附錄一

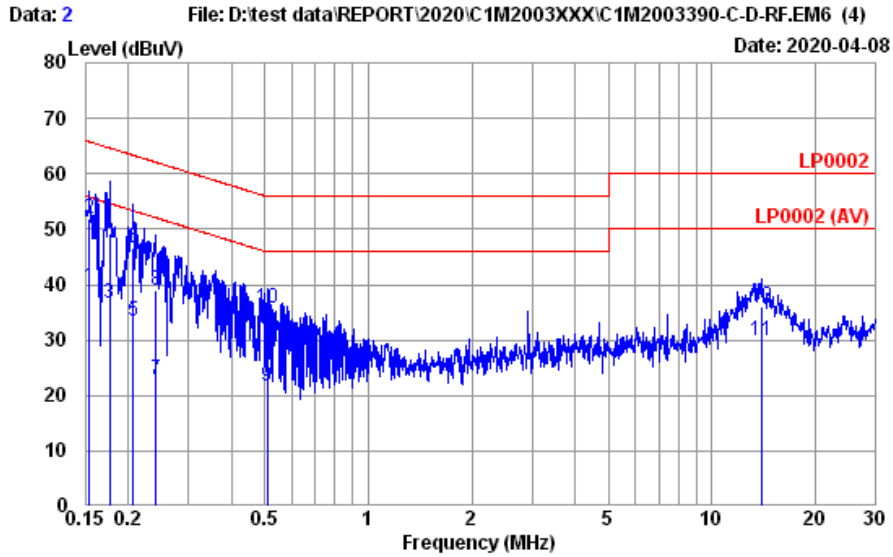
受測裝置之測試結果

目錄 **頁次**

1. 電源線傳導干擾之量測 2
2. 場強輻射之量測 4
2.1. 30-1000MHz 頻率範圍，其他不必要發射量測 5
2.2. 1000MHz 以上頻率範圍，其他不必要發射量測 8
2.3. 禁用頻帶量測結果 (其他不必要發射) 10
3. 20dB 頻寬之量測 18
3.1. 20dB 頻寬 18
3.2. 20dB 頻寬之量測圖 19
4. 載波頻率間隔之量測 20
4.1. 載波頻率間隔 20
4.2. 載波頻率間隔之量測圖 21
5. 跳頻頻率數目之量測 23
6. 佔用時間(停留時間)之量測 24
6.1. 佔用時間(停留時間) 24
7. 峰值輸出功率之量測 36
7.1. 峰值輸出功率 36
7.2. 峰值輸出功率之量測圖 37
8. 頻帶邊緣之 RF 傳導發射之量測 38
9. 混附發射之 RF 傳導發射之量測 39

1. 電源線傳導干擾之量測

測試日期	2020/04/08	環境溫/濕度	23℃/51%
測試電壓	AC 110V/60Hz(經電源供應器供電)	測試人員	Ken Yang

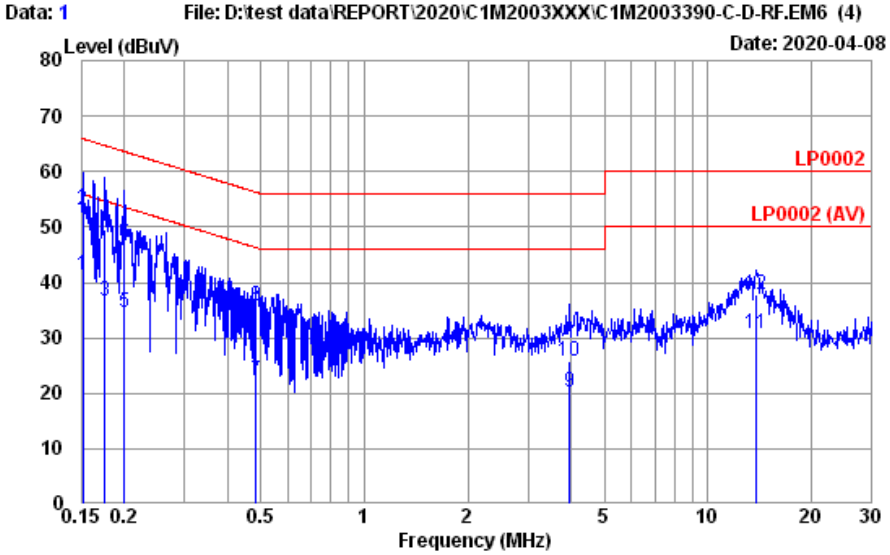


Site No. : No.8 Shielded Room Data No. : 2
Instrument 1 : Receiver ESR(774)
Instrument 2 : ENV4200 (169)(A)|CE-08|ESH3-Z2 (354)
Limit : LP0002 Phase : NEUTRAL
Environment : 23°C / 51% Engineer : Ken Yang
EUT Model : SRS-XB43 Test Rating : 110Vac/60Hz
Test Mode : Normal

	Freq. (MHz)	AMN Factor (dB)	Cable Loss (dB)	Pulse Att. (dB)	Reading (dBµV)	Emission Level (dBµV)	Limits (dBµV)	Margin (dB)	Remark
1	0.154	10.73	0.04	9.85	19.06	39.68	55.78	16.10	Average
2	0.154	10.73	0.04	9.85	31.29	51.91	65.78	13.87	QP
3	0.177	10.69	0.04	9.85	16.16	36.74	54.64	17.90	Average
4	0.177	10.69	0.04	9.85	28.66	49.24	64.64	15.40	QP
5	0.207	10.64	0.04	9.85	12.87	33.40	53.32	19.92	Average
6	0.207	10.64	0.04	9.85	26.14	46.67	63.32	16.65	QP
7	0.240	10.62	0.04	9.85	2.20	22.71	52.08	29.37	Average
8	0.240	10.62	0.04	9.85	18.55	39.06	62.08	23.02	QP
9	0.507	10.51	0.04	9.86	1.35	21.76	46.00	24.24	Average
10	0.507	10.51	0.04	9.86	15.30	35.71	56.00	20.29	QP
11	13.915	12.47	0.16	9.93	7.42	29.98	50.00	20.02	Average
12	13.915	12.47	0.16	9.93	13.46	36.02	60.00	23.98	QP

Remarks: 1. Emission Level= AMN Factor + Cable Loss + Pulse Att. + Reading.
2. If the average limit is met when using a quasi-peak detector, the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.

測試日期	2020/04/08	環境溫/濕度	23℃/51%
測試電壓	AC 110V/60Hz (經電源供應器供電)	測試人員	Ken Yang



Site No. : No.8 Shielded Room Data No. : 1
Instrument 1 : Receiver ESR(774)
Instrument 2 : EMV4200 (169)(A)|CE-08|ESH3-Z2 (354)
Limit : LP0002 Phase : LINE
Environment : 23°C / 51% Engineer : Ken Yang
EUT Model : SRS-XB43 Test Rating : 110Vac/60Hz
Test Mode : Normal

	Freq. (MHz)	AMN Factor (dB)	Cable Loss (dB)	Pulse Att. (dB)	Reading (dBµV)	Emission Level (dBµV)	Limits (dBµV)	Margin (dB)	Remark
1	0.152	10.68	0.04	9.85	20.64	41.21	55.91	14.70	Average
2	0.152	10.68	0.04	9.85	32.59	53.16	65.91	12.75	QP
3	0.176	10.64	0.04	9.85	16.04	36.57	54.68	18.11	Average
4	0.176	10.64	0.04	9.85	29.08	49.61	64.68	15.07	QP
5	0.201	10.61	0.04	9.85	14.21	34.71	53.58	18.87	Average
6	0.201	10.61	0.04	9.85	26.76	47.26	63.58	16.32	QP
7	0.484	10.49	0.04	9.86	1.82	22.21	46.27	24.06	Average
8	0.484	10.49	0.04	9.86	15.38	35.77	56.27	20.50	QP
9	3.964	10.61	0.09	9.88	-0.22	20.36	46.00	25.64	Average
10	3.964	10.61	0.09	9.88	5.21	25.79	56.00	30.21	QP
11	13.768	12.14	0.16	9.93	8.59	30.82	50.00	19.18	Average
12	13.768	12.14	0.16	9.93	15.55	37.78	60.00	22.22	QP

Remarks: 1. Emission Level= AMN Factor + Cable Loss + Pulse Att. + Reading.
2. If the average limit is met when using a quasi-peak detector, the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.

2. 場強輻射之量測

【經實驗室評估量測後，以最差之調變方式 GFSK 進行本章節之測試】

本裝置有兩種電源供應模式分別為電池(DC 7.2V)及 USB (DC 5V)，實驗室以單機(電池供電)分別以三種不同的擺設方式(站立、平放、側立)**進行量試評估，最後選取最大場強值的擺設方式(平放)以低、中、高頻率來進行量測**，並將下列測試模式之掃頻圖隨案件所附。另搭配電源供應器(DC 5V)執行充電模式，經評估充電模式不影響 1GHz 以上訊號結果，此模式僅呈現 30MHz-1GHz 測試結果於此份報告，所得讀值資料請見章節 2.1 ~2.2：

- Normal/充電模式

動作狀態	測試電壓	量測頻率範圍
Normal	AC 110V/60Hz (經電源供應器供電)	30-1000MHz
		1000-25000MHz
充電	AC 110V/60Hz (經電源供應器供電)	30-1000MHz

- 發射/接收模式

模式	測試電壓	動作狀態	基本頻率	量測頻率範圍
BT	DC 7.2V (經內建鋰電池供電)	發射	2402MHz (CH0)	1000-25000MHz
		發射	2441MHz (CH39) *	30-1000MHz
				1000-25000MHz
		發射	2480MHz (CH78)	1000-25000MHz
		接收	2441MHz(CH39)	30-1000MHz
				1000-25000MHz

註：*: 經評估後，以最差頻率進行 30-1000MHz 量測。

對受測物裝置落於技術規範第 2.7 章節的禁用頻率之混附發射以下列測試模式依規定分別進行量測，所得量測資料請見章節 1.3。

模式	測試電壓	動作狀態	基本頻率	量測頻率範圍
BT (GFSK)	DC 7.2V (經內建鋰電池供電)	發射	2402MHz (CH0)	2310-2410MHz
			2480MHz (CH78)	2430-2900MHz
BT (8-DPSK)		發射	2402MHz (CH0)	2310-2410MHz
			2480MHz (CH78)	2450-2900MHz

測試日期	2020/04/07~16	環境溫/濕度	20 ~ 22℃/62 ~ 68%
測試電壓	(1) AC 110V/60Hz (經電源供應器供電) (2) DC 7.2V (經內建鋰電池供電)	測試人員	Sean Wang

2.1. 30-1000MHz 頻率範圍，其他不必要發射量測

Mode	Normal	Frequency	---

Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
68.800	11.95	0.69	28.22	46.30	30.72	40.00	9.28	Peak
143.490	16.81	1.03	27.89	48.84	38.79	43.50	4.71	Peak
348.160	20.17	1.70	27.83	41.76	35.80	46.00	10.20	Peak
485.900	22.81	2.08	28.65	37.33	33.57	46.00	12.43	Peak
673.110	24.59	2.53	28.80	40.88	39.20	46.00	6.80	Peak
985.450	26.93	3.23	28.09	29.60	31.67	54.00	22.33	Peak

Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
34.850	22.13	0.49	28.31	28.24	22.55	40.00	17.45	Peak
198.780	14.94	1.25	27.66	37.57	26.10	43.50	17.40	Peak
485.900	22.81	2.08	28.65	35.05	31.29	46.00	14.71	Peak
671.170	24.58	2.53	28.80	39.79	38.10	46.00	7.90	Peak
906.880	26.25	3.04	28.31	29.57	30.55	46.00	15.45	Peak
989.330	26.96	3.24	28.08	28.75	30.87	54.00	23.13	Peak

Mode	Charge	Frequency	---

Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
68.800	11.95	0.69	28.22	45.92	30.34	40.00	9.66	Peak
143.490	16.81	1.03	27.89	50.17	40.12	43.50	3.38	Peak
485.900	22.81	2.08	28.65	37.54	33.78	46.00	12.22	Peak
672.140	24.59	2.53	28.80	41.73	40.05	46.00	5.95	Peak
912.700	26.30	3.05	28.29	29.91	30.97	46.00	15.03	Peak
995.150	27.01	3.26	28.06	28.92	31.13	54.00	22.87	Peak

Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
35.820	21.49	0.49	28.31	29.81	23.48	40.00	16.52	Peak
141.550	16.96	1.03	27.89	34.45	24.55	43.50	18.95	Peak
528.580	23.40	2.19	28.77	32.48	29.30	46.00	16.70	Peak
672.140	24.59	2.53	28.80	38.31	36.63	46.00	9.37	Peak
867.110	26.01	2.96	28.41	29.49	30.05	46.00	15.95	Peak
981.570	26.90	3.22	28.10	28.19	30.21	54.00	23.79	Peak

Mode	GFSK	Frequency	TX 2441MHz

Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
68.800	11.95	0.69	28.22	46.35	30.77	40.00	9.23	Peak
120.210	18.23	0.93	28.01	48.04	39.19	43.50	4.31	Peak
336.520	19.88	1.67	27.75	41.36	35.16	46.00	10.84	Peak
673.110	24.59	2.53	28.80	41.66	39.98	46.00	6.02	Peak
899.120	26.19	3.02	28.33	30.93	31.81	46.00	14.19	Peak
982.540	26.90	3.23	28.10	29.00	31.03	54.00	22.97	Peak

Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
31.940	23.29	0.47	28.32	29.24	24.68	40.00	15.32	Peak
120.210	18.23	0.93	28.01	36.92	28.07	43.50	15.43	Peak
335.550	19.88	1.67	27.74	31.93	25.74	46.00	20.26	Peak
623.640	24.37	2.43	28.84	42.11	40.07	46.00	5.93	Peak
939.860	26.53	3.12	28.21	29.53	30.97	46.00	15.03	Peak
990.300	26.96	3.25	28.08	28.62	30.75	54.00	23.25	Peak

Mode	---	Frequency	RX 2441MHz

Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
68.800	11.95	0.69	28.22	45.42	29.84	40.00	10.16	Peak
143.490	16.81	1.03	27.89	46.21	36.16	43.50	7.34	Peak
335.550	19.88	1.67	27.74	40.78	34.59	46.00	11.41	Peak
563.500	23.83	2.28	28.82	35.09	32.38	46.00	13.62	Peak
951.500	26.64	3.15	28.18	29.85	31.46	46.00	14.54	Peak
969.930	26.78	3.19	28.13	28.23	30.07	54.00	23.93	Peak

Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
32.910	22.91	0.47	28.31	29.20	24.27	40.00	15.73	Peak
167.740	15.37	1.13	27.78	40.39	29.11	43.50	14.39	Peak
336.520	19.88	1.67	27.75	34.25	28.05	46.00	17.95	Peak
612.000	24.32	2.41	28.86	41.10	38.97	46.00	7.03	Peak
924.340	26.42	3.08	28.26	29.12	30.36	46.00	15.64	Peak
994.180	26.98	3.26	28.07	28.71	30.88	54.00	23.12	Peak

2.2. 1000MHz 以上頻率範圍，其他不必要發射量測

頻率範圍量測至主波發射的 10 倍諧波，其他未列在報告上乃因訊號太小無法量測。

Mode	Normal	Frequency	---

Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
4880.000	34.37	10.24	34.45	29.73	39.89	54.00	14.11	Peak

Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
4880.000	34.37	10.24	34.45	30.48	40.64	54.00	13.36	Peak

Mode	GFSK	Frequency	TX 2402MHz

Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
4804.000	33.90	10.22	34.47	32.26	41.91	54.00	12.09	Peak

Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
4804.000	33.90	10.22	34.47	30.41	40.06	54.00	13.94	Peak

