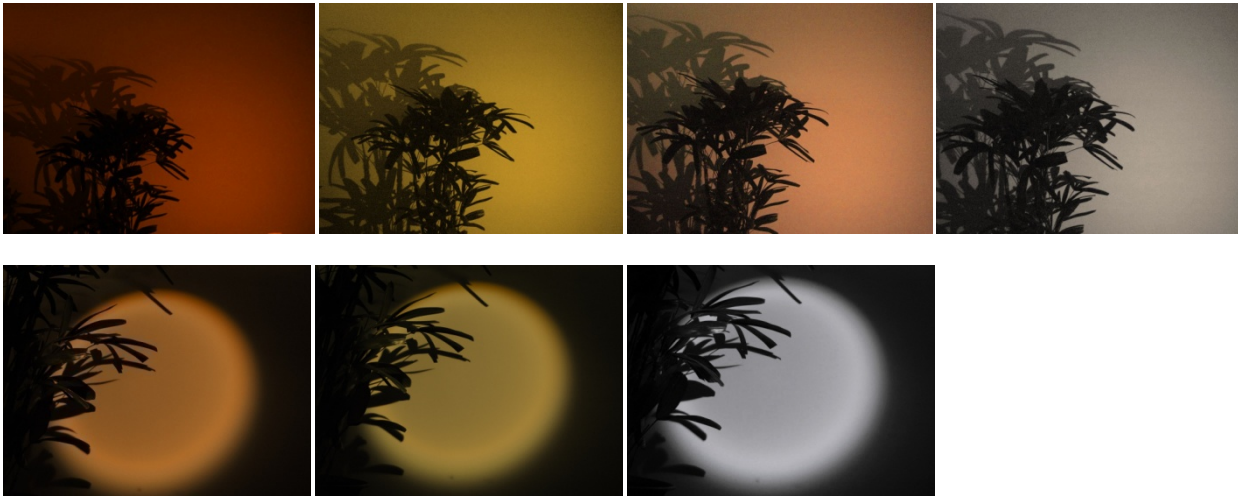


## Red Magic White™ RMW™

### TUNABLE WHITE LIGHT

#### Description

Red Magic White (RMW) technology from Yokohama Electron now offers lighting designers tunable white light from all in one high brightness and efficient LED components. Surpassing other white light sources RMW multi-chromatics combine blue and red LED chips with high stability multi-color phosphors. Now high Color Rendering Index (CRI) of 90+ combined with 119 lumen/watt efficiencies are possible in a wide range of white color temperature ranges from 2900K to 7500K. Imagine having warm Sunrise to cool Moonlight white available from a single source.



#### How does it work?

The magic comes from combining LED emitters with custom phosphor formulations to make adjustable LED components with specific white color regions, 3100k - 1625K (6 x5 mm device) and 7400K - 3000K (7 mm powerLED) are shown to suit specific requirements. Complex RGB control systems are no longer needed for compensation or control. Simple control of red and or blue die allows tuning of Correlated Color Temperature (CCT) on the planckian locus or within a specific white color region. Small package size and compact emitter geometry is optimal for optical design. The results are highly efficient environmentally friendly “Green” light sources which are adjustable to suit individual requirements.

#### Benefits

- High color rendering achievement by all in one LED.
- White color temperature can be adjusted by driving current of Blue & Red Chip.
- White color temperature can be adjusted for daytime and night (warm & cool white).
- White color temperature can be adjusted for outdoor and indoor lighting conditions.

