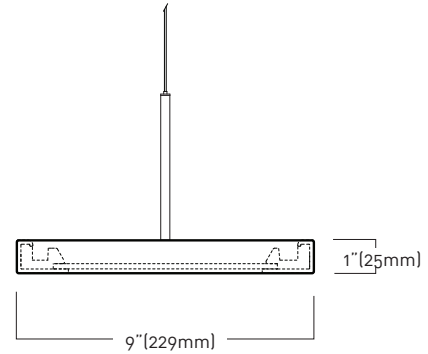




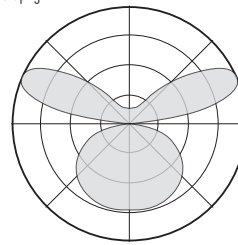
TVR
TAVO
 Bi-Direct

Pendant / Radius End Cap
 Remote Driver



- 4mm thick acrylic optical light guide coupled with high efficacy mid power LED's delivers controlled light distribution to create uniform ceiling surfaces and wide luminaire spacing for low glare and high visual comfort environments.
- Extruded aluminum housing with die cast radiused aluminum end caps. Powder coat white finish is standard. Optional silver, black, or customer colors.
- Standard constant current electronic driver houses in a separate enclosure with 0-10V dimming input; dimming range from 100% down to 1%.
- Distributed LED array in a variety of lumen output packages. LED color is available in 3000K, 3500K or 4000K with a CRI of 80 or 90. Custom outputs are available. Module is replaceable. L90>100,000 hrs.

TVS-54
 54% Downlight
 46% Uplight



Light Output and Energy Consumption*

Light Level	lm/ft	Watts/ft	Efficacy
08	742.0	5.7	130
10	1024.0	8.0	128
13	1213.0	9.5	128
15	1426.0	11.2	127
19	1850.0	14.8	125

Lumen output may vary. 3500K / 80CRI used for above results.

ORDERING INFORMATION

SAMPLE NUMBER: TVR-54-08L35-1C-U-D-W-W-T1/48-4

TVR					
SERIES	LIGHT DISTRIBUTION	LUMEN PACKAGE ¹	CRI/ CCT	CIRCUIT ³	VOLTAGE
TVR - Tavo remote pendant with radiused end cap	54 - 54% downlight, 46% uplight 66 - 66% downlight, 34% uplight TC - 100% downlight	08 - 781 lm/ft 10 - 1008 lm/ft 13 - 1256 lm/ft 15 - 1437 lm/ft 19 - 1741 lm/ft XX ²	L30 - 80 CRI, 3000K L35 - 80 CRI, 3500K L40 - 80 CRI, 4000K H30 - 90 CRI, 3000K H35 - 90 CRI, 3500K H40 - 90 CRI, 4000K	1C - Single Circuit 1E - Single Circuit with EM Circuit 1B5 - Single Circuit with 5W Battery Pack 1B7 - Single Circuit with 7W Battery Pack 1B10 - Single Circuit with 10W Battery Pack 1B12 - Single Circuit with 12W Battery Pack CEC - CEC Compliant (10W Battery Pack)	U - Universal 1 - 120 Volt 2 - 277 Volt

- Notes:
1. Nominal lumen output for 3500K, 80CRI
 2. Consult factory for custom lumen package
 3. Consult factory for additional options
 4. Consult factory for specifications and custom dimming options. See page 2 for additional information
 5. See page 3-4 for additional information. Option GP not available with battery
 6. Specify run length in 4' increments
 7. Specify 1 - 120 volt or 2 - 277 volt

