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Multiplicative functions whose values are uniformly distributed in $(0,\infty)$*.* (In English)

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A positive valued arithmetic function f: $\mathbb{N} \to \setminus^+$ which tends to infinity as $n \to \infty$ has values uniformly distributed in $(0,\infty)$ if there exists a positive constant $d \in \mathbb{R}^+$ such that for $y \to \infty \sum_{f(n)\leq y} 1 \sim dy$. The number d will be called the density of values. Under certain conditions the uniform distribution of the values of a multiplicative function f is equivalent to the behavior of $F(s) = \sum_{n=1}^{\infty} f(n)^{-s}$ near $s = 1$. There is also a connection between the uniform distribution of the values of the multiplicative function f in $(0,\infty)$ and the existence of a positive mean values of the arithmetic function $h(n) = n/f(n)$. The cases $d = 0$ and $d = \infty$ are included in a similar way. Several examples show that some of the theorem fail if the condition are weakened.

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Classification:
11N37 Asymptotic results on arithmetic functions
11A25 Arithmetic functions, etc.
11K65 Arithmetic functions (probabilistic number theory)

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