



# Your everyday LEDspot MR16

## Essential LED spot 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

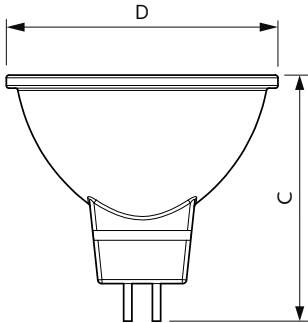
- Easy retrofit
- Lifetime up to 15,000 hours
- Non-dimmable
- UV- and IR-free light

### Application

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

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## Dimensional drawing



| Product  | D       | C       |
|--|---------|---------|
| 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 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 |
| ESS LED MR16 4.5-50W 36D 865 SO 100-240V           | 50.5 mm | 46.5 mm |
| ESS LED MR16 6-48W 36D 827 100-240V                | 50 mm   | 45 mm   |
| ESS LED MR16 6-48W 36D 830 100-240V                | 50 mm   | 45 mm   |
| ESS LED MR16 6-48W 36D 840 100-240V                | 50 mm   | 45 mm   |
| LED MR16 4.5-50W 36D 830 SO 120V Dim 1CT           | 50.5 mm | 46.5 mm |

### General Information

|                  |                |
|------------------|----------------|
| Cap-Base         | GU5.3          |
| Switching Cycle  | 50,000         |
| Nominal lifetime | 15,000 hour(s) |

### Light Technical

|                                       |      |
|---------------------------------------|------|
| LLMF At End Of Nominal Lifetime (Nom) | 70 % |
|---------------------------------------|------|

### Operating and Electrical

|                     |       |
|---------------------|-------|
| Starting Time (Nom) | 0.5 s |
|---------------------|-------|

### Mechanical and Housing

|            |      |
|------------|------|
| Bulb Shape | MR16 |
|------------|------|

## General Information

| Order Code   | Full Product Name                                  | Rated Lifetime (Hours) |
|--------------|--|------------------------|
| 929003607708 | ESS LED MR16 6-48W 36D 830 100-240V                | -                      |
| 929003607808 | ESS LED MR16 6-48W 36D 840 100-240V                | -                      |
| 929003617508 | ESS LED MR16 6-48W 36D 827 100-240V                | -                      |
| 929001240108 | 5W (50W) GU5.3 cap Warm white Non-dimmable Spot    | 15,000 hour(s)         |
| 929001240208 | 5W (50W) GU5.3 cap Cool daylight Non-dimmable Spot | 15,000 hour(s)         |

| Order Code   | Full Product Name                        | Rated Lifetime (Hours) |
|--------------|--|------------------------|
| 929001874008 | ESS LED MR16 4.5-50W 36D 830 SO 100-240V | -                      |
| 929001874012 | ESS LED MR16 4.5-50W 36D 830 SO 100-240V | -                      |
| 929001874068 | ESS LED MR16 4.5-50W 36D 830 100-240V    | -                      |
| 929001874108 | ESS LED MR16 4.5-50W 36D 865 SO 100-240V | -                      |
| 929001874112 | ESS LED MR16 4.5-50W 36D 865 SO 100-240V | -                      |
| 929001874208 | ESS LED MR16 3-35W 36D 830 SO 100-240V   | -                      |
| 929001874412 | LED MR16 4.5-50W 36D 830 SO 120V Dim 1CT | -                      |

## Light Technical

| Order Code   | Full Product Name                   | Beam Angle (Nom) | Correlated Color Temperature (Nom) | Color rendering index (CRI) | Color Code | Luminous Flux (Nom) | Luminous Intensity (Nom) |
|--------------|-------------------------------------|------------------|------------------------------------|-----------------------------|------------|---------------------|--------------------------|
| 929003607708 | ESS LED MR16 6-48W 36D 830 100-240V | 36 degree(s)     | 3000 K                             | 83                          | 830        | 625 lm              | 1,050 cd                 |
| 929003607808 | ESS LED MR16 6-48W 36D 840 100-240V | 36 degree(s)     | 4000 K                             | 83                          | 840        | 650 lm              | 1,100 cd                 |
| 929003617508 | ESS LED MR16 6-48W 36D 827 100-240V | 36 degree(s)     | 2700 K                             | 83                          | 827        | 600 lm              | 1,050 cd                 |

