**March 2019** 

http://attardimarketing.com/ http://energywatchnews.com/

The saddest thing in life is wasted talent and the choices that you make will shape your life forever. A Bronx Tale

That's the trouble with you Americans, you expect only good to happen and are disappointed when it doesn't; the rest of the world expects only bad to happen and they are never disappointed.

The Sopranos

### Something to Think About...

A Judicious SWOT Analysis – Just Five (5) Apropos Questions to Ask Yourself

The SWOT (Strengths / Weaknesses / Opportunities / Threats) Analysis is an important tool in the strategic marketing planning process and is taught in every graduate and undergraduate business course in academia. My view is that this should be an annual event, to spend the time thoroughly during the planning process to ask your key people the select critical questions in each quadrant because it starts us to gather the most viable internal and external information to plan and run a successful business. *How you gather, manage, and use information will determine whether you win or lose* (Bill Gates). Well, in my travels in the lighting world, I offer a short cut with five (5) questions, yes – just 5 judicious questions that could help us maneuver thru the intelligent lighting combat zone and be on the winning side. Your answers could pave the wave to a workable strategic plan but it's only a start:

- 1. What are your core competencies? SUSTAINABLE COMPETITIVE ADVANTAGES, not easily duplicated by your competitors, is driven by your core competencies. Those unique strengths, embedded deep within your business that allow you to differentiate your offerings so profoundly that they create higher value for your customers than anyone else. Can you identify them? More importantly, can you communicate them effectively to your customers, employees and interested stakeholders?
- 2. What are the key technologies shaping your industry? Let me repeat what I have been saying: every lighting source out there will be replaced over the next 5 to 10 years. Everything! That means every Taco Bell, every Home Depot, every Olive Garden, every Walmart, every home, office, hotel, hospital, streetlight, supermarket, et al will be upgraded to Intelligent Lighting and to all the advanced technologies that connect everything we do. Where do you want to dominate? Not just a leadership position but a dominant leadership position....A SUSTAINABLE BRAND OF CHOICE!

Attardi Marketing www.attardimarketing.com
Our business is changing your future...

- 3. What's motivating your customers to buy from you and how are they adapting to change? The focus of all your marketing activities is the customer. That's the first multiple choice question I have on every exam I give and I will not let a student leave my class until they answer that question correctly. So, what are your customers asking of you? Do they know about Smart Lighting? About Intelligent Lighting? What are you telling them? When they understand the advantages and benefits of the new technologies, and there will be many, will they buy them from you? Why not? Just remember when they do ask, we are not just selling light anymore.
- 4. Who are the new entrants in the industry and are they a threat or opportunity? Incumbents do not like change, so if you are one, I feel your pain. Chris Brown calls the new entrants the gorillas that will be driving the bus. He may be right. Lighting has never seen the likes of Cisco, Apple, Qualcomm, Verizon / Sensity, Gooee, Opple, MLS, et al... What are they doing in the lighting industry? Get out, you say! Well, lighting has the potential to be the core connector to every device you own. They are here and the only question is will they be a threat to your survival or will it be cooperative innovation, as it has forever been? The lighting industry has always been an intradependent industry. Lamp companies working with ballast companies working with luminaire companies, all working with the supply chain: agents, distributors, contractors, designers, the spec community, all working together to serve everyone's lighting needs. Time will tell but it is clear, we are on a pathway to connected information using light! The real game changer: Big Lighting vs. Big Networking. New entrant IT companies see a real opportunity to reshape the lighting industry and they want a piece. Maybe even dominate......don't look back, they may be gaining on you.
- 5. What are your existing competitors doing that's working against you? What are you doing to them that's working for you? Let's get local...we all know that all sales are local. Whether you are a manufacturer, distributor, contractor, agent, whatever, you compete in the lighting industry now and you know who your existing competitors are and it's personal, new entrants notwithstanding. Your first responsibility is the day-to-day operations of your business to win in a very competitive market. Are you winning? You must! This is the only way it allows you to invest in tomorrow's technologies and opportunities. Times, they are a changin and the future is moving at the speed of light (sorry about that). Are you keeping up? I leave you with a quote from Jack Welch: If the rate of change on the outside is greater than the rate of change on the inside, the end is near.

