

別紙 TEST DATA

(for Bluetooth Low Energy)

1. 周波数の偏差

1.1. 試験結果

Test Voltage	Channel [MHz]	Read. Frequency [MHz]	Tolerance [kHz]	Tolerance [ppm]	Limit [ppm]
DC 3.70 V	2402	2402.01995	19.95	8.31	± 50.0
	2440	2440.00315	3.15	1.29	± 50.0
	2480	2480.00300	3.00	1.21	± 50.0

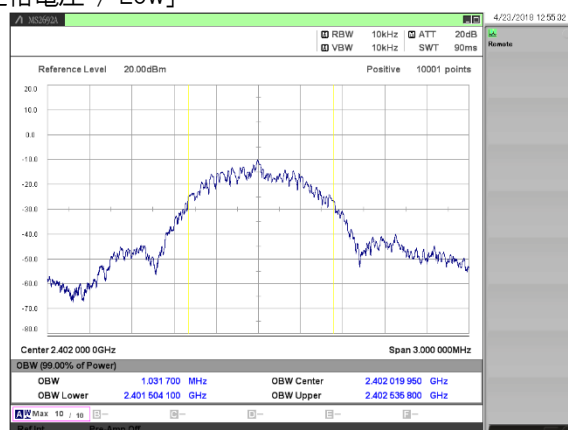
$$\text{Tolerance [kHz]} = (\text{Read. Frequency [MHz]} - \text{Channel [MHz]}) \times 10^3$$

$$\text{Tolerance [ppm]} = \text{Tolerance [kHz]} \times 10^{-3} / \text{Channel [MHz]} \times 10^6$$

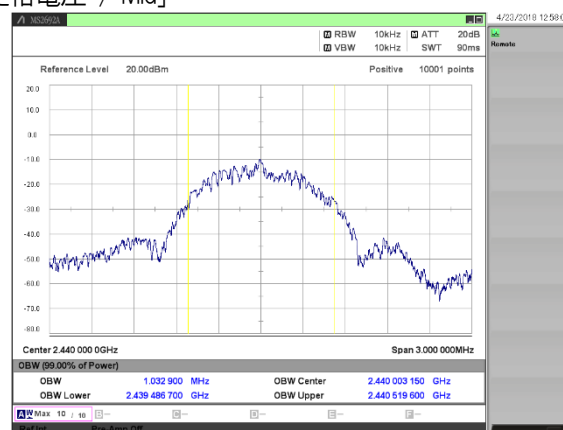
※ 変調状態で試験を実施し、占有周波数帯幅の中央周波数を結果とした

1.2. 測定器画面データ

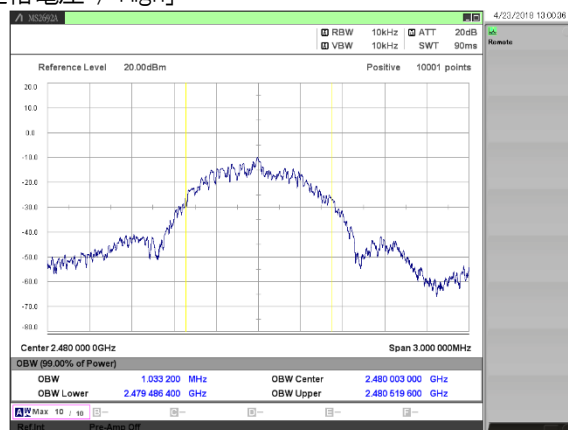
[定格電圧 / Low]



[定格電圧 / Mid]



[定格電圧 / High]



