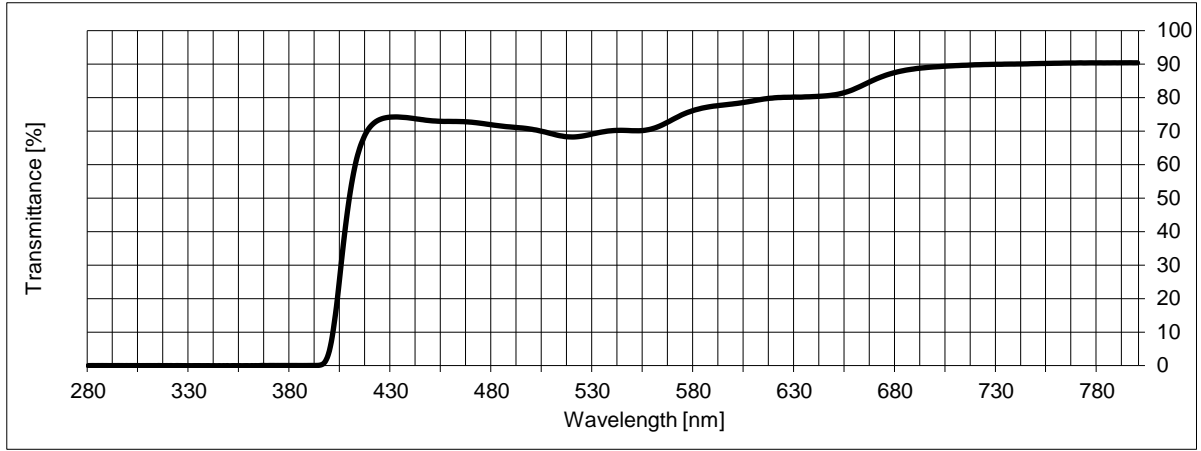


Wavelength [nm]	Transmission [%]
280	0,0
290	0,0
300	0,0
310	0,0
320	0,0
330	0,0
340	0,0
350	-0,1
360	-0,1
370	0,0
380	0,0
390	0,0
400	5,7
410	52,4
420	71,5
430	74,2
440	73,9
450	73,1
460	72,9
470	72,7
480	71,9
490	71,2
500	70,5
510	69,2
520	68,2
530	69,2
540	70,2
550	70,1
560	70,8
570	73,6
580	76,2
590	77,5
600	78,2
610	79,1
620	79,9
630	80,2
640	80,3
650	80,9
660	82,7
670	85,5
680	87,5
690	88,6
700	89,2
710	89,6
720	89,8
730	90,0
740	90,0
750	90,2
760	90,3
770	90,4
780	90,4
790	90,4
800	90,4



European Standard DIN EN ISO 12312-1:2015						Limit value
Luminous transmittance (D65) τ_V :		73,0%	Filter category:		1	
UV (280 - 380nm)	τ_{SUV} :	0,0%	100% UV-Protection			
UVA (315 - 380nm)	τ_{SUVA} :	0,0%	100% UVA-Protection	$\tau_{SUVAmax}$ (315 - 380nm):	0,0%	pass 73,0%
UVB (280 - 315nm)	τ_{SUVB} :	0,0%	100% UVB-Protection	$\tau_{SUVBmax}$ (280 - 315nm):	0,0%	pass 3,7%
blue light (380 - 500nm)	τ_{sb} :	71,2%	spectral transmittance (475-650nm) τ_{Vmin} :	68,2%	Pass	14,6%
Signal transmittance:						
red	signal transmittance τ_{sig} :	79,8%	Recognition of signal light Q:	1,09	Pass	0,8
yellow	signal transmittance τ_{sig} :	76,2%	Recognition of signal light Q:	1,04	Pass	0,6
green	signal transmittance τ_{sig} :	70,6%	Recognition of signal light Q:	0,97	Pass	0,6
blue	signal transmittance τ_{sig} :	71,9%	Recognition of signal light Q:	0,98	Pass	0,6
transmission properties related to traffic signal recognition: Pass						

