

附錄 一

受測裝置之測試結果

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1. 場強輻射之量測

對受測物裝置之其他不必要之發射(測至本地振盪頻率之 10 次諧波)依下列測試模式分別於電波暗室內進行量測，實驗室先將發射機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，並將所有模式之掃頻圖檢附於附錄中。最後，選擇較差模式進行讀值之測量，所得讀值資料請見章節 1.1 ~ 1.2：

模式	動作狀態	基本頻率	量測頻率範圍
1	發射	*2405MHz (CH01)	30-1000MHz
2			1000-3000MHz
3			3000-8000MHz
4			8000-18000MHz
5			18000-25000MHz
6		2440MHz (CH07)	1000-3000MHz
7			3000-8000MHz
8			8000-18000MHz
9			18000-25000MHz
10		2475MHz (CH14)	1000-3000MHz
11			3000-8000MHz
12			8000-18000MHz
13			18000-25000MHz
14	接收	2440MHz (CH07)	30-1000MHz
15			1000-3000MHz
16			3000-8000MHz
17			8000-18000MHz
18			18000-25000MHz

註：1. 以上所有模式之掃頻圖是檢附於附錄中。

2.*: 經評估後，以最差頻率進行 30-1000MHz 量測。

測試日期	2018/11/05	環境溫/濕度	24°C/53%
測試電壓	DC 6V (透過電池供電)		

1.1. 30-1000MHz 頻率範圍，其他不必要發射量測

Mode	ZigBee	Frequency	TX 2405MHz
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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
30.9700	24.27	1.22	1.82	27.31	40.00	12.69	Peak
101.7800	17.60	2.29	6.46	26.35	43.50	17.15	Peak
249.2200	19.11	3.80	8.34	31.25	46.00	14.75	Peak
328.7600	20.31	4.71	3.92	28.94	46.00	17.06	Peak
718.7000	25.09	7.19	2.31	34.59	46.00	11.41	Peak
979.6300	27.63	8.70	2.36	38.69	54.00	15.31	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
101.7800	17.60	2.29	5.67	25.56	43.50	17.94	Peak
244.3700	18.79	3.76	4.19	26.74	46.00	19.26	Peak
323.9100	20.18	4.65	7.54	32.37	46.00	13.63	Peak
584.8400	24.44	6.71	2.08	33.23	46.00	12.77	Peak
834.1300	26.23	7.80	2.71	36.74	46.00	9.26	Peak
966.0500	27.49	8.61	2.63	38.73	54.00	15.27	Peak

Mode	ZigBee	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
30.9700	24.27	1.22	1.55	27.04	40.00	12.96	Peak
101.7800	17.60	2.29	6.45	26.34	43.50	17.16	Peak
250.1900	19.16	3.81	7.62	30.59	46.00	15.41	Peak
343.3100	20.69	4.89	3.85	29.43	46.00	16.57	Peak
794.3600	25.86	7.57	2.68	36.11	46.00	9.89	Peak
982.5400	27.66	8.72	2.60	38.98	54.00	15.02	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
101.7800	17.60	2.29	5.71	25.60	43.50	17.90	Peak
240.4900	18.57	3.73	4.49	26.79	46.00	19.21	Peak
325.8500	20.21	4.66	7.49	32.36	46.00	13.64	Peak
515.9700	23.40	6.48	1.88	31.76	46.00	14.24	Peak
654.6800	24.77	6.94	1.41	33.12	46.00	12.88	Peak
979.6300	27.63	8.70	1.57	37.90	54.00	16.10	Peak

1.2. 1000MHz 以上頻率範圍，其他不必要發射量測

Mode	ZigBee	Frequency	TX 2405MHz
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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
4810.00	34.22	9.54	2.05	45.81	54.00	8.19	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
4810.00	34.22	9.54	2.38	46.14	54.00	7.86	Peak

Mode	ZigBee	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	34.25	9.56	0.52	44.33	54.00	9.67	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
4880.00	34.25	9.56	0.31	44.12	54.00	9.88	Peak

Mode	ZigBee	Frequency	TX 2475MHz
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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
4950.00	34.28	9.59	-0.77	43.10	54.00	10.90	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
4950.00	34.28	9.59	-1.26	42.61	54.00	11.39	Peak

2. 峰值輸出功率之量測

測試日期	2018/11/08	環境溫/濕度	24°C/52%
測試電壓	DC 6V (透過電池供電)		

2.1. 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)
ZigBee	2405	2.13	30
	2440	2.28	
	2475	2.10	

2.2. 峰值輸出功率之量測圖

