



上海新桦邦光电科技有限公司 Shanghai A-LASER Tech. Corp.
(常熟华邦光电科技工业有限公司 Changshu A-LASER Tech. Corp.)



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APPROVAL SHEET

(承认书)

ITEM: AD-EG8030

版本 (Version) : V0
日期 (Date) : 2014-10-16

Prepared By(製定)	Confirmed By(確認)	Approved By(承認)
		
Date (日期):	Date (日期):	Date (日期):

ITEM NO. / 零件编号	AD-EG8030	Material / 材 质	D-ZK3
Series No. / 图面编号	AD-EG8030_V0	NAME / 产品名	Collimator Lens

1. 前言 / Preface

这份文件是针对常熟华邦光电科技工业有限公司开发与制造的AD-EG8030-Collimator Lens, 所订定的出货检验标准。

This document is applied to inspection of the AD-EG8030-Collimator Lens developed and produced by ChangShu A-LASER Tech Corp.

2. 规格 Specification

2.1 光学性质 Optical Character

2.1.1 操作波长 Operation Wavelength	635 nm
2.1.2 有效焦点距离 Effective Focal Length	6.00 mm
2.1.3 作动距离 Working Distance	5.20 mm
2.1.4 穿透率 Transmittance	$\geq 95\%$
2.1.5 波面收差 Wavefront error	$\leq 0.05 \lambda @ 632.8\text{nm}$ (field radius 0.15mm)
2.1.6 数值孔径 Numerical Aperture	0.22
2.1.7 有效径 Effective Diameter	R1 $\Phi 2.7\text{mm}$ / R2 $\Phi 2.2\text{mm}$

2.2 尺寸 Dimensions

2.2.1 外径 Outer Diameter	3.0 (0/-0.02)mm
2.2.2 厚度 Thickness	1.50 (+/-0.02)mm
2.2.3 其它尺寸 Other Dimensions	参考附件 A Reference appendix A

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3. 外观检验 / Appearance Inspection			
参考附件B Reference appendix B.			
4. 包装 / Package			
真空包装, 参考附件C Reference appendix C			
5. 出货检查标准 / Shipment Inspection Standard			
5.1 尺寸 Dimensions	8 pcs Per Batch; Ac=0, Re=1		
5.2 波面收差RMS值 Wave front RMS	8 pcs Per Batch; Ac=0, Re=1		
5.3 外观 Appearance	MIL-STD-105E table, Level 2 / AQL = 0.65%		

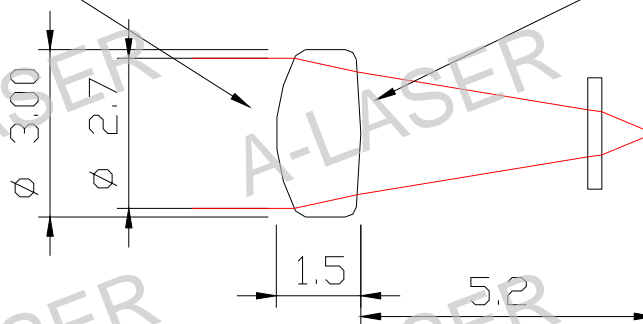
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附件 (Appendix) A
尺寸 (Dimensions)

UNIT: mm

R1 Surface

R2 Surface



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附件 (Appendix) B

AD-EG8030-Collimator Lens外观检验标准:

AD-EG8030-Collimator Lens Appearance Inspection Standard :

A. 目的 Purpose

定义镜的外量测标准,以控制光学质量.

Define the appearance specification of lens to control optical performance.

B. 定义 Definition:

1. 镜面区: 全镜片直径86%区域(参考附图.1)

Lens Surface : the 86% area of whole lens diameter (see Figure. 1)

2. 有效径区域: 全镜片直径80%区域(参考附图.1)

Effective Zone : the 80% area of whole lens diameter for both surfaces of lens (see Figure. 1)

3. 次要区域: 镜面区扣除有效径之其余区域

Non-critical Zone : the other area outside of the effective zone.

4. 刮伤: 长宽比大于3:1

Scratch : the length / wide ratio larger than 3.

5. 孔/洞: 镜片表面的缺陷

Dig : the small cave on the lens.

6. 白点: 镜片内外不透光部份

Bubble : the air, bladder inside the lens.

7. 微粒: 残料/灰尘/毛屑等异物位于镜面

Particle : the foreign objects, something like dust, bits and small pieces on the lens surface.

