

NOVAL GLASS

AUTO GLASS



WWW.NOVALGLASS.COM

CLEAR AUTO GLASS

FEATURES

- Stable glass quality, uniform stress relief, and high tempering rate;
- High reprocessing yield, good cutting ability, excellent optical quality, and good speckle angle;
- The surface is flat, the thickness is uniform, and low reflection distortion after reprocessing;
- Strong continuous product supply capability;
- The quality control level is leading domestically, ensuring the ultimate high quality.

THICKNESS

2.1mm, 2.5mm, 3.0mm, 3.2mm, 3.5mm, 4.0mm, 5.0mm, 6.0mm.

SIZE

Min Size: 500mm * 700mm

Max Size: 3300mm * 6500mm

DATA SHEET

Thickness (Tolerance) (mm)	Optic Character (%) & Test Specification				Color Character (%) & Test Specification		
	LTA (Light Transmittance)	TE (Solar Direct Transmittance)	TUV (UV- Transmittance)	TIR (Near-Infrared Transmittance)	L*	a*	b*
	380nm~780nm	300nm~2500nm	300nm~380nm	780~2500nm	ASTM E308-01 D65 Illuminant 1964 10 °		
	ISO 9050-2003						
2.1(+/-0.1)	90.9	87.6	75.1	85.4	96.4	-0.5	0.2
2.5(+/-0.1)	90.7	86.9	73.0	84.3	96.3	-0.6	0.2
3.0(+/-0.1)	90.6	86.1	71.7	82.8	96.3	-0.7	0.1
3.2(+/-0.1)	90.5	85.5	70.2	81.9	96.3	-0.8	0.2
3.5(+/-0.1)	90.4	85.1	69.3	81.1	96.2	-0.9	0.1
4.0(+/-0.2)	90.1	84.0	67.4	79.4	96.1	-1.0	0.1
5.0(+/-0.2)	89.5	82.3	65.2	76.6	95.9	-1.2	0.1
6.0(+/-0.2)	89.1	80.7	61.8	74.1	95.8	-1.5	0.2



F-GREEN AUTO GLASS

FEATURES

- The F green tinted glass specially developed for the front windshield of automobiles has a visible light transmittance of up to 79% (thickness of 4mm);
- The solar transmittance is only 53%, and the shading coefficient is 0.75; As a front windshield of a car, it provides drivers and passengers with a wide and clear view, while also absorbing and reflecting a large amount of radiant heat from sunlight, effectively reducing the energy consumption of car air conditioning cooling in summer;
- The color and performance are stable and durable, and the performance and color of both flat and curved glass products remain consistent.



THICKNESS

2.1mm, 2.5mm, 3.0mm, 3.2mm, 3.5mm, 4.0mm, 5.0mm, 6.0mm.

