

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，選擇低、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 1.1 ~1.2：

Normal 模式

模式	動作狀態	基本頻率	量測頻率範圍
Normal	Operating	---	30-1000MHz
			1000-25000MHz

Wireless LAN 模式

支援 IEEE 802.11b/g/n，依測試要求評估低、中、高頻率，並檢附三頻率之最差模式於此測試報告中。

模式	動作狀態	基本頻率	量測頻率範圍
802.11b	發射	2412MHz (CH1)	1000-25000MHz
802.11g	發射	2412MHz (CH11)*	30-1000MHz
			1000-25000MHz
802.11n-HT20	發射	2412MHz (CH11)	1000-25000MHz
802.11n-HT40	發射	2437MHz(CH6)	1000-25000MHz
---	接收	2437MHz(CH6)	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 1.3。

模式	動作狀態	基本頻率	量測頻率範圍
802.11b	發射	2412MHz (CH1)	2310-2420MHz
		2462MHz (CH11)	2430-2530MHz
802.11g	發射	2412MHz (CH1)	2310-2420MHz
		2462MHz (CH11)	2430-2530MHz
802.11n-HT20	發射	2412MHz (CH1)	2310-2430MHz
		2462MHz (CH11)	2450-2530MHz
802.11n-HT40	發射	2422MHz (CH3)	2310-2450MHz
		2452MHz (CH9)	2430-2530MHz

測試日期	2019/10/31 ~ 11/26	環境溫/濕度	23 ~ 25°C/48 ~ 49%
測試電壓	DC 12V (經 DC 電源供應器供電)	測試人員	Kuper Hsu

1.1. 30-1000MHz 頻率範圍，其他不必要發射量測

● Normal 模式

Mode	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
31.94	24.34	1.23	2.00	27.57	40.00	12.43	Peak
197.81	16.18	3.40	14.31	33.89	43.50	9.61	Peak
240.49	18.38	3.85	22.60	44.83	46.00	1.17	Peak
484.93	23.53	6.63	3.17	33.33	46.00	12.67	Peak
874.87	27.11	8.32	6.38	41.81	46.00	4.19	Peak
969.93	27.84	8.87	2.36	39.07	54.00	14.93	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
45.52	16.80	1.49	13.76	32.05	40.00	7.95	Peak
167.74	16.05	3.10	9.50	28.65	43.50	14.85	Peak
240.49	18.38	3.85	10.83	33.06	46.00	12.94	Peak
829.28	26.75	8.07	2.88	37.70	46.00	8.30	Peak
903.00	27.34	8.47	2.87	38.68	46.00	7.32	Peak
992.24	28.02	9.00	4.11	41.13	54.00	12.87	Peak

● Wireless LAN 模式

Mode	802.11g	Frequency	TX 2412MHz
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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
31.94	24.34	1.23	0.38	25.95	40.00	14.05	Peak
196.84	16.12	3.39	14.84	34.35	43.50	9.15	Peak
238.55	18.26	3.83	22.75	44.84	46.00	1.16	Peak
484.93	23.53	6.63	3.09	33.25	46.00	12.75	Peak
874.87	27.11	8.32	5.31	40.74	46.00	5.26	Peak
997.09	28.04	9.02	7.30	44.36	54.00	9.64	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
45.52	16.80	1.49	14.87	33.16	40.00	6.84	Peak
167.74	16.05	3.10	9.68	28.83	43.50	14.67	Peak
238.55	18.26	3.83	11.67	33.76	46.00	12.24	Peak
666.32	25.22	7.21	2.52	34.95	46.00	11.05	Peak
920.46	27.46	8.58	2.80	38.84	46.00	7.16	Peak
995.15	28.04	9.01	1.67	38.72	54.00	15.28	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
31.94	24.34	1.23	1.84	27.41	40.00	12.59	Peak
198.78	16.21	3.41	15.11	34.73	43.50	8.77	Peak
243.40	18.50	3.88	22.08	44.46	46.00	1.54	Peak
480.08	23.47	6.59	3.80	33.86	46.00	12.14	Peak
874.87	27.11	8.32	5.75	41.18	46.00	4.82	Peak
967.02	27.82	8.85	3.03	39.70	54.00	14.30	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	17.81	1.46	12.49	31.76	40.00	8.24	Peak
167.74	16.05	3.10	9.47	28.62	43.50	14.88	Peak
240.49	18.38	3.85	11.16	33.39	46.00	12.61	Peak
567.38	24.43	6.84	1.97	33.24	46.00	12.76	Peak
827.34	26.72	8.06	3.04	37.82	46.00	8.18	Peak
993.21	28.02	9.00	3.80	40.82	54.00	13.18	Peak

1.2. 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。

● Normal 模式

Mode	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
4875.00	33.50	8.51	5.15	47.16	54.00	6.84	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
4875.00	33.50	8.51	3.74	45.75	54.00	8.25	Peak

● Wireless LAN 模式

Mode	802.11b	Frequency	TX 2412MHz
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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
4824.00	33.35	8.46	4.67	46.48	54.00	7.52	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
4824.00	33.35	8.46	5.71	47.52	54.00	6.48	Peak

Mode	802.11g	Frequency	TX 2412MHz
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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
4824.00	33.35	8.46	4.71	46.52	54.00	7.48	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
4824.00	33.35	8.46	4.30	46.11	54.00	7.89	Peak

Mode	802.11n-HT20	Frequency	TX 2412MHz
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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
4824.00	33.35	8.46	4.79	46.60	54.00	7.40	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
4824.00	33.35	8.46	4.45	46.26	54.00	7.74	Peak

Mode	802.11n-HT40	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
4874.00	33.50	8.51	3.58	45.59	54.00	8.41	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
4874.00	33.50	8.51	3.28	45.29	54.00	8.71	Peak

Mode	---	Frequency	RX 2437MHz
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Antenna at Horizontal Polarization

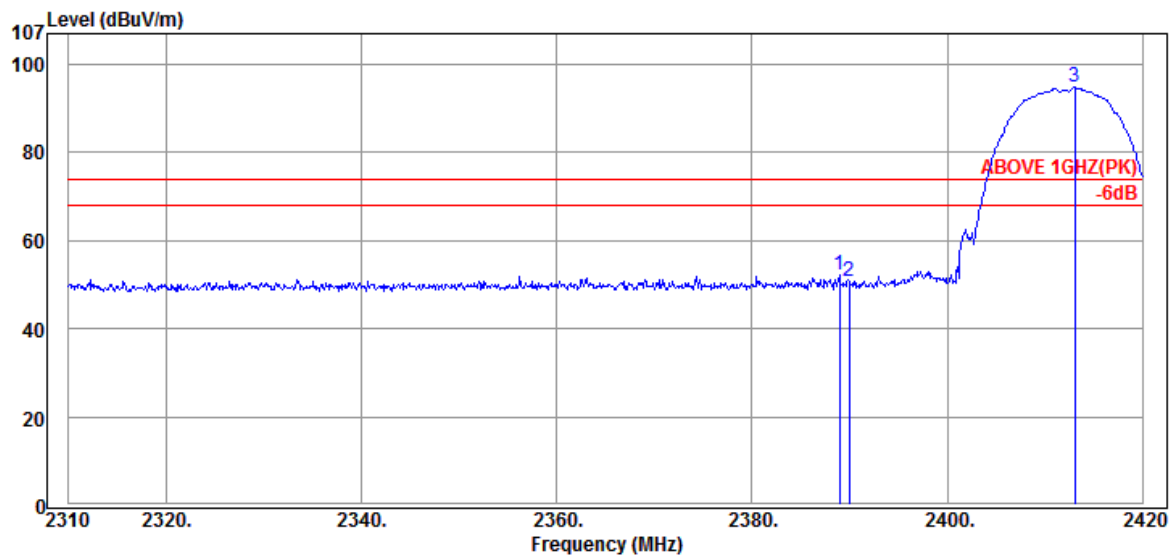
Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
4874.00	33.50	8.51	6.17	48.18	54.00	5.82	Peak

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
4874.00	33.50	8.51	5.78	47.79	54.00	6.21	Peak

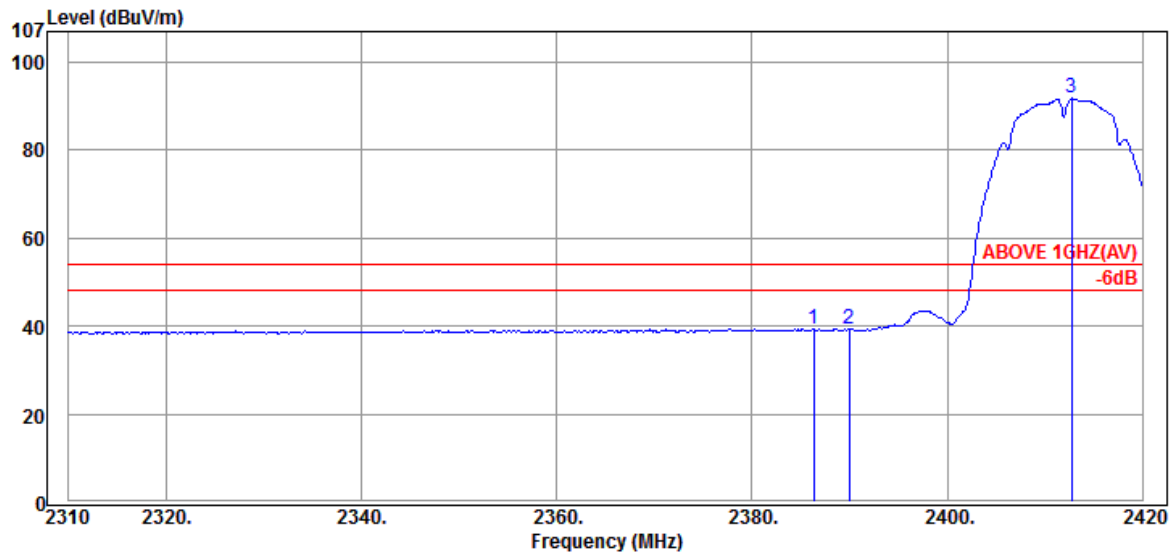
1.3. 禁用頻帶量測結果 (其他不必要發射)

Mode	802.11b	Frequency	TX 2412MHz
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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
2388.98	28.31	6.02	17.75	52.08	74.00	21.92	Peak
2389.97	28.32	6.02	16.33	50.67	74.00	23.33	Peak
@ 2413.07	28.43	6.05	60.43	94.91	---	---	Peak

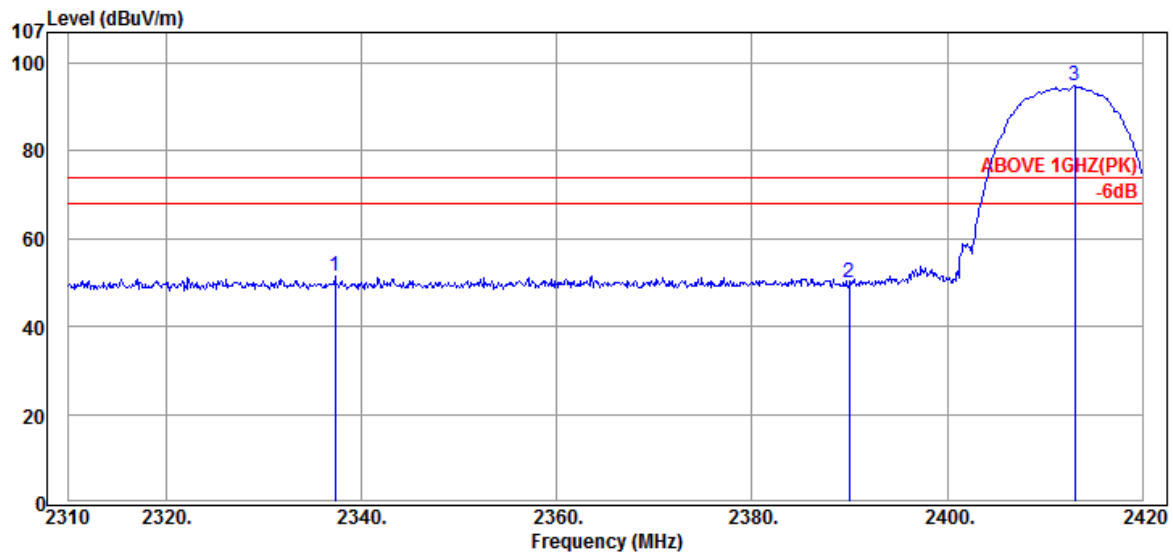


Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
2386.34	28.29	6.02	5.18	39.49	54.00	14.51	Average
2389.97	28.32	6.02	4.88	39.22	54.00	14.78	Average
@ 2412.74	28.43	6.05	57.30	91.78	---	---	Average

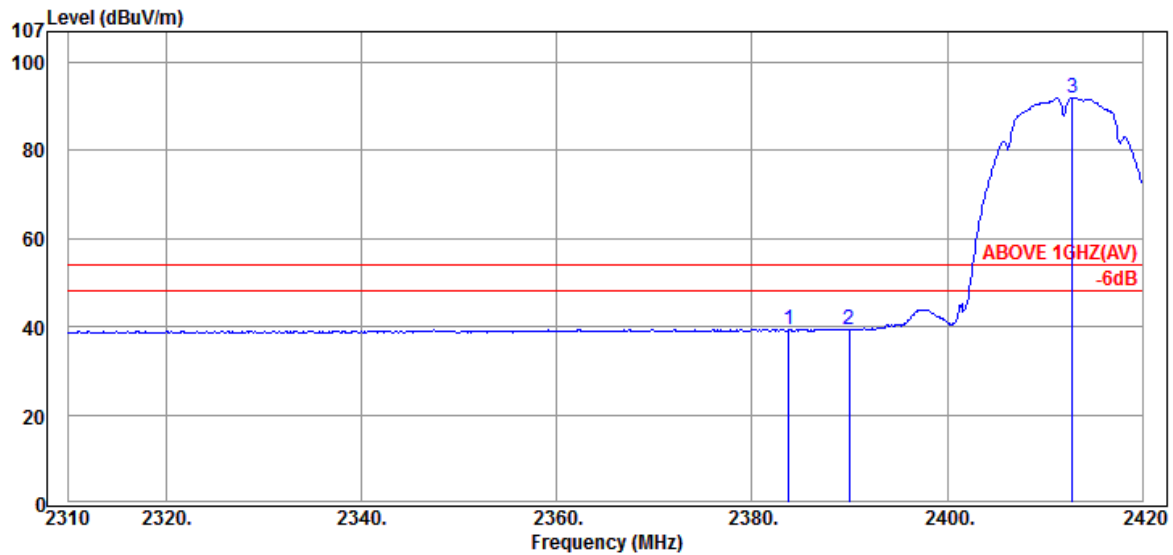
備註：“@”為主波，在此章節是不予以判定。

Mode	802.11b	Frequency	TX 2412MHz
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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
2337.28	27.95	5.96	17.59	51.50	74.00	22.50	Peak
2389.97	28.32	6.02	15.65	49.99	74.00	24.01	Peak
@ 2413.07	28.43	6.05	60.30	94.78	---	---	Peak

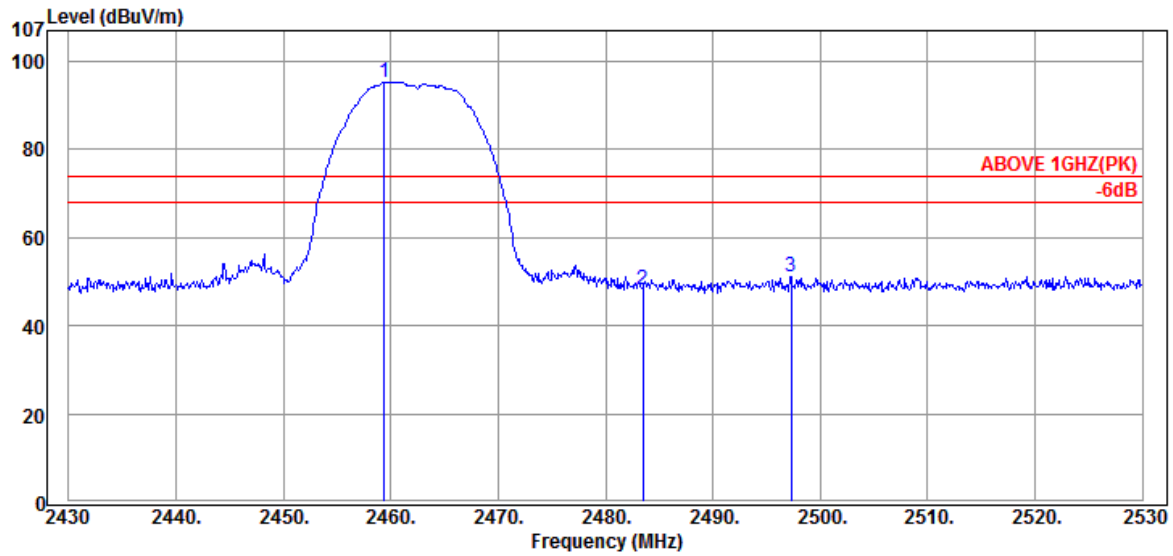


Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
2383.81	28.27	6.02	5.18	39.47	54.00	14.53	Average
2389.97	28.32	6.02	4.84	39.18	54.00	14.82	Average
@ 2412.85	28.43	6.05	57.58	92.06	---	---	Average

