

# Revision of the Advanced Camera for Surveys Filter Throughputs

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F. R. Boffi, R. C. Bohlin  
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In analyzing the ACS photometry of the primary WD stars, Bohlin & Gilliland (2004) found a 2.5% contribution to the predicted integrated HRC count rates due to the F660N filter transmission rise at the shortest wavelength of the tabulation. Following discussions with G. Hartig, the tabulated value of 0.00604 at 2500 Å was deemed a spurious artifact of the measurement procedure (Leviton et al. 1998a, Leviton et al. 1998b). The ACS filters generally use colored glass substrates to block short wavelengths and are not subject to the kind of UV leak that is indicated by the original data supplied by the IDT. The signal transmitted by the filter at 2500 Å in the lab measurement process was probably dominated by stray light from longer wavelengths. Even though for normal stellar continua, similar errors for other filters are less than 0.5% of the predicted count rate, all UV transmittance curves with a similar suspicious rise in the UV are corrected to values typical of the nearest measured values. Table 1 lists all of the changes that are implemented in Synphot as a result of this investigation. These changes are also reflected in the ETC calculations.

## References

- Bohlin, R. C., & Gilliland, R. L. 2004, AJ, submitted in June  
Leviton, D. B., Tsvetanov, Z., Woodruff, R. A., & Mooney, T. A. 1998a,  
Proc. of SPIE, ed. P. Bely & J. B. Breckinridge, 3356, 308  
Leviton, D. B., & 15 co-authors 1998b, Proc. of SPIE, ed. P. Bely & J. B.  
Breckinridge, 3356, 350

**Table 1.** List of all changes in order of filter

<b>Filter</b>	<b>Wavelength</b>	<b>Old</b>	<b>New</b>
F330W	2500	1.12e-04	1.e-05
F344N	2500	0.000247	1.e-05
F435W	2500	0.000132	6.e-06
F435W	2750	1.e-05	6.e-06
F502N	3000	0.000163	1.e-05
F502N	3500	4.5e-05	1.e-05
F502N	4000	3.53e-05	1.e-05
F550M	2500	0.000124	1.e-05
F606W	3000	0.000107	1.e-06
F625W	3000	5.76e-05	1.e-05
F658N	2500	0.000175	5.e-06
F660N	2500	0.000596	4.e-06
F892N	2500	0.00010	3.e-06