



STANDARD RANGE

Ultra Flat Optic (UFO)

July, 2021

UFO: presentation

Given the current increasing demand on zoom solutions and wanting to provide an alternative to already GAGGIONE existing zoom products in both PMMA and Silicone, GAGGIONE is launching a new range of optics.

3 references in PMMA

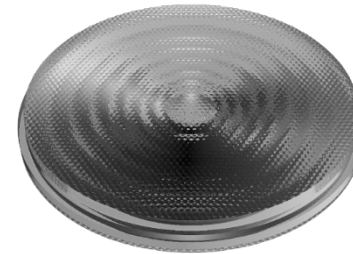
Asymmetric version



UF045A

45 mm

Zoom versions



UF045Z

45 mm



UF067Z

67mm

- **Flat design** allowing innovative form factor fixtures.
- **Tunable White** compatibility.
- State of the art **beam homogeneity** on any position.

Visit our [website](#)

UFO: LED specifications

LES size: HP: 28mm² max - COB: Ø 6mm max

Type of LED: high power, COB, CSP based clusters

Type of Led	UF045A	UF045Z
RGBW	✗	✗
Tunable White	✓	✗
Single chip	✓	✓
Multi chip	✓	✓
COB	✓	✓

See more details on page 4

- ✓ Compatible
- ✓ To be confirmed by measurements
- ✗ Not compatible

LES size: HP: 28mm² max - COB: Ø 13mm max

Type of LED: high power, COB, CSP based clusters

Type of Led	UF067Z
RGBW	✗
Tunable White	✓
Single chip	✓
Multi chip	✓
COB	✓

UFO: LED specifications

This compatibility chart is relevant for "full zoom operation".

Compatibility for "static" beam application might be wider.

	WHITE						If "White compatible" →	TUNABLE WHITE		
	High power w/o dome	High power With dome	COB 4mm	COB 6mm	COB 9mm	COB 14mm		Quad Chip	CSP based clusters	« Phospore Line » COB
UF045Z	✓	✓	✓	✓ Fixed beam only	✗	✗	If "White compatible" →	✗	✗	✗
UF067Z	✓	✓	✓	✓	✓	✓		✗	✓	✓
UF045A	✓	✓	✓	✓	✗	✗		✓	✓	✓

