

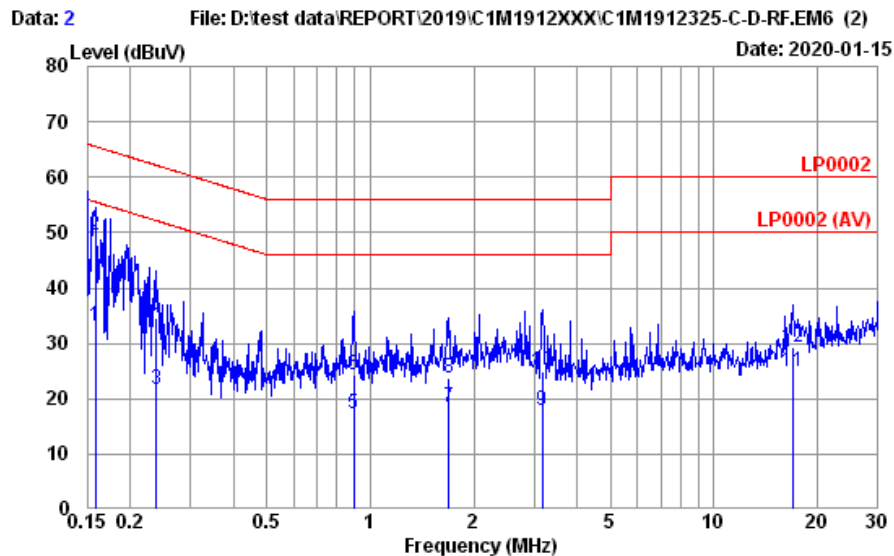
附錄一

受測裝置之測試結果

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1. 電源線傳導干擾之量測

測試日期	2020/01/15	環境溫/濕度	21°C/61%
測試電壓	DC 5V (經 USB 充電電源)	測試人員	Chucky Chiu
Tested SKU	SKU #1		

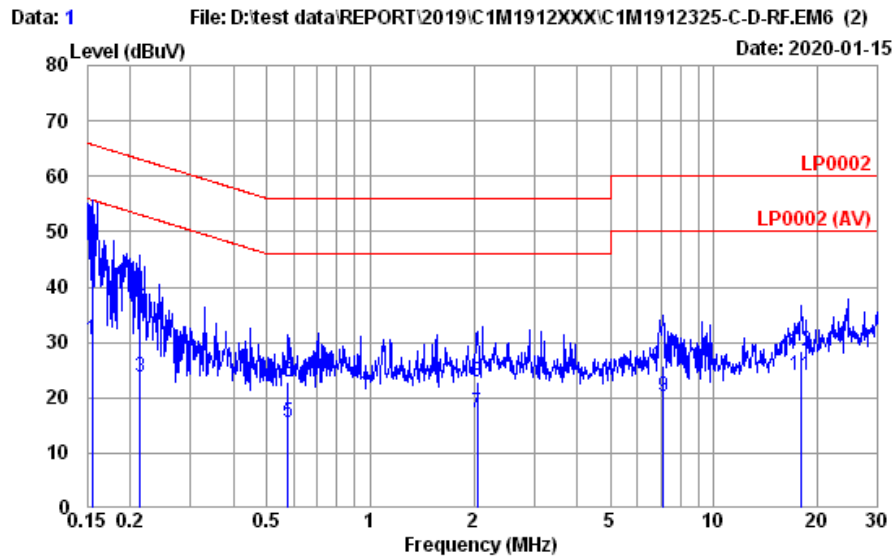


Site no. : No.8 Shielded Room Data no. : 2
Condition : ENV4200 (169) (A) LISN Phase : NEUTRAL
Limit : LP0002
Env. / Ins. : 21°C / 61% ESR3 (1774) Engineer : Chucky Chiu
EUT : SRS-XB23 (SKU #1)
Power Rating : DC 5V(VIA USB)
Test Mode : Normal

	Freq. (MHz)	AMN Factor (dB)	Cable Loss (dB)	Pulse Att. (dB)	Reading (dBμV)	Emission Level (dBμV)	Limits (dBμV)	Margin (dB)	Remark
1	0.158	10.72	0.06	9.86	12.53	33.17	55.56	22.39	Average
2	0.158	10.72	0.06	9.86	28.84	49.48	65.56	16.08	QP
3	0.238	10.62	0.07	9.86	1.26	21.81	52.17	30.36	Average
4	0.238	10.62	0.07	9.86	14.06	34.61	62.17	27.56	QP
5	0.894	10.50	0.11	9.86	-3.17	17.30	46.00	28.70	Average
6	0.894	10.50	0.11	9.86	3.79	24.26	56.00	31.74	QP
7	1.689	10.53	0.15	9.86	-2.11	18.43	46.00	27.57	Average
8	1.689	10.53	0.15	9.86	3.32	23.86	56.00	32.14	QP
9	3.171	10.63	0.20	9.87	-2.91	17.79	46.00	28.21	Average
10	3.171	10.63	0.20	9.87	4.28	24.98	56.00	31.02	QP
11	17.018	13.11	0.51	9.93	1.27	24.82	50.00	25.18	Average
12	17.018	13.11	0.51	9.93	5.61	29.16	60.00	30.84	QP

Remarks: 1. Emission Level= AMN Factor + Cable Loss + Pulse Att. + Reading.

測試日期	2020/01/15	環境溫/濕度	21°C/61%
測試電壓	DC 5V (經 USB 充電電源)	測試人員	Chucky Chiu
Tested SKU	SKU #1		

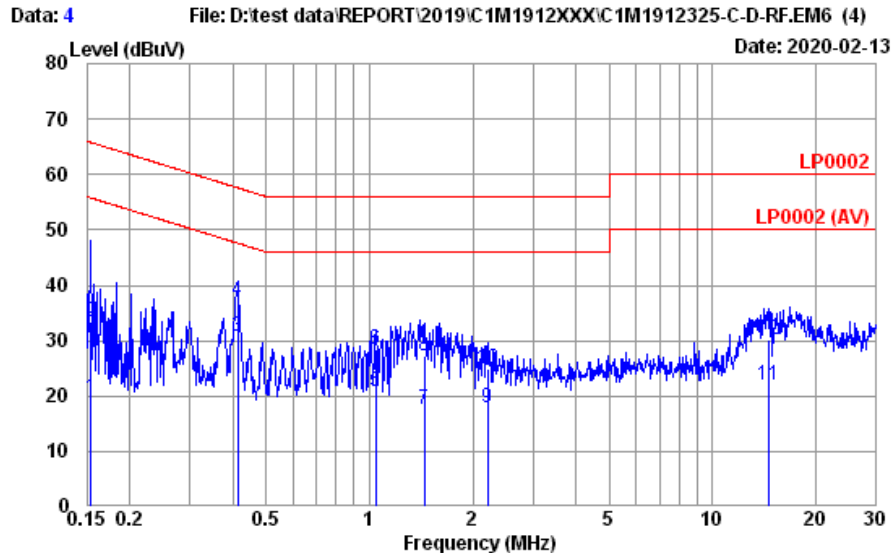


Site no. : No.8 Shielded Room Data no. : 1
Condition : ENV4200 (169) (A) LISN Phase : LINE
Limit : LP0002
Env. / Ins. : 21°C / 61% ESR3 (1774) Engineer : Chucky Chiu
EUT : SRS-XB23 (SKU #1)
Power Rating : DC 5V(VIA USB)
Test Mode : Normal

	Freq. (MHz)	AMN Factor (dB)	Cable Loss (dB)	Pulse Att. (dB)	Reading (dBμV)	Emission Level (dBμV)	Limits (dBμV)	Margin (dB)	Remark
1	0.155	10.67	0.06	9.86	9.90	30.49	55.74	25.25	Average
2	0.155	10.67	0.06	9.86	29.20	49.79	65.74	15.95	QP
3	0.214	10.60	0.06	9.86	3.12	23.64	53.05	29.41	Average
4	0.214	10.60	0.06	9.86	17.37	37.89	63.05	25.16	QP
5	0.576	10.48	0.09	9.86	-4.79	15.64	46.00	30.36	Average
6	0.576	10.48	0.09	9.86	2.55	22.98	56.00	33.02	QP
7	2.044	10.51	0.17	9.86	-3.20	17.34	46.00	28.66	Average
8	2.044	10.51	0.17	9.86	2.36	22.90	56.00	33.10	QP
9	7.137	10.99	0.31	9.88	-0.89	20.29	50.00	29.71	Average
10	7.137	10.99	0.31	9.88	4.54	25.72	60.00	34.28	QP
11	17.944	12.90	0.52	9.94	0.72	24.08	50.00	25.92	Average
12	17.944	12.90	0.52	9.94	4.93	28.29	60.00	31.71	QP

Remarks: 1. Emission Level= AMN Factor + Cable Loss + Pulse Att. + Reading.

