

# **Complex Environment**

# DOWNLIGHTS

Surgical Suite • MRI & Scanning • Vandal Resistant / Behavioral • Cleanroom / Food Processing



# ARCHITECTURAL **DOWNLIGHTING**

for Complex Environments

Built With Purpose, Designed To Protect, Engineered To Perform



#### **Surgical Suite**

Designing to industry certifications along with application suitable construction helps to protect patients and staff during routine and life-saving procedures.





#### MRI & Scanning

Proper shielding of electromagnetic interference and non-ferromagnetic construction ensure compatibility with sensitive equipment, resulting in positive patient outcomes.



# **Behavioral**

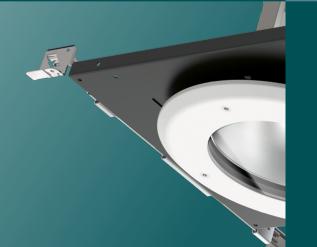
Impact and ligature resistant lighting helps deter self-harm



and / or injury to others or property.



Lifeshield offers a wide breadth of complex environment lighting to cover patient rooms, surgical and imaging, behavioral spaces, vandal, and cleanroom applications.



## Cleanroom / **Food Processing**

Fixtures for these applications not only provide illumination for tasks, but also serve as a barrier between the room and plenum to dirt and contaminants.





Lifeshield offers five beam distributions.



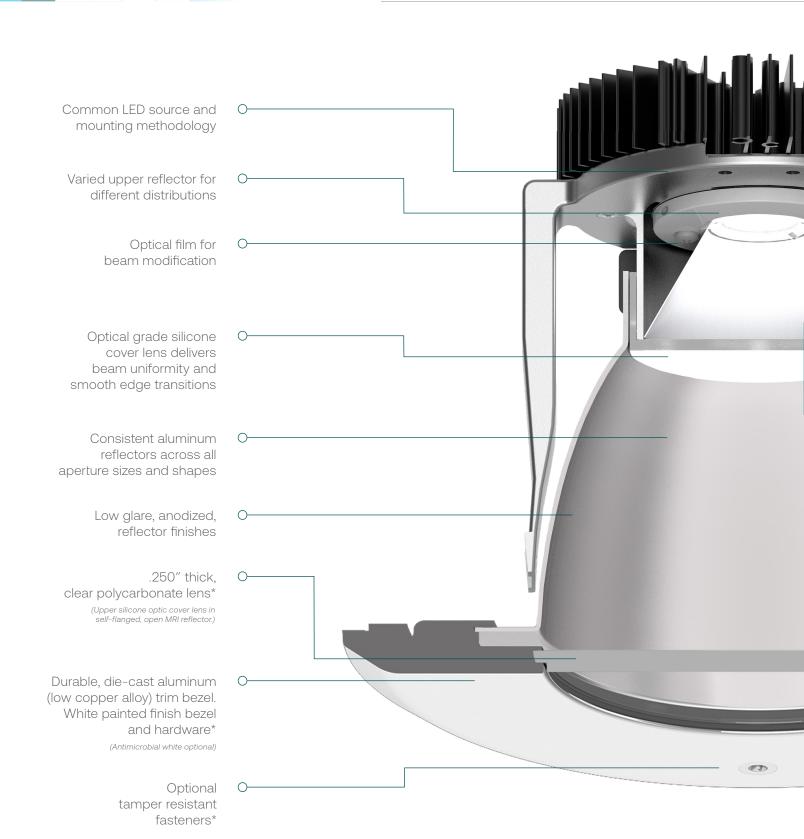
MRI

6" 4" 6"

Up to Up to Up to 6000 lm 4000 lm 6000 lm

		Surgica	al Suite			Vandal R Beha	esistant vioral	/					
	4"	6"	4"	6"	4"	6"	4"	6"	4"	6"	4"	6"	4"
Lumens		Up to 4	000 lm			Up to 4	1000 lm			Up to 4	1000 lm		Up to 4000 lm
C US	•	•	•	•	•	•	•	•	•	•	•	•	•
WET	•	•	•	•	•	•	•	•	•	•	•	•	•
MIL 461G	•	•	•	•									•
(IEC) 4	•	•	•	•									•
100	•	•	•	•	•	•	•	•	•	•	•	•	
CCEA 2	•	•	•	•	•	•	•	•	•	•	•	•	
UL 924 3	•	•	•	•	•	•	•	•	•	•	•	•	
(P) 66	•	•	•	•	•	•	•	•	•	•	•	•	
IP 69K	•	•	•	•	•	•	•	•	•	•	•	•	
(K 10	•	•	•	•	•	•	•	•	•	•	•	•	
NSF2	•	•	•	•	•	•	•	•	•	•	•	•	
(ISO 3	•	•	•	•	•	•	•	•	•	•	•	•	

- IC Housing option required to meet IC rating.
   CP Housing option required to meet CCEA rating.
- 3 EMR Housing option required to meet UL 924 rating.



