

# Light yield and uniformity measurements of different scintillator tiles and studies of 4th generation Hamamatsu SiPMs

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We present light yield and uniformity measurements of square tiles and hexagonal tiles that are read out with SiPMs via a Y11 fiber or directly from the side or from the top in a dimple. All tiles have an area of  $9\text{ cm}^2$ . Their sides are wrapped with two layers of Teflon tape and the top and bottom faces are wrapped with two layers of Tyvec paper. We further show the first light yield and uniformity measurements of ATLAS TileCal tiles with SiPM readout. This study has been motivated to look into a possible phase 3 upgrade for the calorimeter. Finally we present first measurements of the 4th generation SiPMs from Hamamatsu.

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