## LED EnergyWatch...

- 1. CSIL Pegs US Luminaire Market at \$20 Billion CSIL's recent research publication, The Lighting Fixtures Market in the United States (July 2018, 190 pages, EUR 1,600), estimated that consumption of luminaires few at an average annual rate of 4.6% between 2012 and 2017, resulting in a \$20 billion industry. Other conclusions:
  - Over 65% of lighting sales is handled by 50 companies.
  - Nearly half of lighting is imported.
  - LED share is now 65%.

http://www.lightnowblog.com/2019/01/csil-pegs-us-luminaire-market-at-20-billion/



- 2. DLC Releases First Draft of Solid-State Lighting Technical Requirements 5.0 Technical Requirements V5.0 will continue to accelerate broad scale energy savings by improving the quality of light and controllability of DLC listed products. V5.0 expands the benefits of LED lighting by encouraging the development of products that keep the customer in mind. V5.0 Goals:
  - Differentiate lighting with a focus on health and wellness that can provide comfortable, safe environments for people.
  - Increase lighting controls adoption to better realize energy savings and enable improved quality of light.
  - Ensure persistent energy savings through increases in efficacy and enhanced user experience with DLC qualified lighting.
  - Make more product data available for lighting decision-makers.

https://www.designlights.org/workplan/technical-requirements-V5-0/

- 3. DOE Publishes 2018 Solid-State Lighting R&D Opportunities (RDO) This is a summary of feedback from experts through inputs received at roundtable meetings, at the OLED Stakeholder meeting, and at the DOE Solid-State Lighting (SSL) R&D Workshop held in January 2018 in Nashville, Tennessee. The discussions covered foundational R&D needs for both LED and OLED technologies and reflect SSL stakeholder inputs on topics that will improve efficacy, reduce cost, and add value for LED and OLED lighting solutions. These stakeholders include academic, national laboratory, and industry researchers who provide feedback and inputs to the BTO SSL Program. These topics represent stakeholder suggestions for the most critical areas for advancement of SSL technologies. <a href="https://www.energy.gov/eere/ssl/downloads/2018-solid-state-lighting-rd-opportunities">https://www.energy.gov/eere/ssl/downloads/2018-solid-state-lighting-rd-opportunities</a>
- 4. DOE Announces Selections for SSL R&D Funding Opportunity (Round 13) The U.S. Department of Energy has announced the competitive selection of 11 projects for solid-state lighting (SSL) R&D, in response to the funding opportunity announcement (FOA) DE-FOA-0001823. These projects will support key scientific advancements in SSL technology and help to accelerate the development of high-quality light-emitting diode (LED) and organic light-emitting diode (OLED) lighting products. Department-funded R&D will drive U.S. technology leadership in SSL by supporting innovative research. In total, the 11 selected projects will receive \$11 million and will make a cost-share contribution for a total public-private investment of over \$15 million, as they help to further reduce the cost and improve the quality of SSL products. This is the thirteenth round of DOE investments in SSL R&D. The selections are listed at: <a href="https://www.energy.gov/eere/ssl/doe-announces-selections-ssl-rd-funding-opportunity-round-13">https://www.energy.gov/eere/ssl/doe-announces-selections-ssl-rd-funding-opportunity-round-13</a>
- 5. DOE Energy Conservation Program: Energy Conservation Standards for General Service Lamps ACTION: Notice of proposed rulemaking and request for comment. SUMMARY: On January 19, 2017, the U.S. Department of Energy (DOE) published two final rules adopting revised definitions of general service lamp (GSL), general service incandescent lamp (GSIL) and other supplemental definitions, effective January 1, 2020. DOE has since determined that the legal basis underlying those revisions misconstrued existing law. As a result, DOE is issuing this notice of proposed rulemaking (NOPR) proposing to withdraw the definitions established in the January 19, 2017, final rules. DOE proposes to maintain the existing regulatory definitions of GSL and GSIL, which are the same as the statutory definitions of those terms. DATES: Meeting: DOE will hold a public meeting on February 28, 2019, from 9:00 a.m. to 2:00 p.m., in Washington, D.C. The meeting will also be broadcast as a webinar. https://www.energy.gov/sites/prod/files/2019/02/f59/withdrawal-of-gsl-definition-nopr.pdf

