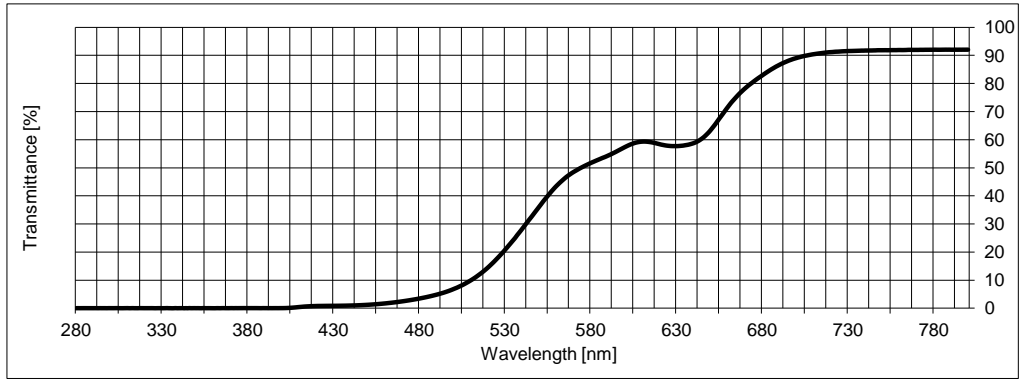


Wavelength [nm]	Transmission [%]
280	0,0
290	0,0
300	0,0
310	0,0
320	0,0
330	0,0
340	0,0
350	0,0
360	0,0
370	0,0
380	0,0
390	0,0
400	0,0
410	0,4
420	0,8
430	0,8
440	0,9
450	1,2
460	1,7
470	2,4
480	3,4
490	4,8
500	6,8
510	9,9
520	14,4
530	20,7
540	28,2
550	36,1
560	43,5
570	48,5
580	51,7
590	54,3
600	57,4
610	59,3
620	58,4
630	57,7
640	58,8
650	63,5
660	71,7
670	78,3
680	82,9
690	86,6
700	89,1
710	90,4
720	91,2
730	91,6
740	91,7
750	91,8
760	91,9
770	92,0
780	92,0
790	92,0
800	92,0



European Standard		DIN EN ISO 12312-1:2014-04		Pass
Luminous transmittance (D65) τ_v :		36,5%	Filter category: 2	Limit value
UV (280 - 380nm)	τ_{SUV} : 0,0%	100% UV-Protection		
UVA (315 - 380nm)	$\tau_{SUV(A)}$: 0,0%	100% UVA-Protection	$\tau_{SUV(A)max}$ (315 - 380nm): 0,0%	pass 36,5%
UVB (280 - 315nm)	$\tau_{SUV(B)}$: 0,0%	100% UVB-Protection	$\tau_{SUV(B)max}$ (280 - 315nm): 0,0%	pass 1,8%
blue light (380 - 500nm)	τ_{sb} : 1,7%	spectral transmittance (475-650nm) τ_{Vmin} :	2,9%	Fail 7,3%
Signal transmittance:				
red	signal transmittance τ_{sig} : 59,8%	Recognition of signal light Q:	1,64	Pass 0,8
yellow	signal transmittance τ_{sig} : 51,9%	Recognition of signal light Q:	1,42	Pass 0,6
green	signal transmittance τ_{sig} : 26,7%	Recognition of signal light Q:	0,73	Pass 0,6
blue	signal transmittance τ_{sig} : 22,0%	Recognition of signal light Q:	0,60	Pass 0,6
transmission properties related to traffic signal recognition: Fail				

American Standard		ANSI Z80.3-2010		Fail
Luminous transmittance (C) τ_v :		36,9%	primary function: General Purpose lens or shield	shade: medium to dark
			Limit value	Limit value
			normal use	high exposure
UVA, mean Transmittance (315 - 380nm)	$\tau_{SUV(A)}$: 0,0%	Pass 36,9%	Pass 18,4%	
UVB, mean Transmittance (280 - 315nm)	$\tau_{SUV(B)}$: 0,0%	Pass 4,6%	Pass 0,4%	
blue light (380 - 500nm)	τ_{sb} : 1,7%	spectral transmittance (475-650nm) τ_{Vmin} :	2,9%	Fail 7,4%
Signal transmittance:				
red	signal transmittance τ_{sig} : 62,3%	Pass		
yellow	signal transmittance τ_{sig} : 51,7%	Pass		
green	signal transmittance τ_{sig} : 26,9%	Pass		
transmission properties related to traffic signal recognition: Fail				

Australian Standard		AS/NZS 1067:2003 / AMDT 1:2009		Fail
Luminous transmittance (D65) τ_v :		36,5%	Lens category: 2	Limit value
UV (280 - 380nm)	τ_{SUV} : 0,0%	100% UV-Absorption	$\tau_{F(A)max}$ (280 - 315nm): 0,0%	Pass 1,8%
UVA (315 - 380nm)	$\tau_{SUV(A)}$: 0,0%		$\tau_{F(A)max}$ (315 - 350nm): 0,0%	Pass 36,5%
UVB (280 - 315nm)	$\tau_{SUV(B)}$: 0,0%		$\tau_{SUV(A)max}$ (315 - 380nm): 0,0%	Pass 36,5%
blue light (400 - 500nm)	τ_{sb} : 1,7%	spectral transmittance (450-650nm) τ_{Vmin} :	1,2%	Fail 7,3%
Signal transmittance:				
red	signal transmittance τ_{sign} : 59,8%	Recognition of signal light Q:	1,64	Pass 0,8
yellow	signal transmittance τ_{sign} : 51,9%	Recognition of signal light Q:	1,42	Pass 0,8
green	signal transmittance τ_{sign} : 26,7%	Recognition of signal light Q:	0,73	Pass 0,6
blue	signal transmittance τ_{sign} : 22,0%	Recognition of signal light Q:	0,60	Fail 0,7

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

Colorimetric Observer according DIN 5033

Standard illuminant A			
2° Observer	x = 0,5652	y = 0,4243	Y = 4,65
CIELAB 1976	L* = 71,63	a* = 25,11	b* = 88,97
HUNTER	L = 65,66	a = 8,51	b = 7,71
10° Observer	x = 0,5718	y = 0,4196	Y = 4,77
CIELAB 1976	L* = 70,79	a* = 26,29	b* = 91,47
HUNTER	L = 64,72	a = 9,19	b = 78,53

Standard illuminant C			
2° Observer	x = 0,5123	y = 0,4564	Y = 3,73
CIELAB 1976	L* = 71,04	a* = 16,55	b* = 87,92
HUNTER	L = 19,31	a = 4,90	b = 12,74
10° Observer	x = 0,5234	y = 0,4483	Y = 3,83
CIELAB 1976	L* = 70,34	a* = 21,94	b* = 87,00
HUNTER	L = 58,62	a = 6,83	b = 128,53

Standard illuminant D65			
2° Observer	x = 0,5104	y = 0,4593	Y = 3,86
CIELAB 1976	L* = 66,91	a* = 19,16	b* = 86,78
HUNTER	L = 60,42	a = 5,74	b = 12,40
10° Observer	x = 0,5217	y = 0,4510	Y = 3,97
CIELAB 1976	L* = 70,62	a* = 23,94	b* = 86,21
HUNTER	L = 58,42	a = 7,54	b = 125,46