

Specification Sheet

VALENT® X Wet Location 24\Visual High Density LED Tape Light

Precision-engineered, high density tape light for wet locations (IP65). Up to 500+ lumens per foot with 95+ CRI / 90+ R9.

Date

Project Notes













FEATURES

- Dense LED placement for uninterrupted linear light
- 500 Lumen output
- 95+ CRI
- 1.32 inch cuttable increments
- Precision color rendering with 90+ R9 value
- Ultra high lumen output
- 12 Year limited warranty



ORDERING CODES Order spools, and components for field assembly				OPTIONAL ORDERING CODES Add Assembly Preferences, Finish, Lens, Mounting, Driver, and Delivery									
	Voltage	Model	ССТ	Length		Channels		Finish	Lens	Mounting	Dr	iver	Delivery
DI													
	24V (24V Volt)	VLX5	27 (2700K) 30 (3000K) 35 (3500K) 40 (4000K)	W016 (16.4 feet) W100 (100 feet)	A1 (A1) S2 (S2) S45 (S45) 16 (16mm Square)	RC20 (20mm Round) SQ20 (20mm Square) SL (Slim) SQ (Square)	45 (45°) REC (Recessed) M11 (1-inch Mud-In) M12 (2-inch Mud-In)	AL (Aluminum) BL (Black) WH (White)	*blank* (Classic Frosted Lens) BL (Black Lens) CLT (Arch. Clear Lens) FRT (Arch. Frosted Lens) OPT (Opal Lens) PD (Prem. Diffusion Lens)	3M (3M Adhesive) MC (Mounting Clip) UC (U-Clip) VC (Vertical Clip) HNG (Hanging Hardware) RC (Rotating Clip)	ELV (Electronic) VLM (Constant Voltage) O/O (On / Off)	LUT (Lutron) 010 (0-10V) POE (Power over Ethernet)	Field Assembly Factory + Field (Hybrid) Factory Assembly

VALENT® X Wet Location - SPECIFICATION TABLE

Models	24V-VLX5
Voltage	24VDC
Wattage	4.6W/ft.
2400K	466 Lm/ft.
2700K	437 Lm/ft.
Lumens 3000K	469 Lm/ft.
3500K	492 Lm/ft.
4000K	480 Lm/ft.
Cut Points	1.32 in.
Max Run (ft.)	30 ft.
CRI	95+
Dimensions	0.55 × 0.22 in. (W x H)
TM-21 (LM-80)	>50,000 hours
Environment	Outdoor / Wet Location (IP65)
Lead Wire A	36 in. Bare Lead 20/2 AWG UL 2464 Wire with Strain Relief
Lead Wire B	36 in. Bare Lead 20/2 AWG UL 2464 Wire with Strain Relief
LED Chips	72/ft.
Chip Type	2835
Certification	UL Listed 2108
Warranty	12 Year



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CHANNEL / LENS / MOUNTING COMPATIBILITY

Channel	Compatible Lenses	Available Finishes	Mounting Options	
A1 (A1)	FRT	AL / WH / BL	UC	
\$2 (\$2)	*blank*	AL	UC	
S45 (S45)	*blank*	AL	UC	
16 (16mm Square)	FRT	AL	МС	
RC20 (20mm Round)	*blank*	AL	UC	
SQ20 (20mm Square)			UC	
SL (Slim)	*blank* / CLT / FRT / BL / PD	AL / WH / BL	MC / 3M / MAG	
SQ (Square)			MC / VC / RC / HNG	
45 (45°)			MC / VC / RC / HNG	
REC (Recessed)			3M	
MI1 (1-inch Mud-In)	OPT	AL		
MI2 (2-inch Mud-In)	OPT	AL		

Lens *blank* Classic Frosted Len BL Black Lens

blank	Classic Frosted Lens
BL	Black Lens
CLT	Architectural Clear Lens
FRT	Architectural Frosted Lens
ОРТ	Opal Lens
PD	Premium Diffusion Lens

Finish						
AL	Aluminum					
WH	White					
BL	Black					

	Mounting
ЗМ	3M Adhesive
HNG	Hanging Hardware
MAG	Magnetic Clip
мс	Mounting Clip
RC	Rotating Clip
uc	U-Clip
VC	Vertical Clin



