

ความสามารถห้องปฏิบัติการสอบเทียบ

ห้องปฏิบัติการทางความถี่

No.	Description	Range	ISO/IEC 17025		ISO/IEC 17025	
			by TISI (สมอ)		by ANAB (USA)	
			In-lab	On-site	In-lab	On-site
1	Oscilloscope			✓	✓	
	Vertical Deflection (Amplitude)	Square Wave			Square Wave	
	- Input Impedance 1 M Ω	1 mV/div to 10 V/div			1 mV/div to 10 V/div	
	- Input Impedance 50 Ω	1 mV/div to 5 V/div			1 mV/div to 5 V/div	
	- Horizontal Deflection (Time)	2 ns/div to 5 s/div			2 ns/div to 5 s/div	
2	Bandwidth	100 kHz to 26.5 GHz			✓	✓
					100 kHz to 26.5 GHz	
3	RF Power- Measure RF Power	1 mW at frequency 50 MHz			✓	✓
	- Reference at 1 mW				1 mW at frequency 50 MHz	
4	RF Power: -30 dBm to +20 dBm	100 kHz to 26.5 GHz			✓	✓
					100 kHz to 26.5 GHz	
5	Tuned RF Power - Measure :	100 kHz to 26.5 GHz			✓	✓
	0 dBm to -90 dBm				100 kHz to 26.5 GHz	
6	Frequency Response : - Flatness	100 kHz to 26.5 GHz			✓	✓
					100 kHz to 26.5 GHz	

7	Distortion - Measure Fundamental Frequencies : 400 Hz and 1 kHz	0.01% to 100%	✓	✓	0.01% to 100%
8	Amplitude Modulation - Measure - Rate: 20 Hz to 100 kHz - Depth: 5% to 99%	150 kHz to 26.5 GHz	✓	✓	150 kHz to 26.5 GHz
	Frequency Modulation - Measure - Rate: 20 Hz to 200 kHz	250 kHz to 26.5 GHz	✓	✓	250 kHz to 26.5 GHz
	Phase Modulation - Rate: 200 Hz to 20 kHz - Radian: 0° to 360°	150 kHz to 26.5 GHz	✓	✓	150 kHz to 26.5 GHz
9	RF Power - Source	RF Power: 3 μ W – 100 mW	✓	✓	RF Power: 3 μ W – 100 mW
10	Spectrum Analyzer (Display Average Noise Level Function) (0 dBm to -130 dBm)	9 kHz to 26.5 GHz	✓	✓	9 kHz to 26.5 GHz
11	Spectrum Analyzer (Input Attenuator Function) (0 dB to 70 dB)	9 kHz to 26.5 GHz	✓	✓	9 kHz to 26.5 GHz
12	Spectrum Analyzer : Resolution Bandwidth - Bandwidth Switching	RBW : 300 Hz to 3MHz Frequency : 9 kHz to 26.5 GHz	✓	✓	RBW : 300 Hz to 3MHz Frequency : 9 kHz to 26.5 GHz
13	Spectrum Analyzer : Scale Fidelity Accuracy	9 kHz to 26.5 GHz	✓	✓	

- Logarithmic scale 1 dB/Step
- Logarithmic scale 10 B/Step
- Linear scale

9 kHz to 26.5 GHz

14	Frequency - Measure	0.1 Hz to 26.5 GHz	✓	✓
				0.1 Hz to 26.5 GHz
15	Frequency - Source	1 kHz to 26.5 GHz	✓	✓
				1 kHz to 26.5 GHz
16	Stroboscope - RPM Speed	(6 to 99,999) RPM	✓	✓
				(6 to 99,999) RPM
17	Timer	Up to 3,600 s	✓	✓
				Up to 3,600 s
18	Centrifuge		✓	✓
	- Timer	(1 to 90) min		(1 to 90) min
	- RPM Speed	Up to 15,000 RPM		Up to 15,000 RPM
19	Calibration Factor of Power sensor	1 mW at 100 kHz - 26.5 GHz	✓	✓
				1 mW at 100 kHz - 26.5 GHz
20	Low Frequency Step Attenuator	0.1 dB - 50 dB at 10 Hz - 100 kHz	✓	✓
				0.1 dB - 50 dB at 10 Hz - 100 kHz