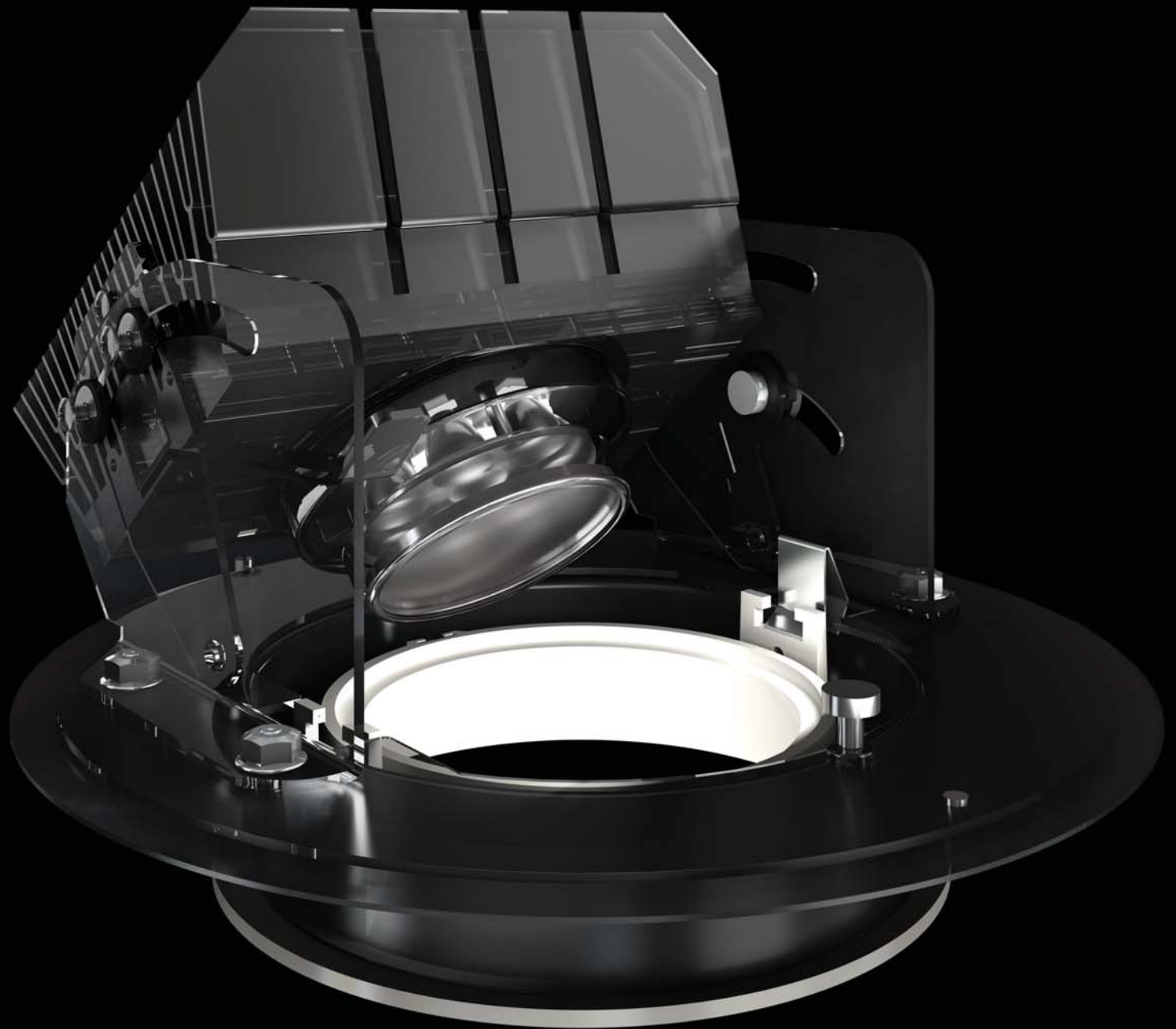


USAI[®]
innovation>>>illumination[®]



BeveLED[®]
Downlight . Adjustable . Wall Wash

USAI. THE RIGHT LED PARTNER.