DRIVER ⁴	LUMINAIRE FINISH	DRIVER ENCLOSURE / SUSPENSION LENGTH (IN INCHES) ⁵	LENGTH	OPTIONS ⁵	
Dimming 0-10v D - Dims to 1% (Standard) D0 - Dims to 1%, fade to off D02 - Eldoled Solodrive, dims to 0%	DALI Dimming ELE - Eldoled Ecodrive, dims to 1% ELS - Eldoled Solodrive, dims to 0% Lutron Dimming L12 - Lutron HiLume™ 2-Wire 120V Forward Phase, dims to 1% L15 - Lutron HiLume™ H-Series, dims to 1% L16 - Lutron HiLume™ 5-Series, dims to 5%	W - White (Standard) S - Silver B - Black CC⁴ - Custom Color CANOPY FINISH W - White (Standard) B - Black	Grid Ceiling Plenum Enclosure T1 / 48 T1 / 120 T9 / 48 T9 / 120 TS / 48 TS / 120	Inaccessible / Grid Ceiling Enclosure GP / 48 GP / 120 Surface Enclosure SR / 48 SR / 120 SR-BAT / 48 SR-BAT / 120	4 - 4 ft 8 - 8 ft XX ⁶ - x ft N - Nightlight OS - Occupancy sensor DS - Daylight sensor GTD ⁷ - Generator transfer device GLR - Fusing ETS ⁷ - Electronic transfer switch CP - Chicago plenum

PHOTOMETRICS

Cat # TVR-55-08L35-1C-U-D-W-W-T1/48-4

ITL Test #: ITL90063

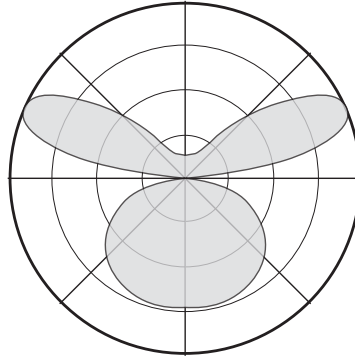
Total Delivered Lumens: 2968

Input Watts: 22.8

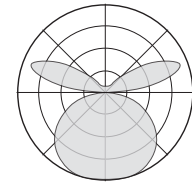
Efficacy: 130 lm/W

54% Downlight

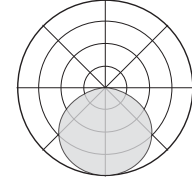
46% Uplight



TVS-54 (54% downlight)



TVR-66 (66% downlight)



TVR-TC (100% downlight)

Luminance Data (CD/SQ.M)

Angle in Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	2622	2935	3185
55	2620	3031	3402
65	2584	3066	3569
75	2361	2897	3410
85	1931	2337	2777

Zonal Lumen Summary

Zone	Lumens	%Fixt
0-30	383	13
0-40	640	22
0-60	1196	40
0-90	1603	54
90-120	745	25
90-130	1040	35
90-150	1292	44
90-180	1366	46
0-180	2968	100

LIGHTING CONTROL

Nulite provides flexibility in meeting the needs of each project by easily integrating with several manufacturers for lighting control options.

0-10V: A non-directional dimming system. The control system tells the LED driver what to do and it adjusts according to the voltage on the control circuit.

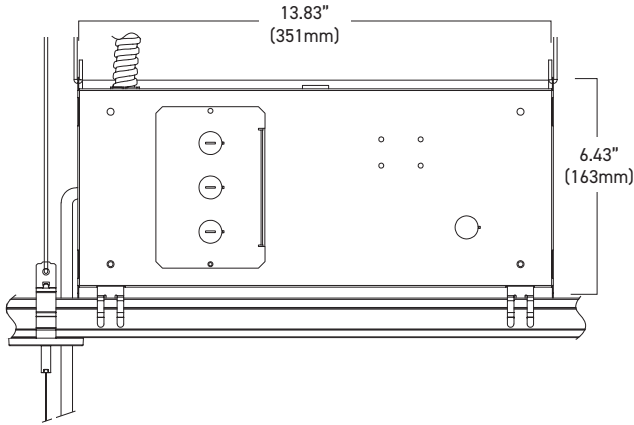
DALI: Digital Addressable Lighting Interface is a simple two-wire control connection that goes to each fixture to form the control network. It allows LED drivers to be controlled independently from lighting control circuits.

