



**PRENTALUX**  
PRINTED LIGHT

 **COOPER**  
Lighting Solutions





# PRENTALUX<sub>PRINTED LIGHT</sub>

Cooper Lighting Solutions introduces a new way to manufacture lighting products using proprietary 3D printing technology, which allows for beautiful designs, textures, and shapes that are distinctive and adaptive. PrentaLux means Printed Light which is a new and creative way to design lighting products. PrentaLux information found [here](#).

### Awards & Recognitions



PrentaLux has received top honors from NeoCon with an Innovation award, and a Best of NeoCon Gold in Decorative Lighting. These juried awards transcend design innovation across different industries.

The HiP Award Honoree from Interior Design Magazine celebrates the most innovative commercial products and designs in the architectural and design community.

The Good Design award is the oldest design award from the Chicago Athenaeum Museum dating back to 1950 and created by industry legends; Edgar Kaufmann, Jr., Eero Saarinen, and Charles and Ray Eames. The Product Innovation Award from Architectural SSL Magazine honor top LED lighting products.

### Sustainability Ethos



To add to these recognitions, PrentaLux also meets new standards and definitions of sustainability with reaching [Red List Approved and Declare from the Living Building Challenge](#).

PrentaLux goes further with many paths to sustainability in the material itself and how it is made by being ISCC Certified where the materials are made from 55% recycled or bio-based materials that come from other industries, waste streams.

All combined - this award winning and sustainable product line is an industry game changer with the adaptability to meet customers needs in design and performance.

*“Innovation is the ability to see change as an opportunity, not a threat”*

– Steve Jobs



**printed** **light**



*"I found I could say things with color and shapes that I couldn't say any other way - things I had no words for"*

– Georgia O’Keefe



# What is 3D printing, and what are we doing with it?

Three-dimensional (3D) printing is an additive manufacturing process that creates a physical object from a digital design. The process works by laying down thin layers of material in the form of liquid or powdered plastic, metal or cement, and then fusing the layers together.

Cooper Lighting Solutions (CLS) is taking our parent company's 3D printing technology and using it to mass manufacture complete lighting products with a method that spans and scales globally. CLS uses fused deposition modeling (FDM), which is a method of 3D Printing where layers of material are fused/melted together to create an object.

Take the concept of 100 of printers, that can print a form within hours, which equals 100 products that can be made within that time frame. This is 3D printing for mass manufacturing, not a prototype business.

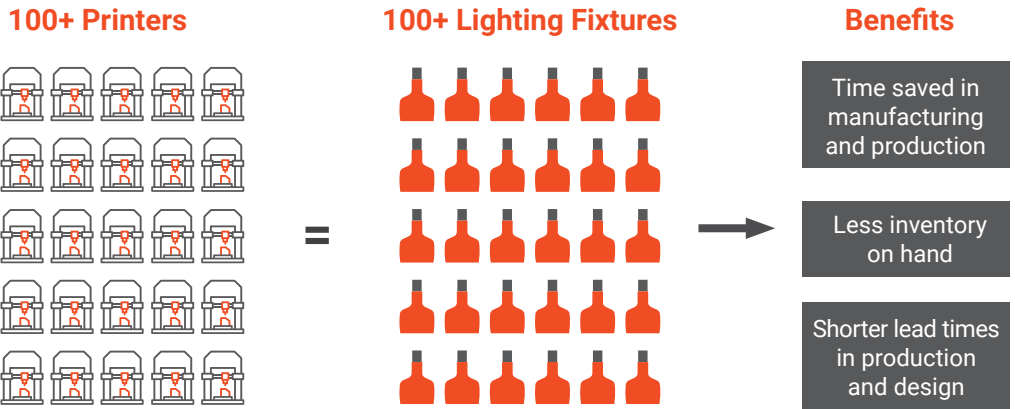
- The process is as follows:
- A catalog specification becomes a distinct SKU.
  - That SKU, translates to a distinct G-code (3D printer language).
  - This G-code can then be sent to local print farms or across the world, to other print farms, allowing manufacturing to happen anywhere there is a receiving internal company print farm.
  - This enables manufacturing to be flexible and local, or accessible when needed.

This revolutionary technology was developed by Signify, and identified as the next new wave of innovation for lighting products. Cooper Lighting, a business unit of Signify, is bringing this technology to our strong customer and sales base, which gives you back:

**Innovation you can rely on.**

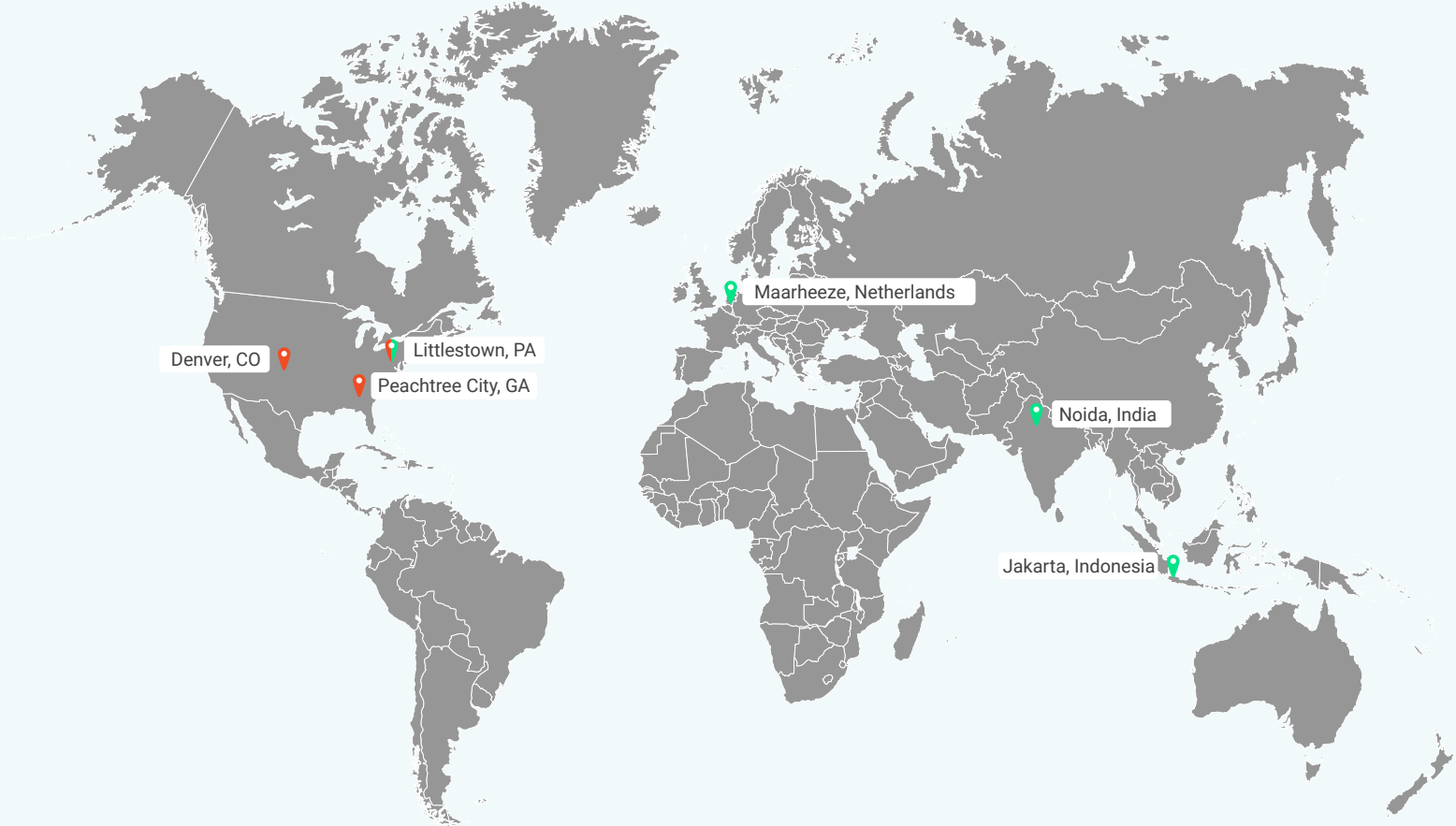


**This is the power of 3D Printing technology and how we are using it to innovate.**



The TIME it takes to print one fixture can be anywhere between 1-3 hours. Thus 100 printers in 3 hours can produce 100 fixtures.

# Around the world, around the world...



PrentaLux products are also BAA, or Buy American Act compliant. The 3D printed materials used are significantly lighter than their metal equivalent, requiring less fuel to transport, which has a 35% lower impact on carbon footprint.

“We are the first lighting manufacturer to produce 3D printed luminaires on an industrial scale, reinforcing our position at the forefront of lighting and sustainable innovation.”

**Olivia Qiu**  
Chief Innovation Officer | Signify

# 200s Series

When form and function unite, we get the best of both worlds. The PrentaLux 200s series provide performance lighting with integral LED based products and output ranges up to 7000 lumens. Combining that with simple and refined aesthetics with texture variations, make this product series a win win.



205



215



225



235

# Meet the family...

Aunt Bertha... Cousin Fred... Oh wait...



305



301



303



307



309



311



313

# 300s Series

Sometimes, just a glow to highlight warmth and character is the key driving factors for a hospitality setting. These elegant shapes transform into geometries that are unique and when combined with the variations of 18 different colors, offers calming and comfortable lighting for most spaces. The PrentaLux 300 series resounds in beauty.



# 400s Series

The 400s series feature a modern industrial look similar to the 300s series with one main distinction in that there are 6 new modern and elegant textures that can make each product standout. One shade shape, with a different texture applied - can present a whole different feeling that changes the ambiance and intent. All of this differentiation of thousands of SKUs in texture and color all culminate in the same result; design at the fingertips of designers.









# 200s Series

## Features, Benefits, & all that jazz...

- The 200s exemplify the best of design + function.  
The following are technical aspects of the products:
- 8 light levels that range from nominal 1000 to 7000+ lumens
  - 4 CCTs [2700K, 3000K, 3500K, 4000K], 90 CRI
  - 16 color options for outer shade, 4 color options for inner shade
  - 3 Outer shade textures, and 3 inner shade textures
  - Universal Voltage [120-277V]
  - 0-10V dimming, 1%
  - Mounting Canopy in Disk or Conical shape
  - Canopy can be same as outer shade color
  - 5 Year Warranty
  - UGR, TM-30 LM-79 data available
  - [Learn more about PrentaLux](#)

