POWERFUL, EFFICIENT, RESPONSIBLE
THE TECHNOLOGY BEHIND COOLTEK™ ENGINEERING

Environmentally friendly products have risen to the forefront of the consumer and business conscience over the last year. Fortunately for DP, efficient design has been a cornerstone of their development philosophy for more than a decade. As a result, Digital Projection's precision displays possess technologies that promote efficiency and extend useful life, while limiting cost of ownership, energy consumption, heat generation and operating noise. Many of the most important efficiency benefits of these products stem from DP's innovative CoolTek™ Engineering. The technologies that comprise CoolTek™ make Digital Projection's Displays best-in-class in terms of performance, cost of ownership and environmental impact.

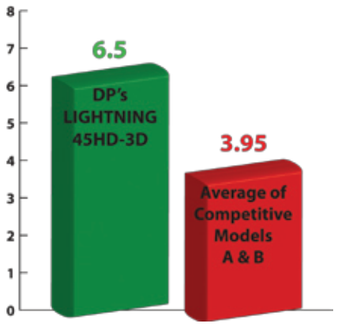
Depending on the projector model, up to three primary design principles contribute to the CoolTek™ benefits:

CoolTek™ Principle 1: Minimum Wattage In, Maximum Lumens Out.
As a result of DP's innovative illumination and optical designs, every DP projector is a demonstration of extraordinary lumen-per-watt efficiency. Lumen for lumen, these products employ lower wattage lamps and consume less power then comparable products. In some products, the difference can be dramatic: As an example, the LIGHTNING 45HD-3D projector employs a 3.6 Kilowatt(kW) xenon lamp to produce 30,000 lumens. Competitive products employ 6 or 7 kW lamps to deliver similar brightness. Over the course of a projector's operational life (5-10 years), the positive financial and ecological savings derived from using a display that is thousands of watts more efficient would be very meaningful and tangible in terms of electricity consumed, carbon produced and dollars saved.

To study this principle in more detail, we will analyze two of DP's most popular platforms: the LIGHTNING and TITAN series. We will compare their amazing efficiency to that of similarly bright competitive models.

*LIGHTNING 45HD-3D vs Competitors A & B**

Lumens per Watt

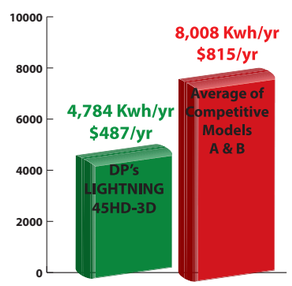


At 30,000 lumens, DP's LIGHTNING 45HD-3D is among the brightest digital projectors in the world. Our CoolTek™ optical designs and illumination technologies produce these amazing 30,000 lumens from a 3600 watt Xenon lamp. Total chassis power consumption is only 4600 watts. By comparison, competitive 30K lumen digital projectors employ 6000 or 7000 watt lamps, with total chassis power consumption of up to 8400 watts. That equals **nearly twice** the power requirement of DP's LIGHTNING with significantly lower lumen per watt performance.

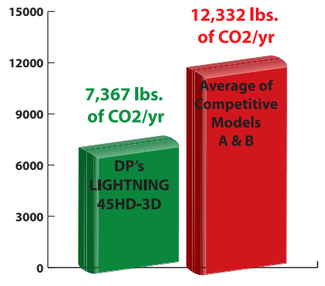
To further study how this power consumption delta impacts both customers and the environment, it's logical to compare the long-term cost of ownership and environmental impact of DP's efficient LIGHTNING series with the competitor's more traditional designs:

*LIGHTNING 45HD-3D vs Competitors A & B**

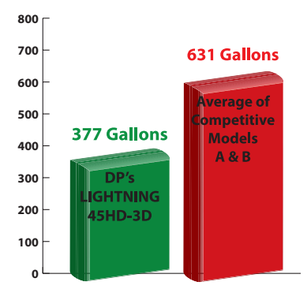
Annual Power Consumption and Cost [1, 2]



Equivalent CO2 Production [1, 3]



CO2 Production Equivalent in Gallons of Gas [1, 4]