- **6.** DOE 2019 SSL R&D Workshop Presentations Posted Thanks to all who participated in the 16th Annual DOE Solid-State Lighting R&D Workshop, held in Dallas, Texas. Lighting experts from across the country and abroad gathered to address the complex science and technology challenges facing SSL today. The mix of perspectives spanning universities, labs, and companies large and small resulted in a robust and exciting exchange of ideas on SSL research progress and future R&D needs, generating much food for thought. Visit the DOE SSL website to view the workshop presentations and to download the latest edition DOE Solid-State Lighting R&D Opportunities
- 7. NEMA New Standard Available for Wireless Networked Lighting Controllers for Use with Roadway and Area Lighting Systems ANSI C136.48-2018 American National Standard for Roadway and Area Lighting Equipment—Wireless Networked Lighting Controllers. Developed by the ANSI Committee for Outdoor Lighting, this new Standard defines the minimum requirements for wireless NLCs intended for use with roadway and area lighting systems. ANSI C136.48-2018 is available in hard copy or as an electronic download for \$63 on the NEMA website.
- 8. Sensor Standard Paves Way for Internet-Connected Lights The sharing of Signify's Sensor Ready standard with the industry will drive adoption of internet-connected lighting and the exciting possibilities and applications it opens up, a senior executive in the company has declared. Jon Potter, business development manager for Signify, believes the protocol which allows sensors to communicate with the cloud via Dali drivers could help lighting become the backbone of the so-called Internet of Things in commercial and industrial buildings. The SR standard was ratified by the DiiA in November. <a href="https://luxreview.com/article/2019/02/sensor-standard-paves-way-for-internet-connected-lights">https://luxreview.com/article/2019/02/sensor-standard-paves-way-for-internet-connected-lights</a>
- 9. ENERGY STAR 2019 Lighting Materials Available The Environmental Protection Agency (EPA) is pleased to share upcoming plans to promote ENERGY STAR certified LED lighting in conjunction with Earth Day this April. This year we will continue to build on the momentum of the ENERGY STAR Light the Moment campaign, while supplementing this broad appeal with a targeted effort to reach the low to mid-income (LMI) consumer. To support this outreach and provide ample opportunity for lighting partners to participate and benefit, updated materials are now available, including the wide variety of Light the Moment themed materials from 2018 as well as sample mobile ads and additional social media posts targeting LMI audiences.

  https://www.energystar.gov/products/tools\_resources?f[0]=field\_products\_t\_r\_promotion\_cam%3A1641
- 10. A 2019 Outlook on the Latest Developments & Trends Within Automotive Lighting The automotive lighting industry is forecasted to grow substantially over the next few years, partially fueled by the movement towards autonomous, electric, shared, and connected vehicles. More this eBook discusses the following in-depth:
  - Status Update on the Proposed Changes to U.S. Lighting Regulations
  - The Latest Developments in Adaptive Driving Beam Headlights & Laser Headlights
  - LED and Interior Lighting Market Trends & Revenue Forecasts

Join Ford Motor Company, General Motors, Toyota North America and more at Auto IQ's <a href="https://automotive">4th Advanced Lighting for Automotive</a> (May 29-31 in Detroit) which will focus on key lighting essentials to include advancements in intelligent lighting technologies, sensor integration, autonomy's role in the lighting ecosystem, safety performance and design, branding and differentiation, and much more! <a href="https://autoadvancedlighting.iqpc.com/downloads">https://autoadvancedlighting.iqpc.com/downloads</a>



