

## MOISTURE SEALED LOW PROFILE LENSES FOR LEDs



U.S. & Foreign Patents Issued and Pending

### VERSATILITY

CLIPLITE® moisture sealed lenses, installed in a display panel, provide a moisture seal effective against splash and drip conditions. The lens can be used with either circuit board mounted or panel mounted LEDs. For PCB mounting applications the lens remains attached to the display or panel door while the LEDs are fixed to the PCB. The lens is ideal when used with the CONXRITE® connector for mounting the LED directly to the display panel.

### BRIGHTNESS

CLIPLITE® lenses utilize fresnel rings to increase apparent brightness and viewing angle up to 180 degrees with either diffused or nondiffused LEDs.

### PROTECTION

CLIPLITE® tests show it is an effective moisture seal in splash and drip conditions. In addition, the lens helps prevent IC failures caused by electrostatic discharge (ESD). A CLIPLITE® mounted LED guards components from ESD up to 16 kV while affording the LED physical protection.

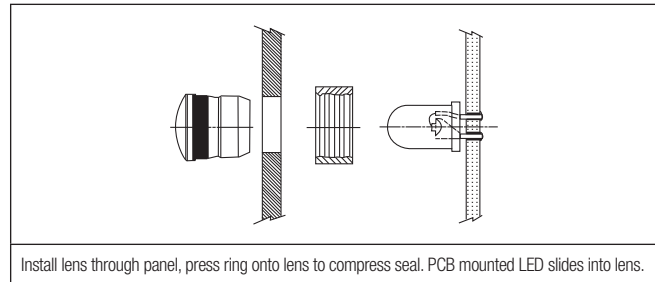
### INSTALLATION

The CLIPLITE™ lens is inserted through panel opening, retaining ring is then pressed into place compressing the seal. PCB mounted LEDs slide easily into lens allowing simple insertion or removal of the PCB. Panel mounting of the LED is accomplished with the CONXRITE® connector which also serves to compress the moisture sealing ring.

### SPECIFICATIONS

<b>MATERIAL</b>	Lens - Polycarbonate Ring - Polypropylene, Seal - J-Von (U.L. Listed Materials)
<b>DESIGN</b>	Low profile lenses with moisture seal.
<b>TESTING</b>	Environmental testing performed by Consolidated Labs, Inc. for moisture sealing, shock, vibration and standard operating temperatures. Meets NEMA 3 standards.
<b>MOUNTING</b>	Mounts through front of panel, compression of the seal is accomplished by pressing the retaining ring or CONXRITE® connector in place.  5mm (CMS 322), mounts in a 9/32" (7.2mm) hole on 3/8" centers. Panel thickness 1/32" to 1/8". Hole should be deburred but not chamfered.  See specs. on page 19 for use with CNX connectors.

### PANEL MOUNTED LENS WITH PCB MOUNTED LED



Install lens through panel, press ring onto lens to compress seal. PCB mounted LED slides into lens.

### ORDERING CODES

**CMS 322**    **RTP**

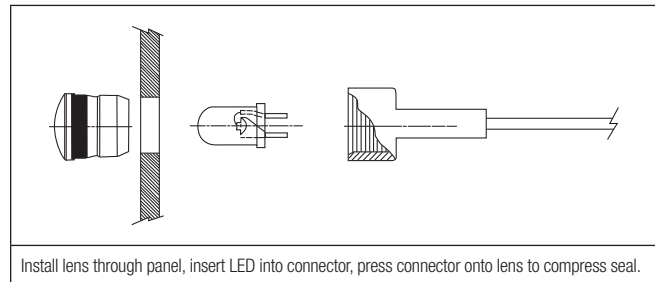
#### MODEL

CMS 322 (5mm) Low Profile Lens with moisture seal  
RING 268 (5mm) Retaining Ring

#### COLOR

RTP Red Transparent  
ATP Amber Transparent  
GTP Green Transparent  
BTP Blue Transparent  
YTP Yellow Transparent  
CTP Clear Transparent

### PANEL MOUNTED LENS WITH CONXRITE® CONNECTOR

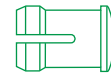


Install lens through panel, insert LED into connector, press connector onto lens to compress seal.

