



# IndoorLighting



MR16 3W is designed for energy savings. It has a high light output efficiency but low power consumption. The stylish aluminum housing provides air ventilation to take away heat effectively. Temperature rise of the housing is less than 25 degrees and it is safe to touch.

The MR16 3W lamp fits into most standard, low voltage MR16 light fixtures with a GU5.3 base. MR16 3W is available in 3 color temperatures 2800K, 4200K and 6000K and two beam angles 15 deg and 25 deg.

# **SPECIFICATIONS**

COLOR TEMPERATURE 2800K, 4200K and 6000K Also available in Red, Green and Blue

LIGHT SOURCE Cree XRE LED

BEAM ANGLE 15 deg and 25 deg FWHM

**HOUSING** Die cast aluminum, either painted silver or black

WEIGHT 60g BASE TYPE GU5.3

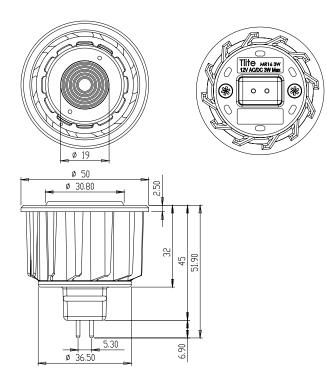
OPERATION VOLTAGE 12V AC/DC POWER CONSUMPTION 3W

TRANSFORMER Low voltage magnetic transformer of switching mode power supply

**OPERATION TEMPERATURE** -20 deg C to 50 deg C

**HUMIDITY RANGE** 0 to 95% non-condensing humidity

# PHYSICAL DIMENSIONS



7 ORDERING CODE	
MR16-3W-CW-15-12V	MR-16 3W cool white 15°
MR16-3W-CW-25-12V	MR-16 3W cool white 25°
MR16-3W-CW-1040-12V	MR-16 3W cool white 10x40°
MR16-3W-NW-15-12V	MR-16 3W neutral white 15°
MR16-3W-NW-25-12V	MR-16 3W neutral white 25°
MR16-3W-WW-15-12V	MR-16 3W warm white 15°
MR16-3W-WW-25-12V	MR-16 3W warm white 25°
MR16-3W-RED-15-12V	MR-16 3W red 15°
MR16-3W-GRN-15-12V	MR-16 3W green 15°
MR16-3W-BLU-15-12V	MR-16 3W blue 15°



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# ► PHOTOMETRIC DATA

# **715 DEGREE** Light Source Specifications

Optics: PMMA

Light source: 1 high power LED

Beam angle: 15 deg

Light distribution: symmetric direct illumination

CCT: 2800K

# Illuminance

DISTANCE	1m			2m		3m		5m	
COLOR	Lux	Size(mm)	Lux	Size(mm)	Lux	Size(mm)	Lux	Size (mm)	
WHITE	628.4	250	157.2	500	69.8	750	25.2	1250	

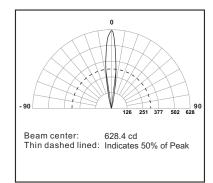
<sup>\*</sup> light pattern indicates the size at 50% of peak intensity

# Illuminance Distribution

					miux	
1.5	2.7	3.8	4.1	2.4	1.6	1m
2.5	8.6	14	17	7.0	2.5	
5.6	20	41	48	18	4.9	
5.7	20	45	46	21	5.2	0
3.4	9.6	22	19	10	3.3	
1.6	2.9	4.3	4.9	3.4	1.8	
Lm		(	)			1m

Location: 3.05m normal to surface

# **Light Distribution**



IES file is also available

# **Light Output**

Color	Warm white
Total (lumens)	64.1
Power(watts)	2.5
Efficacy(lm/W)	26

\*The power consumption is measured with the lamp fixture (power consumption of the DC power supply is not included)

# **725 DEGREE** Light Source Specifications

Optics: PMMA

Light source: 1 high power LED

Beam angle: 25 deg

Light distribution: symmetric direct illumination

CCT: 2800K

# Illuminance

DISTANCE	1m		1m 2m		3m		5m	
COLOR	Lux	Size(mm)	Lux	Size(mm)	Lux	Size(mm)	Lux	Size (mm)
WHITE	396.4	320	99	640	44	960	15.8	1600

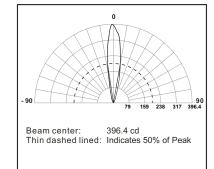
<sup>\*</sup> light pattern indicates the size at 50% of peak intensity

#### **Illuminance Distribution**

					in lux	
1.5	2.7	4.1	3.9	2.5	1.5	1m
2.6	6.9	12	12	6.1	2.2	
4.2	18	77	73	15	4.0	
4.2	18	89	82	15	4.1	0
2.6	7.2	14	13	6.5	2.3	
1.7	3.1	4.2	4.0	2.9	1.6	
1m			)		1m	1

Location: 1.5m normal to surface

#### **Light Distribution**



IES file is also available

# **Light Output**

Color	Warm white
Total (lumens)	68
Power(watts)	2.5
Efficacy(lm/W)	27.2

\*The power consumption is measured with the lamp fixture (power consumption of the DC power supply is not included)