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RECOMMENDED CHANNELS

MODEL	DIAGRAM	INCLUDED ACCESSORIES	CONNECTION OPTIONS	IN CHANNEL DIFFUSION	TECHNICAL RATINGS	MOUNTING OPTIONS WITH DIMENSIONS
A1 Channel DI-CHB-A1 (A1) 48°, 90° Aluminum, White, Black For 14mm Tape Lights or smaller	Height (H): 0.81 in. Width (W): 0.87 in. Interior Depth (ID): 0.45 in. Interior Width (IW): 0.79 in. W ID ID II	48" Aluminum, Black, & White Channels - 48 in. channel & Iens - 28 surface mounting clips - 12 surface mounting clips - 1 retaining clip - 1 find caps: 1x open, 1x closed 90" Aluminum, 18Lex, & White Channels - 90" in. channel & Iens - 4x surface mounting clips - 2x strain relief clip - End caps: 2x open, 2x closed, 2x sidned	14mm Tape Light: Soldered Lead Only	Architectural Frosted Lens VLXS: Dotless	Beam Angle: 120° Architectural Frosted Lens Light Loss: 30% CCT Shift: 35K IP Rating Shift: IP40	U-Clip: 0.82 × 0.88 in. (H x W)
S2 Channel DI-CHB-S2 (S2) (S8) 48", 96" Aluminum For 14mm Tape Lights or smaller	Height (H): 0.57 in. Width (W): 0.74 in. Width (W): 0.74 in. Interior Depth (II): 0.34 in. Interior Width (IW): 0.63 in. INTER	48 in. Channel & Frosted Lens, 1 open end cap, 1 closed end cap, 2 mounting clips, 2 mounting screws 96 in. Channel & Frosted Lens, 2 open end cap, 2 closed end cap, 4 mounting screws	Defend natural natural natural partner	Classic Frosted Lens VLXS: Dotless	Beam Angle: 120° Classic Frosted Lens Light Loss: 20% CCT Shift: +40K IP Rating Shift: IP40	U-Clip: 0.58 × 0.75 in. (H x W)
S45 Channel DI-CHB-S45 (S45) 48", 96" Aluminum For 14mm Tape Lights or smaller	Height (H): 0.78 in. Width (W): 0.78 in. Width (W): 0.78 in. Interior Depth (ID): 0.54 in. Interior Width (IW): 0.6 in. W W	48 in Channel & Frosted Lens. 1 open end cap, 1 closed end cap, 2 mounting clips, 2 mounting screws 96 in Channel & Frosted Lens, 2 open end cap, 2 closed end cap, 4 mounting clips, 4 mounting screws		Classic Frosted Lens VLXS: Dotless	Beam Angle: 120° Classic Frosted Lens Light Loss: 20% CCT Shft: -40K IP Rating Shift: IP40	U-Cilp: 0.79 × 0.79 in. (H x W)
16mm Square Channel DI-CPCHB-16MM (16) 48", 96" Aluminum For 14mm Tape Lights or smaller	Height (H): 0.89 in. Width (W): 0.77 in. Interior Depth (I0): 0.58 in. Interior Width (IW): 0.63 in. Interior Width (IW): 0.63 in. IW	48 in. channel & Architectural Frosted Lens 2x surface mounting clips End caps: 1x open, 1x closed. 96 in. channel & Architectural Frosted Lens 4x surface mounting clips End caps: 2x open, 2x closed.	14mm Tape Light: Soldered Lead Only	Architectural Frosted Lens VLX5: Dotless	Beam Angle: 120° Architectural Frosted Lens Light Loss: 30% CCT Shift: 35K Black Lens Light Loss: 90% CCT Shift: 330K IP Rating Shift: IP40	Mounting Clip: 0.89 × 0.77 in. (H × W)



