

# USHIO

## MR-16 REFLECTOR LAMP

### WHITESTAR™ SERIES



### WHITESTAR™ 4200K - 6500K HIGH COLOR TEMPERATURE MR-16 FOR GENERAL LIGHTING

The Whitestar™ high color temperature series of lamps were designed to provide a balanced, full spectrum MR-16 for display and task lighting. These high color temperature lamps project a high luminous intensity with low ultraviolet and infrared emissions to protect artwork and valuable merchandise.

Whitestar™ lamps have a correlated color temperature range of 4200K through 6500K. Whitestar™ lamps can be specified to meet your specialty display applications.

Available in:      35W in flood beam spread  
                             50W in spot, narrow flood and flood beam spreads

## FEATURES & BENEFITS

- 4200K, 4700K, 5300K & 6500K — Daylight Spectrum
- Consistent color — Titanium Oxide reflector coating
- Integrated UV protection
- Cool beam effect
- Integrated cover glass
- Precisely focused light cone
- Homogeneous color with 4200K Metal Halide & Fluorescents



The Whitestar™ series of lamps are manufactured under ISO 9001 guidelines ensuring quality and security for the purchaser

## APPLICATIONS

- |                       |                         |
|-----------------------|-------------------------|
| ● Retail              | ● Museums               |
| ● Jewelry             | ● Eyewear               |
| ● Textile Displays    | ● Crystal and Glassware |
| ● Color Matching      | ● Task Lighting         |
| ● Waterscape          | ● Machine Vision        |
| ● Silver and Platinum | ● Health Care           |

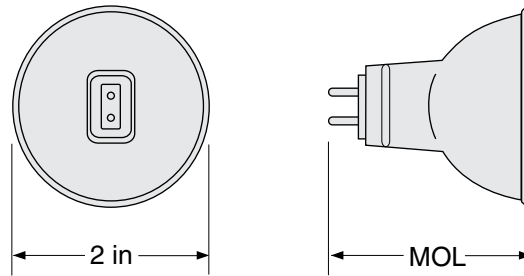
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## CHARACTERISTICS & SPECIFICATIONS

**WHITESTAR™**  
12 Volt - 35 & 50 Watt  
GU5.3 Base

**Chromaticity Coordinates:**

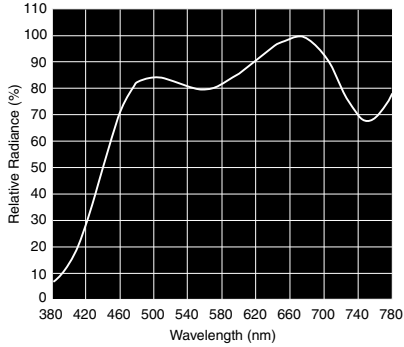
4200K: x= 0.372 y= 0.371  
4700K: x= 0.356 y= 0.365  
5300K: x= 0.337 y= 0.345  
6500K: x= 0.315 y= 0.325



Watts (W)	USHIO Ordering Code	USHIO Lamp Code	Dimension MOL (in)	Color Temp (K)	Beam Angle	Beam Spread	Luminous Intensity (cd)	Avg Life (h)
35	1003340	FMW/FG/WS/4200	1.78	4200	36°	Flood	600	4000
35	1003341	FMW/FG/WS/5300	1.78	5300	36°	Flood	500	4000
50	1002287	EXT/FG/WS/4700	1.78	4700	12°	Spot	5000	4000
50	1002286	EXZ/FG/WS/4200	1.78	4200	24°	Narrow Flood	2000	4000
50	1002249	EXN/FG/WS/4200	1.78	4200	36°	Flood	1200	4000
50	1003226	EXT/FG/WS/6500	1.78	6500	12°	Spot	3300	4000
50	1003224	EXZ/FG/WS/5300	1.78	5300	24°	Narrow Flood	1100	4000
50	1003225	EXN/FG/WS/5300	1.78	5300	36°	Flood	600	4000

