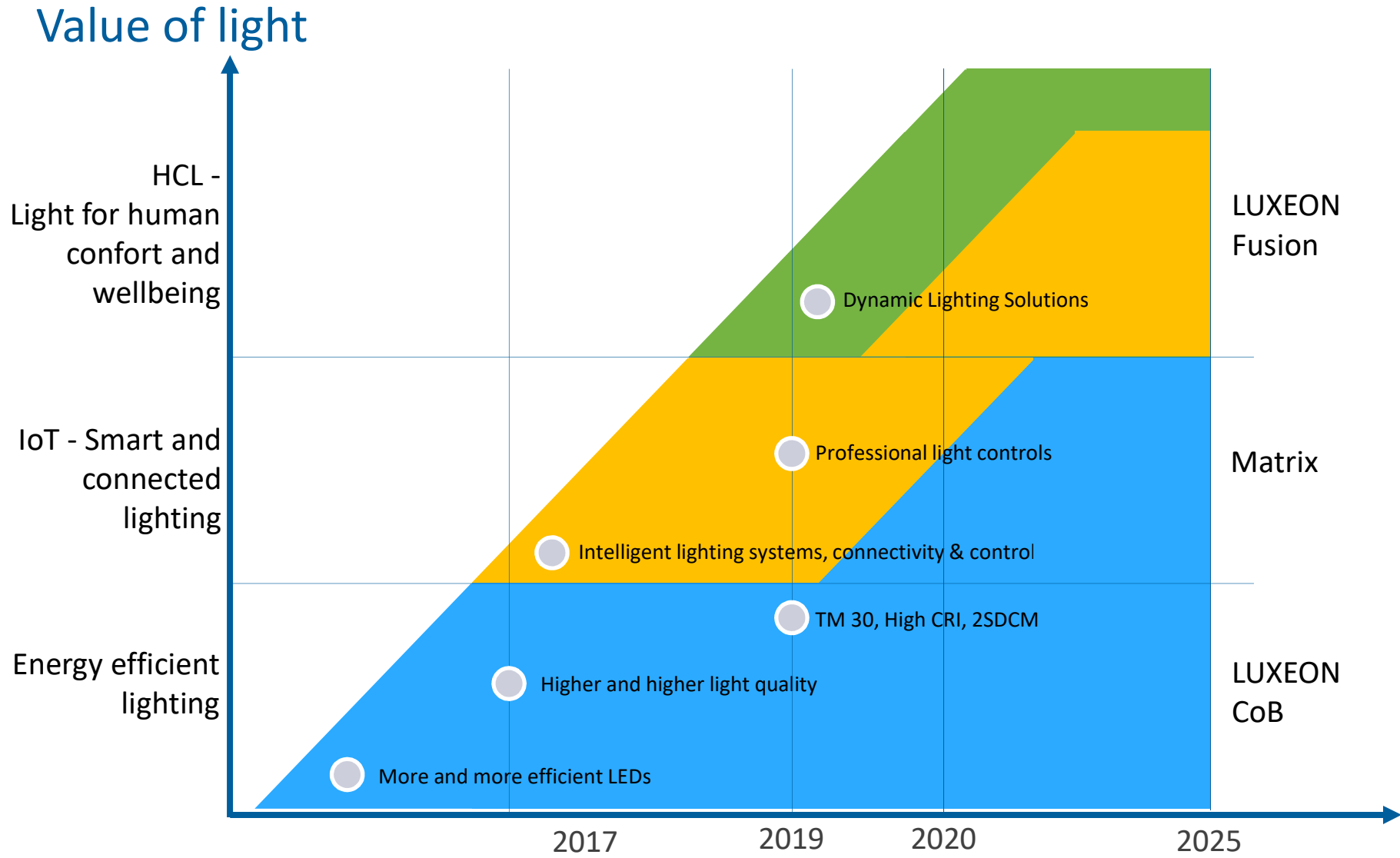


FUSION, DYNAMIC WHITE AND BEYOND

Andrea G. Banfi
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Lumileds: Help customers innovating faster than current products commoditize



