

# SIGMA 2







	Job Information	
Pr	oject Name	
Ту	ре	
Lo	cation	
Qı	uantity	
Da	ate	

# Round Reflector, 700-1600 Lumens, 7-21 Watts

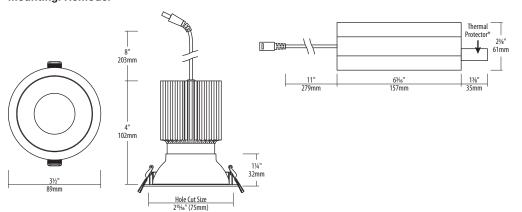
Recessed Downlighting

## **Description**

The SIGMA 2 series boasts a sleek modern look with a broad offering of shapes, including pinspots, slots, and slopes. In addition, choose between multiples, regressed optics and tailed beam angles to match the intended look and feel of your architectural space. Add a hex cell louver, a softening, or a linear spread lens to further customize your fixture to further meet desired optical performance.

## **Technical Drawings**

## Mounting: Remodel

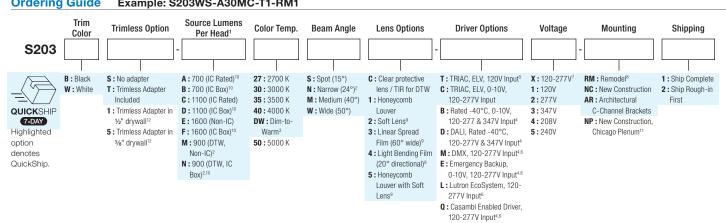


FIXTURE SPECIFICATIONS			
Aperture	2¾" (70mm)		
Application	Recessed		
Approved Location	Damp		
Certification	cETLus		
CRI	90		
Dimming	Yes		
Hole Cut Size	215/16" (75mm)		
Max. Ceiling Thickness	34" (19mm)		
Power Factor	>0.9		
Power Supply Type	Constant Current		
Lumen Maintenance	70% @ 50,000 Hrs		
THD	<20%		
Title 24	Yes		
TM-30 Annex E	P2 / V- / F3		

**Delivered Lumens** Driver Lumens/ Option Per Head Watt Wattage 719 A,B 97 1001 C,D 88 1498

## \* Required for Non-IC models only

Ordering Guide	Evample: \$203WS_A30MC_T1_RM	1



# Example items for "Ship Rough-in First":

First: S203WS-C30MC-T1-NC2 Second: S203WS-C30MC2

#### Notes:

1 Delivered lumens provided are based on 3000 K with wide reflector.

- <sup>2</sup> Only available for DTW models.
- 3 DTW models are only IC rated with an IC Box (Source Lumens Per Head option N).
- <sup>4</sup> Above ceiling access or remote mount required.
- <sup>5</sup> Only available in 120V (Voltage option 1).
- 6 Not available in 347V.
- 7 Available with Source Lumens Per Head option; A, B, C, D, F or N only
- 8 Not available with IC Box (option B, D, F or N). 9 Not available for DTW models.
- 10 Only available with Driver Options "T" or "C".
- 11 Only available with IC Box (option B, D, F or N).
- 12 Adapter ships separately.

QuickShip option is available on orders of 100 pieces or less. QuickShip lead time may vary for orders greater than 100 pieces. No additional shipment rates apply. Subject to

availability.

For additional options please consult your A-Line representative. All trademarks are the property of their respective owners. Due to our continued efforts to improve our products, product specifications are subject to change without notice.

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#### **Beam Angle**

Multi-faceted reflector available for fixed CCT models in spot (15°), medium (40°) or wide (50°) beam angles. Dim-to-Warm CCT option is equipped with a multi-faceted TIR lens which eliminates hot spots and provide for a sharp cut-off. This option is available with 15°, 24°, 38° and 60° beam angles.

#### **LED Characteristics**

Available with high powered BRIDGELUX® LED chip that maintains high lumens per watt with a typical 90 CRI.

#### LED Characteristics - Dim-to-Warm

Available with high powered LED chip that dims from 3000 K to 2000 K with a typical 90 CRI.

#### **LED Optics**

Integrated clear protective lens with fixed CCT models. Dim-to-Warm models contain an integrated TIR lens.

#### **Dimming**

Multiple dimming options are available. 100~10% dimming with TRIAC/ELV, 100~1% dimming with 0-10V, and dim to off with compatible devices. Compatible with OnCloud dimmer. See LED Driver

Options for details. Consult factory for compatible dimmers.