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MODEL	DIAGRAM	INCLUDED ACCESSORIES	CONNECTION OPTIONS	IN CHANNEL DIFFUSION	TECHNICAL RATINGS	MOUNTING OPTIONS WITH DIMENSIONS
20mm Round Channel DI-CPCHB-RC20 (RC20) 48", 96" Aluminum For 14mm Tape Lights or smaller	Height (H): 1.18 in. Width (W): 1.18 in. Interior Depth (ID): 0.84 in. Interior Width (IW): 0.84 in. INTERIOR (IW): 0.84 in.	48 in. channel & frosted lens 2x surface mounting clips End caps: 1x open, 1x closed. 96 in. channel & frosted lens 4x surface mounting clips End caps: 2x open, 2x closed.	14mm Tape Light: Soldered Lead Only	Classic Frosted Lens VLX5: Dotless	Beam Angle: 180° Classic Frosted Lens Light Loss: 20% CCT Shift: 40K IP Rating Shift: IP40	U-Clip: 1.19 × 1.19 in. (H x W)
20mm Square Channel DI-CPCHB-SQC20 (SQ20) 48", 96" Aluminum For 14mm Tape Lights or smaller	Height (H): 1.18 in. Width (W): 1.18 in. Width (W): 1.18 in. Interior Depth (ID): 0.84 in. Interior Width (IW): 0.84 in. IW W	48 in. channel & frosted lens 2x surface mounting clips End caps: 1x open, 1x closed. 96 in. channel & frosted lens 4x surface mounting clips End caps: 2x open, 2x closed.	14mm Tape Light: Soldered Lead Only	Classic Frosted Lens VLX5: Dotless	Beam Angle: 180° Classic Frosted Lens Light Loss: 20% CCT Shft: -40K IP Rating Shift: IP40	U-Clip: 1.19 × 1.19 in. (H x W)
Slim Channel DI-CPCHB-SL (SL) 48", 96" Aluminum, White, Black For 14mm Tape Lights or smaller	Height (H): 0.38 in. Width (W): 0.82 in. Width (W): 0.82 in. Interior Depth (ID): 0.3 in. Interior Width (IW): 0.67 in. IW H	48° Aluminum, Black, & White Channels • 48 in. channel & lens • 22 surface mounting clips • End caps: 1x open, 1x closed 96° Aluminum, Black, & White Channels • 96 in. channel & lens • 4x surface mounting clips • end caps: 2x open, 2x closed	14mm Tape Light: Soldered Lead Only	Architectural Frosted Lens VLX5: Semi-Diffused Premium Diffusion Lens VLX5: Dottess For diffusion options not listed, refer to Slim Channel Specification Sheet.	Beam Angle: 120° Architectural Clear Lens Light Loss: 10% CCT Shift: -20K Architectural Frosted Lens Light Loss: 30% CCT Shift: -35K Classic Frosted Lens Light Loss: 20% CCT Shift: -40K Black Lens Light Loss: 90% CCT Shift: -350K Premium Diffusion Lens Light Loss: 10% CCT Shift: -30K Light Loss: 10% Light Loss:	Slim Mount: 3M Adhesive: Magnetic U-Clip: Premium Diffusion: 0.54 × 0.87 in. (H x W) 0.48 × 0.82 in. (H x W) 0.59 × 0.82 in. (H x W) 0.96 × 0.82 in. (H x W)
Square Channel DI-CPCHB-SQ (SQ) 48", 96" Aluminum, White, Black For 14mm Tape Lights or smaller	Height (H): 0.55 in. Width (W): 0.82 in. Interior Depth (II): 0.27 in. Interior Width (IW): 0.67 in. IW W	48" Aluminum Channel 48 in. channel & frosted lens 22 surface mounting clips End caps: 1x open, 1x closed. 48" Black & White Channels 48 in. channel & clear, or frosted lens 48 in. channel & clear, or frosted lens 48 in. channel & clear, or 676 "Aluminum Channel 96" al. channel Manel 48 surface mounting clips End caps: 2x open, 2x closed. 96" Black & White Channels 96" in. channel & clear, or frosted lens 4x surface mounted clips 56" in. channel & clear, or frosted lens 4x surface mounted clips 4x surface mounted clips 4x surface mounted clips 4x surface mounted clips	14mm Tape Light: Soldered Lead Only	Architectural Frosted Lens	Beam Angle: 120° Architectural Clear Lens - Light Loss: 10% - CCT Shift: -20K Architectural Frosted Lens - Light Loss: 30% - CCT Shift: -35K Classic Frosted Lens - Light Loss: 20% - CCT Shift: -40K Black Lens - Light Loss: 90% - CCT Shift: -350K Premium Diffusion Lens - Light Loss: 10% - CCT Shift: -36K - CT Shift: -36K - CT Shift: -30K	Chromapath Surface



