

Kamamalu Building – Replace Light Fixtures

Background

Selected light fixtures within the Kamamalu Building require replacement. See Plan Sheets E-1 through E-10.

Scope of Work

Request a proposal for all work, complete and in-place, for the following:

- Replace missing/non-operating light fixtures as indicated on plans Sheets E-1 through E-10.
- Replace Light strips on second floor restrooms (Rooms 207 and 208 only) with wall-mounted vanity type light fixtures (2'-0" length).
- Replacement light fixtures shall match the appearance of the existing fixture and be of the type indicated on the attached catalog cuts "or equal" to the greatest extent possible.
- For identified stairwell fixtures, replace fixture driver assemblies only. Existing fixture to remain.
- Test light fixture for proper control and operation.
- For emergency backup light fixtures, test for proper backup illumination and backup power duration performance.

Notes

- For attached catalog cuts, the items indicated are "or equal." The catalog cuts do not mandate replacement of the exact brand and model of fixture. "Or equal" items shall match the appearance of the existing fixture and performance of the model indicated to the greatest extent possible.
- Contractor shall field verify existing conditions; to include electrical requirements and characteristics of existing fixtures and building power distribution prior to ordering any replacement electrical components.

Time of Performance

- Provide schedule two (2) weeks after notice to proceed.
- 2 weeks construction schedule.

End

Attached: Plans and example catalog cuts.



createchange

FEATURES

- Architecturally enhanced triple lens design
- Up to 138 lumens per watt
- Long-life, 60,000 hour LEDs at L80 (80% lumen maintenance) reduce life cycle maintenance costs
- Four LED Color Choices
- Eight Lumen packages
- Superior color consistency within a 3-step MacAdam ellipse and greater than 80 CRI
- Rigorous testing and QR code record
- Lens design and materials provide uniform appearance without pixelation
- Hinged optical system allows easy access to lamps and electrical from below the ceiling
- Lenses interlock for structural integrity
- Two optional lens aesthetics
- Most configurations produce low W/ft² to meet the most restrictive lighting power density codes
- Five year warranty (Terms and Conditions apply).

PROJECT INFORMATION

Project Name _____

Type _____

Catalog No. _____

Date _____

CONSTRUCTION

Housing is constructed of heavy gauge steel, die formed for extra rigidity. Four T-bar clips integral to housing. Optical system hinges and latches from either side for easy access to LED module and electrical components. Mechanical light trap prevents light leaks. Latches are spring loaded.

FINISH

All visible parts are custom formulated soft, non-glare high reflectance white powder coat finish, painted after fabrication.

SHIELDING

Lenses are high transmission extruded acrylic with an interlocking design for structural integrity and ease of maintenance.

INSTALLATION

An access plate or mounting collar is furnished with luminaire for fast wiring connections without the necessity to open the fixture or wireway.

CEILING COMPATIBILITY

Designed for recessed installation in standard inverted tee grid ceilings (G), recessed installation in hard ceilings (G with FK accessory), Surface mount at ceiling plane (SM) or cable mount suspension below ceiling plane (CM). For compatibility with specific ceilings contact your Hubbell Lighting representative.

CERTIFICATION

All luminaires are built to UL 1598 and 2108 standards, and bear appropriate CSA labels. UL Sanitation Certified per NSF Standards. Damp location labeling is standard. CSA certified to UL 924 standards with battery pack or DTS (Dimming Bypass Module) options. Adheres to LM79, LM80 and TM21 standards. IC rating is standard on all models (does not apply to thru-wiring). The DTS, Dimming Bypass Module, is for emergency circuit control loads including sensors and wireless systems CSA certified to UL 924. See page 4 for wiring diagram.