2. 空中線電力の偏差

2.1. 試験結果

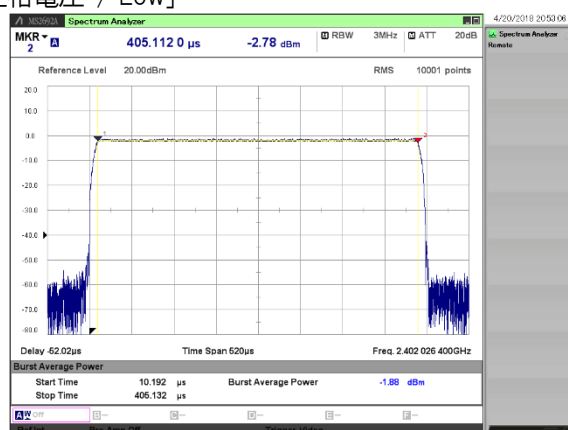
Test Voltage	Channel [MHz]	S/A Read. [dBm]	C.F. [dB]	Power [mW]	Power Limit [mW]	Tolerance [%]	Tolerance Limit [%]
DC 3.70 V	2402	-1.88	0.83	0.7852	10.0000	-34.85	+20 ~ -80
	2440	-1.40	0.84	0.8790	10.0000	-27.07	+20 ~ -80
	2480	-1.46	0.84	0.8670	10.0000	-28.07	+20 ~ -80

$$\text{Power [mW]} = 10^{\{(S/A \text{ Read. [dBm]} + C.F. [dB])/10\}}$$

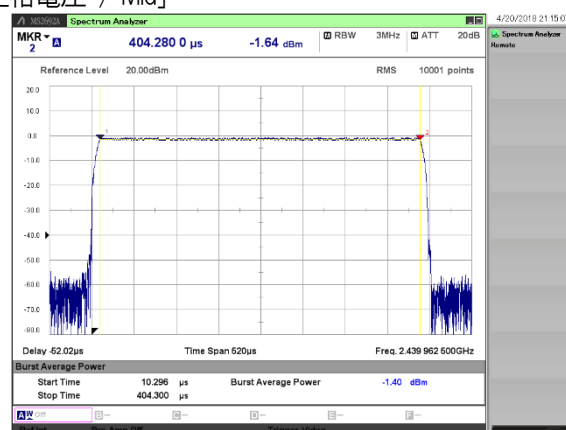
$$\text{Tolerance [\%]} = \text{Power [mW]} / \text{申請定格電力 [mW]} * 100 - 100$$

2.2. 測定器画面データ

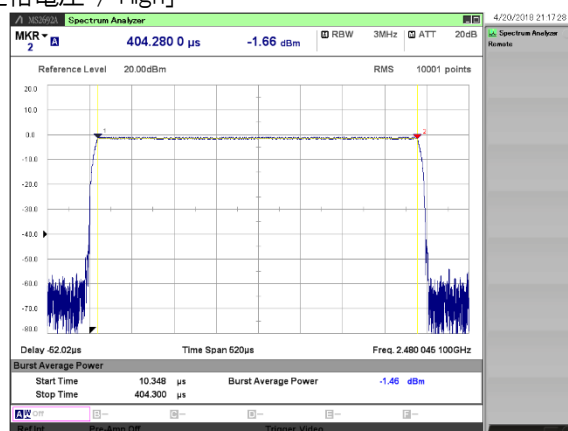
[定格電圧 / Low]



[定格電圧 / Mid]



[定格電圧 / High]



