Date: 2024-12-26

Inspected By:

Reviewed By:

Approved By:

Applicant: Guangzhou excellence optical technology co., LTD

Device Model:

Sample Description: 2024-8009 red color anti blue

European Standard [EN/ISO 12312-1-2015]

Item	Value	Requment	Results
Transmittance(Tv)	27.09%		
Filter Category	2		
Tsuvb (280nm~315nm)	0.00%	>1.35%(0.05Tv)	PASS
Tsuva (315nm~380nm)	0.00%	<13.54%(0.5Tv)	PASS
Tmin (475nm~650nm)	0.03%	>=5.42%(0.2Tv)	REF.
Claimed Value			
Tsuvb (280nm~315nm)	0.00%	<=(2.00+0.5)%	PASS
Tsuva (315nm~380nm)	0.00%	<=(2.00+0.5)%	PASS
Tsuv (280nm~380nm)	0.00%	<=(2.00+0.5)%	PASS
Tsb (380nm~500nm)	0.08%	<=(90.00+0.5)%	PASS
Recognition of signal lights			
Red[Q] (INCT)	2.85	≥0.8	PASS
Yellow[Q] (INCT)	1.74	≥0.6	PASS
Green[Q] (INCT)	0.45	≥0.6	REF.
Blue[Q] (INCT)	0.22	≥0.6	REF.

AS/NZS Standard [AS/NZS 1067-2016]

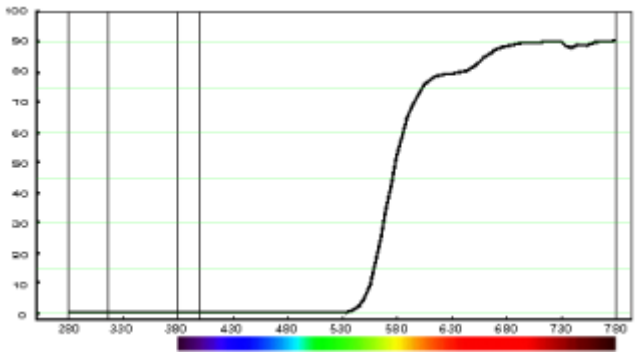
Item	Value	Requment	Results
Transmittance(Tv)	27.09%		
Filter Category	2		
Tsuvb (280nm~315nm)	0.00%	>1.35%(0.05Tv)	PASS
Tsuva (315nm~380nm)	0.00%	<13.54%(0.5Tv)	PASS
Tmin (475nm~650nm)	0.03%	>=5.42%(0.2Tv)	REF.
Claimed Value			
Tsuvb (280nm~315nm)	0.00%	<=(2.00+0.5)%	PASS
Tsuva (315nm~380nm)	0.00%	<=(2.00+0.5)%	PASS
Tsuv (280nm~380nm)	0.00%	<=(2.00+0.5)%	PASS
Tsb (380nm~500nm)	0.08%	<=(90.00+0.5)%	PASS
Recognition of signal lights			
Red[Q] (INCT)	2.85	≥0.8	PASS
Yellow[Q] (INCT)	1.74	≥0.6	PASS
Green[Q] (INCT)	0.45	≥0.6	REF.
Blue[Q] (INCT)	0.22	≥0.7	REF.

American National Standard [ANSI Z80.3-2015]

High and prolonged exposure NO

Item	Value	Requment	Results
Transmittance(Tc)	27.67%		
Filter Category	(General Purpose, medium to dark)		
Tsig Vaules			
Red	80.90%	≥8%	PASS
Yellow	51.34%	≥6%	PASS
Green	10.32%	≥6%	PASS
Mean Transmitance			
Tsb	0.08%		
UVB (280nm~315nm)	0.00%	<=3.46%(0.125Tv)	PASS
UVA (315nm~380nm)	0.00%	<=27.67%(Tv)	PASS
Tmin (475nm~650nm)	0.03%	>=5.53%(0.2Tv)	REF.
Color CIE			
Day light (D65)	X:0.612 Y:0.386		REF.
YELLOW	X:0.634 Y:0.366		PASS
GREEN	X:0.524 Y:0.472		REF.

lens: 1



CIE 1976 L*,a*,b* colc **L*= 59.05** a*= 60.13 **b*= 100.15**

Δp%= 100.00% **P%= 100.00%** **Photochromic= 0.00** **UV400= 0.00**

Spectrum Data:

780	90.55	**775**	90.20	**770**	90.14	**765**	89.96	**760**	89.71	**755**	89.09	**750**	88.93	**745**	88.83
740	87.95	**735**	88.46	**730**	89.98	**725**	90.09	**720**	90.07	**715**	89.93	**710**	89.86	**705**	89.75
700	89.56	**695**	89.61	**690**	89.26	**685**	89.07	**680**	88.47	**675**	87.98	**670**	87.15	**665**	86.06
660	84.72	**655**	83.15	**650**	81.82	**645**	80.63	**640**	79.95	**635**	79.53	**630**	79.24	**625**	79.17
620	78.97	**615**	78.38	**610**	77.40	**605**	75.57	**600**	72.89	**595**	69.31	**590**	64.87	**585**	58.93
580	51.54	**575**	42.82	**570**	33.56	**565**	24.32	**560**	15.86	**555**	9.09	**550**	4.60	**545**	2.01
540	0.74	**535**	0.25	**530**	0.09	**525**	0.05	**520**	0.03	**515**	0.04	**510**	0.03	**505**	0.05
500	0.03	**495**	0.04	**490**	0.04	**485**	0.06	**480**	0.06	**475**	0.08	**470**	0.06	**465**	0.06
460	0.05	**455**	0.07	**450**	0.07	**445**	0.08	**440**	0.07	**435**	0.09	**430**	0.10	**425**	0.10
420	0.13	**415**	0.14	**410**	0.15	**405**	0.18	**400**	0.21	**395**	0.01	**390**	0.01	**385**	0.01
380	0.02	**375**	0.00	**370**	0.00	**365**	0.00	**360**	0.00	**355**	0.00	**350**	0.00	**345**	0.00
340	0.00	**335**	0.00	**330**	0.00	**325**	0.00	**320**	0.00	**315**	0.00	**310**	0.00	**305**	0.00
300	0.00	**295**	0.00	**290**	0.00	**285**	0.00	**280**	0.00						

CIE 1931 XYZ

