## Articles related to the effect of light on Melatonin Onset

Article	Metric of Light used
Gooley, J. J., Chamberlain, K., & Smith, K. A. (2011). "Exposure to room light before bedtime suppresses melatonin onset and shortens melatonin duration in humans." The Journal of Clinical Endocrinology & Metabolism, 96(3), E463-E472.	Illuminance (Lux) (e.g., 100 lux, 300 lux, 500 lux)
Hartstein, L. E., Diniz Behn, C., Akacem, L. D., Stack, N., Wright, K. P., Jr., & LeBourgeois, M. K. (2023). "High Sensitivity of Melatonin Suppression Response to Evening Light in Preschool-Aged Children." Journal of Pineal Research.	Illuminance (Lux) (e.g., 5 lux, 40 lux, up to 5,000 lux)
Cajochen, C., Munch, M., & Kobialka, S. (2005). "High sensitivity of melatonin suppression to short wavelength light." The Journal of Clinical Endocrinology & Metabolism, 90(5), 3310-3314.	Illuminance (Lux) (e.g., 20 lux, 100 lux)
Blume, C., Garbazza, C., & Spitschancor, M. (2019). "Effects of light on human circadian rhythms, sleep, and mood." Somnologie (Berl), 23(3), 147–156.	Illuminance (Lux) - up to 100,000 lux; Spectral Power Distribution (380-780 nm); Correlated Color Temperature (e.g., 4000 K, 6500 K, 10,000 K)

## Articles related to effect of light on Cortisol (Cortisol Awakening Response)

Articles	Metrics of Light used
Jung, C. M. et al., (2011). "Acute Effects of Bright Light Exposure on Cortisol Levels." Journal of Biological Rhythms, 26(3), 239-250.	Illuminance: Lux (e.g., 10,000 lux for bright light; 3 lux for dim light)
Petrowski et al., (2019). "The effects of post-awakening light exposure on the cortisol awakening response in healthy male individuals." Psychoneuroendocrinology.	Light Intensity: Lux (e.g., Bright light ~800 lux; Dim light ~10 lux) Spectral Composition: Blue light (~470 nm), Green light (~520 nm), Red light (~630 nm)
Thorn, L et al., (2004). "The effect of dawn simulation on the cortisol response to awakening in healthy participants." Psychoneuroendocrinology, 29(1), 41-50.	Illuminance: Lux (e.g., ~250 lux during dawn simulation)

Among the metrics listed in LightlogR, the ones related to lux (a unit of illuminance) are likely those that involve thresholds, duration, timing, or periods of light exposure. These metrics assess the amount of light exposure in terms of lux and how long or when exposure occurs relative to a specific threshold. Here are the metrics that involve or could be related to lux:

- 1. Duration above threshold
- 2. Period above threshold
- 3. Pulses above threshold
- 4. Threshold for duration
- 5. Timing above threshold

These metrics measure or define light exposure based on thresholds, which could be expressed in lux, and analyze the duration, period, or timing when the light level is above, below, or within a certain lux value.