PRUDENTIAL LTG.

PRULITE.COM   213.746.0360

Type:

Job:

13˝, 24˝, 36˝ or 48˝

8˝

11⅞˝, 22⅞˝
34⅞˝ or 46⅞˝

LUMEN OUTPUT: Direct

		LO	MO	SO
12˝	lm	550	700	1100
	w	10	14	25
2´	lm	2100	3150	3900
	w	32	53	72
3´	lm	4500	7000	9000
	w	56	95	131
4´	lm	7000	8800	13900
	w	76	97	164

CLICK HERE

Our ever-popular 'skylights'.

The standard for four decades with a slightly regressed 2˝ trim for a skylight effect.
Perfect partner to our P3900 Sky Oculus pendant.

Lumen output may vary +/- 5%

nLIGHT   LED WARRANTY 5 YEAR   LED Details   Made in the USA★

See LED Details PDF for more info

SERIES	LED COLOR	OUTPUT	SHIELD-ING	TRIM COLOR	CIRCUIT-ING	VOLTAGE	CEILING SYSTEMS	CONTROLS	DRIVERS	OPTIONS
P8912 12˝ Dia.	TU Tū Hue Tunable White (A6500K)	LO Low	CWA Concave White Acrylic (NA - 12˝ & 2´)	TMW Textured Matte White (Standard)	SC Single Circuit	UNV (120-277)	X1 T-Bar 15/16˝ or 9/16˝ Exposed (Standard) Consult factory for 9/16˝ Tegular	0-10V Uses E10V Driver	E10V .1% 0-10V DUALdrive, EldoLED (Dim to Dark [Off] Tunable White)	EMHE CA T20 Emergency Battery (18˝-2´: Remote only, 3´- 4´: 900 delivered lumens)
P8920 2´ Dia.		MO Medium	VWA Convex White Acrylic	YGW Gloss White			X1T T-Bar Ceiling with Tegular Panels	DALI Uses EDALI Driver	EDALI DALI DUALdrive, EldoLED (Dim to Dark [Off] Tunable White)	EM Emergency Battery (2´: 500 delivered lumens)
P8930 3´ Dia.		SO Standard	FWA Flat White Acrylic	Y__ Premium Color			X3B Hard Ceiling (Flange Trim)	DMX Uses EDMX Driver	EDMX DMX POWERdrive, EldoLED (Dim to Dark [Off] Tunable White)	PruTune Wall Device (EDALI driver only, one PruTune device for each zone)
P8940 4´ Dia.				CC Custom Color			NOTE: Fixture must be installed BEFORE ceiling for X3B	nLight Uses EDALI Driver		ETRAN 0-10V to DALI Eldo Translator

PHOTOMETRICS

Low Output:

P8940-TW

7017	Delivered Lumens
88	Watts
80	lm/w
3500	CCT
Test	#L041411805
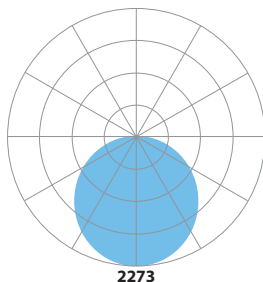
Zonal Lumen Summary:
0-90 = 100%

2273

Vertical Angle	0°	22.25°	45°	67.5°	90°
0°	2273	2273	2273	2273	2273
5°	2260	2260	2260	2260	2260
15°	212	212	212	212	212
25°	2005	2005	2005	2005	2005
35°	1773	1773	1773	1773	1773
45°	1484	1484	1484	1484	1484
55°	1150	1150	1150	1150	1150
65°	807	807	807	807	807
75°	440	440	440	440	440
85°	131	131	131	131	131
90°	0	0	0	0	0

Luminance Chart:

Angle	0°	45°	90°
45°	1959	1959	1959
55°	1871	1871	1871
65°	1782	1782	1782
75°	1587	1587	1587
85°	1403	1403	1403

LUMEN MAINTENANCE

L70 (LO, MO, SO) — 100,000+ Hours

L70 (HO) — 90,000+ Hours

LED SYSTEM   LED modules and drivers are field replaceable.

CONTROLS   Tunable White can be controlled via the following methods:

— **0-10V:** Control brightness and color independently via 2 dimmers.

— **DALI:** For more precise control. Prudential's PruTune wall control includes a color wheel, dimming indicator and six preset color options (2700K, 3000K, 3500K, 4000K, 5000K & 6500K).

— **nLight*:** Similar to DALI but with easier installation.

— **DMX*:** Recommended for dynamic lighting.

* Both nLight and DMX have Plug-n-Play connectors installed on the fixture

NOTE: Independent control of Up and Down light (dual circuit) requires doubling the above controls for 0-10V and DALI (Four dimmers or two PruTune, or similar, devices). Dual circuit on DMX and nLight is handled via addressing of connected components. Mixing control options is not recommended.

LABELS   CSA and ETL damp labeled and I.B.E.W. manufactured.

CONSTRUCTION

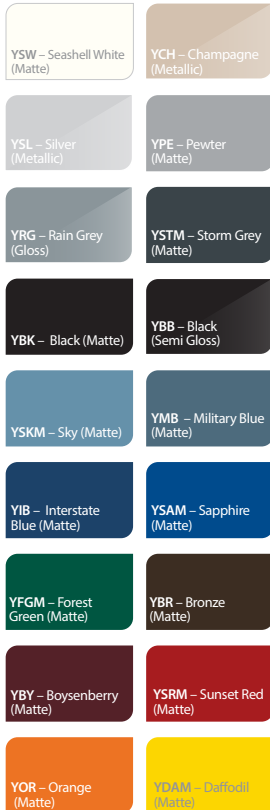Housing   Die-formed 20-gauge steel, >20% PC recycled, 100% recyclable.

Lens   Acrylic, 100% recyclable.

MOUNTING   Recessed mounted into T-bar or hard ceiling applications.