## Essential LED spot MR16

| Order Code   | Full Product Name                                  | Beam Angle (Nom) | Correlated Color  | Color rendering | Color | Luminous Flux | Luminous Intensity (Nom) |
|--------------|--|------------------|-------------------|-----------------|-------|---------------|--------------------------|
|              |  |                  | Temperature (Nom) | index (CRI)     | Code  |               |                          |
| 929001240108 | 5W (50W) GU5.3 cap Warm white Non-dimmable Spot    | 24 degree(s)     | 2700 K            | 80              | 827   | 400 lm        | 1,700 cd                 |
| 929001240208 | 5W (50W) GU5.3 cap Cool daylight Non-dimmable Spot | 24 degree(s)     | 6500 K            | 80              | 865   | 435 lm        | 1,700 cd                 |
| 929001874008 | ESS LED MR16 4.5-50W 36D 830 SO 100-240V           | 36 degree(s)     | 3000 K            | 80              | 830   | 400 lm        | 700 cd                   |
| 929001874012 | ESS LED MR16 4.5-50W 36D 830 SO 100-240V           | 36 degree(s)     | 3000 K            | 80              | 830   | 400 lm        | 700 cd                   |
| 929001874068 | ESS LED MR16 4.5-50W 36D 830 100-240V              | 36 degree(s)     | 3000 K            | 80              | 830   | 400 lm        | 700 cd                   |
| 929001874108 | ESS LED MR16 4.5-50W 36D 865 SO 100-240V           | 36 degree(s)     | 6500 K            | 80              | 865   | 400 lm        | 700 cd                   |
| 929001874112 | ESS LED MR16 4.5-50W 36D 865 SO 100-240V           | 36 degree(s)     | 6500 K            | 80              | 865   | 400 lm        | 700 cd                   |
| 929001874208 | ESS LED MR16 3-35W 36D 830 SO 100-240V             | 36 degree(s)     | 3000 K            | 80              | 830   | 230 lm        | 550 cd                   |
| 929001874412 | LED MR16 4.5-50W 36D 830 SO 120V Dim 1CT           | 36 degree(s)     | 3000 K            | 80              | 830   | 400 lm        | 750 cd                   |

### Operating and Electrical

| Order Code   | Full Product Name                                  | Input Frequency | Line Frequency | Power Consumption | Wattage Equivalent | Order Code   | Full Product Name                        | Input Frequency | Line Frequency | Power Consumption | Wattage Equivalent |
|--------------|--|-----------------|----------------|-------------------|--------------------|--------------|--|-----------------|----------------|-------------------|--------------------|
| 929003607708 | ESS LED MR16 6-48W 36D 830 100-240V                | 50 to 60 Hz     | -              | 6 W               | 48 W               | 929001874012 | ESS LED MR16 4.5-50W 36D 830 SO 100-240V | 50 to 60 Hz     | 50 to 60 Hz    | 4.5 W             | 50 W               |
| 929003607808 | ESS LED MR16 6-48W 36D 840 100-240V                | 50 to 60 Hz     | -              | 6 W               | 48 W               | 929001874068 | ESS LED MR16 4.5-50W 36D 830 100-240V    | 50 to 60 Hz     | 50 to 60 Hz    | 4.5 W             | 50 W               |
| 929003617508 | ESS LED MR16 6-48W 36D 827 100-240V                | 50 to 60 Hz     | -              | 6 W               | 48 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               |
| 929001240108 | 5W (50W) GU5.3 cap Warm white Non-dimmable Spot    | - Hz            | - Hz           | 5 W               | 50 W               | 929001874112 | ESS LED MR16 4.5-50W 36D 865 SO 100-240V | 50 to 60 Hz     | 50 to 60 Hz    | 4.5 W             | 50 W               |
| 929001240208 | 5W (50W) GU5.3 cap Cool daylight Non-dimmable Spot | - Hz            | - Hz           | 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               |
| 929001874008 | ESS LED MR16 4.5-50W 36D                           | 50 to 60 Hz     | 50 to 60 Hz    | 4.5 W             | 50 W               | 929001874412 | LED MR16 4.5-50W 36D 830 SO 120V Dim 1CT | 60 Hz           | 60 Hz          | 4.5 W             | 50 W               |

