

SIGMA 2



6%" 157mm Thermal Protector\*

1%" 35mm 61mm

Round Slot with Stepped Baffle, 700-1600 Lumens, 7-21

## Watts

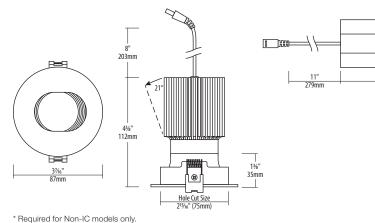
# Recessed Downlighting

## 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**



Job Information							
Project Name							
Туре							
Location							
Quantity							
Date							



FIXTURE SPE	CIFICATIONS
Aperture	2" (50mm)
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%
TM-30 Annex E	P2 / V- / F3

Delivered Lumens Per Head	Option	Lumens/ Watt	Driver Wattage	
490	A,B	67	7	
696	C,D	62	11	
1046	E.F	48	22	

## Ordering Guide Example: S215WS-A30MC-T1-RM1

		im blor	Tr	imless Option	So	ource Lumens Per Head <sup>1</sup>	Color Temp.		eam Ingle	L	ens Options		Driver Options		Voltage	Mounting	Shipping
S215					-							-				-	
$\wedge$	B:	Black	S:	No adapter	Α:	700 (IC Rated)10	27: 2700 K	S:	Spot	C :	Clear protective	Τ:	TRIAC, ELV, 120V Input <sup>5</sup>	Χ:	120-277V7	RM : Remodel <sup>8</sup>	1: Ship Complete
$  \langle \rangle  $	W :	White	Τ:	Trimless Adapter	В:	700 (IC Box)10	<b>30:</b> 3000 K	Ν:	Narrow <sup>2</sup>		lens / TIR for	C :	TRIAC, ELV, 0-10V, 120-	1:	120V	NC : New Construction	2: Ship Rough-in First
	F:	White		Included	C :	1100 (IC Rated)	35: 3500 K	M :	Medium		DTW		277V Input	2:	277V	AR: Architectural	
QUICKSHIP		with	1:	Trimless Adapter	D :	1100 (IC Box)10	40: 4000 K	W :	Wide	1:	Honeycomb	B:	Rated -40°C, 0-10V,	3:	347V	C-Channel Brackets	
7-DAY		White		in 1/2" drywall <sup>12</sup>	Ε:	1600 (Non-IC)	DW : Dim-to-				Louver		120-277 & 347V Input4	4:	208V	NP: New Construction,	
Highlighted		Baffle	5:	Trimless Adapter	F:	1600 (IC Box)10	Warm <sup>3</sup>			2:	Soft Lens <sup>9</sup>	D:	DALI, Rated -40°C,	5:	240V	Chicago Plenum <sup>11</sup>	
option denote	s			in 5⁄8" drywall <sup>12</sup>	M :	900 (DTW,	50: 5000 K			3:	Linear Spread		120-277V & 347V Input4				
QuickShip.						Non-IC) <sup>2</sup>					Film (60° wide)9	М:	DMX, 120-277V Input <sup>4,6</sup>				
					N:	900 (DTW, IC				4:	Light Bending	E:	Emergency Backup,				
						Box) <sup>2,10</sup>					Film (20°		0-10V, 120-277V Input4,6				
											directional)9	L:	Lutron EcoSystem, 120-				
										5:	Honeycomb		277V Input <sup>6</sup>				
											Louver with Soft	0:	Casambi Enabled Driver.				

Lens9

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

Telephone

416.996.1856

1.866.730.7704

First: S215WS-C30MC-T1-NC2 Second: S215WS-C30MC2 Notes:

- <sup>1</sup> Delivered lumens provided are based on 3000 K with wide reflector.
- <sup>2</sup> Only available for DTW models.

<sup>3</sup> 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.

Liteline Corporation Copyright © 2023 All rights reserved. <sup>5</sup> Only available in 120V (Voltage option 1).

- <sup>6</sup> Not available in 347V.
- 7 Available with Source Lumens Per Head
- option; A, B, C, D, F or N only.
- <sup>8</sup> Not available with IC Box (option B, D, F or N).
- <sup>9</sup> Not available for DTW models.
  <sup>10</sup> Only available with Driver Options "T" or "C".

905.709.5255

1.888.738.9736

Fax

<sup>11</sup> Only available with IC Box (option B, D, F or N).
<sup>12</sup> Adapter ships separately.

120-277V Input4,6

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.



#### **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. Optional honeycomb, soft lens, and light bending films are also available. 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

## **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: I ow temperature driver operation. Dimming to 1% over 0-10V.

(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.</li>

(D) DALI : DALI soft dimming to 1%. Dim-to-off with standby power <0.3W. Rated to (M) DMX : DMX/RDM soft dimming to 0.1%. Dim-to-off with standby power <0.3W.</p>

(M) DMX : DMX/RDM soft dimining to 0.1%. Dim-to-orf with standby power < 0.3%.</p>
(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<sup>®</sup> 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.



