

4" ROUND COMPLEX ENVIRONMENT DOWNLIGHT **SURGICAL**

DATE: LOCATION TYPE: **PROJECT** CATALOG #

FEATURES

- · 4" round architectural LED downlight delivering 600-4000 lumens
- · Five beam distributions and wall wash allow for controlled illumination of medical suites
- 50° cutoff to source and source image provides a low glare, distraction free environment with enhanced visual acuity for intricate tasks
- Options for color temperature range from 2700K-5000K in 80+ or 90+ CRI providing quality illumination for a variety of surgical applications
- · Aluminum anodized reflectors available in a wide array of colors and finishes
- · Closed cell silicone gasket protects against dust and water ingress. Supports the fixture's ISO 3 cleanroom rating
- · Suitable for wet location under covered ceiling and rated IP66 / IP69K (room side), making the product ideal for intense cleaning and sanitation
- · Durable, marine grade, die cast aluminum bezel trim (low-copper alloy) and flush polycarbonate lens are available with optional antimicrobial paint finish and rated for NSF2 certification
- Standard (through 20L) for MIL 461G and IEC/EN 60601-1-2:2020, complies with safety and performance for EMI and medical electrical equipment and systems





























CONSTRUCTION

- Corrosion resistant, marine grade (low copper alloy), die cast aluminum bezel trim
- · Flush, impact resistant .250" thick, clear polycarbonate lens for ease of wipe down.
- · Closed cell silicone gasket prevents dust and water ingress for IP66, IP69K, ISO3 certification
- · Non-IC standard, Chicago Plenum and IC options
- · Steel platform with black finish and pre-installed bar hangers simplify installation
- · Pre-wired junction box with snap-on covers for easy access
- · Snap-in quick connectors simplify electrical connections to the driver compartment
- · Light Engine connections use plenum rated (CMP) cable

OPTICS

- Visually pleasing 50° cutoff to source and source image
- · The light distribution is free of distracting bright spots or pixelation and the perimeter has a smooth transition
- · Optical grade silicone lens is integral to the light engine to ensure precise beam control
- · High purity aluminum reflector enables reliable and consistent finish and color
- · Large selection of anodized inner reflector finishes and colors as well as painted cone options
- White painted bezel trim finish, antimicrobial white paint as option

ELECTRICAL

- · Chip-on-board LED with 2 SDCM
- · Multiple CCTs, 80+ or 90+ CRI
- Long LED life: L90 at >55,000 hours (TM-21)
- · Universal voltage 120V-277V driver,
- · UL Class 2, inherent short circuit and overload protection
- Flicker free 0–10V dimming 1%
- · Battery pack with remote test switch and indicator available

INSTALLATION

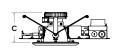
- Accommodates ceiling thickness up to 2" (See DIMENSIONS section for details)
- · Universal adjustable mounting brackets also accept 0.5" EMT conduit or 1.5" or 0.75" lathing channel (by others) or Prescolite accessory bar hangers (B24 or B6)
- Light Engine/Driver fully serviceable from above or below the ceiling

CERTIFICATIONS

- CSA certified, UL1598
- · Suitable for wet location (under covered ceiling), IP66 and IP69K rated
- ISO3 certified per ISO 14644-1:2015 ISO class 3 standards
- · NSF2 Non-Food Zone certified
- · 06L-20L: Complies with MIL-STD-461G for electromagnetic compatibility







	Typical Dimensions and Weights									
	Lumen Package	"A" Length Inches (mm)	"B" Width Inches (mm)	"C" Height Inches (mm)	Weight lbs (kg)					
ĺ	06L - 15L	14.56 (370)	14.36 (365)	4.97 (126)	7.4 (3.3)					
	20L - 30L	14.56 (370)	14.36 (365)	6.15 (156)	7.8 (3.6)					
	35L - 40L	14.56 (370)	14.36 (365)	7.33 (186)	8.3 (3.8)					

See DIMENSIONS section for complete details

CERTIFICATIONS (CONTINUED)

