

DATE

PROJECT

TYPE

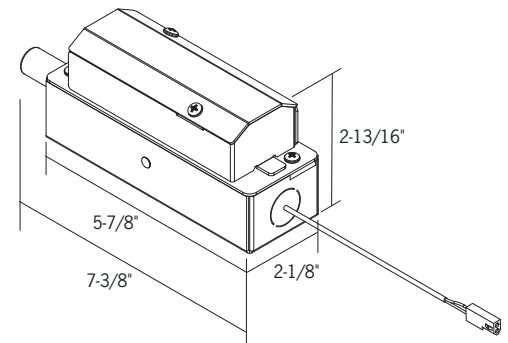
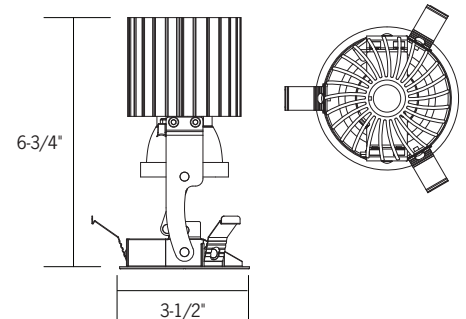
R2ARMWD | 2" Warm Dimming LED Adjustable Recessed Downlight: Remodel

WATTAGE	13W
LUMEN OUTPUT ¹	800Lm
COLOR TEMPERATURE	3000K – 1800K
CRI	90
BEAM SPREAD	16° Spot/24° Medium/31° Flood
SYSTEM RATING	50,000 Hours @ 70% Lumen Maintenance
DRIVER INPUT WATTAGE	13W
DRIVER INPUT CURRENT (A) 120/277	.10/.04
DRIVER INPUT VOLTAGE	120V AC, 50/60Hz
Standard Driver	277V AC, 50/60Hz
Lutron EcoSystem® Driver	120V AC, 50/60Hz
	277V AC, 50/60Hz
DRIVER Power Factor	> 0.90
THD	< 20%
LISTING	cCSAus Certified using U.S. (UL) and Canadian (CSA) Standards Suitable for damp locations Assembled in the USA
WARRANTY	Five (5) Year Replacement After Date of Purchase

1. Lumen values are approximate, see page 3 for photometric test results



Ceiling Opening: 3-1/4"
Ceiling Thickness: 1/2" - 1-1/2"



DATE

PROJECT

TYPE

R2ARMWD | 2" Warm Dimming LED Adjustable Recessed Downlight: Remodel

Ordering Information

Driver Kit + Module + Trim = Complete System

Example Order Driver Kit:
 Module:
 Trim:

Driver Kit

Driver Kit	LED Series	Electrical/Dimming
R2ARM - Remodel Housing	WD1 - 13W/800Lm	12D - 120V Triac, ELV and 0-10V Dimming 27D - 277V 0-10V Dimming ONLY 12D4 - 120V Lutron Hi-lume 1% EcoSystem LED Driver with Soft-on, Fade-to-Black 27D4 - 277V Lutron Hi-lume 1% EcoSystem LED Driver with Soft-on, Fade-to-Black

LED Module

LED Module	Color Temp Range/CRI	Beam Distribution	Replacement Optics and Accessories
UMOD - 2" Universal Module	WD1 - 3000K-1800K 90 CRI	S - 16° Spot M - 24° Medium F - 31° Flood	2INOPTIC-S - Spot Replacement Beam Optic 2INOPTIC-M - Medium Replacement Beam Optic 2INOPTIC-F - Flood Replacement Beam Optic FA-47 - Black Accessory Holder Clip; Accepts Two (2) Media R2ASNRI-B - Dual Ring Snoot 60MM OD X 1" Long, Black, FA-47 Required FA-16 60MM - Honeycomb Louver, FA-47 Required LF16-** 60MM - 2-3/8" Diameter Lenses, FA-47 Required

****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)

R2ARMWD | 2" Warm Dimming LED Adjustable Recessed Downlight: Remodel

Trims

Note: R2A and R2RM Series trims are NOT compatible with each other.



