


# Lithophane Moon

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VIEW IN BROWSER

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## Summary

A very high detail lithophane moon, for people who don't mind >48 hour prints!

Art & Design > Sculptures

Tags: light lithophane moon

None of the lithophane moons already here were quite right for me, the main issue for me being that there wasn't enough difference between the dark and light areas of the moon. I wanted to fix that.

After a bit of experimenting, it turned out pretty easy to create my own. Here's how I did it.

I used the 8192x4096 colour image of the moon from https://svs.gsfc.nasa.gov/cgi-bin/details.cgi?aid=4720 I loaded it into Photoshop and stretched the levels a bit, to increase the difference between light and dark areas of the surface.

I then used https://lithophanemaker.com/Lithophane%20Sphere.html#processing to create a lithophane of the moon. The settings I used were :

Fit Image to Sphere
Lithophane Resolution: 0.25mm/pixel

Sphere Diameter: 200mm
Maximum Thickness: 3.6mm
Minimum Thickness: 0.8mm
Cylinder Outer Diameter: 65mm
Cylinder Height: 5mm
Cylinder Thickness: 5mm
Cylinder Ledge Outer Diameter: 65mm
Top Hole Outer Diameter: 0mm
Y Shift: 1.00

Obviously the Cylinder settings should be altered to fit your requirements. In my case, the lamp base I'm using has a 55mm tube which holds the light bulb.

The Maximum Thickness should be altered to suit the brightness of the bulb you will be placing inside the moon. Choosing 3.6mm was an educated guess based on another moon I printed, which seemed to vary between 0.8mm and 2.0mm.

I then imported the resulting .stl into Bambu Studio, and printed it at 0.12mm layer height without any support. I set the wall loops to 7 (I could have set infill to 100% to achieve the same result, of course), and added 20mm of brim. The resulting print took just short of 2 days and 4 hours.

The lamp base is from B&Q here in the UK.

# Model files

**carls-moon-3mf.3mf**

**carls-moon-stl.stl**

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