**CMS Simulation Preliminary**

$H \rightarrow \gamma\gamma$ ($m_{\gamma\gamma}$ = 124 GeV, 7 TeV)

■ category 0 (EB, R9>0.94)

▲ category 1 (EB, R9<0.94)

▼ category 2 (EE, R9>0.94)

● category 3 (EE, R9<0.94)

Photon ID Efficiency

Photon $p_T$ (GeV)