

V-Tune-Azlime

(3-channel CCT Control)

V-Tune-Azlime provides a wide range of colour temperature from 2,200K to 10,000K, or even up to natural sky-like azure colour by a unique 3-circuit control method. Unlike conventional tunable LEDs, not only CCT can be controlled, but also colour tone can be controlled and XY chromaticity can be set right on top of a black body line.

(= Ideal natural/ comfortable colour)

The fixture can control the melanopic ratio as well, which is a key factor for an effective human centric lighting solution.



The image shows a series of four parallel LED light tubes. From top to bottom, they transition in color from a pale, almost white light to a bright yellow, then a warm orange, and finally a deep, rich orange-red. This visual gradient demonstrates the 'Triangle CCT Tuning' capability of the fixture.

Lime
Colour LED

Azure(cyan)
Colour LED

Warm White
2200K LED

Triangle CCT Tuning
~ Azure-Lime-Warm ~
3 LEDs / 3 Circuits

DC24V
(3-channel)

16W/m
(max)

Indoor
use

Custom
Length
(Build-to-order
basis)

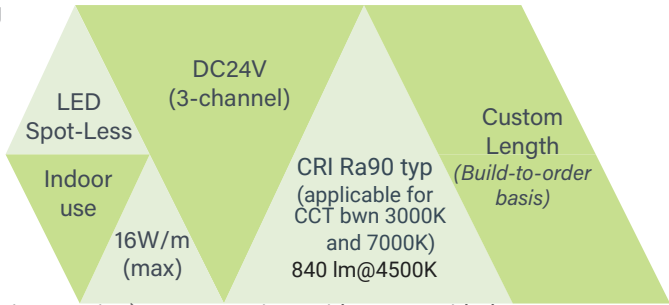
LED
Spot-Less

Ra90 typ
(applicable
for CCT
btw 3000K
-7000K)

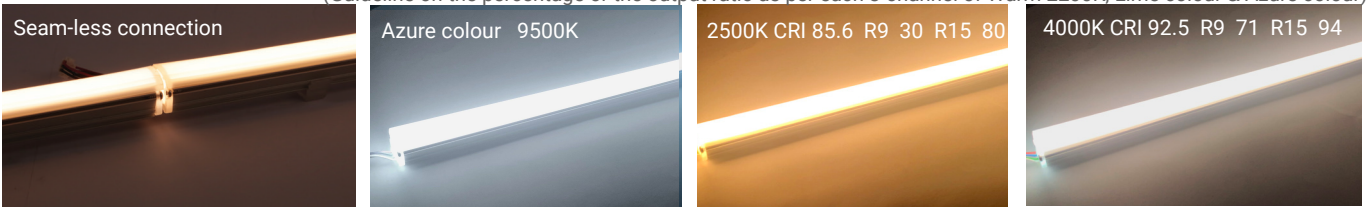
FEATURES

- Perfect solution for ambience lighting that requires CCT tuning
- Colour temperature tunable in the range from 2,200K to 10,000K (Azure-like colour).
- CCT & XY chromaticity setting by using DMX system, DALI, or Casambi control system (3-channel).
- LED-Spot-Less. Uniform lighting effect along the whole surface of the diffuser cover.
- Able to adjust melanopic ratio (stimulus) -> help assist in human centric lighting solutions.

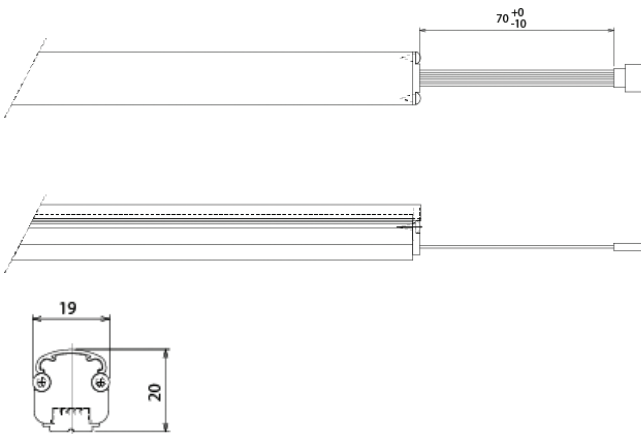
BASIC SPECIFICATION



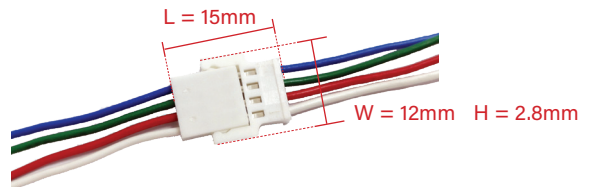
For CCT setting/ Colour tone (XY points setting), programming guidance provided upon request.
 (Guideline on the percentage or the output ratio as per each 3-channel of Warm 2200K, Lime colour & Azure colour)