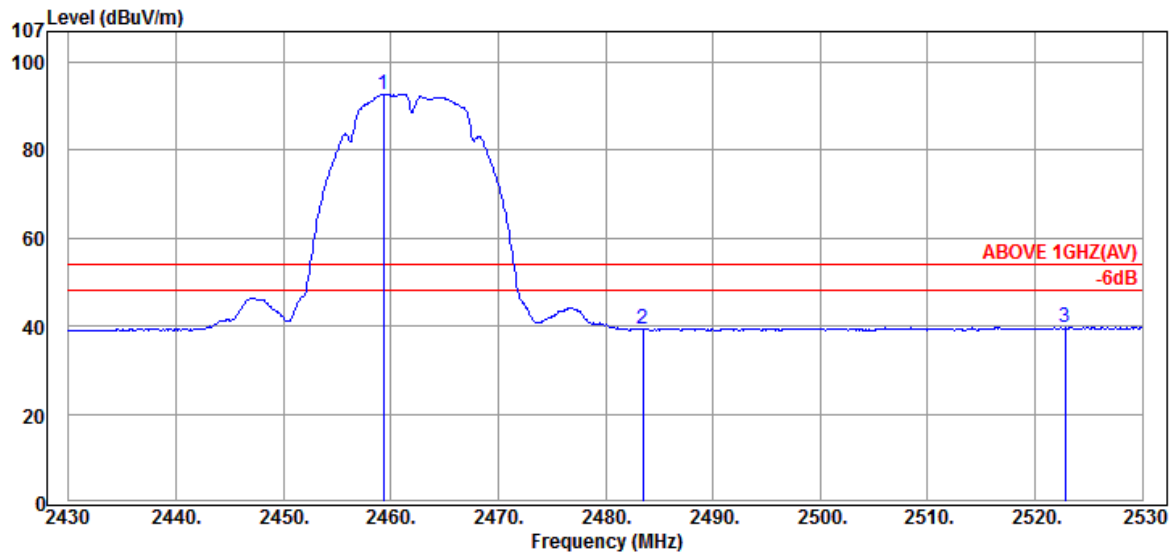
備註：“@”為主波，在此章節是不予以判定。

Mode	802.11b	Frequency	TX 2462MHz
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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
@	2459.40	28.56	6.10	60.70	95.36	---	---	Peak
	2483.50	28.70	6.13	13.49	48.32	74.00	25.68	Peak
	2497.30	28.78	6.15	16.22	51.15	74.00	22.85	Peak

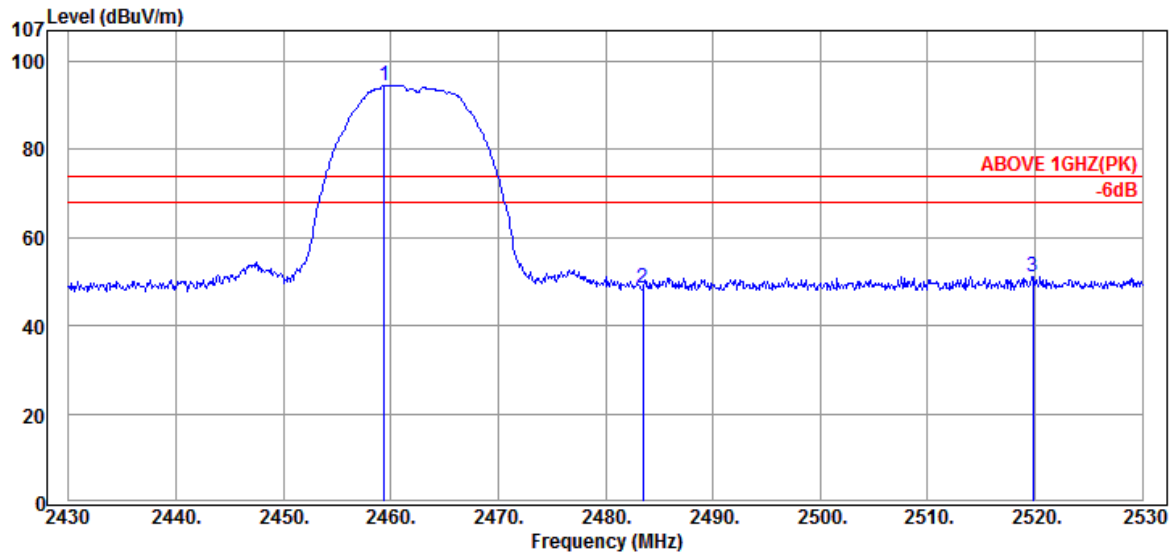


Antenna at Horizontal Polarization

	Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
@	2459.30	28.56	6.10	58.17	92.83	---	---	Average
	2483.50	28.70	6.13	4.38	39.21	54.00	14.79	Average
	2522.80	28.85	6.18	4.71	39.74	54.00	14.26	Average

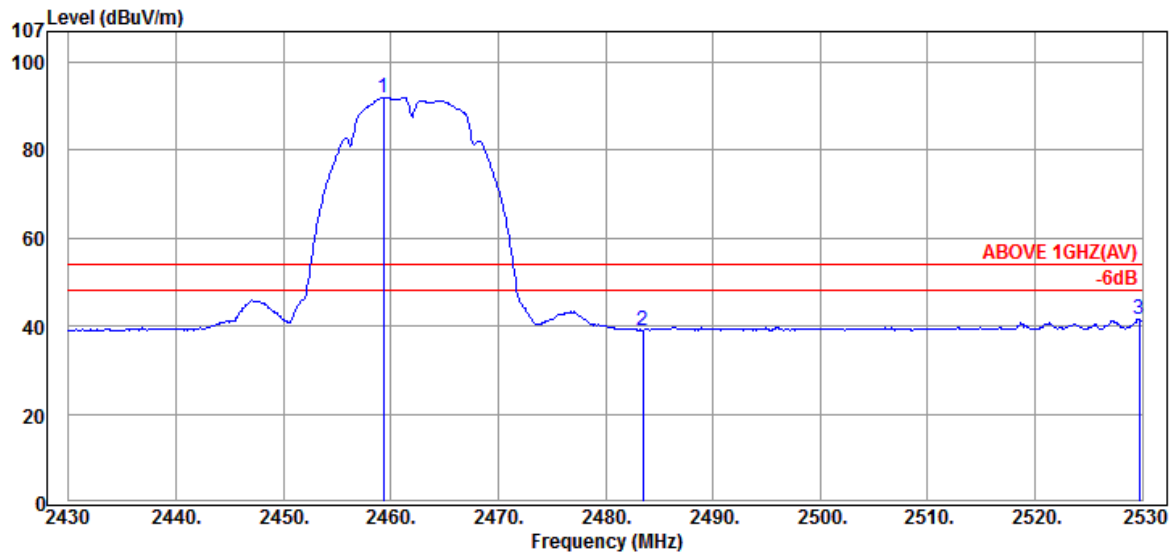
備註：“@”為主波，在此章節是不予以判定。

Mode	802.11b	Frequency	TX 2462MHz
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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
@	2459.40	28.56	6.10	59.90	94.56	---	---	Peak
	2483.50	28.70	6.13	13.75	48.58	74.00	25.42	Peak
	2519.80	28.84	6.18	16.14	51.16	74.00	22.84	Peak

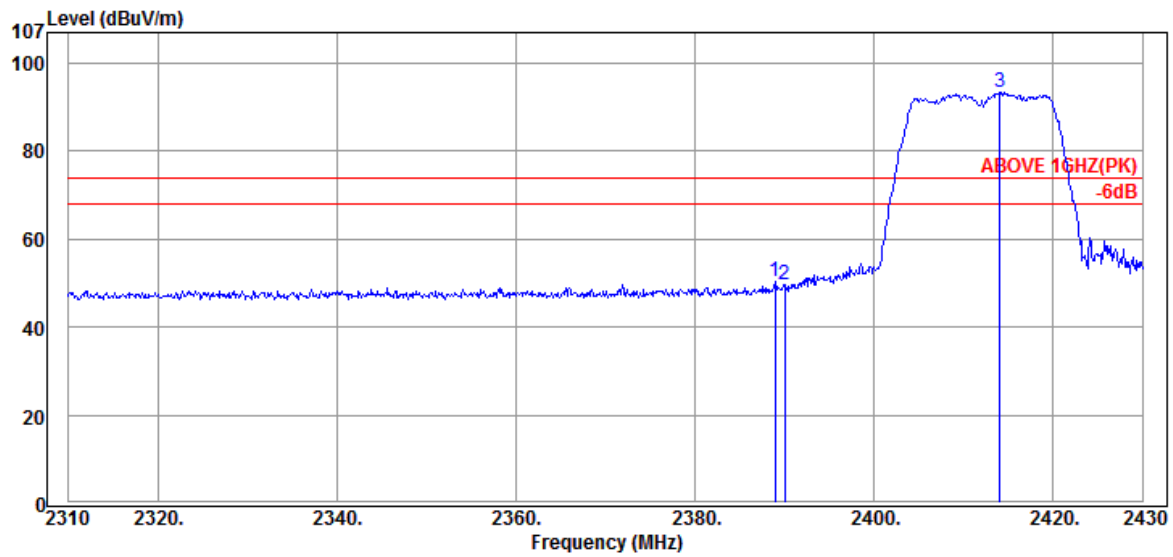


Antenna at Vertical Polarization

	Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
@	2459.30	28.56	6.10	57.35	92.01	---	---	Average
	2483.50	28.70	6.13	4.24	39.07	54.00	14.93	Average
	2529.70	28.86	6.19	6.62	41.67	54.00	12.33	Average

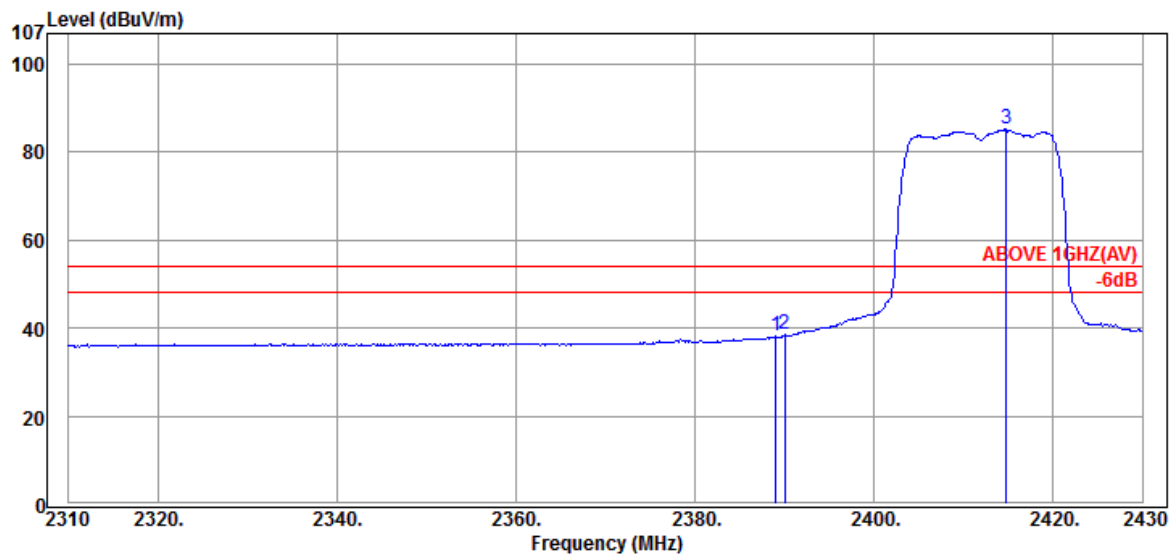
備註：“@”為主波，在此章節是不予以判定。

Mode	802.11g	Frequency	TX 2412MHz
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Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBUV)	Emission Level (dBUV/m)	Limits (dBUV/m)	Margin (dB)	Detector
2388.96	28.31	6.02	16.20	50.53	74.00	23.47	Peak
2390.04	28.32	6.03	15.11	49.46	74.00	24.54	Peak
@ 2414.04	28.43	6.05	58.88	93.36	---	---	Peak

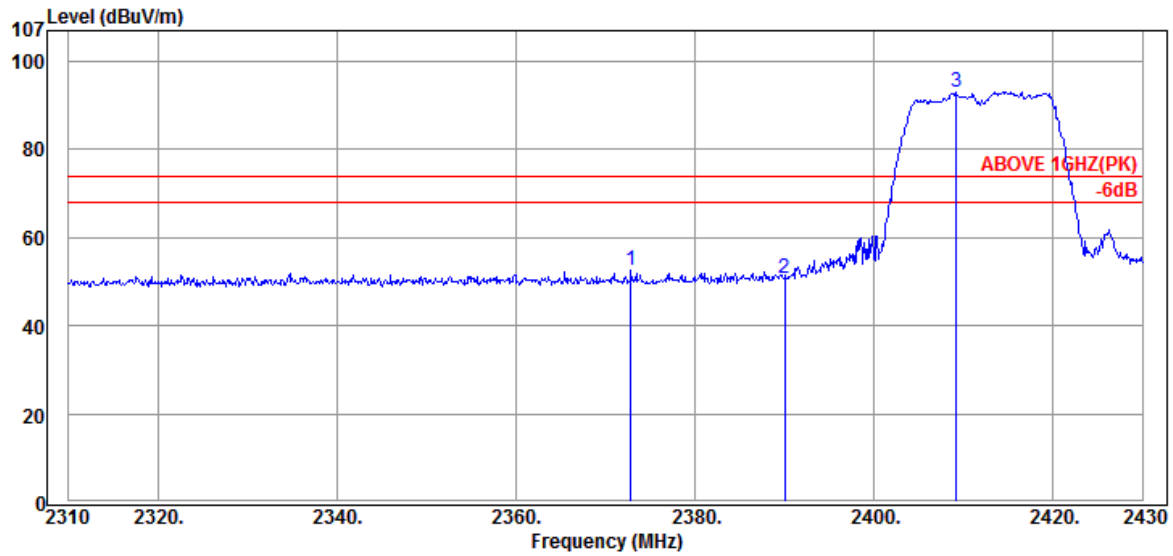


Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBUV)	Emission Level (dBUV/m)	Limits (dBUV/m)	Margin (dB)	Detector
2389.08	28.31	6.02	3.85	38.18	54.00	15.82	Average
2390.04	28.32	6.03	4.22	38.57	54.00	15.43	Average
@ 2414.76	28.43	6.05	50.75	85.23	---	---	Average

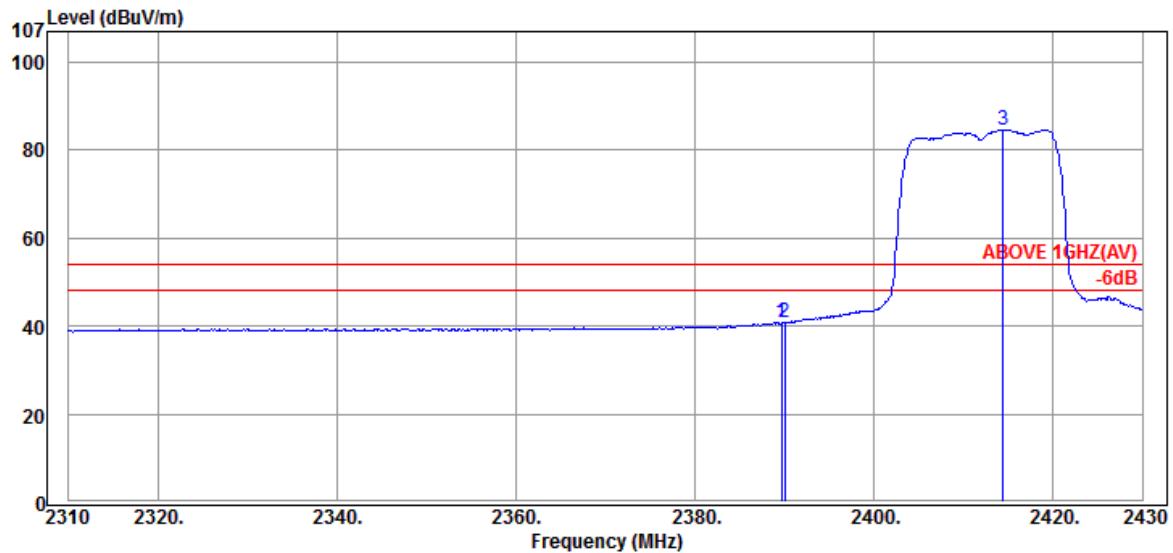
備註：“@”為主波，在此章節是不予以判定。

Mode	802.11g	Frequency	TX 2412MHz
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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
2372.88	28.18	6.01	18.57	52.76	74.00	21.24	Peak
2390.04	28.32	6.03	16.30	50.65	74.00	23.35	Peak
@ 2409.24	28.42	6.05	58.55	93.02	---	---	Peak

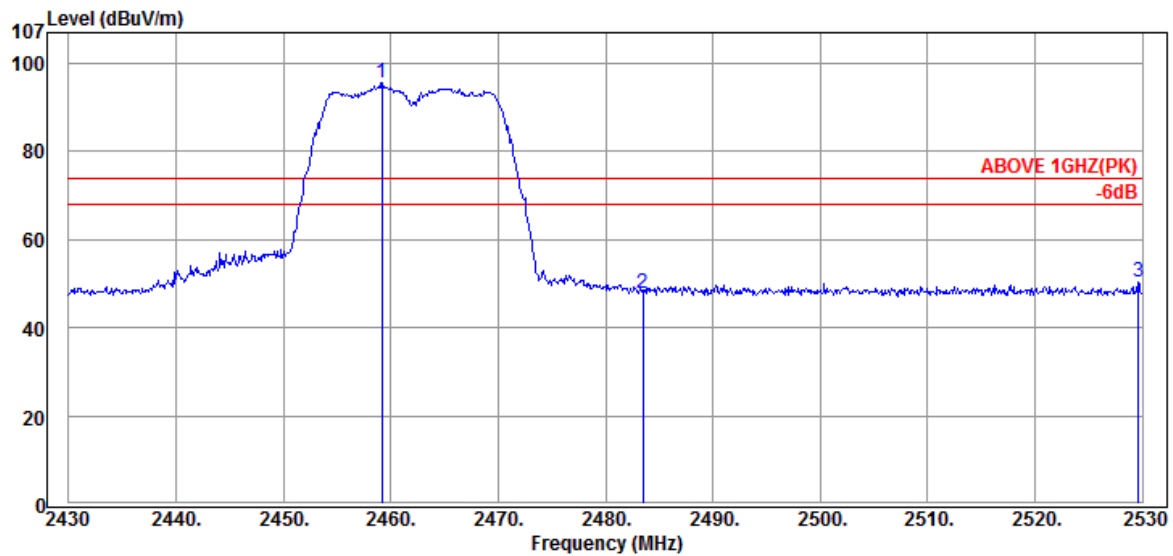


Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
2389.68	28.32	6.02	6.52	40.86	54.00	13.14	Average
2390.04	28.32	6.03	6.43	40.78	54.00	13.22	Average
@ 2414.40	28.43	6.05	50.22	84.70	---	---	Average

