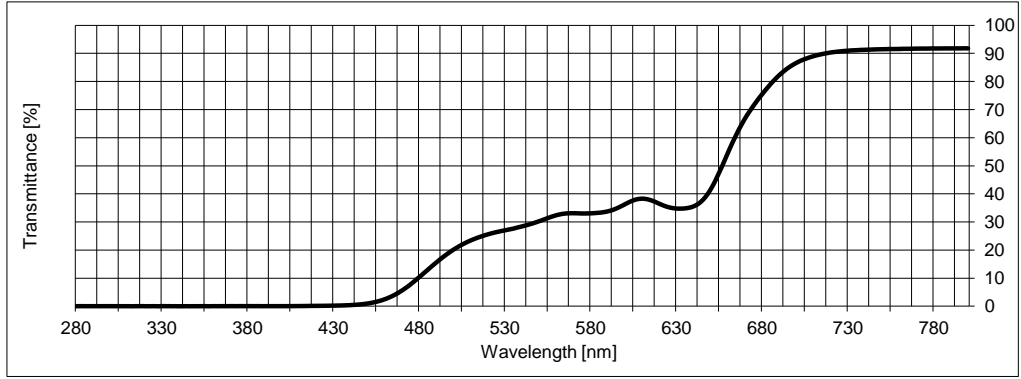


Wavelength [nm]	Transmission [%]
280	0,0
290	0,0
300	0,0
310	0,0
320	0,0
330	0,0
340	0,0
350	0,0
360	0,0
370	0,0
380	0,0
390	0,0
400	0,0
410	0,0
420	0,1
430	0,2
440	0,4
450	1,0
460	2,5
470	5,6
480	10,3
490	15,6
500	20,1
510	23,4
520	25,5
530	27,0
540	28,4
550	30,2
560	32,4
570	33,1
580	33,0
590	33,8
600	36,3
610	38,3
620	36,5
630	34,8
640	35,5
650	41,6
660	54,6
670	66,8
680	75,5
690	82,3
700	86,6
710	89,0
720	90,3
730	90,9
740	91,3
750	91,5
760	91,5
770	91,7
780	91,7
790	91,8
800	91,8



European Standard		DIN EN ISO 12312-1:2014-04		Pass
Luminous transmittance (D65) τ_v :		29,8%	Filter category: 2	Limit value
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 29,8%
UVB (280 - 315nm)	τ_{SUVB} : 0,0%	100% UVB-Protection	$\tau_{SUVBmax}$ (280 - 315nm): 0,0%	pass 1,5%
blue light (380 - 500nm)	τ_{sb} : 3,2%	spectral transmittance (475-650nm) τ_{Vmin} :	7,8%	Pass 6,0%
Signal transmittance:				
red	signal transmittance τ_{sig} :	38,9%	Recognition of signal light Q:	1,30 Pass 0,8
yellow	signal transmittance τ_{sig} :	35,1%	Recognition of signal light Q:	1,18 Pass 0,6
green	signal transmittance τ_{sig} :	27,1%	Recognition of signal light Q:	0,91 Pass 0,6
blue	signal transmittance τ_{sig} :	25,5%	Recognition of signal light Q:	0,86 Pass 0,6
transmission properties related to traffic signal recognition: Pass				

American Standard		ANSI Z80.3-2010		Fail
Luminous transmittance (C) τ_v :		29,9%	primary function: General Purpose lens or shield	shade: medium to dark
			Limit value	Limit value
			normal use	high exposure
UVA, mean Transmittance (315 - 380nm)	τ_{SUVA} : 0,0%	Pass 29,9%	Pass 14,9%	
UVB, mean Transmittance (280 - 315nm)	τ_{SUVB} : 0,0%	Pass 3,7%	Pass 0,3%	
blue light (380 - 500nm)	τ_{sb} : 3,2%	spectral transmittance (475-650nm) τ_{Vmin} :	7,8%	Pass 6,0%
Signal transmittance:				
red	signal transmittance τ_{sig} :	41,6% Pass	2°-Observer { D65 0,4456 0,4809 Yellow 0,5902 0,4087 Green 0,2729 0,5926	Fail Please refer to sheet "Farbort"
yellow	signal transmittance τ_{sig} :	35,0% Pass		
green	signal transmittance τ_{sig} :	27,1% Pass		
transmission properties related to traffic signal recognition: Fail				

Australian Standard		AS/NZS 1067:2003 / AMDT 1:2009		Fail
Luminous transmittance (D65) τ_v :		29,8%	Lens category: 2	Limit value
UV (280 - 380nm)	τ_{SUV} : 0,0%	100% UV-Absorption	$\tau_{F(A)max}$ (280 - 315nm): 0,0%	Pass 1,5%
UVA (315 - 380nm)	τ_{SUVA} : 0,0%		$\tau_{F(A)max}$ (315 - 350nm): 0,0%	Pass 29,8%
UVB (280 - 315nm)	τ_{SUVB} : 0,0%		$\tau_{SUVAmax}$ (315 - 380nm): 0,0%	Pass 29,8%
blue light (400 - 500nm)	τ_{sb} : 3,2%	spectral transmittance (450-650nm) τ_{Vmin} :	1,0%	Fail 6,0%
Signal transmittance:				
red	signal transmittance τ_{sign} :	38,9%	Recognition of signal light Q:	1,30 Pass 0,8
yellow	signal transmittance τ_{sign} :	35,1%	Recognition of signal light Q:	1,18 Pass 0,8
green	signal transmittance τ_{sign} :	27,1%	Recognition of signal light Q:	0,91 Pass 0,6
blue	signal transmittance τ_{sign} :	25,5%	Recognition of signal light Q:	0,86 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 = 0,5273	y = 0,4439	Y = 3,49
CIELAB 1976	L* = 63,60	a* = 9,07	b* = 59,41
HUNTER	L = 56,85	a = 2,82	b = 5,86
10° Observer	x = 0,5341	y = 0,4419	Y = 3,60
CIELAB 1976	L* = 63,08	a* = 9,65	b* = 63,14
HUNTER	L = 56,29	a = 3,09	b = 61,34

Standard illuminant C			
2° Observer	x = 0,4488	y = 0,4755	Y = 3,02
CIELAB 1976	L* = 60,55	a* = -4,21	b* = 65,15
HUNTER	L = 17,37	a = -1,13	b = 10,52
10° Observer	x = 0,4596	y = 0,4746	Y = 3,17
CIELAB 1976	L* = 60,14	a* = -0,51	b* = 66,74
HUNTER	L = 53,30	a = -0,14	b = 108,83

Standard illuminant D65			
2° Observer	x = 0,4456	y = 0,4809	Y = 3,15
CIELAB 1976	L* = 61,49	a* = -2,78	b* = 64,14
HUNTER	L = 54,60	a = -0,76	b = 10,25
10° Observer	x = 0,4569	y = 0,4795	Y = 3,31
CIELAB 1976	L* = 60,43	a* = 0,54	b* = 66,04
HUNTER	L = 53,34	a = 0,16	b = 106,40

Testreport Sunglasses

v = Pass x = Fail

released	V	
blocked		
separated		

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