photobiologyFilters Version 0.4.0
Catalogue of filters

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Contents

1 Introduction

```
library(ggplot2)
library(photobiologyFilters)
library(photobiologygg)
```

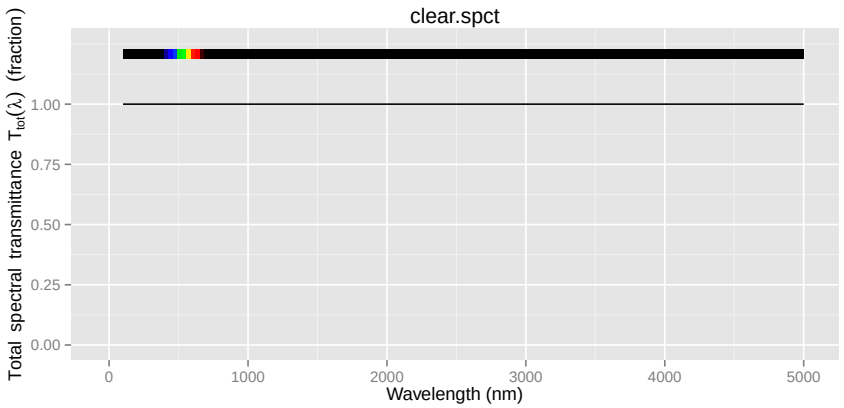
```
options(photobiology.plot.annotations = c("boxes", "labels", "colour.guide", "title"))
```

2 Dummy filters

2.1 Flat transmittance filters

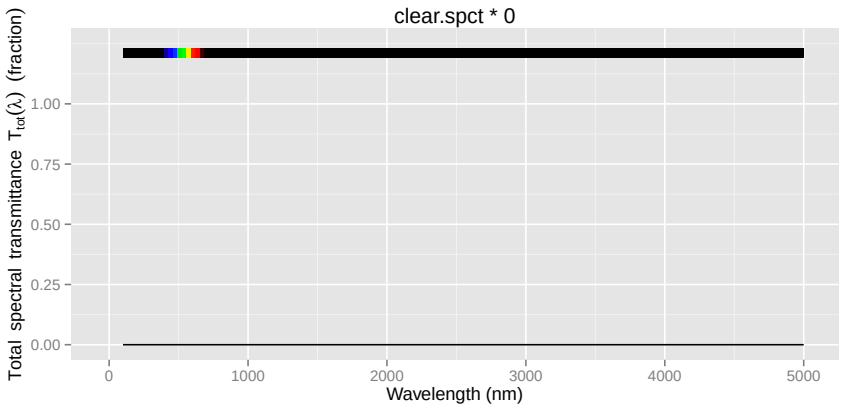
Perfectly clear filter.

```
plot(clear.spct,
     annotations = c("colour.guide", "title"))
```



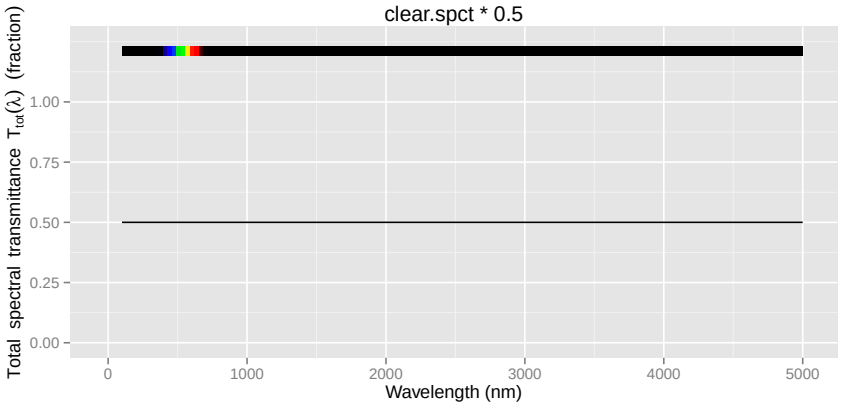
Perfectly apaque filter.

```
plot(clear.spct * 0,
     annotations = c("colour.guide", "title"))
```



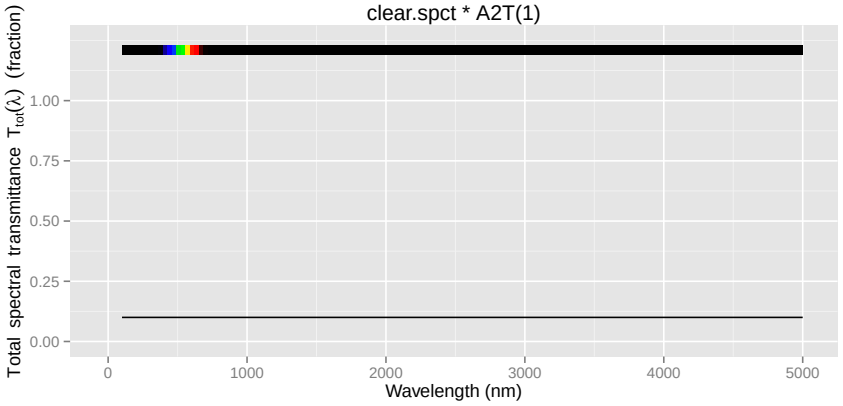
Flat neutral filters as fractional transmittance.

```
plot(clear.spct * 0.5,
     annotations = c("colour.guide", "title"))
```



As absorbance.

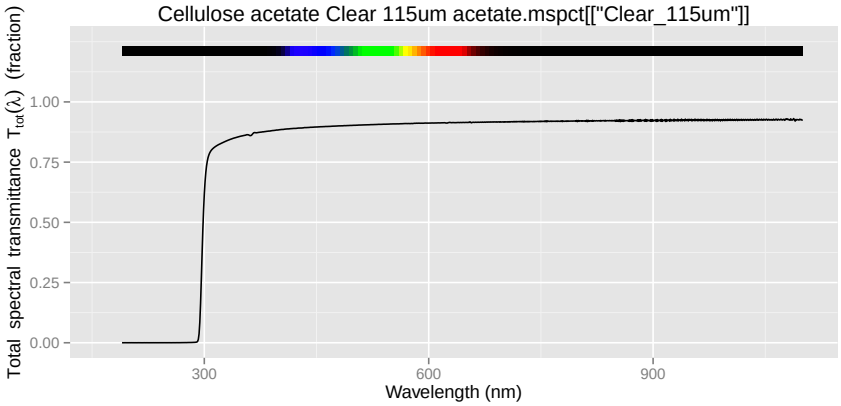
```
plot(clear.spct * A2T(1),
     annotations = c("colour.guide", "title"))
```

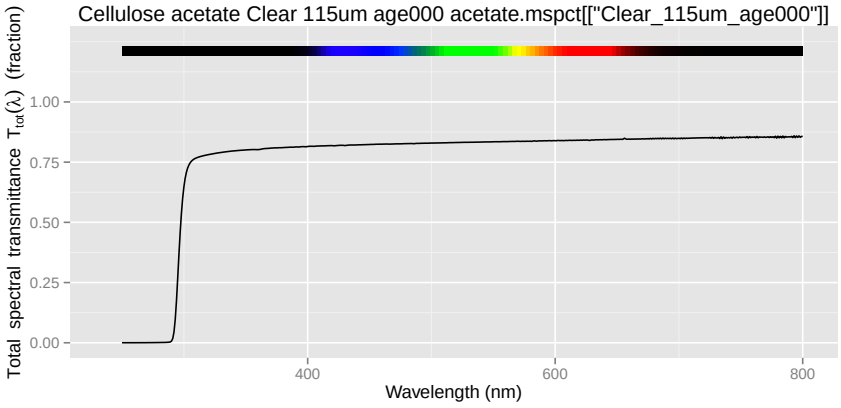


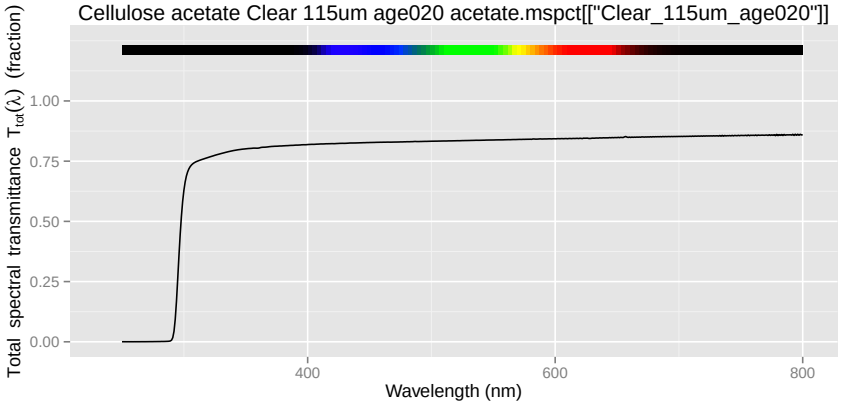
3 Plastic films

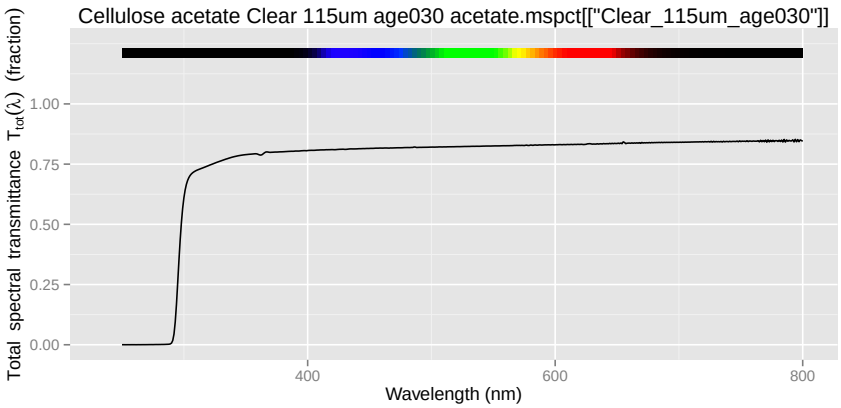
3.1 Cellulose diacetate

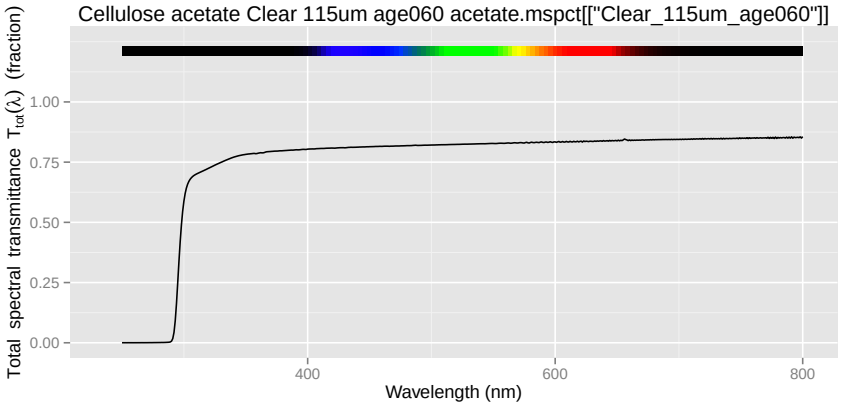
```
for (s in names(acetate.mspct)) {
  print(plot(acetate.mspct[[s]], annotations = "colour.guide") +
          labs(title = paste("Cellulose acetate ",
                             gsub("_", " ", s, fixed = TRUE),
                             ' acetate.mspct[["', s, '"]]',
                             sep = "")))
}
```

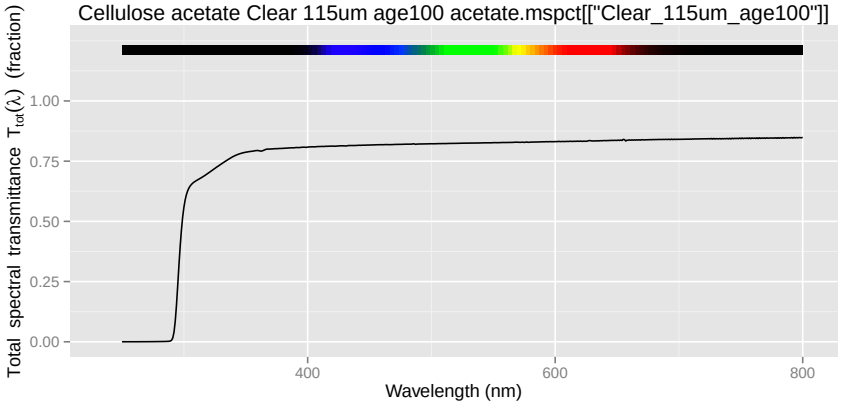

Cellulose acetate Clear 115um acetate.mspct[["Clear_115um"]]
Total spectral transmittance $T_{tot}(\lambda)$ (fraction)
1.00
0.75
0.50
0.25
0.00
300
600
900
Wavelength (nm)

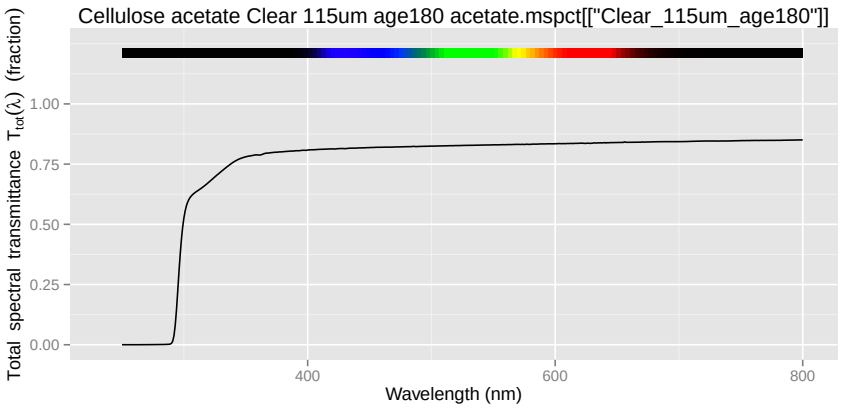

Cellulose acetate Clear 115um age000 acetate.mspct[["Clear_115um_age000"]]
Total spectral transmittance $T_{tot}(\lambda)$ (fraction)
1.00
0.75
0.50
0.25
0.00
400
600
800
Wavelength (nm)

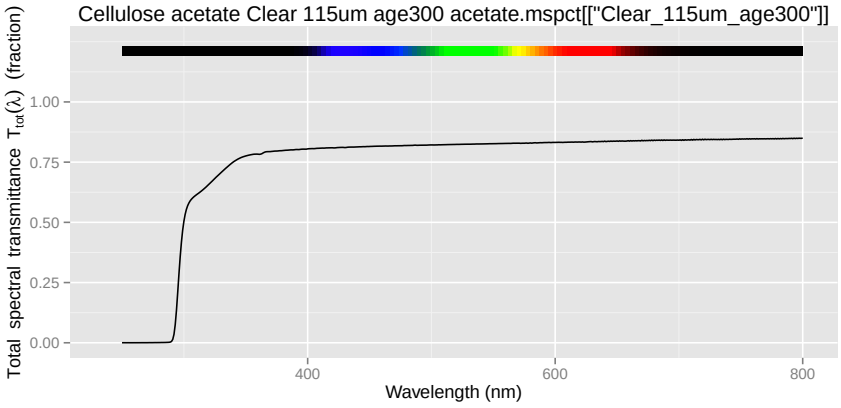

Cellulose acetate Clear 115um age020 acetate.mspct[["Clear_115um_age020"]]
Total spectral transmittance $T_{tot}(\lambda)$ (fraction)
1.00
0.75
0.50
0.25
0.00
400
600
800
Wavelength (nm)

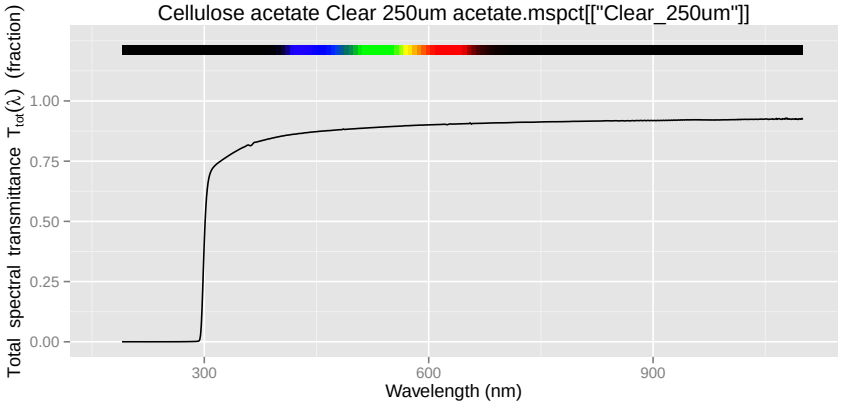

Cellulose acetate Clear 115um age030 acetate.mspct[["Clear_115um_age030"]]
Total spectral transmittance $T_{tot}(\lambda)$ (fraction)
1.00
0.75
0.50
0.25
0.00
400
600
800
Wavelength (nm)

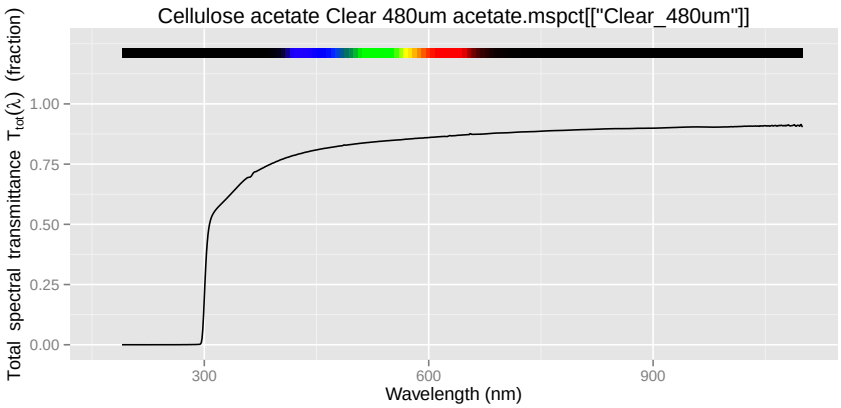

Cellulose acetate Clear 115um age060 acetate.mspct[["Clear_115um_age060"]]
Total spectral transmittance $T_{tot}(\lambda)$ (fraction)
1.00
0.75
0.50
0.25
0.00
400
600
800
Wavelength (nm)


Cellulose acetate Clear 115um age100 acetate.mspct[["Clear_115um_age100"]]
Total spectral transmittance $T_{tot}(\lambda)$ (fraction)
1.00
0.75
0.50
0.25
0.00
400
600
800
Wavelength (nm)


Cellulose acetate Clear 115um age180 acetate.mspct[["Clear_115um_age180"]]
Total spectral transmittance $T_{tot}(\lambda)$ (fraction)
1.00
0.75
0.50
0.25
0.00
400
600
800
Wavelength (nm)

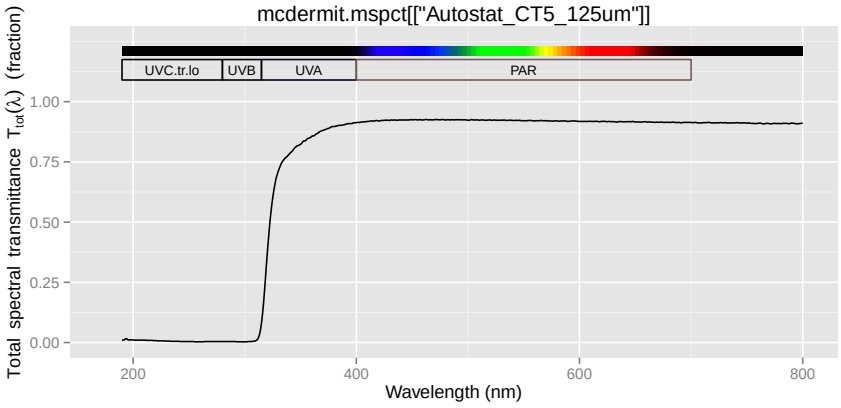

Cellulose acetate Clear 115um age300 acetate.mspct[["Clear_115um_age300"]]
Total spectral transmittance $T_{tot}(\lambda)$ (fraction)
1.00
0.75
0.50
0.25
0.00
400
600
800
Wavelength (nm)


Cellulose acetate Clear 250um acetate.mspct[["Clear_250um"]]
Total spectral transmittance $T_{tot}(\lambda)$ (fraction)
1.00
0.75
0.50
0.25
0.00
300
600
900
Wavelength (nm)



