

# Trulifi leveraging light waves for send-receive of office data

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Credit: Signify

Some companies need your time when they explain properly what their technology is all about and in turn brochures, white papers and video talks are in order. Signify is lucky. Two words wrap it up for them. Light

connects.

Lighting in business and industry takes an ambitious add-on these days, in the name of "infrastructure." Signify is talking about lighting in the context of high-speed wireless communication. Resulting customers would be in healthcare as well as offices, hospitality and retail.

Currently, tech watchers are reporting on the-future-is-now realities of connecting to the Web with light fixtures, thanks to the presence of office lights serving up 250 Mbps wireless data transfer. Signify gets the credit for "a version available that's capable of a steady 250 Mbps up and down," said *New Atlas*.

In short, expect convergence in lighting and telecommunications. A June 19 product announcement from Eindhoven, The Netherlands, said Signify, previously Philips Lighting, launched a new range of LiFi [systems](#). LiFi has been around for a number of years. LiFi is short for light fidelity. The range has been branded as Trulifi.

Time to hit pause. Last year, said the company, it became the first global lighting company to LiFi-enable normal office lighting fixtures.



Credit: Signify

"In 2018 Signify became the first global lighting company to LiFi-enable normal office lighting [fixtures](#)." So, think broadband data through light. Signify was bringing out fast, stable broadband connections through light waves, especially useful in areas where WiFi cannot be used or where wireless connections are poor if not nonexistent.

Trulifi by Signify is a range of LiFi systems, utilizing light waves for [wireless communications](#).

David Nield, *TechRadar*, took a look at the announcement by Signify of "a new high-speed version of its LiFi (Light Fidelity) technology that

transmits data over light."

It works in places where [radio frequencies](#) are not permitted, restricted or could cause interference. Such cases would be in hospitals, some schools, aircraft and industrial plants. It also works where radio frequencies don't work well.

"Our Trulifi systems modulate [light waves](#) to transmit data. A USB access key plugged into a laptop or tablet receives data and sends data back to a transceiver," said the company.



Credit: Signify



Paul Ridden in *New Atlas* said, "the Trulifi system's optical transceiver can come already built into new lighting, or can be retrofitted into existing Philips light."

Again, the word infrastructure comes into play in promoting the ease of plug-and-play, as the company said "Trulifi can be retrofitted into existing luminaires," to "declutter" the office ceilings.

TruLifi uses the ITU G.9991 LiFi [standard](#). The company provides [light](#) sources, modems and USB access keys.

Signify offered this argument for why Trulifi makes contemporary sense:

"By 2020, more than 50 billion devices will connect to the Internet, most wirelessly. This is placing wireless communication under increasing pressure. Put simply, the radio spectrum is becoming congested. What's more there are areas where radio frequency wireless communication is not permitted or the best fit."



Credit: Signify

David Nield, *TechRadar*: "...with the first commercial partners signing up for the [technology](#), it's a wireless streaming option to keep an eye on—alongside the growth of 5G."

Mike Wehner, *BGR*, weighed in: Signify, formerly Philips Lighting and with brand recognition on its side, is hoping that Trulifi systems "will be embraced by business and healthcare [organizations](#). At data speeds topping 250 Mbps, it might have a shot."

Speeds and data rates stood out in the announcement details. The technology can translate into wireless connectivity at up to 150 Mbps throughout the office for uploads and downloads. (Trulifi 6002 series has the net data rate up to 150 Mbps for the downlink and the uplink, fast enough to stream simultaneously 30 1080p HDTV movies.)

Trulifi 6013 is a fixed point-to-point system. It acts like a wireless cable with a guaranteed net data rate up to 250 Mbps for the downlink and uplink. It can be used in environments—from connecting machines in a factory to sending large image files in a hospital.

*BGR* noted the data speed numbers and what they bring: "The wireless data speed in any given area can be as high as 150 Megabits per second, but the systems can also be configured to provide connections between two specific computers at speeds of up to 250 Mbps, which would make it great for transferring files from one spot to another within the same organization."

Customers who have liked what they see in this lighting infrastructure concept include a Belgian marketing and communications agency (Claerhout Communication Campus). They retrofitted Trulifi into some Philips LED luminaires in a large meeting room in its office in Ghent, said the Signify release. Christoph Ruys, a company manager at Claerhout, mentioned "wireless connectivity capable of handling high resolution images, artwork and big data files."

**More information:** [www.signify.com/global/our-com ... ify-launches-trulifi](http://www.signify.com/global/our-com...ify-launches-trulifi)  
[www.signify.com/global/innovation/trulifi](http://www.signify.com/global/innovation/trulifi)

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