

# Creating the future of lighting design with organic EL light panels.

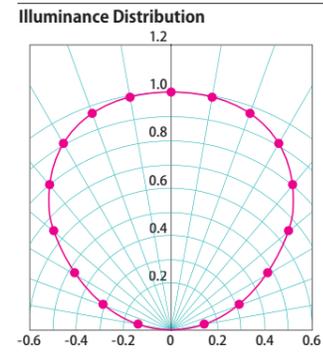


Get the very utmost out of a limited space.

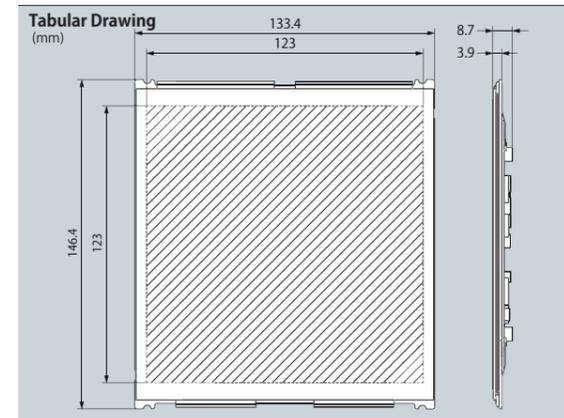
Ultra-thin and light-weight, the organic EL light panel, VELVE, is perfect for nearly any location or purpose. Open new frontiers in lighting and design.



## Variable tone / lighting organic EL light panel.



Specification DATA	Unit	OLED Panel Module
Product Numbers		<b>52800</b>
Color		RGB Color Tunable
Luminous Efficacy (Panel)	lm/W	31
Maximum Luminance	cd/m <sup>2</sup>	1,000
Color Temperature (Tunable Range)	K	3,000 (2,700~6,500)
Maximum Luminous Flux	lm	48
CRI (Color Rendering Index)	Ra(Average)	>80
	R9(Red)	>80
Standard Deviation Color Matching		< MacAdam 2-STEP
Chromaticity Coordinates (White)	(x, y)	(0.43, 0.40)
Operating Temperature Range	°C	-20 ~ +65
Storage Temperature Range	°C	-30 ~ +80
Median Lifetime	(LT70)	8,000
	(LT50)	20,000
Dimension	mm (W×L×T)	146.4×133.4×8.7
Lighting Area	mm (W×L)	123.0×123.0
Weight	g	192
Interface		DMX512 / DALI
Safety Regulation		UL 8750 certified
Rated Current	mA	110
Rated Voltage	V	DC24
Energy Consumption	W	2.6
Country of Origin		Japan



®VELVE is a registered trademark of Mitsubishi Chemical Corporation.  
 \*Due to improvements, any specifications or appearances included in this catalogue are subject to change without notice. Numerical values are for reference only and are not a guarantee of product performance.  
 \*Please request the newest documentation at time of use and review their contents.  
 \*DMX512 and DALI (Digital Addressable Lighting Interface) communications systems are asynchronous serial communication methods in use in the lighting industry.  
 \*Due to printing, ink, and conditions at the time of photography, colors in these product images may appear differently than in reality.

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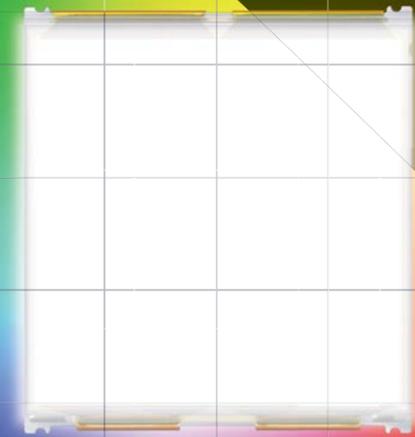
(As of Feb, 2012) MCLB201202B(E)

The World's First<sup>®</sup> Organic EL Light Panel with Variable Lighting and Tone — VELVE

# VELVE™

OLED LIGHTING

Introduce perfect, brilliant whiteness to your lighting designs.



Utilizing RGB stripe design for tone and variable lighting, to create the absolute in brilliant whiteness.  
 Mitsubishi Chemical Corporation makes it possible with VELVE,  
 the next generation in panel lighting. Experience greater freedom in interior and product designs.

