
LED Lighting Global Market Trends

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About Pennwell



Market Research

World's leader in photonics market research and custom Research



- North America – Nearly 5,000 registrants
- Japan – 5,000 attendees
- Europe – Nearly 1,000 registrants
- Las Vegas—2,300+ attendees, 90 exhibitors



- Global circulation 63,800
- 9 issues annually including the Suppliers Directory



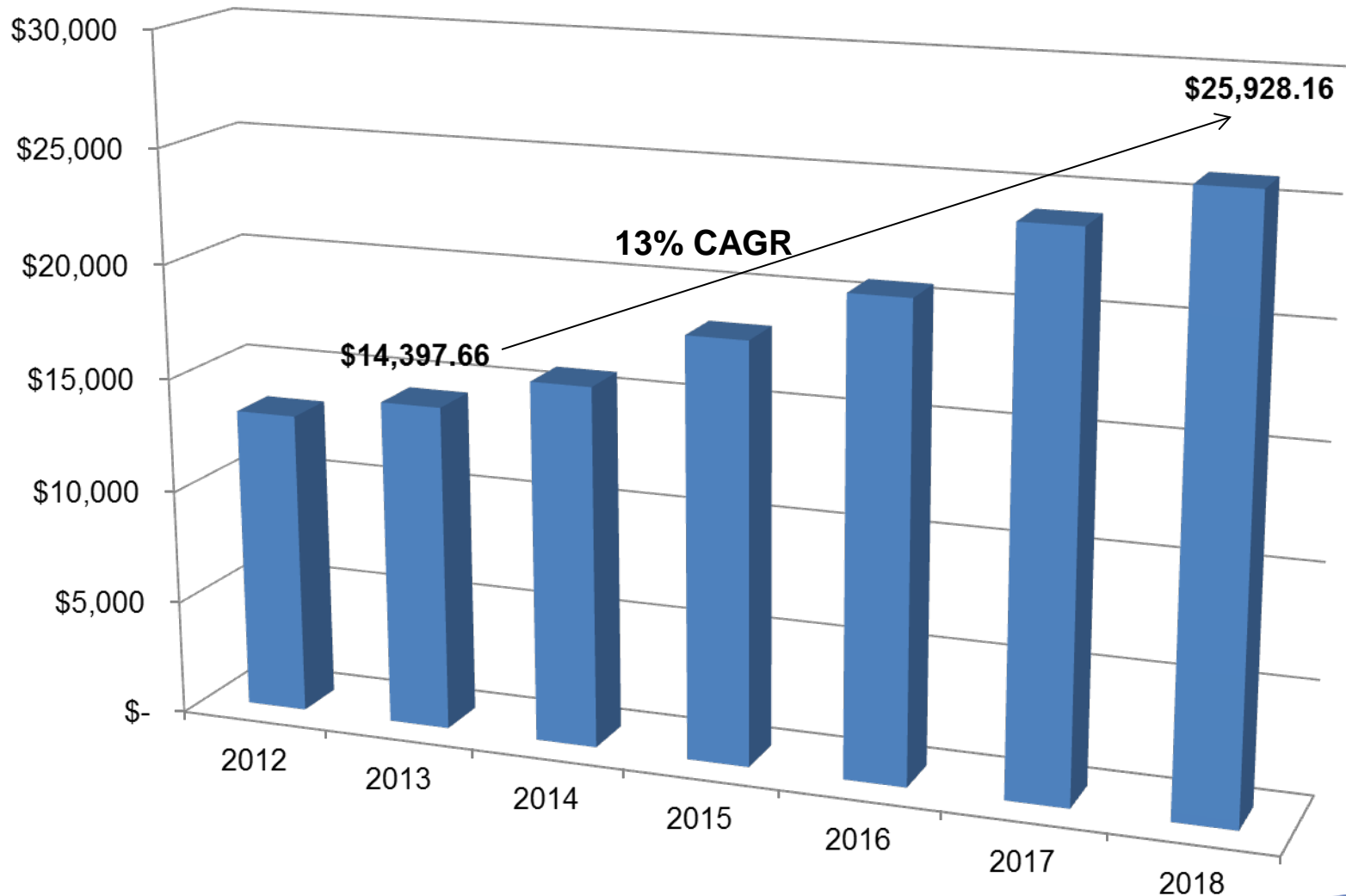
- Page views : 349,667
- Visits: 133,580
- Unique: 82,787



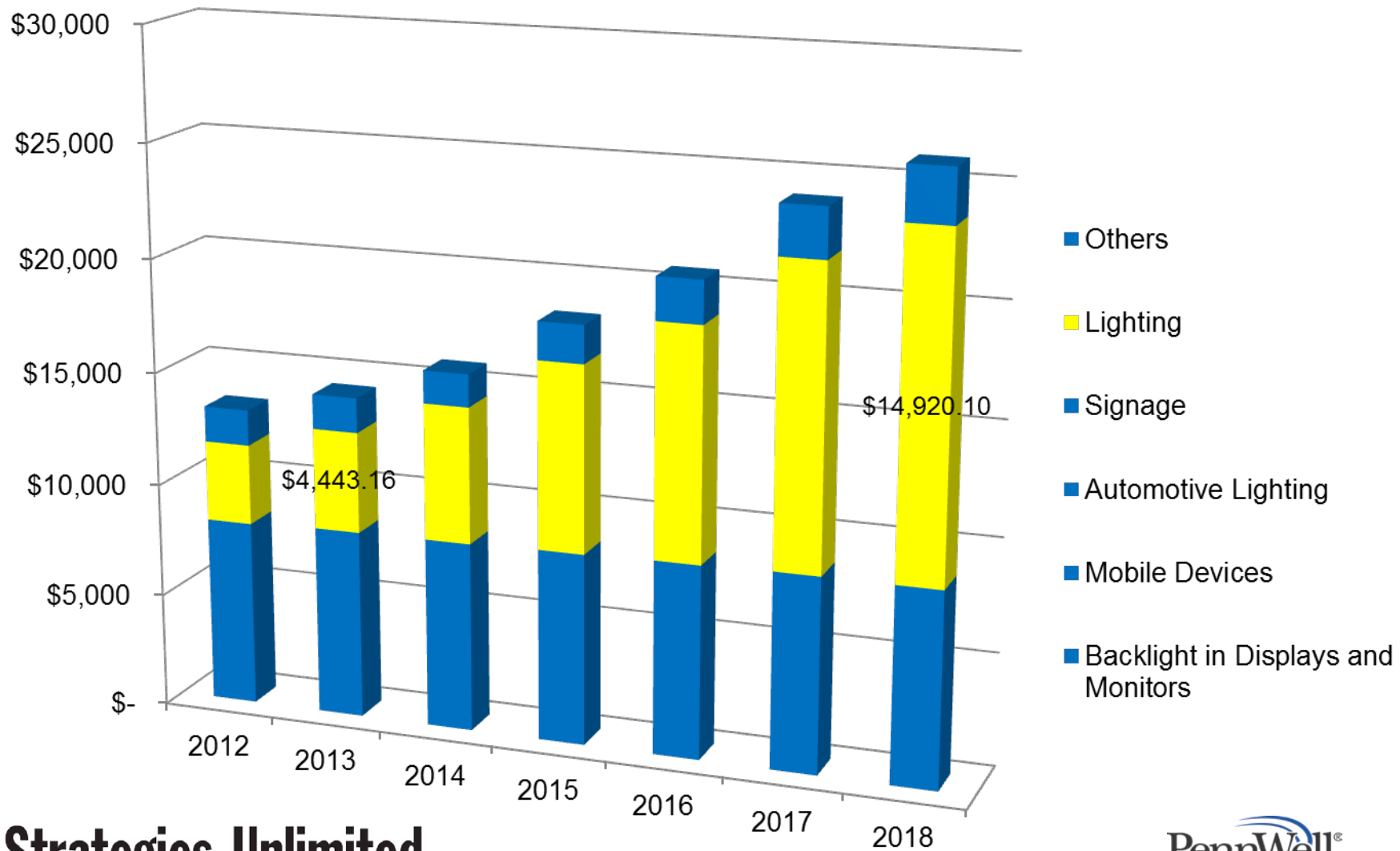
Outline

- Packaged LED market
- LED Lamp Market
 - Sizing and Forecast
 - Geographical Impacts
- LED Luminaire Market
 - Commercial
 - Industrial
 - Architectural
 - Outdoor