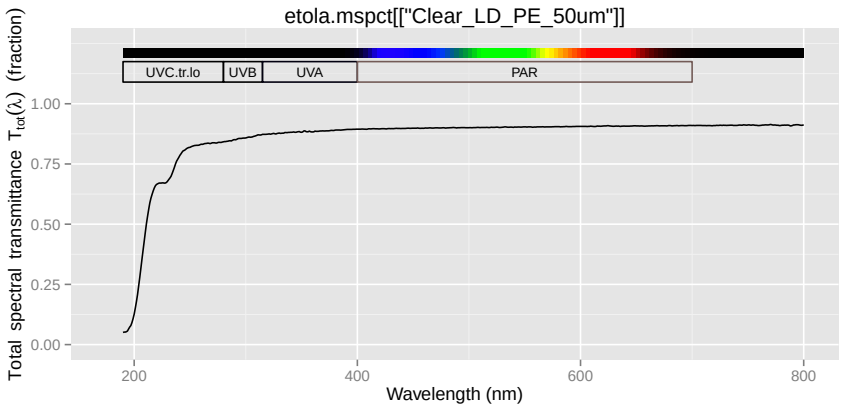
3.2 Polyester

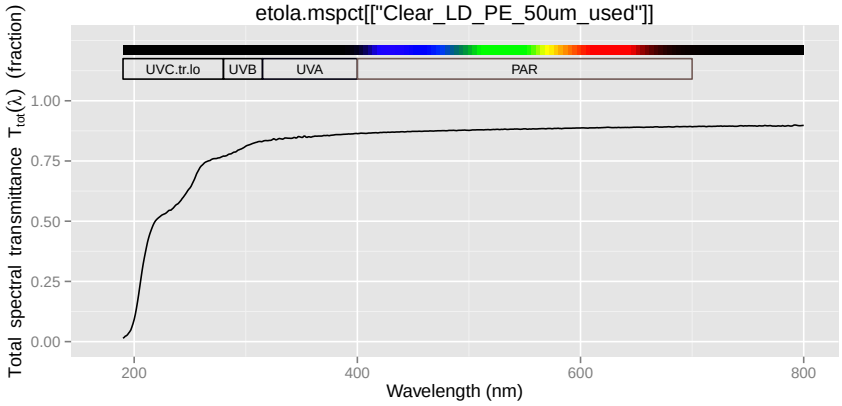
```
plot(mcdermit.mspct[["Autostat_CT5_125um"]])
```



3.3 Polythene

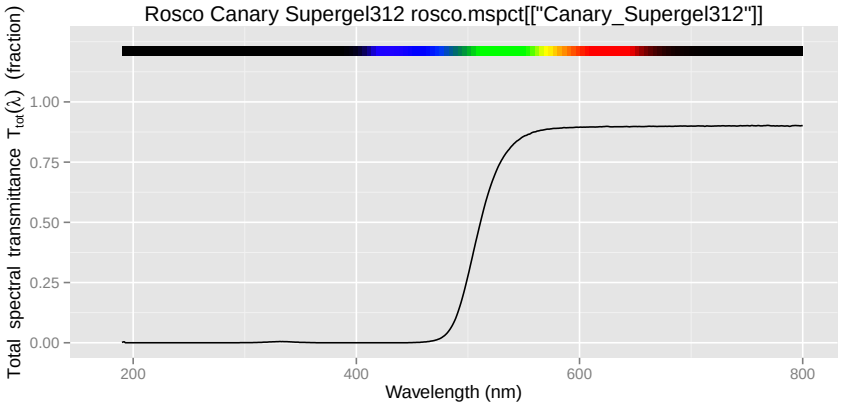
```
plot(etola.mspct[["Clear_LD_PE_50um"]])
plot(etola.mspct[["Clear_LD_PE_50um_used"]])
```

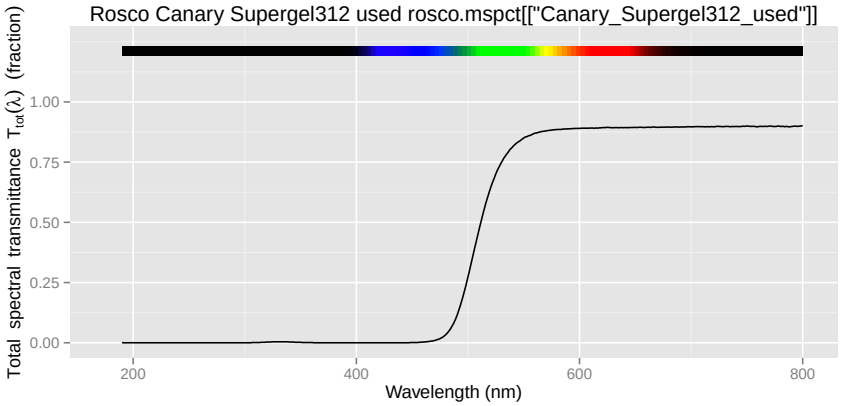


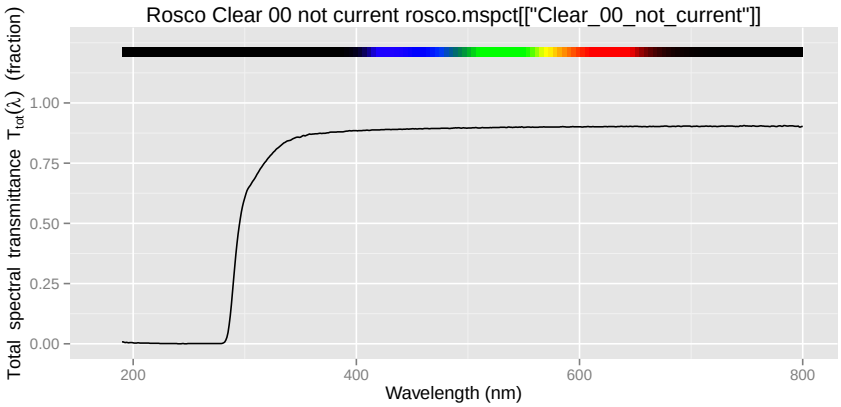


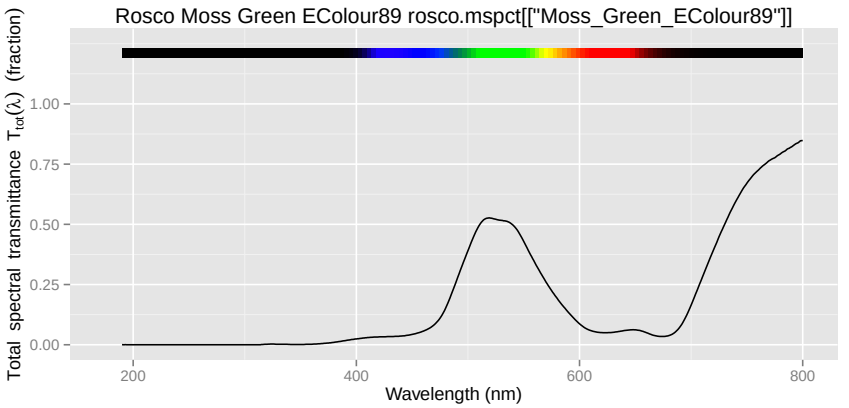
3.4 Rosco theatrical filters

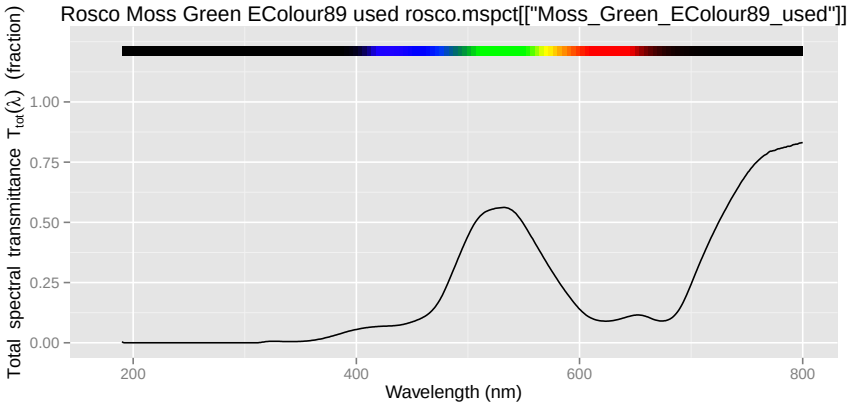
```
for (s in names(rosco.mspct)) {
  print(plot(rosco.mspct[[s]], annotations = "colour.guide") +
          labs(title = paste("Rosco ", gsub("_", " ", s, fixed = TRUE),
                             ' rosco.mspct[["', s, '"]]',
                             sep = "")))
}
```

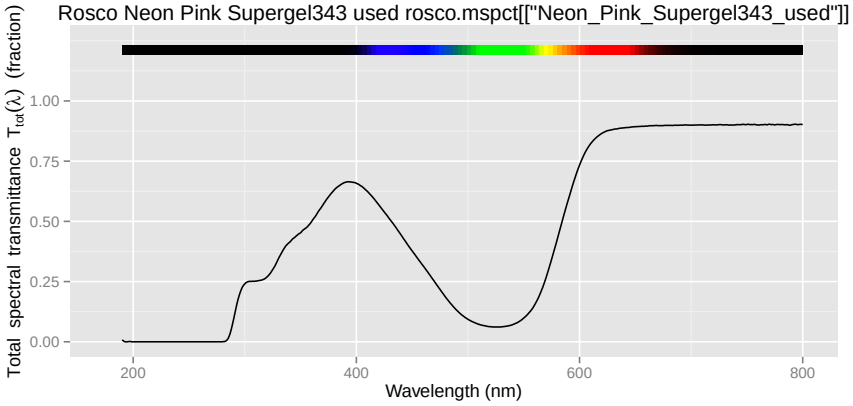

Rosco Canary Supergel312 rosco.mspct[["Canary_Supergel312"]]
Total spectral transmittance $T_{tot}(\lambda)$ (fraction)
1.00
0.75
0.50
0.25
0.00
200
400
600
800
Wavelength (nm)

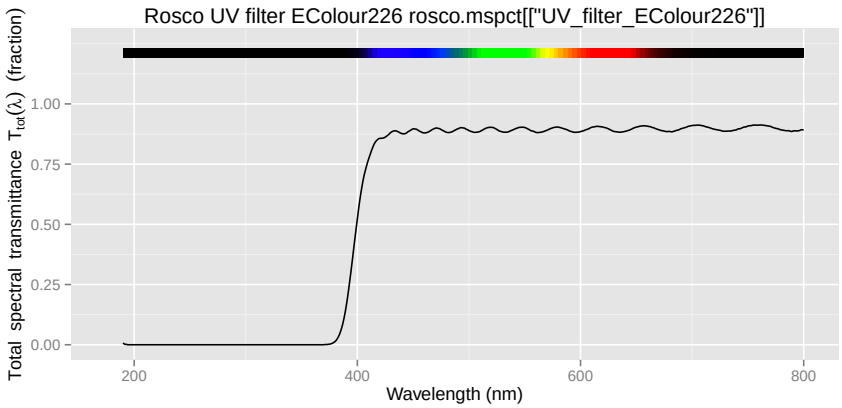

Rosco Canary Supergel312 used rosco.mspct[["Canary_Supergel312_used"]]
Total spectral transmittance $T_{tot}(\lambda)$ (fraction)
1.00
0.75
0.50
0.25
0.00
200
400
600
800
Wavelength (nm)

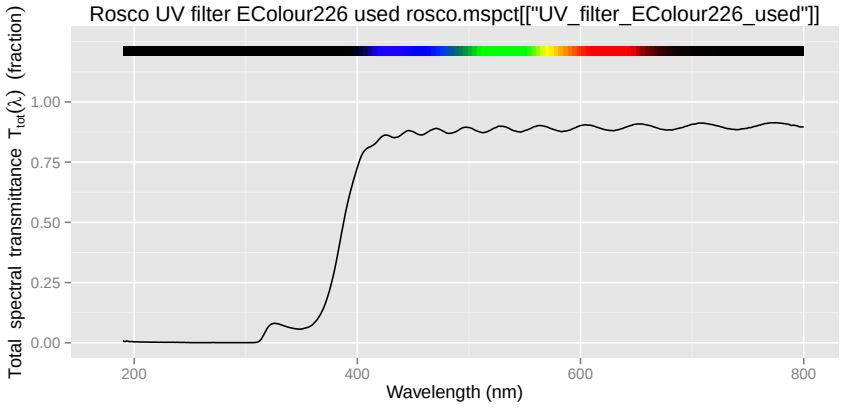

Rosco Clear 00 not current rosco.mspct[["Clear_00_not_current"]]
Total spectral transmittance $T_{tot}(\lambda)$ (fraction)
1.00
0.75
0.50
0.25
0.00
200
400
600
800
Wavelength (nm)


Rosco Moss Green EColour89 rosco.mspct[["Moss_Green_EColour89"]]
Total spectral transmittance $T_{tot}(\lambda)$ (fraction)
1.00
0.75
0.50
0.25
0.00
200
400
600
800
Wavelength (nm)


Rosco Moss Green EColour89 used rosco.mspct[["Moss_Green_EColour89_used"]]
Total spectral transmittance $T_{tot}(\lambda)$ (fraction)
1.00
0.75
0.50
0.25
0.00
200
400
600
800
Wavelength (nm)

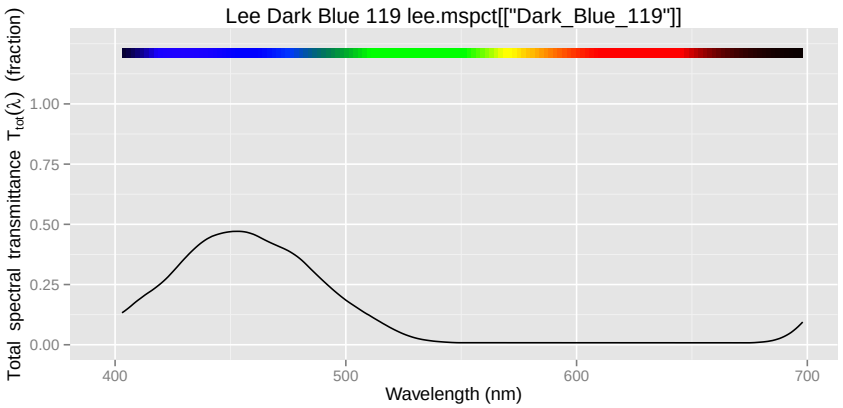

Rosco Neon Pink Supergel343 used rosco.mspct[["Neon_Pink_Supergel343_used"]]
Total spectral transmittance $T_{tot}(\lambda)$ (fraction)
1.00
0.75
0.50
0.25
0.00
200
400
600
800
Wavelength (nm)

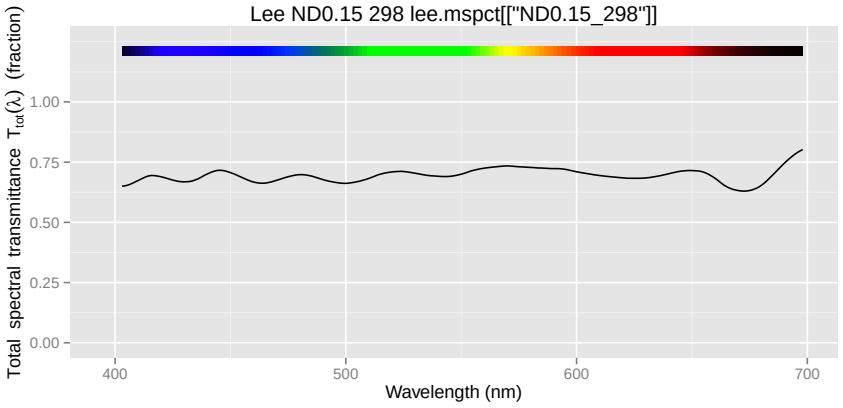


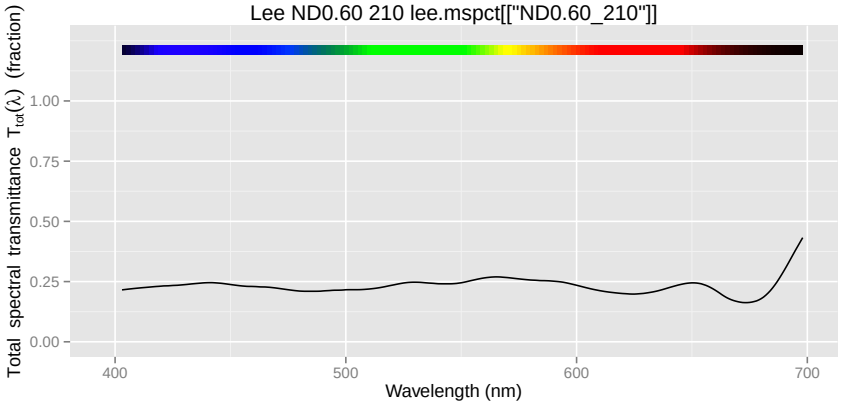


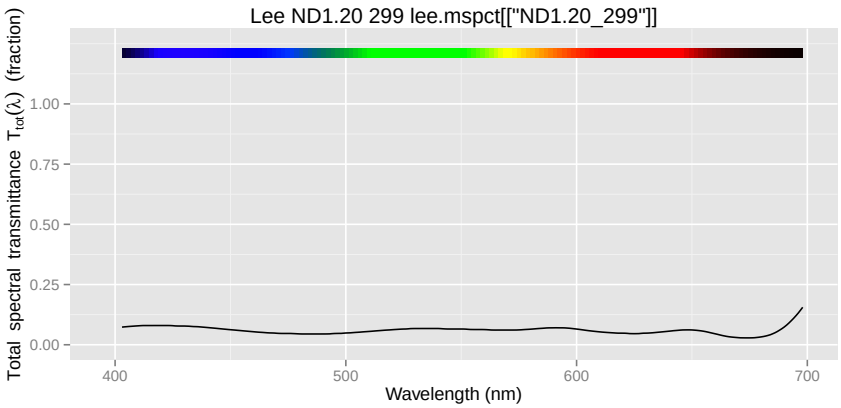
3.5 Lee theatrical filters

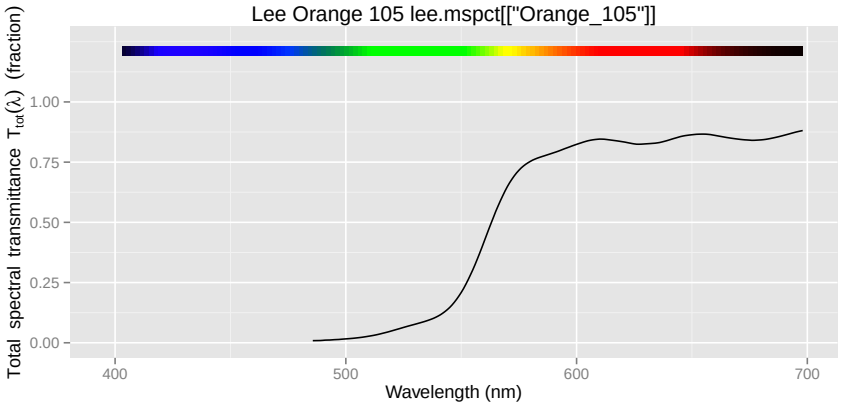
```
for (s in names(lee.mspct)) {
  print(plot(lee.mspct[[s]], annotations = "colour.guide") +
          labs(title = paste("Lee ", gsub("_", " ", s, fixed = TRUE),
                             ' lee.mspct[["', s, '"]]',
                             sep = "")))
}
```

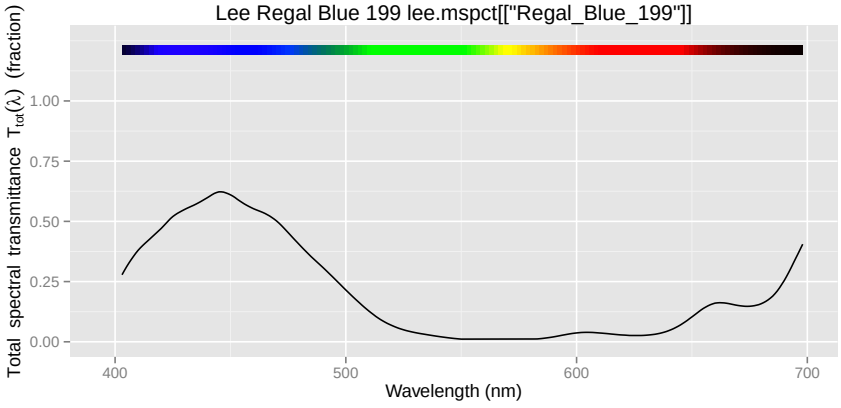

Lee Dark Blue 119 lee.mspct[["Dark_Blue_119"]]
Total spectral transmittance $T_{tot}(\lambda)$ (fraction)
1.00
0.75
0.50
0.25
0.00
400
500
600
700
Wavelength (nm)

