

10. 功率密度

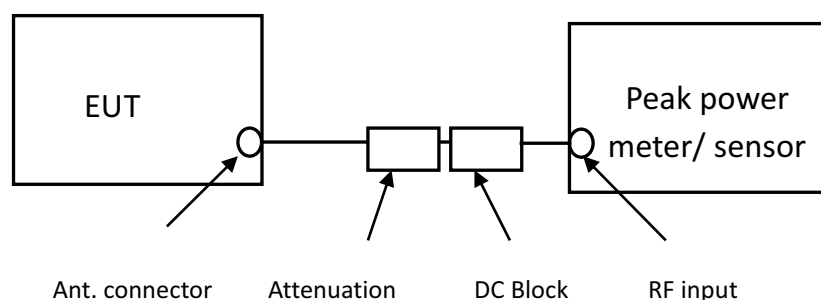
10.1 適用規範

依據國家通訊傳播委員會低功率射頻電機技術規範 3.10.1.6(2)(B)節之規定，對數位調變技術系統，在使用頻率範圍之任意 3kHz 頻寬內，由發射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。

10.2 測試方法

將發射機之天線埠經由適當之衰減直接連至測試儀器。找出發射峰值並擴展於通帶內，設定解析頻寬為 3 kHz，視訊頻寬大於解析頻寬，掃描時間為頻率掃描範圍除以 3 kHz。

10.3 測試配置圖



10.4 測試結果

溫度 : 21 °C

相對濕度 : 59 %

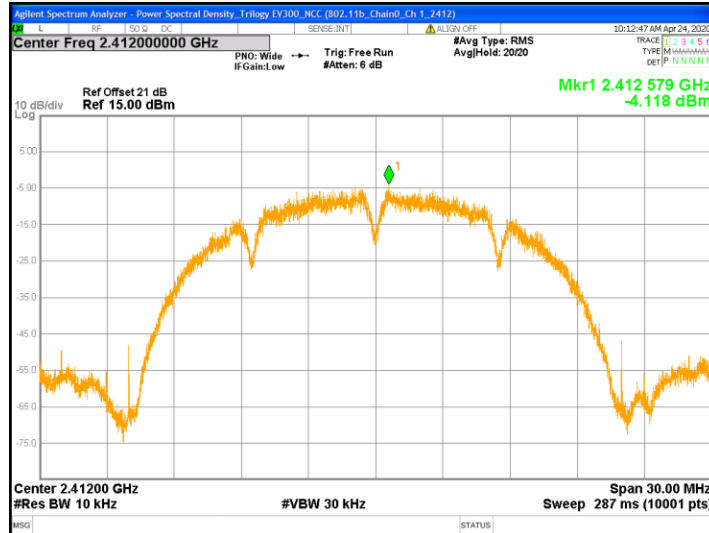
Single TX Chain 0

Mode	Channel	Frequency (MHz)	RBW factor	PSD in 10kHz	PSD in 3kHz		Limit (dBm)	Margin (dB)
					(dBm)	(mw)		
802.11b	1	2412	5.23	-4.118	-9.35	0.12	8	-17.35
	6	2437	5.23	-4.012	-9.24	0.12	8	-17.24
	11	2462	5.23	-3.507	-8.74	0.13	8	-16.74
802.11g	1	2412	5.23	-8.007	-13.24	0.05	8	-21.24
	6	2437	5.23	-4.384	-9.61	0.11	8	-17.61
	11	2462	5.23	-7.519	-12.75	0.05	8	-20.75
802.11n(HT20)	1	2412	5.23	-9.242	-14.47	0.04	8	-22.47
	6	2437	5.23	-4.886	-10.11	0.10	8	-18.11
	11	2462	5.23	-8.647	-13.88	0.04	8	-21.88

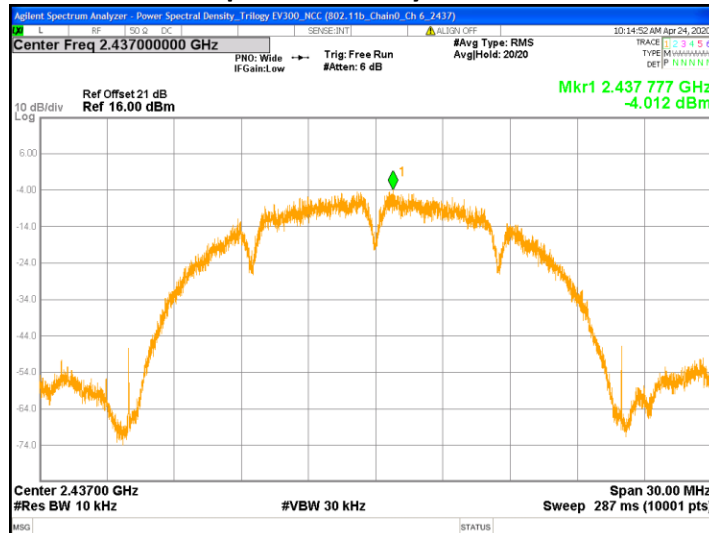
Note: Correction Factor = $10\log(10\text{kHz}/3\text{kHz})$

10.5 繪圖資料

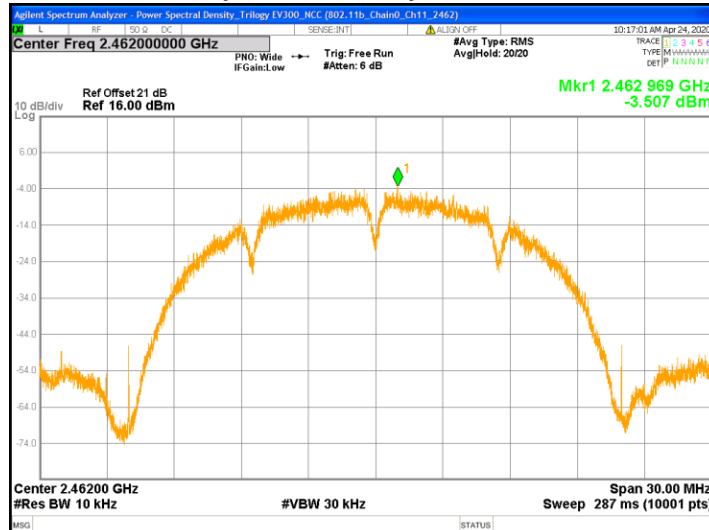
Chain0 : Power Spectral Density @ 802.11b Mode Ch 1



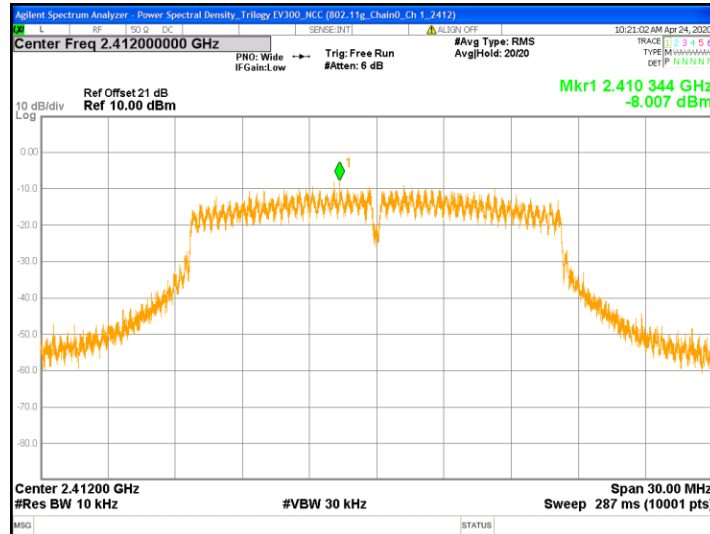
Chain0 : Power Spectral Density @ 802.11b Mode Ch 6



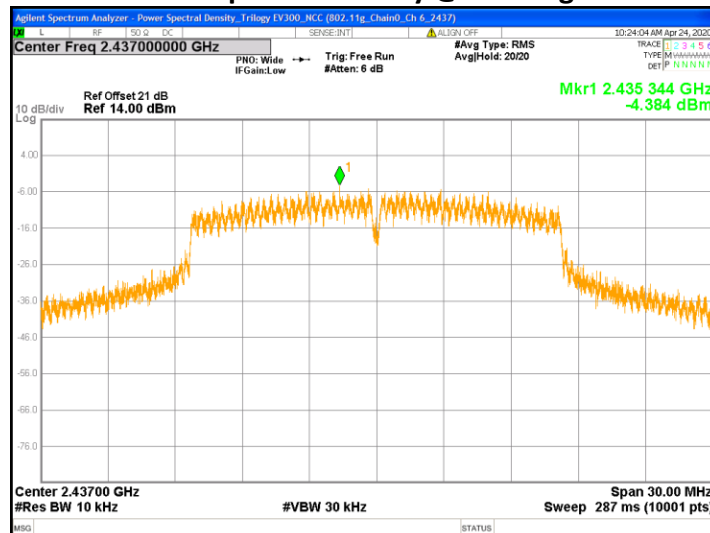
Chain0 : Power Spectral Density @ 802.11b Mode Ch11



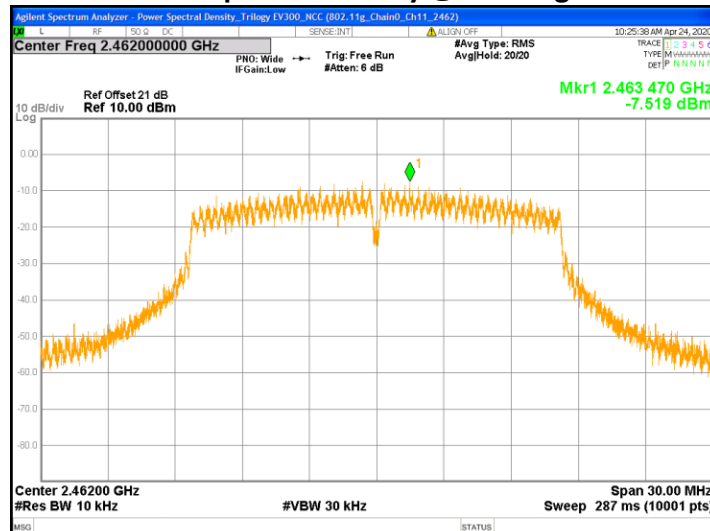
Chain0 : Power Spectral Density @ 802.11g Mode Ch 1



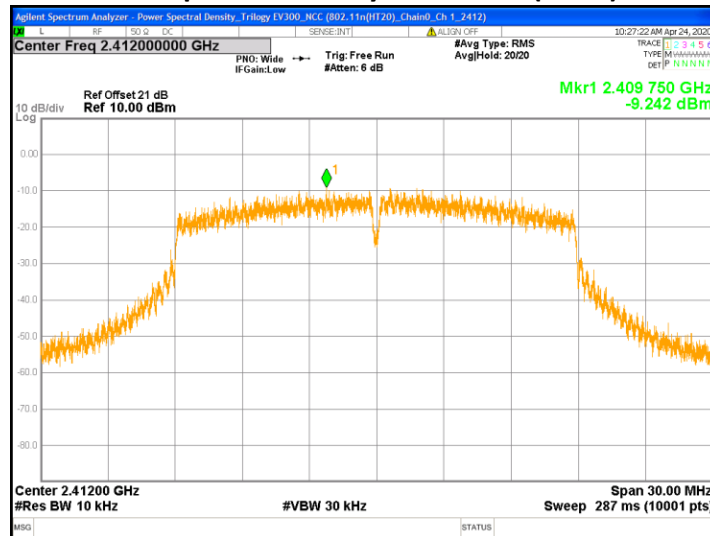
Chain0 : Power Spectral Density @ 802.11g Mode Ch 6



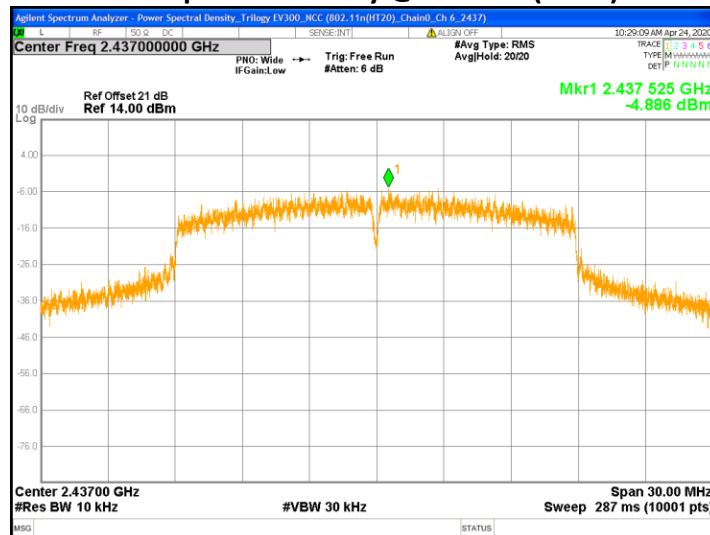
Chain0 : Power Spectral Density @ 802.11g Mode Ch11



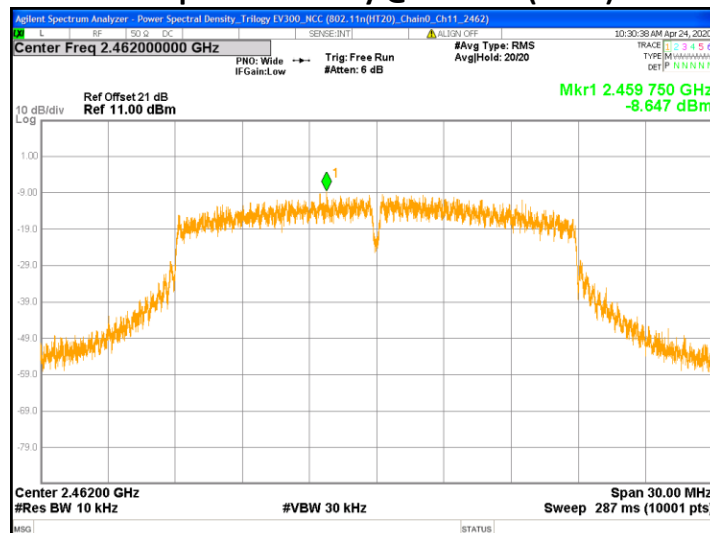
Chain0 : Power Spectral Density @ 802.11n(HT20) Mode Ch 1



Chain0 : Power Spectral Density @ 802.11n(HT20) Mode Ch 6



Chain0 : Power Spectral Density @ 802.11n(HT20) Mode Ch11

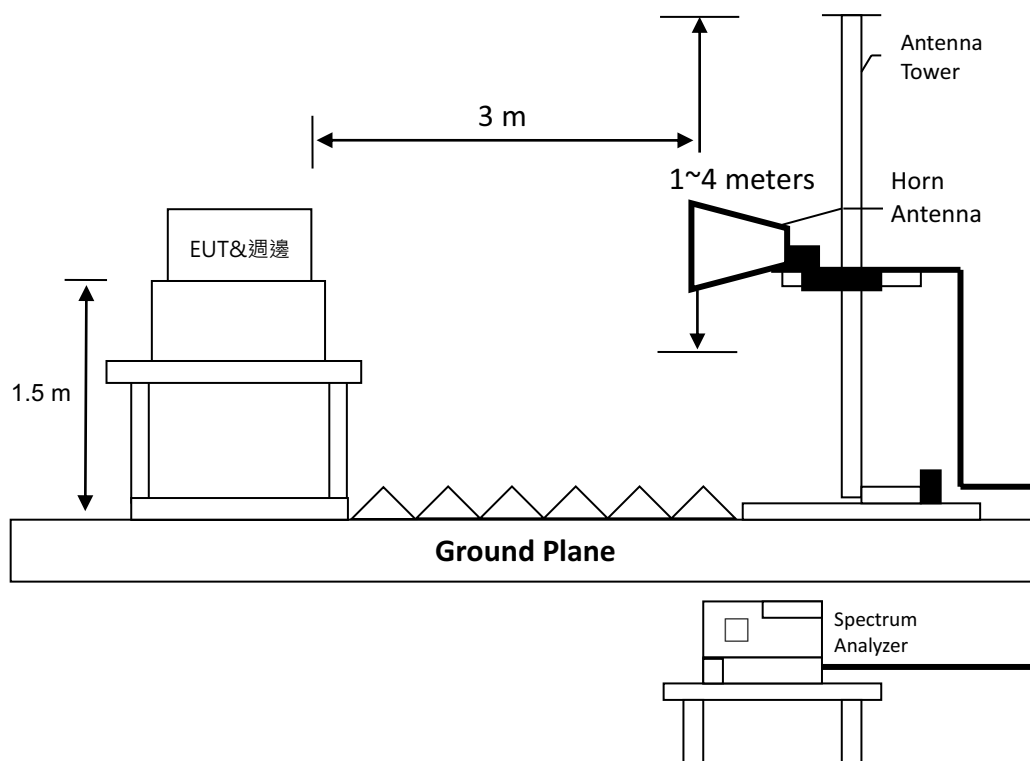


11. 頻帶邊緣測試

11.1 適用規範

依據國家通訊傳播委員會低功率射頻電機技術規範 3.10.1 節(5)之規定，使用頻帶範圍外之任意 100kHz 內，發射器所產生的射頻功率相較於頻帶範圍中包含最高所需功率之 100kHz 內的射頻功率，需衰減 20 分貝(dB)，以射頻傳導或輻射方式量測。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。

