

# International Accreditation Service, Inc.

# CERTIFICATE OF ACCREDITATION

*This is to signify that*

**AMERICAN GAGE**  
870 NORTH BATAVIA STREET  
ORANGE, CALIFORNIA 92868

Calibration Laboratory CL-111  
(Revised June 12, 2009)

has demonstrated compliance with the ANS/ISO/IEC Standard 17025:2005, *General criteria for the competence of testing and calibration laboratories*, and has been accredited commencing May 1, 2007, for the calibration discipline(s) listed in the approved scope of accreditation. The laboratory meets the IAS program requirements in the field of calibration.



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Patrick V. McCullen  
Vice President



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C. P. Ramani, P.E.  
President

*(see attached scope of accreditation for measurement area or type of test, range or quantity, best measurement capability, technique reference, standard equipment or unique conditions)*

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# International Accreditation Service, Inc.

## SCOPE OF ACCREDITATION


American Gage CL-111

American Gage  
870 North Batavia Street  
Orange, CA 92868

Roger Arnold  
President  
(714) 997-0291

| MEASUREMENT AREA   | RANGE & RESOLUTION                      | BEST MEASUREMENT CAPABILITY <sup>1</sup> (BMC) (±) | TECHNIQUE, REFERENCE STANDARD, EQUIPMENT          |
|--|---|--|---|
| <i>Mechanical</i><br>Pressure - Hydraulic                                | 10 to 10,000 psig                       | 0.017% of reading                                  | Pressurements M2200-3                             |
| Pressure - Pneumatic<br>Vacuum - Pneumatic                               | 0 to 50 psia<br>0 to -14.9 psia         | 0.007psia<br>0.007psia                             | Ruska 6220  |
| <i>Thermal</i><br>Temperature – Generate / Measure<br>Comparison to SPRT | -190°C to <0°C<br>0°C<br>>0°C to +420°C | 0.011°C<br>0.007°C<br>0.009°C                      | Fluke 8508A and Rosemount 162C (baths, dry wells) |

May 1, 2007  
Commencement Date

  
C. P. Ramani, P.E.  
President

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|--|--------------------|--|--|--------|
| <i>Thermal</i><br>Temperature - Generate/Measure<br>Thermocouple | Type B             | 600°C to 800°C<br>>800°C to 1000°C<br>>1000°C to 1550°C<br>>1550°C to 1820°C | Fluke 5520A                              |        |
|  | Type C             | 0 to 150°C   |  | 0.44°C |
|  |                    | >150°C to 650°C  |  | 0.34°C |
|  |                    | >650°C to 1000°C   |  | 0.30°C |
|  |                    | >1000°C to 1800°C  |  | 0.33°C |
|  |                    | >1800°C to 2316°C  |  | 0.30°C |
|  | Type E             | -250°C to -100°C   |  | 0.30°C |
|  |                    | >-100°C to -25°C   |  | 0.26°C |
|  |                    | >-25°C to 350°C  |  | 0.31°C |
|  |                    | >350°C to 650°C  |  | 0.50°C |
|  |                    | >650°C to 1000°C   |  | 0.84°C |
|  |                    |  |  | 0.50°C |
|  | 0.16°C             |  |  |        |
|  | 0.14°C             |  |  |        |
|  | 0.16°C             |  |  |        |
|  | 0.21°C             |  |  |        |

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|---|--|--|--|
| <i>Thermal</i><br>Temperature – Generate / Measure<br>continued |  |  |  |
| Thermocouple<br>Type J  | -210°C to -100°C<br>>-100°C to -30°C<br>>-30°C to 150°C<br>>150°C to 760°C<br>>760°C to 1200°C   | 0.27°C<br>0.16°C<br>0.14°C<br>0.17°C<br>0.23°C     | Fluke 5520A                              |
| Type K  | -200°C to -100°C<br>>-100°C to -25°C<br>>-25°C to 120°C<br>>120°C to 1000°C<br>>1000°C to 1372°C | 0.33°C<br>0.18°C<br>0.16°C<br>0.26°C<br>0.40°C     |  |
| Type L  | -200°C to -100°C<br>>-100°C to 800°C<br>>800°C to 900°C  | 0.37°C<br>0.26°C<br>0.17°C                         |  |