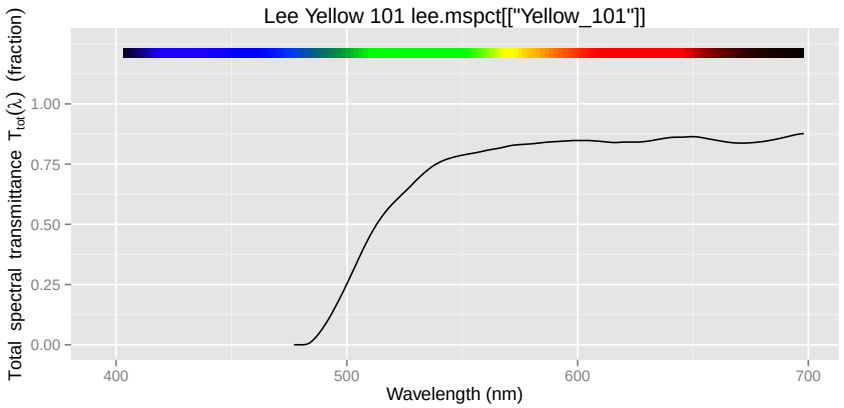

Lee ND0.15 298 lee.mspct[["ND0.15_298"]]
Total spectral transmittance $T_{tot}(\lambda)$ (fraction)
1.00
0.75
0.50
0.25
0.00
400
500
600
700
Wavelength (nm)


Lee ND0.60 210 lee.mspct[["ND0.60_210"]]
Total spectral transmittance $T_{tot}(\lambda)$ (fraction)
1.00
0.75
0.50
0.25
0.00
400
500
600
700
Wavelength (nm)


Lee ND1.20 299 lee.mspct[["ND1.20_299"]]
Total spectral transmittance $T_{tot}(\lambda)$ (fraction)
1.00
0.75
0.50
0.25
0.00
400
500
600
700
Wavelength (nm)

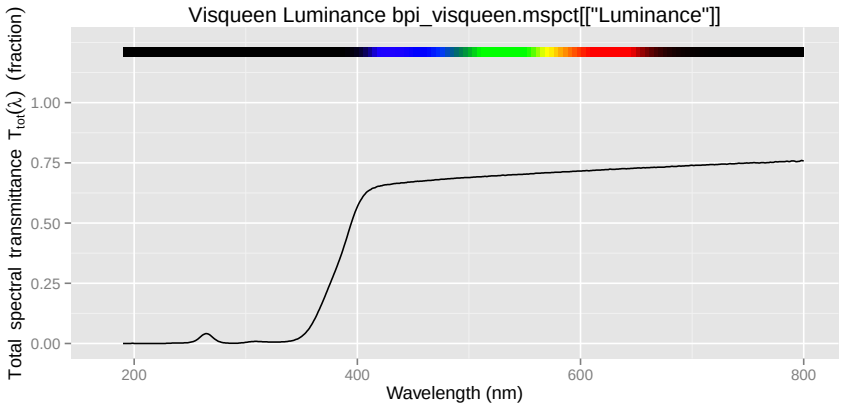

Lee Orange 105 lee.mspct[["Orange_105"]]
Total spectral transmittance $T_{tot}(\lambda)$ (fraction)
1.00
0.75
0.50
0.25
0.00
400
500
600
700
Wavelength (nm)

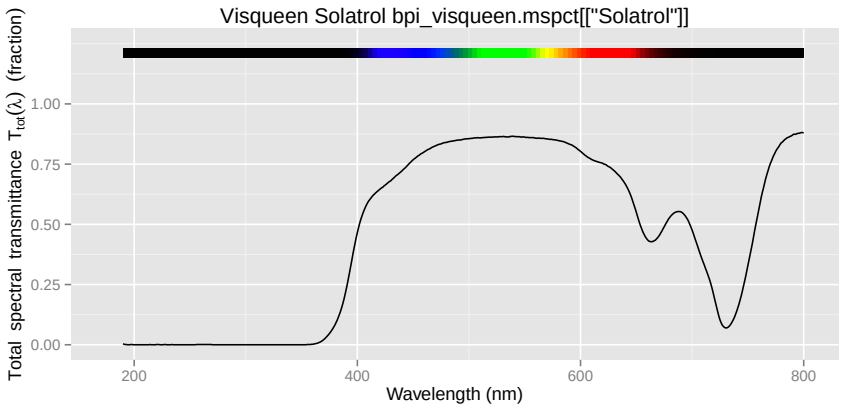

Lee Regal Blue 199 lee.mspct[["Regal_Blue_199"]]
Total spectral transmittance $T_{tot}(\lambda)$ (fraction)
1.00
0.75
0.50
0.25
0.00
400
500
600
700
Wavelength (nm)



3.6 Commercial greenhouse films from BPI Agri Visqueen

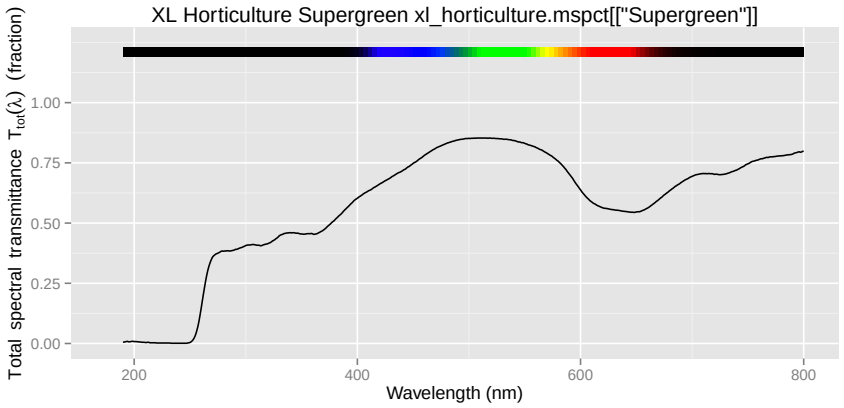
```
for (s in names(bpi_visqueen.mspct)) {
  print(plot(bpi_visqueen.mspct[[s]], annotations = "colour.guide") +
          labs(title = paste("Visqueen ", gsub("_", " ", s, fixed = TRUE),
                             ' bpi_visqueen.mspct[["', s, '"]]',
                             sep = "")))
}
```

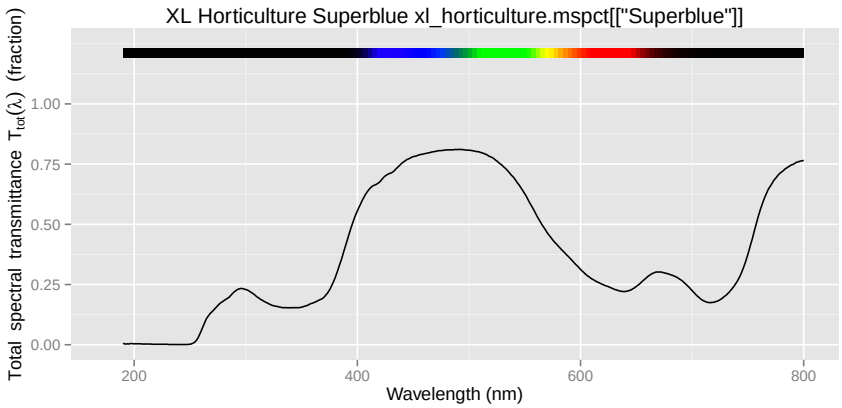


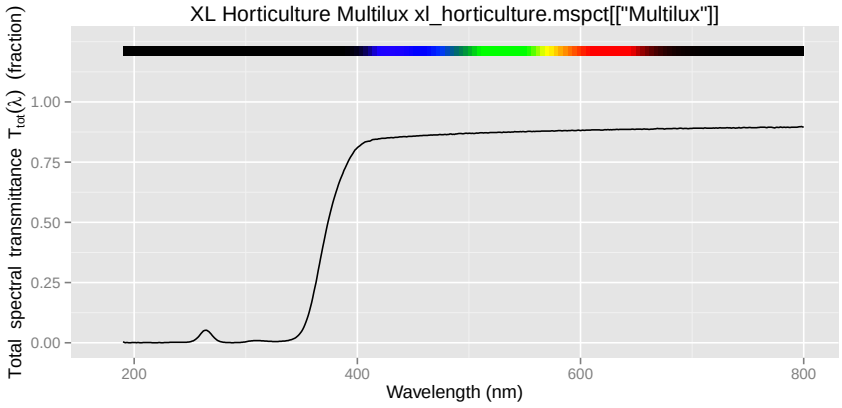


3.7 Commercial greenhouse films from XL Agriculture

```
for (s in names(xl_horticulture.mspct)) {
  print(plot(xl_horticulture.mspct[[s]], annotations = "colour.guide") +
          labs(title = paste("XL Horticulture ", gsub("_", " ", s, fixed = TRUE),
                             ' xl_horticulture.mspct[["', s, '"]]',
                             sep = "")))
}
```



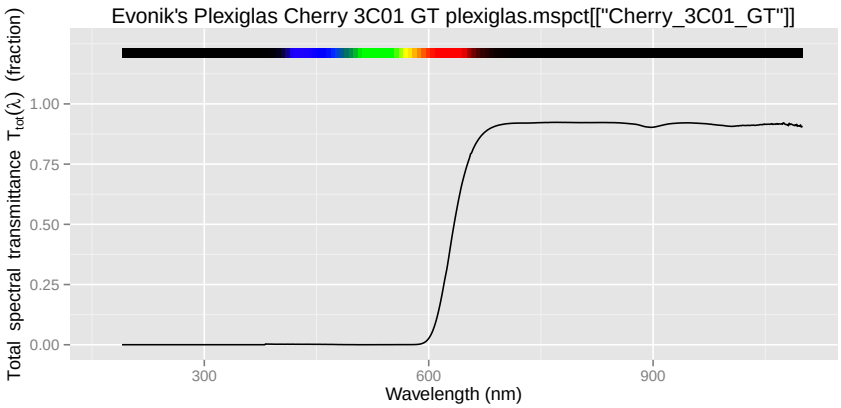


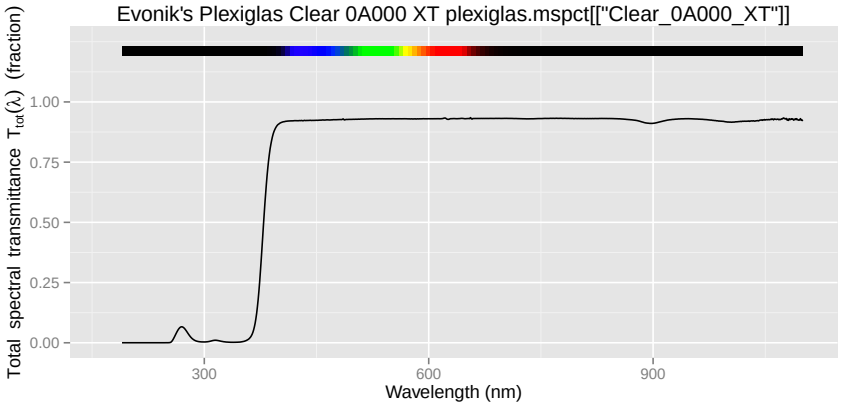


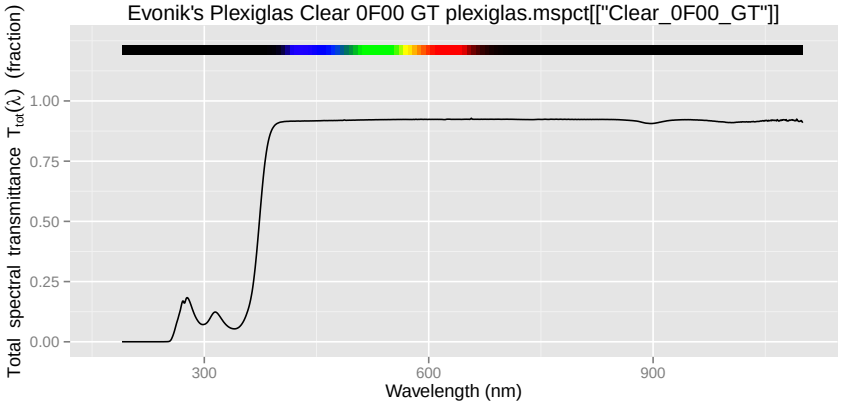
4 Plastic sheets

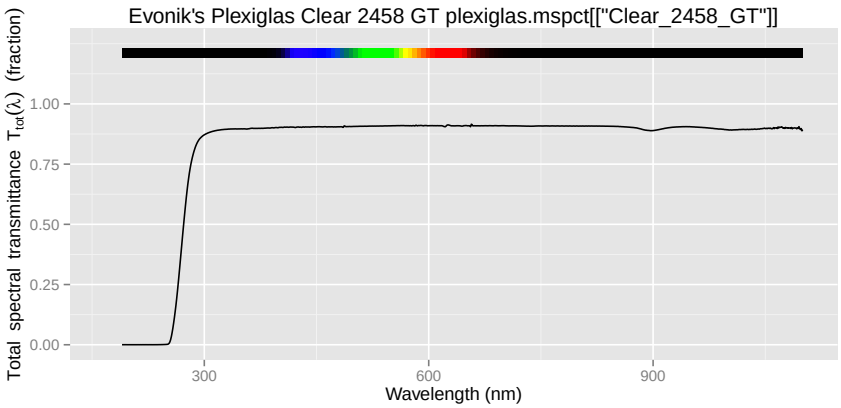
4.1 Plexiglas

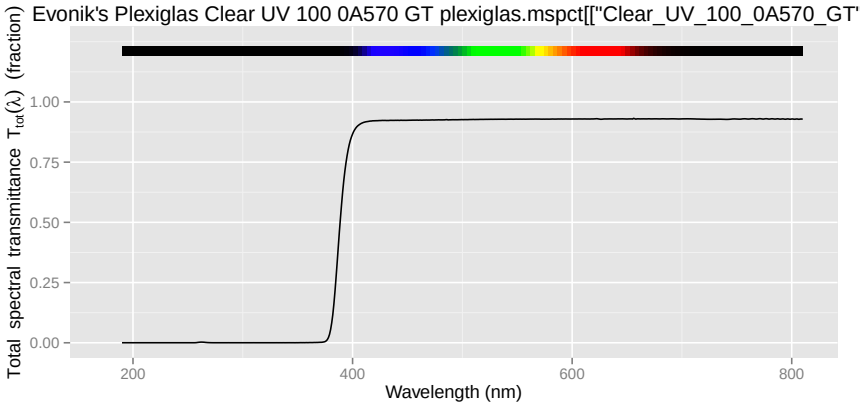
```
for (s in names(plexiglas.mspct)) {
  print(plot(plexiglas.mspct[[s]], annotations = "colour.guide") +
          labs(title = paste("Evonik's Plexiglas ", gsub("_", " ", s, fixed = TRUE),
                             ' plexiglas.mspct[["', s, '"]]',
                             sep = "")))
}
```

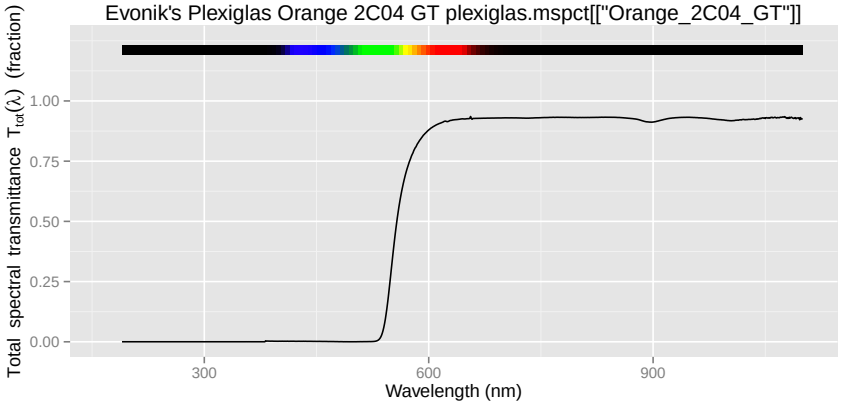

Evonik's Plexiglas Cherry 3C01 GT plexiglas.mspct[["Cherry_3C01_GT"]]
Total spectral transmittance $T_{tot}(\lambda)$ (fraction)
1.00
0.75
0.50
0.25
0.00
300
600
900
Wavelength (nm)

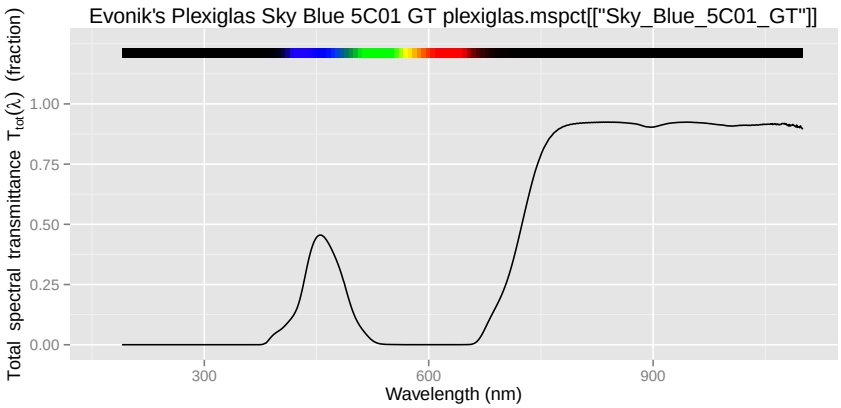

Evonik's Plexiglas Clear 0A000 XT plexiglas.mspct[["Clear_0A000_XT"]]
Total spectral transmittance $T_{tot}(\lambda)$ (fraction)
1.00
0.75
0.50
0.25
0.00
300
600
900
Wavelength (nm)

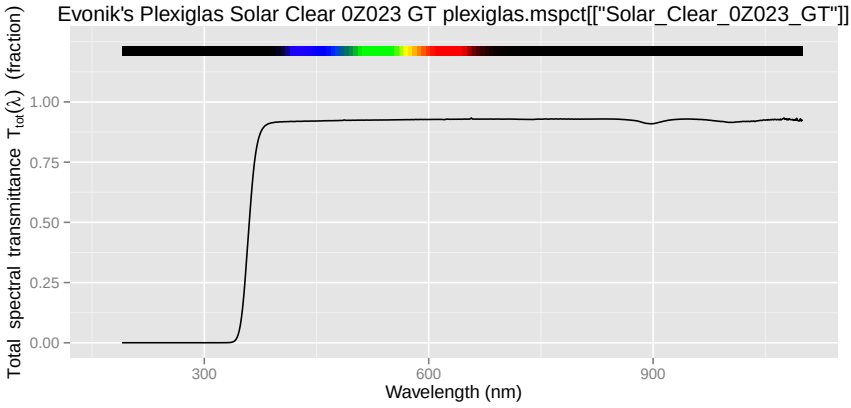

Evonik's Plexiglas Clear 0F00 GT plexiglas.mspct[["Clear_0F00_GT"]]
Total spectral transmittance $T_{tot}(\lambda)$ (fraction)
1.00
0.75
0.50
0.25
0.00
300
600
900
Wavelength (nm)

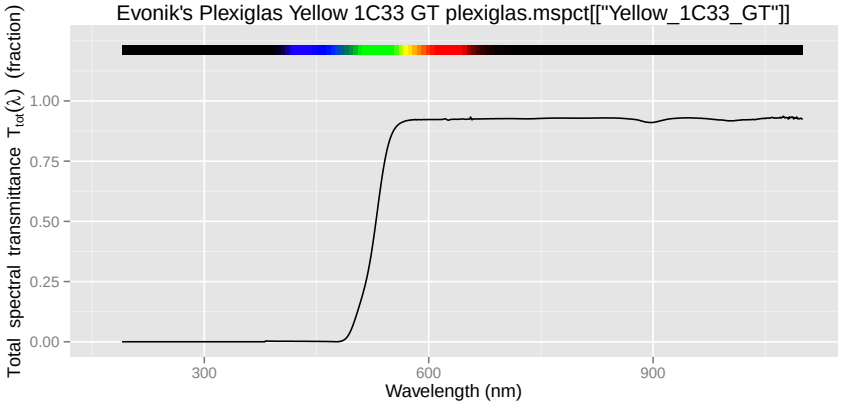

Evonik's Plexiglas Clear 2458 GT plexiglas.mspct[["Clear_2458_GT"]]
Total spectral transmittance $T_{tot}(\lambda)$ (fraction)
1.00
0.75
0.50
0.25
0.00
300
600
900
Wavelength (nm)


Evonik's Plexiglas Clear UV 100 0A570 GT plexiglas.mspct[["Clear_UV_100_0A570_GT'
Total spectral transmittance $T_{tot}(\lambda)$ (fraction)
1.00
0.75
0.50
0.25
0.00
200
400
600
800
Wavelength (nm)