WARRANTY

Five year warranty (Terms and Conditions apply)

TO MATCH EXST

ONLY IF INDICATED AS "EMERGENCY TYPE"

ORDERING INFORMATION

EXAMPLE LSER24-35HLG-C-EU

LSER 24 -		-		-		-		-	
MODEL	COLOR TEMP	CEILING TYPE	SHIELDING	DRIVER	VOLTAGE	OPTIONS			
LSER Serrano® LED Architectural Luminaire	30 3000K 35 3500K 40 4000K 50 5000K	G Grid ¹ SM Surface Mount CM Cable Mount ²	C Contour R Rail	E Fixed Output ED 0-10V Dimming ED1 0-10V Dimming to 1% EDD 0-10V Dimming, Dim to Off ^{3,4} ESD Step Dimming ³ LUTH Hi-Lume 1% EcoSystem LED driver with Soft-on, Fade-to-Black dimming technology ^{3,5}	U 120V-277V 347 347V	ELL14 Emergency Battery Pack Installed, 1400 Lumens ⁶ C388 3-Wire Flex C488 4-Wire Flex C588 5-Wire Flex GLR Fast Blow Fuse GTD Generator Transfer Device ⁷ DTS Dimming Bypass Module ⁸ EOR End of Row (SM and CM only) ⁹ INT Intermediate (SM and CM only) ⁹ CP Chicago Plenum			
SIZE	LUMEN OUTPUT								
24 2' x 4'	XW Extra Low Watt VW Very Low Watt MW Medium Low Watt LW Low Watt ML Medium Lumen HL High Lumen VL Very High Lumen XL Extra High Lumen								

¹ For drywall, order G with Flange Kit Accessory

² Order hanger accessories separately

³ Not available in 347V

⁴ Not available with HL, VL and XL

⁵ Not available on VL or XL

⁶ For compatibility with Dual-Lite LiteGear® inverters in lieu of installed Battery Pack, contact Hubbell Lighting Representative

⁷ GTD available for E (fixed output) driver option only

⁸ For emergency circuit control loads including sensors and wireless systems CSA certified to UL 924. Only available with 0-10V drivers. Universal voltage only. See page 4 for wiring diagram

⁹ Provides ends with wiring access for continuous row mounting

Damp Label - standard

ACCESSORIES (ORDER SEPARATELY)

FK24	2' x 4' Flange Kit, Single Mounting (for rows add FKCR)
FKCR	Flange Kit Row Adaptor
CM 48Y25C3F-KIT	48" Cable Mount Kit for 2' wide Cable Mount Fixtures, 3-Wire



createchange

FEATURES

- Architecturally enhanced triple lens design
- Up to 119 lumens per watt
- Long-life, 60,000 hour LEDs at L80 (80% lumen maintenance) reduce life cycle maintenance costs
- Four LED Color Choices
- Six Lumen Packages
- Superior color consistency within a 3-step MacAdam ellipse and greater than 80 CRI
- Rigorous testing and QR code record
- Lens design and materials provide uniform appearance without pixelation
- Hinged optical system allows easy access to lamps and electrical from below the ceiling
- Lenses interlock for structural integrity
- Two optional lens aesthetics
- Most configurations produce low W/ft² to meet the most restrictive lighting power density codes
- Five year warranty (Terms and Conditions apply)

PROJECT INFORMATION

Project Name _____

Type _____

Catalog No. _____

Date _____

CONSTRUCTION

Housing is constructed of heavy gauge steel, die formed for extra rigidity. Four T-bar clips integral to housing. Optical system hinges and latches from either side for easy access to LED module and electrical components. Mechanical light trap prevents light leaks. Latches are spring loaded.

FINISH

All visible parts are custom formulated soft, non-glare high reflectance white powder coat finish, painted after fabrication.

SHIELDING

Lenses are high transmission extruded acrylic with an interlocking design for structural integrity and ease of maintenance.

INSTALLATION

An access plate or mounting collar is furnished with luminaire for fast wiring connections without the necessity to open the fixture or wireway.

CEILING COMPATIBILITY

Designed for recessed installation in standard inverted tee grid ceilings (G), recessed installation in hard ceilings (G with FK accessory). Surface mount at ceiling plane (SM) or cable mount suspension below ceiling plane (CM). For compatibility with specific ceilings contact your representative.

CERTIFICATION

All luminaires are built to UL 1598 and 2108 standards, and bear appropriate CSA labels. UL Sanitation Certified per NSF Standards. Damp location labeling is standard. CSA certified to UL 924 standards with battery pack or DTS (Dimming Bypass Module) options. Adheres to LM79, LM80 and TM21 standards. IC rating is standard on all models (does not apply to thru-wiring). The DTS, Dimming Bypass Module, is for emergency circuit control loads including sensors and wireless systems CSA certified to UL 924. See page 4 for wiring diagram.

WARRANTY

Five year warranty (Terms and Conditions apply).

