As promised here is my comparison of the DFV [Designs for Vision] and the Orascoptic LED Portables head-to-head. I’ve had the Orascoptic for two months now and the DFV for two days. The DFV came with a head band instead of mounted to my glasses, but I was told that this is temporary because they wanted to get it out to me for my test and in a couple of weeks when they are shipped out, they will have attachments for glasses. The headband makes everyday a bad hair day. It is much better mounted to the glasses.

The cost: DFV $995, Orascoptic $1,295. Advantage, DFV.

The batteries:

Size, DFV is wider. Orascoptic is taller. Depth (not shown) is equal. Advantage, even.

Weight, Orascoptic is heavier. Advantage, DFV.

The DFV comes with two batteries. Two-year warranty on the batteries. Each one lasts about four hours, so you need to have one recharged for the afternoon. Replacement battery costs $325. I figure both batteries die about the same time, so the total cost to replace DFV batteries is $650.

The Orascoptic comes with one battery. They claim that it lasts the whole day, but I found that at seven hours of use, it got duller (picture of this will come later). Replacement costs $595. Warranty according to Orascoptic is one year, although they say that you should get three to four years out of a battery.

Battery cost, slight advantage, Orascoptic.

If you plan to use it six hours or less a day (on time, not work time) for convenience. Advantage, Orascoptic.

If you do not want to keep track of hours of use. Advantage, DFV.

The light—When fully charged I found the brightness of the lights very close. DFV might be a touch brighter, but Orascoptic might be a touch whiter. Could be my eyes deceiving me though, so I cannot say one is better than the other.

I took pictures with the lights about 14 inches from the crowns (about the distance I work at). The Orascoptic has a wider beam. The DFV has a smaller tighter beam, (see right).

I first thought that the advantage would go to DFV for being brighter on the tooth, but there was no significant difference. I then thought maybe DFV’s beam was too narrow, but that was not a problem either with my 4.3x glasses. I wonder if it is a problem with 2.5x? Advantage, even.

I have used tethers for years. After using these portables for two months, I would never go back. That being said, the tethers give much more light. I do not think that the more light is needed. Untethered is the way to go.

Conclusion:
Both units work great and you can’t go wrong either way.

I am going to go with the DFV for two reasons.
1) It doesn’t bother me to switch batteries at lunch and have one charging up in the morning and one at night.
2) The initial cost.
Howard, quite a thorough presentation! In Chicago I purchased the PeriOptix light, which is compatible with my Zeiss loupes. I’ve been tethered to a box for several years and now find it a real pain.... The PeriOptix unit is apparently very bright (I’ll check when it gets here), very light weight, purported to have six hours of continuous output, and doesn’t polymerize composites, so I don’t have to keep flipping on the amber filter as I have had to with the box. I was wondering if you had any information on this unit? Thanks!

Howard Goldstein | Total Posts: 4768 | Member Since: 09/16/03 | Location: Bethlehem, PA | Posted: 5/10/2006 6:25:35 AM | Post: 29 of 157

I added SheerVision’s Portable LED to the test and guess what? They kicked butt! They are as bright as the big boys (Orascoptic and DFV). They have a wide field of vision like Orascoptic. Overtime I had a problem with the DFV’s narrow beam. I constantly had to fiddle with my glasses to keep the light on the correct area. If my glasses moved slightly I had to reach up and adjust them to get the light back on the correct area. This got real annoying. The Orascoptic and the SheerVision have wider beams which negate this problem.

The SheerVision battery is nickel metal halide like Orascoptic’s, but they give you two batteries unlike Orascoptic, which is a plus. I needed two batteries with every one I tried. Orascoptic says that one is enough, but my light got obviously duller by 3 p.m. Two batteries are essential and SheerVision and DFV give you two and Orascoptic gives only one. If you ever need a new battery the Orascoptic replacement is $525! DFV is $325! The SheerVision replacement is only $75! ‘Nuff said about that. They all claim that their batteries last a couple of years.

Here is the best part. The cost on SheerVision’s Web site is $795, which is way less than either DFV or Orascoptic. …

To recap, SheerVision’s portable light quality is exactly the same as the others. They all are equally bright. SheerVision has a larger field of vision than the DFV. SheerVision has two batteries instead of Orascoptic’s one. SheerVision’s replacement batteries are only $75. SheerVision is much less money.

I returned both my Orascopics and DFVs. If SheerVision’s quality was not as good, I would not have, regardless of price. We now have a clear winner in the comparison test. …

To the right is a beam-by-beam comparison with the DFV. Notice how they are both bright, but the SheerVision covers more area.

Howard Goldstein | Total Posts: 4768 | Member Since: 09/16/03 | Location: Bethlehem, PA | Posted: 5/10/2006 6:25:35 AM | Post: 29 of 157

My first set of loupes were Orascoptic TTL [through the lens] type. There were fantastic and worked great, until my assistant dropped them and cracked the lens. When I found out it would cost three or four hundred bucks to fix it and a month or two in time, I looked for an alternative. I “discovered” SheerVision and have never looked back. All the other manufacturers tell you about how their loupes are better at this or that, but in my experience, SheerVision loupes work fantastic and they cost about HALF AS MUCH! That pretty much ends the discussion of whether the field of vision is 10 angstroms bigger with Orascoptic’s or lumens or what not. Most dentists realize that during the day your loupes are covered with spit, tooth dust and amalgam bits, so any kind of magnification will work just fine. I have since bought a stronger powered set of loupes, a tethered light, and brought all of my dentist buddies to SheerVision. And to top it all off,
their customer service is the best in the business. I saw the new portable light at the CDA convention and I’m starting to salivate again.

