




Moon Visions Lighting

www.moonvisionslighting.com
214.393.7407

12V & 120V LED Specification Resource Guide

Moon Visions Lighting was created by folks who are passionate about quality lighting. Since 2008, our bullets have been made right here in Texas with only the finest aluminum alloy and have an exceptional powder-coat finish guaranteed for five years in the harshest environmental conditions. The knuckle is placed more forward on the fixture for better balance, with 7.5° indexing angles for precise aiming. And even though they are made from the best 380 aluminum alloy, they are still the lightest weight bullet on the market—making it even easier to mount in the highest of treetops.

But what makes the Moon Visions family of bullets stand above the rest is their unique **DuraLune™ Electrocoated**  finish. Our DuraLune Electrocoat is a molecularly bonded epoxy that is applied before their superior powder coat, making them the most durable bullet on the market. Our electrocoated bullets can withstand the most intense environmental conditions—perfect when you have a 50,000 hour LED lamp inside!

And speaking of LEDs...Moon Visions Lighting has teamed up with an American based LED company, with over 30 years of experience, to design and produce our own line of LED lamps. This partnership allowed us to design the exact LED lamp we wanted – the color, the beam spread, the intensity, etc. - all customized for our unique outdoor lighting applications. And best of all, our LEDs are 120V or 12V—depending on which application suits you best. For retrofitting a mercury vapor system or other line voltage system, use our 120V PARs; but for starting a new project, our 12V PARs are the easiest to install and maintain. The various beam spreads, wattages, and lenses available in our LED family make for endless lighting possibilities.



In this newest specification catalog, you will find all the information needed for our entire line of Moon Visions bullets, including our 12V and 120V LED bullets, Feature Spots, Tube Shields, Stainless Transformers and more. We have added a new Architectural Light Bar Floodlight, made with our same LEDs but in a linear configuration. These sleek 12VAC floods are available in both warm white and cool white. See pages 2-3 for additional specifications. Please refer to our website for the most up-to-date information on our LEDs and current cut sheets. Please enjoy!

Moon Visions Lighting

www.moonvisionslighting.com

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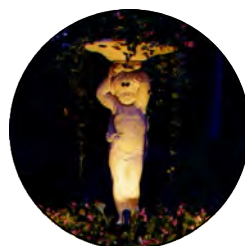


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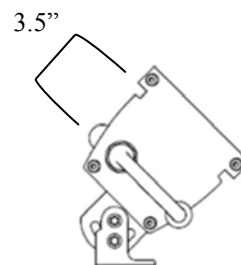
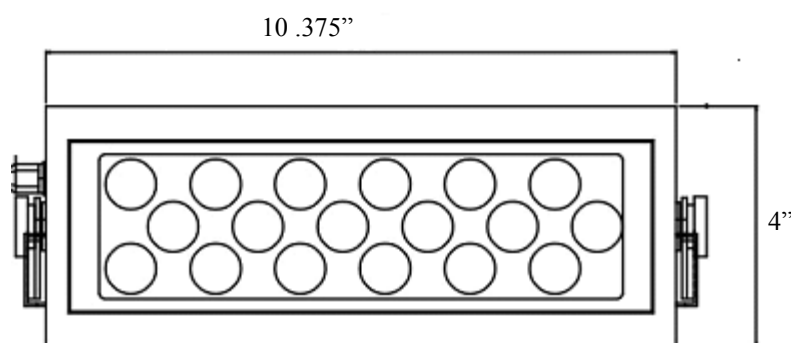
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12VAC 22W LIGHT BAR

LB10-22W-12V



- UL Listed under UL Standard 1598
- Certified to CSA Standard
- 10" length
- Available in 5000K or 3500K
- 120° optics
- 1668 lumens in 5000K
- IP66 Wet Location
- Rated for 50,000 hours
- Custom mounting hardware included
- Standard finish BLK only
- Limited 5 year warranty
- 12VAC required
- Not dimmable

Light Bar Ordering Guide

Fixture Series	Wattage	Voltage	Color Temp.	Mount
LB10	22W	12V	3500K	TM
			5000K	TMB
				LGS

Example: LB10-22W-12V-3500K-LGS

Mounting Accessories:

See also pages 24-25



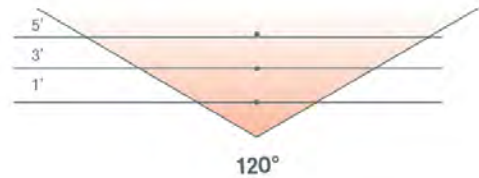
Tree Mount



Tree Mount Box



LGS



Electrical Specifications

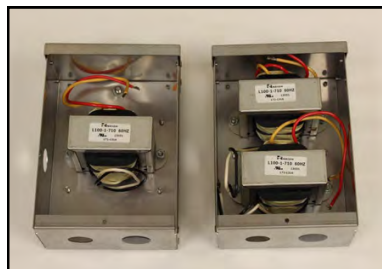
Watts/Ft	Fixture Wattage	System Wattage	Max Load per Run	Total Lumen	Lumen/ft	Lumen/Watt	CRI
25.2W	21W	18.9W	96W (85% -90%)	1668 lm	2002 lm/ft	66.2 lm/W	83

*tested at 5000K with 120° lens

12VAC Transformer Required. See page 26 for options.



MVX 50W or 100W



MVX-HW Hardwire Transformers



Project Name: _____ Fixture Type: _____

Catalog Part Number: _____



Moon Visions R38 22W LED Bullet Series

Housing (BR40): 380 Aluminum alloy die cast.

Downshields: Required for use as a downlight.

(DSA10): Fabricated steel material, angle-cut 10" in length.

(DST10): Fabricated steel material, straight tube shield 5.75" in length. See also page 18.

Upshields: Required for use as an uplight. Die cast aluminum with heat resistant crystal tempered convex glass lens. Sealed with 50 year-life silicone solution and high temperature silicone sponge gaskets. Positive stainless screw mount attachment. **NOTE: Fixture must be mounted at less than 90°**

(USR40): Angled upshield 3.9" tall.

(UST40): Straight Tube upshield 5" tall with debris guard.
See also page 19.

Sockets & Electrical Assembly:

- **12V Bullet** = Unique 12V GU24 Twist-Lock base allows for maximum pin contact as well as "locked" socket to insure lamp security. GU24 Base is known for high vibration tolerances (a must for fixtures mounted high in trees) and high heat tolerances. Low voltage (12V) system requires magnetic or electronic transformer, sold separately.
- **120V Bullet** = Leviton 4KV Pulse rated 600V porcelain lampholders. Direct lamp replacement design; no separate driver needed.

Knuckles: Forward placement for better balance. Adjustable in 7.5° increments for precise aiming. 1/2" NPSM threaded arm with stainless hardware. Knuckles are filled with silicone for maximum protection from elements.

Finish: Super polyester Duracoat™ powder coat with 5 year warranty. South Florida exposure rating for 5 years. Powder coated inside and outside with additional **DuraLune™ Electrocoating** application underneath. Standard textured finishes are Hartford Green (HGT) and Bronze (BZT). Other finishes available on page 38. See also "Moon Visions Difference" on page 36.



LED Lamp: 18 Low heat-emitting LEDs with no UV light radiation, paired with excellent heat sinks, provides a 50,000 hr. expected lamp life and 3 year warranty. Solid state LED direct lamp replacement technology. LED Lamp is not dimmable. PAR38 light engine contains built-in fan for maximum heat dissipation. Available in 25° (NFL) and 40° (FL) beam spreads in Cool White, and 40° (FL) in Warm White. Patent-pending rubber stabilizer included. Lumens: 1900 (5K); 1700 (3.5K)

LED Lamp Accessories:

Overall Spread Lens—doubles beam spread of lamp.

Diffused Lens—sandblasted glass softens and spreads light.

Mercury Vapor Lens—corrects color temperature to 5500K.

Mounting Accessories:

See also pages 22-23.



Tree Mount



Tree Mount Box



LGS

Moon Visions R38 22W LED Bullet Series Ordering Guide

Fixture and LED Lamp Ordered Separately

Fixture:

Fixture Series	Voltage	Shield	Mount*	Color
BR40	12V	DSA10	TM	HGT
	120V	DST10	TMB	BZT
		USR40	LGS	
		UST40		
BR40	12V	DSA10	TM	BZT

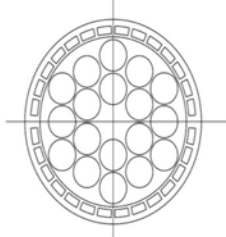
Example: BR40-12V-DSA10-TM-BZT = 12V R40 Bronze Downlight

LED Lamp:

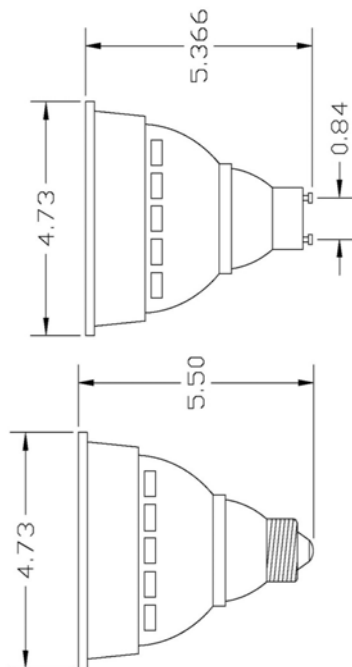
LED Lamp Series	Voltage	Size	Wattage	Color and Beam Spread	Spread Lens	5500K Lens
LED MV	12V	R38	22W	3500K 40° FL	OSL	MV
	120V			5000K 25° NFL	DIF	
				5000K 40° FL		
LED MV	12V	R38	22W	5000K 40°	MV	

Example: LED MV12V R38 22W 5000K 40° FL MV = 22W 12V LED PAR38 FL with MV lens

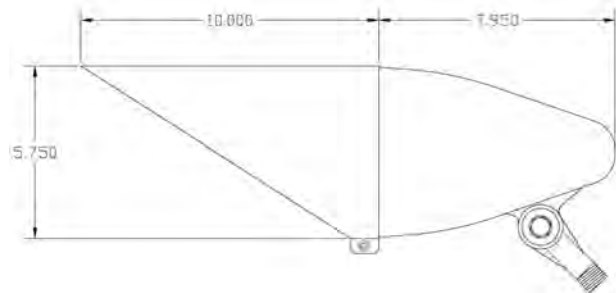
GU24 12V
Lamp



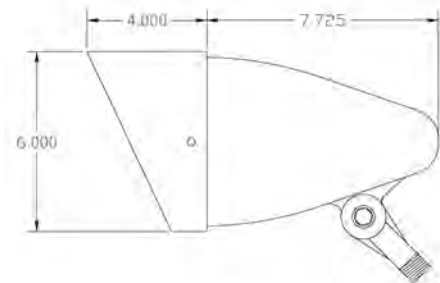
E26 120V
Lamp



BR40 with DSA10 Downshield



BR40 with USR40 Upshield



Project Name: _____ Fixture Type: _____

Catalog Part Number: _____



Moon Visions R30 14W LED Bullet Series

Housing (BR30): 380 Aluminum alloy die cast.

Downshields: Required for use as a downlight.

(DSA8): Fabricated steel material, angle-cut 8" in length.

(DST8): Fabricated steel material, straight tube shield 4.5" in length. See also page 18.

Upshields: Required for use as an uplight. Die cast aluminum with heat resistant crystal tempered convex glass lens. Sealed with 50 year-life silicone solution and high temperature silicone sponge gaskets. Positive stainless screw mount attachment. **NOTE: Fixture must be mounted at less than 90°**

(USR30): Angled upshield 3.5" tall.

(UST30): Straight Tube upshield 4" tall with debris guard.
See also page 19.

Sockets & Electrical Assembly:

- **12V Bullet** = Unique 12V GU24 Twist-Lock base allows for maximum pin contact as well as "locked" socket to insure lamp security. GU24 Base is known for high vibration tolerances (a must for fixtures mounted high in trees) and high heat tolerances. Low voltage (12V) system requires magnetic or electronic transformer, sold separately.
- **120V Bullet** = Leviton 4KV Pulse rated 600V porcelain lampholders. Direct lamp replacement design; no separate driver needed.