Mode	GFSK	Frequency	TX 2441MHz

Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
4882.000	34.37	10.24	34.45	29.40	39.56	54.00	14.44	Peak

Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
4882.000	34.37	10.24	34.45	30.31	40.47	54.00	13.53	Peak

Mode	GFSK	Frequency	TX 2480MHz

Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
4960.000	34.27	10.27	34.44	29.21	39.31	54.00	14.69	Peak

Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
4960.000	34.27	10.27	34.44	29.83	39.93	54.00	14.07	Peak

Mode	---	Frequency	RX 2441MHz

Antenna at Horizontal Polarization

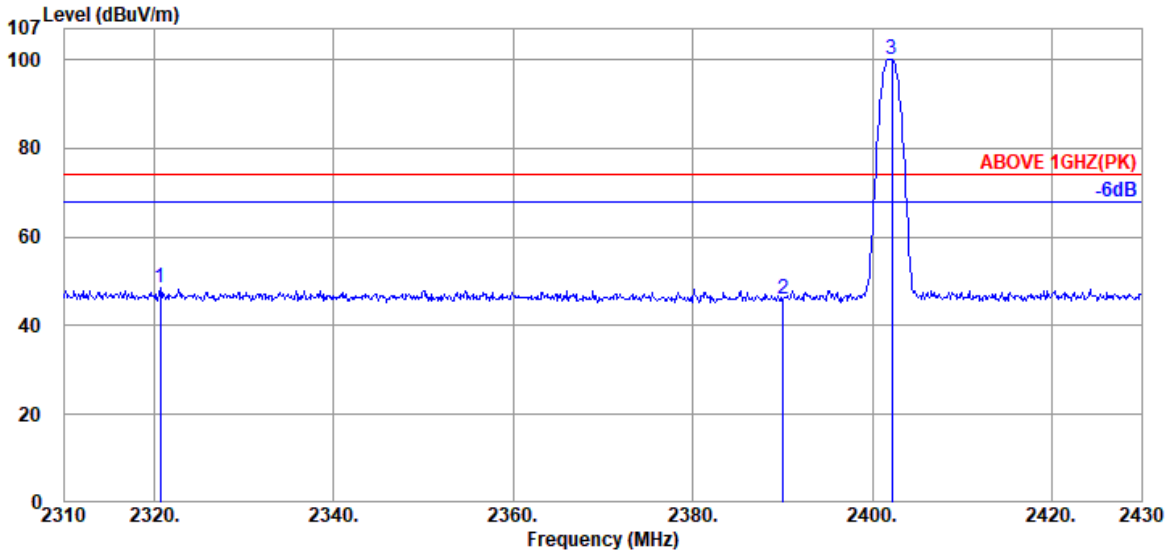
Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
1594.000	27.70	7.53	34.68	42.37	42.92	54.00	11.08	Peak

Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
1459.000	28.53	7.29	34.77	43.91	44.96	54.00	9.04	Peak

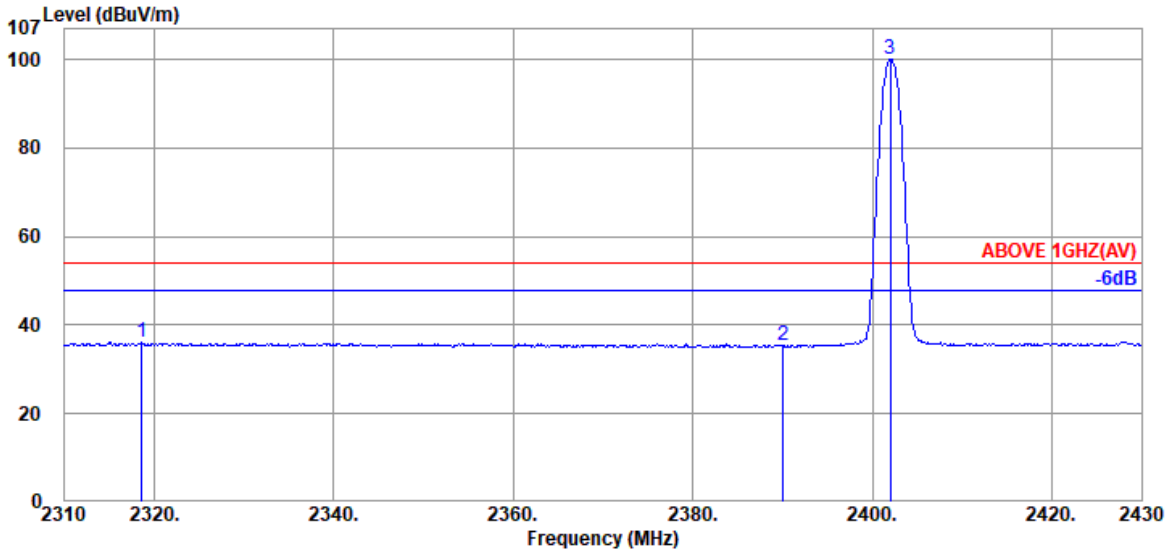
2.3. 禁用頻帶量測結果 (其他不必要發射)

Mode	GFSK	Frequency	TX 2402MHz



Antenna at Horizontal Polarization

	Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
	2320.68	32.00	8.47	34.57	42.79	48.69	74.00	25.31	Peak
	2390.04	32.00	8.52	34.58	40.25	46.19	74.00	27.81	Peak
@	2402.16	32.00	8.52	34.59	94.31	100.24	---	---	Peak

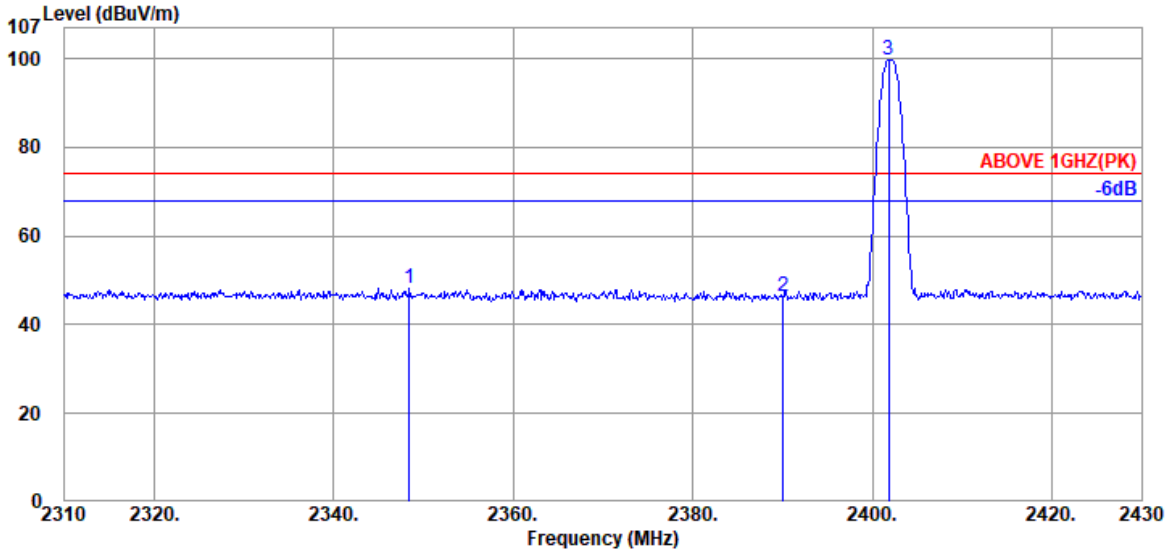


Antenna at Horizontal Polarization

	Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
	2318.64	32.00	8.47	34.57	30.28	36.18	54.00	17.82	Average
	2390.04	32.00	8.52	34.58	29.37	35.31	54.00	18.69	Average
@	2402.04	32.00	8.52	34.59	94.09	100.02	---	---	Average

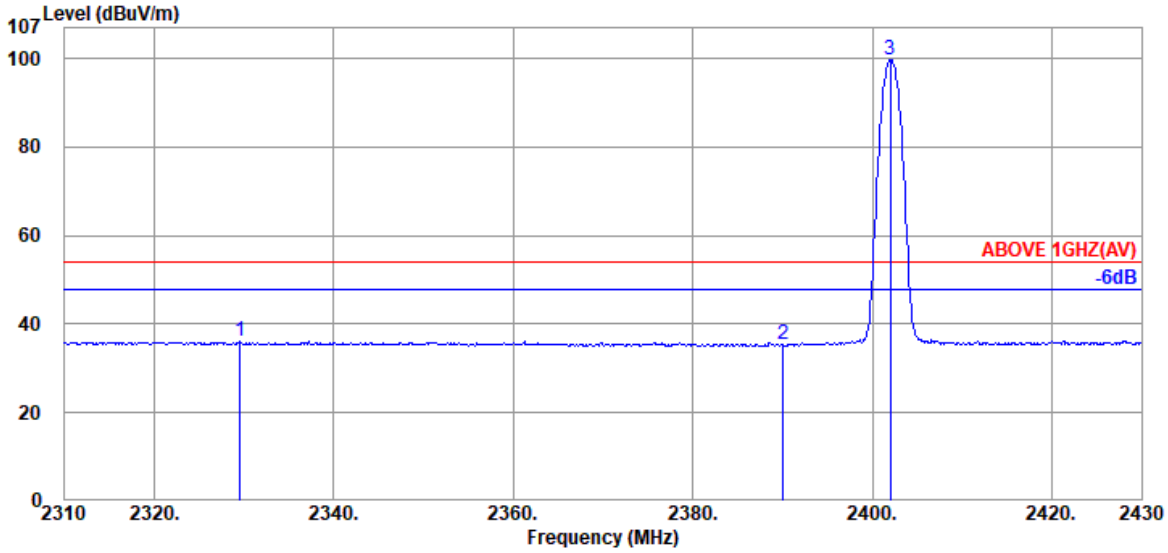
備註:"@"為主波，在此章節是不予以判定。

Mode	GFSK	Frequency	TX 2402MHz



Antenna at Vertical Polarization

	Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
	2348.40	32.00	8.48	34.57	42.17	48.08	74.00	25.92	Peak
	2390.04	32.00	8.52	34.58	40.54	46.48	74.00	27.52	Peak
@	2401.80	32.00	8.52	34.59	93.90	99.83	---	---	Peak

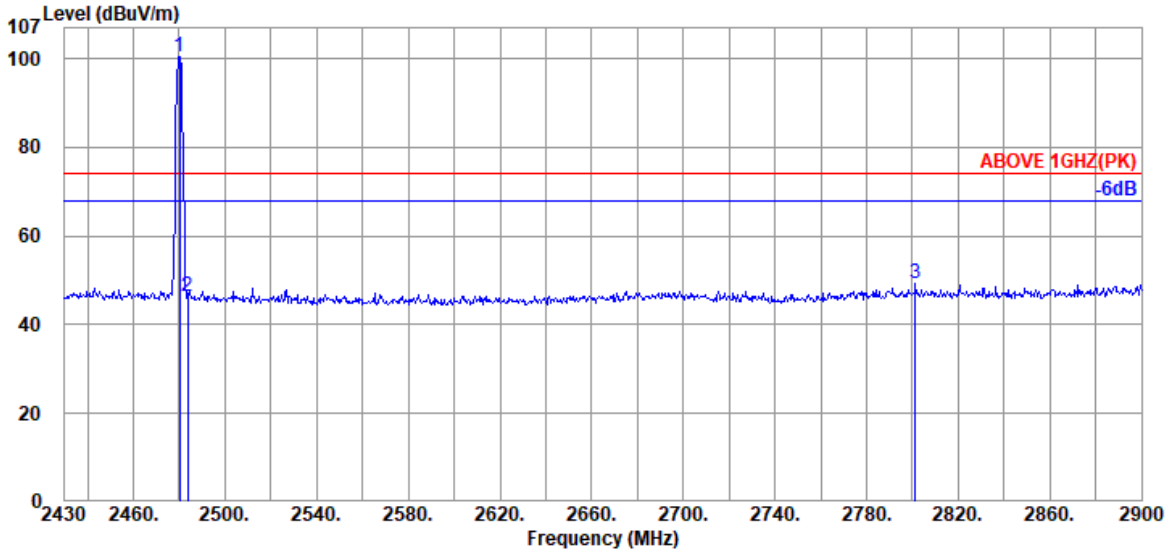


Antenna at Vertical Polarization

	Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
	2329.56	32.00	8.47	34.57	30.16	36.06	54.00	17.94	Average
	2390.04	32.00	8.52	34.58	29.30	35.24	54.00	18.76	Average
@	2402.04	32.00	8.52	34.59	93.69	99.62	---	---	Average

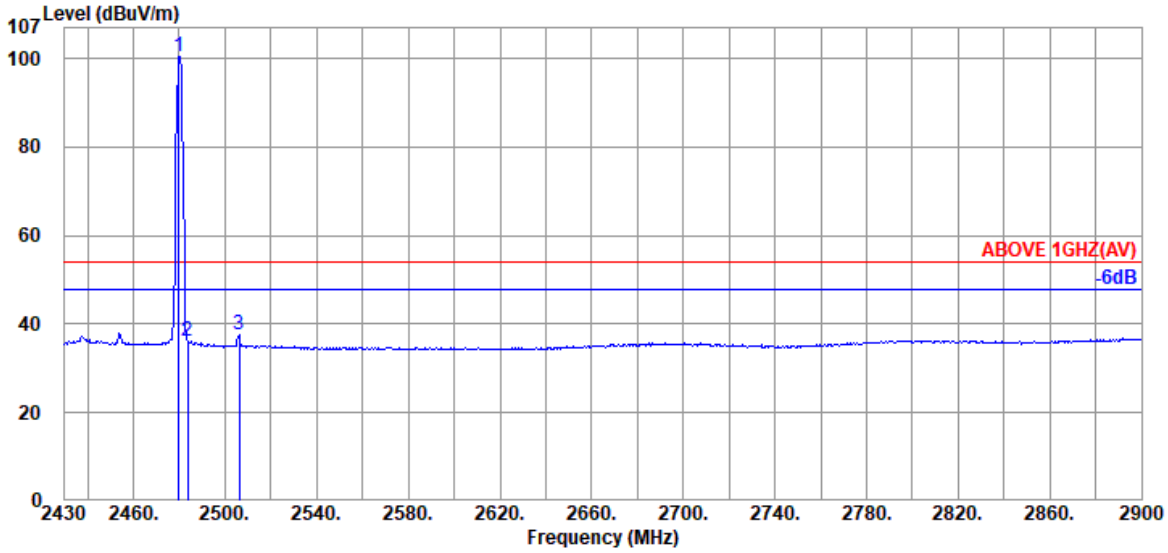
備註:“@”為主波，在此章節是不予以判定。

Mode	GFSK	Frequency	TX 2480MHz



Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
@ 2480.29	32.57	8.58	34.60	93.97	100.52	---	---	Peak
2483.58	32.57	8.58	34.61	39.95	46.49	74.00	27.51	Peak
2801.30	32.90	8.66	34.67	42.30	49.19	74.00	24.81	Peak