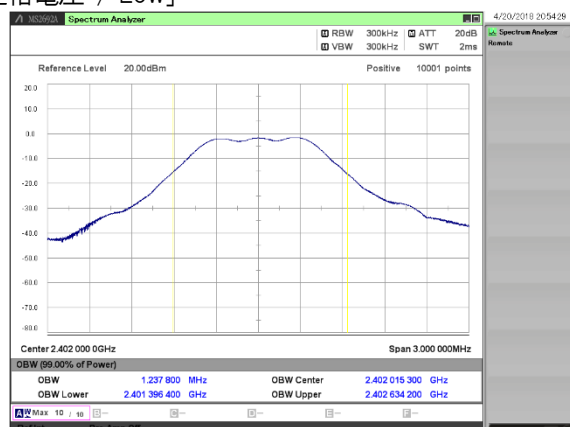
3. 占有周波数帯幅

3.1. 試験結果

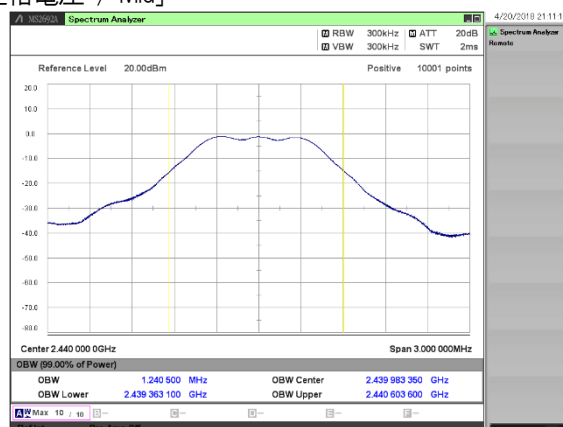
Mode	Channel [MHz]	Result [MHz]	Limit [MHz]
DC 3.70 V	2402	1.238	26.0
	2440	1.241	26.0
	2480	1.241	26.0

3.2. 測定器画面データ

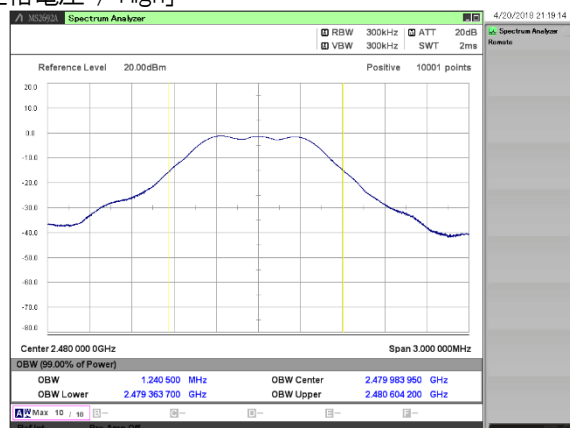
[定格電圧 / Low]



[定格電圧 / Mid]



[定格電圧 / High]



4. スプリアス発射または不要発射の強度

4.1. 試験結果

Test Voltage	Channel [MHz]	Frequency [MHz]	S/A Read. [dBm]	C.F. [dB]	Result [dBm]	Result [uW]	Limit [dBm]	Limit [uW]	Margin [dB]
DC 3.70 V	2402	2245.55	-57.03	0.82	-56.21	0.00240	-26.02	2.5	30.19
		2383.03	-54.82	0.83	-53.99	0.00399	-26.02	2.5	27.97
		2399.99	-35.17	0.83	-34.34	0.36855	-16.02	25.0	18.32
		2493.94	-56.29	0.84	-55.45	0.00285	-16.02	25.0	39.43
		2506.40	-52.95	0.84	-52.11	0.00615	-26.02	2.5	26.09
		2558.45	-51.80	0.84	-50.96	0.00802	-26.02	2.5	24.94
	2440	2283.52	-56.29	0.83	-55.46	0.00284	-26.02	2.5	29.44
		2380.86	-55.59	0.83	-54.76	0.00334	-26.02	2.5	28.74
		2395.21	-55.51	0.83	-54.68	0.00340	-16.02	25.0	38.66
		2491.61	-55.82	0.84	-54.98	0.00317	-16.02	25.0	38.96
		2497.42	-55.57	0.84	-54.73	0.00336	-26.02	2.5	28.71
		2595.42	-51.78	0.85	-50.93	0.00807	-26.02	2.5	24.91
	2480	2323.84	-56.15	0.83	-55.32	0.00294	-26.02	2.5	29.30
		2375.31	-54.95	0.83	-54.12	0.00387	-26.02	2.5	28.10
		2396.54	-55.57	0.83	-54.74	0.00336	-16.02	25.0	38.72
		2483.51	-46.29	0.84	-45.45	0.02850	-16.02	25.0	29.43
		2505.53	-55.43	0.84	-54.59	0.00348	-26.02	2.5	28.57
		2635.38	-52.85	0.85	-52.00	0.00632	-26.02	2.5	25.98

