CMS Simulation (LHE) 8 TeV

$pp \to h \to 2n_1 \to 2n_D + 2\gamma_D \to 2n_D + 4\mu$

$m_h = 125$ GeV, $m_{n_1} = 10$ GeV, $m_{n_D} = 1$ GeV

$m_{\gamma_D} = 0.250$ GeV, $c\tau_{\gamma_D} = 0.2$ mm

—— 1st dark photon (leading p_T)

—— 2nd dark photon

Normalized Fraction of events / 0.2 mm

L_{XY} of γ_D [mm]