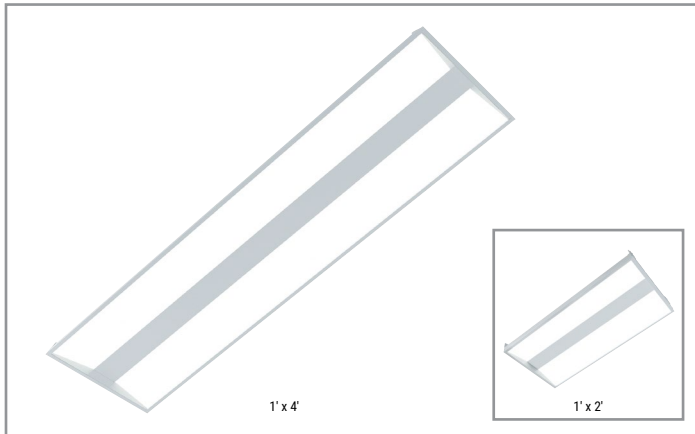


Project		Catalog #		Type	
Prepared by		Notes		Date	



Fail-Safe

ENW/ENC/ENV

ENW: Wet Location/Wipe Down

ENC: Cleanroom

ENV: Vandal Resistant

Typical Applications

- Patient Rooms • Corridors • Food Preparation • Schools • Laboratories
- Sterile Environments • Clean Rooms • Detention Centers • Behavioral
- Health • Public Spaces • Canopies • Locker Rooms.

Interactive Menu

- Order Information [page 2](#)
- VividTune Tunable White [page 5](#)
- Product Warranty

Product Certification



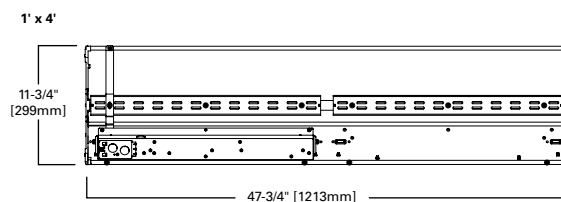
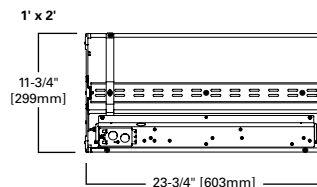
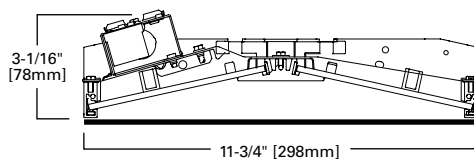
Top Product Features

- Leverages our patented WaveStream Technology with AccuAim™ optics
- 0-10V dimming standard
- Clear acrylic or polycarbonate lens adhered to fixture
- White tuning solutions available, either 3000K - 5000K or 2700K - 6500K
- Use the DFCL for hard ceiling applications

Product Features



Dimensional and Mounting Details



Ceiling Compatibility

G	F	Ceiling Type	Trim Type
Grid/Lay-in Standard	Drywall Frame Kit	Exposed Grid	G
		Concealed T	G or T
		Slot Grid	G or T
		Flange	*

Notes:
*See Drywall Frame Kit Accessory in Ordering Information section.