ONLY IF INDICATED AS "EMERGENCY TYPE"

TO MATCH EXST

ORDERING INFORMATION

EXAMPLE LSER22-3500K-C-ED-347-ELL14

LSER 22 -

MODEL	COLOR TEMP	CEILING TYPE	SHIELDING	DRIVER	VOLTAGE	OPTIONS
LSER Serrano® LED Architectural Luminaire	30 3000K 35 3500K 40 4000K 50 5000K	G Grid ¹ SM Surface Mount CM Cable Mount ²	C Contour R Rail	E Fixed Output ED 0-10V Dimming ED1 0-10V Dimming to 1% EDD 0-10V Dimming, Dim to Off ³ ESD Step Dimming ³ LUTH Hi-lume 1% EcoSystem LED driver with Soft-on, Fade-to-Black dimming technology ^{3,4}	U 120V-277V 347 347V	ELL14 Emergency Battery Pack Installed, 1400 Lumens ⁵ C388 3-Wire Flex C488 4-Wire Flex C588 5-Wire Flex GLR Fast Blow Fuse GTD Generator Transfer Device ⁶ DTS Dimming Bypass Module ⁷ EOR End of Row (SM & CM only) ⁸ INT Intermediate (SM & CM only) ⁸ CP Chicago Plenum
SIZE	LUMEN OUTPUT					
22 2' x 2'	VW Very Low Watt MW Medium Low Watt LW Low Watt ML Medium Lumen HL High Lumen VL Very High Lumen					

¹ For drywall, order G with Flange Kit Accessory

² Order hanger accessories separately

³ Not available in 347V

⁴ Not available on VL

⁵ For compatibility with Dual-Lite LiteGear® inverters in lieu of installed Battery Pack, contact your representative

⁶ GTD available for E (fixed output) driver option only

⁷ For emergency circuit control loads including sensors and wireless systems CSA certified to UL 924. Only available with 0-10V drivers. Universal voltage only. See page 4 for wiring diagram

⁸ Provides ends with wiring access for continuous row mounting

Damp Label - standard

ACCESSORIES (ORDER SEPARATELY)

FK22	2' x 2' Flange Kit, Single Mounting (for rows add FKCR)
FKCR	Flange Kit Row Adaptor
CM 48Y25C3F-KIT	48" Cable Mount Kit for 2' wide Cable Mount Fixtures, 3-Wire

LTR-6RW Open

LITEISTRY 6" ROUND OPEN WALL WASH (WW/DWW/CWW)

FEATURES

- 6" architectural LED wall wash delivering 600-9000 lm
- Single, double and corner wall wash solutions
- Provides uniform vertical illumination as well as room side light
- Quiet reflector appearance with 50° optical cutoff
- 2700K–5000K, 80+ and 90+ CRI options
- Available for New Construction (non-IC), IC and Chicago Plenum applications
- Variety of dimming protocol options including 0-10V, DALI, DMX, and Lutron EcoSystem
- NX Lighting Controls wired and wireless controls capability available



CONTROLS TECHNOLOGY



SPECIFICATIONS

CONSTRUCTION

- Standard Non-IC, Chicago Plenum and IC options
- Painted black durable steel platform with pre-installed bar hangers
- Pre-wired junction box with snap-on covers for easy access
- Snap-in connection from driver compartment allows easy installation
- Light Engine connections use plenum rated (CMP) cable

OPTICS

- Visually pleasing 50° cutoff to source and source image
- Open cone and kicker reflector assembly with an optical grade silicone lens integral to light engine
- Available in Single, Double, and Corner wall wash distributions
- Provides excellent uniformity down the wall while also contributing to room side lighting
- The light distribution is free of distracting bright spots or pixelation and the perimeter has a smooth transition
- High purity spun aluminum reflector, self-flanged
- Flush mount flange option with mud-in ring available
- Large selection of anodized finishes and colors
- Painted cones and flange options available

ELECTRICAL

- Chip-on-board LED with 2 SDCM
- Multiple CCTs, 80+ or 90+ CRI
- Long LED life: L90 at > 55,000 hours (TM-21)

ELECTRICAL (CONTINUED)

