

The dynamic multileaf collimator (DMLC) provides the versatility of generating intensity modulated photon beams while providing field-shaping capabilities. The DMLC on Varian 2300C/D was programmed to deliver wedge beam of  $15^{\circ}$ ,  $30^{\circ}$ ,  $45^{\circ}$  and  $60^{\circ}$  EDW using Golden Segmented Treatment Table (GSTT) data of Enhanced Dynamic Wedge. The cross beam profiles and the output factors for the same size EDW and DMLC generated wedge fields compare within 0.5% except in the penumbra region. Minimum difference in the penumbra region is attributed to round leaf design of Varian MLC. Inter-leaf and intra-leaf transmission contributes minimally to the output and therefore can be ignored in this simple case of intensity modulation. A limit of 14.5 cm in maximum leaf spread can be easily overcome by using two match fields. The maximum variation at the match point of two fields is less than 4%. This approach allows a maximum symmetric wedge field size of 29 cm, which is 9 cm larger than maximum symmetric current EDW field. Current treatment planning systems can be easily adapted to simulate dynamic wedge with DMLC without additional effort. Both discrete and dynamic approach of beam delivery gives similar results in this study.