

DATE

PROJECT

TYPE

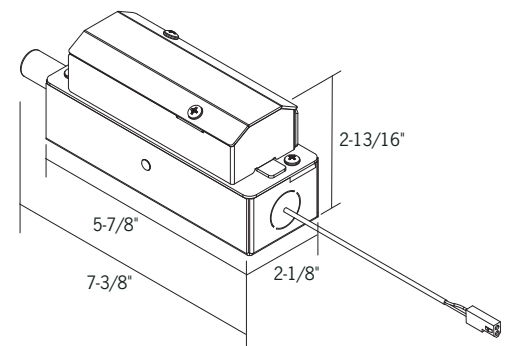
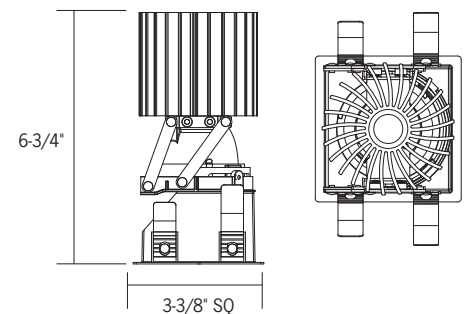
R2ASQRM | 2" Square LED Adjustable Recessed Downlight: Remodel

WATTAGE	8W	10W	14W	21W
LUMEN OUTPUT ¹	700Lm	1100Lm	1200Lm	1700Lm
BEAM SPREAD	14° Spot/29° Medium/37° Flood			
COLOR TEMPERATURE	2700K, 3000K, 3500K, 4000K, 3000K Crisp White (90+ CRI)			
CRI	83 (80min) / 90+			
SYSTEM RATING	50,000 Hours @ 70% Lumen Maintenance			
DRIVER INPUT WATTAGE	8W	10W	14W	21W
DRIVER INPUT CURRENT (A) 120/277	.07/.03	.08/.04	.12/.05	.18/.08
DRIVER INPUT VOLTAGE Standard Driver	120V AC, 50/60Hz 277V AC, 50/60Hz			
Lutron EcoSystem® Driver	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			

1. Lumen values are approximate, see page 5 for photometric test results



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



DATE

PROJECT

TYPE

R2ASQRM | 2" Square LED Adjustable Recessed Downlight: Remodel

Ordering Information

Driver Kit + Module + Trim = Complete System

Example Order Driver Kit:	R2ASQRM112D
Module:	UMODSQ30KS
Trim:	C2302SQ-CLR

Driver Kit

Driver Kit	LED Series	Electrical/Dimming
R2ASQRM - Remodel Housing	05 - 8W/700lm 1 - 10W/1100lm 2 - 14W/1200lm 3 - 21W/1700lm	12D - 120V Triac, ELV and 0-10V Dimming 27D - 277V Triac, ELV and 0-10V Dimming 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/CRI	Beam Distribution	Replacement Optics and Accessories
UMODSQ - 2" Square Universal Module	83 (80min) CRI 27K - 2700K 30K - 3000K 35K - 3500K 40K - 4000K 90 CRI 27KC - 2700K 30KC - 3000K 35KC - 3500K 40KC - 4000K 90+ Crisp White 30KW - 3000K	S - 14° Spot M - 29° Medium F - 37° Flood	2INOPTIC-S - Spot Beam Replacement Optic 2INOPTIC-M - Medium Beam Replacement Optic 2INOPTIC-F - Flood Beam Replacement 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-55 - Honeycomb Louver, FA-47 Required LF50 - 2-1/8 Inch Square 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)

R2ASQRM | 2" Square LED Adjustable Recessed Downlight: Remodel

Trims



C2322SQ-BLK*

Matte Black Painted Reflector



C2322SQ-SL*

Satin Silver Painted Reflector



C2304SQ-BLK*

Black Angle Cut Reflector



C2304SQ-SL*

Silver Angle Cut Reflector



C2322SQ-WHT

Matte White Painted 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 Painted 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 Painted Flange, add -WPF to part number



C2305SQ-BLK

Black Pinhole Trim



C2305SQ-WHT

White Pinhole Trim

C2305SQ Series Pinhole Trim

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



C2304SQWL-BLK*

Black Wet Location Angle Cut Reflector



C2304SQWL-SL*

Silver Wet Location Angle Cut Reflector



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 Painted Flange, add -WPF to part number

R2ASQRM | 2" Square 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; four 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. 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

- 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
- 3000K Crisp White LED option delivers 90+ color rendering with additional violet wavelengths that enhance white visibility
- Precision TIR Optics produce 14°, 29°, and 37° beam distributions; optics are interchangeable and can be field replaced
- Module features rotational adjustability of 30° per side (60° total); adjusts 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 R2ASQ 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

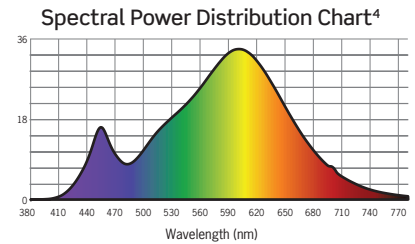
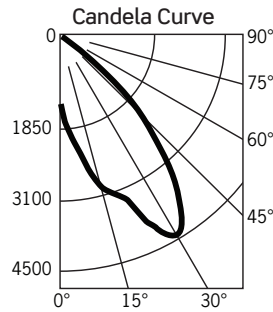
- Complete fixture is covered by ConTech's full five (5) year replacement guarantee after date of purchase.

