PHILIPS

Lighting



Your everyday LEDspot MR16

Essential LEDspot MR16

Essential LEDspots MR16 are compatible with most existing fixtures with a GU5.3 socket and are designed as a retrofit replacement for halogen spots. Essential LEDspots MR16 deliver significant energy savings and minimize initial investment.

Benefits

- Up to 90% energy saving compared with traditional halogen lamps
- Lower maintenance costs
- Low initial investment

Features

- Easy retrofit
- Lifetime up to 15,000 hours
- Non-dimmable
- UV- and IR-free light

Application

- Hotels, restaurants, bars, cafés, shops
- Lobbies, corridors, stairwells, washrooms, reception areas

Essential LEDspot MR16

Versions

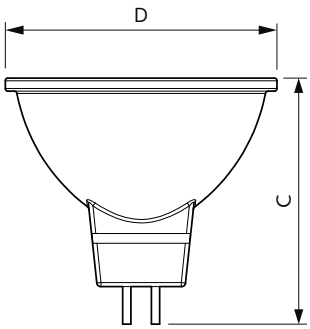


LEDspot Essential 50W GU5.3 MR16 827 24D ND



35W GU5-3 MR16

Dimensional drawing



Product	D	C
ESS LED MR16 3-35W 36D 830 SO 100-240V	50.5 mm	46.5 mm
ESS LED MR16 4.5-50W 36D 830 SO 100-240V	50.5 mm	46.5 mm
ESS LED MR16 4.5-50W 36D 865 SO 100-240V	50.5 mm	46.5 mm
Essential LED 5-50W 2700K MR16 24D	50 mm	46 mm
Essential LED 5-50W 6500K MR16 24D	50 mm	46 mm

General Information	
Cap-Base	GU5.3
Switching Cycle	50,000
Nominal lifetime	15,000 hour(s)
Light Technical	
Color rendering index (CRI)	80
LLMF At End Of Nominal Lifetime (Nom)	70 %
Operating and Electrical	
Starting Time (Nom)	0.5 s
Controls and Dimming	
Dimmable	No
Mechanical and Housing	
Bulb Shape	MR16

General Information

Order Code	Full Product Name	Rated Lifetime (Hours)
929001240108	Essential LED 5-50W 2700K MR16 24D	15,000 hour(s)
929001240208	Essential LED 5-50W 6500K MR16 24D	15,000 hour(s)
929001874008	ESS LED MR16 4.5-50W 36D 830 SO 100-240V	-
929001874108	ESS LED MR16 4.5-50W 36D 865 SO 100-240V	-
929001874208	ESS LED MR16 3-35W 36D 830 SO 100-240V	-

Light Technical (1/2)

Essential LEDspot MR16

Order Code	Full Product Name	Beam Angle (Nom)	Correlated Color Temperature (Nom)	Color Code	Luminous Flux
929001240108	Essential LED 5-50W 2700K MR16 24D	24 degree(s)	2700 K	827	400 lm
929001240208	Essential LED 5-50W 6500K MR16 24D	24 degree(s)	6500 K	865	435 lm
929001874008	ESS LED MR16 4.5-50W 36D 830 SO 100-240V	36 degree(s)	3000 K	830	400 lm
929001874108	ESS LED MR16 4.5-50W 36D 865 SO 100-240V	36 degree(s)	6500 K	865	400 lm
929001874208	ESS LED MR16 3-35W 36D 830 SO 100-240V	36 degree(s)	3000 K	830	230 lm

Light Technical (2/2)

Order Code	Full Product Name	Luminous Intensity (Nom)
929001240108	Essential LED 5-50W 2700K MR16 24D	1,700 cd
929001240208	Essential LED 5-50W 6500K MR16 24D	1,700 cd
929001874008	ESS LED MR16 4.5-50W 36D 830 SO 100-240V	700 cd
929001874108	ESS LED MR16 4.5-50W 36D 865 SO 100-240V	700 cd
929001874208	ESS LED MR16 3-35W 36D 830 SO 100-240V	550 cd