- Universal voltage 120V–277V driver, 347V optional
- UL Class 2, inherent short circuit and overload protection
- Flicker free 0–10V dimming with 1% or <1% performance
- DALI, DMX, and Lutron EcoSystem options
- NX Lighting Controls provides options for stand-alone and networked functionality with wired or wireless connectivity for NX system deployments
- Emergency battery pack option available with remote test switch and indicator light
- Refer to additional spec sheets for information on SpectraSync™ Tunable White or Dim-to-Warm solutions

INSTALLATION

- Accommodates ceiling thickness up to 2" (WW/DWW in SL, ML, HL); up to 1.25" (All CWW and all VL, HL) (See DIMENSIONS section for details)
- Universal adjustable mounting brackets also accept 1/2" EMT conduit or 1/2" or 3/4" lathing channel (by others) or Prescolite accessory bar hangers (B24 or B6)
- Light engine/driver fully serviceable from above or below the ceiling

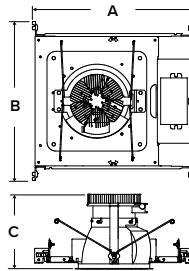
CERTIFICATIONS

- cCSAus certified to UL 1598
- For ≥ 70L: Marked spacing required 36" fixture center to center; 36" fixture center to building member; 0.50" above fixture
- Suitable for damp locations

LITEISTRY™



SERVICE PROGRAMS



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)	5.9 (150)	7.8 (3.5)
20L - 30L	14.56 (370)	14.36 (365)	6.68 (170)	8.2 (3.7)
35L - 45L	14.56 (370)	14.36 (365)	7.86 (200)	8.8 (4)
50L - 60L	14.56 (370)	14.36 (365)	9.04 (230)	9.9 (4.5)
70L - 90L	14.56 (370)	15.56 (395)	11.56 (294)	10.1 (4.6)

See DIMENSIONS section for complete details

CERTIFICATIONS (CONTINUED)

- EMR: Certified under UL 924 standard for emergency lighting and power equipment
- EMR: Emergency battery packs are California Energy Commission (CEC) Title 20 Compliant
- When used with CE Bezel Trim Accessories: IP66/ IP69K rating; also 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
- ENERGY STAR® certified models available (For list and additional information, visit www.energystar.gov)
- For -BAA Option: This product meets federal procurement law requirements under the Buy American Act (FAR 52.225-9) [See Buy American\(n\) Solutions](#)
- For -TAA Option: Product configurations meet federal procurement law requirements under the Trade Agreements Act (FAR 52.225-11) [See Buy American\(n\) Solutions](#)

WARRANTY

- 5 year warranty

KEY DATA	
Lumen Range	600–9000
Wattage Range	8–99
Efficacy Range (LPW)	97*
Reported Life (Hours)	L90 / >55,000
Input Current (mA)	67-825 (120V)

*Based on Specular, 35K, 80 CRI

LTR-6RW Open

LITEISTRY 6" ROUND OPEN WALL WASH (WW/DWW/CWW)

Gray Shading = Service Program



ORDERING GUIDE

Example: LTR-6RD-H-SL10L-DM1-LTR-6RW-T-SL35K8WW-S

CATALOG #

HOUSING

LTR-6RD-H		Lumen Package		Lumen Output		Driver Options		Control Options		Voltage		Housing Options	
Aperture/Shape/Function		SL Standard Lumen		06L 600		DM1 0-10V Dimming to 1% ²		NX Lighting Controls		<i>Standard 120-277V</i>		CP Chicago Plenum ^{7,9}	
LTR-6RD-H 6" Round Downlight/WW/DWW Wall Wash New Construction Housing				10L 1000		DM01 0-10V Dimming to < 0.1% ²		Networked Wireless		34 347V⁶		IC IC rated ^{8,9}	
				15L 1500		DMX DMX with RDM dimming to < 0.1% ²		NXW NX Networked Wireless Radio Module NXRM2 and Bluetooth Programming, without Sensor ³				EMR 7W Emergency Battery Pack (CEC Title 20 Compliant) with remote test switch and indicator light ⁹	
		ML Medium Lumen		20L 2000		DALI DALI Dimming to 1% ²		Networked Wired				DTS Device Transfer Switch with Dimming Bypass ^{9,13}	
				25L 2500		EDM Lutron Hi-Lume EcoSystem Dimming to 1% ³						NXE NX Wired Dual RJ45 SmartPORTS, without Sensor ³	
		HL High Lumen		30L 3000								F Fuse ⁹	
				35L 3500								BAA Buy American Act (FAR 52.225-9) Compliant	
				40L 4000								TAA Trade Agreements Act (FAR 52.225-11) Compliant	
				45L 4500									
		VL Very High Lumen		50L 5000									
				55L 5500									
				60L 6000									
		XL Extra high Lumen¹²		70L 7000									
				80L 8000									
				90L 9000									

