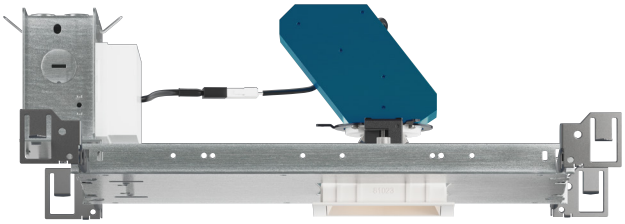
alphabet

PROJECT INFORMATION			
JOB NAME		TYPE	
ORDERING CODE			

NU3

3" Square Downlight Tunable White

NSF · AT airtight · DF dead-front · PR plenum rated · wet rated

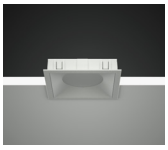


65° - 80° BEAM (Note: Specifications are subject to change without notice)		
14mm LUMINUS COB PERFORMANCE DATA		
LED LIGHT ENGINE	NOMINAL DELIVERED LUMENS	SYSTEM WATTAGE
10LM	1040LM @30K/95CRI	15W
15LM	1280LM @30K/95CRI	19W
20LM	1600LM @30K/95CRI	25W
Notes	Delivered lumens based on WH75 optic with clear lens, (see page 2)	

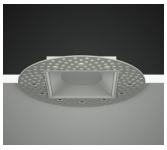
65° - 80° BEAM (Note: Specifications are subject to change without notice)		
14mm NICHIA COB PERFORMANCE DATA		
LED LIGHT ENGINE	NOMINAL DELIVERED LUMENS	SYSTEM WATTAGE
15LM	1440LM @30K/80CRI	15W
20LM	1760LM @30K/80CRI	19W
25LM	2250LM @30K/80CRI	24W
Notes	Delivered lumens based on WH75 optic with clear lens, (see page 2)	

LUMINUS See Page 2 · NICHIA See Page 3 · eldoLED (your product | our drive)

CASAMBI · nLIGHT



Trim



Trimless

Trimless Millwork

FEATURES

- 3/4" bezel regress with 1/16" micro flange
- 65° - 80° optical beam control
- UGR < 22
- Up to 96 LPW
- Glare control, specialty optics, trim options, and custom finishes available
- Microban® antimicrobial finish available on all exposed painted surfaces

DIMMING AND CONTROLS

- eldoLED flicker free 0-10V dimming to 0%
- eldoLED flicker free DALI dimming to 0%
- Casambi bluetooth dimming to 0%
- NLight control interface dimming to 0%

CONSTRUCTION

- Lexan™ (PC) highly resistant to impact and heat (240°F)
- Optimal material for wireless BLE signal connectivity
- Shatter proof acrylic bezel lens
- Electrocoated 16-gauge cold-rolled steel construction
- Accommodates ceiling thickness from 1/8" to 1-3/8"
- **For servicing the driver/j-box, access above ceiling is required**

LED

- 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

LISTING

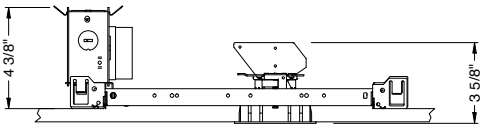
- ULus Listed to UL1598 & UL2108; cUL Listed to CSA C22.2 #250.0
- IP65 with lens - Suitable for wet locations with lens - Suitable for damp locations without lens
- Non-conductive, dead-front construction (shower approved)
- NSF/ANSI-2 with lens (Non-Food and Splash Zones)
- 5 Year Limited warranty

ELECTRICAL

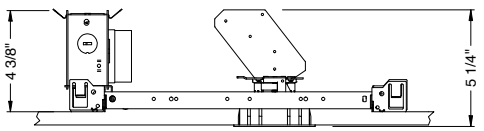
- 120V-277V, 120 only Triac / ELV
- Power factory ≥ 0.9
- 2kV driver input surge protection
- Max. ambient installation temperature 95°F (35°C)

