

R2ASQRM

2" Square LED Adjustable Recessed Downlight: Remodel

Specifications/Features

Housing/Mounting

Specification grade 2" downlight delivering 1700 lumens.
16-gauge galvanized steel driver kit.
Requires minimum 3" clearance around driver kit from insulation material.
Thermal protection provided in case of improper insulation use.
Quick-connect design enables easy installation and removal of Universal LED Module.
Driver kit housing utilizes a spring latch tether to provide secondary support of the Universal LED Module.
LED drivers are fully accessible from below the ceiling.

Electrical

Driver with Class 2 output. RoHS compliant.
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.

Universal LED Module

Requires minimum 3" clearance around module from insulation material.
Consists of a high output multi-chip LED array arranged into a single LED package, enabling precise optical control.
Available in four wattage/lumen packages: 8W/700Lm, 10W/1100Lm, 14W/1200Lm, and 21W/1700Lm.
Excellent fixture-to-fixture color consistency with a 2-step MacAdam Ellipse tolerance.
The 3000K Crisp White LED option delivers 90+ color rendering with additional violet wavelengths that enhance white visibility.
System designed and rated for 50,000 hours at 70% lumen maintenance.
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.
Four spring steel supports secure module into ceiling.
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).
Module features adjustability to 45° when installed in a 1/2" to 1" thick ceiling.
30° in 1-1/2" ceiling.
With optional FA-47 accessory holder clip: Two lens/louvers, 45° at 3/4" thick ceiling. Snoot, 45° at 5/8" thick ceiling.
Mechanism adjustment features white graduation marks every 15° for consistent aiming.

Dimming

All R2ASQ adjustable downlights are available for non-dimming and dimming applications.
For a list of compatible dimmers, refer to the [Dimming Specifications sheet](#).

Trims

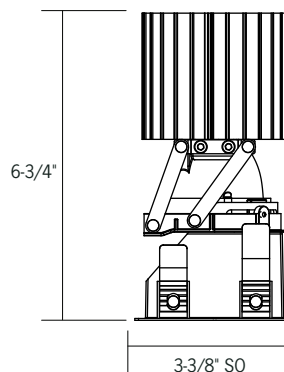
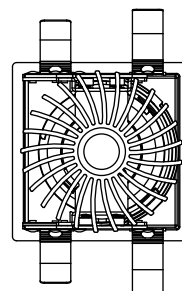
Specification Grade trims are available in different styles and finishes.
Angle Cut, Full Cone and Pinhole trims are available.

Warranty

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

Labels/Usage

cCSAus Certified using US (UL) and Canadian (CSA) standards.
Suitable for damp locations.
Assembled in the USA.



Ceiling Cut-out: 3-5/32"
Ceiling Thickness: 1/2" – 1-1/2"

	Series-05	Series-1	Series-2	Series-3
Input Wattage (W)	8	10	14	21
Input Current (A) 120/277	.07/.03	.08/.04	.12/.05	.18/.08
Input Voltage				
120V Standard Driver	120V AC, 50/60Hz			
277V Standard Driver	277V AC, 50/60Hz			
Color Temp	2700K/3000K/3500K/4000K			
CRI Standard/High	83 (80min) / 90+			
Driver				
Power Factor	> 0.90			
THD	< 20%			

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Ordering Information

Housing/Driver Kit + Module + Trim = Complete System

Example Order: Housing:

Module:

Trim:

Housing	LED Series	Electrical/Dimming
<input type="text"/>	<input type="text"/>	<input type="text"/>
R2ASQRM - Remodel Driver Kit	05 - 8W/700lm 1 - 10W/1100lm 2 - 14W/1200lm 3 - 21W/1700lm	12D - 120V Triac, ELV and 0-10V Dimming 27D - 277V 0-10V Dimming ONLY