Knuckles: Forward placement for better balance. Adjustable in 7.5° increments for precise aiming. 1/2" NPSM threaded arm with stainless hardware. Knuckles are filled with silicone for maximum protection from elements.

Finish: Super polyester Duracoat™ powder coat with 5 year warranty. South Florida exposure rating for 5 years. Powder coated inside and outside with additional **DuraLune™ Electrocoating** application underneath. Standard textured finishes are Hartford Green (HGT) and Bronze (BZT). Other finishes available on page 38. See also "Moon Visions Difference" on page 36.



LED Lamp: 12 Low heat-emitting LEDs with no UV light radiation, paired with excellent heat sinks, provides a 50,000 hr. expected lamp life and 3 year warranty. Solid state LED direct lamp replacement technology. LED Lamp is not dimmable. PAR3012 light engine contains built-in fan for maximum heat dissipation. Available in 25° (NFL) and 40° (FL) beam spreads in Cool White, and 15°(SP) and 40° (FL) in Warm White. Lumens: 1400 (5K); 1300 (3.5K)

LED Lamp Accessories:

Overall Spread Lens—doubles beam spread of lamp.

Diffused Lens—sandblasted glass softens and spreads light.

Mercury Vapor Lens—corrects color temperature to 5500K.

Mounting Accessories:

See also pages 22-23.



Tree Mount



Tree Mount Box



LGS

Moon Visions R30 14W LED Bullet Series Ordering Guide

Fixture and LED Lamp Ordered Separately

Fixture:

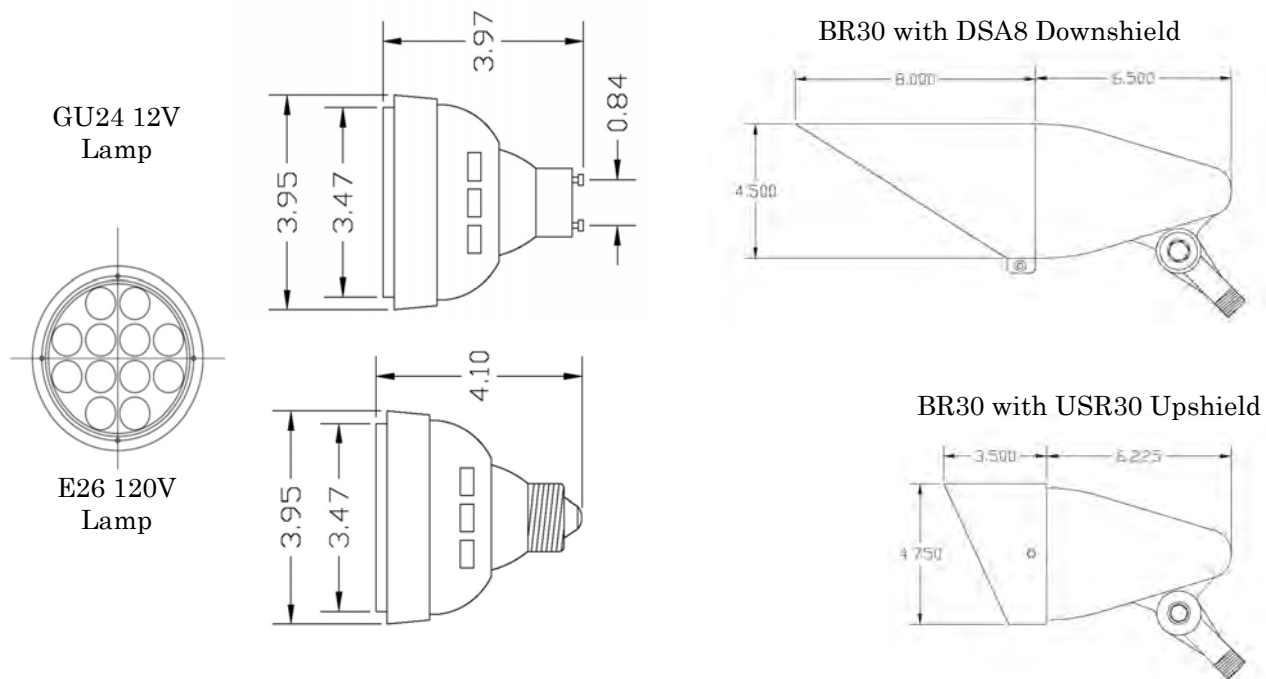
Fixture Series	Voltage	Shield	Mount*	Color
BR30	12V	DSA8	TM	HGT
	120V	DST8	TMB	BZT
		USR30	LGS	
		UST30		
BR30	120V	USR30		BZT

Example: BR30-120V-USR30-BZT = 120V R30 Bronze Uplight

LED Lamp:

LED Lamp Series	Voltage	Size	Wattage	Color and Beam Spread	Spread Lens	5500K Lens
LED MV	12V	R30	14W	3500K 15° SP	OSL	MV
	120V			3500K 40° FL	DIF	
				5000K 25° NFL		
				5000K 40° FL		
LED MV	120V	R30	14W	3500K 40°	OSL	

Example: LED MV120V R30 14W 3500K 40° FL OSL = 14W 120V LED PAR30 FL with Spread lens



Project Name: _____ Fixture Type: _____

Catalog Part Number: _____



Moon Visions R30 7W LED Bullet Series

Housing (BR30): 380 Aluminum alloy die cast.

Downshields: Required for use as a downlight.

(DSA8): Fabricated steel material, angle-cut 8" in length.

(DST8): Fabricated steel material, straight tube shield 4.5" in length. See also page 18.

Upshields: Required for use as an uplight. Die cast aluminum with heat resistant crystal tempered convex glass lens. Sealed with 50 year-life silicone solution and high temperature silicone sponge gaskets. Positive stainless screw mount attachment. **NOTE: Fixture must be mounted at less than 90°**

(USR30): Angled upshield 3.5" tall.

(UST30): Straight Tube upshield 4" tall with debris guard.
See also page 19.

Sockets & Electrical Assembly:

- **12V Bullet** = Unique 12V GU24 Twist-Lock base allows for maximum pin contact as well as "locked" socket to insure lamp security. GU24 Base is known for high vibration tolerances (a must for fixtures mounted high in trees) and high heat tolerances. Low voltage (12V) system requires magnetic or electronic transformer, sold separately.
- **120V Bullet** = Leviton 4KV Pulse rated 600V porcelain lampholders. Direct lamp replacement design; no separate driver needed.

Knuckles: Forward placement for better balance. Adjustable in 7.5° increments for precise aiming. 1/2" NPSM threaded arm with stainless hardware. Knuckles are filled with silicone for maximum protection from the elements.

Finish: Super polyester Duracoat™ powder coat with 5 year warranty. South Florida exposure rating for 5 years. Powder coated inside and outside with additional **DuraLune™ Electrocoating** application underneath. Standard textured finishes are Hartford Green (HGT) and Bronze (BZT). Other finishes available on page 38. See also "Moon Visions Difference" on page 36.



LED Lamp: 6 Low heat-emitting LEDs with no UV light radiation, paired with excellent heat sinks, provides a 50,000 hr. expected lamp life and 3 year warranty. Solid state LED direct lamp replacement technology. LED Lamp is not dimmable. Available in 25° (NFL) and 40° (FL) beam spreads in Cool White, and 40° (FL) in Warm White. Lumens: 655 (5K); 600 (3.5K)

LED Lamp Accessories:

Overall Spread Lens—doubles beam spread of lamp.

Diffused Lens—sandblasted glass softens and spreads light.

Mercury Vapor Lens—corrects color temperature to 5500K.

Mounting Accessories:

See also pages 22-23.



Tree Mount



Tree Mount Box



MGS (12V)



LGS (120V)

Moon Visions R30 7W LED Bullet Series Ordering Guide

Fixture and LED Lamp Ordered Separately

Fixture:

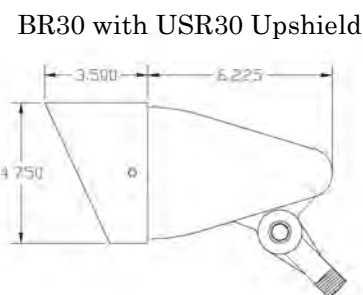
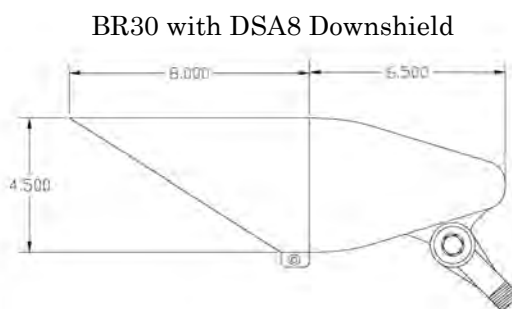
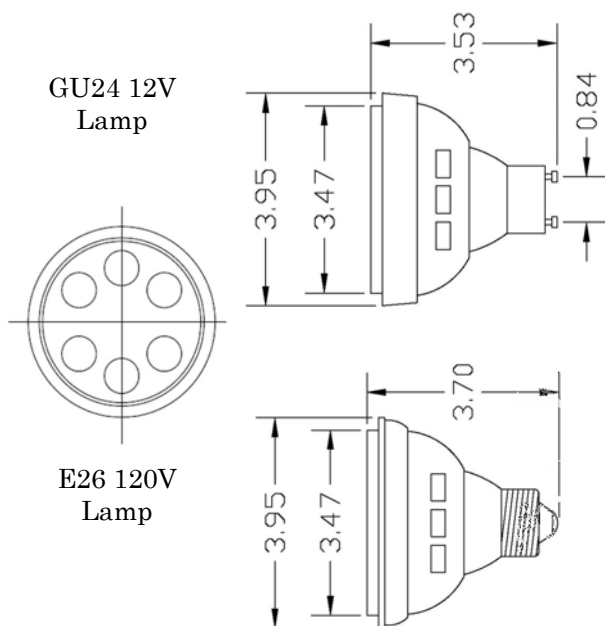
Fixture Series	Voltage	Shield	Mount*	Color
BR30	12V	DSA8	TM	HGT
	120V	DST8	TMB	BZT
		USR30	MGS (12V)	
		UST30	LGS (120V)	
BR30	120V	USR30		BZT

Example: BR30-120V-USR30-BZT = 120V R30 Bronze Uplight

LED Lamp:

LED Lamp Series	Voltage	Size	Wattage	Color and Beam Spread	Spread Lens	5500K Lens
LED MV	12V	R30	7W	3500K 40° FL	OSL	MV
	120V			5000K 25° NFL	DIF	
				5000K 40° FL		
LED MV	120V	R30	7W	3500K 40°	OSL	

Example: LED MV120V R30 7W 3500K 40° FL OSL = 7W 120V LED PAR30 FL with Spread lens



Project Name: _____ Fixture Type: _____

Catalog Part Number: _____



Moon Visions R20 5W LED Bullet Series

Housing (BR20): 380 Aluminum alloy die cast.

Downshields: Required for use as a downlight.

(DSA6): Fabricated steel material, angle-cut 6" in length.

(DST6): Fabricated steel material, straight tube shield 4" in length. See also page 18.

Upshields: Required for use as an uplight. Die cast aluminum with heat resistant crystal tempered convex glass lens. Sealed with 50 year-life silicone solution and high temperature silicone sponge gaskets. Positive stainless screw mount attachment. **NOTE: Fixture must be mounted at less than 90°**

(USR20): Angled upshield 3" tall.

(UST20): Straight Tube upshield 3" tall with debris guard.
See also page 19.

Sockets & Electrical Assembly:

- **12V Bullet** = Unique 12V GU24 Twist-Lock base allows for maximum pin contact as well as "locked" socket to insure lamp security. GU24 Base is known for high vibration tolerances (a must for fixtures mounted high in trees) and high heat tolerances. Low voltage (12V) system requires magnetic or electronic transformer, sold separately.
- **120V Bullet** = Leviton 4KV Pulse rated 600V porcelain lampholders. Direct lamp replacement design; no separate driver needed.