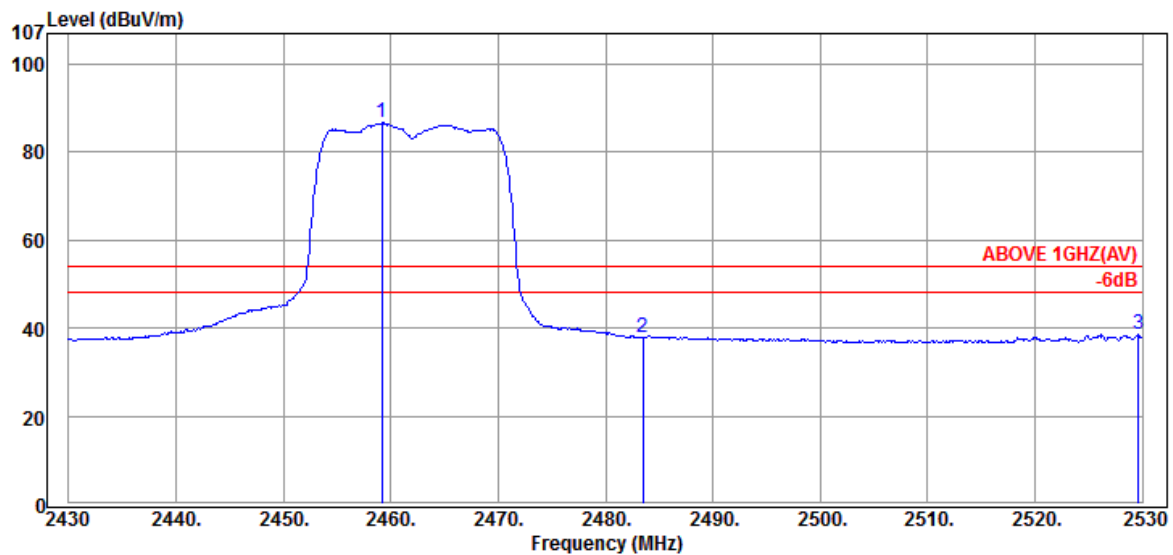
備註：“@”為主波，在此章節是不予以判定。

Mode	802.11g	Frequency	TX 2462MHz
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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
@	2459.20	28.56	6.10	61.09	95.75	---	---	Peak
	2483.50	28.70	6.13	13.14	47.97	74.00	26.03	Peak
	2529.60	28.86	6.19	15.17	50.22	74.00	23.78	Peak

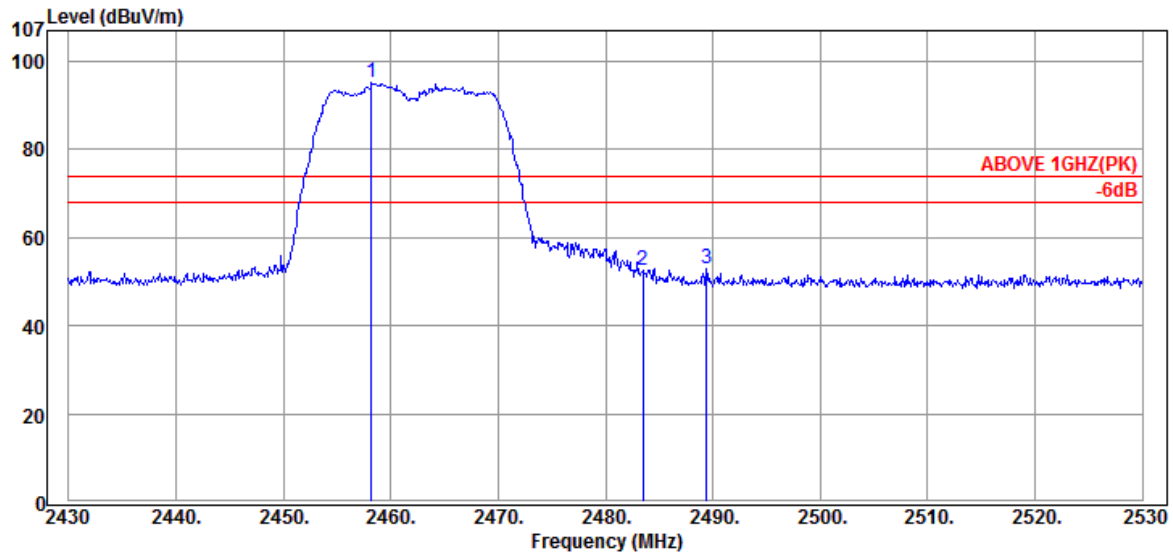


Antenna at Horizontal Polarization

	Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
@	2459.20	28.56	6.10	51.96	86.62	---	---	Average
	2483.50	28.70	6.13	3.16	37.99	54.00	16.01	Average
	2529.60	28.86	6.19	3.40	38.45	54.00	15.55	Average

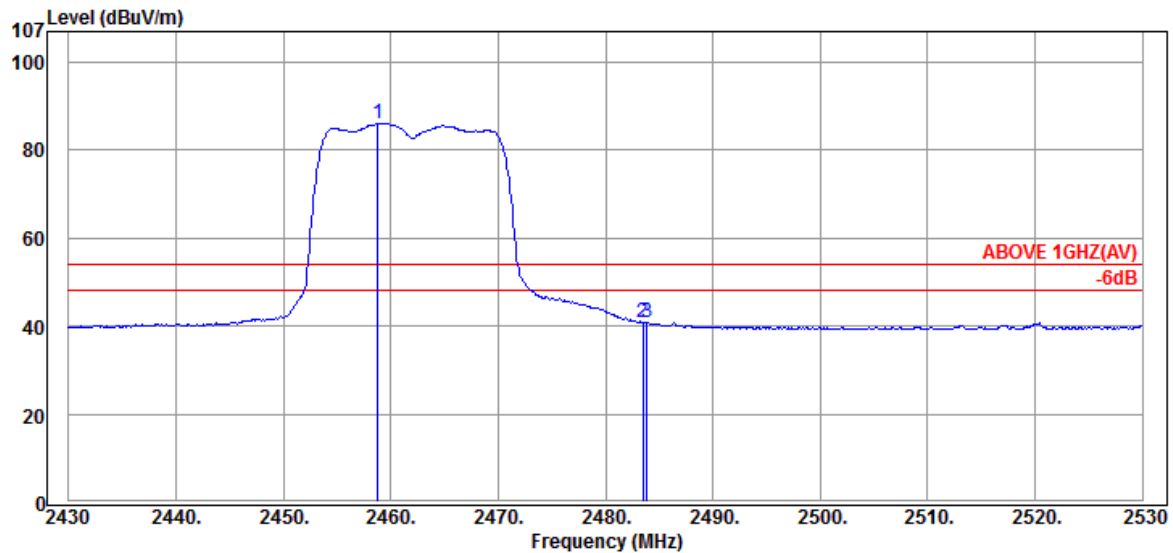
備註：“@”為主波，在此章節是不予以判定。

Mode	802.11g	Frequency	TX 2462MHz
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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
@	2458.20	28.55	6.10	60.43	95.08	---	---	Peak
	2483.50	28.70	6.13	17.71	52.54	74.00	21.46	Peak
	2489.40	28.74	6.14	18.13	53.01	74.00	20.99	Peak

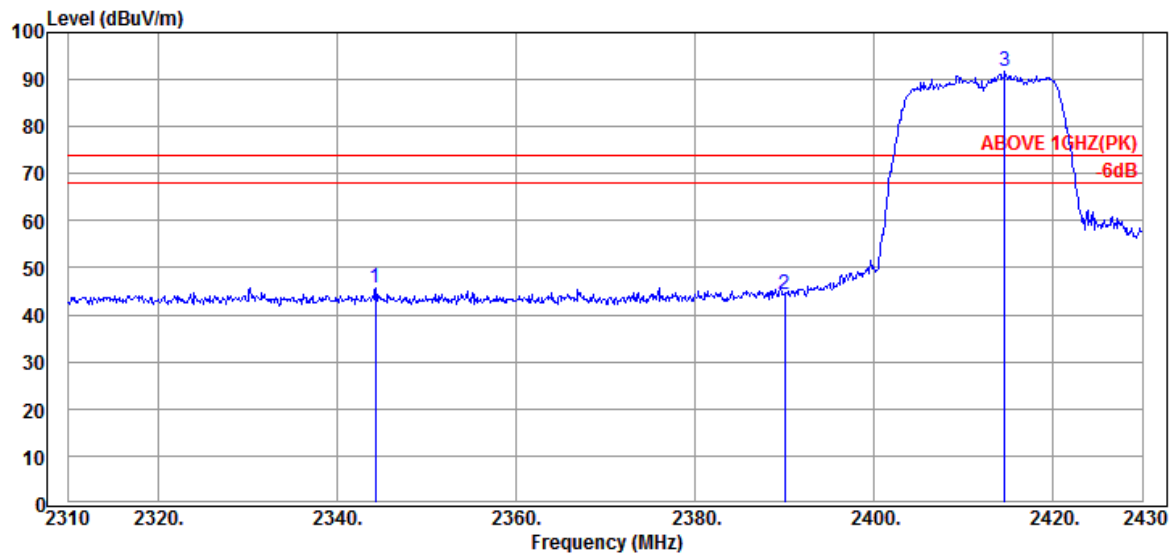


Antenna at Vertical Polarization

	Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
@	2458.80	28.55	6.10	51.54	86.19	---	---	Average
	2483.50	28.70	6.13	5.83	40.66	54.00	13.34	Average
	2483.90	28.70	6.13	5.98	40.81	54.00	13.19	Average

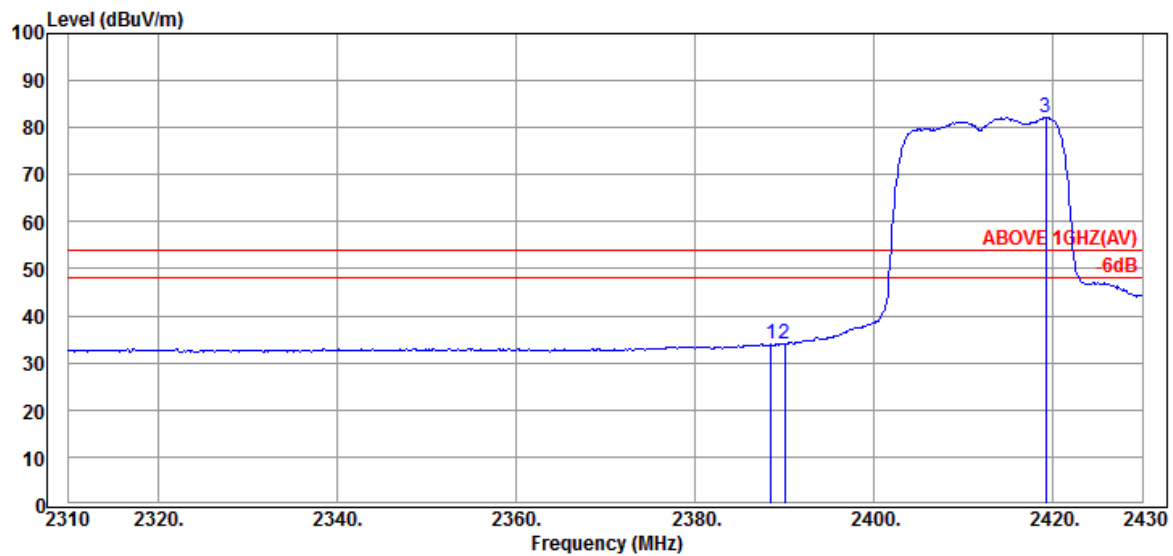
備註：“@”為主波，在此章節是不予以判定。

Mode	802.11n-HT20	Frequency	TX 2412MHz
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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
2344.32	27.98	5.97	11.80	45.75	74.00	28.25	Peak
2390.04	28.32	6.03	9.94	44.29	74.00	29.71	Peak
@ 2414.64	28.43	6.05	57.16	91.64	---	---	Peak

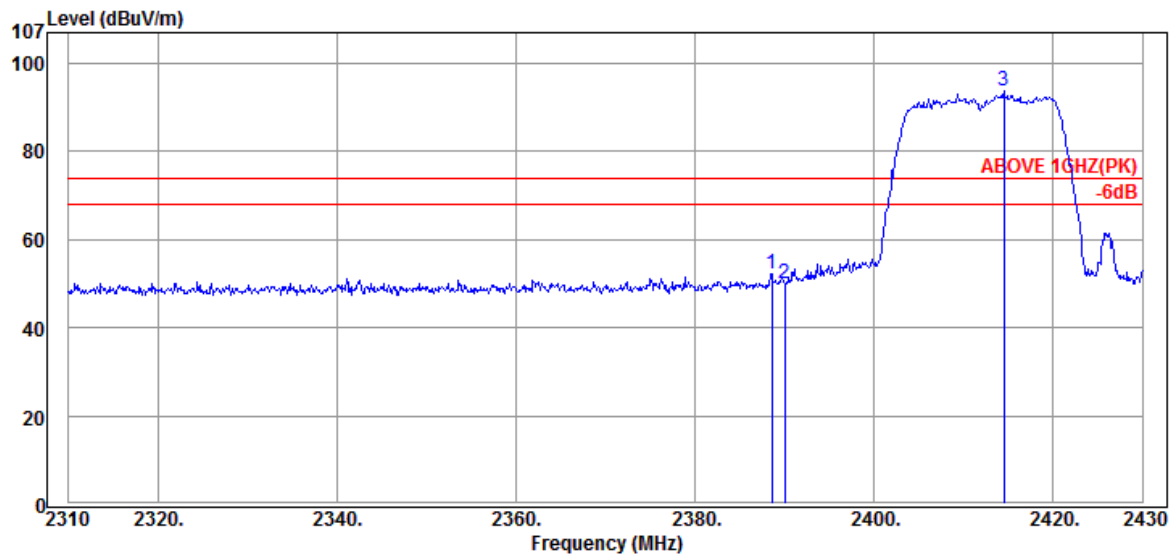


Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
2388.48	28.31	6.02	-0.32	34.01	54.00	19.99	Average
2390.04	28.32	6.03	-0.30	34.05	54.00	19.95	Average
@ 2419.20	28.44	6.06	47.63	82.13	---	---	Average

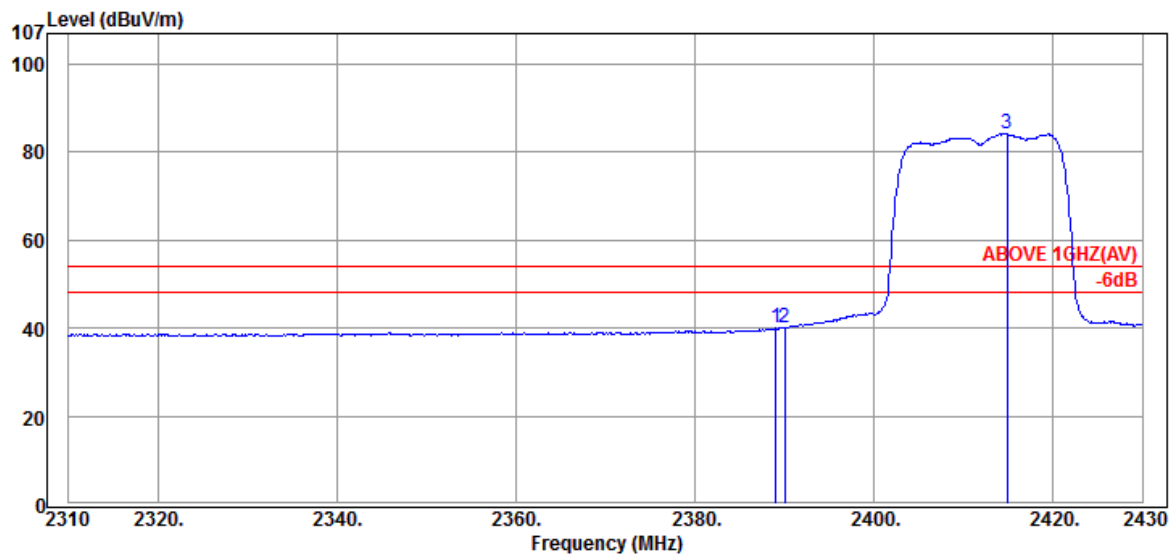
備註：“@”為主波，在此章節是不予以判定。

Mode	802.11n-HT20	Frequency	TX 2412MHz
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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
2388.60	28.31	6.02	17.93	52.26	74.00	21.74	Peak
2390.04	28.32	6.03	15.76	50.11	74.00	23.89	Peak
@ 2414.52	28.43	6.05	59.18	93.66	---	---	Peak