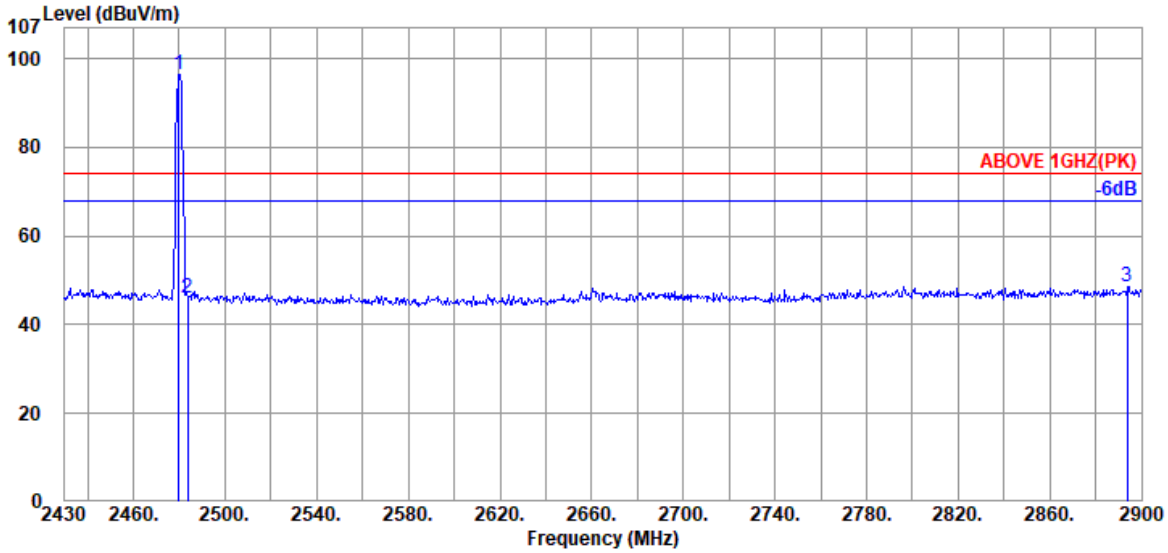


Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
@ 2479.82	32.57	8.58	34.60	93.71	100.26	---	---	Average
2483.58	32.57	8.58	34.61	29.64	36.18	54.00	17.82	Average
2506.14	32.30	8.59	34.61	31.40	37.68	54.00	16.32	Average

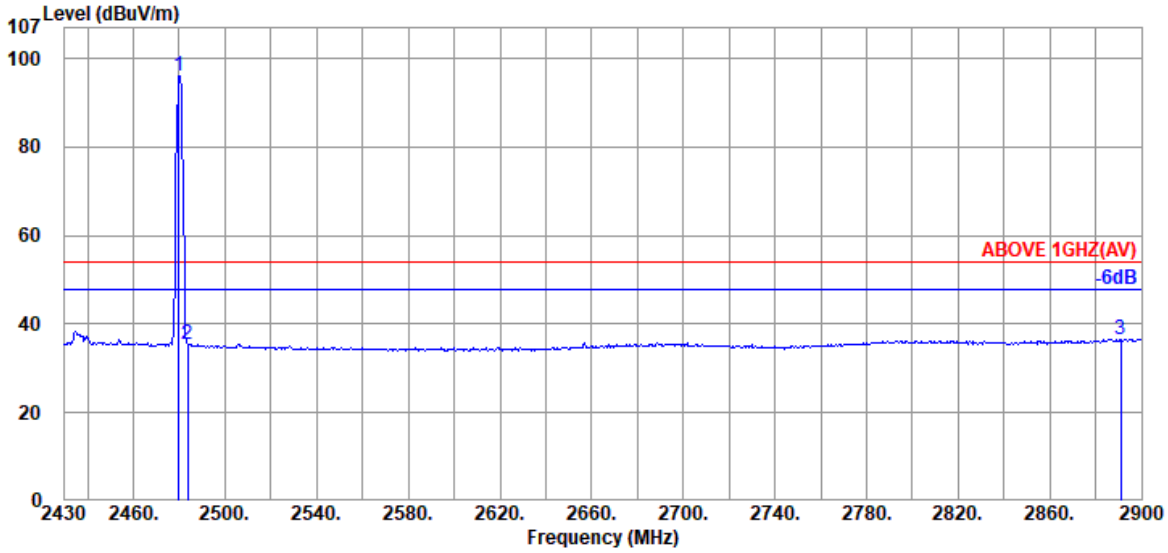
備註:“@”為主波，在此章節是不予以判定。

Mode	GFSK	Frequency	TX 2480MHz



Antenna at Vertcial Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
@ 2479.82	32.57	8.58	34.60	89.88	96.43	---	---	Peak
2483.58	32.57	8.58	34.61	39.48	46.02	74.00	27.98	Peak
2893.89	32.90	8.68	34.68	41.71	48.61	74.00	25.39	Peak

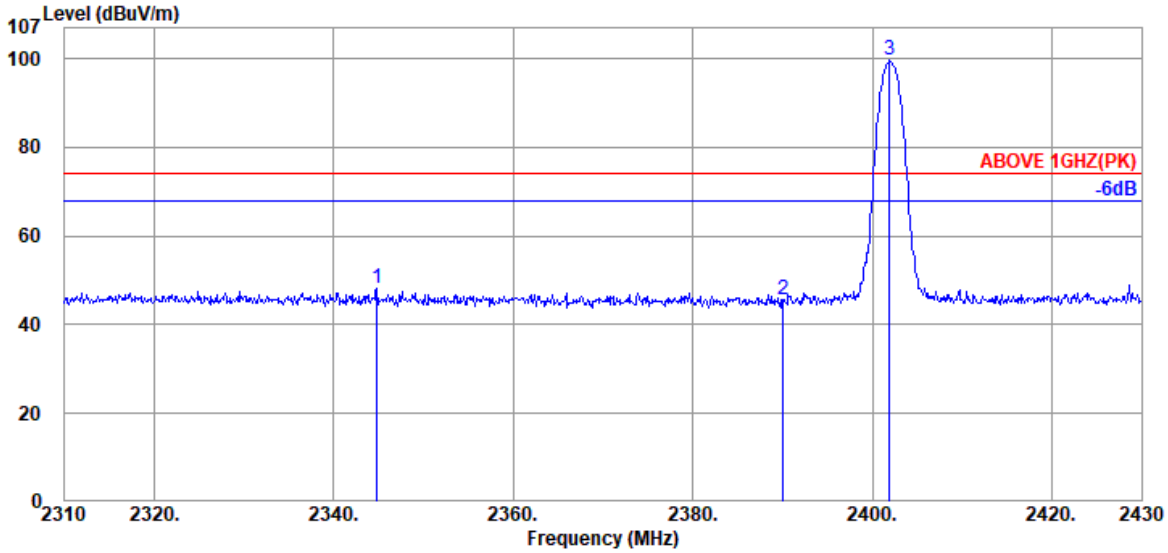


Antenna at Vertcial Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
@ 2479.82	32.57	8.58	34.60	89.61	96.16	---	---	Average
2483.58	32.57	8.58	34.61	28.76	35.30	54.00	18.70	Average
2891.07	32.90	8.68	34.68	29.61	36.51	54.00	17.49	Average

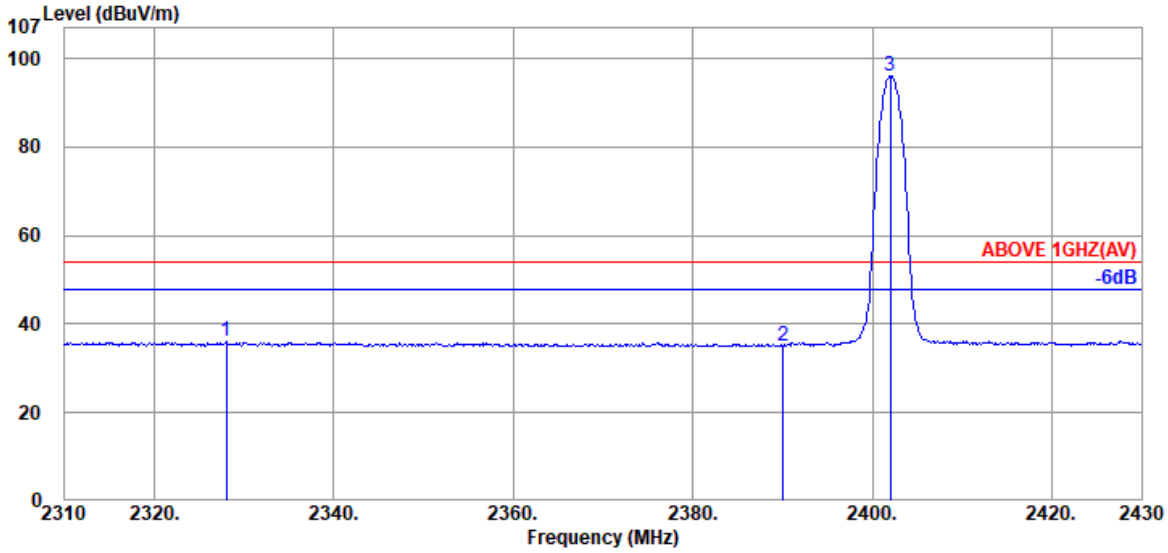
備註:“@”為主波，在此章節是不予以判定。

Mode	8-DPSK	Frequency	TX 2402MHz



Antenna at Horizontal Polarization

	Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
	2344.80	32.00	8.48	34.57	42.12	48.03	74.00	25.97	Peak
	2390.04	32.00	8.52	34.58	39.61	45.55	74.00	28.45	Peak
@	2401.92	32.00	8.52	34.59	93.62	99.55	---	---	Peak

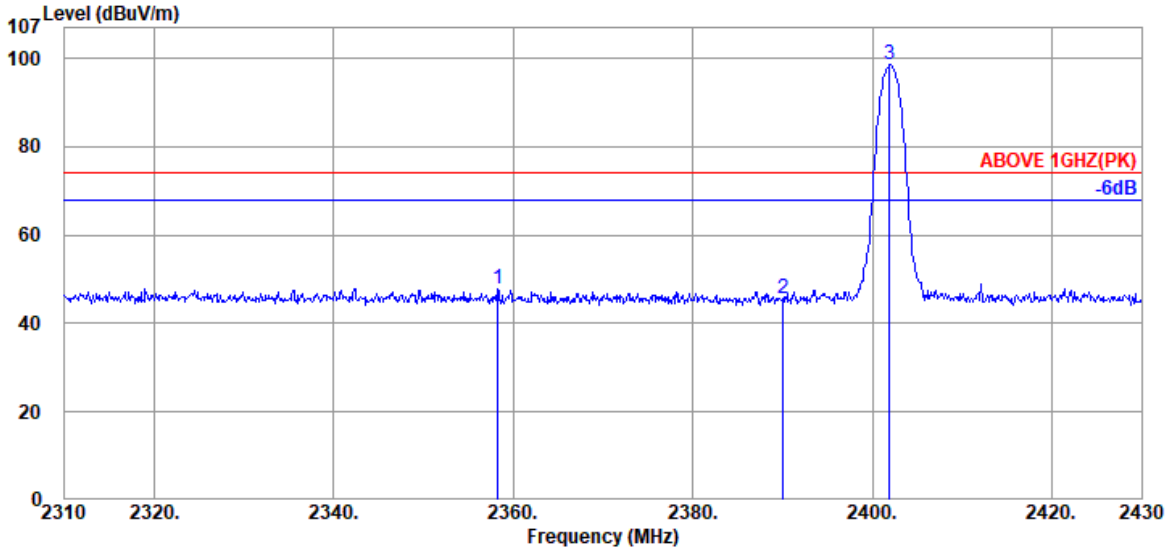


Antenna at Horizontal Polarization

	Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
	2328.00	32.00	8.47	34.57	30.14	36.04	54.00	17.96	Average
	2390.04	32.00	8.52	34.58	29.18	35.12	54.00	18.88	Average
@	2402.04	32.00	8.52	34.59	90.07	96.00	---	---	Average

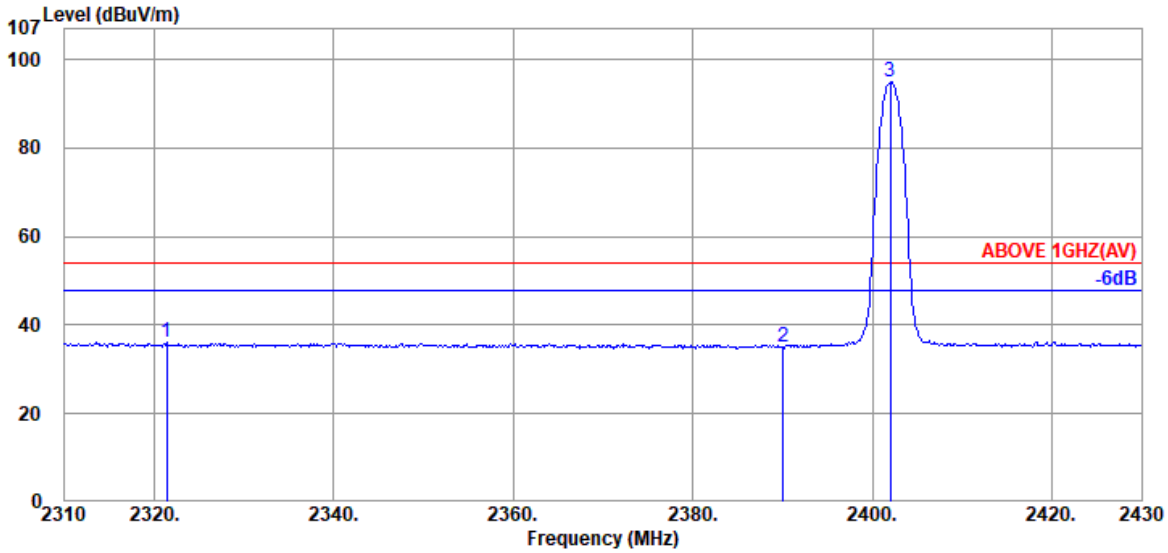
備註:“@”為主波，在此章節是不予以判定。

Mode	8-DPSK	Frequency	TX 2402MHz



Antenna at Vertical Polarization

	Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
	2358.24	32.00	8.49	34.58	41.95	47.86	74.00	26.14	Peak
	2390.04	32.00	8.52	34.58	39.58	45.52	74.00	28.48	Peak
@	2401.92	32.00	8.52	34.59	92.53	98.46	---	---	Peak

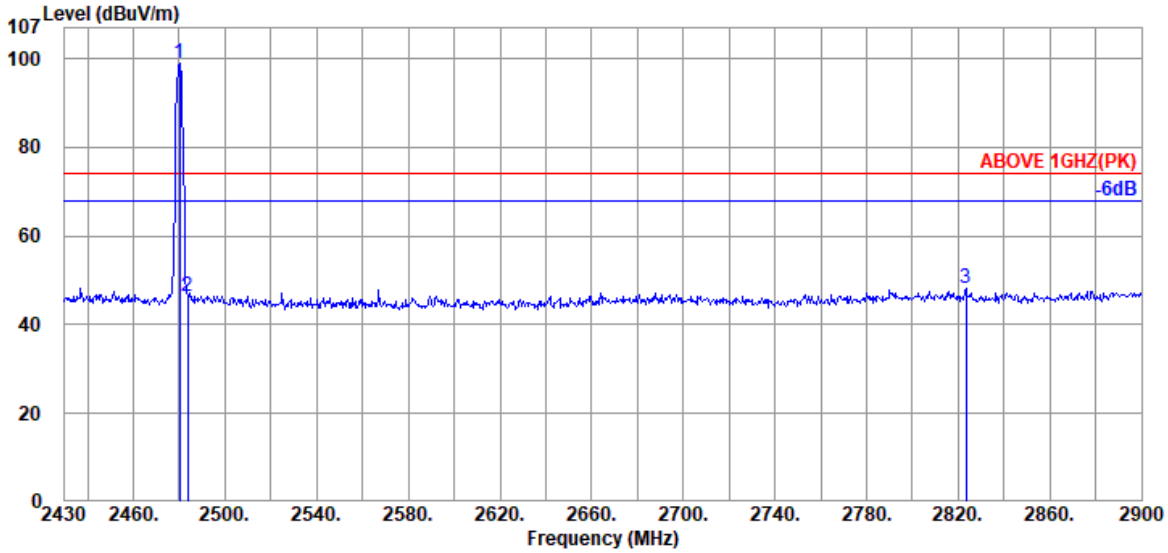


Antenna at Vertical Polarization

	Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
	2321.40	32.00	8.47	34.57	30.20	36.10	54.00	17.90	Average
	2390.04	32.00	8.52	34.58	29.21	35.15	54.00	18.85	Average
@	2402.04	32.00	8.52	34.59	88.95	94.88	---	---	Average