Knuckles: Forward placement for better balance. Adjustable in 7.5° increments for precise aiming. 1/2" NPSM threaded arm with stainless hardware. Knuckles are filled with silicone for maximum protection from the elements.

Finish: Super polyester Duracoat™ powder coat with 5 year warranty. South Florida exposure rating for 5 years. Powder coated inside and outside with additional **DuraLune™ Electrocoating** application underneath. Standard textured finishes are Hartford Green (HGT) and Bronze (BZT). Other finishes available on page 38. See also "Moon Visions Difference" on page 36.



LED Lamp: 4 Low heat-emitting LEDs with no UV light radiation, paired with excellent heat sinks, provides a 50,000 hr. expected lamp life and 3 year warranty. Solid state LED direct lamp replacement technology. LED Lamp is not dimmable. Available in 25° (NFL) and 40° (FL) beam spreads in Cool White, and 15°(SP) and 40° (FL) in Warm White. Lumens: 440 (5K); 388 (3.5K)

LED Lamp Accessories:

Overall Spread Lens—doubles beam spread of lamp.

Diffused Lens—sandblasted glass softens and spreads light.

Mercury Vapor Lens—corrects color temperature to 5500K.

Mounting Accessories:

See also pages 22-23.



Tree Mount



Tree Mount Box



SGS (12V)



LGS (120V)

Moon Visions R20 5W LED Bullet Series Ordering Guide

Fixture and LED Lamp Ordered Separately

Fixture:

Fixture Series	Voltage	Shield	Mount*	Color
BR20	12V	DSA6	TM	HGT
	120V	DST6	TMB	BZT
		USR20	SGS (12V)	
		UST20	LGS (120V)	
BR20	12V	DSA6	TMB	HGT

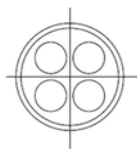
Example: BR20-12V-DSA6-TMB-HGT = 12V R20 Green Downlight

LED Lamp:

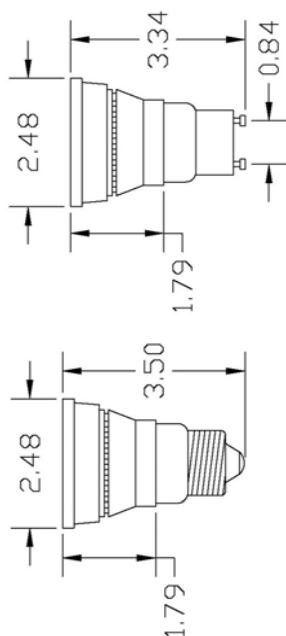
LED Lamp Series	Voltage	Size	Wattage	Color and Beam Spread	Spread Lens	5500K Lens
LED MV	12V	R20	5W	3500K 15° SP	OSL	MV
	120V			3500K 40° FL	DIF	
				5000K 25° NFL		
				5000K 40° FL		
LED MV	12V	R20	5W	5000K 40°	OSL	

Example: LED MV12V R20 5W 5000K 40° FL OSL = 5W 12V LED PAR20 FL with Spread lens

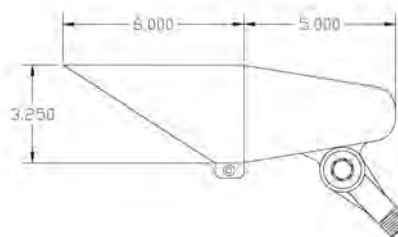
GU24 12V
Lamp



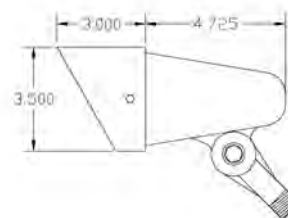
E26 120V
Lamp



BR20 with GS6 Downshield



BR20 with USR20 Upshield



Project Name: _____ Fixture Type: _____

Catalog Part Number: _____



Moon Visions R20 2.5W & 1.5W LED Bullet Series

Housing (BR20): 380 Aluminum alloy die cast.

Downshields: Required for use as a downlight.

(DSA6): Fabricated steel material, angle-cut 6" in length.

(DST6): Fabricated steel material, straight tube shield 4" in length. See also page 18.

Upshields: Required for use as an uplight. Die cast aluminum with heat resistant crystal tempered convex glass lens. Sealed with 50 year-life silicon solution and high temperature silicone sponge gaskets. Positive stainless screw mount attachment. **NOTE: Fixture must be mounted at less than 90°**

(USR20): Angled upshield 3" tall.

(UST20): Straight Tube upshield 3" tall with debris guard.
See also page 19.

Sockets & Electrical Assembly:

- **12V Bullet** = Unique 12V GU24 Twist-Lock base allows for maximum pin contact as well as "locked" socket to insure lamp security. GU24 Base is known for high vibration tolerances (a must for fixtures mounted high in trees) and high heat tolerances. Low voltage (12V) system requires magnetic or electronic transformer, sold separately.
- **120V Bullet** = Leviton 4KV Pulse rated 600V porcelain lampholders. Direct lamp replacement design; no separate driver needed.

Knuckle: Forward placement for better balance. Adjustable in 7.5° increments for precise aiming. 1/2" NPSM threaded arm with stainless hardware. Knuckles are filled with silicone for maximum protection from the elements.

Finish: Super polyester Duracoat™ powder coat with 5 year warranty. South Florida exposure rating for 5 years. Powder coated inside and outside with additional **DuraLune™ Electrocoating** application underneath. Standard textured finishes are Hartford Green (HGT) and Bronze (BZT). Other finishes available on page 38. See also "Moon Visions Difference" on page 36.



LED Lamp: 4 Low heat-emitting LEDs operating at .5 watts (.375 watts for 1.5W) each. No UV light radiation, paired with excellent heat sinks, provides a 50,000 hr. expected lamp life and 3 year warranty. Solid state LED direct lamp replacement technology. LED Lamp is not dimmable. Available in 40° (FL) beam spreads in Cool White and Warm White. Lumens: 220/110 (5K); 194/97 (3.5K)

LED Lamp Accessories:

Overall Spread Lens—doubles beam spread of lamp.

Diffused Lens—sandblasted glass softens and spreads light.

Mercury Vapor Lens—corrects color temperature to 5500K.

Mounting Accessories:

See also pages 22-23.



Tree Mount



Tree Mount Box



SGS (12V)



LGS (120V)

Moon Visions R20 2.5W & 1.5W LED Bullet Series Ordering Guide

Fixture and LED Lamp Ordered Separately

Fixture:

Fixture Series	Voltage	Shield	Mount*	Color
BR20	12V	DSA6	TM	HGT
	120V	DST6	TMB	BZT
		USR20	SGS (12V)	
		UST20	LGS (120V)	
BR20	12V	DSA6	TMB	HGT

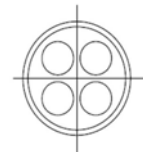
Example: BR20-12V-DSA6-TMB-HGT = 12V R20 Green Downlight

LED Lamp:

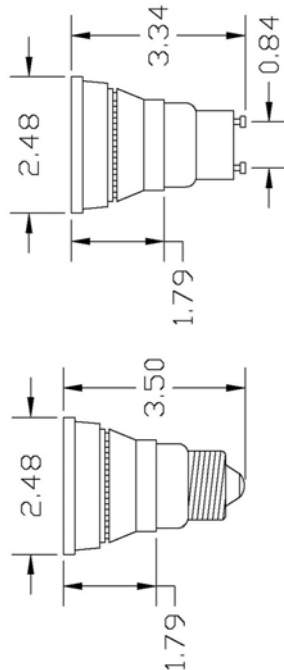
LED Lamp Series	Voltage	Size	Wattage	Color and Beam Spread	Spread Lens	5500K Lens
LED MV	12V	R20	2.5W	3500K 40° FL	OSL	MV
	120V		1.5W	5000K 40° FL	DIF	
LED MV	12V	R20	2.5W	5000K 40°	OSL	

Example: LED MV12V R20 2.5W 5000K 40° FL OSL = 2.5W 12V LED PAR20 FL with Spread lens

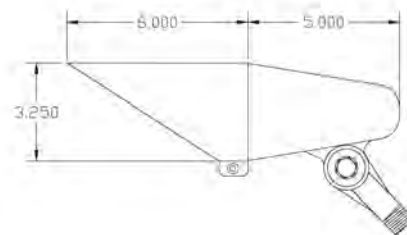
GU24 12V
Lamp



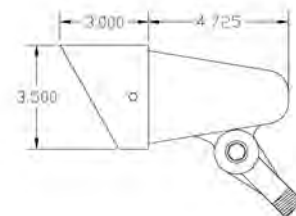
E26 120V
Lamp



BR20 with GS6 Downshield



BR20 with USR20 Upshield



Project Name: _____ Fixture Type: _____

Catalog Part Number: _____



Moon Visions LED “Feature Spot” Bullets

Highlight a statue, waterfall, flagpole or piece of art with a warm punch of light using our LED feature spot bullet. Available in a 15° beam spread, in our medium (BR30) or small (BR20) bullet fixture. Customize with your LED lamp preference: 12V or 120V; 5 watts or 14 watts.



Lighting Designer: Dana Clarke
Photography by: Frankie Sanchez
Desert Springs, CA

BR30-14W-LED-SPOT

14 watt R30 Medium Bullet

- BR30 bullet with 14 watt LED lamp
- 15° (SP) Beam Spread
- 3500K Warm White
- Available in 12 volts or 120 volts
- DSA8 (angled shield) or DST8 (tube shield) required for use as a downlight
- USR30 (angled upshield) or UST30 (tube upshield) required for use as an uplight
- Available in textured finishes Hartford Green (HGT) or Bronze (BZT)

BR20-5W-LED-SPOT

5 watt R20 Small Bullet

- BR20 bullet with 5 watt LED lamp
- 15° (SP) Beam Spread
- 3500K Warm White
- Available in 12 volts or 120 volts
- DSA6 (angled shield) or DST6 (tube shield) required for use as a downlight
- USR20 (angled upshield) or UST20 (tube upshield) required for use as an uplight
- Available in textured finishes Hartford Green (HGT) or Bronze (BZT)



Moon Visions LED “Feature Spot” Bullets

Fixture Series	Voltage	Shield	Mount*	Color
BR30	12V	DSA8	TM	HGT
	120V	DST8	TMB	BZT
		USR30	LGS (120V)	
		UST30		

Fixture Series	Voltage	Shield	Mount*	Color
BR20	12V	DSA6	TM	HGT
	120V	DST6	TMB	BZT
		USR20	SGS (12V)	
		UST20	LGS (120V)	

LED Lamp Series	Voltage	Size and Wattage	Color and Beam Spread
LED MV	12V	R20 5W	3500K 15° SP
	120V	R30 14W	

Example: BR30-120V-UST30-LGS-BZT with LED MV120V R30 14W 3500K 15° SP

***Mounting Accessories—See also pages 22-23.**



Tree Mount



Tree Mount Box



SGS (12V)



LGS (120V)



Project Name: _____ Fixture Type: _____

Catalog Part Number: _____



Moon Visions Bullet Series

Lamp Types: Mercury Vapor, Metal Halide, Fluorescent, LED, and Incandescent.

Housing: 380 Aluminum alloy die cast.

Downshield: Required for use as downlight. Fabricated steel material. Angle-cut (DSA) or straight tube (DST) shields. Downlights do not require lenses.

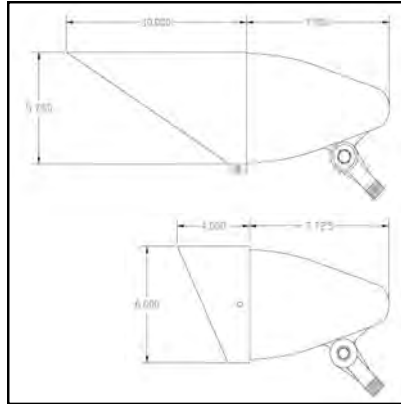
Upshield: Required for use as an uplight. Die cast aluminum with heat resistant, crystal tempered convex glass lens. Sealed with 50 year-life silicone solution and high temperature silicone sponge gaskets. Positive stainless screw mount attachment. Angle-cut (USR) or straight tube (UST) available.