\*Not applicable to MRI applications.



Alternative shallow aperture solutions create greater ceiling glare.



Lifeshield Downlights with 50° cutoff for a quiet ceiling.



This is a critical feature when placed in challenging complex environments that require proper light levels with good uniformity. In addition, the fixtures must work around the mechanical obstructions of medical or industrial equipment to provide a comfortable and task safe work environment.

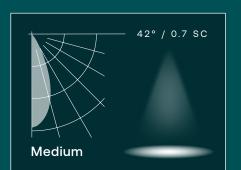
## **Beam Distributions**

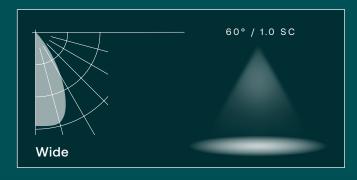
Based on 4" Round MRI Downlight

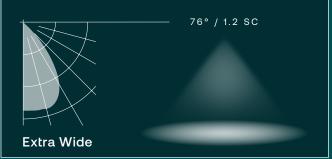




illuminate all work surfaces safely for tasks.







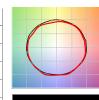
Various distributions give flexibility of luminaire placement and ability to



While providing vertical illumination on wall surfaces, Wall Wash luminaires (available for round aperture) also contribute to the ambient illumination — complementing other downlighting in the space.

TM-30 Data 3500K

_		
Value	80+ CRI	90+ CRI
$R_{_{\mathrm{f}}}$	84	88
$R_{_{g}}$	95	95
CCT (K)	3411	3419
$D_uv$	0.0015	0.0042
Х	0.4120	0.4147
У	0.3974	0.4052
CIE R <sub>a</sub>	84	93
CIE R <sub>9</sub>	11	62





#### 2 Step MacAdam Ellipse

Color quality is important for true color rendition of critical tasks. Surgeries and medical diagnostics require high CRI for true assessment of organs and tissue during medical procedures. Pharmaceutical labs require proper color rendition for detailed analysis and food processing requires high CRI to spot mold, discoloration and other deficiencies during food prep.





# Housing Options & ACCESSORIES



Specular (S)



Semi-Specular

## **Finish Options**

**Specular** is a mirror-like finish that creates a low brightness, glare-free appearance with its precise cutoff.

**Semi-Specular** exhibits a slightly diffuse look in the ceiling plane while still maintaining a glare-free appearance.

American Matte™ (U.S. Patent No. 6,254,256) finish has a stippled surface texture that provides a softer cutoff with dynamic brightness that helps hide fingerprints.

**SoftSheen™** falls in between the Specular and Softglow® finishes. It offers a deeper finish than Semi-Specular with a slightly brighter ceiling appearance.

**Softglow®** reflectors raise the ceiling plane visually by creating controlled brightness without glare at the aperture. It is an excellent alternative to a white painted reflector finish.





#### **Non-IC Plaster Frame**

(-H) New Construction plaster frame housing for Non-IC applications.

#### IC Rated and Chicago Plenum

(-H IC) New Construction enclosed housing suitable for use in insulated ceiling (IC) applications.

(-H CP) New Construction enclosed housing CCEA approved for use in Chicago Plenum applications.

American Matte™



SoftSheen™



Softglow® (VS)

#### **Reflector Color Options**

Lifeshield Downlights offer an array of anodized and painted cone colors that, with the finish options, will enhance the tone and color within the space.



## Flange Options

Varied flange options allow choices for how the reflector trim will integrate with the ceiling surface. Selection only available for MRI.





Painted White (WT)



Painted Black (BT)

## **Emergency Options**

Lifeshield offers remote emergency lighting options as well as auxiliary power solutions to ensure safe egress and compliance with life safety codes.

#### **UL 924 Compliant**

All emergency housing options and accessories provide path of egress lighting for a minimum of 90 minutes.