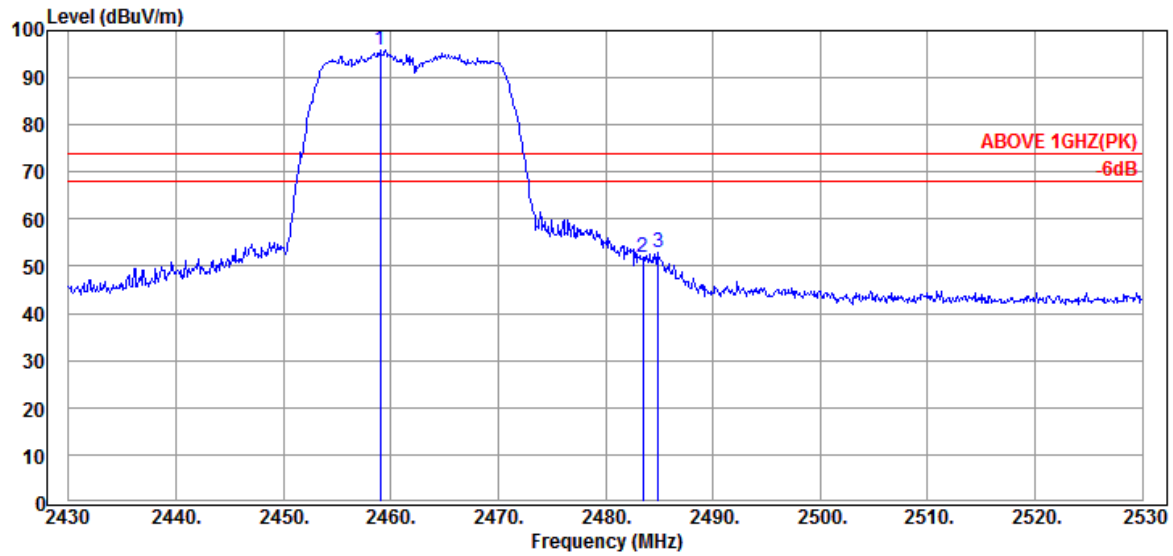


Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
2389.08	28.31	6.02	5.85	40.18	54.00	13.82	Average
2390.04	28.32	6.03	5.79	40.14	54.00	13.86	Average
@ 2414.88	28.43	6.05	49.72	84.20	---	---	Average

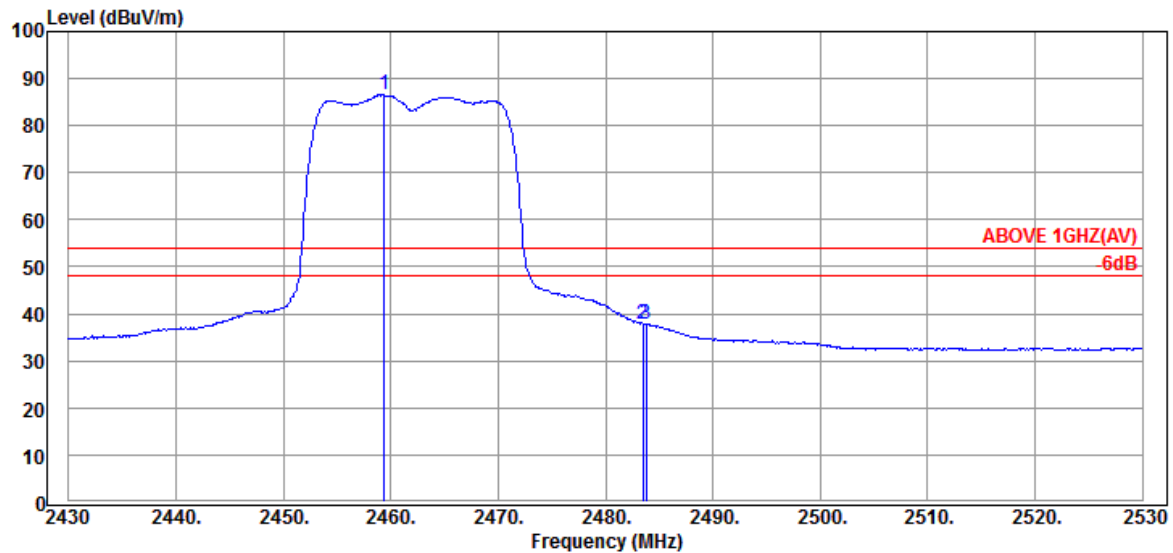
備註：“@”為主波，在此章節是不予以判定。

Mode	802.11n-HT20	Frequency	TX 2462MHz
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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
@	2459.00	28.55	6.10	61.34	95.99	---	---	Peak
	2483.50	28.70	6.13	17.05	51.88	74.00	22.12	Peak
	2484.90	28.71	6.13	18.06	52.90	74.00	21.10	Peak

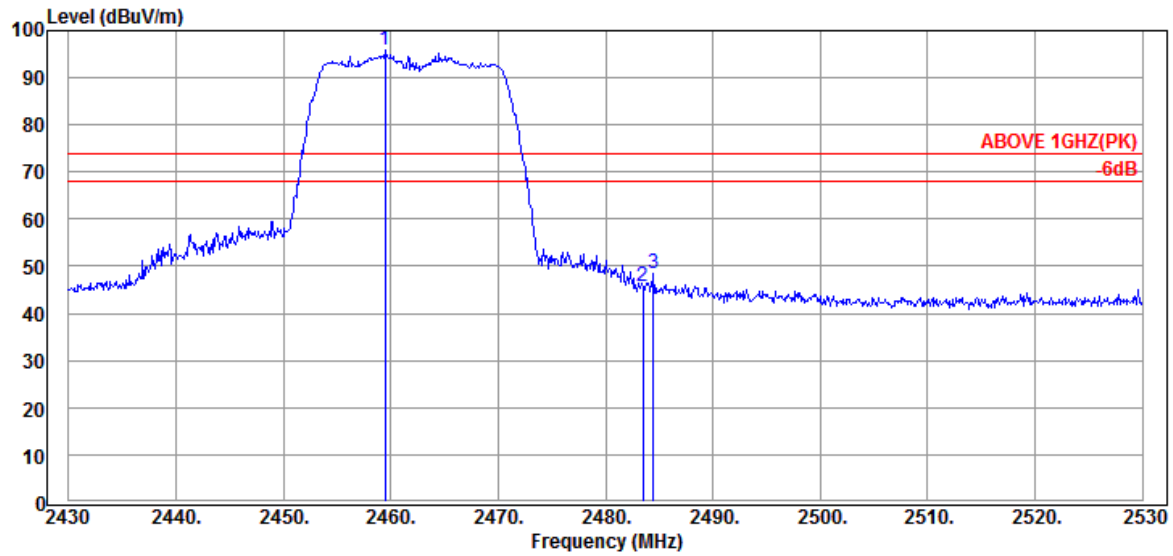


Antenna at Horizontal Polarization

	Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
@	2459.40	28.56	6.10	51.92	86.58	---	---	Average
	2483.50	28.70	6.13	3.13	37.96	54.00	16.04	Average
	2483.80	28.70	6.13	2.89	37.72	54.00	16.28	Average

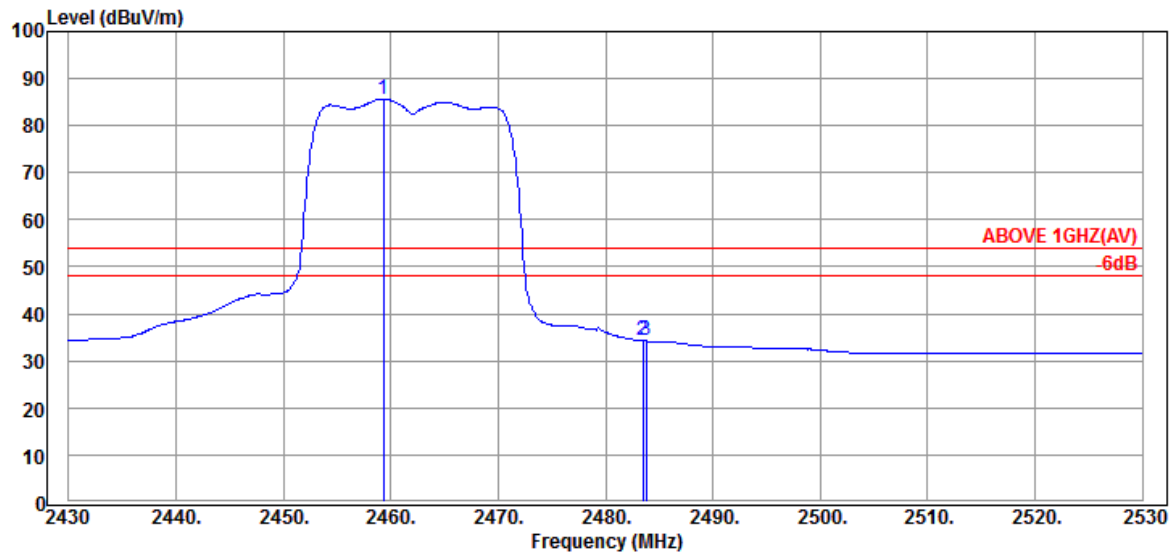
備註：“@”為主波，在此章節是不予以判定。

Mode	802.11n-HT20	Frequency	TX 2462MHz
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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
@	2459.50	28.56	6.10	61.18	95.84	---	---	Peak
	2483.50	28.70	6.13	10.94	45.77	74.00	28.23	Peak
	2484.50	28.71	6.13	13.52	48.36	74.00	25.64	Peak

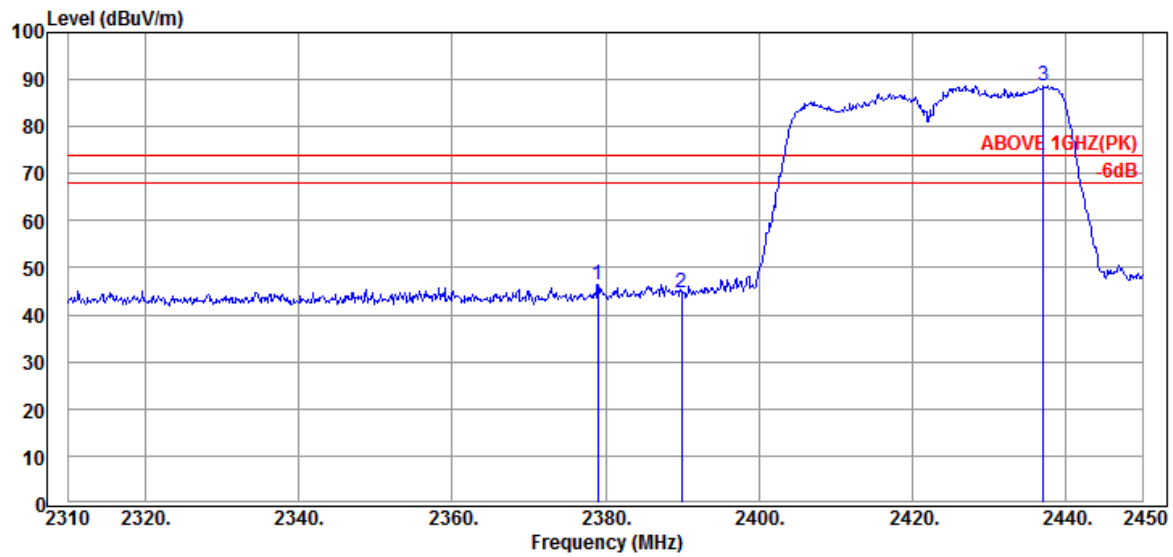


Antenna at Vertical Polarization

	Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
@	2459.30	28.56	6.10	51.03	85.69	---	---	Average
	2483.50	28.70	6.13	-0.59	34.24	54.00	19.76	Average
	2483.80	28.70	6.13	-0.63	34.20	54.00	19.80	Average

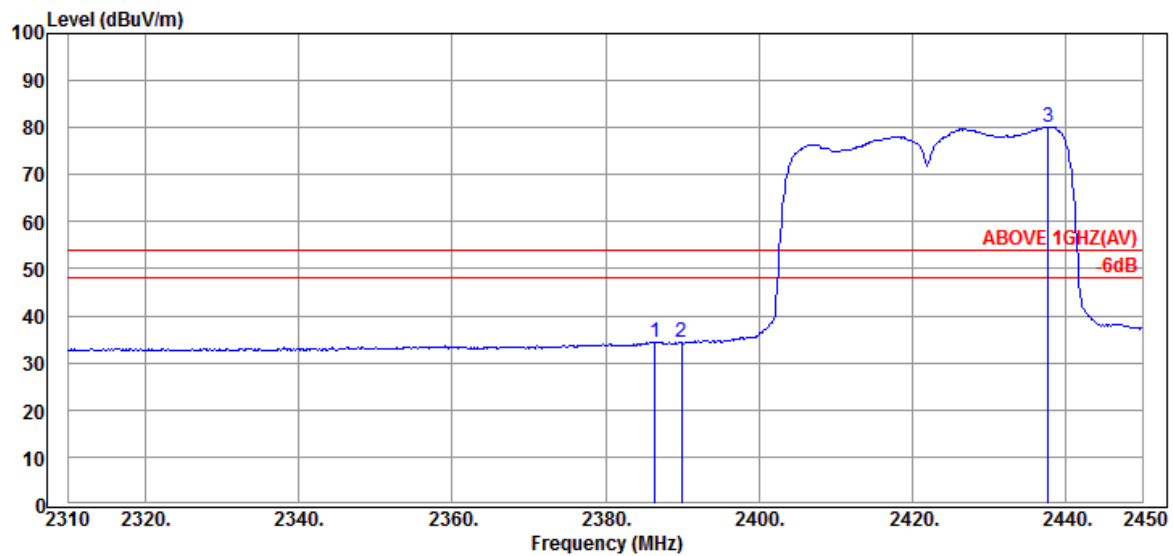
備註：“@”為主波，在此章節是不予以判定。

Mode	802.11n-HT40	Frequency	TX 2422MHz
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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
2379.02	28.23	6.01	12.26	46.50	74.00	27.50	Peak
2389.94	28.32	6.02	10.33	44.67	74.00	29.33	Peak
@ 2437.12	28.47	6.08	54.25	88.80	---	---	Peak

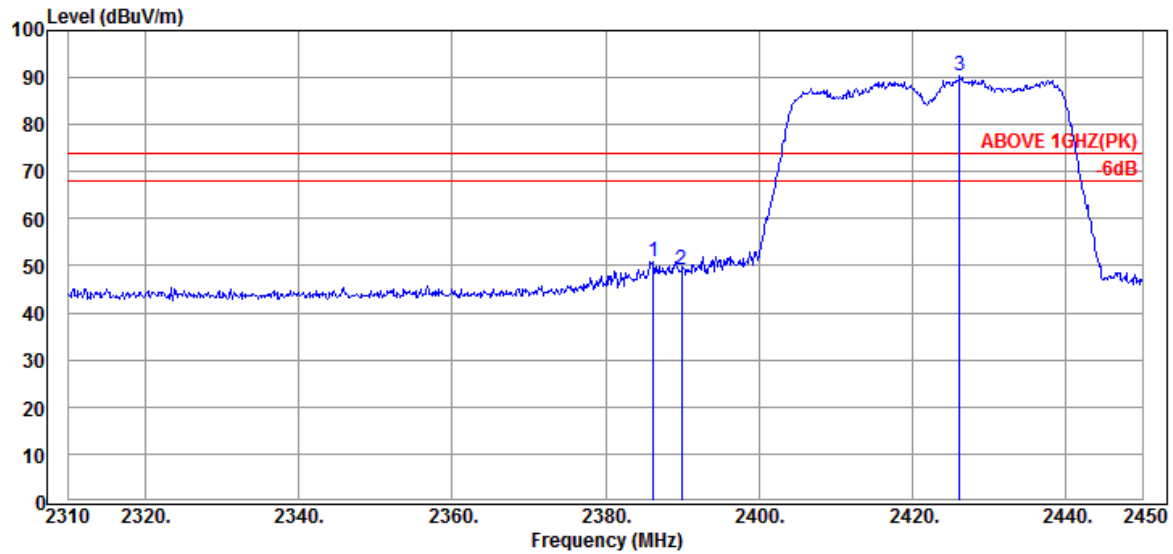


Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
2386.44	28.29	6.02	0.06	34.37	54.00	19.63	Average
2389.94	28.32	6.02	-0.14	34.20	54.00	19.80	Average
@ 2437.68	28.48	6.08	45.63	80.19	---	---	Average

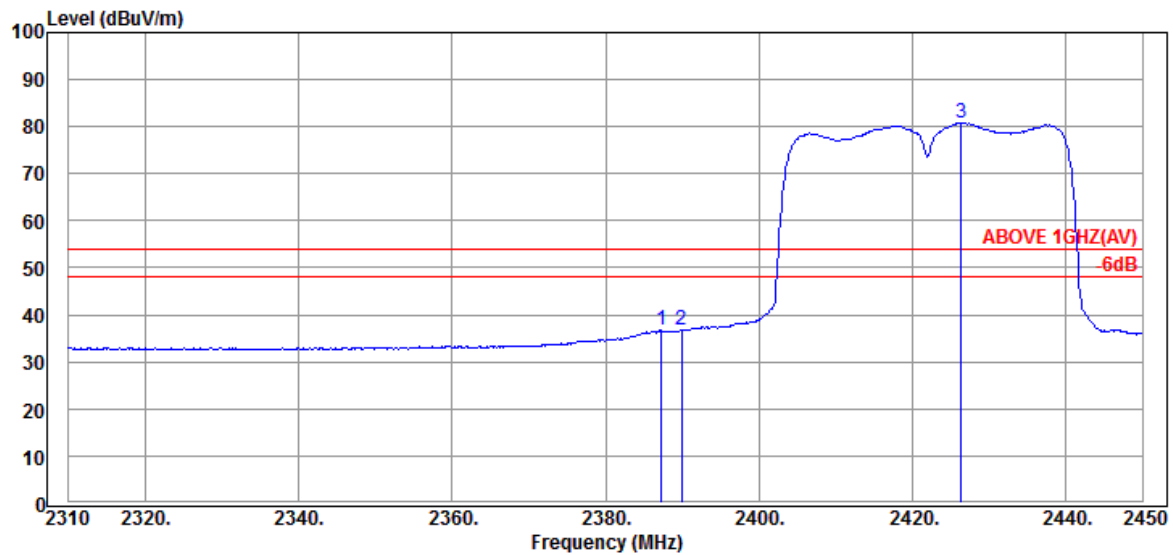
備註：“@”為主波，在此章節是不予以判定。

Mode	802.11n-HT40	Frequency	TX 2422MHz
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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
2386.30	28.29	6.02	16.71	51.02	74.00	22.98	Peak
2389.94	28.32	6.02	14.69	49.03	74.00	24.97	Peak
@ 2426.20	28.45	6.07	55.72	90.24	---	---	Peak