- ✓ Compatible
- ✓ To be confirmed by measurements
- ✗ Not compatible

UFO: applications

Architectural



Wall washing



Indoor



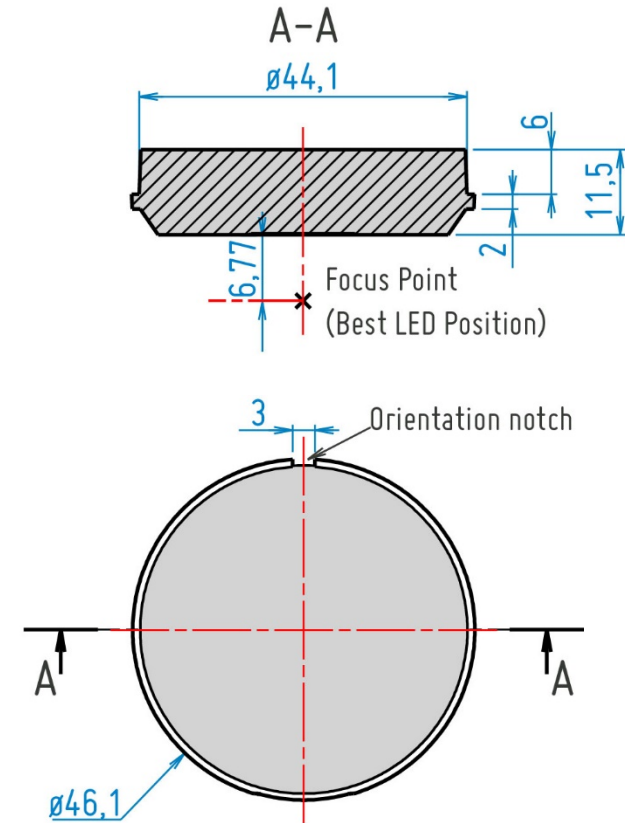
Asymmetric version



UF045A

45 mm

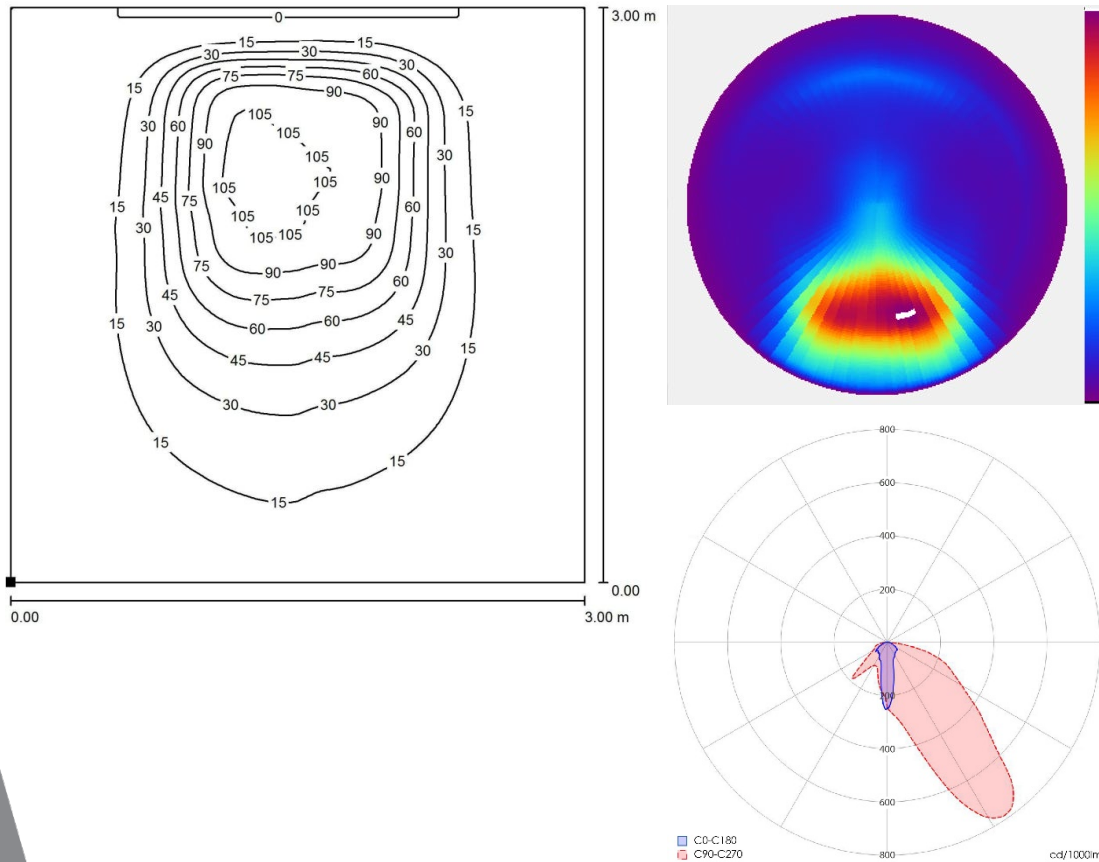
UF045A: Asymmetric version



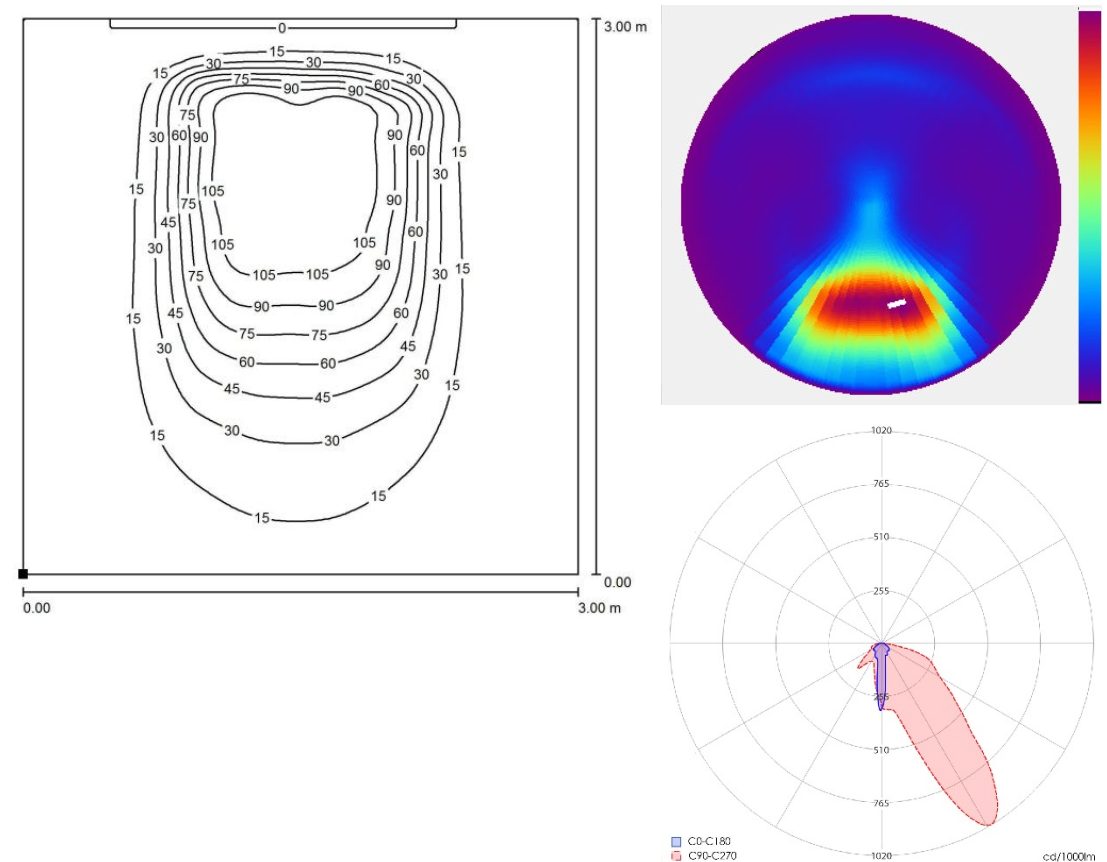
Visit the [product page](#) on our website

UF045A: Illumination & intensity pattern

BRIDGELUX
VESTA 6 TW



CITIZEN
CLU7B2

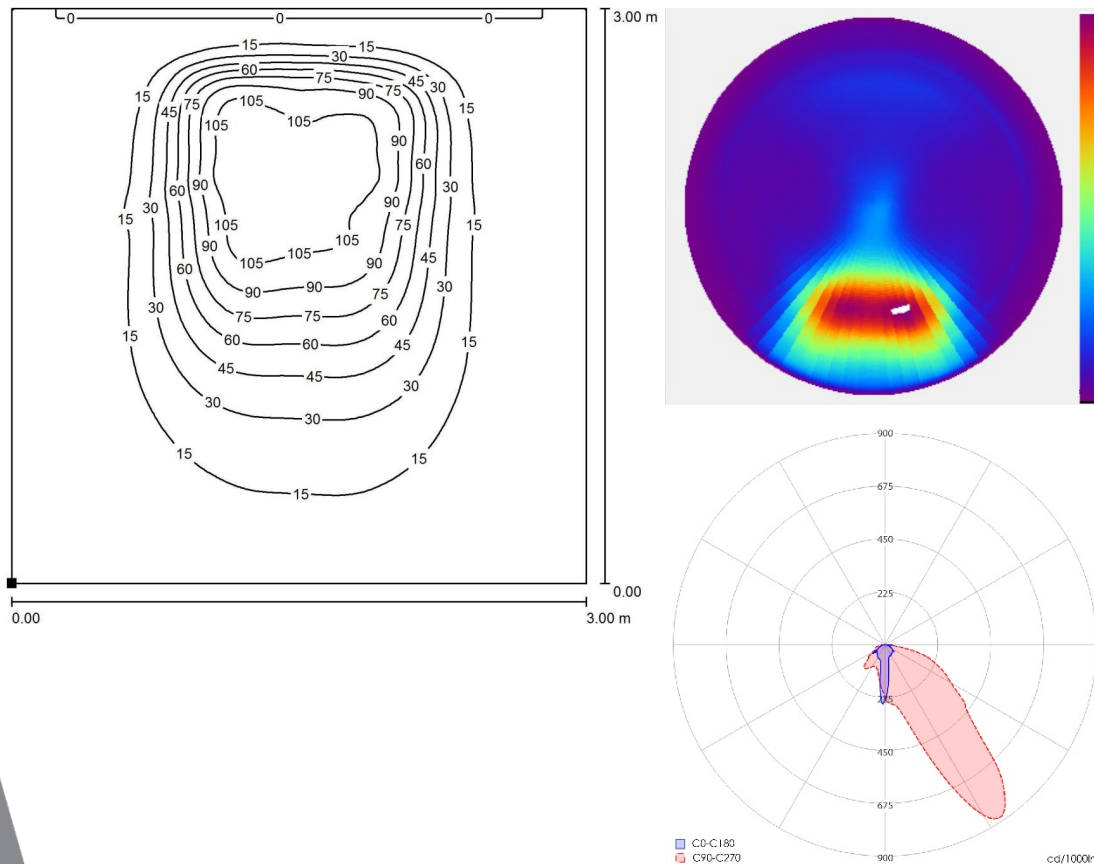


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UF045A: Illumination & intensity pattern

