

Technology & Science Unit

Lens Code : **Rhythm560 Lens PC2041R[F]** #1, Specimen #2, YH Ref. #3, Customer Ref. **Rhythm Optics**
 Date : 19/7/2019

SPECTRUM TEST REPORT

TSU190719-01A

Lens Specification

Lens material	: PC	Spherical power	: $\leq \pm 0.09$ DS
Base	: 4B	Astigmatic power	: ≤ 0.09 DC
Size	: 76mm	Prismatic power	: ≈ 0.12 cm/m
Color	: Red	Thickness	: 1.5 ± 0.1 mm

American Standard ANSI Z 80.3-2018

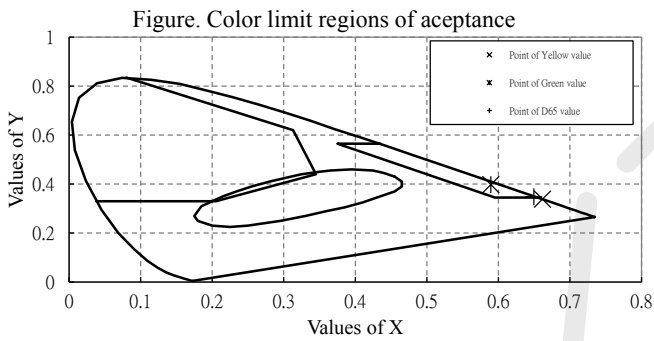
	Center	Req.	Pass/Fail
4.6.1. Luminous Transmittance	21.90%		
Primary function:	General purpose lens or shield, medium to dark		
4.6.2. Mean Transmittance			
Mean UVB	0.00%	Max : 2.74%	Pass
Mean UVA	0.00%	Max : 21.90%	Pass
4.6.3. Traffic Signals Recognition			
Red Signal	89.94%	Min : 8.00%	Pass
Yellow Signal	44.78%	Min : 6.00%	Pass
Green Signal	5.23%	Min : 6.00%	Fail
Spectral transmittance	0.00Tv	Min : 0.20Tv	Fail
Color Limits	X	Y	
Daylight(D65)	0.6495	0.3481	Fail
Yellow traffic signals	0.6614	0.3383	Fail
Green traffic signals	0.5893	0.3980	Fail

European Standard EN/ISO 12312-1:2013/Amd.1:2015

	Center	Req.	Pass/Fail
5.2. Transmittance and filter categories	21.58%		
Filter category	2		
Blue-light absorption	99.89%		
UV absorption	100.00%		
280-315nm UVB	0.00%	Max : 1.08%	Pass
315-380nm UVA	0.00%	Max : 10.79%	Pass
5.3.2. Requirements for road and driving			
Red	3.91	Min : 0.80	Pass
Yellow	1.92	Min : 0.60	Pass
Green	0.25	Min : 0.60	Fail
Blue	0.25	Min : 0.60	Fail
Spectral transmittance	0.00Tv	Min : 0.20Tv	Fail

Australian/ New Zealand Standard AS/NZS 1067.1:2016

	Center	Req.	Pass/Fail
2.1. Transmittance requirement and lens categories	21.58%		
Filter category	2		
UVB (280-315nm)	0.00%	Max : 1.08%	Pass
UVA (315-400nm)	0.00%	Max : 21.58%	Pass
Spectral transmittance	0.00Tv	Min : 0.20Tv	Fail
Red	3.91	Min : 0.80	Pass
Yellow	1.92	Min : 0.60	Pass
Green	0.25	Min : 0.60	Fail
Blue	0.25	Min : 0.70	Fail
2.4. Claimed transmittance properties			
Blue-light absorption	99.89%		
UV absorption	100.00%		



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

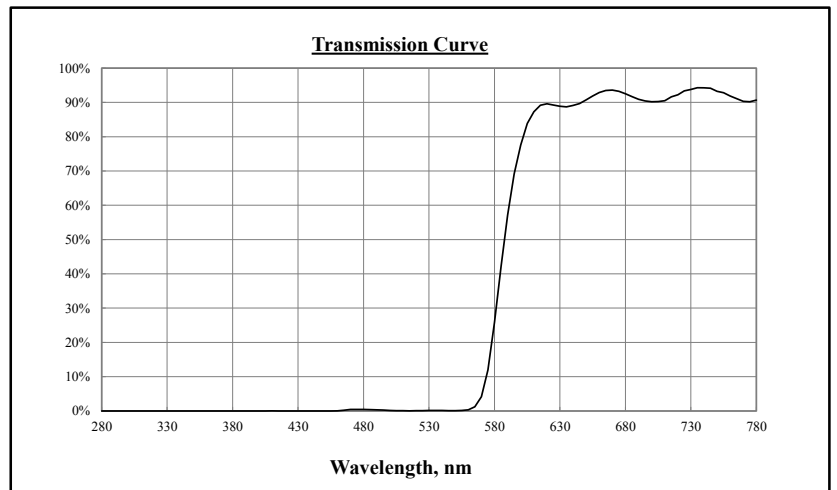
Center			
L*	: 53.6	a*	: 75.53
b*	: 97.79		

Results

1). American Standard ANSI Z 80.3-2018	Pass	- Not Suitable for driving or road use -
2). European Standard EN/ISO 12312-1:2013/Amd.1:2015	Pass	- NOT SUITABLE FOR DRIVING AND ROAD USE -
3). Australian/ New Zealand Standard AS/NZS 1067.1:2016	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	90.66%	590	57.15%	400	0.00%
770	90.30%	580	25.89%	390	0.00%
760	91.86%	570	4.15%	380	0.00%
750	93.24%	560	0.36%	370	0.00%
740	94.25%	550	0.11%	360	0.00%
730	93.78%	540	0.14%	350	0.00%
720	92.21%	530	0.14%	340	0.00%
710	90.50%	520	0.08%	330	0.00%
700	90.21%	510	0.07%	320	0.00%
690	90.88%	500	0.17%	310	0.00%
680	92.54%	490	0.34%	300	0.00%
670	93.59%	480	0.43%	290	0.00%
660	92.90%	470	0.43%	280	0.00%
650	90.72%	460	0.03%		
640	89.10%	450	0.00%		
630	88.87%	440	0.00%		
620	89.58%	430	0.00%		
610	87.25%	420	0.00%		
600	77.61%	410	0.01%		



Tested by : CT Ye

Date : 19/7/2019

Approved by : [Signature]

Date : 19/7/2019