FIXTURE HEIGHT

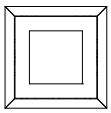
10LM - 15LM LOW LUMENS



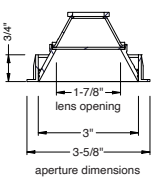
20LM - 25LM HIGH LUMENS



TRIMMED

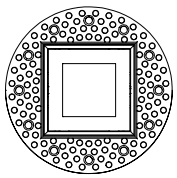


ceiling cutout 3-1/4" square
ceiling thickness 1/8" to 1-1/4"

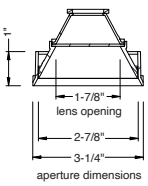


aperture dimensions

TRIMLESS

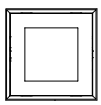


ceiling cutout 3-1/4" square
ceiling thickness 3/8" to 1-3/8"

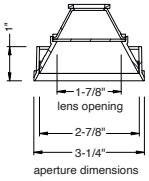


aperture dimensions

MILLWORK



ceiling cutout 3-9/32" square
ceiling thickness 5/8" to 1-3/8"



aperture dimensions

100155

In a continuing effort to offer the best product possible we reserve the right to change, without notice, specifications or materials that in our opinion will not alter the function of the product.

alphabet

PROJECT INFORMATION			
JOB NAME		TYPE	
ORDERING CODE			

65°- 80° BEAM ORDERING CODE

SERIES	**NU3**	NU3
TYPE	**QD**	square downlight
	QDT	square downlight trimless
	QDTMW	square downlight trimless millwork
LED	**TW**	tunable white (Luminus)
DELIVERED LUMENS	**10LM**	1040 lm
	15LM	1280 lm
	20LM	1600 lm
	Standard Configuration: 3500K HE65	
	Calculated Delivered Lumens = [Delivered Lumen Value] x [CCT Multiplier] x [Reflector Multiplier]	
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	1.01	1.01	1.02
EML RATIO	0.49	0.57	0.68	0.79	0.96	1.04	1.12

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	0.21	0.33	0.46	0.53	0.59	0.67	0.73

CRI	**95**	95 typical, 90 minimum	
OPTIC & LM MULTIPLIER SEE PAGE 5	**HE65**	65° high efficiency diffused lens	(1.00)
	HE80	80° high efficiency diffused lens	(0.95)
	WH75	75° brilliant white with clear lens	(0.99)
BEZEL LENS SEE PAGE 4	**NL**[1,2]	no lens	(1.00)
TRIM COLOR SEE PAGE 4	**BK**	black	
	WH	white	
	MC	matte chrome	
	BZ	bronze	
	WT	wheat	
	CC[3]	custom color, consult factory for details	
	Antimicrobial finish, add **AM** to black, white or matte chrome i.e. BKAM.		
	Not applicable to trimless option. Do not include in trimless ordering code.		
BEZEL COLOR SEE PAGE 4	**BK**	black	(0.98)
	WH	white	(1.00)
	MC	matte chrome	(0.99)
	BZ	bronze	(0.98)
	WT	wheat	(0.99)
	CC[3]	custom color, consult factory for details	
	Antimicrobial finish, add **AM** to black, white or matte chrome i.e. BKAM.		

65°- 80° BEAM ORDERING CODE

MOUNTING OPTIONS SEE PAGE 7, 8	**NC**	new construction with ceiling fitting plate
	RET	retrofit, no ceiling fitting plate
	For servicing the driver/j-box access above ceiling is required.	
VOLTAGE	**120**	120V
	UNV	120V-277V
DIMMING	**DIM10Z**[4]	eldoLED flicker free 0-10V dimming to 0%
	DALIZ	eldoLED flicker free DALI dimming to 0%
	NLT	nLight control interface: standard Cat-5/RJ45 connection (female), dimming to 0%
	CASZ	Casambi Bluetooth dim to zero

ADDITIONAL MOUNTING INFO

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"

YOUR COMPLETED ORDERING CODE

Follow the steps to specify your fixture, example:

NU3 - QD - TW - 20LM - 2765 - 95 - WH75 - WH - WH - NC - UNV - DIM10Z

NOTES

1. NL available for WH75.
2. NL option does not meet requirement for AT/DF/WET/NSF listings.
3. Custom set up fee plus minimum quantity required per color.
4. 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: 254 lux x 0.79 = 200 melanopic lux at 4000K.

alphabet

PROJECT INFORMATION			
JOB NAME		TYPE	
ORDERING CODE			

NICHIA TUNABLE WHITE - ORDERING CODE

SERIES	**NU3**	NU3
TYPE	**QD**	square downlight
	QDT	square downlight trimless
	QDTMW	square downlight trimless millwork
LED	**TW**	tunable white (Nichia)
DELIVERED LUMENS	**15LM**	1440 lm
	20LM	1760 lm
	25LM	2250 lm
	Standard Configuration: 3500K HE65	
	Calculated Delivered Lumens = [Delivered Lumen Value] x [CCT Multiplier] x [Reflector Multiplier]	
CCT	**2750**	2700K to 5000K tunable white

CCT	2700K	3000K	3500K	4000K	5000K
EML RATIO	0.67	0.74	0.8	0.85	0.88

CRI	**80**	80 CRI	
OPTIC & LM MULTIPLIER SEE PAGE 5	**HE65**	65° high efficiency diffused lens	(1.00)
	HE80	80° high efficiency diffused lens	(0.95)
	WH75	75° brilliant white with clear lens	(0.99)
BEZEL LENS SEE PAGE 4	**NL**[1,2]	no lens	
TRIM COLOR SEE PAGE 4	**BK**	black	
	WH	white	
	MC	matte chrome	
	BZ	bronze	
	WT	wheat	
	CC[3]	custom color, consult factory for details	
	Antimicrobial finish, add **AM** to black, white or matte chrome i.e. BKAM.		
	Not applicable to trimless option. Do not include in trimless ordering code.		
BEZEL COLOR SEE PAGE 4	**BK**	black	(0.98)
	WH	white	(1.00)
	MC	matte chrome	(0.99)
	BZ	bronze	(0.98)
	WT	wheat	(0.99)
	CC[3]	custom color, consult factory for details	
	Antimicrobial finish, add **AM** to black, white or matte chrome i.e. BKAM.		

NICHIA TUNABLE WHITE - ORDERING CODE

MOUNTING OPTIONS SEE PAGE 7, 8	**NC**	new construction with ceiling fitting plate
	RET	retrofit, no ceiling fitting plate
VOLTAGE	**120**	120V
	UNV	120V-277V
DIMMING	**DIM10Z**[4]	eldoLED flicker free 0-10V dimming to 0%
	DALIZ	eldoLED flicker free DALI dimming to 0%
	NLT	nLight control interface: standard Cat-5/RJ45 connection (female), dimming to 0%
	CASZ	Casambi Bluetooth dim to zero

ADDITIONAL MOUNTING INFO

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"

YOUR COMPLETED ORDERING CODE

Follow the steps to specify your fixture, example:

NU3 - QD - TW - 15LM - 2750 - 80 - WH75 - WH - WH - NC - UNV - DIM10Z

NOTES

1. NL available for WH75.
2. NL option does not meet requirement for AT/DF/WET/NSF listings.
3. Custom set up fee plus minimum quantity required per color.
4. Requires 2 wall controllers (see wiring diagram).

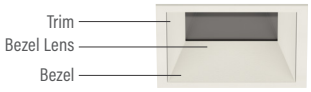
*EML = equivalent melanopic lux. To calculate EML, multiply the measured photopic lux by the EML ratio for the given CCT.
Example: 290 lux x 0.69 = 200 melanopic lux at 4000K.

alphabet

PROJECT INFORMATION			
JOB NAME		TYPE	
ORDERING CODE			

TRIM OPTIONS

TRIM/BEZEL COLORS



WH

MC

BK

BZ

WT

OPTICAL OPTIONS

- UGR calculation based on CIE 117-1995; room size: 4H X 8H, reflectance: 70/50/20;
- UGR calculation based on 15LM fixtures, unless otherwise noted.

