



## Achieving opacity

Use Case – Using Stratasys® VeroUltra™ materials to simulate the fit, form and features of a smart home device.

### Challenge

Many small features in a single high-finish part require 3D printing as the prototyping solution. However, the LED lights inside this smart home device prototype requires a specific level of opacity to block out back light in unwanted areas that most technologies cannot support. Additionally, adding graphics to the part is an expensive and time-consuming step that is often excluded during the creation of prototypes. As a result, designers don't get the output they need to make fully-informed design decisions.

### Solution

Using Stratasys PolyJet™ 3D printing technology and VeroUltra family of opaque color materials, designers were able to produce a prototype with high opacity that simulated the pigments used in the masterbatch while blocking the PCB lights from shining in undesired areas. Graphics were also easily incorporated into the 3D print file allowing designers to achieve a full CMF prototype in one streamlined step.

### Impact

By tapping into the capabilities of PolyJet technology and VeroUltra materials, designers were able to create a smart home device prototype that simulated the fine features and uniformity of the final, injection molded part. Workflows were also streamlined, resulting a one-day turnaround time to produce a full CMF prototype.