測試日期	2020/02/13	環境溫/濕度	22°C/60%
測試電壓	DC 5V (經 USB 充電電源)	測試人員	Chucky Chiu
Tested SKU	SKU #2		

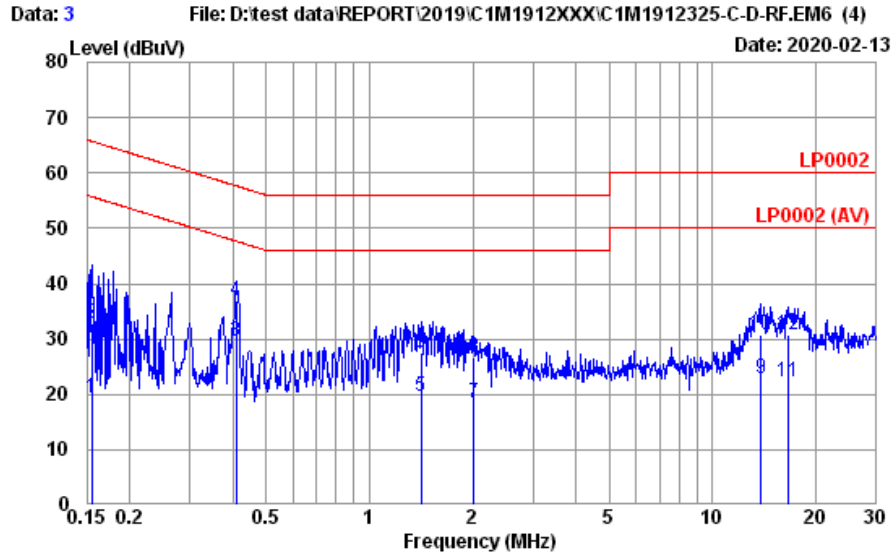


Site no. : No.8 Shielded Room Data no. : 4
Condition : ENV4200 (169) (A) LISN Phase : NEUTRAL
Limit : LP0002
Env. / Ins. : 22°C / 60% ESR3 (1774) Engineer : Chucky Chiu
EUT : SRS-XB23 (SKU #2)
Power Rating : DC 5V(VIA USB)
Test Mode : Normal

	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	0.00	9.86	-1.10	19.49	55.78	36.29	Average
2	0.154	10.73	0.00	9.86	12.78	33.37	65.78	32.41	QP
3	0.413	10.52	0.00	9.86	10.35	30.73	47.59	16.86	Average
4	0.413	10.52	0.00	9.86	16.89	37.27	57.59	20.32	QP
5	1.043	10.50	0.00	9.86	0.59	20.95	46.00	25.05	Average
6	1.043	10.50	0.00	9.86	8.17	28.53	56.00	27.47	QP
7	1.449	10.52	0.00	9.86	-2.87	17.51	46.00	28.49	Average
8	1.449	10.52	0.00	9.86	6.85	27.23	56.00	28.77	QP
9	2.213	10.56	0.00	9.86	-2.44	17.98	46.00	28.02	Average
10	2.213	10.56	0.00	9.86	4.36	24.78	56.00	31.22	QP
11	14.517	12.61	0.00	9.92	-0.67	21.86	50.00	28.14	Average
12	14.517	12.61	0.00	9.92	7.78	30.31	60.00	29.69	QP

Remarks: 1. Emission Level= AMN Factor + Cable Loss + Pulse Att. + Reading.

測試日期	2020/02/13	環境溫/濕度	22°C/60%
測試電壓	DC 5V (經 USB 充電電源)	測試人員	Chucky Chiu
Tested SKU	SKU #2		



Site no. : No.8 Shielded Room Data no. : 3
Condition : ENV4200 (169) (A) LISN Phase : LINE
Limit : LP0002
Env. / Ins. : 22°C / 60% ESR3 (774) Engineer : Chucky Chiu
EUT : SRS-XB23 (SKU #2)
Power Rating : DC 5V(VIA USB)
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	0.155	10.67	0.00	9.86	-1.25	19.28	55.74	36.46	Average
2	0.155	10.67	0.00	9.86	12.43	32.96	65.74	32.78	QP
3	0.408	10.49	0.00	9.86	9.27	29.62	47.68	18.06	Average
4	0.408	10.49	0.00	9.86	16.54	36.89	57.68	20.79	QP
5	1.411	10.49	0.00	9.86	-0.78	19.57	46.00	26.43	Average
6	1.411	10.49	0.00	9.86	7.12	27.47	56.00	28.53	QP
7	2.012	10.51	0.00	9.86	-2.04	18.33	46.00	27.67	Average
8	2.012	10.51	0.00	9.86	6.26	26.63	56.00	29.37	QP
9	13.841	12.15	0.00	9.91	0.70	22.76	50.00	27.24	Average
10	13.841	12.15	0.00	9.91	8.71	30.77	60.00	29.23	QP
11	16.661	12.69	0.00	9.93	-0.42	22.20	50.00	27.80	Average
12	16.661	12.69	0.00	9.93	8.11	30.73	60.00	29.27	QP

Remarks: 1. Emission Level= AMN Factor + Cable Loss + Pulse Att. + Reading.

2. 場強輻射之量測

本裝置有兩種電源供應模式分別為(1)電池(DC 3.67V 或 DC3.62V)、(2)USB 供電(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(站立)以低、中、高頻率來進行量測，並將下列測試模式之測試數據隨案件所附，所得讀值資料請見章節 2.1 ~ 2.2：

模式	動作狀態	基本頻率	量測頻率範圍
SKU #1 Charge	Charging	---	30-1000MHz
SKU #2 Charge		---	30-1000MHz
模式	動作狀態	基本頻率	量測頻率範圍
SKU #1 Normal	BT Playing	---	30-1000MHz
			1000-25000MHz
SKU #2 Normal		---	30-1000MHz
			1000-25000MHz
模式	動作狀態	基本頻率	量測頻率範圍
SKU #1 BLE (2Mbps)	發射	2402MHz	1000-25000MHz
		2440MHz*	30-1000MHz
			1000-25000MHz
		2480MHz	1000-25000MHz
	接收	2440MHz	30-1000MHz
			1000-25000MHz
SKU #1 BLE	接收	2440MHz	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 章節的禁用頻帶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 2.3。

模式	動作狀態	基本頻率	量測頻率範圍
SKU #1 BLE (2M)	發射	2402MHz	2310-2410MHz
		2480MHz	2450-2900MHz

測試日期	2020/01/15~02/13	環境溫/濕度	20°C/59~66%
測試電壓	(1)DC 5V (經 USB 充電電源) (2)DC 3.67V (經 SKU #1 電池供電) (3)DC 3.62V (經 SKU #2 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	SKU #1 Charge	Frequency	---
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Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
32.910	23.73	1.25	-2.76	22.22	40.00	17.78	Peak
93.050	16.05	2.20	5.49	23.74	43.50	19.76	Peak
226.910	17.70	3.71	14.28	35.69	46.00	10.31	Peak
312.270	20.07	4.63	8.59	33.29	46.00	12.71	Peak
844.800	26.87	8.15	-1.52	33.50	46.00	12.50	Peak
991.270	27.99	8.99	-1.22	35.76	54.00	18.24	Peak

Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
44.550	17.26	1.47	4.89	23.62	40.00	16.38	Peak
167.740	16.05	3.10	5.47	24.62	43.50	18.88	Peak
312.270	20.07	4.63	12.33	37.03	46.00	8.97	Peak
667.290	25.24	7.21	-0.87	31.58	46.00	14.42	Peak
921.430	27.49	8.58	-1.08	34.99	46.00	11.01	Peak
997.090	28.04	9.02	-0.83	36.23	54.00	17.77	Peak

Mode	SKU #2 Charge	Frequency	---
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Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
34.850	22.43	1.29	-2.88	20.84	40.00	19.16	Peak
168.710	15.98	3.11	-1.62	17.47	43.50	26.03	Peak
314.210	20.14	4.66	1.45	26.25	46.00	19.75	Peak
674.080	25.29	7.24	-3.63	28.90	46.00	17.10	Peak
845.770	26.87	8.16	-3.09	31.94	46.00	14.06	Peak
989.330	27.99	8.98	-1.91	35.06	54.00	18.94	Peak

Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
45.520	16.80	1.49	-1.69	16.60	40.00	23.40	Peak
166.770	16.11	3.09	-2.19	17.01	43.50	26.49	Peak
315.180	20.17	4.68	4.78	29.63	46.00	16.37	Peak
665.350	25.22	7.20	-1.72	30.70	46.00	15.30	Peak
823.460	26.70	8.03	-2.48	32.25	46.00	13.75	Peak
988.360	27.99	8.97	-3.05	33.91	54.00	20.09	Peak

Mode	SKU #1 Normal	Frequency	---
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Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
32.910	23.73	1.25	-2.30	22.68	40.00	17.32	Peak
180.350	15.43	3.23	6.31	24.97	43.50	18.53	Peak
622.670	24.93	7.00	-2.08	29.85	46.00	16.15	Peak
747.800	25.96	7.63	-1.68	31.91	46.00	14.09	Peak
944.710	27.66	8.72	-1.68	34.70	46.00	11.30	Peak
989.330	27.99	8.98	-1.14	35.83	54.00	18.17	Peak

Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
48.430	15.45	1.54	4.29	21.28	40.00	18.72	Peak
101.780	17.50	2.31	2.93	22.74	43.50	20.76	Peak
312.270	20.07	4.63	0.74	25.44	46.00	20.56	Peak
555.740	24.31	6.83	-1.05	30.09	46.00	15.91	Peak
921.430	27.49	8.58	-1.01	35.06	46.00	10.94	Peak
997.090	28.04	9.02	-0.42	36.64	54.00	17.36	Peak

Mode	SKU #2 Normal	Frequency	---
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Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
34.850	22.43	1.29	-4.47	19.25	40.00	20.75	Peak
147.370	17.15	2.86	-3.20	16.81	43.50	26.69	Peak
415.090	22.61	6.02	-3.64	24.99	46.00	21.01	Peak
665.350	25.22	7.20	-3.27	29.15	46.00	16.85	Peak
796.300	26.45	7.88	-3.37	30.96	46.00	15.04	Peak
977.690	27.92	8.91	-3.76	33.07	54.00	20.93	Peak

Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
35.820	21.86	1.31	-4.31	18.86	40.00	21.14	Peak
103.720	17.65	2.34	-1.53	18.46	43.50	25.04	Peak
557.680	24.33	6.83	-2.83	28.33	46.00	17.67	Peak
710.940	25.58	7.42	-3.27	29.73	46.00	16.27	Peak
871.960	27.09	8.30	-3.89	31.50	46.00	14.50	Peak
994.180	28.02	9.01	-2.42	34.61	54.00	19.39	Peak

Mode	SKU #1 BLE (2Mbps)	Frequency	TX 2440MHz
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Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
74.620	12.96	1.96	16.76	31.68	40.00	8.32	Peak
167.740	16.05	3.10	21.94	41.09	43.50	2.41	Peak
204.600	16.55	3.47	19.65	39.67	43.50	3.83	Peak
323.910	20.43	4.81	13.56	38.80	46.00	7.20	Peak
673.110	25.27	7.24	7.77	40.28	46.00	5.72	Peak
983.510	27.94	8.95	-1.56	35.33	54.00	18.67	Peak

Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
75.590	13.06	1.97	9.93	24.96	40.00	15.04	Peak
167.740	16.05	3.10	12.61	31.76	43.50	11.74	Peak
323.910	20.43	4.81	2.62	27.86	46.00	18.14	Peak
671.170	25.25	7.23	6.56	39.04	46.00	6.96	Peak
958.290	27.77	8.80	-1.07	35.50	46.00	10.50	Peak
995.150	28.04	9.01	-0.91	36.14	54.00	17.86	Peak

Mode	SKU #1 BLE	Frequency	RX 2440MHz
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Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
75.590	13.06	1.97	15.45	30.48	40.00	9.52	Peak
167.740	16.05	3.10	21.42	40.57	43.50	2.93	Peak
323.910	20.43	4.81	14.09	39.33	46.00	6.67	Peak
504.330	23.76	6.76	3.61	34.13	46.00	11.87	Peak
696.390	25.42	7.34	2.49	35.25	46.00	10.75	Peak
996.120	28.04	9.02	-1.78	35.28	54.00	18.72	Peak

Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
75.590	13.06	1.97	8.47	23.50	40.00	16.50	Peak
167.740	16.05	3.10	7.55	26.70	43.50	16.80	Peak
251.160	18.84	3.95	1.23	24.02	46.00	21.98	Peak
485.900	23.53	6.64	1.49	31.66	46.00	14.34	Peak
915.610	27.44	8.55	-1.51	34.48	46.00	11.52	Peak
997.090	28.04	9.02	-1.42	35.64	54.00	18.36	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	SKU #1 Normal	Frequency	---
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Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dB μ V)	Emission Level (dB μ V/m)	Limits (dB μ V/m)	Margin (dB)	Detector
4804.00	33.92	0.00	9.61	43.53	54.00	10.47	Peak

Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dB μ V)	Emission Level (dB μ V/m)	Limits (dB μ V/m)	Margin (dB)	Detector
4804.00	33.92	0.00	8.39	42.31	54.00	11.69	Peak

Mode	SKU #2 Normal	Frequency	---
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Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dB μ V)	Emission Level (dB μ V/m)	Limits (dB μ V/m)	Margin (dB)	Detector
4804.000	33.92	10.22	32.23	41.92	54.00	12.08	Peak

Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dB μ V)	Emission Level (dB μ V/m)	Limits (dB μ V/m)	Margin (dB)	Detector
4804.000	33.92	10.22	30.95	40.64	54.00	13.36	Peak

Mode	SKU #1 BLE (2Mbps)	Frequency	TX 2402MHz
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Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
4804.00	33.92	10.22	33.84	43.53	54.00	10.47	Peak

Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
4804.00	33.92	10.22	32.62	42.31	54.00	11.69	Peak

Mode	SKU #1 BLE (2Mbps)	Frequency	TX 2440MHz
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Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
4880.00	34.34	10.24	-1.46	43.12	54.00	10.88	Peak

Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
4880.00	34.34	10.24	-1.09	43.49	54.00	10.51	Peak

Mode	SKU #1 BLE (2Mbps)	Frequency	TX 2480MHz
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Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
4960.00	34.32	10.27	0.59	45.18	54.00	8.82	Peak

Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
4960.00	34.32	10.27	-0.30	44.29	54.00	9.71	Peak

Mode	SKU #1 BLE	Frequency	RX2440MHz
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Antenna at Horizontal Polarization

