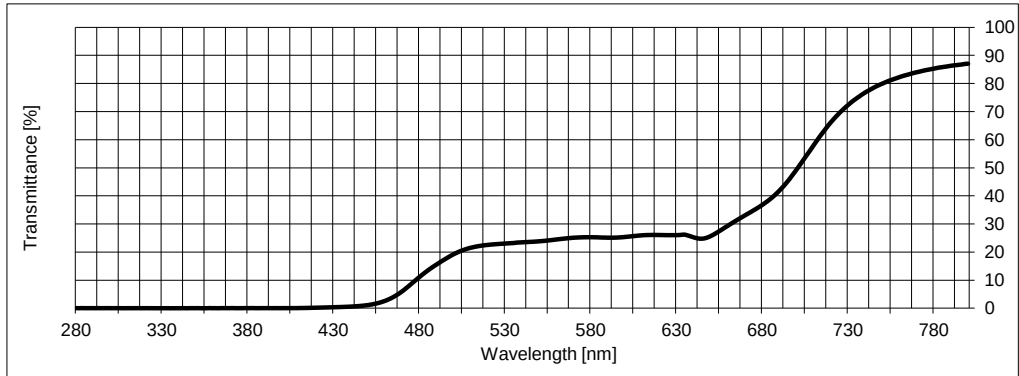


Wavelength [nm]	Transmission [%]
280	0,0
290	0,0
300	0,0
310	0,0
320	0,0
330	0,0
340	0,0
350	0,0
360	0,0
370	0,0
380	0,0
390	0,0
400	0,0
410	0,0
420	0,2
430	0,3
440	0,5
450	1,1
460	2,6
470	5,9
480	11,0
490	15,5
500	19,2
510	21,5
520	22,5
530	23,0
540	23,4
550	23,8
560	24,4
570	25,1
580	25,2
590	25,1
600	25,3
610	25,9
620	26,0
630	26,0
640	25,2
650	25,7
660	29,3
670	33,0
680	36,7
690	41,8
700	49,3
710	58,0
720	66,1
730	72,3
740	76,8
750	79,9
760	82,2
770	84,0
780	85,3
790	86,3
800	87,0



European Standard				DIN EN ISO 12312-1:2014-04		Pass
Luminous transmittance (D65) τ_V :		23,2%		Filter category:	2	Limit value
UV	(280 - 380nm)	τ_{SUV} :	0,0%	100% UV-Protection		
UVA	(315 - 380nm)	τ_{SUA} :	0,0%	100% UVA-Protection	τ_{SUAmax} (315 - 380nm):	0,0% pass 23,2%
UVB	(280 - 315nm)	τ_{SUB} :	0,0%	100% UVB-Protection	τ_{SUBmax} (280 - 315nm):	0,0% pass 1,2%
blue light	(380 - 500nm)	τ_{sb} :	3,4%	spectral transmittance (475-650nm) τ_{Vmin} :	8,4%	Pass 4,6%
Signal transmittance:						
red	signal transmittance τ_{sig} :	26,4%		Recognition of signal light Q:	1,13	Pass 0,8
yellow	signal transmittance τ_{sig} :	25,4%		Recognition of signal light Q:	1,09	Pass 0,6
green	signal transmittance τ_{sig} :	22,4%		Recognition of signal light Q:	0,97	Pass 0,6
blue	signal transmittance τ_{sig} :	20,6%		Recognition of signal light Q:	0,88	Pass 0,6
transmission properties related to traffic signal recognition: Pass						

American Standard				ANSI Z80.3-2010			Fail		
Luminous transmittance (C) τ_V :		23,2%	primary function:	General Purpose lens or shield		shade:	medium to dark		
					Limit value		Limit value		
					normal use		high exposure		
UVA, mean Transmittance (315 - 380nm) τ_{SUA} :		0,0%		Pass	23,2%	Pass	11,6%		
UVB, mean Transmittance (280 - 315nm) τ_{SUB} :		0,0%		Pass	2,9%	Pass	0,2%		
blue light (380 - 500nm) τ_{sb} :		3,4%		spectral transmittance (475-650nm) τ_{Vmin} :		8,4%	Pass 4,6%		
Signal transmittance:				Color Limits		x	y		
red	signal transmittance τ_{sig} :	27,2%	Pass	2°-Observer	D65	0,4182	0,4850	Fail	Please refer to sheet "Farbort"
yellow	signal transmittance τ_{sig} :	25,4%	Pass		Yellow	0,5817	0,4172	Pass	
green	signal transmittance τ_{sig} :	22,3%	Pass		Green	0,2541	0,5850	Pass	
transmission properties related to traffic signal recognition:								Fail	

Australian Standard				AS/NZS 1067:2003 / AMDT 1:2009		Fail
Luminous transmittance (D65) τ_V :		23,2%		Lens category:	2	Limit value
UV	(280 - 380nm)	τ_{SUV} :	0,0%	100% UV-Absorption	$\tau_{F(A)max}$ (280 - 315nm):	0,0% Pass 1,2%
UVA	(315 - 380nm)	τ_{SUA} :	0,0%		$\tau_{F(A)max}$ (315 - 350nm):	0,0% Pass 23,2%
UVB	(280 - 315nm)	τ_{SUB} :	0,0%		τ_{SUAmax} (315 - 380nm):	0,0% Pass 23,2%
blue light	(400 - 500nm)	τ_{sb} :	3,4%	spectral transmittance (450-650nm) τ_{Vmin} :	1,1%	Fail 4,6%
Signal transmittance:						
red	signal transmittance τ_{sig} :	26,4%		Recognition of signal light Q:	1,13	Pass 0,8
yellow	signal transmittance τ_{sig} :	25,4%		Recognition of signal light Q:	1,09	Pass 0,8
green	signal transmittance τ_{sig} :	22,4%		Recognition of signal light Q:	0,97	Pass 0,6
blue	signal transmittance τ_{sig} :	20,6%		Recognition of signal light Q:	0,88	Pass 0,7

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

Fail

Colorimetric Observer according DIN 5033

Standard illuminant A			
2° Observer	x = 0,5065	y = 0,4546	Y = 2,63
CIELAB 1976	L* = 56,42	a* = 1,50	b* = 47,24
HUNTER	L = 49,33	a = 0,43	b = 4,73
10° Observer	x = 0,5147	y = 0,4525	Y = 2,73
CIELAB 1976	L* = 56,05	a* = 2,40	b* = 50,82
HUNTER	L = 48,95	a = 0,72	b = 50,09

Standard illuminant C			
2° Observer	x = 0,4212	y = 0,4789	Y = 2,35
CIELAB 1976	L* = 52,75	a* = -10,92	b* = 53,94
HUNTER	L = 15,32	a = -2,76	b = 8,83
10° Observer	x = 0,4326	y = 0,4798	Y = 2,48
CIELAB 1976	L* = 52,54	a* = -7,60	b* = 55,79
HUNTER	L = 47,19	a = -2,01	b = 92,20

Standard illuminant D65			
2° Observer	x = 0,4182	y = 0,4850	Y = 2,46
CIELAB 1976	L* = 55,31	a* = -9,79	b* = 53,12
HUNTER	L = 48,20	a = -2,50	b = 8,60
10° Observer	x = 0,4302	y = 0,4854	Y = 2,60
CIELAB 1976	L* = 52,83	a* = -6,76	b* = 55,23
HUNTER	L = 47,28	a = -1,81	b = 90,17

Testreport Sunglasses

v = Pass

x = Fail

released	V
blocked	
separated	

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