#### **EMR**

#### Remote Emergency

Battery pack mounts to plaster frame. Remote test switch plate/indicator light assembly can mount up to 50 ft away.

EMR Battery packs provide 7-watts of emergency power.

## DTS

#### **Device Transfer Switch**

Control relay device mounts to plaster frame J-box and connects to auxiliary generator or inverter. Senses loss of normal power and bypasses switch position and dimmer settings to provide full lumen output under emergency power. DTS Listed to UL1008 Transfer Switch Standard.

DTS Option & Inverters provide full output emergency AC power.

#### Accessories



LPS Series
Micro-Inverter
20VA/55VA

Use with multiple fixtures from 20W through 55W loads.



LiteGear® Central Inverters 125VA/250VA

Ideal for larger applications and loads from 110W to 220W.



Contact your local Current representative for any assistance with proper sizing and loading of your inverter selection.





## SURGICAL SUITE

- ISO3 clean room rated downlights support sterile healthcare applications.
- Standard (through 20L) for MIL 461G and IEC/EN 60601-1-2:2020 for use with medical electrical equipment and systems
- Antimicrobial finishes and smooth, easily cleaned surfaces help inhibit contamination.

Housing Trim Bezel EX:

LTR-6RD-H-SUR-SL10L-DM1 / LTR-6RD-T-SUR-SL35K8MD-SS / LTR-6RD-CE-WTAM

	_		_				_					
Housing		Housing Type		Lumen Package	Lume	n Output		Driver	Options	Voltage	Hous	ing Options
LTR-4RD-H 4" Round Housing LTR-4SQD-H 4" Square Housing		SUR Surgical Suite		SL Standard Lumen	06L 10L 15L	600 lm 1000 lm 1500 lm		DM1	0–10V Dimming to 1%	Standard 120–277V	CP	Chicago Plenum IC Rated
LTR-6RD-H 6" Round Housing  LTR-6SQD-H 6" Square Housing				ML Medium Lumen	20L 25L 30L	2000 lm 2500 lm 3000 lm					EMR	Emergency Battery Pack with remote
				HL High Lumen	35L 40L	3500 lm 4000 lm						test switch indicator light
											F	Fuse

		-											-				
Trim			Trim	Туре	Lun	nen Package	сст		CF	al .	Distri	bution		Refle	ctor Finish	Refle	ctor Color
Downlight			SUR	Surgical	SL	Standard	27K	2700K	8	80+ CRI	VNR	Very			inish not	Sta	andard Clear
LTR-4RD-T	4" Round Downlight Trim Assembly			Suite	ML	Lumen Medium		3000K 3500K	9	90+ CRI	NR	Narrow Narrow		pain	olicable with ted reflectors WC or BC)	CG	Champagne Gold
LTR-4SQD-T	4" Square Downlight Trim Assembly				HL	Lumen High		4000K			MD	Medium		S	Specular	BL LW	Black Light Wheat
LTR-6RD-T	6" Round Downlight					Lumen	50K	5000K			WD XW	Wide Extra		SS	Semi- Specular	PW	Pewter
LTR-6SQD-T	Trim Assembly 6" Square Downlight										14/14/	Wide		MFC	American Matte™	WC	Painted White Cone
EIN OOGD I	Trim Assembly										WW	Wall Wash		VS	Softglow®	вс	and Flange Painted
Wall Wash														VSS	SoftSheen™		Black Cone
LTR-4RW-T	4" Round Wall Wash Trim Assembly																and Flange
LTR-6RW-T	6" Round Wall Wash Trim Assembly																

Bezel	
LTR-4RD-CE	4" Round Bezel Trim, Clear Polycarbonate Flush Lens, Stainless Steel Philips Head Screws
LTR-4SQD-CE	4" Square Bezel Trim, Clear Polycarbonate Flush Lens, Stainless Steel Philips Head Screws
LTR-6RD-CE	6" Round Bezel Trim, Clear Polycarbonate Flush Lens, Stainless Steel Philips Head Screws
LTR-6SQD-CE	6" Square Bezel Trim, Clear Polycarbonate Flush Lens, Stainless Steel Philips Head Screws

















For overview purposes only. Not all options are available in combination.

For complete ordering information, see specification sheets.



To learn more about surgical downlights visit our website: currentlighting.com/surgical-suite-downlights/290427



## MRI & SCANNING

- Non-ferrous construction prevents electromagnetic interference with the most sensitive medical equipment.
- · Remote driver enclosures isolate electromagnetic fields.