WARRANTY   Single-source, 5 year limited warranty covers standard components and construction.
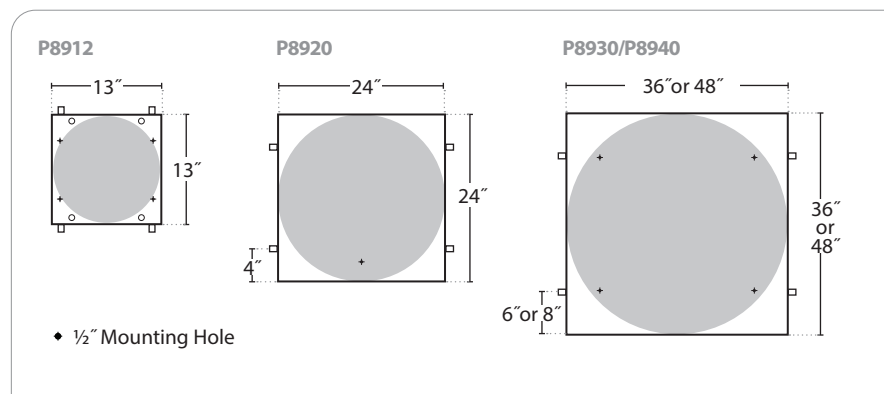
YSW – Seashell White (Matte)
YCH – Champagne (Metallic)
YSL – Silver (Metallic)
YPE – Pewter (Matte)
YRG – Rain Grey (Gloss)
YSTM – Storm Grey (Matte)
YBK – Black (Matte)
YBB – Black (Semi Gloss)
YSKM – Sky (Matte)
YMB – Military Blue (Matte)
YIB – Interstate Blue (Matte)
YSAM – Sapphire (Matte)
YFGM – Forest Green (Matte)
YBR – Bronze (Matte)
YBY – Boysenberry (Matte)
YSRM – Sunset Red (Matte)
YOR – Orange (Matte)
YDAM – Daffodil (Matte)

Choose from one of our Premium Colors with no set-up fee.
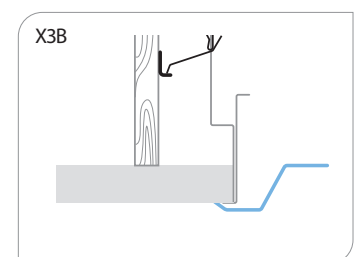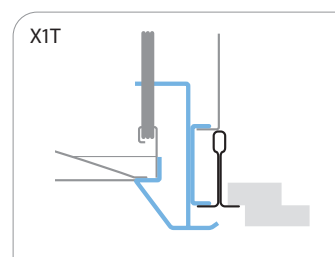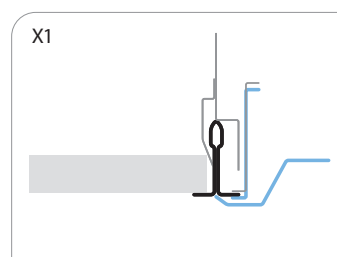
For paint chip samples, please email:
info@prulite.com

Client | Mercer   **Architect** | GKK Works

MOUNTING LOCATIONS

P8912
13″
13″

P8920
24″
24″
4″

P8930/P8940
36″or 48″
36″ or 48″
6″or 8″

◆ ½″ Mounting Hole

CEILING SYSTEMS

X1

X1T

X3B

NOTE: Fixture must be installed BEFORE ceiling for X3B

COMPLIMENTARY FIXTURES

P9000 Detail

P8900 Detail

P4000 Detail
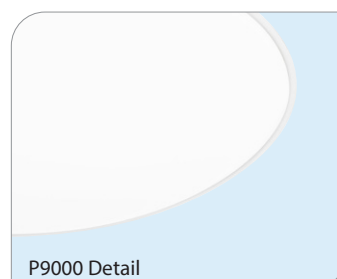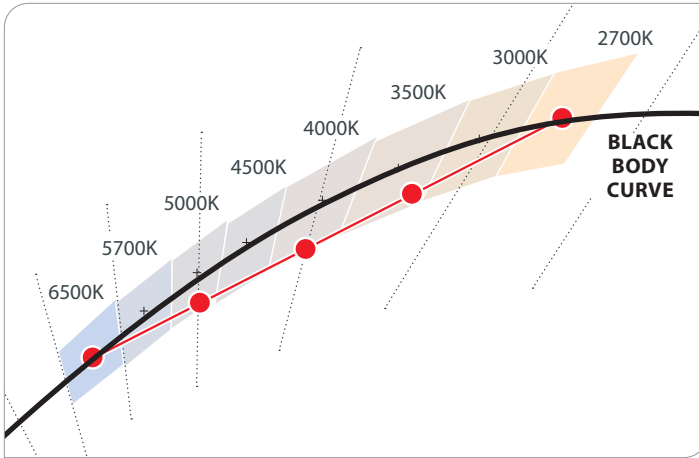
TARGETED CCT	TESTED CCT	LUMEN OUTPUT	TOTAL POWER (W)	CRI	R9	DUV
6500	6100	+ 2%	- 11%	96	96	0
5000	4675	STATED LUMENS ON LUMEN CHART	- 14%	95	96	- 0.005
4000	3675	+ 2%	- 13%	94	85	- 0.007
3500	3225	+ 1%	- 12%	93	74	- 0.006
3000	2875	STATED LUMENS ON LUMEN CHART	- 6%	93	57	- 0.004
2700	2650	- 2%	STATED WATTS ON LUMEN CHART	91	46	- 0.002

LIGHT OUTPUT AND COLOR

— Actual CCT is below targeted, especially in cooler range as a function of LED chip

— Light output is held constant over full color range and output matches static white PRU fixtures for easy specification (Low, Medium, Standard and High output), see spec sheets for delivered lumens for individual fixtures (varies). Lumen output may vary +/- 5%
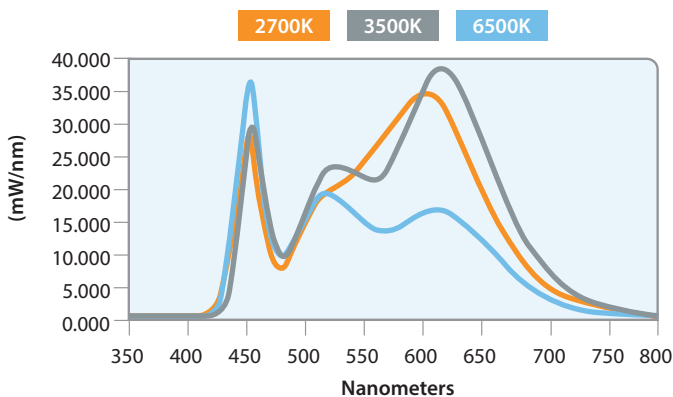
ELECTRICAL

