

# BeveLED® 2.2 Infinite Color+® - B4RC-FC1

## 4.5" Round Deep Regress Downlight

Field Convertible from Trimless or Millwork to Trimmed

### Trimmed - B4RCF-FC1



### Trimless - B4RCL-FC1



### Millwork - B4RCM-FC1



[usailighting.com/infinitecolor](http://usailighting.com/infinitecolor)

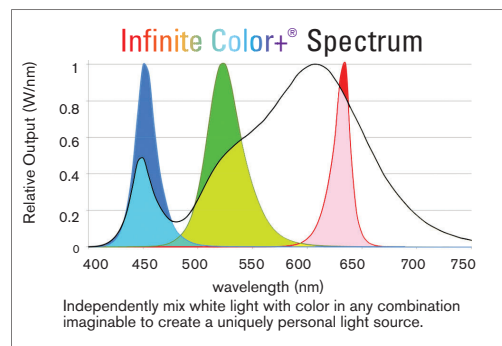
**BeveLED 2.2 Infinite Color+** - Access to a wide variety of perfect architectural whites, saturated colors, neutrals, and pastels are possible with DMX controls. Infinite opportunities abound for residential, hospitality and retail lighting applications, and any project requiring full color and white light flexibility.

#### FEATURES

- Full color and white light flexibility
- Dry/damp/wet location rated for showers
- Field convertible from trimless or millwork to trimmed

#### DOWNLIGHT PERFORMANCE DATA

DELIVERED PERFORMANCE:	Infinite Color +	
	White Light Channel Only	Multi Channel Output
Wattage	23W	32W
Source Lumens:	1675	2100
Lumens Per Watt:	50	44
Delivered Lumens:	1125	1400



# BeveLED® 2.2 Infinite Color+® - B4RC-FC1

## 4.5" Round Deep Regress Downlight with Integral Driver

Specify fixture part number

B4RC__	32FC1		SF				UNV			
BeveLED Trim Style	Wattage Options	Beam Options	Lens Options	Bevel Trim Finish Options	*Flange/ Millwork Collar Finish	Housing Options	Universal Voltage Option	Dimming Driver Options	Cabling Options <i>Select one</i>	Accessories (Optional)
<b>F</b> Trimmed with Flange (use with all materials)  <b>L</b> Trimless Spackle-in (use with sheetrock and plaster only)  <b>M</b> Millwork Knife-Edge (use with wood and stone)	32FC1 32W LED	<b>50</b> 50° beam  <b>70</b> 70° beam	SF Solite Frosted	<b>WH</b> White  <b>SC</b> Conduit Silver  <b>GR</b> Grey  <b>BL</b> Black  <b>BZ</b> Bronze  <b>PR</b> Primer Finish  <b>AC</b> Clear Matte Anodized  <b>AB</b> Piano Gloss Black	<b>WH</b> White  <b>SC</b> Conduit Silver  <b>GR</b> Grey  <b>BL</b> Black  <b>BZ</b> Bronze  <b>PR</b> Primer Finish  <b>AC</b> Clear Matte Anodized  <b>WH</b> White  <b>GR</b> Grey  <b>BL</b> Black  <b>AB</b> Piano Gloss Black  <b>WH</b> White  <b>GR</b> Grey  <b>BL</b> Black	<b>NC</b> New Construction All-in-One  <b>NCSM</b> New Construction Narrow Width  <b>NCCP</b> Chicago Plenum  <b>NCIC</b> Insulation Contact Rated / Airtight	UNV 120V-277V	<b>D23X1</b> EldoLED DMX 0.1% dimming, manual addressing using RDM protocol, 8 bit  <b>D23X2</b> EldoLED DMX 0.1% dimming, manual addressing using RDM protocol, 16 bit	<b>RJ</b> RJ45 Jacks  <b>WR</b> Manual Wire Splice Connection	<b>CB27</b> 27" C-Channel Bars  <b>CB52</b> 52" C-Channel Bars  <b>EM</b> Emergency battery (available with NC housing only)
				<b>RAL</b> Custom Color Specify RAL #	<b>RAL</b> Custom Color Specify RAL #  *Leave blank for Trimless					