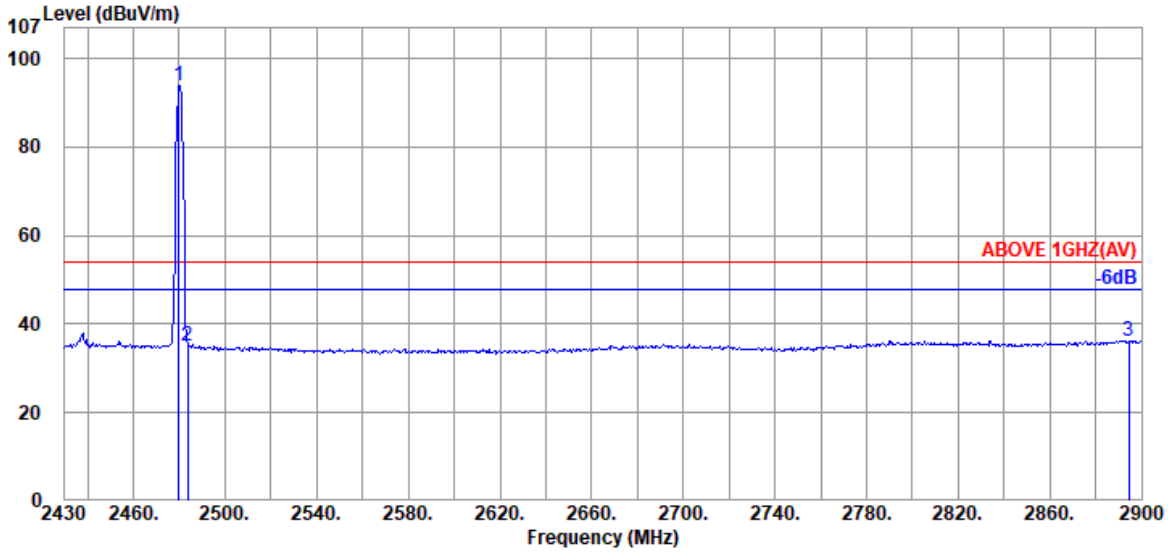
備註:“@”為主波，在此章節是不予以判定。

Mode	8-DPSK	Frequency	TX 2480MHz



Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
@ 2480.29	32.57	8.58	34.60	92.26	98.81	---	---	Peak
2483.58	32.57	8.58	34.61	39.72	46.26	74.00	27.74	Peak
2823.39	32.83	8.67	34.67	41.25	48.08	74.00	25.92	Peak

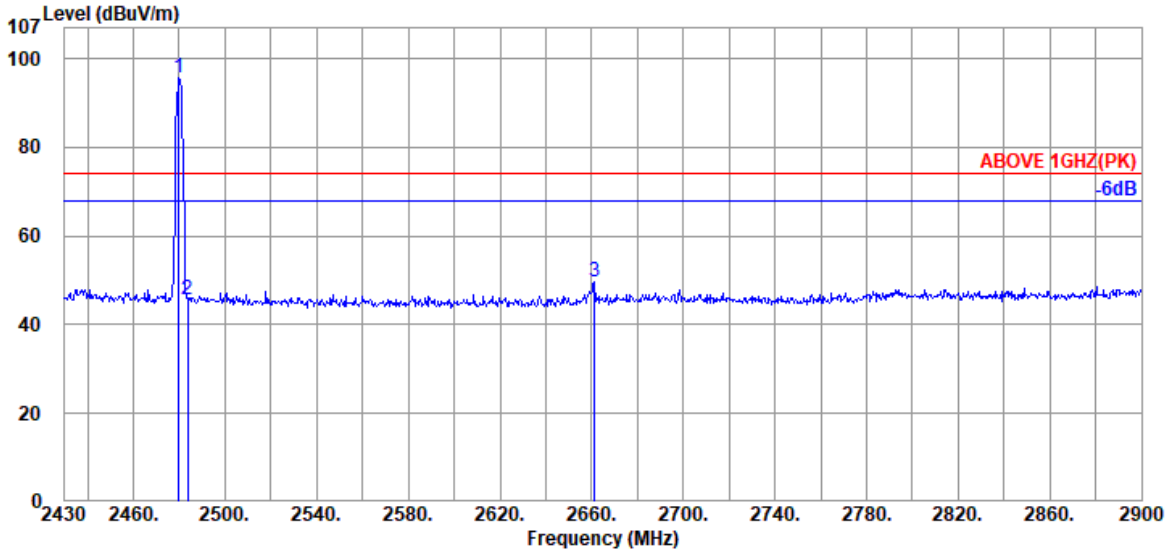


Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
@ 2479.82	32.57	8.58	34.60	87.44	93.99	---	---	Average
2483.58	32.57	8.58	34.61	28.64	35.18	54.00	18.82	Average
2894.36	32.90	8.68	34.68	29.39	36.29	54.00	17.71	Average

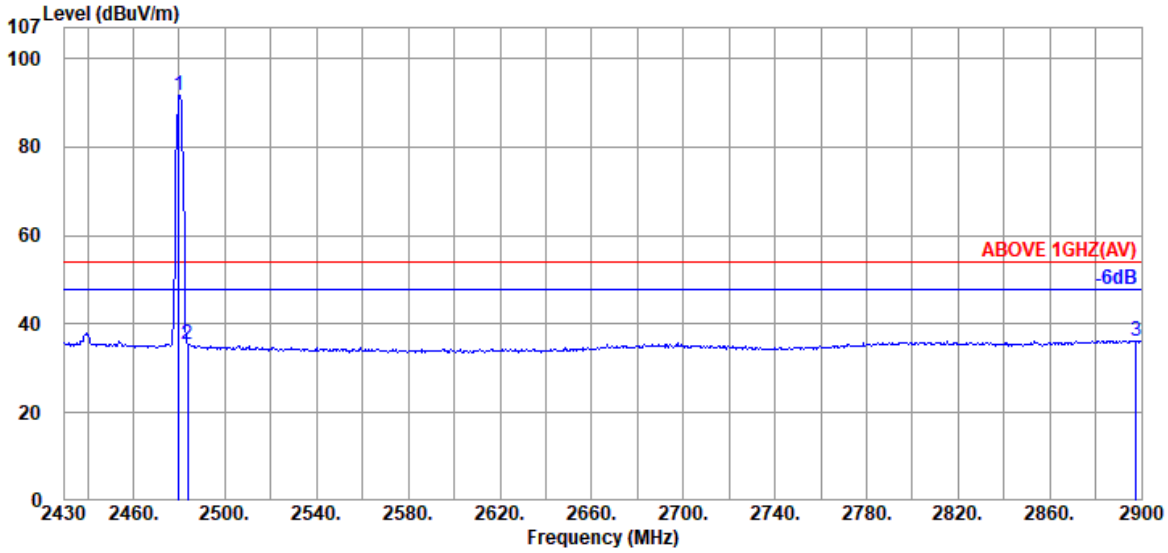
備註:“@”為主波，在此章節是不予以判定。

Mode	8-DPSK	Frequency	TX 2480MHz



Antenna at Vertcial Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
@ 2479.82	32.57	8.58	34.60	89.00	95.55	---	---	Peak
2483.58	32.57	8.58	34.61	38.95	45.49	74.00	28.51	Peak
2661.24	32.27	8.63	34.64	43.33	49.59	74.00	24.41	Peak



Antenna at Vertcial Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
@ 2479.82	32.57	8.58	34.60	85.29	91.84	---	---	Average
2483.58	32.57	8.58	34.61	28.90	35.44	54.00	18.56	Average
2897.65	33.00	8.69	34.68	29.33	36.34	54.00	17.66	Average

備註:"@"為主波，在此章節是不予以判定。

3. 20dB 頻寬之量測

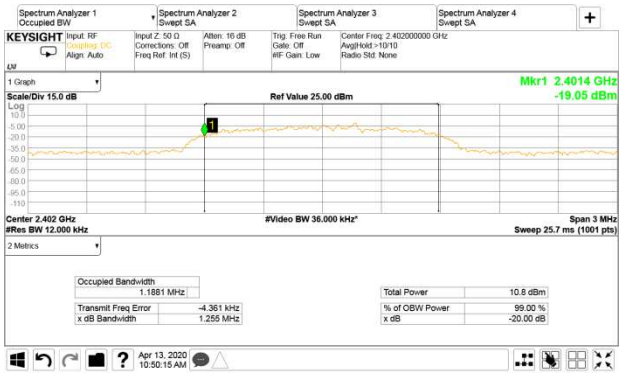
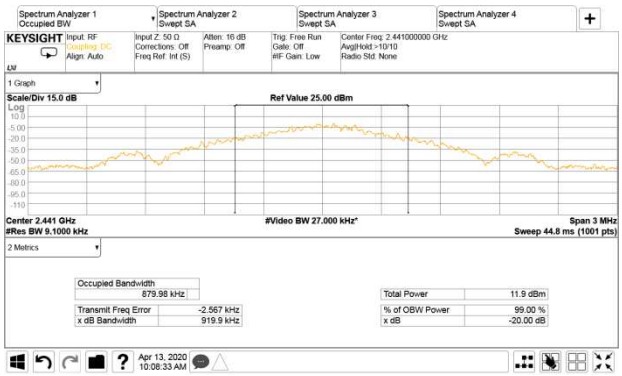
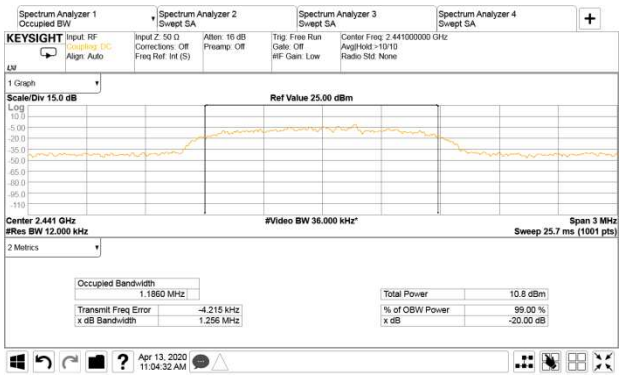
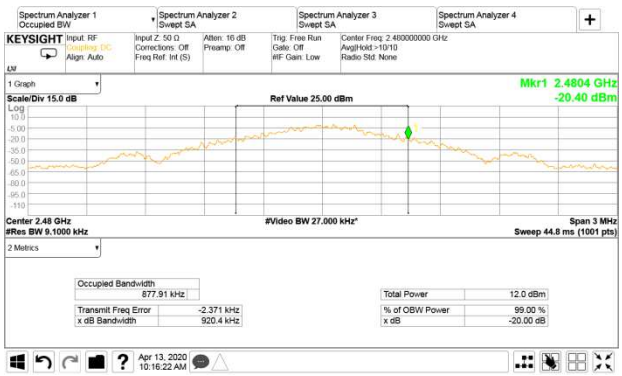
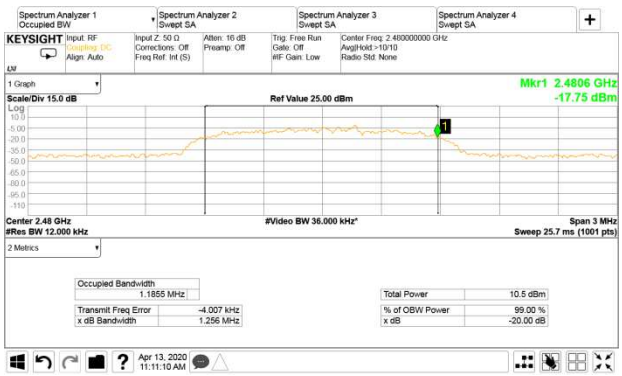
測試日期	2020/04/13	環境溫/濕度	18℃/56%
電纜損失	0.8dB	測試人員	Sean Wang
測試電壓	DC 7.2V (經內建鋰電池供電)		

3.1. 20dB 頻寬

模式	測試頻率 (MHz)	20dB 頻寬 (MHz)	頻道間隔參考限制值 2/3 (20dB 頻寬) (MHz)
GFSK	2402	0.9203	0.614
	2441	0.9199	0.613
	2480	0.9204	0.614

模式	測試頻率 (MHz)	20dB 頻寬 (MHz)	頻道間隔參考限制值 2/3 (20dB 頻寬) (MHz)
8-DPSK	2402	1.255	0.837
	2441	1.256	0.837
	2480	1.256	0.837

3.2. 20dB 頻寬之量測圖

GFSK	8-DPSK
	
	
	

4. 載波頻率間隔之量測

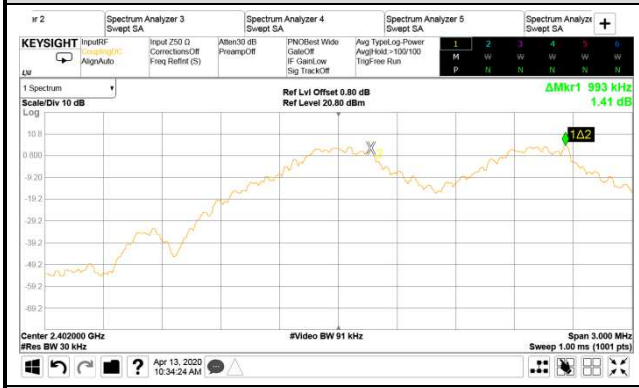
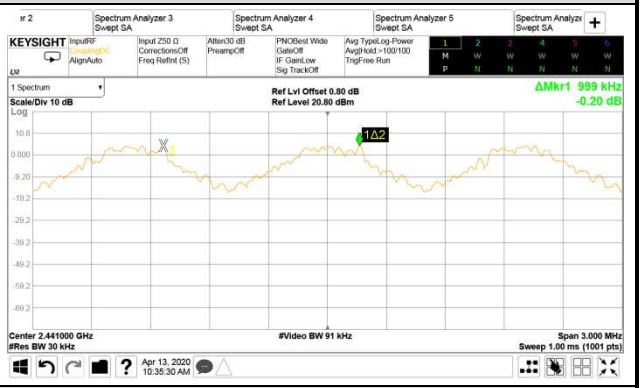
測試日期	2020/04/13	環境溫/濕度	18℃/56%
電纜損失	0.8dB	測試人員	Sean Wang
測試電壓	DC 7.2V (經內建鋰電池供電)		

4.1. 載波頻率間隔

模式 (Mode)	測試頻率 (MHz)	頻道間隔(MHz)	頻道間隔參考限制值 2/3 (20dB 頻寬) (MHz)
GFSK	2402	0.993	＞0.614
	2441 (左邊鄰近頻道)	0.999	
	2441 (右邊鄰近頻道)	0.993	
	2480	0.999	

模式 (Mode)	測試頻率 (MHz)	頻道間隔(MHz)	頻道間隔參考限制值 2/3 (20dB 頻寬) (MHz)
8-DPSK	2402	1.080	＞0.837
	2441 (左邊鄰近頻道)	1.059	
	2441 (右邊鄰近頻道)	0.996	
	2480	1.068	