Knuckle: Forward placement for better balance. Adjustable in 7.5° increments for precise aiming. 1/2" NPSM threaded arm. Knuckle may be threaded into Myer's Hubs, Tree Mounts, Surface Mounts, Ground Stakes, or Junction Boxes.

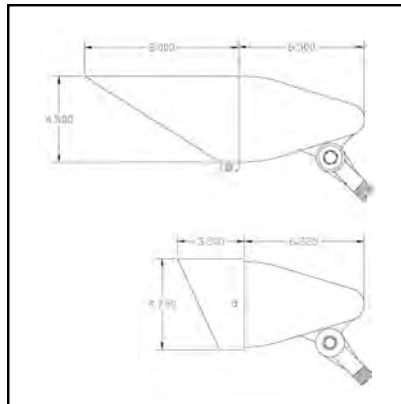
Finish: Super polyester Duracoat™ powder coat with 5 year warranty. South Florida exposure rating for 5 years. Powder coated inside and outside with **DuraLune™ Electrocoating** application underneath. Standard finishes are Hartford Green (HGT) and Bronze (BZT).

Socket: Leviton 4KV Pulse rated 600V porcelain lampholders with 25% more lamp contact area than Chinese sockets.

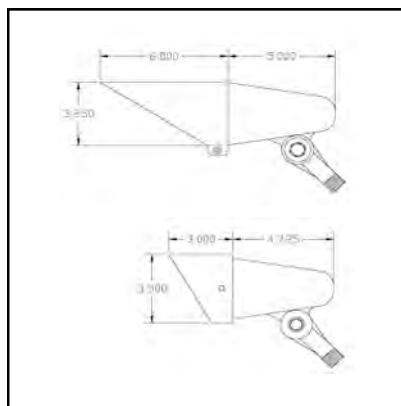
Optics: BR40 available with Flood (FL) or Spot (SP) optics for use with MV or MH E17 shaped lamps and spiral fluorescents.



BR40 Series



BR30 Series



BR20 Series



Moon Visions Bullet Series Ordering Guide

Bullet Series	Optics	Finish	Shields & Accessories
BR40	R40 Reflector Lamps MV-175W R40 Max MV-100W R40 Max R38 PAR Lamps LED-22W PAR38 Max INC-250W PAR38 Max Fluor-23W PAR38 Max FL Flood Reflector-65° MV-175W E17 Max MH-175W E17 Max SP Spot Reflector-39° MV-175W E17 Max MH-175W E17 Max	-HGT Hartford Green Texture -BZT Bronze Texture	DSA10-10" Angled Downshield DST10-5.75" Straight Tube Downshield USR40-4" Cast Angled Upshield UST40-5" Tube Upshield with debris guard TM-Tree Mount with mounting hardware TMB-Tree Mount Box with mounting hardware LGS-Large Ground Stake for Uplighting only INL-Internal Hexcell Louver
BR30	R30 Reflector Lamps MV-100W R30 Max R30 PAR Lamps LED-14W PAR30 Max MH-70W PAR30 Max INC-75W PAR30 Max Fluor-15W PAR30 Max	-HGT Hartford Green Texture -BZT Bronze Texture	DSA8-8" Angled Downshield DST8-4.5" Straight Tube Downshield USR30-3.5" Cast Angled Upshield UST30-4" Tube Upshield with debris guard TM-Tree Mount with mounting hardware TMB-Tree Mount Box with mounting hardware LGS-Large Ground Stake for Uplighting only INL-Internal Hexcell Louver
BR20	R20 Reflector Lamps MV-50W R20 Max R20 PAR Lamps LED- 5W, 2.5W, 1.5W MH-35W PAR20 Max INC-50W PAR20 Max Fluor-11W PAR20 Max	-HGT Hartford Green Texture -BZT Bronze Texture	DSA6-6" Angled Downshield DST6-4" Straight Tube Downshield USR20-3" Cast Angled Upshield UST20-3" Tube Upshield with debris guard TM-Tree Mount with mounting hardware TMB-Tree Mount Box with mounting hardware LGS-Large Ground Stake for Uplighting only INL-Internal Hexcell Louver

Ballast: Required for Mercury Vapor and Metal Halide lamps. Universal Lighting Technologies ballast housed in 6"x7"x4" steel box (for single ballast setups) or a 6"x12"x4" steel box (for double ballast setups). Ballast box is powder coated the same color as the fixture with the same 5 year warranty. Each MV or MH lamp requires one ballast. Wattage of the ballast must match the wattage of the lamp used.

Ballast	Wattage	Lamp	Voltage	Finish	Hub Mount
RB (Remote Box)	175	MH, MV	MT (120, 208, 240, 277V)	HGT BZT	H
	100 70 50	MH, MV			
	35	MH			



Tree Mount



Tree Mount Box



LGS



RB Single



RB w/ Hub



2RB Double



Project Name: _____ Fixture Type: _____

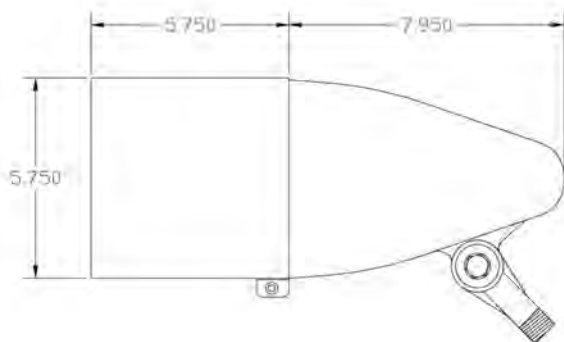
Catalog Part Number: _____



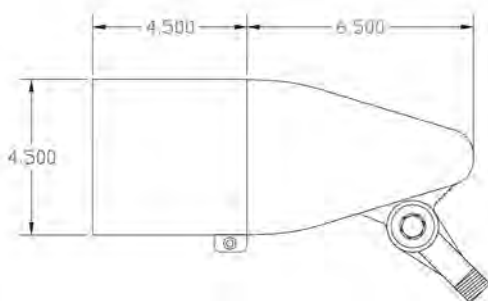
Tube Light Downshields

- Available in all three sizes: BR40, BR30 and BR20 for both 12V or 120V bullet setups
- Full straight shield constructed of fabricated steel material
- Allows for minimal glare in all directions
- Excellent for use as a FEATURE SPOT
- Available in textured finishes Hartford Green (HGT) or Bronze (BZT)

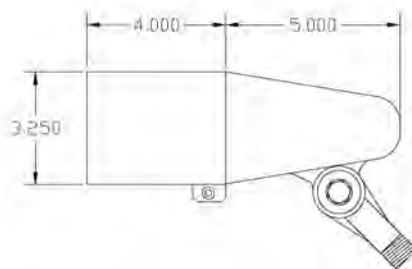
BR40 with DST10 Downshield



BR30 with DST8 Downshield



BR20 with DST6 Downshield

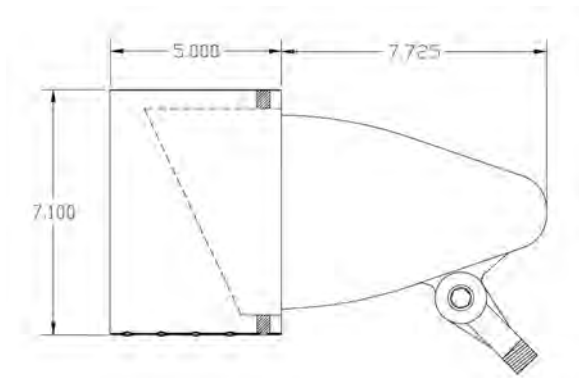




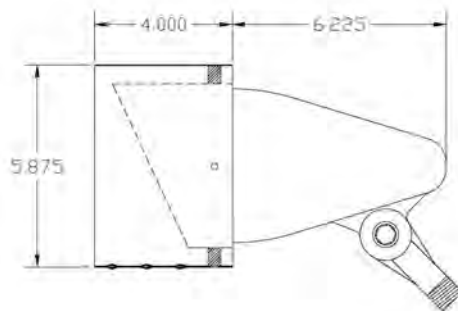
Tube Light Upshields

- Available in all three sizes: BR40 BR30 and BR20 in both 12V or 120V bullet setups
- Full straight upshield allows for minimal glare in all directions
- 1/2" gap around cast shield eliminates water and debris build up
- Fixture remains completely sealed
- Available in textured finishes Hartford Green (HGT) or Bronze (BZT)

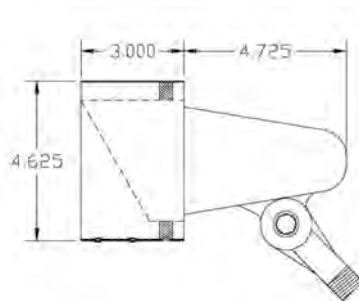
BR40 with UST40 Upshield



BR30 with UST30 Upshield



BR20 with UST20 Upshield



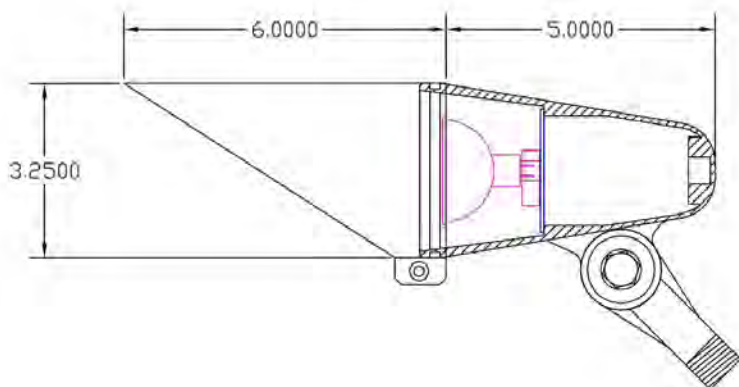
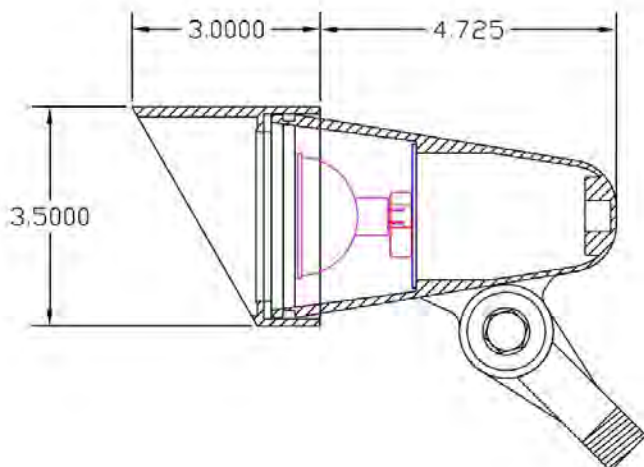
Project Name: _____ Fixture Type: _____

Catalog Part Number: _____



BR20-MR16 Bullet

- BR20 bullet has 12V MR16 socket with lamp clip assembly installed
- Rated for up to 75 watt 12V MR16 lamp
- USR20 (angled shield) or UST20 (tube shield) required for use as an uplight
- DSA6 (angled shield) or DST6 (tube shield) required for use as a downlight
- Remote transformer required
- Available in textured finishes Hartford Green (HGT) or Bronze (BZT)



For use with 10W, 20W, 35W, 50W, or 75W MR16 12V lamps. Also compatible with any LED MR16 replaceable lamp.

