



# Uphoria™ LED MR16

## LED MR16 for Use in Enclosed Fixtures

Uphoria™ LED MR16 lamps incorporate the highest quality Cree LEDs, a customized optical design, and unsurpassed thermal management characteristics to provide outstanding efficiency, life, and quality. At 6.5 watts in a standard MR16 form factor, Uphoria series LED lamps incorporate a state-of-the-art Cool-Blade™ heat sink design that guarantees reliability and stability through proper thermal management.

Uphoria's Cool-Blade technology was originally developed for the aerospace industry and the military and as a way of providing superior heat transfer for computer servers and intricate electronics that require premium thermal management in a very lightweight product. This same technology is incorporated into every Uphoria MR16 lamp where individual, high-density aluminum cooling blades draw damaging heat away from the LED's creating an ideal operating environment for the chipsets. The thermal management is so superior that these lamps have been UL listed for use in fully enclosed fixtures. Less heat means a longer life for LED's and USHIO is proud to stand behind its high performance Uphoria lamps with a 3-year limited warranty and a rated life of 35,000 hours.

Rated at more than 10 times the life of standard halogen MR16 lamps on the market today, Uphoria is the intelligent choice for those applications where frequency of lamp changes and cost of ownership are significant factors. Uphoria LED MR16 lamps are available in Narrow Flood (20 degree), Flood (35 degree) and Wide Flood (60 degree) beam spreads and in Warm White (3000K) or Daylight (5700K) color temperatures.



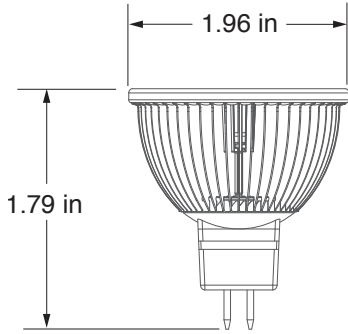
## FEATURES & BENEFITS

- 80% Energy Savings vs. Halogen MR16
- Proprietary Cool-Blade™ Aluminum Heat Sink
- Proprietary Driver Designed for Optimal Thermal Management
- Very Tight Color Binning for Lamp-to-Lamp Consistency
- Long Life: 35,000 Hours
- Application Friendly: UV Free & IR Free
- Environmentally Friendly: Mercury Free, Lead Free and RoHS Compliant
- For Use in Enclosed Fixtures
- 3-Year Limited Warranty

## APPLICATIONS

- Track Lighting
- Recessed Lighting
- Landscape Lighting
- Accent Lighting
- Art Gallery & Museum Lighting
- Display Case Lighting

# SPECIFICATIONS



GU5.3 Base

Item 1002483

ø(ft)	H(ft)	E(fc)
0.7	2.0	396.4
1.5	4.0	99.1
2.2	6.0	44.0
3.0	8.0	24.8
3.7	10.0	15.9
<b>20°</b>		<b>6.5W</b>
6.5W LED/MR16/NFL20/WW		

Item 1002484

ø(ft)	H(ft)	E(fc)
1.1	2.0	221.2
2.2	4.0	55.3
3.3	6.0	24.6
4.4	8.0	13.8
5.5	10.0	8.8
<b>35°</b>		<b>6.5W</b>
6.5W LED/MR16/FL35/WW		

Item 1002485

ø(ft)	H(ft)	E(fc)
2.2	2.0	71.7
4.5	4.0	17.9
6.7	6.0	8.0
9.0	8.0	4.5
11.2	10.0	2.9
<b>60°</b>		<b>6.5W</b>
6.5W LED/MR16/WFL60/WW		

Item 1002486

ø(ft)	H(ft)	E(fc)
0.7	2.0	580.4
1.4	4.0	145.1
2.1	6.0	64.5
2.8	8.0	36.3
3.4	10.0	23.2
<b>20°</b>		<b>6.5W</b>
6.5W LED/MR16/NFL20/DL		

Item 1002487

ø(ft)	H(ft)	E(fc)
1.2	2.0	281.7
2.3	4.0	70.4
3.5	6.0	31.3
4.6	8.0	17.6
5.8	10.0	11.3
<b>35°</b>		<b>6.5W</b>
6.5W LED/MR16/FL35/DL		

Item 1002488

ø(ft)	H(ft)	E(fc)
2.2	2.0	97.8
4.5	4.0	24.5
6.7	6.0	10.9
8.9	8.0	6.1
11.2	10.0	3.9
<b>60°</b>		<b>6.5W</b>
6.5W LED/MR16/WFL60/DL		