- 11. LIGHTFAIR® International Returns to Las Vegas Convention Center in 2020 LIGHTFAIR® has additionally committed to a 2021 return to Philadelphia and the Pennsylvania Convention Center, where LFI 2019 opens on May 19. Staged alternately on the U.S. east and west coasts, LFI returns to Las Vegas in 2020 following its 2014 Convention Center showing, which set new west-coast occupancy and attendance records. For LIGHTFAIR International 2019, the Pre-Conference program will take place in Philadelphia at the Pennsylvania Convention Center Sunday, May 19 Monday, May 20 and the LFI Trade Show and Conference will run Tuesday, May 21 Thursday, May 23. For more information about LIGHTFAIR International, please visit LIGHTFAIR.COM
- 12. San Diego Broadly Deploys Cameras and Sensors On LED Street Light Poles The city of San Diego, CA is currently deploying what is arguably the largest smart city and Internet of Things (IoT) project yet to be undertaken globally by a municipality. Already the city has deployed 2000 smart nodes based on technology from Current, powered by GE and Intel, and the size of the network should double by mid-2019. Some of the software and applications might still be described as trials or prototypes, but the project is a full-fledged, city-wide deployment with the nodes mounted on selected LED street light poles upon which the city had previously installed solid-state lighting (SSL) with integrated wireless connectivity. The new smart nodes include cameras and other sensors, connected via high-speed cellular technology, that are capturing anonymized data which the city will use to better serve citizens and visitors. That data will also be available to organizations and businesses located in San Diego. <a href="https://www.ledsmagazine.com/">https://www.ledsmagazine.com/</a>
- 13. From Smart Homes to IoT and Autonomous Cars, This Is How 5G Will Impact Our World Super-fast phones. Self-driving cars. Smarter homes. Streaming movies, music, and games with zero lag. These are just a some of the technologies we can expect to see in our lives, beginning in 2019, and tying them all is a next-generation cellular network known as 5G. As with 4G and 3G before it, 5G will deliver faster speeds, but that's just one part of the story. 5G will allow our devices and services the Internet of Things, or IOT to interconnect seamlessly. Things that seem complex to operate, like autonomous cars or drones, will become achievable. Here's everything you need to know about your next wireless network: <a href="https://www.digitaltrends.com/5g/">https://www.digitaltrends.com/5g/</a>
- 14. Cree Announces Best-in-Class Horticulture Efficiency with New Red XLamp LEDs Cree, Inc. announces the next-generation XLamp® XP-E2 Photo Red (660 nm) and Far Red (730 nm) LEDs, delivering breakthrough performance for horticulture applications. The new Red XP-E2 LEDs provide a drop-in upgrade for the previous generation that outperforms competing LEDs by up to 68 percent. These higher-performance horticulture LEDs increase the efficiency of LED luminaires and shorten their payback periods, making it more affordable to grow food under optimized lighting. https://www.cree.com/led-
- 15. Affiliated Distributors' Electrical Member Sales Grew +8% 2018 On a same store basis, by industry, 2018 PHCP (Plumbing, Heating, Cooling, Piping) sales were up 12%; Industrial/Power Transmission sales were up +11%; Electrical sales were up +8%; and Building Materials was up +4%. AD (Affiliated Distributors), Wayne, PA, the contractor and industrial products wholesale buying/marketing group, reported a +11% increase in member sales across its 12 divisions, totaling \$41.4 Billion in 2018. Purchases from AD suppliers grew by 13% in 2018. <a href="https://www.ewweb.com/news/affiliated-distributors-electrical-member-sales-grew-8-2018">https://www.ewweb.com/news/affiliated-distributors-electrical-member-sales-grew-8-2018</a>

### Global LED EnergyWatch...

- 16. We've Learned from Our Mistakes Says Signify Chief by Arthur van Schendel For several years now, Rondolat, a Moroccan-born citizen of the world with French and Italian nationality, heads the listed company Signify, the former Philips Lighting. Rondolat is seen as the man who transformed the more than one century old light bulb factory into a modern 'service provider in lighting solutions'. 'We then saw that there was not just one transition going on, no, at the time we saw four transitions, and even later five.
  - 1) 'The first was simple and inescapable: the conventional lamp would slowly but surely disappear.
  - 2) 'The second was a logical consequence: the unprecedented advance of LED lighting.
  - 3) 'The third was about the consequences: we would have to switch from one technology to another and we would immediately have to move on by linking the lighting systems and connecting them to the Internet. 'That required a control system and software.
  - 4) 'The fourth transition ensued again: now that we all lighting could be connected, we could start to offer services: you do not buy a lamp, you buy lighting.
  - 5) 'In all fairness, we did not see the fifth and final transition at the time. We have gained the insight that light is a wave and that you can transport data with light waves. 'Of course! Light as language, light as a means of communication. Light waves could, for example, be an excellent, faster and safer alternative to Wi-Fi. We call that system Li-Fi.