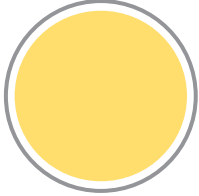
8 Light Levels:  
1000 to 7000+ lumens

LL1
LL2
LL3
LL4
LL5
LL6
LL7
LL8


4 Color Temperatures

2700K	3500K
3000K	4000K


Integrated LED



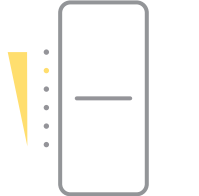
Voltage: 120-277V



Color Rendering Index

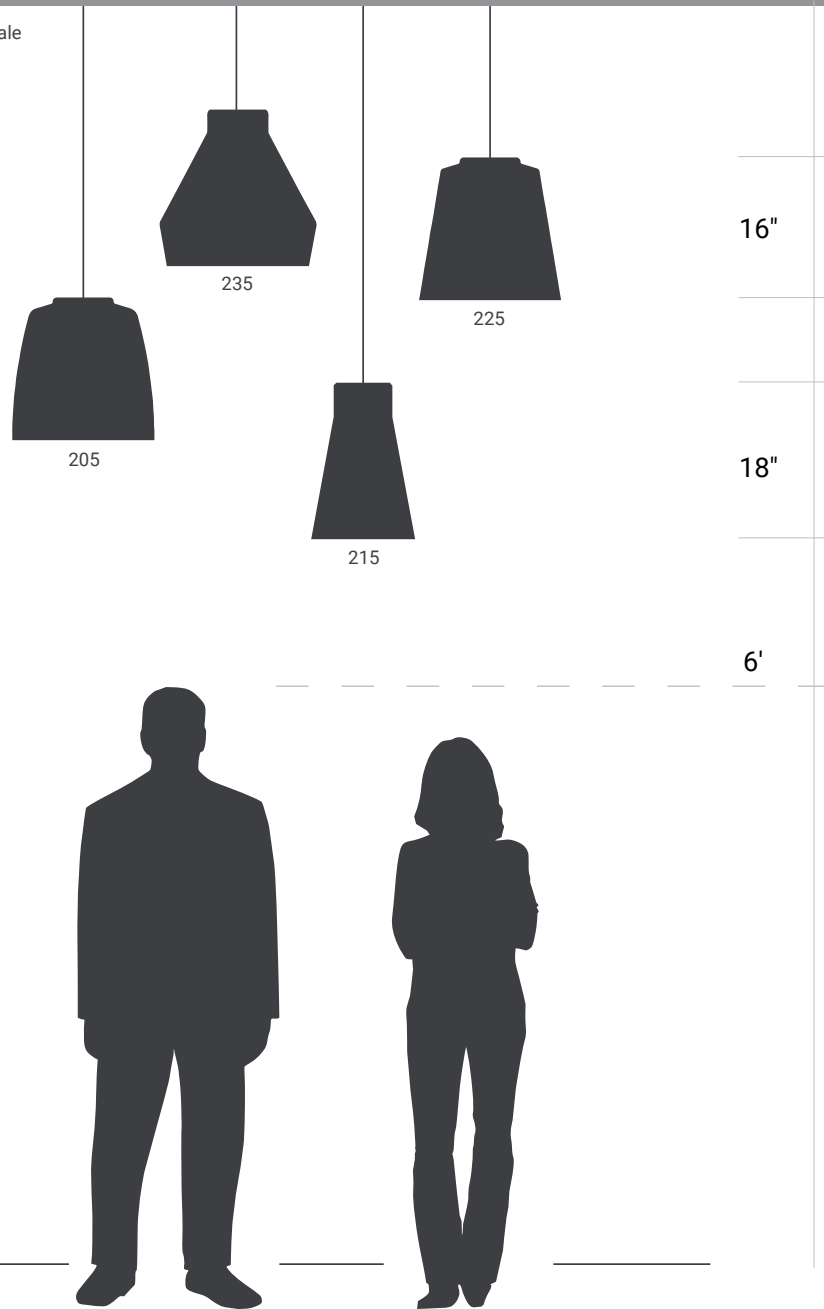


Dimming: 0-10V, 1%

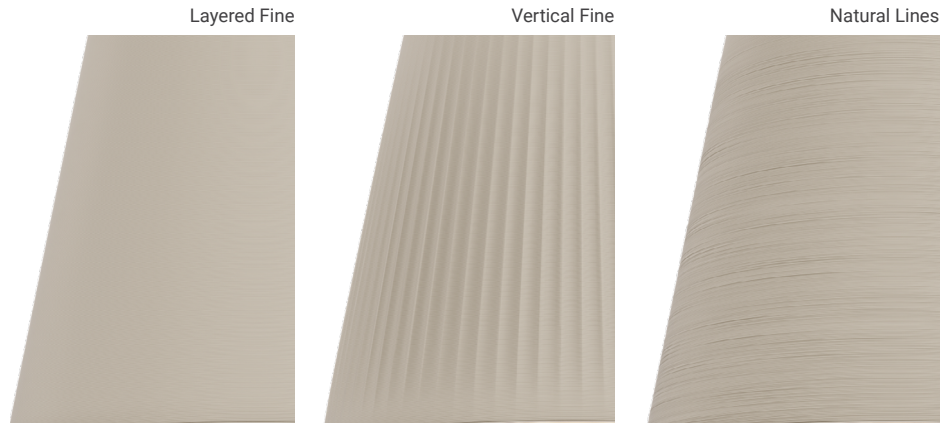




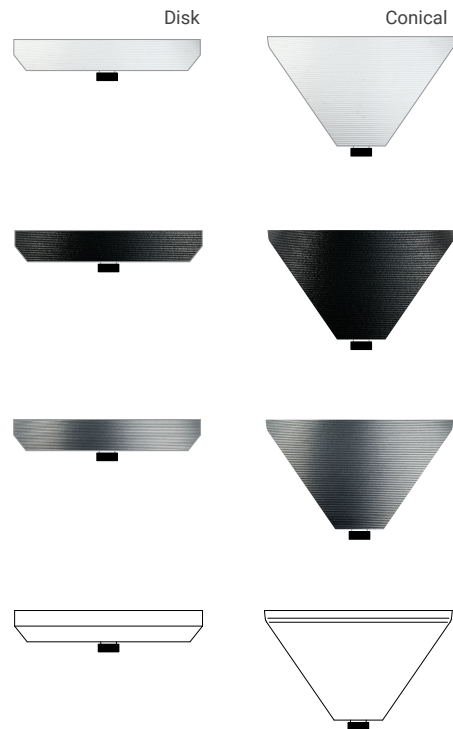
200s in Scale



3 Exterior Textures



2 Canopy Styles  
3 Standard Colors or Matching Fixture Color



3 Interior Textures







adaptive design...





# 300s Series

## Features, Benefits, & all that jazz...

The 300s series are a lamp base product that offers a variety of hospitality driven shapes. They are part of the sustainable lighting product using 3D printed technology, at the forefront of lighting innovation.

- LED lamp based
- 2 CCTs [2700K filament, 3000K frosted], 90 CRI or preferred lamp of choice
- 18 color options for outer shade
- 1 texture of a smooth, layered design
- 120V
- Mounting Canopy is 3D printed and available in Disk or Conical shape
- Canopy can be same as outer shade color
- 5 year warranty
- UGR, TM-30 LM-79 data available
- [Learn more about PrentaLux products](#)

A-19 Lamp, E26W Socket



Equivalent to 60W INC; 15W



Voltage: 120V Only



3 Lamp Options



Frosted LED Lamp  
3000K



Filament Lamp  
2700K



No Lamp  
(Lamp by Others)



Each of our 3D printing manufacturing plants have been audited by the ISCC (International Sustainability and Carbon Certification) organization to verify the implementation and use of environmentally, socially and economically sustainable production and materials.

