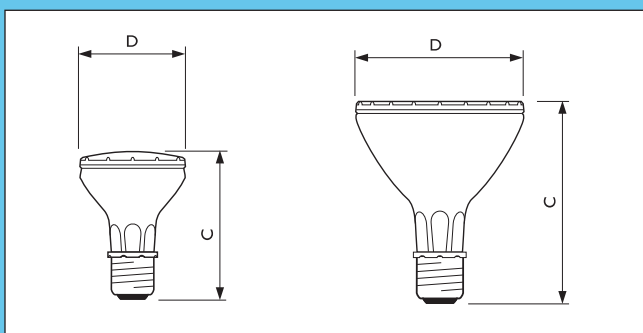


MASTERColour CDM



CDM-R PAR20 10D

Dimensions in mm



MASTERColour CDM-R

Product Description

- Range of compact, high-efficiency, discharge reflector lamps with a stable color over lifetime and a crisp, sparkling light

Product Features

- Warm or cool white color impression with good color rendering
- High beam intensities are achieved very easy and efficiently from these compact reflector lamps

Product Benefits

- High lamp efficacy results in low operating costs and low heat generation
- Long lamp life compared with incandescent and halogen lamps
- Stable color impression over lifetime
- Unique DESIGN increases flexibility in application and allows powerful accents from small, unobtrusive luminaires
- Simplified luminaire design because CDM-R lamps can be used in open luminaires
- Relatively low heat output enhances comfort for shoppers and staff
- Integrated UV-Block shield reduces fading risks

Application

- Shops and shop windows, offices and public buildings
- Decorative outdoor: floodlighting and pedestrian areas

Luminaires

- E27 lampholders used must be suitable for ignition peaks up to 5 kV
- Suitable for use in open luminaires

System

- Must be used in combination with a ballast and ignitor or electronic gear
- If there is a constant voltage deviation of more than 3% of the rated voltage, a different ballast rating/tap must be used
- A high-current protection device (thermo-switch) in the gear is mandatory (IEC 61167)
- Electronic gear can be used and increases lamp-life, improves system efficacy and eliminates visible flicker
- /942 models can achieve optimal performance only with electronic ballast

Product ID	Overall length	Diameter
	C nom.	D nom.
CDM-R PAR20	92	64
CDM-R PAR30L	120	95



CDM-R PAR20 30D



CDM-R PAR30L 10D



CDM-R PAR30L 30D



CDM-R PAR30L 40D

Preferred selection

Product ID	Lamp Wattage EL (W)	Lamp Current EL (A)	Lamp Voltage (V)	Mains Voltage Stable Operation min. (V)	Color Temperature (k)	Color Rendering Index (R _a)	Photo Letter
MASTERColour CDM-R 35W/830 E27 PAR20 10D	39	0.45	88	198	3000	81	A
MASTERColour CDM-R 35W/830 E27 PAR20 30D	39	0.45	88	198	3000	81	B
MASTERColour CDM-R 35W/942 E27 PAR20L 10D*	39	0.45	85	198	4200	92	A
MASTERColour CDM-R 35W/942 E27 PAR20L 30D*	39	0.45	85	198	4200	92	B
MASTERColour CDM-R 35W/830 E27 PAR30L 10D	39	0.45	88	198	3000	81	C
MASTERColour CDM-R 35W/830 E27 PAR30L 30D	39	0.45	88	198	3000	81	D
MASTERColour CDM-R 70W/830 E27 PAR30L 10D	73	0.83	90	198	3000	83	C
MASTERColour CDM-R 70W/830 E27 PAR30L 30D	73	0.83	90	198	3000	83	D
MASTERColour CDM-R 70W/830 E27 PAR30L 40D	73	0.83	90	198	3000	83	E
MASTERColour CDM-R 70W/942 E27 PAR30L 10D*	73	0.83	88	198	4200	94	C
MASTERColour CDM-R 70W/942 E27 PAR30L 30D*	73	0.83	88	198	4200	94	D
MASTERColour CDM-R 70W/942 E27 PAR30L 40D*	73	0.83	88	198	4200	94	E

