Aethermind AI

INDEPENDENT PRODUCT CONCEPT

Folded *Light*

A browser light table for object designers choosing the form and fold spacing of a paper shade.



Vesper / 28 folds / 3300 K

Which outline should we fold?

Before cutting a sheet, a lighting designer and a paper maker can compare three silhouettes with the same fold count and light setting.



Vesper

A rounded middle.



Spire

A narrower crown.



Bloom

A wider shoulder.

All three browser studies use 28 folds and the 3300 K palette.

The spacing between ridges

Keep the profile and 3300 K palette fixed. Adding eight folds narrows each band around the shade.

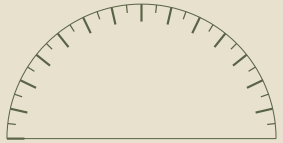


28 FOLDS

12.86°

360° ÷ 28

56 contour points per ring



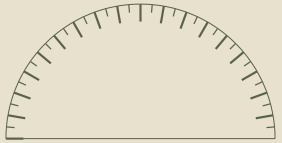


36 FOLDS

10°

360° ÷ 36

72 contour points per ring



A ring alternates outer ridges and inner valleys. JavaScript joins adjacent rings into faces and shades them in a 2D canvas.

ONE VARIABLE AT A TIME

The colour at the *crease*

Hold Vesper at 28 folds and move the light setting from 3300 K to 5000 K. The raised bands lose some amber while the profile stays fixed.

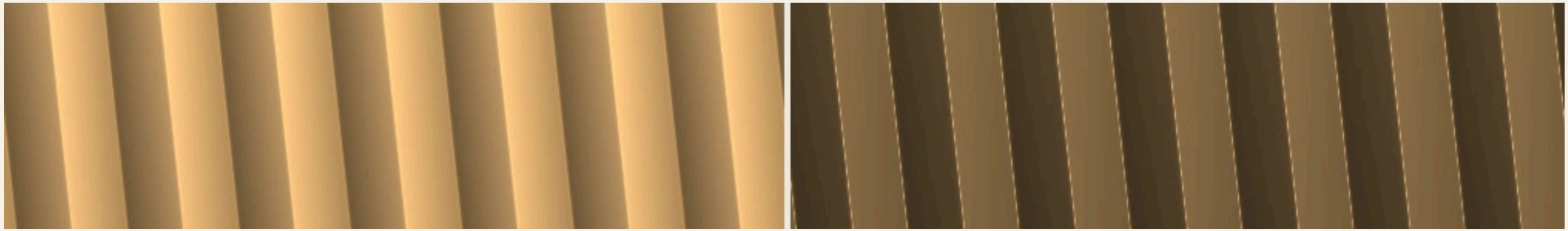
The slider blends palettes. A physical lamp's spectrum and the sheet's thickness determine the colour that reaches the eye.

2400 K Slider range 6400 K



Two papers under one light

The same side light falls across two simulated strips. Their different responses give the maker a reason to test both finishes by hand.



Translucent sheet

A stronger backlight term (0.70) carries colour into the fold. A broad highlight softens its edge.

Coated card

A lower backlight term (0.16) and a tighter highlight concentrate the sheen on one face.

Local WebGL2 draw · 28 folds · 3300 K · side light +35° · coefficients are illustrative.

What changed when the light turned?

Turning the side light from +35° to −40° changes the colour read at the centre of each rendered strip.

These are RGB pixels from one browser run on an Apple M2 Pro using Metal. They describe the rendered image. Physical transmission still needs a swatch test.

	Translucent sheet centre pixel, RGB	Coated card centre pixel, RGB
+35°	255, 212, 139	205, 164, 110
−40°	210, 166, 110	101, 80, 53

The optional shader reads two pixels after drawing each frame. Results depend on the viewport and rendering setup.

The main Canvas 2D light table and its PNG export remain available when WebGL2 is unavailable.



Two PNG study exports from the working light table.

THE PHYSICAL TRIAL

Take two prints to the *bench*

Pin both Vesper exports at the same size. Step back across the room and choose the spacing that keeps the silhouette legible.

Fold that spacing into a strip of the intended stock. Check the grain, inspect the crease for cracking and hold it up to the intended lamp. Size the final shade on a physical model.

Independent design proposal for Aethermind AI
aethermindstudio.com