

附錄一

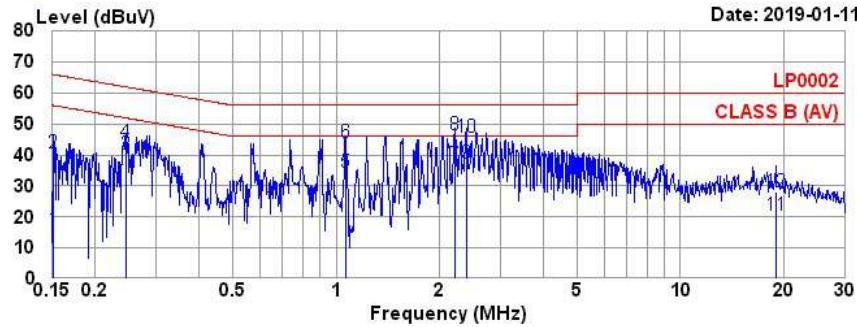
受測裝置之測試結果

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1. 電源線傳導干擾之量測

測試日期	2019/01/11	環境溫/濕度	23°C/58%
測試電壓	AC 110V/60Hz		

Data: 2 File: D:\test data\REPORT\2018\1M1812\1M181200\1M1812100-C-D.EM6-RF (4)



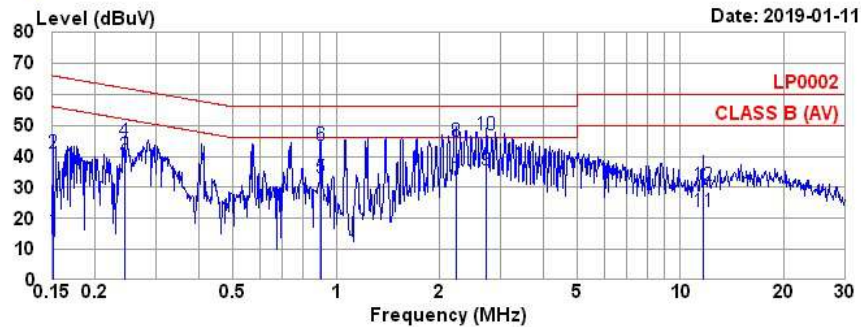
Site no. : No.7 Shielded Room Data no. : 2
 Condition : ESH2-Z5 366(ADAPTER) Phase : NEUTRAL
 Limit : LP0002
 Env. / Ins. : 23°C / 58% ESCI (1276) Engineer : NICK
 EUT : HSD-0015-Q
 Power Rating : 110Vac/60Hz
 Test Mode : OPERATING

	Freq. (MHz)	AMN Factor (dB)	Cable Loss (dB)	Pulse Att. (dB)	Reading (dBμV)	Emission Level (dBμV)	Limits (dBμV)	Margin (dB)	Remark
1	0.152	0.13	0.03	9.98	5.96	16.10	55.91	39.81	Average
2	0.152	0.13	0.03	9.98	30.66	40.80	65.91	25.11	QP
3	0.246	0.14	0.03	9.98	30.12	40.27	51.91	11.64	Average
4	0.246	0.14	0.03	9.98	33.92	44.07	61.91	17.84	QP
5	1.065	0.17	0.04	9.98	24.14	34.33	46.00	11.67	Average
6	1.065	0.17	0.04	9.98	33.96	44.15	56.00	11.85	QP
7	2.213	0.21	0.06	9.99	26.59	36.85	46.00	9.15	Average
8	2.213	0.21	0.06	9.99	36.31	46.57	56.00	9.43	QP
9	2.396	0.22	0.07	9.99	27.10	37.38	46.00	8.62	Average
10	2.396	0.22	0.07	9.99	35.49	45.77	56.00	10.23	QP
11	18.920	0.92	0.20	10.06	9.51	20.69	50.00	29.31	Average
12	18.920	0.92	0.20	10.06	16.73	27.91	60.00	32.09	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	2019/01/11	環境溫/濕度	23°C/58%
測試電壓	AC 110V/60Hz		

