

# ERRATA

## THEORY OF EDGE DIFFRACTION IN ELECTROMAGNETICS

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Page	Location	Printed	Correct
19	caption to Fig. 1.3.2	shadow boundary	shadow contour
21	line 2 above eqn. 1.4.1	$E_{\Sigma}, H_{\Sigma}$	$\mathcal{E}_{\Sigma}, \mathcal{H}_{\Sigma}$
21	line 3 above eqn. 1.4.1	$E_S, H_S$	$\mathcal{E}_S, \mathcal{H}_S$
40	line 6 from bottom	This same	The same
64	line 4 below eqn. 2.4.15	the bistatic radar	the radar
65	line 2 from bottom	the bistatic radar	the radar
73	line 2 above eqn. 2.5.4	$n = 1 + \frac{\omega_1 + \Omega}{\pi}$	$n = 1 + \frac{\omega + \Omega}{\pi}$
100	line 1 after eqn. 3.3.11	polar coordinates	ray coordinates
103	second term in eqn. 3.4.7	$\frac{1}{ka_1} \tan^2 \omega_2 \sin kl_1$	$\frac{1}{ka_1} \tan^2 \omega_2 \sin kl_2$
105	eqn. 3.4.21	$ka_2 \sin(\omega_2 - 2\omega_1)$	$ka_2 \sin \omega_2 \sin(\omega_2 - 2\omega_1)$
106	bottom line	$l_1 + l_2 < a^2 \tan 2\omega_1$	$l_1 + l_2 < a_2 \tan 2\omega_1$
127	line 1 after eqn. 5.2.3	be sought the form	be sought in the form
131	line 2 from bottom	$(\alpha < 0)$	$(\alpha < \pi)$

Page	Location	Printed	Correct
132	line 2 from bottom :	$\text{Printed : } 2 \left[ \frac{\sin \frac{\pi + \psi}{n}}{\cos \frac{\tau}{n} - \cos \frac{\pi + \psi}{n}} + \frac{\sin \frac{\pi - \psi}{n}}{\cos \frac{\tau}{n} - \cos \frac{\pi - \psi}{n}} \right] =$	$\text{Correct : } \frac{\sin \frac{\pi + \psi}{n}}{\cos \frac{\tau}{n} - \cos \frac{\pi + \psi}{n}} + \frac{\sin \frac{\pi - \psi}{n}}{\cos \frac{\tau}{n} - \cos \frac{\pi - \psi}{n}} =$
134	eqn. 5.4.1	$e^{-ikr\tau^2}$	$e^{-kr\tau^2}$
137	eqn. 5.4.17	$\sin \frac{\psi}{n} \cos \frac{\psi}{2}$	$\sin \frac{\pi}{n} \cos \frac{\psi}{2}$
149	line 1 above eqn. 6.2.6	from at $z = z_1$	from $z = z_1$
162	eqn.6.4.18	$\text{Printed : } \frac{1}{2g(0)} \int_0^z \ln \frac{2\gamma k(z - \zeta)}{i} \psi'(\zeta)$	$\text{Correct : } \frac{1}{g_{\pm}(0) + g(0)} \int_0^z \ln \frac{\gamma(k \pm w)(z - \zeta)}{i} \psi'_{\pm}(\zeta)$
163	line 1 after eqn. 6.4.19	<p><b>Printed:</b> Hence, for <math>kz \ll 1</math> we have</p> <p><b>Correct:</b> Hence, given <math>kz \ll 1</math> and therefore the integral term of Eqn. ( 6.4.18) is negligible, we have</p>	
164	eqn. 6.5.3	$\frac{\partial^2}{dz^2}$	$\frac{\partial^2}{\partial z^2}$
165	line 4 above eqn. 6.6.1	can the calculate	can calculate