Choosing the right LED partner is important.

With over 70 years and three generations in the lighting industry, USAI continues to be driven by our strong commitment to leadership, service and innovative solutions. USAI BeveLED products meet and exceed the strictest regulatory standards and provide the maximum assurances available – making us the ideal long-term partner in providing efficient, reliable and beautiful LED solutions for projects of any type or scale.

WE DELIVER PERFORMANCE AND AESTHETICS

With USAI BeveLED you can have it all – a beautifully designed and architectural family of recessed LED downlight, adjustable and wall wash fixtures with best-in-class performance.

- **SUPERIOR PERFORMANCE**

USAI employs an advanced approach to maximizing delivered lumens by utilizing the best white LED technology available, combined with precise optical control and advanced thermal management. The result: A full family of LED downlights which meet and exceed the industry's most stringent standards for energy efficiency.

- **5 YEAR WARRANTY**

USAI provides a 5 year warranty at L70 standards for our BeveLED products.

- **LM-79 TESTED**

LM-79 test reports are available for all USAI BeveLED products.

- **TIGHT COLOR BINNING**

With BeveLED, you can rely on fixture to fixture color consistency – every time. USAI's custom-mixed-bin light engines combined with our proprietary Blended Optical System enables us to deliver consistently beautiful and smooth beams having the appearance of a single incandescent source.

- **EASY TO REPLACE LIGHT ENGINES. EASY TO UPGRADE IN THE FUTURE.**

All USAI Light Engines are designed to exceed a life expectancy of 50,000 hours. In the event that a replacement is required, BeveLED light engines are easily replaced through the aperture.

- **BEVELED ADJUSTABLE DOWNLIGHT – 2009 NEXT GENERATION LUMINAIRE RECOGNIZED WINNER**

Gaining Next Generation Luminaire(NGL) recognition is no easy matter. Judges put the BeveLED Adjustable downlight through its paces across a whole range of key parameters and selected it as a 2009 Recognized Winner.

- **LIGHTING FACTS AND ENERGY STAR PARTNER**

USAI has taken the pledge to label all LED products with the Department of Energy's Lighting Facts label. All performance data supplied by USAI will accurately reflect the results of our LM-79 tests. All BeveLED products meet Energy Star requirements.

- **CLEAN ARCHITECTURAL LINES WITH BLENDED OPTICS**

BeveLED's beautiful die cast and perfectly proportioned trims are completed by USAI's comfortable and appealing Blended Optical System. BeveLED offers the power and benefits of the LED source with a pleasing incandescent appearance – eliminating the multiple shadows normally associated with LEDs.



Point Source Flexibility with LED Benefits

BeveLED®

BeveLED is the first full family of architectural grade LED recessed downlight, adjustable, and wall wash products.

In addition to offering excellent general illumination and wall wash performance, BeveLED has harnessed the directional source capabilities of LEDs – producing a uniform and crisp beam of light as well as a significant amount of punch – replicating the quality of traditional incandescent point sources such as MR16.

Downlight



Adjustable



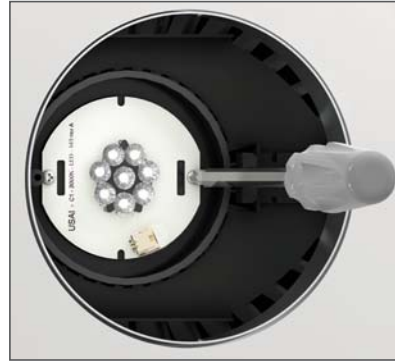
Wall Wash



**5 YEAR
LED
WARRANTY**

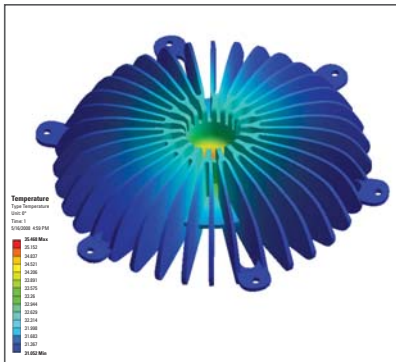
5 - YEAR WARRANTY

USAI LED products, when properly installed and operating under normal conditions of use, are warranted to our customers for a period of 5 years from the date of shipment.