### Temperature

## Essential LED spot MR16

| Order Code   | Full Product Name                                  | T-Case Maximum (Nom) |
|--------------|--|----------------------|
| 929003607708 | ESS LED MR16 6-48W 36D 830 100-240V                | 70 °C                |
| 929003607808 | ESS LED MR16 6-48W 36D 840 100-240V                | 70 °C                |
| 929003617508 | ESS LED MR16 6-48W 36D 827 100-240V                | 70 °C                |
| 929001240108 | 5W (50W) GU5.3 cap Warm white Non-dimmable Spot    | 76 °C                |
| 929001240208 | 5W (50W) GU5.3 cap Cool daylight Non-dimmable Spot | 76 °C                |

| Order Code   | Full Product Name                        | T-Case Maximum (Nom) |
|--------------|--|----------------------|
| 929001874008 | ESS LED MR16 4.5-50W 36D 830 SO 100-240V | 65 °C                |
| 929001874012 | ESS LED MR16 4.5-50W 36D 830 SO 100-240V | 65 °C                |
| 929001874068 | ESS LED MR16 4.5-50W 36D 830 100-240V    | 65 °C                |
| 929001874108 | ESS LED MR16 4.5-50W 36D 865 SO 100-240V | 65 °C                |
| 929001874112 | 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                |
| 929001874412 | LED MR16 4.5-50W 36D 830 SO 120V Dim 1CT | 65 °C                |

### Controls and Dimming

| Order Code   | Full Product Name                                  | Dimmable |
|--------------|--|----------|
| 929003607708 | ESS LED MR16 6-48W 36D 830 100-240V                | No       |
| 929003607808 | ESS LED MR16 6-48W 36D 840 100-240V                | No       |
| 929003617508 | ESS LED MR16 6-48W 36D 827 100-240V                | No       |
| 929001240108 | 5W (50W) GU5.3 cap Warm white Non-dimmable Spot    | No       |
| 929001240208 | 5W (50W) GU5.3 cap Cool daylight Non-dimmable Spot | No       |
| 929001874008 | ESS LED MR16 4.5-50W 36D 830 SO 100-240V           | No       |

| Order Code   | Full Product Name                        | Dimmable |
|--------------|--|----------|
| 929001874012 | ESS LED MR16 4.5-50W 36D 830 SO 100-240V | No       |
| 929001874068 | ESS LED MR16 4.5-50W 36D 830 100-240V    | No       |
| 929001874108 | ESS LED MR16 4.5-50W 36D 865 SO 100-240V | No       |
| 929001874112 | ESS LED MR16 4.5-50W 36D 865 SO 100-240V | No       |
| 929001874208 | ESS LED MR16 3-35W 36D 830 SO 100-240V   | No       |
| 929001874412 | LED MR16 4.5-50W 36D 830 SO 120V Dim 1CT | Yes      |

### Mechanical and Housing

| Order Code   | Full Product Name                                  | Bulb Finish |
|--------------|--|-------------|
| 929003607708 | ESS LED MR16 6-48W 36D 830 100-240V                | Clear       |
| 929003607808 | ESS LED MR16 6-48W 36D 840 100-240V                | Clear       |
| 929003617508 | ESS LED MR16 6-48W 36D 827 100-240V                | Clear       |
| 929001240108 | 5W (50W) GU5.3 cap Warm white Non-dimmable Spot    | -           |
| 929001240208 | 5W (50W) GU5.3 cap Cool daylight Non-dimmable Spot | -           |
| 929001874008 | ESS LED MR16 4.5-50W 36D 830 SO 100-240V           | -           |