Optional Mounting Accessories:

SGS 12V Mounting Stake
TM Tree Mount
TMB Tree Mount Box

*Optional MR16 Lenses:

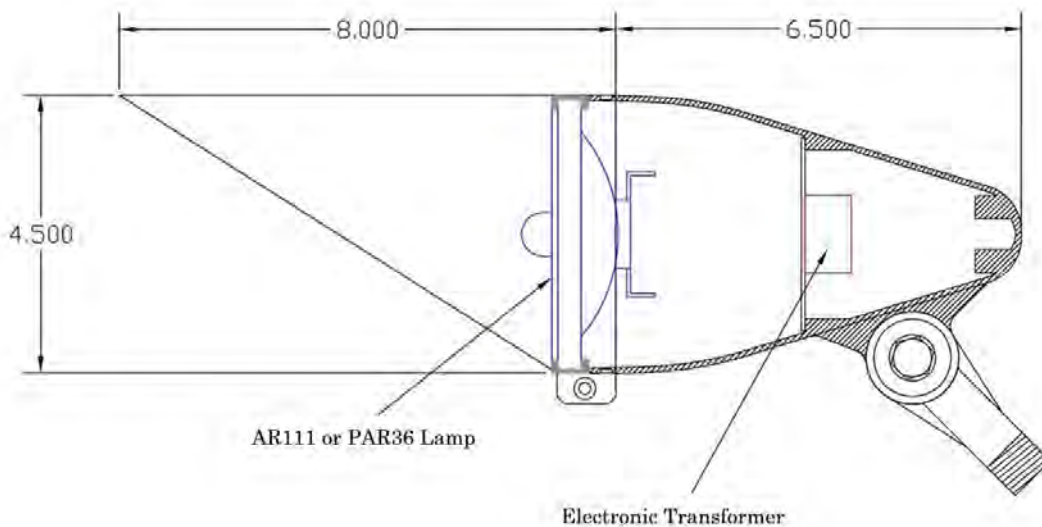
PBL Pale Blue Lens	DIF Diffused Lens
PGL MV Green Lens	LSL Linear Spread Lens
OSL Spread Lens	LVR Honeycomb Louver

*All MR16 lenses require lens clip to attach to lamp



BR30-PAR36 “Feature Spot” Bullet

- BR30 bullet with built-in 75 watt 12 volt electronic transformer
- Rated for up to 50 watts
- Available as downlight only
- DSA8 (angled shield) or DST8 (tube shield) required for use as a downlight
- Available in textured finishes Hartford Green (HGT) or Bronze (BZT)



For use with these lamps:

- 50W/AR111/SSP 4° Super Spot
- 50W/AR111/SP 8° Spot
- 20W, 35W, or 50W PAR36 Narrow Spot or Very Narrow Spot Sealed Beam

Optional Accessories:

- TM or TMB Tree Mount
- R30-INL Internal Louver to reduce side-to-side glare



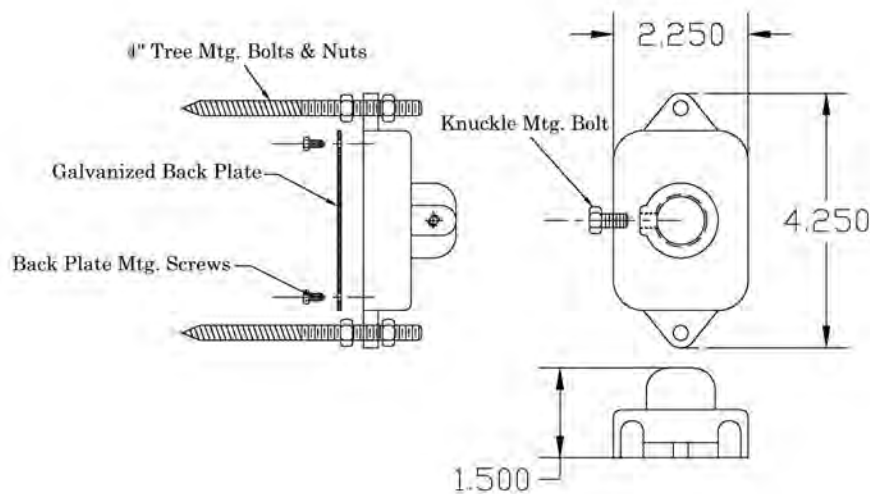
Project Name: _____ Fixture Type: _____

Catalog Part Number: _____

Mounting Accessories

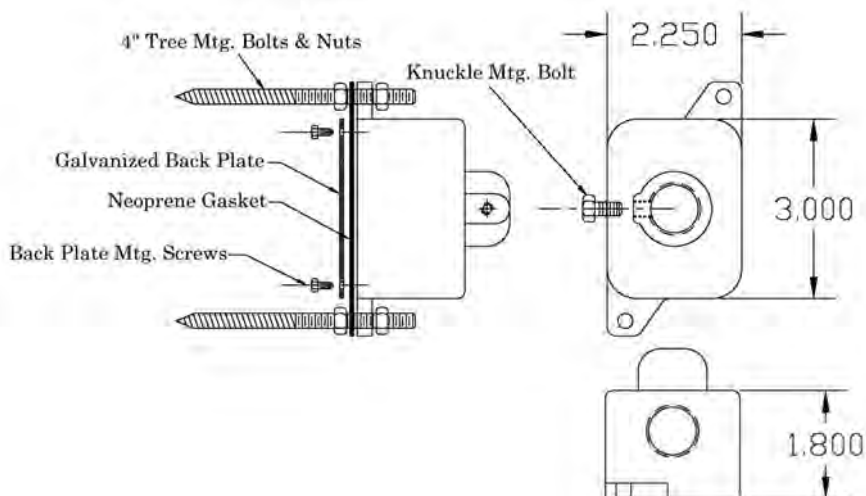
TM Tree Mount

- All mounting hardware included:
 - (2) 4" Stainless Tree Bolts with (4) 1/4 x 20 nuts
 - (1) Galvanized back plate
 - (2) Back plate mounting screws
 - (1) Knuckle mounting stainless screw
- Comes standard with all downlight kits unless specified
- Available in textured finishes Hartford Green (HGT) or Bronze (BZT)



TMB Tree Mount Box

- All mounting hardware included:
 - (2) 4" Stainless Tree Bolts with (4) 1/4 x 20 nuts
 - (1) Galvanized back plate
 - (2) Back plate mounting screws
 - (1) Knuckle mounting stainless screw
- Larger box with Neoprene Gasket
- 1/2-14 NPT inlet thread for cord grip/seal tite attachment
- For low voltage applications, use TMB box to house RS12 LED transformer
- Available in textured Bronze (BZT) finish standard; longer lead time for other finishes (see page 38)



Stake Mounting Accessories

Small Ground Stake (SGS-12V)

- Two-piece low voltage mounting stake
- PVC stake 1 3/8" O.D. x 9 1/2" long
- Integral 1/2" NPS fitter
- Includes ABS removable 1/2" NPS cap with screws
- Recommended for use with BR20 12 volt series



Medium Ground Stake (MGS-12V)

- Two-piece low voltage mounting stake
- PVC stake 1 3/8" O.D. x 15" long
- Integral 1/2" NPS fitter
- Includes ABS removable 1/2" NPS cap with screws
- Recommended for use with BR30 7 watt 12 volt series



Large Ground Stake (LGS-120V)

- Suitable for Wet Locations
- Heavy wall, impact resistant PVC
- Die Cast Aluminum Cap—Electrocoated & powder coated in BLK black finish
- Threaded 1/2" NPT hub
- Slanted bottom accepts conduits of different depths
- 3" O.D. x 19" H
- Required for all BR series in 120 volt, and recommended for BR30 14 watt and BR40 22 watt series in 12 volts



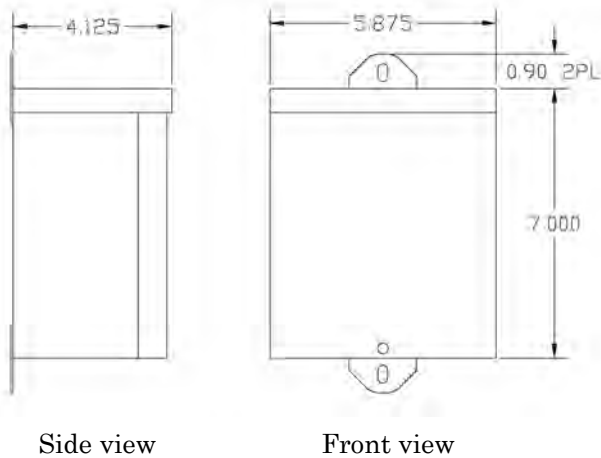
Project Name: _____ Fixture Type: _____

Catalog Part Number: _____

Ballast Box Assemblies

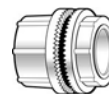
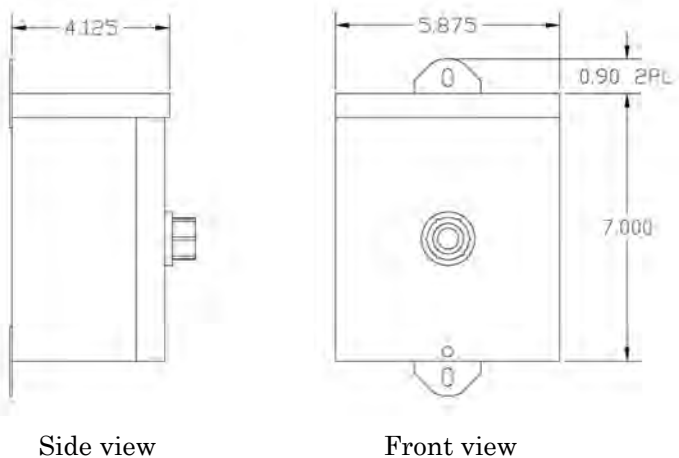
Single Remote Ballast Box (RB)

- 35W, 50W, 70W, 100W, 150W or 175W Metal Halide
- Made of EG (electro-magnetic) metal that will not rust
- Powder coating has 5 year warranty
- Mounting ears made of nickel plated steel
- Available in textured finishes Hartford Green (HGT) and Bronze (BZT)



Ballast Box Hub Mount

- 1/2" Myers Hub mounted on door of single ballast box
- For use in mounting bullet directly to ballast box
- Hub painted same finish as box color
- Mounting ears made of nickel plated steel
- Powder coating on box has 5 year warranty
- Available in textured finishes Hartford Green (HGT) or Bronze (BZT)
- Add (-H) to order for hub mount



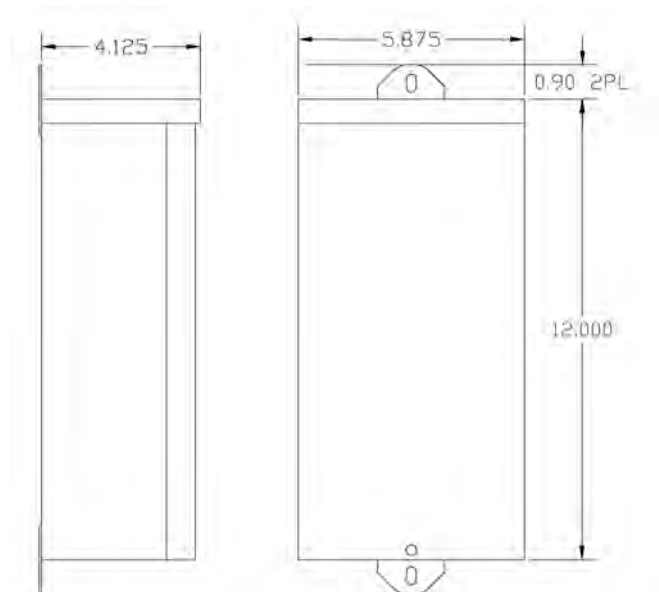
1/2" Zinc Myers Hub



Ballast Box Assemblies

Double Remote Ballast Box (2RB)

- 2x35W, 2x50W, 2x70W, 2x100W, 2x150W or 2x175W Metal Halide
- Made of EG (electro-magnetic) metal that will not rust
- Powder coating has 5 year warranty
- Makes for cleaner installation—one box for two lights
- Mounting ears made of nickel plated steel
- Available in textured finishes Hartford Green (HGT) and Bronze (BZT)



Side view

Front view



Project Name: _____ Fixture Type: _____

Catalog Part Number: _____



Low Voltage Transformers



MVX 50/100-SS 100W Transformer with Cord & Plug

- UL 5085-2 & cUL Recognized components
- 50 and 100 Watt output model
- 304 Stainless Steel enclosure with No. 4 brushed finish
- Removable door slides on and off for ease of entry
- Above grade, NEMA 3R rated, rain tight enclosure: 10.75" x 5" x 4"
- Timer Ready standard (for plug in timers—see below)
- Mounting plate and hardware included
- Transformer Coils: High Efficiency, Flame Retardant, UL 94V0 Rating, 2.4VA Power Rating 120v primary, 12v secondary 50/60 Hertz/cycle (standard)
- 6 foot 18/3 SJT-WA weatherproof grounded power cord (120v)
- Extra heavy duty (80 amp) terminal lugs
- Manually resettable circuit breaker for overload and short circuit protection



TN111RM Timer

Plug-in analog timer sold separately. Outdoor rated with 2 on-off settings per day.