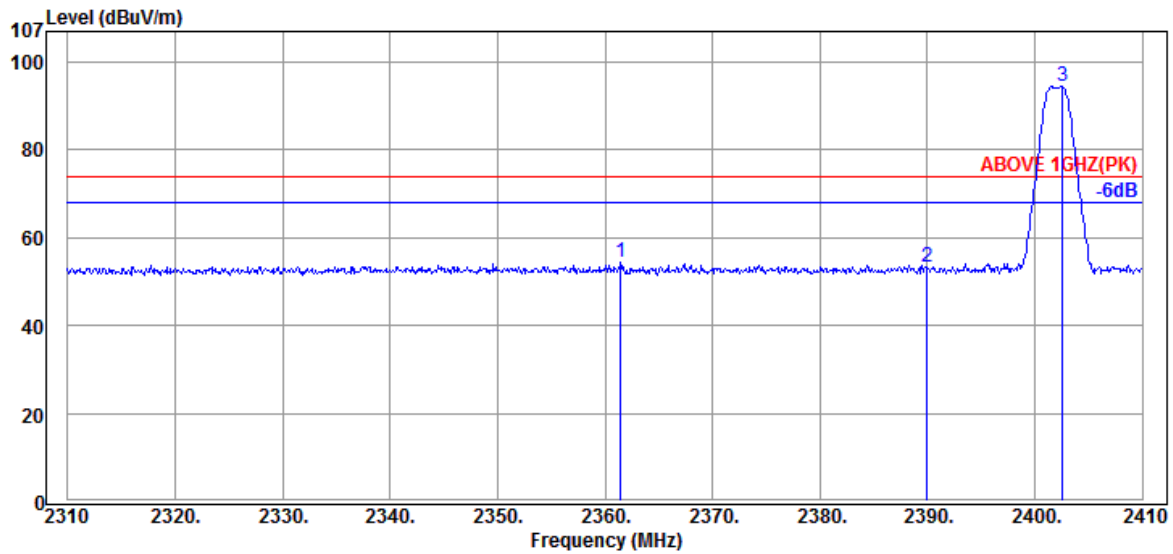
Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
4880.00	34.34	10.24	-3.48	41.10	54.00	12.90	Peak

Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
4880.00	34.34	10.24	-3.46	41.12	54.00	12.88	Peak

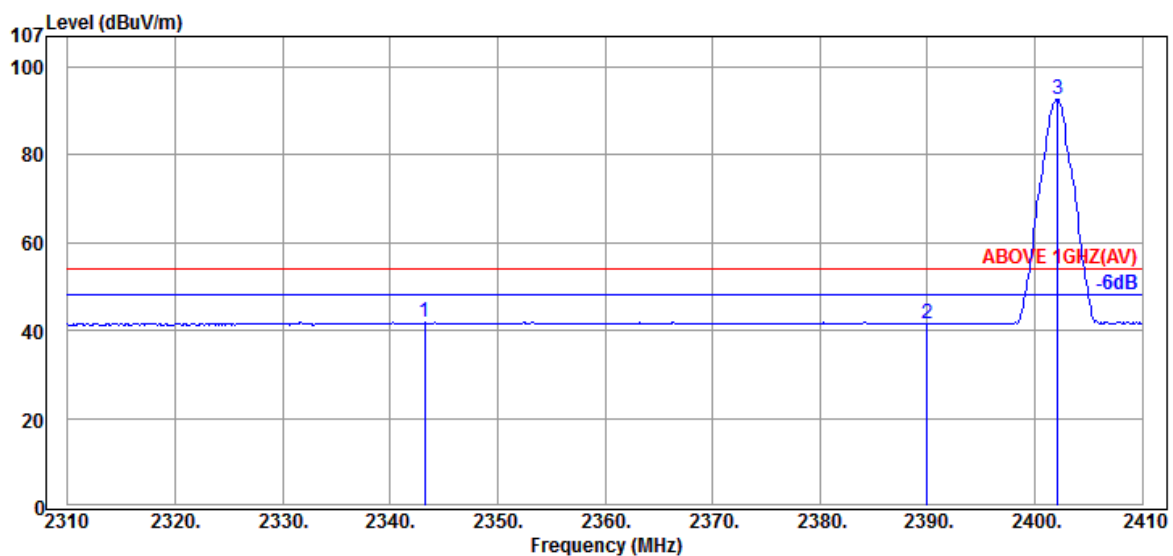
2.3. 禁用頻帶量測結果 (其他不必要發射)

Mode	SKU #1 BLE (2Mbps)	Frequency	TX 2402MHz
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Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
2361.50	32.00	8.49	13.85	54.34	74.00	19.66	Peak
2390.00	32.00	8.52	12.93	53.45	74.00	20.55	Peak
@ 2402.60	32.04	8.53	53.83	94.40	---	---	Peak

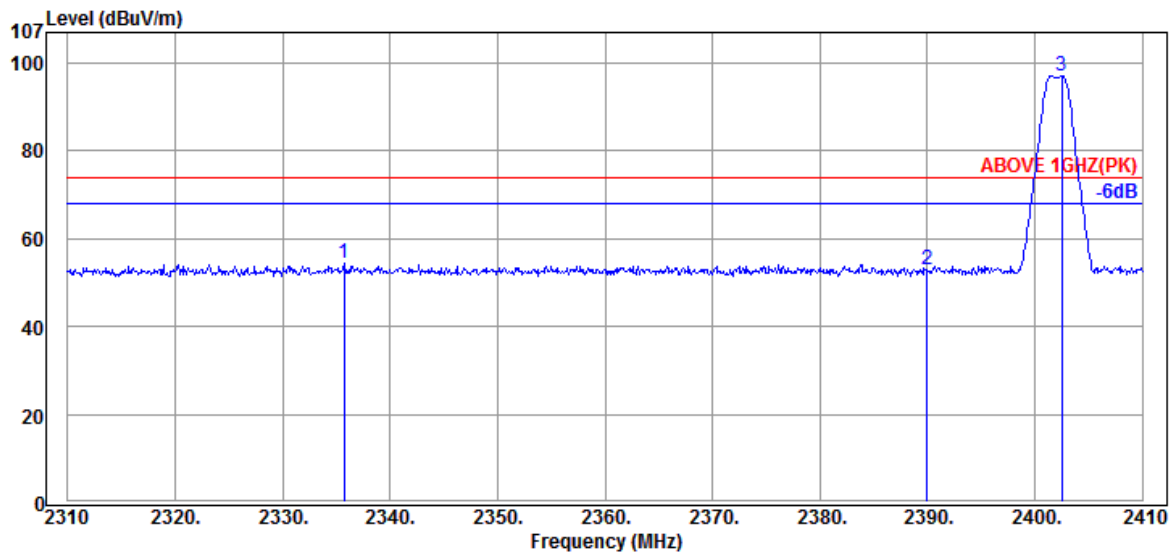


Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
2343.20	32.00	8.48	1.40	41.88	54.00	12.12	Average
2390.00	32.00	8.52	0.99	41.51	54.00	12.49	Average
@ 2402.10	32.03	8.52	52.09	92.64	---	---	Average

