

JOB NAME

CONTACT

ORDERING CODE

NU4"

Round Downlight
Tunable White

Trim



Trimless



Trimless Millwork

DESCRIPTION

The NU4RD-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. Alternative high-grade die-cast aluminum alloy trim and bezel that has superior corrosion resistance properties, combined with a smooth aesthetic finish consistently meeting stringent performance criteria. 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	New Construction Bar Hangers (included)	Mounting Length: 14-3/4" to 26"
Trim	1/8" to 1-5/8"	4-3/8" diameter	Extension Kit p/n: K20266 (ordered separately, 1 per fixture)	<i>Extends a pair of Bar Hangers</i> Total Mounting Length: 29" to 48"
Trimless	3/8" to 1-3/4"	4-1/2" diameter		
Millwork (Trimless)	1/2" to 1-3/4"	4-3/8" diameter		

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: L₇₀ > 54,000 hrs
- Nichia tunable white COB:
80 CRI, R9 > 0: SDCM = 3-step MacAdam Ellipse; Lumen Maintenance: L₉₀ > 33,000 hrs

LUMINUS TUNABLE WHITE - ORDERING CODE



SERIES	NU4																																																							
TYPE	RD RDT RDM RDTMW	round downlight round downlight trimless round downlight metal round downlight trimless millwork																																																						
LED	TW	Tunable White (Luminus)																																																						
DELIVERED LUMENS	07LM 10LM 13LM 16LM 20LM	625 lm 940 lm 1135 lm 1240 lm 1645 lm Calculated Delivered Lumens = [Delivered Lumen Value] x [CCT Multiplier] x [Reflector Multiplier] Standard Configuration: 3000K HE60																																																						
CCT	<div>2765<div>2700K to 6500K tunable white<table><tr><th>CCT</th><th>2700K</th><th>3000K</th><th>3500K</th><th>4000K</th><th>5000K</th><th>5700K</th><th>6500K</th></tr><tr><td>CCT MULTIPLIER FOR LUMEN OUTPUT</td><td>0.91</td><td>0.98</td><td>1.00</td><td>0.99</td><td>1.00</td><td>1.01</td><td>1.02</td></tr><tr><td>EML RATIO²</td><td>0.49</td><td>0.57</td><td>0.68</td><td>0.79</td><td>0.96</td><td>1.04</td><td>1.12</td></tr></table></div></div> <div>1840<div>1800K to 4000K tunable white<table><tr><th>CCT</th><th>1800K</th><th>2000K</th><th>2400K</th><th>2700K</th><th>3000K</th><th>3500K</th><th>4000K</th></tr><tr><td>CCT MULTIPLIER FOR LUMEN OUTPUT</td><td>0.67</td><td>0.74</td><td>0.8</td><td>0.85</td><td>0.88</td><td>0.95</td><td>1.01</td></tr><tr><td>EML RATIO²</td><td>0.21</td><td>0.33</td><td>0.46</td><td>0.53</td><td>0.59</td><td>0.67</td><td>0.73</td></tr></table></div></div>								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	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
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CRI	95	95 typical, 90 minimum																																																						
REFLECTOR & LM MULTIPLIER	HE45 HE60 HE80 HET30 HET50 HET70 SS30 SS45 SS60 D40 D60 WH70	45° high efficiency diffused lens (0.98) 60° high efficiency diffused lens (1.00) 80° high efficiency diffused lens (0.93) 30° high efficiency textured lens (0.97) 50° high efficiency textured lens (0.97) 70° high efficiency textured lens (0.91) 30° semi-specular with clear lens (0.89) 45° semi-specular with clear lens (0.83) 60° semi-specular with clear lens (0.95) 40° diffused with clear lens (0.85) 60° diffused with clear lens (0.88) 70° brilliant white with clear lens (0.97)																																																						
ACCESSORIES	HCL ³	honeycomb louver																																																						
VOLTAGE	120 UNV	120V 120V-277V																																																						
DIMMING	CAS NLT DIM10Z ¹ DALIZ	Casambi Bluetooth dimming to 0% nLight control interface: Standard Cat-5/RJ45 connection (female), dimming to 0% eldoLED flicker free 0-10V dimming to 0% eldoLED flicker free DALI dimming to 0%																																																						
MOUNTING OPTIONS	NC IC ICAT CP RET	new construction with ceiling fitting plate insulation contact housing insulation contact/airtight housing chicago plenum housing retrofit, no ceiling fitting plate																																																						
TRIM COLOR	WH MC BK BZ WT	white matte chrome black bronze wheat Not applicable to trimless option. Do not include in trimless ordering code.																																																						
BEZEL COLOR	WH MC BK BZ WT	white matte chrome black bronze wheat																																																						

ORDERING CODE

Follow the steps to specify your fixture, example:

NU4 - RD - TW - 13LM - 2765 - 95 - HE80 - 120 - CASZ - NC - WH - WH

LUMINUS (LED)	POWER
DELIVERED LM	W (95 CRI)
625	10
940	15
1135	17
1240	19
1645	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.
3. HCL not available with lens. Multiply delivered lumens by (0.78) and beam spread by (0.80) when honeycomb louver is chosen.