LUMINUS

CL
Clear Lens

OPTIC	BEAM ANGLE	UGR
WH75	74	24.2

DL
Diffused Lens

OPTIC	BEAM ANGLE	UGR
HE65	64	22.8
HE80	79	24.9

NICHIA

CL
Clear Lens

OPTIC	BEAM ANGLE	UGR
WH75	79	24.8

DL
Diffused Lens

OPTIC	BEAM ANGLE	UGR
HE65	64	23.5
HE80	83	25.6

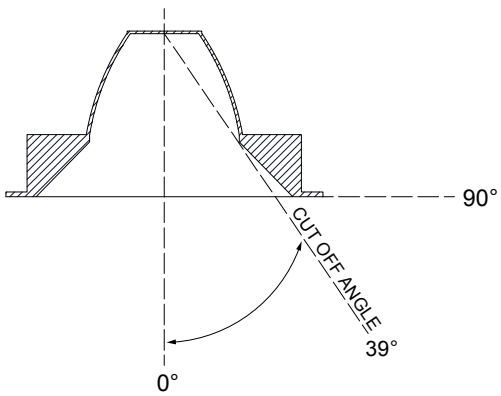
GLARE CONTROL

CUT-OFF ANGLE

Visual comfort is achieved with a lower cut-off angle due to improved glare control. The smaller the cut-off angle, the easier it is on the eye.

Alphabet downlights have been thoughtfully engineered to eliminate glare while still delivering functional illumination.

- Cutoff angle of NL and CL is 39° degrees;



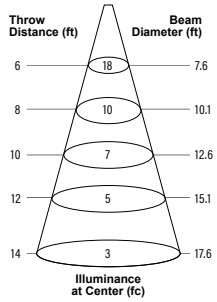
alphabet

PROJECT INFORMATION			
JOB NAME		TYPE	
ORDERING CODE			

PHOTOMETRIC DATA LUMINUS

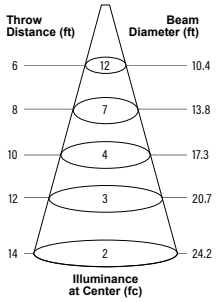
10LM

HE65
64° HIGH EFFICIENCY DIFFUSED LENS



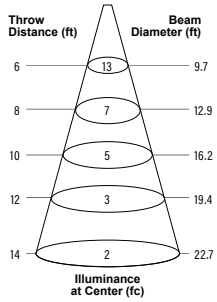
WATTS: 13	LPW: 58.7
LUMENS: 763	CCT: 3000K
INTENSITY	
DEGREE	CANDELA
0	663
5	651
15	569
25	441
35	282
45	109

HE80
79° HIGH EFFICIENCY DIFFUSED LENS



WATTS: 13	LPW: 57.3
LUMENS: 745	CCT: 3000K
INTENSITY	
DEGREE	CANDELA
0	431
5	428
15	408
25	367
35	291
45	159

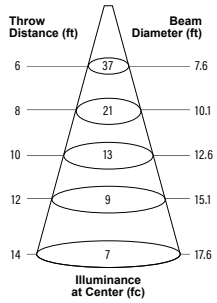
WH75
74° BRILLIANT WHITE WITH CLEAR LENS



WATTS: 13	LPW: 61.6
LUMENS: 800	CCT: 3000K
INTENSITY	
DEGREE	CANDELA
0	476
5	476
15	466
25	437
35	351
45	135

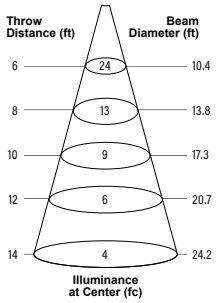
20LM

HE65
64° HIGH EFFICIENCY DIFFUSED LENS



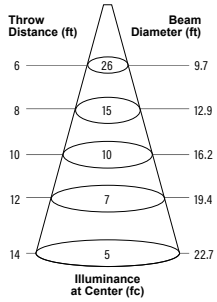
WATTS: 25	LPW: 61.1
LUMENS: 1526	CCT: 3000K
INTENSITY	
DEGREE	CANDELA
0	1326
5	1303
15	1138
25	882
35	564
45	219