MECHANICAL DRAWING



Male-Female Connector
 (Standard Spec comes with this connector)



- Red Cable = Common Positive (+) 24Vdc
- Green Cable = Lime Colour (-)
- Blue Cable = Azure (Cyan) (-)
- White Cable = Warm White (-)

Specification & design are subject to change without prior notice

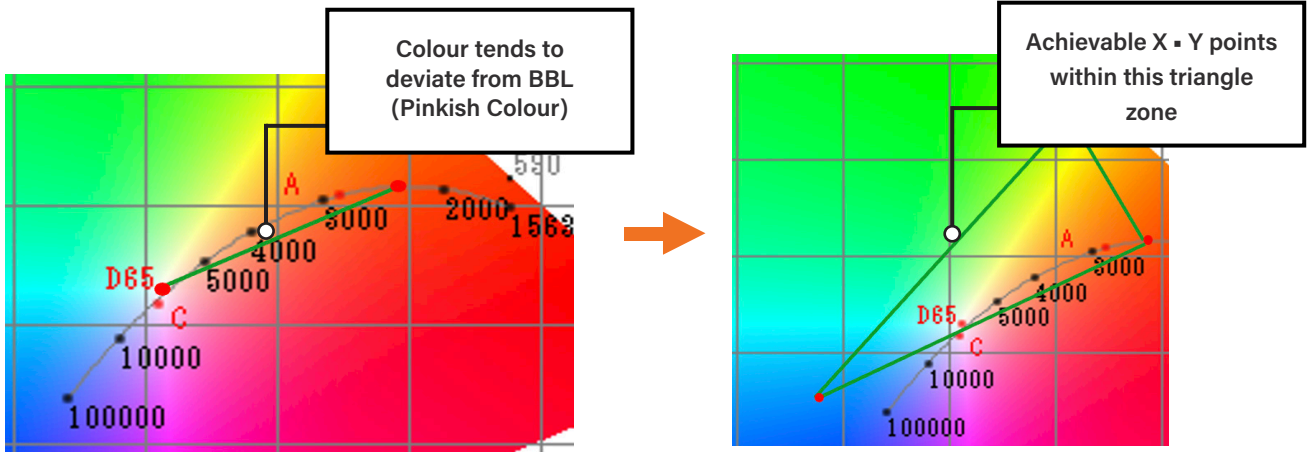
TRIANGLE CCT TUNING

~ By the use of Azure-Lime-Warm 3-LED / 3-Circuit ~

X = Y Control Closer to Black-body Line

» Natural / Comfortable colour tone with wide range of CCT

Conventional 2-Circuit Tunable Control (By Daylight-Warm)

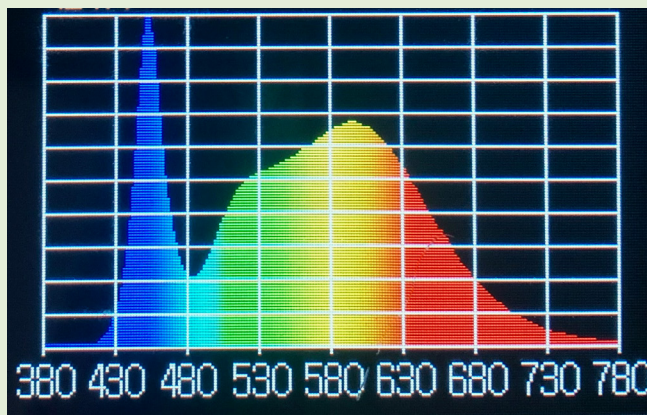
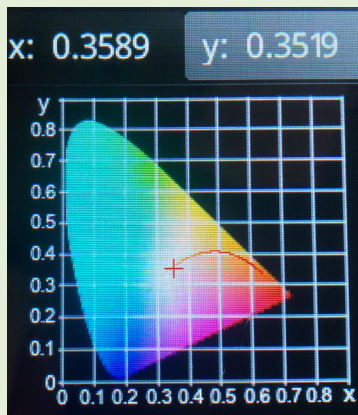


Spectrum & CRI Ra.R9.R15 Comparison

The below data shown is just an example. For various other CCT, actual measurement data to be provided upon request.