Housing

Trim

Remote Driver Cabinet\*\*

LTR-6RD-H-MRI / LTR-6RD-T-MRI-SL35K8MD-SS / RDE-LTR-SL10LDM1-1

#### Housing

EX:

LTR-4RD-H 4" Round Housing LTR-4SQD-H 4" Square Housing

LTR-6RD-H 6" Round Housing LTR-6SQD-H 6" Square Housing

#### **Housing Type**

MRI MRI / Imaging (Non-ferromagnetic)



Remote Driver Enclosure

	_									_									_
Trim		Lum	nen Package	сст		CR	RI	Distr	ibution		Refle	ctor Finish	Refl	ector Color	Flai	nge Color	Options		
Downlight LTR-4RD-T-MRI 4"Round LTR-4SQD-T-MRI 4"Square LTR-6RD-T-MRI 6"Round		SL ML HL VL	Standard Lumen Medium Lumen High Lumen Very High Lumen	30K 35K 40K	2700K 3000K 3500K 4000K 5000K	9	80+ CRI 90+ CRI	VNR NR MD WD XW	Very Narrow Narrow Medium Wide Extra Wide		ap wit re	nish not pplicable h painted effectors //C or BC) Specular Semi- Specular American	CG BL LW PW	ndard Clear Champagne Gold Black Light Wheat Pewter Painted White Cone	re	tandard hatches offector color White Flange Black Flange	AM Anti- micro Coati	obial	
Wall Wash LTR-4RW-T-MRI 6"Round LTR-6RW-T-MRI 6"Round			Lumen					ww	Wall Wash		VS VSS	Matte™ Softglow® SoftSheen™	ВС	and Flange Painted Black Cone and Flange					

## Remote Driver Cabinet

RDE-LTR Remote Driver Cabinet for use with LTR MRI Downlights

Lum	en Package	Lume	n Output	Drive	r Options
SL	Standard Lumen	06L 10L 15L	600 1000 1500	DM1	0–10V Dimming to 1%
ML	Medium Lumen	20L 25L 30L	2000 2500 3000		
HL	High Lumen	35L 40L 45L	3500 4000 4500		
VL	Very High Lumen	50L 55L 60L	5000 5500 6000		

Number	of	Drivers



2 2 Drivers

3 3 Drivers

4 4 Drivers

5 5 Drivers

6 6 Drivers

**7** 7 Drivers

8 8 Drivers







For overview purposes only. Not all options are available in combination.
For complete ordering information, see specification sheets.

\*\*Customer is required to provide appropriate filters for MRI application.





## VANDAL RESISTANT / **BEHAVIORAL**

• Ligature resistant design lessens risk of personal harm from misuse.

• Tamper resistant fasteners and construction prevent unauthorized access.

Housing Trim Bezel EX: LTR-6RD-H-SL10L-DM1 / LTR-6RD-T-SL35K8MD-SS / LTR-6RD-CEVR-WTAM

		-					-									
Housing			Lum	en Package	Lume	n Output		Driver	Options	Contro	ol Options	Vol	tage	е	Hous	ing Options
LTR-4RD-H LTR-4SQD-H	4" Round Housing		SL	Standard Lumen	06L 10L 15L	600 lm 1000 lm 1500 lm		DM1	0-10V Dimming to 1%	NXE	NX Wired Dual RJ45 SmartPORTS, without Sensor	_	0-2	dard 277V 347V	CP	Chicago Plenum IC Rated
LTR-6RD-H	Housing 6" Round Housing		ML	Medium Lumen	20L 25L 30L	2000 lm 2500 lm 3000 lm		DM01	0-10V Dimming to <1%	NXW	NX Networked Wireless Radio and Bluetooth® Programming,	34	,	047 V	EMR	Emergency Battery Pack with remote
LTR-6SQD-H	Ü		HL	High Lumen	35L 40L	3500 lm 4000 lm		DALI	DALI Dimming to 1%	LV	without Sensor  Lutron Vive Enabled, 0–10V				DTS	test switch indicator light Device
								EDM	Lutron Hi-Lume	LVE	(requires 0-10V driver)					Transfer Switch
									EcoSystem Dimming to 1%		EcoSystem (requires EDM)				GTD	Generator Transfer Device
															F	Fuse

