ALPHABET

Alphabet by Ledra Brands, Inc. | 88 Maxwell Irvine, CA 92618 | PH: 714.259.9959 FAX: 714.259.9969 | AlphabetLighting.com

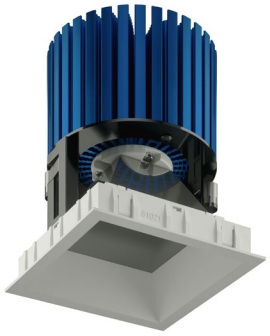
JOB NAME

CONTACT

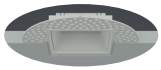
ORDERING CODE

NU4" Square Downlight Tunable White

LUMINUS see page 1 | NICHIA see page 2 | eldoLED your product | our drive | nLIGHT | HUMAN CENTRIC



Trim



Trimless

Trimless Millwork

DESCRIPTION

The NU4QD-TW 4" recessed downlight by ALPHABET offers economical and efficient, tunable CCT LED technology from Luminus or Nichia, premium performance, thoughtful construction and pleasing aesthetics. Available with optional Bluetooth controls or standard premium dimming using the EldoLED flicker-free driver with LightShape technology at 120V-277V universal voltage. Several beam angles available, plus an optional high-efficiency BrightView diffused lens for smooth light distribution and obscured LED image. Optional integrated nLight® interface for Acuity Controls compatibility. Optional Casambi interface for Bluetooth®control. DALI and 0-10V compatible dimming.

For the trim version, a minimalistic look is achieved with an ultrathin 1/16" trim that is only 5/16" wide. Color choices of both trim and bezel are offered for a customized look. For the trimless version, a perforated, mud up, regressed trim assembly provides for clean, trim free installation. Perforated mud frame's integrated lip helps guide the joint compound creating a sharp and clean opening.

HOUSING

Electrocoated 16-gauge cold-rolled steel provides enhanced structural reinforcement and rust prevention. Superior, UL-certified, injection-molded commercial-grade Lexan™ (PC) is used for the frame and regressed bezel trim. Lexan provides unmatched durability and impact resistance, and is tested for UV resistance and water exposure in outdoor applications. The thermally-advanced, anodized heat sink uses 6063 aluminum alloy. Wet location rated is offered standard.

MOUNTING

An advanced mounting system allows for quick and secure installation with LED and driver serviceability from below the ceiling. The LED assembly uses die-cast aluminum mounting clamp grips (MCG) that swing out to tighten onto variable ceiling thicknesses. Integrated rubber feet on each MCG provide a non-slip vibration-resistant installation. The hidden MCG system is accessible from below ceiling by removing the snap-in lens/bezel assembly with either the included suction cup or a screwdriver blade. Integrated bar hangers feature integral toothed nails, T-bar mounting slots with locking holes, tabs for joist positioning. Retrofit mounting option allows for installation from below ceiling by use of compact driver box. No risk damaging LED or bezel assembly during installation, these are installed during last steps. Fixture and driver are easily removed for servicing after install without damaging drywall.

MOUNTING DIMENSIONS	CEILING THICKNESS	CEILING CUTOUT
Trim	1/8" to 1-5/8"	4-1/4" square
Trimless	3/8" to 1-3/4"	4-1/2" square
Millwork (Trimless)	5/8" to 1-3/4"	4-1/4" square

New Construction Bar Hangers (included)	Mounting Length: 14-3/4" to 26"
Extension Kit p/n: K20266 (ordered separately, 1 per fixture)	*Extends a pair of Bar Hangers* Total Mounting Length: 29" to 48"

LISTINGS

- ETLus Listed to UL1598, cETL Listed to CSA C22.2 #250.0
- IP65 with lens - Suitable for wet locations with lens - Suitable for damp locations without lens
- Non-conductive, Lexan dead-front construction.
- Made in the USA - meets the requirements of the Buy American provision within the ARRA

RATINGS / CERTIFICATIONS	NC	RET	IC	ICAT	CP
Type non-IC	✔	✔			
Type IC			✔	✔	✔
Chicago Plenum (CCEA)					✔
Suitable for air handling plenums				✔	✔
Reduced airflow (with lens) ASTM E283	✔	✔	✔	✔	✔