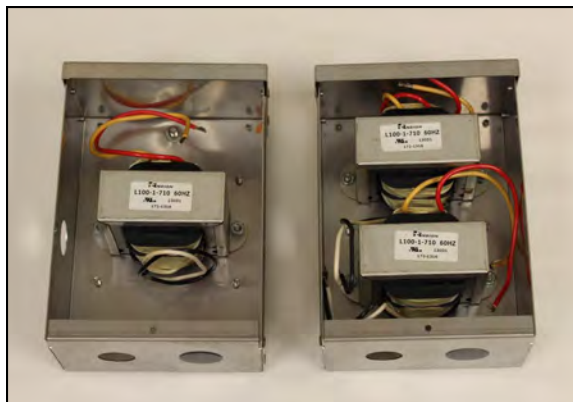
Hardwire Transformers:

MVX-HW-50-SS

MVX-HW-100-SS

MVX-HW-150-SS

MVX-HW-200-SS



- UL 5085-2 & cUL Recognized components
- 50,100, 150 & 200 Watt output models
- 304 Stainless Steel enclosure with No. 4 brushed finish
- Removable door slides on and off for ease of entry
- Above grade, NEMA 3R rated, rain tight enclosure: 5" x 7" 3.25"
- Mounting plate and hardware included
- Transformer Coils: High Efficiency, Flame Retardant, UL 94V0 Rating, 2.4VA Power Rating 120v primary, 12v secondary 50/60 Hertz/cycle (standard)
- Supplied with two 1/2" conduit (trade size) holes & one 1-1/2" inlet with plugs in bottom panel, plus 2 side panel 1/2" conduit (trade size) holes with plugs

Low Voltage Transformers & Accessories



RS12-LED 30/60W
Electronic Transformer



FPC 120V
Side Mount Photocell



UPC 120V
Upright Photocell



Buck Boost 120/12V
Transformers
100, 150, 250, 500 & 750W



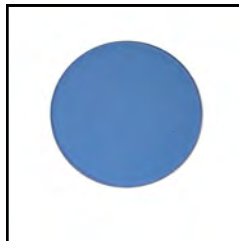
OTC 120V
Outdoor Time Clock



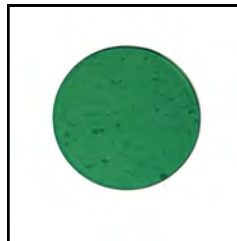
250' Wire Spools
10-2 12V, 12-2 12V or 16-3 120V



INL Louver for BR
Series



PBL
Pale Blue Lens



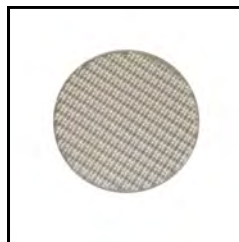
PGL
Pale Green Lens



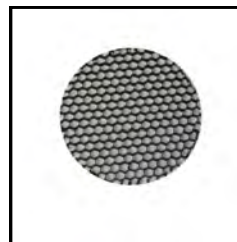
DIF
Diffused Lens



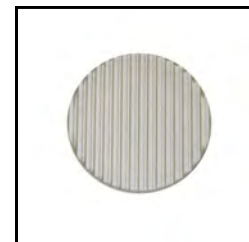
MR16 Lens Clip
*Required for all lenses



OSL
Overall Spread



LVR
Hexcell Louver



LSL
Linear Spread

BR40 Lamp Options

Mercury Vapor Lamps for use with Metal Halide Ballasts

- HR175R40 175W R40 MV (5700K)
 - HR100R40 100W R40 MV (5700K)
 - H175/E17 175W E17 MV (5700K) - use with FL/SP optics
 - H100/E17 100W E17 MV (5700K) - use with FL/SP optics
-

Metal Halide Lamps

- MH175/U/MED 175W E17 MH—use with FL/SP optics
 - MH100/U/MED 100W E17 MH—use with FL/SP optics
 - MH70/U/MED 70W E17 MH—use with FL/SP optics
 - MH50/U/MED 50W E17 MH—use with FL/SP optics
-

LED Lamps

- LED MV R38 22W 5K 22W R38 Cool White (5000K)
 - 18 LEDs at 1.22 watts each
 - 1900 Lumens
 - Available as 12V or 120V (remote transformer required for 12V applications)
 - Rated Life = 50,000 hours
 - Warranty = 3 Years in a Moon Visions fixture only
 - Available in 25° (NFL) and 40° (FL) beam spreads
 - LED MV R38 22W 3.5K 22W R38 Warm White (3500K)
 - 18 LEDs at 1.22 watts each
 - 1700 Lumens
 - Available as 12V or 120V (remote transformer required for 12V applications)
 - Rated Life = 50,000 hours
 - Warranty = 3 Years in a Moon Visions fixture only
 - Available in 40° (FL) beam spread
-

Halogen Lamps

- 70PAR38/FL/H 70W (replaces 90 watt PAR38) 120V Halogen 30° Flood
 - 70PAR38/SP/H 70W (replaces 90 watt PAR38) 120V Halogen 10° Spot
-

Fluorescent Lamps

- CFL 30W 6500K Spiral Use with flood reflector for best results—Cool White
- CFL 30W 2700K Spiral Use with flood reflector for best results—Warm White
- 23W PAR38 5000K Equivalent to 75 watt halogen—Cool White
- 23W PAR38 2700K Equivalent to 75 watt halogen—Warm White

BR30 Lamp Options

Mercury Vapor Lamps for use with Metal Halide Ballasts

- HR100/R30 100W R30 MV (5700K)
- HR75/R30 75W R30 MV (5700K)
- HR50/R30 50W R30 MV (5700K)

Metal Halide Lamps

- 70MHPAR30L/FL 70W MH PAR30 Long-neck, 30° Flood
- 70MHPAR30L/SP 70W MH PAR30 Long-neck, 10° Spot

LED Lamps

- LED MV R30 14W 5K 14W R30 Cool White (5000K)
 - 12 LEDs at 1.22 watts each / Lumens: 1400
 - Available as 12V or 120V (remote transformer required for 12V applications)
 - Rated Life = 50,000 hours
 - Warranty = 3 years in a Moon Visions fixture only
 - Available in 25° (NFL) and 40° (FL) beam spreads
- LED MV R30 14W 3.5K 14W R30 Warm White (3500K)
 - 12 LEDs at 1.22 watts each / Lumens: 1300
 - Available as 12V or 120V (remote transformer required for 12V applications)
 - Rated Life = 50,000 hours
 - Warranty = 3 years in a Moon Visions fixture only
 - Available in 15° (SP) and 40° (FL) beam spreads
- LED MV R30 7W 5K 7W R30 Cool White (5000K)
 - 6 LEDs at 1.22 watts each / Lumens: 655
 - Available as 12V or 120V (remote transformer required for 12V applications)
 - Rated Life = 50,000 hours
 - Warranty = 3 years in a Moon Visions fixture only
 - Available in 25° (NFL) and 40° (FL) beam spreads
- LED MV R30 7W 3.5K 7W R30 Warm White (3500K)
 - 6 LEDs at 1.22 watts each / Lumens: 600
 - Available as 12V or 120V (remote transformer required for 12V applications)
 - Rated Life = 50,000 hours
 - Warranty = 3 years in a Moon Visions fixture only
 - Available in 40° (FL) beam spread

Halogen Lamps

- 60PAR30/LN/NFL/H 60W (replaces 75 watt PAR30) 120V Halogen 25° Narrow Flood
- 60PAR30/LN/NSP/H 60W (replaces 75 watt PAR30) 120V Halogen 9° Narrow Spot

Fluorescent Lamps

- CFL 16W R30 6500K Equivalent to 50 watt halogen—Cool White
- CFL 16W R30 2700K Equivalent to 50 watt halogen—Warm White
- 15W PAR30 5000K Equivalent to 50 watt halogen—Cool White
- 15W PAR30 2700K Equivalent to 50 watt halogen—Warm White



Project Name: _____ Fixture Type: _____

Catalog Part Number: _____

BR20 Lamp Options

Mercury Vapor Lamps for use with Metal Halide Ballasts

- HR50/R20 50W R20 MV (5700K)
-

Metal Halide Lamps

- 35MHPAR20/FL 35W PAR20 MH 30° Flood
 - 35MHPAR20/SP 35W PAR20 MH 10° Spot
-

LED Lamps

- LED MV R20 5W 5000K/3500K 5W R20 LED
 - 4 LEDs at 1.22 watts each / Lumens: 440 (5K); 388 (3.5K)
 - 3500K (warm white) or 5000K (cool white)
 - Available as 12V or 120V (remote transformer required for 12V applications)
 - Rated Life = 50,000 hours
 - Warranty = 3 years in a Moon Visions fixture only
 - Available in 25° (NFL) and 40° (FL) beam spreads
 - LED MV R20 2.5W 5000K/3500K 2.5W R20 LED
 - 4 LEDs at .5 watts each / Lumens: 220 (5K); 194 (3.5K)
 - 3500K (warm white) or 5000K (cool white)
 - Available as 12V or 120V (remote transformer required for 12V applications)
 - Rated Life = 50,000 hours
 - Warranty = 3 years in a Moon Visions fixture only
 - Available in 40° (FL) beam spread
 - LED MV R20 1.5W 5000K/3500K 1.5W R20 LED
 - 4 LEDs at .375 watts each / Lumens: 110 (5K); 97 (3.5K)
 - 3500K (warm white) or 5000K (cool white)
 - Available as 12V or 120V (remote transformer required for 12V applications)
 - Rated Life = 50,000 hours
 - Warranty = 3 years in a Moon Visions fixture only
 - Available in 40° (FL) beam spread
-

Halogen Lamps

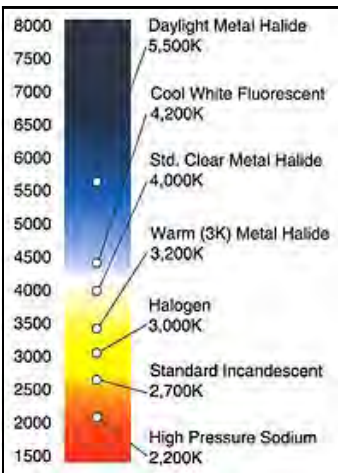
- 39PAR20/NFL/H 39 watt (replaces 50 watt PAR20) 120 V Halogen 30° Narrow Flood
 - 39PAR20/NSP/H 39 watt (replaces 50 watt PAR20) 120V Halogen 10° Narrow Spot
-

Fluorescent Lamps

- 11W PAR20 5000K Equivalent to 50 watt halogen—Cool White
- 11W PAR20 2700K Equivalent to 50 watt halogen—Warm White
- CFL 14W R20 6500K Spiral Equivalent to 50 watt halogen—Cool White
- CFL 14W R20 2700K Spiral Equivalent to 50 watt halogen—Warm White

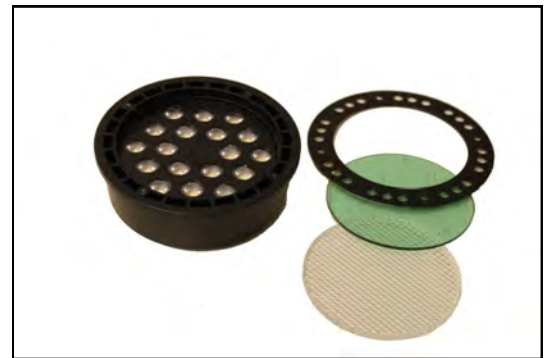
Designing with LED Lights

LED Lights and Kelvin Temperatures



Color temperature is a measurement in degrees Kelvin that indicates the hue of a specific type of light source. So, why do we measure the hue of the light as a "temperature"? This was started in the late 1800s, when the British physicist William Kelvin heated a block of carbon. He noticed that as it glowed in the heat, the carbon produced a range of different colors at different temperatures. The black cube first produced a dim red light, increasing to a brighter yellow as the temperature went up, and eventually produced a bright blue-white glow at the highest temperatures. In his honor, Color Temperatures are measured in degrees Kelvin, which are a variation on Centigrade degrees.