4.2. 載波頻率間隔之量測圖

<table>
<tr><td colspan="2">GFSK</td></tr>
<tr><td>2402MHz</td><td>2441MHz
左邊鄰近頻道</td></tr>
<tr><td> 
</td><td> 
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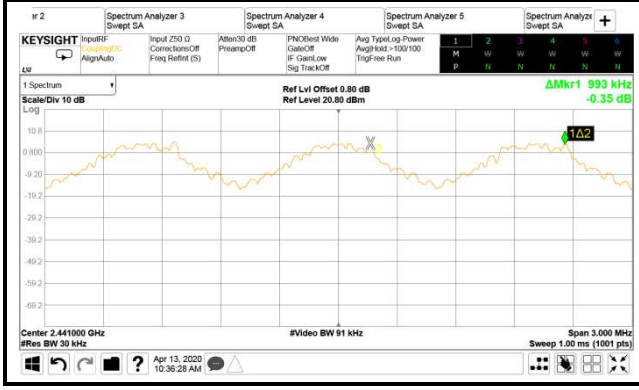
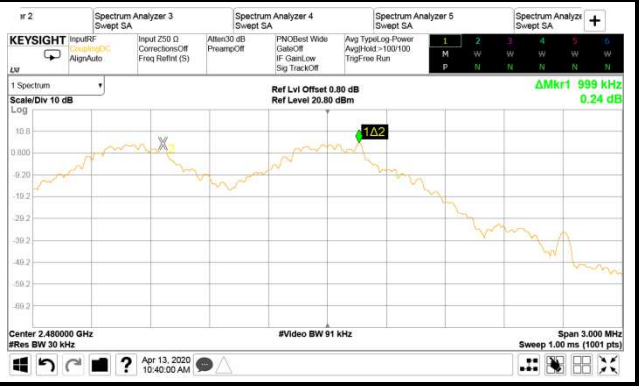
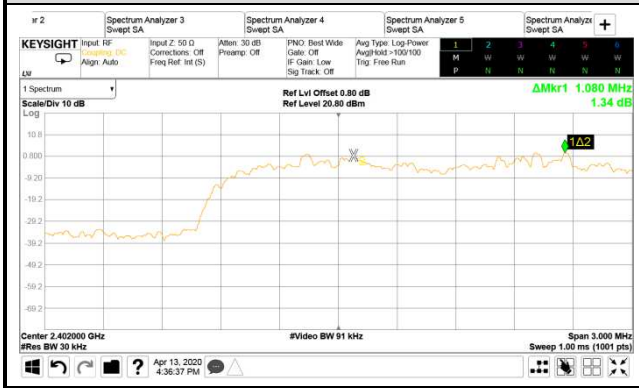
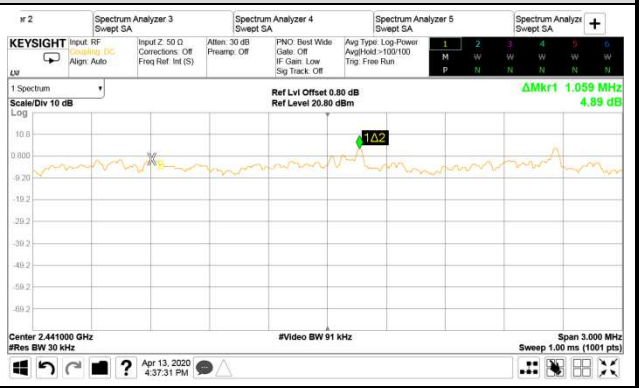
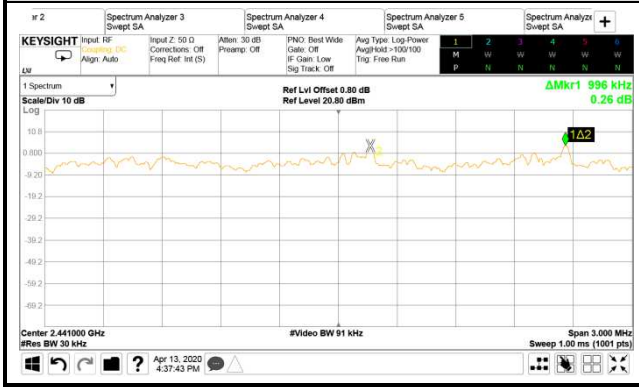
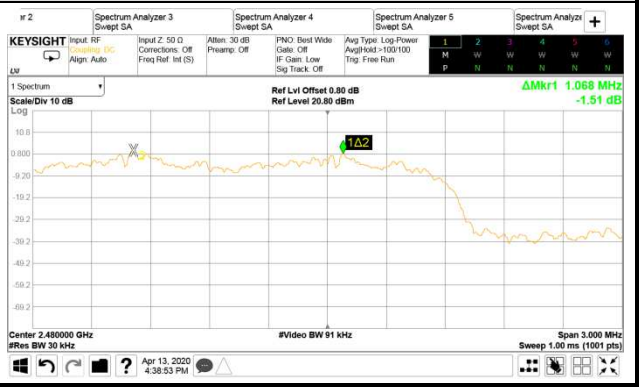
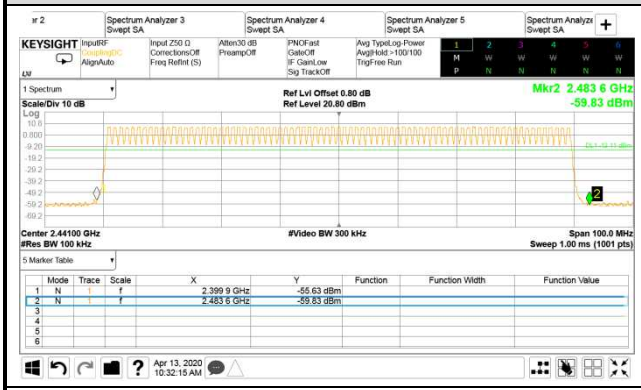
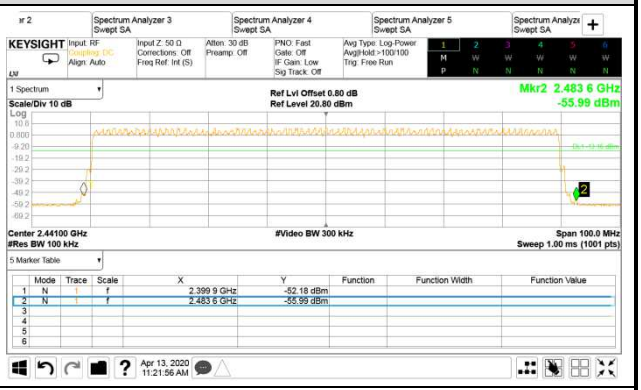
<tr><td>2441MHz
右邊鄰近頻道</td><td>2480MHz</td></tr>
<tr><td> 
</td><td> 
</td></tr>
</table>

8-DPSK	
2402MHz	2441MHz 左邊鄰近頻道
	
2441MHz 右邊鄰近頻道	2480MHz
	

5. 跳頻頻率數目之量測

測試日期	2020/04/13	環境溫/濕度	18℃/56%
電纜損失	0.8dB	測試人員	Sean Wang
測試電壓	DC 7.2V (經內建鋰電池供電)		

GFSK	8-DPSK
	
使用跳頻頻道數為 79 個。	使用跳頻頻道數為 79 個。

6. 佔用時間(停留時間)之量測

測試日期	2020/04/13	環境溫/濕度	18℃/56%
電纜損失	0.8dB	測試人員	Sean Wang
測試電壓	DC 7.2V (經內建鋰電池供電)		

6.1. 佔用時間(停留時間)

模式	測試頻率 (MHz)	封包	每秒出現頻道數	佔用時間 (ms)	佔用時間加總 (ms)	限制值 (ms)
GFSK	2402	DH1	7	0.370	81.844	<400
		DH3	5	1.620	255.960	<400
		DH5	2	2.870	181.384	<400

週期之計算: **79** 頻道數 * **0.4** 秒= **31.6** 秒

封包模式: DH1

以每**1**秒出現 **7** 個頻道數為例, 每 **31.6** 秒內之最長佔用時間為：

7 頻道數 * **31.6** 秒* **0.370** ms= **81.844** ms (<400ms)

封包模式: DH3

以每**1**秒出現 **5** 個頻道數為例, 每 **31.6** 秒內之最長佔用時間為：

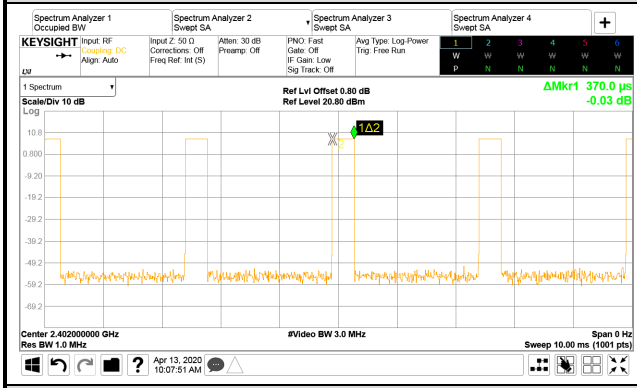
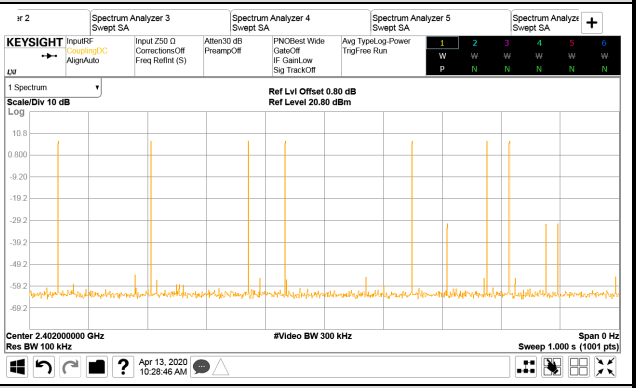
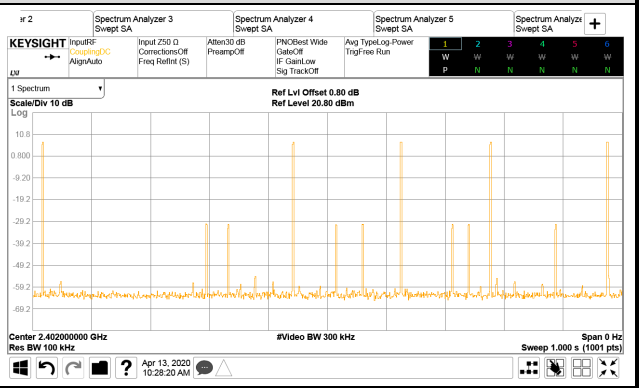
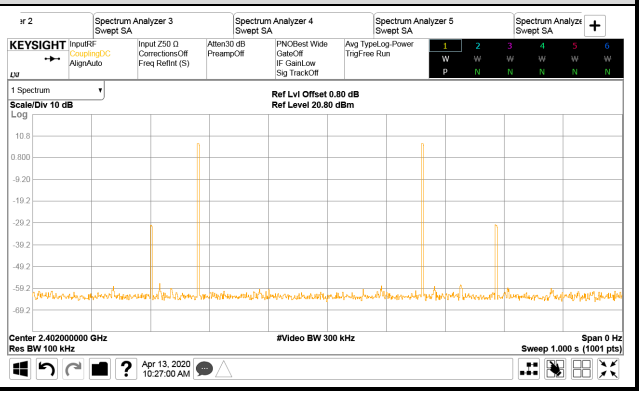
5 頻道數 * **31.6** 秒* **1.620** ms= **255.960** ms (<400ms)

封包模式: DH5

以每**1**秒出現 **2** 個頻道數為例, 每 **31.6** 秒內之最長佔用時間為：

2 頻道數 * **31.6** 秒* **2.870** ms= **181.384** ms (<400ms)

- 佔用時間(停留時間)之量測圖

GFSK	
2402MHz	
DH1	
	
DH3	
	
DH5	
	

模式	測試頻率 (MHz)	封包	每秒出現頻道數	佔用時間 (ms)	佔用時間加總 (ms)	限制值 (ms)
GFSK	2441	DH1	7	0.380	84.056	<400
		DH3	5	1.620	255.960	<400
		DH5	2	2.880	182.016	<400

週期之計算: **79** 頻道數 * **0.4** 秒= **31.6** 秒

封包模式: DH1

以每**1**秒出現 **7** 個頻道數為例, 每 **31.6** 秒內之最長佔用時間為：

7 頻道數 * **31.6** 秒* **0.380** ms= **84.056** ms (<400ms)

封包模式: DH3

以每**1**秒出現 **5** 個頻道數為例, 每 **31.6** 秒內之最長佔用時間為：

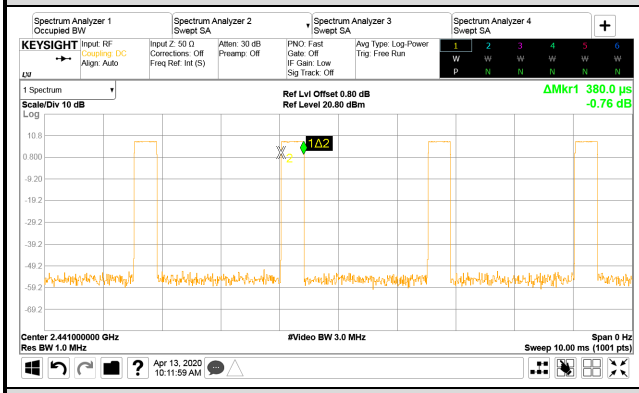
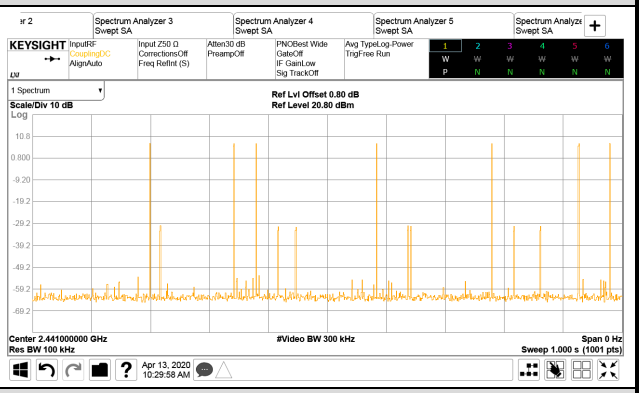
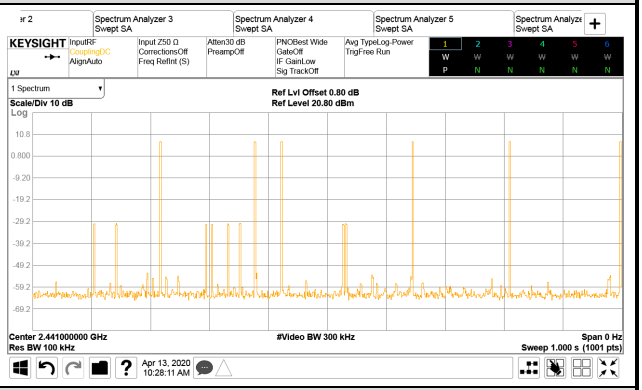
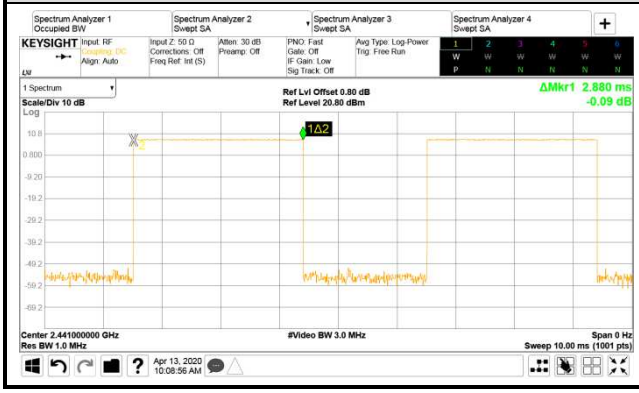
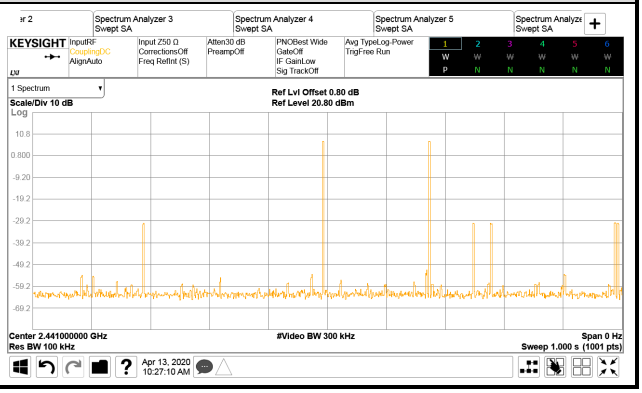
5 頻道數 * **31.6** 秒* **1.620** ms= **255.960** ms (<400ms)

