VeraSol

# IEC 62257-9-5/-9-8 and Program Changes for 2025

VERASOL COMPANY WEBINAR
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# Speakers

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# Topics for discussion

1. **Overview of what we have achieved**
2. **Major Changes in IEC 62257-9-5/-9-8**
    1. Length of certification
    2. Testing Sample Size
    3. Random Sampling Product Stock Requirements
    4. Truth in Advertising Requirements
    5. Structural Reporting Changes
3. **VeraSol Program Updates**
    1. Transition timeline
    2. VeraSol renewal extension requirement changes
    3. Expiration date policy change
4. **Questions, comments, feedback**
5. **Other notable changes in IEC 62257-9-5/-9-8**
    1. Consumer-Facing Information Requirements
    2. Other Testing Changes

# 讨论主题

1. **我们取得的成就概述**
2. **IEC 62257-9-5/-9-8 的主要变化**
    1. 认证有效期
    2. 测试样本量
    3. 随机抽样产品库存要求
    4. 广告真实性要求
    5. 结构性报告更改
3. **VeraSol 计划更新**
    1. 过渡期时间线
    2. VeraSol 续期认证延期要求变更
    3. 到期日期政策变化
4. **问题、评论、反馈**
5. **IEC 62257-9-5/-9-8 中的其他显著变化**
    1. 面向消费者的信息要求
    2. 其他测试更改

# BENEFITS FOR MARKET ACTORS

VeraSol

## COMPANIES

Easily assess their own products, compare them against competitors' products, and make smarter product development decisions

## DISTRIBUTORS

Quickly and easily identify good quality products that reduce the financial and reputational risks associated with guaranteeing products to end consumers.

## DEVELOPMENT INSTITUTIONS

Increase impact and cost effectiveness by limiting eligibility for programs to products that meet VeraSol standards or certain minimum requirements.

## INVESTORS

Reduce risk by investing only in companies that trade in products that meet VeraSol's standards for quality, performance, and durability.

## GOVERNMENTS

Use our QA framework as a basis for tax and duty policies, voluntary market stimulation programs, and product regulations. Harmonized national standards reduce the resources needed to develop and implement policy.

## CONSUMERS

Access high-quality products at an affordable price. They can trust companies' performance claims and avoid purchasing products that won't perform as expected.

# 市场参与者如何受益

VeraSol

## 公司

轻松评估自己的产品，将其与竞争对手的产品进行比较，并做出更明智的产品开发决策

## 经销商

快速轻松地识别出优质产品，从而降低与向最终消费者保证产品相关的财务和声誉风险.

## 开发机构

通过将计划资格限制为符合 VeraSol 标准或某些最低要求的产品，提高影响力和成本效益。

## 投资者

通过仅投资于交易符合 VeraSol 质量、性能和耐用性标准的产品的公司来降低风险

## 政府

使用我们的 QA 框架作为税收和关税政策、自愿市场刺激计划和商品法规的基础。协调的国家标准减少了制定和实施政策所需的资源。

## 消费者

以实惠的价格获得高质量的产品。他们可以信任公司的性能广告，避免购买性能不如预期的产品。

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# Leaving no one behind

VeraSol works to increase access to modern energy services through high-quality off-grid solar products that build confidence in modern solar solutions and protect the most vulnerable consumers.

**100 million people**

currently have improved energy access from using VeraSol certified solar energy kits.

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# 不让任何一个人掉队

VeraSol 致力于通过高品质离网太阳能产品，建立对现代太阳能解决方案的信心并保护最脆弱的消费者，增加获得现代能源服务的机会。

## 1 亿人

目前，通过使用 VeraSol 认证的太阳能套件改善能源获取的人口。

# What we have achieved

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## Impact

**90 million** — Metric tons of $CO_2e$ avoided through products certified by VeraSol (since 2010)

**$411 million** — Incentives available only to companies with VeraSol-certified products

**75 million** — Units of VeraSol-certified products sold to date

## Program Results

| | |
|---|---|
| **5** | Test methods & quality standards developed |
| **8** | Test labs received technical training and capacity building support |
| **22** | Countries have adopted solar energy kit (SEK) test methods or quality standards |
| **26** | Financing program partners include VeraSol's evaluation as part of their program's eligibility requirements |
| **16K+** | Unique users visited the VeraSol Product Database to access product information |

# 我们取得的成就

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## 影响力

**9 百万**

VeraSol 认证产品避免的二氧化碳排放（自 2010 年起）

**$4 亿万**

仅对 VeraSol 认证产品开放的金融激励机制

**75 百万**

迄今售出的 VeraSol 认证产品数量

## 项目成果

| | |
|---|---|
| **5** | 测试方法和质量标准的制定 |
| **8** | 接受技术培训和能力建设支持的测试实验室 |
| **22** | 采纳太阳能套件 （SEK） 测试方法或质量标准的国家 |
| **26** | 将 VeraSol 纳入其计划资格要求的融资计划合作伙伴 |
| **16K+** | 访问 VeraSol 产品数据库以获取产品信息的用户数量 |

# Terminology

- **2020 version** of Test methods and Requirements
  - IEC TS 62257-9-5:2018 (ed. 4.0)
  - IEC TS 62257-9-8:2020 (ed. 1.0)

- **2025 version** of Test methods and Requirements
  - IEC TS 62257-9-5:2024 (ed. 5.0)
  - IEC TS 62257-9-8:2025 (ed. 2.0)

# Major Changes in IEC 62257-9-5 and IEC 62257-9-8

| | 2020 version | 2025 version |
|---|---|---|
| Length of Certification | 2 years | 3 years |
| Testing Sample Size | QTM: n=4 (size B) or n=6 (size A) Renewal: n=2 | n=2 for all test types and product sizes |
| Product Stock Requirements | QTM: 500 (size A); 150 (size B) Renewal: 250 (size A); 113 (size B) | 150 units for all test types and product sizes* |
| Truth In Advertising | 15% difference between rated and measured allowed | 10% difference between rated and measured allowed |
| Structural Changes- see the following slides for more detail | Test methods are in both -9-5 and in-9-8 | All test methods in -9-5. -9-8 has only requirements |

* 2025 version clarifies that size A products have <10.5 W PV ; size B products have ≥ 10.5 W PV

# IEC 62257-9-5 和 IEC 62257-9-8 的主要变化

| | 2020 版 | 2025 版 |
|---|---|---|
| 认证有效期 | 2 年 | 3 年 |
| 测试样本量 | QTM: n=4 （大小 B） 或 n=6 （大小 A）更新：n=2 | n=2 对于所有测试类型和产品尺寸 |
| 产品库存要求 | QTM：500（A 号）;150 （B 码）续订：250 （尺寸 A）;113 （B 尺寸） | 150 个单位，适用于所有测试类型和产品尺寸* |
| 广告真实性 | 允许额定值和测量值之间相差 15% | 允许额定值和测量值之间相差 10% |
| 结构变化 - 有关详细信息，参见下页幻灯片 | 测试方法为 -9-5 和 in-9-8 | -9-5 中的所有测试方法。 -9-8 只有要求 |

* 2025 版本阐明了 A 尺寸产品 <10.5 W ;B 尺寸产品 ≥ 10.5 W PV

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# Structural reporting changes in IEC TS 62257-9-5/-9-8

# IEC TS 62257-9-5/-9-8 中的结构报告更改

# Current system: 2020 version

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IEC TS 62257-9-5:2018

- Test methods
  ISM, QTM, MCM
- Sampling
- Most test procedures

IEC TS 62257-9-8:2020

- Requirements
  - Safety
  - Battery
  - Outdoor cables
  - Ports
  - TIA
  - Warranty
  - User manual
  - Lumen maintenance
  - Durability, IP
- PV test procedures
  *(Partial shading, bend/fold, etc.)*

# 当前系统：2020 版

VeraSol

IEC TS 62257-9-5:2018

测试方法
ISM、QTM、MCM

采样

大多数测试程序

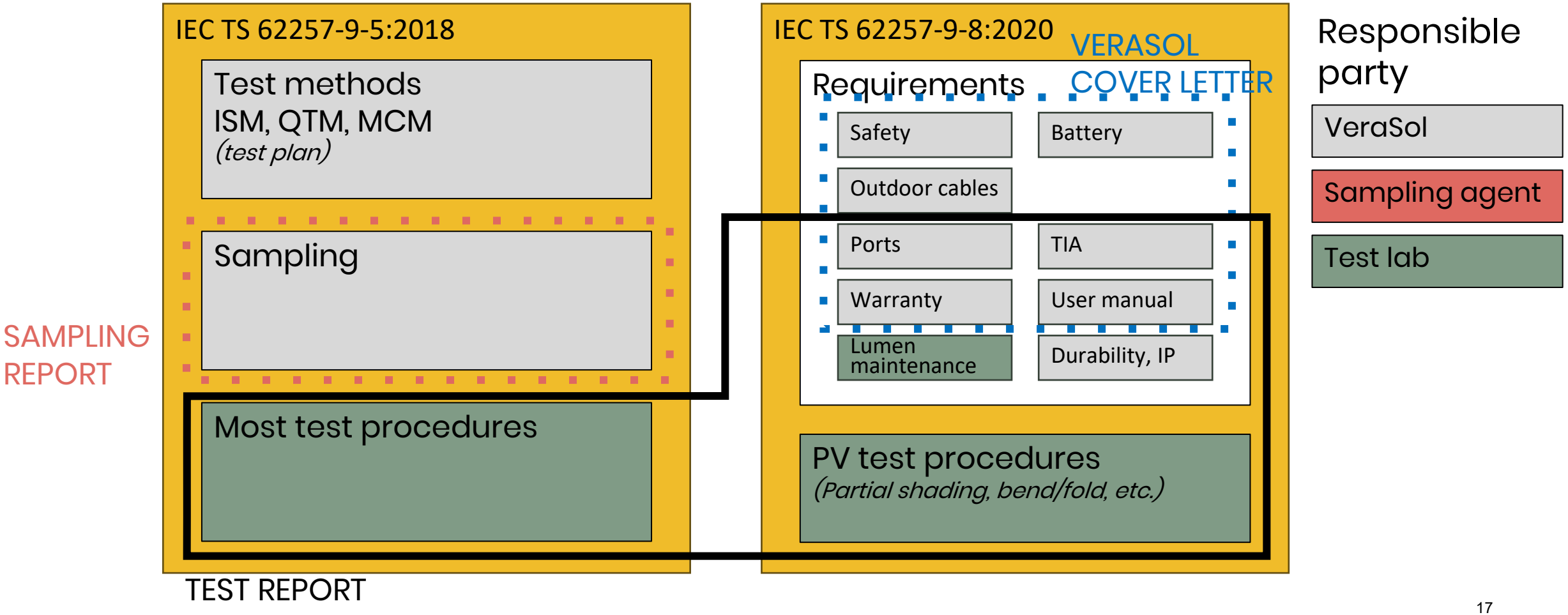
IEC TS 62257-9-8:2020

要求

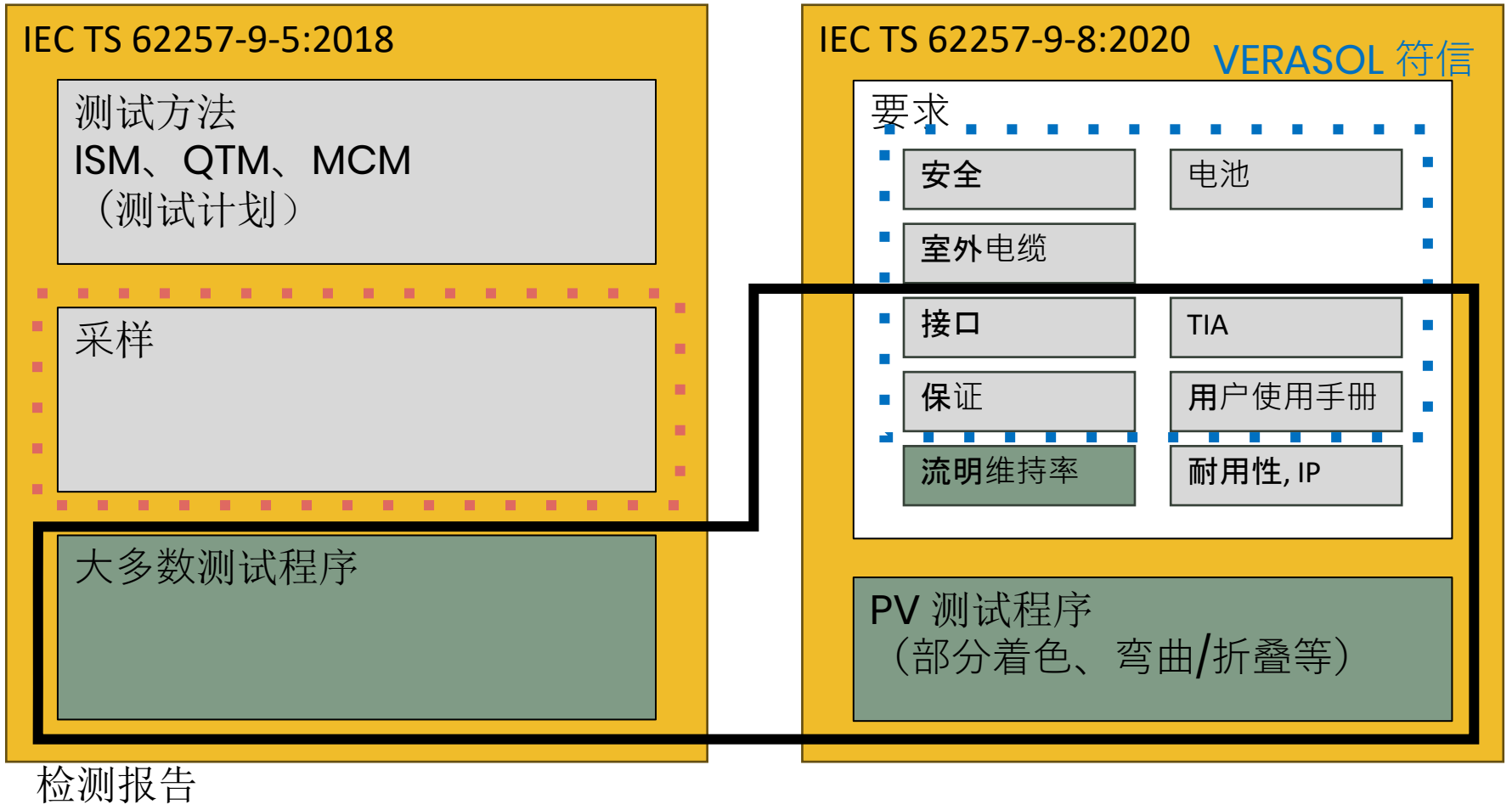
- **安全**
- 电池
- **室外**电缆
- **接口**
- TIA
- **保修**
- **用**户使用手册
- **流明**维持率
- **耐用性**， IP

PV 测试程序
（部分阴影、弯曲/折叠等）

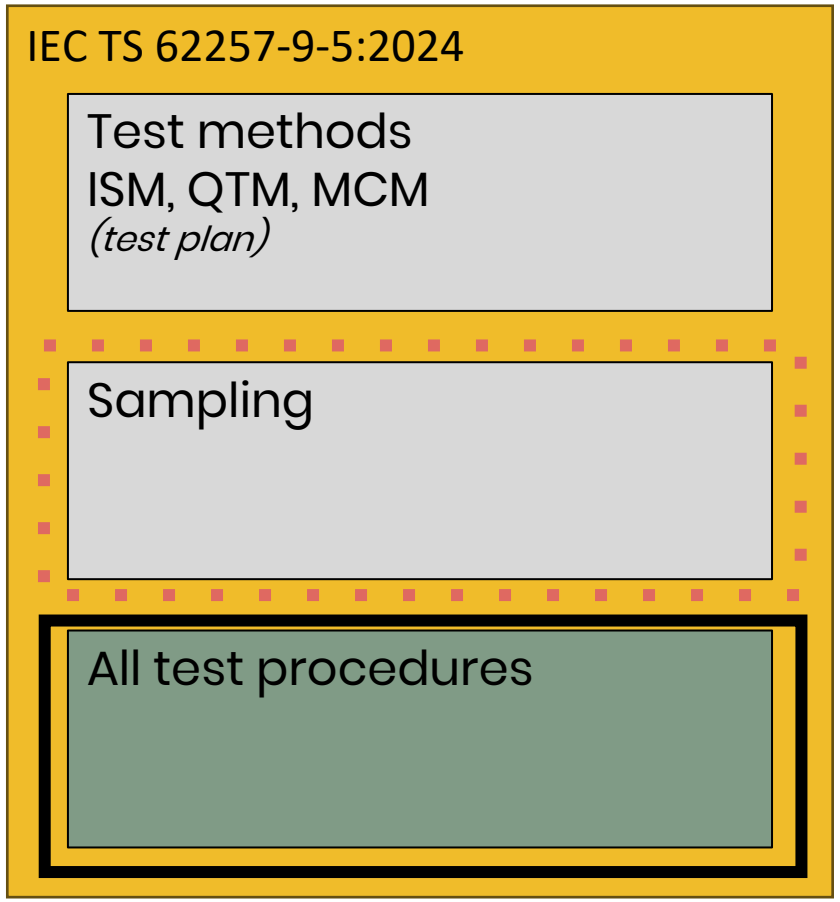
# Current system: 2020 version



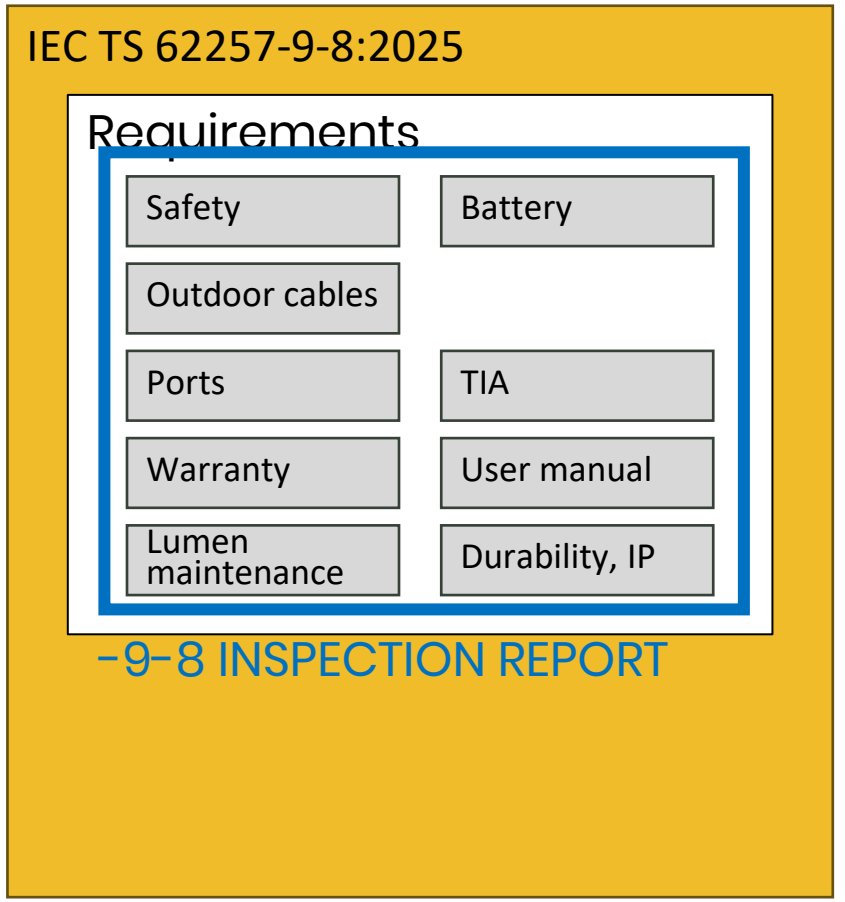
# 当前系统：2020 版


IEC TS 62257-9-5:2018
测试方法
ISM、QTM、MCM
（测试计划）
采样
大多数测试程序
抽样报告
检测报告
IEC TS 62257-9-8:2020
VERASOL 符信
要求
安全
电池
室外电缆
接口
TIA
保证
用户使用手册
流明维持率
耐用性, IP
PV 测试程序
（部分着色、弯曲/折叠等）
责任方
VeraSol
抽样第三方
测试实验室

# New system: 2025 version




SAMPLING REPORT



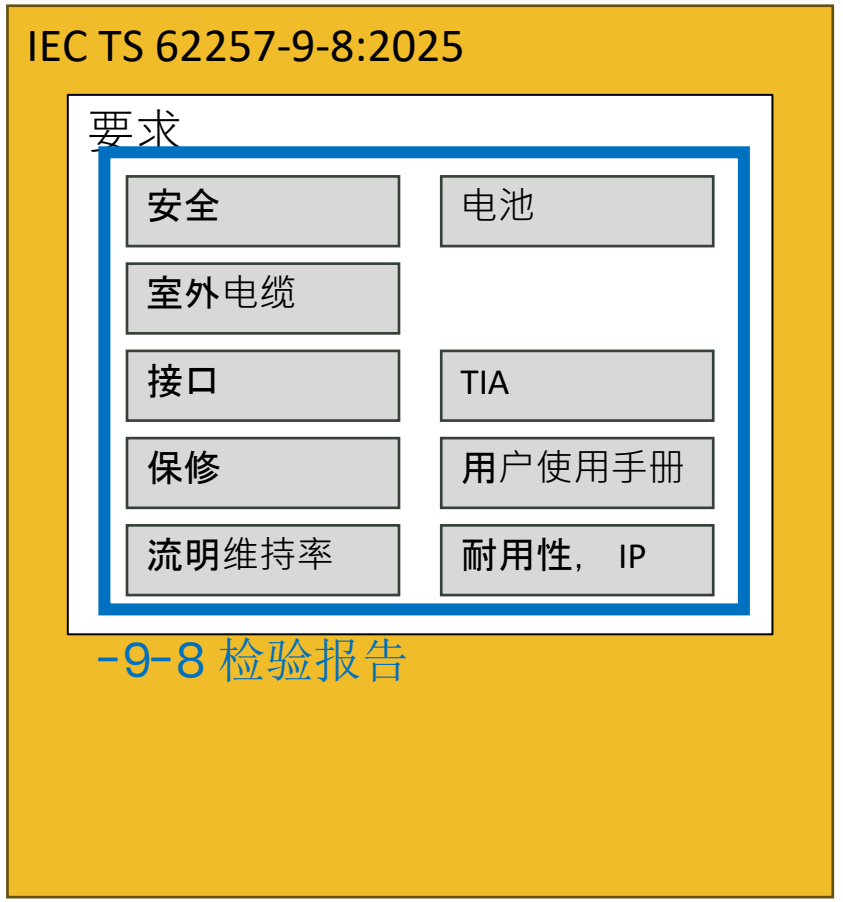

Responsible party

- VeraSol
- Sampling agent
- Test lab

# 新系统：2025 版


抽样报告

-9-5 检测报告




-9-8 检验报告

责任方

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抽样第三方

测试实验室

# Changes for test labs

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- Test labs no longer need IEC TS 62257-9-8 in scope of accreditation to conduct the testing
- Test labs no longer evaluate warranty details, user manual, performance reporting, labeling
- Test labs still need to interpret advertised values that are needed as inputs to tests or ESC


Intertek

University of Nairobi

# 测试实验室的更改

- 测试实验室在认证范围内不再需要 IEC TS 62257-9-8
- 测试实验室不再评估产品保修详情、用户手册、性能报告、标签
- 测试实验室仍然需要解释作为测试或 ESC 输入所需的通告值

# Reasons for the reporting structure changes

| 2020 version issues | 2025 version solutions |
|---|---|
| Products that do not comply with all requirements of -9-8 can often get through import controls using a -9-5 test report. | A -9-8 report will be available for PVoC companies and other organizations |
| The -9-5 test report can have “failing” results even if the issues are corrected | The -9-8 report can be updated when corrective actions are taken by the company |
| The VeraSol cover letter does not include details of all requirements in -9-8, so some requirements might be missed. | The -9-8 inspection report will have all -9-8 results in one place |
| No accredited document with all the -9-8 results | Ultimately, accredited test labs will issue the -9-8 report |

# 报告结构更改的原因

| 2020 版本问题 | 2025 版解决方案 |
| --- | --- |
| 有些不符合 -9-8 所有要求的商品可以使用 -9-5 检测报告通过进口管制。 | PVoC 公司和其他组织也将收到 -9-8 报告 |
| 即使问题已更正，-9-5 测试报告也可能有“失败”的结果 | 当公司采取纠正措施时，-9-8 报告可以同步更新 |
| VeraSol 付函并未包括 -9-8 中所有要求的详细信息，因此可能会遗漏一些要求。 | -9-8 检查报告会把 -9-8 的所有结果放在一个地方 |
| 没有包含所有 -9-8 结果的认可文件 | 最终，经认可的测试实验室将发布-9-8 报告 |

# Certification process changes

| Activity | Responsible Party | | |
|---|---|---|---|
| | prior to June 2025 | new process | future process |
| Create test plan | VeraSol | VeraSol | Commercial partner/Lab |
| Arrange random sampling | VeraSol & Sampling agent | VeraSol & Sampling agent | Commercial partner/Lab |
| Issue test report (IEC 62257-9-5) | Commercial partner/Lab | Commercial partner/Lab | Commercial partner/Lab |
| Issue compliance report (IEC 62257-9-8) | n/a | VeraSol | Commercial partner/Lab |
| Create certification documentation | VeraSol | VeraSol | VeraSol |
| Manage VeraSol database | VeraSol | VeraSol | VeraSol |

# 认证流程变更

| 活动 | 责任方 | | |
|---|---|---|---|
| | 2025 年 6 月之前 | 新流程 | 未来流程 |
| 创建测试计划 | VeraSol | VeraSol | 商业合作伙伴/实验室 |
| 安排采样 | VeraSol | VeraSol | 商业合作伙伴/实验室 |
| 出具测试报告（IEC 62257-9-5） | 商业合作伙伴/实验室 | 商业合作伙伴/实验室 | 商业合作伙伴/实验室 |
| 发布合规性报告（IEC 62257-9-8） | n/a | VeraSol | 商业合作伙伴/实验室 |
| 创建认证文档 | VeraSol | VeraSol | VeraSol |
| 管理 VeraSol 数据库 | VeraSol | VeraSol | VeraSol |

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# VeraSol Program Updates

# VeraSol 计划更新

## Transition Timeline

- IEC TS 62257-9-5:2024 (ed. 5.0) was published in December of 2024
- IEC TS 62257-9-8:2025 (ed. 2.0) was published in January of 2025
- SMQ is accredited to issue IEC TS 62257-9-5:2024 reports and Intertek is pursuing ISO 17025 accreditation (expected completion in August 2025)
- Starting in February 2025, some products opted to be tested to the 2025 versions and the first results were published in June. As of July 1, all new test agreements will be for the 2025 versions.

# 过渡时间线

- IEC TS 62257-9-5：2024（第 5.0 版）于 2024 年 12 月发布
- IEC TS 62257-9-8：2025（第 2.0 版）于 2025 年 1 月发布
- SMQ 被授权发布 IEC TS 62257-9-5：2024 报告，Intertek 正在寻求 ISO 17025 认证（预计 2025 年 8 月完成）
- 从 2025 年 2 月开始，一些商品选择接受 2025 版的测试，第一批结果已于 6 月发布。自 7 月 1 日起，所有新的测试协议都将适用于 2025 版本。

# Transition Timeline

| Test type | 2020 version timeline | 2025 version timeline |
|---|---|---|
| QTM | Agreement signed before June 30, and sampled before July 30, 2025 | Optional until June 30. Required for all test agreements starting in July |
| | Certification available upon test completion and review | Certification available upon test completion and review |
| Renewal | Agreement signed before June 30, and sampled before July 30, 2025 | Optional until June 30. Required for all test agreements starting in July |
| | Certification available upon test completion and review | Certification available upon test completion and review |
| | If sampled before expiration date, will be extended on the VeraSol Product database.<br>If sampled after expiration date, will be temporarily removed from the VeraSol Product database until renewal is complete. | |

# 过渡时间线

| 测试类型 | 2020 版本时间表 | 2025 版本时间表 |
| --- | --- | --- |
| QTM | **在 6 月 30 日之前**签署并在 2025 年 7 月 30 日**之前抽**样的协议 | **在 6 月 30 日之前可**选。对于 7 月**开始的所有**测试协议，此属性是必**需的** |
| | **考**试完成和审核后可获得认证 | **考**试完成和审核后可获得认证 |
| **更新** | **在 6 月 30 日之前**签署并在 2025 年 7 月 30 日**之前抽**样的协议 | **在 6 月 30 日之前可**选。对于 7 月**开始的所有**测试协议，此属性是必**需的** |
| | **考**试完成和审核后可获得认证 | **考**试完成和审核后可获得认证 |
| | **如果在有效期内取**样，将在VeraSol产品数据库中扩展。<br>**如果在到期日之后抽**样，将暂时从 VeraSol 产品数据库中删除，直到续订完成。 | |

# Renewal extension requirements changes

Testing agreement must be signed **AND product sampled** before the expiration date to extend VeraSol support during renewal testing.

- In order to meet this deadline companies will need to sign the agreement approximately 30 days before the expiration date, complete the sampling form and set a sampling date 2 weeks ahead of the expiration date. VeraSol is not able to respond to last minute requests for service agreements or sampling.

- Began January 1, 2025 for both 2020 version and 2025 version testing

# 续证延期要求更改

在认证到期日之前已经签署测试协议**并完成产品抽样**，才能在续证测试期间延长 VeraSol 的支持.

- 为了满足此截止日期，公司需要在认证到期日期前大约 30 天签署协议，填写抽样表并在到期日期前 2 周预约抽样。VeraSol 无法响应临期提出的服务协议或样品请求。
- 从 2025 年 1 月 1 日起生效，适用于 2020 版和 2025 版测试

# Expiration date policy changes-slide 1

- QTM testing: 2025 version testing
  - Expiration date is set 3 years from the test report date.
  - Additional time is no longer given for correction of conditional pass issues.
  - 6 months is given for retesting in case of failures (no change from current policy)

# 到期日期政策变更 – 第 1 页

- QTM 测试：2025 版本测试
  - 认证有效期设置为测试报告日期起的 3 年.
  - 不再为纠正有条件通过提供额外时间.
  - 如测试失败，给予 6 个月的重新测试时间（与当前政策没有变化）

# Expiration date policy changes- slide 2

- Renewal expiration dates for 2025 testing will be based on the renewal test report date.
  - Expiration dates for products on the VeraSol website will only be extended while under test if sampled before their expiration date for both 2020 version and 2025 version testing.

# 到期日期政策变更 – 第 2 页

- 2025 年测试的续证到期日期将基于续证测试报告日期
  - VeraSol 网站上的产品只有在2020版和2025版测试的有效期到期日之前完成取样，才能在测试期间延长。

# Resources for additional information

- Email us: Testing@verasol.org
- VeraSol website: VeraSol.org
- Summary of changes to test methods and standards:
  - https://verasol.org/updates/transition-to-iec-ts-62257-9-52024-and-iec-ts-62257-9-82025/
- Purchase a copy of the 2025 versions:
  - IEC 62257-9-5
  - IEC 62257-9-8
  - Apply for a discount on IEC documents: https://forms.zohopublic.com/business1257/form/IECTS62257DiscountEligibilitySurvey/formperma/Nw_tlV_9Xok4RJjF5HvHIlhhAC3rXnlIhAxwpa_f3YA
- Verasol policies:
  - VeraSol.org/publications/verasol-policies and resources



- 60 decibels report "Why Off-Grid Energy Matters: 2024"

# 更多信息资源

- 邮箱联系我们: Testing@verasol.org
- VeraSol 网站：VeraSol.org
- 测试方法和标准变化摘要：
  - https://verasol.org/updates/transition-to-iec-ts-62257-9-52024-and-iec-ts-62257-9-82025/
- 购买 2025 年版本纸质版：
  - IEC 62257-9-5
  - IEC 62257-9-8
  - 申请折扣：https://forms.zohopublic.com/business1257/form/IECTS62257DiscountEligibilitySurvey/formperma/Nw_tlV_9Xok4RJjF5HvHIlhhAC3rXnIlhAxwpa_f3YA
- Verasol 政策中心：
  - VeraSol.org/publications/verasol-policies and resources

- 60 decibels 报告 “Why Off-Grid Energy Matters: 2024”

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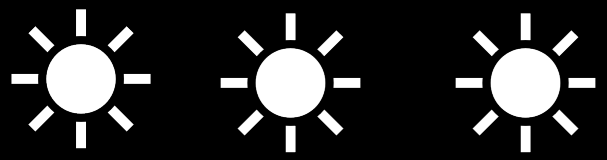
# THANK YOU FOR YOUR ATTENTION



QUESTIONS, COMMENTS, FEEDBACK?

问题、评论、反馈？

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# Other notable changes in -9-5/-9-8*

- *This section highlights changes most likely to impact companies and does not cover all changes in -9-5/-9-8.

# 其他显著变化 -9-5/-9-8*

*本节重点介绍最有可能影响公司的变更，并未涵盖 -9-5/-9-8 中的所有变更

# Consumer-Information Requirement changes-slide 1

- Consumer information requirements are more flexible in terms of how the information is presented for light output and solar run time:
  - For pico-solar products (<10.5 W), the light output and solar run time on the packaging may be presented for either the main lighting or the combination of the main lighting and auxiliary lights.
  - The light output may be presented for each light individually, the main lighting as a unit, or all lights in combination, but would need to align with the presented solar run time.
  - For SHS kits, the solar run time profile requirement may either be presented as:
    - a combination of all lights on high + the highest power appliance (advertised or included; other appliances may be included if desired), or
    - the individual run times for all lighting appliances + the individual run time of the highest power appliance.

# 消费者信息要求变更 – 第1页

- 在如何呈现光输出和太阳能运行时间方面的消费者信息要求更加灵活:
  - 对于微型太阳能产品 （<10.5 W），**包装上的光**输出和太阳能运行时间可以用于**主照明或主照明和**辅助灯的组合。
  - **每个灯的光**输出可以单独显示，主照明作为一个单元显示，也可以组合显示所有灯，**但需要与**显示的太阳能运行时间保持一致.
  - 对于 SHS **套件**，**太阳能运行**时间概况要求可以表示为：
    - **所有灯亮高 + 最高功率**设备的组合（广告或包括;**如果需要**，**可以包括其他**设备），**或**
    - **所有照明**设备的单个运行时间 + **最高功率**设备的单个运行时间。

## Consumer-Information Requirement changes slide 2

- Appliance and PV module labeling requirements reduced
  - *Ratings no longer required on user manual/packaging*:
    - power rating and nominal voltage of each light and appliance
    - PV module Voc and Isc.
  - *Items no longer required on the PV label*:
    - serial number,
    - date and place of manufacture,
    - maximum system voltage (note: Voc and Isc are still required on the PV label).

# 消费者信息要求更改 – 第 2 页

- 减少电器和 PV 模块的标签要求
  - *用户手册/包装上不再需要评级：*
    - 每个灯和设备的额定功率和标称电压
    - 光伏组件 Voc 和 Isc.
  - *PV 标签上不再需要的项目：*
    - 序列号，
    - 制造日期和地点，
    - 最大系统电压（注意：PV 标签上仍需要 Voc 和 Isc）。

## Consumer-Information Requirement changes slide 3

- If runtimes are advertised for appliances that are not included with the kit:
  - the assumed power (or, if run time is specified in terms of full charges, the battery capacity) of the advertised appliances shall be presented
  - the assumed power must be representative of actual appliances that can be found in the market (these could be generic appliances or appliances that the company sells).
- Added a requirement that all PAYG-enabled products include instructions for PAYG system.