Product ID	Chromaticity Coordinate X	Chromaticity Coordinate Y	Bulb Shape	Luminous Intensity (cd)	Beam Angle Description	Beam Angle Technical (°)	Operating Position
MASTERColour CDM-R 35W/830 E27 PAR20 10D	433	402	PAR20	23000	Spot	7.5	ANY
MASTERColour CDM-R 35W/830 E27 PAR20 30D	433	402	PAR20	5000	Narrow Flood	26.0	ANY
MASTERColour CDM-R 35W/942 E27 PAR20L 10D*	371	366	PAR20	21500	Spot	7.5	ANY
MASTERColour CDM-R 35W/942 E27 PAR20L 30D*	371	366	PAR20	5000	Flood	26.0	ANY
MASTERColour CDM-R 35W/830 E27 PAR30L 10D	431	400	PAR30L	44000	Spot	7.0	ANY
MASTERColour CDM-R 35W/830 E27 PAR30L 30D	431	400	PAR30L	7400	Narrow Flood	25.0	ANY
MASTERColour CDM-R 70W/830 E27 PAR30L 10D	427	397	PAR30L	68000	Spot	7.0	ANY
MASTERColour CDM-R 70W/830 E27 PAR30L 30D	427	397	PAR30L	13500	Narrow Flood	26.0	ANY
MASTERColour CDM-R 70W/830 E27 PAR30L 40D	427	397	PAR30L	10000	Flood	34.0	ANY
MASTERColour CDM-R 70W/942 E27 PAR30L 10D*	371	366	PAR30L	63000	Spot	7.0	ANY
MASTERColour CDM-R 70W/942 E27 PAR30L 30D*	371	366	PAR30L	13000	Narrow Flood	26.0	ANY
MASTERColour CDM-R 70W/942 E27 PAR30L 40D*	371	366	PAR30L	9000	Flood	34.0	ANY

Note: * Electronic ballast only.

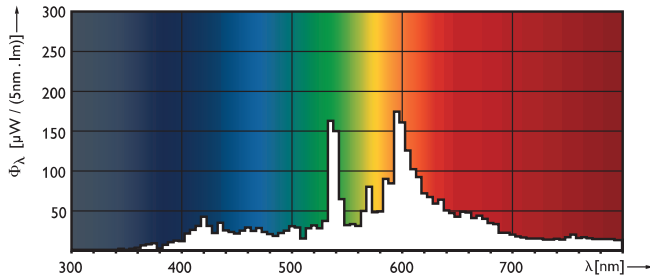
MASTERCcolour CDM

MASTERCcolour CDM-R

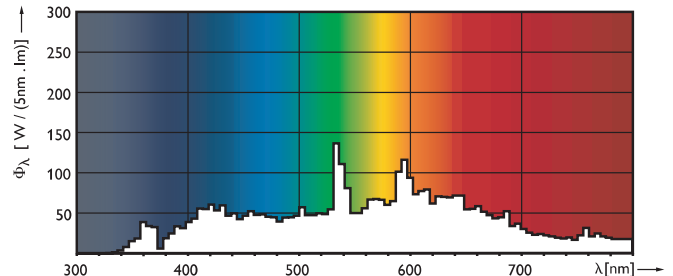
Product ID	Cap/Base Temperature max. (°C)	Bulb Temperature max. (°C)	Ignition Time max. (sec)	Re-ignition Time max. (min)	Run-up Time 90% max. (min)	Net Weight Per Piece (g)
MASTERCcolour CDM-R 35W/830 E27 PAR20 10D	200	300	30	15	3	121
MASTERCcolour CDM-R 35W/830 E27 PAR20 30D	200	300	30	15	3	121
MASTERCcolour CDM-R 35W/942 E27 PAR20L 10D*	200	300	30	15	3	121
MASTERCcolour CDM-R 35W/942 E27 PAR20L 30D*	200	300	30	15	3	121
MASTERCcolour CDM-R 35W/830 E27 PAR30L 10D	200	300	30	15	3	225
MASTERCcolour CDM-R 35W/830 E27 PAR30L 30D	200	300	30	15	3	225
MASTERCcolour CDM-R 70W/830 E27 PAR30L 10D	200	300	30	15	3	225
MASTERCcolour CDM-R 70W/830 E27 PAR30L 30D	200	300	30	15	3	225
MASTERCcolour CDM-R 70W/830 E27 PAR30L 40D	200	300	30	15	3	225
MASTERCcolour CDM-R 70W/942 E27 PAR30L 10D*	200	300	30	15	3	225
MASTERCcolour CDM-R 70W/942 E27 PAR30L 30D*	200	300	30	15	3	225
MASTERCcolour CDM-R 70W/942 E27 PAR30L 40D*	200	300	30	15	3	225