Data: 1 File: D:\test data\REPORT\2018\1M1812XX\1C1M1812100\1C1M1812100-C-D.EM6-RF (4)



Site no. : No.7 Shielded Room Data no. : 1
Condition : ESH2-Z5 366(ADAPTER) Phase : LINE
Limit : LP0002
Env. / Ins. : 23°C / 58% ESCI (1276) Engineer : NICK
EUT : HSD-0015-Q
Power Rating : 110Vac/60Hz
Test Mode : OPERATING

	Freq. (MHz)	AMN Factor (dB)	Cable Loss (dB)	Pulse Att. (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.151	0.13	0.03	9.98	5.87	16.01	55.96	39.95	Average
2	0.151	0.13	0.03	9.98	30.77	40.91	65.96	25.05	QP
3	0.244	0.13	0.03	9.98	30.16	40.30	51.95	11.65	Average
4	0.244	0.13	0.03	9.98	34.82	44.96	61.95	16.99	QP
5	0.904	0.16	0.04	9.98	22.94	33.12	46.00	12.88	Average
6	0.904	0.16	0.04	9.98	33.42	43.60	56.00	12.40	QP
7	2.225	0.20	0.06	9.99	22.16	32.41	46.00	13.59	Average
8	2.225	0.20	0.06	9.99	34.64	44.89	56.00	11.11	QP
9	2.736	0.21	0.07	9.99	25.22	35.49	46.00	10.51	Average
10	2.736	0.21	0.07	9.99	36.48	46.75	56.00	9.25	QP
11	11.621	0.49	0.16	10.03	11.74	22.42	50.00	27.58	Average
12	11.621	0.49	0.16	10.03	20.05	30.73	60.00	29.27	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

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)，實驗室擇取原報告之最差之模式進行 30MHz-25GHz 的場強輻射之量測，並將下列測試模式之掃頻圖檢附於附錄中。所得讀值資料請見章節 2.1 ~2.2：

Wireless LAN 模式

模式	動作狀態	基本頻率	量測頻率範圍
802.11b			
1	發射	2437MHz	30-1000MHz
2			1000-3000MHz
3			3000-5000MHz
4			5000-8000MHz
5			8000-18000MHz
6			18000-25000MHz

7	接收	2437MHz	30-1000MHz
8			1000-3000MHz
9			3000-5000MHz
10			5000-8000MHz
11			8000-18000MHz
12			18000-25000MHz

註：以上所有模式之掃頻圖是檢附於附錄中。

BLE 測試模式

模式	動作狀態	基本頻率	量測頻率範圍
1	發射	2480MHz	30-1000MHz
			1000-3000MHz
2			3000-5000MHz
3			5000-8000MHz
4			8000-18000MHz
5			18000-25000MHz
6	接收	2440MHz	30-1000MHz
7			1000-3000MHz
8			3000-5000MHz
9			5000-8000MHz
10			8000-18000MHz
11			18000-25000MHz

註：以上所有模式之掃頻圖是檢附於附錄中。

測試日期	2019/01/10	Temp./Hum.	23°C/50%
測試電壓	AC 110V/60Hz		

2.1. 30-1000MHz 頻率範圍，其他不必要發射量測

● Wireless LAN 模式

Mode	802.11b	Frequency	TX 2437MHz
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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
163.86	16.26	3.45	17.68	37.39	43.50	6.11	Peak
244.37	19.02	3.94	22.07	45.03	46.00	0.97	Peak
262.80	19.52	4.08	21.19	44.79	46.00	1.21	Peak
272.50	19.60	4.15	17.71	41.46	46.00	4.54	Peak
458.74	23.22	5.94	12.56	41.72	46.00	4.28	Peak
792.42	26.43	7.53	8.63	42.59	46.00	3.41	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
41.64	18.90	1.74	18.74	39.38	40.00	0.62	Peak
113.42	18.41	2.88	17.72	39.01	43.50	4.49	Peak
167.74	16.08	3.50	22.85	42.43	43.50	1.07	Peak
241.46	18.86	3.92	18.91	41.69	46.00	4.31	Peak
458.74	23.22	5.94	11.40	40.56	46.00	5.44	Peak
799.21	26.49	7.56	10.41	44.46	46.00	1.54	Peak

