CERTIFICATE OF ACCREDITATION

ANSI-ASQ National Accreditation Board
500 Montgomery Street, Suite 625, Alexandria, VA 22314, 877-344-3044

This is to certify that

Wireless Telecom Group
25 Eastmans Road
Parsippany, New Jersey 07054

has been assessed by ANAB
and meets the requirements of international standard

ISO/IEC 17025:2017

while demonstrating technical competence in the field of

CALIBRATION

Refer to the accompanying Scope of Accreditation for information regarding the types of calibrations to which this accreditation applies.

AC-2619
Certificate Number

ANAB Approval

Certificate Valid: 09/25/2018-09/25/2020
Version No. 001 Issued: 09/25/2018

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communiqué dated April 2017).

ANSI-ASQ National Accreditation Board

SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

Wireless Telecom Group

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CALIBRATION

Valid to: **September 25, 2020** Certificate Number: **AC-2619**

Electrical RF/Microwave

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
RF Power Sensors Calibration Factors	0 dBm (1 to 10) MHz (0.01 to 10) GHz (10 to 18) GHz	 1.1 % of reading 1.3 % of reading 1.6 % of reading	Tegam F1130 Power Standard
RF Power Sensors Linearity 1 GHz	0 dBm (-50 to 0) dBm (0 to 20) dBm	0.046 dB 0.11 dB + 0.006 dB/dB 0.048 dB + 0.006 dB/dB	Boonton Model 2530 Calibrator
RF Power Sensors Reflection Coefficient[1]	$\geq 0 \mid \Gamma \mid \leq 0.3$ $\geq 1 \rho \leq 1.88$ (0.01 to 10) GHz (10 to 18) GHz	 0.023 lin 0.028 lin	Anritsu 560-98KF50 SWR Tester
RF Power Meters Linearity (Source) 1 GHz	0 dBm (-50 to 0) dBm (0 to 20) dBm	0.046 dB 0.11 dB + 0.006 dB/dB 0.048 dB + 0.006 dB/dB	Boonton Model 2530 Calibrator
RF Power Meters Linearity (Measure) 1 GHz Calibrator Output	(-34 to -20) dBm (-20 to 20) dBm	0.2 dB + 0.006 dB/dB 0.08 dB + 0.006 dB/dB	Boonton Model 4532A Power Meter w/ 51075 Sensor
RF Power Meters 1 GHz Calibrator Output	0 dBm	3.8 dB	HP 432A Power Meter w/ 478A H84 Thermistor Mount
Noise Sources ENR	(5, 15, 21) dB (0.01 to 8) GHz (8 to 26) GHz (26 to 40) GHz	 0.17 dB 0.23 dB 0.31 dB	HP346CK01, HP346C Noise Standards, Keysight PNA-X Network Analyzer

Electrical RF/Microwave

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Noise Sources Reflection Coefficient[1]	$\geq 0 \ \lvert \Gamma \rvert \leq 0.3$ $\geq 1 \ \rho \leq 1.88$ (0.01 to 2) GHz (2 to 16) GHz (16 to 26.5) GHz (26.5 to 40) GHz	 0.097 lin 0.14 lin 0.18 lin 0.17 lin	HP346CK01, HP346C Noise Standards, Keysight PNA-X Network Analyzer

Calibration and Measurement Capability (CMC) is expressed in terms of the measurement parameter, measurement range, expanded uncertainty of measurement and reference standard, method, and/or equipment. The expanded uncertainty of measurement is expressed as the standard uncertainty of the measurement multiplied by a coverage factor of 2 (k=2), corresponding to a confidence level of approximately 95%.

Notes:

1. Unitless linear measure.
2. This scope is formatted as part of a single document including Certificate of Accreditation No. **AC-2619**.

Vice President