

# R2ASQRMWD | 2" Square Warm Dimming LED Adjustable Recessed Downlight: Remodel

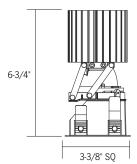
WATTAGE	13W
LUMEN OUTPUT <sup>1</sup>	700Lm
COLOR TEMPERATURE	3000K – 1800K
CRI	90
BEAM SPREAD	17° Spot/25° Medium/33° Flood
SYSTEM RATING	50,000 Hours @ 70% Lumen Maintenance
DRIVER INPUT WATTAGE	13W
DRIVER INPUT CURRENT (A) 120/277	.10/.04
DRIVER INPUT VOLTAGE Standard Driver Lutron EcoSystem® Driver	120V AC, 50/60Hz 277V AC, 50/60Hz 120V AC, 50/60Hz 277V AC, 50/60Hz
DRIVER Power Factor THD	> 0.90 < 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

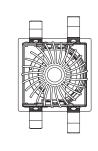


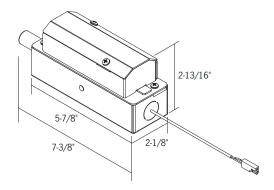


Ceiling Opening: 3-5/32" Ceiling Thickness: 1/2" - 1-1/2"











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# **Ordering Information**

Driver Kit + Module + Trim = Complete System

**Example Order** Driver Kit:

R2ASQRM112D3

Module:

UMODSQWD1S

Trim:

C2304SQ-CLR

# Housing/Driver Kit

Driver Kit	LED Series	Electrical/Dimming
R2ASQRM - Remodel Driver Kit	<b>WD1</b> - 13W/700Lm	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
UMODSQ - 2" Square	WD1 - 3000K-1800K	S - 17° Spot
Universal Module	90 CRI	M - 25° Medium
		F - 33° Flood

## **Replacement Optics and Accessories**

2INOPTIC-S - Spot Beam Replacement Optic 2INOPTIC-M - Medium Beam Replacement Optic 2INOPTIC-F - Flood Beam Replacemnt Optic

FA-47 - Black Accessory Holder Clip; Accepts Two (2) Media
R2ASNR1-B - Dual Ring Snoot 60MM OD X 1" Long, Black, FA-47 Required

FA-55 - Honeycomb Louver, FA-47 Required LF50 - 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)



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### **Trims**



C2322SO-BLK\*

Matte Black Painted Reflector



C2322SQ-WHT Matte White Painted Reflector

C2322SO-SL\*

Satin Silver Painted Reflector



C2304SQ-BLK\*

Black Angle Cut Reflector



C2304SQ-SL\*

Silver Angle Cut Reflector



C2304SQ-WHT

White Angle Cut Reflector

# C2322SQ Series

Reflector

Aperture: 2-5/8" SQ; Trim Frame: 3-5/8" SQ

Wet location certified when used with an LF50 lens. Accepts one (1) FA-55 2-1/8" Square Black Honeycomb Louver or (1) LF50 2-1/8" Square Tempered Glass Lens.

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

# C2304SQ Series

Angle Cut Reflector

Aperture: 2-5/8" SQ; Trim Frame: 3-5/8" SQ

Specification grade trim.

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



C2304SQWL-BLK\*

Black Wet Location Angle Cut Reflector



C2304SQWL-SL\*

Silver Wet Location Angle Cut Reflector



C2305SQ-BLK

Black Pinhole Trim



C2305SQ-WHT

White Pinhole Trim



# C2304SQWL-WHT

White Wet Location Angle Cut Reflector



# C2304SQWL Series

Wet Location Angle Cut Reflector

Aperture: 2-5/8" SQ; Trim Frame: 3-5/8" SQ

Specification grade trim; Clear glass lens provides wet location certification.

