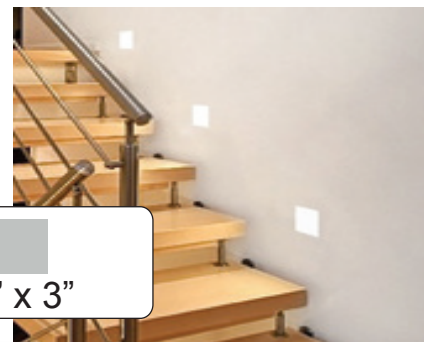# dado Lighting

StepLineLED 33 x 5/8"

3" White or Colored luminous Square

Smooth Flush installation in plaster and drywall

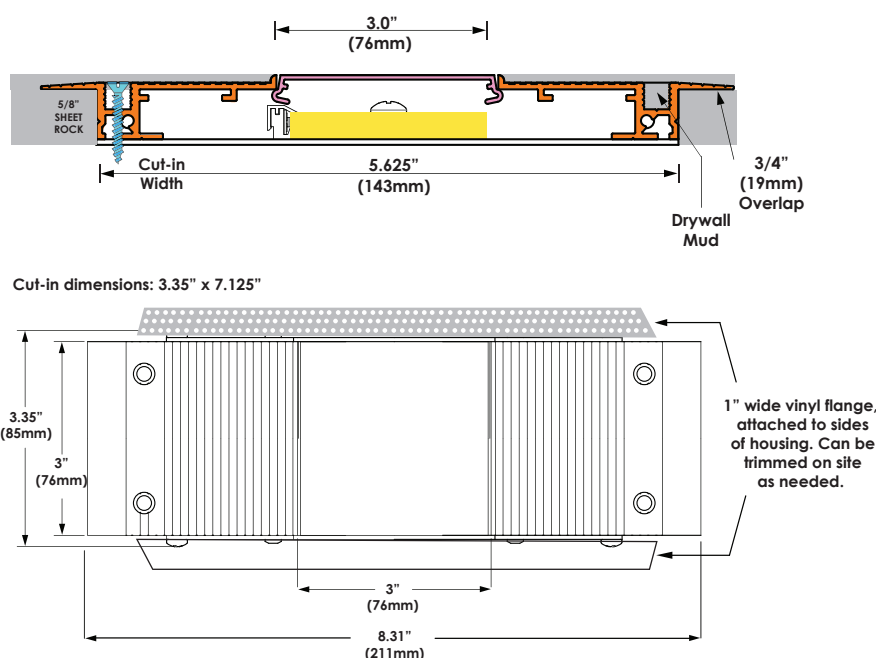Zero Cavity construction allows precise placement without special framing

Units fits within thickness of the finished wall material

3" x 3"

Specification

3.0" (76mm)

5/8" SHEET ROCK

Cut-in Width — 5.625" (143mm)

3/4" (19mm) Overlap

Drywall Mud

Cut-in dimensions: 3.35" x 7.125"

3.35" (85mm)

3" (76mm)

3" (76mm)

8.31" (211mm)

1" wide vinyl flange, attached to sides of housing. Can be trimmed on site as needed.

Housing
All aluminum housing mounts with screws to studs, joists and hat channel just like drywall to create a monolithic heat sink. Use cut-in housing for remodel and European style installations. Aluminum heat sink pads conduct heat away from LED for improved performance, life and color. Fits common drywall and plaster thickness. Housing lip is mudded into surface to provide trimless installations. Ships with 15ft CL2P cable to wire to remote power supply. IC rated. ETL listed.

LED
Under driven Low Wattage (0.25W) White light LEDs produce even distribution with no shadows. Blending and overlapping optics of LED keep color uniform, Various "White" color temps available, & gel filters can be added for more fun. Gel sits between LED and light guide, so that color is even and lens is white when fixture is off.

Optics
Light guide for diffusing multiple LED sources, has short cable with quick connect plug for easy replacement. Snap in high transmission, matte white acrylic lens provides a lambertian distribution for a dimensionless appearance. Lens sits flush with wall surface.