*\* PrentaLux products will convert to printing our 3D parts with over 55% recycled or bio-circular materials (using an ISCC certified mass balance approach) within Q3 2023. Bio-circular materials are raw materials from ISCC Plus certified waste streams and residues including tall oils from the wood processing industry or used cooking oil from the food processing industry.*

300s in Scale



Top Finial Color Same as  
Outer Shade Color  
(Recommended)



Top Finial is White if outer shade  
is Clear Translucent  
(Recommended)



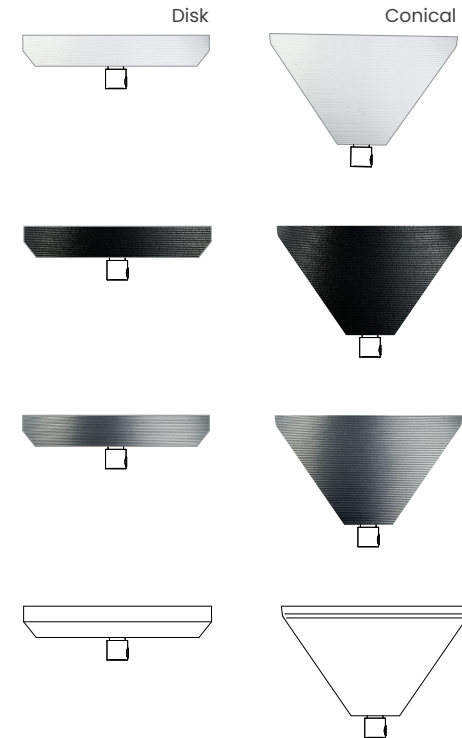
Top Finial is Black if outer shade is  
Smokey Gray Translucent  
(Recommended)



Top Finial custom colors available.  
Choose from 16 opaque colors



2 Canopy Styles  
3 Standard Colors or Matching Fixture Color






# 400s Series

## Features, Benefits, & all that jazz...

The 400s series are a lamp base product that offers a variety of contemporary texture choices. They are part of the sustainable lighting product using 3D printed technology, at the forefront of lighting innovation

- LED Lamp
- 2 CCTs [2700K filament, 3000K frosted], 90 CRI
- 18 color options for outer shade
- 6 modern industrial textures
- 120V
- Mounting Canopy is 3D printed and available in Disk or Conical shape
- Canopy can be same as outer shade color
- 5 Year Warranty
- UGR, TM-30 LM-79 data available
- [Learn more about PentaLux products](#)