[Posted: 5/10/2006 12:03:44 PM]

I’m tempted, but since I bought my Isolite system, I’ve noticed that I don’t need to have the light so much. The fiber optics on the Isolite are fantastic and my handpiece fiber optic just adds to the light.

N8RV | Total Posts: 2747 | Member Since: 01/13/04 | Location: Elkhart, IN | Posted: 5/10/2006 12:55:34 PM | Post: 37 of 157

Alright, Howard, I just hung up with SheerVision. On your testimony, I bought TWO systems! I mean, for a couple hundred bucks more than the DFV I ordered in FEBRUARY (and have been told “two more weeks” for a couple of months now), I get TWO lights and cables and FOUR batteries—one setup for my DFV 6x and one for my DFV 3.5x. With 30 days to try them out, how can I go wrong? Thanks for the tip, buddy. Oh, and BTW [by the way], I told the young lady to be sure that you got a bottle of premium scotch as a thank you for all the business that they’re getting from you.

Payetdds | Total Posts: 19993 | Member Since: 07/08/03 | Location: Charlotte, NC | Posted: 5/12/2006 3:15:28 AM | Post: 54 of 157

Talked with my DFV rep; he SAYS that they’re getting production of their lights ramped up, and that a LOT of people should be getting theirs shipped within a week or two, and that delivery times are about to start going down. So, since SheerVision also has a 30-day trial, I MIGHT get lucky enough to do a side-by-side trial as Howard did. If the DFV light doesn’t arrive in time, though, don’t have to worry about it.


Hi, this is John Walsh and I work for Designs for Vision. I wanted to include Dr. Goldstein’s photo comparison of the two products to make a couple of points.

1. Light intensity: Designs for Vision is the only LED headlight on the market that optically focuses the light from the LED with precision glass lenses.

Other products are using plastic collimators. The result can be seen in Dr. Goldstein’s photo. The Designs for Vision light is on the left-hand side, the other product on the right-hand side. Glass is a better conductor of light than plastic. Designs for Vision’s light is noticeably brighter than the other LED Headlights on the market (up to 4,300 footcandles) simply because we are optically focusing the light. I believe the other units only put out about 2,500 footcandles.

2. Light quality. Please look at the difference in the quality of the light: Even distribution vs. dispersed and uneven. Designs for Vision’s PortaLite provides shadow-free illumination focused in the oral cavity. The diameter of the LED PortaLite’s beam is three inches. The funny thing is that most dentists I spoke with who used other LED headlights expressed concern that the unfocused, dispersed light was shining in the patient’s eyes. The PortaLite is providing the brightest illumination and focusing the light where you need it, not where you don’t want it!

3. Batteries: Designs for Vision is providing two high-tech lithium-ion batteries with the PortaLite. We warranty these battery packs for two years. The other products mentioned in this thread are using nickel metal hydride [NiMH]. High-tech lithium-ion batteries are a better choice for the following reasons:

- Lithium-ions have a higher energy density: The cells are lighter than NiMH.
- Lithium-ions suffer less from memory effects: Repeated partial discharging doesn’t reduce capacity.
- Lithium-ions have a lower self-discharge rate: The battery can be stored for longer periods of time without losing power.

I also wanted to apologize to all of you that have been patiently waiting for the delivery of your LED PortaLite. The demand for this product has been tremendous. We have improved the delivery schedule and are clearing our back orders. The LED PortaLite is the superior portable headlight on the market. I think when you receive it, you will see the visible difference for yourself.

If you have any questions, please contact me at jtwalsh@dvimail.com or 800-345-4009.
UPDATE: Two weeks ago, I read Howard’s excellent treatise and immediately picked up the phone and called SheerVision and ordered TWO portable lights. I was told that they were in stock and would go out “in a day or two.” In the meantime, John Walsh PM’d me to say that my DFV headlight was being overnighted to me (thanks, John!) and it indeed showed up the next day. Been using the DFV for almost a week now, and my initial impression is...I’m marginally impressed. While the light is very white (looks blue-white, like a Lexus coming at you at night!), the pattern is small and very well-defined, just like Howard’s pics. This would be fine if the light remained right where you want it—in the center of your field of view. However, with the universal clip attachment, it’s slightly off-center and attempts to move it are fleeting at best. Like Howard said, lots of fooling around with trying to center it as you work. I really need to try it with my DFV 6x to see if the light is even bright enough. Chances are, until it’s mounted firmly—as my BIG light source is, the frustration of not having the light centered will only be magnified (no pun intended). Anyway, two weeks later, I still don’t have the SheerVision lights. I’ve called a couple of times, only to be told today that, while the light kits are in stock, the clips for my DFV glasses aren’t! Could be another couple of weeks. *Sigh* With my luck, my 45-day trial period with the DFV will expire before the SheerVisions show up. The saga continues.

I finally got my SheerVision LED today and packed up the DFV as soon as I got the battery charged up. It took a while to figure out the mounting, and SheerVision walked me through it. The pictures that were posted here helps, too (thanks, Mark). However, I have the DFV metal frames, and although it feels pretty secure occlusal-gingivally, it does tend to move a bit mesial-distally. It also sits a little higher, giving more leverage to weigh down my loupes, so I definitely have to tighten the croakies around my neck. Overall, I’m happy with them and glad I made the switch.

I got the DFV light last week and I expected to be disappointed, based on the feedback here. I couldn’t have been more wrong. I think it is fantastic.

I also got the DFV this week and love it (I had previously been using corded Orascoptic Zeon). My SheerVision is still on backorder, so [I] can’t do head-to-head. Always looking to save money, but only if equal or superior project. Any other comments (or additional comments) from Howard?

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