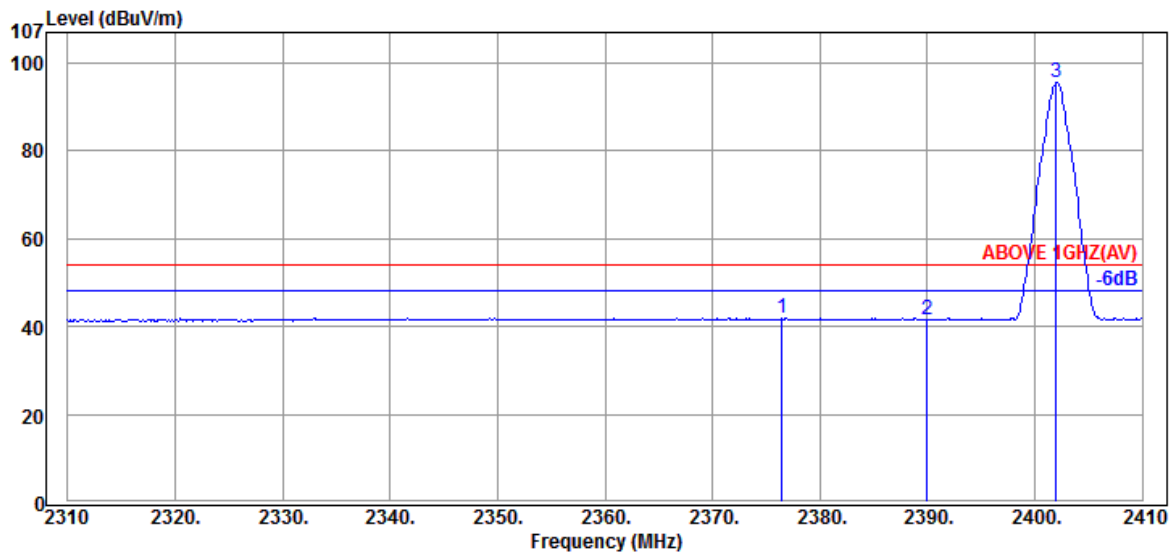
備註：“@”為主波，在此章節是不予以判定。

Mode	SKU #1 BLE (2Mbps)	Frequency	TX 2402MHz
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Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
2335.70	32.00	8.48	13.94	54.42	74.00	19.58	Peak
2390.00	32.00	8.52	12.29	52.81	74.00	21.19	Peak
@ 2402.50	32.03	8.52	56.51	97.06	---	---	Peak

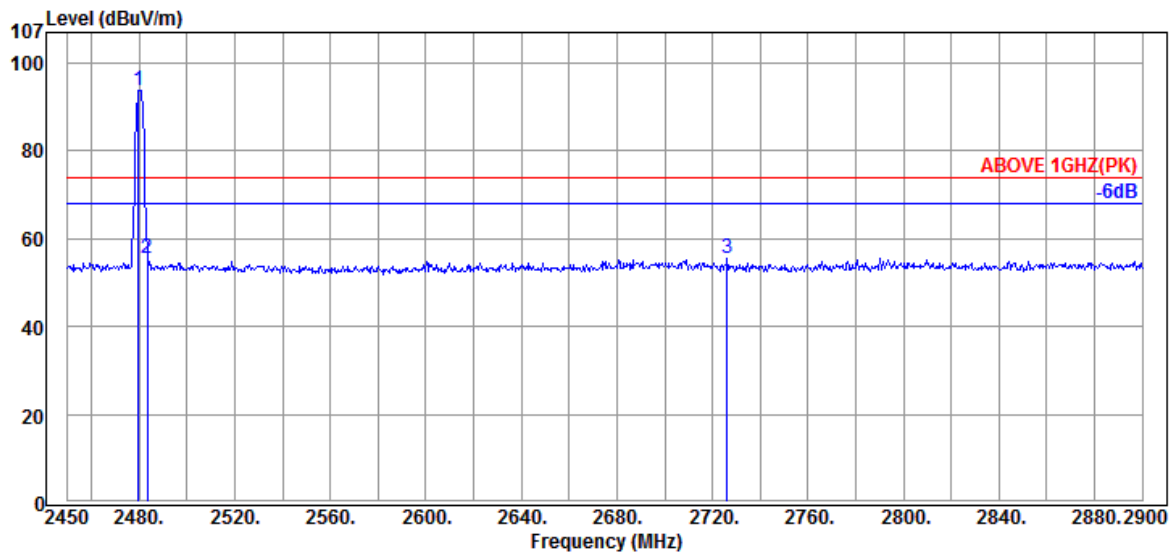


Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
2376.50	32.00	8.51	1.42	41.93	54.00	12.07	Average
2390.00	32.00	8.52	0.94	41.46	54.00	12.54	Average
@ 2402.00	32.03	8.52	54.98	95.53	---	---	Average

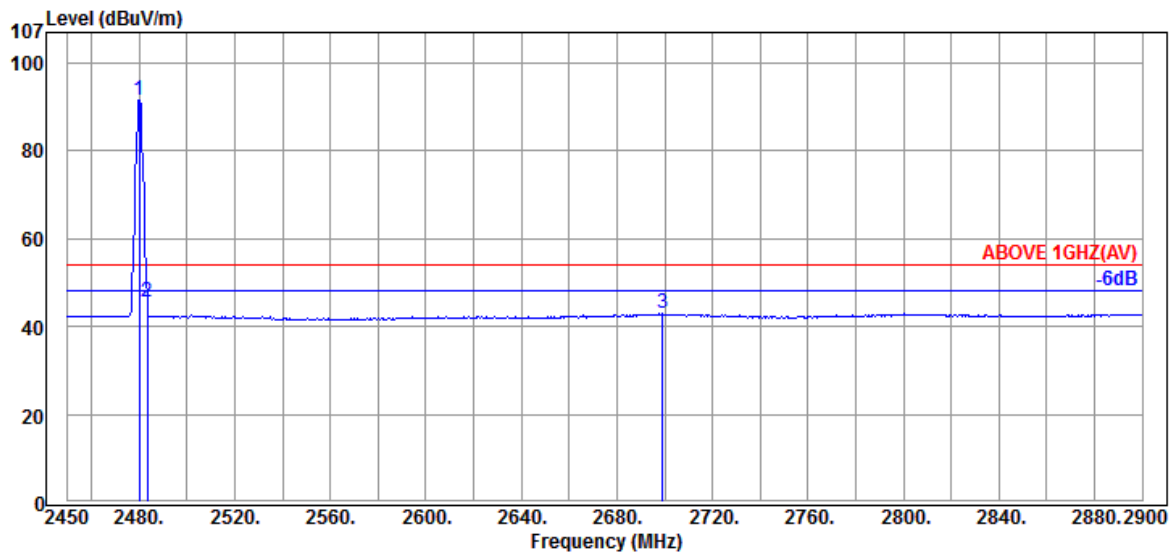
備註：“@”為主波，在此章節是不予以判定。

Mode	SKU #1 BLE (2Mbps)	Frequency	TX 2480MHz
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Antenna at Horizontal Polarization

	Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
@	2479.70	32.58	8.58	52.61	93.77	---	---	Peak
	2483.30	32.57	8.58	14.36	55.51	74.00	18.49	Peak
	2726.30	32.48	8.65	14.22	55.35	74.00	18.65	Peak

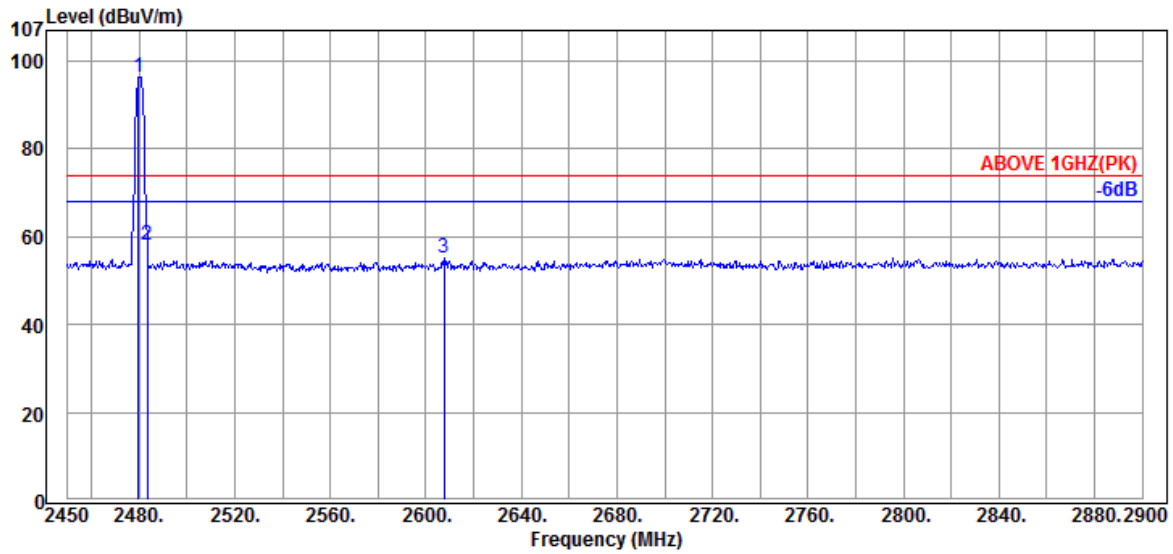


Antenna at Horizontal Polarization

	Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
@	2480.15	32.58	8.58	50.50	91.66	---	---	Average
	2483.30	32.57	8.58	4.53	45.68	54.00	8.32	Average
	2699.30	32.79	8.64	1.46	42.89	54.00	11.11	Average

