



Spin Photochromic Lens Seris P8 Grey Performance Testing

2023.06

产品测试清单



- **Puresensor-P8-1.60 ----- (Pure)**
- **Transitions-T8-1.60 ----- (Transitions)**

01



- **Depth of Photo**
- **Fading Speed**
- **Temperature Resistance**
- **Discoloration Lifespan**

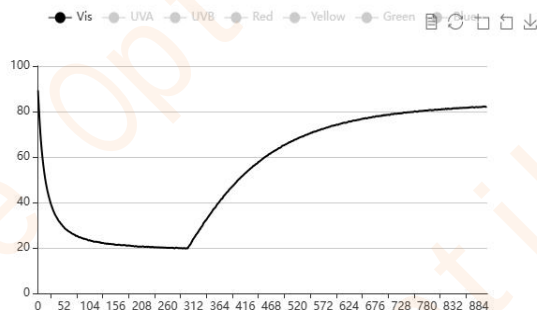
Sample1 P8 1.60UV400 HMC 23°

Photochromic Results

T	Visible Light Transmittance	UVA-band Transmittance	UVB-band Transmittance	Red Transmittance Visual Attenuation Factor	Yellow Transmittance Visual Attenuation Factor	Green Transmittance Visual Attenuation Factor	Blue Transmittance Visual Attenuation Factor
0	89.331%	0.097%	0.072%	91.097% 1.020	89.951% 1.007	88.969% 0.996	89.167% 0.998
15	19.803%	0.035%	0.032%	22.173% 1.120	18.989% 0.959	20.744% 1.048	23.358% 1.179
Photochromic Response Value	4.511	Half Recovery Transmittance	54.567	Half Recovery Time Point	Reaching Half Recovery in 126 Seconds After Irradiation		

Photochromic Curve

Trend Curve of Photochromic Transmittance



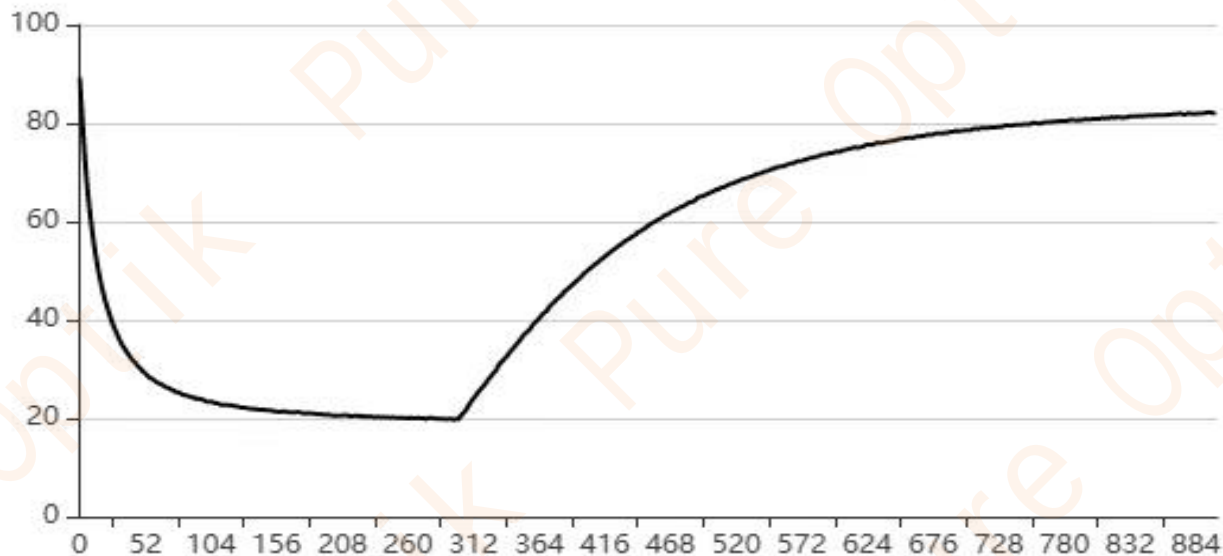
Transmission Curve Before & After Photochromic