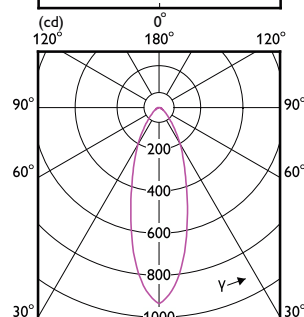
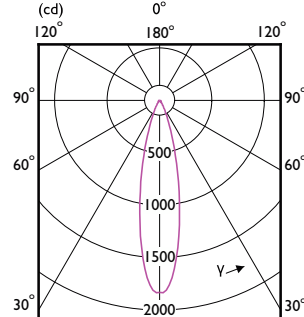
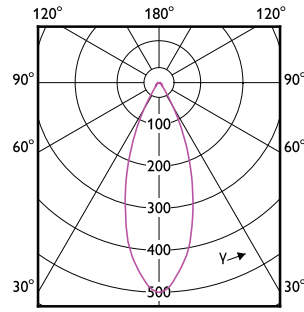
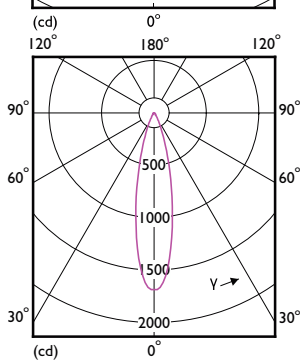
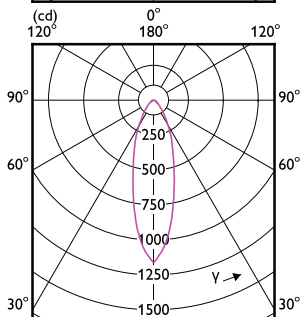
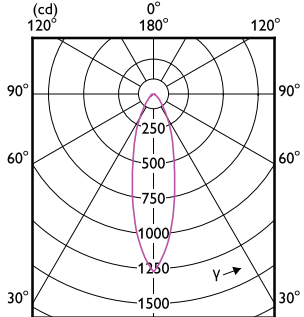
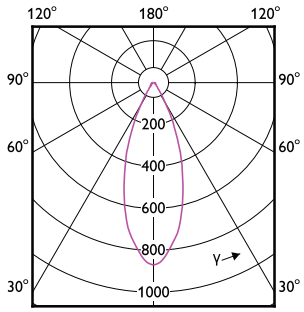
| Order Code   | Full Product Name                        | Bulb Finish |
|--------------|--|-------------|
| 929001874012 | ESS LED MR16 4.5-50W 36D 830 SO 100-240V | -           |
| 929001874068 | ESS LED MR16 4.5-50W 36D 830 100-240V    | -           |
| 929001874108 | ESS LED MR16 4.5-50W 36D 865 SO 100-240V | -           |
| 929001874112 | ESS LED MR16 4.5-50W 36D 865 SO 100-240V | -           |
| 929001874208 | ESS LED MR16 3-35W 36D 830 SO 100-240V   | -           |
| 929001874412 | LED MR16 4.5-50W 36D 830 SO 120V Dim 1CT | -           |