HE80
79° HIGH EFFICIENCY DIFFUSED LENS



WATTS: 25	LPW: 59.6
LUMENS: 1491	CCT: 3000K
INTENSITY	
DEGREE	CANDELA
0	861
5	857
15	817
25	735
35	582
45	318

WH75
74° BRILLIANT WHITE WITH CLEAR LENS



26 9.7	LPW:
15 12.9	CCT: 3000K
INTENSITY	
DEGREE	CANDELA
0	953
5	952
15	931
25	875
35	702
45	270

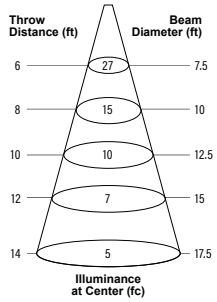
alphabet

PROJECT INFORMATION			
JOB NAME		TYPE	
ORDERING CODE			

PHOTOMETRIC DATA NICHIA

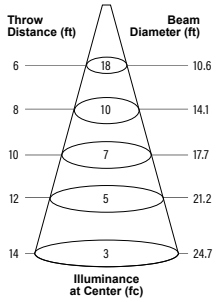
15LM

HE65
64° HIGH EFFICIENCY DIFFUSED LENS



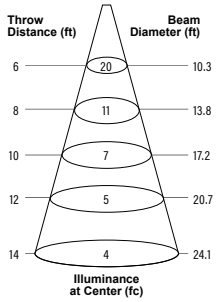
WATTS: 12.8	LPW: 90.2
LUMENS: 1154	CCT: 3000K
INTENSITY	
DEGREE	CANDELA
0	986
5	968
15	841
25	645
35	423
45	193

HE80
83° HIGH EFFICIENCY DIFFUSED LENS



WATTS: 12.8	LPW: 89.7
LUMENS: 1148	CCT: 3000K
INTENSITY	
DEGREE	CANDELA
0	657
5	653
15	620
25	553
35	441
45	260

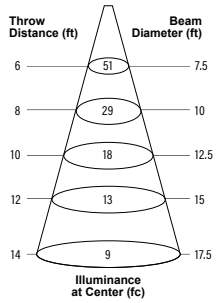
WH75
79° BRILLIANT WHITE WITH CLEAR LENS



WATTS: 12.8	LPW: 94.2
LUMENS: 1206	CCT: 3000K
INTENSITY	
DEGREE	CANDELA
0	711
5	708
15	684
25	636
35	529
45	232

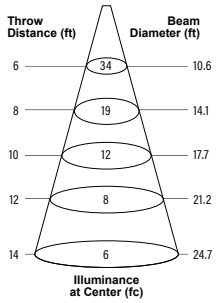
30LM

HE65
64° HIGH EFFICIENCY DIFFUSED LENS



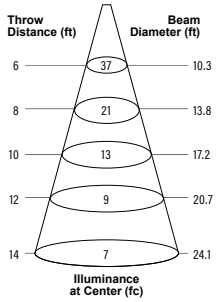
WATTS: 24	LPW: 89.6
LUMENS: 2151	CCT: 3000K
INTENSITY	
DEGREE	CANDELA
0	1837
5	1804
15	1569
25	1202
35	788
45	360