Evonik's Plexiglas Orange 2C04 GT plexiglas.mspct[["Orange_2C04_GT"]]
Total spectral transmittance $T_{tot}(\lambda)$ (fraction)
1.00
0.75
0.50
0.25
0.00
300
600
900
Wavelength (nm)

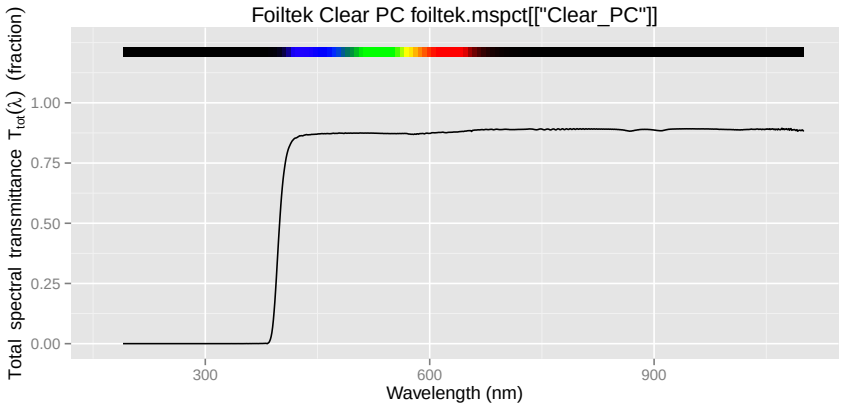


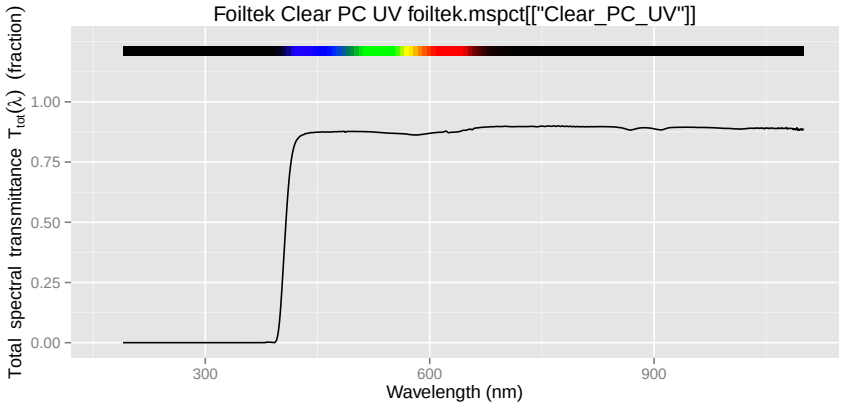




4.2 Polycarbonate

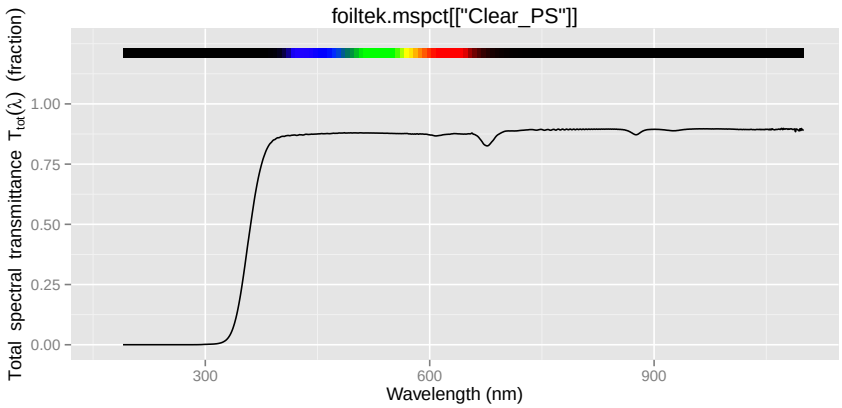
```
for (s in c("Clear_PC", "Clear_PC_UV")) {
  print(plot(foiltek.mspct[[s]], annotations = "colour.guide") +
          labs(title = paste("Foiltek ", gsub("_", " ", s, fixed = TRUE),
                             ' foiltek.mspct[["', s, '"]]',
                             sep = "")))
}
```





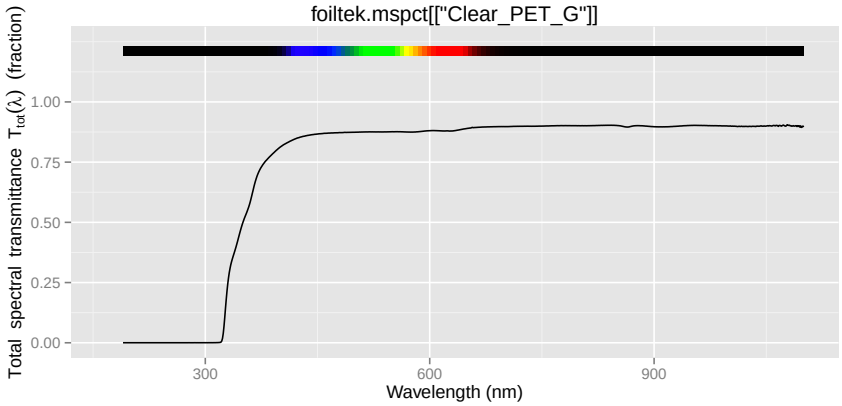
4.3 Polyestyrene

```
plot(foiltek.mspct[["Clear_PS"]],
     annotations = c("colour.guide", "title"))
```



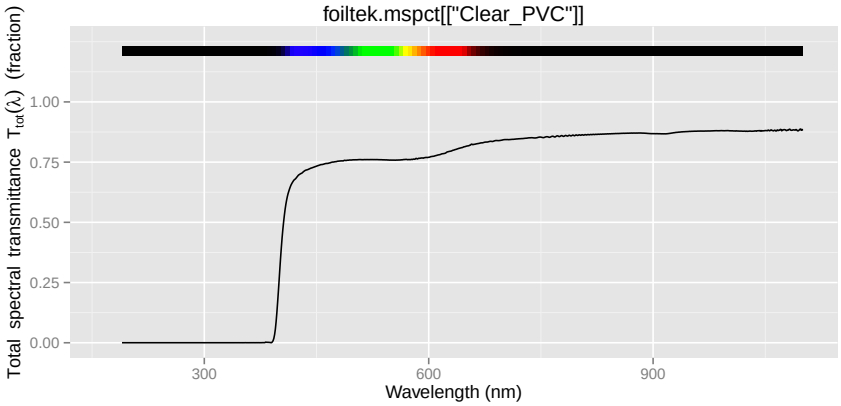
4.4 Polyester

```
plot(foiltek.mspct[["Clear_PET_G"]],
     annotations = c("colour.guide", "title"))
```



4.5 Polyvinilchloride

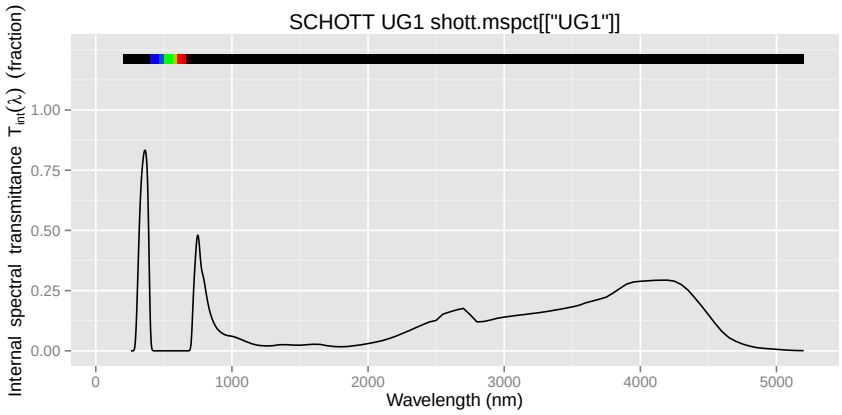
```
plot(foiltek.mspct[["Clear_PVC"]],
     annotations = c("colour.guide", "title"))
```

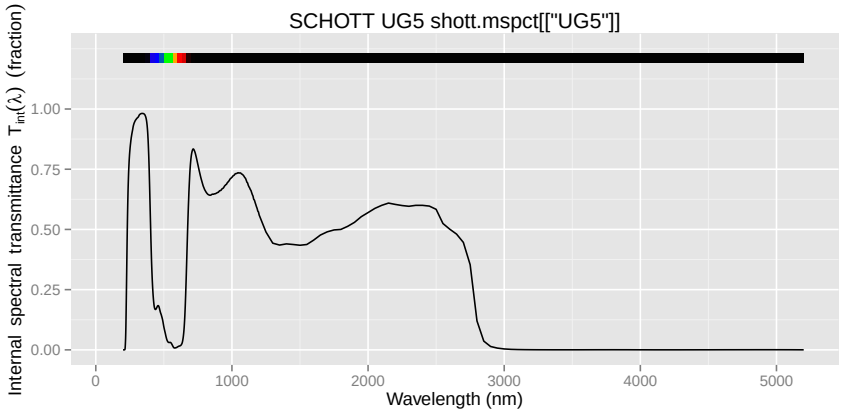

foiltek.mspct[["Clear_PVC"]]
Total spectral transmittance $T_{tot}(\lambda)$ (fraction)
1.00
0.75
0.50
0.25
0.00
300
600
900
Wavelength (nm)

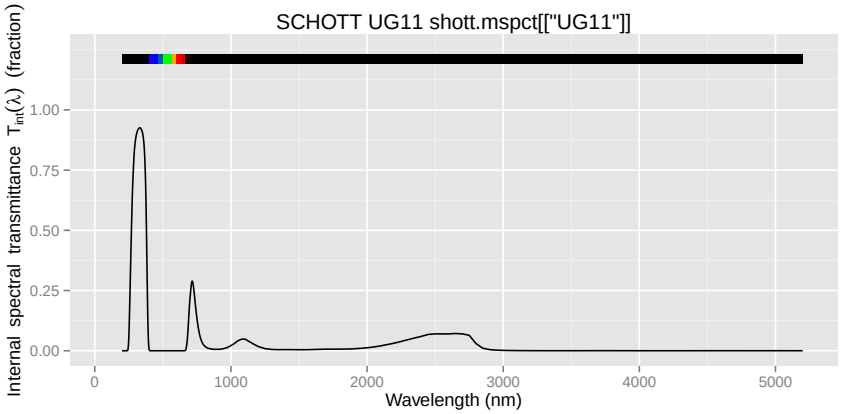
5 Optical glass filters

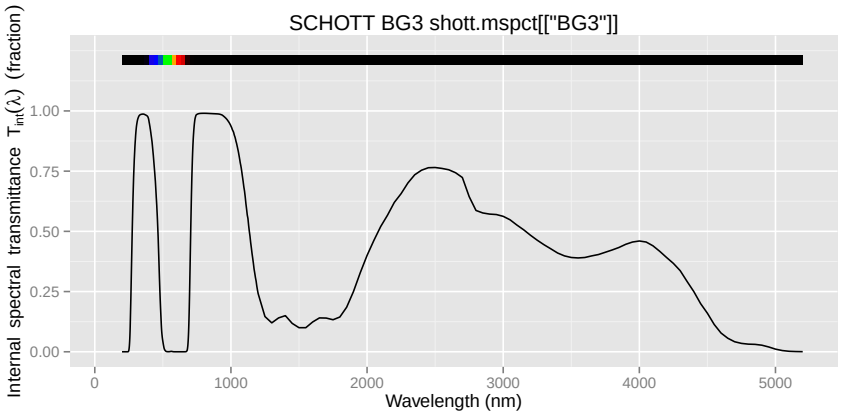
5.1 Schott long-pass filters

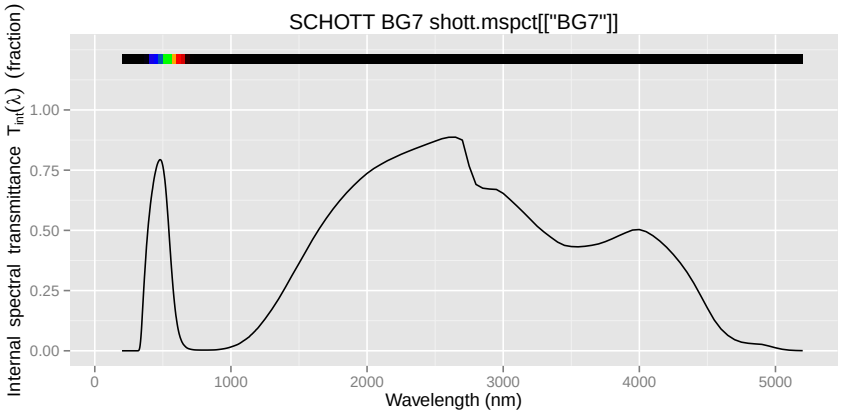
```
for (s in names(schott.mspct)) {
  print(plot(schott.mspct[[s]], annotations = "colour.guide") +
          labs(title = paste("SCHOTT ", s,
                             ' shott.mspct[["', s, '"]]',
                             sep = "")))
}
```

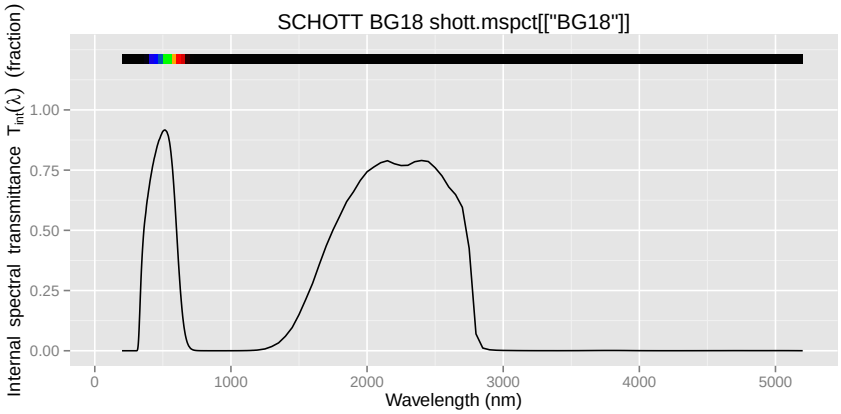


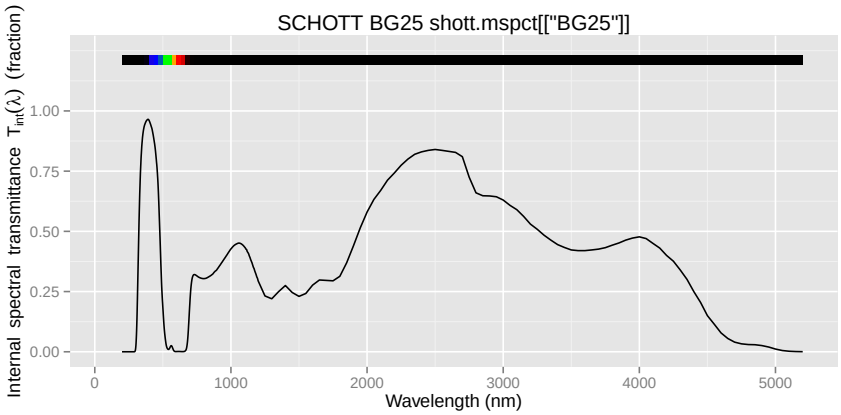


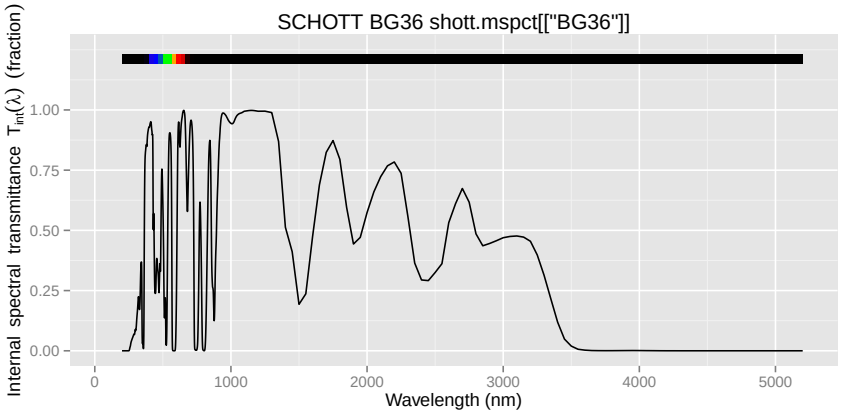

SCHOTT UG11 shott.mspct[["UG11"]]
Internal spectral transmittance $T_{int}(\lambda)$ (fraction)
1.00
0.75
0.50
0.25
0.00
0
1000
2000
3000
4000
5000
Wavelength (nm)

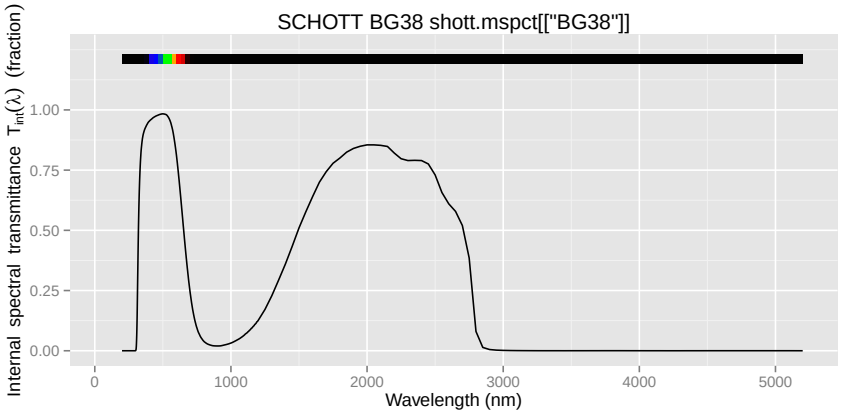

SCHOTT BG3 shott.mspct[["BG3"]]
Internal spectral transmittance $T_{int}(\lambda)$ (fraction)
1.00
0.75
0.50
0.25
0.00
0
1000
2000
3000
4000
5000
Wavelength (nm)

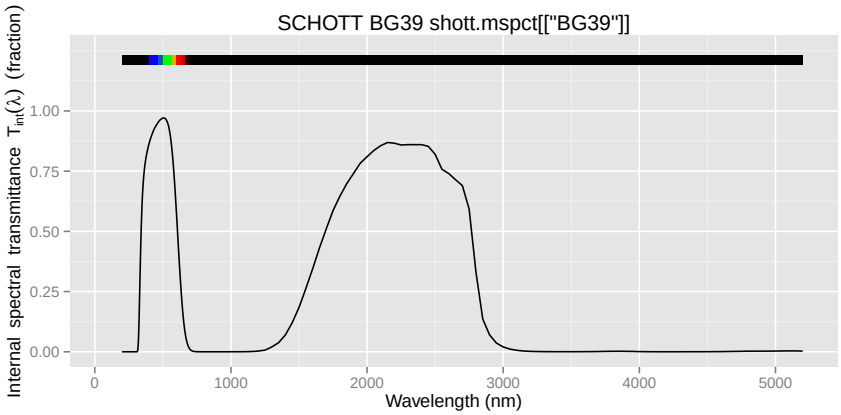

SCHOTT BG7 shott.mspct[["BG7"]]
Internal spectral transmittance $T_{int}(\lambda)$ (fraction)
1.00
0.75
0.50
0.25
0.00
0
1000
2000
3000
4000
5000
Wavelength (nm)

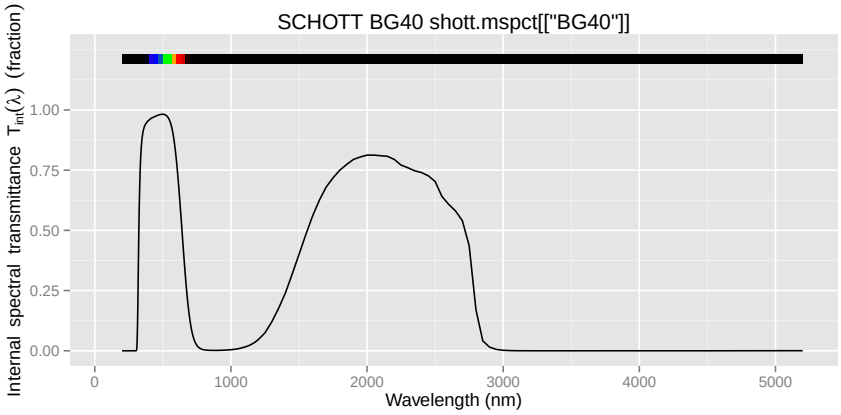

SCHOTT BG18 shott.mspct[["BG18"]]
Internal spectral transmittance $T_{int}(\lambda)$ (fraction)
1.00
0.75
0.50
0.25
0.00
0
1000
2000
3000
4000
5000
Wavelength (nm)