Operating and Electrical

Order Code	Full Product Name	Input Frequency	Line Frequency	Power Consumption	Wattage Equivalent
929001240108	Essential LED 5-50W 2700K MR16 24D	- Hz	- Hz	5 W	50 W
929001240208	Essential LED 5-50W 6500K MR16 24D	- Hz	- Hz	5 W	50 W
929001874008	ESS LED MR16 4.5-50W 36D 830 SO 100-240V	50 to 60 Hz	50 to 60 Hz	4.5 W	50 W
929001874108	ESS LED MR16 4.5-50W 36D 865 SO 100-240V	50 to 60 Hz	50 to 60 Hz	4.5 W	50 W
929001874208	ESS LED MR16 3-35W 36D 830 SO 100-240V	50 to 60 Hz	50 to 60 Hz	3 W	35 W

Temperature

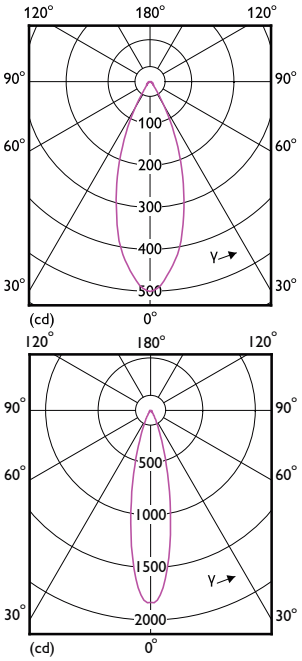
Order Code	Full Product Name	T-Case Maximum (Nom)
929001240108	Essential LED 5-50W 2700K MR16 24D	76 °C
929001240208	Essential LED 5-50W 6500K MR16 24D	76 °C
929001874008	ESS LED MR16 4.5-50W 36D 830 SO 100-240V	65 °C
929001874108	ESS LED MR16 4.5-50W 36D 865 SO 100-240V	65 °C
929001874208	ESS LED MR16 3-35W 36D 830 SO 100-240V	55 °C

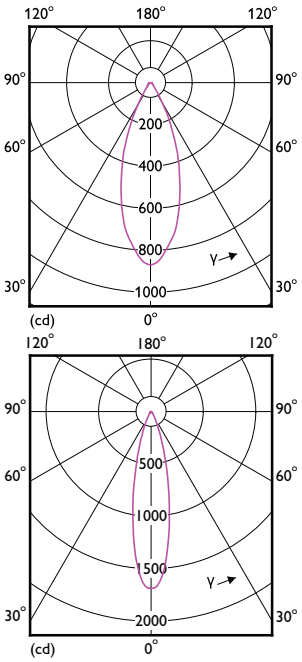
Approval and Application

Order Code	Full Product Name	Energy Consumption kWh/1000 h
929001240108	Essential LED 5-50W 2700K MR16 24D	- kWh
929001240208	Essential LED 5-50W 6500K MR16 24D	- kWh

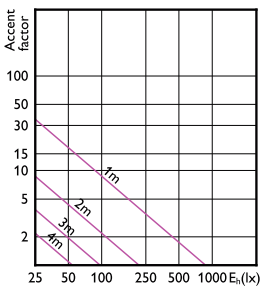
Essential LEDspot MR16

Order Code	Full Product Name	Energy Consumption kWh/1000 h
929001874008	ESS LED MR16 4.5-50W 36D 830 SO 100-240V	4.5 kWh
929001874108	ESS LED MR16 4.5-50W 36D 865 SO 100-240V	4.5 kWh
929001874208	ESS LED MR16 3-35W 36D 830 SO 100-240V	3 kWh