### WHITESTAR™

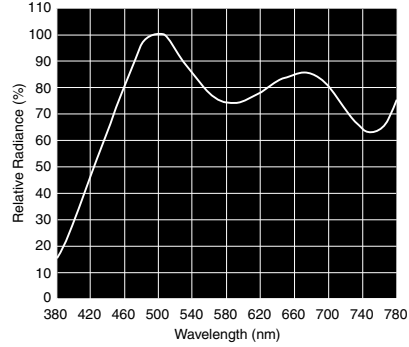
**35W FMW 4200K**



ø[ft]	H[ft]	E[fc]
2.13	3.3	56
4.26	6.6	14
6.40	9.8	6
8.53	13.1	4

36° FMW 4200K 35W

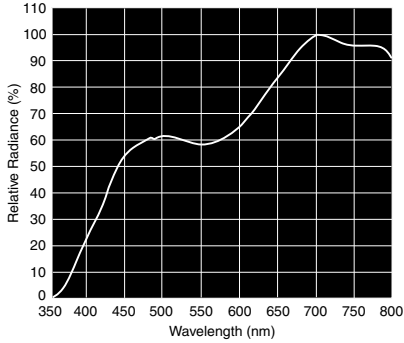
**35W FMW 5300K**



ø[ft]	H[ft]	E[fc]
2.13	3.3	46
4.26	6.6	12
6.40	9.8	5
8.53	13.1	3

36° FMW 5300K 35W

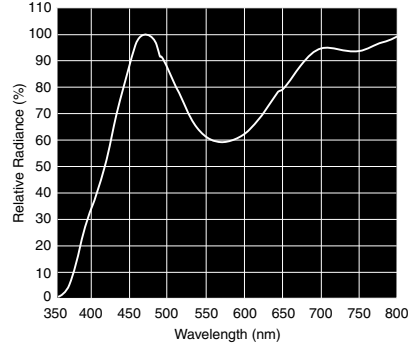
**50W EXT 4700K**



ø[ft]	H[ft]	E[fc]
0.69	3.3	465
1.38	6.6	116
2.10	9.8	52
2.79	13.1	29

12° EXT 4700K 50W

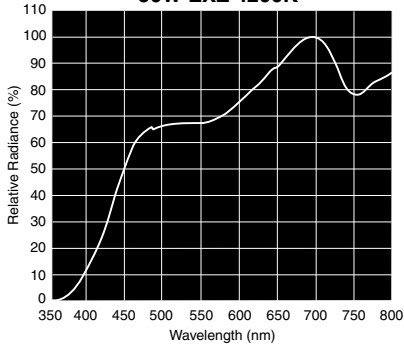
**50W EXT 6500K**



ø[ft]	H[ft]	E[fc]
0.69	3.3	307
1.38	6.6	77
2.10	9.8	34
2.79	13.1	19

12° EXT 6500K 50W

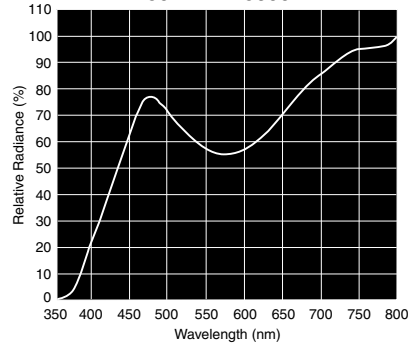
**50W EXZ 4200K**



ø[ft]	H[ft]	E[fc]
1.41	3.3	186
2.79	6.6	46
4.20	9.8	21
5.58	13.1	12

24° EXZ 4200K 50W

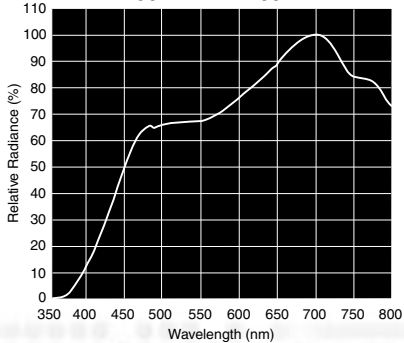
**50W EXZ 5300K**



ø[ft]	H[ft]	E[fc]
1.41	3.3	102
2.79	6.6	26
4.20	9.8	11
5.58	13.1	6

24° EXZ 5300K 50W

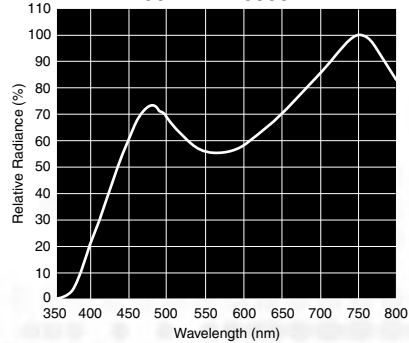
**50W EXN 4200K**



ø[ft]	H[ft]	E[fc]
2.13	3.3	111
4.26	6.6	28
6.40	9.8	12
8.53	13.1	7

36° EXN 4200K 50W

**50W EXN 5300K**

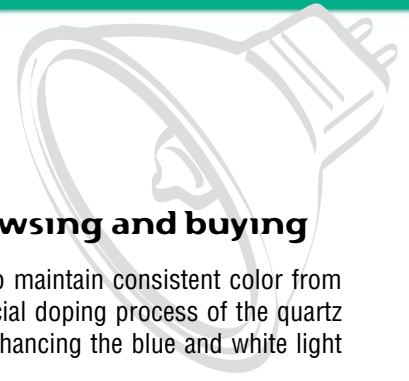


ø[ft]	H[ft]	E[fc]
2.13	3.3	56
4.26	6.6	14
6.40	9.8	6
8.53	13.1	4

36° EXN 5300K 50W

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## WHITESTAR™



**The right light can make all of the difference between browsing and buying**

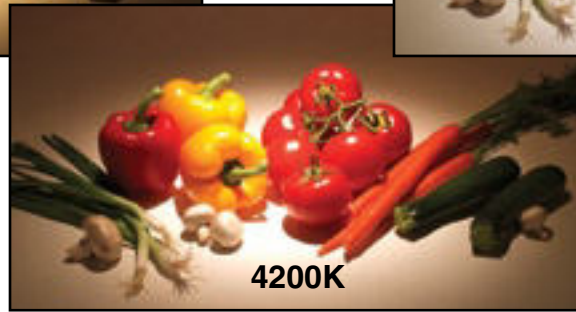
Whitestar™ MR-16 lamps from USHIO utilize Titanium Oxide hard coatings on the reflector to maintain consistent color from lamp to lamp and throughout the life of the lamp. Harmful UV light is reduced through a special doping process of the quartz envelope. A proprietary dichroic coating of the front glass reduces the yellow light thereby enhancing the blue and white light spectrum in 4200K, 4700K, 5300K, and 6500K lamps.



3000K



5300K



4200K



5300K



3000K

The daylight spectrum of Whitestar™ lamps brings out the brilliance, fire and scintillation of diamonds. White metals such as Platinum and Silver display their luminescence under the light of Whitestar™ lamps. Sapphire color saturation will be pure and vivid and tones will be balanced.

**Distributed by:**

Form No. S-MR16WS/R-0607: The specifications on this sheet supercede all previously published specifications and may be subject to change for design and specification improvement without prior notice.