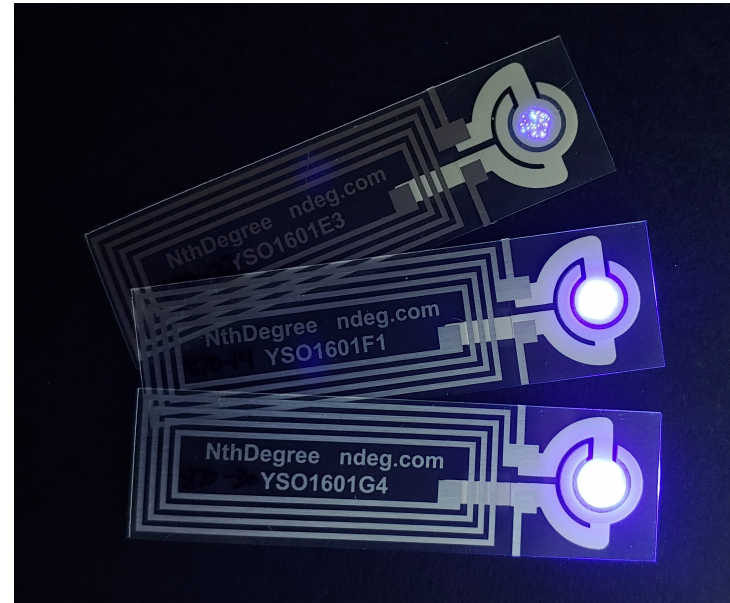




NthDegree

Nth-Light™ Wireless Smart Label Products



Product Features

- NFC powered from Mobile Phones
- Construction: Lamp + Antenna
- Customizable Shapes/Designs
- Safe to Operate
- Low Power
- Low Operating Temperature
- Unique Form Factor
 - Flexible
 - Thin
 - Lightweight
 - Double sided light emission



Customer Targets

APPLICATIONS

Smart Tags/Labels
Lit Labels
IOT Sensors
Anti-Counterfeiting
Authentication
Sensing Labels

TARGETED MARKETS

Retail
Healthcare & Pharma
Logistics
Manufacturing
Food & Produce (food packaging)

TARGETED CUSTOMERS

Smart Label Solution Integrators



Fit for Purpose

- NEW, innovative tech
- Circuits designs specifically to work with mobile platforms (Apple and Android)
- 13.56MHz antenna operates on same frequency as HF RFID tags
- Found in systems like transportation passes and also touchless payment kiosks
- Printed technology offers a wide variety of designs
- Thinner than a standard credit card
- Easily integrated with standard manufacturing equipment
- Compatible with other smart label tech (RFID, Sensors, QR codes, Capacitive Touch, etc.)
- No direct hardware required (batteries, power circuits, connectors), just the printed label
- High volume manufacturing (printing rate @ 20ft per minute)
- Simple to operate



Proven Production Capacity

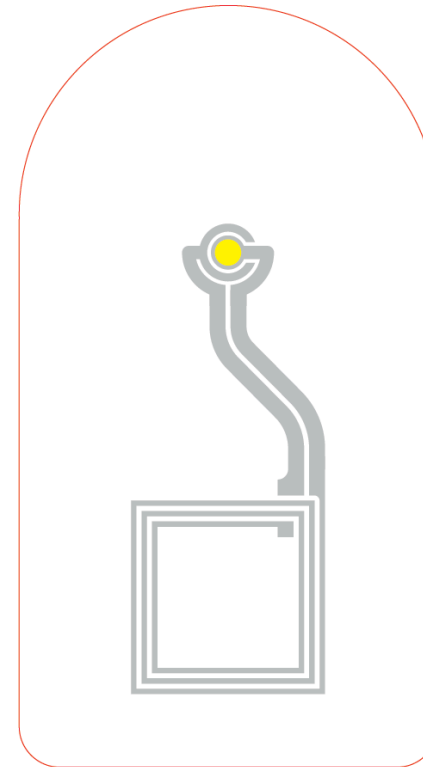
- NthDegree is currently partnered with Specialty Printing LLC (Hartford, CT)
 - ISO 9000 certified facility
 - 24/5 operation (up to three shifts)
 - Flexographic roll-to-roll press dedicated to printed electronics
 - Up to 10,000 linear feet per shift
 - Able to print millions of units per week
- Vertically integrated R&D
 - In-house ink production
 - Small scale prototyping via screen press
 - Quick turnaround time to deliver samples



Printed Circuit Design

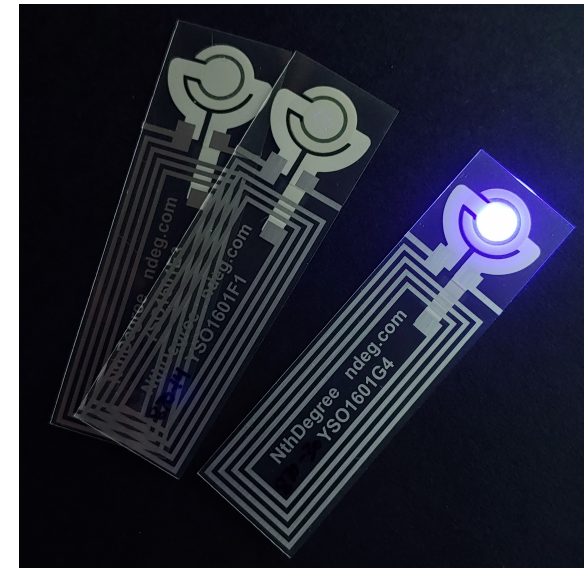
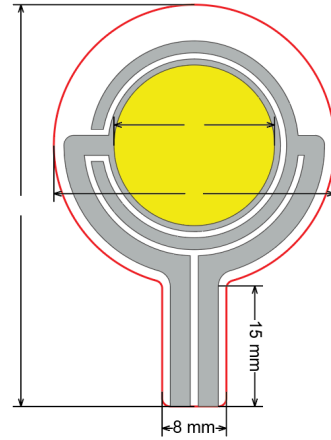
- Design of lit areas and non-lit areas will vary based on requirements
- Designs may have less than 50% of the area lit using printed LEDs
- Entire design area is referred to as a “lamp”
- Price model calculates multiple factors
 - Total area
 - Lit area
 - Conductive area
 - Antenna area*
 - Set-up fee
 - Additional factors (labor/waste/etc)

* Note: only for wirelessly powered applications



Lamp

- LED Area
- Printed Silver
- Outside Edge



NFC Solutions

NEXT GEN PRODUCTS

