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Kevin Ford* (ford@math.uiuc.edu), Department of Mathematics, University of Illinois at Urbana-Champaign, Urbana, IL 61801, **Florian Luca** (fluca@matmor.unam.mx), Fundación Marcos Moshinsky, Instituto de Ciencias Nucleares UNAM, Circuito Exterior, C.U., Apdo. Postal 70-543, D.F. 04510 Mexico, Mexico, and **Carl Pomerance** (carlp@gauss.dartmouth.edu), Department of Mathematics, Dartmouth College, Hanover, NH 03755-3551. *The range of Carmichael's universal exponent function.*

Let $\lambda(n)$ denote the maximal order of an element of the group $(\mathbb{Z}/n\mathbb{Z})^*$, commonly called Carmichael's function. We are concerned with estimating the function $V_\lambda(x)$ which counts the number of distinct values up to x in the image of λ . We show that $V_\lambda(x) = x(\log x)^{-c+o(1)}$, where $c = 1 - \frac{1+\log \log 2}{\log 2} \approx 0.08607$. (Received August 20, 2013)