HE80
83° HIGH EFFICIENCY DIFFUSED LENS



WATTS: 24	LPW: 89.1
LUMENS: 2139	CCT: 3000K
INTENSITY	
DEGREE	CANDELA
0	1224
5	1216
15	1155
25	1031
35	822
45	485

WH75
79° BRILLIANT WHITE WITH CLEAR LENS



WATTS: 24	LPW: 93.7
LUMENS: 2248	CCT: 3000K
INTENSITY	
DEGREE	CANDELA
0	1326
5	1320
15	1276
25	1186
35	985
45	433

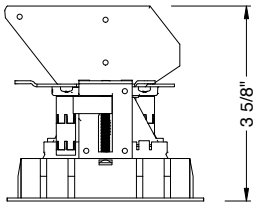
alphabet

PROJECT INFORMATION			
JOB NAME		TYPE	
ORDERING CODE			

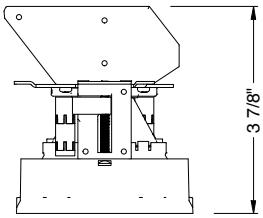
MOUNTING OPTIONS

FIXTURE HEIGHT

10LM - 20LM CONFIGURATION

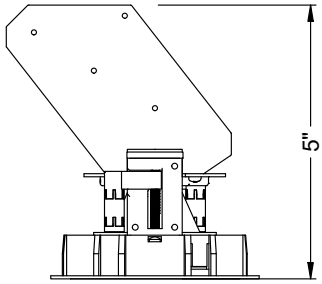


TRIMMED



TRIMLESS & MILLWORK

25LM CONFIGURATION



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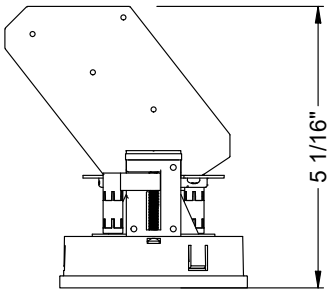
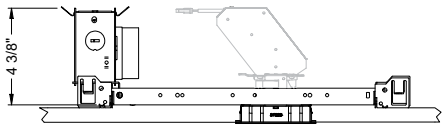
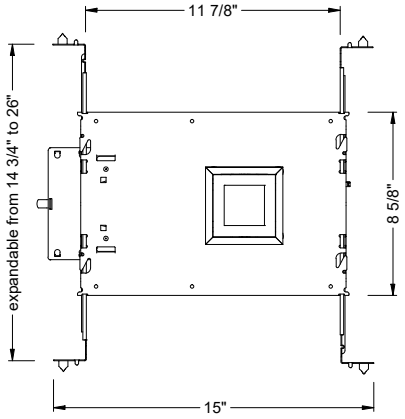


TRIMLESS & MILLWORK

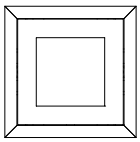
NC - NEW CONSTRUCTION

TRIM

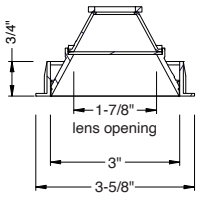




TRIM

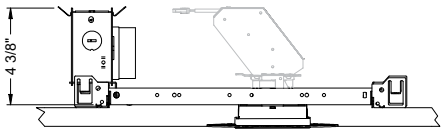


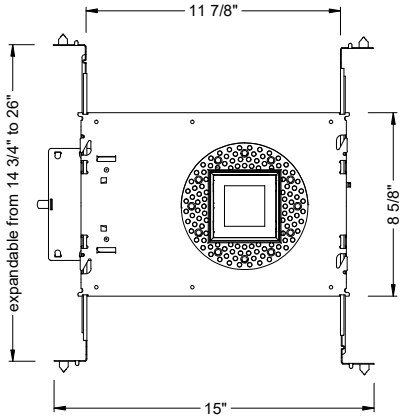
ceiling cutout
3-1/4" square
ceiling thickness
1/8" to 1-1/4"



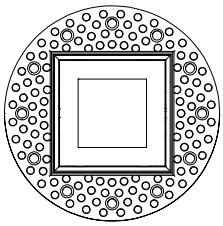
aperture dimensions

TRIMLESS

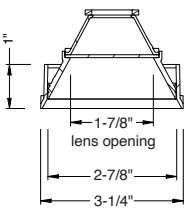




TRIMLESS

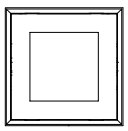


ceiling cutout
3-1/4" square
ceiling thickness
3/8" to 1-3/8"

