

Highly Efficient Home Made LED Head-Lamp-Rev-2

The design of revision 1 of this headlamp was detailed last year in the file on this site named “Highly_Efficient_Home_Made_LED_Head-Lamp-2016.pdf”. This file talks about the revisions made since that time and also details how to install in on a hat.

The input current was boosted to 94 ma to provide a higher output current and a higher light intensity. Without the lens the light intensity is about 9,810 Lux. With the lens in place the field of view is much less with the intensity being about 28,400 Lux.

The lens was made to allow it to be removed when needed, by prying it out with a nail or wire. A small hole behind the lens in the white plastic allows for this. The ratio of Lux with the lens to without the lens is about 2.9.

The maximum run time for each charge of the 4 cell NiMh AA battery pack is now 20 to 23 hours.



1.5mm wide princes binder clips were used on the hat and .75” or 19mm clip were used on the caps bill or sun shade. The smaller clips go over the wire and over a seam in the cap and stay very well in place. One can remove the handles on the clips if they don’t look good to you.