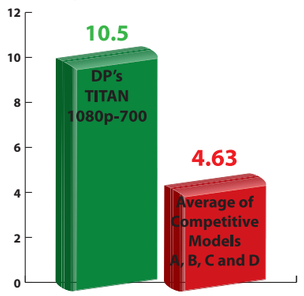


Taking this data into consideration, it becomes clear that in a large venue application, using a product that produces maximum lumens from the lowest wattage lamps can make a huge difference in terms of long-term cost of ownership (cost of electricity per year) and CO2 footprint. For multi-unit applications, the environmental and cost of ownership benefits of using a DP product, as well as the negative impacts of using competitive products, are multiplied.

Now let's look at similar data for DP's mighty but tiny, 10,000 lumen TITAN 1080p-700, along with competitive products specified at similar lumens:

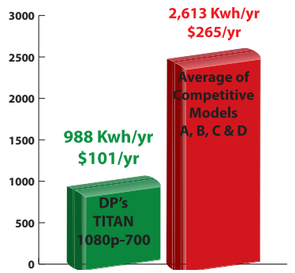
*TITAN 1080p-700 vs Competitors A, B, C & D**

Lumens per Watt

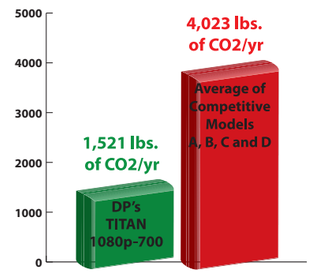


*TITAN 1080p-700 vs Competitors A, B, C & D**

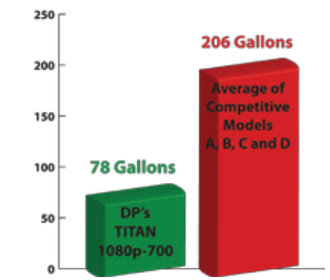
Annual Power Consumption and Cost [1, 2]



Equivalent CO2 Production [1, 3]



CO2 Production Equivalent in Gallons of Gas [1, 4]



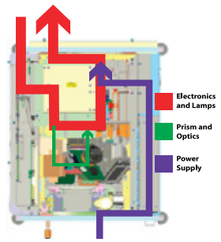
Therein lies yet another compelling comparison. Even among these mid-brightness units, power consumption, power costs and environmental footprints are widely different, with DP's TITAN series clearly delivering the highest efficiency / lowest cost of ownership and environmental footprint.

Another advantage of maximum lumens per watt is that lower wattage lamps generally cost less and run longer then higher wattage lamps. When considered along with the cost savings on electricity, DP's CoolTek™ engineered products can offer dramatically lower long-term cost of ownership then the bigger, heavier and less efficient models marketed by competing companies.

CoolTek™ Principle 2: Design thermal management systems to maximize component life while minimizing heat generation, cost of ownership and projector noise levels.
Efficient thermal management within high-performance displays is critical to long-term performance and reliability. DP's CoolTek™ innovations excel in meeting this design objective while keeping total chassis power consumption to an absolute minimum. Digital Projection has engineered a unique system of airflow management that efficiently cools projector components in a manner that allows us to produce some of the most energy conservative and quiet projectors on the market.

One of the key components of a DLP® display is the DMD chipset located in the projector light engine. Many 3-chip LIGHTNING Pro Series II projectors employ DP's exclusive DirectFlow™ system that provides active cooling of the DMD's inside the light engine. This technology allows maximum illumination to be directed to the DMD while ensuring the device operates well below thermal limits. Armed with this technology, DP's LIGHTNING sx+ and 1080p displays produce class-leading brightness.

In the TITAN family of projectors, DP created a mechanical architecture that reveals a simple but amazingly efficient airflow path. Filtered cool air moves through the chassis with few obstructions and few turns, minimizing back pressure as well as noise due to airflow turbulence. In addition, DP crafted an array of DC controlled "smart fans" each managed by thermal sensors positioned throughout the TITAN chassis. This innovation, known as ***Silent Stream***™ allows the fans to run only at the speed required to produce optimum cooling, thus reducing overall power consumption and projector noise generation.



