

## Lumie reveals light levels received in July are as low as a winter's day

Based on light measurements taken for the month of July, light therapy specialist Lumie, is advising sufferers of Seasonal Affective Disorder (SAD), a condition that usually affects people during the dark winter months, that additional 'top-ups' of bright light may be required this summer, to keep symptoms of SAD at bay.

Throughout July, Lumie, a company with over 17 years scientific expertise in light therapy, monitored daily light levels (measured in lux) received at its head office in Cambridge. Although readings for this time of year are normally expected to peak at around 50,000lux, measurements taken from the light meter revealed that not one day in the entire month reached this point<sup>1</sup>.

The readings also showed that overall light levels received in July were down compared to the same time last year; with seven days producing lux levels that were so low, they resembled measurements you'd expect to see on a dark winter's day<sup>2</sup>, which could well trigger the onset of SAD symptoms.

SAD is condition that is thought to affect seven per cent of the UK population, it is recognised by the World Health Organisation and usually affects people especially between the months of October through to March. Evidence suggests that as night falls, the pineal gland starts to produce a substance called melatonin, which tells our internal body clock, that it's night time. Bright light at daybreak signals to the brain that it should stop producing melatonin, so that we don't feel tired and drowsy. During winter, especially when we're indoors, the body receives inconsistent light cues - this change can cause our internal body clock to become misaligned; which means our sleep patterns, mood and behaviour alter as a result. For some, the disruption of the body clock can be so severe they feel considerably stressed and their day to day lives can become significantly disrupted; these people are suffering from SAD.

Another contributing factor thought to affect SAD is low serotonin levels (this is also common in people with depression). Serotonin is a neurotransmitter in the brain that responds to changing light levels; when it's dark, grey and overcast outside, people can be left feeling low. Recent research also implies that lack of light exposure on short winter days can make proteins, which clear the brain of serotonin, more active.

Typical lux level readings:  
To help demonstrate how bright 10,000lux is, please see general readings below:

- Moonlight = less than 1lux
- Living room at night in front of a TV = 50lux
- Well lit kitchen or office = 500lux
- Car lights on in middle of the day = 1000lux
- MINIMUM lux to treat SAD (typically in 90 minutes) = 2500lux
- Clear spring morning in the UK 30 minutes after sunrise (typically 30minute SAD treatment using Lumie Pharos bright lights) = 10,000lux
- Bright summers day in UK = 50,000lux
- A high mountain in Kenya (on the equator) at midday = more than 100,000lux

The combination of the low light levels and miserable weather received in July has also prompted many to discuss the early onset of SAD symptoms online, through social networking sites, such as Twitter and the Lumie Forum. Lumie can also report that consumer sales figures for the month of July are up 37.5 per cent, compared to the same time last year.

One form of treatment that can be easily administered by people suffering from the early onset of SAD, is bright light therapy. Based on research, people need at least 2,500lux to combat the symptoms. Bright lights, such as the [Lumie Pharos](#) range emit 10,000lux at a practical distance, which is the same level of light produced on a bright spring morning and 20 times brighter than a well-lit office.



[Bodyclock](#) dawn simulators can also help treat milder forms of the condition, known as the winter blues. They provide a gentle awakening to light, rather than sound, and over a period of say 30 minutes create a gradual simulated sunrise, and this triggers a peaceful wake-up response that runs in tune with the body's natural biorhythm.

Jonathan Cridland, CEO of Lumie, said: "I think we have all noticed the difference in weather conditions over the last month. June provided some gloriously sunny days with clear blue skies and soaring temperatures, whereas July seems to have taken a back turn, providing grey overcast skies, rain and thunderstorms.

"When you look at the graphs produced from the Lumie light meter, you can clearly identify why SAD sufferers may be feeling the early onset of the condition. For at least seven of the days in July, the readings produced were so low they resembled what one would expect to see on a dark, winter's day; for thirteen days, light levels didn't even reach 10,000lux, which incidentally is the same level of lux output as our light boxes.

Lumie light buying guide:  
Lights can be purchased from a number of companies, however Lumie recommends customers should always check the following before buying one:

- Is the light certified as a medical device?
- Does the manufacturer supply details of the lux output (the measurement of intensity of visible light received at a given distance) and the distance at which that lux level applies?
- Are the lux distance measurements independently verified?
- Does the manufacturer provide recommendation for usage time and distance?
- Is the light available for home trial?