- 06L-20L: Complies with IEC/EN 6061-1-2:2020 for basic safety and performance for electromagnetic compatibility with medical electrical equipment and systems
- EMR: Certified under UL 924 standard for emergency lighting and power equipment
- EMR: Emergency battery packs are California Energy Commission (CEC) Title 20 Compliant
- · Meets IK10 per IEC 60068-2-75 impact testing
- Approved for 8 (4 in/4 out) No. 12AWG conductors rated for 90°C through wiring
- For -BAA Option: This product meets federal procurement law requirements under the Buy American Act (FAR 52.225-9) See Buy America(n) Solutions
- For -TAA Option: Product configurations meet federal procurement law requirements under the Trade Agreements Act (FAR 52.225-11) See Buy America(n) Solutions

WARRANTY

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KEY DATA	A
Lumen Range	600-4000
Wattage Range	8-52
Efficacy Range (LPW)	52-83*
Reported Life (Hours)	L90 / >55,000
Input Current (mA)	66-434 (120V)

*Based on 35K, 80 CRI





4" ROUND COMPLEX ENVIRONMENT DOWNLIGHT **SURGICAL**

DATE:	LOCATION:
TYPE:	PROJECT:
CATALOG #:	

ORDERING GUIDE

Example: LTR-4RD-H-SUR-SL10L-DM1-LTR-4RD-T-SUR-SL35K8MD-SS -LTR-4RD-CE-WTAM

CATALOG #

HOUSING

LTR-4RD-H		-	SUR		-					-	DM1					-
Aperture/Sha	ape/Function		Housi	ng Type		Lum	en Package	Lume	n Output		Drive	r Options	Voltage	Housir	ng Options	
LTR-4RD-H	4" Round Downlight		SUR	Surgical		SL	Standard	06L	600		DM1	0-10V	Standard	СР	Chicago Plenum ^{2,4}	1
	New Construction Housing			Suite			Lumen	10L	1000			Dimming to 1%	120-277V	IC	IC rated 3,4	
	riousing							15L	1500			10 1/6		EMR	7W Emergency Battery	
						ML	Medium	20L	2000						Pack (CEC Title 20 Compliant) with remote	
							Lumen	25L	2500 °						test switch and indicator	
								30L	3000 6						light ⁴	
						HL	High	35L	3500 ⁶					F	Fuse 4	
							Lumen ⁶	40L	4000 ⁶					BAA	Buy American Act (FAR 52.225-9) Compliant	
														TAA	Trade Agreements Act (FAR 52.225-11) Compliant	

TRIM

LTR-4RD-T		-	SUR		-									-
Aperture/Sha	ape/Function		Trim T	уре		Lum	en Package	ССТ		CR	I	Distrib	oution	
LTR-4RD-T	4" Round Downlight		SUR	Surgical		SL	Standard	27K	2700K	8	80+CRI	VNR	Very Narrow (0.3 SC/20°)	7
	Light Engine/ Trim Assembly			Suite			Lumen	30K	3000K	9	90+CRI	NR	Narrow (0.5 SC/30°)	
ITD 40W T	,					ML	Medium Lumen	35K	3500K			MD	Medium (0.7 SC/40°)	
LTR-4RW-T	4" Round Wall Wash Light Engine/					HL	High	40K	4000K			WD	Wide (0.9 SC/59°)	
	Trim Assembly 5						Lumen 5	50K	5000K 1			XW	Extra Wide (1.1 SC/74°)	
												ww	Single Wall Wash 5	

TRIM CONTINUED

Reflec	Reflector Finish		ctor Color	Reflector Options		
Finish not applicable with painted reflectors		Standard Clear		BAA	Buy American Act	
	WC or BC)	CG	Champagne Gold		(FAR 52.225-9) Compliant	
S	Specular	BL	Black	TAA	Trade Agreements Act (FAR 52.225-11)	
SS	Semi- Specular	LW	Light Wheat		Compliant	
MFC	American	PW	Pewter			
WII O	Matte™	wc	Painted White Cone and Flange			
VS	Softglow®	вс	Painted Black			
VSS	SoftSheen™		Cone and Flange			

Notes:

- 1 5000K available in 80+ CRI only.
- 2 CP available for 06L-35L.
- 3 IC available up to 20L
- 4 Housing options (except Fuse, BAA/TAA) not available in combination.
- 5 Wall wash trim requires WW distribution option.
- Not available for MIL 461G or IEC.
- 7 VNR available up to 30L.

