Scope of Work

DC Voltage Measurement	10 mV to 1000 V 1 kV to 30 kV	Accurate to 0.90 µV Accurate to 0.5%
DC Voltage Generation	100 nV to 1000 V	Accurate to 1 ppm
AC Voltage Measurement	1 mV to 700 V 0.7 to 30 kV (60 Hz to 1 kHz)	Accurate to 3.6 µV Accurate to 0.5%
AC Voltage Generation	1 mV to 1020 V	Accurate to 6 ppm
DC Power Generation	10 mW to 20.9 kW	Accurate to 0.16%
AC Power Generation	10 mW to 20.9 kW	Accurate to 0.16%
DC Current Measurement	0.1 nA to 100 A	Accurate to 0.09 nA
DC Current Generation	1 pA to 20.5 A	Accurate to 16 nA
AC Current Measurement	10 µA to 100 A	Accurate to 35 nA
AC Current Generation	29 µA to 20.5 A	Accurate to 0.11 µA
AC Level Flatness	1 V & 3 V (20 Hz to 100 MHz)	Accurate to 0.11%
Phase Generation	±179.9°	Accurate to 0.13°
Phase Measurement	±179.9°	Accurate to 0.01°
Resistance Measurement	0 to 1 GΩ	Accurate to 56 ppm
Resistance Source	0 to 1.1 GΩ	Accurate to 0.88 µΩ
Capacitance Measurement	1 pF to 100 µF (DC to 1 kHz)	Accurate to 0.05%
Capacitance Source	0.19 nF to 110 mF	Accurate to 11 pF
Inductance Measurement	1 to 200 mH (DC to 1 kHz)	Accurate to 0.05%
Inductance Source		Accurate to 0.05%
Frequency Generation	0 to 50 GHz	Accurate to 5 pHz/Hz
Frequency Measurement	0 to 26.5 GHz	Accurate to 5 pHz/Hz
RF Power Sensors	100 kHz to 4.2 GHz 4.2 GHz to 18 GHz 18 to 50 GHz	Accurate to 0.66% Accurate to 0.88% Accurate to 0.95%
RF Power Level	100 kHz to 50 GHz	Accurate to 0.1 dBm
Reflection Coefficient/ Passive Device Characterization	45 MHz to 26.5 GHz	Accurate to 0.004 Rho
Transmission/Passive Device Characterization	45 MHz to 26.5 GHz	Accurate to 0.012 dB
Phase Angle/Passive Device Characterization	45 MHz to 26.5 GHz	Accurate to 0.08°
Precision Attenuation Source	1 to 121 dB (DC to 4 GHz)	Accurate to 0.006 dB
Attenuation Source	1 to 110 dB (1 to 26.5 GHz)	Accurate to 0.25 dB
Attenuation Measurement	150 kHz to 1.3 GHz	Accurate to 0.15 dB
Attenuation Measurement	45 MHz to 26.5 GHz	Accurate to 0.012 dB
Frequency Modulation	150 kHz to 18 GHz	Accurate to 1%
Amplitude Modulation	150 kHz to 18 GHz	Accurate to 1%

Phase Modulation	150 kHz to 18 GHz	Accurate to 3%
Harmonic Distortion	9 kHz to 50 GHz	Accurate to 1.8 dB
Phase Noise	100 kHz to 3 GHz	Accurate to 2 dB with measurement capability to -140 dBc/Hz @1 Hz offset -150 dBc/Hz @10 Hz offset -160 dBc/Hz @100 Hz offset -170 dBc/Hz @1 kHz offset -178 dBc/Hz @10 kHz offset -175 dBc/Hz @100 kHz offset -173 dBc/Hz >100 kHz offset
Noise Sources (ENR)	10 MHz to 26.5 GHz	Accurate to 0.1 dB
Simulated Thermocouple Source and Measure	E, J, K, T, B, C, R, S, L, N, U Type Thermocouple	Accurate to 0.17 °C
Infrared Thermometers	Blackbody Source	Accurate to 0.1 °C
Pressure Source and Measure	0 to 2 in. H_2O 0 to 1 PSI 1 to 100 PSI 100 to 300 PSI 300 to 3,000 PSI 3,000 to 10,000 PSI	Accurate to 0.002 in. H_2O Accurate to 0.003 PSI Accurate to 0.05 PSI Accurate to 0.15 PSI Accurate to 0.6 PSI Accurate to 3 PSI
Gage Blocks	0 to 4 in. 4 to 20 in.	Accurate to +4, -2 µin Accurate to +14, -7 µin
Plug Gages	Up to 8 in.	Accurate to 20 µin
Thread Plug Gages	P.D up to 8 in.	Accurate to 20 µin
Coating Thickness	0.94 to 19.8 mils	Accurate to 20 µin
Mass	2 mg to 17.5 kg 10 to 195 lbs	Accurate to Class F Accurate to Class F
Torque	0.9 to 250 in-lbs 20 to 500 ft-lbs	Accurate to 0.5% Accurate to 1.0%
Sound Pressure Level	94 dB and 114 dB	Accurate to 0.3 dB
Light Illuminance	0 to 50,000 foot candles	Accurate to 1.0%
pH Meters	PH 4, 7, 10, and 13	Accurate to 0.01%
Conductivity Meters	23, 84, 447, 1500, and 4500 µS/cm	Accurate to 1%