

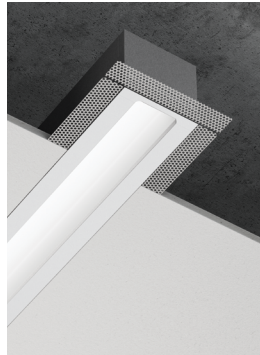
# CAVA LED

## RECESSED

**LUMENWERX**  
WWW.LUMENWERX.COM



Grid ceiling



Drywall ceiling

### DESCRIPTION

**Cava** is a linear LED recessed, surface and pendant luminaire with a remarkably comfortable and surprising appearance. Using completely concealed and indirect LED arrays, Cava provides superior brightness control, while maintaining high efficacy by distributing light over the vaulted interior cavity of the luminaire. See separate spec sheets for other available design and mountings.

PROJECT: \_\_\_\_\_

TYPE: \_\_\_\_\_

NOTES: \_\_\_\_\_



**up to 122 lm/w performance**

**IC RATED**

### ORDER GUIDE

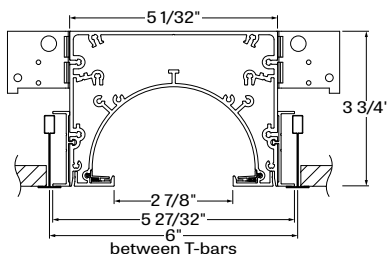
CAVR	RLO	LED			
LUMINAIRE ID	OPTICS	LIGHT SOURCE	CRI	LUMEN PACKAGES	COLOR TEMP.
CAVR - cava recessed	RLO - Reduced Luminance Optic	LED - high performance LED	80 - 80CRI 90 - 90CRI	350 - min. low output 350lm/ft 500 - medium output 500lm/ft 750 - max. high output 750lm/ft #### - other required lm/ft	27 - 2700K 30 - 3000K 35 - 3500K 40 - 4000K

LUMINAIRE LENGTH	VOLTAGE	DRIVER	ELECTRICAL	MOUNTING
Standard sections - 2', 3', 4', 5', 8' & 12' For all other specify length #FT - nominal length in feet Continuous Run - for luminaires over 12'	120 - 120V 277 - 277V UNV - 120V-277V 347 - 347V (not available with Lutron)	D1 - 1% 0-10V DA - DALI LTEA2W - Lutron 1% - 2 wire FP 120V LDE1 - Lutron Hi-lume 1% Eco LDE5 - Lutron 5% EcoSystem	1 - 1 circuit +EB - emergency battery pack +EM - emergency light circuit +NL - night light circuit +GTD - generator transfer device	TG9 - regular 9/16" TG15 - regular 15/16" TB9 - t-bar 9/16" TB15 - t-bar 15/16" ST - screw slot t-bar DTR - drywall trim DTL - drywall trimless DMF - drywall mud flange

See page 2 for ordering code detailed information

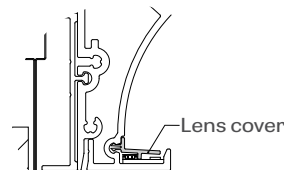
W		
FINISH	CONTROLS	OPTIONS
W - matte white	For grid mountings only <b>STANDALONE CONTROLS</b> OMS - Onboard Occupancy ODS - Onboard Daylight OCS - Onboard Occupancy & Daylight <b>CONNECTED CONTROLS</b> CCS() - LU-Lutron, EN-Enlighted, OS-Osram, CR-Crestron. To specify see information on page 3	FU - fuse FWC - flexible whip cable (6' std) CP - Chicago Plenum CU - custom

### CROSS SECTION



CAVR - cava recessed

### DETAIL VIEW



**TECHZONE™ & USG** Compatible with 6" ceiling

File Name: CAVA-RECESSED-SPEC-REV1

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**OPTICS**

**REDUCED LUMINANCE OPTIC (RLO)** - Reduced Luminance Optic (RLO) consists of indirect-mounted LED arrays illuminating a vaulted reflector with a matte white finish greater than 95% reflectivity. The ultra-shallow arrays in RLO completely conceal the light source while evenly distributing brightness over the entire surface of the cavity using a combination of multiple reflective bounces and a very high diffuse reflectivity. Compared to diffusing optics, RLO reduces luminaire brightness due to the visible interior surface being larger than the aperture.

