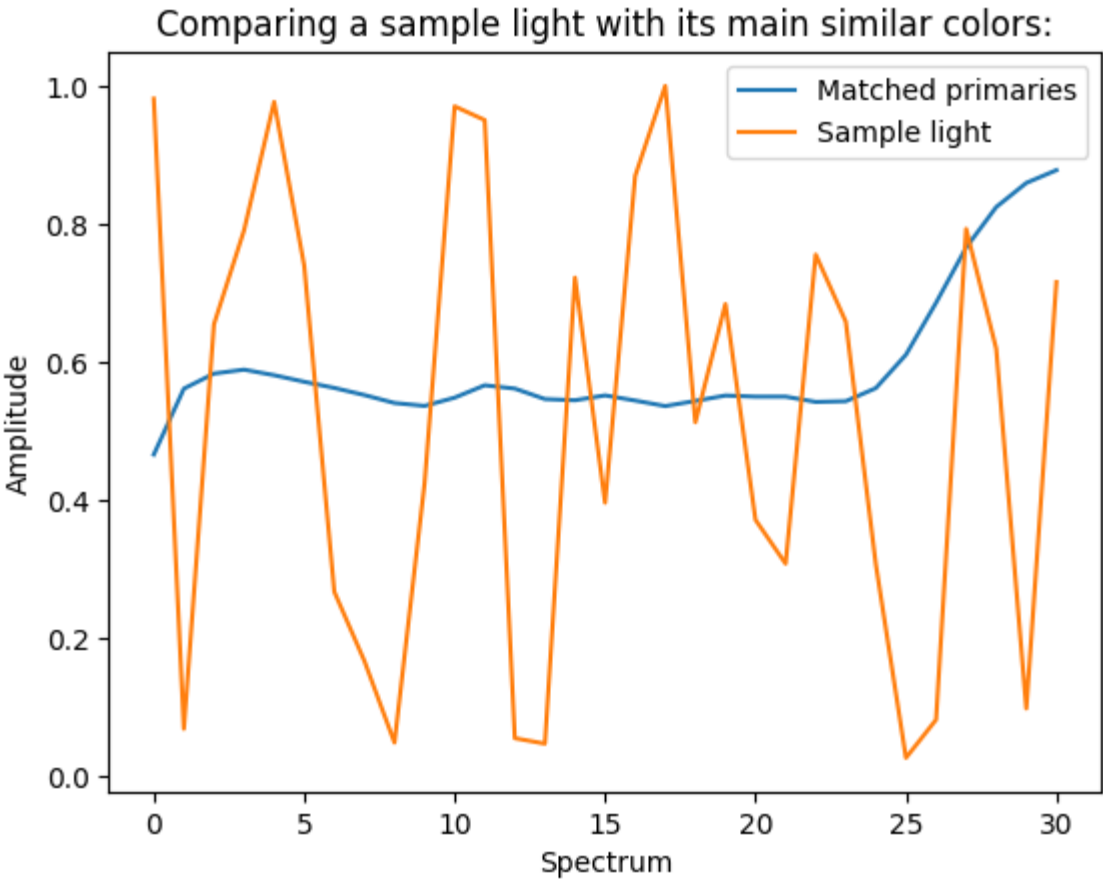


Q1

a)

```
[[1.1108926 ]  
 [0.15554466]  
 [0.40202417]]  
<matplotlib.legend.Legend at 0x1b35dd6e930>
```



b)