Driver
Remote power supply – see next page for details.

Modifications
Optional Artisan Glass tiles provide for focal elements. For unique custom work, consult factory and additional specification sheets for additional apertures and details.

Ordering

Series	DM33	☐ Mud in 3" x 3" square
Mounting	MC5	☐ New or Cut-In construction 5/8" drywall or thicker
Color	27	☐ 2700K, 85+ CRI
	30	☐ 3000K, 85+ CRI
	35	☐ 3500K, 85+ CRI
	40	☐ 4000K, 85+ CRI
	50	☐ 5000K, 85+ CRI
Gel Color	_	☐ Add G (Gam), L (Lee) or ☐ R (Rosco) + gel color #
Driver	R	☐ Remote

Driver*	R	☐ Remote
Drive Qty Per	-	☐ Blank for ELV type & DLUT type
Power Supply	X	☐ Factory determined with N100 or D010 type
Type	ELVxx	☐ Elec low voltage, 20, 40 or 100W max.
	N100	☐ Electronic, 100W max.
	D010	☐ Dimming via 0-10Vdc
	DLUT96	☐ Lutron Hi-Lume Premier 96W
Voltage	UNV	☐ Universal 120-277V N100, D010 & DLUT type
	120	☐ 120 for ELV type
	CP	☐ Chicago Plenum rated enclosure

* See Power Supplies spec sheet for additional versions and details

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Environmental Data

For 3000k:
W: 2.5W per unit
LLD: 50,000hrs @ 70%lm
Up to (8) units on one 20W driver

Temp range: 0° ~ 90°F (-20 ~ 30°C)
No Mercury, No UV, No Flicker
Warranty: **5** years
cETLUS Listed