### TRIM FINISH OPTIONS



Custom colors and primer finish also available

# BeveLED® 2.2 Infinite Color+® - B4RC-FC1

## 4.5" Round Deep Regress Downlight with Remote Driver

### 1. Specify fixture part number

B4RC__	32FC1		SF				RM	
BeveLED Trim Style	Wattage Options	Beam Options	Lens Options	Bevel Trim Finish Options	*Flange/Millwork Collar Finish	Housing Options	Remote Dimming Driver	Accessories (Optional)
<b>F</b> Trimmed with Flange (use with all materials)  <b>L</b> Trimless Spackle-in (use with sheetrock and plaster only)  <b>M</b> Millwork Knife-Edge (use with wood and stone)	<b>32FC1</b> 32W LED	<b>50</b> 50° beam  <b>70</b> 70° beam	<b>SF</b> Solite Frosted	<b>WH</b> White  <b>SC</b> Conduit Silver  <b>GR</b> Grey  <b>BL</b> Black  <b>BZ</b> Bronze  <b>PR</b> Primer Finish  <b>AC</b> Clear Matte Anodized  <b>AB</b> Piano Gloss Black	<b>WH</b> White  <b>SC</b> Conduit Silver  <b>GR</b> Grey  <b>BL</b> Black  <b>BZ</b> Bronze  <b>PR</b> Primer Finish  <b>AC</b> Clear Matte Anodized  <b>WH</b> White  <b>GR</b> Grey  <b>BL</b> Black  <b>AB</b> Piano Gloss Black  <b>WH</b> White  <b>GR</b> Grey  <b>BL</b> Black  <b>RAL</b> Custom Color Specify RAL #	<b>NC</b> New Construction All-in-One  <b>NCSM</b> New Construction Narrow Width  <b>NCCP</b> Chicago Plenum  <b>NCIC</b> Insulation Contact Rated / Airtight	<b>RM</b> Remote Dimming Driver, specify remote power supply in table below	<b>CB27</b> 27" C-Channel Bars  <b>CB52</b> 52" C-Channel Bars

USAI  
Power  
Supply  
Must Be  
Specified

### TRIM FINISH OPTIONS



Custom colors and primer finish also available

### 2. Specify Remote Power Supply

RPC-01	32FC1	UNV		
Remote Power Supply	Fixture Wattage	Voltage	Remote Dimming Driver Type*	Cabling Options <i>Select one</i>
<b>RPC-01</b> BeveLED 2.2 Infinite Color+ Remote Power Supply	<b>32FC1</b> 32W LED	<b>UNV</b> 120V - 277V	<b>D23X1</b> EldoLED DMX 0.1% dimming, manual addressing using RDM protocol, 8 bit  <b>D23X2</b> EldoLED DMX 0.1% dimming, manual addressing using RDM protocol, 16 bit  *Requires remote enclosure by others, minimum size 9"L x 4"W x 2"H	<b>RJ</b> RJ45 Jacks  <b>WR</b> Manual Wire Splice Connection

NOTE:  
Remote Power Supplies Require Enclosures by Others.  
See Page 7 for Details.

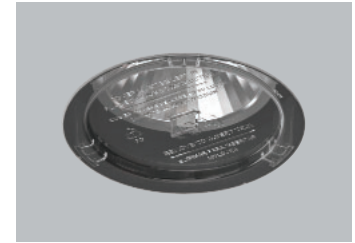
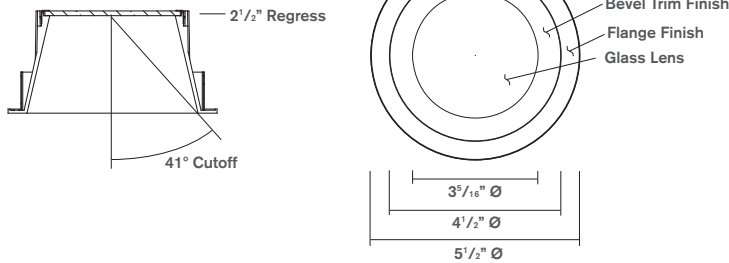
# BeveLED® 2.2 Infinite Color+® - B4RC-FC1