“Despite it being the middle of summer, the light levels we’ve been experiencing could definitely have something to do with why people are feeling low, and also why Lumie has seen an upturn in sales at time that’s normally quiet.

ENDS

Notes to editors:

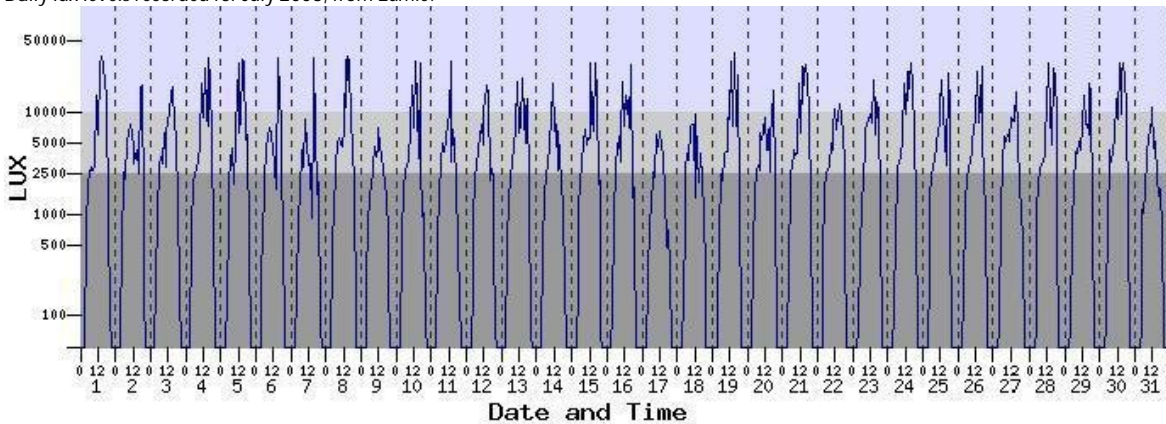
If you would like any further information, access to scientific research, comments from academic experts or case studies, please do not hesitate to contact the Lumie press office on 01954 780 500 or email [lindsay@lumie.com](mailto:lindsay@lumie.com)

Please find below graphs and tables produced from the Lumie light meter readings:

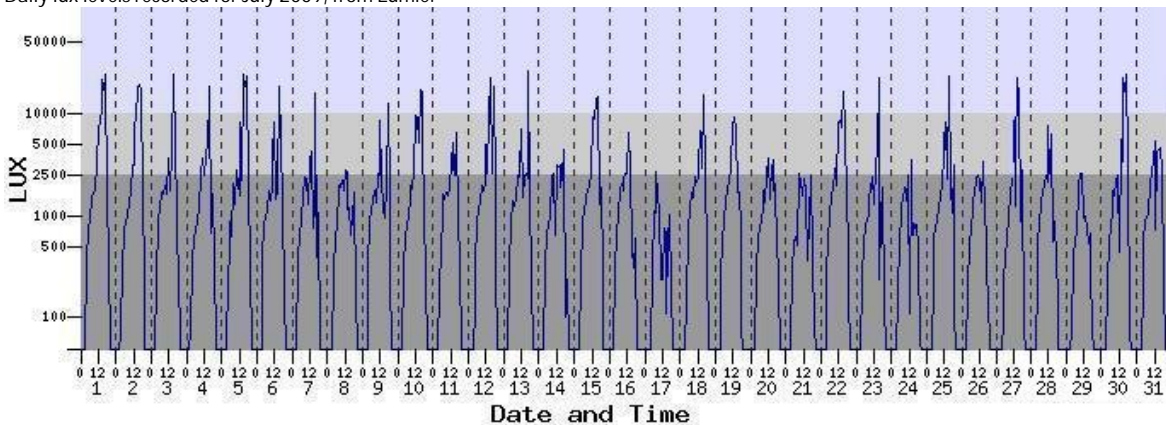
<sup>1</sup> Monthly lux levels for July 2008 and July 2009  
 Year on Year lux readings for July, from Lumie:

	July 2008	July 2009
Number of days where light level readings peaked above 10,000lux	28 days	18 days
Number of days where light levels readings peaked between 2,500lux and 10,000lux	3 days	13 days

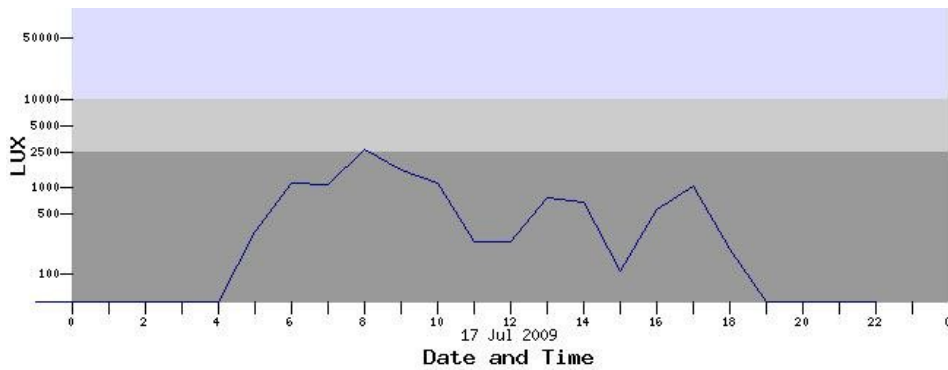
Daily lux levels recorded for July 2008, from Lumie:



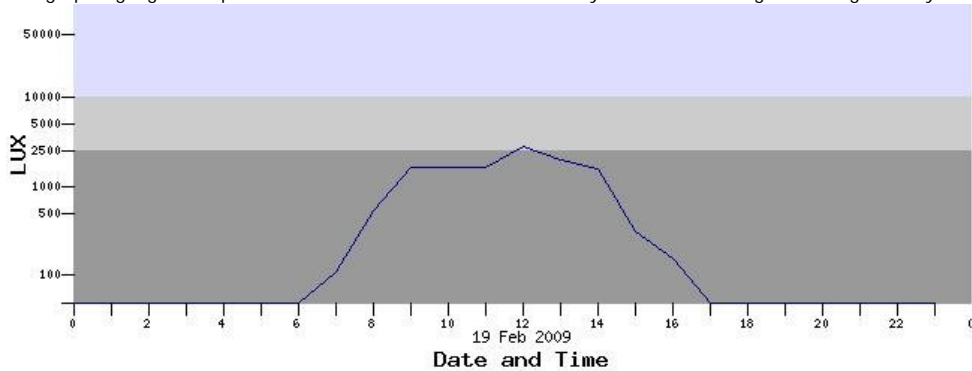
Daily lux levels recorded for July 2009, from Lumie:



<sup>2</sup> Low July lux levels compared to winter lux levels  
 Daily lux levels recorded for 17 July 2009, from Lumie:



Daily lux levels recorded for 17 February 2009, from Lumie:  
 This graph highlights the peak of the lux level received on a winter day and is not referring to the length of day



**About Lumie:**

Lumie is Europe's market leader in light therapy and produces a range of quality products, including dawn simulators, light and visors, all of which are certified as medical devices. Light therapy provides relief to sufferers of mood disorders (such as Seasonal Affective Disorder (SAD) and the winter blues), boosts energy levels, improves sleep patterns and corrects body clock problems such as jet lag.

Created in 2002, Lumie is a trademarked brand belonging to Outside In (Cambridge) Ltd, a company with over 17 years experience in light therapy that pioneered the first ever dawn simulator. Lumie quickly grew as a brand, providing a refreshing new look and approach to the market by using scientific expertise, product innovation and customer feedback. In 2007, it was decided that all Outside In products should become Lumie branded to provide greater clarity to the consumer.

Lumie has earned the respect of the medical profession by constantly evolving its portfolio of products based on new developments in scientific evidence and clinical trials. It is a massive success in the mainstream health and wellbeing arena and the Bodyclock range is fast-becoming the world's best-selling form of light therapy. As well, Lumie also prides itself on providing the highest level of personalised care to its customers, through its customer care team and with the internet forum.

Lumie products are currently available by logging onto [www.lumie.com](http://www.lumie.com), by calling 01954 780 500 or through nationwide stockists including Boots and John Lewis.