Global Revenues for Packaged LEDs 2013 - 2018

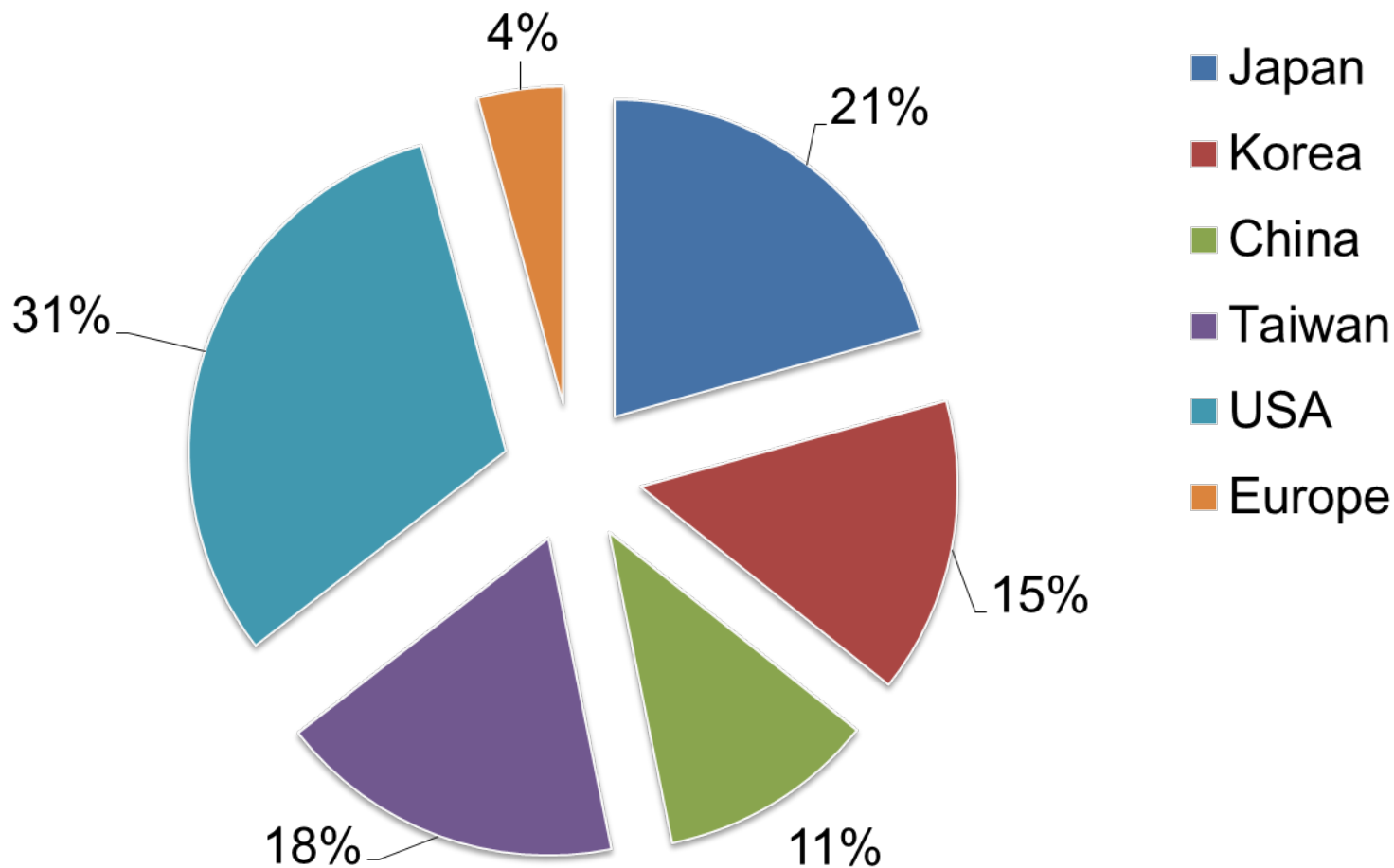


LEDs in Lighting



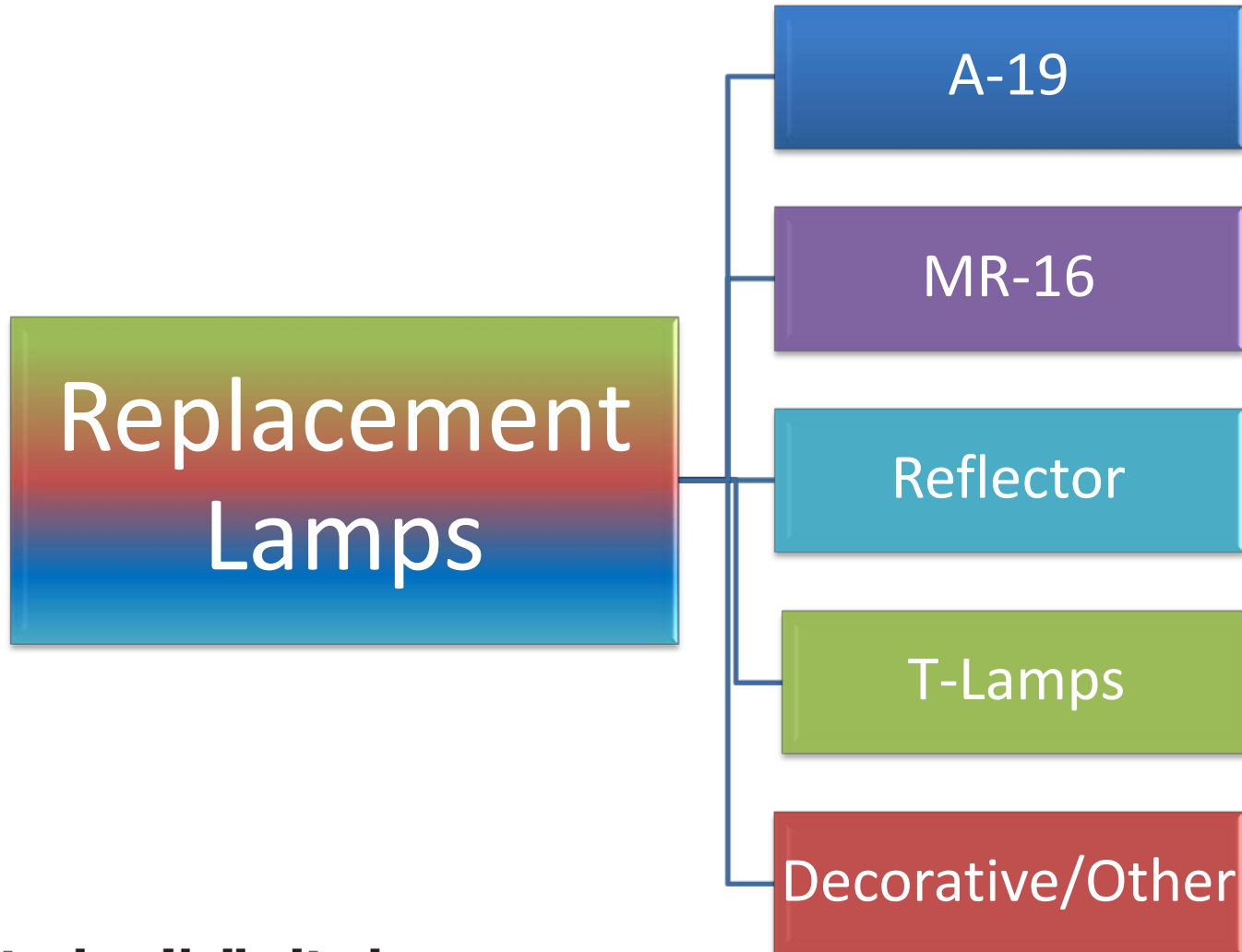
Revenues (Supply) for LEDs in Lighting

\$ 4,470 (M) in 2013

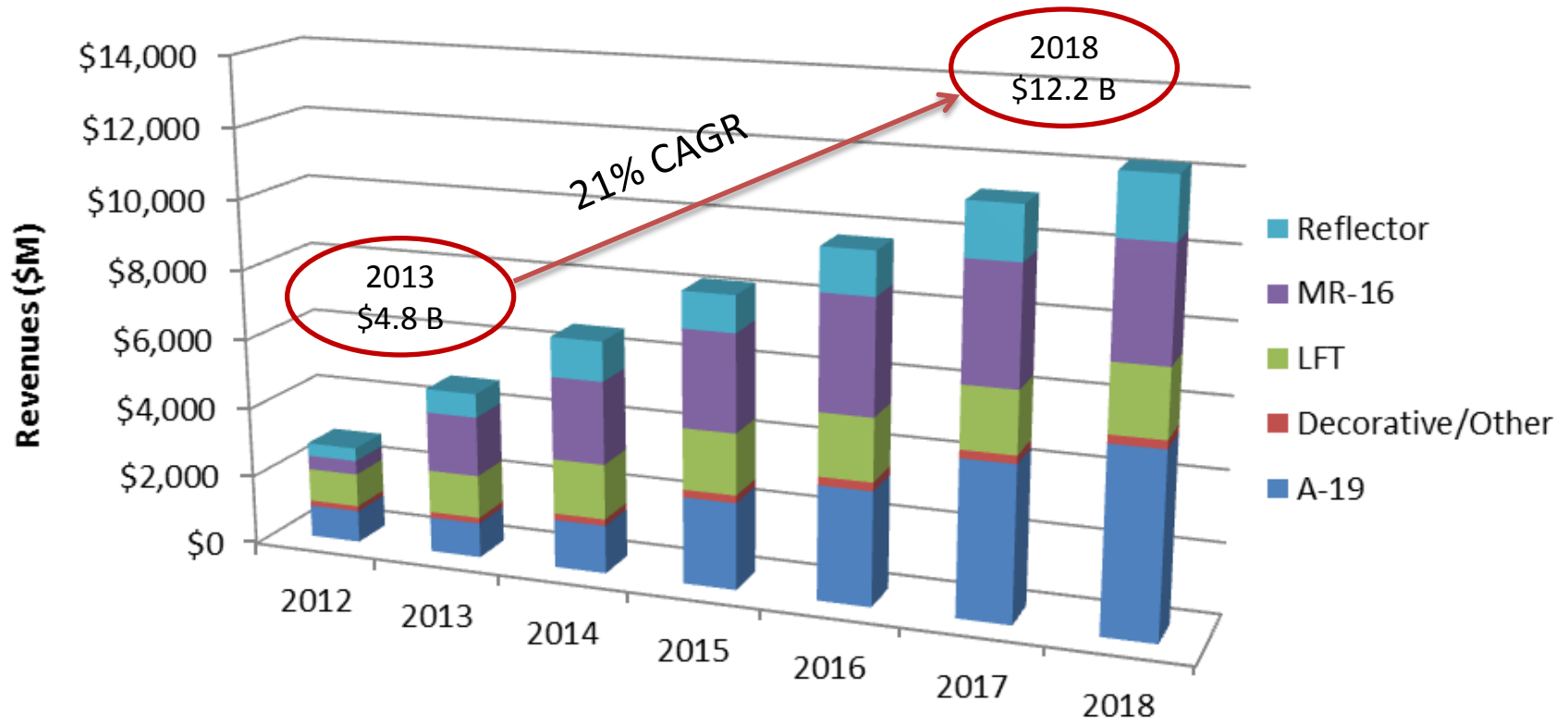


LED Lamps

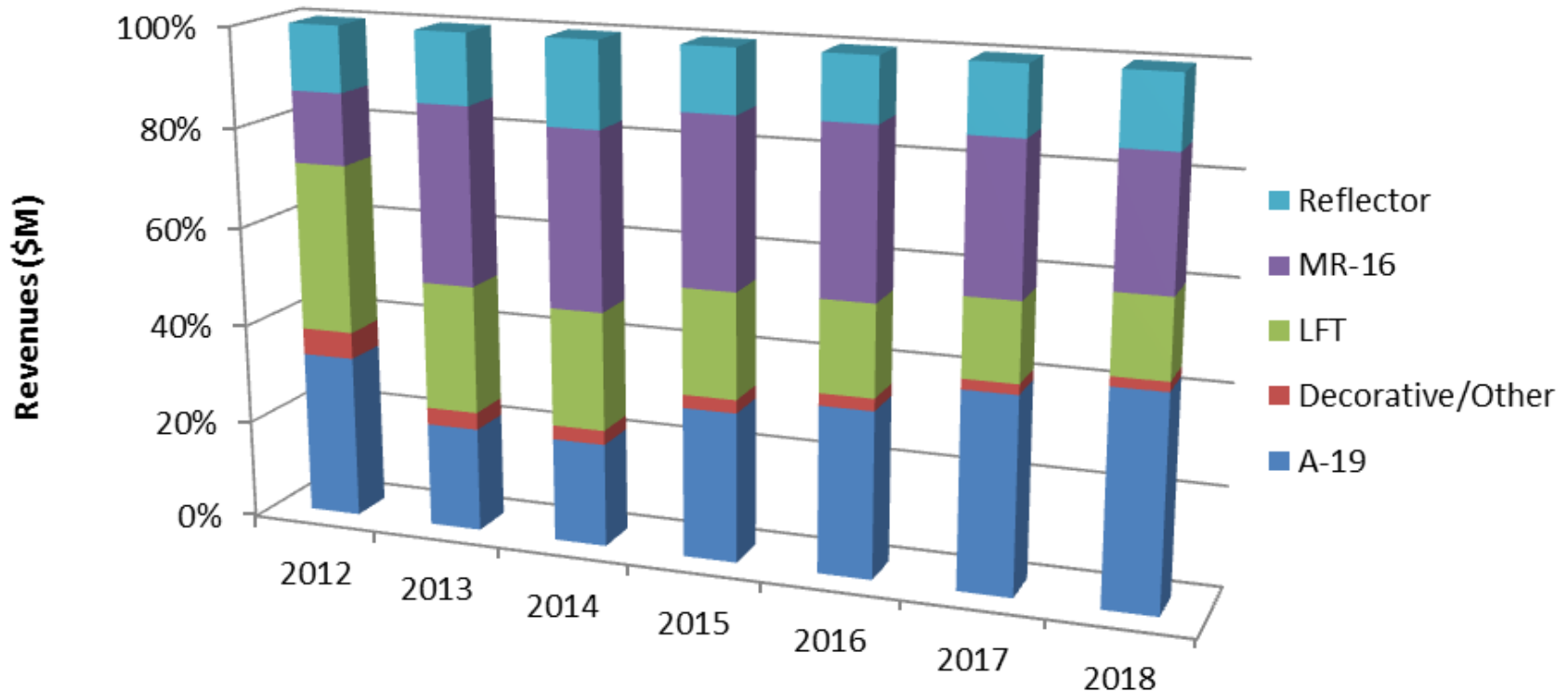