## 4.5" Round Deep Regress Downlight

### Trimmed - B4RCF-FC1

#### TRIM DETAILS

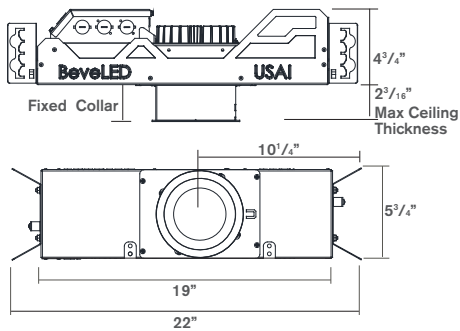
Trimmed - B4RCF-FC1



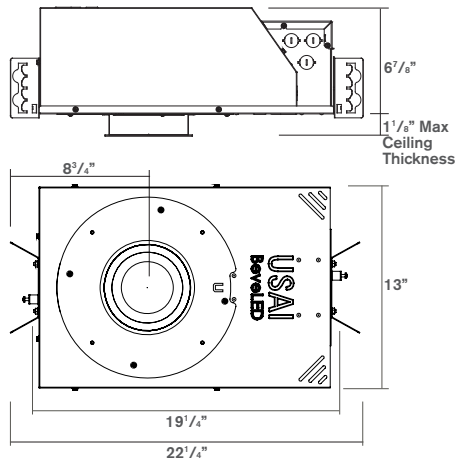
Clear acrylic overspray protector provided standard with every housing to keep out dust and contaminants during construction. Allows for use as work light.

#### HOUSING OPTIONS

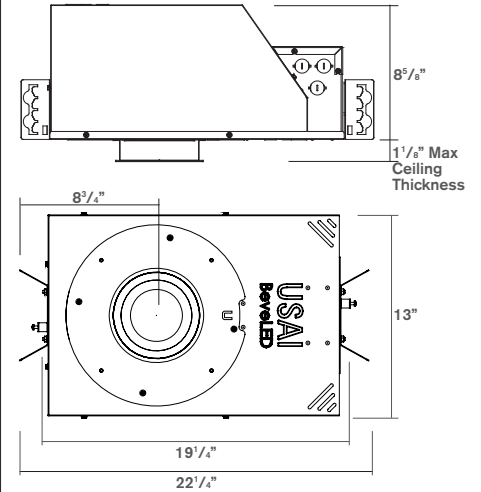
New Construction Narrow Width - NCSM



New Construction - NC



Insulation-Contact Rated - NCIC  
Chicago Plenum Rated - NCCP



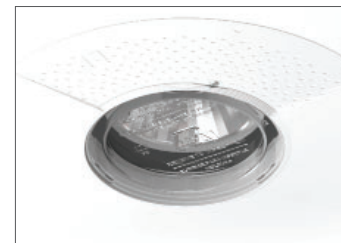
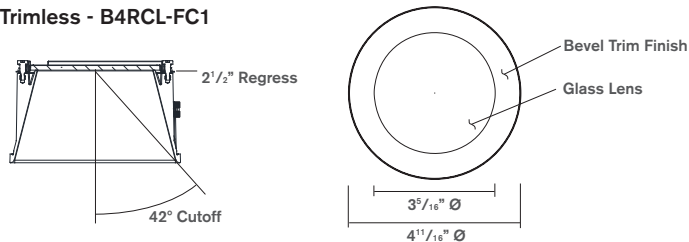
# BeveLED® 2.2 Infinite Color+® - B4RC-FC1

