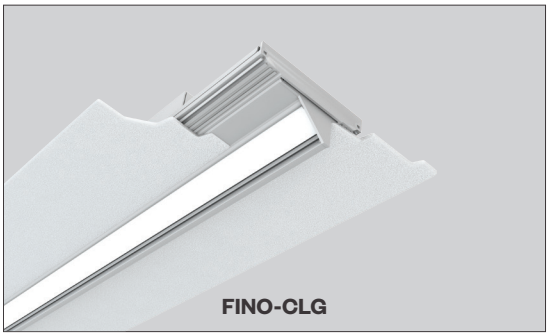
Fino®

Ceiling Mount Wall Wash

PROJECT: **TYPE:**

Features

Our ceiling-mounted Fino has won recognition for discreet light directed from above. It leaves a clean ceiling and installs easily into typical existing structure. Ideal for high wall washing over counter areas and reception desks.



Product Overview

Type:	Ceiling Mount, High Angle Wall Wash
Wattage:	6W/ft, 12W/ft *(other wattages consult factory)*
Color Temp:	2700K, 3000K, 3500K, 4000K
CRI:	83 typ. or 90+ typ.
Dimming (wired):	0-10V, 1% dim, 120/277VAC *(standard)* Lutron LDE1 Hi-lume® 1% Soft-On/Fade-to-Black DALI, 1% dim

Certifications

5 year limited warranty
AMERLUX LED

Fixture Summary

Ceiling Types

4" Tech Zone	6" Tech Zone	9/16"	15/16"	Gyp Board
Yes	No	Yes	Yes	Yes

Runs

Individual Runs for GB: 1.5' - 8' *(to nearest 6").*
Individual Runs for Grid: 2' - 8' *(to nearest 6").*
Continuous Runs: Available *(to nearest 6").*

Performance Data

Wattage per Foot	Delivered Lumens	LPW	Color Temp
6	2077	94.1	3500K-83
12	3943	87.1	3500K-83

Data is based on 4' fixture, 3500K-83 120V IES files available on website.

Electrical Data

		4'		8'	
Wattage per Foot	Voltage	System Watts	Amps	System Watts	Amps
6	120V	22.1	0.18	44.1	0.37
	277V	22.1	0.08	44.1	0.16
12	120V	45.3	0.38	90.6	0.76
	277V	45.3	0.16	90.6	0.33

Electronic multi-volt (120-277VAC), constant current LED driver.

178 Bauer Drive, Oakland, NJ 07436 • P: 973-882-5010 F: 973-882-2605 • amerlux.com

Fino®

Ceiling Mount Wall Wash

amerlux

PROJECT:	TYPE:

Ordering Information

_____.____.____.HW.120/277.____.____.____

1 2 3 4 5 6 7 8

1	Model
	FINO-CLG-GB-A16†
	FINO-CLG-GB-REMOTE-A16†
	FINO-CLG-GRID-A16†
	FINO-CLG-GRID-REMOTE-A16†

2	Wattage *(per foot)*
	6 6W/ft
	12 12W/ft
	Consult factory for other wattage options.

3	Color Temp	
	83 CRI	90+ CRI*
	27 2700K-83	**279** 2700K-90+
	30 3000K-83	**309** 3000K-90+
	35 3500K-83	**359** 3500K-90+
	40 4000K-83	**409** 4000K-90+
	**** Consult factory for lead times.***	

4	Finish
	HW high reflectance matte white

5	Voltage
	120/277

6	Length
	_____ specify length
	(for individual fixture, 1.5' to 8' in 6" increments for GB, 2' to 8' in 6" increments for Grid)
	(for continuous run, specify to nearest 6")

7	Configuration
	IND[1] individual fixture, for GB 1.5' to 8' in 6" increments, for Grid 2' to 8' in 6" increments
	CON continuous run > than 8', specify to nearest 6"

8	Drivers
	0-10V 0-10V, 1% electronic dimming , multi-volt 120-277VAC constant current driver *(standard)*
	Consult factory for the following options
	HILUME-H-ECO Lutron LDE1 Hi-lume® 1% dim Soft-On/Fade-to-Black
	DALI DALI dimming 120-277VAC, 1% dim

1 - Lengths less than 4' may have restrictions based upon wattage, lengths, drivers or other options.