Solution	Manufacturer	Prefix	Series	Dim Level	Quantity of Wires	Dim to Dark (Smooth)	Fade to Off
Dimming 0-10V							
D	Variable			1%	2		
D0	Variable			0%	2		X
D02	eldoLed		SOLOdrive	0%	2	X	
DALI Dimming							
ELE	eldoLed		ECOdrive	1%	2	X	
ELS	eldoLed		SOLOdrive	0%	2	X	
Lutron Dimming							
L12	Lutron	LTEA	Hi-lume™ 2-Wire 120V forward phase	1%	No Control Wires - Uses Hot		
L15	Lutron	LDE1	Hi-lume™ - H Series	1%	2	X	
L16	Lutron	LDE5	5-Series	5%	2		

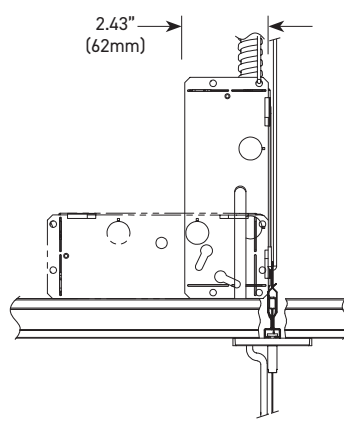
REMOTE DRIVER PENDANT INSTALLATION DETAILS

GRID CEILING PLENUM ENCLOSURE (T1, T9 OR TS)

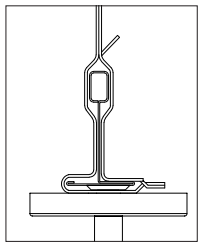
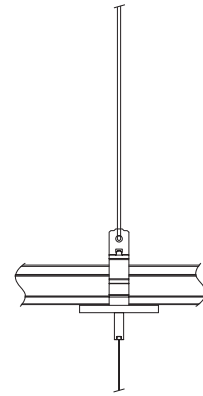
Power Feed - Side View



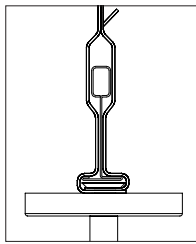
Power Feed - End View



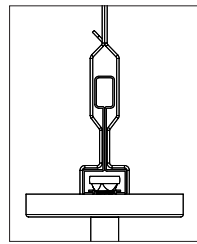
Non-Power Feed



T1
15/16" Grid



T9
9/16" Grid

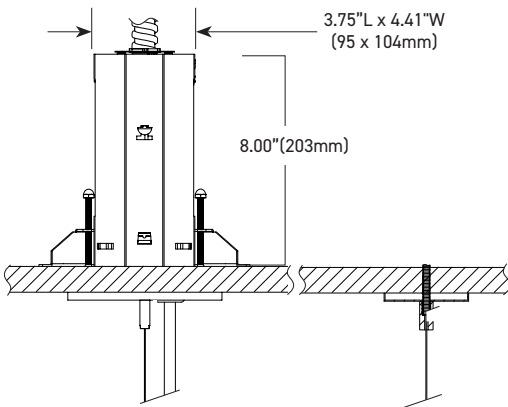


TS
Slot Grid

INACCESSIBLE CEILING / GRID CEILING ENCLOSURE (OPTION)

