

LulzBot Filament Testing Report

Manufacturer: Colorfabb
Filament Name: Copperfill
Filament Type: Copper powder filled PLA/PHA
Tested By: Brent M
Date: 10/20/2015

Ease of use: 6/10
Appearance: 8/10 - Can be polished
Size consistency: 7/10
Color consistency: 10/10
Print temperature: 215/60
Prints using Lulzbot profiles/temps: Yes, profiles had to be created for this material

Notes:

- Great density and feel, especially when polished
- Prints with the same profiles as the bronzefill
- Needed to be printed at a hotter temperature than manufacturer recommends (230 vs 190-210C)
- Color was very consistent throughout the roll.
- Nice professional looking packaging.
- Overhangs and bridging are pretty poor, but dimensional accuracy and negative space are great.
- The material is pretty brittle when printed (similar to laybrick), but it feeds off of the spool very nicely.
- Material tends to build up on the tip of the nozzle and cause print defects
- Should be noted that 0.75kg of this filament is a much smaller roll than what people are used to with non metal filled filaments

Recommendation: This material is great looking, and can be printed well with the profiles developed, should be great for cosplay or decorative prints. Because of the potential heat creep issues and nozzle buildup, I would recommend classifying the material as “advanced” in the cura quickprint menu.

Filament	Variance in diameter	Maximum out of round	Extrusion temperature
Colorfabb Copperfill (2.85mm)	2.76-2.89mm in 10m sample	2.79-2.86mm (0.07mm)	215/60 worked well, running cooler could improve overhangs but may cause jamming