SIZE

Min Size: 500mm * 700mm

Max Size: 3300mm * 6500mm



F-GREEN DATA SHEET

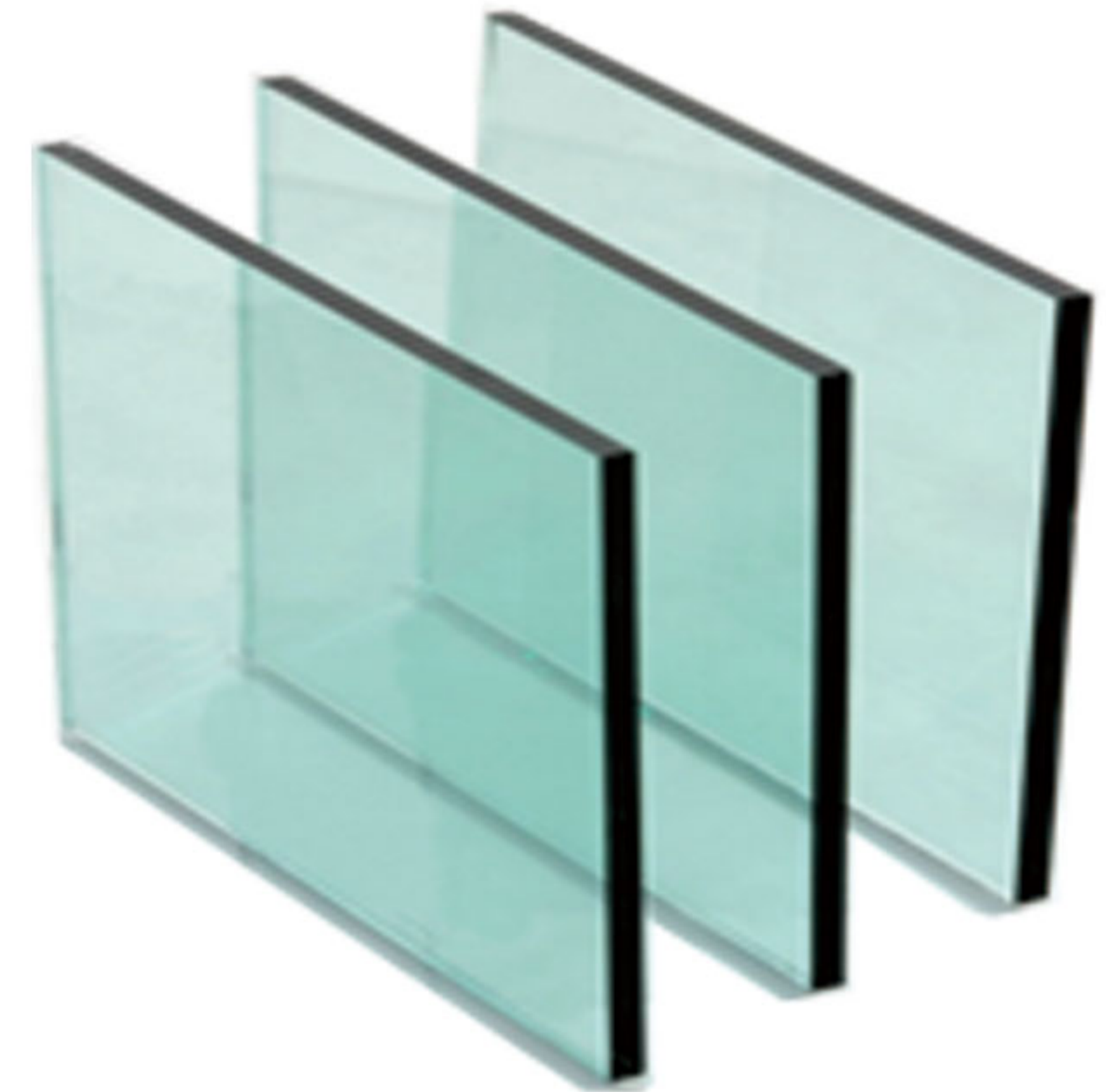
Thickness (Tolerance) (mm)	Optic Character (%) & Test Specification				Color Character (%) & Test Specification		
	LTA (Light Transmittance)	TE (Solar Direct Transmittance)	TUV (UV- Transmittance)	TIR (Near-Infrared Transmittance)	L*	a*	b*
	380nm~780nm	300nm~2500nm	300nm~380nm	780~2500nm	1931CIE L*a*b*		
	ISO 9050-2003				D65 Illuminant 2°		
2.1(+/-0.1)	84	68.2	43.5	54.3	94.0	-3.2	0.6
2.3(+/-0.1)	83	66.1	42.8	50.8	93.7	-3.6	0.7
2.5(+/-0.1)	83	64.9	41.7	49.0	93.5	-3.9	0.7
3.0(+/-0.1)	82	61.3	38.2	43.3	92.8	-4.5	0.7
3.2(+/-0.1)	81	59.4	36.3	40.7	92.5	-4.8	0.7
3.5(+/-0.1)	79	57.5	34.5	38.2	91.9	-5.4	0.8
4.0(+/-0.1)	78	54.3	31.4	33.6	91.6	-6.0	0.9
5.0(+/-0.2)	76	50.0	27.7	27.8	90.4	-7.3	1.1
6.0(+/-0.2)	73	43.8	22.8	20.0	89.1	-8.7	1.2