Watts (W)	Ordering Code	Lamp Description	Volts (V)	Color Temp (K)	Beam Angle	Beam Spread	Lumens* (lm)	CBCP* (cd)	CRI	Avg** Life (h)	Case Qty
6.5	1002483	UPHORIA LED MR16, NFL20, WW	12	3000	20	Narrow Flood	325	1586	80	35000	20
6.5	1002484	UPHORIA LED MR16, FL35, WW	12	3000	35	Flood	350	885	80	35000	20
6.5	1002485	UPHORIA LED MR16, WFL60, WW	12	3000	60	Wide Flood	335	300	80	35000	20
6.5	1002486	UPHORIA LED MR16, NFL20, DL	12	5700	20	Narrow Flood	450	2321	70	35000	20
6.5	1002487	UPHORIA LED MR16, FL35, DL	12	5700	35	Flood	485	1130	70	35000	20
6.5	1002488	UPHORIA LED MR16, WFL60, DL	12	5700	60	Wide Flood	470	400	70	35000	20

\* Photometric data is based on LM-79 tests performed at 12V AC.

\*\* Average life based on 70% lumen maintenance. LM-80 data available.

Not compliant with California Title 20.

## Electrical Specifications:

Driver: High Efficiency

Operating Voltage Range: 8V to 17V AC or DC

Power Factor: > 0.80

Dimming: Not designed for operation on dimming systems

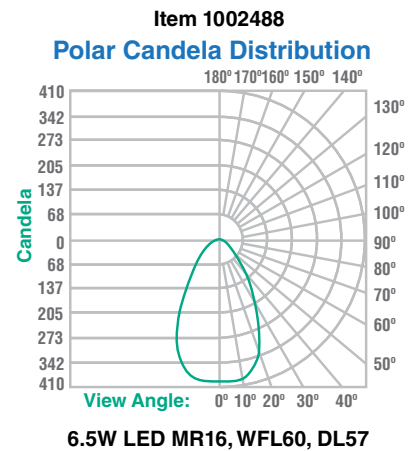
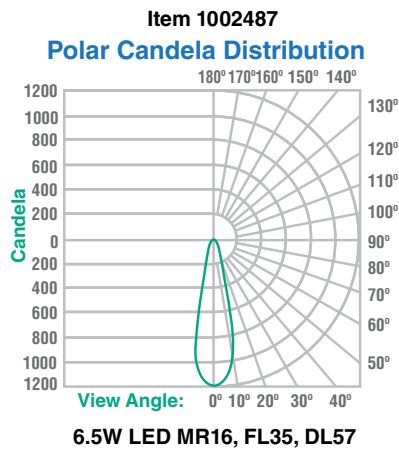
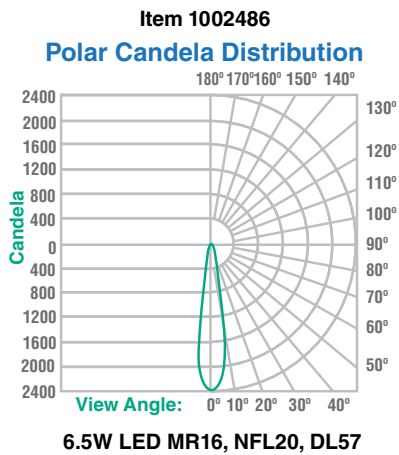
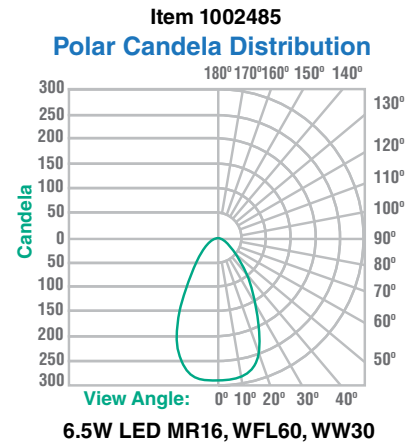
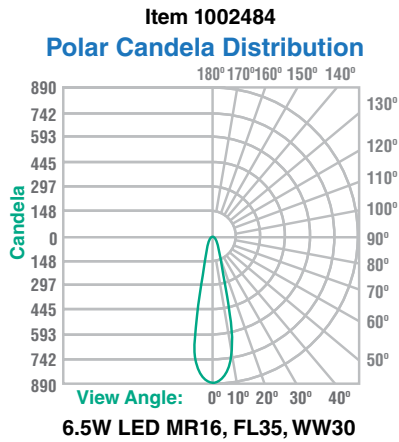
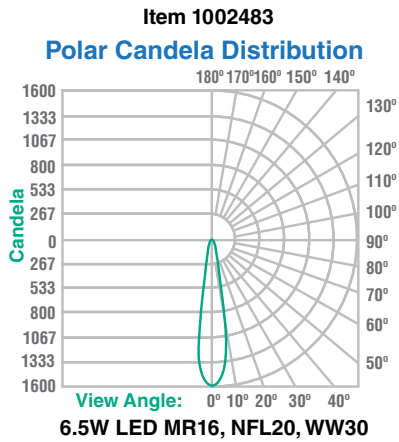
## CAUTION:

Not designed for dimming systems

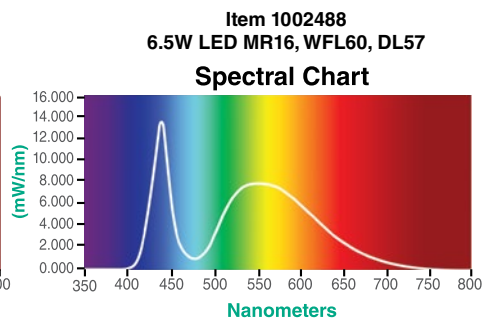
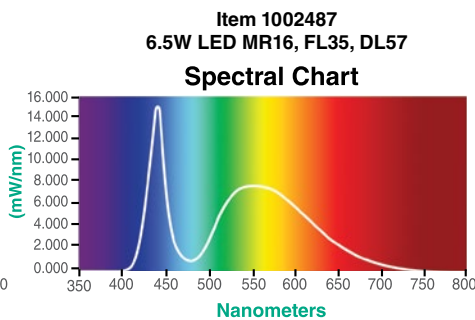
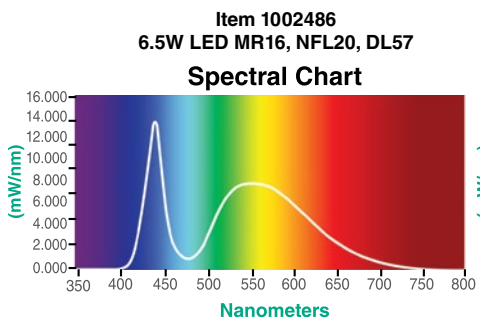
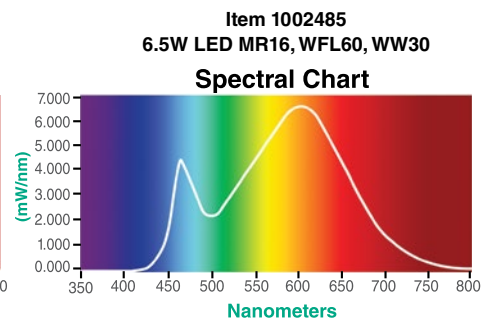
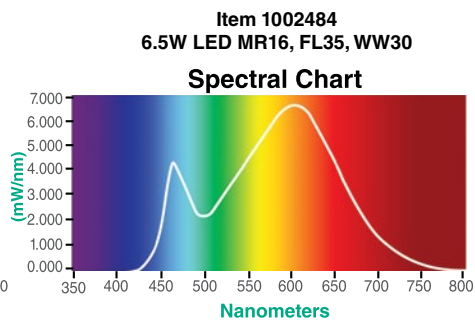
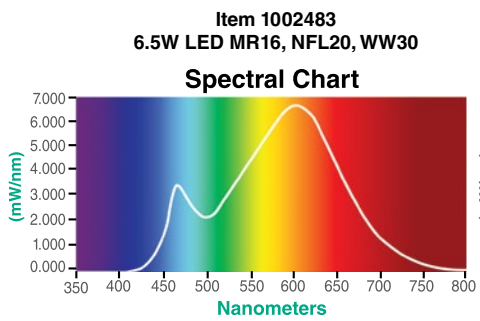
Suitable for dry and damp locations

Not for use in emergency or exit lighting

## Polar & Spectral Distribution



## Spectral Distribution Charts



# SPECIFICATIONS

## Lighting Facts

Item 1002483  
Uphoria LED MR16, NFL20, WW30

Lighting Facts/ Facts d'éclairage	
Per Bulb/Par l'ampoule	
<b>Brightness/Luminosité</b>	<b>325 lumens</b>
<b>Estimated Yearly Energy Cost/ Coût énergétique annuel estimé</b>	<b>\$0.78</b>
Based on 3 hrs/day, 11¢/kWh. Cost depends on rates and use. /Basé sur 3 heures/jour, 11¢/kWh. Les coûts dépendent du tarif et de la fréquence d'utilisation.	
<b>Life/Vie</b>	<b>32 years/ans</b>
Based on 3 hrs/day. /Basé sur 3 heures/jour.	
<b>Light Appearance/Apparence de l'éclairage</b>	
Warm/Chaud	Cool/Froid
3000K	
<b>Energy Used/Énergie utilisée</b>	<b>6.5 watts</b>