TRIM

LTR-6RW-T		Lumen Package		CCT		CRI		Distribution	
Aperture/Shape/Function		SL Standard Lumen		27K 2700K		8 80+CRI		WW Single Wall Wash	
LTR-6RW-T 6" Round Wall Wash Light Engine/Trim Assembly		ML Medium Lumen		30K 3000K		9 90+CRI		DWW Double Wall Wash	
		HL High Lumen		35K 3500K				CWW Corner Wall Wash ¹¹	
		VL Very High Lumen		40K 4000K					
		XL Extra High Lumen¹²		50K 5000K¹					

TRIM CONTINUED

Reflector Finish		Reflector Color		Flange Color Options		Lower Trim Options		Reflector Options	
<i>Finish not applicable with painted reflectors (WC or BC)</i>		<i>Standard Clear</i>		<i>Standard matches reflector color</i>		FM Flush Mount Mud-In Ring ¹⁰		AM Antimicrobial Coating ⁵	
S Specular		CG Champagne Gold		WT White Flange ⁴		WF Wide Flange		BAA Buy American Act (FAR 52.225-9) Compliant	
SS Semi-Specular		BL Black		BT Black Flange ⁴				TAA Trade Agreements Act (FAR 52.225-11) Compliant	
MFC American Matte™		LW Light Wheat							
VS Softglow®		PW Pewter							
VSS SoftSheen™		WC Painted White Cone and Flange							
		BC Painted Black Cone and Flange							

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
- FMR6-R** Flush Mount Mud-In Ring, 6" Round
- LiteGear** LiteGear® Inverter, 125VA-250VA
- LPS Series** LightPower Micro-Inverter, 20VA-55VA
- MOR6-R-WH** Metal Oversized Ring, 6" Round, White (10" outside diameter)
- MOR6-R-BL** Metal Oversized Ring, 6" Round, Black (10" outside diameter)

(See next page for Bezel Trim Accessories for Complex Environments)¹⁴

Notes:

- 1 5000K available in 80+ CRI only.
- 2 EDM available in 10L-35L. DMX not available on >35L. DM01, DALI not available on >55L.
- 3 NX requires DM1 driver option; not available on >60L.
- 4 WT not needed for WC, BT not needed for BC.
- 5 AM available with WC or Specular Clear (S or SWT). Consult factory for other colors.
- 6 347V available for 06L-30L; requires DM1 driver; not available with Controls, EMR, DTS, GTD or F.
- 7 CP available up to 50L; not available with DMX, Controls, or EMR options.
- 8 IC available up to 20L; not available with Controls options.
- 9 Housing options (except Fuse, BAA/TAA) not available in combination.
- 10 Flush Mount Flange (FM) requires FMR accessory (sold separately).
- 11 CWW must use LTR-6RCW-H housing; available in 06L-60L.
- 12 XL (70L-90L) require marked spacing. See line art for more details.
- 13 DTS available with DM1, DM01, or DALI.
- 14 See next page for option restrictions when using with bezel trim accessories.

LTR-4RA

LITEISTRY 4" ROUND ADJUSTABLE

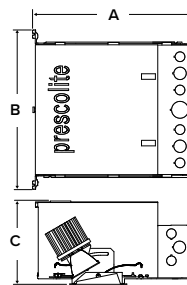
LITEISTRY™

FEATURES

- 4" architectural LED adjustable accent delivering 600–3500 lm
- Four field interchangeable beam distributions from 15° to 45°
- Translating center beam optic allows 0–35° vertical tilt, 362° horizontal rotation
- Select from three lower trim styles: Angle Cut Cone, Pinhole or Slot
- Accommodates up to two lens media including hexcell louver and linear spread options
- Variety of dimming protocol options including 0-10V, DALI, DMX, and Lutron EcoSystem
- NX Lighting Controls wired and wireless controls capability available



