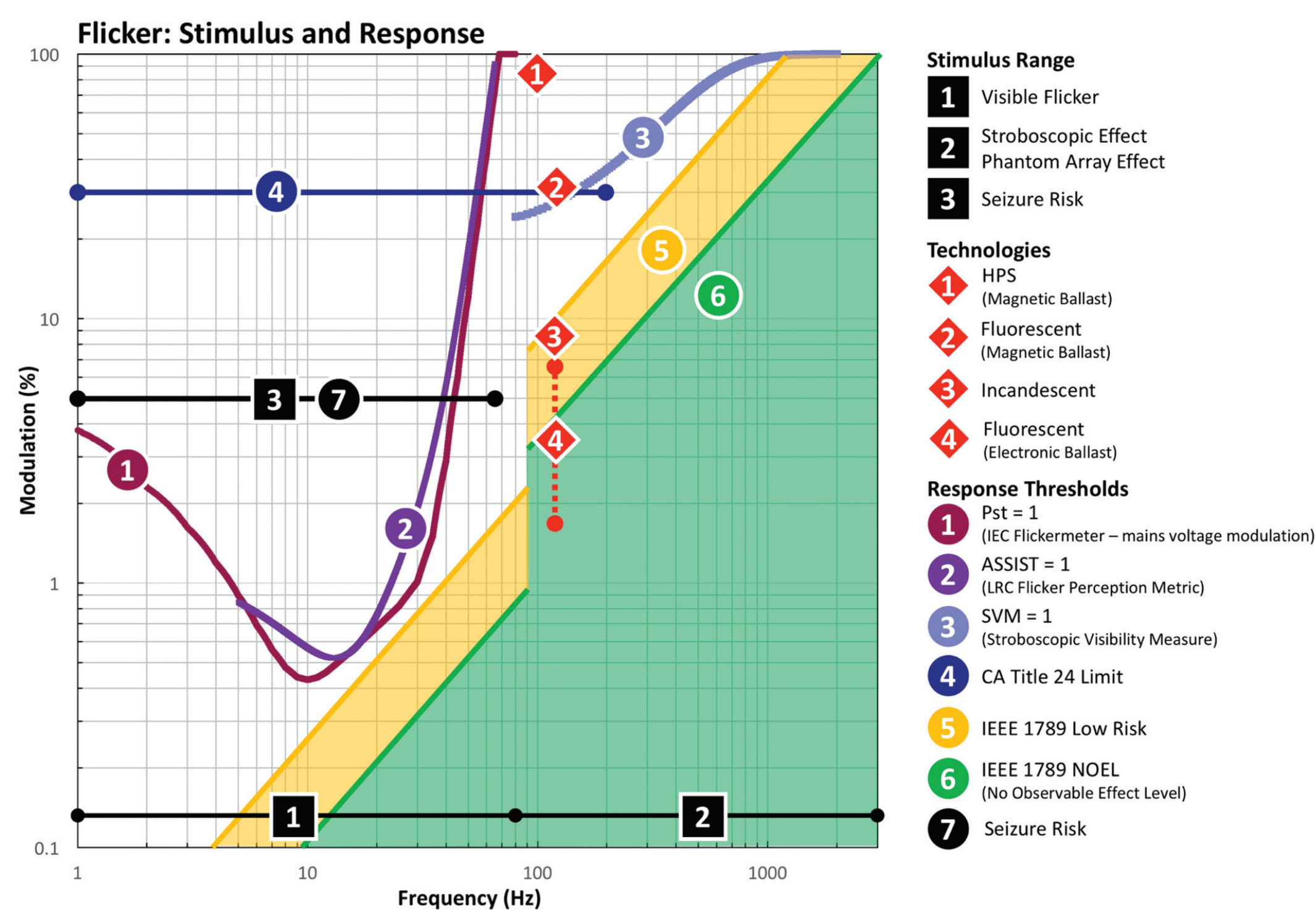


Addressing Flicker: Guidance, Standards, and Tools



DOE and Industry Efforts Drive Technology Improvements, Specifier Guidance

U.S. DEPARTMENT OF
ENERGY

DOE Report

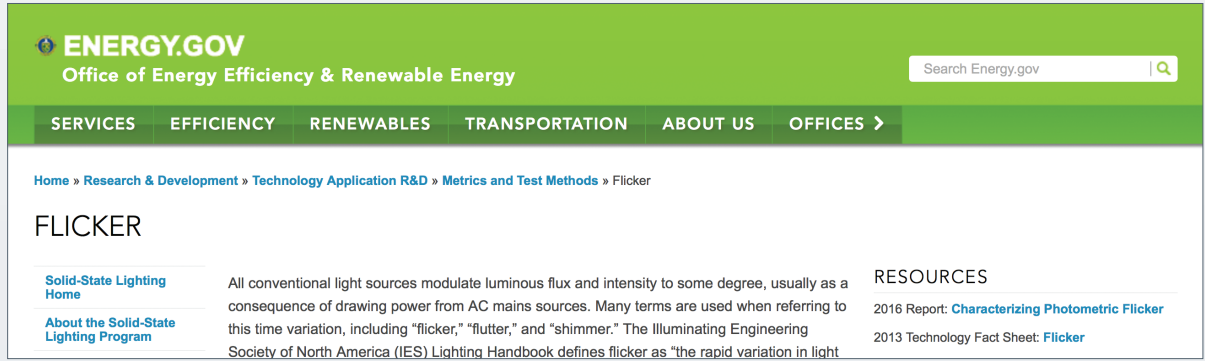
Characterizing Photometric Flicker

Discusses the performance for three commercially available meters against a defined reference system.



Flicker Fact Sheet and Website

Technical information and analysis



IEEE 1789™-2015

Recommended Practices for Modulating Current in High-Brightness LEDs for Mitigating Health Risks to Viewers

Relates flicker, specifically the concept modulation frequencies, to LEDs for various applications and provides recommendations for modulation frequencies at three risk levels.



NEMA 77-2017

Temporal Light Artifacts: Test Methods and Guidance for Acceptance Criteria

Presents methods and metrics to quantify the visibility of TLA and sets initial application-dependent limits.



CIE TN 006:2016

Visual Aspects of Time-Modulated Lighting Systems—Definitions and Measurement Models

Provides definitions and methods to quantify Temporal Light Artifacts (TLA), especially flicker and stroboscopic effect.

CIE Stakeholder Workshop (2017)

To improve collaboration across organizations, this workshop summarized the current knowledge base, identified gaps, and developed a roadmap.



IES Forthcoming LM-XX

Forthcoming LM-XX Method of Measuring and Quantifying Temporal Light Artifacts

Insight and analysis, at your fingertips

Learn more: energy.gov/eere/ssl/flicker