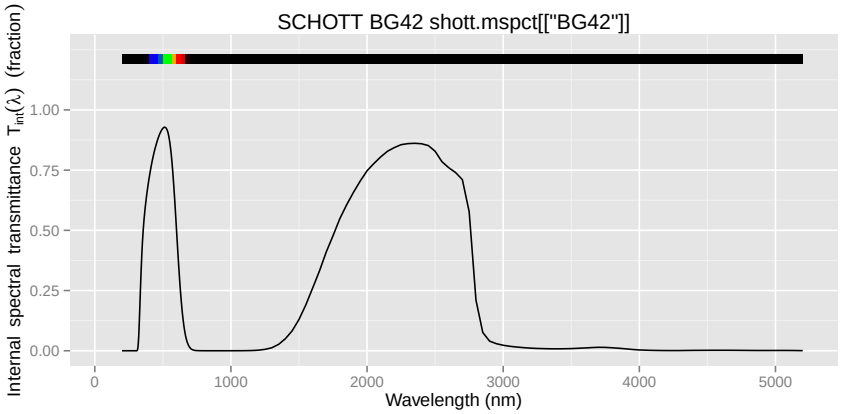

SCHOTT BG25 shott.mspct[["BG25"]]
Internal spectral transmittance $T_{int}(\lambda)$ (fraction)
1.00
0.75
0.50
0.25
0.00
0
1000
2000
3000
4000
5000
Wavelength (nm)

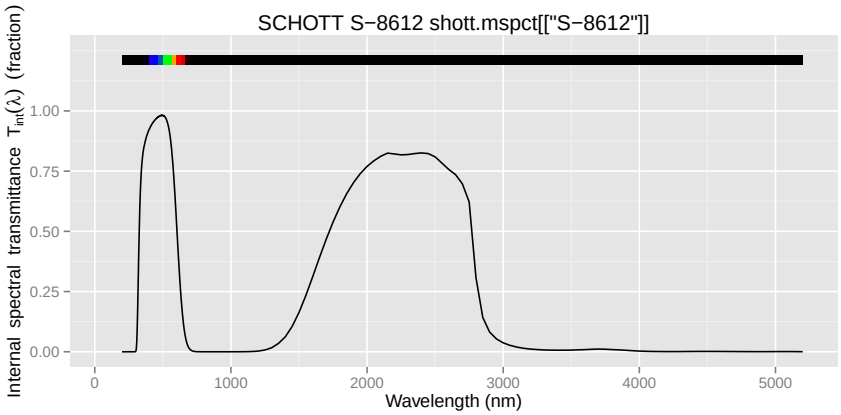

SCHOTT BG36 shott.mspct[["BG36"]]
Internal spectral transmittance $T_{int}(\lambda)$ (fraction)
1.00
0.75
0.50
0.25
0.00
0
1000
2000
3000
4000
5000
Wavelength (nm)

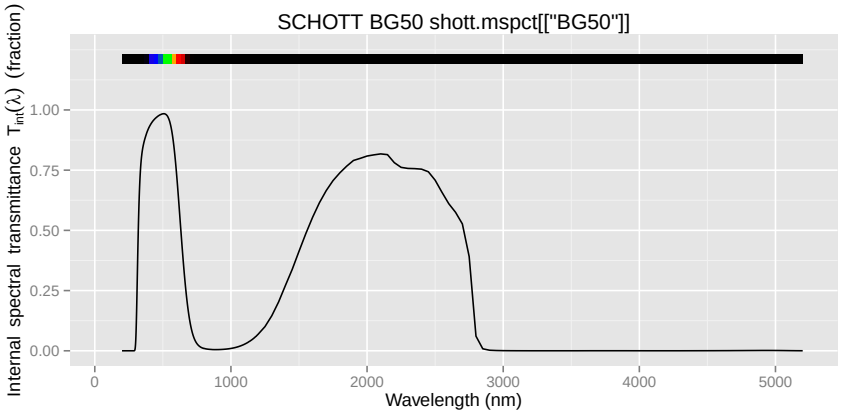

SCHOTT BG38 shott.mspct[["BG38"]]
Internal spectral transmittance $T_{int}(\lambda)$ (fraction)
1.00
0.75
0.50
0.25
0.00
0
1000
2000
3000
4000
5000
Wavelength (nm)

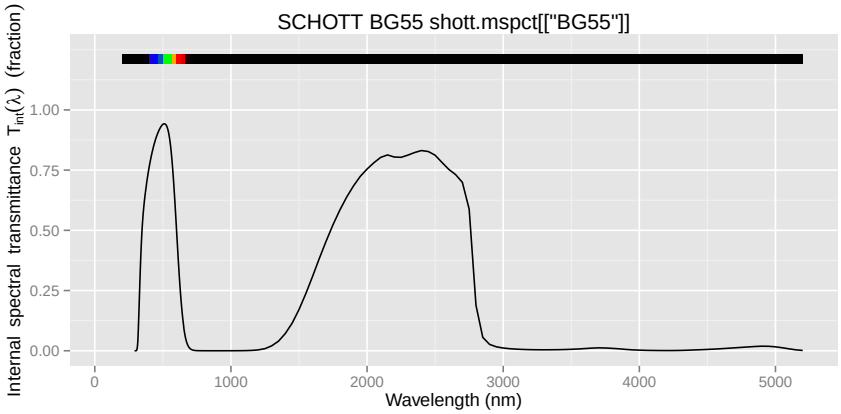

SCHOTT BG39 shott.mspct[["BG39"]]
Internal spectral transmittance $T_{int}(\lambda)$ (fraction)
1.00
0.75
0.50
0.25
0.00
0
1000
2000
3000
4000
5000
Wavelength (nm)

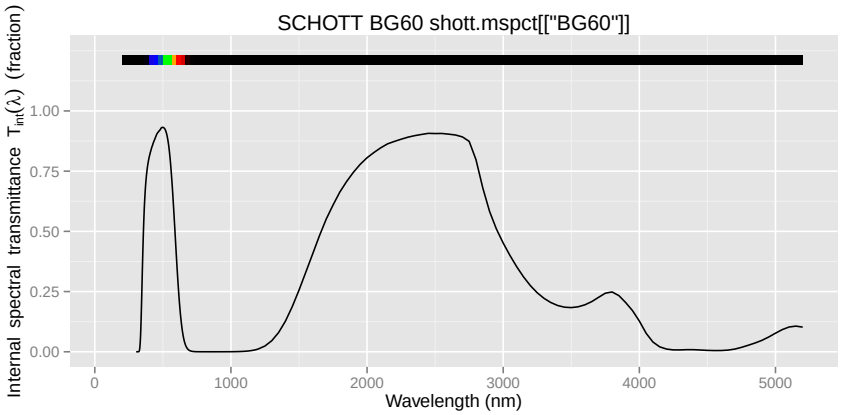

SCHOTT BG40 shott.mspct[["BG40"]]
Internal spectral transmittance $T_{int}(\lambda)$ (fraction)
1.00
0.75
0.50
0.25
0.00
0
1000
2000
3000
4000
5000
Wavelength (nm)

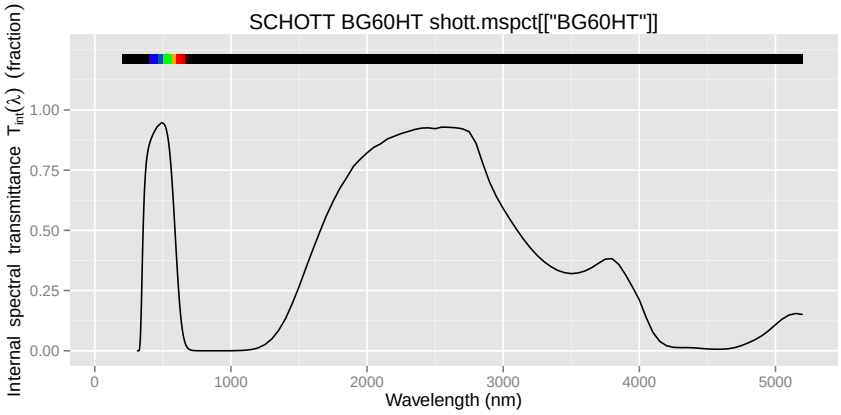

SCHOTT BG42 shott.mspct[["BG42"]]
Internal spectral transmittance $T_{int}(\lambda)$ (fraction)
1.00
0.75
0.50
0.25
0.00
0
1000
2000
3000
4000
5000
Wavelength (nm)

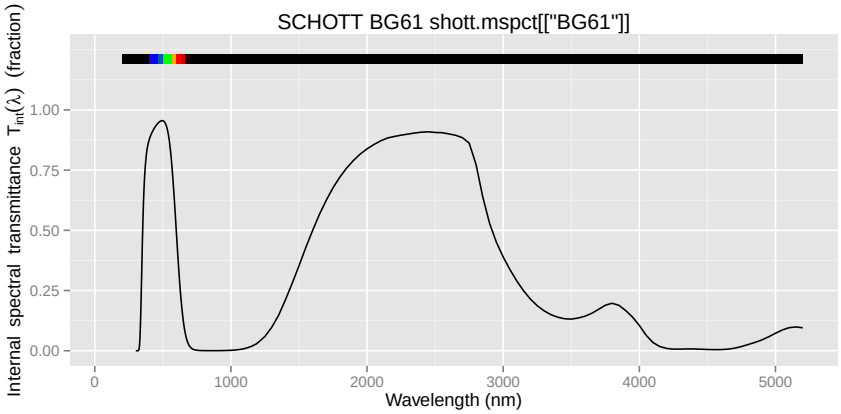

SCHOTT S−8612 shott.mspct[["S−8612"]]
Internal spectral transmittance $T_{int}(\lambda)$ (fraction)
1.00
0.75
0.50
0.25
0.00
0
1000
2000
3000
4000
5000
Wavelength (nm)

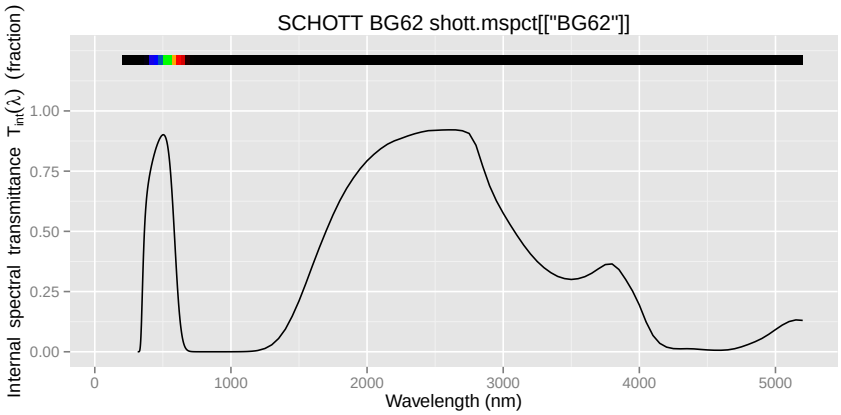

SCHOTT BG50 shott.mspct[["BG50"]]
Internal spectral transmittance $T_{int}(\lambda)$ (fraction)
1.00
0.75
0.50
0.25
0.00
0
1000
2000
3000
4000
5000
Wavelength (nm)

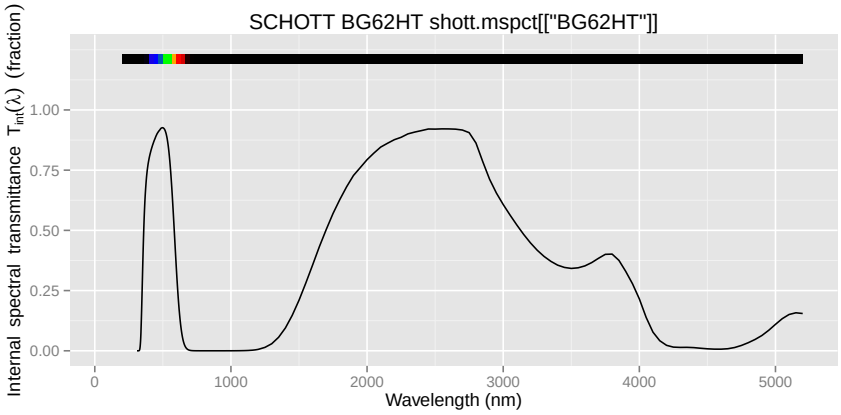

SCHOTT BG55 shott.mspct[["BG55"]]
Internal spectral transmittance $T_{int}(\lambda)$ (fraction)
1.00
0.75
0.50
0.25
0.00
0
1000
2000
3000
4000
5000
Wavelength (nm)

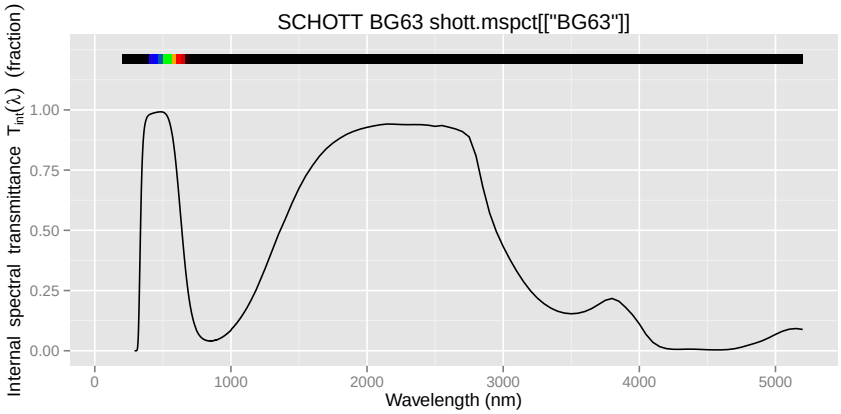

SCHOTT BG60 shott.mspct[["BG60"]]
Internal spectral transmittance $T_{int}(\lambda)$ (fraction)
1.00
0.75
0.50
0.25
0.00
0
1000
2000
3000
4000
5000
Wavelength (nm)

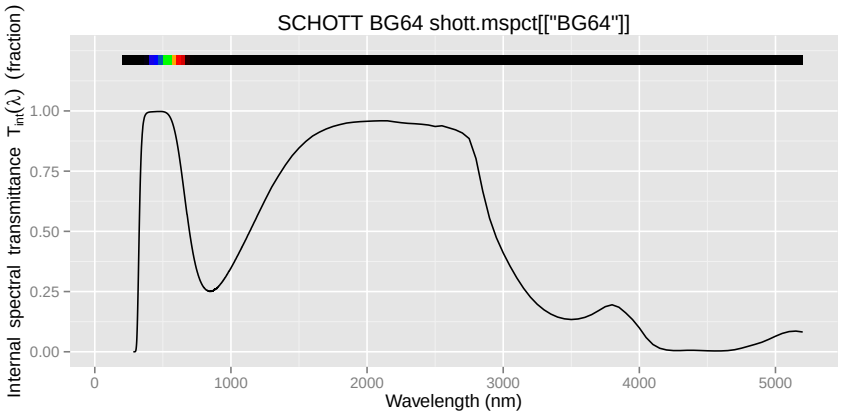

SCHOTT BG60HT shott.mspct[["BG60HT"]]
Internal spectral transmittance $T_{int}(\lambda)$ (fraction)
1.00
0.75
0.50
0.25
0.00
0
1000
2000
3000
4000
5000
Wavelength (nm)

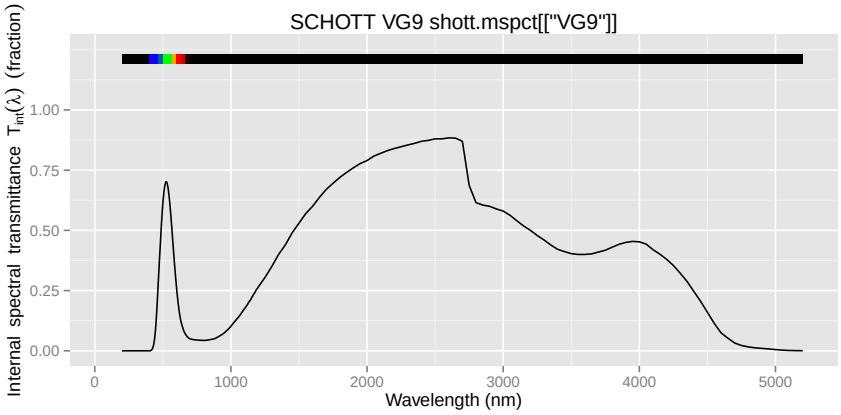

SCHOTT BG61 shott.mspct[["BG61"]]
Internal spectral transmittance $T_{int}(\lambda)$ (fraction)
1.00
0.75
0.50
0.25
0.00
0
1000
2000
3000
4000
5000
Wavelength (nm)

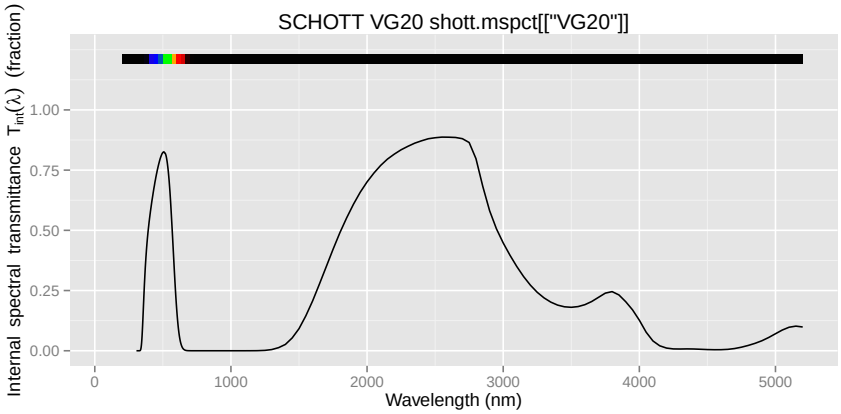

SCHOTT BG62 shott.mspct[["BG62"]]
Internal spectral transmittance $T_{int}(\lambda)$ (fraction)
1.00
0.75
0.50
0.25
0.00
0
1000
2000
3000
4000
5000
Wavelength (nm)

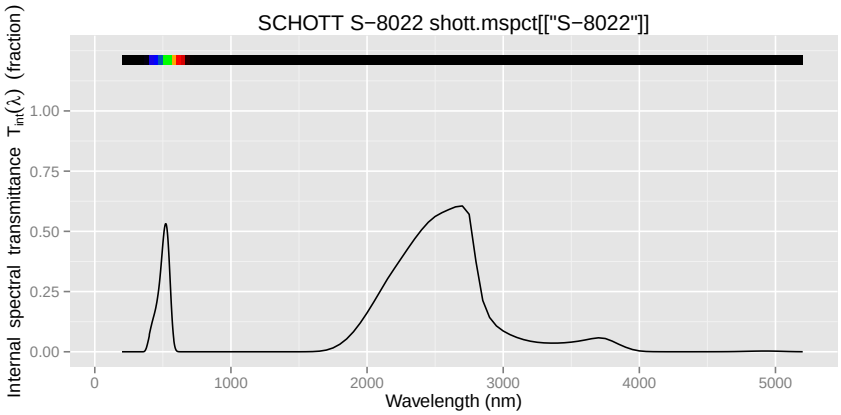

SCHOTT BG62HT shott.mspct[["BG62HT"]]
Internal spectral transmittance $T_{int}(\lambda)$ (fraction)
1.00
0.75
0.50
0.25
0.00
0
1000
2000
3000
4000
5000
Wavelength (nm)

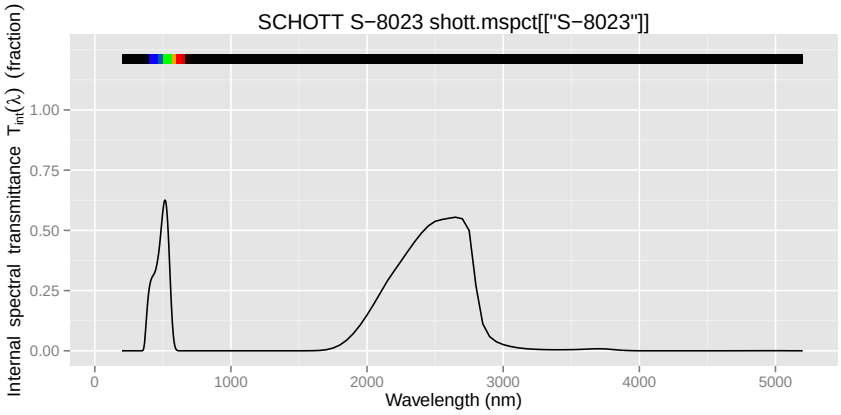

SCHOTT BG63 shott.mspct[["BG63"]]
Internal spectral transmittance $T_{int}(\lambda)$ (fraction)
1.00
0.75
0.50
0.25
0.00
0
1000
2000
3000
4000
5000
Wavelength (nm)