LED INFO

- Luminus tunable white COB:
  95 CRI, R9 > 70: SDCM = 4-step MacAdam Ellipse; Lumen Maintenance: L_{70} > 54,000 hrs
- Nichia tunable white COB:
  80 CRI, R9 > 0: SDCM = 3-step MacAdam Ellipse; Lumen Maintenance: L_{90} > 33,000 hrs

LUMINUS TUNABLE WHITE - ORDERING CODE

made in the USA LM-79

SERIES	NU4	
TYPE	QD	square downlight
	QDT	square downlight trimless
	QDTMW	square downlight trimless millwork
LED	TW	Tunable White (Luminus)
DELIVERED LUMENS	07LM	775 lm
	10LM	980 lm
	13LM	1200 lm
	16LM	1450 lm
	20LM	1865 lm
	Calculated Delivered Lumens = [Delivered Lumen Value] x [CCT Multiplier] x [Reflector Multiplier] Standard Configuration: 3500K WH85	
CCT	2765	2700K to 6500K tunable white

CCT	2700K	3000K	3500K	4000K	5000K	5700K	6500K
CCT MULTIPLIER FOR LUMEN OUTPUT	0.91	0.98	1.00	0.99	1.00	1.01	1.02
EML RATIO[2]	0.49	0.57	0.68	0.79	0.96	1.04	1.12

CCT	1840	1800K to 4000K tunable white

CCT	1800K	2000K	2400K	2700K	3000K	3500K	4000K
CCT MULTIPLIER FOR LUMEN OUTPUT	0.67	0.74	0.8	0.85	0.88	0.95	1.01
EML RATIO[2]	0.21	0.33	0.46	0.53	0.59	0.67	0.73

CRI	95	95 typical, 90 minimum
REFLECTOR & LM MULTIPLIER	HE60	60° high efficiency diffused lens (0.88)
	HE75	75° high efficiency diffused lens (0.95)
	D70	70° diffused with clear lens (0.92)
	WH85	85° brilliant white with clear lens (1.00)
VOLTAGE	120	120V
	UNV	120V-277V
DIMMING	CAS	Casambi Bluetooth dimming to 0%
	NLT	nLight control interface: Standard Cat-5/RJ45 connection (female), dimming to 0%
	DIM10Z	eldoLED flicker free 0-10V dimming to 0%
	DALIZ[1]	eldoLED flicker free DALI dimming to 0%
MOUNTING OPTIONS	NC	new construction with ceiling fitting plate
	IC	insulation contact housing
	ICAT	insulation contact/airtight housing
	CP	chicago plenum housing
	RET	retrofit, no ceiling fitting plate
TRIM COLOR	BK	black
	WH	white
	MC	matte chrome
	BZ	bronze
	WT	wheat
	Not applicable to trimless option. Do not include in trimless ordering code.	
BEZEL COLOR	BK	black
	WH	white
	MC	matte chrome
	BZ	bronze
	WT	wheat

ORDERING CODE

Follow the steps to specify your fixture, example:
NU4 - QD - TW - 13LM - 2765 - 95 - WH85 - 120 - CAS - NC - WH - WH

LUMINUS (LED)	POWER
DELIVERED LM	W (95 CRI)
775	10
980	13
1200	15
1450	19
1865	25

Power Factor ≥ 0.9

NOTES
1. Requires 2 wall controllers (see wiring diagram).
2. EML = equivalent melanopic lux. To calculate EML, multiply the measured photopic lux by the EML ratio for the given CCT. Example: 254 lux x 0.79 = 200 melanopic lux at 4000K.

