

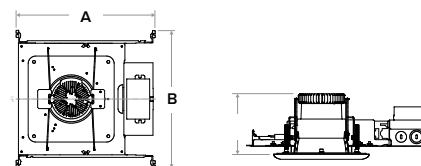
LTR-4SQD (SR)

4" SQUARE COMPLEX ENVIRONMENT DOWNLIGHT
SURGICAL SUITE

DATE:	LOCATION:
TYPE:	PROJECT:
CATALOG #:	

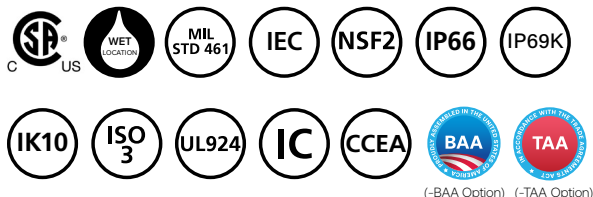
FEATURES

- 4" square architectural LED downlight delivering 600–4000 lumens
- Five beam distributions 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



Typical Dimensions and Weights				
Lumen Package	"A" Length Inches (mm)	"B" Width Inches (mm)	"C" Height Inches (mm)	Weight lbs (kg)
06L - 15L	14.56 (370)	14.36 (365)	4.83 (123)	7.7 (3.5)
20L - 30L	14.56 (370)	14.36 (365)	6.02 (153)	8.1 (3.7)
35L - 40L	14.56 (370)	14.36 (365)	7.20 (183)	8.6 (3.9)

See DIMENSIONS section for complete details



(-BAA Option) (-TAA Option)

SPECIFICATIONS

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

OPTICS (CONTINUED)

- 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

CERTIFICATIONS (CONTINUED)

- 06L–20L: Complies with IEC/EN 60601-1-2:2020 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

- 5 year warranty

KEY DATA	
Lumen Range	600–4000
Wattage Range	8–52
Efficacy Range (LPW)	60–81*
Life (Hours)	L90 / >55,000
Input Current (mA)	66–434 (120V)

* Based on Specular, 35K, 80 CRI

LTR-4SQD (SR)

4" SQUARE COMPLEX ENVIRONMENT DOWNLIGHT

SURGICAL SUITE

ORDERING GUIDE

DATE:	LOCATION:
TYPE:	PROJECT:
CATALOG #:	

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

CATALOG #

HOUSING

LTR-4SQD-H	-	SUR	-		-	DM1			-
Aperture/Shape/Function		Housing Type		Lumen Package	Lumen Output	Driver Options	Voltage	Housing Options	
LTR-4SQD-H 4" Square Downlight New Construction Housing		SUR Surgical Suite		SL Standard Lumen	06L 600 10L 1000 15L 1500	DM1 0-10V Dimming to 1%	Standard 120-277V	CP Chicago Plenum ^{2,4} IC IC rated ^{3,4} EMR 7W Emergency Battery Pack (CEC Title 20 Compliant) with remote test switch and indicator light ⁴ F Fuse ⁴ BAA Buy American Act (FAR 52.225-9) Compliant TAA Trade Agreements Act (FAR 52.225-11) Compliant	
				ML Medium Lumen	20L 2000 25L 2500 ⁵ 30L 3000 ⁵				
				HL High Lumen ⁶	35L 3500 ⁵ 40L 4000 ⁵				

TRIM

LTR-4SQD-T	-	SUR	-						-
Aperture/Shape/Function		Trim Type		Lumen Package	CCT	CRI	Distribution		
LTR-4SQD-T 4" Square Downlight Light Engine/ Trim Assembly		SUR Surgical Suite		SL Standard Lumen	27K 2700K 30K 3000K	8 80+CRI 9 90+CRI	VNR Very Narrow (0.3 SC/20°) NR Narrow (0.5 SC/30°) MD Medium (0.7 SC/40°) WD Wide (0.9 SC/59°) XW Extra Wide (1.1 SC/74°)		
				ML Medium Lumen	35K 3500K 40K 4000K				
				HL High Lumen ⁵	50K 5000K ¹				

TRIM CONTINUED

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

Notes:

- 5000K available in 80+ CRI only.
- CP available for 06L-35L.
- IC available up to 20L.
- Housing options (except Fuse, BAA/TAA) not available in combination.
- Not available for MIL 461G or IEC.
- VNR available up to 30L.