**LIGHT SOURCE - LED**

Custom linear array of mid-flux LED's are cartridge-mounted with quick-connect wiring to facilitate service and thermal management. Available in 3000K, 3500K and 4000K with a minimum 80 CRI and an option for 90 CRI with elevated R9 value. Color consistency maintained to within 3 SDCM. LEDs operated at reduced drive current to optimize efficacy and lumen maintenance.

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.

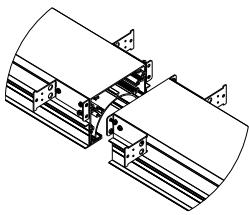
**PERFORMANCE PER 4' AT 4000K**

LED output	Color Temp	Watts	Nominal Delivered Lumens	Efficacy LPW
low output	4000K	11.5	1400	122
medium output	4000K	17	2000	119
high output	4000K	25	3000	119

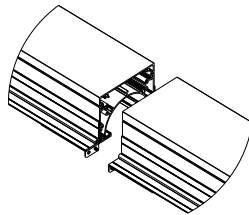
**LUMINAIRE LENGTH**

Cava is made up of standard 2, 3, 4, 5, 8 and 12 foot sections that may be joined together to create longer continuous run lengths. Nominal run length must be noted in the product code. The minimum individual section available is 2 foot.

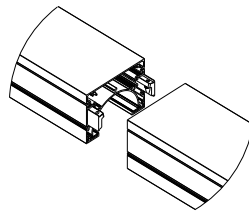
All individual sections are joined together onsite using the joiner kits provided. Lumenwerx offers joiner kits that are extremely simple to work with in the field and result in a fixture that appears virtually seamless with no light leak at any connection.

**Joining system**

T-bar



Mud flange



Trim &amp; Trimless

**ELECTRICAL**

Factory-set, adjustable output current LED driver with universal (120-277VAC) input. Dimmable from 100% to 1% with 0-10V dimming control. Rated life (90% survivorship) of 50,000 hours at 50°C max. ambient (and 70°C max. case) temperature. At maximum driver load: Efficiency>84%, PF>0.9, THD<20%. Other specifiable options include Lutron Hi-Lume 1% (specify 2-wire, or Ecosystem Dim-to-Off), Lutron 5-Series (5% Ecosystem), DMX (RDM compatible) and DALI protocol drivers. All of our standard 0-10V drivers are NEMA 410 compliant.

