

Product Factory Inspection Report

Product model		WM2099HD		Date			2026/3/22	
Material Description	Surface coating	Anti-aging layer UV	PET Base Film	Insulation layer material	PET Base Film	Adhesive	Bottom Protective Film	Core production process
	Military-grade SR scratch-resistant coating	Full-spectrum UV-absorbing heat-insulating composite material	Optical-grade transparent substrate	Molecular-level TIN + WO ₃ hybrid heat insulation material (with 30% curing content)	Optical-grade transparent substrate	High-performance optical acrylate pressure-sensitive adhesive	Optical-grade release film	Precision coating dual process
Items		Standard	Devices	Unit	Standard value		Test value	Result
Structure	Thickness	GB/T 6672	Micrometer	um	62±5		63	√
Optical Performance	Visible Light Transmittance	GB/T 2680	LS160	%	18-23		20	√
	UV Rejection Rate	GB/T 2680	LS160	%	≥99		99.9	√
	IR Rejection Rate	GB/T 2680	LS160	%	≥97		97.5	√
	TSER	GB/T 2680	LS182	%	≥80		86	√
	Haze	ASTM D 1003	Haze Meter	/	≤1		0.8	√
Mechanical Performance	20min Initial Peel Strength	ISO 527-1:2019	Tensile Tester	gf/inch	≥500		612	√
	24H Peel Strength	ISO 527-1:2019	Tensile Tester	gf/inch	≥800		1187	√
Physical Performance	Abrasion Resistance	ASTM D6037	Steel Wool Abrasion Tester	/	200gf/200times		Qualified	√
Appearance	Appearance	QCT 1170	Inspection Lamp	/	Refer to the appearance inspection standard for automotive glass functional films		Qualified	√