

Evaporation Materials

LUMILEAD TNO

Characteristic

- ◆ Antistatic properties are imparted, preventing the adhesion of dust and dirt.
- ◆ Continuous evaporation can be performed by replenishing the material.
- ◆ The material has a granular shape and therefore is easily melted.
- ◆ The deposited film has a greater refractive index than that of ITO.



non coat

coated

Application



Glasses



Auto motive



Camera



display



LCD projector



Microscope



Cosmetics

Performance

Electrostatic Potential Measurement

Conditions	Substrate with AR Coating I (Titanium Oxide Materials) [kV]	Substrate with AR Coating II (LUMILEAD TNO) [kV]
Before rubbing	0.00	0.00
Immediately after rubbing with cotton for 10 seconds	-0.39	-0.08
1 min. after rubbing	-0.27	-0.03
2 min. after rubbing	-0.18	-0.02

Sheet Resistance, Absorption

Evaporation Material	Sheet Resistance [Ω/\square]	Absorption (@500nm)[%]
LUMILEAD TNO	1.7×10^9	1.75
Titanium Oxide Materials	5.5×10^{11}	0.32

Values described in this document are actual measurements, not product specification values.

Please note that we are not liable for any loss or damage arising from the use of the information in this document.

Please make sure that this product is fit for purpose, including performing preliminary tests, before starting to use it.

Product Lineup

Product Name	Form	Size
LUMILEAD TNO	Amorphous granular	0.1-1.7 [mm]



Appearance

Deposition Condition Examples

Deposition Conditions	
Chamber diameter	Φ1,300 [mm]
Evaporation source	Electron beam
Oxygen introduction	None
Ion assist (IAD)	Voltage: 550 [V] Current: 550 [mA] O ₂ Flow rate: 40 [sccm]
Evaporating distance	1100 [mm]
Substrate heating	No heating
Evaporation rate	4 [Å/s]
Film thickness	100[nm]
Degree of vacuum at start of evaporation	9.0×10 ⁻⁴ [Pa] or lower
Substrate to be vapor-deposited, size	Optical glass BK7 Φ74.5 × t 1.1 [mm]

Electron beam Conditions			
	AMP. [-]	Emission current [mA]	Time [min'sec]
Pre-melting	5.0	400→580→410	1'05"
Evaporation	0.0	Rate control	—

- All the data listed in this Pamphlet Data are either values measured by our company or quoted from the literature. However, we cannot accept any liability for any troubles or damage caused by using any of these data.
- In order to use the product safely and correctly, please first read the Product Safety Data Sheet.
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- Please contact us for any inquiries/requests about the product, for more details, or for product catalogs, etc.

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