Status of 3D Printing

Hwidong Yoo (Yonsei Univ.)

On behalf of the Korea Dual-Readout Calorimeter team

1





Status of 3D Printing

Ordered two pieces of samples with specific requirements

4 x 4 cm



2

Status of 3D Printing

• The 1st trial is not hopeless, but we should investigate more details and will try several other options to improve



2nd Trial

- With following configuration
 - 1) 99% density (1kW laser 3D printer)
 - 26 x 26 holes (front), 27 x 27 holes (end) => for projective module building
 - 1.3 mm diameter + 0.7 mm distance between holes + 3 cm height
 - This outcome is the most interesting!
 - 95% density (400W laser 3D printer)
 - 2) same as above + 4 cm height
 - 3) 60 x 60 holes (rectangular) with 1mm diameter + 0.5 mm distance

Sample 2, 3



Sample 1



Sample 1: front



Sample 1: end



Sample 1: side



Sample 1: light



Sample 1: light



Sample 1: light



Next Steps

- Investigate more details of the outputs
 - Measure the diameter, distance between holes etc. more precisely
 - Find how to make the hole smoother