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Performance of the CMS Zero Degree Calorimeter's Electromagnetic Section RAYMOND KENNY, U of Kansas, CMS COLLABORATION — The crossing angle of the LHC beams at CMS assures the isolation of consecutive collisions and effects the luminosity of the beams. We have measured the crossing angle using the Zero Degree Calorimeter. This was achieved by finding the energy weighted mean position of electromagnetic clusters of energy. For this measurement the electromagnetic section of the ZDC was used. The hadronic section of the ZDC was employed to reject hadronic showers and thereby improve the measurement. In addition, we developed methods for removing events where secondary particles hit the photo-multiplier tubes directly. We will describe the techniques used in these measurements, and the performance of the Zero Degree Calorimeter.

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