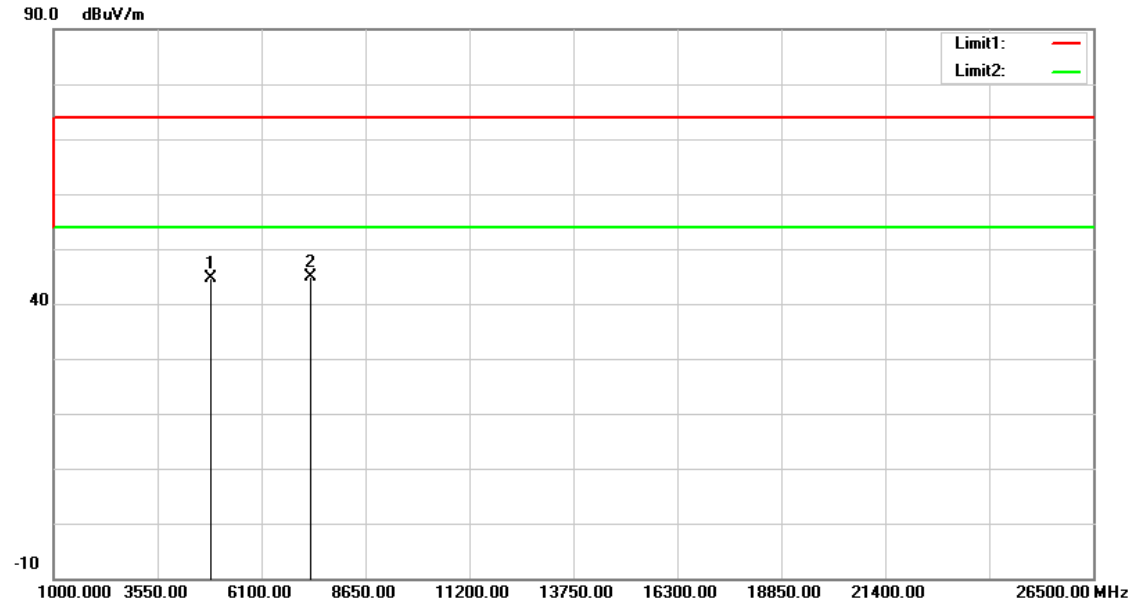
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4874.000	32.39	7.35	39.74	74.00	-34.26	peak
2	7311.000	34.54	9.94	44.48	74.00	-29.52	peak

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	Power:	AC 110 V/60 Hz
Frequency:	2437 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 2		
Ant.Polar.:	Vertical		



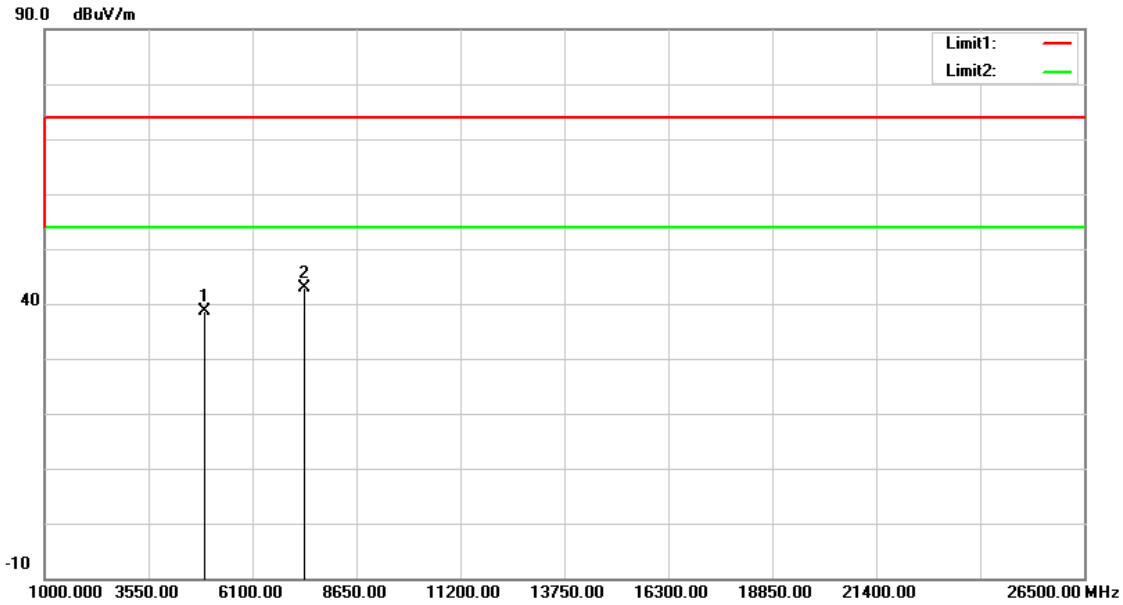
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4874.000	37.34	7.35	44.69	74.00	-29.31	peak
2	7311.000	34.97	9.94	44.91	74.00	-29.09	peak

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	Power:	AC 110 V/60 Hz
Frequency:	2462 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 2		
Ant.Polar.:	Horizontal		



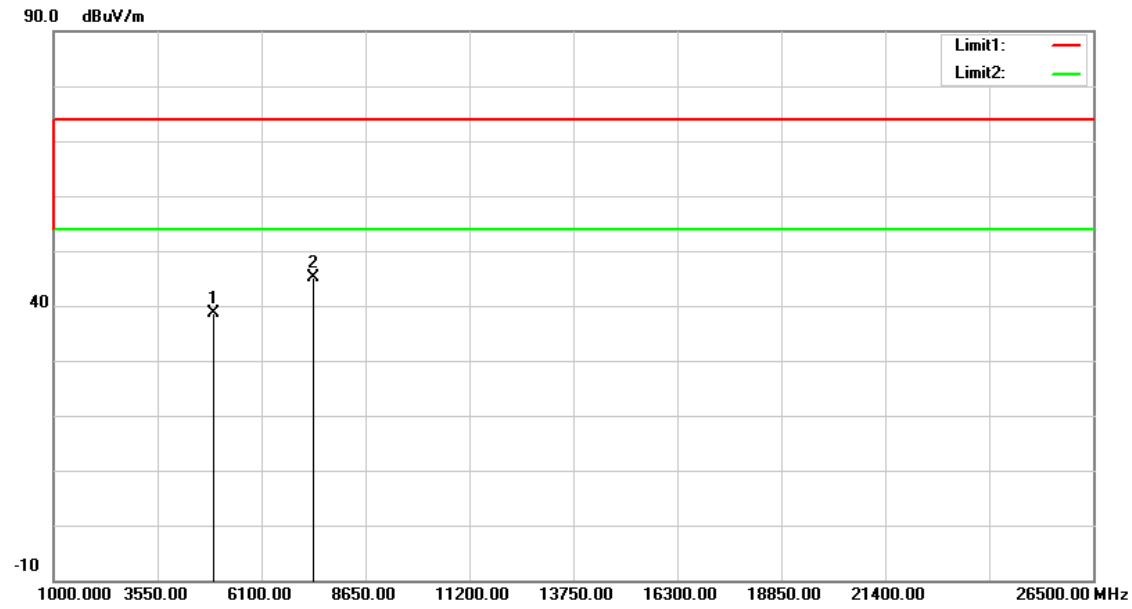
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4924.000	31.31	7.41	38.72	74.00	-35.28	peak
2	7386.000	32.91	9.96	42.87	74.00	-31.13	peak

