

DATE

PROJECT

TYPE

# R2RMWD | 2" Warm Dimming LED Downlight: New Construction and Remodel Housing

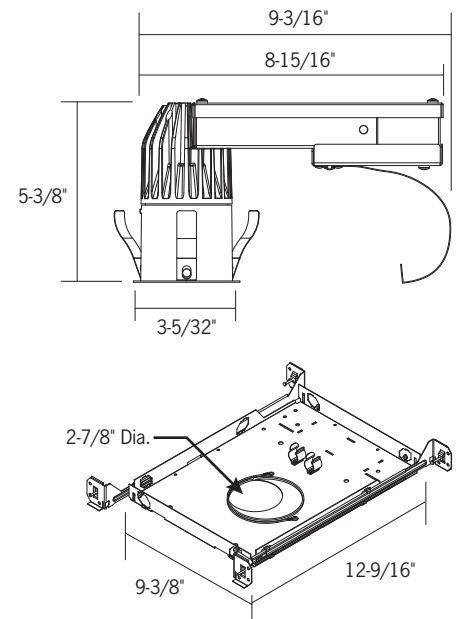
WATTAGE	13W
LUMEN OUTPUT <sup>1</sup>	800Lm
COLOR TEMPERATURE	3000K – 1800K
CRI	90
BEAM SPREAD	17° Spot/28° Medium/38° Flood 63° Wide Flood/Wall Wash
SYSTEM RATING	50,000 Hours @ 70% Lumen Maintenance
DRIVER INPUT WATTAGE	13W
DRIVER INPUT CURRENT (A) 120/277	.10/.04
DRIVER INPUT VOLTAGE Dimming (Triac, ELV, 0-10V) Lutron EcoSystem® Dimming	90-305V AC, 50/60Hz 120-277V AC, 50/60Hz
DRIVER Power Factor THD	> 0.90 < 20%
LISTING	cCSAus Certified using U.S. (UL) and Canadian (CSA) Standards The R2RMWD1 Housing using Triac, ELV, 0-10V or Lutron EcoSystem® Dimming with a Medium or Flood beam is ENERGY STAR® Certified The standard Wall Wash (WW) housing/trim combination is suitable for damp locations; all other options are suitable for wet locations Conforms to Washington State Energy Code for low air infiltration; tested in accordance with ASTM E283 CP Housings are Chicago Plenum CCEA listed Assembled in the USA
WARRANTY	Five (5) year replacement after date of purchase



1. Lumen values are approximate, see photometric test results



Ceiling Opening: 2-7/8"  
Ceiling Thickness: 1/2" - 1"



Optional Mounting Frame: NCF1

For Ordering Information, see page 2

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## Ordering Information

Example Order: R2RMWD1MVD4M-CP

Housing	LED Series	Electrical/Dimming	Beam Distribution	Options
R2RM - Non-IC, StopAire Remodel Housing	WD1 - 13W/1000Lm 90 CRI	<b>MVD<sup>1</sup></b> - 120/277V Triac, ELV and 0-10V Dimming <b>MVD4</b> - Lutron Hi-Lume 1% EcoSystem LED Driver with Soft-on, Fade-to-Black	<b>S</b> - 17° Flood <b>M</b> - 28° Medium <b>F</b> - 38° Flood <b>WF</b> - 63° Wide Flood <b>WW</b> - Wall Wash	<b>CP</b> - Chicago Plenum

1. Triac and ELV Dimming for 120V only

### Replacement Optics and Accessories

*Standard Hanger Bars Supplied with Housing*

- 2INOPTIC-S-RA2** - Spot Beam Replacement Optic
- 2INOPTIC-M** - Medium Beam Replacement Optic
- 2INOPTIC-F** - Flood Beam Replacement Optic
- 2INOPTIC-WF** - Wide Flood Beam Replacement Optic
- NCF1** - New Construction Mounting Frame
- RL-KIT** - Commercial Mounting Brackets (When Used with NCF1)
- HB-24** - 27" Flat Hanger Bars for RL-KIT
- HBC-24** - 25" C-Channel Hanger Bars for RL-KIT in Grid Ceiling Construction
- HB-30** - T-Bar Hanger Set (When Used with NCF1)

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# R2RMWD | 2" Warm Dimming LED Downlight: New Construction and Remodel Housing