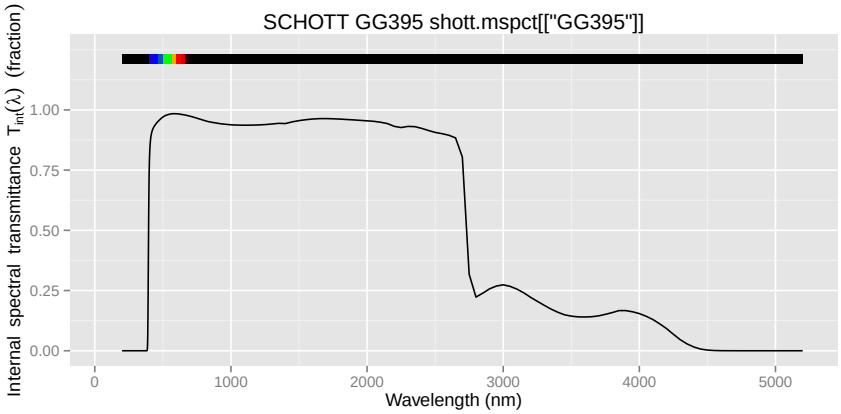

SCHOTT BG64 shott.mspct[["BG64"]]
Internal spectral transmittance $T_{int}(\lambda)$ (fraction)
1.00
0.75
0.50
0.25
0.00
0
1000
2000
3000
4000
5000
Wavelength (nm)

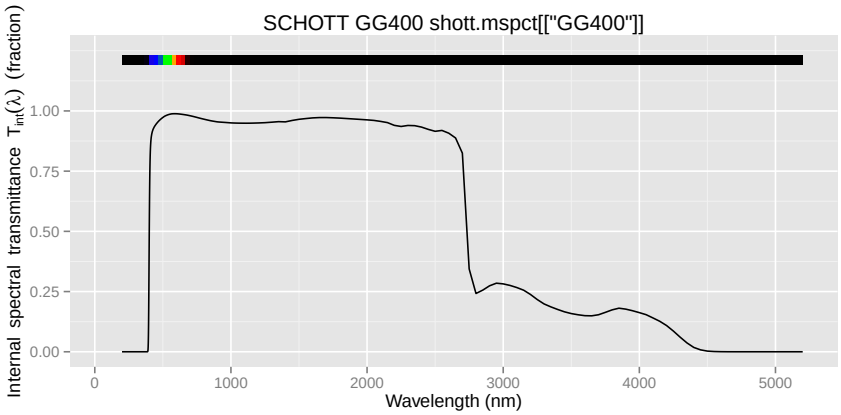

SCHOTT VG9 shott.mspct[["VG9"]]
Internal spectral transmittance $T_{int}(\lambda)$ (fraction)
1.00
0.75
0.50
0.25
0.00
0
1000
2000
3000
4000
5000
Wavelength (nm)

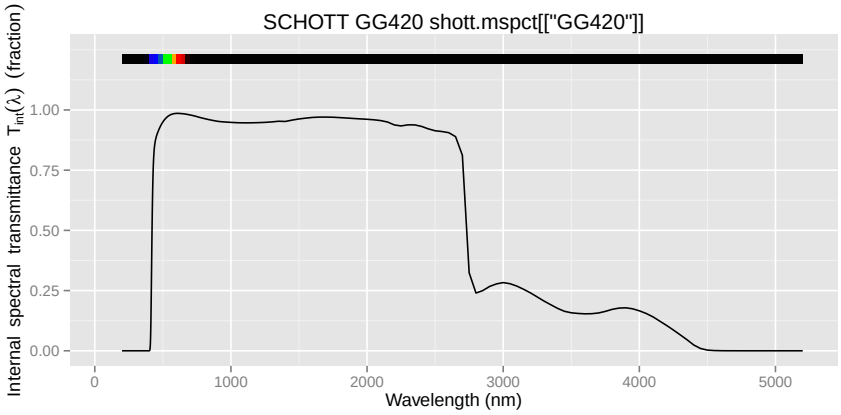

SCHOTT VG20 shott.mspct[["VG20"]]
Internal spectral transmittance $T_{int}(\lambda)$ (fraction)
1.00
0.75
0.50
0.25
0.00
0
1000
2000
3000
4000
5000
Wavelength (nm)

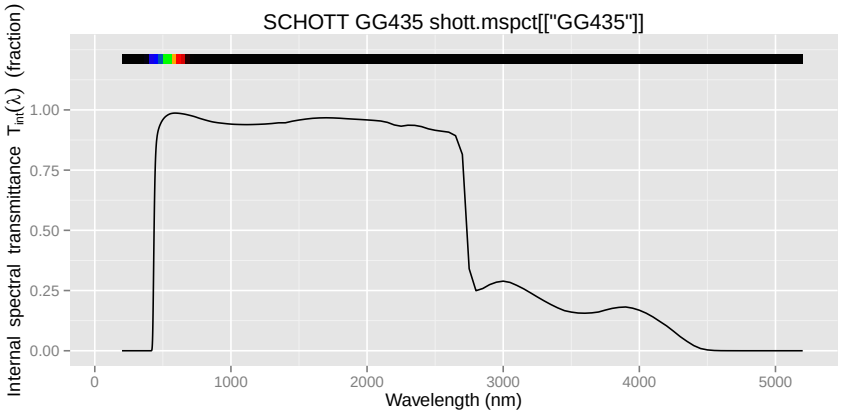

SCHOTT S−8022 shott.mspct[["S−8022"]]
Internal spectral transmittance $T_{int}(\lambda)$ (fraction)
1.00
0.75
0.50
0.25
0.00
0
1000
2000
3000
4000
5000
Wavelength (nm)

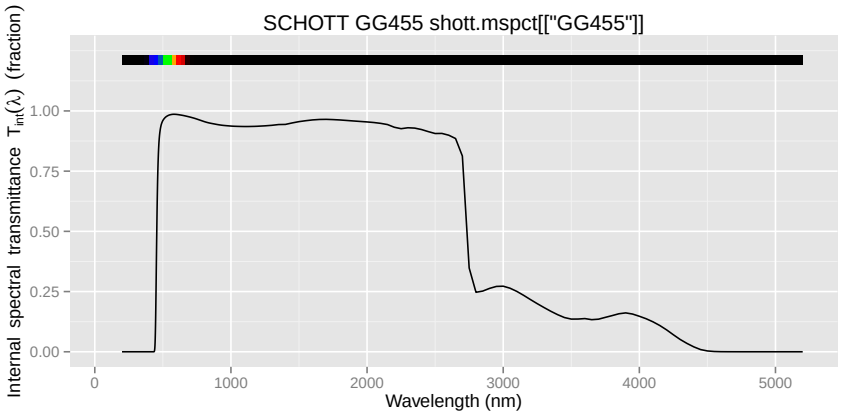

SCHOTT S−8023 shott.mspct[["S−8023"]]
Internal spectral transmittance $T_{int}(\lambda)$ (fraction)
1.00
0.75
0.50
0.25
0.00
0
1000
2000
3000
4000
5000
Wavelength (nm)

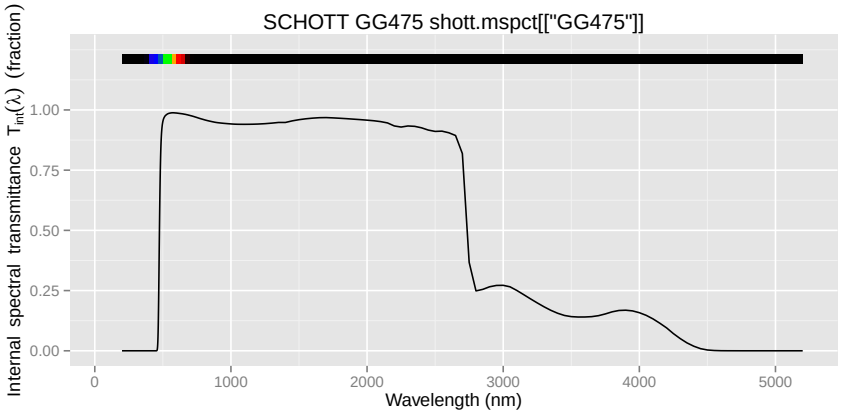

SCHOTT GG395 shott.mspct[["GG395"]]
Internal spectral transmittance $T_{int}(\lambda)$ (fraction)
1.00
0.75
0.50
0.25
0.00
0
1000
2000
3000
4000
5000
Wavelength (nm)

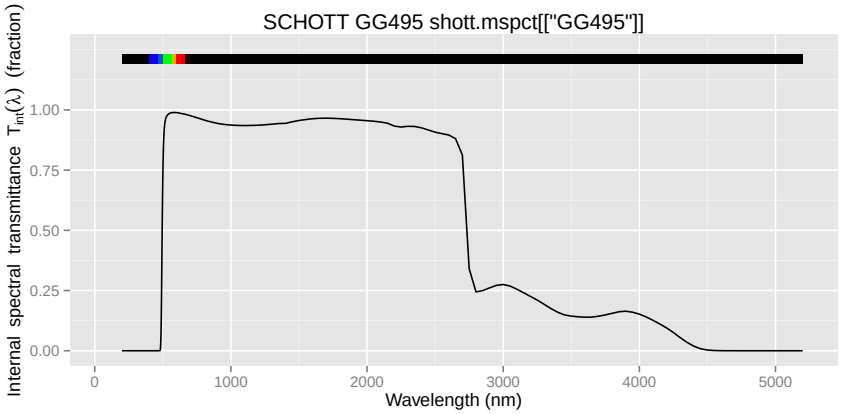

SCHOTT GG400 shott.mspct[["GG400"]]
Internal spectral transmittance $T_{int}(\lambda)$ (fraction)
1.00
0.75
0.50
0.25
0.00
0
1000
2000
3000
4000
5000
Wavelength (nm)

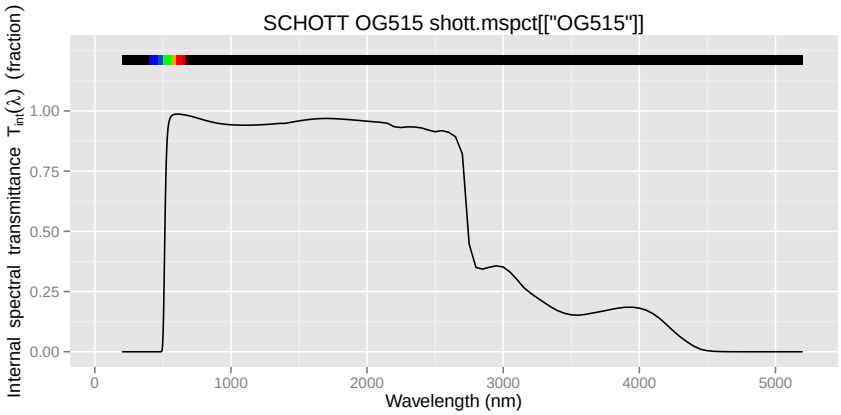

SCHOTT GG420 shott.mspct[["GG420"]]
Internal spectral transmittance $T_{int}(\lambda)$ (fraction)
1.00
0.75
0.50
0.25
0.00
0
1000
2000
3000
4000
5000
Wavelength (nm)

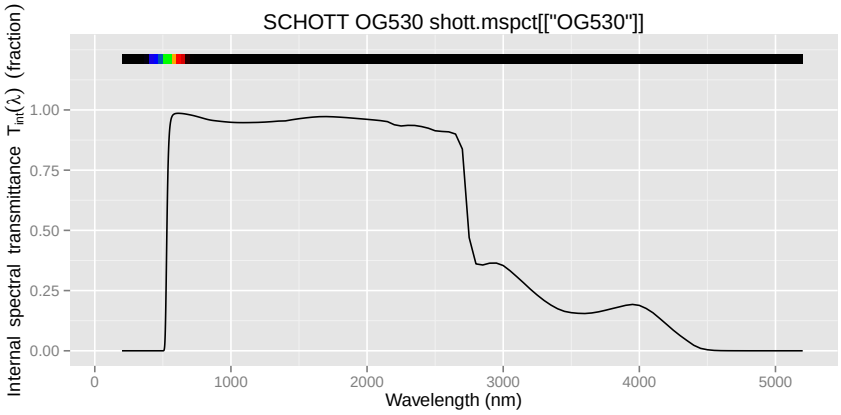

SCHOTT GG435 shott.mspct[["GG435"]]
Internal spectral transmittance $T_{int}(\lambda)$ (fraction)
1.00
0.75
0.50
0.25
0.00
0
1000
2000
3000
4000
5000
Wavelength (nm)

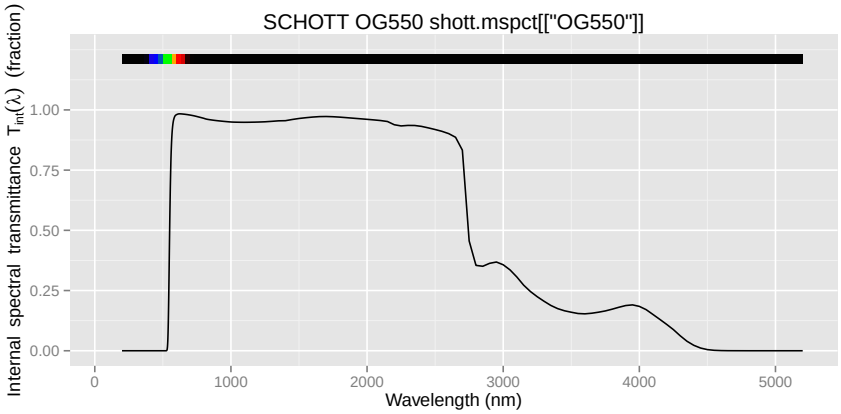

SCHOTT GG455 shott.mspct[["GG455"]]
Internal spectral transmittance $T_{int}(\lambda)$ (fraction)
1.00
0.75
0.50
0.25
0.00
0
1000
2000
3000
4000
5000
Wavelength (nm)

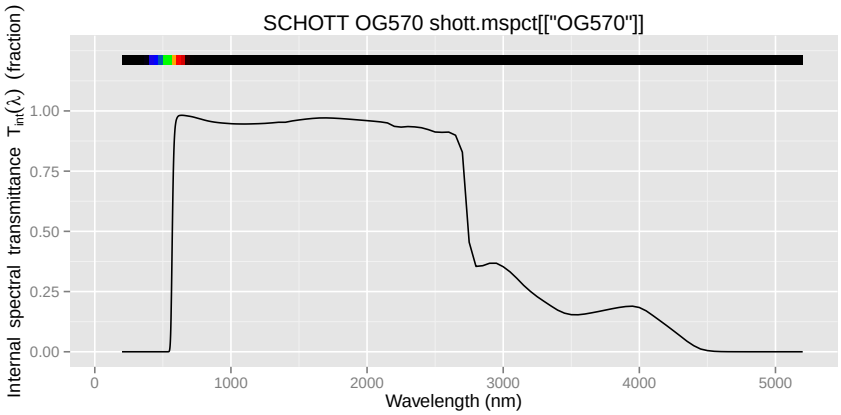

SCHOTT GG475 shott.mspct[["GG475"]]
Internal spectral transmittance $T_{int}(\lambda)$ (fraction)
1.00
0.75
0.50
0.25
0.00
0
1000
2000
3000
4000
5000
Wavelength (nm)

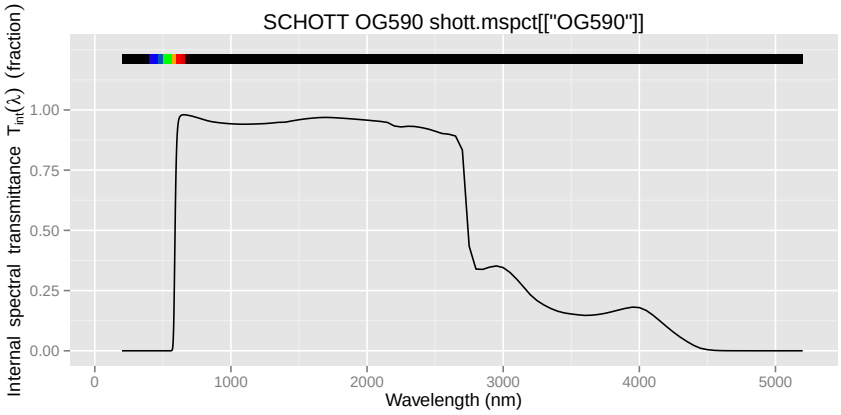

SCHOTT GG495 shott.mspct[["GG495"]]
Internal spectral transmittance $T_{int}(\lambda)$ (fraction)
1.00
0.75
0.50
0.25
0.00
0
1000
2000
3000
4000
5000
Wavelength (nm)

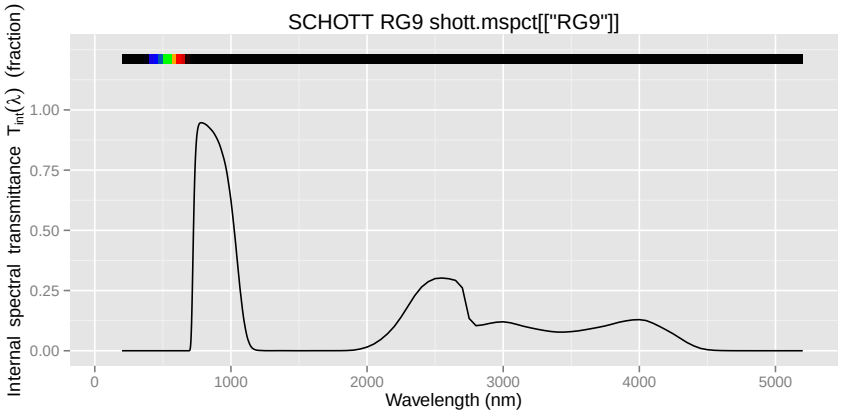

SCHOTT OG515 shott.mspct[["OG515"]]
Internal spectral transmittance $T_{int}(\lambda)$ (fraction)
1.00
0.75
0.50
0.25
0.00
0
1000
2000
3000
4000
5000
Wavelength (nm)


SCHOTT OG530 shott.mspct[["OG530"]]
Internal spectral transmittance $T_{int}(\lambda)$ (fraction)
1.00
0.75
0.50
0.25
0.00
0
1000
2000
3000
4000
5000
Wavelength (nm)


SCHOTT OG550 shott.mspct[["OG550"]]
Internal spectral transmittance $T_{int}(\lambda)$ (fraction)
1.00
0.75
0.50
0.25
0.00
0
1000
2000
3000
4000
5000
Wavelength (nm)


SCHOTT OG570 shott.mspct[["OG570"]]
Internal spectral transmittance $T_{int}(\lambda)$ (fraction)
1.00
0.75
0.50
0.25
0.00
0
1000
2000
3000
4000
5000
Wavelength (nm)


SCHOTT OG590 shott.mspct[["OG590"]]
Internal spectral transmittance $T_{int}(\lambda)$ (fraction)
1.00
0.75
0.50
0.25
0.00
0
1000
2000
3000
4000
5000
Wavelength (nm)