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	Power:	AC 110 V/60 Hz
Frequency:	2462 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 2		
Ant.Polar.:	Vertical		



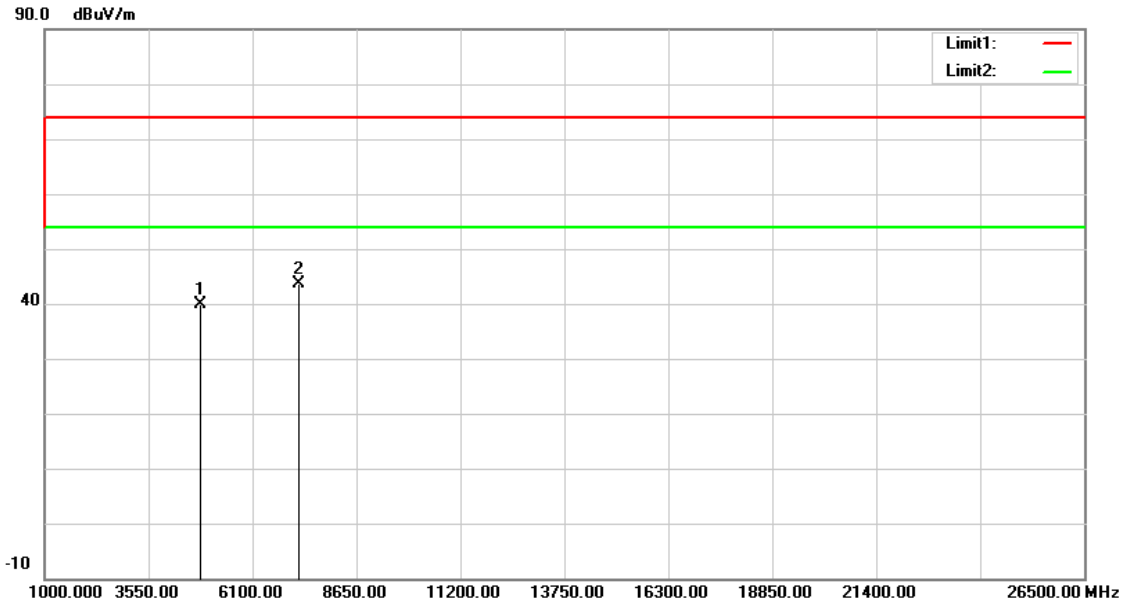
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4924.000	31.25	7.41	38.66	74.00	-35.34	peak
2	7386.000	45.09	0.00	45.09	74.00	-28.91	peak

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	Power:	AC 110 V/60 Hz
Frequency:	2412 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 3		
Ant.Polar.:	Horizontal		



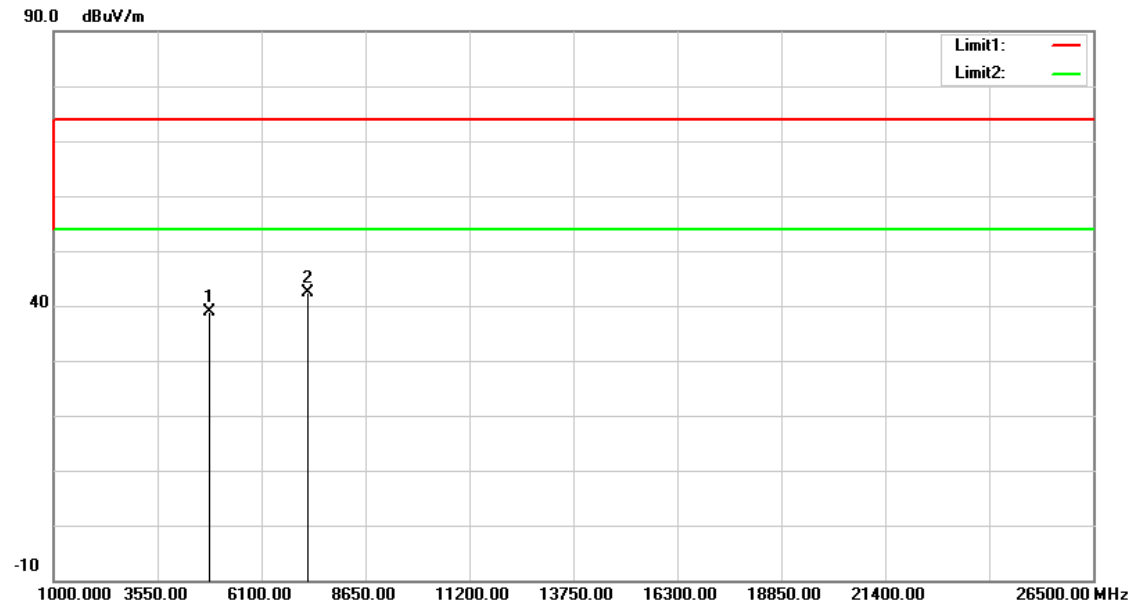
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4824.000	32.52	7.28	39.80	74.00	-34.20	peak
2	7236.000	33.73	9.93	43.66	74.00	-30.34	peak

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	Power:	AC 110 V/60 Hz
Frequency:	2412 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 3		
Ant.Polar.:	Vertical		



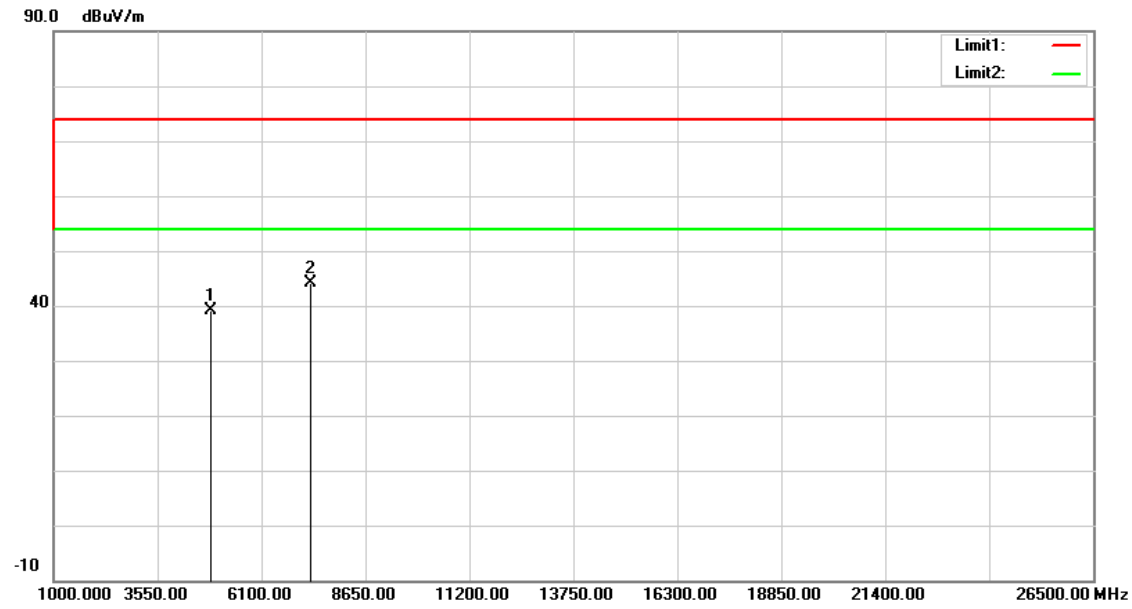
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4824.000	31.70	7.28	38.98	74.00	-35.02	peak
2	7236.000	32.38	9.93	42.31	74.00	-31.69	peak

