B-Lit aims to address lack of visibility of ski terrain in flat light

Laser grid to help skiers perceive depth
**Flat light:** Minimal contrast between shadows and highlights, making it difficult to see shapes in snow.

*Image Credit: SurfDome*
Problem: Skiers can’t easily see terrain in flat light

Need: Anticipate upcoming terrain for safety
Improve visual cues for depth of features

Baseline: Goggle lenses yield limited visibility improvements
Does a laser grid improve skiers’ ability to perceive terrain in flat light conditions?

Would a battery-powered laser that is convenient and safe be powerful enough to help visibility?
Flat Light Simulation

With Contrast

Flat Light Simulation
Flat Light Simulation
Laser-grid Projection Helmet

- Laser system encased to protect from water, impact
- Knob to adjust laser angle
- Battery enclosure (opens to allow for battery change)
Product Stats

**Safety:**
Class IIB Laser
Passes Flesh-test

**Device Metrics:**
Mass - 137g
Laser Power Req. – 1 Joule/10 Seconds
9V battery ~ 150,000 Joules
Laser Use Time ~ 40 Hours
8.4 Million active snowboarders and skiers in the US 2016

Average spent on ski goggles online 2016 $83.79

1) National Ski Areas Association
2) SnowSports Industries America