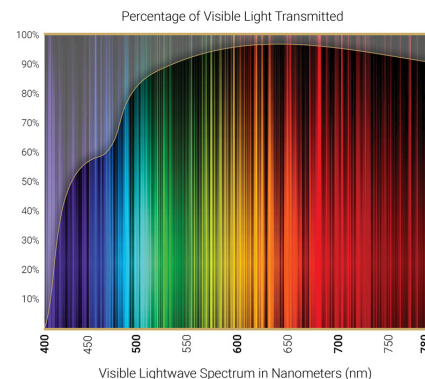


The Twilight® lens system featured in the Cocoons collection of night driving fitovers is professional-grade. Unlike many “yellow” tinted night driving lenses, Twilight lenses pass the US, European and Australasian eyewear standards for use in low to dark lighting conditions.

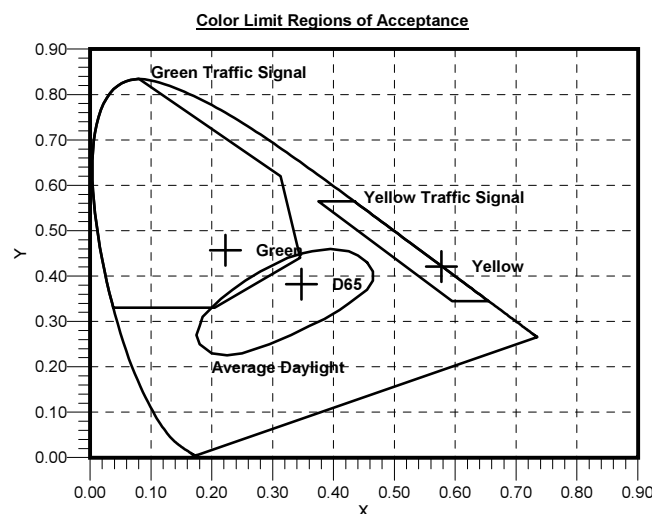
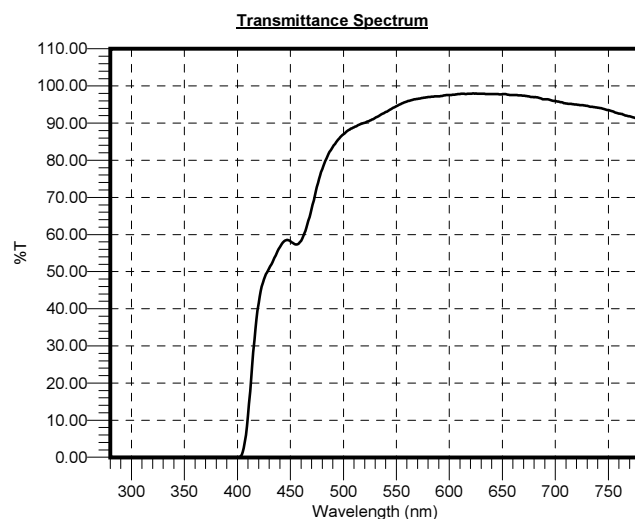
The lens is designed to reduce the levels of High Energy Visible (HEV) Blue Light, which is created by modern LED headlights and streetlights. The anti-reflective coatings help mitigate glare, delivering a crisp, less irritable night driving experience.



Standard: ANSI Z80.3:2010			
Item	Value	Requirement	Result
Lens Primary Function	Cosmetic Lens		
Luminous Transmittance Tv	93.18%	>= 40%	PASS
Color Limit, Yellow(x,y)	(0.5776 , 0.4212)		PASS
Color Limit, Green(x,y)	(0.2224 , 0.4570)		PASS
Color Limit, D65(x,y)	(0.3476 , 0.3818)		PASS
Tsig, Red Signal	97.77%	>= 8%	PASS
Tsig, Yellow Signal	96.78%	>= 6%	PASS
Tsig, Green Signal	91.47%	>= 6%	PASS
Tmin (475 - 650nm)	72.79%	>= 18.64% (0.2Tv)	PASS
Tmax UVB (280 - 315nm)	0.00%	<= 11.65% (0.125Tv)	PASS
Tmax UVA (315 - 380nm)	0.00%	<= 93.18% (Tv)	PASS
Tsb (380 - 500nm)	56.95%		

Standard: EN ISO 12312-1:2013			
Item	Value	Requirement	Result
Filter Category	0		
Luminous Transmittance Tv	93.20%	80% - 150%	PASS
Incandescent Lights			
Q, Red	1.04	>= 0.80	PASS
Q, Yellow	1.03	>= 0.60	PASS
Q, Green	0.99	>= 0.60	PASS
Q, Blue	0.89	>= 0.60	PASS
LED Signal Lights			
Q, Red	1.07	>= 0.80	PASS
Q, Yellow	1.03	>= 0.60	PASS
Q, Green	0.94	>= 0.60	PASS
Q, Blue	0.78	>= 0.60	PASS
Tmin (475 - 650nm)	72.79%	>= 18.64% (0.2Tv)	PASS
Tsuva (315 - 380nm)	0.00%	<= 93.20% (Tv)	PASS
Tsubv (280 - 315nm)	0.00%	<= 4.66% (0.05Tv)	PASS
Tsuv (280 - 380nm)	0.00%		
Tsb (380 - 500nm)	56.95%		

Standard: AS/NZS 1067:2003 (A1:2009)			
Item	Value	Requirement	Result
Lens Category	0		
Luminous Transmittance Tv	93.18%	80% - 100%	PASS
Q, Red	1.04	>= 0.80	PASS
Q, Yellow	1.03	>= 0.80	PASS
Q, Green	0.98	>= 0.60	PASS
Q, Blue	0.93	>= 0.70	PASS
Tmax (280 - 315nm)	0.00%	<= 4.66% (0.05Tv)	PASS
Tmax (315 - 350nm)	0.00%	<= 93.18% (Tv)	PASS
Tmin (450 - 650nm)	57.30%	>= 18.64% (0.2Tv)	PASS
Tsuva (315 - 400nm)	0.00%	<= 93.18% (Tv)	PASS
Tsubv (280 - 315nm)	0.00%		
Tsuv (280 - 400nm)	0.00%		
Tsb (400 - 500nm)	57.13%		



Spectrum Data:

nm	%T	nm	%T	nm	%T	nm	%T	nm	%T	nm	%T	nm	%T	nm	%T	nm	%T	nm	%T	nm	%T
280	0.000	290	0.000	300	0.000	310	0.000	320	0.000	330	0.000	340	0.000	350	0.000	360	0.000	370	0.000	380	0.000
390	0.000	400	0.000	410	11.214	420	41.532	430	50.932	440	56.614	450	58.173	460	58.338	470	66.898	480	77.594	490	83.606
500	86.997	510	88.886	520	90.087	530	91.387	540	92.983	550	94.555	560	95.852	570	96.510	580	96.998	590	97.226	600	97.607
610	97.854	620	97.963	630	97.901	640	97.870	650	97.793	660	97.565	670	97.409	680	96.986	690	96.449	700	95.945	710	95.288
720	94.991	730	94.628	740	94.177	750	93.483	760	92.590	770	91.839	780	91.152								

(1). ANSI Z80.3:2010	PASS	Lens Primary Function	Cosmetic Lens
(2). EN ISO 12312-1:2013	PASS	Filter Category	0
(3). AS/NZS 1067:2003 (A1:2009)	PASS	Lens Category	0