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:	Harmonic	Power:	AC 110 V/60 Hz
Frequency:	2437 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 3		
Ant.Polar.:	Horizontal		



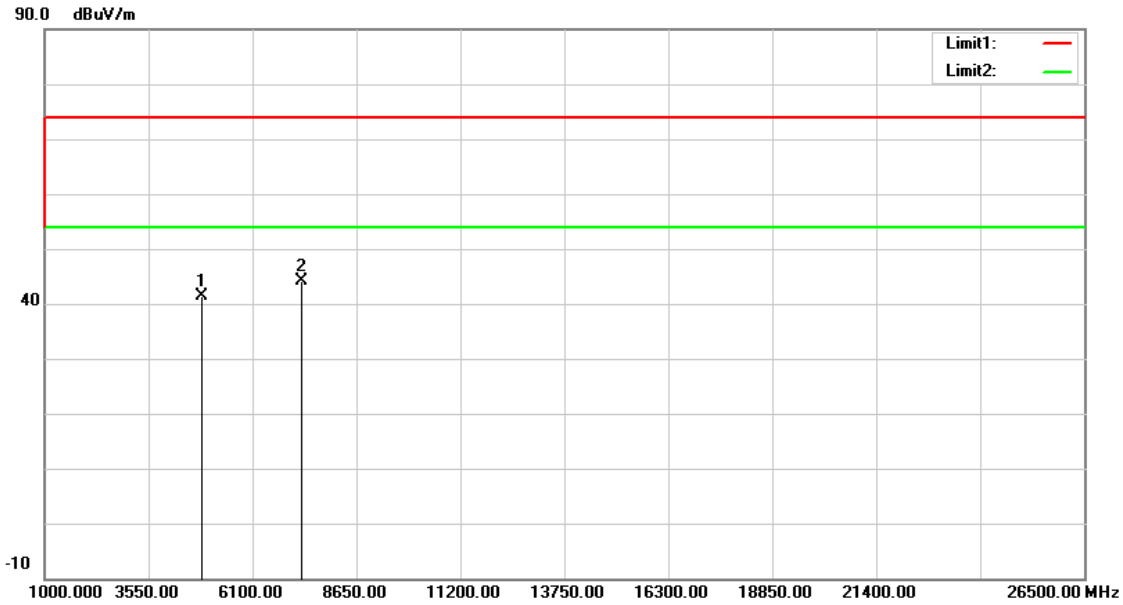
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4874.000	31.83	7.35	39.18	74.00	-34.82	peak
2	7311.000	34.29	9.94	44.23	74.00	-29.77	peak

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	Power:	AC 110 V/60 Hz
Frequency:	2437 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 3		
Ant.Polar.:	Vertical		



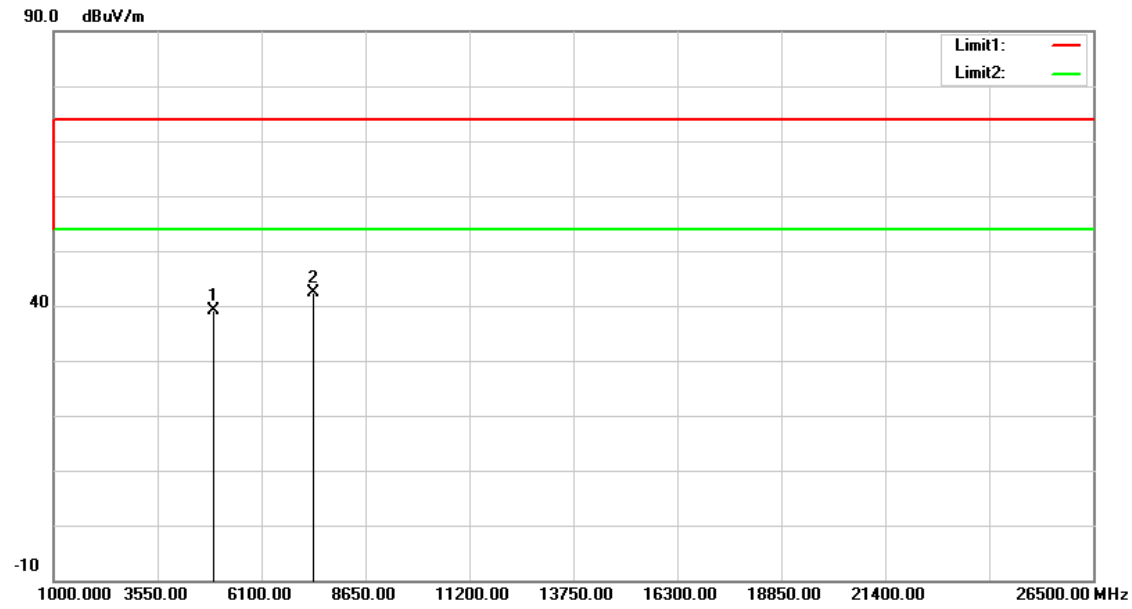
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4874.000	34.05	7.35	41.40	74.00	-32.60	peak
2	7311.000	34.24	9.94	44.18	74.00	-29.82	peak

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	Power:	AC 110 V/60 Hz
Frequency:	2462 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 3		
Ant.Polar.:	Horizontal		



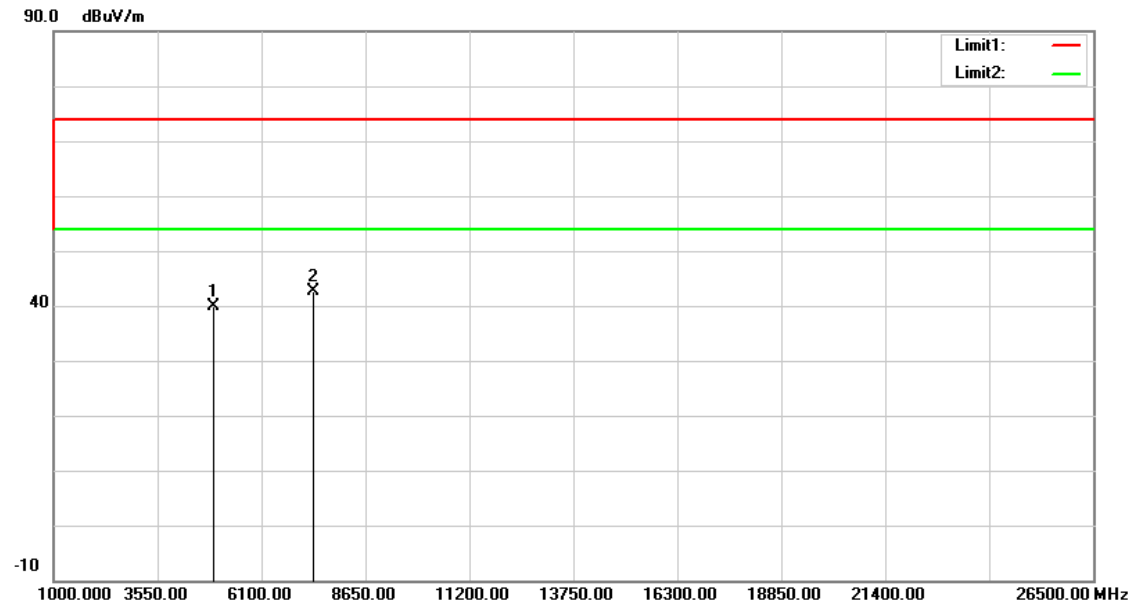
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4924.000	31.83	7.41	39.24	74.00	-34.76	peak
2	7386.000	32.44	9.96	42.40	74.00	-31.60	peak

