

paragraph 2 using the obtained f_w should be referred to as "*attained EEDI_{weather}*";

- .1 f_w can be determined by conducting the ship specific simulation on its performance at representative sea conditions. The simulation methodology should be based on the Guidelines developed by the Organization⁴ and the method and outcome for an individual ship should be verified by the Administration or an organization recognized by the Administration; and
- .2 in cases where a simulation is not conducted, f_w should be taken from the "Standard f_w " table/curve. A "Standard f_w " table/curve is provided in the Guidelines⁴ for each ship type defined in regulation 2 of MARPOL Annex VI, and expressed as a function of capacity (e.g. deadweight). The "Standard f_w " table/curve is based on data of actual speed reduction of as many existing ships as possible under the representative sea condition.

f_w and *attained EEDI_{weather}*, if calculated, with the representative sea conditions under which those values are determined, should be indicated in the EEDI Technical File to distinguish it from the attained EEDI calculated under regulations 20 and 21 of MARPOL Annex VI.

- .10 $f_{eff(i)}$ is the availability factor of each innovative energy efficiency technology. $f_{eff(i)}$ for waste energy recovery system should be one (1.0)⁵.
- .11 f_i is the capacity factor for any technical/regulatory limitation on capacity, and should be assumed to be one (1.0) if no necessity of the factor is granted
 - .1 The capacity correction factor, f_i , for ice-classed ships should be taken as the lesser value of f_{i0} and $f_{i,max}$ as tabulated in Table 2, but not less than $f_{i,min} = 1.0$. For further information on approximate correspondence between ice classes, see HELCOM Recommendation 25/7⁶.

Table 2: Capacity correction factor f_i for ice-classed ships

Ship type	f_{i0}	$f_{i,max}$ depending on the ice class			
		IA Super	IA	IB	IC
Tanker	$\frac{0.00138 \cdot L_{pp}^{3.331}}{capacity}$	$2.10L_{pp}^{-0.11}$	$1.71L_{pp}^{-0.08}$	$1.47L_{pp}^{-0.06}$	$1.27L_{pp}^{-0.04}$
Bulk carrier	$\frac{0.00403 \cdot L_{pp}^{3.123}}{capacity}$	$2.10L_{pp}^{-0.11}$	$1.80L_{pp}^{-0.09}$	$1.54L_{pp}^{-0.07}$	$1.31L_{pp}^{-0.05}$

⁴ Refer to *Interim Guidelines for the calculation of the coefficient f_w for decrease in ship speed in a representative sea condition for trial use*, approved by the Organization and circulated by MEPC.1/Circ.796.

⁵ EEDI calculation should be based on the normal seagoing condition outside Emission Control Area designated under regulation 13.6 of MARPOL ANNEX VI.

⁶ HELCOM Recommendation 25/7 may be found at <http://www.helcom.fi>.

