

ISO 20256:2026-04 (E)

Space systems - Solar cells - Calibration procedures

Contents

Page

| | |
|---|------------|
| Foreword..... | iv |
| Introduction..... | v |
| 1 Scope..... | 1 |
| 2 Normative references..... | 1 |
| 3 Terms and definitions..... | 1 |
| 4 Symbols and abbreviated terms..... | 8 |
| 5 General requirements and procedures for AM0 primary reference solar cells..... | 8 |
| 5.1 General..... | 8 |
| 5.2 Classification..... | 8 |
| 5.2.1 General..... | 8 |
| 5.2.2 Single-junction AM0 primary reference solar cell..... | 8 |
| 5.2.3 Multi-junction AM0 primary reference solar cell..... | 11 |
| 5.2.4 High altitude calibration procedures..... | 12 |
| 5.2.5 Synthetic calibration procedures..... | 12 |
| 5.3 Selection..... | 12 |
| 5.4 Temperature measurement..... | 12 |
| 5.5 Electrical connections..... | 13 |
| 5.6 Calibration..... | 13 |
| 5.7 Data sheet..... | 13 |
| 5.8 Marking..... | 14 |
| 5.9 Packaging..... | 14 |
| 5.10 Care of AM0 primary reference solar cells..... | 14 |
| 6 General requirements and procedures for AM0 secondary reference solar cells..... | 14 |
| 6.1 General..... | 14 |
| 6.2 Solar simulator..... | 15 |
| 6.3 Calibration procedure..... | 16 |
| 7 AM0 solar spectral irradiance reference..... | 16 |
| 7.1 General..... | 16 |
| 7.2 AM0 solar spectral irradiance..... | 16 |
| Annex A (informative) Calibration methods for AM0 primary reference solar cells..... | 18 |
| Annex B (normative) AM0 solar spectral irradiance..... | 31 |
| Annex C (normative) Measurement method of the spectral irradiance..... | 90 |
| Annex D (informative) Solar cell holders..... | 97 |
| Bibliography..... | 101 |