C. 检查方法 Method of Inspection :

1. 镜片以显微镜倍率10X检查

Observer should inspect the quality of lens surface by a microscope in 10X.

2. 有效径区域: 全镜片直径80%区域(参考附图.1)

Effective Zone : the 80% area of whole lens diameter for both surfaces of lens (see Figure. 1)

D. 规格 Specification

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1. 刮伤 Scratch

a. 在有效径区域内 In the effective zone.

i. 任何刮伤宽度不超过0.005mm是允许的。
Any scratch under 0.005mm is allowed.

ii. 最大刮伤宽长度不能大于0.04mm, 刮伤总数应在2个以下。

The maximum width of scratch should be less than 0.04mm, the number of scratch should be under two.

iii. 总刮伤长度不能大于0.8mm.

The maximum length of scratch should be less than 0.8mm.

b. 次要区域内 Non-critical Zone

i. 不计算.

No Specification

2. 孔/洞/白点 Dig/Bubble

a. 在有效径区域内 In the effective zone.

i. 任何孔/洞/白点不超过0.05mm是允许的。
Any dig/bubble under 0.05mm is allowed.

ii. 最大孔/洞/白点直径不能大于0.16mm, 孔/洞/白点总数应在3个以下。

The maximum width of dig/bubble should be less than 0.16mm, the number of dig/bubble should be under three.

b. 次要区域内 Non-critical Zone

i. 不计算.

No Specification

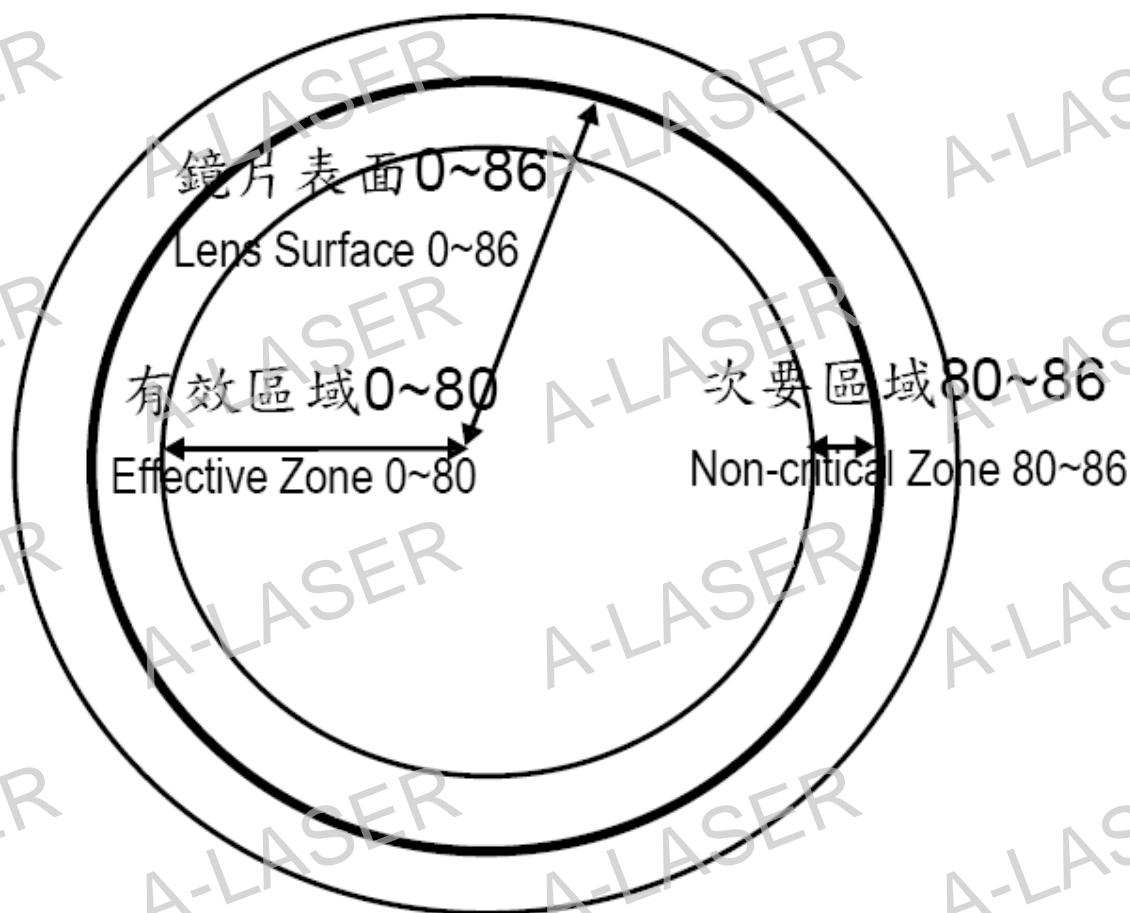
3. 毛屑/灰尘 Hair/Particle

a. 用喷枪清除毛屑和灰尘后再观察是允许的。

Hair of Particle cleanable by air gun is allowed.