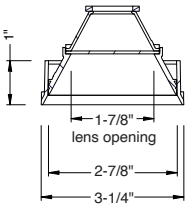


aperture dimensions

TRIMLESS/MILLWORK



ceiling cutout
3-9/32" square
ceiling thickness
5/8" to 1-3/8"



aperture dimensions

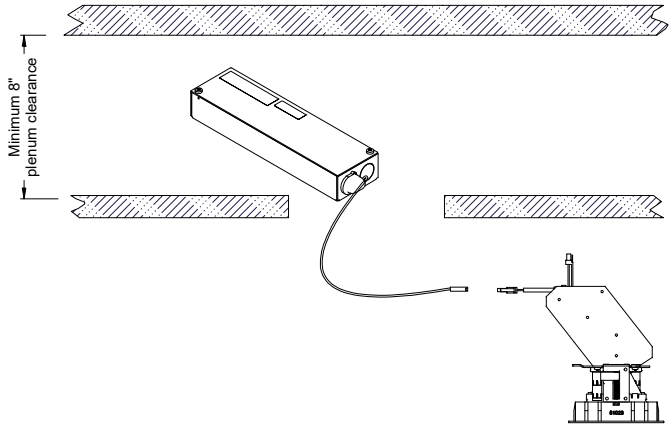
100155

alphabet

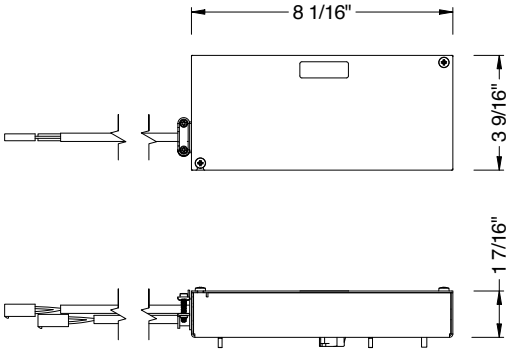
PROJECT INFORMATION			
JOB NAME		TYPE	
ORDERING CODE			

MOUNTING OPTIONS

RET - RETRO
TRIM/TRIMLESS



NC - DRIVER BOX SIZE
TRIM/TRIMLESS



NOTE:
For servicing the driver/j-box, access above ceiling is required. T-Bar type ceilings with removable adjacent tile access recommended. Hard lid ceilings may require access doors directly adjacent to luminaire.

RATINGS / CERTIFICATIONS	NC	RET
TYPE NON-IC	✔	✔
TYPE IC		
CHICAGO PLENUM (CCEA)		
SUITABLE FOR AIR HANDLING PLENUMS		
REDUCED AIRFLOW (WITH LENS) ASTM E283	✔	✔

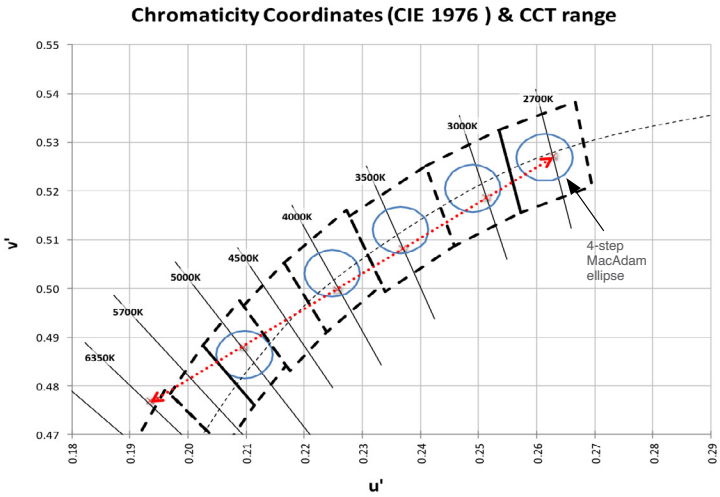
CEILING THICKNESS	
FIXTURE TYPE	MOUNTING TYPE
	NC, RET
	STANDARD CEILING THICKNESS
TRIM	1/8" to 1- 1/4"
TRIMLESS	3/8" to 1-3/8"
MILLWORK (TRIMLESS)	5/8" to 1-3/8"