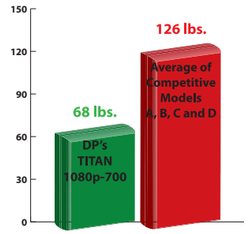
The Xenon lamp-based LIGHTNING series benefits from DP's exclusive ***Hyper-cooled Lamp Module***™ to improve illumination system cooling as well as extend lamp and reflector life. Instead of increasing fan speed, which leads to a direct increase in audible noise and power consumption, the Hyper-cooled Lamp Module™ enlists a directional flow reflector mask and radial heat exchanger to increase airflow turbulence and contact with the reflectors and bulb.

Each of these CoolTek™ sub-systems allow Pro Series II displays to achieve maximum illumination from minimal power, while ensuring critical components operate well within their thermal tolerances.

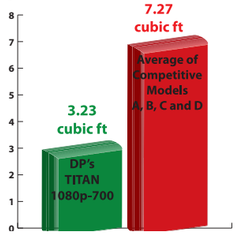
Cooltek™ Principle 3: DP Products must be small, light and as quiet as possible, reducing the projectors' impact on their immediate environment.

*TITAN 1080p-700 vs Competitors A, B, C & D**

Projector Weight

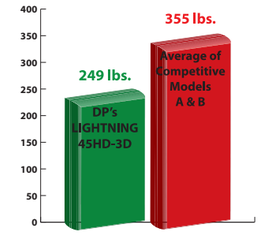


Physical Volume

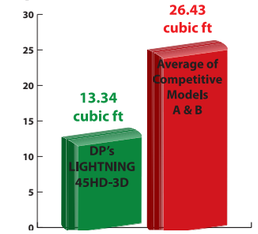


*LIGHTNING 45HD-3D vs Competitors A & B**

Projector Weight



Physical Volume



By designing products that comply with the first 2 CoolTek™ principles, it becomes much easier to build small and quiet products.

- Lower lamp wattage reduces the need for high volume air flow. Lumen for lumen, many DP projectors are quietest in class.
- Lower wattage lamps and their matched reflectors are smaller and lighter than higher wattage lamps / reflectors. Lower wattage lamps can also be cooled with smaller fans.
- Lower lamp wattage and fewer / smaller fans = smaller power supplies. This further reduces power consumption, heat generation and chassis size.

The combination of the above points supports chassis designs that are very efficient, with little wasted space and exceptional airflow management. So, not only are DP projectors the smallest, lightest, quietest and most efficient in terms of lumens / watt, they also consume less power and produce the lowest possible thermal impact on their environments.

Powerful. Efficient. Responsible.

The stellar image quality, rugged chassis and all metal construction of the TITAN and LIGHTNING series make bold statements about the quality and attention to detail that DP designs into it's displays. Yet even with this superior design and use of highest quality, environmentally friendly materials, lumen for lumen and pixel for pixel, DP projectors are priced similarly to competitive offerings.

Consider this:

- Amazing image quality at a similar purchase cost
- Smaller, lighter, quieter
- Extraordinary rugged construction
- Long life, low cost lamps
- Highest Lumens per Watt
- Minimal power consumption
- Reduced impact on the environment
- Efficient long-term cost of ownership

In terms of physical size, weight, thermal output, power consumption and lumens per watt, DP leads the projection industry when compared to products boasting similar lumen performance. Invest in a precision display by Digital Projection, and bring a better projector to your world.

* Competitive data based on spec sheets posted to competitors web sites on 3-13-08
(1)Operational hours per year based on 4 hours/day, 260 days per year for a total of 1,040 hours per year
(2) 2007 Average Cost of Residential and Commercial Electricity in the US from: Energy Information Administration: http://www.eia.doe.gov/cneaf/electricity/epm/table5_6_b.html
(3) Formula converting Electricity to CO2 from: http://www.epa.gov/cleanenergy/energy-resources/refs.html
(4) The average car consumes 586 gallons of gas per year. Formula converting CO2 to Gasoline from: http://www.epa.gov/cleanenergy/energy-resources/refs.html

THE

COOLTEK ENGINEERING

ADVANTAGE

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