Mode	---	Frequency	RX 2437MHz
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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
159.01	16.49	3.41	17.91	37.81	43.50	5.69	Peak
242.43	18.91	3.93	22.47	45.31	46.00	0.69	Peak
262.80	19.52	4.08	21.33	44.93	46.00	1.07	Peak
296.75	19.81	4.34	16.45	40.60	46.00	5.40	Peak
453.89	23.16	5.93	12.68	41.77	46.00	4.23	Peak
797.27	26.46	7.54	9.47	43.47	46.00	2.53	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
42.61	18.40	1.75	19.33	39.48	40.00	0.52	Peak
113.42	18.41	2.88	18.12	39.41	43.50	4.09	Peak
164.83	16.21	3.46	23.06	42.73	43.50	0.77	Peak
240.49	18.81	3.92	18.74	41.47	46.00	4.53	Peak
454.86	23.16	5.93	11.75	40.84	46.00	5.16	Peak
796.30	26.46	7.54	9.50	43.50	46.00	2.50	Peak

● BLE 測試模式

Mode	BLE	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
153.19	16.90	3.37	17.24	37.51	43.50	5.99	Peak
240.49	18.81	3.92	22.46	45.19	46.00	0.81	Peak
261.83	19.51	4.07	21.33	44.91	46.00	1.09	Peak
296.75	19.81	4.34	16.22	40.37	46.00	5.63	Peak
453.89	23.16	5.93	12.76	41.85	46.00	4.15	Peak
794.36	26.43	7.53	8.12	42.08	46.00	3.92	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
42.61	18.40	1.75	19.39	39.54	40.00	0.46	Peak
166.77	16.13	3.49	22.87	42.49	43.50	1.01	Peak
243.40	18.97	3.94	19.26	42.17	46.00	3.83	Peak
371.44	21.79	5.41	9.68	36.88	46.00	9.12	Peak
458.74	23.22	5.94	11.33	40.49	46.00	5.51	Peak
794.36	26.43	7.53	10.56	44.52	46.00	1.48	Peak

Mode	---	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
159.98	16.45	3.41	18.04	37.90	43.50	5.60	Peak
237.58	18.59	3.90	22.49	44.98	46.00	1.02	Peak
260.86	19.50	4.06	21.47	45.03	46.00	0.97	Peak
272.50	19.60	4.15	19.46	43.21	46.00	2.79	Peak
451.95	23.14	5.93	13.56	42.63	46.00	3.37	Peak
799.21	26.49	7.56	10.14	44.19	46.00	1.81	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
43.58	17.90	1.77	19.65	39.32	40.00	0.68	Peak
113.42	18.41	2.88	18.06	39.35	43.50	4.15	Peak
166.77	16.13	3.49	22.98	42.60	43.50	0.90	Peak
240.49	18.81	3.92	18.65	41.38	46.00	4.62	Peak
457.77	23.20	5.94	11.83	40.97	46.00	5.03	Peak
799.21	26.49	7.56	10.40	44.45	46.00	1.55	Peak