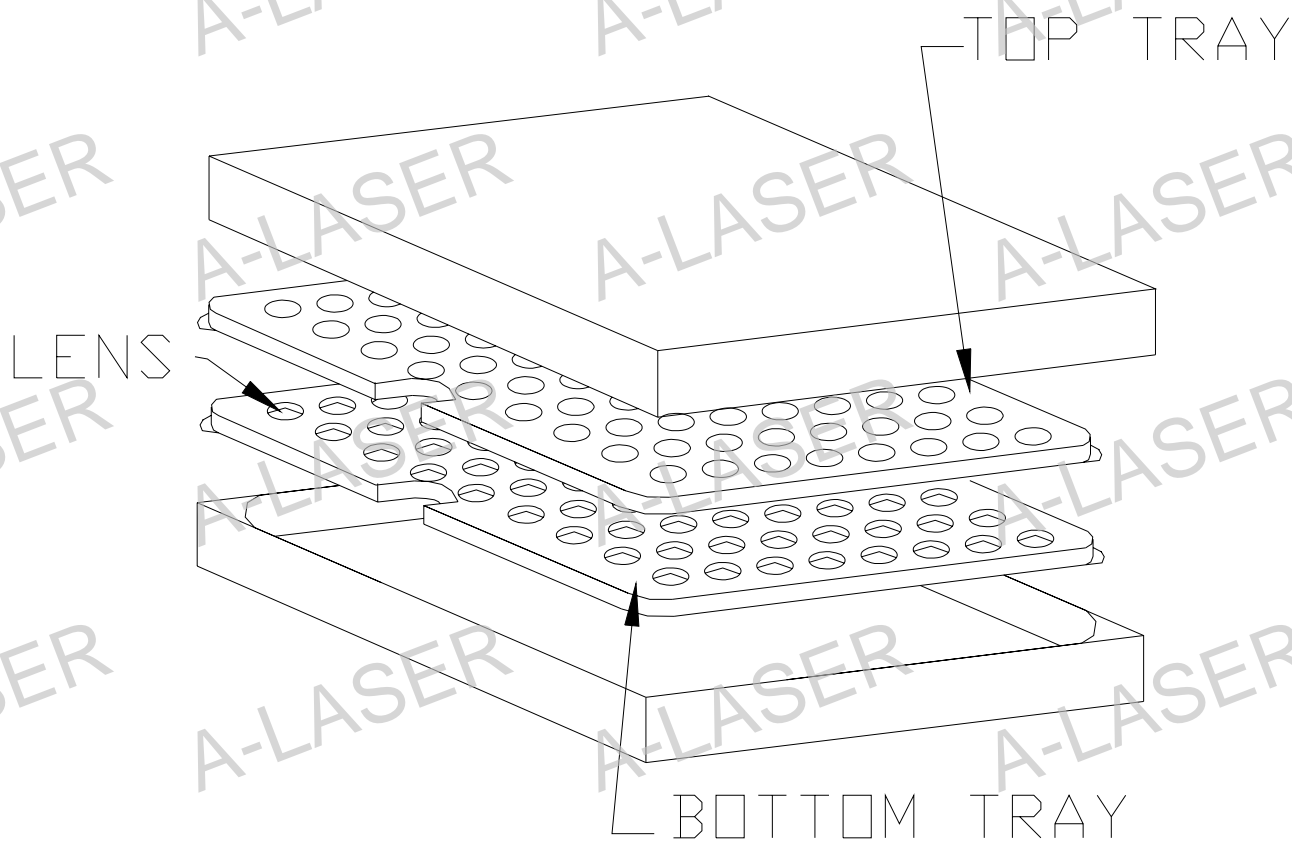
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图 (Figure.)1



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附件 (Appendix) C



Standard Packing : 100PCS/tray