StepLineLED 33 x 5/8"
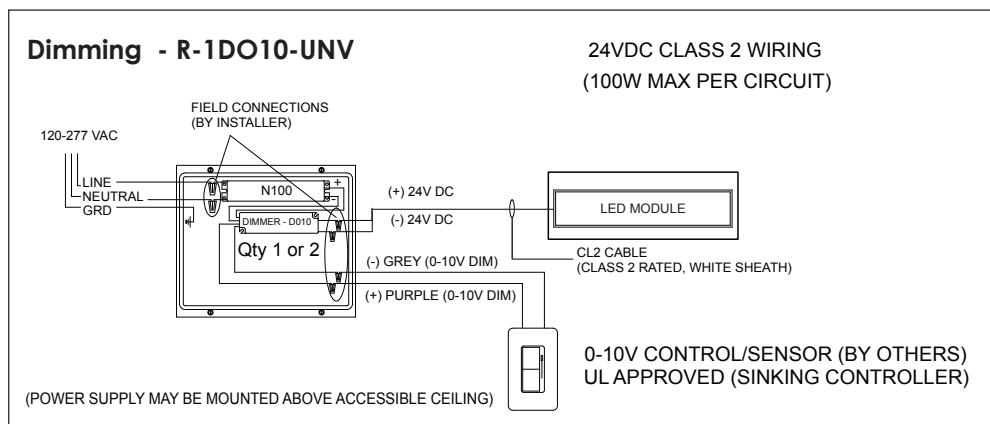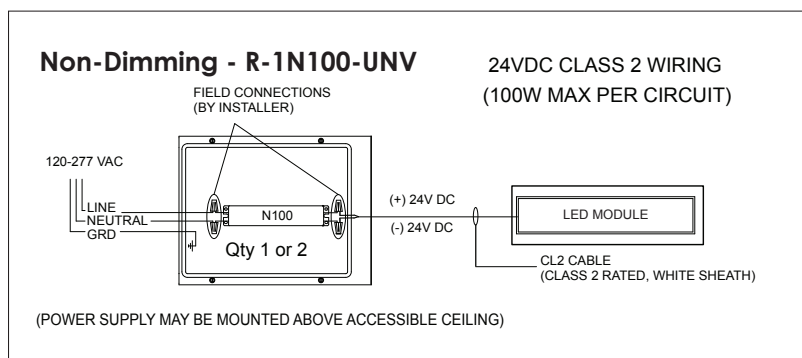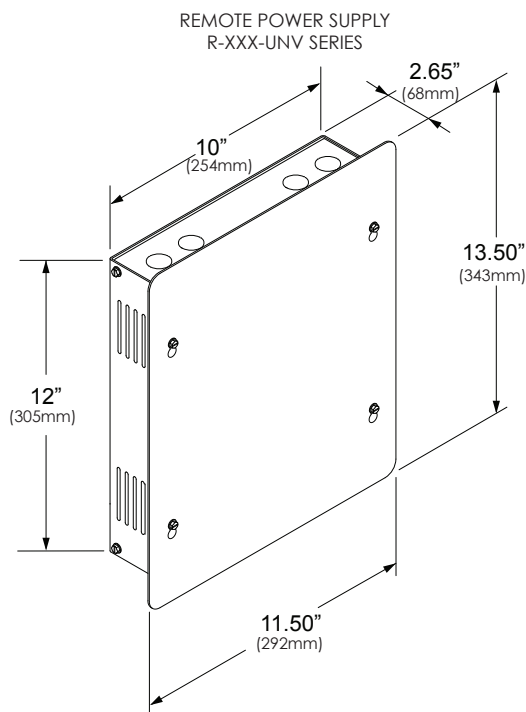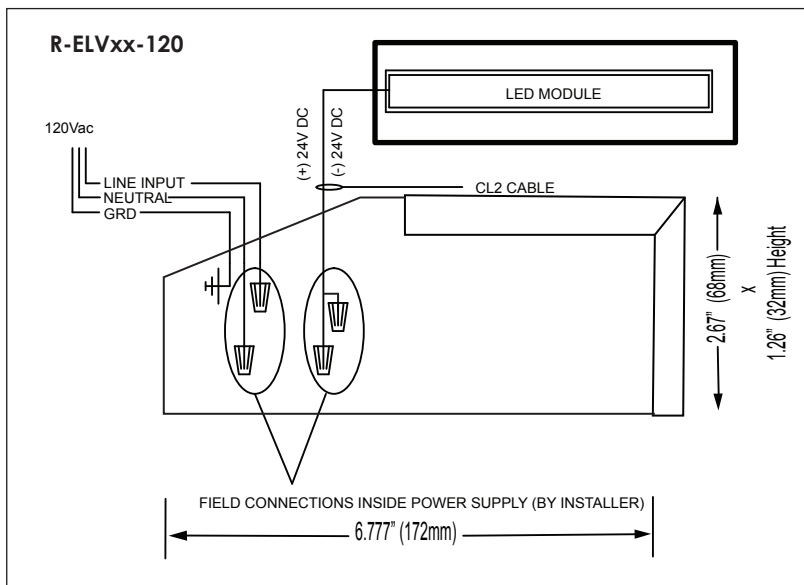
dado Lighting

R-ELV Driver
Economical electronic remote mounted power supply with 24Vdc
  Constant Voltage output for simple class 2 installation.
20W, 40W; 96W input, 60Hz.
Dims to 20% with forward phase 2-wire magnetic low voltage dimmer.
Short circuit and overload protected.
Non-IC installations.
Listed for 90 C conductors with 1/2'' trade size knock outs.
NEMA 3R aluminum enclosure, rated for outdoor use
See Power Supplies spec sheet for additional information and
    alternate power supplies.

R-xxx-UNV Drivers
Remotely located power supply with 24Vdc Constant Voltage
  output for simple class 2 installation.
Electronic Drivers 50/60 Hz, 120 thru 277 input.
Choice of 0-10V dimming or switched on/off. 0-10V dimmable drivers
  may flicker below 10%. Adjust low end trim of dimmer accordingly.
Type A Sound Rating,
Non IC installations standard; consult factory for IC installation.
May be surface mounted or recessed in 2x4 walls or above
    accessible ceilings.
Housing is die formed 16ga CRS with White painted after fabrication
    finish.
Listed for 90°C conductors with 1/2'' trade size Knock Outs.
See Power Supplies spec sheet or consult factory for additional
    driver options.