2.2. 1000MHz 以上頻率範圍，其他不必要發射量測

● Wireless LAN 模式

Mode	802.11b	Frequency	TX 2437MHz
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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
1196.00	25.47	3.91	20.88	50.26	54.00	3.74	Peak
1398.00	25.35	4.66	16.50	46.51	54.00	7.49	Peak
1492.00	25.30	5.00	17.70	48.00	54.00	6.00	Peak
1584.00	25.77	5.01	17.63	48.41	54.00	5.59	Peak
1794.00	26.85	5.04	17.98	49.87	54.00	4.13	Peak
1998.00	27.77	5.07	14.49	47.33	54.00	6.67	Peak
2094.00	27.92	5.35	12.92	46.19	54.00	7.81	Peak
2692.00	29.10	6.62	14.31	50.03	54.00	3.97	Peak
2800.00	29.45	6.68	12.42	48.55	54.00	5.45	Peak
3148.00	30.39	7.10	16.01	53.50	54.00	0.50	Peak
4740.00	32.69	9.00	11.31	53.00	54.00	1.00	Peak
4874.00	32.96	9.07	10.88	52.91	54.00	1.09	Peak
5399.00	33.83	9.45	-3.15	40.13	54.00	13.87	Average
5399.00	33.83	9.45	18.63	61.91	74.00	12.09	Peak
7310.00	36.01	10.59	1.64	48.24	54.00	5.76	Average
7310.00	36.01	10.59	7.77	54.37	74.00	19.63	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
1196.00	25.47	3.91	21.31	50.69	54.00	3.31	Peak
1520.00	25.42	5.00	14.75	45.17	54.00	8.83	Peak
1600.00	25.88	5.02	17.49	48.39	54.00	5.61	Peak
1794.00	26.85	5.04	16.25	48.14	54.00	5.86	Peak
2000.00	27.80	5.07	15.15	48.02	54.00	5.98	Peak
2096.00	27.92	5.35	14.81	48.08	54.00	5.92	Peak
2696.00	29.10	6.62	12.41	48.13	54.00	5.87	Peak
3150.00	30.39	7.10	16.37	53.86	54.00	0.14	Peak
4712.00	32.63	8.98	9.86	51.47	54.00	2.53	Peak
4874.00	32.96	9.07	10.97	53.00	54.00	1.00	Peak
5390.00	33.83	9.43	-4.32	38.94	54.00	15.06	Average
5390.00	33.83	9.43	16.77	60.03	74.00	13.97	Peak
7310.00	36.01	10.59	6.69	53.29	74.00	20.71	Peak

● BLE 測試模式

Mode	BLE	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
1192.00	25.47	3.90	20.19	49.56	54.00	4.44	Peak
1518.00	25.40	5.00	16.95	47.35	54.00	6.65	Peak
1584.00	25.77	5.01	18.16	48.94	54.00	5.06	Peak
1736.00	26.57	5.03	19.05	50.65	54.00	3.35	Peak
1798.00	26.88	5.04	17.92	49.84	54.00	4.16	Peak
1992.00	27.75	5.07	14.63	47.45	54.00	6.55	Peak
2084.00	27.91	5.31	14.07	47.29	54.00	6.71	Peak
2692.00	29.10	6.62	13.88	49.60	54.00	4.40	Peak
2816.00	29.51	6.69	13.46	49.66	54.00	4.34	Peak
3168.00	30.42	7.13	-3.40	34.15	54.00	19.85	Average
3168.00	30.42	7.13	17.41	54.96	74.00	19.04	Peak
4706.00	32.63	8.98	9.90	51.51	74.00	22.49	Peak
5399.00	33.83	9.45	-3.09	40.19	54.00	13.81	Average
5399.00	33.83	9.45	17.45	60.73	74.00	13.27	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
1192.00	25.47	3.90	22.25	51.62	54.00	2.38	Peak
1518.00	25.40	5.00	16.48	46.88	54.00	7.12	Peak
1600.00	25.88	5.02	17.23	48.13	54.00	5.87	Peak
1720.00	26.50	5.03	16.67	48.20	54.00	5.80	Peak
1788.00	26.82	5.04	16.48	48.34	54.00	5.66	Peak
1994.00	27.77	5.07	17.58	50.42	54.00	3.58	Peak
2100.00	27.93	5.37	15.07	48.37	54.00	5.63	Peak
2692.00	29.10	6.62	13.25	48.97	54.00	5.03	Peak
3152.00	30.39	7.10	15.98	53.47	54.00	0.53	Peak
4730.00	32.69	9.00	8.75	50.44	54.00	3.56	Peak
5399.00	33.83	9.45	-3.47	39.81	54.00	14.19	Average
5399.00	33.83	9.45	16.84	60.12	74.00	13.88	Peak