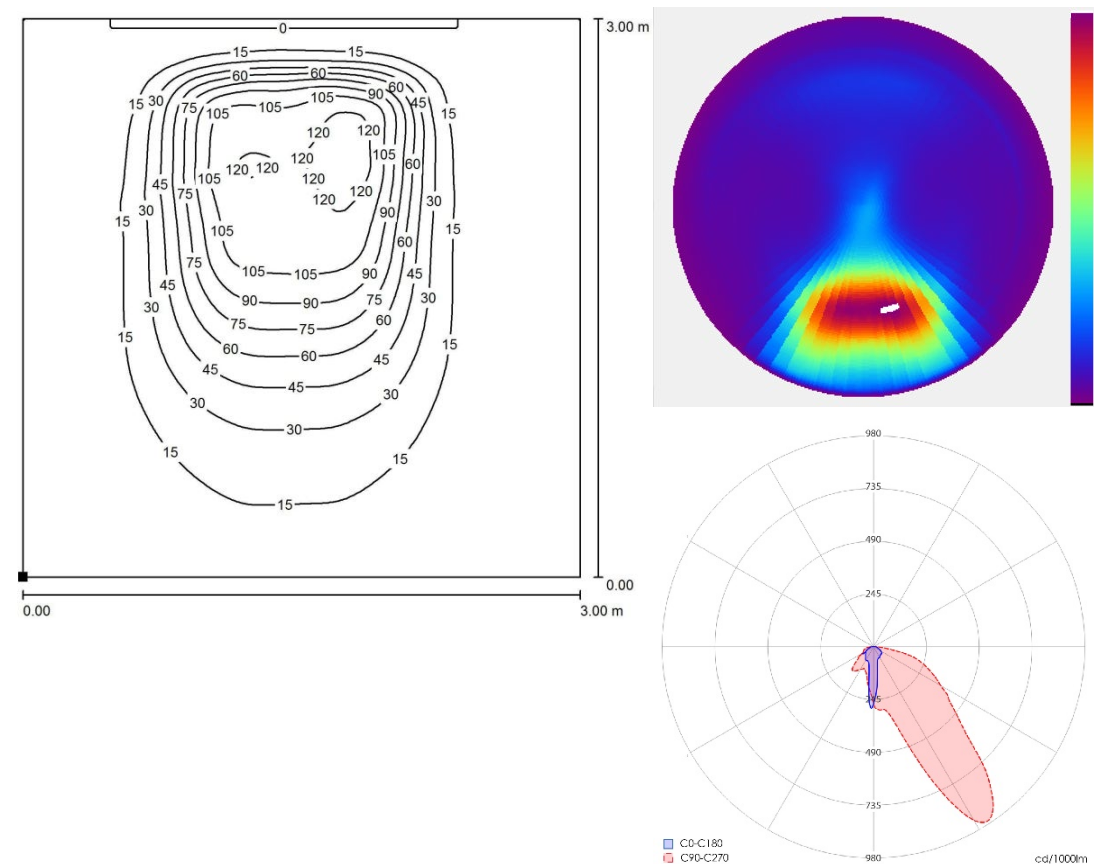
CREE

XHP35.2 HD



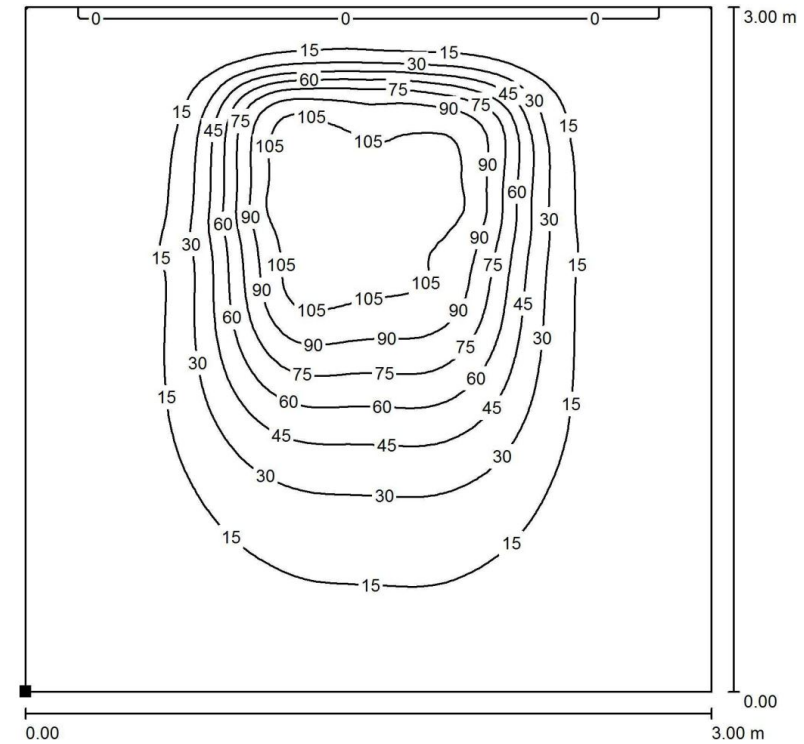
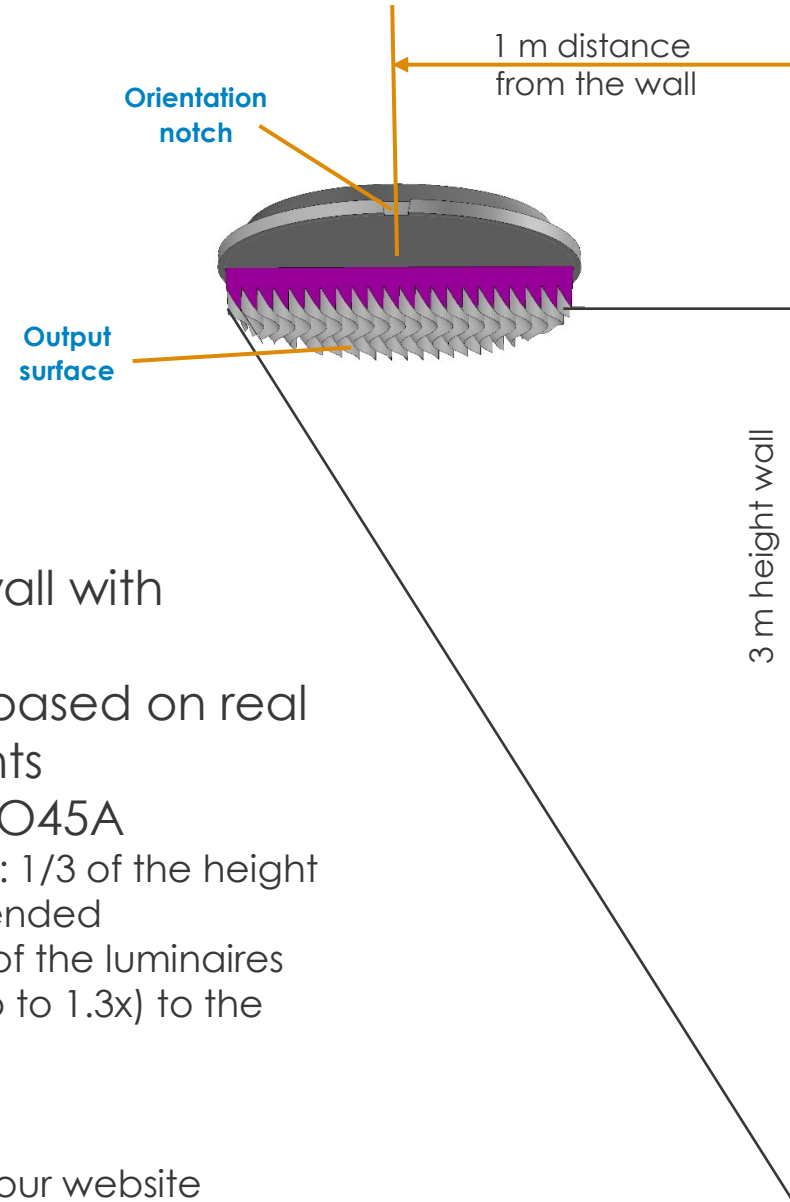
LUMILEDS

LUXEON MZ



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UF045A: Illumination pattern