LUXEON Fusion: DYNAMIC WHITE AND BEYOND

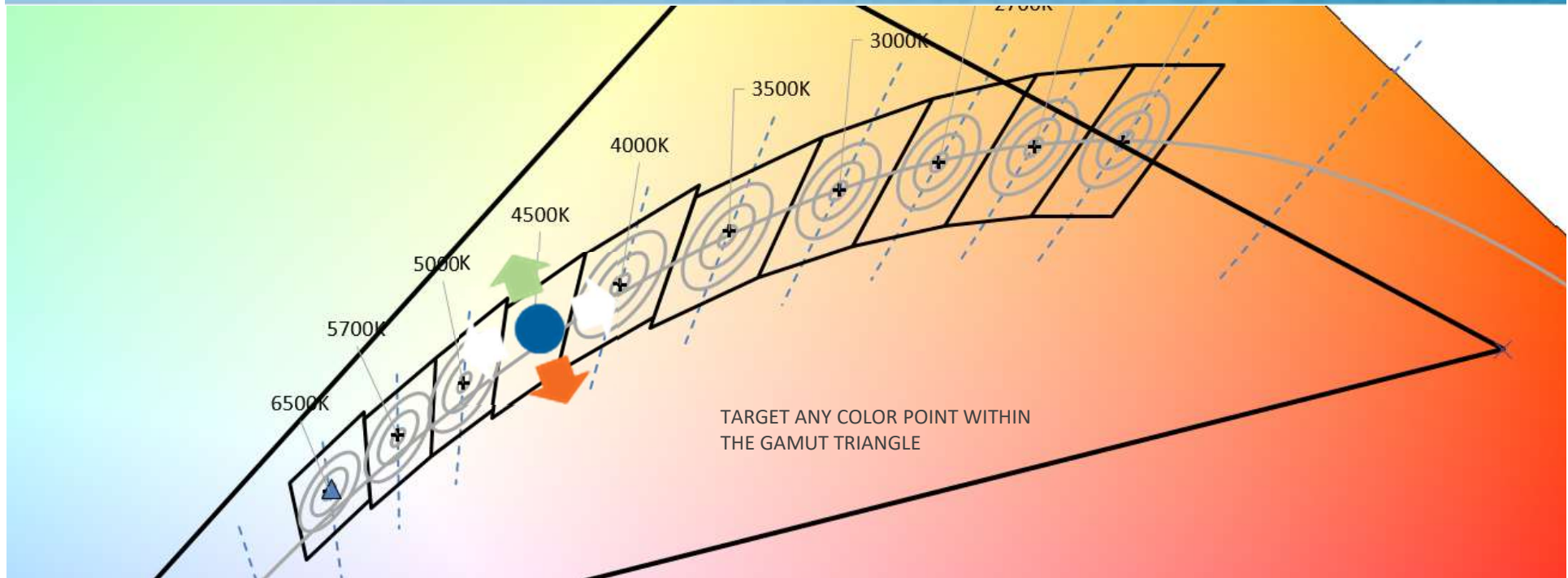
Fusion is our advanced approach to **precisely controllable white** light.