## 4.5" Round Deep Regress Downlight

### Trimless - B4RCL-FC1

#### TRIM DETAILS

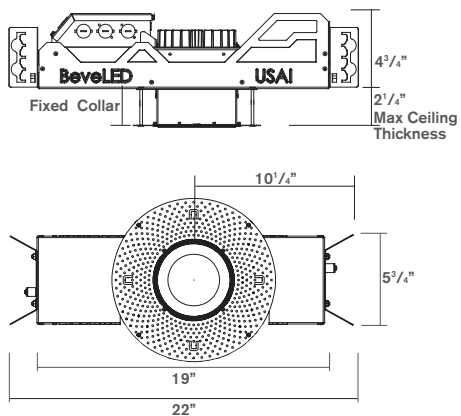
##### Trimless - B4RCL-FC1



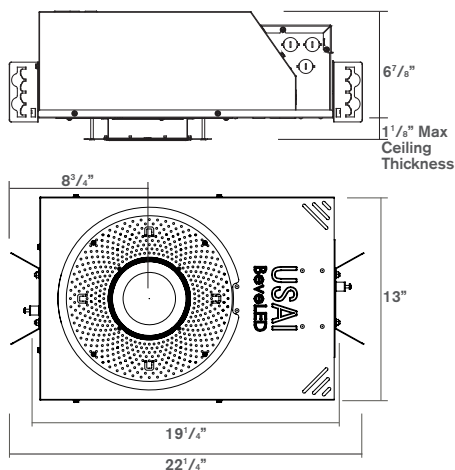
Clear acrylic overspray protector provided standard with every housing to keep out dust and contaminants during construction. Allows for use as work light.

#### HOUSING OPTIONS

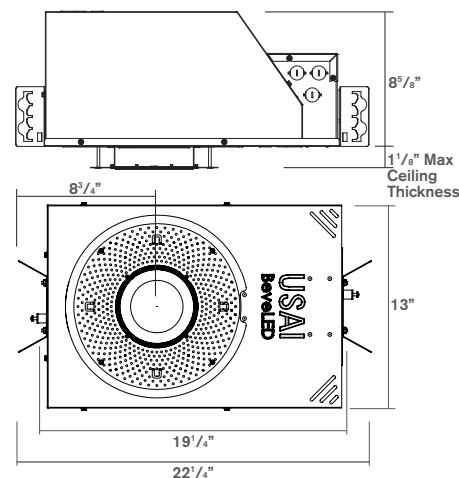
##### New Construction Narrow Width - NCSM



##### New Construction - NC



##### Insulation-Contact Rated - NCIC Chicago Plenum Rated - NCCP



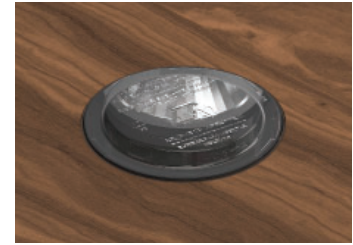
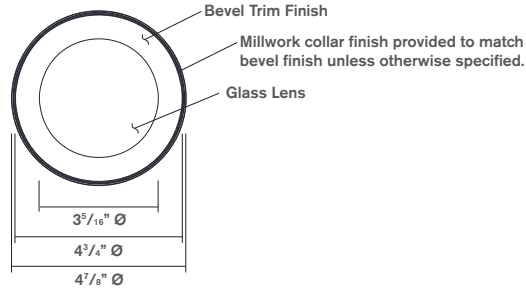
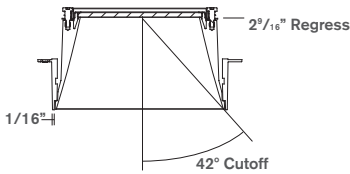
# BeveLED® 2.2 Infinite Color+® - B4RC-FC1

## 4.5" Round Deep Regress Downlight

### Millwork - B4SCM-FC1

#### TRIM DETAILS

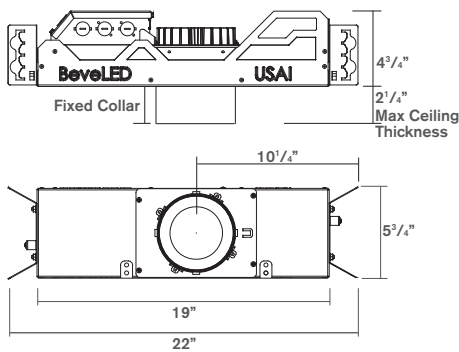
##### Millwork - B4RCM-FC1



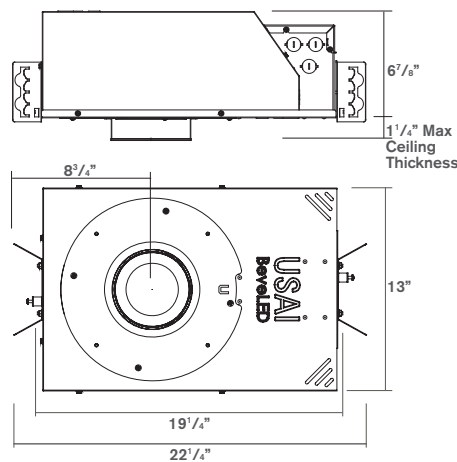
Clear acrylic overspray protector provided standard with every housing to keep out dust and contaminants during construction. Allows for use as work light.

