



Tel: Fax:

Lens Certification Report

Customer :
Lens Name : R2251
Lens Type :

Standard:EN ISO 12312-1:2022				Standard: AS/NZS 1067.1:2016+A1-2021			
Item	Requirement	Value	Result	Item	Requirement	Value	Result
Filter Category		2		Filter Category		2	
Luminous Transmittance Tv	18% - 43%	19.77 %	PASS	Luminous Transmittance	18% - 43%	19.74 %	PASS
Incandescent Lights				Incandescent Lights			
Q,Red	≥ 0.80	3.94	PASS	Q,Red	≥ 0.80	3.94	PASS
Q,Yellow	≥ 0.60	1.93	PASS	Q,Yellow	≥ 0.60	1.94	PASS
Q,Green	≥ 0.60	0.30	FAILED	Q,Green	≥ 0.60	0.30	FAILED
Q,Blue	≥ 0.60	0.28	FAILED	Q,Blue	≥ 0.70	0.28	FAILED
Tmin (475-650 nm)	≥ 3.95 % (0.2Tv)	0.09 %	FAILED	Tmin (475-650 nm)	≥ 3.95 % (0.2Tv)	0.09 %	FAILED
Tsuva (315-380 nm)	≤ 9.88 % (0.5Tv)	0.02 %	PASS	Tsuva (315-400 nm)	≤ 9.87 % (0.5Tv)	0.03 %	PASS
Tsubv (280-315 nm)	≤ 1.00 %	0.03 %	PASS	Tsubv (280-315 nm)	≤ 0.99 % (0.05Tv)	0.03 %	PASS
Tsuv (280-380 nm)		0.02 %		Tsuv (280-400 nm)		0.03 %	
Tsb (380-500 nm)		0.79 %		Tsb (380-500 nm)		0.79 %	
Road Use And Driving			FAILED	LED Signal Lights			
Driving In Twilight or Night	Tv ≥ 75 %	19.77 %	NOT	Q,Red	≥ 0.80	4.31	PASS
LED Signal Lights				Q,Yellow	≥ 0.60	1.98	PASS
Q,Red	≥ 0.80	4.30	PASS	Q,Green	≥ 0.60	0.03	FAILED
Q,Yellow	≥ 0.60	1.98	PASS	Q,Blue	≥ 0.70	0.05	FAILED
Q,Green	≥ 0.60	0.03	FAILED				
Q,Blue	≥ 0.60	0.05	FAILED				

Standard: ANSI Z80.3:2018				Color Limit Regions of Acceptance			
Item	Requirement	Value	Result				
Lens Primary Function		General Purpose					
Luminous Transmittance Tv	8% - 40%	20.10 %	PASS				
Colour Distortion							
Yellow (X,Y)		(0.6622,0.3375)	FAILED				
Green (X,Y)		(0.5588,0.4177)	FAILED				
D65 (X,Y)		(0.6396,0.3485)	FAILED				
Traffic Signals Transmittance							
Tsig, Red Signal	≥ 8.00 %	88.21 %	PASS				
Tsig, Yellow Signal	≥ 6.00 %	41.23 %	PASS				
Tsig, Green Signal	≥ 6.00 %	5.45 %	PASS				
Tmin (475-650 nm)	≥ 4.02 % (0.2Tv)	0.09 %	FAILED				
Tmax UVB (280-315 nm)	≤ 2.51 % (0.125Tv)	0.02 %	PASS				
Tmax UVA (315-380 nm)	≤ 20.10 % (Tv)	0.02 %	PASS				
Tsb (380-500 nm)		0.79 %					

Measurement Results:

ISO 12312-1:2022	ANSI Z80.3-2018	AS/NZS 1067.1:2016+A1-2021	Illuminant D65	
Result FAIL	Result FAIL	Result FAIL	x 0.64	L * 50.53
			y 0.35	a * 69.49
			z 0.01	b * 76.53

Transmittance Spectrum

Wavelength (nm)

% TRANSMISSION VALUES (CENTER)

280	0.03	290	0.02	300	0.02
310	0.03	320	0.02	330	0.03
340	0.02	350	0.03	360	0.02
370	0.03	380	0.03	390	0.07
400	0.05	410	1.00	420	2.42
430	1.70	440	0.77	450	0.43
460	0.25	470	0.16	480	0.13
490	0.12	500	0.18	510	0.18
520	0.20	530	0.22	540	0.50
550	1.29	560	3.84	570	10.33
580	24.47	590	43.05	600	62.97
610	75.22	620	83.36	630	87.92
640	88.38	650	92.75	660	91.24
670	93.32	680	94.37	690	91.86
700	95.18	710	94.23	720	92.79
730	95.32	740	95.29	750	92.83
760	94.10	770	96.54	780	94.33