### Approval and Application

| Order Code   | Full Product Name                                  | Energy                    |                        |
|--------------|--|---------------------------|------------------------|
|              |  | Ambient temperature range | Consumption kWh/1000 h |
| 929003607708 | ESS LED MR16 6-48W 36D 830 100-240V                | -20 to +45 °C             | -                      |
| 929003607808 | ESS LED MR16 6-48W 36D 840 100-240V                | -20 to +45 °C             | -                      |
| 929003617508 | ESS LED MR16 6-48W 36D 827 100-240V                | -20 to +45 °C             | -                      |
| 929001240108 | 5W (50W) GU5.3 cap Warm white Non-dimmable Spot    | -20 to +45 °C             | -                      |
| 929001240208 | 5W (50W) GU5.3 cap Cool daylight Non-dimmable Spot | -20 to +45 °C             | -                      |
| 929001874008 | ESS LED MR16 4.5-50W 36D 830 SO 100-240V           | -20 to +40 °C             | 4.5 kWh                |
| 929001874012 | ESS LED MR16 4.5-50W 36D 830 SO 100-240V           | -20 to +40 °C             | -                      |
| 929001874068 | ESS LED MR16 4.5-50W 36D 830 100-240V              | -20 to +40 °C             | -                      |

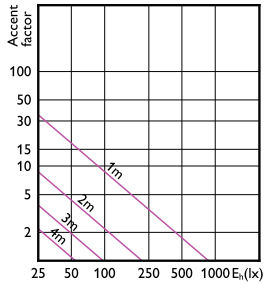
| Order Code   | Full Product Name                        | Energy                    |                        |
|--------------|--|---------------------------|------------------------|
|              |  | Ambient temperature range | Consumption kWh/1000 h |
| 929001874108 | ESS LED MR16 4.5-50W 36D 865 SO 100-240V | -20 to +40 °C             | 4.5 kWh                |
| 929001874112 | ESS LED MR16 4.5-50W 36D 865 SO 100-240V | -20 to +40 °C             | -                      |
| 929001874208 | ESS LED MR16 3-35W 36D 830 SO 100-240V   | -20 to +40 °C             | 3 kWh                  |
| 929001874412 | LED MR16 4.5-50W 36D 830 SO 120V Dim 1CT | -20 to +40 °C             | -                      |

# Essential LED spot MR16

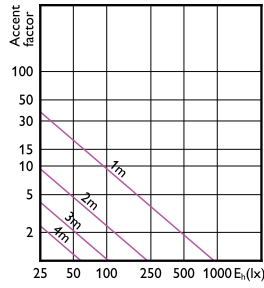


# Essential LED spot MR16

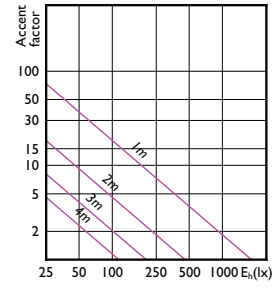
## Accent Diagrams



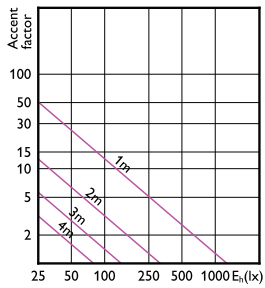
Accent Diagram - LED MR16 4.5-50W 36D 830 SO 120V Dim 1CT



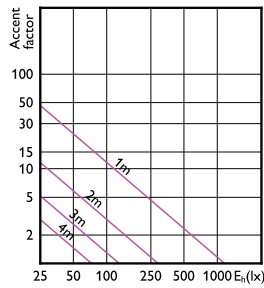
Accent Diagram - ESS LED MR16 6-48W 36D 827 100-240V



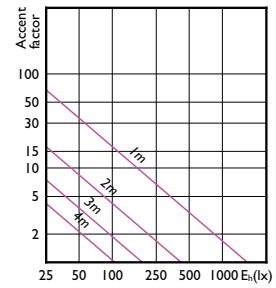
Accent Diagram - Essential LED 5-50W 6500K MR16 24D



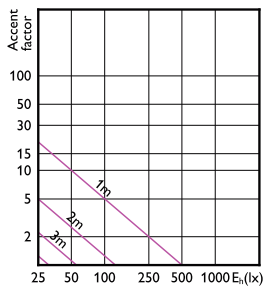
Accent Diagram - ESS LED MR16 6-48W 36D 830 100-240V



