LulzBot Filament Testing Report

Manufacturer: Proto Pasta / ProtoPlant Filament Name: Aromatic Coffee PLA

Filament Type: PLA filled with ~2% coffee extract

Tested By: Brent M. Date: 12/30/2015

Ease of use: 7/10 **Appearance:** 10/10 **Size consistency:** 9/10 **Color consistency:** 9/10 **Print temperature:** 225/60

Prints using Lulzbot profiles/temps: Profile had to be created, strips out with std. PLA profiles

Notes:

- The base material for this filament is Protopasta's high temperature PLA
 - It can't be printed with the standard 205C print temperature, needs 220-230C (225 seems ideal).
 - It can be "annealed" by post processing in an oven at ~70-110C, this increases the heat deflection temperature to up to 140C
- The material is 98% HT PLA, ~2% coffee extract
- While printing there's a definite smell of coffee mixed with the sweet odor of PLA, there is no noticeable smell at room temperature.
- The packaging is a standard ProtoPasta cardboard spool with lulzbot label, looks nice.
- The color of the filament changes a bit depending on print temperature and speed, similar to wood filled filaments but not as drastic.
- The MSDS states a maximum safe temperature of 230C.

Recommendation: This is definitely a niche filament, but is of excellent quality and produces nice prints. Definitely R&D approved and can be sold once unique profiles are created. There should be a note on the product page to not bring the filament above 230C.

Filament	Variance in diameter	Maximum out of round	Print temperatures (C)
ProtoPasta Aromatic Coffee (2.85 mm)	2.82-2.86mm (0.04mm) in 10m sample	2.82-2.84mm (0.02mm)	225/60