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	Power:	AC 110 V/60 Hz
Frequency:	2462 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 3		
Ant.Polar.:	Vertical		



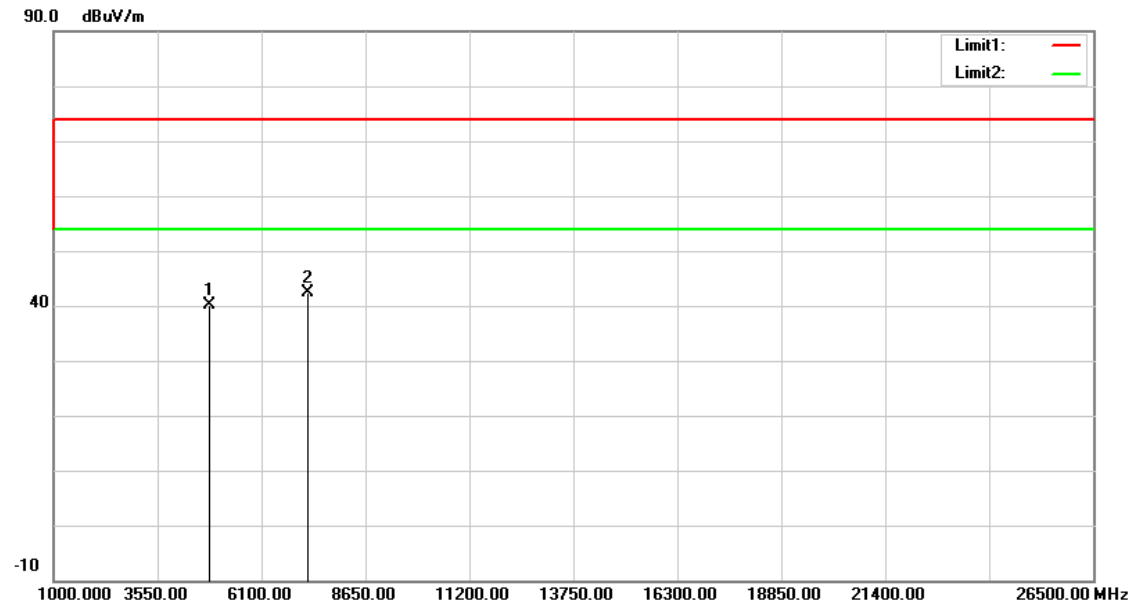
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4924.000	32.38	7.41	39.79	74.00	-34.21	peak
2	7386.000	32.79	9.96	42.75	74.00	-31.25	peak

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	Power:	AC 110 V/60 Hz
Frequency:	2412 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 4		
Ant.Polar.:	Horizontal		



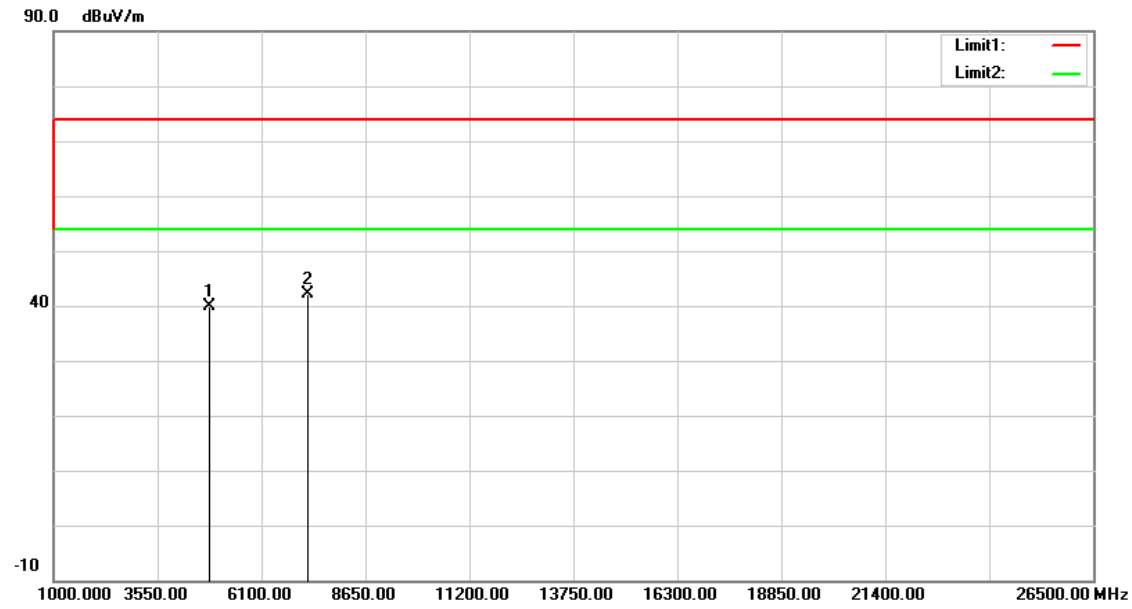
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4824.000	32.81	7.28	40.09	74.00	-33.91	peak
2	7236.000	32.35	9.93	42.28	74.00	-31.72	peak

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	Power:	AC 110 V/60 Hz
Frequency:	2412 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 4		
Ant.Polar.:	Vertical		



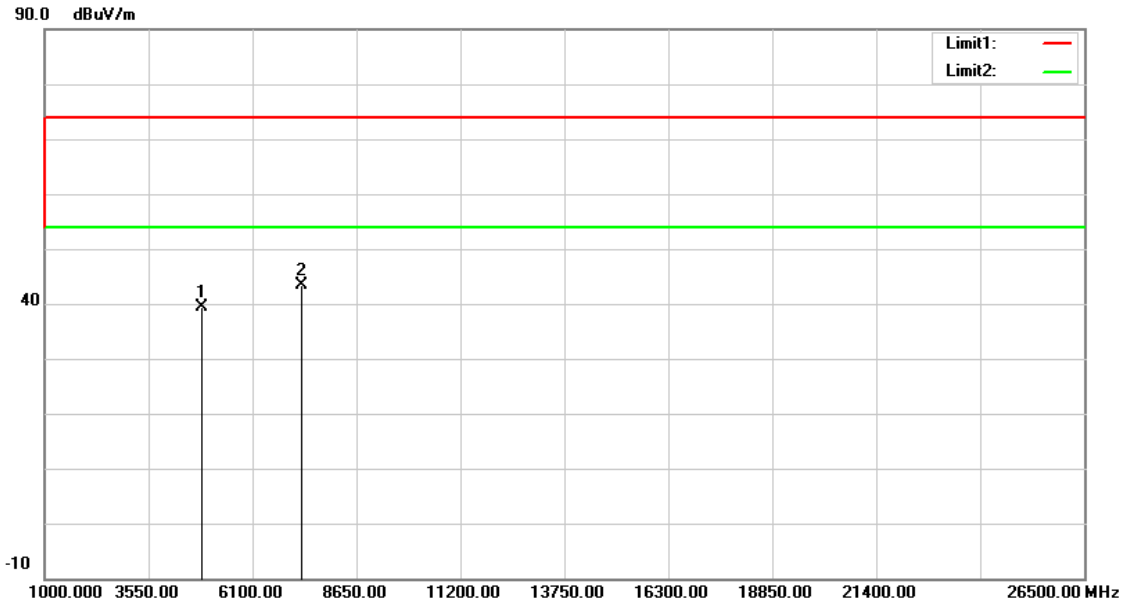
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4824.000	32.53	7.28	39.81	74.00	-34.19	peak
2	7236.000	32.23	9.93	42.16	74.00	-31.84	peak