FIELD REPLACEABLE LIGHT ENGINE

Remove and recycle less than 2% of total material components via the removal of (2) screws to replace or upgrade the LED light engine. Eliminates waste and offers a truly sustainable lighting solution.



ADVANCED THERMAL MANAGEMENT

USAI utilized the most advanced thermal design software available to develop the robust BeveLED heatsinks which dissipate heat well below recommended operating junction temperatures – maximizing performance and life.

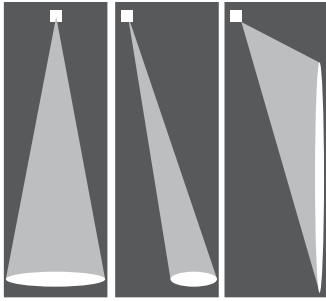


BLENDED OPTICS

USAI's proprietary low glare Blended Optical System provides the pleasing appearance of an incandescent light source while surpassing the energy efficiency benefits of compact fluorescent (CFL).



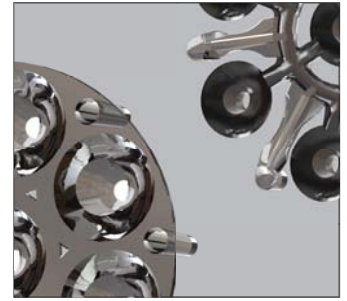
At A Glance



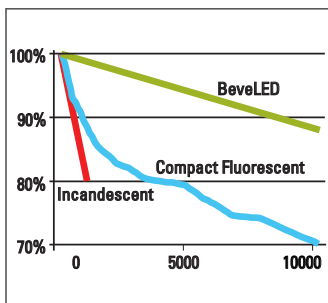
Complete Family of Downlight, Adjustable and Wall Wash Products



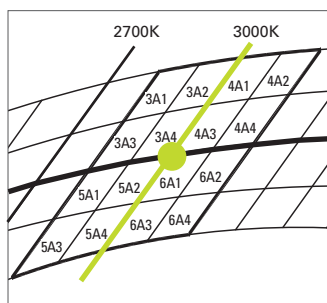
Interchangeable 30° and 50° Reflectors for Downlight Fixtures



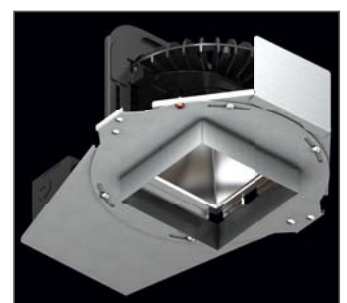
High Performance 10° and 30° Beam Spreads for Adjustable Fixtures



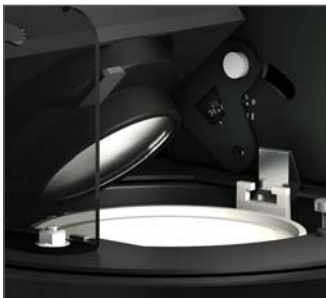
50,000 Hours Rated Life @ L70



Tight Binning for Consistent Fixture-to-Fixture Color



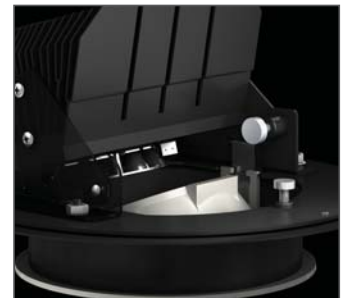
All-Ways Square Feature for Easy Alignment. Patent Pending.



Locking Vertical Tilt with Aiming Indicators



362° Locking Horizontal Rotation



High Performance Wall Wash Optical System



Trimless or Millwork Option



Wet Location Option (Under Covered Ceiling)



Emergency Back-up and Dimming Options

The Challenge

To develop an optical approach to LED product design that not only takes advantage of LED efficacy benefits for general and task lighting, but also utilizes the directional capability of LEDs to replicate point-source applications.