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NICHIA TUNABLE WHITE - ORDERING CODE

SERIES	**NU4**	
TYPE	**QD**	square downlight
	QDT	square downlight trimless
	QDTMW	square downlight trimless millwork
LED	**TW**	Tunable White (Nichia)
DELIVERED LUMENS	**13LM**	1050 lm
	16LM	1300 lm
	20LM	1600 lm
	30LM	2400 lm
	Calculated Delivered Lumens = [Delivered Lumen Value] x [CCT Multiplier] x [Reflector Multiplier] Standard Configuration: 3500K WH85	
CCT	**2750**	2700K to 5000K tunable white

CCT	2700K	3000K	3500K	4000K	5000K
EML RATIO[2]	0.43	0.51	0.63	0.69	0.80

CRI	**80**	80+ CRI
REFLECTOR & LM MULTIPLIER	**HE65**	65° high efficiency diffused lens (0.89)
	HE75	75° high efficiency diffused lens (0.87)
	HE85	85° high efficiency diffused lens (0.95)
	D70	70° diffused with clear lens (0.91)
	WH85	85° brilliant white with clear lens (1.00)
VOLTAGE	**120**	120V
	UNV	120V-277V
DIMMING	**CAS**	Casambi Bluetooth dimming to 0%
	NLT	nLight control interface: Standard Cat-5/RJ45 connection (female), dimming to 0%
	DIM10Z	eldoLED flicker free 0-10V dimming to 0%
	DALIZ[1]	eldoLED flicker free DALI dimming to 0%
MOUNTING OPTIONS	**NC**	new construction with ceiling fitting plate
	IC	insulation contact housing
	ICAT	insulation contact/airtight housing
	CP	chicago plenum housing
	RET	retrofit, no ceiling fitting plate
TRIM COLOR	**BK**	black
	WH	white
	MC	matte chrome
	BZ	bronze
	WT	wheat
	Not applicable to trimless option. Do not include in trimless ordering code.	
BEZEL COLOR	**BK**	black
	WH	white
	MC	matte chrome
	BZ	bronze
	WT	wheat

ORDERING CODE

Follow the steps to specify your fixture, example:
NU4 - QD - TW - 13LM - 2750 - 80 - HE65 - 120 - CAS - NC - WH - WH

NICHIA (LED)	POWER	
DELIVERED LM	**W (80 CRI) 2700K**	**W (80 CRI) 5000K**
1050	15	12
1300	18	15
1600	22	18
2400	35	28

Power Factor ≥ 0.9

NOTES
1. Requires 2 wall controllers (see wiring diagram).
2. EML = equivalent melanopic lux. To calculate EML, multiply the measured photopic lux by the EML ratio for the given CCT. Example: 290 lux x 0.69 = 200 melanopic lux at 4000K.

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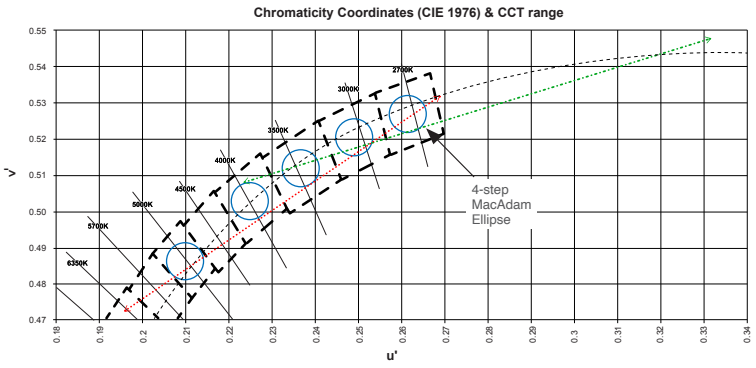
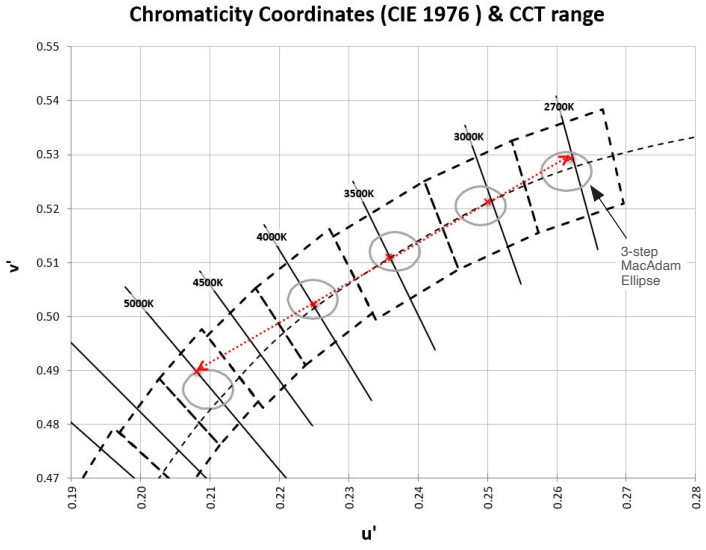
TUNABLE WHITE