Spectral power distribution

CDM-R /830



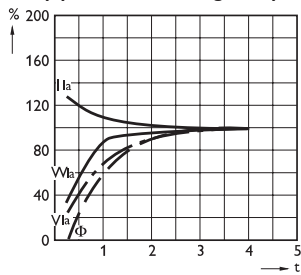
CDM-R /942



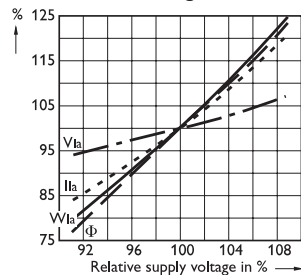
Performance diagrams

MASTERCcolour CDM-R /830

Lamp performance during run up



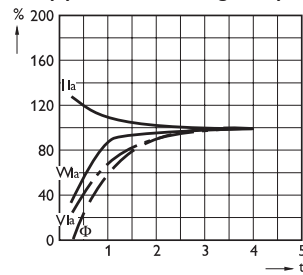
Effects of mains voltage variations



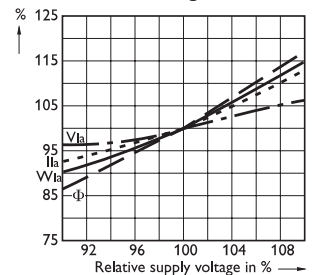
I_{la} = Lamp current
 Φ = Luminous Flux
 V_{la} = Lamp Voltage
 W_{la} = Lamp Wattage

MASTERCcolour CDM-R /942

Lamp performance during run up



Effects of mains voltage variations

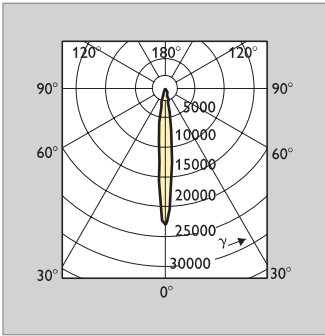


I_{la} = Lamp current
 Φ = Luminous Flux
 V_{la} = Lamp Voltage
 W_{la} = Lamp Wattage