Trim		Lum	nen Package	сст		CRI		Distri	bution	Reflec	ctor Finish	Refle	ector Color	
Downlight		SL	Standard	27K	2700K	8	80+ CRI	VNR	Very Narrow		inish not	St	andard Clear	
LTR-4RD-T	4" Round Downlight Trim Assembly	ML	Lumen	30K	3000K	9	90+ CRI	NR	Narrow	paint	licable with ed reflectors VC or BC)	CG	Champagne Gold	
LTR-4SQD-T	4" Square Downlight Trim Assembly	HL	Lumen High	35K 40K	3500K 4000K			MD WD	Medium Wide	S	Specular	BL LW	Black Light Wheat	
LTR-6RD-T	6" Round Downlight	пь	Lumen	50K	5000K			XW	Extra Wide	SS	Semi- Specular	PW	Pewter	
LTR-6SQD-T	Trim Assembly  6" Square Downlight			AMB	Amber (590 nm)			WW	Wall Wash	MFC	American Matte™	WC	Painted White Cone and	
	Trim Assembly									VS	Softglow®	вс	Flange Painted Black	
Wall Wash										VSS	SoftSheen™		Cone and	
LTR-4RW-T	4" Round Wall Wash Trim Assembly												Flange	
LTR-6RW-T	6" Round Wall Wash Trim Assembly													

Bezel Color WT White

WTAM White, Antimicrobial

Bezel	
TR-4RD-CEVR	4" Round Bezel Trim, Clear Polycarbonate Flush Lens, Stainless Steel Tamper Resistant Torx® screws
TR-4SQD-CEVR	4" Square Bezel Trim, Clear Polycarbonate Flush Lens, Stainless Steel Tamper Resistant Torx® screws
TR-6RD-CEVR	6" Round Bezel Trim, Clear Polycarbonate Flush Lens, Stainless Steel Tamper Resistant Torx® screws

LTR-6SQD-CEVR 6" Square Bezel Trim, Clear Polycarbonate Flush Lens, Stainless Steel Tamper Resistant Torx® screws















are available in combination.
For complete ordering information, see specification sheets.



To learn more about Vandal Resistant / Behavioral downlights visit our website: currentlighting.com/vandal-behavioral-downlights/290429



## CLEANROOM / FOOD PROCESSING

• ISO3 clean room rated downlights support sterile applications.

• Antimicrobial finishes and smooth, easily cleaned surfaces help inhibit contamination.

• IP66 and IP69K sealed construction ensures durability in wash down environments, NSF and wet locations.

• IC rated options accommodate installation in insulated ceilings.

Trim Housing

LTR-6RD-H-SL10L-DM1 / LTR-6RD-T-SL35K8MD-SS / LTR-6RD-CE-WTAM

		-					_								
lousing			Lum	en Package	Lume	en Output		Driver	Options	Contro	ol Options	Volta	age	Housi	ng Options
TR-4RD-H	4" Round Housing		SL	Standard Lumen	06L 10L	600 lm 1000 lm		DM1	0–10V Dimming to 1%	NXE	NX Wired Dual RJ45 SmartPORTS,		ndard -277V	СР	Chicago Plenum
LTR-4SQD-H	4" Square				15L	1500 lm		DM01	0-10V Dimming		without Sensor	34	347V	IC	IC Rated
	Housing		ML	Medium	20L	2000 lm			to <1%	NXW	NX Networked			EMR	Emergency
LTR-6RD-H	6" Round Housing			Lumen	25L 30L	2500 lm 3000 lm		DALI	DALI Dimming to 1%		Wireless Radio and Bluetooth Programming,				Battery Pack with remote test switch indicator
LTR-6SQD-H	6" Square		HL	High Lumen	35L 40L	3500 lm 4000 lm		EDM	Lutron Hi-Lume		without Sensor				light
	Housing			Lumen	401	4000 1111			EcoSystem Dimming to 1%	LV	Lutron Vive Enabled, 0-10V (requires 0-10V driver)			DTS	Device Transfer Switch
										LVE	Lutron Vive Enabled			GTD	Generator Transfer Device
											EcoSystem (requires EDM)			F	Fuse