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	Power:	AC 110 V/60 Hz
Frequency:	2437 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 4		
Ant.Polar.:	Horizontal		



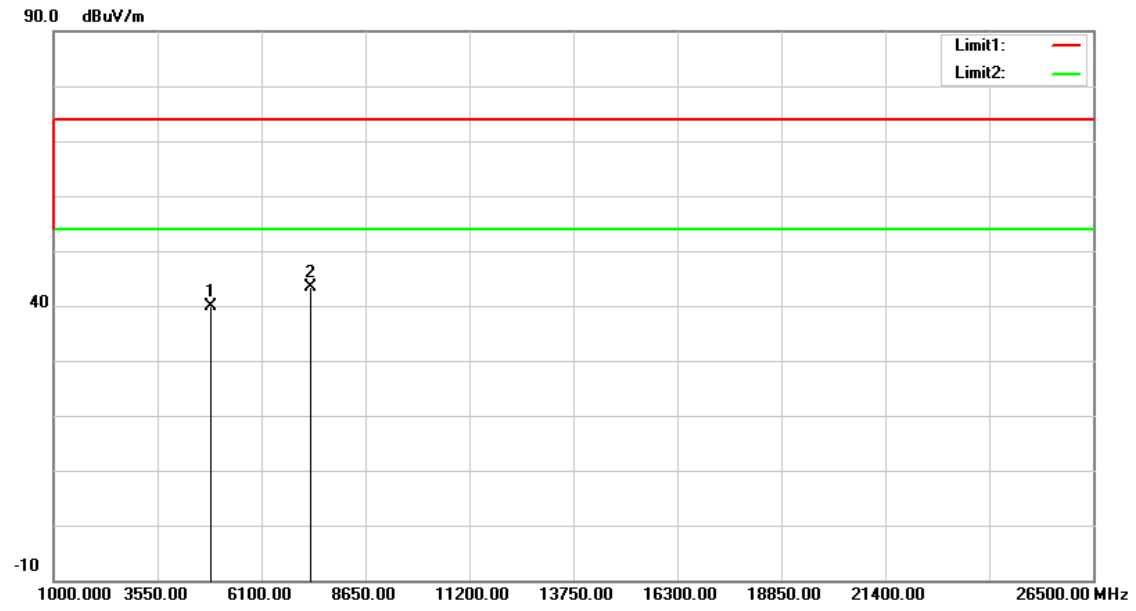
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4874.000	32.05	7.35	39.40	74.00	-34.60	peak
2	7311.000	33.50	9.94	43.44	74.00	-30.56	peak

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:	Harmonic	Power:	AC 110 V/60 Hz
Frequency:	2437 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 4		
Ant.Polar.:	Vertical		



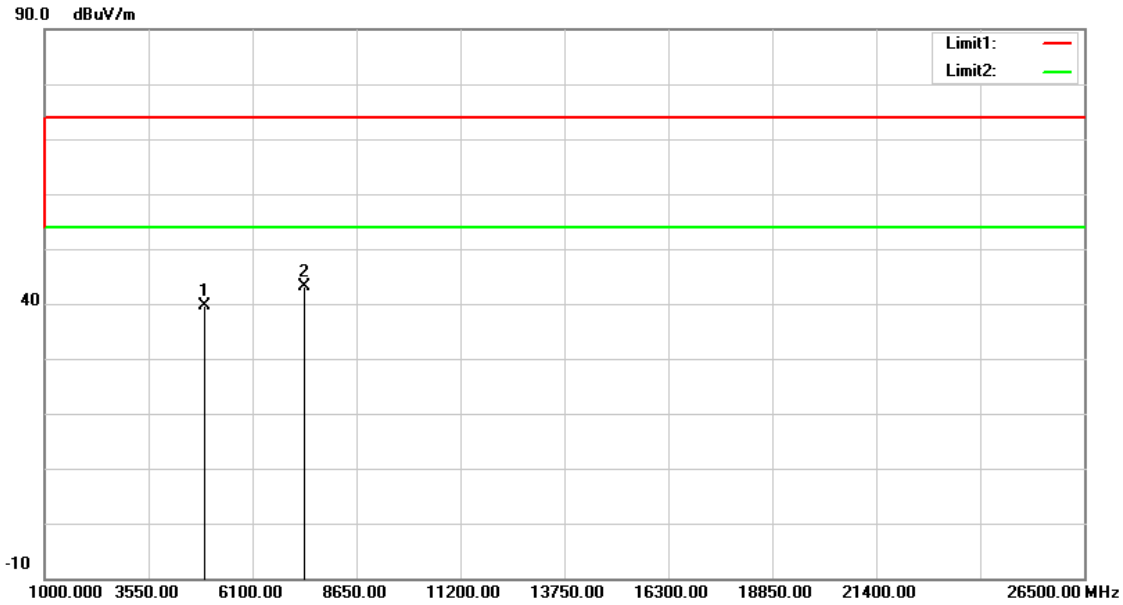
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4874.000	32.54	7.35	39.89	74.00	-34.11	peak
2	7311.000	33.36	9.94	43.30	74.00	-30.70	peak

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	Power:	AC 110 V/60 Hz
Frequency:	2462 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 4		
Ant.Polar.:	Horizontal		



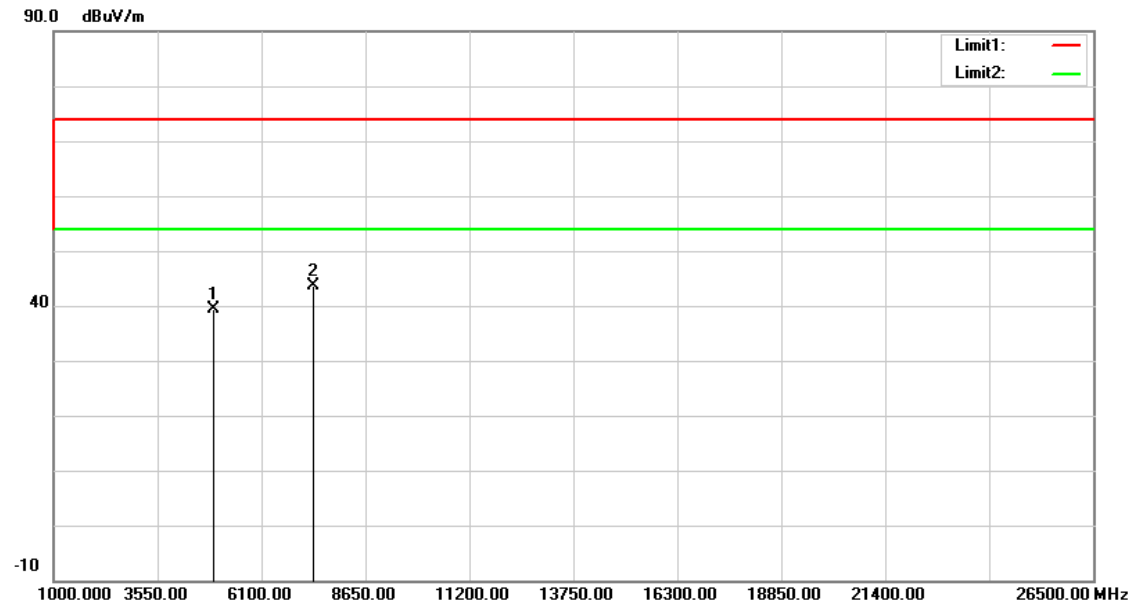
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4924.000	32.20	7.41	39.61	74.00	-34.39	peak
2	7386.000	33.21	9.96	43.17	74.00	-30.83	peak

