

Errata.

Introduction to Lens Design

with Practical Zemax[®] Examples as of February 28, 2005

Note: Any additional errata should be reported to LensDesign@willbell.com. Both the author and publisher will see all e-mail sent to this address.

1. **Page 82**, Equations 7.6 and 7.7 did not print. They are as follows:

$$\text{PSF} = P(\xi, n) \bullet P^*(\xi, n) \quad (7.6)$$

$$T = -\left(\frac{R}{nr}\right)\left(\frac{dW}{dy}\right) \quad (7.7)$$

2. **Page 109**, first sentence: replace Buchdahl with Seidel.
3. **Page 146**, delete point 2 in the 4 point list: **2**. Try dummy image surface. Any improvement?
4. **Page 152**, equation in mid-page should read:

$$S_{II} = \frac{1}{2}(0.349955)4^2(0.020383)^2(0.99507)$$

5. **Page 170** Eq. 15.10 should read

$$W_D = \left[W_{311} \bar{H}^3 \right] \rho \cos \phi$$

6. **Page 200**, Eq. 18.16 should read

$$\Delta\phi_{dC} = [(n_{da} - 1) - (n_{Ca} - 1)](C_1 - C_2) + [(n_{db} - 1) - (n_{Cb} - 1)](C_3 - C_4)$$

7. **Page 282**, Equation in Figure 25.19 point 4 should read: $P_\theta = RA_L \ell A_0^{-2} \times \cos^4 \theta$ where R is Radiance. .
8. **Page 291**, Third equation down from top of the page should read (no “cm”):

$$u'_P = -0.24876 = u_S$$

9. **Page 319**, mid page equation, value within parenthesis should read 0.1:

$$c = 43.93(0.1)^2 = 0.4393$$

10. **Page 335** Second sentence after Section 29.8 should read: This is the same form as Equation 29.29
11. **Page 336**, Figure 29.7 centimeters should read millimeters
12. **Page 351**, in Equation 30.23 the term dy_{CF} should read $d\bar{y}_{CF}$
13. **Page 353**, in first line, second paragraph the term dy_{CF} should read $d\bar{y}_{CF}$
14. **Page 357**, Table 31.1 replace Greek letter lambda (λ) with symbol for microns (μm). Second line above Section 31.2.2 (Wavefront Variance) should be changed from $\sigma = 0.05 \lambda$ to $\sigma = 0.05 \mu\text{m}$
15. **Page 363**, reference to Figure 31.6 in last line should be Figure 31.7
16. **Page 366**, just before Equation 32.5, change Equation 32.23 to 32.4
17. **Page 419**, and additional column titled “Strict no DIS” should be added to Table 36.2:

	Strict	Strict no DIS	Relaxed
\bar{U}	RMS	RMS	RMS
0°	236 μm	100 μm	34 μm
7°	245	128	77
10°	283	173	114

18. **Page 430**, caption crediting Gaskill under Fig. 37.25 should be moved to Fig. 37.26
19. **Page 446**, Section 29.12 part a) should read . . . and $l'_t = -9.88694''$

20. **Page 446**, Section 30.9 part 1) the $2/3$ fraction should read $3/2$:

$$C = (3/2)(R/r)^2 W_{131}^2 \quad \text{where } \bar{H} = 1$$

21. **Page 460**, add index entries under D as follows: degrees of freedom 315, 343