Note: All P8 gray UC are UV400 and have anti-blue function after spin coating

Photo/Fading

1.60-P8 (23°) Fading Chart



X-Axis: Time/S

y-Axis: Transmittance/%

Sample2

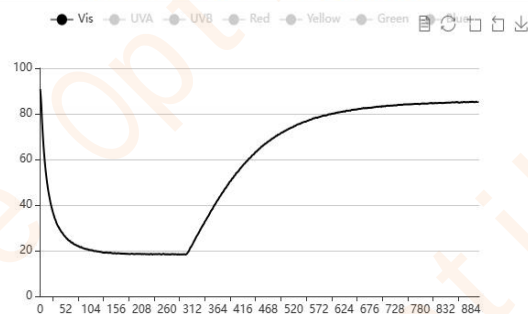
T8 1.60UV400 HMC 23°

Photochromic Results

T	Visible Light Transmittance	UVA-band Transmittance	UVB-band Transmittance	Red Transmittance Visual Attenuation Factor	Yellow Transmittance Visual Attenuation Factor	Green Transmittance Visual Attenuation Factor	Blue Transmittance Visual Attenuation Factor
0	90.865%	0.096%	0.075%	91.669% 1.009	90.895% 1.000	90.924% 1.001	91.215% 1.004
15	18.480%	0.063%	0.049%	20.927% 1.132	17.620% 0.953	19.459% 1.053	22.491% 1.217
Photochromic Response Value	4.917	Half Recovery Transmittance	54.672	Half Recovery Time Point	Reaching Half Recovery in 106 Seconds After Irradiation		

