

Ophthalmic Testing Report

Report Number: R-20160606-034 Flatness Testing

Prepared for:

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June 15, 2016

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Contents

Project Definition and Scope 3
Sample Identification
Opinions, Interpretations, and Conclusions 4
Image Comparisons 4
Results 5
Image 1: S-160606-054.1, Class A (99-UVBTS72)5
Image 2: S-160606-054.2, Class A (99-UVBTS72)5
Image 3: S-160606-055.1, Class AB (99-UVBT72)6
Image 4: S-160606-055.2, Class AB (99-UVBT72)6
Image 5: S-160606-056.1, Class B (98-UVATS72)7
Image 6: S-160606-056.2, Class B (98-UVATS72)7
Image 7: S-160606-057.1, New Class C (98-UVAT72)8
Image 8: S-160606-057.2, New Class C (98-UVAT72)8
Image 9: S-160606-058.1, Class D (95-UVAT72)9
Image 10: S-160606-058.2, Class D (95-UVAT72)9
Image 11: S-160606-059.1, Class E (90-UVAT72) 10
Image 12: S-160606-059.2, Class E (90-UVAT72) 10



Project Definition and Scope

Twelve lens filters were submitted for flatness testing by transmittance. The test outlined was performed on all lens filters. The sample filters were received on June 6, 2016.

Sample Identification

The samples are labeled as indicated in the table below.

Sample Number	Client Label	Pass/Fail
S-160606-054.1	Class A (99-UVBTS72)	Pass
S-160606-054.2	Class A (99-UVBTS72)	Pass
S-160606-055.1	Class AB (99-UVBT72)	Pass
S-160606-055.2	Class AB (99-UVBT72)	Pass
S-160606-056.1	Class B (98-UVATS72)	Pass
S-160606-056.2	Class B (98-UVATS72)	Pass
S-160606-057.1	New Class C (98-UVAT72)	Pass
S-160606-057.2	New Class C (98-UVAT72)	Pass
S-160606-058.1	Class D (95-UVAT72)	Pass
S-160606-058.2	Class D (95-UVAT72)	Pass
S-160606-059.1	Class E (90-UVAT72)	Fail
S-160606-059.2	Class E (90-UVAT72)	Pass



Opinions, Interpretations, and Conclusions

Lens filter samples were examined using an A&R Dual LensMapper. Measurement by transmission provides combined surface curvature readings in diopters (D or Dpt), the standard unit of measure in Ophthalmic Optics. "Flatness" is represented across a 40mm diameter as 0.00 D ... zero curvature or absolutely flat, which is a SOLID GREEN COLOR on the LensMapper Images. Variations in flatness are noted in tenths of diopters (.1D), recognized on the LensMapper Images by COLOR CHANGES. Convex variations are lighter shades of green into yellow (plus numbers running north on the numeric scale); concave variations are green into blue (minus numbers running south on the scale).

In addition to flatness, COLOR CHANGES on the LensMapper Images also alert us to refractive errors. Conversely, SOLID COLORS indicate there are no measureable refractive errors. Hence, where there is a color change on the LensMapper image, you will find light refraction in the filter. The ultimate effect is that light refraction will cause image distortion.

If you have any questions regarding these results, please contact us.

Report Prepared By: Terry Graham Ophthalmic Technician

Approved by:



Report #: R-20160606-034 Flatness Testing Page 5 of 10 June 15, 2016

Results

Image 1: S-160606-054.1, Class A (99-UVBTS72)





Image 2: S-160606-054.2, Class A (99-UVBTS72)



DefaultRTC (Dpt Measure) by transmission

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mm

Report #: R-20160606-034 Flatness Testing Page 6 of 10 June 15, 2016

Image 3: S-160606-055.1, Class AB (99-UVBT72)

DefaultRTC (Dpt Measure) by transmission

Class AB, (99-UVBT72) Class AB, (99-UVBT72) ◀ 1.01 0.909 0.808 0.707 1.01 0.909 0.808 0.707 0.606 0.606 0.505 0.404 0.303 0.505 0.404 0.303 0.303 0.202 0.1 -0.1 -0.201 -0.302 -0.403 0.202 0.1 -0.1 -0.201 -0.302 -0.403 -0.505 -0.606 -0.707 -0.808 -0.505 -0.606 -0.707 -0.808 -0.909 -0.909 -1.01-1.01∃ mm mm ∃ mm

DefaultRTC (Dpt Measure) by transmission

Image 4: S-160606-055.2, Class AB (99-UVBT72)

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Report #: R-20160606-034 Flatness Testing Page 7 of 10 June 15, 2016

DefaultRTC (Dpt Measure) by transmission DefaultRTC (Dpt Measure) by transmission Class B, (98-UVATS72) Class B, (98-UVATS72) ◀ 1.01 0.909 0.808 0.707 0.606 0.505 0.404 1.01 0.909 0.808 0.707 0.606 0.505 0.404 0.303 0.303 0.202 0.1 0 0.202 0.1 -0.1 -0.201 -0.302 -0.403 -0.505 -0.1 -0.201 -0.302 -0.403 -0.505 -0.505 -0.606 -0.707 -0.808 -0.606 -0.707 -0.808 -0.909 -1.01 -0.909 -1.01 mm mm mm mm mm mm

Image 5: S-160606-056.1, Class B (98-UVATS72)

Image 6: S-160606-056.2, Class B (98-UVATS72)

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Report #: R-20160606-034 Flatness Testing Page 8 of 10 June 15, 2016

Image 7: S-160606-057.1, New Class C (98-UVAT72)

Image 8: S-160606-057.2, New Class C (98-UVAT72)





Report #: R-20160606-034 Flatness Testing Page 9 of 10 June 15, 2016

Image 9: S-160606-058.1, Class D (95-UVAT72)



DefaultRTC (Dpt Measure) by transmission

Image 10: S-160606-058.2, Class D (95-UVAT72)



DefaultRTC (Dpt Measure) by transmission



Report #: R-20160606-034 Flatness Testing Page 10 of 10 June 15, 2016

Image 11: S-160606-059.1, Class E (90-UVAT72)



DefaultRTC (Dpt Measure) by transmission

Image 12: S-160606-059.2, Class E (90-UVAT72)

DefaultRTC (Dpt Measure) by transmission