11.2 測試配置圖



11.3 測試結果

溫度 : 24 °C

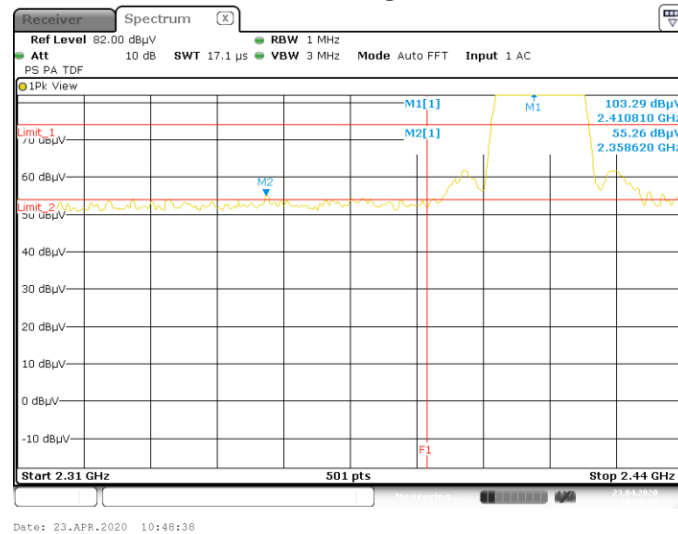
相對濕度 : 57 %

Mode	Frequency (MHz)	Spectrum Analyzer Detector	Ant. Pol. (H/V)	Correction Factor (dB/m)	Reading (dBμV)	Corrected Reading (dBμV/m)	Limit @ 3 m (dBμV/m)	Margin (dB)	Restricted band (MHz)
802.11b	2358.62	PK	V	34.38	20.88	55.26	74	-18.74	2310~2390
	2386.44	AV	V	34.50	8.38	42.88	54	-11.12	
	2485.00	PK	V	34.93	21.14	56.06	74	-17.94	2483.5~2500
	2487.64	AV	V	34.94	8.57	43.50	54	-10.50	
802.11g	2317.80	PK	V	34.21	21.72	55.92	74	-18.08	2310~2390
	2390.00	AV	V	34.52	9.71	44.23	54	-9.77	
	2484.52	PK	V	34.92	23.02	57.94	74	-16.06	2483.5~2500
	2483.68	AV	V	34.92	9.50	44.42	54	-9.58	
802.11n (HT20)	2390.00	PK	V	34.52	24.73	59.24	74	-14.76	2310~2390
	2390.00	AV	V	34.52	10.65	45.17	54	-8.83	
	2484.16	PK	V	34.92	28.07	62.99	74	-11.01	2483.5~2500
	2483.50	AV	V	34.92	10.88	45.80	54	-8.20	

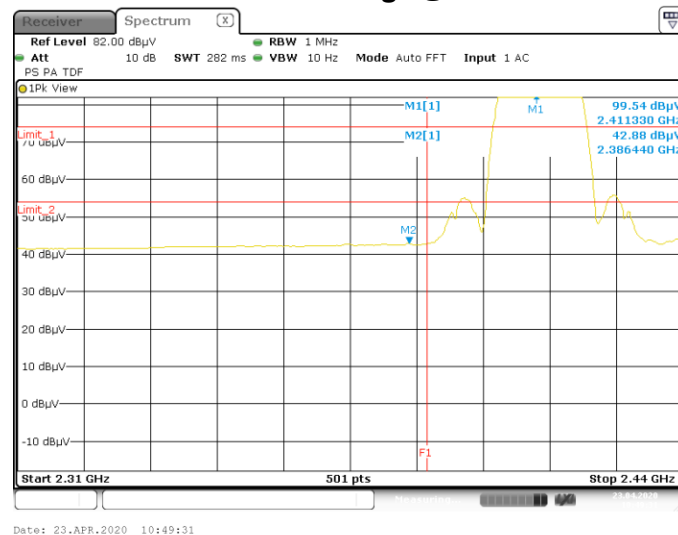
Remark: Correction Factor = Antenna Factor + Cable Loss

以上測試結果符合規範。

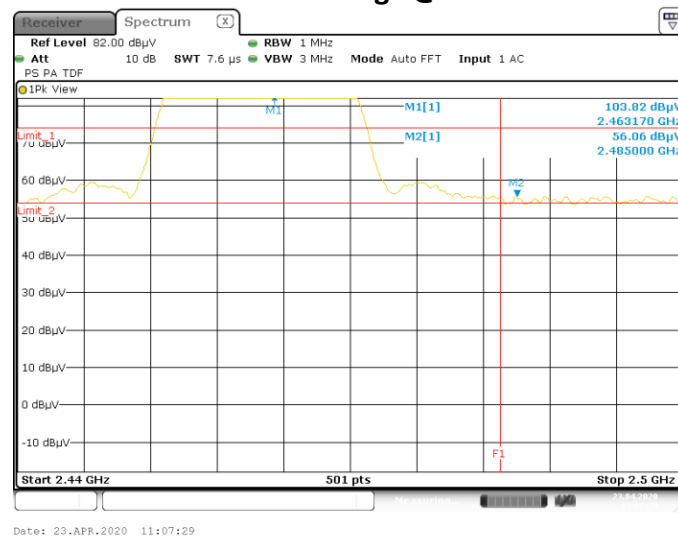
Chain0 : Restricted Band Bandedge @ 802.11b Mode Ch1 PK



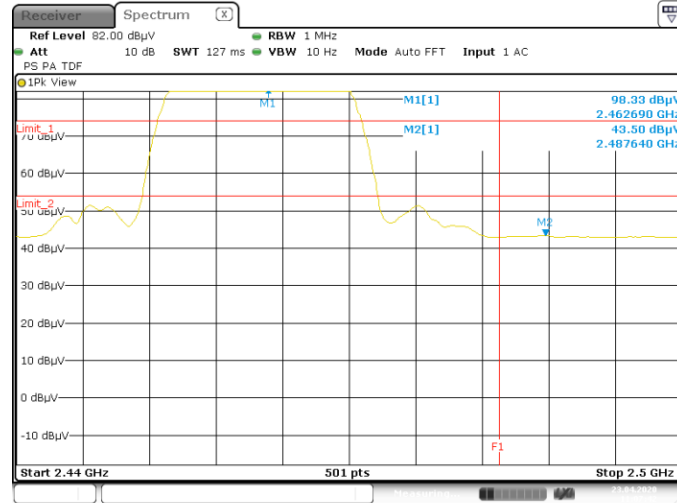
Chain0 : Restricted Band Bandedge @ 802.11b Mode Ch1 AV



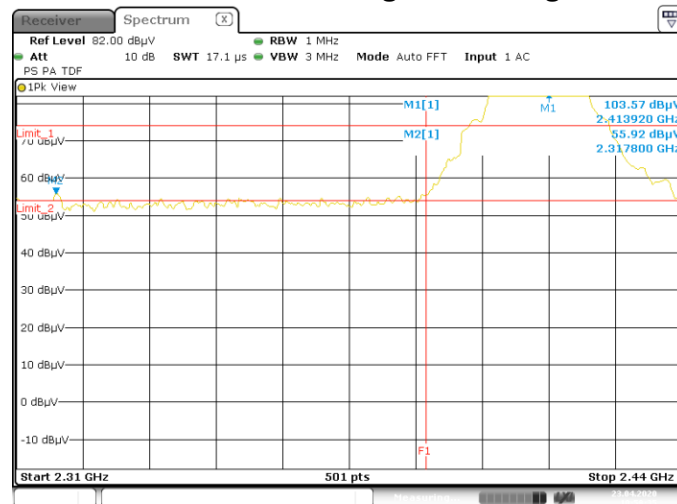
Chain0 : Restricted Band Bandedge @ 802.11b Mode Ch11 PK



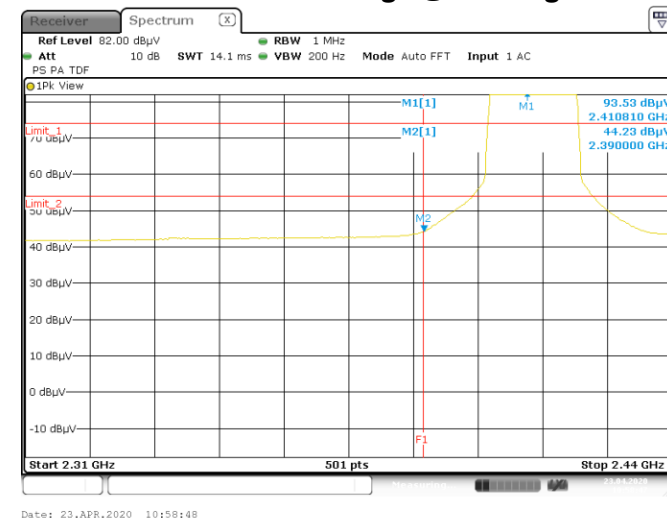
Chain0 : Restricted Band Bandedge @ 802.11b Mode Ch11 AV



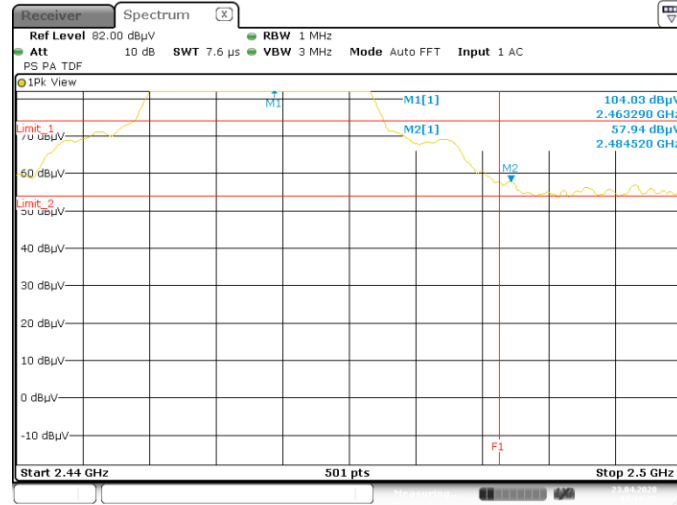
Chain0 : Restricted Band Bandedge @ 802.11g Mode Ch1 PK



Chain0 : Restricted Band Bandedge @ 802.11g Mode Ch1 AV

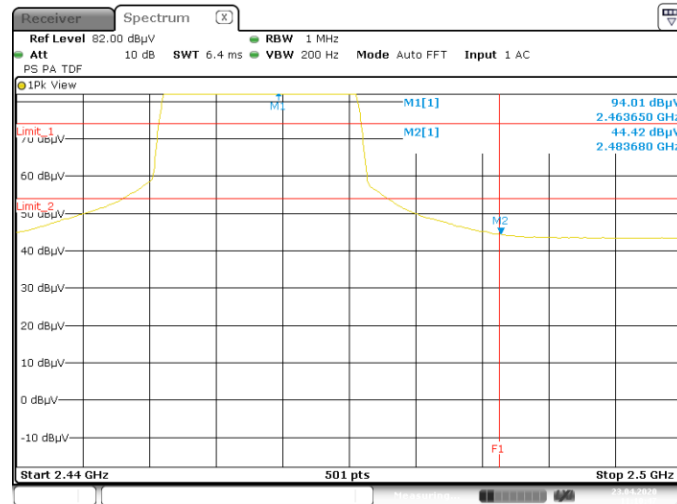


Chain0 : Restricted Band Bandedge @ 802.11g Mode Ch11 PK



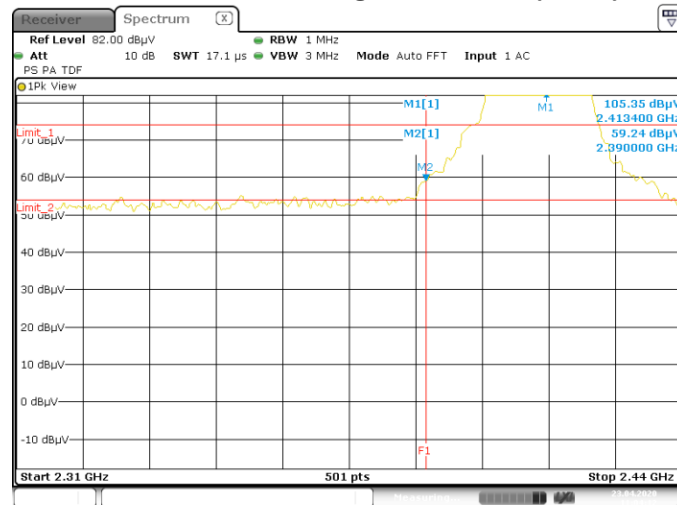
Date: 23.APR.2020 11:10:32

Chain0 : Restricted Band Bandedge @ 802.11g Mode Ch11 AV



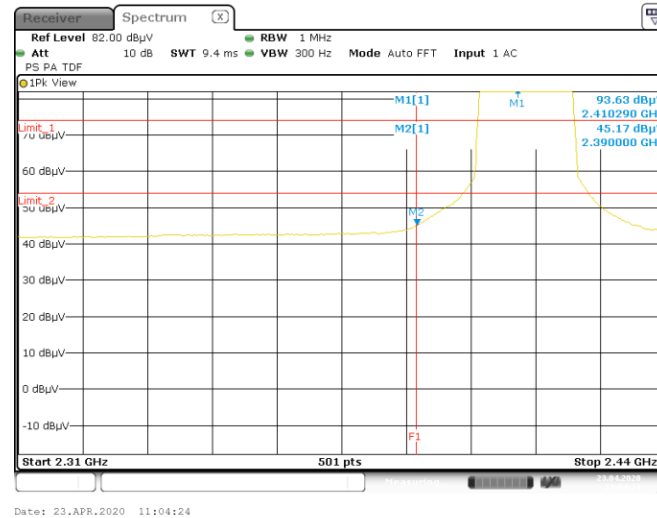
Date: 23.APR.2020 11:10:47

Chain0+1 : Restricted Band Bandedge @ 802.11n(HT20) Mode Ch1 PK

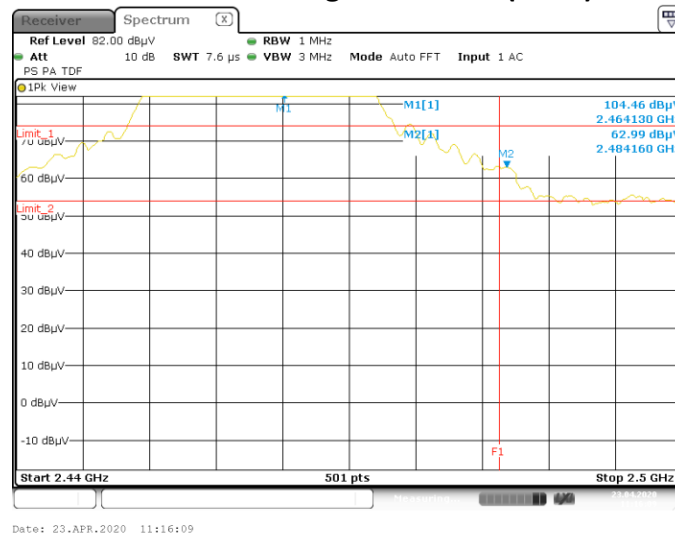


Date: 23.APR.2020 11:04:12

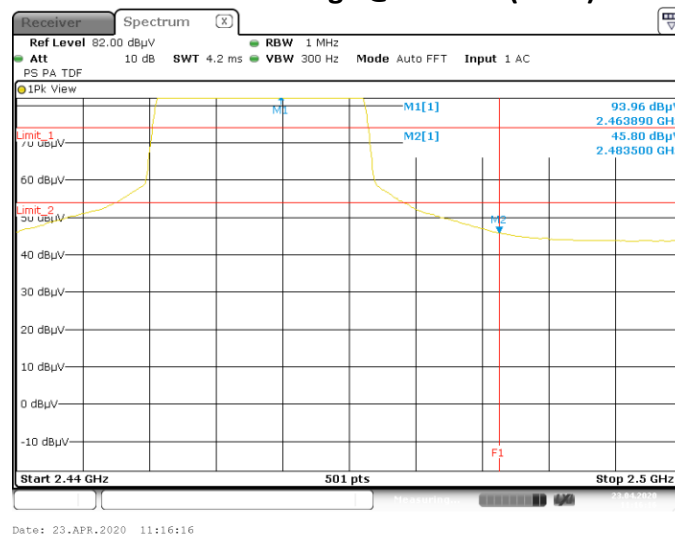
Chain0 : Restricted Band Bandedge @ 802.11n(HT20) Mode Ch1 AV



