Nitro®

2% Nitrogen Infused Acrylic Pendant

amerlux
Passion. Power. Performance.

Nitro (23W, 36W, 51W)

Features

Nitro A16 is a high performance architecturally styled pendant for ambient and general lighting applications in retail and supermarket spaces. Offered with various wattages ranging from 27 watts to 94 watts. A 16 inch 2% nitrogen infused refractor surrounds the source, reducing glare and providing a comfortable ambient light level. With a choice of flood, wide flood or very wide flood distributions, the Nitro LED is a great replacement for CMH or CFL sources.

Product Overview

Type:	Round Pendant
Wattage:	23, 36, 51, 70, 94
Lumen Output:	up to 6,361; up to 90 lm/W
CBCP:	up to 14,414
Color Temp:	2700K, 3000K, 3500K, 4000K, Class A
CRI:	83 typ. (2700K, 3000K, 3500K, 4000K) 90+ typ. (2700K, 3000K, 3500K) Class A, 3000K LED available
Dimming:	TRIAC & ELV (27W-51W) - 5% Dim 0-10V (canopy mount only) - 1% Dim

PROJECT: **TYPE:**

Nitro (70W)

Nitro (94W)

Performance Chart

Watts	Delivered Lumens	LPW	CBCP	Color Temp
23	2,099	90	5,344	3000K-83
36	2,732	76	6,899	3000K-83
51	3,848	75	9717	3000K-83
70	4,577	65	10,666	3000K-83
94	6,185	66	14414	3000K-83

Data is based on 3000K-83 IES files available on website
Data is based on Flood optics
See pages 5-6 for data on other beam spreads

Electrical Data

	23W		36W		51W	
	System Watts	Amps	System Watts	Amps	System Watts	Amps
120V	23	0.19	36	0.30	51	0.43
277V	23	0.08	36	0.13	51	0.18

	70W		94W	
	System Watts	Amps	System Watts	Amps
120V	70	0.58	94	0.78
277V	70	0.25	94	0.34

Electronic constant current LED driver

c SA us

5 year limited warranty AMERLUX LED

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PROJECT: **TYPE:**

Ordering Information

NIT-A17 . ____ . ____ . ____ . ____ . ____ . ____ . ____ . ____

1 2 3 4 5 6 7 8

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1 Model
NIT

2 Wattage
23
36
51
70
94

3 Housing Finish
WT - white texture
BT - black texture
ST - silver texture
For other RAL colors, consult factory

4 Mounting
C4 - canopy, 4' stem* length
C8 - canopy, 8' stem* length
B4 - busway (B40, B50, B60c), 4' stem* length
B8 - busway (B40, B50, B60c), 8' stem* length
CCL-SCP4 - C-Clamp with straight cord (6'), 4' stem* length
CCL-SCP8 - C-Clamp with straight cord (6'), 8' stem* length
CCL-CCP4 - C-Clamp with coil cord (12" length at rest/5' extended), 4' stem* length
CCL-CCP8 - C-Clamp with coil cord (12" length at rest/5' extended), 8' stem* length
*Field cuttable
For custom lengths, consult factory

5 Voltage
120 (for C-Clamp mounting option only)
120-277

6 Beam Spreads
FL - flood, 35°
WF - wide flood, 45°
VWF - very wide flood, 65°

7 Color Temp

83 CRI	90+ CRI	
27 - 2700K-83	**279** - 2700K-90+	**3CLA** - Class A
30 - 3000K-83	**309** - 3000K-90+	
35 - 3500K-83	**359** - 3500K-90+	
40 - 4000K-83		

8 Driver
LE/TE - TRIAC/ELV dimming, 5% dim (23W-51W only)
0-10V - 0-10V dimming, 1% dim (canopy mount only)
ND - non-dimming (all wattages)

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PROJECT: **TYPE:**

Specifications

Application
Retail and supermarket ambient and display lighting

Construction
Extruded aluminum heat sink and driver enclosure
Formed sheet metal
Acrylic 2% nitrogen infused refractor

Optical
Beam Spread Options:
Flood 35°, Wide Flood, 45°, Very Wide Flood 65°

LED
Color Temp Options:
2700K, 3000K, 3500K, 4000K
CRI: 83 typ. (2700K, 3000K, 3500K, 4000K)
90+ typ. (2700K, 3000K, 3500K)
Class A*, 3000K LED available
R9 Values: 11 (83 CRI), 55 (92 CRI)
Binning: 3 MacAdam (SDCM)
Life: 50,000+ hrs, > 70% of initial lumens at 50,000 hrs

Class A LED: Class A LED's have a CRI > 80 and a GAI > 80. CRI defines color "Naturalness" and GAI defines color "Saturation." Both being high delivers rich colors and pure whites.