Lamp Breakout



LED Lamp Market Forecast



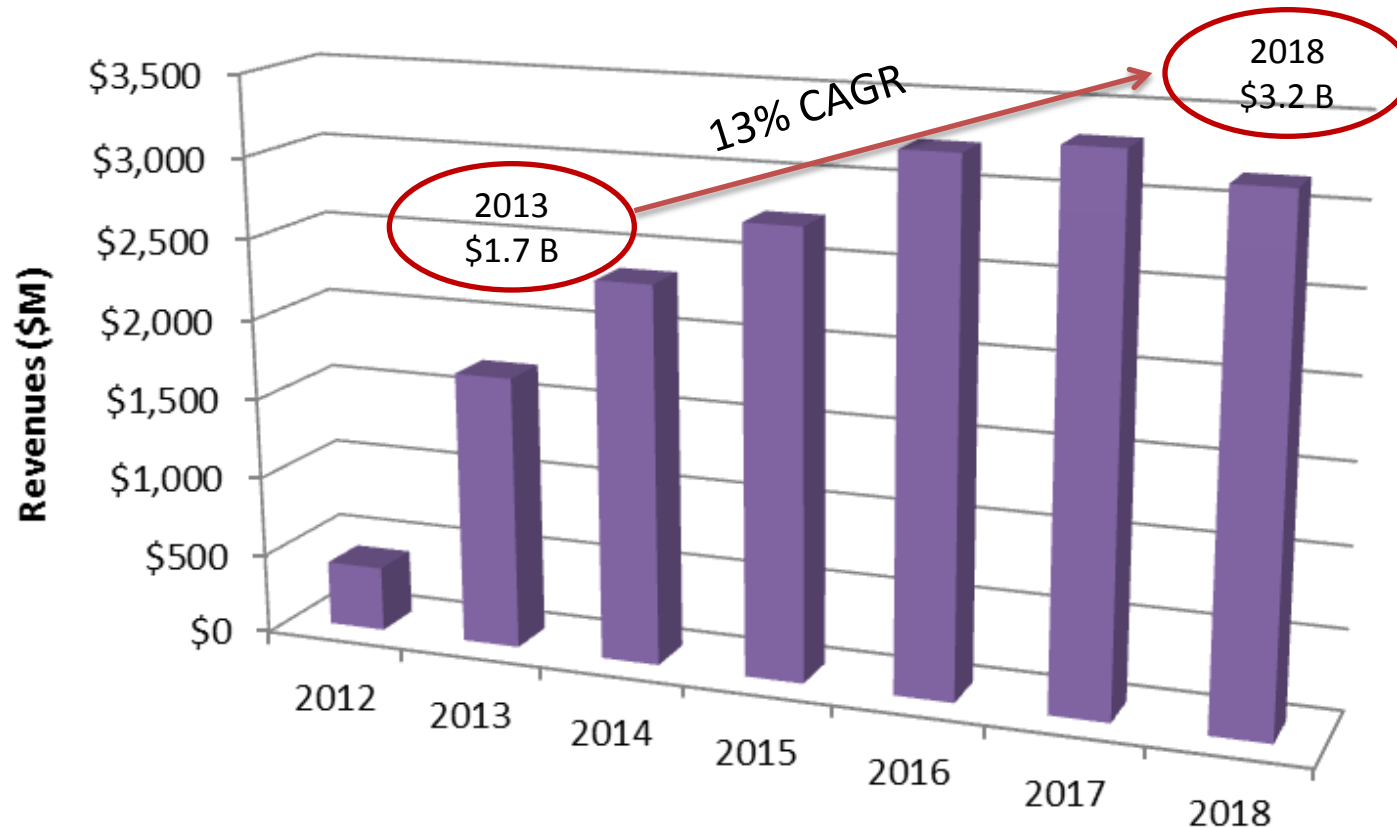
LED Lamp Market Forecast



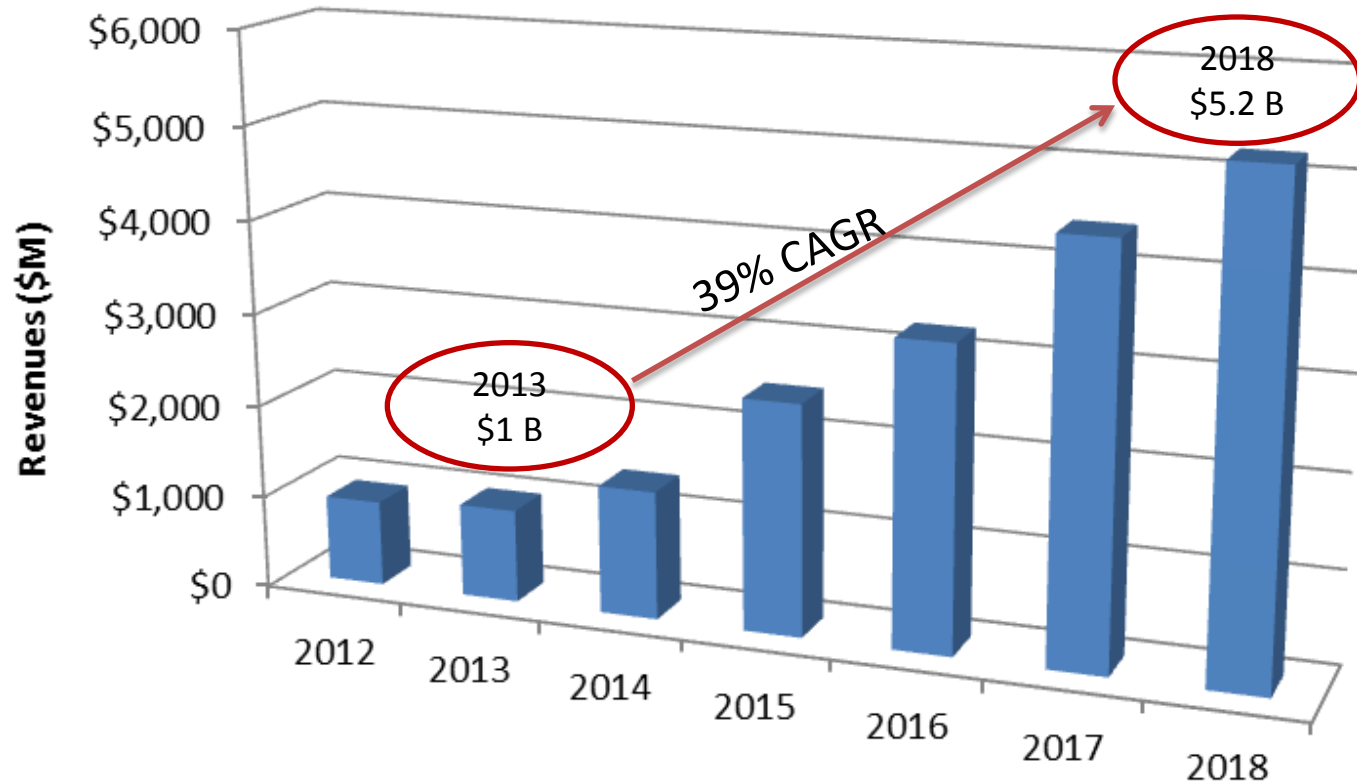
2014: MR -16 = 36% by 2018= 26%

A-19 by 2018 = 42% of market

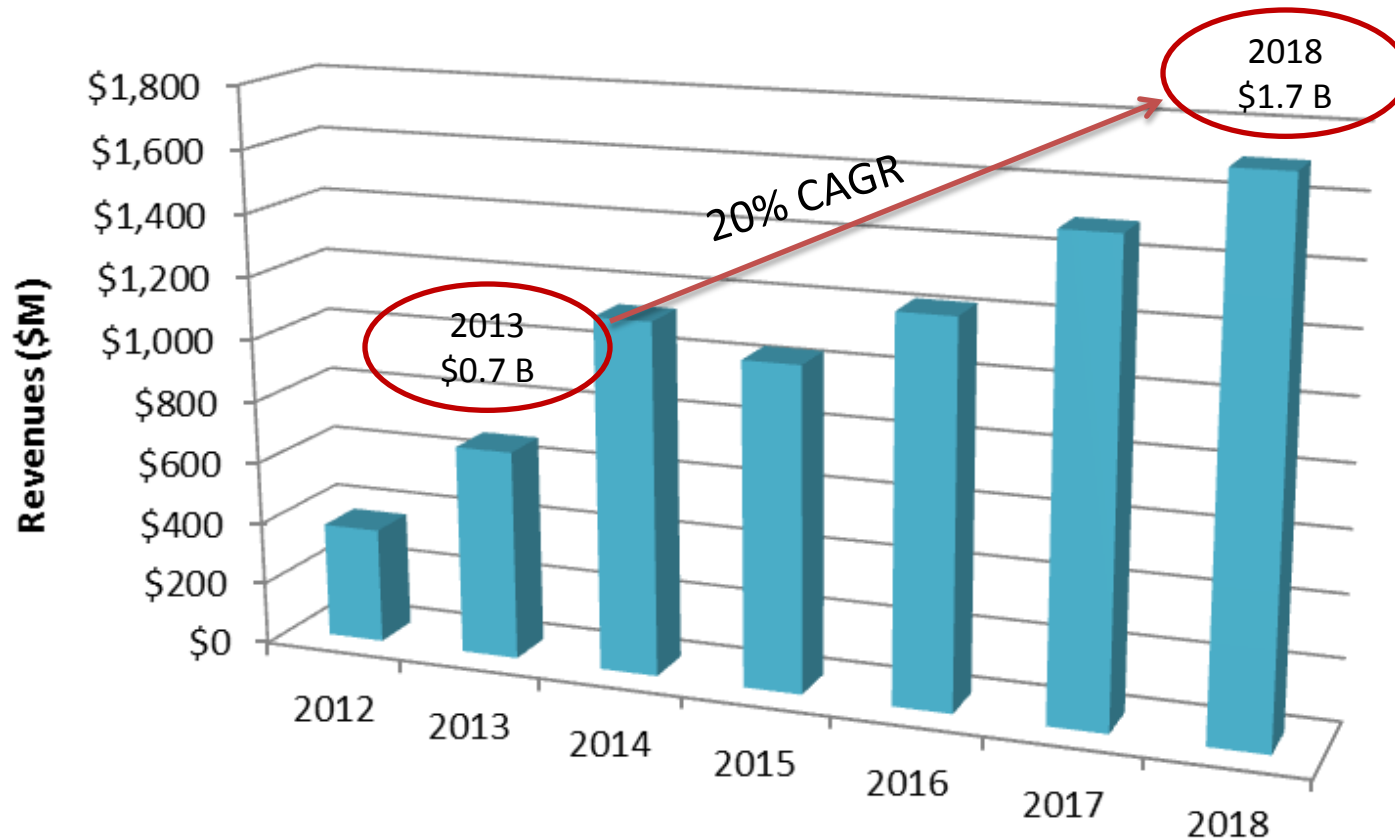
MR 16 LED Lamp Forecast



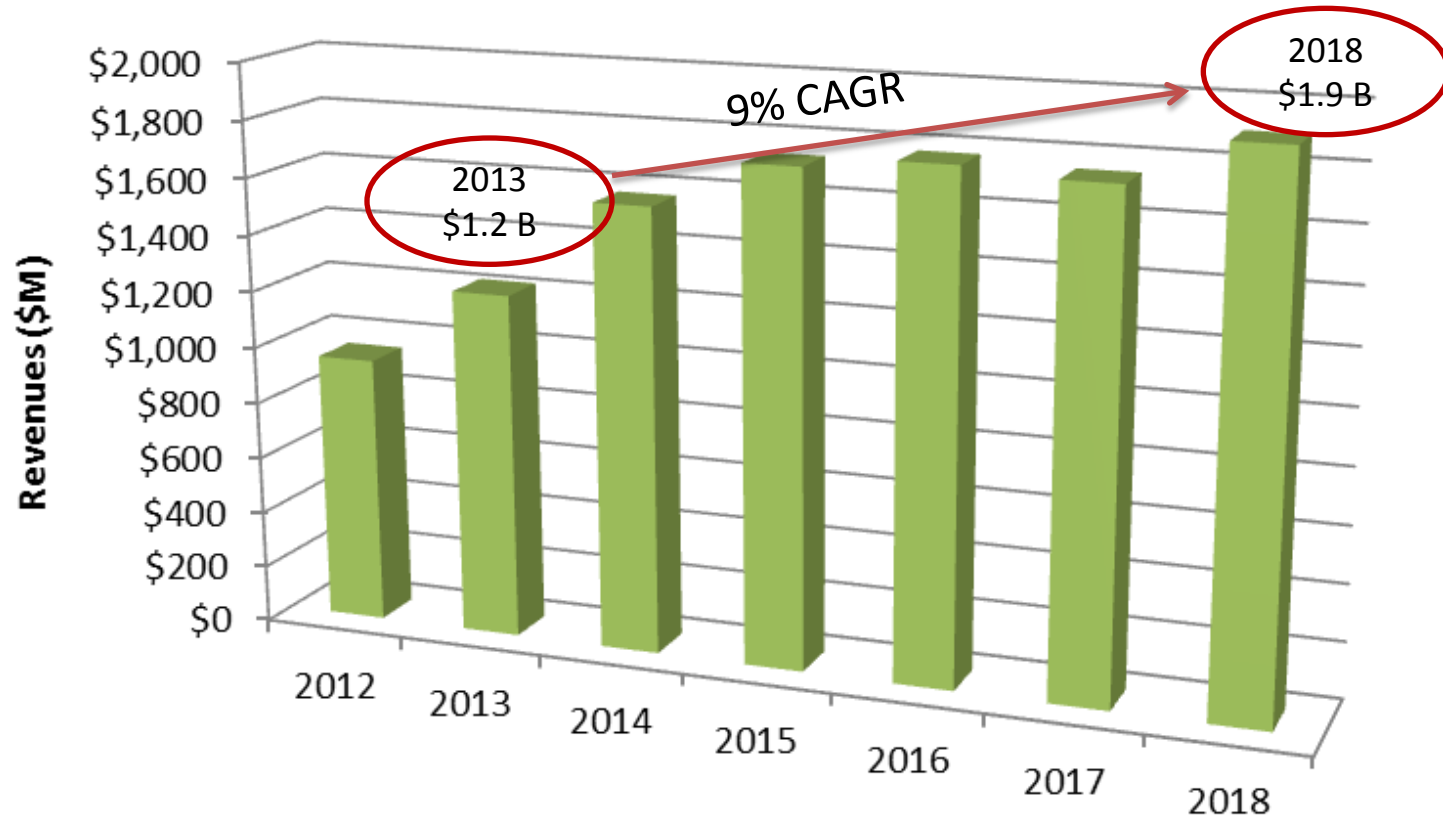
A-19 LED Lamp Forecast



Reflector LED Lamp Forecast



LED T-lamps Forecast



Incumbent Technologies Still Matter

- Global fluorescent lamps make up 25% of all lamp sales (4.5 billion) and 36% of IB
- Don't get too excited
- Fluorescent
 - Long life
 - Cheap
 - Efficient
 - Known