C2302-CLR*

Clear Full Cone Reflector



C2302-PL*

Platinum Full Cone Reflector



C2304WL-CLR*

Clear Angle Cut Reflector



C2304WL-PL*

Platinum Angle Cut Reflector



C2302-BLK

Black Full Cone Reflector



C2302-WHT

White Full Cone Reflector



C2304WL-BLK

Black Angle Cut Reflector



C2304WL-WHT

White Angle Cut Reflector

C2302 Series

Full Cone Reflector

OD: 3-5/8"; ID: 2-5/8"

Specification Grade Full Cone Reflector Trim. Wet location certified when used with an LF16 60MM lens. 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



C2304WL Series

Wet Location Angle Cut Reflector

OD: 3-5/8"; ID: 2-5/8"

Specification Grade Angle Cut Reflector Trim. Clear glass lens provides wet location certification.

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



C2304-CLR*

Clear Angle Cut Reflector



C2304-PL*

Platinum Angle Cut Reflector



C2304-BLK

Black Angle Cut Reflector



C2304-WHT

White Angle Cut Reflector



C2305-BLK

Black Pinhole Trim



C2305-WHT

White Pinhole Trim

C2304 Series

Angle Cut Reflector

OD: 3-5/8"; ID: 2-5/8"

Specification Grade Angle Cut Reflector Trim.

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

C2305SQ Series

Pinhole Trim

Aperture: 1-1/2" Dia.; O.D.: 3-5/8"

R2ARMWD | 2" Warm Dimming LED Adjustable Recessed Downlight: Remodel

Trims

Note: R2A and R2RM Series trims are NOT compatible with each other.



C2302SQ-CLR-(B,P)
Clear Full Cone Reflector
Black or White Square Trim Plate



C2302SQ-PL-(B,P)
Platinum Full Cone Reflector
Black or White Square Trim Plate



C2304SQWL-CLR-(B,P)
Clear Angle Cut Reflector
Black or White Square Trim Plate



C2304SQWL-PL-(B,P)
Platinum Angle Cut Reflector
Black or White Square Trim Plate



C2302SQ-BLK-(B,P)
Black Full Cone Reflector
Black or White Square Trim Plate



C2302SQ-WHT-(B,P)
White Full Cone Reflector
Black or White Square Trim Plate



C2304SQWL-BLK-(B,P)
Black Angle Cut Reflector
Black or White Square Trim Plate



C2304SQWL-WHT-(B,P)
White Angle Cut Reflector
Black or White Square Trim Plate

C2302SQ Series

Full Cone Reflector with Square Trim Plate

SQ: 3-5/8"; ID: 2-5/8"

Specification Grade Full Cone Reflector Trim with Square Trim Plate. Wet location certified when used with an LF16 60MM 2-3/8" dia. glass lens. Accepts one (1) FA-16 60MM 2-3/8" dia. Black Honeycomb Louver or (1) LF16 60MM 2-3/8" dia. Tempered Glass Lens.



C2304SQWL Series

Wet Location Angle Cut Reflector with Square Trim Plate

SQ: 3-5/8"; ID: 2-5/8"

Specification Grade Angle Cut Reflector Trim with Square Trim Plate. Clear glass lens provides wet location certification.



C2304SQ-CLR-(B,P)
Clear Angle Cut Reflector
Black or White Square Trim Plate



C2304SQ-PL-(B,P)
Platinum Angle Cut Reflector
Black or White Square Trim Plate



C2304SQ-BLK-(B,P)
Black Angle Cut Reflector
Black or White Square Trim Plate



C2304SQ-WHT-(B,P)
White Angle Cut Reflector
Black or White Square Trim Plate



C2305SQ-BLK
Black Pinhole Trim



C2305SQ-WHT
White Pinhole Trim

C2304SQ Series

Angle Cut Reflector with Square Trim Plate

SQ: 3-5/8"; ID: 2-5/8"

Specification Grade Angle Cut Reflector Trim with Square Trim Plate.

C2305SQ Series

Pinhole Trim with Square Trim Plate

Aperture: 1-1/2" Dia.; SQ: 3-5/8"

R2ARMWD | 2" Warm Dimming LED Adjustable Recessed Downlight: Remodel

Features

- Housing requires minimum 3" clearance around driver kit from insulation material; thermal protection provided in case of improper insulation use
- 16-Gauge galvanized steel driver kit
- Driver kit housing utilizes a spring latch tether to provide secondary support of the Universal LED Module; three spring steel supports secure module into ceiling
- Quick-connect design enables easy installation and removal of Universal LED Module
- Output over voltage, over-current and short circuit protection
- Pre-wired junction box with (1) 1/2" concentric knockout; a duplex electrical connector is provided to simplify daisy-chain wiring
- Many trim options available to complement any design style. See attached trim spec sheet for information and details. Note: R2A series and R2RM series trims are not compatible with each other
- Matte black painted mechanism is constructed of 16-gauge sheet metal, an aluminum die-cast heat-sink, an acrylic TIR optic, and a thermoplastic optic holder.

