

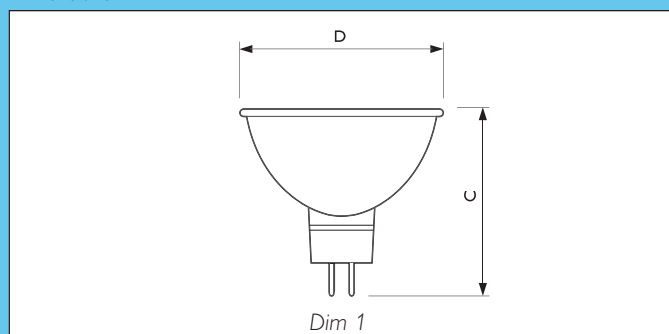
## LV with reflector

New



MLES

Dimensions in mm



## MASTER Line ES

**Product Description**

- MASTER dichroic coated low-voltage halogen reflector lamp with EcoBoost technology: the most energy-efficient dichroic lamp on the market

**Product Feature**

- Unique Philips patented infrared-coated single-ended burner with 40% higher efficiency than standard products
- Heat-reflecting coating on the inner lamp burner reflects heat back to the filament so less energy is needed to operate the lamp
- Revolutionary compact and precision-shaped single-ended burner and high-performance coating for maximum lamp performance
- Extreme long average rated life
- GU5.3 base for extra retention in luminaire
- Complex reflector design for excellent beam performance
- Range of energy saving wattages to replace the higher standard wattages

**Product Benefit**

- Lowest possible energy and maintenance costs while maintaining light levels.
- Lowest possible heat production
- Bright, sparkling white halogen light with excellent color rendering
- Replaces standard and high-end dichroic reflector lamps
- Energy savings of up to 40% compared with standard dichroics
- Increased comfort and (where applicable) lower cooling costs through up to 40% lower heat transmission
- Up to 66% more lifetime (5000 hours) compared with standard conventional halogen dichroics
- Lowest dichroic UV output reduces fading risks to an absolute minimum

**Application**

- Accent and general lighting applications in homes, shops, hotels and restaurants, where energy efficiency and low maintenance are important
- Art galleries, museums and exhibitions

**Luminaires**

- Can be used in luminaires without front glass in accordance with IEC 598

Product ID	Overall length	Diameter
	C max.	D max.
Dim 1	50.5	51

## Preferred selection

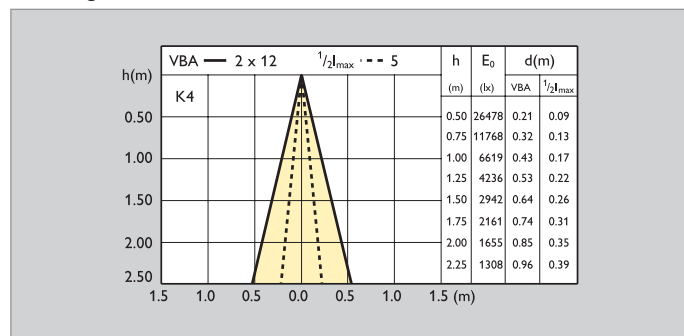
Product ID	Rated Lamp Wattage [W]	Voltage [V]	ANSI	Beam Angle	Cap Base	Luminous Intensity [cd]	Life to 50% Failures [hrs]	Dim No.	Nett Weight Product In Grams [gr]
MASTER Line ES 20W GU5.3 12V 8D	20	12	ESX	8	GU5.3	6500	5000	1	39.60
MASTER Line ES 20W GU5.3 12V 36D	20	12	BAB	36	GU5.3	1000	5000	1	34.85
MASTER Line ES 30W GU5.3 12V 8D	30	12	-	8	GU5.3	11000	5000	1	39.60
MASTER Line ES 30W GU5.3 12V 24D	30	12	-	24	GU5.3	3350	5000	1	36.80
MASTER Line ES 30W GU5.3 12V 36D	30	12	-	36	GU5.3	1600	5000	1	34.40
MASTER Line ES 35W GU5.3 12V 8D	35	12	FRB	8	GU5.3	14000	5000	1	39.40
MASTER Line ES 35W GU5.3 12V 24D	35	12	FRA	24	GU5.3	4400	5000	1	36.40
MASTER Line ES 35W GU5.3 12V 36D	35	12	FMW	36	GU5.3	2200	5000	1	35.10
MASTER Line ES 45W GU5.3 12V 8D	45	12	EXT	8	GU5.3	16000	5000	1	39.40
MASTER Line ES 45W GU5.3 12V 24D	45	12	EXZ	24	GU5.3	5450	5000	1	36.80
MASTER Line ES 45W GU5.3 12V 36D	45	12	EXN	36	GU5.3	2850	5000	1	35.00

