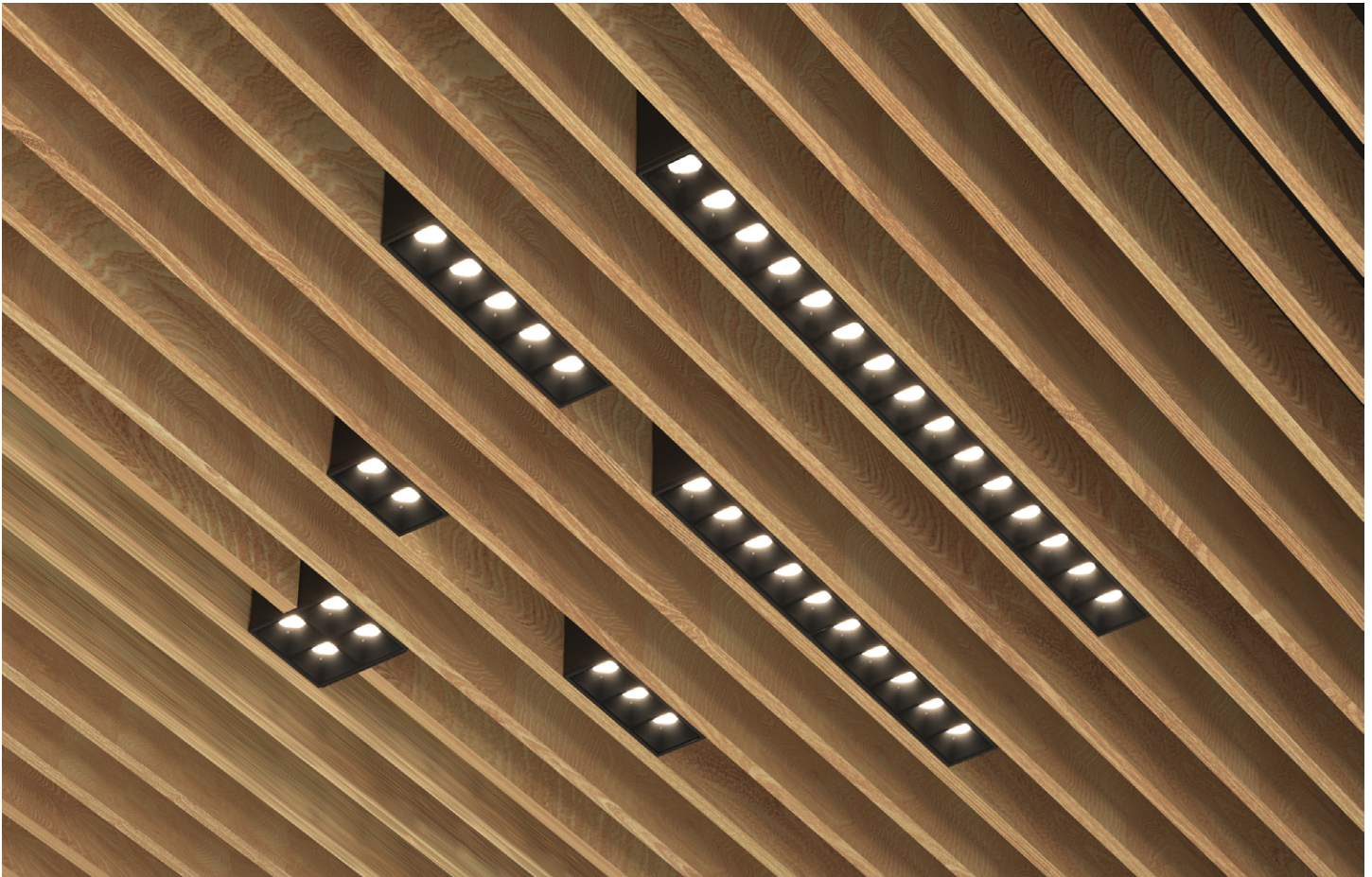


# CLUSTER WOOD SLAT

## RECESSED



Cluster Wood Slat Recessed luminaires are a versatile group of downlights available in various configurations, designed for seamless installation in wood slat ceilings. With a choice of optics, including parabolic, wall wash, soft-edge, and sharp-edge options, these luminaires can address a wide variety of applications, delivering a clean, crisp aesthetic and precise, visually comfortable light.