Order Information

SAMPLE ORDER NUMBER: **ENW-12-4-LD2-28-30-CA125-UNV-EDC1** or **ENV-12-2-LD2-17-50-CP187-UNV-ED1D1-EL7W**

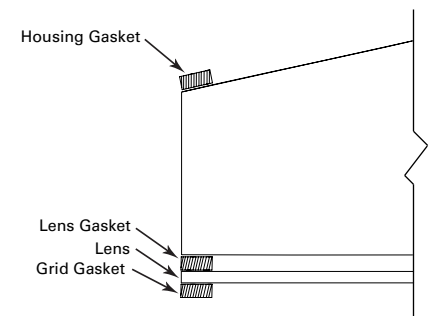
Family	Type	Width	Length	LED Type	Lumen Outputs	Color Temperature	Lens
EN =Encounter	W =Wet Location, Wipe Down, Sealed C =Clean Room Rated, Wet Location V =Vandal Resistant ^{(7),(9)}	12 =12"	2 =2" 4 =4"	LD2 =LED 2.0	1' x 2' 13=1300 Lumens ⁽¹⁰⁾ 17=1700 Lumens 27=2700 Lumens 35=3500 Lumens 1' x 4' 25=2500 Lumens ⁽¹¹⁾ 28=2800 Lumens 33=3300 Lumens 43=4300 Lumens	30 =3000K 35 =3500K 40 =4000K 50 =5000K 2765 =White Tuning, 2700K-6500K 3050 =White Tuning, 3000K-5000K	ENW and ENC CA08 =Clear Acrylic, 0.080" Thick CA125 =Clear Acrylic, 0.125" Thick ENV CP125 =Clear Polycarbonate, 0.125" Thick CP187 =Clear Polycarbonate, 0.187" Thick CP250 =Clear Polycarbonate, 0.250" Thick
Notes (7) DFCL is used to install the ENW and ENC in hard ceiling applications. For applications requiring the ENV to be installed in a hard ceiling, the DFVR is required. (9) HS (high security) option requires a minimum .250" thick polycarbonate lens (CP250), and for hard ceiling application, specify the DFVR framing kit (see accessories for ordering logic). DFVR is an optional behavioral framing kit that includes countersunk holes in the face of the T-bar, and countersunk tamper resistant screws. The screws are used to secure the DFVR to the ceiling. Installer attaches the fixture to the DFVR, then the DFVR to the ceiling.				Notes (10) 1300 lumens not available with White Tuning. (11) 2500 lumens not available with WN driver.			

Voltage	Driver	Options
UNV =Universal Voltage 120-277V 120=120 Volt 120=277 Volt	EDC1 =Electronic Driver, Single Circuit, Non-Dimming EDD1 =Electronic Driver, Single Circuit, 0-10V Dimming, 10% ED1D1 =Electronic Driver, Single Circuit, 0-10V Dimming, 1% SLTD1 =Fifth Light DALI Driver, Single Circuit, (10%-100% Dimming) ^{(2),(6)} SLTHD1 =Fifth Light Driver, Single Circuit, (1%-100% Dimming) ⁽²⁾ EDSD1 =Step Dim Driver, Single Circuit ⁽²⁾ LH1 =Lutron HiLume, (LDE1 series) 1% -100% Ecosystem Driver with Soft-on Fade to Black Dimming L51 =Lutron 5 Series (LDE5 series) 5% -100% Ecosystem Driver W2A =White Tuning, 2ch, Intensity and CCT Control ^{(10),(13)} WN =WaveLinX Wireless Driver ^{(11),(12)}	EL7W =Emergency Driver, 7W ^{(4),(5)} EL14W =Emergency Driver, 14W ^{(4),(5)} GTR2 =Bodine Generator Transfer Relay ^{(8),(12)} ETRD =Iota Emergency Transfer Relay with dimming control ^{(8),(12)} CP =CCEA Compliant ⁽¹⁾ GSK/GRD =Gasket around perimeter of bottom edge of lens to seal between the fixture and T-Grid (standard on ENC) GSK/HSG =Gasket on back side of housing (standard on ENC) HS =High Security (ENV only) ⁽⁹⁾ 90 =90CRI
Notes (2) 1300,1700,2500,2700,2800,3300 lumen packages not available with SLTD1 or EDSD1 drivers. (6) Must be used with DALI control system. (10) 1300 lumens not available with White Tuning. (11) 2500 lumens not available with WN driver. (12) Not compatible with GTR,ETRD, or integrated sensor options. Available with UNV voltage only. (13) White Tuning provides correlated color temperatures (CCT) between 3000K (warm) to 5000K (cool) or 2700K (warm) to 6500K (cool). Must be used in conjunction with W2A driver only. Must be used with two (2) 10V dimming control channels, 1color, 1 intensity		Notes (1) Row mounting not possible. (4) Repositionable adhesive is used to secure the lens to the fixture. Separate the lens from the fixture to disengage the EZ key. Then re-attach the lens to the fixture. (5) Test switch must be activated by LASER, ordered separately. (6) Used to bypass local control during outage. Must be used in conjunction with UL 1008 device (provided by others). GTR2 includes (2) relays on fixtures with dimming drivers. ETRD option only requires (1) relay when used on a dimming fixture. Must specify voltage as 120V or 277V when ordering these devices. (9) HS (high security) option requires a minimum .250" thick polycarbonate lens (CP250), and for hard ceiling application, specify the DFVR framing kit (see accessories for ordering logic). DFVR is an optional behavioral framing kit that includes countersunk holes in the face of the T-bar, and countersunk tamper resistant screws. The screws are used to secure the DFVR to the ceiling. Installer attaches the fixture to the DFVR, then the DFVR to the ceiling. (12) Not compatible with GTR, ETRD, or integrated sensor options. Available with UNV voltage only.