† The "A" refers to the sequential revision in a year and "XX" refers to the year of update. Updates coincide with improved performance while not changing the overall fixture aesthetic and are reflected in the published performance data. Please contact your Amerlux representative for explanations of changes.

Fino®

Ceiling Mount Wall Wash

amerlux

PROJECT:	TYPE:

Specifications

Application

Effective high angle wall wash, Fino Ceiling is an innovative lighting tool that allows the subtle lighting of vertical surfaces without drawing attention to the fixture.

Construction

Two piece assembly:

1) Extruded aluminum mud-in frame & sheet metal die-formed gear tray.
2) Snap-in reflector, extruded aluminum optical assembly.

Positive latching system for hairline seams.

Optical

High performance high angle wall wash optical system.

LED

Amerlux's boards and patented connector design with brand name LEDs enables Amerlux fixtures to have excellent thermal management and offer a 5 year warranty. Our LED binning is within 3 MacAdam ellipse. Boards are configured for maximum flexibility resulting in even illumination no matter the fixture layout. LED boards are easily replaced in the field with just a Phillips screw driver.

Color Temperature Options: 2700K, 3000K, 3500K, 4000K
CRI: 83 typical, 90+ *(consult factory for lead times)*
R9: 16 @ CRI 83; R9: >50 @ CRI 92
Life: 50,000+ hr., > 70% of initial lumens *(L70)*

Electrical

Wattage: 6W/ft, 12W/ft *(consult factory for other wattages)*.
Electronic constant current LED driver:
6 watts - 18" min. fixture length, 96" max. length.
12 watts - 18" min. fixture length, 48" max. length.

Integral Driver: Gypsum Board

Drivers prewired in an Adjustable Enclosure that can be field adjusted to be mounted in-between ceiling studs or other support structure. Adjustable Enclosures are not connected internally to fixture. Live voltage must be brought to from a J-Box or from an adjacent powered Adjustable Enclosure. Prewired low voltage leads in the Adjustable Enclosure are field connected to LED board leads within fixture housing.

Integral Driver: Grid

Grid ceiling fixtures have a continuous wireway and can be wired through quick access plate on top of fixture housing.

Remote Driver: Gypsum Board or Grid

Drivers are housed in a Remote Enclosure. Fixtures are provided with low voltage plenum rated 18/2 cable for field connection *(by others)* to Remote Driver. Remote Driver can be mounted anywhere within 25' of fixture.

Short Runs: Gypsum Board or Grid

Remote drivers are required. One driver can power multiple short fixtures in multiples of 6" , cumulative minimum lengths are required, see Table 3. Short Runs can be installed in either ceiling type. Each driver must be independently powered with line voltage from J-Box or from an adjacent powered Remote Enclosure.

See page 5 for wiring diagram.

Emergency circuit via remote inverter or auxiliary emergency power supply (by others).

This product complies with IEEE C62.41 for surge endurance up to 2.5KV. Amerlux® recommends using additional surge protection with this unit (supplied by others), surge and over voltage damage is not covered under warranty.

Drivers

0-10V - 1% electronic dimming , multi-volt *(120-277VAC)* constant current driver *(standard)*. Cap leads for non-dim applications.

Optional Drivers:

HILUME-H-ECO - Lutron LDE1 Hi-lume® 1% Soft-On/Fade-to-Black
DALI - DALI Dimming 120-277VAC, 1% dim

Note: Driver is accessible by removing snap-in reflector assembly.

Finish

HW - High reflectance matte white powder coat paing. Baked on finish for maximum durability and color stability.

Configurations/Lengths

Straight lengths only.

IND - Individual fixtures are made of single standard lengths of 1.5' to 8' *(in 6" increments)* for Gypsum board, 2' - 8' *(in 6" increments)* for Grid. These are stand alone fixtures. Lengths less than 4' may have restrictions based upon wattage, lengths, drivers or other options.

CON - Continuous runs, > than 8', specified to nearest 6" increments.

Each Housing/mud-in frame has factory installed alignment pins. Mating frames are easily aligned and joined with "catch and latch" mechanisms. Wiring is made fast and positive with molded quick connectors.