### Beam

#### Soft edge



25° 35° 55°

#### Sharp edge



15° 30° 45°

### Sizes



2x1 3x1 5x1 10x1



15x1 2x2 3x3

### Cluster Family (Refer to other spec sheets)

#### Recessed, Wood Slat



Downlight Parabolic Wall Wash

#### Recessed Adjustable



Downlight Parabolic Wall Wash

#### Pendant



Downlight Parabolic Wall Wash

#### Surface



Downlight Parabolic Wall Wash

#### Combo



Recessed  
Pendant  
Surface

#### Acoustix



Blank  
Downlight  
Parabolic

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Project: \_\_\_\_\_

Type: \_\_\_\_\_

### Order Guide

LUMINAIRE ID	INSTALLATION TYPE	MOUNTING OPTION <sup>1</sup>	LIGHT SOURCE	OPTIC	BEAM	CRI
	<b>OFB</b>		<b>SW</b>			<b>90CRI</b>
<b>CLU02WSR</b> - Cluster 2x1 Wood Slat Recessed <b>CLU03WSR</b> - Cluster 3x1 Wood Slat Recessed <b>CLU05WSR</b> - Cluster 5x1 Wood Slat Recessed <b>CLU10WSR</b> - Cluster 10x1 Wood Slat Recessed <b>CLU15WSR</b> - Cluster 15x1 Wood Slat Recessed <b>CLU22WSR</b> - Cluster 2x2 Wood Slat Recessed <b>CLU33WSR</b> - Cluster 3x3 Wood Slat Recessed	<b>OFB</b> - Open Frame Type Non-IC, black	<b>BAB24</b> - Black adjustable bar hangers, 17" to 24" <b>BAB48</b> - Black adjustable bar hangers, 30" to 48"  <sup>1</sup> See page 4 for more details.	<b>SW</b> - Static white	<b>SOF</b> - Soft edge downlight <b>REF</b> - Sharp edge downlight	<b>SOF</b> <b>NFL</b> - Narrow flood <b>FLD</b> - Flood <b>WFL</b> - Wide flood  <b>REF</b> <b>SPT</b> - Spot <b>FLD</b> - Flood <b>WFL</b> - Wide flood	<b>90CRI</b> - 90+ CRI

COLOR TEMP.	ADJUSTABLE BRACKET FINISH	LOUVER	LOUVER FINISH	DRIVER	VOLTAGE	LUMEN PACKAGE <sup>2</sup>	DIMMING
<b>27K</b> - 2700K <b>30K</b> - 3000K <b>35K</b> - 3500K <b>40K</b> - 4000K <b>50K</b> - 5000K	<b>FTMW</b> - Matte white <b>FTMB</b> - Matte black <b>CF#</b> - Custom finish, specify RAL#	<b>SQR</b> - Square <b>HYP</b> - Hyperbolic	<b>MF01</b> - Matte white <b>MF04</b> - Matte black <b>BL05</b> - Black chrome	<b>INTEGRAL</b>	<b>120V</b> - 120V <b>277V</b> - 277V <b>UNV</b> - 120V-277V	2x1 <b>380LM</b> - 380 lm 3x1 <b>578LM</b> - 578 lm 5x1 <b>923LM</b> - 923 lm 10x1 <b>1791LM</b> - 1791 lm 15x1 <b>2600LM</b> - 2600 lm 2x2 <b>811LM</b> - 811 lm 3x3 <b>1743LM</b> - 1743 lm  <sup>2</sup> Lumen packages shown at 3500K, with SOF-NFL 25°. For other, see lumen output multipliers on page 5.	2x1 <b>ND</b> - No dimming D1 - 1% 0-10V ELV <sup>3</sup> - ELV 120V TRI <sup>3</sup> - TRIAC 120V  <sup>3</sup> Available with 120V only.
<b>REMOTE DO NOT SPECIFY FOR REMOTE. SEE "REMOTE DRIVER BOX" SECTION BELOW.</b>							

### Remote Driver Box

Ordered separately. Specify each required remote driver box on a separate line.