BEZEL

		-			-			Accessories	
Bezel Type			Bezel Tr	im Color		Optio	ns	☐ B24	Set of two (2) 24" bar hangers for T-bar ceilings
LTR-4RD-CE	4" Round Bezel Trim Assembly with		WT	White		BAA	Buy American Act	□ B 0	Set of two bar hangers for
	Clear Polycarbonate Lens, Stainless Steel Philips Head Screws (included)		WTAM	White			(FAR 52.225-9) Compliant	∐ B6	ceiling joist up to 24" centers
	Stoot Timpe Floud Screws (Floudesa)			Antimicrobial		TA A		LiteGear	LiteGear® Inverter,
LTR-4RD-CEVR	4" Round Bezel Trim Assembly with					TAA	Trade Agreements Act (FAR 52.225-11)	_	25VA-250VA
	Clear Polycarbonate Lens, Stainless steel tamper resistant Torx® center pin reject (included)						Compliant	LPS Series	LightPower Micro-Inverter, 20VA-55VA





4" ROUND COMPLEX ENVIRONMENT DOWNLIGHT **SURGICAL**

DATE: LOCATION:

TYPE: PROJECT:

CATALOG #:

PERFORMANCE DATA TABLE (3500K, 80CRI)

Lumen Package	Nominal Lumens	Distribution	Delivered Lumens	Watts	LPW
		Very Narrow	571	7.6	75
		Narrow	563	7.8	72
0.01		Medium	541	7.8	69
06L	600	Wide	483	7.8	62
		Extra Wide	501	7.8	64
		Wall Wash	427	7.8	55
		Very Narrow	935	11.3	83
		Narrow	900	12.0	75
		Medium	866	12.0	72
10L	1000	Wide	773	12.0	64
		Extra Wide	802	12.0	67
		Wall Wash	682	12.0	57
		Very Narrow	1340	17.3	77
		Narrow	1287	18.6	69
		Medium	1239	18.6	67
15L	1500	Wide	1106	18.6	59
		Extra Wide	1146	18.6	62
		Wall Wash	976	18.6	52
		Very Narrow	1678	22.8	74
		Narrow	1745	22.0	79
		Medium	1679	22.3	75
20L	2000	Wide	1499	22.2	68
		Extra Wide	1554	22.2	70
		Wall Wash	1323	22.0	60
		Very Narrow	2021	28.6	71
		Narrow	2141	27.8	77
		Medium	2060	27.8	74
25L	2500	Wide	1839	27.8	66
		Extra Wide	1906	27.8	69
		Wall Wash	1623	27.8	58
		Very Narrow	2358	36.0	66
		Narrow	2570	34.6	74
		Medium	2472	34.6	71
30L	3000	Wide	2207	34.6	64
		Extra Wide	2288	34.6	66
		Wall Wash	1948	34.6	56
		Narrow	3070	42.9	72
		Medium	2954	42.9	69
35L	3500	Wide	2637	42.9	61
		Extra Wide	2734	42.9	64
		Wall Wash	2327	42.9	54
		Narrow	3369	51.5	65
		Medium	3504	51.5	68
40L	4000	Wide	3371	51.5	65
		Extra Wide	3010	51.5	58
	-	Wall Wash	2656	51.5	52





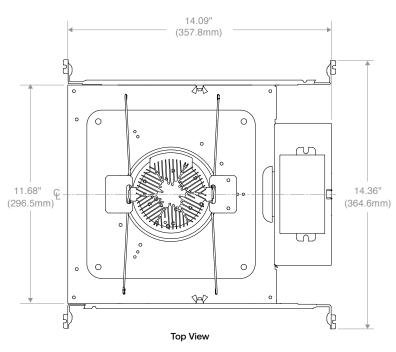
4" ROUND COMPLEX ENVIRONMENT DOWNLIGHT **SURGICAL**

DIMENSIONS

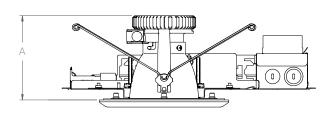
DATE: LOCATION:

TYPE: PROJECT:

CATALOG #:

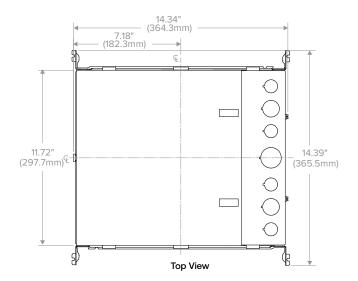


LTR-4RD-H-SUR New Construction

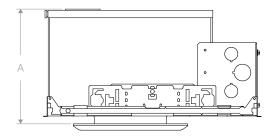


Dimensi	onal Data
Aperture Opening	4.00" (101.6mm)
Overall Flange	Ø 7.67" (194.8 mm)
Bezel (below ceiling)	0.42" (10.7 mm)
Ceiling Cutout:	Ø 6.50" (165.1 mm)
Ceiling Thickness:	0.50" to 2.00" (12.7 mm to 50.8 mm)

	Lumen Package	"A"
	06L-15L	4.97" (126.2mm)
	20L-30L	6:15" (156:2mm)
	35L-40L	7.33" (186.2mm)



LTR-4RD-H-SUR IC/CP



Dimensi	onal Data
Aperture Opening	4.00" (101.6mm)
Overall Flange	Ø 7.67" (194.8 mm)
Bezel (below ceiling)	0.42" (10.7 mm)
Ceiling Cutout:	Ø 6.50" (165.1 mm)
Ceiling Thickness:	0.50" to 2.00" (12.7 mm to 50.8 mm)

Lumen Package	"A"
Standard	7.68" (195.0mm)
CP option ≥35L	10.06" (255.5mm)





4" ROUND COMPLEX ENVIRONMENT DOWNLIGHT **SURGICAL**

DATE: LOCATION:

TYPE: PROJECT:

PHOTOMETRY

LTR-4RD-H-SUR-ML20L-DM1 / LTR-4RD-T-SUR0ML35K8VNR-SS / LTR-4RD-CE-WT

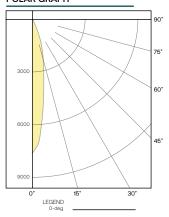
LUMINAIRE DATA

Test No.	23.00004
Description	2000 lm, Very Narrow, 3500K,
	80 CRI
Delivered Lumens	1678
Watts	22.8W
Efficacy	74
Mounting	Recessed
Spacing Criterion	0.3
Beam Angle (FWHM)	20

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0-40	1633	97.3
0-60	1666	99.3
0-90	1678	100.0
0-180	1678	100.0

POLAR GRAPH



CATALOG #:

CANDELA DISTRIBUTION

Degree	Candela
0	7663
5	6093
15	2462
25	713
35	146
45	24
55	11
65	7
75	4
85	1
90	0

LUMINANCE DATA*

Vertical Angle	Average
45°	4186
55°	2366
65°	2043
75°	1906
85°	1415

*Candela/Square Meter

LTR-4RD-H-SUR-ML20L-DM1 / LTR-4RD-T-SUR-ML35K8NR-SS / LTR-4RD-CE-WT

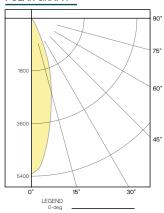
LUMINAIRE DATA

Test No.	23.00005
Description	2000 lm, Narrow, 3500K, 80 CRI
Delivered Lumens	1745
Watts	22.0W
Efficacy	79
Mounting	Recessed
Spacing Criterion	0.5
Beam Angle (FWHM)	30

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0-40	1700	97.4
0-60	1736	99.5
0-90	1745	100.0
0-180	1745	100.0

POLAR GRAPH



CANDELA DISTRIBUTION

Degree	Candela
0	5312
5	4757
15	2623
25	907
35	196
45	27
55	9
65	5
75	3
85	1
90	0