A-GREEN AUTO GLASS

DESCRIPTION

A Green Glass (Also known as Solar Green) is a type of green glass that strongly absorbs ultraviolet and infrared rays. It is produced by adding special colorants to the float glass mixture. Its ability to absorb ultraviolet and infrared rays is stronger than ordinary colored glass. It is a new generation float glass product with high heat absorption, high transmittance, aesthetics, and energy conservation. Its visual effect is also beautiful and fashionable. A green glass can meet various visual effects and energy-saving requirements of automobiles, and customers can process it into various products such as tempered or laminated



FEATURES

- High visible light transmittance;
- Absorb sunlight radiation, absorb ultraviolet light, heat insulation and energy conservation;
- Can be used as a substrate for various composite glass products

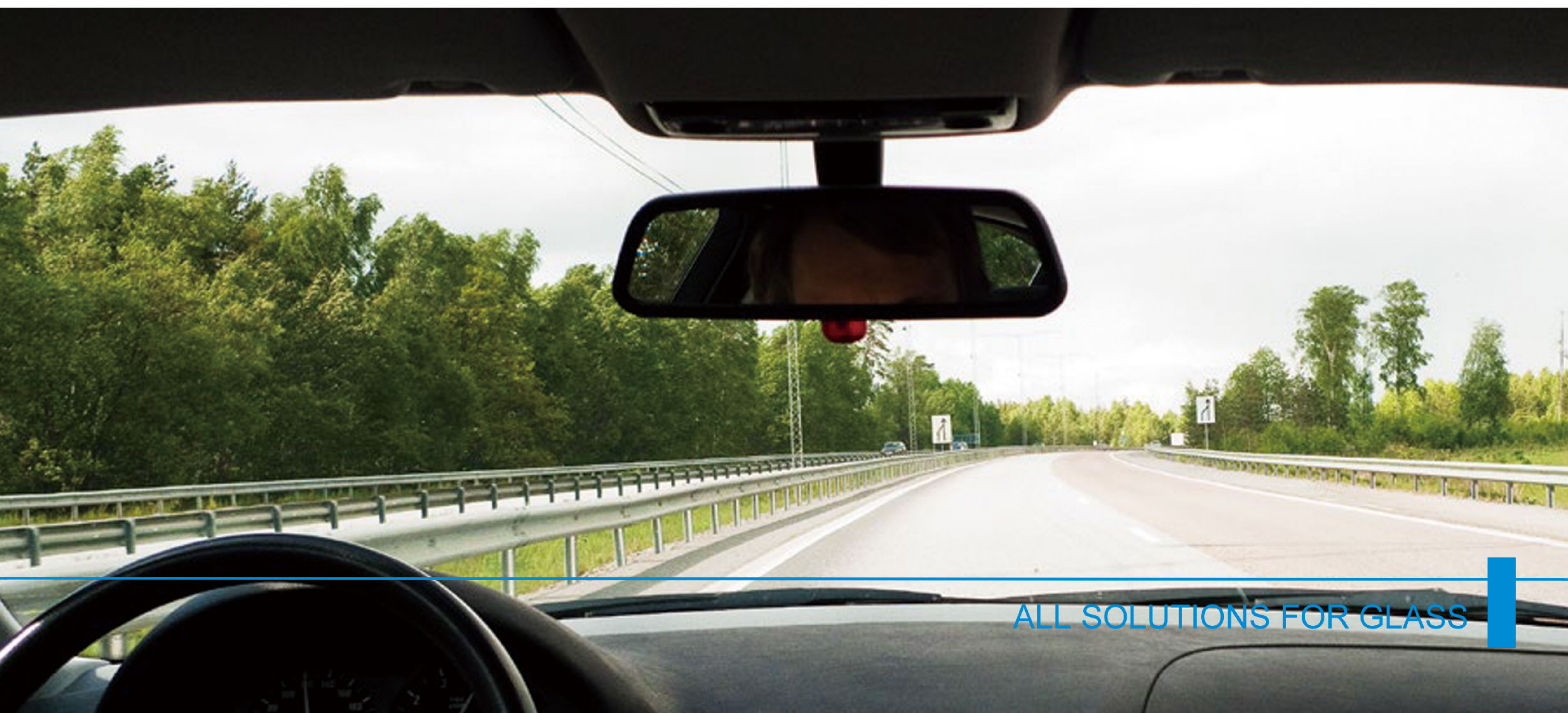
THICKNESS

1.6mm, 2.1mm, 2.3mm, 3.2mm, 3.5mm, 3.85mm, 4.0mm, 5.0mm.