Chain0: Restricted Band Bandedge @ 802.11n(HT20) Mode Ch11 PK



Chain0 : Restricted Band Bandedge @ 802.11n(HT20) Mode Ch11 AV



第三部份 BT2.1 測試項目：LP0002 3.10.1

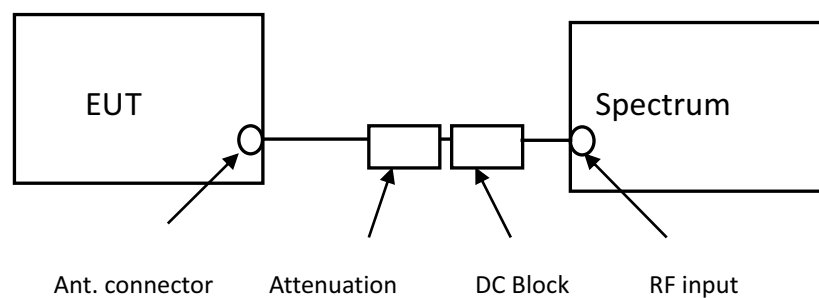
12.20dB 頻寬

12.1 適用規範

依據國家通訊傳播委員會低功率射頻電機技術規範 3.10.1.6(1)(A)節之規

定，20dB 頻寬為跳頻系統之載波頻率間隔限制的參考依據。

12.2 測試架構圖



12.3 測試結果

溫度 : 21 °C

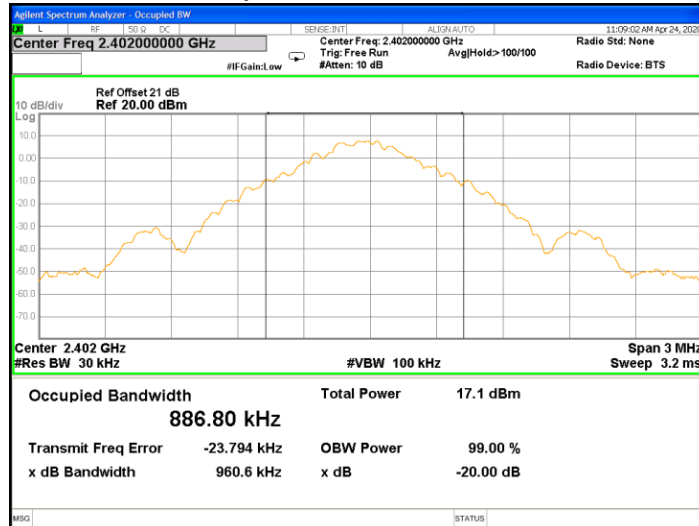
相對濕度 : 59 %

Mode	Channel	Frequency (MHz)	20dB Bandwidth (MHz)
DH5	0	2402	0.961
	39	2441	0.958
	78	2480	0.956
2DH5	0	2402	1.374
	39	2441	1.375
	78	2480	1.375
3DH5	0	2402	1.358
	39	2441	1.355
	78	2480	1.357

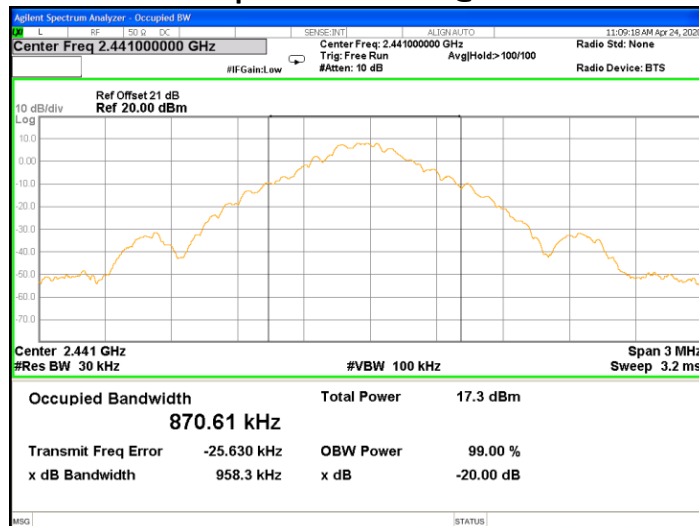
以上測試結果符合規範

12.4 繪圖資料

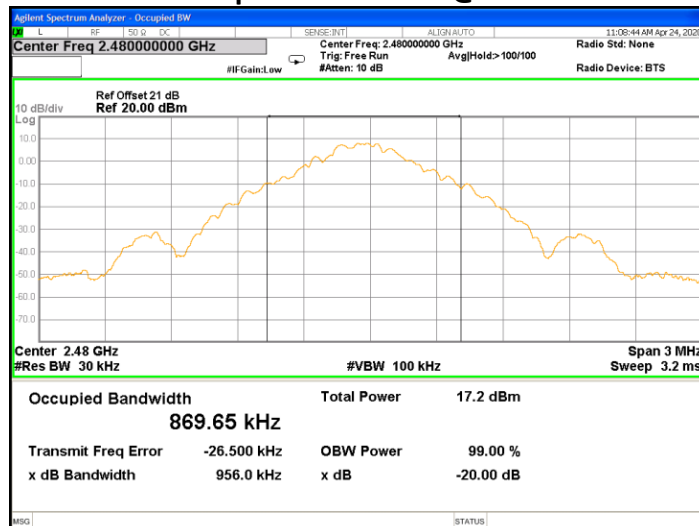
20dB Occupied Bandwidth @ DH5 Ch 0



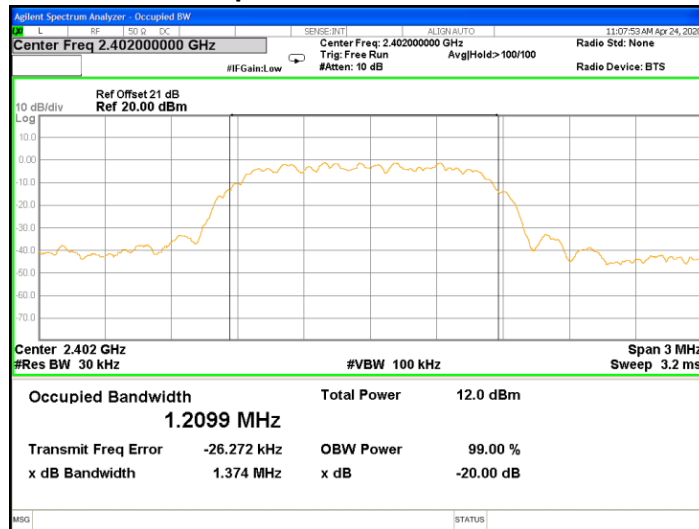
20dB Occupied Bandwidth @ DH5 Ch 39



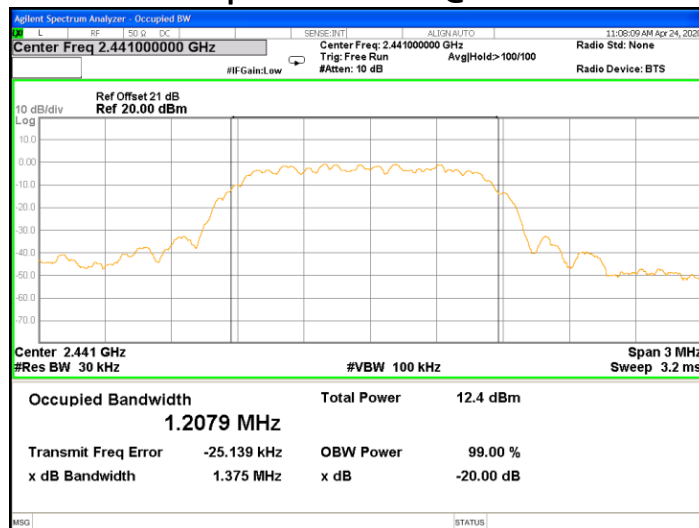
20dB Occupied Bandwidth @ DH5 Ch 78



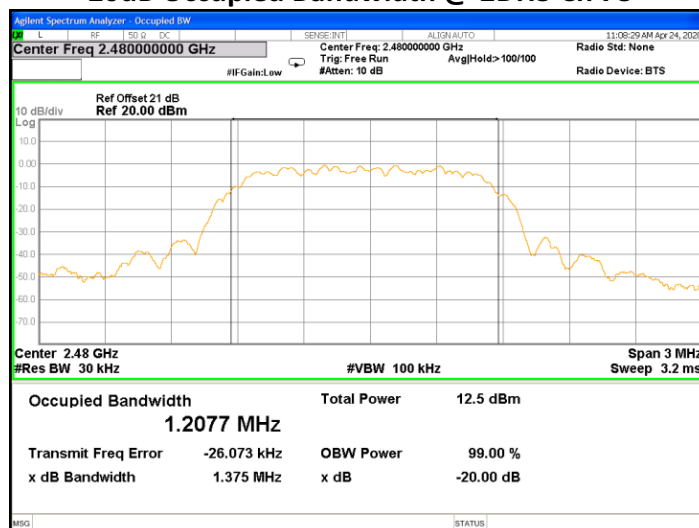
20dB Occupied Bandwidth @ 2DH5 Ch 0



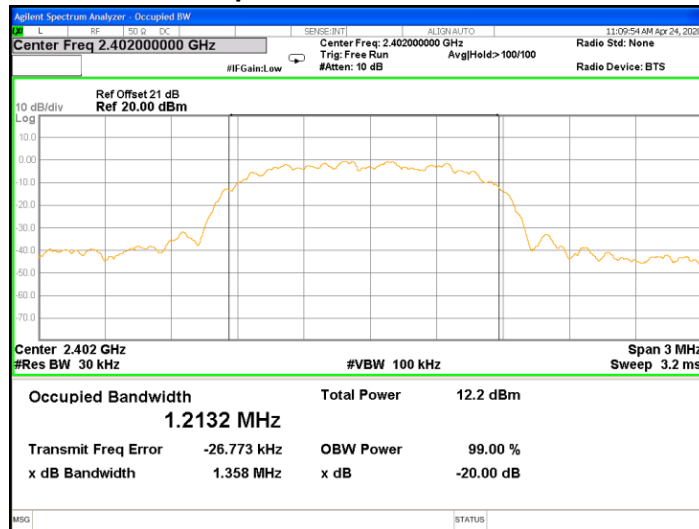
20dB Occupied Bandwidth @ 2DH5 Ch 39



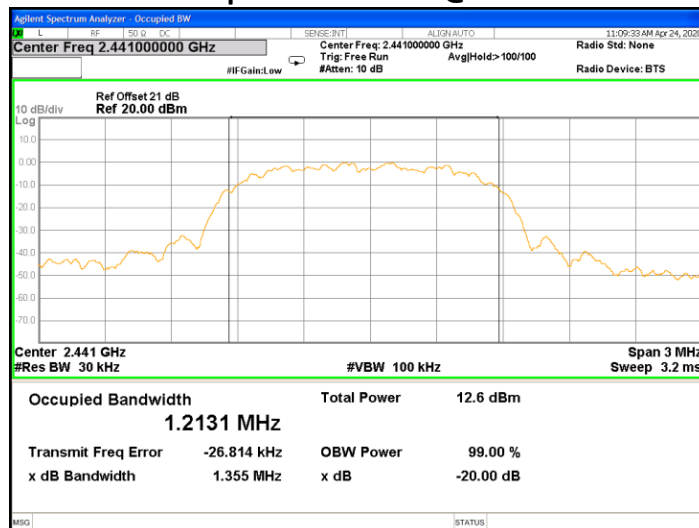
20dB Occupied Bandwidth @ 2DH5 Ch 78



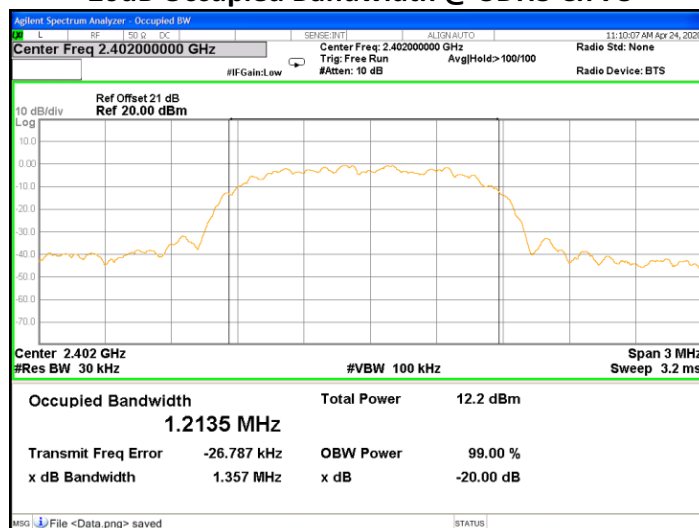
20dB Occupied Bandwidth @ 3DH5 Ch 0



20dB Occupied Bandwidth @ 3DH5 Ch 39



20dB Occupied Bandwidth @ 3DH5 Ch 78



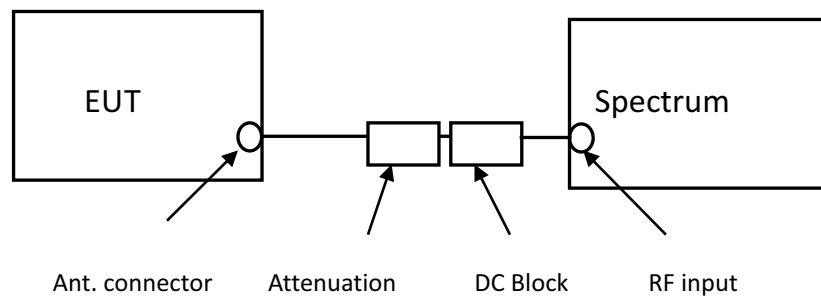
13.載波頻率間隔測試

13.1 適用規範

依據國家通訊傳播委員會低功率射頻電機技術規範 3.10.1.6(1)(A)節之規定，載波頻率間隔應至少 25kHz 或跳頻頻道之 20dB 頻寬，兩者取較寬者。

但操作頻率為 2400-2483.5MHz 頻帶且輸出功率不大於 125mW 之跳頻系統，其載波頻道間隔不得小於 25kHz 或跳頻頻道 20dB 頻寬之 2/3 兩者取較寬者。

13.2 測試架構



13.3 測試結果

溫度 : 21 °C

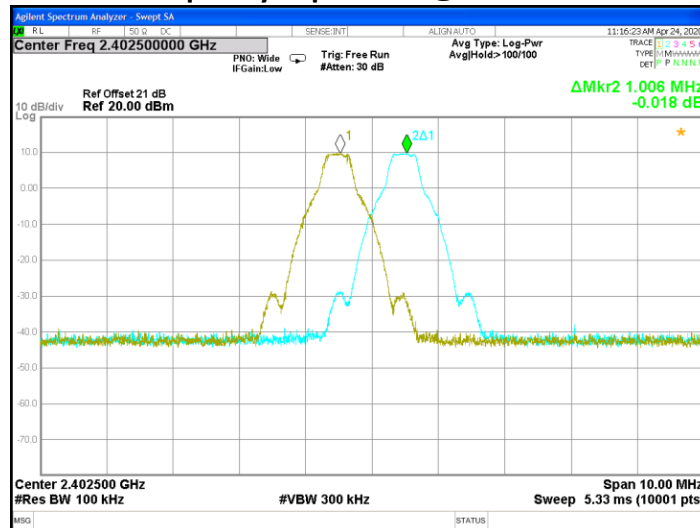
相對濕度 : 59 %

Mode	Channel	Frequency (MHz)	Adjacent channel separation (MHz)	Limit (MHz)
DH5	0	2402	1.006	0.640
	39	2441	0.995	0.639
	78	2480	0.995	0.637
2DH5	0	2402	0.995	0.916
	39	2441	1.017	0.917
	78	2480	1.003	0.917
3DH5	0	2402	1.002	0.905
	39	2441	0.999	0.903
	78	2480	0.996	0.905