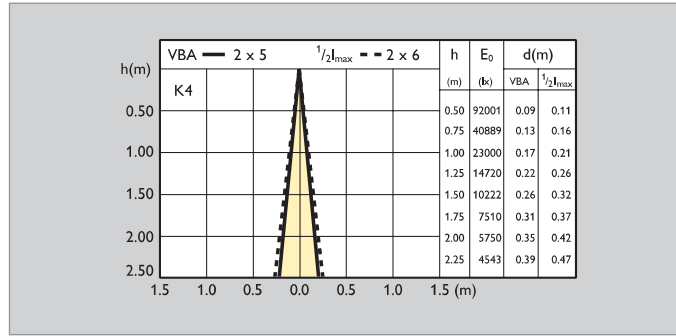
Photometric diagrams

MASTERC^olour CDM-R 35W/830 PAR20 10D

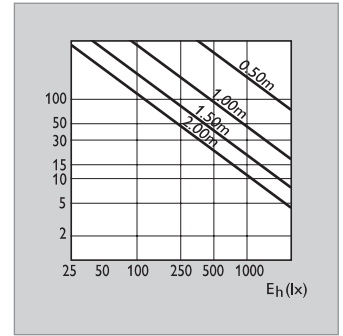
Light distribution curves



Beam diagram

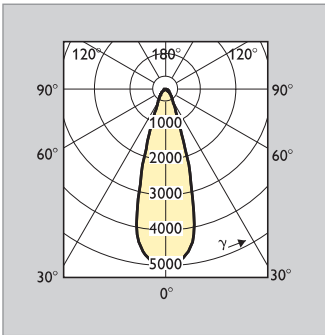


Accent diagram

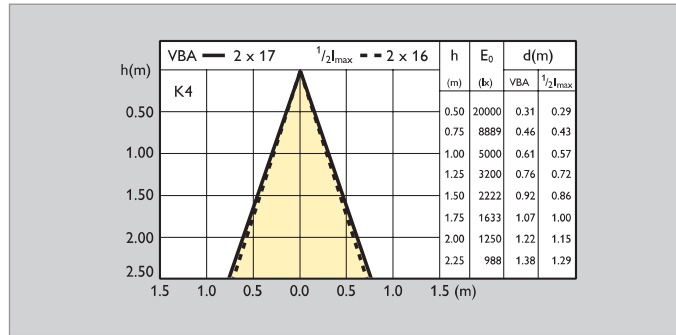


MASTERC^olour CDM-R 35W/830 PAR20 30D

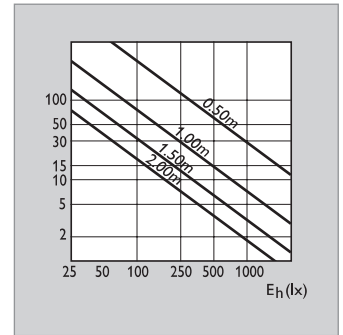
Light distribution curves



Beam diagram

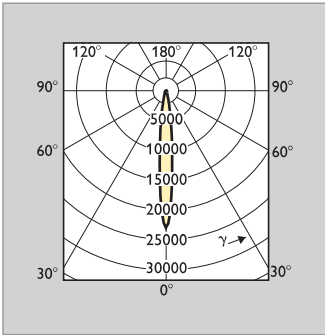


Accent diagram

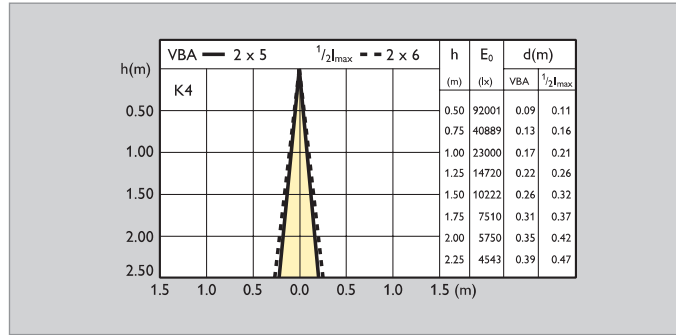


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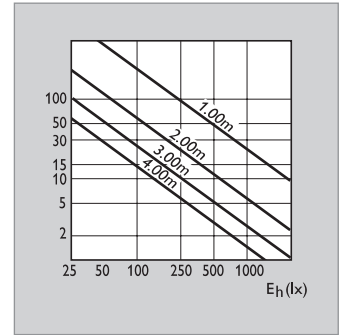
Light distribution curves



Beam diagram

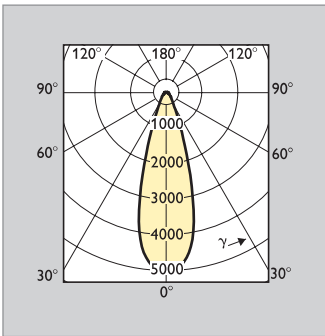


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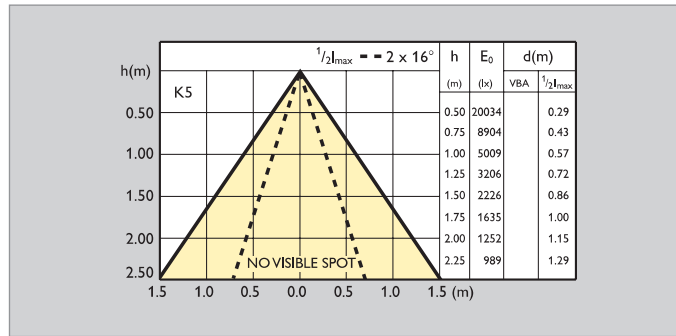


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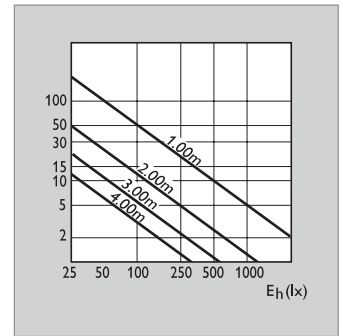
Light distribution curves



