

# ELLIM OPTICAL

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## Sunglasses Certification Report

Sample Name : **DS-11 샘플렌즈 이름**  
Company :  
Material : **CR-39 샘플렌즈 재질**  
Size :

Sample Remark :

### Standard: ANSI Z80.3:2010 아시아기준

Item	Value	Requirement	Result
Lens Primary Function	General Purpose		
Luminous Transmittance Tv	10.26% (투과율) 8% - 40%		PASS
Color Limit, Yellow(x,y)	(0.60,0.40) (차단율=100%-투과율)		PASS
Color Limit, Green(x,y)	(0.20,0.40)		PASS
Color Limit, D65(x,y)	(0.32,0.33)		PASS
Tsig, Red Signal	15.58%	>=8.00%	PASS
Tsig, Yellow Signal	15.58%	>=6.00%	PASS
Tsig, Green Signal	10.29%	>=6.00%	PASS
Tmin (475 - 650nm)	7.64%	>=2.05%(0.2Tv)	PASS
Tmax UVB (280 - 315nm)	0.00%	<=1.28%(0.125Tv)	PASS
Tmax UVA (315 - 380nm)	0.00%	<=10.26%(Tv)	PASS
Tsb (380 - 500nm)	9.27%	청광투과율	

### Standard: EN ISO 12312-1:2013 유럽기준

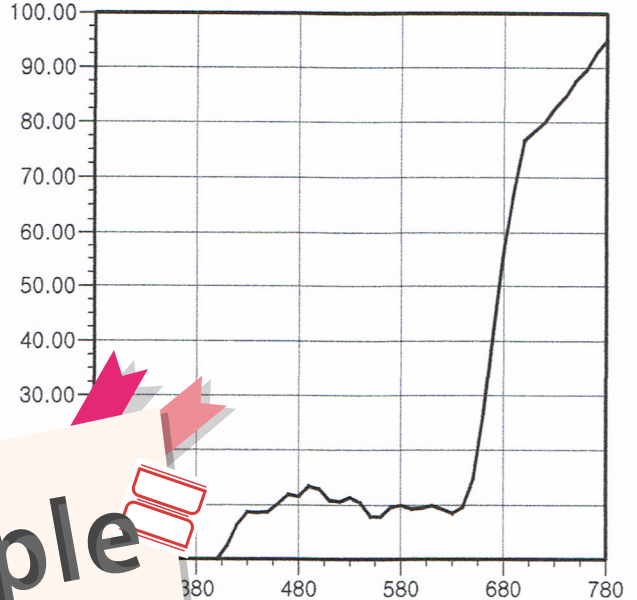
Item	Value	Requirement	Result
Filter Category	3		
Luminous Transmittance Tv	10.26%	8% - 18%	PASS
Incandescent Lights			
Q,Red	1.25	>=0.80	
Q,Yellow	1.02	>=0.80	
Q,Green	0.99	>=0.60	
Q,Blue	1.22	>=0.60	
LED Signal Lights			
Q,Red	0.96	>=0.80	
Q,Yellow	0.93	>=0.60	
Q,Green	1.13	>=0.60	
Q,Blue	1.09	>=0.60	
Tmin(475 - 650nm)	7.64%	>=2.05%(0.2Tv)	PASS
Tsuva(315 - 380nm)	0.00%	<=5.13%(0.51Tv)	PASS
Tsuvb(280 - 315nm)	0.00%	<=1.00%	PASS
Tsuv(280 - 400nm)	0.00%		
Tsb(380 - 500nm)	9.28%		

### Standard: AS/NZS 1067:2003(A1:2009) 호주, 뉴질랜드 기준

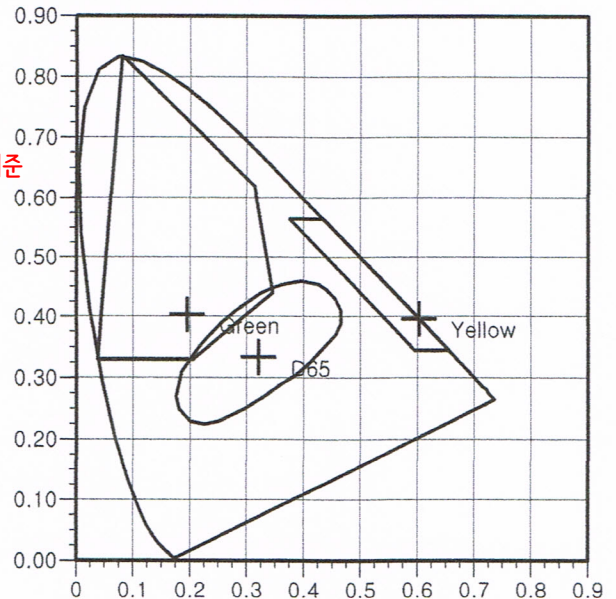
Item	Value	Requirement	Result
Lens Category	3		
Luminous Transmittance Tv	10.26%	8% - 18%	PASS
Q,Red	1.20	>=0.80	PASS
Q,Yellow	1.02	>=0.80	PASS
Q,Green	1.00	>=0.60	PASS
Q,Blue	1.34	>=0.70	PASS
Tmax(280 - 315nm)	0.00%	<=0.51%(0.05Tv)	PASS
Tmax(315 - 350nm)	0.00%	<=5.13%(0.5Tv)	PASS
Tmin(450 - 650nm)	7.64%	>=2.05%(0.2Tv)	PASS
Tsuva(315 - 400nm)	0.00%	<=5.13%(0.5Tv)	PASS
Tsuvb(280 - 315nm)	0.00%		
Tsuv(280 - 400nm)	0.00%		
Tsb(400 - 500nm)	9.28%		

CIE 1976 L\*,a\*,b\* color space coordinates, illuminant D65  
L\*=38.436 a\*=-1.299 b\*=2.591

Transmittance Spectrum



Color Limit Regions of Acceptance



#### Spectrum Data:

nm	%T	nm	%T	nm	%T	nm	%T	nm	%T	nm	%T	nm	%T	nm	%T	nm	%T	nm	%T	nm	%T
280	0.00	290	0.00	300	0.00	310	0.00	320	0.00	330	0.00	340	0.00	350	0.00	360	0.00	370	0.00	380	0.00
410	2.55	420	6.41	430	8.76	440	8.63	450	8.82	460	10.33	470	11.97	480	11.64	490	13.51	500	12.97	510	10.94
540	10.50	550	7.92	560	7.90	570	9.70	580	10.04	590	9.39	600	9.54	610	10.00	620	9.32	630	8.58	640	9.75
670	42.33	680	57.09	690	67.67	700	76.76	710	78.46	720	80.12	730	82.80	740	84.85	750	87.73	760	89.59	770	92.84
																		780	95.18		

- (1). ANSI Z80.3:2010 PASS
- (2). EN ISO 12312-1:2013 PASS
- (3). AS/NZS 1067:2003(A1:2009) PASS
- (4). UV380 PASS UV400 통과
- (5). UV400 PASS

Lens Primary Function General Purpose  
Filter Category 3 렌즈진도 카테고리  
Lens Category 3 (카테고리로 가시광선 투과율을 알 수 있다.)