P4001

Submitter Email: cdurell@labsphere.com
Type of Project: New IEEE Standard
PAR Request Date: 15-Mar-2018
PAR Approval Date: 14-May-2018
PAR Expiration Date: 31-Dec-2022
Status: PAR for a New IEEE Standard
Project Record: P4001

1.1 Project Number: P4001
1.2 Type of Document: Standard
1.3 Life Cycle: Trial Use

2.1 Title: Standard for Characterization and Calibration of Ultraviolet through Shortwave Infrared (250 nm to 2500 nm) Hyperspectral Imaging Devices

3.1 Working Group: Test and Calibration for UV-SWIR Hyperspectral Image Devices (GRSS/SC/Hyperspectral)
Contact Information for Working Group Chair
   Name: Christopher Durell
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Contact Information for Working Group Vice-Chair
None

3.2 Sponsoring Society and Committee: IEEE Geoscience and Remote Sensing Society/Standards Committee (GRSS/SC)
Contact Information for Sponsor Chair
   Name: Siri Jodha Khalsa
   Email Address: sirijodha.khalsa@ieee.org
   Phone: 3034921445

Contact Information for Standards Representative
None

4.1 Type of Ballot: Individual
4.2 Expected Date of submission of draft to the IEEE-SA for Initial Sponsor Ballot: 10/2020
4.3 Projected Completion Date for Submittal to RevCom
Note: Usual minimum time between initial sponsor ballot and submission to Revcom is 6 months.: 08/2021

5.1 Approximate number of people expected to be actively involved in the development of this project: 15
5.2 Scope: The standard defines terminology, device classes, laboratory tests, characterization and calibration methodologies, and recommended practices for application-specific tasks. Initial work is limited to devices that cover the 0.25-2.50um spectral region.

5.3 Is the completion of this standard dependent upon the completion of another standard: No
5.4 Purpose: This standard prescribes the basic specification, testing and characterization that must be done on UV-SWIR (0.25-2.50um) based hyperspectral sensors in order to provide calibrated absolute output and performance, or at least relative performance that will suit the user's task.

5.5 Need for the Project: Hyperspectral Imaging is an exciting and rapidly expanding area of instruments and technology in remote sensing that holds great promise of benefit to human society. Due to quickly changing applications, the instruments are evolving to suit new uses and there is a need for consistent definition, testing, characterization and calibration.

5.6 Stakeholders for the Standard: Hyperspectral instrument and industry manufacturers and users

Intellectual Property
6.1.a. Is the Sponsor aware of any copyright permissions needed for this project?: Yes
If yes please explain: Some papers have been published on this subject in SPIE, EUFAR and other media. Copyright may need to be obtained to use these references.
6.1.b. Is the Sponsor aware of possible registration activity related to this project?: No

7.1 Are there other standards or projects with a similar scope?: No
7.2 Joint Development
   Is it the intent to develop this document jointly with another organization?: No

8.1 Additional Explanatory Notes: