

激光产品检测认证

Laser product testing and certification

CTNTTM

深圳市中为检验技术有限公司

关于我们 About us

深圳市中为检验技术有限公司由从事检测认证行业十余年的多位认证专家，对检测技术具有多年开发经验的技术专家、以及具有高学历背景的创新人才团队组成。拥有国家资质认定的第三方检测机构、中国认可国际互认检测实验室、中国能效标签备案实验室，所在地发改局备案的“量子光电磁检验检测技术公共服务平台”、检测行业创新技术研究基地等多项资质荣誉。是一家对于检测技术有绝对实力、对于市场准入和检测认证具有较深入研究和剖析的专业、权威第三方检测机构。

中为检验技术以“科学、创新、严谨、高效”为生存和发展的质量方针。在运行和管理过程中严格按照 ISO 17025 (GB/T 27025) 检测及校准实验室能力通用要求、GB/T 27425 科研实验室良好规范进行实验室规范运作，力求检测结果精准、认证过程高效、客户服务满意。

中为检验技术现建激光实验室、电气性能实验室、光学性能实验室、可靠性实验室、材料实验室、能效实验室共六大实验科室。特别对于光学和美容仪器有创新性和领先于行业的检测技术研究。能为社会提供激光、电子电器、蓝光防护、机械设备、家用电器、照明电器、信息通讯、人工智能、医疗美容等众多产品的质量分析、检测认证、市场准入咨询等多方位专业技术服务。

中为检验技术将为客户提高产品质量和减小合规风险作为第一社会责任，在检测认证过程中秉持公正科学的原则，为客户为社会提供专业优质的检验检测技术服务。同时为质量传递信任、为推动科学技术进步做出有力的贡献。

权威资质授权

- 中国认可、国际互认实验室（证书号 L15898）
- 资质认定第三方检测机构（证书号 202119015918）
- 中国能效标签备案实验室（证书号 2021-032260）
- 公共技术服务平台（深龙岗发改〔2021〕0184号）

五大事业中心

- 激光检测事业中心
- 美容仪检测事业中心
- 机械检测事业中心
- 家电电器检测事业中心
- 综合检测认证事业中心

CTNT is composed of multiple certification experts who have been engaged in the testing and certification industry for more than ten years, technical experts with years of development experience in testing technology, and a team of innovative talents with a high degree of education. Third-party testing institutions with national qualifications, China accredited international mutual recognition testing laboratories, China energy efficiency label filing laboratories, "quantum photoelectromagnetic inspection technology public service platform" filed by the local Development and Reform Bureau, and innovative technology research bases for the testing industry. And many other qualifications and honors. It is a professional and authoritative third-party testing organization with absolute strength in testing technology and in-depth research and analysis on market access and testing certification.

CTNT adheres to the quality policy of "science, innovation, rigor, and efficiency" for survival and development. In the process of operation and management, strictly follow the ISO 17025 (GB/T 27025) general requirements for testing and calibration laboratory capabilities, GB/T 27425 scientific research laboratories, and conduct laboratory standardized operations, and strive for accurate test results, efficient certification processes, and customers Satisfactory service.

CTNT currently has six major laboratory departments: laser laboratory, electrical performance laboratory, optical performance laboratory, reliability laboratory, materials laboratory, and energy efficiency laboratory. Especially for optical and beauty equipment, it has innovative and industry-leading testing technology research. It can provide the society with multi-faceted professional technical services such as laser, electronic appliances, blue light protection, mechanical equipment, household appliances, lighting appliances, information communication, artificial intelligence,

As the first social responsibility of improving product quality and reducing compliance risks for customers, CTNT will uphold the principles of fairness and science in the testing and certification process, and provide customers with professional and high-quality inspection and testing technical services for the society. At the same time, it delivers trust in quality and makes a strong contribution to the advancement of science and technology.

QUALIFICATION & AUTHORIZATION

- CNAS ILAC (L15898)
- China Metrology Accreditation (202119015918)

全球激光安全认证

中国 GB 7247.1
国际 IEC 60825.1
美国 FDA 21CFR 1040.10



全球激光安全认证 Global laser safety certification

- 中国、美国 FDA、欧盟、英国、澳洲、俄罗斯、中亚、中东、非洲等全球国家地区激光安全认证
- China, US FDA, EU, UK, Australia, Russia, Central Asia, Middle East, Africa and other global countries and regions laser safety certification
- 中为检验技术是全国唯一同时有国内外激光标准 IEC/EN/BS/AS 60825、GB 7247.1、FDA 21CFR 1040.10 授权认可实验室
- CTNT is the only accredited laboratory has laser standards IEC/EN/BS/AS 60825, GB 7247.1 and FDA 21CFR 1040.10

国家和地区标准 Test standard

- GB 7247.1 激光安全等级 (中国)
GB 7247.1 laser safety class (China)
- IEC 60825 国际电工激光安全等级 (适用于中亚、中东、非洲)
IEC 60825 laser safety class (Central Asia, Middle East, Africa)
- EN 60825 激光安全等级 (欧盟)
EN 60825 laser safety class (European Union)
- BS 60825 激光安全等级 (英国)
BS 60825 laser safety class (United Kingdom)
- FDA 21CFR 1040.10 激光安全等级 (美国)
FDA 21CFR1040.10 laser safety class (America)
同时提供激光产品入驻亚马逊 CNAS 盖章检测报告、FDA 注册号
- AS 60825 激光安全等级 (澳洲)
AS 60825 laser safety class (Australia)

测试产品类别 Test product

- 消费类激光产品 Consumer laser products
激光玩具、激光指示器、激光夜视仪、激光射机枪等等
- 测量类激光产品 Measurement laser products
激光雷达、激光测距仪、激光甲烷探测仪、激光跟踪仪、激光轮廓仪、激光测径仪、激光测振仪、激光干涉仪等
- 表演和显示类激光产品 Performance and display laser
激光舞台灯、激光灯光秀、激光彩灯、激光投影、全息激光、激光电视等
- 医疗类激光产品 Medical laser products
激光手术设备、激光治疗设备、激光诊断仪器、弱激光体外治疗仪器等
- 工业类激光产品 Industrial laser products
激光雕刻机、激光打标机、激光焊接机、激光切割机等等
- 美容类激光产品 Beauty laser products
激光嫩肤仪、激光脱毛仪、激光生发仪等等



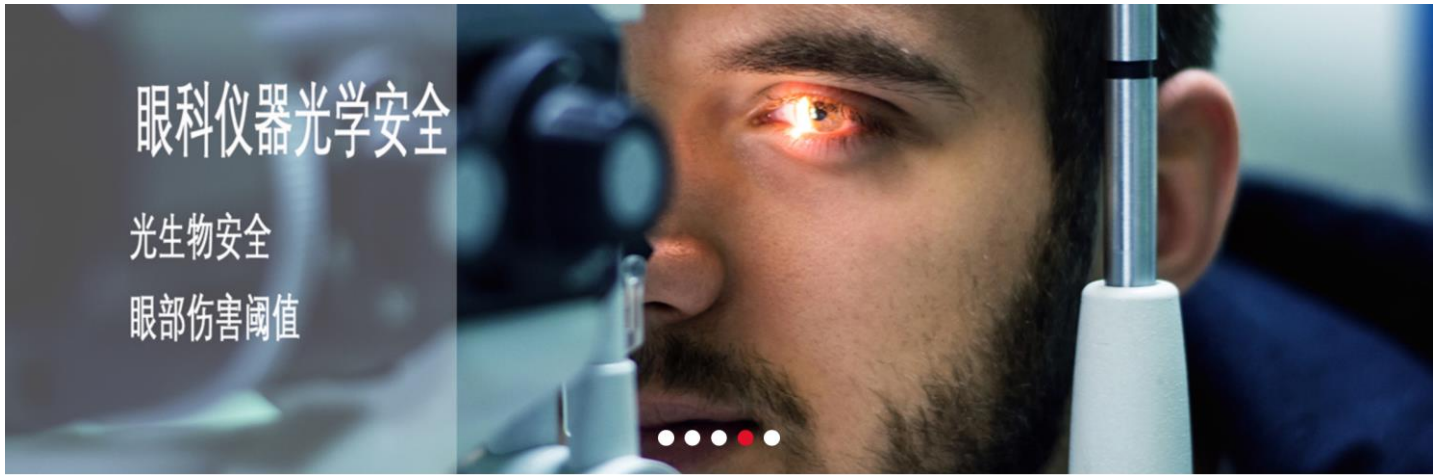
激光雷达点云质量评价

Quality evaluation of laser lidar

■ 中为检验技术为华南首家车载激光雷达激光点云质量评价实验室

■ CTNT is the first vehicle-mounted lidar laser point cloud quality evaluation laboratory in South China

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| ■ 激光安全等级 | ■ Laser safety level |
| ■ 水平视场角 | ■ Horizontal field of view |
| ■ 水平角分辨率 | ■ Horizontal angle resolution |
| ■ 垂直视场角 | ■ Vertical field of view |
| ■ 垂直（平均）角分辨率 | ■ Vertical (average) angular resolution |
| ■ 点频率（测距重复频率） | ■ Dot frequency (ranging repetition frequency) |
| ■ 距离分辨率 | ■ Distance resolution |
| ■ 测程误差 | ■ Range error |
| ■ 帧频 | ■ Frame rate |
| ■ 最大、最小测程 | ■ Maximum and minimum range |
| ■ 线数 | ■ Line count |
| ■ 准测率 | ■ Accuracy rate |
| ■ 相邻光束夹角 | ■ Angle between adjacent beams |
| ■ 光束发散角 | ■ Beam divergence angle |
| ■ 空间测量范围 | ■ Spatial measurement range |
| ■ 空间测量分辨率 | ■ Spatial measurement resolution |
| ■ 高低温环境耐受性能 | ■ High and low temperature environmental test |
| ■ 腐蚀环境耐受性能 | ■ Corrosive Environment Resistance |
| ■ 平均无故障寿命 MTBF | ■ Mean Time Between Failure MTBF |



眼科仪器光生物安全检测

Optical biosafety testing of ophthalmic instruments

■ 哺光仪、视康仪、视力训练仪、虚拟现实 VR 眼镜、增强现实 AR 眼镜、混合现实 MR 眼镜

■ Light Feeding Instrument, Vision Health Instrument, Vision Training Instrument, VR Glasses, AR Glasses, MR Glasses

检测指标

- 角膜和晶状体紫外辐照度
- 视网膜可见辐照度、辐亮度
- 角膜和晶状体红外辐照度
- 前房可见和红外辐照度
- 视网膜可见和红外热辐照度、辐亮度
- 视网膜可见和红外辐射曝光度
- 可见和红外辐射积分辐亮度
- 角膜和晶状体红外辐射曝光度
- 前房可见和红外辐射曝光度
- 视网膜辐射曝光度
- 辐亮度视网膜积分

Test Item

- Corneal and lens UV irradiance
- Retinal visible irradiance, radiance
- Cornea and Lens Infrared Irradiance
- Anterior chamber visible and infrared irradiance
- Retinal visible and infrared thermal irradiance, radiance
- Retinal Visible and Infrared Radiation Exposure
- Visible and infrared radiation integrated radiance
- Corneal and Lens Infrared Radiation Exposure
- Anterior chamber visible and infrared radiation exposure
- Retinal radiation exposure
- Radiance retinal integral



激光光束性能指标检测

Optical biosafety testing of ophthalmic instruments

- 固体激光器、半导体激光器、光纤激光器、工业体激光器
- Solid-state lasers, Semiconductor lasers, Fiber lasers, Industrial Laser
- 中为检验技术为华南唯一能力同时覆盖激光安全和激光性能检测资质授权的第三方检测机构
- CTNT is the only third-party lab in South China capable of covering both laser safety and laser performance

检测指标

- 激光功率/能量 (连续、平均、峰值)
- 激光波长 (峰值、中心)
- 激光光谱分布
- 脉冲宽度
- 半波全宽
- 重复频率
- 电光转换效率
- 边模抑制比
- 斜率效率
- 工作电压、电流
- 激光光束质量因子

Test Item

- Laser power/energy (continuous, average, peak)
- Laser wavelength (peak, center)
- Laser spectral distribution
- Pulse Width
- Half-wave full width
- Repeat frequency
- Electro-optical conversion efficiency
- Side Mode Suppression Ratio
- Slope efficiency
- Working voltage and current
- Beam quality factor

光束质量分析

激光、IPL脉冲光、可见光、紫外光、光透过率



光学检测分析

Optical detection analysis

- 可见光、紫外光、红外光、IPL 脉冲光
- Visible light, Ultraviolet light, Infrared light, IPL pulsed light

检测指标

- 光谱能量分布
- 辐照度指标
- 辐亮度指标
- 蓝光危害
- 蓝光过滤镜片
- 色度亮度分析
- 紫外辐射指标
- 红外光谱分析
- IPL 脉冲能量
- IPL 脉冲宽度
- IPL 脉冲稳定性

Test Item

- Spectral energy distribution
- Irradiance index
- Radiance index
- Blue light hazard
- Blue light filter lenses
- Chroma Brightness Analysis
- UV radiation index
- Infrared spectroscopy
- IPL pulse energy
- IPL pulse width
- IPL pulse stability



中为检验技术官方微信公众号

公司官网 Web: www.ctnt-cert.com

激光检测中心官网 Laser Web: www.ctnt-laser.com

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