Electrical
Wattage: 23, 36, 51, 70, 94
Electronic constant current LED driver, 120V or 277V input
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
LE/TE - Leading Edge, TRIAC, forward phase/Trailing Edge, ELV, reverse phase (23W-51W only)
0-10V dimming available (canopy mount only)
ND - non-dimming (all wattages)
See pages 7 for more dimming information
Note: Mounting and wattage affects dimming options available, see chart below

Finish
Powder coat paint
Consult factory for custom finishes

Mounting
Canopy, Busway or C-Clamp

Certifications
CSA tested to UL standards
Indoor use only

Warranty
5 year limited warranty

Dimming Options Depending on Selected Mounting and Wattage:

Wattage	Canopy Mount	Busway Mount	C-Clamp Mount
23	ND, 0-10V, LE/TE	ND, LE/TE	ND, LE/TE
36	ND, 0-10V, LE/TE	ND, LE/TE	ND, LE/TE
51	ND, 0-10V, LE/TE	ND, LE/TE	ND, LE/TE
70	ND, 0-10V	ND	ND
94	ND, 0-10V	ND	ND

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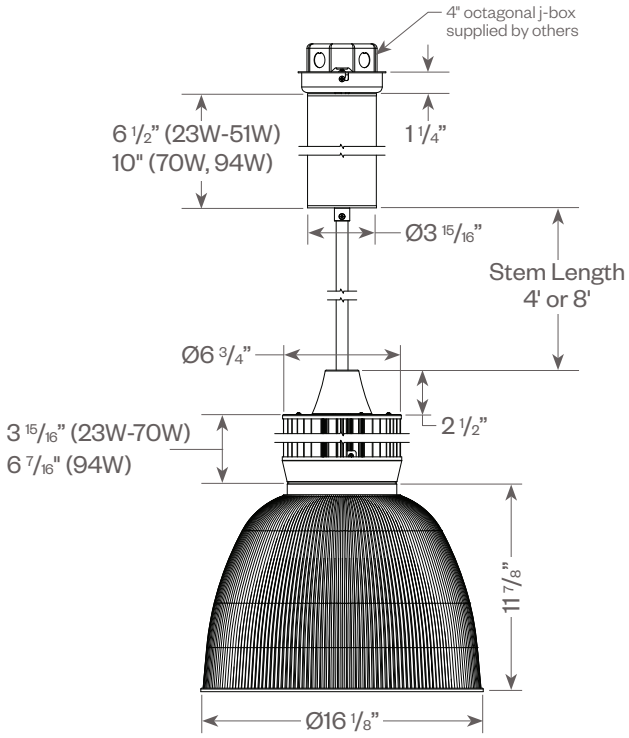
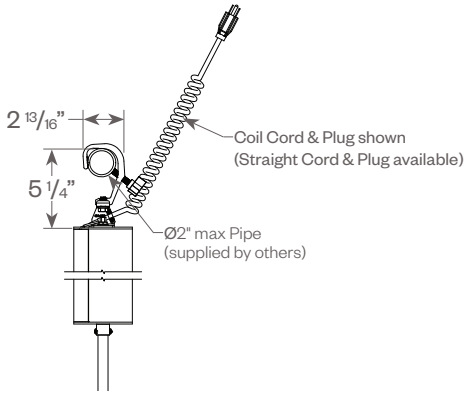
PROJECT: **TYPE:**

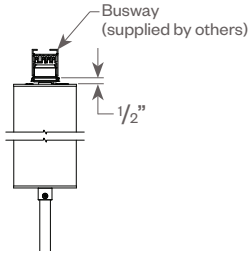


Canopy Mount Option

Additional Mounting Options:



C-Clamp Mount Option



Busway Mount Option

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PROJECT: **TYPE:**

FIXTURE DATA: (Complete photometric data (.ies format) available upon request)

MULTIPLYING FACTORS: (Multiplying Factor is based on 3000K-83 120V IES file on website)

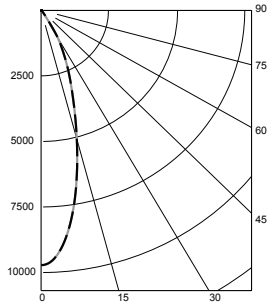
Wattage:	23W	36W	51W	70W	94W
Factor:	0.55	0.71	1.0	1.4	*

*FOR 94W DATA SEE PAGE 6

CCT:	2700K-83	3000K-83	3500K-83	4000K-83	2700K-90+	3000K-90+	3500K-90+	3CLA
Factor:	0.96	1.0	1.02	1.04	0.80	0.83	0.87	0.75