# LV with reflector

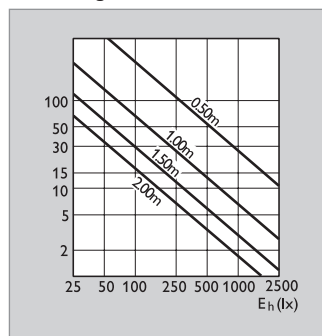
## Photometric diagrams

### MLES 20W 8D

#### Beam diagram

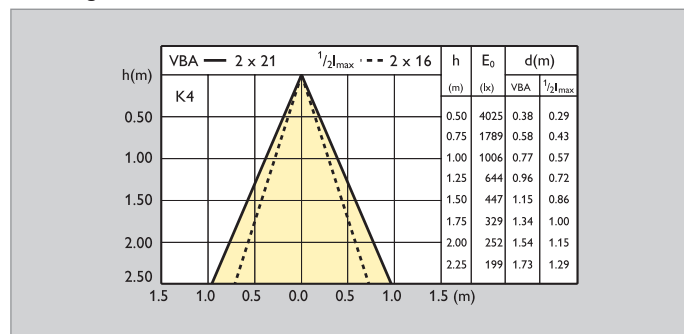


#### Accent diagram

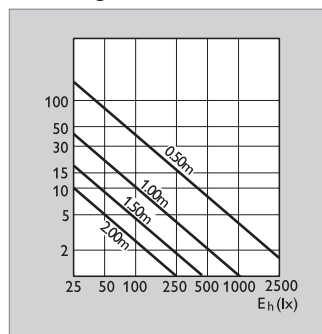


### MLES 20W 36D

#### Beam diagram

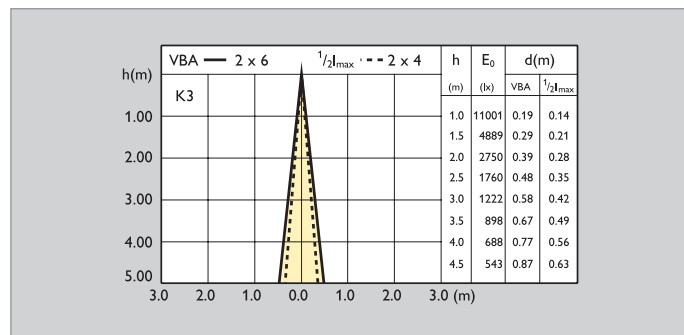


#### Accent diagram

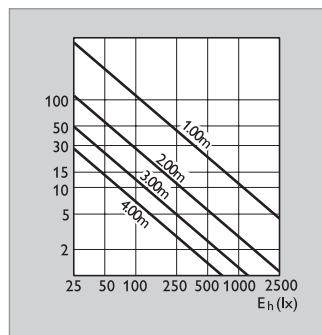


### MLES 30W 8D

#### Beam diagram

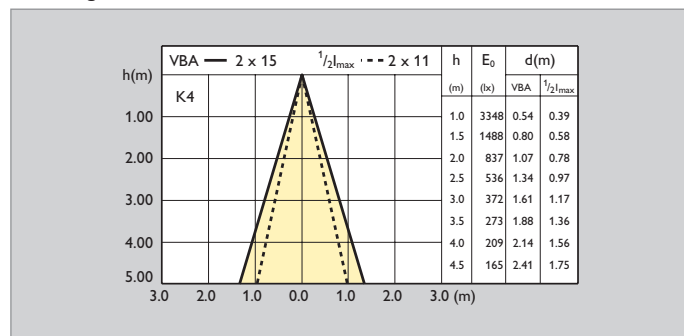