Photochromic Curve

Trend Curve of Photochromic Transmittance

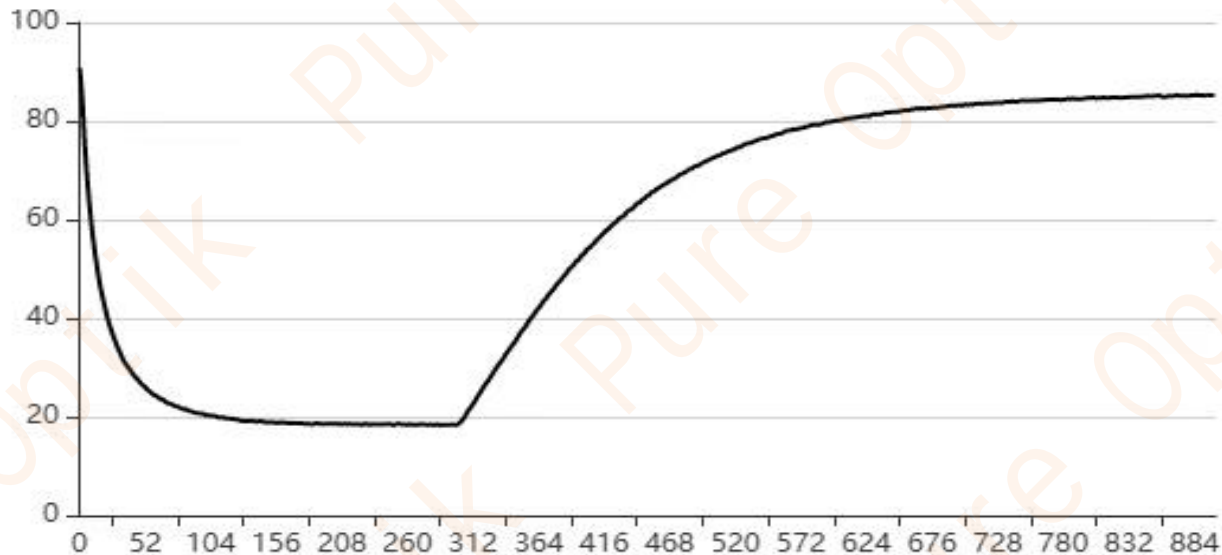


Transmission Curve Before & After Photochromic





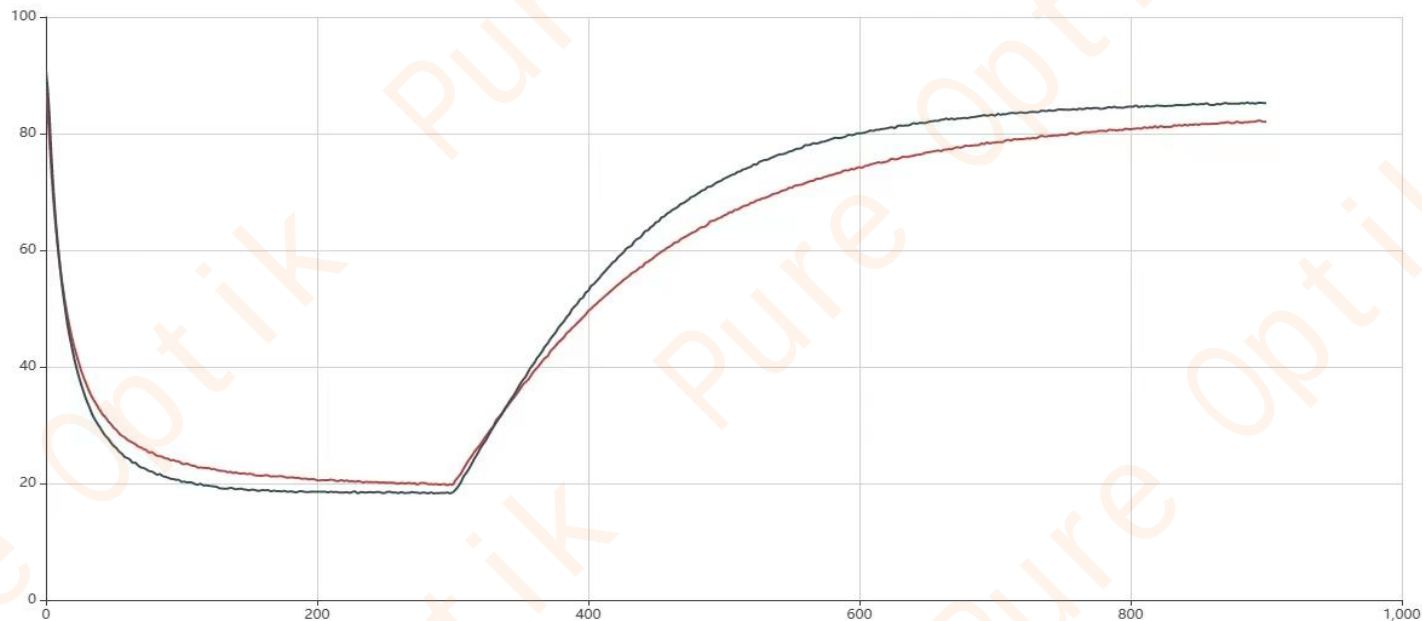
1.60-T8 (23°) Fading Chart





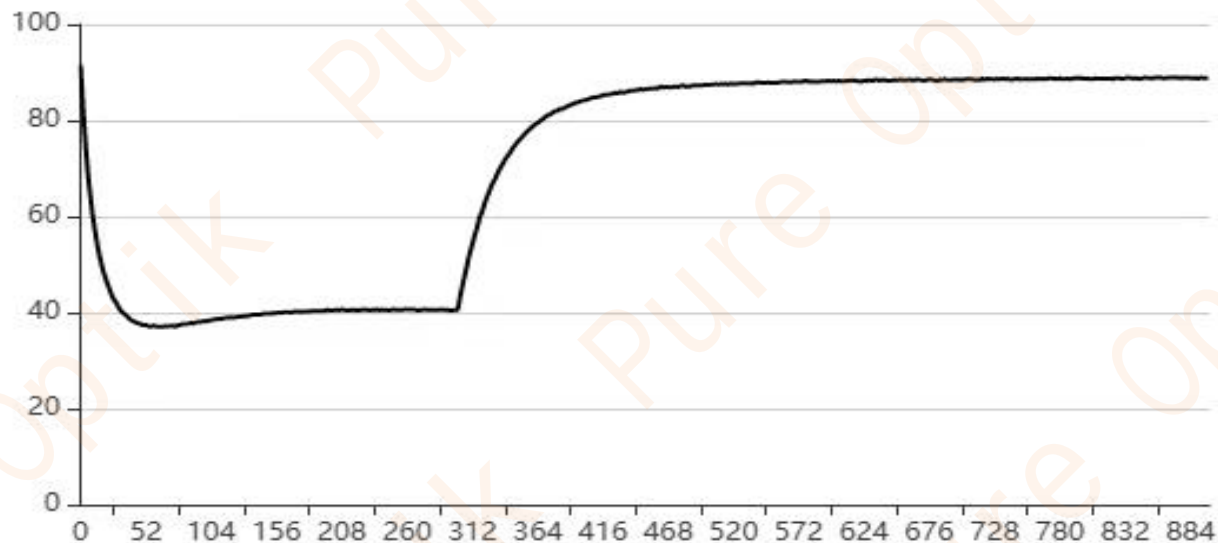
1.60-P8 & T8 (23°) Fading Chart