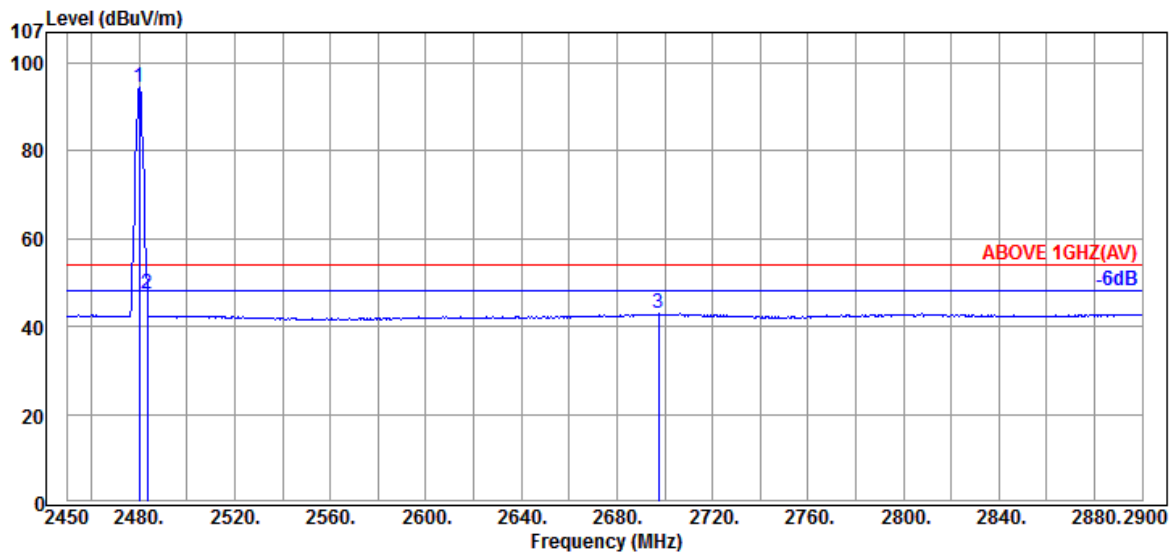
備註：“@”為主波，在此章節是不予以判定。

Mode	SKU #1 BLE (2Mbps)	Frequency	TX 2480MHz
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Antenna at Vertical Polarization

	Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
@	2479.70	32.58	8.58	55.31	96.47	---	---	Peak
	2483.30	32.57	8.58	16.99	58.14	74.00	15.86	Peak
	2607.50	32.08	8.62	14.47	55.17	74.00	18.83	Peak



Antenna at Vertical Polarization

	Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
@	2480.15	32.58	8.58	53.46	94.62	---	---	Average
	2483.30	32.57	8.58	6.13	47.28	54.00	6.72	Average
	2697.50	32.76	8.64	1.53	42.93	54.00	11.07	Average

備註：“@”為主波，在此章節是不予以判定。

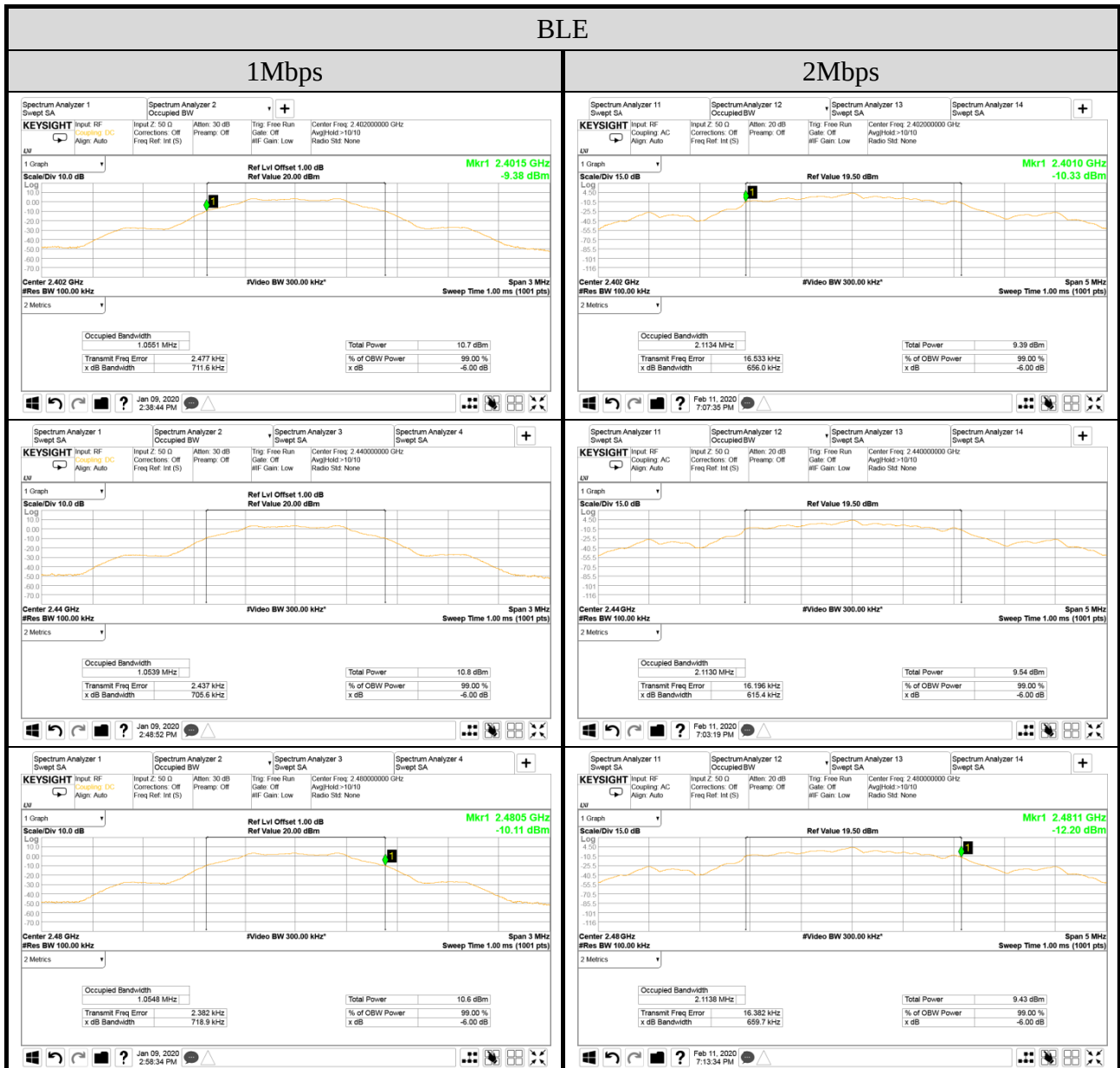
3. 發射頻寬之量測

測試日期	2020/01/09 ~ 02/11	環境溫/濕度	21~22°C/51~56%
電纜損失	1.0dB	測試人員	Sean Wang
測試電壓	DC 3.67V(經電池供電)	Test SKU	SKU #1