51W LED, 3000K-83

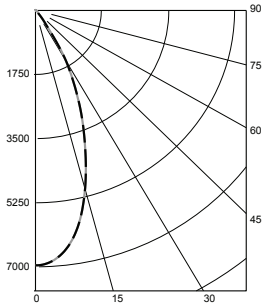
Flood (FL) Distribution, 35°
LTL #1234418
Lumens: 3848 Lm/W



Candelas at Nadir

Deg	Candela
0	9717
5	9033
15	5120
25	2230
35	349
45	93

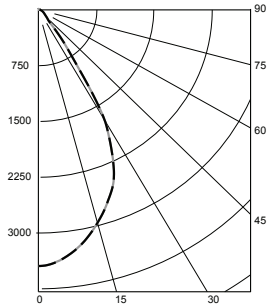
Wide Flood (WF) Distribution, 45°
LTL#1234419
Lumens: 3908 Lm/W



Candelas at Nadir

Deg	Candela
0	6958
5	6762
15	5014
25	2605
35	519
45	100

Very Wide Flood (VWF) Distribution, 65°
LTL # 1234420
Lumens: 3204 Lm/W



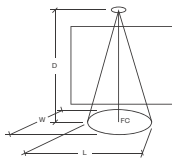
Candelas at Nadir

Deg	Candela
0	3444
5	3373
15	2966
25	2316
35	752
45	168

Application Data:

0° Aiming Angle
Horizontal
Footcandles

	D	FC	L	W
Flood	7.5'	167	3.9	3.9
	10.0'	95	5.3	5.3
	12.5'	61	6.6	6.6
	15.0'	43	7.9	7.9
wide Flood	D	FC	L	W
	7.5'	120	5.2	5.2
	10.0'	68	7.0	7.0
	12.5'	44	8.7	8.7
	15.0'	31	10.4	10.4
Very Wide Flood	D	FC	L	W
	7.5'	59	7.1	7.1
	10.0'	34	9.5	9.5
	12.5'	22	12.0	12.0
	15.0'	16	14.6	14.6



Notes and Definitions:
Beam spread is to 50% center beam candlepower (CBCP).
D=Distance to floor or wall.
FC=Footcandles on floor or wall at center beam aiming location.
L=Effective Visual Beam length in feet (50% of maximum footcandle level).
W=Effective Visual Beam width in feet (50% of maximum footcandle level).
CB=Distance across or down to center beam location.

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PROJECT: **TYPE:**

FIXTURE DATA: (Complete photometric data (.ies format) available upon request)

MULTIPLYING FACTORS: (Multiplying Factor is based on 3000K-83 120V IES file on website)

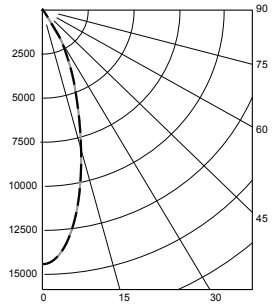
Wattage:	23W	36W	51W	70W	94W
Factor:	0.25	0.38	*	0.74	1.0

*FOR 51W DATA SEE PAGE 5

CCT:	2700K-83	3000K-83	3500K-83	4000K-83	2700K-90+	3000K-90+	3500K-90+	3CLA
Factor:	0.96	1.0	1.02	1.04	0.80	0.83	0.87	0.75

94W LED, 3000K-83

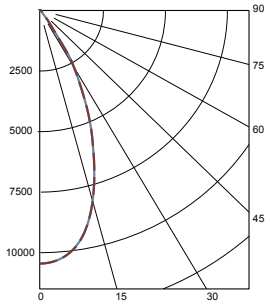
Flood (FL) Distribution, 35°
LTL #1234415
Lumens: 6185 Lm/W



Candelas at Nadir

Deg	Candela
0	14410
5	13550
15	8207
25	3711
35	559
45	154

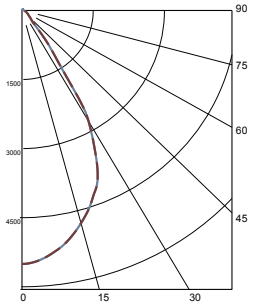
Wide Flood (WF) Distribution, 45°
LTL#1234416
Lumens: 6361 Lm/W



Candelas at Nadir

Deg	Candela
0	10450
5	10250
15	8089
25	4376
35	838
45	167

Very Wide Flood (VWF) Distribution, 65°
LTL # 1234417
Lumens: 5180 Lm/W



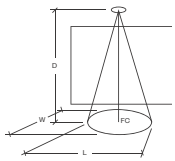
Candelas at Nadir

Deg	Candela
0	5505
5	5395
15	4787
25	3749
35	1211
45	274

Application Data:

0° Aiming Angle
Horizontal
Footcandles

	D	FC	L	W
Flood	7.5'	247	4.2	4.2
	10.0'	141	5.6	5.6
	12.5'	91	7.0	7.0
	15.0'	64	8.5	8.5
wide Flood	D	FC	L	W
	7.5'	179	5.6	5.6
	10.0'	102	7.4	7.4
	12.5'	66	9.2	9.2
	15.0'	47	11.1	11.1
Very Wide Flood	D	FC	L	W
	7.5'	95	7.1	7.1
	10.0'	54	9.6	9.6
	12.5'	35	12.1	12.1
	15.0'	25	14.7	14.7



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CB=Distance across or down to center beam location.

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PROJECT: **TYPE:**

DIMMING COMPATIBILITY:
Amerlux® Nitro 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 ---

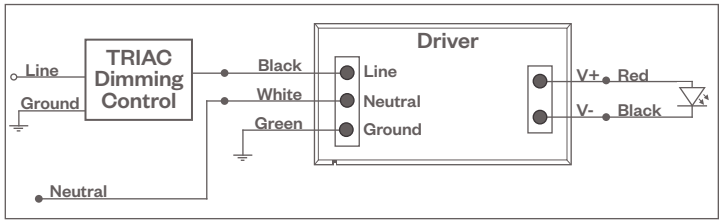
TRIAC (Forward Phase) DIMMING (Standard)

Utilizes "Standard" incandescent dimmers that are in wide use in installations across the US. Best for retrofit applications where TRIAC dimmers are installed.

Notes:

- 120V or 277V*
- Dims down to less than 5% light output (most cases)
- Consult Dimming manufacturer for installation instructions - DO NOT SHARE NEUTRALS!
- Must meet dimmer Minimum Load Requirements per dimming manufacturer

TRIAC Wiring Diagram



Compatible Dimmers†:

Wall Box (Incandescent Style, Wattage as required)		**Central System**
Lutron "Diva"	Lutron "Vareo"	Lutron "GP" Panel
Lutron "Nova-T"	Lutron "Skylark"	Lutron Grafik Eye QS
Lutron "Maestro"		

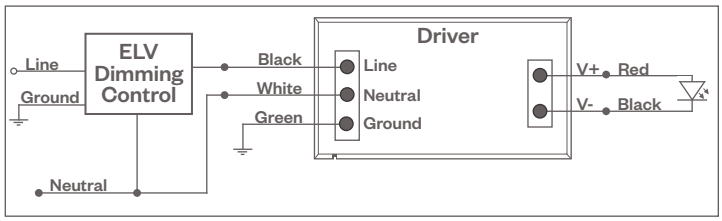
ELV - Electronic Low Voltage (Reverse Phase) DIMMING (Standard)

Utilizes specialized "ELV" dimmers.

Notes:

- 120V or 277V*
- Dims down to less than 5% light output (most cases)
- Consult Dimming manufacturer for installation instructions - DO NOT SHARE NEUTRALS!
- Must meet dimmer Minimum Load Requirements

ELV Wiring Diagram



Compatible Dimmers†:

Wall Box (ELV Style)		**Central System**
Lutron "Diva"	Leviton "Surslide"	Lutron "GP" Panel with PHPM-PA Interface
Lutron "Nova-T"	Leviton "Vizio"	Lutron Grafik Eye QS with PHPM-PA Interface
Lutron "Maestro"		
Lutron "Vareo"		
Lutron "Skylark"		

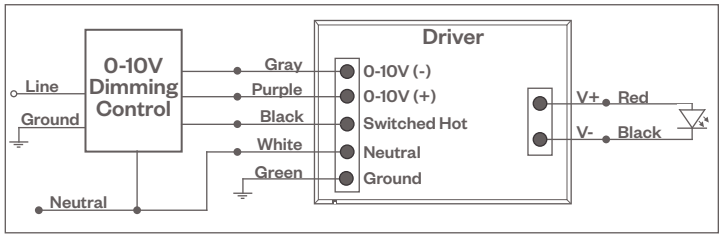
0-10V - DIMMING (-0-10V Option)

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!

0-10V Wiring Diagram



Compatible Dimmers†:

Wall Box		**Central System**
Lutron "Diva" - DVTV with PP-120H Interface	Leviton Renoir II 0-10V	Lutron Grafik Eye with GRX-TVI Interface

Notes:

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

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

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