Beam diagram



Accent diagram

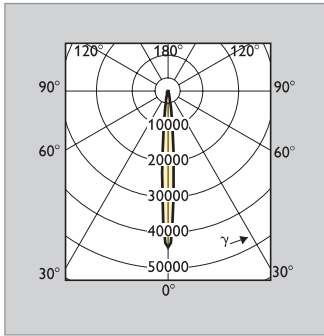


MASTERColour CDM

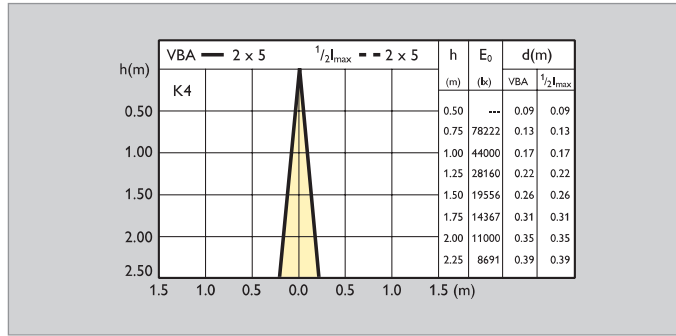
MASTERColour CDM-R

MASTERColour CDM-R 35W/830 PAR30L 10D

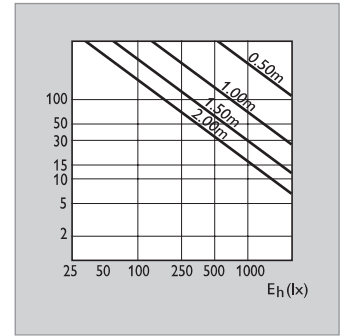
Light distribution curves



Beam diagram

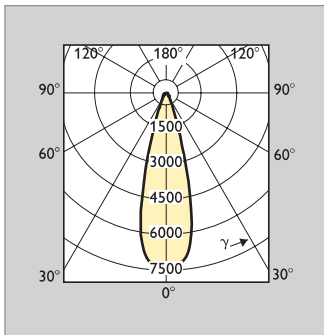


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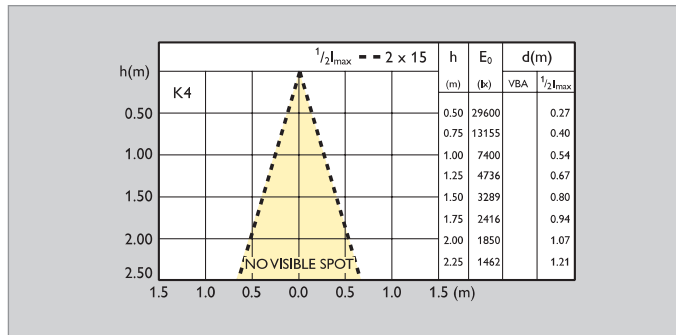


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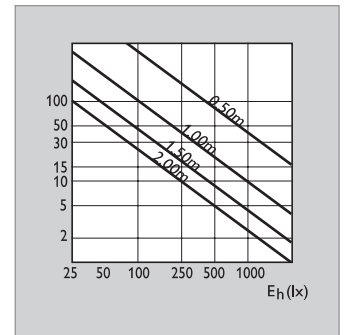
Light distribution curves



Beam diagram

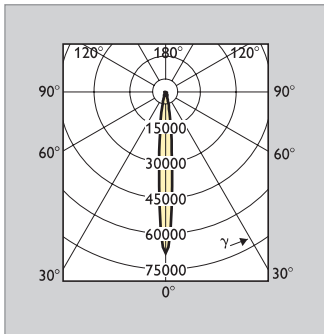


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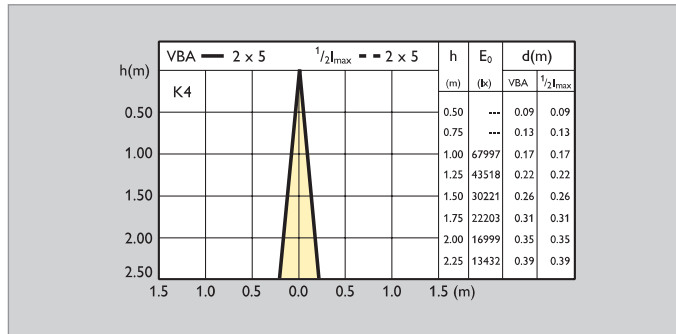


