

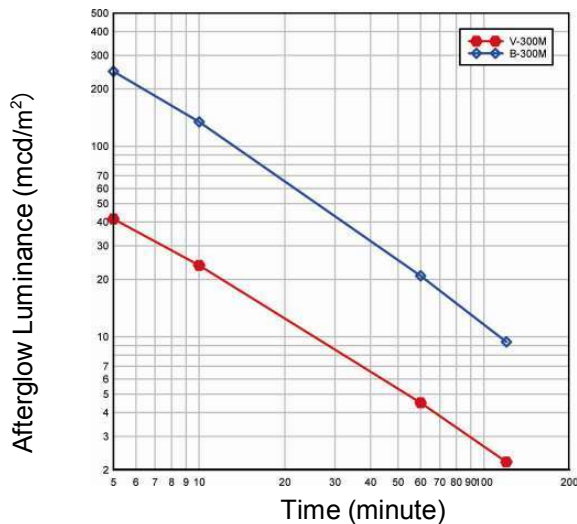
■ Characteristic and comparison between
LumiNova V·B Series and conventional pigment

LumiNova V·B Series	LumiNova (V-300)	LumiNova (B-300)	Conventional Pigment (BAS)
Chemical Identity	CaAl ₂ O ₄ :Eu,Nd	CaAl ₂ O ₄ :Eu,Nd+ Sr ₄ Al ₁₄ O ₂₅ :Eu,Dy	(Sr,Ca)S:Bi
Body color	White	Light Yellowish White	Grey White
Av. Particle Size	20-60 μm ⁽⁶⁾	30 μm	30 μm
Excitation Wave Length	200-410 nm	200-450 nm	250-350 nm
Emission Wave Length	440 nm	450 nm	455 nm
Afterglow Brightness ⁽¹⁾	≐ 25 mcd/m ²	≐ 135 mcd/m ²	0.5 mcd/m ²
Afterglow Extinction ⁽²⁾	> 500 min.	> 1,000 min.	30 min.
Excitation Time ⁽³⁾	~ 40 min.	~ 30 min.	≈ 4 min.
Light Fastness ⁽⁴⁾	> 1,000 hours	> 1,000 hours	—
Chemical Stability	Excellent	Excellent	Poor to good
Specific Gravity ⁽⁵⁾	3.0	3.3	2.8

1. Brightness after 10 minutes excitation with Xe light of 1000 lux for 5 minutes.
2. Time to decrease the afterglow to 0.32mcd/m² when excited with above condition.
3. Time required for saturation with Xe light at 1000 lux.
4. Time to drop the initial afterglow brightness by 20% after irradiation with 300W high pressure mercury lamp. (Accelerated light fastness test)
5. In powder form.
6. Depends on grade of LumiNova.

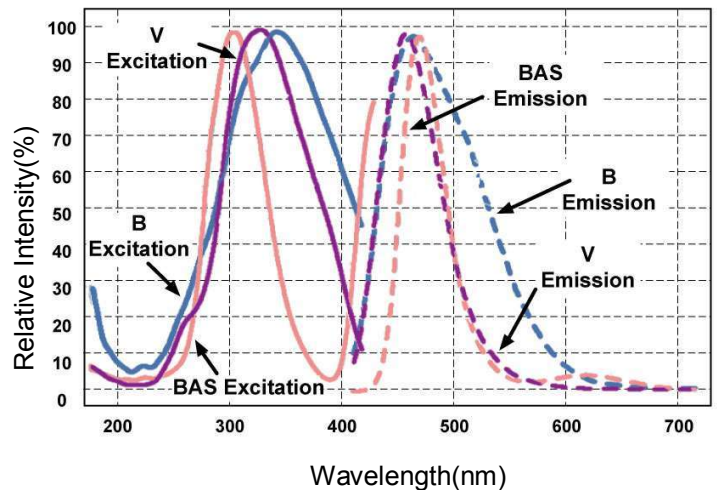
Fig. Afterglow Luminance of provided pigments

Excitation: Xe lamp 1000 lx, 5min.