### OUTLINE DRAWING

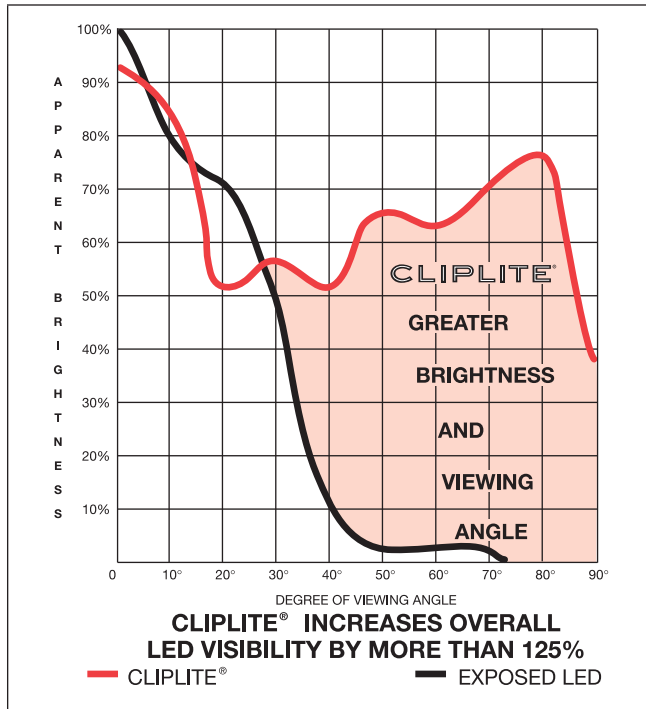
### RECOMMENDED LEDs

<p><b>CMS 322 (5mm)</b></p>	<p><b>RNG 268 (5mm)</b></p>	<p><b>5mm</b></p>
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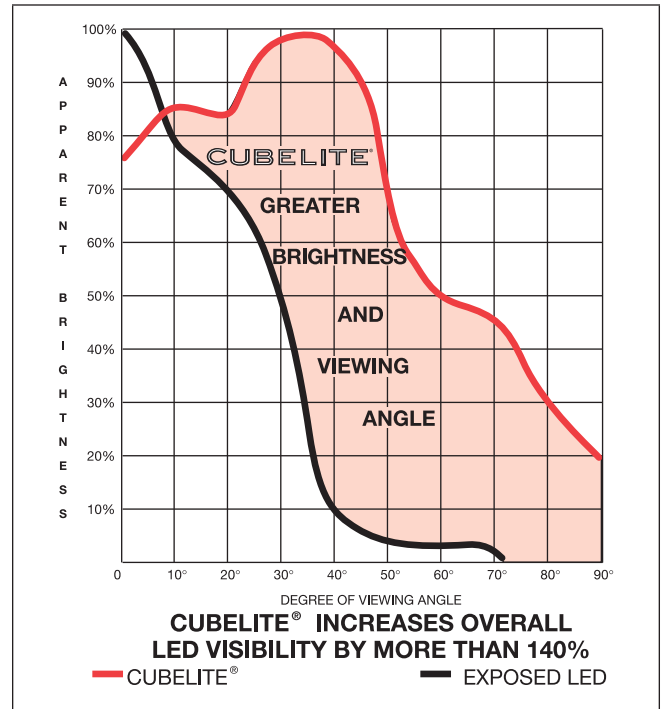