Evenly
illuminated wall

Dialux simulation

Values in lux, scale 1 : 32
Distance from wall: 1 m

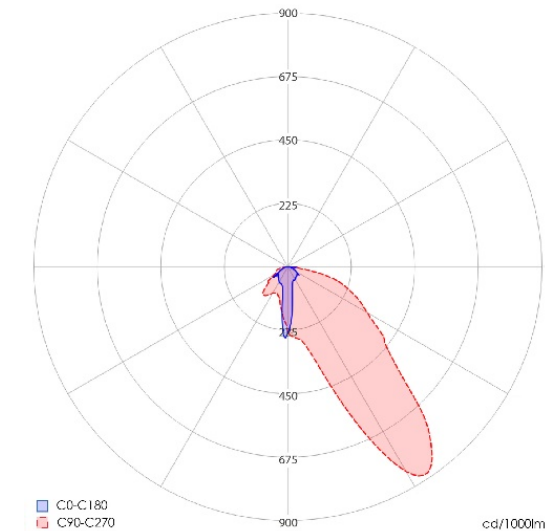
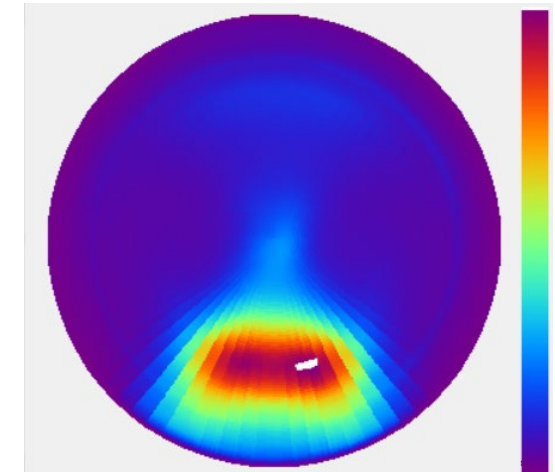
- Isolux curves on the wall with XHP35.2 LED @500 lm
- The isolux curves are based on real physical measurements
- How to implement UFO45A
 - Distance from the wall: 1/3 of the height of the wall is recommended
 - Spacing: the spacing of the luminaires should be equal (or up to 1.3x) to the distance from the wall

Visit the [product page](#) on our website

UF045A: Intensity pattern

- Polar intensity distribution
- LED XHP35.2 HD
- The isolux curves are based on real physical measurements

CHARACTERISTICS	UF045A
L.O.R front (wall)	58.2%
L.O.R rear (stray light)	15.7%
Intensity peak front	941cd/klm
Intensity peak backwards	154cd/klm
Illuminance pattern	rectangular



Visit the [product page](#) on our website

UF045A: Mechanical system

UF045A



Orientation notch

HUF045CA*

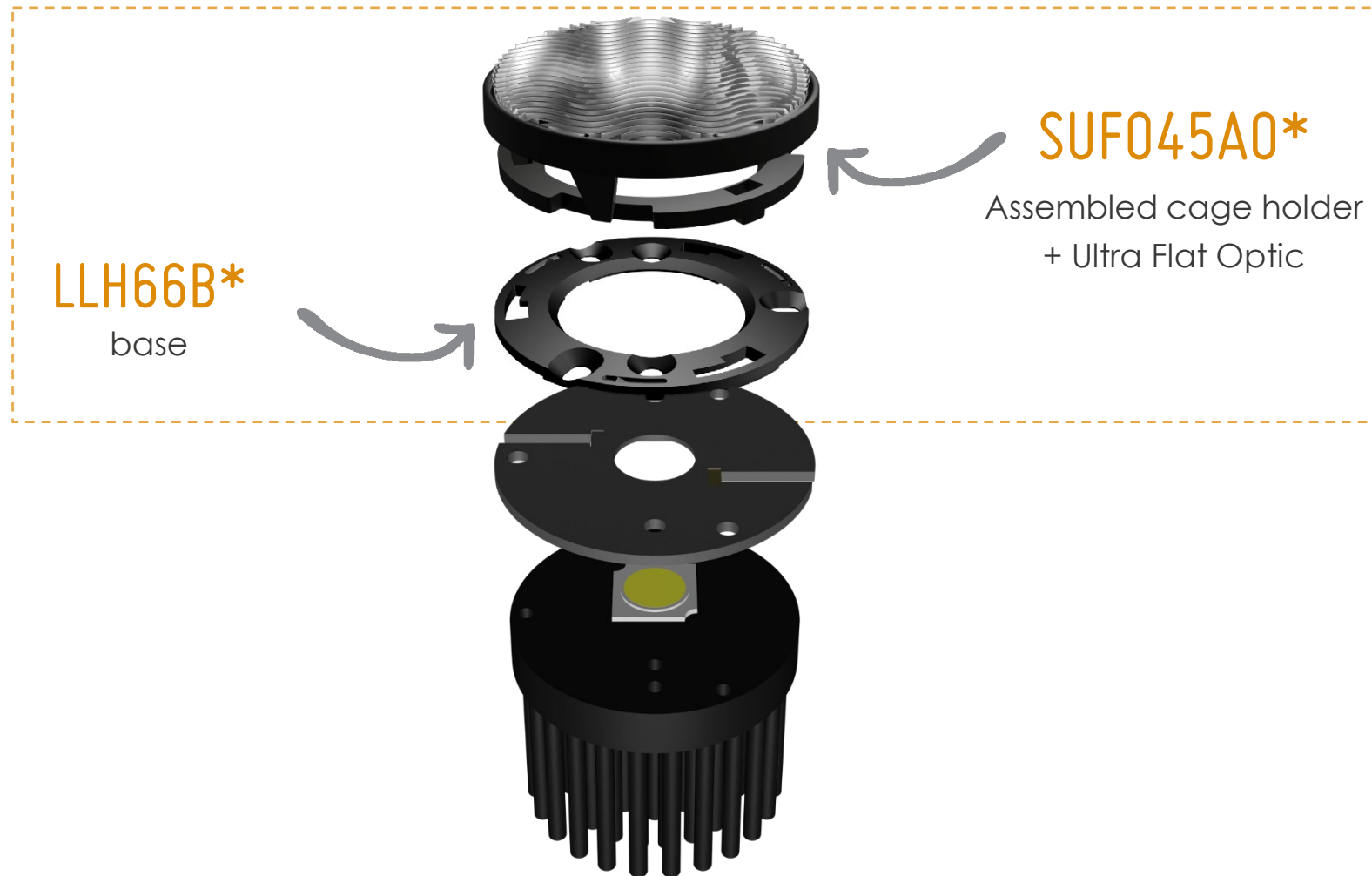


Orientation pin

LLH66B*



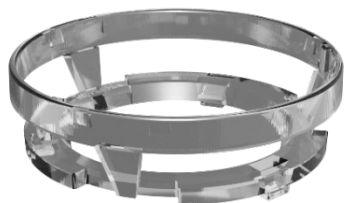
UF045A: Mechanical system



More information about [LLH66B*](#)

UF045A: compatible holders

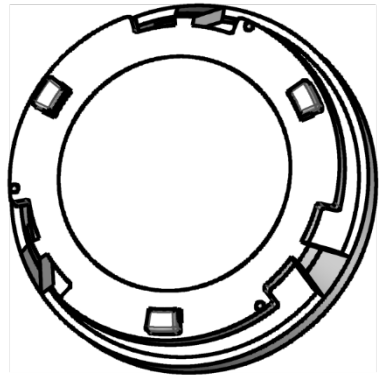
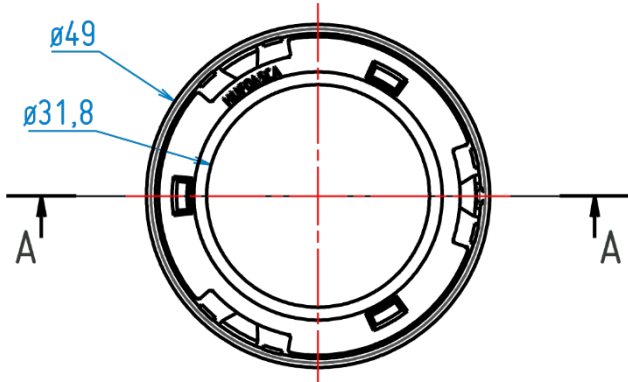
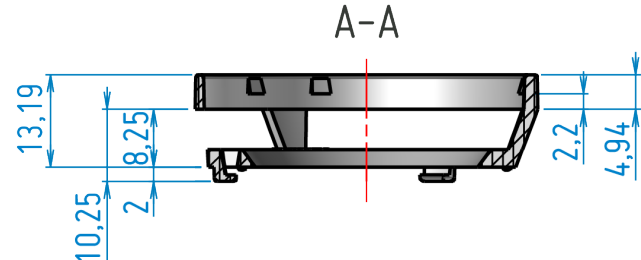
HUF045CA0*



Clear holder
HUF045CA00



Black holder
HUF045CA02



* : colors 0 (clear), 2 (black)
If you need another color of holder, please [contact us](#)

All dimensions are in millimeters.
General tolerance +/- 0.1mm (standard NF T 58-000 cat. 4, reduced class).