LUMINANCE DATA*

Vertical Angle	Average
45°	4710
55°	1935
65°	1459
75°	1430
85°	1415

*Candela/Square Meter

LTR-4RD-H-SUR-ML20L-DM1 / LTR-4RD-T-SUR-ML35K8MD-SS / LTR-4RD-CE-WT

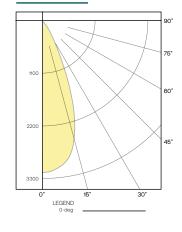
LUMINAIRE DATA

Test No.	23.00006
Description	2000 lm, Medium, 3500K, 80 CRI
Delivered Lumens	1679
Watts	22.3W
Efficacy	75
Mounting	Recessed
Spacing Criterion	0.7
Beam Angle (FWHM)	43

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0-40	1633	97.3
0-60	1669	99.4
0-90	1679	100.0
0-180	1679	100.0

POLAR GRAPH



CANDELA DISTRIBUTION

Degree	Candela
0	3167
5	3106
15	2546
25	1036
35	255
45	25
55	10
65	6
75	3
85	1
90	0

LUMINANCE DATA*

Vertical Angle	Average
45°	4361
55°	2150
65°	1751
75°	1430
85°	1415

*Candela/Square Meter



4" ROUND COMPLEX ENVIRONMENT DOWNLIGHT **SURGICAL**

DATE: LOCATION:

TYPE: PROJECT:

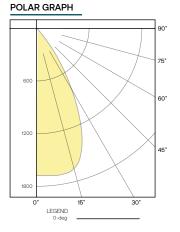
CATALOG #:

PHOTOMETRY CONTINUED

LTR-4RD-H-SUR-ML20L-DM1 / LTR-4RD-T-SUR-ML35K8WD-SS / LTR-4RD-CE-WT

LUMINAIRE DATA

Test No.	22.00434
Description	2000 lm, Wide, 3500K, 80 CRI
Delivered Lumens	1499
Watts	22.2W
Efficacy	68
Mounting	Recessed
Spacing Criterion	0.9
Beam Angle (FWHM)	58



CANDELA DISTRIBUTION

Degree	Candela			
0	1677			
5	1683			
15	1651			
25	1181 445			
35				
45	41			
55	16			
65	8			
75	4			
85	1			
90	0			

LUMINANCE DATA*

Vertical Angle	Average
45°	7152
55°	3441
65°	2335
75°	1906
85°	1415

*Candela/Square Meter

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0-40	1427	95.2
0-60	1486	99.1
0-90	1499	100.0
0-180	1499	100.0

23.00007

80 CRI

1554

70

1.1

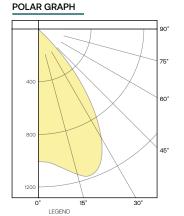
70

22.2W

Recessed

2000 lm, Extra Wide, 3500K,

LTR-4RD-H-SUR-ML20L-DM1 / LTR-4RD-T-SUR-ML35K8XW-SS / LTR-4RD-CE-WT



CANDELA DISTRIBUTION

Degree	Candela			
0	1002			
5	1015			
15	1136			
25	1117			
35	725			
45	175			
55	19			
65	7			
75	3			
85	1			
90	0			

LUMINANCE DATA*

Vertical Angle	Average	
45°	30526	
55°	4086	
65°	2043	
75°	1430	
85°	1415	

*Candela/Square Meter

ZONAL LUMEN SUMMARY

LUMINAIRE DATA

Delivered Lumens

Spacing Criterion

LUMINAIRE DATA

Delivered Lumens

Test No.

Watts

Efficacy Mounting

Description

Beam Angle (FWHM)

Test No. Description

Watts

Efficacy

Mounting

Zone	Lumens	% Luminaire
0-40	1370	88.2
0-60	1542	99.3
0-90	1554	100.0
0-180	1554	100.0

22.01314

1323

22.W

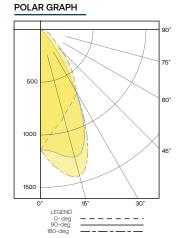
Recessed

60

3500K, 80 CRI

2000 lm, Single Wall Wash,

LTR-4RD-H-SUR-ML20L-DM1 / LTR-4RW-T-SUR-ML35K8WW-SS / LTR-4RD-CE-WT



CANDELA DISTRIBUTION

Degree	Candela			
0	1143			
5	1014			
15	853			
25	740			
35	553			
45	283			
55	143			
65	95			
75	30			
85	1			
90	0			

