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| **Annex 7b to the Contract pursuant to DE-UZ 116**  **Blue Angel Eco-Label for „Solar-Powered Products“** |  | **Please use this  form!** |

Manufacturer (Applicant):

Distributor (Label User):

Brand / Trade name:

Type Designation:

### Measurement Protocol for Solar-Powered Indoor Products with Accumulator Functional Safety Requirement

Applicant’s Information on the Solar-Powered Product (cf. para. 3.2.1 of the Basic Criteria) Please check the applicable place of use:

Cafeteria/kitchen/home environment, Location: near the window

Office environment

Home environment, normal light conditions (e.g. living room)

Home environment, limited light conditions (e.g. bedroom)

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| --- | --- | --- | --- | --- | --- | --- | --- |
| Date: |  | | | | | | |
| Protocol No.: |  | | | | | | |
| Measuring facility/ instruments: |  | | | | | | |
| Accuracy of instruments: |  | | | | | | |
| Irradiation device: |  | | | | | | |
| Test setup (possibly photo): |  | | | | | | |
| Person conducting the test: |  | | | | | | |
| Product under test: |  | | | | | | |
| Item number: |  | | | | | | |
| Serial number: |  | | | | | | |
| Solar module used |  | | | | | | |
| Place of use according to para. 3.2.1 |  | | | | | | |
| Light quantity for full functioning: (1) | [ lux h/d ] | | | | | | |
| Dark power reserve (2) | [ d ] | | | | | | |
| Average energy consumption (3) | [ mWh/d ] | | | | | | |
| Accumulator used | Type | Capacity (4)  [ mAh ] | | Nominal voltage (5)  [ V ] | | | End-of-charge voltage  [ V ] |
| Illuminance under fluorescent light (6) | [ lux ] {Target: 200 lux} | | | | | | |
| Ambient temperature during measurement (7) | Minimum  [°C] | | Maximum  [°C] | | Mean value  [°C] | Standard deviation  [°C] | |
| Charge current of the solar module at nominal voltage of the accumulator (8) | Minimum  [ mA ] | | Maximum  [ mA ] | | Mean value  [ mA ] | Standard deviation  [ mA ] | |
|  | | | | | | | |
| Calculations to Verify Compliance with the Functional Safety Requirements: | | | | | | | |
|  | | | | | | | |
| (9) Energy generated E =  Light quantity(1) / Illuminance(6)\* Charge current(8)\* Nominal voltage(5) =  [mWh/d] | | | | | | | |
| (10) Profit contribution:  Energy generated (9)/ Average energy consumption(3)  [ - ] {Target:>1} | | | | | | | |
| (11) Dark power reserve determined:  Accumulator capacity(4) \* Nominal voltage of the accumulator(5)/ Average energy consumption (3)  [ d ] {Target>= (2)} | | | | | | | |

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| --- | --- | --- | --- |
| **Place:** |  |  |  |
|  |  |  |
| **Date:** |  |  |

**Legally binding signature /company stamp**