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|---|--|--|--|
| <i>Thermal</i><br>Temperature – Generate / Measure<br>continued |  |  |  |
| Thermocouple<br>Type N  | -200°C to -100°C<br>>-100°C to -25°C<br>>-25°C to 120°C<br>>120°C to 410°C<br>>410°C to 1300°C | 0.40°C<br>0.22°C<br>0.19°C<br>0.18°C<br>0.27°C     | Fluke 5520A                              |
| Type R  | 0°C to 250°C<br>>250°C to 400°C<br>>400°C to 1000°C<br>>1000°C to 1767°C                       | 0.57°C<br>0.35°C<br>0.33°C<br>0.40°C               |  |
| Type S  | 0°C to 250°C<br>>250°C to 1000°C<br>>1000°C to 1400°C<br>>1400°C to 1767°C                     | 0.47°C<br>0.36°C<br>0.37°C<br>0.46°C               |  |

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| <i>Thermal</i><br>Temperature – Generate / Measure<br>continued<br>Thermocouple<br>Type T | -250°C to -150°C<br>>-150°C to 0°C<br>>0°C to 120°C<br>>120°C to 400°C | 0.63°C<br>0.24°C<br>0.16°C<br>0.14°C               | Fluke 5520A                              |
| Type U  | -200°C to 0°C<br>>0°C to 600°C   | 0.56°C<br>0.27°C                                   |  |

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|---|---|--|--|
| <i>Thermal</i><br>Temperature - Generate<br>Pt 385,100Ω | -200 C to to 0 C<br>>0 C to 100 C<br>>100 C to 300 C<br>>300 C to 400 C<br>>400 C to 630 C<br>>630 C to 800 C | 0.05 C<br>0.07 C<br>0.09 C<br>0.10 C<br>0.12 C<br>0.23 C | Fluke 5520A                              |
| Pt 3926,100Ω  | -200 C to 0 C<br>>0 C to 100 C<br>>100 C to 300 C<br>>300 C to 400 C<br>>400 C to 630 C                       | 0.05 C<br>0.07 C<br>0.09 C<br>0.10 C<br>0.12 C           |  |

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|---|---|--|--|
| <i>Thermal</i><br>Temperature - Generate continued<br>Pt3916,100Ω | -200 to -190<br>>-190 to -80<br>>-80 to 0<br>>0 to 100<br>>100 to 260<br>>260 to 300<br>>300 to 400<br>>400 to 600<br>>600 to 630 | 0.25 C<br>0.04 C<br>0.05 C<br>0.06 C<br>0.07 C<br>0.08 C<br>0.09 C<br>0.10 C<br>0.23 C | Fluke 5520A                              |
| Pt 385,200Ω   | -200 C to 100 C<br>>100 C to 260 C<br>>260 C to 300 C<br>>300 C to 400 C<br>>400 C to 600 C<br>>600 C to 630 C                    | 0.04 C<br>0.05 C<br>0.12 C<br>0.13 C<br>0.14 C<br>0.16 C                               |  |

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|---|--|--|--|
| <i>Thermal</i><br>Temperature - Generate continued<br>Pt 385,500Ω<br><br><br><br><br>Pt 385,1000Ω | -200 C to -80 C<br>>-80 C to 100 C<br>>100 C to 260 C<br>>260 C to 400 C<br>>400 C to 600 C<br>>600 C to 630 C<br><br>-200 C to 0 C<br>>0 C to 100 C<br>>100 C to 260 C<br>>260 C to 300 C<br>>300 C to 600 C<br>>600 C to 630 C | 0.04 C<br>0.05 C<br>0.06 C<br>0.08 C<br>0.09 C<br>0.11 C<br><br>0.03 C<br>0.04 C<br>0.05 C<br>0.06 C<br>0.07 C<br>0.23 C | Fluke 5520A                              |
| <i>Thermal</i><br>Temperature - Generate continued<br>PtNi 385,120Ω<br><br><br><br>Cu 427,10Ω     | -80 C to 100 C<br>>100 C to 260<br><br>-100 C to 260 C   | 0.08 C<br>0.14 C<br><br>0.3  | Fluke 5520A                              |