0-10V:

— Universal Input Voltage (120-277VAC)

— 0.1% Dimming

— Controlled by two individual 0-10V signals, one for light output (to 1%), the other for adjusting CCT (2700K-6500K)

— 50,000 hours rated life at 70˚C max driver case temperature

— 87% efficiency   — THD <20%   — PF >0.9

DALI:

— Universal Input Voltage (120-277VAC)

— DALI control system (by others) or PRUTune DALI wall device to control color temperature and brightness

NOTE: PRUTune wall device only requires Purple & Grey wires common to 0-10v wiring, ideal for control of individual spaces
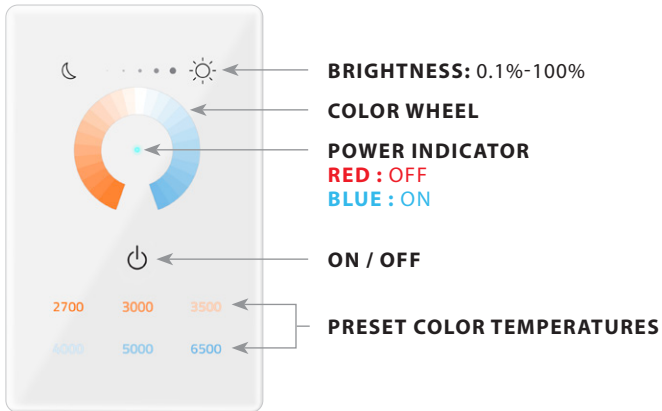
— 50,000 hours rated life at 70˚C max driver case temperature

— 87% efficiency   — THD <20%   — PF >0.9

DMX:

— Universal Input Voltage (120-277VAC)

— DMX control system (by others) for control of CCT and brightness

— DMX drivers have multiple output channels that can be independently addressed at the factory

— 50,000 hours rated life at 70˚C max driver case temperature

— 86% efficiency   — THD <20%   — PF >0.9
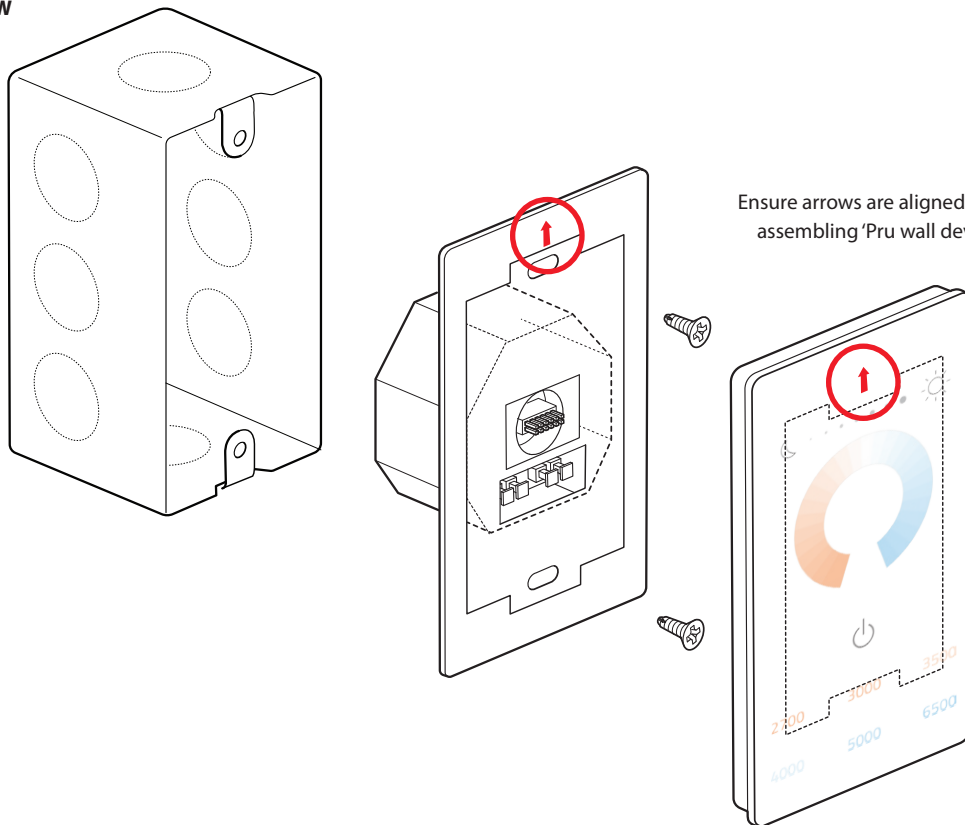
PRUTUNE WALL DEVICE

BRIGHTNESS: 0.1%-100%

COLOR WHEEL

POWER INDICATOR
RED : OFF
BLUE : ON

ON / OFF

PRESET COLOR TEMPERATURES

PRUTune DALI device includes:

— Easy-to-understand user control with intuitive design

— Out-of-the-box set-up, no commissioning needed

— Color wheel for color change from 2700K to 6500K

— Dimming to 1% (255 Steps)

— Six preset colors (2700K, 3000K, 3500K, 4000K, 5000K, 6500K)

— Must use DALI driver, consult factory to control non-Prudential Ltg Tunable White fixtures

— Control one (1) zone - up to 30 drivers
(Consult factory for fixture quantity dependant upon fixture type, size & output)