Notice in the Kelvin temperature light chart above that there is no **green** color shown. The greenish hues of mercury vapor lighting is what makes it so unique and beautiful, enhancing the foliage and giving true moonlight effects. To simulate this green color that is most like moonlight, we have fabricated a "mercury vapor" green lens that can be added to any of our 5000K LEDs. This lens addition increases the LED color to 5500K and closely resembles mercury vapor.



LED Lights: Warm White vs. Cool White



Typically Cool White (5000K) LEDs are used to illuminate the landscape in trees, bushes, etc. The eye is used to seeing the cool moonlight hues coming through the trees at night, creating a very natural and serene setting. Cool White light enhances the color of foliage, making trees and vegetation look even more green and healthy. Use Warm White (3500K) LEDs to light the house, fence, or other structures such as gazebos, arbors, or fountains. Warm White light brings out the texture of a surface and creates crisp and inviting light in seating or dining areas.

In this Tennessee landscape, lighting designer Bill Taylor used 22W 12V 5K downlights in the trees and 5W 3500K 12V uplights across the front of the house and on the ornamental trees.

Photography by Frederick Toma.



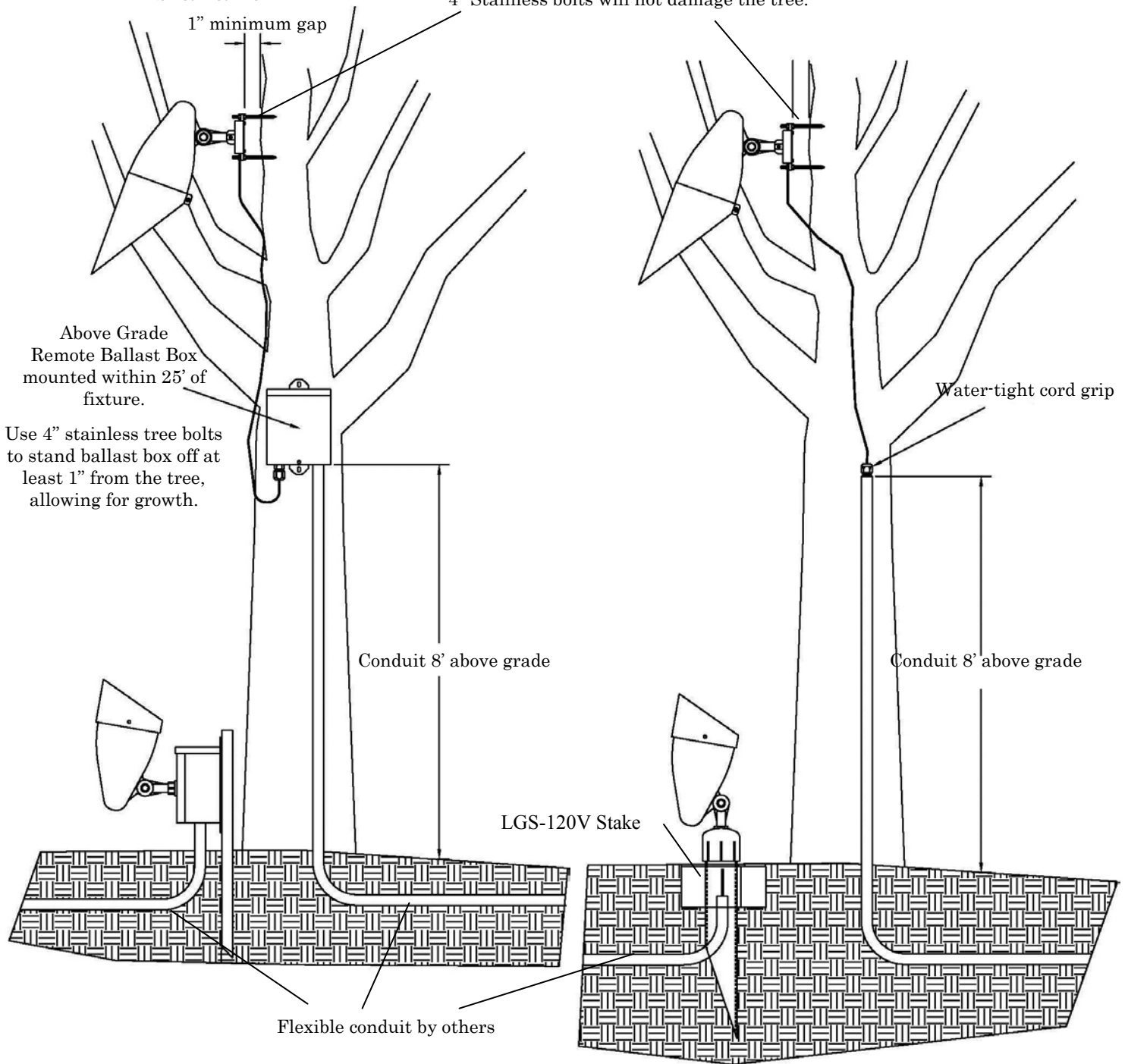
Project Name: _____ Fixture Type: _____

Catalog Part Number: _____

120V Mercury Vapor Installation

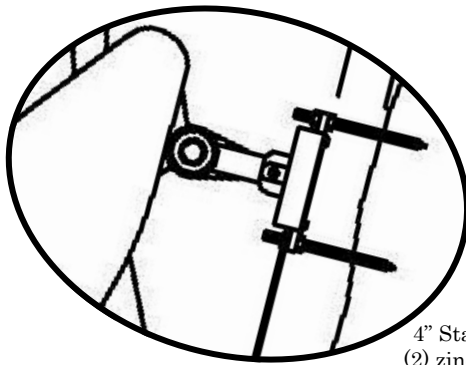
TM or TMB stands off from the tree,
allowing room for growth.
4" Stainless bolts will not damage the tree.

120V LED Installation



Always refer to local, state and national code requirements before installation.

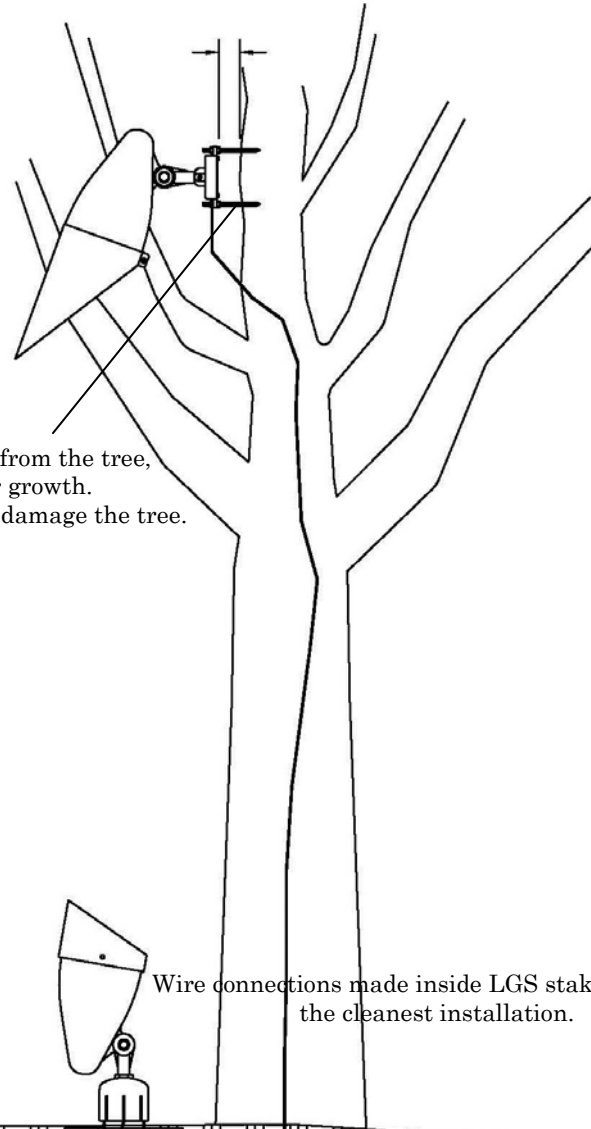
12V LED Installation



Galvanized
back plate

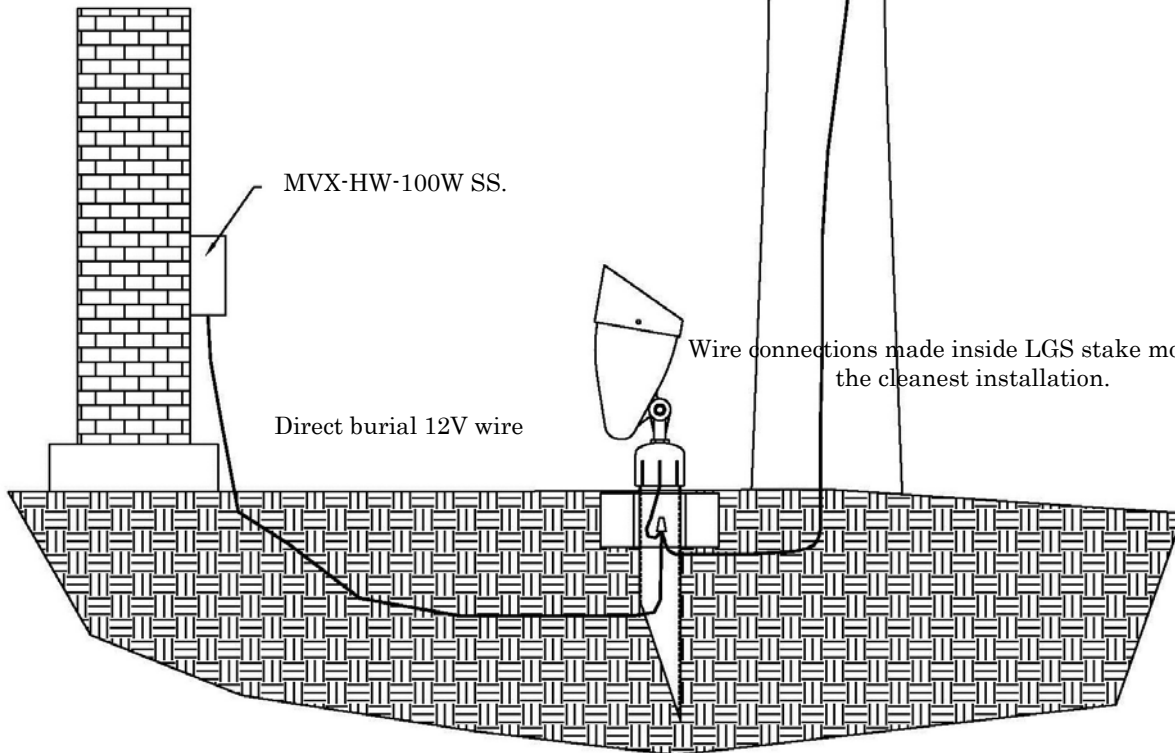
4" Stainless bolts with
(2) zinc 1/4-20 nuts each

TM or TMB stands off from the tree,
allowing room for growth.
4" Stainless bolts will not damage the tree.



Wire connections made inside LGS stake mount for
the cleanest installation.

Direct burial 12V wire



Always refer to local, state and national code requirements before installation.



Why Moon Visions' LEDs?



Moon Visions' LEDs get an A+ report card in their quality, construction, and design. Only the top 2% of Nichia chips are selected for our lamps. They operate at 1.22 watts each, have an average forward voltage of 3.5 volts +/- .1 volt, have a color temperature that is +/- 200K, and use 375 milliamps...exactly as LEDs are designed to operate.