The Solution

USAI's proprietary low glare Blended Optical System provides the pleasing appearance of an incandescent light source while surpassing the energy efficiency benefits of compact fluorescent (CFL).



Advanced Thermal Management

- **Allows for Optimal LED Performance**
- **Low Thermal Junction Temperatures**
- **Maximum LED Life**

BeveLED heatsinks are designed and tested to achieve maximum LED performance and life. Our proprietary heatsinks reduce and radiate damaging heat away from the LED light engine to drive down the junction temperature. Our advanced thermal management approach ensures powerful and long life LED products.

All BeveLED fixtures have been designed with the knowledge that this exciting and rapidly changing technology will likely lend itself to future upgrades of light engines as LED technology continues to evolve. BeveLED heatsinks have been designed and manufactured for compatibility with significantly more efficient and powerful LEDs in the future - so no changes will be required.

Blended Optical System

Proprietary Blended Optical System with mixing chamber blends multiple LED beams into a comfortable single beam with a pleasing incandescent appearance.

- **No Multiple Shadows.** Single shadow and warm tone as found in incandescent and low voltage halogen sources.
- **No Striations** providing even distribution on the desired surfaces.
- **No Visible LEDs** enhances the aesthetics and creates an architecturally pleasing appearance.

Tight Binning for Color Consistency

With BeveLED, you can rely on fixture to fixture color consistency – every time (+/- 100K). USAI's custom-mixed-bin light engines combined with our proprietary Blended Optical System enables us to deliver consistently beautiful and smooth beams having the appearance of a single incandescent source.

Every light engine shipped is coded, tracked and labeled for color temperature, wattage and bin structure. USAI's policy is to maintain detailed identification records for each light engine shipped as well as reasonable inventory of each generation light engine for future replacements.

Field Replaceable Light Engine

Remove and recycle less than 2% of total material components via the removal of (2) screws to replace / upgrade the LED light engine. Eliminates waste and offers truly sustainable lighting solution.

5 Simple Steps to Light Engine Replacement Through the Aperture

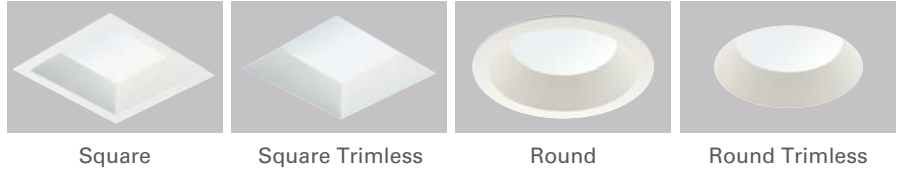
1. Remove the trim and reflector.
2. Remove the (2) Phillips head screws that hold the reflector mounting ring.
3. Remove the Light engine via (2) Phillips head screws and quick disconnect the wire harness.
4. Mount the new light engine to heat sink with (2) Phillips head screws and quick connect the wire harness.
5. Install the reflector mounting ring, reflector and trim.



Downlight Features

- Field Replaceable Light Engine
- Proprietary Blended Optical System
- Interchangeable 30° or 50° Beam Spread
- High Performance Heatsink for Maximum LED Life
- 4.5" Aperture, Die Cast Trims
- Wet Location Option

Available Trims



Performance Summary - Baseline of 3000K

Square Downlight 50° - 20W

Light Output (Lumens)	1013.5
Watts	19.6
Lumens Per Watt (Efficiency)	51.7
Color Accuracy (CRI)	80+
Color Temperature	3000K
IESNA LM-79-2008 Test No.:	LTL 19747

Square Downlight 30° - 20W

Light Output (Lumens)	866.4
Watts	19.6
Lumens Per Watt (Efficiency)	44.2
Color Accuracy (CRI)	80+
Color Temperature	3000K
IESNA LM-79-2008 Test No.:	LTL 19746

Square Downlight 50° - 10W

Light Output (Lumens)	566.2
Watts	9.7
Lumens Per Watt (Efficiency)	58
Color Accuracy (CRI)	80+
Color Temperature	3000K
IESNA LM-79-2008 Test No.:	LTL 19901