R2ASQRM | 2" Square LED Adjustable Recessed Downlight: Remodel

Photometrics

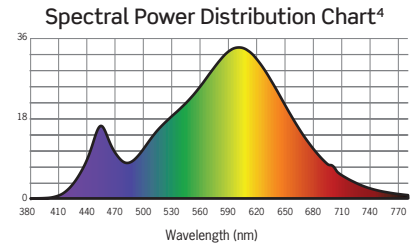
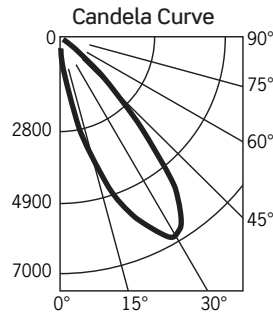
R2ASQRM3MVD/UMODSQ30KF/C2304SQ-SL

Fixture Aimed at 30° from Nadir
 Fixture Delivered Lumens: 1709
 Total Watts@120V: 20.6
 Lumens Per Watt: 82.9
 Center Beam Candle Power: 1190
 Beam Distribution: 37°
 Spacing Criterion: 1.10
 Color Rendering Index (CRI)¹: 81
 Color Temperature (CCT)²: 3061K
 Designed for 50,000 Hour Lamp Life³
 LM-63 Test No. G16110706
 LM-79 Test No. 84022



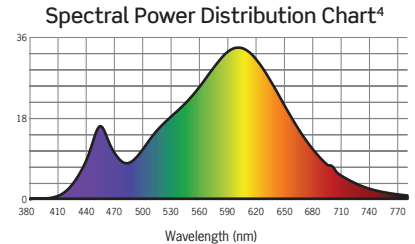
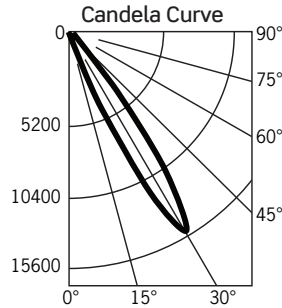
R2ASQRM3MVD/UMODSQ30KM/C2304SQ-SL

Fixture Aimed at 30° from Nadir
 Fixture Delivered Lumens: 1562
 Total Watts@120V: 20.6
 Lumens Per Watt: 75.8
 Center Beam Candle Power: 115
 Beam Distribution: 29°
 Spacing Criterion: 1.35
 Color Rendering Index (CRI)¹: 81
 Color Temperature (CCT)²: 3042K
 Designed for 50,000 Hour Lamp Life³
 LM-63 Test No. G16110805
 LM-79 Test No. 84023



R2ASQRM3MVD/UMODSQ30KS/C2304SQ-SL

Fixture Aimed at 30° from Nadir
 Fixture Delivered Lumens: 1181
 Total Watts@120V: 20.6
 Lumens Per Watt: 57.3
 Center Beam Candle Power: 44
 Beam Distribution: 14°
 Spacing Criterion: 1.85
 Color Rendering Index (CRI)¹: 81
 Color Temperature (CCT)²: 3038K
 Designed for 50,000 Hour Lamp Life³
 LM-63 Test No. G16110409
 LM-79 Test No. 84024



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

Photometric Multiplication Factors

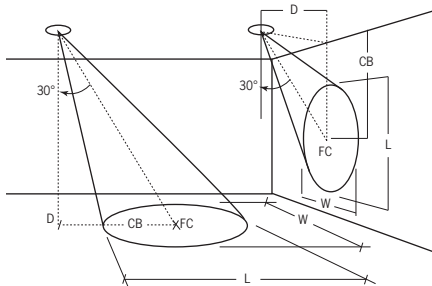
Lumen output values fluctuate based on CCT. To estimate lumen output of the various CCT options, multiply 3000K results by the following:

CCT	STANDARD CRI	HIGH CRI	CRISP WHITE	SERIES 05 (8W)	SERIES 1 (10W)	SERIES 2 (14W)	PL & WHT REFLECT.	BLK REFLECT.
2700K	0.94	0.70	0.79	0.46	0.57	0.75	1.0	0.94
3000K	N/A	0.75	0.79	0.46	0.57	0.75	1.0	0.94
3500K	1.0	0.81	0.79	0.46	0.57	0.75	1.0	0.94
4000K	1.0	0.87	0.79	0.46	0.57	0.75	1.0	0.94

R2ASQRM | 2" Square LED Adjustable Recessed Downlight: Remodel

Photometrics

APPLICATION DATA NOTES BASED UPON R2ASQRM3MVD/UMODSQ30K(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

		ILLUMINANCE ON HORIZONTAL PLANE					ILLUMINANCE ON VERTICAL PLANE				
		D	CB	FC	L	W	D	CB	FC	L	W
SPOT		5	2.9	389	1.4	1.5	3	5.2	244	2.4	1.4
		7.5	4.3	173	2.2	2.2	4	6.9	137	3.2	1.9
		10	5.8	97	2.9	2.9	5	8.7	88	3.9	2.4
		12.5	7.2	62	3.6	3.7	6	10.4	61	4.7	2.9
MEDIUM		5	2.9	182	2.7	2.9	3	5.2	144	3	2.5
		7.5	4.3	81	4.1	4.3	4	6.9	81	4	3.3
		10	5.8	46	5.5	5.8	5	8.7	52	5	4.1
		12.5	7.2	29	6.8	7.2	6	10.4	36	6.1	5.0
FLOOD		5	2.9	119	3.8	4.1	3	5.2	99	3.2	3.2
		7.5	4.3	53	5.7	6.1	4	6.9	55	4.3	4.3
		10	5.8	30	7.6	8.1	5	8.7	35	5.4	5.3
		12.5	7.2	19	9.6	10.1	6	10.4	25	6.5	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.