



# Spacelights: Incandescent vs LED

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## What we set out to achieve

Our objective was to measure the light intensity and fall off from a Gemini 2x1 Hard within a traditional set of silks and compare with the incredibly soft, wrapping illumination of the incandescent spacelight. LED fixtures have previously lacked the output to properly illuminate through a Silk Skirt without an unacceptable drop in available light, and uneven fall off of light.

The output of the Gemini 2x1 Hard outperforms comparable fixtures, with an impressive 23,000 lux / 2,137 fc at 3m / 9.8ft. The test sought to prove whether it can offer a credible alternative to incandescent fixtures and revive the spacelight methodology that was ever present on soundstages around the world for decades.

### How we conducted the test

- A Gemini 2x1 Hard was rigged at 10ft with a traditional set of silks and set to 3200k at full intensity. Beneath the fixture a 10ft x 10ft grid was marked on the floor.
- A light meter was used to record the output at each intersection of the grid to collect precise details of how the light falls away.
- Both the Ultra Light and Domed diffusers were tested on the Gemini to assess their impact on light distribution and output within a set of silks.
- The Gemini data was plotted alongside previously recorded measurements for a traditional 5kW incandescent spacelight.

Test results: Spacelight hung at 10ft			
	Output at center	Output at 10ft	Power draw
Incandescent	42 fc	10 fc	5kW
Gemini 2x1 Hard (Ultra Light diffuser)	53.2 fc	17.3 fc	500W



### Conclusion

The Gemini 2x1 Hard not only emulates but outperforms the incandescent test results.

Both the Domed and Ultra Light diffusers display a more even and predictable fall off. And with the Ultra Light diffuser, Gemini 2x1 Hard delivers a higher output.

At full intensity, the Gemini consumed only 410 watts, a significant reduction compared to the spacelight’s 4.8 kilowatts (over 10 times the power).

From commercials to cinematic blockbusters, Gemini 2x1 Hard’s exceptional high output, broad spectrum, low power consumption, and lightweight design make it the perfect solution for demanding soundstage environments. Without sacrificing output, filmmakers can enjoy the soft, wraparound light of a spacelight and all the benefits of LED technology.