#### Accent diagram

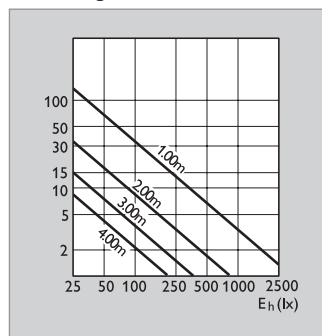


### MLES 30W 24D

#### Beam diagram

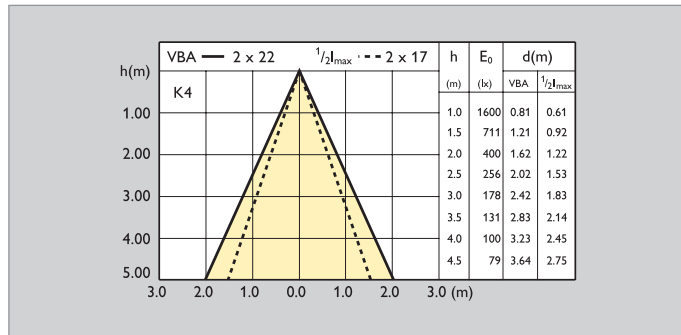


#### Accent diagram

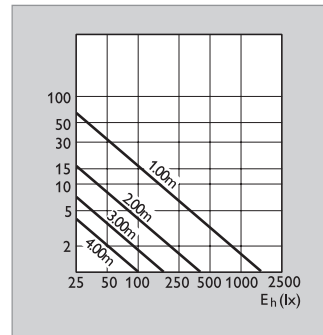


**MLES 30W 36D**

Beam diagram

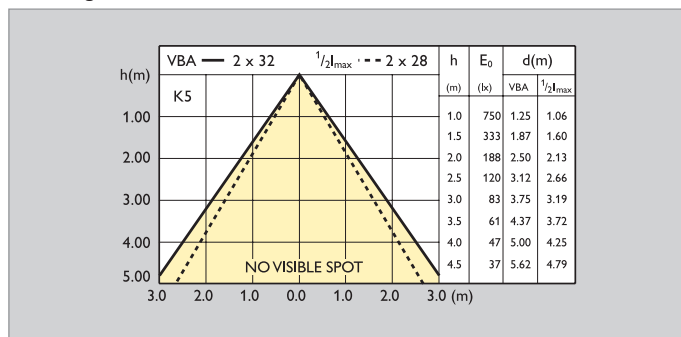


Accent diagram

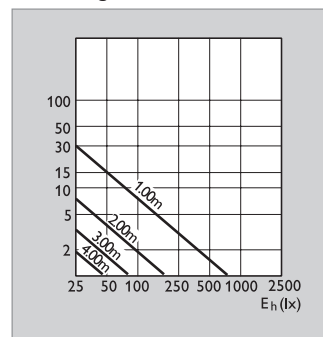


**MLES 30W 60D**

Beam diagram

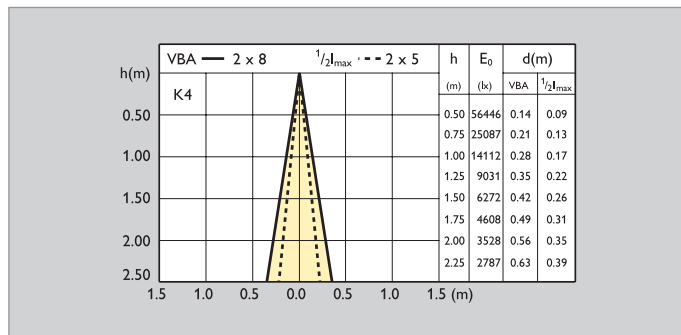


Accent diagram

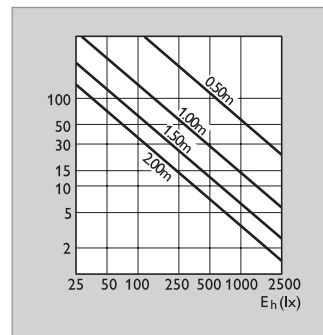


