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Studies of Z + photon production at CDF JAKE WHITAKER, University of Chicago, JOHN FREEMAN, VADIM RUSU, Fermilab, YOUNG-KEE KIM, University of Chicago / Fermilab, CDF COLLABORATION — We present studies of $Z \to l^+l^-$+ photon production with central photons where the Z decays into e^+e^- or $\mu^+\mu^-$, using 4.5 fb^{-1} of Tevatron $p\bar{p}$ collisions collected by the CDF detector at Fermilab. We measure the cross section for $Z \to l^+l^-$+ photon where the invariant mass of the two leptons is greater than 40 GeV and the photon, separated from both leptons, has transverse energy greater than 7 GeV. We then compare it to the next-to-leading-order calculation. We also present kinematic distributions of data events and compare them with the expected shapes from the standard model, with the specific goal of measuring potential beyond-the-standard-model anomalous triple gauge couplings between the Z and the photon.

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