Item 1002484  
Uphoria LED/MR16/FL35/WW30

Lighting Facts/ Facts d'éclairage	
Per Bulb/Par l'ampoule	
<b>Brightness/Luminosité</b>	<b>350 lumens</b>
<b>Estimated Yearly Energy Cost/ Coût énergétique annuel estimé</b>	<b>\$0.78</b>
Based on 3 hrs/day, 11¢/kWh. Cost depends on rates and use. /Basé sur 3 heures/jour, 11¢/kWh. Les coûts dépendent du tarif et de la fréquence d'utilisation.	
<b>Life/Vie</b>	<b>32 years/ans</b>
Based on 3 hrs/day. /Basé sur 3 heures/jour.	
<b>Light Appearance/Apparence de l'éclairage</b>	
Warm/Chaud	Cool/Froid
3000K	
<b>Energy Used/Énergie utilisée</b>	<b>6.5 watts</b>

Item 1002485  
Uphoria LED MR16, WFL60, WW30

Lighting Facts/ Facts d'éclairage	
Per Bulb/Par l'ampoule	
<b>Brightness/Luminosité</b>	<b>335 lumens</b>
<b>Estimated Yearly Energy Cost/ Coût énergétique annuel estimé</b>	<b>\$0.78</b>
Based on 3 hrs/day, 11¢/kWh. Cost depends on rates and use. /Basé sur 3 heures/jour, 11¢/kWh. Les coûts dépendent du tarif et de la fréquence d'utilisation.	
<b>Life/Vie</b>	<b>32 years/ans</b>
Based on 3 hrs/day. /Basé sur 3 heures/jour.	
<b>Light Appearance/Apparence de l'éclairage</b>	
Warm/Chaud	Cool/Froid
3000K	
<b>Energy Used/Énergie utilisée</b>	<b>6.5 watts</b>

Item 1002486  
Uphoria LED MR16, NFL20, DL57

Lighting Facts/ Facts d'éclairage	
Per Bulb/Par l'ampoule	
<b>Brightness/Luminosité</b>	<b>450 lumens</b>
<b>Estimated Yearly Energy Cost/ Coût énergétique annuel estimé</b>	<b>\$0.78</b>
Based on 3 hrs/day, 11¢/kWh. Cost depends on rates and use. /Basé sur 3 heures/jour, 11¢/kWh. Les coûts dépendent du tarif et de la fréquence d'utilisation.	
<b>Life/Vie</b>	<b>32 years/ans</b>
Based on 3 hrs/day. /Basé sur 3 heures/jour.	
<b>Light Appearance/Apparence de l'éclairage</b>	
Warm/Chaud	Cool/Froid
5700K	
<b>Energy Used/Énergie utilisée</b>	<b>6.5 watts</b>

Item 1002487  
Uphoria LED MR16, FL35, DL57

Lighting Facts/ Facts d'éclairage	
Per Bulb/Par l'ampoule	
<b>Brightness/Luminosité</b>	<b>485 lumens</b>
<b>Estimated Yearly Energy Cost/ Coût énergétique annuel estimé</b>	<b>\$0.78</b>
Based on 3 hrs/day, 11¢/kWh. Cost depends on rates and use. /Basé sur 3 heures/jour, 11¢/kWh. Les coûts dépendent du tarif et de la fréquence d'utilisation.	
<b>Life/Vie</b>	<b>32 years/ans</b>
Based on 3 hrs/day. /Basé sur 3 heures/jour.	
<b>Light Appearance/Apparence de l'éclairage</b>	
Warm/Chaud	Cool/Froid
5700K	
<b>Energy Used/Énergie utilisée</b>	<b>6.5 watts</b>

Item 1002488  
Uphoria LED MR16, WFL60, DL57

Lighting Facts/ Facts d'éclairage	
Per Bulb/Par l'ampoule	
<b>Brightness/Luminosité</b>	<b>470 lumens</b>
<b>Estimated Yearly Energy Cost/ Coût énergétique annuel estimé</b>	<b>\$0.78</b>
Based on 3 hrs/day, 11¢/kWh. Cost depends on rates and use. /Basé sur 3 heures/jour, 11¢/kWh. Les coûts dépendent du tarif et de la fréquence d'utilisation.	
<b>Life/Vie</b>	<b>32 years/ans</b>
Based on 3 hrs/day. /Basé sur 3 heures/jour.	
<b>Light Appearance/Apparence de l'éclairage</b>	
Warm/Chaud	Cool/Froid
5700K	
<b>Energy Used/Énergie utilisée</b>	<b>6.5 watts</b>