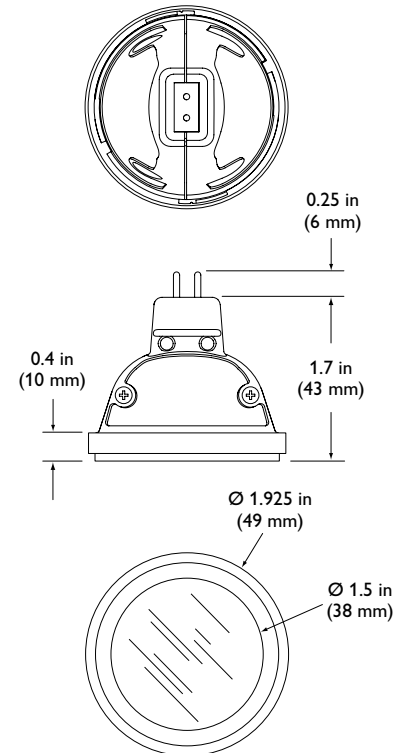# iW MR gen3
100° beam angle

MR 16 LED lamp with high-quality intelligent white light

iW MR gen3 is an LED lamp with high-quality intelligent white light. The stylish housing fits into most standard MR16 fixtures, including tracks, cables, rails, and pendants. With high-intensity LED light sources and three beam angles, iW MR gen3 is suitable for a wide-range of architectural, theatrical, and retail applications.

- Compatible with most MR16 fixtures and sockets — With its standard GU5.3 base and two-pin MR16 connector, iW MR gen3 is compatible with most MR16 tracks, rails, cables, and pendant fixtures.

- Standard wiring and simple installation — iW MR gen3 lamps work with standard 2-conductor jacketed cable or hook-up wire. Power / data supplies specifically designed for use with iW MR gen3 multiplex power and data onto a two-wire circuit for use with conventional MR16 fixtures and sockets.

- High-Intensity LED light — iW MR gen3 provides channels of warm, neutral, and cool LED sources to offer white light in color temperatures ranging from 2700 K – 5700 K.

- Three beam angles — Use the 20° lamp when you need a spot of light with sharply defined edges, the 26° lamps for a wider spread of light, and the 100° (no optic) lamp for a soft, diffuse light.

- Efficient and cost-effective — iW MR gen3 is easily adaptable to a wide range of interior environments where MR16 fixtures are commonly used. With long useful source life, low power draw of just 5 W, and low-maintenance operation, iW MR gen3 lamps cost significantly less to own and operate than conventional MR16 lamps.

0.25 in
(6 mm)

0.4 in
(10 mm)

1.7 in
(43 mm)

Ø 1.925 in
(49 mm)

Ø 1.5 in
(38 mm)

- Complete integrated system — PDS-70mr 24V power / data supply, for use with MR LED lamps, is a complete custom control solution from Philips Color Kinetics.

For detailed product information, please refer to the iW MR gen3 Product Guide at www.colorkinetics.com/ls/rgb/iwmrgen3/

PHILIPS

Specifications

Due to continuous improvements and innovations, specifications may change without notice

Item	Specification	100° Beam Angle
Output	Lumens*	134
	Efficacy (lm / W)	10.8
	CRI	82
	Lumen Maintenance†	54,000 hours L$_{70}$ @ 40° C 54,000 hours L$_{70}$ @ 25° C 54,000 hours L$_{50}$ @ 40° C 54,000 hours L$_{50}$ @ 25° C
	LED Channels	2700 K / 4000 K / 5700 K
Electrical	Input Voltage	24 VDC from PDS-70mr
	Power Consumption	5 W maximum at full output, steady state
Control	Interface	PDS-70mr 24V (DMX / Ethernet)
	Control System	Philips Color Kinetics full range of controllers, including Light System Manager, iPlayer 3, and ColorDial Pro, or third-party controllers
Physical	Dimensions (Height x Width x Depth)	1.9 x 1.9 x 1.9 in (49 x 49 x 49 mm)
	Weight	3.1 oz (88 g)
	Housing	Die-cast zinc, silver finish
	Lens	Tempered glass
	Fixture Connections	Standard 2-pin MR16 connector
	Temperature Ranges	-4° – 104° F (-20° – 40° C) Operating -4° – 104° F (-20° – 40° C) Startup -40° – 176° F (-40° – 80° C) Storage
	Humidity	0 – 95%, non-condensing
	Maximum Fixture Run	14 maximum per PDS-70mr 24V Maximum cable length 50 ft (15 m)
Certification and Safety	Certifications	UL / cUL, FCC Class A, CE
	Environment	Dry Location, IP20

