Schwarzschild effect compensation for different photographic materials

For most photographic materials, reciprocity is valid with good accuracy over a range of values of exposure duration, but becomes increasingly inaccurate as we depart from this range: the Schwarzschild effect. As the light level decreases out of the reciprocity range, the increase in duration, and hence of total exposure, required to produce an equivalent response becomes higher than the formula states; for instance, at half of the light required for a normal exposure, the duration must be more than doubled for the same result. (http://en.wikipedia.org/wiki/Reciprocity)

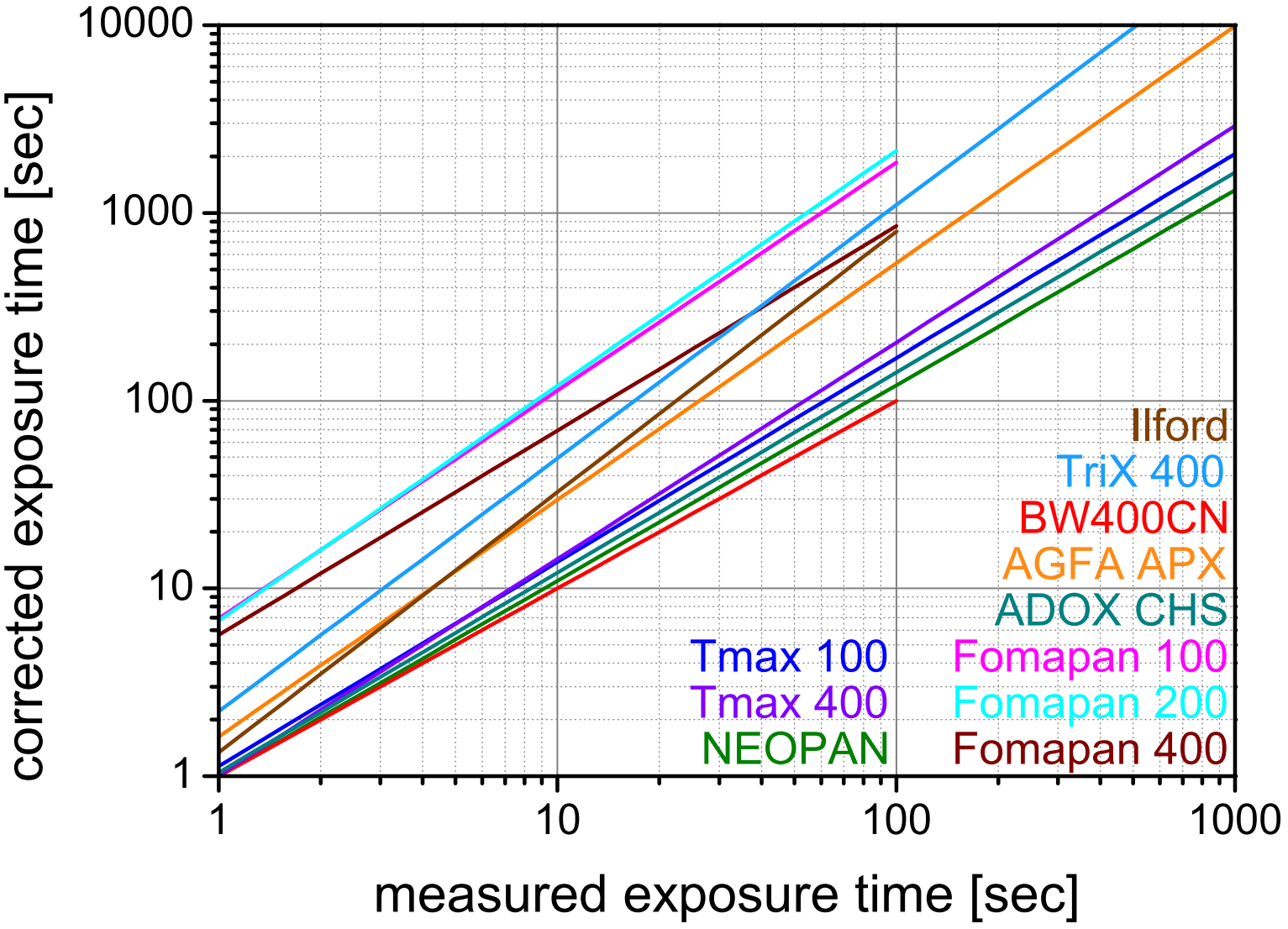

Figure 1: Corrected exposure time values to compensate the Schwarzschildeffect for different photographic materials