#### HOUSING OPTIONS

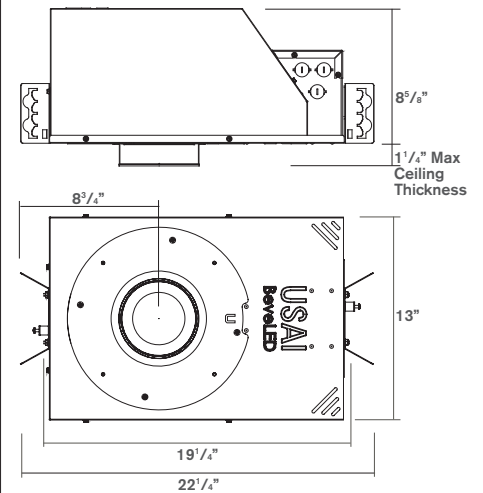
##### New Construction Narrow Width - NCSM



##### New Construction - NC



##### Insulation-Contact Rated - NCIC Chicago Plenum Rated - NCCP



# BeveLED® 2.2 Infinite Color+® - B4RC-FC1

## 4.5" Round Deep Regress Downlight



### BEVELED 2.2 INFINITE COLOR+ SPECIFICATIONS

#### FIELD REPLACEABLE LED LIGHT ENGINE

is serviceable through the aperture without tools or with a Phillips screwdriver. All USAI Lighting light engines feature industry-leading color consistency.

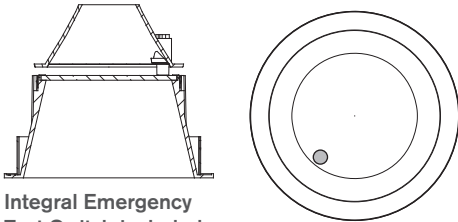
#### FIELD REPLACEABLE INTEGRAL DRIVER

Solid state electronic constant current DMX512 driver with a high power factor provided standard. Works with universal voltages 120V-277V.

All integral dimming drivers are located within the fixture housing and are serviceable from below the ceiling through the aperture. Driver complies with IEEE C62.41 surge protection. Specify D23X1 for 8-bit communication controls; specify D23X2 for 16-bit communication controls. All driver options require remote device management (RDM) communication protocol for addressing.

#### INTEGRAL EMERGENCY BATTERY

An integral emergency battery pack is available as an option with the NC housing and integral driver/power supply only. IOTA emergency battery provides backup power for 90 minutes. NC EM fixtures are provided with an integral emergency battery with integral test switch and can be serviced through the aperture from below the ceiling plane. In emergency mode Infinite Color+ uses the white channel only at ~25% power.



