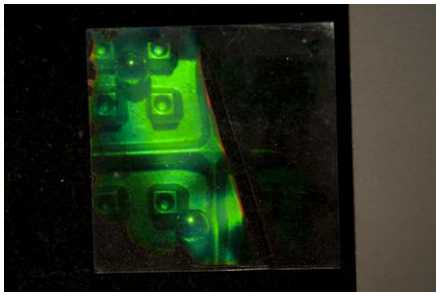
EXPERIENCES WITH CONTEMPORARY HOLOGRAPHIC PLATES, 2012

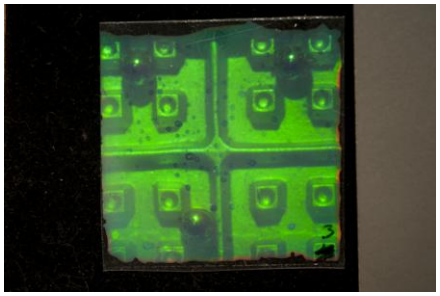
Starting a new series starting with #200, since it's a new year. First Waffle Irons were shot with Hans Bjelkhagen during his winter visit.

#200: There is no #200.

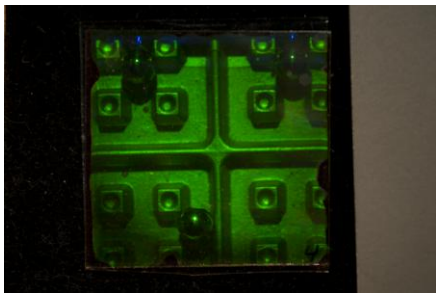
#201: Polygrama Green Photopolymer, 3600 uJ/cm^2 at 532 nm, dim green image. Hans took this one with him.



#202: Polygrama Green Photopolymer, 3600 uJ/cm^2 at 532 nm, dim green image, got kinked in lamination.

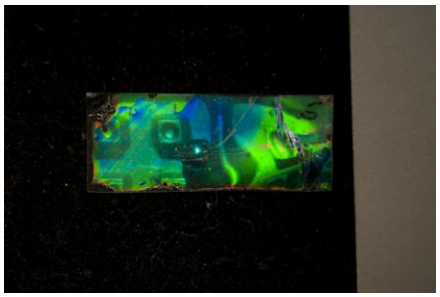


#203: Polygrama Green Photopolymer, 3600 uJ/cm^2 at 532 nm, laminated side toward object, dim green image.

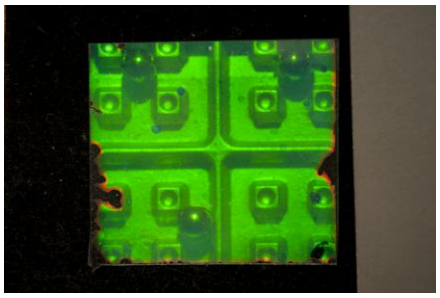


#204: Bayer Photopolymer Batch #2, 3600+ uJ/cm^2 at 532 nm, didn't get bleached completely.

Eventually #'s 201 – 203 were heated and yielded nice and bright holograms!

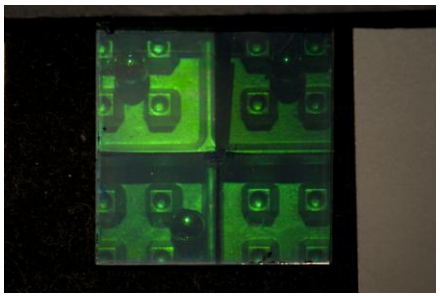


#205: Polygrama Green Photopolymer, 3600 uJ/cm^2 at 532 nm, small strip, wrong side heated, warped.