Square Downlight 30° - 10W

Light Output (Lumens)	478
Watts	9.7
Lumens Per Watt (Efficiency)	49
Color Accuracy (CRI)	80+
Color Temperature	3000K
IESNA LM-79-2008 Test No.:	LTL 19900

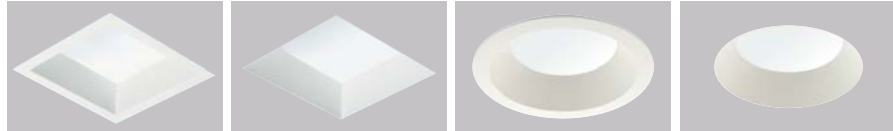
10W and 20W	Dimming Option	Option	Emergency Option
2700K	3000K	3500K	4000K
50°	30°	80+ CRI	



Adjustable Features

- 2009 Next Generation Luminaire Recognized Winner
- Field Replaceable Light Engine
- Proprietary Blended Optical System
- Fully Adjustable 0°- 40° Lockable Vertical Tilt and 362° Lockable Horizontal Rotation
- High Performance Aluminum Heatsink for Maximum LED Life
- 4.5" Aperture, Die Cast Trims
- Wet Location Option

Available Trims



Square

Square Trimless

Round

Round Trimless

Trim shown with optional lens.

Performance Summary - Baseline of 3000K

Square 30° - No Tilt - 20W	
Light Output (Lumens)	899.9
Watts	19.6
Lumens Per Watt (Efficiency)	46.8
Color Accuracy (CRI)	80+
Color Temperature	3000K
IESNA LM-79-2008 Test No.:	LTL 19751

Square 10° - No Tilt - 20W	
Light Output (Lumens)	880.6
Watts	19.6
Lumens Per Watt (Efficiency)	44.9
Color Accuracy (CRI)	80+
Color Temperature	3000K
IESNA LM-79-2008 Test No.:	LTL 19749

Square 30° - No Tilt - 10W	
Light Output (Lumens)	529.3
Watts	9.8
Lumens Per Watt (Efficiency)	53.7
Color Accuracy (CRI)	80+
Color Temperature	3000K
IESNA LM-79-2008 Test No.:	LTL 19904

Square 10° - No Tilt - 10W	
Light Output (Lumens)	531.5
Watts	10.0
Lumens Per Watt (Efficiency)	52.9
Color Accuracy (CRI)	80+
Color Temperature	3000K
IESNA LM-79-2008 Test No.:	LTL 19902

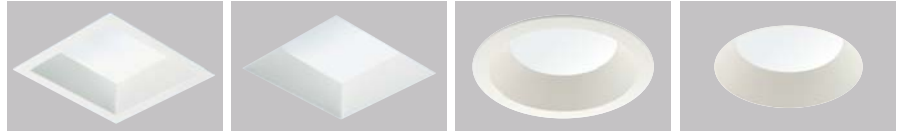
10W and 20W	Dimming Option	Emergency Option	Option
2700K	3000K	3500K	4000K
30°	10°	Accessory Holder	80+ CRI



Wall Wash Features

- Exceptional Uniformity
- Field Replaceable Light Engine
- Proprietary Blended Optical System
- 0° - 362° Lockable Horizontal Rotation
- High Performance Heatsink for Maximum LED Life
- 4.5" Aperture, Die Cast Trims
- Wet Location Option

Available Trims



Square

Square Trimless

Round

Round Trimless

Performance Summary - Baseline of 3000K

Square Wall Wash - 20W

Light Output (Lumens)	868.1
Watts	19.7
Lumens Per Watt (Efficiency)	44
Color Accuracy (CRI)	80+
Color Temperature	3000K
IESNA LM-79-2008 Test No.:	LTL 19753

Square Wall Wash - 10W

Light Output (Lumens)	518.3
Watts	9.9
Lumens Per Watt (Efficiency)	51.9
Color Accuracy (CRI)	80+
Color Temperature	3000K
IESNA LM-79-2008 Test No.:	LTL 19906

10W and 20W	Dimming Option	Option	Emergency Option
2700K	3000K	3500K	4000K
80+ CRI			