封包模式: DH5

以每**1**秒出現 **2** 個頻道數為例, 每 **31.6** 秒內之最長佔用時間為：

2 頻道數 * **31.6** 秒* **2.880** ms= **182.016** ms (<400ms)

- 佔用時間(停留時間)之量測圖

GFSK	
2441MHz	
DH1	
	
DH3	
	
DH5	
	

模式	測試頻率 (MHz)	封包	每秒出現頻道數	佔用時間 (ms)	佔用時間加總 (ms)	限制值 (ms)
GFSK	2480	DH1	7	0.370	81.844	<400
		DH3	5	1.630	257.540	<400
		DH5	2	2.870	181.384	<400

週期之計算: **79** 頻道數 * **0.4** 秒= **31.6** 秒

封包模式: DH1

以每**1**秒出現 **7** 個頻道數為例, 每 **31.6** 秒內之最長佔用時間為：

7 頻道數 * **31.6** 秒* **0.370** ms= **81.844** ms (<400ms)

封包模式: DH3

以每**1**秒出現 **5** 個頻道數為例, 每 **31.6** 秒內之最長佔用時間為：

5 頻道數 * **31.6** 秒* **1.630** ms= **257.540** ms (<400ms)

封包模式: DH5

以每**1**秒出現 **2** 個頻道數為例, 每 **31.6** 秒內之最長佔用時間為：

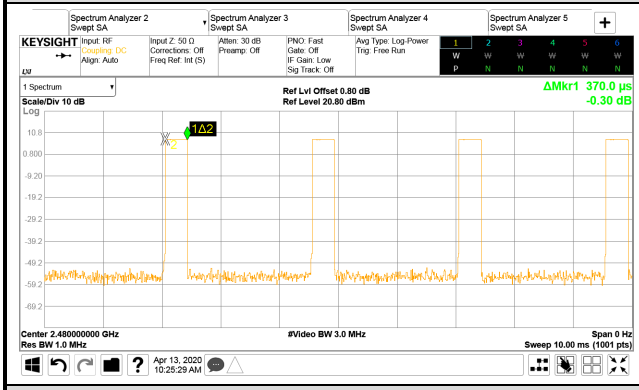
2 頻道數 * **31.6** 秒* **2.870** ms= **181.384** ms (<400ms)

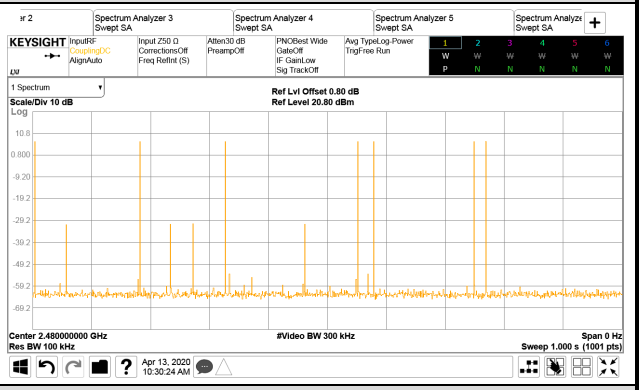
- **佔用時間(停留時間)之量測圖**

GFSK

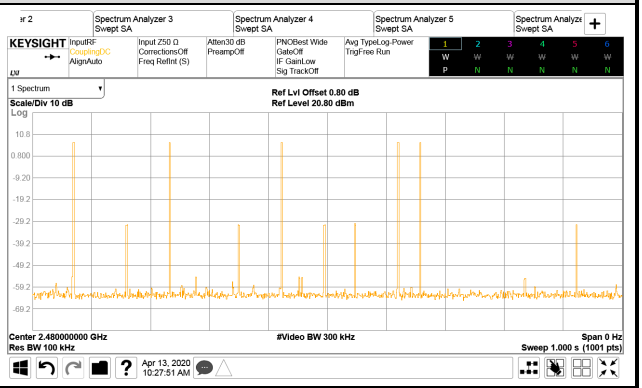
2480MHz

DH1

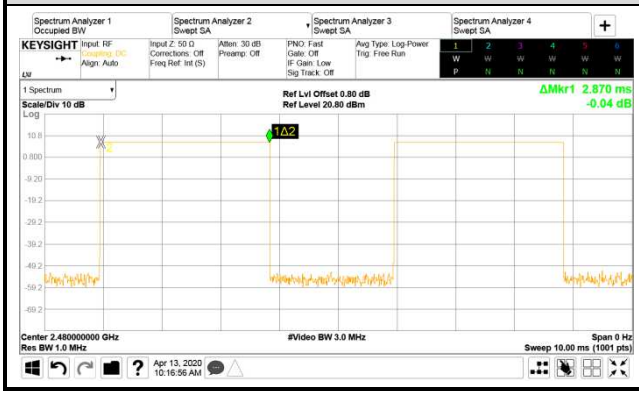


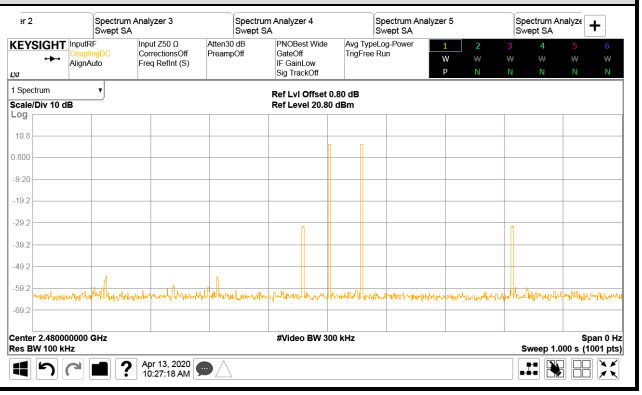


DH3



DH5





模式	測試頻率 (MHz)	封包	每秒出現頻道數	佔用時間 (ms)	佔用時間加總 (ms)	限制值 (ms)
8-DPSK	2402	3DH1	7	0.370	81.844	<400
		3DH3	5	1.630	257.540	<400
		3DH5	2	2.880	182.016	<400

週期之計算: **79** 頻道數 * **0.4** 秒= **31.6** 秒

封包模式:3DH1

以每**1**秒出現 **7** 個頻道數為例, 每 **31.6** 秒內之最長佔用時間為：

7 頻道數 * **31.6** 秒* **0.370** ms= **81.844** ms (<400ms)

封包模式:3DH3

以每**1**秒出現 **5** 個頻道數為例, 每 **31.6** 秒內之最長佔用時間為：

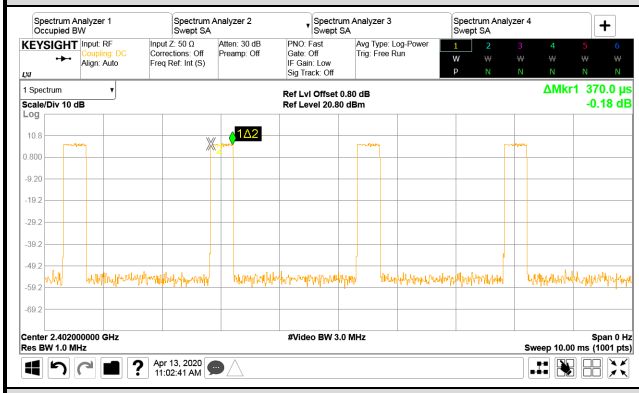
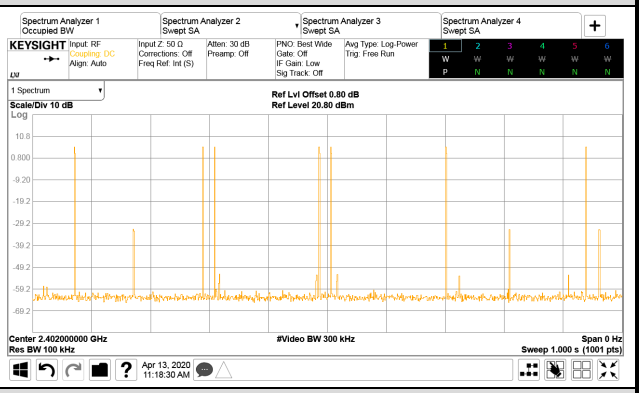
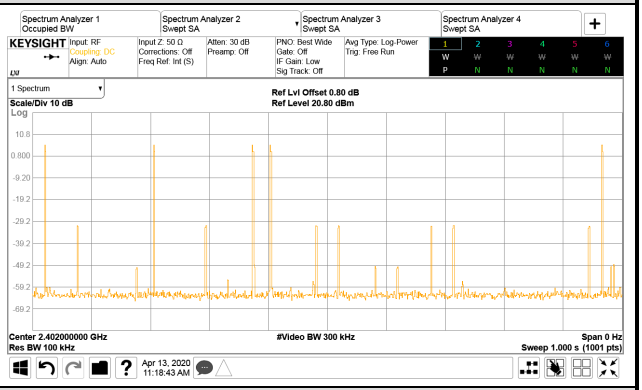
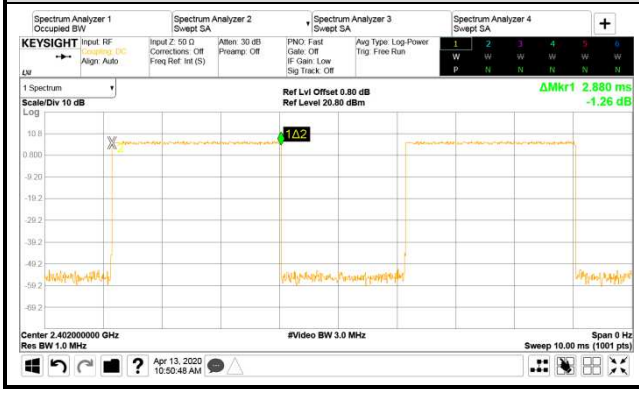
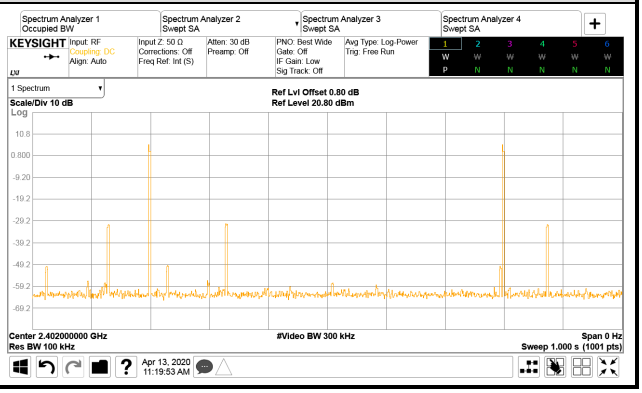
5 頻道數 * **31.6** 秒* **1.630** ms= **257.540** ms (<400ms)

封包模式:3DH5

以每**1**秒出現 **2** 個頻道數為例, 每 **31.6** 秒內之最長佔用時間為：

2 頻道數 * **31.6** 秒* **2.880** ms= **182.016** ms (<400ms)

- **佔用時間(停留時間)之量測圖**

8-DPSK	
2402MHz	
3DH1	
	
3DH3	
	
3DH5	
	

模式	測試頻率 (MHz)	封包	每秒出現頻道數	佔用時間 (ms)	佔用時間加總 (ms)	限制值 (ms)
8-DPSK	2441	3DH1	7	0.380	84.056	<400
		3DH3	5	1.620	255.960	<400
		3DH5	2	2.890	182.648	<400

週期之計算: **79** 頻道數 * **0.4** 秒= **31.6** 秒

封包模式:3DH1

以每**1**秒出現 **7** 個頻道數為例, 每 **31.6** 秒內之最長佔用時間為：

7 頻道數 * **31.6** 秒* **0.380** ms= **84.056** ms (<400ms)

封包模式:3DH3

以每**1**秒出現 **5** 個頻道數為例, 每 **31.6** 秒內之最長佔用時間為：

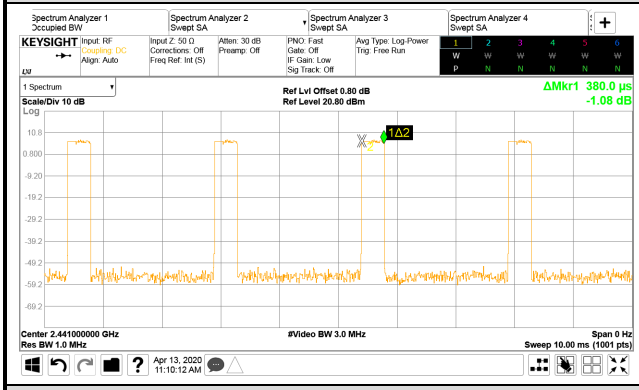
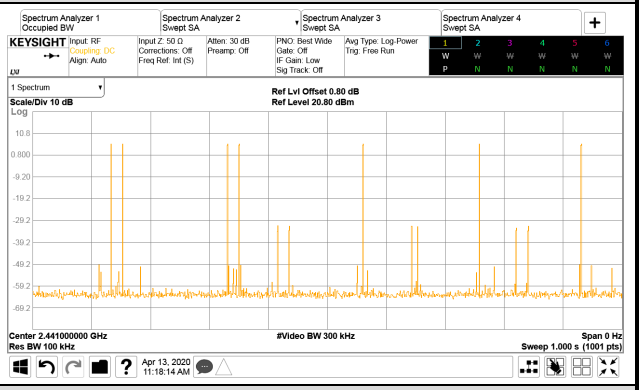
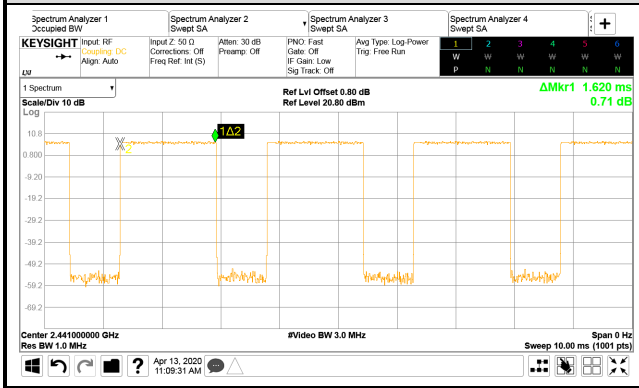
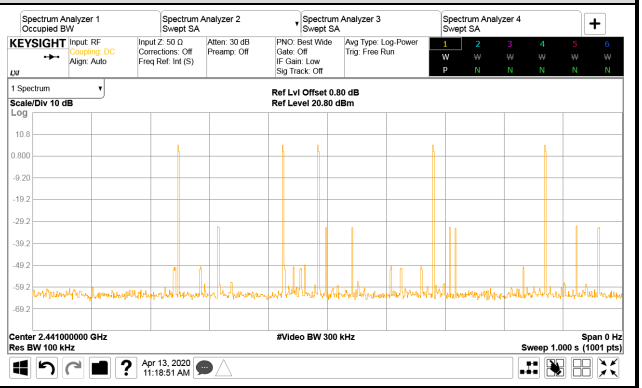
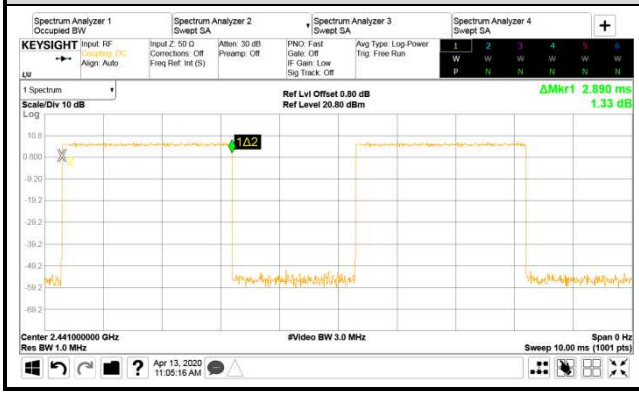
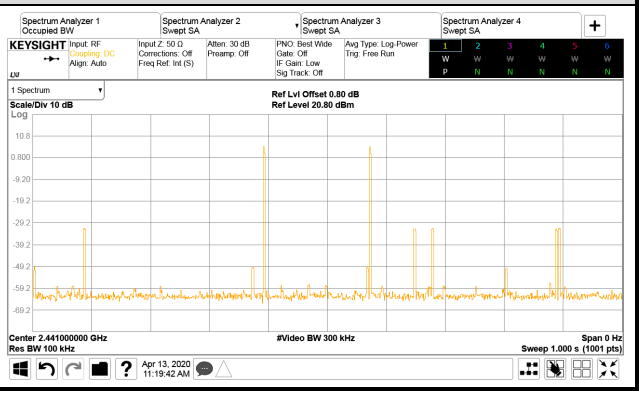
5 頻道數 * **31.6** 秒* **1.620** ms= **255.960** ms (<400ms)