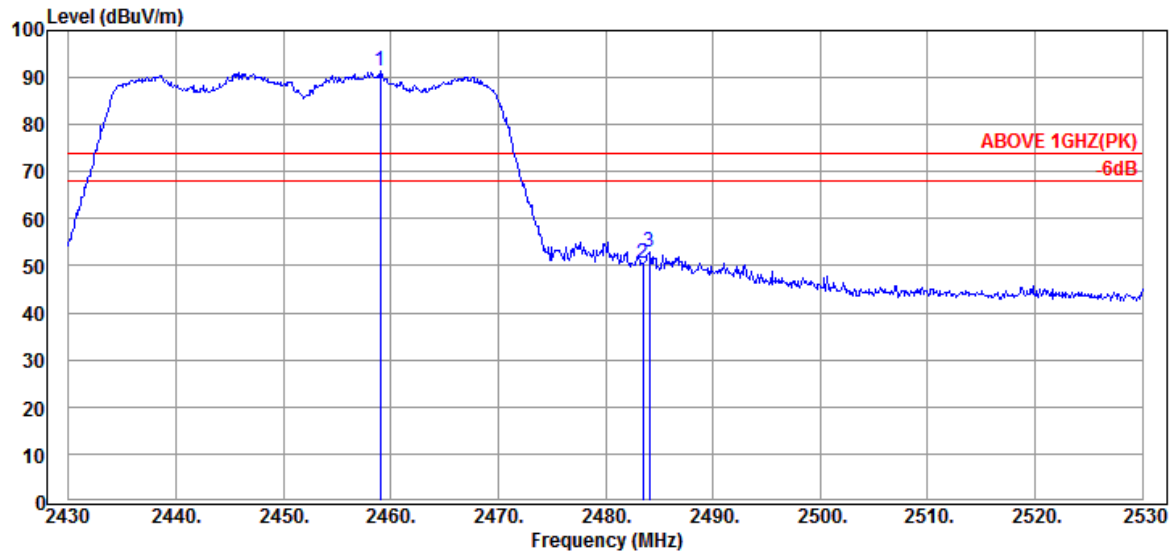


Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
2387.28	28.30	6.02	2.39	36.71	54.00	17.29	Average
2389.94	28.32	6.02	2.38	36.72	54.00	17.28	Average
@ 2426.34	28.45	6.07	46.31	80.83	---	---	Average

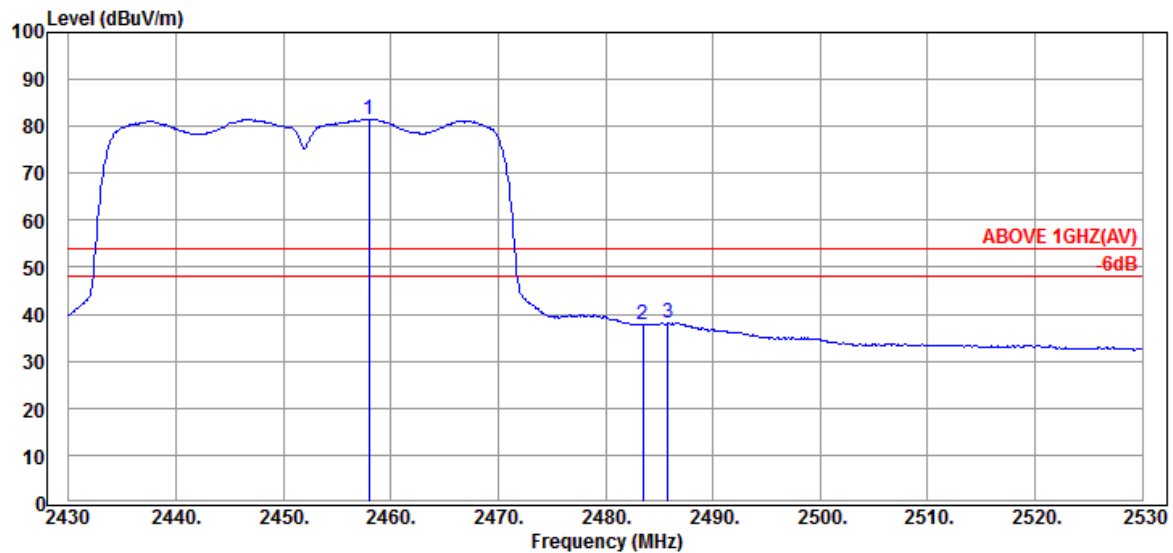
備註：“@”為主波，在此章節是不予以判定。

Mode	802.11n-HT40	Frequency	TX 2452MHz
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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
@	2459.00	28.55	6.10	56.68	91.33	---	---	Peak
	2483.50	28.70	6.13	15.80	50.63	74.00	23.37	Peak
	2484.10	28.70	6.13	18.02	52.85	74.00	21.15	Peak

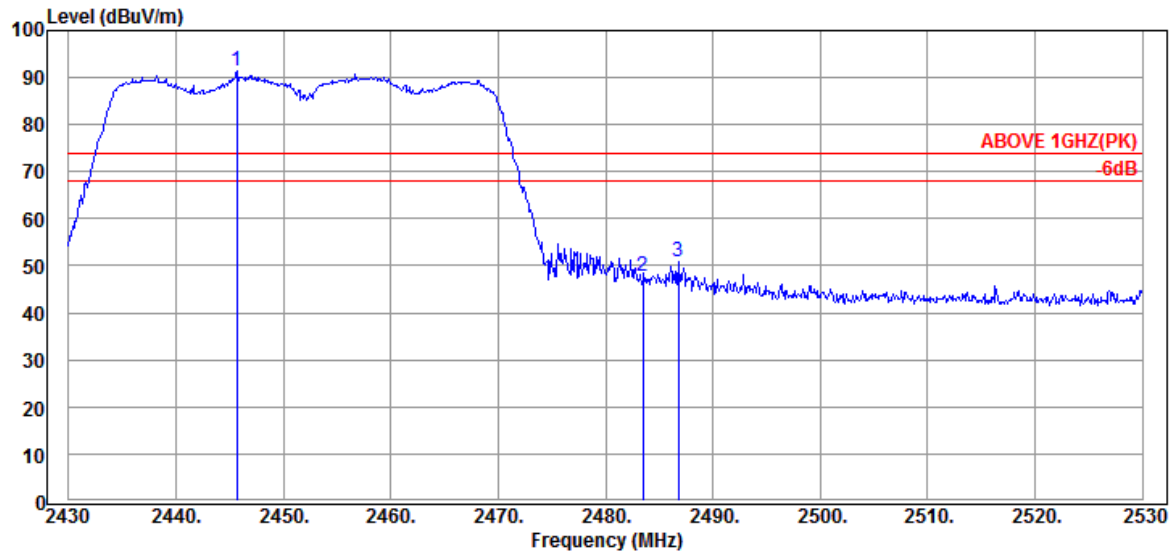


Antenna at Horizontal Polarization

	Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
@	2458.00	28.55	6.10	46.92	81.57	---	---	Average
	2483.50	28.70	6.13	2.86	37.69	54.00	16.31	Average
	2485.80	28.71	6.13	3.34	38.18	54.00	15.82	Average

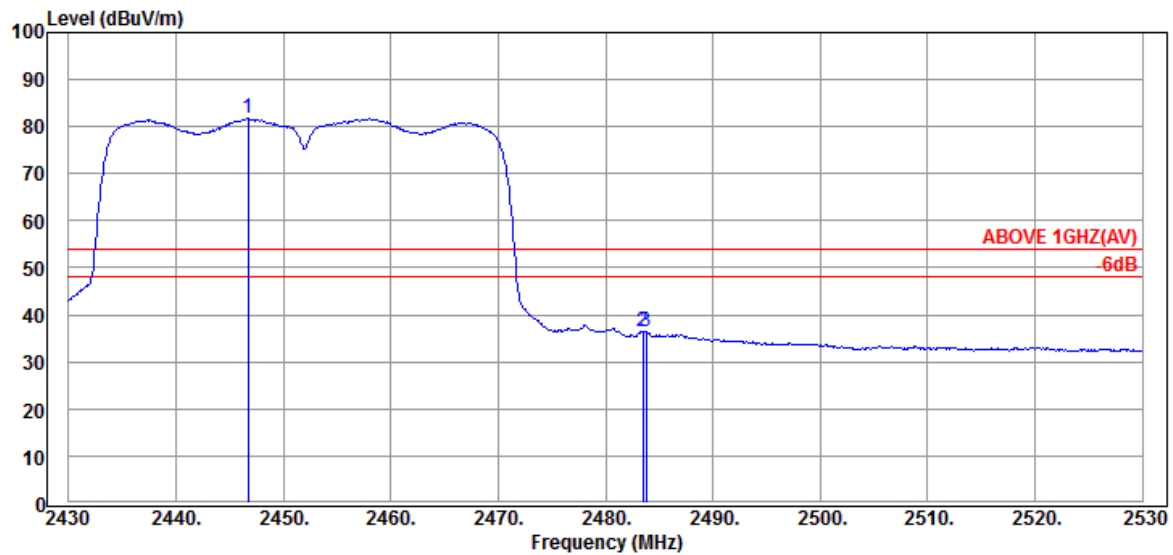
備註：“@”為主波，在此章節是不予以判定。

Mode	802.11n-HT40	Frequency	TX 2452MHz
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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
@	2445.70	28.49	6.09	56.73	91.31	---	---	Peak
	2483.50	28.70	6.13	12.80	47.63	74.00	26.37	Peak
	2486.80	28.72	6.14	15.93	50.79	74.00	23.21	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
@	2446.70	28.49	6.09	47.11	81.69	---	---	Average
	2483.50	28.70	6.13	1.52	36.35	54.00	17.65	Average
	2483.80	28.70	6.13	1.50	36.33	54.00	17.67	Average

備註：“@”為主波，在此章節是不予以判定。

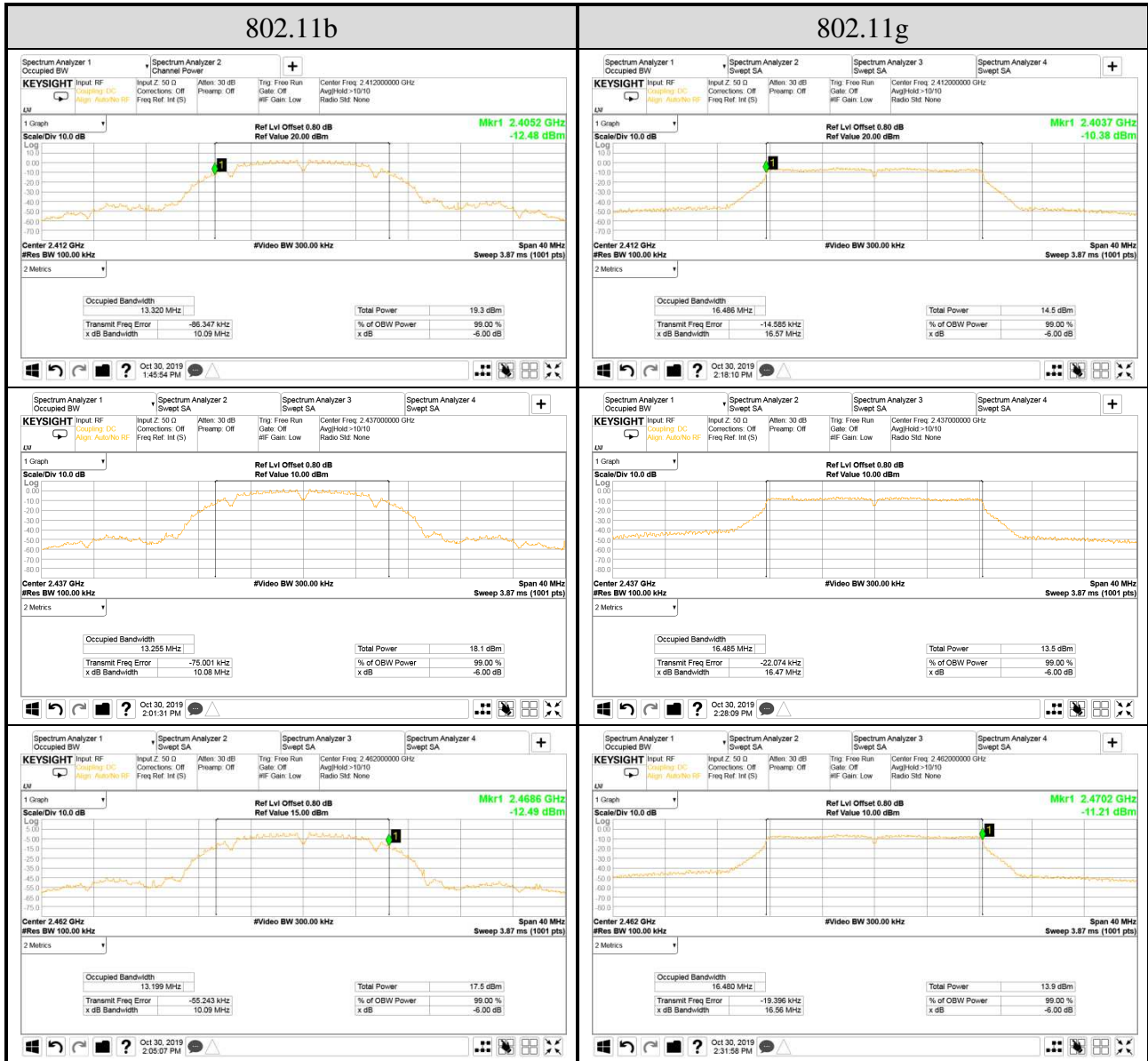
2. 發射頻寬之量測

測試日期	2019/10/30	環境溫/濕度	23°C/53%
電纜損失	0.8dB	測試人員	Kuper Hsu
測試電壓	DC 12V (經 DC 電源供應器供電)		

2.1. 發射頻寬

模式	測試頻率 (MHz)	6dB 頻寬 (MHz)	限制值 (kHz)
802.11b	2412	10.09	>500
	2437	10.08	
	2462	10.09	
802.11g	2412	16.57	
	2437	16.47	
	2462	16.56	
802.11n-HT20	2412	17.66	
	2437	17.67	
	2462	17.71	
802.11n-HT40	2422	36.44	
	2437	36.44	
	2452	36.39	

2.2. 發射頻寬之量測圖



3. 峰值輸出功率之量測

測試日期	2019/10/30	環境溫/濕度	23°C/53%
電纜損失	0.8dB	測試人員	Kuper Hsu
測試電壓	DC 12V (經 DC 電源供應器供電)		

3.1. 峰值輸出功率

Mode	Centre Frequency (MHz)	Peak Output Power (dBm)		Limit
		(dBm)	(W)	
802.11b	2412	15.39	0.034594	<30dBm (1W)
	2437	14.73	0.029717	
	2462	14.38	0.027416	

Mode	Centre Frequency (MHz)	Peak Output Power (dBm)		Limit
		(dBm)	(W)	
802.11g	2412	18.41	0.069343	<30dBm (1W)
	2437	18.32	0.067920	
	2462	18.18	0.065766	

Mode	Centre Frequency (MHz)	Peak Output Power (dBm)		Limit
		(dBm)	(W)	
802.11n-HT20	2412	18.35	0.068391	<30dBm (1W)
	2437	18.07	0.064121	
	2462	18.28	0.067298	

Mode	Centre Frequency (MHz)	Peak Output Power (dBm)		Limit
		(dBm)	(W)	
802.11n-HT40	2422	17.45	0.055590	<30dBm (1W)
	2437	17.53	0.056624	
	2452	17.48	0.055976	

3.2. 平均輸出功率(參考用)

Mode	Centre Frequency (MHz)	Average Output Power (dBm)	10log(1/X)	Max Average Output Power		Limit
				(dBm)	(W)	
802.11b	2412	12.59	0	12.59	0.018155	<30dBm (1W)
	2437	11.93		11.93	0.015596	
	2462	11.43		11.43	0.013900	

Mode	Centre Frequency (MHz)	Average Output Power (dBm)	10log(1/X)	Max Average Output Power		Limit
				(dBm)	(W)	
802.11g	2412	8.66	0	8.66	0.007345	<30dBm (1W)
	2437	7.98		7.98	0.006281	
	2462	8.31		8.31	0.006776	