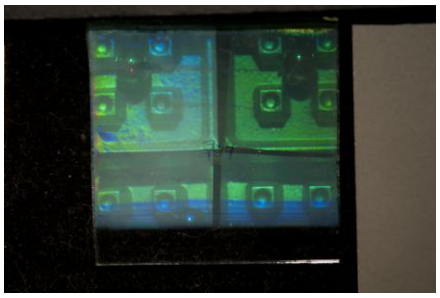


#206: Polygrama Green Photopolymer, 3600 uJ/cm^2 at 532 nm, full plate, done as perfect as could be. (All the above have plenty of dust spots.

#207: Bayer Photopolymer Batch #2, left on for about 15 minutes (18000 uJ/cm^2 at 532 nm), didn't bleach clear. Doesn't seem as bright as Polygrama, but much better signal to noise. Hans also took this one with him.

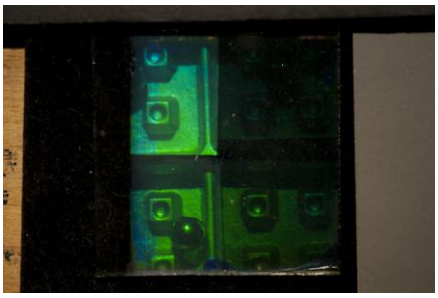


#208: Ultimate U08 Green, 100, 200, 400, 800 uJ/cm^2 at 532 nm, (200 recommended), 4' @ 70F Ultimate Developer plus Ultimate Bleach. 800 best.

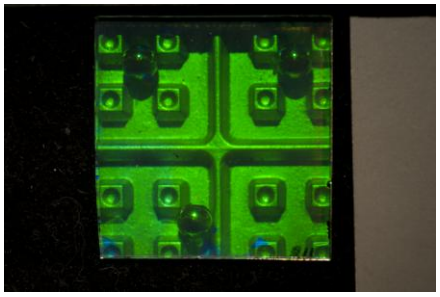


#209: GEO-3, 800, 1600, 3200, 6400 uJ/cm^2 at 532 nm, 4' @ 70F Ultimate Developer plus Ultimate Bleach. Quite a bit overdone!

#210: GEO-3, 100, 200, 400, 4' @ 70F Ultimate Developer Bleach. Correlates that 800 is this material in this processing

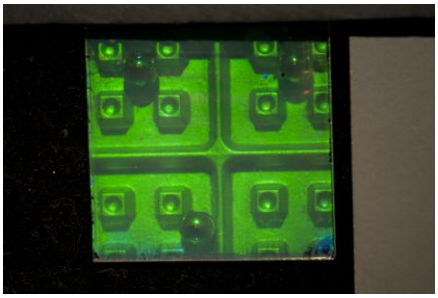


800 at 532 nm, plus Ultimate also optimum for scheme.

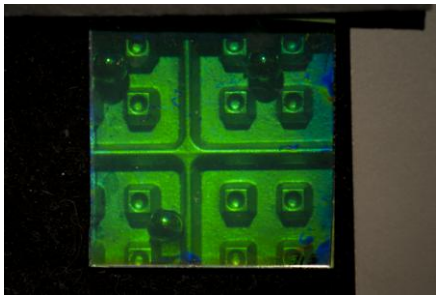


#211: Ultimate U08 Green, 800 uJ/cm^2 at 532 nm, 4' @ 70F Ultimate Developer plus Ultimate Bleach. The standard of comparison for this material.

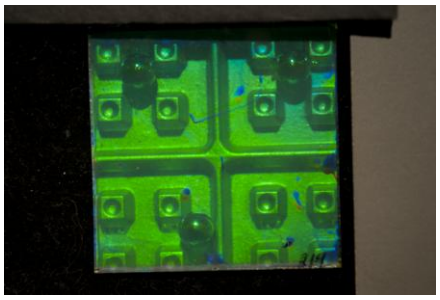
#212: Ultimate U08 Green, 532 nm, 4' @ 70F Ultimate Ultimate Bleach. Hedging our considerably noisier than



1600 uJ/cm^2 at Developer plus bets, but this is above.