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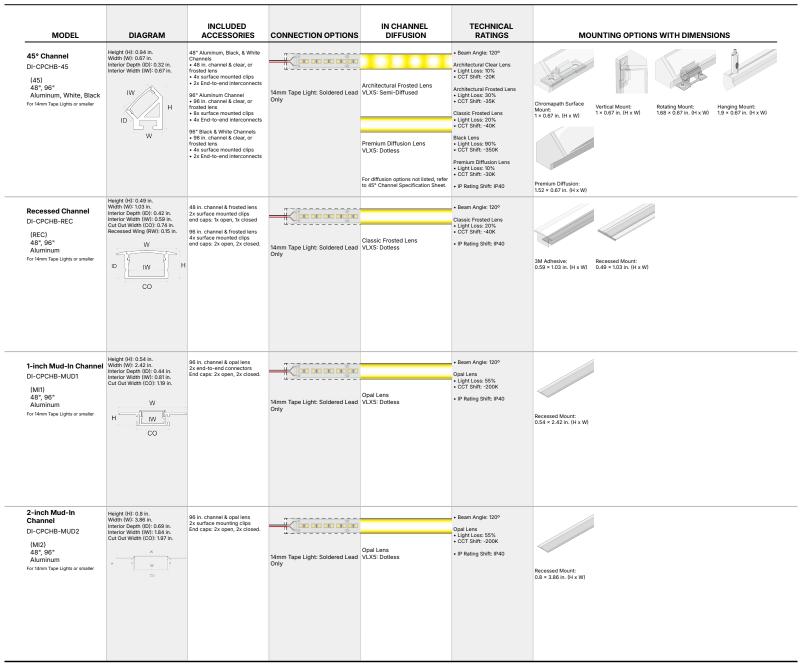








RECOMMENDED CHANNELS





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RECOMMENDED 24V DRIVERS

SKU	INPUT VOLTAGE / FREQUENCY	OUTPUT VOLTAGE	MAXIMUM LOAD	MINIMUM LOAD	CLASS 2	DIMMABLE	LENGTH	WIDTH	HEIGHT
OMNIDRIVE® X Dimma	abla Duissau								r Specification Sheet
					https://www.diodele	d.com/custom/download/p	roductFile/filename		
Versatile driver for most high- systems.	-performance dimming on ELV, TRIA	C, and 0-10V						Cont	
systems.									Derating Curves System Diagrams
DI-ODX-24V30W-J	120-277V	24V	30W	No Minimum Load	Yes	Yes	6.5 in.	3.7 in.	1.57 in.
DI-ODX-24V60W-J	120-277V	24V	60W	No Minimum Load	Yes	Yes	7.4 in.	3.7 in.	1.57 in.
DI-ODX-24V96W-J	120-277V	24V	96W	No Minimum Load	Yes	Yes	8.66 in.	3.7 in.	1.57 in.
DI-ODX-24V120W-J	120-277V	24V	120W	No Minimum Load	No	Yes	8.66 in.	3.7 in.	1.57 in.
MAN Conice Constant	/-lt Dui	·	'	·		,	/LM Series Consta	nt Voltage Drive	r Specification Sheet
VLM Series Constant V	_			https://www.diodeled.co	om/custom/download/j	productFile/filename/VLM-	Specification%20S	heet%20(Driver)	
Compact driver for on/off, PW	/M dimming, and color-changing app	olications.					• Addit		Derating Curves
									System Diagrams
VLM60W-24-LPS3R	120 / 277VAC 47 - 63Hz	24V	60W	No Minimum Load	Yes	PWM	10.79 in.	7.34 in.	2.36 in.
VLM60W-24-LPM	120 / 277VAC 47 - 63Hz	24V	60W	No Minimum Load	Yes	PWM	8.19 in.	2.94 in.	1.31 in.
VLM100W-24-LPS3R	120 / 277VAC 47 - 63Hz	24V	100W	No Minimum Load	Yes	PWM	10.79 in.	7.34 in.	2.36 in.
		I			1	N	IEANWELL Consta	nt Voltage Drive	r Specification Sheet
MEANWELL Constant			https://www.di	odeled.com/custom/downlo	pad/productFile/filenan	ne/commercial-grade-CV-l	Driver-Specification		
Drivers for on/off or PWM dim	nming applications.							Cont	
									Derating Curves System Diagrams
DI-CV-MW24V60W-277-LPS3R	120 ~ 277VAC 50/60Hz	24V	60W	No Minimum Load	Yes	Yes, with compatible PWM dimmer/controls	10.79 in.	7.34 in.	2.36 in.
DI-CV-MW24V60W-277-LPS	120 ~ 277VAC 50/60Hz	24V	60W	No Minimum Load	Yes	Yes, with compatible PWM dimmer/controls	11.25 in.	3.75 in.	1.9 in.

