

DONGGUAN YUEHENG OPTICAL CO., LTD.

Technical Support Unit

Lens Code : Rhythm500 Lens PC2042O [F] #1, Specimen #2, YH Ref. #3, Customer Ref. Rhythm Optics
 Date : 21/3/2017 N/A

SPECTRUM TEST REPORT

TSU170321-01A

Lens Specification

Lens material	: PC	Spherical power	: $\leq \pm 0.09DS$
Base	: 6B	Astigmatic power	: $\leq 0.09DC$
Size	: 73mm	Prismatic power	: $\leq 0.12cm/m$
Color	: Orange	Thickness	: $2.0 \pm 0.1mm$

American Standard ANSI Z 80.3-2015

	Center	Req.	Pass/Fail
4.6.1. Luminous Transmittance	46.22%		
Primary function:	Cosmetic lens or shield, light		
4.6.2. Mean Transmittance			
Mean UVB	-0.01%	Max : 5.78%	Pass
Mean UVA	-0.01%	Max : 46.22%	Pass
4.6.3. Traffic Signals Recognition			
Red Signal	89.31%	Min : 8.00%	Pass
Yellow Signal	73.86%	Min : 6.00%	Pass
Green Signal	26.68%	Min : 6.00%	Pass
Spectral transmittance	0.00Tv	Min : 0.20Tv	Fail
Color Limits	X	Y	
Daylight(D65)	0.5587	0.4397	Fail
Yellow traffic signals	0.6011	0.3981	Pass
Green traffic signals	0.4390	0.5569	Fail

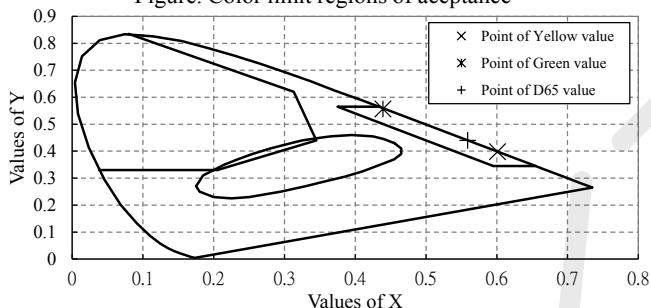
European Standard EN/ISO 12312-1:2013

	Center	Req.	Pass/Fail
5.2. Transmittance and filter categories	45.29%		
Filter category	1		
Blue-light absorption	100.00%		
UV absorption	100.01%		
280-315nm UVB	-0.01%	Max : 2.26%	Pass
315-380nm UVA	-0.01%	Max : 45.29%	Pass
5.3.2. Requirements for road and driving			
Red	1.94	Min : 0.80	Pass
Yellow	1.51	Min : 0.60	Pass
Green	0.70	Min : 0.60	Pass
Blue	0.24	Min : 0.60	Fail
Spectral transmittance	0.00Tv	Min : 0.20Tv	Fail

Australian/ New Zealand Standard AS/NZS 1067:2003+A1:2009

	Center	Req.	Pass/Fail
2.1. Transmittance requirement and lens categories	45.27%		
Filter category	1		
UVB (280-315nm)	-0.01%	Max : 2.26%	Pass
UV (315-350nm)	-0.01%	Max : 45.27%	Pass
UVA (315-400nm)	-0.01%	Max : 45.27%	Pass
Spectral transmittance	0.00Tv	Min : 0.20Tv	Fail
Red	1.95	Min : 0.80	Pass
Yellow	1.63	Min : 0.80	Pass
Green	0.57	Min : 0.60	Fail
Blue	0.43	Min : 0.70	Fail
2.4. Claimed transmittance properties			
Blue-light absorption	100.00%		
UV absorption	100.01%		

Figure. Color limit regions of acceptance



CIE 1976 L*,a*,b* colour coordinates, illuminant D65

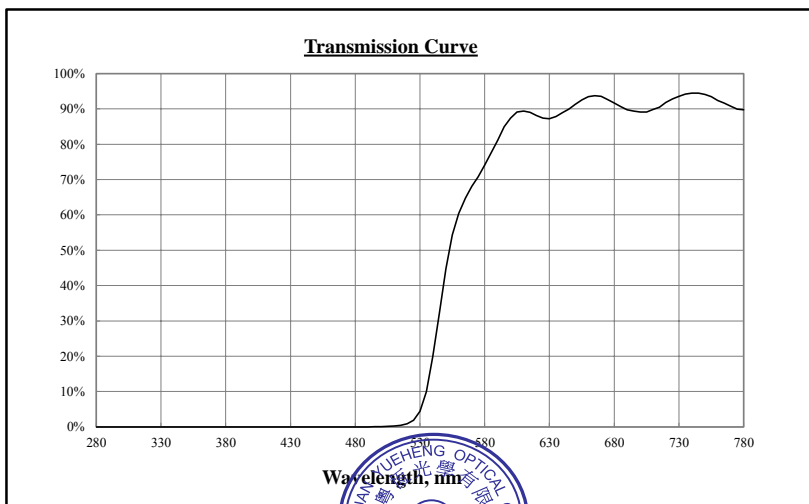
Center			
L*	: 73.1	a*	: 39.00
b*	: 130.36		

Results

1). American Standard ANSI Z 80.3-2010	Pass	- Not Suitable for driving or road use -
2). European Standard EN/ISO 12312-1:2013	Pass	- NOT SUITABLE FOR DRIVING AND ROAD USE -
3). Australian/ New Zealand Standard AS/NZS 1067:2003+A1:2009	Pass	- MUST NOT BE USED WHEN DRIVING -
4). Internal Standard	UV380 Pass	
	UV400 Pass	

Transmission Value (Center)

λ , nm	Exp	λ , nm	Exp	λ , nm	Exp
780	89.73%	590	81.12%	400	0.00%
770	90.80%	580	74.08%	390	-0.01%
760	92.41%	570	68.06%	380	-0.01%
750	94.08%	560	60.40%	370	-0.02%
740	94.51%	550	44.70%	360	-0.01%
730	93.59%	540	19.94%	350	-0.01%
720	91.83%	530	4.39%	340	-0.01%
710	89.82%	520	0.84%	330	-0.01%
700	89.09%	510	0.28%	320	-0.02%
690	89.73%	500	0.00%	310	0.00%
680	91.65%	490	0.00%	300	-0.01%
670	93.53%	480	0.00%	290	-0.01%
660	93.49%	470	0.00%	280	-0.01%
650	91.33%	460	-0.01%		
640	88.92%	450	0.00%		
630	87.23%	440	-0.01%		
620	88.09%	430	0.00%		
610	89.44%	420	0.00%		
600	87.37%	410	-0.01%		



Tested by : Huang Banxi

Date : 21/3/2017

Approved by : [Signature]

Date : 21/3/2017