Performance Summary

- CCT Range from 3000K to 1800K, delivering up to 800 lumens (3000K at 100%, 1800K at ≤5%)
- High output multi-chip LED array arranged into a single LED package, enabling precise optical control
- Excellent fixture to fixture color consistency within a 2-step MacAdam Ellipse tolerance
- Precision TIR Optics produce smooth spot, medium and flood beam distributions; optics are interchangeable and can be field replaced
- Module features adjustability to 45° when installed in a 1/2" to 1" thick ceiling, to 30° in 1-1/2" ceiling. Using the optional FA-47 accessory holder clip with two lenses/louvers, module adjusts to 45° in 3/4" thick ceiling, with snoot to 45° in 5/8" thick ceiling.
- Mechanism adjustment features white graduation marks every 15° for consistent aiming, as well as a set screw to lock tilt adjustment in place.
- Driver with Class 2 output, RoHS Compliant
- All R2A 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, suitable for damp locations.
- Conforms to Washington State Energy Code (WSEC) for low air infiltration; tested in accordance with ASTM E283 (2.0 CFM or less)
- CP Housings are Chicago Plenum CCEA listed
- Assembled in the USA

Warranty

- Complete fixture is covered by ConTech's full five (5) year replacement guarantee after date of purchase.

DATE

PROJECT

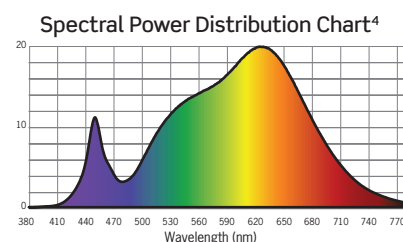
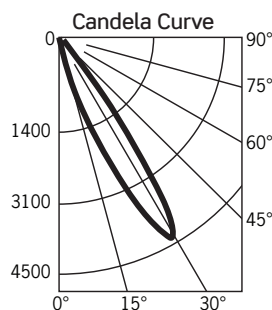
TYPE

R2ARMWD | 2" Warm Dimming LED Adjustable Recessed Downlight: Remodel

Photometrics

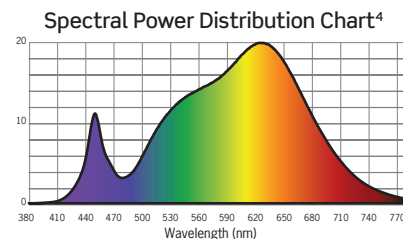
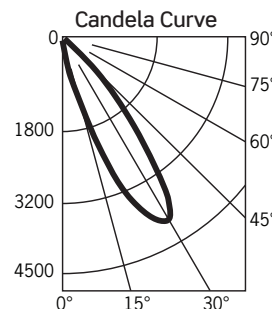
R2ANCWD1MVD/UMODWD1S/C2304-CLR

Fixture Aimed at 30° from Nadir
 Fixture Delivered Lumens: 419
 Total Watts@120V: 13.5
 Lumens Per Watt: 31
 Center Beam Candle Power: 165
 Beam Distribution: 16°
 Color Rendering Index (CRI)¹: 91
 Color Temperature (CCT)²: 2985K
 Designed for 50,000 Hour Lamp Life³
 LM-63 Test No. G20081209
 LM-79 Test No. S20081102



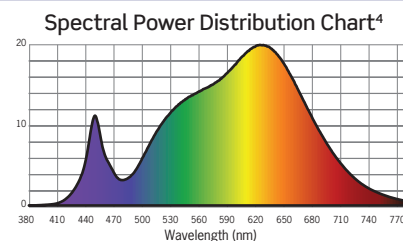
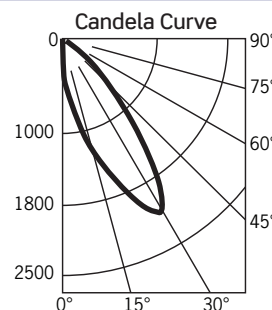
R2ANCWD1MVD/UMODWD1M/C2304-CLR