PoE (Power over Ethernet)

Constant voltage platform, ready for Power over Ethernet (inquire)

RECOMMENDED CONTROLLERS						
SKU	DESCRIPTION					
CASAMBI® Controllers The CASAMBI controllers will remotely control your lighting through the app - downloadable for IOS & Android.						
CBU-PWM4	CASAMBI PWM4 Single Color Dimming Controller					
CBU-A2D	CASAMBI A2D 2 Channel 0-10V/DALI Controller					
CBU-ASR	CASAMBI ASR 0-10V Controller					
DI-CBU-PWM5-PRO	Casambi CBU-PWM5-Pro RGB/W/WW Applications, 5 x PWM for constant voltage lights, 4 amps/CH max					
SWITCHEX® Driver and Dimmer S LED driver and dimmer switch combine						
DI-12V-SE-40W	SWITCHEX 12V Switch/Driver Combo - 40W					
DI-12V-SE-60W	SWITCHEX 12V Switch/Driver Combo - 60W					





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Project Notes





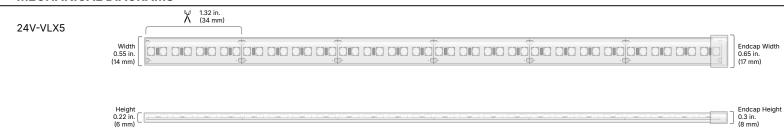








MECHANICAL DIAGRAMS



CONNECTIONS



36 in. Bare Lead 20/2 AWG UL 2464 Wire with Strain Relief

36 in. Bare Lead 20/2 AWG UL 2464 Wire with Strain Relief



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TITLE **24**

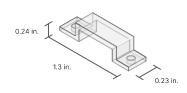
ACCESSORIES

Soldered Lead Only



DI-WLMC-12MM

12mm Tape, Wet Location Over Clips, 10 pack, with 20



DELIVERY OPTIONS

· Field Assembly

Fastest order fulfillment. Field connectors and accessories not included.

• Factory + Field (Hybrid)

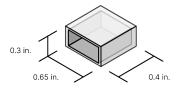
Onsite modifications with factory connection. Additional accessories not included.

Factory Assembly

Fastest Installation. Factory made-to-order fixtures.

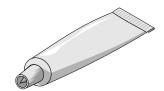
DI-WL-12MM-EC-5

Wet Location Strip End Caps, 12mm Tape, Silicone, 5-pack (5 open, 5 closed)



DI-WPSL

Wet Location Sealant



- Lumen value measured in accordance to IES LM-80-08. LED chips have a luminous flux range with a tolerance of +/- 5%.
- Each maximum run requires a dedicated power feed from the driver. Do not extend beyond the recommended maximum run length. Max run may exceed Class 2 limit. Actual wattage may differ from calculated wattage due to voltage drop across run.
- Do not install product in an environment outside the listed ambient temperature. Exceeding the maximum ambient temperature may damage LED chips, reduce the total lamp life, lumen output, and/or adversely impact color consistency.
- Actual efficacy value is dependent to specified LED driver (power supply). An estimated efficacy value can be calculated as follows: Lumen value divided by average power consumption per foot.
- Operating temperature is measured according to the minimum and maximum ambient temperature environment.