## BRIGHTNESS COMPARISON – VCC's LED LENS MOUNTS vs EXPOSED LEDs

### CLIPLITE® – LED VISIBILITY BY MORE THAN 125%



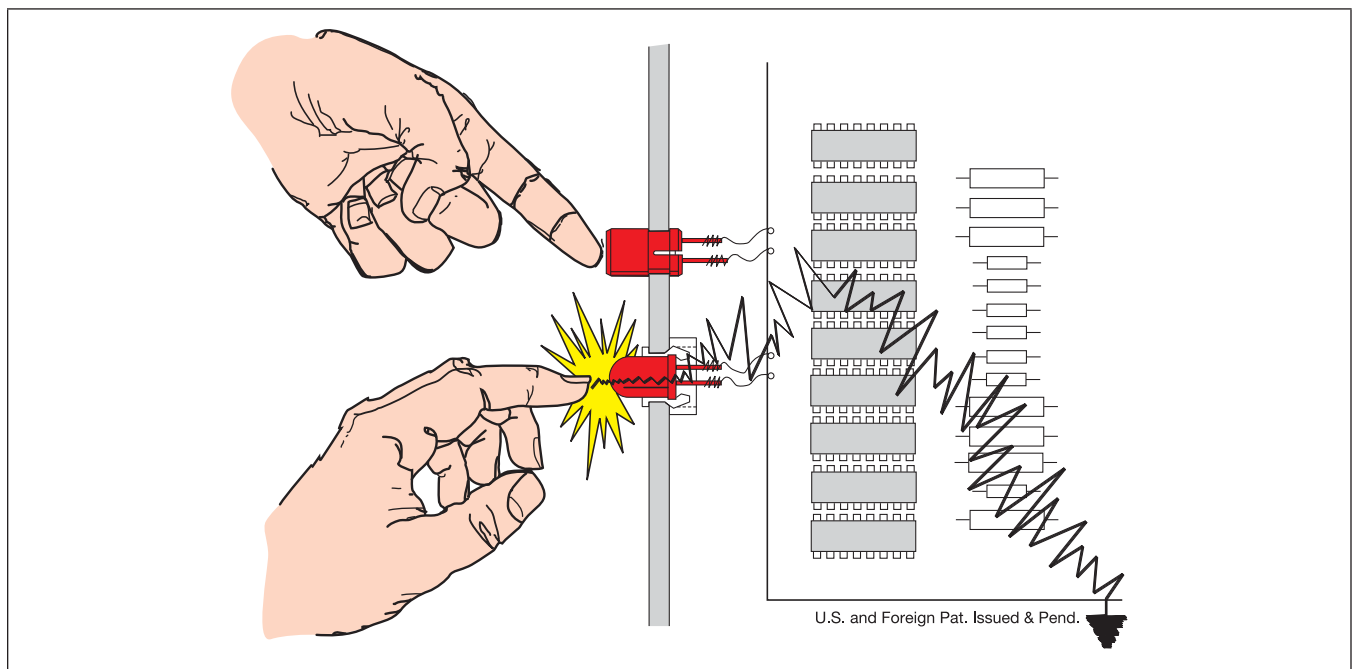
### CUBELITE® – LED VISIBILITY BY MORE THAN 145%



### USING A POINT SOURCE LED

INDEPENDENT TEST CONDUCTED BY INSTRUMENT DEVELOPMENT ENGINEERING ASSOCIATES, INC. MONTROSE, CA.

### STATIC SHIELD – LED LENS MOUNTS PROTECT ICs UP TO 16 kV



By simply walking across a carpeted floor a person can generate 10,000 volts of electrostatic discharge (ESD). Tests reveal that an exposed panel mounted LED can permit transmission of ESD onto PC boards at a level as low as 7 kV, resulting in faults and catastrophic failures of ICs and other semi-conductor components.

Visual Communications Company offers you protective lens and mounting devices for LEDs to combat ESD, (CLIPLITE® & CUBELITE®). Tests using these devices show that transmission of ESD does not occur until 15-16kV is reached. This is a level sufficiently high enough to provide protection against electrostatic discharge.