

## S213

### Sigma 2 Round Adjustable LED Fixture with Stepped Baffle Recessed Lighting

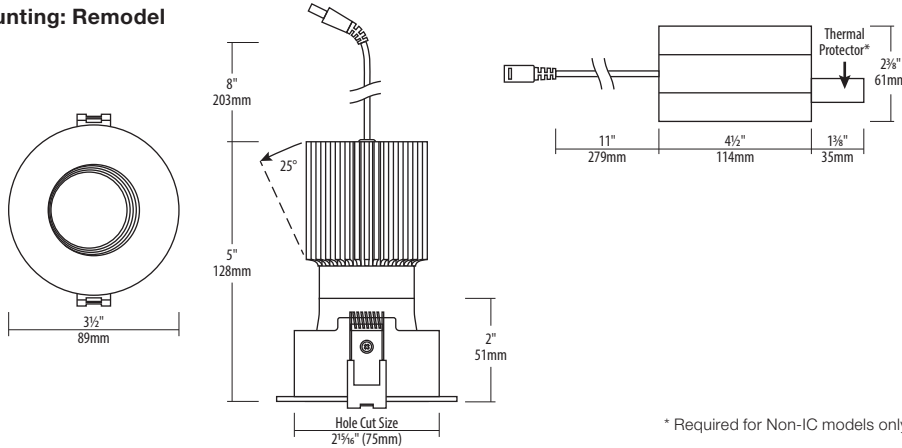
Job Information	
Project Name	
Type	
Location	
Quantity	
Date	

#### 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	1 1/2" (38mm)
Application	Recessed
Approved Location	Damp
Certification	cETLus
CRI	90
Dimming	Yes
Hole Cut Size	2 15/16" (75mm)
Max. Ceiling Thickness	1 1/4" (32mm)
Power Factor	>0.9
Power Supply Type	Constant Current
Lumen Maintenance	70% @ 50,000 Hrs
THD	<20%



2 15/16" 75mm

\* Required for Non-IC models only.

Delivered Lumens Per Head	Option	Lumens/Watt	Driver Wattage
700	A, B	100.0	7
1100	C, D	91.7	12
1600	E, F	76.2	21
900	M, N	81.8	11

#### Ordering Guide Example: S213WS-A30MC-T1-RM1

S213	Trim Color	Trimless Option	Delivered Lumens Per Head <sup>1</sup>	Color Temp.	Beam Angle	Lens Options	Driver Options	Voltage	Mounting	Shipping
<b>QUICKSHIP 7-DAY</b>	<b>B:</b> Black <b>W:</b> White <b>F:</b> White	<b>S:</b> No adapter <b>T:</b> Trimless Adapter Included <b>1:</b> Trimless Adapter in 1/2" drywall <sup>13</sup> <b>5:</b> Trimless Adapter in 5/8" drywall <sup>13</sup>	<b>A:</b> 700 (IC Rated) <sup>2,11</sup> <b>B:</b> 700 (IC Box) <sup>2,11</sup> <b>C:</b> 1100 (IC Rated) <sup>2</sup> <b>D:</b> 1100 (IC Box) <sup>2,11</sup> <b>E:</b> 1600 (Non-IC) <sup>2</sup> <b>F:</b> 1600 (IC Box) <sup>2,11</sup> <b>M:</b> 900 (DTW, Non-IC) <sup>3</sup> <b>N:</b> 900 (DTW, IC Box) <sup>3,11</sup>	<b>27:</b> 2700 K <b>30:</b> 3000 K <b>35:</b> 3500 K <b>40:</b> 4000 K <b>DW:</b> Dim-to-Warm <sup>4</sup> <b>50:</b> 5000 K	<b>S:</b> Spot <b>N:</b> Narrow <sup>3</sup> <b>M:</b> Medium <b>W:</b> Wide	<b>C:</b> Clear protective lens <b>1:</b> Honeycomb Louver <b>2:</b> Soft Lens <sup>2</sup> <b>3:</b> Linear Spread Film (60° wide) <sup>2</sup> <b>4:</b> Light Bending Film (20° directional) <sup>2</sup>	<b>T:</b> TRIAC, ELV, 120V Input <sup>6</sup> <b>C:</b> TRIAC, ELV, 0-10V, 120-277V Input <b>B:</b> Rated -40°C, 0-10V, 120-277 & 347V Input <sup>5</sup> <b>D:</b> DALI, Rated -40°C, 120-277V & 347V Input <sup>5</sup> <b>M:</b> DMX, 120-277V Input <sup>5,7</sup> <b>E:</b> Emergency Backup, 0-10V, 120-277V Input <sup>5,7</sup> <b>L:</b> Lutron EcoSystem, 120-277V Input <sup>5,7</sup> <b>Q:</b> Casambi Enabled Driver, 120-277V Input <sup>5,7</sup>	<b>X:</b> 120-277V <sup>8</sup> <b>1:</b> 120V <b>2:</b> 277V <b>3:</b> 347V <b>4:</b> 208V <b>5:</b> 240V	<b>RM:</b> Remodel <sup>10</sup> <b>NC:</b> New Construction <b>AR:</b> Architectural C-Channel Brackets <sup>9</sup> <b>NP:</b> New Construction, Chicago Plenum <sup>12</sup>	<b>1:</b> Ship Complete <b>2:</b> Ship Rough-in First