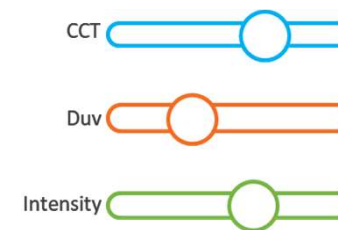
TECHNOLOGY AND KNOW HOW

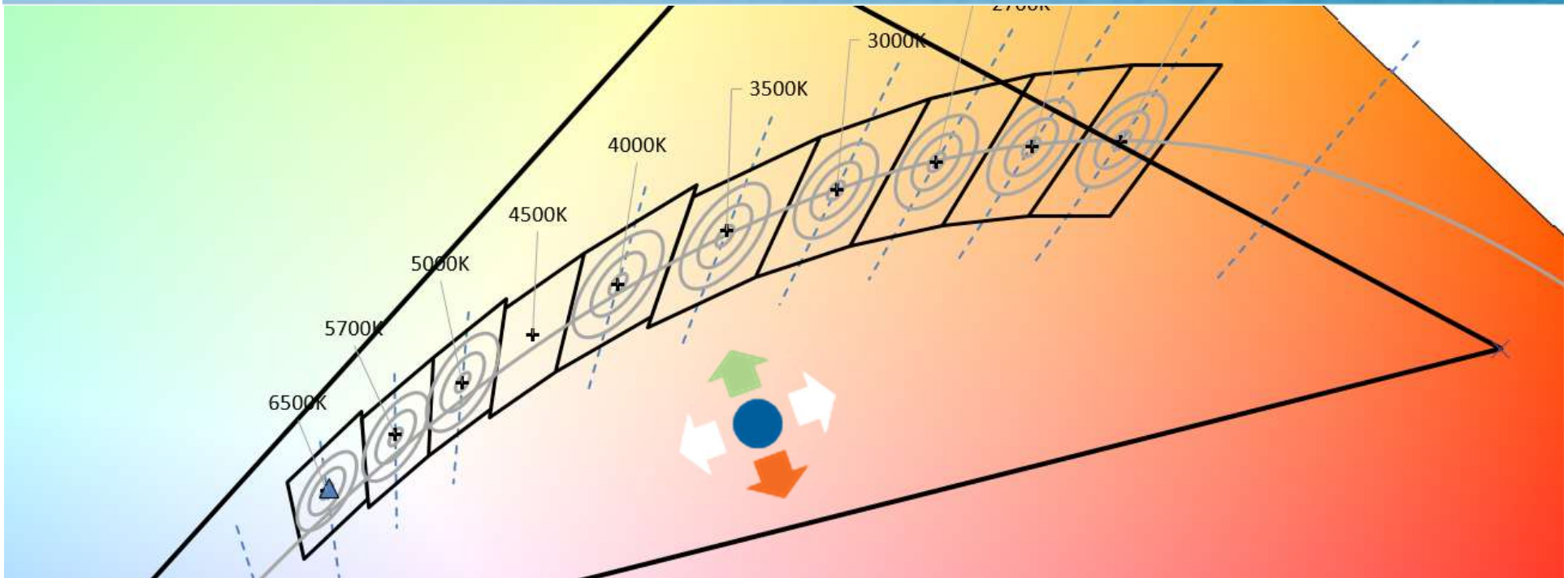
The careful combination of **phosphors**, **selected LED sources**, **electronics** and **proprietary control algorithms**, makes LUXEON Fusion a sophisticated solution that enables high-quality dynamic white light from the same luminaire.

Our binning optimization process also ensures color uniformity and consistency from each LUXEON Fusion board.