Page	Location	Printed	Correct
216	eqn. 8.3.23 cont.	$\frac{h(t_3)dt_3}{t_3 + t}$	$\frac{h(t_3)dt_3}{t_3 + t_2}$
233	line 2 after eqn. 8.7.25	first integral is evaluated	first integral in Eqn.(8.7.3) is evaluated
233	line 2 after eqn. 8.7.25	principal value, but	principal value, and
243	eqn. 9.1.7	$\frac{const}{(q-b)\frac{M+n}{2}}$	$\frac{const}{(q-b)^2}$
246	eqn. 9.1.13	<p><b>Printed :</b></p> $x_1 \frac{\partial^{p_1}}{\partial x_1^{p_1}} x_2 \frac{\partial^{p_2}}{\partial x_2^{p_2}} \dots x_n \frac{\partial^{p_n}}{\partial x_n^{p_n}}$ <p><b>Correct :</b></p> $x_1^{p_1} \frac{\partial^{p_1}}{\partial x_1^{p_1}} x_2^{p_2} \frac{\partial^{p_2}}{\partial x_2^{p_2}} \dots x_n^{p_n} \frac{\partial^{p_n}}{\partial x_n^{p_n}}$	
246	line 2 after eqn. 9.1.13	$(p_l = 1, 2, 3, \dots, m)$	$(p_l = 0, 1, 2, 3, \dots, m)$
248	line 2 in eqn. 9.2.7	$e^{-i2s_1} \hat{\phi}_{m-1}(s_1) ds_1$	$e^{i2s_1} \hat{\phi}_{m-1}(s_1) ds_1$
250	eqn. 9.3.6	$1 + \lambda \int_0^{i\infty}$	$(1 + \lambda) \int_0^{i\infty}$
254	eqn. 9.4.10	$\left[ 1 + O\left(\frac{n}{q}\right) \right]$	$\left[ 1 + O\left(\frac{n}{q}\right) \right]$
260	eqn. 9.6.8	$\frac{\chi_n(2z, 1)}{\chi_{n-1}(2l, 1)}$	$\frac{\chi_n(2l, 1)}{\chi_{n-1}(2l, 1)}$
264	eqn. 10.1.4	$e^{iq(n-1) - \kappa\beta_n}$	$e^{iq(n-1) - i\kappa\beta_n}$

Page	Location	Printed	Correct
265	eqn. 10.1.10 , line 2, two terms	$h(t_{n-1})e^{iqt_{n-1}} dt_{n-1}$	$h(t_{n-1})dt_{n-1}$
265	line 2 from bottom	$h(t_{n-1})e^{iqt_{n-1}} dt_{n-1}$	$h(t_{n-1})dt_{n-1}$
270	line 1 after eqn. 10.2.14	which is valid for $q \gg 1$ and	which is valid for $n = 3, 4, 5, \dots, q \gg 1$ and
271	eqn. 10.2.18	$\varphi_n(\alpha, \alpha_0)e^{iq(n-1)} =$	$\varphi_n(\alpha, \alpha_0) =$
279	line 2 from bottom	$\sum_{m=1,3,5,\dots}^n$	$\sum_{m=1,3,5,\dots}^{\infty}$
279	line 1 from bottom	$\sum_{m=2,4,6,\dots}^n$	$\sum_{m=2,4,6,\dots}^{\infty}$
289	line 2 above eqn. 11.1.2	of Functional the Equations	of the Functional Equations
323	eqn. 11.11.12 , line 2	$\frac{\xi_n(z, 1)}{\psi_{n-1}(1, 1)} e^{i(qn+\kappa z)}$	$\frac{\xi_n(z, 1)}{\psi_{n-1}(1, 1)} e^{i(qn+kz)}$
326	eqn. 12.1.1	$e^{ik(z \cos \varphi_0 + \sin \varphi_0)}$	$e^{ik(z \cos \varphi_0 + y \sin \varphi_0)}$
330	eqn. 12.1.17	$\sin b e^{uvb}$	$\sin vb e^{ivb}$
337	line 2 above eqn. 12.2.33	$\Phi(w, u)$	$\hat{\Phi}(w, u)$
342	line 2 from bottom	$e^{-i(ul+vb)}$	$e^{-i(ul+v^0b)}$
349	line 7 from bottom	$e^{i2w_m(z+l)}$	$e^{iw_m(z+l)}$
352	eqn. 12.5.15	$\mathcal{F}_1(w_j, -u) \Sigma' R_{m_1, m_2}$	$\mathcal{F}_1(w_j, -u) + \Sigma' R_{m_1, m_2}$
354	eqn. 12.5.20	$\mathcal{F}_3(w_m, u) =$	$\mathcal{F}_n(w_m, u) =$