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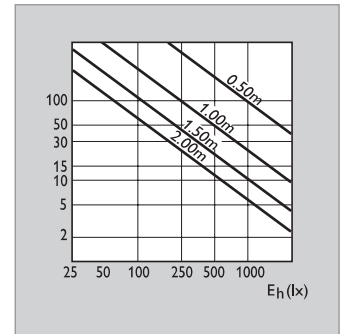
Light distribution curves



Beam diagram

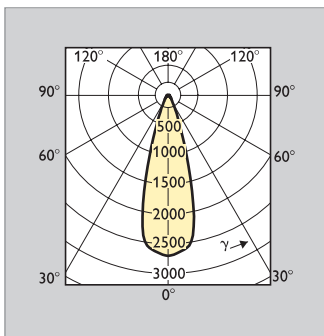


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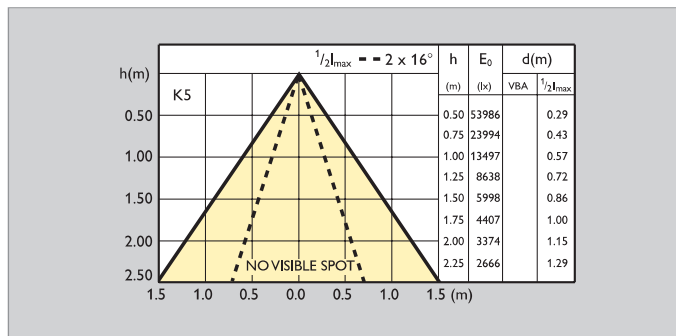


MASTERColour CDM-R 70W/830 PAR30L 30D

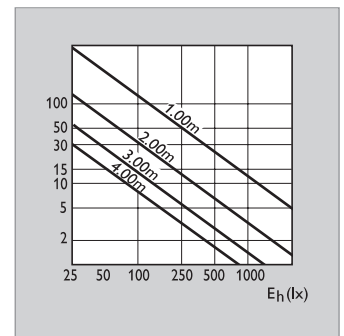
Light distribution curves



Beam diagram

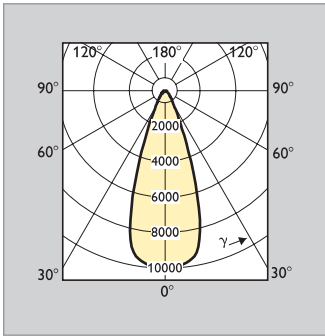


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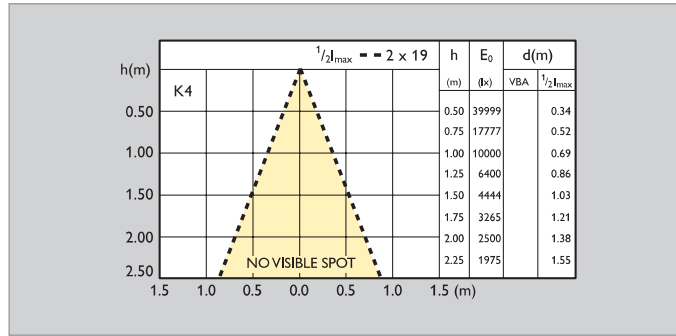


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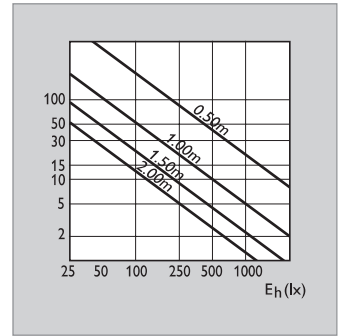
Light distribution curves