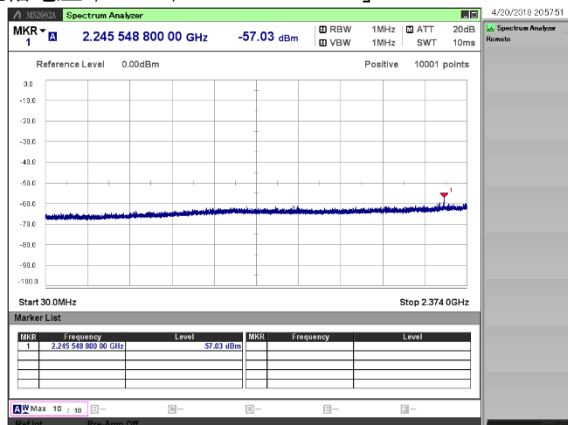
$$\text{Result [uW]} = 10^{\{(S/A \text{ Read. [dBm]} + C.F. [dB])/10\}} * 10^3$$

※ 1GHz 未満は RBW : 1MHz で実施した結果を記載

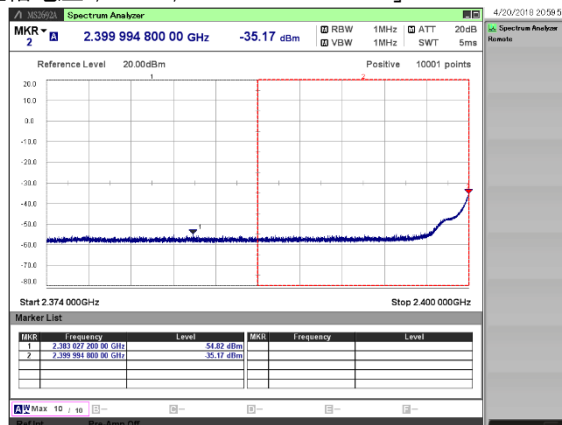
参照帯域幅 (RBW : 100kHz) 当たりに換算した値、および RBW : 100kHz で実施した結果を RBW : 1MHz 当たりに換算した値については、上記結果より小さくなるため記載を省略

4.2. 測定器画面データ

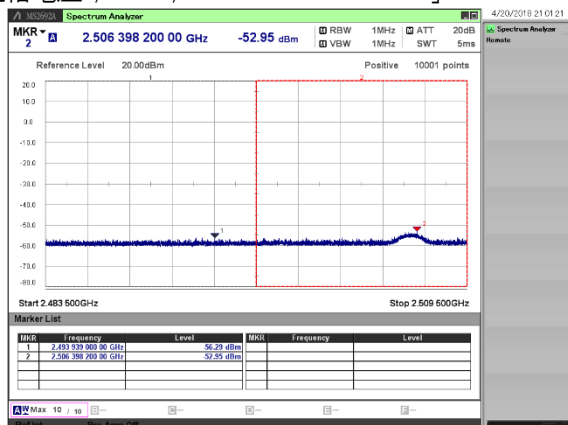
[定格電圧 / Low / 30 - 2374MHz]



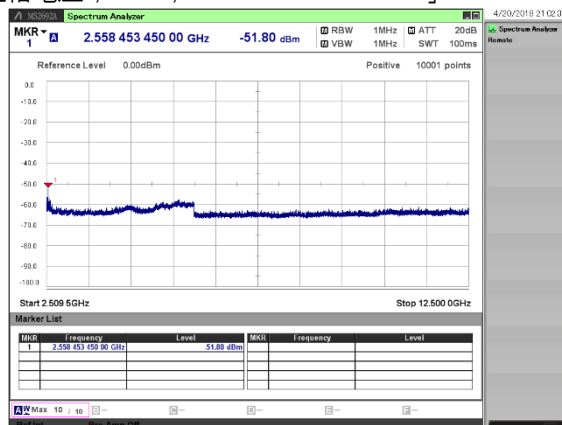
[定格電圧 / Low / 2374 - 2400MHz]



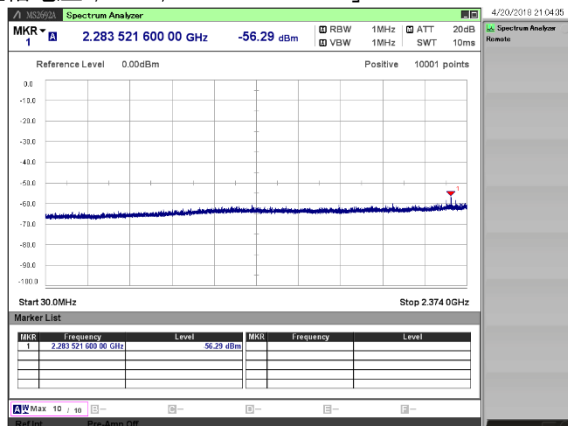
[定格電圧 / Low / 2483.5 - 2509.5MHz]