UF045A: base options

2 base options

Base Reference	Picture	COB Holder Manufacturer	Manufacturer References
LLH66B1*		Bender + Wirth	LED HOLDER SERIES 430 + 630
LLH66B1*		PCB mounted High power LED	
LLH66B4*		TE	LUMAWISE Z35

* : colors 0 (clear), 2 (black)

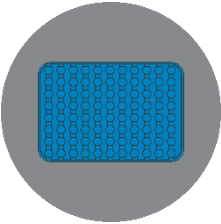
If you need another color of holder, please [contact us](#)

UF045A: Part numbers

Reference	Clear	Black
SET Ultra Flat Optic UFO45A + Holder HUFO45CA	SUFO45A00	SUFO45A02
HOLDER UFO ASYMMETRIC 45	HUFO45CA00	HUFO45CA02
BASE UFO ASYMMETRIC 45 B+W	LLH66B100	LLH66B102
BASE UFO ASYMMETRIC 45 TE	LLH66B400	LLH66B402

UF045A: Packaging

UF045A

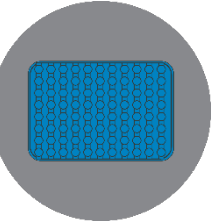


8 thermoformed trays with 24 parts each



192 parts
Box: GALIA A13 – 387x283x170 mm
Weight: 4.0 kg

SUF045A0*



8 thermoformed trays with 24 parts each



192 parts
Box: GALIA A13 – 387x283x170 mm
Weight: 4.6 kg

HUF045CA0*



48 parts in plastic bag
Weight: 0.5 kg

LLH66B*



56 parts in plastic bag
Weight: 1.1 kg

Zoom versions



UF045Z

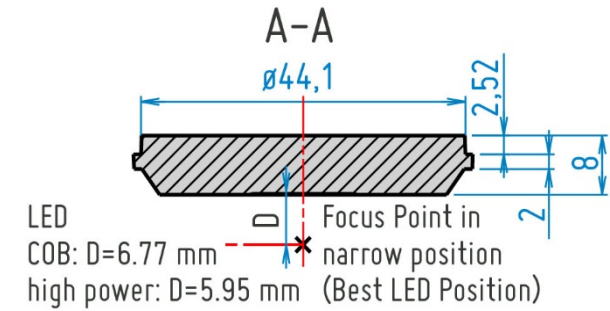
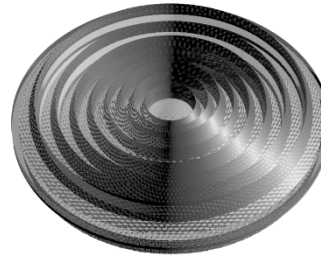
45 mm



UF067Z

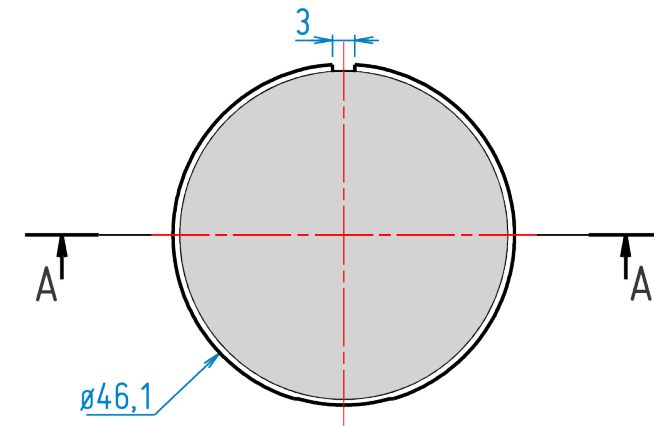
67 mm

UF045Z: Zoom beam



Compatibility matrix

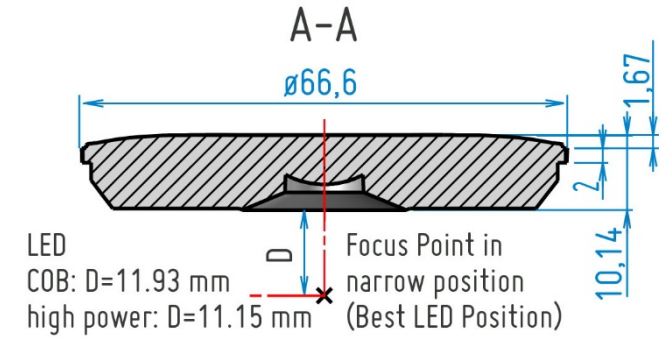
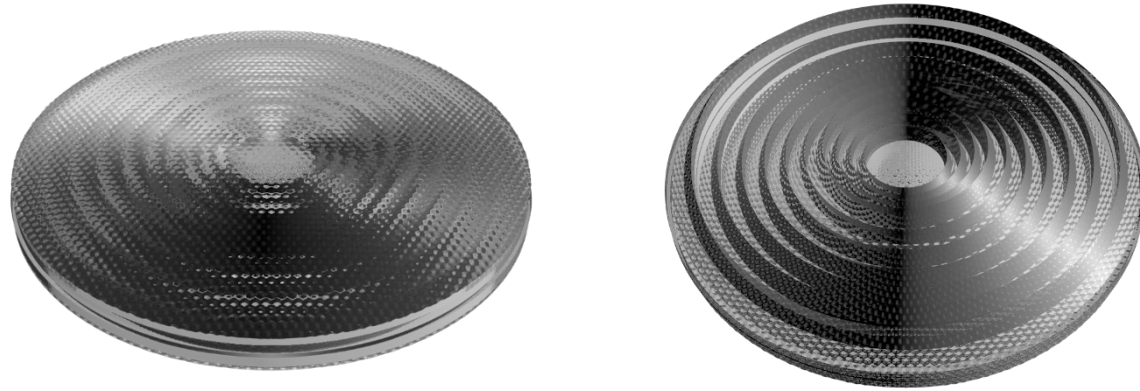
	BRIDGELUX	CITIZEN	CREE	LUMILEDS
UF045Z	VESTA 6 TW	CLU7B2	XHP35.2 HI	LUXEON MZ
FWHM (°)	17.4 – 43.9	14.1 – 37.5	13.9 – 35.2	13.6 – 48.2
FWTM (°)	32.9 – 66.0	25.2 – 52.3	24.7 – 51.0	24.4 – 65.8
Efficacy (cd/lm)	6.1 – 1.5	9.7 – 2.3	9.5 – 2.4	10.4 – 1.3
CCI*	2.3	-	-	-