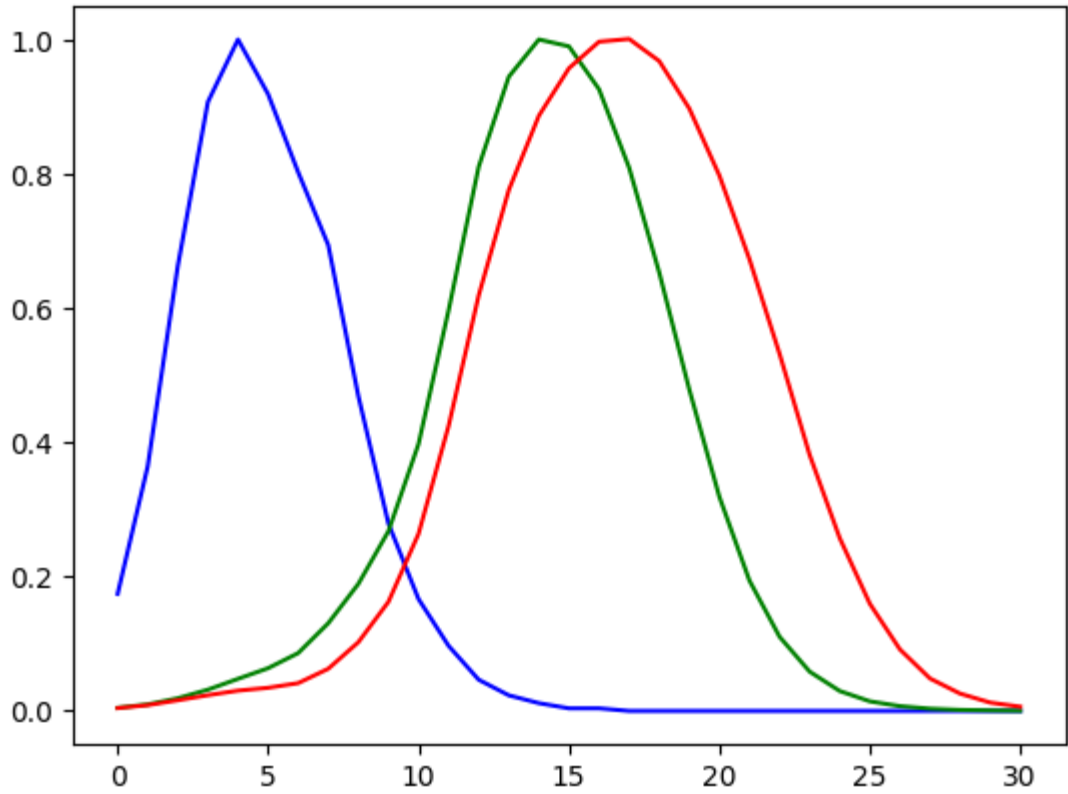
Out of 50 tests, our list called matchingMatrix got the right answer 50 times.

c)

When using the cones matrix with two different lights, we got results `[[6.1881863]`
`[4.73508237]`
`[3.81274333]]` for the first light and `[[6.1881863]`
`[4.73508237]`
`[3.81274333]]` for the second one. These results should be close to each other.
Looking at the list below, we can see that it looks a lot like the matchingMatrix list we had before.
`[[True True True True True True True True True True True True True`
 `True True True True True True True True True True True True True`
 `True True True True True True True]`

q1

```
[ True True True True True True True True True True True True
 True True True True True True True True True True True True
 True True True True True True True]
[ True True True True True True True True True True True True
 True True True True True True True True True True True True
 True True True True True True True]
```



d)

How the settings on a knob change between someone who sees all colors and someone who is colorblind.

```
Test: 1
[[1.30488953]
 [0.21155273]
 [0.25681663]]
[[ 1.05369546]
 [-2.76463902]
 [ 3.68895121]]
```

```
Test: 2
[[0.94594124]
 [0.29952096]
 [0.45985917]]
[[ 0.67263823]
 [-2.93862151]
 [ 4.19407445]]
```

```
Test: 3
[[ 1.58306429]
 [-0.38146065]
 [ 0.57801819]]
[[ 1.32053124]
 [-3.49199864]]
```

[4.16508041]]

Test: 4

[[1.18502387]
[0.33440321]
[-0.14089952]]
[[0.95147739]
[-2.4326967]
[3.05011102]]

Test: 5

[[0.65129381]
[0.46861865]
[0.16123778]]
[[0.4587342]
[-1.81286156]
[2.79223329]]

For colorblind people, the red and green settings are usually set high and are different from those who see all colors.

Test: 1

[[5.55941642]
[5.19726192]
[3.51783145]]
[[5.55941642]
[5.19726192]
[3.51783145]]
[[5.55941642]
[7.2008209]
[3.51783145]]

Test: 2

[[5.28673458]
[4.82764703]
[3.06934498]]
[[5.28673458]
[4.82764703]
[3.06934498]]
[[5.28673458]
[7.15033885]
[3.06934498]]

Test: 3

[[3.60339634]
[3.24705124]
[3.22456353]]
[[3.60339634]
[3.24705124]
[3.22456353]]
[[3.60339634]
[5.22058338]
[3.22456353]]

Test: 4

[[5.86167252]
[4.62820551]

[2.77492717]]
[[5.86167252]
[4.62820551]
[2.77492717]]
[[5.86167252]
[6.7678381]
[2.77492717]]

Test: 5

[[5.78370904]
[5.00213839]
[3.76226817]]
[[5.78370904]
[5.00213839]
[3.76226817]]
[[5.78370904]
[7.53669554]
[3.76226817]]

When looking at the cone reaction, the person with the eye issue has trouble seeing green light. The reaction for the green light is much bigger than for the other colors.