Testing for the ability to distinguish traffic signal colors

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Traffic signal colors

- Red 630 nM
- Yellow 590 nM
- Green 505 nM

Source: http://www.trafficlights.com/LEDsigns.htm

Test Lights

Red: 630 nM
Yellow 592 nM
Green 525 nM

Source: http://www.photonlight.com/pages/Photon-LED-Beam-Colors.html

Testing Strategy

- Do not demonstrate the 3 different colored lights before starting the test
- Present all 3 lights in a random fashion for a total of 9 presentation.
  - If the patient misses any light, the test is over and they have failed
  - The chance of someone with a color deficiency naming all 9 lights correctly is 1/27