https://luxreview.com/article/2019/02/-we-ve-learned-from-our-mistakes-says-signify-chief

- 17. Signify Ratchets Up the Li-Fi Trials, pureLiFi Cranks the Speed A couple of leading Li-Fi developers have announced advances that they hope hasten the technology's arrival. Signify revealed it now has about 30 pilot installations, while also acquiring a Li-Fi company. Meanwhile, Scotland's pureLiFi said it has cranked up transmission speeds to 1 Gbit/sec, about a 20× increase. Li-Fi uses lightwaves from LED luminaires rather than the radio waves of Wi-Fi. It is another part of the move beyond illumination toward a data-focused business model in which the lighting infrastructure would morph into an IT infrastructure. One of the obstacles is that gadget makers have yet to embed Li-Fi receiver chips in phones, tablets, and laptops. Standards could help instigate that, but international standards body IEEE is not expected to release one until 2021. The Li-Fi light spectrum has about 1000 times the frequency range of Wi-Fi. Li-Fi enthusiasts also point out that it is more secure than Wi-Fi, because it requires line of sight. <a href="https://www.ledsmagazine.com/">https://www.ledsmagazine.com/</a>
- 18. Signify Begins LiFi Trial in Europe, North America and Asia Signify is speeding up its LiFi development and implement. The leading lighting company announced the trail of LiFi in Europe, North America and Asia through cooperation with more than 30 customers. Signify and its customers set up pilot LiFi installations in worldwide cities. In India, Signify works with Incubex, an incubator for product and business solution, to set up a LiFi implemented meeting room where new startups and firms can apply the technology with Signify's Philips LiFi-enabled luminaires. In Europe, Signify collaborate with telecoms company Orange, providing LiFi service for its Paris Office. The Dutch lighting company also installed LiFi luminaires for Atea, an iT infrastructure company in the Nordic and Baltic region, in its office in Stravenger, Norway. The LiFi luminaires equipped lobby of its building can demonstrate the technology and offers visitors the connectivity. <a href="https://www.ledinside.com/news/2019/2/signify begins lifi trial in europe northamerica asia">https://www.ledinside.com/news/2019/2/signify begins lifi trial in europe northamerica asia</a>

- 19. Signify Acquires Firefly, its Second LiFi Company EdisonReport can confirm that Signify has acquired Firefly LiFi. According to their website, Firefly has an office in San Diego as well as Germany. We believe the transaction has already occurred. <a href="https://edisonreport.com/signify-acquires-firefly-its-second-lifi-company/">https://edisonreport.com/signify-acquires-firefly-its-second-lifi-company/</a>
- 20. Osram Acquires UK's Ring Automotive for Extend Its Aftermarket Products After revealing its sluggish business performance, Osram announced that it will strengthen its automotive business by acquiring aftermarket specialist Ring Automotive. With the acquisition, Osram plans to expand its aftermarket portfolio and reach end customers via the distribution channels of Ring Automotive in the UK. In addition, Ring's specialization in electronic car accessories complements Osram's product range. Moreover, Osram will give the ring portfolio access to the US market via the established Osram Sylvania channels and opens up new sales potential in Europe and the rest of the world with a differentiated brand strategy. <a href="https://www.ledinside.com/">https://www.ledinside.com/</a>
- 21. Osram Confirms the Buyout Rumors and in Discussion with Bain Capital and Carlyle Group Osram announced a confirmation about the possible buyout by Bain Capital and Carlyle Group and revealed that it is engaged in detailed discussions with the interested parties. After Osram reported its declined business performance in the first quarter of fiscal 2019 and said it has "taken a number of measures to improve revenue and returns," the Germany company confirmed the market rumors that Bain Capital and Carlyle Group are eyeing the buyout of Osram. https://www.ledinside.com/
- 22. Zumtobel CEO: "Li-Fi Will Play A Decisive Role" Li-Fi got another boost from the old guard today, as the CEO of venerable lighting maker Zumtobel endorsed the technology's potential following a trial with pioneer pureLiFi ahead of a joint display by the two companies at the Mobile World Congress, the mobile telecommunication industry's annual giant confab in Barcelona. The comments by Zumtobel boss Alfred Felder mark the second Li-Fi advance in recent weeks at a major lighting company, following Signify's announcement earlier this month that it now has about 30 Li-Fi trials underway. Li-Fi turns LED luminaires into Internet transmitters by using LED lightwaves, rather than the radio frequencies of Wi-Fi, to communicate with laptops, tablets, and smartphones. Li-Fi advocates say that it can be faster than Wi-Fi. It is also potentially an important part of lighting's emerging Internet of Things (IoT) push, in which vendors are looking for altogether new business models and new sources of revenue by tying lights to the Internet and thus using the lighting infrastructure for a myriad of data services.

