

ABSTRACT

CREATIVE PROJECT: *ILLUMINATION: A COMPARATIVE ANALYSIS OF LED LIGHTS VS. OLDER STYLE LIGHTING INSTRUMENTS*

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Over the past several years LED lights have taken over film sets and productions. It is common knowledge that LEDs are much more efficient lights, but do they outperform their predecessors? This study was a look into how modern LED lights compare to older lighting styles like tungsten and HMI lights. This study had two ways to analyze the differences; light data recorded from a spectrometer, and two, 4 filmed scenes where the only difference between the scenes is the lights while everything else was identical. The expectations are that the older lighting styles, with tungsten in particular looking better visually, as well as having better color fidelity, and that LEDs would have much better practicality and efficiency. The hypothesis was correct after the lights were put through a series of tests. LED lights are the future of filmmaking, even though they do not outperform their predecessors visually. The range, adaptability, and usage make the use of LEDs justified, though at a cost aesthetically.