LED Module	Color Temp	Beam Dist.
<input type="text"/>	<input type="text"/>	<input type="text"/>
UMODSQ - 2" Square Universal Module	27K - 2700K 30K - 3000K 35K - 3500K 40K - 4000K 30KW - 3000K 90+ CRI, Crisp White	27KC - 2700K, 93+ CRI 30KC - 3000K, 93+ CRI 35KC - 3500K, 93+ CRI 40KC - 4000K, 90+ CRI
		S - 14° Spot M - 29° Medium F - 37° Flood

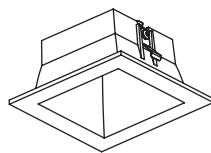
Accessories

- 2INOPTIC-S** - 14° Beam Optic
- 2INOPTIC-M** - 29° Beam Optic
- 2INOPTIC-F** - 37° Beam Optic
- FA-47** - Black Accessory Holder Clip; Accepts Two (2) Media
- R2ASNRI-B** - Black Dual Ring Snoot 60MM OD X 1" Long, FA-47 required
- FA-16 60MM** - Honeycomb Louver, FA-47 required
- LF16-* 60MM** - 2-3/8" Diameter Lenses, FA-47 required

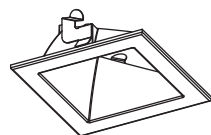
*Color/Pattern Legend:

A (Amber), **B** (Blue), **CL** (Clear), **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)

Specification Grade Trims

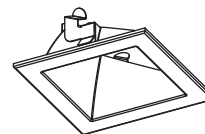


C2322SQ-(BLK*, SL*, WHT)
Reflector is available in painted satin silver, painted matte white, and painted matte black finishes. Trims are wet location certified when used with an LF50 lens. Trim accepts one (1) FA-55 2-1/8" Square Black Honeycomb Louver or (1) LF50 2-1/8" Square Tempered Glass Lens.
Aperture: 2-5/8" SQ; Trim Frame: 3-5/8" SQ

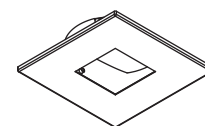


C2304SQ-(BLK*, SL*, WHT)
2" Spec Grade Angle Cut Reflector Trim.
Aperture: 2-5/8" SQ; Trim Frame: 3-5/8" SQ

C2304SQWL-(BLK*, SL*, WHT)
2" Spec Grade Angle Cut Reflector Trim, Wet Location. Clear glass lens provides wet location certification.
Aperture: 2-5/8" SQ; Trim Frame: 3-5/8" SQ



C2305SQ-(BLK, WHT)
2" Pinhole Trim, SQ: 3-5/8"; 1-1/2" Aperture



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

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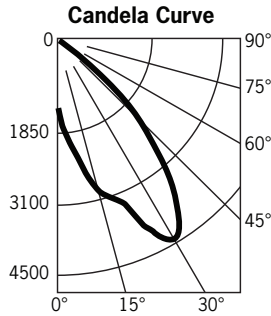
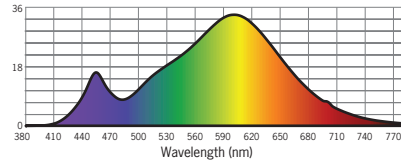
Photometrics

R2ASQNC3MVD-UMODSQ30KF-C2304SQ-SL

Designed for 50,000 Hour Lamp Life¹; LM-63 Test No. G16110706

Fixture aimed at 30° from Nadir
Light Output (Fixture Delivered Lumens): 1709
Total Watts@120V: 20.6; **Lumens Per Watt:** 82.9
Center Beam Candle Power: 4449
Color Rendering Index (CRI)²: 81
Color Temperature (CCT)³: 3061K Warm White
Spectral Power Distribution Chart⁴