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|--|---|---|---|
| <i>Electrical DC/LF</i><br>DC Voltage - Generate | 0 to 329.9999mV<br>330mV to 3.299999V<br>03.3V to 32.99999V<br>33 to 329.9999V<br>100 to 1000.000V  | (ppm of output + $\mu$ V)<br>20 + 1<br>11 + 2<br>12 + 20<br>18 + 150<br>18 + 1500   | Fluke 5520A   |
| <i>Electrical DC/LF</i><br>DC Voltage - Measure  | 0 to 199.999 999mV<br>200mV to 1.999 999 99V<br>2 to 19.999 999 9V<br>20 to 199.999 999V<br>200 to 1050.000 00V   | (ppm Reading + ppm range)<br>5.0 + 0.5<br>3.5 + 0.2<br><br>3.5 + 0.2<br>5.0 + 0.2<br>5.5 + 0.5                                      | Fluke 8508A   |
| <i>Electrical DC/LF</i><br>DC Current - Generate | 0 to 329.999 $\mu$ A<br>330 $\mu$ A to 3.29999mA<br>3.3 to 32.9999mA<br>33 to 329.999mA<br>0 to 1.09999A<br>1.1 to 2.99999A<br>0 to 10.9999A<br>11 to 20.5A | (ppm of output + $\mu$ V)<br>150 + 0.02<br>100 + 0.05<br>100 + 0.25<br>100 + 2.5<br>200 + 40<br>380 + 40<br>500 + 500<br>1000 + 750 | Fluke 5520A<br><br><br><br><br><br><br><br>(20 A Range) |

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|--|--|--|--|
| <i>Electrical DC/LF</i><br>DC Current - Measure  | 0 to 199.999 99µA<br>200µA to 1.999 999 9mA<br>2 to 19.999 999mA<br>20 to 199.999 99mA<br>200mA to 1.999 999 9A<br>2 to 19.999 999A  | (ppm Reading + ppm range)<br>12 + 2.0<br>12 + 2.0<br>14 + 2.0<br>48 + 4.0<br>185 + 8.0<br>400 + 20   | Fluke 8508A                              |
| <i>Electrical DC/LF</i><br>AC Voltage - Generate | 1.0 to 32.999mV @<br>10 to 45Hz<br>>45 to 10kHz<br>>10 to 20kHz<br>>20 to 50kHz<br>>50 to 100kHz<br>>100 to 500kHz<br>33 to 329.999mV @<br>10 to 45Hz<br>>45Hz to 10kHz<br>>10 to 20kHz<br>>20 to 50kHz<br>>50 to 100kHz<br>>100 to 500kHz | (ppm of output + µV)<br>800 + 6<br>150 + 5<br>200 + 6<br>1,000 + 6<br>3,500 + 12<br>8,000 + 50<br>300 + 8<br>145 + 8<br>160 + 8<br>350 + 8<br>800 + 32<br>2,000 + 70 | Fluke 5520A                              |

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|--|---|---|--|
| <i>Electrical DC/LF</i><br>AC Voltage - Generate continued | 0.33 to 3.29999V @<br>10 to 45Hz<br>>45Hz to 10kHz<br>>10 to 20kHz<br>>20 to 50kHz<br>>50 to 100kHz<br>>100 to 500kHz<br>3.3 to 32.9999V @<br>10 to 45Hz<br>>45Hz to 10kHz<br>>10 to 20kHz<br>>20 to 50kHz<br>>50 to 100kHz<br>33 to 329.999V @<br>45Hz to 1kHz<br>>1 to 10kHz<br>>10 to 20kHz<br>>20 to 50kHz<br>>50 to 100kHz | (ppm of output + μV)<br><br>300 + 50<br>150 + 60<br>190 + 60<br>300 + 50<br>700 + 125<br>2,400 + 600<br><br>300 + 650<br>150 + 600<br>240 + 600<br>350 + 600<br>900 + 1,600<br><br>190 + 2,000<br>200 + 6,000<br>250 + 6,000<br>300 + 6,000<br>2,000 + 50,000 | Fluke 5520A                              |

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|--|--|--|--|
| <i>Electrical DC/LF</i><br>AC Voltage - Generate continued | 330 to 1020V @<br>45Hz to 1kHz<br>>1 to 5kHz<br>>5 to 10kHz  | (ppm of output + μV)<br><br>300 + 10,000<br>250 + 10,000<br>300 + 10,000   | Fluke 5520A                              |
| <i>Electrical DC/LF</i><br>AC Voltage - Measure            | 0 to 199.999 9mV @<br>1Hz - 10Hz<br>>10Hz - 40Hz<br>>40Hz - 100Hz<br>>100Hz - 2kHz<br>>2kHz - 10kHz<br>>10kHz - 30kHz<br>>30kHz - 100kHz | (ppm Reading + ppm range)<br><br>165 + 70<br>140 + 20<br>115 + 20<br>110 + 10<br>135 + 20<br>340 + 40<br>765 + 100 | Fluke 8508A                              |

