**Lab 2 – Traffic Light – Test Plan**

1. Turn the traffic light on
   1. Should start with NS Green for 3 counts
   2. Transition to NS Yellow for 2 counts
   3. Then EW Green for 3 counts
   4. Then EW Yellow for 2 counts
   5. Then go back to NS Green
2. Traffic light on with NS Left Turn bit on
   1. Start with NS Green
   2. Transition to NS Yellow for 2 counts
   3. Then EW Green for 3 counts
   4. Then EW Yellow for 2 counts
   5. Then NS Left for 1 count
   6. Then NS Green Short for 2 counts
   7. Then NS Yellow
3. Traffic light on with EW Left turn bit on
   1. Start at NS Yellow for 2 counts
   2. Then EW Left for 1 count
   3. Then EW Green Short for 2 counts
   4. Then EW Yellow
4. Traffic light on with both directions left turn bit on
   1. Start at EW Yellow for 3 counts
   2. Then NS Left for 1 count
   3. Then NS Green Short for 2 counts
   4. Then NS Yellow for 2 counts
   5. Then EW Left for 1 count
   6. Then EW Green Short for 2 counts
   7. Then back to EW Yellow
5. Go into night mode
   1. NS blinks Red 1 count on and 1 count off
   2. EW blinks Yellow 1 count on and 1 count off
6. Exit state mode and go back into normal operation
   1. Begin at NS Green and continue normally