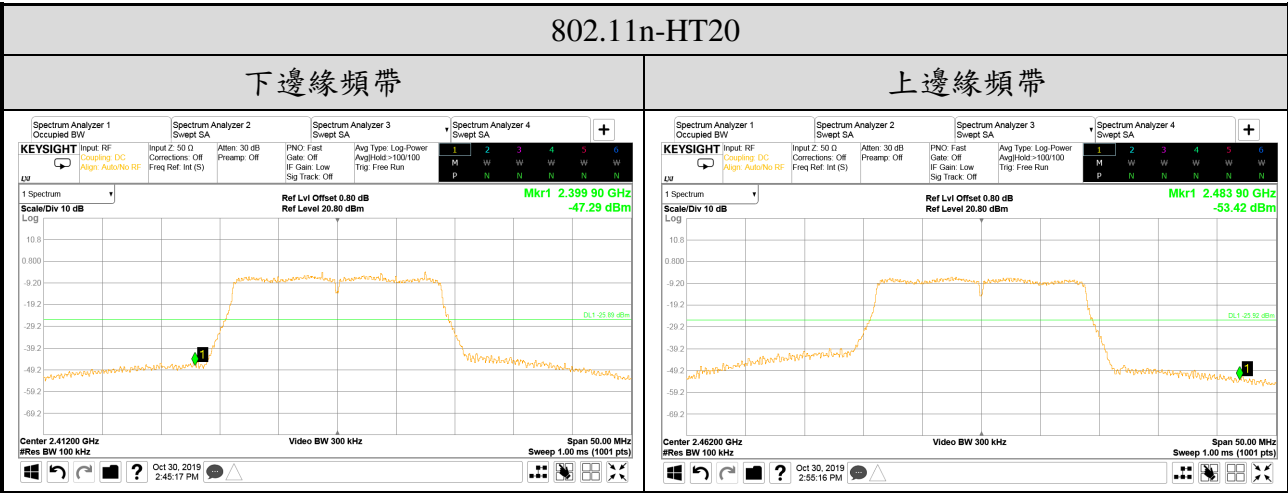
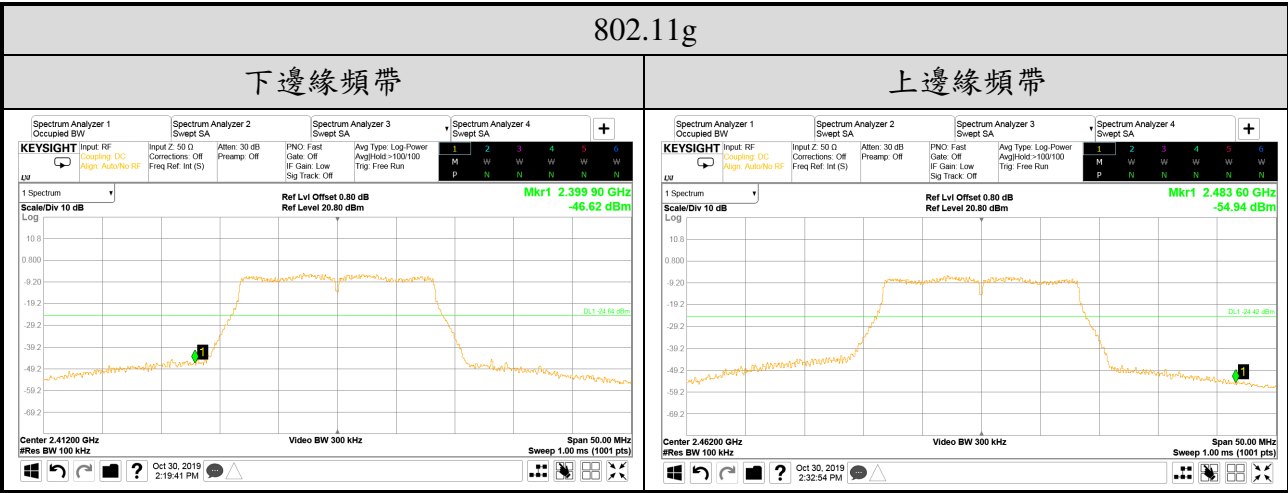
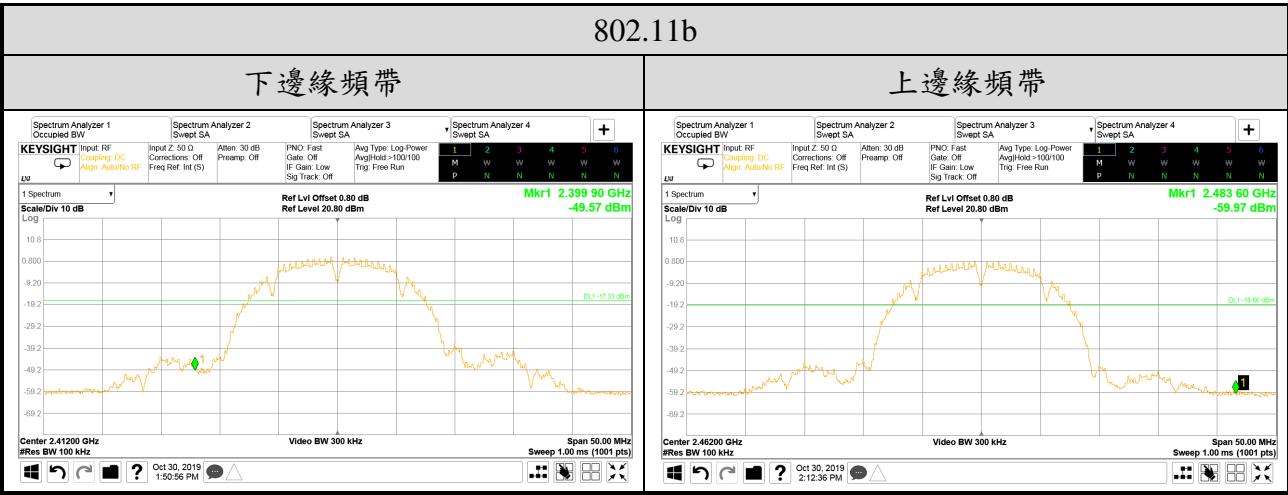
Mode	Centre Frequency (MHz)	Average Output Power (dBm)	10log(1/X)	Max Average Output Power		Limit
				(dBm)	(W)	
802.11n-HT20	2412	8.79	0	8.79	0.007568	<30dBm (1W)
	2437	8.13		8.13	0.006501	
	2462	8.42		8.42	0.006950	

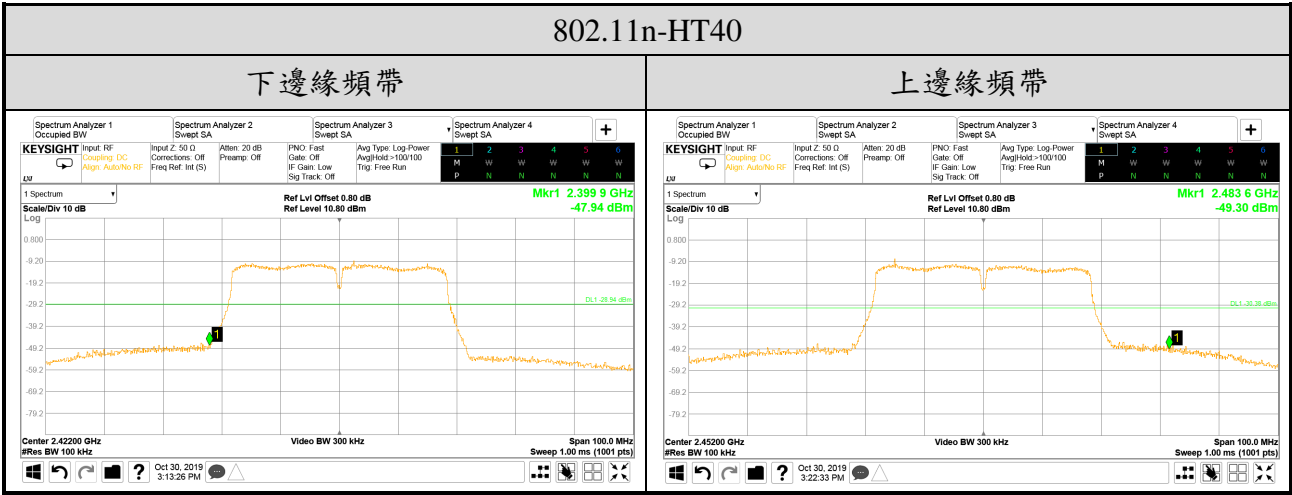
Mode	Centre Frequency (MHz)	Average Output Power (dBm)	10log(1/X)	Max Average Output Power		Limit
				(dBm)	(W)	
802.11n-HT40	2422	7.31	0	7.31	0.005383	<30dBm (1W)
	2437	6.62		6.62	0.004592	
	2452	7.23		7.23	0.005284	

註：當 Duty cycle<98%，最大輸出功率必需要加上 duty cycle factor $10\log(1/x)$ 。(x=duty cycle)

4. 頻帶邊緣之 RF 傳導發射之量測

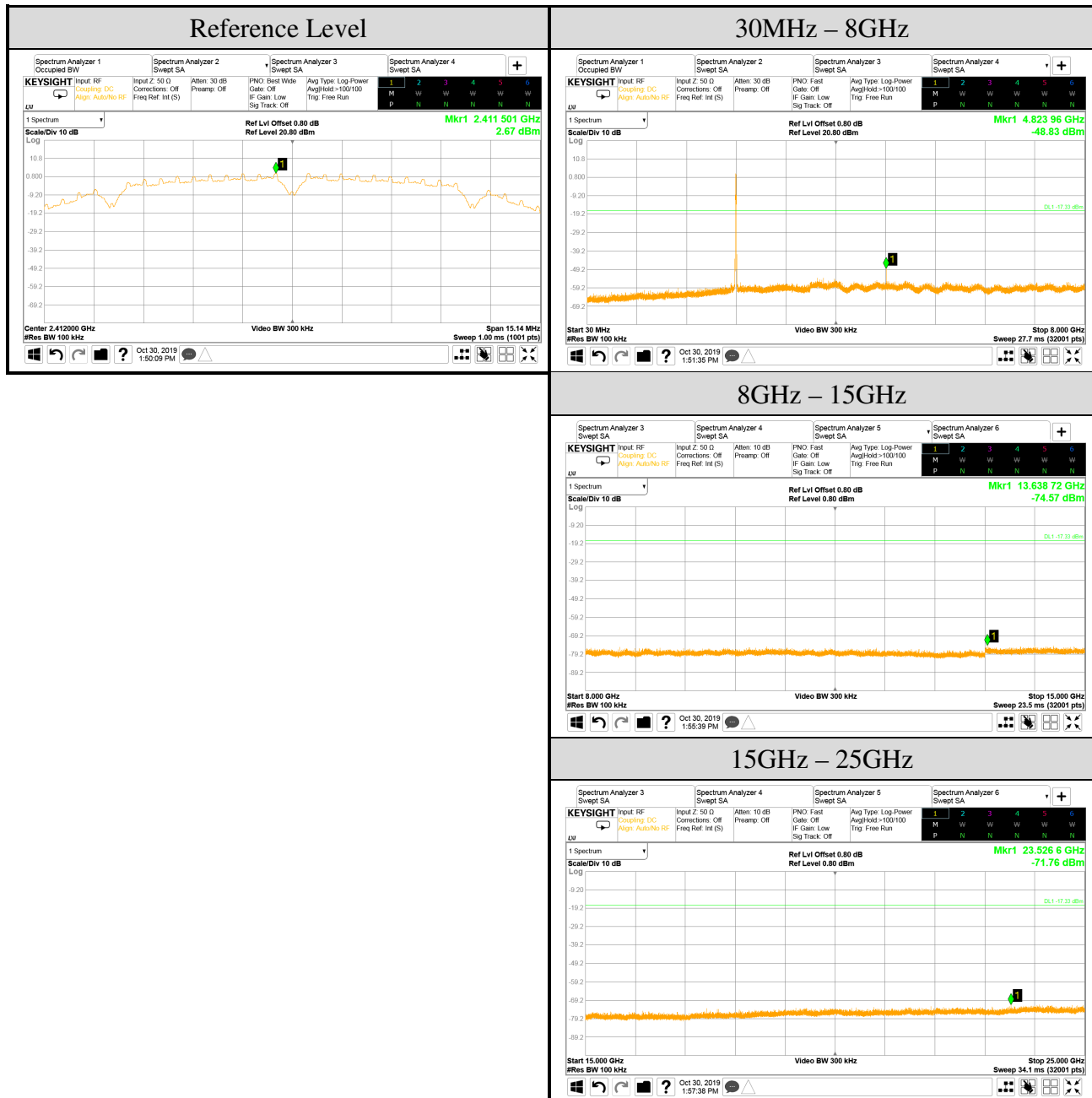
測試日期	2019/10/30	環境溫/濕度	23°C/53%
電纜損失	0.8dB	測試人員	Kuper Hsu
測試電壓	DC 12V (經 DC 電源供應器供電)		



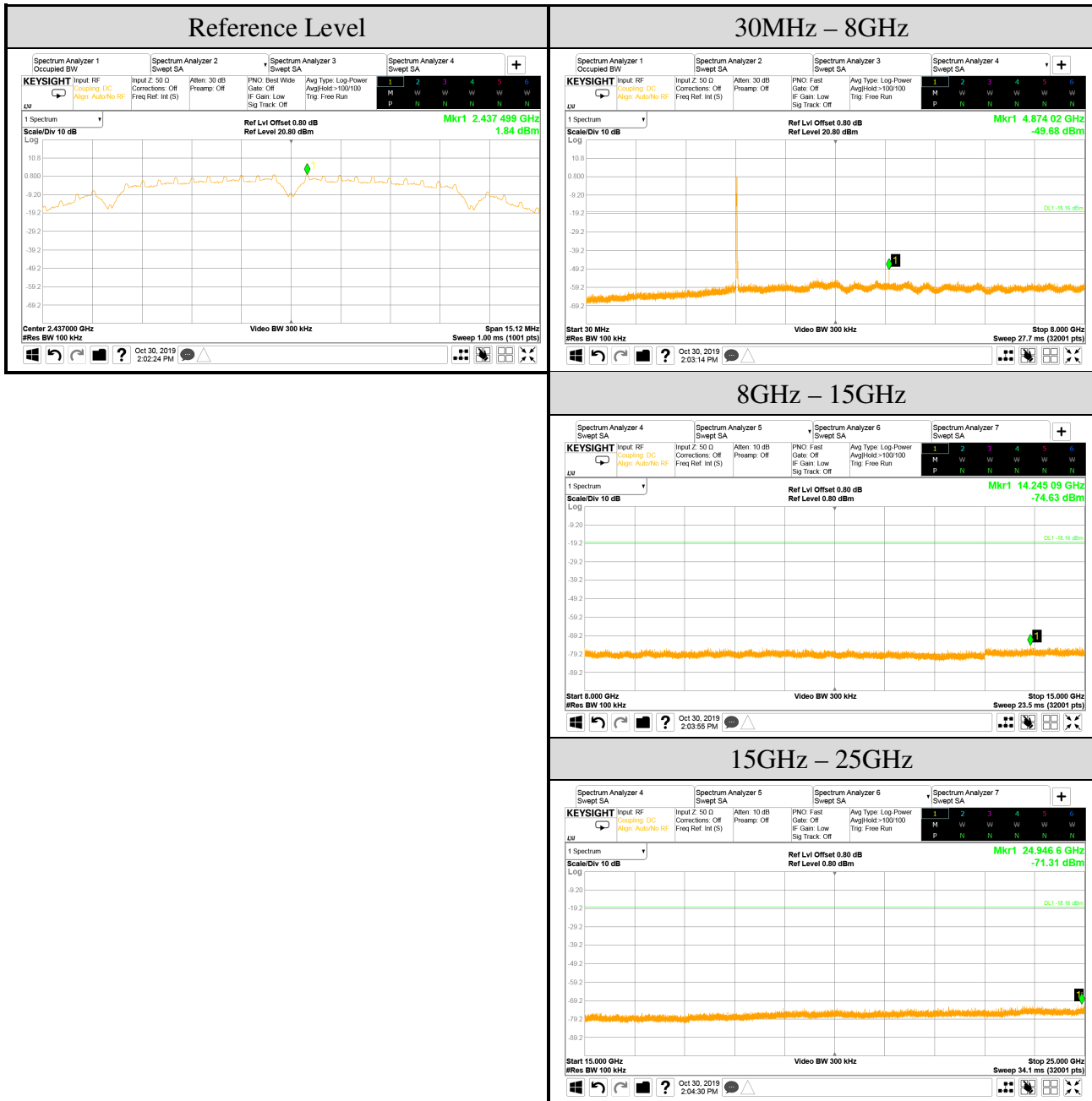


5. 混附發射之 RF 傳導發射之量測

測試日期	2019/10/30	環境溫/濕度	23°C/53%
電纜損失	0.8dB	模式	802.11b
測試電壓	DC 12V (經 DC 電源供應器供電)	測試頻率	2412MHz
		測試人員	Kuper Hsu
Simultaneous Factor10 log(n) (Note: "n" is antenna number)			0