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|---|--|---|--|
| <i>Electrical DC/LF</i><br>AC Voltage Measure - continued | 200mV to 1.999 999V<br>2 to 19.999 99V<br>20 to 199.999 9V @<br>1Hz - 10Hz<br>>10Hz - 40Hz<br>>40Hz - 100Hz<br>>100Hz - 2kHz<br>>2kHz - 10kHz<br>>10kHz - 30kHz<br>>30kHz - 100kHz<br>>100kHz - 300kHz<br>>300kHz - 1MHz<br>200 to 1050.000V @<br>1Hz - 10Hz<br>>10Hz - 40Hz<br>>40Hz - 10kHz<br>>10kHz - 30kHz<br>>30kHz - 100kHz | (ppm Reading + ppm range)<br><br>150 + 60<br>115 + 10<br>90 + 10<br>75 + 10<br>110 + 10<br>220 + 20<br>570 + 100<br>0.3% + 0.1%<br>1% + 1%<br><br>150 + 70<br>120 + 20<br>115 + 20<br>225 + 40<br>580 + 200 | Fluke 8508A                              |

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|--|---|---|--|
| <i>Electrical DC/LF</i><br>AC Current - Generate | 29.00 to 329.99µA @<br>10 to 20Hz<br>>20 to 45Hz<br>>45Hz to 1 kHz<br>>1 to 5 kHz<br>>5 to 10kHz<br>>10 to 30kHz<br>0.33 to 3.2999mA @<br>10 to 20Hz<br>>20 to 45Hz<br>>45Hz to 1kHz<br>>1 to 5kHz<br>>5 to 10kHz<br>>10 to 30kHz | (% of output + µA)<br><br>0.2 + 0.1<br>0.15 + 0.1<br>0.125 + 0.1<br>0.3 + 0.15<br>0.8 + 0.2<br>1.6 + 0.4<br><br>0.2 + 0.15<br>0.125 + 0.15<br>0.1 + 0.15<br>0.2 + 0.2<br>0.5 + 0.3<br>1.0 + 0.6 | Fluke 5520A (L Comp off)                 |

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|--|---|--|--|
| <i>Electrical DC/LF</i><br>AC Current - Generate continued | 3.3 to 32.999mA @<br>10 to 20Hz<br>>20 to 45Hz<br>>45Hz to 1kHz<br>>1 to 5kHz<br>>5 to 10kHz<br>>10 to 30kHz<br>33 to 329.99mA @<br>10 to 20Hz<br>>20 to 45Hz<br>>45Hz to 1kHz<br>>1 to 5kHz<br>>5 to 10kHz<br>>10 to 30kHz<br>0.33 to 1.09999A @<br>10 to 45Hz<br>>45Hz to 1kHz<br>>1 to 5kHz<br>>5 to 10kHz | (% of output + µA)<br><br>0.18 + 2<br>0.09 + 2<br>0.04 + 2<br>0.08 + 2<br>0.2 + 3<br>0.4 + 4<br><br>0.18 + 20<br>0.09 + 20<br>0.04 + 20<br>0.10 + 50<br>0.2 + 100<br>0.4 + 200<br><br>0.18 + 100<br>0.05 + 100<br>0.6 + 1,000<br>2.5 + 5,000 | Fluke 5520A (L Comp off)                 |

May 1, 2007

Commencement Date



C. P. Ramani, P.E.  
President

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# International Accreditation Service, Inc.

## SCOPE OF ACCREDITATION

American Gage CL-111

| MEASUREMENT AREA   | RANGE & RESOLUTION  | BEST MEASUREMENT CAPABILITY <sup>1</sup> (BMC) (±)   | TECHNIQUE, REFERENCE STANDARD, EQUIPMENT |
|--|---|--|--|
| <i>Electrical DC/LF</i><br>AC Current - Generate continued | 1.1 to 2.99999A @<br>10 to 45Hz<br>>45Hz to 1kHz<br>>1 to 5kHz<br>>5 to 10kHz<br>3 to 10.9999A @<br>45 to 100Hz<br>>100Hz to 1kHz<br>>1 to 5kHz<br>11 to 20.5A @<br>45 to 100Hz<br>>100Hz to 1kHz<br>>1 to 5kHz | (% of output + µA)<br><br>0.18 + 100<br>0.06 + 100<br>0.6 + 1,000<br>2.5 + 5,000<br><br>0.06 + 2,000<br>0.10 + 2,000<br>3.0 + 2,000<br><br>0.12 + 5,000<br>0.15 + 5,000<br>3.0 + 5,000 | Fluke 5520A (L Comp off)                 |
| <i>Electrical DC/LF</i><br>AC Current - Generate continued | 29.00 to 329.99µA @<br>10 to 100Hz<br>>100Hz to 1kHz<br>0.33 to 3.2999mA @<br>10 to 100Hz<br>>100Hz to 1kHz   | (% of output + µA)<br><br>0.25 + 0.2<br>0.6 + 0.5<br><br>0.25 + 0.3<br>0.6 + 0.8   | Fluke 5520A (L Comp on)                  |

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# International Accreditation Service, Inc.