Accessories

Accessories (order separately)
MSC4-PK =Mounting Security Clips. Use to secure fixture to grid or to attach tie-wires ⁽³⁾ DFCL-1224W-U =1' x 2' gasketed drywall framing kit. Ships with gasket to be applied in field. Cut out dimension 12.25" x 24.25" ⁽⁷⁾ DFCL-1248W-U =1' x 4' gasketed drywall framing kit. Ships with gasket to be applied in field. Cut out dimension 12.25" x 48.25" ⁽⁷⁾ DFVR/ENV-1224W-U =1' x 2' vandal gasketed drywall framing kit. Ships with gasket to be applied in field. Cut out dimension 12.25" x 24.25" ⁽⁹⁾ DFVR/ENV-1248W-U =1' x 4' vandal gasketed drywall framing kit. Ships with gasket to be applied in field. Cut out dimension 12.25" x 48.25" ⁽⁹⁾ LASER =Laser pointer, enables remote testing to simulate AC power loss and engagement of emergency operation ⁽⁵⁾
Notes (3) Mounting clips included standard with fixture. Order MSC4-PK for spare or replacement clips. (5) Test switch must be activated by LASER, ordered separately. (7) DFCL is used to install the ENW and ENC in hard ceiling applications. For applications requiring the ENV to be installed in a hard ceiling, the DFVR is required. (9) HS (high security) option requires a minimum .250" thick polycarbonate lens (CP250), and for hard ceiling application, specify the DFVR framing kit (see accessories for ordering logic). DFVR is an optional behavioral framing kit that includes countersunk holes in the face of the T-bar, and countersunk tamper resistant screws. The screws are used to secure the DFVR to the ceiling. Installer attaches the fixture to the DFVR, then the DFVR to the ceiling.

Gasket Detail



Product	Wet Location	NSF	IP66	Class / ISO	Lens Gasket	Housing Gasket	Grid Gasket
ENW	Standard	Standard	Standard	Class 100 / ISO5-8	Standard	Option	Option
ENC	Standard	Standard	Standard	Class 100 / ISO5-8	Standard	Standard	Standard
ENV	Standard	Standard	Standard	Class 100 / ISO5-8	Standard	Option	Option

Product Specifications

Construction

- Shallow 3-1/16" deep housing extruded aluminum frame
- Injected molded composite end plates
- End plates screws for strength, rigidity and gap eliminations
- End plates accessory grid-lock feature adds safety
- Four auxiliary fixture end suspension points
- Large access plate for supply connection

Controls

- 0-10V dimming drivers to 1% standard
- WaveLinX wireless fixture for sensor-less wireless control
- WaveLinX sensor compatible for IoT capability
- Enlighted sensor compatible for IoT capability
- SVPD sensor compatible for out-of-the-box functionality
- DLVP sensor and driver compatible for low-voltage applications
- Fifth Light DALI driver, step-dimming and 3rd party drivers available

Electrical

- LED's available in 3000K, 3500K, or 4000K at 80 CRI or 90 CRI minimum
- TM21 life at 60,000 hours up to L92 and calculated L70 exceeds 288,000 hrs
- Drivers available in 120-277V and 347V
- White Tuning options available with Cooper Lighting's VividTune

Emergency Battery Pack Options

- Optional 120V-277V integral emergency battery pack available in 7W or 14W
- 90-minute backup period for code compliance
- Test switch with laser pointer allows safe testing from floor
- Patented EZ Key prevents accidental discharge during construction

Driver Access

- Drivers can be accessed via plenum

Finish

- High reflectance baked matte white enamel finish

Optics

- Precision formed optical assembly
- Positively retained high optical grade acrylic lenses
- WaveStream technology provides a visually comfortable fully luminous surface

Compliance

- Components are UL recognized
- cULus Damp Location listed for 25C ambient indoor environments
- Complies with IESNA LM-79 and LM-80 standards
- DesignLights Consortium® Qualified and classified for DLC Standard and DLC Premium (refer to www.designlights.org)
- IP66 rated standard
- Class100,ISO5-8. NSF2 Listed standard.