  https://www.ledsmagazine.com/articles/2019/02/zumtobel-ceo-li-fi-will-play-a-decisive-role.html
- 23. China LED Chip Makers See High Inventory China-based LED chip makers saw inventory pile up to CNY6 billion (US\$882 million) at the end of 2018 due to oversupply, according to industry sources. With local government subsidies, many China-based LED chip makers expanded production capacities in 2018, but demand fell far short of expectation, resulting in continual price drops and increasing oversupply, the sources noted. During the first three quarters of 2018, prices for entry-level and mid-range white-light LED chips dropped 30-40% and those for high-end models fell 10-20%, the sources indicated. Some China makers had to lower capacity utilization to below 50% at the end of 2018, the sources said. https://www.digitimes.com/news/a20190222PD202.html

- 24. Quality Initiative Aims to End Spec-Breaking in UK A solution to spec-breaking on building projects is being trialed in the UK, which it is hoped can help prevent quality lighting products from being rejected in favor of cheap alternatives. The BIQ (Building in Quality) Quality Tracker has been created jointly by the bodies representing architects, builders and surveyors, in an effort to make sure that those involved in a construction project get together and agree quality requirements at the start. The move comes in response to calls for better quality management in the building industry, in the light of low productivity figures and high-profile scandals resulting from poor building quality and maintenance including the deadly Grenfell Tower fire of 2017, the collapse of a wall at an Edinburgh primary school in 2016, and widespread problems with new-build homes. In the lighting industry, manufacturers and designers are becoming increasingly concerned about contractors ignoring specifications and substituting cheaper products in the name of value engineering. The new Quality Tracker developed and backed by RIBA, representing architects, the RICS, representing surveyors, and the CIOB, representing building professionals aims to get this problem under control. <a href="https://luxreview.com/article/2019/02/quality-initiative-aims-to-end-spec-breaking">https://luxreview.com/article/2019/02/quality-initiative-aims-to-end-spec-breaking</a>
- 25. Australian IoT Vendor Buddy Acquires Lighting Company LIFX for \$51m Australian Internet of Things (IoT) vendor Buddy Platform on Wednesday announced that it has entered into a binding agreement to fully acquire San Francisco-headquartered smart lighting vendor LIFX for about \$51 million in a cash and stock transaction. As part of the deal, Buddy will absorb LIFX's 48 employees across offices in Melbourne, Australia, Silicon Valley and Shenzhen. Following the completion of the acquisition, LIFX's chief technology and product officer, Marc Alexander, will join the Buddy board of directors, per a company statement. <a href="https://www.dealstreetasia.com/stories/buddy-lifx-120265/">https://www.dealstreetasia.com/stories/buddy-lifx-120265/</a>
- 26. WHITE PAPER Samsung's Horticulture LEDs Using Full Spectrum Samsung has made several attempts to develop new spectrum for horticulture lighting. One solution is to utilize white LED alone or in conjunction with monochromatic LEDs to create a very broad spectrum. These approaches using Samsung white LEDS can deliver the full spectrum of light to promote plant growth, as well as comfortably perform cultivation management, with even better color rendering.
  - Comparison of horticulture light sources
  - Functions of visible wavelength on plant growth
  - Superior spectrum for leafy greens and herb
  - Advantages of white-based full spectrum