Mounting

FINO-CLG-GB-A16 - Intended for gypsum board ceiling - "mud in" finish required.
FINO-CLG-GB-REMOTE-A16 - intended for gypsum board remote driver, "mud-in" finish required.
FINO-CLG-GRID-A16 - Intended for 9/16" slot grid or flat tee, or 15/16" flat tee ceiling grids. 4" Tech Zone compatible.
FINO-CLG-GRID-REMOTE-A16 - Intended for 9/16" slot grid or flat tee, or 15/16" flat tee ceiling grids. 4" Tech Zone compatible.

Recommended Fixture Placement:
Min: 18" from wall
Ideal: 24" from wall
Max: 36" from wall

Certifications

Approved to UL standards for damp locations as tested by CSA.
Intended for indoor use only
IC rated

Warranty

Amerlux's 5 year limited warranty. Please consult Amerlux website for details.

Fino®

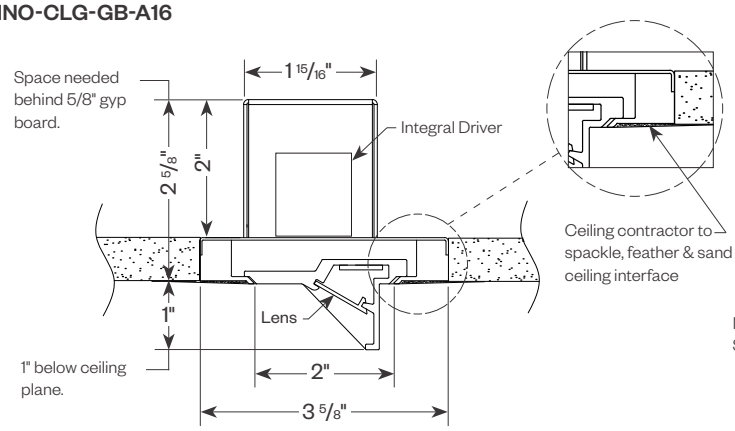
Ceiling Mount Wall Wash

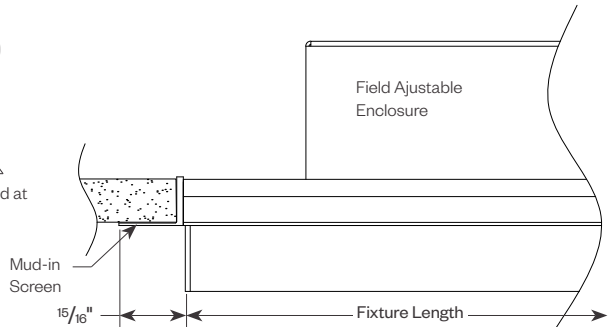
amerlux

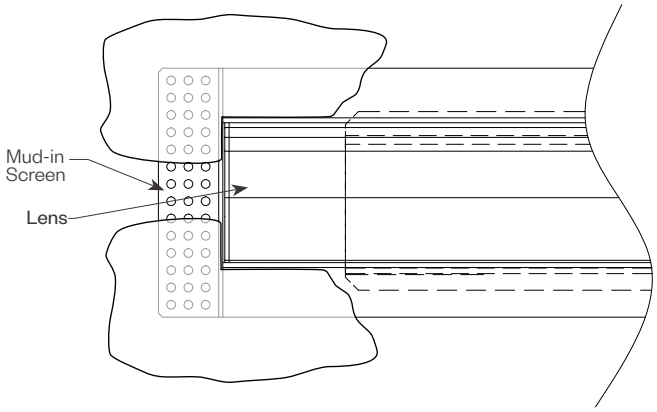
PROJECT:	TYPE:

Product Details

FINO-CLG-GB-A16

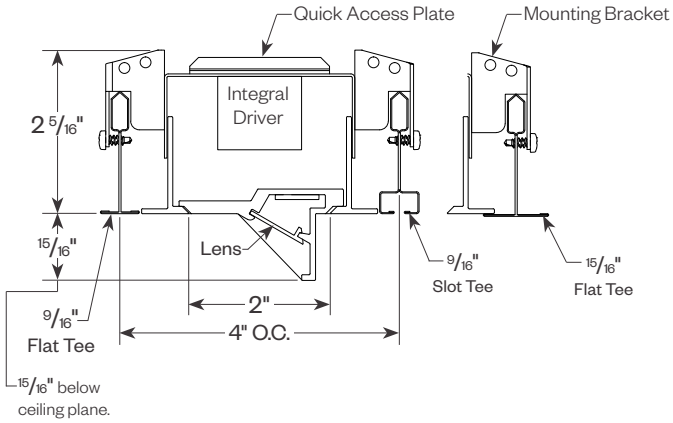


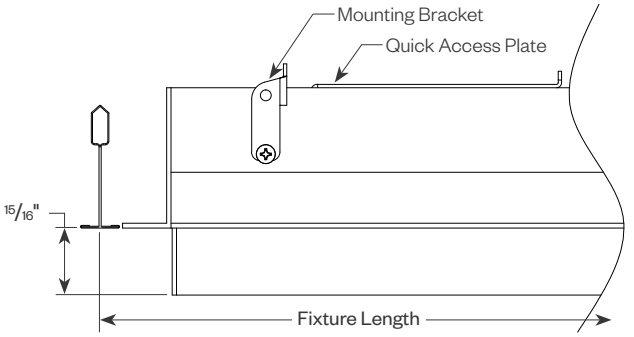


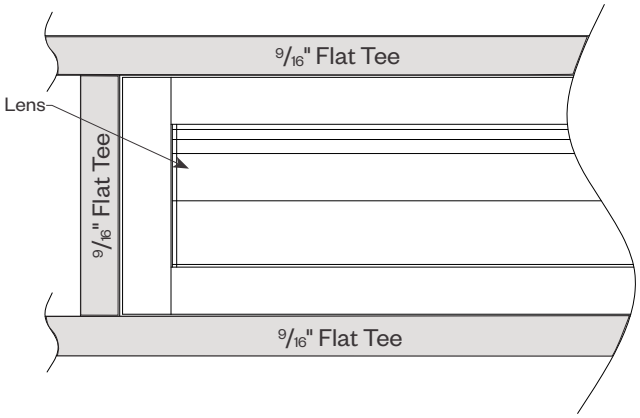


Cut Out Dimension:
Inidividual = 3 5/8" x Fixture Length + 1/4"
Continuous Run = 3 5/8" x Fixture Length + 1"