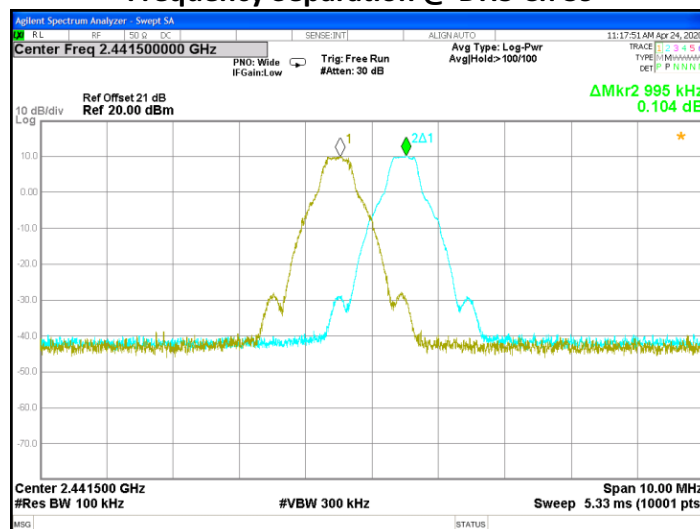
以上測試結果符合規範

13.4 繪圖資料

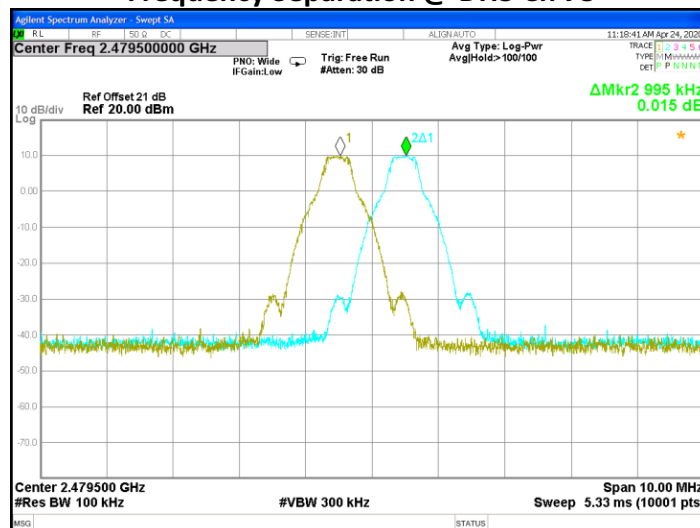
Frequency Separation @ DH5 Ch 0



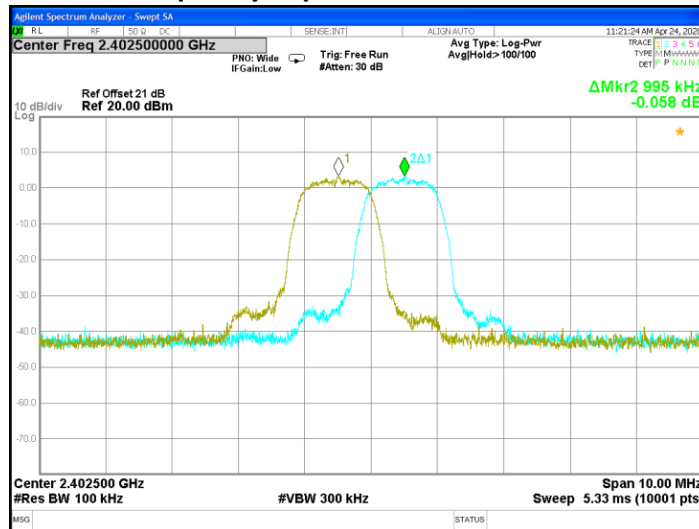
Frequency Separation @ DH5 Ch 39



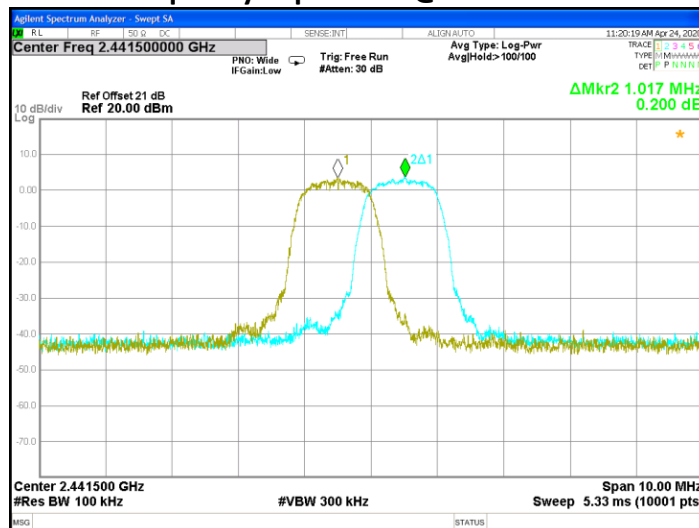
Frequency Separation @ DH5 Ch 78



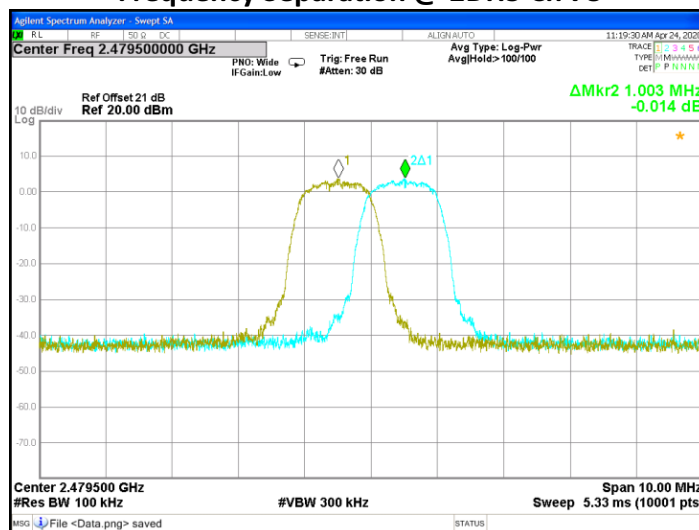
Frequency Separation @ 2DH5 Ch 0



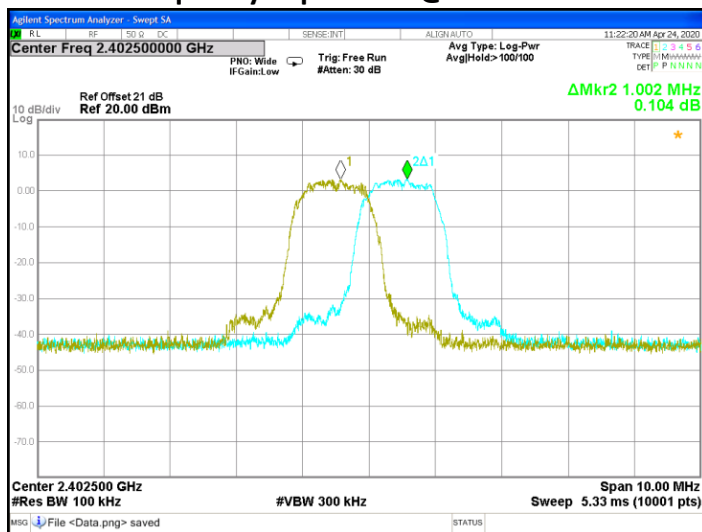
Frequency Separation @ 2DH5 Ch 39



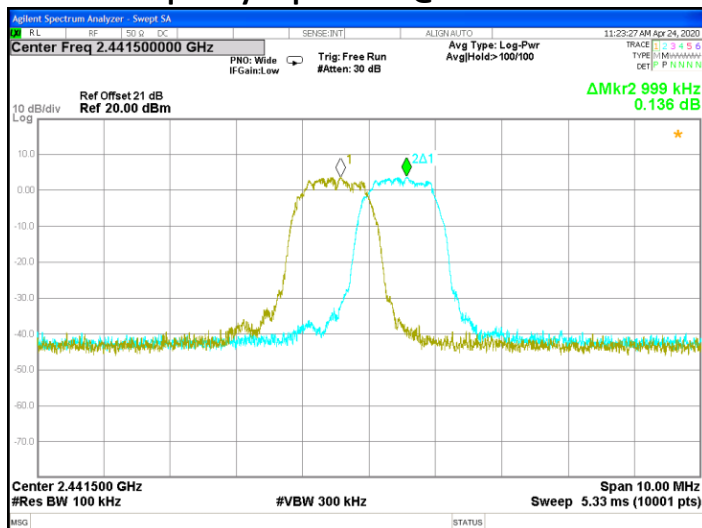
Frequency Separation @ 2DH5 Ch 78



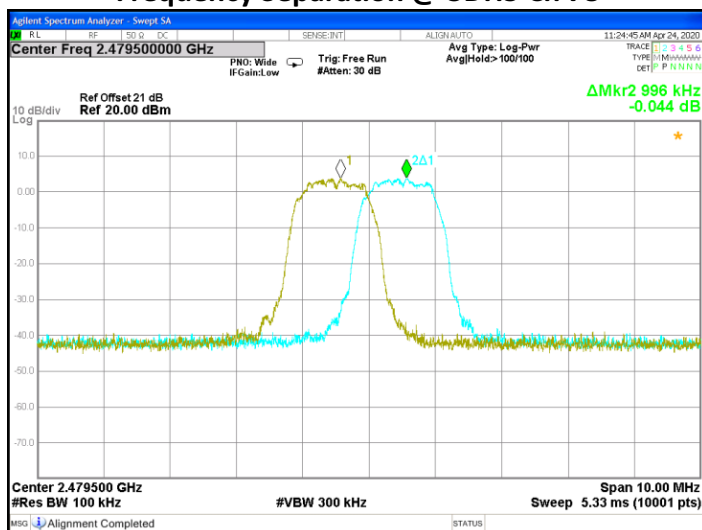
Frequency Separation @ 3DH5 Ch 0



Frequency Separation @ 3DH5 Ch 39



Frequency Separation @ 3DH5 Ch 78

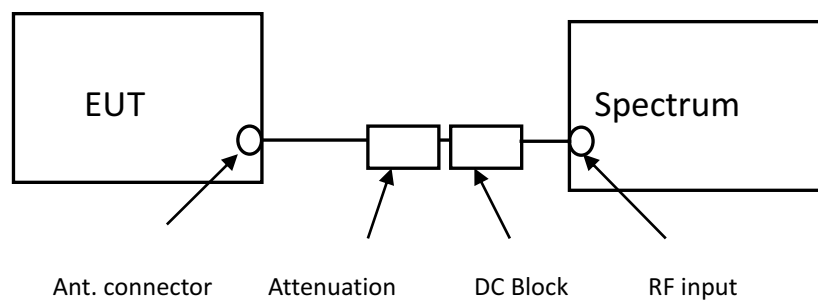


14.跳頻頻道數測試

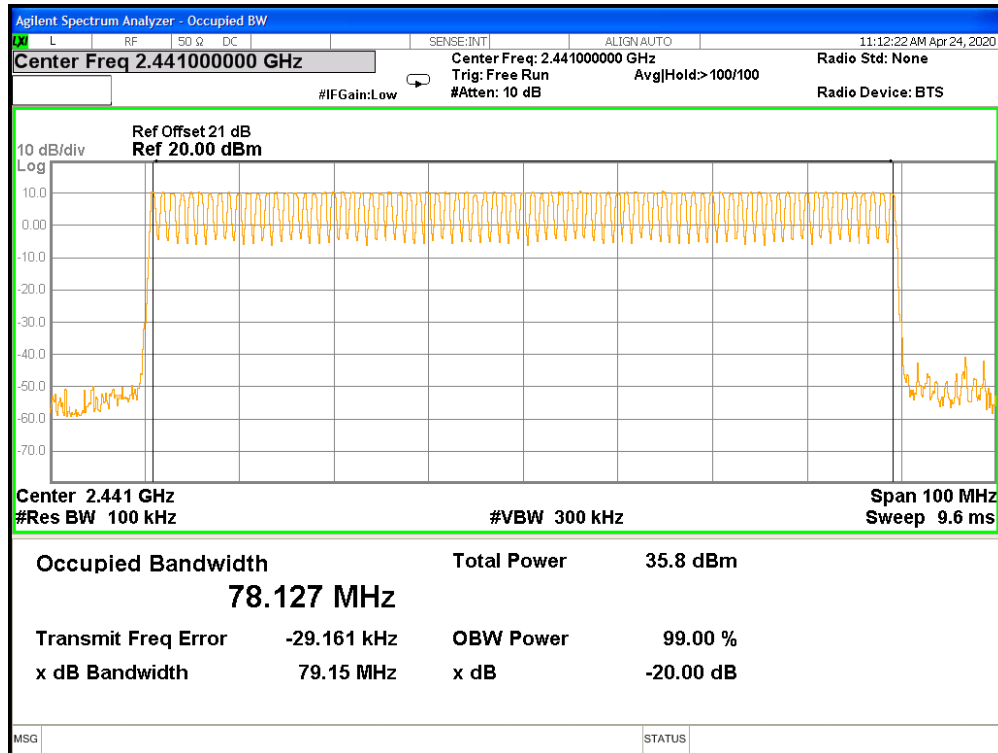
14.1 適用規範

依據國家通訊傳播委員會低功率射頻電機技術規範 3.10.1.6(1)(A)(a)節之規定，操作於 2400-2483.5 MHz 之展頻跳頻系統，須使用至少 15 個無重疊的頻道。

14.2 測試架構



14.3 測試結果

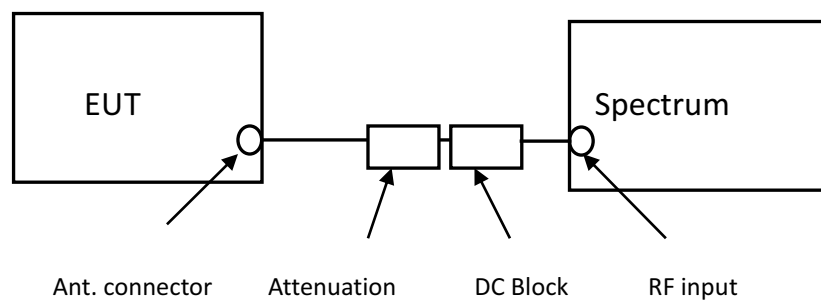


15. 頻道佔用時間測試

15.1 適用規範

依據國家通訊傳播委員會低功率射頻電機技術規範 3.10.1.6(A)(a)節之規定，
操作於 2400-2483.5 MHz 之展頻跳頻系統，在 0.4 秒乘以跳頻頻道數之週期內，任一
頻率佔用之平均時間不得超過 0.4 秒。

15.2 測試架構



15.3 測試結果

溫度 : 21 °C

相對濕度 : 59 %

Mode	Packet type	Pulse duration (ms)	Measure time (s)	Dwell time (s)	Limit (s)	Pass/Fail
GFSK	DH1	0.405	31.6	0.129	0.4	Pass
	DH3	1.659	31.6	0.265	0.4	Pass
	DH5	2.905	31.6	0.310	0.4	Pass
$\pi/4$ -DPSK	2DH1	0.410	31.6	0.131	0.4	Pass
	2DH3	1.659	31.6	0.265	0.4	Pass
	2DH5	2.905	31.6	0.310	0.4	Pass
8-DPSK	3DH1	0.409	31.6	0.131	0.4	Pass
	3DH3	1.659	31.6	0.265	0.4	Pass
	3DH5	2.908	31.6	0.310	0.4	Pass

Note: (1) $\text{Dwell time} = 1600 \div (79 \times N) \times \text{Pulse duration} \times \text{Measure time}$