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American Gage CL-111

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|--|--|---|--|
| <i>Electrical DC/LF</i><br>AC Current - Generate continued | 3.3 to 32.999mA @<br>10 to 100Hz<br>>100Hz to 1kHz<br>33 to 329.99mA @<br>10 to 100Hz<br>>100 to 1kHz<br>0.33 to 2.99999A @<br>10 to 100Hz<br>>100 to 440Hz<br>3 to 20.5A @<br>10 to 100Hz<br>>100Hz to 1kHz | (% of output + $\mu$ A)<br><br>0.08 + 4<br>0.2 + 10<br><br>0.08 + 40<br>0.2 + 100<br><br>0.12 + 200<br>0.3 + 1,000<br><br>0.12 + 2,000<br>1.0 + 5,000 | Fluke 5520A (L Comp on)                  |

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# International Accreditation Service, Inc.

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American Gage CL-111

| MEASUREMENT AREA                              | RANGE & RESOLUTION   | BEST MEASUREMENT CAPABILITY <sup>1</sup> (BMC) (±)  | TECHNIQUE, REFERENCE STANDARD, EQUIPMENT |
|---|--|---|--|
| <i>Electrical DC/LF</i><br>AC Current Measure | 0 to 199.999 9µA<br>200µ to 1.999 999mA<br>2 to 19.999 99mA @<br>1 - 10Hz<br>>10Hz - 10kHz<br>>10 - 30kHz<br>>30 - 100kHz<br>20mA to 199.999 9mA @<br>1 - 10Hz<br>>10Hz - 10kHz<br>>10 - 30kHz<br>200mA to 1.999 999A @<br>10Hz - 2kHz<br>>2 - 10kHz<br>>10 - 30kHz<br>2A to 19.999 99A @<br>10Hz - 2kHz<br>>2 - 10kHz | (ppm Reading + ppm range)<br><br>310 + 100<br>300 + 100<br>710 + 100<br>0.4% + 100<br><br>310 + 100<br>290 + 100<br>625 + 100<br><br>620 + 100<br>725 + 100<br>0.3% + 100<br><br>820 + 100<br>0.25% + 100 | Fluke 8508A                              |

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| MEASUREMENT AREA                                 | RANGE & RESOLUTION  | BEST MEASUREMENT CAPABILITY <sup>1</sup> (BMC) (±)   | TECHNIQUE, REFERENCE STANDARD, EQUIPMENT |
|--|---|--|--|
| <i>Electrical DC/LF</i><br>Resistance - Generate | 0 to 10.9999Ω<br>11 to 32.9999Ω<br>33 to 109.9999Ω<br>110 to 329.9999Ω<br>330Ω to 1.099999kΩ<br>1.1 to 3.299999kΩ<br>3.3 to 10.99999kΩ<br>11 to 32.99999Ω<br>33 to 109.9999kΩ<br>110 to 329.9999kΩ<br>330kΩ to 1.099999MΩ<br>1.1 to 3.299999MΩ<br>3.3 to 10.99999MΩ<br>11 to 32.99999MΩ<br>33 to 109.9999MΩ<br>110 to 329.9999MΩ<br>330 to 1100MΩ | (ppm of output + floor)<br>40 + 0.01<br>30 + 0.015<br>28 + 0.015<br>28 + 0.02<br>28 + 0.02<br>28 + 0.2<br>28 + 0.1<br>28 + 1<br>28 + 1<br>32 + 10<br>32 + 10<br>60 + 150<br>130 + 250<br>250 + 2,500<br>500 + 3,000<br>3,000 + 100,000<br>15,000 + 500,000 | Fluke 5520A                              |

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# International Accreditation Service, Inc.