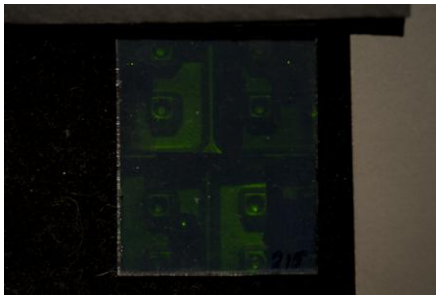
#213: GEO-3, 800 at 532 nm, 4’ @ 70F Ultimate Developer plus Ultimate Bleach. Decently bright , but plagued by blue shrinkage marks, even though it was dunked in cold water before processing. Close second to #211.



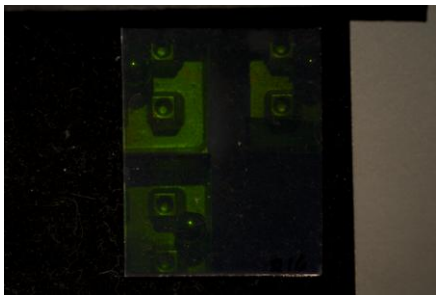
#214: GEO-3, 1600 at 532 nm, 4’ @ 70F Ultimate Developer plus Ultimate Bleach. More blue marks, emulsions of this and above may have touched other emulsions or edges and scratched things up.

Conclusions on the above: Ultimate plates and processing are just a tad better than GEO-3. Ultimate processing gives GEO-3 a stop or two more of speed compared to the standard “Cold Processing”, but had shrinkage problems. If there were more materials, just developing GEO-3 in Ultimate at 65F would be a good trial.

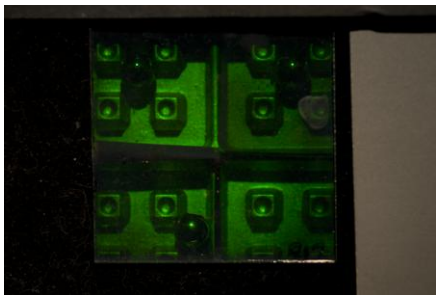
Comparing #211 to the waffles made in May of 2011 to prove to Hans the power of the Cold Process, there is a bit more brightness and definitely better S/N.



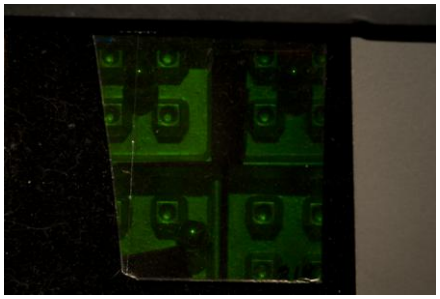
#215: Harman Green, 200, 400, 800, 1600 uJ/cm^2 at 532 nm, 45" @ 72F JD-4, TJ Bleach. Nothing to write home about, even following the LaserSmith's recommendations.



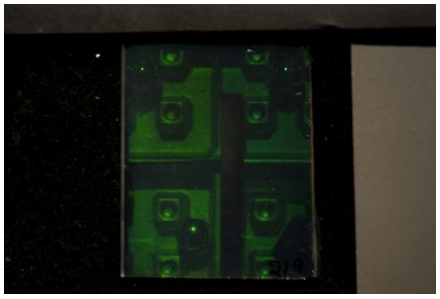
#216: BB-520, 800, 1600, 3200, 6400 uJ/cm^2 at 532 nm, 45" @ 72F JD-4, TJ Bleach. Better than the above, not as good as 5' in D-8.



#217: U08 Green, 800, 1600, 3200, 6400 uJ/cm^2 at 532 nm, 45" @ 72F JD-4, TJ Bleach. Better than the above, although not as good as its own process.



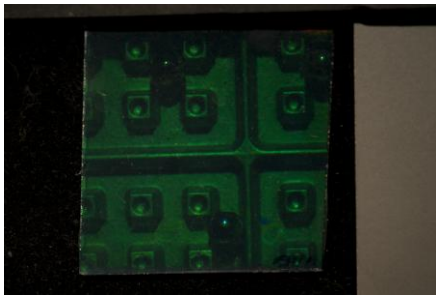
#218: BB-520, 800, 1600, 3200, 6400 uJ/cm^2 at 532 nm, 5' @ 72F JD-4, TJ Bleach. Much better than #216, almost like Ultimate.