LUMINANCE DATA*

Vertical Angle	Average		
45°	49366		
55°	30752		
65°	27727		
75°	14297		
85°	1415		

*Candela/Square Meter

ZONAL LUMEN SUMMARY Zone Lumens

Current @

Zone	Lumens	% Luminaire
0-40	1133	85.7
0-60	1275	96.4
0-90	1323	100.0
0-180	1323	100.0



4" ROUND COMPLEX ENVIRONMENT DOWNLIGHT **SURGICAL**

DATE:	LOCATION:
TYPE:	PROJECT:
CATALOG #:	

PHOTOMETRY CONTINUED

LUMEN MULTIPLIER

Option	27K8	30K8	35K8	40K8	50K8	27K9	30K9	35K9	40K9
Multiplier	0.94	0.98	1.00	1.01	1.02	0.81	0.84	0.85	0.85

Photometrics are published below at a nominal 3500 Kelvin, 80+ CRI. This table may be used to approximate the lumen values at different Kelvin temperatures. Power consumption would stay the same.

REFLECTOR FINISH MULTIPLIER (Based on Clear (Standard) Color)

Option	Specular (S)	Semi-Specular (SS)	American Matte (MFC)	Softglow (VS)	Softsheen (VSS)
Multiplier	1	1	0.984	0.888	0.938

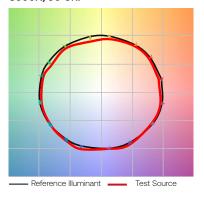
REFLECTOR COLOR MULTIPLIER (Based on Semi-Specular (SS) Finish)

Option	Clear (Standard)	Champagne Gold (CG)	Black (BL)	Light Wheat (LW)	Pewter (PW)	White Cone (WC)	Black Cone (BC)
Multiplier	1	0.974	0.444	0.861	0.915	0.984	0.442

Multiply FINISH x COLOR to calculate other reflector finish and color combinations. Example: SoftGlow Pewter (VSPW) = 0.888 (VS) x 0.915 (PW) = 0.813

TM-30 DATA

COLOR VECTOR GRAPHIC 3500K, 90 CRI

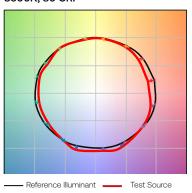


COLOR DISTORTION GRAPHIC 3500K, 90 CRI



TEST RESULTS - 3500K Value 80+ CRI 90+ CRI R, 84 88 R_{g} 95 95 CCT (K) 3411 3419 0.0015 0.0042 D_{uv} 0.4120 0.4147 0.3974 0.4052 У CIE R 84 93 CIE R

COLOR VECTOR GRAPHIC 3500K, 80 CRI



COLOR DISTORTION GRAPHIC 3500K, 80 CRI





4" ROUND COMPLEX ENVIRONMENT DOWNLIGHT **SURGICAL**

DAT	ΓE:	LOCATION:
TYF	PE:	PROJECT:
CA	TALOG #:	

ELECTRICAL DATA

DRIVER DATA	
Input Voltage	120-277 V
Input Frequency	50/60 Hz
Power Factor	≥0.90
THD	<20%
EMI Filtering (FCC 47 CFR Part 15)	Class A

^{*} Values for DM1 option shown, values for other dimming options may vary.

ADDITIONAL INFORMATION

Dimming Compatibility

For more details and recommended dimmer list, see Dimming Compatibility Information on currentlighting.com/lifeshield.

Central Inverters

For full fixture output in back-up mode, we recommend you visit currentlighting.com/dual-lite for your Central Lighting Inverter options. Please contact your local Current representative for any assistance with proper sizing and loading of your inverter selection. Central lighting inverters must be ordered separately.

Bezel Trim

See installation instructions on currentlighting.com/lifeshield for complete details.

Lumen Output in Emergency Mode

To determine the lumen output in emergency mode multiply the battery pack wattage by the fixture lumens per watt (LPW). For example, 7W x 120 LPW = 840 lumens in emergency mode.