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American Gage CL-111

| MEASUREMENT AREA                                | RANGE & RESOLUTION     | BEST MEASUREMENT CAPABILITY <sup>1</sup> (BMC) (±) | TECHNIQUE, REFERENCE STANDARD, EQUIPMENT |
|---|------------------------|--|--|
| <i>Electrical DC/LF</i><br>Resistance - Measure | 0 to 1.999 999 99Ω     | 17 + 2.0   | Fluke 8508A                              |
|   | 2 to 19.999 999 9Ω     | 9.5 + 0.7  | Normal/Lo Current                        |
|   | 20 to 199.999 999Ω     | 8.0 + 0.25   | Normal/Lo Current                        |
|   |                        | 8.0 + 0.7  | Normal                                   |
|   | 200Ω to 1.999 999 9kΩ  | 8.0 + 0.25   | Lo Current                               |
|   |                        | 8.0 + 0.7  | Normal                                   |
|   | 20 to 199.999 999kΩ    | 8.0 + 0.25   | Lo Current                               |
|   |                        | 8.0 + 0.5  | Normal                                   |
|   | 200kΩ to 1.999 999 9MΩ | 9.0 + 0.5  | Lo Current                               |
|   |                        | 15 + 0.5   | Normal                                   |
| 2 to 19.999 999 9MΩ                             | 20 + 5.0               | Lo Current   |  |
|   | 90 + 5.0               | Normal   |  |
| 20 to 199.999 999MΩ                             | 17 + 0.5               | Lo Current   |  |
|   | 120 + 50               | High Voltage                                       |  |
|   | 1505 + 500             | Normal   |  |
| 200MΩ to 1.999 999 99GΩ                         | 65 + 5.0               | Lo Current   |  |
|   | 1510 + 500             | High Voltage                                       |  |
|   | 180 + 500              | Normal/Lo Current                                  |  |
| 2GΩ to 19.999 999 9GΩ                           | 1510 + 500             | High Voltage                                       |  |

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# International Accreditation Service, Inc.

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| MEASUREMENT AREA                                  | RANGE & RESOLUTION               | BEST MEASUREMENT CAPABILITY <sup>1</sup> (BMC) (±) | TECHNIQUE, REFERENCE STANDARD, EQUIPMENT |
|---|----------------------------------|--|--|
| <i>Electrical DC/LF</i><br>Capacitance - Generate | 0.19 to 1.0999nF @ 10Hz to 10kHz | (% of output + floor)<br>0.5 + 0.01nF              | Fluke 5520A                              |
|   | 1.1 to 3.2999nF @ 10Hz to 3kHz   | 0.5 + 0.01nF                                       |  |
|   | 3.3 to 10.9999nF @ 10Hz to 1kHz  | 0.25 + 0.01nF                                      |  |
|   | 11 to 109.999nF @ 10Hz to 1kHz   | 0.25 + 0.1nF                                       |  |
|   | 110 to 329.999nF @ 10Hz to 1kHz  | 0.25 + 0.3nF                                       |  |
|   | 0.33 to 1.09999 F @ 10 to 600Hz  | 0.25 + 1nF   |  |
|   | 1.1 to 3.29999 F @ 10 to 300Hz   | 0.25 + 3nF   |  |

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|---|---|--|--|
| <i>Electrical DC/LF</i><br>Capacitance - Generate continued | 3.3 to 10.9999 F @ 10 to 150Hz<br>11 to 32.9999 F @ 10 to 120Hz<br>33 to 109.999 F @ 10 to 80Hz<br>110 to 329.999 F @ 0 to 50Hz<br>0.33 F to 1.09999mF @ 0 to 20Hz<br>1.1 to 3.2999mF @ 0 to 6Hz<br>3.3 to 10.9999mF @ 0 to 2Hz<br>11 to 32.9999mF @ 0 to 0.6Hz<br>33 to 110mF @ 0 to 0.2Hz | (% of output + floor)<br><br>0.25 + 10nF<br>0.40 + 30nF<br>0.45 + 100nF<br>0.45 + 300nF<br>0.45 + 1 F<br>0.45 + 3 F<br>0.45 + 10 F<br>0.75 + 30 F<br>1.1 + 100 F | Fluke 5520A                              |

<sup>1</sup> "Best Measurement Capability" is the smallest uncertainty of measurement that a laboratory can achieve within its scope of accreditation when performing more or less routine calibrations of nearly ideal measurement standards or of nearly ideal measuring instruments. Best Measurement Capabilities are expressed as uncertainties at approximately the 95% level of confidence, usually using a coverage factor of  $k=2$ . The measurement uncertainty of a specific calibration performed by the laboratory may be greater than the least uncertainty due to the behavior of the customer's device, to the environment (if the calibration is performed in the field), and to influences from the circumstances of the specific calibration.

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