SCHOTT RG9 shott.mspct[["RG9"]]
Internal spectral transmittance $T_{int}(\lambda)$ (fraction)
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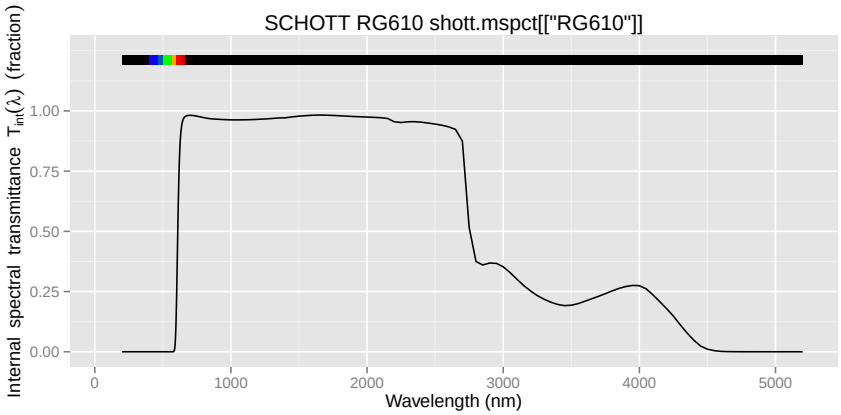
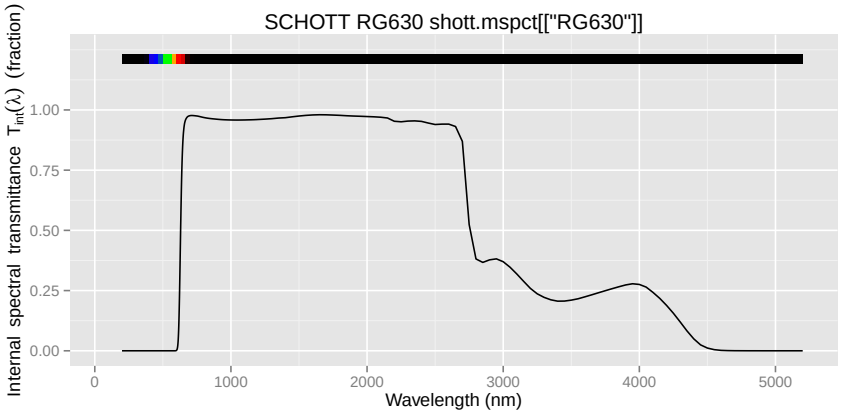
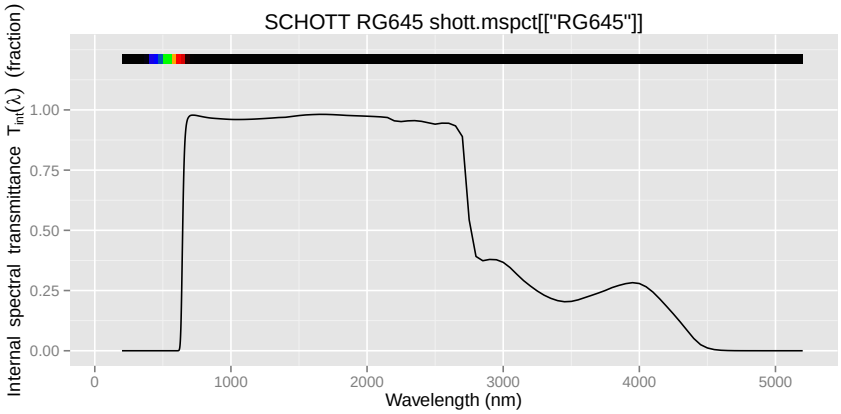
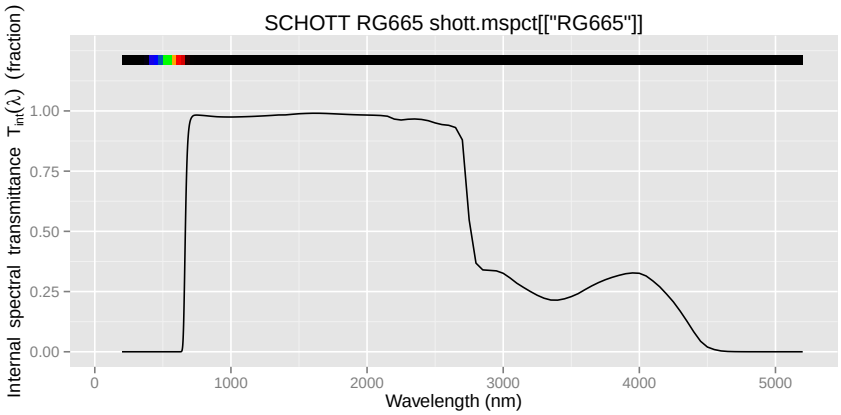
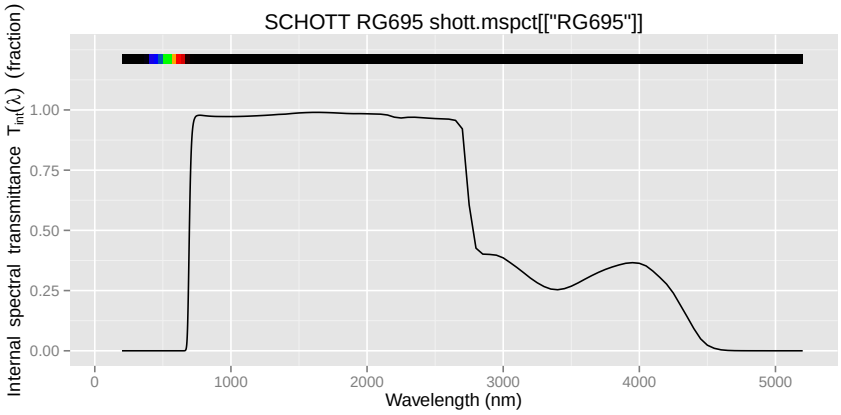
0.75
0.50
0.25
0.00
0
1000
2000
3000
4000
5000
Wavelength (nm)

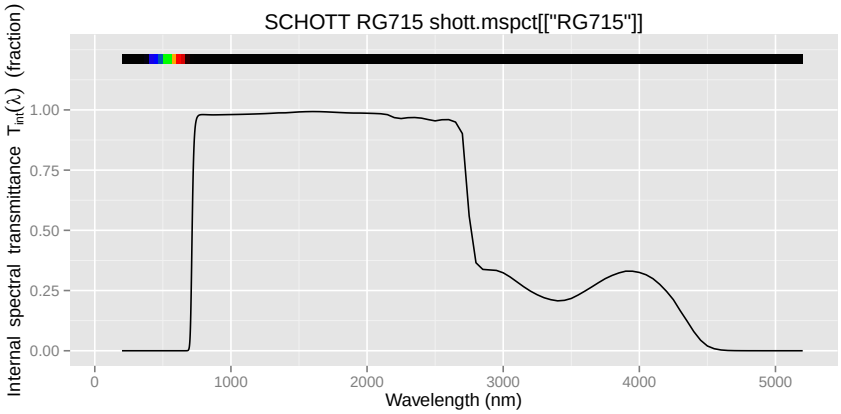

SCHOTT RG610 shott.mspct[["RG610"]]
Internal spectral transmittance $T_{int}(\lambda)$ (fraction)
1.00
0.75
0.50
0.25
0.00
0
1000
2000
3000
4000
5000
Wavelength (nm)

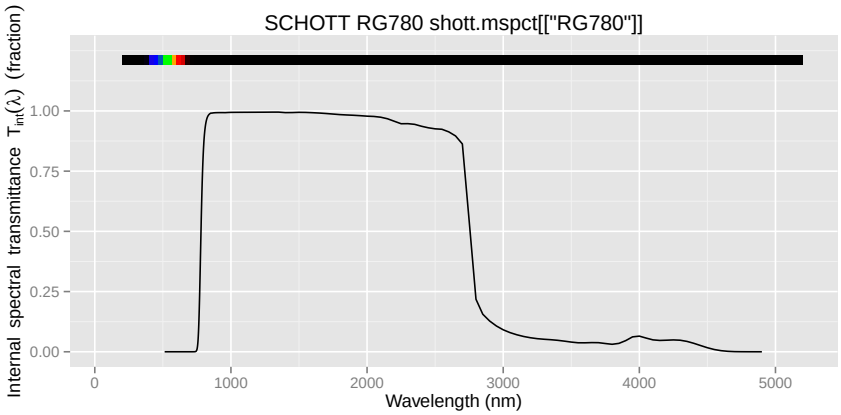

SCHOTT RG630 shott.mspct[["RG630"]]
Internal spectral transmittance $T_{int}(\lambda)$ (fraction)
1.00
0.75
0.50
0.25
0.00
0
1000
2000
3000
4000
5000
Wavelength (nm)

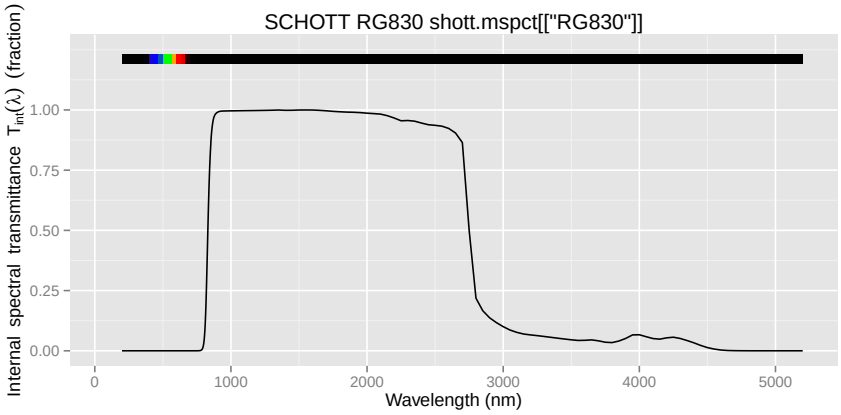

SCHOTT RG645 shott.mspct[["RG645"]]
Internal spectral transmittance $T_{int}(\lambda)$ (fraction)
1.00
0.75
0.50
0.25
0.00
0
1000
2000
3000
4000
5000
Wavelength (nm)

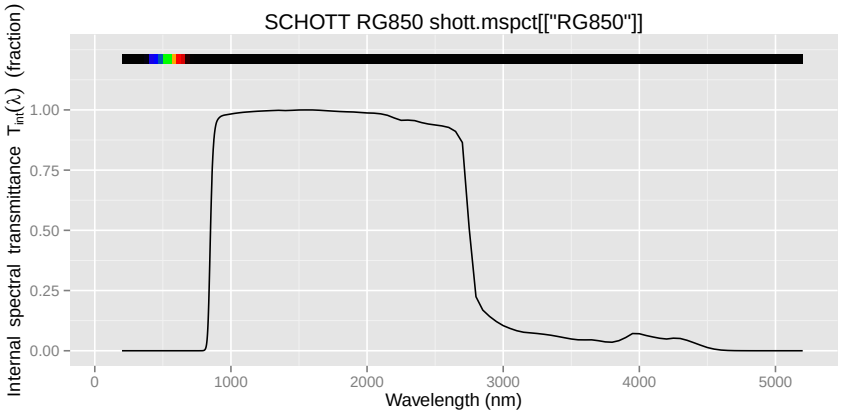

SCHOTT RG665 shott.mspct[["RG665"]]
Internal spectral transmittance $T_{int}(\lambda)$ (fraction)
1.00
0.75
0.50
0.25
0.00
0
1000
2000
3000
4000
5000
Wavelength (nm)


SCHOTT RG695 shott.mspct[["RG695"]]
Internal spectral transmittance $T_{int}(\lambda)$ (fraction)
1.00
0.75
0.50
0.25
0.00
0
1000
2000
3000
4000
5000
Wavelength (nm)


SCHOTT RG715 shott.mspct[["RG715"]]
Internal spectral transmittance $T_{int}(\lambda)$ (fraction)
1.00
0.75
0.50
0.25
0.00
0
1000
2000
3000
4000
5000
Wavelength (nm)


SCHOTT RG780 shott.mspct[["RG780"]]
Internal spectral transmittance $T_{int}(\lambda)$ (fraction)
1.00
0.75
0.50
0.25
0.00
0
1000
2000
3000
4000
5000
Wavelength (nm)


SCHOTT RG830 shott.mspct[["RG830"]]
Internal spectral transmittance $T_{int}(\lambda)$ (fraction)
1.00
0.75
0.50
0.25
0.00
0
1000
2000
3000
4000
5000
Wavelength (nm)


SCHOTT RG850 shott.mspct[["RG850"]]
Internal spectral transmittance $T_{int}(\lambda)$ (fraction)
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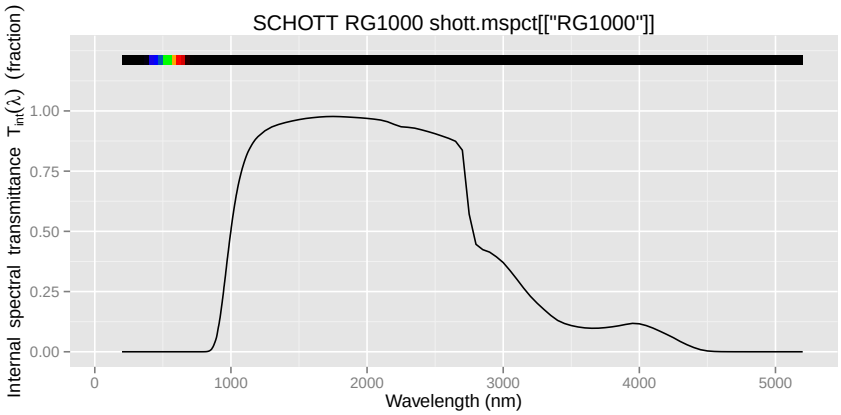
0.75
0.50
0.25
0.00
0
1000
2000
3000
4000
5000
Wavelength (nm)


SCHOTT RG1000 shott.mspct[["RG1000"]]
Internal spectral transmittance $T_{int}(\lambda)$ (fraction)
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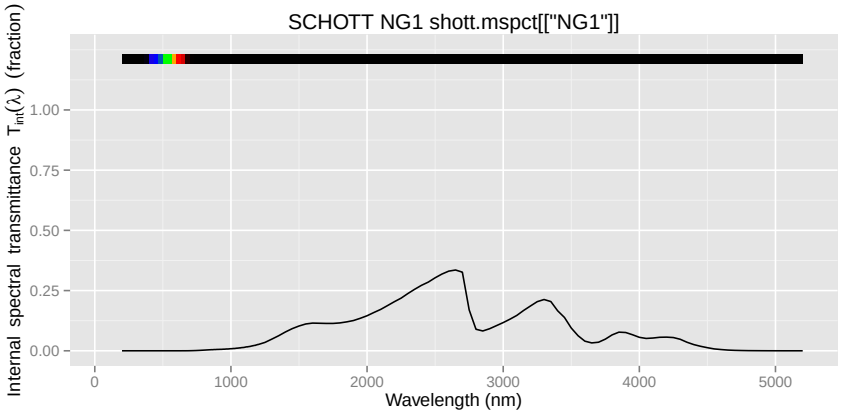
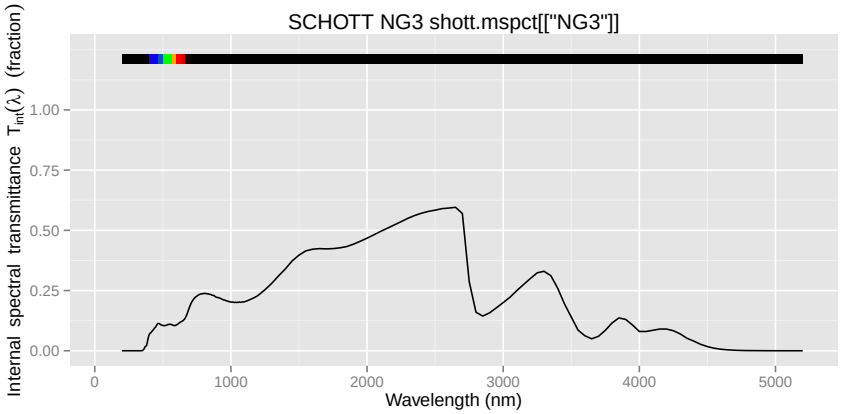
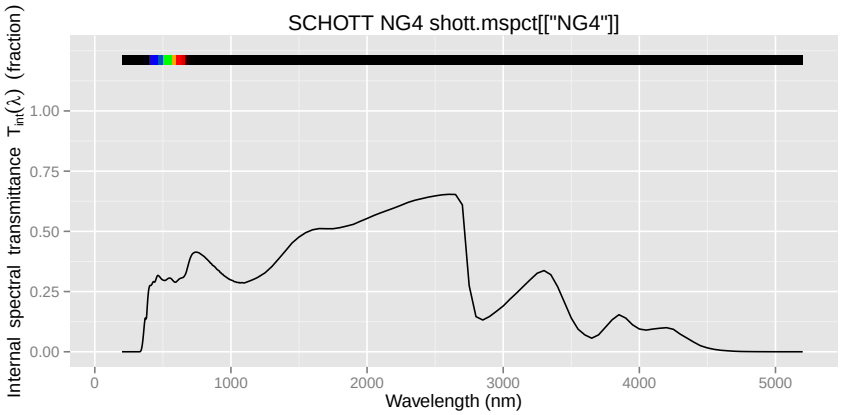
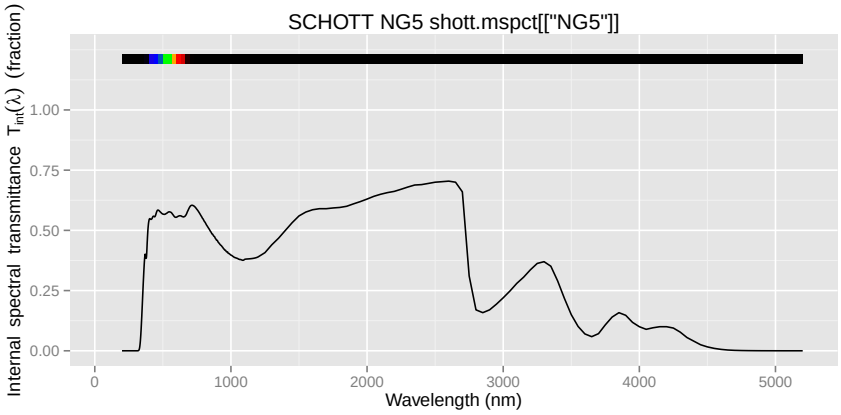
0.75
0.50
0.25
0.00
0
1000
2000
3000
4000
5000
Wavelength (nm)


SCHOTT NG1 shott.mspct[["NG1"]]
Internal spectral transmittance $T_{int}(\lambda)$ (fraction)
1.00
0.75
0.50
0.25
0.00
0
1000
2000
3000
4000
5000
Wavelength (nm)


SCHOTT NG3 shott.mspct[["NG3"]]
Internal spectral transmittance $T_{int}(\lambda)$ (fraction)
1.00
0.75
0.50
0.25
0.00
0
1000
2000
3000
4000
5000
Wavelength (nm)


SCHOTT NG4 shott.mspct[["NG4"]]
Internal spectral transmittance $T_{int}(\lambda)$ (fraction)
1.00
0.75
0.50
0.25
0.00
0
1000
2000
3000
4000
5000
Wavelength (nm)