**Integral Emergency Test Switch included with NC housing and integral driver only.**

#### REMOTE LOCATION DRIVER

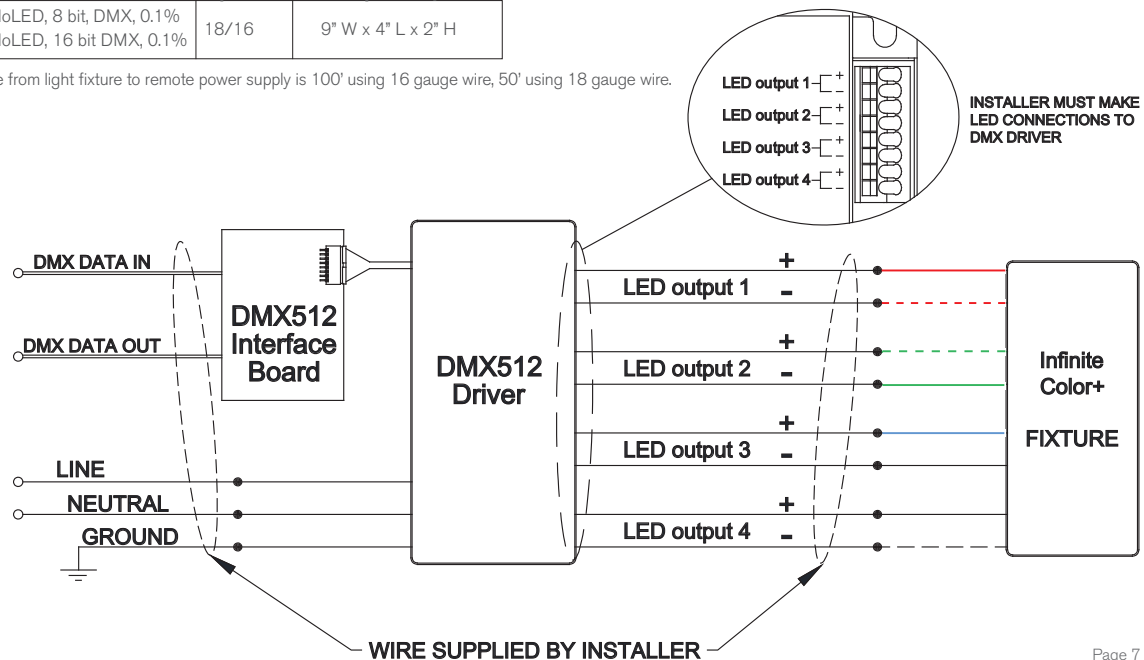
BeveLED 2.2 Infinite Color+ is available for use with remotely located driver. Driver is provided separately for remote location on site, enclosure to be provided by others. Remote dimming driver power supply option must be clearly specified in the "RP" table, below Remote power supplies require enclosures by others that meet local codes and must be located in an accessible service panel within 100ft of the light fixture; see remote driver table below for coordination of enclosure sizes and wire gauges required. All dimming drivers comply with IEEE C62.41 surge protection.

Remote Power Supply Requirements and Wiring Diagrams Note: Must be wired in homeruns per wiring diagram below.

#### 1 Fixture Maximum Per Power Supply.

Remote Power Supply	Dimming Option	Wire Gauge Required*	Minimum Enclosure Size Required (by others)
RPC-01-32FC1	UNV-D23X1 EldoLED, 8 bit, DMX, 0.1% UNV-D23X2 EldoLED, 16 bit DMX, 0.1%	18/16	9" W x 4" L x 2" H

\* Wire gauge 18/16 = Maximum distance from light fixture to remote power supply is 100' using 16 gauge wire, 50' using 18 gauge wire.



# BeveLED® 2.2 Infinite Color+® - B4RC-FC1

## 4.5" Round Deep Regress Downlight

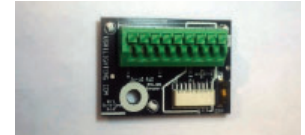
**CABLING:** Data cables must be run in series between fixtures. Choose your preferred method of connection when specifying. To avoid signal transmission problems, the DMX link terminator dip switch should be used in the last fixture in a series on a given DMX bus. NOTE: Data communication cables and AC power lines must not be run in the same conduit.

• **RJ Cabling Option:** If the RJ cabling option is specified, the remote power supply is provided with a DMX interface board that has RJ45 jacks for data connection with CAT5 cable terminated with RJ45 connectors. A link termination dip switch is provided at the connector board; no separate link termination device is required.



• **WR Cabling Option:** If the WR cabling option is specified, the remote power supply is provided with a DMX interface board with terminal blocks for wires to be manually spliced for data connection. A link termination dip switch is provided at the connector board; no separate link termination device is required. The data cable used must meet the following requirements:

- type: shielded, 2-conductor twisted pair
- maximum capacitance between conductors: 30 pF/ft
- maximum capacitance between conductor and shield: 55 pF/ft
- maximum resistance: 0.02 ohms/ft
- normal impedance: 100-140 ohms
- conductive core: 24 AWG is recommended



If 3-wire data cables are preferred, we suggest a Belden 9841 or equivalent cable which meets the specifications for EIA RS-485 applications. Do not use standard microphone cables: they cannot transmit DMX512 data reliably over long distances.

### HOUSING

All BeveLED 2.2 fixtures are field-flexible which allows for field changes from trimless or millwork to trimmed with a simple components change with parts from USAI. Integral driver housings are fabricated of 20 ga. steel construction with thru wire J-box, 4 in 4 out at min. 90°C, #12 AWG thru branch circuit wiring. Remote driver housings are supplied with quick connects and wire connections for use with remotely located driver.