A-19 Lamp, E26W Socket




Equivalent to 60W INC; 15W

15W


Voltage: 120V Only




3 Lamp Options



Frosted LED Lamp  
3000K



Filament Lamp  
2700K

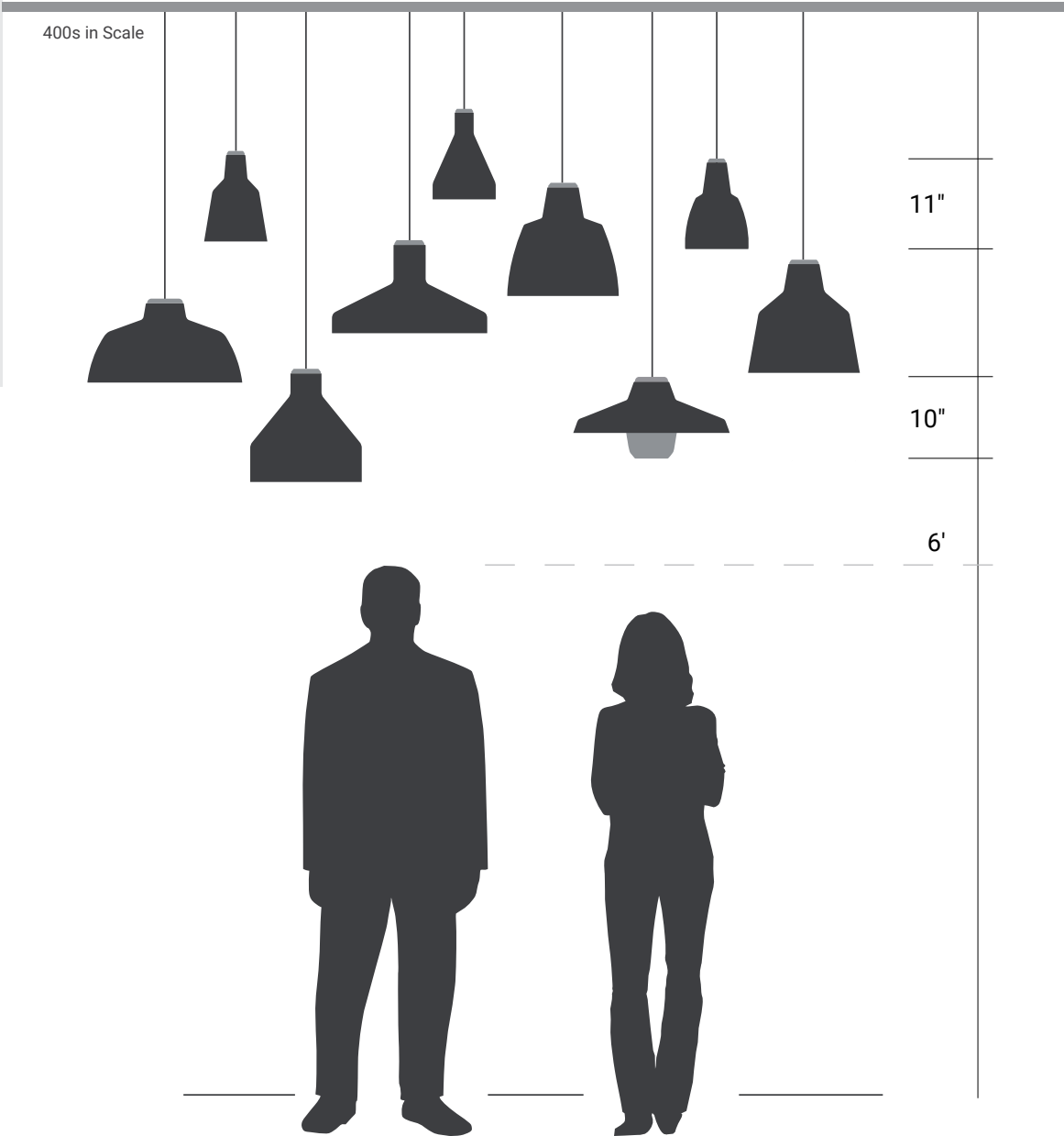


No Lamp  
(Lamp by Others)



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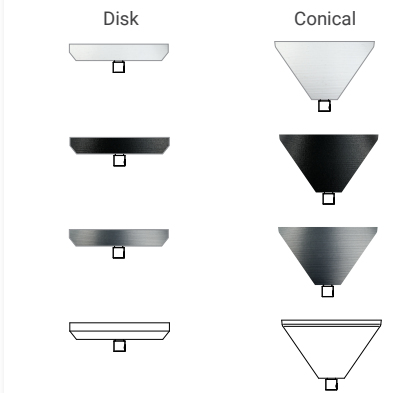
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### 6 Exterior Textures



### 2 Canopy Styles 3 Standard Colors or Matching Fixture Color







*"Life is about using the whole box of crayons"*  
– RuPaul



# Textures that Inspire

The true ingenuity of PrentaLux technology for lighting products, is the ability for anyone to be inspired by a form, shape, or appearance of a surface... and then apply this to the product using 3D printed technology. New colors that are on trend, can easily be introduced. Textures that inspire a designer, can be applied. Geometric shapes that are within the limits of the printer's capabilities, can be formed. This is Cooper Lighting's 3D printing.

## Outer Texture



+



+



=



Shape

Texture

Outer Color

Final Product

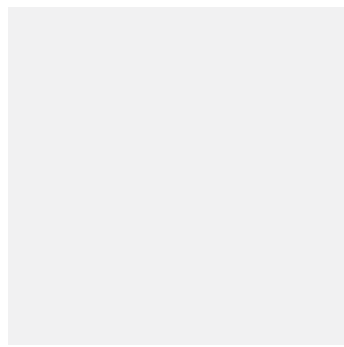
## Inner Texture



+



+



=

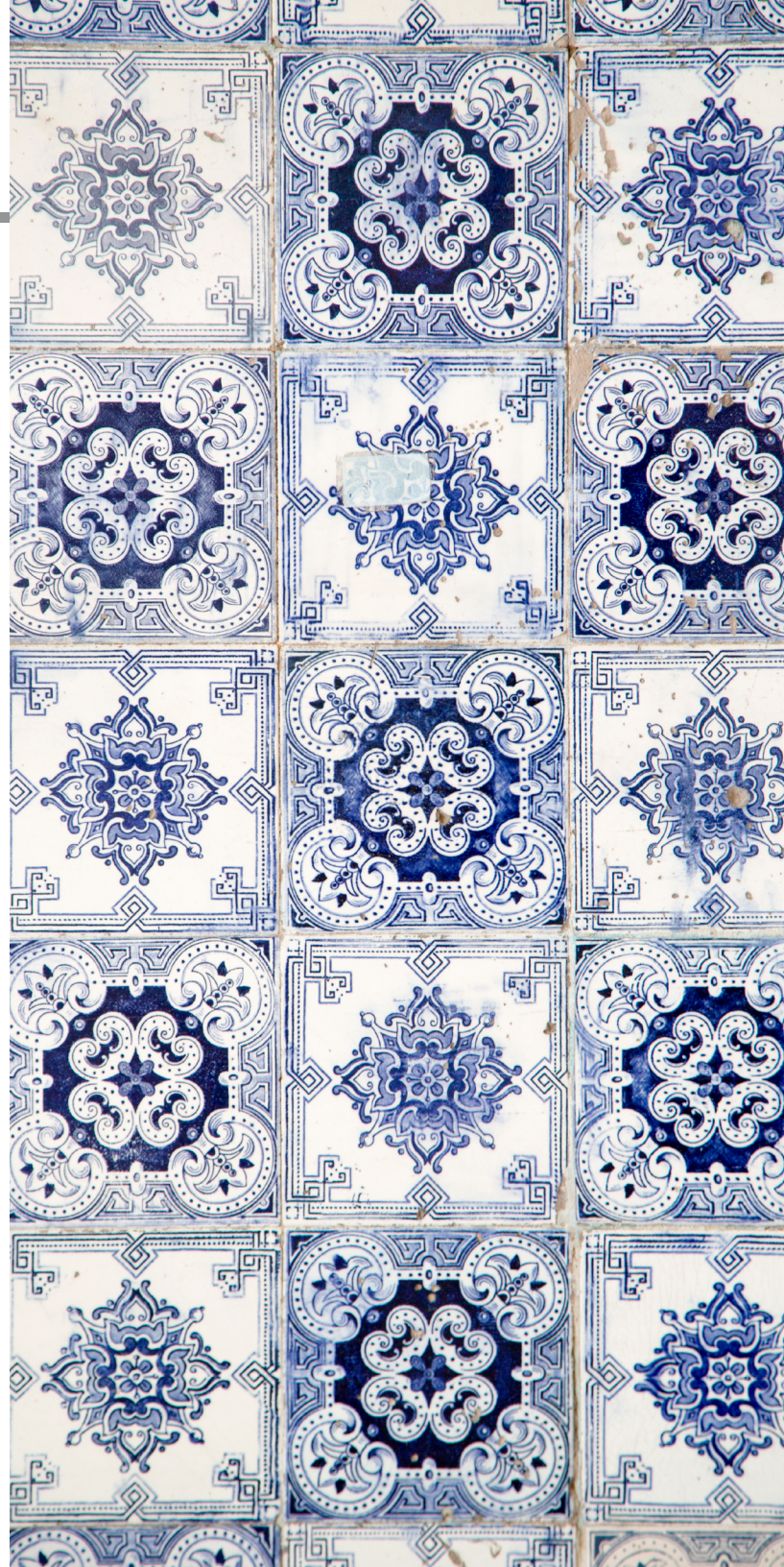


Shape

Texture

Inner Color

Final Product



215 in Black with Natural Lines  
outer shade texture and High  
Reflective White Floral inner  
shade texture.





