



Telescope Reflector Solar (Eclipse) Filter

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[VIEW IN BROWSER](#)

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Summary

For my Meade 4.5" Reflector Telescope



6.85 hrs



2 pcs



0.20 mm



0.40 mm



ASA



62 g



Creality
Ender 3

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For this eclipse I wanted to get a bit more official than the Cardboard and tape I had used to observe and photograph the past Eclipse. So I have taken some measurements and drew out this part to make use of the ISO filter material.

Some parts you will need

4 - #8-32 1/2 " Machine Fasteners (Countersunk)

1 - 6" of Solar Filter

I had performed some post processing on the part. For one it is printed in ASA. I went ahead and sanded some of the rough edges. Also used a Dremel with a Sanding Wheel to clean out the filter inset.

On the Outer piece, I did use a Black Spray paint enamel to help give it some more resistance to the sun and give it a cleaner look. Also I sanded the Pad that mates with the inset to avoid damage or tearing of the filter.

The O-Ring is printed with TPU (around 95A) in order to provide a gasket to secure the Filter material so it will compress in.

Also have added an optional template for cutting the Filter Material.

Model files



telescope-reflector01-tscope-inner-ring.stl

❏ Piece of assembly that goes into the Telescope - Use ASA,ABS or PETG would not recommend PLA



telescope-reflector01-tscope-outer-ring.stl

❏ Piece of assembly that attached to the "Inner Ring" - Use ASA,ABS or PETG



telescope-reflector01-oring001.stl

❏ Gasket for Filter and Housing - Use TPU



telescope-solar-template-reflector.stl

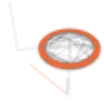
❏ Template for Filament Cutting

Print files



telescope-reflector01-tscope-inner-ring_3h54m_020mm... .gcode

⚙ ASA ⚙ 0.40 mm ⚙ 0.20 mm ⌚ 3.90 hrs ⚖ 35 g 🖨 Creality Ender 3



telescope-reflector01-tscope-outer-ring_2h57m_020mm... .gcode

ASA 0.40 mm 0.20 mm 2.95 hrs 27 g Creality Ender 3

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