

# BUY VS SELL

**At Toshiba, we don't want to just sell you lamps. We want you to buy into us.** As an industry leader in Japan, Toshiba has over 120 years of lighting experience and a limitless knowledge of electronics. We are uniquely qualified to create superior LED lighting products because we're not a lighting company trying to learn the electronics business or an electronics company trying to learn the lighting business. We've been doing both for over a century. Plus, we are 100% focused on LED lighting technology. So when you really think about it, you're not just buying a lamp – you're buying a brand you can trust.

## MR16 GU5.3 450 Series

- Direct replacement for 35-watt halogen lamps
- Available in 25° & 35° beam angles
- Available in 2700K, 3000K, & 4000K color temperatures
- Dimmable
- Lasts up to 20 times longer & uses up to 80% less energy than halogen lamps
- Emits up to 70% less UV light compared to halogen lamps
- Designed to fit most gimbal rings
- Rated for both damp locations & enclosed fixtures
- Contains no mercury or lead

Learn more at [toshiba.com/lighting](http://toshiba.com/lighting).  
Toshiba LED Lighting. Ready for Work.



**TOSHIBA**  
Leading Innovation >>>

# TOSHIBA

## Dimmable LED MR16 GU5.3 450 Series

Project:	Toshiba Lamp:
Type:	Notes:

### Ordering Information

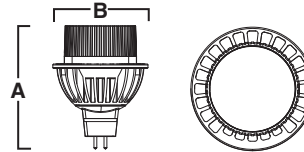
Ordering Code	Input Voltage VAC	Lamp Shape	Base Type	Wattage W	CCT <sup>1</sup>	Beam Angle	Initial Lumens lm <sup>2</sup>	Lamp Efficacy lm/W	Rated Life hrs <sup>3</sup>	CBCP cd	CRI	Power Factor	Equivalency <sup>4</sup>	Lamp Weight lbs. (g)
9MR16/27FNF-UP	12	MR16	GU5.3	9.0	2700K	25°	410	45.6	25,000	1810	84	> 0.75	35W	0.2 (91)
9MR16/27FFL-UP	12	MR16	GU5.3	9.0	2700K	35°	415	46.1	25,000	990	84	> 0.75	35W	0.2 (91)
9MR16/30FNF-UP	12	MR16	GU5.3	9.0	3000K	25°	440	48.9	25,000	1900	84	> 0.75	35W	0.2 (91)
9MR16/30FFL-UP	12	MR16	GU5.3	9.0	3000K	35°	445	49.4	25,000	1040	84	> 0.75	35W	0.2 (91)
9MR16/40FNF-UP	12	MR16	GU5.3	9.0	4000K	25°	470	52.2	25,000	2030	85	> 0.75	35W	0.2 (91)
9MR16/40FFL-UP	12	MR16	GU5.3	9.0	4000K	35°	475	52.8	25,000	1110	85	> 0.75	35W	0.2 (91)

- CCT range complies with ANSI C78.377-2008
  - Thermally stable typical lumens (±10%)
  - Rated life is based on 70% lumen maintenance and engineering testing and probability analysis
  - Equivalency based on the Energy Star® Integral LED Lamp Program
- Note: All Information consistent with IESNA LM-80-08 results and IESNA LM-79-08 testing completed by a qualified third party facility  
 Note: All lamps meet Energy Star® Integral LED Lamp requirements and will be submitted for testing  
 Note: Five-year warranty for MR16 GU5.3 based on 12 hr/day usage



### Dimensions

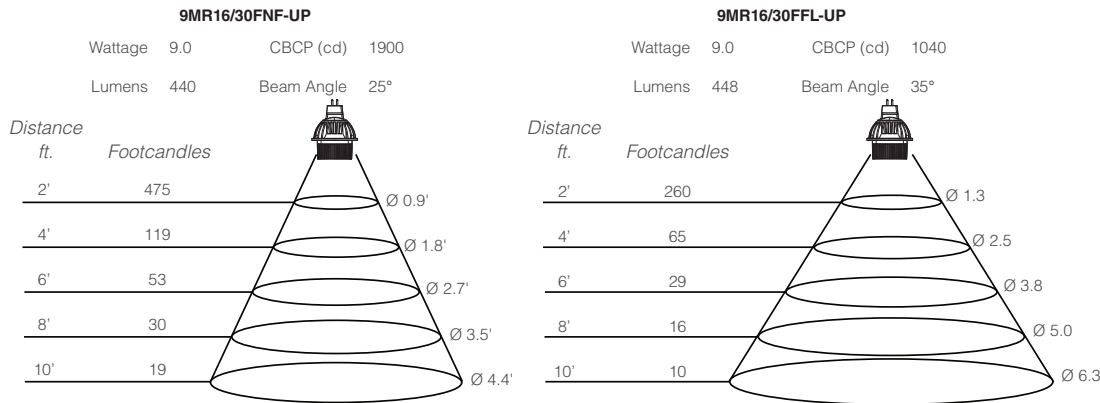
Model	MOL (A) in. (mm)	Diameter (B) in. (mm)
MR16 25° Narrow Flood	2.54 (65)	1.97 (50)
MR16 35° Flood	2.54 (65)	1.97 (50)



25° Narrow Flood & 35° Flood

Note: Lamp shape conforms to ANSI C78.21-2003  
 Note: Designed to comply with RoHS Directive 2002/95/EC

### Illuminance Cone Diagrams



### Energy Savings

	20W Halogen	25W Halogen	35W Halogen	50W Halogen
9MR16/30FNF-UP	\$30.25	\$40.00	\$71.50*	\$112.75
9MR16/30FFL-UP	\$30.25	\$40.00	\$71.50*	\$112.75

\*Actual equivalent replacement based on the Energy Star® Integral LED Lamp Program  
 Note: Energy savings based on using one bulb for 25,000 hr rated life at 11¢/kWh; Does not include maintenance and replacement lamp savings

### Ordering Guide

6	MR16	/	27	F	—	UP
<b>Wattage</b>	<b>Lamp Type</b>		<b>CRI + CCT</b>	450 Series = F		<b>NF = Narrow Flood</b>
9.0 Watts = 9	MR16 GU5.3 = MR16		2700K = 27 3000K = 30 4000K = 40			<b>FL = Flood</b>
						<b>US Professional Package = UP</b>