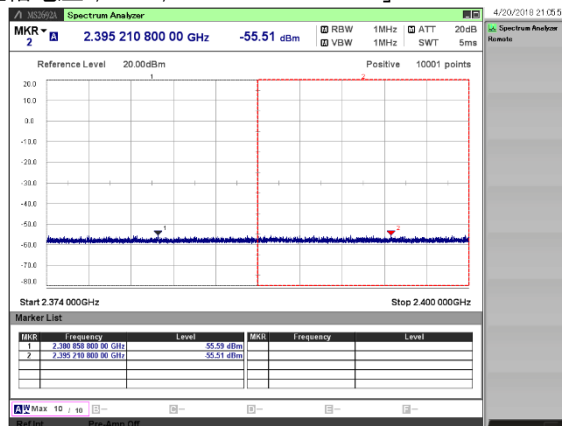
[定格電圧 / Low / 2509.5 - 12500MHz]



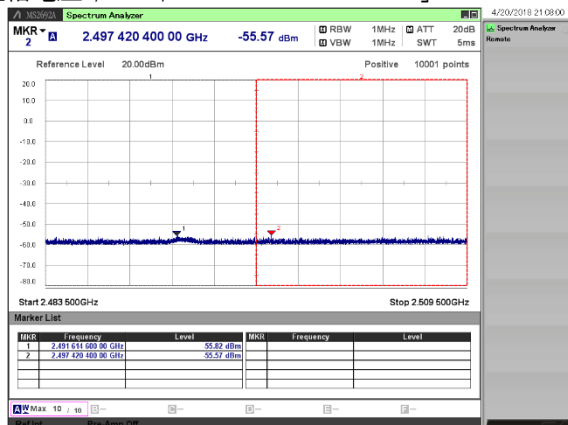
[定格電圧 / Mid / 30 - 2374MHz]



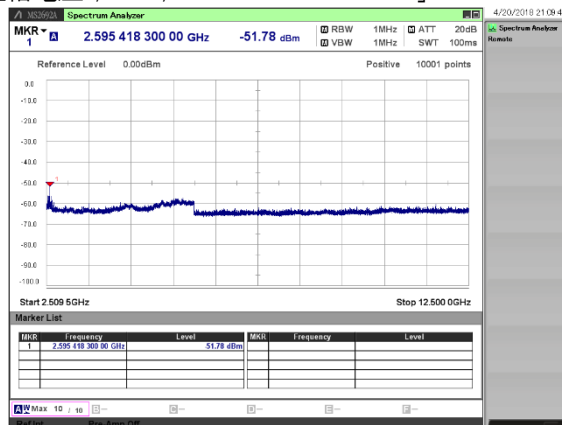
[定格電圧 / Mid / 2374 - 2400MHz]



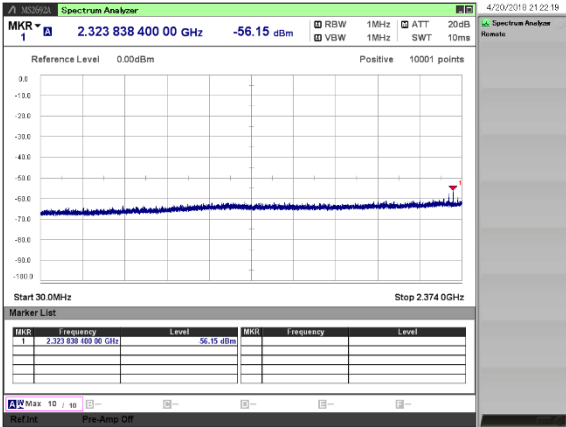
[定格電圧 / Mid / 2483.5 - 2509.5MHz]