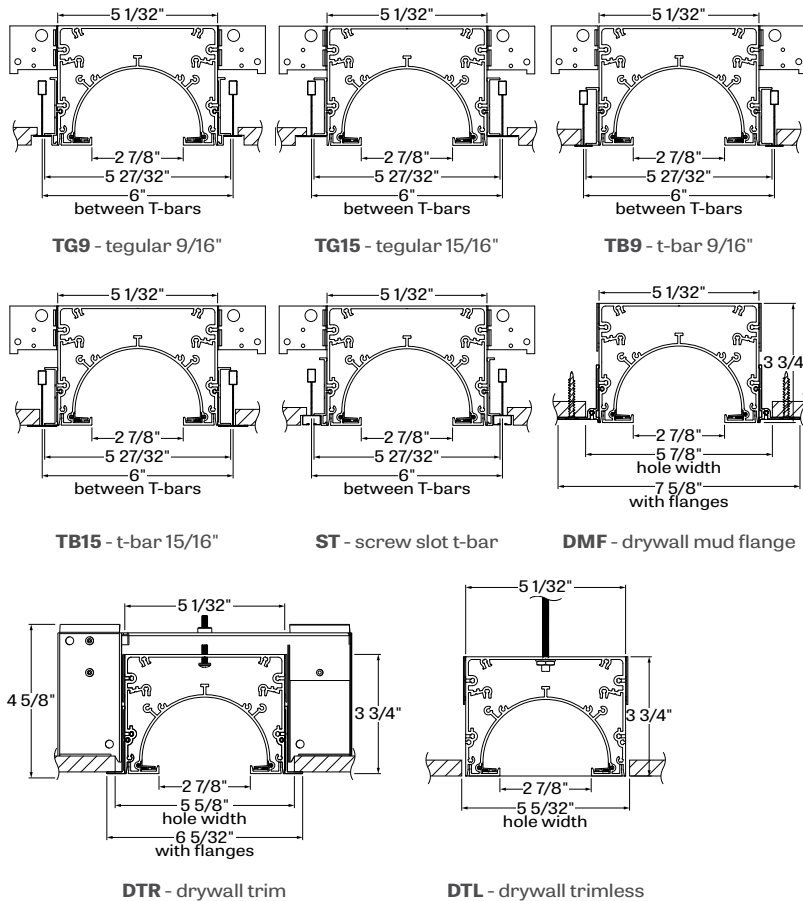
**EMERGENCY**

Factory installed long life high temperature recyclable Ni-Cad battery pack with test switch and charge indicator; minimum of 90 minutes operation, up to 1000 lumens per 4ft (25°C) emergency lighting output. Recharge time of 24 hours.

### MOUNTING OPTIONS

Recess mount into exposed or concealed T-Bar or Tegular grid ceiling, Cava is fully compatible with Armstrong Techzone™ & USG ceilings

Mounting for drywall ceilings are available with visible trim, mud flange trim or trimless



### FINISH

**Interior** - 95%, reflective matte powder coated white paint

**Exterior** - matte white or aluminum powder coating.

Custom finishes are also available.

### CONTROLS

Lumenwerx offers several options for integrating occupancy and daylight harvesting controls in our luminaires.

#### STANDALONE CONTROLS

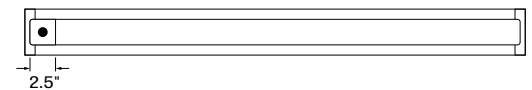
An integrated standalone sensor controls the luminaire in which it is installed. Depending on the length, more than one sensor may be necessary and may control the entire luminaire, or just a section of it. These controls operate independently. Unless otherwise agreed, location and functionality of the sensor within the luminaire are selected by Lumenwerx.

Three types are available:

**OMS:** An integral Passive InfraRed (PIR) sensor turns luminaires on and off automatically with field-adjustable time out period. No wall control is used. Coverage pattern for large motion has a 12' diameter with the sensor mounted 8' above the floor; for small motion, the pattern has an 8' diameter. Typically, one sensor is required for every 10' of a continuous luminaire run.

**ODS:** An integral, daylight harvesting sensor with closed-loop operation dims the luminaire in which it is installed in order to compensate for available daylight. The sensor measures the combination of daylight and luminaire light reflected from horizontal surfaces below the luminaire. Initial onsite calibration is required via the use of provided remote control.

**OCS:** Both an occupancy and a daylight sensor are installed in the luminaire.



Location of an Onboard control

#### CONNECTED CONTROLS

With Connected Controls, sensors or nodes installed in the luminaire form part of a larger control system infrastructure from manufacturers such as: Lutron\*, Enlighted, Osram ENCELIUM, Acuity nLight, Crestron and others. These connected controls allow for a scalable system providing features like occupancy and daylight control, manual control, scheduling and configuration of various zones and scenes. Energy reporting and system monitoring are also possible. Specific capabilities depend on the control system being used.

Lumenwerx installs the components (sensors, nodes, power packs, etc) which may be supplied to us by a third party, or procured directly by Lumenwerx, depending on the control system manufacturer.

Lumenwerx is solely responsible for the installation of specified components; the controls manufacturer is responsible for performance of the control system.

To indicate a Lumenwerx luminaire with Connected Controls, identify the specific onsite control system to be integrated into the luminaires using the ordering code.

Due to the diversity of components, you must contact [controls@Lumenwerx.com](mailto:controls@Lumenwerx.com) to assure complete compatibility with intended control system and to fully specify the luminaire.

Complete control specifications, sensor/node/power pack layout, and narrative for the control system are required for Lumenwerx to create shop drawings and submittals.

\* Lumenwerx offers a Lutron Vive-Enabled fixture option using either the DFCSJ-OEM-OCC (OCS Option) or DFCSJ-OEM-RF (wireless only, no sensor) Integral Fixture Modules and a DALI or EcoSystem LED driver based on customer dimming requirements.

