

# LucidShape Application: Test Tables I

## Overview

A lighting engineer working with LucidShape created a daytime running light (DRL) to meet European regulations (ECE). The product requirements were then expanded to meet US regulations (SAE) as well. The engineer easily updated the optical system to comply with US regulations after testing the DRL's light pattern and identifying small deviations from US regulations.

## The Challenge

- ▶ Find the correct regulations from certification offices
- ▶ Re-analyze the design model for the new regulation criteria

## The Solution

- ▶ LucidShape<sup>®</sup> includes test table tables for ECE and FMVSS
- ▶ Test points are displayed directly in the light distribution measurement result
- ▶ Customization of test tables for in-house company safety margins is possible

As a result, the LucidShape user added the right test table to the design model and immediately updated the lighting system to the new requirement. The direct test point report and pass/fail markings allowed easy assessment of all changes to the lighting system for ECE and US regulations.

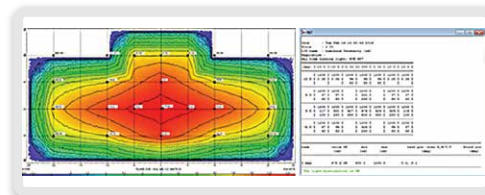


Figure 1. Light distribution including test points of ECE regulations.  
Right: Test Table with results.

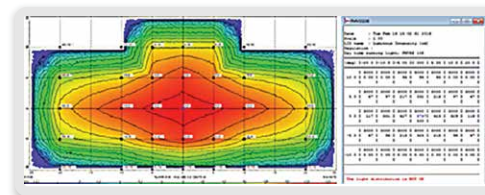


Figure 2. Light distribution including test points of SAE regulations.  
Right: Test Table with results.

For more information, please contact Synopsys' Optical Solutions Group at (626) 795-9101, visit <https://www.synopsys.com/optical-solutions/lucidshape.html>, or send an e-mail to [lucidshapeinfo@synopsys.com](mailto:lucidshapeinfo@synopsys.com).