(2) DH1, N=2

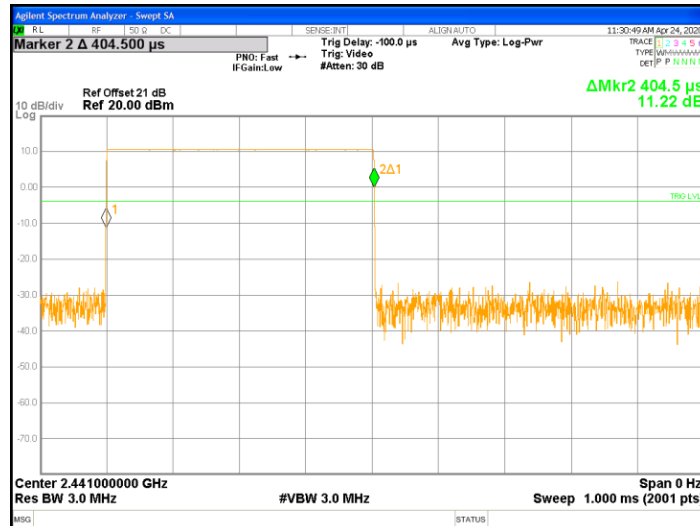
DH3, N=4

DH5, N=6

以上測試結果符合規範

15.4 繪圖資料

Dwell Time @ DH1 Ch 39



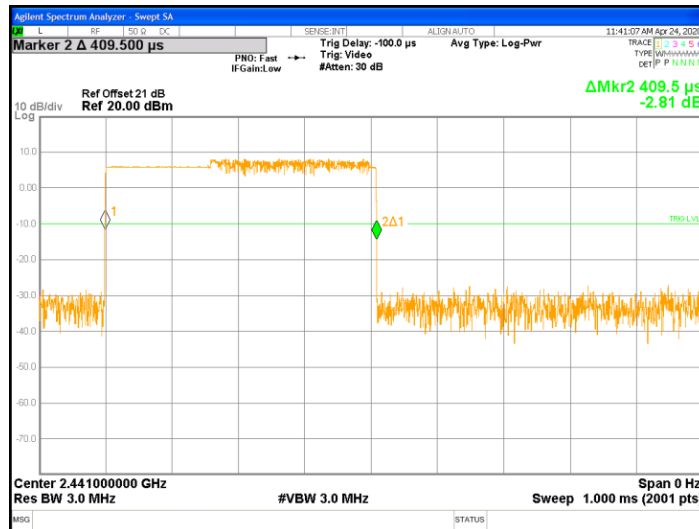
Dwell Time @ DH3 Ch 39



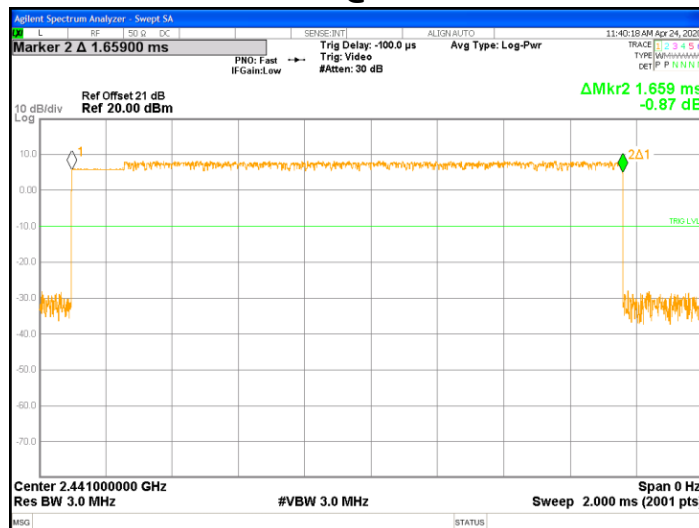
Dwell Time @ DH5 Ch 39



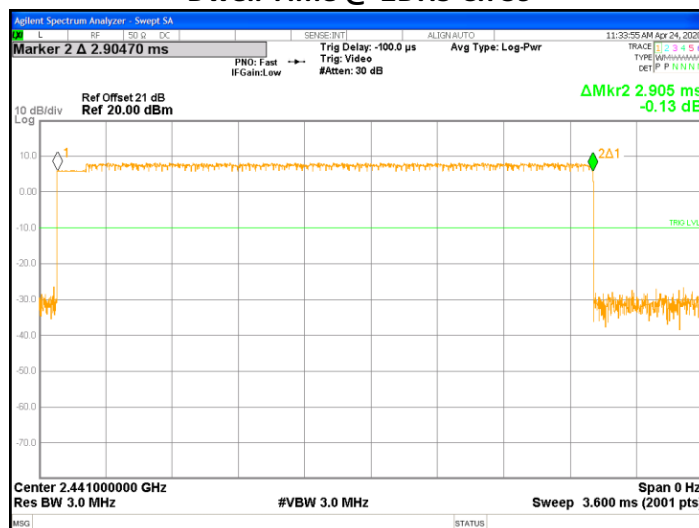
Dwell Time @ 2DH1 Ch 39



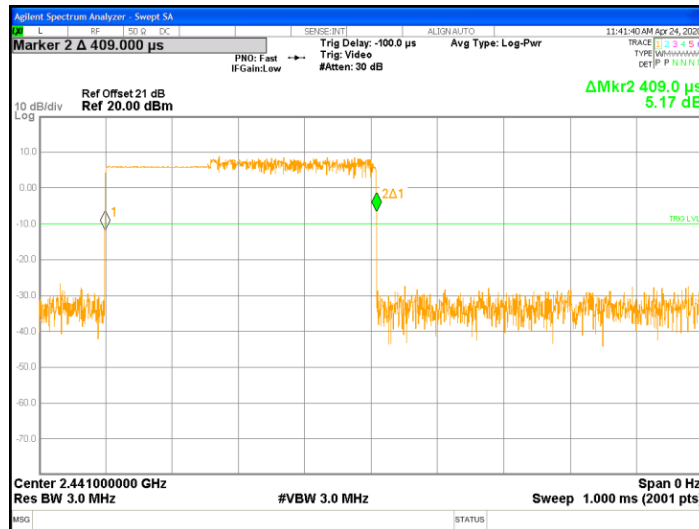
Dwell Time @ 2DH3 Ch 39



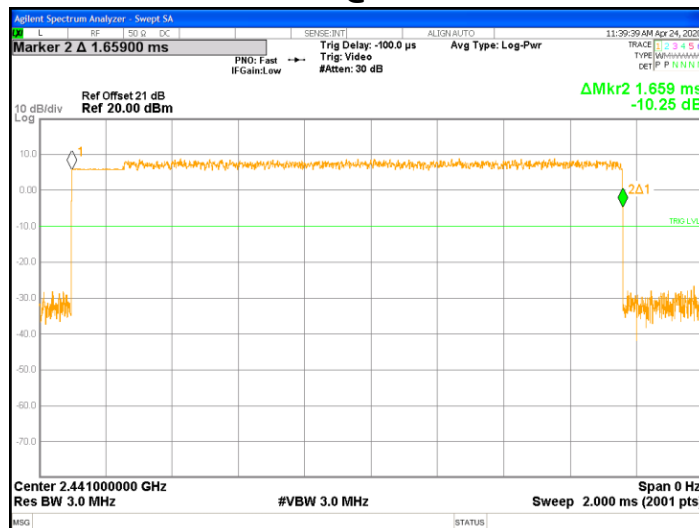
Dwell Time @ 2DH5 Ch 39



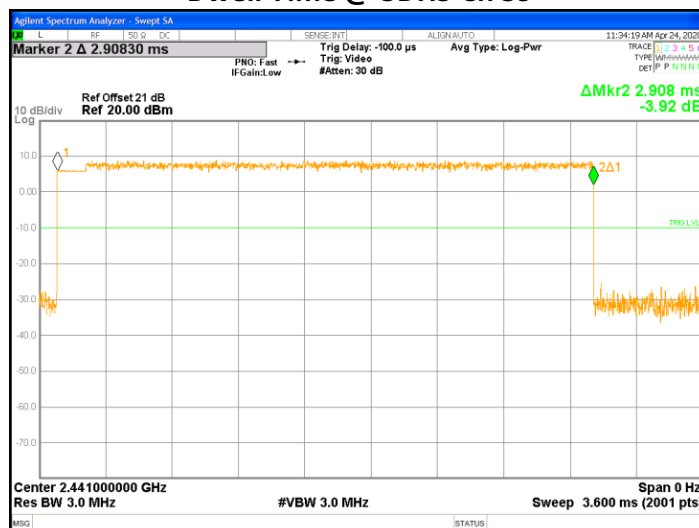
Dwell Time @ 3DH1 Ch 39



Dwell Time @ 3DH3 Ch 39



Dwell Time @ 3DH5 Ch 39

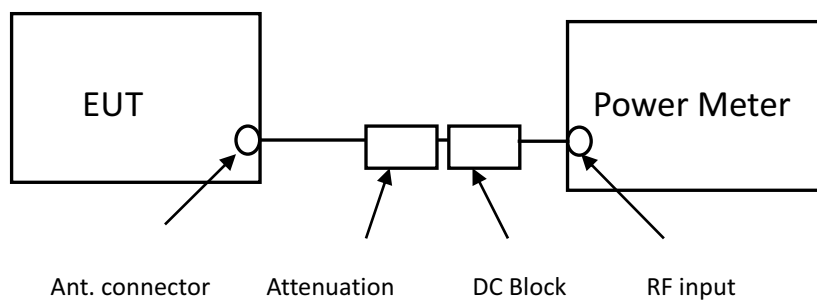


16. 峰值輸出功率

16.1 適用規範

依據國家通訊傳播委員會低功率射頻電機技術規範 3.10.1.2(1)(A)節之規定，
操作於 2400-2483.5 兆赫(MHz)，並至少使用 75 個跳頻頻道之跳頻系統之低功率發
射機，其峰值輸出功率不得大於 1Watt。

16.2 測試架構圖



16.3 測試結果

溫度 : 21 °C

相對濕度 : 59 %

Mode	Channel	Frequency (MHz)	Output Power (AV) (dBm)	Total Power (AV) (mW)	Maximun power (PK) (dBm)	Maximun power (PK) (mW)	Limit (dBm)	Margin (dB)
DH5	0	2402	10.41	10.99	10.56	11.376	30	-19.44
	39	2441	10.42	11.02	10.58	11.429	30	-19.42
	78	2480	10.40	10.96	10.54	11.324	30	-19.46
2DH5	0	2402	5.36	3.44	7.99	6.295	30	-22.01
	39	2441	5.62	3.65	8.10	6.457	30	-21.90
	78	2480	5.79	3.79	8.15	6.531	30	-21.85
3DH5	0	2402	5.41	3.48	8.49	7.063	30	-21.51
	39	2441	5.61	3.64	8.62	7.278	30	-21.38
	78	2480	5.76	3.77	8.80	7.586	30	-21.20

以上測試結果符合規範以上測試結果符合規範。

17. 輻射場強干擾測試

17.1 適用法規

依據國家通訊傳播委員會低功率射頻電機技術規範之 3.10.1.5 節之要求，其他超出頻帶外之輻射，應符合 2.8 節之一般限制要求：

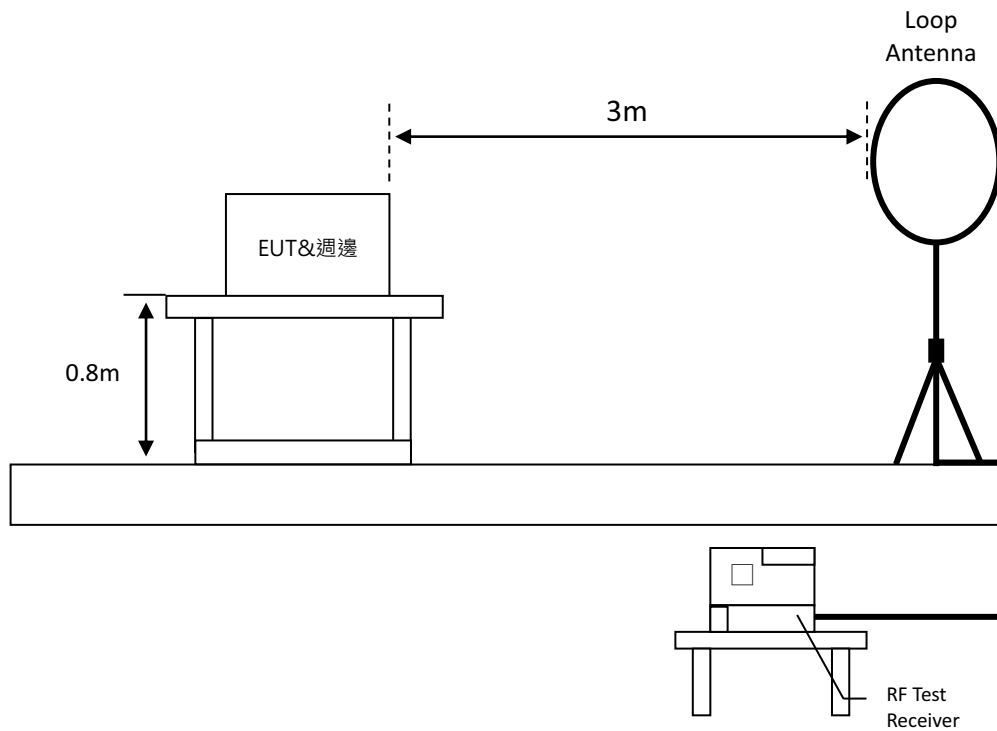
頻率 (MHz)	電場強度 (微伏/公尺)	測距 (公尺)
0.009-0.490 (含)	2,400/頻率(千赫)	300
0.490 (不含)-1.705 (含)	24,000/頻率(千赫)	30
1.705 (不含)-30 (不含)	30	30
30 (含)-88 (含)	100	3
88 (不含)-216 (含)	150	3
216 (不含)-960 (含)	200	3
Above 960	500	3

備註：

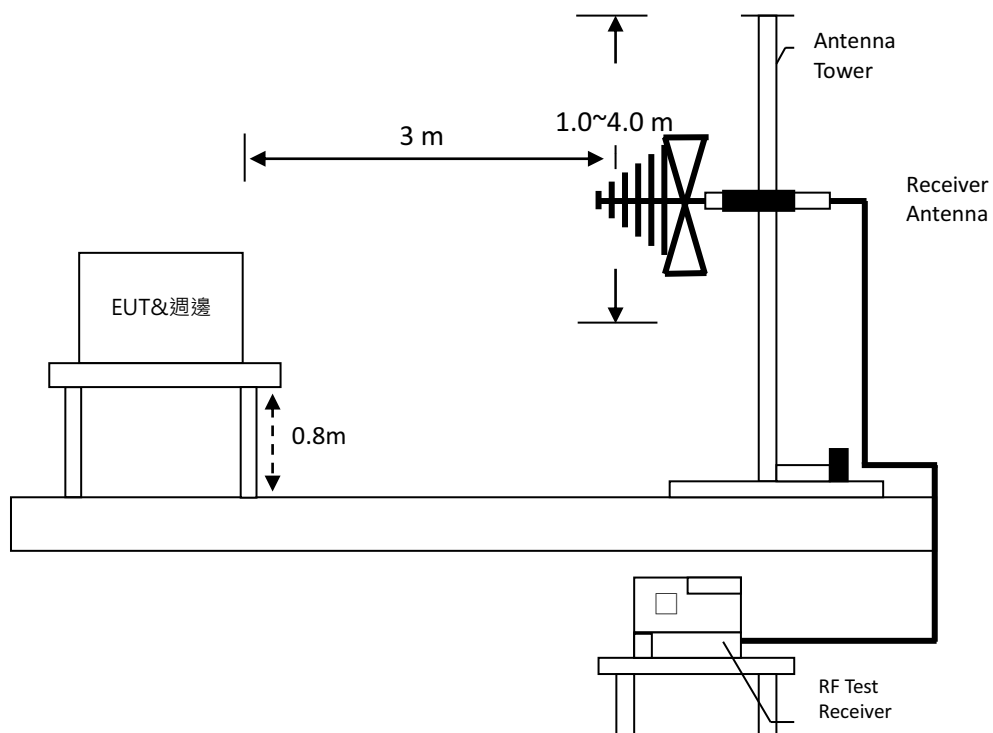
1. 在交界頻率處，以數值較小者為標準。
2. 測試距離指待測物最靠近天線的點到天線的距離。