SIZE

Min Size: 500mm * 700mm

Max Size: 3300mm * 6500mm



A-GREEN DATA SHEET

Thickness (Tolerance) (mm)	Optic Character (%) & Test Specification				Color Character (%) & Test Specification		
	LTA (Light Transmittance)	TE (Solar Direct Transmittance)	TUV (UV- Transmittance)	TIR (Near-Infrared Transmittance)	L*	a*	b*
	380nm~780nm	300nm~2500nm	300nm~380nm	780~2500nm	1931CIE L*a*b*		
	ISO 9050-2003				D65 Illuminant 2°		
1.6(+/-0.1)	83.5	67.1	43.3	53.7	93.6	-3.5	0.6
2.1(+/-0.1)	81.5	62.2	38.5	46.6	92.8	-4.5	0.8
2.3(+/-0.1)	80.6	60.3	36.2	44.0	92.4	-4.8	0.9
3.2(+/-0.1)	76.7	52.6	29.5	33.3	90.8	-6.6	1.1
3.5(+/-0.1)	75.2	50.0	27.3	29.9	90.2	-7.3	1.1
3.85(+/-0.1)	73.4	47.3	24.8	26.7	89.4	-8.0	1.3
4.0(+/-0.1)	73.1	46.4	24.0	25.0	89.4	-8.1	1.3
5.0(+/-0.2)	71.5	44.0	22.0	22.0	88.5	-9.0	1.3



BLACK AUTO GLASS

FEATURES

- The PG series Black body tinted glass specially developed for car skylights and business car side windows has excellent thermal insulation function. Less than 20% transmittance of visible light and solar energy, used as car skylights and business car side window glass to block more than 50% of solar heat from entering the car, it has excellent energy-saving and environmental protection functions;
- Less than 10% UV transmittance, effectively blocking the damage of ultraviolet rays to organic materials in the car, and extending the durability of various items in the car interior service life;
- It has good privacy protection function. Automotive designers and customers have high privacy requirements for car glass, that is, they do not want to protect it from the outside of the car you can easily see it inside the car. The appearance of the PG series is black, and you can hardly see anything inside the car from the outside, so it has excellent privacy protection function. At the same time, the PG series also has a good "observation rate", which means that you can see the outside of the car without any obstacles from inside. This type of glass has been reduced by over 80% the reflection inside the glass car not only meets the requirements of privacy protection, but also allows for easy observation from the outside. This special performance fundamentally meets the needs of automotive the need for glass to protect privacy.

THICKNESS

2.1mm, 3.2mm, 3.5mm, 4.0mm, 5.0mm, 6.0mm.