LEDs only require 3.5 volts to operate, yet most LED PAR lamps are 120 volts. The conversion of 120 volts down to 3.5 volts generates most of the heat associated with LEDs. By operating at 12 volts, the heat is reduced by a significant percentage, the lamp life is longer, and the light reduction over time is virtually eliminated.

Now throw wattage into the equation: LEDs are designed to operate at 1.22 watts each. Many companies have only 3-5 LEDs in their PAR lamps, yet are rated anywhere from 15 to 20 watts. That means the current in each LED is being driven way up to run at 3-5 watts each, instead of the 1.22 watts in which they are designed. Again, this is way too hot and causes premature lamp life and output reduction. Moon Vision's PAR38 LED is 22 watts and has 18 LEDs in the lamp running at 1.22 watts each. Couple this with the fact that it can run on 12V AC, and we have one truly long-lasting LED lamp!

Moon Visions' LEDs are available in Cool White (5000K), simulated Mercury Vapor (5500K) with our optional green lens, and Warm White (3500K). The cool white temperatures are best to simulate moonlight (as a comparison, mercury vapor light is 5700K) and warm white temperatures to simulate halogen light. Because our binning process is so tight, you can be sure that our lamps are consistent from batch to batch. In other words, a PAR30 next to a PAR38 will not be two different colors!

PAR38 Stabilizers & Heat Fans



To keep our PAR38 LEDs from jiggling around in the fixtures, we've developed a rubber stabilizer to hold them in place. When mounted way up in the trees, the wind and storms can sway the fixtures high up on the top branches. This rubber donut keeps the LED in place and secure within the fixture. The R30 and R20 LEDs are designed to fit snug within their housings, so they do not require a stabilizer. These stabilizers come standard in both 12V and 120V PAR38 LEDs.



Another unique feature of Moon Visions' LEDs are the built-in fans in the light engines. These 50,000 hour fans dissipate the heat, and draw it away from the diodes. When there is power to the light, the fan is activated and cools the engine. The long-life fans are in the engines of both the 14W and 22W LEDs.



A Preston Hollow residence in Dallas, TX features Moon Visions 14W 5000K LEDs to illuminate this majestic focal point of the garden.

Lighting Designer: Greg Mavor
Photography by: Jason Voinov

The Moon Visions Difference: DuraLune™ Electrocoating



Why have a 50,000 hour LED lamp if the fixture will look like this in two years?

An LED lamp rated at 50,000 hours, operating 8 hours a day, has a hypothetical 17 YEAR life. You need a fixture that has this same 17 year life.

Moon Visions Lighting takes a special step in production to have an exclusively protected **DuraLune™ Electrocoating** applied before the powder coat finish. Electrocoating is a process in which an epoxy “paint” becomes molecularly bonded to the fixtures and essentially becomes part of the fixture itself. It provides total protection inside and out because every crevice, hole, thread and recess is covered.

Knuckle threads and fixture edges are a common place for corrosion to begin on powder-coated surfaces. This is eliminated with our DuraLune Electrocoating! Typically if a fixture is chipped or scratched in the field, over time corrosion will begin at the damaged area and infect the rest of the fixture from there. With a DuraLune Electrocoated bullet, the corrosion stops at that spot and does not damage the rest of the bullet. We are the only manufacturer that provides this extensive corrosion protection.

Cast aluminum is a preferred material to work with in outdoor lighting. It is lightweight, cost effective and an impressive dissipater for heat. By electrocoating our fixtures, we ensure that our fixtures will last as long as any brass or copper fixture—but much lighter in weight and cost!

Other items that are electrocoated:

- manhole covers
- mercury marine outdrives
- the undercarriage of automobiles
- military trucks

—it is a perfect fit for outdoor lighting!



Moon Visions bullets shown with the **DuraLune™ Electrocoating** applied. Notice even the threads are protected.

And as a bonus...our DuraLune Electrocoating process is 100% eco- friendly! Coating waste is minimal, as virtually all of the coating put in the tank goes on the product and stays on the product. Low solvents and water-borne formulations make electrocoating a **GREEN** solution!

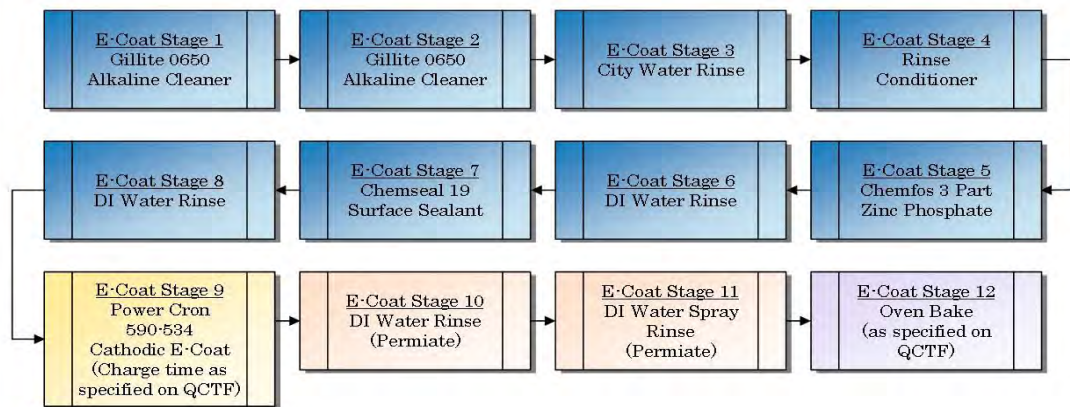
Moon Visions DuraLune™ Electrocoating Process



Our Trademarked painting method which uses an electrical current to deposit paint.

How it works...

- A DC charge is applied to the bullets immersed in a bath of oppositely charged “paint” particles.
- Epoxy “paint” particles are drawn to the bullet and are molecularly bonded to the aluminum bullet molecules.
- Amount of coating thickness applied is controlled by the electrical charge applied – within a tolerance of +/- .0001 inches.
- Provides total protection because every crevice, hole and recess is covered - a process known as “Throwing Power”.
- Bullets and upshields are coated with an even, continuous film both inside and out - with no gaps, drips, pools, etc.
- Wear resistant, corrosion resistant, chemical resistant, & temperature resistant.
- Withstands rigorous salt spray, adhesion, dielectric and acid resistance tests.
- Accelerated Life Test performed by the Army for 3,200 hours in a salt fog chamber concluded the coating would last 20 years!



Project Name: _____ Fixture Type: _____

Catalog Part Number: _____

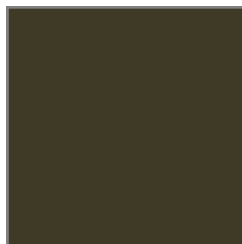


Finish Options

Standard Finish Options:



Hartford Green



Bronze Texture

Custom Premium Finish Options:

note: custom options require a longer lead time and custom paint setup fee



Almond



Beechwood



Designer Beige



Crystal White



Flat White



Stardust Silver



Dove Gray



Light Gray



Dusty Gray



Khaki Gray



Gray Texture



Satin Black



Black Texture



The Desert Springs Marketplace in Desert Springs, CA features Moon Visions low voltage 14W and 22W LEDs in 5000K with mercury vapor green lenses to welcome shoppers to the entrance of the center. The bullets are powder coated a custom “Weaver Tan” to match the desertscape.

Lighting Designer: Dana Clarke
Photography by: Frankie Sanchez





Frequently Asked Questions

- **Do I need a separate driver for each lamp?**

NO. The technology is all built into the lamp itself...no remote driver; no extra labor; no ugly boxes, etc. The lamps are composed of two parts: a light engine (the LED board) and a driver, which determines the voltage—either 12V or 120V.

- **What kind of transformer do I need for the 12V LEDs?**

The 12V LEDs require a remote transformer. As with any low voltage installation, simply add up the number of watts you are using and purchase the transformer accordingly. Since the wattages are 1.5W, 2.5W, 5W, 7W 14W or 22Ws...it won't take much! A 500W transformer will run 20 of the largest 22W LEDs!

- **Will these 12V LEDs work on an electronic transformer?**

YES! Our LED lamps will work on both a magnetic and electronic transformer. Please note: when using the electronic transformer (RS12), the LED lamp must be within **25 feet** of the transformer.

- **Are these lamps replaceable in the field if I have a failure?**

YES! If for any reason our PAR LED's fail, they can be replaced quite easily in the field unlike most manufacturers who have built-in LED modules in their fixture. If you do have a failure, we will test the LED engine and the LED source (12V or 120V) and only replace what is necessary. And it won't require waiting for the part from the factory or involve you reinstalling the LED module in the field with teeny tiny screws!

- **What kind of warranty do these LED lamps have?**

THREE years on the Moon Visions LED lamps WITH Moon Visions fixtures. They are rated at 50,000 hours, meaning they will still be operating at 70% light output. A date code is adhered to each lamp as it leaves the factory to insure proper warranty.

Note: We do not warranty our LEDs in any other manufacturer's light fixtures.

- **How much energy does LED lighting save compared to halogen or mercury vapor lighting?**

The standard formula for calculating energy savings is:

$$\frac{\text{Old Watts} - \text{New Watts}}{1000} \times \text{Hours in Use} \times \text{Energy Rate} = \$ \text{ Savings}$$

So for example, replacing (8) 100 watt lights with (8) 14 watt LED lamps, burning 8 hours a night at \$.12/kwh (typical TXU rate):

.688 * 8 * .12 = \$.66 savings per day, which is approximately \$241.00 a year.

- **Do LED lights attract bugs as much as other light sources?**



YES! Bugs like light...therefore they will be attracted to LEDs as much as any other source. Because our LEDs have open vents in the back to allow for air circulation, we fill our bullet knuckles with silicone to insure that bugs cannot enter the fixture from the back. This also keeps moisture and other outdoor elements from siphoning in from the knuckle.

Terms & Conditions of Sales

- Prices are FOB shipping point.
- Shipping and handling allowed on orders with a selling price of \$2,500 or more, per order, per destination in the continental United States.
- All other orders, freight is not included and is determined at the time of shipment processing.
- All discrepancies must be addressed within 10 days of delivery.
- Title to any goods sold and the risk of loss of such goods passes to Buyer upon delivery by Seller or Seller's vendors to the carrier, and any claims or losses or damage in transit shall be filed by Buyer directly with the carrier. Buyer shall inspect all goods immediately upon delivery for concealed damage. Buyer must note any damage/shortage on carrier's delivery receipt. Buyer must report all damage to goods to the carrier within 10 days of delivery of goods. UPS damaged shipments must be reported to Seller within 10 days and must be in the original cartons at the original delivery point for inspection.
- Scheduled ship date is an estimate only. Seller is not responsible for missed ship dates and late deliveries caused by the carrier. Seller will not accept any back charges for late deliveries.
- COD orders are not accepted. If buyer does not have an active credit account with Seller, then Buyer must pay cash in advance at order entry.
- No returns will be accepted without prior approval. All requests must be made within 30 days of invoice date.
- Authorized returns will be charged for both inbound and outbound freight and a minimum service charge of thirty-five percent (35%) of the product value.
- Moon Visions Lighting reserves the right to make modifications or changes to any of its products, pricing, Limited Warranty, and Terms of Conditions without prior notice.

Limited Warranty Information

Moon Visions Lighting warrants any product or component manufactured or assembled by Moon Visions against defects in materials and workmanship for a period of 3 years from date of shipment, provided the conditions of installation and operation have been proper. At Moon Visions' option, any product proven to be defective within the warranty period will either be repaired or replaced.

- Warranty is extended to the original buyer only. Proof of purchase is required.
- Moon Visions Lighting does not warranty any of our LED products if housed in any other manufacturer's product. LED Lamps must be in a Moon Visions fixture to receive full three year warranty.
- Ballasts, capacitors, and igniters are warranted by the ballast manufacturers. Please check the manufacturer's published warranty for the ballast in question.
- Non-LED lamps are not manufactured by Moon Visions and are specifically excluded from this warranty. Contact the lamp manufacturer for warranty assistance.
- Moon Visions shall claim warranty to be null and void for damage or failure caused by acts of God, falling objects, external forces, explosion, fire, misuse or abuse in application, or any other circumstance beyond our control.



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Moon Visions Lighting



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