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

First: S213WS-C30MC-T1-NC2  
Second: S213WS-C30MC2

#### Notes:

<sup>1</sup> Delivered lumens provided are based on 3000 K with medium reflector. <sup>2</sup> Not available with DTW. <sup>3</sup> DTW models only. <sup>4</sup> DTW models are only IC rated with an IC Box (Delivered Lumens Per Head option N). <sup>5</sup> Above ceiling access or remote mount required. <sup>6</sup> Only available in 120V (Voltage option 1). <sup>7</sup> Not available in 347V. <sup>8</sup> Available with Delivered Lumens Per Head option; A, B, C, D, F or N only. <sup>9</sup> Not available with IC Box (option B, D, F or N). <sup>10</sup> Ship complete only. <sup>11</sup> Only available with Driver Options "T" or "C". <sup>12</sup> Only available with IC Box (option B, D, F or N). <sup>13</sup> 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. Casambi is a trademark of Casambi Technologies. Due to our continued efforts to improve our products, product specifications are subject to change without notice.

## Features

### 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. 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. 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 Sigma2 fixtures.



### S2-ZCR-2

75mm Sigma2 round trimless adapter.



### S2-PWD1R-2

Trimless Adapter in 1/2" drywall.

### S2-PWD5R-2

Trimless Adapter in 5/8" drywall.

## Lens Options



### S2-HC-LVR

Honeycomb louver.



### S2-LS60-LENS\*

Linear spread film (60° wide).



### S2-SL-LENS-2\*

Soft lens.



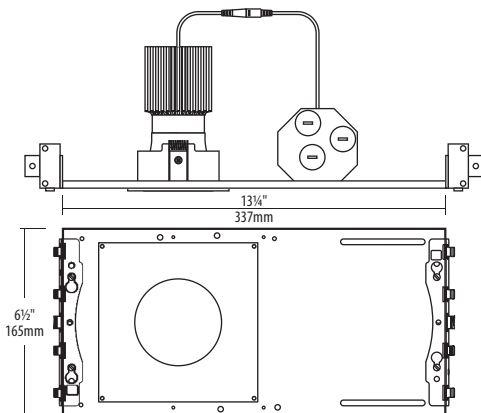
### S2-LB20-LENS\*

Light bending film (20° directional).

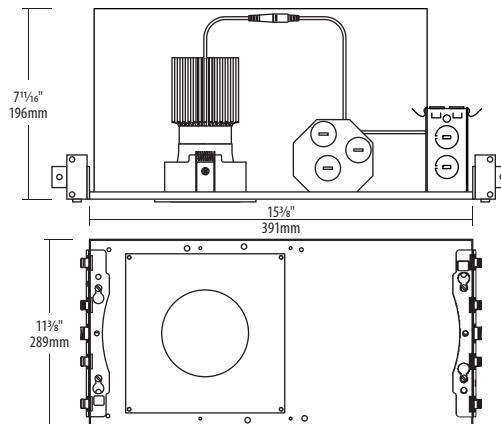
\* Not available for DTW models.

## Technical Drawings

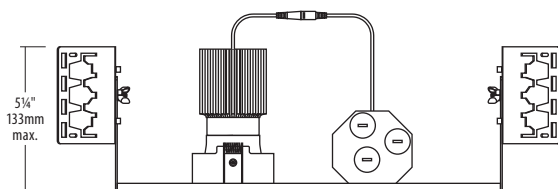
### Mounting: New Construction



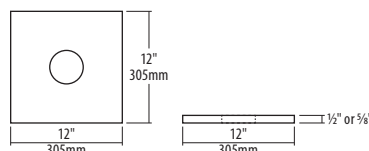
### Mounting: IC Box / New Construction Chicago Plenum



### Mounting: Architectural



### Mounting: Trimless Adapter in Drywall



# Photometry

## CCT Correction Factors :

Baseline lumens = 3000 K

Multiply 3000 K lumen values by:

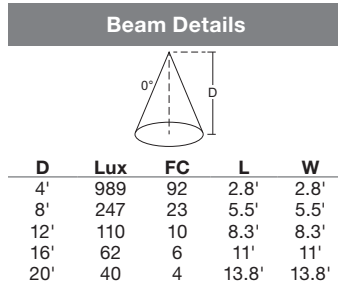
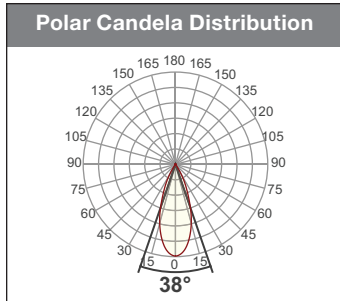
0.95 for 2700 K

1.10 for 3500 K

1.15 for 4000 K

1.20 for 5000 K

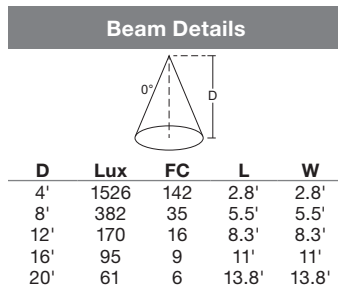
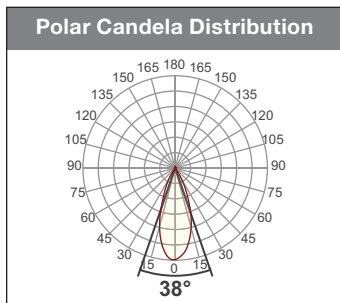
**S2xxx-A30MC-xx-xx** : SIGMA 2, 7W, medium beam spread, clear protective lens



**Zonal Lumen Summary**

Zone	Lumens	% Luminaire
0-30	577.5	85.6%
0-40	619.2	91.7%
0-60	636.1	94.2%
60-90	12.3	1.8%
70-100	10.0	1.5%
90-120	9.0	1.3%
0-90	648.4	96.1%
90-180	26.6	3.9%
0-180	675.0	100%

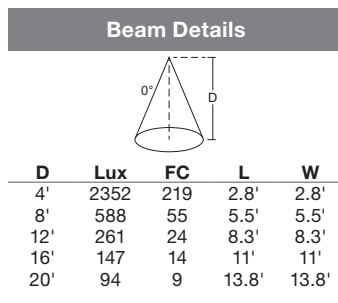
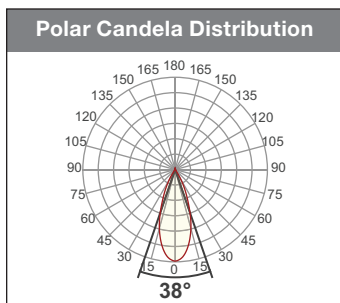
**S2xxx-C30MC-xx-xx** : SIGMA 2, 12W, medium beam spread, clear protective lens



**Zonal Lumen Summary**

Zone	Lumens	% Luminaire
0-30	400	38.25%
0-40	608	58.29%
0-60	893	85.62%
60-90	71.0	6.81%
70-100	28.6	2.74%
90-120	18.1	1.74%
0-90	964	92.43%
90-180	37.1	3.56%
0-180	1043	100%

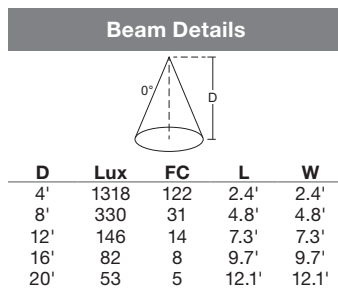
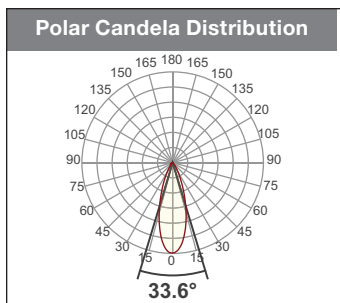
**S2xxx-E30MC-xx-xx** : SIGMA 2, 21W, medium beam spread, clear protective lens



**Zonal Lumen Summary**

Zone	Lumens	% Luminaire
0-30	586	36.93%
0-40	914	57.59%
0-60	1368	86.20%
60-90	113	7.12%
70-100	42.9	2.70%
90-120	26.9	1.70%
0-90	1481	93.32%
90-180	51.6	3.25%
0-180	1587	100%

**S2xxx-M30MC-xx-xx** : SIGMA 2, Dim-to-Warm, 11W, medium beam spread, clear protective lens



**Zonal Lumen Summary**

Zone	Lumens	% Luminaire
0-30	309	36.70%
0-40	453	53.80%
0-60	646	76.72%
60-90	98.8	11.73%
70-100	61.4	7.29%
90-120	28.8	3.42%
0-90	745	88.48%
90-180	54.2	6.44%
0-180	872	100%