SCHOTT NG5 shott.mspct[["NG5"]]
Internal spectral transmittance $T_{int}(\lambda)$ (fraction)
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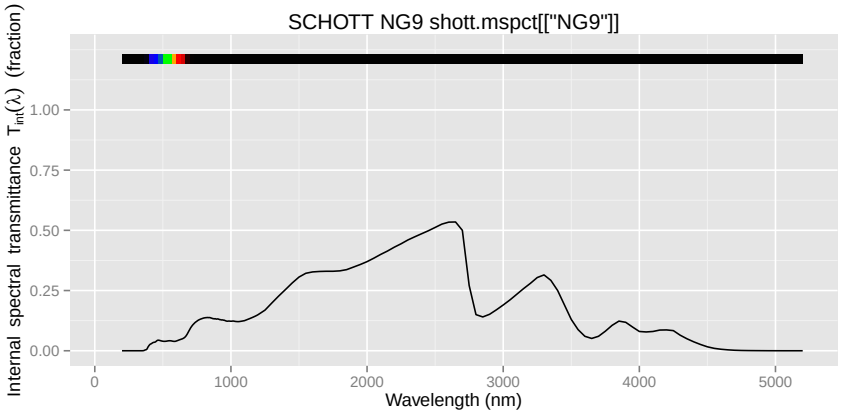
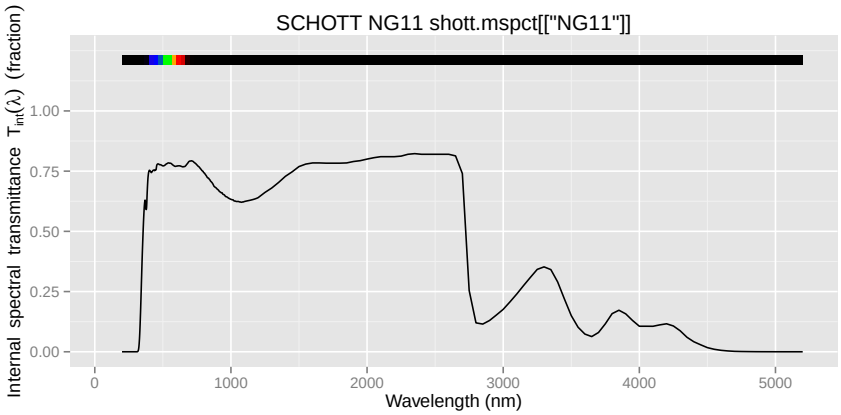
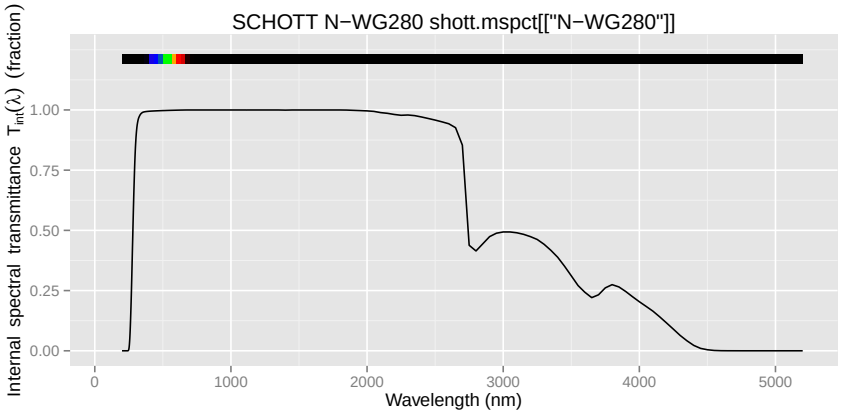
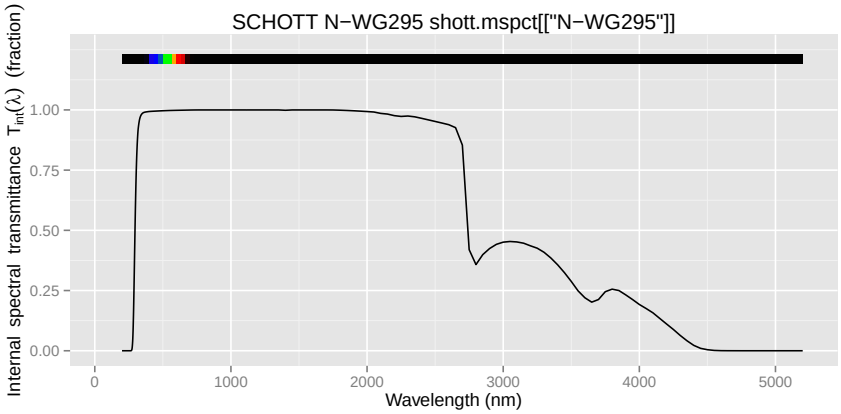
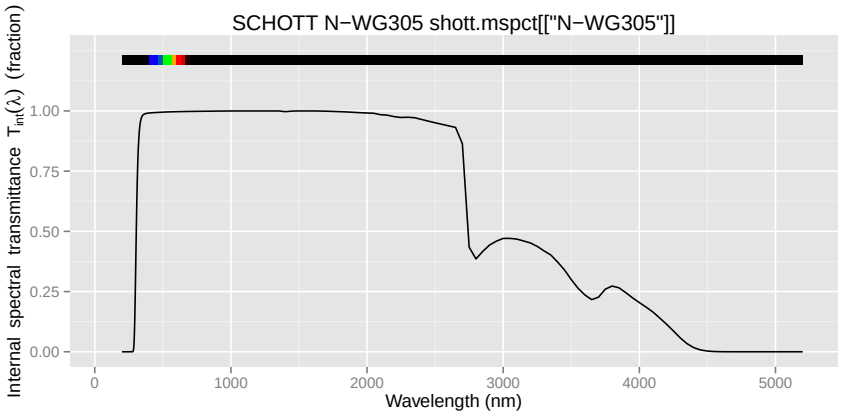
0.75
0.50
0.25
0.00
0
1000
2000
3000
4000
5000
Wavelength (nm)

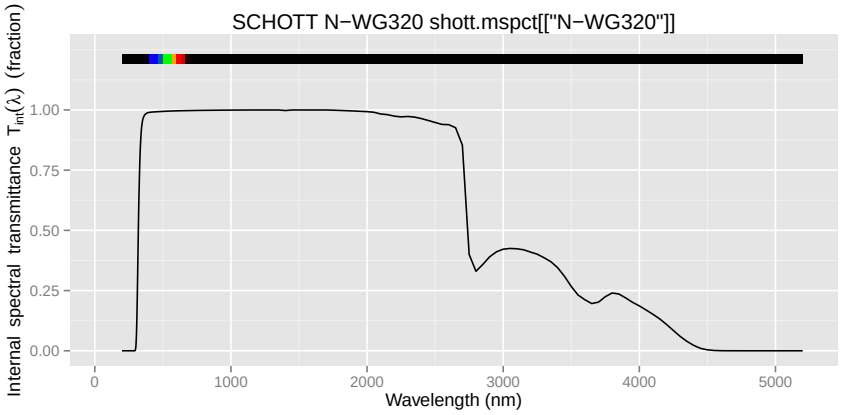

SCHOTT NG9 shott.mspct[["NG9"]]
Internal spectral transmittance $T_{int}(\lambda)$ (fraction)
1.00
0.75
0.50
0.25
0.00
0
1000
2000
3000
4000
5000
Wavelength (nm)

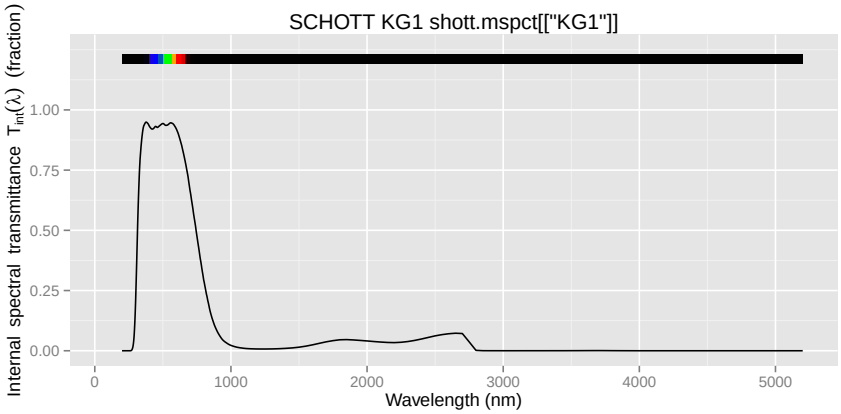

SCHOTT NG11 shott.mspct[["NG11"]]
Internal spectral transmittance $T_{int}(\lambda)$ (fraction)
1.00
0.75
0.50
0.25
0.00
0
1000
2000
3000
4000
5000
Wavelength (nm)

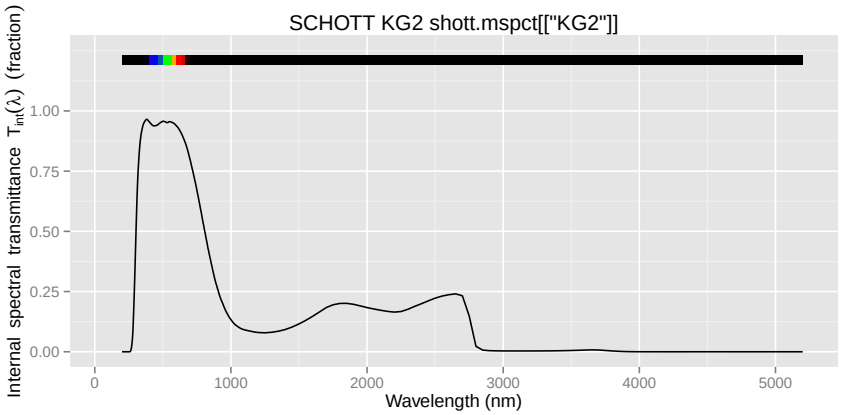

SCHOTT N−WG280 shott.mspct[["N−WG280"]]
Internal spectral transmittance $T_{int}(\lambda)$ (fraction)
1.00
0.75
0.50
0.25
0.00
0
1000
2000
3000
4000
5000
Wavelength (nm)

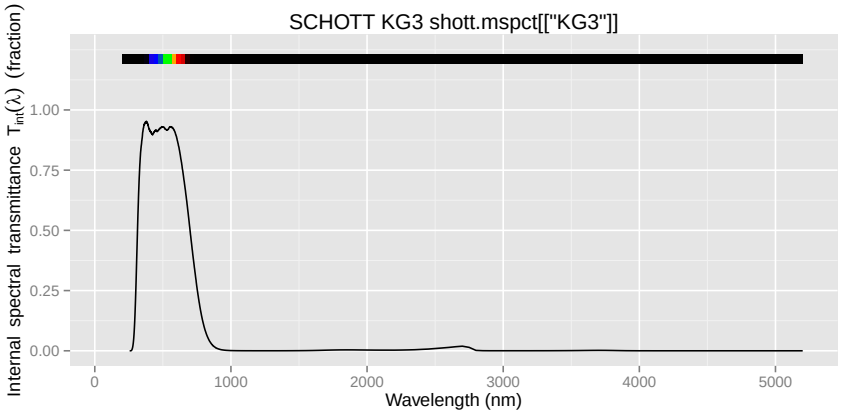

SCHOTT N−WG295 shott.mspct[["N−WG295"]]
Internal spectral transmittance $T_{int}(\lambda)$ (fraction)
1.00
0.75
0.50
0.25
0.00
0
1000
2000
3000
4000
5000
Wavelength (nm)

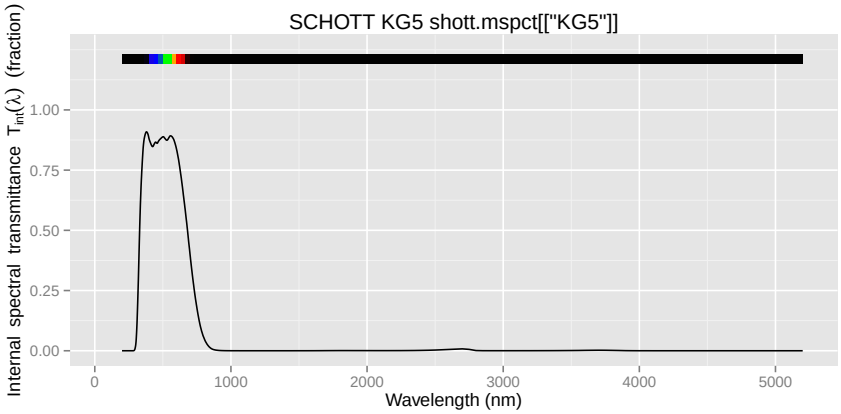

SCHOTT N−WG305 shott.mspct[["N−WG305"]]
Internal spectral transmittance $T_{int}(\lambda)$ (fraction)
1.00
0.75
0.50
0.25
0.00
0
1000
2000
3000
4000
5000
Wavelength (nm)

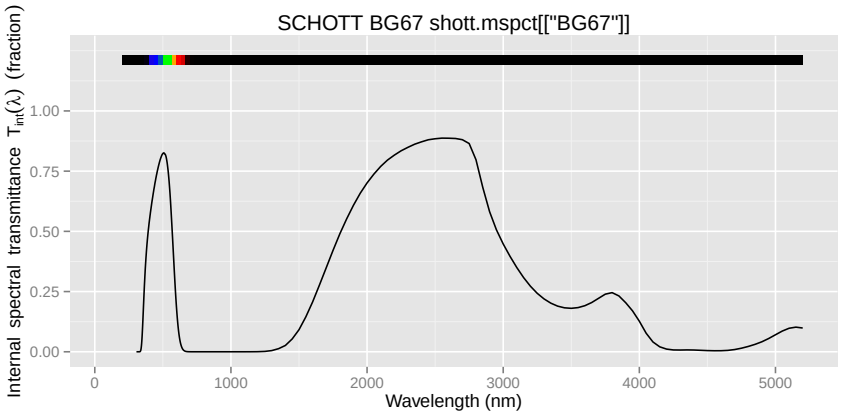

SCHOTT N−WG320 shott.mspct[["N−WG320"]]
Internal spectral transmittance $T_{int}(\lambda)$ (fraction)
1.00
0.75
0.50
0.25
0.00
0
1000
2000
3000
4000
5000
Wavelength (nm)

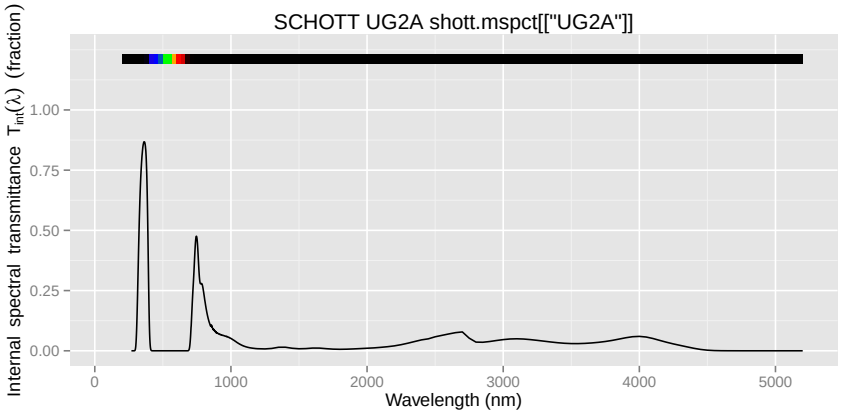

SCHOTT KG1 shott.mspct[["KG1"]]
Internal spectral transmittance $T_{int}(\lambda)$ (fraction)
1.00
0.75
0.50
0.25
0.00
0
1000
2000
3000
4000
5000
Wavelength (nm)

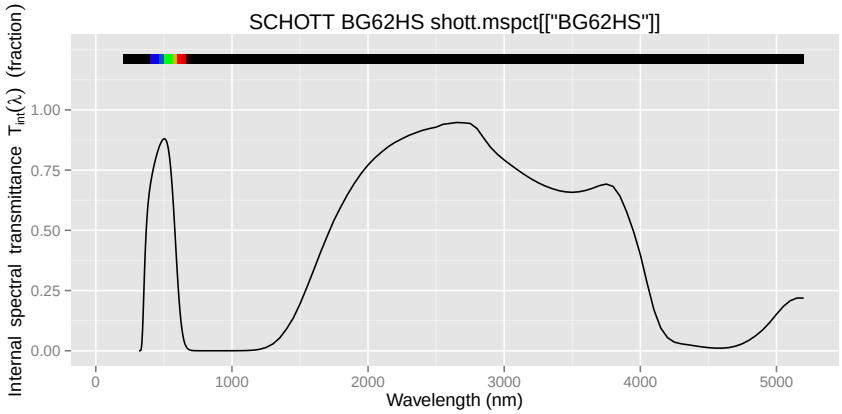

SCHOTT KG2 shott.mspct[["KG2"]]
Internal spectral transmittance $T_{int}(\lambda)$ (fraction)
1.00
0.75
0.50
0.25
0.00
0
1000
2000
3000
4000
5000
Wavelength (nm)

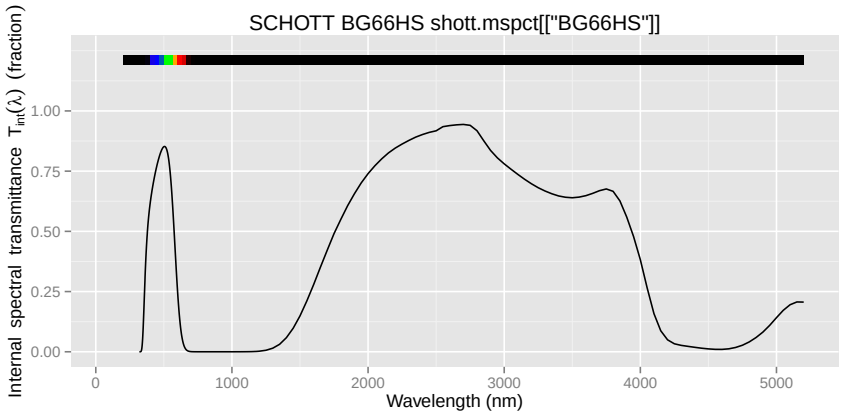

SCHOTT KG3 shott.mspct[["KG3"]]
Internal spectral transmittance $T_{int}(\lambda)$ (fraction)
1.00
0.75
0.50
0.25
0.00
0
1000
2000
3000
4000
5000
Wavelength (nm)


SCHOTT KG5 shott.mspct[["KG5"]]
Internal spectral transmittance $T_{int}(\lambda)$ (fraction)
1.00
0.75
0.50
0.25
0.00
0
1000
2000
3000
4000
5000
Wavelength (nm)


SCHOTT BG67 shott.mspct[["BG67"]]
Internal spectral transmittance $T_{int}(\lambda)$ (fraction)
1.00
0.75
0.50
0.25
0.00
0
1000
2000
3000
4000
5000
Wavelength (nm)

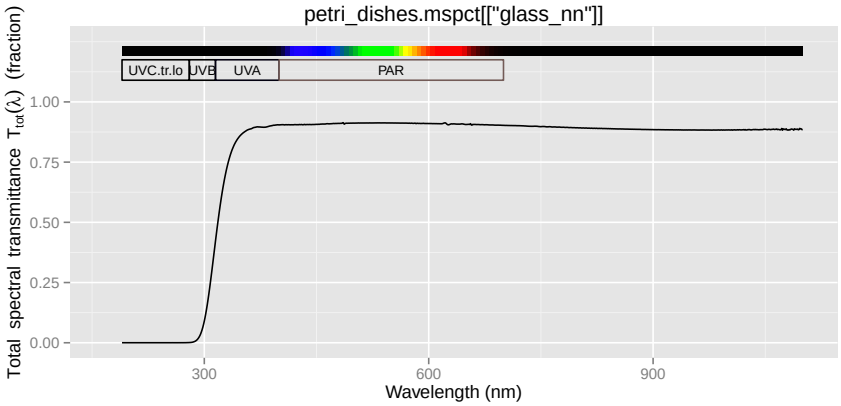

SCHOTT UG2A shott.mspct[["UG2A"]]
Internal spectral transmittance $T_{int}(\lambda)$ (fraction)
1.00
0.75
0.50
0.25
0.00
0
1000
2000
3000
4000
5000
Wavelength (nm)

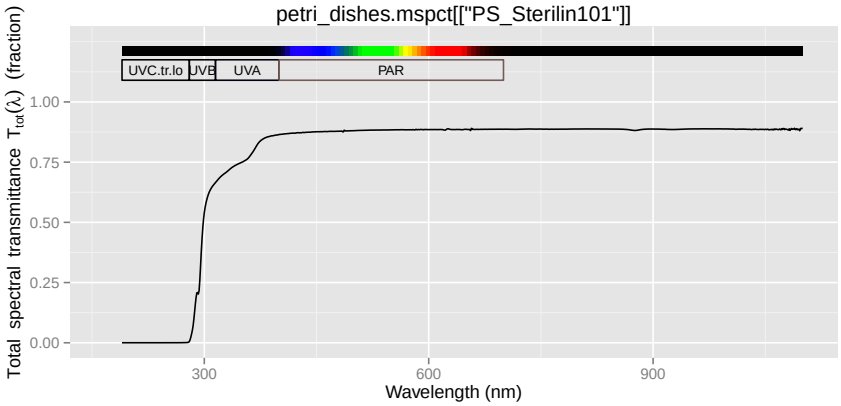


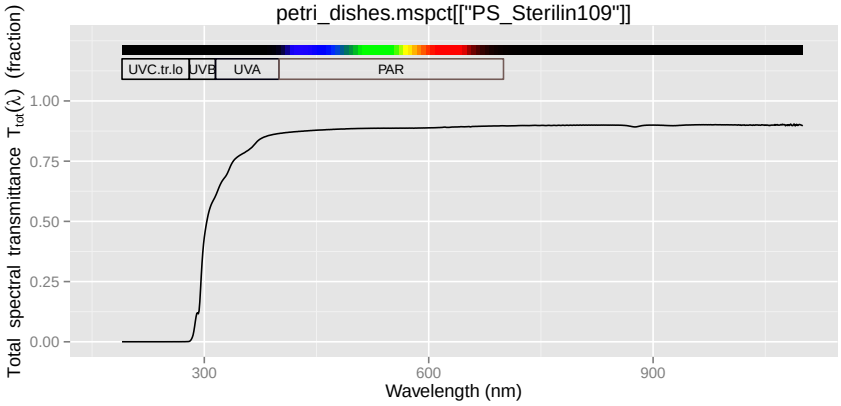


6 Petri dishes

```
plot(petri_dishes.mspct[["glass_nn"]])
plot(petri_dishes.mspct[["PS_Sterilin101"]])
plot(petri_dishes.mspct[["PS_Sterilin109"]])
```


petri_dishes.mspct[["glass_nn"]]
UVC.tr.lo
UVB
UVA
PAR
Total spectral transmittance $T_{tot}(\lambda)$ (fraction)
1.00
0.75
0.50
0.25
0.00
300
600
900
Wavelength (nm)


petri_dishes.mspct[["PS_Sterilin101"]]
UVC.tr.lo
UVB
UVA
PAR
Total spectral transmittance $T_{tot}(\lambda)$ (fraction)
1.00
0.75
0.50
0.25
0.00
300
600
900
Wavelength (nm)


petri_dishes.mspct[["PS_Sterilin109"]]
UVC.tr.lo
UVB
UVA
PAR
Total spectral transmittance $T_{tot}(\lambda)$ (fraction)
1.00
0.75
0.50
0.25
0.00
300
600
900
Wavelength (nm)