PRUTune + EMHE: — Prutune does not have memory
— Once normal power is restored, the controller sends a signal of 100% intensity and 6500K CCT
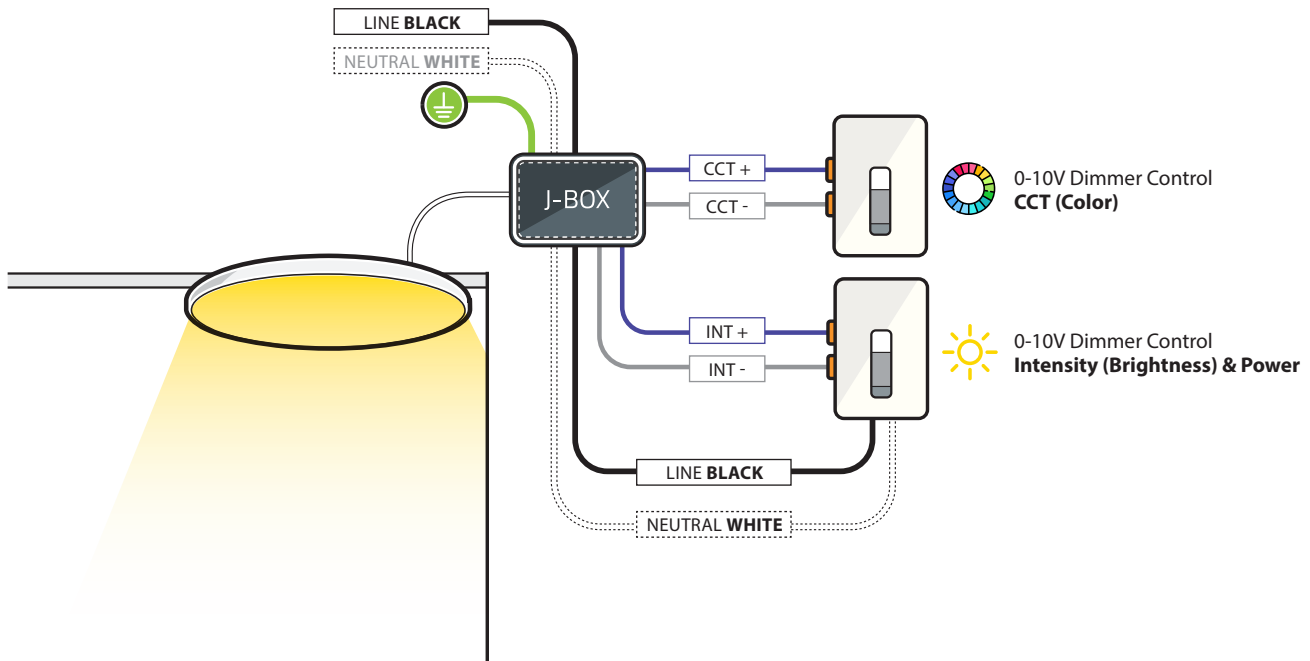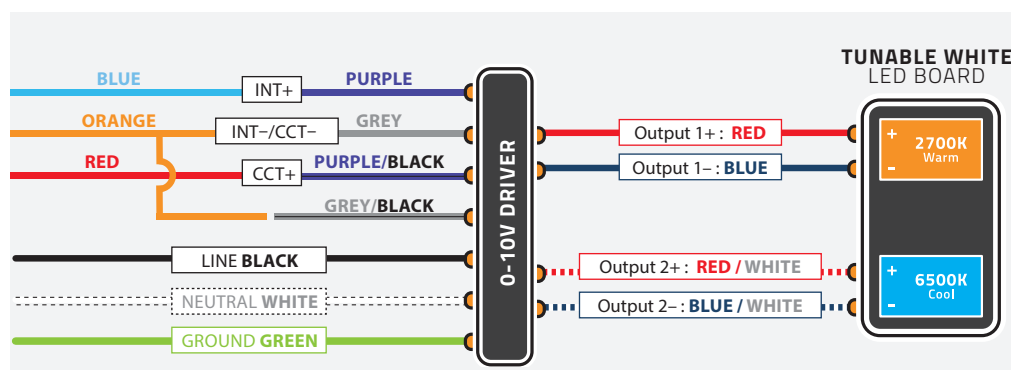
EXPLODED VIEW

Ensure arrows are aligned when assembling 'Pru wall device'

D1 – SC – 0-10v
Single Control for Color, Single Control for Intensity

LINE **BLACK**

NEUTRAL **WHITE**

J-BOX

CCT +

CCT -

0-10V Dimmer Control
CCT (Color)

INT +

INT -

0-10V Dimmer Control
Intensity (Brightness) & Power

LINE **BLACK**

NEUTRAL **WHITE**

— Junction box wiring by others. *Wire colors shown are for illustration purposes only.*

LIGHTING FIXTURE INTERNAL DETAILS:

TUNABLE WHITE
LED BOARD

BLUE

ORANGE

RED

INT+   **PURPLE**

INT–/CCT–   **GREY**

CCT+   **PURPLE/BLACK**

GREY/BLACK

LINE **BLACK**

NEUTRAL **WHITE**

GROUND **GREEN**

0-10V DRIVER

Output 1+ : **RED**

Output 1– : **BLUE**

Output 2+ : **RED / WHITE**

Output 2– : **BLUE / WHITE**

+ 2700K Warm −

+ 6500K Cool −

D1 – SC – DALI – PruTune
Single Control for Color & Intensity
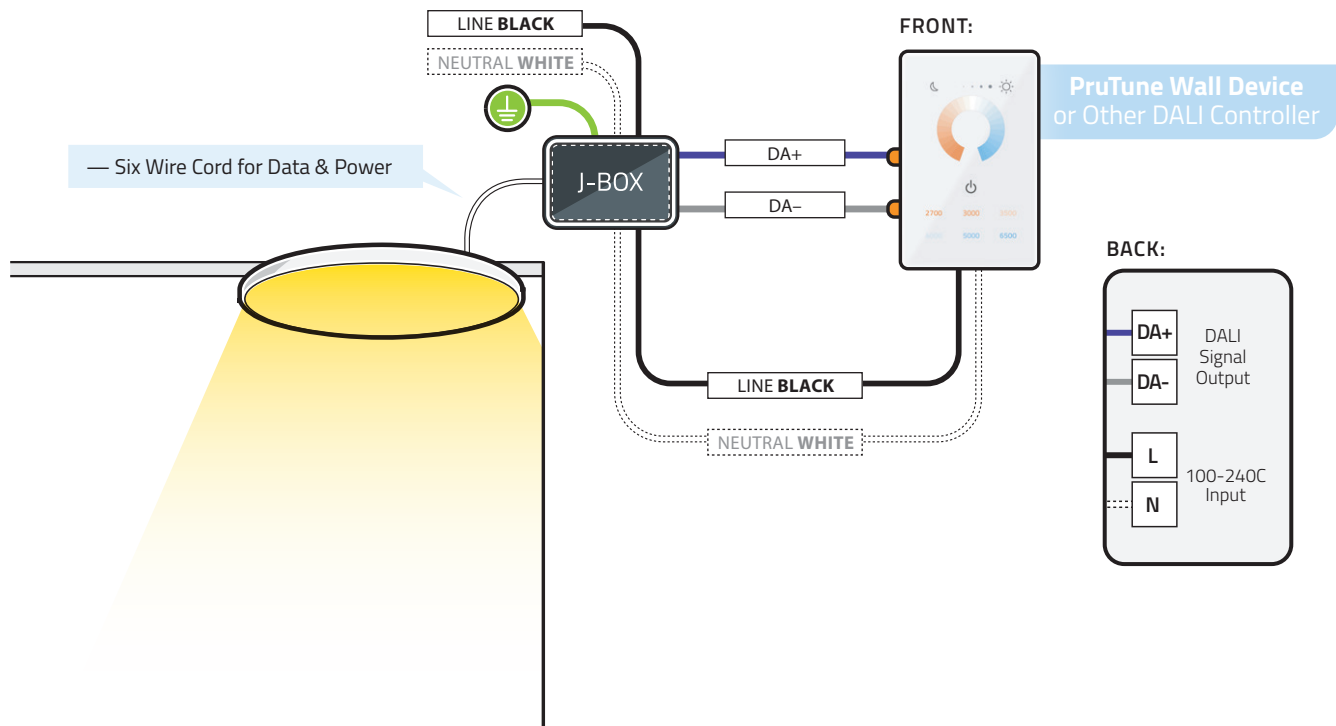
LINE **BLACK**

NEUTRAL **WHITE**

— Six Wire Cord for Data & Power

J-BOX

DA+

DA–

LINE **BLACK**

NEUTRAL **WHITE**

FRONT:

2700   3000   5000
5000   6500

PruTune Wall Device
or Other DALI Controller

BACK:

DA+   DALI Signal Output

DA-

L   100-240C Input

N

— Junction box wiring by others. *Wire colors shown are for illustration purposes only.*

LIGHTING FIXTURE INTERNAL DETAILS:

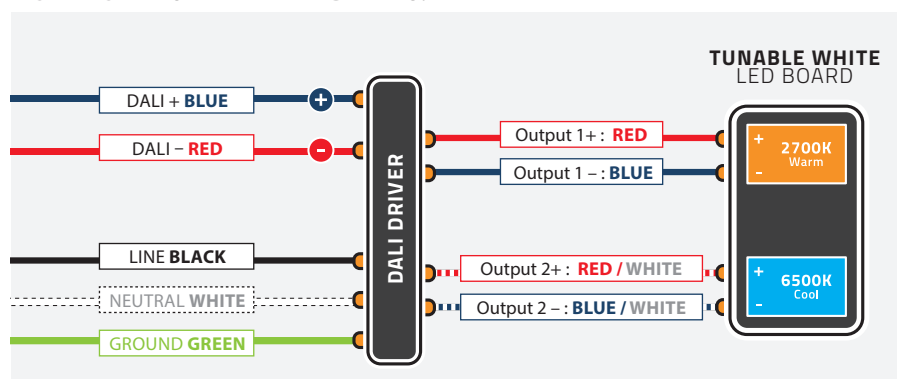DALI + **BLUE**   +

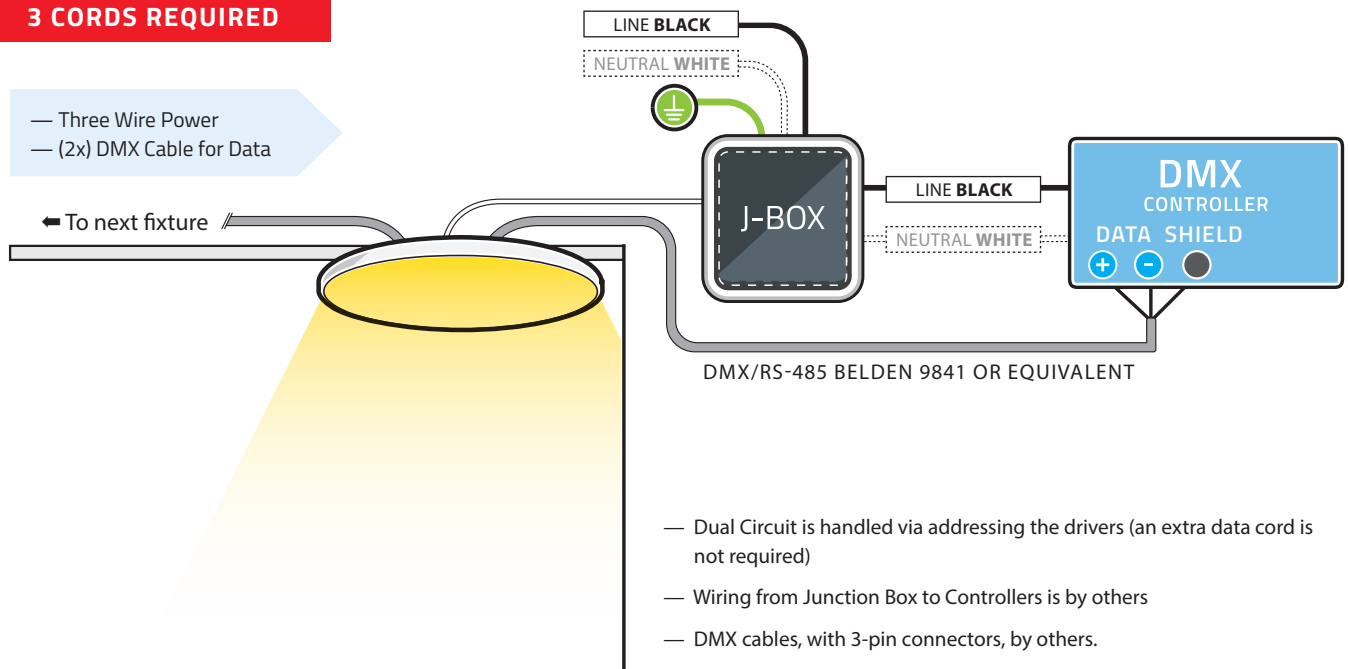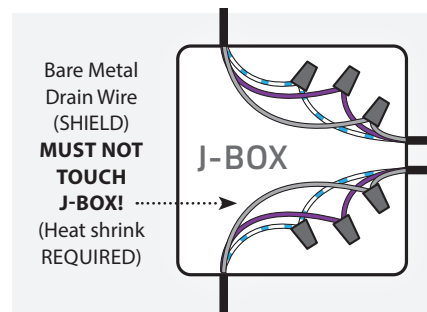DALI – **RED**   −