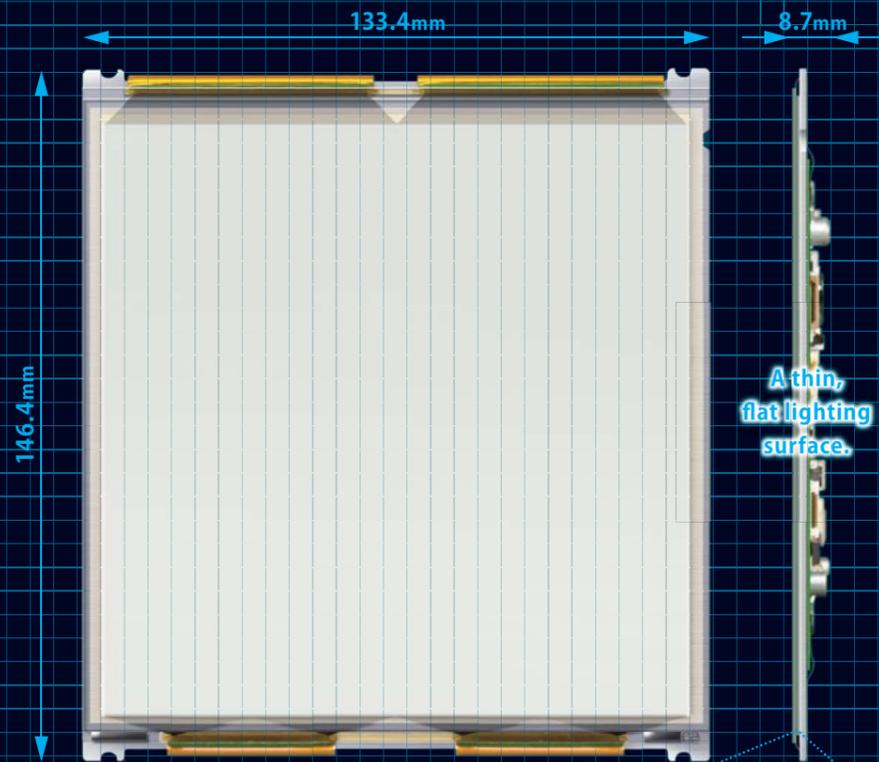
\*September, 2011 (Inquiry by Mitsubishi Chemical Corporation)

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# High Specs & High Quality in a Larger Size

Compare actual sizes and see for yourself: the world's largest<sup>※</sup> class panel lighting.

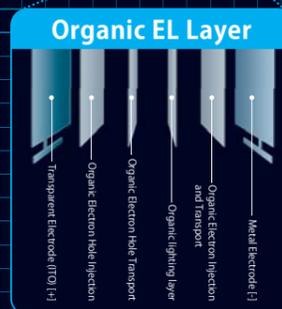


Lit by running electricity across an ultra-thin organic membrane less than 1/1000 the thickness of a strand of hair, organic EL technology delivers exceptional panel lighting without bulk, ushering in a new style of lighting and design.

Mitsubishi Chemical Corporation is proud to introduce VELVE, a unique organic EL light panel. The fruit of years of painstaking research which capitalizes on the broad range of industrial expertise available to our corporate group, VELVE utilizes an unusual RGB strip design which offers freely customizable variable lighting and tone.

The unique coated underlayer creates a smoother substratum, allowing us to guarantee quality while simultaneously offering the world's largest class<sup>※</sup> ultra-thin panel.

※September, 2011. (Inquiry by Mitsubishi Chemical Corporation)

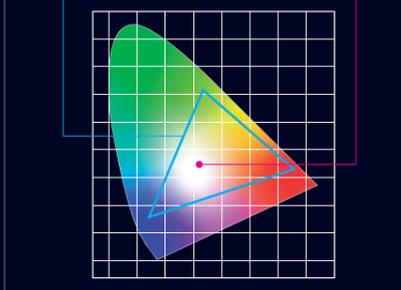
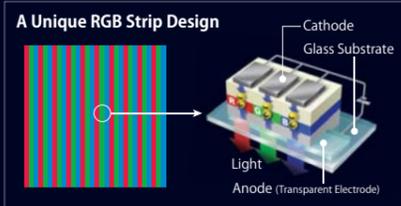


# The state of the art in organic EL light panels.

Customizable for application in any multi-colored lighting design, the organic EL light panel, VELVE, offers 3 clear innovations which have driven forward the evolution of organic EL lighting.

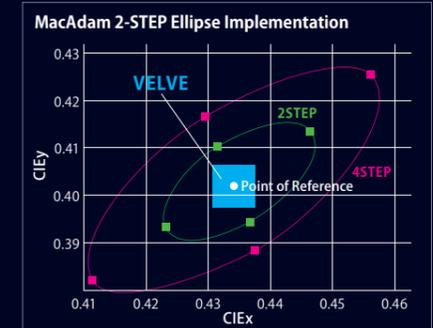
**<Innovation 1>**  
They illuminate by surface rather than by spot, eliminating shadow. Additionally, they offer greater RGB precision and depth.

The greatest merit of organic EL technology is that it illuminates by surface rather than by spot, eliminating uneven lighting and shadows. And since the ultra-thin design can be mounted on ceilings and walls, light installation is now possible even in areas previously problematic. Additionally, unlike standard organic EL displays which stack their RGB displays, the VELVE's unique horizontal (parallel) RGP stripe design allows for exact expression of a range of colors—not only white. These minute inflections in brightness and hue allow for a subtle and exacting display of lights.