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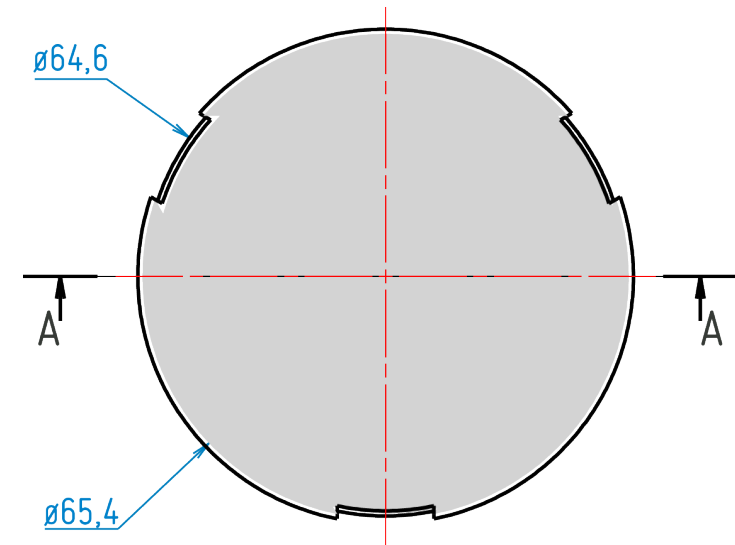
*CCI: Color Consistency Index, [more information](#)

UF067Z: Zoom beam



Compatibility matrix

	BRIDGELUX	CITIZEN	CREE	LUMILEDS
UF067Z	VESTA 6 TW	CLU7B2	XHP35.2 HI	LUXEON MZ
FWHM (°)	13.9 – 44.1	12.2 – 36.5	12.2 – 35.6	11.3 – 50.3
FWTM (°)	25.6 – 60.1	22.3 – 50.4	22.4 – 48.9	21.6 – 65.7
Efficacy (cd/lm)	9.4 – 1.7	11.3 – 2.4	10.8 – 2.4	13.4 – 1.4
CCI*	1.3	-	-	-



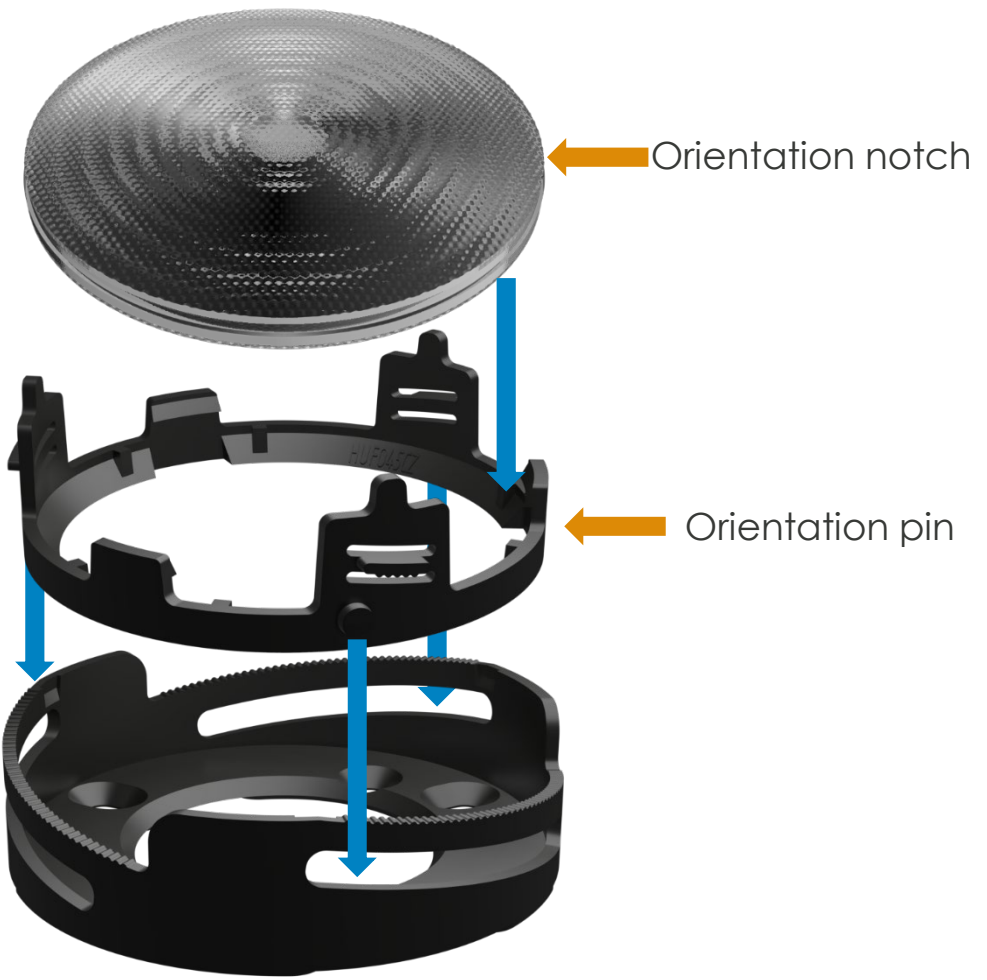
Visit the [product page](#) on our website

*CCI: Color Consistency Index, [more information](#)

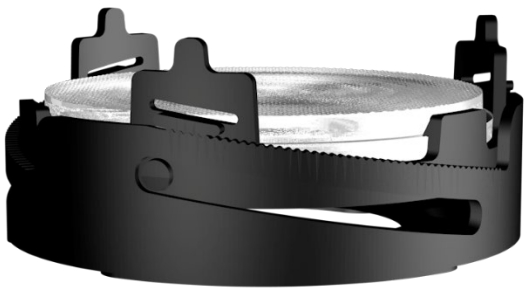
UFO**Z: Mechanical zoom system

Mechanical zoom system

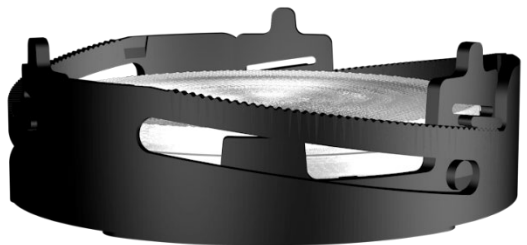
- UF045Z
- UF067Z
- HUF045CZ*
- HUF067CZ*
- BUF045Z*
- BUF067Z*



