nTune™ — User Programming Guide

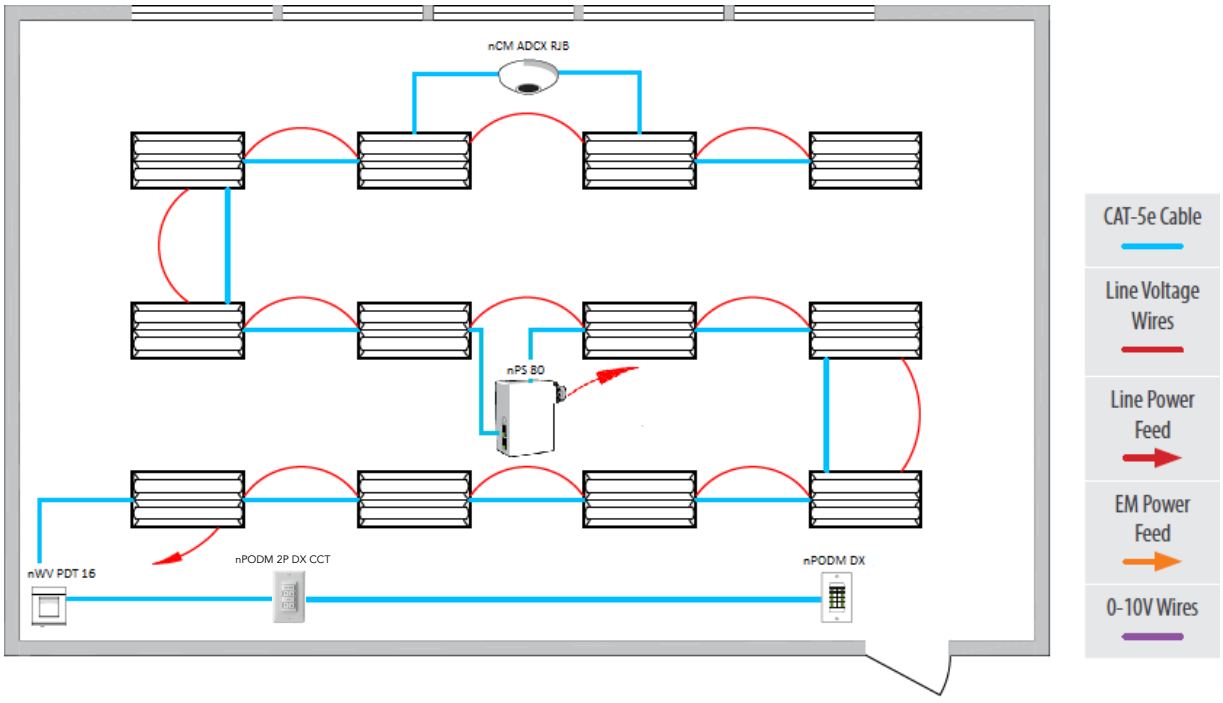
The nTune programming guide provides an overview of the Tunable White Mainstream Dynamic Feature application in SensorView with programming instructions for an nLight® enabled Acuity Brands luminaire with nTune technology.

Features

- Full control over color with Productivity range (3000K-5000K) or Rhythm range (2700K-6500K)
- Works with all existing nLight network switches, sensors, and controls

Note: nTune luminaires require external bus power to operate.
Please refer to the graphic at the bottom of page 2 for the power calculation

Application Layout:



Bill of materials

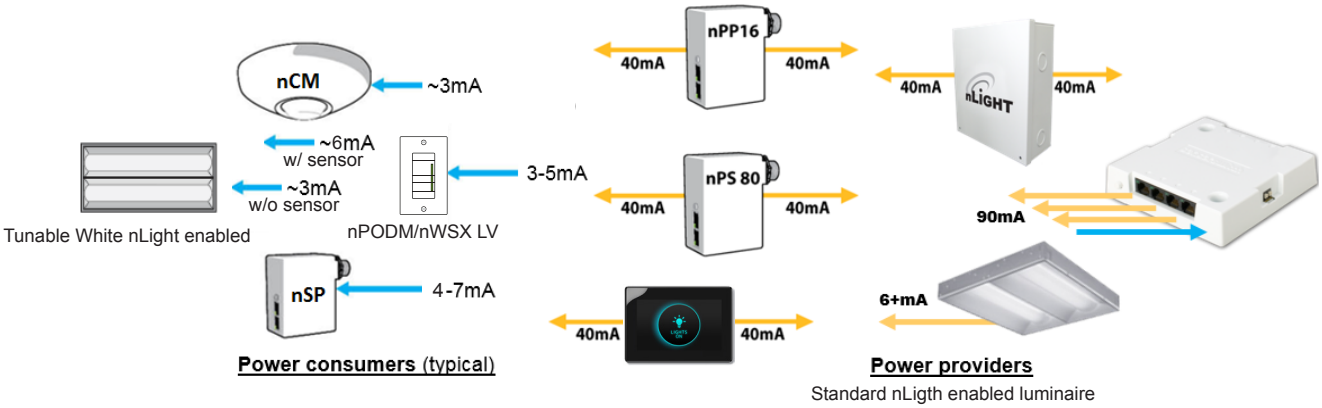
Label	Qty	Product #	Description
	12	Rubik, BLT, Slot, Bruno, Whisper, Cerra 10, LightFlex Tunable White LED	nLight Enabled Fixtures with nTune
	1	nPODM 2P DX CCT	On/Off, Raise/Lower Intensity, Color Temperature Control
	1	nPODM 2P D	On/Off, & Lower WallPod
	1	nWV PDT 16	Dual Technology Wide View Occupany Sensor
	1	nPS 80	Bus Power Supply (80mA)
	1	nCM ADCX (RJB)	Automatic Dimming Control Photocell

NOTE: nLight enabled fixtures each consume either ~3mA of nLight bus power without a sensor or ~6mA of nLight bus power with a sensor:

- Bus power is supplied by power/relay packs (nPP16 family and nPS 80), power supplies (PP20 PL BP and nPANELS), nLight enabled fixtures (non-EMG or TUWH options), and bridges
- nPP16 D ER and nPP20 PL are self-powered and do not contribute bus power to the nLight zone
- Power for all bus power consuming devices is delivered via the CAT-5e
- nLight zones need to have a net positive amount of bus power

Typical nLight Bus Power Calculations

nLight enabled luminaires with nTune



Available nLight Wallpods with default Tunable White control

nPODM 2P DX CCT

nPODM 4S DX

nPODM 4S

nPODM 4S DX EDUTW

nPODM 4S EDUTW

With Productivity Range luminaire

Label	CCT	Percentage
General	4200K	60%
Reading	3000K	1%
Testing	3500K	25%
Energy	5000K	100%

Application Examples:

2700K

3500K

4750K

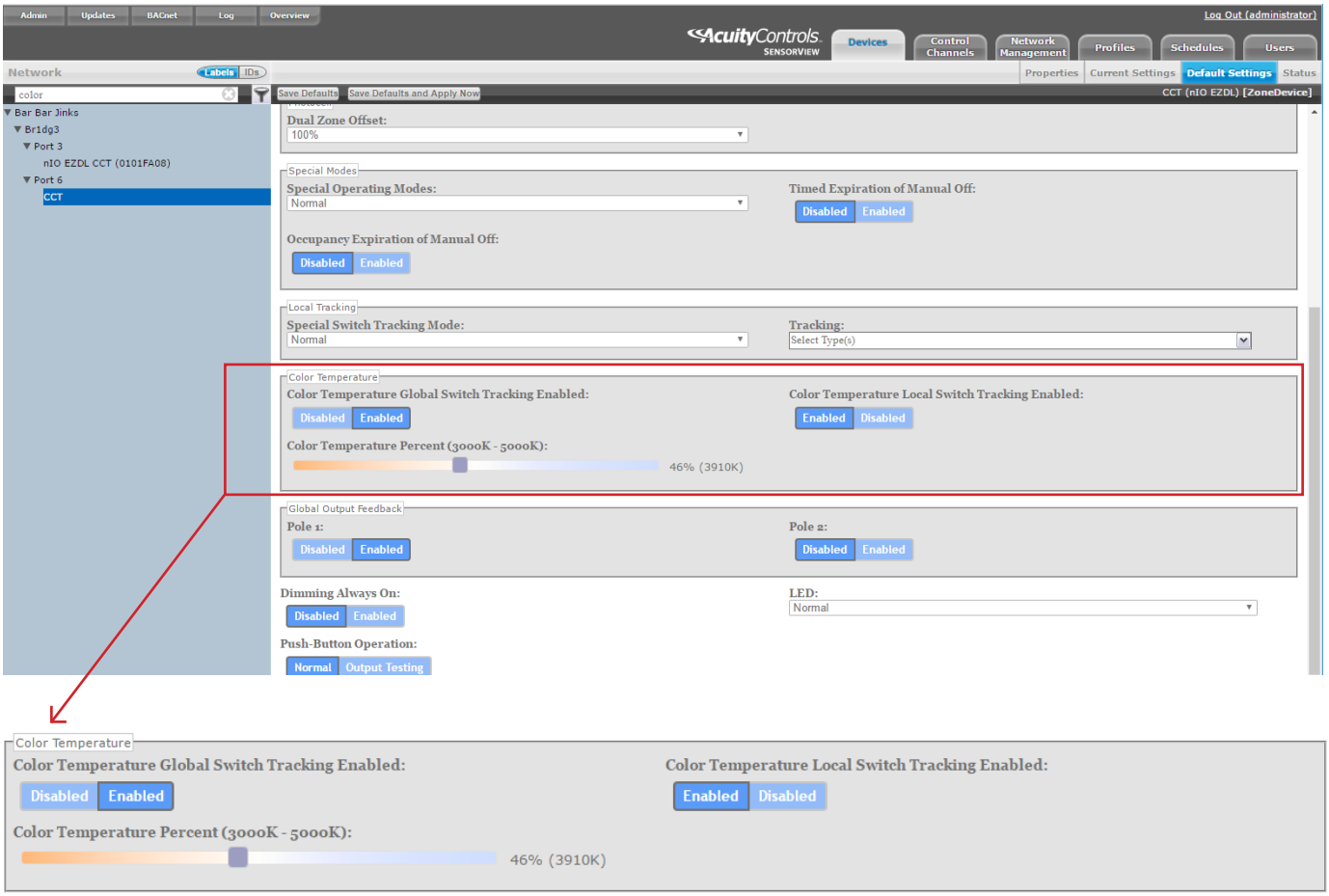
6500K

Programming Tunable White through SensorView

Acuity Brands Tunable White fixtures with nTune technology have an nLight model nIO EZDL/EZDA CCT embedded device which displays as a dual pole device within SensorView.

- Pole 1: Intensity control - maintains all of the same settings as the current nIO EZ PH device, including capability to track switch/photocell/occupancy channels.
- Pole 2: Color temperature control – ONLY tracks switch channels; does not have settings to track photocell/occupancy channels.

These devices show with an additional group of settings on the device default settings page:



*This range shown matches the range of the luminaire.

These settings each have the following operation:

- **Color Temperature Global Switch Tracking Enabled**: Allows user to enable/disable global switch tracking commands
- **Color Temperature Local Switch Tracking Enabled**: Allows user to enable/disable local switch tracking commands
- **Color Temperature Percent:** Current color temperature of fixture as a percentage. The color temperature percentage maps to fixture color temperature via the following chart:

Productivity Range (3000K-5000K)

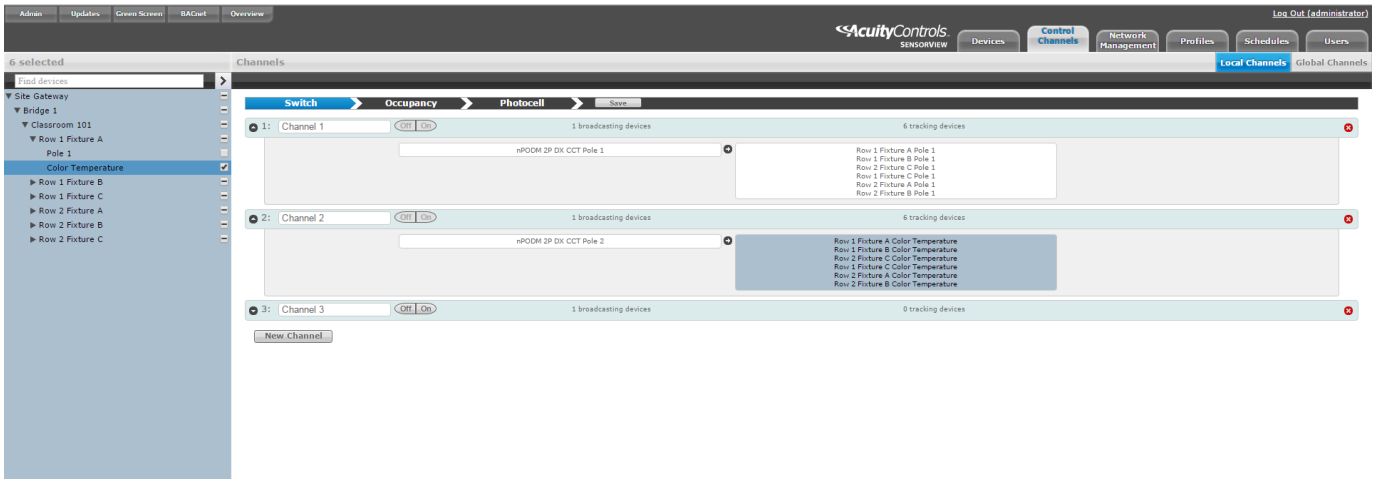
Percentage	Color Temperature
1%	3000 K
5%	3100 K
10%	3200 K
15%	3300 K
20%	3400 K
25%	3500 K
30%	3600 K
35%	3700 K
40%	3800 K
45%	3900 K
50%	4000 K
55%	4100 K
60%	4200 K
65%	4300 K
70%	4400 K
75%	4500 K
80%	4600 K
85%	4700 K
90%	4800 K
95%	4900 K
100%	5000 K