Accent Diagram - ESS LED MR16 6-48W 36D 840 100-240V



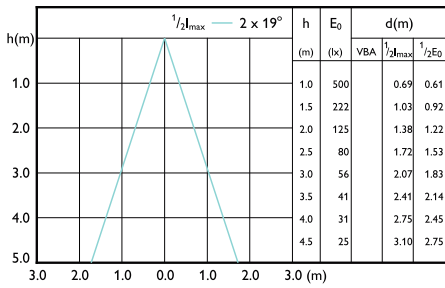
Accent Diagram - Essential LED 5-50W 2700K MR16 24D



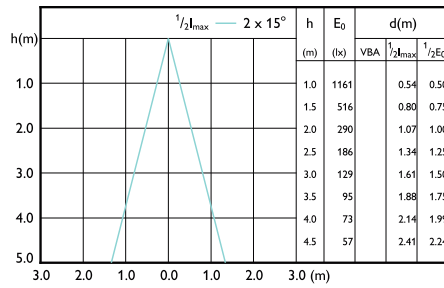
Accent Diagram - ESS LED MR16 3-35W 36D 830 SO 100-240V

# Essential LED spot MR16

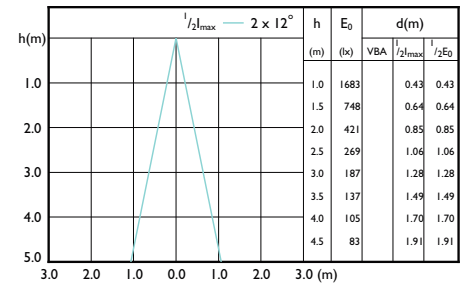
## Beam Diagrams



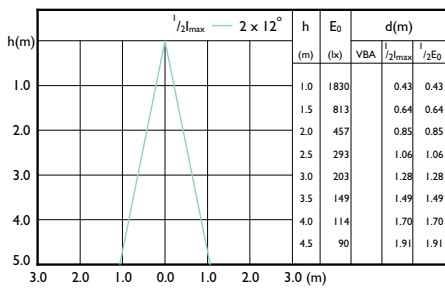
Beam diagram - ESS LED MR16 3-35W 36D 830 SO 100-240V



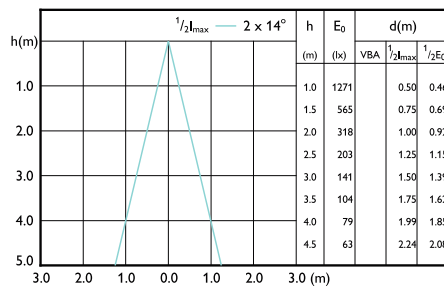
Beam diagram - ESS LED MR16 6-48W 36D 840 100-240V



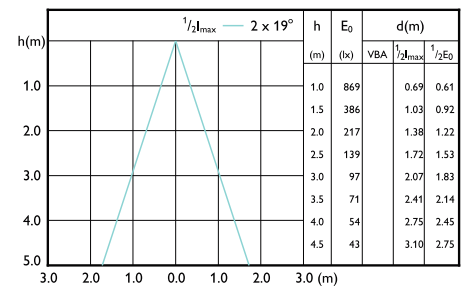
Beam diagram - Essential LED 5-50W 2700K MR16 24D



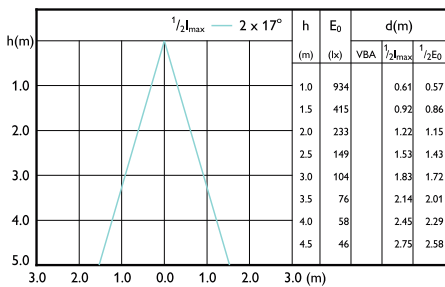
Beam diagram - Essential LED 5-50W 6500K MR16 24D



Beam diagram - ESS LED MR16 6-48W 36D 830 100-240V



Beam diagram - LED MR16 4.5-50W 36D 830 SO 120V Dim 1CT



Beam diagram - ESS LED MR16 6-48W 36D 827 100-240V

## Essential LED spot MR16