Direct Access Suspension Enclosure for Inaccessible Ceiling

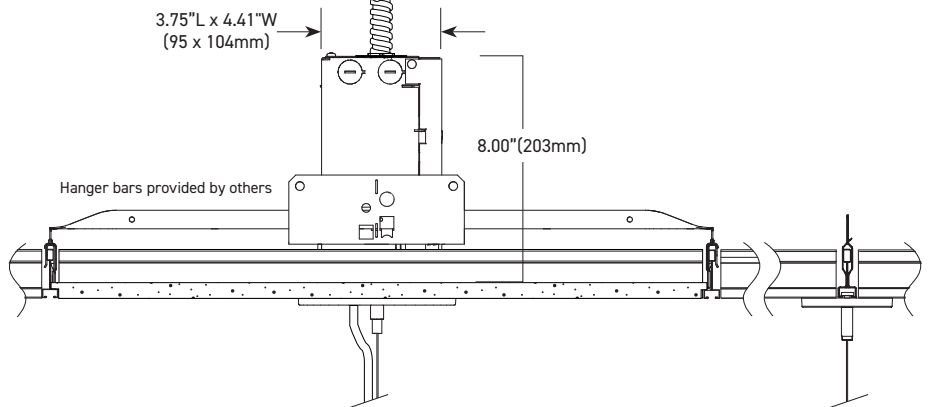
Power Feed



Non-Power Feed

Direct Access Suspension Enclosure for Grid Ceiling w/Hanger Bars

Power Feed



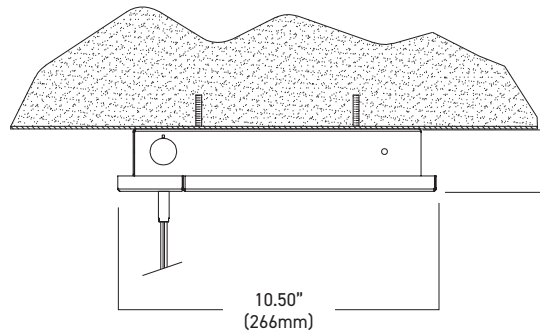
Non-Power Feed

NOTE: If battery is required, contractor to supply and remote battery

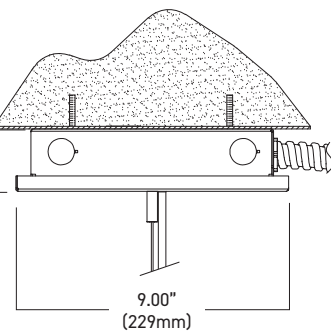
REMOTE DRIVER PENDANT INSTALLATION DETAILS (CONT.)

SURFACE MOUNT ENCLOSURE (OPTION SR)

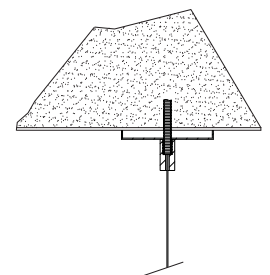
Power Feed - Side View



Power Feed - End View

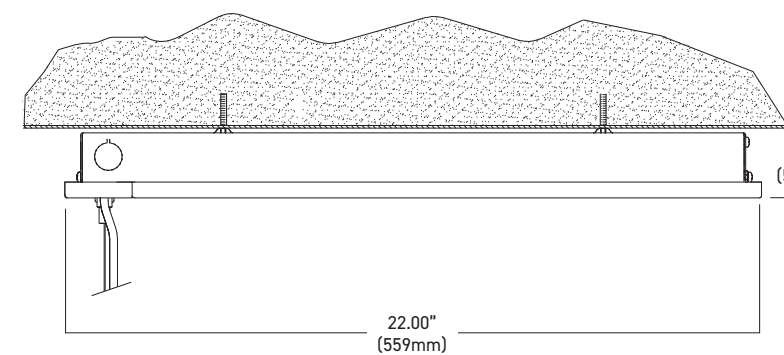


Non-Power Feed

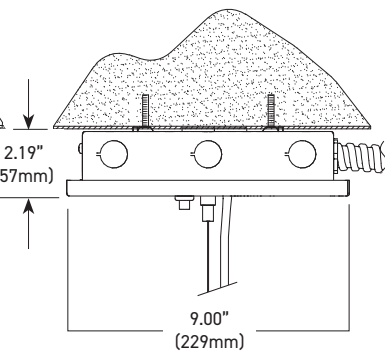


SURFACE MOUNT ENCLOSURE W/ BATTERY (OPTION SR-BAT)