Excitation & Emission Spectra

LumiNova V, B & BAS Pigments

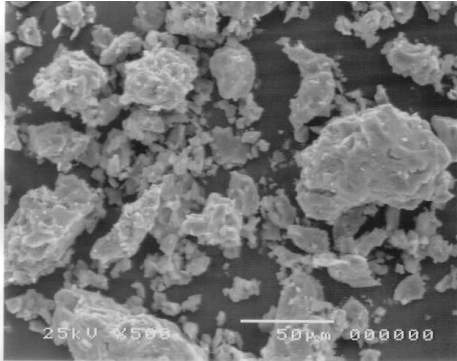


LumiNova®

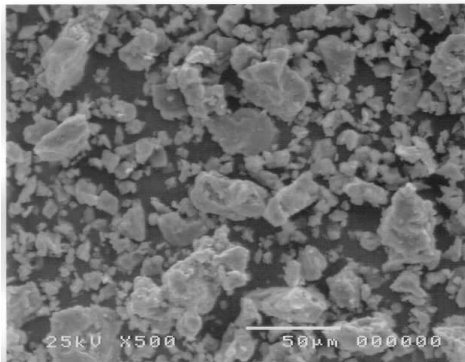
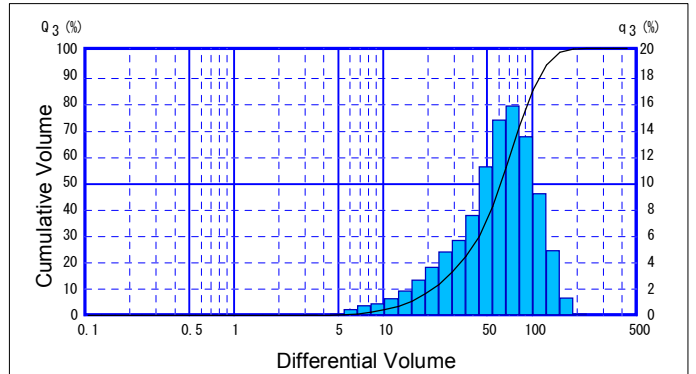
LIGHT FAST - SUPER BRIGHT
LONG AFTERGLOW
PHOSPHORESCENT PIGMENTS

LumiNova V·B Series
Particle distribution

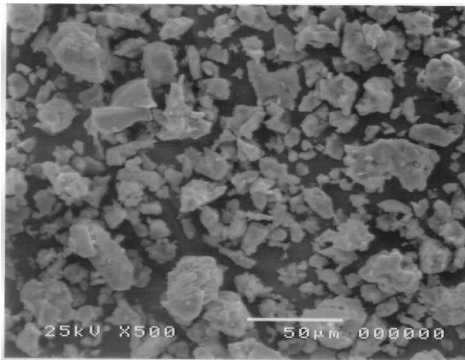
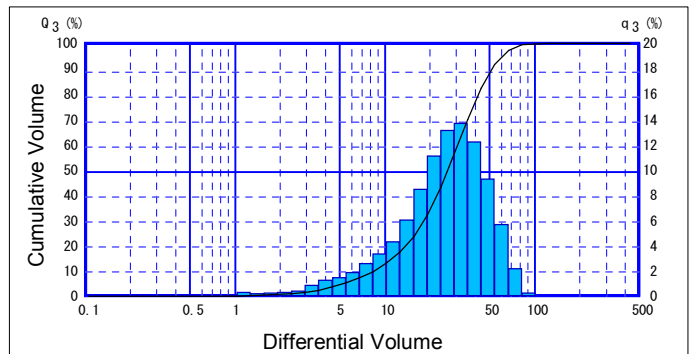
V/B Grade	Typical Particle Size (µm)		
	D10	D50	D90
V-300 C	21.3	61.7	114.6
V-300 M	8.3	26.1	52
B-300 M	6.5	27.4	57.3



V-300C



V-300M



B-300M