CONTROLS TECHNOLOGY



Typical Dimensions		
"A" Length Inches (mm)	"B" Width Inches (mm)	"C" Height Inches (mm)
14.56 (370)	14.36 (365)	7.48 (190)

See DIMENSIONS section for complete details

SPECIFICATIONS

CONSTRUCTION

- Standard Non-IC. Chicago Plenum and IC options
- Painted black enclosed steel platform with tool-less top access and pre-installed bar hangers
- Smooth friction adjustment with 0-35° vertical tilt, 362° horizontal rotation without tools
- Precise hot aiming capability, securely locks with thumbscrews for dependable control

OPTICS

- Translating center beam optic ensures full beam optimization from 0.5" to 1.25" ceiling thickness
- Proprietary twist-and-lock upper reflector with diffusion film provides 15°, 25°, 35° or 45° beam distributions
- Optional accessory lens media including linear spread and hexcell louver (order separately)
- Upper reflector can accommodate up to two additional lens media up to 0.25" max. thickness
- Provides dramatic, crisp highlights without distracting rings or excessive spill light
- Standard angle cut cone: High purity spun aluminum reflector, self-flanged
- Flush mount flange option with mud-in ring available
- Large selection of anodized finishes and colors
- Painted cones and flange options available

OPTICS (CONTINUED)

- Optional pinhole or slot lower trim styles are available (painted finishes only)

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, 347V optional
- UL Class 2, inherent short circuit and overload protection
- Flicker free 0-10V dimming with 1% or <1% performance
- DALI, DMX, and Lutron EcoSystem options
- NX Lighting Controls provides options for standalone and networked functionality with wired or wireless connectivity for NX system deployments
- Emergency Battery Pack option available with remote test switch and indicator light

INSTALLATION

- Accommodates ceiling thickness up to 1.25"
- Universal adjustable mounting brackets also accept ½" EMT conduit or 1½" or ¾" lathing channel (by others) or Prescolite accessory bar hangers (B24 or B6)
- Light Engine and driver serviceable from above or below ceiling. Top access required for Controls, EMR, GTD, or DTS component replacement.

CERTIFICATIONS

- cCSAus certified to UL 1598
- Suitable for damp locations
- EMR: Certified under UL 924 standard for emergency lighting and power equipment
- EMR: Emergency battery packs are California Energy Commission (CEC) Title 20 Compliant
- 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	600-3500
Wattage Range	8-43
Efficacy Range (LPW)	77-85*
Reported Life (Hours)	L90 / >55,000
Input Current (mA)	67-358 (120V)

*Based on Specular, 35K, 80 CRI

LTR-4RA

LITEISTRY 4" ROUND ADJUSTABLE

TO MATCH EXST; ALL OTHER OPTIONS
"TO MATCH EXISTING"

ORDERING GUIDE

Example: LTR-4RA-H-10L35K8NR-DM1-LTR-4RA-T-SSCG

CATALOG # _____

HOUSING

LTR-4RA-H		Lumen Output		CCT		CRI		Distribution	
Aperture/Shape/Function									
LTR-4RA-H	4" Round Adjustable New Construction Housing	06L	600	27K	2700K	8	80+ CRI	NR	Narrow 15° ¹⁴
		10L	1000	30K	3000K	9	90+ CRI	MD	Medium 25°
		15L	1500	35K	3500K			WD	Wide 35°
		20L	2000	40K	4000K			XW	Extra Wide 45°
		25L	2500	50K	5000K ²				
		30L	3000						
		35L	3500						

HOUSING (CONTINUED)

Driver Options		Control Options		Voltage		Housing Options	
DM1	0-10V Dimming to 1%	NX Lighting Controls		<i>Standard</i>		CP	Chicago Plenum ^{1,9}
DM01	0-10V Dimming to < 1% ¹³	<u>Networked Wireless</u>		<i>120-277V</i>		IC	IC rated ^{1,10}
DMX	DMX with RDM dimming to < 0.1%	NXW	NX Networked Wireless Radio Module NXRM2 and Bluetooth Programming, without Sensor ⁴	34	347V ⁸	EMR	7W Emergency Battery Pack (CEC Title 20 Compliant) with remote test switch and indicator light ¹
DALI	DALI Dimming to 1% ¹³	<u>Networked Wired</u>				GTD	Generator Transfer Device ¹
EDM	Lutron Hi-Lume EcoSystem Dimming to 1% ³	NXE	NX Wired Dual RJ45 SmartPORTS, without Sensor ⁴			DTS	Device Transfer Switch with Dimming Bypass ^{1,15}
						F	Fuse ¹
						BAA	Buy American Act (FAR 52.225-9) Compliant
						TAA	Trade Agreements Act (FAR 52.225-11) Compliant

