**Supplemental file**

G21; metric values

G90; absolute position

M83; set extruder to absolute mode

G92 E0; zero the extruder lenght

G1 E0.1; extrude material

G1 F400 X0 Y0 Z1.4; printing position

; start printing

; sides

G1 X6 F400 E0.01

G1 Y6 F400 E0.01

G1 X0 F400 E0.01

G1 Y0 F400 E0.01

; layer 1

G1 X1 F400 E0

G1 Y6 F400 E0.01

G1 X2 F400 E0

G1 Y0 F400 E0.01

G1 X3 F400 E0

G1 Y6 F400 E0.01

G1 X4 F400 E0

G1 Y0 F400 E0.01

G1 X5 F400 E0

G1 Y6 F400 E0.01

G1 X6 F400 E0

G1 Y0 F400 E0.01

; layer 2

G1 Z1.6; 0.2 mm between layers

G1 X0 F400 E0.011

G1 Y1 F400 E0

G1 X6 F400 E0.011

G1 Y2 F400 E0

G1 X0 F400 E0.011

G1 Y3 F400 E0

G1 X6 F400 E0.011

G1 Y4 F400 E0

G1 X0 F400 E0.011

G1 Y5 F400 E0

G1 X6 F400 E0.011

G1 Y6 F400 E0

G1 X0 F400 E0.011

; layer 3

G1 Z1.8

G1 Y0 F400 E0.012

G1 X1 F400 E0

G1 Y6 F400 E0.012

G1 X2 F400 E0

G1 Y0 F400 E0.012

G1 X3 F400 E0

G1 Y6 F400 E0.012

G1 X4 F400 E0

G1 Y0 F400 E0.012

G1 X5 F400 E0

G1 Y6 F400 E0.012

G1 X6 F400 E0

G1 Y0 F400 E0.012

; layer 4

G1 Z2

G1 X0 F400 E0.013

G1 Y1 F400 E0

G1 X6 F400 E0.013

G1 Y2 F400 E0

G1 X0 F400 E0.013

G1 Y3 F400 E0

G1 X6 F400 E0.013

G1 Y4 F400 E0

G1 X0 F400 E0.013

G1 Y5 F400 E0

G1 X6 F400 E0.013

G1 Y6 F400 E0

G1 X0 F400 E0.013

; layer 5

G1 Z2.2

G1 Y0 F400 E0.014

G1 X1 F400 E0

G1 Y6 F400 E0.014

G1 X2 F400 E0

G1 Y0 F400 E0.014

G1 X3 F400 E0

G1 Y6 F400 E0.014

G1 X4 F400 E0

G1 Y0 F400 E0.014

G1 X5 F400 E0

G1 Y6 F400 E0.014

G1 X6 F400 E0

G1 Y0 F400 E0.014

; layer 6

G1 Z2.4

G1 X0 F400 E0.015

G1 Y1 F400 E0

G1 X6 F400 E0.015

G1 Y2 F400 E0

G1 X0 F400 E0.015

G1 Y3 F400 E0

G1 X6 F400 E0.015

G1 Y4 F400 E0

G1 X0 F400 E0.015

G1 Y5 F400 E0

G1 X6 F400 E0.015

G1 Y6 F400 E0

G1 X0 F400 E0.015

; end of printing

G0 F400 Z15; needle moves away from the dish