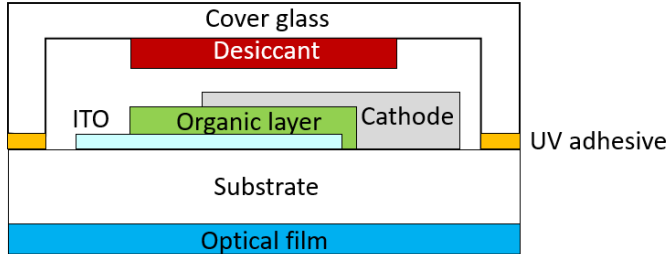


### Total Solution for OLED Encapsulation and Out-coupling



#### Substrate

- High-refractive-index Glass
- Cover Glass
- FTO Glass (patterned)
- ITO Glass (patterned)

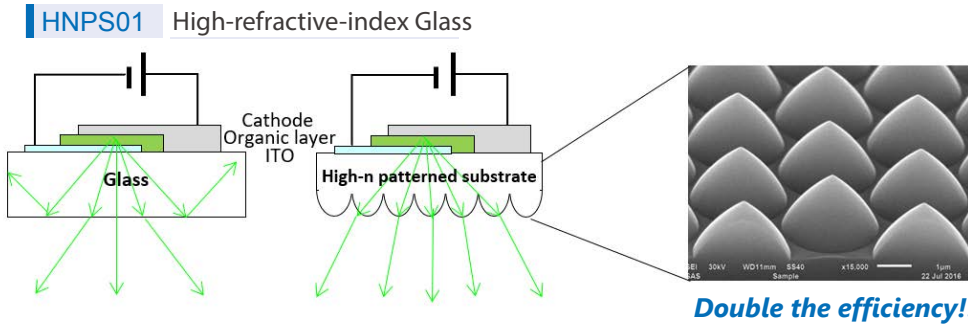
#### Optical Film

- Microlens Array Film
- Diffuser Film
- OCA Tape

#### Desiccant / UV Adhesive

- Label Desiccant
- Liquid Desiccant
- UV Adhesive

### Substrate



#### Feature

High-refractive-index substrate ( $n=1.77$ ) with micro-lens-array structure can largely enhance the external efficiency of conventional bottom-emission OLED.

Emission area (2cm x 2cm)	CIE (x, y)	Ra	V (V)	CE(cd/A)	PE(lm/W)
Glass / ITO	(0.37, 0.41)	89	7.5	39.1	16.4
High-refractive-index Glass / ITO	(0.40, 0.40)	89	7.0	76.7(+96%)	34.4(+110%)

# Electrode / Substrate and Sealing

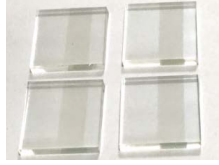
## OLED Encapsulation and Out-coupling

### LT-Cover Cover Glass



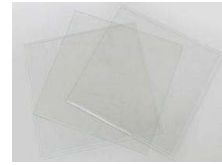
Type : Sandblasted or Etched  
 Transmittance : > 90% (Etched)  
 Dimension : 370\*470\*1.1mm or Customize

### LT-G004 FTO Glass



Glass Thickness : 2.2mm  
 FTO Thickness : 200nm  
 Resistance : 15Ω/sq  
 Transmittance : > 83%  
 Dimension : Customize

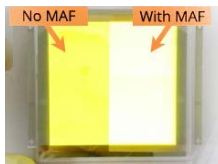
### LT-G001 / LT-G002 ITO Glass



LT-G001	LT-G002
ITO Thickness : 1200~1600Å	: 3100~3700Å
Resistance : 9~15Ω/sq	: 4~6Ω/sq
Transmittance : > 84% (at 550nm)	: > 78% (at 550nm)
Glass : Polished soda lime glass	
Dimension : 370*470*0.7mm or Customize	

## Optical Film

### MA1101001 Microlens Array Film



Micro-lens Thickness : 20um
PET Thickness : 250um
Adhesive Thickness : 5um
Haze : 88%
Emission area 6x6cm : Brightness
Panel w/o MAF : 2164nits
Panel w/ MAF : 3542nits
Enhancement ratio : 63.7%

### DF1252501 Diffuser Film



Diffusion layer : 15um
PET Thickness : 100um
Adhesive Thickness : 25um
Haze : 89.5%
Emission area 6x6cm: Brightness
Panel w/o DF : 474nits
Panel w/ DF : 625nits
Enhancement ratio : 31.8%

\*Diffuser film can reduce color shift with angle compared to microlens array film.

### OCA100001 OCA Tape



Adhesion to Glass : > 1.0(kg/inch)
Liner Release - Easy : 5~20(g/inch)
Liner Release - Tight : 20~55(g/inch)
Transmission : > 92%
Haze : < 2%
Clarity : > 90%

## Desiccant / Adhesive

### LLDY1000001 Label Desiccant



Package : 100pcs/pack  
 Dimension : 18x18mm<sup>2</sup>  
 Thickness : 180um  
 Sorption Capacity : >50g/m<sup>2</sup>  
 (20°C/65% RH)

### LLDY2000001 Liquid Desiccant



Package : 10g/syringe  
 Curing Condition : 120°C/3hr or 160°C/1hr  
 Sorption Capacity : >16wt%  
 (23°C/50% RH)  
 Viscosity : 123,000cP  
 (shear rate 5s<sup>-1</sup>)

### LT-U001 UV Adhesive



Storage : at 5°C  
 Viscosity : 400~600 Pa.s  
 Curing condition : 6J /cm<sup>2</sup>(High-pressure Hg lamp)+80°C/1h  
 WVTR : 4g/m<sup>2</sup>/24h  
 Tg : 120°C (by DSC)  
 Package : 10g/Syringe

Our products are used for testing and research purpose; they are not guaranteed in patent contention by customer use.

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