

# Excel with FILM★STAR

FilmStar DESIGN & MEASURE are [Excel-compatible](#) without requiring Excel. Click Spectra...Save As and select XLS or XLSX. [It's that easy.](#)

Unlike incompatible spectral file formats like DSP/ASC/CSV/USD/SPC/SP/SPA/PRN/DX, Excel is the universal format for transferring data. You use Excel; so do your managers, customers, and colleagues.

*Excel is even more compelling when you consider that [UMA](#)/[ARTA](#)/[TAMS](#)/[URA](#) attachments acquire multiple spectra. If you measure one optic at five angles and two polarizations, do you really want ten files? The same applies to multiple samples from a coating run, etc.*

## MULTIPLE SPECTRA

- FilmStar's [Collector](#) supports multiple spectra as well as multiple samples. Neither PE's UV Winlab nor Agilent's WinUV offer this capability.
- The integrated free [Microsoft Excel Viewer](#), lets users verify and review but not modify data, thereby ensuring that technicians do not 'improve' results.
- [BASIC XL](#) commands add special capabilities such as required when measuring angular dispersive devices or taking advantage of Excel add-ins.

*Effective handling of single or multiple spectra is only one reason to utilize Excel. FilmStar and Excel also provide powerful automation tools.*

## AUTOMATION

- FTG recently delivered a turnkey Excel-based solution for inspecting IR filter assemblies. The system utilizes our PE Spectrum 10 server, controls a stepper motor, computes pass/fail, and prints Dymo labels. Each part is saved as an Excel file including graphs and data. [Inspection time was reduced by 80%!](#)
- A previous project adapted FilmStar BASIC to automate [scanning vs. temperature](#). Excel was utilized as data repository. If the project were repeated today, Excel would not be required because FilmStar now directly creates Excel XLS and XLSX files.

## ANALYSIS

- With its many million users, there's virtually no end of Excel add-ins and compatible applications. Google "SPC Excel" and be astonished by the number of hits.
- The [color-shift map](#) at the right is an example of the ability to accomplish more with DESIGN when Excel's VBA capability is put to use.

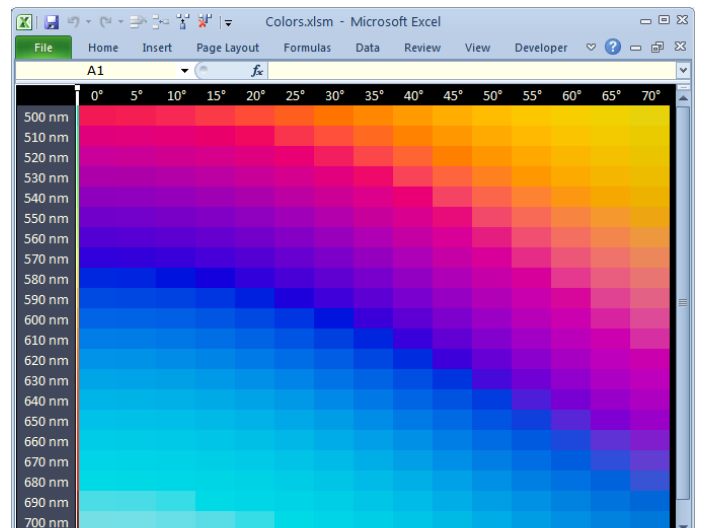
Inspired to know more about FilmStar+Excel? E-mail your questions or call us at +1 609-924-6222.

W (nm)	RP +45 +90	RS +45 +90	RP -45 -90	RS -45 -90
400.0	48.01156	68.28693	48.10080	67.40234
402.0	48.44352	67.86972	48.27138	67.64357
404.0	48.34723	68.55136	48.45859	67.71307
406.0	48.47416	68.58641	48.71173	67.98173
408.0	48.74633	68.13619	48.77828	67.90657
410.0	48.91021	68.58829	48.98993	68.13950
412.0	49.05447	68.33987	49.27163	68.04305
414.0	49.24713	68.91556	49.39544	68.37307
416.0	49.32618	68.97413	49.47021	68.30711

Spectra Collector (normalized data)

Wave (nm)	%R 0°	%T 0°	%R 15°	%T 15°	%R 30°	%T 30°
380.00	58.60	12.60	59.03	12.31	60.02	11.62
385.00	62.73	12.79	63.07	12.53	63.84	11.95
390.00	66.71	13.11	66.98	12.90	67.57	12.42
395.00	70.58	13.57	70.78	13.40	71.21	13.03
400.00	74.35	14.18	74.50	14.05	74.77	13.80

Integration with free Excel Viewer



```

Microsoft Visual Basic for Applications - Colors.xlsm - [basColors (Code)]
File Edit View Insert Format Debug Run Tools Add-Ins Window Help
[General] ShowColors
For Ang = aMin To aMax Step aDelta
    kCol = kCol + 1
    wksColors.Cells(1, kCol) = CStr(Ang) & ""
    .Angle = Ang
    .Pol = "R"
    .GetCieColor kColor, sType$
    wksColors.Range(Cells(kRow, kCol), Cells(kRow, kCol)).Interior.Color = kColor
Next Ang
    
```

VBA code generates color maps