FINO-CLG-GRID-A16







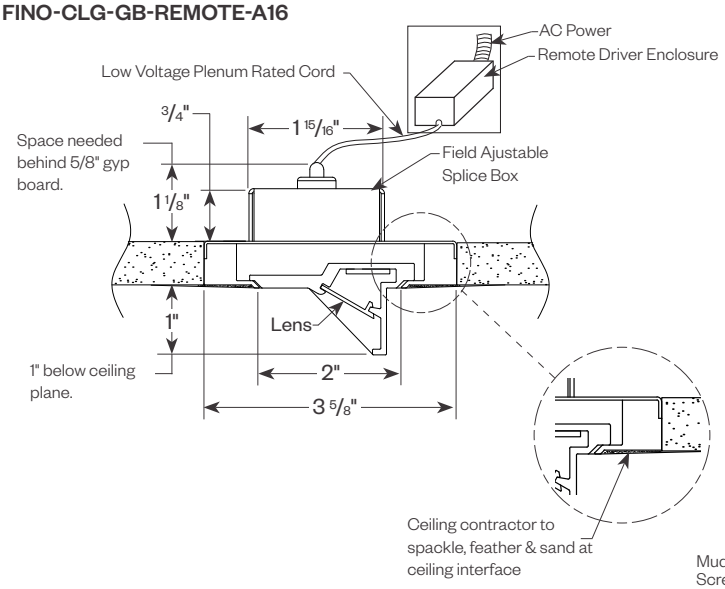
Fino®

Ceiling Mount Wall Wash

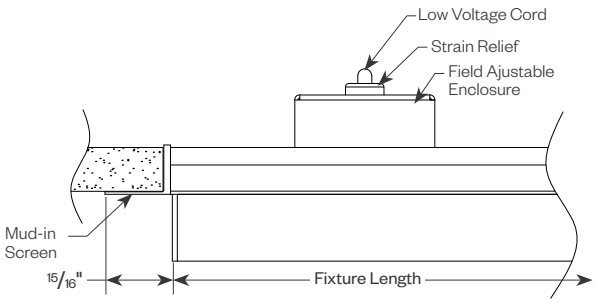
PROJECT: **TYPE:**

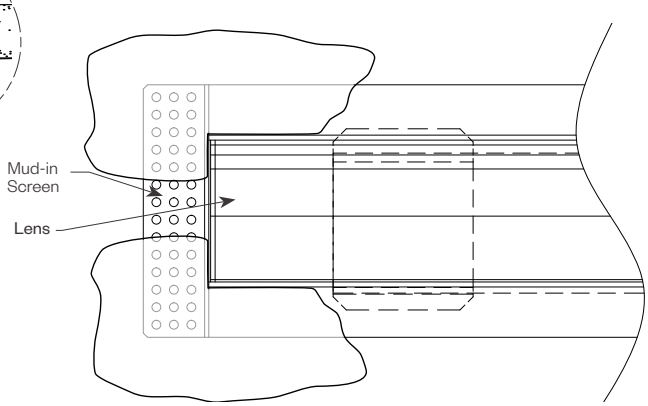
Product Details *(continued)*

FINO-CLG-GB-REMOTE-A16



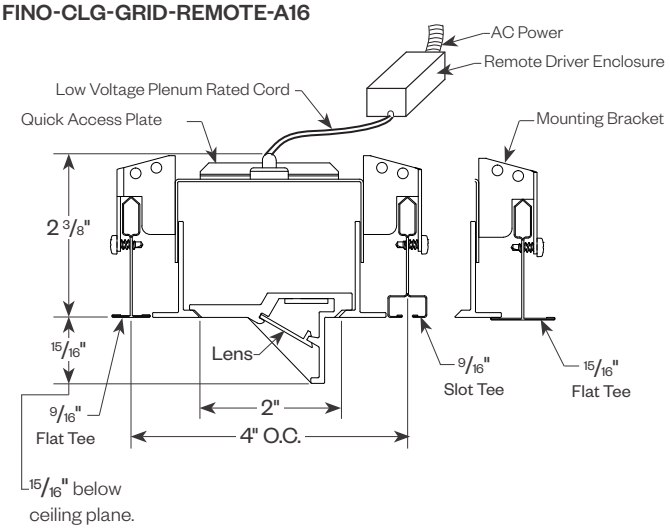
Note: Remote driver can be installed up to 25' max. from fixture.



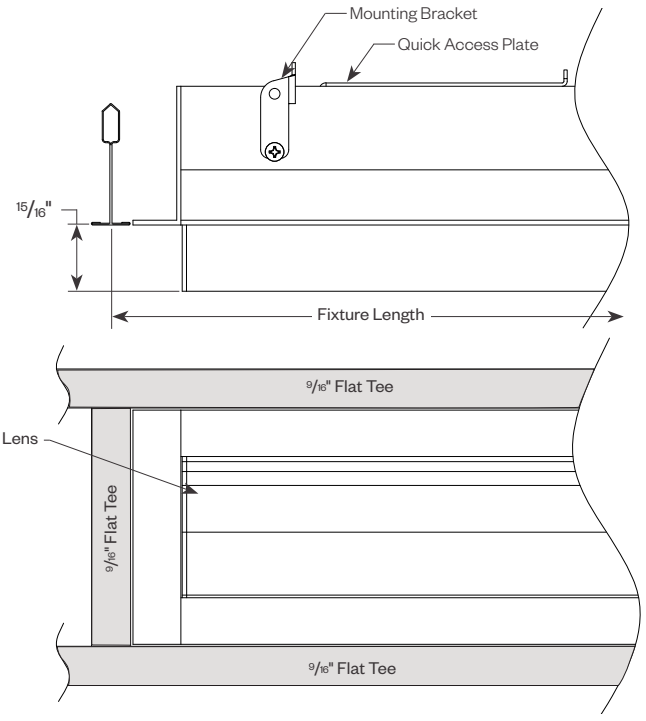


Cut Out Dimension:
Inidividual = 3 5/8" x Fixture Length + 1/4"
Continuous Run = 3 5/8" x Fixture Length + 1"

FINO-CLG-GRID-REMOTE-A16



Note: Remote driver can be installed up to 25' max. from fixture.