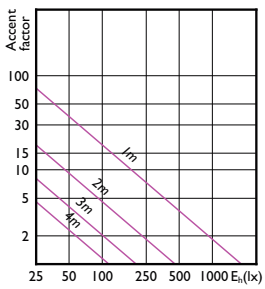




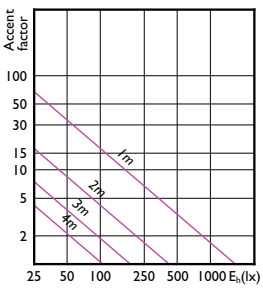
Accent Diagrams



Accent Diagram - ESS LED MR16 4.5-50W 36D 830 SO 100-240V

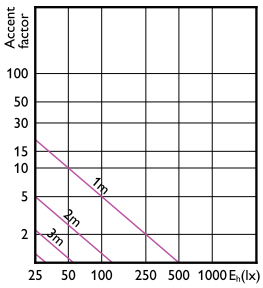


Accent Diagram - Essential LED 5-50W 6500K MR16 24D



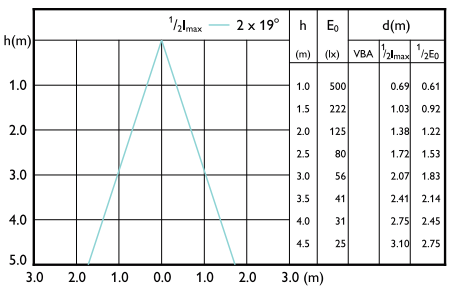
Accent Diagram - Essential LED 5-50W 2700K MR16 24D

Accent Diagrams



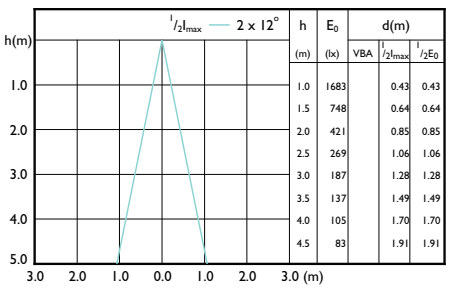
Accent Diagram - ESS LED MR16 3-35W 36D 830 SO 100-240V

Beam Diagrams



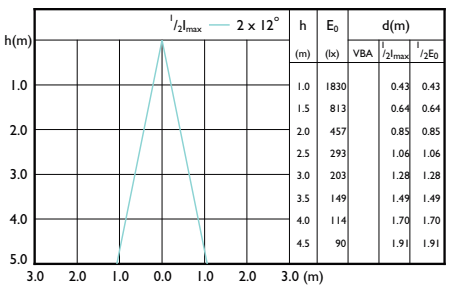
h (m)	E_0 (lx)	d(m) VBA	d(m) $^1/_2I_{max}$	d(m) $^1/_2E_0$
1.0	500		0.69	0.61
1.5	222		1.03	0.92
2.0	125		1.38	1.22
2.5	80		1.72	1.53
3.0	56		2.07	1.83
3.5	41		2.41	2.14
4.0	31		2.75	2.45
4.5	25		3.10	2.75

Beam diagram - ESS LED MR16 3-35W 36D 830 SO 100-240V



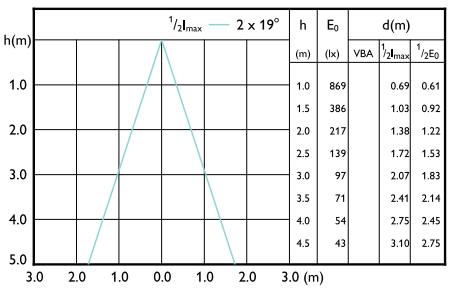
h (m)	E_0 (lx)	d(m) VBA	d(m) $^1/_2I_{max}$	d(m) $^1/_2E_0$
1.0	1683		0.43	0.43
1.5	748		0.64	0.64
2.0	421		0.85	0.85
2.5	269		1.06	1.06
3.0	187		1.28	1.28
3.5	137		1.49	1.49
4.0	105		1.70	1.70
4.5	83		1.91	1.91

Beam diagram - Essential LED 5-50W 2700K MR16 24D



h (m)	E_0 (lx)	d(m) VBA	d(m) $^1/_2I_{max}$	d(m) $^1/_2E_0$
1.0	1830		0.43	0.43
1.5	813		0.64	0.64
2.0	457		0.85	0.85
2.5	293		1.06	1.06
3.0	203		1.28	1.28
3.5	149		1.49	1.49
4.0	114		1.70	1.70
4.5	90		1.91	1.91

Beam diagram - Essential LED 5-50W 6500K MR16 24D



h (m)	E_0 (lx)	d(m) VBA	d(m) $^1/_2I_{max}$	d(m) $^1/_2E_0$
1.0	869		0.69	0.61
1.5	386		1.03	0.92
2.0	217		1.38	1.22
2.5	139		1.72	1.53
3.0	97		2.07	1.83
3.5	71		2.41	2.14
4.0	54		2.75	2.45
4.5	43		3.10	2.75

Beam diagram - ESS LED MR16 4.5-50W 36D 830 SO 100-240V

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