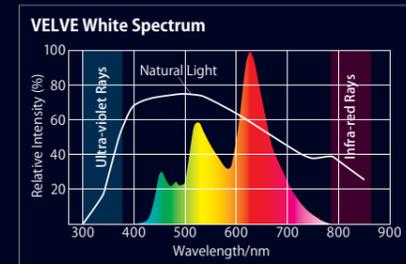
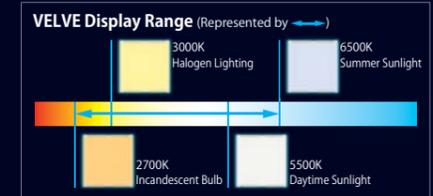
**A unique tonal controller allows you to manipulate hue dispersion.**  
The back of the VELVE lighting panel is equipped with a tonal controller which utilizes a unique technology which allows you to manipulate hue dispersion. More precise than MacAdam 2-STEP ellipses, our exceptional standard for quality ensures perfect hue distribution.

Additionally, since color temperature (2700-6500K), tone and lighting strength can be freely adjusted according to DMX and DALI international lighting standards, your lighting display can be tailored to suit the time, the place and the occasion.



**<Innovation 2>**  
The ability to generate soft, natural lighting is gentler on the human and eye and kinder to the environment.

VELVE is the leader in variable lighting control. A wide range of color temperatures from 'lightbulb' (2700K) to natural outdoor lighting (6500K) can be chosen from, and brightness can be set from 0% to 100%. Moreover, with Ra (General Color Rendering Index) and R9 (High Saturation Red) at over 80% color rendering, even a natural lighting, similar to the rays of the sun, is now possible. The ability of natural lighting to reflect the true colors of items makes it ideal for artworks, food displays, and even dressing tables.



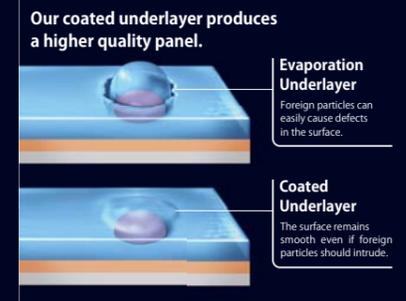
**Furthermore, VELVE is free of ultra-violet rays.**  
VELVE's soft and even lighting is free of ultra-violet rays. Gentle on the skin and eyes, it is even safe to look at directly. VELVE lighting can be depended upon to not fade merchandise colors, nor does it attract bugs.

**Ecological design for a cleaner environment.**  
VELVE is manufactured according to European RoHS standards, using absolutely no mercury or other toxic substances. We take pride in remaining gentle on the environment, and considerate of the planet.

**Energy-saving and ecologically friendly.**  
Efficient, energy-saving, low heat lighting is one of the defining characteristics of VELVE. We remain ever dedicated to improving the efficiency of our lighting and curtailing CO2 emissions.

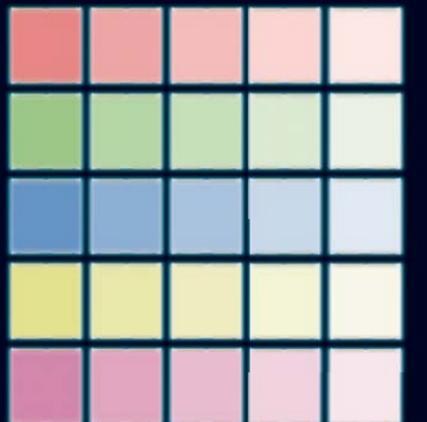
**<Innovation 3>**  
The unique coating process not only guarantees greater smoothness and higher quality, but also a faster, more reliable supply.

The underlayer of the VELVE organic EL panel is not produced with standard evaporation techniques, but instead with a unique coating process. The smoother substrate allows us to produce the world's largest class<sup>※</sup> panel size. Since the yield rate of the manufacturing process is improved, production is also increased, providing for a faster and more reliable product supply.



**<The Results Speak for Themselves>**  
Thanks to these three innovations VELVE promises optimal lighting which never fails to deliver.

Due to superior color rendering, the tone, color temperature and brightness of your light can be freely controlled. VELVE is able to produce not only the precise white light you choose, but also a brilliant array of multi-faceted tones to suit the occasion. VELVE's repertoire of color can be seen in the photograph below.



Please take this opportunity and experience the next-generation functionality of VELVE with your own two eyes.

**VELVE Sample Kits currently available.**  
The sample consists of a simple demo tool which introduces the superior functionality of VELVE. Attached power supply and operating software will allow you to regulate basic tone and variable lighting settings.  
W207mmH145mmTHK21.3mm