17.2 測試架構圖

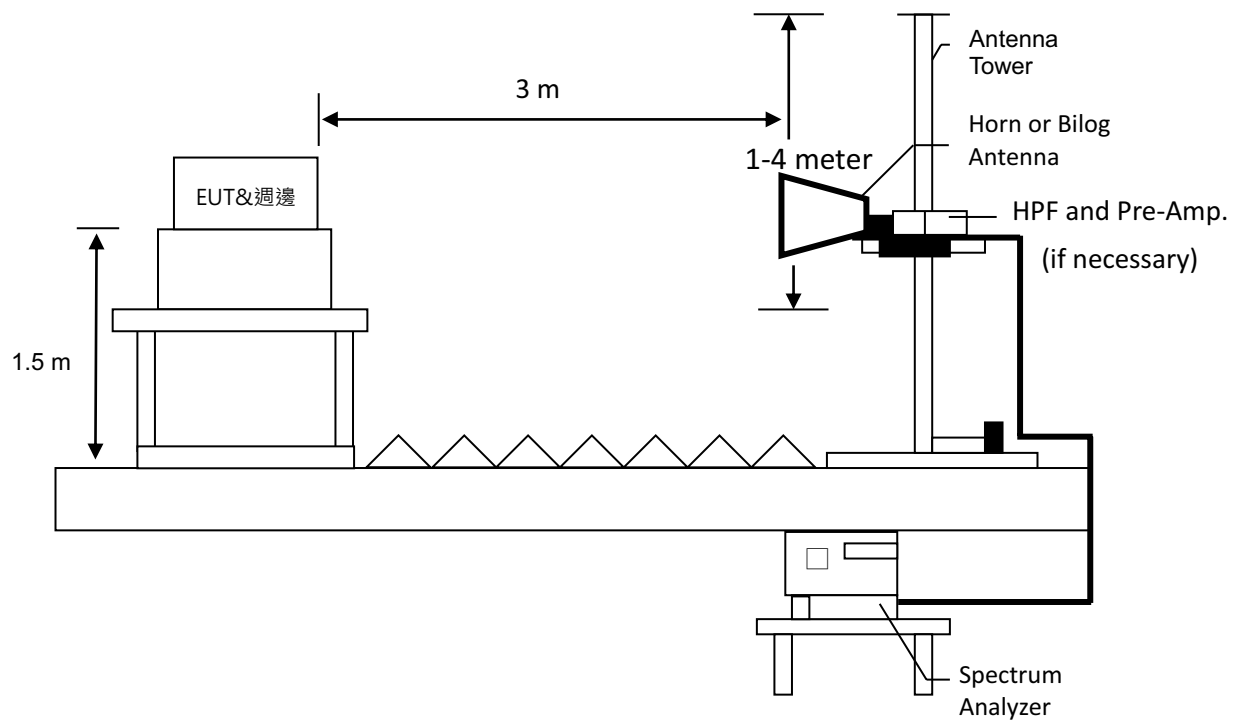
頻率範圍 9kHz - 30MHz



頻率範圍 30MHz - 1GHz



頻率範圍大於 1GHz



17.3 測試方法

如待測物須與週邊同時操作，則待測物須與週邊同時量測。在量測時，所有之連接線皆須擺設在最大的輻射場強下。待測物放在一個距離地面 0.8 公尺、可 360°C 旋轉的旋轉木桌上，待測物距離天線 3 米，天線可在距離地面 1~4 米之間升降，利用天線升降和桌子旋轉，找出待測物最大輻射場強，天線水平和垂直極化都須測量。

輻射場強量測是在 3 公尺測試距離下執行，除非輻射場強之強度太低以致於無法在此一距離下量測。至於待測物之輻射場強強度低於儀器本身背景雜訊(Noise floor)之情況，則使用一放大器(Pre-amplifier)或將測試距離拉近，而後將所有之讀值反推至 3 米之量測值。

17.4 測試結果

17.4.1 頻率低於 1GHz

溫度 : 26 °C

相對濕度 : 54 %

9kHz-30MHz

待測物分別在 DH5、2DH5 和 3DH5 各搭配 Channel 0、39 與 78 之測試模式下執行測試，經本實驗室證實，待測物在 DH5 Channel 39 為 EMI 最差之模式，故將其最差之讀值記錄於報告中。

測試項目 : 混附發射

Frequency (MHz)	Detector	Correction Factor (dB/m)	Reading (dBμV)	Corrected Reading (dBμV/m)	Limit @ 3 m (dBμV/m)	Margin (dB)
0.37	AV	18.46	29.22	47.68	96.24	-48.56
0.55	QP	18.56	29.91	48.48	72.80	-24.32
1.15	QP	18.87	24.82	43.69	66.39	-22.70
1.71	QP	18.90	16.08	34.98	69.54	-34.56
4.75	QP	19.36	12.49	31.85	69.54	-37.69
5.23	QP	19.43	12.57	32.00	69.54	-37.54

Remark: Corr. Factor = Antenna Factor + Cable Loss

30MHz - 1GHz

待測物分別在 DH5、2DH5 和 3DH5 各搭配 Channel 0、39 與 78 之測試模式下執行測試，經本實驗室證實，待測物在 DH5 Channel 39 為 EMI 最差之模式，故將其最差之讀值記錄於報告中。

測試項目：混附發射

Ant. Pol. (H/V)	Frequency (MHz)	Spectrum Analyzer Detector	Correction Factor (dB/m)	Reading (dBμV)	Corrected Reading (dBμV/m)	Limit @ 3 m (dBμV/m)	Margin (dB)
Vertical	39.70	QP	19.78	6.96	26.74	40.00	-13.26
Vertical	264.74	QP	20.86	6.24	27.10	46.00	-18.90
Vertical	431.58	QP	25.09	6.16	31.25	46.00	-14.75
Vertical	503.36	QP	26.40	9.94	36.35	46.00	-9.65
Vertical	530.52	QP	26.92	9.12	36.04	46.00	-9.96
Vertical	825.40	QP	31.81	4.00	35.80	46.00	-10.20

Ant. Pol. (H/V)	Frequency (MHz)	Spectrum Analyzer Detector	Correction Factor (dB/m)	Reading (dBμV)	Corrected Reading (dBμV/m)	Limit @ 3 m (dBμV/m)	Margin (dB)
Horizontal	220.12	QP	19.26	10.31	29.58	46.00	-16.42
Horizontal	274.44	QP	21.10	9.42	30.52	46.00	-15.48
Horizontal	359.80	QP	23.18	11.04	34.22	46.00	-11.78
Horizontal	491.72	QP	26.22	7.12	33.33	46.00	-12.67
Horizontal	608.12	QP	28.74	4.95	33.69	46.00	-12.31
Horizontal	730.34	QP	30.48	4.95	35.43	46.00	-10.57

Remark: Corr. Factor = Antenna Factor + Cable Loss

17.4.2 頻率大於 1GHz

Mode	Frequency	Spectrum	Ant.	Correction	Reading	Corrected	Limit	Margin
		Analyzer	Pol.	Factor		Reading	@ 3 m	
	(MHz)	Detector	(H/V)	(dB/m)	(dBμV)	(dBμV/m)	(dBμV/m)	(dB)
DH5_2402	3585	PK	V	1.80	48.85	50.65	74	-23.35
	4804	PK	V	7.34	43.19	50.53	74	-23.47
	7206	PK	V	14.02	35.95	49.97	74	-24.03
	3585	PK	H	1.80	45.21	47.01	74	-26.99
	4804	PK	H	7.34	41.21	48.55	74	-25.45
	7206	PK	H	14.02	36.80	50.82	74	-23.18
DH5_2441	3585	PK	V	1.80	47.68	49.48	74	-24.52
	4785	PK	V	7.30	41.48	48.78	74	-25.22
	4882	PK	V	7.55	45.20	52.75	74	-21.25
	4882	AV	V	7.55	42.67	50.22	54	-3.78
	7323	PK	V	14.43	32.28	46.71	74	-27.29
	3585	PK	H	1.80	44.71	46.51	74	-27.49
	4882	PK	H	7.55	45.44	52.99	74	-21.01
	7323	PK	H	14.43	37.04	51.47	74	-22.53
DH5_2480	3585	PK	V	1.80	46.66	48.46	74	-25.54
	4800	PK	V	7.33	36.82	44.15	74	-29.85
	4960	PK	V	7.75	47.26	55.01	74	-18.99
	4960	AV	V	7.75	45.28	53.03	54	-0.97
	7440	PK	V	14.84	33.08	47.92	74	-26.08
	3585	PK	H	1.80	43.48	45.28	74	-28.72
	4960	PK	H	7.75	45.04	52.79	74	-21.21
	7440	PK	H	14.84	33.56	48.40	74	-25.60

Remark: Correction Factor = Antenna Factor + Cable Loss + High Pass Filter Loss - Pre_Amplifier Gain

Mode	Frequency	Spectrum	Ant.	Correction	Reading	Corrected	Limit	Margin
		Analyzer	Pol.	Factor		Reading	@ 3 m	
	(MHz)	Detector	(H/V)	(dB/m)	(dBμV)	(dBμV/m)	(dBμV/m)	(dB)
2DH5_2402	3585	PK	V	1.80	47.71	49.51	74	-24.49
	4785	PK	V	7.30	41.52	48.82	74	-25.18
	4804	PK	V	7.34	36.06	43.40	74	-30.60
	3585	PK	H	1.80	43.38	45.17	74	-28.83
	4804	PK	H	7.34	35.59	42.93	74	-31.07
2DH5_2441	3585	PK	V	1.80	46.81	48.61	74	-25.39
	4770	PK	V	7.26	39.75	47.00	74	-27.00
	4882	PK	V	7.55	35.80	43.35	74	-30.65
	3585	PK	H	1.80	41.84	43.64	74	-30.36
	4882	PK	H	7.55	34.04	41.59	74	-32.41
2DH5_2480	3585	PK	V	1.80	46.13	47.93	74	-26.07
	4785	PK	V	7.30	41.35	48.65	74	-25.35
	4960	PK	V	7.75	40.92	48.67	74	-25.33
	6000	PK	V	9.35	35.11	44.46	74	-29.54
	3585	PK	H	1.80	43.27	45.06	74	-28.94
	4960	PK	H	7.75	35.32	43.07	74	-30.93
3DH5_2402	3585	PK	V	1.80	46.33	48.13	74	-25.87
	4804	PK	V	7.34	38.71	46.06	74	-27.94
	3585	PK	H	1.80	41.40	43.20	74	-30.80
	4804	PK	H	7.34	33.58	40.92	74	-33.08
3DH5_2441	3585	PK	V	1.80	49.20	50.99	74	-23.01
	4770	PK	V	7.26	40.23	47.48	74	-26.52
	4882	PK	V	7.55	35.56	43.11	74	-30.89
	3585	PK	H	1.80	41.12	42.92	74	-31.08
	4785	PK	H	7.30	35.54	42.83	74	-31.17
	4882	PK	H	7.55	34.33	41.88	74	-32.12
3DH5_2480	3585	PK	V	1.80	46.55	48.35	74	-25.65
	4785	PK	V	7.30	39.86	47.15	74	-26.85
	4960	PK	V	7.75	39.15	46.90	74	-27.10
	3585	PK	H	1.80	44.90	46.69	74	-27.31
	4960	PK	H	7.75	34.97	42.72	74	-31.28

Remark: Correction Factor = Antenna Factor + Cable Loss + High Pass Filter Loss - Pre_Amplifier Gain

18. 傳導雜訊干擾測試

18.1 適用規範

依據國家通訊傳播委員會低功率射頻電機技術規範 3.10.1.5 節之規定，使用頻帶範圍外之任意 100kHz 內，發射器所產生的射頻功率相較於頻帶範圍中包含最高所需功率之 100kHz 內的射頻功率，需衰減 20 分貝(dB)。