3.1. 發射頻寬

模式	測試頻率 (MHz)	6dB 頻寬 (MHz)	限制值 (kHz)
BLE (1Mbps)	2402	0.7116	>500
	2440	0.7056	
	2480	0.7189	
BLE (2Mbps)	2402	0.6560	
	2440	0.6154	
	2480	0.6597	

3.2. 發射頻寬之量測圖



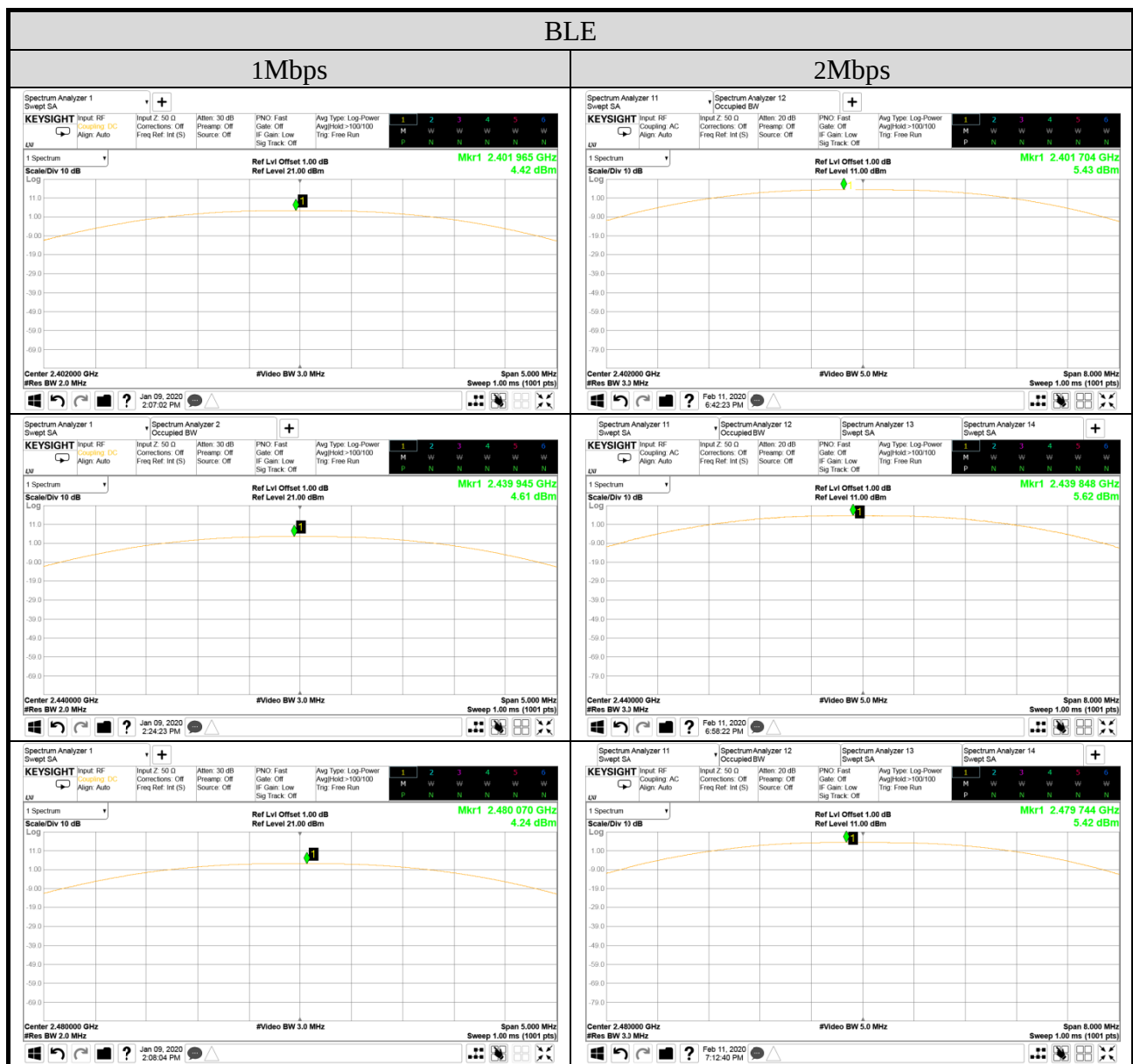
4. 峰值輸出功率之量測

測試日期	2020/01/09 ~ 02/11	環境溫/濕度	21~22°C/51~56%
電纜損失	1.0dB	測試人員	Sean Wang
測試電壓	DC 3.67V(經電池供電)	Test SKU	SKU #1

4.1. 峰值輸出功率

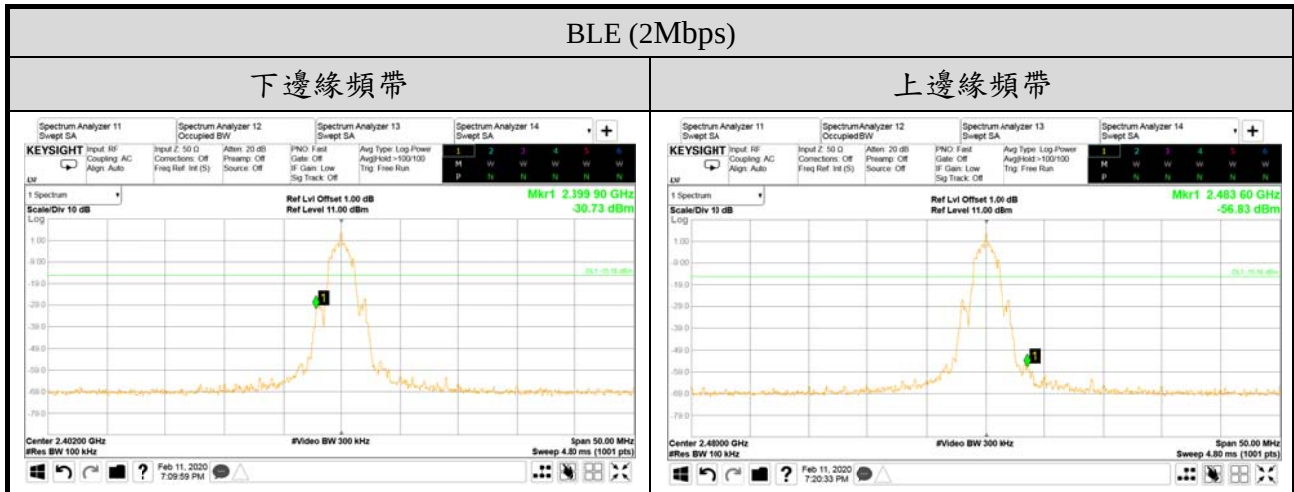
模式 (Mode)	測試頻率 (MHz)	最大輸出功率 (dBm)	限制值 (dBm)
BLE (1Mbps)	2402	4.42	30
	2440	4.61	
	2480	4.24	
BLE (2Mbps)	2402	5.43	30
	2440	5.62	
	2480	5.42	

4.2. 峰值輸出功率之量測圖



5. 頻帶邊緣之 RF 傳導發射之量測

測試日期	2020/02/11	環境溫/濕度	22°C 56%
電纜損失	1.0dB	測試人員	Sean Wang
測試電壓	DC 3.67V(經電池供電)	Test SKU	SKU #1