Beam diagram

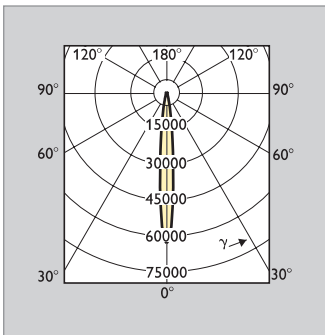


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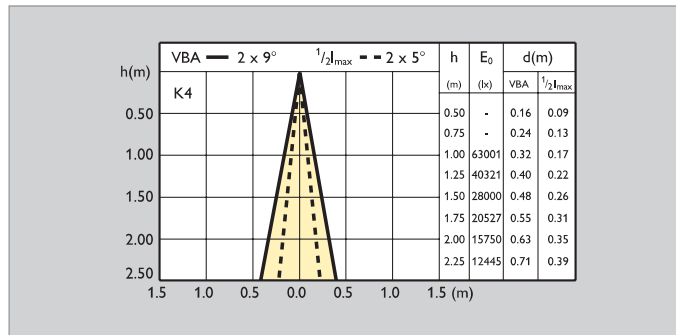


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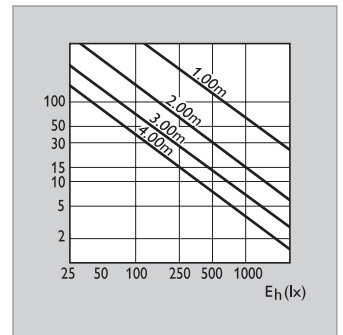
Light distribution curves



Beam diagram

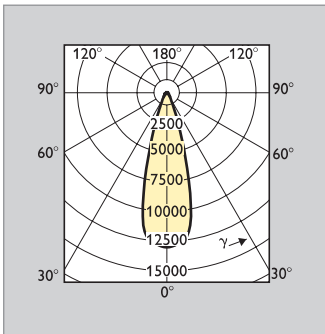


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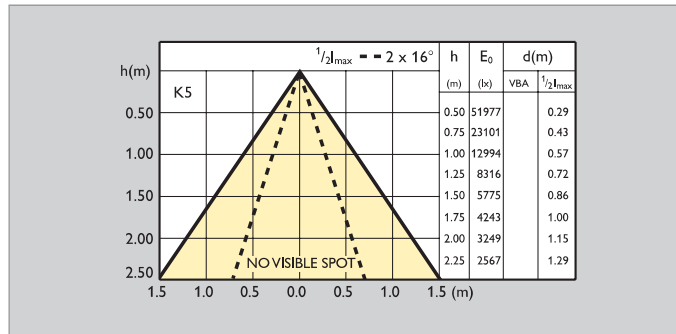


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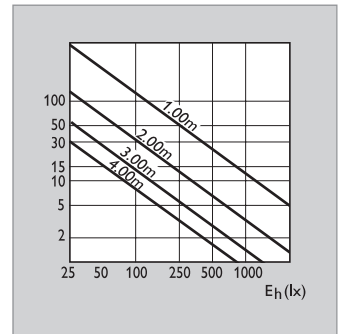
Light distribution curves



Beam diagram

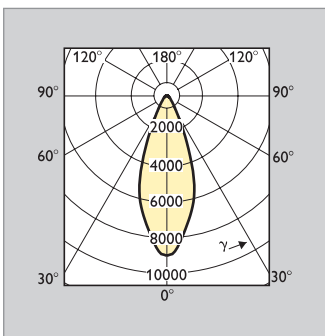


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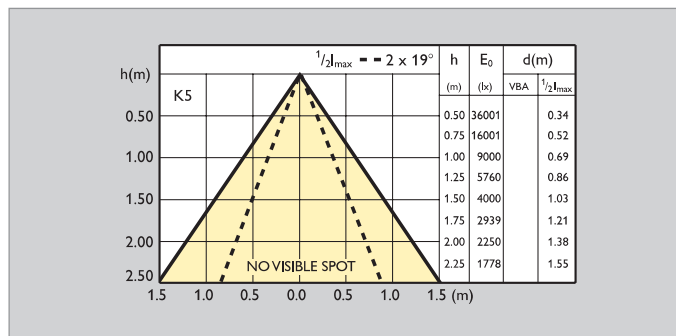


MASTERColour CDM-R 70W/942 PAR30L 40D

Light distribution curves



Beam diagram



Accent diagram