NICHIA TUNABLE WHITE - ORDERING CODE

SERIES	NU4													
TYPE	RD RDT RDM RDTMW	round downlight round downlight trimless round downlight metal round downlight trimless millwork												
LED	TW	Tunable White (Nichia)												
DELIVERED LUMENS	13LM 16LM 20LM 30LM	1050 lm 1300 lm 1600 lm 2400 lm Calculated Delivered Lumens = [Delivered Lumen Value] x [CCT Multiplier] x [Reflector Multiplier] Standard Configuration: 3500K HE60												
CCT	2750	2700K to 5000K tunable white <table><tr><th>CCT</th><th>2700K</th><th>3000K</th><th>3500K</th><th>4000K</th><th>5000K</th></tr><tr><td>EML RATIO²</td><td>0.43</td><td>0.51</td><td>0.63</td><td>0.69</td><td>0.80</td></tr></table>	CCT	2700K	3000K	3500K	4000K	5000K	EML RATIO ²	0.43	0.51	0.63	0.69	0.80
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EML RATIO ²	0.43	0.51	0.63	0.69	0.80									
CRI	80	80+ CRI												
REFLECTOR & LM MULTIPLIER	HE45 HE60 HE80 SS30 SS45 SS60 D40 D60 WH70	45° high efficiency diffused lens (0.98) 60° high efficiency diffused lens (1.00) 80° high efficiency diffused lens (0.93) 30° semi-specular with clear lens (0.89) 45° semi-specular with clear lens (0.83) 60° semi-specular with clear lens (0.95) 40° diffused with clear lens (0.85) 60° diffused with clear lens (0.88) 70° brilliant white with clear lens (0.97)												
ACCESSORIES	HCL ³	honeycomb louver												
VOLTAGE	120 UNV	120V 120V-277V												
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MOUNTING OPTIONS	NC IC ICAT CP RET	new construction with ceiling fitting plate insulation contact housing insulation contact/airtight housing chicago plenum housing retrofit, no ceiling fitting plate												
TRIM COLOR	WH MC BK BZ WT	white matte chrome black bronze wheat Not applicable to trimless option. Do not include in trimless ordering code.												
BEZEL COLOR	WH MC BK BZ WT	white matte chrome black bronze wheat												

ORDERING CODE

Follow the steps to specify your fixture, example:

NU4 - RD - TW - 13LM - 2750 - 80 - HE45 - 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

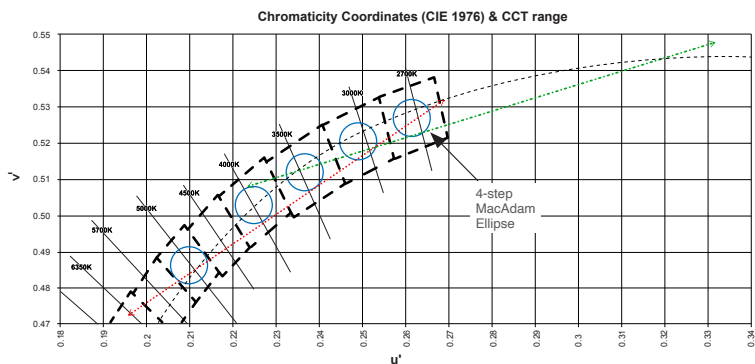
Power Factor ≥ 0.9

NOTES

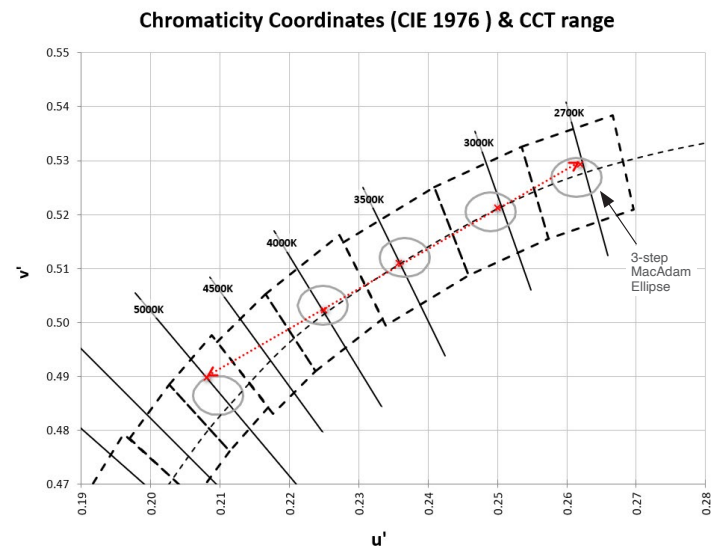
- Requires 2 wall controllers (see wiring diagram).
- EML = equivalent melanopic lux. To calculate EML, multiply the measured photopic lux by the EML ratio for the given CCT.
Example: 290 lux x 0.69 = 200 melanopic lux at 4000K
- HCL not available with lens. Multiply delivered lumens by (0.78) and beam spread by (0.80) when honeycomb louver is chosen.