#### **Thermal Performance**

Extruded aluminum heat sink ensures optimal heat dissipation and LED life.

#### **LED Driver**

The LED driver is remote mounted to allow for a lower operating temperature of the LED, longer life, and serviceable separate from the fixture. Includes an 18" (457mm) plenum rated FT6 wire with DC 2.1 connector from the driver to fixture. Inrush current for all drivers is compliant with NEMA 410. See LED Driver Options for more specific details.

## **System Protection**

Integral thermal protection provided on Non-IC models to indicate improper installations. Mounted to the junction box and will disconnect if insulation is detected. Insulation must maintain 3" (76mm) clearance from top or sides.

#### IC Box and New Construction Chicago Plenum

Single wall aluminum housing allows fixture to be installed in insulated ceiling applications. The housing is equipped with rigid hanger bars for easy installation without warping or moving.

With Mounting option "NP" the fixture is built in accordance with City of Chicago Environmental Air (CCEA).

#### Hanger Bars - New Construction and IC Box

Rigid hanger bars extend up to 25' (635mm). Score lines on the hanger bars allow for tool-less shortening down to 12" (305mm). Built-in line-up foot allows for accurate housing height during installation. Integrated T-bar clips easily snap onto T-bars.

#### Hanger Bars - Architectural C-Channel

Architectural frame bracket accepts C-channel and EMT conduit. Vertically adjustable.

#### **Trimless Option**

Trimless adapter provides a flush and seamless ceiling mount. Trimless adapter is also available prefabricated in level 5 drywall for ease of installation.

#### Shipping

Fixtures can be shipped complete or with rough-in components first, and the remainder once requested. Drywall options ship separately.

#### **Environment**

Suitable for use in damp locations.

## Warranty

5-Year warranty.

# QuickShip Made-To-Order

Made-To-Order products ship within seven business days of an order being released.



# **LED Driver Options**

- (T) TRIAC: Dimming for 120V only, 100~10% dimming.
- (C) TRIAC/ELV/0-10V: TRIAC/ELV dimming for 120V only, 100~10% dimming, 1% Dimming over 0-10V is optional, but required for 277V & 347V dimming.
- (B) Rated -40: Low temperature driver operation. Dimming to 1% over 0-10V.
- (D) DALI: DALI soft dimming to 1%. Dim-to-off with standby power < 0.3W. Rated to -40.
- (M) DMX: DMX/RDM soft dimming to 0.1%. Dim-to-off with standby power <0.3W.
- (E) Emergency Backup: Integrated emergency battery with switchable output of 5W for 180 minutes, or 10W for 90 minutes of operation during an outage.
- (L): Lutron EcoSystem: Suitable for integration into a planned or existing EcoSystem® lighting control solution. Dimming down to 1% with compatible controls.
- (Q) Casambi Enabled: Casambi wireless module included. Wireless dimming to 1% provided over 0-10V signal from module.

## **Accessories**



## P-3010

75mm round pre-mounting plate for Sigma 2 fixtures.



#### **ALB-27**

27" Linear hanger bar, 2-pack.



## SIGMA-EXT-10

10' Single CCT Sigma driver extension, FT6.

## SIGMA-EXT-50

50' Single CCT Sigma driver extension, FT6.



## LC-CRTL-DIM-1

Smart Wi-Fi dimmer, 150W, 120V. \* Compatible with TRIAC Driver.

# **Trimless**



#### P-3510

90mm round pre-mounting plate for Sigma 2 fixtures.



#### S2-ZCR-3

75mm Sigma 2 round trimless adapter.



#### S2-PDW1R-3

Trimless Adapter in 1/2" drywall.

# S2-PDW5R-3

Trimless Adapter in 5/8" drywall.

# **Lens Options**



## S2-HC-LVR

Honeycomb louver.



S2-SI-LENS

Soft lens



S2-LS60-LENS

Linear spread film (60° wide).

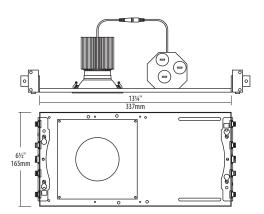


### S2-LB20-LENS

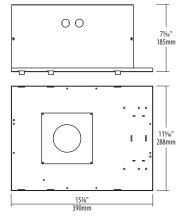
Light bending film (20° directional).

