CMS Simulation (LHE) 14TeV TeV $|pp| \rightarrow |h| \rightarrow |2h_1| \rightarrow |2h_D| + |2\gamma_D| \rightarrow |2h_D| + |4\mu|$ $m_h = 125 \text{ GeV}, m_{n_s} = 50 \text{ GeV}, m_{n_p} = 1 \text{ GeV}$ $m_{\gamma_{\Sigma}} = 20 \text{ GeV}, c\tau_{\gamma_{\Sigma}} = 10 \text{ mm}$ 1st dark photon (leading p_T) 2nd dark photon

15 20 25 30 35