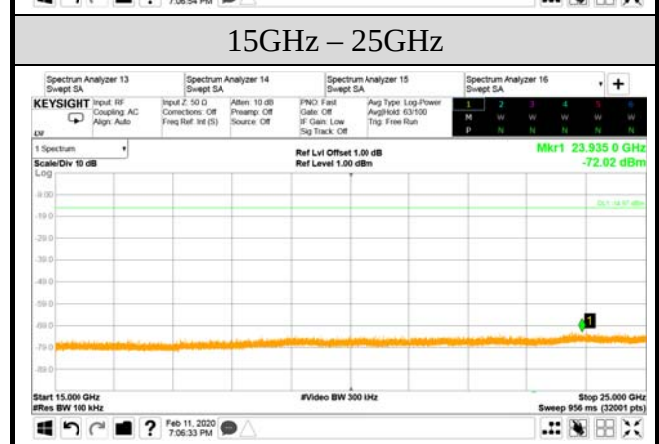
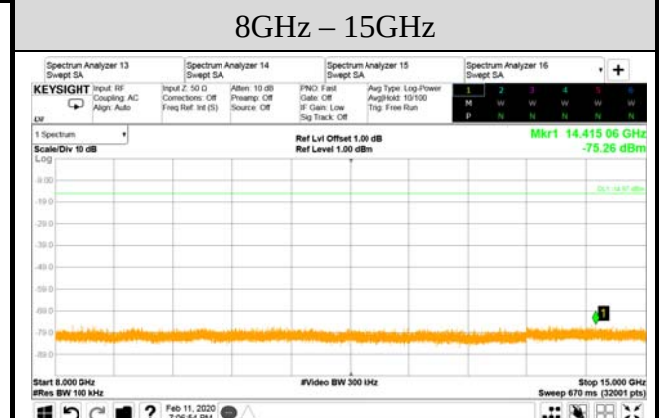
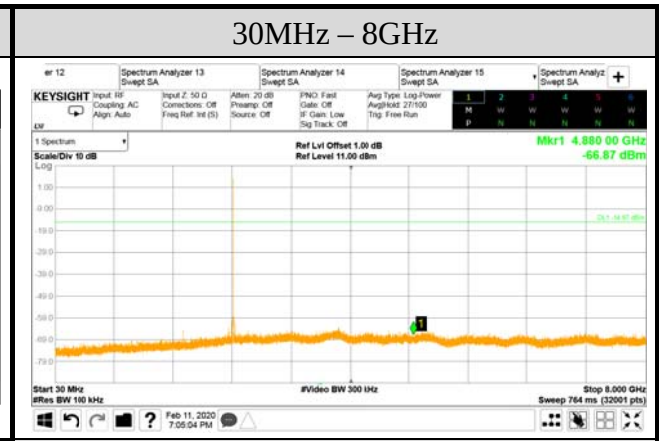
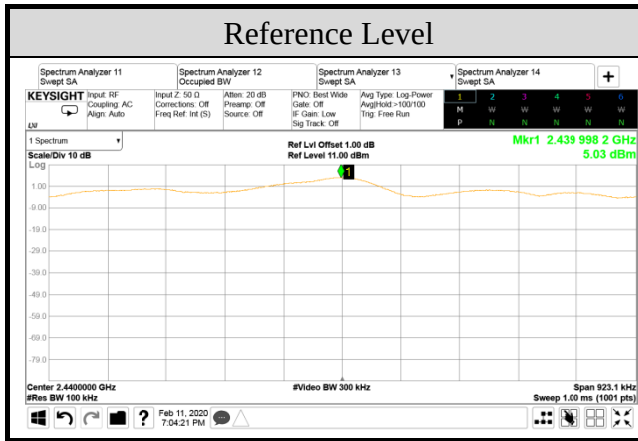


6. 混附發射之 RF 傳導發射之量測

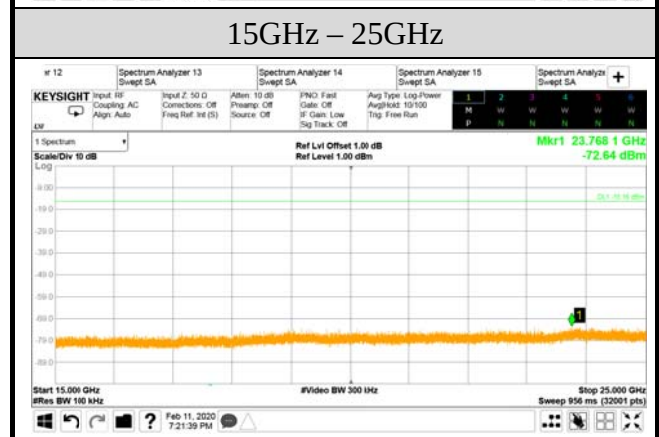
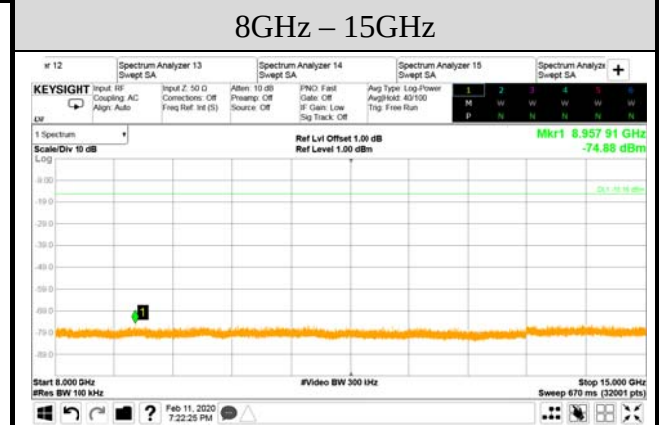
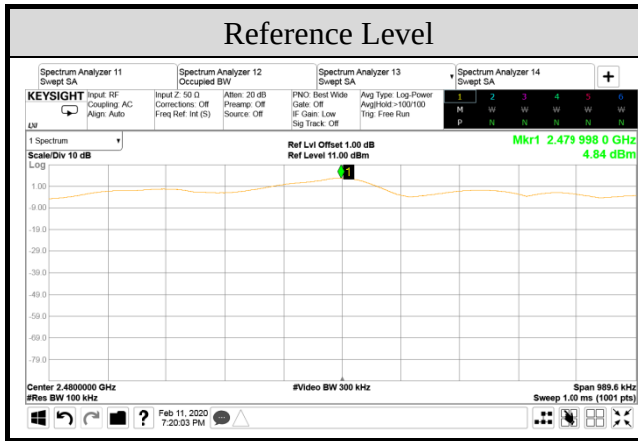
測試日期	2020/02/11	環境溫/濕度	22°C 56%
電纜損失	1.0dB	測試人員	Sean Wang
測試電壓	DC 3.67V(經電池供電)	模式	BLE (2Mbps)
Test SKU	SKU #1	測試頻率	2402MHz



測試日期	2020/02/11	環境溫/濕度	22°C 56%
電纜損失	1.0dB	測試人員	Sean Wang
測試電壓	DC 3.67V(經電池供電)	模式	BLE (2Mbps)
Test SKU	SKU #1	測試頻率	2440MHz



測試日期	2020/02/11	環境溫/濕度	22°C 56%
電纜損失	1.0dB	測試人員	Sean Wang
測試電壓	DC 3.67V(經電池供電)	模式	BLE (2Mbps)
Test SKU	SKU #1	測試頻率	2480MHz



7. 功率密度之量測

測試日期	2020/02/11	環境溫/濕度	22°C 56%
電纜損失	1.0dB	測試人員	Sean Wang
測試電壓	DC 3.67V(經電池供電)	Test SKU	SKU #1

7.1. 功率密度

模式	測試頻率 (MHz)	功率密度(dBm)	限制值 (dBm)
BLE (2Mbps)	2402	4.82	<8 dBm/3kHz
	2440	5.03	
	2480	-4.84	

測試結果係依照 FCC 公告之 KDB558074 D01V04，且解析頻寬以 100kHz 量測其測試結果較 3kHz 嚴格

7.2. 功率密度之量測圖