Fino®

Ceiling Mount Wall Wash

amerlux

PROJECT: **TYPE:**

Driver Wiring Options

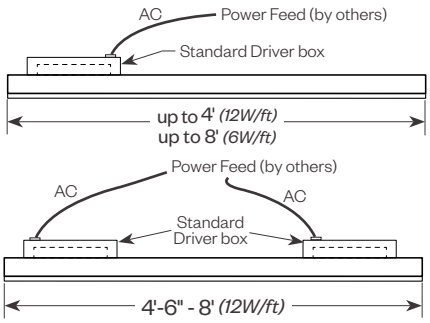
INTEGRAL DRIVER: GYPSUM BOARD

Driver required for every fixture section. Adjustable Driver Enclosure is located on back of fixture housing. It is field adjustable to fit in between ceiling studs or other structure. Line Voltage Power Feed *(by others)* must be brought to each Driver Enclosure. 1 or 2 drivers per fixture required *(see Table 1)*.

Table 1

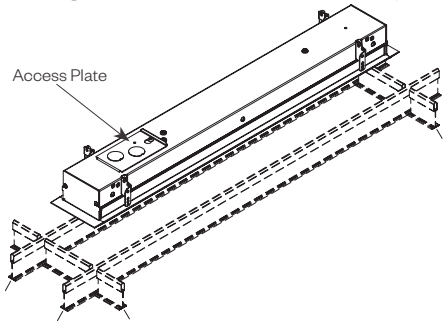
			Max. Driver	
Driver	**W/ft**	**Min. Length**	**1**	**2**
0-10V	6W	1'-6"	8'	x
	12W	1'-6"	4'	8'
Lutron	6W	2'-6"	8'	x
	12W	1'-6"	4'	8'
DALI	6W	1'-6"	8'	x
	12W	1'-6"	4'	8'

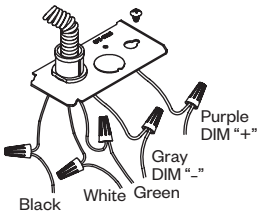
Standard Individual Wiring



INTEGRAL DRIVER: GRID

Grid ceiling fixtures have a continuous wireway and can be wired through quick access plate on top of fixture housing.





Note: Additional connections *(not shown)* as required for dimming, EM, or other wiring requirements. Cap all unused leads *(wire nuts supplied by others)*.

Remote Driver: Gypsum Board or Grid

Every fixture section requires an enclosure. 2 Drivers per may be required. Note; only 1 driver per Enclosure. Fixtures are provided with low voltage, plenum rates 18/2 cable for field connection *(by others)*. For maximum remoted driver distances see Table 2.

Table 2

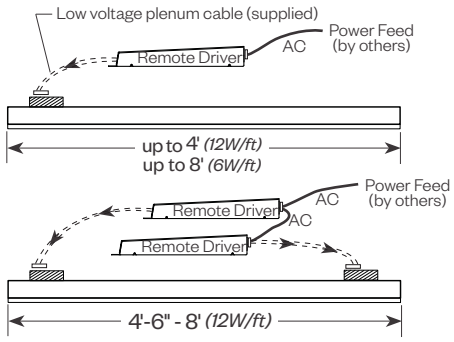
			Max. Driver		Max.Remote
Driver	**W/ft**	**Min. Length**	**1**	**2**	**Driver Distance**
0-10V	6W	1'-6"	8'	x	25'
	12W	1'-6"	4'	8'	25'
Lutron	6W	2'-6"	8'	x	25'
	12W	1'-6"	4'	8'	25'
DALI	6W	1'-6"	8'	x	25'
	12W	1'-6"	4'	8'	25'

Note: Minimum length for Grid ceiling installation is 2'.

Remote Driver Enclosure Dimensions:

19 3/4" x 2 1/2" x 2 1/4"

Remote Individual Wiring



Short Runs: Gypsum Board or Grid *(remote driver enclosures required)*

In either gypsum board or grid ceiling installation, multiple short fixture lengths can be wired *(daisy chained)* from one remote driver. Cumulative fixture lengths must equal Min. Length per driver criteria and be divisible by 6" *(see Table 3)*.