TUNABLE WHITE

LUMINUS 95CRI



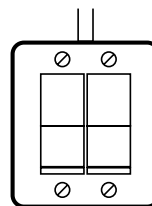
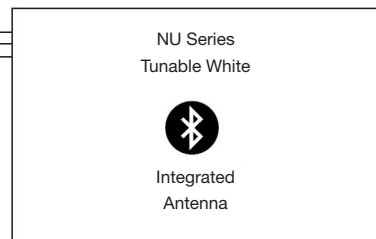
NICHIA 80CRI



WIRING DIAGRAMS

“CAS” CASAMBI CONTROLS

120/277VAC
50/60Hz INPUT



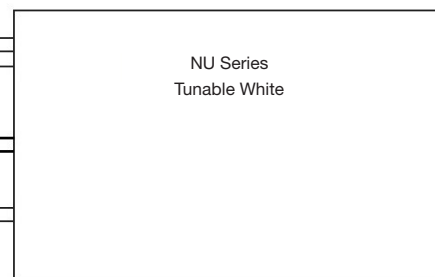
COMPATIBLE WIRELESS SWITCHES
CCT & Light Intensity Control



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

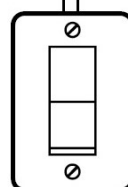
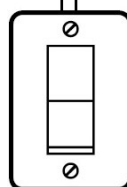
“DIM10Z” HARDWIRED 0-10V CONTROL

120/277VAC
50/60Hz INPUT



0-10V INPUT #1
Light Intensity

0-10V INPUT #2
CCT



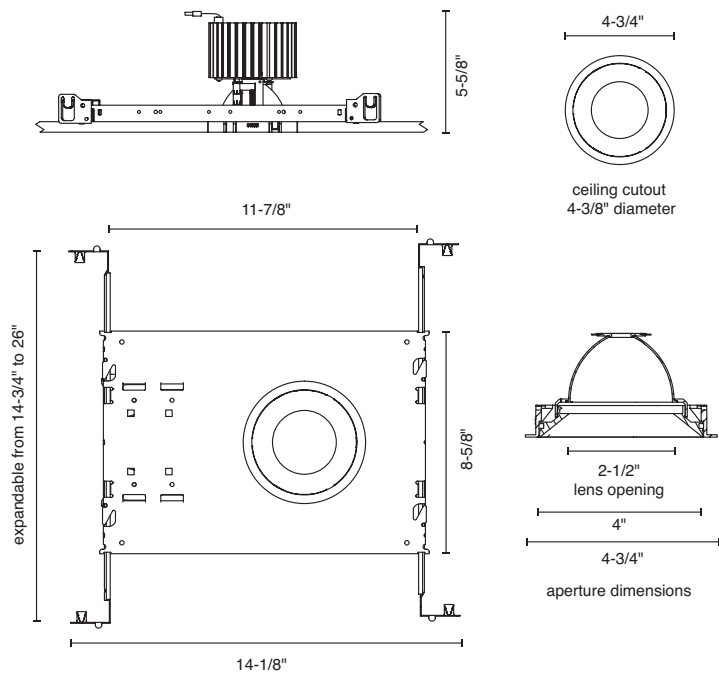
STANDARD 0-10V SWITCHES
(provided by others)