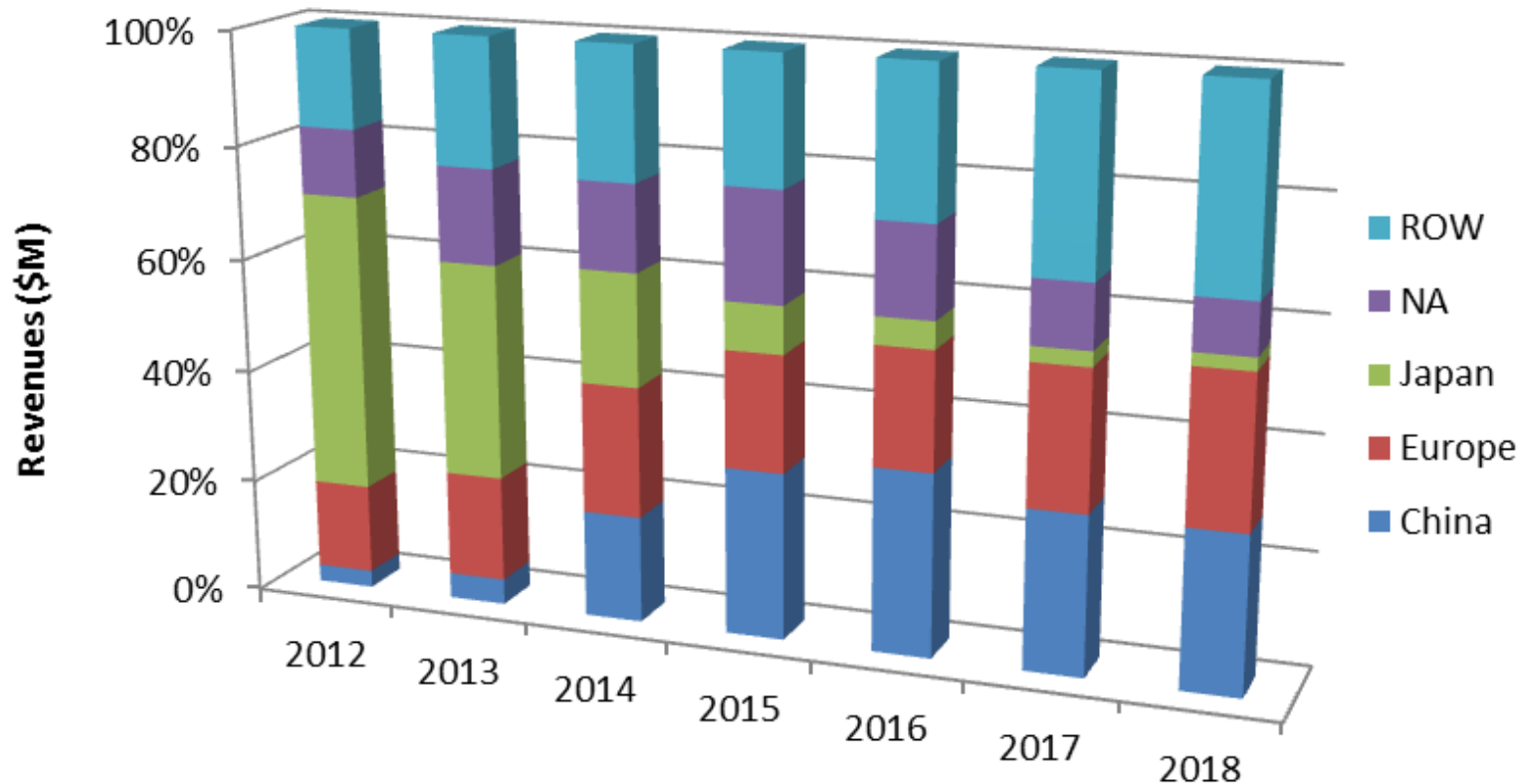
Vs.



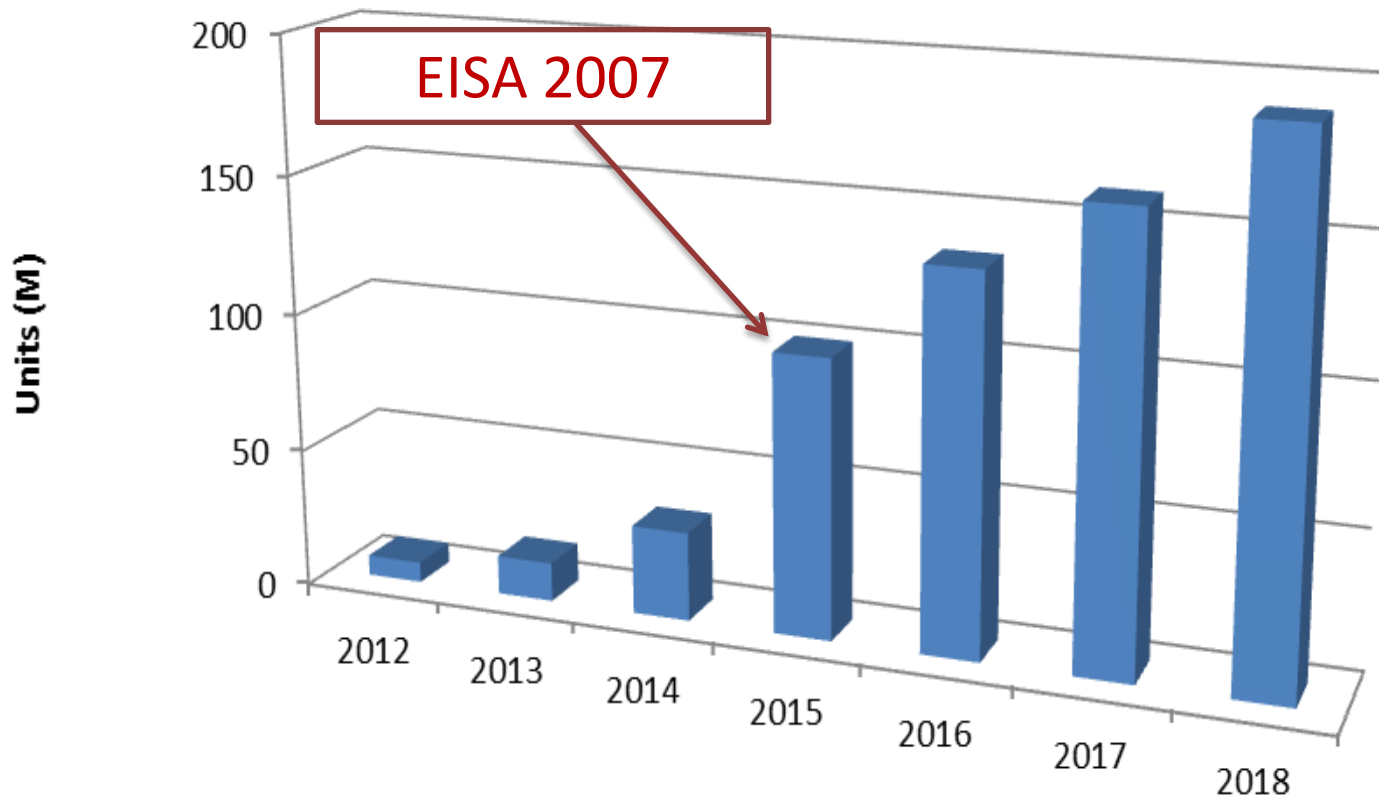
Not Just How Fast, But Where?



Regional A-19

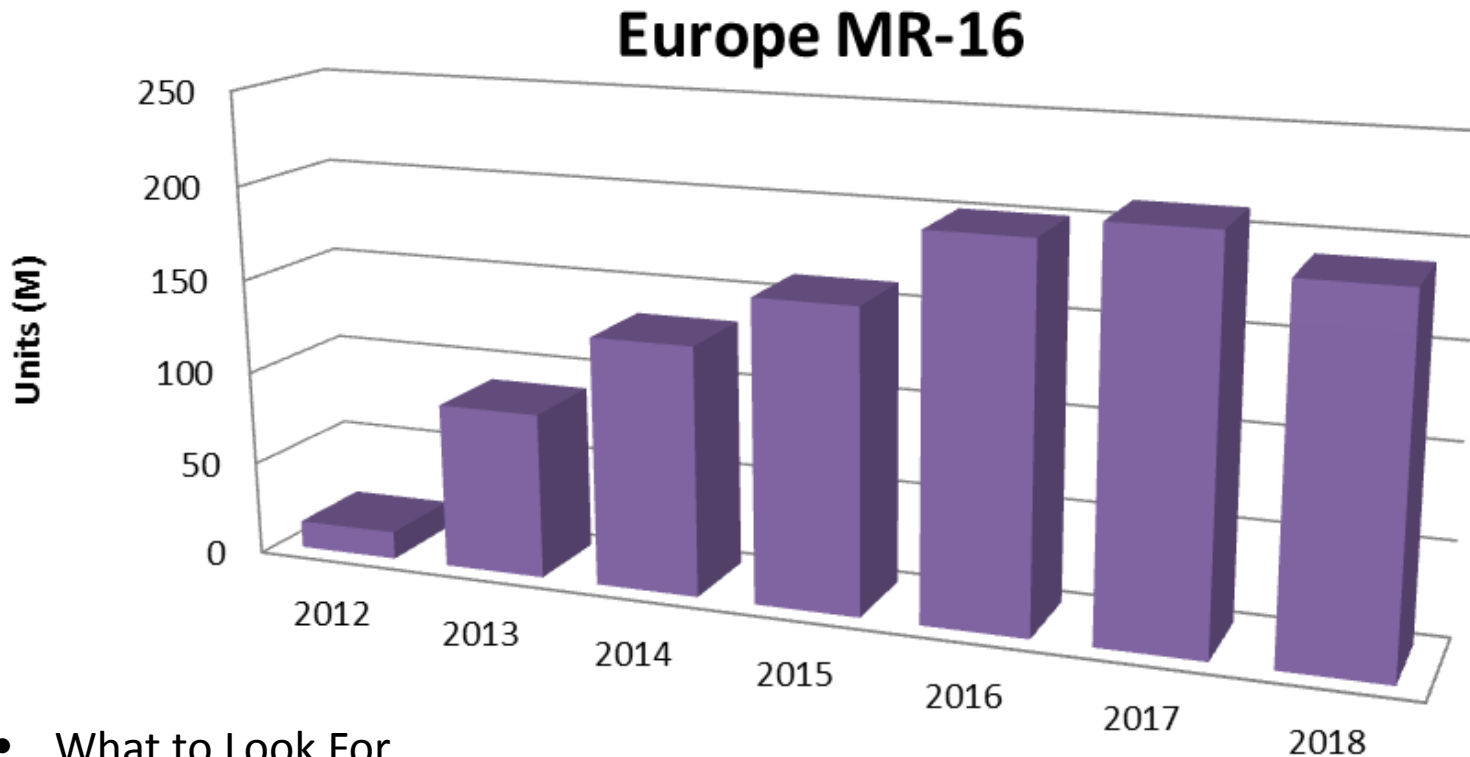


NA A-19 Lamp Forecast



- What to Look For
 - Application
 - Regulatory Environment
- Competing Technology
- Lighting Preferences