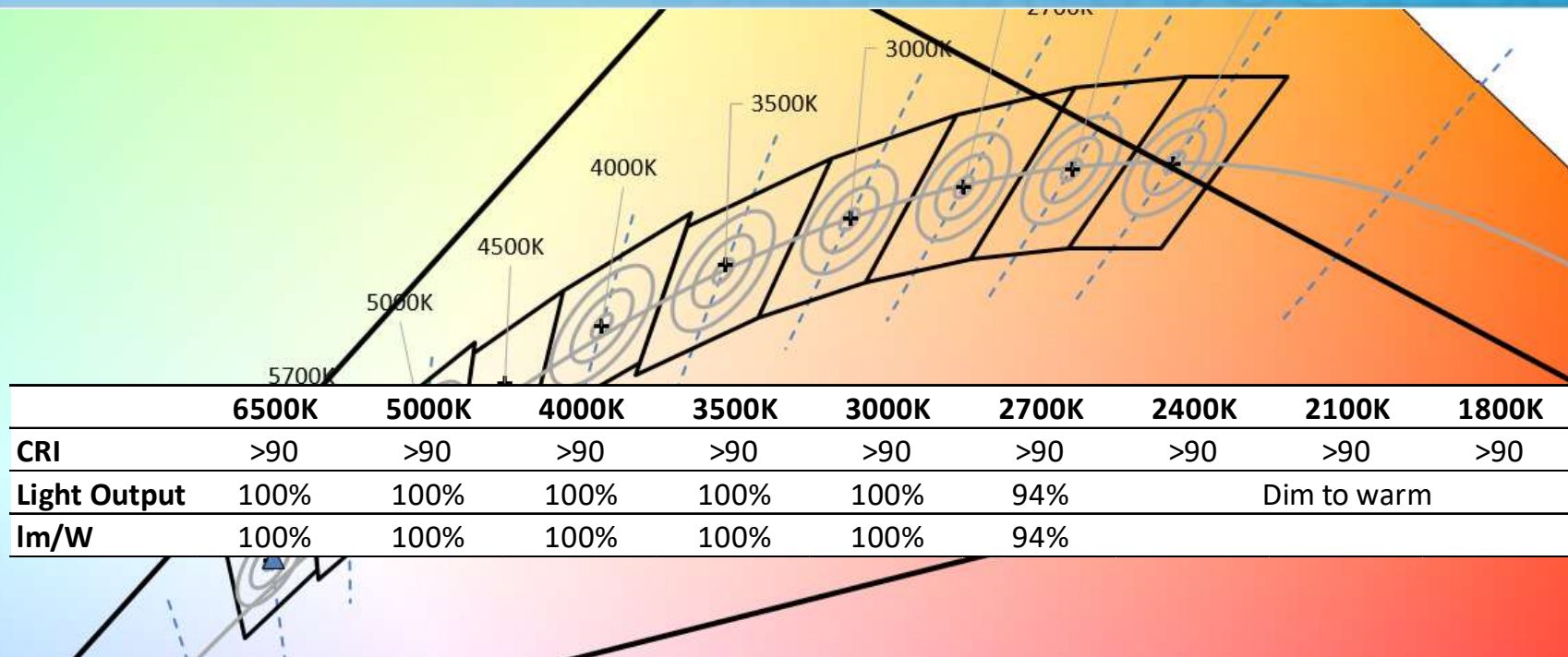
Imagine YOU can select and define almost infinite **CCT / Du'v' / intensity combinations** from the same fixture in both **static and dynamic** mode, adapting light to the specific needs of each individual project.





ALL IN ONE SINGLE PLATFORM

- ❖ Freedom of white color selection from the same fixture
- ❖ Dim to warm capability (candle light)
- ❖ Dynamically tunable white lighting (scenes)



PERFORMANCE

- ❖ CCT tuning range 1800K to 10000K, Track Planckian or off Planckian within 0.001 Du'v'
- ❖ >90 CRI, typical 94CRI above 3000K, R9>50
- ❖ Color consistency: 3McA, <2McA possible
- ❖ Average efficacy 150 lm/W
- ❖ Constant light output between 2,700K and > 6,500K with virtually no impact on efficacy, dim to warm 2700K -1800K

APPLICATIONS

Fixed CCT Setting - LUXEON Fusion is able to deliver consistent light output and efficiency across a large white color range, from 2700K to 10000K on the Blackbody locus | **Perfect color definition** | e.g. 2700K, 3500K, 5000K on Planckian

Color on Demand - LUXEON Fusion allows for the creation of unique lighting experiences, fulfilling specific tuning and color requirements that is becoming more and more important for designers seeking to execute a particular experience | **Post installation color correction** | e.g. 3195K, 2.5pts $Du'v'$ under Planckian 80% light intensity

Dim to Warm - same as an halogen, LUXEON Fusion enables dim to warm capability from 1800K to 2700K, which is highly coveted in hospitality and residential settings to set an atmosphere or mood | *CCT/ $Du'v'$ / intensity corrections based on personal comfort.*

Dynamic CCT - Especially useful for retail settings where various CCT patterns are needed (think of an owner who wants to accentuate certain areas on certain hours of the day), LUXEON Fusion enables dynamic CCT tuning before, during and even after installation | Human Centric Lighting



Key takeaways

For USERS and designers

On-site CCT adjustability and on-site installation color correction

- Very tiny color corrections
- Fully free color selection
- Consistent between light layers
- Dynamic White
- Dim to Warm