		Г									_				
Trim			Lum	nen Package	ССТ		CR	ı	Distri	bution		Refle	ctor Finish	Refle	ector Color
Downlight			SL	Standard	27K	2700K	8	80+ CRI	VNR	Very			n not applicable vith painted	S	Standard Clear
LTR-4RD-T	4" Round Downlight Trim Assembly		NAI.	Lumen High	30K	3000K	9	90+ CRI	NR	Narrow Narrow			etors (WC or BC)	CG BL LW	Champagne Gold
LTR-4SQD-T	4" Square Downlight		HL		35K	3500K			MD	Medium		S	Specular Semi- Specular		Black
	Trim Assembly				40K	4000K			WD	Wide		SS			Light Wheat
LTR-6RD-T	6" Round Downlight Trim Assembly			Lumen	50K AMB	5000K Amber			xw	Extra		MFC	American	PW WC	Pewter Painted White
LTR-6SQD-T	6" Square Downlight				AIVID	(590 nm)			14/14/	Wide		\/C	Matte™	VVC	Cone and Flange
Ent coap i	Trim Assembly								WW	Wall Wash		VS VSS	Softglow® SoftSheen™	ВС	Painted Black Cone and Flange
Wall Wash												V 3 3	JOHOHEEH		oone and hange
LTR-4RW-T	4" Round Wall Wash Trim Assembly														
LTR-6RW-T	6" Round Wall Wash Trim Assembly														

Bezel	
LTR-4RD-CE	4" Round Bezel Trim, Clear Polycarbonate Flush Lens, Stainless Steel Philips Head Screws
LTR-4SQD-CE	4" Square Bezel Trim, Clear Polycarbonate Flush Lens, Stainless Steel Philips Head Screws
LTR-6RD-CE	6" Round Bezel Trim, Clear Polycarbonate Flush Lens, Stainless Steel Philips Head Screws
LTR-6SQD-CE	6" Square Bezel Trim, Clear Polycarbonate Flush Lens, Stainless Steel Philips Head Screws



Bezel Color

WTAM White, Antimicrobial

















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To learn more about Cleanroom / Food Processing downlights visit our website: currentlighting.com/cleanroom-food-processing-downlights/290431







**CSA:** Product tested by a certified lab via an agreement with UL, insuring it meets all Canadian and American National Standards for security and performance. The cCSAus listing qualifies that a product is certified for use in the U.S. and Canada.







**IP69K:** Ingress Protection (IP) 69K fixtures are rated to the same particulate and water (other liquids) standards as IP66, but also include protection against prolonged exposure to high pressure water jets including those used at high temperatures for cleaning and sanitizing.

**IK10:** An international numeric classification for the degree of protection provided by an electrical enclosure (fixture) against external mechanical impacts. The highest level of protection rating is IK10.

ISO 3: Fixtures tested to the International Standards Organization (ISO) standard 14644-1 that are rated as ISO 3 (Federal Std. 209E, Class 1.) ISO ratings (1 through 9) are used for qualifying cleanrooms and enclosures (fixtures) for use in cleanrooms. ISO 3 rated fixtures meet the requirements of ISO ratings 3 through 9.



**MIL461 G:** A United States Military Standard that describes how to test equipment for electromagnetic compatibility. The standard covers both conducted and radiated emissions and ensures that sensitive electronic equipment is less likely to be affected by electromagnetic interference (EMI).



**NSF:** NSF/ANSI Standard 2 (NSF2) establishes minimum requirements for food equipment, including lighting. Construction requirements are designed to prevent food contamination, including corrosion resistance, cleanability and the ability of exposed material to withstand normal wear.



ANSI / UL 924: The Standard for Safety of Emergency Lighting and Power Equipment published by Underwriters Laboratories. UL Listed Emergency Lights feature reliable battery backup systems that will operate for at least 90 minutes when power fails.



**WET Location:** Meets UL requirements for recessed fixtures that are mounted in a covered ceiling and are suitable for contact with water (liquid) from the room side.



**CCEA:** City of Chicago Environmental Air (CCEA) approved fixtures feature airtight construction to limit airflow from the room side to the plenum. Electrical wiring and conductors are enclosed in metal wireway compartments and sealed from the plenum.





Lifeshield offers a wide breadth of complex environment lighting to cover patient rooms, surgical and imaging, behavioral spaces, vandal, and cleanroom applications.



One Lighting Platform for a Connected World. The NX Lighting Controls platform delivers seamless interior and exterior lighting control.



# **Current** <sup>®</sup>

#### **Current - HLI Brands**

701 Millennium Blvd. Greenville, SC 29607

#### currentlighting.com/lifeshield

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(Rev 5/15/23)

LS-Downlights\_Brochure\_R06