Rhythm Range (2700K-6500K)

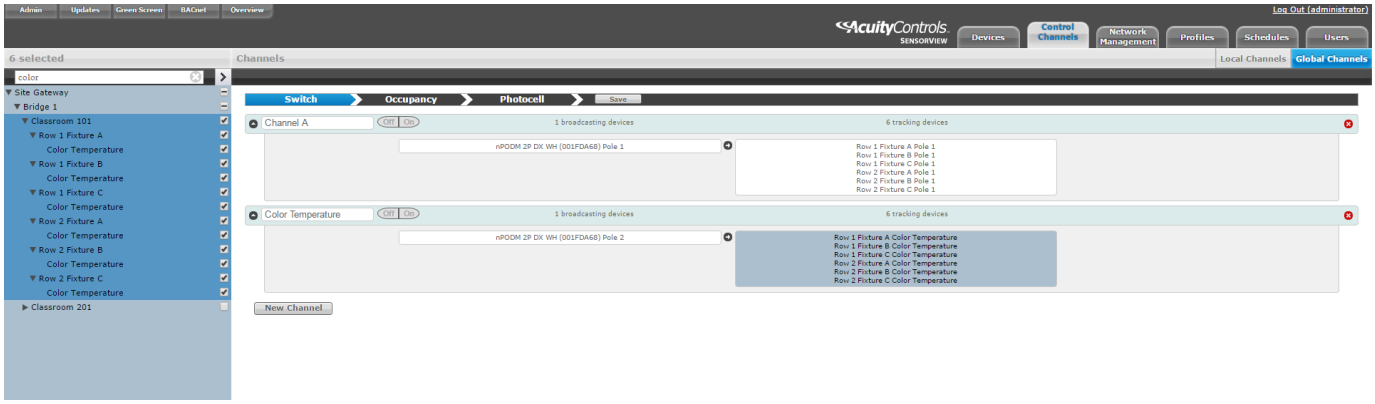
Percentage	Color Temperature
1%	2700 K
5%	2890 K
10%	3080 K
15%	3270 K
20%	3460 K
25%	3650 K
30%	3840 K
35%	4030 K
40%	4220 K
45%	4410 K
50%	4600 K
55%	4790 K
60%	4980 K
65%	5170 K
70%	5360 K
75%	5550 K
80%	5740 K
85%	5930 K
90%	6120 K
95%	6310 K
100%	6500 K

Color temperature is available via local/global switch channels for assigning to switch control or preset scene control; also available as a device setting for profile scene control. The nIO EZDL/EZDA CCT will display as a 2-pole device when completing this programming:

Local Switch Channel Tracking Screenshot



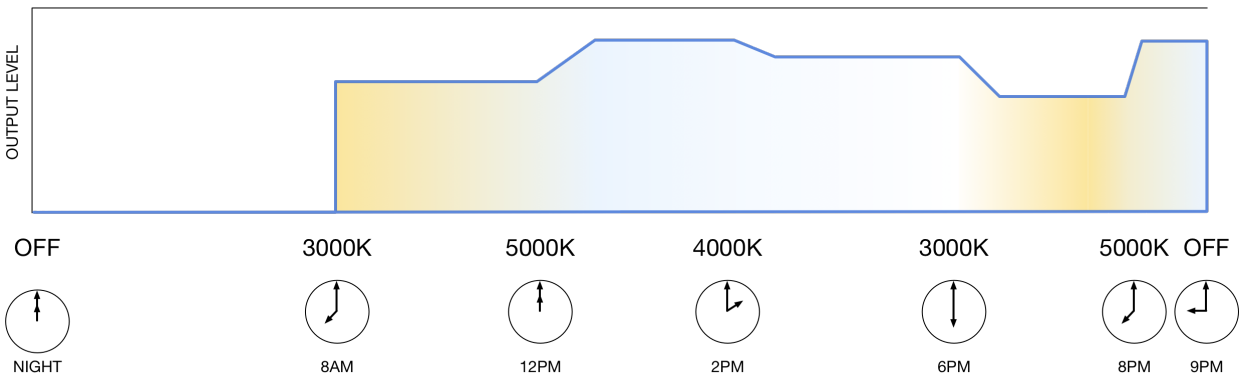
Global Switch Channel Tracking Screenshot



