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Numbers that are integrally representable by the homogenization of the minimal polynomial of $\tan(\pi/n)$

Let $F(x, y)$ denote a binary form with integer coefficients of degree $d > 2$ and non-zero discriminant. Let $R_F(Z)$ denote the number of all integers $\leq Z$ that are integrally representable by F . In 2019, Stewart and Xiao proved that there exists a positive constant C , which depends only on F , such that $R_F(Z) \sim CZ^{2/d}$. For every integer $n > 2$, we estimate the constant C for $t_n(x, y)$, the homogenization of the minimal polynomial of $\tan(\pi/n)$.