## Trims

**Note:** R2AWD and R2RMWD Series trims are NOT compatible with each other.



**CST2322L-BLK**

Matte Black Painted Reflector



**CST2322L-WHT**

Matte White Painted Reflector



**CST2322L-CLR\***

Anodized Clear Reflector



**CST2322L-PL\***

Anodized Platinum Reflector



**CST2322LDF-SL\***

Satin Silver Painted Reflector



**CST2322LDF-WHT**

Matte White Painted Reflector



**CST2322L-PLWHE**

Anodized Platinum Wheat Reflector

### **CST2322L Series** Specification Grade Reflector Trim

OD: 3-1/2"; ID: 2-1/2"

Trim is wet location certified without the need for lensing. Accepts one (1) FA-16 60MM 2-3/8" Dia. Black Honeycomb Louver or (1) LF16 60MM 2-3/8" Dia. Tempered Glass Lens.

\*Available with White Painted Flange, add -WPF to part number

### **CST2322LDF Series** ISOWET Dead Front Reflector Trim

OD: 3-1/2"; ID: 2-1/2"

Isolated, wet location approved thermoplastic reflector with clear glass lens. Lens is deeply regressed inside top of reflector. Cannot be used with additional lens or louver.

\*Available with White Painted Flange, add -WPF to part number



**CTR2323L-BLK**

Matte Black Painted Wall Wash Reflector



**CTR2323L-CLR\***

Anodized Clear Wall Wash Reflector



**CTR2323L-PL\***

Anodized Platinum Wall Wash Reflector



**CTR2323L-WHT**

Matte White Painted Wall Wash Reflector

### **CTR2323L Series** Wall Wash Reflector

OD: 3-1/2"; ID: 2-5/16"

Angled TIR optic enables precise light control. Cannot be used with lenses or louvers.

\*Available with White Painted Flange, add -WPF to part number

### 2-3/8" Dia. Lenses/Louvers

**FA-16 60MM** - Honeycomb Louver

**LF16-\*\* 60MM** - 2-3/8" Diameter Lenses

#### \*\*Color/Pattern Legend

-A (Amber), -B (Blue), -CL (Clear), -DPE (Dichroic Peach), -G (Green), -LB (Light Blue),  
-R (Red), -RO (Rose), -Y (Yellow), -73 (Spread Lens), -LS (Linear Spread Lens),  
-SL (Soft Light), -SOL (Solite), -UV (Optivex UV Filter)

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## Trims

**Note:** R2AWD and R2RMWD Series trims are NOT compatible with each other.



**CST2322LSQ-CLR-(B,P)**  
Clear Specular Reflector  
Black or White Square Trim Plate



**CST2322LSQ-PL-(B,P)**  
Platinum Reflector  
Black or White Square Trim Plate



**CTR2323LSQ-CLR-(B,P)**  
Clear Wall Wash Trim  
Black or White Square Trim Plate



**CTR2323LSQ-PL-(B,P)**  
Platinum Wall Wash Trim  
Black or White Square Trim Plate



**CST2322LSQ-BLK-(B,P)**  
Black Reflector  
Black or White Square Trim Plate



**CST2322LSQ-WHT-P**  
White Reflector  
White Square Trim Plate



**CTR2323LSQ-BLK-(B,P)**  
Black Wall Wash Trim  
Black or White Square Trim Plate



**CTR2323LSQ-WHT-P**  
White Wall Wash Trim  
White Square Trim Plate

**CST2322LSQ Series**  
Specification Grade Reflector with Square Trim Plate  
OD: 3-1/2" SQ.; ID 2-1/2"

Trim is wet location certified without the need for lensing. Accepts one (1) FA-16 60MM 2-3/8" Dia. Black Honeycomb Louver or (1) LF16 60MM 2-3/8" Dia. Tempered Glass Lens.

**CTR2323LSQ Series**  
Wall Wash Trim with Square Trim Plate  
OD: 3-1/2" Sq.; ID 2-5/16"

Angled TIR optic enables precise light control. Cannot be used with lenses or louvers. Suitable for wet locations.