Warranty

- Five year warranty standard. Optional ten year warranty available

Nominal Delivered Lumen Chart

Size	Lumens	Color Temp	Input Watts	Initial Delivered Lumens (Open)	.080" Clear Acrylic	.125" Clear Acrylic	.125" Clear Polycarbonate	.187" Clear Polycarbonate	.250" Clear Polycarbonate
1x2	1300	4000	12.2	1372	1290	1262	1180	1166	1152
1x2	1700	4000	15.7	1807	1698	1663	1554	1536	1518
1x2	2700	4000	24.0	2846	2675	2619	2448	2419	2390
1x2	3500	4000	31.4	3631	3413	3341	3123	3086	3050
1x4	2500	4000	20.9	2557	2403	2353	2199	2173	2148
1x4	2800	4000	23.6	2869	2697	2640	2467	2438	2410
1x4	3300	4000	28.1	3396	3192	3125	2921	2886	2852
1x4	4300	4000	37.6	4422	4156	4069	3803	3758	3714

Approximate Color Temperature Multiplier

4000K	1.0
3000K	0.944
3500K	0.972
5000K	1.078

Notes: Delivered lumens in table above are approximate values. Refer to LM79 data/IES files for precise values.

Shipping Data

Catalog No.	Weight (lbs)
1x4 CA125 Lens	18
1x2 CA125 Lens	10

Control Systems

- WaveLinx
- DLVP
- Enlighted
- iLumin Plus
- VividTune



Connected Systems
[CLICK HERE](#)

Systems comparison chart

Cooper Lighting Solutions provides many lighting system solutions designed to satisfy code requirements and meet the unique needs of any project.

	Distributed Low-Voltage Power System	WaveLinx	Enlighted
Space type	Interior	Interior/Outdoor	Any
Stand-alone or Network	Stand-alone	Both	Network
Need-based feature progression			
Basic compliance only	•	•	•
Occupancy sensing	•	•	•
Daylight harvesting	•	•	•
Zone control	•	•	•
Scheduling	•	•	•
0-10V dimming	•	•	•
Individual fixture control	•	•	•
Retrofit+Building Integration	•	•	•
Total wireless connectivity		•	•
A/V integration		•	•
BMS integration		•	•
UI options (touchscreen, apps, etc.)		•	•
Enterprise level building integration		•	•
Facility management & tools		•	•
Floor plan & reporting tools			•
Value-added services			•
Asset tracking			•
API integration		•	•
Analytics/higher problem solving			•

Integrated Sensor

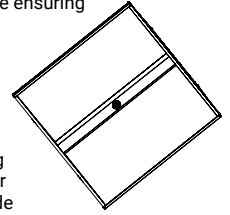
The Encounter with Integrated Sensor technology provides automatic energy savings without sacrificing performance. Traditionally, these types of energy savings required coordination between the luminaire and a lighting control system. The Encounter delivers superior lighting with integrated occupancy and daylighting controls.

Capture the benefits of traditional lighting controls, without complicated coverage planning or special wiring. Ideal for new construction or retrofit, the Encounter delivers automatic ON to an energy saving light level, while ensuring lighting is turned OFF when the space is unoccupied.

The integral daylight sensor reduces the need for special daylight zone planning. Each luminaire will automatically adjust the light level based on reflected light beneath the sensor in a closed loop method.

Occupied daylight light levels and unoccupied light levels can be adjusted using the integrated sensor programming remote (Catalog Number: ISHH-01). The integrated sensor personal remote (Catalog Number: ISHH-02) provides code compliant manual raise, lower, ON, OFF control.

The Encounter with Integrated Sensor is easy to install with no special wiring and ensures energy savings out-of-the-box with default control settings.