LUMINUS 95CRI

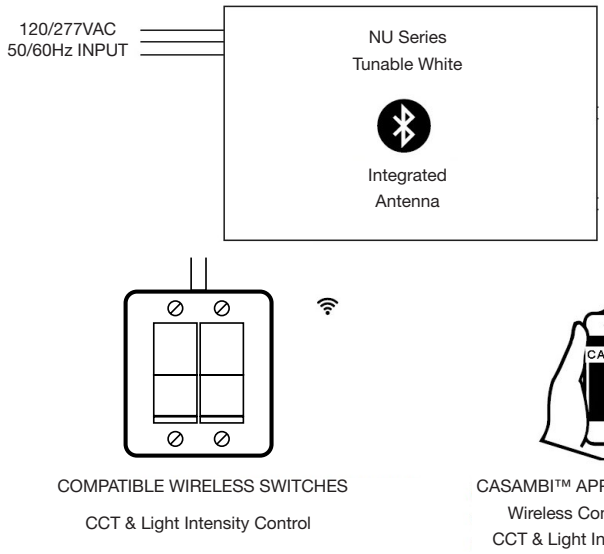


NICHIA 80CRI



WIRING DIAGRAMS

"CAS" CASAMBI CONTROLS

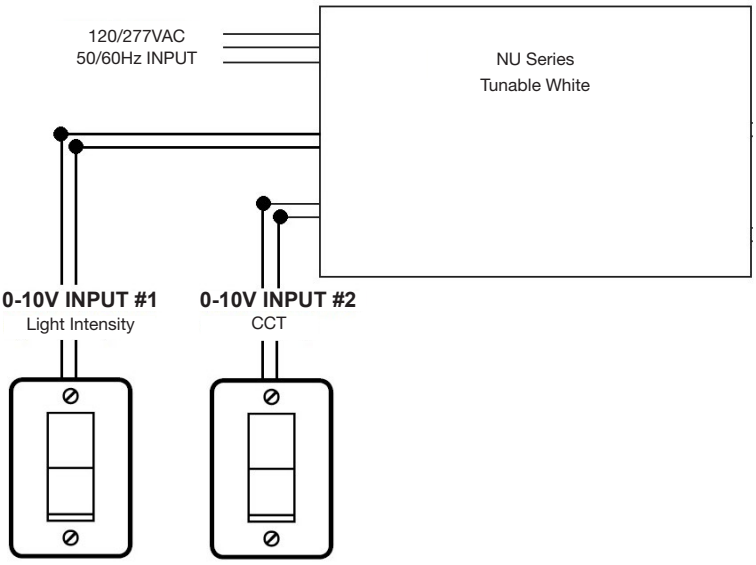


COMPATIBLE WIRELESS SWITCHES

CCT & Light Intensity Control

CASAMBI™ APP (IOS & Android)
Wireless Commissioning,
CCT & Light Intensity Control

"DIM10Z" HARDWIRED 0-10V CONTROL

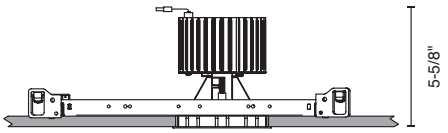


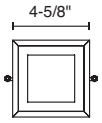
STANDARD 0-10V SWITCHES
(provided by others)

NOTES
1 Consult factory to order compatible wireless switches.