- Ports requirements adjusted to make them easier to understand and enforce:
  - The maximum current (or power) and nominal voltage (or voltage range) must now be stated for every output port in the user manual, on the packaging, or on the product

# 消费者信息要求更改 – 第 3 页

- **当运行**时广告是针对套件中未包含的设备时：
  - 应提供所广告设备假定的功率（或者，如果以完全充电的方式指定运行时间，则为电池容量）
  - **假定的功率必**须代表市场上可以找到的实际电器（可以是通用电器或公司实际销售的电器）

- 针对所有 PAYG **适配的**产品，新增加入 PAYG **系**统说明的要求

- 调整了端口要求，使其更易于理解和执行：
  - 现在必须在用户手册、包装或产品上说明每个输出端口的最大电流（或功率）和标称电压（**或**电压范围）

# Additional notable -9-8 changes

- Clarified that pack-level safety testing is not required for products with a single-cell lithium battery; cell-level testing is sufficient. Components with two to four single-cell batteries have options for how to meet the pack-level safety testing requirement.

- For lumen maintenance testing, the requirement may be met via the LM-80 method or by being tested to 1000 hours for QTM, AVM, or renewal testing. An extension of the test to 2000 hours may be requested, but is no longer an option to meet the requirements.

- The term "manufacturer" is replaced with "company" to avoid ambiguous language and match updated usage in the VeraSol program

## 其他值得注意的 -9-8 更改

- 阐明了使用单节锂电池的商品不需要进行电池组级安全测试；单节水平检测已足够。具有 2 到 4 节电池的组件可以选择如何满足电池组级安全测试要求。

- 对于流明维持测试，可通过 LM-80 方法，QTM、AVM 1000 小时的测试、或进行更新测试来满足要求。测试延长至 2000 小时或被要求，但不再是满足要求的选项.

- “制造商”名称被替换为“公司”，以避免语言的歧义，以匹配 VeraSol 程序中的最新用法

## Test method changes- slide 1

- Visual screening procedure no longer includes measurements and recorded information that aren't useful for stakeholders.

- Two tests are now optional: light distribution and charging efficiency. These can be performed upon request. If the charging efficiency test is not performed, default values will be used for the assumed charging efficiency of any appliances that charge from other batteries in the system (such as a radio charging from the main battery).
- Five tests were removed or have reduced applicability: removed PV marking durability (for all products), PV breakage/impact (for all products), PV overvoltage test (for most products), and the screw connections test (for most products), and made PV module partial shading test only applicable to modules greater than 100 W.

# 测试方法更改 – 第 1 页

- 目视筛查程序不再要求对利益相关方无用的测量和记录信息。

- 以下两项测试为可选测试：光分布和充电效率。这些可以根据要求进行。如果未进行充电效率测试，则默认值将用于从系统中的其他电池充电（例如从主电池进行无线电充电）的任何设备的假定充电效率。

- 删除了五项测试或降低了适用性：删除了 PV 标记耐久性（适用于所有产品）、PV 破损/冲击（适用于所有产品）、PV 过电压测试（适用于大多数产品）和螺钉连接测试（适用于大多数产品），并使 PV 组件部分阴影测试仅适用于大于 100 W 的组件

## Test method changes- slide 2

- Added test procedures and requirements for products advertising "fast-charging" capabilities.
- Added a test method for assessing the power consumption of computers and clarified that the power consumption of peripherals (mice, keyboards, etc.) with negligible power requirements does not need to be measured
- Added an additional failure criterion for the strain relief test: "Exposed cores of cables (e.g. due to the cable sheath pulling out of a cord anchorage)."
- Changed test conditions for TVs to better assess the expected power. The brightness will be set to halfway between the maximum brightness and the factory default and the audio will be set to 50% of the maximum setting.

# 测试方法更改 – 第 2 页

- 新增针对宣传“快速充电”功能的商品的测试程序和要求
- 新增一项评估计算机功耗的测试方法，并阐明了不需要测量功耗要求可以忽略不计的外围设备（鼠标、键盘等）的功耗
- 为应力消除测试新增一个额外的失效准则：“电缆的裸露芯线（例如，由于电缆护套从电线固定装置中拉出）。
- 更改了电视的测试条件，以更好地评估预期功率。亮度将设置为最大亮度和出厂默认值之间的中间值，音频将设置为最大设置的 50%。

# Test method changes- slide 3

- Changed the temperature for lithium battery storage tests from 60 °C ± 5 K to 55 °C ± 5 K. In many cases, this can allow the test to be performed without exceeding the battery manufacturer's rated storage temperature
- Updated power consumption and energy capacity values for generic appliances including mobile devices and televisions and added new generic appliance categories. (The increase in the assumed value for energy capacity of a generic smartphone (15 Wh) will impact the combination run times of many products).
- Corrected an issue in the energy service calculations that gave inaccurate results for products designed to step down to a lower setting when the battery is low.

# 测试方法更改 – 第 3 页

- 将锂电池存储测试的温度从 60 °C ± 5 K 更改为 55 °C ± 5 K。在许多情况下，这可以在不超过电池制造商的额定存储温度的情况下进行测试

- 更新了通用设备（包括移动设备和电视）的功耗和能源容量值，并添加了新的通用设备类别。（通用智能手机的能量容量假设值 （15 Wh） 的增加将影响许多产品的组合运行时间）。

- 更正了能源服务计算中的一个问题，该问题导致设计为在电池电量不足时降至较低设置的产品给出不准确的结果.

## Test method changes- slide 4

- Added an optional maximum solar operation efficiency measurement to the solar charge test to more accurately estimate the daily energy service (Wh/day) for products that do not fully utilize the PV module generation capacity unless additional loads are plugged in during solar charging.

- Added a step prior to the full battery run time test to ensure the battery has not discharged substantially due to standby loss prior to the start of the test.