* Lumen measurement complies with IES LM-79-08 testing procedures.

† L$_{70}$ = 70% lumen maintenance (when light output drops below 70% of initial output).
L$_{50}$ = 50% lumen maintenance (when light output drops below 50% of initial output).
Ambient luminaire temperatures specified. Lumen maintenance calculations are based on lifetime prediction graphs supplied by LED source manufacturers. Calculations for white-light LED fixtures are based on measurements that comply with IES LM-80-08 testing procedures. Refer to www.philipscolorkinetics.com/support/appnotes/lm-80-08.pdf for more information.

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CK TECHNOLOGY | CK TECHNOLOGY

Photometrics

iW MR gen3, 100° beam angle

Polar Candela Distribution

	0	5	30	50	75	95
0		56	56	56	56	56
5		56	56	56	56	56
15		53	53	53	53	53
25		48	48	48	48	48
35		41	41	41	41	41
45		32	32	32	32	32
55		23	23	23	23	23
65		14	14	14	14	14
75		6	6	6	6	6
85		0	0	0	0	0
90		0	0	0	0	0

VA: 0° 10° 20° 30° 40°

■ - 0° H   ■ - 90° H

Illuminance at Distance

	Center Beam fc	Beam Width	
4 ft	4 fc	9.3 ft	9.2 ft
8 ft	1 fc	18.6 ft	18.4 ft
12 ft	0 fc	27.9 ft	27.7 ft
16 ft	0 fc	37.1 ft	36.9 ft
20 ft	0 fc	46.4 ft	46.1 ft
24 ft	0 fc	55.7 ft	55.3 ft

7.5 ft (2.3 m)
1 fc maximum distance

■ Vert. Spread: 98.5°
■ Horiz. Spread: 98.1°
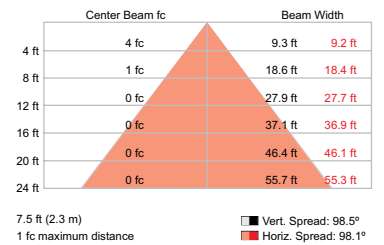
Lumens	Efficacy
134	10.9

For lux multiply fc by 10.7

Fixtures and Accessories

Item	Type	Item Number	Philips 12NC
iW MR gen3	20° beam angle	501-000015-00	910503704547
	26° beam angle	501-000015-01	910503704629
	100° beam angle	501-000015-02	910503704630
PDS-70mr 24V Power / Data Supply	Pre-programmed	109-000018-00	910503700098
	DMX	109-000018-01	910503700099
	Ethernet	109-000018-02	910503700583

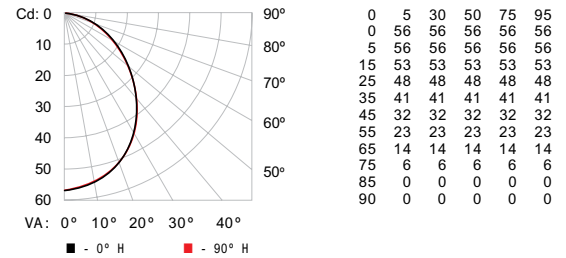Use Item Number when ordering in North America.

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