# MADE TO PRINT LIGHT

## Outer Texture



+



+



=



Shape

Texture

Outer Color

Final Product

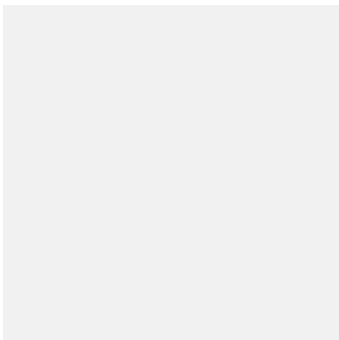
## Inner Texture



+



+



=

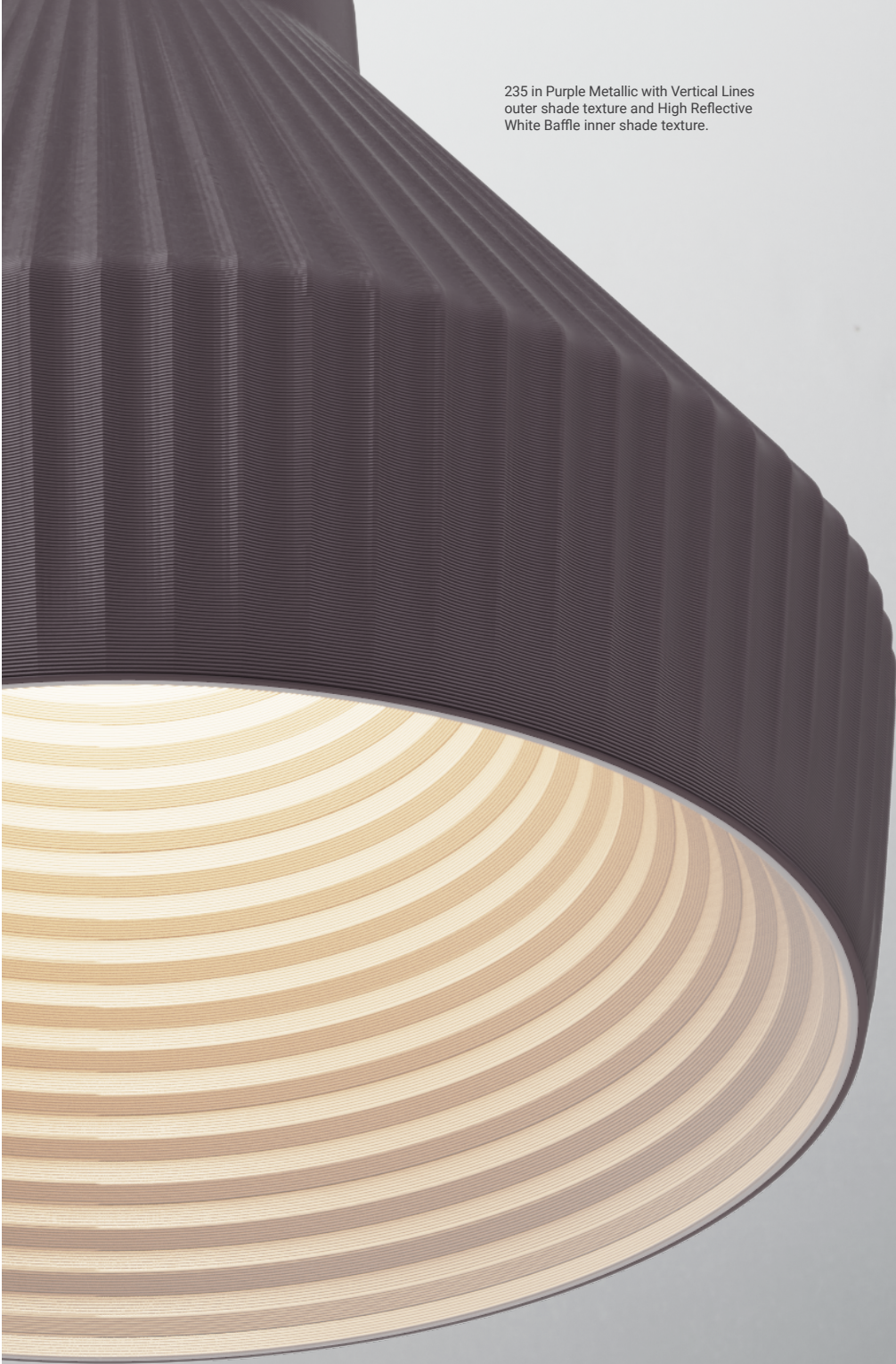


Shape

Texture

Inner Color

Final Product



235 in Purple Metallic with Vertical Lines  
outer shade texture and High Reflective  
White Baffle inner shade texture.





geometric charisma...



# Subtle Design

To design “something” is to create an arrangement of elements in a product or work of art. PrentaLux allows for such creativity in the form of branding details that can become a part of the lighting product. PrentaLux offers a unique value to our customers by allowing them to influence and design a shape, a texture and sometimes even a color. Customization using 3D printed technology is as limitless as our imaginations (and maybe our printer sizes) - and provides more freedom to create and design than traditional manufacturing processes. The designer can create thousands if not millions of different products from the standard offering - let alone when they help create their own vision for the space.

The way that 3D printed lighting products can interlace with the environment it lives in, are in subtle details of design, hinting at place and culture.