Always reproducible and scalable

For SHIPYARDS

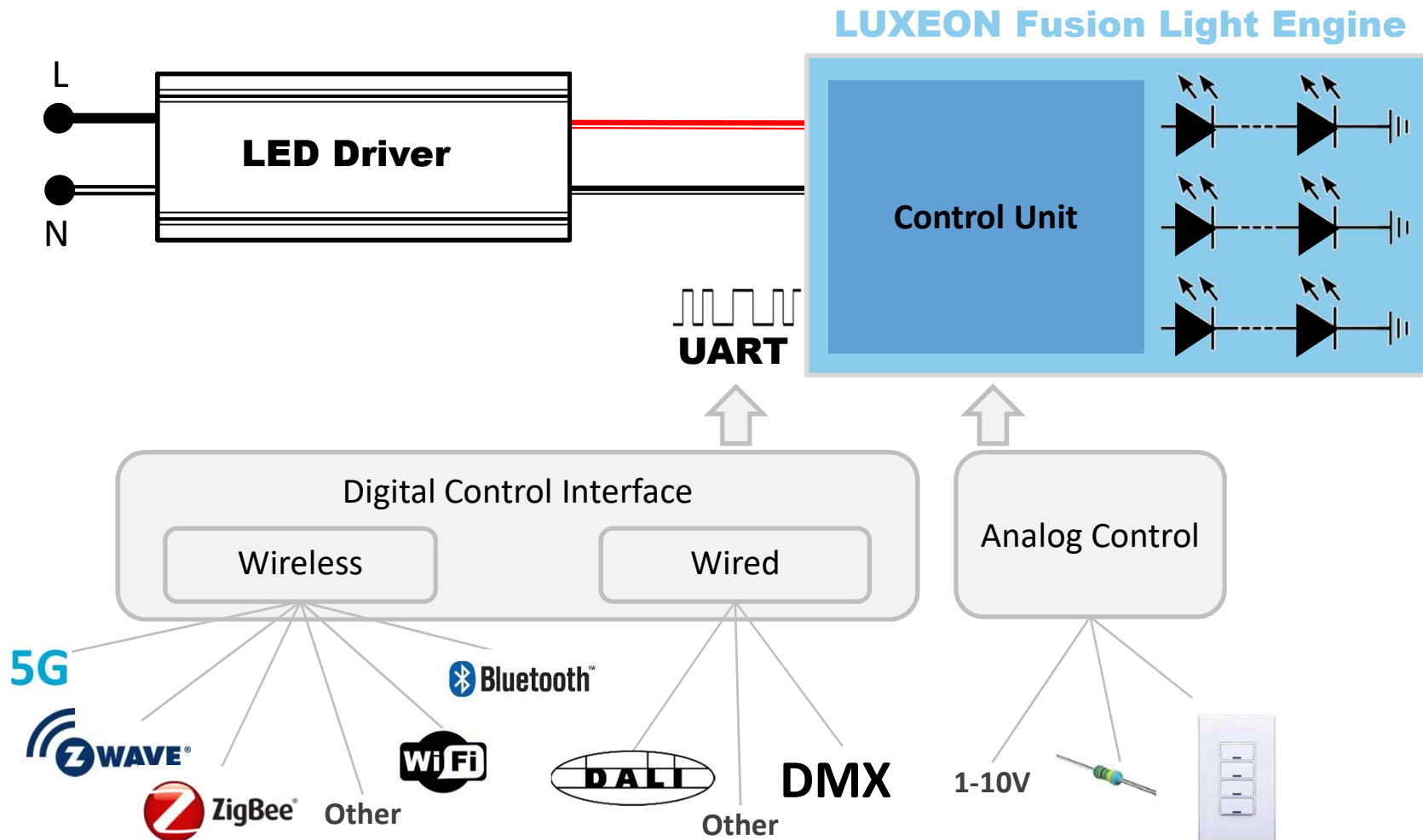
CCT adjustability before fixtures delivery

- Eliminate the problem of shift from original LED CCT due to optics
- Adapt to existing installations
- Precise color matching with previous productions
- supply chain optimization
- Lesser spare parts onboard