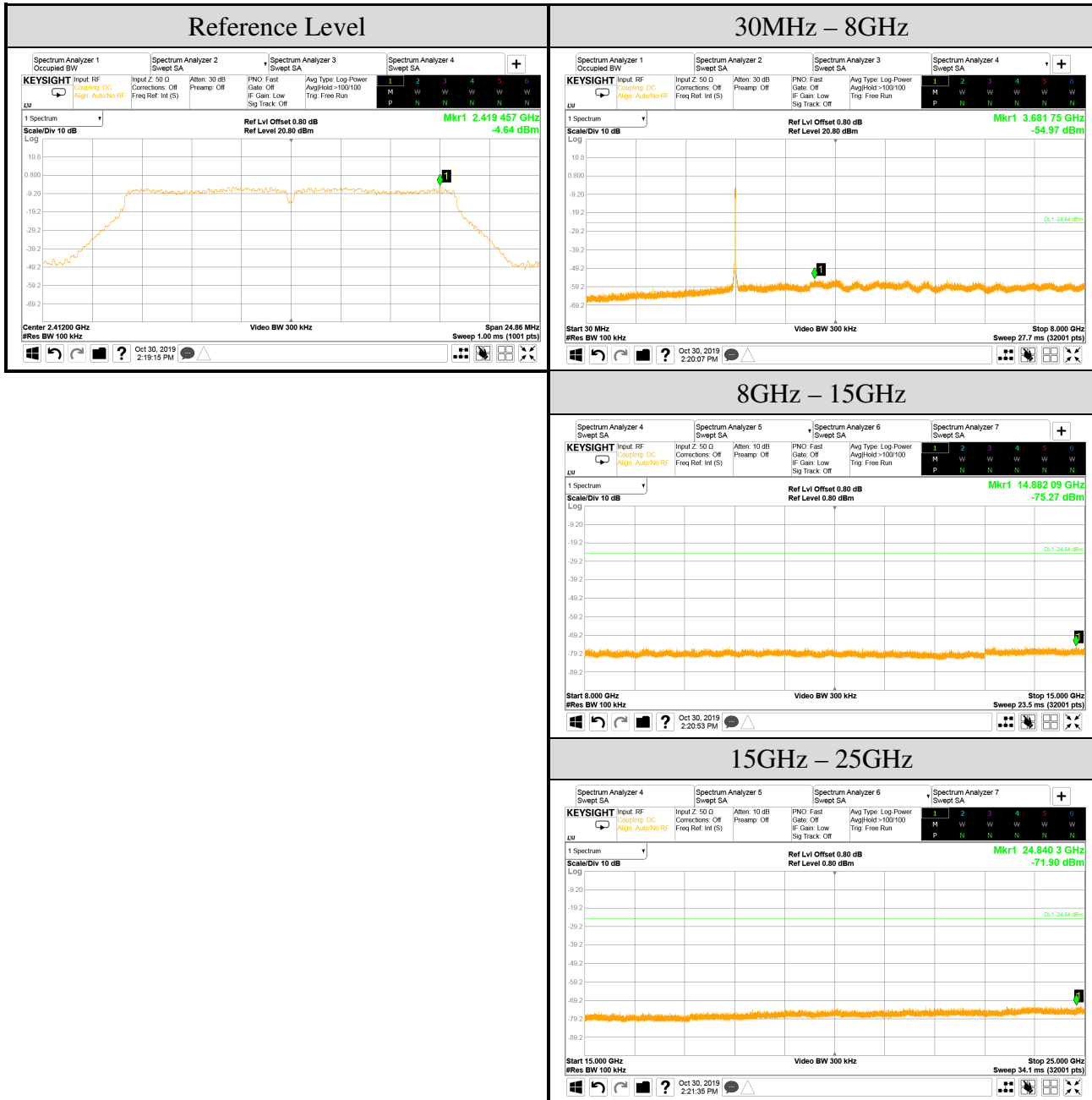
測試日期	2019/10/30	環境溫/濕度	23°C/53%
電纜損失	0.8dB	模式	802.11b
測試電壓	DC 12V (經 DC 電源供應器供電)	測試頻率	2437MHz
Simultaneous Factor10 log(n) (Note: “n” is antenna number)			0



測試日期	2019/10/30	環境溫/濕度	23°C/53%
電纜損失	0.8dB	模式	802.11b
測試電壓	DC 12V (經 DC 電源供應器供電)	測試頻率	2462MHz
		測試人員	Kuper Hsu
Simultaneous Factor10 log(n) (Note: “n” is antenna number)			0



測試日期	2019/10/30	環境溫/濕度	23°C/53%
電纜損失	0.8dB	模式	802.11g
測試電壓	DC 12V (經 DC 電源供應器供電)	測試頻率	2412MHz
		測試人員	Kuper Hsu
Simultaneous Factor10 log(n) (Note: “n” is antenna number)			0



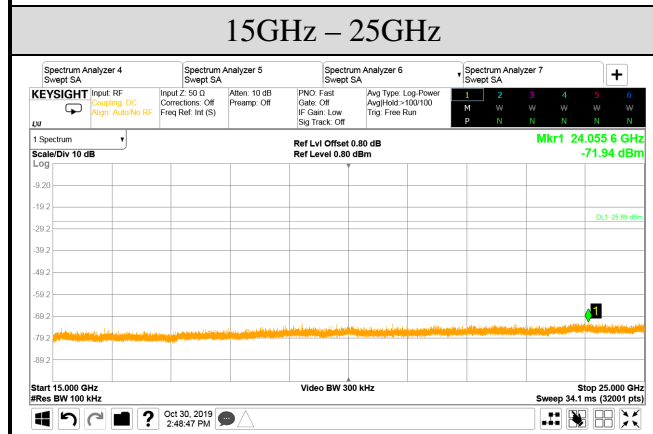
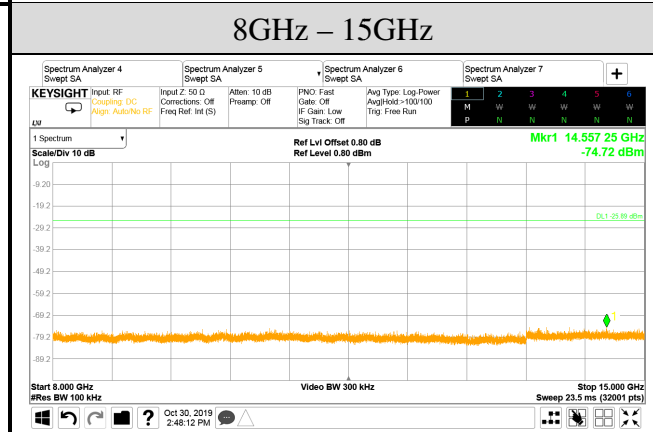
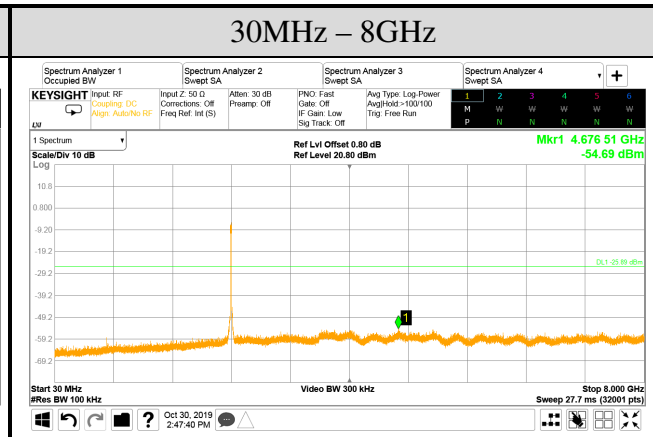
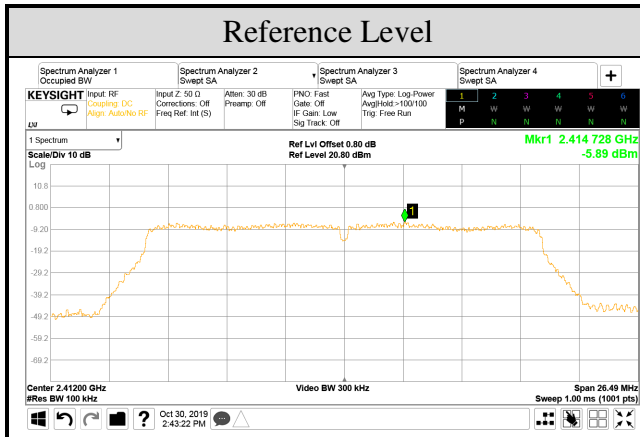
測試日期	2019/10/30	環境溫/濕度	23°C/53%
電纜損失	0.8dB	模式	802.11g
測試電壓	DC 12V (經 DC 電源供應器供電)	測試頻率	2437MHz
		測試人員	Kuper Hsu
Simultaneous Factor10 log(n) (Note: “n” is antenna number)			0



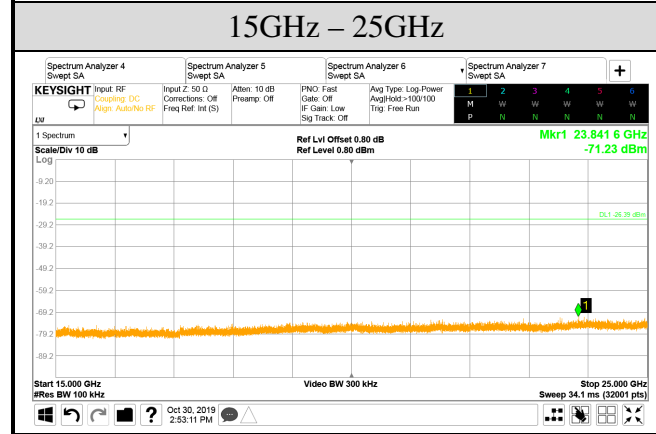
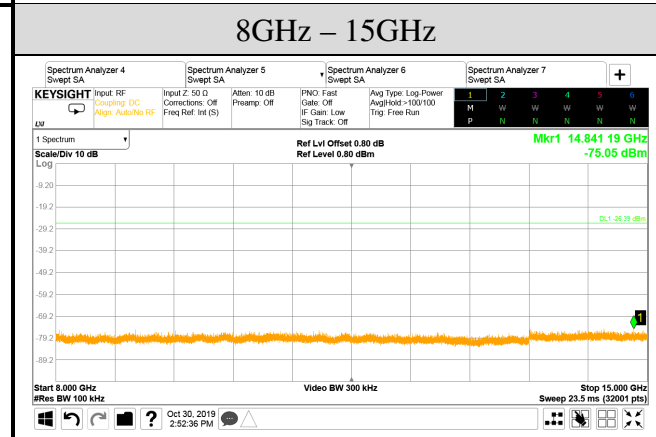
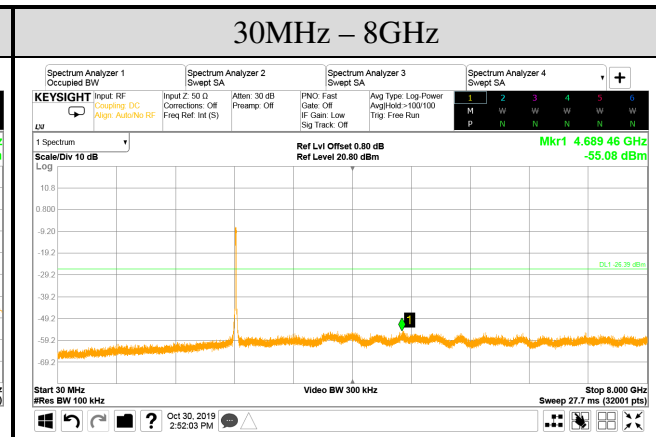
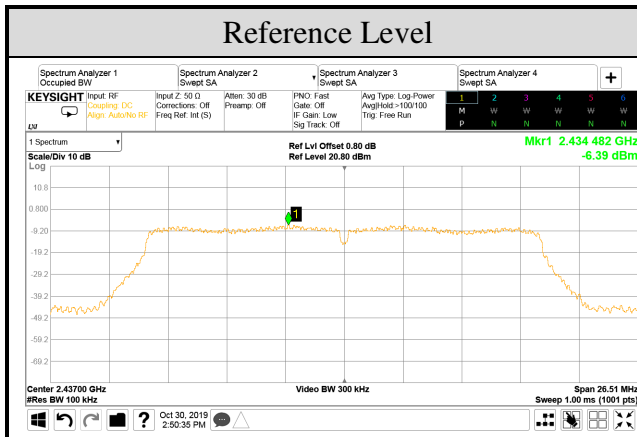
測試日期	2019/10/30	環境溫/濕度	23°C/53%
電纜損失	0.8dB	模式	802.11g
測試電壓	DC 12V (經 DC 電源供應器供電)	測試頻率	2462MHz
		測試人員	Kuper Hsu
Simultaneous Factor10 log(n) (Note: “n” is antenna number)			0



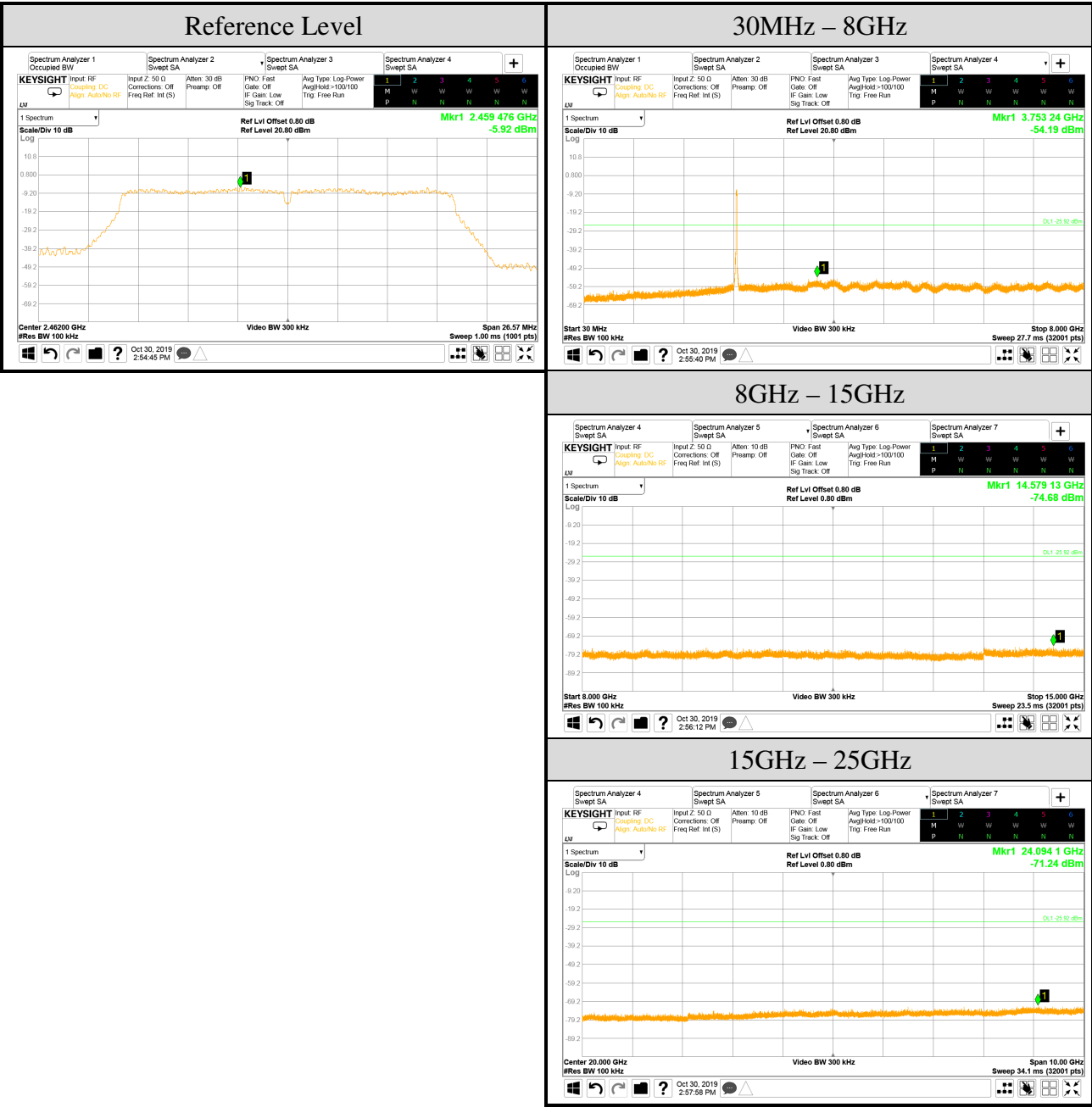
測試日期	2019/10/30	環境溫/濕度	23℃/53%
電纜損失	0.8dB	模式	802.11n-HT20
測試電壓	DC 12V (經 DC 電源供應器供電)	測試頻率	2412MHz
		測試人員	Kuper Hsu
Simultaneous Factor10 log(n) (Note: “n” is antenna number)			0



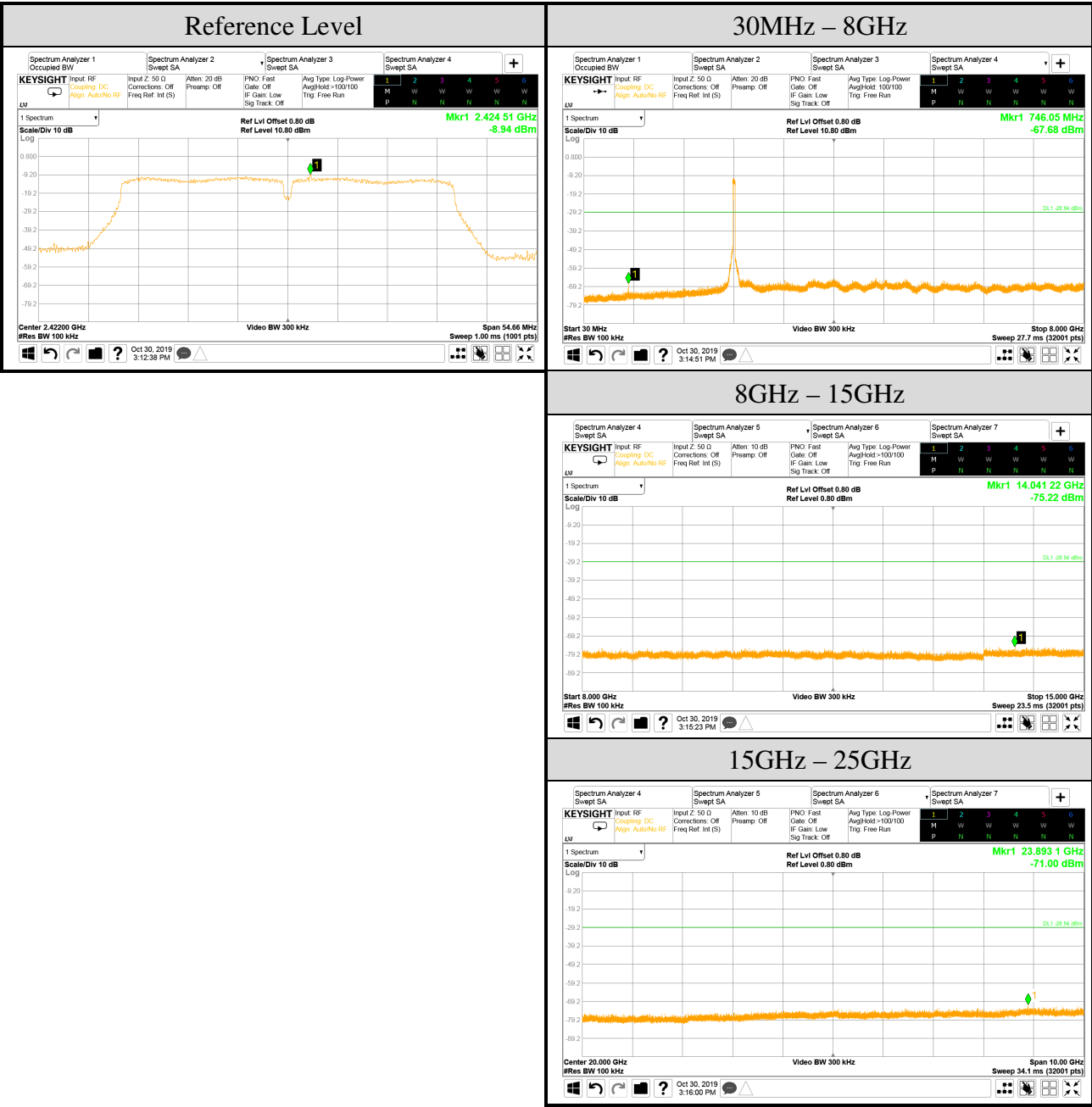
測試日期	2019/10/30	環境溫/濕度	23°C/53%
電纜損失	0.8dB	模式	802.11n-HT20
測試電壓	DC 12V (經 DC 電源供應器供電)	測試頻率	2437MHz
		測試人員	Kuper Hsu
Simultaneous Factor10 log(n) (Note: “n” is antenna number)			0