BEZEL

Bezel Type	Bezel Trim Color	Options
LTR-4SQD-CE 4" Square Bezel Trim Assembly with Clear Polycarbonate Lens, Stainless Steel Philips Head Screws (included)	WT White WTAM White Antimicrobial	BAA Buy American Act (FAR 52.225-9) Compliant TAA Trade Agreements Act (FAR 52.225-11) Compliant
LTR-4SQD-CEVR 4" Square Bezel Trim Assembly with Clear Polycarbonate Lens, Stainless steel tamper resistant Torx® center pin reject (included)		

Accessories

- ☐ B24 Set of two (2) 24" bar hangers for T-bar ceilings
- ☐ B6 Set of two bar hangers for ceiling joist up to 24" centers
- ☐ LiteGear LiteGear® Inverter, 25VA-250VA
- ☐ LPS Series LightPower Micro-Inverter, 20VA-55VA

LTR-4SQD (SR)

4" SQUARE COMPLEX ENVIRONMENT DOWNLIGHT
SURGICAL SUITE

PERFORMANCE DATA TABLE

Performance data provided below is for 3500K, 80 CRI

Lumen Package	Nominal Lumens	Distribution	Delivered Lumens	Watts	LPW
06L	600	Very Narrow	597	8.2	73
		Narrow	579	7.8	74
		Medium	562	7.8	72
		Wide	498	7.8	64
		Extra Wide	497	7.8	64
10L	1000	Very Narrow	981	12.5	78
		Narrow	925	12.0	77
		Medium	900	12.0	75
		Wide	796	12.0	66
		Extra Wide	795	12.0	66
15L	1500	Very Narrow	1409	18.0	78
		Narrow	1323	18.6	71
		Medium	1287	18.6	69
		Wide	1139	18.6	61
		Extra Wide	1137	18.6	61
20L	2000	Very Narrow	1771	22.8	77
		Narrow	1794	22.1	81
		Medium	1744	22.1	79
		Wide	1544	22.1	70
		Extra Wide	1541	22.1	70
25L	2500	Very Narrow	2135	29.6	72
		Narrow	2201	27.8	79
		Medium	2140	27.8	77
		Wide	1894	27.8	68
		Extra Wide	1891	27.8	68
30L	3000	Very Narrow	2495	37.0	67
		Narrow	2642	34.6	76
		Medium	2568	34.6	74
		Wide	2274	34.6	66
		Extra Wide	2269	34.6	66
35L	3500	Narrow	3156	42.9	74
		Medium	3068	42.9	72
		Wide	2716	42.9	63
		Extra Wide	2711	42.9	63
40L	4000	Narrow	3602	51.5	70
		Medium	3502	51.5	68
		Wide	3100	51.5	60
		Extra Wide	3094	51.5	60

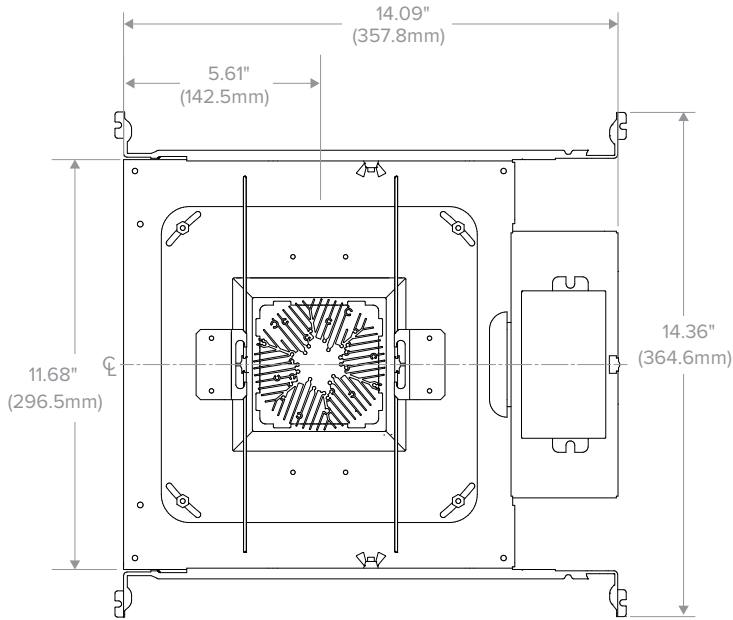
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CATALOG #:	

LTR-4SQD (SR)

4" SQUARE COMPLEX ENVIRONMENT DOWNLIGHT
SURGICAL SUITE

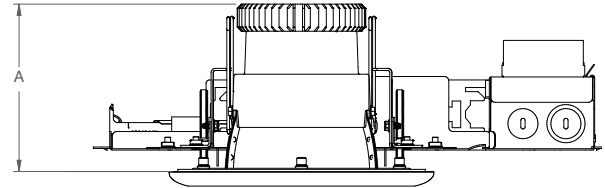
DIMENSIONS

DATE:	LOCATION:
TYPE:	PROJECT:
CATALOG #:	



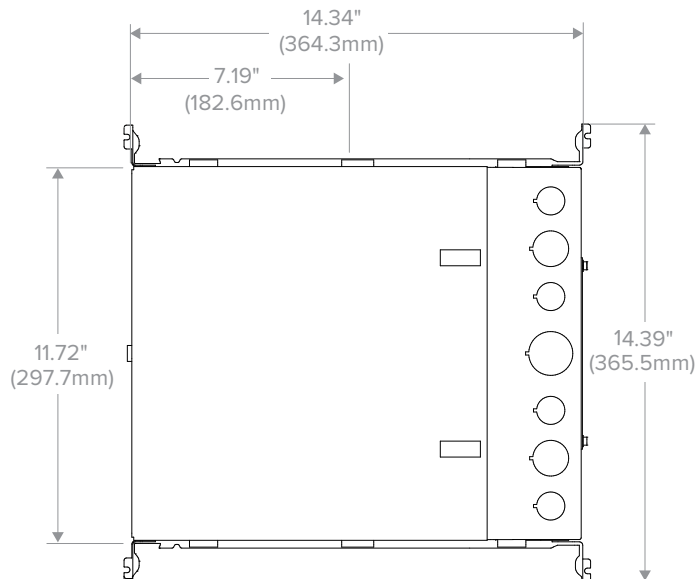
Top View

LTR-4SQD-H-SUR New Construction



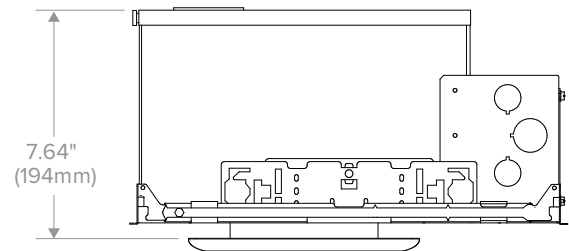
Dimensional Data	
Aperture	□ 4.00" (101.6mm)
Flange	□ 7.67" (194.8 mm)
Bezel (below ceiling)	0.42" (10.7 mm)
Ceiling Cutout	□ 6.50" (165.1 mm)
Ceiling Thickness	0.50" to 2.00" (12.7 mm to 50.8 mm)

Lumen Package	"A"
06L-15L	4.83" (122.7mm)
20L-30L	6.02" (152.9mm)
35L-40L	7.20" (182.9mm)



Top View

LTR-4SQD-H-SUR IC/CP



Dimensional Data	
Aperture Opening	□ 4.00" (101.6 mm)
Overall Flange	□ 7.68" (195.1 mm)
Bezel (below ceiling)	0.42" (10.7 mm)
Ceiling Cutout	□ 6.50" (165.1 mm)
Ceiling Thickness	0.50" to 2.00" (12.7 mm to 50.8 mm)

LTR-4SQD (SR)

4" SQUARE COMPLEX ENVIRONMENT DOWNLIGHT

SURGICAL SUITE

PHOTOMETRY

DATE:	LOCATION:
TYPE:	PROJECT:
CATALOG #:	

LTR-4SQD-H-SUR-ML20L-DM1 / LTR-4SQD-T-SUR-ML35K8VNR-SS / LTR-4SQD-CE-WT

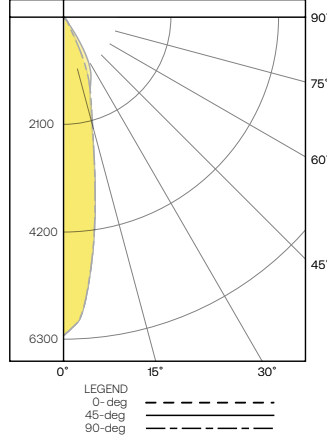
LUMINAIRE DATA

Test No.	P22.01418
Description	2000 lm, Very Narrow, 3500K, 80 CRI
Delivered Lumens	1771
Watts	22.8W
Efficacy	77
Mounting	Recessed
Spacing Criterion	0.4
Beam Angle (FWHM)	23

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0-40	1681	94.9
0-60	1758	99.3
0-90	1771	100.0
0-180	1771	100.0

POLAR GRAPH



CANDELA DISTRIBUTION

Degree	Candela
0	6203
5	5317
15	2136
25	868
35	161
45	72
55	18
65	8
75	4
85	1
90	0

LUMINANCE DATA*

Vertical Angle	Average
45°	9864
55°	3040
65°	1834
75°	1497
85°	1112

*Candela/Square Meter

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

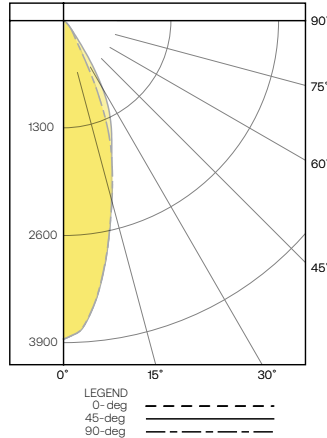
LUMINAIRE DATA

Test No.	22.01419
Description	2000 lm, Narrow, 3500K, 80 CRI
Delivered Lumens	1794
Watts	22.1W
Efficacy	81
Mounting	Recessed
Spacing Criterion	0.6
Beam Angle (FWHM)	37

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0-40	1673	93.3
0-60	1780	99.2
0-90	1794	100.0
0-180	1794	100.0

POLAR GRAPH



CANDELA DISTRIBUTION

Degree	Candela
0	3851
5	3578
15	2259
25	1008
35	223
45	98
55	22
65	9
75	5
85	1
90	0

LUMINANCE DATA*

Vertical Angle	Average
45°	13426
55°	3716
65°	2063
75°	1871
85°	1112

*Candela/Square Meter

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

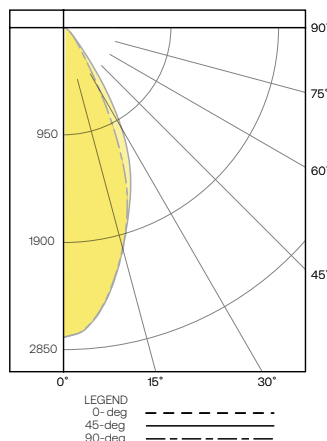
LUMINAIRE DATA

Test No.	22.01420
Description	2000 lm, Medium, 3500K, 80 CRI
Delivered Lumens	1744
Watts	22.1W
Efficacy	79
Mounting	Recessed
Spacing Criterion	0.7
Beam Angle (FWHM)	46

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0-40	1611	92.4
0-60	1730	99.2
0-90	1744	100.0
0-180	1744	100.0

POLAR GRAPH



CANDELA DISTRIBUTION

Degree	Candela
0	2739
5	2633
15	2018
25	1116
35	285
45	107
55	23
65	10
75	5
85	1
90	0

LUMINANCE DATA*

Vertical Angle	Average
45°	14659
55°	3885
65°	2292
75°	1871
85°	1112

*Candela/Square Meter

LTR-4SQD (SR)

4" SQUARE COMPLEX ENVIRONMENT DOWNLIGHT

SURGICAL SUITE

PHOTOMETRY CONTINUED

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

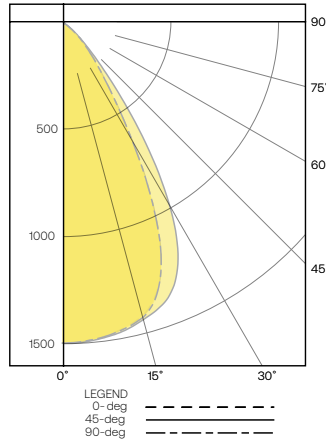
LUMINAIRE DATA

Test No.	22.01421
Description	2000 lm, Wide, 3500K, 80 CRI
Delivered Lumens	1544
Watts	22.1W
Efficacy	70
Mounting	Recessed
Spacing Criterion	1.0
Beam Angle (FWHM)	58

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0-40	1369	88.7
0-60	1528	99.0
0-90	1544	100.0
0-180	1544	100.0