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# **▶ PHOTOMETRIC DATA**

# **715 DEGREE** Light Source Specifications

Optics: PMMA

Light source: 1 high power LED

Beam angle: 15 deg

Light distribution: symmetric direct illumination

CCT: 4200K

# Illuminance

DISTANCE	1m		2	2m		3m		5m	
COLOR	Lux	Size(mm)	Lux	Size(mm)	Lux	Size(mm)	Lux	Size (mm)	
WHITE	683.6	250	170.8	500	76	750	27.4	1250	

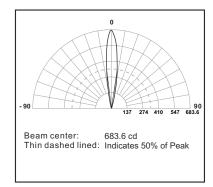
<sup>\*</sup> light pattern indicates the size at 50% of peak intensity

# **Illuminance Distribution**

2.6	4.6	6.3	7.0	4.0	2.3	11				
4.3	12	20	21	12	4.4					
7.0	27	51	50	26	6.5					
6.7	32	54	56	25	7.0	0				
4.4	14	24	29	16	5.3					
2.4	5.0	7.0	8.0	4.9	2.7					
1m	1m 0									

Location: 3.05m normal to surface

# **Light Distribution**



IES file is also available

# **Light Output**

Color	Neutral white
Total (lumens)	71.25
Power(watts)	2.5
Efficacy(lm/W)	28.5

\*The power consumption is measured with the lamp fixture (power consumption of the DC power supply is not included)

# **25 DEGREE** Light Source Specifications

Optics: PMMA

Light source: 1 high power LED

Beam angle: 25 deg

Light distribution: symmetric direct illumination

CCT: 4200K

# Illuminance

DISTANCE	1m Lux Size <sub>(mm)</sub>		1m 2m		3m		5m	
COLOR			Lux	Size(mm)	Lux	Size(mm)	Lux	Size (mm)
WHITE	416.8	333.5	104.2	667	46.4	1000.5	16.6	1667.5

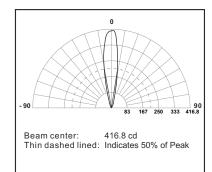
<sup>\*</sup> light pattern indicates the size at 50% of peak intensity

#### **Illuminance Distribution**

Thumbance Distribution											
	in lux										
1.6	2.8	4.0	4.1	2.7	1.6	1m					
2.7	6.9	13	13	6.6	2.6						
4.3	17	83	79	16	4.1						
4.3	16	80	82	16	4.2	0					
2.7	7.2	14	13	6.9	2.6						
1.7	3.0	4.4	4.4	2.95	1.8						
1 m			<u> </u>		1 1 2						

Location: 1.5m normal to surface

#### **Light Distribution**



IES file is also available

# **Light Output**

Color	Neutral white
Total (lumens)	74.56
Power(watts)	2.5
Efficacy(lm/W)	28.5

\*The power consumption is measured with the lamp fixture (power consumption of the DC power supply is not included)

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# **▶ PHOTOMETRIC DATA**

# **715 DEGREE** Light Source Specifications

Optics: PMMA

Light source: 1 high power LED

Beam angle: 15 deg

Light distribution: symmetric direct illumination

CCT: 6000K

# Illuminance

DISTANCE	1m		2m		3m		5m	
COLOR	Lux	Size(mm)	Lux	Size(mm)	Lux	Size(mm)	Lux	Size (mm)
WHITE	897	268.5	224.2	537	99.6	805.5	35.8	1342.5

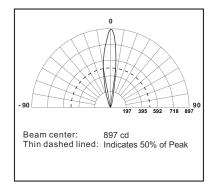
<sup>\*</sup> light pattern indicates the size at 50% of peak intensity

# **Illuminance Distribution**

					III IUX	٠.
2.4	4.1	6.2	6.1	4.1	2.5	1
4.1	13.5	29	27	12	4.7	
8.3	34	75	73	29	7.0	
8.4	30	70	68	28	7.2	0
4.1	14	27	26	11	3.7	
2.1	3.6	5.8	5.5	3.5	2.2	
1m		1m 0 1m				

Location: 3.05m normal to surface

# **Light Distribution**



IES file is also available

# **Light Output**

Color	Cool white
Total (lumens)	94.97
Power(watts)	2.7
Efficacy(lm/W)	35.2

\*The power consumption is measured with the lamp fixture (power consumption of the DC power supply is not included)

# **25 DEGREE** Light Source Specifications

Optics: PMMA

Light source: 1 high power LED

Beam angle: 25 deg

Light distribution: symmetric direct illumination

CCT: 6000K

# Illuminance

DISTANCE	1m		2m		3m		5m	
COLOR	Lux	Size(mm)	Lux	Size(mm)	Lux	Size(mm)	Lux	Size (mm)
WHITE	500.2	316	125	632	55.6	948	20	1580

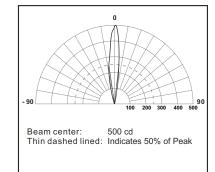
<sup>\*</sup> light pattern indicates the size at 50% of peak intensity

#### **Illuminance Distribution**

					in lux	
1.8	2.8	4.2	4.3	2.6	1.8	1m
2.5	6.8	14	14	6.5	2.7	
4.2	15	96	98	15	4.7	
4.3	16	85	82	15	4.7	0
2.9	7.5	15	16	7.3	3.1	
1.6	2.9	4.4	4.4	2.6	1.7	
1 m			)		1 m	1

Location: 1.5m normal to surface

#### **Light Distribution**



IES file is also available

# Light Output

Color	Cool white
Total (lumens)	80
Power(watts)	2.7
Efficacy(lm/W)	29.6

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