### MOUNTING

B4RCF overlap flange fixtures are designed for use in sheetrock, acoustical ceiling tile, and many other ceiling materials. B4RCL trimless fixtures are provided with a spackle collar and are designed for use in sheetrock/mud-in ceiling applications. B4RCM millwork fixtures are provided with a millwork collar and are designed for use in wood/millwork and stone construction applications. Butterfly brackets and adjustable nailer bars extendible from 14" to 24" centers with integral nails are provided for attachment to building structure. C-channel bars are optionally available for acoustical ceiling applications.

### FIXTURE WEIGHT

NC, NCIC, and NCCP housings weigh 16 lbs. NC housing with EM weighs 24.5 lbs.

### WARRANTY

Based on IESNA LM80-2008, BeveLED has a 50,000 hour rated life at 70% lumen maintenance (L70). USAI Lighting Warranty covers replacement parts for 5 years from date of shipment. Ambient temperatures at fixture location should not exceed 40°C during normal operation.

### CEILING CUT OUT

B4RCF Trimmed with Overlap Flange: 5-1/16" Ø

B4RCL Trimless Spackle-in: 5-1/2" Ø

B4RCM Millwork Knife-edge: 4-15/16" Ø

### LISTINGS

Dry/Damp/Wet location. AC and AB trim finishes are dry/damp only. UL2043 rated for use in air handling plenums. NRTL/CSA-US tested to UL standards. IBEW union made.

### NOTES



- Not for use in corrosive environment
- Use of pressure washer voids warranty

### PHOTOMETRICS

Consult factory or website for IES files. Tested in accordance with IESNA LM79.



**IMPORTANT SAFETY INSTRUCTIONS**

**SAVE THESE INSTRUCTIONS**

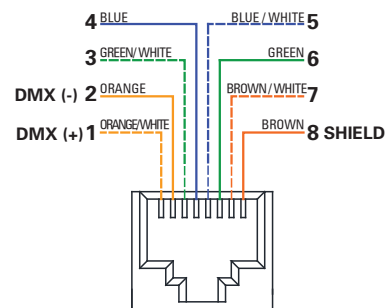
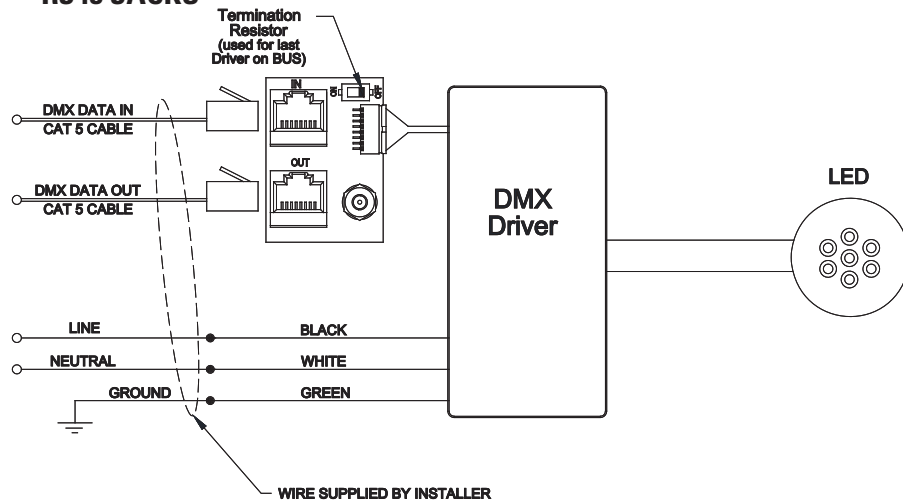
1. Keep these instructions in a safe place for future reference.
2. Only qualified electricians in accordance to local codes should install these fixtures.
3. De-energize the electrical circuit at the circuit breaker prior to installation process or servicing.
4. Make sure all connections are in accordance with the National Electrical Code and any local regulations.