Fixture Aimed at 30° from Nadir
 Fixture Delivered Lumens: 758.4
 Total Watts@120V: 13.5
 Lumens Per Watt: 56.2
 Center Beam Candle Power: 164
 Beam Distribution: 24°
 Color Rendering Index (CRI)¹: 91
 Color Temperature (CCT)²: 2985K
 Designed for 50,000 Hour Lamp Life³
 LM-63 Test No. G20081205
 LM-79 Test No. S20081102



R2ANCWD1MVD/UMODWD1F/C2304-CLR

Fixture Aimed at 30° from Nadir
 Fixture Delivered Lumens: 676.6
 Total Watts@120V: 13.5
 Lumens Per Watt: 50.1
 Center Beam Candle Power: 312
 Beam Distribution: 31°
 Color Rendering Index (CRI)¹: 91
 Color Temperature (CCT)²: 2985K
 Designed for 50,000 Hour Lamp Life³
 LM-63 Test No. G20081201
 LM-79 Test No. S20081102

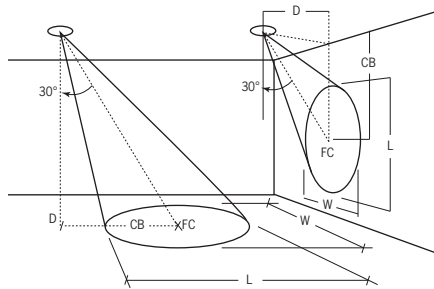


1. Accuracy of rendering colors 2. Color appearance of light source 3. Dependent on surrounding temperatures 4. Colors present within the light source

R2ARMWD | 2" Warm Dimming LED Adjustable Recessed Downlight: Remodel

Photometrics

APPLICATION DATA NOTES BASED UPON R2ANCWD1MVD/UMODWD1(S,M,F)/C2304-CLR:



- D - Offset distance between the luminaire to the illuminated plane in feet
- CB - Projected distance between the luminaire and the center point where the beam is aimed in feet
- FC - Horizontal or vertical illuminance at the center point where the beam is aimed in footcandles
- L - Beam length corresponding to the perimeter where the luminous intensity is 50% of center beam candlepower (CBCP) in feet
- W - beam width corresponding to the perimeter where the luminous intensity is 50% of center beam candlepower (CBCP) in feet

Luminaires aimed at 30° from Nadir, horizontal; 60° from Nadir, vertical

		ILLUMINANCE ON HORIZONTAL PLANE					ILLUMINANCE ON VERTICAL PLANE				
		D	CB	FC	L	W	D	CB	FC	L	W
SPOT	5	2.9	113	1.9	1.6		3	5.2	60	3.6	1.7
	7.5	4.3	50	2.8	2.4		4	6.9	34	4.8	2.2
	10	5.8	28	3.8	3.2		5	8.7	22	6	2.8
	12.5	7.2	18	4.7	4.1		6	10.4	15	7.2	3.4
MEDIUM	5	2.9	105	2.9	2.4		3	5.2	56	5.8	2.5
	7.5	4.3	47	4.3	3.7		4	6.9	32	7.8	3.4
	10	5.8	26	5.7	4.9		5	8.7	20	9.7	4.2
	12.5	7.2	17	7.1	6.1		6	10.4	14	11.7	5.1
FLOOD	5	2.9	55	3.7	3.1		3	5.2	29	8.2	3.2
	7.5	4.3	24	5.5	4.6		4	6.9	17	10.9	4.3
	10	5.8	14	7.3	6.2		5	8.7	11	13.7	5.4
	12.5	7.2	9	9.2	7.7		6	10.4	7	16.4	6.4