#### Quality of light certification

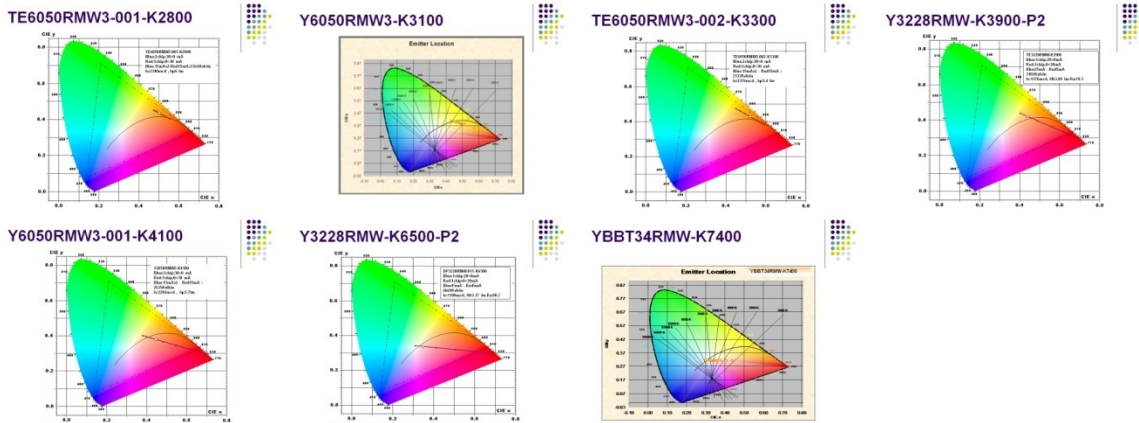
2007 to 2008 - months of rigorous characterization, accelerated ageing and life-cycle testing assures a RMW™ LED Lighting Solution with improved efficiency, with white color ability, stability & uniformity, to enhance the quality of the changing needs of our environments. The full definition of this novel technology is still in development by Yokohama Electron Co., Ltd.

## Applications

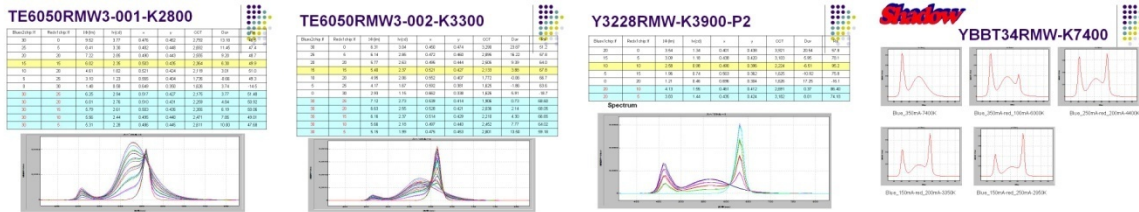
Architectural application requiring high color rendering with simple color control. Components may be combined to make linear, round, and any shape lighting elements. Display cases, high end merchandizing, jewelry, medical, museum,

## Many White Color Ranges

Please contact us for details...



## Spectrum charts examples



## Aging Performance

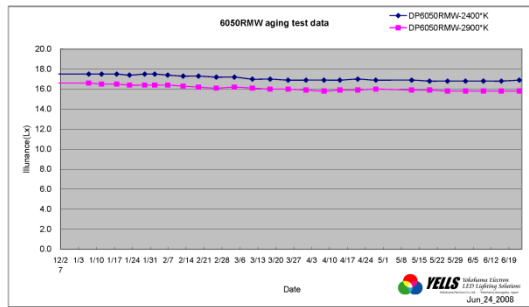
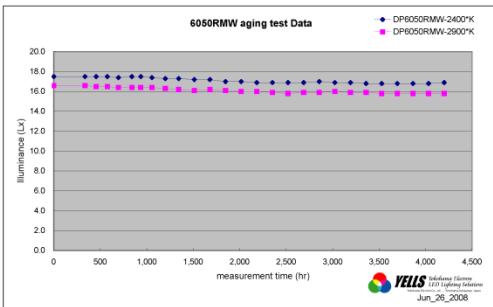


Figure 1 - [6050 aging test time](#)

Figure 2 - [6050 aging test date](#) [click links to view](#)

## Availability

In a range of component sizes including 3.2x2.8 mm PLCC -2 -4, to Shadow™ power LED. On Linear and Flexible strips, Card LED, DECO5050, imagine the possibilities.

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