封包模式:3DH5

以每**1**秒出現 **2** 個頻道數為例, 每 **31.6** 秒內之最長佔用時間為：

2 頻道數 * **31.6** 秒* **2.890** ms= **182.648** ms (<400ms)

- 佔用時間(停留時間)之量測圖

8-DPSK	
2441MHz	
3DH1	
	
3DH3	
	
3DH5	
	

模式	測試頻率 (MHz)	封包	每秒出現頻道數	佔用時間 (ms)	佔用時間加總 (ms)	限制值 (ms)
8-DPSK	2480	3DH1	7	0.380	84.056	<400
		3DH3	5	1.630	257.540	<400
		3DH5	2	2.880	182.016	<400

週期之計算: **79** 頻道數 * **0.4** 秒= **31.6** 秒

封包模式:3DH1

以每**1**秒出現 **7** 個頻道數為例, 每 **31.6** 秒內之最長佔用時間為：

7 頻道數 * **31.6** 秒* **0.380** ms= **84.056** ms (<400ms)

封包模式:3DH3

以每**1**秒出現 **5** 個頻道數為例, 每 **31.6** 秒內之最長佔用時間為：

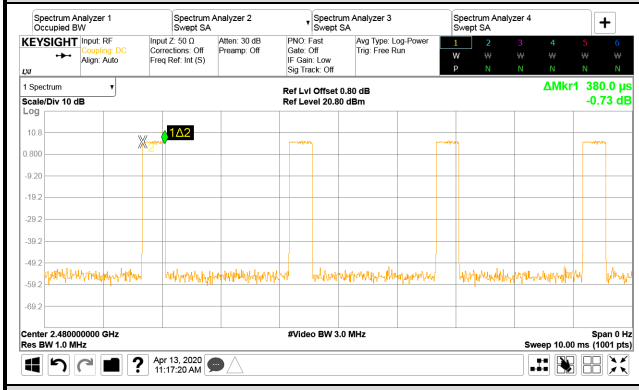
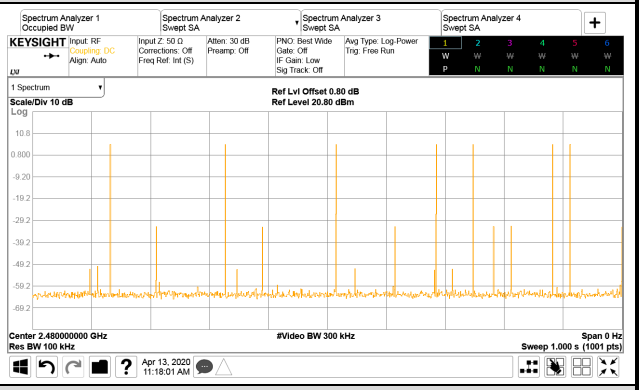
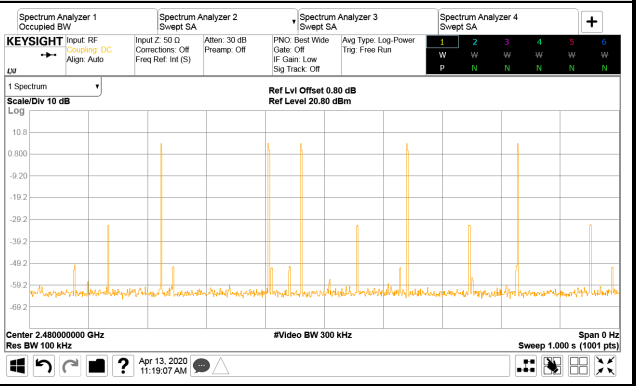
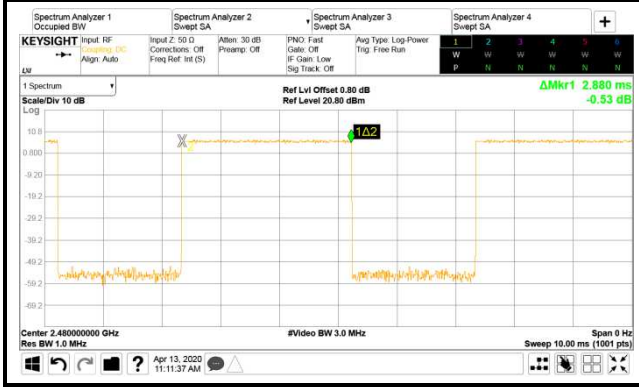
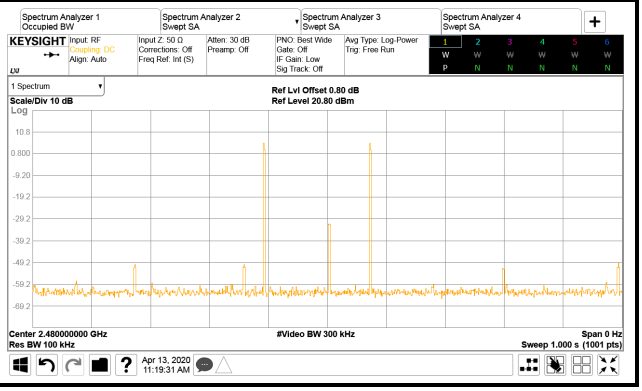
5 頻道數 * **31.6** 秒* **1.630** ms= **257.540** ms (<400ms)

封包模式:3DH5

以每**1**秒出現 **2** 個頻道數為例, 每 **31.6** 秒內之最長佔用時間為：

2 頻道數 * **31.6** 秒* **2.880** ms= **182.016** ms (<400ms)

- 佔用時間(停留時間)之量測圖

8-DPSK	
2480MHz	
3DH1	
	
3DH3	
	
3DH5	
	

7. 峰值輸出功率之量測

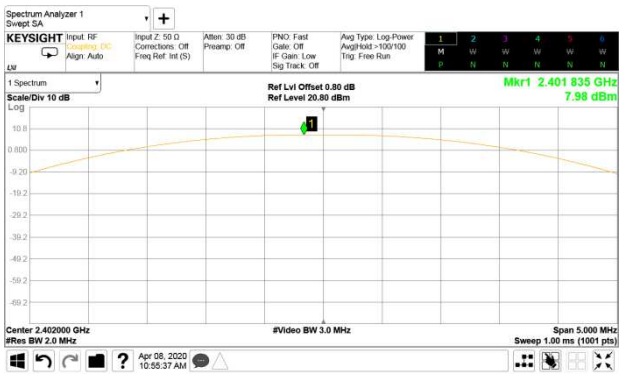
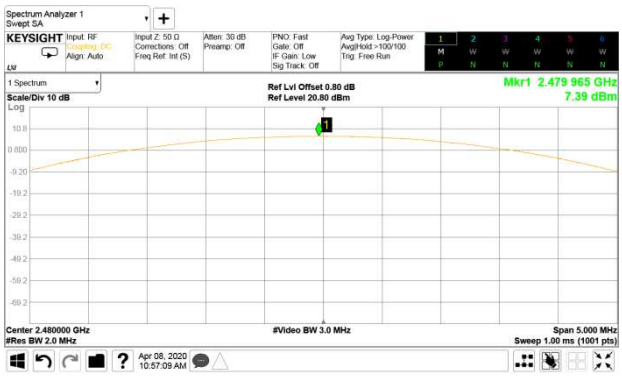
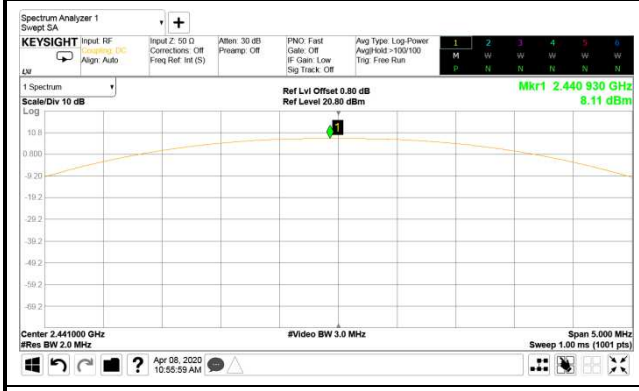
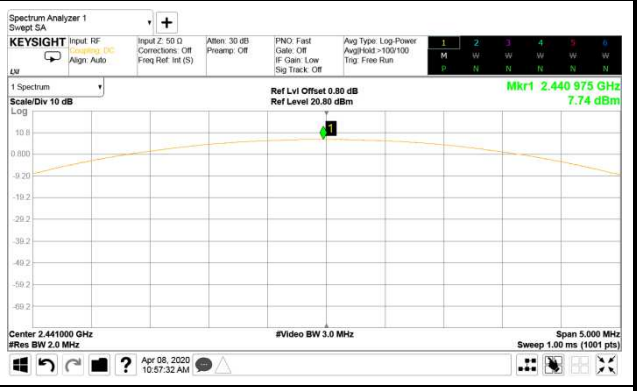
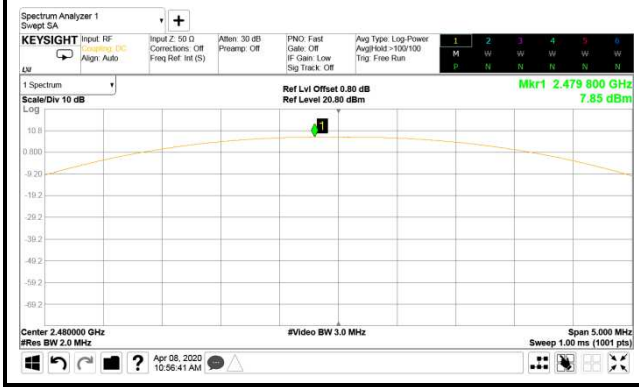
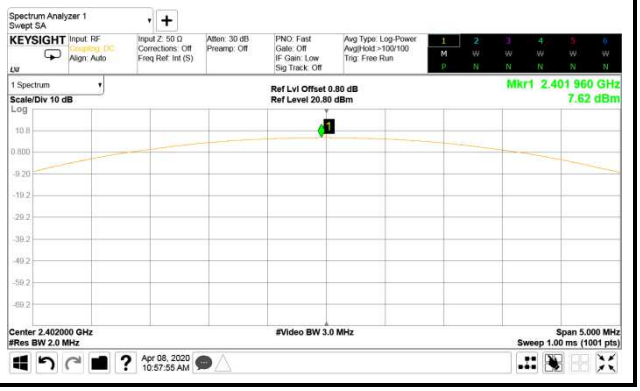
測試日期	2020/04/08	環境溫/濕度	22℃/60%
電纜損失	0.8dB	測試人員	Sean Wang
測試電壓	DC 7.2V (經內建鋰電池供電)		

7.1. 峰值輸出功率

模式	測試頻率 (MHz)	峰值輸出功率(dBm)
GFSK	2402	7.98
	2441	8.11
	2480	7.85

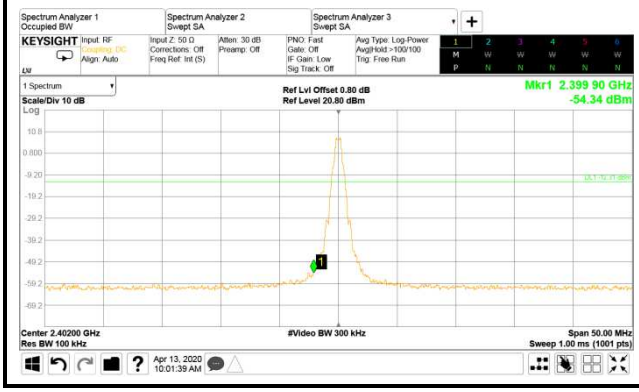
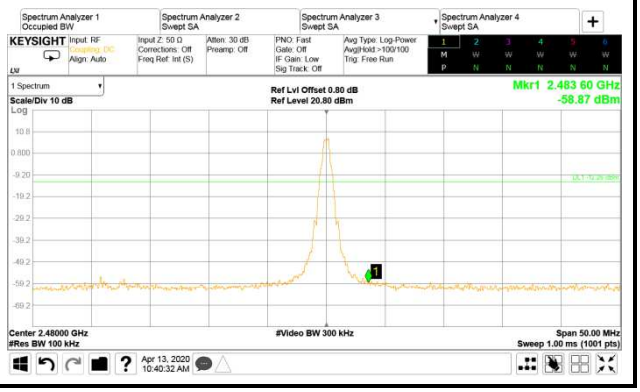
模式	測試頻率 (MHz)	峰值輸出功率(dBm)
8-DPSK	2402	7.39
	2441	7.74
	2480	7.62

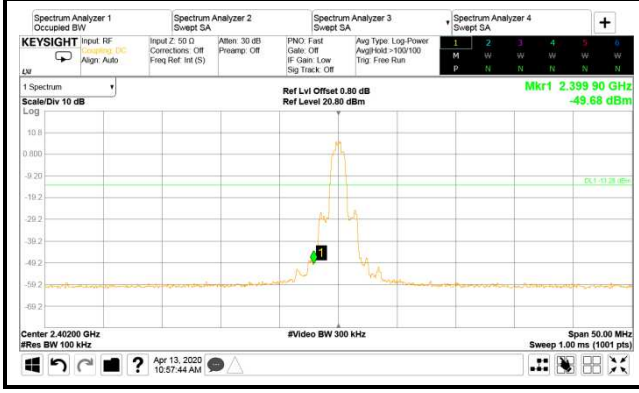
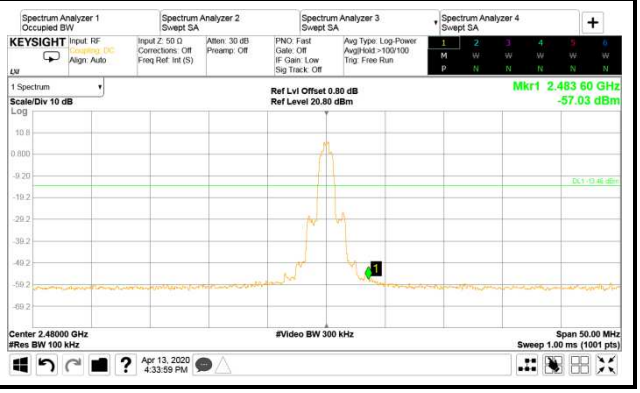
7.2. 峰值輸出功率之量測圖

GFSK	8-DPSK
	
	
	