The distinctive, yet nuance of subtle design is where designers from a large commercial aviation management company, used their core competency of airplanes, as part of their décor to emphasize culture and brand.

Images courtesy of Warren Byrd



## Jet Setting

235 in Black with Layered Fine outer texture and custom interior with logo of airplanes on High Reflective White finish



# National Accounts

A National Account for Cooper Lighting Solutions is described as a multi-site, multi-location end user, that has businesses across geographical areas/countries. The National Account end user looks for transparency, consistency in pricing, and a distributor partner to project manage: shop drawings, orders, change orders, deliveries and close out documents for each location. This ensures a timely lighting and controls delivery to the site for an on time opening. A symbiosis of the end-user, Cooper Lighting Solutions, and the National Account Distributor work together as one team in open collaboration. Cooper Lighting Solutions is looking for distributor design partners to help them with all of their locations.

The value of PrentaLux, the 3D printed lighting brand within Cooper, can provide National Account partners with a resolution for design challenges, aesthetic desires, product performance, and delivery constraints, that the customers may have.

The PrentaLux, or printed light, products have shown customers solutions to these challenges by using the technology to showcase designs that relate to the customer's environments. Also, because of the speed of design development, products are delivered to the customer, faster, than traditional manufacturing methods.

For National Account partners - 3D printing can provide a unique branding solution to bring more unity and cohesiveness to their space. This technology can add a logo design or a customized texture to a shade shape. The National Account designer can co-create a shade shape and/or texture with the Cooper Lighting Solutions team, that is personalized to their customer's spaces.



A large National Account for Cooper Lighting Solutions, was able to use the decorative 3D printed PrentaLux products to bring warmth and coziness to a plain room. The 3D printed textures not only look great from the outside - but can create shadows and depth based on the form.

These 3D printed products not only added appeal to the space - but as a project, was able to pull in other Cooper Lighting products.

*Images courtesy of Warren Byrd*



## From Customer Problems to Customer Solutions

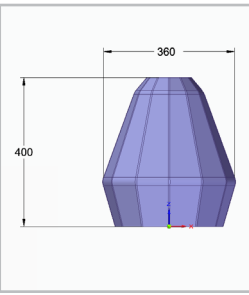
**Case Study:** The way to truly utilize customization to meet the customers need is to deliver a project from the design teams' conceptualization of the space, to rendered image, to proof of concept, to prototype, to delivered products, in 4 weeks.



Concept of chain store from distributor



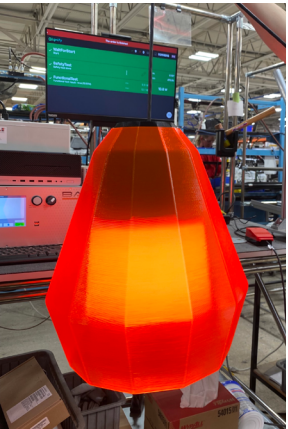
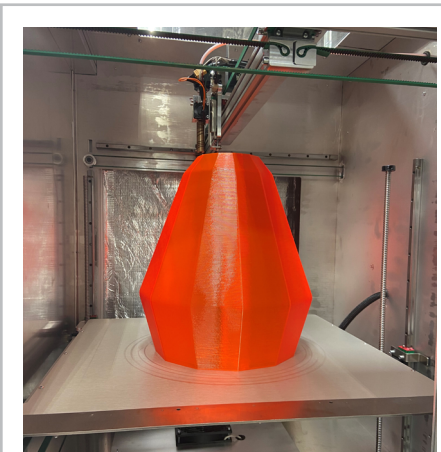
Concept image sent to client



Initial conceptual image and model created by 3DP team



Client reviews and approves product and color



First prototypes and prints developed



Ideate. Create. Prototype. Develop. Produce. Ship. Deliver. Install.







# A Color Story

As a manufacturer, keeping up with the Joneses, or color forecasts, can prove difficult to achieve in timing or application. But with PrentaLux, colors can be made to match corporate identities and any space that requires it, relatively quickly.

These sophisticated colors, are on par with design trends today. When combined and grouped together, can bring a calm aesthetic and neutrality to the space. These charming and stylish color palettes are meant to be mixed and enjoyed.