### 2-3/8" Dia. Lenses/Louver

- FA-16 60MM** - Honeycomb Louver
- LF16-\*\* 60MM** - 2-3/8" Diameter Lenses

#### \*\*Color/Pattern Legend

- A (Amber), -B (Blue), -CL (Clear), -DPE (Dichroic Peach), -G (Green), -LB (Light Blue), -R (Red), -RO (Rose), -Y (Yellow), -73 (Spread Lens), -LS (Linear Spread Lens), -SL (Soft Light), -SOL (Solite), -UV (Optivex UV Filter)

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## Product Details

### Features

- Housing requires minimum 3" clearance around driver kit from insulation material; thermal protection provided in case of improper insulation use
- Die-cast aluminum collar and heat sink, driver compartment and junction box made from 16-gauge steel. Housing has a black painted finish.
- LED Drivers are fully accessible from below the ceiling
- Three spring steel friction springs provide secure support in ceiling thicknesses from 1/2" - 1". NOTE: Certain regions require the use of a housing mounting frame in conjunction with the R2RMWD housing. The NCF1 new construction mounting frame should be specified when required (ordered separately).
- Minimum plenum clearance required to install housing in ceiling is 6"
- Pre-wired junction box with a convenient screwdriver pry-out. (1) 1/2" Pryout. A duplex electrical connector is provided to simplify daisy-chain wiring. Output over voltage, over-current and short circuit protection.
- Many trim options available to complement any design style. See ordering information for details. Note: R2A series and R2RM series trims are not compatible with each other.

### Performance Summary

- CCT Range from 3000K to 1800K, delivering up to 1000 lumens (3000K at 100%, 1800K at ≤5%)
- Light engine consists of a high output multi-chip LED array arranged into a single LED package, enabling precise optical control without requiring lensing to diffuse multiple LED sources
- Precision TIR Optics produce smooth spot, medium, flood and wide flood beam distributions. Optics are interchangeable and can be field replaced.
- The Wall Wash housing/trim combination utilizes a unique angled TIR optic mounted to the trim to create a smooth, uniform beam distribution. **Wall Wash housing is dedicated for use only with Wall Wash trim**; there is no interchangeability with other housings or optics.
- Excellent fixture to fixture color consistency within a 2-step MacAdam Ellipse tolerance
- Driver with Class 2 output, RoHS Compliant
- All R2RM adjustable downlights are available for non-dimming and dimming applications. For a list of compatible dimmers, refer to the Dimming Specifications sheet.
- cCSAus Certified using U.S. (UL) and Canadian (CSA) Standards
- R2RMWD1 Housing using Triac, ELV, 0-10V or Lutron EcoSystem® Dimming with a Medium or Flood beam is ENERGY STAR® Certified:  
R2RMWD1MVDM  
R2RMWD1MVDF  
R2RMWD1MVD4M  
R2RMWD1MVD4F
- The standard Wall Wash (WW) option is suitable for damp locations; all other options are suitable for wet locations
- Conforms to Washington State Energy Code for low air infiltration; tested in accordance with ASTM E283
- CP Housings are Chicago Plenum CCEA listed
- Suitable for damp locations
- Assembled in the USA

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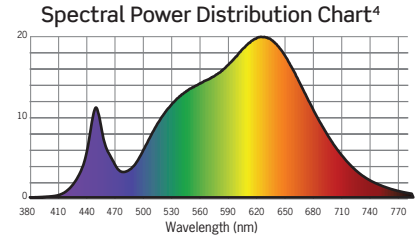
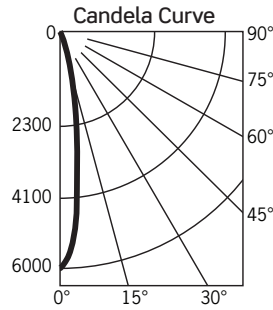
# R2RMWD | 2" Warm Dimming LED Downlight: New Construction and Remodel Housing

## Photometrics

### R2RMWD1MVDS/CST2322L-CLR

Fixture Delivered Lumens: 725.9  
 Total Watts@120V: 13.5  
 Lumens Per Watt: 53.8  
 Center Beam Candle Power: 5929  
 Beam Distribution: 17°  
 Spacing Criterion: 0.31  
 Color Rendering Index (CRI)<sup>1</sup>: 91  
 Color Temperature (CCT)<sup>2</sup>: 2985K  
 Designed for 50,000 Hour Lamp Life<sup>3</sup>  
 LM-63 Test No. G20081011  
 LM-79 Test No. S20081102

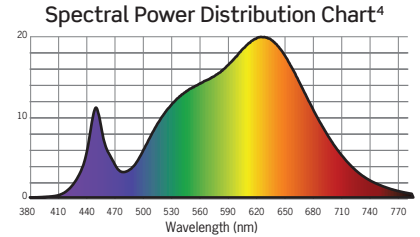
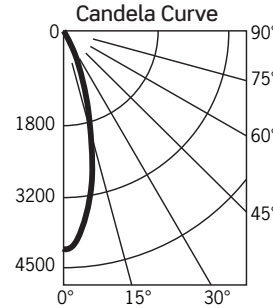
Intensity Distribution		
DISTANCE (FT.)	FOOTCANDLES (FC)	BEAM DIAMETER (FT.)
6'	164.7	1.8
8'	92.6	2.4
10'	59.3	3.1
12'	41.2	3.7
14'	30.3	4.3
16'	23.2	4.9