Compare BeveLED to Compact Fluorescent BeveLED®

The BeveLED Advantage

- Smaller Aperture
- More Efficient
- Spectral Distribution Similar to Incandescent
- Enhanced Color Perception
- No UV
- No Mercury
- Full Family of Downlight, Adjustable and Wall Wash Products

Compact Fluorescent Limitations

- Requires Larger Aperture to Optimize Efficiency
- Average Color Rendering
- Diffuse Light Source
- UV emitter
- Lamp Disposal Issues due to Mercury Content
- Downlight and Wall Wash only



BeveLED

Actual size 4.5"

Typical Compact Fluorescent Downlight

Actual size 6.0"

4.5" BeveLED

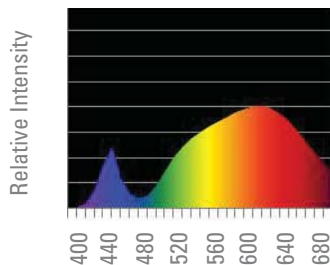
20W LED w/ 50° Beam

Source Data & Optical Efficiency

Light Output (Lumens)	1013.5
Input Watts	19.6
Lumens Per Watt (Efficiency)	51.7
Color Accuracy (CRI)	80+
Color Temperature	3000K

Rated Life 50,000 Hrs.

SPECTRAL DISTRIBUTION



Compact Fluorescent Source

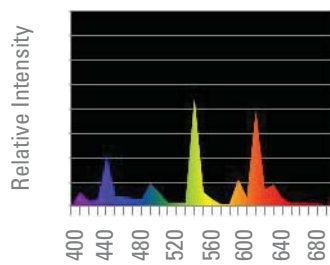
Typical 6" Vertical (26W CFL)

Source Data & Optical Efficiency

Source Lumens	1800
Optical Efficiency	50.00%
Light Output (Lumens)	900
Input Watts	29
Lumens Per Watt (Efficiency)	31.0
Color Accuracy (CRI)	80+
Color Temperature	3000K

Rated Life 12,000 Hrs.