LINE **BLACK**

NEUTRAL **WHITE**

GROUND **GREEN**

DALI DRIVER

Output 1+ : **RED**

Output 1 – : **BLUE**

Output 2+ : **RED / WHITE**

Output 2 – : **BLUE / WHITE**

TUNABLE WHITE
LED BOARD

+ 2700K Warm −

+ 6500K Cool −

D1 – SC – DMX
DMX Control of Color & Intensity

3 CORDS REQUIRED

— Three Wire Power
— (2x) DMX Cable for Data

← To next fixture

LINE **BLACK**

NEUTRAL **WHITE**

J-BOX

LINE **BLACK**

NEUTRAL **WHITE**

DMX
CONTROLLER
DATA   SHIELD
+   −

DMX/RS-485 BELDEN 9841 OR EQUIVALENT

— Dual Circuit is handled via addressing the drivers (an extra data cord is not required)

— Wiring from Junction Box to Controllers is by others

— DMX cables, with 3-pin connectors, by others.

J-BOX WIRING DETAIL:
DMX CONNNECTIONS

Bare Metal
Drain Wire
(SHIELD)
**MUST NOT
TOUCH
J-BOX!**
(Heat shrink
REQUIRED)

J-BOX

DMX CONNECTOR DETAIL:

MALE: **DMX IN**

FEMALE: **DMX OUT**

DMX −
Shield

DMX +

DMX −
Shield

DMX +

8 PIN CONNECTOR DETAIL:

DMX IN +

DMX IN −

DMX IN SHIELD

NOT USED

8 PIN
CONNECTOR

DMX DRIVER

Output 1+ : **RED**

Output 1− : **BLUE**

Output 2+ : **RED / WHITE**

Output 2− : **BLUE / WHITE**

**TUNABLE
WHITE**
LED BOARD

+ **2700K**
Warm
−

+ **6500K**
Cool
−

LINE **BLACK**

NEUTRAL **WHITE**

GROUND **GREEN**

POWER CORD

LINE **BLACK**

NEUTRAL **WHITE**

GROUND **GREEN**
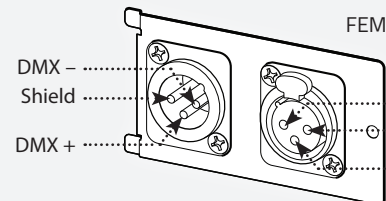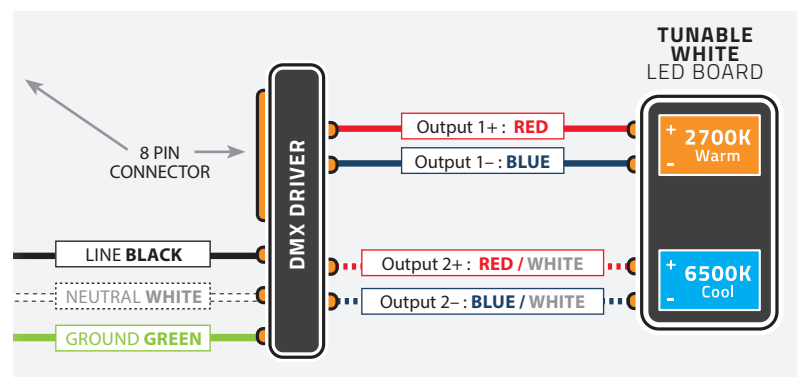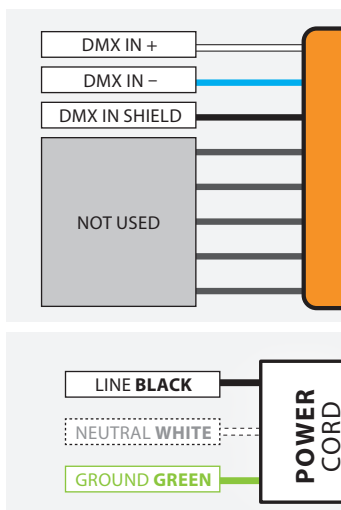
FOR MULTIPLE
FIXTURES
SEE NEXT PAGE

D1 – SC – DMX
DMX Control of Color & Intensity, Multiple Fixtures

IN

FIRST DMX FIXTURE

OUT

DRIVER   **DRIVER**

ELECTRICAL J-BOX

DMX CONTROLLER
(BY OTHERS)