**DIMMING DRIVER COMPATIBILITY  
SELECTION GUIDE  
D23X1 AND D23X2**

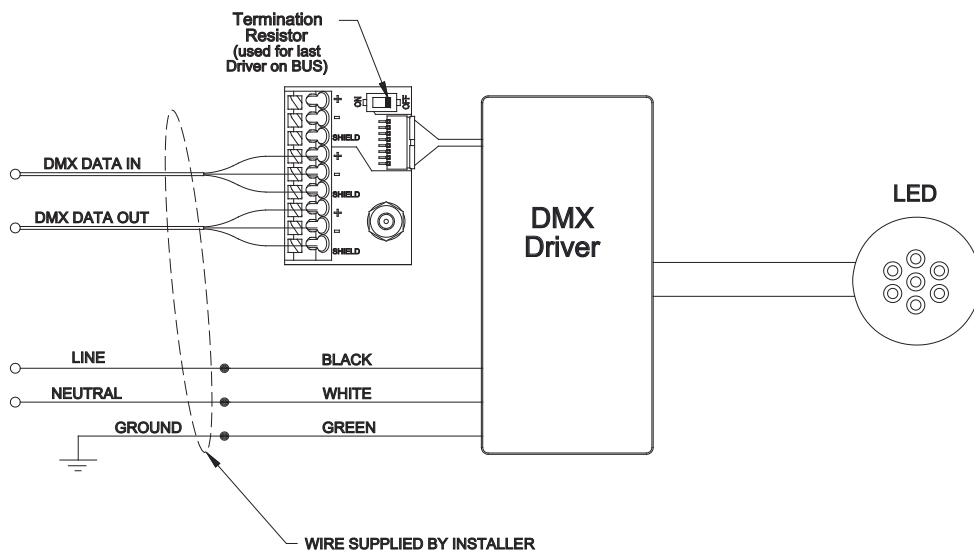
**D23X1: EldoLED DMX dimming with manual addressing, 8-bit (Dims down to 0%)**

**D23X2: EldoLED DMX dimming with manual addressing, 16-bit (Dims down to 0%)**

**RJ CABLE OPTION  
RJ45 JACKS**



**WR CABLE OPTION  
wire splice connection**



• **WR Cabling Option:** cables must be spliced inside the junction box for connection. The data cable used must meet the following requirements:

- type: shielded, 2-conductor twisted pair
- maximum capacitance between conductors: 30 pF/ft
- maximum capacitance between conductor and shield: 55 pF/ft
- maximum resistance: 0.02 ohms/ft
- normal impedance: 100-140 ohms
- conductive core: 24 AWG is recommended

If 3-wire data cables are preferred, we suggest a Belden 9841 or equivalent cable which meets the specifications for EIA RS-485 applications. Do not use standard microphone cables: they cannot transmit DMX512 data reliably over long distances.



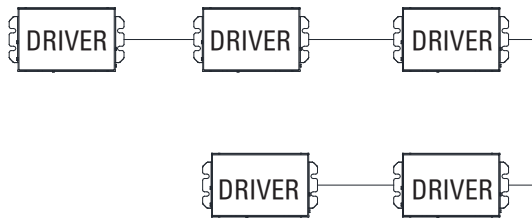
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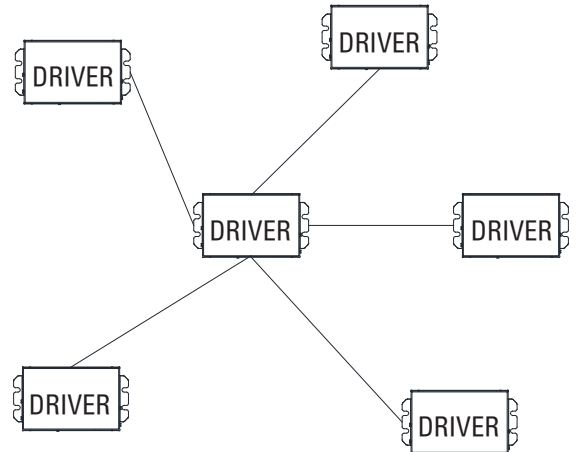
# DIMMING DRIVER COMPATIBILITY SELECTION GUIDE D23X1 AND D23X2

## DMX MUST BE DAISY CHAINED IN SINGLE LINE

**CORRECT !**



**INCORRECT !**



**NOTES:**

1. DMX signal cable must NOT be run in same conduit as high voltage AC power lines.
2. Fixtures must be daisy chained in one serial line using Data in and Data out
3. Maximum of 32 DMX devices on single DMX bus
4. Maximum of 1600' serial communication link distance
5. To avoid signal loss, DMX signal terminator should be used on last Fixture in line. This is provided through a dip-switch on the DMX512 interface board.