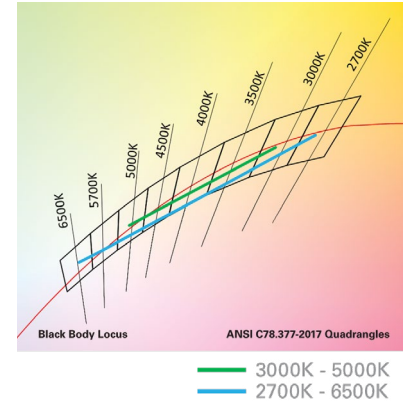
How it works:

- As the user enters the space controlled by the integral sensor, the lighting turns ON to the default daylight level.
- Lighting will remain at that the daylight level until the space is unoccupied. This will start the occupancy timeout period (default 20 minutes).
- If the space remains unoccupied for half of the timeout period, the lighting will automatically reduce to the Energy Saver light level. This adjustable light level is typically half of the occupied daylight level.
- At the end of the timeout period the lighting will go to the unoccupied light level. This adjustable light level uses the OFF default setting.



EN LED with VividTune Tunable White

VividTune tunable white luminaires from Cooper Lighting Solutions deliver high-quality light in a broad range of continuously variable color temperatures and intensities. Create a dynamic environment by adjusting the ambient light warmer or cooler to influence mood, support the task at hand, or create a dramatic ambience. The ability to control correlated color temperature and intensity separately using simple controls is the next evolution of LED lighting for the commercial, educational, healthcare and hospitality space. The unparalleled flexibility and number of available lighting environments enable users to find the right light with tunable white.



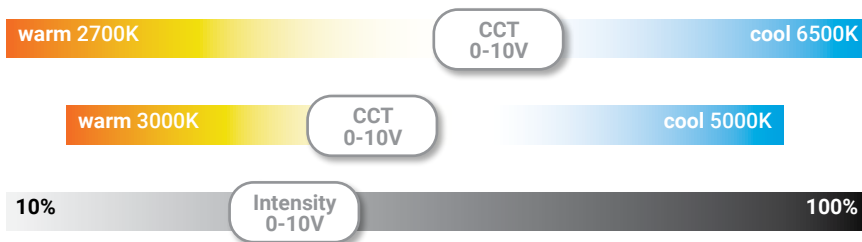
Performance Data*

Tunable White - Lumen Adjustment Factors (example only)				
CCT	3000K-5000K		2700K-6500K	
	80 CRI	90 CRI	80 CRI	90 CRI
2700K	-	-	0.894	0.738
3000K	0.968	0.809	0.903	0.762
3500K	0.984	0.827	0.932	0.779
4000K	0.988	0.860	0.919	0.814
4500K	1.002	0.864	0.946	0.808
5000K	1.003	0.868	0.945	0.829
6500K	-	-	0.949	0.850

1' x 4' Fail Safe Encounter LED- Example of Lumen Calculation			
	Standard Catalog #	VividTune 80 CRI Catalog #	VividTune 90 CRI Catalog #
CCT Setting	ENW-12-4-LD2-28-35-CA125-UNV-EDC1	ENW-12-4-LD2-28-3050-CA125-UNV-W2A1	ENW-12-4-LD2-28-3050-CA125-UNV-W2A1-90
3000K	-	2484	2076
3500K	2566	2525	2122
4000K	-	2535	2270
4500K	-	2571	2217
5000K	-	2574	2470

Controlling VividTune Tunable White

VividTune luminaires make tunable white more accessible by using simple and familiar controls. From wall dimmers to wireless controls, VividTune tunable white luminaires are compatible with industry standard 0-10V dimming controls. A single 0-10V dimming input is used to control intensity (brightness) while a second 0-10V dimming input is used to adjust CCT. For suggested control configurations, [click here](#) for tunable white application guides.



Example of Lumen Adjustment Calculation

ENW-12-4-LD2-28-3050-CA125-UNV-W2A1 at 80 CRI tuned to 3500K

Adjusted Lumen = published lm x adjusted lm factor

*Adjusted Lumen = 2566 * 0.984*

Adjusted Lumen = 2525 lm

* Lumen adjustment factors are for reference and may be different for each product selected. Refer to IES files for actual performance data on each.