https://www.samsung.com/led/

27. ams Introduce New IR Laser for 3D Sensing in Mobile Devices - ams announced the launch of MERANO-Photodiode (PD), an in-frared (IR) laser flood illuminator module which provides the uniform light output needed in mobile 3D sensing applications such as user face recognition. By introducing a VCSEL-based flood illuminator in a slim package, ams aims to ehance the adoption of 3D sensing applications in mainstream mobile phones. Its 2W Merano-PD is suitable for use in the latest technologies for 3D sensing, including ToF and structured light methods. Applications such as face recognition, augmented reality, 3D object scanning and 3D image rendering, as well as other industrial and automotive applications, will benefit from use of the Merano-PD. Benefiting from optimized thermal design, the 2W-Merano-PD module has a footprint of 2.4mm x 3.3mm and just 1.2mm high. It is small enough to be integrated easily into a mobile phone's design for either front-or world-facing applications. https://www.ledinside.com/



## LED TechnologyWatch...

28. Ushio America Introduces New 90+ CRI LED BR Lamps Certified for California Title 20 - The Uphoria<sup>TM</sup> PRO Gold, a new line of LED R20, LED BR30 and LED BR40 lamps, are a direct replacement for Incandescent R/BR lamps offering smooth, quiet dimming (down to 10%). Designed with a wide, soft beam to reduce glare, these high-efficient lamps feature high color rendering (90+ CRI) and save up to 93% in operating costs! Ushio America is proud to stand behind these 25,000 hour rated Uphoria PRO Gold LED BR lamps with a 5-year limited warranty. For more information: https://www.ushio.com/product/uphoria-pro-gold-led-br/



**29.** AmazonBasics 65W Equivalent BR30 Floodlight - AmazonBasics is the online megaretailer's version of a store brand -- and for the past year or so, just like the store brands at Walmart and at



Target, the product lineup has included LED light bulbs. Among those AmazonBasics-branded bulbs: a soft white, 65-watt replacement floodlight LED that sells in a two-pack for \$12. Unlike a lot of store brand products, that's actually *more* expensive than much of the name-brand competition. Run to the hardware store, and you'll find some very good floodlight LEDs from names like GE and Cree all cost a bit less per bulb. With Amazon, you're basically paying an extra buck or two not to need the hardware store at all. At 792 lumens

and drawing 9.5 watts at full brightness, they would pay for themselves within 11 months. https://www.cnet.com/reviews/amazonbasics-65w-equivalent-br30-floodlight-led-review/

30. Philips 65W Replacement BR30 Floodlight LED with Warm Glow Dimming - Philips' newest BR30-shaped floodlight bulb is as efficient as floodlights come, it's near flawless on dimmer switches, it turns warmer and more candle-like in tone as you dim it down -- and, at about \$14 for a three-pack at Home Depot, it costs a fraction of what bulbs like this used to cost back when I started. Along with best-yet brightness and efficiency and an improved lifespan of 22.8 years, the biggest step forward for Philips here might be the bulb's warranty. Last time I tested floodlights in 2017, Philips was warranting its bulbs for three years. Now, in 2019, that figure is up to 10 years, which finally matches North Carolina lighting manufacturer Cree, a key



competitor with Philips on those Home Depot shelves. <u>Cree's latest floodlight LED is an excellent pick</u>, but the Philips 65-watt replacement floodlight is almost equally strong. In fact, it's brighter and more efficient than Cree while still costing a quarter or two less per bulb. That makes it one of the strongest values in the lighting aisle, and a terrific choice if you're in need of new overhead lights. <a href="https://www.cnet.com/reviews/philips-65w-replacement-br30-floodlight-led-with-warm-glow-dimming-2019-review/">https://www.cnet.com/reviews/philips-65w-replacement-br30-floodlight-led-with-warm-glow-dimming-2019-review/</a>