SPECTRAL DISTRIBUTION

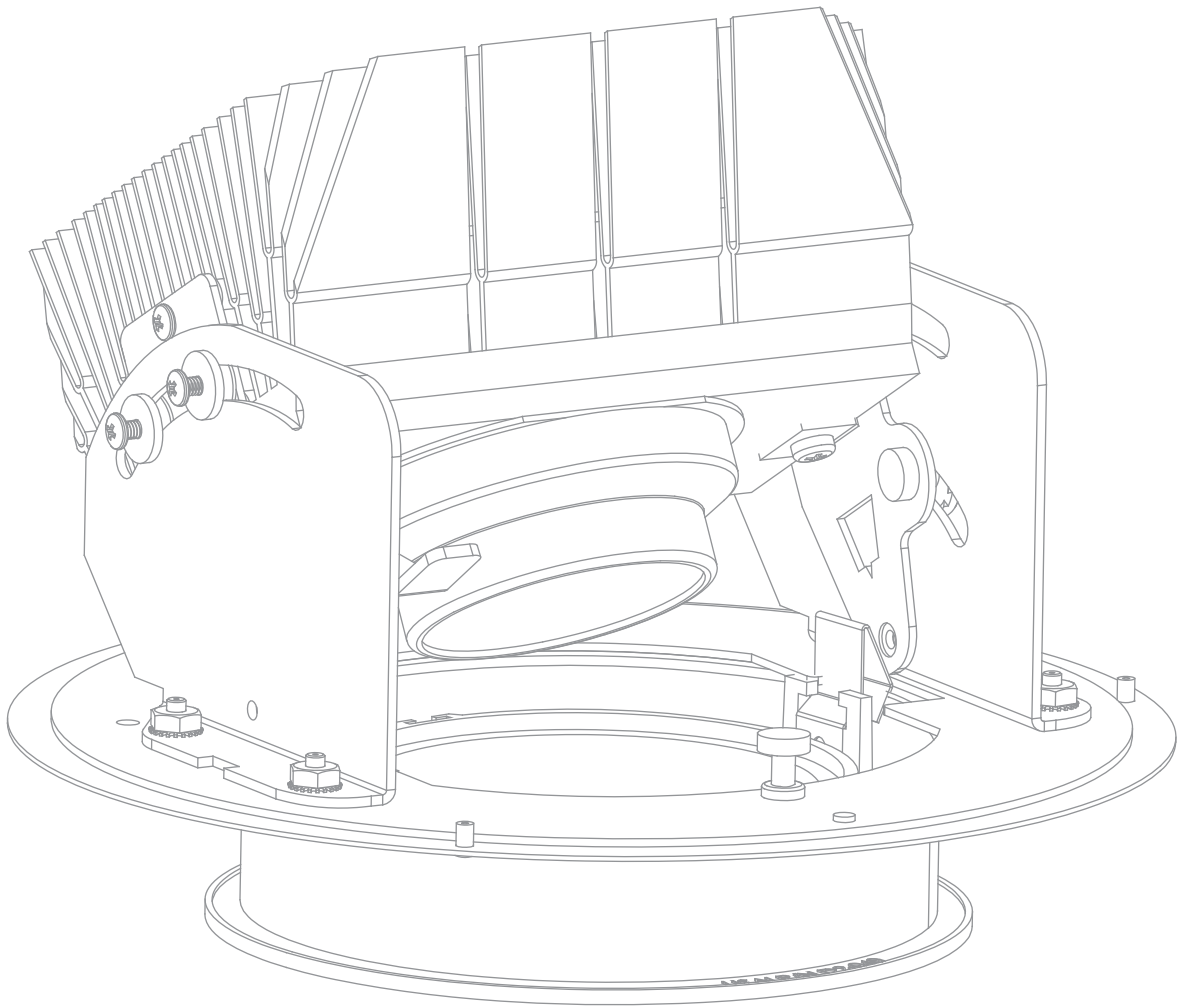


LED Advantage vs CFL

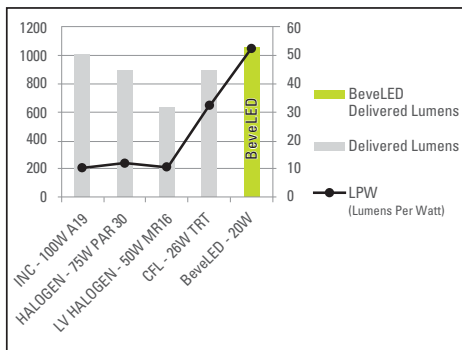
Increase Lumen Output By	12.61%
Increased Energy Savings of	32.41%
Increased Energy Efficiency By	65.62%
Lamp Replacements Eliminated	3 to 5
Reduced BTUs for HVAC System	32.09

BeveLED®

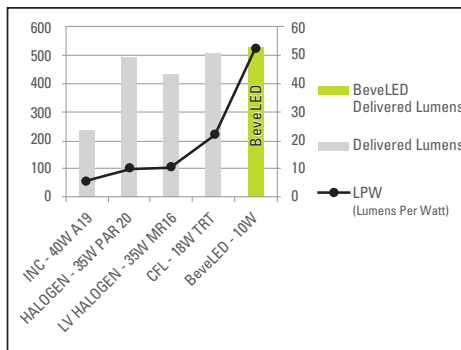
Downlight . Adjustable . Wall Wash



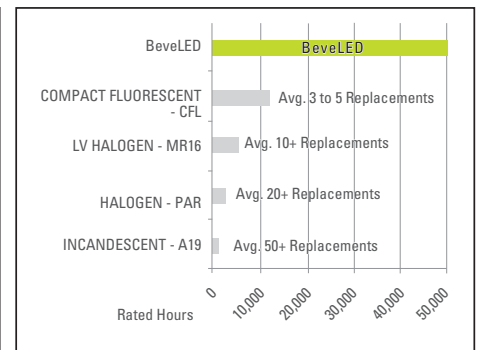
20W BeveLED Vs. Comparable Lamps



10W BeveLED Vs. Comparable Lamps



Lamp Replacements Eliminated



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