**MLES 35W 8D**

Beam diagram

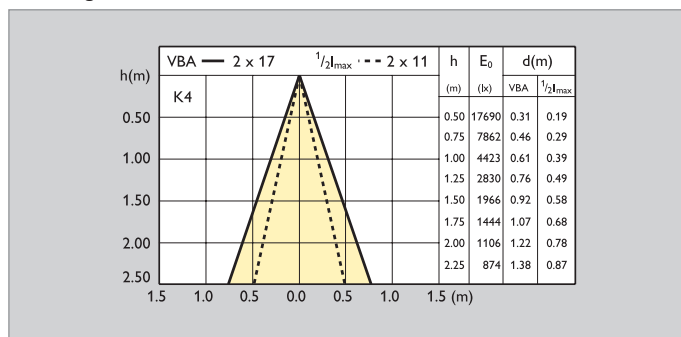


Accent diagram

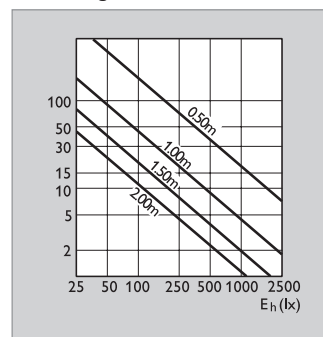


**MLES 35W 24D**

Beam diagram



Accent diagram

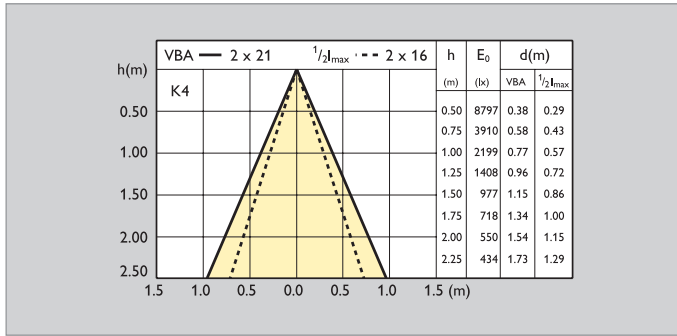


# LV with reflector

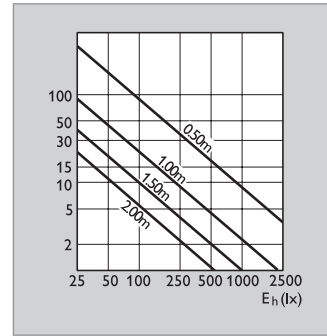
## Photometric diagrams

### MLES 35W 36D

#### Beam diagram

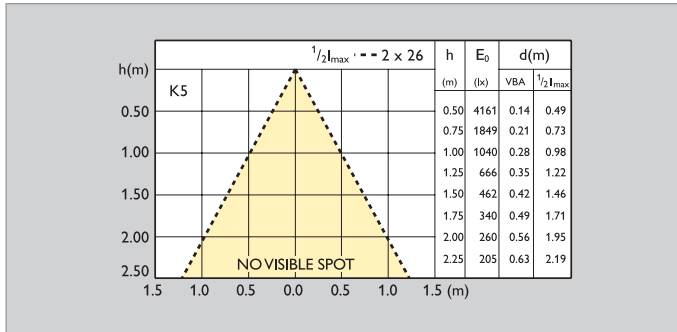


#### Accent diagram

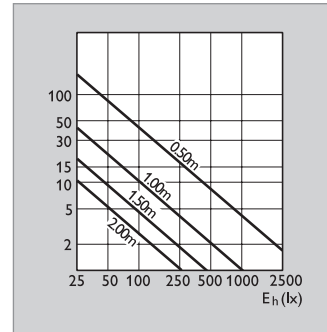