SIZE

Min Size: 500mm* 700mm

Max Size: 3300mm * 6500mm

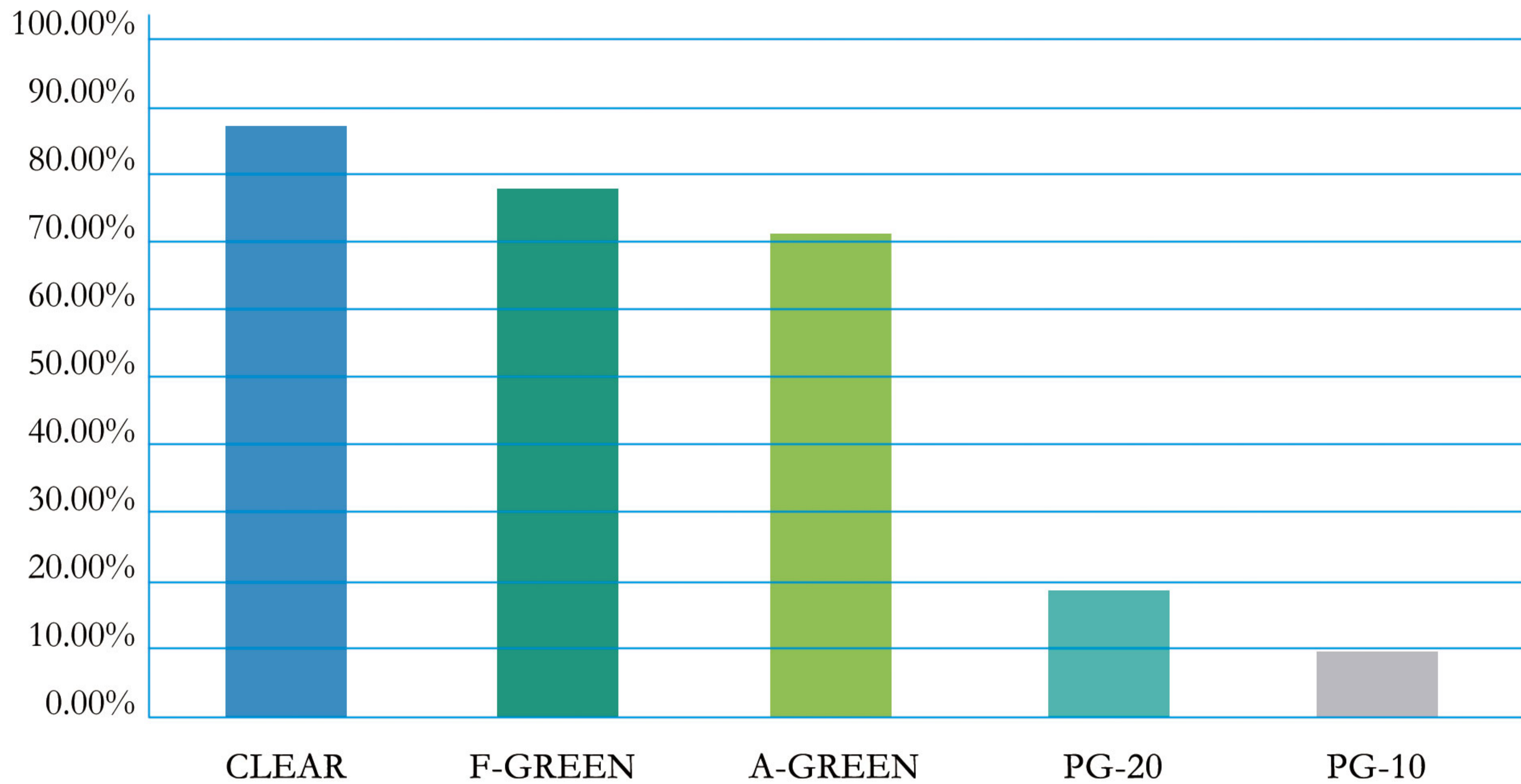


BLACK DATA SHEET

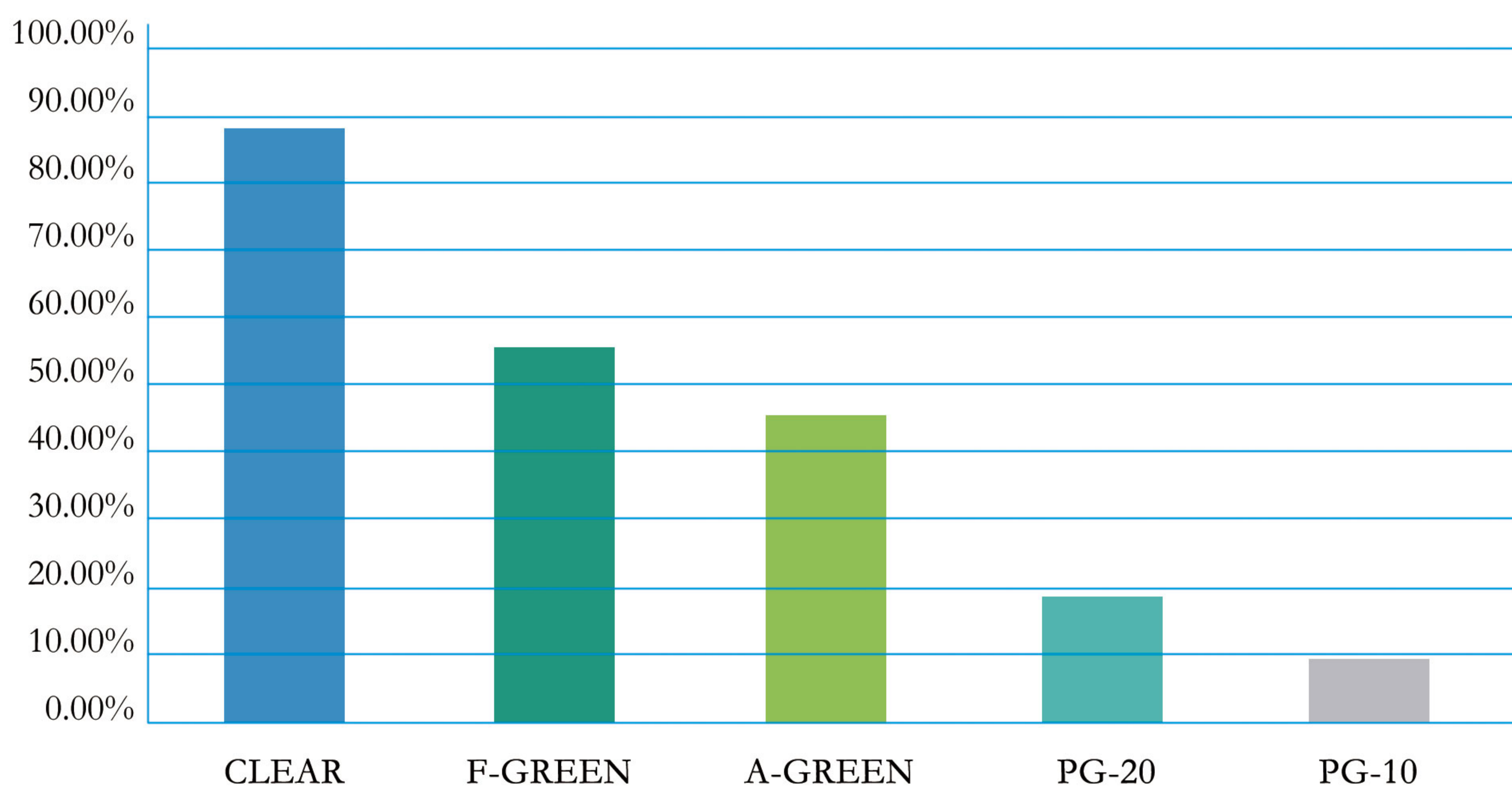
Thickness (Tolerance) (mm)	Optic Character (%) & Test Specification				Color Character (%) & Test Specification		
	LTA (Light Transmittance)	TE (Solar Direct Transmittance)	TUV (UV- Transmittance)	TIR (Near-Infrared Transmittance)	L*	a*	b*
	380nm~780nm	300nm~2500nm	300nm~380nm	780~2500nm	1931CIE L*a*b*		
	ISO 9050-2003				D65 Illuminant 2°		
PG-10							
3.2(+/-0.1)	15.1	14.0	2.8	12.0	46.0	-3.9	1.9
4.0(+/-0.2)	9.7	8.7	1.4	6.8	37.5	-4.7	1.7
5.0(+/-0.2)	5.4	5.0	0.8	4.0	28.1	-4.6	2.1
PG-18							
3.2(+/-0.1)	25.0	25.4	7.6	24.4	57.0	-1.0	0.3
4.0(+/-0.2)	18.0	18.7	4.7	17.8	49.6	-1.1	0.6
5.0(+/-0.2)	12.4	13.2	2.8	12.5	41.8	-1.2	0.8
6.0(+/-0.2)	8.2	9.0	1.6	8.7	34.3	-1.2	1.0
PG-20							
2.1(+/-0.1)	38.6	36.8	17.6	33.6	68.6	-3.5	2.8
3.2(+/-0.1)	24.2	20.5	5.4	16.6	56.5	-4.7	3.9
3.5(+/-0.1)	21.7	18.3	4.5	14.7	53.9	-4.8	4.2
4.0(+/-0.1)	18.4	15.4	3.6	12.1	50.1	-5.0	4.5
5.0(+/-0.2)	12.1	9.7	1.9	7.2	41.5	-5.5	5.1