DIMMING SPECIFICATIONS | R2A, RN2A, R2AWD, RN2AWD, R2ASQ, RN2ASQ, R2ASQWD and RN2ASQWD Series

- Incandescent 120VAC dimmers adjust the light with “forward phase control,” where the dimmer “chops” the forward part of the AC wave to deliver less or more power to the light source. No neutral wire connection required.
- Electronic low voltage 120VAC dimmers adjust the light with “reverse phase control,” where the dimmer “chops” the back part of the AC wave to deliver less or more power to the light source. Neutral wire connection required.
- 0-10V DC low voltage dimmers operate using two low voltage dimming wires that are separate from the 120V or 277V AC power. The dimmer sends a variable output voltage to the fixture based upon the dimming level. 10V corresponds to undimmed operation, 5V to 50% and so on. Switching on/off is controlled with the line voltage power (120V or 277V AC) input to the dimmer and then dimming operation is controlled with the 0-10V DC low voltage wiring connection between the dimmer and the LED driver. The control signal runs on two low voltage control wires (color coded violet and gray).
- Lutron HiLume and EcoSystem drivers provide continuous dimming from 1%-100%. For a complete list of compatible dimmers and controls, please visit www.lutron.com
- Use DALI approved controls for dimming eldoLED MVD7 (1%-100%) and MVD9 (0.1%-100%) options.

Manufacturer	Product	Model	Light Output	Light Output	Light Output
			R2ANC*, R2ARM*, RN2ANC*, RN2ARM*, R2ANCWD*, R2ARMWD*, RN2ANCWD*, RN2ARMWD*, R2ASQNC*, R2ASQRM*, RN2ASQNC*, RN2ASQRM*, R2ASQNCWD*, R2ASQRMWD*, RN2ASQNCWD*, RN2ASQRMWD* Dimming Options: 12D, 27D, MVD	R2ANC, RN2ANC, R2ASQNC, R2ANCWD, RN2ANCWD, R2ASQNCWD, RN2ASQNC, RN2ASQNCWD eldoLED ECOdrive 0-10V Dimming Option: MVD6	R2ANC, RN2ANC, R2ASQNC, R2ASQNCWD, RN2ANCWD, R2ASQNCWD, RN2ASQNC, RN2ASQNCWD eldoLED SOLOdrive 0-10V Dimming Option: MVD8
Leviton	IllumaTech	IPI06-1LZ	1%-100%	NA	NA
Leviton	SureSlide	6631-2	1%-100%	NA	NA
Leviton	Vizia	VPE06	9%-100%	NA	NA
Leviton	Trimatron	6683-W	4%-100%	NA	NA
Leviton	Decora	6161	15%-100%	NA	NA
Leviton	SureSlide	6633-P	0%-100%	NA	NA
Leviton	IllumaTech	IPE04	6%-100%	NA	NA
Leviton	IllumaTech	IP710-DLX	NA	1%-100%	0.1%-100%
Cooper	Devine	DLC03P	1%-100%	NA	NA
Cooper	Skye	SLC03P	0%-100%	NA	NA
Cooper	Decorator	DAL06P	0%-100%	NA	NA
Pass & Seymour	Titan	CD4FB-W	NA	1%-100%	0.1%-100%
Synergy		ISD BC	NA	1%-100%	0.1%-100%
Watt Stopper	Miro Decorator	DCLV1	NA	1%-100%	0.1%-100%
Lutron	Ariadni	TGCL-153P	4%-100%	NA	NA
Lutron	Ariadni	TG-600P	11%-100%	NA	NA
Lutron	Diva	DVCL-153P	0%-100%	NA	NA
Lutron	Diva	DV600P	0%-100%	NA	NA
Lutron	Diva	DVELV303P	6%-100%	NA	NA
Lutron	Diva	DVTV	NA	1%-100%	0.1%-100%
Lutron	Faedra	FAELV500	12%-100%	NA	NA
Lutron	Lumea	LG600P	5%-100%	NA	NA
Lutron	Maestro	MAELV600	11%-100%	NA	NA
Lutron	Nova	NFTV	NA	1%-100%	0.1%-100%
Lutron	Nova T	NTFTV	NA	1%-100%	0.1%-100%
Lutron	Skylark	S-603PG	4%-96%	NA	NA
Lutron	Skylark	S600P	1%-100%	NA	NA
Lutron	Skylark	SELV300P	7%-100%	NA	NA
Lutron	Skylark	CT103P	9%-100%	NA	NA

*277V Triac dimming is not available

Notes

1. Testing was performed with a single fixture connected to dimmer.
2. Testing has been performed on these dimmers, but this does not imply any warranty of compatibility.
3. Dimming performance can be influenced by different loads, as well as variations in dimmer switches within the same model.
4. Dimmer maximum load rating with LED may differ from published traditional source dimmer ratings. Consult manufacturer for maximum dimmer information.
5. Consult factory for additional dimming information.