Regional MR-16



- What to Look For

- Application
- Regulatory Environment

- Competing Technology
- Lighting Preferences

LED Luminaires

Luminaire Breakout

Led Luminaires

Architectural

Entertainment

Retail Display

Residential

Commercial

Industrial

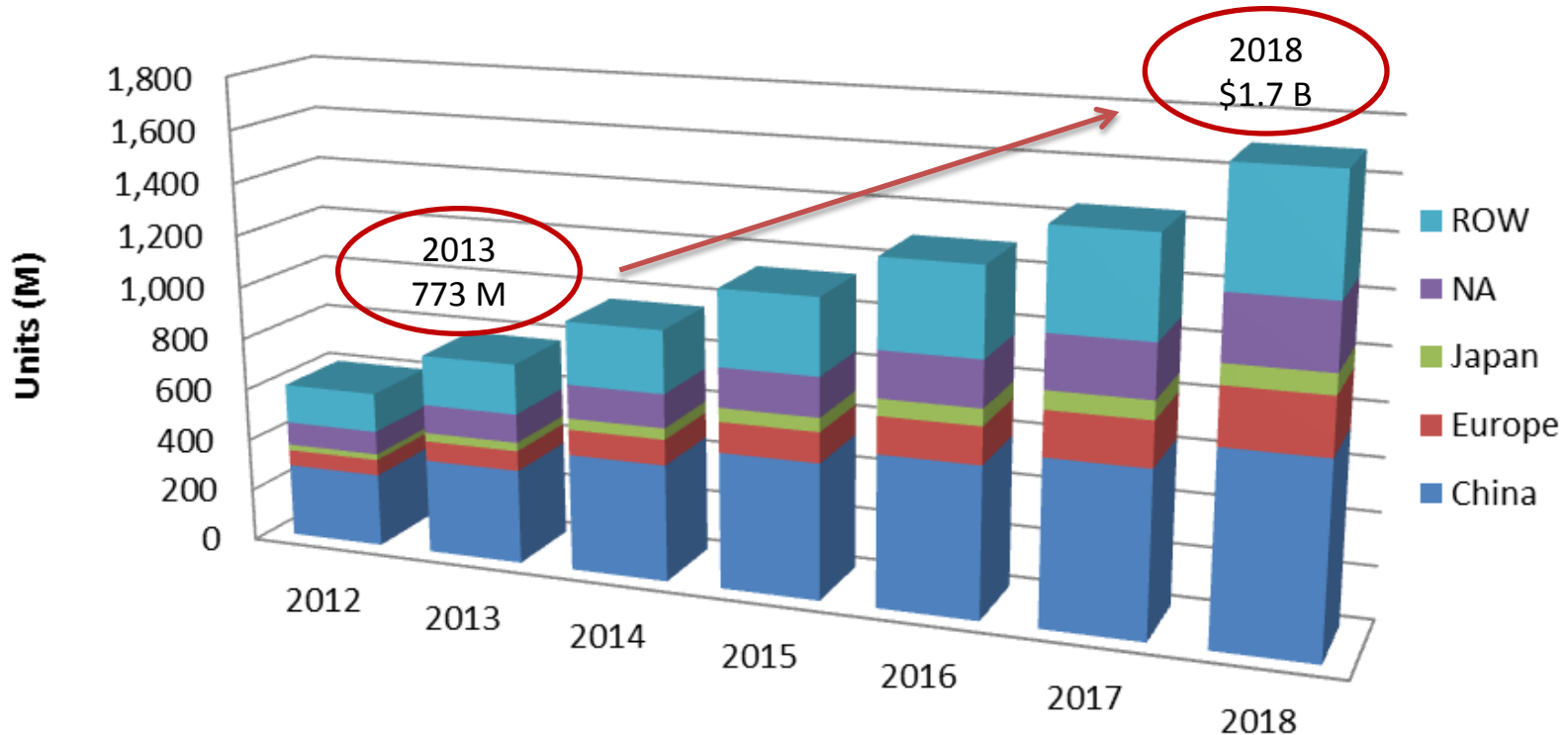
Consumer Portable

Emergency

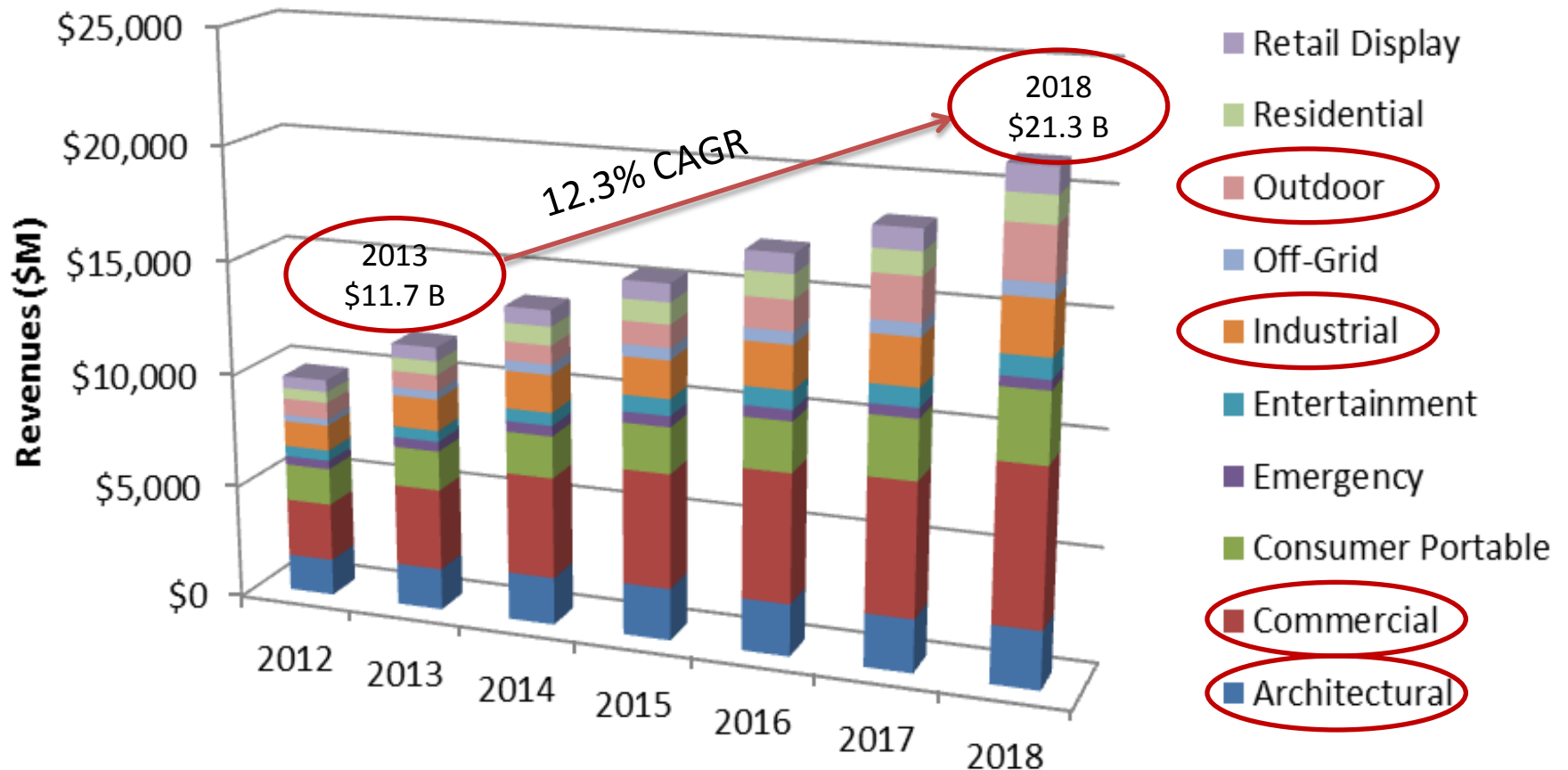
Outdoor

Off Grid/Solar Powered