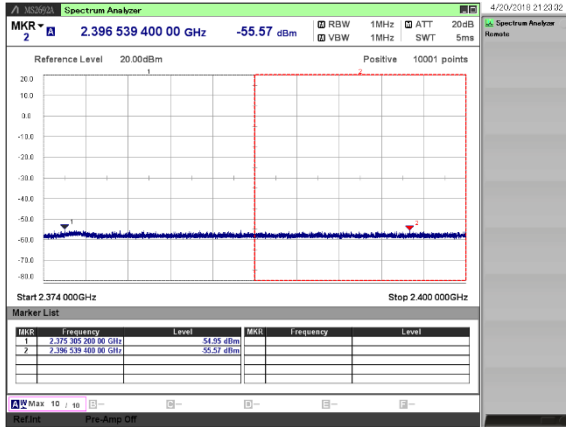
[定格電圧 / Mid / 2509.5 - 12500MHz]



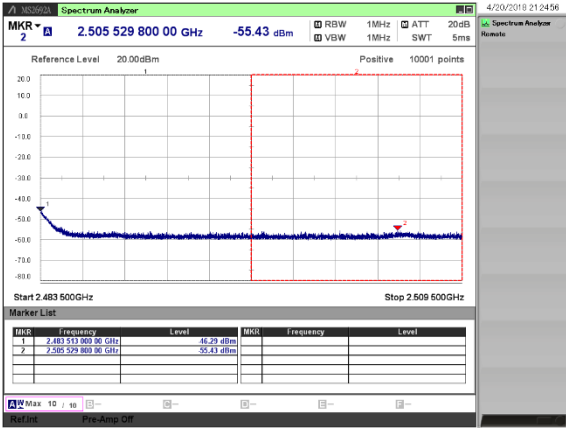
[定格電圧 / High / 30 – 2374MHz]



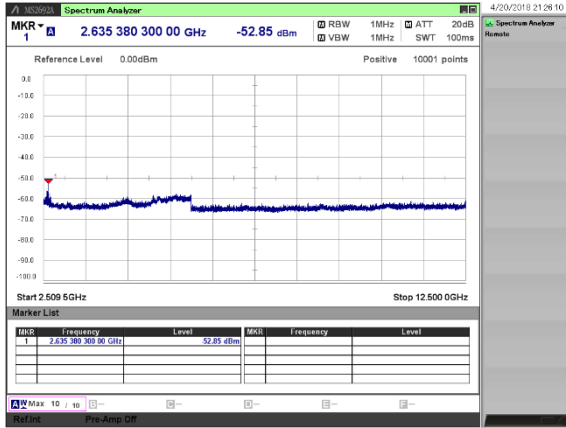
[定格電圧 / High / 2374 – 2400MHz]



[定格電圧 / High / 2483.5 – 2509.5MHz]



[定格電圧 / High / 2509.5 – 12500MHz]



5. 副次的に発する電波等の限度

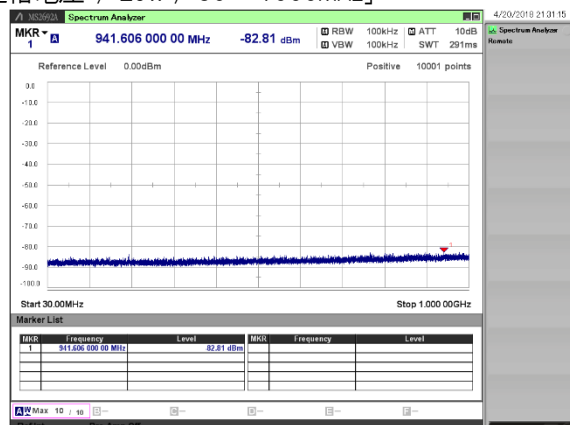
5.1. 試験結果

Test Voltage	Channel [MHz]	Frequency [MHz]	S/A Read. [dBm]	C.F. [dB]	Result [dBm]	Result [nW]	Limit [dBm]	Limit [nW]	Margin [dB]
DC 3.70 V	2402	941.61	-82.81	0.73	-82.08	0.00620	-53.97	4.0	28.11
		5575.85	-67.60	0.97	-66.63	0.21732	-46.98	20.0	19.65
	2440	973.42	-82.34	0.74	-81.60	0.00692	-53.97	4.0	27.63
		5633.35	-67.23	0.98	-66.25	0.23741	-46.98	20.0	19.27
	2480	832.77	-81.81	0.72	-81.09	0.00778	-53.97	4.0	27.12
		5628.75	-67.27	0.98	-66.29	0.23502	-46.98	20.0	19.31