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	Power:	AC 110 V/60 Hz
Frequency:	2462 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 4		
Ant.Polar.:	Vertical		



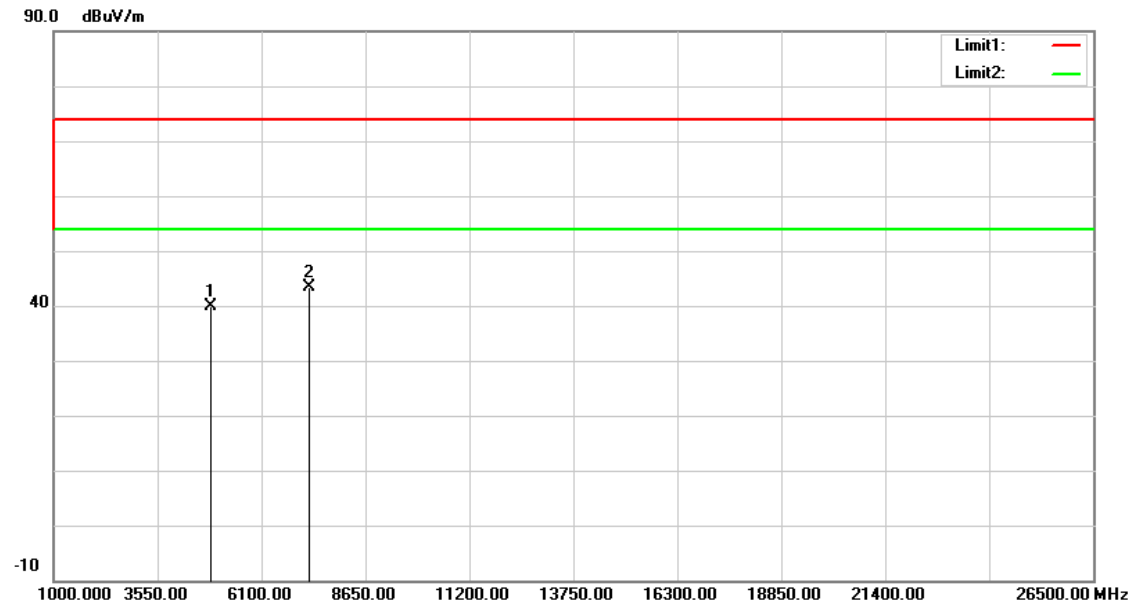
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4924.000	31.89	7.41	39.30	74.00	-34.70	peak
2	7386.000	33.56	9.96	43.52	74.00	-30.48	peak

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:	Harmonic	Power:	AC 110 V/60 Hz
Frequency:	2422 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 5		
Ant.Polar.:	Horizontal		



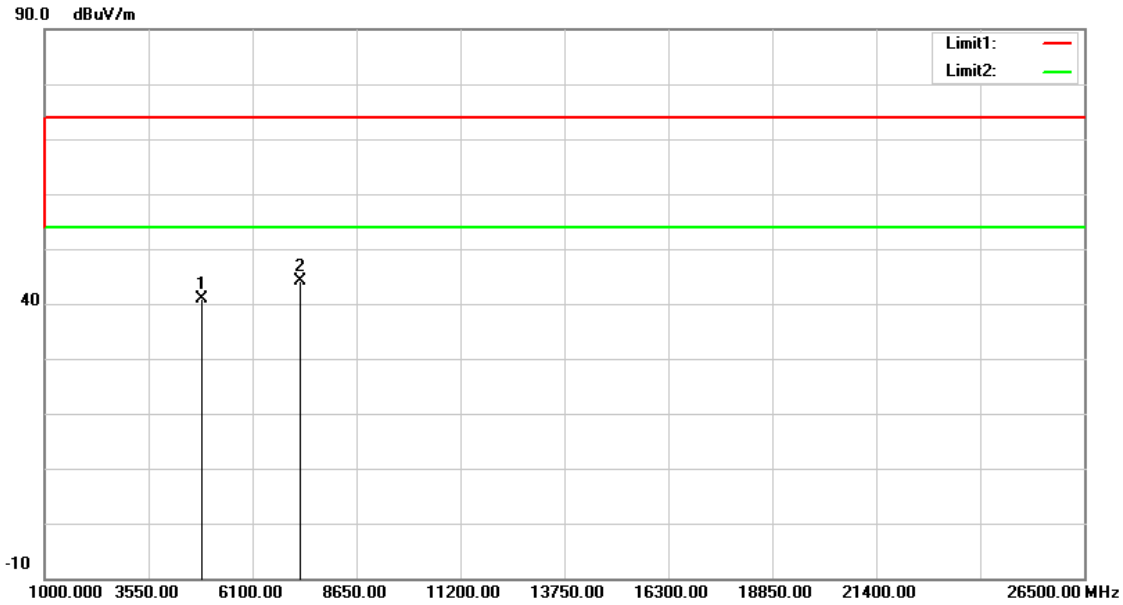
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4844.000	32.51	7.32	39.83	74.00	-34.17	peak
2	7266.000	33.42	9.93	43.35	74.00	-30.65	peak

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:	Harmonic	Power:	AC 110 V/60 Hz
Frequency:	2422 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 5		
Ant.Polar.:	Vertical		