### R2RMWD1MVDM/CST2322L-CLR

Fixture Delivered Lumens: 1026  
 Total Watts@120V: 13.5  
 Lumens Per Watt: 76  
 Center Beam Candle Power: 4140  
 Beam Distribution: 28°  
 Spacing Criterion: 0.46  
 Color Rendering Index (CRI)<sup>1</sup>: 91  
 Color Temperature (CCT)<sup>2</sup>: 2985K  
 Designed for 50,000 Hour Lamp Life<sup>3</sup>  
 LM-63 Test No. G20081006  
 LM-79 Test No. S20081102

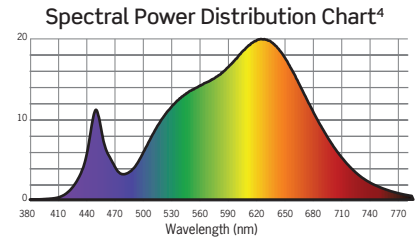
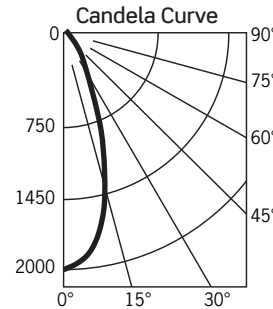
Intensity Distribution		
DISTANCE (FT.)	FOOTCANDLES (FC)	BEAM DIAMETER (FT.)
6'	115.0	3.0
8'	64.7	4.0
10'	41.4	5.0
12'	28.8	6.0
14'	21.1	7.0
16'	16.2	8.0



### R2RMWD1MVDF/CST2322L-CLR

Fixture Delivered Lumens: 939.7  
 Total Watts@120V: 13.5  
 Lumens Per Watt: 69.6  
 Center Beam Candle Power: 1990  
 Beam Distribution: 38°  
 Spacing Criterion: 0.62  
 Color Rendering Index (CRI)<sup>1</sup>: 91  
 Color Temperature (CCT)<sup>2</sup>: 2985K  
 Designed for 50,000 Hour Lamp Life<sup>3</sup>  
 LM-63 Test No. G20081002  
 LM-79 Test No. S20081102

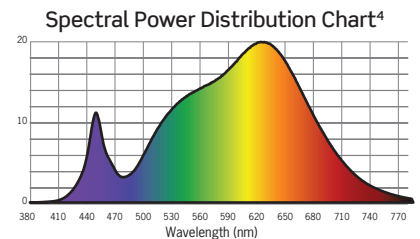
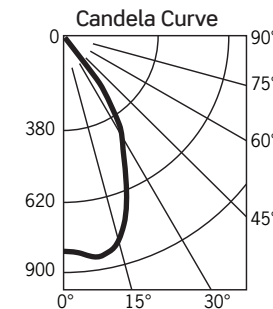
Intensity Distribution		
DISTANCE (FT.)	FOOTCANDLES (FC)	BEAM DIAMETER (FT.)
6'	55.3	4.2
8'	31.1	5.6
10'	19.9	6.9
12'	13.8	8.3
14'	10.2	9.7
16'	7.8	11.1



### R2RMWD1MVDWF/CST2322L-CLR

Fixture Delivered Lumens: 787  
 Total Watts@120V: 13.5  
 Lumens Per Watt: 58.3  
 Center Beam Candle Power: 816  
 Beam Distribution: 63°  
 Spacing Criterion: 0.94  
 Color Rendering Index (CRI)<sup>1</sup>: 91  
 Color Temperature (CCT)<sup>2</sup>: 2985K  
 Designed for 50,000 Hour Lamp Life<sup>3</sup>  
 LM-63 Test No. G20081016  
 LM-79 Test No. S20081102

Intensity Distribution		
DISTANCE (FT.)	FOOTCANDLES (FC)	BEAM DIAMETER (FT.)
6'	22.7	7.3
8'	12.7	9.7
10'	8.2	12.1
12'	5.7	14.5
14'	4.2	16.9
16'	3.2	19.3



1. Accuracy of rendering colors 2. Color appearance of light source 3. Dependent on surrounding temperatures 4. Colors present within the light source