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



Pinhole Trim

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



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## **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
- LED Drivers are fully accessible from below the ceiling
- Pre-wired junction box with (1) 1/2" concentric knockout; 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.
- 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 700 lumens (3000K at 100%, 1800K at  $\leq$ 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 rotational adjustability of 30° per side (60° total)
- 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.
- Assembled in the USA

### Warranty

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



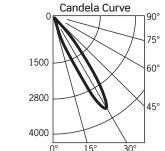
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# **Photometrics**

### R2ASQNCWD1MVD/UMODSQWD1S/C2304SQ-SL

Fixture Aimed at 30° from Nadir
Fixture Delivered Lumens: 400.5
Total Watts@120V: 13.5
Lumens Per Watt: 29.7
Center Beam Candle Power: 36
Beam Distribution: 17°
Color Rendering Index (CRI)¹: 91
Color Temperature (CCT)²: 2985K
Designed for 50,000 Hour Lamp Life³
LM-63 Test No. G20081411

LM-79 Test No. S20081102

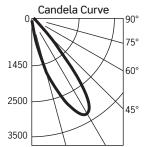




## R2ASQNCWD1MVD/UMODSQWD1M/C2304SQ-SL

Fixture Aimed at 30° from Nadir
Fixture Delivered Lumens: 699.8
Total Watts@120V: 13.5
Lumens Per Watt: 51.8
Center Beam Candle Power: 87
Beam Distribution: 25°
Color Rendering Index (CRI)¹: 91
Color Temperature (CCT)²: 2985K
Designed for 50,000 Hour Lamp Life³

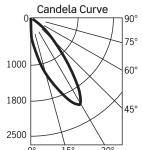
LM-63 Test No. G20081414 LM-79 Test No. S20081102

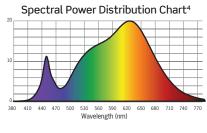




# R2ASQNCWD1MVD/UMODSQWD1F/C2304SQ-SL

Fixture Aimed at 30° from Nadir
Fixture Delivered Lumens: 660.3
Total Watts@120V: 13.5
Lumens Per Watt: 48.9
Center Beam Candle Power: 338
Beam Distribution: 33°
Color Rendering Index (CRI)¹: 91
Color Temperature (CCT)²: 2985K
Designed for 50,000 Hour Lamp Life³
LM-63 Test No. G20081408
LM-79 Test No. S20081102





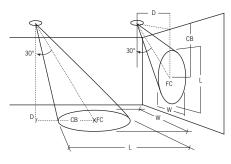
1. Accuracy of rendering colors 2. Color appearance of light source 3. Dependent on surrounding temperatures 4. Colors present within the light source



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# **Photometrics**

# APPLICATION DATA NOTES BASED UPON R2ASQNCWD1MVD/UMODSQWD1(S,M,F)/C2304SQ-SL:



- 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	СВ	FC	L	W		D	СВ	FC	L	W	Ī
_	5	2.9	93	2.0	1.7		3	5.2	50	3.8	1.8	Ī
SPOT	7.5	4.3	41	3.0	2.6		4	6.9	28	5.1	2.4	Ī
0,	10	5.8	23	4.0	3.5		5	8.7	18	6.4	3.0	Ī
	12.5	7.2	15	5.0	4.3		6	10.4	12	7.7	3.6	Ī
_	D	СВ	FC	L	W		D	СВ	FC	L	W	Ī
Σ	5	2.9	85	3.0	2.6		3	5.2	46	6.2	2.7	Ī
MEDIUM	7.5	4.3	38	4.5	3.8		4	6.9	26	8.3	3.5	Ī
S	10	5.8	21	6.0	5.1		5	8.7	16	10.4	4.4	Ī
	12.5	7.2	14	7.5	6.4		6	10.4	11	12.5	5.3	
	D	СВ	FC	L	W		D	СВ	FC	L	W	Ī
8	5	2.9	43	4.1	3.4		3	5.2	23	9.6	3.6	Ī
FLOOD	7.5	4.3	19	6.1	5.1		4	6.9	13	12.9	4.7	
ш.	10	5.8	11	8.1	6.8		5	8.7	8	16.1	5.9	ĺ
	12.5	7.2	7	10.2	8.6		6	10.4	6	19.3	7.1	Ĺ
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# **DIMMING SPECIFICATIONS** | R2A, RN2A, R2AWD, RN2AWD, R2ASQ, RN2ASQ, R2ASOWD and RN2ASOWD 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.

			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
Manufacturer	Product	Model	Light Output	Light Output	Light Output
Leviton	IllumaTech	IPI06-1LZ	1%-100%	NA NA	NA NA
Leviton	SureSlide	6631-2	1%-100%	NA	NA
Leviton	Vizia	VPE06	9%-100%	NA	NA
Leviton	Trimatron	6683-IW	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.