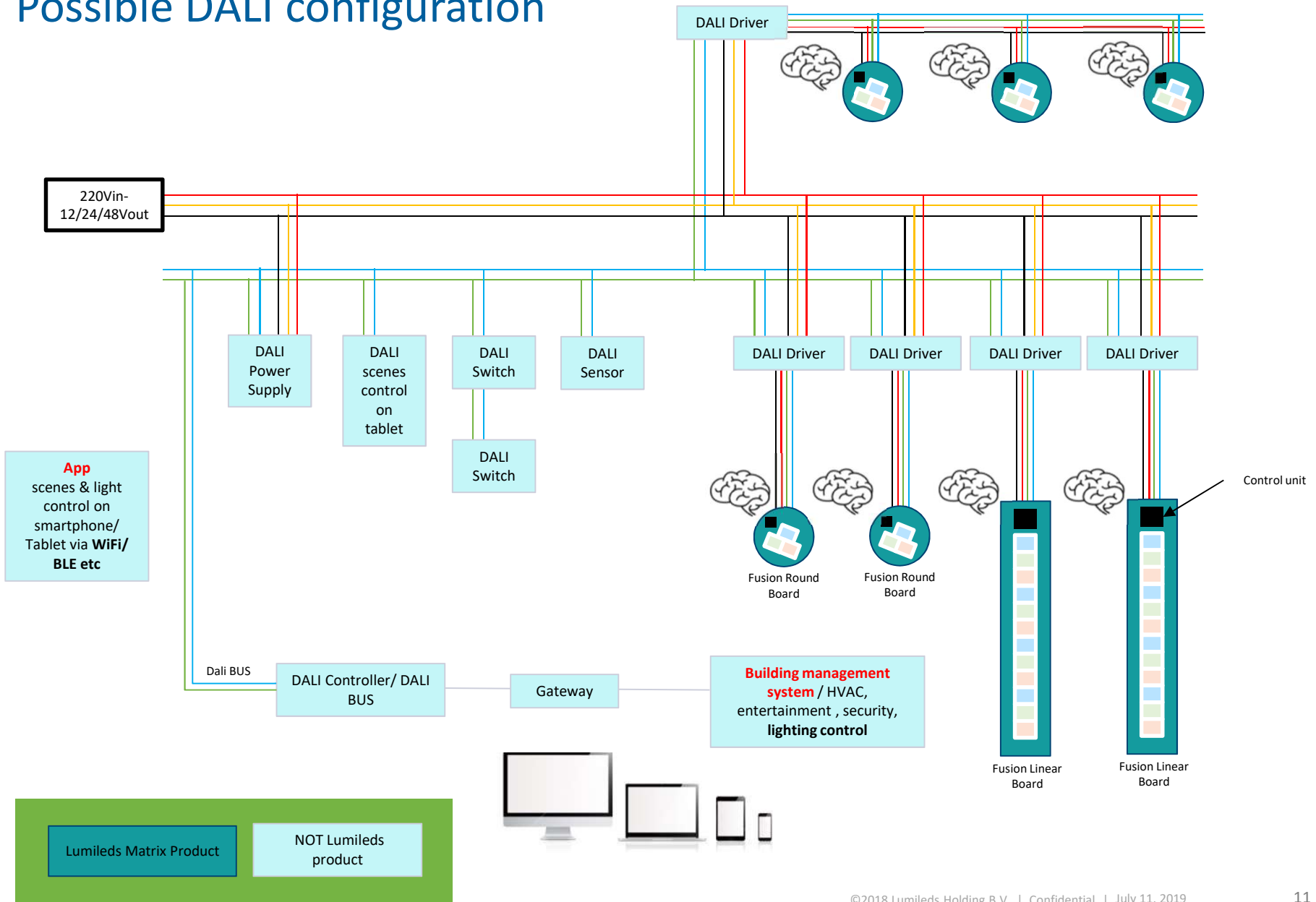
FLEXIBLE SYSTEM DESIGN | EASY INSTALLATION | FAST COMMISSIONING | EASY MAINTAINANCE | USER FRIENDLY

LUXEON Fusion System Block Diagram

Agnostic to drive and control implementations



Possible DALI configuration



Phosphor mix overview



TM30-15

CRI 70

CRI 80

CRI 90

HIGH CRI

CRI97 on BBL (**NEW**)
Crisp White CRI97 (**NEW**)

SPECIAL

Crisp White
Crisp Color
Atmosphere
Fresh Food

CUSTOM

FUSION