- Updated the calculation for *energy removed from the battery until the DUT reaches a low-voltage disconnect* to exclude energy discharged after all appliances, lights, and ports have turned off. This change may slightly reduce the calculated run times and Wh/day values of some products

# 测试方法更改 – 第 4 页

- 在太阳能充电测试中增加了可选的最大太阳能运行效率测量，以更准确地估计未充分利用光伏组件发电容量的产品的每日能源服务（Wh/天），除非在太阳能充电期间插入额外的负载.

- 在电池完全运行时间测试之前添加了一个步骤，以确保电池在测试开始前不会因待机损耗而大幅放电.

- 更新了从 DUT 达到低电压断开之前从电池中移除的能量的计算，以排除在所有电器、灯和端口关闭后释放的能量。此更改可能会略微减少某些产品的计算运行时间和 Wh/天值

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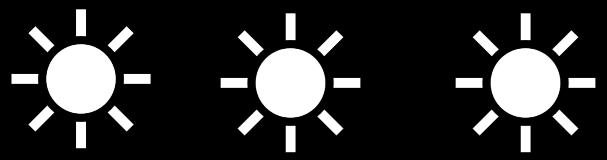
# EXTRA SLIDES



# 补充信息

# Certification process changes

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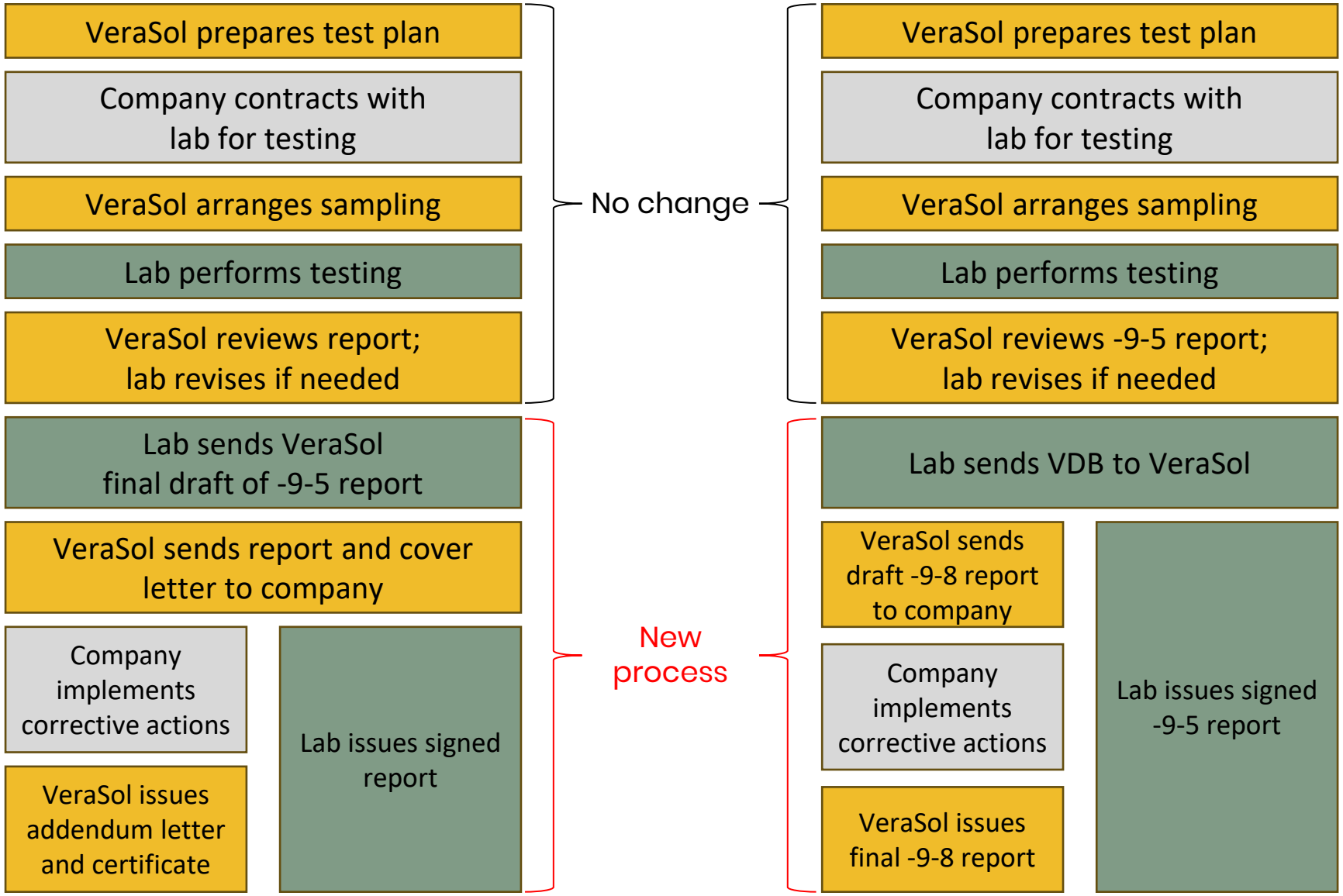


Responsible party

- VeraSol
- Company
- Test lab

# 认证流程变更

VeraSol

责任方

VeraSol

公司

测试实验室

VeraSol 准备测试计划

公司与检测实验室签订合同

VeraSol 安排采样

实验室执行测试

VeraSol 审阅报告;
实验室修订报告（如需）

无变化

VeraSol 准备测试计划

公司与检测实验室签订合同

VeraSol 安排采样

实验室执行测试

VeraSol 审阅报告;
实验室修订报告（如需）

实验室将-9-5 报告最终草案
发给 VeraSol

VeraSol 向公司发送报告和附信

公司实施
纠正措施

VeraSol 颁发
附信和证书

实验室签发报告

新流程

实验室将 VDB 发给 VeraSol

VeraSol 向公司
发送 -9-8 报告草案

公司实施
纠正措施

VeraSol
签发 -9-8 报告

实验室签发 -9-5
报告

# Estimated Timeline for Transition