alphabet

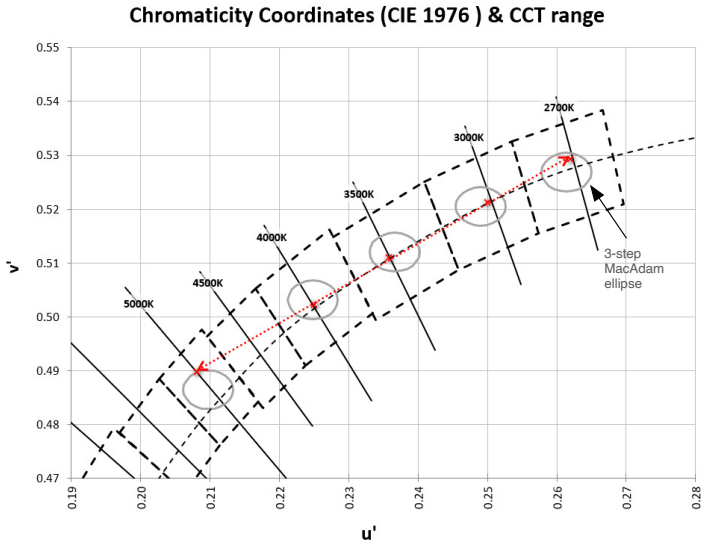
PROJECT INFORMATION			
JOB NAME		TYPE	
ORDERING CODE			

TUNABLE WHITE

LUMINUS 95CRI

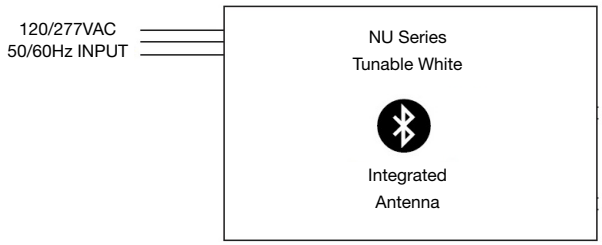


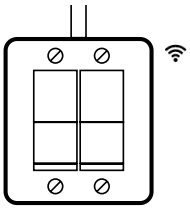
NICHIA 80CRI



WIRING DIAGRAMS

"CAS" CASAMBI CONTROLS



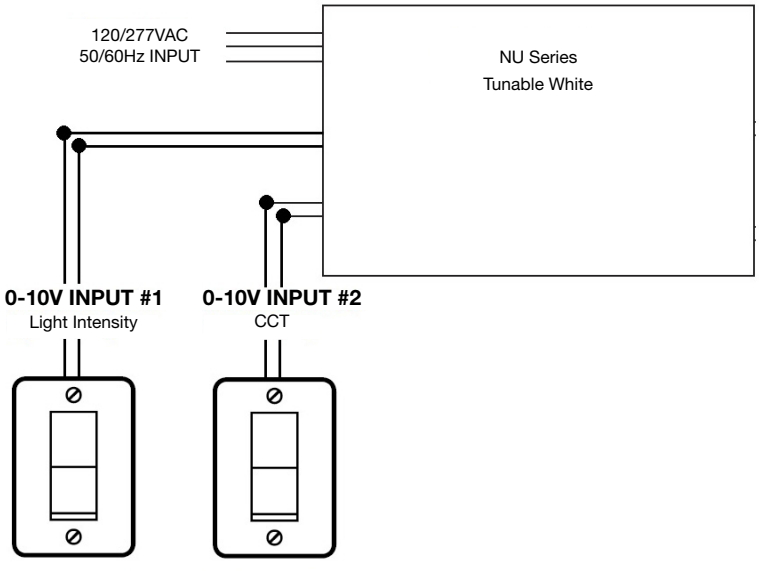


COMPATIBLE WIRELESS SWITCHES

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.