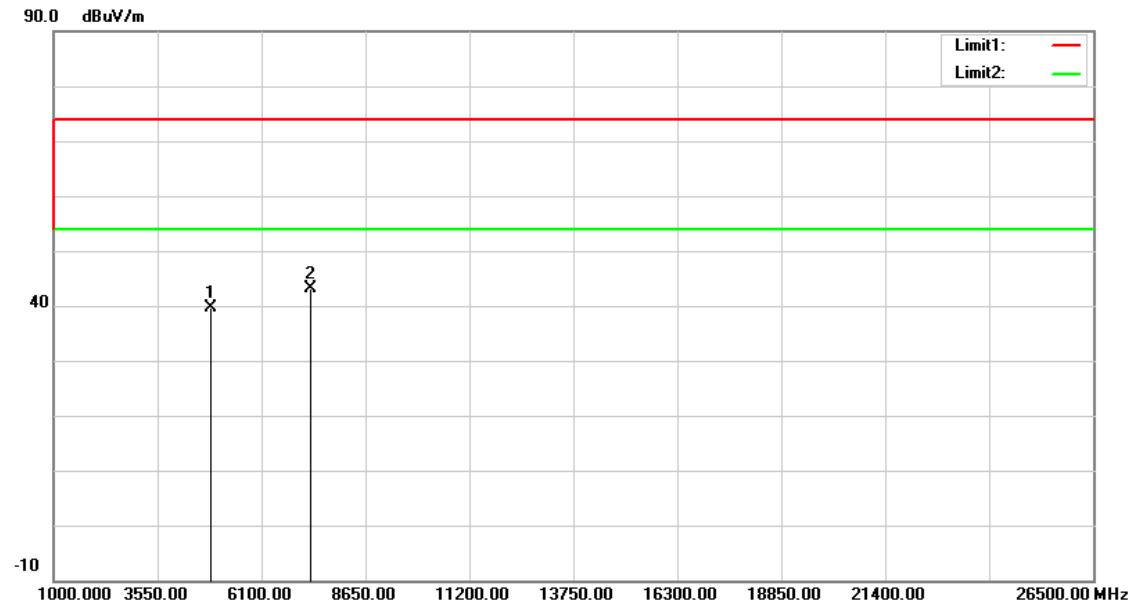
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4844.000	33.52	7.32	40.84	74.00	-33.16	peak
2	7266.000	34.30	9.93	44.23	74.00	-29.77	peak

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	Power:	AC 110 V/60 Hz
Frequency:	2437 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 5		
Ant.Polar.:	Horizontal		



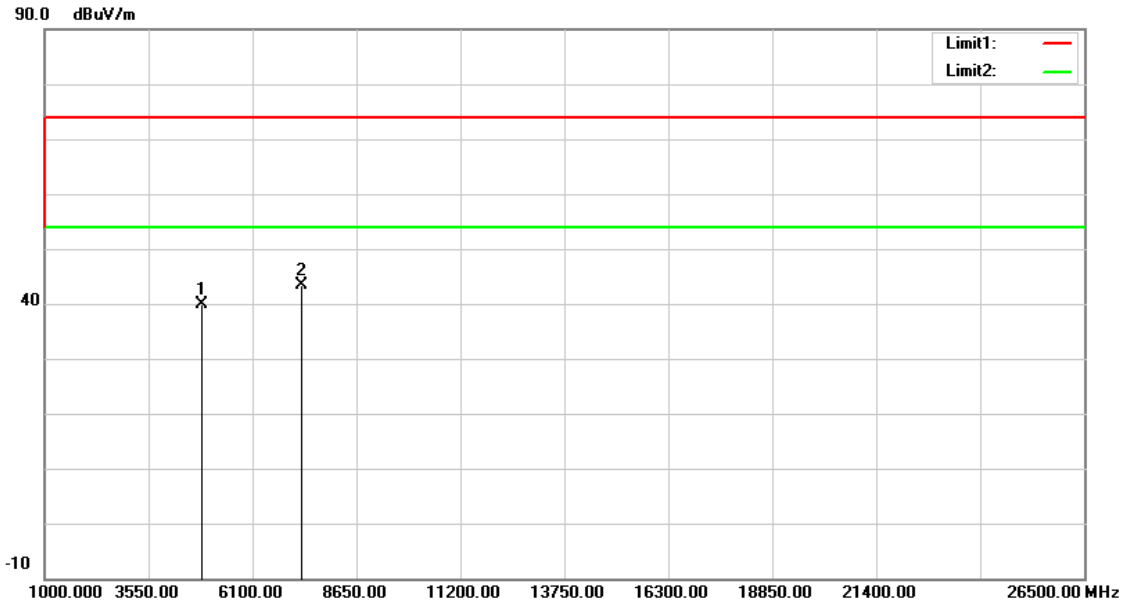
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4874.000	32.38	7.35	39.73	74.00	-34.27	peak
2	7311.000	33.19	9.94	43.13	74.00	-30.87	peak

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	Power:	AC 110 V/60 Hz
Frequency:	2437 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 5		
Ant.Polar.:	Vertical		



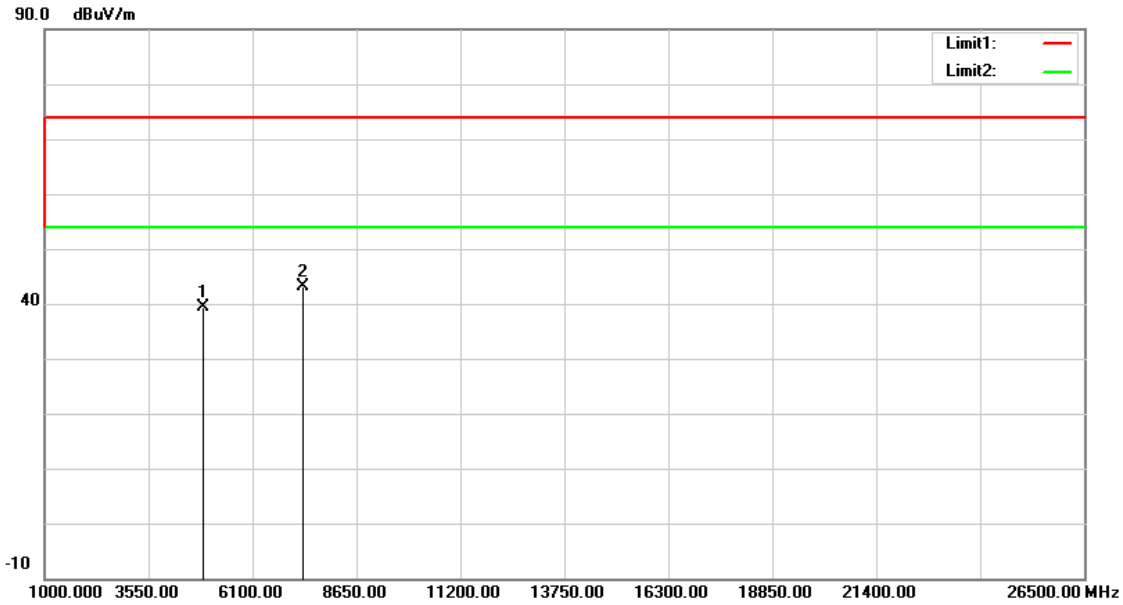
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4874.000	32.49	7.35	39.84	74.00	-34.16	peak
2	7311.000	33.49	9.94	43.43	74.00	-30.57	peak

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:	Harmonic	Power:	AC 110 V/60 Hz
Frequency:	2452 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 5		
Ant.Polar.:	Horizontal		



