

<b>Procurement Description*</b>	ARRA Funded: Sandia National Laboratories' National Thermal Test Facility has a need for one Field Portable Hand-Held Reflectometer and Emissometer. The Field Portable Hand-Held Reflectometer and Emissometer measures directional reflectance at six bands in the thermal infrared spectral region at two incidence angles, 20° and 60°.
<b>Statement of Work*</b>	Sandia National Laboratories' Solar Technologies organization has a need for one Field Portable Hand-Held Reflectometer and Emissometer. We need a Field Portable Hand-Held Reflectometer and Emissometer that measures directional reflectance at six bands in the thermal infrared spectral region at two incidence angles, 20° and 60°. Based on those values, the directional and total hemispherical emissivity will be able to be calculated. We need the Field Portable Hand-Held Reflectometer and Emissometer to be battery powered reflectometer controlled by a built in PDA type computer. This device needs to be compatible for use for thermal control coatings analysis, thermal emissivity measurements and radiative heat transfer applications including field inspections.
<b>Mandatory Requirements*</b>	<p>The system shall:</p> <ul style="list-style-type: none"> <li>• Measure reflectance in the infrared spectral range and calculate directional thermal emissivity</li> <li>• Spectral Range (s): 1.5-21 microns, 6 bands</li> <li>• Make measurements at two incidence angles: near normal 20°, and near grazing 60°</li> <li>• Measurement time approximately 10 seconds</li> <li>• Battery operated &amp; fully portable</li> <li>• Saves the data on a CompactFlash™ card</li> <li>• Calculates hemispherical thermal emissivity</li> <li>• No sample size restrictions</li> </ul>
DOE funding statement	"Sandia National Laboratories is a multi-program laboratory managed and operated by Sandia Corporation, a wholly owned subsidiary of Lockheed Martin Corporation, for the U.S. Department of Energy's National Nuclear Security Administration under contract DE-AC04-94AL85000."