American Standard ANSI Z80.3-2018				Limit value	Limit value	
Luminous transmittance (C) τ_V :		73,1%	primary function:	Cosmetic lens or shield	shade: light	
				normal use	high exposure	
UVA, mean Transmittance (315 - 380nm)	τ_{SUVA} :	0,0%		Pass 73,1%	Pass 36,6%	
UVB, mean Transmittance (280 - 315nm)	τ_{SUVB} :	0,0%		Pass 9,1%	Pass 0,7%	
blue light (380 - 500nm)	τ_{sb} :	71,2%	spectral transmittance (475-650nm) τ_{Vmin} :	68,2%	Pass 14,6%	
Signal transmittance:						
			<u>Color Limits</u>			
red	signal transmittance τ_{sig} :	81,1%	2°-Observer	x	y	
yellow	signal transmittance τ_{sig} :	76,1%		D65 0,3224	0,3267	Pass Please refer to sheet "Farbort"
green	signal transmittance τ_{sig} :	70,8%		Yellow 0,5825	0,4163	Pass
				Green 0,2113	0,3945	Pass
transmission properties related to traffic signal recognition: Pass						

Australian Standard AS/NZS 1067.1:2016						Limit value
Luminous transmittance (D65) τ_V :		73,0%	Lens category:		1	
UV (280 - 400nm)	τ_{SUV} :	0,1%	100% UV-Absorption	$\tau_{F(\lambda)max}$ (280 - 315nm):	0,0%	Pass 3,7%
UVA (315 - 400nm)	τ_{SUVA} :	0,1%		$\tau_{F(\lambda)max}$ (315 - 350nm):	0,0%	Pass 73,0%
UVB (280 - 315nm)	τ_{SUVB} :	0,0%		τ_{SUVAmx} (315 - 380nm):	0,0%	Pass 73,0%
blue light (400 - 500nm)	τ_{sb} :	71,5%	spectral transmittance (450-650nm) τ_{Vmin} :	68,2%	Pass	14,6%
Signal transmittance:						
red	signal transmittance τ_{sign} :	79,8%	Recognition of signal light Q:	1,09	Pass	0,8
yellow	signal transmittance τ_{sign} :	76,2%	Recognition of signal light Q:	1,04	Pass	0,8
green	signal transmittance τ_{sign} :	70,6%	Recognition of signal light Q:	0,97	Pass	0,6
blue	signal transmittance τ_{sign} :	71,9%	Recognition of signal light Q:	0,98	Pass	0,7
transmission properties related to traffic signal recognition: Pass						

Demand on lenses for use by drivers at night (5.2.3.4): Fail

Testreport Sunglasses

v = Pass x = Fail

Quantity of Shipment	
Frame	
color correctness	
surface / col.	
soldering	
adjustment	
nickel test	
form / dimension	
Lenses	
color	
size / form	
opt. quality	
UV-index / vertex power	
polarisation	
decentration	
Impact Resistance Test acc. to 21 CFR 801.410	test quantity: passed: failed: acceptance no.: rejection no.:
random test	
Sign	
released	
blocked	
separated	

Colormetric Observer according DIN 5033

Standard illuminant A			
2° Observer	x = 0,4595	y = 0,4019	Y = 8,02
CIELAB 1976	L* = 89,10	a* = 6,09	b* = 1,84
HUNTER	L = 86,24	a = 2,15	b = 0,33
10° Observer	x = 0,4623	y = 0,4009	Y = 8,45
CIELAB 1976	L* = 89,06	a* = 5,58	b* = 1,82
HUNTER	L = 86,19	a = 2,03	b = 3,31

Standard illuminant C			
2° Observer	x = 0,3194	y = 0,3140	Y = 7,39
CIELAB 1976	L* = 89,79	a* = 5,58	b* = 0,68
HUNTER	L = 27,19	a = 1,79	b = 0,21
10° Observer	x = 0,3190	y = 0,3171	Y = 8,14
CIELAB 1976	L* = 89,62	a* = 5,05	b* = 0,71
HUNTER	L = 85,44	a = 1,69	b = 2,33

Standard illuminant D65			
2° Observer	x = 0,3224	y = 0,3267	Y = 7,71
CIELAB 1976	L* = 88,45	a* = 5,72	b* = 0,80
HUNTER	L = 85,44	a = 1,85	b = 0,25
10° Observer	x = 0,3228	y = 0,3290	Y = 8,47
CIELAB 1976	L* = 89,59	a* = 5,13	b* = 0,87
HUNTER	L = 85,38	a = 1,73	b = 2,81