Table 3

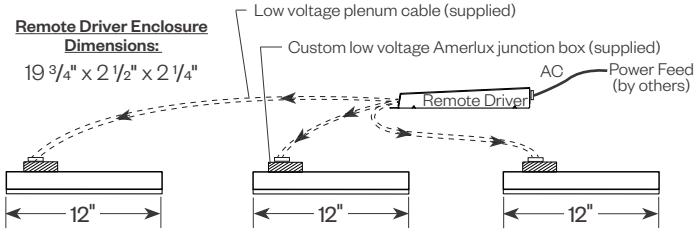
Driver	W/ft	Min. Length	# of Drivers	6" Section	12" Section
0-10V	6W	1'-6"	1	3	0
	12W	1'-6"	1	1	1
Lutron	6W	2'-6"	1	1	2
	12W	1'-6"	1	3	0
		1'-6"	1	1	1
DALI	6W	2'-6"	1	1	2
	12W	1'-6"	1	3	0
		1'-6"	1	1	1

Notes: Minimum length for Grid ceiling installation is 2'.
Consult factory for additional remote driver requirements not shown.

Remote Driver Enclosure Dimensions:

19 3/4" x 2 1/2" x 2 1/4"

Short Run Remote Unit Wiring



Fino®

Ceiling Mount Wall Wash

PROJECT:	TYPE:

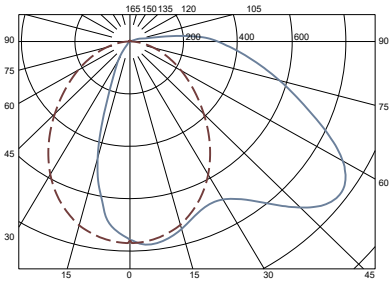
Performance Data

Multiplying Factors: *(Multiplying Factor is based on 3500K-83 120V IES file on website)*

CCT:	2700K-83	3000K-83	3500K-83	4000K-83	2700K-90+	3000K-90+	3500K-90+	4000K-90+
Factor:	0.91	0.96	1.0	1.01	0.80	0.84	0.88	0.89

FINO CEILING 6W 3500K 4FT
Total Watts: 22
Total Lumens: 2077 (519 Lm/ft)
Source: 112 White LED's

LTL# 14626239.32



ZONAL LUMEN SUMMARY

Zone	Lumens	%Fixt
0-40	752	36.2
0-60	1342	64.6
0-90	1988	95.7
90-180	89	4.3

Efficacy (lumens/watt) = 94.1 lm/W

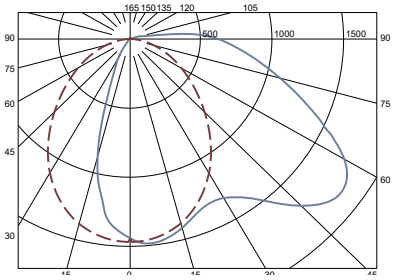
COEFFICIENTS OF UTILIZATION

RC	80			
RW	70	50	30	10
RCR				
0	118	118	118	118
1	105	99	94	89
2	94	85	77	70
3	86	74	65	57
4	78	65	56	48
5	72	58	48	41
6	66	52	43	36
7	61	47	38	32
8	57	43	34	28
9	54	40	31	26
10	50	37	29	23

Note: Values expressed as % of total lumen output delivered to the task surface.

FINO CEILING 12W 3500K 4FT
Total Watts: 45
Total Lumens: 3943 (986 Lm/ft)
Source: 112 White LED's

LTL# 14626239.31



ZONAL LUMEN SUMMARY

Zone	Lumens	%Fixt
0-40	1431	36.3
0-60	2553	64.8
0-90	3782	95.9
90-180	161	4.1

Efficacy (lumens/watt) = 87.1 lm/W

COEFFICIENTS OF UTILIZATION

RC	80			
RW	70	50	30	10
RCR				
0	118	118	118	118
1	105	99	94	89
2	94	85	77	70
3	86	74	65	57
4	78	65	56	48
5	72	58	48	41
6	66	52	43	36
7	62	47	38	32
8	57	43	34	28
9	54	40	31	26
10	50	37	29	23

Note: Values expressed as % of total lumen output delivered to the task surface.

Fino®

Ceiling Mount Wall Wash

amerlux

PROJECT:	TYPE:

Dimming Compatibility

Amerlux® Fino® fixtures are compatible with all major dimming protocols prevalent in the United States. Please see below for general compatibilities and wiring diagrams. Amerlux recommends testing your unique dimming configuration as the exact full configuration *(Dimmer, Fixture Quantity, Voltage, etc)* may affect dimming performance.

