



# 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

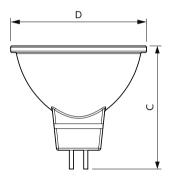
- Hotels, restaurants, bars, cafés, shops
- · Lobbies, corridors, stairwells, washrooms, reception areas

## Versions



5W (50W) GU5.3 cap Warm white Spot - RFT

## Dimensional drawing



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	70 %
(Nom)	
Operating and Electrical	
Starting Time (Nom)	0.5 s
Controls and Dimming	
Dimmable	No
Mechanical and Housing	
Bulb Shape	MR16

## Light Technical (1/2)

Product	D	с
5W (50W) GU5.3 cap Cool daylight Non-dimmable Spot	50 mm	46 mm
5W (50W) GU5.3 cap Warm white Non-dimmable Spot	50 mm	46 mm
ESS LED MR16 3-35W 36D 830 SO 100-240V	50.5 mm	46.5 mm
ESS LED MR16 4.5-50W 36D 830 100-240V	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

## **General Information**

Order Code	Full Product Name	Rated Lifetime (Hours)
57955800	Essential LED 5-50W 2700K MR16 24D	15,000 hour(s)
57957200	Essential LED 5-50W 6500K MR16 24D	15,000 hour(s)
80919800	ESS LED MR16 4.5-50W 36D 830 SO 100-240V	-
28453100	ESS LED MR16 4.5-50W 36D 830 100-240V	-
80921100	ESS LED MR16 4.5-50W 36D 865 SO 100-240V	-
80915000	ESS LED MR16 3-35W 36D 830 SO 100-240V	-

Order Code	Full Product Name	Beam Angle (Nom)	Correlated Color Temperature (Nom)	Color Code	Luminous Flux
57955800	Essential LED 5-50W 2700K MR16 24D	24 degree(s)	2700 K	827	400 lm
57957200	Essential LED 5-50W 6500K MR16 24D	24 degree(s)	6500 K	865	435 lm
80919800	ESS LED MR16 4.5-50W 36D 830 SO 100-240V	36 degree(s)	3000 K	830	400 lm

			Correlated Color		
		Beam Angle	Temperature	Color	Luminous
Order Code	Full Product Name	(Nom)	(Nom)	Code	Flux
28453100	ESS LED MR16	36 degree(s)	3000 K	830	400 lm
	4.5-50W 36D 830				
	100-240V				
80921100	ESS LED MR16	36 degree(s)	6500 K	865	400 lm
	4.5-50W 36D 865				
	SO 100-240V				
80915000	ESS LED MR16	36 degree(s)	3000 K	830	230 lm
	3-35W 36D 830 SO				
	100-240V				

## Light Technical (2/2)

Order Code	Full Product Name	Luminous Intensity (Nom)
57955800	Essential LED 5-50W 2700K MR16 24D	1,700 cd
57957200	Essential LED 5-50W 6500K MR16 24D	1,700 cd
80919800	ESS LED MR16 4.5-50W 36D 830 SO 100-240V	700 cd

Order Code	Full Product Name	Luminous Intensity (Nom)
28453100	ESS LED MR16 4.5-50W 36D 830 100-240V	700 cd
80921100	ESS LED MR16 4.5-50W 36D 865 SO 100-240V	700 cd
80915000	ESS LED MR16 3-35W 36D 830 SO 100-240V	550 cd

## **Operating and Electrical**

Order	Full Product	Input	Line	Power	Wattage
Code	Name	Frequency	Frequency	Consumption	Equivalent
57955800	Essential LED	– Hz	– Hz	5 W	50 W
	5-50W 2700K				
	MR16 24D				
57957200	Essential LED	– Hz	– Hz	5 W	50 W
	5-50W 6500K				
	MR16 24D				
80919800	ESS LED MR16	50 to 60 Hz	50 to 60 Hz	4.5 W	50 W
	4.5-50W 36D				
	830 SO				
	100-240V				
28453100	ESS LED MR16	50 to 60 Hz	50 to 60 Hz	4.5 W	50 W
	4.5-50W 36D				
	830 100-240V				

