Purpose:
Total skin electron treatment with the six-field, dual-angle technique is commissioned. Two types of dosimeters, the Gafchromic EBT2 films and the NACP parallel plate ion chamber, are employed to allow cross-comparison of the measurement results.

Methods:
The commissioning followed AAPM report 23 guidelines and was performed on a Varian 2300EX under the HDTse- mode. The SSD was 4.2m. Dual gantry angles were determined by sampling the vertical profile using the chamber. Both EBT2 films and the chamber were used to determine PDDs and perform the output calibration in solid water under a single-dual field setting. The beam output was verified by a 3rd party dosimetry service using TLDs. Dual-angle six-field measurements, including the x-ray contamination measurement, were performed using the EBT2 films in an anthropomorphic phantom.

Results:
16deg was selected for the dual angles to achieve a dose uniformity of 80% along the vertical profile on the central axis. The single dual field R_50s determined using the EBT2 films and NACP chamber matched within 0.5mm, and the dmax determined using the two dosimeters matched within 1mm. The output calibration results between the EBT2 films and NACP matched with 2.1%. The 3rd party measured beam output matched ours to within 3%. The x-ray contamination was 0.8%. PDD results of the-six dual field demonstrated that the R_50 was smaller than those of a single-dual field and the doses at the clinical depth of interest of 4mm varied up to 35%. B factor, defined as the ratio of the dose at the Rando surface from the six-dual field over the dose at dmax of a single-dual field was within the range suggested in AAPM report 23.

Conclusions:
Commissioning results obtained using the two different dosimeters are comparable and satisfactory. Future work is to establish a QA program for this treatment modality.