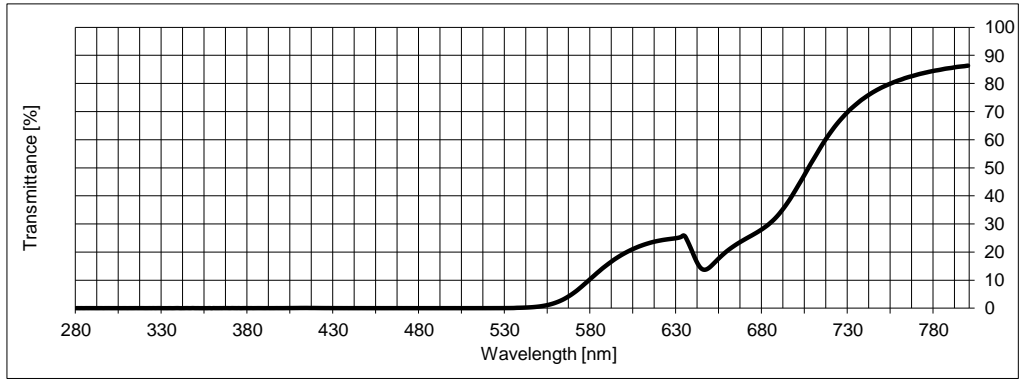


Wavelength [nm]	Transmission [%]
280	0,0
290	0,0
300	0,0
310	0,0
320	0,0
330	0,0
340	0,0
350	0,0
360	0,0
370	0,0
380	0,0
390	0,0
400	0,0
410	0,1
420	0,1
430	0,0
440	0,0
450	0,0
460	0,0
470	0,0
480	0,0
490	0,0
500	0,0
510	0,0
520	0,0
530	0,0
540	0,2
550	0,6
560	2,1
570	5,4
580	10,5
590	15,6
600	19,6
610	22,4
620	24,0
630	24,9
640	19,0
650	14,9
660	20,6
670	24,5
680	28,1
690	33,6
700	42,6
710	53,1
720	62,7
730	69,9
740	75,0
750	78,6
760	81,1
770	83,0
780	84,4
790	85,5
800	86,3



European Standard				DIN EN 1836:2005+A1:2007 (D)				Pass
Luminous transmittance (D65) τ_v :				6,5%	Filter category: 4			Limit value
UV	(280 - 380nm)	τ_{SUV} :	0,0%	100% UV-Absorption	$\tau_{F(\lambda)max}$ (280 - 315nm):	0,0%	Pass	0,6%
UVA	(315 - 380nm)	τ_{SUVA} :	0,0%		$\tau_{F(\lambda)max}$ (315 - 350nm):	0,0%	Pass	3,2%
UVB	(280 - 315nm)	τ_{SUB} :	0,0%		τ_{SUVAmx} (315 - 380nm):	0,0%	Pass	3,2%
blue light	(380 - 500nm)	τ_{sb} :	0,0%		spectral transmittance (500-650nm) τ_{Vmin} :	0,0%	Fail	1,3%
Signal transmittance:								
red	signal transmittance τ_{slg} :	21,5%		Recognition of signal light Q:	3,32	Pass		0,8
yellow	signal transmittance τ_{slg} :	13,1%		Recognition of signal light Q:	2,02	Pass		0,8
green	signal transmittance τ_{slg} :	1,8%		Recognition of signal light Q:	0,28	Fail		0,6
blue	signal transmittance τ_{slg} :	3,4%		Recognition of signal light Q:	0,53	Pass		0,4
				transmission properties related to traffic signal recognition:				Fail