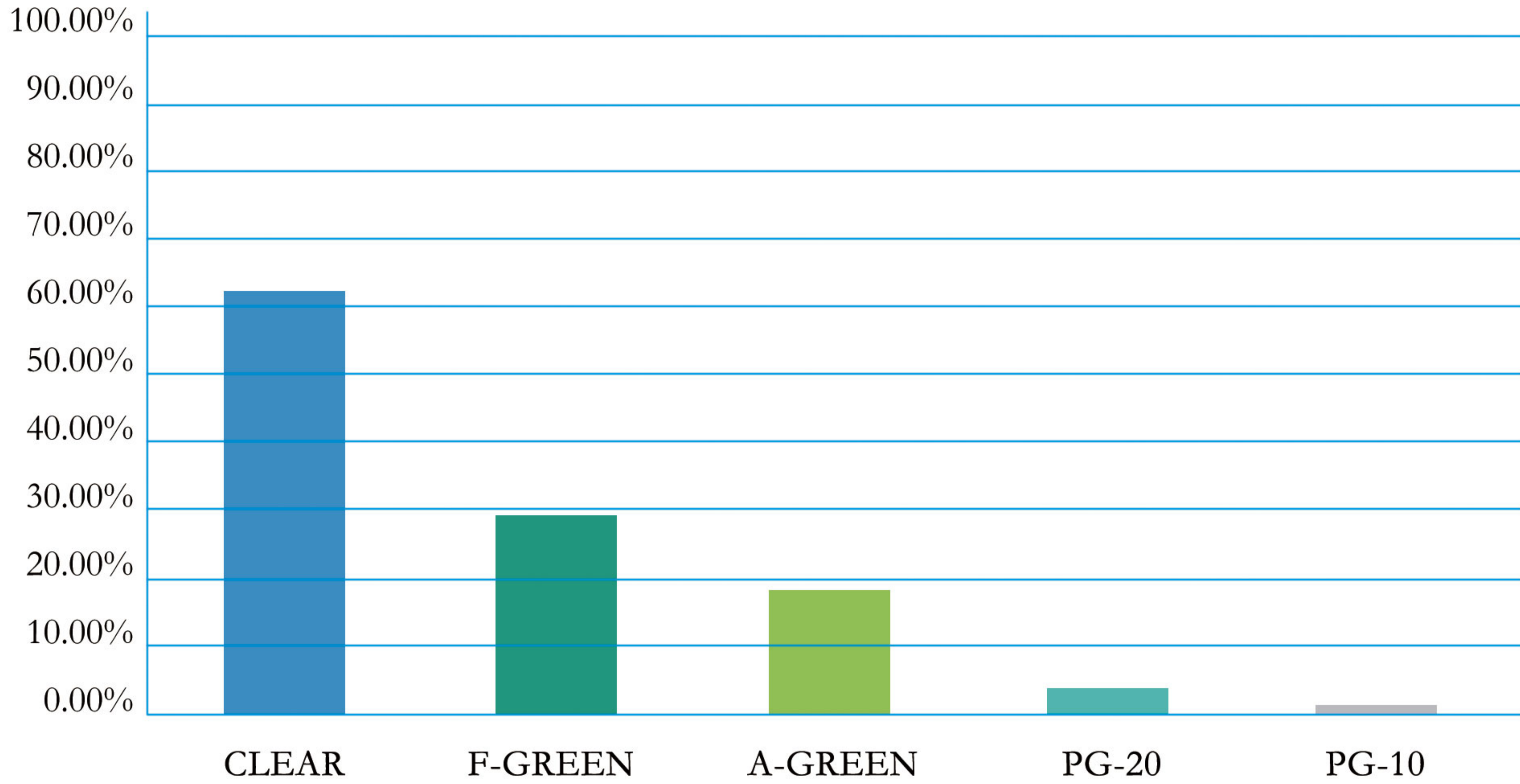
DATA COMPARE (4MM GLASS) - LTA
Light Transmittance 380nm~780nm