### MLES 35W 60D

#### Beam diagram

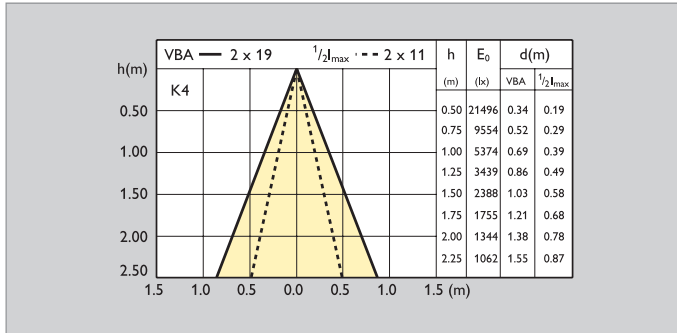


#### Accent diagram

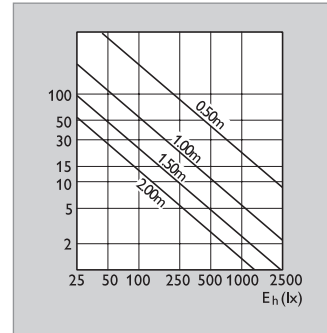


### MLES 45W 24D

#### Beam diagram

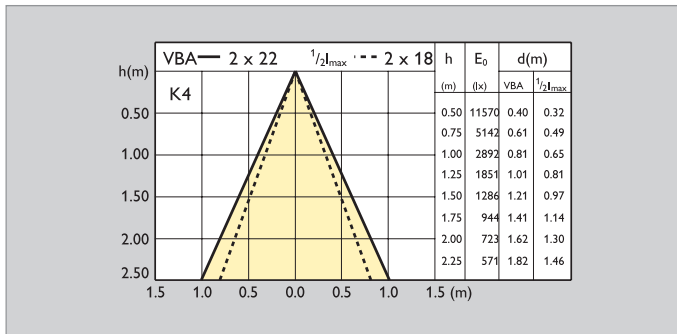


#### Accent diagram

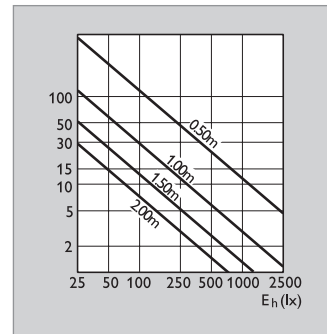


### MLES 45W 36D

#### Beam diagram

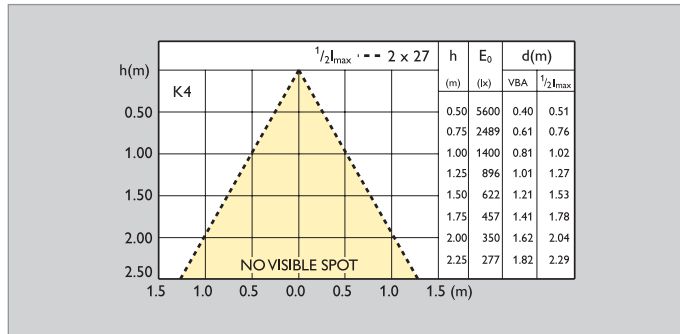


#### Accent diagram



MLES 45W 60D

Beam diagram



Accent diagram