In case of CCT4500K

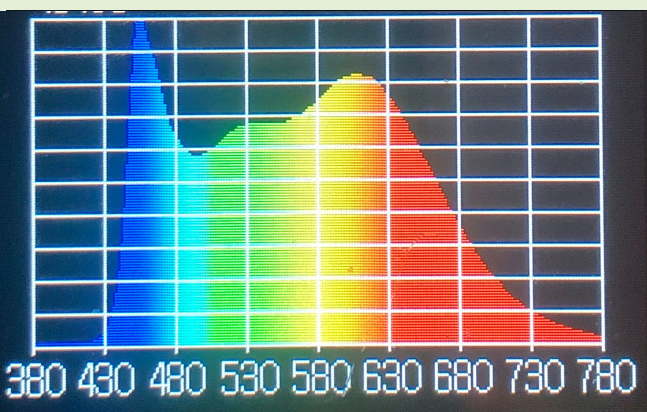
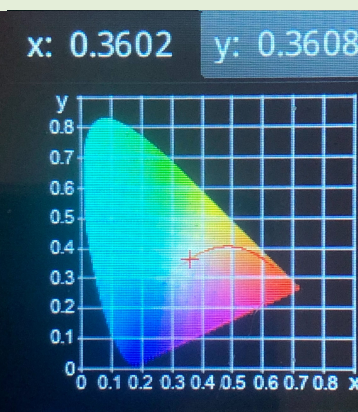
Conventional Tunable LED



CRI Ra 85
R9 35
R15 82
MR: 0.5

*MR = Melanopic Ratio

V-TUNE Azlime



CRI Ra 92.5
CCT 4501K
R9 73.9
R15 95.2
MR 0.89

*MR = Melanopic Ratio

Right on top of the black body line

Power consumption/ Lumens / CRI As per different CCT setting

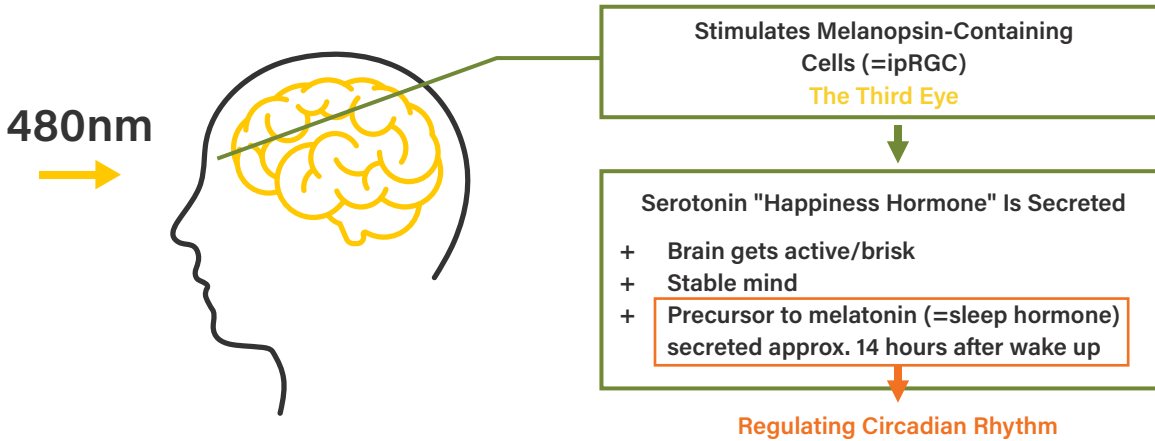
Actual Measurement				Max Power consumption (W/meter)
CCT	CRI Ra	R9	R15	
2223	82,1	18,2	74,5	7,5
2306	83,7	23,4	76,9	8,4
2504	86,1	32,0	80,7	10,3
2700	88,1	39,8	83,9	12,4
3004	90,0	47,1	86,4	13,9
3225	91,2	55,2	89,7	14,6
3516	91,9	61,9	91,8	15,1
3998	92,4	71,9	94,0	15,7
4501	92,5	73,9	95,2	16,1
5012	91,7	87,0	94,8	16,1
6030	91,5	88,5	92,5	16,6
6594	91,2	83,3	90,9	16,5
7438	90,3	76,3	86,1	16,0
8399	87,9	57,0	82,4	16,0
9429	85,3	43,5	77,9	15,7

Data shown above is the typical value and not the guaranteed spec.