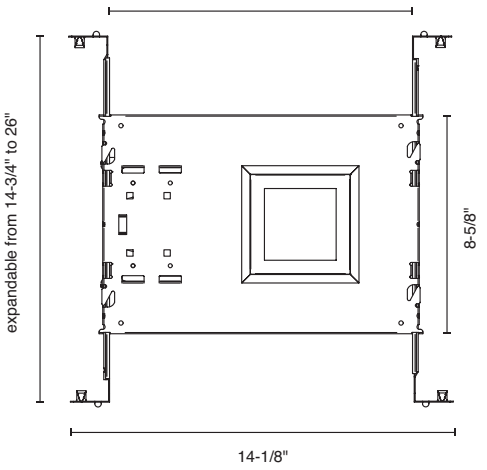
MOUNTING OPTIONS

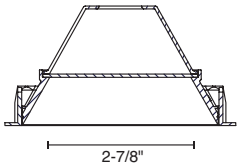
NC - NEW CONSTRUCTION
TRIM





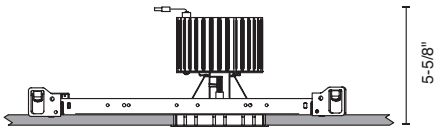
ceiling cutout
4-1/4" square

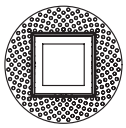




aperture dimensions

NC - NEW CONSTRUCTION
TRIMLESS

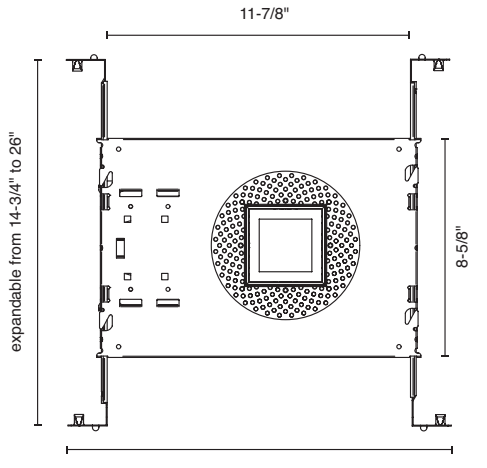


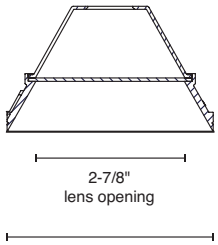


ceiling cutout
4-1/2" square

1. Fasten mud frame to ceiling.

2. Insert protective cover (included).
Apply joint compound over the mud frame.





aperture dimensions

3. Install LED assembly.

4. Install bezel.

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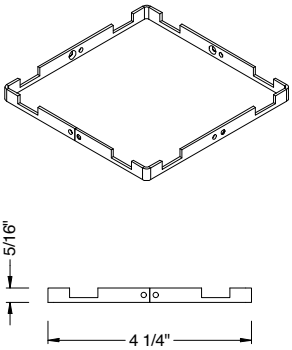
MOUNTING OPTIONS (CONTINUED)

QDTMW – MILLWORK
TRIMLESS



Millwork Mounting Bracket

NOTES
1. Ceiling cutout 4-1/4" x 4-1/4".
2. Millwork Mounting Bracket & Mounting Screws are included with each Luminaire.
3. One Plastic Spacer and two C-Clamps are included with each order.
4. Refer to Installation Instructions for further details.

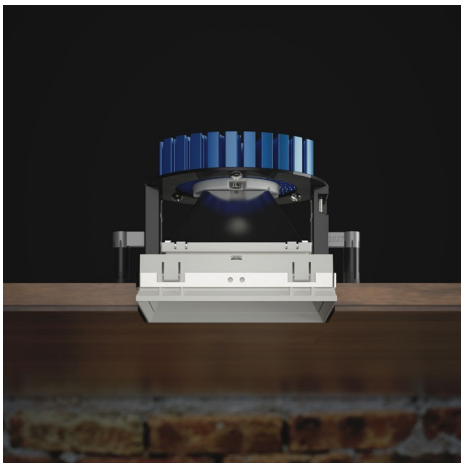
1. Insert Millwork Mounting Bracket using the included Plastic Spacer for proper depth positioning.