● P8 1.60UV400 HMC 23° ● T8 1.60UV400 HMC 23°



Photo/Fading

1.60-P8 (35°) Fading Chart

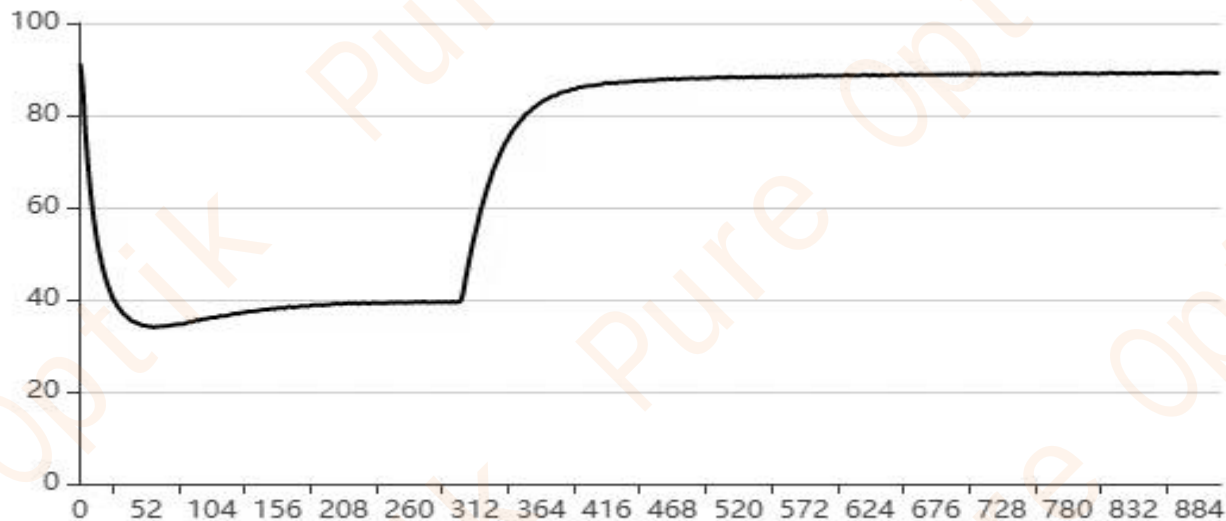


Photo/Fading



PUREOPTIK
— Ophthalmic Lenses —

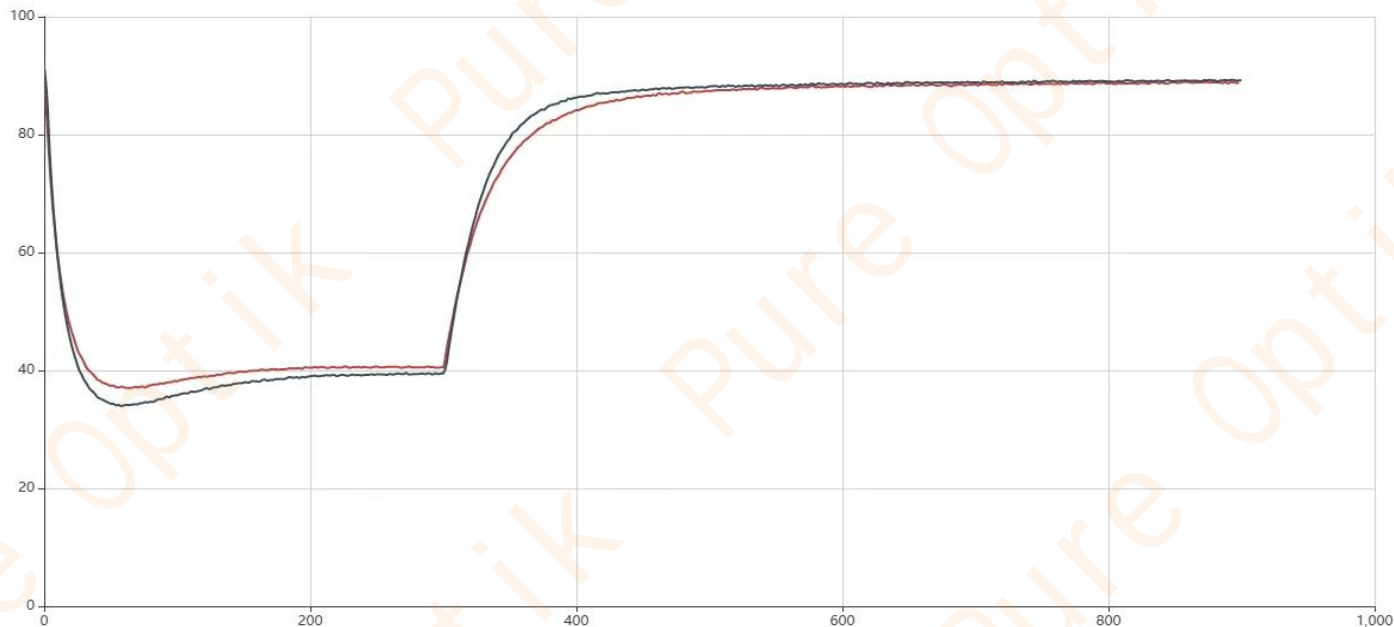
1.60-T8 (35°) Fading Chart





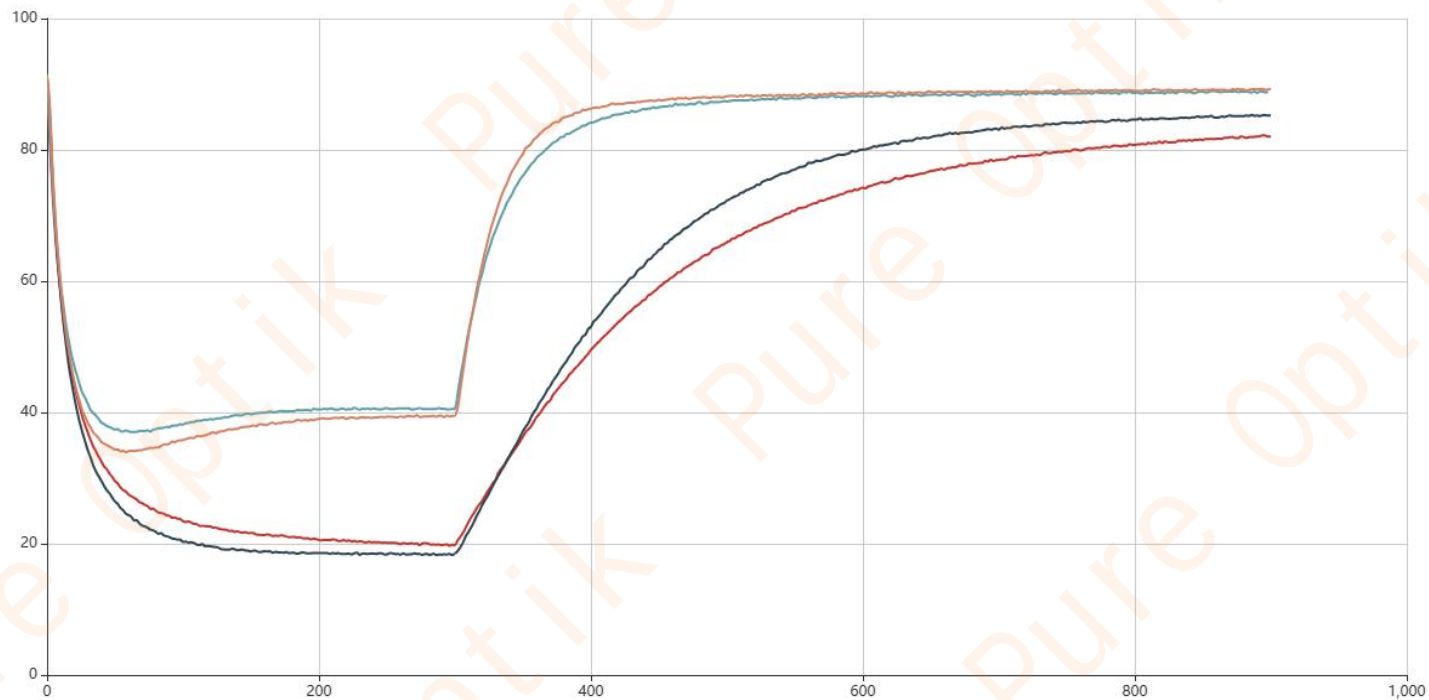
1.60-P8 & T8 (35°) Fading Chart