**Please contact our controls department at [controls@Lumenwerx.com](mailto:controls@Lumenwerx.com) for further assistance.**

## CONSTRUCTION

**Housing** - Extruded aluminum (0.095" nominal) up to 90% recycled content

**Interior brackets** - Die formed cold rolled sheet steel 18 gauge thick

**Joining system** - Die cast zinc (0.95" nominal) and die formed galvanized sheet 18 gauge

**Reflectors** - Extruded aluminum 0.07" nominal, 95% reflective matte white painted

**Recessed flanges** - Extruded aluminum (0.075" nominal) up to 90% recycled content

**Mud flange** - Extruded aluminum (0.075" nominal) up to 90% recycled content

**Slip-through bracket** - Die Formed galvanized sheet 18 gauge

## WEIGHT

**Cava 4ft** - 11.78lbs - 5.35kg

**Cava 8ft** - 22.91lbs - 10.4kg

**Cava 12ft** - 34.14lbs - 15.5kg

## CERTIFICATIONS

**ETL** - Rated for Indoor Dry/Damp locations. Conforms to UL Standard 1598 and certified to CAN/CSA Standard C22.2 No. 250.0.

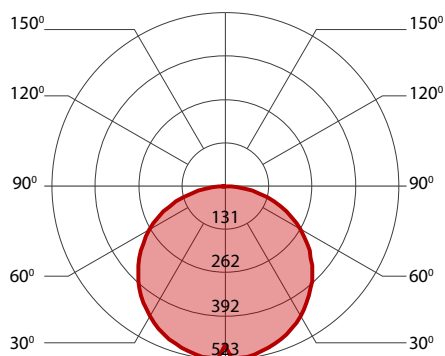
**Chicago plenum** - City of Chicago Approved (CCEA)

**IC rated** - suitable for direct contact with insulation.

## WARRANTY

Lumenwerx provides a five-year limited warranty of 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.

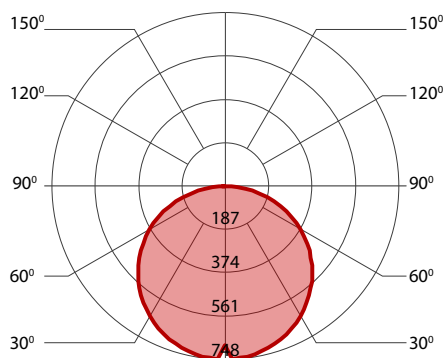
## 350 LUMEN AT 80CRI - LOW OUTPUT



## PERFORMANCE PER 4'

LED output	Color Temp	Watts	Nominal Delivered Lumens	Efficacy LPW
low output	2700K	12.5	1400	112
low output	3000K	12	1400	116
low output	3500K	12	1400	118
low output	4000K	11.5	1400	122

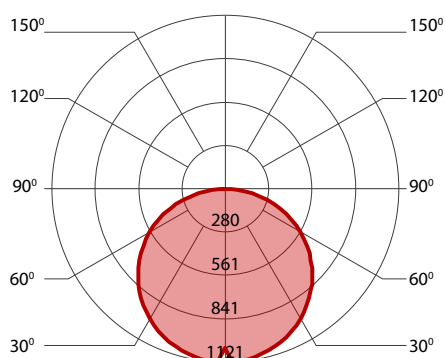
## 500 LUMEN AT 80CRI - MEDIUM OUTPUT



## PERFORMANCE PER 4'

LED output	Color Temp	Watts	Nominal Delivered Lumens	Efficacy LPW
medium output	2700K	18.5	2000	109
medium output	3000K	17.5	2000	113
medium output	3500K	17.5	2000	115
medium output	4000K	17	2000	119

## 750 LUMEN AT 80CRI - HIGH OUTPUT



## PERFORMANCE PER 4'

LED output	Color Temp	Watts	Nominal Delivered Lumens	Efficacy LPW
high output	2700K	27.5	3000	110
high output	3000K	26.5	3000	113
high output	3500K	26	3000	116
high output	4000K	25	3000	119