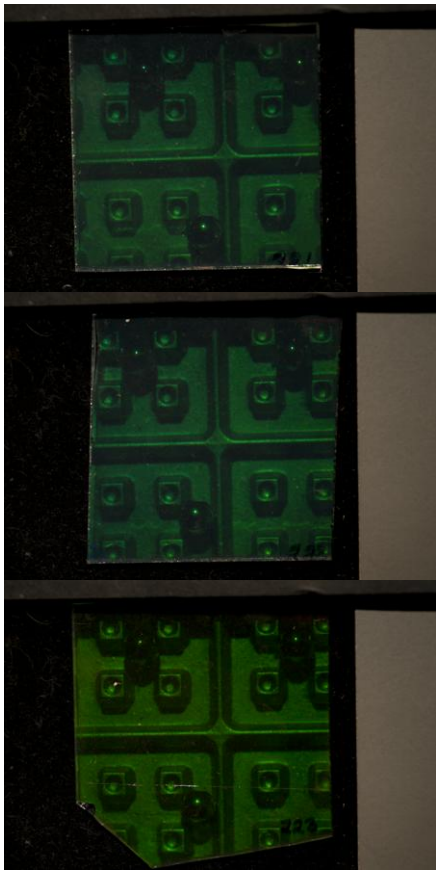
#219: Harman Green, 200, 400, 800, 1600 uJ/cm^2 at 532 nm, 45" @ 72F JD-4, TJ Bleach. From a fresh box of 30 by 40 cm plates. Better than #215, still not great.

#219a: Harman Green new box fog test, yes there is some, maybe .3 density even!

#220: Harman Green, 200 nm, 45” @ 72F JD-4, TJ



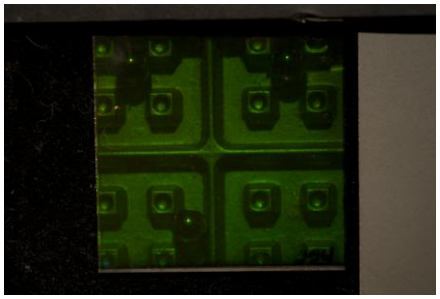
uJ/cm^2 at 532 Bleach.



#221: Harman Green, 400 uJ/cm^2 at 532 nm, 45” @ 72F JD-4, TJ Bleach.

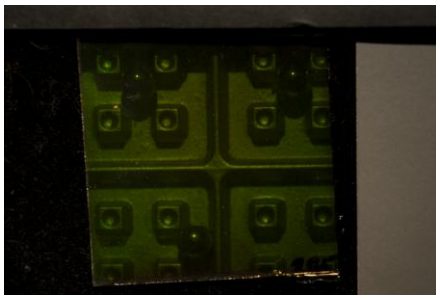
#222: Harman Green, 800 uJ/cm^2 at 532 nm, 45” @ 72F JD-4, TJ Bleach.

#223: BB-520, 6400 uJ/cm^2 at 532 nm, 1’ @ 72F JD-4, TJ Bleach. Was supposed to go for 5’, yanked early because of high density. What gives with consistency?

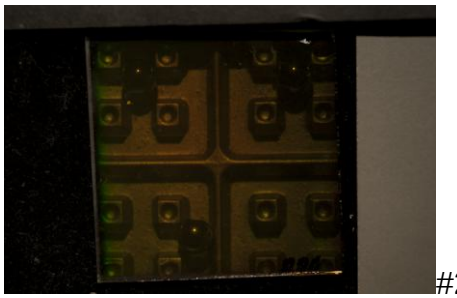


#224: Harman Green, 200 uJ/cm^2 at 532 nm, 2' @ 70F Pyrochrome Developer, TJ Bleach.

#225: Harman Green, 400 nm, 2' @ 70F Pyrochrome Bleach.

