## **Philips Coralcare 2018 version: improvements**

Launched at <u>Interzoo 2016</u>, the LED lighting for Phillips Coralcare reef aquariums has been updated with a 2018 version announced at <u>Interzoo 2018</u>. Here are the details of the improvements made to this new version!



Philips Coralcare has been available in three colors since the end of 2017.

With its <u>190 watts and 22 lb of cast iron</u>, it left more than just one person surprised. As a matter of fact, it was designed to illuminate large surfaces, of up to 39 x 31 in and for aquariums that are very rich in demanding corals, 31 x 24 in. The first scientific studies using them have proven that <u>growth under this rail is identical to that under T-5</u>, the lighting often considered to be the benchmark for SPS growth in particular.



Growth test under T-5 bulbs and under Phillips Coralcare

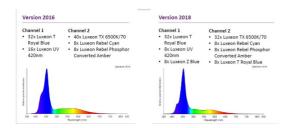
What's new on the Philips Coralcare 2018?



Blue lighting phases can be programmed at the beginning and end of the day, for example, to take advantage of the corals' fluorescence.

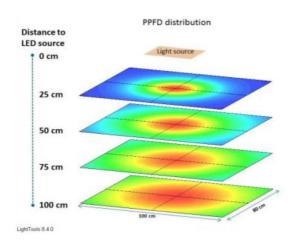
The first thing that stands out on the 2018 version is its new LED composition. To improve the visual appearance in line with users' expectations, Phillips replaced the 8 white LEDs with 8 Royal Blue LEDs on channel 2. And on channel 1, Phillips replaced the 8 UV LEDs with 8 Z Blue LEDs, one of which has an emission peak of 1.85 in. These changes are explained by the desire for a more bluish appearance so that the coloring of the coral can be better perceived, which is in part due to the fluorescence of certain fluorescent pigments under

the blue light, and the fact that the human eye detects 'average' wave lengths better than low ones. Thus the 1.85-in Z Blue LEDs provide humans with a brighter view than the Royal Blue LEDs whose emissions peak is located between 1.75- and 1.79-in and even more than the 1.65-in UV LED that they are replacing. Moreover, the 1.85-in waves are particularly responsible for the fluorescence of the red/orangey coral.

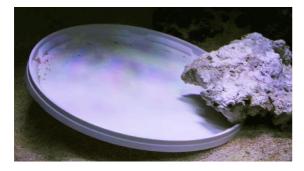


Old (on the left) and new (on the right) Phillips Coralcare specters.

Other improvements: the use of a new material which reflects the inside of the optical cup, the co-extruded PMMA specially designed for this rail. The reflection of the optical guide is thus improved by 15% in comparison to the 2016 version and the light losses are therefore very low. This better light distribution therefore gives it a brighter appearance. The contours of the covered area are brighter and finally, the wave/bright spots effect called 'shimmering' is reduced.



The light distribution is improved thanks to the reduced light loss.



The lighting is more uniform on the new reflective material.

You can (re)discover it in action in this video taken at the fair last month:



https://youtu.be/fWJyPEJKM34