REMOTE DRIVER <sup>4</sup>	LUMINAIRE QTY. <sup>5</sup>	LUMINAIRE ID	VOLTAGE	LUMEN PACKAGE <sup>6</sup>	DIMMING <sup>7</sup>				
<b>RDB#</b> - Remote driver box  <sup>4</sup> Specify each required remote driver box on a separate line.	<b>#X</b> - Number of luminaires  <sup>5</sup> Specify number (#) of luminaires per remote driver. See page 5 for minimum and maximum per driver.	<b>CLU02WSR</b> - Cluster 2x1 Wood Slat Recessed <b>CLU03WSR</b> - Cluster 3x1 Wood Slat Recessed <b>CLU05WSR</b> - Cluster 5x1 Wood Slat Recessed <b>CLU10WSR</b> - Cluster 10x1 Wood Slat Recessed <b>CLU15WSR</b> - Cluster 15x1 Wood Slat Recessed <b>CLU22WSR</b> - Cluster 2x2 Wood Slat Recessed <b>CLU33WSR</b> - Cluster 3x3 Wood Slat Recessed	<b>120V</b> - 120V <b>277V</b> - 277V <b>UNV</b> - 120V-277V	Low	High	<b>RD1</b> - 1% 0-10V <b>RELV</b> <sup>8,9</sup> - ELV 120V <b>RTRI</b> <sup>8,9</sup> - TRIAC 120V <b>RDA</b> <sup>10</sup> - DALI <b>RLDE1</b> <sup>10</sup> - Lutron Hi-lume 1% Eco <b>RELD1</b> - eldoLED 1% ECOdrive 0-10V <b>RELD0</b> - eldoLED 0.1% SOLOdrive 0-10V  <sup>7</sup> For configurations involving different cluster sizes on a remote driver, please consult factory. <sup>8</sup> Available with 120V only. <sup>9</sup> Only available with high lumen packages. <sup>10</sup> On-site commissioning is required.			
				2x1	<b>95LM</b> - 95 lm		<b>238LM</b> - 238 lm	<b>380LM</b> - 380 lm	
				3x1	<b>145LM</b> - 145 lm		<b>362LM</b> - 362 lm	<b>578LM</b> - 578 lm	
				5x1	<b>230LM</b> - 230 lm		<b>577LM</b> - 577 lm	<b>923LM</b> - 923 lm	
				10x1	<b>448LM</b> - 448 lm		<b>1120LM</b> - 1120 lm	<b>1791LM</b> - 1791 lm	
				15x1	<b>650LM</b> - 650 lm		<b>1625LM</b> - 1625 lm	<b>2600LM</b> - 2600 lm	
				2x2	<b>203LM</b> - 203 lm		<b>507LM</b> - 507 lm	<b>811LM</b> - 811 lm	
				3x3	<b>436LM</b> - 436 lm		<b>1089LM</b> - 1089 lm	<b>1743LM</b> - 1743 lm	
				<sup>6</sup> Watts and lumen per watts will vary based on the number of light units per remote driver as well as on the type of driver selected.					