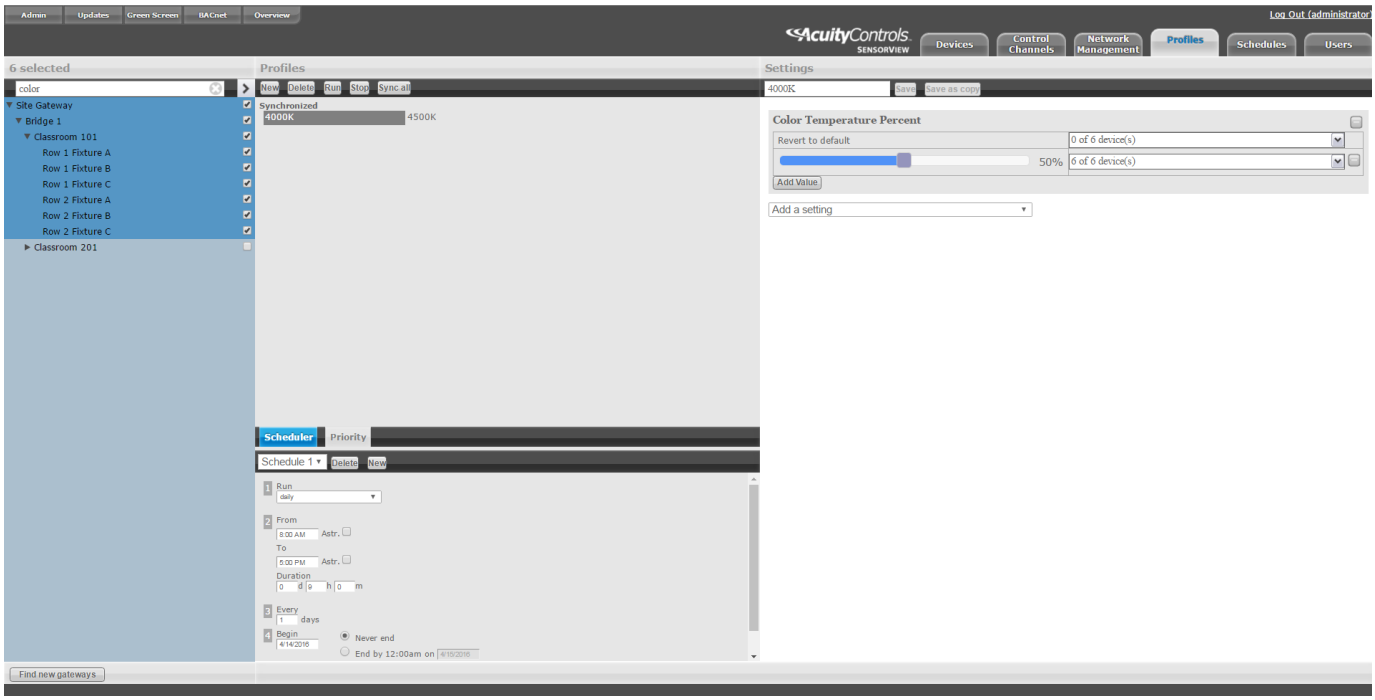
System scheduling can be used to adjust the color temperature through the day – this is accomplished by creating "global profile scenes" at scheduled times of the day.

There are two notes that should be applied/considered when using this feature:

1. "Global profile scenes" modify all device settings to defaults, except for those added in the settings window. Therefore, if the fixture intensity ("occupied bright level") has been modified by the end user from a dimming wallpod, the "wallpod dimming adjustments" setting should be set to "permanent" to stop the fixture intensity from changing when each scheduled event implements. The same process applies to the "override" setting if the lights were overridden off by a wallpod device.
2. The "dimming rate" setting on the nIO device can be used to adjust the amount of time to transfer from one color temperature to another when a "profile scene" implements.
    - **a.** Slowest - 300 seconds
    - **b.** Slow - 15 seconds
    - **c.** Normal - 5 seconds
    - **d.** Faster - 2 seconds
    - **e.** Fastest - 1 second



Example of “global profile scenes” created in SensorView



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