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# New MPF rating system for sleep eye wear points toward melanin (not melatonin)

*San Antonio-based bio-tech firm, Photoprotective Technologies (PPT), develops a new melanin lens that extends your night time use of the iPad to up to 12 hours. The newly-developed eyewear utilize lenses that filter blue light according to the Melatonin Production Factor (MPF) – a new lens rating system also recently developed by PPT.*

San Antonio, Texas – Researchers at Photoprotective Technologies (PPT) introduced a rating system for determining the ability of blue-light-filtering computer glasses to preserve the night-time production of melatonin. Melatonin is the body's own 'sleep medicine' and can decrease significantly when people are exposed to blue light from cell phones and iPads before bedtime. It's a serious problem because lack of sleep may increase the risks of Alzheimer, cancer, diabetes, and obesity.

Even 2 hours of exposure to blue light from the iPad has been shown to suppress melatonin by 22%. So how do you know how well your computer glasses are working? The patent-pending "Melatonin Production Factor" – or MPF – can rate any computer eyewear to let you know how much longer you can use your electronic display before you get that 22 % loss of melatonin.

A lens with an MPF value of 3, for example, means that you can use the iPad 3 times longer with that lens – or 6 hours – to get the same 22 % loss of melatonin that you would get without that lens. "It's possible to get really high MPF values by blocking all of the blue light," says Dr. Jim Gallas, co-inventor of the rating system and CEO of Photoprotective Technologies, "but then you lose your perception of color." "We knew that lenses with melanin were able to filter significant amounts of blue light and still preserve the colors," says Gallas. To determine the MPF value of any lens, a transmission spectrum is recorded for the lens and serves as the input to an Excel-based spreadsheet containing the MPF algorithm created by PPT.

Melanin lenses with high MPF values. Gallas and his staff then proceeded to modify their melanin technology to arrive at MPF values as high as 6 – making it possible for computer users to extend their night time marathon habits to up to 12 hours. "The technology is very broad with other applications – including light filters for LED and fluorescent lighting and film covers for iPhones," adds Gallas. For more information, see: www.mpf6.com