LM-79 Test No. 84022



Candlepower Summary

FROM 0	CANDELA	LUMENS
0	1190	
5	1825	113
15	3045	370
25	3930	707
35	4034	903
45	2194	553
55	181	54
65	2	3
75	0	1
85	0	0

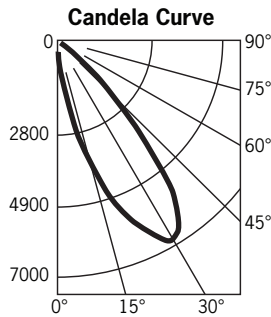
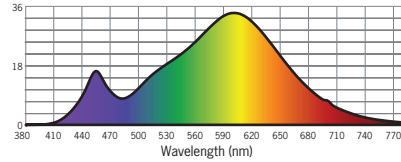
Beam Distribution: 37°

R2ASQNC3MVD-UMODSQ30KM-C2304SQ-SL

Designed for 50,000 Hour Lamp Life¹; LM-63 Test No. G16110805

Fixture aimed at 30° from Nadir
Light Output (Fixture Delivered Lumens): 1562
Total Watts@120V: 20.6; **Lumens Per Watt:** 75.8
Center Beam Candle Power: 6724
Color Rendering Index (CRI)²: 81
Color Temperature (CCT)³: 3042K Warm White
Spectral Power Distribution Chart⁴

LM-79 Test No. 84023



Candlepower Summary

FROM 0	CANDELA	LUMENS
0	115	
5	434	20
15	3502	355
25	6098	964
35	6156	1242
45	2245	554
55	98	31
65	2	2
75	0	1
85	0	0

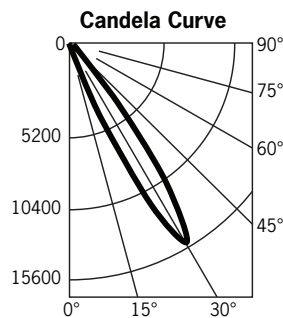
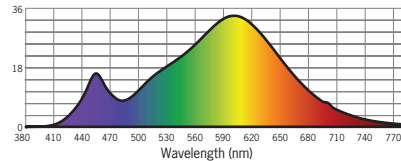
Beam Distribution: 29°

R2ASQNC3MVD-UMODSQ30KS-C2304SQ-SL

Designed for 50,000 Hour Lamp Life¹; LM-63 Test No. G16110409

Fixture aimed at 30° from Nadir
Light Output (Fixture Delivered Lumens): 1181
Total Watts@120V: 20.6; **Lumens Per Watt:** 57.3
Center Beam Candle Power: 15516
Color Rendering Index (CRI)²: 81
Color Temperature (CCT)³: 3038K Warm White
Spectral Power Distribution Chart⁴

LM-79 Test No. 84024



Candlepower Summary

FROM 0	CANDELA	LUMENS
0	44	
5	43	4
15	331	38
25	7917	1166
35	10812	2138
45	869	219
55	21	11
65	2	4
75	0	2
85	0	0

Beam Distribution: 14°

Multiplication Factors

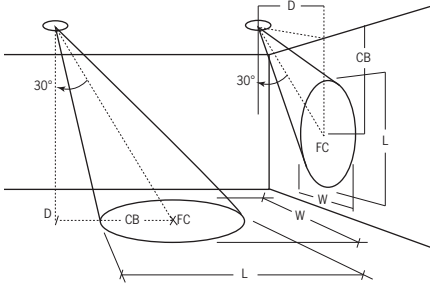
CCT	STANDARD CRI	HIGH CRI	CRISP WHITE	SERIES 05, 8W	SERIES 1, 10W	SERIES 2, 14W	PL & WHT REFLECTORS	BLK REFLECTOR
2700K	0.94	0.70	0.79	0.46	0.57	0.75	1.0	0.94
3000K	N/A	0.75	0.79	0.46	0.57	0.75	1.0	0.94
3500K	1.0	0.81	0.79	0.46	0.57	0.75	1.0	0.94
4000K	1.00	0.87	0.79	0.46	0.57	0.75	1.0	0.94

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

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Photometrics



APPLICATION DATA NOTES BASED UPON R2ASQNC3MVD-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