Order	Full Product	Input	Line	Power	Wattage
Code	Name	Frequency	Frequency	Consumption	Equivalent
80921100	ESS LED MR16	50 to 60 Hz	50 to 60 Hz	4.5 W	50 W
	4.5-50W 36D				
	865 SO				
	100-240V				
80915000	ESS LED MR16	50 to 60 Hz	50 to 60 Hz	3 W	35 W
	3-35W 36D				
	830 SO				
	100-240V				

#### Temperature

Order Code	Full Product Name	T-Case Maximum (Nom)
57955800	Essential LED 5-50W 2700K MR16 24D	76 °C
57957200	Essential LED 5-50W 6500K MR16 24D	76 °C
80919800	ESS LED MR16 4.5-50W 36D 830 SO 100-240V	65 °C

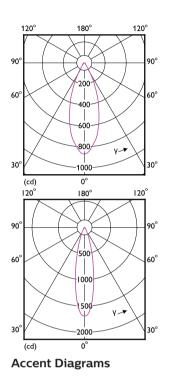
Order Code	Full Product Name	T-Case Maximum (Nom)
28453100	ESS LED MR16 4.5-50W 36D 830 100-240V	65 ℃
80921100	ESS LED MR16 4.5-50W 36D 865 SO 100-240V	65 ℃
80915000	ESS LED MR16 3-35W 36D 830 SO 100-240V	55 ℃

## Approval and Application

		Energy Consumption
Order Code	Full Product Name	kWh/1000 h
57955800	Essential LED 5-50W 2700K MR16 24D	-
57957200	Essential LED 5-50W 6500K MR16 24D	-

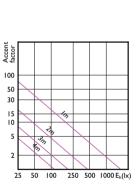
		Energy Consumption
Order Code	Full Product Name	kWh/1000 h
80919800	ESS LED MR16 4.5-50W 36D 830 SO 100-240V	4.5 kWh
28453100	ESS LED MR16 4.5-50W 36D 830 100-240V	-

		Energy Consumption			
Order Code	Full Product Name	kWh/1000 h			
80921100	ESS LED MR16 4.5-50W 36D 865 SO 100-240V	4.5 kWh			
80915000	ESS LED MR16 3-35W 36D 830 SO 100-240V	3 kWh			

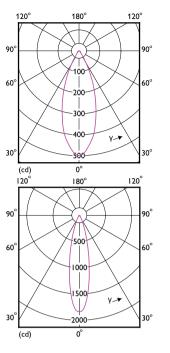


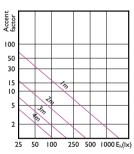
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Accent Diagram - ESS LED MR16 4.5-50W 36D 830 100-240V



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

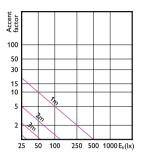




Accent Diagram - Essential LED 5-50W 2700K MR16 24D

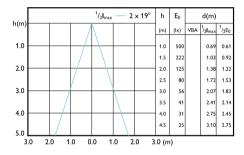
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## **Accent Diagrams**

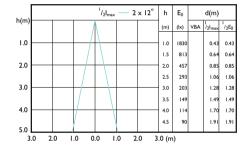


Accent Diagram - ESS LED MR16 3-35W 36D 830 SO 100-240V

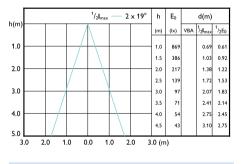
#### **Beam Diagrams**



h ()	$1/2I_{max} - 2 \times 12^{\circ}$					h	E <sub>0</sub>	d(m)			
h(m)							(m)	(lx)	VBA	l /2I <sub>max</sub>	/ <sub>2</sub> E0
1.0							1.0	1683		0.43	0.43
							1.5	748		0.64	0.64
2.0				$\vdash$			2.0	421		0.85	0.85
							2.5	269		1.06	1.06
3.0				$\vdash$			3.0	187		1.28	1.28
							3.5	137		1.49	1.49
4.0			/				4.0	105		1.70	1.70
5.0							4.5	83		1.91	1.91
3	.0 2	.0 1	.0 0.	.0 1	.0 2	0 3	.0 (m	)			



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



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

Beam diagram - Essential LED 5-50W 2700K MR16 24D Beam diagram - Essential LED 5-50W 6500K MR16 24D



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