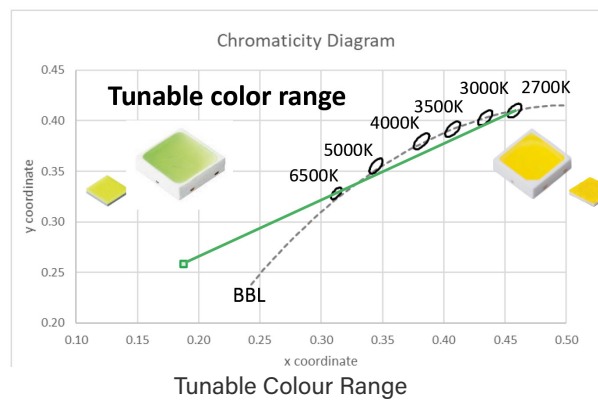
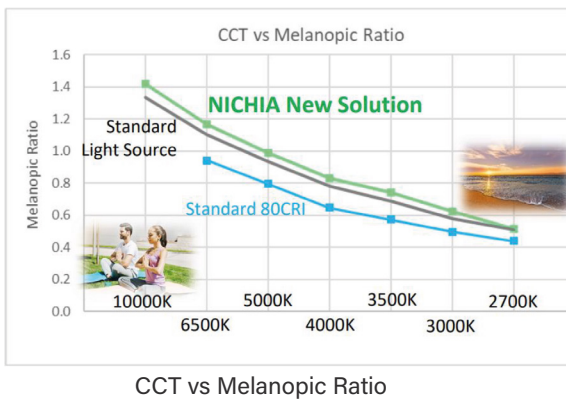
TRUE HUMAN CENTRIC LIGHTING SOLUTION

~ Circadian Rhythm X Melanopsin Stimulation ~

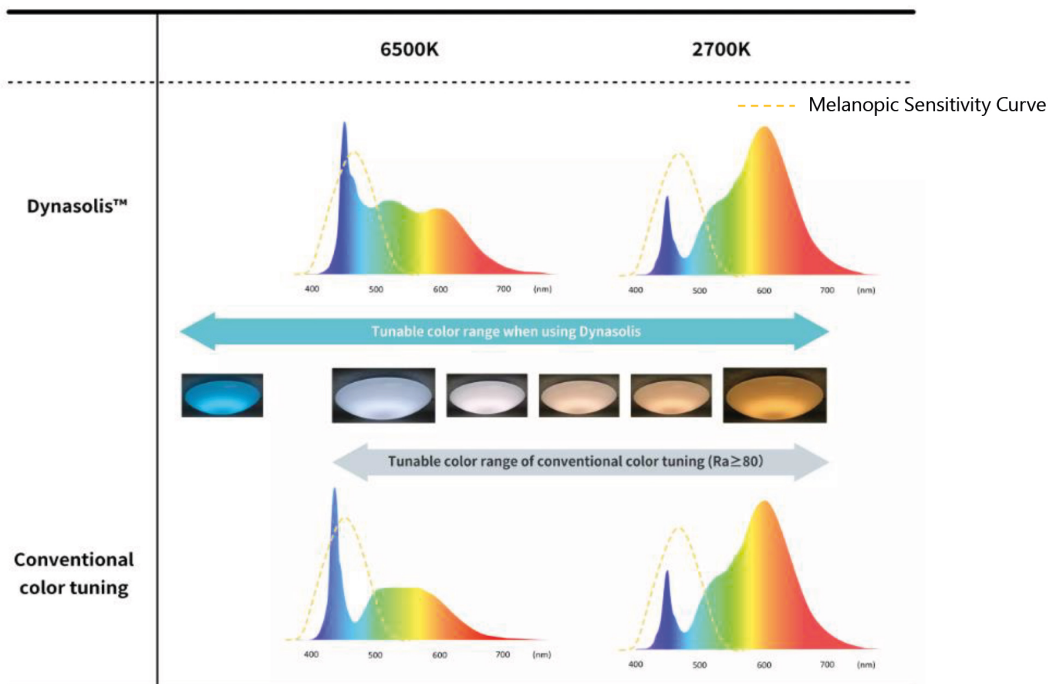
1. Why Aztune 480nm?