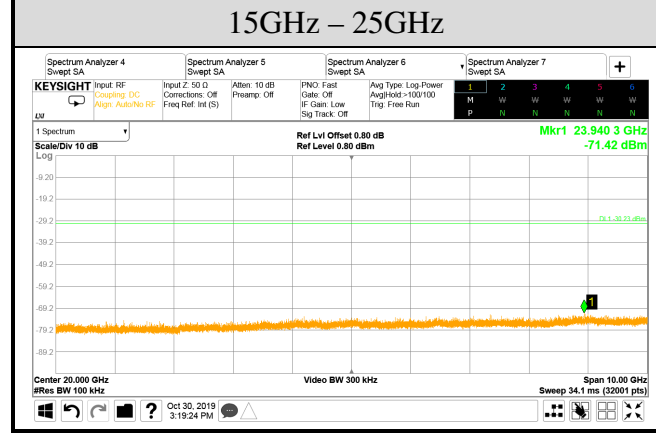
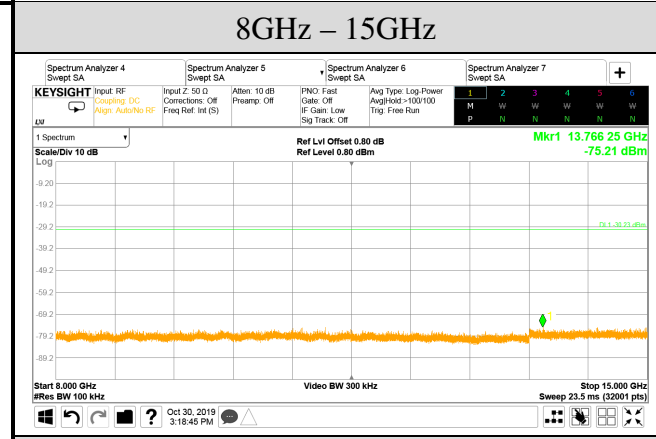
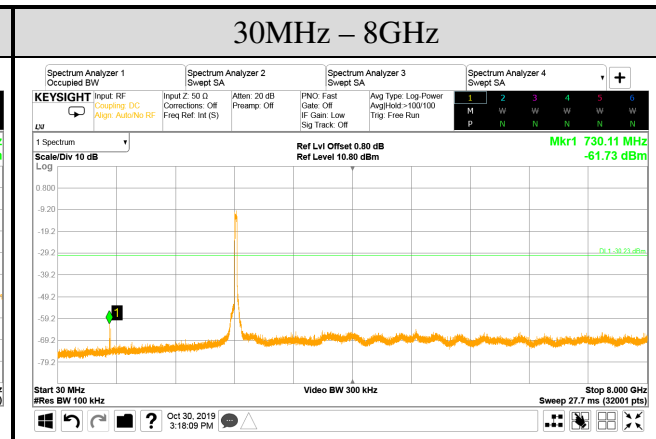
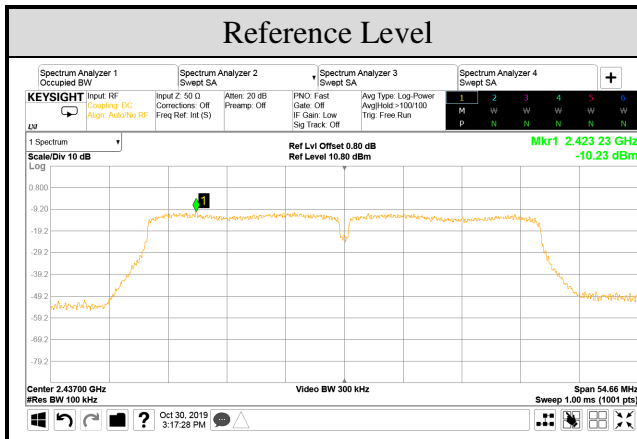
測試日期	2019/10/30	環境溫/濕度	23°C/53%
電纜損失	0.8dB	模式	802.11n-HT20
測試電壓	DC 12V (經 DC 電源供應器供電)	測試頻率	2462MHz
		測試人員	Kuper Hsu
Simultaneous Factor10 log(n) (Note: “n” is antenna number)			0



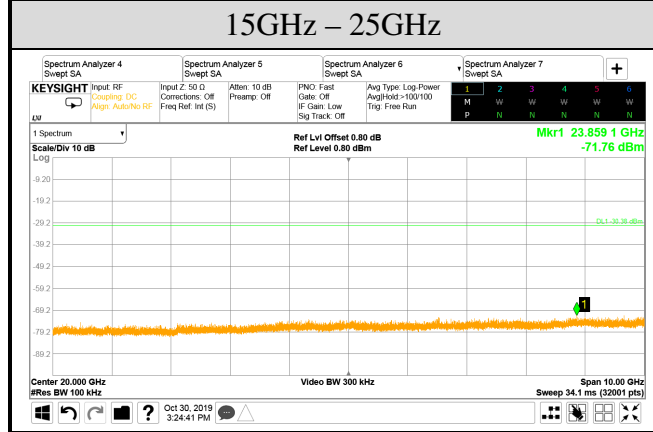
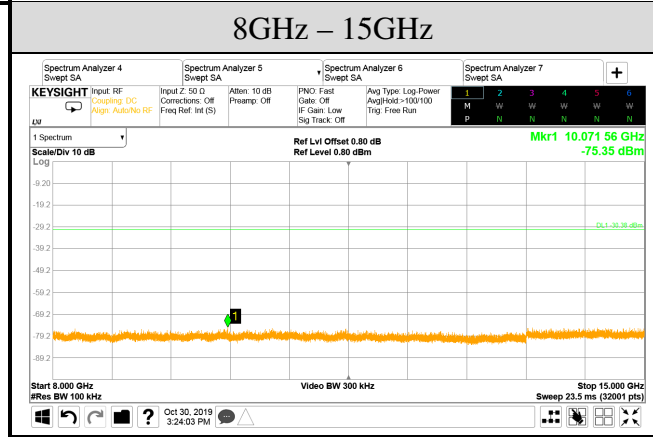
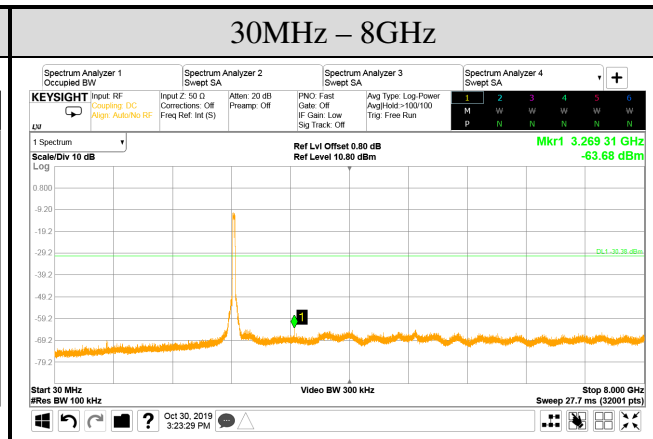
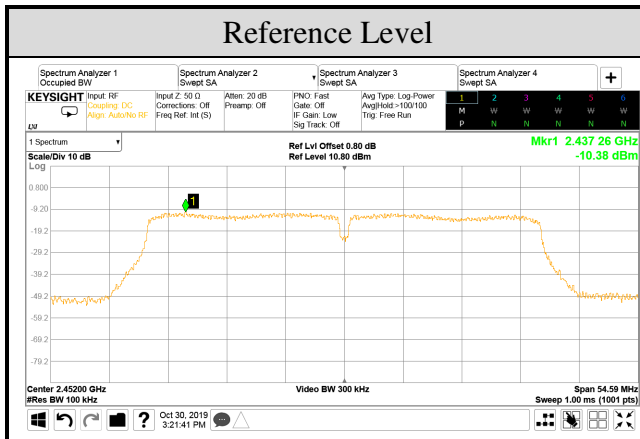
測試日期	2019/10/30	環境溫/濕度	23°C/53%
電纜損失	0.8dB	模式	802.11n-HT40
測試電壓	DC 12V (經 DC 電源供應器供電)	測試頻率	2422MHz
		測試人員	Kuper Hsu
Simultaneous Factor10 log(n) (Note: “n” is antenna number)			0



測試日期	2019/10/30	環境溫/濕度	23°C/53%
電纜損失	0.8dB	模式	802.11n-HT40
測試電壓	DC 12V (經 DC 電源供應器供電)	測試頻率	2437MHz
		測試人員	Kuper Hsu
Simultaneous Factor10 log(n) (Note: “n” is antenna number)			0



測試日期	2019/10/30	環境溫/濕度	23°C/53%
電纜損失	0.8dB	模式	802.11n-HT40
測試電壓	DC 12V (經 DC 電源供應器供電)	測試頻率	2452MHz
		測試人員	Kuper Hsu
Simultaneous Factor10 log(n) (Note: “n” is antenna number)			0



6. 功率密度之量測

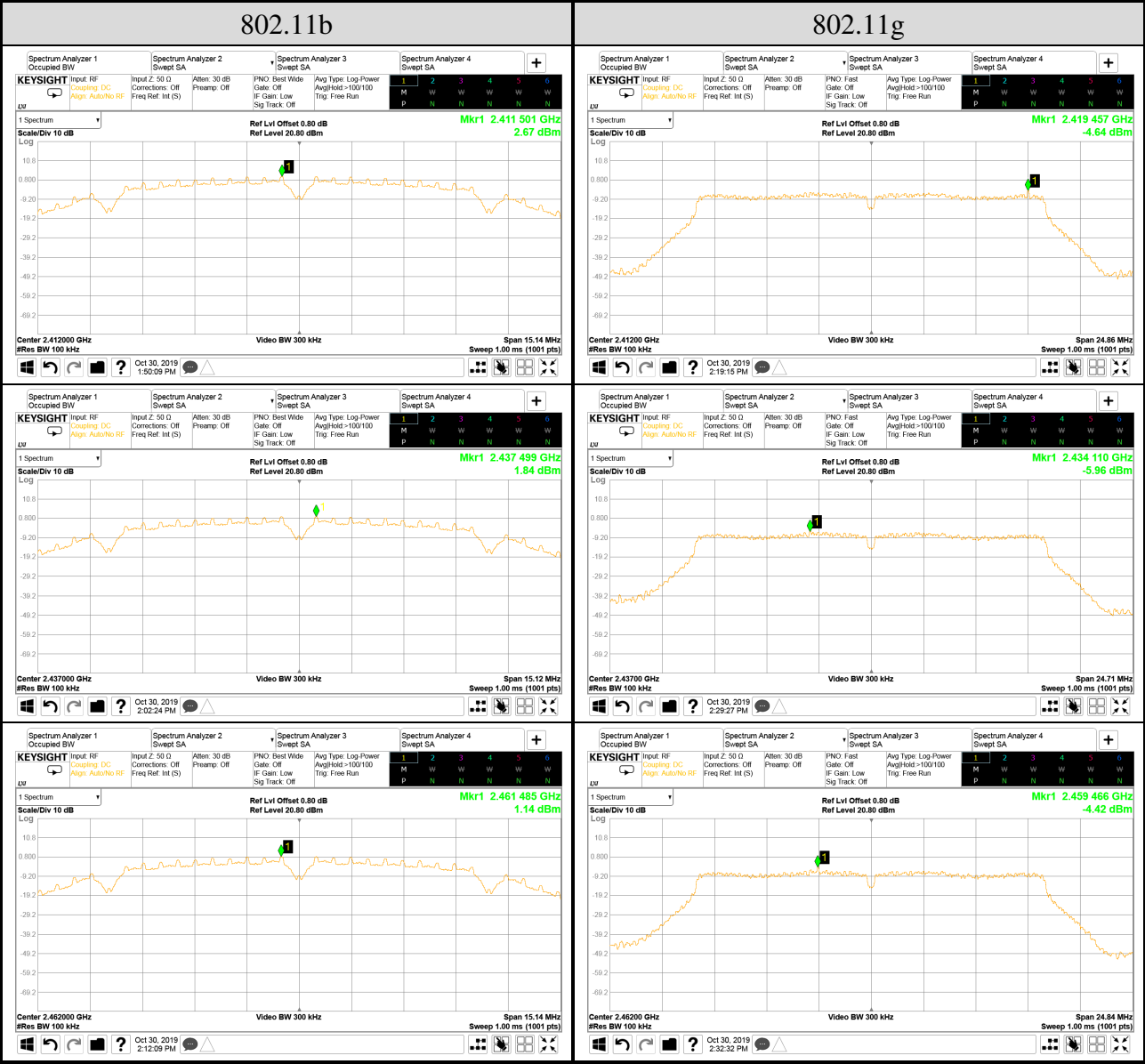
測試日期	2019/10/30	環境溫/濕度	23°C/53%
電纜損失	0.8dB	測試人員	Kuper Hsu
		測試電壓	DC 12V (經 DC 電源供應器供電)
Simultaneous Factor10 log(n) (Note: “n” is antenna number)			0

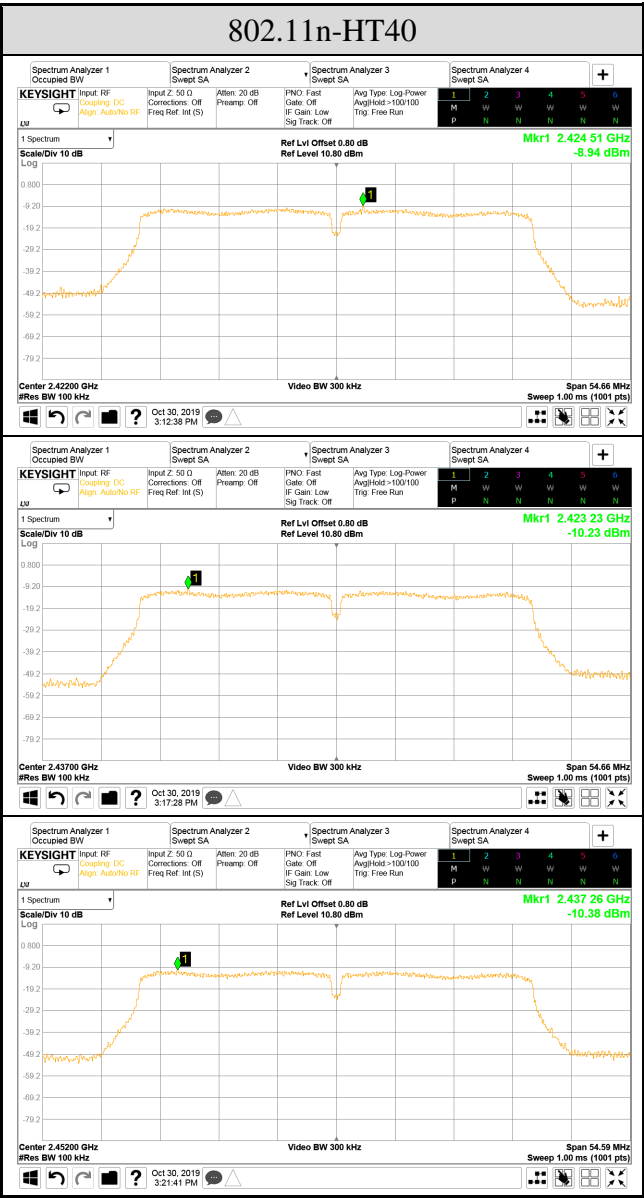
6.1. 功率密度

Mode	Centre Frequency (MHz)	Power Spectral Density (dBm)	Limit
802.11b	2412	2.67	<8 dBm/3kHz
	2437	1.84	
	2462	1.14	
802.11g	2412	-4.65	
	2437	-5.96	
	2462	-4.42	
802.11n-HT20	2412	-5.89	
	2437	-6.39	
	2462	-5.92	
802.11n-HT40	2422	-8.94	
	2437	-10.23	
	2452	-10.38	

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

6.2. 功率密度之量測圖





7. 電波暴露量之量測

測試日期	2019/10/30	環境溫/濕度	23°C/53%
測試電壓	DC 12V (經 DC 電源供應器供電)	測試人員	Kuper Hsu

距離人體(r):	20	cm	
最大發射功率(P):	18.41	dBm	= 69.343 mW
最大天線增益(G):	4.7	dBd	= 2.951 Numerical
MPE (S) = (P*G) / (4* π *r ²) =	0.0407		mW/cm ²
註：1. 最大發射功率系指2.4GHz各模式/頻道中最大之發射功率功率。			
2. 電磁波曝露量MPE標準值1mW/cm ² ，送測產品實測值為：0.0407 mW/cm ²			