### EXAMPLE

HOUSING + LIGHT	CLU02WSR-OFB-BAB24-SW-SOF-NFL-90CRI-35K-FTMB-SQR-MF04-REMOTE	REMOTE DRIVER BOX	RDB1-2X-CLU02WSR-120V-95LM-RD1 RDB2-4X-CLU02WSR-120V-238LM-RD1
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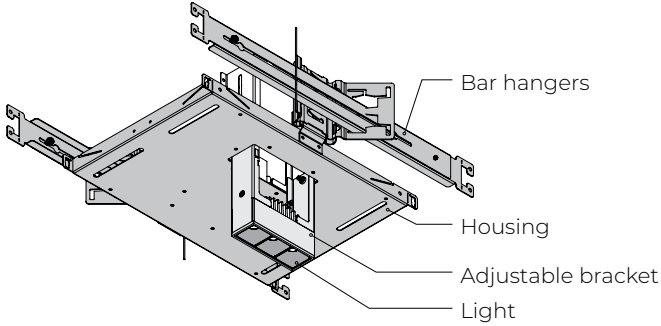


# CLUSTER WOOD SLAT

## RECESSED



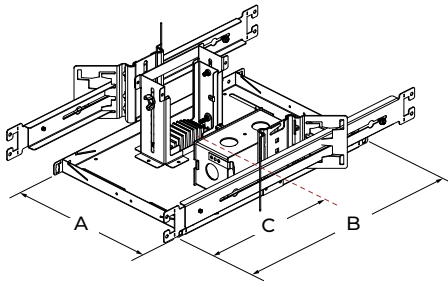
### Overview



- Housing**
  - OFB
    - Black housing
- Adjustable bracket**
  - ADJUSTABLE BRACKET FINISH
    - Matte white
    - Matte black
- Bar hangers**
  - BAB24
    - Black adjustable bar hangers, 17" to 24"
  - BAB48
    - Black adjustable bar hangers, 30" to 48"
- Light**
  - LOUVER FINISH
    - Matte white
    - Matte black
    - Black chrome

### Housing

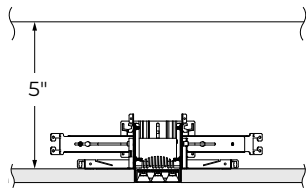
#### INSTALLATION TYPE



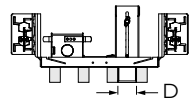
OFB - Open Frame

	HOUSING		
	A	B	C
<b>2x1</b>	8 11/16"	13 5/16"	6 11/16"
<b>3x1</b>	8 11/16"	13 5/16"	6 11/16"
<b>5x1</b>	8 11/16"	13 5/16"	6 11/16"
<b>10x1</b>	8 11/16"	19 5/16"	9 11/16"
<b>15x1</b>	8 11/16"	25 5/16"	12 11/16"
<b>2x2</b>	9 9/16"	13 1/8"	4 7/8"
<b>3x3</b>	11 9/16"	12 3/16"	6 1/16"

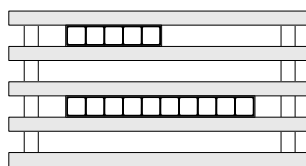
#### DIMENSIONS



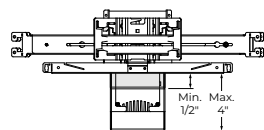
Clearance height



Spacing between slats



Bottom view



Cluster height

	SPACING BETWEEN SLATS	
	D	
	INTEGRAL (access from below the ceiling)	INTEGRAL / REMOTE (access from above the ceiling)
<b>2x1</b>	NA	1 1/2"
<b>3x1</b>	NA	1 1/2"
<b>5x1</b>	1 3/4"	1 1/2"
<b>10x1</b>	1 3/4"	1 1/2"
<b>15x1</b>	1 3/4"	1 1/2"
<b>2x2</b>	NA	2 5/8"
<b>3x3</b>	3 7/8"	3 7/8"

# CLUSTER WOOD SLAT

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### Housing

**MOUNTING OPTION**

**BAB24** - Black adjustable bar hangers, 17" to 24"  
**BAB48** - Black adjustable bar hangers, 30" to 48"

Black adjustable bar hangers can be used in both commercial and residential applications and are by far the most versatile mounting bar we offer with its adjustability to various heights. BAB hangers are suitable for Grid Ceiling, Drywall, Metal, Wood and Frame mounting.