NOTES

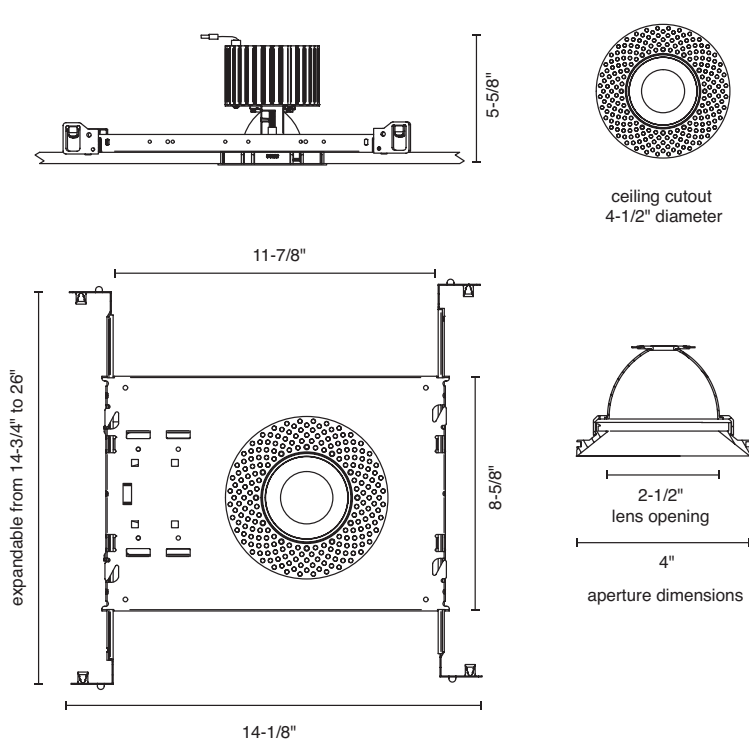
- 1 Consult factory to order compatible wireless switches.

MOUNTING OPTIONS

NC - NEW CONSTRUCTION TRIM



NC - NEW CONSTRUCTION TRIMLESS



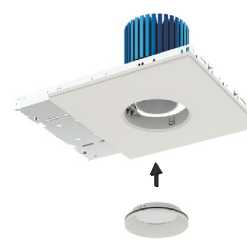
1. Fasten mud frame to ceiling.



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



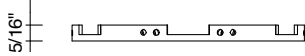
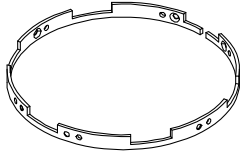
3. Install LED assembly.



4. Install bezel.

MOUNTING OPTIONS (CONTINUED)

RDTMW – MILLWORK TRIMLESS



Millwork Mounting Bracket

NOTES

- 1 Ceiling cutout 4-3/8".
- 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.

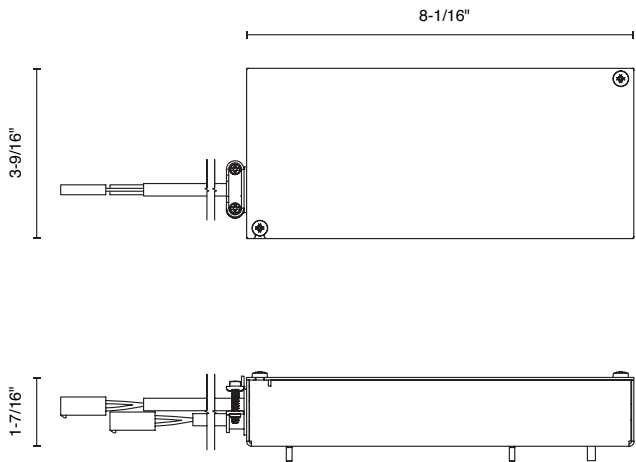


5. Insert Bezel to finish the installation.

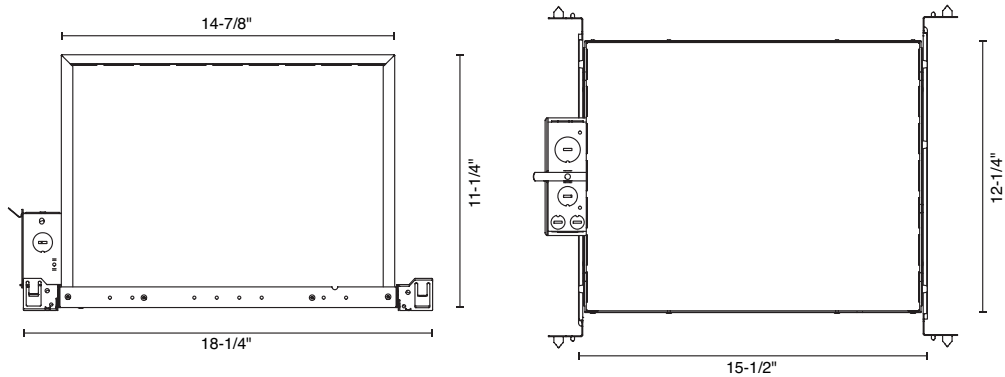


MOUNTING OPTIONS (CONTINUED)

RET - RETROFIT
 TRIM/TRIMLESS



IC - INSULATION CONTACT HOUSING
 TRIM/TRIMLESS



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