TRIM

LTR-4RA-T		Lower Trim Style		Reflector Finish		Reflector Color		Flange Color Options		Lower Trim Options		Reflector Options			
LTR-4RA-T	4" Round Adjustable Light Engine/ Trim Assembly	<i>Standard Angle Cut Cone</i>		<i>Finish not applicable with painted reflectors (WC or BC)</i>		<i>Standard Clear</i>		<i>Standard matches reflector color</i>		FM	Flush Mount Mud-in Ring ⁷	AM	Antimicrobial Coating ⁶		
		PH	Pinhole ¹¹	S	Specular	CG	Champagne Gold	WT	White Flange ⁵					BAA	Buy American Act (FAR 52.225-9) Compliant
		SLT	Slot ¹¹	SS	Semi-Specular	BL	Black	BT	Black Flange ⁵						
		MFC	American Matte™	LW	Light Wheat										
		VS	Softglow®	PW	Pewter										
				VSS	SoftSheen™	WC	Painted White Cone and Flange								
						BC	Painted Black Cone and Flange								

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
- FMR4-R** Flush Mount Mud-In Ring, 4" Round
- LiteGear** LiteGear® Inverter, 125VA-250VA
- LPS Series** LightPower Micro-Inverter, 20VA-55VA
- MOR4-R-WH** Metal Oversized Ring, 4" Round, White (8.25" outside diameter)
- MOR4-R-BL** Metal Oversized Ring, 4" Round, Black (8.25" outside diameter)

Lens/Media Accessories

- LL4** Linear Spread Lens for 4" and 6" (MD, WD, XW)¹²
- LL4-NR** Linear Spread Lens for 4" and 6" (NR only)¹²
- PL4** Prismatic Lens for 4" and 6" (MD, WD, XW)¹²
- PL4-NR** Prismatic Lens for 4" and 6" (NR only)¹²
- SOL4** Solite Lens for 4" and 6" (MD, WD, XW)¹²
- SOL4-NR** Solite Lens for 4" and 6" (NR only)¹²
- HL4** Hexcell Louver Black for 4" and 6" (MD, WD, XW)¹²
- HL4-NR** Hexcell Louver Black for 4" and 6" (NR only)¹²

Notes:

- 1 Housing options (except Fuse, BAA/TAA) not available in combination.
- 2 5000K available in 80+ CRI only.
- 3 EDM available in 10L-35L.
- 4 NX requires DM1 driver option.
- 5 WT not needed for WC, BT not needed for BC.
- 6 AM available with WC or Specular Clear (S or SWT). Consult factory for other colors.
- 7 Flush Mount Flange (FM) requires FMR accessory (sold separately).
- 8 347V available for 06L-30L; requires DM1 driver; not available with Controls, EMR, DTS, GTD or F.
- 9 CP available up to 15L; not available with DMX, Controls, or EMR options.
- 10 IC available up to 15L; not available with Controls options.
- 11 Pinhole and Slot available only in WC or BC painted colors.
- 12 Lens holder supplied with fixture accommodates up to 2 media (0.25" max. total thickness).
- 13 DM01, DALI available up to 20L.
- 14 Narrow (NR) available up to 20L.
- 15 DTS available with DM1, DM01, or DALI.



Catalog Number
Notes
Type

Contractor Select™

FMVTSL Vanity LED

Traditional Square Vanity



Provides an LED lighting platform to deliver general or task lighting for residential and light commercial applications. Light engine delivers long life and excellent color to ensure a quality, low-maintenance light installation. Ideal for use in bathrooms, lavatories, hallways, corridors, stairways, utility areas and more.

FEATURES:

- Produces 1300 lumens, Standard input = 9.5 watts.
- Fixture is rated to deliver L70 performance at 50,000 hours and operates at 120-277 volts.



