Modeling of the Opacity-on-NIF hohlraum for Anchor 2[1] ES DODD, NS KRASHENINNIKOVA, NB RAMEY, P HAKEL, CJ FONTES, LANL, RA LONDON, LLNL, IL TREGILLIS, TS PERRY, LANL, RF HEETER, LLNL, HM JOHNS, LANL, YP OPACHICH, LLNL, TH DAY, T CARDENAS, BH WILDE, TJ URBATSCH, MR DOUGLAS, LANL — The Opacity-on-NIF experiments have begun taking data for LTE opacity measurements of iron at conditions referred to as Anchor 2: 180 eV and 310^{22} cm^{-3} [1]. Iron opacities are important for understanding the structure of the sun, yet there is an ongoing disagreement between opacity theory and data that makes corroboration highly important. Complex hohlraum geometries are required to achieve the necessary iron plasma conditions and minimize spectrometer background [2], however moving to the Anchor 2 conditions has forced a re-examination of background sources. Windows on the hohlraum have been used to create a plasma fill that holds the expanding gold wall out of the spectrometer line-of-sight. We will discuss the role of windows and the pre-pulse used to disassemble them in creating spectrometer background, based on Lasnex calculations. We will also examine the use of Be liners on the hohlraum wall, instead of windows, to better reduce background in the measured spectra. [1] J. E. Bailey, *et al.*, *Nature,* **517** 56 (2015). [2] E. S. Dodd, *et al.*, Phys. Plasmas **25**, 063301 (2018).

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