**LC-CRTL-DIM-1** Smart Wi-Fi dimmer, 150W, 120V. \* Compatible with TRIAC 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.

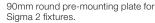


ONLINE PRODUCT DETAILS AND DOCUMENTATION



# P-3510

Trimless





S2-PDW1R-3

Trimless Adapter in 1/2" drywall.



# Lens Options



S2-HC-LVR Honeycomb louver.

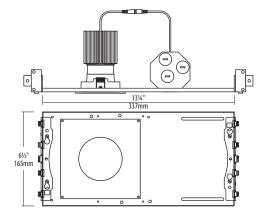
S2-SL-LENS Soft lens.

**S2-LS60-LENS** Linear spread film (60° wide).

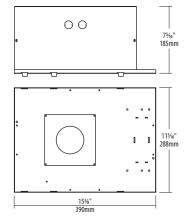
**S2-LB20-LENS** Light bending film (20° directional).

## **Technical Drawings**

#### **Mounting: New Construction**



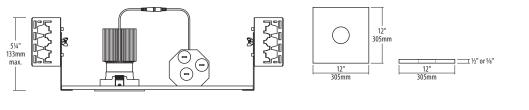
Mounting: IC Box / New Construction Chicago Plenum

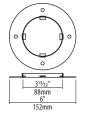




## Mounting: Trimless Adapter in Drywall

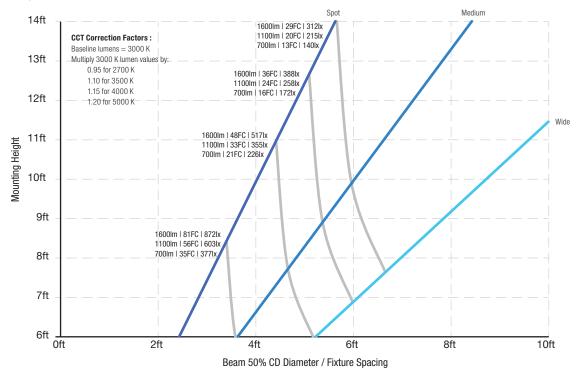
## **Mounting: Trimless Adapter**





## 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  $\ensuremath{\mathsf{Y}}$  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 :**

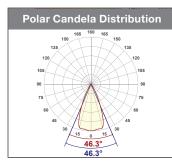
Baseline lumens = 3000 K Multiply 3000 K lumen values by:

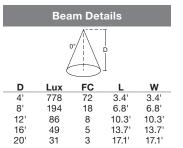
- 0.95 for 2700 K 1.10 for 3500 K
- 1.10 for 3500 K 1.15 for 4000 K
- 1.20 for 5000 K

S215W×-A30WC-××-×××: SIGMA 2, 7W, wide beam spread, clear protective lens

Polar Candela Distribution		Bea	im Dei	tails		Zon	al Lumen S	ummary
105	<b>D</b> 4' 8' 12' 16' 20'	Lux 540 135 60 34 22	<b>FC</b> 50 13 6 3 2	<b>L</b> 3.4' 6.8' 10.3' 13.7' 17.1'	<b>W</b> 3.4' 6.8' 10.3' 13.7' 17.1'	Zone 0-30 0-40 0-60 60-90 70-100 90-120 0-90 90-180 0-180	Lumens 429 462 470 10.6 8.80 4.52 4.81 9.02 490	% Luminaire 87.55% 94.29% 95.92% 2.16% 1.80% 0.92% 98.16% 1.84% 100%

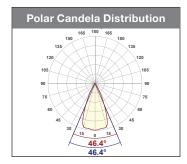
## S215Wx-C30WC-xx-xx: SIGMA 2, 11W, wide beam spread, clear protective lens

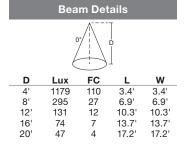




Zonal Lumen Summary							
Zone	Lumens	% Luminaire					
0-30	618	88.79%					
0-40	666	95.69%					
0-60	675	96.98%					
60-90	11.4	1.64%					
70-100	9.20	1.32%					
90-120	449	0.65%					
0-90	687	98.71%					
90-180	8.97	1.29%					
0-180	696	100%					

S215W×-E30WC-××-××× : SIGMA 2, 22W, wide beam spread, clear protective lens





Zon	al Lumen Si	ummary
Zone	Lumens	% Luminaire
0-30	936	89.48%
0-40	1008	96.37%
0-60	1020	97.51%
60-90	14.1	1.35%
70-100	11.6	1.11%
90-120	6.02	0.58%
0-90	1034	98.85%
90-180	12.0	1.15%
0-180	1046	100%