Catalog Number	UPC	Description	Lumens	Input Watts	Voltage	Color Temperature	Pallet qty.
FMVTSL 24IN MVOLT 30K 90CRI BN M4	889804269628	2' LED Vanity	1,300	9.5W	MVOLT	3000K	72

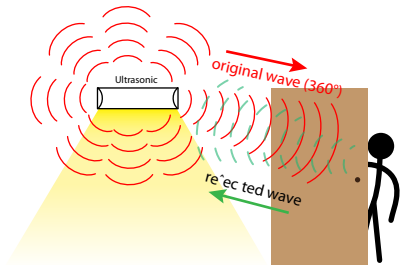
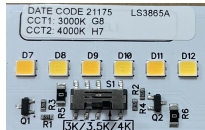
The Voyager series is part of our Occu-Smart[®] S³ product line. Equipped with an integral ultrasonic motion sensor, the VOL Gen5 features bi-level operation with adjustable standby light levels and time delay and Multi-Color tuning. With Bluetooth programming, there is no need to open the fixture for light level adjustment! All that's needed is an IOS or Android device and free companion app!

VOL Gen5 Voyager series with ultrasonic motion sensor

BLUETOOTH PROGRAMMING AND MULTI-COLOR TUNING!



Field adjustable CCT (Multi-Color Tuning)
Choice of 3000K, 3500K or 4000K (factory preset)
Note: Each board must be switched individually



Ultrasonic motion sensors are ideal for stairwells and corridors where 360° coverage can detect motion beyond the line of sight around barriers such as staircases, workspace partitions, shelves and other obstacles in the area

Features and Specifications:

Construction:

- Direct setting of sensitivity and time delay using the switches on the sensor, adjustable high and low light levels through the app
- Durable steel housing and injection molded end caps
- Efficient LED formula impact resistant diffuser, smooth exterior for easy cleaning, retained by captive ends
- User selectable Multi-Color Tuning via dipswitch on LED board array - choice of 3000K, 3500K or 4000K (factory pre-set to 4000K), Separate 5000k available
- Optional Casambi[®] Bluetooth mesh for fixture to fixture communication (see back for details)

Size Options:

- Available in 1', 2' and 4' lengths (nominal)

Sensor:

- Highly sensitive ultrasonic motion sensor detects motion outside direct line of sight
- Easy setup with 5 minute walk test mode
- Adjustable sensitivity and time delay of 1, 5 or 20 minutes
- User selectable standby options 5, 10, 25 or 50% nominal light output (factory shipped 10% standby level) - Can be adjusted to any non-listed value via app

Listing & Ratings:

- UL Certified, ADA compliant, DLC Listed (2' and 4' MCT models)
- Union made in the USA, Meets Buy America Act (ARRA)

Mounting Options:

- Rigid stem mount or surface mount on ceiling or wall

Driver:

- Universal voltage 120-277V standard
- Optional emergency backup available including "UL924" approved

Warranty:

- 5 years - part replacement only (see our terms & conditions page at www.lamarled.com for details)

See page 2 for lumen chart & dimensions

See page 3 for sensor info, application notes & APP QR code

Ordering Guide / Example

VOL48AFAMCT-AS-BT or VOL48AFA50-AS-BT

VOL	A	FA					
Series	Size	Power	Lens Options	MCT or 5000K	Standby Options	Bluetooth	General Options
VOL = Voyager Gen5	12 = 1' nominal 24 = 2' nominal 48 = 4' nominal	A = Adjustable power user selectable output power via smartphone app See chart on back	FA = Frosted linear ribbed polycarbonate	MCT = User Selectable: 3000K, 3500K, 4000K (MCT DLC Listed, except 1' model) 50 = 5000K (2' and 4' only)	AS = User selectable standby options 5, 10, 25 or 50% light output (factory shipped 10% standby level) FO = Dim to off (dark)	BT = Bluetooth (standard) BTM = Bluetooth mesh (optional)	EM = Emergency pack >90 min., >500 lumens EMH = High lumen emergency pack >90 min., >1400 lumens (4' only) EM9 = "UL924" approved as Emergency Lighting Equipment (2' and 4' only) ESRU = 120V/277V emergency shunt relay

Consult factory for additional options not shown or listed

Correlated Color Temperatures (CCTs) fall within the nominal range as per ANSI C78.377A

Project Information:

Job Name: _____ Fixture Type: _____

Catalog #: _____ Date: _____

Comments: _____

Certification & Listings:

