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**