2. Use the included C-Clamps to temporarily hold the Plastic Spacer in position. Fasten the included wood screws into the Mounting Bracket using a right-angle impact driver (supplied by others).

3. Remove Plastic Spacer.

4. Install Luminaire.

5. Insert Bezel to finish the installation.



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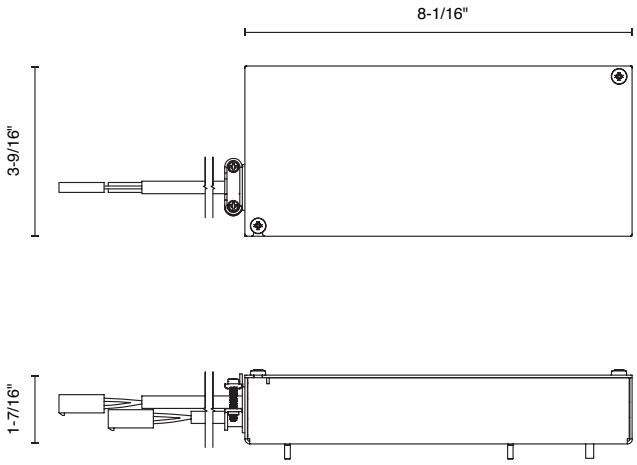
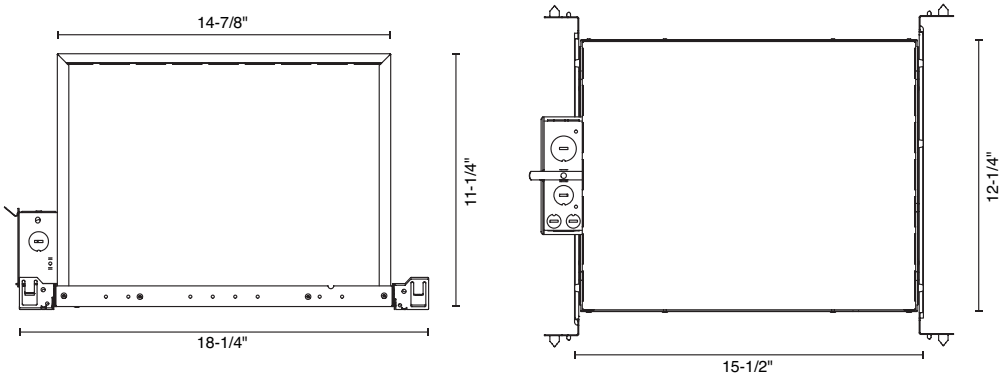
MOUNTING OPTIONS (CONTINUED)

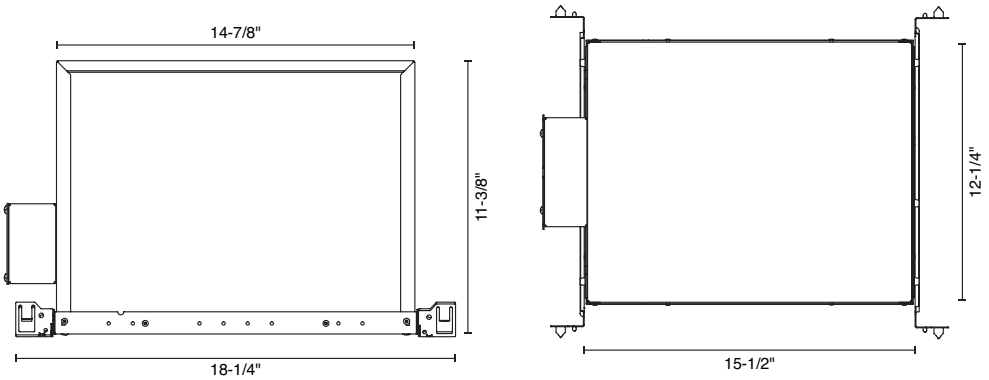
RET - RETROFIT
TRIM/TRIMLESS



IC - INSULATION CONTACT HOUSING
TRIM/TRIMLESS



CP - CHICAGO PLENUM
ICAT - INSULATION CONTACT / AIR TIGHT
TRIM/TRIMLESS



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