IN

NEXT DMX FIXTURE

OUT

DRIVER   **DRIVER**

ELECTRICAL J-BOX

IN

LAST DMX FIXTURE

OUT

DRIVER   **DRIVER**

ELECTRICAL J-BOX

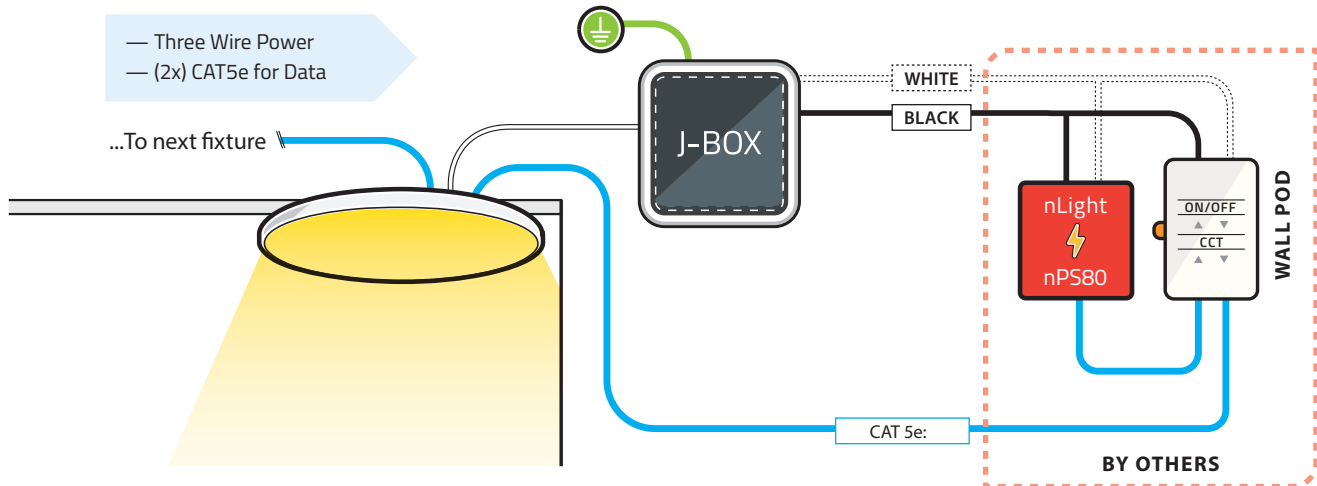**120 OHM** END OF LINE RESISTOR
(BY OTHERS)
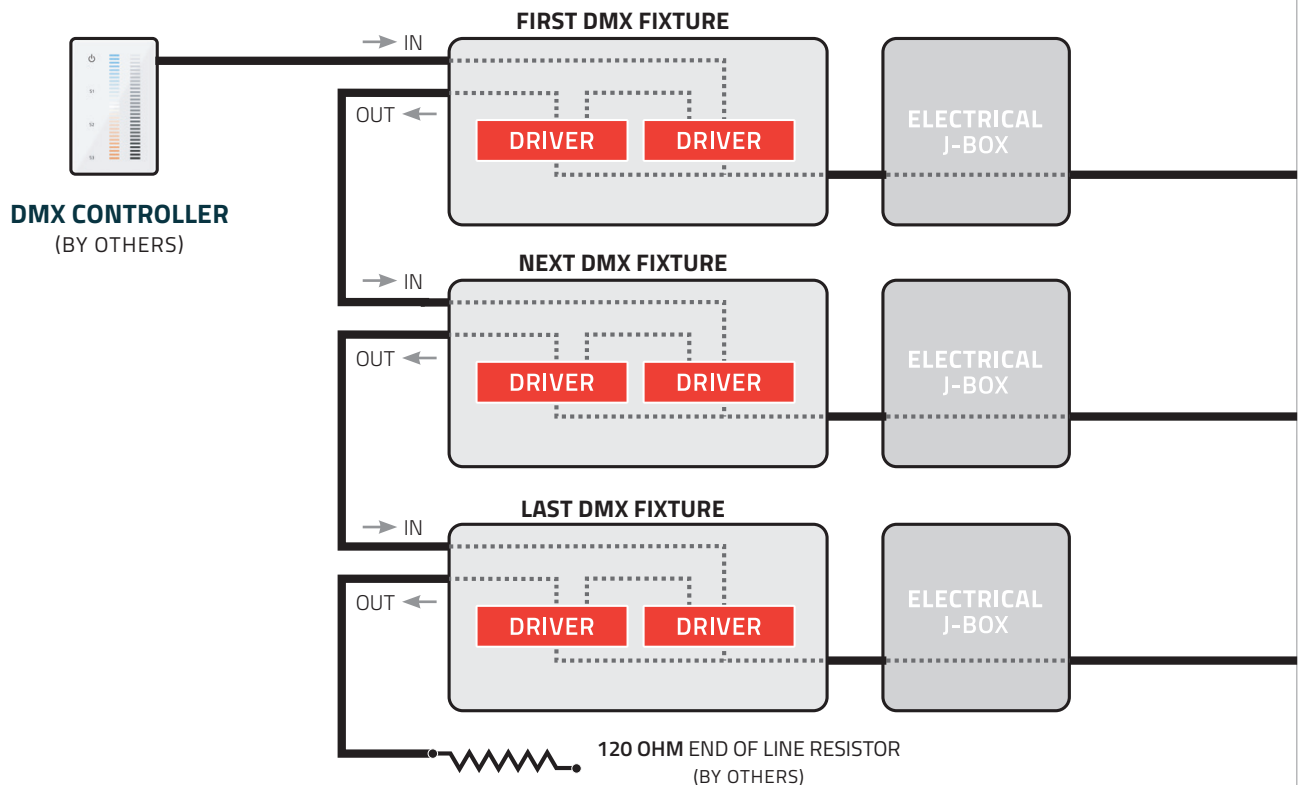
RECOMMENDATIONS

— Complete DMX requirements form.

— Fixtures must be daisy chained. (Drivers internal to fixture and daisy chained)

— Maximum 32 drivers per controller, consult factory for quantity of drivers per fixture.
   If more than 32 drivers a DMX booster / repeater (by others) must be used.

— Keep DMX cable less than 1000ft between controller and end of line resistor.

— Cables connecting fixtures must be designed for DMX/RS-485, Beldin 9841 or equivalent.

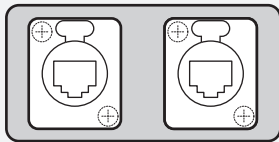— If more than one zone, fixtures per zone must be specified.

