

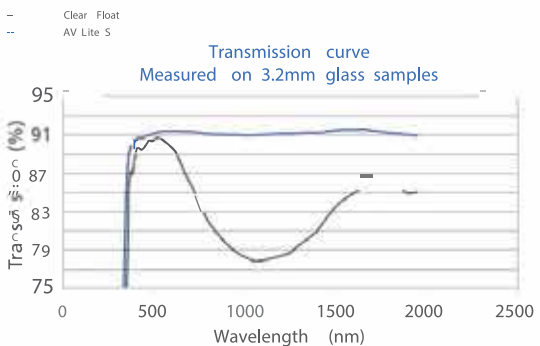


# AV-LITE S

AV-LITES is an extra clear patterned glass formed with a smooth pattern on both faces. This ensures the highest energy transmission over the whole solar spectrum. Combined with the excellent durability of glass, AV-LITES is the product of choice for photovoltaic modules (crystalline and CIGS, where its pattern allows for an easy lamination) and for thermal collectors (for which AV-LITES is labelled U1 from SPF). Through its pattern, AV-LITES also ensures non-blinding reflection and a better aesthetics to the solar modules. AV-LITES conforms to EN572 and is delivered fully tempered as per EN12150. It can be supplied with AV Solar Plus Anti Reflective Coating .

## PRODUCT DESCRIPTION

Type	Extra clear patterned glass
Pattern	Smooth / Smooth
Applications	Cover glass for photovoltaic modules (crystalline or CIGS) Cover glass for thermal collectors



## MAIN CHARACTERISTICS \*

Light Transmission (%)	3.2mm - 1/8": 91.6 4mm - 5/32": 91.5	Illuminant D65 at 2" (acc. +/- 0.2%) Illuminant D65 at 2" (acc. +/- 0.2%)
Energy Transmission (%)	3.2mm - 1/8": 91.1 4mm - 5/32": 90.9	ISO 9050 ISO 9050
Certification	3.2mm - 1/8" 4mm - 5/32"	SPF measurement, labelled U1 SPF measurement, labelled U1
Maximal length	From 950 to 2150mm (from 37" to 85")	
Maximal width	From 650 to 1020mm (from 26" to 40") Other dimensions available on request.	
Specific weight (kg/m <sup>2</sup> )	3.2mm - 1/8": 8 4mm - 5/32": 10	
Processing conditions	Tempered, C-grinded	EN1663

AV SOLAR can help evaluating these values according to other standards and/or to the specificities of the final application.

## MECHANICAL CHARACTERISTICS \*

Mechanical strength (MPa)	90	EN1288
Young modulus (GPa)	70	EN572
Poisson ratio	0.2	EN572
Hardness	Mohs (scratch hardness) Knoop (indentation hardness)	6 470 Indenter load 500g
Density (kg/m <sup>3</sup> )	2500	EN572, at 18°C

## THERMAL CHARACTERISTICS \*

Hemispherical emissivity (corrected)	0.84	Between -18°C and 65°C
Expansion coefficient (10 <sup>-6</sup> 1/K)	9	EN572, between 20°C and 300°C
Specific heat (J/kgK)	720	EN572
Thermal conductivity (W/mK)	1	EN572
Softening point (°C)	722	
Annealing point (°C)	552	
Strain point (°C)	500	

## CHEMICAL COMPOSITION \*

Silicon dioxide (SiO <sub>2</sub> , %)	69 to 74	EN572
Sodium oxide (Na <sub>2</sub> O, %)	10 to 16	EN572
Calcium oxide (CaO, %)	5 to 14	EN572
Magnesium oxide (MgO, %)	0 to 6	EN572
Aluminum oxide (Al <sub>2</sub> O <sub>3</sub> , %)	0 to 3	EN572
Trace elements (FeO, etc., %)	< 5	

Quality control



Safety package



Worldwide logistics



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