R-DLUT96-UNV
Remote power supply 24Vdc Constant Voltage Output.
50/60Hz,120 thru 277V input.
Class A sound rated.
Rated for Damp location use. Non-IC installations.
Dims below 1% with 3-Wire dimmer or EcoSystem™
Requires 25W minimum load.
For more info visit:
  http://www.lutron.com/TechnicalDocumentLibrary/369883.pdf

R-ELVxx-120

LED MODULE

120Vac

(+) 24V DC
(-) 24V DC

LINE INPUT
NEUTRAL
GRD

CL2 CABLE

2.67" (68mm)
X
1.26" (32mm) Height

FIELD CONNECTIONS INSIDE POWER SUPPLY (BY INSTALLER)
6.777" (172mm)

REMOTE POWER SUPPLY
R-XXX-UNV SERIES

2.65"
(68mm)

10"
(254mm)

13.50"
(343mm)

12"
(305mm)

11.50"
(292mm)

Non-Dimming - R-1N100-UNV
24VDC CLASS 2 WIRING
(100W MAX PER CIRCUIT)

FIELD CONNECTIONS
(BY INSTALLER)

120-277 VAC

LINE
NEUTRAL
GRD

N100

Qty 1 or 2

(+) 24V DC
(-) 24V DC

LED MODULE

CL2 CABLE
(CLASS 2 RATED, WHITE SHEATH)

(POWER SUPPLY MAY BE MOUNTED ABOVE ACCESSIBLE CEILING)

Dimming - R-1DO10-UNV
24VDC CLASS 2 WIRING
(100W MAX PER CIRCUIT)

FIELD CONNECTIONS
(BY INSTALLER)

120-277 VAC

LINE
NEUTRAL
GRD

N100
DIMMER - D010

Qty 1 or 2

(+) 24V DC
(-) 24V DC

(-) GREY (0-10V DIM)
(+) PURPLE (0-10V DIM)

LED MODULE

CL2 CABLE
(CLASS 2 RATED, WHITE SHEATH)

0-10V CONTROL/SENSOR (BY OTHERS)
UL APPROVED (SINKING CONTROLLER)

(POWER SUPPLY MAY BE MOUNTED ABOVE ACCESSIBLE CEILING)

StepLineLED 33 x 5/8"

Photometric Data

BALLabs
Independent Test No. 17940.0

Cat No.: S25-MC5-2ML-35-1-W-R-S-24-S-in*
Meanwell Driver No.: LPV-20-24 operating at 120v
Total Lumens: 701
* All data needs to be multiplied by .125 for actual output of DM33 fixture

This is an absolute test
per LM-79-08
Luminous Length: 24"
Width: 2.5"

Candlepower Distribution (cd)

Angle	Along	45°	Across
0°	259	259	259
5°	262	259	256
10°	256	252	251
15°	252	247	246
20°	240	236	234
25°	230	225	225
30°	219	214	211
35°	202	199	197
40°	186	180	179
45°	166	163	162
50°	149	144	145
55°	128	124	125
60°	107	105	104
65°	85	84	82
70°	65	54	64
75°	43	42	40
80°	25	24	26
85°	9	7	10
90°	0	0	0

Zonal Lumen Summary

Zone	Lumen	
0-30°	198	28.4%
0-40°	322	46.1%
0-60°	560	80.2%
60-90°	139	19.8%
90-180°	0	0%
0-180°	699	100%

Luminance Data (cd/m2)

Angle	Along	45°	Across
45°	6017	5905	5868
55°	5713	5529	5575
65°	5128	5065	5003
75°	4288	4186	3982
85°	2729	2122	3032

1. Mount and Level Housing. Cable to Remote Power Supply.

2. Install Drywall, Tape, Mud & Finish.

3. Snap in LED Module and Lens.