Narrow position

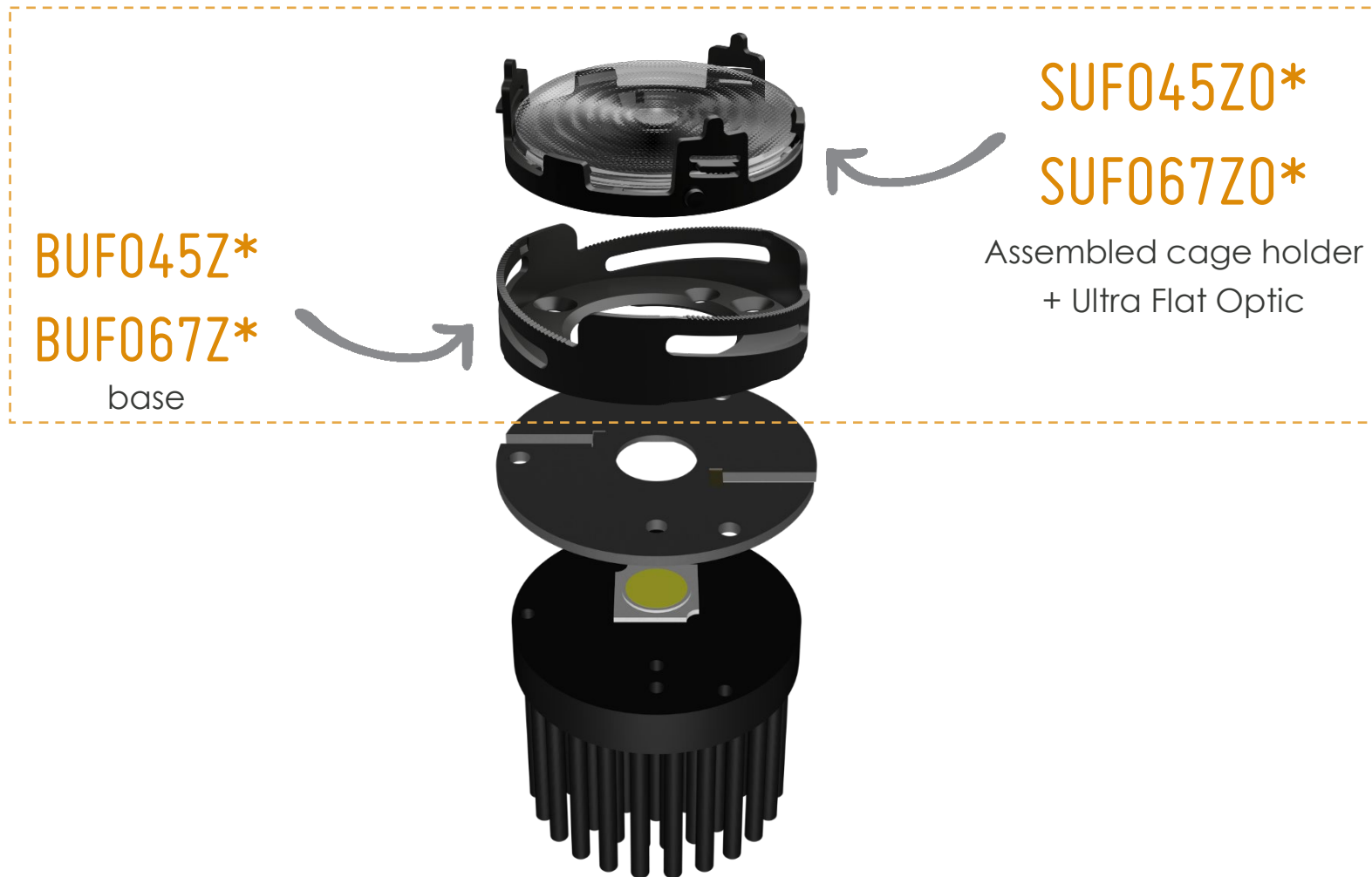


Wide position



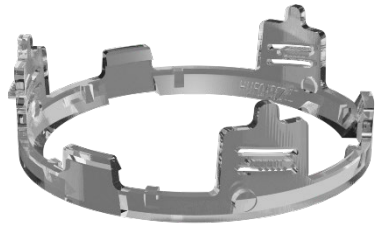
Distance between narrow and wide positions
UF045Z: 6 mm UF067Z: 9 mm

UFO**Z: Mechanical zoom system



UF045Z: compatible holders

HUF045CZ0*



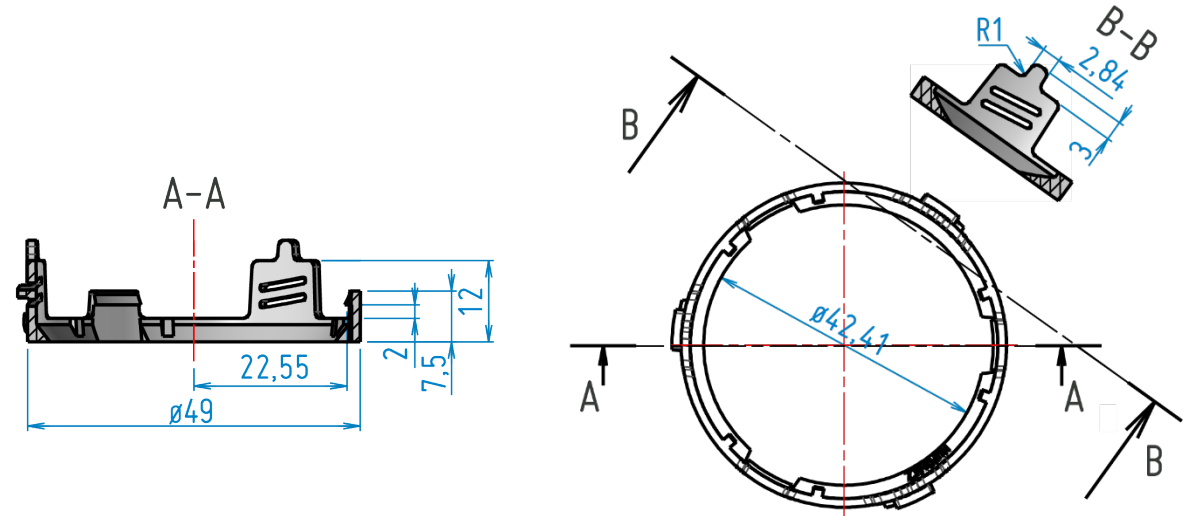
Clear holder

HUF045CZ00



Black holder

HUF045CZ02



* : colors 0 (clear), 2 (black)

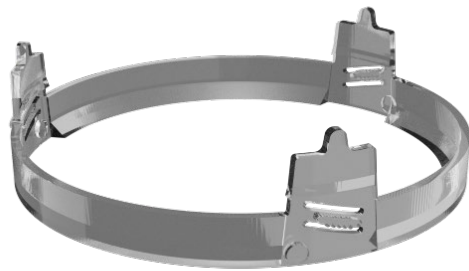
If you need another color of holder, please [contact us](#)

All dimensions are in millimeters.

General tolerance +/- 0.1mm (standard NF T 58-000 cat. 4, reduced class).

UF067Z: compatible holders

HUF067CZO*



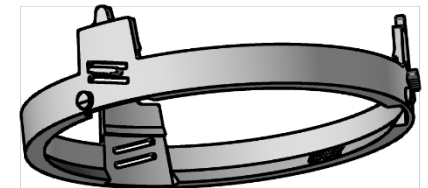
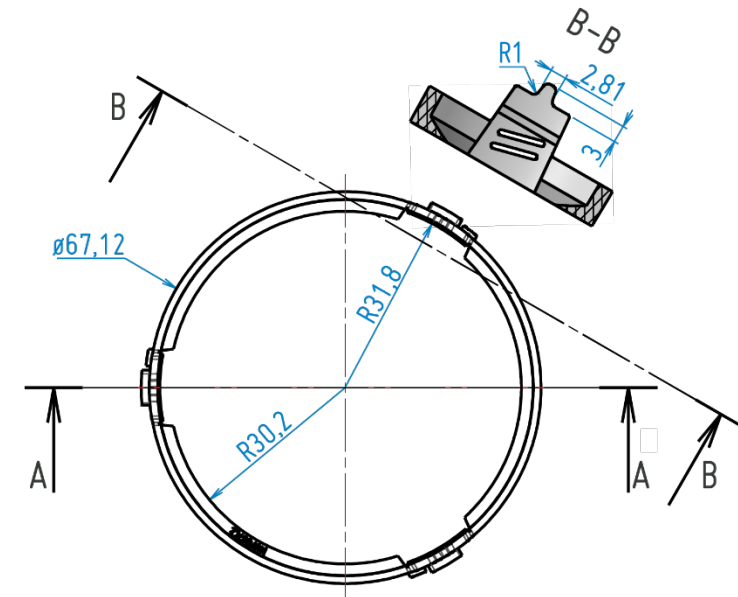
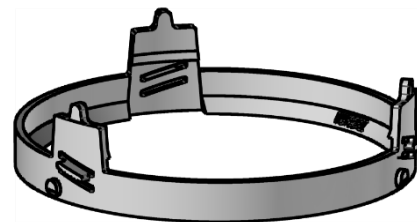
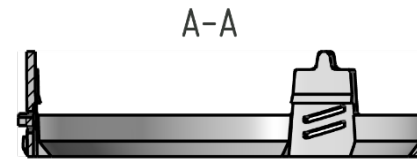
Clear holder

HUF067CZ00



Black holder

HUF067CZ02



* : colors 0 (clear), 2 (black)



If you need another color of holder, please [contact us](#)

All dimensions are in millimeters.