## **Technical Drawings**

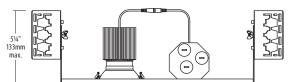
## **Mounting: New Construction**



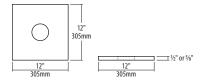
## Mounting: IC Box / New Construction Chicago Plenum



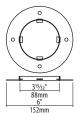
## **Mounting: Architectural**



## Mounting: Trimless Adapter in Drywall

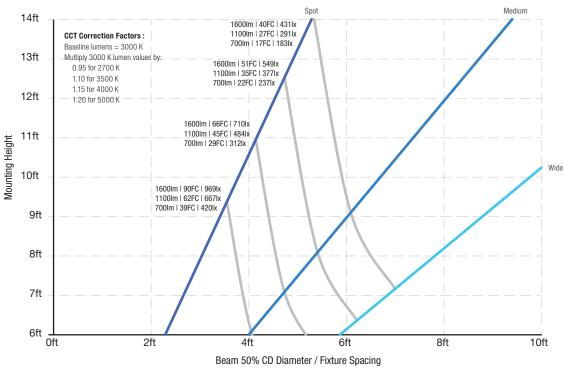


## **Mounting: Trimless Adapter**



# **Luminaire Budgetary Diagram**

Mounting Height vs. Fixture Spacing Sample reference with 90 CRI at 3000 K CCT



To use Liteline's Budgetary Diagram:

- 1. Determine mounting height above work surface for application on Y axis.
- 2. Determine appropriate spacing by comparing beam cone size on X axis.
- 3. Select appropriate beam angle and lumen package from slope line at intersection point.

# **Photometry**

Note: All photometric data is based on 3000 K CCT, wide beam spread, white trim and clear protective lens.

# **CCT Correction Factors:**

Baseline lumens = 3000 K

Multiply 3000 K lumen values by:

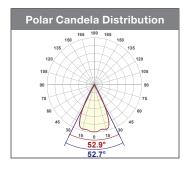
0.95 for 2700 K

1.10 for 3500 K

1.15 for 4000 K

1.20 for 5000 K

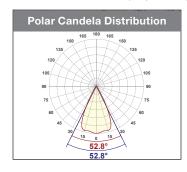
\$203Wx-A30WC-xx-xxx: SIGMA 2, 7W, wide beam spread, clear protective lens

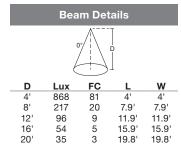


Beam Details					
0					
D	Lux	FC	L	W	
4'	614	57	4'	4'	
8'	153	14	7.9'	7.91	
12'	68	6	11.9'	11.9'	
16'	38	4	15.9'	15.9'	
20'	25	2	19.9'	19.9'	

Zonal Lumen Summary				
Zone	Lumens	% Luminaire		
0-30	579	80.53%		
0-40	641	89.15%		
0-60	675	93.88%		
60-90	19.9	2.77%		
70-100	13.0	1.81%		
90-120	11.2	1.56%		
0-90	695	96.66%		
90-180	24.0	3.34%		
0-180	719	100%		

**\$203Wx-C30WC-xx-xxx:** SIGMA 2, 11W, wide beam spread, clear protective lens





Zon	al Lumen Sı	ummary
Zone	Lumens	% Luminaire
0-30	816	81.52%
0-40	904	90.31%
0-60	951	95.00%
60-90	25.3	2.53%
70-100	14.5	1.45%
90-120	11.4	1.14%
0-90	976	97.50%
90-180	24.9	2.49%
0-180	1001	100%

**\$203Wx-E30WC-xx-xxx:** SIGMA 2, 22W, wide beam spread, clear protective lens

Polar Candela Distribution
150 150 155 150 150

Beam Details					
0"					
D	Lux	FC	L	W	
4'	<b>Lux</b> 1317	<b>FC</b> 122	<b>L</b> 4'	<b>W</b>	
4'	1317	122	4'	4'	
4' 8'	1317 329	122 31	4' 7.9'	4' 7.9'	

Zonal Lumen Summary					
Zone	Lumens	% Luminaire			
0-30	1237	82.58%			
0-40	1371	91.52%			
0-60	1441	96.19%			
60-90	32.0	2.14%			
70-100	14.9	0.99%			
90-120	10.9	0.73%			
0-90	1472	98.26%			
90-180	25.5	1.70%			
0-180	1498	100%			