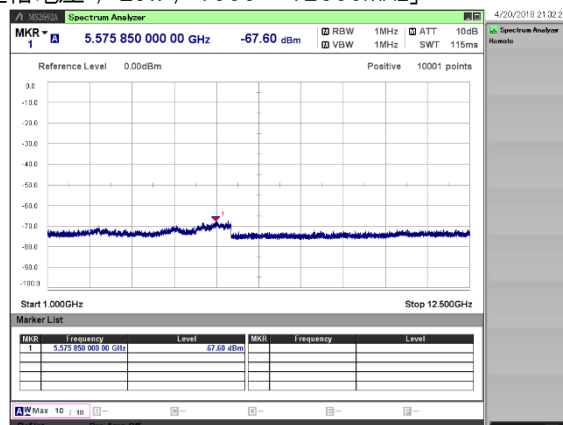
$$\text{Result [nW]} = 10^{\{(S/A \text{ Read. [dBm]} + C.F. [dB])/10\}} * 10^6$$

5.2. 測定器画面データ

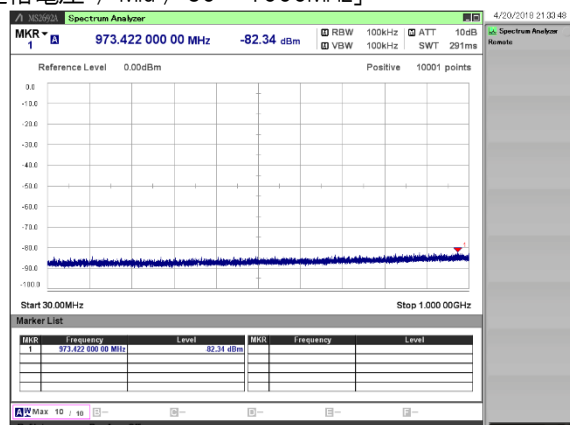
[定格電圧 / Low / 30 - 1000MHz]



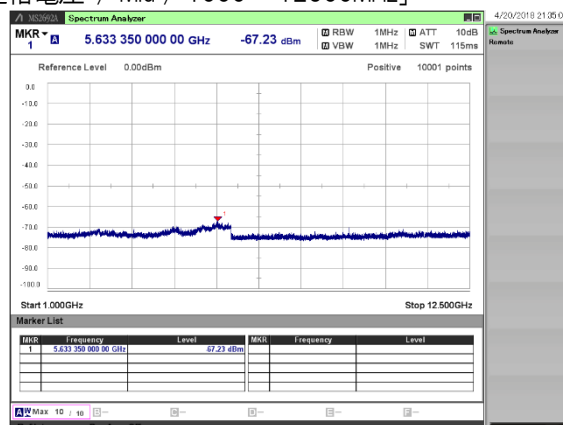
[定格電圧 / Low / 1000 - 12500MHz]



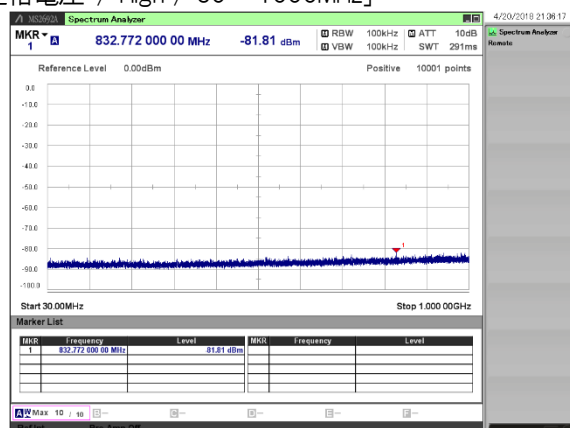
[定格電圧 / Mid / 30 - 1000MHz]



[定格電圧 / Mid / 1000 - 12500MHz]



[定格電圧 / High / 30 - 1000MHz]



[定格電圧 / High / 1000 - 12500MHz]