2. Better Melanopic Ratio vs Standard Light Source (By the use of NICHIA's Azure LED & Dynasolis™ technology)



3. Achieve high EML, while maintaining high IPW and high CRI that are required for HCL



Spectrum Comparison between Dynasolis™ and Conventional Tunable Light

OPTIONAL ACCESSORIES

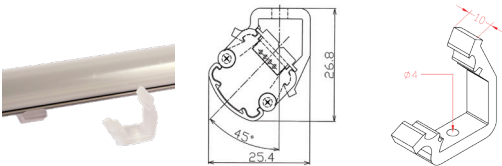
1 Mounting Clip Bracket 0° Flat Type

Model: MC-0DEG

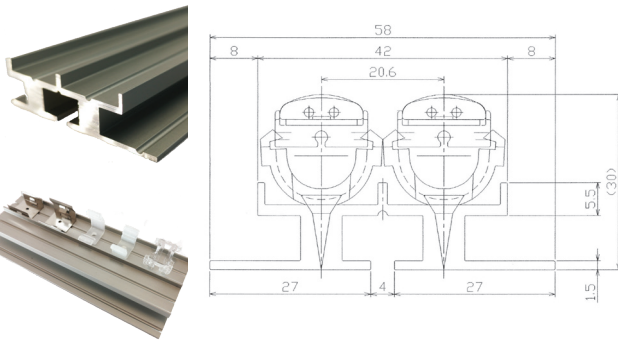


2 Mounting Clip Bracket 45° Type

Model: MC-45DEG



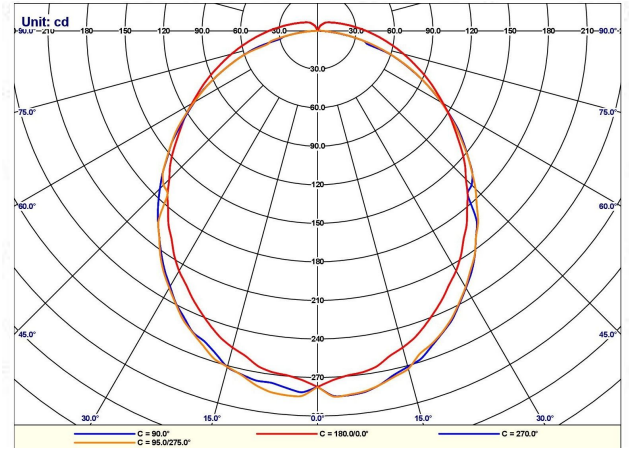
3 Aluminum Guide Rail



PHOTOMETRICS

1 V-TUNE-AZLIME (L960mm)

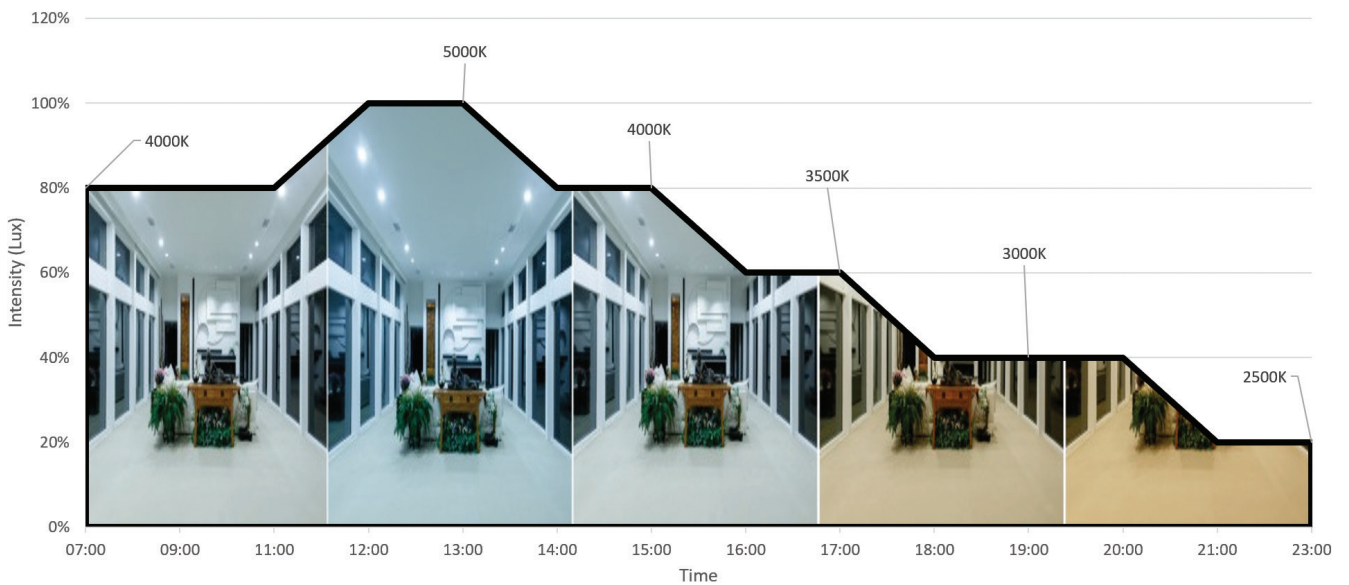
Model: VTX0960-AZLM
L960mm set @ CCT 4500K
Luminous flux (Luminaire): 840 lm



