

How it Works: PIAA's Innovative Reflector Facing Technology

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The Goal

When we set out to perfect LED lighting, we knew we wanted to bring innovation and a new standard of quality to the LED market. This led us to design the industry first, Reflector Facing Technology (RFT).

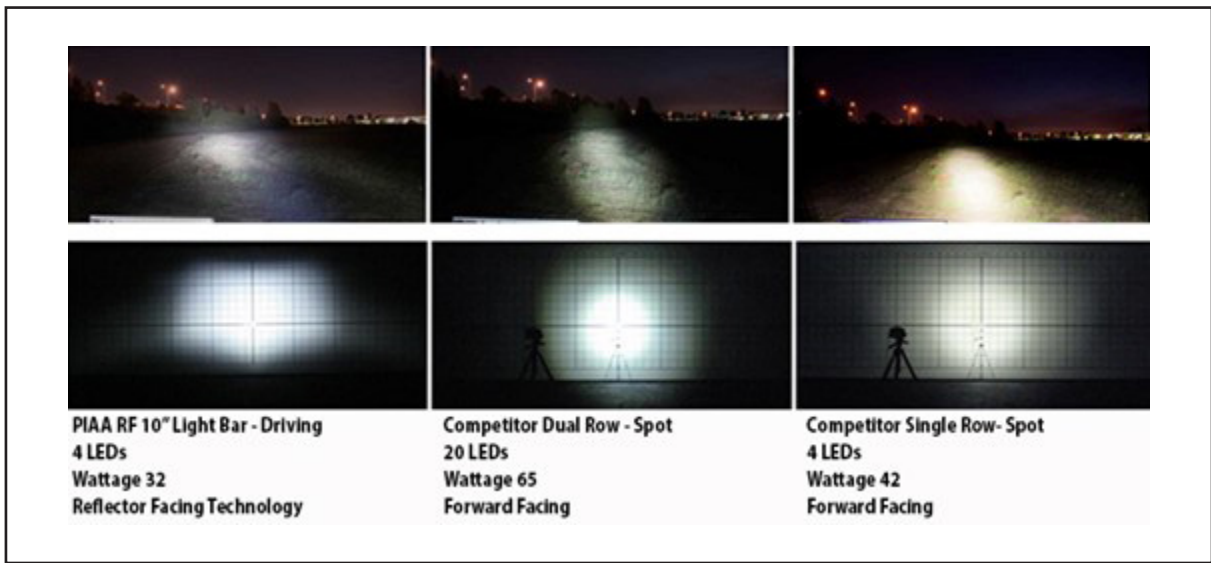
What does it mean?

For starters, RFT simply means we aim the LED chips back towards the reflector inside the lamp. Conventional LED lights are “forward-facing,” which, as the name suggests, means the LED chips are all aimed forward to produce light output.



Advantages

The advantages of Reflector Facing Technology are two-fold. First, by aiming the LED chips towards our multi-surface reflector, we are able to create a more direct and defined beam pattern. The reflector is designed to concentrate the light from the LED chips and project a focused beam pattern to put the light where you need it. This ability to control the beam is what makes our driving lights SAE compliant and prevents wasted stray light from blinding oncoming drivers. The output from forward-facing LEDs comes straight from the chips themselves, resulting in more stray light for a loss of beam focus and overall output.



The second advantage comes from the ability of Reflector Facing Technology to concentrate the light from the LEDs, allowing us to harness the entire output of each chip. Getting the most out of each LED chip means you get more light output with fewer LEDs, resulting in a lower power draw to your vehicle's charging system. Forward-facing LED lamps get a less concentrated light output from each chip, meaning they must use more power to produce a strong light output.

Our RF Series LED Light Bars and LP Series LED lamps available at PIAA.com both feature Reflector Facing Technology.