Page	Location	Printed	Correct
355	line 3 above eqn. 12.5.22	$\Sigma \mathcal{F}(w_m, u)$	$\sum_{n=1} \mathcal{F}_n(w_m, u)$
356	line 1 after eqn. 12.5.23	$\sum_{n=1} \mathcal{F}(w_m, u)$	$\sum_{n=1} \mathcal{F}_n(w_m, u)$
356	line 2 above eqn. 12.5.25	$\sum_{n=1} \mathcal{F}(w_m, u)$	$\sum_{n=1} \mathcal{F}_n(w_m, u)$
359	eqn, 12.6.16	$T(\alpha_j, -\beta) + \sum_{m_1}^{j-1} R_{m_1, j}$	$T(\alpha_j, -\beta) - \sum_{m_1}^{j-1} R_{m_1, j}$
361	eqn. 12.6.22	<b>Printed:</b> $R_{m,n} F_1(w_m, w_m) = -F_1(w_m, -w_m)$	
		<b>Correct:</b> $R_{m,n} \mathcal{F}_1(w_m, w_m) = -\mathcal{F}_1(w_n, -w_m)$	
361	eqn. 12.6.25	$\frac{8\pi^2}{c} \sum_m^\infty \frac{L_+(w_m)}{\varepsilon_m i 2 w_m b}$	$\frac{8\pi^2}{c} \frac{L_+(w_m)}{\varepsilon_m i 2 w_m b}$
361	eqn. 12.6.26	$\frac{8\pi^2}{c} \sum_m^\infty \frac{L_+(w_m)}{\varepsilon_m i 2 w_m b}$	$\frac{8\pi^2}{c} \frac{L_+(w_m)}{\varepsilon_m i 2 w_m b}$
362	line 3 after eqn. 12.7.2	pp.349-350 of the previous section shows	pp. 349-350 shows
362	line 3 above eqn. 12.7.3	which is results	which results
363	eqn. 12.7.6	$e^{i(ul+\xi)}$	$e^{-i(ul+\xi)}$
363	eqn. 12.7.8	$e^{i(ul+\xi)}$	$e^{-i(ul+\xi)}$
364	eqn. 12.7.10	$\hat{\Phi}(w, u) =$	$\Phi(w, u) =$
367	eqn. 12.7.19	$e^{ikb \sin \varphi} L_+(w)$	$e^{-ikb \sin \varphi} L_+(w)$
372	eqn. 12.8.1	$\varphi = \varphi_n^{(1)} \cos^{-1}$	$\varphi = \varphi_n^{(1)} = \cos^{-1}$

<b>Page</b>	<b>Location</b>	<b>Printed</b>	<b>Correct</b>
388	reference 30, line 3	p. 115.	pp. 115-119.
388	reference 33, line 1	Benenson, Chapter 1 of	Benenson, Part 1 of
389	reference 44, line 1	Narrow Angle	Narrow-Angle
389	reference 51, line 2	<i>IEEE</i> 3, no. 12	<i>IEEE</i> 63, no.12
390	reference 57, line 2	Society 52, no. 2	Society of America 52, no.2
393	reference 90, line 2	splavno	plavno
393	reference 91, line 3	accomplishments on	Meeting on
394	reference 94, line 5	U.S.S.R.], 1956, pp.	U.S.S.R.], 1967, pp.
397	reference 129, line 4	pp. 2565-2605.	pp. 2595-2605.
397	reference 130, line 3	pp. 542-543	pp. 542- 568.
397	reference 131, line 3	295-256.	295-298.
398	reference 140, line 3	pp. 381.	pp. 381-390.
398	reference 141, line 2	p. 405.	pp. 405-415.