- Extremely rigid
- Fits into C-Channel notches in a Butterfly Bracket

### Light

#### DIMENSIONS

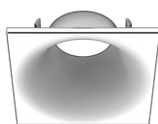
SIZE	Diagram
2x1	
3x1	
5x1	
10x1	
15x1	

SIZE	Diagram
2x2	
3x3	

#### LOUVERS



**SQR** - Square



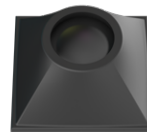
**HYP** - Hyperbolic

#### LOUVER FINISHES

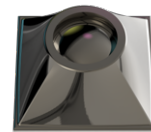
Louver is injection molded with integral texture and color.



**MF01** - Matte white



**MF04** - Matte black



**BL05** - Black chrome



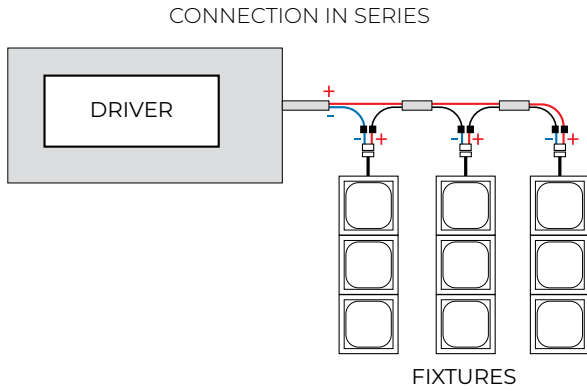
# CLUSTER WOOD SLAT RECESSED



## Driver

### REMOTE DRIVER

The remote driver can power several lighting units, depending on their total power. The minimum and maximum number of lighting units and driver type are shown in the table below and must be observed. The remote driver and lighting units are wired together through connection boxes, which are furnished pre-wired to the driver enclosure. All wiring is Class 2 with quick-splice connectors. The remote driver requires access from above the ceiling (or an access panel).



Number of lighting units per driver (minimum and maximum).

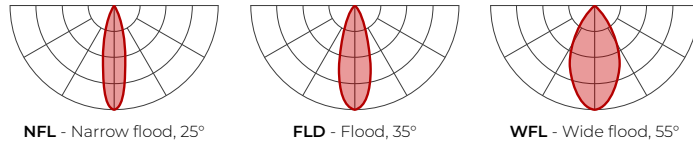
DRIVER	2x1	3x1	5x1	10x1	15x1	2x2	3x3
RD1	2-16	2-10	1-6	1-2	1-2	1-8	1-3
RELV	5-9	4-6	2-3	1	1	3-4	1
RTRI	5-9	4-6	2-3	1	1	3-4	1
RDA	1-16	1-10	1-6	1-2	1-2	1-8	1-3
RLDE1	4-8	3-5	2-3	1	1	2-4	1
RELD1	1-16	1-10	1-6	1-2	1-2	1-8	1-3
RELD0	1-16	1-10	1-6	1-2	1-2	1-8	1-3

For any quantities of lighting units per driver that fall outside the minimum and maximum listed above, please consult factory.

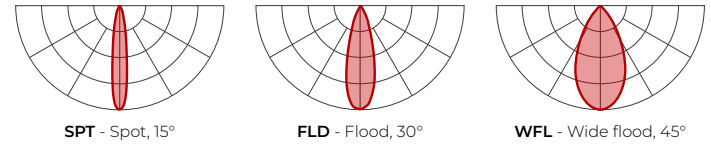
## Photometrics

Values calculated based on 3500K, 90+ CRI, SOF, and NFL.

### SOF - Soft edge downlight



### REF - Sharp edge downlight



	LM	W	LM/W
2x1	380	6.1	63
3x1	578	7.8	74
5x1	923	11.8	78
10x1	1791	23.6	76
15x1	2600	34.2	76
2x2	811	10.4	78
3x3	1743	21.5	81

### MULTIPLIER TABLES

Please follow the multiplier tables to ensure correct lumen value. CCT and optics will change the lumen value.