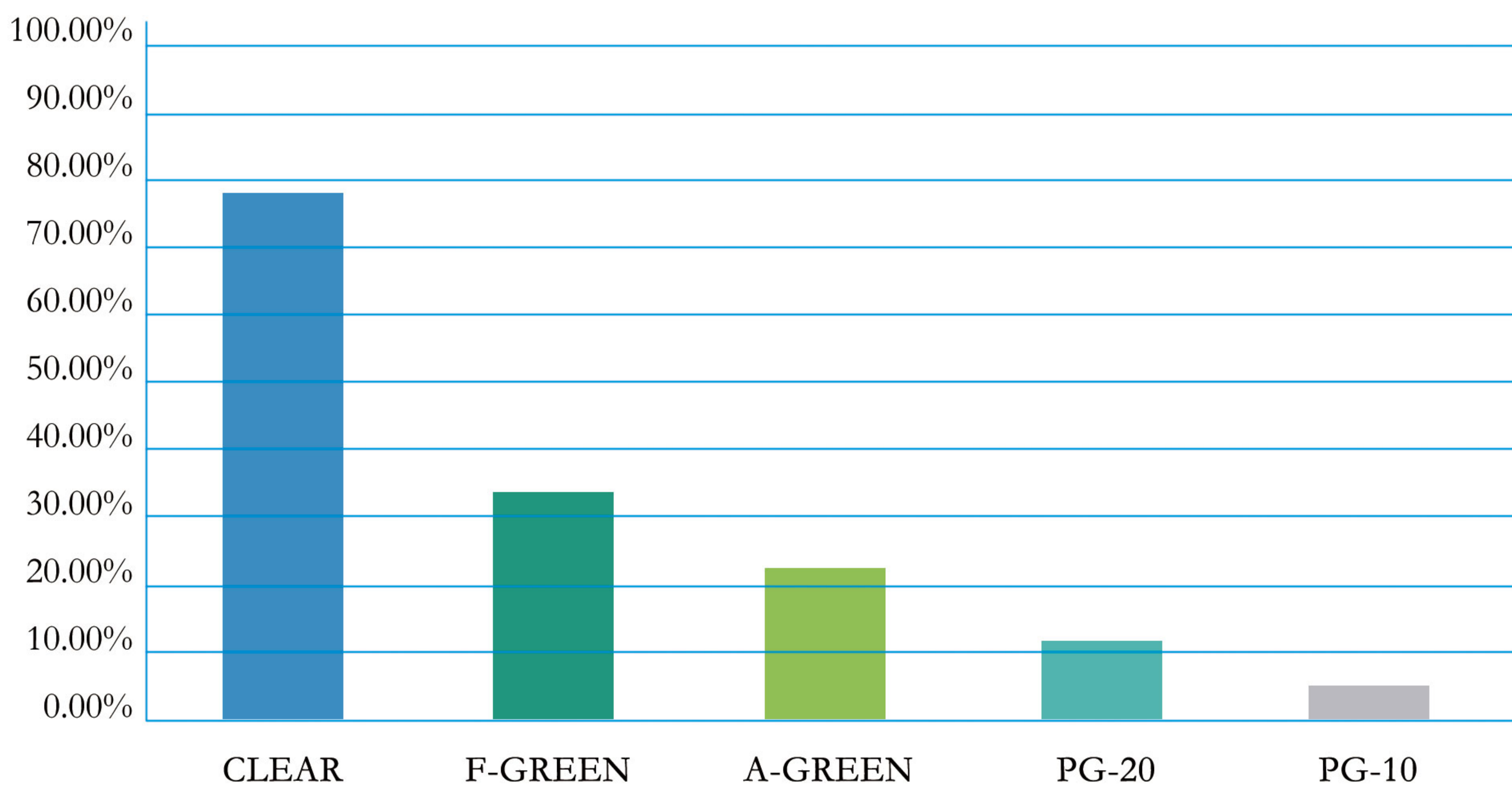
DATA COMPARE (4MM GLASS) - TE
Solar Transmittance 300nm~2500nm



DATA COMPARE (4MM GLASS) - TUV
UV Transmittance 300nm~380nm



DATA COMPARE (4MM GLASS) - TIR
Near-Infrared Transmittance 780nm~2500nm





NOVAL GLASS GROUP LTD

E-mail: info@novalglass.com / sales@novalglass.com

Tel: 0086-532-82751111 / Fax: 0086-532-82752222

Add: No.6 Shandong Rd, Qingdao, China