SC – nLight
(nLight Control of Color & Intensity, One Fixture)

3 CORDS REQUIRED

— Three Wire Power
— (2x) CAT5e for Data

...To next fixture

J-BOX

WHITE
BLACK

nLight
⚡
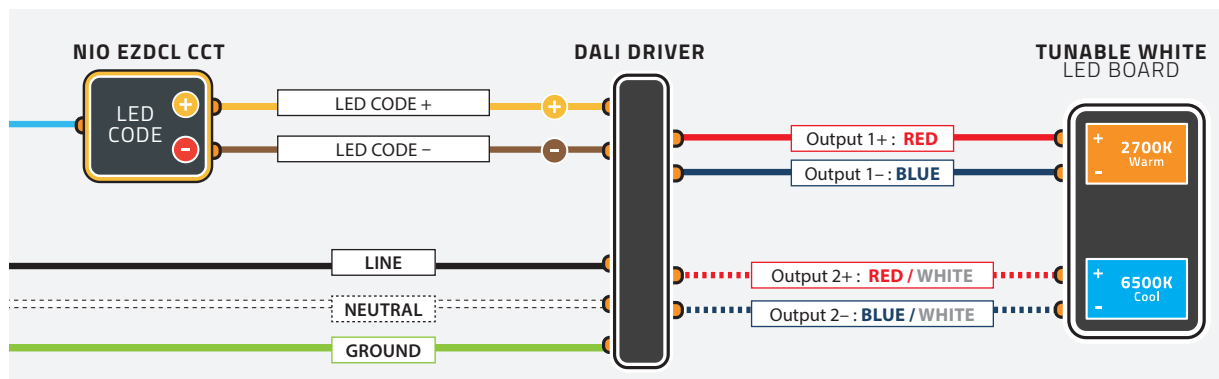nPS80

ON/OFF
▲ ▼
CCT
▲ ▼

WALL POD

CAT 5e:

BY OTHERS

— Dual Circuit is handled via addressing the drivers (an extra data cord is not required)

—Wiring from Junction Box to Controllers is by others

— CAT 5e cables by others

RJ45 CONNECTOR DETAIL:

LIGHTING FIXTURE INTERNAL DETAILS:

NIO EZDCL CCT	DALI DRIVER	TUNABLE WHITE LED BOARD

LED CODE +
LED CODE –

LED CODE +
LED CODE –

Output 1+ : **RED**
Output 1– : **BLUE**

+ 2700K Warm
–

LINE
NEUTRAL
GROUND

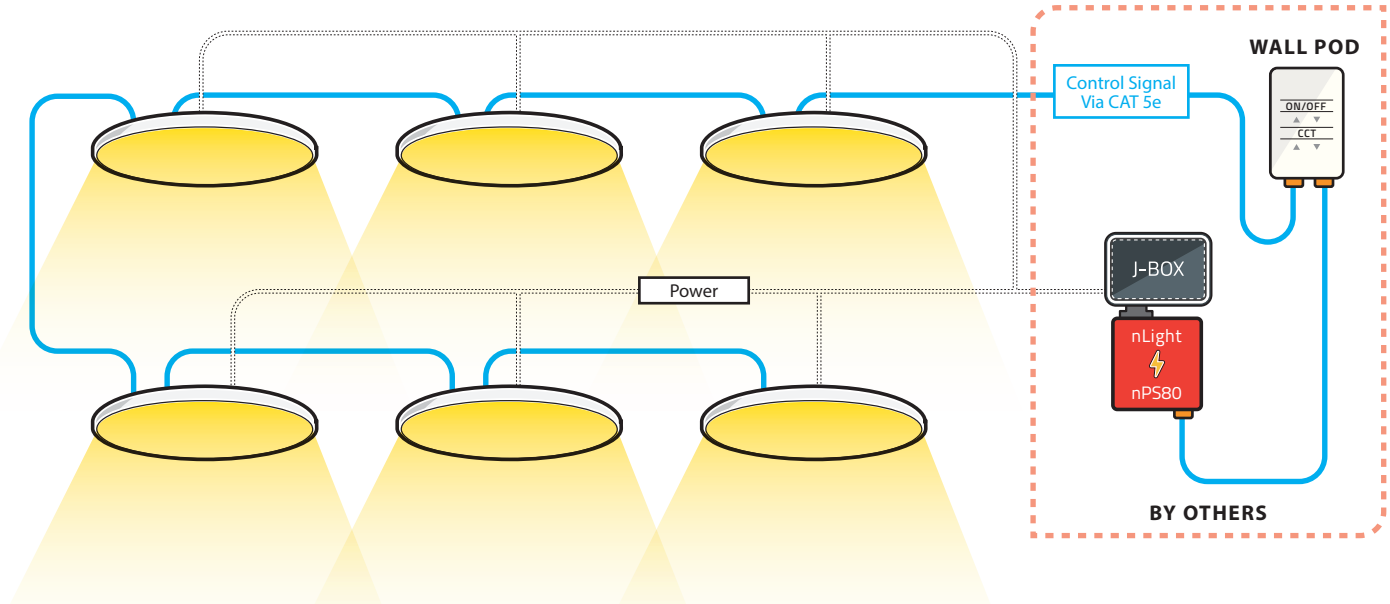Output 2+ : **RED / WHITE**
Output 2– : **BLUE / WHITE**

+ 6500K Cool
–

nLIGHT

SC – nLight
(nLight Control of Color & Intensity, Multiple Fixtures)

TYPICAL NETWORK LAYOUT

3 CORDS REQUIRED

Control Signal Via CAT 5e

WALL POD

ON/OFF ▲ ▼
CCT ▲ ▼

J-BOX

nLight ⚡ nPS80

Power

BY OTHERS

BUS POWER CONSUMPTION

	LO			
	D1	**D9**	**SC**	**DC**
P8912				
P8920	**1**mA		**2**mA	N/A
P8930		**1**mA	**3**mA	
P4040				

— All nLight RJ45 ports are interchangeable (no dedicated IN or OUT).

— nLight zones must have a net positive amount of bus power. See table below for bus power consumption as a function of fixture size and output. Bus power is supplied by power/relay packs (nPP16 family and nPS80), power supplies (PP20 PL BP and nPANELS), nLight enabled fixtures, and bridges.