

**Errata for the book**  
**Phase Optimization Problems: Applications in Wave Field Theory**  
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(Ty, Bz mean line y from top, line z from bottom;  
 only Captions is taken into account in Figures)

Page	Line	Is	Should be	Remark
14	T6	Section 3.1.6	Subection 3.1.6	
14	T14	wave correctors	phase correctors	
19	(2.34)	$U_0 \in L_2(D_0)$	$U_0 \in L_2(D)$	
22	(2.46d)	$d\xi d\eta$ .	$d\xi d\eta$ ,	
22	T9	(2.46c)	(2.46d)	
27	T3	instead of $d\vec{R}_m^{(3)}$	instead of $\vec{R}_m^{(3)}$	
27	(2.68)	$m = 1, \dots, M$ ,	$m = 1, \dots, M$ .	
29	T19:(2.77)	(2.77)		deleted
29	T19, T20, T21	$\vec{\omega}_0$	$\vec{\omega}$	3 times
36	B15	to $\vec{v}_1(\vec{r}_1)$ .	to $\vec{V}_1(\vec{r}_1)$ .	
42	B14	The condition	This condition	
43	(3.5)	$\ f\ _2^2 = (f, f)_1$	$\ f\ _2^2 = (f, f)_2$	
49	T5-T8	Similar to ... by (3.48).		deleted
51	T7	reflexivity	relaxivity	
53	(3.78)	$d\xi'$ ,	$d\xi'$ .	
56	T5,T6	homogeneous system	homogeneous equation	
58	(3.109)	$u \in L_2(\Omega_1)$	$u \in H_1$	
61	B3, (3.135)	$\sigma_\tau(u)$	$\sigma_\tau(u)$	2 times
62	(3.138)	$f_\tau^{(p+1)}, f_\tau^{(p)}$	$f^{(p+1)}, f^{(p)}$	
63	B10	Real positive function $\psi$ and constant	Real function $\psi$ and positive constant	
63	B6	(see (3.37))		deleted
64	T15,T16,T19,T22	$Cf]$	$Cf]$	4 times
67	T1	$ u $	$ v $	
67	T10	$\chi_s(u)$	$\chi_s(\psi)$	
70	B12	at given $\varepsilon$		deleted
75	B5	minimized	maximalized	
85	B1	has the multiple eigenvalue	has the eigenvalue	

89	B2	eigenvalues	eigenvalue	
111	T6, (4.87), (4.91)	$\beta$	$t$	4 times
130	B5	Asymmetrical	Asymmetrically	
173	B12	amplitude and phase distributions of different solutions are	amplitude distributions of different solutions for $c = 3.0$ are	
173	B8	about $3\pi$ .	about $3\pi$ (see Fig.5.3).	
173	B5	The phase distributions of different solutions at $c = 3.0$ are shown in Figure 5.3.		deleted
177	T10	dimensionless coordinate on the antenna	generalized angular coordinate in the far zone	
178	T12	to (5.147) is	to (5.147) has	
179	T12, T14	(5.151a)	(5.151b)	
179	T15	(5.151b)	(5.151a)	
180	B6	property (5.148)	property (5.154)	
180	(5.155a)	$n = 1, \dots, N$ .	$n = 1, \dots, N$ ,	
181	T12	is larger than	is smaller than	
185	B12	$w_n(x)$	$w(x)$	
187	B3	function ( $f_0(\xi)$ )	function, ( $w_0(x)$ ),	
193	T3	to zero at $C = 7$ .	to zero.	
194	T8, T9	(Section 3.2.2.3) and a the ... (Section 3.2.2.4).	(Section 3.2.2.3). The ... (Section 3.2.2.4) concerning the beam wave transformers (Problem <b>T</b> ) is considered in Section 5.3.2.	
194	B3	minimized	maximalized	
197	B12	and (5.178) take	and relations (5.178) for even $m$ take	
197	B9	$(cx_{2n}x_{2n+1})$	$(cx_{2n}x_{2n+1}$	
197	B8	$(v_{2n}(x_2))dx_2$	$(v_{2n}(x_2)))dx_2$	
203	T6	with $n$ increasing	with $c$ increasing	
203	B4	even-number-element	odd-number-element	

227	Figure 5.37	$x_0, x_1$	$x, y$	ordinate axes
235	B13	wall impedance.	wall impedance in the resonator.	
237	B13	falling onto	outgoing from	
237	(6.4)	$\sqrt{\frac{\varepsilon}{\mu}}$	$\sqrt{\frac{\mu}{\varepsilon}}$	
238	T14	$S_x < 0$	$S_z < 0$	
238	(6.9)	$R^2 =$	$ R ^2 =$	
239	T16	$H(TE)$	$E(TM)$	
241	B15	$z \gg p$	$z > p$	
246	B9	magnetic fields	magnetic currents	
246	B8, (6.32), B2	$F(r)$	$\mathcal{F}(r)$	
249	T2	per unit length	per unit angle	
249	B7	to those arising at the incidence of the $H$ polarized wave onto	the wave of $H$ -type on	
249	B2, B1	on the wave number	on the ordinal number of the wave	
261	T8	these components	their components	
264	T3	<i>magnetic field</i>	<i>magnetic current</i>	
266	(6.91)	$\int_{\Omega} [\dots]^2 d\Omega$	$\int_{\Omega}  \dots ^2 d\Omega$	
267	(6.93)	$\int_{\Omega} \{\dots\}^2 d\Omega$	$\int_{\Omega}  \dots ^2 d\Omega$	
267	T18	elliptical of cross-section	elliptical cross-section	
277	T21	$h_j = k^2 - \alpha_j^2$	$h_j^2 = k^2 - \alpha_j^2$	
309, col.1	T16	reflexivity	relaxivity	