18.2 測試方法

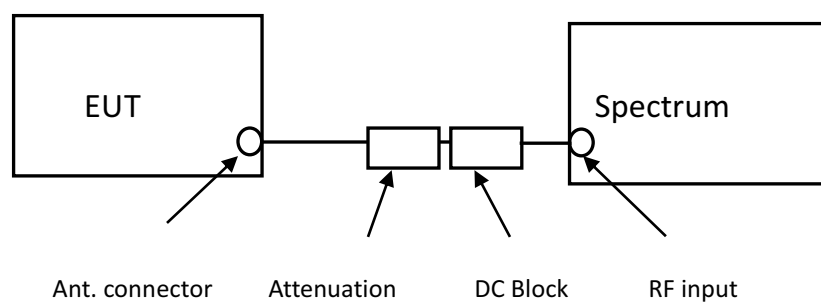
將發射機之天線埠經由適當之衰減直接連至測試儀器。

量測範圍為：操作於 2.4GHz 為 30MHz ~ 25GHz，

操作於 5GHz 為 30MHz ~ 40GHz

設定解析頻寬為 100 kHz，視訊頻寬大於等於解析頻寬。

18.3 測試配置圖

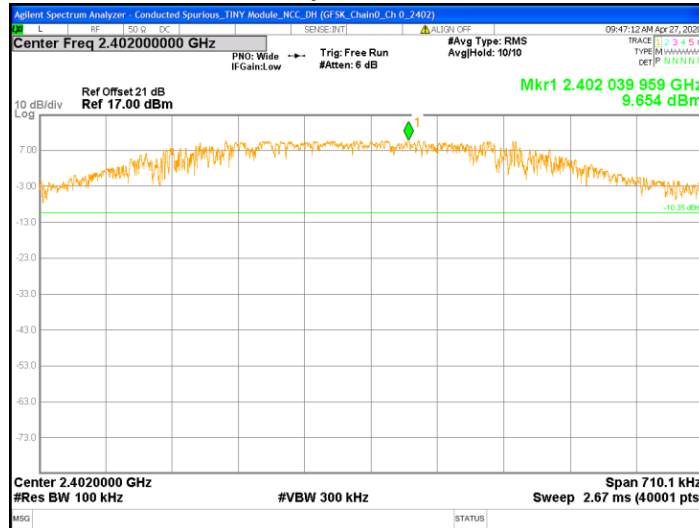


18.4 測試結果

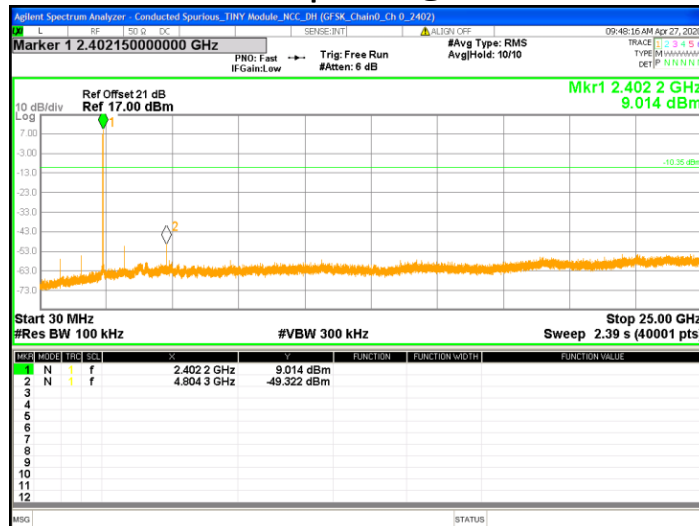
溫度 : 21 °C

相對濕度 : 59 %

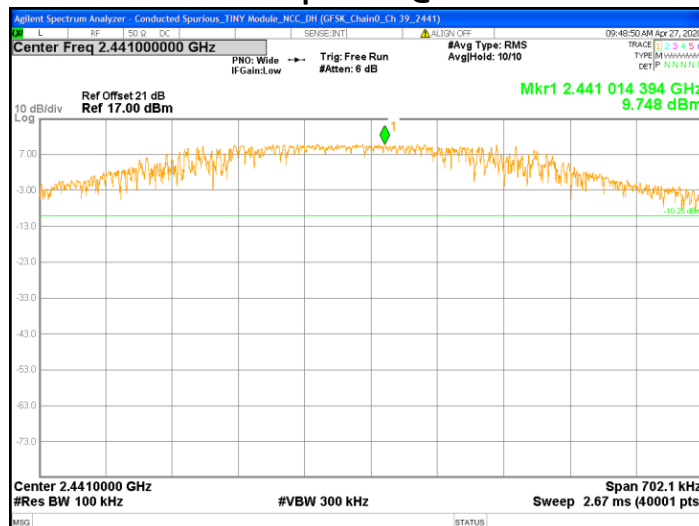
Conducted Spurious @ DH5 Ch 0



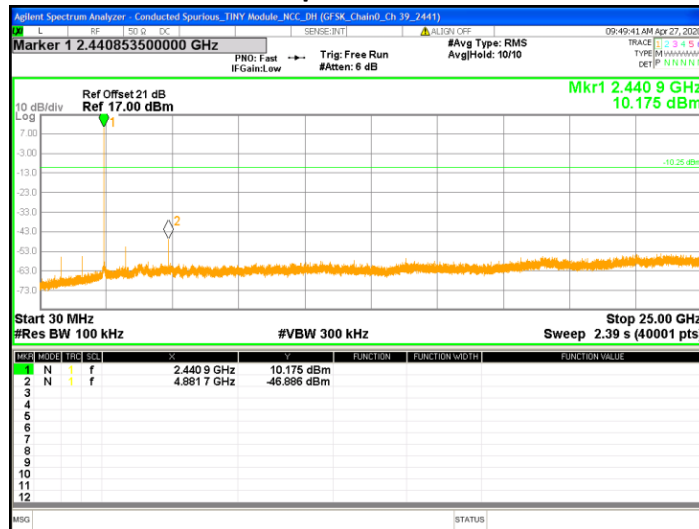
Conducted Spurious @ DH5 Ch 0



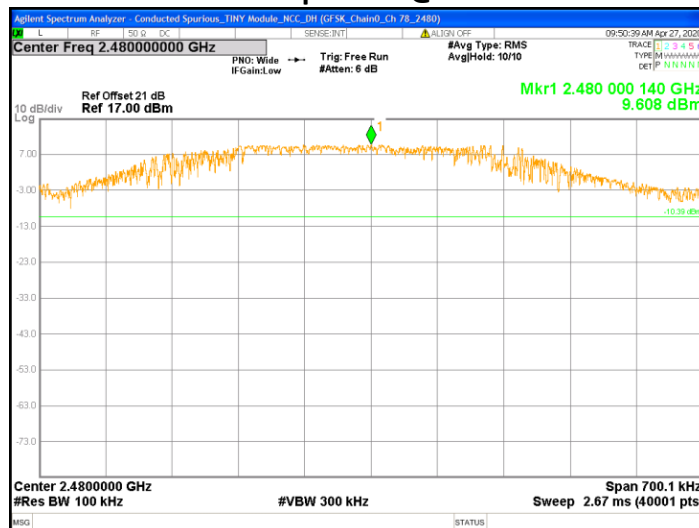
Conducted Spurious @ DH5 Ch 39



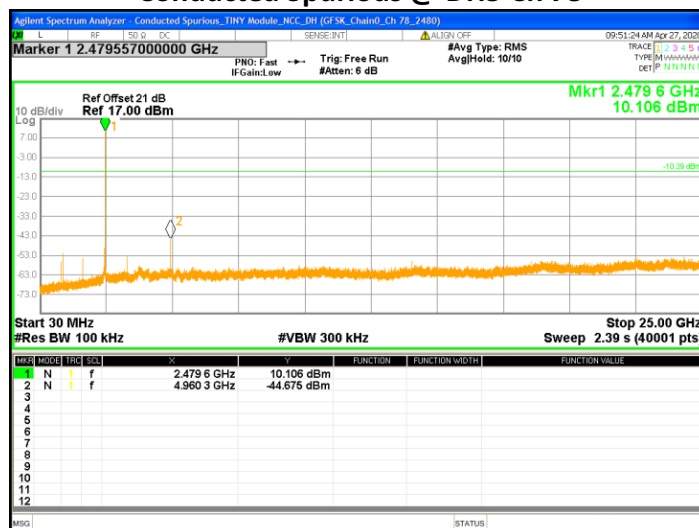
Conducted Spurious @ DH5 Ch 39



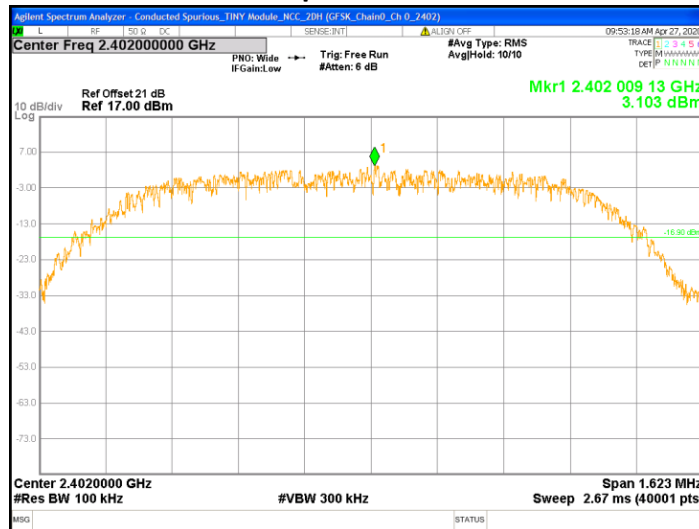
Conducted Spurious @ DH5 Ch 78



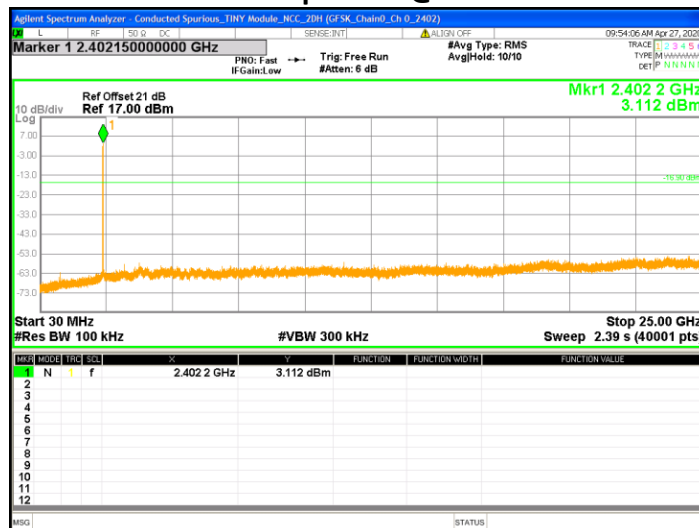
Conducted Spurious @ DH5 Ch 78



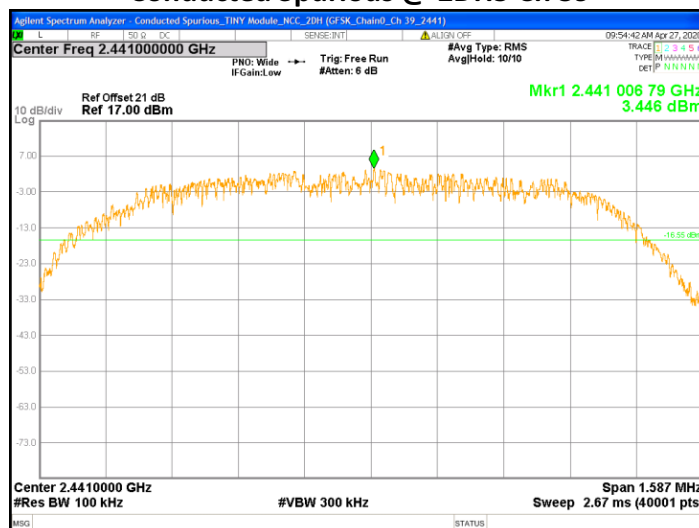
Conducted Spurious @ 2DH5 Ch 0



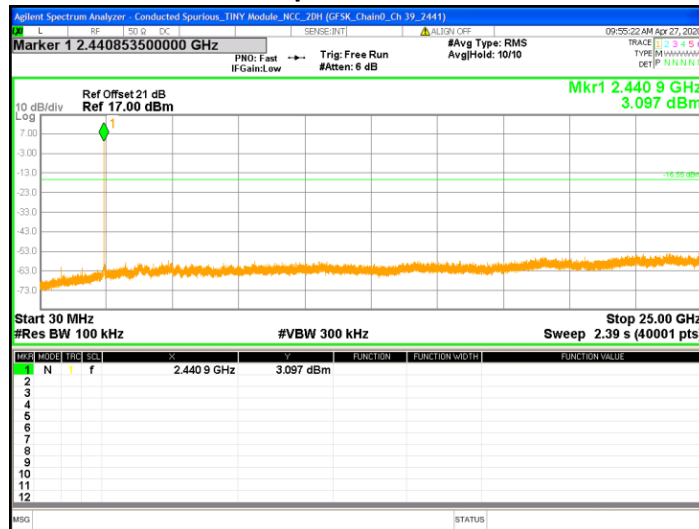
Conducted Spurious @ 2DH5 Ch 0



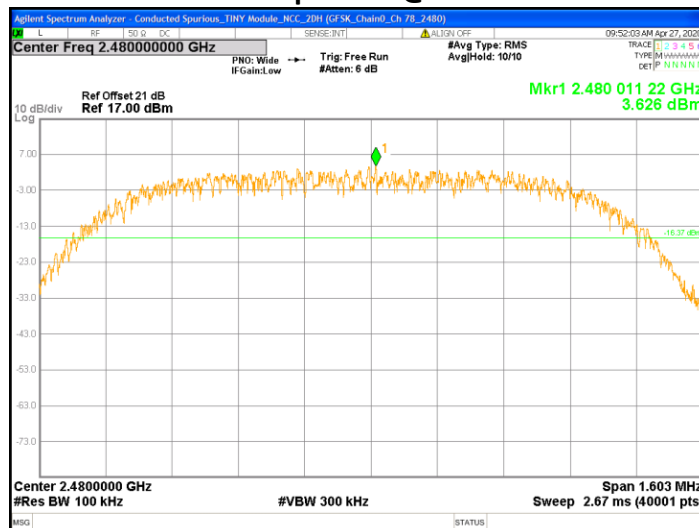
Conducted Spurious @ 2DH5 Ch 39



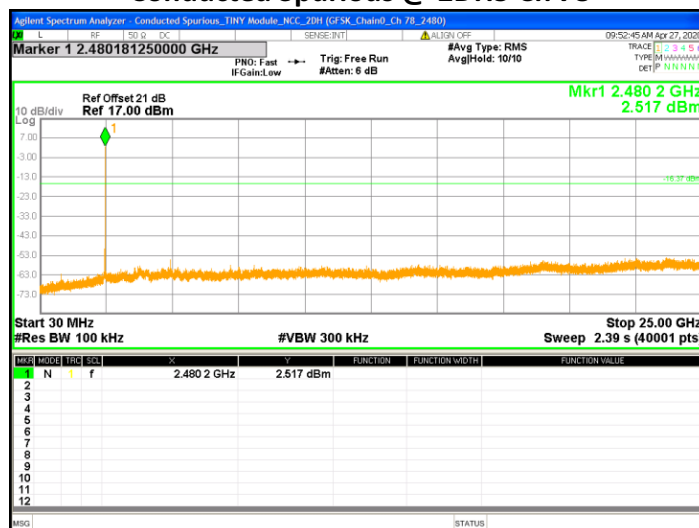
Conducted Spurious @ 2DH5 Ch 39



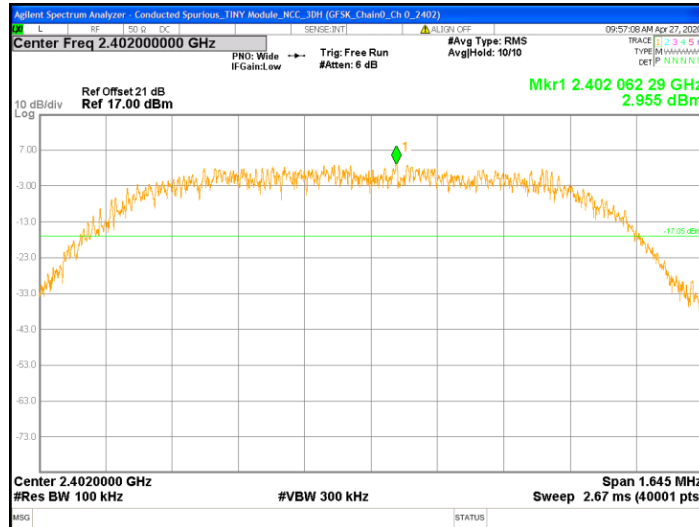
Conducted Spurious @ 2DH5 Ch 78



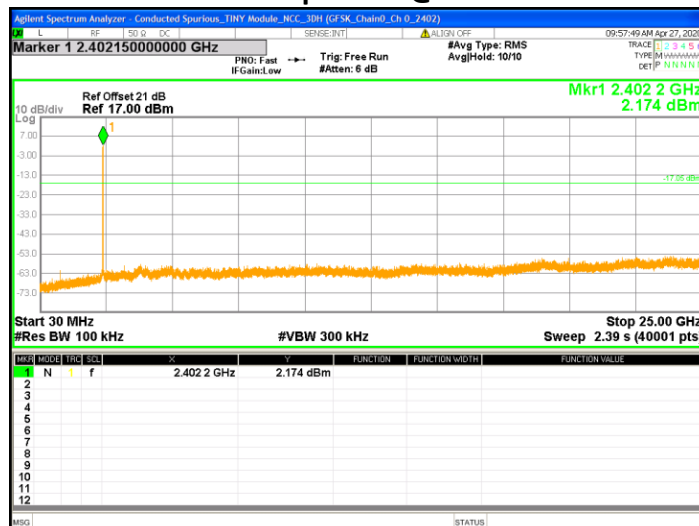
Conducted Spurious @ 2DH5 Ch 78



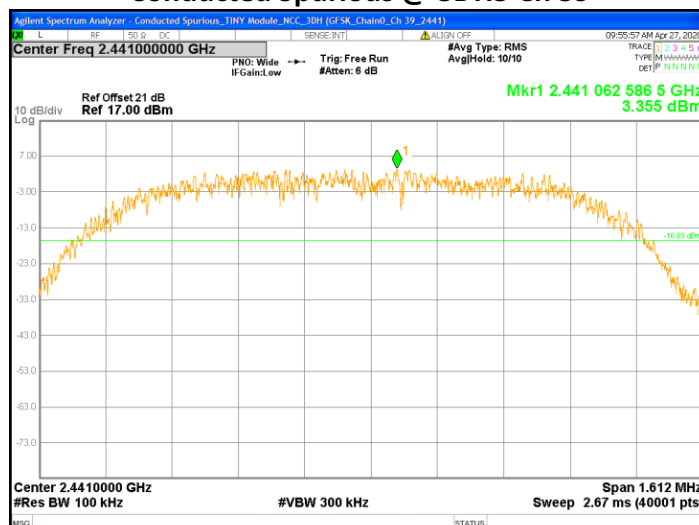
Conducted Spurious @ 3DH5 Ch 0



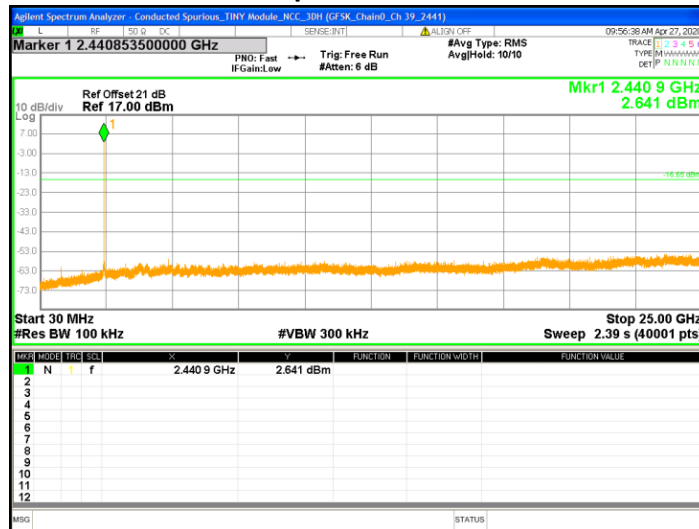
Conducted Spurious @ 3DH5 Ch 0



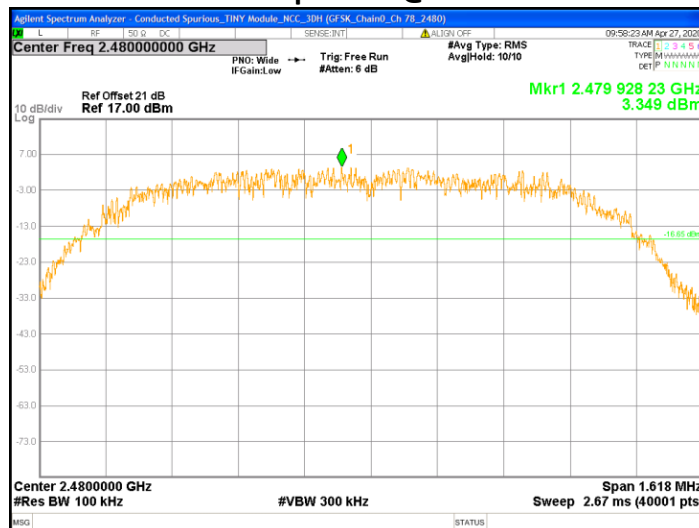
Conducted Spurious @ 3DH5 Ch 39



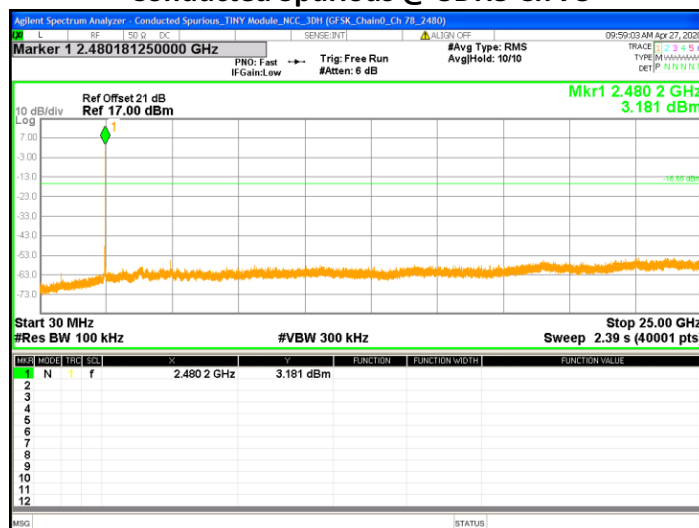
Conducted Spurious @ 3DH5 Ch 39



Conducted Spurious @ 3DH5 Ch 78



Conducted Spurious @ 3DH5 Ch 78