LED Luminaire Markets

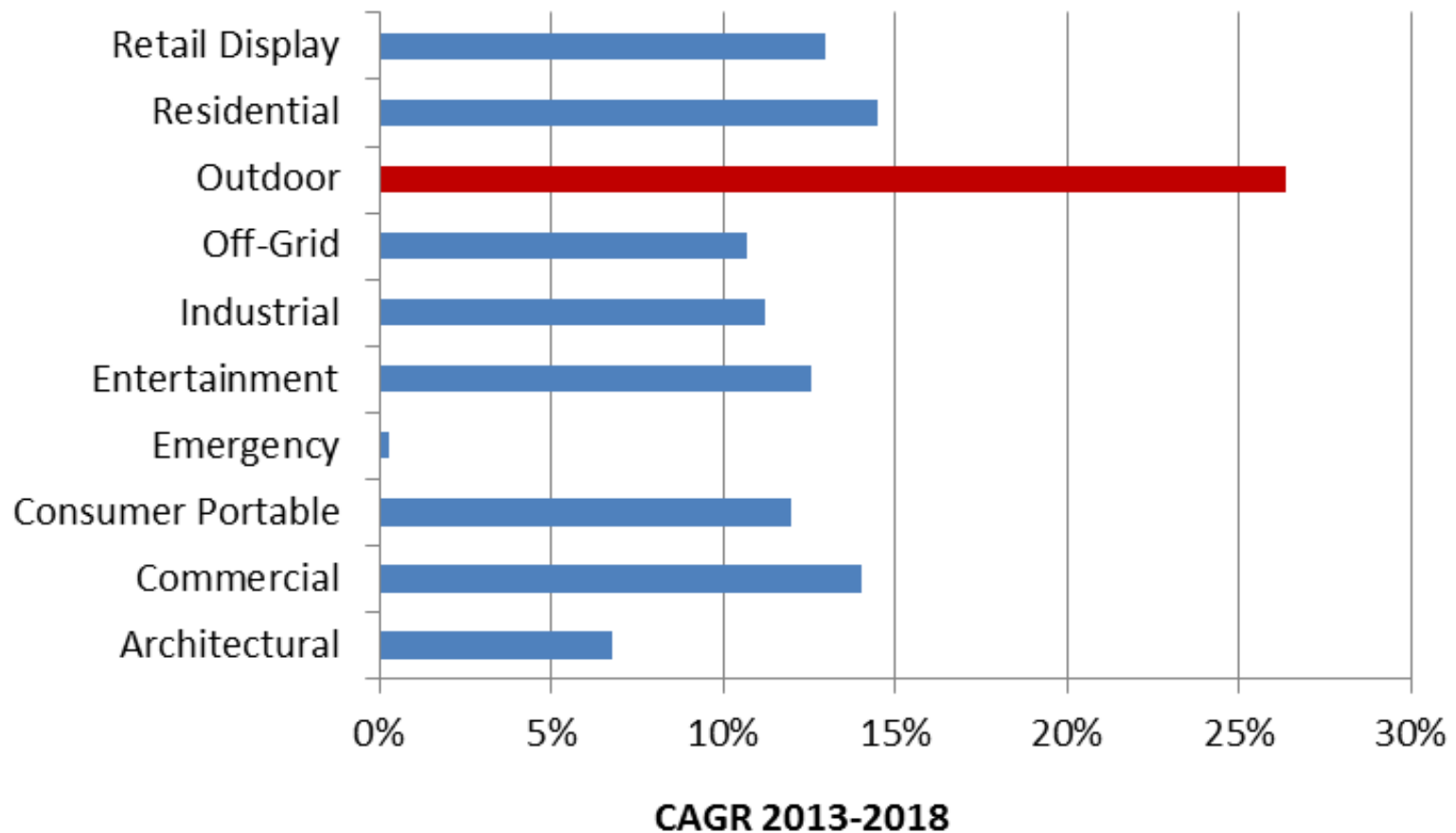


LED Luminaire Market

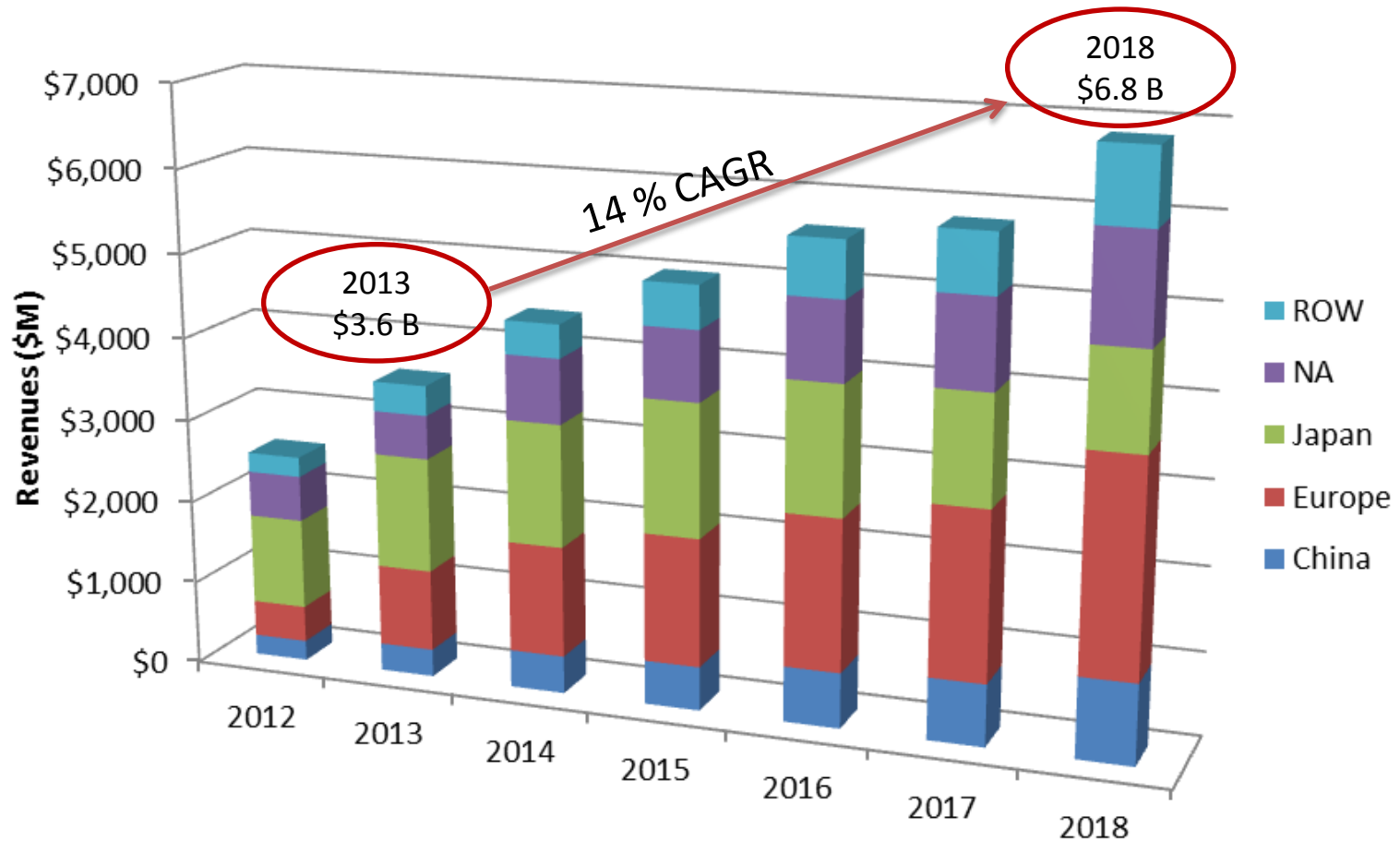


- Commercial, Industrial, Outdoor and Architectural > 60% market

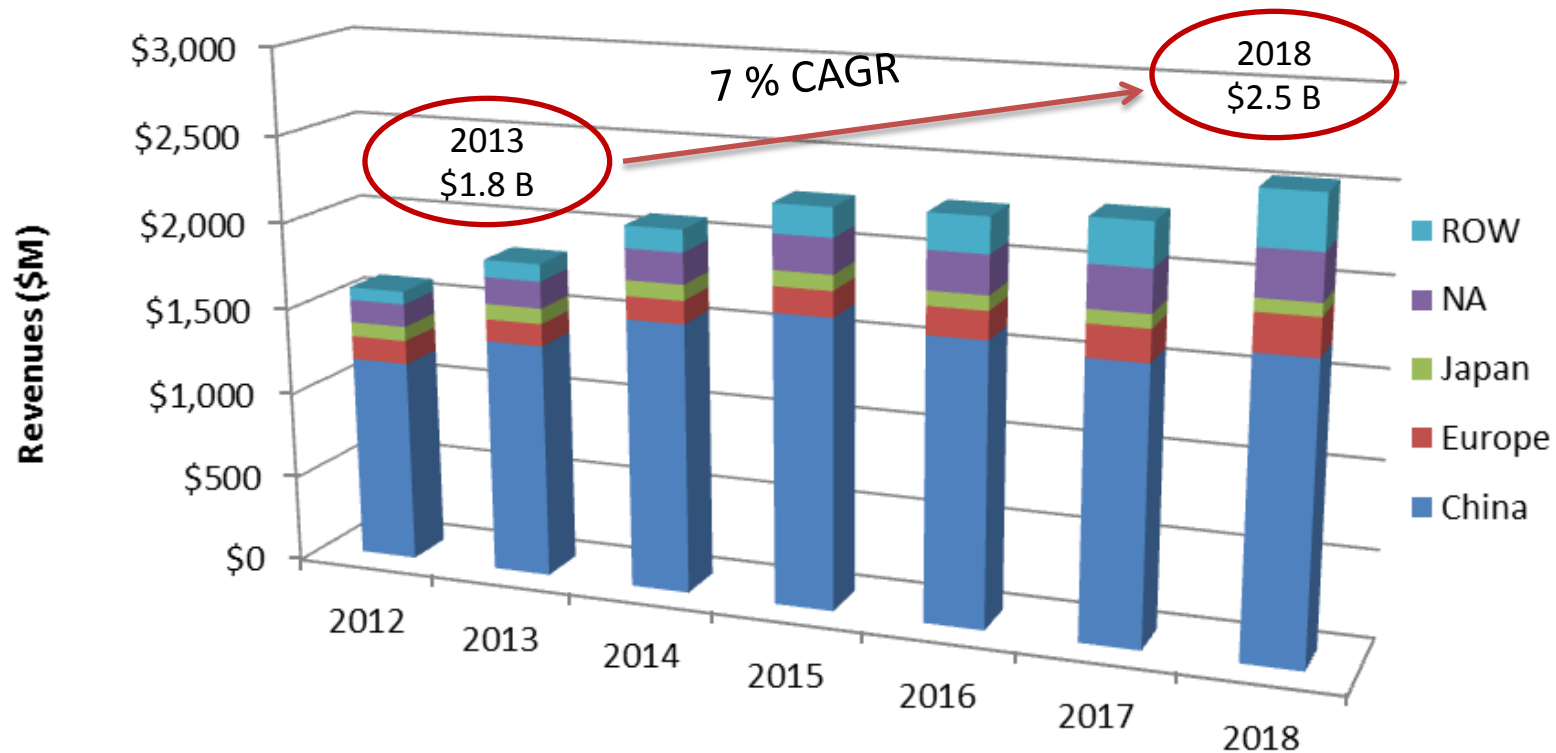
Luminaire Forecast CAGR/Application



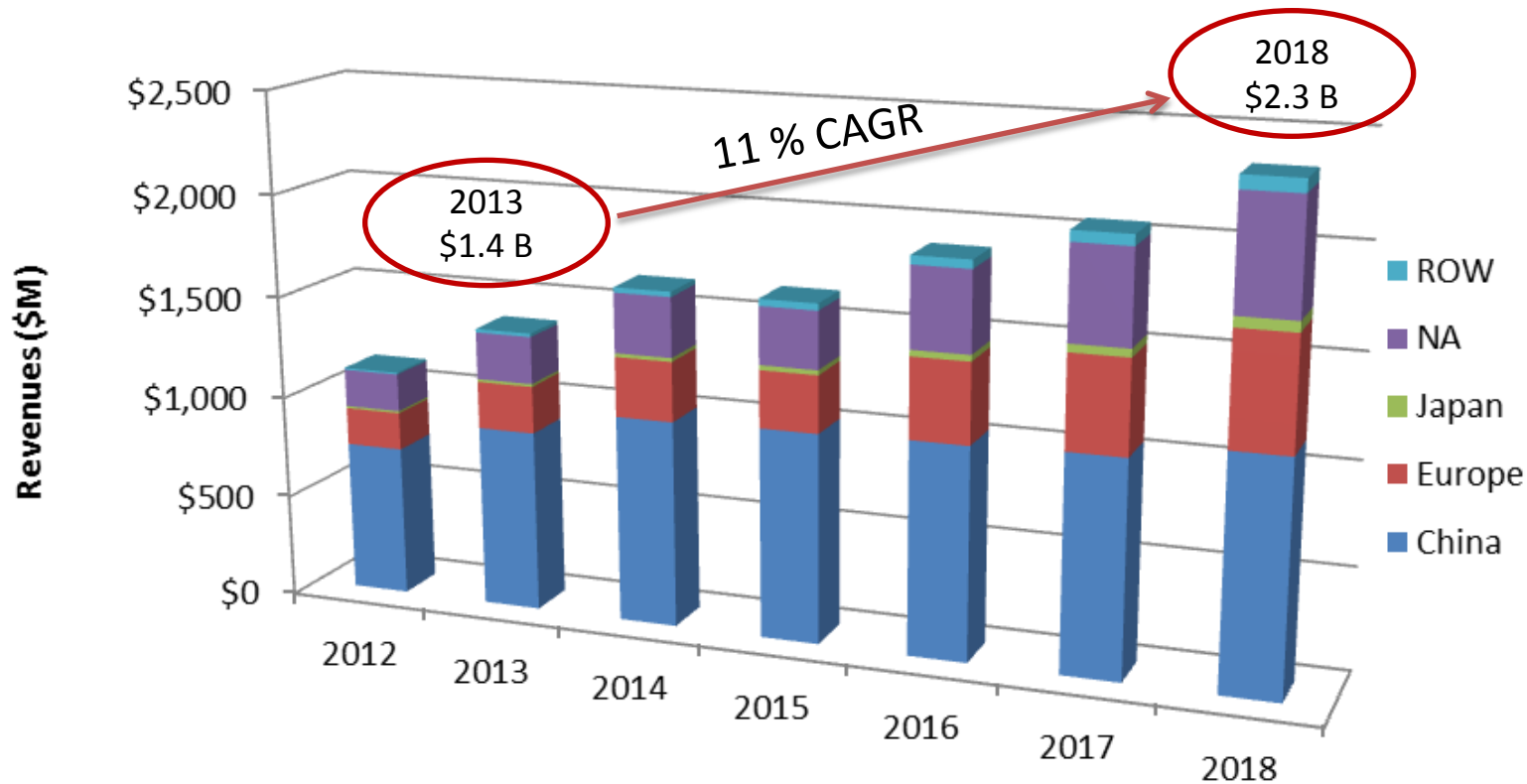
Commercial Forecast



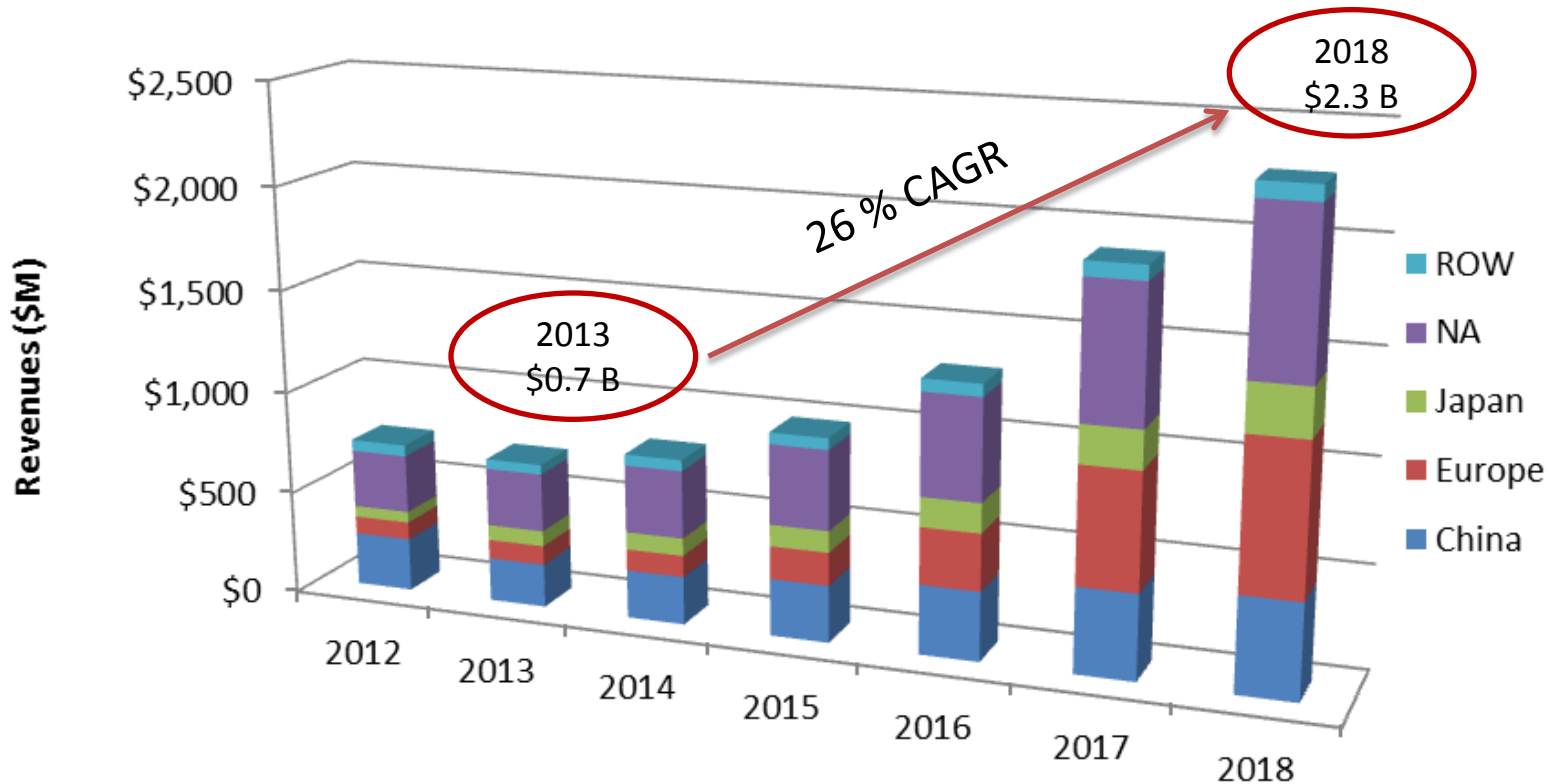
Architectural Forecast



Industrial Forecast



Outdoor Forecast



Conclusion

- LED lamps market forecasted to grow 21% to \$12.2 Billion in 2018
- Competing technologies are still very important
- LED luminaire market forecasted to grow 12% to \$21.3 Billion in 2018
- Commercial, industrial, outdoor and architectural will be leading the way

Thank You!

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