--- NOTE: INFORMATION BELOW IS FOR WIRED DIMMERS ONLY. FOR WIRELESS DIMMERS, CONSULT FACTORY ---

0-10V - DIMMING *(Standard)*

Integrates into a variety of building management and daylighting controls

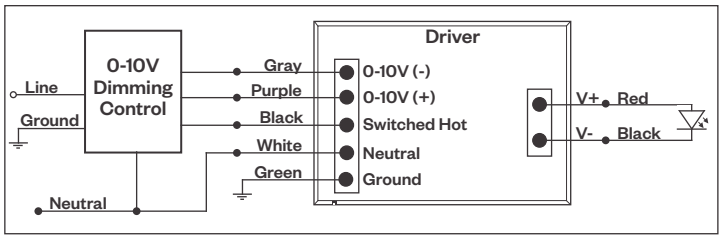
Notes:

- 120V or 277V*
- Dims down to 1% light output
- Requires interface to turn off power to driver
- Consult Dimming manufacturer for installation instructions - **DO NOT SHARE NEUTRALS!**

Compatible Dimmers†:

Wall Box			Central System
Lutron:	Wattstopper:	Leviton:	Lutron Grafixk Eye with GRX-TV1 Interface
Diva - DVSTV	ADF-120277	Renoir II	
Maestro - MS-Z101			
Nova-T - NTSTV-DV			

0-10V Wiring Diagram



LUTRON LDE1 DIMMING

Integrates into Lutron EcoSystem building management

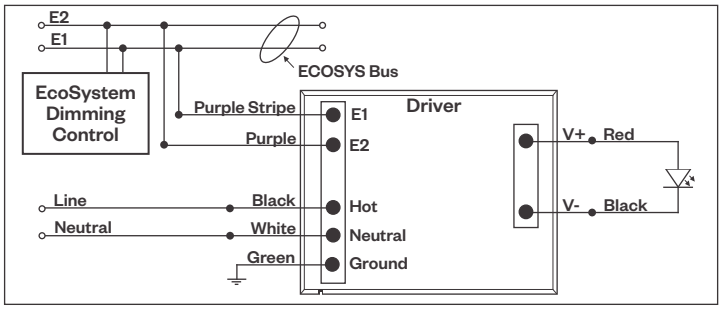
Notes:

- 120VAC or 277VAC*
- Dims down to 1% Soft-On/Fade-to-Black
- EcoSystem Control
- Consult Dimming manufacturer for installation instructions - **DO NOT SHARE NEUTRALS!**

Compatible Dimmers†:

Lutron ECO System	Central System
Pow Pak Dimming Modules	Lutron EcoSystem compatible controls
Energi Savr Node	
Grafik Eye QS/Homeworks	
QS Control Unit	
Quantum Hub	
Homeworks QS/My Room	

LDE1 *(HILUME-H-ECO)* EcoSystem Digital Control Wiring Diagram



DALI - DALI DIMMING 120V-277V

Digital control protocol allows individual fixture control

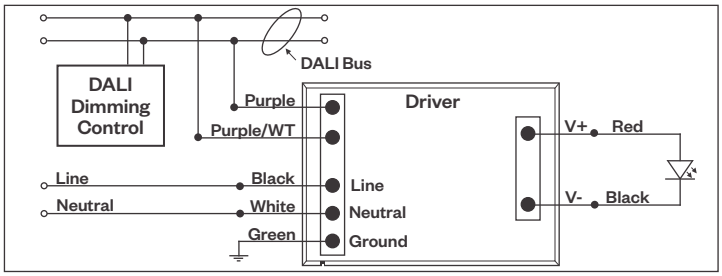
Notes:

- 120VAC - 277VAC*
- Dims down to 1% light output in most cases

Compatible Dimmers†:

Wall Box	Central System
Leviton CD250 Controller	Dynalite
	Fifth Light

DALI Wiring Diagram



Notes:

* Driver is 277VAC dimmable with appropriate dimmer *(by others)*. All provided wiring diagrams show 120VAC wiring colors and method. Please refer to 277VAC dimmer installation instructions for 277VAC wiring diagrams.

† The absence of a dimmer from the lists above does not imply incompatibility. Please consult factory for compatibility inquiries.