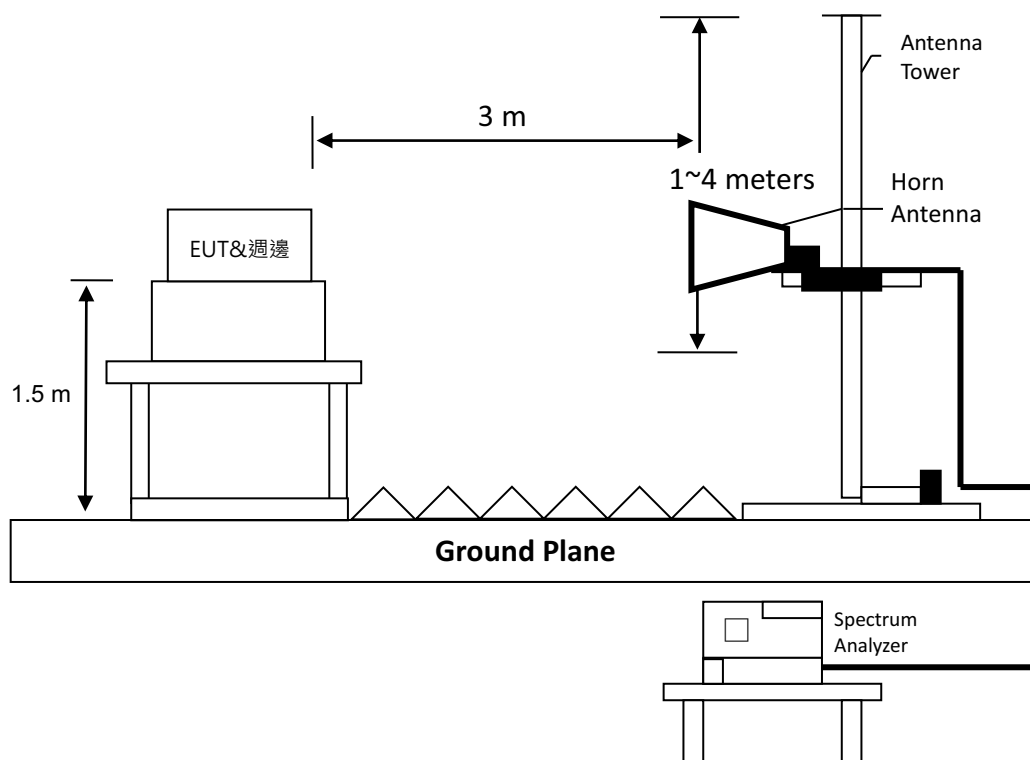


19. 頻帶邊緣測試

19.1 適用規範

依據國家通訊傳播委員會低功率射頻電機技術規範 3.10.1.5 節之規定，使用頻帶範圍外之任意 100kHz 內，發射器所產生的射頻功率相較於頻帶範圍中包含最高所需功率之 100kHz 內的射頻功率，需衰減 20 分貝(dB)，以射頻傳導或輻射方式量測。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。

19.2 測試架構



19.3 測試結果

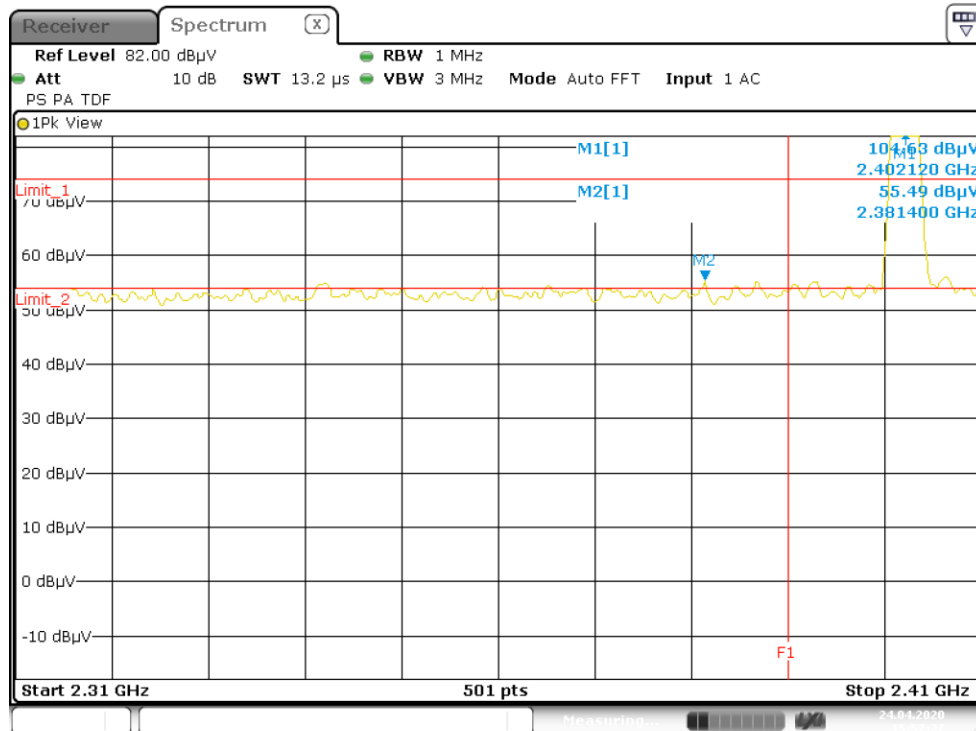
溫度 : 23 °C

相對濕度 : 56 %

Mode	Frequency (MHz)	Spectrum Analyzer Detector	Ant. Pol. (H/V)	Correction Factor (dB/m)	Reading (dBμV)	Corrected Reading (dBμV/m)	Limit @ 3 m (dBμV/m)	Margin (dB)	Restricted band (MHz)
GFSK	2381.40	PK	V	34.48	21.01	55.49	74	-18.51	2310~2390
	2373.60	AV	V	34.45	8.16	42.60	54	-11.40	
	2489.70	PK	V	34.95	22.96	57.91	74	-16.09	2483.5~2500
	2486.50	AV	V	34.93	9.68	44.62	54	-9.38	
π/4-DPSK	2371.60	PK	V	34.44	21.59	56.03	74	-17.97	2310~2390
	2389.40	AV	V	34.51	8.06	42.58	54	-11.42	
	2487.50	PK	V	34.94	20.96	55.89	74	-18.11	2483.5~2500
	2483.50	AV	V	34.92	9.09	44.01	54	-9.99	
8-DPSK	2370.40	PK	V	34.43	20.22	54.66	74	-19.34	2310~2390
	2390.00	AV	V	34.52	8.13	42.64	54	-11.36	
	2484.40	PK	V	34.92	22.28	57.21	74	-16.79	2483.5~2500
	2483.50	AV	V	34.92	9.20	44.12	54	-9.88	

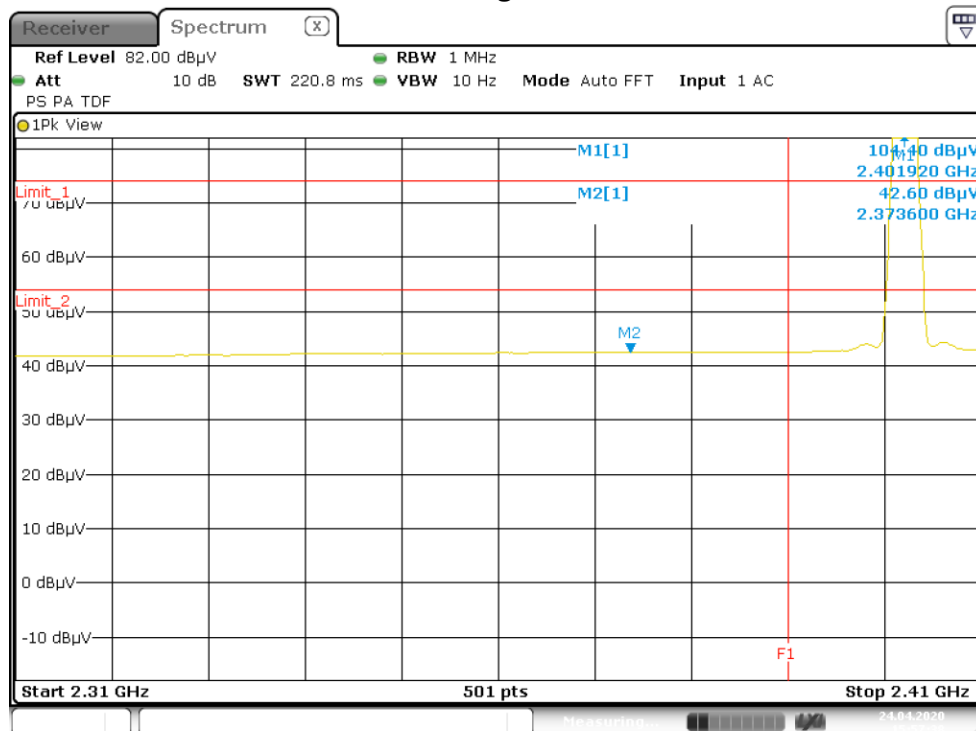
Remark: Correction Factor = Antenna Factor + Cable Loss

Restricted Band Bandedge @ DH5 Mode Ch0 PK



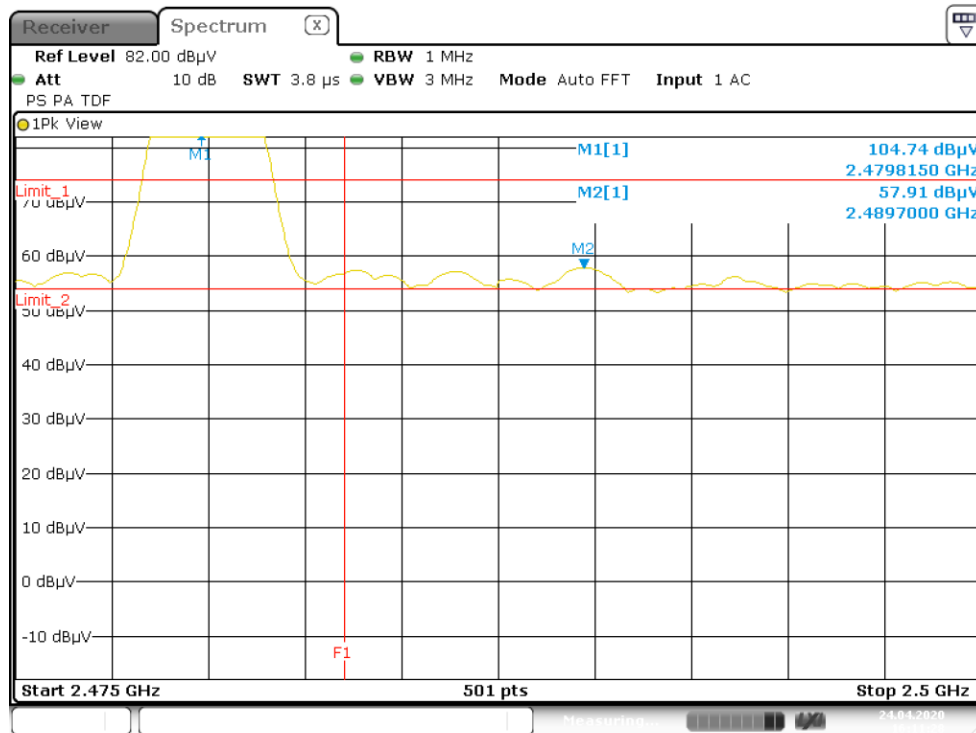
Date: 24.APR.2020 15:57:27

Restricted Band Bandedge @ DH5 Mode Ch0 AV



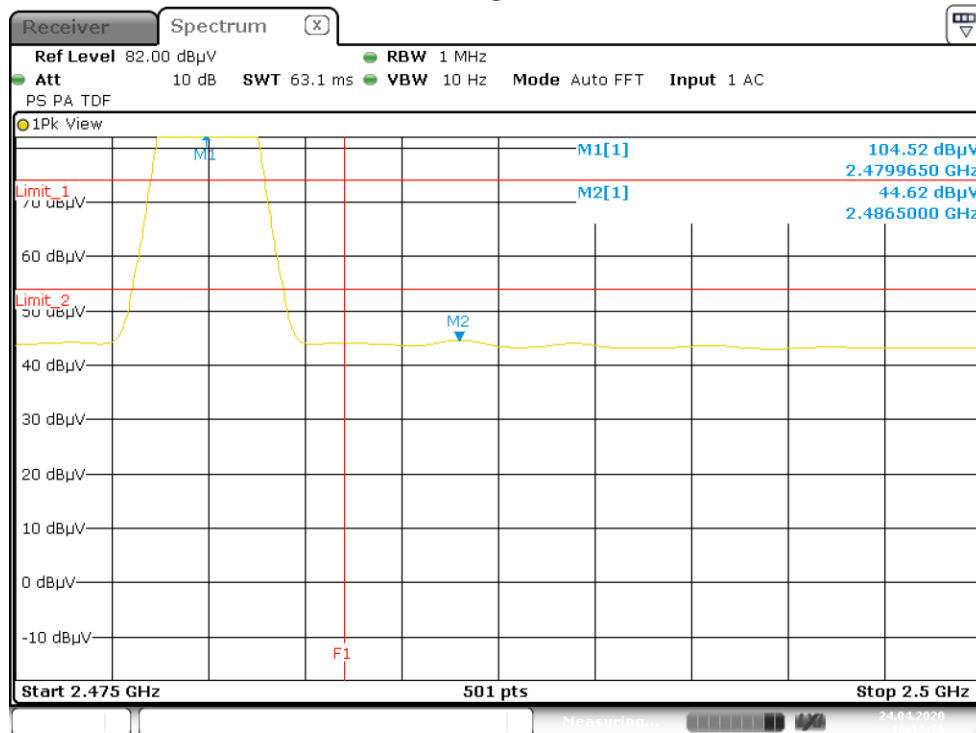
Date: 24.APR.2020 15:57:38

Restricted Band Bandedge @ DH5 Mode Ch78 PK



Date: 24.APR.2020 16:11:28

Restricted Band Bandedge @ DH5 Mode Ch78 AV



Date: 24.APR.2020 16:11:35