CCT	LPW					
	SOF			REF		
Beam angle	25°	35°	55°	15°	30°	45°
2700K	0.87	0.92	0.82	0.80	0.84	0.86
3000K	0.93	0.99	0.87	0.86	0.89	0.92
3500K	1	1.06	0.94	0.92	0.96	0.99
4000K	1.03	1.09	0.97	0.95	0.99	1.02
5000K	1.08	1.14	1.02	0.99	1.04	1.07



# CLUSTER WOOD SLAT

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## Technical Specifications

### OPTICS

#### Soft edge downlight (SOF)

The Soft edge downlight blends the light into darker areas for a gentle brightness transition. Each LED emitter directs light through a single, custom molded circular optic using total internal reflection (TIR) to shape the light. A 0.5" reflective square louver provides a cut off with a UGR of 10. Three different TIR elements create a choice of beam spread: 25° narrow flood (NFL), 35° flood (FLD), or 55° wide flood (WFL).



Shown with 25°

#### Sharp edge downlight (REF)

The Sharp edge downlight creates dramatic impact, limiting the spread of light outside of the primary beam. A molded conical reflector redirects light from each emitter into the desired beam angle. A 0.5" reflective square louver provides a cut off with a UGR of 10. Three different TIR elements create a choice of beam spread: 15° spot (SPT), 30° flood (FLD), or 45° wide flood (WFL).



Shown with 15°

### LIGHT SOURCE

Custom array of mid-flux LEDs mounted onto aluminum-backed circuitry. Available in 2700K, 3000K, 3500K, 4000K, and 5000K with a minimum 90+ CRI with elevated R9 value. Color consistency is maintained to within 3 SDCM. All LEDs have been tested in accordance with IESNA LM-80-08 and the results have shown L80 lumen maintenance greater than 60,000 hours. Absolute product photometry is measured and presented in accordance with IESNA LM-79, unless otherwise indicated.

### ELECTRICAL

Unless otherwise specified, dimming down to 1%. At maximum driver load: efficiency>84%, PF>0.9, THD<20%. ELV and TRIAC dimming performance (including minimum dimming percentage) subject to dimmer selection.

**Integral:** No dimming, 0-10V, ELV, TRIAC

**Remote:** 0-10V, ELV, TRIAC, Lutron Hi-Lume 1% EcoSystem, eldoLED 0.1% SOLOdrive 0-10V, eldoLED 1% ECOdrive 0-10V

### PoE

Depending on the PoE manufacturer selected, Lumenwerx will install the node in factory as either integral to the luminaire or as a remote module. Factory programming of the PoE node may or may not enable the following functionalities: lumen package, DUO (tunable white), QUADRO (RGBW), emergency battery backup, and sensor integration. These must be addressed and evaluated on a case-by-case basis.

### CONSTRUCTION

**Housing:** Die-cast aluminum

**Optics:** Polycarbonate

**Mounting frame:** Galvanized sheet metal

**Driver housing:** Galvanized sheet metal

### WEIGHT

	OFB
<b>2x1</b>	4.64 lbs - 2.1 kg
<b>3x1</b>	5.47 lbs - 2.48 kg
<b>5x1</b>	5.7 lbs - 2.58 kg
<b>10x1</b>	6.88 lbs - 3.12 kg
<b>15x1</b>	7.68 lbs - 3.48 kg
<b>2x2</b>	5.81 lbs - 2.64 kg
<b>3x3</b>	5.12 lbs - 2.32 kg

### CERTIFICATION

**ETL:** Rated for indoor dry/damp locations. Conforms to UL 1598 Standard and certified to CAN/CSA Standard C22.2 No. 250.0.

### WARRANTY

Lumenwerx provides a five-year limited warranty on electrical and mechanical performance of the luminaires, including the LED boards, drivers, and auxiliary electronics. Lumenwerx will repair or replace defective luminaires or components at our discretion, provided they have been installed and operated in accordance with our specifications. Other limitations apply, please refer to the full warranty on our website.