● P8 1.60UV400 HMC 35° ● T8 1.60UV400 HMC 35°



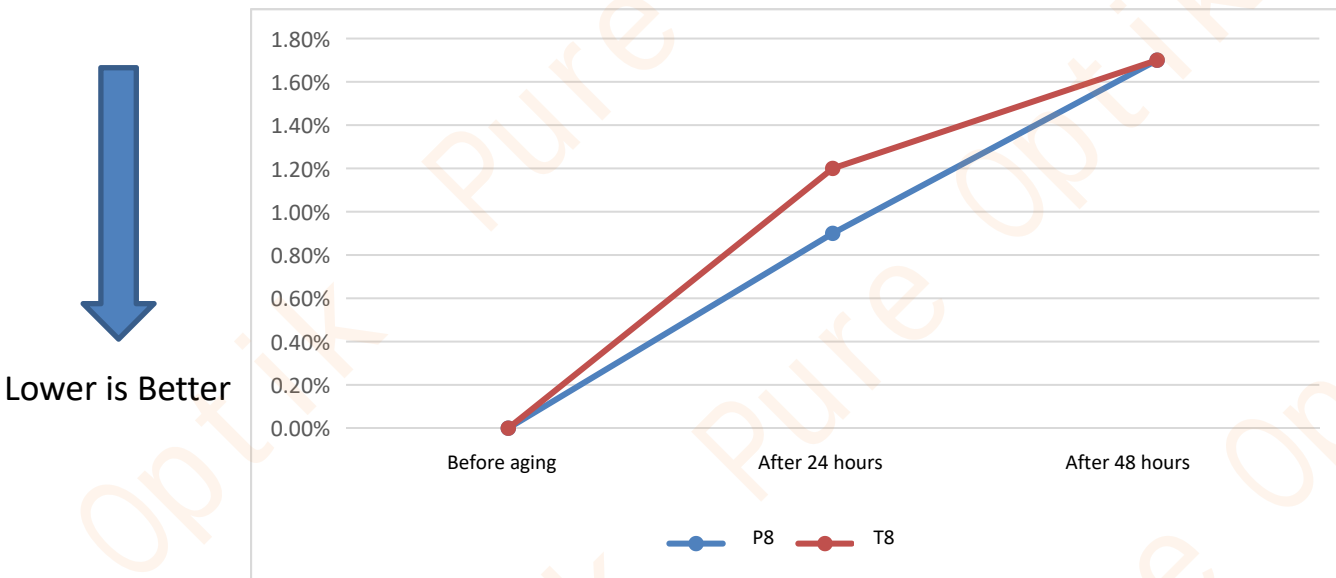
Analysis Chart of Photochromic Change Trend

● P8 1.60UV400 HMC 23° ● T8 1.60UV400 HMC 23° ● P8 1.60UV400 HMC 35° ● T8 1.60UV400 HMC 35°



Photochromic life

Effect of Photochromic depth after aging experiment



Conclusion: The Photochromic performance of PureSensor-P8 and Transitions-T8 after accelerated aging is basically the same

02



- 100 Grid Test
- High Temperature Coating Cracking Test

Coating Test



PUREOPTIK
— Ophthalmic Lenses —

Test Items	PureSenser-P8	Transitions-T8
100 Grid Test	Pass	Pass
High Temperature Coating Cracking Test	Pass	Pass