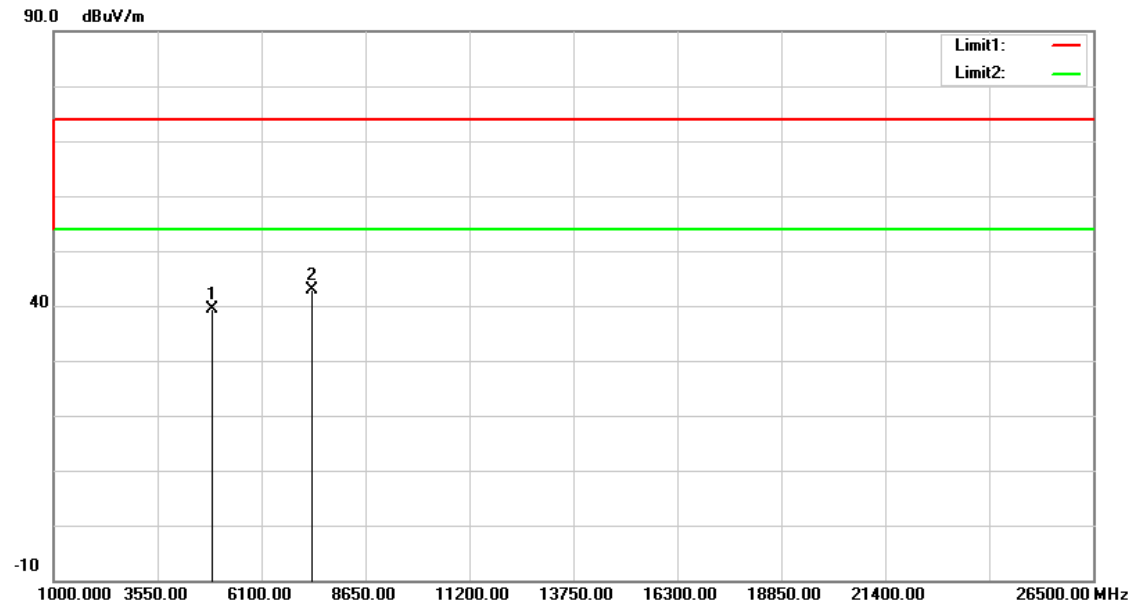
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4904.000	31.96	7.38	39.34	74.00	-34.66	peak
2	7356.000	33.07	9.95	43.02	74.00	-30.98	peak

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	Power:	AC 110 V/60 Hz
Frequency:	2452 MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Mode:	Mode 5		
Ant.Polar.:	Vertical		



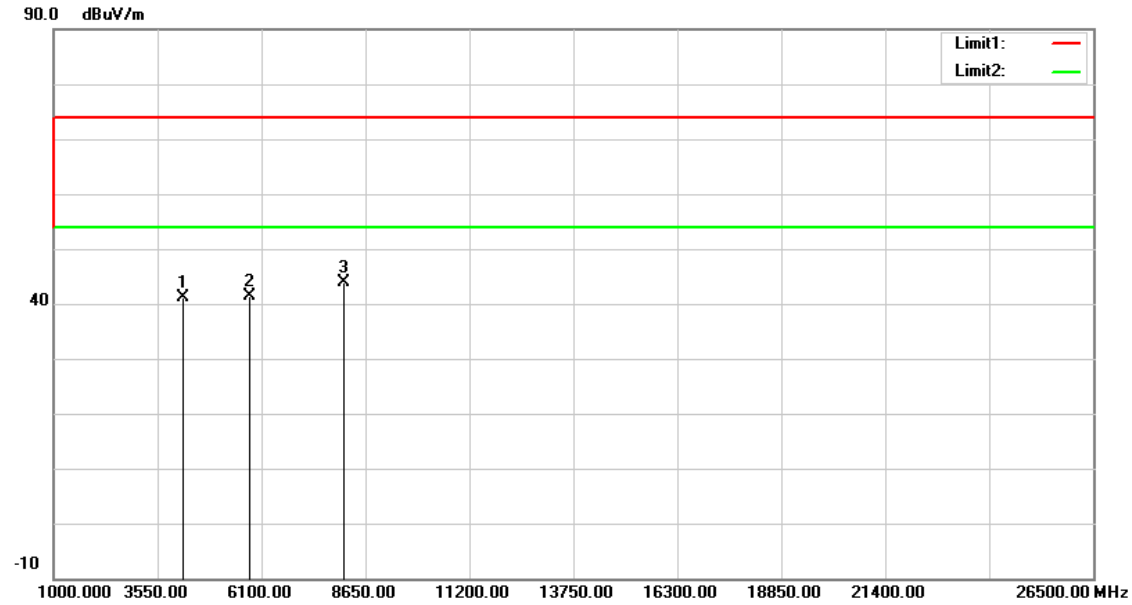
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4904.000	32.02	7.38	39.40	74.00	-34.60	peak
2	7356.000	32.92	9.95	42.87	74.00	-31.13	peak

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	Power:	AC 110 V/60 Hz
Mode:	Mode 6	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Ant.Polar.:	Horizontal		
Description:			



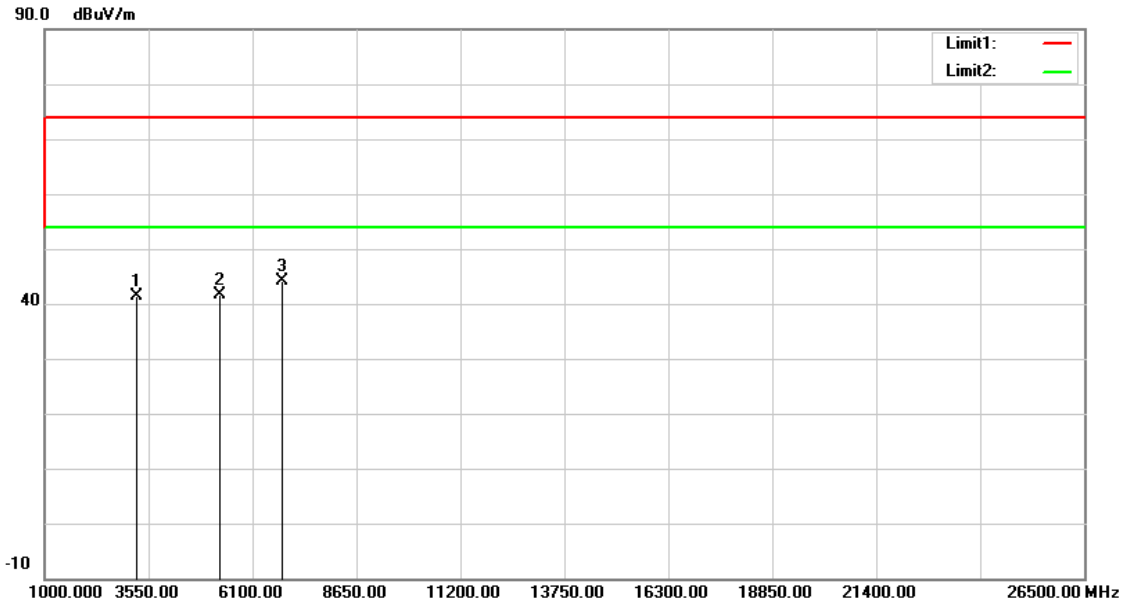
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4180.000	34.31	6.70	41.01	74.00	-32.99	peak
2	5776.000	33.24	8.19	41.43	74.00	-32.57	peak
3	8092.000	34.34	9.66	44.00	74.00	-30.00	peak

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	Power:	AC 110 V/60 Hz
Mode:	Mode 6	Temp.(℃)/Hum.(%RH):	26(℃)/60 %RH
Ant.Polar.:	Vertical		
Description:			



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	3232.000	36.87	4.50	41.37	74.00	-32.63	peak
2	5284.000	34.15	7.59	41.74	74.00	-32.26	peak
3	6820.000	34.17	9.92	44.09	74.00	-29.91	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.