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CERTIFICATIONS

Safety

- UL Listed 2108 Low Voltage Lighting System / Low Voltage Luminaire. UL 1598 / CSA 250.0-08, UL 8750. UL 879 / CAN/CSA-C22.2 no. 207-M89. Certified for United States and Canada. File # E469769.
- UL Listed Field Cuttable
- CE & EMC Compliant: Verification No. GZEM141200683705V
- Approved for storage areas of clothes closets per NEC 410.16.A.1,3 and 410.16.C.1,3,5

Environment

- Ambient Temperature: -4 ~ 122°F (-20 ~ 50°C)
- Operating Temperature: -4 ~ 176°F (-20 ~ 80°C)
- RoHS Compliant: Verification No. CANEC1610091501

Performance

- Can be used to comply with TITLE 24 Part 6 High Efficacy Lighting LED requirements JA8-2016-2022-E
- LED chip data measured in accordance to IES LM-80-08.
- Photometric & Colorimetry data measured in accordance to IES LM-79-08, in Elemental LED's Innovation Lab.

Safety / Warnings / Disclosures

- Install in accordance with national and local electrical code regulations
- 2. This product is intended to be installed and serviced by a qualified, licensed electrician.
- 3. Only use copper wiring. Use wires rated for at least 176°F (80°C) and certified for use with external connection of
- 4. Each maximum run requires a dedicated power feed from the driver. Do not extend beyond the recommended maximum run length.
- 5. Tape light, attached wire leads, and additional extension cables, connectors, etc., are not rated for in-wall installation unless otherwise noted. Tape light and attached wire leads are field-cuttable.
- Ensure applicable wire is installed between driver, fixture, and any controls in-between. When choosing wire 6. factor in voltage drop, amperage rating, and type (in-wall rated, wet location rated, etc.). Inadequate wire installation could overheat wires, and cause fire.
- Do not install in environment where LED chips are exposed to direct sunlight as damage to the phosphor will
- 8. Do not install in environment where excessive heat may exist (ex. close proximity to fireplace, etc.) See Ambient
- Do not install indoor LED tape light products in outdoor / wet location environments. Only wet location tape light models are rated for outdoor / wet locations.
- 10. Do not modify product beyond instructions or warranty will be void.
- 11. Tape light must be handled with care. Excessive handling, bending, and pressure may damage the product, voiding the warranty.
- 12. Actual color may vary from what is pictured on this sheet and other print materials due to the limitations of photographic processes.
- We reserve the right to modify and improve the design of our fixtures without prior notice. We cannot guarantee to 13. match existing installed fixtures for subsequent orders or replacements in regards to product appearance, CCT, or lumen output.

WARRANTY

Limited Warranty

12 Year limited warranty

This warranty does not include the additional accessories referenced in this specification sheet. Complete warranty details for fixtures and additional accessories are available at www.diodeled. com/limited-warranty/ within the Policies section. For warranty related questions please contact product support.

Consumer's Acknowledgment

Elemental LED, Inc. stands behind its products when they are used properly and according to our specifications. By purchasing our products, the purchaser agrees and acknowledges that lighting design, configuration and installation is a complex process, wherein seemingly minor factors or changes in layout and infield adjustments can have a significant impact on an entire system. Choosing the correct components is essential. Elemental LED is able to work with the original purchaser to make an appropriate product selection to the extent of the limited information that the customer can provide, but it is virtually impossible for Elemental LED to design a system that foresees every unknown factor. For this reason, this Warranty does not cover problems caused by improper design, configuration or installation issues. Any statement from a Elemental LED employee or agent regarding a customer's bill of goods and/or purchase order is NOT an acknowledgment that the products purchased are designed and configured correctly. The purchase agrees and acknowledges that it is the customer's responsibility to adhere strictly to all information contained in the Product Specification Sheets.

There is often more than one way to design, configure and layout an LED lighting application properly to achieve the same lighting effect. Elemental LED strongly recommends that licensed professionals be used in the design and installation of lighting systems that include Elemental LED products. The specifications include important information that a designer and installer should carefully review and strictly follow. Qualified designers and certified and/or licensed installers, with access to the final installation environment, customer goals, and Elemental LED product specifications can make the requisite decisions appropriate for a successful finished lighting application.