



Eyesafe® Accessory Requirements 2.0

Blue Light Management and Color Performance for Screen Accessory Manufacturers

Document issued August 30, 2023

Developed in collaboration with the Eyesafe Vision Health Advisory Board.
For more information about Eyesafe® Standards, certification, and partner guidelines,
please visit eyesafe.com.

For questions regarding this document, contact info@eyesafe.com

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Amidst increasing scientific and medical research on blue light exposure, Eyesafe and TÜV Rheinland are releasing updated blue light accessory requirements, targeting the light filtered between 435-440 nanometers (nm). Studies suggest this wavelength poses the greatest risk to retinal health as referenced by the Spectral Weighting Factors for Blue-Light Hazard as published by the International Commission on Non-Ionizing Radiation Protection (ICNIRP) in 2013 and the American National Standard Institute (ANSI) in 2015.

In parallel with the updated standards, Eyesafe is renewing RPF® Radiance Protection Factor for Accessory. RPF is a universal and comprehensive measure to assess the blue light hazard across accessories and devices. RPF is similar to SPF, where higher numbers translate to better protection. For accessories, RPF is identified as a factor (percentage number between 0-100) to quantify the performance of reduction of blue light hazard of a standard display product. The RPF Number shows the reduction level of toxic blue light of accessory optical film at 435-440 nm, empowering consumers to make informed choices for their eye health. RPF for Accessory aligns with TÜV Rheinland's Blue Light Reduction certification and may be used for marketing purposes with permission from Eyesafe.

Eyesafe Accessory Requirements 2.0 (2023)					
RPF® Radiance Protection Factor	TÜV Rheinland Blue Light Reduction Ratio Accessory	Peak Protection at 435-440nm	Blue Light Toxicity Reduction	Shift of CCT	Luminance Reduction
RPF20	20% Blue Light Reduction	At least 20%	≥15%	≤250K	≤20%
RPF30	30% Blue Light Reduction	At least 30%	≥15%	≤250K	≤20%
RPF40	40% Blue Light Reduction	At least 40%	≥20%	≤350K	≤20%
RPF50	50% Blue Light Reduction	At least 50%	≥20%	≤350K	≤20%
RPF60	60% Blue Light Reduction	At least 60%	≥30%	≤500K	≤20%
RPF70	70% Blue Light Reduction	At least 70%	≥30%	≤500K	≤20%
RPF80	80% Blue Light Reduction	At least 80%	≥40%	≤500K	≤30%

Notes:
 The Eyesafe Accessory Requirements are applicable for product formats including screen overlays and protectors for use with consumer electronics.
 The RPF number will range from RPF20 to RPF80 and require achievement of each of the identified requirements.
 The application of the solution will reduce the blue content and lead to a display color temperature deviation and luminance reduction within an identified range.
 The performance of the solution shall not lead to a color temperature shift more than allowed limits.