*“Color is a power which directly influences the soul”*

– Kandinsky



White



Matcha



Cappuccino



Silver



Dark Gray



Black



Metallic Pink



Bronze



Stone Brown



Gold



Metallic Purple



Smokey Gray



Metallic Green



Enamel Green



Metallic Blue



Steel Blue



Misty Blue



Clear



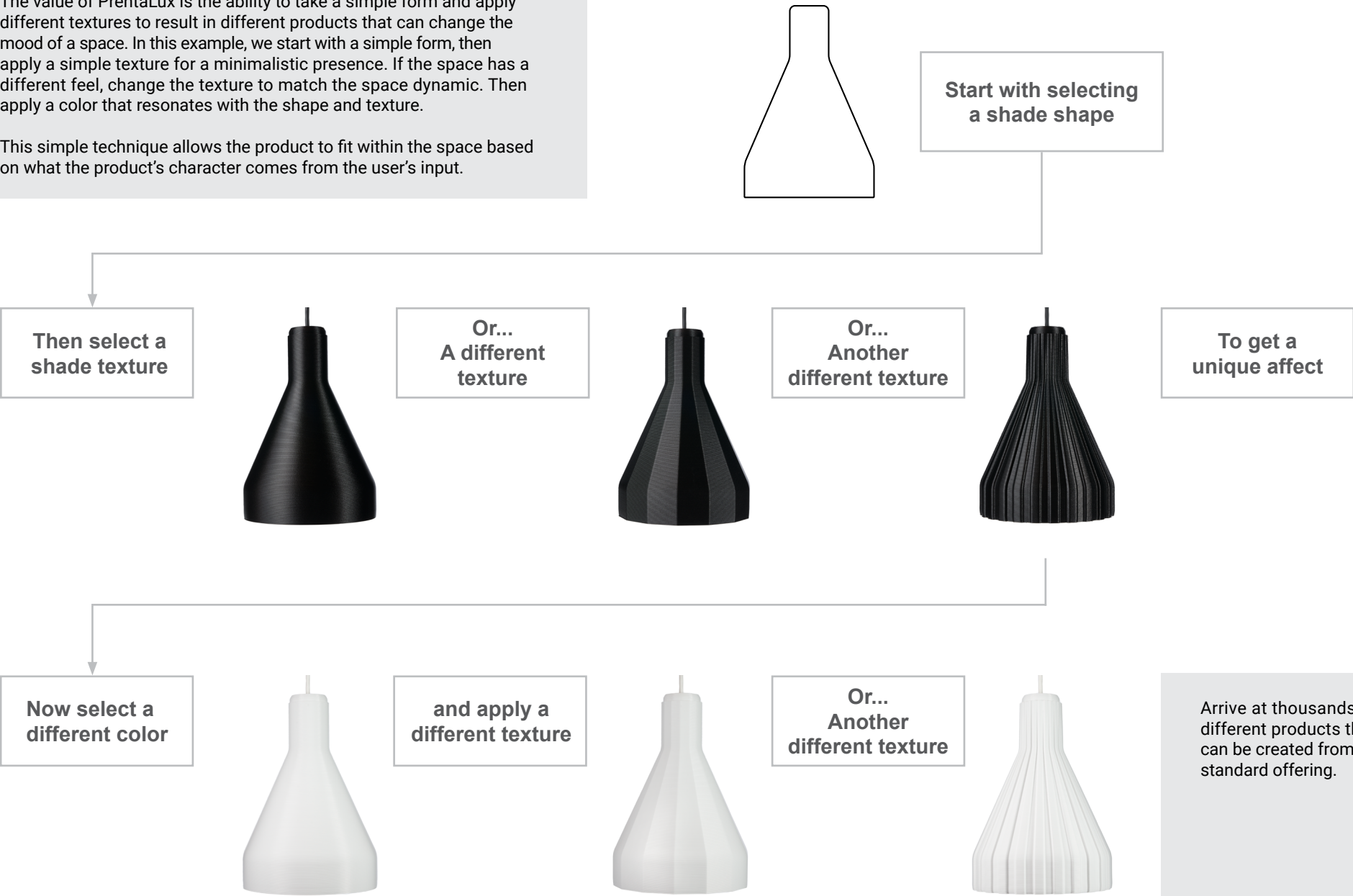




# Why 3D printing makes a difference... and why it works.

The value of PrentaLux is the ability to take a simple form and apply different textures to result in different products that can change the mood of a space. In this example, we start with a simple form, then apply a simple texture for a minimalistic presence. If the space has a different feel, change the texture to match the space dynamic. Then apply a color that resonates with the shape and texture.

This simple technique allows the product to fit within the space based on what the product's character comes from the user's input.



Arrive at thousands of different products that can be created from the standard offering.



it's all black & white...  
(and everything in between)









# PrentaLux For a Variety of Spaces

## National Accounts



National Accounts can utilize the customization aspects of PrentaLux that bring branding to the client in a way that is different than traditional products.

## Education



Add some interest to any space with high performance products that can be mounted well over 10' or 12' while still balancing the aesthetics with minimalistic geometries that fit into these spaces.

## Office



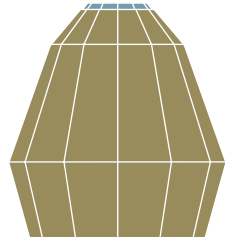
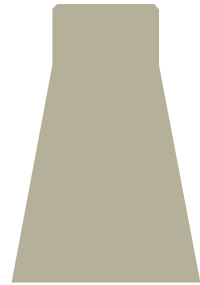
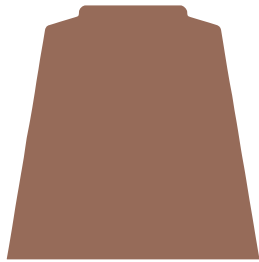
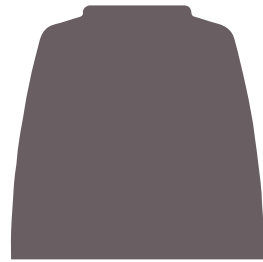
The trend towards a more hospitality type setting within the traditional office can easily be accommodated with stylish and artisan like product designs with the warm and inviting color palettes and shapes offered in PrentaLux.

## Retail



The performance pendant offering from PrentaLux brings design details that can enhance retail spaces to match the space functionalities.





@cooperlightingsolutions



@cooper-lighting-solutions

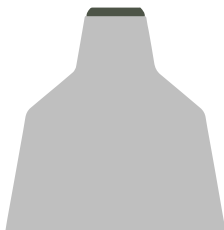
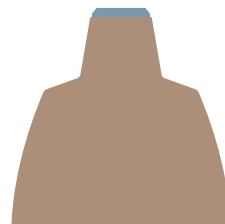
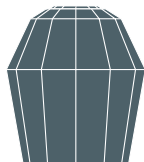
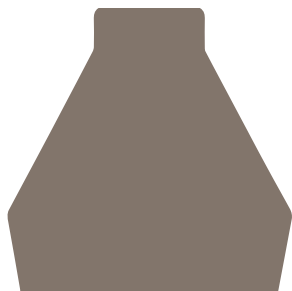


@cooperlighting1



@cooperlightingsolutions

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### **Lighting Product Lines**

Ametrix  
AtLite  
Corelite  
Ephesus  
Fail-Safe  
Halo  
Halo Commercial  
Invue  
io  
Iris  
Lumark  
Lumière  
McGraw-Edison  
Metalux  
MWS  
Neo-Ray  
Portfolio  
RSA  
Shaper  
PrentaLux 3D Printing  
Streetworks  
Sure-Lites

### **Controls Product Lines**

Fifth Light Technology  
Greengate  
iLight (International Only)  
iLumin  
Zero 88

### **Connected Lighting Systems**

Distributed Low-Voltage Power  
HALO Home  
iLumin Plus  
LumaWatt Pro  
WaveLinx  
Trellix



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