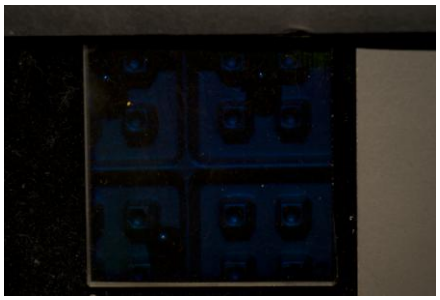


uJ/cm^2 at 532 Developer, TJ



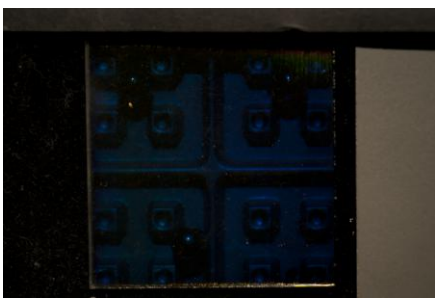
#226: Harman Green, 800 uJ/cm^2 at 532 nm, 2' @ 70F Pyrochrome Developer, TJ Bleach.

First time we're seeing decent results with this material! 200 seems the best, and the color is a decent green.

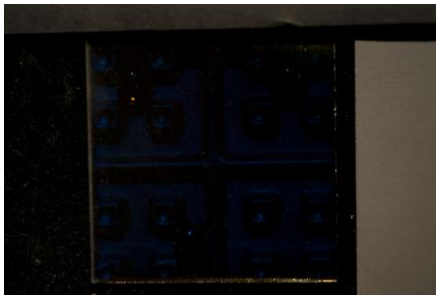


#227: Harman Green, 200 uJ/cm^2 at 532 nm, 2' @ 70F Pyrochrome Developer and Bleach.

#228: Harman Green, 400 nm, 2' @ 70F Pyrochrome Bleach.

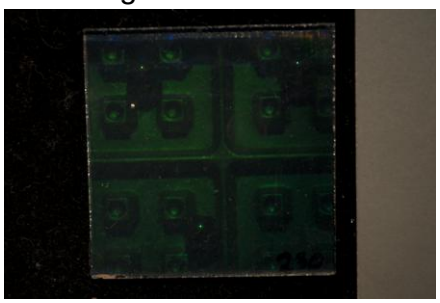


uJ/cm^2 at 532 Developer and

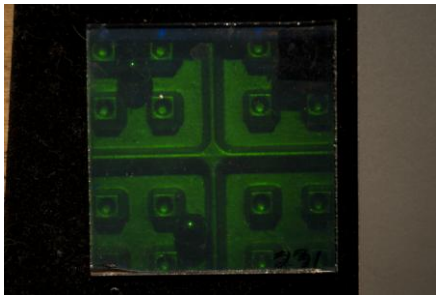


#229: Harman Green, 800 uJ/cm^2 at 532 nm, 2' @ 70F Pyrochrome Developer and Bleach.

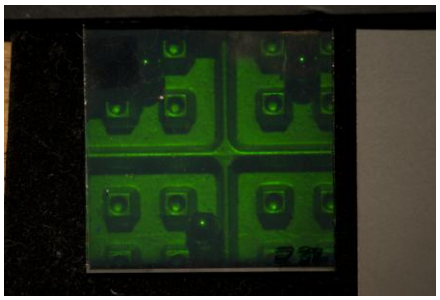
The above shifted pretty far into the green, but decently bright when up-shifted by breathing on them.



#230: Harman Green, 200 uJ/cm^2 at 532 nm, 2' @ 70F D-19, TJ Bleach.



#231: Harman Green, 400 uJ/cm^2 at 532 nm, 2' @ 70F D-19, TJ Bleach.



#232: Harman Green, 800 uJ/cm^2 at 532 nm, 2' @ 70F D-19, TJ Bleach.

If I were to do this again, I would try 1600 as the 800 was the best. My conclusion on Harmans, both Red and Green, use D-19 or Pyro depending on what you want to do.