POLAR GRAPH



CANDELA DISTRIBUTION

Degree	Candela
0	1492
5	1483
15	1417
25	1046
35	388
45	143
55	29
65	11
75	5
85	1
90	0

LUMINANCE DATA*

Vertical Angle	Average
45°	19591
55°	4898
65°	2521
75°	1971
85°	112

*Candela/Square Meter

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

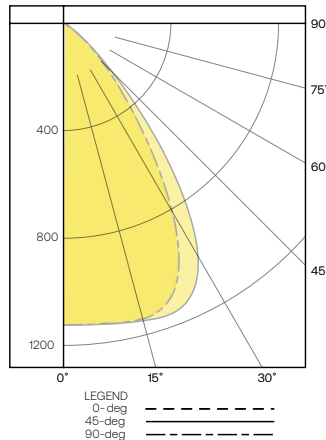
LUMINAIRE DATA

Test No.	22.01422
Description	2000 lm, Extra Wide, 3500K, 80 CRI
Delivered Lumens	1541
Watts	22.1W
Efficacy	70
Mounting	Recessed
Spacing Criterion	1.1
Beam Angle (FWHM)	67

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0-40	1302	84.5
0-60	1523	98.8
0-90	1541	100.0
0-180	1541	100.0

POLAR GRAPH



CANDELA DISTRIBUTION

Degree	Candela
0	1122
5	1124
15	1134
25	1001
35	537
45	194
55	33
65	12
75	5
85	1
90	0

LUMINANCE DATA*

Vertical Angle	Average
45°	26578
55°	5574
65°	2951
75°	1871
85°	112

*Candela/Square Meter

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

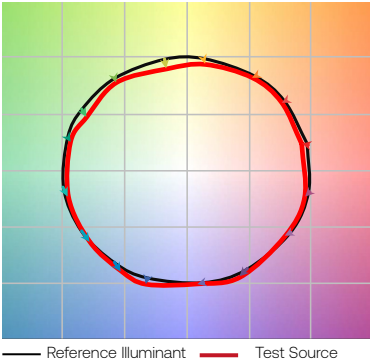
LTR-4SQD (SR)

4" SQUARE COMPLEX ENVIRONMENT DOWNLIGHT

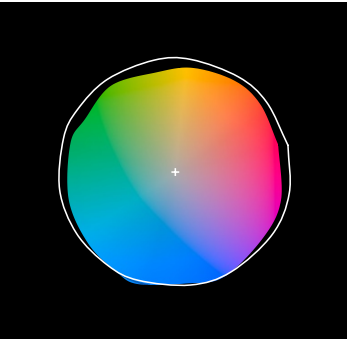
SURGICAL SUITE

TM-30 DATA

COLOR VECTOR GRAPHIC
3500K, 90 CRI

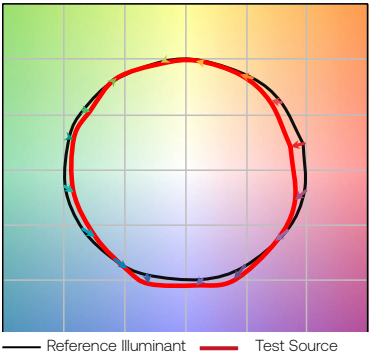


COLOR DISTORTION GRAPHIC
3500K, 90 CRI

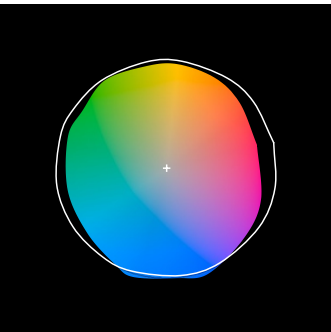


TEST RESULTS - 3500K		
Value	80+ CRI	90+ CRI
R _t	84	88
R _g	95	95
CCT (K)	3411	3419
D _{uv}	0.0015	0.0042
x	0.4120	0.4147
y	0.3974	0.4052
CIE R _a	84	93
CIE R _g	11	62

COLOR VECTOR GRAPHIC
3500K, 80 CRI



COLOR DISTORTION GRAPHIC
3500K, 80 CRI



LTR-4SQD (SR)

4" SQUARE COMPLEX ENVIRONMENT DOWNLIGHT

SURGICAL SUITE

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.

DATE:	LOCATION:
TYPE:	PROJECT:
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