General tolerance ± 0.1 mm (standard NF T 58-000 cat. 4, reduced class).

UF045Z : base options

1 base option

Base Reference	Picture	COB Holder Manufacturer	Manufacturer References
BUFO45Z10*		Bender + Wirth	LED HOLDER SERIES 430 + 630
BUFO45Z10*		PCB mounted high power LED	

* : colors 0 (clear), 2 (black)

If you need another color of holder, please [contact us](#)

UF067Z : base options

3 base options

Base Reference	Picture	COB Holder Manufacturer	Manufacturer References
BUFO6Z10*		Bender + Wirth	LED HOLDER SERIES 430 + 630
BUFO67Z10*		PCB mounted high power LED	
BUFO67Z20*		Bridgelux	Vero10
BUFO67Z30*		Xicato	All

* : colors 0 (clear), 2 (black)

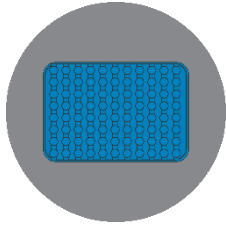
If you need another color of holder, please [contact us](#)

UFOxxZ: Part numbers

Reference	Clear	Black
SET Ultra Flat Optic UFO45Z + Holder HUFO45CZ	SUFO45Z00	SUFO45Z02
SET Ultra Flat Optic UFO67Z + Holder HUFO67CZ	SUFO67Z00	SUFO67Z02
HOLDER UFO ZOOM 45	HUFO45CZ00	HUFO45CZ02
HOLDER UFO ZOOM 67	HUFO67CZ00	HUFO67CZ02
BASE UFO ZOOM 45 B+W	BUFO45Z100	BUFO45Z102
BASE UFO ZOOM 67 B+W	BUFO67Z100	BUFO67Z102
BASE UFO ZOOM 67 BRIDGE	BUFO67Z200	BUFO67Z202
BASE UFO ZOOM 67 XICATO	BUFO67Z300	BUFO67Z302

UF045Z: Packaging

UF045Z

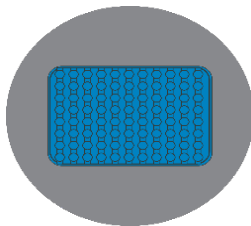


8 thermoformed trays with 24 parts each



192 parts
Box: GALIA A13 – 387x283x170 mm
Weight: 3.2 kg

SUF045Z0*



8 thermoformed trays with 24 parts each



192 parts
Box: GALIA A13 – 387x283x170 mm
Weight: 4.6 kg

HUF045CZ0*



48 parts in plastic bag
Weight: 0.5 kg

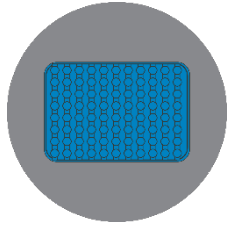
BUF045Z*



48 parts in plastic bag
Weight: 0.5 kg

UF067Z: Packaging

UF067Z

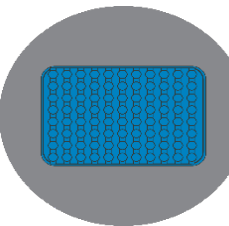


8 thermoformed trays with 12 parts each



96 parts
Box: GALIA A13 – 387x283x170 mm
Weight: 3.6 kg

SUF067Z0*



8 thermoformed trays with 12 parts each



96 parts
Box: GALIA A13 – 387x283x170 mm
Weight: 4.3 kg

HUF067CZ0*



48 parts in plastic bag
Weight: 0.5 kg

BUF067Z*



48 parts in plastic bag
Weight: 0.5 kg

Code form standard range

LENS

OPTICAL

- 01: 16 mm
- 02: 16 mm
- 12: 16 mm
- 22: 16 mm RGBW
- 05: 32 mm
- 15: 32 mm
- 25: 32 mm RGBW
- 07: 35 mm
- 45: 45 mm UFO
- 49: 45 mm RGBW
- 59: 45 mm RGBW gen 2
- 56: 67mm in PMMA
- 66: 67 mm in silicone
- 76: 67mm in silicone
- 67: 67 mm UFO

PRODUCT

- LLC: Collimator
- LLH: Holder
- LLL: Linear collimator
- LLR: Reflector
- LLS: Set
- UFO: Ultra Flat Optic

BEAM ANGLE

- U/R: Ultra Narrow
- N: Narrow
- M: Medium
- W: Wide
- X: Extra large
- S: Super large
- L: Large
- V: Very large
- E: Elliptical
- Z: Zoom

MATERIAL

- 0 or nothing : PMMA
- 1: PC
- 2: PC anti-UV
- 7: Silicone

LLS01W01ABC001

ABC: Holder type according to LED package

COLORS & DECORS

- 0: Translucent
- 1: White
- 2: Black

ADHESIVE OPTION

- 1: Yes
- Nothing: No

VERSION

TYPE

- 1: 16mm
- 2: 32mm
- 3: 3x16mm
- 4: 4x16mm
- 9: 45mm

HOLDER

Contact us

GAGGIONE SAS Headquarter

3, Rue de la Rolland
01460 Montréal la Cluse
France

☎ +33 4 74 76 12 66
@ contact@gaggione.com
🌐 www.optic-gaggione.com

Sales Team in GAGGIONE

Sandrine Mancuso
France, UK, Italy, Spain

@ s.mancuso@gaggione.com
☎ +33 787 87 84 72

Antoine Le Cordier
France, Scandinavia,
Eastern and Northern Europe

@ a.lecordier@gaggione.com
☎ +33 607 37 20 28

Laurent Barel
Sales & Marketing Director

@ l.barel@gaggione.com
☎ +33 612 04 41 30

International Sales Offices

GAGGIONE Americas
Michael Pietro
12833 Surrey Ct.
Palos Park, IL
60464

@ m.pietro@gaggione.com
☎ +1 224 392 0087

GAGGIONE Asia
Zhen Xu
Unit 1808, No. 8, Kuaiji Road,
Jintiandi International building,
Huangpu District,
Shanghai, 200021, China

@ z.xu@gaggione.com
☎ +86 136 5189 6981

GAGGIONE Canada
Stephane Saindon
744 36th Avenue
Montreal, Quebec
H8T3L2

@ s.saindon@gaggione.com
☎ +1 514 928 2179

GAGGIONE DACH
Angelika Aigner
Kreuzstrasse 7
83355 Grabenstätt
Germany

@ a.aigner@gaggione.com
☎ +49 8661 983 44 77