8. 頻帶邊緣之 RF 傳導發射之量測

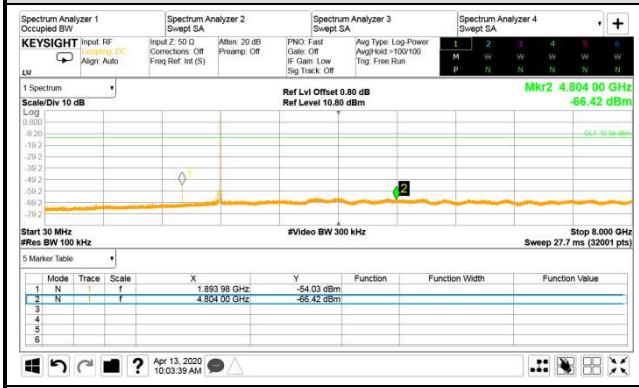
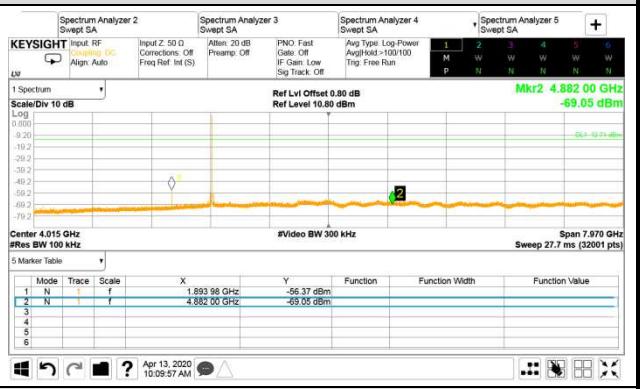
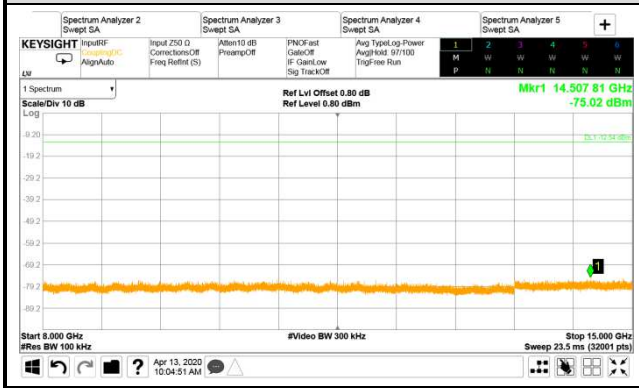
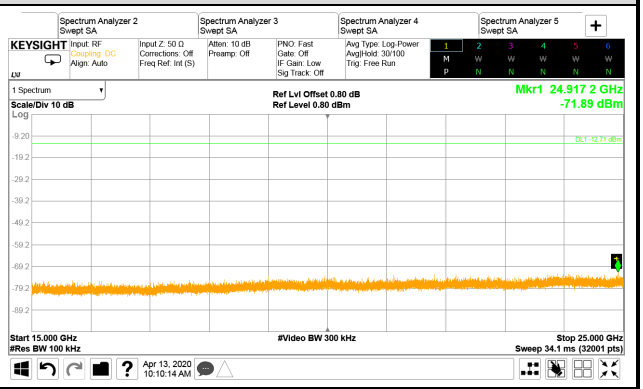
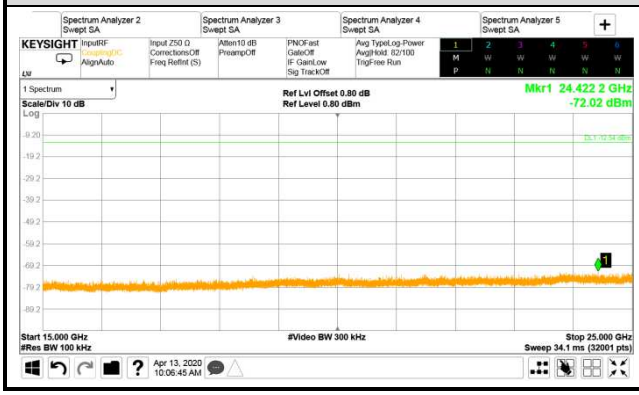
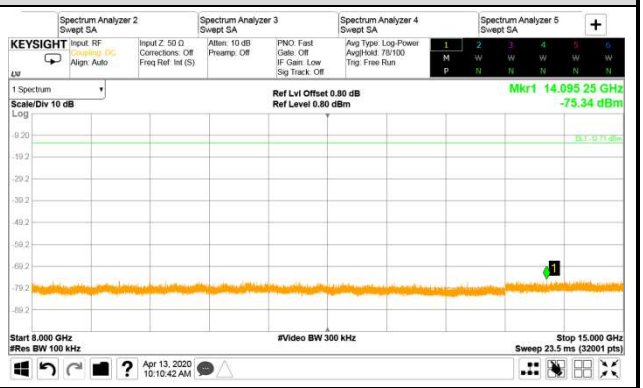
測試日期	2020/04/13	環境溫/濕度	18℃/56%
電纜損失	0.8dB	測試人員	Sean Wang
測試電壓	DC 7.2V (經內建鋰電池供電)		

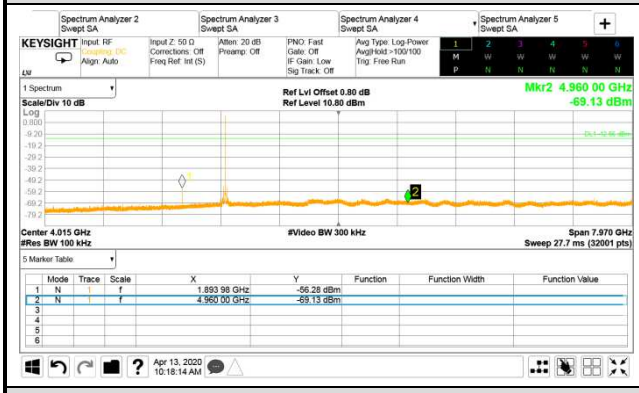
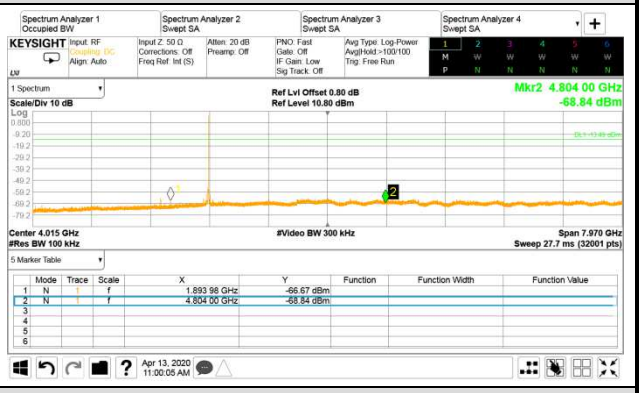
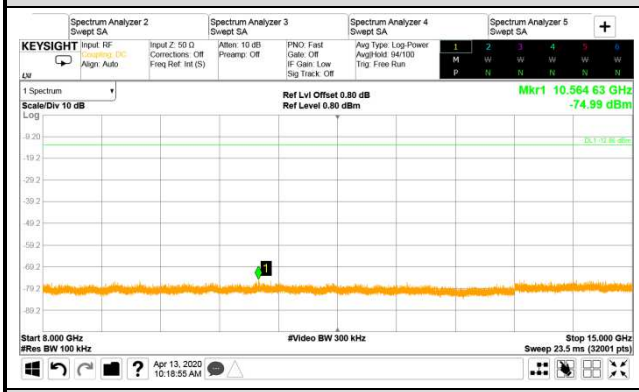
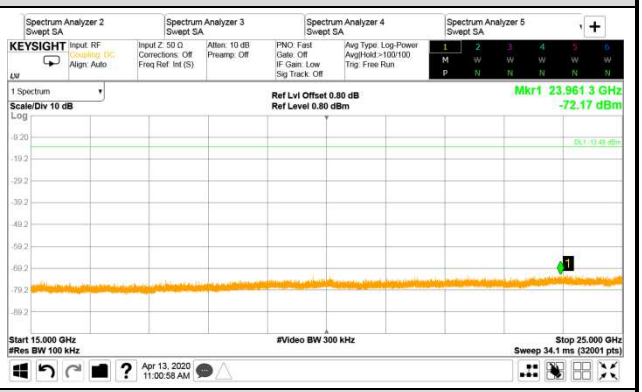
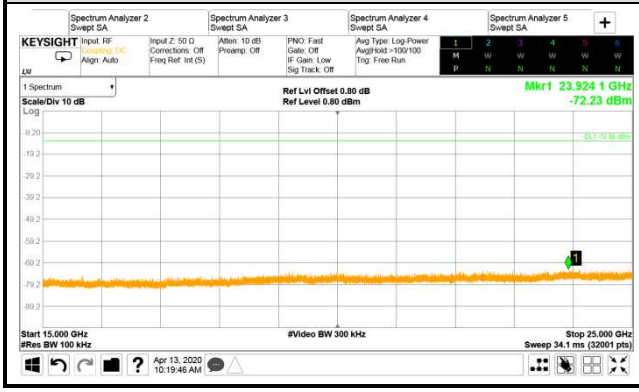
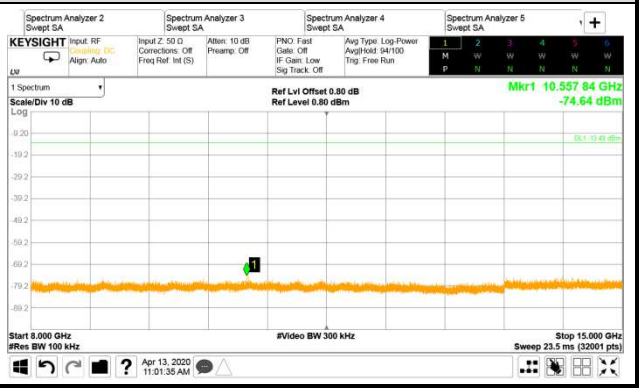
GFSK	
下邊緣頻帶	上邊緣頻帶
	

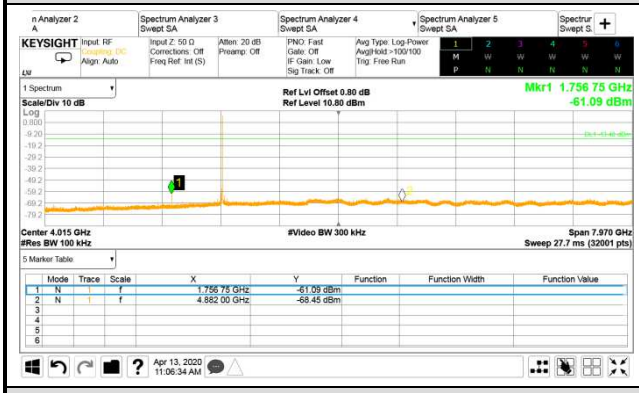
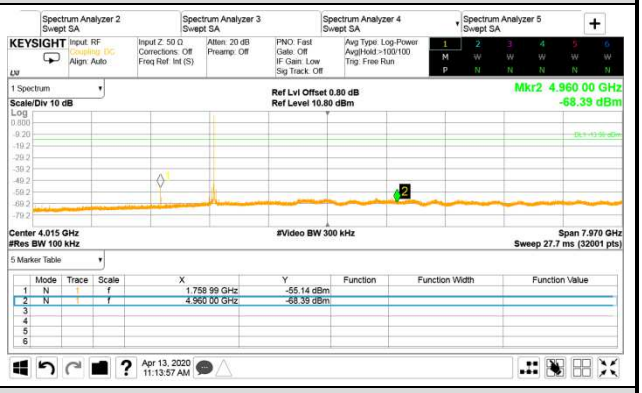
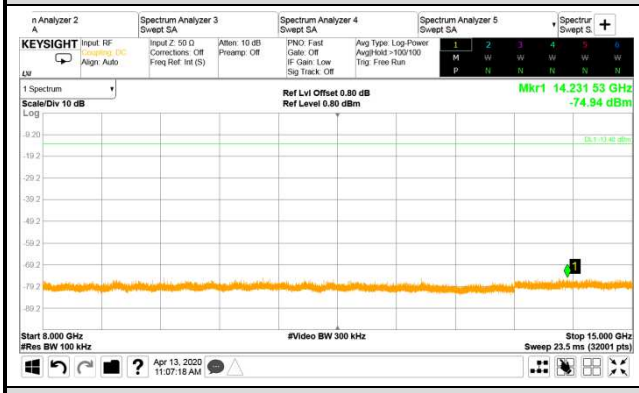
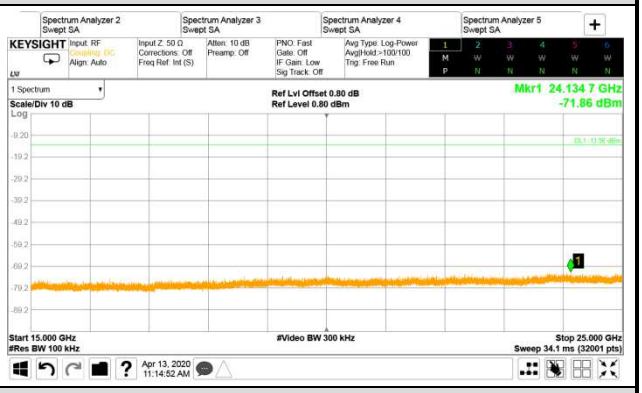
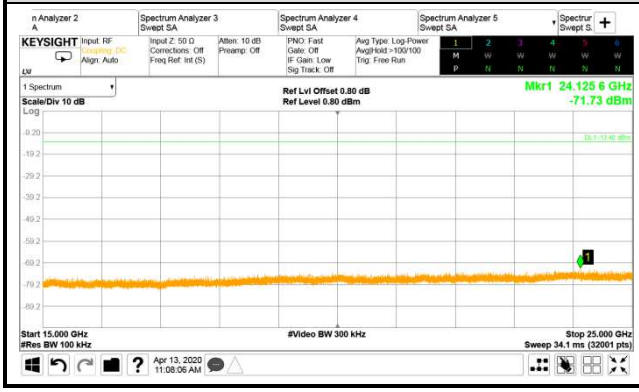
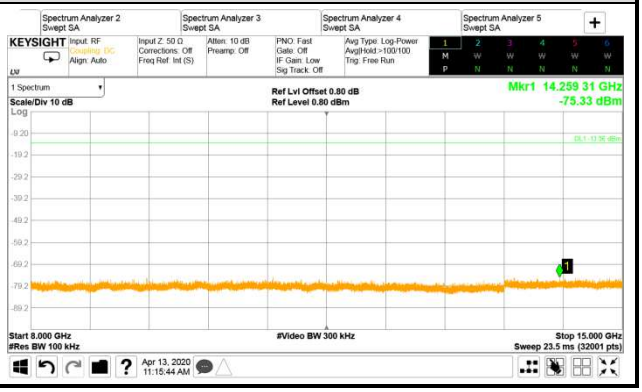
8-DPSK	
下邊緣頻帶	上邊緣頻帶
	

9. 混附發射之 RF 傳導發射之量測

測試日期	2020/04/13	環境溫/濕度	18℃/56%
電纜損失	0.8dB	測試人員	Sean Wang
測試電壓	DC 7.2V (經內建鋰電池供電)		

GFSK	
2402MHz	2441MHz
30MHz –8GHz	30MHz –8GHz
	
8GHz –15GHz	8GHz –15GHz
	
15GHz – 25GHz	15GHz – 25GHz
	

GFSK	8-DPSK
2480MHz	2402MHz
30MHz –8GHz	30MHz –8GHz
	
8GHz –15GHz	8GHz –15GHz
	
15GHz – 25GHz	15GHz – 25GHz
	

8-DPSK	
2441MHz	2480MHz
30MHz –8GHz	30MHz –8GHz
	
8GHz –15GHz	8GHz –15GHz
	
15GHz – 25GHz	15GHz – 25GHz