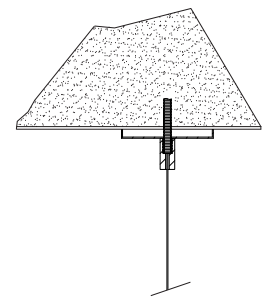
Power Feed - Side View



Power Feed - End View



Non-Power Feed



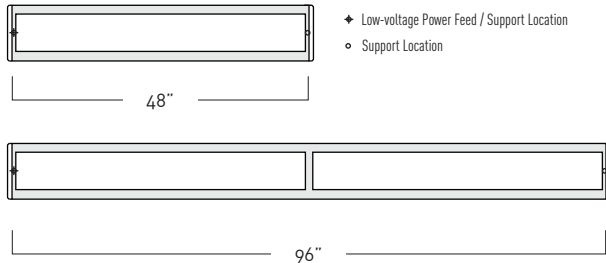
UNIT LENGTHS

ORDERING EXAMPLE FOR STANDARD LENGTH

TVR-54-08L35-1C-U-D-W-W-T1/48-4

Lines

For linear individuals and continuous linear runs, specify run lengths to the nearest 4'.



PRODUCT DETAILS

LIGHT SOURCE LED custom linear array is mounted with quick-connect wiring to facilitate service. Five lumen packages are available (08, 10, 13, 15, and 19). All luminaire configurations tested in accordance with IESNA LM-79. Diodes tested in accordance with IESNA LM-80.

DRIVER Standard constant current remote electronic driver with 0-10V dimming input standard; dimming range from 100% down to 1%. Dims to 0% and DALI are available. Universal (U), 120 volt (1), and 277 volt (2).

OPTIONAL DALI Digital Addressable Lighting Interface is a simple two-wire control connection that goes to each fixture to form the control network. DALI enables dimmable transformers, relay modules, emergency fittings, and controllers from different manufacturers to be mixed and matched into a single control system, allowing LED drivers to be controlled independently from lighting control circuits.

OPTIONAL BATTERY AND EMERGENCY OPTIONS Recyclable Ni-Cad battery pack, battery run time is 90 minutes. 5W, 7W, 10W, or 12W battery packs are available. Total output is determined by exact efficacy of specified configuration multiplied by battery wattage (i.e. TVS-50-08L35 with a 10W battery pack is a 1,230 battery lumen output). Recharge time of 24 hours. Entire direct fixture housing is on battery for lengths up to 4'. Half of direct fixture is on battery for 8' housing lengths. Emergency circuit or night light circuit available.

SECURE TOOL-FREE JOINING DESIGN A dynamic mechanism that ensures stable positioning, no light leak, and speeds up installation for continuous rows. Constructed with spring steel over center draw latch, 22 gauge thick.

MOUNTING Designed to install into grid plenum (T1, T9, or TS clips), inaccessible / grid ceiling, and surface ceilings. Supplied with two 3" (76mm) power and non-power canopies. Sheet rock / grid ceiling (option GP) supplied with one 5" (127mm) power and one 3" (76mm) non-power canopies. Refer to installation instructions for appropriate ceiling detail.

WARRANTY 5-year limited warranty on LED and driver from date of shipment. Refer to the full warranty details on www.nulite-lighting.com.

LUMINAIRE LENGTH Any length, 2-foot minimum, in increments down to 6". 8-foot maximum section length.

WEIGHT ~4 lbs/ft.

APPROVALS ETL listed, conforms to UL Standard 1598 / 8750 and CSA Standard C22.2, indoor dry/damp locations.

INDEPENDENT TESTING

IESNA LM79 - Testing method for the Electrical and Photometric Measurements of Solid State Lighting on the complete system, such as luminous flux, electrical power, luminous intensity distribution, and various properties of chromaticity.

IESNA LM80 - Testing method for measuring lumen maintenance of LED light sources, applies to the LED package, array or module alone, not the complete system.