# 31. Cree BR30 Floodlight LED - What you should look for in a good 65-watt replacement floodlight LED:

- Brightness-wise, your bulb should put out at least 650 lumens
- Your bulb shouldn't draw more than 10 watts of energy
- Your bulb should be able to dim without flickering or buzzing
- Your bulb should offer a warranty of at least five years
- You shouldn't pay more than \$8 per bulb (ideally, you shouldn't spend more than \$5)

Cree's newest floodlight LED checks all of these boxes. Available

in a two-pack at Home Depot for \$10, it's an affordable and well-rounded choice that boasts an industry-leading 10-year warranty and the best efficiency I've ever seen from a floodlight. It's brighter than advertised, it handled heat build-up better than any other floodlight LED I've tested, and it didn't flicker or buzz on any of the dimmer switches I tried it out on.

https://www.cnet.com/reviews/cree-br30-floodlight-led-2019-review/





help the colors in your home pop, your safest bet has long been to go with a GE Reveal bulb. Each one is specifically designed to boost the color quality in your home, and after testing several of them over the years, they all work like a charm -- whiter whites, redder reds, more natural-looking skin and wood tones, you name it. The newest floodlight LED in the GE Reveal catalog is no different, but it does use a different method than before to get you those better-looking colors. Previous versions of the bulb, including the one I tested in 2017,

would filter out much of the excess light from the yellow part of the spectrum (that "W"-shaped dip in the graph on the left below). The new version doesn't do that -- instead, it boosts the light in the red part of the spectrum (those telltale spikes on the right side of the right-hand graph). https://www.cnet.com/reviews/ge-reveal-hd-65w-replacement-br30-floodlight-led-2019-review/

#### 33. *Just sayin*....



## Monthly Special Feature... CSIL Pegs US Luminaire Market at \$20 Billion

https://www.lighting.csilmilano.com/report/the-lighting-fixtures-market-the-united-states-0058484.html

The 12<sup>th</sup> edition of The Lighting Fixtures market in the United States offers a comprehensive picture of the lighting fixtures industry in the US, providing data and trends 2012-2017 and forecast up to 2021. From one hand, the report analyzes the main trends affecting the market over the last five years, considering the production, the consumption, the imports and the exports of lighting fixtures in the country. On the other hand, it offers an analysis of the market structure and the competitive system, an overview of the distribution system and the main players operating in the market.

### 1) International Trade

Lighting fixtures exports and imports are considered, broken down by country and by geographical area of destination/origin. The time frame considered is 2012-2017.

### 2) Market Structure

The lighting fixtures market is divided into four **main segments**:

- residential-consumer
- architectural-commercial
- industrial
- outdoor.

Within them, the market is further broken down by types of product, by light sources, and by the place of production. A **financial analysis**, **o**n a sample of a selected number of companies operating in the market, includes profitability ratios and financial indicators.

### 3) Distribution Channels

The analysis of the **distribution system** is organized by the following channels:

- Contract/Builders
- Lighting Specialists
- Lifestyle stores
- DIY stores
- E-commerce

A selection of architectural offices and lighting designers, electrical and lighting wholesalers, and furniture stores is also included.

### 4) Competitive System

Finally, the report offers an analysis of the leading local and foreign players present in the market and in each segment considered; through sales data, market shares and short profiles.

An address list of more than 130 US lighting fixtures manufacturer is included.

Among the **considered products**: indoor/outdoor lighting, decorative/residential lighting, commercial lighting, industrial lighting, technical lighting, traditional/transitional/contemporary lighting, floor/table/wall/ceiling lamps, suspensions, downlights/recessed, tracks/systems, projectors/spotlights, hospitality, retail, office lighting, entertainment lighting, lighting for museums, lighting for industrial plants, explosion-proof lighting, marine lighting, healthcare lighting, emergency lighting, residential outdoor lighting, lighting for urban landscape, Christmas lighting, street lighting, sporting facilities and galleries, incandescence, fluorescence, gas discharge, LED, lighting controls and IoT applications.