IES file available upon request

CIRCADIAN RHYTHM PROGRAMMING CHART

Circadian Rhythm Programming (Example for Optional DMX Programming)



MODEL NO

Model No

VTX XXXX – AZLM

Fixture Type

Fixture Length

Color Temperature

Fixture Type

VTX → V-Tune Series

Fixture Length

0960 → L960mm, **Standard**

0640 → L640mm, **Standard**

0320 → L320mm, **Standard**

1175 → L1175mm, Build-to-order (= Maximum customizable fixture length)

0112 → L112mm, Build-to-order (= The shortest customizable fixture length)

860 → L860mm, Build-to-order

747 → L747mm, Build-to-order

Color Temperature

AZLM → 3-circuit CCT Tunable 2,200K - 10,000K

Example

VTX 0960 – AZLM

Fixture Type

Fixture Length

Color Temperature

V-Tune Series

L960mm, Standard

Azlime Tunable
2,200K - 10,000K

PRODUCT SPECIFICATIONS			
Product Name	V-Tune Azlime (Aprx. 16W/meter at maximum output)		
Model No.	VTX0320-AZLM (L320mm)	VTX0640-AZLM (L640mm)	VTX0960-AZLM (L960mm)
Input Voltage	24Vdc (TDK Lambda recommended)		
Power Consumption	5.0 W (Aprx. 16W/meter)	10.1 W (Aprx. 16W/meter)	15.2 W (Aprx. 16W/meter)
Dimension (mm)	320*19*20(H)	640*19*20(H)	960*19*20(H)
Weight	98 grams	188 grams	285 grams
Casing Body	Aluminium extrusion heatsink with frost polycarbonate cover		
LED Beam Angle	105°	105°	105°
Operating Temperature	-10°C~45°C	-10°C~45°C	-10°C~45°C
Maximum Length of Series Connection	4 meter	4 meter	4 meter
Option Parts	Mounting clip bracket 0° (flat) type or 45°fixed angle type		
No of LEDs	63	126	189
Power Supply Unit	24Vdc Constant-Voltage Switching Power Supply :: TDK Lambda brand recommended)		
Dimming Control	:: With recommended DMX or DALI or Casambi compatible dimming driver (3-channel, 24Vdc)		
Lumens (typical @ 3000K)	280 Lumens @4500K	560 Lumens @4500K	840 Lumens @4500K
Available LED Color			
Daylight 6500K	Available (= Dot-Less II)	Available (= Dot-Less II)	Available (= Dot-Less II)
Cool White 4000K	Available (= Dot-Less II)	Available (= Dot-Less II)	Available (= Dot-Less II)
3500K	Available (= Dot-Less II)	Available (= Dot-Less II)	Available (= Dot-Less II)
Light Warm 3000K	Available (= Dot-Less II)	Available (= Dot-Less II)	Available (= Dot-Less II)
Standard Warm 2700K	Available (= Dot-Less II)	Available (= Dot-Less II)	Available (= Dot-Less II)
Dark Warm 2400K	Not Applicable	Not Applicable	Not Applicable
RGB Full Color	Available (= Dot-Less II RGB)	Available (= Dot-Less II RGB)	Available (= Dot-Less II RGB)

Specification is subject to change without prior notice.

PROJECT REFERENCE



Project List
Product Summary
V-Cove
V-Cove II P23 & P46
V-Cove II RGB
V-Tune-X
Dot-Less 1-2
Dot-Less II
Dot-Less II RGB
V-Spectra
V-Wash II
V-Wash II RGBW
V-Wide
V-Wide Aztune