American Standard				ANSI Z80.3-2010				Fail	
Luminous transmittance (C) τ_v :				6,6%	primary function:	Special Purpose lens or shield	shade:	very dark	
						Limit value	Limit value		
						normal use	high exposure		
UVA, mean Transmittance	(315 - 380nm)	τ_{SUVA} :	0,0%	Pass	3,3%	Pass	3,3%		
UVB, mean Transmittance	(280 - 315nm)	τ_{SUB} :	0,0%	Pass	0,1%	Pass	0,1%		
blue light	(380 - 500nm)	τ_{sb} :	0,0%		spectral transmittance (475-650nm) τ_{Vmin} :	0,0%	Fail	1,3%	
Signal transmittance:									
red	signal transmittance τ_{slg} :	22,3%	Pass	2°-Observer	D65	0,6295	0,3694	Fail	Please refer to sheet
yellow	signal transmittance τ_{slg} :	12,8%	Pass		Yellow	0,6467	0,3530	Pass	
green	signal transmittance τ_{slg} :	2,1%	Fail		Green	0,5513	0,4464	Fail	"Farbort"
				transmission properties related to traffic signal recognition:				Fail	

Australian Standard				AS/NZS 1067:2003 / AMDT 1:2009				Fail
Luminous transmittance (D65) τ_v :				6,5%	Lens category: 4			Limit value
UV	(280 - 380nm)	τ_{SUV} :	0,0%	100% UV-Absorption	$\tau_{F(\lambda)max}$ (280 - 315nm):	0,0%	Pass	0,3%
UVA	(315 - 380nm)	τ_{SUVA} :	0,0%		$\tau_{F(\lambda)max}$ (315 - 350nm):	0,0%	Pass	3,2%
UVB	(280 - 315nm)	τ_{SUB} :	0,0%		τ_{SUVAmx} (315 - 380nm):	0,0%	Pass	3,2%
blue light	(400 - 500nm)	τ_{sb} :	0,0%		spectral transmittance (450-650nm) τ_{Vmin} :	0,0%	Fail	1,3%
Signal transmittance:								
red	signal transmittance τ_{slg} :	21,5%		Recognition of signal light Q:	3,32	Pass		0,8
yellow	signal transmittance τ_{slg} :	13,1%		Recognition of signal light Q:	2,02	Pass		0,8
green	signal transmittance τ_{slg} :	1,8%		Recognition of signal light Q:	0,28	Fail		0,6
blue	signal transmittance τ_{slg} :	3,4%		Recognition of signal light Q:	0,53	Fail		0,7

Demand on lenses for use by drivers at night according DIN EN ISO 14889:2009-07: **Fail**

Testreport Sunglasses

v = Pass x = Fail

Quantity	
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Frame

color correctness	
surface / col.	
soldering	
adjustment	
nickel test	
form / dimension	

Lenses

color	
size / form	
opt. quality	
UV-index / vertex power	
polarisation	
decentration	
random test	
Sign	

released	
blocked	
separated	

Colorimetric Observer according DIN 5033

Standard illuminant A			
2° Observer	x = 0,6446	y = 0,3549	Y = 1,01
CIELAB 1976	L* = 36,72	a* = 41,48	b* = 76,65
HUNTER	L = 30,64	a = 12,18	b = 3,85
10° Observer	x = 0,6430	y = 0,3569	Y = 1,04
CIELAB 1976	L* = 36,31	a* = 39,38	b* = 80,83
HUNTER	L = 30,28	a = 11,82	b = 38,99

Standard illuminant C			
2° Observer	x = 0,6294	y = 0,3695	Y = 0,67
CIELAB 1976	L* = 40,32	a* = 40,81	b* = 69,83
HUNTER	L = 8,16	a = 10,53	b = 5,70
10° Observer	x = 0,6303	y = 0,3689	Y = 0,69
CIELAB 1976	L* = 39,23	a* = 40,75	b* = 69,23
HUNTER	L = 24,79	a = 10,92	b = 57,38

Standard illuminant D65			
2° Observer	x = 0,6295	y = 0,3694	Y = 0,68
CIELAB 1976	L* = 30,57	a* = 43,14	b* = 69,25
HUNTER	L = 25,44	a = 11,30	b = 5,54
10° Observer	x = 0,6305	y = 0,3688	Y = 0,70
CIELAB 1976	L* = 39,45	a* = 42,64	b* = 68,80
HUNTER	L = 24,62	a = 11,60	b = 55,91